



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 5, 2026 – 03:46 PM UTC

PDB ID : 5NDV / pdb_00005ndv
Title : Crystal structure of Paromomycin bound to the yeast 80S ribosome
Authors : Prokhorova, I.; Djumagulov, M.; Urzhumtsev, A.; Yusupov, M.; Yusupova, G.
Deposited on : 2017-03-09
Resolution : 3.30 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

MolProbity : 4-5-2 with Phenix2.0
Mogul : 2022.3.0, CSD as543be (2022)
Xtriage (Phenix) : 2.0
EDS : 3.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.010 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

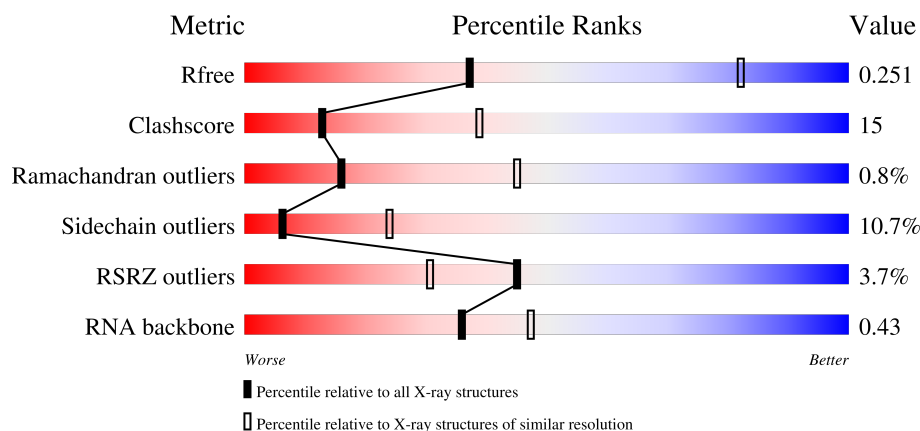
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.30 Å.

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



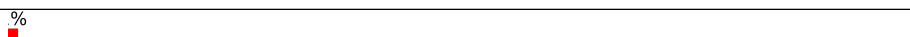
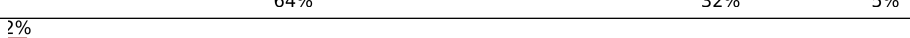
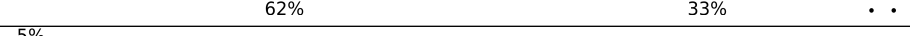
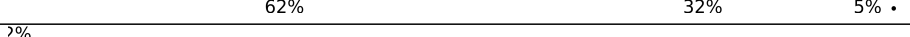
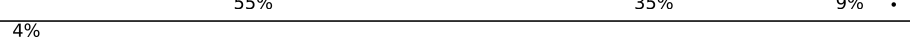
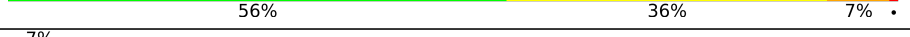
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1169 (3.32-3.28)
Clashscore	190562	1209 (3.32-3.28)
Ramachandran outliers	187476	1188 (3.32-3.28)
Sidechain outliers	187428	1187 (3.32-3.28)
RSRZ outliers	180081	1169 (3.32-3.28)
RNA backbone	3983	1048 (3.60-3.00)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1	3396	
1	5	3396	
2	3	121	
2	7	121	

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Mol	Chain	Length	Quality of chain
3	4	158	
3	8	158	
4	L2	248	
4	l2	248	
5	L3	386	
5	l3	386	
6	L4	361	
6	l4	361	
7	L5	296	
7	l5	296	
8	L6	176	
8	l6	176	
9	L7	226	
9	l7	226	
10	L8	231	
10	l8	231	
11	L9	191	
11	l9	191	
12	M0	221	
12	m0	221	
13	M1	169	
13	m1	169	
14	M3	194	
14	m3	194	
15	M4	137	

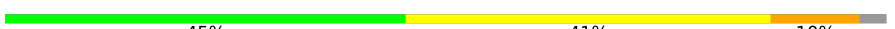
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Mol	Chain	Length	Quality of chain
15	m4	137	
16	M5	203	
16	m5	203	
17	M6	197	
17	m6	197	
18	M7	184	
18	m7	184	
19	M8	185	
19	m8	185	
20	M9	188	
20	m9	188	
21	N0	172	
21	n0	172	
22	N1	159	
22	n1	159	
23	N2	99	
23	n2	99	
24	N3	136	
24	n3	136	
25	N4	155	
25	n4	155	
26	N5	120	
26	n5	120	
27	N6	125	
27	n6	125	

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Mol	Chain	Length	Quality of chain
28	N7	135	
28	n7	135	
29	N8	148	
29	n8	148	
30	N9	58	
30	n9	58	
31	O0	100	
31	o0	100	
32	O1	112	
32	o1	112	
33	O2	127	
33	o2	127	
34	O3	106	
34	o3	106	
35	O4	112	
35	o4	112	
36	O5	119	
36	o5	119	
37	O6	99	
37	o6	99	
38	O7	87	
38	o7	87	
39	O8	77	
39	o8	77	
40	O9	50	

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Mol	Chain	Length	Quality of chain
40	o9	50	
41	Q0	52	
41	q0	52	
42	Q1	25	
42	q1	25	
43	Q2	105	
43	q2	105	
44	Q3	91	
44	q3	91	
45	2	1800	
45	6	1800	
46	S0	206	
46	s0	206	
47	S1	216	
47	s1	216	
48	S2	217	
48	s2	217	
49	S3	223	
49	s3	223	
50	S4	260	
50	s4	260	
51	S5	206	
51	s5	206	
52	S6	236	
53	S7	186	

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Mol	Chain	Length	Quality of chain
53	s7	186	
54	S8	200	
54	s8	200	
55	S9	185	
55	s9	185	
56	C0	105	
56	c0	105	
57	C1	146	
57	c1	146	
58	C2	143	
58	c2	143	
59	C3	150	
59	c3	150	
60	C4	128	
60	c4	128	
61	C5	141	
61	c5	141	
62	C6	142	
62	c6	142	
63	C7	136	
63	c7	136	
64	C8	145	
64	c8	145	
65	C9	143	
65	c9	143	

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Mol	Chain	Length	Quality of chain
66	D0	109	
66	d0	109	
67	D1	87	
67	d1	87	
68	D2	129	
68	d2	129	
69	D3	144	
69	d3	144	
70	D4	134	
70	d4	134	
71	D5	70	
71	d5	70	
72	D6	97	
72	d6	97	
73	D7	81	
73	d7	81	
74	D8	63	
74	d8	63	
75	D9	53	
75	d9	53	
76	E0	62	
76	e0	62	
77	SR	318	
77	sR	318	
78	SM	272	

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Mol	Chain	Length	Quality of chain
78	sM	272	4% 22% 11% 65%
79	s6	218	6% 59% 38%

2 Entry composition [i](#)

There are 83 unique types of molecules in this entry. The entry contains 397978 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	3078	Total	C	N	O	P	0	0	0
			65834	29406	11864	21486	3078			
1	5	3087	Total	C	N	O	P	0	0	0
			66030	29494	11905	21544	3087			

- Molecule 2 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
2	7	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 3 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	4	157	Total	C	N	O	P	0	0	0
			3333	1491	584	1101	157			
3	8	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 4 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	L2	248	Total	C	N	O	S	0	0	0
			1884	1173	382	328	1			
4	l2	248	Total	C	N	O	S	0	0	0
			1884	1173	382	328	1			

- Molecule 5 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	L3	386	Total	C	N	O	S	0	0	0
			3081	1956	584	533	8			
5	l3	386	Total	C	N	O	S	0	0	0
			3081	1956	584	533	8			

- Molecule 6 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	L4	361	Total	C	N	O	S	0	0	0
			2749	1730	522	494	3			
6	l4	361	Total	C	N	O	S	0	0	0
			2749	1730	522	494	3			

- Molecule 7 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	L5	293	Total	C	N	O	S	0	0	0
			2353	1489	409	453	2			
7	l5	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- Molecule 8 is a protein called 60S ribosomal protein L6-A.

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

- Molecule 9 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	L7	226	Total	C	N	O	S	0	0	0
			1818	1171	331	315	1			
9	l7	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- Molecule 10 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	L8	231	Total	C	N	O	S	0	0	0
			1793	1145	321	324	3			

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

- Molecule 11 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L9	189	Total	C	N	O	S	0	0	0
			1502	953	272	273	4			
11	l9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 12 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M0	217	Total	C	N	O	S	0	0	0
			1759	1114	333	305	7			
12	m0	219	Total	C	N	O	S	0	0	0
			1773	1122	336	308	7			

- Molecule 13 is a protein called 60S ribosomal protein L11-B.

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

- Molecule 14 is a protein called 60S ribosomal protein L13-A.

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

- Molecule 15 is a protein called 60S ribosomal protein L14-A.

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

- Molecule 16 is a protein called 60S ribosomal protein L15-A.

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

- Molecule 17 is a protein called 60S ribosomal protein L16-A.

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

- Molecule 18 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	M7	175	Total	C	N	O	0	0	0
			1378	856	273	249			
18	m7	155	Total	C	N	O	0	0	0
			1227	764	238	225			

- Molecule 19 is a protein called 60S ribosomal protein L18-A.

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

- Molecule 20 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	M9	185	Total	C	N	O	0	0	0
			1499	923	323	253			
20	m9	188	Total	C	N	O	0	0	0
			1521	935	326	260			

- Molecule 21 is a protein called 60S ribosomal protein L20-A.

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

- Molecule 22 is a protein called 60S ribosomal protein L21-A.

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

- Molecule 23 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	N2	99	Total	C	N	O		0	0	0
			787	511	129	147				
23	n2	98	Total	C	N	O		0	0	0
			778	505	127	146				

- Molecule 24 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	N3	132	Total	C	N	O	S	0	0	0
			981	617	184	173	7			
24	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 25 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	N4	63	Total	C	N	O	S	0	0	0
			521	336	102	82	1			
25	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

- Molecule 26 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	N5	118	Total	C	N	O	S	0	0	0
			946	608	166	170	2			

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

- Molecule 27 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	N6	125	Total	C	N	O		0	0	0
			984	620	191	173				
27	n6	123	Total	C	N	O		0	0	0
			967	608	188	171				

- Molecule 28 is a protein called 60S ribosomal protein L27-A.

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

- Molecule 29 is a protein called 60S ribosomal protein L28.

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

- Molecule 30 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	N9	56	Total	C	N	O		0	0	0
			444	277	96	71				
30	n9	58	Total	C	N	O		0	0	0
			462	289	100	73				

- Molecule 31 is a protein called 60S ribosomal protein L30.

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

- Molecule 32 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	O1	106	Total	C	N	O	S	0	0	0
			849	541	164	143	1			
32	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 33 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	O2	125	Total	C	N	O	S	0	0	0
			1007	638	203	165	1			
33	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 34 is a protein called 60S ribosomal protein L33-A.

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

- Molecule 35 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	O4	112	Total	C	N	O	S	0	0	0
			881	546	179	152	4			
35	o4	112	Total	C	N	O	S	0	0	0
			881	546	179	152	4			

- Molecule 36 is a protein called 60S ribosomal protein L35-A.

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

- Molecule 37 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	O6	97	Total	C	N	O	S	0	0	0
			750	469	149	130	2			
37	o6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			

- Molecule 38 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	O7	84	Total	C	N	O	S	0	0	0
			665	405	145	110	5			
38	o7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 39 is a protein called 60S ribosomal protein L38.

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

- Molecule 40 is a protein called 60S ribosomal protein L39.

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

- Molecule 41 is a protein called Ubiquitin-60S ribosomal protein L40.

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

- Molecule 42 is a protein called 60S ribosomal protein L41-B.

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

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

- Molecule 43 is a protein called 60S ribosomal protein L42-A.

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

- Molecule 44 is a protein called 60S ribosomal protein L43-A.

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

- Molecule 45 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	2	1712	Total	C	N	O	P	0	0	0
			36485	16312	6462	11999	1712			
45	6	1683	Total	C	N	O	P	0	0	0
			35865	16035	6355	11792	1683			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	S0	206	Total	C	N	O	S	0	0	0
			1581	1017	278	284	2			
46	s0	206	Total	C	N	O	S	0	0	0
			1581	1017	278	284	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	S1	211	Total	C	N	O	S	0	0	0
			1688	1071	305	308	4			
47	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	S3	209	Total	C	N	O	S	0	0	0
			1621	1028	297	290	6			
49	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	S4	256	Total	C	N	O	S	0	0	0
			2044	1300	385	356	3			
50	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	S6	200	Total	C	N	O	S	0	0	0
			1593	997	313	280	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	S7	179	Total	C	N	O	0	0	0
			1442	926	259	257			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
53	s7	186	Total	C	N	O	0	0	0
			1492	957	267	268			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
54	S8	185	Total	C	N	O	0	0	0
			1466	910	293	261			
54	s8	188	Total	C	N	O	0	0	0
			1489	925	298	264			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	S9	174	Total	C	N	O	0	0	0
			1418	900	273	244			
55	s9	185	Total	C	N	O	0	0	0
			1494	943	289	261			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
56	C0	90	Total	C	N	O	0	0	0
			742	481	120	139			
56	c0	96	Total	C	N	O	0	0	0
			761	490	125	144			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
57	C1	139	Total	C	N	O	0	0	0
			1127	724	214	186			
57	c1	146	Total	C	N	O	0	0	0
			1168	747	221	197			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
58	C2	102	Total	C	N	O	0	0	0
			764	485	132	145			
58	c2	124	Total	C	N	O	0	0	0
			890	560	156	172			

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	C5	116	Total	C	N	O	S	0	0	0
			918	583	171	157	7			
61	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
62	C6	136	Total	C	N	O	0	0	0
			1064	682	195	187			
62	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	C7	115	Total	C	N	O	S	0	0	0
			901	562	172	165	2			
63	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	C8	143	Total	C	N	O	S	0	0	0
			1178	734	235	207	2			
64	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	C9	137	Total	C	N	O	S	0	0	0
			1072	669	202	199	2			
65	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	D0	102	Total	C	N	O	S	0	0	0
			818	519	148	150	1			
66	d0	109	Total	C	N	O	S	0	0	0
			873	549	159	164	1			

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	D9	53	Total	C	N	O	S	0	0	0
			443	275	92	72	4			
75	d9	53	Total	C	N	O	S	0	0	0
			443	275	92	72	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			
76	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 77 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	SR	317	Total	C	N	O	S	0	0	0
			2432	1537	416	471	8			
77	sR	318	Total	C	N	O	S	0	0	0
			2437	1540	417	472	8			

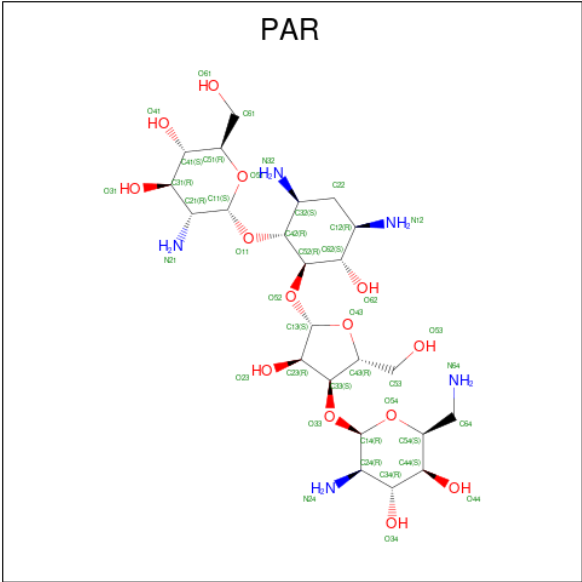
- Molecule 78 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	SM	147	Total	C	N	O		0	0	0
			1044	616	209	219				
78	sM	95	Total	C	N	O		0	0	0
			635	376	131	128				

- Molecule 79 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 80 is PAROMOMYCIN (CCD ID: PAR) (formula: C₂₃H₄₅N₅O₁₄).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	1	1	Total	C	N	O	0	0
			42	23	5	14		
80	3	1	Total	C	N	O	0	0
			42	23	5	14		
80	3	1	Total	C	N	O	0	0
			42	23	5	14		
80	3	1	Total	C	N	O	0	0
			42	23	5	14		
80	4	1	Total	C	N	O	0	0
			42	23	5	14		
80	4	1	Total	C	N	O	0	0
			42	23	5	14		
80	2	1	Total	C	N	O	0	0
			42	23	5	14		
80	2	1	Total	C	N	O	0	0
			42	23	5	14		
80	2	1	Total	C	N	O	0	0
			42	23	5	14		
80	2	1	Total	C	N	O	0	0
			42	23	5	14		
80	2	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	5	1	Total	C	N	O	0	0
			42	23	5	14		
80	7	1	Total	C	N	O	0	0
			42	23	5	14		
80	7	1	Total	C	N	O	0	0
			42	23	5	14		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
80	8	1	Total	C	N	O	0	0
			42	23	5	14		
80	8	1	Total	C	N	O	0	0
			42	23	5	14		
80	n3	1	Total	C	N	O	0	0
			42	23	5	14		
80	o2	1	Total	C	N	O	0	0
			42	23	5	14		
80	6	1	Total	C	N	O	0	0
			42	23	5	14		
80	6	1	Total	C	N	O	0	0
			42	23	5	14		
80	6	1	Total	C	N	O	0	0
			42	23	5	14		
80	6	1	Total	C	N	O	0	0
			42	23	5	14		
80	6	1	Total	C	N	O	0	0
			42	23	5	14		

- Molecule 81 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	1	762	Total	Mg	0	0
			762	762		
81	3	15	Total	Mg	0	0
			15	15		
81	4	35	Total	Mg	0	0
			35	35		
81	L2	6	Total	Mg	0	0
			6	6		
81	L3	5	Total	Mg	0	0
			5	5		
81	L4	3	Total	Mg	0	0
			3	3		
81	L5	3	Total	Mg	0	0
			3	3		
81	L7	2	Total	Mg	0	0
			2	2		
81	L8	1	Total	Mg	0	0
			1	1		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	L9	4	Total 4	Mg 4	0	0
81	M0	1	Total 1	Mg 1	0	0
81	M3	1	Total 1	Mg 1	0	0
81	M4	3	Total 3	Mg 3	0	0
81	M5	9	Total 9	Mg 9	0	0
81	M6	5	Total 5	Mg 5	0	0
81	M7	6	Total 6	Mg 6	0	0
81	M8	2	Total 2	Mg 2	0	0
81	M9	2	Total 2	Mg 2	0	0
81	N0	1	Total 1	Mg 1	0	0
81	N1	3	Total 3	Mg 3	0	0
81	N3	4	Total 4	Mg 4	0	0
81	N5	1	Total 1	Mg 1	0	0
81	N6	5	Total 5	Mg 5	0	0
81	N7	2	Total 2	Mg 2	0	0
81	N8	3	Total 3	Mg 3	0	0
81	O0	1	Total 1	Mg 1	0	0
81	O1	3	Total 3	Mg 3	0	0
81	O2	3	Total 3	Mg 3	0	0
81	O3	2	Total 2	Mg 2	0	0
81	O4	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	O6	1	Total 1	Mg 1	0	0
81	O7	4	Total 4	Mg 4	0	0
81	O9	1	Total 1	Mg 1	0	0
81	Q1	1	Total 1	Mg 1	0	0
81	Q2	5	Total 5	Mg 5	0	0
81	Q3	2	Total 2	Mg 2	0	0
81	2	212	Total 212	Mg 212	0	0
81	S2	2	Total 2	Mg 2	0	0
81	S6	1	Total 1	Mg 1	0	0
81	S7	1	Total 1	Mg 1	0	0
81	S9	1	Total 1	Mg 1	0	0
81	C8	1	Total 1	Mg 1	0	0
81	C9	2	Total 2	Mg 2	0	0
81	D3	2	Total 2	Mg 2	0	0
81	D6	1	Total 1	Mg 1	0	0
81	5	698	Total 698	Mg 698	0	0
81	7	12	Total 12	Mg 12	0	0
81	8	23	Total 23	Mg 23	0	0
81	l2	3	Total 3	Mg 3	0	0
81	l3	9	Total 9	Mg 9	0	0
81	l4	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	l7	6	Total 6	Mg 6	0	0
81	l8	1	Total 1	Mg 1	0	0
81	l9	1	Total 1	Mg 1	0	0
81	m0	3	Total 3	Mg 3	0	0
81	m5	2	Total 2	Mg 2	0	0
81	m6	4	Total 4	Mg 4	0	0
81	m7	9	Total 9	Mg 9	0	0
81	m8	1	Total 1	Mg 1	0	0
81	m9	5	Total 5	Mg 5	0	0
81	n0	6	Total 6	Mg 6	0	0
81	n1	2	Total 2	Mg 2	0	0
81	n2	1	Total 1	Mg 1	0	0
81	n3	3	Total 3	Mg 3	0	0
81	n5	1	Total 1	Mg 1	0	0
81	n6	4	Total 4	Mg 4	0	0
81	n8	4	Total 4	Mg 4	0	0
81	n9	1	Total 1	Mg 1	0	0
81	o0	3	Total 3	Mg 3	0	0
81	o1	3	Total 3	Mg 3	0	0
81	o2	3	Total 3	Mg 3	0	0
81	o3	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
81	o4	1	Total 1	Mg 1	0	0
81	o7	2	Total 2	Mg 2	0	0
81	q0	1	Total 1	Mg 1	0	0
81	q2	1	Total 1	Mg 1	0	0
81	q3	1	Total 1	Mg 1	0	0
81	6	169	Total 169	Mg 169	0	0
81	s2	1	Total 1	Mg 1	0	0
81	s4	1	Total 1	Mg 1	0	0
81	s6	2	Total 2	Mg 2	0	0
81	s8	1	Total 1	Mg 1	0	0
81	c1	1	Total 1	Mg 1	0	0
81	c4	3	Total 3	Mg 3	0	0
81	c9	2	Total 2	Mg 2	0	0
81	d2	1	Total 1	Mg 1	0	0
81	d3	5	Total 5	Mg 5	0	0
81	d4	1	Total 1	Mg 1	0	0
81	d6	1	Total 1	Mg 1	0	0

- Molecule 82 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	O4	1	Total 1	Zn 1	0	0
82	O7	1	Total 1	Zn 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
82	Q0	1	Total 1	Zn 1	0	0
82	Q2	1	Total 1	Zn 1	0	0
82	Q3	1	Total 1	Zn 1	0	0
82	D6	1	Total 1	Zn 1	0	0
82	D7	1	Total 1	Zn 1	0	0
82	D9	1	Total 1	Zn 1	0	0
82	o4	1	Total 1	Zn 1	0	0
82	o7	1	Total 1	Zn 1	0	0
82	q0	1	Total 1	Zn 1	0	0
82	q2	1	Total 1	Zn 1	0	0
82	q3	1	Total 1	Zn 1	0	0
82	d6	1	Total 1	Zn 1	0	0
82	d7	1	Total 1	Zn 1	0	0
82	d9	1	Total 1	Zn 1	0	0

- Molecule 83 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	1	500	Total 500	O 500	0	0
83	3	7	Total 7	O 7	0	0
83	4	15	Total 15	O 15	0	0
83	L2	5	Total 5	O 5	0	0
83	L3	2	Total 2	O 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	L4	2	Total 2	O 2	0	0
83	L5	1	Total 1	O 1	0	0
83	L7	1	Total 1	O 1	0	0
83	M5	2	Total 2	O 2	0	0
83	M6	2	Total 2	O 2	0	0
83	M7	4	Total 4	O 4	0	0
83	N0	2	Total 2	O 2	0	0
83	N1	1	Total 1	O 1	0	0
83	N3	3	Total 3	O 3	0	0
83	N6	2	Total 2	O 2	0	0
83	N7	2	Total 2	O 2	0	0
83	N8	2	Total 2	O 2	0	0
83	N9	2	Total 2	O 2	0	0
83	O0	1	Total 1	O 1	0	0
83	O2	2	Total 2	O 2	0	0
83	O3	2	Total 2	O 2	0	0
83	O4	1	Total 1	O 1	0	0
83	O7	1	Total 1	O 1	0	0
83	Q2	4	Total 4	O 4	0	0
83	2	122	Total 122	O 122	0	0
83	S1	1	Total 1	O 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	S9	1	Total 1	O 1	0	0
83	C3	1	Total 1	O 1	0	0
83	C6	1	Total 1	O 1	0	0
83	C7	1	Total 1	O 1	0	0
83	C9	1	Total 1	O 1	0	0
83	D3	4	Total 4	O 4	0	0
83	5	477	Total 477	O 477	0	0
83	7	12	Total 12	O 12	0	0
83	8	7	Total 7	O 7	0	0
83	l2	5	Total 5	O 5	0	0
83	l3	2	Total 2	O 2	0	0
83	l5	1	Total 1	O 1	0	0
83	l7	1	Total 1	O 1	0	0
83	l9	1	Total 1	O 1	0	0
83	m0	1	Total 1	O 1	0	0
83	m6	1	Total 1	O 1	0	0
83	m7	2	Total 2	O 2	0	0
83	m9	1	Total 1	O 1	0	0
83	n0	2	Total 2	O 2	0	0
83	n1	2	Total 2	O 2	0	0
83	n3	3	Total 3	O 3	0	0

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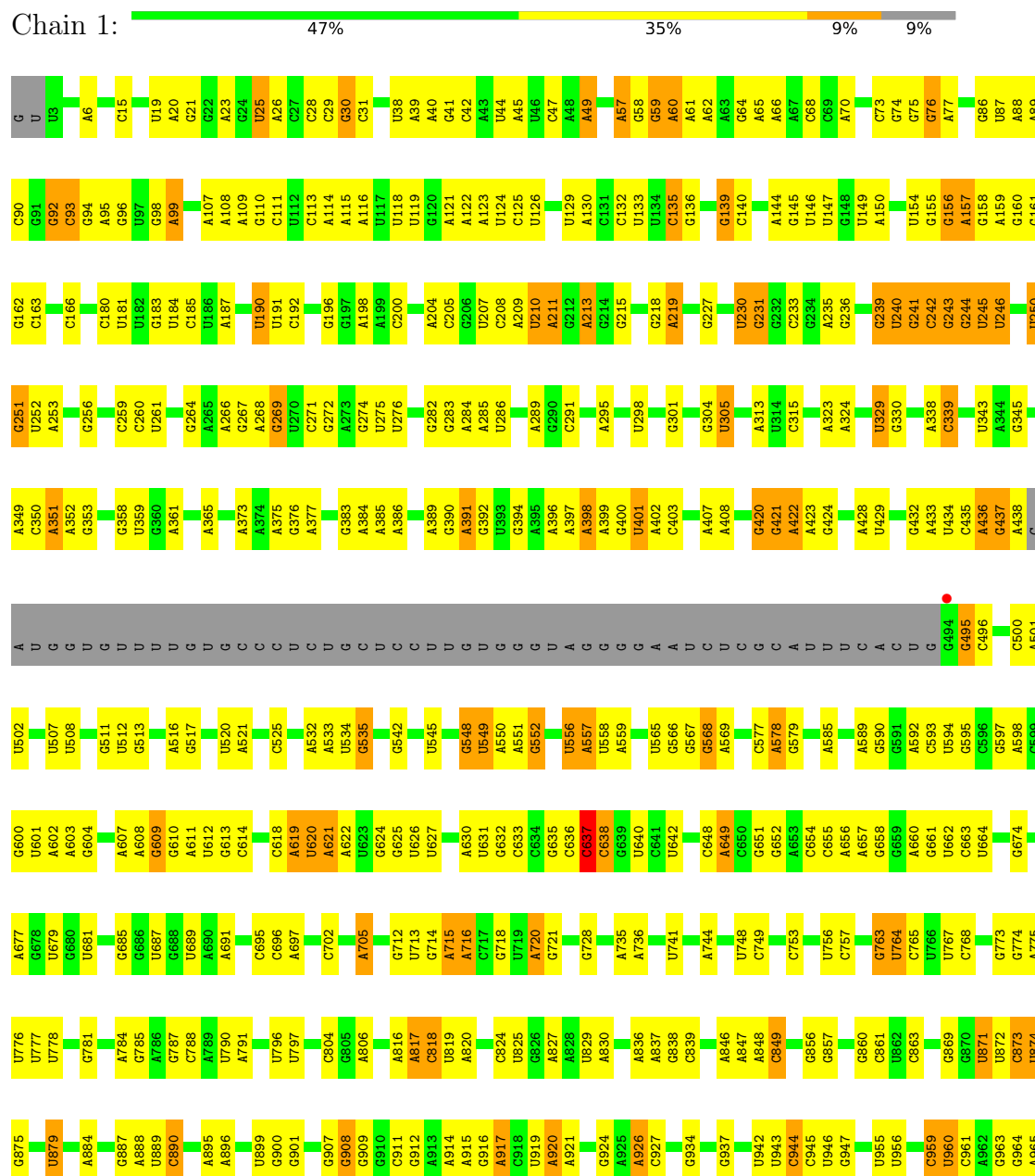
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
83	n6	1	Total 1	O 1	0	0
83	n7	1	Total 1	O 1	0	0
83	n8	3	Total 3	O 3	0	0
83	o2	3	Total 3	O 3	0	0
83	6	113	Total 113	O 113	0	0
83	c3	4	Total 4	O 4	0	0
83	c4	1	Total 1	O 1	0	0
83	c6	1	Total 1	O 1	0	0
83	c9	1	Total 1	O 1	0	0
83	d3	1	Total 1	O 1	0	0
83	d6	1	Total 1	O 1	0	0

3 Residue-property plots

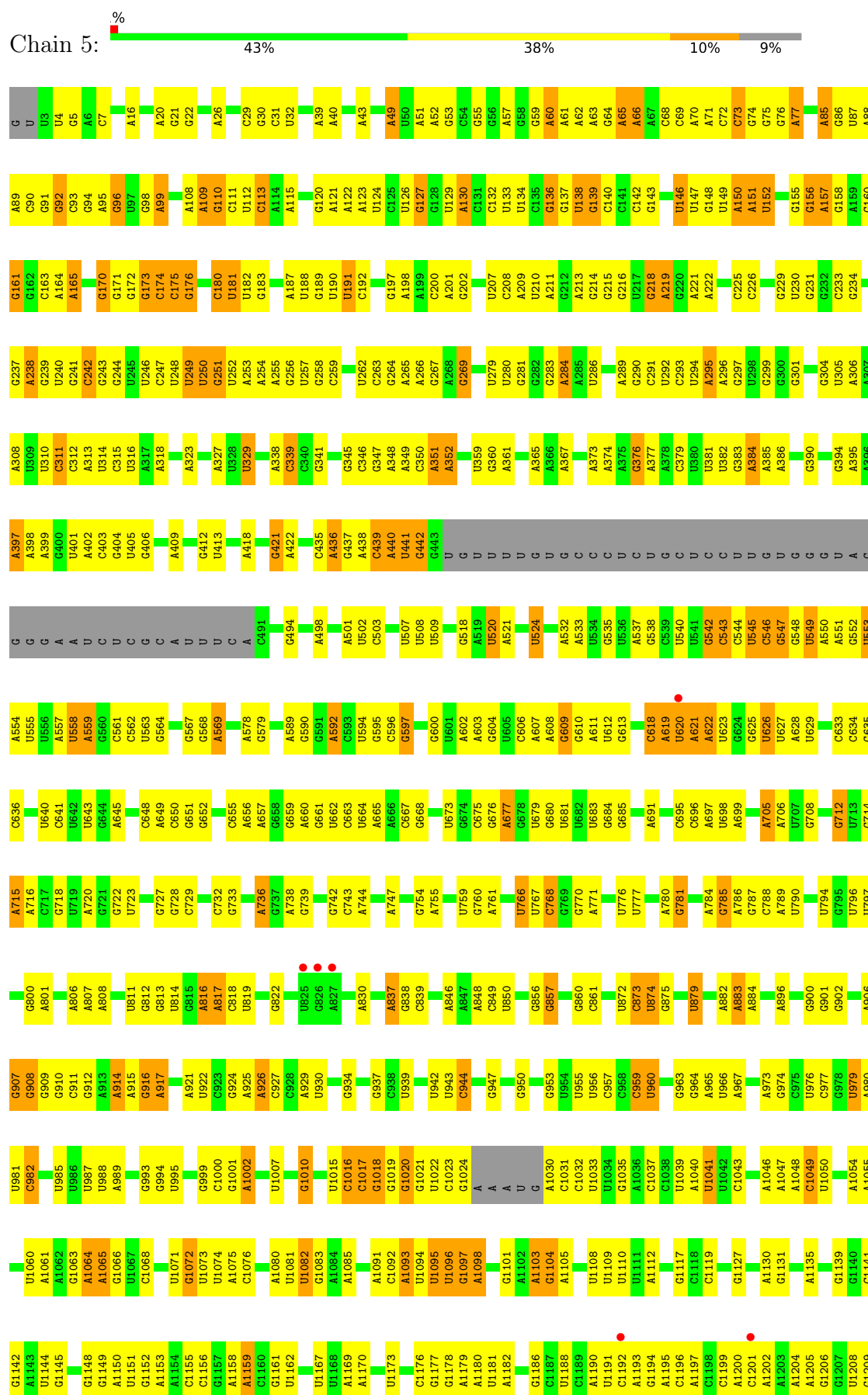
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density.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

• Molecule 1: 25S ribosomal RNA



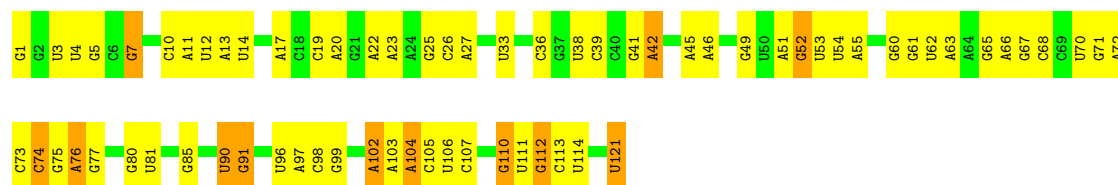
A2158	A2159	C2163	A2166	G2169	U2170	G2174	G2177	A2178	C2179	G2180	C2181	A2182	G2185	A2188	U2193	G2194	C2195	G2196	C2197	A2198	G2199	C2202	U2203	C2204	U2205	G2206	A2207	U2208	U2209	G2210	A2213	A2214	A2223	A2224	U2225	U2226	C2227	A2228	A2229	G2238	G2239	A2242	A2243	A2244	C2245									
U	G	A	C	C	G	U	U	G	U	C	G	A	C	A	A2092	A2093	C2094	A2099	A2100	C2101	U2102	U2103	A2106	A2107	U2109	C2110	U2111	A2112	A2113	C2114	A2117	A2120	C2121	G2122	G2130	A2131	A2138	U2139	U2140	A2144	A2145	C2155												
U1938	G1939	G1940	G1952	G1953	G	U	U	A	A	G	G	A	A	G	U1877	G1878	A1879	A1886	A1895	G1899	A1900	A1901	G1902	U1903	G1906	C1907	A1908	A1909	A1913	C1917	G1918	G1919	U1821	U1924	U1937	G																		
A1729	G1730	U1740	A1741	U1742	G1743	U1750	G1751	A1760	U1763	U1764	U	G1766	C1767	U1768	G1769	G1770	G1780	U1783	G1784	A1787	C1788	G1789	G1790	C1793	G1794	U1795	G1796	A1797	A1798	A1799	A1804	C1805	A1806	G1807	G1808	A1809	A1810	G1811	G1812	A1813	A1814	A1816	G1817	U1820	U1824	G1825								
U1636	C1639	U1640	U1641	U1642	U1643	U1644	U1645	A1648	U1649	G1653	A1654	C1657	G1658	U1659	U1660	G1661	G1666	A1667	G1673	G1674	G1675	U1682	A1683	U1686	U1687	U1688	A1696	A1697	G1700	C1701	C1709	C1710	C1711	G1712	G1713	A1714	U1715	U1716	G1718	G1719	U1720	U1721	U1722	U1723	U1724	C1725								
A1559	G1560	C1561	C1562	A1563	U1564	G1565	A1566	U1567	U1568	U1569	U1570	A1571	U1572	G1573	C1574	A1575	G1576	G1577	U1578	C1579	A1580	C1581	C1582	U1583	U1584	C1585	G1586	A1587	U1588	A1589	G1590	G1591	U1595	C1596	C1597	A1603	G1604	A1605	U1606	U1607	U1616	G1617	G1618	A1619	U1620	G1624	A1625	U1629	U1630	C1631	A1632	C1633	G1634	G1635
U1471	U1472	G1473	A1477	C1478	U1479	G1480	A1481	A1482	G1483	U1484	G1485	G1488	G1492	G1493	U1494	U1495	C1502	A1506	G1507	C1508	A1509	G1517	U1518	G1519	G1520	U1523	A1524	G1525	U1526	C1527	G1528	A1529	U1533	G1536	A1539	U1540	G1541	G1542	G1543	C1550	C1551	U1552	U1553	U1554	U1555	C1556	A1557	U1558						
A1366	G1367	U1368	A1369	A1373	G1380	A1381	C1385	A1386	C1391	G1392	A1393	A1394	A1399	G1400	G1412	U1415	C1416	G1417	A1418	A1419	C1420	G1421	C1422	C1423	U1427	G1431	C1432	A1433	G1434	A1435	U1436	C1437	U1438	U1439	G1440	G1441	G1444	U1445	A1446	G1447	G1450	C1459	A1460	A1461	U1470									
C	A	C1279	G1285	A1286	A1287	A1291	C1292	G1295	C1296	G1297	U1298	A1300	A1301	A1302	G1306	G1307	G1313	C1316	A1317	A1318	G1319	C1320	G1323	U1324	C1327	G1328	U1329	A1330	U1331	U1334	U1341	C1342	G1345	G1346	U1347	U1348	G	A	U	A	U	U	A	C	A	C	U							
G1209	U1210	U1211	A1212	G1213	C1216	G1222	G1228	C1229	A1230	A	C	G	G	U	U	U	U	G	A	U	G	U	G	G	A	A	U	U	C	C	C	U	A	G	G	A	U	U	U	G	U	A	C	A	C	U								
U1110	U1111	G1115	G1116	G1117	C1118	U1128	A1129	A1130	G1131	C1132	A1133	A1134	A1135	G1139	G1140	U1144	G1145	C1146	A1150	U1151	G1152	A1153	A1154	A1158	A1159	C1160	G1161	A1169	U1173	G1174	C1175	G1176	G1177	G1178	A1179	A1180	U1181	A1182	C1185	A1190	U1191	C1192	A1193	G1194	A1195	C1196	C1201	A1202						
U1039	A1040	U1041	U1042	G1043	U1044	C1045	A1046	A1047	A1048	A980	U1050	U1051	A1054	A1055	U1056	A1057	U1060	A1061	A1062	G1063	A1064	A1065	G1066	U1067	C1068	U1071	G1072	U1073	U1074	A1079	A1080	U1081	G1082	G1083	A1084	U1088	G1089	G1090	A1091	A1092	C1093	U1094	U1095	U1096	G1097	A1098	A1099	U1100	G1101	C1031	C1032	A1036	C1037	C1038

G3328	G2246	U2318	G2400	U2643	U2629	U2712	G2814	G2894	G3172	U3078	G3173	U3250	G3328
U3329	G2247	U2319	A2401	U2644	U2635	U2713	A2817	G2895	G3174	U3079	G3175	U3251	U3330
A3330	C2248	C2330	G2402	C2645	A2636	G2714	U2818	A2896	U3176	C3082	U3177	U3252	U3331
U3332	G2249	C2331	A2403	C2646	A2637	U2718	A2819	A2897	G3177	C3083	G3178	G3253	G3333
G3333	G2250	G2332	A2404	C2647	A2638	U2719	A2820	G2898	G3178	C3084	A3179	U3254	U3334
U3334	G2251	U2334	C2405	C2648	U2639	U2723	C2821	A2900	A3178	G3085	U3179	U3255	A3335
A3335	A2252	G2335	C2406	G2649	U2650	U2724	U2822	A2903	A3180	A3086	A3180	G3256	A3336
G3336	G2253	U2336	C2407	U2651	U2655	U2725	U2826	U2904	G3181	G3088	G3182	U3259	G3337
U3337	U2254	C2337	U2408	C2652	U2656	G2726	U2827	U2905	G3182	G3089	G3183	G3263	U3341
U3341	A2255	G2338	U2411	U2653	A2657	U2727	C2836	A2910	A3183	U3090	A3187	G3264	A3342
G3342	C2257	C2339	A2412	A2658	A2658	A2727	A2837	U2915	G3188	A3091	C3092	G3265	G3343
U3343	U2258	U2340	A2413	G2655	G2657	G2728	U2837	U2916	G3189	C3093	C3093	A3268	G3344
A3344	A2259	A2341	G2414	U2660	G2659	U2737	U2842	U2917	G3190	U3094	A3094	U3269	G3345
G3345	U2260	U2344	C2418	A2661	G2660	C2737	U2844	U2918	A3187	C3095	U3095	U3270	A3346
U3346	A2262	G2346	A2419	G2662	G2662	C2741	U2845	U2919	G3188	U3096	U3097	G3271	U3347
G3347	C2263	U2347	C2420	U2663	G2663	U2742	A2846	U2920	G3189	U3097	U3098	G3272	G3348
U3348	C2267	U2348	U2423	C2668	U2665	U2743	A2847	U2921	G3190	C3098	C3098	G3273	C3349
G3349	U2268	U2349	A2424	U2669	U2666	U2744	G2848	U2922	G3191	C3099	C3099	A3274	C3350
U3350	C2269	U2352	G2429	U2670	G2667	A2747	U2849	U2923	U3192	U3100	U3100	G3275	U3351
G3351	A2270	A2352	C2435	C2671	G2668	U2748	A2850	C2927	U3193	G3101	G3101	G3276	U3352
U3352	G2271	G2353	U2441	U2672	U2669	U2749	A2851	C2928	U3194	G3102	G3102	G3277	G3353
G3353	A2272	C2354	A2442	C2673	G2670	U2750	A2852	C2929	U3195	A3103	A3103	G3278	U3354
U3354	G2273	G2355	G2436	U2674	U2673	C2751	U2853	U2932	U3196	A3113	A3113	A3279	U3355
G3355	C2276	A2356	A2438	U2675	A2674	U2752	U2854	U2933	U3197	C3121	C3121	U3280	G3356
U3356	G2277	A2357	A2439	C2676	C2675	G2753	U2855	U2934	U3198	U3121	U3121	U3281	U3357
G3357	C2278	A2358	G2440	U2681	A2676	U2754	C2857	U2935	U3199	U3122	U3122	G3282	G3361
U3358	A2279	C2359	A2441	U2682	C2677	C2756	U2858	U2936	U3200	A3130	A3130	U3283	A3362
G3359	C2280	C2360	C2442	U2683	A2678	U2762	U2859	U2937	U3201	U3131	U3131	G3284	U3363
A3360	A2281	A2361	A2443	U2684	C2685	A2768	U2860	U2938	U3202	C3132	C3132	G3285	G3366
U3361	U2282	C2362	C2444	U2685	U2686	A2769	U2861	U2939	U3203	C3133	C3133	G3286	C3367
G3362	C2288	G2363	A2444	U2686	U2687	U2775	U2862	U2940	U3204	C3134	C3134	G3287	U3368
U3363	U2289	C2364	A2445	U2687	U2688	C2776	U2863	U2941	U3205	A3142	A3142	G3288	A3294
G3364	C2290	C2365	A2446	U2688	U2689	C2777	U2864	U2942	U3206	C3143	C3143	G3289	A3295
U3365	U2291	C2366	A2447	U2689	U2690	C2778	U2865	U2943	U3207	A3150	A3150	G3290	A3296
G3366	C2292	A2367	A2448	U2690	C2692	C2779	U2866	U2944	U3208	U3151	U3151	G3291	U3300
U3367	G2302	G2376	A2372	U2691	U2693	U2782	U2867	U2945	U3209	U3152	U3152	G3292	U3301
G3368	A2303	U2379	A2373	U2692	C2694	U2783	U2868	U2946	U3210	C	C	G3293	U3302
U3369	C2306	C2383	A2374	U2693	U2695	C2776	U2869	U2947	U3211	U	U	G3294	U3303
G3370	C2307	A2384	C2374	U2694	A2696	C2777	U2870	U2948	U3212	U	U	G3295	U3304
U3371	C2308	G2385	G2375	U2695	C2697	C2778	U2871	U2949	U3213	U	U	G3296	U3305
G3372	C2309	U2388	G2376	U2696	U2698	C2779	U2872	U2950	U3214	U	U	G3297	U3306
U3373	A2312	G2393	U2377	U2697	U2699	U2780	U2873	U2951	U3215	U	U	G3298	U3307
G3374	A2313	G2394	G2378	U2698	G2700	U2781	U2874	U2952	U3216	U	U	G3299	U3308
U3375	U2314	A2397	G2379	U2699	U2701	U2782	U2875	U2953	U3217	U	U	G3300	U3309
G3376	C2315	A2398	U2378	U2700	U2702	U2783	U2876	U2954	U3218	U	U	G3301	U3310
U3377	C2316	G2399	A2388	U2701	A2703	U2784	U2877	U2955	U3219	U	U	G3302	U3311
G3378	A2317	G2400	U2389	U2702	A2704	U2785	U2878	U2956	U3220	U	U	G3303	U3312
U3379	C2318	U2390	G2390	U2703	A2705	U2786	U2879	U2957	U3221	U	U	G3304	U3313
G3380	A2319	A2391	A2389	U2704	C2706	U2787	U2880	U2958	U3222	U	U	G3305	U3314
U3381	C2320	U2392	A2390	U2705	U2707	U2788	U2881	U2959	U3223	U	U	G3306	U3315
G3382	U2321	G2393	A2391	U2706	U2708	U2789	U2882	U2960	U3224	U	U	G3307	U3316
U3383	C2322	G2394	A2392	U2707	U2709	U2790	U2883	U2961	U3225	U	U	G3308	U3317
G3384	A2323	G2395	A2393	U2708	U2710	U2791	U2884	U2962	U3226	U	U	G3309	U3318
U3385	U2324	U2397	A2394	U2709	U2711	U2792	U2885	U2963	U3227	U	U	G3310	U3319
G3386	C2325	A2398	A2395	U2710	U2712	U2793	U2886	U2964	U3228	U	U	G3311	U3320
U3387	U2326	U2399	A2396	U2711	U2713	U2794	U2887	U2965	U3229	U	U	G3312	U3321
G3388	C2327	A2400	A2397	U2712	U2714	U2795	U2888	U2966	U3230	U	U	G3313	U3322
U3389	U2328	U2401	A2398	U2713	U2715	U2796	U2889	U2967	U3231	U	U	G3314	U3323
G3390	C2329	A2402	A2399	U2714	U2716	U2797	U2890	U2968	U3232	U	U	G3315	U3324
U3391	U2330	U2403	A2400	U2715	U2717	U2798	U2891	U2969	U3233	U	U	G3316	U3325
G3392	C2331	U2404	A2401	U2716	U2718	U2799	U2892	U2970	U3234	U	U	G3317	U3326
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G3394	C2333	U2406	A2403	U2718	U2720	U2801	U2894	U2972	U3236	U	U	G3319	U3328
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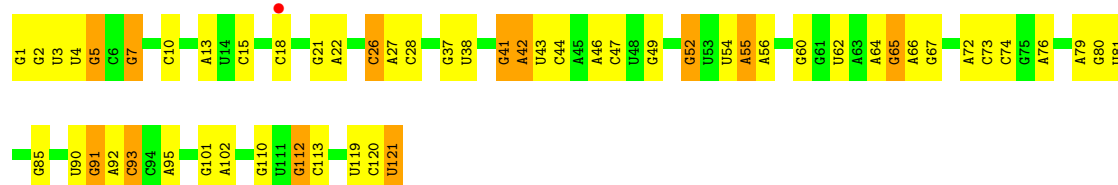


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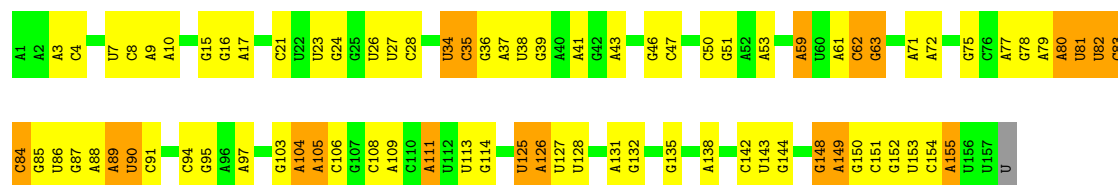




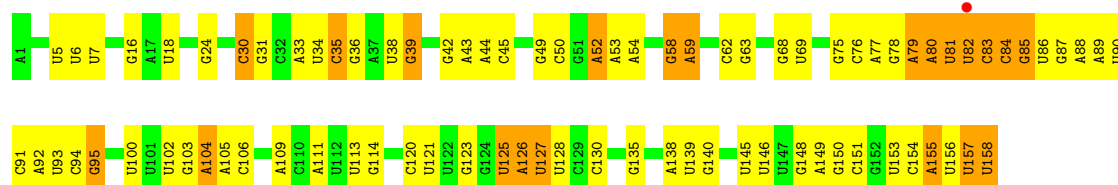
• Molecule 2: 5S ribosomal RNA



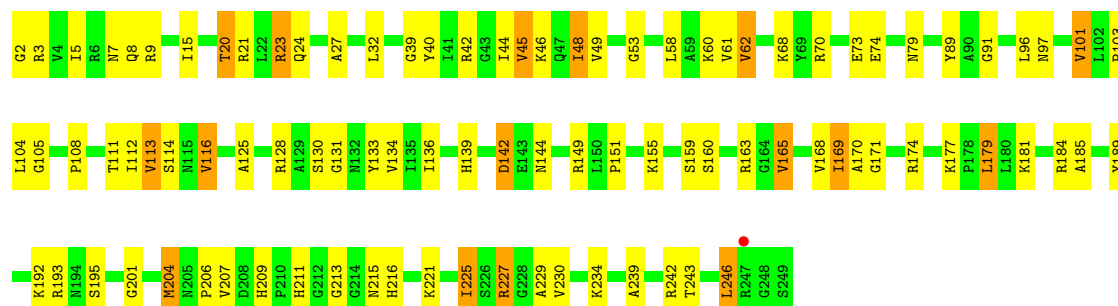
• Molecule 3: 5.8S ribosomal RNA



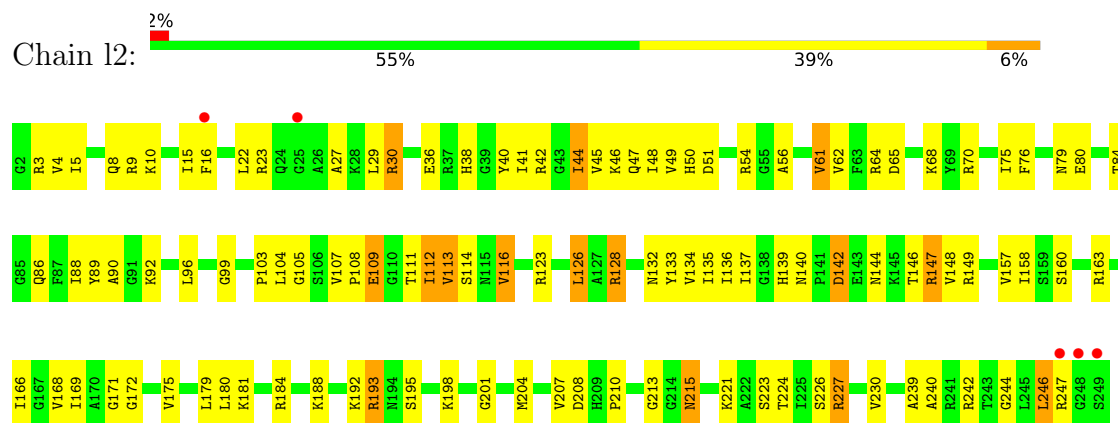
• Molecule 3: 5.8S ribosomal RNA



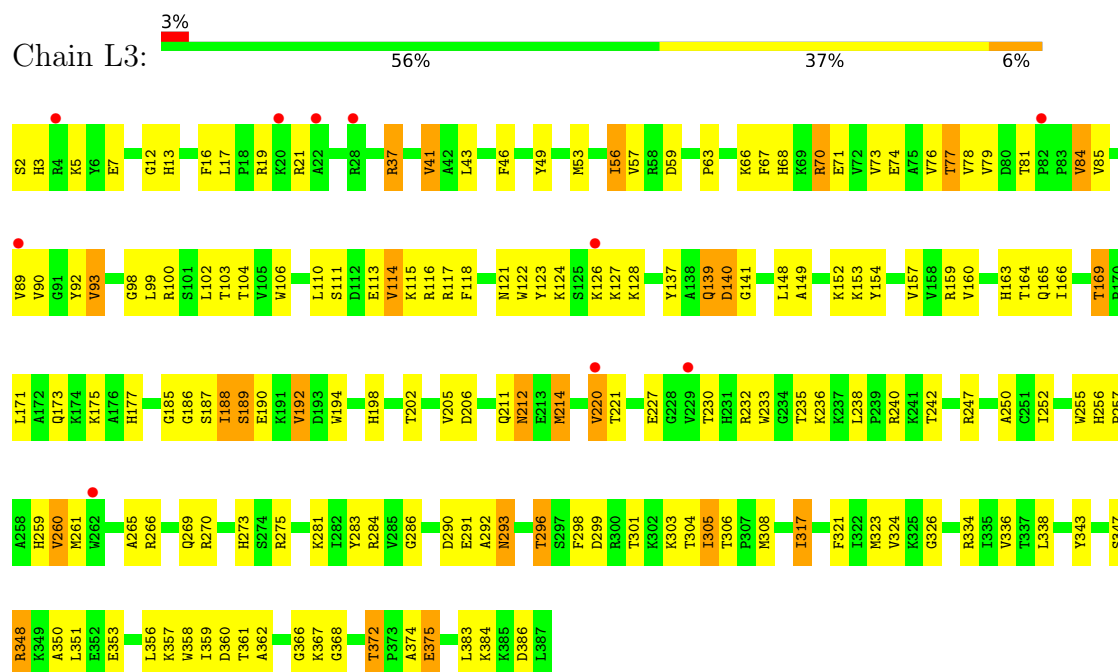
• Molecule 4: 60S ribosomal protein L2-A



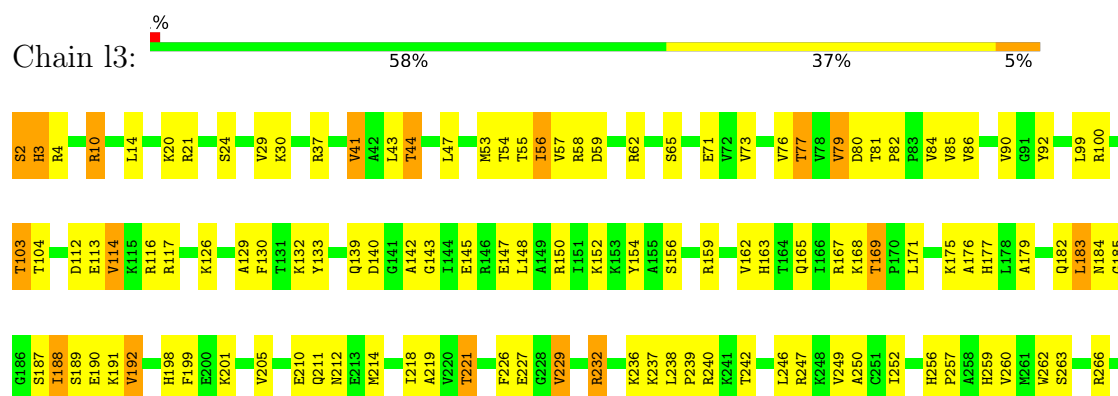
- Molecule 4: 60S ribosomal protein L2-A

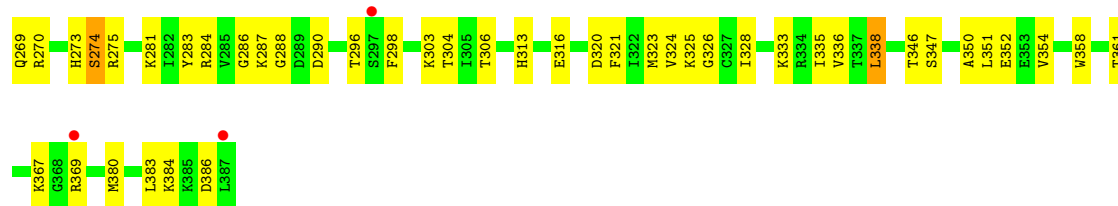


- Molecule 5: 60S ribosomal protein L3



- Molecule 5: 60S ribosomal protein L3





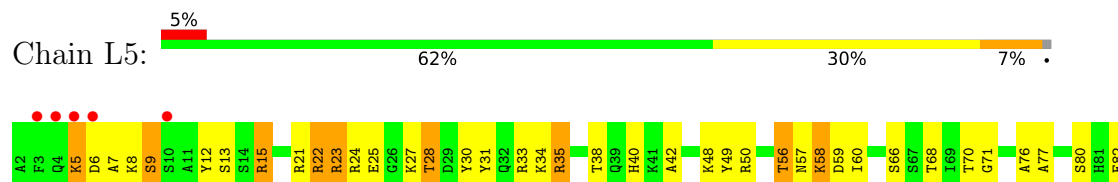
• Molecule 6: 60S ribosomal protein L4-A

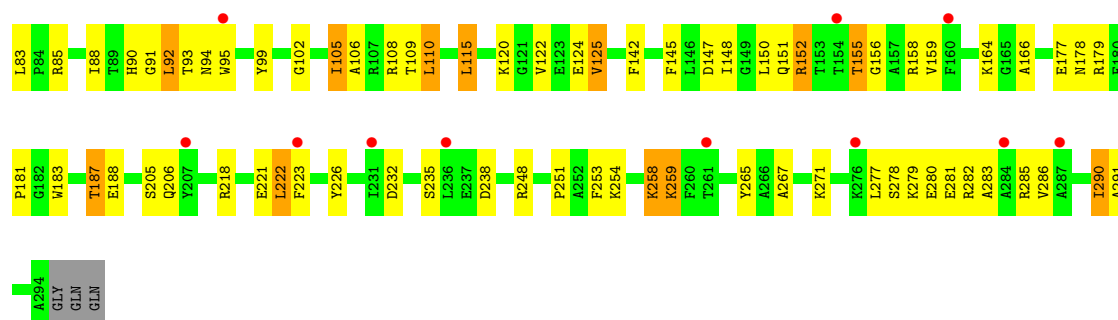


• Molecule 6: 60S ribosomal protein L4-A

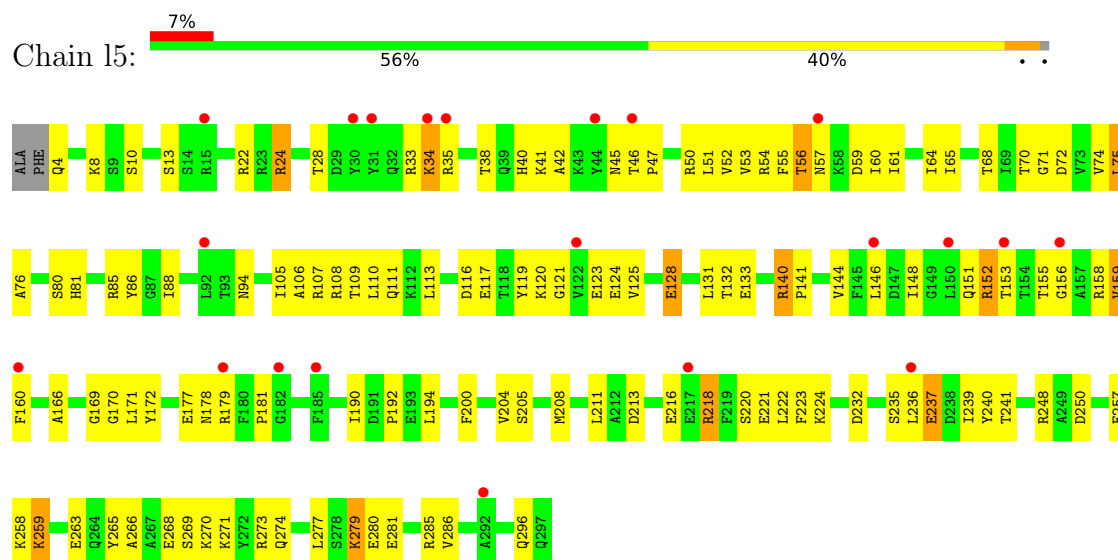


• Molecule 7: 60S ribosomal protein L5

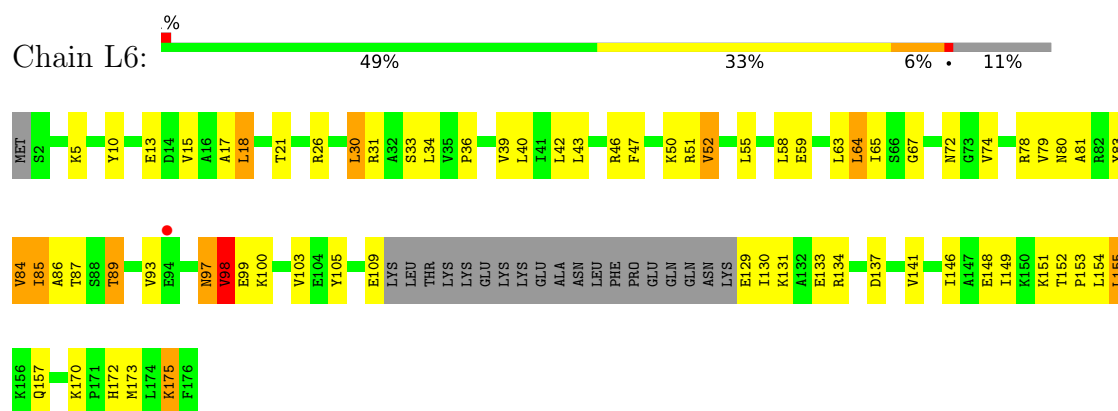




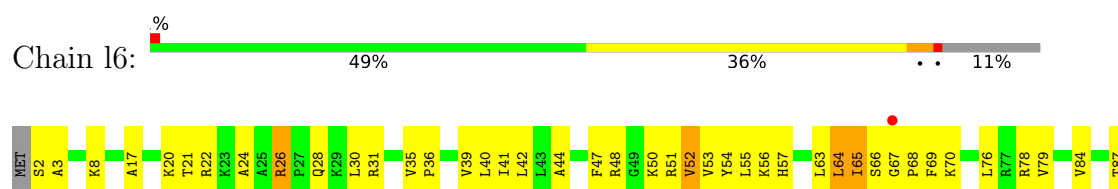
• Molecule 7: 60S ribosomal protein L5

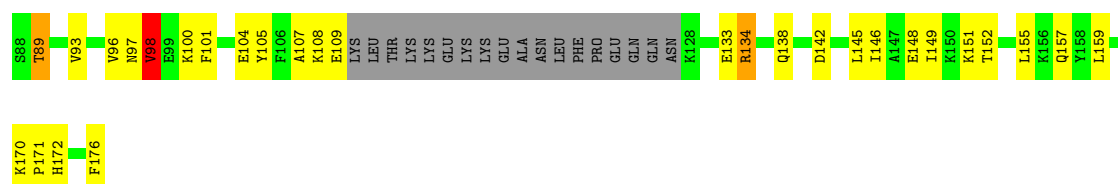


• Molecule 8: 60S ribosomal protein L6-A



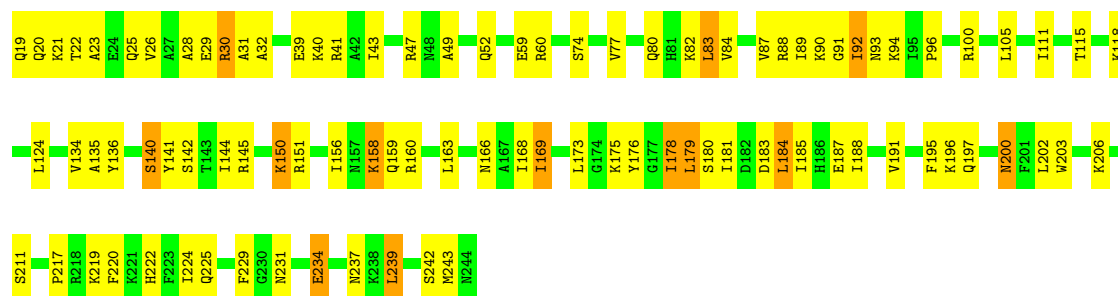
• Molecule 8: 60S ribosomal protein L6-A





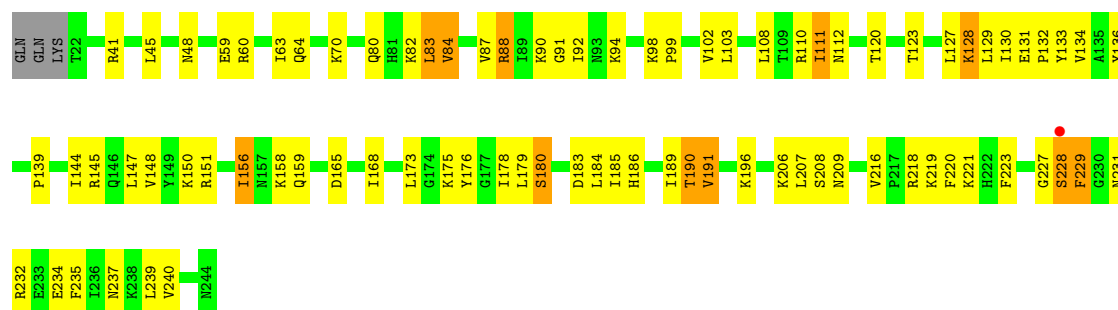
- Molecule 9: 60S ribosomal protein L7-A

Chain L7:



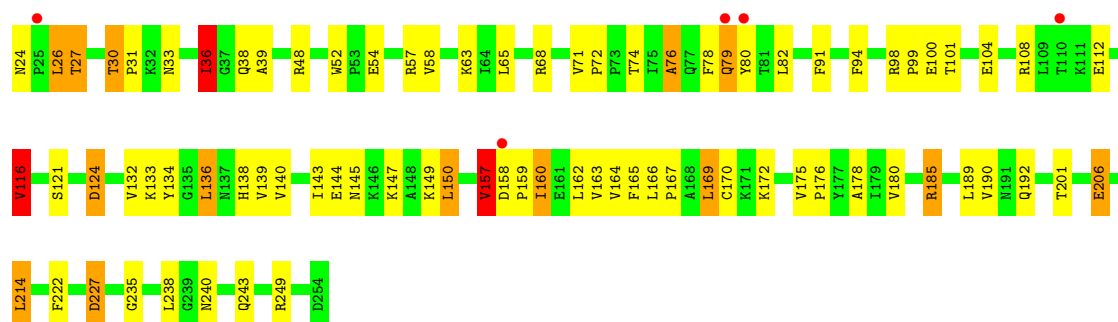
- Molecule 9: 60S ribosomal protein L7-A

Chain L7:

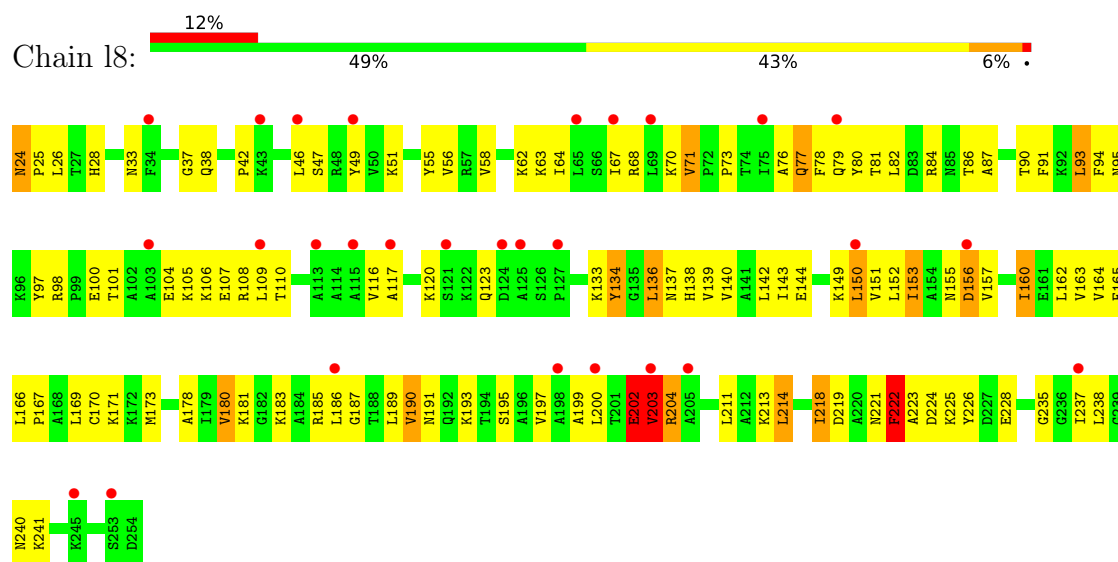


- Molecule 10: 60S ribosomal protein L8-A

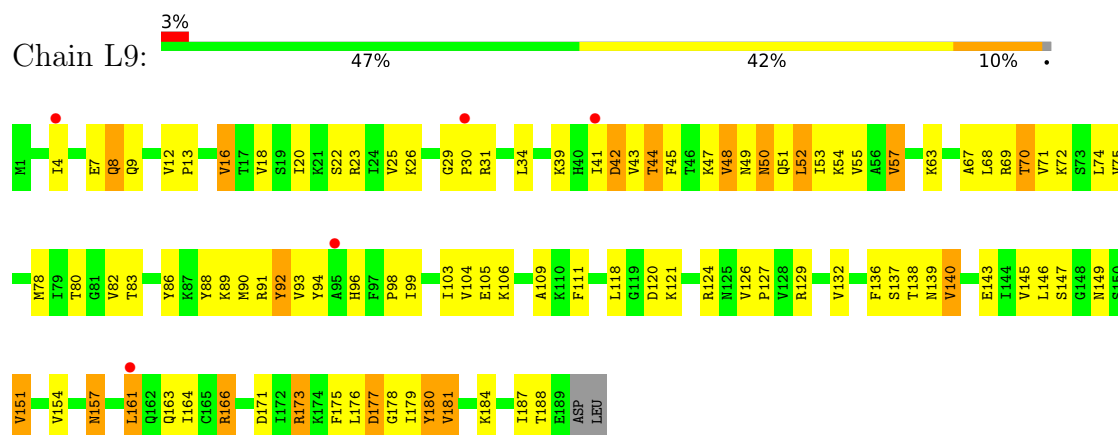
Chain L8:



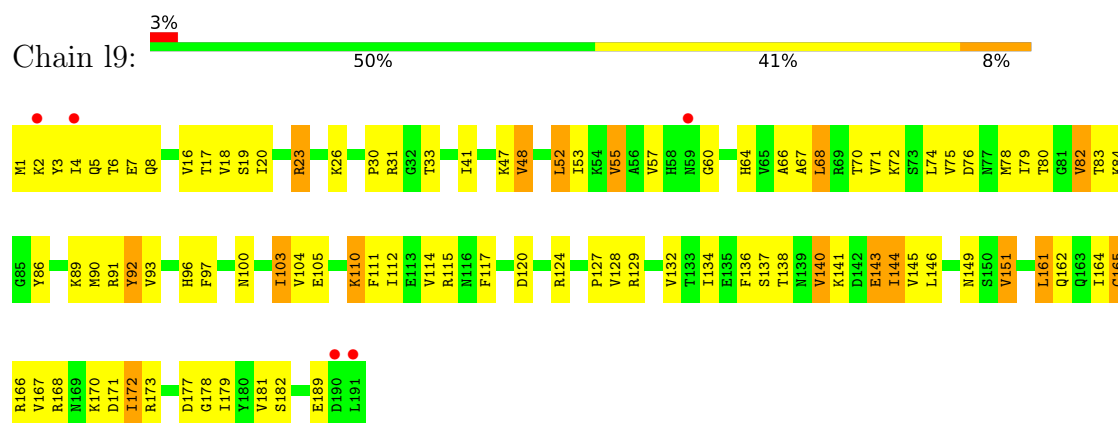
- Molecule 10: 60S ribosomal protein L8-A



• Molecule 11: 60S ribosomal protein L9-A

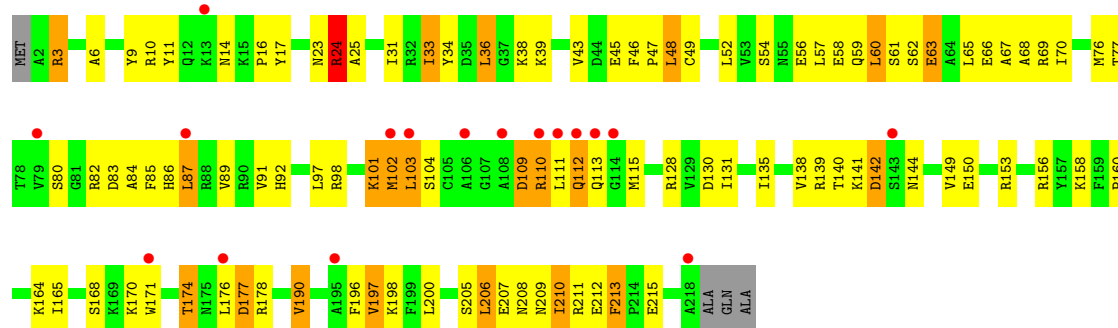


• Molecule 11: 60S ribosomal protein L9-A

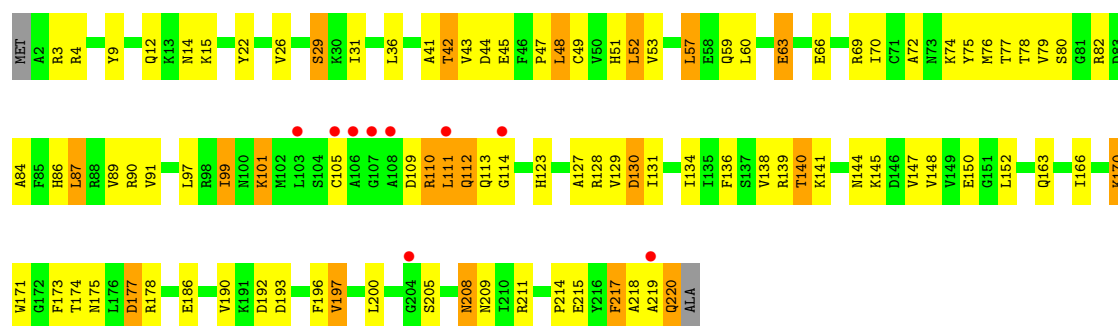


• Molecule 12: 60S ribosomal protein L10

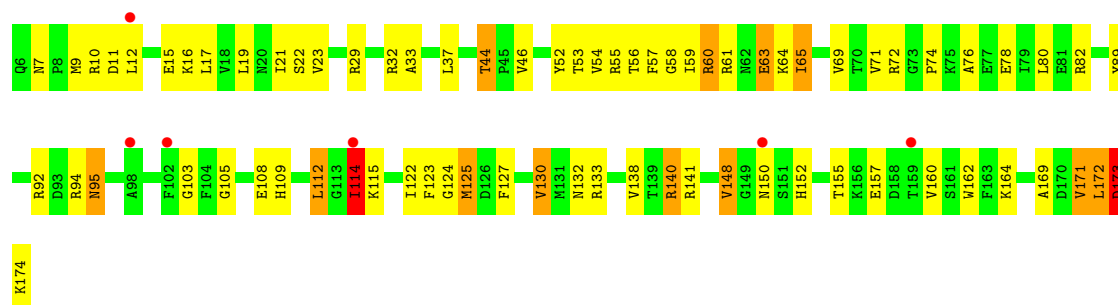




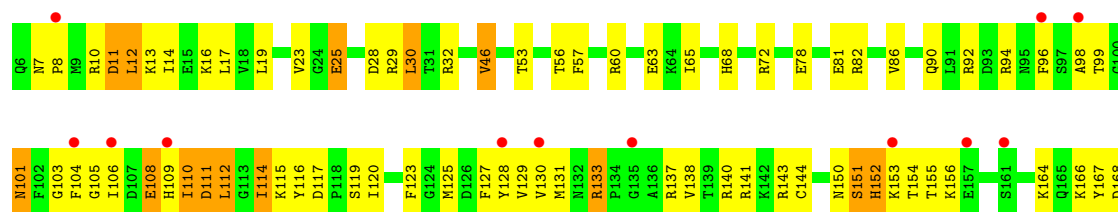
• Molecule 12: 60S ribosomal protein L10



• Molecule 13: 60S ribosomal protein L11-B



• Molecule 13: 60S ribosomal protein L11-B

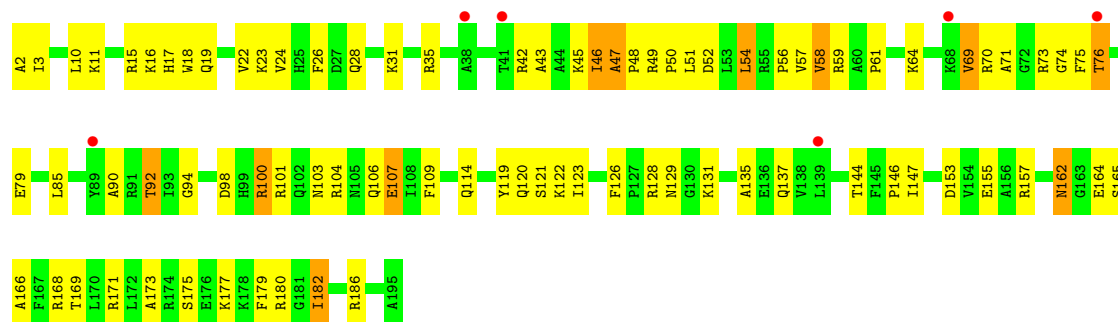




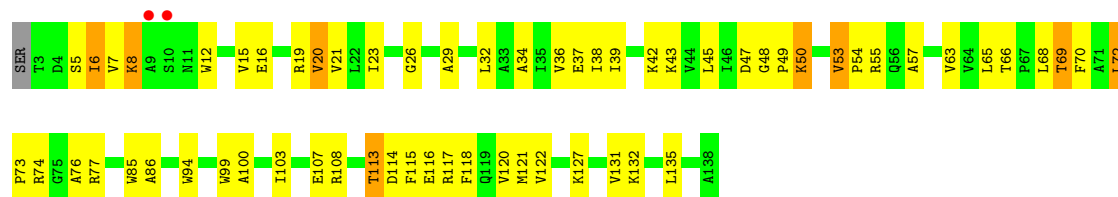
• Molecule 14: 60S ribosomal protein L13-A



• Molecule 14: 60S ribosomal protein L13-A



• Molecule 15: 60S ribosomal protein L14-A



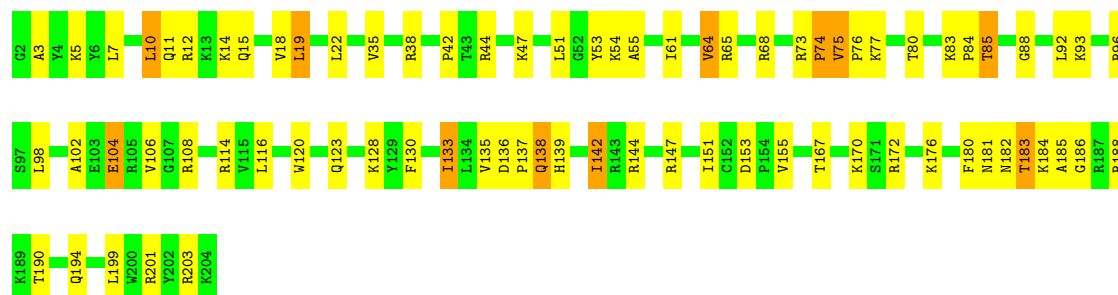
• Molecule 15: 60S ribosomal protein L14-A





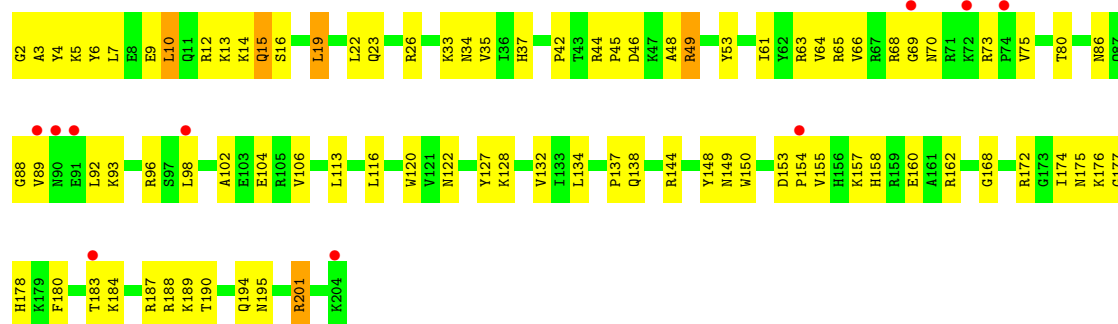
- Molecule 16: 60S ribosomal protein L15-A

Chain M5: 62% 33% 5%



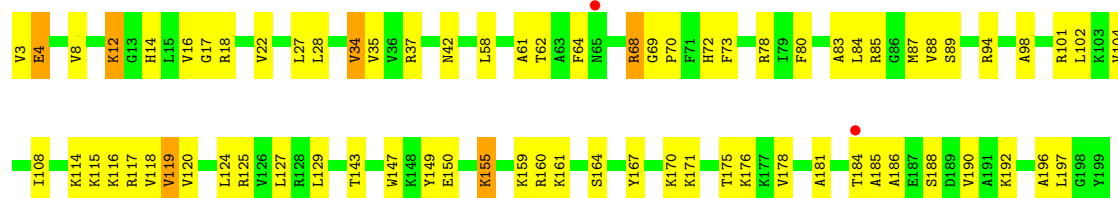
- Molecule 16: 60S ribosomal protein L15-A

Chain m5: 5% 57% 40%



- Molecule 17: 60S ribosomal protein L16-A

Chain M6: % 63% 34%



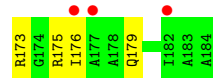
- Molecule 17: 60S ribosomal protein L16-A

Chain m6: % 68% 28%

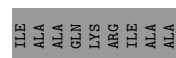
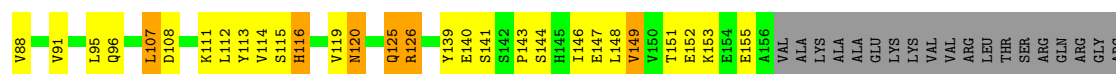
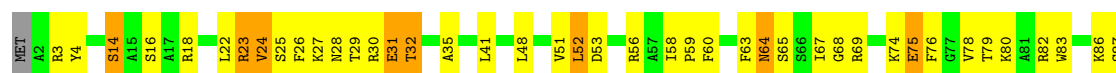




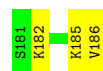
- Molecule 18: 60S ribosomal protein L17-A



- Molecule 18: 60S ribosomal protein L17-A

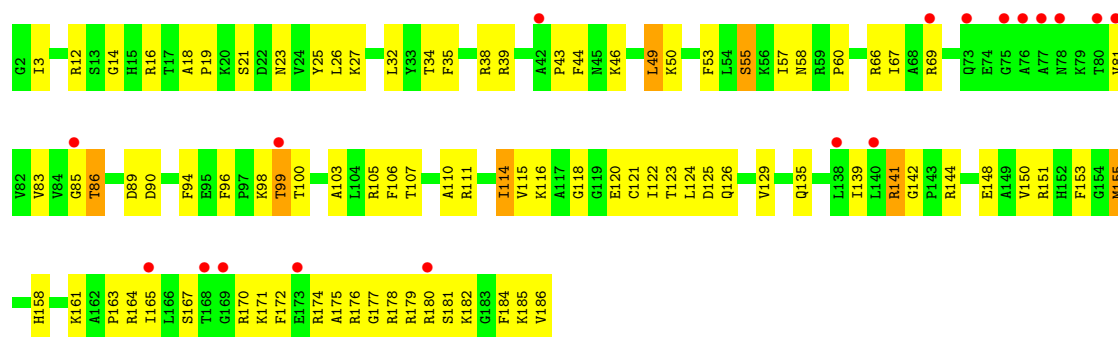


- Molecule 19: 60S ribosomal protein L18-A

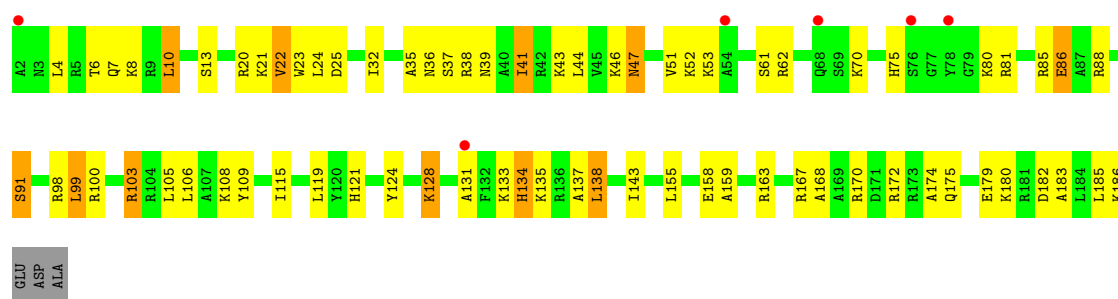


- Molecule 19: 60S ribosomal protein L18-A

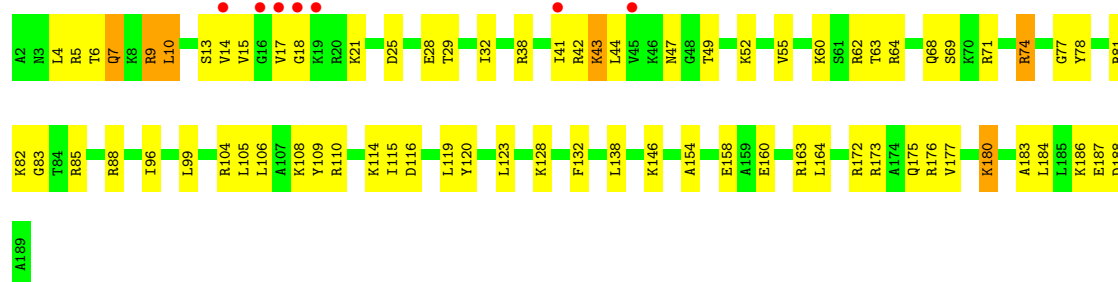




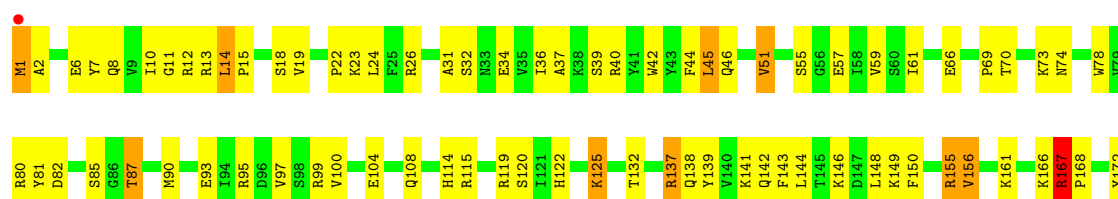
• Molecule 20: 60S ribosomal protein L19-A



• Molecule 20: 60S ribosomal protein L19-A

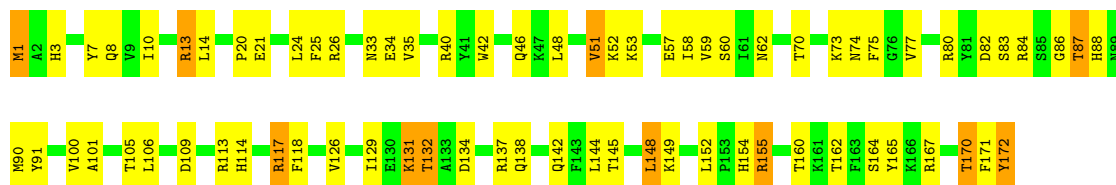


• Molecule 21: 60S ribosomal protein L20-A



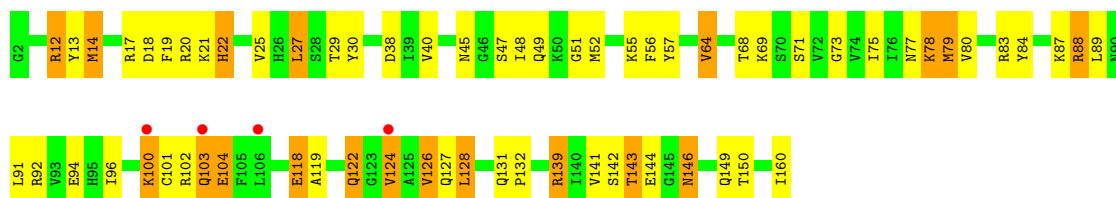
• Molecule 21: 60S ribosomal protein L20-A

Chain n0:  58% 36% 6%



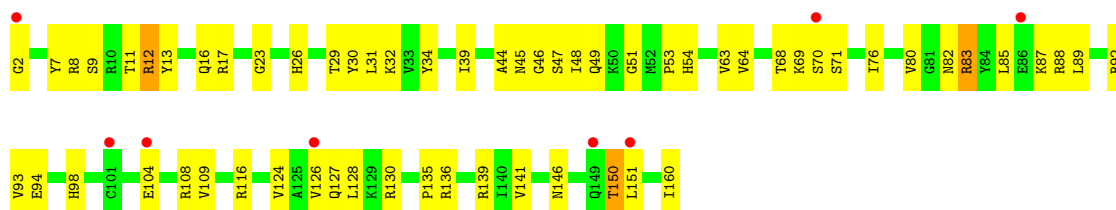
- Molecule 22: 60S ribosomal protein L21-A

Chain N1:  3% 58% 30% 12%



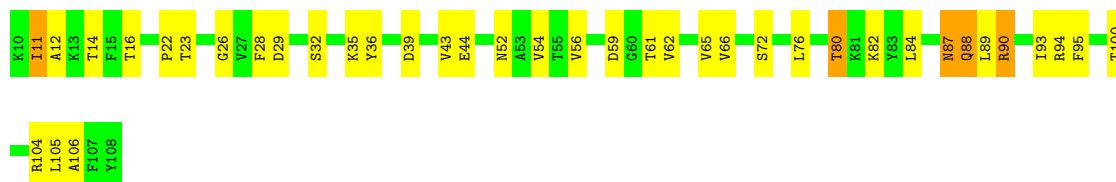
- Molecule 22: 60S ribosomal protein L21-A

Chain n1:  5% 62% 36% 0%



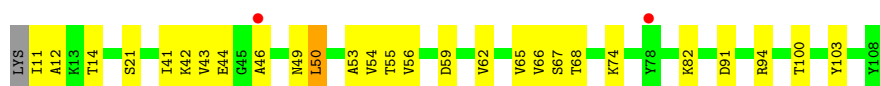
- Molecule 23: 60S ribosomal protein L22-A

Chain N2:  61% 34% 5%



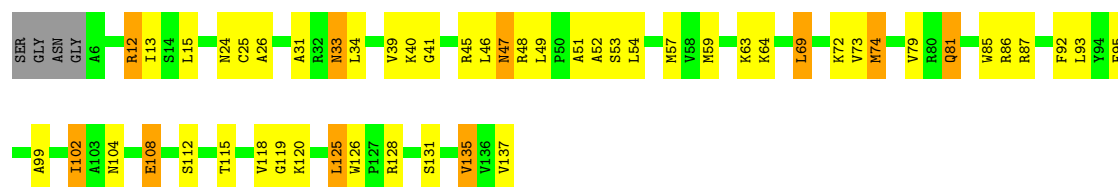
- Molecule 23: 60S ribosomal protein L22-A

Chain n2:  2% 72% 26% 0%



- Molecule 24: 60S ribosomal protein L23-A

Chain N3:  59% 31% 7% .



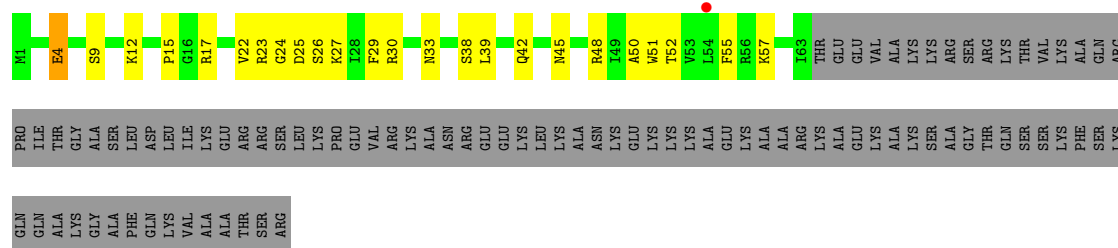
- Molecule 24: 60S ribosomal protein L23-A

Chain n3:  74% 22% .



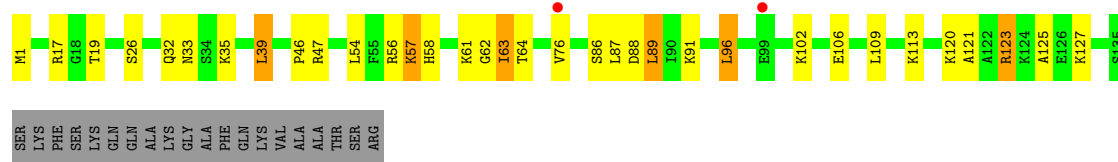
- Molecule 25: 60S ribosomal protein L24-A

Chain N4:  25% 15% 59% .



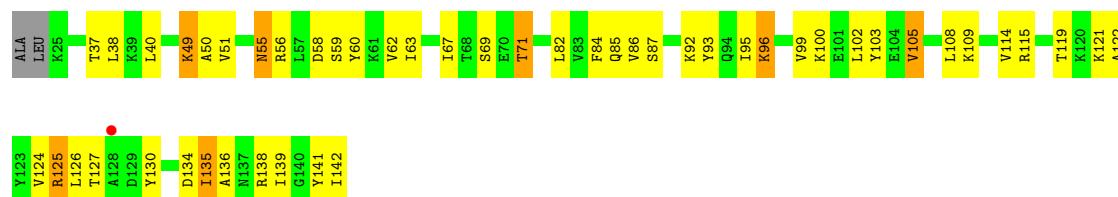
- Molecule 25: 60S ribosomal protein L24-A

Chain n4:  65% 18% 13% .

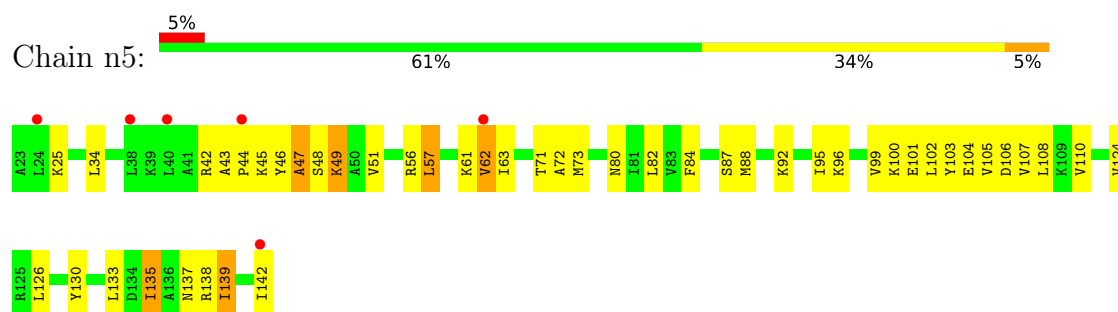


- Molecule 26: 60S ribosomal protein L25

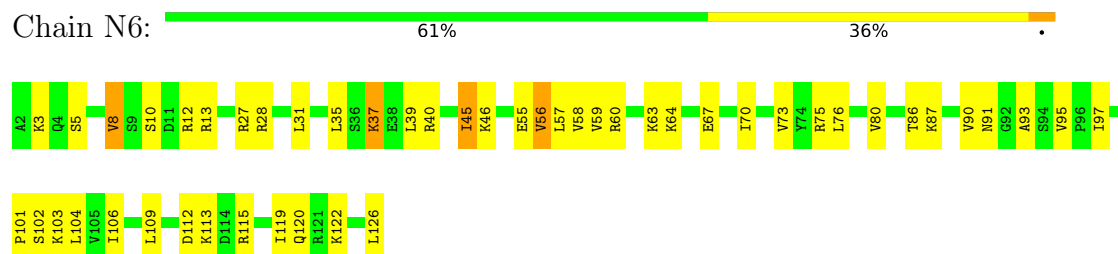
Chain N5:  58% 35% 6% .



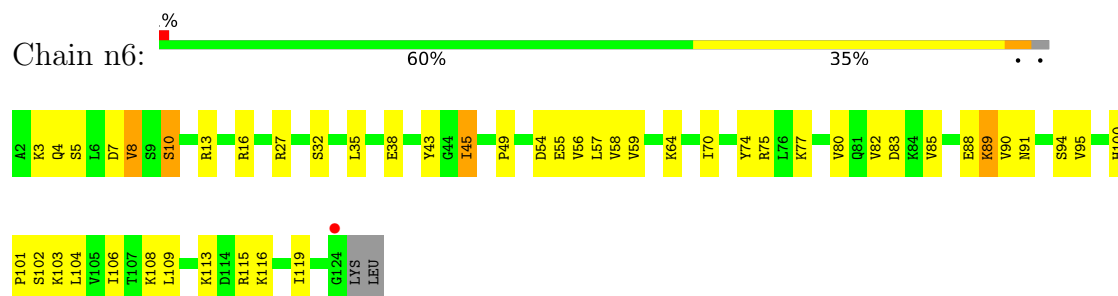
- Molecule 26: 60S ribosomal protein L25



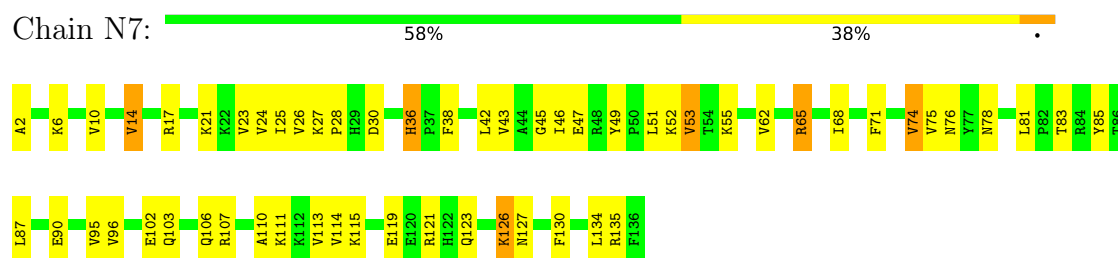
- Molecule 27: 60S ribosomal protein L26-A



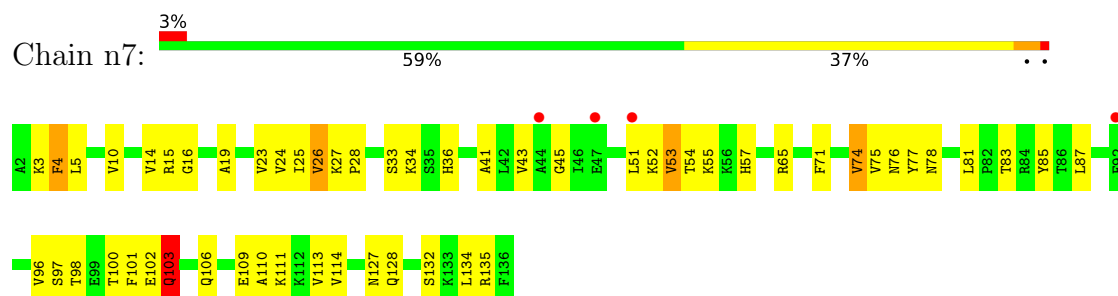
- Molecule 27: 60S ribosomal protein L26-A



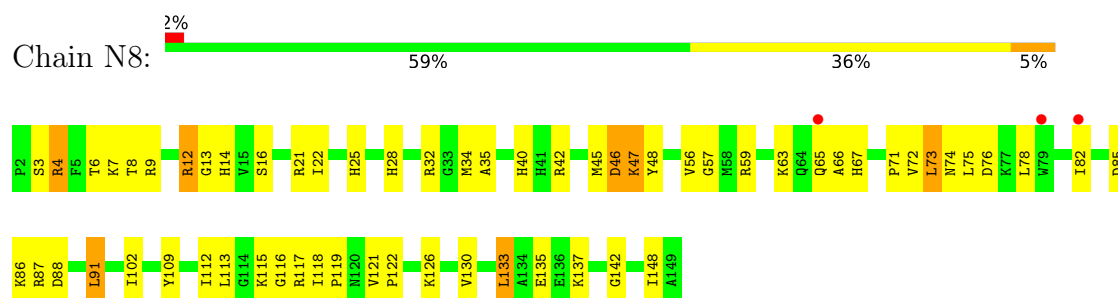
- Molecule 28: 60S ribosomal protein L27-A



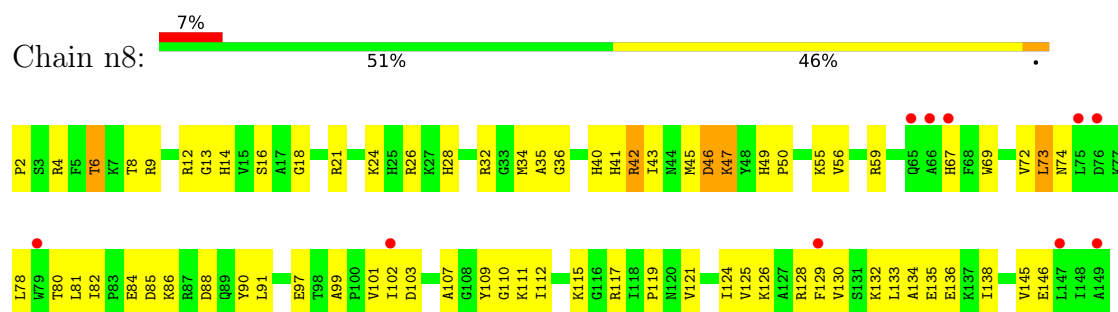
- Molecule 28: 60S ribosomal protein L27-A



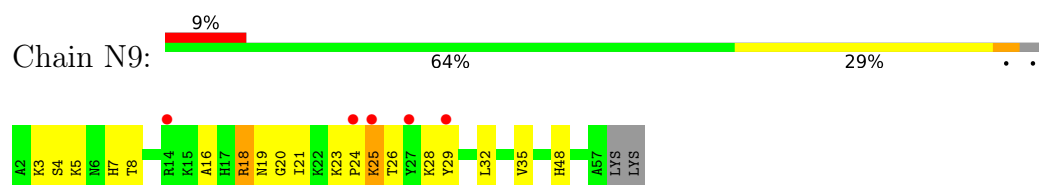
- Molecule 29: 60S ribosomal protein L28



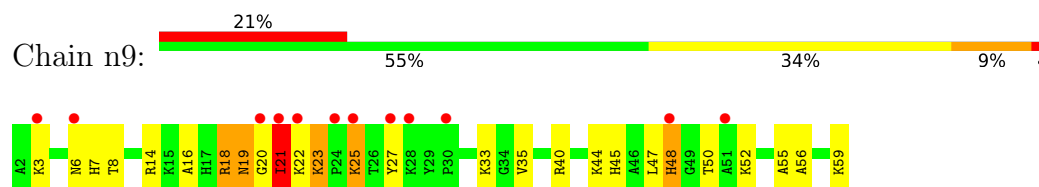
- Molecule 29: 60S ribosomal protein L28



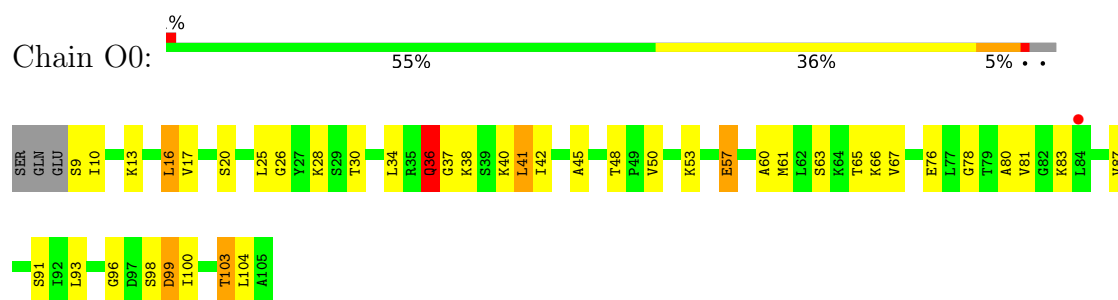
- Molecule 30: 60S ribosomal protein L29



- Molecule 30: 60S ribosomal protein L29

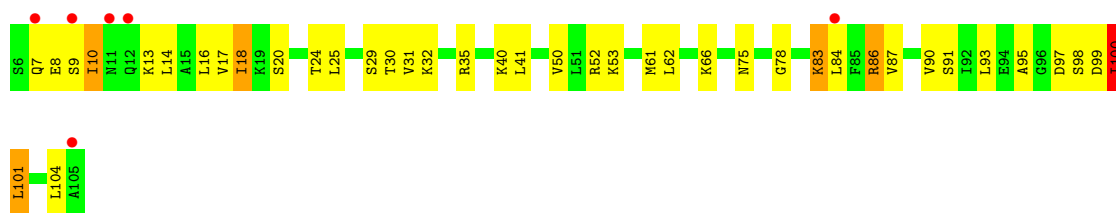


- Molecule 31: 60S ribosomal protein L30

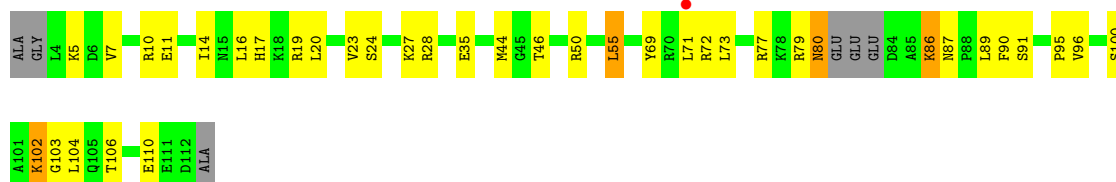


- Molecule 31: 60S ribosomal protein L30

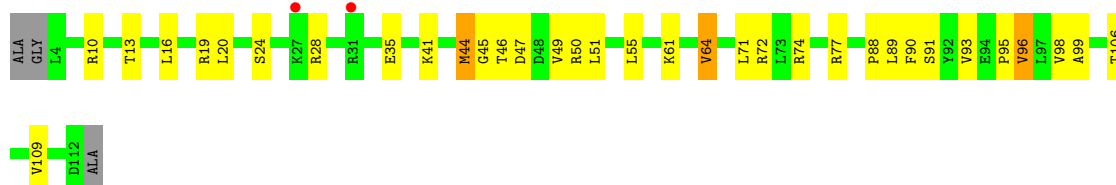




• Molecule 32: 60S ribosomal protein L31-A



• Molecule 32: 60S ribosomal protein L31-A



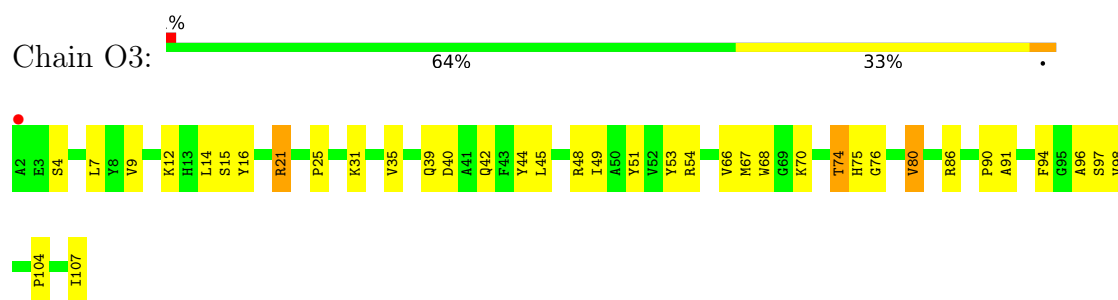
• Molecule 33: 60S ribosomal protein L32



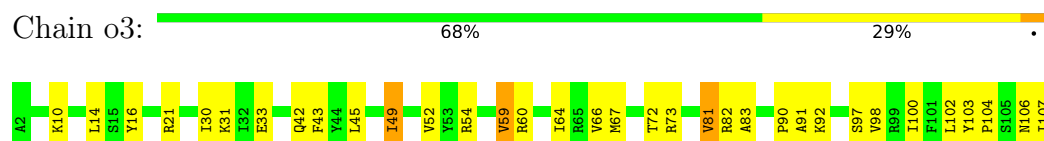
• Molecule 33: 60S ribosomal protein L32



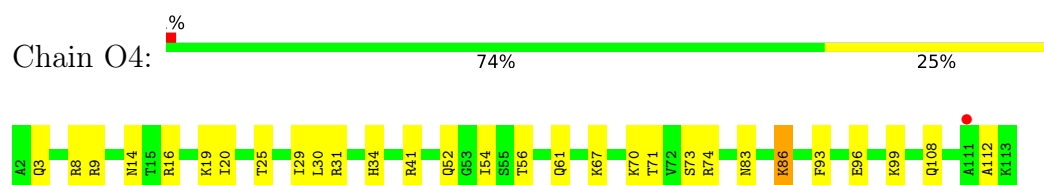
• Molecule 34: 60S ribosomal protein L33-A



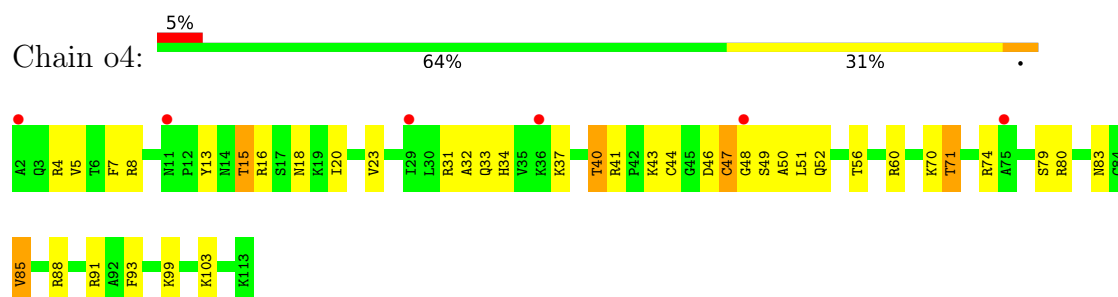
- Molecule 34: 60S ribosomal protein L33-A



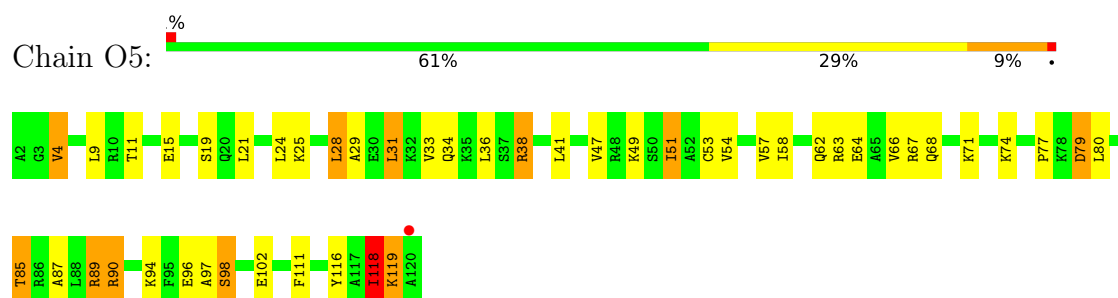
- Molecule 35: 60S ribosomal protein L34-A



- Molecule 35: 60S ribosomal protein L34-A

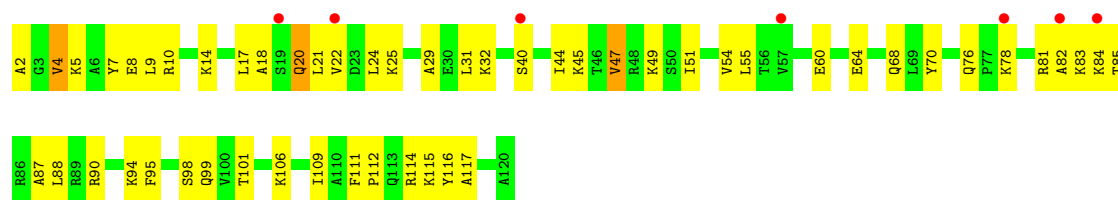


- Molecule 36: 60S ribosomal protein L35-A

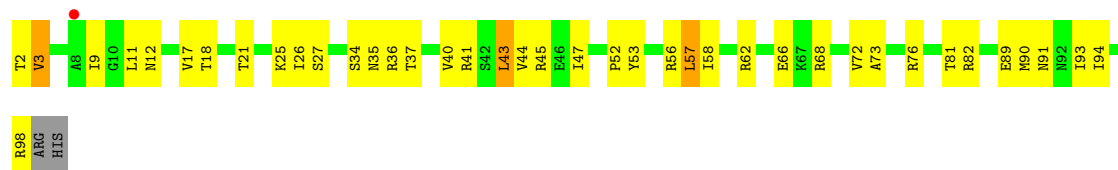


- Molecule 36: 60S ribosomal protein L35-A

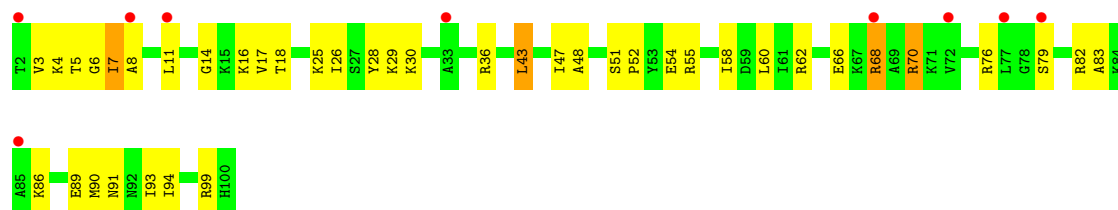




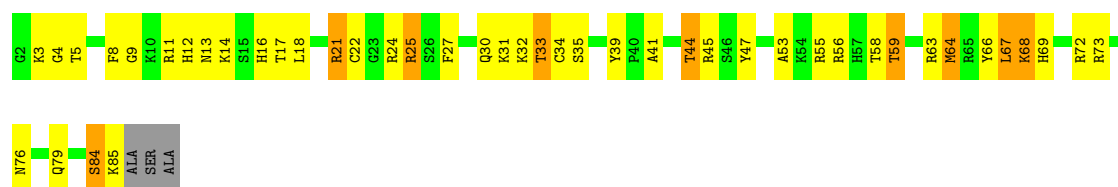
• Molecule 37: 60S ribosomal protein L36-A



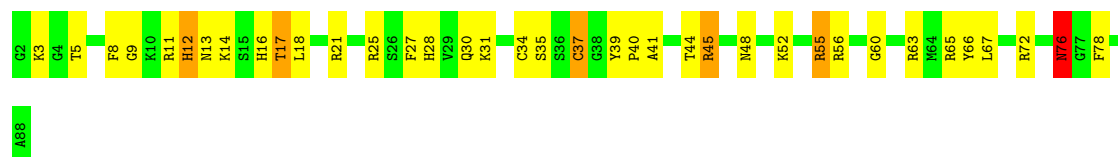
• Molecule 37: 60S ribosomal protein L36-A



• Molecule 38: 60S ribosomal protein L37-A

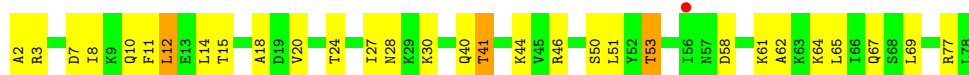


• Molecule 38: 60S ribosomal protein L37-A

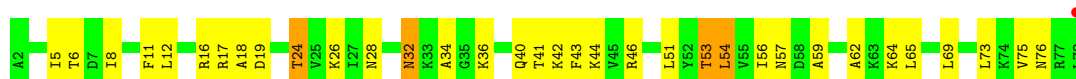


• Molecule 39: 60S ribosomal protein L38





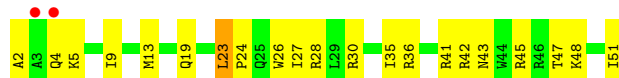
- Molecule 39: 60S ribosomal protein L38



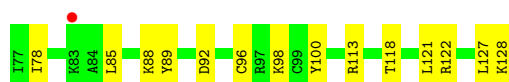
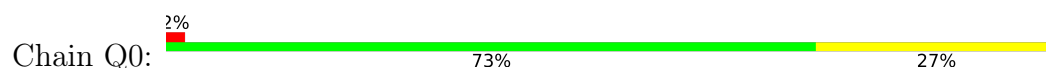
- Molecule 40: 60S ribosomal protein L39



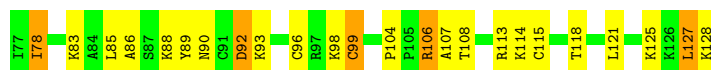
- Molecule 40: 60S ribosomal protein L39



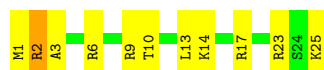
- Molecule 41: Ubiquitin-60S ribosomal protein L40



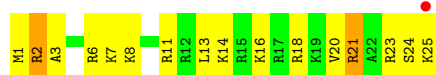
- Molecule 41: Ubiquitin-60S ribosomal protein L40



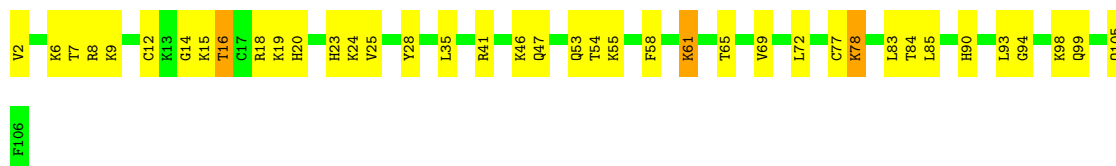
- Molecule 42: 60S ribosomal protein L41-B



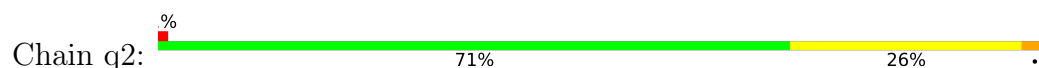
- Molecule 42: 60S ribosomal protein L41-B



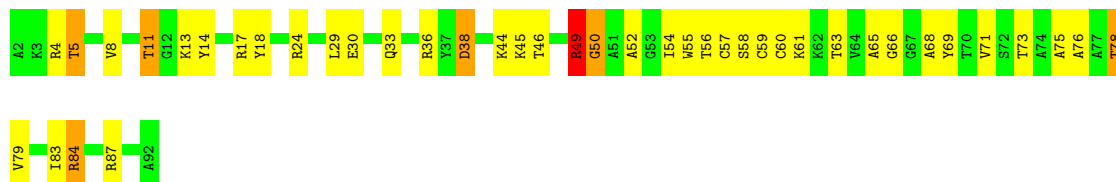
- Molecule 43: 60S ribosomal protein L42-A



- Molecule 43: 60S ribosomal protein L42-A



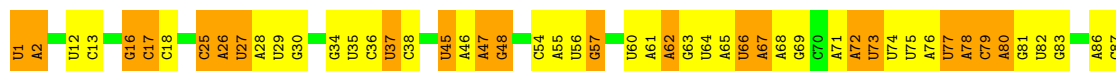
- Molecule 44: 60S ribosomal protein L43-A



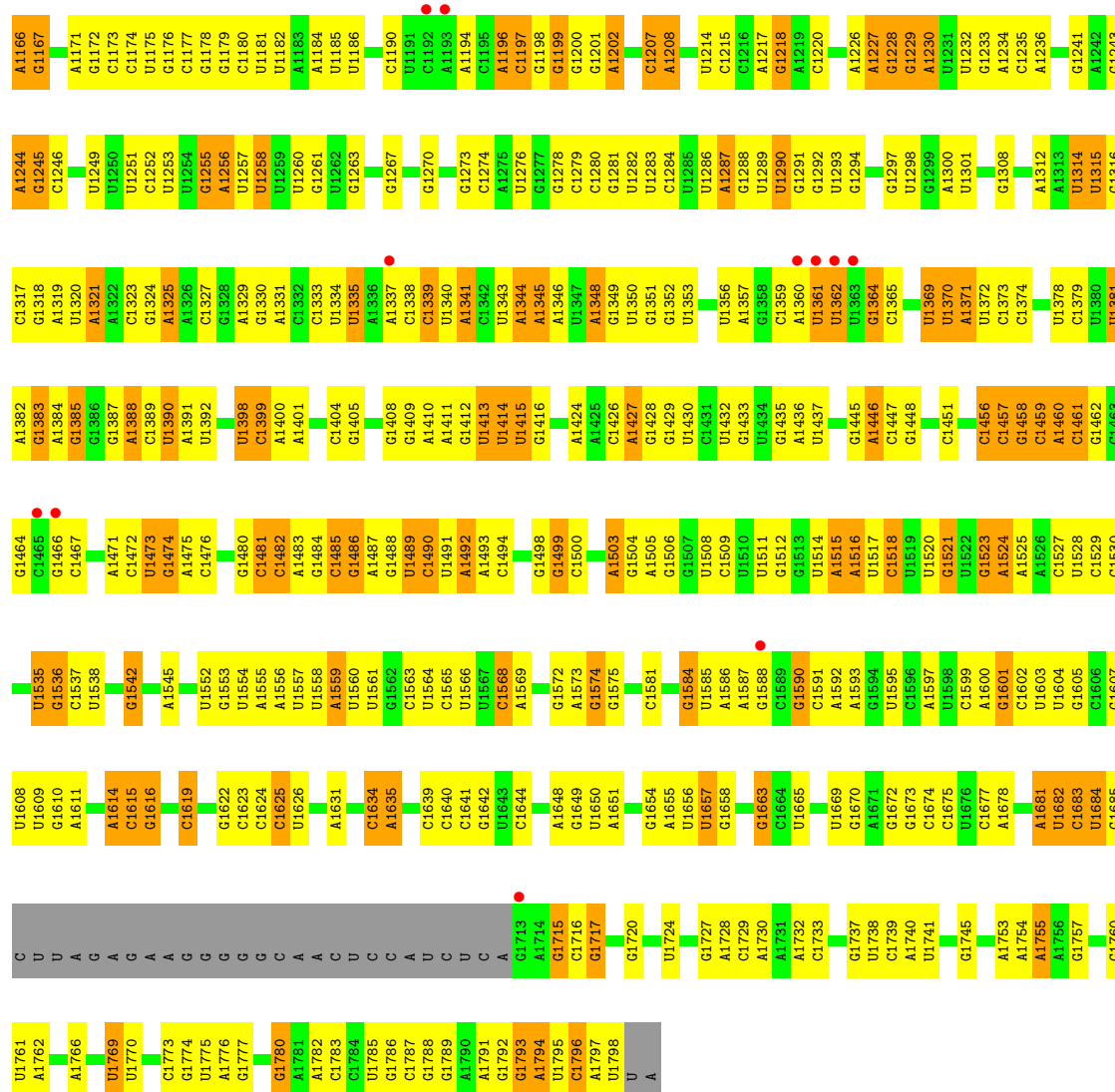
- Molecule 44: 60S ribosomal protein L43-A



- Molecule 45: 18S ribosomal RNA

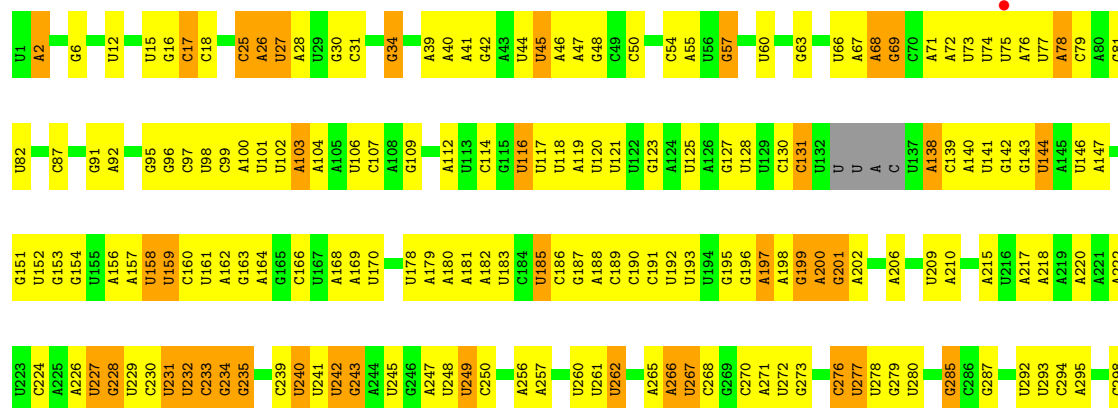


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U1142	U1142	G1042	U982	U913	U	U							
U1143	U1143	U1043	U983	U914	U	U							
U1144	U1144	G1043	U984	U915	U	U							
U1145	U1145	U1044	U985	U916	U	U							
U1146	U1146	G1044	U986	U917	U	U	</						

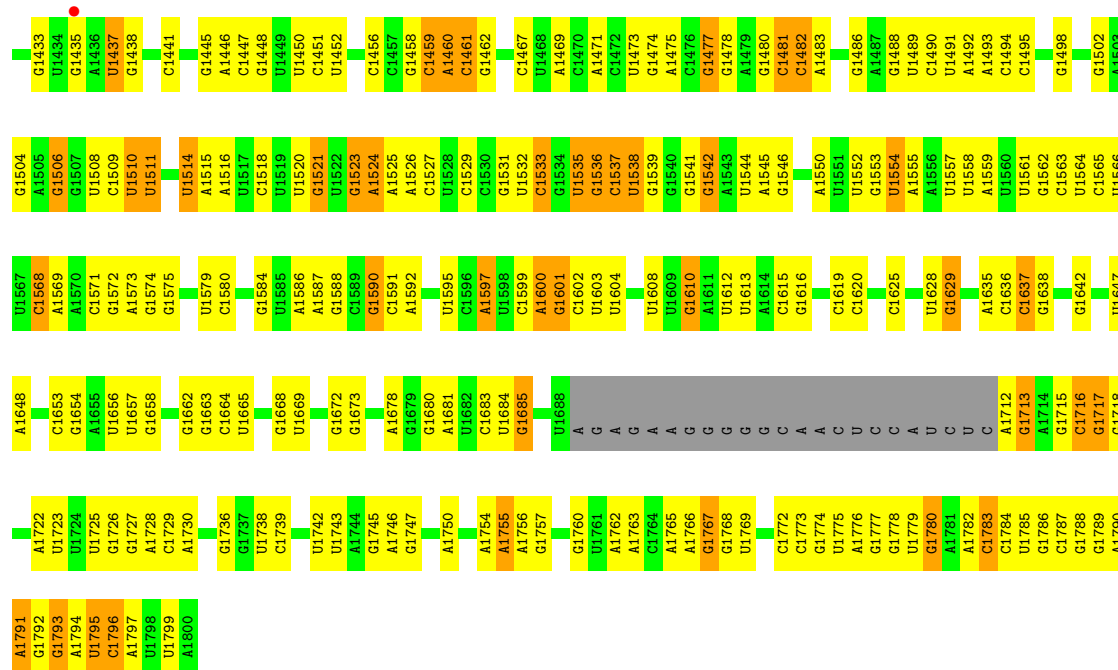


• Molecule 45: 18S ribosomal RNA

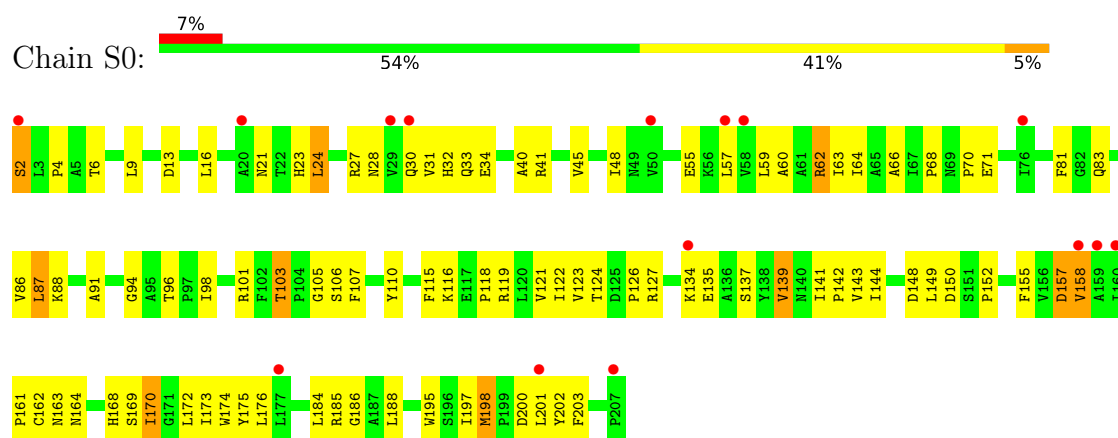
Chain 6: 39% 42% 13% 6%



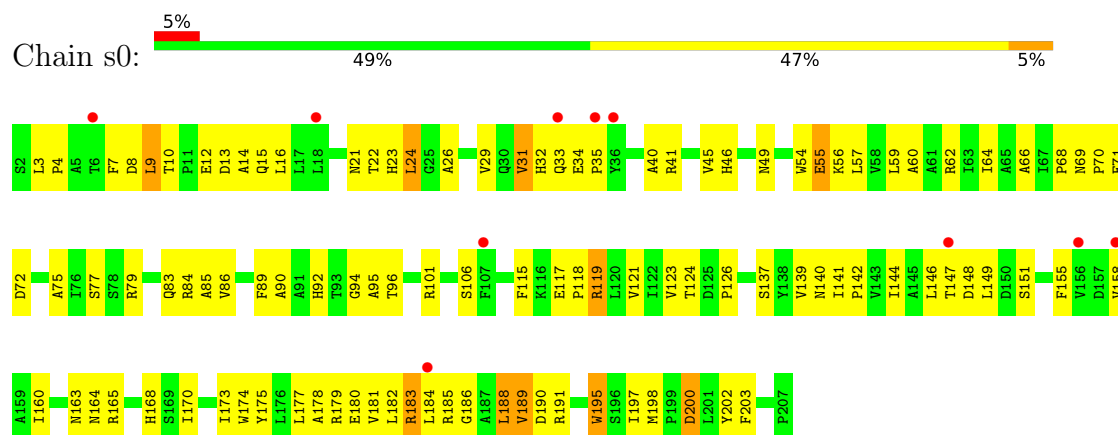
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U1282	G1283	U1266	G1267	U1270	G1271	U1272	U1273	C1274	A1275	U1276	U1277	U1278	U1279	U1280	U1281	U1282	U1283	U1284	U1285	U1286	U1287	U1288	U1289	U1290	U1291	U1292	U1293	U1294	U1295	U1296	U1297	U1298	U1299	U1300	U1301	U1302	U1303	U1304	U1305	U1306	U1307	U1308	U1309	U1310	U1311	U1312	U1313	U1314	U1315	U1316	U1317	U1318	U1319	U1320	U1321	U1322	U1323	U1324	U1325	U1326	U1327	U1328	U1329	U1330	U1331	U1332	U1333	U1334	U1335	U1336	U1337	U1338	U1339	U1340	U1341	U1342	U1343	U1344	U1345	U1346	U1347	U1348	U1349	U1350	U1351	U1352	U1353																																																																																																																																																																																																																																																																																																																				
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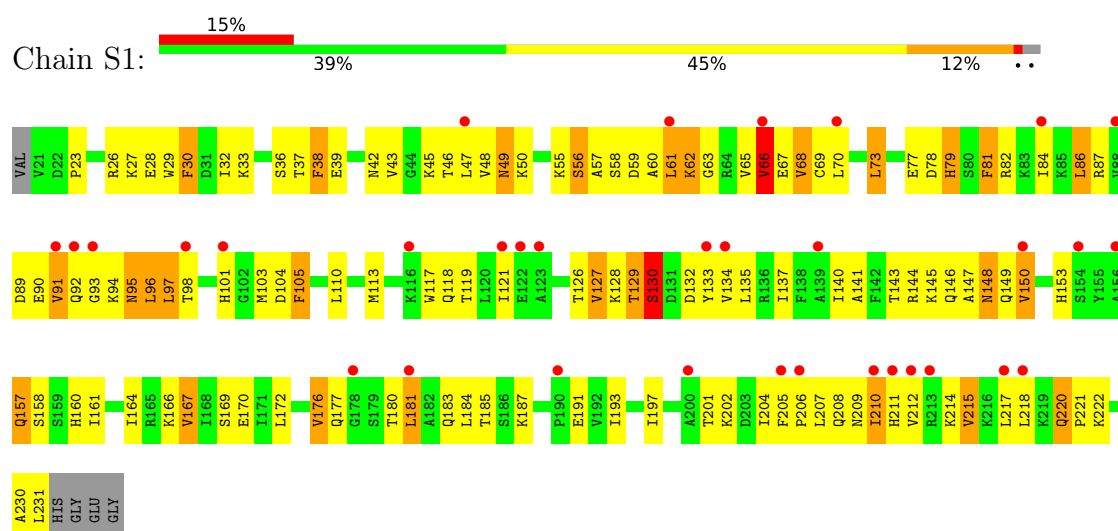
• Molecule 46: 40S ribosomal protein S0-A



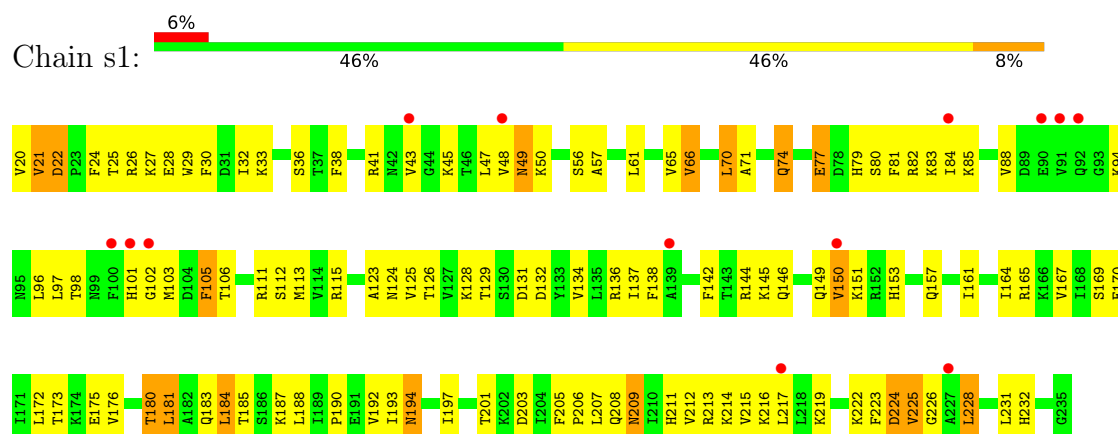
• Molecule 46: 40S ribosomal protein S0-A



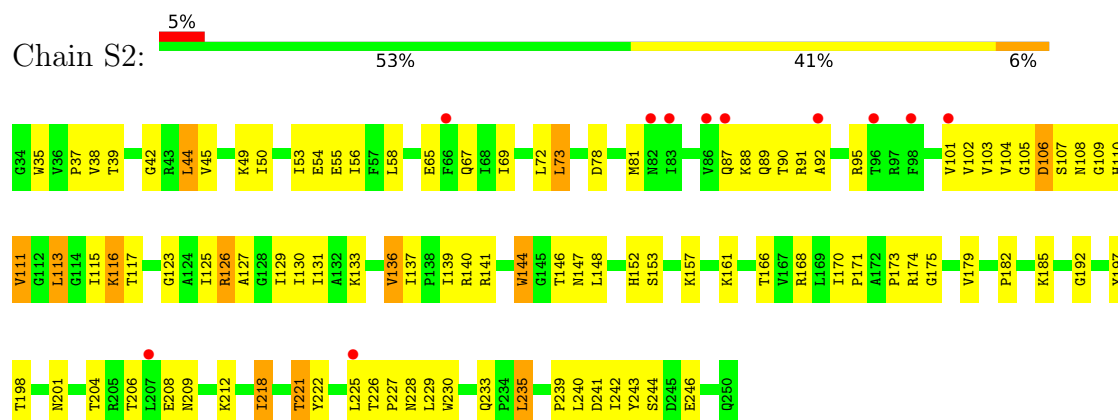
• Molecule 47: 40S ribosomal protein S1-A



• Molecule 47: 40S ribosomal protein S1-A

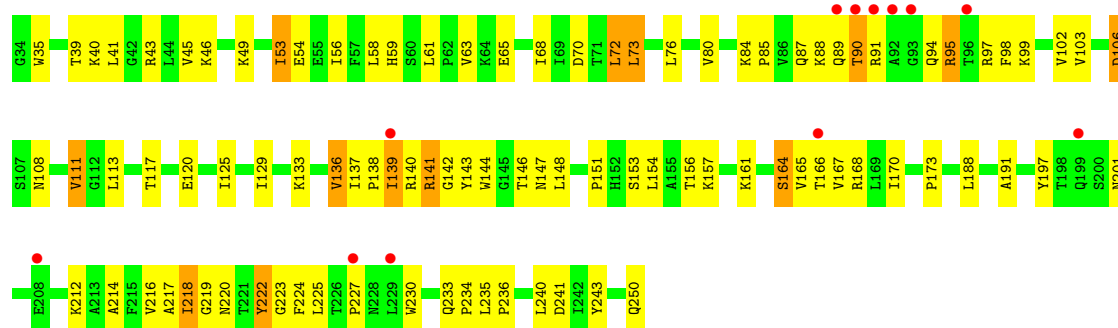


• Molecule 48: 40S ribosomal protein S2

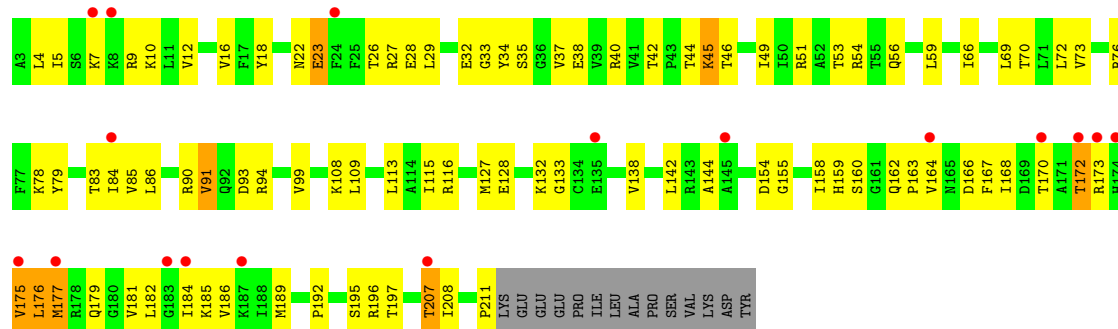


• Molecule 48: 40S ribosomal protein S2

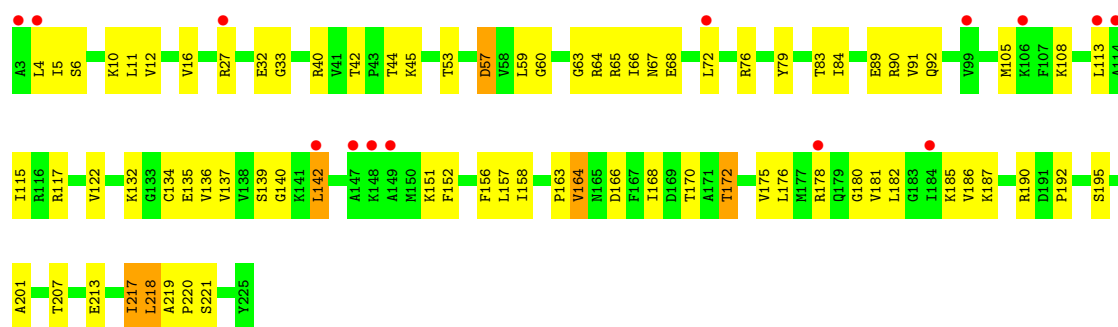




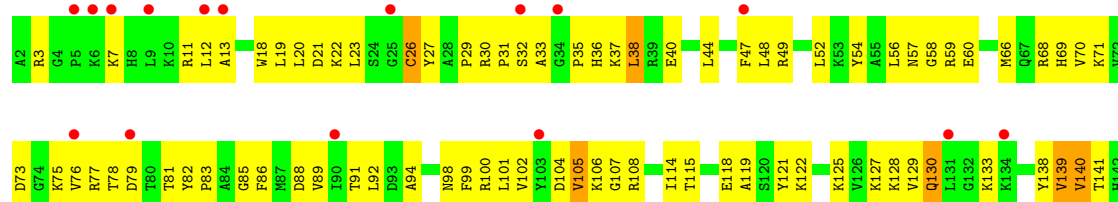
- Molecule 49: 40S ribosomal protein S3

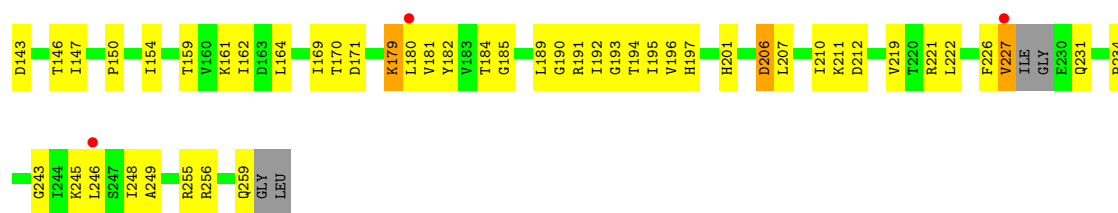


- Molecule 49: 40S ribosomal protein S3

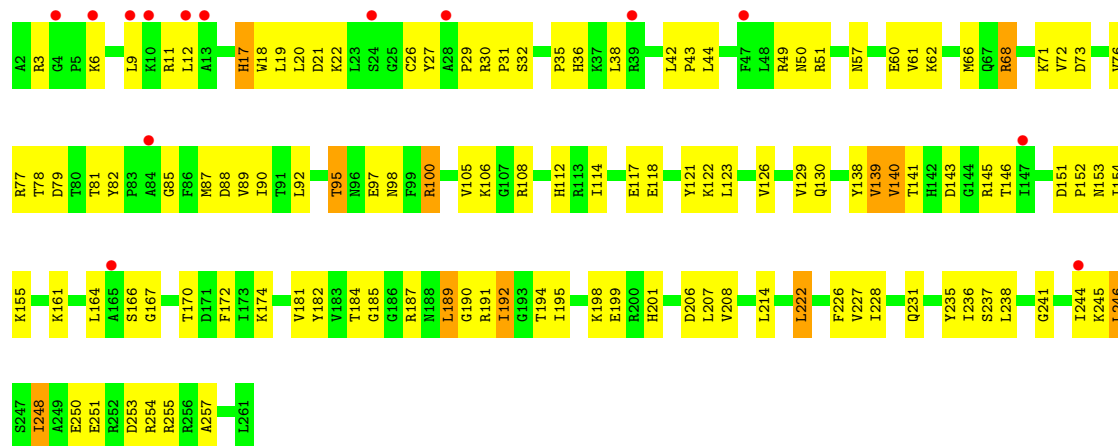


- Molecule 50: 40S ribosomal protein S4-A

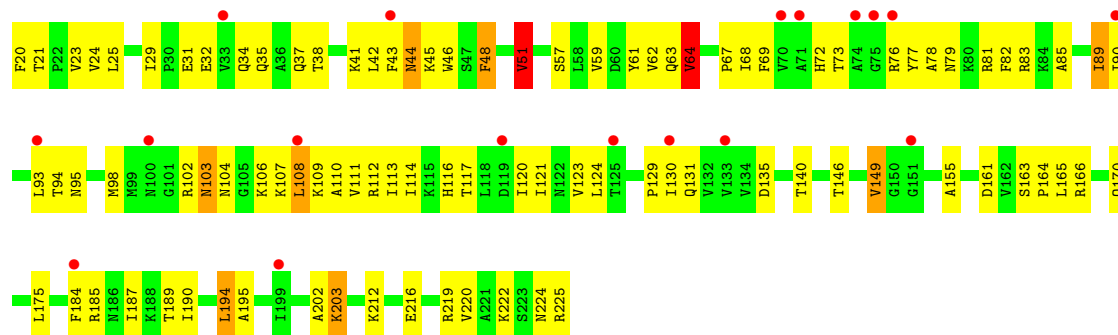




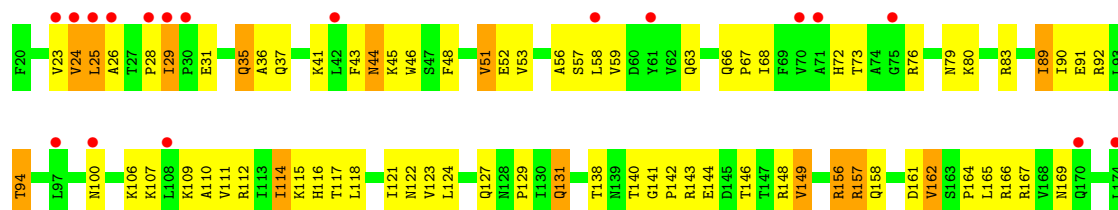
• Molecule 50: 40S ribosomal protein S4-A

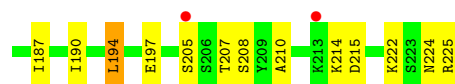


• Molecule 51: 40S ribosomal protein S5

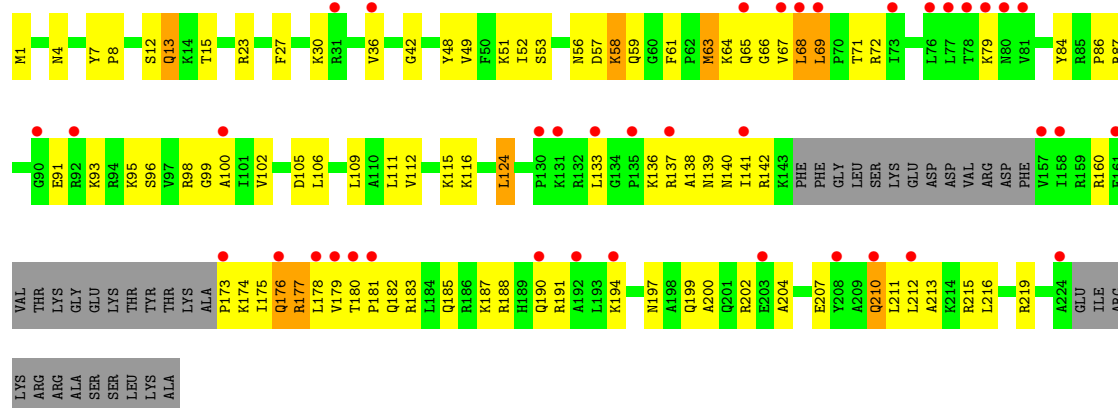


• Molecule 51: 40S ribosomal protein S5

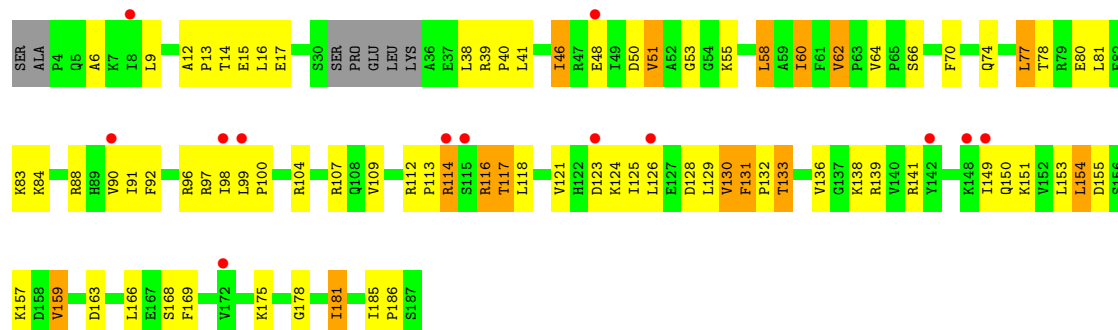




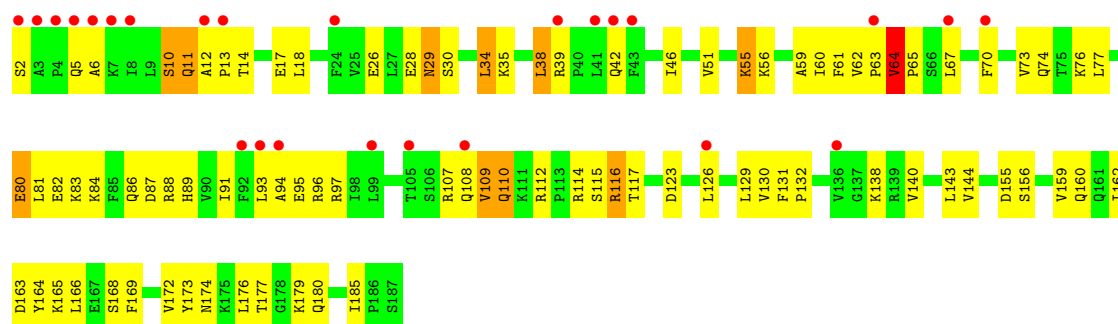
• Molecule 52: 40S ribosomal protein S6-A



• Molecule 53: 40S ribosomal protein S7-A

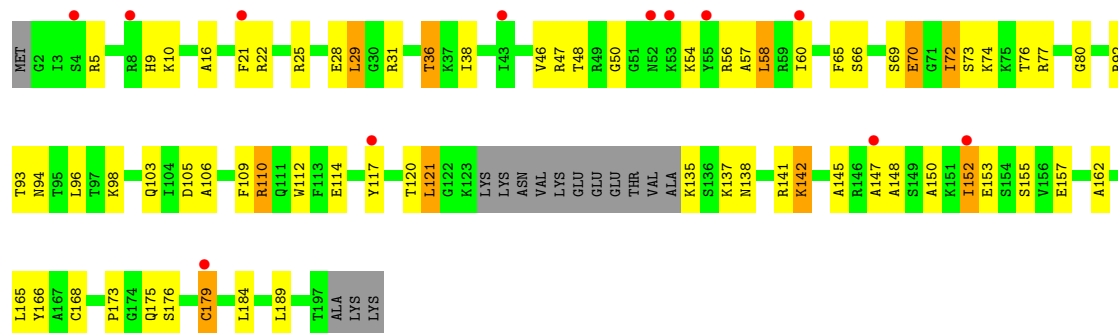


• Molecule 53: 40S ribosomal protein S7-A



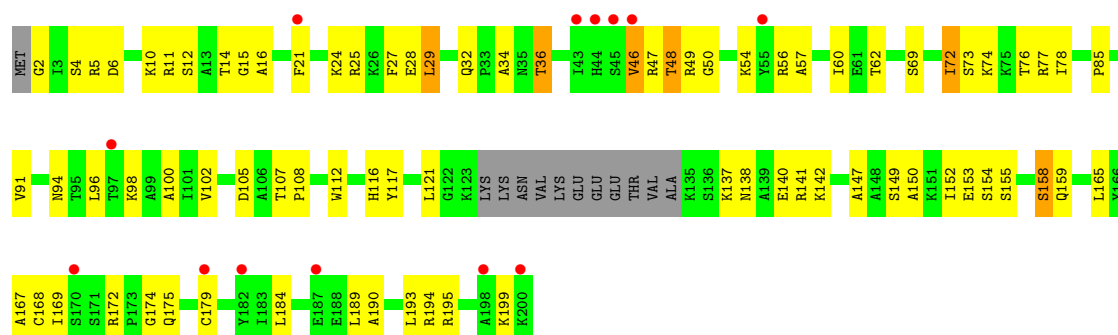
• Molecule 54: 40S ribosomal protein S8-A

Chain S8: 



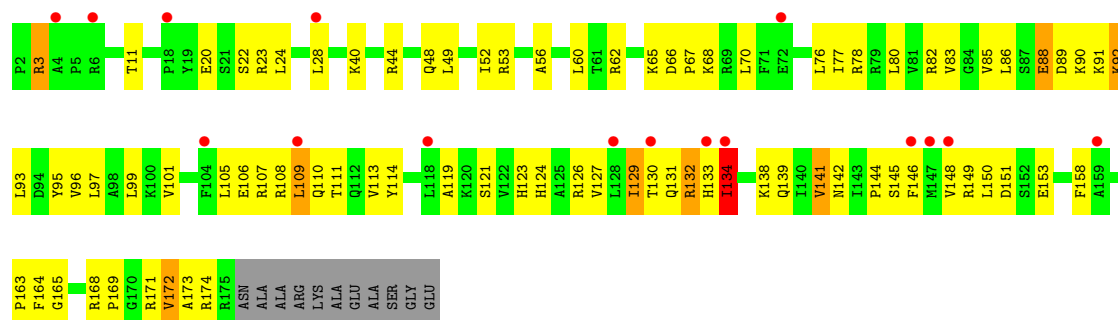
• Molecule 54: 40S ribosomal protein S8-A

Chain s8: 



• Molecule 55: 40S ribosomal protein S9-A

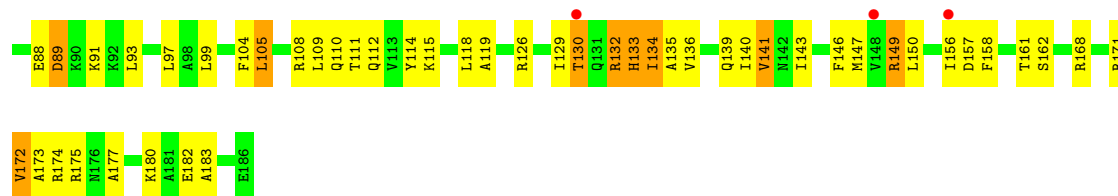
Chain S9: 



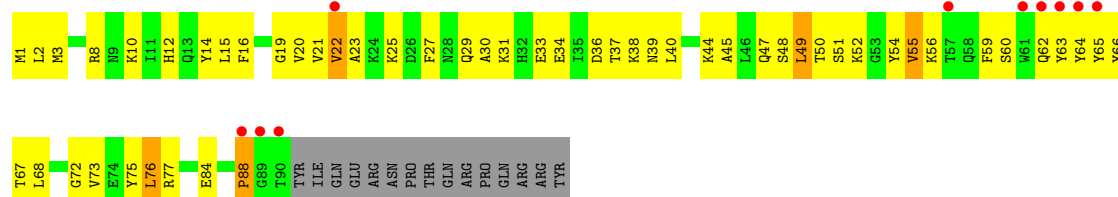
• Molecule 55: 40S ribosomal protein S9-A

Chain s9: 

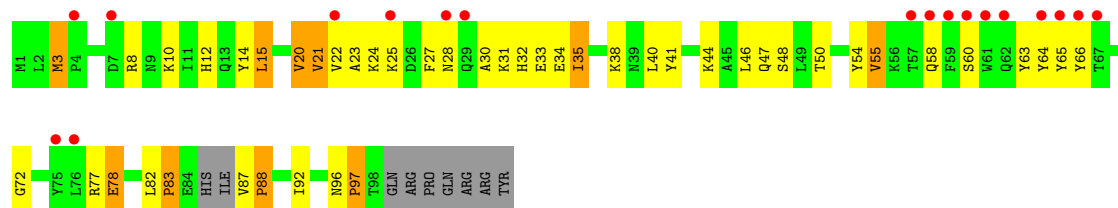




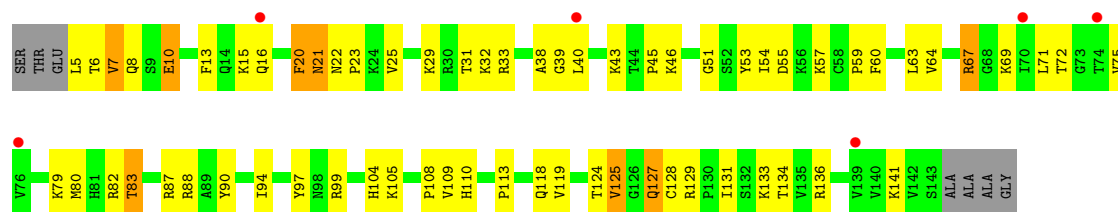
• Molecule 56: 40S ribosomal protein S10-A



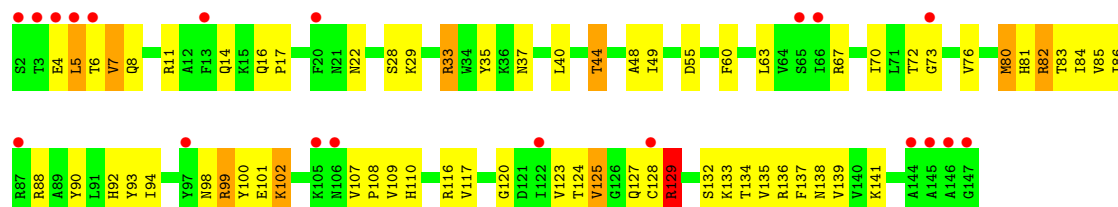
• Molecule 56: 40S ribosomal protein S10-A



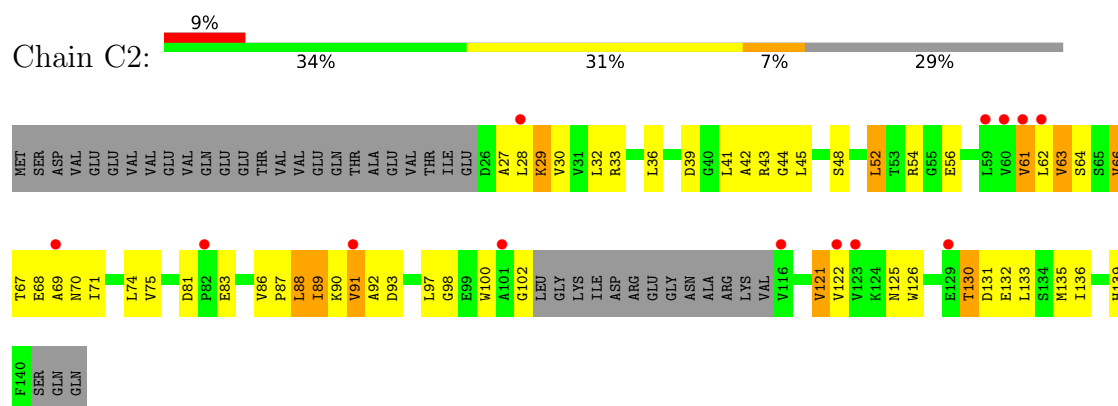
• Molecule 57: 40S ribosomal protein S11-A



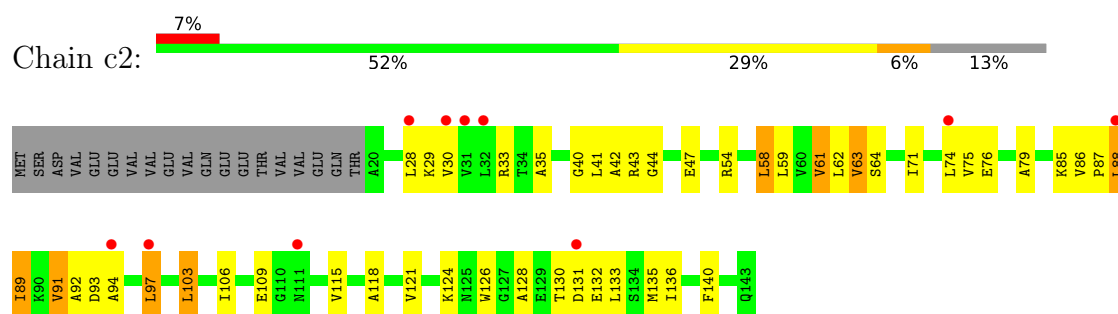
• Molecule 57: 40S ribosomal protein S11-A



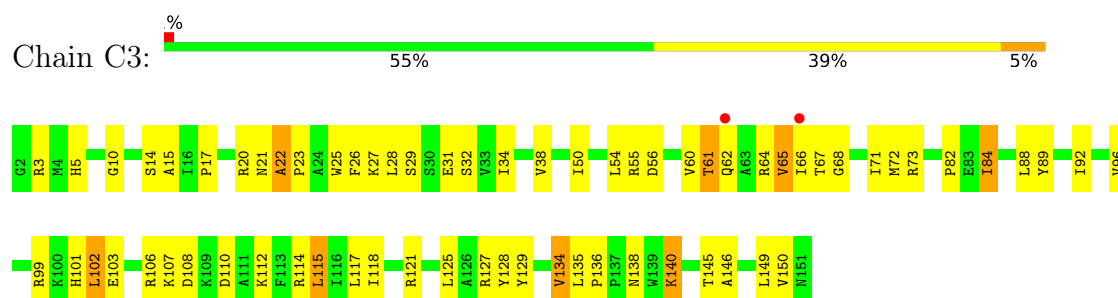
- Molecule 58: 40S ribosomal protein S12



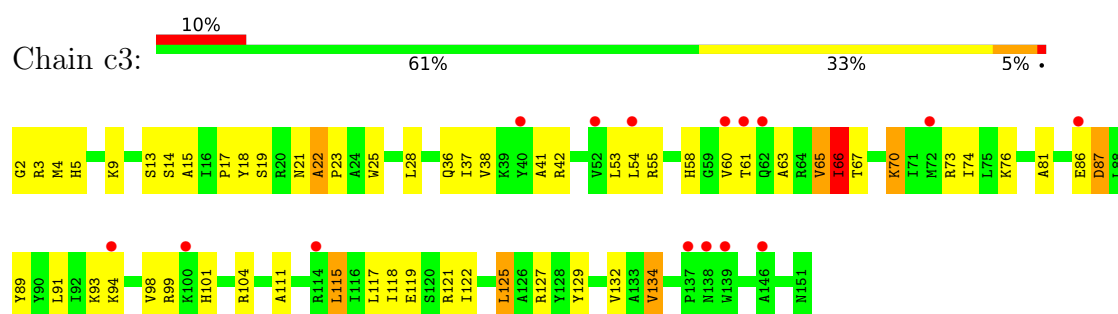
- Molecule 58: 40S ribosomal protein S12



- Molecule 59: 40S ribosomal protein S13

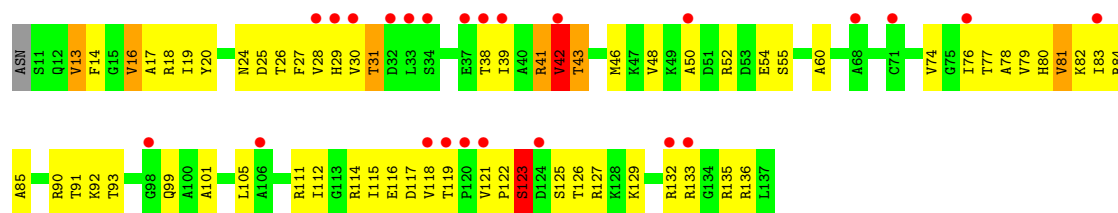


- Molecule 59: 40S ribosomal protein S13

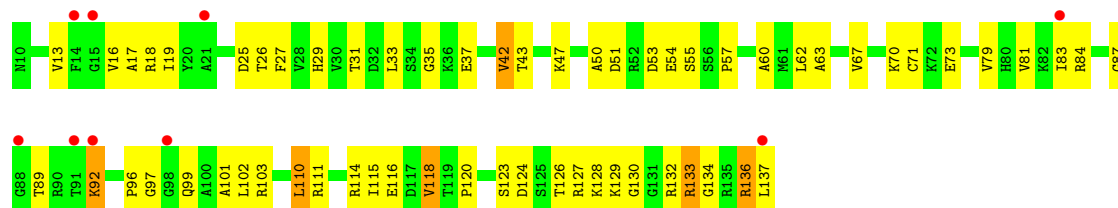


- Molecule 60: 40S ribosomal protein S14-B

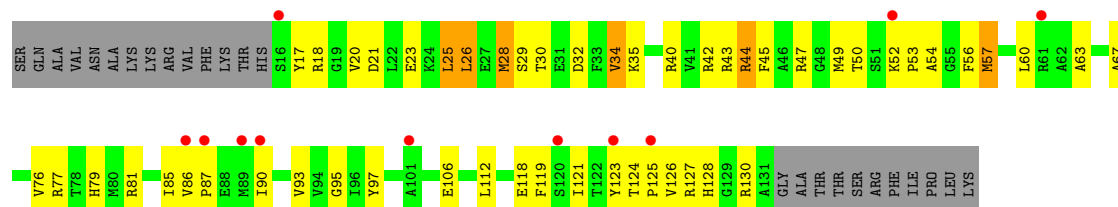




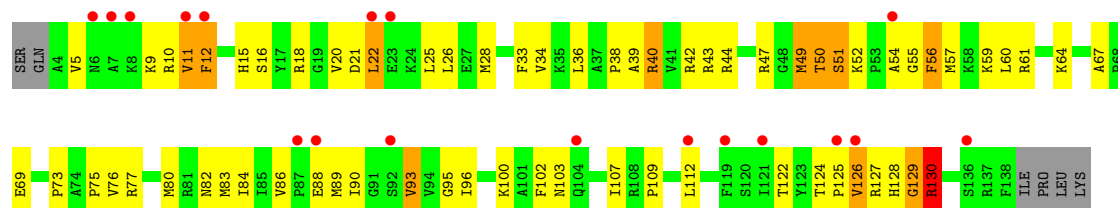
• Molecule 60: 40S ribosomal protein S14-B



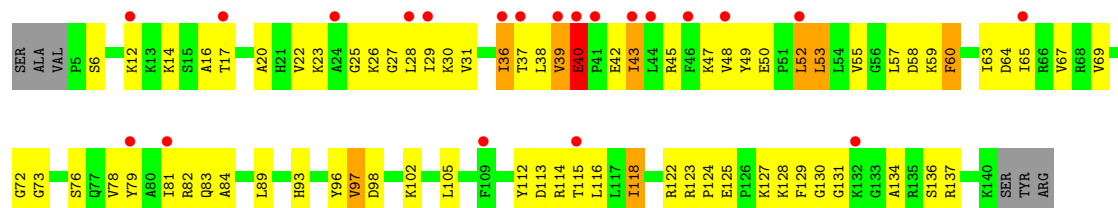
• Molecule 61: 40S ribosomal protein S15



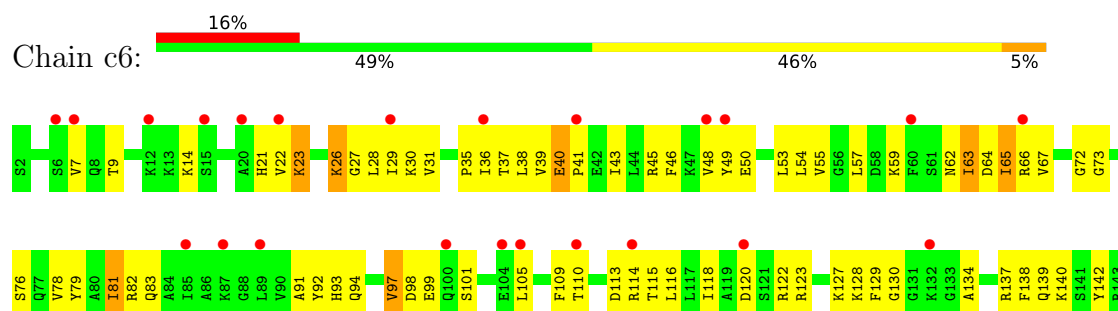
• Molecule 61: 40S ribosomal protein S15



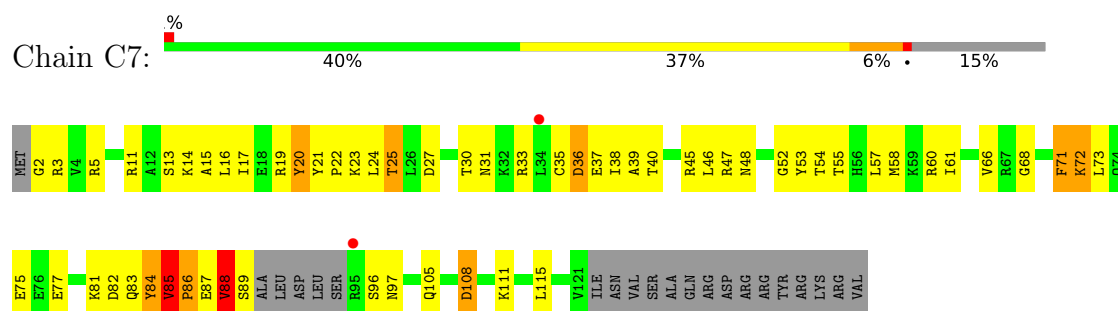
• Molecule 62: 40S ribosomal protein S16-A



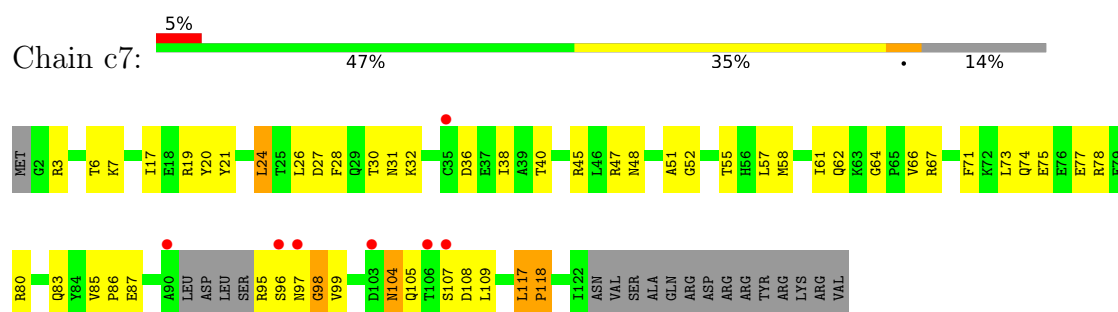
- Molecule 62: 40S ribosomal protein S16-A



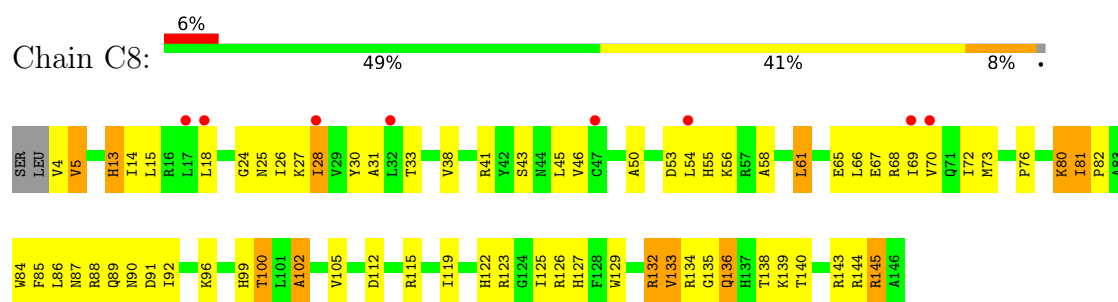
- Molecule 63: 40S ribosomal protein S17-A



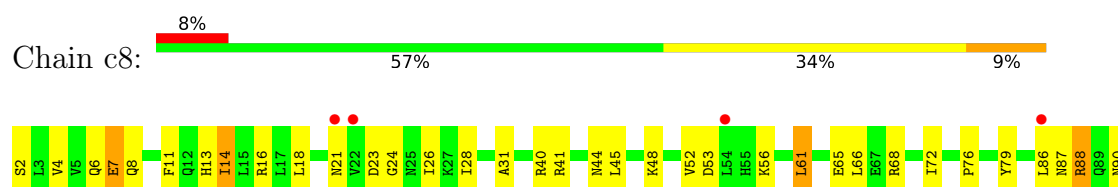
- Molecule 63: 40S ribosomal protein S17-A

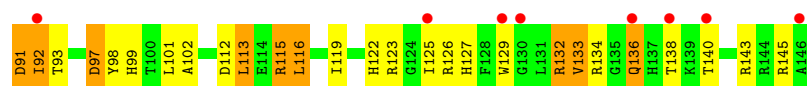


- Molecule 64: 40S ribosomal protein S18-A

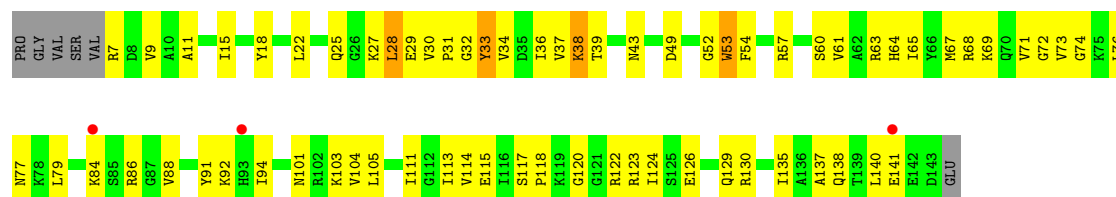


- Molecule 64: 40S ribosomal protein S18-A

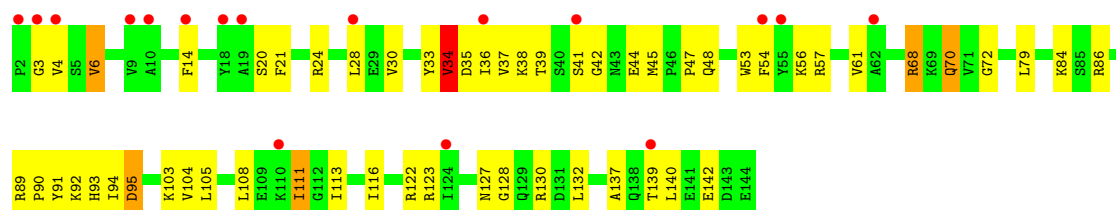




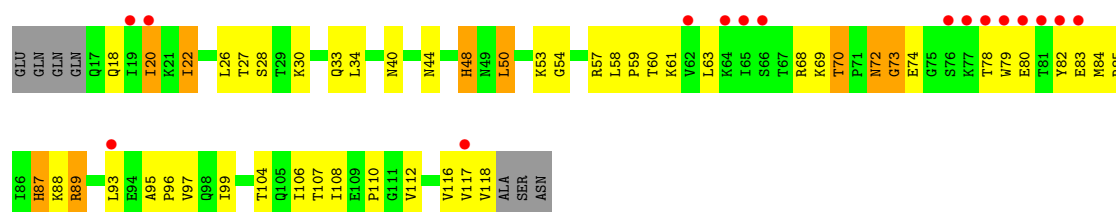
- Molecule 65: 40S ribosomal protein S19-A



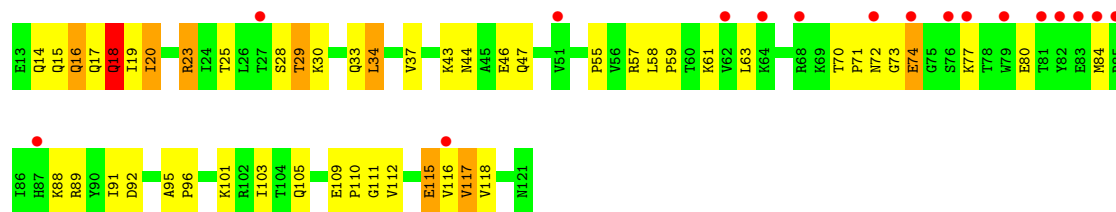
- Molecule 65: 40S ribosomal protein S19-A



- Molecule 66: 40S ribosomal protein S20

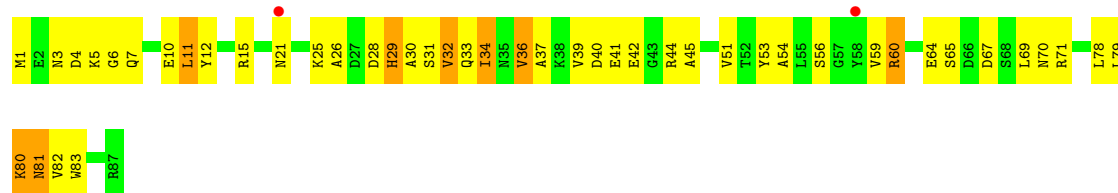


- Molecule 66: 40S ribosomal protein S20



- Molecule 67: 40S ribosomal protein S21-A

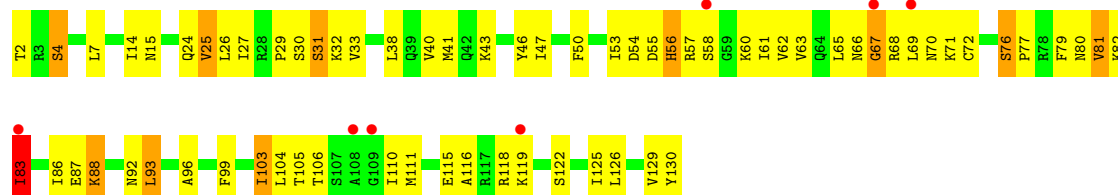




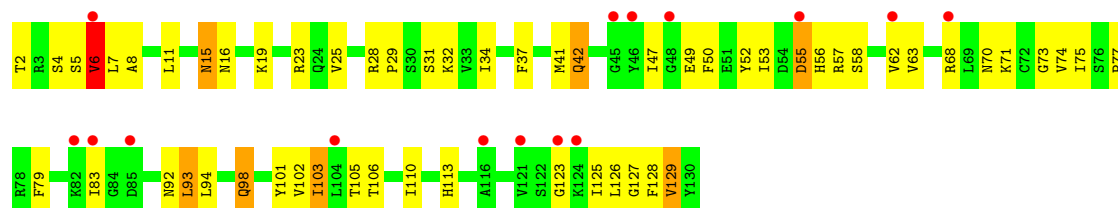
- Molecule 67: 40S ribosomal protein S21-A



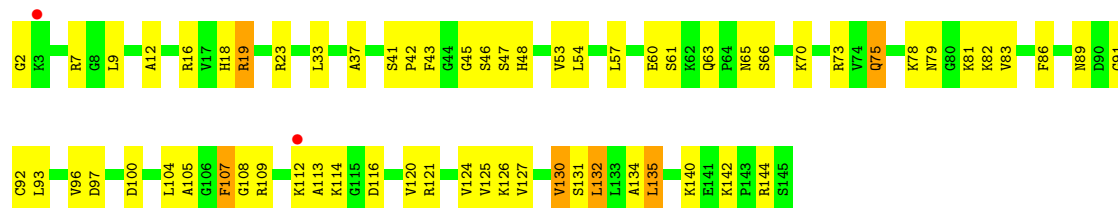
- Molecule 68: 40S ribosomal protein S22-A



- Molecule 68: 40S ribosomal protein S22-A

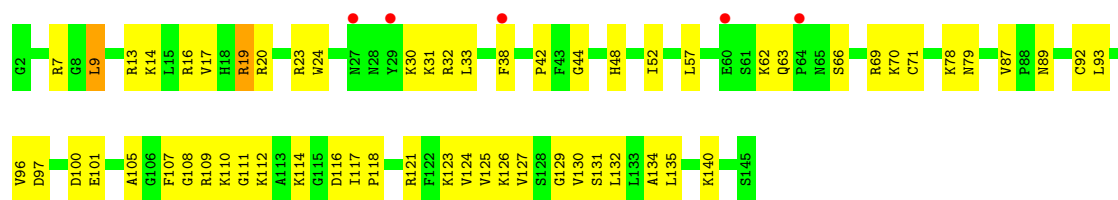


- Molecule 69: 40S ribosomal protein S23-A

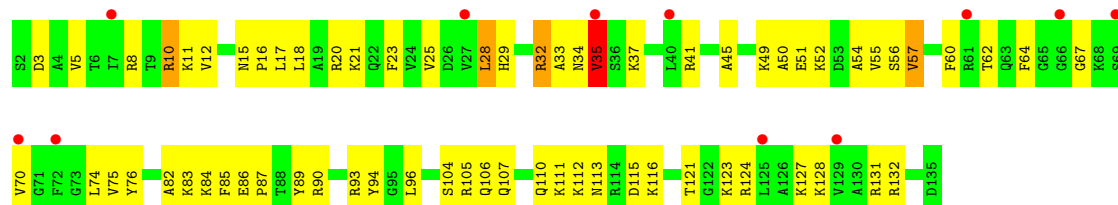


- Molecule 69: 40S ribosomal protein S23-A

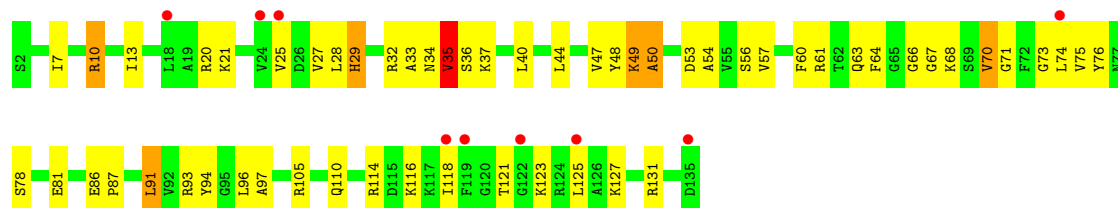




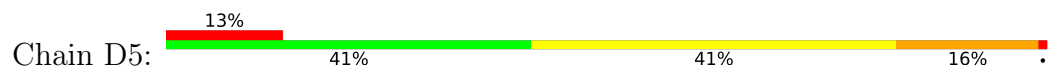
- Molecule 70: 40S ribosomal protein S24-A



- Molecule 70: 40S ribosomal protein S24-A



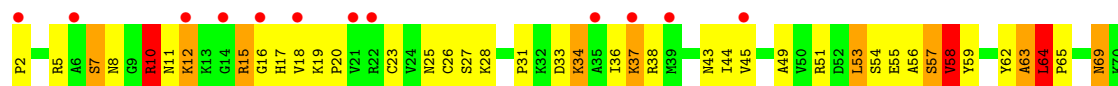
- Molecule 71: 40S ribosomal protein S25-A



- Molecule 71: 40S ribosomal protein S25-A

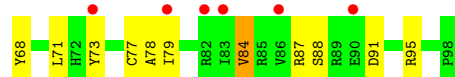
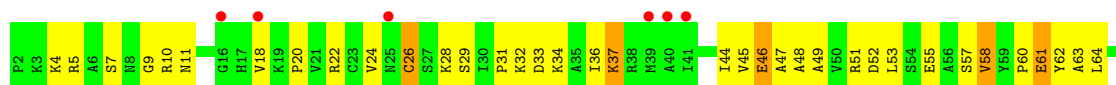


- Molecule 72: 40S ribosomal protein S26-B





- Molecule 72: 40S ribosomal protein S26-B



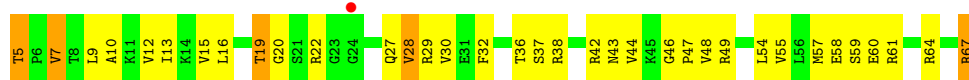
- Molecule 73: 40S ribosomal protein S27-A



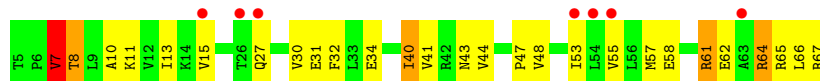
- Molecule 73: 40S ribosomal protein S27-A



- Molecule 74: 40S ribosomal protein S28-A

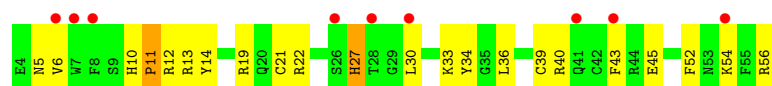


- Molecule 74: 40S ribosomal protein S28-A



- Molecule 75: 40S ribosomal protein S29-A

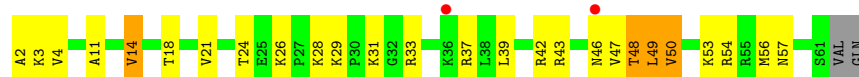




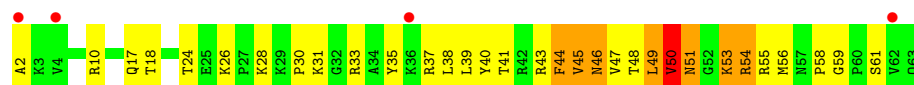
- Molecule 75: 40S ribosomal protein S29-A



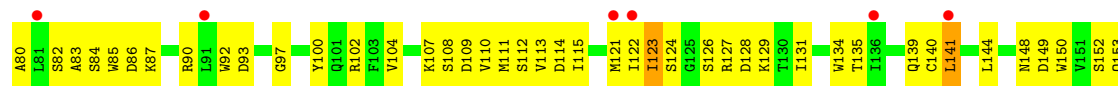
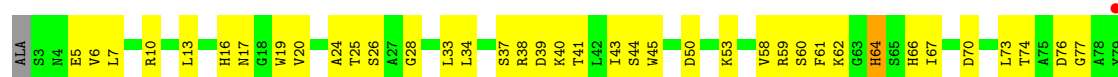
- Molecule 76: 40S ribosomal protein S30-A



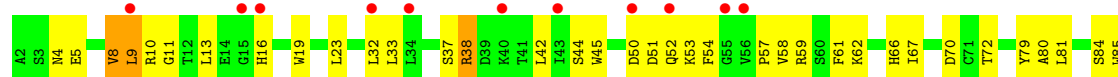
- Molecule 76: 40S ribosomal protein S30-A

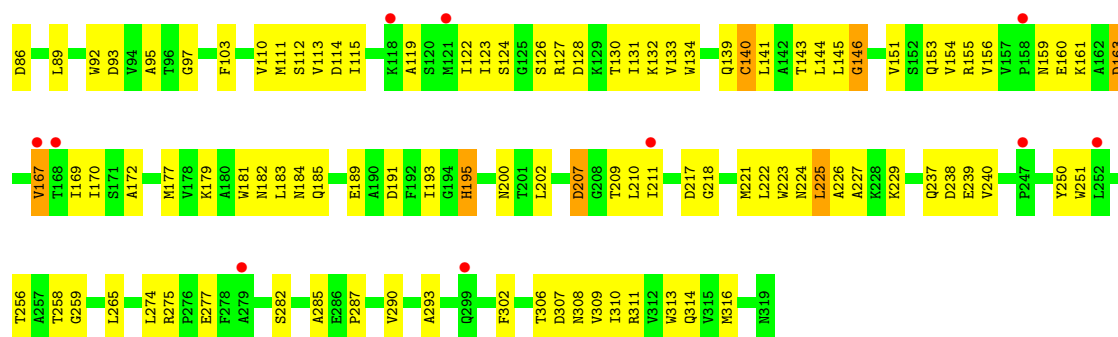


- Molecule 77: Guanine nucleotide-binding protein subunit beta-like protein

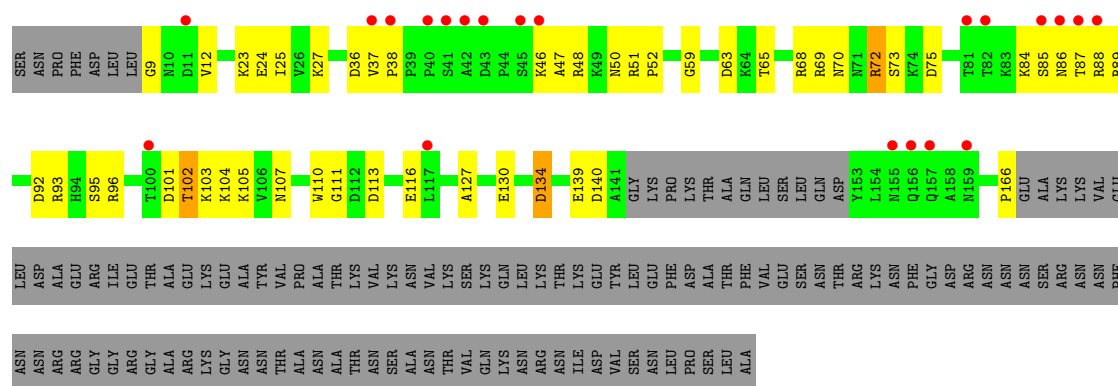
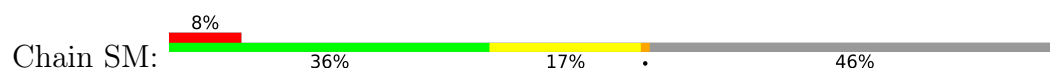


- Molecule 77: Guanine nucleotide-binding protein subunit beta-like protein

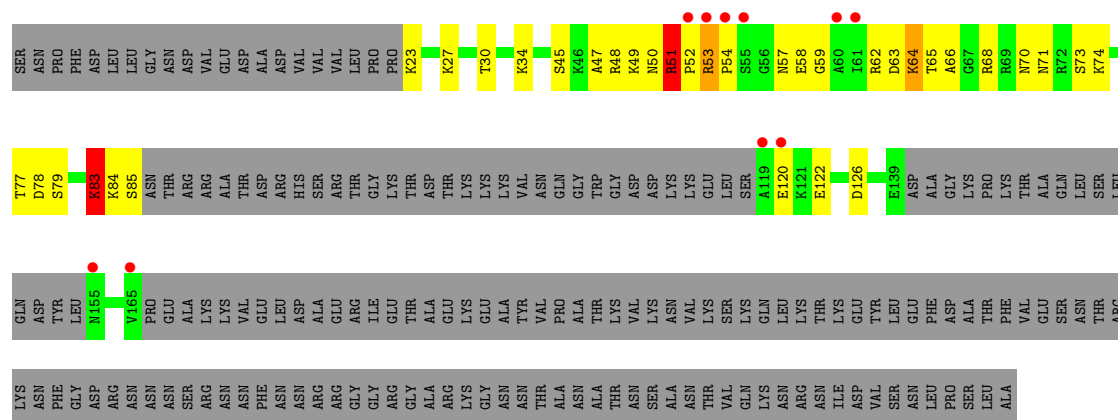




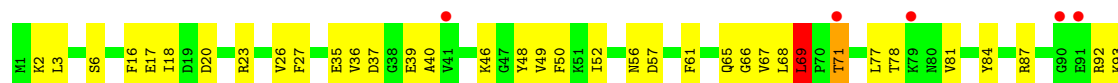
• Molecule 78: Suppressor protein STM1

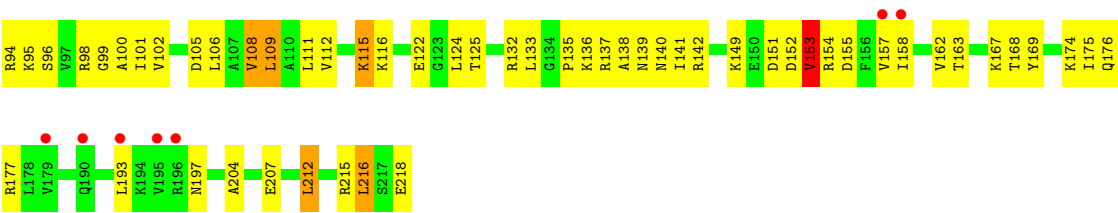


• Molecule 78: Suppressor protein STM1



• Molecule 79: 40S ribosomal protein S6-A





4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	434.53Å 293.33Å 295.79Å 90.00° 97.40° 90.00°	Depositor
Resolution (Å)	146.66 – 3.30 146.66 – 3.30	Depositor EDS
% Data completeness (in resolution range)	99.9 (146.66-3.30) 91.7 (146.66-3.30)	Depositor EDS
R_{merge}	0.32	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.92 (at 3.33Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.203 , 0.250 0.205 , 0.251	Depositor DCC
R_{free} test set	21969 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å ²)	77.3	Xtriage
Anisotropy	0.209	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.32 , 101.1	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.92	EDS
Total number of atoms	397978	wwPDB-VP
Average B, all atoms (Å ²)	102.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.45% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: PAR, ZN, MG

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	1	0.37	0/73685	0.52	3/114868 (0.0%)
1	5	0.31	0/73908	0.47	1/115221 (0.0%)
2	3	0.29	0/2883	0.45	0/4491
2	7	0.24	0/2883	0.40	0/4491
3	4	0.40	0/3724	0.54	0/5798
3	8	0.29	0/3746	0.49	0/5832
4	L2	0.40	0/1918	0.69	0/2577
4	l2	0.28	0/1918	0.62	0/2577
5	L3	0.36	0/3152	0.63	0/4239
5	l3	0.37	1/3152 (0.0%)	0.60	0/4239
6	L4	0.38	0/2801	0.65	0/3792
6	l4	0.32	0/2801	0.63	2/3792 (0.1%)
7	L5	0.27	0/2403	0.54	0/3242
7	l5	0.22	0/2408	0.49	0/3248
8	L6	0.31	0/1260	0.55	0/1694
8	l6	0.28	0/1269	0.56	1/1705 (0.1%)
9	L7	0.33	0/1855	0.55	0/2496
9	l7	0.30	0/1828	0.56	0/2461
10	L8	0.33	0/1825	0.63	2/2466 (0.1%)
10	l8	0.24	0/1795	0.56	2/2429 (0.1%)
11	L9	0.32	0/1523	0.62	0/2051
11	l9	0.30	0/1539	0.53	0/2073
12	M0	0.37	0/1796	0.64	2/2409 (0.1%)
12	m0	0.32	0/1810	0.60	0/2428
13	M1	0.26	0/1374	0.63	0/1842
13	m1	0.25	0/1374	0.54	0/1842
14	M3	0.36	0/1568	0.64	0/2106
14	m3	0.31	0/1573	0.64	2/2113 (0.1%)
15	M4	0.29	0/1068	0.56	0/1438
15	m4	0.28	0/1074	0.53	0/1446
16	M5	0.39	0/1757	0.63	0/2354
16	m5	0.26	0/1757	0.56	0/2354

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	M6	0.39	0/1585	0.58	0/2128
17	m6	0.39	0/1585	0.61	0/2128
18	M7	0.38	0/1400	0.65	0/1882
18	m7	0.36	0/1250	0.65	0/1683
19	M8	0.37	0/1465	0.64	0/1965
19	m8	0.27	0/1465	0.61	0/1965
20	M9	0.32	0/1516	0.56	0/2020
20	m9	0.27	0/1538	0.51	0/2050
21	N0	0.34	0/1481	0.62	0/1990
21	n0	0.31	0/1481	0.54	0/1990
22	N1	0.33	0/1300	0.59	0/1743
22	n1	0.27	0/1300	0.51	0/1743
23	N2	0.27	0/803	0.67	0/1087
23	n2	0.23	0/794	0.54	0/1076
24	N3	0.38	0/996	0.60	0/1340
24	n3	0.36	0/1018	0.58	0/1369
25	N4	0.31	0/533	0.53	0/707
25	n4	0.28	0/1052	0.60	0/1398
26	N5	0.36	0/961	0.57	0/1296
26	n5	0.28	0/974	0.60	0/1314
27	N6	0.36	0/995	0.60	0/1329
27	n6	0.31	0/978	0.55	0/1307
28	N7	0.41	1/1118 (0.1%)	0.62	0/1497
28	n7	0.24	0/1118	0.51	0/1497
29	N8	0.35	0/1204	0.71	3/1612 (0.2%)
29	n8	0.26	0/1204	0.62	2/1612 (0.1%)
30	N9	0.35	0/455	0.63	1/607 (0.2%)
30	n9	0.30	0/473	0.64	0/629
31	O0	0.29	0/751	0.55	0/1008
31	o0	0.24	0/775	0.50	0/1040
32	O1	0.33	0/862	0.55	0/1157
32	o1	0.34	0/897	0.57	0/1205
33	O2	0.37	0/1028	0.62	0/1376
33	o2	0.35	0/1041	0.68	2/1394 (0.1%)
34	O3	0.40	0/868	0.61	0/1168
34	o3	0.34	0/868	0.57	0/1168
35	O4	0.36	0/891	0.65	0/1191
35	o4	0.27	0/891	0.59	0/1191
36	O5	0.37	0/978	0.66	2/1301 (0.2%)
36	o5	0.25	0/974	0.54	0/1297
37	O6	0.35	0/756	0.63	0/1005
37	o6	0.24	0/778	0.54	0/1034
38	O7	0.45	0/680	0.80	0/901

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	o7	0.35	0/696	0.71	0/923
39	O8	0.29	0/618	0.55	0/826
39	o8	0.23	0/614	0.60	0/822
40	O9	0.49	0/443	0.74	0/588
40	o9	0.36	0/443	0.53	0/588
41	Q0	0.37	0/423	0.67	0/562
41	q0	0.39	0/423	0.67	0/562
42	Q1	0.33	0/234	0.48	0/300
42	q1	0.31	0/234	0.57	0/300
43	Q2	0.35	0/860	0.62	0/1136
43	q2	0.24	0/860	0.50	0/1136
44	Q3	0.40	0/701	0.76	3/934 (0.3%)
44	q3	0.29	0/701	0.66	1/934 (0.1%)
45	2	0.24	0/40808	0.42	0/63582
45	6	0.22	0/40116	0.40	0/62502
46	S0	0.23	0/1621	0.56	0/2220
46	s0	0.25	0/1621	0.56	0/2220
47	S1	0.29	0/1713	0.70	2/2305 (0.1%)
47	s1	0.22	0/1748	0.55	0/2352
48	S2	0.24	0/1665	0.51	0/2263
48	s2	0.26	0/1665	0.58	0/2263
49	S3	0.22	0/1643	0.46	0/2210
49	s3	0.21	0/1759	0.53	0/2368
50	S4	0.25	0/2084	0.59	0/2804
50	s4	0.24	0/2109	0.56	0/2839
51	S5	0.21	0/1629	0.59	0/2202
51	s5	0.22	0/1629	0.58	0/2202
52	S6	0.22	0/1611	0.54	0/2151
53	S7	0.25	0/1465	0.56	0/1971
53	s7	0.28	0/1517	0.69	3/2044 (0.1%)
54	S8	0.27	0/1491	0.58	0/1992
54	s8	0.25	0/1514	0.50	0/2021
55	S9	0.23	0/1443	0.56	0/1934
55	s9	0.24	0/1519	0.58	0/2035
56	C0	0.22	0/759	0.65	1/1025 (0.1%)
56	c0	0.25	0/776	0.93	8/1047 (0.8%)
57	C1	0.27	0/1153	0.61	0/1554
57	c1	0.27	0/1194	0.59	0/1610
58	C2	0.32	0/771	0.72	0/1044
58	c2	0.31	0/898	0.71	2/1220 (0.2%)
59	C3	0.27	0/1215	0.53	0/1638
59	c3	0.22	0/1215	0.53	0/1638
60	C4	0.29	0/901	0.69	0/1217

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
60	c4	0.23	0/960	0.64	0/1290
61	C5	0.22	0/937	0.53	0/1258
61	c5	0.33	0/1060	0.68	2/1426 (0.1%)
62	C6	0.22	0/1083	0.56	3/1452 (0.2%)
62	c6	0.22	0/1131	0.52	0/1518
63	C7	0.29	0/910	1.00	7/1219 (0.6%)
63	c7	0.27	0/914	0.71	3/1224 (0.2%)
64	C8	0.30	1/1197 (0.1%)	0.55	1/1609 (0.1%)
64	c8	0.23	0/1211	0.60	0/1628
65	C9	0.20	0/1089	0.53	0/1461
65	c9	0.19	0/1130	0.49	0/1517
66	D0	0.25	0/828	0.54	0/1119
66	d0	0.24	0/883	0.63	2/1193 (0.2%)
67	D1	0.24	0/693	0.57	0/935
67	d1	0.25	0/693	0.61	0/935
68	D2	0.25	0/1038	0.57	0/1395
68	d2	0.25	0/1038	0.54	0/1395
69	D3	0.31	0/1139	0.58	0/1518
69	d3	0.29	0/1139	0.54	0/1518
70	D4	0.24	0/1087	0.58	0/1449
70	d4	0.29	0/1087	0.65	0/1449
71	D5	0.25	0/571	0.67	0/768
71	d5	0.20	0/566	0.49	0/761
72	D6	0.38	0/782	0.90	4/1047 (0.4%)
72	d6	0.24	0/782	0.71	2/1047 (0.2%)
73	D7	0.20	0/620	0.57	0/838
73	d7	0.22	0/620	0.55	0/838
74	D8	0.22	0/499	0.52	0/670
74	d8	0.23	0/499	0.60	0/670
75	D9	0.29	0/453	0.66	0/602
75	d9	0.35	0/453	0.72	2/602 (0.3%)
76	E0	0.27	0/483	0.60	0/643
76	e0	0.32	0/499	0.74	0/665
77	SR	0.18	0/2485	0.42	0/3383
77	sR	0.19	0/2490	0.53	2/3390 (0.1%)
78	SM	0.31	0/1053	0.60	1/1418 (0.1%)
78	sM	0.55	1/638 (0.2%)	0.63	2/860 (0.2%)
79	s6	0.23	0/1779	0.49	0/2379
All	All	0.30	4/419528 (0.0%)	0.52	76/615687 (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
4	l2	0	1
6	L4	0	1
7	L5	0	5
10	L8	0	3
10	l8	0	3
13	M1	0	1
13	m1	0	1
14	M3	0	1
15	m4	0	1
16	M5	0	1
20	M9	0	1
21	N0	0	3
21	n0	0	2
23	N2	0	2
26	n5	0	1
28	n7	0	1
29	n8	0	1
30	N9	0	1
30	n9	0	1
31	O0	0	1
33	O2	0	1
33	o2	0	1
35	o4	0	1
38	o7	0	1
43	Q2	0	1
47	S1	0	2
48	S2	0	1
48	s2	0	2
49	s3	0	1
51	S5	0	1
51	s5	0	1
53	S7	0	2
53	s7	0	5
54	S8	0	1
55	s9	0	4
57	c1	0	1
58	C2	0	1
58	c2	0	2
60	C4	0	3
61	c5	0	1
62	C6	0	1
62	c6	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
63	C7	0	2
63	c7	0	1
65	C9	0	1
66	D0	0	2
68	D2	0	3
70	d4	0	3
71	D5	0	1
72	D6	0	3
73	D7	0	1
75	D9	0	2
75	d9	0	1
77	SR	0	2
77	sR	0	1
78	SM	0	1
78	sM	0	1
All	All	0	92

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	sM	51	ARG	C-N	12.32	1.62	1.33
5	l3	168	LYS	C-N	-8.04	1.17	1.33
28	N7	36	HIS	C-N	7.63	1.51	1.33
64	C8	81	ILE	C-N	-7.28	1.16	1.33

All (76) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
63	C7	85	VAL	CA-C-N	15.88	143.35	121.91
63	C7	85	VAL	C-N-CA	15.88	143.35	121.91
44	Q3	50	GLY	N-CA-C	-8.86	100.12	111.72
64	C8	102	ALA	CB-CA-C	-8.85	106.36	116.54
56	c0	88	PRO	N-CA-CB	8.27	111.94	103.25
56	c0	97	PRO	N-CA-CB	8.08	111.73	103.25
63	c7	118	PRO	N-CA-CB	8.01	111.66	103.25
72	D6	57	SER	CB-CA-C	-7.96	107.39	116.63
56	C0	88	PRO	N-CA-CB	7.66	111.29	103.25
72	D6	85	ARG	N-CA-C	-7.65	94.50	110.80
63	C7	86	PRO	CA-C-O	-6.92	116.19	121.31
78	SM	166	PRO	N-CA-CB	6.73	110.40	103.00
63	C7	86	PRO	N-CA-C	6.63	125.37	113.70
56	c0	78	GLU	N-CA-C	-6.63	96.67	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	c0	83	PRO	N-CA-CB	6.59	110.17	103.25
36	O5	118	ILE	CA-C-N	6.54	136.25	121.53
36	O5	118	ILE	C-N-CA	6.54	136.25	121.53
63	c7	98	GLY	CA-C-N	6.53	133.72	121.97
63	c7	98	GLY	C-N-CA	6.53	133.72	121.97
53	s7	12	ALA	CA-C-N	6.44	127.89	119.84
53	s7	12	ALA	C-N-CA	6.44	127.89	119.84
10	L8	30	THR	CA-C-N	6.42	127.86	119.84
10	L8	30	THR	C-N-CA	6.42	127.86	119.84
47	S1	176	VAL	CA-C-N	6.35	133.67	121.54
47	S1	176	VAL	C-N-CA	6.35	133.67	121.54
44	q3	50	GLY	N-CA-C	-6.33	101.00	110.38
56	c0	77	ARG	CA-C-N	6.22	133.41	121.54
56	c0	77	ARG	C-N-CA	6.22	133.41	121.54
29	N8	66	ALA	N-CA-C	-6.09	97.83	110.80
10	l8	202	GLU	CA-C-N	6.05	132.86	121.97
10	l8	202	GLU	C-N-CA	6.05	132.86	121.97
6	l4	144	LYS	CA-C-N	5.98	133.19	122.13
6	l4	144	LYS	C-N-CA	5.98	133.19	122.13
75	d9	4	GLU	CA-C-N	5.92	132.85	121.54
75	d9	4	GLU	C-N-CA	5.92	132.85	121.54
53	s7	10	SER	N-CA-C	5.84	116.98	107.23
78	sM	83	LYS	CA-C-N	5.71	132.46	121.54
78	sM	83	LYS	C-N-CA	5.71	132.46	121.54
58	c2	89	ILE	CA-C-N	5.71	132.44	121.54
58	c2	89	ILE	C-N-CA	5.71	132.44	121.54
66	d0	16	GLN	CA-C-N	5.69	132.40	121.54
66	d0	16	GLN	C-N-CA	5.69	132.40	121.54
56	c0	87	VAL	CA-C-N	5.66	126.92	119.84
56	c0	87	VAL	C-N-CA	5.66	126.92	119.84
8	l6	67	GLY	N-CA-C	5.60	123.77	112.34
30	N9	25	LYS	CB-CA-C	-5.58	108.52	115.89
1	1	637	C	C4'-C3'-O3'	5.57	117.75	109.40
1	1	1329	U	C4'-C3'-O3'	5.49	117.63	109.40
1	1	1716	U	C2'-C3'-O3'	5.48	117.72	109.50
12	M0	103	LEU	CA-C-N	5.48	131.56	121.70
12	M0	103	LEU	C-N-CA	5.48	131.56	121.70
44	Q3	49	ARG	CA-C-N	5.47	138.67	121.71
44	Q3	49	ARG	C-N-CA	5.47	138.67	121.71
1	5	1307	G	P-O3'-C3'	5.43	128.35	120.20
62	C6	40	GLU	CA-C-N	5.37	139.88	127.00
62	C6	40	GLU	C-N-CA	5.37	139.88	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
72	D6	63	ALA	CA-C-N	5.35	134.86	121.80
72	D6	63	ALA	C-N-CA	5.35	134.86	121.80
72	d6	7	SER	CA-C-N	5.35	131.76	121.54
72	d6	7	SER	C-N-CA	5.35	131.76	121.54
33	o2	124	GLY	CA-C-N	-5.30	113.06	122.07
33	o2	124	GLY	C-N-CA	-5.30	113.06	122.07
77	sR	160	GLU	CA-C-N	5.23	131.53	121.54
77	sR	160	GLU	C-N-CA	5.23	131.53	121.54
14	m3	61	PRO	CA-C-N	5.22	131.52	121.54
14	m3	61	PRO	C-N-CA	5.22	131.52	121.54
29	N8	47	LYS	CA-C-N	5.10	131.28	121.54
29	N8	47	LYS	C-N-CA	5.10	131.28	121.54
61	c5	129	GLY	CA-C-N	5.09	131.26	121.54
61	c5	129	GLY	C-N-CA	5.09	131.26	121.54
63	C7	82	ASP	CA-C-N	5.07	131.22	121.54
63	C7	82	ASP	C-N-CA	5.07	131.22	121.54
62	C6	40	GLU	C-N-CD	-5.05	109.50	120.60
29	n8	47	LYS	CA-C-N	5.02	131.14	121.54
29	n8	47	LYS	C-N-CA	5.02	131.14	121.54
63	C7	85	VAL	C-N-CD	-5.02	104.41	125.00

There are no chirality outliers.

All (92) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
58	C2	39	ASP	Peptide
60	C4	123	SER	Peptide
60	C4	74	VAL	Peptide
60	C4	90	ARG	Peptide
62	C6	40	GLU	Peptide
63	C7	20	TYR	Peptide
63	C7	85	VAL	Peptide
65	C9	28	LEU	Peptide
66	D0	48	HIS	Peptide
66	D0	73	GLY	Peptide
68	D2	54	ASP	Peptide
68	D2	67	GLY	Peptide
68	D2	83	ILE	Peptide
71	D5	94	LYS	Peptide
72	D6	10	ARG	Peptide
72	D6	34	LYS	Peptide
72	D6	97	PRO	Peptide

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Mol	Chain	Res	Type	Group
73	D7	58	SER	Peptide
75	D9	5	ASN	Peptide
75	D9	6	VAL	Peptide
6	L4	196	ASN	Peptide
7	L5	124	GLU	Peptide
7	L5	251	PRO	Peptide
7	L5	258	LYS	Peptide
7	L5	7	ALA	Peptide
7	L5	8	LYS	Peptide
10	L8	24	ASN	Peptide
10	L8	30	THR	Peptide
10	L8	76	ALA	Peptide
13	M1	63	GLU	Peptide
14	M3	86	THR	Peptide
16	M5	74	PRO	Peptide
20	M9	131	ALA	Peptide
21	N0	166	LYS	Peptide
21	N0	22	PRO	Peptide
21	N0	69	PRO	Peptide
23	N2	26	GLY	Peptide
23	N2	90	ARG	Peptide
30	N9	20	GLY	Peptide
31	O0	36	GLN	Peptide
33	O2	122	PRO	Peptide
43	Q2	99	GLN	Peptide
47	S1	157	GLN	Peptide
47	S1	23	PRO	Peptide
48	S2	106	ASP	Peptide
51	S5	44	ASN	Peptide
53	S7	107	ARG	Peptide
53	S7	131	PHE	Peptide
54	S8	147	ALA	Peptide
78	SM	50	ASN	Peptide
77	SR	163	ASP	Peptide
77	SR	193	ILE	Peptide
57	c1	120	GLY	Peptide
58	c2	109	GLU	Peptide
58	c2	130	THR	Peptide
61	c5	51	SER	Peptide
62	c6	40	GLU	Peptide
63	c7	83	GLN	Peptide
70	d4	29	HIS	Peptide

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Mol	Chain	Res	Type	Group
70	d4	35	VAL	Peptide
70	d4	50	ALA	Peptide
75	d9	6	VAL	Peptide
4	l2	215	ASN	Peptide
10	l8	222	PHE	Peptide
10	l8	24	ASN	Peptide
10	l8	25	PRO	Peptide
13	m1	151	SER	Peptide
15	m4	48	GLY	Peptide
21	n0	170	THR	Peptide
21	n0	3	HIS	Peptide
26	n5	47	ALA	Peptide
28	n7	132	SER	Peptide
29	n8	110	GLY	Peptide
30	n9	19	ASN	Peptide
33	o2	15	LYS	Peptide
35	o4	47	CYS	Peptide
38	o7	76	ASN	Peptide
48	s2	106	ASP	Peptide
48	s2	236	PRO	Peptide
49	s3	219	ALA	Peptide
51	s5	44	ASN	Peptide
53	s7	10	SER	Peptide
53	s7	11	GLN	Peptide
53	s7	130	VAL	Peptide
53	s7	29	ASN	Peptide
53	s7	64	VAL	Peptide
55	s9	132	ARG	Peptide
55	s9	133	HIS	Peptide
55	s9	134	ILE	Peptide
55	s9	89	ASP	Peptide
78	sM	64	LYS	Peptide
77	sR	146	GLY	Peptide

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	65834	0	33085	1097	0
1	5	66030	0	33183	1256	0
2	3	2579	0	1304	58	0
2	7	2579	0	1304	53	0
3	4	3333	0	1685	65	0
3	8	3353	0	1695	72	0
4	L2	1884	0	1951	66	0
4	l2	1884	0	1951	87	0
5	L3	3081	0	3165	129	0
5	l3	3081	0	3165	118	0
6	L4	2749	0	2863	97	0
6	l4	2749	0	2863	106	0
7	L5	2353	0	2306	102	0
7	l5	2359	0	2311	101	0
8	L6	1239	0	1326	50	0
8	l6	1248	0	1339	56	0
9	L7	1818	0	1898	67	0
9	l7	1791	0	1869	69	0
10	L8	1793	0	1867	59	0
10	l8	1763	0	1819	89	0
11	L9	1502	0	1572	85	0
11	l9	1518	0	1587	61	0
12	M0	1759	0	1799	91	0
12	m0	1773	0	1812	72	0
13	M1	1353	0	1383	59	0
13	m1	1353	0	1383	59	0
14	M3	1543	0	1608	65	0
14	m3	1548	0	1613	79	0
15	M4	1053	0	1149	55	0
15	m4	1059	0	1154	39	0
16	M5	1720	0	1779	70	0
16	m5	1720	0	1779	78	0
17	M6	1555	0	1659	58	0
17	m6	1555	0	1659	41	0
18	M7	1378	0	1404	54	0
18	m7	1227	0	1236	55	0
19	M8	1441	0	1543	55	0
19	m8	1441	0	1543	78	0
20	M9	1499	0	1602	48	0
20	m9	1521	0	1617	54	0
21	N0	1445	0	1487	67	0
21	n0	1445	0	1487	52	0
22	N1	1276	0	1323	57	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	n1	1276	0	1323	53	0
23	N2	787	0	804	24	0
23	n2	778	0	791	14	0
24	N3	981	0	1031	49	0
24	n3	1003	0	1048	29	0
25	N4	521	0	551	16	0
25	n4	1038	0	1071	23	0
26	N5	946	0	1007	37	0
26	n5	959	0	1023	33	0
27	N6	984	0	1075	31	0
27	n6	967	0	1051	30	0
28	N7	1092	0	1155	41	0
28	n7	1092	0	1155	41	0
29	N8	1173	0	1215	49	0
29	n8	1173	0	1215	63	0
30	N9	444	0	465	15	0
30	n9	462	0	491	19	0
31	O0	743	0	797	30	0
31	o0	767	0	816	31	0
32	O1	849	0	893	26	0
32	o1	883	0	918	23	0
33	O2	1007	0	1074	40	0
33	o2	1020	0	1090	34	0
34	O3	850	0	880	32	0
34	o3	850	0	880	21	0
35	O4	881	0	945	27	0
35	o4	881	0	946	34	0
36	O5	969	0	1078	35	0
36	o5	965	0	1067	41	0
37	O6	750	0	829	30	0
37	o6	771	0	849	41	0
38	O7	665	0	668	38	0
38	o7	681	0	683	39	0
39	O8	612	0	682	19	0
39	o8	608	0	671	18	0
40	O9	436	0	475	18	0
40	o9	436	0	475	19	0
41	Q0	417	0	455	9	0
41	q0	417	0	455	17	0
42	Q1	233	0	284	8	0
42	q1	233	0	284	11	0
43	Q2	847	0	915	26	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	q2	847	0	915	23	0
44	Q3	694	0	734	38	0
44	q3	694	0	734	29	0
45	2	36485	0	18353	901	0
45	6	35865	0	18038	686	0
46	S0	1581	0	1579	65	0
46	s0	1581	0	1579	96	0
47	S1	1688	0	1765	106	0
47	s1	1722	0	1793	89	0
48	S2	1635	0	1723	75	0
48	s2	1635	0	1723	76	0
49	S3	1621	0	1705	72	0
49	s3	1734	0	1817	60	0
50	S4	2044	0	2125	109	0
50	s4	2068	0	2154	96	0
51	S5	1609	0	1675	93	0
51	s5	1609	0	1675	84	0
52	S6	1593	0	1683	81	0
53	S7	1442	0	1529	59	0
53	s7	1492	0	1581	67	0
54	S8	1466	0	1494	52	0
54	s8	1489	0	1525	61	0
55	S9	1418	0	1501	74	0
55	s9	1494	0	1573	77	0
56	C0	742	0	715	40	0
56	c0	761	0	697	34	0
57	C1	1127	0	1197	53	0
57	c1	1168	0	1233	48	0
58	C2	764	0	799	34	0
58	c2	890	0	887	30	0
59	C3	1192	0	1255	67	0
59	c3	1192	0	1255	48	0
60	C4	891	0	883	70	0
60	c4	949	0	985	46	0
61	C5	918	0	951	43	0
61	c5	1039	0	1050	55	0
62	C6	1064	0	1126	69	0
62	c6	1111	0	1171	62	0
63	C7	901	0	917	61	0
63	c7	906	0	909	37	0
64	C8	1178	0	1206	70	0
64	c8	1192	0	1222	57	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
65	C9	1072	0	1083	54	0
65	c9	1112	0	1124	56	0
66	D0	818	0	885	52	0
66	d0	873	0	931	35	0
67	D1	684	0	672	44	0
67	d1	684	0	672	36	0
68	D2	1021	0	1060	57	0
68	d2	1021	0	1060	45	0
69	D3	1121	0	1196	54	0
69	d3	1121	0	1196	54	0
70	D4	1073	0	1132	61	0
70	d4	1073	0	1132	51	0
71	D5	563	0	603	38	0
71	d5	558	0	598	24	0
72	D6	769	0	815	63	0
72	d6	769	0	816	47	0
73	D7	610	0	633	28	0
73	d7	610	0	633	20	0
74	D8	497	0	535	31	0
74	d8	497	0	535	18	0
75	D9	443	0	432	23	0
75	d9	443	0	432	21	0
76	E0	475	0	525	21	0
76	e0	491	0	542	29	0
77	SR	2432	0	2374	97	0
77	sR	2437	0	2379	92	0
78	SM	1044	0	966	49	0
78	sM	635	0	587	34	0
79	s6	1755	0	1846	68	0
80	1	1554	0	1663	96	0
80	2	210	0	225	16	0
80	3	126	0	135	13	0
80	4	84	0	90	4	0
80	5	1176	0	1256	94	0
80	6	252	0	270	19	0
80	7	84	0	90	5	0
80	8	84	0	90	1	0
80	n3	42	0	45	5	0
80	o2	42	0	45	3	0
81	1	762	0	0	0	0
81	2	212	0	0	0	0
81	3	15	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
81	4	35	0	0	0	0
81	5	698	0	0	0	0
81	6	169	0	0	0	0
81	7	12	0	0	0	0
81	8	23	0	0	0	0
81	C8	1	0	0	0	0
81	C9	2	0	0	0	0
81	D3	2	0	0	0	0
81	D6	1	0	0	0	0
81	L2	6	0	0	0	0
81	L3	5	0	0	0	0
81	L4	3	0	0	0	0
81	L5	3	0	0	0	0
81	L7	2	0	0	0	0
81	L8	1	0	0	0	0
81	L9	4	0	0	0	0
81	M0	1	0	0	0	0
81	M3	1	0	0	0	0
81	M4	3	0	0	0	0
81	M5	9	0	0	0	0
81	M6	5	0	0	0	0
81	M7	6	0	0	0	0
81	M8	2	0	0	0	0
81	M9	2	0	0	0	0
81	N0	1	0	0	0	0
81	N1	3	0	0	0	0
81	N3	4	0	0	0	0
81	N5	1	0	0	0	0
81	N6	5	0	0	0	0
81	N7	2	0	0	0	0
81	N8	3	0	0	0	0
81	O0	1	0	0	0	0
81	O1	3	0	0	0	0
81	O2	3	0	0	0	0
81	O3	2	0	0	0	0
81	O4	3	0	0	0	0
81	O6	1	0	0	0	0
81	O7	4	0	0	0	0
81	O9	1	0	0	0	0
81	Q1	1	0	0	0	0
81	Q2	5	0	0	0	0
81	Q3	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
81	S2	2	0	0	0	0
81	S6	1	0	0	0	0
81	S7	1	0	0	0	0
81	S9	1	0	0	0	0
81	c1	1	0	0	0	0
81	c4	3	0	0	0	0
81	c9	2	0	0	0	0
81	d2	1	0	0	0	0
81	d3	5	0	0	0	0
81	d4	1	0	0	0	0
81	d6	1	0	0	0	0
81	l2	3	0	0	0	0
81	l3	9	0	0	0	0
81	l4	3	0	0	0	0
81	l7	6	0	0	0	0
81	l8	1	0	0	0	0
81	l9	1	0	0	0	0
81	m0	3	0	0	0	0
81	m5	2	0	0	0	0
81	m6	4	0	0	0	0
81	m7	9	0	0	0	0
81	m8	1	0	0	0	0
81	m9	5	0	0	0	0
81	n0	6	0	0	0	0
81	n1	2	0	0	0	0
81	n2	1	0	0	0	0
81	n3	3	0	0	0	0
81	n5	1	0	0	0	0
81	n6	4	0	0	0	0
81	n8	4	0	0	0	0
81	n9	1	0	0	0	0
81	o0	3	0	0	0	0
81	o1	3	0	0	0	0
81	o2	3	0	0	0	0
81	o3	1	0	0	0	0
81	o4	1	0	0	0	0
81	o7	2	0	0	0	0
81	q0	1	0	0	0	0
81	q2	1	0	0	0	0
81	q3	1	0	0	0	0
81	s2	1	0	0	0	0
81	s4	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
81	s6	2	0	0	0	0
81	s8	1	0	0	0	0
82	D6	1	0	0	0	0
82	D7	1	0	0	0	0
82	D9	1	0	0	0	0
82	O4	1	0	0	0	0
82	O7	1	0	0	0	0
82	Q0	1	0	0	0	0
82	Q2	1	0	0	0	0
82	Q3	1	0	0	0	0
82	d6	1	0	0	0	0
82	d7	1	0	0	0	0
82	d9	1	0	0	0	0
82	o4	1	0	0	0	0
82	o7	1	0	0	0	0
82	q0	1	0	0	0	0
82	q2	1	0	0	0	0
82	q3	1	0	0	0	0
83	1	500	0	0	65	0
83	2	122	0	0	17	0
83	3	7	0	0	3	0
83	4	15	0	0	0	0
83	5	477	0	0	72	0
83	6	113	0	0	10	0
83	7	12	0	0	4	0
83	8	7	0	0	1	0
83	C3	1	0	0	0	0
83	C6	1	0	0	0	0
83	C7	1	0	0	0	0
83	C9	1	0	0	0	0
83	D3	4	0	0	1	0
83	L2	5	0	0	0	0
83	L3	2	0	0	0	0
83	L4	2	0	0	0	0
83	L5	1	0	0	0	0
83	L7	1	0	0	1	0
83	M5	2	0	0	0	0
83	M6	2	0	0	0	0
83	M7	4	0	0	1	0
83	N0	2	0	0	0	0
83	N1	1	0	0	0	0
83	N3	3	0	0	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
83	N6	2	0	0	0	0
83	N7	2	0	0	0	0
83	N8	2	0	0	0	0
83	N9	2	0	0	0	0
83	O0	1	0	0	0	0
83	O2	2	0	0	1	0
83	O3	2	0	0	0	0
83	O4	1	0	0	0	0
83	O7	1	0	0	0	0
83	Q2	4	0	0	0	0
83	S1	1	0	0	0	0
83	S9	1	0	0	0	0
83	c3	4	0	0	0	0
83	c4	1	0	0	0	0
83	c6	1	0	0	0	0
83	c9	1	0	0	0	0
83	d3	1	0	0	0	0
83	d6	1	0	0	0	0
83	l2	5	0	0	0	0
83	l3	2	0	0	0	0
83	l5	1	0	0	0	0
83	l7	1	0	0	0	0
83	l9	1	0	0	0	0
83	m0	1	0	0	0	0
83	m6	1	0	0	0	0
83	m7	2	0	0	0	0
83	m9	1	0	0	0	0
83	n0	2	0	0	0	0
83	n1	2	0	0	0	0
83	n3	3	0	0	2	0
83	n6	1	0	0	0	0
83	n7	1	0	0	0	0
83	n8	3	0	0	0	0
83	o2	3	0	0	0	0
All	All	397978	0	294441	10076	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 15.

All (10076) 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)
80:1:3435:PAR:N21	80:1:3435:PAR:H23	1.44	1.28
72:D6:79:ILE:HA	72:D6:84:VAL:HG21	1.30	1.14
45:6:1034:C:HO2'	68:d2:2:THR:N	1.48	1.11
80:1:3435:PAR:H23	80:1:3435:PAR:HN22	0.98	1.05
45:6:521:A:N3	70:d4:34:ASN:ND2	2.07	1.03
1:5:1352:A:H1'	1:5:1353:U:H5'	1.43	1.01
45:2:1488:G:H3'	45:2:1515:A:H61	1.28	0.97
12:M0:43:VAL:HG21	12:M0:197:VAL:HG22	1.47	0.96
45:6:329:G:H5''	54:s8:98:LYS:HB3	1.48	0.96
45:2:1291:G:H1	45:2:1324:G:H22	1.14	0.95
5:l3:221:THR:HG22	5:l3:273:HIS:H	1.30	0.95
1:1:627:U:H4'	1:1:1399:A:H1'	1.50	0.94
80:1:3435:PAR:N21	80:1:3435:PAR:C23	2.30	0.94
13:M1:114:ILE:HG22	13:M1:115:LYS:H	1.32	0.94
12:m0:217:PHE:HA	12:m0:220:GLN:H	1.33	0.94
5:l3:41:VAL:HA	5:l3:185:GLY:HA3	1.50	0.93
46:s0:56:LYS:HZ2	46:s0:158:VAL:HG23	1.34	0.93
19:m8:170:ARG:HA	19:m8:174:ARG:HD2	1.50	0.93
44:Q3:49:ARG:HD2	44:Q3:50:GLY:H	1.34	0.92
59:C3:23:PRO:HG2	59:C3:26:PHE:HB2	1.51	0.92
23:N2:11:ILE:HG22	23:N2:12:ALA:H	1.32	0.92
12:M0:102:MET:HG3	12:M0:110:ARG:HG3	1.49	0.92
1:5:2940:A:N7	5:l3:2:SER:N	2.18	0.92
1:1:980:A:H2	1:1:1104:G:H21	1.17	0.92
1:5:640:U:OP1	29:n8:21:ARG:NH2	2.04	0.91
45:2:1588:G:H1	45:2:1608:U:H3	1.18	0.91
5:l3:296:THR:HG22	5:l3:298:PHE:H	1.37	0.90
12:m0:110:ARG:H	12:m0:110:ARG:HE	1.20	0.90
45:2:647:G:H22	45:2:687:G:H1	1.16	0.89
1:1:1639:C:OP2	35:O4:74:ARG:NH2	2.06	0.89
47:s1:33:LYS:HE2	47:s1:41:ARG:HH12	1.37	0.89
28:n7:26:VAL:HG11	28:n7:96:VAL:HB	1.55	0.89
30:N9:23:LYS:HD2	30:N9:24:PRO:HD3	1.56	0.88
1:5:1764:U:H3'	1:5:1765:U:H4'	1.56	0.88
3:8:80:A:H5'	36:o5:2:ALA:HB2	1.56	0.88
1:5:3242:G:H5'	1:5:3245:A:H8	1.39	0.88
4:l2:27:ALA:O	4:l2:128:ARG:NH2	2.07	0.88
19:m8:174:ARG:HG3	29:n8:56:VAL:HG11	1.56	0.88
4:L2:27:ALA:O	4:L2:128:ARG:NH2	2.07	0.88
63:C7:23:LYS:HG3	77:SR:198:ASN:HD21	1.39	0.87
1:1:640:U:OP1	29:N8:21:ARG:NH2	2.07	0.87
11:L9:49:ASN:O	11:L9:51:GLN:N	2.06	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:O2:19:ARG:HH11	33:O2:28:VAL:HG13	1.39	0.87
69:d3:107:PHE:HE1	69:d3:123:LYS:HB3	1.39	0.87
1:1:2836:C:H5	1:1:2852:C:H42	1.23	0.87
47:S1:48:VAL:HG13	47:S1:61:LEU:HD11	1.55	0.87
45:6:1636:C:H4'	45:6:1637:C:H5'	1.55	0.87
47:s1:83:LYS:HD3	47:s1:106:THR:HG22	1.56	0.86
45:2:992:A:H2	45:2:1012:U:H3	1.20	0.86
5:L3:41:VAL:HA	5:L3:185:GLY:HA3	1.56	0.86
62:C6:115:THR:HB	62:C6:118:ILE:HG23	1.57	0.86
1:1:3042:U:OP2	1:1:3092:C:N4	2.07	0.86
13:M1:55:ARG:O	13:M1:58:GLY:N	2.08	0.86
78:SM:84:LYS:HD2	78:SM:85:SER:H	1.41	0.86
11:L9:75:VAL:HA	11:L9:78:MET:HE2	1.59	0.85
45:2:1456:C:H5''	45:2:1457:C:H5''	1.57	0.85
66:D0:72:ASN:HD22	66:D0:73:GLY:H	1.24	0.85
47:s1:184:LEU:HA	47:s1:187:LYS:HB2	1.59	0.85
50:s4:191:ARG:HD3	50:s4:245:LYS:HB2	1.58	0.85
51:s5:26:ALA:HB2	62:c6:26:LYS:HB2	1.57	0.85
12:M0:23:ASN:O	12:M0:24:ARG:NH1	2.09	0.84
1:5:3214:U:OP2	15:m4:128:ARG:NH2	2.10	0.84
57:c1:102:LYS:HD3	57:c1:102:LYS:H	1.42	0.84
77:SR:248:ASN:HD21	77:SR:298:GLY:HA3	1.43	0.84
45:2:400:A:H5''	54:S8:25:ARG:HA	1.59	0.84
48:s2:170:ILE:HB	48:s2:197:TYR:HB2	1.60	0.84
5:L3:232:ARG:NH1	5:L3:269:GLN:O	2.11	0.83
15:m4:48:GLY:HA3	15:m4:53:VAL:HB	1.58	0.83
45:2:1145:U:O2'	48:S2:89:GLN:O	1.95	0.83
9:l7:82:LYS:HG3	22:n1:135:PRO:HG2	1.58	0.83
1:5:1639:C:OP2	35:o4:74:ARG:NH2	2.11	0.83
45:6:1097:U:H4'	45:6:1098:U:H5'	1.60	0.83
12:m0:43:VAL:HG21	12:m0:197:VAL:HG22	1.60	0.83
47:S1:147:ALA:O	47:S1:148:ASN:ND2	2.09	0.83
5:L3:214:MET:HE2	5:L3:350:ALA:HA	1.61	0.83
15:M4:48:GLY:HA3	15:M4:53:VAL:HG13	1.59	0.83
45:6:454:U:H5''	45:6:455:C:H5	1.43	0.83
6:l4:188:ARG:HE	6:l4:197:ARG:HB2	1.42	0.83
50:S4:100:ARG:HH22	50:S4:122:LYS:HA	1.41	0.82
46:s0:189:VAL:HG22	46:s0:190:ASP:H	1.42	0.82
69:d3:69:ARG:HD3	69:d3:117:ILE:HG12	1.61	0.82
1:5:2201:G:H21	4:l2:224:THR:HG21	1.44	0.82
45:2:888:U:H1'	60:C4:126:THR:HG21	1.61	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1082:U:H5''	80:5:3428:PAR:H532	1.62	0.82
1:5:1427:U:OP2	29:n8:4:ARG:NH2	2.12	0.82
50:S4:94:ALA:HB1	70:D4:16:PRO:HB2	1.61	0.82
62:c6:93:HIS:HA	62:c6:97:VAL:HG13	1.61	0.82
65:C9:118:PRO:HD2	65:C9:123:ARG:HH22	1.45	0.82
3:4:135:G:OP1	26:N5:49:LYS:NZ	2.12	0.82
31:O0:100:ILE:H	31:O0:100:ILE:HD12	1.43	0.82
36:O5:79:ASP:OD1	36:O5:79:ASP:N	2.13	0.82
3:4:135:G:OP2	26:N5:56:ARG:NH2	2.13	0.82
9:l7:132:PRO:HA	9:l7:229:PHE:CE2	2.15	0.82
63:c7:26:LEU:HD21	63:c7:62:GLN:HG3	1.62	0.82
65:c9:33:TYR:HD1	65:c9:34:VAL:H	1.27	0.82
6:L4:204:GLY:O	6:L4:246:ARG:NH1	2.12	0.82
50:S4:79:ASP:HB3	50:S4:82:TYR:HB2	1.62	0.82
1:1:1722:U:OP1	20:M9:100:ARG:NH1	2.13	0.82
80:3:203:PAR:H11	80:3:203:PAR:H13	1.62	0.82
45:2:1243:G:H21	61:C5:54:ALA:HB1	1.45	0.81
14:m3:74:GLY:O	14:m3:101:ARG:NH1	2.09	0.81
45:6:169:A:H5''	79:s6:176:GLN:HG2	1.61	0.81
53:S7:17:GLU:HG2	53:S7:46:ILE:HB	1.63	0.81
49:S3:45:LYS:H	49:S3:45:LYS:HD3	1.45	0.81
8:L6:43:LEU:HD11	8:L6:85:ILE:HG13	1.63	0.81
70:D4:45:ALA:O	70:D4:49:LYS:N	2.14	0.81
50:s4:92:LEU:HB2	50:s4:95:THR:HG22	1.61	0.81
51:S5:225:ARG:HB2	74:D8:61:ARG:HH12	1.46	0.81
80:5:3423:PAR:O41	19:m8:174:ARG:NH2	2.14	0.81
45:6:933:A:OP2	72:d6:37:LYS:NZ	2.12	0.81
6:l4:26:PHE:HD1	6:l4:130:ALA:HB2	1.46	0.80
10:L8:145:ASN:HB3	10:L8:147:LYS:HG3	1.64	0.80
17:m6:22:VAL:HG21	17:m6:120:VAL:HG11	1.63	0.80
1:1:31:C:OP2	16:M5:188:ARG:NH2	2.13	0.80
6:L4:226:GLU:OE1	6:L4:237:GLN:NE2	2.14	0.80
11:L9:41:ILE:HD11	11:L9:67:ALA:HB1	1.62	0.80
1:5:115:A:OP1	16:m5:49:ARG:NH2	2.15	0.80
19:M8:158:HIS:H	19:M8:186:VAL:HG12	1.47	0.80
58:C2:62:LEU:HB3	58:C2:75:VAL:HG11	1.63	0.80
45:6:79:C:H1'	79:s6:174:LYS:HG3	1.63	0.80
69:D3:125:VAL:HG12	69:D3:126:LYS:HG3	1.64	0.80
37:o6:4:LYS:HD2	37:o6:14:GLY:HA3	1.64	0.80
47:s1:85:LYS:HB3	47:s1:101:HIS:HB3	1.64	0.80
77:sR:140:CYS:SG	77:sR:141:LEU:N	2.54	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:N4:4:GLU:HG2	25:N4:30:ARG:HD3	1.62	0.80
8:L6:31:ARG:NH1	34:O3:107:ILE:O	2.14	0.80
1:5:2436:U:H3	1:5:2511:A:H62	1.27	0.80
80:1:3416:PAR:H43	80:1:3416:PAR:H241	1.45	0.80
70:d4:36:SER:OG	70:d4:37:LYS:N	2.15	0.80
1:1:1940:G:H21	1:1:3362:A:H8	1.30	0.79
45:2:754:A:N6	45:2:793:A:N7	2.31	0.79
48:S2:88:LYS:H	48:S2:95:ARG:HB2	1.45	0.79
63:C7:21:TYR:HA	63:C7:58:MET:HE1	1.64	0.79
1:5:1671:C:OP1	20:m9:60:LYS:NZ	2.13	0.79
45:6:1104:U:OP1	69:d3:14:LYS:NZ	2.15	0.79
22:N1:51:GLY:HA3	22:N1:92:ARG:HG3	1.63	0.79
46:S0:119:ARG:HE	48:S2:240:LEU:HB3	1.46	0.79
45:2:96:G:N7	83:2:2209:HOH:O	2.15	0.79
45:2:913:G:H3'	45:2:914:G:H5'	1.62	0.79
50:S4:71:LYS:HG2	50:S4:91:THR:HB	1.65	0.79
53:s7:143:LEU:O	68:d2:42:GLN:NE2	2.15	0.79
70:d4:127:LYS:HZ1	70:d4:131:ARG:HH11	1.30	0.79
14:M3:28:GLN:HB3	16:M5:201:ARG:HD2	1.63	0.79
45:2:297:U:H5''	50:S4:37:LYS:HG2	1.65	0.79
6:l4:20:LEU:HD11	6:l4:252:GLU:HG3	1.65	0.79
45:2:386:G:OP2	54:S8:25:ARG:NH2	2.16	0.79
51:S5:72:HIS:HD1	62:C6:79:TYR:HH	1.25	0.79
53:s7:91:ILE:HG12	53:s7:129:LEU:HD23	1.65	0.79
15:M4:23:ILE:HA	15:M4:63:VAL:HG23	1.64	0.79
28:N7:14:VAL:HG13	35:O4:86:LYS:HG2	1.63	0.79
46:s0:3:LEU:HD12	46:s0:4:PRO:HD2	1.65	0.79
31:O0:16:LEU:HD12	31:O0:98:SER:HB2	1.65	0.79
66:D0:106:ILE:HG23	66:D0:107:THR:HG23	1.63	0.79
1:1:400:G:H4'	1:1:401:U:H5''	1.65	0.79
1:1:687:U:OP2	14:M3:36:ARG:NH2	2.15	0.79
35:O4:29:ILE:HD11	35:O4:31:ARG:HH21	1.47	0.79
60:C4:81:VAL:HG22	60:C4:115:ILE:HB	1.65	0.79
9:l7:178:ILE:HA	9:l7:183:ASP:HB3	1.65	0.79
1:5:1949:G:OP1	20:m9:104:ARG:NH1	2.16	0.78
46:s0:55:GLU:HG2	67:d1:79:LEU:HD22	1.64	0.78
51:s5:63:GLN:HE22	51:s5:66:GLN:HB3	1.46	0.78
19:M8:185:LYS:HG2	19:M8:186:VAL:HG23	1.65	0.78
45:2:1297:G:N2	45:2:1300:A:OP2	2.12	0.78
1:5:1064:A:N6	1:5:1096:U:O4	2.16	0.78
31:o0:20:SER:HB2	31:o0:97:ASP:H	1.46	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2636:A:H5''	1:1:2637:A:H5'	1.63	0.78
55:S9:133:HIS:HD2	55:S9:134:ILE:HG22	1.47	0.78
1:5:1170:A:OP2	83:5:4206:HOH:O	2.01	0.78
49:S3:115:ILE:HD11	49:S3:138:VAL:HG21	1.65	0.78
72:D6:12:LYS:HE2	72:D6:16:GLY:H	1.48	0.78
80:5:3428:PAR:N21	80:5:3428:PAR:O43	2.15	0.78
39:o8:64:LYS:HE3	39:o8:65:LEU:HG	1.66	0.78
45:2:516:G:O6	45:2:537:G:N2	2.17	0.78
61:c5:22:LEU:HA	61:c5:25:LEU:HB2	1.66	0.78
11:L9:138:THR:O	11:L9:139:ASN:ND2	2.16	0.78
80:2:1904:PAR:N21	80:2:1904:PAR:O53	2.16	0.78
46:S0:57:LEU:HD21	46:S0:173:ILE:HG23	1.66	0.78
8:l6:176:PHE:H	15:m4:117:ARG:HH22	1.32	0.78
46:s0:185:ARG:H	67:d1:44:ARG:HA	1.48	0.78
65:c9:111:ILE:HB	65:c9:113:ILE:HG12	1.64	0.78
69:d3:109:ARG:O	69:d3:112:LYS:NZ	2.17	0.78
1:5:1072:G:N7	80:5:3428:PAR:H34	1.99	0.78
9:l7:228:SER:HA	9:l7:232:ARG:HH21	1.49	0.78
19:m8:158:HIS:H	19:m8:186:VAL:HG12	1.49	0.78
72:D6:38:ARG:HH21	72:D6:83:ILE:HG21	1.48	0.78
1:5:3182:G:OP1	17:m6:160:ARG:NH2	2.17	0.78
1:1:1837:U:OP2	83:1:4307:HOH:O	2.00	0.77
1:5:1367:G:OP2	83:5:4208:HOH:O	2.02	0.77
5:l3:232:ARG:NH1	5:l3:269:GLN:O	2.17	0.77
45:6:895:G:H22	45:6:917:U:H3	1.28	0.77
1:1:1787:A:OP2	80:1:3416:PAR:N64	2.18	0.77
17:M6:127:LEU:HD11	21:N0:168:PRO:HG3	1.67	0.77
45:2:168:A:OP1	52:S6:140:ASN:ND2	2.17	0.77
66:D0:30:LYS:HG3	66:D0:33:GLN:HB2	1.66	0.77
43:q2:71:ARG:HH21	43:q2:80:ARG:HH11	1.30	0.77
79:s6:98:ARG:NH2	79:s6:101:ILE:O	2.16	0.77
11:L9:171:ASP:OD1	11:L9:173:ARG:HG2	1.84	0.77
49:s3:105:MET:HG2	49:s3:122:VAL:HG21	1.64	0.77
71:d5:49:ARG:HH12	71:d5:69:LEU:HA	1.49	0.77
1:1:2375:G:OP2	83:1:4310:HOH:O	2.02	0.77
45:2:268:C:OP1	52:S6:176:GLN:NE2	2.16	0.77
45:2:1498:G:H5''	65:C9:72:GLY:HA3	1.64	0.77
1:5:1677:G:OP2	23:n2:103:TYR:OH	2.01	0.77
1:5:1813:A:O2'	1:5:1816:A:N3	2.18	0.77
34:O3:21:ARG:HH11	34:O3:21:ARG:HG3	1.49	0.77
45:2:1066:C:H4'	47:S1:149:GLN:HE22	1.48	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1207:C:H42	45:6:1456:C:H5	1.32	0.77
7:L5:60:ILE:HB	7:L5:80:SER:HB3	1.67	0.77
62:C6:29:ILE:HA	62:C6:65:ILE:HB	1.65	0.77
1:5:165:A:H61	1:5:257:U:H3	1.32	0.77
1:5:2376:G:N7	83:5:4236:HOH:O	2.16	0.77
1:5:2836:C:H5	1:5:2852:C:H42	1.30	0.77
1:5:659:G:N7	83:5:4244:HOH:O	2.18	0.77
1:5:2516:U:O2	1:5:2594:C:N4	2.17	0.77
62:c6:129:PHE:O	62:c6:137:ARG:NH1	2.17	0.77
1:5:2754:G:OP1	83:5:4207:HOH:O	2.02	0.77
6:l4:10:SER:OG	6:l4:13:GLY:O	2.00	0.77
15:M4:108:ARG:NH2	17:M6:196:ALA:O	2.19	0.76
18:M7:56:ARG:NH1	18:M7:75:GLU:OE2	2.17	0.76
44:Q3:38:ASP:HA	44:Q3:45:LYS:HA	1.67	0.76
1:5:1318:A:OP1	17:m6:18:ARG:NH2	2.18	0.76
55:s9:59:LEU:HB3	55:s9:93:LEU:HD21	1.64	0.76
77:sR:10:ARG:HG3	77:sR:314:GLN:HB2	1.67	0.76
1:1:41:G:OP1	83:1:4308:HOH:O	2.01	0.76
1:1:2279:A:OP1	83:1:4309:HOH:O	2.02	0.76
45:2:390:G:OP1	80:2:1902:PAR:N24	2.18	0.76
1:5:1073:U:H5	80:5:3428:PAR:H44	1.49	0.76
1:5:155:G:H5''	1:5:156:G:C8	2.20	0.76
1:5:3274:A:H3'	1:5:3275:U:H5''	1.67	0.76
1:1:1323:G:H5''	21:N0:1:MET:HA	1.68	0.76
80:1:3405:PAR:N64	83:1:4342:HOH:O	2.17	0.76
3:4:63:G:O2'	36:O5:49:LYS:NZ	2.16	0.76
12:M0:102:MET:HE2	12:M0:110:ARG:HD2	1.67	0.76
12:M0:174:THR:HG23	12:M0:176:LEU:H	1.48	0.76
1:5:518:G:OP2	1:5:518:G:N2	2.18	0.76
24:n3:33:ASN:HD22	24:n3:63:LYS:HB2	1.49	0.76
49:s3:142:LEU:HD23	49:s3:182:LEU:HD21	1.68	0.76
45:2:398:G:OP2	54:S8:47:ARG:NH1	2.18	0.76
1:5:838:G:O6	44:q3:4:ARG:NH2	2.18	0.76
45:6:1429:G:H1'	66:d0:74:GLU:HG2	1.66	0.76
1:1:3245:A:H5'	1:1:3246:G:H5''	1.68	0.76
61:C5:127:ARG:NH2	78:SM:65:THR:OG1	2.18	0.76
1:5:1061:A:H62	80:5:3420:PAR:H531	1.49	0.76
45:6:138:A:H62	45:6:266:A:H61	1.33	0.76
1:5:1060:U:O4	80:5:3420:PAR:N24	2.19	0.76
72:d6:4:LYS:HG2	72:d6:5:ARG:HG3	1.66	0.76
1:1:2174:G:H21	80:1:3410:PAR:H13	1.51	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:S2:242:ILE:HG23	48:S2:243:TYR:HD2	1.50	0.76
63:C7:25:THR:HB	63:C7:27:ASP:H	1.49	0.76
1:5:222:A:N7	80:5:3401:PAR:N12	2.33	0.76
45:6:1213:G:O2'	45:6:1244:A:N6	2.19	0.76
66:d0:18:GLN:O	66:d0:96:PRO:HB3	1.86	0.76
11:L9:111:PHE:HD1	11:L9:127:PRO:HA	1.51	0.76
46:S0:41:ARG:HB3	46:S0:45:VAL:HB	1.68	0.76
1:5:149:U:OP2	16:m5:49:ARG:NH1	2.19	0.76
1:5:3234:A:H2	1:5:3253:G:H22	1.31	0.76
5:l3:219:ALA:HB2	5:l3:336:VAL:HG23	1.66	0.76
57:c1:124:THR:HB	57:c1:141:LYS:HB3	1.68	0.76
1:1:3350:C:N4	1:1:3353:G:O6	2.19	0.75
24:N3:54:LEU:HD21	24:N3:119:GLY:HA3	1.68	0.75
55:S9:121:SER:HB3	55:S9:124:HIS:HB3	1.68	0.75
65:C9:28:LEU:HD13	65:C9:30:VAL:HG22	1.68	0.75
1:5:3171:U:H3	1:5:3279:A:H61	1.33	0.75
45:6:629:U:OP1	59:c3:127:ARG:NH2	2.19	0.75
60:c4:89:THR:O	60:c4:128:LYS:NZ	2.17	0.75
23:N2:89:LEU:HD13	23:N2:93:ILE:HD11	1.66	0.75
26:N5:115:ARG:HD3	26:N5:121:LYS:HB2	1.67	0.75
77:SR:216:LYS:HA	77:SR:239:GLU:HG3	1.68	0.75
1:5:1073:U:C5	80:5:3428:PAR:H44	2.21	0.75
26:n5:96:LYS:NZ	26:n5:107:VAL:O	2.18	0.75
53:s7:55:LYS:HE2	53:s7:87:ASP:HA	1.68	0.75
63:c7:24:LEU:HB3	63:c7:58:MET:HE3	1.67	0.75
75:d9:29:GLY:O	75:d9:40:ARG:N	2.19	0.75
76:e0:59:GLY:O	76:e0:61:SER:N	2.19	0.75
33:O2:100:ILE:O	33:O2:105:ARG:NH1	2.19	0.75
1:5:1493:G:O6	40:o9:2:ALA:N	2.19	0.75
1:5:3354:U:H4'	1:5:3355:U:H3'	1.68	0.75
45:6:558:U:OP1	76:e0:55:ARG:NH2	2.20	0.75
45:6:868:G:H1	45:6:960:U:H3	1.33	0.75
1:1:2155:G:O2'	4:L2:227:ARG:NH2	2.20	0.75
45:2:620:A:OP2	83:2:2202:HOH:O	2.03	0.75
55:S9:77:ILE:HD11	55:S9:93:LEU:HB2	1.69	0.75
52:S6:79:LYS:HB3	52:S6:86:PRO:HG2	1.67	0.75
1:5:2951:G:OP2	83:5:4210:HOH:O	2.05	0.75
45:6:629:U:O2	45:6:970:A:N6	2.20	0.75
13:m1:14:ILE:HG13	13:m1:131:MET:HE1	1.68	0.75
5:L3:169:THR:HG23	5:L3:171:LEU:H	1.51	0.75
32:O1:44:MET:HE3	32:O1:77:ARG:HB2	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:772:G:H21	45:2:774:A:H1'	1.50	0.75
46:S0:126:PRO:HB2	46:S0:152:PRO:HG2	1.69	0.75
1:1:180:C:O2	1:1:236:G:N2	2.20	0.75
24:N3:47:ASN:ND2	83:N3:301:HOH:O	2.19	0.75
70:D4:50:ALA:HB1	70:D4:54:ALA:HB3	1.67	0.75
1:5:1952:G:O6	1:5:2094:C:N4	2.20	0.75
11:19:72:LYS:NZ	11:19:76:ASP:OD2	2.19	0.75
1:1:899:U:OP2	80:1:3435:PAR:O53	2.04	0.74
1:1:1846:C:OP1	1:1:1849:C:N4	2.19	0.74
1:1:3353:G:H5'	54:S8:162:ALA:HA	1.69	0.74
64:C8:86:LEU:HG	64:C8:99:HIS:HB2	1.67	0.74
78:SM:51:ARG:HB2	78:SM:52:PRO:HD2	1.69	0.74
45:6:767:U:H6	55:s9:141:VAL:HA	1.51	0.74
26:N5:86:VAL:HG21	26:N5:95:ILE:HG12	1.69	0.74
45:2:402:C:OP2	83:2:2203:HOH:O	2.06	0.74
1:5:860:G:OP1	44:q3:17:ARG:NH1	2.20	0.74
45:6:187:G:N2	45:6:199:G:O6	2.20	0.74
1:1:612:U:H2'	1:1:613:G:H8	1.52	0.74
6:L4:82:THR:HG23	6:L4:84:ARG:H	1.52	0.74
31:O0:13:LYS:HB3	31:O0:100:ILE:HG13	1.69	0.74
45:2:591:A:H2'	45:2:592:A:C8	2.23	0.74
12:m0:42:THR:HG23	12:m0:45:GLU:HB2	1.69	0.74
51:s5:157:ARG:NH2	51:s5:224:ASN:OD1	2.19	0.74
79:s6:135:PRO:HB2	79:s6:141:ILE:HG12	1.68	0.74
45:2:929:A:OP2	45:2:931:C:N4	2.20	0.74
45:2:1339:C:O2'	45:2:1341:A:N7	2.19	0.74
1:5:1364:C:OP1	9:l7:110:ARG:NH2	2.20	0.74
45:6:78:A:OP2	79:s6:154:ARG:NH1	2.20	0.74
45:6:1294:G:O2'	45:6:1321:A:N1	2.19	0.74
60:c4:84:ARG:HB3	60:c4:118:VAL:HG23	1.69	0.74
1:5:1719:G:OP1	20:m9:110:ARG:NH1	2.20	0.74
1:5:2394:G:H5'	5:l3:252:ILE:HG13	1.70	0.74
1:1:829:U:H3	1:1:895:A:H62	1.35	0.74
1:5:1150:A:OP1	83:5:4209:HOH:O	2.04	0.74
12:m0:218:ALA:N	12:m0:219:ALA:HA	2.01	0.74
45:6:399:A:P	54:s8:49:ARG:HH22	2.10	0.74
45:6:1595:U:H3	45:6:1600:A:H2	1.34	0.74
11:L9:90:MET:HE3	11:L9:181:VAL:HG23	1.69	0.74
30:N9:25:LYS:HG3	30:N9:26:THR:H	1.51	0.74
58:C2:61:VAL:HG13	58:C2:121:VAL:HG23	1.69	0.74
64:C8:45:LEU:HD11	65:C9:36:ILE:HG22	1.68	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1017:C:H42	1:5:1032:C:H41	1.36	0.74
1:5:1098:A:OP2	22:n1:130:ARG:NH1	2.21	0.74
80:5:3416:PAR:N64	4:l2:23:ARG:O	2.21	0.74
45:6:686:C:H2'	45:6:687:G:H8	1.50	0.74
1:1:919:U:OP1	83:1:4311:HOH:O	2.06	0.74
2:3:45:A:OP1	7:L5:151:GLN:NE2	2.21	0.74
70:D4:57:VAL:HG13	70:D4:60:PHE:CE2	2.22	0.74
13:m1:17:LEU:HG	13:m1:129:VAL:HB	1.70	0.74
1:1:1222:G:O2'	1:1:1285:G:N1	2.18	0.74
9:L7:20:GLN:HG3	9:L7:21:LYS:H	1.53	0.74
14:M3:48:PRO:HG3	14:M3:135:ALA:HB1	1.70	0.74
45:2:1521:G:O2'	45:2:1523:G:OP2	2.03	0.74
51:S5:108:LEU:H	51:S5:108:LEU:HD12	1.53	0.74
1:5:667:C:OP2	80:5:3424:PAR:N64	2.21	0.74
1:5:914:A:C2	4:l2:204:MET:HG2	2.23	0.74
5:l3:90:VAL:HG22	5:l3:104:THR:HG23	1.69	0.74
45:6:312:A:OP1	80:6:1904:PAR:N21	2.21	0.74
47:s1:225:VAL:HA	47:s1:228:LEU:HB3	1.68	0.74
50:s4:89:VAL:HG21	50:s4:164:LEU:HD11	1.70	0.74
7:L5:91:GLY:O	7:L5:94:ASN:ND2	2.21	0.73
9:L7:158:LYS:HE2	9:L7:159:GLN:H	1.52	0.73
1:5:269:G:OP2	16:m5:44:ARG:NH2	2.21	0.73
55:s9:83:VAL:HA	55:s9:149:ARG:HA	1.70	0.73
1:1:989:A:H62	80:1:3412:PAR:H641	1.54	0.73
11:L9:30:PRO:HD2	11:L9:83:THR:HG22	1.70	0.73
65:C9:25:GLN:HB3	65:C9:27:LYS:HG3	1.69	0.73
72:D6:73:TYR:HB3	72:D6:78:ALA:HB2	1.70	0.73
1:5:979:U:H1'	1:5:980:A:C6	2.23	0.73
1:5:2249:G:H2'	1:5:2250:G:C8	2.22	0.73
1:1:44:U:H5''	16:M5:85:THR:HG23	1.70	0.73
12:M0:103:LEU:HD21	12:M0:109:ASP:HA	1.70	0.73
60:C4:18:ARG:HA	60:C4:82:LYS:O	1.88	0.73
61:c5:25:LEU:HD23	61:c5:28:MET:HE1	1.70	0.73
5:L3:293:ASN:HB2	5:L3:304:THR:HA	1.71	0.73
5:L3:372:THR:HB	5:L3:375:GLU:H	1.54	0.73
78:SM:87:THR:HG23	78:SM:88:ARG:H	1.53	0.73
1:5:2854:U:OP2	12:m0:3:ARG:NH2	2.21	0.73
69:d3:107:PHE:HD2	69:d3:114:LYS:HB3	1.53	0.73
27:N6:5:SER:HB3	27:N6:8:VAL:HG23	1.71	0.73
45:2:840:U:HO2'	45:2:841:U:H6	1.34	0.73
45:2:1593:A:O2'	75:D9:33:LYS:NZ	2.21	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:c3:63:ALA:O	59:c3:67:THR:OG1	2.06	0.73
61:c5:54:ALA:HA	61:c5:57:MET:HB2	1.69	0.73
62:c6:110:THR:HA	62:c6:113:ASP:HB2	1.70	0.73
1:1:516:A:O3'	9:L7:60:ARG:NH2	2.20	0.73
1:5:1795:U:H2'	4:l2:50:HIS:HD2	1.53	0.73
77:SR:38:ARG:HA	77:SR:67:ILE:HG23	1.71	0.73
1:5:1412:G:OP1	33:o2:105:ARG:NH2	2.22	0.73
46:s0:179:ARG:NH1	46:s0:180:GLU:OE1	2.22	0.73
1:1:1507:G:N7	18:M7:129:THR:HG23	2.04	0.73
45:2:329:G:H5''	54:S8:98:LYS:HB3	1.70	0.73
48:S2:53:ILE:HD11	48:S2:73:LEU:HB2	1.71	0.73
45:6:511:A:H5'	55:s9:173:ALA:HB2	1.69	0.73
1:1:1369:A:OP1	29:N8:21:ARG:NH1	2.22	0.73
1:1:2303:A:OP1	42:Q1:23:ARG:NH2	2.21	0.73
7:L5:21:ARG:HA	7:L5:24:ARG:HE	1.53	0.73
28:N7:52:LYS:O	28:N7:65:ARG:NH1	2.18	0.73
68:D2:29:PRO:HB2	68:D2:58:SER:HB2	1.69	0.73
1:5:295:A:N3	37:o6:82:ARG:NH2	2.35	0.73
2:7:44:C:OP2	13:m1:137:ARG:NH2	2.21	0.73
6:L4:20:LEU:HD11	6:L4:252:GLU:HG3	1.71	0.72
47:S1:130:SER:OG	47:S1:177:GLN:O	2.05	0.72
1:5:959:C:OP1	83:5:4211:HOH:O	2.06	0.72
24:n3:87:ARG:HH22	24:n3:137:VAL:HG22	1.54	0.72
1:1:2399:A:N7	83:1:4354:HOH:O	2.20	0.72
7:L5:68:THR:HG22	7:L5:70:THR:H	1.54	0.72
11:l9:91:ARG:NH2	11:l9:141:LYS:O	2.22	0.72
31:o0:13:LYS:HB3	31:o0:100:ILE:HG22	1.70	0.72
45:6:168:A:OP1	79:s6:140:ASN:ND2	2.21	0.72
7:L5:40:HIS:HD2	7:L5:42:ALA:H	1.36	0.72
40:O9:9:ILE:HG22	40:O9:13:MET:HE2	1.70	0.72
1:5:198:A:N3	1:5:218:G:O2'	2.22	0.72
1:5:1780:G:O6	80:5:3403:PAR:N12	2.20	0.72
13:m1:101:ASN:HB3	13:m1:130:VAL:HA	1.71	0.72
45:6:475:A:OP2	55:s9:126:ARG:NH1	2.21	0.72
47:s1:20:VAL:HG13	47:s1:21:VAL:HG22	1.71	0.72
79:s6:57:ASP:HA	79:s6:106:LEU:HA	1.71	0.72
1:1:2703:A:OP2	7:L5:23:ARG:NH1	2.22	0.72
44:Q3:46:THR:OG1	44:Q3:57:CYS:SG	2.47	0.72
47:s1:112:SER:O	47:s1:115:ARG:NH2	2.23	0.72
77:sR:42:LEU:HB2	77:sR:61:PHE:HD2	1.53	0.72
1:1:1412:G:OP1	33:O2:105:ARG:NH2	2.22	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L7:217:PRO:O	83:L7:401:HOH:O	2.07	0.72
24:N3:79:VAL:HB	24:N3:118:VAL:HG13	1.69	0.72
36:O5:118:ILE:HG22	36:O5:119:LYS:H	1.54	0.72
47:S1:29:TRP:HZ3	47:S1:45:LYS:HB3	1.54	0.72
1:5:1912:U:N3	1:5:2122:G:OP2	2.21	0.72
1:5:2662:G:H2'	1:5:2663:G:C8	2.23	0.72
45:6:1542:G:H22	45:6:1568:C:H1'	1.54	0.72
13:M1:10:ARG:HB2	13:M1:133:ARG:HD3	1.71	0.72
67:D1:36:VAL:O	67:D1:51:VAL:N	2.15	0.72
72:D6:10:ARG:HB2	72:D6:34:LYS:HG3	1.71	0.72
1:5:2759:U:H5''	1:5:2760:C:H5'	1.72	0.72
4:L2:5:ILE:HG12	4:L2:8:GLN:HG3	1.69	0.72
3:8:35:C:OP2	83:8:301:HOH:O	2.08	0.72
45:6:1330:G:OP2	83:6:2101:HOH:O	2.06	0.72
46:s0:126:PRO:HG3	46:s0:147:THR:HG22	1.71	0.72
1:1:2620:G:N7	12:M0:113:GLN:NE2	2.37	0.72
1:1:3182:G:OP1	17:M6:160:ARG:NH2	2.22	0.72
1:5:2829:U:OP2	83:5:4212:HOH:O	2.06	0.72
10:l8:134:TYR:CG	10:l8:190:VAL:HG11	2.24	0.72
1:1:635:G:OP2	83:1:4312:HOH:O	2.06	0.72
36:O5:77:PRO:HD2	36:O5:80:LEU:HD12	1.72	0.72
48:S2:38:VAL:HG13	48:S2:39:THR:HG23	1.72	0.72
66:D0:69:LYS:HE2	66:D0:80:GLU:HB2	1.72	0.72
69:D3:70:LYS:HB3	69:D3:93:LEU:HD22	1.71	0.72
1:5:59:G:H4'	1:5:60:A:H4'	1.72	0.72
1:5:987:U:OP2	80:5:3420:PAR:N64	2.22	0.72
1:5:2358:A:OP1	80:5:3412:PAR:N32	2.21	0.72
1:5:2639:G:OP2	83:5:4215:HOH:O	2.07	0.72
5:l3:287:LYS:HB2	5:l3:290:ASP:HB3	1.72	0.72
27:N6:73:VAL:HA	27:N6:80:VAL:HG23	1.72	0.71
1:5:2818:U:H5'	1:5:2818:U:H6	1.55	0.71
1:1:1090:G:H2'	1:1:1091:A:H8	1.55	0.71
80:1:3415:PAR:N64	4:L2:24:GLN:O	2.24	0.71
14:M3:74:GLY:O	14:M3:101:ARG:NH1	2.23	0.71
58:C2:136:ILE:HA	58:C2:139:HIS:HB3	1.71	0.71
1:5:284:A:OP2	43:q2:38:GLN:NE2	2.21	0.71
5:l3:296:THR:HG22	5:l3:298:PHE:N	2.05	0.71
14:m3:79:GLU:OE2	14:m3:103:ASN:ND2	2.22	0.71
62:c6:82:ARG:HH22	62:c6:114:ARG:HG3	1.55	0.71
74:d8:27:GLN:HE22	74:d8:64:ARG:HD2	1.54	0.71
24:N3:74:MET:HE3	24:N3:102:ILE:HB	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:239:C:H3'	45:2:240:U:H5''	1.70	0.71
45:2:778:G:H2'	45:2:779:U:H2'	1.71	0.71
47:S1:129:THR:HA	47:S1:177:GLN:HA	1.71	0.71
50:S4:141:THR:OG1	50:S4:143:ASP:OD2	2.07	0.71
7:I5:106:ALA:HB2	7:I5:166:ALA:HA	1.70	0.71
45:6:1067:C:H5''	47:s1:150:VAL:HG13	1.71	0.71
45:6:1460:A:H5'	64:c8:145:ARG:HH12	1.54	0.71
1:1:2895:G:O2'	41:Q0:100:TYR:O	2.08	0.71
5:L3:152:LYS:HG3	5:L3:189:SER:HA	1.73	0.71
7:L5:38:THR:HG22	22:N1:30:TYR:HB3	1.70	0.71
19:M8:73:GLN:HB2	19:M8:76:ALA:HB2	1.71	0.71
45:2:1459:C:OP2	64:C8:138:THR:OG1	2.06	0.71
70:D4:89:TYR:HE1	70:D4:93:ARG:HH21	1.36	0.71
1:5:1863:G:N1	1:5:1866:C:OP2	2.23	0.71
5:I3:2:SER:O	5:I3:2:SER:OG	2.08	0.71
8:L6:50:LYS:HE3	8:L6:72:ASN:HB2	1.72	0.71
57:C1:54:ILE:HG23	57:C1:55:ASP:H	1.54	0.71
1:5:2278:C:O2	83:5:4213:HOH:O	2.07	0.71
46:s0:9:LEU:HD11	46:s0:14:ALA:HB2	1.73	0.71
46:s0:185:ARG:HD3	46:s0:186:GLY:H	1.54	0.71
47:s1:149:GLN:HE21	47:s1:151:LYS:HB3	1.56	0.71
20:M9:23:TRP:CH2	20:M9:25:ASP:HB3	2.25	0.71
29:N8:112:ILE:HB	29:N8:130:VAL:HG12	1.73	0.71
49:S3:27:ARG:HE	56:C0:60:SER:HB2	1.55	0.71
70:D4:83:LYS:NZ	70:D4:96:LEU:O	2.24	0.71
74:d8:58:GLU:HB3	74:d8:61:ARG:HG2	1.72	0.71
1:1:3329:U:H5''	5:L3:308:MET:HE2	1.72	0.71
45:2:868:G:H1	45:2:960:U:H3	1.39	0.71
54:S8:117:TYR:CD1	54:S8:150:ALA:HB2	2.26	0.71
1:5:1675:G:OP2	80:5:3404:PAR:N12	2.23	0.71
45:6:320:U:H2'	45:6:321:C:H2'	1.72	0.71
37:O6:66:GLU:OE2	37:O6:91:ASN:ND2	2.23	0.71
45:2:1341:A:H4'	77:SR:90:ARG:HH22	1.55	0.71
1:5:2319:U:OP1	42:q1:25:LYS:NZ	2.23	0.71
7:I5:76:ALA:HB3	7:I5:109:THR:HG22	1.72	0.71
21:n0:109:ASP:OD1	21:n0:113:ARG:NH1	2.22	0.71
45:6:541:A:O2'	45:6:542:A:H5'	1.91	0.71
45:6:1023:A:OP1	45:6:1126:G:N2	2.21	0.71
45:6:1364:G:O3'	62:c6:26:LYS:NZ	2.22	0.71
1:1:944:C:O2'	33:O2:33:ARG:NH1	2.24	0.71
1:1:1055:A:N3	2:3:81:U:O2'	2.23	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:M3:80:VAL:HG11	14:M3:87:ALA:H	1.53	0.71
27:N6:45:ILE:HD12	27:N6:119:ILE:HG23	1.71	0.71
33:O2:39:ASP:OD1	83:O2:301:HOH:O	2.08	0.71
52:S6:57:ASP:HA	52:S6:106:LEU:HA	1.73	0.71
77:SR:131:ILE:HB	77:SR:144:LEU:HD23	1.72	0.71
1:5:29:C:O3'	16:m5:172:ARG:NH1	2.24	0.71
1:5:641:C:H42	1:5:645:A:H8	1.39	0.71
1:5:2817:A:N7	83:5:4268:HOH:O	2.24	0.71
13:m1:23:VAL:HG13	13:m1:29:ARG:HD3	1.71	0.71
13:m1:109:HIS:CD2	13:m1:114:ILE:HG21	2.26	0.71
70:d4:49:LYS:HZ2	70:d4:49:LYS:H	1.39	0.71
1:1:1116:G:OP2	83:1:4313:HOH:O	2.08	0.71
1:1:1764:U:H1'	1:1:1766:G:H5'	1.73	0.71
32:O1:86:LYS:H	32:O1:86:LYS:HD3	1.54	0.71
1:5:1673:G:OP1	80:5:3404:PAR:O31	2.08	0.71
9:l7:88:ARG:HD2	9:l7:90:LYS:O	1.90	0.71
1:1:2616:C:OP2	83:1:4314:HOH:O	2.08	0.70
1:1:2996:U:H5'	1:1:2997:G:H5''	1.73	0.70
21:N0:8:GLN:HG3	21:N0:26:ARG:HE	1.56	0.70
56:C0:29:GLN:OE1	56:C0:39:ASN:ND2	2.24	0.70
16:m5:158:HIS:ND1	16:m5:160:GLU:OE2	2.24	0.70
46:s0:146:LEU:HD21	46:s0:173:ILE:HG21	1.72	0.70
8:L6:30:LEU:HD21	8:L6:34:LEU:HD12	1.71	0.70
45:2:339:C:OP2	54:S8:10:LYS:NZ	2.23	0.70
62:C6:29:ILE:HG21	62:C6:36:ILE:HD12	1.73	0.70
63:C7:13:SER:HA	63:C7:54:THR:HG22	1.72	0.70
1:5:943:U:H3'	29:n8:13:GLY:HA2	1.72	0.70
31:o0:30:THR:HG22	31:o0:91:SER:HB2	1.73	0.70
45:6:768:C:C2	55:s9:143:ILE:HG12	2.26	0.70
48:s2:216:VAL:O	48:s2:220:ASN:ND2	2.24	0.70
57:c1:108:PRO:HB2	57:c1:135:VAL:HG22	1.71	0.70
17:M6:27:LEU:HD22	17:M6:101:ARG:HB2	1.72	0.70
45:2:1364:G:O2'	62:C6:26:LYS:NZ	2.24	0.70
58:C2:42:ALA:HB3	58:C2:122:VAL:HB	1.74	0.70
70:D4:3:ASP:H	70:D4:32:ARG:NH1	1.88	0.70
1:5:96:G:OP1	14:m3:15:ARG:NH2	2.23	0.70
1:5:3139:A:OP1	5:l3:274:SER:OG	2.09	0.70
3:8:135:G:OP2	26:n5:56:ARG:NH2	2.25	0.70
77:sR:146:GLY:HA3	77:sR:181:TRP:HH2	1.56	0.70
48:S2:103:VAL:HG22	48:S2:113:LEU:HD23	1.72	0.70
51:S5:124:LEU:HD21	71:D5:59:TYR:HB2	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:520:U:OP2	9:l7:70:LYS:NZ	2.24	0.70
3:8:156:U:OP1	10:l8:84:ARG:NH2	2.24	0.70
62:c6:113:ASP:HA	62:c6:116:LEU:HD12	1.73	0.70
2:3:19:C:H2'	2:3:20:A:H8	1.56	0.70
68:D2:70:ASN:ND2	68:D2:130:TYR:O	2.24	0.70
1:5:225:C:OP2	83:5:4216:HOH:O	2.08	0.70
1:5:1002:A:N1	1:5:1050:U:O2'	2.25	0.70
1:5:2902:A:OP2	83:5:4217:HOH:O	2.08	0.70
31:o0:40:LYS:HB3	31:o0:101:LEU:HD11	1.72	0.70
79:s6:139:ASN:HA	79:s6:142:ARG:HB2	1.74	0.70
69:D3:135:LEU:HD11	69:D3:142:LYS:HB2	1.74	0.70
1:5:1762:C:H5'	1:5:1763:U:H5''	1.73	0.70
4:l2:172:GLY:HA3	44:q3:68:ALA:H	1.55	0.70
4:L2:105:GLY:HA3	4:L2:160:SER:HB3	1.74	0.70
5:L3:115:LYS:HA	5:L3:118:PHE:HD1	1.55	0.70
31:O0:38:LYS:HB3	31:O0:93:LEU:HD23	1.72	0.70
65:C9:38:LYS:HD2	65:C9:43:ASN:HB3	1.74	0.70
1:5:7:C:H5''	10:l8:193:LYS:HB3	1.73	0.70
1:5:1497:C:H2'	1:5:1498:A:H8	1.57	0.70
1:5:1750:A:H4'	1:5:1751:G:H5'	1.73	0.70
41:q0:127:LEU:HD22	41:q0:128:LYS:H	1.56	0.70
45:6:755:A:O2'	45:6:756:A:O4'	2.08	0.70
45:6:886:U:OP1	47:s1:214:LYS:NZ	2.25	0.70
45:6:1552:U:O4	61:c5:40:ARG:NH2	2.24	0.70
1:1:2660:G:O3'	1:1:2749:G:N2	2.24	0.70
9:L7:28:ALA:O	9:L7:32:ALA:N	2.22	0.70
18:M7:116:HIS:HB3	18:M7:149:VAL:HG13	1.71	0.70
45:2:589:C:OP1	76:E0:42:ARG:NH2	2.24	0.70
71:D5:37:GLN:O	71:D5:38:HIS:ND1	2.25	0.70
1:5:2920:U:OP1	83:5:4218:HOH:O	2.08	0.70
13:m1:115:LYS:HD2	13:m1:116:TYR:H	1.56	0.70
79:s6:20:ASP:HB3	79:s6:23:ARG:HG3	1.72	0.70
45:2:1516:A:OP1	66:D0:88:LYS:NZ	2.21	0.70
45:2:1619:C:O2	74:D8:22:ARG:NH1	2.25	0.70
71:D5:83:LEU:O	71:D5:87:GLY:N	2.23	0.70
1:5:3164:C:H1'	1:5:3165:A:H5'	1.74	0.70
45:6:1565:C:OP1	64:c8:41:ARG:NH1	2.25	0.70
53:s7:59:ALA:HA	53:s7:91:ILE:HG22	1.74	0.70
53:s7:62:VAL:HG12	53:s7:64:VAL:H	1.56	0.70
1:1:3296:A:OP2	5:L3:121:ASN:HB2	1.91	0.70
46:S0:201:LEU:HD13	63:C7:83:GLN:HG3	1.74	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:l3:57:VAL:HG22	5:l3:73:VAL:HG12	1.73	0.70
45:6:1482:C:N4	45:6:1524:A:OP2	2.24	0.70
58:c2:76:GLU:HA	58:c2:79:ALA:HB3	1.74	0.70
63:c7:77:GLU:HA	63:c7:80:ARG:HB2	1.72	0.70
72:d6:46:GLU:HG2	72:d6:47:ALA:N	2.07	0.70
5:L3:41:VAL:HA	5:L3:185:GLY:CA	2.22	0.69
10:L8:76:ALA:O	10:L8:79:GLN:NE2	2.24	0.69
17:M6:98:ALA:HA	17:M6:101:ARG:HH11	1.55	0.69
20:M9:105:LEU:HD22	20:M9:138:LEU:HD13	1.73	0.69
1:5:3178:A:H5'	17:m6:5:PRO:HD2	1.74	0.69
24:n3:22:ILE:HG12	24:n3:35:TYR:HB2	1.74	0.69
1:1:49:A:OP2	83:1:4319:HOH:O	2.10	0.69
1:1:1508:C:OP2	83:1:4316:HOH:O	2.10	0.69
20:M9:155:LEU:O	20:M9:159:ALA:N	2.20	0.69
45:2:1258:U:OP1	56:C0:1:MET:N	2.21	0.69
57:C1:33:ARG:NH2	57:C1:51:GLY:O	2.25	0.69
62:C6:55:VAL:HG23	62:C6:105:LEU:HD11	1.74	0.69
46:s0:183:ARG:NH2	46:s0:191:ARG:O	2.23	0.69
69:d3:107:PHE:CD2	69:d3:114:LYS:HB3	2.27	0.69
69:d3:125:VAL:HG12	69:d3:126:LYS:HG3	1.73	0.69
35:O4:3:GLN:HB3	35:O4:30:LEU:HD12	1.75	0.69
44:Q3:56:THR:HB	44:Q3:63:THR:HG23	1.72	0.69
45:2:1487:A:OP1	75:D9:34:TYR:OH	2.09	0.69
46:S0:62:ARG:HD3	67:D1:36:VAL:HG13	1.71	0.69
9:l7:180:SER:HB2	9:l7:183:ASP:H	1.57	0.69
60:C4:17:ALA:N	60:C4:80:HIS:O	2.25	0.69
77:SR:28:GLY:HA3	77:SR:76:ASP:HA	1.74	0.69
1:5:126:U:OP1	16:m5:144:ARG:NH1	2.25	0.69
1:5:1524:A:OP2	83:5:4219:HOH:O	2.09	0.69
17:m6:179:ALA:O	17:m6:182:ASN:ND2	2.20	0.69
45:6:640:U:O2	53:s7:179:LYS:NZ	2.23	0.69
70:d4:29:HIS:HB2	70:d4:67:GLY:HA2	1.73	0.69
1:1:2398:A:OP2	83:1:4320:HOH:O	2.11	0.69
53:S7:138:LYS:O	53:S7:139:ARG:NE	2.25	0.69
45:6:1082:C:H1'	67:d1:62:ARG:HH21	1.58	0.69
45:6:1420:C:N3	83:6:2107:HOH:O	2.25	0.69
1:5:2826:U:O4	80:5:3409:PAR:O44	2.10	0.69
61:c5:28:MET:HE3	61:c5:33:PHE:HB2	1.74	0.69
39:O8:58:ASP:OD2	39:O8:61:LYS:N	2.16	0.69
45:2:1199:G:C4	75:D9:40:ARG:HD3	2.28	0.69
71:D5:48:ASP:HA	71:D5:51:LEU:HB2	1.73	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:l9:90:MET:HE2	11:l9:179:ILE:HG22	1.74	0.69
51:s5:25:LEU:HD12	62:c6:27:GLY:HA3	1.74	0.69
1:1:899:U:O4	80:1:3435:PAR:O44	2.11	0.69
1:1:912:G:OP2	4:l2:9:ARG:NH1	2.26	0.69
1:1:2676:A:N1	13:M1:22:SER:OG	2.25	0.69
45:2:1350:U:H2'	45:2:1351:G:H8	1.58	0.69
45:2:1555:A:OP2	61:C5:47:ARG:NH2	2.26	0.69
63:C7:25:THR:OG1	63:C7:31:ASN:OD1	2.10	0.69
1:5:1761:C:H6	1:5:1765:U:H3	1.41	0.69
1:5:2155:G:H4'	4:l2:239:ALA:HB3	1.74	0.69
7:l5:60:ILE:HB	7:l5:80:SER:HB3	1.75	0.69
11:l9:171:ASP:OD2	11:l9:173:ARG:NH1	2.26	0.69
24:n3:47:ASN:ND2	83:n3:301:HOH:O	2.18	0.69
46:s0:155:PHE:O	67:d1:60:ARG:NH2	2.24	0.69
54:s8:62:THR:HA	54:s8:76:THR:O	1.92	0.69
66:d0:70:THR:HG22	66:d0:71:PRO:O	1.93	0.69
74:d8:10:ALA:HB1	74:d8:30:VAL:HB	1.74	0.69
14:M3:14:PHE:HB3	14:M3:18:TRP:CD1	2.28	0.69
45:2:619:A:OP2	83:2:2202:HOH:O	2.11	0.69
45:2:736:C:OP1	50:S4:197:HIS:NE2	2.20	0.69
1:1:620:U:H2'	1:1:621:A:H1'	1.75	0.69
1:1:1721:U:O4	20:M9:128:LYS:NZ	2.25	0.69
45:2:369:A:O2'	45:2:371:G:OP2	2.11	0.69
1:5:202:G:OP1	80:5:3401:PAR:O41	2.11	0.69
1:5:312:C:H2'	1:5:313:A:H8	1.58	0.69
1:5:950:G:OP2	83:5:4220:HOH:O	2.10	0.69
1:5:2611:U:OP1	83:5:4224:HOH:O	2.11	0.69
80:5:3424:PAR:N21	80:5:3424:PAR:O43	2.25	0.69
45:6:393:C:OP2	54:s8:2:GLY:N	2.26	0.69
66:d0:28:SER:HB3	66:d0:34:LEU:HD13	1.74	0.69
1:1:1686:U:O4	23:N2:82:LYS:NZ	2.21	0.68
7:L5:56:THR:HG23	7:L5:59:ASP:HB3	1.75	0.68
47:S1:27:LYS:HG2	47:S1:49:ASN:HA	1.75	0.68
1:5:668:G:O2'	19:m8:164:ARG:NH1	2.26	0.68
1:5:2641:U:O4	83:5:4214:HOH:O	2.07	0.68
1:5:2867:C:OP2	83:5:4222:HOH:O	2.11	0.68
4:l2:108:PRO:O	4:l2:111:THR:OG1	2.10	0.68
9:l7:88:ARG:HA	9:l7:134:VAL:HG12	1.75	0.68
1:1:1479:U:OP2	83:1:4318:HOH:O	2.10	0.68
45:2:1291:G:H22	45:2:1324:G:N2	1.90	0.68
1:5:685:G:OP2	14:m3:35:ARG:NH1	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:d0:23:ARG:HB3	66:d0:117:VAL:HG11	1.73	0.68
15:M4:55:ARG:NH2	15:M4:76:ALA:O	2.25	0.68
45:2:45:U:O2'	45:2:46:A:H2'	1.93	0.68
55:S9:150:LEU:HA	55:S9:153:GLU:HB2	1.73	0.68
56:C0:10:LYS:HD2	56:C0:37:THR:HG23	1.74	0.68
1:5:2553:U:O2'	35:o4:91:ARG:NH2	2.25	0.68
1:5:2964:G:N2	1:5:2967:A:OP2	2.20	0.68
51:s5:156:ARG:HA	51:s5:157:ARG:NH1	2.09	0.68
54:s8:11:ARG:NH1	54:s8:15:GLY:O	2.26	0.68
1:1:2514:U:H5'	10:L8:68:ARG:HG3	1.73	0.68
11:L9:34:LEU:HD21	11:L9:149:ASN:HB2	1.75	0.68
45:2:1429:G:OP2	83:2:2205:HOH:O	2.12	0.68
1:5:3156:U:O2'	1:5:3157:U:O4'	2.10	0.68
41:q0:98:LYS:HD3	41:q0:118:THR:HG21	1.75	0.68
45:6:828:U:H3'	45:6:829:A:H5''	1.75	0.68
47:s1:176:VAL:HG22	47:s1:184:LEU:HD21	1.75	0.68
60:c4:70:LYS:HA	60:c4:73:GLU:HB3	1.74	0.68
78:sM:51:ARG:O	78:sM:53:ARG:NH2	2.25	0.68
1:1:2607:G:OP2	83:1:4317:HOH:O	2.10	0.68
2:3:17:A:OP1	13:M1:150:ASN:ND2	2.25	0.68
11:L9:22:SER:OG	11:L9:23:ARG:N	2.26	0.68
45:2:27:U:H2'	45:2:28:A:H8	1.59	0.68
60:C4:111:ARG:HB2	72:D6:57:SER:HA	1.75	0.68
1:5:982:C:H42	1:5:1101:G:H1	1.42	0.68
1:5:2992:U:H1'	18:m7:69:ARG:HH21	1.57	0.68
16:m5:73:ARG:HH11	16:m5:92:LEU:HD21	1.58	0.68
45:6:530:C:O2	70:d4:61:ARG:NH2	2.27	0.68
47:s1:175:GLU:HG2	47:s1:193:ILE:HD12	1.76	0.68
49:s3:11:LEU:HD13	66:d0:29:THR:HG23	1.74	0.68
60:c4:42:VAL:HG13	60:c4:67:VAL:HG22	1.74	0.68
1:1:2404:A:OP2	83:1:4323:HOH:O	2.12	0.68
1:1:2679:A:O2'	13:M1:52:TYR:OH	2.09	0.68
21:n0:57:GLU:OE2	22:n1:139:ARG:NH1	2.26	0.68
1:1:1480:G:N7	83:1:4318:HOH:O	2.25	0.68
1:1:2880:U:H1'	5:L3:250:ALA:HB3	1.75	0.68
83:1:4330:HOH:O	38:O7:30:GLN:NE2	2.18	0.68
2:3:66:A:OP2	83:3:301:HOH:O	2.11	0.68
45:2:580:A:O2'	45:2:582:U:OP1	2.11	0.68
45:2:1681:A:H2'	45:2:1682:U:H5'	1.76	0.68
55:S9:53:ARG:HG3	55:S9:97:LEU:HD23	1.75	0.68
1:5:1155:C:O2'	1:5:1197:A:N1	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:l6:52:VAL:HG11	8:l6:65:ILE:HG23	1.75	0.68
14:m3:177:LYS:HA	37:o6:11:LEU:HD13	1.74	0.68
43:q2:70:LEU:N	43:q2:83:LEU:O	2.26	0.68
1:1:92:G:OP2	1:1:93:C:H5''	1.92	0.68
3:4:142:C:OP1	16:M5:38:ARG:NH1	2.26	0.68
45:2:472:U:H5''	55:S9:11:THR:HG23	1.76	0.68
45:2:522:U:O2'	70:D4:60:PHE:O	2.12	0.68
45:2:1298:U:O2	48:S2:209:ASN:ND2	2.27	0.68
45:2:1591:C:H2'	45:2:1592:A:C8	2.29	0.68
48:S2:175:GLY:HA3	55:S9:97:LEU:HD22	1.76	0.68
72:D6:10:ARG:NH1	72:D6:36:ILE:H	1.91	0.68
1:5:216:G:OP1	27:n6:16:ARG:NH1	2.26	0.68
1:5:255:A:H2'	1:5:256:G:H8	1.58	0.68
1:5:2611:U:OP1	83:5:4226:HOH:O	2.12	0.68
1:5:2663:G:H5'	7:l5:152:ARG:HD3	1.74	0.68
45:6:383:G:OP1	50:s4:6:LYS:NZ	2.27	0.68
2:3:7:G:H5''	7:L5:22:ARG:HD3	1.76	0.68
7:L5:21:ARG:NH1	7:L5:25:GLU:OE2	2.26	0.68
45:2:140:A:OP2	52:S6:187:LYS:NZ	2.22	0.68
45:2:154:G:N3	52:S6:56:ASN:ND2	2.42	0.68
72:D6:51:ARG:NH1	74:D8:60:GLU:OE1	2.27	0.68
25:n4:46:PRO:HB2	25:n4:54:LEU:HD23	1.76	0.68
39:o8:17:ARG:HG3	39:o8:18:ALA:H	1.59	0.68
45:6:1546:G:N7	64:c8:134:ARG:NH2	2.42	0.68
64:c8:127:HIS:CD2	64:c8:133:VAL:HG21	2.28	0.68
1:1:398:A:H5''	18:M7:3:ARG:HD2	1.74	0.68
5:L3:70:ARG:HH22	24:N3:120:LYS:HZ2	1.42	0.68
45:2:62:A:O2'	45:2:268:C:O2	2.10	0.68
45:2:149:C:OP1	70:D4:121:THR:N	2.26	0.68
45:2:887:A:H1'	60:C4:122:PRO:HB3	1.76	0.68
45:2:1308:G:H22	45:2:1318:G:H1'	1.59	0.68
60:C4:19:ILE:HG21	60:C4:29:HIS:H	1.58	0.68
1:5:175:C:H41	1:5:243:G:N2	1.92	0.68
1:5:243:G:OP1	36:o5:115:LYS:NZ	2.25	0.68
1:5:1145:G:OP1	33:o2:44:ARG:NH1	2.27	0.68
1:5:2138:A:OP1	83:5:4227:HOH:O	2.12	0.68
1:5:2174:G:OP2	4:l2:193:ARG:NH1	2.27	0.68
8:l6:55:LEU:HD12	8:l6:64:LEU:HD22	1.74	0.68
10:l8:71:VAL:HB	10:l8:76:ALA:HB2	1.74	0.68
68:d2:55:ASP:HB2	68:d2:57:ARG:H	1.58	0.68
1:1:1591:G:OP1	35:O4:16:ARG:NH1	2.27	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2389:C:H1'	18:m7:69:ARG:NH1	2.09	0.67
45:6:188:A:OP2	54:s8:138:ASN:ND2	2.27	0.67
45:6:1316:G:HO2'	45:6:1401:A:HO2'	1.40	0.67
64:c8:7:GLU:HG2	64:c8:8:GLN:N	2.09	0.67
1:1:648:C:O2'	83:1:4324:HOH:O	2.12	0.67
72:D6:43:ASN:OD1	72:D6:64:LEU:HD11	1.94	0.67
5:13:29:VAL:HG22	5:13:218:ILE:HD13	1.76	0.67
26:n5:103:TYR:HB3	26:n5:135:ILE:HD11	1.75	0.67
45:6:1243:G:H4'	45:6:1244:A:H5'	1.75	0.67
70:d4:29:HIS:NE2	70:d4:35:VAL:HG22	2.10	0.67
12:M0:76:MET:HE1	12:M0:138:VAL:HG21	1.76	0.67
46:S0:155:PHE:O	67:D1:60:ARG:NH2	2.28	0.67
62:C6:49:TYR:HB3	62:C6:53:LEU:HD21	1.77	0.67
1:5:1675:G:O6	80:5:3404:PAR:O23	2.12	0.67
5:13:185:GLY:O	5:13:191:LYS:NZ	2.21	0.67
8:l6:51:ARG:NH1	15:m4:114:ASP:OD2	2.28	0.67
45:6:1363:U:O2'	45:6:1364:G:O5'	2.13	0.67
61:c5:57:MET:HA	61:c5:60:LEU:HD12	1.75	0.67
11:L9:31:ARG:HH22	11:L9:188:THR:HG23	1.60	0.67
21:N0:137:ARG:HG2	21:N0:139:TYR:CZ	2.30	0.67
45:2:647:G:N2	45:2:687:G:H1	1.91	0.67
80:5:3406:PAR:N64	80:5:3406:PAR:O44	2.27	0.67
11:l9:48:VAL:HG22	11:l9:52:LEU:HB3	1.77	0.67
50:s4:9:LEU:HB2	50:s4:30:ARG:HB2	1.77	0.67
1:1:899:U:C5	80:1:3435:PAR:H531	2.30	0.67
12:M0:38:LYS:HD2	12:M0:83:ASP:HB3	1.76	0.67
15:M4:135:LEU:HD21	17:M6:178:VAL:HA	1.76	0.67
24:N3:72:LYS:HD2	24:N3:73:VAL:H	1.60	0.67
45:2:312:A:OP1	80:2:1903:PAR:N21	2.28	0.67
45:2:542:A:H8	45:2:543:C:H5'	1.57	0.67
45:2:799:A:O3'	50:S4:201:HIS:NE2	2.27	0.67
47:S1:77:GLU:OE2	60:C4:114:ARG:NH2	2.27	0.67
50:S4:115:THR:HG1	50:S4:118:GLU:H	1.41	0.67
1:5:2756:C:OP1	83:5:4207:HOH:O	2.12	0.67
36:o5:78:LYS:HA	36:o5:81:ARG:HG3	1.75	0.67
55:s9:77:ILE:HG21	55:s9:91:LYS:HB3	1.77	0.67
68:d2:8:ALA:HB2	68:d2:74:VAL:HG11	1.76	0.67
1:1:1191:U:OP1	41:Q0:113:ARG:NH2	2.27	0.67
7:L5:30:TYR:HA	7:L5:33:ARG:HB3	1.76	0.67
11:L9:69:ARG:HH12	11:L9:72:LYS:HE3	1.59	0.67
45:2:637:C:OP1	68:D2:32:LYS:N	2.22	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:68:C:H42	1:5:75:G:H1	1.42	0.67
3:8:49:G:O2'	36:o5:40:SER:HB2	1.94	0.67
6:l4:31:ARG:NH2	6:l4:33:ASP:OD2	2.28	0.67
45:6:1278:G:OP1	49:s3:185:LYS:NZ	2.27	0.67
45:6:1280:C:H2'	45:6:1281:G:H8	1.60	0.67
48:s2:41:LEU:HD11	48:s2:61:LEU:HB3	1.77	0.67
61:c5:49:MET:O	61:c5:51:SER:N	2.25	0.67
80:1:3407:PAR:N64	80:1:3407:PAR:O44	2.28	0.67
8:L6:148:GLU:HA	8:L6:151:LYS:HE2	1.76	0.67
12:M0:38:LYS:HB2	12:M0:83:ASP:HA	1.76	0.67
44:Q3:84:ARG:HE	44:Q3:87:ARG:HH22	1.43	0.67
45:2:158:U:O2'	45:2:160:C:OP2	2.13	0.67
54:S8:103:GLN:HE21	54:S8:166:TYR:HE1	1.42	0.67
1:5:2189:U:OP2	83:5:4229:HOH:O	2.13	0.67
39:o8:26:LYS:NZ	39:o8:28:ASN:OD1	2.26	0.67
45:6:918:U:O2'	60:c4:35:GLY:O	2.13	0.67
45:6:1081:A:O2'	45:6:1083:G:N7	2.26	0.67
58:c2:42:ALA:HB1	58:c2:47:GLU:HB3	1.77	0.67
65:c9:4:VAL:HG21	65:c9:137:ALA:HB2	1.77	0.67
73:d7:50:ALA:HB3	73:d7:71:ALA:HB2	1.77	0.67
1:1:2987:A:O2'	5:L3:259:HIS:HB3	1.95	0.67
80:1:3426:PAR:N21	80:1:3426:PAR:H23	2.09	0.67
47:S1:144:ARG:NH2	47:S1:207:LEU:O	2.28	0.67
53:S7:80:GLU:HA	53:S7:83:LYS:HE2	1.77	0.67
5:l3:284:ARG:HB3	5:l3:323:MET:HB3	1.77	0.67
20:m9:47:ASN:HB3	20:m9:49:THR:HG23	1.76	0.67
45:6:800:U:H2'	45:6:801:G:C8	2.29	0.67
45:6:1597:A:OP2	75:d9:32:ARG:NH2	2.26	0.67
77:sR:134:TRP:HA	77:sR:140:CYS:HA	1.77	0.67
13:M1:15:GLU:HG2	13:M1:72:ARG:HH12	1.57	0.67
6:l4:141:ARG:HB2	6:l4:177:ASP:HB2	1.77	0.67
14:m3:3:ILE:HG21	29:n8:45:MET:HE3	1.76	0.67
45:6:190:C:N4	45:6:196:G:O6	2.28	0.67
80:1:3432:PAR:N21	80:1:3432:PAR:O43	2.26	0.67
45:2:57:G:OP1	70:D4:112:LYS:NZ	2.20	0.67
45:2:420:A:OP1	52:S6:96:SER:OG	2.08	0.67
45:2:1085:G:N2	45:2:1088:A:OP2	2.23	0.67
80:5:3403:PAR:H241	80:5:3403:PAR:H43	1.57	0.67
54:s8:12:SER:HG	54:s8:14:THR:HG1	1.42	0.67
1:1:516:A:H5''	6:L4:344:ALA:HB2	1.76	0.66
7:L5:25:GLU:HB3	7:L5:27:LYS:HG3	1.77	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:O3:14:LEU:HD11	34:O3:31:LYS:HB2	1.76	0.66
70:D4:15:ASN:OD1	70:D4:18:LEU:N	2.22	0.66
16:m5:144:ARG:HD3	36:o5:95:PHE:HE2	1.60	0.66
45:6:591:A:H2'	45:6:592:A:C8	2.29	0.66
59:c3:5:HIS:HB3	59:c3:117:LEU:HD13	1.77	0.66
1:1:577:C:N4	80:1:3433:PAR:O31	2.29	0.66
1:1:1228:C:H2'	1:1:1229:G:H8	1.60	0.66
1:1:1524:A:OP2	83:1:4322:HOH:O	2.12	0.66
15:M4:36:VAL:HB	15:M4:45:LEU:HD23	1.77	0.66
21:N0:24:LEU:HD21	21:N0:59:VAL:HG21	1.77	0.66
50:S4:159:THR:HB	50:S4:227:VAL:HG23	1.77	0.66
60:C4:17:ALA:HB3	60:C4:81:VAL:HA	1.77	0.66
62:C6:93:HIS:HA	62:C6:97:VAL:HG13	1.76	0.66
63:C7:71:PHE:CE1	63:C7:73:LEU:HB3	2.30	0.66
1:5:1586:G:OP2	83:5:4223:HOH:O	2.11	0.66
7:l5:259:LYS:HD3	7:l5:259:LYS:H	1.60	0.66
39:o8:24:THR:HG23	39:o8:44:LYS:HB2	1.77	0.66
59:c3:38:VAL:HG12	59:c3:42:ARG:HG3	1.77	0.66
1:1:2606:G:N2	1:1:2609:A:H62	1.92	0.66
1:1:2818:U:H6	1:1:2818:U:H5'	1.59	0.66
1:1:3268:A:OP1	8:L6:46:ARG:NH2	2.27	0.66
22:N1:119:ALA:HB1	22:N1:124:VAL:HA	1.78	0.66
45:2:1382:A:H5''	66:D0:60:THR:H	1.60	0.66
63:C7:37:GLU:HG3	77:SR:150:TRP:HE1	1.60	0.66
1:5:3272:C:H5'	8:l6:78:ARG:HB2	1.77	0.66
80:5:3413:PAR:H641	4:l2:175:VAL:HG23	1.77	0.66
30:n9:45:HIS:HA	30:n9:48:HIS:HB2	1.76	0.66
72:d6:87:ARG:HB3	72:d6:91:ASP:HB3	1.78	0.66
1:1:875:G:N7	83:1:4373:HOH:O	2.27	0.66
4:L2:112:ILE:HD12	44:Q3:79:VAL:HG22	1.78	0.66
13:M1:114:ILE:CG2	13:M1:115:LYS:H	2.08	0.66
43:Q2:15:LYS:HG2	43:Q2:18:ARG:HH11	1.59	0.66
50:S4:32:SER:OG	50:S4:81:THR:OG1	2.07	0.66
2:7:42:A:OP2	83:7:301:HOH:O	2.14	0.66
45:6:1229:G:O2'	45:6:1255:G:N2	2.28	0.66
69:d3:17:VAL:HG22	69:d3:20:ARG:HH12	1.60	0.66
1:1:2621:G:OP1	83:1:4328:HOH:O	2.14	0.66
45:2:544:A:OP1	83:2:2206:HOH:O	2.12	0.66
45:2:985:G:O6	83:2:2204:HOH:O	2.09	0.66
45:2:1648:A:H2'	45:2:1649:G:H8	1.61	0.66
67:D1:71:ARG:NE	73:D7:4:VAL:HG11	2.10	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:D6:15:ARG:HD2	72:D6:18:VAL:HG12	1.77	0.66
1:5:912:G:OP2	4:12:9:ARG:NH1	2.29	0.66
1:5:1093:A:C6	22:n1:116:ARG:HD3	2.31	0.66
1:5:2255:A:H5'	1:5:2261:G:H22	1.59	0.66
12:m0:86:HIS:HB3	12:m0:139:ARG:HG2	1.77	0.66
24:n3:33:ASN:HD21	24:n3:64:LYS:HD3	1.59	0.66
46:s0:66:ALA:HB2	67:d1:37:ALA:HB2	1.75	0.66
72:d6:24:VAL:HG11	72:d6:71:LEU:HB3	1.78	0.66
1:1:979:U:H1'	1:1:980:A:N7	2.11	0.66
80:1:3435:PAR:H23	80:1:3435:PAR:HN21	1.54	0.66
5:L3:281:LYS:HD2	5:L3:283:TYR:HE1	1.60	0.66
45:2:515:A:N6	45:2:537:G:O2'	2.29	0.66
45:2:1100:G:H1'	68:D2:76:SER:HB3	1.77	0.66
45:2:1229:G:O2'	45:2:1255:G:N2	2.28	0.66
45:2:1325:A:OP2	63:C7:11:ARG:NH2	2.29	0.66
45:2:1785:U:OP1	60:C4:136:ARG:NH1	2.26	0.66
65:C9:124:ILE:HG13	65:C9:129:GLN:HG2	1.75	0.66
1:5:394:G:H22	1:5:397:A:H5'	1.60	0.66
1:5:916:G:OP1	83:5:4228:HOH:O	2.13	0.66
1:5:3206:C:O2	21:n0:155:ARG:NH1	2.29	0.66
3:8:80:A:H4'	3:8:81:U:OP1	1.96	0.66
35:o4:41:ARG:HG2	35:o4:56:THR:HG21	1.77	0.66
45:6:1045:C:OP1	47:s1:153:HIS:NE2	2.27	0.66
48:s2:106:ASP:OD1	48:s2:108:ASN:N	2.20	0.66
51:s5:56:ALA:HA	51:s5:59:VAL:HG23	1.78	0.66
1:1:58:G:H4'	16:M5:155:VAL:HG12	1.77	0.66
1:1:900:G:H1'	1:1:1589:A:N6	2.11	0.66
2:3:60:G:H2'	2:3:61:G:C8	2.31	0.66
6:L4:299:ILE:HD12	19:M8:39:ARG:HG3	1.76	0.66
45:2:127:G:H5''	52:S6:194:LYS:HG2	1.77	0.66
69:D3:63:GLN:O	83:D3:301:HOH:O	2.13	0.66
5:l3:284:ARG:HB2	5:l3:323:MET:HE2	1.76	0.66
12:m0:110:ARG:HE	12:m0:110:ARG:N	1.94	0.66
79:s6:26:VAL:HG21	79:s6:40:ALA:HB1	1.77	0.66
1:1:183:G:N2	1:1:233:C:O2	2.18	0.66
1:1:651:G:OP2	83:1:4325:HOH:O	2.13	0.66
24:N3:31:ALA:HB2	24:N3:69:LEU:HD23	1.76	0.66
72:D6:73:TYR:CE2	72:D6:82:ARG:HG3	2.30	0.66
50:s4:118:GLU:HA	50:s4:121:TYR:HE1	1.61	0.66
63:c7:28:PHE:HA	63:c7:55:THR:HG21	1.78	0.66
78:sM:58:GLU:OE2	78:sM:62:ARG:NH1	2.28	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:284:A:OP2	43:Q2:41:ARG:NH1	2.28	0.66
1:1:1871:U:OP1	83:1:4326:HOH:O	2.14	0.66
14:M3:153:ASP:OD1	14:M3:157:ARG:NH2	2.29	0.66
22:N1:17:ARG:CZ	22:N1:45:ASN:HD21	2.09	0.66
45:2:788:A:OP2	50:S4:106:LYS:NZ	2.28	0.66
51:S5:216:GLU:HG3	51:S5:219:ARG:HD2	1.77	0.66
62:C6:82:ARG:HH12	62:C6:114:ARG:HG2	1.61	0.66
72:D6:79:ILE:HA	72:D6:84:VAL:CG2	2.18	0.66
4:l2:112:ILE:HG22	4:l2:135:ILE:HG12	1.77	0.66
13:m1:108:GLU:O	13:m1:109:HIS:ND1	2.29	0.66
16:m5:96:ARG:NH2	16:m5:104:GLU:OE1	2.28	0.66
38:o7:17:THR:HG22	38:o7:18:LEU:H	1.60	0.66
39:o8:11:PHE:HB2	39:o8:54:LEU:HD13	1.78	0.66
47:s1:36:SER:H	47:s1:231:LEU:HD22	1.61	0.66
45:2:1074:G:O6	80:2:1904:PAR:N64	2.29	0.66
10:l8:140:VAL:HG22	10:l8:166:LEU:HD21	1.77	0.66
14:m3:3:ILE:HG12	29:n8:34:MET:HE2	1.76	0.66
51:s5:156:ARG:HA	51:s5:157:ARG:HH11	1.60	0.66
3:4:61:A:OP1	36:O5:49:LYS:NZ	2.25	0.65
5:L3:227:GLU:HG2	5:L3:270:ARG:HD3	1.77	0.65
31:O0:99:ASP:OD2	31:O0:99:ASP:N	2.29	0.65
46:S0:124:THR:HG22	46:S0:174:TRP:HE1	1.61	0.65
1:5:1717:U:H2'	1:5:1718:G:C8	2.31	0.65
6:l4:138:ARG:HH21	6:l4:240:PRO:HB2	1.60	0.65
45:6:1330:G:OP2	83:6:2102:HOH:O	2.14	0.65
45:6:1535:U:H5''	51:s5:187:ILE:HD11	1.78	0.65
50:s4:68:ARG:HH22	50:s4:76:VAL:HG11	1.61	0.65
4:L2:209:HIS:CD2	4:L2:211:HIS:H	2.14	0.65
45:2:1274:C:H5	78:SM:95:SER:HA	1.60	0.65
45:2:1789:G:OP1	72:D6:17:HIS:NE2	2.27	0.65
57:C1:109:VAL:HG21	57:C1:125:VAL:HG22	1.77	0.65
45:6:979:A:N3	45:6:1775:U:O2'	2.29	0.65
59:c3:99:ARG:NH2	59:c3:119:GLU:OE2	2.24	0.65
1:1:1150:A:OP1	83:1:4329:HOH:O	2.14	0.65
11:L9:13:PRO:HD2	11:L9:16:VAL:HG11	1.76	0.65
28:N7:21:LYS:HD3	28:N7:47:GLU:HA	1.78	0.65
45:2:400:A:OP1	83:2:2207:HOH:O	2.13	0.65
63:C7:71:PHE:H	63:C7:71:PHE:HD2	1.41	0.65
69:D3:46:SER:OG	69:D3:78:LYS:NZ	2.28	0.65
1:5:163:C:H2'	1:5:164:A:C8	2.31	0.65
1:5:1176:C:OP2	83:5:4235:HOH:O	2.15	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1681:A:H1'	79:s6:66:GLY:HA2	1.78	0.65
50:s4:79:ASP:HB3	50:s4:82:TYR:HB2	1.77	0.65
55:s9:85:VAL:HG12	55:s9:99:LEU:HD11	1.77	0.65
60:c4:47:LYS:HB3	60:c4:62:LEU:HD23	1.76	0.65
1:1:2971:A:OP2	1:1:2971:A:H4'	1.96	0.65
13:M1:172:LEU:HD13	13:M1:173:ASP:H	1.61	0.65
23:N2:32:SER:HA	23:N2:35:LYS:HB3	1.79	0.65
45:2:231:U:H3	45:2:234:G:H22	1.41	0.65
45:2:1433:G:N2	75:D9:45:GLU:OE1	2.30	0.65
1:5:1471:U:OP1	20:m9:5:ARG:NH1	2.27	0.65
1:5:1509:A:OP2	83:5:4231:HOH:O	2.13	0.65
1:5:2960:C:H2'	1:5:2961:G:C8	2.32	0.65
1:5:3242:G:H5'	1:5:3245:A:C8	2.28	0.65
3:8:78:G:H2'	3:8:79:A:H1'	1.79	0.65
11:l9:172:ILE:HG22	41:q0:90:ASN:HB3	1.77	0.65
13:m1:29:ARG:HG2	13:m1:123:PHE:HE1	1.61	0.65
13:m1:86:VAL:HG11	13:m1:106:ILE:HD12	1.78	0.65
19:m8:123:THR:O	19:m8:125:ASP:N	2.29	0.65
50:s4:181:VAL:HG21	50:s4:195:ILE:HD11	1.79	0.65
1:1:804:C:H4'	6:L4:93:MET:HE1	1.78	0.65
1:1:2403:G:OP2	83:1:4323:HOH:O	2.14	0.65
80:1:3435:PAR:N21	80:1:3435:PAR:O52	2.30	0.65
3:4:153:U:OP1	10:L8:63:LYS:NZ	2.29	0.65
5:L3:292:ALA:HA	5:L3:303:LYS:H	1.61	0.65
23:N2:11:ILE:CG2	23:N2:12:ALA:H	2.09	0.65
49:S3:53:THR:HA	49:S3:91:VAL:HG22	1.79	0.65
51:S5:32:GLU:HA	51:S5:35:GLN:HB2	1.79	0.65
70:D4:8:ARG:HH11	70:D4:28:LEU:HD11	1.61	0.65
1:5:281:G:OP2	83:5:4234:HOH:O	2.15	0.65
1:5:1178:G:OP2	83:5:4230:HOH:O	2.13	0.65
12:m0:205:SER:O	12:m0:209:ASN:ND2	2.27	0.65
1:1:817:A:OP2	83:1:4327:HOH:O	2.14	0.65
1:1:1517:G:OP1	40:O9:41:ARG:NH1	2.29	0.65
2:3:14:U:H5'	7:L5:24:ARG:NH1	2.11	0.65
3:4:88:A:O2'	3:4:89:A:O5'	2.14	0.65
5:L3:123:TYR:CZ	5:L3:124:LYS:HG3	2.30	0.65
20:M9:185:LEU:O	53:S7:39:ARG:NH2	2.30	0.65
27:N6:87:LYS:HB2	27:N6:97:ILE:HD11	1.78	0.65
45:2:197:A:H61	54:S8:138:ASN:HD22	1.45	0.65
1:5:1195:A:N7	80:5:3419:PAR:O44	2.29	0.65
9:l7:88:ARG:NH1	9:l7:91:GLY:O	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1600:A:H4'	45:6:1601:G:OP1	1.95	0.65
47:s1:134:VAL:HB	47:s1:219:LYS:HB2	1.79	0.65
45:2:1427:A:OP2	78:SM:93:ARG:NH1	2.29	0.65
1:5:1743:G:H2'	1:5:1744:G:H8	1.61	0.65
1:5:2256:A:O2'	1:5:2257:C:OP1	2.15	0.65
4:l2:144:ASN:O	4:l2:160:SER:N	2.21	0.65
6:14:54:GLU:CD	6:14:54:GLU:H	2.03	0.65
7:l5:211:LEU:HD21	7:l5:218:ARG:HB3	1.78	0.65
17:m6:185:ALA:HA	17:m6:188:SER:HB3	1.76	0.65
34:o3:14:LEU:HD11	34:o3:31:LYS:HB2	1.79	0.65
45:6:1345:A:H61	45:6:1380:U:H3	1.44	0.65
79:s6:135:PRO:HB3	79:s6:140:ASN:HB3	1.78	0.65
1:1:2108:C:H1'	1:1:3344:A:C8	2.31	0.65
1:1:2412:G:OP1	83:1:4332:HOH:O	2.15	0.65
2:3:72:A:H62	80:3:203:PAR:H34	1.61	0.65
47:S1:137:ILE:HD11	47:S1:172:LEU:HB3	1.79	0.65
57:C1:99:ARG:HB2	69:D3:12:ALA:HB2	1.77	0.65
77:SR:242:SER:H	77:SR:255:ALA:HB3	1.62	0.65
1:5:524:U:OP1	15:m4:77:ARG:NH2	2.29	0.65
1:5:900:G:H1'	1:5:1589:A:N6	2.12	0.65
1:5:981:U:H2'	1:5:982:C:O4'	1.97	0.65
1:5:2227:C:OP1	43:q2:32:LYS:NZ	2.29	0.65
1:5:2639:G:OP2	83:5:4232:HOH:O	2.14	0.65
20:m9:78:TYR:HA	20:m9:81:ARG:HD2	1.79	0.65
45:6:455:C:H3'	45:6:456:A:H8	1.61	0.65
46:s0:24:LEU:HD11	46:s0:41:ARG:HH12	1.62	0.65
50:s4:141:THR:OG1	50:s4:143:ASP:OD2	2.13	0.65
50:s4:185:GLY:HA2	50:s4:189:LEU:HB2	1.79	0.65
67:d1:11:LEU:HD12	67:d1:12:TYR:HD2	1.61	0.65
1:1:215:G:OP1	27:N6:12:ARG:NH1	2.28	0.65
1:1:847:A:N1	45:2:972:G:O2'	2.26	0.65
12:M0:77:THR:HG22	12:M0:82:ARG:HA	1.79	0.65
1:5:1596:C:H2'	1:5:1597:C:C6	2.31	0.65
1:5:2960:C:H2'	1:5:2961:G:H8	1.62	0.65
48:s2:161:LYS:HE3	48:s2:164:SER:H	1.60	0.65
64:c8:7:GLU:HG2	64:c8:8:GLN:H	1.60	0.65
1:1:2782:U:OP1	14:M3:185:LYS:NZ	2.30	0.65
2:3:36:C:H4'	7:L5:155:THR:HG23	1.79	0.65
6:L4:283:THR:HG22	6:L4:285:ASP:H	1.62	0.65
45:2:27:U:H2'	45:2:28:A:C8	2.32	0.65
45:2:549:G:O2'	45:2:556:A:N1	2.27	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:S5:25:LEU:CD1	62:C6:60:PHE:HB3	2.27	0.65
1:5:345:G:O6	83:5:4221:HOH:O	2.10	0.65
3:8:80:A:H1'	3:8:81:U:H5'	1.78	0.65
45:6:57:G:OP2	70:d4:116:LYS:NZ	2.24	0.65
45:6:230:C:O2	45:6:235:G:N2	2.22	0.65
61:c5:90:ILE:HD11	61:c5:112:LEU:HD21	1.78	0.65
67:d1:32:VAL:HB	67:d1:60:ARG:HD2	1.78	0.65
1:1:1447:G:H3'	18:M7:67:ILE:HD11	1.78	0.64
11:L9:126:VAL:HG21	11:L9:161:LEU:HA	1.77	0.64
15:M4:36:VAL:HG11	15:M4:55:ARG:NH2	2.11	0.64
25:N4:9:SER:HA	25:N4:52:THR:HG22	1.79	0.64
45:2:1064:G:O2'	47:S1:204:ILE:O	2.14	0.64
45:2:1458:G:OP1	64:C8:138:THR:N	2.29	0.64
69:D3:54:LEU:HD11	69:D3:75:GLN:HG3	1.78	0.64
1:5:1298:C:O3'	41:q0:113:ARG:NH1	2.29	0.64
80:5:3425:PAR:N21	80:5:3425:PAR:O43	2.30	0.64
3:8:95:G:OP2	38:o7:72:ARG:NH1	2.29	0.64
45:6:322:G:O2'	54:s8:10:LYS:NZ	2.30	0.64
4:L2:209:HIS:HD2	4:L2:211:HIS:H	1.44	0.64
45:2:222:A:H62	45:2:833:U:H3	1.42	0.64
1:5:409:A:OP2	83:5:4233:HOH:O	2.15	0.64
7:l5:110:LEU:HD23	7:l5:116:ASP:HA	1.79	0.64
13:m1:90:GLN:HB3	13:m1:172:LEU:HD11	1.79	0.64
29:n8:111:LYS:HD2	29:n8:129:PHE:HB3	1.79	0.64
46:s0:3:LEU:HD13	46:s0:62:ARG:NH2	2.12	0.64
1:1:161:G:H22	1:1:261:U:H1'	1.61	0.64
1:1:944:C:H4'	33:O2:33:ARG:HH11	1.62	0.64
1:1:2367:A:OP2	83:1:4331:HOH:O	2.14	0.64
3:4:82:U:H5''	3:4:83:C:C5'	2.28	0.64
19:M8:40:THR:HG21	19:M8:45:ASN:ND2	2.12	0.64
45:2:475:A:OP2	55:S9:126:ARG:NH1	2.28	0.64
45:2:929:A:C8	60:C4:123:SER:HA	2.32	0.64
45:2:1516:A:H8	66:D0:58:LEU:HD23	1.61	0.64
47:S1:36:SER:HB2	47:S1:231:LEU:HD22	1.79	0.64
47:S1:184:LEU:HA	47:S1:187:LYS:HD2	1.79	0.64
50:S4:86:PHE:HE2	50:S4:102:VAL:HA	1.62	0.64
1:5:1696:A:OP2	1:5:1749:A:N6	2.29	0.64
1:5:2546:C:H2'	1:5:2547:A:C8	2.31	0.64
3:8:95:G:OP1	38:o7:76:ASN:ND2	2.25	0.64
4:l2:116:VAL:HG11	4:l2:134:VAL:HG11	1.78	0.64
11:l9:140:VAL:HG22	11:l9:143:GLU:HB2	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:q3:86:LEU:HA	44:q3:89:MET:HE3	1.79	0.64
46:s0:57:LEU:HG	46:s0:160:ILE:HD13	1.78	0.64
1:1:1953:G:N1	1:1:2093:A:N1	2.45	0.64
5:L3:303:LYS:HD2	5:L3:361:THR:HG21	1.79	0.64
23:N2:56:VAL:HG22	23:N2:65:VAL:HG22	1.79	0.64
45:2:542:A:C8	45:2:543:C:H5'	2.31	0.64
45:2:1057:U:O2'	45:2:1059:U:OP2	2.15	0.64
45:2:1437:U:H5'	49:S3:176:LEU:HD23	1.79	0.64
45:2:1451:C:OP1	75:D9:12:ARG:NH2	2.30	0.64
53:S7:130:VAL:HG11	53:S7:154:LEU:HD11	1.78	0.64
80:5:3413:PAR:N21	80:5:3413:PAR:O23	2.30	0.64
8:l6:24:ALA:HB3	8:l6:26:ARG:HH21	1.63	0.64
45:6:1521:G:O6	65:c9:68:ARG:NH1	2.30	0.64
45:6:1553:G:N2	45:6:1555:A:H3'	2.13	0.64
1:1:1836:C:OP2	83:1:4302:HOH:O	2.14	0.64
15:M4:39:ILE:HD12	15:M4:43:LYS:HB3	1.78	0.64
1:5:718:G:OP1	29:n8:117:ARG:NH2	2.30	0.64
5:l3:76:VAL:HG12	5:l3:325:LYS:HA	1.78	0.64
11:l9:75:VAL:HA	11:l9:78:MET:HE3	1.79	0.64
14:m3:43:ALA:HA	14:m3:46:ILE:HG22	1.79	0.64
16:m5:155:VAL:O	16:m5:162:ARG:NH2	2.31	0.64
45:6:187:G:OP2	54:s8:142:LYS:NZ	2.24	0.64
69:d3:107:PHE:CE1	69:d3:123:LYS:HB3	2.27	0.64
77:sR:8:VAL:HG12	77:sR:9:LEU:H	1.62	0.64
1:1:3191:G:H5''	17:M6:176:LYS:HE2	1.79	0.64
1:1:3199:G:H2'	1:1:3200:G:H8	1.63	0.64
21:N0:13:ARG:HD3	21:N0:51:VAL:HG12	1.80	0.64
36:O5:85:THR:HG22	36:O5:87:ALA:H	1.61	0.64
52:S6:204:ALA:HA	52:S6:207:GLU:HB3	1.78	0.64
1:5:1050:U:OP2	22:n1:13:TYR:OH	2.08	0.64
49:s3:164:VAL:HG22	49:s3:168:ILE:HG12	1.79	0.64
1:1:817:A:OP1	83:1:4330:HOH:O	2.14	0.64
1:1:2261:G:O2'	1:1:2263:C:N4	2.31	0.64
1:1:2957:G:OP1	83:1:4335:HOH:O	2.15	0.64
7:L5:218:ARG:NH2	7:L5:221:GLU:OE2	2.31	0.64
7:L5:258:LYS:O	7:L5:259:LYS:HB3	1.96	0.64
23:N2:22:PRO:HB3	23:N2:93:ILE:HG21	1.78	0.64
36:O5:34:GLN:OE1	36:O5:38:ARG:NH1	2.31	0.64
45:2:1388:A:H5'	63:C7:48:ASN:HD22	1.62	0.64
1:5:242:C:H2'	1:5:243:G:C8	2.33	0.64
1:5:2106:A:H2'	1:5:2107:A:H8	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
80:5:3409:PAR:H23	80:5:3409:PAR:HN21	1.63	0.64
10:l8:149:LYS:HG2	10:l8:211:LEU:HD11	1.80	0.64
19:m8:34:THR:HG23	19:m8:49:LEU:HD21	1.80	0.64
31:o0:61:MET:HE3	31:o0:62:LEU:HG	1.79	0.64
45:6:1175:U:H2'	45:6:1176:G:C8	2.33	0.64
48:s2:65:GLU:HB2	48:s2:68:ILE:HG13	1.80	0.64
50:s4:100:ARG:HH11	50:s4:100:ARG:HB2	1.63	0.64
50:s4:201:HIS:N	50:s4:206:ASP:OD1	2.28	0.64
1:l:612:U:H2'	1:l:613:G:C8	2.33	0.64
51:S5:123:VAL:O	71:D5:58:ARG:NH1	2.23	0.64
57:C1:5:LEU:HB3	57:C1:6:THR:HG23	1.80	0.64
1:5:297:G:OP2	1:5:297:G:N2	2.24	0.64
1:5:2439:A:H61	1:5:2508:U:H3	1.45	0.64
80:5:3426:PAR:O51	80:5:3426:PAR:N32	2.31	0.64
9:l7:136:TYR:CZ	9:l7:231:ASN:HB2	2.33	0.64
80:6:1904:PAR:H51	80:6:1904:PAR:H322	1.63	0.64
49:s3:63:GLY:O	49:s3:67:ASN:HB2	1.98	0.64
51:s5:43:PHE:N	51:s5:46:TRP:O	2.25	0.64
2:3:97:A:O4'	9:L7:225:GLN:NE2	2.31	0.64
5:L3:37:ARG:O	5:L3:186:GLY:HA3	1.98	0.64
15:M4:20:VAL:HG22	15:M4:68:LEU:HB2	1.80	0.64
45:2:1484:G:OP2	83:2:2208:HOH:O	2.14	0.64
14:m3:157:ARG:NH1	29:n8:146:GLU:OE2	2.31	0.64
44:q3:56:THR:HG22	44:q3:63:THR:HG23	1.79	0.64
45:6:339:C:OP2	54:s8:10:LYS:NZ	2.26	0.64
50:s4:31:PRO:HD2	50:s4:38:LEU:HD13	1.80	0.64
54:s8:172:ARG:HE	54:s8:175:GLN:HG3	1.63	0.64
61:c5:11:VAL:HG13	61:c5:12:PHE:H	1.61	0.64
66:d0:23:ARG:HB2	66:d0:92:ASP:OD1	1.98	0.64
1:l:211:A:OP1	6:L4:220:ARG:NH1	2.28	0.64
34:O3:45:LEU:HD21	34:O3:74:THR:HG22	1.79	0.64
45:2:861:U:O2'	68:D2:56:HIS:O	2.13	0.64
48:S2:157:LYS:NZ	68:D2:92:ASN:O	2.31	0.64
53:S7:131:PHE:O	53:S7:133:THR:N	2.31	0.64
62:C6:25:GLY:H	62:C6:63:ILE:HA	1.61	0.64
5:l3:214:MET:HE2	5:l3:350:ALA:HA	1.79	0.64
5:l3:227:GLU:HG3	5:l3:270:ARG:HE	1.63	0.64
7:l5:148:ILE:HG13	7:l5:151:GLN:HB3	1.80	0.64
20:m9:106:LEU:HD21	20:m9:123:LEU:HB3	1.80	0.64
45:6:87:C:O2'	45:6:169:A:N1	2.29	0.64
45:6:1776:A:H2'	45:6:1777:G:C8	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:d4:53:ASP:HB3	70:d4:96:LEU:HD21	1.80	0.64
1:1:943:U:H3'	29:N8:13:GLY:HA2	1.80	0.63
22:N1:94:GLU:OE1	22:N1:94:GLU:N	2.30	0.63
45:2:1153:G:H1	45:2:1625:C:H42	1.44	0.63
60:C4:79:VAL:O	60:C4:112:ILE:HA	1.99	0.63
61:C5:127:ARG:NH1	78:SM:63:ASP:OD2	2.29	0.63
45:6:1796:C:O5'	72:d6:5:ARG:NH1	2.31	0.63
59:c3:65:VAL:O	59:c3:66:ILE:HG13	1.98	0.63
60:c4:87:GLY:HA3	60:c4:120:PRO:HG2	1.80	0.63
1:1:495:G:H1	1:1:618:C:H42	1.45	0.63
2:3:60:G:H2'	2:3:61:G:H8	1.63	0.63
45:2:1000:C:N4	45:2:1003:A:OP2	2.31	0.63
67:D1:80:LYS:HD2	67:D1:81:ASN:H	1.63	0.63
70:D4:3:ASP:H	70:D4:32:ARG:HH12	1.45	0.63
16:m5:42:PRO:HG3	16:m5:61:ILE:HG13	1.80	0.63
17:m6:59:ARG:HB3	17:m6:59:ARG:HH11	1.63	0.63
36:o5:21:LEU:HD22	36:o5:25:LYS:HE3	1.79	0.63
46:s0:31:VAL:HG23	67:d1:87:ARG:HH22	1.63	0.63
64:c8:14:ILE:H	64:c8:24:GLY:HA2	1.62	0.63
78:sM:48:ARG:HG2	78:sM:50:ASN:HB2	1.80	0.63
1:1:1581:C:H2'	1:1:1582:C:H5'	1.79	0.63
20:M9:13:SER:OG	20:M9:38:ARG:NH2	2.31	0.63
40:O9:3:ALA:H	40:O9:5:LYS:NZ	1.96	0.63
45:2:1345:A:H2'	45:2:1348:A:H62	1.64	0.63
71:D5:57:TYR:HB2	71:D5:60:VAL:HG13	1.81	0.63
1:5:1159:A:H5'	9:l7:92:ILE:HD11	1.81	0.63
1:5:1525:G:OP1	80:5:3415:PAR:N32	2.30	0.63
51:s5:58:LEU:HD12	51:s5:138:THR:HG22	1.81	0.63
57:c1:33:ARG:NH2	57:c1:48:ALA:O	2.31	0.63
61:c5:49:MET:C	61:c5:51:SER:H	2.05	0.63
1:1:959:C:OP1	83:1:4333:HOH:O	2.15	0.63
26:N5:135:ILE:HG13	26:N5:138:ARG:HE	1.64	0.63
59:C3:110:ASP:OD1	59:C3:114:ARG:NH1	2.31	0.63
1:5:174:C:H42	1:5:244:G:H1	1.46	0.63
45:6:1502:G:OP2	65:c9:103:LYS:NZ	2.30	0.63
58:c2:30:VAL:HA	58:c2:33:ARG:HB2	1.80	0.63
64:c8:2:SER:HB3	64:c8:4:VAL:HG23	1.80	0.63
65:c9:37:VAL:HG12	65:c9:39:THR:H	1.64	0.63
1:1:838:G:O6	44:Q3:4:ARG:NH2	2.31	0.63
2:3:121:U:OP1	7:L5:259:LYS:NZ	2.31	0.63
4:L2:20:THR:HA	4:L2:23:ARG:HD2	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:3:ARG:HH11	6:L4:22:LEU:HD12	1.63	0.63
17:M6:167:TYR:OH	17:M6:171:LYS:NZ	2.29	0.63
45:2:924:A:O2'	45:2:987:G:OP1	2.17	0.63
45:2:1034:C:HO2'	68:D2:2:THR:N	1.97	0.63
45:2:1561:U:H4'	45:2:1599:C:H4'	1.79	0.63
48:S2:116:LYS:HE2	48:S2:117:THR:H	1.63	0.63
48:S2:152:HIS:CD2	48:S2:153:SER:H	2.17	0.63
59:C3:23:PRO:HB2	59:C3:25:TRP:CD1	2.33	0.63
1:5:3057:U:H5'	1:5:3086:A:H61	1.63	0.63
36:o5:85:THR:HB	36:o5:88:LEU:HB2	1.80	0.63
54:s8:34:ALA:HB2	54:s8:56:ARG:HD3	1.80	0.63
63:c7:27:ASP:OD1	77:sR:38:ARG:NH1	2.31	0.63
80:3:203:PAR:H33	80:3:203:PAR:H241	1.64	0.63
37:O6:76:ARG:HA	37:O6:76:ARG:HE	1.62	0.63
45:2:1291:G:H22	45:2:1324:G:H21	1.45	0.63
67:D1:71:ARG:HE	73:D7:4:VAL:HG11	1.64	0.63
70:D4:12:VAL:HG13	70:D4:23:PHE:HB3	1.81	0.63
1:5:2103:U:H2'	1:5:2104:A:C8	2.34	0.63
1:5:2634:U:O3'	12:m0:15:LYS:NZ	2.31	0.63
5:l3:41:VAL:CA	5:l3:185:GLY:HA3	2.26	0.63
10:l8:100:GLU:OE2	10:l8:108:ARG:NH1	2.31	0.63
16:m5:66:VAL:HG21	16:m5:98:LEU:HB3	1.79	0.63
45:6:1280:C:H2'	45:6:1281:G:C8	2.33	0.63
45:6:1480:G:N7	45:6:1481:C:N4	2.47	0.63
79:s6:39:GLU:HB2	79:s6:46:LYS:HG3	1.79	0.63
69:d3:130:VAL:HG23	69:d3:131:SER:H	1.62	0.63
1:1:398:A:O2'	1:1:1416:C:OP1	2.14	0.63
1:1:1478:C:OP2	83:1:4326:HOH:O	2.15	0.63
5:L3:53:MET:HE2	5:L3:77:THR:HG22	1.81	0.63
14:M3:180:ARG:HD3	37:O6:11:LEU:HD21	1.81	0.63
35:O4:96:GLU:HA	35:O4:99:LYS:HD3	1.79	0.63
45:2:736:C:N4	45:2:737:A:N7	2.46	0.63
45:2:780:A:N7	70:D4:8:ARG:NH2	2.39	0.63
63:C7:108:ASP:N	63:C7:108:ASP:OD1	2.31	0.63
72:D6:10:ARG:HE	72:D6:34:LYS:HA	1.63	0.63
1:5:655:C:H2'	1:5:656:A:H8	1.63	0.63
1:5:1176:C:H2'	1:5:1177:G:N2	2.14	0.63
1:5:1391:C:C2	33:o2:103:LYS:HD3	2.34	0.63
45:6:959:U:H5''	59:c3:15:ALA:O	1.99	0.63
46:s0:173:ILE:O	46:s0:177:LEU:N	2.28	0.63
61:c5:76:VAL:O	61:c5:95:GLY:N	2.28	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1373:A:OP2	29:N8:7:LYS:NZ	2.31	0.63
45:2:637:C:O2	53:S7:114:ARG:NH2	2.32	0.63
1:5:283:G:OP2	43:q2:45:ARG:NH2	2.32	0.63
1:5:1438:U:H1'	6:l4:94:CYS:HA	1.80	0.63
59:c3:5:HIS:CE1	59:c3:121:ARG:HG3	2.34	0.63
1:1:1575:A:N6	1:1:1577:G:O6	2.32	0.63
1:1:1624:G:O2'	1:1:1643:A:N1	2.30	0.63
1:5:901:G:H2'	1:5:902:G:H8	1.63	0.63
1:5:1334:U:H5''	9:l7:206:LYS:HB3	1.80	0.63
8:l6:31:ARG:NH1	34:o3:107:ILE:O	2.30	0.63
14:m3:47:ALA:HB1	14:m3:48:PRO:HD3	1.80	0.63
28:n7:41:ALA:HB2	28:n7:77:TYR:HE2	1.64	0.63
29:n8:125:VAL:HG21	29:n8:138:ILE:HD13	1.79	0.63
41:q0:104:PRO:HG2	41:q0:107:ALA:HB2	1.81	0.63
48:s2:88:LYS:HG2	48:s2:89:GLN:H	1.62	0.63
59:c3:91:LEU:HD12	59:c3:125:LEU:HD12	1.81	0.63
13:M1:164:LYS:HE3	13:M1:171:VAL:HB	1.79	0.62
39:O8:46:ARG:HH21	39:O8:51:LEU:HB2	1.63	0.62
65:C9:31:PRO:HG3	65:C9:103:LYS:HE2	1.80	0.62
72:D6:25:ASN:ND2	72:D6:77:CYS:SG	2.72	0.62
1:5:2801:A:OP1	83:5:4211:HOH:O	2.15	0.62
27:n6:59:VAL:C	27:n6:64:LYS:HG3	2.23	0.62
45:6:1459:C:OP2	64:c8:138:THR:OG1	2.16	0.62
49:s3:172:THR:HG22	49:s3:185:LYS:HG2	1.81	0.62
53:s7:155:ASP:OD2	53:s7:156:SER:N	2.31	0.62
1:1:655:C:H2'	1:1:656:A:H8	1.63	0.62
1:1:2179:C:O3'	4:L2:174:ARG:NH2	2.31	0.62
28:N7:10:VAL:O	28:N7:83:THR:HG22	1.99	0.62
46:S0:126:PRO:HG2	46:S0:152:PRO:HD2	1.81	0.62
49:S3:70:THR:HG23	49:S3:86:LEU:HD13	1.80	0.62
1:5:250:U:H3'	1:5:251:G:H5''	1.80	0.62
7:l5:211:LEU:HD13	7:l5:223:PHE:HE1	1.63	0.62
23:n2:53:ALA:O	23:n2:67:SER:OG	2.15	0.62
1:1:784:A:N7	19:M8:69:ARG:HG3	2.13	0.62
1:1:2960:C:H2'	1:1:2961:G:C8	2.34	0.62
1:1:3294:A:OP1	5:L3:128:LYS:NZ	2.33	0.62
1:1:3343:G:H21	1:1:3362:A:H2	1.46	0.62
4:L2:177:LYS:HB2	44:Q3:29:LEU:HD12	1.81	0.62
7:L5:34:LYS:HE3	7:L5:35:ARG:HH21	1.63	0.62
45:2:903:U:OP2	60:C4:24:ASN:ND2	2.31	0.62
45:2:1165:G:N2	45:2:1581:C:O2	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:D1:21:ASN:HB2	68:D2:67:GLY:HA3	1.79	0.62
28:n7:25:ILE:HA	28:n7:43:VAL:HG12	1.81	0.62
56:c0:44:LYS:HD3	56:c0:47:GLN:HE21	1.65	0.62
78:sM:65:THR:OG1	78:sM:66:ALA:N	2.26	0.62
1:1:714:G:HO2'	1:1:753:C:HO2'	1.47	0.62
1:1:2344:U:H2'	1:1:2345:A:C8	2.33	0.62
26:N5:108:LEU:HD23	26:N5:127:THR:HG22	1.82	0.62
44:Q3:49:ARG:HD3	44:Q3:52:ALA:HA	1.80	0.62
45:2:100:A:OP1	83:2:2210:HOH:O	2.16	0.62
45:2:1553:G:O6	61:C5:43:ARG:NH1	2.33	0.62
45:2:1683:C:O2'	45:2:1684:U:O5'	2.16	0.62
51:S5:25:LEU:HD13	62:C6:60:PHE:HB3	1.81	0.62
55:S9:130:THR:HA	55:S9:142:ASN:HB2	1.81	0.62
1:5:2398:A:OP2	83:5:4237:HOH:O	2.16	0.62
2:7:95:A:OP2	80:7:202:PAR:O31	2.17	0.62
45:6:220:A:N7	45:6:831:U:N3	2.46	0.62
53:s7:46:ILE:HG12	53:s7:60:ILE:HA	1.81	0.62
67:d1:69:LEU:O	67:d1:73:ALA:N	2.30	0.62
73:d7:64:CYS:HB3	73:d7:73:LEU:HD23	1.80	0.62
78:sM:53:ARG:H	78:sM:53:ARG:HD2	1.65	0.62
2:3:19:C:H2'	2:3:20:A:C8	2.35	0.62
9:L7:145:ARG:HA	9:L7:185:ILE:HD13	1.80	0.62
47:S1:70:LEU:HD11	47:S1:79:HIS:HB2	1.82	0.62
55:S9:85:VAL:HG22	55:S9:107:ARG:HG3	1.82	0.62
65:C9:57:ARG:NH2	65:C9:101:ASN:OD1	2.32	0.62
72:D6:82:ARG:HH11	72:D6:83:ILE:HG12	1.64	0.62
1:5:817:A:N3	38:o7:11:ARG:HB3	2.15	0.62
80:5:3424:PAR:N64	80:5:3424:PAR:O44	2.32	0.62
3:8:38:U:H5	36:o5:83:LYS:H	1.46	0.62
3:8:81:U:OP2	3:8:81:U:H4'	1.99	0.62
45:6:822:U:H2'	45:6:823:G:H5''	1.81	0.62
45:6:1564:U:H2'	45:6:1565:C:C6	2.34	0.62
53:s7:74:GLN:HG2	53:s7:131:PHE:CD2	2.34	0.62
64:c8:145:ARG:HD2	78:sM:68:ARG:HD3	1.80	0.62
65:c9:116:ILE:O	65:c9:123:ARG:NH1	2.33	0.62
1:1:3178:A:C2	17:M6:115:LYS:HG2	2.34	0.62
6:L4:22:LEU:HD11	6:L4:26:PHE:HB2	1.81	0.62
8:L6:18:LEU:HD13	8:L6:18:LEU:H	1.65	0.62
27:N6:31:LEU:HB3	27:N6:101:PRO:HG2	1.81	0.62
40:O9:45:ARG:HH11	40:O9:45:ARG:HB2	1.64	0.62
45:2:1066:C:H2'	45:2:1067:C:C6	2.35	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2106:A:H2'	1:5:2107:A:C8	2.34	0.62
45:6:354:C:H5''	54:s8:16:ALA:HB2	1.81	0.62
45:6:856:A:C6	53:s7:96:ARG:HB3	2.35	0.62
55:s9:27:GLU:HB3	55:s9:39:LYS:HD2	1.80	0.62
1:1:271:C:O2	37:O6:82:ARG:NH2	2.30	0.62
14:M3:73:ARG:HG2	14:M3:98:ASP:HB2	1.81	0.62
45:2:227:U:H3	45:2:834:G:H1	1.48	0.62
45:2:1152:A:N6	45:2:1626:U:O4	2.17	0.62
46:S0:40:ALA:O	63:C7:105:GLN:NE2	2.33	0.62
56:C0:3:MET:HE1	56:C0:45:ALA:HB2	1.82	0.62
77:SR:149:ASP:H	77:SR:175:ASP:HB3	1.64	0.62
1:5:68:C:OP2	1:5:301:G:N2	2.32	0.62
1:5:89:A:OP1	19:m8:170:ARG:NH2	2.32	0.62
1:5:3042:U:OP2	1:5:3092:C:N4	2.31	0.62
45:6:1474:G:OP1	51:s5:109:LYS:NZ	2.33	0.62
1:1:2255:A:N1	45:2:1644:C:O2'	2.29	0.62
6:L4:152:VAL:HG22	6:L4:172:VAL:HG21	1.81	0.62
9:L7:184:LEU:HD11	9:L7:202:LEU:HD21	1.82	0.62
12:M0:205:SER:O	12:M0:209:ASN:HB2	1.98	0.62
53:S7:41:LEU:HB3	53:S7:70:PHE:HE1	1.64	0.62
1:5:1940:G:H21	1:5:3362:A:H8	1.47	0.62
23:n2:14:THR:HG23	23:n2:66:VAL:HG22	1.81	0.62
49:s3:135:GLU:HB3	49:s3:187:LYS:HB3	1.81	0.62
1:1:829:U:H3	1:1:895:A:N6	1.98	0.62
1:1:1174:G:N2	17:M6:87:MET:SD	2.73	0.62
1:1:2344:U:H2'	1:1:2345:A:H8	1.65	0.62
12:M0:3:ARG:CZ	12:M0:63:GLU:HG3	2.30	0.62
45:2:169:A:OP1	52:S6:137:ARG:NH2	2.33	0.62
48:S2:229:LEU:HD11	67:D1:1:MET:HE3	1.81	0.62
1:5:3178:A:C2	17:m6:115:LYS:HG2	2.35	0.62
19:m8:180:ARG:HH11	19:m8:185:LYS:HB3	1.63	0.62
49:s3:217:ILE:HG22	49:s3:218:LEU:H	1.65	0.62
1:1:857:G:O6	83:1:4321:HOH:O	2.11	0.62
1:1:1057:A:OP2	80:1:3413:PAR:N12	2.33	0.62
1:1:1603:A:OP1	20:M9:38:ARG:NH1	2.33	0.62
1:1:2522:G:O6	4:L2:70:ARG:NH2	2.33	0.62
10:L8:124:ASP:N	10:L8:124:ASP:OD1	2.33	0.62
25:N4:45:ASN:HB3	25:N4:48:ARG:HG3	1.81	0.62
45:2:372:G:H5'	68:D2:88:LYS:HZ3	1.64	0.62
45:2:912:U:H1'	45:2:914:G:C6	2.34	0.62
45:2:1558:U:H3'	45:2:1559:A:H4'	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:m7:31:GLU:HG3	18:m7:60:PHE:HA	1.82	0.62
48:s2:133:LYS:O	48:s2:136:VAL:HG13	1.99	0.62
71:d5:92:ILE:HB	71:d5:100:ILE:HB	1.82	0.62
18:M7:82:ARG:NH2	83:M7:301:HOH:O	2.33	0.61
39:O8:30:LYS:NZ	39:O8:40:GLN:OE1	2.32	0.61
45:2:805:U:O4	53:S7:104:ARG:NH1	2.33	0.61
51:S5:81:ARG:HD3	51:S5:82:PHE:CE2	2.35	0.61
1:5:279:U:H2'	1:5:280:U:H6	1.65	0.61
1:5:1711:C:OP1	28:n7:78:ASN:ND2	2.34	0.61
11:l9:47:LYS:NZ	15:m4:5:SER:O	2.25	0.61
45:6:298:C:H5''	50:s4:38:LEU:HD23	1.81	0.61
45:6:333:A:H62	54:s8:27:PHE:HB2	1.64	0.61
45:6:1506:G:HO2'	45:6:1550:A:HO2'	1.45	0.61
59:c3:86:GLU:HA	59:c3:89:TYR:HB3	1.82	0.61
1:1:1334:U:H5''	9:L7:206:LYS:HB3	1.82	0.61
1:1:2349:U:OP1	83:1:4337:HOH:O	2.16	0.61
8:L6:131:LYS:HE3	8:L6:133:GLU:HB3	1.80	0.61
9:L7:136:TYR:CZ	9:L7:231:ASN:HB2	2.34	0.61
37:O6:62:ARG:HH12	37:O6:98:ARG:HH11	1.46	0.61
45:2:1681:A:H1'	52:S6:66:GLY:HA2	1.82	0.61
60:C4:115:ILE:HG13	72:D6:44:ILE:HD12	1.82	0.61
2:7:67:G:O2'	7:l5:13:SER:O	2.19	0.61
2:7:72:A:H62	80:7:201:PAR:H34	1.63	0.61
45:6:242:U:H2'	45:6:243:G:N7	2.15	0.61
47:s1:197:ILE:O	47:s1:201:THR:OG1	2.18	0.61
48:s2:90:THR:HG22	48:s2:94:GLN:H	1.64	0.61
49:s3:59:LEU:HD23	49:s3:66:ILE:HG21	1.81	0.61
67:d1:2:GLU:HG3	67:d1:3:ASN:H	1.66	0.61
1:1:155:G:H5''	1:1:156:G:C8	2.36	0.61
1:1:1913:A:N3	1:1:2120:A:H2'	2.15	0.61
1:1:2801:A:O2'	1:1:2802:A:H2'	2.00	0.61
1:1:3242:G:OP1	17:M6:159:LYS:NZ	2.31	0.61
1:5:1382:G:OP1	6:l4:188:ARG:NH2	2.33	0.61
7:l5:116:ASP:OD2	7:l5:117:GLU:N	2.34	0.61
7:l5:181:PRO:HB2	7:l5:194:LEU:HD22	1.82	0.61
11:l9:89:LYS:HG2	11:l9:145:VAL:HG22	1.82	0.61
80:6:1904:PAR:H43	80:6:1904:PAR:H241	1.64	0.61
50:s4:31:PRO:HG3	50:s4:43:PRO:HG3	1.82	0.61
1:1:2193:U:H5'	1:1:2194:G:H5'	1.82	0.61
1:1:3084:C:O2'	1:1:3332:U:OP1	2.17	0.61
1:1:3199:G:H5''	15:M4:6:ILE:HG21	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:L3:46:PHE:CZ	5:L3:84:VAL:HG22	2.35	0.61
20:M9:8:LYS:HD2	20:M9:22:VAL:HG23	1.83	0.61
45:2:1153:G:H5'	72:D6:85:ARG:HD2	1.82	0.61
49:S3:59:LEU:HA	49:S3:66:ILE:HG13	1.82	0.61
49:S3:116:ARG:NH2	78:SM:113:ASP:OD1	2.28	0.61
76:E0:48:THR:OG1	76:E0:49:LEU:N	2.32	0.61
1:5:612:U:H2'	1:5:613:G:H8	1.65	0.61
1:5:2103:U:H2'	1:5:2104:A:H8	1.64	0.61
1:5:2956:A:OP2	83:5:4239:HOH:O	2.16	0.61
10:l8:93:LEU:HD23	10:l8:214:LEU:HD22	1.83	0.61
12:m0:217:PHE:C	12:m0:219:ALA:HA	2.25	0.61
13:m1:82:ARG:HD2	13:m1:112:LEU:HB2	1.82	0.61
45:6:753:A:N7	50:s4:187:ARG:NH2	2.49	0.61
57:c1:102:LYS:HD3	57:c1:102:LYS:N	2.12	0.61
1:1:2196:C:O2'	1:1:2270:A:N3	2.32	0.61
1:1:3180:A:OP1	17:M6:171:LYS:NZ	2.27	0.61
12:M0:110:ARG:HH12	12:M0:112:GLN:N	1.98	0.61
28:N7:83:THR:HG23	28:N7:85:TYR:H	1.65	0.61
45:2:812:A:H4'	45:2:813:U:H3'	1.82	0.61
47:S1:38:PHE:HD2	47:S1:39:GLU:H	1.46	0.61
48:S2:39:THR:O	48:S2:42:GLY:N	2.31	0.61
50:S4:102:VAL:HG23	50:S4:182:TYR:HE1	1.64	0.61
55:S9:109:LEU:HB2	55:S9:146:PHE:HB3	1.80	0.61
63:C7:47:ARG:NH1	63:C7:48:ASN:OD1	2.34	0.61
77:SR:218:GLY:O	77:SR:236:ALA:HB3	1.99	0.61
1:5:138:U:H2'	1:5:139:G:C8	2.36	0.61
11:l9:4:ILE:HD11	21:n0:148:LEU:HD21	1.82	0.61
45:6:780:A:H5''	45:6:781:U:H5'	1.81	0.61
53:s7:73:VAL:HA	53:s7:76:LYS:HD3	1.83	0.61
54:s8:47:ARG:NH2	54:s8:48:THR:O	2.33	0.61
1:1:1810:A:H2'	1:1:1811:G:C8	2.36	0.61
1:1:2662:G:H2'	1:1:2663:G:C8	2.35	0.61
26:N5:139:ILE:HD11	26:N5:141:TYR:HE2	1.64	0.61
45:2:1625:C:OP1	48:S2:91:ARG:NH2	2.34	0.61
47:S1:127:VAL:HG12	47:S1:128:LYS:H	1.66	0.61
70:D4:124:ARG:HA	70:D4:127:LYS:HG2	1.82	0.61
1:5:296:A:OP1	37:o6:86:LYS:NZ	2.33	0.61
1:5:1110:U:OP1	19:m8:164:ARG:NH2	2.32	0.61
1:5:1593:A:H2'	1:5:1594:A:C8	2.35	0.61
1:5:3245:A:H2	1:5:3246:G:C2	2.18	0.61
18:m7:25:SER:HB3	18:m7:28:ASN:HB2	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:647:G:H1	45:6:687:G:H22	1.48	0.61
45:6:1537:C:H4'	45:6:1538:U:H5	1.65	0.61
45:6:1785:U:P	60:c4:133:ARG:HH22	2.24	0.61
46:s0:148:ASP:OD1	46:s0:149:LEU:N	2.32	0.61
49:s3:113:LEU:HD21	49:s3:117:ARG:HH21	1.64	0.61
1:1:113:C:OP1	16:M5:147:ARG:NH2	2.32	0.61
1:1:1228:C:H2'	1:1:1229:G:C8	2.35	0.61
1:1:1295:G:O2'	21:N0:115:ARG:NH1	2.34	0.61
80:1:3422:PAR:N21	80:1:3422:PAR:O43	2.34	0.61
9:L7:47:ARG:NH2	9:L7:179:LEU:HD11	2.16	0.61
18:M7:126:ARG:NE	18:M7:140:GLU:OE2	2.32	0.61
43:Q2:15:LYS:HA	43:Q2:18:ARG:HE	1.65	0.61
45:2:780:A:H8	70:D4:8:ARG:HB3	1.64	0.61
45:2:1274:C:N4	78:SM:92:ASP:O	2.33	0.61
48:S2:226:THR:OG1	48:S2:228:ASN:OD1	2.13	0.61
49:S3:76:ARG:HA	56:C0:22:VAL:HG11	1.83	0.61
51:S5:131:GLN:NE2	51:S5:135:ASP:OD1	2.31	0.61
1:5:297:G:O6	16:m5:12:ARG:NH1	2.33	0.61
1:5:914:A:N1	4:l2:204:MET:HE3	2.15	0.61
1:5:2711:C:O2'	1:5:2744:U:OP1	2.17	0.61
8:l6:40:LEU:HD13	8:l6:84:VAL:HG11	1.82	0.61
9:l7:128:LYS:HA	9:l7:131:GLU:HG3	1.81	0.61
45:6:158:U:O2'	45:6:160:C:OP2	2.19	0.61
45:6:454:U:H5''	45:6:455:C:C5	2.31	0.61
54:s8:138:ASN:HA	54:s8:141:ARG:HD3	1.83	0.61
1:1:190:U:H2'	27:N6:60:ARG:HH22	1.65	0.61
29:N8:46:ASP:O	29:N8:47:LYS:HB3	2.00	0.61
45:2:482:U:H3	45:2:505:A:N6	1.99	0.61
45:2:566:C:OP2	69:D3:66:SER:OG	2.18	0.61
45:2:1088:A:O3'	72:D6:89:ARG:NH2	2.34	0.61
45:2:1681:A:C8	52:S6:66:GLY:HA3	2.36	0.61
49:S3:38:GLU:HB2	49:S3:49:ILE:HD13	1.83	0.61
50:S4:122:LYS:O	50:S4:162:ILE:N	2.34	0.61
61:C5:130:ARG:HH22	78:SM:70:ASN:HB3	1.65	0.61
69:D3:70:LYS:HE2	76:E0:11:ALA:HB2	1.83	0.61
1:5:1176:C:H2'	1:5:1177:G:H21	1.66	0.61
1:5:2775:U:H2'	1:5:2776:C:H6	1.64	0.61
1:5:3233:C:H2'	1:5:3234:A:C8	2.36	0.61
51:s5:31:GLU:CD	51:s5:31:GLU:H	2.09	0.61
64:c8:56:LYS:HD2	64:c8:61:LEU:HD23	1.81	0.61
77:sR:123:ILE:HG22	77:sR:133:VAL:HG22	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:994:G:N2	1:1:995:U:O4	2.33	0.61
1:1:2302:G:OP2	83:1:4339:HOH:O	2.16	0.61
15:M4:113:THR:HB	15:M4:116:GLU:HG3	1.83	0.61
45:2:372:G:H5'	68:D2:88:LYS:NZ	2.15	0.61
45:2:576:G:OP2	78:SM:102:THR:HG21	2.00	0.61
45:2:1727:G:H2'	45:2:1728:A:C8	2.35	0.61
47:S1:66:VAL:CG2	47:S1:67:GLU:H	2.14	0.61
49:S3:211:PRO:HG3	63:C7:20:TYR:CZ	2.35	0.61
58:C2:41:LEU:HD12	58:C2:43:ARG:HD2	1.83	0.61
64:C8:132:ARG:HD3	64:C8:136:GLN:HG3	1.81	0.61
1:5:973:A:OP2	19:m8:12:ARG:NH1	2.33	0.61
1:5:2814:G:OP1	6:l4:73:ARG:NH2	2.26	0.61
11:l9:100:ASN:HB3	11:l9:115:ARG:HB2	1.82	0.61
14:m3:126:PHE:HZ	14:m3:135:ALA:HB2	1.65	0.61
30:n9:47:LEU:HA	30:n9:50:THR:HG22	1.81	0.61
32:o1:55:LEU:HB2	32:o1:95:PRO:HD3	1.83	0.61
58:c2:61:VAL:HG13	58:c2:121:VAL:HG23	1.83	0.61
71:d5:49:ARG:NH1	71:d5:69:LEU:HA	2.15	0.61
1:1:860:G:OP1	44:Q3:17:ARG:NH1	2.34	0.61
1:1:1541:G:N2	1:1:1555:U:O2'	2.29	0.61
80:1:3415:PAR:N21	80:1:3415:PAR:O43	2.33	0.61
80:1:3421:PAR:N21	80:1:3421:PAR:O43	2.33	0.61
5:L3:296:THR:HG22	5:L3:298:PHE:N	2.15	0.61
7:L5:120:LYS:O	7:L5:248:ARG:NH2	2.34	0.61
11:L9:177:ASP:N	11:L9:177:ASP:OD1	2.34	0.61
16:M5:35:VAL:HG13	16:M5:65:ARG:HB2	1.81	0.61
18:M7:78:VAL:HG22	18:M7:80:LYS:H	1.65	0.61
45:2:875:G:O2'	45:2:877:G:OP2	2.18	0.61
63:C7:17:ILE:HG23	63:C7:58:MET:HE2	1.81	0.61
4:l2:48:ILE:HD11	44:q3:63:THR:HG22	1.82	0.61
6:l4:237:GLN:O	6:l4:246:ARG:HG3	2.01	0.61
46:s0:79:ARG:O	46:s0:83:GLN:N	2.33	0.61
50:s4:32:SER:OG	50:s4:81:THR:OG1	2.18	0.61
56:c0:10:LYS:HB3	56:c0:35:ILE:HG23	1.83	0.61
64:c8:88:ARG:HG2	64:c8:98:TYR:HB2	1.81	0.61
1:1:269:G:H5'	16:M5:120:TRP:CE3	2.36	0.60
10:L8:26:LEU:HD21	28:N7:123:GLN:HG2	1.82	0.60
67:D1:40:ASP:OD1	67:D1:44:ARG:NE	2.30	0.60
1:5:3242:G:N2	1:5:3245:A:H5''	2.16	0.60
4:l2:47:GLN:HA	4:l2:84:THR:HG22	1.82	0.60
14:m3:56:PRO:HG3	14:m3:74:GLY:O	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:m7:78:VAL:HG22	18:m7:79:THR:H	1.66	0.60
21:n0:26:ARG:HH11	22:n1:150:THR:HG21	1.65	0.60
26:n5:105:VAL:HG21	26:n5:135:ILE:HD12	1.82	0.60
29:n8:103:ASP:HA	29:n8:126:LYS:HB2	1.82	0.60
45:6:333:A:H2'	45:6:334:G:C8	2.36	0.60
47:s1:84:ILE:HD13	47:s1:103:MET:HB2	1.83	0.60
77:sR:182:ASN:HD21	77:sR:184:ASN:HD21	1.49	0.60
1:1:988:U:C5	80:1:3412:PAR:H642	2.35	0.60
18:M7:26:PHE:HE1	18:M7:120:ASN:HA	1.65	0.60
45:2:589:C:O4'	76:E0:57:ASN:ND2	2.33	0.60
57:C1:133:LYS:O	57:C1:136:ARG:NH1	2.35	0.60
68:D2:77:PRO:HG2	68:D2:79:PHE:CZ	2.36	0.60
72:D6:19:LYS:HG3	72:D6:20:PRO:HD2	1.82	0.60
16:m5:35:VAL:HG13	16:m5:65:ARG:HB2	1.83	0.60
51:s5:156:ARG:NH1	51:s5:158:GLN:OE1	2.34	0.60
62:c6:22:VAL:HG22	62:c6:65:ILE:HG22	1.82	0.60
1:1:1420:C:OP2	6:L4:193:LYS:NZ	2.34	0.60
33:O2:100:ILE:HG22	33:O2:105:ARG:HG3	1.82	0.60
45:2:580:A:OP1	83:2:2211:HOH:O	2.16	0.60
45:2:1022:C:O2'	45:2:1125:A:N1	2.33	0.60
45:2:1500:C:OP1	65:C9:122:ARG:NH2	2.28	0.60
61:C5:29:SER:OG	61:C5:32:ASP:OD2	2.18	0.60
61:C5:77:ARG:HA	61:C5:95:GLY:HA3	1.82	0.60
74:D8:19:THR:HG22	74:D8:20:GLY:H	1.65	0.60
11:l9:91:ARG:HG2	11:l9:182:SER:HB3	1.83	0.60
47:s1:85:LYS:N	47:s1:102:GLY:O	2.32	0.60
49:s3:115:ILE:HD13	49:s3:142:LEU:HD22	1.81	0.60
1:1:2340:U:OP1	5:L3:236:LYS:NZ	2.34	0.60
38:O7:64:MET:O	38:O7:68:LYS:HG3	2.02	0.60
38:O7:69:HIS:HB3	38:O7:72:ARG:HH21	1.65	0.60
45:2:307:G:OP2	57:C1:105:LYS:NZ	2.33	0.60
45:2:354:C:H5''	54:S8:16:ALA:HB2	1.83	0.60
45:2:687:G:H5'	68:D2:119:LYS:HG2	1.83	0.60
45:2:1294:G:O2'	45:2:1321:A:N1	2.28	0.60
47:S1:137:ILE:HG13	47:S1:172:LEU:HD13	1.84	0.60
48:S2:168:ARG:HD3	48:S2:170:ILE:HD11	1.83	0.60
62:C6:52:LEU:HB3	62:C6:60:PHE:HE1	1.66	0.60
72:D6:87:ARG:NH2	72:D6:94:ASN:O	2.19	0.60
1:5:267:G:O5'	1:5:318:A:N6	2.34	0.60
10:l8:84:ARG:HA	10:l8:87:ALA:HB3	1.84	0.60
14:m3:162:ASN:HB2	14:m3:164:GLU:OE1	2.01	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:557:G:OP1	76:e0:55:ARG:NH1	2.35	0.60
46:s0:72:ASP:OD1	48:s2:40:LYS:NZ	2.35	0.60
51:s5:197:GLU:OE1	51:s5:208:SER:OG	2.15	0.60
55:s9:32:GLY:HA3	76:e0:40:TYR:CD1	2.36	0.60
74:d8:11:LYS:HG2	74:d8:31:GLU:HB2	1.82	0.60
1:1:268:A:C5	16:M5:12:ARG:HG2	2.37	0.60
1:1:345:G:O6	83:1:4334:HOH:O	2.15	0.60
1:1:674:G:OP1	6:L4:31:ARG:NH1	2.34	0.60
1:1:997:A:OP2	83:1:4336:HOH:O	2.16	0.60
1:1:2335:G:N2	1:1:2339:C:O2'	2.34	0.60
6:L4:22:LEU:HD13	6:L4:24:ALA:H	1.65	0.60
14:M3:114:GLN:NE2	14:M3:118:GLU:OE2	2.31	0.60
69:D3:93:LEU:O	69:D3:96:VAL:HG22	2.02	0.60
1:5:437:G:P	1:5:437:G:H8	2.25	0.60
1:5:2439:A:N6	1:5:2508:U:H3	1.99	0.60
9:l7:216:VAL:HG11	9:l7:227:GLY:HA3	1.84	0.60
45:6:138:A:H62	45:6:266:A:N6	2.00	0.60
60:c4:99:GLN:HE22	72:d6:44:ILE:C	2.10	0.60
70:d4:57:VAL:HB	70:d4:60:PHE:CE2	2.36	0.60
75:d9:30:LEU:HA	75:d9:39:CYS:HA	1.82	0.60
1:1:1422:G:H21	8:L6:5:LYS:NZ	2.00	0.60
1:1:2852:C:N3	12:M0:158:LYS:NZ	2.49	0.60
1:1:3344:A:N6	1:1:3361:G:O2'	2.29	0.60
13:M1:82:ARG:HG2	13:M1:112:LEU:HB2	1.83	0.60
45:2:151:G:H21	52:S6:13:GLN:NE2	1.99	0.60
45:2:520:A:H2'	45:2:521:A:C8	2.35	0.60
45:2:960:U:H2'	45:2:961:U:H6	1.67	0.60
45:2:1462:G:N7	64:C8:143:ARG:NH2	2.48	0.60
47:S1:61:LEU:CD2	47:S1:62:LYS:H	2.15	0.60
53:S7:74:GLN:HG2	53:S7:131:PHE:CD1	2.36	0.60
55:S9:107:ARG:NH2	55:S9:148:VAL:O	2.35	0.60
60:C4:24:ASN:H	60:C4:55:SER:HB3	1.67	0.60
77:SR:50:ASP:HB2	77:SR:53:LYS:HG3	1.84	0.60
1:5:901:G:H2'	1:5:902:G:C8	2.36	0.60
7:l5:59:ASP:OD2	7:l5:60:ILE:N	2.35	0.60
16:m5:34:ASN:HB2	16:m5:37:HIS:HB3	1.82	0.60
17:m6:26:GLN:HB3	17:m6:31:GLN:HB3	1.84	0.60
22:n1:8:ARG:O	22:n1:11:THR:OG1	2.15	0.60
58:c2:58:LEU:HD23	58:c2:59:LEU:H	1.66	0.60
72:d6:44:ILE:HG23	72:d6:45:VAL:HG13	1.82	0.60
1:1:2199:G:N7	83:1:4384:HOH:O	2.31	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L5:222:LEU:HD23	7:L5:222:LEU:H	1.66	0.60
11:L9:109:ALA:HB1	11:L9:111:PHE:CE2	2.36	0.60
46:S0:185:ARG:HB2	67:D1:45:ALA:H	1.66	0.60
47:S1:104:ASP:HA	47:S1:214:LYS:HG3	1.82	0.60
54:S8:5:ARG:NH1	54:S8:29:LEU:O	2.32	0.60
1:5:96:G:OP2	29:n8:34:MET:HB2	2.02	0.60
1:5:266:A:N6	37:o6:29:LYS:O	2.35	0.60
1:5:1119:C:OP2	83:5:4240:HOH:O	2.17	0.60
80:5:3418:PAR:N64	80:5:3418:PAR:O44	2.34	0.60
11:l9:47:LYS:HB2	15:m4:7:VAL:HB	1.83	0.60
45:6:518:A:O2'	45:6:534:A:N6	2.35	0.60
46:s0:26:ALA:HB3	46:s0:149:LEU:HB2	1.84	0.60
1:1:437:G:H2'	1:1:438:A:O4'	2.02	0.60
1:1:978:G:HO2'	1:1:979:U:H6	1.49	0.60
1:1:1481:A:O2'	1:1:1858:A:N3	2.28	0.60
5:L3:92:TYR:HE1	5:L3:159:ARG:HD2	1.66	0.60
10:L8:160:ILE:HG22	10:L8:164:VAL:HG13	1.84	0.60
11:L9:106:LYS:H	11:L9:109:ALA:CB	2.15	0.60
21:N0:11:GLY:HA2	21:N0:59:VAL:HG23	1.84	0.60
28:N7:115:LYS:NZ	28:N7:119:GLU:OE2	2.30	0.60
45:2:385:A:H5''	54:S8:22:ARG:HB3	1.84	0.60
45:2:1498:G:H2'	45:2:1499:G:H5'	1.83	0.60
54:S8:36:THR:HG21	54:S8:173:PRO:HB2	1.84	0.60
65:C9:61:VAL:O	65:C9:65:ILE:HG13	2.02	0.60
69:D3:42:PRO:O	69:D3:79:ASN:ND2	2.34	0.60
1:5:16:A:OP1	26:n5:43:ALA:N	2.23	0.60
1:5:94:G:H2'	1:5:95:A:C8	2.37	0.60
6:l4:285:ASP:OD1	6:l4:286:VAL:N	2.35	0.60
7:l5:107:ARG:NH1	7:l5:120:LYS:O	2.35	0.60
13:m1:164:LYS:HE3	13:m1:171:VAL:H	1.65	0.60
80:n3:201:PAR:O53	80:n3:201:PAR:N64	2.35	0.60
33:o2:78:ASN:HA	33:o2:108:ILE:HD11	1.84	0.60
34:o3:49:ILE:HG23	34:o3:100:ILE:HG13	1.82	0.60
45:6:1344:A:H2'	45:6:1345:A:C8	2.36	0.60
65:c9:105:LEU:HD23	65:c9:108:LEU:HD12	1.82	0.60
69:d3:62:LYS:HD3	69:d3:118:PRO:HB3	1.82	0.60
1:1:884:A:OP2	38:O7:4:GLY:HA3	2.01	0.60
35:O4:41:ARG:HG2	35:O4:56:THR:HG21	1.84	0.60
45:2:741:C:O2'	45:2:742:U:O4'	2.15	0.60
45:2:758:U:OP1	50:S4:22:LYS:NZ	2.32	0.60
49:S3:40:ARG:HG2	66:D0:110:PRO:HB3	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:C7:35:CYS:HA	63:C7:38:ILE:HG22	1.83	0.60
66:D0:63:LEU:HB2	66:D0:84:MET:HB3	1.84	0.60
1:5:811:U:H2'	1:5:812:G:C8	2.37	0.60
1:5:1431:G:OP1	83:5:4238:HOH:O	2.16	0.60
1:5:2714:G:H8	1:5:2751:G:H2'	1.67	0.60
1:5:2952:G:O6	83:5:4225:HOH:O	2.12	0.60
5:l3:41:VAL:HA	5:l3:185:GLY:CA	2.28	0.60
47:s1:111:ARG:HD2	72:d6:68:TYR:HB2	1.84	0.60
50:s4:206:ASP:HB2	50:s4:222:LEU:HD12	1.84	0.60
72:d6:88:SER:H	72:d6:91:ASP:HB2	1.67	0.60
1:1:2700:G:OP1	22:N1:17:ARG:HB2	2.01	0.60
6:L4:26:PHE:HA	6:L4:127:ALA:HA	1.82	0.60
9:L7:169:ILE:HD12	9:L7:181:ILE:HA	1.83	0.60
13:M1:52:TYR:CE2	78:SM:38:PRO:HB3	2.37	0.60
18:M7:168:LEU:HD13	18:M7:173:ARG:HB3	1.83	0.60
48:S2:107:SER:O	48:S2:192:GLY:HA3	2.02	0.60
67:D1:79:LEU:HD13	67:D1:82:VAL:HG21	1.84	0.60
77:SR:110:VAL:HA	77:SR:126:SER:HB2	1.84	0.60
77:SR:200:ASN:ND2	77:SR:240:VAL:O	2.35	0.60
1:5:3118:C:H4'	41:q0:106:ARG:NH2	2.16	0.60
17:m6:124:LEU:O	17:m6:128:ARG:HB2	2.02	0.60
1:1:190:U:H2'	27:N6:60:ARG:NH2	2.17	0.59
1:1:1103:A:H4'	1:1:1104:G:OP1	2.02	0.59
80:1:3414:PAR:H322	80:1:3414:PAR:H51	1.67	0.59
8:L6:129:GLU:OE2	8:L6:130:ILE:N	2.35	0.59
18:M7:10:ASN:O	18:M7:14:SER:OG	2.20	0.59
23:N2:22:PRO:HB2	23:N2:28:PHE:HB2	1.84	0.59
45:2:181:A:H2'	45:2:182:A:H8	1.67	0.59
45:2:748:U:H2'	45:2:749:U:H6	1.67	0.59
45:2:916:U:H3	60:C4:41:ARG:NH2	1.99	0.59
45:2:1529:C:OP1	51:S5:112:ARG:NH1	2.35	0.59
47:S1:87:ARG:NH2	47:S1:220:GLN:OE1	2.34	0.59
51:S5:184:PHE:HD1	51:S5:185:ARG:HG3	1.67	0.59
77:SR:37:SER:OG	77:SR:39:ASP:OD2	2.20	0.59
1:5:1082:U:H5''	80:5:3428:PAR:C53	2.31	0.59
1:5:1348:U:H5''	1:5:1355:A:H61	1.67	0.59
1:5:1560:G:N2	1:5:1579:C:O2	2.34	0.59
1:5:1696:A:H2'	1:5:1697:A:C8	2.36	0.59
1:5:3378:C:H2'	1:5:3379:C:H6	1.65	0.59
14:m3:180:ARG:HH11	37:o6:11:LEU:HD11	1.66	0.59
23:n2:12:ALA:HB2	23:n2:68:THR:HG23	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:641:G:H2'	45:6:642:G:H8	1.67	0.59
45:6:755:A:H2'	45:6:756:A:C8	2.37	0.59
45:6:1106:U:H2'	45:6:1107:G:H8	1.67	0.59
1:1:107:A:O2'	1:1:324:A:N3	2.32	0.59
6:L4:104:LYS:HD3	6:L4:106:TRP:CZ2	2.37	0.59
18:M7:25:SER:HB3	18:M7:28:ASN:HB2	1.84	0.59
22:N1:45:ASN:OD1	22:N1:47:SER:OG	2.20	0.59
28:N7:46:ILE:HD11	28:N7:49:TYR:HA	1.84	0.59
45:2:895:G:H1	45:2:917:U:H3	1.50	0.59
47:S1:101:HIS:ND1	47:S1:101:HIS:O	2.35	0.59
49:S3:116:ARG:NH1	78:SM:116:GLU:HG2	2.16	0.59
60:C4:25:ASP:OD1	60:C4:26:THR:N	2.35	0.59
62:C6:16:ALA:HB2	62:C6:72:GLY:HA3	1.84	0.59
71:D5:61:SER:H	71:D5:64:VAL:HG12	1.65	0.59
1:5:90:C:OP1	29:n8:59:ARG:NH1	2.35	0.59
1:5:1682:U:O2	23:n2:82:LYS:NZ	2.32	0.59
9:l7:132:PRO:HA	9:l7:229:PHE:CD2	2.37	0.59
22:n1:34:TYR:HE2	22:n1:93:VAL:HG13	1.67	0.59
45:6:621:A:N3	45:6:1107:G:H1'	2.17	0.59
51:s5:72:HIS:HD1	62:c6:79:TYR:HH	1.47	0.59
55:s9:114:TYR:HA	55:s9:119:ALA:HB3	1.84	0.59
59:c3:65:VAL:HG13	59:c3:66:ILE:HG23	1.83	0.59
2:3:7:G:OP2	7:L5:28:THR:OG1	2.14	0.59
5:L3:187:SER:O	5:L3:190:GLU:N	2.35	0.59
5:L3:296:THR:HG22	5:L3:298:PHE:H	1.67	0.59
23:N2:32:SER:O	23:N2:36:TYR:N	2.32	0.59
24:N3:104:ASN:OD1	24:N3:108:GLU:HG3	2.02	0.59
29:N8:74:ASN:HB3	29:N8:115:LYS:HB2	1.83	0.59
31:O0:36:GLN:O	31:O0:38:LYS:N	2.34	0.59
34:O3:75:HIS:HB3	34:O3:80:VAL:HB	1.84	0.59
39:O8:58:ASP:HB3	39:O8:61:LYS:HB2	1.84	0.59
45:2:1615:C:N4	51:S5:78:ALA:O	2.35	0.59
49:S3:108:LYS:HG3	49:S3:113:LEU:HD12	1.85	0.59
80:5:3420:PAR:H43	80:5:3420:PAR:H241	1.66	0.59
7:l5:111:GLN:HA	7:l5:116:ASP:HB3	1.83	0.59
15:m4:13:ARG:NH1	15:m4:65:LEU:O	2.35	0.59
45:6:234:G:H2'	45:6:235:G:H4'	1.84	0.59
72:d6:18:VAL:HG21	72:d6:33:ASP:H	1.68	0.59
73:d7:33:LEU:HD22	73:d7:79:PHE:HB2	1.83	0.59
77:sR:11:GLY:HA3	77:sR:54:PHE:HB2	1.84	0.59
1:1:837:A:OP1	44:Q3:5:THR:OG1	2.20	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:97:A:H2'	2:3:98:C:H6	1.67	0.59
22:N1:56:PHE:CE1	22:N1:78:LYS:HD3	2.37	0.59
45:2:474:A:H5''	55:S9:144:PRO:HD2	1.84	0.59
45:2:1553:G:N2	45:2:1555:A:H3'	2.18	0.59
45:2:1553:G:O2'	75:D9:14:TYR:OH	2.20	0.59
50:S4:193:GLY:HA2	50:S4:212:ASP:HA	1.84	0.59
61:C5:23:GLU:HA	61:C5:26:LEU:HB2	1.84	0.59
1:5:89:A:N7	19:m8:171:LYS:NZ	2.51	0.59
18:m7:155:GLU:N	18:m7:155:GLU:OE2	2.34	0.59
20:m9:25:ASP:HB3	20:m9:28:GLU:HB2	1.84	0.59
24:n3:33:ASN:ND2	24:n3:64:LYS:HD3	2.17	0.59
40:o9:5:LYS:HD3	40:o9:13:MET:HE1	1.83	0.59
45:6:523:G:H5'	70:d4:60:PHE:O	2.02	0.59
45:6:1034:C:O2'	68:d2:2:THR:N	2.27	0.59
79:s6:163:THR:HA	79:s6:168:THR:HG22	1.83	0.59
53:s7:13:PRO:HB2	53:s7:14:THR:HB	1.85	0.59
53:s7:115:SER:O	53:s7:116:ARG:HB2	2.01	0.59
59:c3:37:ILE:HG12	59:c3:54:LEU:HD11	1.83	0.59
61:c5:90:ILE:HD13	61:c5:109:PRO:HA	1.84	0.59
62:c6:39:VAL:HG21	62:c6:48:VAL:HG11	1.84	0.59
1:1:2177:G:OP2	4:L2:128:ARG:NH1	2.35	0.59
80:1:3426:PAR:H23	80:1:3426:PAR:HN21	1.67	0.59
4:L2:225:ILE:HG21	4:L2:234:LYS:HA	1.83	0.59
5:L3:92:TYR:CE1	5:L3:159:ARG:HD2	2.37	0.59
10:L8:178:ALA:HA	10:L8:222:PHE:CD2	2.37	0.59
12:M0:170:LYS:HA	12:M0:177:ASP:HA	1.83	0.59
14:M3:69:VAL:N	14:M3:149:GLN:OE1	2.36	0.59
17:M6:3:VAL:HG13	17:M6:4:GLU:H	1.67	0.59
24:N3:95:PHE:HD1	25:N4:22:VAL:HB	1.68	0.59
29:N8:46:ASP:OD1	29:N8:46:ASP:N	2.34	0.59
45:2:164:A:H1'	52:S6:13:GLN:NE2	2.17	0.59
45:2:1489:U:OP2	49:S3:9:ARG:NH2	2.35	0.59
45:2:1559:A:C6	64:C8:134:ARG:HD2	2.37	0.59
69:D3:19:ARG:O	69:D3:23:ARG:HG2	2.01	0.59
1:5:912:G:N1	4:l2:208:ASP:OD2	2.26	0.59
9:l7:156:ILE:O	9:l7:159:GLN:HB2	2.02	0.59
79:s6:153:VAL:HG23	79:s6:154:ARG:H	1.67	0.59
68:d2:31:SER:HB3	68:d2:34:ILE:HG13	1.84	0.59
76:e0:44:PHE:O	76:e0:45:VAL:HB	2.02	0.59
1:1:961:C:OP2	83:1:4338:HOH:O	2.16	0.59
1:1:2228:A:H2'	1:1:2229:A:C8	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L7:26:VAL:HG23	9:L7:30:ARG:HG2	1.85	0.59
11:L9:124:ARG:NH1	11:L9:164:ILE:O	2.32	0.59
20:M9:98:ARG:HD2	20:M9:133:LYS:O	2.02	0.59
45:2:773:C:O2'	45:2:787:G:N2	2.36	0.59
45:2:1480:G:H5''	65:C9:63:ARG:HH21	1.67	0.59
52:S6:52:ILE:HG23	52:S6:109:LEU:HD21	1.85	0.59
56:C0:23:ALA:O	56:C0:64:TYR:HB2	2.03	0.59
62:C6:73:GLY:H	62:C6:76:SER:HB3	1.66	0.59
5:l3:229:VAL:HG11	5:l3:249:VAL:HG23	1.84	0.59
12:m0:109:ASP:OD1	12:m0:110:ARG:NH2	2.36	0.59
33:o2:85:LEU:HB2	33:o2:117:ILE:HD13	1.85	0.59
68:d2:57:ARG:NH2	73:d7:26:GLN:OE1	2.36	0.59
1:l:661:G:OP1	29:N8:12:ARG:NH2	2.36	0.59
11:L9:106:LYS:H	11:L9:109:ALA:HB3	1.68	0.59
14:M3:166:ALA:N	29:N8:135:GLU:OE1	2.35	0.59
14:M3:168:ARG:NH1	14:M3:172:LEU:HD11	2.18	0.59
44:Q3:13:LYS:HE3	44:Q3:14:TYR:CZ	2.38	0.59
48:S2:242:ILE:HG23	48:S2:243:TYR:CD2	2.36	0.59
49:S3:164:VAL:HG13	49:S3:168:ILE:HD11	1.83	0.59
1:5:130:A:H61	1:5:138:U:H3	1.51	0.59
1:5:944:C:H4'	33:o2:33:ARG:HH11	1.66	0.59
1:5:2880:U:H1'	5:l3:250:ALA:HB3	1.85	0.59
12:m0:48:LEU:HD22	12:m0:49:CYS:H	1.67	0.59
27:n6:27:ARG:NH1	27:n6:75:ARG:O	2.29	0.59
33:o2:5:PRO:O	33:o2:6:HIS:ND1	2.36	0.59
44:q3:59:CYS:SG	44:q3:60:CYS:N	2.75	0.59
45:6:861:U:O2'	68:d2:56:HIS:O	2.17	0.59
45:6:1413:U:H4'	45:6:1414:U:OP2	2.01	0.59
60:c4:27:PHE:HA	60:c4:43:THR:HG22	1.85	0.59
1:l:2621:G:O6	12:M0:113:GLN:HG3	2.03	0.59
1:l:2945:G:O2'	83:1:4315:HOH:O	2.08	0.59
9:L7:178:ILE:HA	9:L7:183:ASP:HB3	1.85	0.59
18:M7:173:ARG:HA	18:M7:176:ILE:HB	1.84	0.59
46:S0:107:PHE:HB3	46:S0:139:VAL:HG21	1.84	0.59
51:S5:103:ASN:HA	51:S5:106:LYS:HD2	1.84	0.59
59:C3:102:LEU:HD13	59:C3:115:LEU:HD12	1.83	0.59
77:SR:16:HIS:CE1	77:SR:37:SER:HB2	2.38	0.59
1:5:675:C:O2'	1:5:679:U:OP1	2.20	0.59
1:5:1597:C:H2'	1:5:1598:G:H8	1.67	0.59
1:5:3043:C:OP2	24:n3:48:ARG:NH2	2.35	0.59
51:s5:57:SER:HA	74:d8:53:ILE:HB	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1039:U:H2'	1:1:1040:A:C8	2.38	0.59
80:1:3434:PAR:N21	80:1:3434:PAR:H23	2.17	0.59
3:4:80:A:H3'	3:4:82:U:O2	2.03	0.59
4:L2:108:PRO:O	4:L2:111:THR:OG1	2.21	0.59
5:L3:76:VAL:HG11	5:L3:323:MET:HE3	1.85	0.59
7:L5:187:THR:OG1	7:L5:188:GLU:N	2.33	0.59
10:L8:190:VAL:HG13	10:L8:192:GLN:HG2	1.85	0.59
12:M0:110:ARG:CZ	12:M0:110:ARG:HA	2.33	0.59
15:M4:32:LEU:HD11	15:M4:94:TRP:CG	2.37	0.59
44:Q3:46:THR:HB	44:Q3:58:SER:HB2	1.84	0.59
45:2:778:G:H3'	45:2:780:A:H2	1.67	0.59
45:2:859:A:C5	59:C3:73:ARG:HD3	2.38	0.59
51:S5:25:LEU:HD12	62:C6:27:GLY:HA3	1.85	0.59
52:S6:68:LEU:HB2	52:S6:69:LEU:HD22	1.84	0.59
54:S8:153:GLU:HG2	54:S8:155:SER:H	1.67	0.59
62:C6:112:TYR:OH	62:C6:114:ARG:NH1	2.36	0.59
70:D4:25:VAL:HB	70:D4:60:PHE:HE1	1.68	0.59
1:5:1655:G:H5'	1:5:1655:G:H8	1.68	0.59
5:l3:53:MET:HE2	5:l3:77:THR:HG22	1.83	0.59
13:m1:96:PHE:O	13:m1:156:LYS:NZ	2.32	0.59
28:n7:10:VAL:HG22	28:n7:24:VAL:HG22	1.83	0.59
38:o7:52:LYS:HA	38:o7:55:ARG:HD3	1.84	0.59
45:6:1684:U:O2	45:6:1718:G:N1	2.36	0.59
48:s2:56:ILE:HA	48:s2:61:LEU:HD12	1.83	0.59
1:1:899:U:H5	80:1:3435:PAR:H531	1.66	0.59
1:1:2882:U:H2'	1:1:2883:U:O4'	2.02	0.59
1:1:3294:A:H5''	5:L3:128:LYS:HG3	1.85	0.59
8:L6:52:VAL:HG21	8:L6:65:ILE:HD12	1.84	0.59
11:L9:23:ARG:HH21	11:L9:42:ASP:HA	1.68	0.59
12:M0:130:ASP:OD1	12:M0:131:ILE:N	2.36	0.59
37:O6:2:THR:OG1	37:O6:3:VAL:N	2.35	0.59
49:S3:99:VAL:HG13	49:S3:173:ARG:HH21	1.68	0.59
60:C4:16:VAL:HG12	60:C4:31:THR:OG1	2.03	0.59
6:l4:52:VAL:HG11	6:l4:99:MET:HE3	1.84	0.59
16:m5:113:LEU:HD12	16:m5:134:LEU:HD23	1.85	0.59
45:6:95:G:H3'	45:6:96:G:H8	1.68	0.59
45:6:310:C:OP1	69:d3:20:ARG:HD2	2.03	0.59
45:6:1684:U:H1'	45:6:1718:G:H22	1.67	0.59
46:s0:124:THR:HG22	46:s0:174:TRP:HE1	1.66	0.59
48:s2:73:LEU:HG	48:s2:76:LEU:HD13	1.84	0.59
54:s8:152:ILE:HG13	54:s8:153:GLU:H	1.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
78:sM:51:ARG:HG3	78:sM:52:PRO:HD2	1.84	0.59
22:N1:17:ARG:HG3	22:N1:22:HIS:HA	1.85	0.58
45:2:1554:U:OP1	75:D9:13:ARG:NH2	2.36	0.58
48:S2:38:VAL:HG22	48:S2:39:THR:H	1.68	0.58
50:S4:60:GLU:HB3	70:D4:18:LEU:HD11	1.85	0.58
51:S5:61:TYR:HA	51:S5:85:ALA:HB1	1.85	0.58
60:C4:79:VAL:HG13	60:C4:112:ILE:HG22	1.85	0.58
1:5:1368:U:O2'	1:5:1369:A:OP1	2.19	0.58
7:l5:85:ARG:NH2	7:l5:250:ASP:OD1	2.36	0.58
10:l8:97:TYR:OH	10:l8:204:ARG:HB2	2.02	0.58
22:n1:76:ILE:HG22	22:n1:87:LYS:HB2	1.85	0.58
45:6:753:A:H62	50:s4:187:ARG:HH22	1.51	0.58
45:6:963:A:OP2	59:c3:70:LYS:NZ	2.36	0.58
45:6:1387:G:OP1	63:c7:32:LYS:NZ	2.28	0.58
45:6:1588:G:H1	45:6:1608:U:H3	1.50	0.58
53:s7:30:SER:O	53:s7:34:LEU:HB2	2.02	0.58
56:c0:14:TYR:CD2	56:c0:35:ILE:HD11	2.37	0.58
62:c6:41:PRO:HG2	62:c6:78:VAL:HG21	1.84	0.58
1:1:245:U:H2'	1:1:246:U:C6	2.37	0.58
5:L3:283:TYR:HB3	5:L3:356:LEU:HD21	1.85	0.58
6:L4:82:THR:HG23	6:L4:84:ARG:N	2.18	0.58
37:O6:58:ILE:HG22	37:O6:90:MET:HB3	1.84	0.58
45:2:1535:U:O2'	45:2:1536:G:N3	2.35	0.58
48:S2:148:LEU:HA	67:D1:4:ASP:HB2	1.84	0.58
53:S7:78:THR:HA	53:S7:81:LEU:HB2	1.84	0.58
55:S9:88:GLU:HA	55:S9:91:LYS:HE3	1.85	0.58
1:5:1621:A:H2'	1:5:1622:U:C6	2.38	0.58
2:7:4:U:H2'	2:7:5:G:C8	2.38	0.58
4:l2:41:ILE:HG22	4:l2:90:ALA:HB3	1.85	0.58
5:l3:147:GLU:HA	5:l3:150:ARG:HB3	1.85	0.58
45:6:397:A:O3'	54:s8:50:GLY:HA2	2.03	0.58
50:s4:66:MET:HE1	50:s4:78:THR:OG1	2.03	0.58
61:c5:39:ALA:HA	61:c5:42:ARG:HE	1.68	0.58
61:c5:130:ARG:NH2	78:sM:71:ASN:OD1	2.35	0.58
63:c7:104:ASN:O	63:c7:107:SER:OG	2.19	0.58
66:d0:72:ASN:HD22	66:d0:73:GLY:H	1.49	0.58
72:d6:46:GLU:HG2	72:d6:47:ALA:H	1.67	0.58
3:4:143:U:P	16:M5:38:ARG:HH22	2.26	0.58
45:2:72:A:H1'	45:2:73:U:H4'	1.85	0.58
45:2:484:C:H42	45:2:503:G:H22	1.52	0.58
45:2:511:A:H5'	55:S9:173:ALA:HA	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:877:G:H5'	45:2:937:C:H1'	1.84	0.58
47:S1:117:TRP:HB3	47:S1:153:HIS:HA	1.85	0.58
60:C4:31:THR:HG22	60:C4:38:THR:HB	1.85	0.58
64:C8:13:HIS:HE1	71:D5:40:VAL:HG13	1.68	0.58
69:D3:73:ARG:HH11	69:D3:82:LYS:HB3	1.67	0.58
72:D6:54:SER:C	72:D6:56:ALA:H	2.11	0.58
1:5:1022:U:H3	1:5:1030:A:H2	1.50	0.58
1:5:2585:G:O6	10:18:47:SER:OG	2.21	0.58
7:15:68:THR:HG22	7:15:70:THR:H	1.67	0.58
12:m0:110:ARG:HG3	12:m0:113:GLN:O	2.03	0.58
40:o9:28:ARG:HD3	40:o9:36:ARG:HA	1.85	0.58
48:s2:137:ILE:HG13	48:s2:138:PRO:HD2	1.85	0.58
53:s7:82:GLU:O	53:s7:86:GLN:NE2	2.36	0.58
62:c6:73:GLY:H	62:c6:76:SER:HG	1.51	0.58
1:1:1470:U:H2'	1:1:1471:U:C6	2.39	0.58
1:1:1582:C:H5''	1:1:1583:A:OP1	2.04	0.58
7:L5:34:LYS:HA	22:N1:27:LEU:HD11	1.85	0.58
45:2:861:U:OP1	59:C3:64:ARG:NH2	2.37	0.58
51:S5:116:HIS:O	51:S5:120:ILE:HG13	2.03	0.58
65:C9:64:HIS:CE1	65:C9:68:ARG:HH22	2.21	0.58
70:D4:33:ALA:O	70:D4:34:ASN:ND2	2.36	0.58
1:5:503:C:OP1	8:l6:26:ARG:NH1	2.34	0.58
1:5:2562:A:N6	1:5:2579:G:O2'	2.36	0.58
3:8:78:G:H2'	3:8:79:A:C1'	2.33	0.58
6:l4:33:ASP:O	6:l4:37:THR:HG23	2.04	0.58
13:m1:23:VAL:HG21	13:m1:30:LEU:HA	1.85	0.58
51:s5:53:VAL:HB	51:s5:59:VAL:HG22	1.85	0.58
78:sM:64:LYS:O	78:sM:70:ASN:ND2	2.35	0.58
1:1:184:U:H2'	1:1:185:C:C6	2.39	0.58
1:1:1381:A:OP1	6:L4:197:ARG:NH1	2.36	0.58
1:1:2375:G:O2'	1:1:2377:G:OP2	2.19	0.58
1:1:2709:C:H2'	1:1:2710:C:C6	2.39	0.58
16:M5:172:ARG:O	16:M5:183:THR:OG1	2.21	0.58
20:M9:172:ARG:HD3	45:2:852:C:OP1	2.03	0.58
45:2:751:G:H2'	45:2:752:A:C8	2.38	0.58
45:2:1031:U:H4'	45:2:1032:G:OP2	2.03	0.58
51:S5:51:VAL:HG21	51:S5:130:ILE:HG23	1.85	0.58
1:5:837:A:OP2	44:q3:4:ARG:NH1	2.32	0.58
1:5:2749:G:O2'	7:l5:35:ARG:HG2	2.03	0.58
1:5:3355:U:O2'	1:5:3356:G:H5''	2.04	0.58
9:l7:132:PRO:HB2	9:l7:133:TYR:CZ	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:m0:80:SER:HB3	12:m0:147:VAL:HG11	1.85	0.58
16:m5:102:ALA:O	16:m5:106:VAL:HG12	2.03	0.58
48:s2:40:LYS:HA	48:s2:43:ARG:HH11	1.67	0.58
50:s4:192:ILE:HG23	50:s4:228:ILE:HD11	1.86	0.58
77:sR:72:THR:HG22	77:sR:81:LEU:HB2	1.86	0.58
1:1:1709:C:H2'	1:1:1710:C:H6	1.69	0.58
1:1:2993:G:H2'	1:1:3142:A:N6	2.19	0.58
2:3:121:U:OP2	7:L5:265:TYR:OH	2.13	0.58
3:4:81:U:O2	3:4:85:G:H1'	2.03	0.58
12:M0:36:LEU:HD12	12:M0:87:LEU:HB3	1.85	0.58
22:N1:77:ASN:ND2	30:N9:24:PRO:HG2	2.18	0.58
24:N3:40:LYS:HG3	24:N3:57:MET:HE2	1.85	0.58
40:O9:5:LYS:HG2	40:O9:13:MET:HE1	1.86	0.58
45:2:320:U:H4'	45:2:321:C:OP1	2.04	0.58
61:C5:121:ILE:HD13	64:C8:122:HIS:HD2	1.68	0.58
66:D0:20:ILE:HD11	66:D0:97:VAL:HA	1.86	0.58
67:D1:28:ASP:O	67:D1:31:SER:N	2.36	0.58
71:D5:96:SER:O	71:D5:97:LYS:HG3	2.03	0.58
1:5:817:A:C4	38:o7:13:ASN:O	2.56	0.58
1:5:2728:G:C6	22:n1:80:VAL:HG11	2.39	0.58
3:8:58:G:O6	38:o7:63:ARG:NH2	2.34	0.58
45:6:245:U:O2'	45:6:247:A:N7	2.28	0.58
1:1:3181:C:HO2'	17:M6:164:SER:HG	1.51	0.58
7:L5:9:SER:O	7:L5:12:TYR:N	2.24	0.58
9:L7:92:ILE:HD11	19:M8:4:ASP:HB2	1.85	0.58
18:M7:131:ARG:NH1	18:M7:137:ASN:OD1	2.35	0.58
34:O3:48:ARG:HG3	34:O3:104:PRO:HD3	1.86	0.58
45:2:737:A:O2'	45:2:738:G:O5'	2.21	0.58
45:2:745:U:H2'	45:2:746:A:H8	1.68	0.58
64:C8:140:THR:O	64:C8:143:ARG:NH1	2.36	0.58
65:C9:115:GLU:OE2	65:C9:123:ARG:NH1	2.37	0.58
1:5:1073:U:H1'	30:n9:50:THR:HB	1.86	0.58
1:5:1497:C:H2'	1:5:1498:A:C8	2.37	0.58
37:o6:91:ASN:O	37:o6:94:ILE:HG22	2.04	0.58
49:s3:42:THR:C	49:s3:44:THR:H	2.12	0.58
51:s5:90:ILE:O	51:s5:94:THR:OG1	2.20	0.58
61:c5:61:ARG:HA	61:c5:64:LYS:HB2	1.84	0.58
66:d0:29:THR:HG21	66:d0:84:MET:HE2	1.86	0.58
68:d2:101:TYR:HB2	68:d2:129:VAL:HG12	1.85	0.58
1:1:2356:A:OP1	18:M7:138:LYS:NZ	2.37	0.58
1:1:3275:U:H5'	34:O3:68:TRP:HZ2	1.67	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3348:G:H1	1:1:3357:U:H3	1.50	0.58
34:O3:67:MET:HE1	34:O3:90:PRO:HD3	1.86	0.58
47:S1:121:ILE:HG12	47:S1:161:ILE:HG23	1.86	0.58
48:S2:88:LYS:HB3	48:S2:95:ARG:HG3	1.84	0.58
55:S9:123:HIS:CE1	76:E0:37:ARG:HD2	2.39	0.58
64:C8:5:VAL:O	71:D5:42:LEU:HD12	2.04	0.58
1:5:3296:A:H2'	1:5:3297:U:C6	2.39	0.58
8:l6:40:LEU:HD12	8:l6:65:ILE:HD11	1.85	0.58
14:m3:180:ARG:HD3	37:o6:11:LEU:HD21	1.86	0.58
15:m4:60:LEU:HD13	21:n0:152:LEU:HD11	1.85	0.58
22:n1:127:GLN:HG3	22:n1:127:GLN:O	2.04	0.58
30:n9:23:LYS:O	30:n9:25:LYS:HG3	2.04	0.58
41:q0:78:ILE:HG12	41:q0:83:LYS:HB2	1.84	0.58
47:s1:77:GLU:O	47:s1:80:SER:OG	2.18	0.58
79:s6:36:VAL:HG12	79:s6:37:ASP:H	1.67	0.58
1:1:435:C:H2'	1:1:436:A:H8	1.69	0.58
1:1:2257:C:H2'	1:1:2258:U:O4'	2.04	0.58
4:L2:53:GLY:O	4:L2:192:LYS:NZ	2.36	0.58
6:L4:138:ARG:HE	6:L4:240:PRO:HD2	1.68	0.58
11:L9:48:VAL:HG13	11:L9:52:LEU:HB3	1.86	0.58
12:M0:16:PRO:HD3	12:M0:128:ARG:NH1	2.18	0.58
36:O5:53:CYS:O	36:O5:57:VAL:HG23	2.04	0.58
48:S2:144:TRP:CD2	48:S2:173:PRO:HG3	2.38	0.58
1:5:299:G:N1	37:o6:30:LYS:HB3	2.19	0.58
1:5:412:G:H2'	1:5:413:U:C6	2.38	0.58
1:5:412:G:H2'	1:5:413:U:H6	1.69	0.58
1:5:720:A:H3'	19:m8:69:ARG:HH12	1.68	0.58
1:5:2400:G:O6	83:5:4242:HOH:O	2.17	0.58
80:5:3427:PAR:H11	80:5:3427:PAR:H23	1.85	0.58
3:8:80:A:C5'	36:o5:2:ALA:HB2	2.33	0.58
25:n4:87:LEU:HD22	25:n4:91:LYS:HE3	1.85	0.58
45:6:778:G:H5'	45:6:780:A:H62	1.69	0.58
45:6:1018:U:H2'	45:6:1019:A:H8	1.69	0.58
45:6:1231:U:HO2'	45:6:1258:U:HO2'	1.52	0.58
57:c1:5:LEU:HD13	57:c1:7:VAL:H	1.69	0.58
61:c5:75:PRO:HA	61:c5:93:VAL:HG13	1.86	0.58
62:c6:37:THR:O	62:c6:45:ARG:NH1	2.36	0.58
77:sR:37:SER:OG	77:sR:38:ARG:N	2.36	0.58
77:sR:132:LYS:NZ	77:sR:143:THR:OG1	2.37	0.58
78:sM:70:ASN:O	78:sM:74:LYS:NZ	2.36	0.58
5:L3:367:LYS:HE3	25:N4:33:ASN:HB2	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:250:TRP:CZ3	6:L4:258:LEU:HD21	2.39	0.58
11:L9:94:TYR:CZ	11:L9:98:PRO:HA	2.39	0.58
14:M3:99:HIS:H	14:M3:99:HIS:CD2	2.22	0.58
15:M4:48:GLY:HA3	15:M4:53:VAL:CG1	2.30	0.58
23:N2:14:THR:HG22	23:N2:66:VAL:HG22	1.85	0.58
24:N3:85:TRP:O	24:N3:92:PHE:HA	2.03	0.58
50:S4:256:ARG:O	50:S4:259:GLN:NE2	2.37	0.58
64:C8:53:ASP:HB3	64:C8:56:LYS:HB2	1.86	0.58
77:SR:64:HIS:ND1	77:SR:86:ASP:OD2	2.33	0.58
77:SR:140:CYS:SG	77:SR:141:LEU:N	2.77	0.58
77:SR:250:TYR:O	77:SR:251:TRP:HD1	1.87	0.58
1:5:766:U:H4'	1:5:767:U:H5'	1.85	0.58
1:5:1167:U:OP1	83:5:4241:HOH:O	2.17	0.58
1:5:1214:U:OP2	21:n0:137:ARG:NH2	2.28	0.58
3:8:24:G:OP2	27:n6:13:ARG:HD3	2.04	0.58
8:l6:157:GLN:OE1	8:l6:157:GLN:N	2.36	0.58
23:n2:50:LEU:HB2	23:n2:54:VAL:HB	1.85	0.58
45:6:1272:U:H3	45:6:1438:G:H1	1.50	0.58
1:1:1764:U:H3	20:M9:43:LYS:HE2	1.68	0.57
1:1:3259:U:H6	1:1:3259:U:H5'	1.68	0.57
7:L5:106:ALA:HB2	7:L5:166:ALA:HA	1.86	0.57
14:M3:85:LEU:HD23	14:M3:90:ALA:HB2	1.86	0.57
18:M7:67:ILE:HG13	18:M7:82:ARG:CZ	2.33	0.57
21:N0:141:LYS:HA	21:N0:144:LEU:HD12	1.86	0.57
45:2:1649:G:H2'	45:2:1650:U:C6	2.39	0.57
52:S6:69:LEU:O	52:S6:71:THR:N	2.37	0.57
55:S9:92:LYS:HB2	55:S9:95:TYR:HE2	1.69	0.57
57:C1:53:TYR:CD1	57:C1:113:PRO:HG2	2.39	0.57
1:5:2373:A:N3	1:5:2824:G:O2'	2.31	0.57
45:6:1018:U:H2'	45:6:1019:A:C8	2.38	0.57
79:s6:67:VAL:HG21	79:s6:99:GLY:HA2	1.85	0.57
1:1:655:C:H2'	1:1:656:A:C8	2.39	0.57
1:1:1482:A:H4'	1:1:1483:G:OP2	2.04	0.57
6:L4:8:VAL:HG12	6:L4:9:HIS:H	1.68	0.57
15:M4:135:LEU:HD11	17:M6:178:VAL:HG13	1.85	0.57
45:2:1607:G:H2'	45:2:1608:U:C6	2.40	0.57
49:S3:28:GLU:OE1	56:C0:56:LYS:NZ	2.37	0.57
57:C1:6:THR:O	57:C1:8:GLN:N	2.36	0.57
69:D3:48:HIS:CD2	69:D3:105:ALA:HB2	2.39	0.57
77:SR:13:LEU:HB2	77:SR:310:ILE:HB	1.85	0.57
1:5:3027:A:H2'	1:5:3028:G:O4'	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1684:U:O2'	45:6:1718:G:N2	2.37	0.57
45:6:1795:U:H5'	72:d6:79:ILE:HD11	1.86	0.57
62:c6:14:LYS:O	62:c6:123:ARG:NH2	2.32	0.57
69:d3:42:PRO:O	69:d3:79:ASN:ND2	2.37	0.57
1:1:2800:G:O6	29:N8:42:ARG:NH2	2.37	0.57
1:1:3344:A:H2	1:1:3361:G:H21	1.51	0.57
80:1:3407:PAR:O44	12:M0:153:ARG:NH2	2.37	0.57
11:L9:120:ASP:OD1	11:L9:124:ARG:NH2	2.37	0.57
22:N1:40:VAL:HB	22:N1:96:ILE:HG13	1.86	0.57
26:N5:108:LEU:HB3	26:N5:125:ARG:HD2	1.85	0.57
28:N7:121:ARG:NH1	28:N7:127:ASN:OD1	2.37	0.57
45:2:208:U:H4'	54:S8:176:SER:HB2	1.85	0.57
51:S5:140:THR:HG21	51:S5:175:LEU:HD21	1.85	0.57
52:S6:199:GLN:HG2	52:S6:202:ARG:HH12	1.69	0.57
67:D1:70:ASN:HB3	67:D1:83:TRP:HB2	1.86	0.57
1:5:148:G:N7	10:l8:137:ASN:ND2	2.50	0.57
1:5:955:U:H2'	1:5:956:U:C6	2.39	0.57
2:7:49:G:N2	2:7:52:G:O6	2.38	0.57
6:l4:30:ILE:HA	6:l4:124:SER:HB3	1.87	0.57
14:m3:126:PHE:CZ	14:m3:135:ALA:HB2	2.38	0.57
16:m5:154:PRO:HB3	16:m5:157:LYS:HE3	1.86	0.57
45:6:882:U:H2'	45:6:883:C:H6	1.70	0.57
45:6:1206:U:H4'	75:d9:27:HIS:ND1	2.18	0.57
49:s3:5:ILE:HG22	49:s3:6:SER:H	1.70	0.57
51:s5:222:LYS:HA	51:s5:225:ARG:HD2	1.86	0.57
1:1:500:C:H4'	8:L6:80:ASN:HD21	1.68	0.57
1:1:3326:G:H2'	1:1:3327:G:H8	1.69	0.57
7:L5:40:HIS:CD2	7:L5:42:ALA:H	2.19	0.57
17:M6:22:VAL:HG11	17:M6:120:VAL:HG11	1.87	0.57
45:2:145:A:N6	45:2:171:A:H61	2.02	0.57
45:2:1528:U:OP1	51:S5:109:LYS:HD3	2.03	0.57
47:S1:27:LYS:HB3	47:S1:47:LEU:HD11	1.86	0.57
48:S2:115:ILE:HD13	48:S2:208:GLU:HG3	1.86	0.57
49:S3:195:SER:O	49:S3:196:ARG:HB3	2.03	0.57
52:S6:67:VAL:HG23	52:S6:100:ALA:H	1.69	0.57
55:S9:110:GLN:NE2	55:S9:126:ARG:HB2	2.19	0.57
64:C8:46:VAL:HG21	64:C8:73:MET:HG2	1.86	0.57
1:5:1699:A:H62	80:5:3427:PAR:H62	1.69	0.57
1:5:2775:U:H2'	1:5:2776:C:C6	2.39	0.57
5:l3:55:THR:HG22	5:l3:56:ILE:H	1.69	0.57
21:n0:77:VAL:HG13	21:n0:126:VAL:HG22	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:o2:82:LEU:HD11	33:o2:112:ALA:HB2	1.87	0.57
36:o5:95:PHE:O	36:o5:99:GLN:NE2	2.34	0.57
44:q3:36:ARG:HG3	44:q3:48:LYS:HD3	1.86	0.57
47:s1:164:ILE:HD13	47:s1:207:LEU:HD11	1.87	0.57
47:s1:167:VAL:HA	47:s1:170:GLU:HB2	1.86	0.57
65:c9:28:LEU:HD23	65:c9:30:VAL:HG12	1.86	0.57
2:3:11:A:N1	2:3:67:G:O2'	2.36	0.57
10:L8:52:TRP:O	10:L8:57:ARG:NH1	2.38	0.57
18:M7:108:ASP:N	18:M7:152:GLU:OE2	2.36	0.57
19:M8:122:ILE:HG23	19:M8:126:GLN:HB2	1.86	0.57
45:2:1226:A:O2'	45:2:1256:A:N6	2.30	0.57
46:S0:27:ARG:HG3	46:S0:28:ASN:H	1.68	0.57
47:S1:81:PHE:HE2	47:S1:82:ARG:HH11	1.52	0.57
54:S8:77:ARG:H	54:S8:105:ASP:HB2	1.69	0.57
57:C1:69:LYS:O	57:C1:127:GLN:HB2	2.05	0.57
77:SR:41:THR:HG22	77:SR:62:LYS:HG2	1.85	0.57
1:5:1043:C:O3'	12:m0:90:ARG:NH1	2.37	0.57
1:5:1321:G:O3'	21:n0:117:ARG:NH2	2.36	0.57
1:5:1615:C:H2'	1:5:1616:U:C6	2.38	0.57
1:5:3057:U:O2'	1:5:3059:G:OP1	2.22	0.57
35:o4:74:ARG:HD2	35:o4:85:VAL:HG21	1.87	0.57
45:6:1267:G:O2'	45:6:1448:G:O2'	2.19	0.57
45:6:1498:G:H5''	65:c9:72:GLY:HA3	1.84	0.57
3:4:82:U:H5''	3:4:83:C:H5''	1.87	0.57
4:L2:48:ILE:HD11	44:Q3:54:ILE:HG23	1.87	0.57
5:L3:296:THR:HG21	5:L3:357:LYS:O	2.04	0.57
16:M5:136:ASP:OD2	16:M5:138:GLN:HG2	2.04	0.57
17:M6:42:ASN:OD1	17:M6:125:ARG:HD3	2.04	0.57
45:2:56:U:H4'	45:2:57:G:H5'	1.86	0.57
45:2:1787:C:H2'	45:2:1788:G:C8	2.39	0.57
1:5:738:A:H2'	1:5:739:G:C8	2.39	0.57
1:5:2526:C:OP1	4:l2:38:HIS:NE2	2.31	0.57
6:l4:11:LEU:HD11	6:l4:155:ASP:HB2	1.87	0.57
13:m1:53:THR:HG23	13:m1:60:ARG:HA	1.87	0.57
61:c5:16:SER:OG	61:c5:20:VAL:O	2.15	0.57
66:d0:25:THR:HB	66:d0:115:GLU:HG3	1.85	0.57
1:1:1917:C:OP1	20:M9:85:ARG:NH2	2.37	0.57
1:1:2709:C:H2'	1:1:2710:C:H6	1.70	0.57
80:1:3435:PAR:C23	80:1:3435:PAR:HN21	2.14	0.57
6:L4:222:VAL:HG13	6:L4:225:VAL:HB	1.86	0.57
18:M7:22:LEU:HB3	18:M7:90:PHE:CE2	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:M8:154:GLY:O	19:M8:159:LYS:NZ	2.27	0.57
45:2:71:A:H2'	45:2:72:A:H5''	1.87	0.57
45:2:590:C:H2'	45:2:591:A:H8	1.69	0.57
45:2:822:U:H2'	45:2:823:G:H5''	1.85	0.57
45:2:1066:C:C4'	47:S1:149:GLN:HE22	2.16	0.57
45:2:1186:U:OP1	45:2:1456:C:O2'	2.23	0.57
53:S7:133:THR:O	53:S7:155:ASP:HB2	2.04	0.57
54:S8:114:GLU:CD	54:S8:120:THR:HA	2.30	0.57
60:C4:92:LYS:NZ	72:D6:69:ASN:HB2	2.20	0.57
63:C7:31:ASN:ND2	63:C7:55:THR:OG1	2.37	0.57
74:D8:5:THR:HG21	74:D8:57:MET:HE3	1.85	0.57
1:5:817:A:OP1	83:5:4245:HOH:O	2.18	0.57
4:l2:105:GLY:HA2	4:l2:139:HIS:CE1	2.40	0.57
12:m0:36:LEU:HD21	12:m0:69:ARG:HD3	1.85	0.57
14:m3:153:ASP:OD1	14:m3:157:ARG:NH2	2.37	0.57
26:n5:99:VAL:HG11	26:n5:124:VAL:HG11	1.86	0.57
45:6:472:U:H5''	55:s9:11:THR:HG23	1.87	0.57
45:6:755:A:H2'	45:6:756:A:H8	1.70	0.57
45:6:1352:G:H1	45:6:1373:C:H42	1.51	0.57
49:s3:42:THR:OG1	49:s3:44:THR:O	2.23	0.57
57:c1:101:GLU:OE2	69:d3:16:ARG:NH2	2.37	0.57
1:1:2349:U:OP1	83:1:4341:HOH:O	2.17	0.57
2:3:72:A:O2'	2:3:74:C:OP1	2.16	0.57
80:3:203:PAR:H13	80:3:203:PAR:C11	2.34	0.57
5:L3:56:ILE:HD11	5:L3:356:LEU:HD13	1.86	0.57
43:Q2:28:TYR:HB3	43:Q2:69:VAL:HB	1.86	0.57
77:SR:24:ALA:HB3	77:SR:34:LEU:HB3	1.86	0.57
1:5:183:G:H1	1:5:233:C:H42	1.52	0.57
1:5:437:G:H22	1:5:622:A:H61	1.51	0.57
6:l4:286:VAL:O	6:l4:289:ILE:N	2.38	0.57
8:l6:52:VAL:HG12	8:l6:53:VAL:H	1.70	0.57
10:l8:137:ASN:OD1	16:m5:3:ALA:N	2.37	0.57
42:q1:1:MET:HB3	45:6:1642:G:H5'	1.86	0.57
45:6:1363:U:O2'	45:6:1364:G:O4'	2.21	0.57
47:s1:82:ARG:NH2	47:s1:188:LEU:O	2.32	0.57
50:s4:192:ILE:HD12	50:s4:238:LEU:HD13	1.85	0.57
51:s5:52:GLU:O	51:s5:131:GLN:NE2	2.36	0.57
54:s8:159:GLN:HB2	54:s8:165:LEU:HD23	1.86	0.57
1:1:1682:U:O4	23:N2:90:ARG:NH1	2.38	0.57
1:1:2617:U:H3'	30:N9:3:LYS:HD3	1.86	0.57
2:3:73:C:H42	21:N0:19:VAL:HG21	1.70	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:M3:48:PRO:HA	14:M3:137:GLN:HB2	1.87	0.57
45:2:1360:A:H1'	45:2:1364:G:H22	1.70	0.57
50:S4:179:LYS:O	50:S4:194:THR:HA	2.05	0.57
51:S5:120:ILE:HG12	71:D5:100:ILE:HD12	1.86	0.57
60:C4:13:VAL:HG22	60:C4:77:THR:HG23	1.86	0.57
1:5:75:G:OP2	14:m3:104:ARG:NH2	2.37	0.57
1:5:592:A:O2'	8:l6:20:LYS:NZ	2.38	0.57
1:5:3378:C:H2'	1:5:3379:C:C6	2.40	0.57
20:m9:13:SER:HB3	20:m9:38:ARG:HH12	1.69	0.57
31:o0:83:LYS:HD2	31:o0:83:LYS:N	2.20	0.57
45:6:542:A:H8	45:6:543:C:H5'	1.68	0.57
45:6:1168:U:H1'	62:c6:139:GLN:HE22	1.70	0.57
47:s1:26:ARG:NH1	47:s1:49:ASN:OD1	2.38	0.57
1:1:2291:A:H2'	1:1:2292:U:C6	2.39	0.57
1:1:2353:G:N7	83:1:4390:HOH:O	2.33	0.57
4:L2:130:SER:HA	4:L2:169:ILE:HG22	1.86	0.57
4:L2:206:PRO:HG3	4:L2:213:GLY:HA3	1.86	0.57
7:L5:286:VAL:O	7:L5:290:ILE:HG23	2.05	0.57
45:2:536:C:OP2	55:S9:174:ARG:NH2	2.38	0.57
45:2:1079:U:H2'	45:2:1080:U:C6	2.39	0.57
45:2:1284:C:H5'	45:2:1286:U:H1'	1.87	0.57
45:2:1552:U:OP2	61:C5:43:ARG:NH2	2.38	0.57
49:S3:154:ASP:OD1	49:S3:155:GLY:N	2.37	0.57
73:D7:50:ALA:H	73:D7:71:ALA:HB2	1.70	0.57
1:5:655:C:H2'	1:5:656:A:C8	2.39	0.57
1:5:1055:A:N3	2:7:81:U:O2'	2.34	0.57
1:5:1637:A:H5''	28:n7:15:ARG:O	2.05	0.57
4:l2:113:VAL:HG23	4:l2:166:ILE:HD13	1.87	0.57
16:m5:68:ARG:HD2	16:m5:128:LYS:HG3	1.87	0.57
21:n0:8:GLN:HG3	21:n0:26:ARG:HE	1.70	0.57
33:o2:30:GLU:OE2	80:o2:201:PAR:O44	2.15	0.57
45:6:778:G:N7	70:d4:10:ARG:NH1	2.52	0.57
45:6:1525:A:H5'	65:c9:93:HIS:HB2	1.87	0.57
47:s1:128:LYS:HB2	47:s1:134:VAL:HG22	1.87	0.57
55:s9:177:ALA:HA	55:s9:180:LYS:HE2	1.86	0.57
61:c5:20:VAL:HG12	61:c5:21:ASP:H	1.70	0.57
1:1:230:U:H2'	1:1:231:G:O4'	2.05	0.56
1:1:567:G:H2'	1:1:568:G:C8	2.40	0.56
1:1:778:U:O3'	19:M8:185:LYS:NZ	2.38	0.56
1:1:1009:A:O3'	12:M0:39:LYS:HD2	2.05	0.56
1:1:1556:C:H2'	1:1:2169:G:H22	1.69	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1787:A:O5'	80:1:3416:PAR:H641	2.04	0.56
3:4:84:C:C6	27:N6:112:ASP:HA	2.40	0.56
13:M1:133:ARG:NH1	13:M1:152:HIS:O	2.38	0.56
34:O3:21:ARG:HH11	34:O3:21:ARG:CG	2.17	0.56
45:2:76:A:N7	45:2:80:A:N6	2.52	0.56
45:2:399:A:H4'	50:S4:3:ARG:HG2	1.86	0.56
46:S0:157:ASP:OD2	67:D1:65:SER:OG	2.23	0.56
57:C1:97:TYR:O	57:C1:99:ARG:HG2	2.04	0.56
73:D7:6:ASP:OD1	73:D7:9:HIS:ND1	2.30	0.56
1:5:595:G:N1	1:5:609:G:H5''	2.19	0.56
1:5:705:A:O2'	1:5:714:G:N2	2.37	0.56
1:5:790:U:O2'	6:l4:112:LYS:O	2.21	0.56
1:5:974:G:H5''	19:m8:14:GLY:O	2.04	0.56
1:5:1796:G:H4'	4:l2:22:LEU:HD22	1.88	0.56
33:o2:76:VAL:HG23	33:o2:81:ASP:HB2	1.85	0.56
47:s1:169:SER:HA	47:s1:172:LEU:HB2	1.87	0.56
50:s4:153:ASN:OD1	79:s6:215:ARG:NH1	2.37	0.56
77:sR:209:THR:O	77:sR:225:LEU:HB3	2.05	0.56
1:1:585:A:H5''	34:O3:70:LYS:HE3	1.86	0.56
1:1:1176:C:H2'	1:1:1177:G:N2	2.20	0.56
17:M6:62:THR:H	17:M6:69:GLY:HA3	1.70	0.56
45:2:1565:C:OP1	64:C8:41:ARG:NH1	2.38	0.56
1:5:2397:A:N1	83:5:4290:HOH:O	2.33	0.56
1:5:2971:A:H4'	1:5:2972:G:OP1	2.05	0.56
4:l2:242:ARG:HH22	4:l2:246:LEU:HD12	1.70	0.56
12:m0:41:ALA:O	12:m0:139:ARG:NH2	2.39	0.56
12:m0:72:ALA:O	12:m0:76:MET:HG3	2.05	0.56
48:s2:108:ASN:O	48:s2:141:ARG:NH2	2.38	0.56
50:s4:71:LYS:HA	50:s4:76:VAL:HA	1.87	0.56
51:s5:43:PHE:HZ	51:s5:90:ILE:HG21	1.70	0.56
54:s8:36:THR:O	54:s8:96:LEU:N	2.35	0.56
56:c0:24:LYS:HB2	56:c0:63:TYR:CE1	2.40	0.56
57:c1:55:ASP:HA	57:c1:82:ARG:HH12	1.70	0.56
74:d8:7:VAL:HG13	74:d8:8:THR:N	2.19	0.56
1:1:383:G:N2	1:1:386:A:OP2	2.35	0.56
1:1:2407:C:H1'	1:1:2818:U:C2	2.40	0.56
1:1:3335:A:H2'	1:1:3336:A:C8	2.40	0.56
11:L9:111:PHE:CD1	11:L9:127:PRO:HA	2.37	0.56
13:M1:16:LYS:HB3	13:M1:72:ARG:HG2	1.87	0.56
15:M4:57:ALA:HB2	21:N0:97:VAL:HG21	1.86	0.56
20:M9:115:ILE:HG13	20:M9:119:LEU:HD23	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:N7:23:VAL:HG12	28:N7:45:GLY:HA3	1.88	0.56
31:O0:9:SER:OG	31:O0:10:ILE:N	2.38	0.56
45:2:704:C:N4	45:2:735:C:O4'	2.38	0.56
45:2:912:U:H4'	45:2:913:G:H5'	1.86	0.56
47:S1:55:LYS:HE3	47:S1:60:ALA:HA	1.86	0.56
47:S1:56:SER:OG	47:S1:57:ALA:N	2.36	0.56
49:S3:172:THR:HG22	49:S3:185:LYS:HG3	1.86	0.56
55:S9:22:SER:OG	55:S9:23:ARG:N	2.39	0.56
64:C8:50:ALA:O	64:C8:68:ARG:NH2	2.29	0.56
64:C8:115:ARG:O	64:C8:119:ILE:HG13	2.04	0.56
72:D6:26:CYS:HB3	72:D6:77:CYS:SG	2.45	0.56
77:SR:108:SER:OG	77:SR:128:ASP:N	2.38	0.56
1:5:656:A:H2'	1:5:657:A:C8	2.40	0.56
1:5:1658:G:H2'	1:5:1659:U:C6	2.41	0.56
1:5:2838:A:H4'	12:m0:74:LYS:HE3	1.87	0.56
2:7:121:U:H5''	7:l5:265:TYR:HE1	1.69	0.56
5:l3:79:VAL:HG11	5:l3:338:LEU:HD21	1.88	0.56
5:l3:188:ILE:HA	5:l3:191:LYS:HD2	1.88	0.56
12:m0:91:VAL:HG22	12:m0:127:ALA:HB1	1.87	0.56
13:m1:92:ARG:HA	13:m1:172:LEU:HB2	1.88	0.56
16:m5:172:ARG:HB3	16:m5:174:ILE:HD13	1.88	0.56
18:m7:108:ASP:N	18:m7:152:GLU:OE2	2.27	0.56
27:n6:32:SER:HA	27:n6:49:PRO:HA	1.87	0.56
29:n8:101:VAL:HG22	29:n8:124:ILE:HD12	1.86	0.56
45:6:405:C:O2'	79:s6:92:ARG:O	2.20	0.56
45:6:871:G:O2'	73:d7:67:THR:O	2.21	0.56
45:6:877:G:H5'	45:6:937:C:H1'	1.86	0.56
46:s0:68:PRO:HG2	48:s2:241:ASP:HB3	1.87	0.56
48:s2:111:VAL:HG22	48:s2:191:ALA:HA	1.87	0.56
50:s4:121:TYR:OH	50:s4:235:TYR:O	2.21	0.56
55:s9:134:ILE:HD11	55:s9:141:VAL:O	2.05	0.56
56:c0:22:VAL:HB	56:c0:32:HIS:CE1	2.39	0.56
60:c4:60:ALA:HB1	60:c4:101:ALA:HB2	1.86	0.56
70:d4:7:ILE:HG13	70:d4:27:VAL:HG13	1.87	0.56
72:d6:26:CYS:HB3	72:d6:28:LYS:HB2	1.87	0.56
72:d6:60:PRO:C	72:d6:62:TYR:H	2.11	0.56
1:1:1556:C:H2'	1:1:2169:G:N2	2.21	0.56
5:L3:347:SER:O	5:L3:348:ARG:HB3	2.06	0.56
7:L5:110:LEU:HD12	7:L5:115:LEU:HB2	1.87	0.56
11:L9:4:ILE:N	21:N0:142:GLN:OE1	2.34	0.56
18:M7:48:LEU:HD22	18:M7:88:VAL:HG13	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N3:81:GLN:H	24:N3:95:PHE:HD2	1.51	0.56
35:O4:20:ILE:HD11	35:O4:34:HIS:CE1	2.40	0.56
45:2:976:G:N1	45:2:1023:A:O2'	2.31	0.56
45:2:1178:G:H5'	45:2:1190:C:H42	1.70	0.56
51:S5:94:THR:HG22	51:S5:114:ILE:HG13	1.86	0.56
57:C1:6:THR:C	57:C1:8:GLN:H	2.14	0.56
57:C1:108:PRO:HG3	57:C1:134:THR:HB	1.87	0.56
61:C5:52:LYS:HB2	61:C5:53:PRO:HD3	1.87	0.56
1:5:39:A:H5''	29:n8:35:ALA:HB2	1.88	0.56
1:5:87:U:H2'	1:5:88:A:H8	1.69	0.56
1:5:146:U:H5''	1:5:148:G:H5'	1.88	0.56
1:5:269:G:H5''	16:m5:14:LYS:HE2	1.88	0.56
4:l2:242:ARG:NH2	4:l2:244:GLY:O	2.38	0.56
7:l5:41:LYS:HB2	22:n1:68:THR:O	2.06	0.56
14:m3:128:ARG:HH22	36:o5:114:ARG:NH1	2.03	0.56
33:o2:67:SER:HB3	33:o2:68:PRO:HD2	1.87	0.56
45:6:1339:C:O2'	45:6:1341:A:N7	2.37	0.56
49:s3:72:LEU:HD22	56:c0:65:TYR:HD1	1.70	0.56
51:s5:142:PRO:HA	51:s5:214:LYS:HE2	1.87	0.56
51:s5:158:GLN:HG2	74:d8:66:LEU:HD21	1.86	0.56
1:1:1355:A:H5'	1:1:1357:G:H1'	1.88	0.56
1:1:1836:C:OP1	83:1:4343:HOH:O	2.17	0.56
1:1:2705:A:OP1	7:L5:31:TYR:OH	2.17	0.56
7:L5:280:GLU:HA	7:L5:283:ALA:HB3	1.87	0.56
19:M8:55:SER:O	19:M8:58:ASN:N	2.33	0.56
19:M8:89:ASP:OD1	19:M8:90:ASP:N	2.39	0.56
26:N5:103:TYR:O	26:N5:138:ARG:NH1	2.38	0.56
45:2:955:A:H5''	59:C3:10:GLY:HA3	1.87	0.56
49:S3:12:VAL:HG21	75:D9:34:TYR:HB3	1.87	0.56
49:S3:66:ILE:O	49:S3:70:THR:OG1	2.21	0.56
51:S5:90:ILE:O	51:S5:94:THR:HG23	2.06	0.56
1:5:29:C:OP1	16:m5:189:LYS:HB2	2.06	0.56
1:5:2898:G:H5''	1:5:2899:C:H5'	1.87	0.56
10:l8:78:PHE:O	10:l8:79:GLN:HG3	2.06	0.56
17:m6:74:ARG:O	17:m6:142:SER:OG	2.22	0.56
19:m8:180:ARG:NH1	19:m8:185:LYS:HB3	2.21	0.56
34:o3:52:VAL:HG22	34:o3:66:VAL:HG22	1.88	0.56
45:6:1330:G:O6	83:6:2103:HOH:O	2.17	0.56
45:6:1728:A:H1'	54:s8:32:GLN:HE21	1.71	0.56
80:6:1902:PAR:N64	80:6:1902:PAR:O44	2.38	0.56
46:s0:89:PHE:HE2	46:s0:177:LEU:HB3	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
79:s6:152:ASP:CG	79:s6:153:VAL:H	2.13	0.56
53:s7:160:GLN:HA	53:s7:163:ASP:HB2	1.88	0.56
54:s8:25:ARG:O	54:s8:28:GLU:HG2	2.05	0.56
55:s9:112:GLN:O	55:s9:115:LYS:N	2.39	0.56
1:1:1798:A:OP1	80:1:3415:PAR:N24	2.38	0.56
1:1:2891:U:O2'	1:1:3014:U:OP1	2.15	0.56
6:L4:32:PRO:HD2	19:M8:24:VAL:HG21	1.86	0.56
45:2:246:G:H21	57:C1:39:GLY:HA3	1.70	0.56
45:2:325:G:H4'	57:C1:83:THR:HG21	1.88	0.56
45:2:479:C:H5'	55:S9:124:HIS:HB2	1.88	0.56
45:2:1572:G:H5''	45:2:1574:G:N2	2.20	0.56
59:C3:55:ARG:NH1	59:C3:56:ASP:OD2	2.38	0.56
61:C5:18:ARG:NH1	64:C8:90:ASN:O	2.38	0.56
1:5:1096:U:H4'	1:5:1097:G:O5'	2.06	0.56
1:5:3343:G:H21	1:5:3362:A:H2	1.54	0.56
2:7:101:G:OP2	21:n0:52:LYS:NZ	2.38	0.56
4:l2:104:LEU:HD22	4:l2:158:ILE:HD11	1.88	0.56
11:l9:120:ASP:OD1	11:l9:124:ARG:NH2	2.39	0.56
16:m5:2:GLY:O	37:o6:36:ARG:NH2	2.39	0.56
37:o6:25:LYS:HB2	37:o6:28:TYR:CD2	2.40	0.56
43:q2:45:ARG:O	43:q2:48:SER:OG	2.24	0.56
45:6:17:C:H2'	45:6:18:C:C6	2.41	0.56
45:6:1537:C:H4'	45:6:1538:U:C5	2.40	0.56
50:s4:140:VAL:HA	50:s4:145:ARG:O	2.05	0.56
55:s9:126:ARG:HA	55:s9:129:ILE:HD12	1.86	0.56
70:d4:27:VAL:HG21	70:d4:40:LEU:HD11	1.88	0.56
77:sR:207:ASP:OD1	77:sR:209:THR:OG1	2.19	0.56
78:sM:54:PRO:HB2	78:sM:59:GLY:H	1.70	0.56
11:L9:20:ILE:HG12	11:L9:25:VAL:HG22	1.86	0.56
38:O7:21:ARG:NH2	38:O7:41:ALA:O	2.38	0.56
45:2:332:U:OP2	54:S8:56:ARG:NH2	2.36	0.56
51:S5:42:LEU:HB2	51:S5:46:TRP:O	2.04	0.56
71:D5:49:ARG:HH21	71:D5:70:LYS:HD3	1.71	0.56
1:5:308:A:H5'	1:5:2223:A:O2'	2.06	0.56
1:5:508:U:H2'	1:5:509:U:C6	2.41	0.56
1:5:612:U:H2'	1:5:613:G:C8	2.40	0.56
1:5:1202:A:H62	80:5:3419:PAR:H122	1.54	0.56
1:5:2951:G:OP2	83:5:4243:HOH:O	2.17	0.56
5:l3:303:LYS:HD2	5:l3:361:THR:HG21	1.88	0.56
7:l5:237:GLU:OE1	7:l5:241:THR:OG1	2.23	0.56
45:6:1166:A:OP1	51:s5:100:ASN:N	2.36	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:s3:32:GLU:OE1	49:s3:32:GLU:N	2.39	0.56
1:1:1543:G:OP1	16:M5:35:VAL:HG23	2.06	0.56
14:M3:48:PRO:HB2	36:O5:116:TYR:O	2.06	0.56
17:M6:28:LEU:HD21	17:M6:88:VAL:HG13	1.87	0.56
45:2:512:A:OP2	55:S9:173:ALA:N	2.38	0.56
45:2:686:C:H2'	45:2:687:G:C8	2.40	0.56
51:S5:31:GLU:O	51:S5:35:GLN:N	2.36	0.56
55:S9:85:VAL:HG12	55:S9:99:LEU:HD11	1.86	0.56
1:5:49:A:OP1	14:m3:16:LYS:NZ	2.27	0.56
1:5:1156:C:OP2	9:l7:94:LYS:NZ	2.34	0.56
4:l2:113:VAL:HG12	4:l2:134:VAL:HG13	1.88	0.56
12:m0:66:GLU:OE1	12:m0:69:ARG:NH2	2.39	0.56
45:6:901:G:N2	60:c4:54:GLU:OE1	2.38	0.56
45:6:1591:C:H2'	45:6:1592:A:H8	1.71	0.56
53:s7:11:GLN:HB2	53:s7:13:PRO:HD2	1.88	0.56
58:c2:91:VAL:HG22	58:c2:92:ALA:H	1.71	0.56
1:1:94:G:H2'	1:1:95:A:C8	2.41	0.56
1:1:960:U:H4'	1:1:963:G:N1	2.20	0.56
1:1:1320:C:O2	21:N0:115:ARG:NH2	2.39	0.56
1:1:2608:G:OP1	4:L2:2:GLY:N	2.39	0.56
19:M8:40:THR:HG21	19:M8:45:ASN:HD22	1.69	0.56
26:N5:135:ILE:HA	26:N5:138:ARG:HB3	1.88	0.56
31:O0:26:GLY:O	31:O0:30:THR:HG23	2.06	0.56
43:Q2:35:LEU:HD23	43:Q2:35:LEU:H	1.71	0.56
45:2:1152:A:O2'	72:D6:85:ARG:HD3	2.06	0.56
45:2:1257:U:H2'	56:C0:2:LEU:HA	1.88	0.56
45:2:1524:A:H2'	45:2:1525:A:C8	2.40	0.56
45:2:1542:G:H22	45:2:1568:C:H1'	1.70	0.56
50:S4:248:ILE:HG13	50:S4:249:ALA:H	1.70	0.56
65:C9:15:ILE:HD13	65:C9:60:SER:HA	1.87	0.56
70:D4:57:VAL:HG13	70:D4:60:PHE:HE2	1.71	0.56
77:SR:307:ASP:CG	77:SR:311:ARG:HH12	2.13	0.56
1:5:738:A:H2'	1:5:739:G:H8	1.71	0.56
6:l4:26:PHE:CD1	6:l4:130:ALA:HB2	2.35	0.56
14:m3:28:GLN:HB3	16:m5:201:ARG:HD2	1.86	0.56
45:6:600:U:OP2	69:d3:108:GLY:HA2	2.05	0.56
62:c6:98:ASP:HB3	62:c6:101:SER:HB3	1.88	0.56
70:d4:91:LEU:HD13	70:d4:96:LEU:HB2	1.87	0.56
78:sM:83:LYS:NZ	78:sM:84:LYS:O	2.33	0.56
1:1:3295:A:OP2	5:L3:126:LYS:N	2.38	0.56
2:3:11:A:H4'	2:3:13:A:C8	2.40	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:L6:146:ILE:HA	8:L6:149:ILE:HB	1.88	0.56
27:N6:56:VAL:HG21	27:N6:104:LEU:HD13	1.87	0.56
46:S0:30:GLN:HE22	46:S0:34:GLU:HG3	1.71	0.56
77:SR:198:ASN:O	77:SR:215:GLY:HA3	2.06	0.56
1:5:129:U:H2'	1:5:130:A:C8	2.40	0.56
1:5:1021:G:N2	1:5:1032:C:O2	2.39	0.56
1:5:3118:C:H4'	41:q0:106:ARG:HH22	1.71	0.56
5:l3:92:TYR:CE1	5:l3:159:ARG:HD2	2.41	0.56
7:l5:86:TYR:OH	7:l5:250:ASP:O	2.13	0.56
8:l6:100:LYS:NZ	8:l6:133:GLU:OE1	2.39	0.56
9:l7:132:PRO:HB2	9:l7:133:TYR:CE2	2.40	0.56
13:m1:151:SER:O	13:m1:152:HIS:HB2	2.06	0.56
14:m3:157:ARG:O	29:n8:99:ALA:N	2.38	0.56
18:m7:59:PRO:HG3	18:m7:76:PHE:CG	2.41	0.56
31:o0:99:ASP:C	31:o0:101:LEU:H	2.13	0.56
37:o6:26:ILE:H	37:o6:26:ILE:HD12	1.71	0.56
38:o7:21:ARG:NH2	38:o7:41:ALA:O	2.35	0.56
45:6:1166:A:H2'	45:6:1167:G:O4'	2.06	0.56
47:s1:26:ARG:HG2	47:s1:50:LYS:HB2	1.86	0.56
47:s1:126:THR:HG22	47:s1:136:ARG:HB2	1.88	0.56
47:s1:164:ILE:HG23	47:s1:201:THR:HG21	1.87	0.56
56:c0:24:LYS:HA	56:c0:63:TYR:HA	1.86	0.56
57:c1:86:ILE:HG22	57:c1:107:VAL:HB	1.88	0.56
6:L4:191:LYS:HG2	6:L4:194:TYR:CE2	2.41	0.55
12:M0:9:TYR:O	12:M0:59:GLN:NE2	2.39	0.55
23:N2:93:ILE:HA	23:N2:106:ALA:O	2.06	0.55
33:O2:21:HIS:CE1	33:O2:24:ARG:HD2	2.41	0.55
45:2:862:A:OP2	59:C3:64:ARG:NH1	2.39	0.55
45:2:1274:C:OP2	83:2:2213:HOH:O	2.17	0.55
45:2:1461:C:H2'	45:2:1462:G:H8	1.69	0.55
48:S2:123:GLY:HA2	48:S2:126:ARG:HD2	1.87	0.55
69:D3:131:SER:HG	69:D3:134:ALA:H	1.54	0.55
1:5:69:C:OP1	16:m5:178:HIS:ND1	2.35	0.55
1:5:269:G:H5'	16:m5:120:TRP:CE3	2.42	0.55
1:5:1348:U:O2'	1:5:1350:A:H5''	2.05	0.55
1:5:1511:U:H5''	1:5:1512:U:H5	1.70	0.55
1:5:1764:U:C5	1:5:1765:U:H1'	2.40	0.55
6:l4:226:GLU:OE2	6:l4:246:ARG:NH2	2.40	0.55
6:l4:316:ASN:HD21	9:l7:150:LYS:HG3	1.71	0.55
45:6:1795:U:O2	72:d6:10:ARG:NH1	2.38	0.55
47:s1:103:MET:HB3	47:s1:215:VAL:HG12	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:s9:141:VAL:HG21	55:s9:146:PHE:CD2	2.41	0.55
57:c1:108:PRO:HG3	57:c1:134:THR:HB	1.87	0.55
60:c4:18:ARG:N	60:c4:29:HIS:O	2.38	0.55
1:1:435:C:H2'	1:1:436:A:C8	2.41	0.55
1:1:2826:U:O4	80:1:3425:PAR:O44	2.23	0.55
80:3:202:PAR:N21	80:3:202:PAR:O53	2.39	0.55
14:M3:47:ALA:HB1	14:M3:48:PRO:HD2	1.88	0.55
14:M3:54:LEU:HD12	14:M3:75:PHE:CE2	2.40	0.55
45:2:1556:A:P	61:C5:44:ARG:HD3	2.46	0.55
57:C1:82:ARG:O	57:C1:110:HIS:ND1	2.39	0.55
59:C3:56:ASP:O	73:D7:46:VAL:HA	2.07	0.55
14:m3:128:ARG:HH22	36:o5:114:ARG:CZ	2.19	0.55
16:m5:66:VAL:HB	16:m5:98:LEU:HD12	1.87	0.55
23:n2:59:ASP:OD1	23:n2:62:VAL:N	2.36	0.55
36:o5:64:GLU:O	36:o5:68:GLN:HG2	2.07	0.55
45:6:926:A:OP1	45:6:1016:C:O2'	2.21	0.55
45:6:1797:A:H5'	72:d6:95:ARG:HG2	1.89	0.55
46:s0:142:PRO:HG3	67:d1:32:VAL:HG13	1.88	0.55
50:s4:31:PRO:HG2	50:s4:38:LEU:HB2	1.87	0.55
61:c5:21:ASP:O	61:c5:25:LEU:N	2.36	0.55
70:d4:57:VAL:HB	70:d4:60:PHE:HE2	1.70	0.55
73:d7:23:THR:OG1	73:d7:25:VAL:O	2.23	0.55
1:1:267:G:N7	83:1:4389:HOH:O	2.33	0.55
1:1:1560:G:H1	1:1:1580:A:H61	1.54	0.55
1:1:1719:G:N7	20:M9:121:HIS:HE1	2.04	0.55
1:1:2093:A:H5''	20:M9:143:ILE:HD13	1.89	0.55
1:1:2205:U:O2'	1:1:2206:G:O5'	2.25	0.55
1:1:2592:G:H4'	1:1:2594:C:C2	2.41	0.55
1:1:2991:A:N3	18:M7:69:ARG:NH2	2.55	0.55
6:L4:226:GLU:OE2	6:L4:246:ARG:NH2	2.39	0.55
7:L5:279:LYS:O	7:L5:283:ALA:N	2.39	0.55
38:O7:22:CYS:HB2	38:O7:24:ARG:HG3	1.87	0.55
45:2:127:G:H4'	52:S6:194:LYS:HE2	1.88	0.55
45:2:398:G:P	54:S8:47:ARG:HH12	2.28	0.55
45:2:895:G:H22	45:2:917:U:H3	1.53	0.55
71:D5:60:VAL:HG23	71:D5:101:TYR:HB2	1.86	0.55
71:D5:84:GLU:HG3	71:D5:89:ILE:HD11	1.88	0.55
72:D6:88:SER:O	72:D6:92:ARG:N	2.38	0.55
1:5:160:G:N2	1:5:262:U:O2	2.39	0.55
1:5:2724:U:H4'	22:n1:54:HIS:CD2	2.41	0.55
1:5:3296:A:H2'	1:5:3297:U:H6	1.69	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:8:43:A:H2'	3:8:44:A:H8	1.72	0.55
5:13:139:GLN:HE22	5:13:143:GLY:H	1.54	0.55
45:6:233:C:H4'	45:6:234:G:O5'	2.05	0.55
48:s2:87:GLN:HA	48:s2:95:ARG:O	2.06	0.55
49:s3:135:GLU:OE2	49:s3:151:LYS:NZ	2.38	0.55
79:s6:157:VAL:HG22	79:s6:158:ILE:H	1.71	0.55
1:1:649:A:N6	83:1:4377:HOH:O	2.38	0.55
1:1:1060:U:H2'	1:1:1061:A:C8	2.41	0.55
1:1:2675:C:N4	13:M1:22:SER:O	2.39	0.55
45:2:1:U:H1'	45:2:2:A:P	2.47	0.55
45:2:1382:A:H5''	66:D0:60:THR:HG22	1.88	0.55
50:S4:85:GLY:N	50:S4:88:ASP:OD2	2.37	0.55
51:S5:163:SER:HB2	74:D8:48:VAL:HG22	1.89	0.55
60:C4:112:ILE:O	72:D6:57:SER:HB2	2.05	0.55
62:C6:50:GLU:OE2	62:C6:82:ARG:NH2	2.40	0.55
1:5:1807:G:H5''	28:n7:135:ARG:HE	1.70	0.55
1:5:2312:A:OP1	1:5:2314:U:H5	1.89	0.55
1:5:2709:C:H2'	1:5:2710:C:H6	1.71	0.55
21:n0:101:ALA:O	21:n0:105:THR:HG22	2.06	0.55
21:n0:132:THR:C	21:n0:134:ASP:H	2.13	0.55
22:n1:29:THR:HG21	22:n1:94:GLU:HA	1.89	0.55
23:n2:42:LYS:HE2	23:n2:46:ALA:HA	1.88	0.55
30:n9:52:LYS:HA	30:n9:55:ALA:HB3	1.89	0.55
31:o0:16:LEU:HB3	31:o0:98:SER:HB2	1.89	0.55
38:o7:28:HIS:HB3	38:o7:31:LYS:HB2	1.87	0.55
45:6:513:U:H2'	45:6:514:G:C8	2.41	0.55
80:6:1902:PAR:H531	80:6:1902:PAR:H24	1.88	0.55
53:s7:14:THR:O	53:s7:18:LEU:HG	2.06	0.55
53:s7:26:GLU:OE2	53:s7:84:LYS:NZ	2.30	0.55
59:c3:19:SER:OG	59:c3:21:ASN:O	2.24	0.55
78:sM:54:PRO:HB3	78:sM:58:GLU:HB3	1.89	0.55
1:1:161:G:N2	1:1:261:U:H1'	2.20	0.55
1:1:1470:U:H2'	1:1:1471:U:H6	1.71	0.55
1:1:1895:A:OP2	80:1:3432:PAR:O41	2.25	0.55
1:1:2102:U:H2'	1:1:2103:U:C6	2.42	0.55
1:1:2174:G:N2	80:1:3410:PAR:H13	2.21	0.55
1:1:2682:C:OP1	78:SM:27:LYS:NZ	2.39	0.55
5:L3:56:ILE:HD11	5:L3:359:ILE:HG12	1.88	0.55
9:L7:22:THR:O	9:L7:26:VAL:HG12	2.07	0.55
22:N1:79:MET:HB2	22:N1:84:TYR:CE2	2.41	0.55
22:N1:131:GLN:HG3	22:N1:132:PRO:HD2	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:N5:67:ILE:HD12	26:N5:121:LYS:HG3	1.88	0.55
28:N7:83:THR:HG23	28:N7:85:TYR:N	2.22	0.55
45:2:100:A:H61	45:2:385:A:H1'	1.70	0.55
45:2:1672:G:H2'	45:2:1673:G:C8	2.41	0.55
59:C3:136:PRO:HB2	59:C3:138:ASN:OD1	2.06	0.55
60:C4:80:HIS:HD2	60:C4:114:ARG:HB2	1.71	0.55
68:D2:83:ILE:HA	68:D2:86:ILE:HG12	1.87	0.55
1:5:394:G:N1	1:5:397:A:OP2	2.39	0.55
1:5:436:A:H61	1:5:623:U:H3	1.54	0.55
1:5:1724:U:H1'	1:5:1725:C:C6	2.42	0.55
1:5:3267:A:H2'	8:l6:69:PHE:CZ	2.42	0.55
3:8:91:C:H2'	3:8:92:A:H8	1.72	0.55
6:l4:357:GLU:O	6:l4:361:HIS:HB2	2.07	0.55
19:m8:94:PHE:CE2	29:n8:119:PRO:HD3	2.41	0.55
20:m9:116:ASP:OD2	20:m9:119:LEU:N	2.34	0.55
22:n1:82:ASN:HB2	30:n9:21:ILE:H	1.72	0.55
31:o0:99:ASP:O	31:o0:101:LEU:N	2.37	0.55
33:o2:122:PRO:O	33:o2:123:LYS:HG2	2.07	0.55
64:c8:23:ASP:OD1	64:c8:24:GLY:N	2.39	0.55
65:c9:137:ALA:HA	65:c9:140:LEU:HB3	1.88	0.55
71:d5:71:ILE:HG13	71:d5:72:GLY:H	1.70	0.55
1:1:3131:U:H2'	1:1:3132:C:C6	2.42	0.55
1:1:3199:G:H2'	1:1:3200:G:C8	2.42	0.55
18:M7:64:ASN:HB2	18:M7:80:LYS:HD2	1.87	0.55
45:2:1481:C:O2'	45:2:1482:C:O5'	2.19	0.55
46:S0:88:LYS:HB3	46:S0:202:TYR:CZ	2.41	0.55
50:S4:196:VAL:HG22	50:S4:211:LYS:HG2	1.88	0.55
58:C2:131:ASP:OD1	58:C2:132:GLU:N	2.40	0.55
69:D3:107:PHE:HE1	69:D3:114:LYS:HD3	1.72	0.55
1:5:1684:U:H2'	1:5:1685:C:H6	1.70	0.55
80:5:3419:PAR:N21	80:5:3419:PAR:O53	2.39	0.55
5:l3:288:GLY:N	5:l3:320:ASP:OD1	2.36	0.55
17:m6:85:ARG:HD3	17:m6:90:HIS:ND1	2.21	0.55
18:m7:107:LEU:HD12	18:m7:152:GLU:CD	2.31	0.55
30:n9:16:ALA:O	30:n9:20:GLY:HA3	2.07	0.55
45:6:1591:C:H2'	45:6:1592:A:C8	2.41	0.55
53:s7:77:LEU:O	53:s7:81:LEU:N	2.28	0.55
59:c3:36:GLN:HG2	59:c3:58:HIS:CD2	2.42	0.55
1:1:1393:A:N3	1:1:1419:A:O2'	2.39	0.55
1:1:2674:A:H5''	13:M1:105:GLY:HA3	1.88	0.55
21:N0:42:TRP:O	21:N0:46:GLN:HG3	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:N6:45:ILE:HD11	27:N6:122:LYS:HB2	1.89	0.55
28:N7:121:ARG:HD2	28:N7:126:LYS:HG2	1.87	0.55
31:O0:99:ASP:HB2	31:O0:103:THR:HG23	1.87	0.55
40:O9:26:TRP:HZ3	40:O9:30:ARG:HD3	1.72	0.55
45:2:1401:A:OP1	63:C7:60:ARG:NH1	2.39	0.55
46:S0:55:GLU:HB3	67:D1:79:LEU:HD22	1.88	0.55
50:S4:11:ARG:HH11	50:S4:20:LEU:HB3	1.72	0.55
62:C6:37:THR:O	62:C6:45:ARG:NH1	2.40	0.55
1:5:361:A:H5'	38:o7:35:SER:OG	2.06	0.55
1:5:2256:A:N6	45:6:1757:G:H5'	2.21	0.55
1:5:2992:U:C1'	18:m7:69:ARG:HH21	2.20	0.55
5:l3:10:ARG:NH2	5:l3:263:SER:O	2.39	0.55
6:l4:299:ILE:HG23	19:m8:39:ARG:HB3	1.89	0.55
45:6:1795:U:H3'	72:d6:5:ARG:HH12	1.71	0.55
55:s9:110:GLN:HA	55:s9:129:ILE:HD11	1.87	0.55
60:c4:132:ARG:O	72:d6:28:LYS:HA	2.07	0.55
1:1:45:A:P	16:M5:85:THR:HG21	2.47	0.55
1:1:1095:U:OP1	1:1:1096:U:H5'	2.06	0.55
1:1:1423:C:H1'	8:L6:5:LYS:HE3	1.87	0.55
11:L9:90:MET:HB3	11:L9:179:ILE:O	2.07	0.55
13:M1:133:ARG:HD2	13:M1:152:HIS:O	2.07	0.55
45:2:164:A:H1'	52:S6:13:GLN:HE22	1.72	0.55
45:2:773:C:OP1	50:S4:21:ASP:HB2	2.06	0.55
50:S4:207:LEU:HD23	50:S4:219:VAL:HG11	1.89	0.55
53:S7:58:LEU:O	53:S7:90:VAL:HA	2.06	0.55
1:5:595:G:H1	1:5:609:G:H5''	1.72	0.55
1:5:1655:G:OP1	35:o4:40:THR:OG1	2.19	0.55
1:5:2666:C:OP2	1:5:2687:G:N1	2.33	0.55
80:5:3419:PAR:N21	80:5:3419:PAR:O43	2.39	0.55
4:l2:201:GLY:HA2	4:l2:204:MET:SD	2.47	0.55
10:l8:78:PHE:C	10:l8:80:TYR:H	2.15	0.55
11:l9:30:PRO:HG2	11:l9:83:THR:HA	1.89	0.55
15:m4:32:LEU:HD11	15:m4:94:TRP:CG	2.42	0.55
18:m7:141:SER:O	18:m7:143:PRO:HD3	2.06	0.55
45:6:513:U:H5''	55:s9:132:ARG:HG2	1.87	0.55
50:s4:246:LEU:HD13	50:s4:251:GLU:HG2	1.89	0.55
54:s8:190:ALA:O	54:s8:194:ARG:HG3	2.07	0.55
62:c6:130:GLY:O	62:c6:138:PHE:N	2.40	0.55
64:c8:76:PRO:HB2	64:c8:86:LEU:HD11	1.87	0.55
64:c8:140:THR:HA	64:c8:143:ARG:HH11	1.72	0.55
66:d0:72:ASN:HD21	66:d0:74:GLU:HB3	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
76:e0:53:LYS:HB3	76:e0:55:ARG:HG2	1.87	0.55
8:L6:105:TYR:HE1	8:L6:134:ARG:HD3	1.72	0.55
45:2:934:C:N3	45:2:1077:C:H4'	2.22	0.55
51:S5:43:PHE:HB3	51:S5:46:TRP:HB2	1.89	0.55
51:S5:166:ARG:NH1	51:S5:170:GLN:OE1	2.39	0.55
55:S9:65:LYS:HA	55:S9:70:LEU:HD21	1.88	0.55
58:C2:98:GLY:O	58:C2:102:GLY:N	2.40	0.55
61:C5:118:GLU:O	64:C8:122:HIS:N	2.39	0.55
68:D2:66:ASN:OD1	68:D2:67:GLY:N	2.39	0.55
1:5:784:A:H8	19:m8:69:ARG:HE	1.53	0.55
1:5:2261:G:H21	1:5:2262:A:N6	2.05	0.55
1:5:2523:A:C5	10:l8:51:LYS:HG3	2.42	0.55
13:m1:23:VAL:HG12	13:m1:25:GLU:H	1.72	0.55
13:m1:112:LEU:HD13	13:m1:112:LEU:H	1.72	0.55
16:m5:22:LEU:HB3	16:m5:26:ARG:NH1	2.22	0.55
26:n5:100:LYS:HE3	26:n5:106:ASP:HA	1.88	0.55
45:6:1610:G:H5'	51:s5:107:LYS:HB2	1.89	0.55
79:s6:48:TYR:CE1	79:s6:116:LYS:HG3	2.42	0.55
62:c6:22:VAL:HG12	62:c6:92:TYR:HD1	1.72	0.55
63:c7:24:LEU:HD22	63:c7:58:MET:HG3	1.88	0.55
1:1:2208:A:O2'	1:1:2209:U:OP2	2.21	0.55
1:1:2330:C:H2'	1:1:2331:C:H6	1.71	0.55
1:1:3325:G:H5''	32:O1:103:GLY:HA2	1.89	0.55
5:L3:56:ILE:HG22	5:L3:74:GLU:HB2	1.88	0.55
6:L4:157:GLU:HG3	6:L4:251:THR:HG21	1.87	0.55
37:O6:26:ILE:H	37:O6:26:ILE:HD12	1.72	0.55
45:2:686:C:H2'	45:2:687:G:H8	1.72	0.55
45:2:787:G:OP1	50:S4:255:ARG:NH2	2.40	0.55
45:2:868:G:OP1	59:C3:121:ARG:NH1	2.40	0.55
45:2:874:C:O2'	45:2:1046:G:H4'	2.07	0.55
45:2:1516:A:C8	66:D0:58:LEU:HD23	2.41	0.55
48:S2:157:LYS:HG2	48:S2:171:PRO:HD2	1.89	0.55
55:S9:171:ARG:O	55:S9:174:ARG:N	2.36	0.55
66:D0:72:ASN:ND2	66:D0:73:GLY:H	2.00	0.55
1:5:2418:G:H4'	1:5:2419:A:OP1	2.06	0.55
12:m0:215:GLU:OE2	12:m0:215:GLU:N	2.40	0.55
45:6:1389:C:O2'	63:c7:52:GLY:HA3	2.06	0.55
49:s3:65:ARG:O	49:s3:68:GLU:N	2.40	0.55
55:s9:37:LYS:HA	76:e0:33:ARG:HB2	1.88	0.55
66:d0:117:VAL:HG23	66:d0:118:VAL:O	2.07	0.55
1:1:70:A:N1	1:1:313:A:O2'	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:705:A:N7	29:N8:74:ASN:ND2	2.50	0.54
1:1:1213:G:H4'	21:N0:90:MET:HG2	1.89	0.54
1:1:1596:C:H2'	1:1:1597:C:C6	2.42	0.54
1:1:1924:U:OP1	42:Q1:25:LYS:NZ	2.41	0.54
1:1:2291:A:H2'	1:1:2292:U:H6	1.72	0.54
80:1:3425:PAR:O61	12:M0:112:GLN:OE1	2.25	0.54
8:L6:105:TYR:CE1	8:L6:134:ARG:HD3	2.41	0.54
15:M4:20:VAL:O	15:M4:66:THR:OG1	2.22	0.54
31:O0:76:GLU:N	31:O0:76:GLU:OE1	2.40	0.54
45:2:187:G:H3'	54:S8:138:ASN:HD21	1.72	0.54
76:E0:43:ARG:HD2	76:E0:54:ARG:HH22	1.72	0.54
1:5:66:A:OP2	14:m3:100:ARG:NH2	2.40	0.54
1:5:1728:G:H5''	1:5:1730:G:O4'	2.07	0.54
1:5:3294:A:H2'	1:5:3295:A:O4'	2.07	0.54
45:6:1542:G:N2	45:6:1568:C:O2	2.41	0.54
48:s2:142:GLY:N	48:s2:153:SER:O	2.40	0.54
50:s4:112:HIS:NE2	50:s4:237:SER:O	2.40	0.54
79:s6:216:LEU:C	79:s6:218:GLU:H	2.15	0.54
55:s9:67:PRO:O	55:s9:71:PHE:N	2.36	0.54
63:c7:31:ASN:HD22	63:c7:55:THR:HG22	1.72	0.54
1:1:1561:G:N2	1:1:1579:C:O2	2.40	0.54
28:N7:51:LEU:HB2	28:N7:65:ARG:HD2	1.88	0.54
33:O2:3:SER:HA	33:O2:90:LYS:HB3	1.89	0.54
45:2:218:A:N6	45:2:844:A:H1'	2.22	0.54
45:2:1175:U:H2'	45:2:1176:G:C8	2.42	0.54
45:2:1197:C:O2'	66:D0:73:GLY:O	2.24	0.54
45:2:1426:C:H5''	78:SM:93:ARG:HH12	1.72	0.54
47:S1:193:ILE:O	47:S1:197:ILE:HG12	2.06	0.54
49:S3:158:ILE:HD12	49:S3:163:PRO:HB2	1.89	0.54
55:S9:78:ARG:HH22	55:S9:82:ARG:HH11	1.55	0.54
58:C2:54:ARG:NH1	58:C2:56:GLU:OE2	2.41	0.54
64:C8:91:ASP:OD1	64:C8:92:ILE:N	2.41	0.54
65:C9:37:VAL:HG22	65:C9:39:THR:H	1.72	0.54
1:5:76:G:H22	1:5:315:C:H5'	1.71	0.54
1:5:589:A:H1'	1:5:1337:A:H5''	1.88	0.54
1:5:944:C:O3'	33:o2:33:ARG:HD3	2.06	0.54
2:7:3:U:H2'	2:7:4:U:C6	2.42	0.54
19:m8:55:SER:O	19:m8:58:ASN:N	2.39	0.54
19:m8:100:THR:HG22	19:m8:120:GLU:HB2	1.89	0.54
45:6:570:A:N6	69:d3:116:ASP:OD2	2.36	0.54
49:s3:16:VAL:HG22	75:d9:50:ILE:HD13	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:c8:45:LEU:HD11	65:c9:36:ILE:HG22	1.89	0.54
78:sM:120:GLU:C	78:sM:122:GLU:H	2.15	0.54
1:1:2606:G:H22	1:1:2609:A:H62	1.54	0.54
1:1:3164:C:N4	1:1:3286:G:H1	2.05	0.54
80:1:3434:PAR:H23	80:1:3434:PAR:HN21	1.71	0.54
6:L4:237:GLN:O	6:L4:246:ARG:HG3	2.07	0.54
7:L5:49:TYR:CE1	7:L5:66:SER:HB3	2.43	0.54
7:L5:58:LYS:HD2	7:L5:58:LYS:N	2.22	0.54
9:L7:211:SER:H	9:L7:242:SER:HB2	1.72	0.54
10:L8:133:LYS:HD2	10:L8:138:HIS:HE1	1.72	0.54
21:N0:155:ARG:HD3	21:N0:172:TYR:CG	2.42	0.54
45:2:1319:A:C2	45:2:1320:U:H1'	2.43	0.54
48:S2:115:ILE:HD12	48:S2:212:LYS:HE3	1.90	0.54
50:S4:69:HIS:HB3	70:D4:17:LEU:HD22	1.90	0.54
53:S7:48:GLU:OE2	53:S7:88:ARG:NH2	2.34	0.54
55:S9:90:LYS:HB3	55:S9:95:TYR:CD1	2.43	0.54
61:C5:53:PRO:HG2	61:C5:57:MET:HG2	1.88	0.54
1:5:800:G:OP1	1:5:801:A:N6	2.36	0.54
1:5:1445:U:H5''	1:5:1446:A:OP2	2.07	0.54
1:5:1690:C:H2'	1:5:1691:U:C6	2.43	0.54
1:5:3294:A:OP2	5:l3:126:LYS:NZ	2.28	0.54
5:l3:113:GLU:HB3	5:l3:176:ALA:HB2	1.88	0.54
12:m0:47:PRO:HB3	12:m0:171:TRP:CZ2	2.42	0.54
14:m3:48:PRO:HA	14:m3:137:GLN:HB2	1.88	0.54
17:m6:12:LYS:O	21:n0:167:ARG:NH2	2.40	0.54
17:m6:76:PRO:HB3	17:m6:138:LEU:HG	1.89	0.54
20:m9:21:LYS:HE3	20:m9:55:VAL:HA	1.89	0.54
29:n8:73:LEU:HB2	29:n8:109:TYR:CD2	2.43	0.54
31:o0:9:SER:OG	31:o0:10:ILE:N	2.40	0.54
38:o7:37:CYS:O	38:o7:45:ARG:HB2	2.07	0.54
47:s1:142:PHE:O	47:s1:207:LEU:HA	2.07	0.54
58:c2:62:LEU:HD13	58:c2:75:VAL:HG11	1.89	0.54
68:d2:62:VAL:HG13	73:d7:7:LEU:HD12	1.90	0.54
70:d4:21:LYS:HB2	70:d4:75:VAL:HB	1.88	0.54
78:sM:73:SER:OG	78:sM:74:LYS:NZ	2.36	0.54
1:1:289:A:N3	16:M5:93:LYS:HG3	2.23	0.54
1:1:601:U:H2'	1:1:602:A:O4'	2.07	0.54
3:4:36:G:O2'	3:4:104:A:N1	2.39	0.54
6:L4:31:ARG:NH2	6:L4:33:ASP:OD2	2.40	0.54
6:L4:203:ARG:NH1	6:L4:226:GLU:OE2	2.41	0.54
16:M5:186:GLY:O	16:M5:190:THR:HG23	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:O6:57:LEU:HD11	37:O6:73:ALA:HB2	1.89	0.54
44:Q3:73:THR:HG22	44:Q3:76:ALA:H	1.73	0.54
45:2:1154:G:H1	45:2:1624:C:H42	1.55	0.54
51:S5:121:ILE:HG21	51:S5:129:PRO:HA	1.90	0.54
66:D0:28:SER:HB2	66:D0:112:VAL:HA	1.88	0.54
1:5:736:A:OP2	80:5:3422:PAR:N64	2.38	0.54
1:5:1386:A:N7	6:l4:183:LYS:HE3	2.22	0.54
1:5:2942:C:H5''	1:5:2943:G:H5''	1.89	0.54
2:7:46:A:OP1	7:l5:158:ARG:N	2.34	0.54
4:l2:64:ARG:HH22	10:l8:38:GLN:HA	1.72	0.54
6:l4:3:ARG:HB3	6:l4:22:LEU:H	1.72	0.54
6:l4:174:ALA:HB2	6:l4:249:ILE:HD11	1.89	0.54
22:n1:88:ARG:NH2	30:n9:33:LYS:O	2.41	0.54
28:n7:24:VAL:HG21	28:n7:87:LEU:HB3	1.88	0.54
45:6:1754:A:H1'	76:e0:2:ALA:HA	1.89	0.54
46:s0:70:PRO:O	46:s0:95:ALA:N	2.33	0.54
58:c2:58:LEU:HD11	58:c2:126:TRP:CH2	2.43	0.54
70:d4:44:LEU:HA	70:d4:47:VAL:HG22	1.89	0.54
77:sR:207:ASP:OD2	77:sR:207:ASP:N	2.37	0.54
1:1:1091:A:H2'	1:1:1092:C:H5'	1.90	0.54
1:1:2683:U:H2'	1:1:2684:C:C6	2.43	0.54
3:4:38:U:C4	36:O5:89:ARG:HD2	2.42	0.54
5:L3:348:ARG:HA	5:L3:351:LEU:HB2	1.89	0.54
6:L4:261:VAL:O	6:L4:269:SER:OG	2.24	0.54
7:L5:80:SER:HB2	7:L5:92:LEU:HB3	1.88	0.54
9:L7:163:LEU:HD13	9:L7:169:ILE:HD11	1.89	0.54
11:L9:47:LYS:HZ2	15:M4:5:SER:HB2	1.72	0.54
11:L9:163:GLN:O	11:L9:166:ARG:HD3	2.07	0.54
13:M1:94:ARG:NH2	13:M1:173:ASP:OD2	2.39	0.54
14:M3:56:PRO:HG3	14:M3:74:GLY:O	2.07	0.54
50:S4:11:ARG:HB2	50:S4:27:TYR:C	2.32	0.54
62:C6:14:LYS:C	62:C6:123:ARG:HH12	2.15	0.54
68:D2:77:PRO:HG3	69:D3:7:ARG:O	2.06	0.54
1:5:872:U:H2'	1:5:873:C:C6	2.43	0.54
1:5:942:U:C4	29:n8:16:SER:HA	2.43	0.54
1:5:1061:A:N6	80:5:3420:PAR:H531	2.21	0.54
1:5:1472:U:H5'	20:m9:4:LEU:HB2	1.90	0.54
1:5:3330:A:H2'	1:5:3331:U:H6	1.73	0.54
10:l8:116:VAL:HA	10:l8:120:LYS:H	1.73	0.54
14:m3:16:LYS:O	14:m3:17:HIS:HB2	2.08	0.54
35:o4:40:THR:O	35:o4:56:THR:HB	2.08	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:932:U:O2	72:d6:32:LYS:NZ	2.40	0.54
45:6:1267:G:HO2'	45:6:1448:G:HO2'	1.51	0.54
80:6:1902:PAR:O23	80:6:1902:PAR:N21	2.41	0.54
62:c6:91:ALA:HA	62:c6:94:GLN:HB3	1.89	0.54
78:sM:83:LYS:HG3	78:sM:84:LYS:H	1.72	0.54
1:1:124:U:H2'	1:1:125:C:H6	1.73	0.54
1:1:1584:U:H2'	1:1:1585:C:C6	2.42	0.54
1:1:1682:U:O2	23:N2:82:LYS:NZ	2.39	0.54
1:1:2812:C:H2'	1:1:2813:A:H8	1.72	0.54
1:1:3280:U:O2'	1:1:3281:U:H5''	2.08	0.54
6:L4:36:HIS:O	6:L4:40:THR:HG23	2.06	0.54
6:L4:74:ILE:HG21	6:L4:93:MET:HE3	1.88	0.54
17:M6:27:LEU:HD11	17:M6:102:LEU:HB2	1.88	0.54
20:M9:81:ARG:HG2	20:M9:88:ARG:CZ	2.38	0.54
27:N6:27:ARG:NH1	27:N6:75:ARG:O	2.36	0.54
38:O7:8:PHE:O	38:O7:11:ARG:HG3	2.08	0.54
45:2:104:A:OP2	45:2:308:C:N4	2.30	0.54
45:2:782:U:H1'	45:2:783:G:H5''	1.89	0.54
45:2:1190:C:O2'	78:SM:84:LYS:HD3	2.07	0.54
46:S0:142:PRO:HG3	67:D1:32:VAL:HG13	1.90	0.54
47:S1:38:PHE:CG	47:S1:73:LEU:HD21	2.42	0.54
47:S1:201:THR:HG21	47:S1:207:LEU:HD22	1.89	0.54
48:S2:69:ILE:HA	48:S2:72:LEU:HB2	1.89	0.54
48:S2:87:GLN:HA	48:S2:95:ARG:O	2.07	0.54
59:C3:22:ALA:HB1	59:C3:23:PRO:HA	1.89	0.54
61:C5:81:ARG:NH1	61:C5:97:TYR:O	2.39	0.54
62:C6:83:GLN:NE2	62:C6:115:THR:O	2.40	0.54
1:5:91:G:O2'	1:5:95:A:N6	2.41	0.54
1:5:1704:A:N1	1:5:1740:U:H5	2.05	0.54
1:5:3174:A:OP1	34:o3:97:SER:OG	2.17	0.54
4:l2:136:ILE:HA	4:l2:148:VAL:HG12	1.89	0.54
80:n3:201:PAR:H322	80:n3:201:PAR:H11	1.71	0.54
45:6:560:U:H2'	45:6:561:G:H8	1.72	0.54
45:6:805:U:OP1	68:d2:32:LYS:NZ	2.27	0.54
45:6:1727:G:H2'	45:6:1728:A:C8	2.41	0.54
79:s6:69:LEU:HD22	79:s6:71:THR:H	1.71	0.54
63:c7:21:TYR:CD2	63:c7:58:MET:HE1	2.42	0.54
69:d3:134:ALA:HB1	69:d3:140:LYS:HB2	1.90	0.54
71:d5:75:LEU:HA	71:d5:78:ILE:HG22	1.90	0.54
1:1:1595:U:O4	80:1:3419:PAR:N12	2.40	0.54
1:1:2568:C:O2'	1:1:2569:A:O4'	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3066:U:H2'	1:1:3067:C:C6	2.43	0.54
1:1:3174:A:H2'	1:1:3175:U:H5'	1.89	0.54
6:L4:181:VAL:O	6:L4:182:LEU:HB2	2.07	0.54
10:L8:26:LEU:HB2	28:N7:53:VAL:HG21	1.89	0.54
11:L9:161:LEU:O	11:L9:164:ILE:HG22	2.07	0.54
14:M3:95:ILE:HD13	14:M3:116:LEU:HD22	1.88	0.54
31:O0:25:LEU:HD13	31:O0:87:VAL:HG11	1.89	0.54
45:2:812:A:N6	45:2:858:G:H2'	2.22	0.54
45:2:978:A:H2'	45:2:979:A:O4'	2.08	0.54
45:2:1590:G:OP1	65:C9:91:TYR:HB2	2.08	0.54
46:S0:144:ILE:HG23	46:S0:158:VAL:HG13	1.89	0.54
48:S2:106:ASP:OD1	48:S2:108:ASN:N	2.40	0.54
53:S7:114:ARG:HD2	53:S7:117:THR:HG21	1.90	0.54
1:5:1709:C:OP1	35:o4:83:ASN:ND2	2.36	0.54
6:l4:144:LYS:HG2	6:l4:145:ILE:H	1.72	0.54
7:l5:22:ARG:NH1	7:l5:28:THR:OG1	2.41	0.54
10:l8:178:ALA:HA	10:l8:222:PHE:CE2	2.43	0.54
17:m6:35:VAL:HG21	17:m6:80:PHE:HE2	1.72	0.54
21:n0:73:LYS:HB2	21:n0:75:PHE:CE2	2.41	0.54
24:n3:2:SER:OG	24:n3:3:GLY:N	2.39	0.54
45:6:146:U:H2'	45:6:147:A:H8	1.73	0.54
45:6:1064:G:O2'	47:s1:203:ASP:O	2.18	0.54
53:s7:173:TYR:CE2	53:s7:177:THR:HG21	2.43	0.54
59:c3:38:VAL:HA	59:c3:41:ALA:HB3	1.89	0.54
1:1:99:A:OP1	16:M5:194:GLN:NE2	2.40	0.54
1:1:1151:U:O4	83:1:4329:HOH:O	2.18	0.54
1:1:1347:U:H2'	1:1:1355:A:H61	1.72	0.54
2:3:55:A:N3	13:M1:152:HIS:HE1	2.06	0.54
18:M7:24:VAL:HG12	18:M7:86:LYS:HG2	1.89	0.54
45:2:358:U:OP2	80:2:1902:PAR:N32	2.40	0.54
45:2:776:G:N2	45:2:785:U:O2	2.40	0.54
45:2:903:U:H4'	60:C4:135:ARG:HH22	1.72	0.54
51:S5:77:TYR:HA	51:S5:83:ARG:HG2	1.90	0.54
51:S5:161:ASP:O	74:D8:44:VAL:HA	2.07	0.54
56:C0:59:PHE:CZ	56:C0:62:GLN:HA	2.43	0.54
62:C6:6:SER:N	62:C6:96:TYR:OH	2.41	0.54
77:SR:129:LYS:HD2	77:SR:148:ASN:O	2.08	0.54
1:5:545:U:H2'	1:5:547:G:C2	2.43	0.54
1:5:1226:G:H1	1:5:1283:C:H42	1.54	0.54
1:5:2860:U:N3	1:5:2938:G:O5'	2.41	0.54
2:7:18:C:OP2	13:m1:150:ASN:ND2	2.27	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:m0:29:SER:OG	12:m0:31:ILE:O	2.24	0.54
12:m0:171:TRP:CE3	12:m0:178:ARG:HD2	2.42	0.54
36:o5:45:LYS:O	36:o5:49:LYS:HG2	2.08	0.54
47:s1:190:PRO:HG2	47:s1:192:VAL:HG23	1.90	0.54
53:s7:162:ILE:HB	53:s7:169:PHE:HE2	1.72	0.54
58:c2:43:ARG:HB3	58:c2:121:VAL:HG12	1.90	0.54
76:e0:54:ARG:HG3	76:e0:54:ARG:O	2.08	0.54
77:sR:79:TYR:HD1	77:sR:93:ASP:HA	1.73	0.54
1:1:549:U:H2'	1:1:550:A:H8	1.73	0.54
1:1:1185:C:OP1	15:M4:42:LYS:HD3	2.07	0.54
1:1:1716:U:O2'	1:1:1717:U:O5'	2.25	0.54
1:1:2689:A:N3	1:1:2689:A:H2'	2.21	0.54
5:L3:139:GLN:O	5:L3:141:GLY:N	2.41	0.54
28:N7:95:VAL:HG21	28:N7:113:VAL:HG11	1.88	0.54
45:2:513:U:H2'	45:2:514:G:C8	2.43	0.54
45:2:1070:C:H5''	73:D7:17:ARG:HH21	1.73	0.54
63:C7:20:TYR:CE1	63:C7:38:ILE:HD11	2.42	0.54
72:D6:45:VAL:HG11	72:D6:53:LEU:HD11	1.90	0.54
1:5:312:C:H2'	1:5:313:A:C8	2.42	0.54
1:5:1733:G:H2'	1:5:1734:G:C8	2.42	0.54
1:5:2249:G:H2'	1:5:2250:G:H8	1.70	0.54
1:5:2329:C:OP1	83:5:4218:HOH:O	2.19	0.54
1:5:2393:G:H4'	5:l3:252:ILE:HG12	1.90	0.54
1:5:2619:G:OP2	12:m0:112:GLN:HB3	2.08	0.54
1:5:3252:G:H2'	1:5:3253:G:C8	2.43	0.54
80:5:3413:PAR:O23	80:5:3413:PAR:N24	2.22	0.54
80:5:3428:PAR:C13	80:5:3428:PAR:HN21	2.21	0.54
5:l3:188:ILE:O	5:l3:192:VAL:HG13	2.08	0.54
10:l8:58:VAL:O	10:l8:62:LYS:N	2.38	0.54
11:l9:137:SER:HB2	11:l9:143:GLU:HB3	1.90	0.54
26:n5:105:VAL:HG13	26:n5:130:TYR:CG	2.42	0.54
43:q2:6:LYS:HE3	43:q2:94:GLY:HA3	1.88	0.54
45:6:182:A:H2'	45:6:183:U:C6	2.43	0.54
45:6:415:C:O2'	45:6:418:G:O6	2.22	0.54
55:s9:54:ARG:HA	55:s9:57:ARG:HB2	1.89	0.54
57:c1:67:ARG:NH1	57:c1:129:ARG:H	2.06	0.54
59:c3:53:LEU:HG	73:d7:52:THR:HG21	1.90	0.54
1:1:1730:G:N7	31:O0:28:LYS:HB2	2.23	0.54
1:1:3228:C:H4'	1:1:3229:G:O5'	2.07	0.54
80:1:3411:PAR:H51	80:1:3411:PAR:H322	1.73	0.54
4:L2:101:VAL:HB	4:L2:165:VAL:HG12	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:220:ARG:HG3	6:L4:221:ASN:N	2.22	0.54
7:L5:77:ALA:O	7:L5:108:ARG:NH1	2.41	0.54
17:M6:58:LEU:HA	17:M6:72:HIS:CD2	2.43	0.54
32:O1:16:LEU:HB3	32:O1:20:LEU:HD12	1.90	0.54
45:2:159:U:O2'	52:S6:87:ARG:NH1	2.41	0.54
45:2:332:U:P	54:S8:56:ARG:HH22	2.30	0.54
45:2:522:U:H5''	70:D4:37:LYS:HG3	1.90	0.54
45:2:755:A:H2	50:S4:13:ALA:HA	1.73	0.54
45:2:858:G:OP1	53:S7:116:ARG:NH2	2.39	0.54
45:2:1480:G:H1	45:2:1527:C:N4	2.05	0.54
60:C4:112:ILE:H	72:D6:57:SER:HA	1.72	0.54
61:C5:119:PHE:HE1	64:C8:119:ILE:HG22	1.73	0.54
61:C5:123:TYR:OH	64:C8:126:ARG:NH1	2.41	0.54
77:SR:73:LEU:HD22	77:SR:77:GLY:HA2	1.90	0.54
1:5:157:A:C8	37:o6:26:ILE:HG12	2.42	0.54
1:5:1314:C:O3'	17:m6:18:ARG:NH1	2.41	0.54
1:5:3369:G:N1	5:l3:380:MET:O	2.34	0.54
5:l3:62:ARG:HG2	5:l3:65:SER:HB2	1.90	0.54
5:l3:236:LYS:HG3	5:l3:237:LYS:O	2.08	0.54
18:m7:67:ILE:HD12	18:m7:82:ARG:CZ	2.38	0.54
32:o1:20:LEU:HD22	32:o1:28:ARG:HG3	1.89	0.54
33:o2:100:ILE:O	33:o2:125:ARG:NH1	2.40	0.54
45:6:868:G:OP1	59:c3:121:ARG:NH1	2.38	0.54
45:6:879:G:H2'	45:6:880:C:C6	2.44	0.54
46:s0:13:ASP:OD2	46:s0:179:ARG:NH2	2.40	0.54
59:c3:18:TYR:HA	68:d2:56:HIS:CD2	2.43	0.54
1:1:976:U:OP1	19:M8:144:ARG:NH2	2.40	0.53
1:1:1422:G:H21	8:L6:5:LYS:HZ2	1.55	0.53
1:1:3099:C:H2'	1:1:3100:U:H6	1.73	0.53
5:L3:291:GLU:OE1	5:L3:292:ALA:N	2.31	0.53
39:O8:44:LYS:HG2	39:O8:53:THR:HB	1.90	0.53
40:O9:23:LEU:HD22	40:O9:24:PRO:HD2	1.90	0.53
45:2:953:G:H2'	45:2:954:G:C8	2.43	0.53
45:2:1435:G:O6	56:C0:64:TYR:OH	2.19	0.53
59:C3:72:MET:HE1	59:C3:82:PRO:HD2	1.90	0.53
60:C4:14:PHE:HA	60:C4:78:ALA:HB3	1.90	0.53
68:D2:69:LEU:HD21	68:D2:72:CYS:HB3	1.90	0.53
1:5:543:C:OP1	1:5:543:C:H4'	2.07	0.53
1:5:995:U:OP1	83:5:4247:HOH:O	2.19	0.53
1:5:1631:C:H5''	1:5:1632:A:H5''	1.91	0.53
1:5:2309:A:N3	1:5:2961:G:O2'	2.36	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2524:A:N6	10:l8:42:PRO:O	2.40	0.53
1:5:2988:C:O2	5:l3:266:ARG:NH1	2.40	0.53
2:7:28:C:H5''	13:m1:137:ARG:HG2	1.89	0.53
4:l2:10:LYS:HA	4:l2:16:PHE:CD2	2.42	0.53
8:l6:176:PHE:H	15:m4:117:ARG:NH2	2.04	0.53
9:l7:127:LEU:C	9:l7:129:LEU:H	2.16	0.53
10:l8:24:ASN:O	10:l8:26:LEU:N	2.33	0.53
12:m0:77:THR:OG1	12:m0:78:THR:N	2.41	0.53
15:m4:72:LEU:HD22	15:m4:73:PRO:HD2	1.90	0.53
31:o0:20:SER:CB	31:o0:97:ASP:H	2.17	0.53
31:o0:78:GLY:HA2	31:o0:87:VAL:HG12	1.90	0.53
34:o3:59:VAL:HG23	34:o3:60:ARG:H	1.73	0.53
45:6:647:G:H22	45:6:687:G:H22	1.57	0.53
45:6:1437:U:H5'	49:s3:176:LEU:HD23	1.91	0.53
48:s2:220:ASN:O	48:s2:223:GLY:N	2.37	0.53
49:s3:132:LYS:HG3	49:s3:156:PHE:HD2	1.74	0.53
53:s7:64:VAL:HG13	53:s7:67:LEU:HD12	1.90	0.53
1:1:1634:G:OP1	28:N7:107:ARG:NH1	2.41	0.53
3:4:94:C:H5''	38:O7:76:ASN:ND2	2.23	0.53
5:L3:256:HIS:HA	5:L3:257:PRO:C	2.31	0.53
10:L8:94:PHE:HB3	10:L8:189:LEU:HD11	1.89	0.53
11:L9:89:LYS:HG2	11:L9:145:VAL:HG22	1.90	0.53
19:M8:58:ASN:C	19:M8:60:PRO:HD3	2.33	0.53
26:N5:139:ILE:HD11	26:N5:141:TYR:CE2	2.42	0.53
43:Q2:2:VAL:N	43:Q2:90:HIS:O	2.41	0.53
45:2:555:A:H2'	45:2:556:A:C8	2.43	0.53
45:2:879:G:H4'	59:C3:107:LYS:HB3	1.90	0.53
45:2:1797:A:N1	72:D6:87:ARG:HD2	2.22	0.53
53:S7:150:GLN:HB2	53:S7:181:ILE:HD12	1.90	0.53
59:C3:103:GLU:O	59:C3:106:ARG:NH2	2.41	0.53
68:D2:31:SER:OG	68:D2:33:VAL:N	2.40	0.53
1:5:1063:G:N7	1:5:1097:G:H2'	2.23	0.53
1:5:1284:C:O2'	1:5:1285:G:OP1	2.24	0.53
1:5:2768:U:H2'	1:5:2769:A:C8	2.43	0.53
16:m5:183:THR:HA	16:m5:187:ARG:H	1.73	0.53
18:m7:126:ARG:HB2	18:m7:126:ARG:CZ	2.37	0.53
25:n4:56:ARG:HB2	25:n4:61:LYS:HB2	1.88	0.53
27:n6:3:LYS:HD2	27:n6:8:VAL:HG22	1.89	0.53
41:q0:96:CYS:HA	41:q0:121:LEU:HD23	1.89	0.53
45:6:276:C:O2'	45:6:277:U:OP2	2.23	0.53
45:6:506:A:H4'	45:6:507:U:OP2	2.06	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:884:A:H2'	45:6:885:G:C8	2.43	0.53
45:6:1558:U:H3	61:c5:122:THR:HG22	1.73	0.53
46:s0:137:SER:O	67:d1:30:ALA:HA	2.08	0.53
51:s5:146:THR:OG1	51:s5:157:ARG:HB3	2.09	0.53
72:d6:10:ARG:HH22	72:d6:36:ILE:HG13	1.73	0.53
77:sR:42:LEU:HB2	77:sR:61:PHE:CD2	2.40	0.53
77:sR:238:ASP:HB2	77:sR:256:THR:HB	1.90	0.53
1:1:158:G:N2	1:1:264:G:H1'	2.22	0.53
1:1:271:C:H2'	1:1:272:G:O4'	2.08	0.53
1:1:1554:U:O2	1:1:1582:C:N4	2.41	0.53
4:L2:227:ARG:HG2	4:L2:239:ALA:HB2	1.89	0.53
6:L4:72:ALA:O	6:L4:76:ARG:NH1	2.41	0.53
20:M9:115:ILE:HD11	20:M9:119:LEU:HG	1.90	0.53
45:2:1785:U:P	60:C4:133:ARG:HH22	2.32	0.53
80:2:1905:PAR:O44	80:2:1905:PAR:N64	2.36	0.53
46:S0:32:HIS:CD2	46:S0:33:GLN:H	2.26	0.53
52:S6:27:PHE:HD1	52:S6:36:VAL:HG21	1.73	0.53
54:S8:135:LYS:O	54:S8:135:LYS:NZ	2.35	0.53
57:C1:109:VAL:HG21	57:C1:125:VAL:CG2	2.38	0.53
59:C3:129:TYR:HB3	59:C3:135:LEU:HG	1.89	0.53
68:D2:25:VAL:HG12	68:D2:63:VAL:HB	1.90	0.53
1:5:68:C:O3'	16:m5:177:GLY:HA2	2.07	0.53
1:5:69:C:H2'	1:5:70:A:O4'	2.07	0.53
1:5:148:G:OP2	16:m5:4:TYR:OH	2.17	0.53
1:5:1307:G:C2	1:5:1308:A:C2	2.96	0.53
1:5:1491:A:H5'	38:o7:12:HIS:O	2.08	0.53
1:5:2756:C:O2	22:n1:8:ARG:NH2	2.41	0.53
1:5:3150:A:H5'	5:l3:129:ALA:O	2.08	0.53
2:7:119:U:H2'	2:7:120:C:C6	2.44	0.53
6:l4:8:VAL:HB	6:l4:16:THR:HG21	1.89	0.53
6:l4:141:ARG:H	6:l4:177:ASP:HB2	1.72	0.53
7:l5:41:LYS:NZ	22:n1:32:LYS:O	2.38	0.53
8:l6:70:LYS:HB3	8:l6:146:ILE:HD11	1.89	0.53
14:m3:76:THR:HA	14:m3:98:ASP:O	2.08	0.53
16:m5:187:ARG:HG3	16:m5:188:ARG:N	2.23	0.53
44:q3:47:VAL:HA	44:q3:56:THR:O	2.08	0.53
70:d4:25:VAL:HB	70:d4:60:PHE:CE1	2.43	0.53
73:d7:19:HIS:HB3	73:d7:22:LYS:HB2	1.89	0.53
1:1:1064:A:H4'	1:1:1065:A:O5'	2.08	0.53
1:1:1603:A:H61	26:N5:71:THR:HG21	1.71	0.53
9:L7:26:VAL:HA	9:L7:30:ARG:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:N5:136:ALA:O	26:N5:139:ILE:HG12	2.08	0.53
37:O6:45:ARG:NH1	37:O6:89:GLU:OE1	2.39	0.53
45:2:86:A:H2'	45:2:87:C:C6	2.44	0.53
45:2:641:G:O2'	53:S7:178:GLY:O	2.18	0.53
45:2:858:G:H4'	53:S7:113:PRO:HG3	1.90	0.53
47:S1:33:LYS:HB2	47:S1:96:LEU:O	2.08	0.53
57:C1:21:ASN:OD1	57:C1:21:ASN:N	2.38	0.53
64:C8:123:ARG:HB2	64:C8:133:VAL:CG1	2.39	0.53
1:5:65:A:H3'	1:5:111:C:N4	2.24	0.53
1:5:767:U:H5''	14:m3:186:ARG:CZ	2.39	0.53
1:5:811:U:H2'	1:5:812:G:H8	1.71	0.53
1:5:1447:G:H3'	18:m7:67:ILE:HD11	1.90	0.53
1:5:1743:G:H2'	1:5:1744:G:C8	2.44	0.53
1:5:1761:C:H3'	1:5:1762:C:H4'	1.89	0.53
1:5:1817:G:O2'	1:5:1818:U:OP2	2.24	0.53
1:5:3152:U:H2'	1:5:3158:G:H21	1.73	0.53
3:8:149:A:H2'	3:8:150:G:C8	2.43	0.53
4:l2:172:GLY:HA3	44:q3:68:ALA:N	2.24	0.53
9:l7:186:HIS:O	9:l7:190:THR:HG23	2.08	0.53
12:m0:57:LEU:HD22	12:m0:130:ASP:HA	1.89	0.53
14:m3:42:ARG:NH2	14:m3:51:LEU:O	2.40	0.53
25:n4:106:GLU:HA	25:n4:109:LEU:HB2	1.91	0.53
39:o8:32:ASN:HD22	39:o8:34:ALA:H	1.55	0.53
45:6:310:C:H4'	69:d3:33:LEU:HD13	1.91	0.53
51:s5:35:GLN:O	51:s5:37:GLN:N	2.41	0.53
79:s6:152:ASP:CG	79:s6:153:VAL:N	2.66	0.53
54:s8:4:SER:HB2	54:s8:24:LYS:HE2	1.91	0.53
76:e0:50:VAL:O	76:e0:51:ASN:HB3	2.07	0.53
77:sR:33:LEU:O	77:sR:44:SER:HA	2.08	0.53
1:1:1323:G:O3'	21:N0:2:ALA:HA	2.08	0.53
1:1:3308:C:O2	18:M7:69:ARG:HD3	2.08	0.53
1:1:3330:A:H4'	5:L3:366:GLY:HA3	1.91	0.53
5:L3:90:VAL:HG22	5:L3:104:THR:HG23	1.90	0.53
5:L3:296:THR:HG22	5:L3:299:ASP:H	1.72	0.53
45:2:62:A:H1'	45:2:269:G:H1'	1.89	0.53
45:2:840:U:O2'	45:2:841:U:H6	1.91	0.53
45:2:1274:C:OP1	83:2:2205:HOH:O	2.19	0.53
49:S3:46:THR:HB	49:S3:84:ILE:HD13	1.90	0.53
56:C0:55:VAL:HG21	56:C0:66:TYR:HB3	1.89	0.53
60:C4:24:ASN:N	60:C4:55:SER:HB3	2.24	0.53
66:D0:57:ARG:HD2	66:D0:89:ARG:HD3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
66:D0:117:VAL:HG22	66:D0:118:VAL:H	1.74	0.53
1:5:59:G:C4'	1:5:60:A:H4'	2.38	0.53
1:5:1582:C:O2'	1:5:1583:A:OP2	2.23	0.53
1:5:2592:G:H4'	1:5:2594:C:C2	2.44	0.53
1:5:2737:C:H4'	22:n1:68:THR:OG1	2.08	0.53
8:l6:41:ILE:HD13	8:l6:51:ARG:HG2	1.90	0.53
11:l9:92:TYR:CD2	11:l9:92:TYR:N	2.76	0.53
12:m0:36:LEU:HD12	12:m0:87:LEU:HB3	1.91	0.53
45:6:647:G:H22	45:6:687:G:N2	2.07	0.53
45:6:1628:U:H2'	45:6:1629:G:C8	2.44	0.53
45:6:1738:U:H2'	45:6:1739:C:C6	2.43	0.53
46:s0:164:ASN:HA	46:s0:170:ILE:HD11	1.91	0.53
48:s2:45:VAL:HG21	48:s2:68:ILE:HG23	1.90	0.53
54:s8:154:SER:O	54:s8:158:SER:OG	2.27	0.53
58:c2:62:LEU:O	58:c2:91:VAL:HG12	2.09	0.53
67:d1:21:ASN:OD1	68:d2:23:ARG:NH2	2.41	0.53
1:1:1741:A:H2'	1:1:1742:U:O4'	2.09	0.53
1:1:2261:G:H21	1:1:2262:A:N6	2.07	0.53
1:1:3023:U:H2'	1:1:3024:A:H8	1.73	0.53
1:1:3182:G:H2'	1:1:3183:A:O4'	2.09	0.53
80:1:3406:PAR:H322	80:1:3406:PAR:H51	1.74	0.53
5:L3:116:ARG:HG3	5:L3:175:LYS:HB2	1.91	0.53
11:L9:53:ILE:HD13	15:M4:7:VAL:HG21	1.91	0.53
11:L9:137:SER:OG	11:L9:140:VAL:HG13	2.08	0.53
12:M0:57:LEU:HB2	12:M0:131:ILE:HD11	1.91	0.53
20:M9:182:ASP:O	20:M9:186:LYS:HB3	2.08	0.53
30:N9:7:HIS:CG	30:N9:8:THR:N	2.77	0.53
45:2:1166:A:H5''	51:S5:104:ASN:HD21	1.74	0.53
52:S6:215:ARG:O	52:S6:219:ARG:N	2.37	0.53
60:C4:85:ALA:N	60:C4:119:THR:HG22	2.23	0.53
62:C6:28:LEU:N	62:C6:64:ASP:OD2	2.33	0.53
66:D0:82:TYR:HB3	75:D9:52:PHE:HB3	1.91	0.53
68:D2:24:GLN:HE21	73:D7:5:GLN:HG2	1.73	0.53
1:5:1190:A:C8	1:5:1193:A:H1'	2.43	0.53
1:5:1506:A:OP2	83:5:4251:HOH:O	2.19	0.53
2:7:38:U:N3	2:7:41:G:OP2	2.39	0.53
4:l2:54:ARG:HG2	4:l2:56:ALA:H	1.73	0.53
4:l2:116:VAL:HG13	4:l2:126:LEU:HB2	1.90	0.53
5:l3:188:ILE:HD12	5:l3:189:SER:N	2.23	0.53
6:l4:219:LEU:O	6:l4:222:VAL:HG12	2.08	0.53
9:l7:102:VAL:HG21	9:l7:129:LEU:HD22	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:m1:7:ASN:N	13:m1:8:PRO:HD3	2.23	0.53
15:m4:19:ARG:HB3	15:m4:35:ILE:HD12	1.90	0.53
28:n7:103:GLN:HB3	28:n7:106:GLN:HG3	1.90	0.53
38:o7:14:LYS:HZ3	40:o9:51:ILE:HG12	1.74	0.53
45:6:30:G:H2'	45:6:31:C:C6	2.43	0.53
45:6:768:C:H1'	55:s9:143:ILE:HG21	1.90	0.53
45:6:1552:U:OP2	61:c5:43:ARG:NH2	2.41	0.53
47:s1:70:LEU:HB3	47:s1:79:HIS:HB3	1.91	0.53
65:c9:6:VAL:HG11	65:c9:132:LEU:HB3	1.90	0.53
69:d3:109:ARG:HG3	69:d3:114:LYS:HB2	1.91	0.53
1:1:159:A:N6	80:1:3401:PAR:H642	2.24	0.53
1:1:268:A:C4	16:M5:12:ARG:HG2	2.44	0.53
1:1:392:G:O2'	27:N6:90:VAL:HG11	2.09	0.53
11:L9:92:TYR:N	11:L9:92:TYR:CD1	2.75	0.53
12:M0:54:SER:HB2	12:M0:135:ILE:HD11	1.91	0.53
20:M9:21:LYS:O	20:M9:53:LYS:HB2	2.09	0.53
29:N8:122:PRO:HB3	29:N8:142:GLY:O	2.09	0.53
45:2:79:C:H4'	52:S6:173:PRO:O	2.09	0.53
45:2:86:A:H2'	45:2:87:C:H6	1.73	0.53
45:2:480:G:H2'	45:2:481:A:H8	1.73	0.53
45:2:505:A:H2'	45:2:505:A:N3	2.24	0.53
45:2:545:A:OP2	83:2:2206:HOH:O	2.19	0.53
45:2:1334:U:O3'	66:D0:85:ARG:NH2	2.40	0.53
56:C0:49:LEU:HD13	56:C0:54:TYR:HD2	1.73	0.53
68:D2:24:GLN:OE1	68:D2:24:GLN:N	2.41	0.53
72:D6:12:LYS:HE2	72:D6:16:GLY:N	2.22	0.53
72:D6:84:VAL:O	72:D6:85:ARG:NE	2.41	0.53
1:5:618:C:O2'	1:5:619:A:OP1	2.20	0.53
1:5:911:C:N4	4:l2:3:ARG:HD3	2.23	0.53
1:5:929:A:H2'	1:5:930:U:C6	2.44	0.53
1:5:1389:G:H5''	33:o2:101:SER:HB3	1.89	0.53
1:5:1498:A:H2'	1:5:1499:C:C6	2.43	0.53
1:5:2093:A:N6	20:m9:114:LYS:HE3	2.23	0.53
1:5:3285:C:H3'	1:5:3286:G:H5''	1.89	0.53
6:l4:192:GLY:HA2	6:l4:195:ARG:HG3	1.89	0.53
10:l8:190:VAL:O	10:l8:191:ASN:HB2	2.08	0.53
10:l8:202:GLU:O	10:l8:203:VAL:HG22	2.09	0.53
12:m0:87:LEU:HG	12:m0:138:VAL:HG22	1.91	0.53
40:o9:28:ARG:HD3	40:o9:36:ARG:HD3	1.90	0.53
45:6:793:A:H4'	45:6:794:U:C5	2.44	0.53
71:d5:45:GLU:O	71:d5:49:ARG:HB2	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:d6:52:ASP:OD1	72:d6:52:ASP:N	2.40	0.53
1:1:68:C:OP2	1:1:301:G:N2	2.42	0.53
1:1:1567:U:O2'	1:1:1570:U:O4	2.24	0.53
1:1:2541:U:H4'	1:1:2542:U:O5'	2.09	0.53
1:1:2698:G:O2'	22:N1:12:ARG:HG3	2.09	0.53
1:1:3153:U:H1'	1:1:3158:G:C4	2.44	0.53
15:M4:21:VAL:HG23	15:M4:65:LEU:HA	1.90	0.53
21:N0:155:ARG:HD3	21:N0:172:TYR:CD1	2.44	0.53
45:2:446:A:N6	45:2:461:G:H21	2.06	0.53
45:2:1614:A:N1	45:2:1615:C:N4	2.56	0.53
62:C6:128:LYS:NZ	62:C6:134:ALA:O	2.42	0.53
68:D2:46:TYR:HB3	68:D2:69:LEU:HD13	1.91	0.53
70:D4:33:ALA:C	70:D4:34:ASN:HD22	2.17	0.53
74:D8:32:PHE:CE2	74:D8:38:ARG:HD2	2.44	0.53
1:5:679:U:H2'	1:5:680:G:C8	2.44	0.53
1:5:879:U:O2	1:5:2357:A:H1'	2.09	0.53
1:5:1007:U:O4	80:5:3402:PAR:H21	2.08	0.53
1:5:1517:G:P	40:o9:41:ARG:HH22	2.32	0.53
1:5:2514:U:H6	1:5:2514:U:OP1	1.91	0.53
1:5:3198:U:O4	11:l9:26:LYS:HB2	2.09	0.53
14:m3:73:ARG:HG2	14:m3:98:ASP:HB2	1.91	0.53
16:m5:106:VAL:HG11	16:m5:132:VAL:HG21	1.91	0.53
23:n2:43:VAL:HB	23:n2:49:ASN:HB3	1.91	0.53
24:n3:47:ASN:ND2	83:n3:302:HOH:O	2.30	0.53
35:o4:99:LYS:O	35:o4:103:LYS:HG2	2.08	0.53
44:q3:55:TRP:CD1	44:q3:66:GLY:HA3	2.44	0.53
45:6:1022:C:H4'	45:6:1125:A:H61	1.72	0.53
46:s0:92:HIS:HB3	46:s0:182:LEU:HD11	1.89	0.53
47:s1:56:SER:OG	47:s1:57:ALA:N	2.40	0.53
48:s2:144:TRP:CE2	48:s2:173:PRO:HG3	2.44	0.53
1:1:2685:C:P	13:M1:140:ARG:HH22	2.31	0.53
1:1:3058:U:OP1	32:O1:28:ARG:NH2	2.42	0.53
5:L3:368:GLY:H	25:N4:17:ARG:HH12	1.55	0.53
9:L7:25:GLN:O	9:L7:29:GLU:N	2.41	0.53
17:M6:188:SER:O	17:M6:192:LYS:HG2	2.09	0.53
29:N8:28:HIS:CD2	29:N8:32:ARG:HG3	2.44	0.53
45:2:767:U:H6	55:S9:141:VAL:HA	1.74	0.53
45:2:1350:U:H2'	45:2:1351:G:C8	2.40	0.53
45:2:1503:A:O2'	65:C9:37:VAL:HG23	2.09	0.53
45:2:1795:U:H5'	72:D6:79:ILE:HD11	1.90	0.53
46:S0:118:PRO:HG2	46:S0:141:ILE:HD13	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:91:VAL:HG13	47:S1:93:GLY:H	1.74	0.53
59:C3:61:THR:OG1	59:C3:62:GLN:N	2.41	0.53
1:5:602:A:H2'	1:5:603:A:C8	2.43	0.53
1:5:698:U:H2'	1:5:699:A:O4'	2.09	0.53
1:5:2744:U:H2'	1:5:2745:G:C8	2.43	0.53
1:5:2768:U:H2'	1:5:2769:A:H8	1.73	0.53
2:7:62:U:H4'	7:15:285:ARG:HH12	1.73	0.53
3:8:84:C:O2'	3:8:85:G:OP2	2.23	0.53
35:o4:13:TYR:O	35:o4:18:ASN:ND2	2.38	0.53
45:6:560:U:H2'	45:6:561:G:C8	2.44	0.53
45:6:1164:G:N7	83:6:2115:HOH:O	2.34	0.53
45:6:1344:A:O2'	45:6:1345:A:OP1	2.24	0.53
51:s5:94:THR:HG22	51:s5:110:ALA:HB1	1.91	0.53
51:s5:149:VAL:HG22	51:s5:156:ARG:HD2	1.91	0.53
61:c5:21:ASP:C	61:c5:25:LEU:HD12	2.33	0.53
1:1:77:A:O2'	16:M5:176:LYS:NZ	2.41	0.53
1:1:1508:C:OP1	1:1:2354:C:O2'	2.26	0.53
1:1:1616:U:H2'	1:1:1617:G:C8	2.43	0.53
1:1:2279:A:O5'	1:1:2280:A:H5'	2.09	0.53
1:1:2724:U:OP2	22:N1:87:LYS:HE2	2.09	0.53
3:4:82:U:H5''	3:4:83:C:H5'	1.90	0.53
5:L3:70:ARG:HH22	24:N3:120:LYS:NZ	2.06	0.53
5:L3:257:PRO:HG2	5:L3:261:MET:CE	2.39	0.53
11:L9:48:VAL:HG13	11:L9:49:ASN:H	1.74	0.53
12:M0:171:TRP:O	12:M0:174:THR:HG22	2.09	0.53
21:N0:12:ARG:O	21:N0:13:ARG:HB3	2.09	0.53
45:2:164:A:N3	52:S6:13:GLN:NE2	2.57	0.53
45:2:571:G:H8	45:2:572:C:C6	2.27	0.53
45:2:1007:C:O3'	60:C4:135:ARG:NE	2.33	0.53
45:2:1564:U:H2'	45:2:1565:C:C6	2.43	0.53
45:2:1585:U:OP1	62:C6:125:GLU:N	2.41	0.53
60:C4:13:VAL:O	60:C4:77:THR:OG1	2.26	0.53
60:C4:29:HIS:HB3	60:C4:41:ARG:HA	1.91	0.53
70:D4:87:PRO:HD2	70:D4:90:ARG:HG3	1.89	0.53
77:SR:176:LYS:HB3	77:SR:195:HIS:O	2.09	0.53
1:5:3033:A:H2'	1:5:3034:C:C6	2.44	0.53
3:8:91:C:H2'	3:8:92:A:C8	2.43	0.53
5:l3:212:ASN:O	5:l3:281:LYS:NZ	2.42	0.53
10:l8:81:THR:HG21	10:l8:181:LYS:HE2	1.91	0.53
11:l9:112:ILE:HD11	11:l9:134:ILE:HG12	1.91	0.53
13:m1:117:ASP:OD2	13:m1:119:SER:OG	2.22	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:o3:30:ILE:HB	34:o3:81:VAL:HG12	1.91	0.53
45:6:1482:C:O2'	62:c6:72:GLY:O	2.26	0.53
45:6:1601:G:P	65:c9:86:ARG:HH22	2.31	0.53
50:s4:166:SER:OG	50:s4:167:GLY:N	2.41	0.53
79:s6:204:ALA:HA	79:s6:207:GLU:HB3	1.91	0.53
53:s7:80:GLU:HA	53:s7:83:LYS:HE2	1.90	0.53
55:s9:67:PRO:HA	55:s9:70:LEU:HB2	1.91	0.53
1:1:29:C:H4'	1:1:62:A:H4'	1.92	0.52
1:1:1666:G:H2'	1:1:1667:A:C8	2.44	0.52
2:3:112:G:H2'	2:3:113:C:C6	2.44	0.52
27:N6:57:LEU:HD23	27:N6:67:GLU:HB3	1.91	0.52
31:O0:20:SER:O	31:O0:96:GLY:HA3	2.09	0.52
45:2:328:A:H2'	45:2:329:G:H8	1.73	0.52
45:2:518:A:O2'	45:2:534:A:N6	2.39	0.52
45:2:1133:A:H2'	45:2:1134:C:O4'	2.08	0.52
45:2:1172:G:OP1	64:C8:144:ARG:NH2	2.35	0.52
45:2:1196:A:OP2	45:2:1464:G:N2	2.40	0.52
45:2:1530:C:OP1	71:D5:94:LYS:HE2	2.09	0.52
45:2:1601:G:H22	65:C9:88:VAL:HG22	1.74	0.52
54:S8:60:ILE:HG21	54:S8:179:CYS:HB2	1.91	0.52
55:S9:168:ARG:HH21	55:S9:171:ARG:HH12	1.57	0.52
59:C3:20:ARG:HG2	68:D2:56:HIS:CE1	2.44	0.52
61:C5:53:PRO:HB2	61:C5:56:PHE:HB3	1.91	0.52
64:C8:15:LEU:HD23	64:C8:15:LEU:H	1.74	0.52
67:D1:71:ARG:HB2	67:D1:83:TRP:CE2	2.43	0.52
77:SR:307:ASP:OD1	77:SR:311:ARG:NH1	2.38	0.52
1:5:1597:C:H2'	1:5:1598:G:C8	2.44	0.52
2:7:67:G:H5'	7:15:10:SER:HB2	1.91	0.52
3:8:59:A:N1	3:8:100:U:H1'	2.24	0.52
3:8:79:A:H5''	3:8:80:A:C2	2.45	0.52
4:l2:134:VAL:HG23	4:l2:149:ARG:O	2.09	0.52
5:l3:142:ALA:O	5:l3:145:GLU:N	2.42	0.52
6:l4:64:SER:HA	6:l4:75:PRO:HA	1.92	0.52
14:m3:54:LEU:HD12	14:m3:75:PHE:CZ	2.44	0.52
19:m8:83:VAL:HG12	19:m8:85:GLY:H	1.74	0.52
27:n6:100:HIS:CD2	27:n6:101:PRO:HD2	2.45	0.52
34:o3:73:ARG:HD3	34:o3:82:ARG:HD2	1.91	0.52
36:o5:70:TYR:HB3	36:o5:76:GLN:HG2	1.90	0.52
45:6:138:A:C8	45:6:142:G:H5'	2.44	0.52
45:6:980:G:H4'	45:6:1776:A:H4'	1.90	0.52
47:s1:180:THR:HG23	47:s1:183:GLN:HE22	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:s2:111:VAL:O	48:s2:136:VAL:HA	2.08	0.52
62:c6:50:GLU:O	62:c6:54:LEU:HG	2.09	0.52
1:1:1712:G:O6	31:O0:28:LYS:NZ	2.42	0.52
1:1:2868:U:OP2	83:1:4344:HOH:O	2.18	0.52
1:1:3121:U:H1'	1:1:3122:A:H5''	1.91	0.52
3:4:104:A:C8	3:4:105:A:C8	2.97	0.52
5:L3:261:MET:HG2	17:M6:64:PHE:HA	1.92	0.52
15:M4:55:ARG:HH11	21:N0:70:THR:HB	1.73	0.52
18:M7:22:LEU:HB3	18:M7:90:PHE:HE2	1.74	0.52
26:N5:62:VAL:O	26:N5:86:VAL:HG23	2.08	0.52
28:N7:135:ARG:HG2	28:N7:135:ARG:HH21	1.74	0.52
29:N8:88:ASP:O	29:N8:91:LEU:N	2.42	0.52
36:O5:31:LEU:HD13	36:O5:47:VAL:HG11	1.91	0.52
45:2:739:G:H2'	45:2:740:A:C8	2.45	0.52
45:2:953:G:H2'	45:2:954:G:H8	1.75	0.52
45:2:1727:G:H2'	45:2:1728:A:H8	1.72	0.52
45:2:1738:U:H2'	45:2:1739:C:C6	2.44	0.52
47:S1:183:GLN:HG2	47:S1:187:LYS:HE3	1.91	0.52
52:S6:136:LYS:HG2	52:S6:174:LYS:O	2.10	0.52
55:S9:49:LEU:HD11	55:S9:53:ARG:HE	1.73	0.52
63:C7:84:TYR:HD1	63:C7:85:VAL:H	1.57	0.52
64:C8:67:GLU:HA	64:C8:70:VAL:HB	1.91	0.52
1:5:1895:A:O2'	1:5:3053:G:H4'	2.10	0.52
1:5:2303:A:P	42:q1:23:ARG:HH21	2.32	0.52
80:5:3409:PAR:HN21	80:5:3409:PAR:C23	2.23	0.52
6:l4:125:ALA:HB1	6:l4:238:LEU:HB3	1.91	0.52
11:l9:20:ILE:HB	15:m4:7:VAL:HG22	1.90	0.52
14:m3:165:SER:HB3	14:m3:168:ARG:HB3	1.90	0.52
15:m4:20:VAL:HG22	15:m4:68:LEU:HB2	1.90	0.52
16:m5:16:SER:HB2	37:o6:48:ALA:HB1	1.90	0.52
45:6:6:G:O2'	45:6:552:G:N2	2.35	0.52
45:6:66:U:OP1	79:s6:136:LYS:NZ	2.40	0.52
45:6:540:G:O2'	45:6:541:A:H2'	2.09	0.52
48:s2:142:GLY:C	48:s2:151:PRO:HB3	2.34	0.52
64:c8:41:ARG:O	64:c8:44:ASN:N	2.43	0.52
74:d8:61:ARG:HA	74:d8:61:ARG:HH11	1.73	0.52
1:1:349:A:C4	3:4:24:G:H1'	2.44	0.52
1:1:1660:C:H2'	1:1:1661:G:C8	2.44	0.52
1:1:1806:A:OP2	83:1:4346:HOH:O	2.19	0.52
1:1:2778:G:C2'	1:1:2779:A:H5'	2.39	0.52
1:1:2854:U:OP2	12:M0:3:ARG:NH2	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3306:U:H2'	1:1:3307:A:H5''	1.91	0.52
14:M3:61:PRO:HD3	14:M3:70:ARG:HH21	1.73	0.52
48:S2:45:VAL:HG11	48:S2:72:LEU:HD21	1.92	0.52
49:S3:144:ALA:HB1	78:SM:101:ASP:HB3	1.90	0.52
68:D2:38:LEU:HA	68:D2:41:MET:HE3	1.92	0.52
78:SM:89:ARG:O	78:SM:92:ASP:HB2	2.09	0.52
1:5:1802:C:H4'	35:o4:60:ARG:HG3	1.91	0.52
1:5:2864:A:OP1	12:m0:110:ARG:HD2	2.08	0.52
27:n6:45:ILE:HD12	27:n6:119:ILE:HG23	1.91	0.52
32:o1:46:THR:HG21	32:o1:91:SER:HB2	1.91	0.52
37:o6:6:GLY:HA3	37:o6:16:LYS:HD2	1.92	0.52
45:6:934:C:H6	72:d6:11:ASN:HB3	1.75	0.52
46:s0:24:LEU:HG	46:s0:45:VAL:HG11	1.91	0.52
48:s2:90:THR:OG1	48:s2:91:ARG:N	2.40	0.52
51:s5:51:VAL:HB	51:s5:131:GLN:HB2	1.91	0.52
55:s9:104:PHE:O	55:s9:147:MET:HE1	2.09	0.52
56:c0:32:HIS:CD2	56:c0:33:GLU:H	2.28	0.52
65:c9:86:ARG:HD3	65:c9:92:LYS:HG2	1.90	0.52
77:sR:19:TRP:H	77:sR:38:ARG:HG3	1.73	0.52
77:sR:182:ASN:HB2	77:sR:189:GLU:HB2	1.91	0.52
1:1:96:G:P	29:N8:34:MET:HB2	2.50	0.52
1:1:1419:A:H5''	6:L4:193:LYS:HZ2	1.75	0.52
1:1:2419:A:H2'	1:1:2420:C:C6	2.45	0.52
7:L5:85:ARG:NH1	7:L5:254:LYS:H	2.08	0.52
11:L9:47:LYS:HB2	15:M4:7:VAL:HB	1.91	0.52
33:O2:120:THR:C	33:O2:122:PRO:HD3	2.33	0.52
38:O7:66:TYR:OH	38:O7:73:ARG:NH2	2.42	0.52
45:2:240:U:OP1	45:2:240:U:H4'	2.08	0.52
45:2:899:G:H4'	60:C4:46:MET:HE2	1.90	0.52
45:2:1793:G:O2'	45:2:1795:U:OP2	2.26	0.52
46:S0:198:MET:HE1	63:C7:88:VAL:HG13	1.91	0.52
55:S9:109:LEU:HD13	55:S9:129:ILE:HD13	1.91	0.52
57:C1:72:THR:HG22	57:C1:124:THR:HA	1.92	0.52
59:C3:3:ARG:NH2	59:C3:10:GLY:O	2.41	0.52
63:C7:60:ARG:HG3	63:C7:66:VAL:HG21	1.92	0.52
65:C9:137:ALA:O	65:C9:141:GLU:HG2	2.09	0.52
1:5:175:C:H41	1:5:243:G:H21	1.56	0.52
1:5:207:U:H2'	1:5:208:C:H6	1.74	0.52
1:5:673:U:OP1	19:m8:21:SER:OG	2.17	0.52
1:5:1743:G:N7	80:5:3427:PAR:H612	2.24	0.52
1:5:2767:U:O2'	43:q2:28:TYR:OH	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:3324:C:OP1	32:o1:19:ARG:NH1	2.43	0.52
2:7:112:G:H2'	2:7:113:C:C6	2.44	0.52
4:l2:246:LEU:HD22	4:l2:247:ARG:H	1.75	0.52
8:l6:3:ALA:HB2	33:o2:77:ALA:HB2	1.90	0.52
17:m6:55:HIS:O	17:m6:59:ARG:HG3	2.09	0.52
21:n0:155:ARG:HD3	21:n0:172:TYR:CG	2.44	0.52
25:n4:57:LYS:N	25:n4:57:LYS:HD2	2.23	0.52
28:n7:71:PHE:HA	28:n7:111:LYS:HE2	1.91	0.52
30:n9:35:VAL:HB	30:n9:40:ARG:HD2	1.90	0.52
36:o5:94:LYS:O	36:o5:98:SER:OG	2.17	0.52
45:6:950:C:H4'	59:c3:104:ARG:HH22	1.75	0.52
45:6:1417:A:O2'	62:c6:128:LYS:HE3	2.08	0.52
45:6:1467:C:H1'	45:6:1601:G:H21	1.74	0.52
45:6:1477:G:H5''	65:c9:45:MET:HB2	1.92	0.52
61:c5:44:ARG:HH22	61:c5:82:ASN:HB2	1.74	0.52
64:c8:92:ILE:HG23	64:c8:93:THR:N	2.25	0.52
69:d3:111:GLY:O	69:d3:121:ARG:HD2	2.09	0.52
77:sR:13:LEU:HB3	77:sR:45:TRP:CH2	2.45	0.52
77:sR:128:ASP:OD1	77:sR:130:THR:OG1	2.21	0.52
1:1:1427:U:OP2	29:N8:4:ARG:NH2	2.43	0.52
1:1:3326:G:H2'	1:1:3327:G:C8	2.45	0.52
80:3:201:PAR:O44	80:3:201:PAR:N64	2.34	0.52
7:L5:290:ILE:HG13	7:L5:291:ALA:N	2.24	0.52
16:M5:14:LYS:HA	16:M5:19:LEU:HD23	1.91	0.52
22:N1:57:TYR:CG	22:N1:89:LEU:HD21	2.44	0.52
52:S6:180:THR:HB	52:S6:181:PRO:HD2	1.92	0.52
57:C1:45:PRO:HD2	57:C1:60:PHE:CE2	2.44	0.52
60:C4:20:TYR:HB3	60:C4:27:PHE:HB2	1.90	0.52
77:SR:93:ASP:HB2	77:SR:100:TYR:HE1	1.74	0.52
1:5:596:C:H2'	1:5:597:G:O4'	2.10	0.52
6:l4:328:ASN:OD1	9:l7:48:ASN:ND2	2.29	0.52
10:l8:160:ILE:HG22	10:l8:164:VAL:HG13	1.91	0.52
45:6:1361:U:O2'	45:6:1362:U:H5'	2.10	0.52
45:6:1361:U:OP1	45:6:1361:U:H4'	2.09	0.52
51:s5:143:ARG:HD3	74:d8:55:VAL:HG11	1.90	0.52
53:s7:56:LYS:HB2	53:s7:88:ARG:HD3	1.90	0.52
53:s7:73:VAL:HG13	53:s7:76:LYS:HB2	1.90	0.52
1:1:595:G:N1	1:1:609:G:H5''	2.24	0.52
1:1:1016:C:H3'	1:1:1017:C:C5'	2.40	0.52
1:1:1367:G:OP2	83:1:4348:HOH:O	2.19	0.52
80:1:3415:PAR:O41	80:1:3416:PAR:H611	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:L3:67:PHE:HA	5:L3:70:ARG:HG3	1.92	0.52
7:L5:76:ALA:HB3	7:L5:109:THR:HG22	1.92	0.52
10:L8:149:LYS:O	10:L8:176:PRO:HG2	2.09	0.52
11:L9:90:MET:HG2	11:L9:181:VAL:HA	1.92	0.52
17:M6:35:VAL:HB	17:M6:104:VAL:HG13	1.91	0.52
45:2:1524:A:N3	45:2:1590:G:O2'	2.37	0.52
45:2:1610:G:H4'	51:S5:98:MET:HE1	1.91	0.52
47:S1:70:LEU:CD1	47:S1:79:HIS:HB2	2.40	0.52
63:C7:23:LYS:HG3	77:SR:198:ASN:ND2	2.18	0.52
68:D2:40:VAL:HA	68:D2:43:LYS:HB2	1.91	0.52
77:SR:126:SER:OG	77:SR:127:ARG:N	2.43	0.52
78:SM:84:LYS:CD	78:SM:85:SER:H	2.18	0.52
1:5:1010:G:N2	12:m0:193:ASP:OD1	2.43	0.52
1:5:1063:G:C6	22:n1:109:VAL:HG22	2.44	0.52
1:5:2354:C:N4	83:5:4321:HOH:O	2.43	0.52
1:5:2828:G:O2'	12:m0:4:ARG:NH1	2.42	0.52
4:l2:30:ARG:O	4:l2:163:ARG:NH2	2.39	0.52
12:m0:170:LYS:HA	12:m0:177:ASP:HA	1.90	0.52
14:m3:119:TYR:O	14:m3:123:ILE:HG23	2.08	0.52
24:n3:23:MET:HE3	24:n3:100:GLY:HA3	1.91	0.52
33:o2:76:VAL:HG11	33:o2:94:ALA:HB1	1.91	0.52
45:6:1257:U:H4'	56:c0:8:ARG:NH1	2.25	0.52
45:6:1488:G:H3'	45:6:1515:A:H61	1.74	0.52
45:6:1562:G:OP1	65:c9:89:ARG:NH2	2.28	0.52
45:6:1619:C:H2'	45:6:1620:C:H6	1.75	0.52
48:s2:148:LEU:HA	67:d1:4:ASP:HB2	1.92	0.52
50:s4:71:LYS:O	50:s4:90:ILE:HA	2.09	0.52
53:s7:166:LEU:H	53:s7:166:LEU:HD22	1.75	0.52
56:c0:50:THR:HG22	56:c0:55:VAL:HG13	1.92	0.52
57:c1:37:ASN:HA	57:c1:44:THR:HG21	1.90	0.52
57:c1:125:VAL:HG22	57:c1:139:VAL:HA	1.92	0.52
72:d6:11:ASN:O	72:d6:33:ASP:HB2	2.10	0.52
1:1:1306:G:C6	17:M6:62:THR:HA	2.44	0.52
1:1:2163:C:H4'	4:L2:7:ASN:O	2.09	0.52
1:1:2379:U:OP1	83:1:4312:HOH:O	2.18	0.52
1:1:3308:C:N3	18:M7:69:ARG:NH1	2.58	0.52
1:1:3350:C:H2'	1:1:3351:U:H2'	1.90	0.52
3:4:15:G:C6	3:4:16:G:N1	2.78	0.52
3:4:94:C:H5''	38:O7:76:ASN:HD21	1.75	0.52
13:M1:148:VAL:HG13	13:M1:152:HIS:HB3	1.92	0.52
18:M7:88:VAL:O	18:M7:92:GLN:HG3	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N3:86:ARG:HB2	24:N3:92:PHE:CE1	2.45	0.52
45:2:748:U:H2'	45:2:749:U:C6	2.45	0.52
45:2:1390:U:C6	63:C7:3:ARG:HG2	2.45	0.52
46:S0:134:LYS:O	46:S0:137:SER:OG	2.26	0.52
1:5:359:U:H4'	1:5:817:A:N6	2.25	0.52
1:5:648:C:OP1	83:5:4253:HOH:O	2.19	0.52
1:5:1284:C:O2'	1:5:1285:G:H5'	2.10	0.52
1:5:1306:G:C6	17:m6:62:THR:HA	2.44	0.52
1:5:1768:U:H2'	1:5:1769:G:O4'	2.09	0.52
1:5:2101:C:O2'	1:5:2102:U:OP1	2.25	0.52
1:5:2397:A:H8	1:5:2941:A:N1	2.08	0.52
1:5:2962:U:H3	1:5:2969:A:H61	1.58	0.52
1:5:3283:U:H2'	1:5:3284:G:C8	2.45	0.52
36:o5:78:LYS:HA	36:o5:81:ARG:CG	2.39	0.52
45:6:325:G:OP1	57:c1:133:LYS:HB3	2.10	0.52
45:6:474:A:H8	45:6:474:A:OP2	1.93	0.52
45:6:804:A:N3	68:d2:105:THR:HG22	2.24	0.52
48:s2:89:GLN:HA	48:s2:94:GLN:HA	1.92	0.52
49:s3:164:VAL:O	49:s3:168:ILE:HG13	2.09	0.52
51:s5:117:THR:HG22	51:s5:121:ILE:HD11	1.92	0.52
53:s7:123:ASP:OD2	53:s7:138:LYS:NZ	2.43	0.52
57:c1:127:GLN:HB2	57:c1:137:PHE:CZ	2.44	0.52
58:c2:103:LEU:HD23	58:c2:115:VAL:HA	1.91	0.52
62:c6:23:LYS:O	62:c6:64:ASP:N	2.41	0.52
1:1:266:A:OP1	16:M5:5:LYS:NZ	2.31	0.52
1:1:361:A:H5'	38:O7:35:SER:OG	2.10	0.52
1:1:534:U:O2	21:N0:146:LYS:HA	2.10	0.52
1:1:2144:A:C4	1:1:2281:A:N6	2.78	0.52
1:1:2204:C:O2'	1:1:2205:U:H5'	2.10	0.52
1:1:2330:C:H2'	1:1:2331:C:C6	2.45	0.52
1:1:2768:U:H2'	1:1:2769:A:C8	2.44	0.52
1:1:2948:C:O2'	5:L3:242:THR:HG22	2.08	0.52
80:4:201:PAR:H14	80:4:201:PAR:O53	2.10	0.52
24:N3:26:ALA:HB2	24:N3:99:ALA:HB1	1.92	0.52
33:O2:97:ALA:HB3	33:O2:100:ILE:HD13	1.92	0.52
45:2:1010:C:H2'	45:2:1011:G:O4'	2.09	0.52
45:2:1067:C:OP1	47:S1:150:VAL:HG13	2.09	0.52
45:2:1754:A:H1'	76:E0:2:ALA:HA	1.91	0.52
57:C1:75:VAL:HG12	57:C1:119:VAL:HA	1.91	0.52
62:C6:130:GLY:C	62:C6:137:ARG:HH21	2.18	0.52
1:5:77:A:O2'	16:m5:176:LYS:NZ	2.36	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:635:G:OP2	83:5:4252:HOH:O	2.19	0.52
1:5:1493:G:OP2	1:5:1493:G:N2	2.40	0.52
80:5:3405:PAR:N64	80:5:3405:PAR:O44	2.43	0.52
6:14:205:PRO:HD2	6:14:225:VAL:HG22	1.91	0.52
6:14:261:VAL:HG22	6:14:262:TRP:CD1	2.45	0.52
10:18:162:LEU:HA	16:m5:7:LEU:HD11	1.92	0.52
19:m8:67:ILE:HG23	19:m8:81:VAL:HG21	1.91	0.52
50:s4:11:ARG:NH1	50:s4:21:ASP:OD2	2.43	0.52
63:c7:32:LYS:HG3	63:c7:47:ARG:HD3	1.91	0.52
1:1:533:A:O2'	1:1:535:G:H5'	2.10	0.52
1:1:846:A:H2'	1:1:847:A:O4'	2.10	0.52
1:1:915:A:C5	1:1:917:A:H1'	2.45	0.52
45:2:90:C:O2'	45:2:451:A:H5''	2.08	0.52
50:S4:86:PHE:CE2	50:S4:102:VAL:HA	2.45	0.52
50:S4:185:GLY:H	50:S4:189:LEU:HD13	1.75	0.52
58:C2:68:GLU:O	58:C2:70:ASN:N	2.43	0.52
62:C6:20:ALA:HB2	62:C6:84:ALA:HB1	1.91	0.52
65:C9:31:PRO:HB2	65:C9:33:TYR:HD1	1.75	0.52
70:D4:94:TYR:HB2	70:D4:96:LEU:HG	1.92	0.52
1:5:198:A:C6	1:5:219:A:C6	2.98	0.52
1:5:269:G:OP1	16:m5:44:ARG:NH1	2.40	0.52
1:5:2413:A:OP2	83:5:4250:HOH:O	2.19	0.52
1:5:2430:A:H2'	1:5:2431:C:C6	2.45	0.52
1:5:2510:U:O2'	1:5:2511:A:OP2	2.24	0.52
1:5:2618:G:O4'	30:n9:3:LYS:NZ	2.42	0.52
5:l3:21:ARG:HG2	5:l3:269:GLN:HG2	1.91	0.52
9:l7:80:GLN:HB2	22:n1:135:PRO:O	2.09	0.52
12:m0:4:ARG:NH2	12:m0:99:ILE:HG22	2.25	0.52
46:s0:198:MET:HG3	63:c7:85:VAL:HB	1.92	0.52
50:s4:9:LEU:HD12	50:s4:30:ARG:HA	1.92	0.52
55:s9:110:GLN:OE1	55:s9:126:ARG:HB2	2.09	0.52
59:c3:22:ALA:HB1	59:c3:23:PRO:HA	1.92	0.52
66:d0:20:ILE:O	66:d0:95:ALA:N	2.40	0.52
1:1:942:U:OP1	83:1:4349:HOH:O	2.19	0.52
1:1:1291:A:OP2	80:1:3407:PAR:N32	2.43	0.52
1:1:2138:A:O2'	38:O7:3:LYS:HG2	2.09	0.52
1:1:2877:G:H2'	1:1:2878:G:O4'	2.10	0.52
1:1:3170:A:O2'	1:1:3171:U:H5'	2.10	0.52
7:L5:85:ARG:HH12	7:L5:254:LYS:H	1.56	0.52
12:M0:60:LEU:HD23	12:M0:160:PRO:HD2	1.92	0.52
12:M0:68:ALA:HB2	12:M0:158:LYS:HB2	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M0:101:LYS:HD3	12:M0:104:SER:H	1.74	0.52
15:M4:37:GLU:HG2	15:M4:38:ILE:H	1.75	0.52
15:M4:94:TRP:CE2	15:M4:100:ALA:HB2	2.45	0.52
19:M8:30:VAL:O	19:M8:34:THR:HG23	2.10	0.52
19:M8:82:VAL:HG23	19:M8:139:ILE:HA	1.92	0.52
45:2:328:A:H2'	45:2:329:G:C8	2.45	0.52
45:2:532:U:P	55:S9:132:ARG:HH21	2.33	0.52
51:S5:57:SER:C	51:S5:59:VAL:H	2.18	0.52
55:S9:108:ARG:O	55:S9:111:THR:OG1	2.25	0.52
77:SR:10:ARG:HB3	77:SR:312:VAL:HG23	1.92	0.52
77:SR:61:PHE:HB3	77:SR:92:TRP:CE3	2.45	0.52
1:5:822:G:O4'	4:l2:15:ILE:HG23	2.09	0.52
1:5:2767:U:H2'	1:5:2768:U:C6	2.45	0.52
4:l2:171:GLY:O	44:q3:68:ALA:HB2	2.10	0.52
5:l3:188:ILE:HD12	5:l3:189:SER:H	1.75	0.52
11:l9:162:GLN:HG2	11:l9:179:ILE:O	2.10	0.52
13:m1:143:ARG:HG2	13:m1:144:CYS:SG	2.50	0.52
35:o4:79:SER:HB3	35:o4:80:ARG:HE	1.73	0.52
45:6:540:G:H4'	45:6:541:A:OP1	2.09	0.52
46:s0:146:LEU:HD23	46:s0:160:ILE:HB	1.91	0.52
47:s1:32:ILE:HG23	47:s1:96:LEU:HD11	1.92	0.52
47:s1:113:MET:HE2	47:s1:142:PHE:HE2	1.74	0.52
50:s4:253:ASP:O	50:s4:257:ALA:N	2.42	0.52
58:c2:86:VAL:N	58:c2:87:PRO:HD3	2.25	0.52
68:d2:73:GLY:HA3	68:d2:128:PHE:CZ	2.44	0.52
77:sR:167:VAL:HG23	77:sR:183:LEU:HB2	1.92	0.52
1:1:658:G:N2	6:L4:93:MET:HB2	2.24	0.51
1:1:1393:A:OP2	83:1:4347:HOH:O	2.19	0.51
1:1:1555:U:H3'	1:1:1556:C:H5''	1.91	0.51
1:1:1580:A:H5''	1:1:2522:G:N1	2.25	0.51
1:1:3060:C:H1'	1:1:3332:U:H1'	1.92	0.51
5:L3:221:THR:HB	5:L3:273:HIS:H	1.74	0.51
41:Q0:96:CYS:HA	41:Q0:121:LEU:HD23	1.92	0.51
45:2:327:U:O2'	57:C1:10:GLU:HG2	2.10	0.51
45:2:626:U:H2'	45:2:627:C:H6	1.75	0.51
45:2:1241:G:H1'	61:C5:79:HIS:CG	2.45	0.51
47:S1:68:VAL:HG13	47:S1:69:CYS:O	2.10	0.51
49:S3:22:ASN:O	49:S3:26:THR:OG1	2.17	0.51
52:S6:59:GLN:OE1	52:S6:72:ARG:NH1	2.40	0.51
61:C5:32:ASP:HA	61:C5:35:LYS:HD2	1.92	0.51
64:C8:25:ASN:ND2	71:D5:40:VAL:HG22	2.25	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
65:C9:111:ILE:HG23	65:C9:113:ILE:HG13	1.92	0.51
72:D6:96:ALA:C	72:D6:98:PRO:HD2	2.35	0.51
1:5:1818:U:H2'	1:5:1819:U:C6	2.45	0.51
1:5:2261:G:O2'	1:5:2263:C:N4	2.43	0.51
1:5:3228:C:H4'	1:5:3229:G:O5'	2.09	0.51
80:5:3413:PAR:N64	80:5:3413:PAR:O44	2.43	0.51
83:5:4245:HOH:O	38:o7:30:GLN:NE2	2.43	0.51
2:7:66:A:OP2	83:7:302:HOH:O	2.19	0.51
7:15:177:GLU:HB2	7:15:190:ILE:HD12	1.92	0.51
11:19:86:TYR:CE2	11:19:151:VAL:HG22	2.46	0.51
19:m8:96:PHE:HE1	19:m8:114:ILE:HA	1.74	0.51
26:n5:137:ASN:HB3	26:n5:142:ILE:HB	1.92	0.51
45:6:854:U:O4	45:6:855:A:N6	2.43	0.51
45:6:1275:A:H2	49:s3:180:GLY:HA3	1.76	0.51
55:s9:34:PHE:CZ	55:s9:105:LEU:HB3	2.45	0.51
63:c7:71:PHE:HE1	63:c7:73:LEU:HB3	1.75	0.51
64:c8:123:ARG:HG3	64:c8:133:VAL:HG13	1.93	0.51
1:1:207:U:H2'	1:1:208:C:H6	1.74	0.51
1:1:1640:G:C6	1:1:1641:U:C4	2.99	0.51
1:1:2534:G:N2	1:1:2535:A:N7	2.58	0.51
6:L4:261:VAL:HG22	6:L4:262:TRP:CD1	2.46	0.51
7:L5:108:ARG:CZ	7:L5:253:PHE:HB2	2.40	0.51
28:N7:76:ASN:OD1	28:N7:78:ASN:ND2	2.43	0.51
32:O1:14:ILE:HG12	32:O1:16:LEU:HD22	1.91	0.51
42:Q1:1:MET:HE3	45:2:1642:G:H4'	1.92	0.51
45:2:524:U:H2'	45:2:526:A:OP2	2.09	0.51
45:2:547:U:N3	45:2:548:G:N7	2.58	0.51
45:2:607:G:H5'	45:2:613:G:N2	2.26	0.51
45:2:860:U:O4'	53:S7:114:ARG:NH1	2.42	0.51
45:2:1103:U:O4	69:D3:2:GLY:N	2.43	0.51
45:2:1641:C:H2'	45:2:1642:G:C8	2.45	0.51
47:S1:61:LEU:H	47:S1:61:LEU:HD13	1.75	0.51
47:S1:82:ARG:HD2	47:S1:211:HIS:NE2	2.25	0.51
49:S3:99:VAL:HG13	49:S3:173:ARG:NH2	2.24	0.51
53:S7:97:ARG:HB3	53:S7:116:ARG:HG2	1.92	0.51
55:S9:90:LYS:HB3	55:S9:95:TYR:CG	2.45	0.51
57:C1:59:PRO:HA	57:C1:64:VAL:HG23	1.92	0.51
65:C9:74:GLY:HA2	65:C9:77:ASN:HD22	1.75	0.51
1:5:3163:A:C6	1:5:3164:C:N4	2.78	0.51
6:14:283:THR:OG1	6:14:289:ILE:HD11	2.10	0.51
13:m1:98:ALA:HA	13:m1:156:LYS:HB2	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:131:C:N4	45:6:202:A:OP2	2.43	0.51
45:6:1280:C:O2'	66:d0:70:THR:HG23	2.10	0.51
45:6:1601:G:OP1	65:c9:86:ARG:NH2	2.40	0.51
49:s3:166:ASP:O	49:s3:190:ARG:NH2	2.41	0.51
79:s6:6:SER:HB3	79:s6:112:VAL:HG12	1.92	0.51
79:s6:49:VAL:HG21	79:s6:115:LYS:HE3	1.92	0.51
60:c4:57:PRO:HA	60:c4:97:GLY:HA2	1.92	0.51
68:d2:53:ILE:HD13	73:d7:24:LEU:HD21	1.92	0.51
75:d9:33:LYS:O	75:d9:36:LEU:HB2	2.09	0.51
1:1:827:A:H5''	35:O4:14:ASN:O	2.10	0.51
1:1:1316:C:OP1	17:M6:129:LEU:HD12	2.10	0.51
1:1:1493:G:O6	40:O9:2:ALA:N	2.43	0.51
1:1:2663:G:H5'	7:L5:152:ARG:HD3	1.91	0.51
1:1:2962:U:O4	4:L2:216:HIS:HE1	1.93	0.51
2:3:14:U:H5'	7:L5:24:ARG:HH11	1.73	0.51
21:N0:143:PHE:HA	21:N0:148:LEU:HD22	1.92	0.51
31:O0:30:THR:HB	31:O0:91:SER:HB2	1.92	0.51
45:2:225:A:H2'	45:2:226:A:C8	2.45	0.51
45:2:642:G:H2'	45:2:643:G:C8	2.45	0.51
45:2:747:C:H4'	68:D2:80:ASN:HD21	1.74	0.51
45:2:1429:G:N2	66:D0:72:ASN:OD1	2.40	0.51
47:S1:91:VAL:HG13	47:S1:93:GLY:N	2.25	0.51
48:S2:111:VAL:O	48:S2:136:VAL:HA	2.10	0.51
51:S5:32:GLU:CD	51:S5:32:GLU:H	2.19	0.51
52:S6:61:PHE:CE1	52:S6:96:SER:HB2	2.45	0.51
61:C5:30:THR:HG23	61:C5:86:VAL:HG21	1.93	0.51
61:C5:45:PHE:O	61:C5:49:MET:HG3	2.11	0.51
67:D1:33:GLN:NE2	67:D1:53:TYR:O	2.43	0.51
1:5:743:C:O2	19:m8:141:ARG:HD3	2.10	0.51
1:5:908:G:H4'	1:5:909:G:O5'	2.11	0.51
1:5:1555:U:H3'	1:5:1556:C:H5'	1.91	0.51
1:5:2279:A:O4'	83:5:4248:HOH:O	2.19	0.51
1:5:2535:A:H3'	1:5:2536:A:H5''	1.91	0.51
1:5:3068:U:OP2	20:m9:62:ARG:NH2	2.30	0.51
1:5:3393:U:H2'	1:5:3394:U:C6	2.45	0.51
6:l4:295:ILE:HD11	19:m8:129:VAL:HA	1.92	0.51
8:l6:42:LEU:HD22	8:l6:79:VAL:HG21	1.92	0.51
25:n4:121:ALA:O	25:n4:125:ALA:N	2.43	0.51
40:o9:26:TRP:HZ3	40:o9:30:ARG:HD3	1.75	0.51
42:q1:7:LYS:HE2	42:q1:11:ARG:NH2	2.26	0.51
45:6:757:A:H2'	45:6:758:U:H5'	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:s3:170:THR:HG22	49:s3:187:LYS:HA	1.93	0.51
1:1:728:G:H5''	19:M8:43:PRO:HB2	1.92	0.51
1:1:2407:C:H2'	1:1:2408:U:H6	1.76	0.51
1:1:2749:G:O2'	7:L5:35:ARG:HG2	2.10	0.51
1:1:3028:G:H2'	1:1:3029:A:O4'	2.10	0.51
1:1:3089:C:H2'	1:1:3090:U:O4'	2.10	0.51
80:1:3433:PAR:N24	80:1:3433:PAR:H33	2.25	0.51
3:4:108:C:H2'	3:4:109:A:O4'	2.11	0.51
5:L3:139:GLN:C	5:L3:141:GLY:H	2.18	0.51
22:N1:118:GLU:O	22:N1:122:GLN:HB2	2.11	0.51
32:O1:11:GLU:O	32:O1:72:ARG:NH2	2.44	0.51
38:O7:5:THR:HA	38:O7:8:PHE:CD2	2.44	0.51
41:Q0:88:LYS:HA	41:Q0:92:ASP:HB2	1.91	0.51
43:Q2:14:GLY:C	43:Q2:16:THR:H	2.18	0.51
45:2:1066:C:H2'	45:2:1067:C:H6	1.74	0.51
45:2:1740:A:H2'	45:2:1741:U:H6	1.76	0.51
45:2:1798:U:O4	72:D6:83:ILE:HG13	2.10	0.51
52:S6:30:LYS:O	52:S6:102:VAL:HG23	2.10	0.51
52:S6:57:ASP:HB3	52:S6:106:LEU:HD23	1.93	0.51
57:C1:127:GLN:OE1	57:C1:128:CYS:N	2.43	0.51
61:C5:60:LEU:HD22	61:C5:76:VAL:HG21	1.91	0.51
62:C6:47:LYS:HA	62:C6:50:GLU:HG3	1.91	0.51
62:C6:78:VAL:O	62:C6:81:ILE:HG12	2.11	0.51
65:C9:73:VAL:O	65:C9:77:ASN:ND2	2.44	0.51
73:D7:48:SER:HB2	73:D7:49:HIS:CD2	2.45	0.51
1:5:440:A:O2'	1:5:441:U:O5'	2.27	0.51
1:5:728:G:H5''	19:m8:43:PRO:HB2	1.92	0.51
1:5:744:A:OP1	19:m8:66:ARG:NH2	2.44	0.51
1:5:3274:A:H2'	1:5:3275:U:H5	1.76	0.51
1:5:3330:A:H2'	1:5:3331:U:C6	2.46	0.51
3:8:84:C:H6	27:n6:113:LYS:N	2.08	0.51
7:l5:221:GLU:HA	7:l5:224:LYS:HE3	1.91	0.51
9:l7:180:SER:H	9:l7:183:ASP:HB2	1.76	0.51
22:n1:45:ASN:OD1	22:n1:47:SER:OG	2.26	0.51
34:o3:10:LYS:HB2	34:o3:33:GLU:HG3	1.91	0.51
45:6:1068:C:H2'	45:6:1069:A:C8	2.46	0.51
46:s0:90:ALA:HB1	46:s0:95:ALA:O	2.10	0.51
47:s1:29:TRP:CZ2	47:s1:47:LEU:HD23	2.44	0.51
66:d0:30:LYS:HD2	66:d0:111:GLY:HA3	1.91	0.51
77:sR:50:ASP:HB3	77:sR:53:LYS:O	2.11	0.51
1:1:542:G:H22	1:1:549:U:H3	1.57	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1723:A:OP2	20:M9:103:ARG:NH2	2.44	0.51
1:1:3087:A:OP1	83:1:4350:HOH:O	2.19	0.51
7:L5:82:GLU:OE2	7:L5:108:ARG:NH2	2.40	0.51
9:L7:83:LEU:HD23	9:L7:191:VAL:HG22	1.92	0.51
11:L9:178:GLY:HA3	11:L9:180:TYR:CZ	2.45	0.51
15:M4:131:VAL:HG22	17:M6:185:ALA:HB2	1.92	0.51
21:N0:90:MET:HE1	21:N0:114:HIS:CD2	2.46	0.51
37:O6:34:SER:OG	37:O6:35:ASN:N	2.41	0.51
45:2:1381:U:H1'	45:2:1516:A:H61	1.75	0.51
51:S5:62:VAL:HA	51:S5:89:ILE:HG21	1.91	0.51
52:S6:183:ARG:O	52:S6:187:LYS:N	2.43	0.51
55:S9:44:ARG:HG2	55:S9:48:GLN:HE21	1.76	0.51
58:C2:86:VAL:HG13	58:C2:86:VAL:O	2.11	0.51
69:D3:112:LYS:O	69:D3:121:ARG:HG2	2.10	0.51
1:5:230:U:H2'	1:5:231:G:O4'	2.10	0.51
1:5:1064:A:H5''	1:5:1066:G:O4'	2.10	0.51
1:5:2256:A:HO2'	1:5:2257:C:P	2.33	0.51
1:5:2404:A:O2'	1:5:2405:C:O5'	2.27	0.51
1:5:2898:G:O6	41:q0:125:LYS:NZ	2.43	0.51
3:8:7:U:OP1	80:o2:201:PAR:H12	2.11	0.51
14:m3:166:ALA:N	29:n8:135:GLU:OE1	2.44	0.51
22:n1:83:ARG:HH11	22:n1:85:LEU:HD21	1.76	0.51
28:n7:97:SER:N	28:n7:100:THR:OG1	2.40	0.51
45:6:859:A:C5	59:c3:73:ARG:HD3	2.45	0.51
45:6:1266:U:H2'	45:6:1267:G:C8	2.45	0.51
45:6:1564:U:OP1	65:c9:38:LYS:NZ	2.27	0.51
49:s3:57:ASP:OD2	49:s3:57:ASP:N	2.43	0.51
72:d6:10:ARG:HD2	72:d6:34:LYS:HA	1.91	0.51
1:1:119:U:C2	10:L8:138:HIS:CE1	2.98	0.51
5:L3:21:ARG:HG2	5:L3:269:GLN:HG2	1.93	0.51
7:L5:83:LEU:HD22	7:L5:88:ILE:HD12	1.92	0.51
7:L5:281:GLU:O	7:L5:285:ARG:HG3	2.11	0.51
23:N2:76:LEU:O	23:N2:80:THR:HG23	2.10	0.51
29:N8:126:LYS:HB3	29:N8:148:ILE:HG21	1.92	0.51
45:2:612:U:H3'	45:2:613:G:H2'	1.93	0.51
45:2:644:C:H2'	45:2:645:C:C6	2.45	0.51
45:2:1333:C:H5'	49:S3:162:GLN:HG2	1.92	0.51
49:S3:195:SER:OG	49:S3:197:THR:O	2.27	0.51
58:C2:91:VAL:HG11	58:C2:97:LEU:HD23	1.91	0.51
59:C3:62:GLN:HB2	59:C3:65:VAL:HB	1.92	0.51
66:D0:106:ILE:HG13	66:D0:107:THR:H	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:SR:127:ARG:HG2	77:SR:150:TRP:CG	2.46	0.51
1:5:327:A:OP1	14:m3:23:LYS:HE2	2.10	0.51
1:5:849:C:H2'	1:5:850:U:C6	2.45	0.51
1:5:1742:U:H2'	1:5:1743:G:C8	2.46	0.51
1:5:1764:U:H3'	1:5:1765:U:C4'	2.37	0.51
80:5:3420:PAR:H13	80:5:3420:PAR:H14	1.91	0.51
5:l3:346:THR:O	5:l3:351:LEU:HG	2.11	0.51
26:n5:110:VAL:HG22	26:n5:124:VAL:HG22	1.92	0.51
31:o0:95:ALA:HB2	31:o0:101:LEU:HD23	1.92	0.51
32:o1:28:ARG:HB3	32:o1:64:VAL:O	2.11	0.51
36:o5:85:THR:HG22	36:o5:88:LEU:H	1.75	0.51
45:6:532:U:H4'	70:d4:66:GLY:HA2	1.91	0.51
46:s0:89:PHE:CE2	46:s0:177:LEU:HB3	2.45	0.51
49:s3:140:GLY:HA3	49:s3:182:LEU:HD23	1.90	0.51
50:s4:35:PRO:HB3	50:s4:143:ASP:O	2.11	0.51
57:c1:17:PRO:HG3	57:c1:63:LEU:HD11	1.91	0.51
57:c1:81:HIS:NE2	57:c1:82:ARG:HD2	2.26	0.51
58:c2:132:GLU:HA	58:c2:135:MET:HB3	1.92	0.51
59:c3:55:ARG:HA	59:c3:60:VAL:O	2.11	0.51
67:d1:70:ASN:OD1	67:d1:70:ASN:N	2.43	0.51
74:d8:65:ARG:HD3	74:d8:67:ARG:HH21	1.73	0.51
77:sR:44:SER:O	77:sR:58:VAL:HG22	2.10	0.51
1:1:1083:G:H2'	1:1:1084:A:C8	2.46	0.51
1:1:1554:U:H4'	1:1:1555:U:OP1	2.10	0.51
1:1:3096:C:H2'	1:1:3097:C:C6	2.45	0.51
2:3:39:C:H4'	13:M1:44:THR:HG23	1.93	0.51
5:L3:12:GLY:HA3	5:L3:233:TRP:CZ3	2.45	0.51
5:L3:284:ARG:HB3	5:L3:323:MET:HB3	1.93	0.51
17:M6:18:ARG:O	17:M6:22:VAL:HG12	2.11	0.51
20:M9:70:LYS:HD3	20:M9:75:HIS:HB2	1.91	0.51
24:N3:33:ASN:C	24:N3:33:ASN:HD22	2.18	0.51
37:O6:40:VAL:O	37:O6:44:VAL:HG23	2.10	0.51
45:2:239:C:H3'	45:2:240:U:C5'	2.40	0.51
45:2:1563:C:OP1	65:C9:84:LYS:NZ	2.29	0.51
46:S0:110:TYR:HA	46:S0:115:PHE:CD2	2.46	0.51
48:S2:144:TRP:CE2	48:S2:173:PRO:HG3	2.46	0.51
62:C6:22:VAL:HA	62:C6:64:ASP:O	2.11	0.51
74:D8:32:PHE:CZ	74:D8:59:SER:HB2	2.46	0.51
77:SR:113:VAL:HG23	77:SR:124:SER:HB3	1.90	0.51
1:5:225:C:H2'	1:5:226:C:H6	1.75	0.51
1:5:406:G:H1'	3:8:16:G:N2	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2541:U:H4'	1:5:2542:U:OP1	2.11	0.51
4:12:3:ARG:HG2	4:12:4:VAL:H	1.75	0.51
16:m5:183:THR:HB	16:m5:187:ARG:HB2	1.93	0.51
45:6:1031:U:H4'	45:6:1032:G:OP2	2.10	0.51
45:6:1078:C:H2'	45:6:1079:U:C6	2.45	0.51
46:s0:121:VAL:HG23	46:s0:141:ILE:HG21	1.93	0.51
54:s8:69:SER:HA	57:c1:22:ASN:HD21	1.75	0.51
1:1:1040:A:O2'	12:M0:198:LYS:HE2	2.11	0.51
1:1:1433:A:N3	33:O2:27:ARG:NH1	2.59	0.51
1:1:2750:U:OP2	22:N1:69:LYS:NZ	2.33	0.51
1:1:2969:A:N7	4:L2:215:ASN:ND2	2.57	0.51
1:1:3252:G:H2'	1:1:3253:G:C8	2.46	0.51
80:1:3414:PAR:H241	80:1:3414:PAR:H33	1.76	0.51
11:L9:91:ARG:HD2	11:L9:143:GLU:HG3	1.93	0.51
17:M6:61:ALA:HA	17:M6:70:PRO:HD2	1.93	0.51
26:N5:103:TYR:HB3	26:N5:135:ILE:HD11	1.93	0.51
38:O7:53:ALA:HA	38:O7:56:ARG:HD2	1.91	0.51
45:2:140:A:H8	52:S6:179:VAL:HG21	1.74	0.51
45:2:291:G:H2'	45:2:292:U:C6	2.45	0.51
45:2:1073:G:H4'	59:C3:10:GLY:HA2	1.93	0.51
51:S5:62:VAL:HG13	51:S5:89:ILE:HG21	1.93	0.51
57:C1:71:LEU:HD22	57:C1:88:ARG:NH1	2.25	0.51
61:C5:18:ARG:O	61:C5:20:VAL:HG23	2.10	0.51
1:5:209:A:H4'	1:5:211:A:C8	2.46	0.51
1:5:1333:C:O2'	9:l7:207:LEU:O	2.25	0.51
1:5:1935:G:H2'	1:5:1936:A:H8	1.76	0.51
1:5:2800:G:O6	29:n8:42:ARG:NH2	2.44	0.51
2:7:66:A:OP2	83:7:303:HOH:O	2.20	0.51
9:l7:131:GLU:O	9:l7:229:PHE:HD2	1.94	0.51
45:6:455:C:H3'	45:6:456:A:C8	2.45	0.51
45:6:829:A:H4'	45:6:829:A:OP1	2.11	0.51
64:c8:76:PRO:HG2	64:c8:86:LEU:HD21	1.92	0.51
72:d6:60:PRO:O	72:d6:62:TYR:N	2.43	0.51
1:1:47:C:H5''	14:M3:16:LYS:HG2	1.93	0.51
1:1:76:G:OP1	14:M3:70:ARG:NH1	2.44	0.51
1:1:86:G:O2'	1:1:98:G:O6	2.29	0.51
1:1:899:U:H5	80:1:3435:PAR:C53	2.23	0.51
1:1:1419:A:H5''	6:L4:193:LYS:NZ	2.26	0.51
1:1:1444:G:H1	1:1:2359:C:H42	1.58	0.51
1:1:2334:U:H5''	80:1:3432:PAR:H611	1.93	0.51
1:1:3218:A:H4'	1:1:3219:G:O5'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:M5:120:TRP:HZ2	16:M5:123:GLN:HG2	1.76	0.51
18:M7:64:ASN:O	18:M7:67:ILE:HB	2.10	0.51
37:O6:89:GLU:O	37:O6:93:ILE:HG12	2.11	0.51
45:2:745:U:H2'	45:2:746:A:C8	2.45	0.51
45:2:863:A:O5'	68:D2:57:ARG:HG2	2.10	0.51
45:2:925:G:H2'	45:2:926:A:H8	1.75	0.51
45:2:1175:U:H2'	45:2:1176:G:H8	1.76	0.51
45:2:1244:A:O2'	45:2:1245:G:OP1	2.29	0.51
45:2:1290:U:H2'	45:2:1291:G:C8	2.46	0.51
53:S7:41:LEU:HB3	53:S7:70:PHE:CE1	2.44	0.51
77:SR:64:HIS:CE1	77:SR:84:SER:HB3	2.46	0.51
77:SR:152:SER:H	77:SR:173:GLY:HA2	1.76	0.51
1:5:1108:U:H2'	1:5:1109:U:C6	2.46	0.51
1:5:1679:A:OP1	23:n2:94:ARG:NH1	2.43	0.51
1:5:3259:U:H5''	1:5:3261:C:H5	1.76	0.51
22:n1:51:GLY:HA3	22:n1:92:ARG:HG3	1.92	0.51
35:o4:8:ARG:HH21	35:o4:31:ARG:HD3	1.76	0.51
39:o8:40:GLN:HG3	39:o8:57:ASN:HA	1.93	0.51
45:6:767:U:C6	55:s9:141:VAL:HA	2.39	0.51
45:6:856:A:C5	53:s7:96:ARG:HB3	2.46	0.51
45:6:1400:A:O4'	63:c7:67:ARG:NH2	2.44	0.51
47:s1:48:VAL:HG21	47:s1:61:LEU:HD22	1.93	0.51
54:s8:5:ARG:NH1	54:s8:29:LEU:O	2.44	0.51
55:s9:34:PHE:CE1	55:s9:105:LEU:HB3	2.46	0.51
60:c4:79:VAL:HB	60:c4:110:LEU:HD12	1.93	0.51
61:c5:95:GLY:HA2	61:c5:103:ASN:O	2.10	0.51
62:c6:97:VAL:HG22	62:c6:98:ASP:N	2.26	0.51
67:d1:20:THR:HB	67:d1:22:ARG:HD3	1.93	0.51
76:e0:46:ASN:OD1	76:e0:48:THR:HG23	2.10	0.51
76:e0:46:ASN:O	76:e0:47:VAL:HG12	2.11	0.51
1:1:787:G:H2'	1:1:788:C:C6	2.46	0.51
1:1:2120:A:N1	80:1:3432:PAR:H44	2.26	0.51
1:1:2404:A:N7	1:1:2872:A:N6	2.59	0.51
1:1:2998:U:H4'	1:1:3394:U:O2'	2.11	0.51
1:1:3231:U:H3	1:1:3256:G:H1	1.58	0.51
9:L7:20:GLN:HG3	9:L7:21:LYS:N	2.25	0.51
18:M7:29:THR:HG22	18:M7:87:SER:CB	2.40	0.51
47:S1:66:VAL:HG22	47:S1:67:GLU:H	1.75	0.51
48:S2:35:TRP:NE1	48:S2:37:PRO:HB3	2.26	0.51
48:S2:53:ILE:HG23	48:S2:56:ILE:HD12	1.92	0.51
56:C0:16:PHE:CD2	56:C0:76:LEU:HB3	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:C4:117:ASP:OD1	60:C4:119:THR:HG23	2.11	0.51
68:D2:50:PHE:HB3	68:D2:63:VAL:HG13	1.93	0.51
77:SR:16:HIS:HD1	77:SR:20:VAL:HG22	1.75	0.51
78:SM:68:ARG:O	78:SM:72:ARG:N	2.44	0.51
1:5:22:G:OP2	83:5:4254:HOH:O	2.20	0.51
1:5:1614:C:H2'	1:5:1615:C:H6	1.76	0.51
1:5:1704:A:N1	1:5:1740:U:C5	2.79	0.51
12:m0:111:LEU:HB2	12:m0:112:GLN:NE2	2.26	0.51
17:m6:85:ARG:HD3	17:m6:90:HIS:CG	2.46	0.51
45:6:926:A:H1'	45:6:988:A:C2	2.45	0.51
45:6:1553:G:O2'	75:d9:14:TYR:OH	2.27	0.51
46:s0:118:PRO:HG2	46:s0:141:ILE:HD13	1.93	0.51
49:s3:136:VAL:HG22	49:s3:186:VAL:HG22	1.92	0.51
79:s6:67:VAL:HG23	79:s6:68:LEU:O	2.11	0.51
60:c4:103:ARG:HH22	72:d6:48:ALA:HB3	1.76	0.51
77:sR:38:ARG:HA	77:sR:67:ILE:HG23	1.93	0.51
1:1:256:G:H4'	36:O5:111:PHE:HZ	1.75	0.50
1:1:908:G:H4'	1:1:909:G:O5'	2.12	0.50
1:1:999:G:C6	1:1:1000:C:N4	2.79	0.50
1:1:1506:A:H1'	1:1:1848:G:O6	2.11	0.50
1:1:1917:C:P	20:M9:85:ARG:HH22	2.34	0.50
1:1:3163:A:N1	1:1:3164:C:N4	2.59	0.50
80:3:203:PAR:H33	80:3:203:PAR:N24	2.25	0.50
5:L3:41:VAL:CA	5:L3:185:GLY:HA3	2.33	0.50
32:O1:17:HIS:CG	32:O1:69:TYR:HD1	2.28	0.50
34:O3:16:TYR:CD1	34:O3:25:PRO:HA	2.46	0.50
45:2:532:U:H2'	45:2:533:U:O4'	2.12	0.50
45:2:652:G:N2	45:2:683:C:O2	2.44	0.50
45:2:687:G:OP1	68:D2:118:ARG:NH1	2.44	0.50
45:2:1150:G:H22	80:2:1901:PAR:H23	1.76	0.50
45:2:1196:A:H4'	45:2:1197:C:O5'	2.09	0.50
54:S8:22:ARG:HD2	54:S8:25:ARG:NH1	2.25	0.50
54:S8:110:ARG:HH11	54:S8:121:LEU:HB2	1.77	0.50
58:C2:30:VAL:HA	58:C2:33:ARG:HB2	1.93	0.50
63:C7:3:ARG:O	63:C7:5:ARG:NH1	2.32	0.50
64:C8:80:LYS:NZ	65:C9:32:GLY:O	2.44	0.50
64:C8:145:ARG:O	78:SM:68:ARG:NH2	2.44	0.50
68:D2:50:PHE:HB2	68:D2:63:VAL:HG22	1.93	0.50
1:5:109:A:H4'	1:5:110:G:OP1	2.10	0.50
80:5:3424:PAR:HN22	6:l4:108:LYS:HZ3	1.58	0.50
6:l4:299:ILE:CG2	19:m8:39:ARG:HE	2.23	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:l9:83:THR:OG1	11:l9:84:LYS:N	2.44	0.50
13:m1:7:ASN:CB	13:m1:10:ARG:HE	2.23	0.50
17:m6:59:ARG:HB3	17:m6:59:ARG:NH1	2.27	0.50
36:o5:24:LEU:HD22	36:o5:47:VAL:HG23	1.93	0.50
37:o6:25:LYS:HB2	37:o6:28:TYR:HD2	1.75	0.50
45:6:324:U:OP1	57:c1:133:LYS:NZ	2.44	0.50
45:6:1041:G:H2'	45:6:1042:G:C8	2.46	0.50
45:6:1508:U:H2'	45:6:1509:C:C6	2.46	0.50
45:6:1791:A:OP2	45:6:1791:A:H8	1.94	0.50
48:s2:111:VAL:CG2	48:s2:191:ALA:HA	2.41	0.50
64:c8:65:GLU:HG2	64:c8:68:ARG:NH2	2.26	0.50
72:d6:9:GLY:HA3	72:d6:34:LYS:HE3	1.93	0.50
1:l1:15:C:OP1	83:l1:4345:HOH:O	2.19	0.50
1:l1:2948:C:H2'	1:l1:2949:U:C6	2.46	0.50
2:3:42:A:OP2	83:3:302:HOH:O	2.19	0.50
5:L3:111:SER:HB3	5:L3:114:VAL:HG23	1.93	0.50
6:L4:12:THR:HA	6:L4:171:ALA:HB1	1.93	0.50
7:L5:40:HIS:HD2	7:L5:42:ALA:N	2.04	0.50
9:L7:20:GLN:CG	9:L7:21:LYS:H	2.21	0.50
10:L8:78:PHE:C	10:L8:80:TYR:H	2.19	0.50
10:L8:136:LEU:HD22	16:M5:3:ALA:HB2	1.93	0.50
10:L8:227:ASP:OD2	10:L8:227:ASP:N	2.42	0.50
10:L8:238:LEU:HB3	10:L8:243:GLN:HG2	1.91	0.50
11:L9:74:LEU:O	11:L9:78:MET:HG3	2.12	0.50
16:M5:199:LEU:HD13	16:M5:203:ARG:NH1	2.25	0.50
27:N6:102:SER:OG	27:N6:103:LYS:NZ	2.37	0.50
45:2:480:G:H1	45:2:508:U:H3	1.58	0.50
45:2:766:U:H5''	45:2:768:C:OP2	2.11	0.50
45:2:1341:A:H4'	77:SR:90:ARG:NH2	2.26	0.50
46:S0:119:ARG:HB3	46:S0:119:ARG:HH11	1.76	0.50
62:C6:136:SER:C	62:C6:137:ARG:HD2	2.36	0.50
1:5:1382:G:P	6:l4:188:ARG:HH22	2.33	0.50
1:5:1654:A:H2'	1:5:1655:G:H5''	1.93	0.50
1:5:3101:G:O6	80:5:3406:PAR:O31	2.19	0.50
80:5:3413:PAR:HN21	80:5:3413:PAR:C23	2.25	0.50
12:m0:174:THR:HB	12:m0:196:PHE:HE2	1.76	0.50
24:n3:120:LYS:H	24:n3:137:VAL:CG2	2.24	0.50
28:n7:83:THR:HG22	28:n7:85:TYR:H	1.76	0.50
35:o4:80:ARG:HG3	35:o4:88:ARG:HH21	1.77	0.50
45:6:143:G:N2	45:6:144:U:O2	2.44	0.50
45:6:882:U:H2'	45:6:883:C:C6	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1647:U:H2'	45:6:1648:A:C8	2.46	0.50
46:s0:57:LEU:HD21	46:s0:173:ILE:HG23	1.93	0.50
48:s2:218:ILE:C	48:s2:220:ASN:H	2.19	0.50
49:s3:72:LEU:HD23	56:c0:20:VAL:HG13	1.92	0.50
55:s9:180:LYS:HA	55:s9:183:ALA:HB3	1.92	0.50
64:c8:91:ASP:OD1	64:c8:92:ILE:HG22	2.11	0.50
65:c9:14:PHE:HZ	65:c9:132:LEU:HD13	1.75	0.50
77:sR:79:TYR:CD1	77:sR:93:ASP:HA	2.46	0.50
77:sR:123:ILE:HD12	77:sR:154:VAL:HB	1.94	0.50
1:1:284:A:H4'	1:1:285:A:C2	2.46	0.50
1:1:1831:U:P	26:N5:92:LYS:HG3	2.50	0.50
1:1:2197:C:O2	83:1:4340:HOH:O	2.17	0.50
1:1:2339:C:OP2	24:N3:48:ARG:HG3	2.11	0.50
1:1:2363:A:C6	1:1:2364:G:C6	2.99	0.50
1:1:2542:U:H1'	1:1:2543:U:H5'	1.94	0.50
1:1:2694:A:H5'	1:1:2695:A:OP2	2.10	0.50
3:4:26:U:H2'	3:4:27:U:C6	2.46	0.50
5:L3:115:LYS:HA	5:L3:118:PHE:CD1	2.43	0.50
10:L8:101:THR:HG22	10:L8:104:GLU:HB2	1.93	0.50
14:M3:109:PHE:O	14:M3:113:VAL:HG23	2.10	0.50
14:M3:184:GLU:O	14:M3:188:ARG:HG3	2.11	0.50
33:O2:40:SER:O	33:O2:44:ARG:HG3	2.12	0.50
39:O8:14:LEU:O	39:O8:20:VAL:HG11	2.12	0.50
39:O8:41:THR:HG21	39:O8:62:ALA:CB	2.41	0.50
45:2:1663:G:H5''	80:2:1902:PAR:H43	1.93	0.50
45:2:1796:C:H1'	72:D6:7:SER:HB3	1.94	0.50
46:S0:105:GLY:N	46:S0:135:GLU:OE2	2.44	0.50
53:S7:125:ILE:O	53:S7:129:LEU:N	2.44	0.50
59:C3:84:ILE:HD13	59:C3:89:TYR:HB2	1.92	0.50
60:C4:129:LYS:O	72:D6:27:SER:OG	2.23	0.50
66:D0:18:GLN:O	66:D0:96:PRO:HA	2.12	0.50
74:D8:12:VAL:HG13	74:D8:28:VAL:HG13	1.94	0.50
78:SM:102:THR:HG23	78:SM:105:LYS:HB2	1.94	0.50
1:5:254:A:H4'	36:o5:106:LYS:HE2	1.93	0.50
1:5:1048:A:H2'	12:m0:22:TYR:CZ	2.46	0.50
1:5:1864:A:OP1	20:m9:83:GLY:N	2.44	0.50
1:5:2197:C:H4'	1:5:2198:A:C8	2.46	0.50
1:5:2535:A:H8	1:5:2535:A:OP2	1.94	0.50
1:5:3365:U:H2'	1:5:3366:G:C8	2.45	0.50
28:n7:110:ALA:O	28:n7:114:VAL:HG23	2.11	0.50
33:o2:105:ARG:NH1	33:o2:125:ARG:HD2	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:570:A:H5''	45:6:571:G:OP2	2.11	0.50
45:6:686:C:H2'	45:6:687:G:C8	2.40	0.50
45:6:835:U:H2'	45:6:836:U:C6	2.46	0.50
45:6:1586:A:H2'	45:6:1587:A:O4'	2.12	0.50
47:s1:103:MET:O	47:s1:214:LYS:HA	2.11	0.50
51:s5:23:VAL:HG22	51:s5:24:VAL:H	1.77	0.50
51:s5:72:HIS:ND1	62:c6:79:TYR:OH	2.40	0.50
66:d0:58:LEU:HD22	66:d0:88:LYS:HD2	1.93	0.50
70:d4:49:LYS:H	70:d4:49:LYS:NZ	2.06	0.50
1:1:1631:C:H5''	1:1:1632:A:H5''	1.92	0.50
1:1:1793:C:OP2	44:Q3:49:ARG:NH2	2.40	0.50
1:1:2510:U:O2'	1:1:2511:A:H5''	2.12	0.50
1:1:3162:C:H2'	1:1:3163:A:H8	1.76	0.50
1:1:3325:G:H5'	32:O1:104:LEU:O	2.12	0.50
5:L3:212:ASN:ND2	5:L3:353:GLU:HA	2.26	0.50
8:L6:31:ARG:NH2	8:L6:81:ALA:O	2.40	0.50
24:N3:87:ARG:HH22	24:N3:137:VAL:CG2	2.24	0.50
45:2:477:A:OP1	76:E0:31:LYS:HG2	2.12	0.50
45:2:600:U:H1'	69:D3:47:SER:HB3	1.93	0.50
45:2:872:G:H2'	45:2:873:U:O4'	2.12	0.50
48:S2:153:SER:OG	48:S2:171:PRO:HA	2.11	0.50
58:C2:70:ASN:O	58:C2:74:LEU:HG	2.11	0.50
65:C9:52:GLY:C	65:C9:54:PHE:H	2.19	0.50
67:D1:82:VAL:HG23	67:D1:83:TRP:H	1.77	0.50
77:SR:87:LYS:HA	77:SR:110:VAL:HG23	1.93	0.50
1:5:1665:C:OP1	80:5:3403:PAR:H642	2.12	0.50
1:5:1748:G:H3'	1:5:1749:A:H2'	1.92	0.50
1:5:1918:C:O2	1:5:1934:G:N2	2.32	0.50
6:l4:266:THR:OG1	6:l4:267:VAL:N	2.45	0.50
12:m0:14:ASN:O	12:m0:128:ARG:NH2	2.39	0.50
19:m8:148:GLU:OE1	19:m8:151:ARG:NH2	2.34	0.50
23:n2:43:VAL:HG21	23:n2:50:LEU:HB3	1.93	0.50
27:n6:58:VAL:HA	27:n6:104:LEU:HD23	1.93	0.50
31:o0:17:VAL:HG21	31:o0:100:ILE:HD13	1.92	0.50
45:6:91:G:H2'	45:6:92:A:O4'	2.12	0.50
45:6:969:C:H4'	45:6:1104:U:O2'	2.11	0.50
51:s5:73:THR:OG1	51:s5:91:GLU:OE1	2.24	0.50
53:s7:29:ASN:HA	53:s7:35:LYS:HE2	1.94	0.50
54:s8:137:LYS:HA	54:s8:140:GLU:CD	2.37	0.50
64:c8:127:HIS:NE2	64:c8:133:VAL:HG21	2.27	0.50
66:d0:70:THR:HG21	66:d0:74:GLU:O	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:d4:50:ALA:CB	70:d4:54:ALA:HB3	2.41	0.50
77:sR:114:ASP:HB3	77:sR:156:VAL:HG23	1.92	0.50
1:1:20:A:C6	1:1:21:G:C6	2.99	0.50
1:1:873:C:H5''	1:1:874:U:O5'	2.12	0.50
1:1:1355:A:O2'	19:M8:31:LYS:HE2	2.12	0.50
1:1:2295:A:N3	1:1:2929:C:O2'	2.38	0.50
1:1:2943:G:N7	5:L3:2:SER:N	2.59	0.50
2:3:27:A:OP2	7:L5:57:ASN:HB2	2.11	0.50
4:L2:96:LEU:O	44:Q3:87:ARG:HD3	2.11	0.50
5:L3:293:ASN:CB	5:L3:304:THR:HA	2.41	0.50
6:L4:291:ASN:O	6:L4:296:GLN:HG2	2.11	0.50
6:L4:293:SER:OG	6:L4:294:GLU:OE1	2.27	0.50
17:M6:16:VAL:HG23	17:M6:80:PHE:HD1	1.77	0.50
34:O3:51:TYR:HD2	34:O3:67:MET:HE3	1.76	0.50
45:2:1078:C:O2'	45:2:1079:U:H5'	2.11	0.50
45:2:1142:A:H5''	72:D6:2:PRO:HB3	1.92	0.50
45:2:1218:G:P	56:C0:44:LYS:HZ1	2.34	0.50
45:2:1591:C:OP1	65:C9:92:LYS:HG3	2.12	0.50
47:S1:105:PHE:HB3	47:S1:110:LEU:HD11	1.94	0.50
47:S1:146:GLN:O	47:S1:149:GLN:HB2	2.10	0.50
48:S2:141:ARG:H	48:S2:141:ARG:HD2	1.77	0.50
51:S5:42:LEU:HD11	51:S5:45:LYS:HD3	1.94	0.50
54:S8:9:HIS:CD2	54:S8:10:LYS:H	2.30	0.50
54:S8:54:LYS:HD3	54:S8:175:GLN:CD	2.37	0.50
57:C1:87:ARG:HH21	57:C1:104:HIS:CE1	2.30	0.50
58:C2:68:GLU:C	58:C2:70:ASN:H	2.19	0.50
1:5:1054:A:H5''	1:5:2637:A:H61	1.77	0.50
1:5:1664:G:H2'	1:5:1665:C:C6	2.47	0.50
1:5:2546:C:H2'	1:5:2547:A:H8	1.77	0.50
1:5:3274:A:H2'	1:5:3275:U:C5	2.46	0.50
80:5:3408:PAR:H241	80:n3:201:PAR:H14	1.75	0.50
3:8:125:U:O2'	3:8:126:A:H5'	2.12	0.50
6:l4:16:THR:HG23	6:l4:18:ASN:H	1.77	0.50
8:l6:55:LEU:HB2	8:l6:64:LEU:HB3	1.92	0.50
14:m3:31:LYS:O	14:m3:35:ARG:HB2	2.11	0.50
14:m3:43:ALA:HB2	14:m3:51:LEU:HD21	1.93	0.50
17:m6:27:LEU:HD11	17:m6:102:LEU:HB2	1.93	0.50
21:n0:154:HIS:HA	21:n0:170:THR:HB	1.94	0.50
39:o8:12:LEU:HD21	39:o8:65:LEU:HD21	1.94	0.50
44:q3:85:ARG:HG2	44:q3:89:MET:HE2	1.92	0.50
45:6:327:U:H2'	45:6:328:A:C8	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:524:U:O2'	45:6:526:A:N7	2.31	0.50
46:s0:9:LEU:CD1	46:s0:14:ALA:HB2	2.40	0.50
51:s5:122:ASN:ND2	51:s5:127:GLN:O	2.45	0.50
57:c1:102:LYS:HE2	69:d3:13:ARG:HH12	1.77	0.50
65:c9:53:TRP:CD1	65:c9:53:TRP:H	2.27	0.50
67:d1:71:ARG:HG2	67:d1:83:TRP:CZ2	2.46	0.50
1:1:156:G:OP2	37:O6:25:LYS:HB3	2.11	0.50
1:1:501:A:H2'	1:1:502:U:C6	2.47	0.50
1:1:565:U:H2'	1:1:566:G:H8	1.76	0.50
1:1:620:U:H3'	1:1:621:A:O4'	2.11	0.50
1:1:872:U:H2'	1:1:873:C:C6	2.47	0.50
1:1:2400:G:H5''	1:1:2401:A:OP2	2.12	0.50
2:3:26:C:H2'	2:3:27:A:O4'	2.11	0.50
3:4:34:U:O2'	3:4:35:C:OP2	2.26	0.50
31:O0:41:LEU:HD23	31:O0:66:LYS:O	2.12	0.50
34:O3:15:SER:OG	34:O3:16:TYR:O	2.29	0.50
44:Q3:84:ARG:NE	44:Q3:87:ARG:HH22	2.09	0.50
45:2:17:C:H2'	45:2:18:C:C6	2.46	0.50
45:2:72:A:OP1	45:2:72:A:H4'	2.11	0.50
45:2:514:G:O2'	45:2:515:A:H5'	2.12	0.50
45:2:1314:U:O2'	45:2:1315:U:OP2	2.30	0.50
47:S1:137:ILE:HG22	47:S1:215:VAL:HB	1.94	0.50
54:S8:74:LYS:NZ	54:S8:112:TRP:HB2	2.26	0.50
60:C4:77:THR:HB	60:C4:111:ARG:HH12	1.76	0.50
66:D0:58:LEU:HD13	66:D0:88:LYS:HD2	1.92	0.50
73:D7:50:ALA:C	73:D7:52:THR:H	2.20	0.50
1:5:498:A:O2'	1:5:3273:A:N1	2.41	0.50
1:5:1547:G:H2'	1:5:1548:C:C6	2.47	0.50
1:5:1636:U:H3	1:5:1710:C:H4'	1.77	0.50
1:5:1656:A:OP2	35:o4:37:LYS:NZ	2.37	0.50
1:5:2557:A:H5'	28:n7:135:ARG:HH22	1.77	0.50
2:7:7:G:OP1	7:l5:33:ARG:NH1	2.45	0.50
3:8:82:U:H4'	3:8:83:C:OP2	2.11	0.50
13:m1:16:LYS:HB3	13:m1:72:ARG:HG2	1.94	0.50
19:m8:60:PRO:HG2	19:m8:142:GLY:C	2.37	0.50
45:6:159:U:O2'	79:s6:87:ARG:NH1	2.43	0.50
45:6:1514:U:C6	49:s3:5:ILE:HA	2.47	0.50
80:6:1906:PAR:O44	80:6:1906:PAR:N64	2.45	0.50
77:sR:61:PHE:HB3	77:sR:92:TRP:CZ3	2.46	0.50
77:sR:195:HIS:CD2	77:sR:195:HIS:H	2.27	0.50
1:1:149:U:H5'	16:M5:55:ALA:O	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2254:U:H2'	1:1:2261:G:N2	2.26	0.50
1:1:2419:A:H2'	1:1:2420:C:H6	1.76	0.50
1:1:2582:C:H2'	1:1:2583:C:C6	2.47	0.50
1:1:3233:C:H2'	1:1:3234:A:C8	2.47	0.50
5:L3:188:ILE:HD12	5:L3:189:SER:N	2.26	0.50
9:L7:140:SER:OG	9:L7:142:SER:N	2.45	0.50
12:M0:34:TYR:HB3	12:M0:89:VAL:HB	1.93	0.50
26:N5:63:ILE:HD11	26:N5:99:VAL:HG23	1.94	0.50
34:O3:35:VAL:HG13	34:O3:40:ASP:HB3	1.93	0.50
45:2:16:G:H2'	45:2:17:C:C6	2.46	0.50
45:2:153:G:H4'	52:S6:15:THR:HG21	1.93	0.50
45:2:289:U:H2'	45:2:290:G:O4'	2.11	0.50
45:2:853:G:H2'	45:2:854:U:C6	2.47	0.50
46:S0:175:TYR:OH	46:S0:197:ILE:O	2.22	0.50
61:C5:34:VAL:O	61:C5:42:ARG:HG2	2.12	0.50
67:D1:28:ASP:O	67:D1:30:ALA:N	2.44	0.50
1:5:156:G:OP2	37:o6:25:LYS:HB3	2.12	0.50
1:5:383:G:N2	1:5:386:A:OP2	2.28	0.50
1:5:960:U:H4'	1:5:963:G:N1	2.26	0.50
1:5:1470:U:H2'	1:5:1471:U:C6	2.46	0.50
1:5:2150:G:H4'	44:q3:22:LEU:HD21	1.94	0.50
1:5:3366:G:H2'	1:5:3367:C:C6	2.47	0.50
9:l7:127:LEU:O	9:l7:129:LEU:N	2.39	0.50
10:l8:97:TYR:OH	10:l8:204:ARG:N	2.45	0.50
16:m5:46:ASP:OD2	16:m5:46:ASP:N	2.43	0.50
17:m6:22:VAL:O	17:m6:26:GLN:HG2	2.11	0.50
25:n4:17:ARG:NH2	25:n4:32:GLN:HE22	2.09	0.50
35:o4:7:PHE:CD1	35:o4:20:ILE:HD11	2.46	0.50
45:6:434:G:H5'	69:d3:78:LYS:HB3	1.93	0.50
45:6:765:G:H1	55:s9:146:PHE:HZ	1.58	0.50
45:6:867:G:H1	45:6:961:U:H3	1.58	0.50
45:6:1299:G:O3'	48:s2:99:LYS:NZ	2.45	0.50
46:s0:49:ASN:HA	63:c7:109:LEU:HD21	1.92	0.50
49:s3:220:PRO:HG3	77:sR:221:MET:HE2	1.93	0.50
56:c0:44:LYS:CD	56:c0:47:GLN:HE21	2.24	0.50
59:c3:76:LYS:HA	59:c3:81:ALA:HB2	1.93	0.50
76:e0:55:ARG:HH22	76:e0:58:PRO:HA	1.77	0.50
1:1:610:G:C8	6:L4:312:VAL:HG21	2.47	0.50
1:1:818:C:N3	1:1:920:A:H5'	2.27	0.50
1:1:1844:C:O2	38:O7:9:GLY:HA2	2.12	0.50
1:1:2688:U:OP1	7:L5:12:TYR:OH	2.24	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2904:U:OP2	80:1:3430:PAR:H13	2.12	0.50
7:L5:205:SER:OG	7:L5:206:GLN:N	2.45	0.50
8:L6:47:PHE:O	8:L6:50:LYS:HB2	2.12	0.50
12:M0:142:ASP:OD2	12:M0:142:ASP:N	2.44	0.50
15:M4:38:ILE:HD11	21:N0:150:PHE:CE2	2.46	0.50
16:M5:135:VAL:HG13	16:M5:142:ILE:HG12	1.93	0.50
17:M6:124:LEU:HD23	17:M6:127:LEU:HD12	1.93	0.50
21:N0:12:ARG:HB3	21:N0:24:LEU:HD23	1.94	0.50
28:N7:103:GLN:HB3	28:N7:106:GLN:HG3	1.94	0.50
45:2:444:C:H42	45:2:460:A:H62	1.59	0.50
45:2:587:C:H2'	45:2:588:U:O4'	2.11	0.50
45:2:986:G:H2'	45:2:987:G:O4'	2.12	0.50
45:2:1196:A:H4'	45:2:1197:C:C5'	2.42	0.50
45:2:1794:A:H1'	72:D6:79:ILE:HD12	1.93	0.50
47:S1:66:VAL:O	47:S1:86:LEU:N	2.36	0.50
47:S1:164:ILE:HA	47:S1:167:VAL:HG12	1.94	0.50
48:S2:230:TRP:CE3	68:D2:68:ARG:HD3	2.46	0.50
64:C8:28:ILE:HA	64:C8:31:ALA:HB3	1.94	0.50
77:SR:82:SER:OG	77:SR:92:TRP:NE1	2.32	0.50
1:5:816:A:H5'	1:5:906:A:H61	1.76	0.50
1:5:1355:A:H4'	1:5:1356:U:O5'	2.11	0.50
1:5:1369:A:H5'	29:n8:21:ARG:HD2	1.92	0.50
1:5:1572:U:O2'	1:5:1573:G:O4'	2.23	0.50
1:5:1765:U:H5'	20:m9:43:LYS:HE2	1.93	0.50
1:5:2425:G:H2'	1:5:2426:U:O4'	2.11	0.50
1:5:2569:A:H4'	1:5:2570:U:H5'	1.94	0.50
3:8:43:A:H2'	3:8:44:A:C8	2.46	0.50
3:8:89:A:H8	3:8:89:A:O5'	1.95	0.50
3:8:157:U:H2'	3:8:158:U:H2'	1.94	0.50
5:l3:159:ARG:HG2	5:l3:182:GLN:HA	1.93	0.50
6:l4:98:ARG:HD2	6:l4:99:MET:O	2.12	0.50
6:l4:287:THR:HA	6:l4:290:ILE:HD12	1.94	0.50
7:l5:257:GLU:C	7:l5:258:LYS:HG2	2.37	0.50
9:l7:139:PRO:HA	9:l7:237:ASN:OD1	2.11	0.50
80:n3:201:PAR:H11	80:n3:201:PAR:N32	2.26	0.50
34:o3:42:GLN:HA	34:o3:45:LEU:HG	1.94	0.50
44:q3:57:CYS:SG	44:q3:60:CYS:N	2.79	0.50
45:6:562:G:H1	45:6:583:C:H42	1.60	0.50
46:s0:57:LEU:HD11	46:s0:173:ILE:HD12	1.94	0.50
64:c8:48:LYS:HD3	65:c9:35:ASP:HB2	1.93	0.50
77:sR:256:THR:N	77:sR:259:GLY:O	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3216:G:O6	1:1:3259:U:H2'	2.11	0.50
80:1:3427:PAR:H322	80:1:3427:PAR:H51	1.75	0.50
2:3:46:A:OP1	7:L5:158:ARG:HG2	2.12	0.50
4:L2:201:GLY:HA2	4:L2:204:MET:HG3	1.94	0.50
5:L3:113:GLU:OE1	5:L3:165:GLN:HA	2.12	0.50
16:M5:47:LYS:HE3	16:M5:51:LEU:HD11	1.94	0.50
24:N3:39:VAL:HG22	24:N3:52:ALA:HB2	1.93	0.50
28:N7:26:VAL:HG11	28:N7:96:VAL:HB	1.94	0.50
32:O1:50:ARG:HD3	32:O1:90:PHE:CD2	2.46	0.50
45:2:1344:A:H4'	45:2:1345:A:OP1	2.11	0.50
48:S2:147:ASN:HB3	67:D1:4:ASP:HA	1.94	0.50
50:S4:92:LEU:HD12	70:D4:17:LEU:HD21	1.94	0.50
60:C4:82:LYS:HB3	60:C4:118:VAL:HG13	1.93	0.50
66:D0:72:ASN:HD22	66:D0:73:GLY:N	2.01	0.50
77:SR:114:ASP:HB3	77:SR:123:ILE:HD11	1.94	0.50
77:SR:164:ASP:OD2	77:SR:164:ASP:N	2.45	0.50
77:SR:224:ASN:O	77:SR:228:LYS:N	2.45	0.50
1:5:120:G:N2	10:I8:123:GLN:O	2.45	0.50
1:5:1091:A:H2'	1:5:1092:C:C6	2.47	0.50
1:5:1307:G:H1'	1:5:1308:A:C8	2.46	0.50
1:5:1888:U:OP1	5:I3:247:ARG:HD3	2.11	0.50
1:5:2152:A:H2'	1:5:2153:U:H6	1.77	0.50
1:5:2794:G:O2'	1:5:2795:U:OP2	2.22	0.50
1:5:3122:A:N1	11:I9:70:THR:HG21	2.26	0.50
50:s4:191:ARG:HD3	50:s4:245:LYS:CB	2.37	0.50
1:1:373:A:N1	1:1:394:G:H4'	2.27	0.49
1:1:685:G:OP1	14:M3:35:ARG:HD2	2.12	0.49
1:1:1038:C:H4'	7:L5:5:LYS:HE2	1.94	0.49
1:1:1557:A:N7	1:1:1559:A:N6	2.59	0.49
5:L3:163:HIS:ND1	5:L3:164:THR:O	2.45	0.49
12:M0:47:PRO:HB3	12:M0:171:TRP:CH2	2.46	0.49
26:N5:115:ARG:HG3	26:N5:119:THR:OG1	2.12	0.49
38:O7:63:ARG:O	38:O7:68:LYS:HE2	2.11	0.49
45:2:1280:C:H2'	45:2:1281:G:H8	1.77	0.49
45:2:1542:G:N2	45:2:1568:C:H1'	2.27	0.49
58:C2:63:VAL:HG22	58:C2:92:ALA:O	2.12	0.49
67:D1:41:GLU:CD	67:D1:41:GLU:H	2.20	0.49
1:5:290:G:O3'	16:m5:69:GLY:HA2	2.11	0.49
1:5:1112:A:O2'	1:5:1370:G:O3'	2.30	0.49
1:5:1152:G:H1	1:5:1200:A:H61	1.60	0.49
1:5:2683:U:H2'	1:5:2684:C:C6	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2709:C:H2'	1:5:2710:C:C6	2.47	0.49
1:5:2736:A:O2'	22:n1:68:THR:HG21	2.11	0.49
2:7:64:A:H5'	2:7:65:G:H5''	1.94	0.49
4:l2:204:MET:HE2	4:l2:208:ASP:HB3	1.94	0.49
7:l5:237:GLU:O	7:l5:241:THR:OG1	2.30	0.49
15:m4:36:VAL:HG11	15:m4:55:ARG:NH2	2.27	0.49
16:m5:22:LEU:HB3	16:m5:26:ARG:HH12	1.76	0.49
27:n6:102:SER:OG	27:n6:103:LYS:NZ	2.45	0.49
28:n7:25:ILE:HG23	28:n7:41:ALA:HB1	1.94	0.49
37:o6:79:SER:HB3	37:o6:82:ARG:HB2	1.94	0.49
38:o7:28:HIS:CG	38:o7:31:LYS:HB2	2.46	0.49
45:6:97:C:H2'	45:6:98:U:H6	1.77	0.49
45:6:119:A:H2'	45:6:120:U:O4'	2.11	0.49
45:6:334:G:OP2	54:s8:54:LYS:NZ	2.30	0.49
45:6:1067:C:H5'	47:s1:149:GLN:HA	1.94	0.49
45:6:1098:U:P	48:s2:168:ARG:HE	2.35	0.49
45:6:1597:A:OP1	75:d9:19:ARG:NH2	2.35	0.49
47:s1:138:PHE:HE2	47:s1:216:LYS:HG3	1.77	0.49
67:d1:28:ASP:O	67:d1:30:ALA:N	2.45	0.49
1:l:73:C:C2	14:M3:59:ARG:HD3	2.47	0.49
1:l:656:A:H2'	1:l:657:A:C8	2.47	0.49
1:l:696:C:OP1	6:L4:272:VAL:HG23	2.11	0.49
1:l:1634:G:N7	28:N7:17:ARG:NH2	2.58	0.49
1:l:2185:G:O2'	1:l:2314:U:OP2	2.31	0.49
1:l:2407:C:H1'	1:l:2818:U:O2	2.12	0.49
1:l:2514:U:OP1	10:L8:68:ARG:HD2	2.11	0.49
1:l:2880:U:H1'	5:L3:250:ALA:CB	2.40	0.49
3:4:89:A:H5''	3:4:90:U:OP2	2.12	0.49
21:N0:93:GLU:OE1	21:N0:137:ARG:HB2	2.12	0.49
25:N4:23:ARG:HG2	25:N4:24:GLY:H	1.77	0.49
45:2:66:U:O2'	45:2:67:A:H5''	2.12	0.49
45:2:160:C:O2'	52:S6:95:LYS:NZ	2.44	0.49
45:2:926:A:H1'	45:2:988:A:C2	2.47	0.49
45:2:1064:G:H2'	45:2:1065:A:H8	1.77	0.49
45:2:1565:C:H2'	45:2:1566:U:C6	2.47	0.49
47:S1:32:ILE:HD11	47:S1:46:THR:HG23	1.94	0.49
50:S4:19:LEU:HD11	50:S4:108:ARG:HD2	1.94	0.49
57:C1:67:ARG:O	57:C1:127:GLN:HB3	2.12	0.49
58:C2:27:ALA:HB1	58:C2:132:GLU:HG2	1.94	0.49
1:5:621:A:H2'	1:5:622:A:H8	1.75	0.49
1:5:1091:A:H2'	1:5:1092:C:H6	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1766:G:H2'	1:5:1767:C:H5'	1.94	0.49
5:l3:56:ILE:O	5:l3:73:VAL:HA	2.12	0.49
6:l4:238:LEU:O	6:l4:246:ARG:HB2	2.12	0.49
10:l8:133:LYS:HD2	10:l8:138:HIS:CE1	2.47	0.49
13:m1:138:VAL:HG13	13:m1:141:ARG:HH21	1.77	0.49
15:m4:32:LEU:HD11	15:m4:94:TRP:CD1	2.47	0.49
16:m5:48:ALA:C	16:m5:53:TYR:HB3	2.37	0.49
26:n5:92:LYS:HA	26:n5:95:ILE:HD12	1.93	0.49
28:n7:4:PHE:H	28:n7:4:PHE:HD2	1.58	0.49
38:o7:14:LYS:HD3	40:o9:51:ILE:HD11	1.94	0.49
39:o8:24:THR:HB	39:o8:76:ASN:HB3	1.93	0.49
44:q3:42:CYS:HB3	44:q3:60:CYS:HB3	1.94	0.49
45:6:1089:U:O2'	45:6:1093:A:N1	2.35	0.49
46:s0:170:ILE:H	46:s0:170:ILE:HD12	1.76	0.49
48:s2:143:TYR:CE1	48:s2:151:PRO:HG3	2.47	0.49
54:s8:4:SER:OG	54:s8:6:ASP:OD2	2.25	0.49
1:1:1541:G:H2'	1:1:1542:G:O4'	2.12	0.49
5:L3:3:HIS:O	5:L3:5:LYS:N	2.45	0.49
7:L5:95:TRP:CD1	7:L5:158:ARG:HA	2.47	0.49
8:L6:51:ARG:NH1	15:M4:114:ASP:OD2	2.45	0.49
14:M3:37:ASN:HA	14:M3:40:ALA:HB3	1.95	0.49
16:M5:102:ALA:O	16:M5:106:VAL:HG12	2.12	0.49
45:2:123:G:P	50:S4:77:ARG:HH22	2.36	0.49
45:2:959:U:C6	59:C3:17:PRO:HG2	2.47	0.49
45:2:1172:G:H2'	45:2:1173:C:C6	2.47	0.49
45:2:1388:A:H5'	63:C7:48:ASN:ND2	2.26	0.49
45:2:1480:G:H1	45:2:1527:C:H42	1.59	0.49
50:S4:107:GLY:HA2	50:S4:189:LEU:HG	1.93	0.49
51:S5:222:LYS:HA	51:S5:225:ARG:NE	2.27	0.49
54:S8:70:GLU:OE2	54:S8:117:TYR:OH	2.16	0.49
55:S9:168:ARG:NH2	55:S9:171:ARG:HH22	2.10	0.49
60:C4:29:HIS:CG	60:C4:41:ARG:HG3	2.47	0.49
64:C8:24:GLY:HA2	64:C8:58:ALA:HB3	1.93	0.49
66:D0:60:THR:HG1	66:D0:87:HIS:CE1	2.30	0.49
69:D3:79:ASN:HB3	69:D3:81:LYS:H	1.77	0.49
1:5:160:G:H2'	1:5:161:G:O4'	2.12	0.49
1:5:256:G:H4'	36:o5:111:PHE:HZ	1.77	0.49
1:5:568:G:H2'	1:5:569:A:O4'	2.13	0.49
1:5:982:C:N4	1:5:1101:G:H1	2.10	0.49
1:5:1911:A:H2	1:5:2122:G:C8	2.31	0.49
12:m0:52:LEU:HG	12:m0:152:LEU:HB3	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:m3:50:PRO:O	14:m3:52:ASP:N	2.46	0.49
15:m4:55:ARG:NH2	15:m4:76:ALA:O	2.43	0.49
18:m7:113:TYR:CE1	18:m7:115:SER:HA	2.48	0.49
21:n0:132:THR:O	21:n0:134:ASP:N	2.42	0.49
50:s4:36:HIS:CG	50:s4:85:GLY:HA3	2.47	0.49
79:s6:3:LEU:HD23	79:s6:109:LEU:HB3	1.94	0.49
55:s9:78:ARG:C	55:s9:78:ARG:HH21	2.20	0.49
56:c0:32:HIS:HD2	56:c0:34:GLU:O	1.96	0.49
57:c1:6:THR:O	57:c1:7:VAL:HG22	2.11	0.49
62:c6:31:VAL:HA	62:c6:67:VAL:HB	1.94	0.49
69:d3:97:ASP:H	69:d3:100:ASP:CG	2.20	0.49
70:d4:25:VAL:HB	70:d4:60:PHE:HE1	1.76	0.49
75:d9:17:GLY:HA2	75:d9:27:HIS:CE1	2.47	0.49
1:1:590:G:OP2	83:1:4352:HOH:O	2.20	0.49
1:1:818:C:H2'	1:1:819:U:O4'	2.12	0.49
1:1:2102:U:H2'	1:1:2103:U:H6	1.76	0.49
1:1:3086:A:OP1	83:1:4351:HOH:O	2.20	0.49
2:3:97:A:H2'	2:3:98:C:C6	2.47	0.49
3:4:3:A:H2'	3:4:4:C:O4'	2.12	0.49
5:L3:194:TRP:CE2	5:L3:198:HIS:CE1	3.00	0.49
6:L4:203:ARG:HH21	6:L4:240:PRO:HB3	1.76	0.49
7:L5:285:ARG:HB3	7:L5:285:ARG:HH11	1.77	0.49
32:O1:5:LYS:HA	32:O1:89:LEU:HD22	1.94	0.49
39:O8:7:ASP:CG	39:O8:10:GLN:H	2.19	0.49
45:2:153:G:OP1	52:S6:15:THR:OG1	2.19	0.49
45:2:211:U:H5''	57:C1:20:PHE:CD1	2.47	0.49
45:2:1171:A:H2'	45:2:1172:G:C8	2.47	0.49
45:2:1202:A:H1'	45:2:1207:C:H42	1.77	0.49
45:2:1798:U:OP2	72:D6:38:ARG:NH1	2.34	0.49
55:S9:127:VAL:O	55:S9:131:GLN:HB2	2.12	0.49
70:D4:20:ARG:HB3	70:D4:76:TYR:CD2	2.47	0.49
77:SR:294:TRP:CD2	77:SR:301:LEU:HD13	2.47	0.49
1:5:1601:U:OP2	20:m9:42:ARG:NH2	2.43	0.49
1:5:1805:C:OP1	35:o4:71:THR:HG21	2.12	0.49
4:l2:5:ILE:HG21	4:l2:210:PRO:HD3	1.94	0.49
11:l9:90:MET:HG2	11:l9:181:VAL:HA	1.94	0.49
18:m7:28:ASN:O	18:m7:32:THR:HG23	2.13	0.49
19:m8:19:PRO:HD3	19:m8:53:PHE:HD1	1.77	0.49
28:n7:25:ILE:HG21	28:n7:28:PRO:HG3	1.94	0.49
38:o7:37:CYS:C	38:o7:45:ARG:HB2	2.38	0.49
45:6:745:U:H2'	45:6:746:A:H8	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:s0:9:LEU:HD23	46:s0:54:TRP:HB2	1.94	0.49
49:s3:192:PRO:HB2	49:s3:201:ALA:HA	1.93	0.49
1:1:565:U:H2'	1:1:566:G:C8	2.47	0.49
1:1:619:A:H4'	1:1:620:U:O4'	2.12	0.49
2:3:113:C:C4	2:3:114:U:C4	3.01	0.49
6:L4:138:ARG:HH21	6:L4:240:PRO:HB2	1.76	0.49
8:L6:36:PRO:HB3	8:L6:55:LEU:O	2.13	0.49
8:L6:154:LEU:HA	8:L6:157:GLN:OE1	2.12	0.49
14:M3:43:ALA:HB2	14:M3:51:LEU:HD21	1.94	0.49
14:M3:105:ASN:ND2	37:O6:17:VAL:HG11	2.28	0.49
17:M6:14:HIS:NE2	17:M6:124:LEU:HD13	2.26	0.49
22:N1:48:ILE:HG13	22:N1:94:GLU:HG2	1.93	0.49
29:N8:3:SER:O	29:N8:6:THR:HG22	2.13	0.49
45:2:271:A:N6	52:S6:182:GLN:OE1	2.45	0.49
45:2:1290:U:H3	45:2:1325:A:H61	1.59	0.49
45:2:1665:U:H1'	45:2:1737:G:N2	2.28	0.49
51:S5:202:ALA:O	51:S5:203:LYS:HD2	2.12	0.49
53:S7:58:LEU:HD12	53:S7:88:ARG:HG3	1.92	0.49
60:C4:84:ARG:HG2	60:C4:85:ALA:H	1.77	0.49
65:C9:34:VAL:C	65:C9:36:ILE:H	2.20	0.49
66:D0:63:LEU:O	66:D0:83:GLU:HA	2.12	0.49
70:D4:28:LEU:H	70:D4:28:LEU:HD12	1.77	0.49
1:5:567:G:H2'	1:5:568:G:C8	2.47	0.49
1:5:908:G:O3'	83:5:4246:HOH:O	2.18	0.49
1:5:3049:A:H5'	5:13:53:MET:HB2	1.93	0.49
5:13:116:ARG:HG2	5:13:175:LYS:HA	1.95	0.49
7:15:119:TYR:HE1	7:15:133:GLU:O	1.95	0.49
8:16:64:LEU:HD23	8:16:65:ILE:H	1.78	0.49
18:m7:67:ILE:HG22	18:m7:68:GLY:N	2.28	0.49
19:m8:86:THR:HG22	19:m8:105:ARG:HD2	1.94	0.49
20:m9:68:GLN:HA	20:m9:71:ARG:HG2	1.95	0.49
34:o3:16:TYR:CZ	34:o3:91:ALA:HB2	2.47	0.49
45:6:242:U:H2'	45:6:243:G:C8	2.47	0.49
45:6:765:G:O6	55:s9:149:ARG:NH1	2.46	0.49
45:6:955:A:H2'	45:6:956:C:O4'	2.12	0.49
45:6:1044:U:H2'	45:6:1045:C:C6	2.48	0.49
45:6:1437:U:H2'	45:6:1438:G:C8	2.47	0.49
45:6:1554:U:H3'	45:6:1555:A:C8	2.47	0.49
51:s5:91:GLU:OE2	51:s5:107:LYS:NZ	2.40	0.49
56:c0:21:VAL:HG11	56:c0:66:TYR:HD2	1.77	0.49
61:c5:33:PHE:O	61:c5:36:LEU:HD23	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:c8:4:VAL:HG21	71:d5:82:HIS:HB2	1.95	0.49
69:d3:131:SER:O	69:d3:135:LEU:HG	2.12	0.49
1:1:1596:C:O2'	1:1:1696:A:N3	2.44	0.49
1:1:2756:C:O4'	22:N1:49:GLN:HG2	2.13	0.49
4:L2:45:VAL:HB	4:L2:61:VAL:HG22	1.95	0.49
5:L3:123:TYR:CE2	5:L3:124:LYS:HE2	2.48	0.49
6:L4:33:ASP:O	6:L4:37:THR:HG23	2.13	0.49
6:L4:314:LYS:NZ	9:L7:150:LYS:O	2.45	0.49
8:L6:42:LEU:HD23	8:L6:84:VAL:HG23	1.95	0.49
20:M9:36:ASN:OD1	20:M9:37:SER:N	2.45	0.49
28:N7:36:HIS:CD2	28:N7:74:VAL:HG11	2.48	0.49
40:O9:3:ALA:H	40:O9:5:LYS:HZ3	1.58	0.49
45:2:54:C:OP1	70:D4:113:ASN:ND2	2.37	0.49
45:2:94:U:OP1	83:2:2214:HOH:O	2.20	0.49
45:2:176:C:H2'	45:2:177:U:H5'	1.94	0.49
45:2:340:U:H2'	45:2:341:A:H8	1.77	0.49
45:2:590:C:OP1	76:E0:43:ARG:NH1	2.42	0.49
45:2:1369:U:H4'	45:2:1370:U:OP2	2.12	0.49
46:S0:83:GLN:O	46:S0:86:VAL:HG22	2.13	0.49
47:S1:105:PHE:HZ	47:S1:211:HIS:CD2	2.30	0.49
58:C2:63:VAL:HG11	58:C2:66:VAL:HG13	1.95	0.49
59:C3:92:ILE:O	59:C3:96:VAL:HG23	2.12	0.49
1:5:77:A:OP2	14:m3:73:ARG:NE	2.45	0.49
1:5:807:A:H61	1:5:934:G:H22	1.60	0.49
1:5:2556:C:OP1	35:o4:88:ARG:NH1	2.46	0.49
39:o8:73:LEU:HG	39:o8:75:VAL:HG22	1.95	0.49
45:6:54:C:O2'	45:6:459:G:N7	2.34	0.49
45:6:407:A:H5'	79:s6:94:ARG:HH21	1.77	0.49
45:6:563:U:H4'	76:e0:17:GLN:OE1	2.12	0.49
45:6:1672:G:H2'	45:6:1673:G:C8	2.48	0.49
45:6:1785:U:H2'	45:6:1786:G:H8	1.77	0.49
49:s3:192:PRO:O	49:s3:195:SER:OG	2.18	0.49
51:s5:76:ARG:NH1	62:c6:120:ASP:HA	2.28	0.49
51:s5:118:LEU:HA	51:s5:121:ILE:HD12	1.94	0.49
51:s5:164:PRO:HA	51:s5:167:ARG:HG3	1.94	0.49
54:s8:60:ILE:HG21	54:s8:179:CYS:HB3	1.94	0.49
58:c2:28:LEU:HD21	58:c2:136:ILE:HG21	1.93	0.49
59:c3:55:ARG:HD3	73:d7:47:PHE:CD1	2.47	0.49
59:c3:94:LYS:HG2	59:c3:118:ILE:HD13	1.95	0.49
70:d4:127:LYS:O	70:d4:131:ARG:N	2.44	0.49
71:d5:73:GLY:HA2	71:d5:76:ALA:HB3	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:sR:224:ASN:HD21	77:sR:226:ALA:HB3	1.77	0.49
1:1:329:U:H4'	1:1:330:G:OP2	2.12	0.49
1:1:1146:C:H4'	1:1:1331:U:C4	2.48	0.49
1:1:1459:C:H42	1:1:1473:G:H1	1.61	0.49
1:1:1907:C:O2	5:L3:240:ARG:NH2	2.42	0.49
1:1:2900:A:N3	1:1:3025:C:O2'	2.37	0.49
1:1:3099:C:H2'	1:1:3100:U:C6	2.47	0.49
2:3:27:A:P	7:L5:57:ASN:H	2.35	0.49
12:M0:48:LEU:HD23	12:M0:178:ARG:HH12	1.78	0.49
29:N8:91:LEU:HD12	29:N8:121:VAL:HG21	1.93	0.49
33:O2:9:ILE:HG23	33:O2:63:THR:HB	1.94	0.49
45:2:1064:G:H2'	45:2:1065:A:C8	2.47	0.49
48:S2:227:PRO:HA	48:S2:230:TRP:CD1	2.47	0.49
50:S4:35:PRO:HD2	50:S4:83:PRO:HG2	1.94	0.49
51:S5:43:PHE:CZ	51:S5:90:ILE:HG21	2.47	0.49
69:D3:134:ALA:HB1	69:D3:140:LYS:HB2	1.95	0.49
70:D4:87:PRO:HB2	70:D4:89:TYR:CE2	2.48	0.49
77:SR:122:ILE:HB	77:SR:134:TRP:HB2	1.93	0.49
1:5:1054:A:H5''	1:5:2637:A:N6	2.28	0.49
1:5:1080:A:OP1	7:l5:140:ARG:NH2	2.46	0.49
1:5:1388:U:H2'	1:5:1389:G:C8	2.48	0.49
1:5:3269:U:H4'	1:5:3270:U:O5'	2.12	0.49
5:l3:239:PRO:O	5:l3:242:THR:HG23	2.12	0.49
7:l5:110:LEU:HD12	7:l5:171:LEU:HD23	1.94	0.49
19:m8:122:ILE:HG22	19:m8:126:GLN:HB2	1.93	0.49
19:m8:177:GLY:O	19:m8:186:VAL:N	2.22	0.49
33:o2:119:VAL:O	33:o2:122:PRO:HD3	2.12	0.49
35:o4:8:ARG:HB2	35:o4:34:HIS:CD2	2.48	0.49
45:6:955:A:OP1	59:c3:3:ARG:NH1	2.45	0.49
45:6:1172:G:H2'	45:6:1173:C:O4'	2.13	0.49
50:s4:18:TRP:CZ3	50:s4:29:PRO:HD2	2.48	0.49
68:d2:8:ALA:CB	68:d2:74:VAL:HG11	2.41	0.49
74:d8:32:PHE:C	74:d8:34:GLU:H	2.20	0.49
77:sR:177:MET:HB3	77:sR:179:LYS:HZ3	1.77	0.49
77:sR:218:GLY:HA3	77:sR:237:GLN:O	2.12	0.49
1:1:343:U:O2	6:L4:95:ARG:HD2	2.13	0.49
1:1:947:G:H5''	33:O2:55:ILE:HB	1.95	0.49
1:1:979:U:H1'	1:1:980:A:C5	2.48	0.49
1:1:2674:A:C6	13:M1:124:GLY:HA3	2.48	0.49
7:L5:280:GLU:H	7:L5:280:GLU:CD	2.21	0.49
21:N0:82:ASP:OD1	21:N0:87:THR:HB	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N3:25:CYS:HB2	24:N3:34:LEU:HG	1.95	0.49
45:2:142:G:OP2	52:S6:177:ARG:HG3	2.13	0.49
45:2:639:U:OP1	53:S7:118:LEU:N	2.45	0.49
45:2:825:U:H3	45:2:847:A:H61	1.60	0.49
45:2:1273:G:N7	45:2:1430:U:H3'	2.28	0.49
45:2:1345:A:H4'	66:D0:53:LYS:HD3	1.95	0.49
45:2:1555:A:P	61:C5:47:ARG:HH21	2.35	0.49
46:S0:195:TRP:CE2	46:S0:197:ILE:HD13	2.47	0.49
47:S1:61:LEU:C	47:S1:63:GLY:H	2.20	0.49
48:S2:78:ASP:HB2	48:S2:104:VAL:HG12	1.95	0.49
48:S2:179:VAL:O	48:S2:198:THR:OG1	2.23	0.49
51:S5:43:PHE:HZ	51:S5:90:ILE:HG21	1.76	0.49
53:S7:123:ASP:OD2	53:S7:138:LYS:NZ	2.46	0.49
53:S7:131:PHE:CD1	53:S7:132:PRO:HD3	2.48	0.49
54:S8:57:ALA:C	54:S8:58:LEU:HD23	2.37	0.49
56:C0:77:ARG:HD3	56:C0:84:GLU:HA	1.94	0.49
57:C1:20:PHE:HE2	57:C1:23:PRO:HD3	1.77	0.49
58:C2:32:LEU:HD12	58:C2:100:TRP:HB2	1.93	0.49
68:D2:70:ASN:HB2	68:D2:130:TYR:HD2	1.78	0.49
77:SR:123:ILE:HG12	77:SR:156:VAL:HG13	1.94	0.49
1:5:147:U:C5	10:l8:157:VAL:HG13	2.47	0.49
1:5:610:G:C8	6:l4:312:VAL:HG21	2.48	0.49
1:5:732:C:H2'	1:5:733:G:O4'	2.13	0.49
1:5:993:G:N3	1:5:2637:A:H2'	2.27	0.49
1:5:3060:C:H1'	1:5:3332:U:H1'	1.95	0.49
4:l2:107:VAL:O	4:l2:139:HIS:NE2	2.45	0.49
6:l4:49:ALA:HA	6:l4:109:TRP:CZ2	2.48	0.49
43:q2:10:THR:HG22	43:q2:23:HIS:CD2	2.47	0.49
45:6:292:U:H2'	45:6:293:U:C6	2.48	0.49
45:6:745:U:O2'	45:6:746:A:OP1	2.29	0.49
45:6:1450:U:H2'	45:6:1451:C:C6	2.47	0.49
46:s0:8:ASP:O	46:s0:10:THR:N	2.46	0.49
51:s5:92:ARG:NH2	51:s5:169:ASN:OD1	2.45	0.49
51:s5:144:GLU:HA	51:s5:161:ASP:HA	1.95	0.49
79:s6:212:LEU:HA	79:s6:215:ARG:HB3	1.95	0.49
65:c9:95:ASP:N	65:c9:95:ASP:OD1	2.46	0.49
69:d3:126:LYS:HE2	69:d3:129:GLY:HA2	1.92	0.49
1:1:209:A:H4'	1:1:211:A:C8	2.46	0.49
1:1:1301:A:H8	1:1:1301:A:OP1	1.96	0.49
1:1:1783:U:H2'	1:1:1784:G:C8	2.47	0.49
1:1:2799:A:H5''	1:1:2800:G:O5'	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3386:G:H5'	32:O1:10:ARG:NH2	2.28	0.49
12:M0:23:ASN:O	12:M0:25:ALA:N	2.45	0.49
14:M3:9:ILE:HD11	29:N8:45:MET:HE1	1.95	0.49
22:N1:126:VAL:HG23	22:N1:127:GLN:H	1.78	0.49
23:N2:87:ASN:O	23:N2:89:LEU:N	2.46	0.49
32:O1:86:LYS:HD3	32:O1:86:LYS:N	2.25	0.49
44:Q3:8:VAL:O	44:Q3:11:THR:HG22	2.13	0.49
45:2:340:U:H2'	45:2:341:A:C8	2.47	0.49
45:2:396:G:N2	45:2:399:A:OP2	2.45	0.49
45:2:581:U:OP1	78:SM:104:LYS:HE3	2.13	0.49
45:2:1251:U:H1'	45:2:1252:C:C6	2.48	0.49
45:2:1511:U:H2'	45:2:1512:G:C8	2.47	0.49
48:S2:127:ALA:HA	48:S2:130:ILE:HB	1.95	0.49
48:S2:218:ILE:O	48:S2:221:THR:OG1	2.23	0.49
49:S3:32:GLU:HA	49:S3:54:ARG:HH12	1.77	0.49
51:S5:187:ILE:H	51:S5:187:ILE:HD12	1.78	0.49
52:S6:67:VAL:HG21	52:S6:99:GLY:HA2	1.95	0.49
65:C9:29:GLU:HG2	65:C9:103:LYS:HE3	1.95	0.49
66:D0:68:ARG:HH21	66:D0:70:THR:HG21	1.78	0.49
1:5:291:C:OP1	16:m5:68:ARG:HG3	2.12	0.49
1:5:348:A:N3	1:5:352:A:O2'	2.44	0.49
1:5:3095:U:H2'	1:5:3096:C:C6	2.48	0.49
15:m4:121:MET:HE2	15:m4:125:LYS:HE2	1.95	0.49
18:m7:16:SER:HB3	18:m7:149:VAL:HB	1.93	0.49
20:m9:172:ARG:O	20:m9:176:ARG:HG2	2.13	0.49
45:6:152:U:C2	45:6:163:G:N2	2.80	0.49
45:6:239:C:H41	45:6:834:G:H1'	1.78	0.49
45:6:1070:C:O2'	73:d7:17:ARG:O	2.29	0.49
45:6:1349:G:O2'	45:6:1379:C:N3	2.46	0.49
51:s5:143:ARG:HD2	74:d8:57:MET:HE1	1.95	0.49
79:s6:98:ARG:HD3	79:s6:99:GLY:N	2.28	0.49
53:s7:162:ILE:HB	53:s7:169:PHE:CE2	2.48	0.49
61:c5:44:ARG:NH2	61:c5:82:ASN:O	2.46	0.49
1:1:1060:U:H2'	1:1:1061:A:H8	1.77	0.49
1:1:2361:A:H61	1:1:2377:G:H1	1.60	0.49
1:1:3162:C:H2'	1:1:3163:A:C8	2.48	0.49
7:L5:282:ARG:O	7:L5:286:VAL:HG23	2.13	0.49
12:M0:9:TYR:CD1	12:M0:97:LEU:HD13	2.47	0.49
13:M1:17:LEU:HB3	13:M1:76:ALA:HB1	1.95	0.49
22:N1:17:ARG:NH2	22:N1:45:ASN:HD21	2.10	0.49
24:N3:33:ASN:HD21	24:N3:63:LYS:HB2	1.77	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N3:33:ASN:HD21	24:N3:64:LYS:H	1.61	0.49
35:O4:8:ARG:HB2	35:O4:34:HIS:CD2	2.48	0.49
37:O6:37:THR:O	37:O6:41:ARG:HB2	2.13	0.49
45:2:454:U:C4	50:S4:66:MET:HB3	2.48	0.49
45:2:644:C:H2'	45:2:645:C:H6	1.78	0.49
45:2:1099:U:OP1	68:D2:71:LYS:NZ	2.30	0.49
45:2:1333:C:H2'	45:2:1334:U:H6	1.77	0.49
45:2:1787:C:OP1	60:C4:127:ARG:NH2	2.45	0.49
47:S1:119:THR:HB	47:S1:143:THR:HG23	1.95	0.49
55:S9:44:ARG:HG2	55:S9:48:GLN:NE2	2.28	0.49
59:C3:66:ILE:HG13	59:C3:67:THR:H	1.78	0.49
68:D2:30:SER:OG	68:D2:31:SER:N	2.41	0.49
71:D5:60:VAL:HA	71:D5:64:VAL:HG11	1.94	0.49
1:5:94:G:H2'	1:5:95:A:H8	1.78	0.49
1:5:96:G:H5'	14:m3:15:ARG:CZ	2.42	0.49
1:5:839:C:O2'	1:5:1724:U:OP1	2.20	0.49
1:5:1048:A:HO2'	1:5:2632:G:HO2'	1.61	0.49
1:5:1381:A:OP1	6:l4:197:ARG:NH1	2.46	0.49
1:5:1441:G:O6	80:5:3412:PAR:N64	2.37	0.49
1:5:1727:G:OP1	44:q3:44:LYS:NZ	2.45	0.49
1:5:3000:A:H2'	1:5:3001:C:C6	2.47	0.49
1:5:3041:U:H2'	1:5:3042:U:C6	2.47	0.49
2:7:47:C:OP1	7:l5:94:ASN:HB2	2.13	0.49
2:7:95:A:N6	80:7:202:PAR:O61	2.39	0.49
5:l3:304:THR:HG23	5:l3:306:THR:H	1.77	0.49
6:l4:169:LEU:O	6:l4:172:VAL:HG12	2.12	0.49
6:l4:361:HIS:CD2	6:l4:362:ASP:HB2	2.48	0.49
8:l6:170:LYS:HB3	8:l6:172:HIS:CE1	2.48	0.49
10:l8:98:ARG:NH1	10:l8:189:LEU:HA	2.27	0.49
12:m0:99:ILE:HG13	12:m0:123:HIS:HB2	1.94	0.49
15:m4:94:TRP:CE2	15:m4:100:ALA:HB2	2.48	0.49
16:m5:33:LYS:HD3	16:m5:37:HIS:CE1	2.48	0.49
25:n4:62:GLY:C	25:n4:63:ILE:HG13	2.37	0.49
31:o0:8:GLU:HB2	31:o0:13:LYS:NZ	2.27	0.49
45:6:650:U:H4'	55:s9:65:LYS:HZ1	1.78	0.49
45:6:870:C:H2'	45:6:871:G:C8	2.48	0.49
48:s2:143:TYR:CG	48:s2:147:ASN:HA	2.48	0.49
51:s5:107:LYS:O	51:s5:111:VAL:HG23	2.13	0.49
55:s9:60:LEU:HD21	55:s9:93:LEU:HB3	1.94	0.49
58:c2:76:GLU:HG3	58:c2:88:LEU:HD13	1.94	0.49
59:c3:65:VAL:CG1	59:c3:66:ILE:HG23	2.43	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:c7:71:PHE:CZ	63:c7:74:GLN:HB2	2.48	0.49
77:sR:80:ALA:HB3	77:sR:92:TRP:HB2	1.94	0.49
1:1:602:A:H2'	1:1:603:A:C8	2.48	0.48
1:1:1477:A:OP1	1:1:3075:G:O2'	2.30	0.48
1:1:2514:U:OP2	1:1:2586:G:N2	2.28	0.48
1:1:2526:C:H2'	1:1:2527:G:C8	2.47	0.48
1:1:2854:U:OP1	12:M0:61:SER:OG	2.28	0.48
6:L4:145:ILE:HD12	6:L4:150:LEU:HD12	1.94	0.48
7:L5:21:ARG:CB	7:L5:24:ARG:HH21	2.26	0.48
11:L9:137:SER:HB3	11:L9:143:GLU:HB3	1.95	0.48
13:M1:54:VAL:HG23	13:M1:59:ILE:HD11	1.94	0.48
14:M3:92:THR:HG21	36:O5:111:PHE:HB3	1.95	0.48
15:M4:21:VAL:HG22	15:M4:63:VAL:HG22	1.94	0.48
16:M5:92:LEU:N	16:M5:92:LEU:HD12	2.28	0.48
44:Q3:75:ALA:O	44:Q3:79:VAL:HG23	2.13	0.48
45:2:136:C:H4'	45:2:137:U:H5'	1.95	0.48
45:2:639:U:OP1	53:S7:117:THR:OG1	2.24	0.48
45:2:1315:U:H2'	45:2:1316:G:O4'	2.13	0.48
45:2:1424:A:O4'	48:S2:92:ALA:HB1	2.12	0.48
45:2:1776:A:H2'	45:2:1777:G:C8	2.48	0.48
50:S4:125:LYS:HB2	50:S4:226:PHE:CE1	2.48	0.48
56:C0:29:GLN:CD	56:C0:39:ASN:HD22	2.21	0.48
63:C7:36:ASP:OD2	63:C7:36:ASP:N	2.44	0.48
66:D0:22:ILE:N	66:D0:93:LEU:O	2.46	0.48
71:D5:78:ILE:HD12	71:D5:81:ARG:HD3	1.95	0.48
1:5:74:G:H5''	14:m3:104:ARG:HH21	1.78	0.48
1:5:339:C:H3'	6:l4:195:ARG:HH12	1.77	0.48
1:5:501:A:H2'	1:5:502:U:C6	2.48	0.48
1:5:662:U:H2'	1:5:663:C:C6	2.48	0.48
80:5:3403:PAR:H31	80:5:3403:PAR:H322	1.76	0.48
3:8:104:A:C8	3:8:105:A:C8	3.01	0.48
80:8:202:PAR:O44	80:8:202:PAR:N64	2.46	0.48
5:l3:358:TRP:CG	25:n4:1:MET:HE2	2.48	0.48
6:l4:281:ILE:HG22	19:m8:25:TYR:HB3	1.95	0.48
7:l5:153:THR:HG22	7:l5:179:ARG:NH1	2.28	0.48
12:m0:208:ASN:OD1	12:m0:208:ASN:N	2.36	0.48
22:n1:83:ARG:NH1	22:n1:85:LEU:HD21	2.28	0.48
27:n6:35:LEU:HD12	27:n6:45:ILE:HG22	1.95	0.48
27:n6:74:TYR:CD1	27:n6:77:LYS:HB2	2.48	0.48
30:n9:19:ASN:O	30:n9:22:LYS:NZ	2.46	0.48
32:o1:98:VAL:HG22	32:o1:99:ALA:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:o6:62:ARG:HH11	37:o6:94:ILE:HD11	1.77	0.48
41:q0:88:LYS:HA	41:q0:92:ASP:HB2	1.94	0.48
45:6:123:G:H21	50:s4:146:THR:HG21	1.77	0.48
45:6:182:A:H2'	45:6:183:U:H6	1.78	0.48
45:6:294:C:H2'	45:6:295:A:H8	1.78	0.48
45:6:747:C:H2'	45:6:748:U:H6	1.78	0.48
45:6:1418:G:O5'	62:c6:128:LYS:HE2	2.11	0.48
45:6:1579:U:H2'	45:6:1580:C:C6	2.48	0.48
47:s1:66:VAL:HG12	60:c4:33:LEU:HB3	1.95	0.48
51:s5:80:LYS:HB3	51:s5:83:ARG:HB2	1.94	0.48
64:c8:112:ASP:O	64:c8:116:LEU:HD13	2.13	0.48
1:1:25:U:OP1	38:O7:58:THR:HG21	2.14	0.48
1:1:44:U:OP1	16:M5:84:PRO:HG2	2.14	0.48
1:1:1565:G:H2'	1:1:1566:A:C8	2.48	0.48
1:1:2678:A:OP1	78:SM:47:ALA:HA	2.12	0.48
1:1:2772:C:C5	80:1:3437:PAR:H31	2.48	0.48
1:1:3041:U:OP1	24:N3:12:ARG:NH1	2.46	0.48
1:1:3277:U:OP2	18:M7:175:ARG:NH2	2.47	0.48
80:3:201:PAR:O62	80:3:201:PAR:H13	2.12	0.48
9:L7:140:SER:OG	9:L7:141:TYR:N	2.46	0.48
11:L9:88:TYR:HE2	11:L9:184:LYS:HE2	1.77	0.48
13:M1:114:ILE:HG22	13:M1:115:LYS:N	2.14	0.48
22:N1:89:LEU:HD23	22:N1:91:LEU:HD11	1.95	0.48
45:2:230:C:H1'	45:2:236:A:C2	2.48	0.48
45:2:1150:G:N2	80:2:1901:PAR:H14	2.27	0.48
45:2:1345:A:OP1	66:D0:54:GLY:N	2.31	0.48
45:2:1607:G:H2'	45:2:1608:U:H6	1.78	0.48
46:S0:31:VAL:HG22	46:S0:149:LEU:O	2.13	0.48
47:S1:208:GLN:O	47:S1:210:ILE:HG13	2.14	0.48
49:S3:54:ARG:HA	49:S3:90:ARG:NH2	2.28	0.48
49:S3:54:ARG:HA	49:S3:90:ARG:CZ	2.43	0.48
63:C7:96:SER:HA	63:C7:97:ASN:HA	1.61	0.48
69:D3:109:ARG:NE	69:D3:113:ALA:O	2.31	0.48
77:SR:17:ASN:HB3	77:SR:39:ASP:CB	2.42	0.48
1:5:63:A:OP1	16:m5:172:ARG:NH2	2.46	0.48
1:5:1560:G:O2'	1:5:1561:G:OP1	2.31	0.48
1:5:2400:G:H5''	1:5:2401:A:OP2	2.13	0.48
2:7:26:C:H5''	7:l5:56:THR:HB	1.95	0.48
3:8:58:G:N7	38:o7:63:ARG:NH1	2.52	0.48
6:l4:269:SER:C	6:l4:271:LYS:H	2.20	0.48
17:m6:108:ILE:HD12	17:m6:117:ARG:HD3	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:413:U:H2'	45:6:414:C:C6	2.48	0.48
45:6:514:G:N1	45:6:543:C:N3	2.52	0.48
45:6:1474:G:H2'	45:6:1475:A:C8	2.48	0.48
49:s3:108:LYS:HG2	49:s3:113:LEU:HD12	1.95	0.48
69:d3:130:VAL:HG21	69:d3:135:LEU:HD21	1.95	0.48
74:d8:44:VAL:HG21	74:d8:48:VAL:HG21	1.95	0.48
77:sR:23:LEU:HD13	77:sR:302:PHE:HB3	1.95	0.48
1:1:291:C:H5''	16:M5:68:ARG:NH1	2.29	0.48
1:1:1003:A:C5	1:1:1004:U:C5	3.01	0.48
1:1:1525:G:N7	80:1:3419:PAR:N32	2.62	0.48
1:1:1718:G:H2'	1:1:1719:G:C8	2.48	0.48
5:L3:383:LEU:HB2	5:L3:386:ASP:HB2	1.95	0.48
13:M1:37:LEU:HD13	13:M1:69:VAL:HG12	1.94	0.48
14:M3:93:ILE:HD12	14:M3:93:ILE:HA	1.68	0.48
16:M5:167:THR:O	16:M5:170:LYS:HB3	2.13	0.48
19:M8:64:VAL:HG11	19:M8:113:LYS:HD2	1.95	0.48
21:N0:59:VAL:HG13	22:N1:141:VAL:HG11	1.95	0.48
34:O3:42:GLN:HA	34:O3:45:LEU:HG	1.95	0.48
40:O9:45:ARG:HB2	40:O9:45:ARG:NH1	2.28	0.48
43:Q2:25:VAL:HG12	43:Q2:93:LEU:HD12	1.94	0.48
45:2:1214:U:H2'	45:2:1215:C:H6	1.78	0.48
45:2:1387:G:P	63:C7:33:ARG:HH12	2.36	0.48
46:S0:4:PRO:HG3	67:D1:39:VAL:HG21	1.94	0.48
46:S0:121:VAL:HG23	46:S0:141:ILE:HG21	1.95	0.48
49:S3:170:THR:HA	49:S3:186:VAL:O	2.13	0.48
50:S4:105:VAL:HG21	50:S4:245:LYS:N	2.28	0.48
55:S9:52:ILE:HG23	55:S9:76:LEU:HD11	1.95	0.48
75:D9:10:HIS:CG	75:D9:11:PRO:HD2	2.48	0.48
1:5:4:U:H3	3:8:155:A:H61	1.61	0.48
1:5:76:G:O2'	14:m3:100:ARG:NH1	2.40	0.48
1:5:308:A:H1'	1:5:2222:A:N3	2.27	0.48
1:5:622:A:H3'	1:5:623:U:H6	1.78	0.48
1:5:650:C:O5'	1:5:650:C:H6	1.96	0.48
1:5:1373:A:H2'	1:5:1374:G:C8	2.48	0.48
1:5:2563:G:OP1	28:n7:55:LYS:N	2.46	0.48
1:5:3024:A:H5''	11:l9:96:HIS:CD2	2.48	0.48
1:5:3113:A:O2'	11:l9:66:ALA:O	2.27	0.48
5:l3:92:TYR:HE1	5:l3:159:ARG:HD2	1.78	0.48
8:l6:63:LEU:HB2	8:l6:79:VAL:HG12	1.95	0.48
18:m7:22:LEU:HD12	18:m7:146:ILE:HG13	1.95	0.48
31:o0:29:SER:HA	31:o0:32:LYS:HE2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:o1:88:PRO:HG2	32:o1:89:LEU:HD22	1.94	0.48
45:6:846:G:H2'	45:6:847:A:C8	2.49	0.48
45:6:1797:A:N1	72:d6:87:ARG:HD2	2.28	0.48
46:s0:200:ASP:HB2	63:c7:86:PRO:HD3	1.95	0.48
48:s2:144:TRP:O	68:d2:98:GLN:NE2	2.46	0.48
49:s3:218:LEU:HD22	49:s3:218:LEU:HA	1.67	0.48
79:s6:77:LEU:HD12	79:s6:95:LYS:HB2	1.95	0.48
55:s9:168:ARG:NH1	55:s9:171:ARG:HD3	2.27	0.48
59:c3:118:ILE:O	59:c3:122:ILE:HG13	2.13	0.48
66:d0:63:LEU:HB3	75:d9:34:TYR:CE2	2.48	0.48
1:1:944:C:H4'	33:O2:33:ARG:NH1	2.28	0.48
1:1:988:U:H2'	1:1:989:A:H8	1.78	0.48
1:1:1584:U:H2'	1:1:1585:C:H6	1.76	0.48
1:1:2683:U:H2'	1:1:2684:C:H6	1.76	0.48
12:M0:33:ILE:HG13	12:M0:69:ARG:NH1	2.28	0.48
28:N7:24:VAL:HG23	28:N7:130:PHE:CE2	2.49	0.48
28:N7:25:ILE:HA	28:N7:43:VAL:HG12	1.96	0.48
28:N7:110:ALA:O	28:N7:114:VAL:HG23	2.13	0.48
33:O2:19:ARG:NH1	33:O2:28:VAL:HG13	2.19	0.48
45:2:611:U:O2'	57:C1:99:ARG:NH2	2.46	0.48
45:2:1054:U:H2'	45:2:1055:U:O4'	2.13	0.48
46:S0:122:ILE:HA	46:S0:144:ILE:O	2.13	0.48
47:S1:66:VAL:CG2	47:S1:67:GLU:N	2.76	0.48
52:S6:160:ARG:H	52:S6:160:ARG:HD2	1.78	0.48
60:C4:19:ILE:HG21	60:C4:28:VAL:HA	1.96	0.48
64:C8:27:LYS:HE2	64:C8:55:HIS:HA	1.96	0.48
1:5:147:U:C4	10:l8:157:VAL:HG13	2.49	0.48
1:5:437:G:H22	1:5:622:A:N6	2.11	0.48
1:5:618:C:H2'	1:5:619:A:C8	2.48	0.48
1:5:2653:C:O2'	1:5:2657:A:N6	2.47	0.48
3:8:42:G:OP1	38:o7:60:GLY:N	2.42	0.48
13:m1:63:GLU:O	13:m1:65:ILE:HG13	2.14	0.48
24:n3:2:SER:HA	24:n3:56:ASP:HA	1.95	0.48
45:6:584:C:O2	76:e0:18:THR:HG21	2.13	0.48
45:6:1175:U:OP2	64:c8:136:GLN:NE2	2.39	0.48
46:s0:84:ARG:NH1	46:s0:203:PHE:O	2.46	0.48
48:s2:125:ILE:O	48:s2:129:ILE:HG13	2.13	0.48
50:s4:117:GLU:CD	50:s4:118:GLU:H	2.20	0.48
57:c1:93:TYR:HA	57:c1:100:TYR:HD1	1.78	0.48
71:d5:65:LEU:O	71:d5:69:LEU:HB2	2.13	0.48
77:sR:124:SER:O	77:sR:131:ILE:HG23	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:901:G:O6	80:1:3435:PAR:H641	2.13	0.48
1:1:1039:U:H2'	1:1:1040:A:H8	1.78	0.48
1:1:1100:U:H2'	1:1:1101:G:C8	2.49	0.48
1:1:2581:U:H2'	1:1:2582:C:C6	2.48	0.48
1:1:2659:G:H4'	1:1:2751:G:O2'	2.13	0.48
1:1:2718:U:H2'	1:1:2719:U:C6	2.49	0.48
3:4:47:C:H1'	3:4:61:A:H2'	1.95	0.48
7:L5:21:ARG:HB2	7:L5:24:ARG:HH21	1.79	0.48
10:L8:139:VAL:O	10:L8:143:ILE:HG13	2.13	0.48
12:M0:48:LEU:HD22	12:M0:49:CYS:H	1.78	0.48
14:M3:57:VAL:N	14:M3:112:ASN:OD1	2.45	0.48
17:M6:127:LEU:HD23	21:N0:156:VAL:HG22	1.96	0.48
45:2:337:G:H3'	57:C1:133:LYS:HB2	1.95	0.48
45:2:1070:C:H5''	73:D7:17:ARG:NH2	2.29	0.48
45:2:1639:C:H2'	45:2:1640:C:O4'	2.13	0.48
67:D1:3:ASN:CG	67:D1:4:ASP:N	2.72	0.48
77:SR:264:SER:HB3	77:SR:269:TYR:CZ	2.48	0.48
1:5:86:G:O2'	14:m3:11:LYS:HD3	2.14	0.48
1:5:1334:U:O2'	9:l7:151:ARG:NH2	2.47	0.48
1:5:1754:G:H2'	1:5:1755:C:H6	1.77	0.48
1:5:2673:A:H4'	13:m1:104:PHE:HA	1.95	0.48
1:5:3043:C:P	24:n3:48:ARG:HH22	2.36	0.48
4:l2:140:ASN:OD1	4:l2:142:ASP:N	2.45	0.48
10:l8:203:VAL:HG23	10:l8:204:ARG:N	2.28	0.48
28:n7:54:THR:H	28:n7:57:HIS:CD2	2.31	0.48
39:o8:11:PHE:HD1	39:o8:12:LEU:HD22	1.78	0.48
42:q1:21:ARG:NH1	45:6:1654:G:OP1	2.47	0.48
45:6:27:U:H2'	45:6:28:A:H8	1.79	0.48
45:6:567:A:H5''	76:e0:10:ARG:O	2.13	0.48
46:s0:40:ALA:HA	46:s0:46:HIS:HA	1.96	0.48
46:s0:163:ASN:OD1	46:s0:165:ARG:HB2	2.12	0.48
47:s1:97:LEU:HB3	47:s1:232:HIS:CD2	2.48	0.48
53:s7:14:THR:H	53:s7:17:GLU:HB2	1.76	0.48
53:s7:61:PHE:HE1	53:s7:93:LEU:HD12	1.78	0.48
64:c8:52:VAL:HG13	64:c8:61:LEU:HD22	1.95	0.48
77:sR:103:PHE:HB3	77:sR:134:TRP:CZ3	2.48	0.48
1:1:160:G:O6	80:1:3401:PAR:N64	2.47	0.48
1:1:1073:U:H2'	1:1:1074:U:C6	2.49	0.48
1:1:1447:G:N7	18:M7:25:SER:OG	2.42	0.48
1:1:2117:A:C8	1:1:3064:U:H1'	2.48	0.48
1:1:2366:C:H2'	1:1:2367:A:H8	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3243:A:OP1	17:M6:159:LYS:NZ	2.40	0.48
80:1:3407:PAR:HO44	12:M0:153:ARG:NH2	2.12	0.48
2:3:80:G:H2'	2:3:81:U:O4'	2.13	0.48
2:3:112:G:H2'	2:3:113:C:H6	1.79	0.48
5:L3:232:ARG:HG2	5:L3:233:TRP:CD1	2.47	0.48
8:L6:50:LYS:HG2	8:L6:74:VAL:CG2	2.44	0.48
8:L6:170:LYS:HG2	8:L6:172:HIS:CE1	2.49	0.48
13:M1:89:TYR:O	13:M1:169:ALA:HB1	2.13	0.48
15:M4:21:VAL:HG13	15:M4:63:VAL:HG21	1.95	0.48
21:N0:10:ILE:O	21:N0:59:VAL:N	2.45	0.48
29:N8:75:LEU:HB3	29:N8:118:ILE:HG23	1.95	0.48
37:O6:62:ARG:HH12	37:O6:98:ARG:NH1	2.10	0.48
45:2:12:U:H2'	45:2:13:C:C6	2.48	0.48
45:2:134:U:OP1	45:2:136:C:N4	2.47	0.48
45:2:964:U:H5''	59:C3:128:TYR:CE1	2.49	0.48
45:2:1257:U:O2'	56:C0:3:MET:HG2	2.13	0.48
45:2:1280:C:H2'	45:2:1281:G:C8	2.47	0.48
45:2:1584:G:O2'	45:2:1610:G:O6	2.27	0.48
47:S1:26:ARG:O	47:S1:50:LYS:HB2	2.13	0.48
51:S5:25:LEU:HD12	62:C6:27:GLY:CA	2.42	0.48
57:C1:108:PRO:HG2	57:C1:134:THR:O	2.14	0.48
64:C8:112:ASP:HA	64:C8:115:ARG:HD3	1.94	0.48
1:5:1148:G:OP2	83:5:4255:HOH:O	2.20	0.48
1:5:1188:U:OP1	1:5:1210:U:O2'	2.32	0.48
1:5:1814:A:H4'	1:5:1815:U:O5'	2.13	0.48
1:5:2376:G:C6	1:5:2377:G:C6	3.01	0.48
1:5:2521:U:OP1	4:l2:123:ARG:NH1	2.47	0.48
1:5:2737:C:OP1	22:n1:70:SER:OG	2.29	0.48
1:5:2991:A:O2'	1:5:3309:G:N7	2.47	0.48
5:l3:221:THR:HG22	5:l3:273:HIS:N	2.14	0.48
6:l4:45:ASN:O	6:l4:110:ASN:ND2	2.46	0.48
13:m1:108:GLU:C	13:m1:110:ILE:H	2.21	0.48
19:m8:44:PHE:CD1	19:m8:139:ILE:HD11	2.49	0.48
38:o7:27:PHE:HA	38:o7:34:CYS:HA	1.95	0.48
38:o7:52:LYS:HG2	38:o7:55:ARG:HH11	1.79	0.48
45:6:1600:A:N6	83:6:2120:HOH:O	2.42	0.48
45:6:1662:G:H2'	45:6:1663:G:H8	1.78	0.48
46:s0:71:GLU:O	46:s0:96:THR:HG22	2.14	0.48
48:s2:88:LYS:HG2	48:s2:89:GLN:N	2.28	0.48
48:s2:103:VAL:HG22	48:s2:113:LEU:HD23	1.95	0.48
49:s3:33:GLY:HA3	49:s3:53:THR:OG1	2.13	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:s3:218:LEU:HD12	77:sR:193:ILE:HG21	1.95	0.48
61:c5:127:ARG:O	61:c5:130:ARG:NH1	2.47	0.48
65:c9:92:LYS:HE3	65:c9:94:ILE:HD11	1.96	0.48
71:d5:80:LEU:HB3	71:d5:101:TYR:HE2	1.78	0.48
76:e0:39:LEU:HD12	76:e0:43:ARG:HH21	1.78	0.48
77:sR:293:ALA:HB3	77:sR:302:PHE:HB2	1.94	0.48
1:1:507:U:H2'	1:1:508:U:C6	2.48	0.48
1:1:2261:G:H21	1:1:2262:A:H62	1.62	0.48
1:1:3132:C:H2'	1:1:3133:C:C6	2.48	0.48
80:1:3415:PAR:H43	80:1:3415:PAR:H241	1.79	0.48
3:4:142:C:H5''	16:M5:38:ARG:HH12	1.79	0.48
4:L2:68:LYS:HB3	4:L2:70:ARG:HG2	1.95	0.48
5:L3:188:ILE:HD12	5:L3:189:SER:H	1.78	0.48
9:L7:160:ARG:HB2	9:L7:203:TRP:CD2	2.49	0.48
9:L7:178:ILE:HD11	9:L7:187:GLU:HG2	1.94	0.48
11:L9:86:TYR:CE2	11:L9:151:VAL:HG13	2.49	0.48
11:L9:109:ALA:HB1	11:L9:111:PHE:CD2	2.48	0.48
12:M0:36:LEU:HD21	12:M0:69:ARG:HD3	1.95	0.48
13:M1:109:HIS:CE1	13:M1:122:ILE:HA	2.49	0.48
27:N6:58:VAL:HA	27:N6:104:LEU:HD23	1.95	0.48
45:2:79:C:H2'	45:2:80:A:C8	2.48	0.48
45:2:753:A:O4'	50:S4:221:ARG:NH2	2.46	0.48
45:2:886:U:O2'	60:C4:121:VAL:O	2.23	0.48
45:2:1321:A:OP2	46:S0:101:ARG:NH2	2.46	0.48
45:2:1559:A:H5''	64:C8:135:GLY:HA3	1.95	0.48
45:2:1775:U:H2'	45:2:1776:A:H8	1.78	0.48
50:S4:104:ASP:HB3	50:S4:106:LYS:H	1.78	0.48
52:S6:84:TYR:OH	52:S6:91:GLU:OE1	2.27	0.48
58:C2:93:ASP:O	58:C2:97:LEU:HB2	2.14	0.48
62:C6:38:LEU:O	62:C6:45:ARG:NE	2.47	0.48
72:D6:11:ASN:O	72:D6:33:ASP:HB2	2.14	0.48
1:5:1169:A:H4'	9:l7:219:LYS:HE2	1.96	0.48
1:5:1456:A:N1	1:5:1476:G:O2'	2.41	0.48
1:5:2154:U:O3'	4:l2:240:ALA:HA	2.14	0.48
1:5:2437:G:H1	1:5:2510:U:H3	1.62	0.48
1:5:2547:A:H2'	1:5:2548:C:O4'	2.14	0.48
1:5:2801:A:O2'	1:5:2802:A:H2'	2.14	0.48
1:5:3033:A:H2'	1:5:3034:C:H6	1.78	0.48
5:l3:43:LEU:HD12	5:l3:43:LEU:N	2.28	0.48
8:l6:105:TYR:CE1	8:l6:134:ARG:HD3	2.48	0.48
19:m8:170:ARG:HA	19:m8:174:ARG:CD	2.34	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:q1:2:ARG:NH1	45:6:1773:C:OP2	2.39	0.48
43:q2:22:GLN:HB3	43:q2:75:VAL:HG21	1.95	0.48
45:6:545:A:N1	45:6:593:U:O2'	2.40	0.48
45:6:856:A:C6	53:s7:116:ARG:HD3	2.49	0.48
45:6:1458:G:H5''	45:6:1459:C:OP2	2.13	0.48
45:6:1580:C:H4'	62:c6:137:ARG:HB2	1.95	0.48
45:6:1797:A:C6	72:d6:87:ARG:HD2	2.49	0.48
80:6:1906:PAR:H32	80:6:1906:PAR:HN21	1.79	0.48
48:s2:161:LYS:HB2	48:s2:166:THR:HG22	1.95	0.48
56:c0:23:ALA:CB	56:c0:64:TYR:HB2	2.43	0.48
62:c6:73:GLY:N	62:c6:76:SER:OG	2.39	0.48
67:d1:77:GLY:O	67:d1:78:LEU:HD22	2.14	0.48
77:sR:59:ARG:HH11	77:sR:95:ALA:HA	1.78	0.48
1:1:259:C:H2'	1:1:260:C:H6	1.78	0.48
1:1:305:U:C5	1:1:2776:C:H1'	2.49	0.48
1:1:1355:A:H4'	1:1:1356:U:O5'	2.14	0.48
1:1:2546:C:H2'	1:1:2547:A:C8	2.49	0.48
1:1:2747:A:H2'	1:1:2748:A:C8	2.49	0.48
1:1:2927:C:H2'	1:1:2928:C:C6	2.49	0.48
3:4:82:U:O2	3:4:82:U:O4'	2.31	0.48
8:L6:89:THR:HG21	15:M4:115:PHE:HB2	1.96	0.48
16:M5:68:ARG:HA	16:M5:98:LEU:HD21	1.96	0.48
26:N5:105:VAL:HG12	26:N5:130:TYR:CD2	2.48	0.48
27:N6:35:LEU:HD21	27:N6:109:LEU:HD21	1.96	0.48
29:N8:122:PRO:HB3	29:N8:142:GLY:C	2.39	0.48
36:O5:85:THR:HG22	36:O5:87:ALA:N	2.28	0.48
45:2:1415:U:OP1	63:C7:45:ARG:NH2	2.45	0.48
45:2:1472:C:H5'	45:2:1474:G:O4'	2.14	0.48
46:S0:33:GLN:HG3	73:D7:2:VAL:HG11	1.96	0.48
47:S1:113:MET:SD	47:S1:209:ASN:ND2	2.87	0.48
50:S4:193:GLY:HA3	50:S4:210:ILE:HG22	1.96	0.48
51:S5:34:GLN:HG2	62:C6:57:LEU:HD22	1.96	0.48
66:D0:50:LEU:HD21	66:D0:95:ALA:HB2	1.96	0.48
77:SR:83:ALA:HB1	77:SR:110:VAL:HG12	1.96	0.48
1:5:180:C:H2'	1:5:181:U:C6	2.48	0.48
1:5:985:U:P	80:5:3420:PAR:H122	2.37	0.48
1:5:1783:U:H2'	1:5:1784:G:C8	2.49	0.48
1:5:2838:A:H61	1:5:2850:G:H1'	1.78	0.48
1:5:3370:A:OP2	5:l3:383:LEU:HB3	2.14	0.48
2:7:60:G:H21	7:l5:274:GLN:NE2	2.12	0.48
11:l9:114:VAL:HB	11:l9:124:ARG:HB2	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:m3:64:LYS:HG3	29:n8:69:TRP:CG	2.49	0.48
14:m3:85:LEU:HD13	14:m3:90:ALA:HB2	1.94	0.48
18:m7:29:THR:HG22	18:m7:87:SER:CB	2.44	0.48
29:n8:46:ASP:OD1	29:n8:46:ASP:N	2.45	0.48
36:o5:82:ALA:HB1	36:o5:84:LYS:HD3	1.95	0.48
45:6:892:A:H2'	45:6:893:U:O4'	2.13	0.48
45:6:1330:G:H2'	45:6:1331:A:O4'	2.13	0.48
45:6:1531:G:N7	71:d5:96:SER:OG	2.35	0.48
47:s1:194:ASN:OD1	47:s1:194:ASN:N	2.47	0.48
48:s2:157:LYS:NZ	68:d2:92:ASN:O	2.46	0.48
50:s4:12:LEU:HD11	55:s9:5:PRO:HD3	1.96	0.48
50:s4:72:VAL:HG22	50:s4:90:ILE:HG12	1.95	0.48
54:s8:56:ARG:NH2	54:s8:174:GLY:O	2.47	0.48
58:c2:62:LEU:HD22	58:c2:75:VAL:HG11	1.96	0.48
65:c9:139:THR:O	65:c9:142:GLU:HG2	2.14	0.48
66:d0:37:VAL:HG21	66:d0:109:GLU:HB2	1.96	0.48
1:1:196:G:N2	1:1:198:A:H3'	2.29	0.48
1:1:361:A:O3'	38:O7:45:ARG:NH2	2.44	0.48
1:1:624:G:OP1	34:O3:86:ARG:NH1	2.46	0.48
1:1:2568:C:H3'	1:1:2569:A:C8	2.49	0.48
1:1:2581:U:H2'	1:1:2582:C:H6	1.79	0.48
1:1:2960:C:H2'	1:1:2961:G:H8	1.79	0.48
3:4:82:U:OP1	3:4:83:C:H2'	2.14	0.48
11:L9:4:ILE:HD11	21:N0:150:PHE:CD2	2.48	0.48
11:L9:90:MET:HE2	11:L9:179:ILE:O	2.14	0.48
14:M3:80:VAL:HG13	14:M3:85:LEU:HD22	1.95	0.48
21:N0:14:LEU:HB2	21:N0:55:SER:O	2.13	0.48
21:N0:26:ARG:O	22:N1:150:THR:HA	2.13	0.48
33:O2:121:ASN:OD1	33:O2:121:ASN:N	2.47	0.48
44:Q3:49:ARG:HD2	44:Q3:50:GLY:N	2.16	0.48
45:2:127:G:H1'	45:2:178:U:O2'	2.13	0.48
45:2:534:A:H3'	45:2:535:A:C8	2.49	0.48
45:2:767:U:C6	55:S9:141:VAL:HA	2.48	0.48
45:2:1173:C:H2'	45:2:1174:C:H6	1.79	0.48
45:2:1244:A:H3'	45:2:1244:A:N3	2.29	0.48
45:2:1474:G:OP1	51:S5:109:LYS:NZ	2.45	0.48
46:S0:21:ASN:HB3	46:S0:24:LEU:HD23	1.95	0.48
48:S2:182:PRO:HA	48:S2:185:LYS:HB3	1.94	0.48
48:S2:235:LEU:HD21	67:D1:54:ALA:HB2	1.95	0.48
51:S5:59:VAL:C	51:S5:61:TYR:H	2.22	0.48
52:S6:12:SER:C	52:S6:13:GLN:HG2	2.39	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:S6:48:TYR:CE1	52:S6:116:LYS:HA	2.49	0.48
53:S7:51:VAL:HG12	53:S7:53:GLY:H	1.78	0.48
54:S8:29:LEU:HD21	54:S8:31:ARG:HG3	1.96	0.48
60:C4:77:THR:CB	60:C4:111:ARG:HH12	2.27	0.48
61:C5:85:ILE:HG22	61:C5:112:LEU:HD23	1.96	0.48
63:C7:24:LEU:HD13	63:C7:58:MET:HE3	1.96	0.48
63:C7:27:ASP:OD2	63:C7:30:THR:HG22	2.14	0.48
1:5:158:G:N2	1:5:264:G:H1'	2.29	0.48
1:5:770:G:OP1	14:m3:171:ARG:HD3	2.14	0.48
1:5:1333:C:H5'	9:l7:111:ILE:HG23	1.95	0.48
1:5:1492:G:O2'	40:o9:48:LYS:NZ	2.47	0.48
1:5:1837:U:OP2	83:5:4249:HOH:O	2.19	0.48
1:5:2712:U:O2'	1:5:2743:A:H4'	2.13	0.48
5:l3:347:SER:HB2	5:l3:350:ALA:H	1.79	0.48
7:l5:52:VAL:HG13	7:l5:54:ARG:CZ	2.44	0.48
8:l6:68:PRO:HB2	8:l6:142:ASP:CG	2.39	0.48
14:m3:2:ALA:HB1	29:n8:41:HIS:CE1	2.49	0.48
19:m8:175:ALA:O	19:m8:182:LYS:HB2	2.14	0.48
21:n0:91:TYR:O	21:n0:137:ARG:NH1	2.47	0.48
27:n6:55:GLU:HB2	27:n6:108:LYS:HB3	1.96	0.48
45:6:645:C:H2'	45:6:646:C:C6	2.49	0.48
45:6:757:A:C2'	45:6:758:U:H5'	2.43	0.48
45:6:950:C:H4'	59:c3:104:ARG:NH2	2.29	0.48
45:6:1014:G:H2'	45:6:1015:U:O4'	2.14	0.48
45:6:1079:U:H2'	45:6:1080:U:H6	1.77	0.48
49:s3:27:ARG:HD2	56:c0:60:SER:HB2	1.94	0.48
54:s8:36:THR:OG1	54:s8:96:LEU:HB2	2.14	0.48
55:s9:34:PHE:HD1	55:s9:111:THR:HG21	1.79	0.48
55:s9:108:ARG:HH12	55:s9:110:GLN:NE2	2.12	0.48
59:c3:132:VAL:HG23	59:c3:134:VAL:HG13	1.96	0.48
60:c4:50:ALA:O	60:c4:51:ASP:HB2	2.13	0.48
62:c6:46:PHE:HA	62:c6:49:TYR:HB2	1.96	0.48
70:d4:121:THR:HB	70:d4:123:LYS:HG3	1.95	0.48
1:1:19:U:H2'	1:1:20:A:C8	2.48	0.48
1:1:438:A:H8	1:1:438:A:O5'	1.95	0.48
1:1:598:A:P	9:L7:41:ARG:HH12	2.37	0.48
1:1:2256:A:N1	45:2:1757:G:H5'	2.28	0.48
5:L3:220:VAL:HA	5:L3:273:HIS:O	2.13	0.48
11:L9:103:ILE:HG12	11:L9:136:PHE:HE2	1.79	0.48
19:M8:170:ARG:O	19:M8:171:LYS:HG2	2.14	0.48
20:M9:99:LEU:HD11	20:M9:103:ARG:CZ	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:N6:3:LYS:HG3	27:N6:3:LYS:O	2.14	0.48
41:Q0:127:LEU:HD23	41:Q0:128:LYS:N	2.29	0.48
45:2:482:U:H3	45:2:505:A:H61	1.61	0.48
45:2:1208:A:H4'	45:2:1270:G:OP1	2.13	0.48
45:2:1226:A:H4'	45:2:1230:A:H5'	1.96	0.48
45:2:1236:A:H61	45:2:1249:U:H3	1.61	0.48
50:S4:170:THR:OG1	50:S4:171:ASP:N	2.47	0.48
77:SR:70:ASP:HB2	77:SR:111:MET:O	2.14	0.48
1:5:136:G:H2'	1:5:137:G:H8	1.79	0.48
1:5:188:U:H1'	1:5:208:C:H1'	1.96	0.48
1:5:2217:U:H2'	1:5:2218:G:H8	1.79	0.48
1:5:2419:A:H1'	1:5:2804:A:C1'	2.44	0.48
1:5:2994:A:H2'	1:5:2995:A:O4'	2.14	0.48
1:5:3133:C:H2'	1:5:3134:A:O4'	2.14	0.48
80:5:3424:PAR:H531	6:l4:108:LYS:HZ3	1.78	0.48
10:l8:136:LEU:HA	10:l8:197:VAL:HG21	1.96	0.48
12:m0:48:LEU:HD22	12:m0:49:CYS:N	2.29	0.48
15:m4:37:GLU:HG3	15:m4:74:ARG:HG3	1.94	0.48
28:n7:76:ASN:OD1	28:n7:78:ASN:N	2.45	0.48
30:n9:56:ALA:O	30:n9:59:LYS:HG3	2.14	0.48
31:o0:66:LYS:NZ	31:o0:101:LEU:HD12	2.29	0.48
34:o3:16:TYR:OH	34:o3:91:ALA:HB2	2.14	0.48
45:6:500:C:O2'	45:6:501:U:O4'	2.32	0.48
45:6:990:C:H2'	45:6:991:G:O4'	2.13	0.48
45:6:1110:G:C2	45:6:1111:G:H1'	2.49	0.48
45:6:1146:G:N3	45:6:1635:A:H2	2.12	0.48
45:6:1183:A:C2	61:c5:100:LYS:HB3	2.49	0.48
45:6:1600:A:O2'	45:6:1602:C:N4	2.47	0.48
47:s1:176:VAL:HG13	47:s1:184:LEU:HD22	1.96	0.48
49:s3:40:ARG:HG2	66:d0:110:PRO:HB3	1.96	0.48
55:s9:20:GLU:O	55:s9:24:LEU:HG	2.14	0.48
55:s9:54:ARG:HA	55:s9:57:ARG:HE	1.79	0.48
69:d3:57:LEU:O	69:d3:71:CYS:N	2.43	0.48
69:d3:70:LYS:HD2	69:d3:93:LEU:HD22	1.96	0.48
72:d6:62:TYR:CG	72:d6:63:ALA:N	2.80	0.48
1:1:551:A:O2'	1:1:552:G:H8	1.97	0.47
1:1:556:U:H5'	1:1:557:A:C2	2.48	0.47
1:1:978:G:H4'	1:1:979:U:OP1	2.13	0.47
1:1:1639:C:H5'	35:O4:52:GLN:HG2	1.96	0.47
3:4:150:G:O2'	3:4:152:G:OP1	2.26	0.47
9:L7:88:ARG:HA	9:L7:134:VAL:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:M8:177:GLY:O	19:M8:186:VAL:N	2.45	0.47
45:2:180:A:H2'	45:2:181:A:O4'	2.14	0.47
45:2:362:G:H2'	45:2:363:G:O4'	2.14	0.47
45:2:650:U:H2'	45:2:651:G:C8	2.49	0.47
45:2:1381:U:H1'	45:2:1516:A:N6	2.29	0.47
46:S0:148:ASP:HB2	46:S0:164:ASN:ND2	2.29	0.47
47:S1:66:VAL:HG22	47:S1:67:GLU:N	2.29	0.47
48:S2:243:TYR:O	48:S2:246:GLU:HG2	2.14	0.47
49:S3:42:THR:HG22	66:D0:108:ILE:HD11	1.96	0.47
51:S5:51:VAL:HB	51:S5:131:GLN:HB2	1.95	0.47
54:S8:142:LYS:HA	54:S8:145:ALA:HB3	1.96	0.47
56:C0:16:PHE:HD2	56:C0:76:LEU:HB3	1.79	0.47
59:C3:102:LEU:HD11	59:C3:112:LYS:HA	1.96	0.47
62:C6:39:VAL:HG12	62:C6:39:VAL:O	2.14	0.47
1:5:1690:C:H2'	1:5:1691:U:H6	1.79	0.47
2:7:5:G:O3'	7:15:54:ARG:HG3	2.14	0.47
5:13:346:THR:HG22	5:13:347:SER:O	2.14	0.47
6:14:206:LEU:HB2	6:14:246:ARG:HD2	1.96	0.47
7:15:106:ALA:HB1	7:15:169:GLY:HA3	1.96	0.47
7:15:156:GLY:HA2	7:15:181:PRO:HD3	1.96	0.47
41:q0:99:CYS:HB2	41:q0:114:LYS:HD2	1.95	0.47
45:6:39:A:O2'	45:6:40:A:OP2	2.30	0.47
45:6:180:A:H2'	45:6:181:A:O4'	2.14	0.47
48:s2:53:ILE:HG23	48:s2:56:ILE:HD12	1.95	0.47
51:s5:28:PRO:C	51:s5:29:ILE:HG12	2.38	0.47
51:s5:222:LYS:HG3	51:s5:225:ARG:HH11	1.79	0.47
55:s9:40:LYS:HE3	55:s9:40:LYS:HB2	1.68	0.47
60:c4:129:LYS:HG2	60:c4:130:GLY:N	2.29	0.47
65:c9:42:GLY:HA3	65:c9:84:LYS:HB2	1.95	0.47
65:c9:86:ARG:HH21	65:c9:89:ARG:HE	1.62	0.47
77:sR:274:LEU:HD13	77:sR:313:TRP:CE2	2.49	0.47
1:1:1089:G:H2'	1:1:1090:G:H8	1.79	0.47
1:1:1100:U:H2'	1:1:1101:G:H8	1.79	0.47
2:3:12:U:OP2	2:3:68:C:O2'	2.30	0.47
2:3:96:U:H4'	21:N0:119:ARG:HB2	1.96	0.47
80:3:201:PAR:H532	80:3:201:PAR:N21	2.29	0.47
3:4:71:A:H4'	3:4:72:A:O5'	2.12	0.47
10:L8:144:GLU:OE1	37:O6:36:ARG:NH2	2.47	0.47
11:L9:22:SER:HB2	11:L9:39:LYS:HE3	1.94	0.47
21:N0:6:GLU:OE2	21:N0:99:ARG:NE	2.39	0.47
30:N9:28:LYS:HD3	30:N9:29:TYR:H	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:238:U:H2'	45:2:239:C:H5''	1.96	0.47
45:2:272:U:H2'	45:2:273:G:C8	2.49	0.47
45:2:472:U:H1'	45:2:770:A:N3	2.29	0.47
45:2:1523:G:O6	65:C9:68:ARG:NH1	2.48	0.47
53:S7:38:LEU:HD23	53:S7:41:LEU:HD12	1.96	0.47
53:S7:126:LEU:HD21	53:S7:181:ILE:HD11	1.96	0.47
61:C5:17:TYR:H	61:C5:25:LEU:HD11	1.78	0.47
61:C5:125:PRO:HG3	64:C8:129:TRP:CH2	2.49	0.47
70:D4:84:LYS:HE2	70:D4:85:PHE:CZ	2.49	0.47
72:D6:18:VAL:HG23	72:D6:31:PRO:HB3	1.96	0.47
1:5:266:A:C4	37:o6:30:LYS:HE3	2.49	0.47
1:5:1738:C:O2'	35:o4:52:GLN:HG3	2.14	0.47
1:5:2659:G:H4'	1:5:2751:G:O2'	2.14	0.47
1:5:3013:U:H3	1:5:3041:U:H3	1.62	0.47
2:7:110:G:OP2	7:15:279:LYS:NZ	2.47	0.47
3:8:59:A:C2	3:8:100:U:H1'	2.49	0.47
4:l2:96:LEU:O	44:q3:87:ARG:HD3	2.14	0.47
10:l8:134:TYR:H	10:l8:134:TYR:HD2	1.62	0.47
11:l9:117:PHE:CE1	11:l9:165:CYS:HB2	2.49	0.47
18:m7:25:SER:O	18:m7:29:THR:HG23	2.13	0.47
31:o0:25:LEU:HD23	31:o0:90:VAL:HG13	1.97	0.47
43:q2:71:ARG:NH2	43:q2:80:ARG:HH11	2.07	0.47
45:6:416:A:H5''	45:6:417:A:N7	2.30	0.47
45:6:1081:A:OP2	45:6:1081:A:H8	1.96	0.47
53:s7:29:ASN:OD1	53:s7:29:ASN:N	2.47	0.47
53:s7:164:TYR:CD1	53:s7:165:LYS:HG3	2.49	0.47
61:c5:126:VAL:HG12	78:sM:71:ASN:HD21	1.78	0.47
64:c8:40:ARG:NH1	65:c9:44:GLU:OE1	2.48	0.47
78:sM:27:LYS:HB2	78:sM:27:LYS:HE3	1.68	0.47
1:1:548:G:H2'	1:1:549:U:C5	2.49	0.47
1:1:713:U:H2'	1:1:714:G:O4'	2.14	0.47
1:1:824:C:H2'	1:1:825:U:C6	2.49	0.47
1:1:945:C:H2'	1:1:946:U:C6	2.49	0.47
1:1:1100:U:OP2	9:L7:196:LYS:NZ	2.33	0.47
1:1:1541:G:H1'	1:1:1557:A:C5	2.49	0.47
1:1:2775:U:H2'	1:1:2776:C:C6	2.49	0.47
1:1:3096:C:H2'	1:1:3097:C:H6	1.79	0.47
4:L2:125:ALA:O	4:L2:128:ARG:HD2	2.14	0.47
6:L4:289:ILE:O	6:L4:295:ILE:HD12	2.15	0.47
19:M8:170:ARG:NH2	29:N8:59:ARG:HA	2.29	0.47
20:M9:4:LEU:HD22	20:M9:32:ILE:HG22	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:N6:59:VAL:O	27:N6:64:LYS:HD2	2.14	0.47
31:O0:45:ALA:O	31:O0:48:THR:HG22	2.13	0.47
38:O7:27:PHE:HA	38:O7:34:CYS:HA	1.95	0.47
45:2:995:A:H2'	45:2:996:U:O4'	2.13	0.47
45:2:1413:U:H4'	45:2:1414:U:OP2	2.14	0.47
45:2:1473:U:H5''	51:S5:190:ILE:HG13	1.96	0.47
45:2:1603:U:H2'	45:2:1604:U:H6	1.79	0.47
47:S1:32:ILE:O	47:S1:42:ASN:HA	2.14	0.47
48:S2:101:VAL:HG22	48:S2:115:ILE:HG12	1.97	0.47
51:S5:113:ILE:HG21	51:S5:190:ILE:HG22	1.96	0.47
53:S7:141:ARG:HD3	53:S7:151:LYS:HE3	1.95	0.47
64:C8:54:LEU:H	64:C8:54:LEU:HD22	1.79	0.47
66:D0:96:PRO:HG2	66:D0:99:ILE:HB	1.94	0.47
67:D1:31:SER:OG	67:D1:32:VAL:N	2.47	0.47
77:SR:234:LEU:H	77:SR:234:LEU:HD12	1.78	0.47
1:5:347:G:N7	38:o7:55:ARG:NH2	2.53	0.47
1:5:1016:C:H1'	1:5:1017:C:H5	1.79	0.47
1:5:1020:G:OP2	78:sM:49:LYS:HD2	2.14	0.47
1:5:2947:G:C2	5:l3:250:ALA:HB1	2.50	0.47
1:5:3131:U:H2'	1:5:3132:C:C6	2.50	0.47
1:5:3393:U:H2'	1:5:3394:U:H6	1.78	0.47
80:5:3419:PAR:O44	80:5:3419:PAR:N64	2.44	0.47
80:5:3423:PAR:O52	80:5:3423:PAR:N21	2.48	0.47
4:l2:29:LEU:HA	4:l2:76:PHE:CE1	2.49	0.47
5:l3:152:LYS:HD3	5:l3:189:SER:HA	1.97	0.47
7:l5:270:LYS:HG2	7:l5:273:ARG:HB3	1.96	0.47
8:l6:47:PHE:O	8:l6:50:LYS:HB2	2.14	0.47
8:l6:97:ASN:HD21	8:l6:100:LYS:HG2	1.80	0.47
11:l9:2:LYS:HA	11:l9:60:GLY:O	2.13	0.47
13:m1:111:ASP:N	13:m1:111:ASP:OD1	2.46	0.47
14:m3:24:VAL:HG11	14:m3:26:PHE:CZ	2.49	0.47
15:m4:116:GLU:O	15:m4:120:VAL:HG23	2.15	0.47
45:6:359:A:C2	69:d3:38:PHE:HB3	2.50	0.47
45:6:1051:G:H4'	45:6:1052:U:OP2	2.14	0.47
45:6:1057:U:H3	45:6:1062:A:H61	1.61	0.47
45:6:1142:A:H2'	45:6:1143:A:C8	2.48	0.47
45:6:1223:A:H2'	45:6:1224:A:C8	2.49	0.47
45:6:1451:C:H2'	45:6:1452:U:C6	2.48	0.47
45:6:1544:U:H4'	64:c8:132:ARG:NH1	2.30	0.47
48:s2:80:VAL:HA	48:s2:102:VAL:HG12	1.96	0.47
62:c6:55:VAL:HG22	62:c6:59:LYS:HD2	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:c7:61:ILE:HA	63:c7:64:GLY:O	2.15	0.47
69:d3:130:VAL:O	69:d3:131:SER:HB3	2.15	0.47
73:d7:49:HIS:HA	73:d7:70:LYS:HA	1.96	0.47
76:e0:30:PRO:O	76:e0:35:TYR:HB2	2.15	0.47
1:1:595:G:H1	1:1:609:G:H5''	1.79	0.47
1:1:796:U:H2'	1:1:797:U:C6	2.49	0.47
1:1:1431:G:N7	29:N8:9:ARG:NH2	2.62	0.47
1:1:2213:A:H2'	1:1:2214:A:C8	2.49	0.47
1:1:2768:U:H2'	1:1:2769:A:H8	1.78	0.47
1:1:3133:C:C2	1:1:3134:A:C8	3.02	0.47
1:1:3169:U:O2'	1:1:3170:A:OP1	2.32	0.47
13:M1:160:VAL:CG2	13:M1:171:VAL:HG21	2.44	0.47
20:M9:172:ARG:O	20:M9:175:GLN:N	2.47	0.47
22:N1:12:ARG:HD3	22:N1:13:TYR:CE1	2.50	0.47
34:O3:16:TYR:CG	34:O3:25:PRO:HA	2.50	0.47
40:O9:10:LYS:HA	40:O9:13:MET:HE3	1.95	0.47
42:Q1:6:ARG:O	42:Q1:10:THR:HG23	2.14	0.47
43:Q2:77:CYS:O	43:Q2:78:LYS:HG2	2.14	0.47
45:2:555:A:O2'	45:2:556:A:O5'	2.23	0.47
45:2:1504:G:H2'	45:2:1505:A:C8	2.50	0.47
47:S1:169:SER:HA	47:S1:172:LEU:HB2	1.94	0.47
48:S2:129:ILE:O	48:S2:133:LYS:N	2.38	0.47
49:S3:167:PHE:CE1	49:S3:192:PRO:HB3	2.49	0.47
60:C4:82:LYS:HA	60:C4:116:GLU:O	2.14	0.47
65:C9:84:LYS:HB2	65:C9:94:ILE:HB	1.96	0.47
78:SM:102:THR:OG1	78:SM:103:LYS:N	2.47	0.47
1:5:214:G:H4'	27:n6:10:SER:O	2.13	0.47
1:5:237:G:H5'	1:5:238:A:OP2	2.13	0.47
1:5:308:A:H1'	1:5:2222:A:C2	2.49	0.47
1:5:664:U:H2'	1:5:665:A:C8	2.50	0.47
1:5:856:G:C6	1:5:857:G:N1	2.82	0.47
1:5:2349:U:OP1	83:5:4257:HOH:O	2.20	0.47
1:5:2757:U:H4'	22:n1:7:TYR:HB3	1.96	0.47
80:5:3418:PAR:N21	80:5:3418:PAR:O43	2.47	0.47
6:l4:26:PHE:HE2	6:l4:258:LEU:HD23	1.78	0.47
7:l5:105:ILE:HA	7:l5:108:ARG:HB3	1.96	0.47
19:m8:100:THR:HG22	19:m8:120:GLU:H	1.79	0.47
21:n0:129:ILE:HG22	21:n0:131:LYS:O	2.14	0.47
37:o6:55:ARG:O	37:o6:58:ILE:HG12	2.15	0.47
45:6:143:G:H2'	45:6:144:U:H1'	1.96	0.47
45:6:327:U:H2'	45:6:328:A:H8	1.77	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:333:A:C6	45:6:334:G:C6	3.03	0.47
45:6:1347:U:C4	66:d0:58:LEU:HD21	2.49	0.47
45:6:1382:A:O2'	45:6:1383:G:H5''	2.14	0.47
47:s1:129:THR:OG1	47:s1:131:ASP:OD1	2.25	0.47
47:s1:181:LEU:O	47:s1:185:THR:OG1	2.32	0.47
79:s6:2:LYS:HB3	79:s6:108:VAL:HG12	1.96	0.47
53:s7:164:TYR:CE1	53:s7:165:LYS:HG3	2.50	0.47
53:s7:165:LYS:O	53:s7:168:SER:N	2.47	0.47
56:c0:25:LYS:HB2	56:c0:64:TYR:CE2	2.49	0.47
70:d4:54:ALA:HB1	70:d4:76:TYR:HB2	1.95	0.47
1:1:358:G:O6	80:4:201:PAR:H641	2.15	0.47
1:1:391:A:C5	1:1:392:G:C8	3.03	0.47
1:1:911:C:H5''	4:L2:15:ILE:HD13	1.96	0.47
1:1:1139:G:O3'	9:L7:94:LYS:HA	2.13	0.47
1:1:1660:C:H2'	1:1:1661:G:H8	1.79	0.47
1:1:1798:A:H2'	1:1:1799:A:C8	2.49	0.47
1:1:1877:U:H5''	1:1:1878:G:O4'	2.14	0.47
1:1:2202:C:H2'	1:1:2203:U:O4'	2.15	0.47
1:1:3230:G:H4'	15:M4:132:LYS:HG2	1.97	0.47
5:L3:117:ARG:NH1	5:L3:175:LYS:HD3	2.30	0.47
5:L3:188:ILE:O	5:L3:192:VAL:HG12	2.14	0.47
10:L8:149:LYS:HG3	10:L8:201:THR:O	2.14	0.47
11:L9:23:ARG:HB2	11:L9:39:LYS:HA	1.96	0.47
16:M5:104:GLU:O	16:M5:108:ARG:HG3	2.15	0.47
17:M6:62:THR:HG21	17:M6:68:ARG:HG3	1.95	0.47
18:M7:36:ILE:HG12	18:M7:44:ALA:HB1	1.97	0.47
18:M7:107:LEU:HD12	18:M7:152:GLU:CD	2.40	0.47
19:M8:34:THR:HG22	19:M8:49:LEU:HD21	1.96	0.47
19:M8:57:ILE:HD11	19:M8:147:ARG:CZ	2.44	0.47
32:O1:23:VAL:O	32:O1:28:ARG:NH1	2.48	0.47
32:O1:44:MET:HB2	32:O1:46:THR:HG22	1.97	0.47
44:Q3:83:ILE:HG22	44:Q3:87:ARG:NH1	2.29	0.47
45:2:206:A:H1'	45:2:262:U:O2	2.15	0.47
45:2:267:U:H2'	45:2:268:C:H6	1.80	0.47
45:2:823:G:O2'	45:2:824:G:H8	1.97	0.47
45:2:1160:A:H2'	45:2:1161:C:C6	2.49	0.47
47:S1:166:LYS:O	47:S1:170:GLU:N	2.45	0.47
49:S3:69:LEU:HA	49:S3:72:LEU:HD12	1.97	0.47
50:S4:121:TYR:CD2	50:S4:161:LYS:HE3	2.50	0.47
51:S5:48:PHE:CZ	51:S5:67:PRO:HA	2.50	0.47
54:S8:9:HIS:CD2	54:S8:10:LYS:N	2.82	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:S9:168:ARG:HG2	55:S9:169:PRO:HD2	1.96	0.47
56:C0:25:LYS:HD2	56:C0:59:PHE:CE2	2.48	0.47
57:C1:13:PHE:HE2	57:C1:15:LYS:HB3	1.79	0.47
59:C3:50:ILE:HG22	59:C3:71:ILE:HD13	1.97	0.47
72:D6:82:ARG:O	72:D6:84:VAL:HB	2.14	0.47
77:SR:115:ILE:HG13	77:SR:121:MET:O	2.14	0.47
1:5:299:G:C6	37:o6:30:LYS:HB3	2.49	0.47
1:5:947:G:H5''	33:o2:55:ILE:HB	1.97	0.47
1:5:1494:U:P	40:o9:42:ARG:HH22	2.37	0.47
1:5:1718:G:H2'	1:5:1719:G:C8	2.50	0.47
1:5:2365:C:H42	1:5:2382:G:H1	1.61	0.47
1:5:2436:U:H3	1:5:2511:A:N6	2.05	0.47
1:5:3051:U:H1'	24:n3:92:PHE:CE1	2.49	0.47
1:5:3159:C:H2'	1:5:3160:U:C6	2.49	0.47
80:5:3402:PAR:H642	80:5:3402:PAR:H43	1.96	0.47
3:8:36:G:OP1	38:o7:66:TYR:OH	2.24	0.47
7:15:128:GLU:HG3	7:15:192:PRO:HG3	1.96	0.47
11:19:76:ASP:O	11:19:80:THR:HG23	2.14	0.47
18:m7:24:VAL:HG13	18:m7:86:LYS:HG2	1.97	0.47
45:6:366:A:OP1	45:6:758:U:O2'	2.30	0.47
45:6:444:C:H5	70:d4:105:ARG:HH12	1.63	0.47
45:6:1092:A:O2'	45:6:1093:A:H3'	2.15	0.47
45:6:1237:G:H2'	45:6:1238:A:C8	2.50	0.47
45:6:1461:C:H2'	45:6:1462:G:H8	1.78	0.47
47:s1:71:ALA:HB1	47:s1:77:GLU:HA	1.96	0.47
49:s3:45:LYS:HG3	49:s3:83:THR:HA	1.95	0.47
51:s5:116:HIS:CE1	71:d5:98:GLN:HB3	2.50	0.47
53:s7:174:ASN:OD1	53:s7:180:GLN:NE2	2.48	0.47
61:c5:18:ARG:NH2	61:c5:38:PRO:HG3	2.30	0.47
64:c8:72:ILE:HA	64:c8:79:TYR:CD2	2.48	0.47
1:1:911:C:N4	4:L2:3:ARG:HD3	2.30	0.47
1:1:996:A:H2'	1:1:997:A:O4'	2.15	0.47
1:1:2267:C:H2'	1:1:2268:U:O4'	2.14	0.47
1:1:2357:A:H2'	1:1:2358:A:H8	1.80	0.47
2:3:85:G:OP1	83:3:303:HOH:O	2.20	0.47
3:4:143:U:H4'	16:M5:139:HIS:HE2	1.80	0.47
16:M5:128:LYS:HB3	16:M5:130:PHE:CE2	2.50	0.47
17:M6:37:ARG:HG3	17:M6:108:ILE:HG13	1.97	0.47
19:M8:111:ARG:HB2	19:M8:121:CYS:SG	2.55	0.47
26:N5:99:VAL:HG11	26:N5:124:VAL:HG11	1.97	0.47
31:O0:13:LYS:HB3	31:O0:100:ILE:CG1	2.41	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:O3:39:GLN:H	34:O3:39:GLN:CD	2.23	0.47
45:2:1317:C:H2'	45:2:1318:G:O4'	2.14	0.47
45:2:1344:A:H2'	45:2:1345:A:C8	2.49	0.47
45:2:1466:G:H2'	45:2:1467:C:C6	2.50	0.47
45:2:1503:A:H3'	45:2:1504:G:C8	2.49	0.47
49:S3:18:TYR:HE1	49:S3:37:VAL:HG23	1.77	0.47
49:S3:115:ILE:HG21	78:SM:110:TRP:HA	1.96	0.47
52:S6:136:LYS:HG3	52:S6:173:PRO:HB3	1.96	0.47
55:S9:139:GLN:HE22	70:D4:64:PHE:HB3	1.79	0.47
57:C1:94:ILE:HG12	69:D3:16:ARG:HD3	1.96	0.47
60:C4:29:HIS:HB3	60:C4:41:ARG:HG3	1.96	0.47
60:C4:91:THR:OG1	60:C4:93:THR:HG22	2.13	0.47
67:D1:3:ASN:CG	67:D1:4:ASP:H	2.23	0.47
76:E0:50:VAL:HA	76:E0:54:ARG:HA	1.97	0.47
1:5:85:A:OP2	80:5:3423:PAR:O34	2.33	0.47
1:5:676:G:H3'	19:m8:107:THR:HG21	1.97	0.47
1:5:706:A:H4'	1:5:781:G:O2'	2.15	0.47
1:5:768:C:OP1	14:m3:186:ARG:NH2	2.37	0.47
1:5:785:G:OP2	19:m8:66:ARG:NH1	2.48	0.47
1:5:873:C:H5''	1:5:874:U:O5'	2.15	0.47
1:5:1803:C:O2'	35:o4:70:LYS:HD2	2.14	0.47
1:5:1841:A:N3	40:o9:45:ARG:NH2	2.63	0.47
1:5:2131:A:N6	44:q3:18:TYR:HA	2.29	0.47
1:5:2745:G:N2	1:5:2748:A:OP2	2.47	0.47
1:5:2772:C:H4'	1:5:2773:C:H5'	1.97	0.47
80:5:3415:PAR:H42	80:5:3415:PAR:H13	1.70	0.47
3:8:5:U:H2'	3:8:6:U:C6	2.50	0.47
19:m8:83:VAL:O	19:m8:103:ALA:HA	2.15	0.47
25:n4:17:ARG:HH21	25:n4:32:GLN:HE22	1.61	0.47
28:n7:54:THR:OG1	28:n7:55:LYS:N	2.48	0.47
28:n7:97:SER:OG	28:n7:98:THR:N	2.46	0.47
35:o4:47:CYS:O	35:o4:49:SER:N	2.48	0.47
45:6:1755:A:OP1	69:d3:63:GLN:HG2	2.15	0.47
53:s7:109:VAL:HG13	53:s7:110:GLN:H	1.79	0.47
55:s9:109:LEU:HD11	55:s9:134:ILE:HD13	1.96	0.47
65:c9:127:ASN:OD1	65:c9:130:ARG:NH1	2.47	0.47
71:d5:40:VAL:O	71:d5:75:LEU:HD11	2.14	0.47
77:sR:126:SER:O	77:sR:151:VAL:HB	2.15	0.47
1:1:114:A:N1	1:1:266:A:O2'	2.44	0.47
1:1:129:U:H2'	1:1:130:A:C8	2.49	0.47
1:1:351:A:N6	40:O9:35:ILE:HG23	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:656:A:C6	1:1:657:A:C6	3.03	0.47
1:1:879:U:O2	1:1:2357:A:H1'	2.15	0.47
1:1:1629:U:O4	28:N7:111:LYS:HD2	2.14	0.47
1:1:2356:A:N6	1:1:2983:C:C5	2.79	0.47
1:1:2358:A:OP1	80:1:3409:PAR:H11	2.15	0.47
1:1:2561:A:C2	10:L8:31:PRO:HA	2.50	0.47
1:1:2652:U:OP1	43:Q2:65:THR:OG1	2.28	0.47
1:1:2656:A:H4'	1:1:2657:A:OP1	2.14	0.47
1:1:2855:U:OP2	12:M0:6:ALA:HB3	2.14	0.47
2:3:75:G:O2'	2:3:104:A:N6	2.41	0.47
6:L4:209:TYR:O	6:L4:230:VAL:HG22	2.15	0.47
7:L5:178:ASN:HA	7:L5:183:TRP:CD2	2.50	0.47
10:L8:178:ALA:HA	10:L8:222:PHE:HD2	1.80	0.47
12:M0:14:ASN:O	12:M0:128:ARG:NH2	2.48	0.47
12:M0:84:ALA:HB1	12:M0:144:ASN:ND2	2.30	0.47
12:M0:87:LEU:HG	12:M0:138:VAL:HG22	1.97	0.47
12:M0:208:ASN:HA	12:M0:211:ARG:HB2	1.95	0.47
13:M1:148:VAL:CG1	13:M1:152:HIS:HB3	2.45	0.47
20:M9:23:TRP:CZ2	20:M9:25:ASP:HB3	2.50	0.47
22:N1:14:MET:HE3	22:N1:14:MET:HB3	1.81	0.47
26:N5:60:TYR:CD1	36:O5:25:LYS:HD3	2.49	0.47
28:N7:47:GLU:HB3	28:N7:71:PHE:CD2	2.50	0.47
28:N7:134:LEU:HD11	35:O4:93:PHE:HB2	1.96	0.47
31:O0:76:GLU:O	31:O0:80:ALA:N	2.39	0.47
35:O4:29:ILE:HD11	35:O4:31:ARG:NH2	2.23	0.47
39:O8:64:LYS:NZ	39:O8:67:GLN:HG3	2.30	0.47
45:2:181:A:H2'	45:2:182:A:C8	2.48	0.47
45:2:197:A:N6	54:S8:138:ASN:HD22	2.10	0.47
45:2:278:U:H4'	45:2:279:G:O5'	2.15	0.47
45:2:327:U:H2'	45:2:328:A:C8	2.49	0.47
45:2:434:G:H5'	69:D3:78:LYS:HB3	1.97	0.47
45:2:473:A:H3'	45:2:474:A:H8	1.78	0.47
45:2:913:G:H5'	45:2:914:G:C8	2.50	0.47
45:2:1112:G:O2'	45:2:1133:A:N6	2.47	0.47
45:2:1229:G:HO2'	45:2:1255:G:N2	2.10	0.47
45:2:1542:G:N2	45:2:1568:C:O2	2.47	0.47
45:2:1656:U:OP1	45:2:1657:U:H5''	2.14	0.47
45:2:1740:A:H2'	45:2:1741:U:C6	2.49	0.47
46:S0:23:HIS:CD2	46:S0:24:LEU:HD22	2.50	0.47
49:S3:16:VAL:HG11	75:D9:22:ARG:NH1	2.29	0.47
50:S4:89:VAL:HA	50:S4:99:PHE:O	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:150:PRO:HB2	50:S4:154:ILE:HD12	1.97	0.47
50:S4:206:ASP:HB2	50:S4:222:LEU:HG	1.96	0.47
65:C9:76:LEU:HD23	65:C9:79:LEU:HD23	1.96	0.47
66:D0:87:HIS:HB2	66:D0:89:ARG:HH11	1.78	0.47
74:D8:10:ALA:HB1	74:D8:30:VAL:HB	1.96	0.47
1:5:365:A:H1'	6:l4:82:THR:OG1	2.14	0.47
1:5:705:A:N1	1:5:714:G:O2'	2.45	0.47
1:5:956:U:H2'	1:5:957:C:C6	2.49	0.47
1:5:1347:U:H3'	19:m8:38:ARG:NH2	2.30	0.47
1:5:1389:G:O6	6:l4:186:LYS:NZ	2.48	0.47
1:5:1614:C:H2'	1:5:1615:C:C6	2.49	0.47
1:5:1666:G:H2'	1:5:1667:A:C8	2.49	0.47
1:5:2586:G:C8	10:l8:241:LYS:HD3	2.49	0.47
1:5:2697:A:H2'	1:5:2698:G:C8	2.49	0.47
1:5:2874:G:C6	1:5:2945:G:C8	3.02	0.47
1:5:2882:U:H2'	1:5:2883:U:O4'	2.14	0.47
80:5:3420:PAR:N24	80:5:3420:PAR:H43	2.30	0.47
7:l5:120:LYS:HG3	7:l5:121:GLY:H	1.79	0.47
8:l6:98:VAL:HA	8:l6:101:PHE:HD2	1.80	0.47
11:l9:55:VAL:O	11:l9:68:LEU:HD21	2.14	0.47
14:m3:79:GLU:HG2	14:m3:109:PHE:CD2	2.49	0.47
14:m3:120:GLN:O	14:m3:123:ILE:HG12	2.14	0.47
16:m5:48:ALA:O	16:m5:53:TYR:HB3	2.14	0.47
17:m6:12:LYS:HG3	17:m6:40:GLU:HB3	1.96	0.47
22:n1:17:ARG:NH1	22:n1:45:ASN:OD1	2.47	0.47
23:n2:56:VAL:HG22	23:n2:65:VAL:HG22	1.96	0.47
24:n3:135:VAL:HG21	25:n4:26:SER:HB3	1.95	0.47
25:n4:47:ARG:HD3	25:n4:58:HIS:CE1	2.49	0.47
26:n5:63:ILE:HD13	26:n5:103:TYR:HE2	1.78	0.47
26:n5:82:LEU:HD11	26:n5:135:ILE:HD13	1.97	0.47
29:n8:73:LEU:HB3	29:n8:112:ILE:HD13	1.97	0.47
32:o1:41:LYS:O	32:o1:45:GLY:HA2	2.15	0.47
39:o8:24:THR:HA	39:o8:76:ASN:O	2.15	0.47
45:6:107:C:OP1	45:6:384:G:H5'	2.14	0.47
45:6:156:A:H2'	45:6:157:A:O4'	2.15	0.47
45:6:580:A:O2'	45:6:582:U:OP1	2.32	0.47
45:6:799:A:H4'	50:s4:201:HIS:NE2	2.30	0.47
45:6:1144:U:H2'	45:6:1145:U:C6	2.50	0.47
45:6:1171:A:H2'	45:6:1172:G:C8	2.50	0.47
46:s0:56:LYS:NZ	67:d1:66:ASP:OD1	2.44	0.47
48:s2:153:SER:OG	48:s2:154:LEU:N	2.46	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:s4:95:THR:HG23	50:s4:97:GLU:HG3	1.96	0.47
50:s4:161:LYS:HB3	50:s4:170:THR:O	2.15	0.47
51:s5:37:GLN:HB3	62:c6:53:LEU:HD13	1.97	0.47
55:s9:109:LEU:HB2	55:s9:146:PHE:HB3	1.96	0.47
55:s9:126:ARG:O	55:s9:130:THR:HG23	2.15	0.47
56:c0:46:LEU:O	56:c0:50:THR:HG23	2.15	0.47
58:c2:35:ALA:HB3	58:c2:41:LEU:HG	1.97	0.47
61:c5:55:GLY:O	61:c5:59:LYS:HD3	2.14	0.47
63:c7:51:ALA:O	63:c7:55:THR:HG23	2.15	0.47
65:c9:21:PHE:HA	65:c9:24:ARG:HE	1.79	0.47
66:d0:80:GLU:OE1	75:d9:44:ARG:NH1	2.47	0.47
70:d4:91:LEU:HB3	70:d4:97:ALA:HB3	1.95	0.47
77:sR:161:LYS:C	77:sR:163:ASP:N	2.73	0.47
5:L3:152:LYS:HD3	5:L3:189:SER:HB3	1.97	0.47
10:L8:158:ASP:HB3	10:L8:159:PRO:HD3	1.96	0.47
18:M7:122:ALA:HB3	18:M7:143:PRO:HB2	1.95	0.47
35:O4:83:ASN:OD1	35:O4:83:ASN:N	2.48	0.47
45:2:77:U:H4'	45:2:78:A:OP1	2.15	0.47
45:2:119:A:N1	50:S4:7:LYS:NZ	2.61	0.47
45:2:452:A:H3'	45:2:453:U:C6	2.50	0.47
45:2:1389:C:O2'	63:C7:52:GLY:HA3	2.15	0.47
45:2:1459:C:H4'	61:C5:126:VAL:HG11	1.96	0.47
45:2:1584:G:C8	62:C6:122:ARG:HB3	2.49	0.47
46:S0:184:LEU:C	46:S0:186:GLY:H	2.22	0.47
47:S1:61:LEU:HD22	47:S1:62:LYS:H	1.78	0.47
56:C0:15:LEU:O	56:C0:19:GLY:HA2	2.15	0.47
68:D2:26:LEU:HD23	68:D2:62:VAL:HG22	1.96	0.47
70:D4:45:ALA:HB2	70:D4:51:GLU:O	2.14	0.47
78:SM:89:ARG:NH2	78:SM:92:ASP:OD2	2.45	0.47
1:5:314:U:H2'	1:5:315:C:C6	2.49	0.47
1:5:883:A:H5''	1:5:884:A:OP1	2.15	0.47
1:5:1097:G:O2'	22:n1:108:ARG:NH2	2.46	0.47
1:5:1715:A:N3	1:5:1715:A:H2'	2.29	0.47
1:5:1907:C:O2	5:l3:240:ARG:NH2	2.39	0.47
1:5:2563:G:H8	1:5:2563:G:O5'	1.97	0.47
1:5:3155:U:O3'	1:5:3156:U:H4'	2.14	0.47
1:5:3383:G:H2'	1:5:3384:U:H6	1.80	0.47
9:l7:165:ASP:H	9:l7:168:ILE:HD12	1.80	0.47
10:l8:64:ILE:O	10:l8:68:ARG:HG2	2.15	0.47
10:l8:219:ASP:HA	10:l8:223:ALA:HB3	1.97	0.47
20:m9:160:GLU:HG3	20:m9:163:ARG:CZ	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:n3:2:SER:O	24:n3:57:MET:N	2.28	0.47
45:6:856:A:N6	53:s7:116:ARG:HD3	2.30	0.47
45:6:1514:U:H6	49:s3:5:ILE:HA	1.80	0.47
45:6:1527:C:H5'	51:s5:106:LYS:HE2	1.97	0.47
45:6:1765:A:H5'	45:6:1767:G:N7	2.30	0.47
50:s4:189:LEU:HD12	50:s4:190:GLY:N	2.30	0.47
61:c5:20:VAL:HG23	61:c5:36:LEU:HD11	1.97	0.47
62:c6:105:LEU:O	62:c6:109:PHE:N	2.36	0.47
71:d5:57:TYR:HB2	71:d5:60:VAL:HG22	1.96	0.47
72:d6:36:ILE:H	72:d6:36:ILE:HD12	1.80	0.47
77:sR:70:ASP:OD1	77:sR:155:ARG:NH2	2.44	0.47
1:1:126:U:OP1	16:M5:144:ARG:NH1	2.45	0.47
1:1:353:G:O6	38:O7:55:ARG:NH1	2.48	0.47
1:1:2159:U:OP2	80:1:3410:PAR:H642	2.15	0.47
1:1:2677:G:H1'	78:SM:51:ARG:NH1	2.30	0.47
1:1:2712:U:O2'	1:1:2743:A:O2'	2.31	0.47
1:1:3217:C:O2	1:1:3217:C:H2'	2.15	0.47
3:4:9:A:H2'	3:4:10:A:C8	2.49	0.47
5:L3:13:HIS:HB3	5:L3:16:PHE:HD1	1.79	0.47
7:L5:25:GLU:OE1	7:L5:27:LYS:HD2	2.15	0.47
7:L5:102:GLY:O	7:L5:105:ILE:HG22	2.14	0.47
7:L5:148:ILE:HG13	7:L5:159:VAL:HG11	1.96	0.47
8:L6:52:VAL:HG23	8:L6:67:GLY:HA2	1.95	0.47
10:L8:72:PRO:HG3	16:M5:18:VAL:HA	1.97	0.47
11:L9:106:LYS:O	11:L9:109:ALA:HB2	2.14	0.47
18:M7:28:ASN:O	18:M7:32:THR:HG23	2.14	0.47
19:M8:98:LYS:HG3	19:M8:118:GLY:O	2.14	0.47
24:N3:108:GLU:HB3	24:N3:128:ARG:HG3	1.97	0.47
25:N4:27:LYS:HG2	25:N4:29:PHE:CE1	2.49	0.47
31:O0:83:LYS:HD2	31:O0:83:LYS:N	2.30	0.47
33:O2:78:ASN:HA	33:O2:108:ILE:HD11	1.95	0.47
45:2:793:A:H2'	45:2:794:U:C2	2.50	0.47
45:2:794:U:O2'	45:2:795:U:O2	2.15	0.47
45:2:960:U:H2'	45:2:961:U:C6	2.50	0.47
45:2:1207:C:H42	45:2:1456:C:H41	1.61	0.47
49:S3:32:GLU:OE1	49:S3:32:GLU:N	2.47	0.47
58:C2:89:ILE:HG12	58:C2:90:LYS:H	1.80	0.47
59:C3:89:TYR:HE2	59:C3:150:VAL:HA	1.78	0.47
64:C8:87:ASN:OD1	64:C8:88:ARG:N	2.48	0.47
67:D1:11:LEU:H	67:D1:11:LEU:HG	1.52	0.47
1:5:73:C:O2'	14:m3:59:ARG:HG2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:279:U:H2'	1:5:280:U:C6	2.46	0.47
1:5:398:A:N7	18:m7:3:ARG:NH2	2.62	0.47
1:5:618:C:O2'	1:5:621:A:O2'	2.29	0.47
1:5:620:U:C3'	1:5:621:A:H5'	2.44	0.47
1:5:1494:U:H4'	1:5:1495:U:O5'	2.15	0.47
1:5:1632:A:H2'	1:5:1633:C:C6	2.50	0.47
2:7:72:A:N6	80:7:201:PAR:H34	2.28	0.47
8:l6:109:GLU:OE1	8:l6:109:GLU:N	2.27	0.47
11:l9:57:VAL:HG23	11:l9:68:LEU:HG	1.96	0.47
11:l9:84:LYS:HD3	11:l9:189:GLU:HB2	1.97	0.47
12:m0:60:LEU:HD12	12:m0:129:VAL:HG21	1.96	0.47
17:m6:175:THR:O	17:m6:178:VAL:HG12	2.15	0.47
19:m8:58:ASN:O	19:m8:144:ARG:NH2	2.43	0.47
21:n0:1:MET:HB3	21:n0:118:PHE:CD1	2.49	0.47
45:6:17:C:H2'	45:6:18:C:H6	1.79	0.47
49:s3:221:SER:H	77:sR:193:ILE:HB	1.80	0.47
58:c2:128:ALA:HB3	58:c2:133:LEU:HD22	1.96	0.47
63:c7:6:THR:OG1	63:c7:7:LYS:N	2.48	0.47
67:d1:76:ASP:OD1	67:d1:76:ASP:N	2.48	0.47
78:sM:83:LYS:HA	78:sM:83:LYS:HD2	1.62	0.47
1:1:283:G:O6	1:1:304:G:H1'	2.15	0.47
1:1:871:U:H2'	1:1:872:U:C6	2.49	0.47
1:1:1145:G:OP1	33:O2:44:ARG:NH1	2.45	0.47
1:1:2338:C:H2'	1:1:2339:C:C5	2.50	0.47
1:1:2674:A:C5	13:M1:124:GLY:HA3	2.49	0.47
2:3:49:G:N7	7:L5:58:LYS:HE2	2.29	0.47
3:4:41:A:O2'	38:O7:59:THR:HG22	2.14	0.47
3:4:81:U:H3'	3:4:81:U:C6	2.51	0.47
6:L4:6:VAL:HG21	6:L4:255:PHE:CZ	2.50	0.47
7:L5:223:PHE:HA	7:L5:226:TYR:HD1	1.80	0.47
13:M1:55:ARG:O	13:M1:57:PHE:N	2.47	0.47
13:M1:157:GLU:O	13:M1:160:VAL:HG12	2.15	0.47
16:M5:184:LYS:HG2	16:M5:185:ALA:N	2.30	0.47
17:M6:155:LYS:HB2	17:M6:155:LYS:HE3	1.68	0.47
26:N5:82:LEU:HB3	26:N5:84:PHE:CE2	2.50	0.47
27:N6:113:LYS:HA	27:N6:113:LYS:HD2	1.68	0.47
28:N7:103:GLN:O	28:N7:107:ARG:HD2	2.15	0.47
31:O0:16:LEU:HD13	31:O0:20:SER:OG	2.14	0.47
45:2:46:A:N6	45:2:433:C:H4'	2.30	0.47
45:2:91:G:H2'	45:2:92:A:O4'	2.15	0.47
45:2:1047:G:H2'	45:2:1048:G:O4'	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1109:G:O2'	45:2:1138:A:N1	2.35	0.47
45:2:1144:U:H2'	45:2:1145:U:C6	2.49	0.47
47:S1:61:LEU:O	47:S1:63:GLY:N	2.48	0.47
47:S1:68:VAL:HG22	47:S1:69:CYS:H	1.79	0.47
48:S2:91:ARG:HE	48:S2:91:ARG:HB3	1.41	0.47
50:S4:52:LEU:O	50:S4:54:TYR:N	2.47	0.47
52:S6:27:PHE:CD1	52:S6:36:VAL:HG21	2.50	0.47
55:S9:113:VAL:HG21	55:S9:129:ILE:HD11	1.96	0.47
56:C0:3:MET:SD	56:C0:8:ARG:HD2	2.55	0.47
57:C1:124:THR:HB	57:C1:141:LYS:HB3	1.96	0.47
66:D0:61:LYS:HE2	66:D0:61:LYS:HB3	1.60	0.47
70:D4:127:LYS:HG3	70:D4:128:LYS:N	2.30	0.47
74:D8:10:ALA:CB	74:D8:30:VAL:HB	2.45	0.47
1:5:310:U:H2'	1:5:311:C:O4'	2.15	0.47
1:5:1104:G:H2'	1:5:1105:A:H8	1.80	0.47
1:5:1699:A:H1'	1:5:1747:G:N2	2.29	0.47
1:5:2152:A:H2'	1:5:2153:U:C6	2.50	0.47
1:5:2550:U:O4	4:l2:40:TYR:N	2.36	0.47
80:5:3423:PAR:H612	19:m8:174:ARG:CZ	2.44	0.47
2:7:13:A:N3	7:l5:24:ARG:NH2	2.62	0.47
4:l2:105:GLY:HA3	4:l2:160:SER:HB3	1.97	0.47
5:l3:169:THR:HG23	5:l3:171:LEU:H	1.78	0.47
7:l5:107:ARG:HG3	7:l5:248:ARG:HG2	1.97	0.47
8:l6:40:LEU:HB3	8:l6:84:VAL:CG1	2.45	0.47
8:l6:44:ALA:C	8:l6:48:ARG:HB3	2.40	0.47
10:l8:143:ILE:HD13	10:l8:170:CYS:SG	2.55	0.47
11:l9:3:TYR:HA	21:n0:142:GLN:OE1	2.15	0.47
11:l9:17:THR:OG1	15:m4:3:THR:HG23	2.15	0.47
12:m0:3:ARG:CZ	12:m0:63:GLU:HG3	2.45	0.47
13:m1:103:GLY:HA3	13:m1:128:TYR:HA	1.97	0.47
18:m7:48:LEU:HB3	18:m7:88:VAL:HG13	1.96	0.47
20:m9:69:SER:O	20:m9:74:ARG:HB2	2.15	0.47
21:n0:24:LEU:HG	22:n1:146:ASN:ND2	2.29	0.47
21:n0:82:ASP:HA	21:n0:87:THR:HA	1.97	0.47
39:o8:5:ILE:O	39:o8:54:LEU:HD12	2.15	0.47
45:6:1252:C:H2'	45:6:1253:U:C6	2.50	0.47
45:6:1381:U:H4'	66:d0:59:PRO:HG3	1.97	0.47
46:s0:3:LEU:HG	46:s0:7:PHE:HB2	1.97	0.47
55:s9:49:LEU:HD23	55:s9:53:ARG:HG3	1.97	0.47
61:c5:67:ALA:HB2	61:c5:73:PRO:HA	1.96	0.47
63:c7:20:TYR:CD1	63:c7:38:ILE:HD12	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:sR:155:ARG:HB2	77:sR:170:ILE:HD11	1.97	0.47
1:1:114:A:OP1	16:M5:54:LYS:NZ	2.47	0.46
1:1:118:U:C5	1:1:119:U:C4	3.03	0.46
1:1:373:A:C6	1:1:375:A:C6	3.02	0.46
1:1:1597:C:H5''	35:O4:25:THR:HG22	1.96	0.46
1:1:1640:G:C2'	1:1:1641:U:H5'	2.44	0.46
1:1:1804:A:OP1	35:O4:70:LYS:HE3	2.15	0.46
1:1:2138:A:C4	38:O7:3:LYS:HB3	2.49	0.46
1:1:2355:G:H4'	18:M7:139:TYR:CE2	2.50	0.46
1:1:2951:G:OP2	83:1:4355:HOH:O	2.20	0.46
1:1:3024:A:H5''	11:L9:96:HIS:CD2	2.50	0.46
5:L3:166:ILE:HD13	5:L3:173:GLN:HG2	1.98	0.46
10:L8:134:TYR:CG	10:L8:190:VAL:HG21	2.50	0.46
12:M0:80:SER:O	12:M0:84:ALA:HB2	2.16	0.46
15:M4:127:LYS:O	15:M4:131:VAL:HG23	2.14	0.46
17:M6:73:PHE:HB3	17:M6:78:ARG:HB3	1.97	0.46
22:N1:19:PHE:CE2	22:N1:20:ARG:HG3	2.50	0.46
29:N8:133:LEU:HD22	29:N8:137:LYS:HG3	1.97	0.46
36:O5:33:VAL:O	36:O5:36:LEU:HG	2.15	0.46
45:2:288:A:H2'	45:2:289:U:O4'	2.15	0.46
45:2:577:G:OP2	78:SM:105:LYS:NZ	2.47	0.46
45:2:1227:A:OP2	45:2:1228:G:H2'	2.15	0.46
45:2:1320:U:H3'	46:S0:101:ARG:HH21	1.79	0.46
45:2:1475:A:H2'	45:2:1476:C:O4'	2.15	0.46
45:2:1769:U:O2	60:C4:136:ARG:NH1	2.46	0.46
49:S3:5:ILE:HD11	49:S3:10:LYS:HE3	1.97	0.46
50:S4:26:CYS:SG	55:S9:3:ARG:HG3	2.56	0.46
51:S5:45:LYS:O	51:S5:46:TRP:CG	2.68	0.46
52:S6:63:MET:HG2	52:S6:100:ALA:HA	1.96	0.46
54:S8:25:ARG:HB2	54:S8:28:GLU:HG2	1.97	0.46
56:C0:15:LEU:HD13	56:C0:21:VAL:HG23	1.96	0.46
67:D1:5:LYS:O	67:D1:7:GLN:N	2.48	0.46
69:D3:107:PHE:CE1	69:D3:114:LYS:HD3	2.49	0.46
70:D4:128:LYS:HA	70:D4:131:ARG:HG2	1.97	0.46
72:D6:45:VAL:HB	72:D6:49:ALA:HB3	1.96	0.46
75:D9:36:LEU:HD11	75:D9:43:PHE:HE2	1.81	0.46
78:SM:107:ASN:O	78:SM:111:GLY:N	2.40	0.46
1:5:93:C:C2	29:n8:55:LYS:HE2	2.51	0.46
1:5:926:A:H2'	1:5:927:C:C6	2.50	0.46
1:5:1317:A:O2'	1:5:1318:A:H3'	2.14	0.46
1:5:1901:A:O3'	1:5:2918:G:H5'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:3106:A:H61	1:5:3128:G:H1'	1.80	0.46
2:7:10:C:OP2	22:n1:26:HIS:ND1	2.45	0.46
5:l3:313:HIS:O	5:l3:333:LYS:HE3	2.16	0.46
6:l4:362:ASP:H	21:n0:26:ARG:HH22	1.60	0.46
10:l8:153:ILE:HD12	10:l8:167:PRO:HG3	1.97	0.46
11:l9:111:PHE:HD1	11:l9:127:PRO:HA	1.81	0.46
12:m0:89:VAL:HG22	12:m0:136:PHE:CE1	2.50	0.46
25:n4:33:ASN:OD1	25:n4:35:LYS:HB3	2.14	0.46
25:n4:86:SER:OG	25:n4:89:LEU:HB2	2.14	0.46
80:o2:201:PAR:O51	80:o2:201:PAR:N32	2.44	0.46
45:6:206:A:H1'	45:6:262:U:C2	2.50	0.46
45:6:514:G:O2'	45:6:515:A:H5'	2.15	0.46
45:6:894:U:H2'	45:6:895:G:C8	2.49	0.46
45:6:1132:A:OP1	69:d3:30:LYS:HD3	2.15	0.46
45:6:1555:A:O3'	61:c5:44:ARG:NH2	2.48	0.46
48:s2:188:LEU:HA	48:s2:191:ALA:HB3	1.97	0.46
79:s6:2:LYS:O	79:s6:108:VAL:HA	2.16	0.46
53:s7:91:ILE:HD11	53:s7:129:LEU:O	2.14	0.46
53:s7:129:LEU:HD22	53:s7:169:PHE:HD1	1.80	0.46
54:s8:102:VAL:N	54:s8:167:ALA:O	2.48	0.46
55:s9:45:ILE:HG13	55:s9:105:LEU:CD1	2.45	0.46
63:c7:20:TYR:CE1	63:c7:38:ILE:HD12	2.51	0.46
64:c8:125:ILE:HD11	78:sM:57:ASN:HB3	1.96	0.46
65:c9:33:TYR:HB2	65:c9:36:ILE:HG12	1.97	0.46
69:d3:13:ARG:HG3	69:d3:16:ARG:HH22	1.80	0.46
69:d3:44:GLY:H	69:d3:78:LYS:NZ	2.13	0.46
69:d3:69:ARG:NH1	69:d3:116:ASP:OD1	2.48	0.46
1:1:343:U:O2	1:1:1439:U:H1'	2.16	0.46
1:1:944:C:C4'	33:O2:33:ARG:HH11	2.28	0.46
1:1:1566:A:H3'	1:1:1567:U:H5''	1.97	0.46
1:1:1809:A:H2'	1:1:1810:A:O4'	2.14	0.46
1:1:3180:A:C6	17:M6:114:LYS:HD2	2.50	0.46
1:1:3275:U:O4'	34:O3:66:VAL:HG21	2.14	0.46
13:M1:53:THR:OG1	13:M1:61:ARG:N	2.47	0.46
15:M4:70:PHE:HE2	15:M4:72:LEU:HD23	1.79	0.46
21:N0:12:ARG:HD3	21:N0:59:VAL:HG22	1.97	0.46
45:2:156:A:H1'	45:2:416:A:C8	2.50	0.46
45:2:855:A:O2'	45:2:856:A:H3'	2.14	0.46
45:2:1100:G:O2'	68:D2:76:SER:N	2.48	0.46
45:2:1201:G:N2	45:2:1600:A:H5'	2.30	0.46
45:2:1592:A:H2'	45:2:1593:A:C8	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1622:G:H2'	45:2:1623:C:C6	2.49	0.46
80:2:1905:PAR:H241	80:2:1905:PAR:H43	1.80	0.46
46:S0:98:ILE:HD11	46:S0:116:LYS:HE3	1.97	0.46
52:S6:51:LYS:O	52:S6:111:LEU:HA	2.15	0.46
55:S9:80:LEU:HB3	55:S9:86:LEU:HB2	1.98	0.46
66:D0:20:ILE:HB	66:D0:22:ILE:HD13	1.96	0.46
1:5:59:G:H2'	3:8:33:A:O2'	2.15	0.46
1:5:173:G:O2'	1:5:174:C:H5'	2.16	0.46
1:5:269:G:P	16:m5:44:ARG:HH22	2.39	0.46
1:5:374:A:N3	1:5:376:G:H5''	2.29	0.46
1:5:1215:U:H2'	1:5:1216:C:C6	2.50	0.46
1:5:1370:G:H5''	29:n8:18:GLY:O	2.15	0.46
1:5:1702:U:H2'	1:5:1703:U:H6	1.80	0.46
1:5:2339:C:OP2	24:n3:48:ARG:HG2	2.15	0.46
3:8:83:C:O2	3:8:83:C:H3'	2.15	0.46
5:l3:47:LEU:HD12	5:l3:335:ILE:HD11	1.96	0.46
5:l3:80:ASP:OD1	5:l3:82:PRO:HD3	2.15	0.46
5:l3:199:PHE:C	5:l3:201:LYS:H	2.23	0.46
8:l6:65:ILE:O	8:l6:76:LEU:HA	2.15	0.46
18:m7:51:VAL:HA	18:m7:56:ARG:O	2.15	0.46
24:n3:54:LEU:HD11	24:n3:119:GLY:HA3	1.97	0.46
29:n8:14:HIS:ND1	33:o2:36:LYS:HE2	2.30	0.46
35:o4:41:ARG:CZ	35:o4:50:ALA:HB1	2.45	0.46
37:o6:43:LEU:O	37:o6:47:ILE:HG13	2.15	0.46
45:6:776:G:H22	45:6:785:U:H1'	1.80	0.46
48:s2:49:LYS:HB3	48:s2:243:TYR:CE1	2.51	0.46
51:s5:73:THR:HG23	62:c6:114:ARG:HE	1.79	0.46
55:s9:171:ARG:HA	55:s9:174:ARG:HB2	1.97	0.46
1:1:139:G:H2'	1:1:140:C:O4'	2.16	0.46
1:1:407:A:C2	3:4:17:A:H1'	2.51	0.46
1:1:978:G:N2	1:1:979:U:O4	2.38	0.46
1:1:2376:G:O2'	1:1:2377:G:H5'	2.15	0.46
1:1:2678:A:OP2	78:SM:48:ARG:NH1	2.48	0.46
1:1:3182:G:H4'	17:M6:161:LYS:HD3	1.96	0.46
80:1:3404:PAR:H322	80:1:3404:PAR:H51	1.80	0.46
2:3:1:G:P	80:3:201:PAR:H241	2.37	0.46
4:L2:42:ARG:HG3	4:L2:89:TYR:CE1	2.51	0.46
4:L2:60:LYS:HD2	4:L2:73:GLU:OE1	2.14	0.46
5:L3:117:ARG:HA	5:L3:175:LYS:HG3	1.97	0.46
11:L9:7:GLU:OE2	11:L9:54:LYS:HD2	2.16	0.46
12:M0:33:ILE:HG13	12:M0:69:ARG:HH12	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M0:49:CYS:HB3	12:M0:168:SER:HB3	1.98	0.46
15:M4:116:GLU:O	15:M4:120:VAL:HG23	2.15	0.46
19:M8:94:PHE:CZ	29:N8:119:PRO:HD3	2.51	0.46
19:M8:176:ARG:NH1	29:N8:46:ASP:OD2	2.48	0.46
32:O1:46:THR:HG21	32:O1:91:SER:OG	2.16	0.46
33:O2:75:LEU:HD23	33:O2:75:LEU:HA	1.72	0.46
39:O8:41:THR:HG21	39:O8:62:ALA:HB2	1.98	0.46
44:Q3:55:TRP:CD1	44:Q3:66:GLY:HA3	2.50	0.46
44:Q3:59:CYS:C	44:Q3:61:LYS:H	2.22	0.46
45:2:178:U:O4	52:S6:191:ARG:HG2	2.15	0.46
45:2:1017:U:H2'	45:2:1018:U:C6	2.51	0.46
45:2:1757:G:OP2	80:2:1905:PAR:N32	2.48	0.46
47:S1:180:THR:HG22	47:S1:181:LEU:H	1.80	0.46
51:S5:72:HIS:ND1	62:C6:79:TYR:OH	2.25	0.46
51:S5:216:GLU:HA	51:S5:219:ARG:HB3	1.97	0.46
55:S9:139:GLN:NE2	70:D4:64:PHE:HB3	2.30	0.46
59:C3:5:HIS:ND1	59:C3:117:LEU:HD22	2.30	0.46
59:C3:34:ILE:O	59:C3:38:VAL:HG23	2.15	0.46
63:C7:88:VAL:HB	63:C7:89:SER:H	1.30	0.46
68:D2:14:ILE:HG12	68:D2:25:VAL:HG11	1.97	0.46
1:5:182:U:H2'	1:5:183:G:C8	2.50	0.46
1:5:352:A:H61	1:5:365:A:H5''	1.79	0.46
1:5:546:C:H5''	1:5:547:G:C8	2.50	0.46
1:5:742:G:H5'	1:5:743:C:OP1	2.14	0.46
1:5:1093:A:N6	22:n1:116:ARG:HD3	2.30	0.46
1:5:1449:A:H2'	1:5:1450:G:O4'	2.16	0.46
1:5:1565:G:N2	1:5:1574:C:H42	2.13	0.46
1:5:1579:C:H2'	1:5:1580:A:C8	2.49	0.46
1:5:1852:G:N3	38:o7:9:GLY:HA3	2.31	0.46
1:5:2367:A:H2'	1:5:2368:A:O4'	2.15	0.46
11:l9:23:ARG:HE	11:l9:23:ARG:HB2	1.55	0.46
13:m1:166:LYS:C	13:m1:168:ASP:H	2.24	0.46
14:m3:48:PRO:HB2	36:o5:117:ALA:HB2	1.98	0.46
15:m4:113:THR:OG1	15:m4:114:ASP:N	2.48	0.46
18:m7:35:ALA:HB2	18:m7:58:ILE:HG23	1.98	0.46
28:n7:33:SER:OG	28:n7:34:LYS:N	2.48	0.46
32:o1:10:ARG:HH12	32:o1:44:MET:HG2	1.79	0.46
45:6:101:U:OP1	80:6:1903:PAR:N21	2.46	0.46
45:6:515:A:H2'	45:6:516:G:O4'	2.15	0.46
45:6:1273:G:H4'	45:6:1274:C:H3'	1.97	0.46
48:s2:156:THR:HG21	48:s2:224:PHE:CE1	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:s9:132:ARG:HB2	55:s9:133:HIS:CD2	2.50	0.46
61:c5:18:ARG:NH1	64:c8:90:ASN:OD1	2.46	0.46
64:c8:113:LEU:O	64:c8:116:LEU:HD22	2.16	0.46
76:e0:35:TYR:CZ	76:e0:39:LEU:HD21	2.51	0.46
77:sR:84:SER:HG	77:sR:86:ASP:CG	2.21	0.46
1:1:259:C:H2'	1:1:260:C:C6	2.50	0.46
1:1:631:U:H2'	1:1:632:G:C8	2.50	0.46
1:1:1097:G:C8	22:N1:128:LEU:HD13	2.50	0.46
1:1:1788:C:H41	80:1:3416:PAR:H531	1.80	0.46
1:1:3164:C:H42	1:1:3286:G:H1	1.63	0.46
3:4:75:G:C8	40:O9:30:ARG:HG2	2.50	0.46
3:4:131:A:H5''	26:N5:93:TYR:CE2	2.51	0.46
5:L3:66:LYS:NZ	24:N3:120:LYS:HE3	2.29	0.46
5:L3:360:ASP:OD1	5:L3:362:ALA:N	2.45	0.46
8:L6:50:LYS:HG2	8:L6:74:VAL:HG21	1.96	0.46
20:M9:179:GLU:O	20:M9:183:ALA:N	2.48	0.46
45:2:352:A:H8	45:2:352:A:OP2	1.98	0.46
45:2:629:U:OP1	59:C3:127:ARG:NH2	2.49	0.46
45:2:779:U:O2'	45:2:780:A:OP1	2.32	0.46
45:2:926:A:H2'	45:2:927:C:C6	2.50	0.46
45:2:1153:G:H1	45:2:1625:C:N4	2.10	0.46
45:2:1312:A:N7	63:C7:2:GLY:HA3	2.30	0.46
45:2:1545:A:OP1	64:C8:133:VAL:HG23	2.15	0.46
46:S0:31:VAL:HG21	46:S0:150:ASP:HA	1.96	0.46
47:S1:214:LYS:HB2	47:S1:214:LYS:HE3	1.72	0.46
48:S2:146:THR:HG23	48:S2:148:LEU:H	1.80	0.46
49:S3:142:LEU:HD12	49:S3:182:LEU:HD21	1.98	0.46
53:S7:12:ALA:HB3	53:S7:13:PRO:HD3	1.97	0.46
53:S7:62:VAL:HG12	53:S7:66:SER:HB2	1.96	0.46
56:C0:10:LYS:NZ	56:C0:36:ASP:HB3	2.30	0.46
64:C8:96:LYS:HE2	64:C8:96:LYS:HB3	1.75	0.46
69:D3:91:GLY:C	69:D3:93:LEU:H	2.23	0.46
1:5:922:U:H6	83:5:4457:HOH:O	1.98	0.46
1:5:1492:G:OP1	38:o7:14:LYS:NZ	2.38	0.46
1:5:1666:G:O6	80:5:3403:PAR:O41	2.34	0.46
1:5:1795:U:H2'	4:l2:50:HIS:CD2	2.43	0.46
1:5:1925:U:O2	44:q3:19:GLY:HA2	2.15	0.46
1:5:2093:A:H62	20:m9:114:LYS:HE3	1.80	0.46
1:5:2401:A:N6	83:5:4242:HOH:O	2.48	0.46
1:5:2585:G:H2'	1:5:2585:G:N3	2.30	0.46
1:5:2689:A:C8	1:5:2702:A:C6	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:3059:G:H4'	1:5:3373:U:O2'	2.15	0.46
2:7:119:U:H2'	2:7:120:C:H6	1.80	0.46
5:l3:59:ASP:OD1	5:l3:71:GLU:HG3	2.15	0.46
9:l7:229:PHE:O	9:l7:229:PHE:CG	2.68	0.46
12:m0:111:LEU:HA	12:m0:112:GLN:HA	1.66	0.46
13:m1:99:THR:OG1	13:m1:101:ASN:OD1	2.33	0.46
19:m8:179:ARG:HG3	19:m8:181:SER:H	1.81	0.46
21:n0:46:GLN:HG2	21:n0:51:VAL:O	2.15	0.46
21:n0:60:SER:OG	21:n0:62:ASN:OD1	2.34	0.46
22:n1:39:ILE:HG12	22:n1:63:VAL:HG22	1.97	0.46
27:n6:83:ASP:C	27:n6:85:VAL:H	2.24	0.46
39:o8:44:LYS:HB3	39:o8:51:LEU:HD11	1.97	0.46
45:6:443:C:P	70:d4:105:ARG:HG3	2.56	0.46
45:6:1338:C:H1'	45:6:1410:A:C4	2.51	0.46
45:6:1365:C:H5''	62:c6:28:LEU:HD22	1.98	0.46
50:s4:11:ARG:HH11	50:s4:21:ASP:H	1.62	0.46
55:s9:135:ALA:CB	55:s9:140:ILE:HA	2.45	0.46
64:c8:65:GLU:HG2	64:c8:68:ARG:HH22	1.80	0.46
1:1:691:A:N1	3:4:28:C:O2'	2.47	0.46
1:1:860:G:C5	4:L2:181:LYS:HB2	2.50	0.46
1:1:2660:G:H1'	1:1:2744:U:H1'	1.98	0.46
3:4:149:A:H2'	3:4:150:G:C8	2.50	0.46
5:L3:230:THR:HA	5:L3:235:THR:HG22	1.98	0.46
10:L8:108:ARG:O	10:L8:112:GLU:HG2	2.15	0.46
11:L9:161:LEU:HD22	11:L9:179:ILE:HG21	1.97	0.46
12:M0:65:LEU:HD11	12:M0:91:VAL:HG12	1.98	0.46
13:M1:16:LYS:HE3	13:M1:130:VAL:HG21	1.96	0.46
13:M1:108:GLU:HA	13:M1:122:ILE:HG23	1.98	0.46
14:M3:70:ARG:HD2	14:M3:71:ALA:O	2.15	0.46
36:O5:54:VAL:O	36:O5:58:ILE:HG13	2.16	0.46
41:Q0:98:LYS:HD2	41:Q0:118:THR:HG21	1.98	0.46
44:Q3:49:ARG:CD	44:Q3:50:GLY:H	2.15	0.46
45:2:115:G:C8	57:C1:129:ARG:HB2	2.50	0.46
45:2:811:A:C2	45:2:858:G:H1'	2.51	0.46
45:2:1157:A:H2'	45:2:1160:A:N7	2.30	0.46
45:2:1365:C:H5'	62:C6:26:LYS:NZ	2.31	0.46
47:S1:90:GLU:O	47:S1:96:LEU:HB2	2.14	0.46
48:S2:90:THR:HG23	48:S2:92:ALA:H	1.80	0.46
64:C8:61:LEU:HD12	64:C8:66:LEU:HD23	1.98	0.46
64:C8:145:ARG:HH11	78:SM:68:ARG:HE	1.62	0.46
70:D4:41:ARG:HG2	70:D4:55:VAL:HG13	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:D7:14:SER:O	73:D7:18:LYS:HG3	2.15	0.46
74:D8:44:VAL:HG21	74:D8:48:VAL:HG21	1.96	0.46
77:SR:191:ASP:N	77:SR:191:ASP:OD2	2.48	0.46
1:5:607:A:OP1	8:l6:26:ARG:NH2	2.48	0.46
3:8:52:A:H62	40:o9:27:ILE:HD12	1.79	0.46
3:8:155:A:C2	3:8:156:U:H1'	2.51	0.46
5:l3:14:LEU:HD13	5:l3:262:TRP:CH2	2.50	0.46
5:l3:163:HIS:HA	5:l3:177:HIS:O	2.16	0.46
6:l4:170:LYS:HE3	6:l4:175:HIS:ND1	2.31	0.46
7:l5:110:LEU:CD2	7:l5:116:ASP:HA	2.45	0.46
15:m4:84:LYS:HA	15:m4:87:ALA:HB3	1.96	0.46
16:m5:88:GLY:HA3	43:q2:50:PHE:CD2	2.51	0.46
20:m9:106:LEU:HB3	20:m9:120:TYR:CE1	2.50	0.46
29:n8:85:ASP:OD2	29:n8:86:LYS:HG3	2.16	0.46
45:6:1251:U:O2'	45:6:1252:C:H5''	2.16	0.46
45:6:1287:A:H4'	45:6:1288:G:OP1	2.16	0.46
45:6:1542:G:N2	45:6:1568:C:H1'	2.25	0.46
83:6:2112:HOH:O	66:d0:77:LYS:NZ	2.48	0.46
49:s3:134:CYS:SG	49:s3:135:GLU:N	2.88	0.46
53:s7:109:VAL:HG13	53:s7:110:GLN:N	2.31	0.46
53:s7:131:PHE:CD2	53:s7:132:PRO:HD3	2.51	0.46
54:s8:72:ILE:HD13	54:s8:112:TRP:CG	2.51	0.46
56:c0:8:ARG:HG2	56:c0:12:HIS:CE1	2.51	0.46
60:c4:114:ARG:HH21	72:d6:62:TYR:HE1	1.63	0.46
61:c5:86:VAL:HG22	61:c5:89:MET:HE3	1.96	0.46
74:d8:13:ILE:HD11	74:d8:31:GLU:HG3	1.95	0.46
77:sR:89:LEU:HD21	77:sR:110:VAL:HG11	1.96	0.46
1:1:135:C:C2	36:O5:94:LYS:HB2	2.51	0.46
1:1:1345:G:C2	1:1:1360:C:C2	3.03	0.46
1:1:1815:U:H1'	1:1:1816:A:OP2	2.15	0.46
80:1:3421:PAR:N21	80:1:3421:PAR:O53	2.49	0.46
5:L3:299:ASP:OD1	5:L3:301:THR:N	2.47	0.46
7:L5:122:VAL:HG12	7:L5:125:VAL:HG22	1.96	0.46
9:L7:166:ASN:OD1	9:L7:181:ILE:N	2.48	0.46
13:M1:133:ARG:HB2	13:M1:152:HIS:CD2	2.51	0.46
13:M1:138:VAL:HG22	13:M1:141:ARG:NH2	2.31	0.46
14:M3:48:PRO:HG3	14:M3:135:ALA:CB	2.42	0.46
14:M3:107:GLU:OE2	14:M3:107:GLU:N	2.46	0.46
16:M5:114:ARG:HD3	16:M5:114:ARG:HA	1.72	0.46
21:N0:57:GLU:CD	22:N1:139:ARG:HH11	2.24	0.46
22:N1:146:ASN:ND2	22:N1:146:ASN:H	2.13	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:246:G:N2	57:C1:38:ALA:O	2.49	0.46
45:2:512:A:OP1	55:S9:163:PRO:HG3	2.16	0.46
45:2:1674:C:H2'	45:2:1675:C:H6	1.80	0.46
47:S1:27:LYS:HE2	47:S1:48:VAL:O	2.16	0.46
51:S5:149:VAL:HG13	74:D8:67:ARG:HB3	1.97	0.46
54:S8:38:ILE:HD12	54:S8:94:ASN:HB3	1.97	0.46
58:C2:135:MET:HE3	58:C2:136:ILE:HG12	1.97	0.46
65:C9:137:ALA:HA	65:C9:140:LEU:HD12	1.97	0.46
67:D1:56:SER:OG	67:D1:59:VAL:HG23	2.14	0.46
69:D3:53:VAL:HG23	69:D3:100:ASP:O	2.16	0.46
73:D7:67:THR:C	73:D7:69:GLY:H	2.24	0.46
1:5:32:U:OP2	83:5:4260:HOH:O	2.21	0.46
1:5:53:G:OP2	38:o7:48:ASN:ND2	2.48	0.46
1:5:209:A:O2'	1:5:211:A:OP2	2.31	0.46
1:5:915:A:H8	1:5:2136:C:O2'	1.98	0.46
1:5:934:G:OP1	83:5:4258:HOH:O	2.21	0.46
1:5:1328:C:H2'	1:5:1329:U:C6	2.51	0.46
1:5:1368:U:HO2'	1:5:1369:A:P	2.38	0.46
1:5:1478:C:H2'	1:5:1479:U:C6	2.50	0.46
1:5:1573:G:H2'	1:5:1574:C:O4'	2.16	0.46
1:5:1765:U:H5'	1:5:1766:G:OP1	2.15	0.46
1:5:2818:U:H5'	1:5:2818:U:C6	2.42	0.46
1:5:3357:U:O2'	1:5:3358:U:OP1	2.31	0.46
3:8:53:A:H3'	3:8:54:A:H8	1.81	0.46
5:l3:256:HIS:HA	5:l3:257:PRO:C	2.41	0.46
9:l7:90:LYS:HD3	9:l7:220:PHE:CE1	2.50	0.46
11:l9:166:ARG:HD2	11:l9:168:ARG:HH11	1.81	0.46
13:m1:19:LEU:HD13	13:m1:125:MET:HE1	1.98	0.46
13:m1:94:ARG:C	13:m1:96:PHE:H	2.23	0.46
16:m5:73:ARG:HG3	16:m5:89:VAL:HA	1.96	0.46
26:n5:44:PRO:O	26:n5:45:LYS:HB2	2.16	0.46
44:q3:73:THR:HB	44:q3:76:ALA:HB3	1.97	0.46
45:6:266:A:H3'	45:6:267:U:C5'	2.45	0.46
45:6:332:U:O2'	54:s8:5:ARG:NH1	2.48	0.46
45:6:544:A:H5'	45:6:545:A:OP2	2.16	0.46
45:6:650:U:H4'	55:s9:65:LYS:NZ	2.31	0.46
45:6:1535:U:H4'	45:6:1535:U:OP1	2.16	0.46
46:s0:60:ALA:O	46:s0:64:ILE:HG13	2.15	0.46
46:s0:195:TRP:CE2	46:s0:197:ILE:HD13	2.49	0.46
47:s1:97:LEU:HB3	47:s1:232:HIS:CG	2.51	0.46
79:s6:142:ARG:HE	79:s6:149:LYS:HA	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:c0:58:GLN:HB3	56:c0:65:TYR:HB2	1.98	0.46
63:c7:87:GLU:H	63:c7:87:GLU:CD	2.23	0.46
1:1:204:A:H2'	1:1:205:C:C6	2.51	0.46
1:1:1038:C:H2'	1:1:1039:U:H6	1.81	0.46
1:1:3090:U:OP1	5:L3:270:ARG:NH2	2.38	0.46
80:1:3433:PAR:H642	80:1:3433:PAR:O33	2.16	0.46
80:1:3435:PAR:N21	80:1:3435:PAR:C13	2.79	0.46
4:L2:134:VAL:HG12	4:L2:151:PRO:HD3	1.97	0.46
14:M3:75:PHE:H	14:M3:97:VAL:HA	1.81	0.46
16:M5:35:VAL:O	16:M5:64:VAL:HA	2.15	0.46
21:N0:74:ASN:OD1	21:N0:95:ARG:NH1	2.43	0.46
22:N1:57:TYR:OH	22:N1:87:LYS:HD3	2.15	0.46
26:N5:103:TYR:CD1	26:N5:139:ILE:HG21	2.50	0.46
45:2:327:U:OP2	57:C1:57:LYS:NZ	2.37	0.46
45:2:358:U:O2'	45:2:360:A:H5''	2.15	0.46
45:2:512:A:OP2	55:S9:172:VAL:HB	2.15	0.46
45:2:1338:C:H1'	45:2:1410:A:C4	2.50	0.46
47:S1:93:GLY:C	47:S1:95:ASN:H	2.24	0.46
53:S7:157:LYS:C	53:S7:159:VAL:H	2.23	0.46
55:S9:108:ARG:HB3	55:S9:145:SER:HA	1.97	0.46
59:C3:5:HIS:CE1	59:C3:121:ARG:HG3	2.51	0.46
63:C7:24:LEU:O	63:C7:25:THR:HG23	2.16	0.46
68:D2:69:LEU:HD12	68:D2:130:TYR:C	2.41	0.46
77:SR:87:LYS:HG2	77:SR:108:SER:C	2.41	0.46
1:5:136:G:H5'	36:o5:95:PHE:CG	2.51	0.46
1:5:172:G:H3'	1:5:173:G:H5''	1.98	0.46
1:5:1438:U:H4'	6:l4:94:CYS:HB3	1.97	0.46
1:5:2714:G:C8	1:5:2751:G:H2'	2.48	0.46
1:5:3241:G:H2'	1:5:3245:A:C8	2.50	0.46
10:l8:138:HIS:O	10:l8:142:LEU:HG	2.16	0.46
10:l8:155:ASN:OD1	10:l8:181:LYS:HA	2.16	0.46
12:m0:174:THR:OG1	12:m0:175:ASN:N	2.49	0.46
32:o1:47:ASP:O	32:o1:49:VAL:HG23	2.16	0.46
45:6:542:A:H1'	45:6:543:C:P	2.56	0.46
45:6:1087:A:C2	45:6:1142:A:H4'	2.51	0.46
80:6:1904:PAR:N24	80:6:1904:PAR:O44	2.48	0.46
47:s1:223:PHE:HB3	47:s1:224:ASP:H	1.43	0.46
48:s2:70:ASP:OD1	48:s2:133:LYS:NZ	2.36	0.46
51:s5:26:ALA:HB3	62:c6:28:LEU:N	2.31	0.46
58:c2:86:VAL:HG13	58:c2:86:VAL:O	2.16	0.46
61:c5:56:PHE:CE1	61:c5:83:MET:SD	3.09	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:c7:17:ILE:HD12	63:c7:57:LEU:HB3	1.97	0.46
74:d8:41:VAL:O	74:d8:62:GLU:HA	2.15	0.46
1:1:155:G:O2'	37:O6:27:SER:HB3	2.16	0.46
1:1:525:C:OP2	15:M4:77:ARG:NH2	2.39	0.46
1:1:1295:G:H2'	1:1:1296:C:C6	2.51	0.46
1:1:3168:A:N6	1:1:3281:U:O4	2.49	0.46
80:1:3428:PAR:N24	80:1:3428:PAR:O44	2.49	0.46
4:L2:149:ARG:HH22	4:L2:155:LYS:NZ	2.13	0.46
15:M4:19:ARG:HA	15:M4:69:THR:HG22	1.98	0.46
18:M7:84:PRO:HB2	18:M7:87:SER:HB2	1.97	0.46
21:N0:31:ALA:HB3	21:N0:37:ALA:HB2	1.97	0.46
26:N5:103:TYR:HE1	26:N5:139:ILE:HD12	1.80	0.46
28:N7:53:VAL:HG11	28:N7:62:VAL:HG13	1.98	0.46
38:O7:84:SER:O	38:O7:85:LYS:HB2	2.16	0.46
45:2:64:U:O2'	45:2:168:A:N3	2.31	0.46
45:2:65:A:O5'	52:S6:136:LYS:NZ	2.49	0.46
45:2:484:C:H42	45:2:503:G:H1	1.63	0.46
45:2:1359:C:OP1	65:C9:130:ARG:HG2	2.16	0.46
45:2:1523:G:N7	65:C9:64:HIS:NE2	2.54	0.46
48:S2:129:ILE:HG22	48:S2:133:LYS:HE3	1.97	0.46
49:S3:29:LEU:HB2	49:S3:34:TYR:HB2	1.98	0.46
49:S3:33:GLY:HA3	49:S3:53:THR:OG1	2.14	0.46
50:S4:180:LEU:HG	50:S4:234:PRO:HA	1.98	0.46
50:S4:184:THR:HA	50:S4:189:LEU:HD13	1.98	0.46
51:S5:48:PHE:CE1	51:S5:67:PRO:HA	2.50	0.46
51:S5:73:THR:HG23	62:C6:114:ARG:HD3	1.97	0.46
53:S7:6:ALA:O	53:S7:9:LEU:HB2	2.15	0.46
56:C0:30:ALA:O	56:C0:38:LYS:HA	2.15	0.46
62:C6:53:LEU:H	62:C6:53:LEU:HG	1.46	0.46
66:D0:20:ILE:HD11	66:D0:97:VAL:CA	2.45	0.46
66:D0:104:THR:HG22	66:D0:116:VAL:HG21	1.98	0.46
68:D2:53:ILE:HG12	68:D2:60:LYS:HB2	1.98	0.46
69:D3:37:ALA:O	69:D3:41:SER:OG	2.34	0.46
72:D6:33:ASP:OD1	72:D6:33:ASP:N	2.48	0.46
72:D6:58:VAL:HG13	72:D6:59:TYR:CD1	2.51	0.46
72:D6:62:TYR:CG	72:D6:63:ALA:N	2.80	0.46
1:5:1488:G:H5''	1:5:1838:G:O6	2.16	0.46
1:5:1941:C:OP2	20:m9:74:ARG:HG3	2.15	0.46
1:5:2526:C:P	4:l2:38:HIS:HE2	2.39	0.46
4:l2:44:ILE:H	4:l2:44:ILE:HG12	1.58	0.46
5:l3:54:THR:OG1	5:l3:55:THR:N	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:15:296:GLN:HG2	12:m0:214:PRO:HB3	1.98	0.46
12:m0:51:HIS:CG	12:m0:134:ILE:HD13	2.50	0.46
19:m8:18:ALA:HB1	19:m8:19:PRO:HD2	1.98	0.46
19:m8:96:PHE:CE1	19:m8:114:ILE:HA	2.50	0.46
45:6:161:U:H2'	45:6:162:A:H8	1.81	0.46
45:6:578:U:H4'	45:6:579:A:H5'	1.98	0.46
45:6:959:U:O2	59:c3:61:THR:HB	2.15	0.46
45:6:1565:C:H2'	45:6:1566:U:C6	2.51	0.46
55:s9:147:MET:HA	55:s9:147:MET:HE2	1.98	0.46
63:c7:31:ASN:ND2	63:c7:55:THR:HG22	2.31	0.46
64:c8:41:ARG:NH1	65:c9:38:LYS:HD3	2.31	0.46
69:d3:30:LYS:HD2	69:d3:31:LYS:HZ1	1.80	0.46
75:d9:6:VAL:C	75:d9:7:TRP:CD1	2.94	0.46
75:d9:22:ARG:HG2	75:d9:38:ILE:HD13	1.96	0.46
77:sR:179:LYS:HZ2	77:sR:191:ASP:CG	2.24	0.46
77:sR:287:PRO:HB3	77:sR:306:THR:OG1	2.15	0.46
1:1:108:A:OP2	83:1:4353:HOH:O	2.20	0.46
1:1:715:A:N3	1:1:753:C:H1'	2.31	0.46
1:1:1569:U:H5''	1:1:1570:U:C5	2.51	0.46
1:1:1636:U:H1'	28:N7:76:ASN:HB2	1.98	0.46
1:1:1895:A:O2'	1:1:3053:G:H4'	2.16	0.46
1:1:2407:C:H2'	1:1:2408:U:C6	2.50	0.46
5:L3:305:ILE:HD12	5:L3:306:THR:N	2.31	0.46
7:L5:83:LEU:HB3	7:L5:88:ILE:HB	1.98	0.46
8:L6:58:LEU:HD21	8:L6:64:LEU:HB2	1.98	0.46
32:O1:24:SER:HB2	32:O1:27:LYS:HG3	1.97	0.46
44:Q3:13:LYS:HE3	44:Q3:14:TYR:CE2	2.51	0.46
45:2:139:C:O4'	45:2:141:U:H5''	2.16	0.46
45:2:447:U:H2'	45:2:448:C:O4'	2.16	0.46
45:2:1458:G:H5''	45:2:1459:C:OP2	2.16	0.46
46:S0:59:LEU:O	46:S0:63:ILE:HG13	2.16	0.46
47:S1:205:PHE:CD1	47:S1:206:PRO:HD2	2.51	0.46
49:S3:12:VAL:O	49:S3:16:VAL:HG23	2.16	0.46
50:S4:101:LEU:HA	50:S4:101:LEU:HD23	1.61	0.46
55:S9:78:ARG:O	55:S9:82:ARG:N	2.40	0.46
58:C2:67:THR:HG22	58:C2:68:GLU:H	1.81	0.46
60:C4:48:VAL:HG22	60:C4:50:ALA:H	1.81	0.46
61:C5:63:ALA:O	61:C5:67:ALA:HB2	2.16	0.46
66:D0:96:PRO:HG2	66:D0:99:ILE:HD13	1.98	0.46
72:D6:37:LYS:HA	72:D6:71:LEU:O	2.16	0.46
72:D6:54:SER:C	72:D6:56:ALA:N	2.72	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:D7:29:ARG:HA	73:D7:29:ARG:HD3	1.80	0.46
78:SM:86:ASN:O	78:SM:87:THR:HG22	2.16	0.46
1:5:592:A:H5'	8:l6:17:ALA:O	2.16	0.46
1:5:645:A:N6	1:5:2869:U:OP1	2.46	0.46
1:5:2550:U:C6	10:l8:37:GLY:HA3	2.51	0.46
1:5:2663:G:N2	1:5:2708:C:O2	2.49	0.46
1:5:2838:A:H2'	1:5:2839:G:O4'	2.16	0.46
1:5:2902:A:OP1	11:l9:170:LYS:HE3	2.15	0.46
1:5:3200:G:H2'	1:5:3201:C:C6	2.50	0.46
1:5:3340:G:O2'	1:5:3341:U:OP1	2.28	0.46
1:5:3365:U:H2'	1:5:3366:G:H8	1.81	0.46
2:7:1:G:N2	7:l5:269:SER:HB2	2.30	0.46
16:m5:15:GLN:HG2	37:o6:52:PRO:HG2	1.98	0.46
16:m5:73:ARG:HB2	16:m5:89:VAL:HG13	1.97	0.46
18:m7:126:ARG:HD3	18:m7:140:GLU:OE2	2.16	0.46
24:n3:74:MET:HB3	24:n3:74:MET:HE2	1.76	0.46
25:n4:35:LYS:O	25:n4:39:LEU:HD22	2.16	0.46
29:n8:28:HIS:CD2	29:n8:32:ARG:HG2	2.51	0.46
30:n9:21:ILE:HD12	30:n9:21:ILE:HA	1.55	0.46
31:o0:24:THR:HG22	31:o0:91:SER:HB3	1.97	0.46
31:o0:50:VAL:HA	31:o0:53:LYS:HB3	1.97	0.46
33:o2:40:SER:O	33:o2:44:ARG:HG3	2.16	0.46
44:q3:49:ARG:HB2	44:q3:55:TRP:CZ3	2.51	0.46
45:6:417:A:H4'	45:6:418:G:O5'	2.16	0.46
45:6:609:U:H4'	45:6:610:G:O5'	2.15	0.46
47:s1:194:ASN:ND2	47:s1:211:HIS:HA	2.30	0.46
65:c9:53:TRP:HA	65:c9:56:LYS:HB2	1.98	0.46
1:1:20:A:OP2	36:O5:90:ARG:NH1	2.49	0.46
1:1:512:U:H2'	1:1:513:G:H8	1.80	0.46
1:1:654:C:OP1	33:O2:27:ARG:NH2	2.49	0.46
1:1:979:U:H1'	1:1:980:A:C8	2.50	0.46
1:1:1573:G:C6	1:1:1574:C:H1'	2.51	0.46
1:1:2887:A:H2'	1:1:2887:A:N3	2.31	0.46
1:1:3045:G:O3'	5:L3:275:ARG:NH1	2.49	0.46
3:4:84:C:O2	3:4:84:C:H2'	2.16	0.46
5:L3:57:VAL:HG23	5:L3:358:TRP:HE3	1.81	0.46
6:L4:187:LEU:HA	6:L4:187:LEU:HD23	1.70	0.46
6:L4:193:LYS:HB2	6:L4:193:LYS:HE3	1.63	0.46
6:L4:329:PRO:HB3	9:L7:41:ARG:NH2	2.30	0.46
10:L8:33:ASN:O	10:L8:39:ALA:HB3	2.16	0.46
12:M0:190:VAL:HG13	12:M0:197:VAL:HG11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:M6:16:VAL:HG13	17:M6:17:GLY:N	2.31	0.46
20:M9:106:LEU:HD13	20:M9:138:LEU:HD11	1.97	0.46
20:M9:134:HIS:CE1	20:M9:137:ALA:HB2	2.50	0.46
25:N4:9:SER:HB3	25:N4:51:TRP:CZ3	2.51	0.46
35:O4:9:ARG:H	35:O4:9:ARG:HD2	1.81	0.46
38:O7:5:THR:HA	38:O7:8:PHE:HD2	1.81	0.46
38:O7:14:LYS:HZ2	40:O9:51:ILE:HD11	1.81	0.46
45:2:130:C:H2'	45:2:131:C:C4	2.51	0.46
45:2:898:A:N6	45:2:911:U:O2'	2.38	0.46
45:2:1122:G:N2	45:2:1125:A:OP2	2.49	0.46
45:2:1408:G:H2'	45:2:1409:G:O4'	2.16	0.46
45:2:1558:U:OP1	64:C8:123:ARG:HB3	2.15	0.46
50:S4:7:LYS:C	50:S4:30:ARG:HD2	2.41	0.46
52:S6:27:PHE:CE1	52:S6:36:VAL:HG11	2.51	0.46
62:C6:39:VAL:HG11	62:C6:48:VAL:HG11	1.98	0.46
68:D2:55:ASP:HB2	68:D2:57:ARG:HH11	1.80	0.46
73:D7:53:ALA:HB1	73:D7:62:ILE:HD11	1.97	0.46
78:SM:139:GLU:HG2	78:SM:140:ASP:H	1.80	0.46
1:5:139:G:C6	1:5:140:C:C4	3.05	0.46
1:5:265:A:H5''	1:5:266:A:OP2	2.16	0.46
1:5:1017:C:N4	1:5:1032:C:H41	2.09	0.46
1:5:1158:A:H2'	1:5:1159:A:H4'	1.98	0.46
1:5:1208:U:O4	41:q0:108:THR:HG21	2.16	0.46
1:5:1334:U:H1'	9:l7:208:SER:HB2	1.96	0.46
1:5:1388:U:H2'	1:5:1389:G:H8	1.81	0.46
1:5:1688:U:H2'	1:5:1689:U:C6	2.51	0.46
2:7:92:A:C5	2:7:93:C:H1'	2.51	0.46
3:8:44:A:H2'	3:8:45:C:C6	2.52	0.46
5:l3:283:TYR:CD1	5:l3:354:VAL:HG21	2.51	0.46
6:l4:299:ILE:HG22	6:l4:300:ARG:O	2.15	0.46
28:n7:52:LYS:O	28:n7:65:ARG:NH1	2.39	0.46
44:q3:30:GLU:HG3	44:q3:34:HIS:CE1	2.50	0.46
45:6:538:A:N7	45:6:543:C:N4	2.64	0.46
45:6:602:U:OP1	69:d3:32:ARG:NH1	2.49	0.46
45:6:749:U:H2'	45:6:750:U:H6	1.81	0.46
45:6:1477:G:H2'	45:6:1478:G:C8	2.51	0.46
46:s0:32:HIS:NE2	67:d1:64:GLU:OE1	2.49	0.46
54:s8:147:ALA:C	54:s8:149:SER:H	2.24	0.46
54:s8:168:CYS:HB2	54:s8:184:LEU:HD11	1.98	0.46
62:c6:140:LYS:HD2	62:c6:142:TYR:CZ	2.51	0.46
72:d6:22:ARG:HD2	72:d6:22:ARG:HA	1.77	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:59:G:H4'	1:1:60:A:H4'	1.98	0.45
1:1:590:G:C2	1:1:610:G:H2'	2.51	0.45
1:1:1173:U:H1'	1:1:1179:A:C4	2.50	0.45
1:1:1301:A:H4'	1:1:1302:A:O5'	2.15	0.45
1:1:2423:U:H2'	1:1:2424:A:C8	2.50	0.45
1:1:2546:C:H2'	1:1:2547:A:H8	1.81	0.45
1:1:2864:A:O3'	12:M0:115:MET:HB2	2.17	0.45
1:1:3122:A:N1	11:L9:70:THR:HG21	2.32	0.45
1:1:3153:U:H1'	1:1:3158:G:C5	2.51	0.45
1:1:3341:U:O2	1:1:3341:U:H2'	2.16	0.45
6:L4:261:VAL:HA	6:L4:270:SER:OG	2.16	0.45
6:L4:280:ILE:HG22	19:M8:104:LEU:O	2.16	0.45
7:L5:267:ALA:O	7:L5:271:LYS:HG3	2.15	0.45
11:L9:129:ARG:HD2	11:L9:157:ASN:HB2	1.97	0.45
14:M3:47:ALA:HB1	14:M3:48:PRO:CD	2.46	0.45
18:M7:13:LYS:HE3	18:M7:154:GLU:CD	2.41	0.45
22:N1:78:LYS:HG3	22:N1:79:MET:N	2.30	0.45
29:N8:67:HIS:H	29:N8:67:HIS:CD2	2.33	0.45
32:O1:46:THR:HG21	32:O1:91:SER:CB	2.46	0.45
45:2:94:U:H2'	45:2:95:G:O4'	2.16	0.45
45:2:325:G:OP1	57:C1:134:THR:OG1	2.31	0.45
45:2:445:A:H2'	45:2:446:A:H8	1.82	0.45
45:2:656:G:O2'	45:2:657:U:O4'	2.33	0.45
45:2:760:A:H2'	45:2:761:G:O4'	2.16	0.45
50:S4:191:ARG:NH1	50:S4:245:LYS:HB3	2.30	0.45
51:S5:23:VAL:HG11	62:C6:58:ASP:HB3	1.97	0.45
54:S8:65:PHE:O	54:S8:109:PHE:HZ	1.99	0.45
59:C3:134:VAL:O	59:C3:135:LEU:HD23	2.15	0.45
60:C4:19:ILE:HG22	60:C4:29:HIS:HD2	1.80	0.45
60:C4:41:ARG:O	60:C4:42:VAL:HG23	2.16	0.45
60:C4:112:ILE:HG12	72:D6:57:SER:HB3	1.98	0.45
74:D8:30:VAL:HG11	74:D8:54:LEU:HD23	1.98	0.45
76:E0:14:VAL:O	76:E0:18:THR:HG23	2.16	0.45
1:5:124:U:H1'	1:5:149:U:H2'	1.97	0.45
1:5:656:A:C6	1:5:657:A:C6	3.04	0.45
1:5:761:A:C2	1:5:771:A:H1'	2.51	0.45
1:5:1858:A:N3	35:o4:4:ARG:NH1	2.62	0.45
1:5:2666:C:H2'	1:5:2667:A:H5''	1.98	0.45
1:5:2898:G:H5''	1:5:2899:C:C5'	2.46	0.45
80:5:3408:PAR:H24	80:5:3408:PAR:H33	1.78	0.45
3:8:76:C:H2'	3:8:77:A:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:8:123:G:H1	3:8:130:C:H42	1.62	0.45
19:m8:116:LYS:NZ	29:n8:88:ASP:OD1	2.33	0.45
20:m9:4:LEU:HD22	20:m9:7:GLN:HG3	1.99	0.45
20:m9:109:TYR:HB3	20:m9:115:ILE:HG12	1.98	0.45
33:o2:20:HIS:CG	33:o2:42:VAL:HG21	2.51	0.45
45:6:25:C:H4'	45:6:26:A:O5'	2.15	0.45
45:6:71:A:H1'	45:6:81:G:N2	2.31	0.45
45:6:1552:U:H2'	45:6:1553:G:O4'	2.16	0.45
47:s1:144:ARG:HB3	47:s1:208:GLN:HB3	1.97	0.45
50:s4:18:TRP:HZ3	50:s4:29:PRO:HD2	1.80	0.45
50:s4:57:ASN:O	50:s4:61:VAL:HG23	2.16	0.45
50:s4:95:THR:HG23	50:s4:97:GLU:H	1.81	0.45
79:s6:137:ARG:HG2	79:s6:138:ALA:H	1.81	0.45
61:c5:15:HIS:CG	61:c5:16:SER:N	2.84	0.45
65:c9:38:LYS:O	65:c9:39:THR:OG1	2.33	0.45
71:d5:98:GLN:OE1	71:d5:99:ALA:N	2.49	0.45
1:1:389:A:H62	80:1:3420:PAR:H532	1.82	0.45
1:1:716:A:C6	29:N8:117:ARG:HG3	2.51	0.45
1:1:1202:A:C2	1:1:2857:C:H5'	2.52	0.45
1:1:1334:U:O2'	9:L7:151:ARG:NH2	2.49	0.45
1:1:1805:C:OP1	35:O4:67:LYS:NZ	2.48	0.45
1:1:1831:U:O2'	3:4:114:G:OP1	2.23	0.45
1:1:2897:A:H2'	1:1:2899:C:H5''	1.99	0.45
1:1:3084:C:H2'	1:1:3085:G:O4'	2.16	0.45
1:1:3113:A:H1'	11:L9:70:THR:HG22	1.98	0.45
1:1:3182:G:C6	1:1:3183:A:C5	3.04	0.45
80:1:3424:PAR:H43	80:1:3424:PAR:O54	2.15	0.45
3:4:7:U:H2'	3:4:8:C:C6	2.50	0.45
11:L9:48:VAL:CG1	11:L9:52:LEU:HB3	2.46	0.45
17:M6:186:ALA:C	17:M6:188:SER:H	2.24	0.45
26:N5:55:ASN:ND2	26:N5:58:ASP:HB3	2.32	0.45
26:N5:67:ILE:HG13	26:N5:85:GLN:N	2.31	0.45
38:O7:21:ARG:HG3	38:O7:39:TYR:CD2	2.50	0.45
45:2:783:G:H1'	45:2:784:C:H5'	1.98	0.45
45:2:1228:G:OP2	58:C2:45:LEU:N	2.49	0.45
45:2:1503:A:H3'	45:2:1504:G:H8	1.79	0.45
54:S8:36:THR:OG1	54:S8:96:LEU:HB2	2.16	0.45
59:C3:20:ARG:HG2	68:D2:56:HIS:HE1	1.80	0.45
59:C3:99:ARG:O	59:C3:103:GLU:N	2.43	0.45
63:C7:33:ARG:HD2	77:SR:109:ASP:OD2	2.16	0.45
72:D6:88:SER:OG	72:D6:91:ASP:HB2	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:SR:59:ARG:HH11	77:SR:59:ARG:HB2	1.81	0.45
77:SR:102:ARG:NH1	77:SR:104:VAL:HB	2.31	0.45
1:5:96:G:H5'	14:m3:15:ARG:NH2	2.32	0.45
1:5:293:C:H2'	1:5:294:U:O4'	2.16	0.45
1:5:542:G:H3'	1:5:543:C:H5''	1.98	0.45
1:5:715:A:H8	29:n8:115:LYS:HG3	1.80	0.45
1:5:2255:A:N3	45:6:1757:G:N2	2.64	0.45
1:5:3395:G:N2	1:5:3396:U:O4	2.41	0.45
80:5:3409:PAR:H31	12:m0:112:GLN:OE1	2.16	0.45
7:l5:40:HIS:CE1	22:n1:69:LYS:HA	2.51	0.45
10:l8:137:ASN:HB3	16:m5:2:GLY:HA2	1.98	0.45
10:l8:152:LEU:HB3	10:l8:180:VAL:HG21	1.98	0.45
14:m3:121:SER:OG	14:m3:122:LYS:N	2.50	0.45
17:m6:157:GLU:O	17:m6:161:LYS:HG3	2.16	0.45
18:m7:16:SER:HA	18:m7:149:VAL:HA	1.97	0.45
19:m8:135:GLN:H	19:m8:135:GLN:CD	2.23	0.45
21:n0:83:SER:N	21:n0:86:GLY:O	2.33	0.45
35:o4:23:VAL:HG21	35:o4:33:GLN:CD	2.41	0.45
45:6:2:A:C8	45:6:370:A:H1'	2.51	0.45
45:6:45:U:C2	45:6:436:A:N6	2.85	0.45
45:6:487:G:O2'	45:6:488:G:OP1	2.32	0.45
45:6:625:C:H2'	45:6:626:U:C6	2.51	0.45
45:6:1320:U:H3'	46:s0:101:ARG:HH21	1.80	0.45
45:6:1541:G:OP2	83:6:2104:HOH:O	2.21	0.45
49:s3:207:THR:HB	63:c7:40:THR:OG1	2.16	0.45
50:s4:172:PHE:HE2	50:s4:174:LYS:HG2	1.82	0.45
62:c6:27:GLY:HA2	62:c6:63:ILE:O	2.16	0.45
63:c7:104:ASN:O	63:c7:108:ASP:OD1	2.33	0.45
64:c8:112:ASP:HA	64:c8:115:ARG:HB3	1.99	0.45
68:d2:15:ASN:OD1	68:d2:71:LYS:HA	2.17	0.45
70:d4:78:SER:HB3	70:d4:81:GLU:HG3	1.98	0.45
1:1:160:G:N7	80:1:3401:PAR:N64	2.63	0.45
1:1:613:G:H2'	1:1:614:C:C6	2.51	0.45
1:1:679:U:H1'	1:1:788:C:H1'	1.97	0.45
1:1:1366:A:C2	1:1:1367:G:C4	3.04	0.45
1:1:2726:C:O2'	1:1:2727:A:H2'	2.16	0.45
1:1:3131:U:H2'	1:1:3132:C:H6	1.81	0.45
1:1:3171:U:O4	34:O3:54:ARG:HD2	2.16	0.45
1:1:3273:A:H1'	8:L6:83:TYR:CE1	2.51	0.45
80:1:3411:PAR:H531	80:1:3411:PAR:H11	1.99	0.45
6:L4:98:ARG:HG2	6:L4:99:MET:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:L5:58:LYS:HE3	7:L5:93:THR:OG1	2.16	0.45
7:L5:177:GLU:OE2	7:L5:177:GLU:N	2.43	0.45
10:L8:134:TYR:CD2	10:L8:190:VAL:HG21	2.51	0.45
13:M1:109:HIS:HE1	13:M1:122:ILE:HA	1.81	0.45
14:M3:139:LEU:HD23	14:M3:139:LEU:HA	1.78	0.45
16:M5:42:PRO:HG2	16:M5:53:TYR:CE2	2.51	0.45
17:M6:116:LYS:HD2	17:M6:117:ARG:H	1.81	0.45
18:M7:32:THR:HG22	18:M7:84:PRO:HG2	1.98	0.45
20:M9:108:LYS:HG3	20:M9:109:TYR:N	2.32	0.45
36:O5:15:GLU:O	36:O5:19:SER:HB2	2.16	0.45
36:O5:47:VAL:O	36:O5:51:ILE:HG13	2.16	0.45
37:O6:53:TYR:CD1	37:O6:76:ARG:HG2	2.52	0.45
45:2:29:U:H2'	45:2:30:G:C8	2.51	0.45
45:2:30:G:H4'	69:D3:131:SER:HB2	1.98	0.45
45:2:56:U:P	45:2:56:U:H6	2.39	0.45
45:2:444:C:N4	45:2:460:A:H62	2.14	0.45
45:2:534:A:H3'	45:2:535:A:H8	1.80	0.45
45:2:626:U:H2'	45:2:627:C:C6	2.51	0.45
45:2:812:A:H62	45:2:858:G:H2'	1.82	0.45
45:2:1274:C:C4	78:SM:96:ARG:HG2	2.52	0.45
45:2:1329:A:OP2	49:S3:160:SER:OG	2.24	0.45
45:2:1732:A:H2'	45:2:1733:C:C6	2.52	0.45
46:S0:87:LEU:O	46:S0:91:ALA:N	2.45	0.45
49:S3:132:LYS:HB3	49:S3:189:MET:HG3	1.98	0.45
49:S3:208:ILE:HD12	63:C7:16:LEU:HD21	1.97	0.45
53:S7:121:VAL:O	53:S7:124:LYS:N	2.49	0.45
60:C4:111:ARG:HB2	72:D6:57:SER:CA	2.44	0.45
64:C8:18:LEU:HD21	64:C8:70:VAL:HG13	1.98	0.45
64:C8:82:PRO:HG3	65:C9:36:ILE:HD12	1.97	0.45
64:C8:127:HIS:NE2	64:C8:133:VAL:HG21	2.31	0.45
1:5:1103:A:H3'	1:5:1104:G:H5'	1.99	0.45
1:5:1202:A:C2	1:5:2857:C:H5'	2.51	0.45
1:5:2204:C:O2'	1:5:2205:U:O5'	2.27	0.45
1:5:2344:U:H2'	1:5:2345:A:C8	2.52	0.45
1:5:2689:A:H4'	1:5:2690:G:H5'	1.98	0.45
3:8:139:U:H2'	3:8:140:G:C8	2.51	0.45
5:l3:286:GLY:N	5:l3:321:PHE:O	2.33	0.45
7:l5:38:THR:HG23	22:n1:30:TYR:HB3	1.98	0.45
7:l5:51:LEU:HB2	7:l5:144:VAL:HG12	1.99	0.45
7:l5:232:ASP:O	7:l5:235:SER:OG	2.29	0.45
26:n5:100:LYS:HG2	26:n5:105:VAL:O	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:n6:43:TYR:CD1	27:n6:119:ILE:HG21	2.51	0.45
37:o6:66:GLU:HG2	37:o6:70:ARG:HH21	1.82	0.45
45:6:449:C:H2'	45:6:450:U:C6	2.50	0.45
45:6:579:A:H3'	45:6:579:A:N3	2.31	0.45
45:6:868:G:H22	45:6:960:U:H3	1.65	0.45
45:6:1525:A:H2'	45:6:1526:A:C8	2.52	0.45
46:s0:106:SER:O	46:s0:115:PHE:HA	2.16	0.45
47:s1:105:PHE:CD2	47:s1:213:ARG:HA	2.51	0.45
47:s1:123:ALA:HB2	47:s1:165:ARG:HG3	1.99	0.45
51:s5:76:ARG:HH12	62:c6:120:ASP:HA	1.81	0.45
54:s8:46:VAL:HG21	54:s8:56:ARG:NH1	2.31	0.45
68:d2:19:LYS:HE3	68:d2:70:ASN:O	2.15	0.45
69:d3:17:VAL:HA	69:d3:20:ARG:NH1	2.32	0.45
76:e0:41:THR:O	76:e0:46:ASN:HB3	2.17	0.45
77:sR:115:ILE:HD11	77:sR:119:ALA:HA	1.98	0.45
77:sR:223:TRP:HA	77:sR:223:TRP:CE3	2.51	0.45
78:sM:53:ARG:HD2	78:sM:53:ARG:N	2.28	0.45
1:1:45:A:OP2	16:M5:85:THR:HG21	2.16	0.45
1:1:207:U:H2'	1:1:208:C:C6	2.52	0.45
1:1:996:A:C2	1:1:1054:A:C4	3.04	0.45
1:1:2093:A:O2'	1:1:2094:C:OP2	2.33	0.45
1:1:2689:A:C8	1:1:2702:A:C6	3.05	0.45
2:3:1:G:OP2	80:3:201:PAR:O44	2.30	0.45
7:L5:156:GLY:HA2	7:L5:181:PRO:HD3	1.97	0.45
9:L7:96:PRO:O	9:L7:100:ARG:HB2	2.17	0.45
11:L9:179:ILE:O	11:L9:179:ILE:HG22	2.17	0.45
14:M3:157:ARG:HG2	14:M3:158:ALA:H	1.80	0.45
20:M9:168:ALA:O	20:M9:172:ARG:HB3	2.17	0.45
22:N1:103:GLN:OE1	22:N1:104:GLU:N	2.50	0.45
23:N2:59:ASP:OD1	23:N2:61:THR:OG1	2.33	0.45
42:Q1:2:ARG:HG3	42:Q1:3:ALA:N	2.30	0.45
45:2:333:A:C6	45:2:334:G:C6	3.04	0.45
45:2:776:G:O6	70:D4:11:LYS:NZ	2.48	0.45
45:2:1351:G:H1	45:2:1374:C:H42	1.64	0.45
45:2:1517:U:O2'	45:2:1518:C:H5'	2.16	0.45
45:2:1715:G:N3	45:2:1715:G:H2'	2.31	0.45
45:2:1775:U:H2'	45:2:1776:A:C8	2.51	0.45
48:S2:152:HIS:HD1	48:S2:174:ARG:HA	1.82	0.45
50:S4:57:ASN:HD21	50:S4:59:ARG:NH1	2.15	0.45
55:S9:114:TYR:HA	55:S9:119:ALA:HB3	1.98	0.45
59:C3:21:ASN:O	59:C3:22:ALA:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:C6:52:LEU:HB3	62:C6:60:PHE:CE1	2.47	0.45
65:C9:30:VAL:HG12	65:C9:54:PHE:CG	2.51	0.45
67:D1:51:VAL:HG11	67:D1:78:LEU:HD11	1.97	0.45
71:D5:95:HIS:CG	71:D5:96:SER:N	2.85	0.45
1:5:183:G:H1'	1:5:234:G:N2	2.32	0.45
1:5:381:U:H2'	1:5:382:U:C6	2.51	0.45
1:5:552:G:H2'	1:5:553:U:O4'	2.16	0.45
1:5:595:G:C8	1:5:609:G:C6	3.05	0.45
1:5:625:G:H2'	1:5:626:U:O4'	2.16	0.45
1:5:1867:A:H2'	1:5:1868:G:C8	2.52	0.45
1:5:1884:A:H5'	1:5:1885:U:OP2	2.17	0.45
1:5:2249:G:N7	1:5:2272:G:O2'	2.37	0.45
1:5:3006:A:H2'	1:5:3007:U:O4'	2.16	0.45
80:5:3416:PAR:H51	80:5:3416:PAR:H322	1.82	0.45
2:7:46:A:OP2	7:15:158:ARG:NH2	2.50	0.45
5:13:227:GLU:HG3	5:13:270:ARG:NE	2.27	0.45
5:13:286:GLY:HA3	5:13:321:PHE:CD2	2.51	0.45
7:15:132:THR:HG21	7:15:170:GLY:HA2	1.99	0.45
8:16:149:ILE:HD13	8:16:159:LEU:HD12	1.97	0.45
13:m1:32:ARG:NE	13:m1:120:ILE:O	2.43	0.45
14:m3:107:GLU:H	14:m3:107:GLU:HG2	1.51	0.45
19:m8:89:ASP:OD1	19:m8:90:ASP:N	2.50	0.45
31:o0:7:GLN:HG3	31:o0:9:SER:H	1.81	0.45
36:o5:10:ARG:NH1	36:o5:60:GLU:OE1	2.49	0.45
36:o5:21:LEU:HD11	36:o5:55:LEU:HD21	1.99	0.45
37:o6:58:ILE:HG22	37:o6:90:MET:HB3	1.97	0.45
39:o8:28:ASN:HD21	39:o8:42:LYS:HE3	1.80	0.45
45:6:68:A:N6	79:s6:132:ARG:HB3	2.31	0.45
45:6:1003:A:H4'	45:6:1004:U:O5'	2.16	0.45
80:6:1906:PAR:H13	80:6:1906:PAR:O62	2.17	0.45
46:s0:3:LEU:HD13	46:s0:62:ARG:HH22	1.79	0.45
46:s0:23:HIS:NE2	46:s0:24:LEU:HD13	2.31	0.45
46:s0:33:GLN:HE22	46:s0:147:THR:HB	1.82	0.45
48:s2:39:THR:OG1	48:s2:65:GLU:OE2	2.33	0.45
51:s5:79:ASN:HB2	51:s5:83:ARG:HH21	1.82	0.45
54:s8:112:TRP:O	54:s8:116:HIS:HB2	2.16	0.45
63:c7:75:GLU:HA	63:c7:78:ARG:HB2	1.98	0.45
65:c9:37:VAL:O	65:c9:47:PRO:HD2	2.16	0.45
1:1:1195:A:OP2	80:1:3423:PAR:N24	2.42	0.45
1:1:1873:U:OP1	20:M9:21:LYS:NZ	2.49	0.45
1:1:1901:A:H5''	1:1:2919:A:OP1	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2109:U:O2'	1:1:3363:U:O2'	2.29	0.45
1:1:2550:U:C4	10:L8:36:ILE:HG22	2.52	0.45
1:1:3092:C:O2'	1:1:3094:A:OP2	2.32	0.45
80:1:3419:PAR:H42	80:1:3419:PAR:H13	1.83	0.45
80:1:3433:PAR:H33	80:1:3433:PAR:H241	1.79	0.45
2:3:105:C:OP2	80:3:203:PAR:O53	2.20	0.45
5:L3:206:ASP:N	5:L3:206:ASP:OD1	2.49	0.45
9:L7:156:ILE:O	9:L7:159:GLN:HB2	2.16	0.45
16:M5:116:LEU:HD23	16:M5:133:ILE:HD11	1.98	0.45
21:N0:24:LEU:HD23	21:N0:24:LEU:HA	1.67	0.45
31:O0:13:LYS:HZ2	31:O0:103:THR:HG21	1.82	0.45
45:2:866:G:C2	45:2:867:G:C8	3.05	0.45
45:2:939:A:H2'	45:2:940:A:C8	2.52	0.45
45:2:1352:G:H2'	45:2:1353:U:O4'	2.17	0.45
45:2:1460:A:O2'	78:SM:72:ARG:NH1	2.49	0.45
45:2:1669:U:H2'	45:2:1670:G:O4'	2.17	0.45
45:2:1677:C:H42	45:2:1724:U:H3	1.63	0.45
51:S5:117:THR:HG23	51:S5:195:ALA:HB2	1.98	0.45
56:C0:55:VAL:CG2	56:C0:66:TYR:HB3	2.46	0.45
59:C3:62:GLN:O	59:C3:66:ILE:HG12	2.17	0.45
63:C7:19:ARG:HB2	63:C7:20:TYR:CD1	2.51	0.45
64:C8:26:ILE:HG23	64:C8:31:ALA:HB2	1.99	0.45
65:C9:105:LEU:HB3	65:C9:122:ARG:NE	2.32	0.45
77:SR:43:ILE:HD13	77:SR:60:SER:HA	1.99	0.45
1:5:553:U:H2'	1:5:554:A:O4'	2.15	0.45
1:5:590:G:C2	1:5:610:G:H2'	2.52	0.45
1:5:922:U:H3'	83:5:4457:HOH:O	2.15	0.45
1:5:1772:U:H5''	1:5:1773:C:H5'	1.99	0.45
1:5:2244:A:O2'	4:l2:223:SER:HB3	2.16	0.45
1:5:2407:C:H1'	1:5:2818:U:C2	2.51	0.45
1:5:2698:G:O2'	22:n1:12:ARG:HG3	2.16	0.45
1:5:2904:U:OP2	80:5:3408:PAR:H13	2.16	0.45
1:5:3151:U:OP2	5:l3:132:LYS:NZ	2.50	0.45
7:l5:64:ILE:HD12	7:l5:144:VAL:HG11	1.98	0.45
10:l8:81:THR:OG1	10:l8:181:LYS:HG3	2.16	0.45
14:m3:169:THR:O	14:m3:173:ALA:N	2.41	0.45
16:m5:5:LYS:NZ	16:m5:9:GLU:HB2	2.32	0.45
26:n5:135:ILE:O	26:n5:139:ILE:HG13	2.16	0.45
27:n6:103:LYS:HA	27:n6:103:LYS:HD3	1.78	0.45
45:6:125:U:H3	45:6:292:U:H3	1.64	0.45
45:6:294:C:H2'	45:6:295:A:C8	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:841:U:O2'	45:6:842:C:OP1	2.31	0.45
45:6:1523:G:H8	65:c9:79:LEU:HD13	1.81	0.45
45:6:1590:G:OP1	65:c9:91:TYR:HB2	2.16	0.45
46:s0:21:ASN:HA	46:s0:23:HIS:CD2	2.51	0.45
47:s1:128:LYS:HD2	47:s1:132:ASP:HA	1.98	0.45
48:s2:140:ARG:HD3	48:s2:222:TYR:CE1	2.52	0.45
48:s2:227:PRO:HA	48:s2:230:TRP:CD1	2.52	0.45
50:s4:92:LEU:HB2	50:s4:95:THR:CG2	2.41	0.45
50:s4:250:GLU:O	50:s4:254:ARG:HG2	2.15	0.45
51:s5:41:LYS:HE2	51:s5:41:LYS:HB3	1.58	0.45
79:s6:61:PHE:CE1	79:s6:96:SER:HB2	2.52	0.45
79:s6:98:ARG:HH11	79:s6:105:ASP:CG	2.25	0.45
66:d0:43:LYS:O	66:d0:47:GLN:HB2	2.17	0.45
70:d4:60:PHE:HA	70:d4:70:VAL:O	2.17	0.45
77:sR:169:ILE:HG12	77:sR:183:LEU:HD21	1.99	0.45
77:sR:258:THR:HB	77:sR:275:ARG:CZ	2.46	0.45
1:1:1169:A:H4'	9:L7:219:LYS:HD2	1.98	0.45
1:1:1460:A:H2'	1:1:1461:A:C8	2.52	0.45
1:1:1830:G:H5''	26:N5:92:LYS:HB2	1.98	0.45
2:3:62:U:O4	2:3:63:A:N6	2.49	0.45
4:L2:177:LYS:HE2	44:Q3:69:TYR:CE1	2.52	0.45
18:M7:95:LEU:HD23	18:M7:95:LEU:HA	1.80	0.45
21:N0:90:MET:HE1	21:N0:114:HIS:NE2	2.31	0.45
34:O3:12:LYS:NZ	34:O3:97:SER:HB3	2.32	0.45
36:O5:96:GLU:O	36:O5:97:ALA:HB3	2.16	0.45
45:2:35:U:H2'	45:2:36:C:C6	2.51	0.45
45:2:418:G:H1'	52:S6:59:GLN:NE2	2.32	0.45
45:2:454:U:C5	50:S4:66:MET:HB3	2.51	0.45
45:2:1603:U:H2'	45:2:1604:U:C6	2.51	0.45
47:S1:137:ILE:HD12	47:S1:172:LEU:HD22	1.98	0.45
47:S1:167:VAL:HA	47:S1:170:GLU:HB3	1.98	0.45
51:S5:37:GLN:OE1	62:C6:53:LEU:HD13	2.17	0.45
51:S5:82:PHE:CE2	74:D8:49:ARG:HD2	2.51	0.45
51:S5:108:LEU:H	51:S5:108:LEU:CD1	2.28	0.45
68:D2:93:LEU:H	68:D2:93:LEU:CD2	2.28	0.45
75:D9:30:LEU:HA	75:D9:39:CYS:HA	1.97	0.45
77:SR:272:ASP:OD1	77:SR:273:ASP:N	2.46	0.45
1:5:818:C:H2'	1:5:819:U:O4'	2.16	0.45
1:5:914:A:N3	4:I2:204:MET:HG2	2.32	0.45
1:5:943:U:H3'	29:n8:13:GLY:CA	2.44	0.45
1:5:1074:U:O4	80:5:3428:PAR:H641	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1301:A:H4'	1:5:1302:A:O5'	2.17	0.45
1:5:1432:C:OP2	83:5:4259:HOH:O	2.21	0.45
1:5:1526:U:H5'	1:5:1594:A:N1	2.32	0.45
1:5:1814:A:O4'	1:5:1816:A:H1'	2.17	0.45
1:5:1903:U:OP2	83:5:4256:HOH:O	2.20	0.45
1:5:3275:U:H4'	1:5:3276:G:C5	2.51	0.45
80:5:3405:PAR:O53	80:5:3405:PAR:H24	2.17	0.45
6:14:29:PRO:O	6:14:124:SER:OG	2.30	0.45
6:14:35:VAL:HG21	6:14:244:LEU:HD21	1.97	0.45
7:15:204:VAL:O	7:15:208:MET:HG3	2.17	0.45
9:17:221:LYS:C	9:17:229:PHE:CD1	2.95	0.45
10:18:90:THR:HG22	10:18:214:LEU:HG	1.97	0.45
10:18:221:ASN:O	10:18:225:LYS:HB3	2.17	0.45
11:19:166:ARG:HD2	11:19:168:ARG:NH1	2.31	0.45
18:m7:95:LEU:HD23	18:m7:148:LEU:HD11	1.99	0.45
29:n8:134:ALA:O	29:n8:138:ILE:HG13	2.16	0.45
45:6:227:U:O2'	45:6:228:G:O5'	2.29	0.45
45:6:610:G:H21	69:d3:19:ARG:NH1	2.15	0.45
45:6:968:U:H2'	45:6:969:C:O4'	2.16	0.45
49:s3:137:VAL:HG22	49:s3:151:LYS:HG3	1.98	0.45
51:s5:157:ARG:HH21	51:s5:224:ASN:CG	2.24	0.45
53:s7:28:GLU:HG2	53:s7:38:LEU:HD12	1.99	0.45
57:c1:132:SER:O	57:c1:133:LYS:C	2.60	0.45
62:c6:99:GLU:HG2	77:sR:57:PRO:HB2	1.99	0.45
65:c9:6:VAL:HG11	65:c9:132:LEU:HD12	1.99	0.45
68:d2:37:PHE:CE1	68:d2:103:ILE:HG21	2.51	0.45
69:d3:131:SER:HG	69:d3:134:ALA:H	1.65	0.45
70:d4:13:ILE:HD12	70:d4:13:ILE:HA	1.84	0.45
70:d4:118:ILE:HG23	70:d4:125:LEU:HD13	1.98	0.45
77:sR:172:ALA:HB3	77:sR:202:LEU:HD22	1.97	0.45
1:1:915:A:H2'	1:1:915:A:N3	2.32	0.45
1:1:1117:G:OP1	30:N9:4:SER:HB2	2.16	0.45
1:1:1347:U:H4'	6:L4:305:ALA:HA	1.98	0.45
1:1:1550:C:H1'	1:1:2166:A:H61	1.82	0.45
1:1:2713:U:H3'	43:Q2:9:LYS:O	2.17	0.45
1:1:2836:C:H5	1:1:2852:C:N4	2.01	0.45
1:1:2947:G:OP2	1:1:2947:G:H4'	2.17	0.45
80:1:3437:PAR:H43	80:1:3437:PAR:H14	1.40	0.45
5:L3:265:ALA:C	5:L3:266:ARG:HG2	2.42	0.45
6:L4:330:TYR:CE1	9:L7:49:ALA:HA	2.52	0.45
18:M7:36:ILE:HD12	18:M7:48:LEU:HD11	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:O7:18:LEU:HA	38:O7:25:ARG:H	1.82	0.45
44:Q3:30:GLU:HA	44:Q3:33:GLN:HG2	1.98	0.45
45:2:64:U:H1'	45:2:168:A:C2	2.52	0.45
45:2:1327:C:HO2'	49:S3:159:HIS:HD1	1.56	0.45
46:S0:103:THR:O	46:S0:106:SER:OG	2.26	0.45
48:S2:109:GLY:O	48:S2:139:ILE:HG12	2.17	0.45
48:S2:166:THR:OG1	48:S2:201:ASN:HB3	2.17	0.45
50:S4:47:PHE:HB3	50:S4:48:LEU:HD12	1.97	0.45
50:S4:211:LYS:HG3	50:S4:211:LYS:O	2.17	0.45
52:S6:210:GLN:HA	52:S6:213:ALA:HB3	1.98	0.45
54:S8:9:HIS:CG	54:S8:10:LYS:N	2.83	0.45
54:S8:76:THR:HB	54:S8:105:ASP:HB3	1.99	0.45
62:C6:40:GLU:HA	62:C6:42:GLU:N	2.32	0.45
62:C6:47:LYS:HD2	62:C6:82:ARG:CZ	2.46	0.45
62:C6:123:ARG:HG3	62:C6:124:PRO:HD2	1.98	0.45
62:C6:127:LYS:NZ	62:C6:131:GLY:O	2.36	0.45
66:D0:22:ILE:HG22	66:D0:93:LEU:HB2	1.99	0.45
72:D6:57:SER:OG	72:D6:58:VAL:N	2.48	0.45
1:5:248:U:H2'	1:5:249:U:H5'	1.99	0.45
1:5:790:U:H4'	6:14:112:LYS:HB3	1.98	0.45
1:5:1362:G:H2'	1:5:1363:A:C8	2.51	0.45
1:5:1672:U:OP1	20:m9:64:ARG:NE	2.50	0.45
1:5:1792:C:H2'	1:5:1795:U:C5	2.52	0.45
1:5:3139:A:H4'	5:13:20:LYS:HD3	1.98	0.45
1:5:3269:U:H5'	1:5:3271:G:O4'	2.17	0.45
6:14:126:ILE:HD11	6:14:233:LEU:HD13	1.98	0.45
7:15:274:GLN:OE1	7:15:274:GLN:N	2.49	0.45
11:19:41:ILE:HD13	11:19:67:ALA:HB1	1.98	0.45
16:m5:37:HIS:CD2	16:m5:63:ARG:HB3	2.52	0.45
21:n0:10:ILE:HG12	21:n0:26:ARG:HB2	1.98	0.45
25:n4:17:ARG:H	25:n4:17:ARG:HG3	1.58	0.45
26:n5:25:LYS:HB2	26:n5:25:LYS:HE3	1.72	0.45
45:6:270:C:H42	45:6:285:G:H1	1.65	0.45
45:6:520:A:C6	45:6:521:A:C6	3.05	0.45
45:6:607:G:H5'	45:6:613:G:N2	2.31	0.45
45:6:885:G:H2'	45:6:886:U:C6	2.51	0.45
45:6:1523:G:OP1	45:6:1523:G:H2'	2.16	0.45
45:6:1533:C:H4'	45:6:1539:G:N1	2.32	0.45
48:s2:234:PRO:O	48:s2:235:LEU:HB2	2.16	0.45
51:s5:44:ASN:HB3	51:s5:115:LYS:HE2	1.99	0.45
51:s5:89:ILE:HD12	51:s5:90:ILE:N	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:s7:64:VAL:HG21	53:s7:94:ALA:HB1	1.98	0.45
55:s9:66:ASP:O	55:s9:70:LEU:N	2.48	0.45
62:c6:21:HIS:O	62:c6:65:ILE:HA	2.16	0.45
66:d0:72:ASN:HD22	66:d0:73:GLY:N	2.14	0.45
71:d5:88:ILE:H	71:d5:88:ILE:HG13	1.49	0.45
1:1:988:U:H2'	1:1:989:A:C8	2.51	0.45
1:1:2277:C:H5'	1:1:2317:A:H4'	1.98	0.45
1:1:2775:U:H2'	1:1:2776:C:H6	1.81	0.45
2:3:4:U:H2'	2:3:5:G:C8	2.52	0.45
4:L2:149:ARG:NH2	4:L2:155:LYS:HD3	2.32	0.45
7:L5:92:LEU:HD12	7:L5:92:LEU:H	1.82	0.45
9:L7:222:HIS:CE1	9:L7:224:ILE:HG13	2.51	0.45
15:M4:118:PHE:O	15:M4:122:VAL:HG23	2.17	0.45
17:M6:12:LYS:O	21:N0:167:ARG:NH2	2.50	0.45
24:N3:47:ASN:ND2	83:N3:302:HOH:O	2.50	0.45
28:N7:10:VAL:HG22	28:N7:24:VAL:HG22	1.99	0.45
42:Q1:2:ARG:NH1	45:2:1773:C:OP2	2.50	0.45
45:2:1233:G:N2	45:2:1234:A:N3	2.65	0.45
45:2:1488:G:H3'	45:2:1515:A:N6	2.11	0.45
50:S4:128:LYS:HB2	50:S4:130:GLN:NE2	2.31	0.45
51:S5:112:ARG:CZ	62:C6:43:ILE:HD12	2.47	0.45
51:S5:225:ARG:HB2	74:D8:61:ARG:NH1	2.24	0.45
52:S6:8:PRO:HD3	52:S6:112:VAL:HG12	1.99	0.45
63:C7:71:PHE:CD2	63:C7:71:PHE:N	2.81	0.45
64:C8:45:LEU:HD12	64:C8:45:LEU:HA	1.81	0.45
65:C9:123:ARG:HG2	65:C9:124:ILE:N	2.31	0.45
66:D0:40:ASN:O	66:D0:44:ASN:N	2.46	0.45
68:D2:27:ILE:HG12	68:D2:61:ILE:HB	1.98	0.45
71:D5:80:LEU:HB3	71:D5:101:TYR:HE2	1.82	0.45
1:5:64:G:N3	1:5:77:A:H2	2.14	0.45
1:5:341:G:N7	6:l4:195:ARG:NH2	2.64	0.45
1:5:979:U:H1'	1:5:980:A:N1	2.31	0.45
1:5:1294:A:O2'	1:5:1295:G:H5''	2.17	0.45
1:5:1908:A:H2'	1:5:1909:A:O4'	2.16	0.45
1:5:2186:U:H5'	1:5:2314:U:OP2	2.17	0.45
1:5:2352:A:H5''	18:m7:83:TRP:O	2.17	0.45
1:5:2536:A:OP1	47:s1:226:GLY:HA3	2.16	0.45
1:5:2719:U:H2'	1:5:2720:G:H8	1.82	0.45
1:5:2880:U:H1'	5:l3:250:ALA:CB	2.45	0.45
1:5:2953:U:H2'	1:5:2954:U:H2'	1.99	0.45
2:7:79:A:H2'	2:7:80:G:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:7:90:U:C4	2:7:91:G:C5	3.05	0.45
5:l3:183:LEU:O	5:l3:191:LYS:NZ	2.50	0.45
6:l4:316:ASN:ND2	9:l7:150:LYS:HG3	2.31	0.45
17:m6:14:HIS:CE1	17:m6:119:VAL:HG22	2.51	0.45
19:m8:23:ASN:O	19:m8:27:LYS:HG3	2.17	0.45
45:6:918:U:H2'	45:6:919:A:C8	2.52	0.45
46:s0:15:GLN:HE21	63:c7:117:LEU:CB	2.28	0.45
50:s4:152:PRO:HG2	79:s6:215:ARG:HG2	1.97	0.45
51:s5:43:PHE:HD2	51:s5:46:TRP:HD1	1.64	0.45
54:s8:91:VAL:O	54:s8:94:ASN:ND2	2.47	0.45
57:c1:133:LYS:O	57:c1:136:ARG:NH1	2.50	0.45
64:c8:92:ILE:HG23	64:c8:93:THR:H	1.80	0.45
70:d4:60:PHE:CD1	70:d4:71:GLY:HA3	2.52	0.45
70:d4:63:GLN:HB3	70:d4:68:LYS:HB3	1.99	0.45
72:d6:10:ARG:HH22	72:d6:36:ILE:N	2.15	0.45
73:d7:64:CYS:HB2	73:d7:71:ALA:HB1	1.97	0.45
76:e0:24:THR:O	76:e0:26:LYS:HD2	2.17	0.45
1:1:339:C:OP1	1:1:1380:G:O2'	2.28	0.45
1:1:662:U:H2'	1:1:663:C:C6	2.52	0.45
1:1:2438:A:H2'	1:1:2439:A:C8	2.52	0.45
1:1:2656:A:H4'	43:Q2:98:LYS:HD2	1.99	0.45
1:1:3170:A:C2'	1:1:3171:U:H5'	2.47	0.45
3:4:125:U:H2'	3:4:126:A:OP1	2.17	0.45
5:L3:78:VAL:HG22	5:L3:323:MET:HG3	1.99	0.45
5:L3:347:SER:HB2	5:L3:350:ALA:H	1.82	0.45
7:L5:232:ASP:O	7:L5:235:SER:OG	2.32	0.45
11:L9:86:TYR:O	11:L9:147:SER:HA	2.17	0.45
12:M0:31:ILE:HA	12:M0:66:GLU:OE1	2.17	0.45
15:M4:34:ALA:HB2	15:M4:85:TRP:HZ3	1.81	0.45
21:N0:78:TRP:CE3	21:N0:125:LYS:HG2	2.52	0.45
37:O6:45:ARG:HD2	37:O6:45:ARG:HA	1.66	0.45
45:2:2:A:H8	45:2:2:A:OP1	1.99	0.45
45:2:562:G:N2	45:2:584:C:C2	2.85	0.45
45:2:755:A:C2	50:S4:13:ALA:HA	2.51	0.45
45:2:931:C:O2'	47:S1:118:GLN:O	2.34	0.45
45:2:1177:C:N4	64:C8:139:LYS:HD3	2.32	0.45
45:2:1388:A:C5	45:2:1411:A:C6	3.05	0.45
45:2:1486:G:O6	45:2:1487:A:N6	2.49	0.45
45:2:1508:U:H2'	45:2:1509:C:C6	2.52	0.45
45:2:1681:A:H2	45:2:1720:G:H21	1.65	0.45
50:S4:18:TRP:HE3	50:S4:20:LEU:HD11	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:S4:147:ILE:HG21	50:S4:169:ILE:HG13	1.99	0.45
52:S6:57:ASP:OD1	52:S6:98:ARG:HG3	2.17	0.45
63:C7:14:LYS:HE2	63:C7:68:GLY:O	2.17	0.45
64:C8:72:ILE:O	64:C8:76:PRO:HA	2.17	0.45
65:C9:135:ILE:HA	65:C9:138:GLN:HB3	1.98	0.45
74:D8:13:ILE:HG13	74:D8:29:ARG:HG2	1.97	0.45
1:5:1733:G:H2'	1:5:1734:G:H8	1.82	0.45
1:5:1758:G:H2'	1:5:1759:C:O4'	2.16	0.45
1:5:2357:A:H2'	1:5:2358:A:H8	1.82	0.45
1:5:2680:A:C2	13:m1:57:PHE:HB3	2.52	0.45
80:5:3418:PAR:N64	80:5:3418:PAR:O33	2.50	0.45
9:l7:98:LYS:HB3	9:l7:99:PRO:HD3	1.99	0.45
15:m4:14:LEU:H	15:m4:19:ARG:NH1	2.15	0.45
15:m4:135:LEU:HD22	15:m4:136:ALA:H	1.82	0.45
17:m6:126:VAL:HG23	21:n0:154:HIS:HE1	1.82	0.45
18:m7:14:SER:HB3	18:m7:151:THR:HG23	1.99	0.45
19:m8:98:LYS:HG3	19:m8:118:GLY:O	2.17	0.45
29:n8:73:LEU:HD22	29:n8:74:ASN:H	1.81	0.45
36:o5:47:VAL:O	36:o5:51:ILE:HG13	2.17	0.45
45:6:48:G:C6	45:6:432:G:C2	3.05	0.45
45:6:566:C:OP2	69:d3:66:SER:OG	2.32	0.45
45:6:1079:U:H2'	45:6:1080:U:C6	2.52	0.45
51:s5:122:ASN:HD22	51:s5:129:PRO:HD3	1.81	0.45
54:s8:189:LEU:O	54:s8:193:LEU:HG	2.17	0.45
55:s9:136:VAL:HG22	55:s9:156:ILE:HG12	1.98	0.45
57:c1:72:THR:O	57:c1:88:ARG:HD2	2.17	0.45
70:d4:37:LYS:O	70:d4:40:LEU:N	2.50	0.45
77:sR:200:ASN:HD21	77:sR:239:GLU:HG3	1.82	0.45
1:1:633:C:O2'	34:O3:21:ARG:O	2.34	0.45
1:1:1209:G:H2'	1:1:1210:U:O4'	2.16	0.45
1:1:1445:U:H5''	1:1:1446:A:OP2	2.16	0.45
1:1:2915:U:H5''	1:1:2916:U:H5'	1.99	0.45
1:1:3023:U:H2'	1:1:3024:A:C8	2.51	0.45
4:L2:111:THR:HB	4:L2:136:ILE:HD13	1.98	0.45
8:L6:31:ARG:HD2	8:L6:33:SER:HB2	1.99	0.45
12:M0:48:LEU:HD22	12:M0:49:CYS:N	2.32	0.45
12:M0:86:HIS:HB3	12:M0:139:ARG:CD	2.47	0.45
18:M7:37:ASN:OD1	18:M7:38:GLY:N	2.50	0.45
24:N3:49:LEU:HD23	24:N3:49:LEU:HA	1.80	0.45
29:N8:6:THR:HG22	29:N8:9:ARG:HG2	1.99	0.45
29:N8:73:LEU:HB2	29:N8:109:TYR:CD2	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:O4:67:LYS:HA	35:O4:70:LYS:HE2	1.99	0.45
42:Q1:3:ALA:HB3	45:2:1773:C:OP1	2.17	0.45
45:2:245:U:O2'	45:2:247:A:N7	2.47	0.45
45:2:567:A:H5''	45:2:568:G:OP2	2.17	0.45
80:2:1904:PAR:O54	80:2:1904:PAR:H43	2.17	0.45
48:S2:81:MET:HE2	48:S2:103:VAL:HB	1.99	0.45
48:S2:161:LYS:HB2	48:S2:166:THR:HG22	1.99	0.45
48:S2:222:TYR:OH	67:D1:10:GLU:OE1	2.31	0.45
50:S4:98:ASN:HD22	50:S4:119:ALA:CB	2.30	0.45
50:S4:206:ASP:N	50:S4:206:ASP:OD1	2.50	0.45
52:S6:58:LYS:HG2	52:S6:105:ASP:O	2.17	0.45
53:S7:60:ILE:HB	53:S7:92:PHE:CE2	2.52	0.45
55:S9:107:ARG:HH22	55:S9:150:LEU:HB2	1.82	0.45
61:C5:127:ARG:HH22	78:SM:65:THR:HG1	1.59	0.45
64:C8:139:LYS:O	64:C8:143:ARG:NH1	2.49	0.45
69:D3:86:PHE:O	69:D3:124:VAL:HG23	2.16	0.45
78:SM:87:THR:HG23	78:SM:88:ARG:N	2.28	0.45
1:5:1194:G:H2'	1:5:1195:A:C8	2.51	0.45
1:5:2514:U:H5'	10:l8:68:ARG:HG3	1.99	0.45
80:5:3411:PAR:O52	80:5:3411:PAR:H11	2.17	0.45
3:8:154:C:O2'	10:l8:185:ARG:HB2	2.17	0.45
6:l4:163:LYS:HB2	6:l4:163:LYS:HE3	1.77	0.45
6:l4:222:VAL:HG13	6:l4:225:VAL:HB	1.99	0.45
8:l6:31:ARG:HD3	34:o3:106:ASN:O	2.16	0.45
9:l7:144:ILE:O	9:l7:148:VAL:HG23	2.17	0.45
10:l8:63:LYS:O	10:l8:67:ILE:HG12	2.16	0.45
10:l8:91:PHE:O	10:l8:95:ASN:HB2	2.17	0.45
13:m1:166:LYS:O	13:m1:167:TYR:HB2	2.16	0.45
16:m5:137:PRO:HG2	16:m5:138:GLN:NE2	2.32	0.45
18:m7:56:ARG:NH1	18:m7:75:GLU:OE1	2.42	0.45
19:m8:165:ILE:HG13	19:m8:167:SER:O	2.17	0.45
29:n8:36:GLY:HA3	29:n8:40:HIS:CE1	2.52	0.45
32:o1:74:ARG:HH21	32:o1:109:VAL:HG21	1.82	0.45
39:o8:43:PHE:O	39:o8:53:THR:HA	2.17	0.45
42:q1:14:LYS:O	42:q1:18:ARG:HG3	2.16	0.45
49:s3:220:PRO:HA	77:sR:193:ILE:HG22	1.98	0.45
50:s4:151:ASP:HB3	50:s4:154:ILE:HG13	1.99	0.45
50:s4:184:THR:O	50:s4:189:LEU:HD13	2.16	0.45
51:s5:76:ARG:HH22	62:c6:122:ARG:HG3	1.81	0.45
55:s9:78:ARG:HH12	55:s9:82:ARG:HE	1.63	0.45
55:s9:118:LEU:HD23	55:s9:158:PHE:CZ	2.51	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:c5:49:MET:C	61:c5:51:SER:N	2.74	0.45
64:c8:13:HIS:HB2	64:c8:14:ILE:HD12	1.99	0.45
65:c9:70:GLN:HA	65:c9:122:ARG:O	2.16	0.45
76:e0:46:ASN:OD1	76:e0:48:THR:N	2.48	0.45
78:sM:54:PRO:HB2	78:sM:59:GLY:N	2.32	0.45
1:1:198:A:C6	1:1:219:A:C6	3.04	0.44
1:1:748:U:H2'	1:1:749:C:C6	2.53	0.44
1:1:856:G:C6	1:1:857:G:N1	2.84	0.44
1:1:1481:A:H2'	1:1:1481:A:N3	2.33	0.44
1:1:2254:U:H2'	1:1:2261:G:H22	1.81	0.44
1:1:2352:A:H5''	18:M7:83:TRP:O	2.17	0.44
4:L2:46:LYS:HG3	4:L2:62:VAL:CG2	2.47	0.44
4:L2:229:ALA:HB3	4:L2:234:LYS:HG2	1.99	0.44
8:L6:59:GLU:HB2	8:L6:103:VAL:HG23	1.98	0.44
10:L8:139:VAL:HG12	10:L8:143:ILE:HD11	1.99	0.44
13:M1:92:ARG:NH2	13:M1:94:ARG:HE	2.16	0.44
13:M1:112:LEU:HD12	13:M1:112:LEU:O	2.16	0.44
14:M3:75:PHE:O	14:M3:79:GLU:HB2	2.17	0.44
22:N1:18:ASP:HB3	22:N1:21:LYS:HB2	2.00	0.44
24:N3:118:VAL:HG12	24:N3:119:GLY:H	1.83	0.44
29:N8:118:ILE:HB	29:N8:119:PRO:HD2	1.99	0.44
33:O2:100:ILE:CG2	33:O2:105:ARG:HG3	2.46	0.44
34:O3:9:VAL:HG21	34:O3:44:TYR:HE1	1.81	0.44
45:2:155:U:H4'	52:S6:59:GLN:N	2.31	0.44
45:2:224:C:H2'	45:2:225:A:C8	2.51	0.44
45:2:968:U:OP2	83:2:2215:HOH:O	2.21	0.44
45:2:1411:A:OP1	62:C6:118:ILE:HD11	2.18	0.44
45:2:1467:C:H5'	45:2:1602:C:OP1	2.18	0.44
45:2:1485:C:H3'	45:2:1486:G:H5''	1.99	0.44
80:2:1905:PAR:N21	80:2:1905:PAR:O53	2.50	0.44
49:S3:78:LYS:HE3	56:C0:33:GLU:HG2	1.99	0.44
49:S3:175:VAL:HG13	49:S3:182:LEU:HB3	1.99	0.44
51:S5:163:SER:HB3	74:D8:46:GLY:HA3	1.98	0.44
53:S7:51:VAL:HG22	53:S7:168:SER:HA	1.98	0.44
63:C7:57:LEU:O	63:C7:61:ILE:HG13	2.17	0.44
66:D0:48:HIS:O	66:D0:48:HIS:ND1	2.47	0.44
74:D8:16:LEU:HD12	74:D8:27:GLN:HB3	1.99	0.44
1:5:20:A:OP2	36:o5:90:ARG:NH1	2.51	0.44
1:5:51:A:C4	1:5:52:A:C8	3.05	0.44
1:5:110:G:OP2	14:m3:73:ARG:NH1	2.36	0.44
1:5:561:C:H2'	1:5:562:C:C6	2.53	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1195:A:OP2	80:5:3419:PAR:H44	2.17	0.44
1:5:1366:A:C2	1:5:1367:G:C4	3.05	0.44
1:5:1851:G:N2	38:o7:5:THR:O	2.44	0.44
1:5:2209:U:H1'	1:5:2210:G:H5''	1.97	0.44
1:5:2426:U:H2'	1:5:2427:U:C6	2.51	0.44
1:5:2795:U:OP2	43:q2:63:LYS:HD3	2.16	0.44
1:5:2903:A:H2'	1:5:2904:U:O4'	2.17	0.44
1:5:2910:A:H5''	1:5:2910:A:H8	1.82	0.44
1:5:2916:U:H5	1:5:2935:U:HO2'	1.64	0.44
80:5:3423:PAR:H612	19:m8:174:ARG:NH1	2.32	0.44
5:l3:81:THR:HG22	5:l3:321:PHE:HA	1.98	0.44
9:l7:185:ILE:O	9:l7:189:ILE:HG22	2.17	0.44
32:o1:44:MET:HB3	32:o1:77:ARG:NH1	2.32	0.44
37:o6:5:THR:OG1	37:o6:7:ILE:HG22	2.16	0.44
45:6:846:G:H2'	45:6:847:A:H8	1.81	0.44
45:6:870:C:H2'	45:6:871:G:H8	1.82	0.44
45:6:872:G:H2'	45:6:873:U:O4'	2.17	0.44
45:6:1037:C:O2'	68:d2:16:ASN:ND2	2.49	0.44
48:s2:63:VAL:HG13	48:s2:68:ILE:HD12	1.98	0.44
48:s2:161:LYS:HE3	48:s2:164:SER:N	2.28	0.44
50:s4:44:LEU:HG	50:s4:82:TYR:HB3	1.99	0.44
50:s4:182:TYR:HB2	50:s4:228:ILE:HG21	1.99	0.44
51:s5:142:PRO:O	51:s5:167:ARG:HD2	2.17	0.44
79:s6:135:PRO:HB2	79:s6:141:ILE:CG1	2.43	0.44
53:s7:67:LEU:HA	53:s7:70:PHE:HB2	1.99	0.44
53:s7:114:ARG:O	53:s7:117:THR:HB	2.16	0.44
61:c5:34:VAL:O	61:c5:42:ARG:HG2	2.16	0.44
70:d4:50:ALA:HB3	70:d4:54:ALA:HB3	1.98	0.44
75:d9:12:ARG:O	75:d9:18:SER:HB2	2.17	0.44
1:1:978:G:O2'	1:1:979:U:H6	1.98	0.44
1:1:1110:U:H2'	1:1:1111:U:C6	2.52	0.44
1:1:1298:C:O2'	41:Q0:113:ARG:HD2	2.16	0.44
1:1:1324:U:P	21:N0:2:ALA:HA	2.58	0.44
1:1:2312:A:OP1	1:1:2314:U:H5	1.99	0.44
1:1:2853:A:H4'	12:M0:63:GLU:O	2.17	0.44
1:1:3242:G:N2	1:1:3245:A:OP2	2.50	0.44
80:1:3425:PAR:H11	80:1:3425:PAR:H52	1.70	0.44
3:4:81:U:H3'	3:4:82:U:H5'	1.98	0.44
3:4:154:C:H2'	3:4:155:A:O4'	2.17	0.44
4:L2:113:VAL:HG13	4:L2:116:VAL:CG1	2.47	0.44
7:L5:40:HIS:CD2	7:L5:42:ALA:HB3	2.52	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L7:179:LEU:HD13	9:L7:179:LEU:H	1.82	0.44
14:M3:76:THR:HA	14:M3:98:ASP:O	2.17	0.44
14:M3:157:ARG:HG2	14:M3:158:ALA:N	2.32	0.44
15:M4:37:GLU:HG3	15:M4:74:ARG:HG3	1.99	0.44
20:M9:103:ARG:HD2	20:M9:124:TYR:CE1	2.51	0.44
23:N2:11:ILE:HG22	23:N2:12:ALA:N	2.14	0.44
28:N7:2:ALA:HA	31:O0:63:SER:O	2.16	0.44
45:2:524:U:O2'	45:2:526:A:N7	2.34	0.44
45:2:778:G:H22	70:D4:10:ARG:NH1	2.15	0.44
45:2:959:U:H5'	59:C3:15:ALA:O	2.16	0.44
45:2:1220:C:OP1	56:C0:48:SER:OG	2.35	0.44
45:2:1278:G:H2'	45:2:1279:C:O4'	2.18	0.44
45:2:1490:C:H5	45:2:1492:A:C4	2.34	0.44
45:2:1654:G:C6	45:2:1745:G:C6	3.06	0.44
45:2:1795:U:O2	72:D6:36:ILE:HD11	2.17	0.44
46:S0:13:ASP:HA	46:S0:16:LEU:HD12	1.98	0.44
49:S3:91:VAL:HG11	49:S3:94:ARG:HB3	1.99	0.44
50:S4:12:LEU:HD23	50:S4:12:LEU:HA	1.70	0.44
53:S7:14:THR:HG22	53:S7:17:GLU:CD	2.42	0.44
60:C4:84:ARG:HG3	60:C4:118:VAL:HG23	1.99	0.44
67:D1:36:VAL:HG12	67:D1:51:VAL:HB	1.98	0.44
70:D4:29:HIS:CE1	70:D4:34:ASN:HA	2.53	0.44
1:5:76:G:OP1	14:m3:70:ARG:NH1	2.50	0.44
1:5:944:C:O2'	33:o2:33:ARG:NH1	2.51	0.44
1:5:1639:C:H5'	35:o4:52:GLN:HG2	2.00	0.44
1:5:1935:G:H2'	1:5:1936:A:C8	2.51	0.44
1:5:2335:G:N2	1:5:2339:C:O2'	2.51	0.44
1:5:2392:C:O2'	5:l3:266:ARG:NH2	2.37	0.44
1:5:3047:U:O2'	5:l3:53:MET:HE1	2.17	0.44
1:5:3131:U:H2'	1:5:3132:C:H6	1.82	0.44
6:l4:119:ARG:HA	6:l4:122:THR:OG1	2.17	0.44
7:l5:205:SER:HB3	7:l5:236:LEU:HD13	1.98	0.44
11:l9:1:MET:HE1	21:n0:138:GLN:HB3	1.99	0.44
14:m3:106:GLN:HB3	37:o6:18:THR:OG1	2.17	0.44
16:m5:73:ARG:NH2	16:m5:86:ASN:O	2.50	0.44
17:m6:65:ASN:OD1	17:m6:67:THR:HB	2.17	0.44
17:m6:179:ALA:HA	17:m6:182:ASN:HB3	1.99	0.44
18:m7:26:PHE:HE1	18:m7:120:ASN:HA	1.82	0.44
27:n6:54:ASP:O	27:n6:70:ILE:HG12	2.17	0.44
29:n8:82:ILE:HD11	29:n8:102:ILE:HG12	1.99	0.44
34:o3:90:PRO:O	34:o3:91:ALA:HB3	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:103:A:H2	45:6:308:C:H2'	1.83	0.44
45:6:185:U:O2	45:6:201:G:N2	2.50	0.44
45:6:1417:A:H2'	45:6:1418:G:O4'	2.16	0.44
45:6:1685:G:H1	45:6:1716:C:N4	2.13	0.44
46:s0:9:LEU:HD23	46:s0:54:TRP:CB	2.48	0.44
46:s0:185:ARG:N	67:d1:44:ARG:HA	2.26	0.44
51:s5:123:VAL:HG12	51:s5:124:LEU:HD12	2.00	0.44
55:s9:75:ALA:O	55:s9:79:ARG:HG3	2.18	0.44
68:d2:37:PHE:CZ	68:d2:103:ILE:HG21	2.52	0.44
77:sR:309:VAL:HG21	77:sR:311:ARG:CZ	2.47	0.44
1:1:107:A:H2'	1:1:108:A:O4'	2.17	0.44
1:1:361:A:OP1	38:O7:24:ARG:NH1	2.50	0.44
1:1:390:G:C6	1:1:391:A:C4	3.05	0.44
1:1:763:G:HO2'	1:1:764:U:P	2.38	0.44
1:1:965:A:H1'	29:N8:40:HIS:O	2.17	0.44
1:1:1767:C:H2'	1:1:1768:U:H6	1.83	0.44
1:1:2578:U:H2'	1:1:2579:G:O4'	2.18	0.44
2:3:74:C:H1'	2:3:106:U:O2	2.17	0.44
3:4:88:A:O2'	3:4:89:A:O4'	2.36	0.44
13:M1:65:ILE:HD12	13:M1:65:ILE:HA	1.75	0.44
14:M3:50:PRO:HG3	36:O5:118:ILE:HD11	1.99	0.44
15:M4:32:LEU:HD11	15:M4:94:TRP:CD1	2.51	0.44
26:N5:96:LYS:O	26:N5:100:LYS:HB2	2.17	0.44
28:N7:17:ARG:HG3	35:O4:73:SER:HB3	1.99	0.44
32:O1:86:LYS:HG2	32:O1:87:ASN:H	1.80	0.44
37:O6:58:ILE:HB	37:O6:94:ILE:HD11	1.99	0.44
45:2:48:G:C6	45:2:432:G:C2	3.06	0.44
45:2:90:C:H2'	45:2:91:G:C8	2.52	0.44
45:2:115:G:H5'	57:C1:129:ARG:HD3	1.99	0.44
45:2:324:U:OP1	57:C1:133:LYS:NZ	2.35	0.44
45:2:537:G:O6	55:S9:171:ARG:HG2	2.18	0.44
45:2:645:C:H2'	45:2:646:C:C6	2.52	0.44
45:2:879:G:H5'	59:C3:108:ASP:HA	1.99	0.44
45:2:1365:C:O3'	62:C6:30:LYS:NZ	2.45	0.44
45:2:1677:C:H2'	45:2:1678:A:O4'	2.18	0.44
46:S0:121:VAL:HB	46:S0:143:VAL:HG22	1.98	0.44
47:S1:28:GLU:O	47:S1:47:LEU:HD12	2.16	0.44
51:S5:164:PRO:HD3	74:D8:54:LEU:HD13	1.98	0.44
55:S9:83:VAL:HG23	55:S9:85:VAL:HG23	1.99	0.44
63:C7:85:VAL:HB	63:C7:86:PRO:CD	2.46	0.44
65:C9:105:LEU:HD22	65:C9:122:ARG:HG2	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:D4:21:LYS:HB2	70:D4:75:VAL:HG12	2.00	0.44
77:SR:26:SER:OG	77:SR:76:ASP:O	2.35	0.44
77:SR:295:SER:OG	77:SR:297:ASP:OD1	2.30	0.44
1:5:70:A:H2	1:5:72:C:H42	1.66	0.44
1:5:71:A:OP2	29:n8:67:HIS:NE2	2.36	0.44
1:5:99:A:H5'	16:m5:194:GLN:CD	2.43	0.44
1:5:661:G:OP2	29:n8:12:ARG:NH2	2.51	0.44
1:5:1213:G:O2'	21:n0:90:MET:HG2	2.17	0.44
1:5:1296:C:P	21:n0:84:ARG:HH22	2.40	0.44
1:5:1446:A:H5''	18:m7:65:SER:HB3	1.99	0.44
1:5:1655:G:H8	1:5:1655:G:C5'	2.30	0.44
1:5:1919:G:H2'	1:5:1920:U:O4'	2.17	0.44
1:5:2653:C:H1'	1:5:2694:A:C2	2.53	0.44
1:5:2912:G:H1'	1:5:3131:U:OP1	2.17	0.44
3:8:151:C:O2'	3:8:153:U:OP2	2.32	0.44
6:l4:234:ASN:HB3	6:l4:237:GLN:CD	2.42	0.44
10:l8:46:LEU:O	10:l8:49:TYR:N	2.50	0.44
10:l8:151:VAL:HA	10:l8:199:ALA:HB2	1.98	0.44
10:l8:214:LEU:O	10:l8:218:ILE:HB	2.17	0.44
13:m1:46:VAL:HG13	13:m1:68:HIS:CE1	2.52	0.44
22:n1:31:LEU:HD23	22:n1:31:LEU:HA	1.87	0.44
24:n3:34:LEU:HD23	24:n3:34:LEU:HA	1.84	0.44
24:n3:120:LYS:H	24:n3:137:VAL:HG23	1.81	0.44
29:n8:91:LEU:HA	29:n8:121:VAL:HG11	1.99	0.44
45:6:358:U:OP1	80:6:1903:PAR:O41	2.31	0.44
80:6:1904:PAR:H24	69:d3:24:TRP:CD2	2.52	0.44
47:s1:81:PHE:CD2	47:s1:82:ARG:HG3	2.53	0.44
61:c5:86:VAL:HG23	61:c5:88:GLU:HB3	1.97	0.44
64:c8:97:ASP:N	64:c8:97:ASP:OD1	2.50	0.44
65:c9:86:ARG:NH2	65:c9:89:ARG:HE	2.16	0.44
65:c9:128:GLY:O	65:c9:132:LEU:HD23	2.17	0.44
75:d9:49:ASP:OD1	75:d9:49:ASP:N	2.35	0.44
1:1:144:A:H2'	1:1:145:G:O4'	2.17	0.44
1:1:2665:U:H4'	1:1:2666:C:OP1	2.16	0.44
1:1:2812:C:H2'	1:1:2813:A:C8	2.53	0.44
5:L3:116:ARG:HD3	5:L3:122:TRP:CD2	2.52	0.44
8:L6:129:GLU:HB2	8:L6:130:ILE:HD12	1.99	0.44
10:L8:116:VAL:O	10:L8:121:SER:N	2.50	0.44
11:L9:94:TYR:CD1	11:L9:99:ILE:HG13	2.52	0.44
15:M4:26:GLY:O	15:M4:29:ALA:HB2	2.17	0.44
16:M5:10:LEU:HA	37:O6:44:VAL:HG11	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:M6:171:LYS:O	17:M6:175:THR:HG23	2.17	0.44
24:N3:33:ASN:ND2	24:N3:63:LYS:HB2	2.32	0.44
33:O2:96:ILE:HG21	33:O2:105:ARG:HG2	1.98	0.44
45:2:82:U:H2'	45:2:83:G:O4'	2.17	0.44
45:2:329:G:H2'	45:2:330:G:H8	1.82	0.44
45:2:477:A:OP2	76:E0:28:LYS:NZ	2.48	0.44
45:2:1066:C:H4'	47:S1:149:GLN:NE2	2.26	0.44
45:2:1600:A:H4'	45:2:1601:G:OP1	2.17	0.44
1:5:405:U:H6	1:5:405:U:O5'	2.00	0.44
1:5:789:A:H2'	1:5:790:U:C6	2.53	0.44
1:5:1571:A:H4'	1:5:1572:U:OP1	2.18	0.44
1:5:1794:G:O2'	1:5:1795:U:H5'	2.18	0.44
1:5:1911:A:C2	1:5:2122:G:C8	3.05	0.44
1:5:2154:U:H4'	4:l2:240:ALA:CB	2.48	0.44
1:5:2249:G:C8	1:5:2272:G:C8	3.05	0.44
5:l3:187:SER:O	5:l3:190:GLU:N	2.51	0.44
6:l4:33:ASP:O	6:l4:36:HIS:N	2.51	0.44
12:m0:101:LYS:HD2	12:m0:101:LYS:HA	1.54	0.44
12:m0:192:ASP:OD2	12:m0:192:ASP:N	2.50	0.44
18:m7:23:ARG:HA	18:m7:143:PRO:HB3	2.00	0.44
26:n5:103:TYR:O	26:n5:138:ARG:NH1	2.50	0.44
32:o1:72:ARG:HG3	32:o1:96:VAL:CG1	2.47	0.44
40:o9:42:ARG:HG2	40:o9:43:ASN:N	2.32	0.44
44:q3:73:THR:HB	44:q3:76:ALA:CB	2.48	0.44
45:6:1473:U:P	51:s5:190:ILE:HG12	2.58	0.44
45:6:1561:U:H4'	45:6:1599:C:H4'	1.99	0.44
45:6:1603:U:H2'	45:6:1604:U:C6	2.53	0.44
46:s0:77:SER:HB3	46:s0:83:GLN:HA	2.00	0.44
46:s0:148:ASP:HB2	46:s0:164:ASN:ND2	2.33	0.44
47:s1:224:ASP:O	47:s1:226:GLY:N	2.50	0.44
48:s2:88:LYS:O	48:s2:95:ARG:N	2.50	0.44
50:s4:73:ASP:H	50:s4:89:VAL:HB	1.83	0.44
51:s5:148:ARG:HD3	51:s5:148:ARG:HA	1.80	0.44
51:s5:190:ILE:O	51:s5:194:LEU:HB2	2.16	0.44
75:d9:43:PHE:O	75:d9:47:ALA:N	2.50	0.44
77:sR:32:LEU:HA	77:sR:45:TRP:O	2.18	0.44
1:1:1415:U:H2'	1:1:1416:C:O4'	2.17	0.44
1:1:2403:G:C2	1:1:2405:C:C4	3.06	0.44
1:1:2526:C:H2'	1:1:2527:G:H8	1.81	0.44
1:1:2778:G:H2'	1:1:2779:A:H5'	1.99	0.44
5:L3:149:ALA:O	5:L3:153:LYS:N	2.42	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:192:GLY:HA2	6:L4:195:ARG:HG3	1.99	0.44
7:L5:40:HIS:CE1	22:N1:69:LYS:HB2	2.51	0.44
14:M3:46:ILE:HG22	14:M3:49:ARG:HB2	1.99	0.44
16:M5:75:VAL:O	16:M5:75:VAL:HG12	2.17	0.44
17:M6:8:VAL:O	17:M6:118:VAL:HG22	2.18	0.44
19:M8:82:VAL:HG23	19:M8:139:ILE:HG12	2.00	0.44
22:N1:17:ARG:O	22:N1:18:ASP:HB2	2.18	0.44
27:N6:37:LYS:CD	27:N6:37:LYS:H	2.31	0.44
36:O5:62:GLN:O	36:O5:66:VAL:HG23	2.18	0.44
44:Q3:44:LYS:H	44:Q3:44:LYS:HG3	1.61	0.44
45:2:47:A:N1	45:2:386:G:H1'	2.33	0.44
45:2:265:A:H61	45:2:289:U:H3	1.65	0.44
45:2:625:C:H2'	45:2:626:U:C6	2.53	0.44
45:2:688:G:H2'	45:2:689:G:C8	2.52	0.44
45:2:1292:G:H2'	45:2:1293:U:C6	2.52	0.44
45:2:1486:G:H1'	45:2:1592:A:O2'	2.18	0.44
45:2:1649:G:H2'	45:2:1650:U:H6	1.82	0.44
46:S0:66:ALA:HB2	67:D1:37:ALA:HB2	2.00	0.44
50:S4:71:LYS:HB2	50:S4:76:VAL:HA	1.99	0.44
51:S5:166:ARG:HB2	74:D8:47:PRO:HD3	1.99	0.44
64:C8:122:HIS:HA	64:C8:125:ILE:HD12	2.00	0.44
64:C8:123:ARG:HB2	64:C8:133:VAL:HG12	1.99	0.44
77:SR:76:ASP:OD1	77:SR:77:GLY:N	2.51	0.44
77:SR:281:TYR:HB3	77:SR:282:SER:H	1.73	0.44
1:5:126:U:H2'	1:5:127:G:O4'	2.17	0.44
1:5:152:U:OP1	36:o5:106:LYS:NZ	2.47	0.44
1:5:1080:A:OP1	7:l5:140:ARG:HB2	2.17	0.44
1:5:1406:A:H5'	33:o2:17:PHE:HD2	1.82	0.44
1:5:1460:A:H5'	32:o1:51:LEU:O	2.17	0.44
1:5:1844:C:O2	38:o7:9:GLY:HA2	2.17	0.44
1:5:2104:A:H2'	1:5:2105:G:H8	1.82	0.44
1:5:2180:G:N7	80:5:3413:PAR:O61	2.50	0.44
1:5:2719:U:H2'	1:5:2720:G:C8	2.52	0.44
1:5:2947:G:OP2	1:5:2947:G:H4'	2.18	0.44
1:5:3187:A:C2	21:n0:171:PHE:HB3	2.53	0.44
2:7:65:G:OP2	83:7:303:HOH:O	2.21	0.44
6:l4:316:ASN:HD21	9:l7:150:LYS:CG	2.30	0.44
10:l8:171:LYS:NZ	10:l8:224:ASP:HA	2.32	0.44
11:l9:53:ILE:HD13	15:m4:7:VAL:HG21	1.98	0.44
22:n1:76:ILE:HD12	22:n1:76:ILE:HA	1.78	0.44
24:n3:45:ARG:HD2	24:n3:46:LEU:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:o5:9:LEU:HD13	36:o5:54:VAL:HA	2.00	0.44
38:o7:39:TYR:CD2	38:o7:40:PRO:HA	2.52	0.44
45:6:420:A:OP1	79:s6:96:SER:OG	2.23	0.44
45:6:1097:U:O4	48:s2:201:ASN:ND2	2.51	0.44
45:6:1654:G:C6	45:6:1745:G:C6	3.06	0.44
47:s1:128:LYS:HA	47:s1:134:VAL:HA	1.98	0.44
50:s4:98:ASN:HB2	50:s4:114:ILE:O	2.18	0.44
50:s4:226:PHE:HD1	50:s4:227:VAL:N	2.15	0.44
57:c1:132:SER:O	57:c1:135:VAL:N	2.44	0.44
70:d4:20:ARG:HD2	70:d4:74:LEU:HD13	1.99	0.44
77:sR:38:ARG:HB3	77:sR:67:ILE:HG12	1.98	0.44
1:1:39:A:H5''	29:N8:35:ALA:HB2	1.99	0.44
1:1:94:G:H2'	1:1:95:A:H8	1.80	0.44
1:1:1135:A:OP1	30:N9:5:LYS:HD2	2.17	0.44
1:1:1285:G:H4'	1:1:1286:A:OP1	2.17	0.44
1:1:2179:C:H4'	1:1:2180:G:OP2	2.17	0.44
1:1:2583:C:H2'	1:1:2584:G:C8	2.52	0.44
1:1:2865:U:P	12:M0:115:MET:HB2	2.58	0.44
3:4:111:A:OP1	38:O7:32:LYS:HE3	2.18	0.44
4:L2:246:LEU:H	4:L2:246:LEU:HD12	1.81	0.44
6:L4:44:LYS:HD2	6:L4:111:VAL:HG21	1.99	0.44
9:L7:90:LYS:HD2	9:L7:91:GLY:H	1.83	0.44
9:L7:163:LEU:O	9:L7:168:ILE:HD12	2.17	0.44
9:L7:188:ILE:HA	9:L7:195:PHE:HD2	1.83	0.44
10:L8:91:PHE:CZ	10:L8:185:ARG:HB3	2.52	0.44
12:M0:103:LEU:HA	12:M0:104:SER:HB3	1.98	0.44
16:M5:15:GLN:HB3	37:O6:52:PRO:HD2	2.00	0.44
16:M5:44:ARG:HB2	16:M5:47:LYS:HB3	1.99	0.44
17:M6:83:ALA:O	17:M6:87:MET:HG3	2.17	0.44
19:M8:99:THR:HB	19:M8:100:THR:H	1.47	0.44
20:M9:163:ARG:O	20:M9:167:ARG:N	2.49	0.44
27:N6:106:ILE:HG21	27:N6:109:LEU:HD23	1.98	0.44
27:N6:112:ASP:H	27:N6:115:ARG:HB2	1.83	0.44
28:N7:47:GLU:HB3	28:N7:71:PHE:HD2	1.83	0.44
45:2:448:C:OP1	50:S4:29:PRO:HD3	2.18	0.44
45:2:906:A:P	60:C4:52:ARG:HB3	2.58	0.44
45:2:1078:C:H2'	45:2:1079:U:C6	2.51	0.44
45:2:1121:C:N3	45:2:1127:G:C6	2.86	0.44
45:2:1232:U:C2	45:2:1233:G:C8	3.06	0.44
47:S1:61:LEU:C	47:S1:63:GLY:N	2.74	0.44
51:S5:51:VAL:O	51:S5:51:VAL:HG22	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:S7:74:GLN:O	53:S7:78:THR:N	2.46	0.44
55:S9:93:LEU:O	55:S9:96:VAL:HG22	2.18	0.44
56:C0:27:PHE:CD1	56:C0:40:LEU:HD23	2.53	0.44
73:D7:50:ALA:O	73:D7:52:THR:N	2.51	0.44
77:SR:19:TRP:H	77:SR:38:ARG:HB2	1.82	0.44
1:5:225:C:H2'	1:5:226:C:C6	2.52	0.44
1:5:361:A:O3'	38:o7:45:ARG:NH2	2.51	0.44
1:5:729:C:P	19:m8:43:PRO:HG2	2.58	0.44
1:5:787:G:H2'	1:5:788:C:C6	2.53	0.44
1:5:1060:U:H2'	1:5:1061:A:C8	2.53	0.44
1:5:1488:G:C2	1:5:1489:A:C8	3.06	0.44
1:5:1664:G:H2'	1:5:1665:C:H6	1.82	0.44
1:5:1742:U:H2'	1:5:1743:G:H8	1.82	0.44
1:5:2355:G:H4'	18:m7:139:TYR:CE2	2.52	0.44
1:5:2628:A:H1'	1:5:2798:C:C2	2.53	0.44
1:5:3386:G:H5'	32:o1:10:ARG:NE	2.33	0.44
2:7:46:A:OP1	7:l5:158:ARG:HB2	2.17	0.44
3:8:39:G:H1'	3:8:105:A:N1	2.32	0.44
3:8:145:U:H2'	3:8:146:U:C6	2.53	0.44
5:l3:165:GLN:HG2	5:l3:167:ARG:HH21	1.83	0.44
10:l8:94:PHE:CZ	10:l8:200:LEU:HG	2.53	0.44
14:m3:92:THR:CG2	36:o5:114:ARG:HG2	2.48	0.44
15:m4:26:GLY:N	15:m4:29:ALA:HB2	2.33	0.44
18:m7:116:HIS:HE1	18:m7:147:GLU:HG3	1.83	0.44
19:m8:94:PHE:CZ	29:n8:119:PRO:HD3	2.53	0.44
24:n3:89:ASP:OD1	24:n3:91:VAL:HG12	2.17	0.44
25:n4:96:LEU:HD23	25:n4:96:LEU:H	1.82	0.44
25:n4:120:LYS:HA	25:n4:123:ARG:NH1	2.32	0.44
28:n7:3:LYS:NZ	28:n7:5:LEU:HB2	2.33	0.44
29:n8:81:LEU:HD22	29:n8:107:ALA:HB1	1.99	0.44
29:n8:135:GLU:O	29:n8:138:ILE:N	2.50	0.44
45:6:44:U:H5	45:6:437:A:N1	2.16	0.44
45:6:164:A:H5''	79:s6:112:VAL:HG11	2.00	0.44
45:6:1461:C:H2'	45:6:1462:G:C8	2.52	0.44
47:s1:105:PHE:HZ	47:s1:211:HIS:ND1	2.15	0.44
47:s1:129:THR:HG22	47:s1:176:VAL:HG12	2.00	0.44
47:s1:137:ILE:HB	47:s1:215:VAL:HG23	1.99	0.44
49:s3:79:TYR:HD1	49:s3:84:ILE:HB	1.82	0.44
50:s4:88:ASP:O	50:s4:100:ARG:HA	2.17	0.44
79:s6:93:LYS:HE3	79:s6:93:LYS:HB2	1.83	0.44
59:c3:13:SER:OG	59:c3:14:SER:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:c5:9:LYS:O	61:c5:10:ARG:HB2	2.16	0.44
66:d0:20:ILE:HB	66:d0:96:PRO:HA	2.00	0.44
70:d4:27:VAL:HG21	70:d4:40:LEU:HD21	2.00	0.44
1:1:1015:U:H1'	1:1:1017:C:H6	1.83	0.44
1:1:1051:U:H4'	22:N1:19:PHE:CD2	2.53	0.44
1:1:1619:A:H2'	1:1:1620:U:O4'	2.18	0.44
1:1:2179:C:C4	4:L2:131:GLY:HA3	2.52	0.44
1:1:2663:G:C5'	7:L5:152:ARG:HD3	2.48	0.44
1:1:3215:A:O5'	15:M4:121:MET:HE1	2.18	0.44
2:3:70:U:H2'	2:3:71:G:C8	2.53	0.44
2:3:106:U:H2'	2:3:107:C:C6	2.53	0.44
6:L4:99:MET:HE1	6:L4:103:THR:HG23	2.00	0.44
7:L5:68:THR:HB	7:L5:71:GLY:O	2.18	0.44
9:L7:74:SER:OG	22:N1:142:SER:HA	2.18	0.44
19:M8:85:GLY:N	19:M8:104:LEU:HD12	2.33	0.44
21:N0:138:GLN:HA	21:N0:141:LYS:HB2	2.00	0.44
29:N8:82:ILE:CG2	29:N8:86:LYS:HB2	2.48	0.44
33:O2:19:ARG:HE	33:O2:33:ARG:CB	2.30	0.44
45:2:145:A:H2	45:2:146:U:C2	2.35	0.44
45:2:273:G:N2	45:2:283:U:O2	2.50	0.44
45:2:702:G:O2'	45:2:703:G:H8	2.01	0.44
45:2:856:A:N6	53:S7:96:ARG:HB3	2.33	0.44
45:2:926:A:H2	60:C4:125:SER:HB3	1.82	0.44
46:S0:70:PRO:HB2	46:S0:94:GLY:HA3	2.00	0.44
47:S1:140:ILE:HG12	47:S1:141:ALA:N	2.33	0.44
56:C0:44:LYS:HD3	56:C0:44:LYS:HA	1.81	0.44
59:C3:54:LEU:HB3	59:C3:60:VAL:HB	2.00	0.44
65:C9:11:ALA:HB1	65:C9:63:ARG:NH2	2.32	0.44
68:D2:41:MET:HB3	68:D2:47:ILE:HG12	2.00	0.44
71:D5:96:SER:C	71:D5:98:GLN:H	2.26	0.44
74:D8:32:PHE:HZ	74:D8:59:SER:HB2	1.82	0.44
77:SR:149:ASP:HB2	77:SR:175:ASP:N	2.32	0.44
77:SR:224:ASN:CG	77:SR:227:ALA:HB3	2.42	0.44
1:5:1186:G:OP1	15:m4:42:LYS:HD2	2.17	0.44
1:5:1636:U:H4'	28:n7:74:VAL:O	2.18	0.44
1:5:2107:A:H2'	1:5:2108:C:C6	2.53	0.44
1:5:2213:A:N1	1:5:2429:G:H1'	2.31	0.44
1:5:2701:U:OP1	22:n1:23:GLY:N	2.45	0.44
7:l5:218:ARG:NH2	7:l5:221:GLU:OE2	2.51	0.44
8:l6:56:LYS:H	8:l6:64:LEU:HB3	1.82	0.44
12:m0:190:VAL:HB	12:m0:197:VAL:HG11	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:m9:88:ARG:H	20:m9:88:ARG:HG2	1.63	0.44
23:n2:55:THR:O	23:n2:65:VAL:HA	2.18	0.44
26:n5:80:ASN:ND2	26:n5:126:LEU:HB2	2.33	0.44
31:o0:13:LYS:O	31:o0:17:VAL:HG23	2.18	0.44
38:o7:16:HIS:O	38:o7:25:ARG:HD3	2.18	0.44
45:6:16:G:H2'	45:6:17:C:C6	2.53	0.44
45:6:97:C:H2'	45:6:98:U:C6	2.53	0.44
45:6:442:C:H2'	45:6:443:C:H6	1.83	0.44
45:6:548:G:H1	45:6:590:C:H42	1.65	0.44
45:6:1270:G:N2	45:6:1441:C:H1'	2.32	0.44
46:s0:9:LEU:O	46:s0:9:LEU:HD22	2.16	0.44
46:s0:62:ARG:HD3	67:d1:36:VAL:HG12	2.00	0.44
46:s0:188:LEU:HD21	46:s0:195:TRP:HE1	1.83	0.44
48:s2:227:PRO:HA	48:s2:230:TRP:CG	2.52	0.44
50:s4:182:TYR:HB2	50:s4:228:ILE:HD13	1.99	0.44
79:s6:78:THR:HG22	79:s6:92:ARG:HG2	2.00	0.44
62:c6:7:VAL:HG21	62:c6:91:ALA:HB1	1.98	0.44
1:1:911:C:H42	4:L2:3:ARG:HD3	1.83	0.44
1:1:1824:U:H2'	1:1:1825:G:O4'	2.18	0.44
1:1:2713:U:O2'	43:Q2:8:ARG:HD2	2.18	0.44
1:1:2941:A:N7	5:L3:255:TRP:CE2	2.86	0.44
5:L3:122:TRP:CZ2	5:L3:127:LYS:HD3	2.53	0.44
5:L3:152:LYS:HE2	5:L3:192:VAL:HG13	2.00	0.44
5:L3:372:THR:HG22	5:L3:374:ALA:H	1.83	0.44
7:L5:50:ARG:HB3	7:L5:147:ASP:HB2	1.99	0.44
9:L7:77:VAL:HG22	22:N1:139:ARG:O	2.17	0.44
10:L8:160:ILE:H	10:L8:160:ILE:HG12	1.49	0.44
11:L9:47:LYS:NZ	15:M4:5:SER:HB2	2.31	0.44
12:M0:77:THR:HG23	12:M0:85:PHE:CZ	2.53	0.44
12:M0:168:SER:HA	22:N1:160:ILE:CG2	2.47	0.44
13:M1:61:ARG:HD3	78:SM:36:ASP:OD1	2.17	0.44
24:N3:24:ASN:O	24:N3:99:ALA:HA	2.18	0.44
33:O2:8:LYS:HE3	33:O2:8:LYS:HB2	1.87	0.44
45:2:243:G:H2'	45:2:244:A:H8	1.83	0.44
45:2:1202:A:H1'	45:2:1207:C:N4	2.33	0.44
45:2:1753:A:OP2	80:2:1905:PAR:N64	2.43	0.44
46:S0:200:ASP:HA	46:S0:203:PHE:CE1	2.52	0.44
51:S5:107:LYS:O	51:S5:111:VAL:HG23	2.18	0.44
52:S6:7:TYR:HD2	52:S6:8:PRO:HD2	1.82	0.44
52:S6:185:GLN:HA	52:S6:188:ARG:NH2	2.33	0.44
63:C7:21:TYR:N	63:C7:22:PRO:HD2	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:C8:84:TRP:HA	64:C8:89:GLN:CD	2.42	0.44
67:D1:34:ILE:HG22	67:D1:53:TYR:O	2.18	0.44
67:D1:64:GLU:HG3	73:D7:3:LEU:HG	2.00	0.44
71:D5:44:GLN:O	71:D5:47:TYR:N	2.51	0.44
1:5:283:G:O6	1:5:304:G:H1'	2.17	0.44
1:5:538:G:H1	1:5:554:A:H1'	1.83	0.44
1:5:814:U:H5'	38:o7:45:ARG:HH12	1.81	0.44
1:5:873:C:O3'	1:5:875:G:H5'	2.18	0.44
1:5:1018:G:H2'	1:5:1019:G:O4'	2.17	0.44
1:5:1593:A:C6	1:5:1594:A:C6	3.06	0.44
5:l3:103:THR:HG21	5:l3:147:GLU:OE2	2.18	0.44
11:l9:110:LYS:O	11:l9:128:VAL:HB	2.17	0.44
12:m0:66:GLU:OE2	12:m0:70:ILE:HD11	2.18	0.44
18:m7:31:GLU:CG	18:m7:60:PHE:HA	2.47	0.44
20:m9:32:ILE:H	20:m9:32:ILE:HG13	1.61	0.44
31:o0:13:LYS:HE3	31:o0:104:LEU:HD11	1.99	0.44
42:q1:3:ALA:HB3	45:6:1773:C:OP1	2.17	0.44
45:6:69:G:H1	45:6:82:U:H3	1.65	0.44
45:6:538:A:N6	45:6:543:C:H41	2.16	0.44
45:6:609:U:O2'	69:d3:23:ARG:HD3	2.18	0.44
45:6:841:U:H2'	45:6:842:C:C6	2.53	0.44
45:6:1253:U:H2'	45:6:1254:U:H5'	2.00	0.44
45:6:1554:U:H5'	61:c5:47:ARG:NH2	2.33	0.44
45:6:1612:U:C4	45:6:1613:U:C4	3.05	0.44
50:s4:19:LEU:HD11	50:s4:108:ARG:HD2	1.99	0.44
57:c1:128:CYS:O	57:c1:129:ARG:O	2.36	0.44
63:c7:19:ARG:HG3	63:c7:20:TYR:CD1	2.53	0.44
63:c7:95:ARG:N	63:c7:96:SER:HA	2.32	0.44
65:c9:53:TRP:O	65:c9:57:ARG:N	2.38	0.44
68:d2:57:ARG:N	68:d2:57:ARG:HD2	2.32	0.44
71:d5:49:ARG:HH21	71:d5:53:GLU:CD	2.25	0.44
72:d6:64:LEU:HD23	72:d6:64:LEU:HA	1.76	0.44
1:1:408:A:N6	3:4:15:G:H1'	2.32	0.44
1:1:735:A:H2'	1:1:736:A:C8	2.53	0.44
1:1:1552:G:O2'	1:1:1553:U:H5'	2.18	0.44
1:1:1816:A:H2'	1:1:1817:G:O4'	2.18	0.44
1:1:3163:A:N6	1:1:3288:G:O6	2.51	0.44
5:L3:59:ASP:OD1	5:L3:71:GLU:HG2	2.17	0.44
10:L8:206:GLU:H	10:L8:206:GLU:HG3	1.47	0.44
14:M3:90:ALA:O	14:M3:93:ILE:HG22	2.17	0.44
15:M4:20:VAL:CG2	15:M4:68:LEU:HB2	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:M5:137:PRO:HG2	16:M5:138:GLN:OE1	2.18	0.44
21:N0:46:GLN:HG2	21:N0:51:VAL:O	2.18	0.44
23:N2:89:LEU:HD23	23:N2:89:LEU:HA	1.75	0.44
23:N2:104:ARG:C	23:N2:105:LEU:HD12	2.43	0.44
30:N9:48:HIS:ND1	30:N9:48:HIS:O	2.50	0.44
33:O2:89:THR:HG22	33:O2:117:ILE:HD13	1.99	0.44
45:2:647:G:N2	45:2:687:G:H22	2.16	0.44
45:2:1378:U:H2'	45:2:1379:C:C6	2.53	0.44
45:2:1610:G:C5'	51:S5:107:LYS:HB2	2.47	0.44
47:S1:69:CYS:SG	47:S1:70:LEU:N	2.90	0.44
53:S7:157:LYS:H	53:S7:157:LYS:HG3	1.65	0.44
58:C2:63:VAL:HG13	58:C2:64:SER:N	2.32	0.44
60:C4:83:ILE:HD12	60:C4:83:ILE:HA	1.81	0.44
72:D6:19:LYS:HG3	72:D6:20:PRO:CD	2.48	0.44
73:D7:19:HIS:HB3	73:D7:22:LYS:HB2	2.00	0.44
77:SR:241:PHE:HE2	77:SR:288:HIS:CG	2.35	0.44
1:5:20:A:C6	1:5:21:G:C6	3.05	0.44
1:5:292:U:OP2	16:m5:68:ARG:NH2	2.44	0.44
1:5:351:A:N6	40:o9:35:ILE:HG23	2.33	0.44
1:5:1917:C:P	20:m9:85:ARG:HH12	2.41	0.44
1:5:2933:A:C2	1:5:3014:U:H4'	2.52	0.44
4:l2:92:LYS:HA	4:l2:103:PRO:HD2	2.00	0.44
5:l3:3:HIS:O	5:l3:3:HIS:CG	2.71	0.44
5:l3:44:THR:HG23	5:l3:184:ASN:HB2	1.99	0.44
7:l5:34:LYS:HE3	22:n1:30:TYR:CD1	2.53	0.44
8:l6:89:THR:HG21	15:m4:115:PHE:HB2	1.99	0.44
8:l6:148:GLU:HA	8:l6:151:LYS:HG3	2.00	0.44
9:l7:88:ARG:O	9:l7:88:ARG:HG3	2.17	0.44
9:l7:147:LEU:HD11	9:l7:240:VAL:HG11	2.00	0.44
19:m8:167:SER:HB2	19:m8:172:PHE:CE1	2.53	0.44
25:n4:63:ILE:HB	25:n4:64:THR:H	1.64	0.44
29:n8:112:ILE:HB	29:n8:130:VAL:HG12	2.00	0.44
45:6:1231:U:O2'	45:6:1258:U:O2'	2.26	0.44
49:s3:220:PRO:HG3	77:sR:223:TRP:HH2	1.83	0.44
53:s7:172:VAL:O	53:s7:176:LEU:HG	2.18	0.44
57:c1:128:CYS:SG	57:c1:138:ASN:HB2	2.58	0.44
59:c3:94:LYS:O	59:c3:98:VAL:HG23	2.18	0.44
77:sR:95:ALA:C	77:sR:97:GLY:H	2.26	0.44
77:sR:131:ILE:HB	77:sR:144:LEU:HB2	2.00	0.44
77:sR:153:GLN:HB2	77:sR:202:LEU:HD23	2.00	0.44
1:1:123:A:C6	1:1:150:A:C5	3.05	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:156:G:O2'	1:1:157:A:H4'	2.17	0.43
1:1:239:G:O2'	1:1:240:U:OP1	2.36	0.43
1:1:269:G:P	16:M5:44:ARG:HH22	2.41	0.43
1:1:817:A:N3	38:O7:11:ARG:HB3	2.33	0.43
1:1:1007:U:O4	80:1:3434:PAR:N21	2.42	0.43
1:1:1210:U:OP1	11:L9:63:LYS:NZ	2.51	0.43
1:1:1713:G:O6	31:O0:28:LYS:HD3	2.18	0.43
1:1:2130:G:H1'	1:1:2144:A:H5''	1.99	0.43
1:1:2673:A:H4'	13:M1:103:GLY:C	2.43	0.43
4:L2:171:GLY:O	44:Q3:68:ALA:HB2	2.18	0.43
5:L3:63:PRO:HA	5:L3:68:HIS:CD2	2.53	0.43
7:L5:40:HIS:CD2	22:N1:69:LYS:HA	2.52	0.43
8:L6:58:LEU:HD12	8:L6:78:ARG:HD2	2.00	0.43
8:L6:137:ASP:O	8:L6:141:VAL:HG23	2.18	0.43
9:L7:224:ILE:HD13	21:N0:39:SER:HB2	2.00	0.43
22:N1:14:MET:HE2	22:N1:55:LYS:HB2	2.00	0.43
34:O3:21:ARG:HG3	34:O3:21:ARG:NH1	2.24	0.43
38:O7:76:ASN:O	38:O7:79:GLN:HG3	2.18	0.43
45:2:175:G:H1'	45:2:266:A:N6	2.32	0.43
45:2:458:G:P	70:D4:105:ARG:HH22	2.41	0.43
45:2:463:U:H2'	45:2:464:A:C8	2.53	0.43
45:2:780:A:C8	70:D4:8:ARG:HB3	2.50	0.43
45:2:1595:U:H3	45:2:1600:A:H2	1.64	0.43
47:S1:105:PHE:HZ	47:S1:211:HIS:NE2	2.16	0.43
50:S4:88:ASP:OD1	50:S4:122:LYS:NZ	2.46	0.43
69:D3:73:ARG:NH1	69:D3:82:LYS:HB3	2.33	0.43
77:SR:67:ILE:O	77:SR:85:TRP:HD1	2.01	0.43
1:5:1173:U:H1'	1:5:1179:A:C4	2.53	0.43
1:5:1727:G:H2'	1:5:1728:G:H21	1.82	0.43
1:5:2138:A:O2'	38:o7:3:LYS:HG2	2.17	0.43
1:5:2265:C:H2'	1:5:2266:U:H5'	2.00	0.43
2:7:60:G:H21	7:l5:274:GLN:HE22	1.66	0.43
4:l2:114:SER:HB2	4:l2:169:ILE:HD11	2.00	0.43
7:l5:52:VAL:HG21	7:l5:65:ILE:HD12	1.98	0.43
10:l8:55:TYR:CE2	10:l8:56:VAL:HG23	2.54	0.43
11:l9:136:PHE:HA	11:l9:144:ILE:HA	2.00	0.43
14:m3:129:ASN:HD22	14:m3:131:LYS:HB2	1.83	0.43
14:m3:179:PHE:HD1	14:m3:182:ILE:HG21	1.82	0.43
16:m5:35:VAL:O	16:m5:64:VAL:HA	2.18	0.43
16:m5:45:PRO:O	16:m5:49:ARG:HB2	2.18	0.43
16:m5:175:ASN:HB2	16:m5:180:PHE:CD1	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:m6:4:GLU:OE1	21:n0:165:TYR:OH	2.36	0.43
24:n3:83:LYS:HG3	24:n3:84:SER:N	2.34	0.43
45:6:186:C:H2'	45:6:187:G:O4'	2.18	0.43
45:6:372:G:H1'	45:6:612:U:O2	2.17	0.43
45:6:951:A:H1'	59:c3:101:HIS:CD2	2.53	0.43
45:6:1160:A:H2'	45:6:1161:C:C6	2.53	0.43
45:6:1477:G:OP1	65:c9:44:GLU:N	2.50	0.43
45:6:1558:U:N3	61:c5:122:THR:HG22	2.33	0.43
45:6:1561:U:H2'	45:6:1562:G:H8	1.80	0.43
47:s1:125:VAL:O	47:s1:136:ARG:HA	2.18	0.43
47:s1:193:ILE:O	47:s1:197:ILE:HG13	2.18	0.43
79:s6:157:VAL:HG21	79:s6:175:ILE:HD11	2.00	0.43
54:s8:107:THR:OG1	54:s8:108:PRO:HD3	2.18	0.43
54:s8:117:TYR:CE1	54:s8:150:ALA:HA	2.53	0.43
56:c0:46:LEU:HD13	56:c0:66:TYR:CD2	2.53	0.43
70:d4:127:LYS:HZ1	70:d4:131:ARG:NH1	2.08	0.43
1:1:385:A:C6	1:1:386:A:C6	3.06	0.43
1:1:1008:U:C2	1:1:1043:C:C2	3.06	0.43
1:1:1551:C:HO2'	1:1:2170:U:HO2'	1.66	0.43
1:1:1740:U:H2'	1:1:1741:A:H5'	2.00	0.43
1:1:1815:U:H4'	1:1:1816:A:O5'	2.18	0.43
1:1:2112:U:H1'	1:1:2113:A:OP2	2.19	0.43
1:1:2181:C:H5''	4:L2:193:ARG:NH2	2.33	0.43
1:1:2655:U:H4'	1:1:2656:A:O5'	2.17	0.43
1:1:2896:A:O2'	41:Q0:122:ARG:NH2	2.51	0.43
1:1:2932:U:OP1	24:N3:41:GLY:N	2.50	0.43
5:L3:296:THR:HB	5:L3:299:ASP:HB3	2.01	0.43
10:L8:165:PHE:HA	37:O6:47:ILE:HD13	1.99	0.43
13:M1:92:ARG:H	13:M1:95:ASN:ND2	2.17	0.43
18:M7:51:VAL:HA	18:M7:56:ARG:O	2.18	0.43
19:M8:40:THR:HB	19:M8:42:ALA:H	1.84	0.43
20:M9:155:LEU:HA	20:M9:158:GLU:HG2	1.99	0.43
24:N3:33:ASN:ND2	24:N3:64:LYS:H	2.15	0.43
37:O6:68:ARG:O	37:O6:72:VAL:HG23	2.17	0.43
45:2:150:U:P	70:D4:123:LYS:HZ1	2.41	0.43
45:2:854:U:C2'	45:2:855:A:H5'	2.47	0.43
45:2:862:A:H4'	45:2:863:A:O5'	2.18	0.43
45:2:1166:A:H2'	45:2:1167:G:O4'	2.17	0.43
45:2:1282:U:H2'	45:2:1283:U:C6	2.53	0.43
45:2:1335:U:H3	45:2:1416:G:H1	1.65	0.43
45:2:1682:U:H4'	52:S6:65:GLN:CD	2.44	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:145:LYS:HB3	47:S1:149:GLN:CB	2.48	0.43
49:S3:35:SER:O	49:S3:51:ARG:HB2	2.18	0.43
51:S5:110:ALA:O	51:S5:114:ILE:HG12	2.18	0.43
55:S9:134:ILE:HA	55:S9:158:PHE:HA	2.00	0.43
58:C2:125:ASN:O	58:C2:126:TRP:CG	2.71	0.43
73:D7:21:LEU:HA	73:D7:26:GLN:HB3	2.00	0.43
1:5:315:C:H2'	1:5:316:U:C6	2.53	0.43
1:5:722:G:H2'	1:5:723:U:H6	1.83	0.43
1:5:909:G:H2'	1:5:910:G:O4'	2.18	0.43
1:5:1595:U:C2	1:5:1596:C:C5	3.06	0.43
1:5:1658:G:C5	1:5:1796:G:C6	3.06	0.43
4:l2:42:ARG:HG3	4:l2:89:TYR:CE1	2.53	0.43
6:l4:74:ILE:HG22	6:l4:76:ARG:NH1	2.33	0.43
6:l4:140:HIS:CD2	6:l4:247:PHE:H	2.37	0.43
7:l5:277:LEU:HB3	7:l5:281:GLU:HB2	1.99	0.43
10:l8:90:THR:HA	10:l8:214:LEU:HD21	1.99	0.43
10:l8:156:ASP:OD2	10:l8:156:ASP:N	2.35	0.43
13:m1:11:ASP:OD1	13:m1:11:ASP:N	2.51	0.43
15:m4:118:PHE:O	15:m4:121:MET:HG2	2.18	0.43
16:m5:64:VAL:HG11	16:m5:102:ALA:HB1	2.00	0.43
21:n0:7:TYR:CE1	21:n0:34:GLU:HG2	2.52	0.43
25:n4:109:LEU:O	25:n4:113:LYS:HB2	2.18	0.43
27:n6:70:ILE:HD13	27:n6:82:VAL:CG1	2.48	0.43
29:n8:132:LYS:HD3	29:n8:136:GLU:OE2	2.18	0.43
32:o1:41:LYS:HG3	32:o1:47:ASP:H	1.83	0.43
32:o1:55:LEU:HG	32:o1:93:VAL:HG12	2.01	0.43
45:6:768:C:H2'	45:6:769:A:O4'	2.18	0.43
45:6:952:A:OP1	59:c3:94:LYS:NZ	2.46	0.43
46:s0:66:ALA:HB1	67:d1:50:TYR:CE1	2.54	0.43
47:s1:45:LYS:HB2	60:c4:13:VAL:HG13	2.01	0.43
58:c2:79:ALA:O	58:c2:86:VAL:HA	2.17	0.43
71:d5:91:PRO:HA	71:d5:101:TYR:CD1	2.53	0.43
77:sR:115:ILE:HG13	77:sR:122:ILE:HG12	2.00	0.43
1:1:999:G:O2'	1:1:1000:C:H5'	2.18	0.43
1:1:1580:A:H3'	1:1:2522:G:C4	2.53	0.43
1:1:1657:C:H5''	80:1:3416:PAR:O31	2.18	0.43
1:1:2818:U:H5'	1:1:2818:U:C6	2.47	0.43
1:1:2864:A:H61	80:1:3425:PAR:H44	1.84	0.43
1:1:3195:U:H4'	1:1:3196:U:OP2	2.17	0.43
80:1:3425:PAR:HN22	12:M0:111:LEU:HD13	1.83	0.43
3:4:79:A:H2'	3:4:80:A:O4'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:202:ARG:NE	6:L4:202:ARG:HA	2.32	0.43
11:L9:140:VAL:HG22	11:L9:143:GLU:HB2	2.00	0.43
16:M5:92:LEU:HD12	16:M5:92:LEU:H	1.84	0.43
16:M5:180:PHE:O	16:M5:184:LYS:HB3	2.18	0.43
18:M7:14:SER:HB3	18:M7:151:THR:HA	1.98	0.43
22:N1:75:ILE:HG22	22:N1:88:ARG:HD2	1.99	0.43
43:Q2:12:CYS:HB2	43:Q2:23:HIS:CE1	2.53	0.43
45:2:138:A:H62	45:2:266:A:H61	1.66	0.43
45:2:1045:C:OP1	47:S1:153:HIS:HE1	2.01	0.43
45:2:1634:C:H3'	45:2:1635:A:H5'	2.00	0.43
47:S1:145:LYS:HE2	47:S1:149:GLN:HB3	1.99	0.43
47:S1:220:GLN:HA	47:S1:221:PRO:HD3	1.79	0.43
49:S3:94:ARG:NH2	78:SM:134:ASP:OD1	2.46	0.43
50:S4:59:ARG:NH1	70:D4:87:PRO:HG3	2.34	0.43
50:S4:68:ARG:HH12	50:S4:76:VAL:HG21	1.83	0.43
53:S7:14:THR:OG1	53:S7:15:GLU:N	2.51	0.43
59:C3:25:TRP:CH2	73:D7:45:THR:HG21	2.53	0.43
59:C3:34:ILE:HD11	59:C3:67:THR:HG23	2.00	0.43
63:C7:72:LYS:O	63:C7:75:GLU:HB3	2.19	0.43
68:D2:30:SER:O	68:D2:31:SER:HB3	2.18	0.43
69:D3:86:PHE:HB2	69:D3:120:VAL:HG11	2.00	0.43
71:D5:38:HIS:CG	71:D5:39:ALA:N	2.85	0.43
77:SR:85:TRP:HA	77:SR:109:ASP:HB3	2.01	0.43
77:SR:135:THR:HG23	77:SR:139:GLN:O	2.18	0.43
1:5:197:G:H2'	1:5:198:A:C8	2.53	0.43
1:5:229:G:H5''	27:m6:4:GLN:H	1.83	0.43
1:5:352:A:N6	1:5:365:A:H5''	2.32	0.43
1:5:622:A:H3'	1:5:623:U:C6	2.53	0.43
1:5:754:G:H2'	1:5:755:A:H8	1.83	0.43
1:5:1103:A:H4'	9:l7:158:LYS:NZ	2.33	0.43
1:5:1109:U:H2'	1:5:1110:U:O4'	2.18	0.43
1:5:1940:G:H2'	1:5:1941:C:O4'	2.18	0.43
1:5:2689:A:N6	1:5:2702:A:O2'	2.52	0.43
1:5:2730:G:H4'	19:m8:184:PHE:CG	2.53	0.43
1:5:2988:C:O2'	5:l3:266:ARG:HD2	2.19	0.43
1:5:3055:U:H1'	1:5:3057:U:OP2	2.17	0.43
3:8:93:U:H2'	3:8:94:C:O4'	2.18	0.43
6:l4:31:ARG:HG3	6:l4:120:TYR:CE1	2.54	0.43
6:l4:316:ASN:HD21	9:l7:150:LYS:CB	2.31	0.43
9:l7:127:LEU:HA	9:l7:130:ILE:HG22	1.99	0.43
12:m0:53:VAL:HG21	12:m0:166:ILE:HD12	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:m5:180:PHE:O	16:m5:184:LYS:HB3	2.19	0.43
17:m6:111:PRO:O	17:m6:115:LYS:HD3	2.18	0.43
18:m7:64:ASN:C	18:m7:67:ILE:HG12	2.43	0.43
20:m9:160:GLU:HA	20:m9:163:ARG:HD3	2.00	0.43
36:o5:17:LEU:HA	36:o5:20:GLN:HB2	2.00	0.43
38:o7:65:ARG:HG3	38:o7:65:ARG:HH11	1.84	0.43
42:q1:8:LYS:HE3	45:6:1777:G:O6	2.19	0.43
45:6:99:C:H4'	45:6:100:A:O5'	2.19	0.43
45:6:127:G:H3'	45:6:128:U:H6	1.84	0.43
45:6:399:A:H4'	50:s4:3:ARG:HG2	2.00	0.43
45:6:521:A:H4'	70:d4:36:SER:HB2	2.00	0.43
45:6:766:U:C4	45:6:769:A:C8	3.06	0.43
45:6:1026:A:N7	45:6:1772:C:O2'	2.48	0.43
45:6:1291:G:H2'	45:6:1292:G:H8	1.82	0.43
49:s3:136:VAL:N	49:s3:152:PHE:O	2.44	0.43
57:c1:8:GLN:NE2	57:c1:14:GLN:O	2.51	0.43
57:c1:35:TYR:CG	57:c1:49:ILE:HG12	2.53	0.43
62:c6:127:LYS:HA	62:c6:134:ALA:HA	1.99	0.43
66:d0:33:GLN:HB3	66:d0:109:GLU:HG2	1.99	0.43
68:d2:5:SER:O	68:d2:6:VAL:HG12	2.18	0.43
70:d4:94:TYR:HB3	70:d4:96:LEU:HD12	2.00	0.43
77:sR:70:ASP:CB	77:sR:112:SER:HA	2.47	0.43
77:sR:223:TRP:HA	77:sR:223:TRP:HE3	1.83	0.43
77:sR:307:ASP:O	77:sR:309:VAL:HG22	2.18	0.43
78:sM:74:LYS:HE2	78:sM:74:LYS:HB2	1.77	0.43
1:1:213:A:N6	1:1:227:G:O2'	2.51	0.43
1:1:428:A:H2'	1:1:429:U:C6	2.53	0.43
1:1:979:U:C2	1:1:980:A:N6	2.86	0.43
1:1:1016:C:H3'	1:1:1017:C:H5'	2.01	0.43
1:1:2258:U:H2'	1:1:2259:A:O4'	2.19	0.43
80:1:3435:PAR:HN21	80:1:3435:PAR:C13	2.30	0.43
3:4:148:G:H2'	3:4:149:A:C8	2.53	0.43
4:L2:49:VAL:N	4:L2:58:LEU:O	2.46	0.43
5:L3:296:THR:HG21	5:L3:357:LYS:C	2.42	0.43
6:L4:219:LEU:O	6:L4:222:VAL:HG12	2.18	0.43
6:L4:361:HIS:CE1	6:L4:362:ASP:HB2	2.53	0.43
11:L9:86:TYR:N	11:L9:187:ILE:HG13	2.33	0.43
19:M8:147:ARG:HG3	19:M8:150:VAL:HG13	2.00	0.43
21:N0:7:TYR:CE1	21:N0:34:GLU:HG2	2.53	0.43
21:N0:8:GLN:O	21:N0:61:ILE:HA	2.17	0.43
21:N0:45:LEU:HD13	21:N0:51:VAL:HG21	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N3:33:ASN:ND2	24:N3:63:LYS:H	2.16	0.43
24:N3:46:LEU:HD12	24:N3:46:LEU:HA	1.80	0.43
27:N6:28:ARG:HB2	27:N6:75:ARG:NH2	2.34	0.43
45:2:589:C:C1'	76:E0:57:ASN:HD22	2.31	0.43
45:2:1556:A:H1'	45:2:1560:U:OP2	2.18	0.43
45:2:1655:A:N6	45:2:1745:G:O2'	2.50	0.43
49:S3:142:LEU:HB2	78:SM:110:TRP:CE2	2.54	0.43
49:S3:144:ALA:HB1	78:SM:101:ASP:CG	2.43	0.43
51:S5:20:PHE:O	51:S5:21:THR:OG1	2.34	0.43
51:S5:44:ASN:ND2	51:S5:69:PHE:O	2.51	0.43
51:S5:149:VAL:O	51:S5:155:ALA:HB1	2.17	0.43
60:C4:30:VAL:O	60:C4:38:THR:OG1	2.35	0.43
63:C7:77:GLU:O	63:C7:81:LYS:HB2	2.18	0.43
74:D8:9:LEU:HD22	74:D8:55:VAL:HG22	2.00	0.43
1:5:627:U:H2'	1:5:628:A:C8	2.53	0.43
1:5:1782:U:H2'	1:5:1783:U:O4'	2.18	0.43
1:5:2144:A:C4	1:5:2281:A:C6	3.06	0.43
2:7:3:U:H2'	2:7:4:U:H6	1.84	0.43
3:8:84:C:H41	27:n6:116:LYS:HE2	1.83	0.43
5:l3:53:MET:HG2	5:l3:77:THR:HG22	2.01	0.43
7:l5:160:PHE:CE2	7:l5:179:ARG:HB3	2.53	0.43
9:l7:83:LEU:HD22	9:l7:84:VAL:H	1.83	0.43
9:l7:127:LEU:C	9:l7:129:LEU:N	2.76	0.43
13:m1:19:LEU:HD22	13:m1:125:MET:SD	2.59	0.43
13:m1:112:LEU:O	13:m1:114:ILE:HG12	2.18	0.43
15:m4:39:ILE:HD12	15:m4:43:LYS:HB3	2.00	0.43
20:m9:183:ALA:HB1	20:m9:187:GLU:CD	2.43	0.43
21:n0:132:THR:C	21:n0:134:ASP:N	2.76	0.43
30:n9:44:LYS:HG2	30:n9:48:HIS:ND1	2.33	0.43
37:o6:99:ARG:HA	37:o6:99:ARG:CZ	2.48	0.43
45:6:774:A:OP2	45:6:788:A:H2	2.01	0.43
45:6:1274:C:H4'	45:6:1275:A:O5'	2.18	0.43
45:6:1407:U:H2'	45:6:1408:G:O4'	2.18	0.43
45:6:1572:G:H2'	45:6:1572:G:N3	2.32	0.43
46:s0:33:GLN:NE2	46:s0:148:ASP:O	2.50	0.43
46:s0:85:ALA:HB1	46:s0:202:TYR:HD1	1.83	0.43
47:s1:28:GLU:OE2	47:s1:94:LYS:NZ	2.45	0.43
47:s1:157:GLN:O	47:s1:161:ILE:HG13	2.18	0.43
49:s3:158:ILE:HD11	49:s3:163:PRO:HB2	2.00	0.43
79:s6:77:LEU:HD13	79:s6:84:TYR:HB2	2.00	0.43
64:c8:113:LEU:HD13	64:c8:113:LEU:HA	1.87	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:d2:11:LEU:HD11	68:d2:37:PHE:CE2	2.53	0.43
69:d3:127:VAL:O	69:d3:130:VAL:HG22	2.18	0.43
70:d4:56:SER:O	70:d4:73:GLY:HA2	2.19	0.43
78:sM:58:GLU:HG3	78:sM:62:ARG:HD2	2.01	0.43
1:1:705:A:C6	29:N8:113:LEU:HD13	2.54	0.43
1:1:887:G:H2'	1:1:888:A:C8	2.53	0.43
1:1:1093:A:H3'	1:1:1093:A:N3	2.32	0.43
1:1:1093:A:O2'	1:1:1095:U:OP2	2.23	0.43
1:1:1327:C:O2'	34:O3:76:GLY:HA2	2.17	0.43
1:1:1580:A:H3'	1:1:2522:G:C2	2.54	0.43
1:1:2214:A:N1	1:1:2429:G:O2'	2.46	0.43
1:1:2656:A:C8	1:1:2658:G:C8	3.07	0.43
2:3:3:U:O2'	2:3:25:G:N3	2.49	0.43
4:L2:174:ARG:HE	4:L2:174:ARG:HB3	1.46	0.43
6:L4:29:PRO:HB3	19:M8:25:TYR:HE2	1.84	0.43
7:L5:235:SER:HA	7:L5:238:ASP:OD2	2.19	0.43
9:L7:30:ARG:HG3	9:L7:31:ALA:N	2.31	0.43
9:L7:92:ILE:HD12	9:L7:92:ILE:HA	1.66	0.43
10:L8:164:VAL:O	10:L8:167:PRO:HD2	2.19	0.43
12:M0:102:MET:HA	12:M0:102:MET:HE3	2.00	0.43
12:M0:207:GLU:O	12:M0:210:ILE:HG22	2.19	0.43
18:M7:60:PHE:HZ	18:M7:84:PRO:HG3	1.83	0.43
18:M7:175:ARG:O	18:M7:179:GLN:HG3	2.19	0.43
29:N8:91:LEU:HD12	29:N8:91:LEU:HA	1.90	0.43
36:O5:24:LEU:HD22	36:O5:47:VAL:HG23	2.01	0.43
45:2:372:G:H1'	45:2:612:U:O2	2.18	0.43
45:2:590:C:H2'	45:2:591:A:C8	2.51	0.43
45:2:800:U:H2'	45:2:801:G:H8	1.83	0.43
45:2:898:A:H2'	45:2:912:U:O4	2.18	0.43
45:2:1361:U:O2'	45:2:1362:U:H5''	2.19	0.43
80:2:1904:PAR:O51	80:2:1904:PAR:N32	2.45	0.43
49:S3:109:LEU:HD11	49:S3:184:ILE:HD11	2.01	0.43
52:S6:137:ARG:HG2	52:S6:138:ALA:H	1.83	0.43
60:C4:60:ALA:HB1	60:C4:101:ALA:HB2	2.01	0.43
62:C6:113:ASP:C	62:C6:115:THR:H	2.27	0.43
69:D3:61:SER:HB2	69:D3:116:ASP:HB2	2.00	0.43
73:D7:49:HIS:HA	73:D7:71:ALA:H	1.83	0.43
77:SR:93:ASP:HB2	77:SR:100:TYR:CE1	2.53	0.43
1:5:189:G:C2	1:5:191:U:C4	3.07	0.43
1:5:418:A:H4'	1:5:629:U:O3'	2.18	0.43
1:5:606:C:O2'	1:5:607:A:N3	2.44	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1002:A:O4'	80:7:201:PAR:H612	2.18	0.43
1:5:2107:A:H2'	1:5:2108:C:H6	1.84	0.43
1:5:2726:C:O2'	1:5:2727:A:H2'	2.18	0.43
1:5:2830:G:N7	83:5:4297:HOH:O	2.36	0.43
80:5:3409:PAR:O23	80:5:3409:PAR:N21	2.52	0.43
3:8:84:C:C6	27:n6:113:LYS:N	2.86	0.43
7:l5:105:ILE:HA	7:l5:105:ILE:HD12	1.91	0.43
7:l5:141:PRO:HB2	7:l5:172:TYR:HB2	2.00	0.43
14:m3:49:ARG:HG2	14:m3:50:PRO:HD2	2.01	0.43
15:m4:72:LEU:HD22	15:m4:72:LEU:HA	1.83	0.43
20:m9:188:ASP:OD2	53:s7:39:ARG:HD3	2.19	0.43
21:n0:77:VAL:HG11	21:n0:106:LEU:HG	1.99	0.43
26:n5:61:LYS:HB2	26:n5:61:LYS:HE3	1.74	0.43
28:n7:34:LYS:HA	28:n7:34:LYS:HD2	1.76	0.43
45:6:151:G:H2'	45:6:152:U:C6	2.53	0.43
45:6:189:C:H2'	45:6:190:C:H6	1.83	0.43
45:6:209:U:H2'	45:6:210:A:C8	2.53	0.43
45:6:312:A:C2	45:6:314:C:H2'	2.53	0.43
45:6:830:U:H2'	45:6:831:U:H5'	2.00	0.43
45:6:1082:C:N3	45:6:1091:A:N6	2.66	0.43
45:6:1767:G:H4'	45:6:1768:G:C4	2.52	0.43
46:s0:12:GLU:O	46:s0:16:LEU:HG	2.19	0.43
51:s5:48:PHE:O	51:s5:51:VAL:HG13	2.19	0.43
56:c0:38:LYS:HB2	56:c0:41:TYR:CD2	2.53	0.43
56:c0:44:LYS:HD3	56:c0:44:LYS:HA	1.87	0.43
60:c4:50:ALA:CB	60:c4:53:ASP:H	2.31	0.43
64:c8:11:PHE:CE1	71:d5:41:ILE:HG21	2.54	0.43
69:d3:87:VAL:HG22	69:d3:124:VAL:HG21	2.00	0.43
73:d7:76:GLY:O	73:d7:77:THR:HG23	2.18	0.43
77:sR:307:ASP:O	77:sR:309:VAL:N	2.52	0.43
1:1:663:C:H2'	1:1:664:U:H6	1.84	0.43
1:1:702:C:P	80:1:3403:PAR:H321	2.41	0.43
1:1:909:G:OP2	16:M5:77:LYS:NZ	2.52	0.43
1:1:2228:A:H2'	1:1:2229:A:H8	1.81	0.43
1:1:2943:G:OP2	5:L3:2:SER:HB2	2.19	0.43
1:1:2948:C:H2'	1:1:2949:U:O4'	2.18	0.43
1:1:3370:A:H5'	5:L3:384:LYS:HD2	2.01	0.43
3:4:80:A:H2'	3:4:82:U:O4'	2.18	0.43
5:L3:286:GLY:HA3	5:L3:321:PHE:CZ	2.54	0.43
7:L5:22:ARG:HG2	7:L5:28:THR:HB	2.00	0.43
8:L6:52:VAL:HG11	8:L6:65:ILE:HD12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:M0:46:PHE:CD1	12:M0:140:THR:HA	2.53	0.43
13:M1:12:LEU:HB2	13:M1:162:TRP:CD1	2.52	0.43
19:M8:26:LEU:HD22	19:M8:26:LEU:HA	1.80	0.43
19:M8:71:LEU:HD13	19:M8:99:THR:HG21	2.01	0.43
19:M8:170:ARG:CD	29:N8:57:GLY:HA3	2.48	0.43
32:O1:46:THR:HG21	32:O1:91:SER:HB2	1.99	0.43
34:O3:7:LEU:HD23	34:O3:7:LEU:HA	1.81	0.43
45:2:267:U:H2'	45:2:268:C:C6	2.54	0.43
45:2:735:C:H1'	45:2:736:C:C6	2.53	0.43
45:2:761:G:O2'	45:2:789:A:N6	2.51	0.43
45:2:1384:A:H2'	45:2:1385:G:O4'	2.18	0.43
45:2:1554:U:H2'	45:2:1555:A:O4'	2.18	0.43
45:2:1796:C:C2	72:D6:5:ARG:HG2	2.54	0.43
47:S1:38:PHE:CE2	47:S1:73:LEU:HD11	2.54	0.43
49:S3:127:MET:SD	49:S3:133:GLY:HA2	2.58	0.43
50:S4:31:PRO:HB2	50:S4:38:LEU:HD22	2.01	0.43
50:S4:133:LYS:HD3	50:S4:133:LYS:HA	1.83	0.43
56:C0:68:LEU:HD23	56:C0:73:VAL:HG22	2.00	0.43
60:C4:19:ILE:HB	60:C4:27:PHE:O	2.18	0.43
60:C4:42:VAL:HB	60:C4:43:THR:H	1.51	0.43
64:C8:80:LYS:HA	64:C8:80:LYS:HD2	1.73	0.43
64:C8:134:ARG:HB2	64:C8:136:GLN:OE1	2.19	0.43
69:D3:53:VAL:HG11	69:D3:97:ASP:O	2.17	0.43
1:5:88:A:C2	1:5:89:A:H1'	2.54	0.43
1:5:112:U:O2'	1:5:113:C:H5''	2.17	0.43
1:5:911:C:H42	4:l2:3:ARG:HD3	1.83	0.43
1:5:1617:G:H2'	1:5:1618:G:O4'	2.18	0.43
1:5:1765:U:C5'	20:m9:43:LYS:HE2	2.48	0.43
1:5:2186:U:H5''	1:5:2315:G:OP2	2.19	0.43
1:5:2190:U:C4	1:5:2191:U:C4	3.06	0.43
1:5:2331:C:H2'	1:5:2332:A:H8	1.83	0.43
1:5:2619:G:OP2	12:m0:113:GLN:HG3	2.18	0.43
1:5:2629:U:O4	22:n1:2:GLY:HA3	2.18	0.43
1:5:2806:U:H2'	1:5:2807:U:C6	2.54	0.43
1:5:2987:A:O2'	5:l3:259:HIS:HB3	2.18	0.43
1:5:3019:U:C4	1:5:3020:U:C4	3.06	0.43
4:l2:30:ARG:HH21	4:l2:36:GLU:HG3	1.82	0.43
10:l8:70:LYS:HA	10:l8:235:GLY:HA3	2.01	0.43
16:m5:35:VAL:HA	16:m5:65:ARG:HD3	1.99	0.43
17:m6:62:THR:H	17:m6:69:GLY:HA3	1.84	0.43
24:n3:13:ILE:HD12	24:n3:54:LEU:HD23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:n4:88:ASP:HA	25:n4:91:LYS:HD2	2.00	0.43
45:6:781:U:H4'	45:6:782:U:OP1	2.18	0.43
45:6:1340:U:H4'	45:6:1341:A:H5''	2.00	0.43
45:6:1360:A:H3'	45:6:1361:U:H5''	2.00	0.43
45:6:1480:G:C8	45:6:1481:C:H5	2.37	0.43
45:6:1510:U:H5'	45:6:1511:U:OP2	2.19	0.43
45:6:1784:C:H2'	45:6:1785:U:C6	2.54	0.43
49:s3:10:LYS:HG3	49:s3:11:LEU:N	2.33	0.43
50:s4:153:ASN:HD21	79:s6:215:ARG:NH2	2.16	0.43
55:s9:53:ARG:HH21	55:s9:97:LEU:HD22	1.84	0.43
55:s9:136:VAL:HG22	55:s9:156:ILE:HG23	2.01	0.43
59:c3:17:PRO:HB3	73:d7:28:PRO:HG3	2.01	0.43
61:c5:57:MET:SD	61:c5:89:MET:HE2	2.58	0.43
63:c7:45:ARG:HA	63:c7:48:ASN:HD22	1.84	0.43
68:d2:94:LEU:HD11	68:d2:102:VAL:HG23	2.00	0.43
77:sR:210:LEU:HD23	77:sR:224:ASN:HA	2.00	0.43
1:1:20:A:C6	1:1:21:G:O6	2.72	0.43
1:1:28:C:C2	1:1:57:A:C6	3.06	0.43
1:1:184:U:H2'	1:1:185:C:H6	1.83	0.43
1:1:756:U:H2'	1:1:757:C:C6	2.53	0.43
1:1:1763:U:C6	1:1:1764:U:H5	2.36	0.43
1:1:2817:A:OP2	83:1:4344:HOH:O	2.21	0.43
1:1:3215:A:C2	8:L6:157:GLN:HB3	2.54	0.43
2:3:90:U:C4	2:3:91:G:C5	3.07	0.43
3:4:97:A:OP1	36:O5:63:ARG:NH2	2.48	0.43
4:L2:39:GLY:O	4:L2:91:GLY:HA3	2.19	0.43
5:L3:93:VAL:HG23	5:L3:102:LEU:HB2	2.00	0.43
5:L3:106:TRP:O	5:L3:137:TYR:OH	2.12	0.43
9:L7:239:LEU:HD22	9:L7:243:MET:SD	2.59	0.43
12:M0:86:HIS:HB3	12:M0:139:ARG:HG2	1.99	0.43
12:M0:200:LEU:HD13	12:M0:213:PHE:CD1	2.54	0.43
15:M4:99:TRP:CD1	15:M4:103:ILE:HD11	2.54	0.43
16:M5:11:GLN:HG2	16:M5:44:ARG:NH2	2.33	0.43
20:M9:46:LYS:HG3	20:M9:47:ASN:N	2.33	0.43
21:N0:81:TYR:CE1	21:N0:90:MET:HE3	2.53	0.43
21:N0:137:ARG:HG2	21:N0:139:TYR:OH	2.17	0.43
22:N1:68:THR:HG22	22:N1:71:SER:O	2.19	0.43
29:N8:14:HIS:ND1	33:O2:36:LYS:HE2	2.33	0.43
45:2:90:C:H2'	45:2:91:G:H8	1.84	0.43
45:2:136:C:H4'	45:2:137:U:C5'	2.48	0.43
45:2:460:A:H3'	45:2:461:G:H8	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1498:G:C2'	45:2:1499:G:H5'	2.49	0.43
47:S1:30:PHE:CE1	47:S1:96:LEU:HD12	2.53	0.43
48:S2:44:LEU:HD22	48:S2:50:ILE:HG13	2.01	0.43
50:S4:105:VAL:HA	50:S4:190:GLY:HA3	2.01	0.43
51:S5:29:ILE:HG22	51:S5:34:GLN:HG3	2.01	0.43
53:S7:77:LEU:HD22	53:S7:81:LEU:HD11	2.01	0.43
55:S9:62:ARG:CZ	55:S9:68:LYS:HD3	2.49	0.43
58:C2:29:LYS:HB3	58:C2:29:LYS:HE3	1.73	0.43
61:C5:28:MET:O	61:C5:32:ASP:HB2	2.18	0.43
66:D0:26:LEU:N	66:D0:89:ARG:O	2.45	0.43
67:D1:25:LYS:O	67:D1:28:ASP:HB2	2.18	0.43
70:D4:29:HIS:CE1	70:D4:67:GLY:O	2.72	0.43
75:D9:10:HIS:HB3	75:D9:12:ARG:NH2	2.33	0.43
1:5:712:G:N2	1:5:754:G:O3'	2.52	0.43
1:5:1141:C:H2'	1:5:1142:G:O4'	2.19	0.43
1:5:1813:A:H2'	1:5:1814:A:C8	2.54	0.43
1:5:2598:G:H2'	1:5:2599:U:C6	2.53	0.43
1:5:2748:A:C2	7:l5:35:ARG:HB3	2.54	0.43
1:5:3152:U:C4	1:5:3395:G:N7	2.87	0.43
1:5:3306:U:O2'	1:5:3308:C:OP2	2.26	0.43
14:m3:175:SER:O	14:m3:179:PHE:HD2	2.02	0.43
17:m6:72:HIS:O	17:m6:74:ARG:NH1	2.51	0.43
18:m7:29:THR:HG22	18:m7:87:SER:OG	2.19	0.43
22:n1:44:ALA:HB2	22:n1:53:PRO:HG2	2.01	0.43
28:n7:83:THR:HG23	35:o4:93:PHE:CZ	2.54	0.43
33:o2:86:THR:HG23	33:o2:115:LEU:HD22	2.00	0.43
34:o3:67:MET:HE2	34:o3:67:MET:HB3	1.88	0.43
40:o9:23:LEU:HD22	40:o9:24:PRO:HD2	2.01	0.43
45:6:12:U:OP1	48:s2:84:LYS:NZ	2.51	0.43
45:6:336:G:N2	45:6:338:C:H5'	2.33	0.43
45:6:805:U:O4	45:6:806:A:N6	2.52	0.43
45:6:1722:A:H2'	45:6:1723:U:O4'	2.19	0.43
50:s4:11:ARG:O	50:s4:12:LEU:HB2	2.18	0.43
79:s6:65:GLN:HA	79:s6:100:ALA:HB2	2.01	0.43
55:s9:118:LEU:HD21	55:s9:157:ASP:OD1	2.19	0.43
57:c1:84:ILE:HG13	57:c1:109:VAL:HG13	2.01	0.43
57:c1:84:ILE:HD13	57:c1:117:VAL:HG21	2.00	0.43
57:c1:92:HIS:O	57:c1:100:TYR:HA	2.18	0.43
59:c3:4:MET:HG2	59:c3:5:HIS:CD2	2.53	0.43
64:c8:122:HIS:O	64:c8:126:ARG:HG2	2.18	0.43
64:c8:140:THR:HA	64:c8:143:ARG:NH1	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:64:G:O2'	1:1:77:A:N3	2.41	0.43
1:1:243:G:H2'	1:1:244:G:O4'	2.19	0.43
1:1:1495:U:H5	1:1:1835:A:N1	2.17	0.43
1:1:2355:G:H5'	18:M7:139:TYR:CE1	2.54	0.43
1:1:3336:A:H3'	1:1:3337:G:H8	1.83	0.43
80:1:3417:PAR:H322	80:1:3417:PAR:H51	1.84	0.43
8:L6:13:GLU:HA	33:O2:4:LEU:HD11	2.00	0.43
9:L7:82:LYS:HB3	9:L7:82:LYS:HE2	1.83	0.43
11:L9:8:GLN:CG	11:L9:72:LYS:HD3	2.49	0.43
11:L9:12:VAL:HB	11:L9:51:GLN:HA	2.00	0.43
12:M0:156:ARG:HH11	12:M0:164:LYS:HA	1.84	0.43
13:M1:19:LEU:HD21	13:M1:127:PHE:CE2	2.53	0.43
13:M1:74:PRO:O	13:M1:78:GLU:HG3	2.18	0.43
14:M3:42:ARG:O	14:M3:46:ILE:HG12	2.18	0.43
14:M3:76:THR:HG22	14:M3:101:ARG:HB3	2.01	0.43
15:M4:16:GLU:HB3	21:N0:149:LYS:HB3	2.01	0.43
17:M6:147:TRP:NE1	17:M6:149:TYR:HB2	2.33	0.43
24:N3:15:LEU:HB3	24:N3:51:ALA:HB1	2.00	0.43
45:2:36:C:H2'	45:2:37:U:C6	2.53	0.43
45:2:78:A:O2'	45:2:79:C:H6	2.02	0.43
45:2:795:U:C5	45:2:796:A:C8	3.07	0.43
45:2:1274:C:C5	78:SM:95:SER:HA	2.48	0.43
45:2:1681:A:H8	52:S6:66:GLY:HA3	1.84	0.43
47:S1:176:VAL:O	47:S1:177:GLN:HG3	2.19	0.43
50:S4:52:LEU:C	50:S4:54:TYR:H	2.25	0.43
60:C4:99:GLN:CD	60:C4:99:GLN:H	2.26	0.43
68:D2:111:MET:HG3	68:D2:116:ALA:HB2	2.01	0.43
71:D5:41:ILE:HG23	71:D5:42:LEU:N	2.33	0.43
77:SR:80:ALA:HB3	77:SR:92:TRP:HB2	2.00	0.43
1:5:438:A:O3'	1:5:494:G:N2	2.51	0.43
1:5:618:C:HO2'	1:5:619:A:P	2.41	0.43
1:5:1383:G:O3'	6:l4:138:ARG:NH2	2.49	0.43
1:5:1392:G:H3'	33:o2:125:ARG:NH2	2.34	0.43
1:5:1483:G:O6	35:o4:4:ARG:NH2	2.52	0.43
1:5:1878:G:H5''	1:5:1879:A:OP2	2.18	0.43
1:5:2586:G:N7	10:l8:241:LYS:HB2	2.33	0.43
1:5:2600:C:OP1	16:m5:93:LYS:NZ	2.51	0.43
1:5:2674:A:H5''	13:m1:105:GLY:HA3	2.00	0.43
1:5:2822:U:H2'	1:5:2823:G:O4'	2.18	0.43
3:8:104:A:OP2	3:8:105:A:H2'	2.18	0.43
4:l2:30:ARG:O	4:l2:163:ARG:NH1	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:l2:65:ASP:HB2	4:l2:70:ARG:HG3	2.01	0.43
7:l5:46:THR:HA	7:l5:47:PRO:HD3	1.89	0.43
7:l5:140:ARG:HG2	7:l5:141:PRO:HD2	1.99	0.43
7:l5:235:SER:O	7:l5:239:ILE:HG13	2.19	0.43
10:l8:133:LYS:HD2	10:l8:138:HIS:HE1	1.83	0.43
11:l9:129:ARG:HB3	11:l9:132:VAL:CG1	2.49	0.43
20:m9:154:ALA:O	20:m9:158:GLU:HG2	2.19	0.43
30:n9:7:HIS:CG	30:n9:8:THR:N	2.86	0.43
35:o4:44:CYS:HB2	35:o4:51:LEU:HD21	2.00	0.43
45:6:34:G:N7	45:6:594:A:H8	2.17	0.43
45:6:54:C:H2'	45:6:55:A:O4'	2.19	0.43
45:6:154:G:H5'	79:s6:108:VAL:HG11	2.01	0.43
45:6:199:G:HO2'	45:6:200:A:H8	1.67	0.43
45:6:239:C:N4	45:6:834:G:N3	2.67	0.43
45:6:790:U:H2'	45:6:791:A:C8	2.54	0.43
45:6:1289:U:H2'	45:6:1290:U:H6	1.84	0.43
47:s1:94:LYS:HE3	47:s1:94:LYS:HB3	1.83	0.43
48:s2:217:ALA:O	48:s2:220:ASN:HB2	2.18	0.43
79:s6:35:GLU:HA	79:s6:50:PHE:O	2.19	0.43
60:c4:123:SER:O	60:c4:124:ASP:HB2	2.18	0.43
61:c5:38:PRO:O	61:c5:42:ARG:HG3	2.18	0.43
68:d2:93:LEU:H	68:d2:93:LEU:CD2	2.32	0.43
76:e0:49:LEU:H	76:e0:54:ARG:NH1	2.17	0.43
77:sR:13:LEU:HB2	77:sR:310:ILE:HB	2.00	0.43
1:1:423:A:H2'	1:1:424:G:O4'	2.19	0.43
1:1:437:G:O6	1:1:621:A:N1	2.52	0.43
1:1:820:A:OP2	80:1:3435:PAR:H62	2.19	0.43
1:1:955:U:H2'	1:1:956:U:C6	2.54	0.43
1:1:1133:A:H1'	1:1:2618:G:O6	2.18	0.43
1:1:1313:G:H5'	17:M6:83:ALA:CB	2.49	0.43
1:1:1391:C:C2	33:O2:103:LYS:HD3	2.54	0.43
1:1:2295:A:OP1	24:N3:63:LYS:NZ	2.44	0.43
1:1:2297:U:O2	1:1:2920:U:H5'	2.19	0.43
1:1:2660:G:N3	1:1:2744:U:O2'	2.51	0.43
80:1:3433:PAR:H532	80:1:3433:PAR:H11	2.00	0.43
11:L9:49:ASN:C	11:L9:51:GLN:N	2.77	0.43
11:L9:67:ALA:O	11:L9:71:VAL:HG23	2.18	0.43
12:M0:47:PRO:HD2	12:M0:141:LYS:HA	2.01	0.43
16:M5:73:ARG:NH1	16:M5:88:GLY:O	2.52	0.43
20:M9:180:LYS:HB3	20:M9:180:LYS:HE2	1.83	0.43
21:N0:8:GLN:HG3	21:N0:26:ARG:NE	2.29	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:N1:18:ASP:O	22:N1:21:LYS:HB2	2.18	0.43
28:N7:6:LYS:HA	28:N7:28:PRO:HG3	2.01	0.43
36:O5:31:LEU:HD23	36:O5:41:LEU:HD21	1.99	0.43
39:O8:2:ALA:HB3	39:O8:50:SER:HB3	2.01	0.43
45:2:25:C:HO2'	45:2:26:A:P	2.42	0.43
45:2:286:C:H2'	45:2:287:G:H5'	2.00	0.43
45:2:1059:U:C4	45:2:1061:A:H1'	2.53	0.43
45:2:1754:A:C1'	76:E0:2:ALA:HA	2.49	0.43
52:S6:137:ARG:HD3	52:S6:177:ARG:HG2	2.01	0.43
54:S8:66:SER:HA	54:S8:73:SER:HA	2.00	0.43
56:C0:14:TYR:HH	56:C0:34:GLU:CD	2.25	0.43
58:C2:48:SER:O	58:C2:52:LEU:HB2	2.19	0.43
59:C3:31:GLU:HA	59:C3:34:ILE:HB	2.00	0.43
70:D4:8:ARG:NH1	70:D4:28:LEU:HD11	2.30	0.43
1:5:520:U:H3	6:14:347:THR:HB	1.83	0.43
1:5:1127:G:N2	1:5:1130:A:OP2	2.45	0.43
1:5:1422:G:C6	1:5:1423:C:C4	3.07	0.43
1:5:2144:A:C2	1:5:2281:A:C5	3.07	0.43
1:5:2201:G:N2	4:12:224:THR:HG21	2.24	0.43
1:5:2401:A:H5''	6:14:70:ALA:HB2	2.00	0.43
1:5:2576:G:H2'	1:5:2577:C:O4'	2.18	0.43
1:5:2727:A:C2	29:n8:43:ILE:HG23	2.54	0.43
1:5:2967:A:H5''	4:12:213:GLY:HA2	2.01	0.43
5:13:47:LEU:HD21	5:13:179:ALA:HB3	2.01	0.43
6:14:74:ILE:HG23	6:14:75:PRO:O	2.19	0.43
7:15:68:THR:HB	7:15:71:GLY:O	2.19	0.43
8:16:171:PRO:HB2	34:o3:43:PHE:CE2	2.54	0.43
10:18:98:ARG:HD3	10:18:189:LEU:O	2.17	0.43
15:m4:28:SER:HB3	15:m4:53:VAL:HG13	2.01	0.43
16:m5:148:TYR:O	16:m5:150:TRP:N	2.51	0.43
17:m6:108:ILE:HA	17:m6:109:PRO:HD3	1.81	0.43
21:n0:8:GLN:HG3	21:n0:26:ARG:NE	2.33	0.43
31:o0:31:VAL:HG12	31:o0:35:ARG:HH11	1.84	0.43
41:q0:86:ALA:O	41:q0:89:TYR:N	2.52	0.43
45:6:300:A:H2'	45:6:301:A:C8	2.54	0.43
45:6:413:U:H2'	45:6:414:C:H6	1.83	0.43
45:6:1451:C:H2'	45:6:1452:U:H6	1.84	0.43
45:6:1553:G:H22	45:6:1555:A:H3'	1.80	0.43
47:s1:131:ASP:CG	47:s1:180:THR:HB	2.44	0.43
48:s2:139:ILE:HG22	48:s2:141:ARG:HG2	2.00	0.43
48:s2:167:VAL:HG11	48:s2:214:ALA:HB2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:s4:194:THR:HG21	50:s4:231:GLN:HG3	2.01	0.43
51:s5:89:ILE:HA	51:s5:92:ARG:HB2	2.00	0.43
57:c1:67:ARG:HH12	57:c1:129:ARG:H	1.64	0.43
60:c4:55:SER:O	60:c4:96:PRO:HG2	2.19	0.43
62:c6:26:LYS:H	62:c6:26:LYS:HD2	1.84	0.43
62:c6:40:GLU:OE2	62:c6:45:ARG:NH2	2.52	0.43
67:d1:64:GLU:HG3	73:d7:3:LEU:HD23	2.01	0.43
69:d3:30:LYS:HB3	69:d3:31:LYS:NZ	2.34	0.43
69:d3:70:LYS:HB3	69:d3:93:LEU:HD22	2.00	0.43
77:sR:227:ALA:HB1	77:sR:229:LYS:HE3	2.00	0.43
1:1:887:G:P	80:1:3405:PAR:H641	2.58	0.43
1:1:990:U:H4'	22:N1:100:LYS:HB2	1.99	0.43
1:1:1447:G:H3'	18:M7:67:ILE:CD1	2.47	0.43
1:1:2262:A:O3'	45:2:1780:G:H1'	2.18	0.43
1:1:2289:U:H2'	1:1:2290:C:C6	2.54	0.43
1:1:3121:U:H4'	1:1:3122:A:OP1	2.19	0.43
80:1:3425:PAR:H31	12:M0:111:LEU:O	2.19	0.43
2:3:52:G:H21	13:M1:9:MET:HE1	1.83	0.43
80:4:202:PAR:H322	80:4:202:PAR:H51	1.84	0.43
5:L3:77:THR:HG23	5:L3:326:GLY:O	2.19	0.43
6:L4:141:ARG:CZ	6:L4:180:LYS:HD3	2.48	0.43
11:L9:8:GLN:HG3	11:L9:72:LYS:HD3	2.01	0.43
13:M1:21:ILE:HG12	13:M1:125:MET:HG2	2.01	0.43
14:M3:60:ALA:HB3	14:M3:65:TYR:O	2.19	0.43
29:N8:82:ILE:HD11	29:N8:102:ILE:HD11	1.99	0.43
31:O0:78:GLY:HA2	31:O0:81:VAL:HG22	1.99	0.43
33:O2:75:LEU:HD23	33:O2:95:GLU:HB3	2.00	0.43
33:O2:122:PRO:O	33:O2:123:LYS:HB2	2.19	0.43
44:Q3:75:ALA:HA	44:Q3:78:THR:HG23	2.01	0.43
45:2:151:G:H21	52:S6:13:GLN:CD	2.27	0.43
45:2:450:U:H2'	45:2:451:A:C8	2.54	0.43
45:2:737:A:O2'	45:2:738:G:H8	2.02	0.43
45:2:902:G:N7	60:C4:24:ASN:HB3	2.34	0.43
45:2:959:U:C6	59:C3:61:THR:HB	2.54	0.43
45:2:1002:G:C6	45:2:1003:A:N7	2.86	0.43
45:2:1267:G:O2'	45:2:1448:G:O2'	2.18	0.43
45:2:1330:G:H2'	45:2:1331:A:O4'	2.19	0.43
45:2:1674:C:H2'	45:2:1675:C:C6	2.54	0.43
45:2:1791:A:OP1	72:D6:8:ASN:HB3	2.19	0.43
48:S2:116:LYS:HB2	48:S2:131:ILE:HD12	2.01	0.43
54:S8:70:GLU:HB3	54:S8:72:ILE:HG13	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
59:C3:26:PHE:HZ	59:C3:28:LEU:HD12	1.84	0.43
61:C5:40:ARG:HA	61:C5:40:ARG:HD2	1.82	0.43
62:C6:97:VAL:HG23	62:C6:98:ASP:H	1.84	0.43
65:C9:28:LEU:H	65:C9:28:LEU:HG	1.45	0.43
68:D2:81:VAL:O	68:D2:122:SER:OG	2.28	0.43
69:D3:43:PHE:C	69:D3:45:GLY:H	2.26	0.43
1:5:608:A:C6	8:l6:22:ARG:HD3	2.54	0.43
1:5:2120:A:N1	80:5:3426:PAR:H44	2.34	0.43
1:5:2631:U:P	22:n1:9:SER:HB3	2.59	0.43
1:5:3141:A:OP2	83:5:4261:HOH:O	2.21	0.43
1:5:3192:U:H2'	1:5:3193:C:C6	2.54	0.43
3:8:52:A:H4'	40:o9:19:GLN:HA	2.00	0.43
3:8:88:A:H3'	3:8:89:A:C8	2.53	0.43
4:l2:195:SER:HB2	4:l2:198:LYS:NZ	2.34	0.43
5:l3:117:ARG:HA	5:l3:175:LYS:HG2	2.01	0.43
5:l3:130:PHE:O	5:l3:133:TYR:N	2.52	0.43
6:l4:208:VAL:HG12	6:l4:230:VAL:HG13	2.01	0.43
7:l5:75:LEU:HD11	7:l5:113:LEU:HD11	1.99	0.43
7:l5:94:ASN:HD22	7:l5:204:VAL:HG21	1.83	0.43
9:l7:150:LYS:HG2	9:l7:151:ARG:HG2	2.00	0.43
10:l8:78:PHE:CD2	10:l8:155:ASN:HA	2.53	0.43
12:m0:12:GLN:HG2	12:m0:59:GLN:HG3	2.01	0.43
12:m0:113:GLN:HA	12:m0:114:GLY:HA3	1.33	0.43
12:m0:144:ASN:O	12:m0:148:VAL:HG23	2.19	0.43
16:m5:153:ASP:OD2	16:m5:155:VAL:HG23	2.19	0.43
18:m7:79:THR:HG23	18:m7:80:LYS:H	1.84	0.43
22:n1:46:GLY:O	22:n1:49:GLN:NE2	2.52	0.43
26:n5:105:VAL:HG13	26:n5:130:TYR:CD2	2.54	0.43
27:n6:106:ILE:HG21	27:n6:109:LEU:HD23	2.01	0.43
44:q3:41:PHE:CE2	44:q3:62:LYS:HE2	2.53	0.43
45:6:169:A:OP1	79:s6:137:ARG:NH2	2.51	0.43
45:6:196:G:O2'	45:6:197:A:O5'	2.37	0.43
45:6:542:A:H1'	45:6:543:C:OP1	2.19	0.43
46:s0:168:HIS:CD2	46:s0:168:HIS:H	2.36	0.43
47:s1:22:ASP:OD2	47:s1:24:PHE:N	2.50	0.43
47:s1:27:LYS:NZ	60:c4:37:GLU:OE1	2.52	0.43
47:s1:66:VAL:CG1	60:c4:33:LEU:HB3	2.49	0.43
51:s5:112:ARG:HH21	62:c6:43:ILE:HG23	1.84	0.43
57:c1:94:ILE:HD13	69:d3:16:ARG:HD3	2.01	0.43
68:d2:15:ASN:HD21	68:d2:71:LYS:HG3	1.83	0.43
72:d6:45:VAL:HG23	72:d6:46:GLU:H	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:180:C:H2'	1:1:181:U:C6	2.54	0.42
1:1:390:G:H5'	1:1:391:A:OP2	2.20	0.42
1:1:817:A:C4	38:O7:13:ASN:O	2.72	0.42
1:1:1764:U:H3	20:M9:43:LYS:CE	2.30	0.42
1:1:1795:U:H4'	1:1:1796:G:C4	2.54	0.42
1:1:2242:A:H5'	4:L2:243:THR:HG23	2.00	0.42
1:1:3279:A:C6	1:1:3280:U:C4	3.07	0.42
2:3:76:A:O3'	2:3:77:G:H4'	2.19	0.42
3:4:62:C:H4'	3:4:63:G:O5'	2.19	0.42
7:L5:148:ILE:HG12	7:L5:151:GLN:HB3	2.01	0.42
8:L6:170:LYS:HB3	8:L6:173:MET:HG2	2.00	0.42
30:N9:32:LEU:O	30:N9:35:VAL:HB	2.19	0.42
32:O1:80:ASN:OD1	32:O1:80:ASN:N	2.52	0.42
45:2:155:U:H4'	52:S6:59:GLN:H	1.83	0.42
45:2:1335:U:H1'	75:D9:56:ARG:HD2	2.01	0.42
45:2:1535:U:O2'	45:2:1536:G:H5''	2.19	0.42
45:2:1650:U:H2'	45:2:1651:A:C8	2.54	0.42
46:S0:200:ASP:N	46:S0:200:ASP:OD1	2.52	0.42
49:S3:56:GLN:H	49:S3:90:ARG:NH1	2.17	0.42
50:S4:44:LEU:HG	50:S4:82:TYR:HB3	2.01	0.42
51:S5:76:ARG:HE	51:S5:76:ARG:N	2.17	0.42
52:S6:212:LEU:O	52:S6:216:LEU:HG	2.18	0.42
59:C3:25:TRP:HH2	73:D7:45:THR:HG21	1.84	0.42
59:C3:96:VAL:HG22	59:C3:146:ALA:HB1	2.01	0.42
60:C4:78:ALA:HB2	60:C4:111:ARG:HH11	1.84	0.42
67:D1:60:ARG:HA	67:D1:65:SER:HB2	2.00	0.42
69:D3:60:GLU:OE1	76:E0:3:LYS:HD2	2.19	0.42
72:D6:58:VAL:HG13	72:D6:59:TYR:CG	2.54	0.42
75:D9:27:HIS:ND1	75:D9:27:HIS:N	2.65	0.42
1:5:727:G:H2'	1:5:728:G:O4'	2.19	0.42
1:5:999:G:C6	1:5:1000:C:N4	2.87	0.42
1:5:1674:G:H2'	1:5:1675:G:O4'	2.18	0.42
1:5:2689:A:H2'	1:5:2689:A:N3	2.33	0.42
1:5:2730:G:H4'	19:m8:184:PHE:CD1	2.54	0.42
1:5:2746:A:H5'	7:l5:178:ASN:OD1	2.19	0.42
1:5:2987:A:C5	1:5:2988:C:C4	3.07	0.42
1:5:3016:A:H2'	1:5:3017:A:C8	2.53	0.42
1:5:3110:C:H2'	1:5:3111:U:C6	2.54	0.42
1:5:3146:G:O2'	5:l3:100:ARG:NH1	2.52	0.42
1:5:3187:A:H61	1:5:3205:G:H1	1.65	0.42
3:8:75:G:H2'	3:8:76:C:C6	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:l4:219:LEU:HD22	6:l4:222:VAL:HG11	2.00	0.42
7:l5:208:MET:HG2	7:l5:223:PHE:CE2	2.54	0.42
10:l8:105:LYS:O	10:l8:109:LEU:HB2	2.19	0.42
11:l9:161:LEU:O	11:l9:164:ILE:HG22	2.18	0.42
13:m1:16:LYS:HG3	13:m1:130:VAL:CG1	2.49	0.42
13:m1:133:ARG:HD2	13:m1:154:THR:HG22	2.00	0.42
14:m3:16:LYS:HE2	16:m5:195:ASN:OD1	2.19	0.42
14:m3:58:VAL:O	14:m3:69:VAL:HG22	2.18	0.42
16:m5:172:ARG:O	16:m5:183:THR:OG1	2.35	0.42
19:m8:89:ASP:HB2	19:m8:110:ALA:N	2.34	0.42
21:n0:154:HIS:CE1	21:n0:170:THR:HG21	2.54	0.42
33:o2:87:MET:HA	33:o2:87:MET:HE3	2.01	0.42
40:o9:9:ILE:C	40:o9:13:MET:HE3	2.45	0.42
43:q2:83:LEU:HD23	43:q2:84:THR:N	2.34	0.42
45:6:78:A:OP2	79:s6:154:ARG:HD2	2.18	0.42
45:6:924:A:O2'	45:6:987:G:OP1	2.35	0.42
45:6:968:U:H5''	45:6:1033:C:O2'	2.19	0.42
45:6:978:A:H2'	45:6:979:A:O4'	2.18	0.42
45:6:1370:U:O3'	45:6:1371:A:H4'	2.19	0.42
45:6:1579:U:O2'	62:c6:139:GLN:HA	2.18	0.42
45:6:1742:U:H2'	45:6:1743:U:H6	1.84	0.42
45:6:1746:A:H2'	45:6:1747:G:O4'	2.19	0.42
46:s0:69:ASN:HB3	46:s0:71:GLU:CD	2.44	0.42
46:s0:83:GLN:O	46:s0:86:VAL:HG22	2.19	0.42
49:s3:89:GLU:HG2	49:s3:90:ARG:H	1.84	0.42
50:s4:198:LYS:HG3	50:s4:208:VAL:HG22	1.99	0.42
79:s6:167:LYS:HE2	79:s6:167:LYS:HB3	1.71	0.42
57:c1:29:LYS:HE2	57:c1:29:LYS:HB3	1.85	0.42
63:c7:27:ASP:OD2	63:c7:30:THR:N	2.39	0.42
65:c9:54:PHE:CZ	65:c9:104:VAL:HG22	2.54	0.42
67:d1:36:VAL:O	67:d1:51:VAL:N	2.41	0.42
70:d4:91:LEU:O	70:d4:97:ALA:N	2.51	0.42
73:d7:67:THR:C	73:d7:69:GLY:H	2.27	0.42
1:1:75:G:OP1	14:M3:58:VAL:HG22	2.19	0.42
1:1:824:C:H2'	1:1:825:U:H6	1.85	0.42
1:1:1014:U:H3	1:1:1036:A:H61	1.66	0.42
1:1:1313:G:O3'	17:M6:17:GLY:HA3	2.19	0.42
1:1:1386:A:N3	6:L4:180:LYS:HA	2.34	0.42
1:1:1563:C:O2'	1:1:1564:U:OP1	2.28	0.42
1:1:3102:G:H2'	1:1:3103:A:H8	1.83	0.42
1:1:3255:U:H2'	1:1:3256:G:H8	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3275:U:H5'	34:O3:68:TRP:CZ2	2.51	0.42
1:1:3382:U:O2	1:1:3382:U:H2'	2.19	0.42
7:L5:58:LYS:N	7:L5:58:LYS:CD	2.82	0.42
10:L8:143:ILE:HG21	10:L8:170:CYS:SG	2.59	0.42
10:L8:170:CYS:HB3	10:L8:175:VAL:O	2.20	0.42
12:M0:31:ILE:HG22	12:M0:62:SER:HB2	2.01	0.42
15:M4:47:ASP:OD2	15:M4:49:PRO:HD3	2.19	0.42
21:N0:12:ARG:HD3	21:N0:59:VAL:CG2	2.49	0.42
24:N3:93:LEU:HD23	24:N3:93:LEU:H	1.83	0.42
25:N4:57:LYS:HB2	25:N4:57:LYS:HE3	1.79	0.42
33:O2:126:LEU:HD23	33:O2:126:LEU:HA	1.80	0.42
36:O5:63:ARG:O	36:O5:67:ARG:HB2	2.18	0.42
39:O8:65:LEU:HD23	39:O8:65:LEU:HA	1.88	0.42
45:2:35:U:H2'	45:2:36:C:H6	1.83	0.42
45:2:920:U:H2'	45:2:921:U:O4'	2.19	0.42
45:2:1152:A:H2'	45:2:1153:G:C8	2.54	0.42
45:2:1597:A:P	75:D9:19:ARG:HH22	2.42	0.42
45:2:1601:G:OP1	65:C9:86:ARG:NH2	2.50	0.42
47:S1:103:MET:HG2	47:S1:104:ASP:N	2.34	0.42
48:S2:239:PRO:O	48:S2:243:TYR:HB2	2.19	0.42
54:S8:69:SER:HB2	57:C1:23:PRO:HD2	2.00	0.42
55:S9:105:LEU:O	55:S9:111:THR:HG21	2.19	0.42
64:C8:15:LEU:HD21	64:C8:58:ALA:HB1	2.01	0.42
64:C8:26:ILE:HG13	64:C8:27:LYS:N	2.34	0.42
70:D4:50:ALA:O	70:D4:51:GLU:HG2	2.19	0.42
77:SR:102:ARG:HH11	77:SR:104:VAL:HB	1.84	0.42
1:5:198:A:H1'	1:5:218:G:O2'	2.18	0.42
1:5:359:U:H2'	1:5:360:G:O4'	2.19	0.42
1:5:532:A:H2'	1:5:533:A:C8	2.53	0.42
1:5:558:U:H4'	1:5:559:A:OP2	2.18	0.42
1:5:744:A:N3	19:m8:141:ARG:NH1	2.60	0.42
1:5:1135:A:OP1	30:n9:6:ASN:HB2	2.19	0.42
1:5:1222:G:O2'	1:5:1285:G:N1	2.39	0.42
1:5:1355:A:H1'	1:5:1356:U:OP2	2.19	0.42
1:5:2355:G:H5'	18:m7:139:TYR:CE1	2.54	0.42
1:5:2561:A:O2'	1:5:2562:A:H5''	2.19	0.42
1:5:2696:A:H2'	1:5:2697:A:C8	2.53	0.42
1:5:2812:C:H2'	1:5:2813:A:C8	2.54	0.42
1:5:2854:U:P	12:m0:3:ARG:HH22	2.41	0.42
1:5:2943:G:C8	5:l3:2:SER:N	2.88	0.42
1:5:3158:G:H8	1:5:3158:G:OP2	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:3164:C:C2	1:5:3165:A:C8	3.07	0.42
1:5:3218:A:H5''	1:5:3219:G:C5	2.54	0.42
80:5:3424:PAR:O61	29:n8:2:PRO:HA	2.19	0.42
4:l2:65:ASP:HB3	4:l2:68:LYS:O	2.19	0.42
5:l3:58:ARG:NH1	5:l3:352:GLU:OE1	2.43	0.42
7:l5:179:ARG:HA	7:l5:179:ARG:HD3	1.85	0.42
10:l8:166:LEU:O	10:l8:170:CYS:N	2.30	0.42
13:m1:101:ASN:ND2	13:m1:130:VAL:HG23	2.34	0.42
16:m5:23:GLN:HG2	16:m5:122:ASN:OD1	2.19	0.42
20:m9:177:VAL:O	20:m9:180:LYS:HD2	2.19	0.42
22:n1:126:VAL:HB	22:n1:128:LEU:HG	2.01	0.42
26:n5:57:LEU:HD23	26:n5:62:VAL:HG22	2.01	0.42
27:n6:89:LYS:HB2	27:n6:91:ASN:OD1	2.19	0.42
27:n6:109:LEU:HD22	27:n6:115:ARG:NH1	2.34	0.42
31:o0:40:LYS:NZ	31:o0:93:LEU:O	2.36	0.42
36:o5:109:ILE:O	36:o5:112:PRO:HD3	2.18	0.42
45:6:40:A:H2'	45:6:41:A:O4'	2.19	0.42
45:6:333:A:O4'	54:s8:49:ARG:HB3	2.19	0.42
45:6:434:G:N2	45:6:436:A:H3'	2.34	0.42
45:6:1357:A:H2'	45:6:1358:G:C8	2.54	0.42
45:6:1535:U:H1'	45:6:1536:G:C2	2.54	0.42
45:6:1793:G:OP1	83:6:2105:HOH:O	2.21	0.42
48:s2:85:PRO:HA	48:s2:97:ARG:O	2.18	0.42
53:s7:140:VAL:O	68:d2:52:TYR:N	2.52	0.42
55:s9:78:ARG:HH12	55:s9:82:ARG:HH21	1.66	0.42
57:c1:72:THR:OG1	57:c1:73:GLY:N	2.51	0.42
57:c1:99:ARG:HG2	69:d3:9:LEU:O	2.19	0.42
60:c4:132:ARG:C	60:c4:134:GLY:N	2.75	0.42
61:c5:130:ARG:HG3	78:sM:74:LYS:HE3	2.01	0.42
62:c6:30:LYS:HG2	62:c6:35:PRO:HA	2.01	0.42
62:c6:83:GLN:HB2	62:c6:115:THR:HG22	2.01	0.42
64:c8:18:LEU:HB3	64:c8:102:ALA:HB2	2.02	0.42
1:1:250:U:C4	1:1:251:G:C5	3.07	0.42
1:1:421:G:C8	1:1:2365:C:C6	3.07	0.42
1:1:511:G:H2'	1:1:512:U:O4'	2.19	0.42
1:1:1624:G:H2'	1:1:1625:A:H8	1.84	0.42
1:1:1937:U:C4	1:1:1938:U:O4	2.72	0.42
1:1:2207:A:H2'	1:1:2208:A:O4'	2.19	0.42
1:1:2873:U:OP2	83:1:4357:HOH:O	2.22	0.42
12:M0:196:PHE:CG	12:M0:197:VAL:N	2.86	0.42
17:M6:124:LEU:HB3	17:M6:127:LEU:HD12	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:M8:81:VAL:HG22	19:M8:101:VAL:HG22	2.01	0.42
19:M8:148:GLU:OE1	19:M8:151:ARG:NE	2.53	0.42
27:N6:91:ASN:OD1	27:N6:93:ALA:N	2.52	0.42
31:O0:42:ILE:HD11	31:O0:67:VAL:HG22	2.01	0.42
45:2:610:G:H21	69:D3:19:ARG:NH1	2.17	0.42
45:2:635:A:H2'	45:2:636:A:C8	2.54	0.42
45:2:899:G:H2'	45:2:900:A:C8	2.54	0.42
45:2:1067:C:H2'	45:2:1068:C:C6	2.54	0.42
45:2:1288:G:N7	45:2:1314:U:H2'	2.35	0.42
45:2:1327:C:O2'	49:S3:159:HIS:ND1	2.31	0.42
45:2:1404:C:H2'	45:2:1405:G:H8	1.83	0.42
47:S1:58:SER:O	47:S1:62:LYS:HG3	2.20	0.42
50:S4:115:THR:OG1	50:S4:118:GLU:N	2.32	0.42
56:C0:8:ARG:HG3	56:C0:12:HIS:CE1	2.54	0.42
56:C0:54:TYR:HA	56:C0:72:GLY:CA	2.50	0.42
57:C1:128:CYS:SG	57:C1:129:ARG:N	2.92	0.42
62:C6:105:LEU:HD12	62:C6:105:LEU:HA	1.72	0.42
63:C7:81:LYS:HD2	63:C7:81:LYS:HA	1.76	0.42
63:C7:108:ASP:HA	63:C7:111:LYS:HD3	2.00	0.42
64:C8:30:TYR:HA	64:C8:33:THR:HG23	2.00	0.42
64:C8:87:ASN:HD21	64:C8:100:THR:N	2.17	0.42
65:C9:61:VAL:HG21	65:C9:104:VAL:HG11	2.01	0.42
70:D4:128:LYS:HB3	70:D4:128:LYS:HE2	1.71	0.42
76:E0:24:THR:O	76:E0:26:LYS:HE2	2.19	0.42
1:5:293:C:O2'	37:o6:76:ARG:HD3	2.19	0.42
1:5:664:U:H4'	6:l4:106:TRP:HD1	1.84	0.42
1:5:759:U:H2'	1:5:760:G:H5'	2.00	0.42
1:5:1333:C:H1'	9:l7:209:ASN:ND2	2.34	0.42
1:5:1715:A:H4'	1:5:1716:U:OP1	2.18	0.42
1:5:1720:U:P	20:m9:110:ARG:HH22	2.42	0.42
1:5:1857:C:H1'	35:o4:5:VAL:O	2.19	0.42
1:5:2661:G:O2'	1:5:2662:G:H5'	2.19	0.42
1:5:3024:A:H4'	11:l9:97:PHE:CE2	2.54	0.42
1:5:3309:G:O6	5:l3:21:ARG:NH2	2.52	0.42
80:5:3421:PAR:H322	80:5:3421:PAR:H51	1.83	0.42
10:l8:150:LEU:HD23	10:l8:150:LEU:HA	1.87	0.42
12:m0:75:TYR:CZ	12:m0:79:VAL:HG21	2.54	0.42
13:m1:23:VAL:HA	13:m1:29:ARG:NH1	2.33	0.42
17:m6:173:ALA:O	17:m6:176:LYS:HB3	2.19	0.42
20:m9:132:PHE:CD2	20:m9:138:LEU:HD23	2.54	0.42
21:n0:26:ARG:O	22:n1:150:THR:HA	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:n8:26:ARG:HA	29:n8:26:ARG:HD3	1.77	0.42
35:o4:44:CYS:N	35:o4:49:SER:O	2.41	0.42
45:6:117:U:C4	45:6:118:U:C4	3.07	0.42
45:6:843:U:H2'	45:6:844:A:C8	2.54	0.42
47:s1:48:VAL:CG2	47:s1:61:LEU:HD13	2.48	0.42
60:c4:17:ALA:HB2	60:c4:79:VAL:HG21	2.00	0.42
70:d4:29:HIS:HB3	70:d4:32:ARG:HB2	2.01	0.42
1:1:373:A:N6	1:1:396:A:H62	2.17	0.42
1:1:420:G:H21	1:1:2384:A:H3'	1.84	0.42
1:1:1049:C:H2'	1:1:1050:U:C6	2.55	0.42
1:1:2225:U:H2'	1:1:2226:U:H6	1.83	0.42
1:1:2636:A:H5''	1:1:2637:A:C5'	2.41	0.42
1:1:2860:U:N3	1:1:2938:G:O5'	2.53	0.42
1:1:3299:A:C5	1:1:3300:U:C5	3.07	0.42
1:1:3366:G:H2'	1:1:3367:C:C6	2.54	0.42
10:L8:240:ASN:HA	10:L8:243:GLN:HB2	2.01	0.42
12:M0:56:GLU:C	12:M0:131:ILE:HG13	2.44	0.42
17:M6:181:ALA:O	17:M6:184:THR:HB	2.18	0.42
22:N1:25:VAL:CG2	22:N1:29:THR:HG21	2.49	0.42
24:N3:33:ASN:OD1	24:N3:64:LYS:HB2	2.20	0.42
27:N6:5:SER:HB3	27:N6:8:VAL:CG2	2.45	0.42
29:N8:67:HIS:CD2	29:N8:67:HIS:N	2.86	0.42
44:Q3:83:ILE:HG22	44:Q3:87:ARG:HH12	1.84	0.42
45:2:121:U:O2'	50:S4:33:ALA:O	2.22	0.42
45:2:540:G:O3'	45:2:541:A:H3'	2.18	0.42
45:2:804:A:H1'	68:D2:106:THR:O	2.19	0.42
45:2:958:U:H2'	59:C3:14:SER:OG	2.19	0.42
45:2:1044:U:P	80:2:1904:PAR:H611	2.58	0.42
45:2:1180:C:O2'	61:C5:128:HIS:ND1	2.49	0.42
45:2:1685:G:N3	45:2:1717:G:N1	2.66	0.42
47:S1:48:VAL:HG12	47:S1:49:ASN:N	2.34	0.42
48:S2:139:ILE:HD12	48:S2:218:ILE:HB	2.01	0.42
50:S4:118:GLU:HG3	50:S4:121:TYR:CE1	2.54	0.42
52:S6:174:LYS:HG3	52:S6:175:ILE:N	2.35	0.42
55:S9:105:LEU:HD12	55:S9:105:LEU:HA	1.89	0.42
56:C0:47:GLN:O	56:C0:50:THR:OG1	2.34	0.42
61:C5:93:VAL:HG22	61:C5:106:GLU:HB2	2.01	0.42
72:D6:90:GLU:OE1	72:D6:93:LYS:NZ	2.44	0.42
77:SR:6:VAL:HG22	77:SR:7:LEU:H	1.84	0.42
1:5:89:A:N6	1:5:98:G:C2	2.87	0.42
1:5:269:G:N2	1:5:295:A:OP2	2.44	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1064:A:H4'	1:5:1065:A:O5'	2.18	0.42
1:5:1161:G:C2	1:5:1162:U:C6	3.08	0.42
1:5:1557:A:O2'	1:5:1558:A:H5''	2.19	0.42
1:5:2137:U:C6	1:5:2141:U:C4	3.08	0.42
80:5:3410:PAR:H322	80:5:3410:PAR:H51	1.83	0.42
3:8:79:A:O2'	3:8:80:A:OP1	2.35	0.42
3:8:84:C:H1'	27:n6:113:LYS:HB2	2.00	0.42
5:l3:287:LYS:HD3	5:l3:290:ASP:OD1	2.20	0.42
6:l4:77:VAL:HG11	6:l4:84:ARG:HG3	2.01	0.42
8:l6:96:VAL:HG12	8:l6:98:VAL:HG23	2.01	0.42
8:l6:104:GLU:HG3	8:l6:107:ALA:HB2	2.02	0.42
10:l8:140:VAL:O	10:l8:144:GLU:HG3	2.19	0.42
11:l9:17:THR:HG23	15:m4:5:SER:H	1.84	0.42
14:m3:144:THR:C	14:m3:146:PRO:HD3	2.44	0.42
15:m4:76:ALA:HB1	15:m4:80:THR:OG1	2.19	0.42
16:m5:66:VAL:O	16:m5:127:TYR:HA	2.18	0.42
18:m7:4:TYR:HE1	18:m7:16:SER:HB2	1.84	0.42
28:n7:26:VAL:HG12	28:n7:27:LYS:N	2.35	0.42
31:o0:84:LEU:HD12	31:o0:84:LEU:HA	1.75	0.42
31:o0:99:ASP:O	31:o0:100:ILE:HG12	2.19	0.42
43:q2:70:LEU:HD21	43:q2:91:PHE:CZ	2.54	0.42
45:6:189:C:H2'	45:6:190:C:C6	2.54	0.42
45:6:312:A:H4'	45:6:313:U:H5''	2.02	0.42
45:6:763:G:H2'	45:6:764:U:H6	1.85	0.42
45:6:1231:U:O4	45:6:1255:G:N2	2.52	0.42
45:6:1483:A:OP2	45:6:1521:G:N2	2.52	0.42
46:s0:178:ALA:HA	46:s0:181:VAL:HG22	2.00	0.42
46:s0:184:LEU:HD13	46:s0:184:LEU:HA	1.87	0.42
47:s1:32:ILE:HB	47:s1:43:VAL:HB	2.01	0.42
79:s6:216:LEU:HD22	79:s6:216:LEU:HA	1.93	0.42
55:s9:78:ARG:NH1	55:s9:82:ARG:HH21	2.18	0.42
60:c4:19:ILE:O	60:c4:83:ILE:HA	2.19	0.42
60:c4:63:ALA:O	60:c4:67:VAL:HG23	2.20	0.42
62:c6:81:ILE:H	62:c6:81:ILE:HG12	1.67	0.42
70:d4:20:ARG:HA	70:d4:75:VAL:O	2.19	0.42
77:sR:67:ILE:HB	77:sR:85:TRP:CG	2.54	0.42
1:1:352:A:H61	1:1:365:A:H5''	1.84	0.42
1:1:642:U:OP1	29:N8:22:ILE:HG12	2.18	0.42
1:1:651:G:O2'	1:1:1435:A:OP1	2.37	0.42
1:1:720:A:H2'	1:1:720:A:N3	2.34	0.42
1:1:836:A:P	44:Q3:4:ARG:HD3	2.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2662:G:H2'	1:1:2663:G:H8	1.82	0.42
1:1:2678:A:O4'	78:SM:46:LYS:HB3	2.19	0.42
1:1:2685:C:OP1	13:M1:140:ARG:NH2	2.27	0.42
1:1:2941:A:OP2	5:L3:256:HIS:HD2	2.03	0.42
1:1:3238:G:N2	1:1:3250:U:H1'	2.33	0.42
1:1:3242:G:O4'	1:1:3245:A:H1'	2.20	0.42
80:1:3407:PAR:H44	12:M0:150:GLU:OE1	2.19	0.42
6:L4:271:LYS:HB2	6:L4:274:TYR:CB	2.49	0.42
6:L4:271:LYS:HB2	6:L4:274:TYR:HB2	2.01	0.42
10:L8:71:VAL:HG23	10:L8:235:GLY:HA3	2.02	0.42
12:M0:110:ARG:HH12	12:M0:112:GLN:H	1.66	0.42
16:M5:190:THR:O	16:M5:194:GLN:HG2	2.20	0.42
24:N3:13:ILE:HG13	24:N3:53:SER:OG	2.19	0.42
26:N5:86:VAL:HG11	26:N5:122:ALA:HB2	2.02	0.42
36:O5:11:THR:HG21	27:n6:108:LYS:HD3	2.02	0.42
38:O7:45:ARG:HG2	38:O7:47:TYR:CE2	2.54	0.42
39:O8:12:LEU:HD22	39:O8:12:LEU:HA	1.82	0.42
45:2:196:G:O2'	45:2:197:A:O5'	2.36	0.42
45:2:307:G:OP1	57:C1:90:TYR:OH	2.33	0.42
45:2:310:C:H2'	45:2:311:U:H6	1.83	0.42
45:2:392:G:O2'	45:2:1673:G:N3	2.51	0.42
45:2:459:G:H5'	45:2:461:G:O6	2.20	0.42
45:2:484:C:N4	45:2:503:G:H22	2.18	0.42
45:2:658:C:H1'	45:2:676:G:O6	2.20	0.42
45:2:912:U:OP1	45:2:913:G:H2'	2.19	0.42
45:2:951:A:H1'	59:C3:101:HIS:ND1	2.34	0.42
47:S1:128:LYS:HE3	47:S1:132:ASP:OD1	2.20	0.42
48:S2:170:ILE:N	48:S2:197:TYR:O	2.49	0.42
49:S3:53:THR:HA	49:S3:91:VAL:CG2	2.45	0.42
51:S5:103:ASN:OD1	51:S5:103:ASN:N	2.52	0.42
52:S6:197:ASN:HA	52:S6:200:ALA:HB3	2.02	0.42
57:C1:20:PHE:CE2	57:C1:23:PRO:HD3	2.55	0.42
64:C8:68:ARG:O	64:C8:72:ILE:HG13	2.20	0.42
65:C9:49:ASP:HB3	65:C9:53:TRP:CD1	2.54	0.42
70:D4:82:ALA:O	70:D4:86:GLU:HB2	2.19	0.42
70:D4:104:SER:HB3	70:D4:107:GLN:HG3	2.00	0.42
1:5:329:U:O2	6:l4:55:LYS:HE2	2.20	0.42
1:5:507:U:H2'	1:5:508:U:C6	2.54	0.42
1:5:848:A:N3	45:6:973:A:H4'	2.34	0.42
1:5:1039:U:H2'	1:5:1040:A:C8	2.55	0.42
1:5:1372:C:H2'	1:5:1373:A:H8	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:1466:G:H22	1:5:1510:G:H5''	1.84	0.42
1:5:1672:U:H1'	1:5:1776:G:N2	2.34	0.42
1:5:1831:U:O2'	3:8:114:G:OP1	2.20	0.42
1:5:2631:U:OP1	22:n1:9:SER:HB3	2.20	0.42
4:l2:88:ILE:HG23	4:l2:99:GLY:O	2.19	0.42
5:l3:114:VAL:HG22	5:l3:163:HIS:CE1	2.54	0.42
8:l6:35:VAL:O	8:l6:36:PRO:C	2.63	0.42
10:l8:106:LYS:O	10:l8:110:THR:OG1	2.34	0.42
12:m0:52:LEU:HA	12:m0:52:LEU:HD23	1.76	0.42
18:m7:27:LYS:HD3	18:m7:63:PHE:HB3	2.02	0.42
18:m7:64:ASN:OD1	18:m7:64:ASN:N	2.50	0.42
19:m8:153:PHE:O	19:m8:161:LYS:HG2	2.19	0.42
20:m9:6:THR:HG23	20:m9:9:ARG:HH12	1.83	0.42
28:n7:51:LEU:HB2	28:n7:65:ARG:HD2	2.00	0.42
29:n8:45:MET:HE2	29:n8:45:MET:HA	2.01	0.42
33:o2:32:TRP:CZ2	33:o2:53:PRO:HD2	2.55	0.42
34:o3:54:ARG:NH1	34:o3:64:ILE:HD11	2.34	0.42
37:o6:51:SER:O	37:o6:55:ARG:HG3	2.20	0.42
38:o7:8:PHE:O	38:o7:11:ARG:HG3	2.19	0.42
42:q1:21:ARG:HD2	45:6:1653:C:H4'	2.01	0.42
45:6:154:G:N3	79:s6:56:ASN:ND2	2.68	0.42
45:6:260:U:H6	45:6:260:U:H2'	1.63	0.42
45:6:477:A:OP1	76:e0:31:LYS:HG2	2.20	0.42
45:6:518:A:H2'	45:6:519:C:H5''	2.00	0.42
45:6:1008:G:H2'	45:6:1009:U:C6	2.54	0.42
45:6:1046:G:H1	45:6:1072:C:H42	1.67	0.42
45:6:1529:C:P	71:d5:95:HIS:HE2	2.42	0.42
45:6:1797:A:C6	72:d6:84:VAL:HG22	2.54	0.42
65:c9:21:PHE:HD1	65:c9:24:ARG:HH21	1.66	0.42
65:c9:33:TYR:C	65:c9:35:ASP:H	2.28	0.42
67:d1:69:LEU:O	67:d1:72:LEU:N	2.52	0.42
68:d2:50:PHE:HB3	68:d2:63:VAL:HG22	2.02	0.42
77:sR:52:GLN:HG2	77:sR:53:LYS:N	2.35	0.42
1:1:1118:C:O2	1:1:1154:A:H2	2.02	0.42
1:1:1130:A:C6	1:1:1132:C:H1'	2.54	0.42
1:1:1341:U:H2'	1:1:1342:C:C6	2.54	0.42
1:1:1440:G:H2'	1:1:1441:G:O4'	2.20	0.42
1:1:1508:C:H2'	1:1:1509:A:O4'	2.19	0.42
1:1:1563:C:H42	1:1:1575:A:H61	1.68	0.42
1:1:1820:U:H4'	1:1:1821:U:O5'	2.20	0.42
1:1:2205:U:O2'	1:1:2206:G:P	2.77	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:3350:C:O2'	1:1:3351:U:OP1	2.34	0.42
2:3:110:G:C6	2:3:111:U:C4	3.08	0.42
4:L2:185:ALA:O	4:L2:189:TYR:HD1	2.03	0.42
4:L2:246:LEU:HD12	4:L2:246:LEU:N	2.33	0.42
5:L3:98:GLY:HA2	17:M6:149:TYR:HE1	1.84	0.42
5:L3:116:ARG:CG	5:L3:175:LYS:HB2	2.50	0.42
6:L4:145:ILE:HD11	6:L4:148:ILE:HG12	2.02	0.42
10:L8:214:LEU:HD12	10:L8:214:LEU:HA	1.88	0.42
12:M0:10:ARG:HG2	12:M0:11:TYR:CD1	2.54	0.42
16:M5:53:TYR:HB2	16:M5:133:ILE:HD12	2.02	0.42
16:M5:194:GLN:HG2	16:M5:194:GLN:H	1.61	0.42
24:N3:125:LEU:HD12	24:N3:126:TRP:CE2	2.55	0.42
25:N4:50:ALA:HA	25:N4:55:PHE:CD1	2.55	0.42
43:Q2:6:LYS:HD2	43:Q2:93:LEU:O	2.20	0.42
45:2:218:A:C6	45:2:844:A:H1'	2.54	0.42
45:2:925:G:H2'	45:2:926:A:C8	2.54	0.42
46:S0:83:GLN:O	46:S0:87:LEU:HD22	2.20	0.42
47:S1:145:LYS:HB3	47:S1:149:GLN:HB3	2.02	0.42
47:S1:157:GLN:O	47:S1:160:HIS:N	2.49	0.42
48:S2:35:TRP:CE2	48:S2:37:PRO:HB3	2.54	0.42
50:S4:114:ILE:HD11	50:S4:119:ALA:HB2	2.01	0.42
51:S5:220:VAL:O	51:S5:224:ASN:HB2	2.20	0.42
55:S9:66:ASP:OD1	55:S9:67:PRO:HD2	2.19	0.42
59:C3:23:PRO:CG	59:C3:26:PHE:HB2	2.36	0.42
63:C7:24:LEU:CD1	63:C7:58:MET:HE3	2.49	0.42
67:D1:26:ALA:O	67:D1:29:HIS:NE2	2.53	0.42
68:D2:115:GLU:OE1	68:D2:119:LYS:NZ	2.31	0.42
71:D5:42:LEU:N	71:D5:42:LEU:HD23	2.34	0.42
77:SR:260:ILE:HD13	77:SR:292:LEU:HD13	2.02	0.42
1:5:348:A:H4'	1:5:367:A:N6	2.34	0.42
1:5:377:A:N1	80:5:3414:PAR:H42	2.35	0.42
1:5:875:G:OP2	83:5:4262:HOH:O	2.21	0.42
1:5:966:U:H2'	1:5:967:A:C8	2.54	0.42
1:5:1422:G:H2'	1:5:1423:C:C6	2.54	0.42
1:5:1756:C:H2'	1:5:1757:A:H8	1.84	0.42
1:5:2510:U:O2'	1:5:2511:A:P	2.77	0.42
1:5:3147:G:H2'	1:5:3148:U:O4'	2.19	0.42
3:8:148:G:H2'	3:8:149:A:C8	2.55	0.42
4:l2:109:GLU:HA	4:l2:136:ILE:HG22	2.01	0.42
5:l3:73:VAL:HG13	24:n3:89:ASP:O	2.20	0.42
6:l4:13:GLY:O	6:l4:14:GLU:HG2	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:l5:40:HIS:CE1	7:l5:42:ALA:HB3	2.55	0.42
12:m0:208:ASN:HB3	12:m0:211:ARG:NH2	2.34	0.42
13:m1:12:LEU:HD13	13:m1:13:LYS:N	2.35	0.42
13:m1:109:HIS:NE2	13:m1:114:ILE:HG21	2.34	0.42
16:m5:19:LEU:HA	16:m5:22:LEU:HD23	2.00	0.42
17:m6:81:TYR:OH	17:m6:99:LEU:HD13	2.20	0.42
26:n5:106:ASP:HB2	26:n5:130:TYR:CE1	2.54	0.42
28:n7:109:GLU:O	28:n7:113:VAL:HG23	2.20	0.42
29:n8:46:ASP:O	29:n8:47:LYS:HB3	2.19	0.42
29:n8:49:HIS:N	29:n8:50:PRO:HD3	2.35	0.42
34:o3:72:THR:HG23	34:o3:83:ALA:HA	2.02	0.42
37:o6:4:LYS:HD3	37:o6:4:LYS:HA	1.92	0.42
41:q0:99:CYS:HB3	41:q0:115:CYS:HB3	2.01	0.42
45:6:151:G:N2	45:6:164:A:C4	2.87	0.42
45:6:185:U:H5'	45:6:186:C:OP2	2.18	0.42
45:6:1147:A:O2'	45:6:1635:A:H2'	2.19	0.42
45:6:1278:G:H2'	45:6:1279:C:O4'	2.19	0.42
80:6:1904:PAR:H43	80:6:1904:PAR:N24	2.33	0.42
46:s0:32:HIS:HE1	67:d1:63:GLY:HA3	1.84	0.42
46:s0:34:GLU:N	46:s0:35:PRO:HD2	2.35	0.42
49:s3:76:ARG:C	49:s3:76:ARG:HD3	2.45	0.42
50:s4:77:ARG:HD2	50:s4:82:TYR:CE1	2.54	0.42
53:s7:5:GLN:HG3	53:s7:6:ALA:H	1.84	0.42
62:c6:35:PRO:HD2	62:c6:38:LEU:HD12	2.02	0.42
66:d0:57:ARG:HD2	66:d0:89:ARG:HH11	1.85	0.42
78:sM:83:LYS:CG	78:sM:84:LYS:H	2.31	0.42
1:1:23:A:OP1	38:O7:44:THR:HG22	2.20	0.42
1:1:147:U:O4	10:L8:157:VAL:HA	2.19	0.42
1:1:618:C:N4	1:1:619:A:H62	2.17	0.42
1:1:887:G:OP1	80:1:3405:PAR:H641	2.19	0.42
1:1:1439:U:OP1	6:L4:87:GLN:HA	2.20	0.42
1:1:1899:G:O2'	1:1:2334:U:O4	2.31	0.42
1:1:2282:U:OP2	1:1:2282:U:H6	2.02	0.42
1:1:2552:C:H2'	31:O0:50:VAL:HG11	2.01	0.42
1:1:2571:U:H2'	1:1:2572:C:O4'	2.20	0.42
1:1:2611:U:O2'	1:1:2803:A:N1	2.48	0.42
1:1:2656:A:C4	1:1:2658:G:N7	2.88	0.42
1:1:2989:U:H2'	1:1:2990:G:O4'	2.19	0.42
3:4:37:A:H5''	3:4:39:G:O4'	2.20	0.42
7:L5:102:GLY:HA2	7:L5:105:ILE:HG22	2.01	0.42
8:L6:100:LYS:HE2	8:L6:105:TYR:HE2	1.84	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:L7:77:VAL:HG12	21:N0:59:VAL:O	2.19	0.42
10:L8:82:LEU:HD12	10:L8:82:LEU:HA	1.83	0.42
10:L8:140:VAL:HG22	10:L8:166:LEU:HD21	2.01	0.42
10:L8:162:LEU:HA	16:M5:7:LEU:HD11	2.00	0.42
11:L9:16:VAL:HG23	11:L9:29:GLY:HA3	2.01	0.42
11:L9:49:ASN:C	11:L9:51:GLN:H	2.15	0.42
12:M0:207:GLU:O	12:M0:211:ARG:N	2.36	0.42
13:M1:29:ARG:HA	13:M1:32:ARG:NH1	2.35	0.42
16:M5:5:LYS:HB3	37:O6:36:ARG:HH12	1.84	0.42
18:M7:30:ARG:C	18:M7:30:ARG:HD3	2.44	0.42
19:M8:179:ARG:HG3	19:M8:182:LYS:H	1.85	0.42
26:N5:82:LEU:HB3	26:N5:84:PHE:HE2	1.84	0.42
31:O0:53:LYS:O	31:O0:57:GLU:HB2	2.19	0.42
35:O4:20:ILE:HD13	35:O4:20:ILE:HA	1.87	0.42
40:O9:27:ILE:HG23	40:O9:30:ARG:CZ	2.49	0.42
45:2:570:A:H5'	45:2:571:G:OP2	2.19	0.42
45:2:871:G:O2'	73:D7:67:THR:O	2.31	0.42
45:2:992:A:H4'	45:2:1786:G:O4'	2.20	0.42
45:2:1227:A:H5'	45:2:1228:G:C8	2.55	0.42
45:2:1287:A:OP2	45:2:1287:A:H8	2.03	0.42
46:S0:48:ILE:HG21	46:S0:161:PRO:HB2	2.02	0.42
50:S4:30:ARG:HA	50:S4:31:PRO:HD3	1.86	0.42
50:S4:71:LYS:HA	50:S4:76:VAL:O	2.19	0.42
50:S4:128:LYS:HG3	50:S4:140:VAL:HG13	2.00	0.42
52:S6:61:PHE:CD1	52:S6:96:SER:HB2	2.55	0.42
59:C3:26:PHE:CZ	59:C3:28:LEU:HD12	2.55	0.42
77:SR:59:ARG:HB2	77:SR:59:ARG:NH1	2.35	0.42
77:SR:93:ASP:HB3	77:SR:97:GLY:O	2.20	0.42
77:SR:214:ALA:HB3	77:SR:240:VAL:HG11	2.01	0.42
1:5:31:C:OP2	16:m5:188:ARG:NH2	2.53	0.42
1:5:201:A:H2'	1:5:202:G:C8	2.55	0.42
1:5:248:U:C2'	1:5:249:U:H5'	2.50	0.42
1:5:549:U:O2	1:5:549:U:H2'	2.19	0.42
1:5:974:G:H5'	19:m8:16:ARG:HG3	2.02	0.42
1:5:1073:U:H2'	1:5:1074:U:C6	2.54	0.42
1:5:1653:G:H4'	35:o4:43:LYS:O	2.19	0.42
1:5:2651:G:C4	1:5:2796:G:C2	3.08	0.42
1:5:2676:A:H4'	1:5:2677:G:O5'	2.19	0.42
1:5:2887:A:OP2	83:5:4264:HOH:O	2.22	0.42
1:5:3310:A:OP1	18:m7:74:LYS:NZ	2.44	0.42
80:5:3401:PAR:H62	80:5:3401:PAR:H13	1.62	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:7:15:C:O2'	7:l5:8:LYS:HD2	2.19	0.42
4:l2:204:MET:HB3	4:l2:208:ASP:HB2	2.02	0.42
5:l3:169:THR:HG23	5:l3:171:LEU:HG	2.01	0.42
8:l6:2:SER:HA	33:o2:81:ASP:OD2	2.20	0.42
8:l6:69:PHE:HB2	8:l6:138:GLN:NE2	2.34	0.42
9:l7:59:GLU:O	9:l7:63:ILE:HG13	2.19	0.42
12:m0:177:ASP:OD2	12:m0:177:ASP:N	2.53	0.42
13:m1:23:VAL:HB	13:m1:65:ILE:O	2.19	0.42
19:m8:111:ARG:O	19:m8:115:VAL:HG23	2.20	0.42
20:m9:106:LEU:HB3	20:m9:120:TYR:HE1	1.85	0.42
28:n7:36:HIS:CD2	28:n7:74:VAL:HG11	2.55	0.42
28:n7:101:PHE:O	28:n7:102:GLU:HB3	2.18	0.42
42:q1:16:LYS:O	42:q1:20:VAL:HG23	2.20	0.42
45:6:871:G:H2'	45:6:872:G:C8	2.55	0.42
45:6:928:U:H4'	60:c4:124:ASP:CB	2.49	0.42
45:6:1188:G:H1	45:6:1197:C:H42	1.66	0.42
45:6:1248:C:H2'	45:6:1249:U:C6	2.55	0.42
45:6:1363:U:H1'	45:6:1364:G:OP1	2.20	0.42
45:6:1535:U:O2'	45:6:1536:G:N3	2.48	0.42
45:6:1664:C:H2'	45:6:1665:U:O4'	2.20	0.42
46:s0:62:ARG:HG2	67:d1:37:ALA:H	1.85	0.42
46:s0:177:LEU:HD23	46:s0:177:LEU:HA	1.88	0.42
51:s5:41:LYS:HZ3	51:s5:67:PRO:C	2.27	0.42
51:s5:205:SER:C	51:s5:207:THR:H	2.27	0.42
55:s9:88:GLU:O	55:s9:91:LYS:HE3	2.20	0.42
55:s9:109:LEU:HD11	55:s9:134:ILE:CD1	2.49	0.42
56:c0:30:ALA:O	56:c0:31:LYS:HB2	2.19	0.42
58:c2:93:ASP:CG	58:c2:94:ALA:H	2.27	0.42
60:c4:99:GLN:NE2	72:d6:44:ILE:O	2.41	0.42
60:c4:103:ARG:HD2	72:d6:49:ALA:HB2	2.02	0.42
61:c5:84:ILE:H	61:c5:84:ILE:HD12	1.84	0.42
66:d0:30:LYS:HE2	66:d0:30:LYS:HB3	1.86	0.42
68:d2:77:PRO:HG2	68:d2:79:PHE:CE2	2.55	0.42
74:d8:40:ILE:HG23	74:d8:62:GLU:HG3	2.02	0.42
1:1:68:C:P	1:1:301:G:H21	2.43	0.42
1:1:385:A:H2'	1:1:386:A:C8	2.55	0.42
1:1:651:G:C6	1:1:652:G:C6	3.08	0.42
1:1:663:C:H2'	1:1:664:U:C6	2.55	0.42
1:1:1591:G:H1'	1:1:1799:A:N1	2.34	0.42
1:1:2808:A:H4'	1:1:2809:C:O5'	2.19	0.42
1:1:3016:A:OP1	80:1:3431:PAR:N64	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:3:77:G:N2	2:3:102:A:OP2	2.35	0.42
8:L6:175:LYS:O	15:M4:117:ARG:NH2	2.53	0.42
9:L7:40:LYS:HB2	9:L7:40:LYS:HE3	1.58	0.42
12:M0:156:ARG:NH1	12:M0:164:LYS:HA	2.34	0.42
13:M1:60:ARG:O	13:M1:63:GLU:HB3	2.20	0.42
16:M5:75:VAL:HA	16:M5:76:PRO:HD3	1.97	0.42
19:M8:159:LYS:HE2	19:M8:159:LYS:HB3	1.72	0.42
20:M9:80:LYS:HD3	20:M9:80:LYS:HA	1.91	0.42
22:N1:19:PHE:C	22:N1:21:LYS:H	2.27	0.42
24:N3:45:ARG:HD2	24:N3:46:LEU:H	1.85	0.42
24:N3:72:LYS:HD2	24:N3:73:VAL:N	2.32	0.42
32:O1:100:SER:OG	32:O1:102:LYS:HB3	2.20	0.42
33:O2:24:ARG:HG2	33:O2:25:TYR:CE1	2.55	0.42
45:2:163:G:H4'	52:S6:53:SER:HB2	2.01	0.42
45:2:397:A:O3'	54:S8:50:GLY:HA2	2.20	0.42
45:2:461:G:H2'	45:2:462:G:H8	1.85	0.42
45:2:635:A:H2'	45:2:636:A:H8	1.84	0.42
45:2:886:U:C2	45:2:887:A:C8	3.07	0.42
45:2:924:A:H2'	45:2:925:G:C8	2.54	0.42
45:2:1634:C:H3'	45:2:1635:A:C5'	2.50	0.42
48:S2:58:LEU:O	67:D1:15:ARG:NE	2.52	0.42
50:S4:100:ARG:HB2	50:S4:114:ILE:HD13	2.01	0.42
52:S6:98:ARG:HD3	52:S6:99:GLY:N	2.34	0.42
54:S8:106:ALA:CB	54:S8:165:LEU:HG	2.50	0.42
57:C1:31:THR:HG22	57:C1:32:LYS:O	2.20	0.42
70:D4:112:LYS:O	70:D4:116:LYS:HG3	2.19	0.42
70:D4:116:LYS:HE2	70:D4:116:LYS:HB3	1.84	0.42
74:D8:64:ARG:HD2	74:D8:64:ARG:HA	1.84	0.42
75:D9:36:LEU:HD11	75:D9:43:PHE:CE2	2.54	0.42
77:SR:218:GLY:HA2	77:SR:240:VAL:HG23	2.02	0.42
1:5:634:C:H2'	1:5:635:G:H8	1.85	0.42
1:5:1657:C:O2'	1:5:1797:A:OP2	2.23	0.42
1:5:1760:A:H2'	1:5:1761:C:H4'	2.00	0.42
1:5:2151:C:O2'	1:5:2243:A:N1	2.50	0.42
80:5:3419:PAR:H641	80:5:3419:PAR:N24	2.35	0.42
80:5:3421:PAR:O41	80:5:3422:PAR:H34	2.19	0.42
6:l4:35:VAL:HG11	6:l4:244:LEU:HD21	2.01	0.42
7:l5:53:VAL:HG11	7:l5:159:VAL:HG23	2.01	0.42
7:l5:107:ARG:NH2	7:l5:116:ASP:O	2.46	0.42
15:m4:55:ARG:HH11	21:n0:70:THR:HB	1.83	0.42
18:m7:64:ASN:O	18:m7:67:ILE:HG12	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:m9:14:VAL:HG11	20:m9:42:ARG:HG2	2.01	0.42
25:n4:102:LYS:HA	25:n4:102:LYS:HD3	1.84	0.42
37:o6:7:ILE:HG12	37:o6:8:ALA:N	2.35	0.42
40:o9:9:ILE:HD12	40:o9:51:ILE:HG22	2.02	0.42
45:6:978:A:O2'	45:6:1787:C:O2	2.36	0.42
45:6:1199:G:C4	75:d9:40:ARG:HD3	2.55	0.42
45:6:1429:G:C1'	66:d0:74:GLU:HG2	2.44	0.42
45:6:1494:C:H2'	45:6:1495:C:H6	1.85	0.42
45:6:1504:G:N3	45:6:1563:C:O2'	2.48	0.42
46:s0:41:ARG:HA	63:c7:105:GLN:OE1	2.20	0.42
48:s2:53:ILE:HG12	48:s2:72:LEU:HB3	2.02	0.42
48:s2:143:TYR:CD1	48:s2:147:ASN:HA	2.55	0.42
51:s5:76:ARG:NH2	62:c6:122:ARG:HG3	2.35	0.42
51:s5:162:VAL:HG23	51:s5:166:ARG:HD3	2.01	0.42
53:s7:129:LEU:HD22	53:s7:169:PHE:CD1	2.54	0.42
54:s8:195:ARG:O	54:s8:199:LYS:N	2.52	0.42
56:c0:44:LYS:O	56:c0:48:SER:HB3	2.19	0.42
57:c1:128:CYS:O	57:c1:128:CYS:SG	2.77	0.42
59:c3:89:TYR:CE1	59:c3:93:LYS:HD2	2.54	0.42
59:c3:111:ALA:O	59:c3:115:LEU:N	2.43	0.42
62:c6:79:TYR:O	62:c6:115:THR:HG21	2.20	0.42
72:d6:28:LYS:HD3	72:d6:29:SER:O	2.20	0.42
1:1:276:U:O2	16:M5:93:LYS:HE3	2.19	0.42
1:1:592:A:H5'	8:L6:17:ALA:O	2.19	0.42
1:1:626:U:H2'	1:1:627:U:O4'	2.20	0.42
1:1:1089:G:H2'	1:1:1090:G:C8	2.55	0.42
1:1:1524:A:O2'	1:1:1526:U:OP2	2.34	0.42
1:1:2529:A:H2'	1:1:2530:G:O4'	2.20	0.42
1:1:3209:A:OP2	21:N0:161:LYS:HD2	2.19	0.42
1:1:3225:C:H2'	1:1:3226:A:C8	2.55	0.42
1:1:3354:U:H5'	1:1:3355:U:OP1	2.20	0.42
80:1:3412:PAR:H51	80:1:3412:PAR:N32	2.34	0.42
3:4:143:U:H2'	3:4:144:G:O4'	2.19	0.42
5:L3:334:ARG:O	5:L3:336:VAL:HG23	2.20	0.42
8:L6:170:LYS:O	8:L6:173:MET:N	2.50	0.42
11:L9:132:VAL:HG23	11:L9:154:VAL:HG22	2.01	0.42
17:M6:14:HIS:CE1	17:M6:119:VAL:HG22	2.54	0.42
17:M6:124:LEU:HD12	17:M6:124:LEU:HA	1.93	0.42
19:M8:123:THR:OG1	19:M8:125:ASP:OD2	2.24	0.42
22:N1:79:MET:O	22:N1:79:MET:HG3	2.20	0.42
30:N9:16:ALA:HB1	30:N9:21:ILE:HD11	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:O8:8:ILE:H	39:O8:8:ILE:HD12	1.84	0.42
45:2:64:U:H1'	45:2:168:A:H2	1.84	0.42
45:2:171:A:H2'	45:2:172:C:H5'	2.02	0.42
45:2:385:A:OP1	54:S8:25:ARG:NH1	2.50	0.42
45:2:556:A:H1'	45:2:590:C:H1'	2.02	0.42
45:2:926:A:H2'	45:2:927:C:H6	1.85	0.42
45:2:1252:C:H2'	45:2:1253:U:O4'	2.20	0.42
45:2:1755:A:OP1	69:D3:63:GLN:HG2	2.20	0.42
46:S0:2:SER:O	46:S0:2:SER:OG	2.36	0.42
46:S0:71:GLU:O	46:S0:96:THR:HG22	2.18	0.42
46:S0:198:MET:SD	63:C7:88:VAL:HG13	2.60	0.42
48:S2:54:GLU:CG	67:D1:12:TYR:HB2	2.49	0.42
48:S2:125:ILE:H	48:S2:125:ILE:HG13	1.64	0.42
50:S4:114:ILE:HB	50:S4:118:GLU:OE2	2.19	0.42
50:S4:118:GLU:HG3	50:S4:121:TYR:CZ	2.55	0.42
50:S4:185:GLY:H	50:S4:189:LEU:HB2	1.85	0.42
52:S6:178:LEU:O	52:S6:183:ARG:NH1	2.50	0.42
59:C3:67:THR:HG22	59:C3:68:GLY:N	2.34	0.42
61:C5:56:PHE:CZ	61:C5:60:LEU:HD21	2.55	0.42
62:C6:55:VAL:HG11	62:C6:89:LEU:HD21	2.01	0.42
63:C7:15:ALA:O	63:C7:19:ARG:HG2	2.20	0.42
69:D3:127:VAL:O	69:D3:130:VAL:N	2.53	0.42
78:SM:127:ALA:HA	78:SM:130:GLU:HB2	2.01	0.42
1:5:61:A:H2'	1:5:62:A:O4'	2.19	0.42
1:5:412:G:H5'	18:m7:26:PHE:HZ	1.84	0.42
1:5:874:U:H5''	1:5:2950:G:OP1	2.19	0.42
1:5:942:U:N3	29:n8:16:SER:HA	2.35	0.42
1:5:1046:A:O2'	1:5:1048:A:OP2	2.21	0.42
1:5:1074:U:O3'	1:5:1075:A:H8	2.03	0.42
1:5:1944:U:H2'	1:5:1945:A:H8	1.85	0.42
1:5:2221:G:N2	1:5:2224:A:OP2	2.44	0.42
1:5:2656:A:H4'	43:q2:98:LYS:HE3	2.01	0.42
8:l6:68:PRO:HB2	8:l6:142:ASP:OD2	2.20	0.42
10:l8:139:VAL:O	10:l8:143:ILE:HG13	2.19	0.42
11:l9:7:GLU:C	11:l9:8:GLN:HG2	2.44	0.42
13:m1:11:ASP:O	13:m1:12:LEU:HB2	2.20	0.42
14:m3:57:VAL:HG22	14:m3:147:ILE:HD13	2.02	0.42
17:m6:85:ARG:HD3	17:m6:90:HIS:CE1	2.55	0.42
19:m8:99:THR:HB	19:m8:100:THR:H	1.60	0.42
21:n0:13:ARG:HG3	21:n0:14:LEU:N	2.35	0.42
30:n9:14:ARG:HH12	30:n9:18:ARG:HH11	1.68	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:o2:13:HIS:HB2	33:o2:57:TYR:CD1	2.55	0.42
43:q2:71:ARG:HH21	43:q2:80:ARG:HD3	1.83	0.42
45:6:112:A:H62	80:6:1902:PAR:H12	1.85	0.42
45:6:323:A:OP2	54:s8:10:LYS:HG3	2.19	0.42
45:6:478:A:OP1	76:e0:37:ARG:NH1	2.50	0.42
45:6:1725:U:H2'	45:6:1726:G:O4'	2.19	0.42
47:s1:113:MET:HE3	47:s1:209:ASN:HB3	2.00	0.42
79:s6:27:PHE:HE1	79:s6:36:VAL:HG21	1.84	0.42
53:s7:89:HIS:CG	53:s7:165:LYS:HG2	2.54	0.42
54:s8:62:THR:HG22	54:s8:77:ARG:HA	2.01	0.42
54:s8:76:THR:HB	54:s8:105:ASP:HB3	2.02	0.42
54:s8:121:LEU:HD12	54:s8:121:LEU:HA	1.90	0.42
60:c4:50:ALA:HB3	60:c4:53:ASP:H	1.82	0.42
63:c7:3:ARG:HD3	63:c7:3:ARG:HA	1.90	0.42
64:c8:41:ARG:HA	64:c8:44:ASN:HB3	2.02	0.42
64:c8:99:HIS:HD2	64:c8:101:LEU:HD21	1.85	0.42
66:d0:44:ASN:HB2	66:d0:103:ILE:HD11	2.01	0.42
67:d1:73:ALA:HB1	67:d1:78:LEU:HB2	2.02	0.42
71:d5:75:LEU:O	71:d5:79:ALA:N	2.48	0.42
1:1:31:C:H4'	16:M5:96:ARG:HD3	2.02	0.42
1:1:899:U:C4	80:1:3435:PAR:O44	2.73	0.42
1:1:926:A:H2'	1:1:927:C:C6	2.55	0.42
1:1:1317:A:O2'	1:1:1318:A:H3'	2.20	0.42
1:1:2347:U:H2'	1:1:2348:A:O4'	2.19	0.42
1:1:2852:C:O2	12:M0:67:ALA:HB1	2.20	0.42
1:1:3045:G:H2'	1:1:3046:A:O4'	2.20	0.42
1:1:3173:G:C2	34:O3:96:ALA:HB2	2.55	0.42
80:1:3413:PAR:H43	80:1:3413:PAR:H241	1.84	0.42
3:4:59:A:H5''	3:4:61:A:C8	2.55	0.42
6:L4:35:VAL:HG21	6:L4:244:LEU:HD21	2.02	0.42
7:L5:259:LYS:HB3	7:L5:259:LYS:HE3	1.60	0.42
9:L7:144:ILE:HG22	9:L7:185:ILE:HG23	2.01	0.42
15:M4:53:VAL:HA	15:M4:54:PRO:HD3	1.93	0.42
16:M5:74:PRO:O	16:M5:75:VAL:C	2.62	0.42
18:M7:4:TYR:CE1	18:M7:16:SER:HB2	2.54	0.42
21:N0:66:GLU:OE2	21:N0:73:LYS:HE3	2.20	0.42
24:N3:15:LEU:HD13	24:N3:51:ALA:HB3	2.01	0.42
24:N3:135:VAL:HG21	25:N4:26:SER:HB3	2.01	0.42
28:N7:27:LYS:HB3	28:N7:42:LEU:HD22	2.02	0.42
36:O5:62:GLN:N	36:O5:62:GLN:OE1	2.53	0.42
38:O7:31:LYS:O	38:O7:33:THR:HG22	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:476:U:H5''	45:2:477:A:O4'	2.20	0.42
45:2:951:A:C2	45:2:952:A:C8	3.07	0.42
45:2:1051:G:HO2'	45:2:1052:U:P	2.40	0.42
45:2:1156:C:H2'	45:2:1157:A:H5'	2.01	0.42
45:2:1198:G:H4'	66:D0:72:ASN:O	2.20	0.42
45:2:1435:G:H4'	45:2:1436:A:H5'	2.02	0.42
45:2:1461:C:H2'	45:2:1462:G:C8	2.52	0.42
45:2:1586:A:H2'	45:2:1587:A:O4'	2.20	0.42
45:2:1615:C:H4'	45:2:1616:G:O5'	2.20	0.42
46:S0:71:GLU:HA	46:S0:94:GLY:O	2.19	0.42
49:S3:56:GLN:H	49:S3:90:ARG:HH11	1.68	0.42
50:S4:36:HIS:CG	50:S4:85:GLY:HA3	2.55	0.42
51:S5:82:PHE:CZ	74:D8:49:ARG:HB3	2.53	0.42
52:S6:1:MET:HE2	52:S6:1:MET:HB3	1.80	0.42
53:S7:39:ARG:N	53:S7:40:PRO:HD2	2.35	0.42
53:S7:129:LEU:HD13	53:S7:169:PHE:HB3	2.02	0.42
55:S9:20:GLU:H	55:S9:23:ARG:HH21	1.67	0.42
56:C0:52:LYS:H	56:C0:52:LYS:HG2	1.63	0.42
57:C1:22:ASN:HA	57:C1:23:PRO:HD3	1.91	0.42
58:C2:126:TRP:O	58:C2:126:TRP:CD1	2.73	0.42
61:C5:87:PRO:HA	61:C5:90:ILE:HG13	2.00	0.42
64:C8:28:ILE:HG13	64:C8:58:ALA:HA	2.02	0.42
65:C9:49:ASP:HB3	65:C9:53:TRP:HD1	1.84	0.42
70:D4:33:ALA:C	70:D4:34:ASN:ND2	2.78	0.42
71:D5:38:HIS:NE2	71:D5:71:ILE:O	2.53	0.42
73:D7:17:ARG:H	73:D7:17:ARG:HG2	1.73	0.42
1:5:29:C:H2'	1:5:30:G:O4'	2.20	0.42
1:5:51:A:H2'	1:5:52:A:H8	1.84	0.42
1:5:92:G:O5'	43:q2:46:LYS:NZ	2.53	0.42
1:5:170:G:H2'	1:5:170:G:N3	2.34	0.42
1:5:683:U:H2'	1:5:684:G:O4'	2.20	0.42
1:5:907:G:O2'	1:5:926:A:N7	2.49	0.42
1:5:916:G:H4'	1:5:917:A:O5'	2.20	0.42
1:5:993:G:C5	1:5:2637:A:C2	3.08	0.42
1:5:1526:U:H5'	1:5:1594:A:C6	2.55	0.42
1:5:2207:A:H2'	1:5:2208:A:O4'	2.20	0.42
1:5:2626:A:OP1	22:n1:2:GLY:N	2.52	0.42
1:5:3182:G:H2'	1:5:3183:A:O4'	2.19	0.42
1:5:3233:C:H2'	1:5:3234:A:H8	1.83	0.42
1:5:3285:C:H5'	1:5:3286:G:OP2	2.20	0.42
80:5:3404:PAR:H11	80:5:3404:PAR:H611	1.77	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:7:7:G:OP1	7:l5:33:ARG:HD2	2.20	0.42
6:l4:122:THR:HG22	6:l4:235:LEU:HB2	2.02	0.42
6:l4:280:ILE:HD11	19:m8:25:TYR:HB2	2.01	0.42
6:l4:316:ASN:O	6:l4:318:LEU:N	2.53	0.42
10:l8:78:PHE:HD2	10:l8:155:ASN:HA	1.85	0.42
15:m4:13:ARG:H	15:m4:13:ARG:HG2	1.62	0.42
18:m7:30:ARG:HD3	18:m7:30:ARG:C	2.45	0.42
19:m8:100:THR:CG2	19:m8:120:GLU:HB2	2.50	0.42
20:m9:10:LEU:HB3	20:m9:41:ILE:HG13	2.00	0.42
20:m9:17:VAL:HG22	20:m9:18:GLY:H	1.85	0.42
20:m9:77:GLY:O	20:m9:81:ARG:HG3	2.20	0.42
22:n1:12:ARG:O	22:n1:16:GLN:HG3	2.20	0.42
26:n5:71:THR:OG1	26:n5:72:ALA:N	2.52	0.42
26:n5:106:ASP:HB2	26:n5:130:TYR:HE1	1.85	0.42
28:n7:4:PHE:HE2	31:o0:35:ARG:HA	1.85	0.42
28:n7:53:VAL:HB	28:n7:57:HIS:HD2	1.84	0.42
29:n8:130:VAL:HG11	29:n8:145:VAL:HG11	2.02	0.42
30:n9:23:LYS:HA	30:n9:23:LYS:HD2	1.46	0.42
31:o0:14:LEU:O	31:o0:18:ILE:HD13	2.19	0.42
34:o3:103:TYR:HA	34:o3:104:PRO:C	2.45	0.42
36:o5:29:ALA:HA	36:o5:32:LYS:HE2	2.02	0.42
36:o5:85:THR:HG22	36:o5:87:ALA:N	2.34	0.42
37:o6:60:LEU:HG	37:o6:68:ARG:HH21	1.85	0.42
41:q0:127:LEU:CD2	41:q0:128:LYS:H	2.29	0.42
45:6:109:G:H1	45:6:305:C:H42	1.68	0.42
45:6:307:G:OP1	57:c1:90:TYR:OH	2.30	0.42
45:6:765:G:C6	55:s9:149:ARG:CZ	3.02	0.42
45:6:948:G:C6	45:6:949:C:C4	3.08	0.42
45:6:1039:A:O2'	45:6:1040:G:O5'	2.36	0.42
45:6:1790:A:O2'	45:6:1791:A:H5'	2.19	0.42
47:s1:214:LYS:HE2	47:s1:214:LYS:HB3	1.82	0.42
51:s5:43:PHE:O	51:s5:44:ASN:C	2.63	0.42
51:s5:210:ALA:O	51:s5:214:LYS:HB2	2.19	0.42
54:s8:46:VAL:CG2	54:s8:56:ARG:HG2	2.50	0.42
60:c4:133:ARG:HB3	60:c4:136:ARG:NH2	2.34	0.42
62:c6:36:ILE:HG23	62:c6:49:TYR:HE1	1.85	0.42
64:c8:122:HIS:NE2	64:c8:126:ARG:HD3	2.35	0.42
66:d0:28:SER:HB2	66:d0:112:VAL:HA	2.01	0.42
1:1:61:A:H2'	1:1:62:A:O4'	2.20	0.41
1:1:2108:C:H1'	1:1:3344:A:H8	1.78	0.41
1:1:2375:G:N2	1:1:2377:G:C8	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2623:G:H2'	1:1:2624:G:H8	1.85	0.41
1:1:2821:C:C4	1:1:2822:U:C5	3.07	0.41
1:1:2961:G:C6	1:1:2962:U:C4	3.08	0.41
1:1:3336:A:H3'	1:1:3337:G:C8	2.55	0.41
83:1:4419:HOH:O	19:M8:2:GLY:HA2	2.19	0.41
3:4:77:A:H2'	3:4:78:G:O4'	2.19	0.41
7:L5:48:LYS:HG3	7:L5:145:PHE:HE2	1.85	0.41
11:L9:103:ILE:HG12	11:L9:136:PHE:CE2	2.54	0.41
15:M4:100:ALA:HA	15:M4:103:ILE:HD12	2.02	0.41
19:M8:138:LEU:HD22	19:M8:140:LEU:HD22	2.02	0.41
22:N1:73:GLY:HA2	22:N1:89:LEU:O	2.20	0.41
25:N4:23:ARG:NH2	25:N4:25:ASP:OD2	2.53	0.41
27:N6:35:LEU:HD23	27:N6:35:LEU:HA	1.89	0.41
27:N6:63:LYS:HD2	27:N6:63:LYS:HA	1.87	0.41
32:O1:71:LEU:HA	32:O1:71:LEU:HD23	1.74	0.41
33:O2:96:ILE:HD13	33:O2:105:ARG:HG2	2.02	0.41
42:Q1:10:THR:O	42:Q1:14:LYS:HG3	2.20	0.41
43:Q2:24:LYS:O	43:Q2:72:LEU:HA	2.20	0.41
45:2:346:G:H5'	57:C1:79:LYS:HB3	2.01	0.41
45:2:800:U:H2'	45:2:801:G:C8	2.55	0.41
45:2:1196:A:H4'	45:2:1197:C:H5''	2.02	0.41
46:S0:162:CYS:SG	46:S0:163:ASN:N	2.93	0.41
47:S1:59:ASP:OD1	47:S1:60:ALA:N	2.53	0.41
47:S1:61:LEU:HD13	47:S1:61:LEU:N	2.35	0.41
47:S1:135:LEU:HA	47:S1:218:LEU:HD13	2.00	0.41
50:S4:164:LEU:O	50:S4:164:LEU:HD13	2.20	0.41
51:S5:102:ARG:H	51:S5:102:ARG:HG3	1.42	0.41
51:S5:165:LEU:HD23	74:D8:47:PRO:HB2	2.02	0.41
63:C7:105:GLN:HA	63:C7:108:ASP:OD1	2.19	0.41
64:C8:33:THR:HA	64:C8:38:VAL:HG12	2.00	0.41
64:C8:69:ILE:H	64:C8:69:ILE:HG13	1.58	0.41
65:C9:54:PHE:HA	65:C9:57:ARG:HB3	2.02	0.41
71:D5:46:LYS:O	71:D5:50:ILE:HG13	2.20	0.41
71:D5:71:ILE:CG2	71:D5:75:LEU:HB2	2.50	0.41
71:D5:83:LEU:HA	71:D5:83:LEU:HD23	1.77	0.41
74:D8:27:GLN:HG2	74:D8:43:ASN:OD1	2.21	0.41
74:D8:42:ARG:NH1	74:D8:61:ARG:O	2.52	0.41
1:5:501:A:O3'	8:l6:28:GLN:HG3	2.20	0.41
1:5:537:A:H2'	1:5:538:G:O4'	2.20	0.41
1:5:538:G:N1	1:5:554:A:H1'	2.35	0.41
1:5:619:A:OP1	1:5:621:A:O2'	2.38	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:965:A:H1'	29:n8:40:HIS:O	2.20	0.41
1:5:988:U:H2'	1:5:989:A:H8	1.85	0.41
1:5:1646:G:N3	1:5:1808:G:C2	2.88	0.41
1:5:2554:A:N7	44:q3:62:LYS:HD3	2.35	0.41
1:5:2863:G:OP1	80:5:3409:PAR:H612	2.20	0.41
1:5:3225:C:H2'	1:5:3226:A:O4'	2.20	0.41
1:5:3261:C:O2'	1:5:3262:U:H5'	2.20	0.41
3:8:79:A:H3'	3:8:80:A:N3	2.35	0.41
6:l4:203:ARG:HB3	6:l4:246:ARG:HH12	1.84	0.41
7:l5:200:PHE:O	7:l5:240:TYR:HD2	2.02	0.41
11:l9:103:ILE:HD11	11:l9:134:ILE:HB	2.02	0.41
19:m8:46:LYS:O	19:m8:50:LYS:HG3	2.20	0.41
21:n0:48:LEU:HD23	21:n0:48:LEU:HA	1.77	0.41
21:n0:90:MET:HE1	21:n0:114:HIS:NE2	2.35	0.41
22:n1:68:THR:HG22	22:n1:71:SER:O	2.20	0.41
25:n4:123:ARG:O	25:n4:127:LYS:HB2	2.20	0.41
26:n5:101:GLU:HG2	26:n5:102:LEU:HD23	2.02	0.41
32:o1:44:MET:HB3	32:o1:77:ARG:CZ	2.49	0.41
35:o4:46:ASP:OD2	35:o4:80:ARG:HD2	2.21	0.41
36:o5:4:VAL:HG13	36:o5:5:LYS:N	2.33	0.41
36:o5:7:TYR:CE2	36:o5:8:GLU:HG3	2.55	0.41
45:6:512:A:OP2	55:s9:172:VAL:HB	2.20	0.41
45:6:587:C:H2'	45:6:588:U:O4'	2.20	0.41
45:6:773:C:OP1	50:s4:22:LYS:N	2.53	0.41
45:6:1211:A:H2'	45:6:1212:G:O4'	2.20	0.41
45:6:1668:G:C6	45:6:1669:U:C4	3.08	0.41
45:6:1725:U:C2	45:6:1726:G:C8	3.08	0.41
46:s0:117:GLU:CD	48:s2:40:LYS:H	2.28	0.41
49:s3:113:LEU:HD23	49:s3:113:LEU:HA	1.88	0.41
50:s4:42:LEU:HD23	50:s4:42:LEU:HA	1.87	0.41
50:s4:129:VAL:HB	50:s4:139:VAL:HG23	2.01	0.41
51:s5:141:GLY:O	51:s5:167:ARG:NH1	2.53	0.41
79:s6:49:VAL:HB	79:s6:115:LYS:HG2	2.02	0.41
54:s8:100:ALA:HB3	54:s8:169:ILE:HG12	2.02	0.41
56:c0:27:PHE:HB3	56:c0:40:LEU:HD23	2.01	0.41
57:c1:76:VAL:HG13	57:c1:85:VAL:HB	2.01	0.41
59:c3:70:LYS:O	59:c3:74:ILE:N	2.52	0.41
68:d2:53:ILE:HG21	73:d7:24:LEU:HD21	2.02	0.41
77:sR:50:ASP:CG	77:sR:51:ASP:H	2.28	0.41
1:1:210:U:C2	1:1:230:U:H4'	2.55	0.41
1:1:274:G:H2'	1:1:275:U:O4'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:420:G:N2	1:1:2385:G:OP2	2.53	0.41
1:1:597:G:C2	1:1:608:A:H1'	2.55	0.41
1:1:658:G:H21	6:L4:93:MET:HB2	1.83	0.41
1:1:1003:A:H1'	7:L5:15:ARG:NH2	2.36	0.41
1:1:1648:A:H2'	1:1:1649:U:O4'	2.20	0.41
1:1:1821:U:C2	35:O4:67:LYS:HB2	2.56	0.41
1:1:2131:A:H61	44:Q3:18:TYR:HA	1.84	0.41
1:1:2874:G:O6	1:1:2945:G:H2'	2.19	0.41
1:1:3082:C:H2'	1:1:3083:G:H8	1.85	0.41
3:4:103:G:H4'	38:O7:21:ARG:HG2	2.01	0.41
6:L4:3:ARG:HE	6:L4:22:LEU:HB3	1.84	0.41
6:L4:266:THR:OG1	6:L4:267:VAL:HG13	2.20	0.41
11:L9:20:ILE:HG21	11:L9:45:PHE:CD2	2.55	0.41
14:M3:129:ASN:HB2	14:M3:131:LYS:CE	2.50	0.41
15:M4:99:TRP:O	15:M4:103:ILE:HG13	2.21	0.41
19:M8:125:ASP:O	19:M8:129:VAL:HG23	2.20	0.41
20:M9:35:ALA:HB1	20:M9:41:ILE:HD12	2.01	0.41
20:M9:170:ARG:O	20:M9:174:ALA:HB2	2.21	0.41
23:N2:54:VAL:HA	23:N2:66:VAL:O	2.20	0.41
26:N5:58:ASP:O	26:N5:62:VAL:HG23	2.19	0.41
28:N7:26:VAL:HG12	28:N7:27:LYS:N	2.35	0.41
39:O8:27:ILE:HG22	39:O8:28:ASN:H	1.86	0.41
45:2:130:C:H2'	45:2:131:C:N3	2.35	0.41
45:2:323:A:OP2	54:S8:10:LYS:HG3	2.21	0.41
45:2:976:G:C6	45:2:1023:A:C4	3.08	0.41
45:2:1091:A:H4'	45:2:1092:A:O4'	2.19	0.41
45:2:1117:U:H2'	45:2:1118:G:C8	2.54	0.41
45:2:1371:A:C2	45:2:1373:C:H5''	2.55	0.41
45:2:1383:G:OP1	66:D0:87:HIS:ND1	2.53	0.41
49:S3:44:THR:HB	49:S3:45:LYS:H	1.68	0.41
49:S3:69:LEU:O	49:S3:73:VAL:HG23	2.21	0.41
50:S4:11:ARG:NH1	50:S4:20:LEU:HB3	2.34	0.41
50:S4:108:ARG:H	50:S4:108:ARG:HG3	1.71	0.41
50:S4:129:VAL:HG23	50:S4:138:TYR:O	2.20	0.41
50:S4:192:ILE:HD12	50:S4:243:GLY:HA3	2.03	0.41
51:S5:46:TRP:CD1	51:S5:129:PRO:HD2	2.55	0.41
51:S5:120:ILE:HG12	71:D5:100:ILE:CD1	2.49	0.41
51:S5:123:VAL:HG13	71:D5:102:THR:HG22	2.02	0.41
53:S7:91:ILE:HD12	53:S7:91:ILE:HA	1.86	0.41
59:C3:22:ALA:HB1	59:C3:23:PRO:CA	2.50	0.41
61:C5:17:TYR:CD1	61:C5:18:ARG:HG3	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:C6:27:GLY:HA2	62:C6:63:ILE:O	2.20	0.41
62:C6:45:ARG:O	62:C6:48:VAL:HG12	2.20	0.41
62:C6:93:HIS:CB	62:C6:102:LYS:HB2	2.50	0.41
63:C7:20:TYR:CD1	63:C7:38:ILE:HD11	2.55	0.41
65:C9:117:SER:OG	65:C9:120:GLY:O	2.38	0.41
68:D2:88:LYS:HB3	68:D2:88:LYS:HE3	1.84	0.41
69:D3:79:ASN:ND2	69:D3:81:LYS:HG3	2.35	0.41
69:D3:144:ARG:H	69:D3:144:ARG:HG2	1.64	0.41
74:D8:5:THR:OG1	74:D8:7:VAL:HG23	2.20	0.41
77:SR:33:LEU:O	77:SR:45:TRP:HD1	2.02	0.41
1:5:60:A:C6	1:5:61:A:C5	3.09	0.41
1:5:176:G:C2	1:5:243:G:C2	3.08	0.41
1:5:633:C:H2'	1:5:634:C:O4'	2.20	0.41
1:5:794:U:O4	80:5:3424:PAR:N12	2.53	0.41
1:5:796:U:H2'	1:5:797:U:C6	2.56	0.41
1:5:1525:G:C6	1:5:1526:U:C4	3.08	0.41
1:5:1765:U:H5''	20:m9:43:LYS:HG3	2.02	0.41
1:5:1778:G:P	80:5:3403:PAR:H242	2.43	0.41
1:5:1942:U:OP2	20:m9:74:ARG:NH1	2.53	0.41
1:5:2181:C:OP1	4:l2:193:ARG:NH2	2.50	0.41
1:5:2181:C:H2'	1:5:2182:A:O4'	2.21	0.41
1:5:2263:C:O5'	1:5:2263:C:H6	2.03	0.41
1:5:2404:A:HO2'	1:5:2405:C:P	2.42	0.41
1:5:2584:G:H5'	1:5:2585:G:OP2	2.20	0.41
1:5:2632:G:C6	1:5:2633:U:C4	3.08	0.41
1:5:3371:G:OP1	5:l3:384:LYS:NZ	2.43	0.41
1:5:3384:U:H2'	1:5:3385:U:C6	2.54	0.41
2:7:41:G:N3	2:7:44:C:N4	2.68	0.41
4:l2:61:VAL:HG21	4:l2:76:PHE:CD2	2.56	0.41
4:l2:132:ASN:O	4:l2:169:ILE:HD12	2.20	0.41
6:l4:206:LEU:HB2	6:l4:246:ARG:NE	2.35	0.41
6:l4:259:ASP:OD1	6:l4:259:ASP:N	2.52	0.41
7:l5:268:GLU:HG3	7:l5:269:SER:N	2.35	0.41
10:l8:101:THR:H	10:l8:104:GLU:HB2	1.85	0.41
11:l9:31:ARG:NH2	11:l9:84:LYS:O	2.52	0.41
13:m1:78:GLU:HA	13:m1:81:GLU:HB3	2.01	0.41
14:m3:54:LEU:HD12	14:m3:75:PHE:HZ	1.83	0.41
26:n5:46:TYR:O	26:n5:46:TYR:CD1	2.73	0.41
26:n5:63:ILE:HD11	26:n5:84:PHE:CD1	2.55	0.41
27:n6:5:SER:HB3	27:n6:8:VAL:CG1	2.49	0.41
31:o0:75:ASN:HA	31:o0:86:ARG:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:o6:60:LEU:CG	37:o6:68:ARG:HH21	2.33	0.41
37:o6:89:GLU:O	37:o6:93:ILE:HG13	2.20	0.41
45:6:102:U:O4	45:6:360:A:H2'	2.20	0.41
45:6:302:U:H5	80:6:1902:PAR:H612	1.85	0.41
45:6:888:U:H1'	60:c4:126:THR:HG21	2.02	0.41
45:6:1106:U:H2'	45:6:1107:G:C8	2.51	0.41
45:6:1229:G:C6	58:c2:44:GLY:HA3	2.55	0.41
45:6:1288:G:N7	45:6:1314:U:O2'	2.50	0.41
45:6:1545:A:N7	64:c8:134:ARG:NH1	2.68	0.41
45:6:1712:A:H3'	45:6:1713:G:H8	1.84	0.41
46:s0:32:HIS:CE1	67:d1:63:GLY:HA3	2.55	0.41
46:s0:175:TYR:HE1	46:s0:197:ILE:HG22	1.85	0.41
47:s1:88:VAL:HG22	47:s1:98:THR:HG22	2.01	0.41
50:s4:11:ARG:NH1	50:s4:20:LEU:HB3	2.35	0.41
50:s4:106:LYS:HB2	50:s4:108:ARG:CZ	2.51	0.41
64:c8:6:GLN:NE2	71:d5:47:TYR:HB2	2.36	0.41
67:d1:3:ASN:CG	67:d1:4:ASP:N	2.78	0.41
70:d4:110:GLN:O	70:d4:114:ARG:HD3	2.20	0.41
76:e0:51:ASN:O	76:e0:51:ASN:CG	2.63	0.41
77:sR:282:SER:HB2	77:sR:285:ALA:HB3	2.02	0.41
78:sM:48:ARG:HE	78:sM:50:ASN:HB2	1.85	0.41
1:1:38:U:H4'	29:N8:32:ARG:HD2	2.02	0.41
1:1:420:G:O2'	1:1:2384:A:N3	2.50	0.41
1:1:434:U:H2'	1:1:435:C:C6	2.55	0.41
1:1:533:A:O2'	1:1:534:U:H3'	2.20	0.41
1:1:595:G:C8	1:1:609:G:C6	3.09	0.41
1:1:631:U:H2'	1:1:632:G:H8	1.85	0.41
1:1:1079:A:O4'	7:L5:142:PHE:HA	2.20	0.41
1:1:1481:A:H2'	1:1:1858:A:H1'	2.01	0.41
1:1:2341:A:OP2	5:L3:247:ARG:NH2	2.53	0.41
1:1:2741:C:H4'	43:Q2:19:LYS:HA	2.01	0.41
1:1:3034:C:H2'	1:1:3035:A:H8	1.85	0.41
1:1:3091:A:N3	1:1:3093:C:O2'	2.47	0.41
1:1:3181:C:H2'	1:1:3182:G:O4'	2.19	0.41
4:L2:179:LEU:O	4:L2:184:ARG:HD2	2.20	0.41
4:L2:242:ARG:NH1	4:L2:246:LEU:HG	2.35	0.41
6:L4:8:VAL:HG12	6:L4:9:HIS:N	2.34	0.41
6:L4:38:VAL:O	6:L4:42:VAL:HG23	2.21	0.41
11:L9:105:GLU:HG3	11:L9:109:ALA:H	1.85	0.41
12:M0:102:MET:O	12:M0:103:LEU:HD22	2.20	0.41
12:M0:206:LEU:O	12:M0:210:ILE:N	2.47	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M1:37:LEU:HB3	13:M1:69:VAL:HG11	2.02	0.41
14:M3:57:VAL:HG23	14:M3:115:ARG:HD2	2.02	0.41
17:M6:8:VAL:HG22	17:M6:34:VAL:CG1	2.51	0.41
18:M7:94:LEU:HB3	18:M7:148:LEU:HD21	2.03	0.41
24:N3:40:LYS:HE2	24:N3:59:MET:HE2	2.01	0.41
25:N4:38:SER:O	25:N4:42:GLN:HG3	2.19	0.41
28:N7:36:HIS:HA	28:N7:38:PHE:CE1	2.55	0.41
29:N8:116:GLY:HA3	29:N8:137:LYS:NZ	2.35	0.41
31:O0:30:THR:O	31:O0:34:LEU:HB2	2.20	0.41
32:O1:19:ARG:HD3	32:O1:35:GLU:HG3	2.02	0.41
35:O4:19:LYS:HD3	35:O4:19:LYS:HA	1.89	0.41
43:Q2:47:GLN:HE22	43:Q2:53:GLN:HA	1.85	0.41
45:2:45:U:H3	45:2:434:G:H1'	1.85	0.41
45:2:86:A:H4'	45:2:148:A:H4'	2.02	0.41
45:2:567:A:N1	45:2:583:C:H1'	2.35	0.41
45:2:613:G:H4'	45:2:614:C:OP1	2.20	0.41
45:2:1089:U:P	72:D6:89:ARG:HH21	2.42	0.41
45:2:1648:A:H2'	45:2:1649:G:C8	2.49	0.41
47:S1:134:VAL:HG12	47:S1:218:LEU:HD22	2.02	0.41
48:S2:49:LYS:HB3	48:S2:243:TYR:CE1	2.56	0.41
50:S4:139:VAL:O	50:S4:146:THR:HA	2.20	0.41
52:S6:7:TYR:HD1	52:S6:124:LEU:O	2.03	0.41
55:S9:20:GLU:HB2	55:S9:23:ARG:HB3	2.03	0.41
57:C1:99:ARG:HB3	69:D3:9:LEU:O	2.20	0.41
59:C3:54:LEU:HD13	59:C3:60:VAL:HG21	2.02	0.41
63:C7:53:TYR:O	63:C7:57:LEU:HG	2.19	0.41
63:C7:58:MET:HA	63:C7:61:ILE:HD12	2.02	0.41
64:C8:67:GLU:HG2	78:SM:9:GLY:HA2	2.03	0.41
68:D2:70:ASN:HB2	68:D2:130:TYR:CD2	2.56	0.41
70:D4:60:PHE:HA	70:D4:70:VAL:O	2.20	0.41
75:D9:21:CYS:HA	75:D9:30:LEU:HD21	2.02	0.41
77:SR:87:LYS:HE3	77:SR:107:LYS:C	2.45	0.41
77:SR:273:ASP:CG	77:SR:275:ARG:HH22	2.28	0.41
1:5:20:A:N6	1:5:21:G:O6	2.53	0.41
1:5:76:G:N2	1:5:315:C:H5'	2.34	0.41
1:5:747:A:H4'	30:n9:27:TYR:CE2	2.55	0.41
1:5:979:U:H6	1:5:979:U:H2'	1.70	0.41
1:5:1101:G:OP2	9:17:196:LYS:NZ	2.53	0.41
1:5:1225:A:H3'	1:5:1226:G:H8	1.85	0.41
1:5:1767:C:H2'	1:5:1768:U:C6	2.55	0.41
1:5:1944:U:H2'	1:5:1945:A:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:2651:G:C2	1:5:2796:G:C4	3.08	0.41
9:17:175:LYS:HE3	9:17:176:TYR:CZ	2.55	0.41
10:18:82:LEU:HD12	10:18:82:LEU:HA	1.88	0.41
13:m1:112:LEU:O	13:m1:112:LEU:HD22	2.19	0.41
16:m5:88:GLY:HA3	43:q2:50:PHE:CE2	2.54	0.41
21:n0:74:ASN:HD21	21:n0:144:LEU:HD21	1.85	0.41
26:n5:63:ILE:HD13	26:n5:103:TYR:CE2	2.55	0.41
28:n7:3:LYS:HE3	28:n7:5:LEU:O	2.20	0.41
29:n8:9:ARG:HE	29:n8:9:ARG:HB3	1.54	0.41
32:o1:50:ARG:HD3	32:o1:90:PHE:CZ	2.56	0.41
45:6:333:A:C8	54:s8:49:ARG:HG2	2.56	0.41
45:6:362:G:N7	83:6:2117:HOH:O	2.36	0.41
45:6:448:C:OP2	50:s4:49:ARG:NH1	2.53	0.41
45:6:471:A:O3'	55:s9:10:LYS:HA	2.20	0.41
45:6:533:U:H4'	70:d4:33:ALA:HB2	2.02	0.41
45:6:1157:A:O2'	45:6:1159:C:OP1	2.26	0.41
47:s1:124:ASN:HB3	47:s1:138:PHE:CD1	2.55	0.41
48:s2:225:LEU:HD22	68:d2:68:ARG:HA	2.01	0.41
50:s4:118:GLU:HA	50:s4:121:TYR:CE1	2.50	0.41
53:s7:63:PRO:C	53:s7:64:VAL:HG23	2.45	0.41
55:s9:89:ASP:HA	55:s9:91:LYS:HG3	2.01	0.41
57:c1:83:THR:HA	57:c1:110:HIS:HA	2.02	0.41
61:c5:129:GLY:O	61:c5:130:ARG:HD2	2.20	0.41
62:c6:29:ILE:HA	62:c6:65:ILE:HG13	2.02	0.41
68:d2:74:VAL:HA	68:d2:127:GLY:HA2	2.03	0.41
1:1:92:G:OP1	43:Q2:46:LYS:HE3	2.20	0.41
1:1:114:A:H2'	1:1:115:A:O4'	2.20	0.41
1:1:204:A:C6	1:1:205:C:C4	3.08	0.41
1:1:784:A:C6	19:M8:93:ILE:HG22	2.55	0.41
1:1:1044:U:O2'	12:M0:92:HIS:HB2	2.21	0.41
1:1:1101:G:H1'	9:L7:105:LEU:HD23	2.03	0.41
1:1:1115:G:OP1	29:N8:22:ILE:HG21	2.20	0.41
1:1:1368:U:H5'	33:O2:43:ARG:NH1	2.35	0.41
1:1:1700:G:H2'	1:1:1701:C:C6	2.55	0.41
1:1:2207:A:H5''	45:2:913:G:O6	2.20	0.41
1:1:2635:A:H4'	1:1:2636:A:O5'	2.20	0.41
1:1:3007:U:OP1	17:M6:73:PHE:HA	2.20	0.41
1:1:3085:G:H5'	1:1:3332:U:OP1	2.20	0.41
1:1:3188:G:H2'	1:1:3189:G:H8	1.85	0.41
1:1:3244:A:OP2	5:L3:100:ARG:NH2	2.51	0.41
4:L2:179:LEU:HD13	4:L2:179:LEU:HA	1.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:L4:16:THR:OG1	6:L4:18:ASN:HB2	2.19	0.41
7:L5:179:ARG:HA	7:L5:179:ARG:HD3	1.73	0.41
8:L6:34:LEU:HD13	8:L6:63:LEU:HD11	2.02	0.41
8:L6:39:VAL:O	8:L6:87:THR:OG1	2.26	0.41
8:L6:97:ASN:O	8:L6:98:VAL:HG12	2.20	0.41
9:L7:39:GLU:O	9:L7:43:ILE:HG13	2.20	0.41
9:L7:200:ASN:HD22	9:L7:200:ASN:C	2.28	0.41
13:M1:19:LEU:HD22	13:M1:125:MET:SD	2.61	0.41
14:M3:46:ILE:O	14:M3:47:ALA:HB3	2.19	0.41
15:M4:50:LYS:NZ	15:M4:86:ALA:HB2	2.35	0.41
29:N8:71:PRO:HB2	29:N8:109:TYR:HA	2.03	0.41
31:O0:60:ALA:HB1	31:O0:65:THR:O	2.21	0.41
38:O7:67:LEU:O	38:O7:68:LYS:C	2.64	0.41
45:2:111:U:C2	45:2:112:A:C8	3.07	0.41
45:2:365:G:C2	45:2:366:A:C8	3.08	0.41
45:2:738:G:H2'	45:2:739:G:H8	1.85	0.41
45:2:765:G:O2'	55:S9:149:ARG:NH2	2.53	0.41
45:2:766:U:C5'	45:2:767:U:H5''	2.50	0.41
45:2:889:U:H2'	45:2:890:C:C6	2.56	0.41
45:2:929:A:N3	45:2:929:A:H2'	2.35	0.41
45:2:1179:G:H2'	45:2:1180:C:C6	2.56	0.41
45:2:1180:C:H2'	45:2:1181:U:O4'	2.20	0.41
45:2:1515:A:OP2	49:S3:7:LYS:HG2	2.21	0.41
45:2:1530:C:OP1	71:D5:95:HIS:HA	2.20	0.41
46:S0:81:PHE:HB3	46:S0:170:ILE:HD13	2.02	0.41
46:S0:157:ASP:HB3	67:D1:69:LEU:HD11	2.01	0.41
47:S1:70:LEU:HB3	47:S1:84:ILE:HD11	2.03	0.41
47:S1:230:ALA:O	47:S1:231:LEU:HD23	2.20	0.41
48:S2:65:GLU:HB3	48:S2:67:GLN:OE1	2.21	0.41
62:C6:59:LYS:HE2	62:C6:59:LYS:HB2	1.92	0.41
65:C9:118:PRO:HD2	65:C9:123:ARG:NH2	2.25	0.41
68:D2:103:ILE:HD11	68:D2:110:ILE:HG22	2.02	0.41
73:D7:59:CYS:SG	73:D7:61:THR:HG22	2.60	0.41
73:D7:75:GLU:HG2	73:D7:76:GLY:H	1.85	0.41
1:5:151:A:O2'	1:5:152:U:OP1	2.38	0.41
1:5:215:G:C4	1:5:216:G:C8	3.09	0.41
1:5:1001:G:H1'	1:5:1041:U:H5'	2.02	0.41
1:5:1139:G:O3'	9:I7:94:LYS:HA	2.21	0.41
1:5:1337:A:C6	1:5:1338:C:C4	3.08	0.41
1:5:1787:A:N6	1:5:1788:C:C4	2.88	0.41
1:5:2178:A:H4'	1:5:2179:C:O5'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:3275:U:H5'	1:5:3276:G:OP1	2.20	0.41
80:5:3413:PAR:O61	80:5:3413:PAR:N32	2.53	0.41
5:l3:259:HIS:ND1	5:l3:259:HIS:N	2.67	0.41
8:l6:145:LEU:O	8:l6:148:GLU:N	2.54	0.41
10:l8:163:VAL:O	10:l8:165:PHE:N	2.54	0.41
13:m1:12:LEU:HD13	13:m1:13:LYS:O	2.20	0.41
17:m6:129:LEU:HD12	17:m6:129:LEU:HA	1.90	0.41
18:m7:52:LEU:HD12	18:m7:52:LEU:HA	1.85	0.41
21:n0:25:PHE:CD1	22:n1:151:LEU:HD11	2.55	0.41
22:n1:48:ILE:HG13	22:n1:94:GLU:HG2	2.02	0.41
24:n3:39:VAL:HG22	24:n3:52:ALA:HB2	2.03	0.41
26:n5:88:MET:HE3	26:n5:88:MET:HB3	1.91	0.41
32:o1:44:MET:HE3	32:o1:44:MET:HB2	1.58	0.41
38:o7:52:LYS:O	38:o7:56:ARG:HG3	2.19	0.41
39:o8:32:ASN:OD1	39:o8:36:LYS:HB2	2.20	0.41
43:q2:41:ARG:H	43:q2:41:ARG:HG2	1.63	0.41
45:6:231:U:O2'	45:6:232:U:O4'	2.39	0.41
45:6:325:G:H2'	45:6:326:G:H8	1.84	0.41
45:6:545:A:H4'	45:6:546:U:OP1	2.19	0.41
45:6:788:A:H5''	45:6:789:A:O4'	2.20	0.41
45:6:1002:G:C6	45:6:1003:A:N7	2.88	0.41
45:6:1032:G:H2'	45:6:1033:C:C6	2.55	0.41
45:6:1179:G:H4'	78:sM:79:SER:O	2.20	0.41
45:6:1244:A:H2'	45:6:1244:A:N3	2.35	0.41
45:6:1356:U:H2'	45:6:1357:A:C8	2.55	0.41
46:s0:75:ALA:HB1	46:s0:174:TRP:CZ3	2.56	0.41
47:s1:128:LYS:HG3	47:s1:129:THR:N	2.35	0.41
50:s4:130:GLN:HB2	50:s4:138:TYR:CZ	2.55	0.41
50:s4:155:LYS:HA	50:s4:155:LYS:HD3	1.73	0.41
55:s9:171:ARG:O	55:s9:175:ARG:HB2	2.21	0.41
56:c0:38:LYS:HB2	56:c0:41:TYR:HD2	1.86	0.41
59:c3:2:GLY:HA3	59:c3:9:LYS:HD3	2.02	0.41
60:c4:67:VAL:HG12	60:c4:71:CYS:SG	2.60	0.41
61:c5:125:PRO:HG3	64:c8:129:TRP:CH2	2.56	0.41
75:d9:4:GLU:O	75:d9:7:TRP:CD1	2.72	0.41
77:sR:258:THR:HB	77:sR:275:ARG:NE	2.35	0.41
1:1:790:U:H2'	1:1:791:A:O4'	2.20	0.41
1:1:1095:U:H5'	22:N1:128:LEU:HD11	2.02	0.41
1:1:1313:G:O2'	1:1:1318:A:N1	2.49	0.41
1:1:1348:U:H4'	1:1:1348:U:OP1	2.20	0.41
1:1:1852:G:C6	1:1:1853:U:C4	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:1908:A:H2'	1:1:1909:A:O4'	2.20	0.41
1:1:2624:G:C6	1:1:2625:C:N4	2.88	0.41
1:1:2947:G:C2	5:L3:250:ALA:HB1	2.55	0.41
5:L3:281:LYS:HD2	5:L3:283:TYR:CE1	2.47	0.41
6:L4:6:VAL:HG21	6:L4:255:PHE:HZ	1.85	0.41
6:L4:191:LYS:HG2	6:L4:194:TYR:CZ	2.55	0.41
6:L4:290:ILE:HG23	19:M8:35:PHE:CE2	2.56	0.41
7:L5:21:ARG:HA	7:L5:24:ARG:NE	2.28	0.41
11:L9:49:ASN:O	11:L9:49:ASN:CG	2.64	0.41
14:M3:75:PHE:HA	14:M3:101:ARG:HH12	1.85	0.41
24:N3:128:ARG:HA	24:N3:131:SER:HB3	2.01	0.41
27:N6:40:ARG:HD2	27:N6:46:LYS:HA	2.02	0.41
35:O4:3:GLN:HE21	35:O4:3:GLN:HB2	1.67	0.41
36:O5:4:VAL:HG11	36:O5:9:LEU:HD11	2.03	0.41
43:Q2:46:LYS:O	43:Q2:54:THR:HG21	2.20	0.41
43:Q2:47:GLN:NE2	43:Q2:53:GLN:OE1	2.53	0.41
45:2:54:C:H2'	45:2:55:A:H8	1.85	0.41
45:2:775:G:C2	45:2:786:C:C4	3.08	0.41
45:2:861:U:O3'	59:C3:20:ARG:NH2	2.54	0.41
45:2:1099:U:H5''	68:D2:71:LYS:NZ	2.35	0.41
45:2:1150:G:O2'	45:2:1151:A:OP1	2.35	0.41
45:2:1227:A:O3'	58:C2:44:GLY:HA2	2.21	0.41
45:2:1289:U:H2'	45:2:1290:U:O4'	2.20	0.41
45:2:1323:C:H2'	45:2:1324:G:O4'	2.21	0.41
45:2:1446:A:C4	45:2:1448:G:C8	3.09	0.41
45:2:1488:G:O2'	45:2:1494:C:O2'	2.34	0.41
47:S1:26:ARG:H	47:S1:26:ARG:HD2	1.85	0.41
48:S2:102:VAL:HG11	48:S2:129:ILE:HG12	2.03	0.41
48:S2:116:LYS:HD2	48:S2:116:LYS:HA	1.77	0.41
49:S3:177:MET:HE2	49:S3:177:MET:HB3	1.90	0.41
51:S5:117:THR:HG21	51:S5:194:LEU:HD12	2.03	0.41
52:S6:49:VAL:HB	52:S6:115:LYS:HB2	2.01	0.41
53:S7:80:GLU:O	53:S7:84:LYS:N	2.33	0.41
54:S8:48:THR:CG2	54:S8:54:LYS:HB2	2.51	0.41
55:S9:77:ILE:HG23	55:S9:86:LEU:HD23	2.02	0.41
59:C3:84:ILE:H	59:C3:84:ILE:HG13	1.41	0.41
62:C6:129:PHE:HB2	66:D0:79:TRP:CD1	2.55	0.41
65:C9:18:TYR:OH	65:C9:113:ILE:HD13	2.20	0.41
67:D1:32:VAL:O	67:D1:32:VAL:HG12	2.19	0.41
72:D6:23:CYS:SG	72:D6:73:TYR:HA	2.61	0.41
76:E0:28:LYS:HG2	76:E0:29:LYS:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:SR:33:LEU:O	77:SR:44:SER:HA	2.21	0.41
1:5:115:A:H8	1:5:115:A:O5'	2.03	0.41
1:5:238:A:H2'	1:5:238:A:N3	2.34	0.41
1:5:1204:A:H2'	1:5:1205:A:O4'	2.21	0.41
1:5:1381:A:C2	1:5:1426:C:C2	3.09	0.41
1:5:1449:A:OP1	83:5:4257:HOH:O	2.21	0.41
1:5:1506:A:C5	1:5:1510:G:C6	3.09	0.41
1:5:1722:U:O4'	20:m9:96:ILE:HG12	2.21	0.41
1:5:2211:U:H2'	1:5:2212:C:O4'	2.20	0.41
1:5:2227:C:H2'	1:5:2228:A:O4'	2.21	0.41
3:8:30:C:H2'	3:8:31:G:C8	2.55	0.41
5:l3:56:ILE:HA	5:l3:56:ILE:HD13	1.72	0.41
6:l4:170:LYS:HE3	6:l4:175:HIS:CE1	2.55	0.41
6:l4:290:ILE:HG23	19:m8:35:PHE:CE2	2.56	0.41
11:l9:57:VAL:HG13	11:l9:64:HIS:CE1	2.56	0.41
11:l9:75:VAL:O	11:l9:79:ILE:HG13	2.21	0.41
12:m0:9:TYR:CG	12:m0:97:LEU:HD13	2.55	0.41
12:m0:47:PRO:HD2	12:m0:141:LYS:HA	2.03	0.41
13:m1:78:GLU:O	13:m1:82:ARG:N	2.46	0.41
18:m7:4:TYR:CZ	18:m7:18:ARG:HG3	2.56	0.41
18:m7:69:ARG:HG2	18:m7:79:THR:OG1	2.20	0.41
19:m8:165:ILE:HD12	19:m8:165:ILE:HA	1.86	0.41
36:o5:18:ALA:O	36:o5:22:VAL:HG23	2.20	0.41
37:o6:83:ALA:O	37:o6:86:LYS:N	2.53	0.41
44:q3:76:ALA:O	44:q3:79:VAL:HB	2.20	0.41
45:6:248:U:H2'	45:6:249:U:H5''	2.03	0.41
45:6:351:C:OP1	45:6:630:A:O2'	2.33	0.41
45:6:427:C:H2'	45:6:428:A:O4'	2.20	0.41
45:6:558:U:H4'	45:6:559:C:C5'	2.50	0.41
45:6:610:G:H5''	45:6:611:U:OP1	2.21	0.41
45:6:1004:U:O4	45:6:1780:G:H8	2.03	0.41
45:6:1005:A:H2'	45:6:1006:C:C6	2.56	0.41
45:6:1012:U:C2	45:6:1013:A:C8	3.09	0.41
45:6:1097:U:H5''	45:6:1099:U:O4'	2.20	0.41
45:6:1773:C:H2'	45:6:1774:G:C8	2.56	0.41
46:s0:21:ASN:HA	46:s0:23:HIS:HD2	1.85	0.41
47:s1:70:LEU:HD23	47:s1:74:GLN:HE21	1.84	0.41
48:s2:212:LYS:O	48:s2:216:VAL:HG23	2.20	0.41
50:s4:26:CYS:HB2	50:s4:27:TYR:CE2	2.55	0.41
53:s7:89:HIS:ND1	53:s7:168:SER:OG	2.40	0.41
53:s7:140:VAL:HB	68:d2:52:TYR:HB3	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
60:c4:128:LYS:HE3	60:c4:128:LYS:HB3	1.98	0.41
62:c6:67:VAL:HG11	62:c6:81:ILE:HG22	2.02	0.41
69:d3:48:HIS:CD2	69:d3:105:ALA:HB2	2.55	0.41
72:d6:20:PRO:HA	72:d6:31:PRO:HA	2.01	0.41
77:sR:112:SER:HB2	77:sR:153:GLN:HA	2.01	0.41
1:1:58:G:H1'	1:1:61:A:H5'	2.02	0.41
1:1:422:A:C2	1:1:2363:A:H4'	2.56	0.41
1:1:517:G:P	9:L7:60:ARG:HH22	2.42	0.41
1:1:1696:A:H2'	1:1:1697:A:C8	2.55	0.41
1:1:1836:C:O2'	1:1:1842:A:N1	2.45	0.41
1:1:2238:G:C2	1:1:2239:G:C8	3.08	0.41
1:1:2245:C:H4'	4:L2:221:LYS:O	2.21	0.41
1:1:2849:C:N4	1:1:2850:G:C6	2.89	0.41
1:1:2893:C:H2'	1:1:2894:C:O4'	2.21	0.41
1:1:2943:G:H2'	1:1:2944:U:O4'	2.21	0.41
1:1:3380:U:H2'	1:1:3381:U:C6	2.55	0.41
80:1:3410:PAR:H43	80:1:3410:PAR:N24	2.36	0.41
80:1:3411:PAR:H43	80:1:3411:PAR:H14	1.85	0.41
4:L2:142:ASP:C	4:L2:144:ASN:H	2.29	0.41
5:L3:12:GLY:HA3	5:L3:233:TRP:HZ3	1.84	0.41
5:L3:358:TRP:CZ3	25:N4:15:PRO:HD2	2.56	0.41
7:L5:5:LYS:HA	7:L5:5:LYS:HD2	1.67	0.41
7:L5:90:HIS:HB2	7:L5:226:TYR:CZ	2.55	0.41
9:L7:19:GLN:HB3	9:L7:23:ALA:HB3	2.03	0.41
9:L7:140:SER:N	9:L7:237:ASN:OD1	2.44	0.41
11:L9:175:PHE:N	11:L9:175:PHE:CD2	2.89	0.41
11:L9:181:VAL:HB	41:Q0:89:TYR:OH	2.21	0.41
12:M0:190:VAL:HG13	12:M0:197:VAL:CG1	2.50	0.41
12:M0:208:ASN:OD1	12:M0:208:ASN:N	2.53	0.41
14:M3:80:VAL:HG13	14:M3:85:LEU:CD2	2.51	0.41
19:M8:80:THR:HG22	19:M8:100:THR:HB	2.01	0.41
21:N0:36:ILE:O	21:N0:40:ARG:HG2	2.21	0.41
24:N3:86:ARG:HD2	24:N3:92:PHE:CZ	2.55	0.41
26:N5:59:SER:HB3	26:N5:102:LEU:HG	2.03	0.41
40:O9:5:LYS:HG2	40:O9:13:MET:CE	2.51	0.41
45:2:186:C:N4	45:2:187:G:N3	2.68	0.41
45:2:602:U:H2'	45:2:603:U:C6	2.55	0.41
45:2:642:G:H2'	45:2:643:G:H8	1.82	0.41
45:2:649:U:H3	45:2:685:A:H61	1.66	0.41
45:2:1059:U:OP1	45:2:1059:U:H4'	2.21	0.41
45:2:1614:A:C6	45:2:1615:C:N4	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1729:C:H2'	45:2:1730:A:O4'	2.21	0.41
45:2:1773:C:H2'	45:2:1774:G:H8	1.84	0.41
46:S0:60:ALA:O	46:S0:64:ILE:HG13	2.21	0.41
47:S1:89:ASP:HB2	47:S1:97:LEU:O	2.21	0.41
50:S4:98:ASN:HD22	50:S4:119:ALA:HB3	1.86	0.41
52:S6:79:LYS:CB	52:S6:86:PRO:HG2	2.44	0.41
56:C0:75:TYR:HD2	56:C0:76:LEU:HD22	1.85	0.41
57:C1:57:LYS:HG2	57:C1:131:ILE:HD12	2.02	0.41
59:C3:29:SER:O	59:C3:32:SER:HB2	2.21	0.41
59:C3:84:ILE:O	59:C3:84:ILE:HD12	2.21	0.41
62:C6:52:LEU:HD22	62:C6:60:PHE:CZ	2.56	0.41
64:C8:56:LYS:HD3	64:C8:61:LEU:HD22	2.03	0.41
66:D0:27:THR:HB	66:D0:88:LYS:HG3	2.03	0.41
69:D3:57:LEU:HD22	76:E0:4:VAL:HG22	2.02	0.41
71:D5:94:LYS:HD3	71:D5:95:HIS:HB3	2.01	0.41
77:SR:112:SER:HB2	77:SR:153:GLN:HA	2.01	0.41
1:5:142:C:H2'	1:5:143:G:O4'	2.19	0.41
1:5:439:C:O2	1:5:440:A:C6	2.74	0.41
1:5:1095:U:H4'	1:5:1096:U:H5''	2.02	0.41
1:5:1227:C:H2'	1:5:1228:C:C6	2.55	0.41
1:5:1481:A:O2'	1:5:1858:A:C2	2.73	0.41
1:5:1667:A:H62	80:5:3403:PAR:H321	1.69	0.41
1:5:2897:A:H2'	1:5:2899:C:H5''	2.02	0.41
1:5:2993:G:H2'	1:5:3142:A:N6	2.35	0.41
1:5:3138:U:OP2	5:l3:30:LYS:HD3	2.21	0.41
3:8:68:G:H2'	3:8:69:U:O4'	2.20	0.41
6:l4:329:PRO:HG3	9:l7:41:ARG:HG3	2.02	0.41
8:l6:54:TYR:OH	8:l6:57:HIS:HB2	2.21	0.41
10:l8:149:LYS:HE2	10:l8:149:LYS:HB2	1.90	0.41
10:l8:193:LYS:HE3	10:l8:193:LYS:HB2	1.87	0.41
14:m3:85:LEU:CD1	14:m3:90:ALA:HB2	2.51	0.41
18:m7:125:GLN:HB2	18:m7:141:SER:HB2	2.03	0.41
20:m9:114:LYS:O	20:m9:146:LYS:HE3	2.21	0.41
34:o3:49:ILE:HG22	34:o3:98:VAL:HG22	2.03	0.41
44:q3:83:ILE:HD13	44:q3:83:ILE:HA	1.83	0.41
45:6:68:A:OP2	45:6:69:G:H8	2.04	0.41
45:6:87:C:H1'	45:6:168:A:N1	2.35	0.41
45:6:352:A:H8	45:6:352:A:OP2	2.04	0.41
45:6:553:G:N2	45:6:571:G:N7	2.67	0.41
45:6:856:A:N6	53:s7:96:ARG:HB3	2.35	0.41
45:6:862:A:H4'	45:6:863:A:O5'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:986:G:H2'	45:6:987:G:O4'	2.20	0.41
45:6:1273:G:N7	45:6:1430:U:H3'	2.36	0.41
45:6:1546:G:H21	64:c8:87:ASN:HB2	1.85	0.41
45:6:1783:C:H2'	45:6:1784:C:C6	2.56	0.41
80:6:1903:PAR:H531	80:6:1903:PAR:H11	2.02	0.41
47:s1:145:LYS:HG2	47:s1:149:GLN:CD	2.45	0.41
47:s1:188:LEU:HD22	47:s1:212:VAL:HG21	2.03	0.41
48:s2:161:LYS:HA	48:s2:165:VAL:O	2.21	0.41
50:s4:87:MET:SD	50:s4:123:LEU:HB2	2.61	0.41
50:s4:251:GLU:OE1	50:s4:255:ARG:NH2	2.54	0.41
55:s9:150:LEU:HD12	55:s9:150:LEU:HA	1.87	0.41
60:c4:84:ARG:HE	60:c4:120:PRO:HD3	1.86	0.41
60:c4:92:LYS:HE2	60:c4:92:LYS:HB2	1.87	0.41
62:c6:62:ASN:OD1	62:c6:62:ASN:N	2.54	0.41
62:c6:99:GLU:CG	77:sR:57:PRO:HB2	2.51	0.41
64:c8:53:ASP:HB3	64:c8:56:LYS:HB2	2.01	0.41
65:c9:86:ARG:HG3	65:c9:90:PRO:O	2.20	0.41
66:d0:55:PRO:HB3	66:d0:91:ILE:HG12	2.02	0.41
1:1:630:A:H2'	1:1:631:U:C6	2.55	0.41
1:1:1090:G:H2'	1:1:1091:A:C8	2.44	0.41
1:1:2506:U:H2'	1:1:2507:C:C6	2.55	0.41
1:1:3049:A:H5'	5:L3:53:MET:HB2	2.01	0.41
1:1:3101:G:C2	1:1:3102:G:C4	3.08	0.41
2:3:26:C:H5''	7:L5:56:THR:OG1	2.21	0.41
3:4:46:G:O2'	3:4:61:A:N1	2.51	0.41
5:L3:56:ILE:HG12	5:L3:356:LEU:HD22	2.02	0.41
6:L4:3:ARG:O	6:L4:5:GLN:HG2	2.19	0.41
7:L5:34:LYS:CE	7:L5:35:ARG:HH21	2.29	0.41
11:L9:69:ARG:HH12	11:L9:72:LYS:CE	2.29	0.41
21:N0:44:PHE:HE1	21:N0:122:HIS:CD2	2.39	0.41
24:N3:33:ASN:HD21	24:N3:63:LYS:CB	2.33	0.41
24:N3:128:ARG:H	24:N3:128:ARG:HG2	1.70	0.41
29:N8:87:ARG:O	29:N8:91:LEU:HB2	2.21	0.41
45:2:298:C:H5''	50:S4:38:LEU:HB2	2.03	0.41
45:2:447:U:C4	45:2:448:C:C4	3.08	0.41
45:2:477:A:O2'	76:E0:33:ARG:NH2	2.52	0.41
45:2:478:A:H5'	76:E0:33:ARG:NH2	2.35	0.41
45:2:505:A:H5'	45:2:506:A:N7	2.35	0.41
45:2:569:C:OP1	69:D3:89:ASN:N	2.48	0.41
45:2:836:U:N3	45:2:837:G:N7	2.69	0.41
45:2:901:G:N2	60:C4:54:GLU:OE1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1199:G:C5	75:D9:40:ARG:HD3	2.55	0.41
48:S2:105:GLY:HA2	48:S2:110:HIS:O	2.21	0.41
49:S3:192:PRO:O	49:S3:195:SER:HB2	2.21	0.41
50:S4:127:LYS:HD3	50:S4:127:LYS:HA	1.88	0.41
53:S7:99:LEU:HB2	53:S7:112:ARG:HG3	2.01	0.41
54:S8:38:ILE:CD1	54:S8:80:GLY:HA2	2.50	0.41
55:S9:163:PRO:C	55:S9:165:GLY:H	2.28	0.41
56:C0:56:LYS:HE2	56:C0:67:THR:HB	2.03	0.41
60:C4:43:THR:HG23	60:C4:46:MET:HG3	2.02	0.41
60:C4:132:ARG:O	72:D6:28:LYS:HA	2.21	0.41
62:C6:6:SER:HB2	62:C6:23:LYS:HA	2.02	0.41
68:D2:96:ALA:HB3	68:D2:99:PHE:CE1	2.56	0.41
69:D3:33:LEU:HD23	69:D3:33:LEU:HA	1.88	0.41
69:D3:104:LEU:HD23	69:D3:124:VAL:HA	2.03	0.41
76:E0:46:ASN:CG	76:E0:48:THR:HG22	2.45	0.41
77:SR:74:THR:HG22	77:SR:115:ILE:HD13	2.03	0.41
1:5:180:C:H2'	1:5:181:U:H6	1.84	0.41
1:5:442:G:OP1	1:5:442:G:O4'	2.39	0.41
1:5:621:A:H2'	1:5:622:A:C8	2.54	0.41
1:5:650:C:H2'	1:5:651:G:C8	2.55	0.41
1:5:695:C:O2'	1:5:696:C:H5'	2.21	0.41
1:5:1449:A:C2	1:5:2356:A:C4	3.09	0.41
1:5:1650:G:H2'	1:5:1651:U:O4'	2.21	0.41
1:5:2209:U:H4'	1:5:2210:G:OP1	2.20	0.41
1:5:2265:C:C2'	1:5:2266:U:H5'	2.51	0.41
1:5:2361:A:N6	1:5:2376:G:O6	2.53	0.41
1:5:2626:A:H5'	1:5:2627:C:H5''	2.02	0.41
1:5:2883:U:H2'	1:5:2884:C:C6	2.56	0.41
1:5:2887:A:H2'	1:5:2887:A:N3	2.35	0.41
1:5:2980:U:H2'	1:5:2981:U:H6	1.86	0.41
1:5:3182:G:H4'	17:m6:161:LYS:HD3	2.02	0.41
1:5:3200:G:H2'	1:5:3201:C:H6	1.84	0.41
1:5:3324:C:H4'	32:o1:13:THR:HG23	2.02	0.41
2:7:37:G:H1'	2:7:44:C:O2	2.20	0.41
2:7:64:A:H1'	7:l5:286:VAL:HG11	2.01	0.41
4:l2:104:LEU:O	4:l2:107:VAL:HG22	2.19	0.41
5:l3:367:LYS:H	5:l3:367:LYS:HG2	1.70	0.41
6:l4:362:ASP:H	21:n0:26:ARG:HH12	1.68	0.41
8:l6:66:SER:C	8:l6:68:PRO:HA	2.46	0.41
10:l8:152:LEU:HD23	10:l8:178:ALA:HB3	2.03	0.41
19:m8:170:ARG:NH2	29:n8:59:ARG:HA	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
80:n3:201:PAR:H241	80:n3:201:PAR:H531	1.85	0.41
26:n5:73:MET:HA	26:n5:73:MET:HE3	2.03	0.41
28:n7:23:VAL:HG12	28:n7:45:GLY:HA3	2.03	0.41
31:o0:16:LEU:CB	31:o0:98:SER:HB2	2.50	0.41
32:o1:19:ARG:HD3	32:o1:35:GLU:CG	2.50	0.41
45:6:811:A:N6	53:s7:110:GLN:OE1	2.53	0.41
45:6:864:U:O4'	73:d7:21:LEU:HD13	2.20	0.41
45:6:1208:A:H5''	45:6:1209:C:OP2	2.21	0.41
45:6:1787:C:H2'	45:6:1788:G:C8	2.56	0.41
80:6:1906:PAR:H11	80:6:1906:PAR:H52	1.80	0.41
47:s1:205:PHE:CG	47:s1:206:PRO:HD2	2.56	0.41
50:s4:57:ASN:HB2	50:s4:60:GLU:HB2	2.03	0.41
50:s4:241:GLY:O	50:s4:244:ILE:HB	2.20	0.41
53:s7:144:VAL:HG22	68:d2:49:GLU:HB3	2.02	0.41
58:c2:136:ILE:H	58:c2:136:ILE:HG12	1.64	0.41
64:c8:28:ILE:HA	64:c8:31:ALA:HB3	2.02	0.41
68:d2:29:PRO:HB3	68:d2:58:SER:HB2	2.02	0.41
68:d2:106:THR:HA	68:d2:123:GLY:HA3	2.02	0.41
69:d3:89:ASN:HB2	69:d3:92:CYS:SG	2.61	0.41
77:sR:159:ASN:ND2	77:sR:163:ASP:HA	2.35	0.41
1:1:156:G:OP2	37:O6:27:SER:OG	2.39	0.41
1:1:578:A:O2'	6:L4:331:ALA:HB1	2.21	0.41
1:1:654:C:H2'	1:1:655:C:C6	2.56	0.41
1:1:695:C:O2'	1:1:696:C:H5'	2.20	0.41
1:1:970:A:OP1	30:N9:18:ARG:HD3	2.20	0.41
1:1:981:U:O2'	1:1:982:C:OP1	2.35	0.41
1:1:992:A:O2'	1:1:993:G:H5'	2.21	0.41
1:1:1821:U:C4	35:O4:67:LYS:HD2	2.56	0.41
1:1:1874:A:OP2	20:M9:20:ARG:NH1	2.48	0.41
1:1:2208:A:HO2'	1:1:2209:U:P	2.41	0.41
1:1:2585:G:N3	1:1:2585:G:H2'	2.34	0.41
1:1:2682:C:O2'	1:1:2683:U:H5'	2.21	0.41
4:L2:133:TYR:HD2	4:L2:168:VAL:HG13	1.85	0.41
10:L8:94:PHE:CE1	10:L8:150:LEU:HD12	2.56	0.41
13:M1:33:ALA:HB2	13:M1:123:PHE:CE1	2.56	0.41
13:M1:46:VAL:HG12	78:SM:25:ILE:HG22	2.03	0.41
14:M3:24:VAL:HA	16:M5:199:LEU:O	2.21	0.41
18:M7:10:ASN:HD22	18:M7:13:LYS:NZ	2.18	0.41
22:N1:38:ASP:O	22:N1:64:VAL:HG13	2.20	0.41
32:O1:55:LEU:HB2	32:O1:95:PRO:HD3	2.03	0.41
36:O5:29:ALA:O	36:O5:33:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:Q3:56:THR:HA	44:Q3:63:THR:HA	2.03	0.41
45:2:88:U:H4'	45:2:171:A:O4'	2.21	0.41
45:2:914:G:H4'	45:2:915:A:O4'	2.20	0.41
45:2:991:G:O3'	45:2:1786:G:H4'	2.21	0.41
45:2:1274:C:H2'	45:2:1274:C:O2	2.21	0.41
45:2:1359:C:N3	45:2:1365:C:N4	2.63	0.41
45:2:1597:A:C8	75:D9:14:TYR:CD2	3.09	0.41
46:S0:203:PHE:CD2	46:S0:203:PHE:N	2.86	0.41
47:S1:129:THR:OG1	47:S1:133:TYR:O	2.36	0.41
50:S4:128:LYS:HD3	50:S4:130:GLN:HE22	1.85	0.41
52:S6:23:ARG:NH1	52:S6:42:GLY:HA3	2.36	0.41
55:S9:109:LEU:O	55:S9:113:VAL:HG23	2.21	0.41
55:S9:138:LYS:HE3	55:S9:138:LYS:HB2	1.81	0.41
57:C1:29:LYS:HA	57:C1:29:LYS:HD2	1.84	0.41
62:C6:31:VAL:HG12	62:C6:67:VAL:HB	2.03	0.41
64:C8:13:HIS:HE1	71:D5:40:VAL:CG1	2.33	0.41
64:C8:43:SER:HA	64:C8:46:VAL:HG12	2.03	0.41
66:D0:68:ARG:HD2	66:D0:78:THR:O	2.19	0.41
73:D7:33:LEU:HD22	73:D7:79:PHE:HB2	2.02	0.41
77:SR:19:TRP:HB2	77:SR:38:ARG:HG3	2.02	0.41
1:5:346:C:C2	1:5:348:A:N7	2.88	0.41
1:5:813:G:O6	1:5:926:A:N6	2.53	0.41
1:5:1049:C:H2'	1:5:1050:U:C6	2.56	0.41
1:5:1478:C:H2'	1:5:1479:U:H6	1.85	0.41
1:5:2206:G:P	1:5:2206:G:H8	2.43	0.41
1:5:2403:G:N7	1:5:2870:C:H4'	2.35	0.41
1:5:2409:G:C6	1:5:2411:U:C4	3.09	0.41
1:5:2766:U:H2'	1:5:2767:U:O4'	2.21	0.41
1:5:2767:U:OP1	43:q2:33:ALA:HA	2.20	0.41
2:7:55:A:H2'	2:7:56:A:O4'	2.21	0.41
3:8:30:C:H2'	3:8:31:G:H8	1.86	0.41
5:l3:73:VAL:CG2	24:n3:90:GLY:HA3	2.51	0.41
5:l3:86:VAL:HA	5:l3:162:VAL:HG12	2.02	0.41
7:l5:285:ARG:HE	7:l5:285:ARG:HB3	1.71	0.41
9:l7:120:THR:HG23	9:l7:123:THR:H	1.84	0.41
10:l8:223:ALA:O	10:l8:226:TYR:HB3	2.20	0.41
12:m0:76:MET:HE1	12:m0:148:VAL:HG13	2.02	0.41
12:m0:84:ALA:O	12:m0:140:THR:HB	2.20	0.41
12:m0:139:ARG:HB3	12:m0:173:PHE:CE1	2.56	0.41
20:m9:62:ARG:CZ	20:m9:62:ARG:HB2	2.51	0.41
20:m9:115:ILE:HD12	20:m9:120:TYR:HB2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:n7:14:VAL:O	28:n7:19:ALA:HB1	2.20	0.41
28:n7:53:VAL:HA	28:n7:57:HIS:CD2	2.56	0.41
38:o7:18:LEU:H	38:o7:18:LEU:HG	1.65	0.41
45:6:106:U:H4'	54:s8:21:PHE:CZ	2.55	0.41
45:6:240:U:H6	45:6:240:U:H5''	1.85	0.41
45:6:343:C:H2'	45:6:344:A:C8	2.55	0.41
45:6:386:G:C6	45:6:387:A:N6	2.89	0.41
45:6:449:C:H2'	45:6:450:U:H6	1.84	0.41
45:6:477:A:P	76:e0:28:LYS:HZ3	2.43	0.41
45:6:610:G:H2'	45:6:614:C:C5	2.56	0.41
45:6:749:U:H2'	45:6:750:U:C6	2.56	0.41
45:6:864:U:H3'	45:6:864:U:O2	2.21	0.41
45:6:1364:G:N2	65:c9:3:GLY:HA3	2.35	0.41
46:s0:70:PRO:HB2	46:s0:94:GLY:H	1.85	0.41
46:s0:140:ASN:HD21	67:d1:29:HIS:HA	1.86	0.41
49:s3:45:LYS:HE2	49:s3:45:LYS:HB2	1.82	0.41
50:s4:87:MET:O	50:s4:122:LYS:HE3	2.21	0.41
51:s5:45:LYS:HA	51:s5:45:LYS:HD3	1.82	0.41
51:s5:109:LYS:HB2	51:s5:109:LYS:HE3	1.90	0.41
55:s9:118:LEU:HD23	55:s9:158:PHE:CE1	2.55	0.41
56:c0:23:ALA:O	56:c0:24:LYS:HB3	2.20	0.41
57:c1:80:MET:HB2	57:c1:80:MET:HE3	1.83	0.41
60:c4:25:ASP:OD1	60:c4:26:THR:N	2.50	0.41
65:c9:38:LYS:HB2	65:c9:38:LYS:HE3	1.77	0.41
72:d6:51:ARG:NH2	72:d6:55:GLU:OE1	2.54	0.41
77:sR:81:LEU:HD13	77:sR:113:VAL:HG22	2.01	0.41
77:sR:240:VAL:HG22	77:sR:256:THR:HG22	2.02	0.41
78:sM:77:THR:OG1	78:sM:78:ASP:N	2.54	0.41
1:1:30:G:H5'	16:M5:172:ARG:HG2	2.02	0.41
1:1:74:G:C2	1:1:75:G:C8	3.08	0.41
1:1:241:G:C6	1:1:242:C:N4	2.88	0.41
1:1:592:A:H2'	1:1:593:C:C6	2.56	0.41
1:1:817:A:H2'	1:1:920:A:C2	2.55	0.41
1:1:1158:A:H8	1:1:1158:A:O5'	2.03	0.41
1:1:1520:G:O2'	1:1:1603:A:N1	2.52	0.41
1:1:1653:G:H2'	1:1:1654:A:O4'	2.21	0.41
1:1:2099:A:H2'	1:1:2100:A:N3	2.35	0.41
1:1:2110:G:O2'	1:1:2111:G:H5''	2.20	0.41
1:1:2181:C:H2'	1:1:2182:A:O4'	2.21	0.41
1:1:2244:A:H2'	1:1:2245:C:H6	1.84	0.41
1:1:2394:G:N9	5:L3:260:VAL:HG12	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1:2406:C:H1'	1:1:2819:A:C2	2.55	0.41
1:1:2656:A:OP1	43:Q2:98:LYS:HG3	2.20	0.41
1:1:2741:C:O2'	43:Q2:20:HIS:N	2.52	0.41
1:1:2820:A:OP1	80:1:3425:PAR:O61	2.38	0.41
1:1:2903:A:H8	1:1:2903:A:O5'	2.04	0.41
1:1:3014:U:C5	80:1:3429:PAR:H24	2.55	0.41
2:3:103:A:H2'	2:3:104:A:O4'	2.21	0.41
5:L3:49:TYR:OH	5:L3:177:HIS:ND1	2.51	0.41
6:L4:31:ARG:HE	6:L4:31:ARG:HB3	1.64	0.41
6:L4:44:LYS:HA	6:L4:47:ARG:HD2	2.03	0.41
6:L4:219:LEU:HD22	6:L4:225:VAL:HG11	2.02	0.41
7:L5:278:SER:OG	7:L5:281:GLU:HG3	2.19	0.41
9:L7:118:LYS:HB2	9:L7:195:PHE:CE1	2.56	0.41
11:L9:43:VAL:HG12	11:L9:57:VAL:HG23	2.03	0.41
11:L9:176:LEU:O	11:L9:180:TYR:OH	2.19	0.41
12:M0:17:TYR:CE1	12:M0:98:ARG:HD3	2.56	0.41
12:M0:38:LYS:NZ	12:M0:45:GLU:OE1	2.34	0.41
12:M0:69:ARG:HH21	12:M0:70:ILE:HG13	1.86	0.41
14:M3:85:LEU:HD12	14:M3:120:GLN:HE22	1.86	0.41
16:M5:153:ASP:OD2	16:M5:155:VAL:HG13	2.21	0.41
19:M8:82:VAL:HG12	19:M8:102:ALA:HB3	2.03	0.41
21:N0:12:ARG:NH1	21:N0:15:PRO:HG3	2.35	0.41
30:N9:25:LYS:HG3	30:N9:26:THR:N	2.26	0.41
30:N9:28:LYS:HD3	30:N9:28:LYS:HA	1.79	0.41
32:O1:19:ARG:HD3	32:O1:35:GLU:CG	2.50	0.41
35:O4:108:GLN:O	35:O4:112:ALA:HB3	2.21	0.41
38:O7:16:HIS:HA	38:O7:27:PHE:O	2.21	0.41
39:O8:18:ALA:N	39:O8:20:VAL:HG22	2.36	0.41
45:2:134:U:O2'	45:2:135:A:O4'	2.31	0.41
45:2:150:U:OP1	70:D4:123:LYS:NZ	2.51	0.41
45:2:246:G:H5''	45:2:247:A:OP2	2.21	0.41
45:2:571:G:C8	45:2:572:C:C5	3.08	0.41
45:2:696:C:OP1	53:S7:100:PRO:HG3	2.21	0.41
45:2:840:U:O2'	45:2:841:U:H5''	2.21	0.41
45:2:917:U:O2	60:C4:41:ARG:NE	2.54	0.41
45:2:1003:A:H1'	45:2:1005:A:N7	2.36	0.41
45:2:1101:G:O2'	68:D2:4:SER:HB2	2.21	0.41
45:2:1113:A:H4'	45:2:1114:G:OP1	2.21	0.41
45:2:1182:U:H2'	45:2:1184:A:OP2	2.21	0.41
45:2:1356:U:H2'	45:2:1357:A:C8	2.56	0.41
45:2:1600:A:O2'	45:2:1602:C:N4	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:S1:37:THR:HG21	47:S1:185:THR:HB	2.03	0.41
47:S1:67:GLU:HA	47:S1:84:ILE:O	2.21	0.41
47:S1:127:VAL:HB	47:S1:176:VAL:HG11	2.02	0.41
47:S1:129:THR:HG23	47:S1:135:LEU:HD22	2.02	0.41
48:S2:35:TRP:C	48:S2:35:TRP:CD1	2.98	0.41
49:S3:23:GLU:OE1	49:S3:27:ARG:NH2	2.54	0.41
50:S4:184:THR:HA	50:S4:189:LEU:CD1	2.51	0.41
50:S4:191:ARG:NE	50:S4:245:LYS:HD3	2.36	0.41
50:S4:193:GLY:HA3	50:S4:210:ILE:CG2	2.51	0.41
50:S4:246:LEU:HD12	50:S4:246:LEU:H	1.86	0.41
51:S5:63:GLN:O	51:S5:64:VAL:HG12	2.21	0.41
51:S5:189:THR:HB	71:D5:97:LYS:NZ	2.36	0.41
52:S6:64:LYS:O	52:S6:67:VAL:HG22	2.20	0.41
52:S6:115:LYS:HB2	52:S6:115:LYS:HE2	1.82	0.41
53:S7:50:ASP:OD1	53:S7:175:LYS:NZ	2.43	0.41
54:S8:141:ARG:O	54:S8:145:ALA:N	2.53	0.41
55:S9:134:ILE:HG12	55:S9:134:ILE:O	2.20	0.41
55:S9:142:ASN:O	55:S9:144:PRO:HD3	2.21	0.41
56:C0:63:TYR:HB3	56:C0:65:TYR:HE2	1.86	0.41
57:C1:5:LEU:O	57:C1:6:THR:OG1	2.35	0.41
57:C1:46:LYS:HE3	57:C1:46:LYS:HB3	1.88	0.41
58:C2:36:LEU:HG	58:C2:41:LEU:HB2	2.03	0.41
59:C3:66:ILE:HG13	59:C3:67:THR:N	2.35	0.41
59:C3:114:ARG:O	59:C3:118:ILE:HG13	2.21	0.41
59:C3:140:LYS:HE2	59:C3:140:LYS:HB3	1.72	0.41
64:C8:102:ALA:O	64:C8:105:VAL:HG12	2.21	0.41
66:D0:60:THR:HG1	66:D0:87:HIS:CG	2.38	0.41
68:D2:86:ILE:HG13	68:D2:87:GLU:N	2.36	0.41
69:D3:43:PHE:O	69:D3:45:GLY:N	2.47	0.41
69:D3:127:VAL:HG23	69:D3:132:LEU:HD22	2.03	0.41
70:D4:56:SER:HB3	70:D4:74:LEU:HB2	2.02	0.41
73:D7:67:THR:OG1	73:D7:70:LYS:O	2.31	0.41
77:SR:169:ILE:HD11	77:SR:181:TRP:HB2	2.03	0.41
77:SR:295:SER:HB2	77:SR:302:PHE:HE2	1.86	0.41
78:SM:59:GLY:O	78:SM:63:ASP:HB2	2.21	0.41
1:5:4:U:H2'	1:5:5:G:H8	1.85	0.41
1:5:75:G:C6	1:5:76:G:C6	3.09	0.41
1:5:76:G:P	14:m3:70:ARG:HH12	2.44	0.41
1:5:258:G:H2'	1:5:259:C:C6	2.56	0.41
1:5:437:G:P	1:5:437:G:C8	3.10	0.41
1:5:651:G:C6	1:5:652:G:C6	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:856:G:O5'	1:5:856:G:H8	2.04	0.41
1:5:1216:C:H2'	1:5:1217:A:H8	1.86	0.41
1:5:1940:G:N2	1:5:3362:A:H8	2.16	0.41
1:5:2509:U:H2'	1:5:2510:U:H5'	2.02	0.41
1:5:2594:C:H2'	1:5:2595:A:O4'	2.21	0.41
1:5:2774:C:H2'	1:5:2775:U:H6	1.86	0.41
1:5:3218:A:H4'	1:5:3219:G:O5'	2.21	0.41
80:5:3411:PAR:H52	80:5:3411:PAR:HN21	1.86	0.41
2:7:1:G:C8	7:15:266:ALA:HB2	2.56	0.41
2:7:2:G:H4'	7:15:270:LYS:HD3	2.01	0.41
3:8:120:C:H2'	3:8:121:U:H6	1.86	0.41
3:8:135:G:H5''	26:n5:49:LYS:HD3	2.02	0.41
4:12:133:TYR:HB3	4:12:168:VAL:HB	2.03	0.41
4:12:188:LYS:O	4:12:192:LYS:HG3	2.19	0.41
4:12:226:SER:OG	4:12:227:ARG:N	2.54	0.41
7:15:41:LYS:HD3	7:15:41:LYS:HA	1.79	0.41
7:15:280:GLU:H	7:15:280:GLU:CD	2.28	0.41
8:16:52:VAL:CG1	8:16:65:ILE:HG23	2.47	0.41
9:17:145:ARG:HA	9:17:185:ILE:HD13	2.03	0.41
9:17:186:HIS:CD2	9:17:190:THR:HG21	2.56	0.41
10:18:166:LEU:HB2	10:18:167:PRO:HD3	2.03	0.41
10:18:187:GLY:N	10:18:195:SER:HB2	2.36	0.41
11:19:74:LEU:HD23	11:19:74:LEU:HA	1.76	0.41
11:19:117:PHE:HE1	11:19:178:GLY:HA2	1.86	0.41
14:m3:18:TRP:CH2	14:m3:19:GLN:HG2	2.55	0.41
14:m3:179:PHE:O	14:m3:182:ILE:HG22	2.21	0.41
16:m5:168:GLY:O	16:m5:172:ARG:HB2	2.21	0.41
19:m8:106:PHE:CE2	19:m8:121:CYS:HB3	2.56	0.41
20:m9:15:VAL:HG11	20:m9:52:LYS:HB2	2.03	0.41
20:m9:44:LEU:HD22	20:m9:49:THR:OG1	2.21	0.41
21:n0:33:ASN:OD1	21:n0:35:VAL:N	2.53	0.41
29:n8:111:LYS:HA	29:n8:129:PHE:O	2.21	0.41
35:o4:15:THR:HG22	35:o4:16:ARG:H	1.86	0.41
37:o6:76:ARG:HD3	37:o6:76:ARG:HA	1.86	0.41
38:o7:76:ASN:O	38:o7:78:PHE:N	2.54	0.41
39:o8:59:ALA:O	39:o8:62:ALA:HB3	2.20	0.41
41:q0:88:LYS:O	41:q0:92:ASP:HB2	2.21	0.41
45:6:15:U:H2'	45:6:16:G:O4'	2.21	0.41
45:6:151:G:H1	45:6:163:G:H1	1.68	0.41
45:6:400:A:H5''	54:s8:25:ARG:HA	2.03	0.41
45:6:830:U:C2'	45:6:831:U:H5'	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:873:U:O2'	45:6:1047:G:H5''	2.21	0.41
45:6:1143:A:O2'	45:6:1300:A:N1	2.42	0.41
45:6:1219:A:O2'	56:c0:48:SER:HA	2.21	0.41
45:6:1356:U:H2'	45:6:1357:A:H8	1.85	0.41
45:6:1647:U:H2'	45:6:1648:A:H8	1.86	0.41
46:s0:8:ASP:O	46:s0:10:THR:HG23	2.21	0.41
46:s0:195:TRP:CE3	46:s0:197:ILE:HB	2.56	0.41
47:s1:38:PHE:CE1	47:s1:185:THR:HG22	2.56	0.41
48:s2:56:ILE:HG22	48:s2:61:LEU:HB2	2.03	0.41
48:s2:85:PRO:HG3	48:s2:98:PHE:CE1	2.55	0.41
49:s3:12:VAL:HG21	75:d9:34:TYR:HB3	2.03	0.41
49:s3:33:GLY:O	49:s3:53:THR:HG23	2.21	0.41
50:s4:17:HIS:HB2	50:s4:108:ARG:HA	2.03	0.41
50:s4:36:HIS:ND1	50:s4:85:GLY:HA3	2.36	0.41
50:s4:248:ILE:HA	50:s4:251:GLU:HG3	2.02	0.41
51:s5:121:ILE:HB	51:s5:129:PRO:HB3	2.03	0.41
51:s5:140:THR:O	51:s5:214:LYS:HG3	2.21	0.41
79:s6:3:LEU:N	79:s6:16:PHE:O	2.50	0.41
79:s6:137:ARG:O	79:s6:141:ILE:HG13	2.21	0.41
53:s7:63:PRO:HB2	53:s7:65:PRO:HD2	2.03	0.41
53:s7:74:GLN:O	53:s7:77:LEU:N	2.53	0.41
53:s7:109:VAL:HG22	53:s7:110:GLN:H	1.86	0.41
53:s7:114:ARG:HD2	53:s7:114:ARG:HA	1.92	0.41
54:s8:60:ILE:HG21	54:s8:179:CYS:CB	2.51	0.41
55:s9:129:ILE:HG12	55:s9:134:ILE:HG12	2.02	0.41
56:c0:14:TYR:CG	56:c0:35:ILE:HD11	2.56	0.41
57:c1:5:LEU:O	57:c1:7:VAL:HG13	2.21	0.41
58:c2:40:GLY:O	58:c2:124:LYS:N	2.45	0.41
58:c2:62:LEU:HD21	58:c2:88:LEU:HD12	2.01	0.41
58:c2:63:VAL:HG13	58:c2:64:SER:N	2.35	0.41
59:c3:87:ASP:OD2	59:c3:129:TYR:OH	2.38	0.41
59:c3:87:ASP:HB3	59:c3:125:LEU:HD11	2.03	0.41
60:c4:81:VAL:HG13	60:c4:115:ILE:HA	2.03	0.41
61:c5:22:LEU:N	61:c5:25:LEU:HD12	2.35	0.41
63:c7:19:ARG:H	63:c7:19:ARG:HG2	1.75	0.41
65:c9:105:LEU:HA	65:c9:108:LEU:HD12	2.02	0.41
72:d6:73:TYR:HB3	72:d6:78:ALA:HB2	2.02	0.41
75:d9:5:ASN:C	75:d9:7:TRP:HD1	2.29	0.41
76:e0:26:LYS:HE3	76:e0:26:LYS:HB3	1.75	0.41
77:sR:111:MET:SD	77:sR:127:ARG:NH1	2.94	0.41
77:sR:217:ASP:OD1	77:sR:217:ASP:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:sR:222:LEU:HD21	77:sR:265:LEU:HD11	2.03	0.41
78:sM:45:SER:C	78:sM:47:ALA:H	2.28	0.41
1:1:158:G:H2'	1:1:159:A:C8	2.57	0.41
1:1:384:A:H2'	1:1:385:A:O4'	2.21	0.41
1:1:685:G:P	14:M3:35:ARG:HH11	2.44	0.41
1:1:839:C:H4'	1:1:1724:U:H2'	2.03	0.41
1:1:889:U:H2'	1:1:890:C:O4'	2.21	0.41
1:1:1063:G:O2'	1:1:1097:G:N2	2.54	0.41
1:1:1394:A:H4'	1:1:1420:C:H4'	2.02	0.41
1:1:1495:U:H5	1:1:1835:A:C2	2.39	0.41
1:1:1518:U:H2'	1:1:1519:G:O4'	2.21	0.41
1:1:1763:U:H3'	1:1:1764:U:C5	2.56	0.41
1:1:1895:A:P	80:1:3432:PAR:HO41	2.43	0.41
1:1:2106:A:H2'	1:1:2107:A:C8	2.56	0.41
1:1:2112:U:H4'	1:1:2113:A:O5'	2.21	0.41
1:1:2526:C:C2	10:L8:48:ARG:NH2	2.89	0.41
1:1:2563:G:OP1	10:L8:27:THR:OG1	2.38	0.41
1:1:3189:G:C6	1:1:3190:C:C4	3.09	0.41
1:1:3333:G:C8	25:N4:51:TRP:CD1	3.08	0.41
2:3:110:G:OP2	7:L5:279:LYS:NZ	2.30	0.41
3:4:80:A:H8	3:4:80:A:OP2	2.03	0.41
4:L2:103:PRO:HA	4:L2:163:ARG:HA	2.03	0.41
4:L2:104:LEU:O	4:L2:139:HIS:HE1	2.04	0.41
4:L2:170:ALA:HB2	44:Q3:65:ALA:HB1	2.01	0.41
5:L3:43:LEU:HA	5:L3:43:LEU:HD12	1.88	0.41
5:L3:114:VAL:O	5:L3:117:ARG:N	2.50	0.41
8:L6:83:TYR:CD2	8:L6:83:TYR:N	2.89	0.41
8:L6:86:ALA:H	34:O3:107:ILE:HG22	1.86	0.41
9:L7:180:SER:HB3	9:L7:183:ASP:CG	2.46	0.41
9:L7:234:GLU:H	9:L7:234:GLU:HG2	1.62	0.41
10:L8:54:GLU:O	10:L8:58:VAL:HG23	2.21	0.41
21:N0:2:ALA:HB3	21:N0:32:SER:CB	2.50	0.41
23:N2:80:THR:OG1	23:N2:95:PHE:HD1	2.04	0.41
23:N2:82:LYS:HE2	23:N2:82:LYS:HB2	1.89	0.41
26:N5:103:TYR:CE1	26:N5:139:ILE:HD12	2.56	0.41
33:O2:79:VAL:HG13	33:O2:111:ARG:HG2	2.03	0.41
43:Q2:58:PHE:CE2	43:Q2:61:LYS:HA	2.56	0.41
45:2:114:C:H6	45:2:114:C:H5'	1.86	0.41
45:2:389:G:C6	45:2:390:G:C5	3.09	0.41
45:2:586:G:C6	45:2:587:C:C4	3.09	0.41
45:2:890:C:H2'	45:2:891:A:C8	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:2:1391:A:H2'	45:2:1392:U:C6	2.56	0.41
45:2:1516:A:C8	66:D0:59:PRO:HD3	2.56	0.41
47:S1:87:ARG:HE	47:S1:87:ARG:HB3	1.76	0.41
47:S1:129:THR:HB	47:S1:180:THR:HG23	2.02	0.41
49:S3:175:VAL:HG13	49:S3:182:LEU:CB	2.51	0.41
49:S3:207:THR:HB	63:C7:40:THR:OG1	2.21	0.41
50:S4:75:LYS:HE2	50:S4:75:LYS:HB3	1.89	0.41
53:S7:136:VAL:O	53:S7:153:LEU:HB2	2.21	0.41
58:C2:81:ASP:O	58:C2:83:GLU:N	2.54	0.41
58:C2:87:PRO:O	58:C2:88:LEU:HD22	2.20	0.41
59:C3:107:LYS:HA	59:C3:107:LYS:HD2	1.66	0.41
62:C6:129:PHE:HB2	66:D0:79:TRP:HD1	1.86	0.41
63:C7:38:ILE:HG23	63:C7:39:ALA:N	2.35	0.41
70:D4:21:LYS:HB2	70:D4:75:VAL:CG1	2.51	0.41
70:D4:106:GLN:O	70:D4:110:GLN:HG3	2.22	0.41
77:SR:44:SER:O	77:SR:58:VAL:HG22	2.21	0.41
1:5:123:A:C6	1:5:150:A:C5	3.09	0.41
1:5:3242:G:H2'	5:l3:154:TYR:CD1	2.56	0.41
1:5:3283:U:H2'	1:5:3284:G:H8	1.85	0.41
3:8:38:U:C4	36:o5:81:ARG:HB2	2.56	0.41
3:8:126:A:H4'	3:8:127:U:OP2	2.21	0.41
6:l4:276:LEU:HA	6:l4:277:PRO:HD3	1.93	0.41
6:l4:320:ASN:O	6:l4:323:VAL:HG23	2.21	0.41
7:l5:216:GLU:O	7:l5:220:SER:N	2.54	0.41
9:l7:129:LEU:HD23	9:l7:129:LEU:C	2.45	0.41
9:l7:232:ARG:HB2	9:l7:235:PHE:HB2	2.03	0.41
10:l8:28:HIS:NE2	28:n7:128:GLN:HG3	2.36	0.41
27:n6:109:LEU:HD22	27:n6:115:ARG:CZ	2.51	0.41
29:n8:6:THR:HG22	29:n8:9:ARG:HG2	2.03	0.41
34:o3:102:LEU:HD23	34:o3:102:LEU:HA	1.82	0.41
45:6:372:G:HO2'	45:6:611:U:H3	1.63	0.41
45:6:416:A:H4'	45:6:417:A:OP2	2.20	0.41
45:6:1340:U:O4	62:c6:9:THR:HA	2.20	0.41
45:6:1565:C:OP1	64:c8:41:ARG:HD3	2.21	0.41
45:6:1787:C:H5''	60:c4:127:ARG:NH2	2.35	0.41
45:6:1796:C:P	72:d6:5:ARG:HH12	2.43	0.41
48:s2:58:LEU:HD22	48:s2:59:HIS:CE1	2.56	0.41
48:s2:84:LYS:HE3	48:s2:84:LYS:HB2	1.87	0.41
48:s2:98:PHE:O	48:s2:117:THR:HA	2.21	0.41
50:s4:31:PRO:CG	50:s4:38:LEU:HB2	2.50	0.41
79:s6:52:ILE:HD13	79:s6:102:VAL:HG21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:s9:64:GLU:HG2	55:s9:65:LYS:H	1.86	0.41
58:c2:63:VAL:HG22	58:c2:93:ASP:O	2.21	0.41
61:c5:96:ILE:O	61:c5:103:ASN:N	2.35	0.41
61:c5:126:VAL:HG12	61:c5:127:ARG:H	1.86	0.41
68:d2:75:ILE:HG13	68:d2:125:ILE:HD13	2.03	0.41
68:d2:102:VAL:O	68:d2:113:HIS:N	2.54	0.41
69:d3:52:ILE:HG12	69:d3:101:GLU:HA	2.03	0.41
70:d4:86:GLU:HA	70:d4:87:PRO:HD2	1.96	0.41
75:d9:17:GLY:HA2	75:d9:27:HIS:NE2	2.35	0.41
1:1:1317:A:C4	1:1:1319:G:N7	2.90	0.40
1:1:1902:G:C6	1:1:1903:U:C2	3.09	0.40
1:1:2100:A:N7	1:1:2101:C:N4	2.69	0.40
1:1:2903:A:H2'	1:1:2904:U:O4'	2.21	0.40
1:1:2941:A:OP1	5:L3:255:TRP:HB3	2.21	0.40
2:3:1:G:P	80:3:201:PAR:HO44	2.43	0.40
2:3:7:G:N7	7:L5:21:ARG:NH2	2.69	0.40
4:L2:79:ASN:ND2	4:L2:165:VAL:HG23	2.36	0.40
6:L4:145:ILE:HD11	6:L4:148:ILE:CG1	2.52	0.40
6:L4:208:VAL:CG1	6:L4:230:VAL:HG13	2.51	0.40
6:L4:354:VAL:HG11	22:N1:143:THR:HG21	2.02	0.40
12:M0:61:SER:HB2	12:M0:63:GLU:HG2	2.03	0.40
19:M8:151:ARG:O	19:M8:161:LYS:HD2	2.21	0.40
21:N0:155:ARG:HH21	21:N0:172:TYR:HA	1.86	0.40
22:N1:17:ARG:HA	22:N1:17:ARG:HD2	1.78	0.40
26:N5:142:ILE:HD12	26:N5:142:ILE:HA	1.95	0.40
27:N6:56:VAL:HG22	27:N6:104:LEU:HB3	2.02	0.40
33:O2:76:VAL:HG11	33:O2:82:LEU:HB2	2.03	0.40
36:O5:24:LEU:HD23	36:O5:24:LEU:HA	1.89	0.40
43:Q2:6:LYS:NZ	43:Q2:94:GLY:HA2	2.35	0.40
45:2:350:U:OP1	45:2:351:C:O2'	2.27	0.40
45:2:636:A:C2	45:2:861:U:C2	3.09	0.40
45:2:1273:G:H4'	45:2:1274:C:H3'	2.03	0.40
45:2:1356:U:H2'	45:2:1357:A:H8	1.85	0.40
45:2:1398:U:H3'	45:2:1399:C:H4'	2.03	0.40
45:2:1527:C:H5'	51:S5:106:LYS:HE2	2.03	0.40
45:2:1609:U:OP2	62:C6:14:LYS:NZ	2.46	0.40
50:S4:37:LYS:HB2	50:S4:40:GLU:CG	2.51	0.40
51:S5:25:LEU:HG	62:C6:27:GLY:O	2.21	0.40
53:S7:124:LYS:O	53:S7:128:ASP:N	2.49	0.40
55:S9:89:ASP:OD1	55:S9:90:LYS:HG2	2.21	0.40
56:C0:1:MET:HG2	56:C0:2:LEU:N	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:C5:21:ASP:OD1	61:C5:21:ASP:N	2.54	0.40
62:C6:12:LYS:HG2	62:C6:17:THR:HG22	2.03	0.40
62:C6:47:LYS:HA	62:C6:47:LYS:HD3	1.94	0.40
69:D3:63:GLN:HA	69:D3:65:ASN:H	1.86	0.40
69:D3:112:LYS:HA	69:D3:112:LYS:HD3	1.79	0.40
77:SR:203:THR:HG23	77:SR:212:ALA:HB3	2.02	0.40
1:5:306:A:C2	1:5:2784:G:H1'	2.56	0.40
1:5:421:G:O6	1:5:2383:C:O2'	2.33	0.40
1:5:976:U:H2'	1:5:977:C:O4'	2.21	0.40
1:5:1415:U:H2'	1:5:1416:C:O4'	2.21	0.40
1:5:1481:A:H2'	1:5:1858:A:N3	2.36	0.40
1:5:1578:C:H5'	1:5:1579:C:OP2	2.20	0.40
1:5:1779:C:O5'	1:5:1779:C:H6	2.03	0.40
1:5:2102:U:H2'	1:5:2103:U:C6	2.56	0.40
80:5:3407:PAR:H241	80:5:3407:PAR:H23	1.86	0.40
83:5:4479:HOH:O	29:n8:16:SER:HB3	2.21	0.40
4:l2:51:ASP:HB3	4:l2:54:ARG:HD2	2.04	0.40
4:l2:79:ASN:O	4:l2:80:GLU:HB3	2.20	0.40
5:l3:187:SER:O	5:l3:188:ILE:C	2.64	0.40
7:l5:177:GLU:CD	7:l5:177:GLU:H	2.29	0.40
10:l8:186:LEU:O	10:l8:190:VAL:HG23	2.21	0.40
14:m3:42:ARG:O	14:m3:46:ILE:N	2.49	0.40
14:m3:155:GLU:HG2	29:n8:90:TYR:OH	2.21	0.40
21:n0:20:PRO:HB2	21:n0:21:GLU:OE2	2.21	0.40
33:o2:72:LYS:O	33:o2:92:TYR:HA	2.21	0.40
35:o4:20:ILE:HG23	35:o4:32:ALA:HB1	2.02	0.40
38:o7:14:LYS:NZ	40:o9:51:ILE:HG12	2.36	0.40
45:6:325:G:H2'	45:6:326:G:C8	2.56	0.40
45:6:631:G:O3'	57:c1:102:LYS:HE3	2.21	0.40
45:6:1532:U:H1'	65:c9:48:GLN:HE22	1.87	0.40
47:s1:101:HIS:O	47:s1:217:LEU:HB2	2.21	0.40
47:s1:169:SER:O	47:s1:173:THR:N	2.54	0.40
48:s2:218:ILE:HD12	48:s2:219:GLY:N	2.37	0.40
49:s3:60:GLY:HA3	49:s3:64:ARG:O	2.21	0.40
50:s4:62:LYS:HG3	50:s4:66:MET:HG2	2.02	0.40
54:s8:73:SER:O	54:s8:74:LYS:HD2	2.21	0.40
57:c1:98:ASN:HB3	68:d2:79:PHE:HE1	1.86	0.40
58:c2:87:PRO:HA	58:c2:140:PHE:CE1	2.56	0.40
58:c2:97:LEU:HB3	58:c2:118:ALA:HB3	2.03	0.40
60:c4:111:ARG:NH1	72:d6:57:SER:O	2.53	0.40
65:c9:57:ARG:O	65:c9:61:VAL:HG23	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
70:d4:47:VAL:HG23	70:d4:48:TYR:CD2	2.55	0.40
77:sR:32:LEU:HA	77:sR:32:LEU:HD12	1.86	0.40
78:sM:34:LYS:HD3	78:sM:34:LYS:HA	1.72	0.40
1:1:373:A:H62	1:1:396:A:N6	2.19	0.40
1:1:377:A:N6	80:1:3420:PAR:H62	2.36	0.40
1:1:1306:G:O2'	1:1:1307:G:H5''	2.21	0.40
1:1:1492:G:O2'	40:O9:48:LYS:HE3	2.21	0.40
1:1:3198:U:O4	11:L9:26:LYS:HB2	2.21	0.40
1:1:3392:U:O2'	1:1:3393:U:H5'	2.22	0.40
3:4:43:A:OP1	80:4:201:PAR:O31	2.31	0.40
3:4:78:G:H2'	3:4:79:A:O4'	2.21	0.40
5:L3:305:ILE:H	5:L3:305:ILE:HG13	1.62	0.40
7:L5:99:TYR:CD1	7:L5:99:TYR:C	2.99	0.40
10:L8:100:GLU:OE1	10:L8:108:ARG:HD3	2.20	0.40
14:M3:106:GLN:HB3	37:O6:18:THR:OG1	2.21	0.40
14:M3:119:TYR:O	14:M3:123:ILE:HG23	2.21	0.40
18:M7:109:ALA:O	18:M7:112:LEU:HB2	2.21	0.40
20:M9:7:GLN:H	20:M9:7:GLN:CD	2.29	0.40
21:N0:82:ASP:HA	21:N0:87:THR:HA	2.03	0.40
26:N5:82:LEU:HG	26:N5:126:LEU:HD11	2.02	0.40
28:N7:24:VAL:HG21	28:N7:87:LEU:HD22	2.02	0.40
28:N7:68:ILE:O	28:N7:115:LYS:HE2	2.21	0.40
34:O3:16:TYR:OH	34:O3:91:ALA:HB2	2.22	0.40
39:O8:3:ARG:HE	39:O8:3:ARG:HB2	1.75	0.40
39:O8:8:ILE:HG23	39:O8:65:LEU:HD11	2.03	0.40
45:2:96:G:H21	45:2:426:G:C4'	2.34	0.40
45:2:641:G:H21	53:S7:178:GLY:HA3	1.85	0.40
45:2:1014:G:C6	45:2:1015:U:C4	3.09	0.40
45:2:1476:C:N4	83:2:2228:HOH:O	2.42	0.40
46:S0:172:LEU:O	46:S0:176:LEU:HG	2.21	0.40
55:S9:158:PHE:CE2	55:S9:164:PHE:HB3	2.56	0.40
58:C2:130:THR:O	58:C2:133:LEU:HB2	2.21	0.40
64:C8:25:ASN:HD22	71:D5:40:VAL:HG22	1.86	0.40
65:C9:69:LYS:H	65:C9:69:LYS:HD2	1.84	0.40
72:D6:85:ARG:HD3	72:D6:85:ARG:HA	1.83	0.40
74:D8:36:THR:O	74:D8:37:SER:OG	2.36	0.40
77:SR:40:LYS:HG2	77:SR:66:HIS:C	2.46	0.40
78:SM:84:LYS:H	78:SM:84:LYS:HG3	1.57	0.40
1:5:4:U:H2'	1:5:5:G:C8	2.56	0.40
1:5:65:A:N1	1:5:109:A:O2'	2.52	0.40
1:5:181:U:H2'	1:5:182:U:O4'	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:5:215:G:H2'	1:5:216:G:H8	1.87	0.40
1:5:289:A:H2'	1:5:290:G:H8	1.86	0.40
1:5:293:C:O2'	37:o6:76:ARG:O	2.29	0.40
1:5:385:A:H2'	1:5:386:A:C8	2.56	0.40
1:5:1145:G:H5'	33:o2:46:PHE:CE1	2.57	0.40
1:5:1482:A:O2'	1:5:1483:G:OP1	2.36	0.40
1:5:1817:G:O2'	1:5:1818:U:P	2.79	0.40
1:5:2405:C:O2	1:5:2819:A:N1	2.54	0.40
1:5:2549:G:C2	10:l8:33:ASN:O	2.73	0.40
1:5:2573:G:H2'	1:5:2574:G:O4'	2.21	0.40
1:5:2762:A:C6	1:5:2763:U:C4	3.09	0.40
1:5:2931:C:H2'	1:5:2932:U:O4'	2.21	0.40
1:5:2998:U:C4	1:5:2999:U:C4	3.09	0.40
1:5:3159:C:HO2'	1:5:3395:G:N2	2.20	0.40
7:l5:50:ARG:NH1	7:l5:72:ASP:OD2	2.55	0.40
8:l6:39:VAL:O	8:l6:40:LEU:HD23	2.20	0.40
9:l7:130:ILE:HD13	9:l7:130:ILE:HG21	1.81	0.40
10:l8:73:PRO:O	10:l8:77:GLN:N	2.54	0.40
10:l8:100:GLU:OE1	10:l8:108:ARG:HD3	2.21	0.40
11:l9:144:ILE:O	11:l9:144:ILE:HG23	2.20	0.40
12:m0:109:ASP:CB	12:m0:110:ARG:HH21	2.34	0.40
19:m8:125:ASP:O	19:m8:129:VAL:HG23	2.20	0.40
19:m8:155:MET:HE3	19:m8:163:PRO:HB3	2.02	0.40
19:m8:176:ARG:NH1	29:n8:46:ASP:OD1	2.54	0.40
20:m9:183:ALA:O	20:m9:187:GLU:N	2.39	0.40
21:n0:14:LEU:HD23	21:n0:14:LEU:HA	1.89	0.40
21:n0:42:TRP:NE1	21:n0:53:LYS:HG3	2.36	0.40
43:q2:69:VAL:HA	43:q2:84:THR:HA	2.03	0.40
45:6:109:G:O2'	45:6:796:A:N1	2.48	0.40
45:6:256:A:H2'	45:6:257:A:O4'	2.21	0.40
45:6:985:G:C2	45:6:1017:U:C2	3.10	0.40
45:6:1146:G:C6	45:6:1147:A:C6	3.09	0.40
45:6:1619:C:H2'	45:6:1620:C:C6	2.55	0.40
45:6:1662:G:H2'	45:6:1663:G:C8	2.56	0.40
49:s3:117:ARG:HD2	78:sM:126:ASP:CB	2.51	0.40
54:s8:85:PRO:HB3	57:c1:11:ARG:O	2.21	0.40
54:s8:117:TYR:CD1	54:s8:150:ALA:HA	2.56	0.40
55:s9:139:GLN:HE22	70:d4:64:PHE:HB3	1.86	0.40
55:s9:161:THR:O	55:s9:162:SER:OG	2.33	0.40
56:c0:54:TYR:O	56:c0:72:GLY:HA3	2.21	0.40
59:c3:22:ALA:HB1	59:c3:23:PRO:CA	2.49	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:c5:86:VAL:HG22	61:c5:89:MET:HG3	2.03	0.40
65:c9:33:TYR:O	65:c9:35:ASP:N	2.46	0.40
74:d8:27:GLN:HG2	74:d8:43:ASN:OD1	2.22	0.40
76:e0:39:LEU:HD12	76:e0:43:ARG:NH2	2.35	0.40
1:1:242:C:O2'	1:1:243:G:H8	2.04	0.40
1:1:432:G:H2'	1:1:433:A:C8	2.56	0.40
1:1:744:A:N3	19:M8:141:ARG:NH2	2.70	0.40
1:1:848:A:C5	1:1:849:C:H1'	2.57	0.40
1:1:973:A:H2'	1:1:974:G:O4'	2.21	0.40
1:1:1042:U:O5'	1:1:1042:U:H6	2.05	0.40
1:1:2407:C:H1'	1:1:2818:U:N3	2.37	0.40
1:1:2550:U:C5	4:L2:40:TYR:CZ	3.09	0.40
1:1:2669:G:H2'	1:1:2670:G:C8	2.55	0.40
80:1:3417:PAR:H44	35:O4:61:GLN:NE2	2.37	0.40
5:L3:305:ILE:HG12	5:L3:321:PHE:CE2	2.56	0.40
6:L4:55:LYS:HB3	6:L4:55:LYS:HE2	1.74	0.40
7:L5:56:THR:CG2	7:L5:59:ASP:HB3	2.49	0.40
8:L6:40:LEU:HB3	8:L6:84:VAL:HG22	2.03	0.40
9:L7:220:PHE:O	9:L7:229:PHE:HE2	2.04	0.40
10:L8:100:GLU:HG3	10:L8:104:GLU:HB3	2.04	0.40
10:L8:136:LEU:O	10:L8:140:VAL:HG23	2.22	0.40
11:L9:82:VAL:HA	11:L9:149:ASN:HD22	1.87	0.40
14:M3:56:PRO:HG3	14:M3:74:GLY:C	2.46	0.40
20:M9:86:GLU:OE2	20:M9:91:SER:OG	2.33	0.40
22:N1:101:CYS:SG	22:N1:102:ARG:N	2.94	0.40
29:N8:133:LEU:CD2	29:N8:137:LYS:HG3	2.51	0.40
36:O5:28:LEU:HD12	36:O5:51:ILE:HD12	2.04	0.40
45:2:381:C:H2'	45:2:382:C:C6	2.57	0.40
45:2:600:U:OP2	69:D3:108:GLY:HA2	2.21	0.40
45:2:1173:C:H2'	45:2:1174:C:C6	2.54	0.40
45:2:1198:G:OP1	45:2:1199:G:O2'	2.28	0.40
45:2:1553:G:H1	61:C5:40:ARG:NH2	2.19	0.40
45:2:1592:A:C2	45:2:1605:G:C2	3.09	0.40
47:S1:157:GLN:O	47:S1:158:SER:C	2.64	0.40
50:S4:104:ASP:OD2	50:S4:108:ARG:NH1	2.48	0.40
51:S5:116:HIS:HE2	71:D5:95:HIS:CE1	2.39	0.40
60:C4:101:ALA:O	60:C4:105:LEU:HG	2.21	0.40
63:C7:37:GLU:HG3	77:SR:150:TRP:NE1	2.31	0.40
64:C8:25:ASN:OD1	64:C8:25:ASN:N	2.55	0.40
66:D0:80:GLU:HG3	75:D9:54:LYS:NZ	2.37	0.40
75:D9:36:LEU:H	75:D9:36:LEU:HD23	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
77:SR:17:ASN:HB3	77:SR:39:ASP:HB3	2.03	0.40
77:SR:127:ARG:HG2	77:SR:150:TRP:CD2	2.57	0.40
1:5:124:U:O2	1:5:149:U:O2'	2.18	0.40
1:5:359:U:H4'	1:5:817:A:H62	1.85	0.40
1:5:563:U:H2'	1:5:564:G:H8	1.85	0.40
1:5:677:A:H2'	1:5:785:G:C6	2.57	0.40
1:5:1149:G:N2	1:5:1199:C:N4	2.69	0.40
1:5:1777:U:O2'	1:5:1778:G:H5'	2.21	0.40
1:5:1887:A:H5'	5:l3:226:PHE:O	2.21	0.40
1:5:2115:G:O2'	20:m9:82:LYS:HE3	2.22	0.40
1:5:2205:U:OP2	1:5:2205:U:H4'	2.20	0.40
1:5:3236:U:O2'	1:5:3237:U:H5'	2.22	0.40
3:8:102:U:H2'	3:8:103:G:C8	2.56	0.40
4:l2:65:ASP:OD1	4:l2:70:ARG:HD2	2.21	0.40
9:l7:127:LEU:HD13	9:l7:136:TYR:CE2	2.57	0.40
9:l7:223:PHE:CD1	9:l7:232:ARG:HB3	2.57	0.40
10:l8:86:THR:O	10:l8:90:THR:HG23	2.21	0.40
14:m3:94:GLY:HA3	36:o5:116:TYR:OH	2.22	0.40
18:m7:111:LYS:O	18:m7:153:LYS:N	2.38	0.40
23:n2:43:VAL:O	23:n2:44:GLU:C	2.64	0.40
28:n7:16:GLY:N	28:n7:19:ALA:HB2	2.36	0.40
32:o1:71:LEU:HD23	32:o1:71:LEU:HA	1.67	0.40
45:6:116:U:O2	45:6:333:A:H2	2.05	0.40
45:6:301:A:H4'	54:s8:27:PHE:CD2	2.56	0.40
45:6:781:U:O2	45:6:781:U:H2'	2.21	0.40
45:6:1087:A:H2	45:6:1142:A:H4'	1.86	0.40
45:6:1351:G:H22	45:6:1375:A:H1'	1.87	0.40
45:6:1729:C:H2'	45:6:1730:A:O4'	2.21	0.40
45:6:1784:C:H2'	45:6:1785:U:H6	1.86	0.40
46:s0:144:ILE:HG23	46:s0:158:VAL:O	2.21	0.40
48:s2:35:TRP:O	48:s2:46:LYS:HE3	2.22	0.40
50:s4:92:LEU:HD12	50:s4:95:THR:HG21	2.03	0.40
50:s4:121:TYR:HD2	50:s4:161:LYS:HG3	1.86	0.40
51:s5:123:VAL:HG11	71:d5:59:TYR:HB2	2.03	0.40
79:s6:136:LYS:O	79:s6:175:ILE:HA	2.21	0.40
79:s6:141:ILE:HD11	79:s6:175:ILE:HD12	2.03	0.40
53:s7:107:ARG:HB2	53:s7:108:GLN:HG2	2.02	0.40
53:s7:164:TYR:CZ	53:s7:165:LYS:HE2	2.57	0.40
54:s8:36:THR:HG21	54:s8:57:ALA:HB3	2.03	0.40
58:c2:29:LYS:HE3	58:c2:29:LYS:HB2	1.88	0.40
59:c3:91:LEU:HB3	59:c3:122:ILE:HG12	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
64:c8:4:VAL:HG21	71:d5:82:HIS:CB	2.51	0.40
65:c9:20:SER:O	65:c9:24:ARG:HG3	2.22	0.40
68:d2:5:SER:C	68:d2:7:LEU:H	2.29	0.40
68:d2:41:MET:HB3	68:d2:47:ILE:HG12	2.03	0.40
69:d3:110:LYS:HB2	69:d3:110:LYS:HE3	1.91	0.40
1:1:359:U:H4'	1:1:817:A:N6	2.37	0.40
1:1:613:G:H2'	1:1:614:C:H6	1.86	0.40
1:1:637:C:H4'	1:1:638:C:OP1	2.21	0.40
1:1:817:A:OP2	1:1:817:A:H4'	2.21	0.40
1:1:1715:A:O3'	1:1:1716:U:H3'	2.20	0.40
1:1:1725:C:H5'	44:Q3:36:ARG:NH1	2.36	0.40
1:1:1918:C:H2'	1:1:1919:G:O4'	2.21	0.40
1:1:2356:A:H5'	18:M7:138:LYS:NZ	2.36	0.40
1:1:2883:U:H2'	1:1:2884:C:C6	2.57	0.40
1:1:3323:A:H8	1:1:3323:A:O5'	2.04	0.40
3:4:131:A:H2'	3:4:132:G:H8	1.86	0.40
6:L4:74:ILE:H	6:L4:74:ILE:HD13	1.86	0.40
6:L4:89:ALA:O	6:L4:91:GLY:N	2.54	0.40
6:L4:194:TYR:O	6:L4:196:ASN:N	2.54	0.40
7:L5:106:ALA:O	7:L5:110:LEU:HD22	2.22	0.40
8:L6:153:PRO:C	8:L6:155:LEU:H	2.30	0.40
9:L7:175:LYS:HB3	9:L7:175:LYS:HE2	1.92	0.40
10:L8:98:ARG:HA	10:L8:99:PRO:HD3	1.90	0.40
10:L8:169:LEU:HD23	37:O6:43:LEU:HD11	2.04	0.40
11:L9:9:GLN:HB3	11:L9:52:LEU:HD21	2.03	0.40
13:M1:60:ARG:HD2	43:Q2:105:GLN:HA	2.04	0.40
16:M5:180:PHE:O	16:M5:181:ASN:C	2.63	0.40
20:M9:61:SER:OG	20:M9:62:ARG:N	2.54	0.40
21:N0:104:GLU:O	21:N0:108:GLN:HG2	2.20	0.40
23:N2:88:GLN:N	23:N2:88:GLN:OE1	2.54	0.40
27:N6:40:ARG:NH1	27:N6:46:LYS:HD2	2.37	0.40
33:O2:32:TRP:CE2	33:O2:53:PRO:HD2	2.57	0.40
39:O8:11:PHE:O	39:O8:15:THR:HG23	2.21	0.40
45:2:1:U:C1'	45:2:2:A:P	3.10	0.40
45:2:37:U:H5''	45:2:38:C:OP2	2.21	0.40
45:2:464:A:C2	45:2:465:G:C8	3.08	0.40
45:2:793:A:H5'	45:2:794:U:OP1	2.22	0.40
45:2:856:A:OP1	53:S7:97:ARG:HD3	2.22	0.40
45:2:888:U:H2'	45:2:889:U:C6	2.56	0.40
45:2:1411:A:P	62:C6:118:ILE:HD11	2.60	0.40
45:2:1545:A:N7	64:C8:134:ARG:NH2	2.69	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:S0:103:THR:O	46:S0:103:THR:HG22	2.21	0.40
49:S3:162:GLN:NE2	49:S3:166:ASP:OD2	2.44	0.40
50:S4:23:LEU:HD13	50:S4:23:LEU:HA	1.80	0.40
50:S4:49:ARG:HD2	50:S4:58:GLY:N	2.37	0.40
52:S6:139:ASN:HA	52:S6:142:ARG:HD2	2.03	0.40
53:S7:13:PRO:CB	53:S7:14:THR:HB	2.52	0.40
53:S7:97:ARG:HD2	53:S7:97:ARG:HA	1.87	0.40
54:S8:184:LEU:C	54:S8:189:LEU:HB2	2.46	0.40
55:S9:132:ARG:HB3	55:S9:132:ARG:HH11	1.87	0.40
63:C7:16:LEU:HD22	63:C7:38:ILE:HD13	2.04	0.40
63:C7:84:TYR:O	63:C7:85:VAL:HG13	2.22	0.40
69:D3:127:VAL:O	69:D3:130:VAL:HG22	2.21	0.40
1:5:16:A:H5''	26:n5:43:ALA:O	2.21	0.40
1:5:30:G:C6	1:5:55:G:C6	3.09	0.40
1:5:191:U:H2'	1:5:192:C:C6	2.57	0.40
1:5:1781:C:H2'	1:5:1782:U:C6	2.56	0.40
1:5:1813:A:OP1	1:5:1817:G:H4'	2.21	0.40
1:5:1819:U:H2'	1:5:1820:U:H5'	2.03	0.40
1:5:2148:U:H2'	1:5:2149:A:C4	2.56	0.40
1:5:2282:U:O2	1:5:2310:U:H4'	2.22	0.40
1:5:2599:U:OP1	16:m5:70:ASN:HB2	2.21	0.40
1:5:2716:U:H5''	43:q2:83:LEU:HD11	2.03	0.40
1:5:2745:G:O2'	1:5:2747:A:N7	2.42	0.40
1:5:3043:C:P	24:n3:48:ARG:NH2	2.94	0.40
1:5:3364:C:H2'	1:5:3365:U:H6	1.85	0.40
2:7:85:G:O3'	9:l7:218:ARG:NH2	2.53	0.40
3:8:80:A:H3'	3:8:82:U:C2	2.56	0.40
4:l2:126:LEU:H	4:l2:126:LEU:HG	1.66	0.40
5:l3:77:THR:HG23	5:l3:326:GLY:O	2.21	0.40
5:l3:86:VAL:HB	5:l3:198:HIS:O	2.20	0.40
6:l4:205:PRO:HB3	6:l4:247:PHE:CD2	2.57	0.40
6:l4:347:THR:HG21	9:l7:64:GLN:OE1	2.22	0.40
9:l7:99:PRO:O	9:l7:103:LEU:HD12	2.20	0.40
14:m3:70:ARG:HD2	14:m3:71:ALA:O	2.21	0.40
16:m5:6:TYR:O	16:m5:10:LEU:HB2	2.21	0.40
18:m7:120:ASN:OD1	18:m7:120:ASN:N	2.54	0.40
19:m8:174:ARG:CZ	19:m8:174:ARG:HB3	2.50	0.40
37:o6:54:GLU:O	37:o6:58:ILE:HG23	2.22	0.40
45:6:138:A:H8	45:6:142:G:H5'	1.82	0.40
45:6:632:U:OP1	57:c1:102:LYS:HD2	2.21	0.40
45:6:1370:U:H1'	45:6:1371:A:H4'	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:6:1553:G:H2'	45:6:1555:A:OP2	2.21	0.40
45:6:1590:G:H2'	45:6:1591:C:C6	2.55	0.40
45:6:1717:G:C2	45:6:1718:G:C4	3.10	0.40
45:6:1778:G:H2'	45:6:1779:U:H6	1.86	0.40
45:6:1796:C:C2	72:d6:5:ARG:HG2	2.57	0.40
46:s0:119:ARG:HE	48:s2:240:LEU:HD23	1.87	0.40
46:s0:189:VAL:CG2	46:s0:190:ASP:H	2.23	0.40
48:s2:233:GLN:HG3	48:s2:234:PRO:HD2	2.03	0.40
50:s4:199:GLU:N	50:s4:207:LEU:O	2.46	0.40
55:s9:83:VAL:HG23	55:s9:85:VAL:HG23	2.04	0.40
59:c3:23:PRO:HB2	59:c3:25:TRP:CD1	2.57	0.40
59:c3:89:TYR:HE1	59:c3:93:LYS:HD2	1.86	0.40
60:c4:132:ARG:O	60:c4:134:GLY:N	2.55	0.40
61:c5:126:VAL:CG1	61:c5:127:ARG:N	2.84	0.40
64:c8:16:ARG:HA	64:c8:21:ASN:HA	2.03	0.40
65:c9:111:ILE:H	65:c9:111:ILE:HG13	1.73	0.40
66:d0:101:LYS:O	66:d0:105:GLN:HG2	2.22	0.40
78:sM:84:LYS:O	78:sM:85:SER:HB2	2.21	0.40
1:1:20:A:N6	1:1:21:G:O6	2.54	0.40
1:1:89:A:H2'	1:1:90:C:H6	1.87	0.40
1:1:260:C:H2'	1:1:261:U:O4'	2.21	0.40
1:1:1341:U:O2'	19:M8:10:HIS:HB3	2.20	0.40
1:1:1657:C:C5	1:1:1797:A:H5''	2.57	0.40
1:1:1729:A:H4'	1:1:1730:G:OP2	2.21	0.40
1:1:1871:U:OP2	83:1:4318:HOH:O	2.22	0.40
1:1:2616:C:H3'	1:1:2617:U:O2	2.21	0.40
1:1:3001:C:H2'	1:1:3002:C:H6	1.86	0.40
1:1:3025:C:H2'	1:1:3026:G:C8	2.56	0.40
1:1:3220:G:H1	1:1:3265:C:H42	1.70	0.40
9:L7:89:ILE:HG12	9:L7:135:ALA:N	2.36	0.40
9:L7:197:GLN:H	9:L7:197:GLN:CD	2.30	0.40
10:L8:157:VAL:HG21	10:L8:163:VAL:HG21	2.04	0.40
11:L9:44:THR:HG21	15:M4:12:TRP:CH2	2.57	0.40
12:M0:16:PRO:HD3	12:M0:128:ARG:HH12	1.87	0.40
15:M4:72:LEU:HD22	15:M4:73:PRO:HD2	2.02	0.40
15:M4:120:VAL:HG22	17:M6:197:LEU:HD13	2.03	0.40
20:M9:6:THR:HG22	20:M9:10:LEU:CD2	2.52	0.40
21:N0:14:LEU:CD2	21:N0:57:GLU:HB3	2.52	0.40
21:N0:155:ARG:HB3	21:N0:172:TYR:HB2	2.04	0.40
23:N2:84:LEU:HD13	23:N2:93:ILE:HG13	2.02	0.40
30:N9:28:LYS:HG3	30:N9:29:TYR:CD1	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:O3:15:SER:HA	34:O3:94:PHE:CE1	2.56	0.40
34:O3:53:TYR:HE1	34:O3:67:MET:HG3	1.86	0.40
36:O5:96:GLU:O	36:O5:98:SER:N	2.55	0.40
40:O9:13:MET:HB3	40:O9:49:MET:HE1	2.04	0.40
44:Q3:49:ARG:HG3	44:Q3:55:TRP:CZ2	2.57	0.40
45:2:63:G:H4'	45:2:170:U:C5	2.57	0.40
45:2:137:U:O2	45:2:137:U:H2'	2.22	0.40
45:2:310:C:H4'	69:D3:33:LEU:HD13	2.02	0.40
45:2:521:A:O2'	70:D4:35:VAL:O	2.39	0.40
45:2:591:A:H5''	55:S9:24:LEU:HD13	2.03	0.40
45:2:1611:A:O2'	51:S5:95:ASN:HB3	2.22	0.40
45:2:1673:G:O5'	45:2:1673:G:H8	2.05	0.40
46:S0:31:VAL:CG2	46:S0:150:ASP:HA	2.52	0.40
51:S5:123:VAL:HG21	71:D5:100:ILE:HD13	2.04	0.40
52:S6:58:LYS:HG2	52:S6:58:LYS:H	1.58	0.40
53:S7:185:ILE:HA	53:S7:186:PRO:HD3	1.94	0.40
54:S8:21:PHE:O	54:S8:22:ARG:HG2	2.22	0.40
55:S9:56:ALA:O	55:S9:60:LEU:HG	2.22	0.40
58:C2:126:TRP:O	58:C2:126:TRP:HD1	2.04	0.40
59:C3:54:LEU:O	59:C3:60:VAL:HB	2.21	0.40
59:C3:88:LEU:HD23	59:C3:88:LEU:HA	1.86	0.40
59:C3:146:ALA:O	59:C3:149:LEU:N	2.55	0.40
65:C9:7:ARG:NH1	65:C9:67:MET:HG3	2.37	0.40
68:D2:104:LEU:H	68:D2:104:LEU:HD23	1.87	0.40
68:D2:111:MET:HB2	68:D2:115:GLU:HB3	2.03	0.40
77:SR:25:THR:HG23	77:SR:293:ALA:HB1	2.03	0.40
1:5:384:A:H5''	1:5:385:A:OP2	2.21	0.40
1:5:608:A:C4	8:l6:22:ARG:NH1	2.89	0.40
1:5:1566:A:H2'	1:5:1566:A:N3	2.36	0.40
1:5:1807:G:O2'	1:5:2559:U:O4	2.31	0.40
1:5:2176:U:OP1	4:l2:54:ARG:NH2	2.55	0.40
1:5:2205:U:H4'	1:5:2206:G:OP1	2.21	0.40
1:5:2381:G:O6	83:5:4263:HOH:O	2.21	0.40
1:5:2762:A:H2'	1:5:2763:U:C6	2.57	0.40
1:5:3192:U:H2'	1:5:3193:C:H6	1.87	0.40
2:7:1:G:H21	7:l5:269:SER:HB2	1.87	0.40
2:7:43:U:H4'	13:m1:140:ARG:O	2.21	0.40
4:l2:4:VAL:HG12	4:l2:8:GLN:HB2	2.03	0.40
4:l2:27:ALA:HA	4:l2:75:ILE:HG22	2.04	0.40
4:l2:146:THR:HG22	4:l2:147:ARG:N	2.37	0.40
4:l2:181:LYS:HB2	4:l2:184:ARG:CG	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:l5:55:PHE:CD1	7:l5:60:ILE:HG12	2.57	0.40
8:l6:40:LEU:HB3	8:l6:84:VAL:HG11	2.04	0.40
10:l8:187:GLY:CA	10:l8:195:SER:HB2	2.51	0.40
11:l9:71:VAL:O	11:l9:75:VAL:HG23	2.22	0.40
11:l9:79:ILE:O	11:l9:82:VAL:HG12	2.21	0.40
14:m3:92:THR:HG22	36:o5:114:ARG:HG2	2.03	0.40
17:m6:18:ARG:O	17:m6:22:VAL:HG13	2.22	0.40
29:n8:14:HIS:CE1	33:o2:36:LYS:HE2	2.56	0.40
37:o6:11:LEU:HD12	37:o6:11:LEU:HA	1.90	0.40
45:6:196:G:N2	45:6:197:A:H1'	2.36	0.40
45:6:604:A:H2'	45:6:605:A:O4'	2.21	0.40
45:6:1196:A:H4'	45:6:1197:C:H5''	2.03	0.40
45:6:1349:G:H2'	45:6:1350:U:C6	2.57	0.40
80:6:1902:PAR:H14	80:6:1902:PAR:H43	1.75	0.40
46:s0:3:LEU:HD11	46:s0:7:PHE:CD1	2.57	0.40
47:s1:30:PHE:CE1	47:s1:94:LYS:HA	2.57	0.40
48:s2:218:ILE:H	48:s2:218:ILE:HG13	1.59	0.40
50:s4:50:ASN:C	50:s4:51:ARG:HE	2.29	0.40
50:s4:245:LYS:HA	50:s4:245:LYS:HD2	1.90	0.40
51:s5:41:LYS:NZ	51:s5:68:ILE:HA	2.36	0.40
51:s5:114:ILE:O	51:s5:118:LEU:HG	2.22	0.40
51:s5:165:LEU:HD23	74:d8:47:PRO:HG2	2.02	0.40
79:s6:216:LEU:C	79:s6:218:GLU:N	2.78	0.40
55:s9:126:ARG:O	55:s9:129:ILE:N	2.55	0.40
56:c0:3:MET:HB2	56:c0:3:MET:HE2	1.72	0.40
56:c0:15:LEU:HD23	56:c0:15:LEU:HA	1.90	0.40
56:c0:32:HIS:CD2	56:c0:33:GLU:N	2.89	0.40
67:d1:38:LYS:HD2	67:d1:49:GLU:HG3	2.03	0.40
67:d1:58:TYR:CE1	67:d1:62:ARG:HG3	2.56	0.40
69:d3:110:LYS:HB2	69:d3:112:LYS:NZ	2.36	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	L2	246/248 (99%)	236 (96%)	10 (4%)	0	100	100
4	l2	246/248 (99%)	229 (93%)	16 (6%)	1 (0%)	30	60
5	L3	384/386 (100%)	355 (92%)	27 (7%)	2 (0%)	24	55
5	l3	384/386 (100%)	359 (94%)	25 (6%)	0	100	100
6	L4	359/361 (99%)	334 (93%)	24 (7%)	1 (0%)	36	65
6	l4	359/361 (99%)	318 (89%)	39 (11%)	2 (1%)	21	52
7	L5	291/296 (98%)	260 (89%)	29 (10%)	2 (1%)	18	49
7	l5	292/296 (99%)	261 (89%)	30 (10%)	1 (0%)	36	65
8	L6	152/176 (86%)	142 (93%)	8 (5%)	2 (1%)	9	35
8	l6	153/176 (87%)	136 (89%)	16 (10%)	1 (1%)	18	49
9	L7	224/226 (99%)	206 (92%)	17 (8%)	1 (0%)	30	60
9	l7	221/226 (98%)	202 (91%)	18 (8%)	1 (0%)	24	55
10	L8	229/231 (99%)	199 (87%)	27 (12%)	3 (1%)	9	35
10	l8	229/231 (99%)	190 (83%)	35 (15%)	4 (2%)	7	30
11	L9	187/191 (98%)	167 (89%)	19 (10%)	1 (0%)	24	55
11	l9	189/191 (99%)	176 (93%)	11 (6%)	2 (1%)	11	39
12	M0	215/221 (97%)	196 (91%)	18 (8%)	1 (0%)	24	55
12	m0	217/221 (98%)	200 (92%)	17 (8%)	0	100	100
13	M1	167/169 (99%)	146 (87%)	18 (11%)	3 (2%)	6	29
13	m1	167/169 (99%)	140 (84%)	25 (15%)	2 (1%)	10	37
14	M3	191/194 (98%)	171 (90%)	19 (10%)	1 (0%)	24	55
14	m3	192/194 (99%)	157 (82%)	34 (18%)	1 (0%)	24	55
15	M4	134/137 (98%)	121 (90%)	12 (9%)	1 (1%)	18	49
15	m4	135/137 (98%)	126 (93%)	9 (7%)	0	100	100
16	M5	201/203 (99%)	190 (94%)	11 (6%)	0	100	100
16	m5	201/203 (99%)	184 (92%)	16 (8%)	1 (0%)	24	55
17	M6	195/197 (99%)	187 (96%)	8 (4%)	0	100	100
17	m6	195/197 (99%)	183 (94%)	11 (6%)	1 (0%)	24	55
18	M7	171/184 (93%)	164 (96%)	7 (4%)	0	100	100
18	m7	153/184 (83%)	142 (93%)	11 (7%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	M8	183/185 (99%)	169 (92%)	13 (7%)	1 (0%)	24	55
19	m8	183/185 (99%)	166 (91%)	15 (8%)	2 (1%)	11	39
20	M9	183/188 (97%)	162 (88%)	21 (12%)	0	100	100
20	m9	186/188 (99%)	173 (93%)	13 (7%)	0	100	100
21	N0	170/172 (99%)	151 (89%)	18 (11%)	1 (1%)	21	52
21	n0	170/172 (99%)	161 (95%)	9 (5%)	0	100	100
22	N1	157/159 (99%)	139 (88%)	16 (10%)	2 (1%)	9	35
22	n1	157/159 (99%)	150 (96%)	6 (4%)	1 (1%)	21	52
23	N2	97/99 (98%)	88 (91%)	7 (7%)	2 (2%)	5	26
23	n2	96/99 (97%)	86 (90%)	10 (10%)	0	100	100
24	N3	130/136 (96%)	124 (95%)	6 (5%)	0	100	100
24	n3	134/136 (98%)	132 (98%)	2 (2%)	0	100	100
25	N4	61/155 (39%)	56 (92%)	5 (8%)	0	100	100
25	n4	133/155 (86%)	121 (91%)	10 (8%)	2 (2%)	8	32
26	N5	116/120 (97%)	104 (90%)	11 (10%)	1 (1%)	14	43
26	n5	118/120 (98%)	105 (89%)	11 (9%)	2 (2%)	7	30
27	N6	123/125 (98%)	119 (97%)	4 (3%)	0	100	100
27	n6	121/125 (97%)	114 (94%)	7 (6%)	0	100	100
28	N7	133/135 (98%)	118 (89%)	15 (11%)	0	100	100
28	n7	133/135 (98%)	117 (88%)	15 (11%)	1 (1%)	16	45
29	N8	146/148 (99%)	133 (91%)	12 (8%)	1 (1%)	18	49
29	n8	146/148 (99%)	128 (88%)	18 (12%)	0	100	100
30	N9	54/58 (93%)	46 (85%)	8 (15%)	0	100	100
30	n9	56/58 (97%)	47 (84%)	8 (14%)	1 (2%)	6	29
31	O0	95/100 (95%)	91 (96%)	3 (3%)	1 (1%)	11	39
31	o0	98/100 (98%)	86 (88%)	11 (11%)	1 (1%)	12	40
32	O1	102/112 (91%)	98 (96%)	3 (3%)	1 (1%)	12	40
32	o1	107/112 (96%)	96 (90%)	11 (10%)	0	100	100
33	O2	123/127 (97%)	114 (93%)	8 (6%)	1 (1%)	16	45
33	o2	125/127 (98%)	117 (94%)	8 (6%)	0	100	100
34	O3	104/106 (98%)	98 (94%)	6 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
34	o3	104/106 (98%)	98 (94%)	6 (6%)	0	100	100
35	O4	110/112 (98%)	101 (92%)	9 (8%)	0	100	100
35	o4	110/112 (98%)	99 (90%)	10 (9%)	1 (1%)	14	43
36	O5	117/119 (98%)	107 (92%)	9 (8%)	1 (1%)	14	43
36	o5	117/119 (98%)	103 (88%)	14 (12%)	0	100	100
37	O6	95/99 (96%)	83 (87%)	11 (12%)	1 (1%)	11	39
37	o6	97/99 (98%)	83 (86%)	14 (14%)	0	100	100
38	O7	82/87 (94%)	78 (95%)	4 (5%)	0	100	100
38	o7	85/87 (98%)	78 (92%)	7 (8%)	0	100	100
39	O8	75/77 (97%)	66 (88%)	9 (12%)	0	100	100
39	o8	75/77 (97%)	63 (84%)	12 (16%)	0	100	100
40	O9	48/50 (96%)	44 (92%)	4 (8%)	0	100	100
40	o9	48/50 (96%)	43 (90%)	5 (10%)	0	100	100
41	Q0	50/52 (96%)	45 (90%)	5 (10%)	0	100	100
41	q0	50/52 (96%)	47 (94%)	2 (4%)	1 (2%)	6	27
42	Q1	23/25 (92%)	21 (91%)	2 (9%)	0	100	100
42	q1	23/25 (92%)	23 (100%)	0	0	100	100
43	Q2	103/105 (98%)	88 (85%)	15 (15%)	0	100	100
43	q2	103/105 (98%)	96 (93%)	7 (7%)	0	100	100
44	Q3	89/91 (98%)	80 (90%)	9 (10%)	0	100	100
44	q3	89/91 (98%)	80 (90%)	9 (10%)	0	100	100
46	S0	204/206 (99%)	179 (88%)	22 (11%)	3 (2%)	8	32
46	s0	204/206 (99%)	177 (87%)	26 (13%)	1 (0%)	24	55
47	S1	209/216 (97%)	161 (77%)	40 (19%)	8 (4%)	2	16
47	s1	214/216 (99%)	186 (87%)	26 (12%)	2 (1%)	14	43
48	S2	215/217 (99%)	194 (90%)	19 (9%)	2 (1%)	14	43
48	s2	215/217 (99%)	187 (87%)	28 (13%)	0	100	100
49	S3	207/223 (93%)	188 (91%)	19 (9%)	0	100	100
49	s3	221/223 (99%)	187 (85%)	33 (15%)	1 (0%)	24	55
50	S4	252/260 (97%)	219 (87%)	31 (12%)	2 (1%)	16	45
50	s4	258/260 (99%)	224 (87%)	34 (13%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
51	S5	204/206 (99%)	173 (85%)	29 (14%)	2 (1%)	12	40
51	s5	204/206 (99%)	177 (87%)	25 (12%)	2 (1%)	12	40
52	S6	194/236 (82%)	174 (90%)	20 (10%)	0	100	100
53	S7	175/186 (94%)	138 (79%)	35 (20%)	2 (1%)	11	39
53	s7	184/186 (99%)	155 (84%)	28 (15%)	1 (0%)	24	55
54	S8	181/200 (90%)	157 (87%)	22 (12%)	2 (1%)	11	39
54	s8	184/200 (92%)	162 (88%)	21 (11%)	1 (0%)	24	55
55	S9	172/185 (93%)	140 (81%)	31 (18%)	1 (1%)	21	52
55	s9	183/185 (99%)	165 (90%)	18 (10%)	0	100	100
56	C0	88/105 (84%)	73 (83%)	14 (16%)	1 (1%)	11	39
56	c0	92/105 (88%)	65 (71%)	19 (21%)	8 (9%)	0	4
57	C1	137/146 (94%)	126 (92%)	10 (7%)	1 (1%)	18	49
57	c1	144/146 (99%)	130 (90%)	12 (8%)	2 (1%)	9	33
58	C2	98/143 (68%)	70 (71%)	25 (26%)	3 (3%)	3	20
58	c2	122/143 (85%)	91 (75%)	28 (23%)	3 (2%)	4	23
59	C3	148/150 (99%)	129 (87%)	18 (12%)	1 (1%)	18	49
59	c3	148/150 (99%)	130 (88%)	15 (10%)	3 (2%)	6	27
60	C4	125/128 (98%)	98 (78%)	25 (20%)	2 (2%)	7	31
60	c4	126/128 (98%)	108 (86%)	17 (14%)	1 (1%)	16	45
61	C5	114/141 (81%)	101 (89%)	13 (11%)	0	100	100
61	c5	133/141 (94%)	100 (75%)	29 (22%)	4 (3%)	3	20
62	C6	134/142 (94%)	114 (85%)	19 (14%)	1 (1%)	18	49
62	c6	140/142 (99%)	132 (94%)	8 (6%)	0	100	100
63	C7	111/136 (82%)	94 (85%)	14 (13%)	3 (3%)	4	22
63	c7	113/136 (83%)	95 (84%)	12 (11%)	6 (5%)	1	10
64	C8	141/145 (97%)	111 (79%)	28 (20%)	2 (1%)	9	33
64	c8	143/145 (99%)	126 (88%)	15 (10%)	2 (1%)	9	33
65	C9	135/143 (94%)	120 (89%)	14 (10%)	1 (1%)	18	49
65	c9	141/143 (99%)	125 (89%)	15 (11%)	1 (1%)	18	49
66	D0	100/109 (92%)	90 (90%)	10 (10%)	0	100	100
66	d0	107/109 (98%)	95 (89%)	11 (10%)	1 (1%)	14	43

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
67	D1	85/87 (98%)	67 (79%)	15 (18%)	3 (4%)	3	18
67	d1	85/87 (98%)	74 (87%)	10 (12%)	1 (1%)	10	37
68	D2	127/129 (98%)	111 (87%)	14 (11%)	2 (2%)	7	31
68	d2	127/129 (98%)	113 (89%)	13 (10%)	1 (1%)	16	45
69	D3	142/144 (99%)	120 (84%)	21 (15%)	1 (1%)	18	49
69	d3	142/144 (99%)	125 (88%)	17 (12%)	0	100	100
70	D4	132/134 (98%)	117 (89%)	13 (10%)	2 (2%)	8	32
70	d4	132/134 (98%)	118 (89%)	14 (11%)	0	100	100
71	D5	68/70 (97%)	54 (79%)	11 (16%)	3 (4%)	2	13
71	d5	67/70 (96%)	56 (84%)	11 (16%)	0	100	100
72	D6	95/97 (98%)	69 (73%)	22 (23%)	4 (4%)	2	14
72	d6	95/97 (98%)	75 (79%)	18 (19%)	2 (2%)	5	26
73	D7	79/81 (98%)	71 (90%)	8 (10%)	0	100	100
73	d7	79/81 (98%)	72 (91%)	7 (9%)	0	100	100
74	D8	61/63 (97%)	51 (84%)	10 (16%)	0	100	100
74	d8	61/63 (97%)	48 (79%)	12 (20%)	1 (2%)	7	31
75	D9	51/53 (96%)	43 (84%)	7 (14%)	1 (2%)	6	27
75	d9	51/53 (96%)	43 (84%)	8 (16%)	0	100	100
76	E0	58/62 (94%)	50 (86%)	7 (12%)	1 (2%)	7	30
76	e0	60/62 (97%)	51 (85%)	7 (12%)	2 (3%)	3	19
77	SR	315/318 (99%)	274 (87%)	41 (13%)	0	100	100
77	sR	316/318 (99%)	278 (88%)	37 (12%)	1 (0%)	36	65
78	SM	143/272 (53%)	117 (82%)	25 (18%)	1 (1%)	18	49
78	sM	89/272 (33%)	73 (82%)	15 (17%)	1 (1%)	11	39
79	s6	216/218 (99%)	183 (85%)	30 (14%)	3 (1%)	9	33
All	All	21808/22972 (95%)	19331 (89%)	2311 (11%)	166 (1%)	16	45

All (166) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
8	L6	98	VAL
10	L8	36	ILE
10	L8	116	VAL

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Mol	Chain	Res	Type
11	L9	50	ASN
33	O2	123	LYS
51	S5	64	VAL
56	C0	88	PRO
57	C1	7	VAL
63	C7	85	VAL
68	D2	83	ILE
71	D5	88	ILE
8	l6	98	VAL
10	l8	203	VAL
19	m8	124	LEU
26	n5	47	ALA
30	n9	21	ILE
31	o0	100	ILE
56	c0	83	PRO
56	c0	88	PRO
56	c0	97	PRO
57	c1	7	VAL
59	c3	66	ILE
63	c7	97	ASN
63	c7	99	VAL
65	c9	34	VAL
76	e0	45	VAL
5	L3	140	ASP
6	L4	195	ARG
13	M1	114	ILE
23	N2	11	ILE
23	N2	88	GLN
58	C2	89	ILE
60	C4	42	VAL
63	C7	84	TYR
71	D5	41	ILE
72	D6	75	VAL
25	n4	63	ILE
25	n4	76	VAL
35	o4	48	GLY
46	s0	189	VAL
51	s5	36	ALA
53	s7	109	VAL
56	c0	78	GLU
56	c0	82	LEU
56	c0	92	ILE

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Mol	Chain	Res	Type
63	c7	117	LEU
63	c7	118	PRO
66	d0	18	GLN
68	d2	6	VAL
74	d8	7	VAL
12	M0	24	ARG
13	M1	56	THR
13	M1	173	ASP
31	O0	37	GLY
36	O5	98	SER
47	S1	49	ASN
47	S1	62	LYS
63	C7	88	VAL
67	D1	29	HIS
68	D2	31	SER
71	D5	71	ILE
72	D6	58	VAL
14	m3	47	ALA
49	s3	217	ILE
56	c0	96	ASN
61	c5	12	PHE
61	c5	50	THR
67	d1	29	HIS
14	M3	47	ALA
15	M4	8	LYS
19	M8	99	THR
22	N1	22	HIS
22	N1	124	VAL
29	N8	48	TYR
46	S0	68	PRO
47	S1	130	SER
51	S5	51	VAL
54	S8	152	ILE
70	D4	5	VAL
9	l7	191	VAL
13	m1	11	ASP
16	m5	149	ASN
19	m8	99	THR
58	c2	91	VAL
58	c2	106	ILE
58	c2	131	ASP
63	c7	104	ASN

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Mol	Chain	Res	Type
64	c8	92	ILE
72	d6	61	GLU
7	L5	9	SER
8	L6	97	ASN
26	N5	50	ALA
47	S1	56	SER
47	S1	94	LYS
48	S2	144	TRP
54	S8	148	ALA
58	C2	69	ALA
72	D6	64	LEU
10	l8	117	ALA
13	m1	114	ILE
22	n1	83	ARG
59	c3	22	ALA
59	c3	87	ASP
60	c4	133	ARG
61	c5	130	ARG
47	S1	68	VAL
48	S2	126	ARG
50	S4	179	LYS
65	C9	53	TRP
72	D6	65	PRO
4	l2	49	VAL
6	l4	144	LYS
7	l5	125	VAL
10	l8	240	ASN
26	n5	62	VAL
28	n7	103	GLN
51	s5	35	GLN
76	e0	50	VAL
77	sR	308	ASN
78	sM	51	ARG
10	L8	157	VAL
46	S0	158	VAL
50	S4	195	ILE
58	C2	91	VAL
75	D9	11	PRO
6	l4	145	ILE
11	l9	144	ILE
21	N0	167	ARG
32	O1	7	VAL

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Mol	Chain	Res	Type
37	O6	3	VAL
47	S1	66	VAL
67	D1	6	GLY
67	D1	32	VAL
47	s1	225	VAL
79	s6	69	LEU
56	c0	35	ILE
61	c5	5	VAL
9	L7	178	ILE
47	S1	210	ILE
53	S7	98	ILE
59	C3	22	ALA
64	C8	14	ILE
76	E0	47	VAL
10	l8	237	ILE
41	q0	78	ILE
47	s1	22	ASP
79	s6	153	VAL
54	s8	78	ILE
57	c1	129	ARG
64	c8	14	ILE
5	L3	317	ILE
46	S0	103	THR
60	C4	39	ILE
62	C6	39	VAL
64	C8	5	VAL
69	D3	130	VAL
70	D4	35	VAL
78	SM	12	VAL
11	l9	167	VAL
79	s6	162	VAL
72	d6	58	VAL
7	L5	125	VAL
53	S7	181	ILE
55	S9	134	ILE
17	m6	4	GLU
63	c7	98	GLY

5.3.2 Protein sidechains

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

resolution.

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	L2	190/190 (100%)	164 (86%)	26 (14%)	3	16
4	l2	190/190 (100%)	164 (86%)	26 (14%)	3	16
5	L3	322/322 (100%)	273 (85%)	49 (15%)	3	13
5	l3	322/322 (100%)	281 (87%)	41 (13%)	4	18
6	L4	288/288 (100%)	255 (88%)	33 (12%)	5	21
6	l4	288/288 (100%)	253 (88%)	35 (12%)	5	19
7	L5	242/244 (99%)	219 (90%)	23 (10%)	8	29
7	l5	243/244 (100%)	215 (88%)	28 (12%)	5	21
8	L6	134/153 (88%)	115 (86%)	19 (14%)	3	14
8	l6	135/153 (88%)	120 (89%)	15 (11%)	6	22
9	L7	190/190 (100%)	167 (88%)	23 (12%)	5	20
9	l7	187/190 (98%)	166 (89%)	21 (11%)	6	22
10	L8	186/190 (98%)	164 (88%)	22 (12%)	5	20
10	l8	177/190 (93%)	153 (86%)	24 (14%)	3	16
11	L9	169/171 (99%)	141 (83%)	28 (17%)	2	11
11	l9	171/171 (100%)	143 (84%)	28 (16%)	2	11
12	M0	185/187 (99%)	158 (85%)	27 (15%)	3	14
12	m0	186/187 (100%)	156 (84%)	30 (16%)	2	12
13	M1	147/147 (100%)	125 (85%)	22 (15%)	3	13
13	m1	147/147 (100%)	131 (89%)	16 (11%)	6	23
14	M3	154/154 (100%)	140 (91%)	14 (9%)	9	31
14	m3	154/154 (100%)	140 (91%)	14 (9%)	9	31
15	M4	107/108 (99%)	97 (91%)	10 (9%)	8	30
15	m4	108/108 (100%)	94 (87%)	14 (13%)	4	17
16	M5	175/175 (100%)	159 (91%)	16 (9%)	9	31
16	m5	175/175 (100%)	165 (94%)	10 (6%)	18	47
17	M6	160/160 (100%)	146 (91%)	14 (9%)	9	32
17	m6	160/160 (100%)	140 (88%)	20 (12%)	4	19
18	M7	139/146 (95%)	118 (85%)	21 (15%)	3	13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
18	m7	125/146 (86%)	103 (82%)	22 (18%)	2	9
19	M8	150/150 (100%)	131 (87%)	19 (13%)	4	18
19	m8	150/150 (100%)	138 (92%)	12 (8%)	11	36
20	M9	151/153 (99%)	134 (89%)	17 (11%)	5	21
20	m9	153/153 (100%)	136 (89%)	17 (11%)	6	22
21	N0	156/156 (100%)	139 (89%)	17 (11%)	6	23
21	n0	156/156 (100%)	135 (86%)	21 (14%)	4	16
22	N1	136/136 (100%)	114 (84%)	22 (16%)	2	11
22	n1	136/136 (100%)	126 (93%)	10 (7%)	13	38
23	N2	86/86 (100%)	73 (85%)	13 (15%)	3	13
23	n2	85/86 (99%)	78 (92%)	7 (8%)	10	35
24	N3	102/104 (98%)	90 (88%)	12 (12%)	5	20
24	n3	104/104 (100%)	94 (90%)	10 (10%)	8	29
25	N4	55/129 (43%)	52 (94%)	3 (6%)	19	48
25	n4	100/129 (78%)	94 (94%)	6 (6%)	17	46
26	N5	103/104 (99%)	87 (84%)	16 (16%)	2	12
26	n5	104/104 (100%)	92 (88%)	12 (12%)	5	21
27	N6	108/108 (100%)	94 (87%)	14 (13%)	4	17
27	n6	106/108 (98%)	93 (88%)	13 (12%)	4	19
28	N7	115/115 (100%)	104 (90%)	11 (10%)	8	29
28	n7	115/115 (100%)	106 (92%)	9 (8%)	11	36
29	N8	118/118 (100%)	102 (86%)	16 (14%)	3	16
29	n8	118/118 (100%)	105 (89%)	13 (11%)	6	23
30	N9	44/46 (96%)	42 (96%)	2 (4%)	24	53
30	n9	46/46 (100%)	41 (89%)	5 (11%)	6	23
31	O0	81/84 (96%)	71 (88%)	10 (12%)	4	19
31	o0	84/84 (100%)	76 (90%)	8 (10%)	8	29
32	O1	89/96 (93%)	80 (90%)	9 (10%)	7	26
32	o1	94/96 (98%)	87 (93%)	7 (7%)	13	38
33	O2	108/109 (99%)	92 (85%)	16 (15%)	3	13
33	o2	109/109 (100%)	99 (91%)	10 (9%)	8	30

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
34	O3	90/90 (100%)	84 (93%)	6 (7%)	15	42
34	o3	90/90 (100%)	85 (94%)	5 (6%)	19	47
35	O4	95/95 (100%)	92 (97%)	3 (3%)	34	60
35	o4	95/95 (100%)	91 (96%)	4 (4%)	26	55
36	O5	104/104 (100%)	87 (84%)	17 (16%)	2	11
36	o5	103/104 (99%)	96 (93%)	7 (7%)	14	42
37	O6	79/81 (98%)	72 (91%)	7 (9%)	9	32
37	o6	81/81 (100%)	75 (93%)	6 (7%)	13	38
38	O7	69/70 (99%)	58 (84%)	11 (16%)	2	12
38	o7	70/70 (100%)	62 (89%)	8 (11%)	5	21
39	O8	68/68 (100%)	62 (91%)	6 (9%)	9	32
39	o8	67/68 (98%)	55 (82%)	12 (18%)	2	8
40	O9	45/45 (100%)	39 (87%)	6 (13%)	4	17
40	o9	45/45 (100%)	42 (93%)	3 (7%)	15	42
41	Q0	47/47 (100%)	45 (96%)	2 (4%)	26	54
41	q0	47/47 (100%)	41 (87%)	6 (13%)	4	18
42	Q1	23/23 (100%)	19 (83%)	4 (17%)	2	9
42	q1	23/23 (100%)	18 (78%)	5 (22%)	1	5
43	Q2	90/90 (100%)	82 (91%)	8 (9%)	9	32
43	q2	90/90 (100%)	81 (90%)	9 (10%)	7	27
44	Q3	71/71 (100%)	62 (87%)	9 (13%)	4	18
44	q3	71/71 (100%)	63 (89%)	8 (11%)	5	21
46	S0	166/173 (96%)	151 (91%)	15 (9%)	9	31
46	s0	166/173 (96%)	151 (91%)	15 (9%)	9	31
47	S1	189/192 (98%)	156 (82%)	33 (18%)	2	9
47	s1	192/192 (100%)	173 (90%)	19 (10%)	7	27
48	S2	176/176 (100%)	158 (90%)	18 (10%)	7	26
48	s2	176/176 (100%)	160 (91%)	16 (9%)	9	31
49	S3	169/182 (93%)	153 (90%)	16 (10%)	8	29
49	s3	182/182 (100%)	168 (92%)	14 (8%)	12	37
50	S4	219/221 (99%)	205 (94%)	14 (6%)	16	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
50	s4	221/221 (100%)	206 (93%)	15 (7%)	14	42
51	S5	173/173 (100%)	156 (90%)	17 (10%)	7	28
51	s5	173/173 (100%)	159 (92%)	14 (8%)	11	36
52	S6	167/201 (83%)	152 (91%)	15 (9%)	9	31
53	S7	160/166 (96%)	140 (88%)	20 (12%)	4	19
53	s7	166/166 (100%)	150 (90%)	16 (10%)	8	29
54	S8	148/161 (92%)	132 (89%)	16 (11%)	6	23
54	s8	150/161 (93%)	143 (95%)	7 (5%)	23	52
55	S9	152/158 (96%)	138 (91%)	14 (9%)	8	30
55	s9	158/158 (100%)	147 (93%)	11 (7%)	14	41
56	C0	77/98 (79%)	70 (91%)	7 (9%)	9	31
56	c0	73/98 (74%)	67 (92%)	6 (8%)	10	35
57	C1	126/129 (98%)	111 (88%)	15 (12%)	5	20
57	c1	129/129 (100%)	112 (87%)	17 (13%)	4	17
58	C2	82/119 (69%)	72 (88%)	10 (12%)	5	19
58	c2	88/119 (74%)	77 (88%)	11 (12%)	4	19
59	C3	127/127 (100%)	117 (92%)	10 (8%)	11	36
59	c3	127/127 (100%)	120 (94%)	7 (6%)	19	48
60	C4	81/97 (84%)	72 (89%)	9 (11%)	6	22
60	c4	97/97 (100%)	87 (90%)	10 (10%)	7	25
61	C5	96/117 (82%)	88 (92%)	8 (8%)	10	34
61	c5	103/117 (88%)	85 (82%)	18 (18%)	2	9
62	C6	113/118 (96%)	104 (92%)	9 (8%)	11	36
62	c6	118/118 (100%)	109 (92%)	9 (8%)	12	37
63	C7	94/124 (76%)	84 (89%)	10 (11%)	6	24
63	c7	92/124 (74%)	89 (97%)	3 (3%)	33	59
64	C8	126/128 (98%)	113 (90%)	13 (10%)	7	25
64	c8	128/128 (100%)	114 (89%)	14 (11%)	6	23
65	C9	110/115 (96%)	103 (94%)	7 (6%)	16	44
65	c9	115/115 (100%)	108 (94%)	7 (6%)	17	45
66	D0	96/102 (94%)	87 (91%)	9 (9%)	8	30

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
66	d0	102/102 (100%)	86 (84%)	16 (16%)	2	12
67	D1	74/74 (100%)	66 (89%)	8 (11%)	6	23
67	d1	74/74 (100%)	64 (86%)	10 (14%)	4	16
68	D2	110/110 (100%)	93 (84%)	17 (16%)	2	12
68	d2	110/110 (100%)	96 (87%)	14 (13%)	4	18
69	D3	119/119 (100%)	111 (93%)	8 (7%)	15	42
69	d3	119/119 (100%)	114 (96%)	5 (4%)	26	55
70	D4	112/112 (100%)	102 (91%)	10 (9%)	9	32
70	d4	112/112 (100%)	105 (94%)	7 (6%)	16	44
71	D5	61/61 (100%)	48 (79%)	13 (21%)	1	5
71	d5	61/61 (100%)	57 (93%)	4 (7%)	15	43
72	D6	83/83 (100%)	68 (82%)	15 (18%)	2	8
72	d6	83/83 (100%)	75 (90%)	8 (10%)	8	29
73	D7	70/70 (100%)	63 (90%)	7 (10%)	7	27
73	d7	70/70 (100%)	66 (94%)	4 (6%)	18	47
74	D8	56/56 (100%)	49 (88%)	7 (12%)	4	19
74	d8	56/56 (100%)	50 (89%)	6 (11%)	6	24
75	D9	47/47 (100%)	46 (98%)	1 (2%)	47	67
75	d9	47/47 (100%)	40 (85%)	7 (15%)	3	13
76	E0	51/53 (96%)	43 (84%)	8 (16%)	2	12
76	e0	53/53 (100%)	44 (83%)	9 (17%)	2	10
77	SR	259/261 (99%)	251 (97%)	8 (3%)	35	60
77	sR	259/261 (99%)	236 (91%)	23 (9%)	9	32
78	SM	97/227 (43%)	88 (91%)	9 (9%)	8	30
78	sM	54/227 (24%)	49 (91%)	5 (9%)	8	30
79	s6	187/187 (100%)	165 (88%)	22 (12%)	5	20
All	All	18408/19292 (95%)	16443 (89%)	1965 (11%)	6	24

All (1965) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	L2	20	THR
4	L2	21	ARG

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Mol	Chain	Res	Type
4	L2	23	ARG
4	L2	32	LEU
4	L2	44	ILE
4	L2	45	VAL
4	L2	48	ILE
4	L2	62	VAL
4	L2	74	GLU
4	L2	97	ASN
4	L2	101	VAL
4	L2	113	VAL
4	L2	114	SER
4	L2	116	VAL
4	L2	142	ASP
4	L2	159	SER
4	L2	165	VAL
4	L2	169	ILE
4	L2	179	LEU
4	L2	195	SER
4	L2	204	MET
4	L2	207	VAL
4	L2	225	ILE
4	L2	227	ARG
4	L2	230	VAL
4	L2	246	LEU
5	L3	7	GLU
5	L3	17	LEU
5	L3	19	ARG
5	L3	37	ARG
5	L3	41	VAL
5	L3	56	ILE
5	L3	70	ARG
5	L3	73	VAL
5	L3	77	THR
5	L3	79	VAL
5	L3	81	THR
5	L3	84	VAL
5	L3	85	VAL
5	L3	89	VAL
5	L3	93	VAL
5	L3	99	LEU
5	L3	103	THR
5	L3	110	LEU

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Mol	Chain	Res	Type
5	L3	114	VAL
5	L3	139	GLN
5	L3	140	ASP
5	L3	148	LEU
5	L3	154	TYR
5	L3	157	VAL
5	L3	160	VAL
5	L3	169	THR
5	L3	188	ILE
5	L3	189	SER
5	L3	192	VAL
5	L3	202	THR
5	L3	205	VAL
5	L3	211	GLN
5	L3	212	ASN
5	L3	214	MET
5	L3	220	VAL
5	L3	238	LEU
5	L3	252	ILE
5	L3	260	VAL
5	L3	290	ASP
5	L3	293	ASN
5	L3	296	THR
5	L3	305	ILE
5	L3	317	ILE
5	L3	324	VAL
5	L3	338	LEU
5	L3	343	TYR
5	L3	348	ARG
5	L3	372	THR
5	L3	375	GLU
6	L4	6	VAL
6	L4	25	VAL
6	L4	73	ARG
6	L4	74	ILE
6	L4	93	MET
6	L4	99	MET
6	L4	112	LYS
6	L4	133	SER
6	L4	138	ARG
6	L4	144	LYS
6	L4	150	LEU

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Mol	Chain	Res	Type
6	L4	161	LYS
6	L4	179	LEU
6	L4	181	VAL
6	L4	197	ARG
6	L4	200	THR
6	L4	206	LEU
6	L4	211	GLU
6	L4	216	VAL
6	L4	220	ARG
6	L4	230	VAL
6	L4	246	ARG
6	L4	258	LEU
6	L4	261	VAL
6	L4	271	LYS
6	L4	307	GLN
6	L4	312	VAL
6	L4	313	LEU
6	L4	323	VAL
6	L4	327	LEU
6	L4	333	VAL
6	L4	347	THR
6	L4	349	THR
7	L5	5	LYS
7	L5	6	ASP
7	L5	13	SER
7	L5	15	ARG
7	L5	22	ARG
7	L5	23	ARG
7	L5	28	THR
7	L5	35	ARG
7	L5	56	THR
7	L5	58	LYS
7	L5	92	LEU
7	L5	105	ILE
7	L5	110	LEU
7	L5	115	LEU
7	L5	150	LEU
7	L5	152	ARG
7	L5	155	THR
7	L5	164	LYS
7	L5	187	THR
7	L5	222	LEU

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Mol	Chain	Res	Type
7	L5	259	LYS
7	L5	277	LEU
7	L5	290	ILE
8	L6	10	TYR
8	L6	15	VAL
8	L6	18	LEU
8	L6	21	THR
8	L6	26	ARG
8	L6	30	LEU
8	L6	52	VAL
8	L6	64	LEU
8	L6	79	VAL
8	L6	84	VAL
8	L6	85	ILE
8	L6	89	THR
8	L6	93	VAL
8	L6	98	VAL
8	L6	99	GLU
8	L6	109	GLU
8	L6	152	THR
8	L6	155	LEU
8	L6	175	LYS
9	L7	30	ARG
9	L7	52	GLN
9	L7	59	GLU
9	L7	80	GLN
9	L7	83	LEU
9	L7	84	VAL
9	L7	87	VAL
9	L7	92	ILE
9	L7	93	ASN
9	L7	111	ILE
9	L7	115	THR
9	L7	124	LEU
9	L7	140	SER
9	L7	150	LYS
9	L7	158	LYS
9	L7	169	ILE
9	L7	173	LEU
9	L7	176	TYR
9	L7	179	LEU
9	L7	184	LEU

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Mol	Chain	Res	Type
9	L7	200	ASN
9	L7	234	GLU
9	L7	239	LEU
10	L8	26	LEU
10	L8	27	THR
10	L8	36	ILE
10	L8	38	GLN
10	L8	65	LEU
10	L8	74	THR
10	L8	79	GLN
10	L8	116	VAL
10	L8	124	ASP
10	L8	132	VAL
10	L8	136	LEU
10	L8	150	LEU
10	L8	157	VAL
10	L8	160	ILE
10	L8	169	LEU
10	L8	172	LYS
10	L8	180	VAL
10	L8	185	ARG
10	L8	206	GLU
10	L8	214	LEU
10	L8	227	ASP
10	L8	249	ARG
11	L9	8	GLN
11	L9	16	VAL
11	L9	18	VAL
11	L9	42	ASP
11	L9	44	THR
11	L9	48	VAL
11	L9	50	ASN
11	L9	52	LEU
11	L9	55	VAL
11	L9	57	VAL
11	L9	68	LEU
11	L9	70	THR
11	L9	80	THR
11	L9	92	TYR
11	L9	93	VAL
11	L9	104	VAL
11	L9	118	LEU

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Mol	Chain	Res	Type
11	L9	121	LYS
11	L9	140	VAL
11	L9	146	LEU
11	L9	151	VAL
11	L9	157	ASN
11	L9	161	LEU
11	L9	166	ARG
11	L9	173	ARG
11	L9	177	ASP
11	L9	180	TYR
11	L9	181	VAL
12	M0	3	ARG
12	M0	24	ARG
12	M0	33	ILE
12	M0	36	LEU
12	M0	48	LEU
12	M0	52	LEU
12	M0	58	GLU
12	M0	60	LEU
12	M0	63	GLU
12	M0	87	LEU
12	M0	101	LYS
12	M0	102	MET
12	M0	109	ASP
12	M0	110	ARG
12	M0	112	GLN
12	M0	142	ASP
12	M0	149	VAL
12	M0	165	ILE
12	M0	174	THR
12	M0	177	ASP
12	M0	190	VAL
12	M0	197	VAL
12	M0	206	LEU
12	M0	210	ILE
12	M0	212	GLU
12	M0	213	PHE
12	M0	215	GLU
13	M1	7	ASN
13	M1	11	ASP
13	M1	23	VAL
13	M1	44	THR

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Mol	Chain	Res	Type
13	M1	60	ARG
13	M1	64	LYS
13	M1	65	ILE
13	M1	71	VAL
13	M1	80	LEU
13	M1	95	ASN
13	M1	112	LEU
13	M1	114	ILE
13	M1	125	MET
13	M1	130	VAL
13	M1	132	ASN
13	M1	140	ARG
13	M1	148	VAL
13	M1	155	THR
13	M1	171	VAL
13	M1	172	LEU
13	M1	173	ASP
13	M1	174	LYS
14	M3	13	HIS
14	M3	17	HIS
14	M3	54	LEU
14	M3	55	ARG
14	M3	58	VAL
14	M3	63	VAL
14	M3	69	VAL
14	M3	85	LEU
14	M3	93	ILE
14	M3	114	GLN
14	M3	124	ILE
14	M3	164	GLU
14	M3	176	GLU
14	M3	194	GLU
15	M4	6	ILE
15	M4	8	LYS
15	M4	15	VAL
15	M4	20	VAL
15	M4	50	LYS
15	M4	53	VAL
15	M4	69	THR
15	M4	72	LEU
15	M4	107	GLU
15	M4	113	THR

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Mol	Chain	Res	Type
16	M5	10	LEU
16	M5	19	LEU
16	M5	22	LEU
16	M5	61	ILE
16	M5	64	VAL
16	M5	75	VAL
16	M5	80	THR
16	M5	83	LYS
16	M5	85	THR
16	M5	104	GLU
16	M5	133	ILE
16	M5	138	GLN
16	M5	142	ILE
16	M5	151	ILE
16	M5	182	ASN
16	M5	183	THR
17	M6	4	GLU
17	M6	12	LYS
17	M6	34	VAL
17	M6	68	ARG
17	M6	84	LEU
17	M6	85	ARG
17	M6	89	SER
17	M6	94	ARG
17	M6	119	VAL
17	M6	143	THR
17	M6	150	GLU
17	M6	155	LYS
17	M6	170	LYS
17	M6	190	VAL
18	M7	7	THR
18	M7	14	SER
18	M7	24	VAL
18	M7	32	THR
18	M7	36	ILE
18	M7	52	LEU
18	M7	55	GLN
18	M7	69	ARG
18	M7	95	LEU
18	M7	107	LEU
18	M7	112	LEU
18	M7	114	VAL

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Mol	Chain	Res	Type
18	M7	120	ASN
18	M7	121	GLN
18	M7	127	ARG
18	M7	128	ARG
18	M7	142	SER
18	M7	144	SER
18	M7	149	VAL
18	M7	165	VAL
18	M7	168	LEU
19	M8	3	ILE
19	M8	7	SER
19	M8	11	LYS
19	M8	13	SER
19	M8	26	LEU
19	M8	31	LYS
19	M8	32	LEU
19	M8	39	ARG
19	M8	40	THR
19	M8	49	LEU
19	M8	57	ILE
19	M8	82	VAL
19	M8	86	THR
19	M8	113	LYS
19	M8	135	GLN
19	M8	138	LEU
19	M8	168	THR
19	M8	178	ARG
19	M8	180	ARG
20	M9	10	LEU
20	M9	22	VAL
20	M9	24	LEU
20	M9	39	ASN
20	M9	41	ILE
20	M9	44	LEU
20	M9	47	ASN
20	M9	51	VAL
20	M9	52	LYS
20	M9	86	GLU
20	M9	91	SER
20	M9	99	LEU
20	M9	103	ARG
20	M9	128	LYS

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Mol	Chain	Res	Type
20	M9	134	HIS
20	M9	135	LYS
20	M9	138	LEU
21	N0	1	MET
21	N0	14	LEU
21	N0	18	SER
21	N0	23	LYS
21	N0	45	LEU
21	N0	51	VAL
21	N0	80	ARG
21	N0	85	SER
21	N0	87	THR
21	N0	100	VAL
21	N0	120	SER
21	N0	125	LYS
21	N0	132	THR
21	N0	137	ARG
21	N0	155	ARG
21	N0	156	VAL
21	N0	167	ARG
22	N1	12	ARG
22	N1	14	MET
22	N1	27	LEU
22	N1	52	MET
22	N1	64	VAL
22	N1	78	LYS
22	N1	79	MET
22	N1	80	VAL
22	N1	83	ARG
22	N1	88	ARG
22	N1	100	LYS
22	N1	103	GLN
22	N1	104	GLU
22	N1	118	GLU
22	N1	122	GLN
22	N1	126	VAL
22	N1	128	LEU
22	N1	139	ARG
22	N1	143	THR
22	N1	144	GLU
22	N1	146	ASN
22	N1	149	GLN

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Mol	Chain	Res	Type
23	N2	16	THR
23	N2	23	THR
23	N2	29	ASP
23	N2	39	ASP
23	N2	43	VAL
23	N2	44	GLU
23	N2	52	ASN
23	N2	62	VAL
23	N2	72	SER
23	N2	80	THR
23	N2	87	ASN
23	N2	94	ARG
23	N2	100	THR
24	N3	12	ARG
24	N3	33	ASN
24	N3	47	ASN
24	N3	69	LEU
24	N3	74	MET
24	N3	81	GLN
24	N3	102	ILE
24	N3	108	GLU
24	N3	112	SER
24	N3	115	THR
24	N3	125	LEU
24	N3	135	VAL
25	N4	4	GLU
25	N4	12	LYS
25	N4	39	LEU
26	N5	37	THR
26	N5	38	LEU
26	N5	40	LEU
26	N5	49	LYS
26	N5	51	VAL
26	N5	55	ASN
26	N5	69	SER
26	N5	71	THR
26	N5	87	SER
26	N5	96	LYS
26	N5	105	VAL
26	N5	109	LYS
26	N5	114	VAL
26	N5	125	ARG

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Mol	Chain	Res	Type
26	N5	134	ASP
26	N5	135	ILE
27	N6	8	VAL
27	N6	10	SER
27	N6	13	ARG
27	N6	37	LYS
27	N6	39	LEU
27	N6	45	ILE
27	N6	55	GLU
27	N6	56	VAL
27	N6	70	ILE
27	N6	76	LEU
27	N6	86	THR
27	N6	95	VAL
27	N6	120	GLN
27	N6	126	LEU
28	N7	14	VAL
28	N7	30	ASP
28	N7	53	VAL
28	N7	55	LYS
28	N7	65	ARG
28	N7	74	VAL
28	N7	75	VAL
28	N7	81	LEU
28	N7	90	GLU
28	N7	102	GLU
28	N7	126	LYS
29	N8	4	ARG
29	N8	8	THR
29	N8	12	ARG
29	N8	16	SER
29	N8	25	HIS
29	N8	46	ASP
29	N8	56	VAL
29	N8	63	LYS
29	N8	65	GLN
29	N8	72	VAL
29	N8	73	LEU
29	N8	76	ASP
29	N8	78	LEU
29	N8	85	ASP
29	N8	91	LEU

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Mol	Chain	Res	Type
29	N8	133	LEU
30	N9	18	ARG
30	N9	19	ASN
31	O0	16	LEU
31	O0	17	VAL
31	O0	36	GLN
31	O0	40	LYS
31	O0	41	LEU
31	O0	57	GLU
31	O0	61	MET
31	O0	99	ASP
31	O0	103	THR
31	O0	104	LEU
32	O1	55	LEU
32	O1	73	LEU
32	O1	79	ARG
32	O1	80	ASN
32	O1	86	LYS
32	O1	96	VAL
32	O1	102	LYS
32	O1	106	THR
32	O1	110	GLU
33	O2	4	LEU
33	O2	14	THR
33	O2	34	LYS
33	O2	35	GLN
33	O2	38	ILE
33	O2	54	LYS
33	O2	73	THR
33	O2	75	LEU
33	O2	76	VAL
33	O2	87	MET
33	O2	88	HIS
33	O2	90	LYS
33	O2	100	ILE
33	O2	109	LEU
33	O2	113	LYS
33	O2	120	THR
34	O3	4	SER
34	O3	21	ARG
34	O3	49	ILE
34	O3	74	THR

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Mol	Chain	Res	Type
34	O3	80	VAL
34	O3	98	VAL
35	O4	54	ILE
35	O4	71	THR
35	O4	86	LYS
36	O5	4	VAL
36	O5	21	LEU
36	O5	28	LEU
36	O5	31	LEU
36	O5	38	ARG
36	O5	51	ILE
36	O5	64	GLU
36	O5	68	GLN
36	O5	71	LYS
36	O5	74	LYS
36	O5	79	ASP
36	O5	85	THR
36	O5	89	ARG
36	O5	90	ARG
36	O5	102	GLU
36	O5	118	ILE
36	O5	119	LYS
37	O6	9	ILE
37	O6	12	ASN
37	O6	21	THR
37	O6	43	LEU
37	O6	56	ARG
37	O6	57	LEU
37	O6	81	THR
38	O7	12	HIS
38	O7	17	THR
38	O7	21	ARG
38	O7	25	ARG
38	O7	33	THR
38	O7	44	THR
38	O7	59	THR
38	O7	64	MET
38	O7	67	LEU
38	O7	68	LYS
38	O7	84	SER
39	O8	12	LEU
39	O8	24	THR

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Mol	Chain	Res	Type
39	O8	41	THR
39	O8	53	THR
39	O8	69	LEU
39	O8	77	ARG
40	O9	4	GLN
40	O9	13	MET
40	O9	19	GLN
40	O9	21	ARG
40	O9	45	ARG
40	O9	51	ILE
41	Q0	78	ILE
41	Q0	85	LEU
42	Q1	2	ARG
42	Q1	9	ARG
42	Q1	13	LEU
42	Q1	17	ARG
43	Q2	7	THR
43	Q2	16	THR
43	Q2	55	LYS
43	Q2	61	LYS
43	Q2	78	LYS
43	Q2	83	LEU
43	Q2	84	THR
43	Q2	85	LEU
44	Q3	5	THR
44	Q3	11	THR
44	Q3	24	ARG
44	Q3	38	ASP
44	Q3	49	ARG
44	Q3	60	CYS
44	Q3	71	VAL
44	Q3	78	THR
44	Q3	84	ARG
46	S0	2	SER
46	S0	6	THR
46	S0	9	LEU
46	S0	24	LEU
46	S0	62	ARG
46	S0	87	LEU
46	S0	123	VAL
46	S0	127	ARG
46	S0	139	VAL

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Mol	Chain	Res	Type
46	S0	157	ASP
46	S0	168	HIS
46	S0	169	SER
46	S0	170	ILE
46	S0	188	LEU
46	S0	198	MET
47	S1	30	PHE
47	S1	38	PHE
47	S1	43	VAL
47	S1	61	LEU
47	S1	65	VAL
47	S1	66	VAL
47	S1	73	LEU
47	S1	78	ASP
47	S1	79	HIS
47	S1	81	PHE
47	S1	86	LEU
47	S1	91	VAL
47	S1	92	GLN
47	S1	95	ASN
47	S1	96	LEU
47	S1	97	LEU
47	S1	98	THR
47	S1	105	PHE
47	S1	126	THR
47	S1	127	VAL
47	S1	129	THR
47	S1	130	SER
47	S1	148	ASN
47	S1	150	VAL
47	S1	167	VAL
47	S1	181	LEU
47	S1	191	GLU
47	S1	202	LYS
47	S1	212	VAL
47	S1	215	VAL
47	S1	217	LEU
47	S1	220	GLN
47	S1	222	LYS
48	S2	44	LEU
48	S2	55	GLU
48	S2	73	LEU

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Mol	Chain	Res	Type
48	S2	111	VAL
48	S2	113	LEU
48	S2	116	LYS
48	S2	136	VAL
48	S2	137	ILE
48	S2	140	ARG
48	S2	204	THR
48	S2	206	THR
48	S2	218	ILE
48	S2	221	THR
48	S2	225	LEU
48	S2	233	GLN
48	S2	235	LEU
48	S2	241	ASP
48	S2	244	SER
49	S3	4	LEU
49	S3	23	GLU
49	S3	45	LYS
49	S3	79	TYR
49	S3	83	THR
49	S3	85	VAL
49	S3	91	VAL
49	S3	93	ASP
49	S3	128	GLU
49	S3	172	THR
49	S3	175	VAL
49	S3	176	LEU
49	S3	177	MET
49	S3	179	GLN
49	S3	181	VAL
49	S3	207	THR
50	S4	26	CYS
50	S4	38	LEU
50	S4	56	LEU
50	S4	70	VAL
50	S4	73	ASP
50	S4	78	THR
50	S4	105	VAL
50	S4	130	GLN
50	S4	139	VAL
50	S4	140	VAL
50	S4	181	VAL

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Mol	Chain	Res	Type
50	S4	206	ASP
50	S4	227	VAL
50	S4	231	GLN
51	S5	24	VAL
51	S5	38	THR
51	S5	41	LYS
51	S5	48	PHE
51	S5	51	VAL
51	S5	64	VAL
51	S5	68	ILE
51	S5	79	ASN
51	S5	89	ILE
51	S5	93	LEU
51	S5	103	ASN
51	S5	108	LEU
51	S5	146	THR
51	S5	149	VAL
51	S5	194	LEU
51	S5	203	LYS
51	S5	212	LYS
52	S6	4	ASN
52	S6	13	GLN
52	S6	58	LYS
52	S6	63	MET
52	S6	68	LEU
52	S6	69	LEU
52	S6	93	LYS
52	S6	124	LEU
52	S6	133	LEU
52	S6	141	ILE
52	S6	176	GLN
52	S6	177	ARG
52	S6	190	GLN
52	S6	210	GLN
52	S6	211	LEU
53	S7	16	LEU
53	S7	46	ILE
53	S7	51	VAL
53	S7	55	LYS
53	S7	58	LEU
53	S7	60	ILE
53	S7	62	VAL

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Mol	Chain	Res	Type
53	S7	64	VAL
53	S7	77	LEU
53	S7	109	VAL
53	S7	114	ARG
53	S7	116	ARG
53	S7	117	THR
53	S7	130	VAL
53	S7	133	THR
53	S7	149	ILE
53	S7	154	LEU
53	S7	159	VAL
53	S7	163	ASP
53	S7	166	LEU
54	S8	29	LEU
54	S8	36	THR
54	S8	46	VAL
54	S8	58	LEU
54	S8	70	GLU
54	S8	72	ILE
54	S8	92	ARG
54	S8	93	THR
54	S8	110	ARG
54	S8	121	LEU
54	S8	137	LYS
54	S8	142	LYS
54	S8	152	ILE
54	S8	157	GLU
54	S8	168	CYS
54	S8	179	CYS
55	S9	3	ARG
55	S9	28	LEU
55	S9	40	LYS
55	S9	88	GLU
55	S9	92	LYS
55	S9	101	VAL
55	S9	106	GLU
55	S9	109	LEU
55	S9	129	ILE
55	S9	132	ARG
55	S9	134	ILE
55	S9	141	VAL
55	S9	151	ASP

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Mol	Chain	Res	Type
55	S9	172	VAL
56	C0	20	VAL
56	C0	22	VAL
56	C0	31	LYS
56	C0	49	LEU
56	C0	51	SER
56	C0	55	VAL
56	C0	76	LEU
57	C1	7	VAL
57	C1	10	GLU
57	C1	16	GLN
57	C1	20	PHE
57	C1	21	ASN
57	C1	25	VAL
57	C1	40	LEU
57	C1	43	LYS
57	C1	63	LEU
57	C1	67	ARG
57	C1	80	MET
57	C1	83	THR
57	C1	118	GLN
57	C1	125	VAL
57	C1	127	GLN
58	C2	28	LEU
58	C2	29	LYS
58	C2	52	LEU
58	C2	61	VAL
58	C2	63	VAL
58	C2	66	VAL
58	C2	71	ILE
58	C2	88	LEU
58	C2	121	VAL
58	C2	130	THR
59	C3	27	LYS
59	C3	61	THR
59	C3	65	VAL
59	C3	84	ILE
59	C3	102	LEU
59	C3	115	LEU
59	C3	125	LEU
59	C3	134	VAL
59	C3	140	LYS

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Mol	Chain	Res	Type
59	C3	145	THR
60	C4	13	VAL
60	C4	16	VAL
60	C4	31	THR
60	C4	41	ARG
60	C4	42	VAL
60	C4	43	THR
60	C4	76	ILE
60	C4	81	VAL
60	C4	123	SER
61	C5	25	LEU
61	C5	26	LEU
61	C5	28	MET
61	C5	34	VAL
61	C5	44	ARG
61	C5	50	THR
61	C5	57	MET
61	C5	124	THR
62	C6	36	ILE
62	C6	43	ILE
62	C6	52	LEU
62	C6	53	LEU
62	C6	60	PHE
62	C6	69	VAL
62	C6	97	VAL
62	C6	116	LEU
62	C6	118	ILE
63	C7	25	THR
63	C7	36	ASP
63	C7	46	LEU
63	C7	71	PHE
63	C7	72	LYS
63	C7	85	VAL
63	C7	87	GLU
63	C7	88	VAL
63	C7	108	ASP
63	C7	115	LEU
64	C8	4	VAL
64	C8	13	HIS
64	C8	28	ILE
64	C8	61	LEU
64	C8	65	GLU

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Mol	Chain	Res	Type
64	C8	80	LYS
64	C8	81	ILE
64	C8	85	PHE
64	C8	100	THR
64	C8	132	ARG
64	C8	133	VAL
64	C8	136	GLN
64	C8	145	ARG
65	C9	9	VAL
65	C9	22	LEU
65	C9	33	TYR
65	C9	38	LYS
65	C9	71	VAL
65	C9	114	VAL
65	C9	126	GLU
66	D0	20	ILE
66	D0	22	ILE
66	D0	34	LEU
66	D0	50	LEU
66	D0	70	THR
66	D0	72	ASN
66	D0	74	GLU
66	D0	87	HIS
66	D0	89	ARG
67	D1	11	LEU
67	D1	34	ILE
67	D1	36	VAL
67	D1	42	GLU
67	D1	60	ARG
67	D1	67	ASP
67	D1	80	LYS
67	D1	81	ASN
68	D2	4	SER
68	D2	7	LEU
68	D2	15	ASN
68	D2	25	VAL
68	D2	56	HIS
68	D2	65	LEU
68	D2	76	SER
68	D2	81	VAL
68	D2	82	LYS
68	D2	83	ILE

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Mol	Chain	Res	Type
68	D2	88	LYS
68	D2	93	LEU
68	D2	103	ILE
68	D2	105	THR
68	D2	125	ILE
68	D2	126	LEU
68	D2	129	VAL
69	D3	18	HIS
69	D3	19	ARG
69	D3	75	GLN
69	D3	83	VAL
69	D3	92	CYS
69	D3	107	PHE
69	D3	132	LEU
69	D3	135	LEU
70	D4	10	ARG
70	D4	28	LEU
70	D4	32	ARG
70	D4	35	VAL
70	D4	52	LYS
70	D4	57	VAL
70	D4	62	THR
70	D4	111	LYS
70	D4	115	ASP
70	D4	132	ARG
71	D5	40	VAL
71	D5	42	LEU
71	D5	49	ARG
71	D5	51	LEU
71	D5	58	ARG
71	D5	60	VAL
71	D5	62	VAL
71	D5	63	SER
71	D5	64	VAL
71	D5	69	LEU
71	D5	71	ILE
71	D5	75	LEU
71	D5	100	ILE
72	D6	7	SER
72	D6	10	ARG
72	D6	12	LYS
72	D6	15	ARG

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Mol	Chain	Res	Type
72	D6	37	LYS
72	D6	53	LEU
72	D6	55	GLU
72	D6	58	VAL
72	D6	64	LEU
72	D6	69	ASN
72	D6	79	ILE
72	D6	84	VAL
72	D6	85	ARG
72	D6	88	SER
72	D6	90	GLU
73	D7	2	VAL
73	D7	3	LEU
73	D7	33	LEU
73	D7	49	HIS
73	D7	56	CYS
73	D7	59	CYS
73	D7	77	THR
74	D8	5	THR
74	D8	7	VAL
74	D8	15	VAL
74	D8	19	THR
74	D8	28	VAL
74	D8	58	GLU
74	D8	67	ARG
75	D9	27	HIS
76	E0	14	VAL
76	E0	21	VAL
76	E0	39	LEU
76	E0	48	THR
76	E0	49	LEU
76	E0	50	VAL
76	E0	53	LYS
76	E0	56	MET
77	SR	5	GLU
77	SR	64	HIS
77	SR	123	ILE
77	SR	141	LEU
77	SR	156	VAL
77	SR	234	LEU
77	SR	238	ASP
77	SR	290	VAL

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Mol	Chain	Res	Type
78	SM	23	LYS
78	SM	24	GLU
78	SM	37	VAL
78	SM	69	ARG
78	SM	72	ARG
78	SM	73	SER
78	SM	75	ASP
78	SM	102	THR
78	SM	134	ASP
4	l2	30	ARG
4	l2	44	ILE
4	l2	45	VAL
4	l2	46	LYS
4	l2	61	VAL
4	l2	62	VAL
4	l2	86	GLN
4	l2	109	GLU
4	l2	112	ILE
4	l2	113	VAL
4	l2	116	VAL
4	l2	126	LEU
4	l2	128	ARG
4	l2	137	ILE
4	l2	142	ASP
4	l2	147	ARG
4	l2	157	VAL
4	l2	179	LEU
4	l2	180	LEU
4	l2	193	ARG
4	l2	207	VAL
4	l2	215	ASN
4	l2	221	LYS
4	l2	227	ARG
4	l2	230	VAL
4	l2	246	LEU
5	l3	2	SER
5	l3	3	HIS
5	l3	4	ARG
5	l3	10	ARG
5	l3	24	SER
5	l3	37	ARG
5	l3	41	VAL

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Mol	Chain	Res	Type
5	l3	44	THR
5	l3	56	ILE
5	l3	77	THR
5	l3	79	VAL
5	l3	84	VAL
5	l3	85	VAL
5	l3	99	LEU
5	l3	103	THR
5	l3	112	ASP
5	l3	114	VAL
5	l3	140	ASP
5	l3	148	LEU
5	l3	156	SER
5	l3	169	THR
5	l3	183	LEU
5	l3	188	ILE
5	l3	192	VAL
5	l3	205	VAL
5	l3	210	GLU
5	l3	211	GLN
5	l3	221	THR
5	l3	229	VAL
5	l3	232	ARG
5	l3	238	LEU
5	l3	246	LEU
5	l3	260	VAL
5	l3	274	SER
5	l3	275	ARG
5	l3	316	GLU
5	l3	324	VAL
5	l3	328	ILE
5	l3	338	LEU
5	l3	369	ARG
5	l3	386	ASP
6	l4	3	ARG
6	l4	10	SER
6	l4	14	GLU
6	l4	16	THR
6	l4	37	THR
6	l4	47	ARG
6	l4	54	GLU
6	l4	63	GLU

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Mol	Chain	Res	Type
6	14	92	ASN
6	14	94	CYS
6	14	118	LYS
6	14	136	LEU
6	14	143	GLU
6	14	144	LYS
6	14	145	ILE
6	14	156	LEU
6	14	179	LEU
6	14	188	ARG
6	14	193	LYS
6	14	194	TYR
6	14	197	ARG
6	14	206	LEU
6	14	217	LYS
6	14	256	THR
6	14	258	LEU
6	14	261	VAL
6	14	283	THR
6	14	284	SER
6	14	294	GLU
6	14	313	LEU
6	14	319	LYS
6	14	323	VAL
6	14	327	LEU
6	14	346	LYS
6	14	357	GLU
7	15	4	GLN
7	15	24	ARG
7	15	34	LYS
7	15	45	ASN
7	15	56	THR
7	15	57	ASN
7	15	61	ILE
7	15	74	VAL
7	15	75	LEU
7	15	81	HIS
7	15	88	ILE
7	15	123	GLU
7	15	124	GLU
7	15	128	GLU
7	15	131	LEU

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Mol	Chain	Res	Type
7	15	140	ARG
7	15	146	LEU
7	15	152	ARG
7	15	155	THR
7	15	159	VAL
7	15	213	ASP
7	15	218	ARG
7	15	222	LEU
7	15	237	GLU
7	15	259	LYS
7	15	263	GLU
7	15	271	LYS
7	15	279	LYS
8	16	8	LYS
8	16	21	THR
8	16	26	ARG
8	16	30	LEU
8	16	52	VAL
8	16	64	LEU
8	16	65	ILE
8	16	87	THR
8	16	89	THR
8	16	93	VAL
8	16	98	VAL
8	16	108	LYS
8	16	134	ARG
8	16	152	THR
8	16	155	LEU
9	17	45	LEU
9	17	60	ARG
9	17	83	LEU
9	17	84	VAL
9	17	87	VAL
9	17	88	ARG
9	17	108	LEU
9	17	111	ILE
9	17	112	ASN
9	17	128	LYS
9	17	156	ILE
9	17	173	LEU
9	17	179	LEU
9	17	180	SER

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Mol	Chain	Res	Type
9	17	184	LEU
9	17	190	THR
9	17	191	VAL
9	17	228	SER
9	17	229	PHE
9	17	234	GLU
9	17	239	LEU
10	18	71	VAL
10	18	77	GLN
10	18	93	LEU
10	18	107	GLU
10	18	134	TYR
10	18	136	LEU
10	18	150	LEU
10	18	153	ILE
10	18	156	ASP
10	18	160	ILE
10	18	169	LEU
10	18	173	MET
10	18	180	VAL
10	18	183	LYS
10	18	190	VAL
10	18	202	GLU
10	18	203	VAL
10	18	204	ARG
10	18	213	LYS
10	18	214	LEU
10	18	218	ILE
10	18	222	PHE
10	18	228	GLU
10	18	238	LEU
11	19	5	GLN
11	19	6	THR
11	19	16	VAL
11	19	18	VAL
11	19	19	SER
11	19	23	ARG
11	19	33	THR
11	19	48	VAL
11	19	52	LEU
11	19	55	VAL
11	19	68	LEU

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Mol	Chain	Res	Type
11	l9	82	VAL
11	l9	92	TYR
11	l9	93	VAL
11	l9	103	ILE
11	l9	104	VAL
11	l9	105	GLU
11	l9	110	LYS
11	l9	138	THR
11	l9	140	VAL
11	l9	143	GLU
11	l9	146	LEU
11	l9	149	ASN
11	l9	151	VAL
11	l9	161	LEU
11	l9	165	CYS
11	l9	172	ILE
11	l9	177	ASP
12	m0	26	VAL
12	m0	29	SER
12	m0	42	THR
12	m0	44	ASP
12	m0	48	LEU
12	m0	52	LEU
12	m0	57	LEU
12	m0	63	GLU
12	m0	82	ARG
12	m0	87	LEU
12	m0	99	ILE
12	m0	101	LYS
12	m0	105	CYS
12	m0	110	ARG
12	m0	111	LEU
12	m0	112	GLN
12	m0	130	ASP
12	m0	131	ILE
12	m0	140	THR
12	m0	145	LYS
12	m0	150	GLU
12	m0	163	GLN
12	m0	170	LYS
12	m0	177	ASP
12	m0	186	GLU

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Mol	Chain	Res	Type
12	m0	197	VAL
12	m0	200	LEU
12	m0	208	ASN
12	m0	217	PHE
12	m0	220	GLN
13	m1	12	LEU
13	m1	25	GLU
13	m1	28	ASP
13	m1	30	LEU
13	m1	46	VAL
13	m1	56	THR
13	m1	101	ASN
13	m1	108	GLU
13	m1	110	ILE
13	m1	111	ASP
13	m1	112	LEU
13	m1	127	PHE
13	m1	133	ARG
13	m1	152	HIS
13	m1	153	LYS
13	m1	155	THR
14	m3	10	LEU
14	m3	22	VAL
14	m3	45	LYS
14	m3	46	ILE
14	m3	54	LEU
14	m3	58	VAL
14	m3	69	VAL
14	m3	76	THR
14	m3	92	THR
14	m3	100	ARG
14	m3	107	GLU
14	m3	114	GLN
14	m3	162	ASN
14	m3	182	ILE
15	m4	15	VAL
15	m4	20	VAL
15	m4	21	VAL
15	m4	42	LYS
15	m4	63	VAL
15	m4	69	THR
15	m4	72	LEU

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Mol	Chain	Res	Type
15	m4	80	THR
15	m4	90	VAL
15	m4	91	CYS
15	m4	98	SER
15	m4	108	ARG
15	m4	135	LEU
15	m4	137	LYS
16	m5	10	LEU
16	m5	13	LYS
16	m5	15	GLN
16	m5	19	LEU
16	m5	49	ARG
16	m5	75	VAL
16	m5	80	THR
16	m5	116	LEU
16	m5	190	THR
16	m5	201	ARG
17	m6	3	VAL
17	m6	25	LYS
17	m6	34	VAL
17	m6	58	LEU
17	m6	66	LYS
17	m6	67	THR
17	m6	77	SER
17	m6	106	GLU
17	m6	108	ILE
17	m6	119	VAL
17	m6	124	LEU
17	m6	126	VAL
17	m6	134	LYS
17	m6	140	LYS
17	m6	143	THR
17	m6	150	GLU
17	m6	166	GLU
17	m6	178	VAL
17	m6	182	ASN
17	m6	187	GLU
18	m7	14	SER
18	m7	23	ARG
18	m7	24	VAL
18	m7	31	GLU
18	m7	32	THR

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Mol	Chain	Res	Type
18	m7	41	LEU
18	m7	52	LEU
18	m7	53	ASP
18	m7	64	ASN
18	m7	75	GLU
18	m7	91	VAL
18	m7	96	GLN
18	m7	107	LEU
18	m7	112	LEU
18	m7	114	VAL
18	m7	116	HIS
18	m7	119	VAL
18	m7	120	ASN
18	m7	125	GLN
18	m7	126	ARG
18	m7	144	SER
18	m7	149	VAL
19	m8	3	ILE
19	m8	26	LEU
19	m8	32	LEU
19	m8	49	LEU
19	m8	55	SER
19	m8	57	ILE
19	m8	86	THR
19	m8	114	ILE
19	m8	141	ARG
19	m8	150	VAL
19	m8	155	MET
19	m8	178	ARG
20	m9	7	GLN
20	m9	9	ARG
20	m9	10	LEU
20	m9	29	THR
20	m9	43	LYS
20	m9	63	THR
20	m9	74	ARG
20	m9	99	LEU
20	m9	105	LEU
20	m9	108	LYS
20	m9	128	LYS
20	m9	164	LEU
20	m9	173	ARG

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Mol	Chain	Res	Type
20	m9	175	GLN
20	m9	180	LYS
20	m9	184	LEU
20	m9	186	LYS
21	n0	1	MET
21	n0	13	ARG
21	n0	40	ARG
21	n0	51	VAL
21	n0	58	ILE
21	n0	59	VAL
21	n0	80	ARG
21	n0	87	THR
21	n0	88	HIS
21	n0	100	VAL
21	n0	117	ARG
21	n0	131	LYS
21	n0	132	THR
21	n0	145	THR
21	n0	148	LEU
21	n0	149	LYS
21	n0	155	ARG
21	n0	160	THR
21	n0	162	THR
21	n0	164	SER
21	n0	172	TYR
22	n1	12	ARG
22	n1	64	VAL
22	n1	89	LEU
22	n1	98	HIS
22	n1	104	GLU
22	n1	124	VAL
22	n1	136	ARG
22	n1	141	VAL
22	n1	150	THR
22	n1	160	ILE
23	n2	11	ILE
23	n2	21	SER
23	n2	41	ILE
23	n2	50	LEU
23	n2	74	LYS
23	n2	91	ASP
23	n2	100	THR

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Mol	Chain	Res	Type
24	n3	7	GLN
24	n3	13	ILE
24	n3	48	ARG
24	n3	54	LEU
24	n3	64	LYS
24	n3	83	LYS
24	n3	88	ARG
24	n3	102	ILE
24	n3	115	THR
24	n3	135	VAL
25	n4	19	THR
25	n4	39	LEU
25	n4	57	LYS
25	n4	89	LEU
25	n4	96	LEU
25	n4	123	ARG
26	n5	34	LEU
26	n5	42	ARG
26	n5	48	SER
26	n5	49	LYS
26	n5	51	VAL
26	n5	57	LEU
26	n5	87	SER
26	n5	104	GLU
26	n5	108	LEU
26	n5	133	LEU
26	n5	135	ILE
26	n5	139	ILE
27	n6	7	ASP
27	n6	8	VAL
27	n6	10	SER
27	n6	38	GLU
27	n6	45	ILE
27	n6	56	VAL
27	n6	57	LEU
27	n6	80	VAL
27	n6	88	GLU
27	n6	89	LYS
27	n6	90	VAL
27	n6	94	SER
27	n6	95	VAL
28	n7	4	PHE

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Mol	Chain	Res	Type
28	n7	26	VAL
28	n7	53	VAL
28	n7	74	VAL
28	n7	75	VAL
28	n7	81	LEU
28	n7	103	GLN
28	n7	127	ASN
28	n7	134	LEU
29	n8	6	THR
29	n8	8	THR
29	n8	24	LYS
29	n8	42	ARG
29	n8	46	ASP
29	n8	72	VAL
29	n8	73	LEU
29	n8	78	LEU
29	n8	80	THR
29	n8	84	GLU
29	n8	97	GLU
29	n8	128	ARG
29	n8	133	LEU
30	n9	18	ARG
30	n9	21	ILE
30	n9	23	LYS
30	n9	25	LYS
30	n9	48	HIS
31	o0	10	ILE
31	o0	18	ILE
31	o0	41	LEU
31	o0	52	ARG
31	o0	83	LYS
31	o0	86	ARG
31	o0	100	ILE
31	o0	101	LEU
32	o1	16	LEU
32	o1	24	SER
32	o1	44	MET
32	o1	61	LYS
32	o1	64	VAL
32	o1	96	VAL
32	o1	106	THR
33	o2	33	ARG

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Mol	Chain	Res	Type
33	o2	35	GLN
33	o2	51	SER
33	o2	73	THR
33	o2	75	LEU
33	o2	76	VAL
33	o2	82	LEU
33	o2	87	MET
33	o2	125	ARG
33	o2	126	LEU
34	o3	21	ARG
34	o3	49	ILE
34	o3	59	VAL
34	o3	81	VAL
34	o3	92	LYS
35	o4	15	THR
35	o4	40	THR
35	o4	71	THR
35	o4	85	VAL
36	o5	4	VAL
36	o5	14	LYS
36	o5	20	GLN
36	o5	31	LEU
36	o5	44	ILE
36	o5	47	VAL
36	o5	101	THR
37	o6	3	VAL
37	o6	7	ILE
37	o6	17	VAL
37	o6	43	LEU
37	o6	68	ARG
37	o6	70	ARG
38	o7	12	HIS
38	o7	17	THR
38	o7	37	CYS
38	o7	44	THR
38	o7	45	ARG
38	o7	55	ARG
38	o7	67	LEU
38	o7	76	ASN
39	o8	6	THR
39	o8	8	ILE
39	o8	16	ARG

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Mol	Chain	Res	Type
39	o8	19	ASP
39	o8	24	THR
39	o8	32	ASN
39	o8	41	THR
39	o8	46	ARG
39	o8	53	THR
39	o8	54	LEU
39	o8	56	ILE
39	o8	69	LEU
40	o9	4	GLN
40	o9	23	LEU
40	o9	47	THR
41	q0	85	LEU
41	q0	92	ASP
41	q0	93	LYS
41	q0	99	CYS
41	q0	106	ARG
41	q0	127	LEU
42	q1	2	ARG
42	q1	6	ARG
42	q1	13	LEU
42	q1	21	ARG
42	q1	24	SER
43	q2	2	VAL
43	q2	4	VAL
43	q2	38	GLN
43	q2	47	GLN
43	q2	71	ARG
43	q2	78	LYS
43	q2	84	THR
43	q2	85	LEU
43	q2	93	LEU
44	q3	3	LYS
44	q3	4	ARG
44	q3	16	VAL
44	q3	20	SER
44	q3	21	SER
44	q3	29	LEU
44	q3	49	ARG
44	q3	90	VAL
46	s0	9	LEU
46	s0	22	THR

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Mol	Chain	Res	Type
46	s0	24	LEU
46	s0	29	VAL
46	s0	31	VAL
46	s0	55	GLU
46	s0	59	LEU
46	s0	119	ARG
46	s0	123	VAL
46	s0	139	VAL
46	s0	151	SER
46	s0	183	ARG
46	s0	188	LEU
46	s0	195	TRP
46	s0	200	ASP
47	s1	21	VAL
47	s1	25	THR
47	s1	49	ASN
47	s1	65	VAL
47	s1	66	VAL
47	s1	70	LEU
47	s1	74	GLN
47	s1	77	GLU
47	s1	105	PHE
47	s1	146	GLN
47	s1	150	VAL
47	s1	180	THR
47	s1	181	LEU
47	s1	184	LEU
47	s1	194	ASN
47	s1	209	ASN
47	s1	222	LYS
47	s1	224	ASP
47	s1	228	LEU
48	s2	53	ILE
48	s2	54	GLU
48	s2	72	LEU
48	s2	73	LEU
48	s2	90	THR
48	s2	95	ARG
48	s2	111	VAL
48	s2	120	GLU
48	s2	136	VAL
48	s2	139	ILE

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Mol	Chain	Res	Type
48	s2	141	ARG
48	s2	146	THR
48	s2	164	SER
48	s2	218	ILE
48	s2	222	TYR
48	s2	250	GLN
49	s3	4	LEU
49	s3	57	ASP
49	s3	91	VAL
49	s3	92	GLN
49	s3	139	SER
49	s3	142	LEU
49	s3	157	LEU
49	s3	164	VAL
49	s3	172	THR
49	s3	175	VAL
49	s3	178	ARG
49	s3	181	VAL
49	s3	213	GLU
49	s3	218	LEU
50	s4	17	HIS
50	s4	68	ARG
50	s4	95	THR
50	s4	100	ARG
50	s4	105	VAL
50	s4	126	VAL
50	s4	139	VAL
50	s4	140	VAL
50	s4	189	LEU
50	s4	192	ILE
50	s4	214	LEU
50	s4	222	LEU
50	s4	236	ILE
50	s4	246	LEU
50	s4	248	ILE
51	s5	24	VAL
51	s5	25	LEU
51	s5	29	ILE
51	s5	51	VAL
51	s5	89	ILE
51	s5	94	THR
51	s5	114	ILE

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Mol	Chain	Res	Type
51	s5	131	GLN
51	s5	149	VAL
51	s5	156	ARG
51	s5	157	ARG
51	s5	162	VAL
51	s5	194	LEU
51	s5	215	ASP
79	s6	17	GLU
79	s6	18	ILE
79	s6	69	LEU
79	s6	71	THR
79	s6	81	VAL
79	s6	108	VAL
79	s6	109	LEU
79	s6	111	LEU
79	s6	115	LYS
79	s6	122	GLU
79	s6	124	LEU
79	s6	125	THR
79	s6	133	LEU
79	s6	151	ASP
79	s6	153	VAL
79	s6	155	ASP
79	s6	169	TYR
79	s6	177	ARG
79	s6	193	LEU
79	s6	197	ASN
79	s6	212	LEU
79	s6	216	LEU
53	s7	2	SER
53	s7	34	LEU
53	s7	38	LEU
53	s7	42	GLN
53	s7	51	VAL
53	s7	55	LYS
53	s7	64	VAL
53	s7	80	GLU
53	s7	95	GLU
53	s7	97	ARG
53	s7	110	GLN
53	s7	112	ARG
53	s7	116	ARG

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Mol	Chain	Res	Type
53	s7	126	LEU
53	s7	159	VAL
53	s7	185	ILE
54	s8	29	LEU
54	s8	36	THR
54	s8	46	VAL
54	s8	48	THR
54	s8	72	ILE
54	s8	155	SER
54	s8	158	SER
55	s9	13	SER
55	s9	14	THR
55	s9	28	LEU
55	s9	59	LEU
55	s9	82	ARG
55	s9	105	LEU
55	s9	130	THR
55	s9	141	VAL
55	s9	149	ARG
55	s9	172	VAL
55	s9	182	GLU
56	c0	3	MET
56	c0	15	LEU
56	c0	20	VAL
56	c0	21	VAL
56	c0	28	ASN
56	c0	55	VAL
57	c1	4	GLU
57	c1	5	LEU
57	c1	16	GLN
57	c1	28	SER
57	c1	33	ARG
57	c1	40	LEU
57	c1	44	THR
57	c1	60	PHE
57	c1	70	ILE
57	c1	80	MET
57	c1	82	ARG
57	c1	99	ARG
57	c1	102	LYS
57	c1	116	ARG
57	c1	123	VAL

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Mol	Chain	Res	Type
57	c1	125	VAL
57	c1	129	ARG
58	c2	54	ARG
58	c2	58	LEU
58	c2	61	VAL
58	c2	63	VAL
58	c2	71	ILE
58	c2	74	LEU
58	c2	85	LYS
58	c2	88	LEU
58	c2	89	ILE
58	c2	97	LEU
58	c2	103	LEU
59	c3	28	LEU
59	c3	65	VAL
59	c3	66	ILE
59	c3	70	LYS
59	c3	115	LEU
59	c3	125	LEU
59	c3	134	VAL
60	c4	16	VAL
60	c4	31	THR
60	c4	42	VAL
60	c4	92	LYS
60	c4	102	LEU
60	c4	110	LEU
60	c4	116	GLU
60	c4	118	VAL
60	c4	136	ARG
60	c4	137	LEU
61	c5	11	VAL
61	c5	22	LEU
61	c5	26	LEU
61	c5	40	ARG
61	c5	49	MET
61	c5	50	THR
61	c5	52	LYS
61	c5	56	PHE
61	c5	69	GLU
61	c5	77	ARG
61	c5	80	MET
61	c5	93	VAL

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Mol	Chain	Res	Type
61	c5	102	PHE
61	c5	107	ILE
61	c5	124	THR
61	c5	126	VAL
61	c5	128	HIS
61	c5	130	ARG
62	c6	23	LYS
62	c6	26	LYS
62	c6	57	LEU
62	c6	63	ILE
62	c6	65	ILE
62	c6	66	ARG
62	c6	81	ILE
62	c6	97	VAL
62	c6	118	ILE
63	c7	24	LEU
63	c7	36	ASP
63	c7	66	VAL
64	c8	7	GLU
64	c8	26	ILE
64	c8	61	LEU
64	c8	66	LEU
64	c8	88	ARG
64	c8	91	ASP
64	c8	97	ASP
64	c8	113	LEU
64	c8	115	ARG
64	c8	116	LEU
64	c8	119	ILE
64	c8	132	ARG
64	c8	133	VAL
64	c8	136	GLN
65	c9	6	VAL
65	c9	34	VAL
65	c9	41	SER
65	c9	68	ARG
65	c9	70	GLN
65	c9	95	ASP
65	c9	111	ILE
66	d0	14	GLN
66	d0	15	GLN
66	d0	16	GLN

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Mol	Chain	Res	Type
66	d0	17	GLN
66	d0	18	GLN
66	d0	19	ILE
66	d0	20	ILE
66	d0	23	ARG
66	d0	29	THR
66	d0	34	LEU
66	d0	46	GLU
66	d0	61	LYS
66	d0	74	GLU
66	d0	115	GLU
66	d0	116	VAL
66	d0	117	VAL
67	d1	3	ASN
67	d1	8	LEU
67	d1	11	LEU
67	d1	32	VAL
67	d1	41	GLU
67	d1	59	VAL
67	d1	62	ARG
67	d1	70	ASN
67	d1	76	ASP
67	d1	78	LEU
68	d2	4	SER
68	d2	6	VAL
68	d2	15	ASN
68	d2	25	VAL
68	d2	28	ARG
68	d2	42	GLN
68	d2	55	ASP
68	d2	83	ILE
68	d2	93	LEU
68	d2	98	GLN
68	d2	103	ILE
68	d2	110	ILE
68	d2	126	LEU
68	d2	129	VAL
69	d3	7	ARG
69	d3	9	LEU
69	d3	19	ARG
69	d3	96	VAL
69	d3	132	LEU

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Mol	Chain	Res	Type
70	d4	10	ARG
70	d4	28	LEU
70	d4	35	VAL
70	d4	49	LYS
70	d4	70	VAL
70	d4	91	LEU
70	d4	93	ARG
71	d5	53	GLU
71	d5	60	VAL
71	d5	67	ASP
71	d5	89	ILE
72	d6	26	CYS
72	d6	37	LYS
72	d6	46	GLU
72	d6	53	LEU
72	d6	58	VAL
72	d6	61	GLU
72	d6	77	CYS
72	d6	84	VAL
73	d7	11	THR
73	d7	23	THR
73	d7	56	CYS
73	d7	77	THR
74	d8	7	VAL
74	d8	8	THR
74	d8	15	VAL
74	d8	40	ILE
74	d8	61	ARG
74	d8	64	ARG
75	d9	5	ASN
75	d9	6	VAL
75	d9	8	PHE
75	d9	20	GLN
75	d9	30	LEU
75	d9	44	ARG
75	d9	54	LYS
76	e0	38	LEU
76	e0	44	PHE
76	e0	46	ASN
76	e0	49	LEU
76	e0	50	VAL
76	e0	51	ASN

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Mol	Chain	Res	Type
76	e0	53	LYS
76	e0	54	ARG
76	e0	56	MET
77	sR	4	ASN
77	sR	5	GLU
77	sR	8	VAL
77	sR	9	LEU
77	sR	16	HIS
77	sR	38	ARG
77	sR	62	LYS
77	sR	66	HIS
77	sR	139	GLN
77	sR	140	CYS
77	sR	145	LEU
77	sR	163	ASP
77	sR	167	VAL
77	sR	185	GLN
77	sR	195	HIS
77	sR	207	ASP
77	sR	211	ILE
77	sR	225	LEU
77	sR	250	TYR
77	sR	251	TRP
77	sR	277	GLU
77	sR	290	VAL
77	sR	316	MET
78	sM	23	LYS
78	sM	30	THR
78	sM	53	ARG
78	sM	63	ASP
78	sM	83	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (180) such sidechains are listed below:

Mol	Chain	Res	Type
4	L2	205	ASN
4	L2	209	HIS
4	L2	216	HIS
5	L3	224	HIS
6	L4	110	ASN
6	L4	279	HIS
6	L4	291	ASN

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Mol	Chain	Res	Type
6	L4	304	GLN
7	L5	40	HIS
7	L5	57	ASN
7	L5	151	GLN
7	L5	244	HIS
8	L6	61	ASN
9	L7	64	GLN
9	L7	146	GLN
10	L8	24	ASN
10	L8	41	GLN
10	L8	61	GLN
10	L8	79	GLN
11	L9	96	HIS
11	L9	116	ASN
12	M0	12	GLN
12	M0	112	GLN
13	M1	20	ASN
13	M1	109	HIS
14	M3	37	ASN
14	M3	99	HIS
14	M3	103	ASN
15	M4	62	GLN
16	M5	156	HIS
16	M5	175	ASN
16	M5	194	GLN
17	M6	31	GLN
18	M7	92	GLN
20	M9	121	HIS
20	M9	175	GLN
22	N1	54	HIS
22	N1	77	ASN
22	N1	146	ASN
24	N3	33	ASN
25	N4	45	ASN
28	N7	122	HIS
29	N8	11	HIS
29	N8	89	GLN
29	N8	120	ASN
30	N9	42	ASN
33	O2	35	GLN
36	O5	61	GLN
38	O7	57	HIS

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Mol	Chain	Res	Type
40	O9	11	GLN
40	O9	50	ASN
43	Q2	59	HIS
44	Q3	32	GLN
44	Q3	33	GLN
46	S0	30	GLN
46	S0	39	ASN
47	S1	79	HIS
47	S1	95	ASN
47	S1	149	GLN
47	S1	160	HIS
48	S2	82	ASN
50	S4	98	ASN
50	S4	130	GLN
50	S4	216	ASN
51	S5	44	ASN
51	S5	86	GLN
51	S5	186	ASN
52	S6	13	GLN
52	S6	197	ASN
54	S8	32	GLN
54	S8	103	GLN
54	S8	116	HIS
54	S8	138	ASN
55	S9	48	GLN
56	C0	39	ASN
59	C3	62	GLN
60	C4	29	HIS
62	C6	77	GLN
64	C8	75	ASN
64	C8	78	HIS
64	C8	104	ASN
64	C8	122	HIS
65	C9	16	ASN
65	C9	101	ASN
68	D2	92	ASN
68	D2	120	HIS
69	D3	48	HIS
70	D4	29	HIS
71	D5	37	GLN
72	D6	25	ASN
73	D7	51	GLN

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Mol	Chain	Res	Type
74	D8	51	ASN
77	SR	29	GLN
77	SR	69	GLN
77	SR	159	ASN
77	SR	182	ASN
77	SR	288	HIS
78	SM	50	ASN
78	SM	86	ASN
4	l2	205	ASN
4	l2	215	ASN
5	l3	224	HIS
6	l4	316	ASN
9	l7	93	ASN
10	l8	38	GLN
10	l8	232	HIS
13	m1	43	GLN
14	m3	137	GLN
16	m5	32	GLN
16	m5	86	ASN
16	m5	182	ASN
17	m6	31	GLN
17	m6	90	HIS
18	m7	121	GLN
19	m8	58	ASN
20	m9	141	HIS
21	n0	8	GLN
22	n1	146	ASN
24	n3	33	ASN
24	n3	47	ASN
25	n4	32	GLN
25	n4	79	GLN
26	n5	137	ASN
27	n6	81	GLN
28	n7	36	HIS
28	n7	57	HIS
28	n7	78	ASN
30	n9	6	ASN
31	o0	11	ASN
33	o2	49	ASN
34	o3	106	ASN
36	o5	104	GLN
36	o5	108	GLN

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Mol	Chain	Res	Type
37	o6	12	ASN
37	o6	63	ASN
37	o6	91	ASN
43	q2	23	HIS
43	q2	38	GLN
43	q2	47	GLN
43	q2	90	HIS
46	s0	140	ASN
47	s1	157	GLN
47	s1	209	ASN
48	s2	59	HIS
48	s2	150	GLN
50	s4	50	ASN
50	s4	259	GLN
51	s5	63	GLN
51	s5	122	ASN
79	s6	176	GLN
79	s6	201	GLN
53	s7	86	GLN
53	s7	180	GLN
54	s8	32	GLN
54	s8	52	ASN
54	s8	116	HIS
56	c0	12	HIS
56	c0	32	HIS
56	c0	47	GLN
57	c1	92	HIS
57	c1	104	HIS
58	c2	38	HIS
59	c3	5	HIS
59	c3	58	HIS
59	c3	105	ASN
62	c6	21	HIS
63	c7	62	GLN
64	c8	75	ASN
64	c8	89	GLN
64	c8	99	HIS
64	c8	103	ASN
64	c8	104	ASN
66	d0	16	GLN
66	d0	72	ASN
68	d2	70	ASN

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Mol	Chain	Res	Type
70	d4	22	GLN
77	sR	69	GLN
77	sR	101	GLN
77	sR	182	ASN
77	sR	288	HIS

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	1	3069/3396 (90%)	620 (20%)	56 (1%)
1	5	3080/3396 (90%)	658 (21%)	53 (1%)
2	3	120/121 (99%)	22 (18%)	1 (0%)
2	7	120/121 (99%)	20 (16%)	0
3	4	156/158 (98%)	35 (22%)	4 (2%)
3	8	157/158 (99%)	35 (22%)	7 (4%)
45	2	1708/1800 (94%)	485 (28%)	33 (1%)
45	6	1678/1800 (93%)	453 (26%)	39 (2%)
All	All	10088/10950 (92%)	2328 (23%)	193 (1%)

All (2328) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	1	6	A
1	1	25	U
1	1	26	A
1	1	30	G
1	1	40	A
1	1	42	C
1	1	49	A
1	1	57	A
1	1	59	G
1	1	60	A
1	1	65	A
1	1	66	A
1	1	76	G
1	1	87	U
1	1	88	A
1	1	92	G
1	1	93	C
1	1	99	A
1	1	109	A

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Mol	Chain	Res	Type
1	1	110	G
1	1	111	C
1	1	116	A
1	1	121	A
1	1	122	A
1	1	132	C
1	1	133	U
1	1	135	C
1	1	136	G
1	1	139	G
1	1	146	U
1	1	154	U
1	1	156	G
1	1	157	A
1	1	162	G
1	1	163	C
1	1	166	C
1	1	187	A
1	1	190	U
1	1	191	U
1	1	192	C
1	1	200	C
1	1	210	U
1	1	211	A
1	1	213	A
1	1	218	G
1	1	219	A
1	1	230	U
1	1	231	G
1	1	235	A
1	1	240	U
1	1	241	G
1	1	242	C
1	1	243	G
1	1	244	G
1	1	245	U
1	1	246	U
1	1	250	U
1	1	251	G
1	1	252	U
1	1	253	A
1	1	269	G

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Mol	Chain	Res	Type
1	1	282	G
1	1	286	U
1	1	295	A
1	1	298	U
1	1	305	U
1	1	315	C
1	1	323	A
1	1	329	U
1	1	338	A
1	1	339	C
1	1	350	C
1	1	351	A
1	1	376	G
1	1	391	A
1	1	397	A
1	1	398	A
1	1	399	A
1	1	401	U
1	1	402	A
1	1	403	C
1	1	420	G
1	1	421	G
1	1	422	A
1	1	436	A
1	1	437	G
1	1	495	G
1	1	496	C
1	1	520	U
1	1	521	A
1	1	532	A
1	1	535	G
1	1	545	U
1	1	548	G
1	1	549	U
1	1	552	G
1	1	556	U
1	1	557	A
1	1	558	U
1	1	559	A
1	1	568	G
1	1	569	A
1	1	578	A

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Mol	Chain	Res	Type
1	1	579	G
1	1	589	A
1	1	594	U
1	1	600	G
1	1	604	G
1	1	607	A
1	1	609	G
1	1	611	A
1	1	619	A
1	1	620	U
1	1	621	A
1	1	622	A
1	1	625	G
1	1	636	C
1	1	637	C
1	1	638	C
1	1	649	A
1	1	660	A
1	1	677	A
1	1	681	U
1	1	689	U
1	1	697	A
1	1	705	A
1	1	712	G
1	1	715	A
1	1	716	A
1	1	718	G
1	1	720	A
1	1	721	G
1	1	741	U
1	1	764	U
1	1	765	C
1	1	767	U
1	1	768	C
1	1	773	G
1	1	774	G
1	1	775	A
1	1	776	U
1	1	777	U
1	1	781	G
1	1	785	G
1	1	806	A

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Mol	Chain	Res	Type
1	1	817	A
1	1	818	C
1	1	830	A
1	1	849	C
1	1	861	C
1	1	863	C
1	1	869	G
1	1	871	U
1	1	874	U
1	1	879	U
1	1	890	C
1	1	896	A
1	1	907	G
1	1	908	G
1	1	914	A
1	1	916	G
1	1	917	A
1	1	920	A
1	1	921	A
1	1	924	G
1	1	926	A
1	1	934	G
1	1	937	G
1	1	944	C
1	1	959	C
1	1	960	U
1	1	964	G
1	1	979	U
1	1	980	A
1	1	982	C
1	1	995	U
1	1	1000	C
1	1	1001	G
1	1	1002	A
1	1	1010	G
1	1	1015	U
1	1	1017	C
1	1	1018	G
1	1	1020	G
1	1	1021	G
1	1	1032	C
1	1	1036	A

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Mol	Chain	Res	Type
1	1	1038	C
1	1	1041	U
1	1	1046	A
1	1	1047	A
1	1	1049	C
1	1	1064	A
1	1	1065	A
1	1	1066	G
1	1	1068	C
1	1	1071	U
1	1	1072	G
1	1	1081	U
1	1	1082	U
1	1	1088	U
1	1	1093	A
1	1	1094	U
1	1	1095	U
1	1	1096	U
1	1	1097	G
1	1	1098	A
1	1	1103	A
1	1	1104	G
1	1	1105	A
1	1	1117	G
1	1	1128	U
1	1	1131	G
1	1	1140	G
1	1	1144	U
1	1	1153	A
1	1	1159	A
1	1	1161	G
1	1	1177	G
1	1	1179	A
1	1	1180	A
1	1	1181	U
1	1	1182	A
1	1	1191	U
1	1	1192	C
1	1	1193	A
1	1	1196	C
1	1	1201	C
1	1	1209	G

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Mol	Chain	Res	Type
1	1	1212	A
1	1	1216	C
1	1	1222	G
1	1	1229	G
1	1	1230	G
1	1	1285	G
1	1	1286	A
1	1	1287	A
1	1	1292	C
1	1	1300	G
1	1	1307	G
1	1	1313	G
1	1	1318	A
1	1	1330	A
1	1	1345	G
1	1	1348	U
1	1	1356	U
1	1	1357	G
1	1	1385	C
1	1	1386	A
1	1	1399	A
1	1	1400	G
1	1	1416	C
1	1	1417	G
1	1	1418	A
1	1	1419	A
1	1	1431	G
1	1	1434	G
1	1	1437	C
1	1	1438	U
1	1	1446	A
1	1	1450	G
1	1	1460	A
1	1	1481	A
1	1	1482	A
1	1	1483	G
1	1	1485	G
1	1	1488	G
1	1	1502	C
1	1	1508	C
1	1	1523	U
1	1	1527	C

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Mol	Chain	Res	Type
1	1	1528	G
1	1	1529	A
1	1	1533	U
1	1	1536	G
1	1	1539	A
1	1	1541	G
1	1	1553	U
1	1	1554	U
1	1	1555	U
1	1	1556	C
1	1	1557	A
1	1	1561	G
1	1	1563	C
1	1	1564	U
1	1	1565	G
1	1	1566	A
1	1	1567	U
1	1	1568	U
1	1	1569	U
1	1	1570	U
1	1	1571	A
1	1	1572	U
1	1	1573	G
1	1	1574	C
1	1	1575	A
1	1	1576	G
1	1	1578	C
1	1	1579	C
1	1	1580	A
1	1	1581	C
1	1	1582	C
1	1	1583	A
1	1	1587	A
1	1	1589	A
1	1	1605	A
1	1	1607	U
1	1	1620	U
1	1	1629	U
1	1	1632	A
1	1	1639	C
1	1	1641	U
1	1	1642	A

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Mol	Chain	Res	Type
1	1	1643	A
1	1	1644	C
1	1	1645	U
1	1	1657	C
1	1	1658	G
1	1	1673	G
1	1	1675	G
1	1	1683	A
1	1	1688	U
1	1	1716	U
1	1	1717	U
1	1	1724	U
1	1	1725	C
1	1	1740	U
1	1	1743	G
1	1	1750	A
1	1	1751	G
1	1	1760	A
1	1	1763	U
1	1	1764	U
1	1	1770	G
1	1	1780	G
1	1	1787	A
1	1	1790	G
1	1	1797	A
1	1	1808	G
1	1	1813	A
1	1	1816	A
1	1	1821	U
1	1	1841	A
1	1	1842	A
1	1	1846	C
1	1	1847	A
1	1	1850	A
1	1	1866	C
1	1	1867	A
1	1	1877	U
1	1	1879	A
1	1	1886	A
1	1	1906	G
1	1	1952	G
1	1	2093	A

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Mol	Chain	Res	Type
1	1	2094	C
1	1	2100	A
1	1	2101	C
1	1	2102	U
1	1	2113	A
1	1	2114	C
1	1	2121	G
1	1	2122	G
1	1	2130	G
1	1	2131	A
1	1	2140	U
1	1	2144	A
1	1	2158	A
1	1	2169	G
1	1	2170	U
1	1	2188	A
1	1	2205	U
1	1	2206	G
1	1	2207	A
1	1	2209	U
1	1	2210	G
1	1	2223	A
1	1	2246	G
1	1	2248	C
1	1	2249	G
1	1	2250	G
1	1	2251	G
1	1	2252	A
1	1	2256	A
1	1	2257	C
1	1	2272	G
1	1	2273	G
1	1	2276	G
1	1	2280	A
1	1	2281	A
1	1	2282	U
1	1	2288	G
1	1	2295	A
1	1	2306	C
1	1	2307	G
1	1	2308	C
1	1	2309	A

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Mol	Chain	Res	Type
1	1	2310	U
1	1	2313	A
1	1	2314	U
1	1	2315	G
1	1	2319	U
1	1	2334	U
1	1	2336	U
1	1	2361	A
1	1	2372	A
1	1	2373	A
1	1	2374	C
1	1	2375	G
1	1	2383	C
1	1	2385	G
1	1	2388	U
1	1	2393	G
1	1	2394	G
1	1	2397	A
1	1	2402	A
1	1	2403	G
1	1	2404	A
1	1	2406	C
1	1	2411	U
1	1	2413	A
1	1	2414	G
1	1	2418	G
1	1	2419	A
1	1	2435	G
1	1	2441	A
1	1	2442	G
1	1	2507	C
1	1	2510	U
1	1	2511	A
1	1	2514	U
1	1	2515	A
1	1	2522	G
1	1	2533	G
1	1	2536	A
1	1	2537	U
1	1	2538	U
1	1	2539	C
1	1	2540	A

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Mol	Chain	Res	Type
1	1	2541	U
1	1	2542	U
1	1	2543	U
1	1	2544	U
1	1	2545	C
1	1	2546	C
1	1	2549	G
1	1	2552	C
1	1	2554	A
1	1	2555	G
1	1	2569	A
1	1	2570	U
1	1	2571	U
1	1	2572	C
1	1	2573	G
1	1	2585	G
1	1	2593	A
1	1	2594	C
1	1	2606	G
1	1	2607	G
1	1	2614	G
1	1	2626	A
1	1	2629	U
1	1	2637	A
1	1	2638	C
1	1	2652	U
1	1	2656	A
1	1	2657	A
1	1	2674	A
1	1	2676	A
1	1	2677	G
1	1	2678	A
1	1	2681	U
1	1	2688	U
1	1	2689	A
1	1	2691	A
1	1	2694	A
1	1	2696	A
1	1	2705	A
1	1	2714	G
1	1	2723	U
1	1	2728	G

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Mol	Chain	Res	Type
1	1	2737	C
1	1	2752	U
1	1	2753	G
1	1	2762	A
1	1	2772	C
1	1	2777	G
1	1	2778	G
1	1	2779	A
1	1	2796	G
1	1	2800	G
1	1	2801	A
1	1	2802	A
1	1	2810	C
1	1	2814	G
1	1	2817	A
1	1	2818	U
1	1	2819	A
1	1	2837	A
1	1	2842	U
1	1	2845	A
1	1	2847	A
1	1	2853	A
1	1	2861	U
1	1	2871	G
1	1	2872	A
1	1	2873	U
1	1	2876	C
1	1	2887	A
1	1	2889	C
1	1	2899	C
1	1	2904	U
1	1	2910	A
1	1	2923	U
1	1	2935	U
1	1	2936	A
1	1	2938	G
1	1	2942	C
1	1	2947	G
1	1	2949	U
1	1	2954	U
1	1	2971	A
1	1	2972	G

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Mol	Chain	Res	Type
1	1	2977	G
1	1	2983	C
1	1	2990	G
1	1	2992	U
1	1	2996	U
1	1	2997	G
1	1	3012	A
1	1	3030	G
1	1	3033	A
1	1	3056	U
1	1	3058	U
1	1	3059	G
1	1	3078	U
1	1	3079	U
1	1	3086	A
1	1	3092	C
1	1	3113	A
1	1	3122	A
1	1	3130	A
1	1	3131	U
1	1	3142	A
1	1	3143	C
1	1	3150	A
1	1	3151	U
1	1	3152	U
1	1	3163	A
1	1	3164	C
1	1	3165	A
1	1	3167	A
1	1	3168	A
1	1	3169	U
1	1	3170	A
1	1	3171	U
1	1	3173	G
1	1	3174	A
1	1	3176	G
1	1	3179	U
1	1	3180	A
1	1	3181	C
1	1	3187	A
1	1	3194	C
1	1	3196	U

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Mol	Chain	Res	Type
1	1	3202	G
1	1	3207	U
1	1	3210	A
1	1	3217	C
1	1	3218	A
1	1	3219	G
1	1	3228	C
1	1	3229	G
1	1	3244	A
1	1	3245	A
1	1	3247	G
1	1	3253	G
1	1	3254	G
1	1	3259	U
1	1	3263	G
1	1	3270	U
1	1	3271	G
1	1	3273	A
1	1	3275	U
1	1	3276	G
1	1	3279	A
1	1	3281	U
1	1	3286	G
1	1	3287	U
1	1	3288	G
1	1	3289	G
1	1	3295	A
1	1	3304	U
1	1	3309	G
1	1	3316	A
1	1	3317	U
1	1	3318	G
1	1	3319	U
1	1	3320	A
1	1	3335	A
1	1	3341	U
1	1	3342	A
1	1	3345	G
1	1	3347	A
1	1	3350	C
1	1	3351	U
1	1	3352	U

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Mol	Chain	Res	Type
1	1	3353	G
1	1	3354	U
1	1	3355	U
1	1	3367	C
1	1	3369	G
1	1	3375	A
1	1	3378	C
1	1	3383	G
1	1	3386	G
1	1	3389	U
1	1	3390	G
1	1	3394	U
1	1	3396	U
2	3	7	G
2	3	10	C
2	3	22	A
2	3	23	A
2	3	33	U
2	3	38	U
2	3	41	G
2	3	42	A
2	3	51	A
2	3	53	U
2	3	54	U
2	3	65	G
2	3	74	C
2	3	76	A
2	3	90	U
2	3	91	G
2	3	99	G
2	3	102	A
2	3	104	A
2	3	110	G
2	3	112	G
2	3	121	U
3	4	21	C
3	4	23	U
3	4	34	U
3	4	35	C
3	4	50	C
3	4	51	G
3	4	53	A

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Mol	Chain	Res	Type
3	4	59	A
3	4	62	C
3	4	63	G
3	4	80	A
3	4	81	U
3	4	82	U
3	4	83	C
3	4	84	C
3	4	86	U
3	4	87	G
3	4	89	A
3	4	90	U
3	4	91	C
3	4	95	G
3	4	104	A
3	4	105	A
3	4	106	C
3	4	111	A
3	4	113	U
3	4	125	U
3	4	126	A
3	4	127	U
3	4	128	U
3	4	138	A
3	4	148	G
3	4	149	A
3	4	151	C
3	4	155	A
45	2	2	A
45	2	16	G
45	2	17	C
45	2	25	C
45	2	26	A
45	2	27	U
45	2	34	G
45	2	37	U
45	2	45	U
45	2	47	A
45	2	48	G
45	2	57	G
45	2	60	U
45	2	61	A

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Mol	Chain	Res	Type
45	2	62	A
45	2	66	U
45	2	67	A
45	2	68	A
45	2	69	G
45	2	72	A
45	2	73	U
45	2	74	U
45	2	75	U
45	2	77	U
45	2	78	A
45	2	79	C
45	2	80	A
45	2	81	G
45	2	94	U
45	2	99	C
45	2	100	A
45	2	101	U
45	2	103	A
45	2	104	A
45	2	110	U
45	2	114	C
45	2	115	G
45	2	116	U
45	2	117	U
45	2	123	G
45	2	124	A
45	2	127	G
45	2	128	U
45	2	130	C
45	2	131	C
45	2	133	U
45	2	134	U
45	2	135	A
45	2	136	C
45	2	137	U
45	2	138	A
45	2	140	A
45	2	141	U
45	2	144	U
45	2	145	A
45	2	146	U

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Mol	Chain	Res	Type
45	2	149	C
45	2	151	G
45	2	158	U
45	2	159	U
45	2	168	A
45	2	178	U
45	2	185	U
45	2	186	C
45	2	187	G
45	2	192	U
45	2	193	U
45	2	194	U
45	2	195	G
45	2	197	A
45	2	200	A
45	2	209	U
45	2	215	A
45	2	217	A
45	2	218	A
45	2	219	A
45	2	225	A
45	2	229	U
45	2	231	U
45	2	232	U
45	2	233	C
45	2	234	G
45	2	238	U
45	2	239	C
45	2	240	U
45	2	241	U
45	2	246	G
45	2	250	C
45	2	254	A
45	2	257	A
45	2	260	U
45	2	261	U
45	2	262	U
45	2	265	A
45	2	266	A
45	2	267	U
45	2	269	G
45	2	270	C

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Mol	Chain	Res	Type
45	2	271	A
45	2	272	U
45	2	276	C
45	2	277	U
45	2	278	U
45	2	279	G
45	2	280	U
45	2	281	G
45	2	283	U
45	2	284	G
45	2	288	A
45	2	292	U
45	2	299	A
45	2	302	U
45	2	306	U
45	2	309	C
45	2	314	C
45	2	316	A
45	2	320	U
45	2	321	C
45	2	324	U
45	2	333	A
45	2	337	G
45	2	338	C
45	2	352	A
45	2	359	A
45	2	360	A
45	2	361	C
45	2	369	A
45	2	381	C
45	2	390	G
45	2	399	A
45	2	400	A
45	2	402	C
45	2	403	G
45	2	404	G
45	2	416	A
45	2	417	A
45	2	418	G
45	2	422	G
45	2	424	C
45	2	425	A

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Mol	Chain	Res	Type
45	2	426	G
45	2	427	C
45	2	428	A
45	2	434	G
45	2	437	A
45	2	439	U
45	2	444	C
45	2	447	U
45	2	448	C
45	2	452	A
45	2	454	U
45	2	455	C
45	2	468	A
45	2	469	C
45	2	474	A
45	2	475	A
45	2	477	A
45	2	483	A
45	2	484	C
45	2	485	A
45	2	486	G
45	2	487	G
45	2	502	U
45	2	504	U
45	2	505	A
45	2	506	A
45	2	507	U
45	2	510	G
45	2	511	A
45	2	512	A
45	2	513	U
45	2	515	A
45	2	516	G
45	2	532	U
45	2	535	A
45	2	536	C
45	2	538	A
45	2	539	G
45	2	540	G
45	2	541	A
45	2	542	A
45	2	543	C

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Mol	Chain	Res	Type
45	2	544	A
45	2	548	G
45	2	554	C
45	2	555	A
45	2	556	A
45	2	557	G
45	2	558	U
45	2	559	C
45	2	560	U
45	2	561	G
45	2	565	C
45	2	567	A
45	2	568	G
45	2	570	A
45	2	576	G
45	2	579	A
45	2	580	A
45	2	582	U
45	2	583	C
45	2	594	A
45	2	595	G
45	2	613	G
45	2	619	A
45	2	620	A
45	2	621	A
45	2	622	A
45	2	623	A
45	2	624	G
45	2	638	U
45	2	639	U
45	2	640	U
45	2	650	U
45	2	654	C
45	2	655	G
45	2	656	G
45	2	658	C
45	2	677	G
45	2	679	U
45	2	683	C
45	2	684	A
45	2	686	C
45	2	694	U

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Mol	Chain	Res	Type
45	2	695	U
45	2	696	C
45	2	697	C
45	2	699	U
45	2	702	G
45	2	703	G
45	2	704	C
45	2	735	C
45	2	737	A
45	2	738	G
45	2	739	G
45	2	741	C
45	2	742	U
45	2	743	U
45	2	754	A
45	2	755	A
45	2	756	A
45	2	762	A
45	2	765	G
45	2	766	U
45	2	770	A
45	2	771	A
45	2	774	A
45	2	775	G
45	2	777	C
45	2	778	G
45	2	779	U
45	2	780	A
45	2	781	U
45	2	782	U
45	2	783	G
45	2	784	C
45	2	789	A
45	2	793	A
45	2	794	U
45	2	795	U
45	2	812	A
45	2	814	A
45	2	815	G
45	2	816	G
45	2	818	C
45	2	820	U

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Mol	Chain	Res	Type
45	2	821	U
45	2	824	G
45	2	827	C
45	2	829	A
45	2	830	U
45	2	831	U
45	2	833	U
45	2	839	U
45	2	840	U
45	2	846	G
45	2	847	A
45	2	855	A
45	2	856	A
45	2	860	U
45	2	863	A
45	2	864	U
45	2	865	A
45	2	873	U
45	2	886	U
45	2	894	U
45	2	895	G
45	2	898	A
45	2	906	A
45	2	911	U
45	2	912	U
45	2	913	G
45	2	914	G
45	2	916	U
45	2	921	U
45	2	927	C
45	2	933	A
45	2	935	U
45	2	942	G
45	2	944	A
45	2	954	G
45	2	960	U
45	2	966	A
45	2	992	A
45	2	993	A
45	2	1003	A
45	2	1004	U
45	2	1005	A

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Mol	Chain	Res	Type
45	2	1021	C
45	2	1026	A
45	2	1028	C
45	2	1039	A
45	2	1040	G
45	2	1042	G
45	2	1052	U
45	2	1056	U
45	2	1057	U
45	2	1059	U
45	2	1060	U
45	2	1061	A
45	2	1063	U
45	2	1072	C
45	2	1075	C
45	2	1076	A
45	2	1079	U
45	2	1081	A
45	2	1083	G
45	2	1091	A
45	2	1092	A
45	2	1096	C
45	2	1097	U
45	2	1100	G
45	2	1109	G
45	2	1138	A
45	2	1146	G
45	2	1150	G
45	2	1151	A
45	2	1155	G
45	2	1157	A
45	2	1158	C
45	2	1160	A
45	2	1164	G
45	2	1166	A
45	2	1167	G
45	2	1185	U
45	2	1194	A
45	2	1196	A
45	2	1197	C
45	2	1199	G
45	2	1200	G

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Mol	Chain	Res	Type
45	2	1202	A
45	2	1207	C
45	2	1208	A
45	2	1217	A
45	2	1218	G
45	2	1227	A
45	2	1228	G
45	2	1229	G
45	2	1230	A
45	2	1235	C
45	2	1244	A
45	2	1245	G
45	2	1246	C
45	2	1255	G
45	2	1256	A
45	2	1258	U
45	2	1260	U
45	2	1261	G
45	2	1263	G
45	2	1276	U
45	2	1287	A
45	2	1290	U
45	2	1301	U
45	2	1314	U
45	2	1315	U
45	2	1321	A
45	2	1325	A
45	2	1335	U
45	2	1337	A
45	2	1339	C
45	2	1340	U
45	2	1341	A
45	2	1343	U
45	2	1344	A
45	2	1345	A
45	2	1346	A
45	2	1348	A
45	2	1349	G
45	2	1361	U
45	2	1362	U
45	2	1364	G
45	2	1369	U

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Mol	Chain	Res	Type
45	2	1370	U
45	2	1371	A
45	2	1372	U
45	2	1381	U
45	2	1383	G
45	2	1385	G
45	2	1388	A
45	2	1390	U
45	2	1398	U
45	2	1399	C
45	2	1400	A
45	2	1412	G
45	2	1413	U
45	2	1414	U
45	2	1415	U
45	2	1427	A
45	2	1428	G
45	2	1432	U
45	2	1445	G
45	2	1446	A
45	2	1447	C
45	2	1456	C
45	2	1457	C
45	2	1458	G
45	2	1459	C
45	2	1460	A
45	2	1461	C
45	2	1471	A
45	2	1473	U
45	2	1474	G
45	2	1482	C
45	2	1483	A
45	2	1485	C
45	2	1486	G
45	2	1489	U
45	2	1490	C
45	2	1491	U
45	2	1492	A
45	2	1493	A
45	2	1499	G
45	2	1503	A
45	2	1506	G

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Mol	Chain	Res	Type
45	2	1514	U
45	2	1515	A
45	2	1516	A
45	2	1518	C
45	2	1520	U
45	2	1521	G
45	2	1523	G
45	2	1524	A
45	2	1535	U
45	2	1536	G
45	2	1537	C
45	2	1538	U
45	2	1542	G
45	2	1557	U
45	2	1559	A
45	2	1569	A
45	2	1574	G
45	2	1575	G
45	2	1584	G
45	2	1590	G
45	2	1601	G
45	2	1614	A
45	2	1616	G
45	2	1619	C
45	2	1625	C
45	2	1631	A
45	2	1634	C
45	2	1635	A
45	2	1657	U
45	2	1658	G
45	2	1663	G
45	2	1681	A
45	2	1682	U
45	2	1683	C
45	2	1684	U
45	2	1715	G
45	2	1716	C
45	2	1717	G
45	2	1755	A
45	2	1760	G
45	2	1762	A
45	2	1766	A

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Mol	Chain	Res	Type
45	2	1769	U
45	2	1770	U
45	2	1780	G
45	2	1782	A
45	2	1783	C
45	2	1792	G
45	2	1793	G
45	2	1794	A
45	2	1796	C
1	5	26	A
1	5	40	A
1	5	43	A
1	5	49	A
1	5	57	A
1	5	60	A
1	5	65	A
1	5	66	A
1	5	73	C
1	5	77	A
1	5	85	A
1	5	92	G
1	5	96	G
1	5	99	A
1	5	108	A
1	5	109	A
1	5	110	G
1	5	113	C
1	5	121	A
1	5	122	A
1	5	127	G
1	5	130	A
1	5	132	C
1	5	133	U
1	5	134	U
1	5	136	G
1	5	138	U
1	5	139	G
1	5	146	U
1	5	150	A
1	5	152	U
1	5	156	G
1	5	157	A

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Mol	Chain	Res	Type
1	5	161	G
1	5	165	A
1	5	170	G
1	5	171	G
1	5	173	G
1	5	174	C
1	5	175	C
1	5	176	G
1	5	180	C
1	5	181	U
1	5	187	A
1	5	190	U
1	5	191	U
1	5	200	C
1	5	210	U
1	5	213	A
1	5	218	G
1	5	219	A
1	5	221	A
1	5	238	A
1	5	239	G
1	5	240	U
1	5	241	G
1	5	242	C
1	5	246	U
1	5	247	C
1	5	249	U
1	5	250	U
1	5	251	G
1	5	252	U
1	5	253	A
1	5	263	C
1	5	269	G
1	5	284	A
1	5	286	U
1	5	295	A
1	5	305	U
1	5	311	C
1	5	323	A
1	5	329	U
1	5	338	A
1	5	339	C

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Mol	Chain	Res	Type
1	5	349	A
1	5	350	C
1	5	351	A
1	5	352	A
1	5	373	A
1	5	376	G
1	5	379	C
1	5	384	A
1	5	390	G
1	5	395	A
1	5	397	A
1	5	399	A
1	5	401	U
1	5	402	A
1	5	403	C
1	5	404	G
1	5	421	G
1	5	422	A
1	5	435	C
1	5	436	A
1	5	439	C
1	5	440	A
1	5	441	U
1	5	442	G
1	5	520	U
1	5	521	A
1	5	524	U
1	5	535	G
1	5	540	U
1	5	542	G
1	5	543	C
1	5	544	C
1	5	545	U
1	5	546	C
1	5	547	G
1	5	548	G
1	5	549	U
1	5	550	A
1	5	551	A
1	5	553	U
1	5	555	U
1	5	557	A

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Mol	Chain	Res	Type
1	5	559	A
1	5	569	A
1	5	578	A
1	5	579	G
1	5	592	A
1	5	594	U
1	5	597	G
1	5	600	G
1	5	604	G
1	5	609	G
1	5	611	A
1	5	618	C
1	5	619	A
1	5	620	U
1	5	621	A
1	5	622	A
1	5	626	U
1	5	636	C
1	5	643	U
1	5	649	A
1	5	660	A
1	5	677	A
1	5	681	U
1	5	691	A
1	5	697	A
1	5	705	A
1	5	708	G
1	5	712	G
1	5	715	A
1	5	716	A
1	5	736	A
1	5	766	U
1	5	768	C
1	5	776	U
1	5	777	U
1	5	780	A
1	5	781	G
1	5	785	G
1	5	786	A
1	5	806	A
1	5	808	A
1	5	816	A

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Mol	Chain	Res	Type
1	5	817	A
1	5	830	A
1	5	837	A
1	5	846	A
1	5	857	G
1	5	861	C
1	5	874	U
1	5	879	U
1	5	882	A
1	5	883	A
1	5	896	A
1	5	907	G
1	5	908	G
1	5	914	A
1	5	916	G
1	5	917	A
1	5	921	A
1	5	924	G
1	5	925	A
1	5	926	A
1	5	937	G
1	5	939	U
1	5	944	C
1	5	953	G
1	5	959	C
1	5	960	U
1	5	964	G
1	5	979	U
1	5	982	C
1	5	994	G
1	5	1002	A
1	5	1010	G
1	5	1015	U
1	5	1016	C
1	5	1017	C
1	5	1018	G
1	5	1020	G
1	5	1023	C
1	5	1024	G
1	5	1031	C
1	5	1033	U
1	5	1035	G

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Mol	Chain	Res	Type
1	5	1037	C
1	5	1041	U
1	5	1047	A
1	5	1049	C
1	5	1064	A
1	5	1065	A
1	5	1068	C
1	5	1071	U
1	5	1072	G
1	5	1076	C
1	5	1081	U
1	5	1082	U
1	5	1083	G
1	5	1085	A
1	5	1093	A
1	5	1094	U
1	5	1095	U
1	5	1097	G
1	5	1098	A
1	5	1103	A
1	5	1104	G
1	5	1117	G
1	5	1131	G
1	5	1144	U
1	5	1151	U
1	5	1153	A
1	5	1159	A
1	5	1180	A
1	5	1181	U
1	5	1182	A
1	5	1191	U
1	5	1192	C
1	5	1196	C
1	5	1201	C
1	5	1206	G
1	5	1209	G
1	5	1212	A
1	5	1220	U
1	5	1222	G
1	5	1225	A
1	5	1285	G
1	5	1308	A

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Mol	Chain	Res	Type
1	5	1311	G
1	5	1312	C
1	5	1313	G
1	5	1324	U
1	5	1330	A
1	5	1332	A
1	5	1348	U
1	5	1349	G
1	5	1350	A
1	5	1351	U
1	5	1352	A
1	5	1353	U
1	5	1354	G
1	5	1356	U
1	5	1357	G
1	5	1358	C
1	5	1369	A
1	5	1380	G
1	5	1385	C
1	5	1386	A
1	5	1392	G
1	5	1399	A
1	5	1400	G
1	5	1416	C
1	5	1417	G
1	5	1418	A
1	5	1419	A
1	5	1428	A
1	5	1434	G
1	5	1437	C
1	5	1438	U
1	5	1446	A
1	5	1450	G
1	5	1455	U
1	5	1466	G
1	5	1481	A
1	5	1482	A
1	5	1483	G
1	5	1488	G
1	5	1500	G
1	5	1501	U
1	5	1503	A

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Mol	Chain	Res	Type
1	5	1508	C
1	5	1511	U
1	5	1524	A
1	5	1527	C
1	5	1533	U
1	5	1539	A
1	5	1554	U
1	5	1555	U
1	5	1556	C
1	5	1557	A
1	5	1560	G
1	5	1561	G
1	5	1562	C
1	5	1564	U
1	5	1565	G
1	5	1572	U
1	5	1573	G
1	5	1574	C
1	5	1575	A
1	5	1576	G
1	5	1577	G
1	5	1578	C
1	5	1581	C
1	5	1582	C
1	5	1583	A
1	5	1587	A
1	5	1589	A
1	5	1593	A
1	5	1605	A
1	5	1607	U
1	5	1608	C
1	5	1619	A
1	5	1628	C
1	5	1629	U
1	5	1632	A
1	5	1636	U
1	5	1639	C
1	5	1642	A
1	5	1643	A
1	5	1644	C
1	5	1645	U
1	5	1655	G

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Mol	Chain	Res	Type
1	5	1657	C
1	5	1662	G
1	5	1687	U
1	5	1715	A
1	5	1716	U
1	5	1724	U
1	5	1731	A
1	5	1736	G
1	5	1746	U
1	5	1750	A
1	5	1751	G
1	5	1759	C
1	5	1760	A
1	5	1761	C
1	5	1762	C
1	5	1763	U
1	5	1765	U
1	5	1766	G
1	5	1769	G
1	5	1770	G
1	5	1775	G
1	5	1778	G
1	5	1780	G
1	5	1788	C
1	5	1797	A
1	5	1809	A
1	5	1810	A
1	5	1812	G
1	5	1813	A
1	5	1814	A
1	5	1815	U
1	5	1816	A
1	5	1817	G
1	5	1818	U
1	5	1821	U
1	5	1835	A
1	5	1839	A
1	5	1842	A
1	5	1846	C
1	5	1849	C
1	5	1878	G
1	5	1879	A

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Mol	Chain	Res	Type
1	5	1880	U
1	5	1884	A
1	5	1886	A
1	5	1906	G
1	5	1935	G
1	5	1948	G
1	5	1952	G
1	5	2093	A
1	5	2100	A
1	5	2101	C
1	5	2102	U
1	5	2112	U
1	5	2113	A
1	5	2114	C
1	5	2121	G
1	5	2122	G
1	5	2131	A
1	5	2140	U
1	5	2146	C
1	5	2158	A
1	5	2168	A
1	5	2169	G
1	5	2176	U
1	5	2179	C
1	5	2185	G
1	5	2198	A
1	5	2201	G
1	5	2205	U
1	5	2206	G
1	5	2210	G
1	5	2213	A
1	5	2222	A
1	5	2223	A
1	5	2225	U
1	5	2228	A
1	5	2244	A
1	5	2246	G
1	5	2250	G
1	5	2251	G
1	5	2252	A
1	5	2253	G
1	5	2255	A

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Mol	Chain	Res	Type
1	5	2256	A
1	5	2257	C
1	5	2266	U
1	5	2269	U
1	5	2270	A
1	5	2273	G
1	5	2281	A
1	5	2307	G
1	5	2310	U
1	5	2313	A
1	5	2315	G
1	5	2334	U
1	5	2336	U
1	5	2372	A
1	5	2373	A
1	5	2374	C
1	5	2375	G
1	5	2388	U
1	5	2393	G
1	5	2395	G
1	5	2397	A
1	5	2401	A
1	5	2402	A
1	5	2403	G
1	5	2404	A
1	5	2405	C
1	5	2411	U
1	5	2418	G
1	5	2419	A
1	5	2420	C
1	5	2433	U
1	5	2434	U
1	5	2435	G
1	5	2437	G
1	5	2441	A
1	5	2442	G
1	5	2443	A
1	5	2509	U
1	5	2510	U
1	5	2511	A
1	5	2512	C
1	5	2514	U

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Mol	Chain	Res	Type
1	5	2515	A
1	5	2522	G
1	5	2523	A
1	5	2524	A
1	5	2525	G
1	5	2535	A
1	5	2536	A
1	5	2537	U
1	5	2538	U
1	5	2539	C
1	5	2540	A
1	5	2541	U
1	5	2543	U
1	5	2544	U
1	5	2545	C
1	5	2546	C
1	5	2549	G
1	5	2552	C
1	5	2555	G
1	5	2560	C
1	5	2562	A
1	5	2567	C
1	5	2568	C
1	5	2569	A
1	5	2571	U
1	5	2572	C
1	5	2573	G
1	5	2574	G
1	5	2585	G
1	5	2593	A
1	5	2594	C
1	5	2606	G
1	5	2607	G
1	5	2610	G
1	5	2614	G
1	5	2619	G
1	5	2620	G
1	5	2626	A
1	5	2629	U
1	5	2648	G
1	5	2652	U
1	5	2656	A

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Mol	Chain	Res	Type
1	5	2663	G
1	5	2667	A
1	5	2673	A
1	5	2674	A
1	5	2675	C
1	5	2676	A
1	5	2677	G
1	5	2681	U
1	5	2689	A
1	5	2690	G
1	5	2691	A
1	5	2694	A
1	5	2695	A
1	5	2696	A
1	5	2714	G
1	5	2715	A
1	5	2720	G
1	5	2728	G
1	5	2737	C
1	5	2738	A
1	5	2740	A
1	5	2746	A
1	5	2752	U
1	5	2753	G
1	5	2773	C
1	5	2777	G
1	5	2778	G
1	5	2796	G
1	5	2799	A
1	5	2800	G
1	5	2801	A
1	5	2802	A
1	5	2810	C
1	5	2814	G
1	5	2816	G
1	5	2817	A
1	5	2818	U
1	5	2819	A
1	5	2837	A
1	5	2843	U
1	5	2845	A
1	5	2847	A

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Mol	Chain	Res	Type
1	5	2853	A
1	5	2871	G
1	5	2872	A
1	5	2875	U
1	5	2876	C
1	5	2887	A
1	5	2889	C
1	5	2898	G
1	5	2899	C
1	5	2910	A
1	5	2923	U
1	5	2935	U
1	5	2936	A
1	5	2942	C
1	5	2943	G
1	5	2947	G
1	5	2951	G
1	5	2952	G
1	5	2967	A
1	5	2971	A
1	5	2972	G
1	5	2979	U
1	5	2983	C
1	5	2990	G
1	5	2994	A
1	5	2996	U
1	5	2997	G
1	5	3012	A
1	5	3028	G
1	5	3030	G
1	5	3039	C
1	5	3056	U
1	5	3059	G
1	5	3062	G
1	5	3074	G
1	5	3078	U
1	5	3080	G
1	5	3086	A
1	5	3087	A
1	5	3092	C
1	5	3120	C
1	5	3130	A

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Mol	Chain	Res	Type
1	5	3131	U
1	5	3142	A
1	5	3143	C
1	5	3153	U
1	5	3154	C
1	5	3155	U
1	5	3156	U
1	5	3157	U
1	5	3158	G
1	5	3164	C
1	5	3165	A
1	5	3166	C
1	5	3168	A
1	5	3172	A
1	5	3173	G
1	5	3174	A
1	5	3176	G
1	5	3178	A
1	5	3180	A
1	5	3181	C
1	5	3187	A
1	5	3188	G
1	5	3195	U
1	5	3196	U
1	5	3207	U
1	5	3209	A
1	5	3217	C
1	5	3218	A
1	5	3219	G
1	5	3227	A
1	5	3229	G
1	5	3233	C
1	5	3239	G
1	5	3244	A
1	5	3245	A
1	5	3246	G
1	5	3247	G
1	5	3252	G
1	5	3253	G
1	5	3254	G
1	5	3259	U
1	5	3265	C

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Mol	Chain	Res	Type
1	5	3270	U
1	5	3271	G
1	5	3272	C
1	5	3275	U
1	5	3276	G
1	5	3277	U
1	5	3279	A
1	5	3280	U
1	5	3282	U
1	5	3284	G
1	5	3285	C
1	5	3286	G
1	5	3287	U
1	5	3289	G
1	5	3290	G
1	5	3294	A
1	5	3295	A
1	5	3304	U
1	5	3313	U
1	5	3317	U
1	5	3318	G
1	5	3319	U
1	5	3341	U
1	5	3342	A
1	5	3345	G
1	5	3349	C
1	5	3351	U
1	5	3352	U
1	5	3354	U
1	5	3355	U
1	5	3358	U
1	5	3368	U
1	5	3369	G
1	5	3378	C
1	5	3383	G
1	5	3389	U
1	5	3396	U
2	7	5	G
2	7	7	G
2	7	21	G
2	7	22	A
2	7	26	C

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Mol	Chain	Res	Type
2	7	27	A
2	7	41	G
2	7	42	A
2	7	52	G
2	7	54	U
2	7	55	A
2	7	65	G
2	7	73	C
2	7	74	C
2	7	76	A
2	7	91	G
2	7	93	C
2	7	102	A
2	7	112	G
2	7	121	U
3	8	18	U
3	8	30	C
3	8	34	U
3	8	35	C
3	8	39	G
3	8	50	C
3	8	52	A
3	8	58	G
3	8	59	A
3	8	62	C
3	8	63	G
3	8	79	A
3	8	80	A
3	8	81	U
3	8	82	U
3	8	83	C
3	8	84	C
3	8	85	G
3	8	86	U
3	8	87	G
3	8	90	U
3	8	95	G
3	8	104	A
3	8	106	C
3	8	109	A
3	8	111	A
3	8	113	U

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Mol	Chain	Res	Type
3	8	125	U
3	8	126	A
3	8	127	U
3	8	128	U
3	8	138	A
3	8	155	A
3	8	157	U
3	8	158	U
45	6	2	A
45	6	17	C
45	6	25	C
45	6	26	A
45	6	27	U
45	6	34	G
45	6	42	G
45	6	45	U
45	6	46	A
45	6	47	A
45	6	50	C
45	6	57	G
45	6	60	U
45	6	63	G
45	6	67	A
45	6	68	A
45	6	69	G
45	6	72	A
45	6	73	U
45	6	74	U
45	6	75	U
45	6	76	A
45	6	77	U
45	6	78	A
45	6	104	A
45	6	114	C
45	6	116	U
45	6	121	U
45	6	130	C
45	6	131	C
45	6	138	A
45	6	139	C
45	6	140	A
45	6	141	U

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Mol	Chain	Res	Type
45	6	144	U
45	6	153	G
45	6	158	U
45	6	159	U
45	6	166	C
45	6	170	U
45	6	178	U
45	6	179	A
45	6	185	U
45	6	191	C
45	6	192	U
45	6	193	U
45	6	195	G
45	6	197	A
45	6	198	A
45	6	199	G
45	6	200	A
45	6	201	G
45	6	215	A
45	6	218	A
45	6	222	A
45	6	224	C
45	6	226	A
45	6	227	U
45	6	228	G
45	6	229	U
45	6	231	U
45	6	232	U
45	6	233	C
45	6	234	G
45	6	235	G
45	6	240	U
45	6	241	U
45	6	242	U
45	6	243	G
45	6	249	U
45	6	250	C
45	6	261	U
45	6	262	U
45	6	265	A
45	6	266	A
45	6	267	U

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Mol	Chain	Res	Type
45	6	268	C
45	6	271	A
45	6	272	U
45	6	273	G
45	6	276	C
45	6	277	U
45	6	278	U
45	6	279	G
45	6	280	U
45	6	285	G
45	6	287	G
45	6	299	A
45	6	302	U
45	6	314	C
45	6	316	A
45	6	320	U
45	6	321	C
45	6	322	G
45	6	333	A
45	6	337	G
45	6	338	C
45	6	352	A
45	6	359	A
45	6	360	A
45	6	361	C
45	6	369	A
45	6	370	A
45	6	379	U
45	6	380	U
45	6	393	C
45	6	400	A
45	6	401	A
45	6	402	C
45	6	403	G
45	6	404	G
45	6	416	A
45	6	418	G
45	6	419	G
45	6	424	C
45	6	425	A
45	6	426	G
45	6	428	A

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Mol	Chain	Res	Type
45	6	434	G
45	6	437	A
45	6	439	U
45	6	444	C
45	6	448	C
45	6	449	C
45	6	452	A
45	6	454	U
45	6	455	C
45	6	468	A
45	6	474	A
45	6	475	A
45	6	480	G
45	6	485	A
45	6	486	G
45	6	487	G
45	6	488	G
45	6	500	C
45	6	501	U
45	6	504	U
45	6	505	A
45	6	506	A
45	6	507	U
45	6	508	U
45	6	510	G
45	6	511	A
45	6	512	A
45	6	513	U
45	6	515	A
45	6	519	C
45	6	527	A
45	6	534	A
45	6	538	A
45	6	539	G
45	6	540	G
45	6	541	A
45	6	542	A
45	6	543	C
45	6	544	A
45	6	554	C
45	6	555	A
45	6	556	A

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Mol	Chain	Res	Type
45	6	557	G
45	6	558	U
45	6	564	G
45	6	565	C
45	6	566	C
45	6	570	A
45	6	574	G
45	6	579	A
45	6	580	A
45	6	582	U
45	6	583	C
45	6	585	A
45	6	594	A
45	6	595	G
45	6	596	C
45	6	606	A
45	6	610	G
45	6	611	U
45	6	619	A
45	6	620	A
45	6	622	A
45	6	623	A
45	6	624	G
45	6	639	U
45	6	647	G
45	6	648	G
45	6	649	U
45	6	650	U
45	6	685	A
45	6	745	U
45	6	746	A
45	6	754	A
45	6	755	A
45	6	756	A
45	6	758	U
45	6	765	G
45	6	766	U
45	6	774	A
45	6	775	G
45	6	778	G
45	6	780	A
45	6	781	U

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Mol	Chain	Res	Type
45	6	782	U
45	6	783	G
45	6	789	A
45	6	793	A
45	6	794	U
45	6	803	A
45	6	811	A
45	6	812	A
45	6	813	U
45	6	815	G
45	6	819	G
45	6	820	U
45	6	821	U
45	6	823	G
45	6	825	U
45	6	826	U
45	6	829	A
45	6	830	U
45	6	831	U
45	6	832	U
45	6	834	G
45	6	835	U
45	6	839	U
45	6	842	C
45	6	843	U
45	6	845	G
45	6	849	C
45	6	856	A
45	6	863	A
45	6	864	U
45	6	876	G
45	6	877	G
45	6	886	U
45	6	898	A
45	6	906	A
45	6	913	G
45	6	914	G
45	6	916	U
45	6	926	A
45	6	929	A
45	6	933	A
45	6	935	U

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Mol	Chain	Res	Type
45	6	942	G
45	6	944	A
45	6	945	U
45	6	951	A
45	6	957	G
45	6	959	U
45	6	960	U
45	6	966	A
45	6	969	C
45	6	971	A
45	6	984	G
45	6	992	A
45	6	993	A
45	6	995	A
45	6	996	U
45	6	997	G
45	6	1003	A
45	6	1004	U
45	6	1005	A
45	6	1024	U
45	6	1025	A
45	6	1026	A
45	6	1028	C
45	6	1030	A
45	6	1039	A
45	6	1040	G
45	6	1042	G
45	6	1043	A
45	6	1051	G
45	6	1052	U
45	6	1053	G
45	6	1058	U
45	6	1059	U
45	6	1060	U
45	6	1061	A
45	6	1062	A
45	6	1063	U
45	6	1071	U
45	6	1076	A
45	6	1081	A
45	6	1082	C
45	6	1083	G

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Mol	Chain	Res	Type
45	6	1092	A
45	6	1096	C
45	6	1097	U
45	6	1098	U
45	6	1100	G
45	6	1109	G
45	6	1112	G
45	6	1138	A
45	6	1140	G
45	6	1150	G
45	6	1155	G
45	6	1158	C
45	6	1160	A
45	6	1163	A
45	6	1167	G
45	6	1185	U
45	6	1186	U
45	6	1194	A
45	6	1196	A
45	6	1199	G
45	6	1200	G
45	6	1202	A
45	6	1208	A
45	6	1212	G
45	6	1217	A
45	6	1218	G
45	6	1225	U
45	6	1226	A
45	6	1228	G
45	6	1229	G
45	6	1230	A
45	6	1235	C
45	6	1240	U
45	6	1243	G
45	6	1244	A
45	6	1245	G
45	6	1249	U
45	6	1252	C
45	6	1254	U
45	6	1256	A
45	6	1257	U
45	6	1258	U

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Mol	Chain	Res	Type
45	6	1261	G
45	6	1263	G
45	6	1285	U
45	6	1312	A
45	6	1314	U
45	6	1315	U
45	6	1316	G
45	6	1321	A
45	6	1337	A
45	6	1341	A
45	6	1344	A
45	6	1345	A
45	6	1346	A
45	6	1347	U
45	6	1349	G
45	6	1354	G
45	6	1356	U
45	6	1357	A
45	6	1360	A
45	6	1361	U
45	6	1362	U
45	6	1363	U
45	6	1364	G
45	6	1366	U
45	6	1371	A
45	6	1372	U
45	6	1385	G
45	6	1388	A
45	6	1390	U
45	6	1398	U
45	6	1399	C
45	6	1400	A
45	6	1402	G
45	6	1406	A
45	6	1413	U
45	6	1414	U
45	6	1415	U
45	6	1427	A
45	6	1428	G
45	6	1433	G
45	6	1435	G
45	6	1437	U

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Mol	Chain	Res	Type
45	6	1445	G
45	6	1446	A
45	6	1447	C
45	6	1459	C
45	6	1460	A
45	6	1461	C
45	6	1469	A
45	6	1471	A
45	6	1477	G
45	6	1481	C
45	6	1482	C
45	6	1486	G
45	6	1489	U
45	6	1490	C
45	6	1491	U
45	6	1492	A
45	6	1493	A
45	6	1506	G
45	6	1510	U
45	6	1511	U
45	6	1514	U
45	6	1516	A
45	6	1518	C
45	6	1520	U
45	6	1521	G
45	6	1523	G
45	6	1524	A
45	6	1533	C
45	6	1535	U
45	6	1536	G
45	6	1537	C
45	6	1538	U
45	6	1542	G
45	6	1554	U
45	6	1557	U
45	6	1559	A
45	6	1569	A
45	6	1571	C
45	6	1574	G
45	6	1575	G
45	6	1584	G
45	6	1590	G

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Mol	Chain	Res	Type
45	6	1597	A
45	6	1600	A
45	6	1601	G
45	6	1610	G
45	6	1616	G
45	6	1625	C
45	6	1629	G
45	6	1637	C
45	6	1638	G
45	6	1656	U
45	6	1657	U
45	6	1658	G
45	6	1678	A
45	6	1680	G
45	6	1683	C
45	6	1685	G
45	6	1713	G
45	6	1715	G
45	6	1716	C
45	6	1717	G
45	6	1736	G
45	6	1750	A
45	6	1755	A
45	6	1756	A
45	6	1760	G
45	6	1762	A
45	6	1763	A
45	6	1766	A
45	6	1767	G
45	6	1769	U
45	6	1780	G
45	6	1782	A
45	6	1783	C
45	6	1789	G
45	6	1791	A
45	6	1792	G
45	6	1793	G
45	6	1794	A
45	6	1795	U
45	6	1796	C
45	6	1799	U

All (193) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	1	25	U
1	1	239	G
1	1	594	U
1	1	637	C
1	1	763	G
1	1	816	A
1	1	873	C
1	1	916	G
1	1	978	G
1	1	981	U
1	1	993	G
1	1	1064	A
1	1	1095	U
1	1	1097	G
1	1	1103	A
1	1	1190	A
1	1	1329	U
1	1	1331	U
1	1	1355	A
1	1	1399	A
1	1	1481	A
1	1	1482	A
1	1	1484	U
1	1	1556	C
1	1	1563	C
1	1	1580	A
1	1	1716	U
1	1	1815	U
1	1	2101	C
1	1	2112	U
1	1	2205	U
1	1	2209	U
1	1	2249	G
1	1	2372	A
1	1	2405	C
1	1	2418	G
1	1	2537	U
1	1	2540	A
1	1	2541	U
1	1	2571	U
1	1	2585	G
1	1	2656	A
1	1	2728	G

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Mol	Chain	Res	Type
1	1	2801	A
1	1	2817	A
1	1	2818	U
1	1	2872	A
1	1	2970	C
1	1	3121	U
1	1	3169	U
1	1	3195	U
1	1	3218	A
1	1	3228	C
1	1	3269	U
1	1	3350	C
1	1	3393	U
2	3	52	G
3	4	80	A
3	4	82	U
3	4	89	A
3	4	125	U
45	2	1	U
45	2	68	A
45	2	77	U
45	2	103	A
45	2	130	C
45	2	136	C
45	2	139	C
45	2	158	U
45	2	218	A
45	2	232	U
45	2	278	U
45	2	280	U
45	2	320	U
45	2	417	A
45	2	503	G
45	2	512	A
45	2	555	A
45	2	558	U
45	2	685	A
45	2	782	U
45	2	829	A
45	2	1150	G
45	2	1157	A
45	2	1196	A

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Mol	Chain	Res	Type
45	2	1244	A
45	2	1344	A
45	2	1369	U
45	2	1370	U
45	2	1481	C
45	2	1568	C
45	2	1573	A
45	2	1615	C
45	2	1761	U
1	5	65	A
1	5	151	A
1	5	252	U
1	5	441	U
1	5	558	U
1	5	618	C
1	5	873	C
1	5	916	G
1	5	979	U
1	5	1081	U
1	5	1093	A
1	5	1096	U
1	5	1284	C
1	5	1307	G
1	5	1329	U
1	5	1348	U
1	5	1352	A
1	5	1355	A
1	5	1368	U
1	5	1481	A
1	5	1560	G
1	5	1573	G
1	5	1589	A
1	5	1715	A
1	5	1814	A
1	5	1815	U
1	5	1816	A
1	5	2101	C
1	5	2112	U
1	5	2144	A
1	5	2204	C
1	5	2205	U
1	5	2209	U

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Mol	Chain	Res	Type
1	5	2249	G
1	5	2255	A
1	5	2281	A
1	5	2372	A
1	5	2404	A
1	5	2513	U
1	5	2662	G
1	5	2772	C
1	5	2801	A
1	5	2818	U
1	5	2971	A
1	5	3154	C
1	5	3218	A
1	5	3228	C
1	5	3269	U
1	5	3289	G
1	5	3303	G
1	5	3317	U
1	5	3340	G
1	5	3357	U
3	8	79	A
3	8	80	A
3	8	81	U
3	8	82	U
3	8	83	C
3	8	84	C
3	8	126	A
45	6	25	C
45	6	76	A
45	6	103	A
45	6	114	C
45	6	139	C
45	6	158	U
45	6	217	A
45	6	233	C
45	6	272	U
45	6	321	C
45	6	417	A
45	6	487	G
45	6	506	A
45	6	512	A
45	6	540	G

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Mol	Chain	Res	Type
45	6	542	A
45	6	555	A
45	6	744	U
45	6	745	U
45	6	755	A
45	6	841	U
45	6	968	U
45	6	1051	G
45	6	1058	U
45	6	1097	U
45	6	1207	C
45	6	1244	A
45	6	1255	G
45	6	1344	A
45	6	1346	A
45	6	1363	U
45	6	1413	U
45	6	1481	C
45	6	1535	U
45	6	1568	C
45	6	1573	A
45	6	1600	A
45	6	1615	C
45	6	1657	U

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 2242 ligands modelled in this entry, 2155 are monoatomic - leaving 87 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond

length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
80	PAR	1	3413	-	44,45,45	0.19	0	63,67,67	0.68	1 (1%)
80	PAR	1	3417	-	44,45,45	0.17	0	63,67,67	0.91	2 (3%)
80	PAR	2	1902	-	44,45,45	0.24	0	63,67,67	1.38	6 (9%)
80	PAR	1	3404	-	44,45,45	0.22	0	63,67,67	0.96	2 (3%)
80	PAR	1	3403	81	44,45,45	0.22	0	63,67,67	0.95	2 (3%)
80	PAR	3	201	-	44,45,45	0.26	0	63,67,67	1.53	5 (7%)
80	PAR	1	3402	-	44,45,45	0.20	0	63,67,67	0.76	2 (3%)
80	PAR	1	3430	-	44,45,45	0.23	0	63,67,67	0.97	3 (4%)
80	PAR	1	3415	-	44,45,45	0.24	0	63,67,67	0.92	3 (4%)
80	PAR	1	3421	-	44,45,45	0.22	0	63,67,67	0.96	2 (3%)
80	PAR	5	3401	-	44,45,45	0.26	0	63,67,67	1.04	2 (3%)
80	PAR	1	3436	-	44,45,45	0.22	0	63,67,67	1.05	3 (4%)
80	PAR	6	1902	-	44,45,45	0.23	0	63,67,67	1.03	3 (4%)
80	PAR	1	3408	-	44,45,45	0.22	0	63,67,67	1.11	5 (7%)
80	PAR	1	3407	-	44,45,45	0.21	0	63,67,67	0.98	3 (4%)
80	PAR	1	3418	-	44,45,45	0.26	0	63,67,67	0.88	3 (4%)
80	PAR	5	3415	-	44,45,45	0.25	0	63,67,67	1.04	2 (3%)
80	PAR	5	3420	-	44,45,45	0.23	0	63,67,67	1.27	6 (9%)
80	PAR	5	3411	-	44,45,45	0.23	0	63,67,67	1.15	6 (9%)
80	PAR	1	3432	-	44,45,45	0.25	0	63,67,67	1.16	2 (3%)
80	PAR	5	3402	-	44,45,45	0.19	0	63,67,67	1.10	2 (3%)
80	PAR	1	3424	-	44,45,45	0.15	0	63,67,67	0.75	2 (3%)
80	PAR	3	203	-	44,45,45	0.21	0	63,67,67	1.05	3 (4%)
80	PAR	o2	201	-	44,45,45	0.28	0	63,67,67	1.21	4 (6%)
80	PAR	1	3428	81	44,45,45	0.22	0	63,67,67	1.01	3 (4%)
80	PAR	1	3416	-	44,45,45	0.25	0	63,67,67	1.15	5 (7%)
80	PAR	8	202	-	44,45,45	0.22	0	63,67,67	0.92	1 (1%)
80	PAR	8	201	-	44,45,45	0.23	0	63,67,67	1.05	5 (7%)
80	PAR	5	3421	-	44,45,45	0.20	0	63,67,67	1.31	2 (3%)
80	PAR	3	202	81	44,45,45	0.20	0	63,67,67	1.11	3 (4%)
80	PAR	5	3416	-	44,45,45	0.21	0	63,67,67	0.95	3 (4%)
80	PAR	6	1905	-	44,45,45	0.19	0	63,67,67	1.11	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
80	PAR	5	3427	-	44,45,45	0.22	0	63,67,67	1.11	3 (4%)
80	PAR	5	3422	-	44,45,45	0.19	0	63,67,67	0.95	4 (6%)
80	PAR	1	3419	-	44,45,45	0.22	0	63,67,67	1.17	5 (7%)
80	PAR	5	3419	-	44,45,45	0.33	0	63,67,67	1.34	9 (14%)
80	PAR	5	3426	-	44,45,45	0.22	0	63,67,67	0.91	1 (1%)
80	PAR	1	3435	-	44,45,45	0.36	0	63,67,67	1.36	4 (6%)
80	PAR	7	202	-	44,45,45	0.16	0	63,67,67	0.91	3 (4%)
80	PAR	1	3425	-	44,45,45	0.26	0	63,67,67	1.21	5 (7%)
80	PAR	1	3420	-	44,45,45	0.19	0	63,67,67	1.02	3 (4%)
80	PAR	2	1901	-	44,45,45	0.19	0	63,67,67	0.75	2 (3%)
80	PAR	5	3428	81	44,45,45	0.39	0	63,67,67	1.25	6 (9%)
80	PAR	1	3406	-	44,45,45	0.20	0	63,67,67	0.92	4 (6%)
80	PAR	6	1904	-	44,45,45	0.21	0	63,67,67	0.90	2 (3%)
80	PAR	6	1901	-	44,45,45	0.24	0	63,67,67	0.96	2 (3%)
80	PAR	1	3412	-	44,45,45	0.21	0	63,67,67	1.21	7 (11%)
80	PAR	6	1903	-	44,45,45	0.17	0	63,67,67	0.91	1 (1%)
80	PAR	1	3411	-	44,45,45	0.32	0	63,67,67	1.74	5 (7%)
80	PAR	1	3426	-	44,45,45	0.25	0	63,67,67	1.04	3 (4%)
80	PAR	5	3414	-	44,45,45	0.19	0	63,67,67	0.85	4 (6%)
80	PAR	2	1904	-	44,45,45	0.20	0	63,67,67	1.48	4 (6%)
80	PAR	1	3427	-	44,45,45	0.21	0	63,67,67	0.87	3 (4%)
80	PAR	5	3408	-	44,45,45	0.20	0	63,67,67	0.96	3 (4%)
80	PAR	6	1906	-	44,45,45	0.19	0	63,67,67	0.78	2 (3%)
80	PAR	5	3417	-	44,45,45	0.16	0	63,67,67	0.82	2 (3%)
80	PAR	1	3405	-	44,45,45	0.24	0	63,67,67	0.93	3 (4%)
80	PAR	1	3414	-	44,45,45	0.20	0	63,67,67	1.09	4 (6%)
80	PAR	1	3429	-	44,45,45	0.24	0	63,67,67	1.31	4 (6%)
80	PAR	5	3412	-	44,45,45	0.20	0	63,67,67	0.93	2 (3%)
80	PAR	5	3406	81	44,45,45	0.27	0	63,67,67	0.93	5 (7%)
80	PAR	5	3424	-	44,45,45	0.18	0	63,67,67	1.04	3 (4%)
80	PAR	1	3422	-	44,45,45	0.21	0	63,67,67	1.09	3 (4%)
80	PAR	5	3423	-	44,45,45	0.22	0	63,67,67	1.00	5 (7%)
80	PAR	2	1903	-	44,45,45	0.21	0	63,67,67	0.86	3 (4%)
80	PAR	4	201	-	44,45,45	0.28	0	63,67,67	1.21	4 (6%)
80	PAR	5	3413	-	44,45,45	0.20	0	63,67,67	1.48	7 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
80	PAR	7	201	-	44,45,45	0.17	0	63,67,67	0.77	2 (3%)
80	PAR	5	3409	-	44,45,45	0.22	0	63,67,67	1.02	4 (6%)
80	PAR	1	3434	-	44,45,45	0.20	0	63,67,67	0.92	5 (7%)
80	PAR	5	3403	-	44,45,45	0.24	0	63,67,67	1.04	3 (4%)
80	PAR	1	3437	1	44,45,45	0.18	0	63,67,67	0.75	2 (3%)
80	PAR	1	3410	-	44,45,45	0.34	0	63,67,67	1.46	8 (12%)
80	PAR	5	3405	-	44,45,45	0.21	0	63,67,67	0.83	2 (3%)
80	PAR	1	3409	-	44,45,45	0.29	0	63,67,67	1.53	5 (7%)
80	PAR	n3	201	-	44,45,45	0.24	0	63,67,67	1.11	4 (6%)
80	PAR	5	3410	-	44,45,45	0.16	0	63,67,67	0.91	2 (3%)
80	PAR	1	3433	-	44,45,45	0.26	0	63,67,67	1.28	7 (11%)
80	PAR	5	3407	-	44,45,45	0.21	0	63,67,67	0.84	3 (4%)
80	PAR	5	3418	-	44,45,45	0.23	0	63,67,67	1.12	3 (4%)
80	PAR	1	3401	-	44,45,45	0.16	0	63,67,67	1.28	3 (4%)
80	PAR	5	3425	-	44,45,45	0.20	0	63,67,67	1.03	4 (6%)
80	PAR	5	3404	-	44,45,45	0.24	0	63,67,67	1.26	4 (6%)
80	PAR	1	3431	-	44,45,45	0.19	0	63,67,67	1.19	3 (4%)
80	PAR	1	3423	-	44,45,45	0.19	0	63,67,67	0.77	1 (1%)
80	PAR	2	1905	-	44,45,45	0.20	0	63,67,67	0.82	4 (6%)
80	PAR	4	202	-	44,45,45	0.25	0	63,67,67	1.09	4 (6%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
80	PAR	1	3413	-	-	5/18/94/94	0/4/4/4
80	PAR	1	3417	-	-	6/18/94/94	0/4/4/4
80	PAR	2	1902	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3404	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3403	81	-	5/18/94/94	0/4/4/4
80	PAR	3	201	-	-	6/18/94/94	0/4/4/4
80	PAR	1	3402	-	-	7/18/94/94	0/4/4/4
80	PAR	1	3430	-	-	7/18/94/94	0/4/4/4
80	PAR	1	3415	-	-	3/18/94/94	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
80	PAR	1	3421	-	-	3/18/94/94	0/4/4/4
80	PAR	5	3401	-	-	6/18/94/94	0/4/4/4
80	PAR	1	3436	-	-	10/18/94/94	0/4/4/4
80	PAR	6	1902	-	-	8/18/94/94	0/4/4/4
80	PAR	1	3408	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3407	-	-	6/18/94/94	0/4/4/4
80	PAR	1	3418	-	-	7/18/94/94	1/4/4/4
80	PAR	5	3415	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3420	-	-	3/18/94/94	1/4/4/4
80	PAR	5	3411	-	-	7/18/94/94	0/4/4/4
80	PAR	1	3432	-	-	3/18/94/94	1/4/4/4
80	PAR	5	3402	-	-	7/18/94/94	0/4/4/4
80	PAR	1	3424	-	-	4/18/94/94	0/4/4/4
80	PAR	3	203	-	-	4/18/94/94	1/4/4/4
80	PAR	o2	201	-	-	9/18/94/94	0/4/4/4
80	PAR	1	3428	81	-	3/18/94/94	0/4/4/4
80	PAR	1	3416	-	-	3/18/94/94	0/4/4/4
80	PAR	8	202	-	-	6/18/94/94	0/4/4/4
80	PAR	8	201	-	-	1/18/94/94	0/4/4/4
80	PAR	5	3421	-	-	5/18/94/94	0/4/4/4
80	PAR	3	202	81	-	8/18/94/94	0/4/4/4
80	PAR	5	3416	-	-	2/18/94/94	0/4/4/4
80	PAR	6	1905	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3427	-	-	3/18/94/94	1/4/4/4
80	PAR	5	3422	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3419	-	-	7/18/94/94	1/4/4/4
80	PAR	5	3419	-	-	7/18/94/94	0/4/4/4
80	PAR	5	3426	-	-	4/18/94/94	1/4/4/4
80	PAR	1	3435	-	-	9/18/94/94	0/4/4/4
80	PAR	7	202	-	-	8/18/94/94	0/4/4/4
80	PAR	1	3425	-	-	10/18/94/94	0/4/4/4
80	PAR	1	3420	-	-	2/18/94/94	0/4/4/4
80	PAR	2	1901	-	-	1/18/94/94	0/4/4/4
80	PAR	5	3428	81	-	8/18/94/94	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
80	PAR	1	3406	-	-	2/18/94/94	0/4/4/4
80	PAR	6	1904	-	-	6/18/94/94	0/4/4/4
80	PAR	6	1901	-	-	2/18/94/94	0/4/4/4
80	PAR	1	3412	-	-	4/18/94/94	0/4/4/4
80	PAR	6	1903	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3411	-	-	8/18/94/94	0/4/4/4
80	PAR	1	3426	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3414	-	-	1/18/94/94	1/4/4/4
80	PAR	2	1904	-	-	5/18/94/94	0/4/4/4
80	PAR	1	3427	-	-	5/18/94/94	0/4/4/4
80	PAR	5	3408	-	-	7/18/94/94	0/4/4/4
80	PAR	6	1906	-	-	5/18/94/94	0/4/4/4
80	PAR	5	3417	-	-	5/18/94/94	0/4/4/4
80	PAR	1	3405	-	-	11/18/94/94	0/4/4/4
80	PAR	1	3414	-	-	3/18/94/94	0/4/4/4
80	PAR	1	3429	-	-	3/18/94/94	0/4/4/4
80	PAR	5	3412	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3406	81	-	5/18/94/94	0/4/4/4
80	PAR	5	3424	-	-	3/18/94/94	0/4/4/4
80	PAR	1	3422	-	-	8/18/94/94	0/4/4/4
80	PAR	5	3423	-	-	5/18/94/94	0/4/4/4
80	PAR	2	1903	-	-	6/18/94/94	0/4/4/4
80	PAR	4	201	-	-	5/18/94/94	1/4/4/4
80	PAR	5	3413	-	-	2/18/94/94	0/4/4/4
80	PAR	7	201	-	-	2/18/94/94	0/4/4/4
80	PAR	5	3409	-	-	9/18/94/94	0/4/4/4
80	PAR	1	3434	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3403	-	-	6/18/94/94	0/4/4/4
80	PAR	1	3437	1	-	5/18/94/94	0/4/4/4
80	PAR	1	3410	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3405	-	-	8/18/94/94	0/4/4/4
80	PAR	1	3409	-	-	8/18/94/94	1/4/4/4
80	PAR	n3	201	-	-	8/18/94/94	0/4/4/4
80	PAR	5	3410	-	-	7/18/94/94	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
80	PAR	1	3433	-	-	6/18/94/94	0/4/4/4
80	PAR	5	3407	-	-	9/18/94/94	0/4/4/4
80	PAR	5	3418	-	-	6/18/94/94	0/4/4/4
80	PAR	1	3401	-	-	5/18/94/94	0/4/4/4
80	PAR	5	3425	-	-	5/18/94/94	0/4/4/4
80	PAR	5	3404	-	-	8/18/94/94	0/4/4/4
80	PAR	1	3431	-	-	4/18/94/94	0/4/4/4
80	PAR	1	3423	-	-	4/18/94/94	0/4/4/4
80	PAR	2	1905	-	-	5/18/94/94	0/4/4/4
80	PAR	4	202	-	-	3/18/94/94	0/4/4/4

There are no bond length outliers.

All (303) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	1	3409	PAR	O11-C11-C21	9.48	123.60	108.08
80	5	3421	PAR	O52-C13-O43	-8.67	102.52	111.37
80	2	1904	PAR	O52-C13-O43	-8.22	102.97	111.37
80	1	3431	PAR	O52-C13-O43	-7.53	103.67	111.37
80	5	3413	PAR	O11-C11-C21	7.29	120.00	108.08
80	1	3411	PAR	O33-C14-C24	7.25	119.95	108.08
80	1	3435	PAR	O52-C13-O43	-7.13	104.09	111.37
80	1	3411	PAR	O52-C13-O43	-6.93	104.29	111.37
80	3	201	PAR	O52-C13-O43	-6.74	104.49	111.37
80	1	3401	PAR	O33-C14-C24	6.71	119.05	108.08
80	1	3411	PAR	C14-C24-N24	6.69	122.25	110.20
80	5	3402	PAR	O52-C13-O43	-6.61	104.61	111.37
80	5	3404	PAR	O11-C11-C21	6.33	118.43	108.08
80	1	3429	PAR	O52-C13-O43	-6.30	104.93	111.37
80	1	3425	PAR	O11-C11-C21	6.24	118.29	108.08
80	5	3425	PAR	O52-C13-O43	-6.09	105.15	111.37
80	o2	201	PAR	O52-C13-O43	-6.02	105.22	111.37
80	4	202	PAR	O52-C13-O43	-5.84	105.41	111.37
80	4	201	PAR	O11-C11-C21	5.82	117.61	108.08
80	5	3410	PAR	O52-C13-O43	-5.80	105.44	111.37
80	3	201	PAR	O11-C11-C21	5.77	117.52	108.08
80	1	3421	PAR	O52-C13-O43	-5.71	105.54	111.37
80	5	3401	PAR	O52-C13-O43	-5.68	105.56	111.37
80	6	1901	PAR	O52-C13-O43	-5.66	105.58	111.37
80	5	3428	PAR	O11-C11-C21	5.64	117.31	108.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	6	1903	PAR	O52-C13-O43	-5.63	105.62	111.37
80	5	3427	PAR	O11-C11-C21	5.62	117.28	108.08
80	1	3422	PAR	O52-C13-O43	-5.55	105.70	111.37
80	1	3432	PAR	O11-C11-C21	5.51	117.10	108.08
80	6	1905	PAR	O52-C13-O43	-5.50	105.75	111.37
80	5	3416	PAR	O52-C13-O43	-5.40	105.85	111.37
80	3	202	PAR	O52-C13-O43	-5.37	105.89	111.37
80	2	1902	PAR	O52-C52-C62	5.34	120.81	107.23
80	5	3420	PAR	O52-C13-O43	-5.34	105.92	111.37
80	5	3403	PAR	O52-C13-O43	-5.32	105.93	111.37
80	5	3415	PAR	O52-C13-O43	-5.32	105.93	111.37
80	5	3418	PAR	O52-C13-O43	-5.30	105.95	111.37
80	1	3420	PAR	O52-C13-O43	-5.28	105.98	111.37
80	6	1902	PAR	O52-C13-O43	-5.25	106.00	111.37
80	1	3436	PAR	O52-C13-O43	-5.12	106.13	111.37
80	8	202	PAR	O52-C13-O43	-5.08	106.17	111.37
80	1	3401	PAR	O52-C13-O43	-5.07	106.19	111.37
80	2	1902	PAR	O33-C33-C23	5.03	127.48	111.32
80	5	3412	PAR	O52-C13-O43	-4.94	106.32	111.37
80	2	1904	PAR	O11-C11-C21	4.93	116.15	108.08
80	1	3432	PAR	O52-C13-O43	-4.88	106.39	111.37
80	5	3413	PAR	O52-C13-O43	-4.81	106.46	111.37
80	n3	201	PAR	O52-C13-O43	-4.80	106.46	111.37
80	3	203	PAR	O33-C14-C24	4.71	115.79	108.08
80	1	3408	PAR	O52-C13-O43	-4.68	106.59	111.37
80	5	3417	PAR	O52-C13-O43	-4.63	106.64	111.37
80	1	3403	PAR	O11-C11-C21	4.63	115.65	108.08
80	1	3414	PAR	O52-C52-C62	4.62	118.98	107.23
80	1	3416	PAR	O52-C52-C62	4.61	118.95	107.23
80	1	3412	PAR	O33-C14-C24	-4.60	100.55	108.08
80	1	3417	PAR	O52-C13-O43	-4.59	106.68	111.37
80	5	3419	PAR	C32-C22-C12	4.57	118.85	111.02
80	1	3433	PAR	O33-C14-C24	4.55	115.53	108.08
80	n3	201	PAR	O11-C11-C21	4.55	115.52	108.08
80	5	3424	PAR	O52-C13-O43	-4.51	106.76	111.37
80	1	3412	PAR	C13-C23-C33	-4.50	96.69	102.10
80	7	202	PAR	O52-C13-O43	-4.48	106.80	111.37
80	1	3433	PAR	C14-C24-N24	4.46	118.25	110.20
80	1	3405	PAR	O33-C14-C24	4.44	115.35	108.08
80	5	3426	PAR	O52-C13-O43	-4.44	106.83	111.37
80	6	1905	PAR	O11-C11-C21	4.41	115.30	108.08
80	5	3409	PAR	O52-C13-O43	-4.40	106.87	111.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	1	3410	PAR	O52-C52-C62	4.40	118.42	107.23
80	5	3418	PAR	O11-C11-C21	4.36	115.21	108.08
80	8	201	PAR	O52-C13-O43	-4.34	106.94	111.37
80	5	3411	PAR	O11-C42-C32	-4.33	98.85	109.18
80	1	3419	PAR	O11-C42-C32	-4.31	98.89	109.18
80	1	3426	PAR	O11-C11-C21	4.31	115.12	108.08
80	5	3420	PAR	O33-C14-C24	4.29	115.10	108.08
80	1	3430	PAR	O52-C13-O43	-4.29	106.98	111.37
80	5	3427	PAR	O52-C13-O43	-4.29	106.98	111.37
80	1	3404	PAR	O52-C13-O43	-4.26	107.02	111.37
80	1	3410	PAR	O11-C11-C21	4.25	115.03	108.08
80	5	3419	PAR	O52-C52-C62	4.19	117.87	107.23
80	1	3415	PAR	O11-C11-C21	4.11	114.80	108.08
80	1	3429	PAR	O33-C14-C24	4.10	114.78	108.08
80	6	1902	PAR	O11-C11-C21	4.09	114.77	108.08
80	5	3428	PAR	C13-C23-C33	-4.07	97.21	102.10
80	1	3424	PAR	O52-C13-O43	-4.03	107.25	111.37
80	1	3422	PAR	O33-C14-C24	-4.03	101.47	108.08
80	5	3421	PAR	O11-C11-C21	4.01	114.65	108.08
80	5	3413	PAR	O33-C14-C24	-4.00	101.53	108.08
80	1	3433	PAR	O52-C13-O43	-3.99	107.29	111.37
80	5	3409	PAR	O11-C11-C21	3.98	114.59	108.08
80	1	3407	PAR	O52-C13-O43	-3.97	107.32	111.37
80	5	3422	PAR	O52-C13-O43	-3.92	107.37	111.37
80	1	3406	PAR	O52-C13-O43	-3.91	107.37	111.37
80	1	3428	PAR	O33-C14-C24	-3.89	101.70	108.08
80	2	1904	PAR	O33-C14-C24	-3.89	101.72	108.08
80	5	3423	PAR	C13-C23-C33	-3.87	97.45	102.10
80	3	202	PAR	O52-C52-C62	3.80	116.90	107.23
80	1	3419	PAR	O52-C13-O43	-3.77	107.52	111.37
80	1	3404	PAR	O52-C52-C62	3.76	116.79	107.23
80	1	3416	PAR	C13-C23-C33	-3.76	97.58	102.10
80	1	3410	PAR	O52-C13-O43	-3.72	107.57	111.37
80	1	3429	PAR	C13-C23-C33	-3.68	97.67	102.10
80	1	3425	PAR	C14-C24-N24	3.68	116.83	110.20
80	5	3424	PAR	O11-C11-C21	3.68	114.09	108.08
80	5	3408	PAR	O11-C11-C21	3.67	114.08	108.08
80	1	3410	PAR	C32-C22-C12	3.64	117.25	111.02
80	1	3423	PAR	O52-C13-O43	-3.63	107.66	111.37
80	1	3410	PAR	O11-C42-C32	3.62	117.81	109.18
80	1	3413	PAR	O52-C13-O43	-3.58	107.71	111.37
80	5	3411	PAR	O52-C13-O43	-3.57	107.72	111.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	2	1903	PAR	O33-C14-C24	-3.57	102.23	108.08
80	1	3431	PAR	O11-C11-C21	3.55	113.89	108.08
80	1	3434	PAR	O52-C13-O43	-3.54	107.75	111.37
80	1	3427	PAR	O11-C11-C21	3.53	113.85	108.08
80	7	201	PAR	O52-C13-O43	-3.51	107.78	111.37
80	1	3436	PAR	O11-C11-C21	3.50	113.80	108.08
80	1	3427	PAR	O52-C13-O43	-3.50	107.80	111.37
80	1	3420	PAR	O33-C14-C24	-3.44	102.44	108.08
80	2	1902	PAR	O33-C14-C24	-3.39	102.53	108.08
80	1	3422	PAR	O11-C11-C21	3.37	113.59	108.08
80	1	3428	PAR	O11-C11-C21	3.37	113.59	108.08
80	5	3416	PAR	O11-C11-C21	3.36	113.58	108.08
80	5	3408	PAR	O33-C14-C24	3.34	113.55	108.08
80	5	3413	PAR	O11-C42-C32	3.34	117.15	109.18
80	8	201	PAR	C32-C22-C12	-3.33	105.31	111.02
80	1	3426	PAR	O33-C33-C23	-3.31	100.66	111.32
80	5	3405	PAR	O11-C11-C21	3.31	113.49	108.08
80	5	3420	PAR	O11-C11-C21	3.31	113.49	108.08
80	7	202	PAR	O11-C11-C21	3.29	113.47	108.08
80	3	201	PAR	O33-C33-C23	3.28	121.87	111.32
80	5	3419	PAR	O33-C14-C24	-3.27	102.72	108.08
80	1	3419	PAR	O33-C14-C24	-3.26	102.75	108.08
80	5	3404	PAR	O52-C52-C62	3.24	115.46	107.23
80	5	3422	PAR	O33-C33-C23	3.23	121.70	111.32
80	5	3415	PAR	O11-C42-C52	3.23	115.61	107.42
80	5	3411	PAR	O33-C33-C23	3.22	121.66	111.32
80	1	3406	PAR	O33-C14-C24	-3.19	102.85	108.08
80	3	201	PAR	O33-C14-C24	-3.17	102.88	108.08
80	8	201	PAR	O11-C42-C32	-3.15	101.65	109.18
80	5	3407	PAR	O52-C13-O43	-3.15	108.15	111.37
80	5	3419	PAR	O11-C11-C21	3.13	113.20	108.08
80	1	3426	PAR	C13-C23-C33	-3.11	98.36	102.10
80	4	202	PAR	O33-C14-C24	-3.09	103.02	108.08
80	5	3414	PAR	O52-C13-O43	-3.08	108.22	111.37
80	2	1902	PAR	O23-C23-C33	3.06	119.76	111.19
80	5	3408	PAR	O52-C13-O43	-3.06	108.25	111.37
80	1	3433	PAR	O11-C42-C32	-3.05	101.90	109.18
80	3	203	PAR	O11-C11-C21	3.03	113.04	108.08
80	5	3428	PAR	C11-C21-N21	3.02	115.64	110.20
80	5	3428	PAR	O33-C33-C23	-3.01	101.63	111.32
80	7	201	PAR	O11-C11-C21	2.99	112.97	108.08
80	2	1901	PAR	O11-C11-C21	2.99	112.97	108.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	o2	201	PAR	C32-C22-C12	-2.99	105.90	111.02
80	1	3410	PAR	C62-C52-C42	-2.93	105.12	111.72
80	5	3406	PAR	C13-C23-C33	-2.91	98.60	102.10
80	1	3425	PAR	C11-C21-N21	2.91	115.44	110.20
80	1	3402	PAR	O11-C42-C32	-2.90	102.26	109.18
80	1	3408	PAR	C11-C21-N21	-2.87	105.03	110.20
80	2	1903	PAR	O11-C11-C21	2.87	112.77	108.08
80	5	3417	PAR	O11-C11-C21	2.84	112.72	108.08
80	n3	201	PAR	O11-C42-C32	2.83	115.94	109.18
80	6	1904	PAR	O11-C42-C32	-2.82	102.44	109.18
80	5	3414	PAR	C32-C22-C12	2.82	115.85	111.02
80	6	1906	PAR	O11-C11-C21	2.81	112.67	108.08
80	1	3429	PAR	C14-C24-N24	2.79	115.23	110.20
80	1	3409	PAR	O33-C14-C24	-2.79	103.51	108.08
80	1	3437	PAR	O52-C13-O43	-2.79	108.52	111.37
80	5	3406	PAR	C14-O54-C54	2.76	119.11	113.72
80	1	3407	PAR	O11-C11-C21	2.75	112.58	108.08
80	1	3417	PAR	O11-C11-C21	2.75	112.58	108.08
80	1	3434	PAR	O52-C52-C62	2.73	114.16	107.23
80	1	3434	PAR	C13-C23-C33	2.71	105.36	102.10
80	5	3406	PAR	O52-C13-O43	-2.71	108.60	111.37
80	1	3411	PAR	O11-C42-C32	-2.70	102.75	109.18
80	2	1905	PAR	O11-C42-C32	-2.69	102.75	109.18
80	5	3420	PAR	C14-C24-N24	2.69	115.05	110.20
80	2	1905	PAR	O11-C11-C21	2.68	112.46	108.08
80	2	1905	PAR	O52-C13-O43	-2.68	108.63	111.37
80	1	3409	PAR	O11-C11-O51	2.67	117.72	110.69
80	5	3409	PAR	O33-C14-C24	-2.67	103.71	108.08
80	1	3427	PAR	O33-C14-C24	2.66	112.43	108.08
80	3	203	PAR	C32-C22-C12	2.65	115.57	111.02
80	5	3405	PAR	C32-C22-C12	-2.65	106.48	111.02
80	5	3409	PAR	C11-C21-N21	2.64	114.97	110.20
80	5	3422	PAR	O11-C11-C21	2.64	112.39	108.08
80	1	3412	PAR	O33-C33-C23	-2.63	102.84	111.32
80	5	3420	PAR	O33-C33-C23	2.63	119.78	111.32
80	1	3436	PAR	C13-C23-C33	-2.63	98.94	102.10
80	1	3430	PAR	O11-C11-C21	2.59	112.32	108.08
80	1	3416	PAR	O33-C33-C23	-2.59	102.98	111.32
80	1	3406	PAR	O11-C11-C21	2.59	112.32	108.08
80	4	201	PAR	O11-C42-C32	2.58	115.34	109.18
80	1	3410	PAR	O33-C14-C24	2.58	112.29	108.08
80	1	3414	PAR	O52-C13-O43	-2.57	108.75	111.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	5	3425	PAR	O11-C11-C21	2.56	112.27	108.08
80	1	3437	PAR	O11-C11-C21	2.55	112.26	108.08
80	4	201	PAR	O33-C14-C24	2.55	112.25	108.08
80	1	3416	PAR	O52-C13-O43	-2.53	108.78	111.37
80	5	3404	PAR	O11-C42-C32	2.53	115.22	109.18
80	6	1902	PAR	C13-C23-C33	2.51	105.12	102.10
80	5	3414	PAR	O33-C14-C24	-2.51	103.97	108.08
80	5	3422	PAR	O23-C23-C33	2.51	118.20	111.19
80	5	3411	PAR	C14-C24-N24	2.48	114.68	110.20
80	1	3405	PAR	O52-C52-C62	2.47	113.52	107.23
80	5	3407	PAR	C13-C23-C33	-2.47	99.13	102.10
80	1	3421	PAR	O33-C14-C24	-2.46	104.04	108.08
80	2	1902	PAR	O11-C11-C21	2.46	112.11	108.08
80	3	202	PAR	C13-C23-C33	2.46	105.06	102.10
80	5	3419	PAR	C14-C24-N24	2.45	114.63	110.20
80	1	3434	PAR	O33-C33-C23	2.45	119.19	111.32
80	2	1901	PAR	O52-C13-O43	-2.45	108.87	111.37
80	1	3416	PAR	O43-C13-C23	-2.44	101.87	104.98
80	5	3401	PAR	O33-C14-C24	-2.42	104.11	108.08
80	5	3425	PAR	O33-C14-C24	-2.42	104.12	108.08
80	6	1905	PAR	O33-C14-C24	2.41	112.02	108.08
80	5	3423	PAR	O52-C13-O43	-2.41	108.91	111.37
80	5	3419	PAR	C62-C52-C42	-2.40	106.31	111.72
80	5	3412	PAR	O11-C11-C21	2.40	112.00	108.08
80	1	3412	PAR	O52-C13-O43	-2.39	108.93	111.37
80	5	3423	PAR	O11-C11-C21	2.37	111.96	108.08
80	5	3413	PAR	C11-C21-N21	2.37	114.47	110.20
80	1	3408	PAR	O11-C11-C21	2.36	111.94	108.08
80	o2	201	PAR	O33-C33-C23	2.35	118.88	111.32
80	5	3407	PAR	O33-C14-C24	2.34	111.91	108.08
80	5	3403	PAR	O11-C11-C21	-2.34	104.24	108.08
80	1	3425	PAR	O52-C13-O43	-2.33	108.98	111.37
80	1	3420	PAR	O11-C42-C32	-2.33	103.61	109.18
80	4	201	PAR	C13-C23-C33	2.33	104.90	102.10
80	1	3418	PAR	C13-C23-C33	-2.33	99.30	102.10
80	5	3414	PAR	O11-C11-C21	2.31	111.85	108.08
80	1	3424	PAR	O11-C11-C21	2.27	111.80	108.08
80	1	3419	PAR	O11-C11-C21	2.27	111.79	108.08
80	o2	201	PAR	O23-C23-C33	2.26	117.51	111.19
80	5	3419	PAR	C22-C12-C62	2.26	113.46	110.08
80	1	3430	PAR	O33-C14-C24	2.25	111.76	108.08
80	2	1905	PAR	O33-C14-C24	-2.25	104.39	108.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	8	201	PAR	O33-C14-C24	-2.24	104.41	108.08
80	1	3415	PAR	O33-C14-C24	2.24	111.73	108.08
80	7	202	PAR	O11-C42-C32	-2.23	103.87	109.18
80	6	1904	PAR	O52-C13-O43	-2.22	109.10	111.37
80	8	201	PAR	C52-C42-C32	2.22	115.42	111.31
80	5	3423	PAR	C32-C22-C12	-2.22	107.22	111.02
80	5	3410	PAR	O11-C11-C21	2.21	111.70	108.08
80	1	3419	PAR	O52-C52-C42	2.21	113.03	107.42
80	1	3415	PAR	C13-C23-C33	-2.21	99.44	102.10
80	1	3414	PAR	O11-C42-C32	-2.20	103.92	109.18
80	5	3425	PAR	C13-C23-C33	2.20	104.74	102.10
80	1	3412	PAR	C23-C33-C43	-2.20	99.40	103.24
80	1	3414	PAR	C13-C23-C33	-2.19	99.46	102.10
80	1	3402	PAR	O52-C13-O43	-2.19	109.13	111.37
80	5	3411	PAR	O52-C52-C62	2.18	112.78	107.23
80	5	3404	PAR	C62-C52-C42	-2.18	106.81	111.72
80	1	3431	PAR	O52-C52-C62	2.17	112.76	107.23
80	2	1904	PAR	C14-O54-C54	2.17	117.96	113.72
80	1	3401	PAR	C32-C22-C12	-2.16	107.32	111.02
80	1	3412	PAR	O11-C42-C32	-2.15	104.04	109.18
80	1	3425	PAR	O33-C33-C23	-2.14	104.43	111.32
80	5	3403	PAR	O52-C52-C62	2.14	112.67	107.23
80	1	3433	PAR	C52-C42-C32	2.14	115.28	111.31
80	1	3435	PAR	C41-C31-C21	-2.14	107.44	110.99
80	5	3413	PAR	C32-C22-C12	2.14	114.69	111.02
80	1	3408	PAR	O51-C11-C21	2.14	114.80	110.08
80	4	202	PAR	O33-C33-C23	-2.14	104.45	111.32
80	6	1901	PAR	O33-C14-C24	-2.13	104.58	108.08
80	1	3412	PAR	C14-O33-C33	2.13	123.02	117.98
80	1	3418	PAR	C23-C33-C43	-2.12	99.52	103.24
80	5	3413	PAR	C62-C52-C42	-2.12	106.94	111.72
80	5	3419	PAR	O43-C43-C33	-2.12	100.44	104.92
80	5	3428	PAR	O52-C13-O43	-2.12	109.20	111.37
80	3	201	PAR	O23-C23-C33	2.11	117.10	111.19
80	6	1906	PAR	C11-C21-N21	2.11	114.01	110.20
80	1	3409	PAR	C62-C52-C42	-2.11	106.98	111.72
80	1	3434	PAR	O33-C14-C24	-2.11	104.63	108.08
80	1	3411	PAR	O54-C54-C64	2.10	110.11	106.07
80	1	3406	PAR	O11-C42-C32	-2.09	104.18	109.18
80	5	3423	PAR	O52-C52-C42	-2.09	102.11	107.42
80	1	3435	PAR	O23-C23-C33	-2.08	105.36	111.19
80	1	3407	PAR	C14-O54-C54	2.08	117.78	113.72

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
80	5	3402	PAR	O11-C42-C32	-2.08	104.22	109.18
80	1	3410	PAR	O62-C62-C52	2.07	115.25	109.94
80	1	3408	PAR	O33-C33-C23	2.07	117.97	111.32
80	4	202	PAR	O11-C42-C32	-2.06	104.26	109.18
80	5	3420	PAR	C13-C23-C33	-2.06	99.63	102.10
80	n3	201	PAR	O11-C42-C52	-2.06	102.21	107.42
80	5	3416	PAR	C11-C21-N21	2.05	113.89	110.20
80	1	3428	PAR	O52-C13-O43	-2.05	109.28	111.37
80	5	3406	PAR	O54-C54-C64	2.05	110.00	106.07
80	2	1903	PAR	C13-O43-C43	-2.04	97.98	105.76
80	1	3433	PAR	O11-C11-C21	2.04	111.41	108.08
80	5	3427	PAR	C13-C23-C33	2.04	104.55	102.10
80	1	3405	PAR	O52-C13-O43	-2.03	109.29	111.37
80	6	1905	PAR	C14-C24-N24	2.03	113.87	110.20
80	5	3428	PAR	C14-O33-C33	-2.03	113.16	117.98
80	2	1902	PAR	O52-C13-O43	-2.03	109.29	111.37
80	1	3435	PAR	O33-C14-C24	-2.03	104.76	108.08
80	5	3406	PAR	O52-C52-C62	2.03	112.38	107.23
80	1	3433	PAR	O54-C54-C64	2.03	109.96	106.07
80	5	3411	PAR	C32-C22-C12	-2.02	107.55	111.02
80	5	3418	PAR	C13-C23-C33	-2.02	99.67	102.10
80	5	3419	PAR	C52-C42-C32	-2.02	107.57	111.31
80	1	3418	PAR	O52-C52-C62	2.01	112.33	107.23
80	1	3409	PAR	O62-C62-C52	2.01	115.08	109.94
80	1	3403	PAR	O11-C42-C52	2.00	112.51	107.42
80	5	3424	PAR	C13-O43-C43	-2.00	98.13	105.76

There are no chirality outliers.

All (468) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
80	1	3401	PAR	C23-C13-O52-C52
80	1	3401	PAR	C24-C14-O33-C33
80	1	3402	PAR	C23-C13-O52-C52
80	1	3403	PAR	C21-C11-O11-C42
80	1	3403	PAR	C23-C13-O52-C52
80	1	3403	PAR	O43-C13-O52-C52
80	1	3405	PAR	C21-C11-O11-C42
80	1	3405	PAR	O51-C11-O11-C42
80	1	3405	PAR	C23-C13-O52-C52
80	1	3405	PAR	O43-C13-O52-C52
80	1	3405	PAR	C43-C33-O33-C14

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Mol	Chain	Res	Type	Atoms
80	1	3405	PAR	C24-C14-O33-C33
80	1	3406	PAR	C23-C13-O52-C52
80	1	3407	PAR	C23-C13-O52-C52
80	1	3407	PAR	O43-C13-O52-C52
80	1	3407	PAR	C23-C33-O33-C14
80	1	3408	PAR	C23-C13-O52-C52
80	1	3409	PAR	C21-C11-O11-C42
80	1	3409	PAR	C23-C13-O52-C52
80	1	3409	PAR	O43-C13-O52-C52
80	1	3410	PAR	C23-C13-O52-C52
80	1	3410	PAR	O43-C13-O52-C52
80	1	3410	PAR	C24-C14-O33-C33
80	1	3410	PAR	O54-C54-C64-N64
80	1	3411	PAR	C23-C13-O52-C52
80	1	3411	PAR	O43-C13-O52-C52
80	1	3411	PAR	C43-C33-O33-C14
80	1	3411	PAR	C24-C14-O33-C33
80	1	3411	PAR	O54-C54-C64-N64
80	1	3413	PAR	C24-C14-O33-C33
80	1	3414	PAR	C24-C14-O33-C33
80	1	3415	PAR	C24-C14-O33-C33
80	1	3416	PAR	O54-C14-O33-C33
80	1	3417	PAR	C24-C14-O33-C33
80	1	3418	PAR	C23-C13-O52-C52
80	1	3418	PAR	C23-C33-O33-C14
80	1	3421	PAR	C23-C13-O52-C52
80	1	3421	PAR	O43-C13-O52-C52
80	1	3422	PAR	C21-C11-O11-C42
80	1	3422	PAR	C23-C13-O52-C52
80	1	3422	PAR	C44-C54-C64-N64
80	1	3422	PAR	O54-C54-C64-N64
80	1	3424	PAR	C43-C33-O33-C14
80	1	3425	PAR	C23-C13-O52-C52
80	1	3425	PAR	O43-C13-O52-C52
80	1	3425	PAR	C43-C33-O33-C14
80	1	3425	PAR	C24-C14-O33-C33
80	1	3426	PAR	C23-C13-O52-C52
80	1	3426	PAR	O43-C13-O52-C52
80	1	3426	PAR	C24-C14-O33-C33
80	1	3427	PAR	C23-C13-O52-C52
80	1	3427	PAR	C44-C54-C64-N64
80	1	3427	PAR	O54-C54-C64-N64

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Mol	Chain	Res	Type	Atoms
80	1	3429	PAR	C23-C13-O52-C52
80	1	3429	PAR	O43-C13-O52-C52
80	1	3430	PAR	C23-C13-O52-C52
80	1	3430	PAR	O43-C13-O52-C52
80	1	3430	PAR	C24-C14-O33-C33
80	1	3431	PAR	C43-C33-O33-C14
80	1	3432	PAR	C44-C54-C64-N64
80	1	3432	PAR	O54-C54-C64-N64
80	1	3433	PAR	C23-C13-O52-C52
80	1	3433	PAR	C24-C14-O33-C33
80	1	3434	PAR	C62-C52-O52-C13
80	1	3435	PAR	C21-C11-O11-C42
80	1	3435	PAR	O54-C54-C64-N64
80	1	3436	PAR	C23-C13-O52-C52
80	1	3436	PAR	O43-C13-O52-C52
80	1	3437	PAR	C23-C13-O52-C52
80	1	3437	PAR	O43-C13-O52-C52
80	1	3437	PAR	C43-C33-O33-C14
80	1	3437	PAR	C44-C54-C64-N64
80	1	3437	PAR	O54-C54-C64-N64
80	3	201	PAR	C23-C13-O52-C52
80	3	201	PAR	C23-C33-O33-C14
80	3	202	PAR	C23-C13-O52-C52
80	3	202	PAR	C44-C54-C64-N64
80	3	202	PAR	O54-C54-C64-N64
80	3	203	PAR	C24-C14-O33-C33
80	4	201	PAR	C23-C13-O52-C52
80	4	201	PAR	C24-C14-O33-C33
80	2	1902	PAR	C23-C33-O33-C14
80	2	1903	PAR	C23-C13-O52-C52
80	2	1903	PAR	O43-C13-O52-C52
80	5	3401	PAR	C23-C13-O52-C52
80	5	3401	PAR	O43-C13-O52-C52
80	5	3403	PAR	C23-C13-O52-C52
80	5	3403	PAR	O43-C13-O52-C52
80	5	3403	PAR	O54-C54-C64-N64
80	5	3404	PAR	C21-C11-O11-C42
80	5	3404	PAR	C24-C14-O33-C33
80	5	3405	PAR	C23-C13-O52-C52
80	5	3405	PAR	O43-C13-O52-C52
80	5	3405	PAR	C43-C33-O33-C14
80	5	3405	PAR	C24-C14-O33-C33

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Mol	Chain	Res	Type	Atoms
80	5	3407	PAR	C23-C13-O52-C52
80	5	3407	PAR	O43-C13-O52-C52
80	5	3407	PAR	C24-C14-O33-C33
80	5	3407	PAR	O54-C54-C64-N64
80	5	3408	PAR	C23-C13-O52-C52
80	5	3408	PAR	O43-C13-O52-C52
80	5	3408	PAR	C24-C14-O33-C33
80	5	3409	PAR	C23-C13-O52-C52
80	5	3409	PAR	C44-C54-C64-N64
80	5	3409	PAR	O54-C54-C64-N64
80	5	3410	PAR	C23-C13-O52-C52
80	5	3410	PAR	O43-C13-O52-C52
80	5	3411	PAR	C62-C52-O52-C13
80	5	3411	PAR	C43-C33-O33-C14
80	5	3412	PAR	C23-C13-O52-C52
80	5	3412	PAR	O43-C13-O52-C52
80	5	3413	PAR	C23-C13-O52-C52
80	5	3417	PAR	C23-C13-O52-C52
80	5	3417	PAR	O43-C13-O52-C52
80	5	3418	PAR	C23-C13-O52-C52
80	5	3418	PAR	C24-C14-O33-C33
80	5	3419	PAR	C23-C13-O52-C52
80	5	3420	PAR	C23-C33-O33-C14
80	5	3420	PAR	C24-C14-O33-C33
80	5	3421	PAR	C24-C14-O33-C33
80	5	3422	PAR	C62-C52-O52-C13
80	5	3422	PAR	C23-C33-O33-C14
80	5	3423	PAR	C21-C11-O11-C42
80	5	3423	PAR	C23-C13-O52-C52
80	5	3423	PAR	O43-C13-O52-C52
80	5	3424	PAR	C24-C14-O33-C33
80	5	3425	PAR	C23-C13-O52-C52
80	5	3427	PAR	C23-C13-O52-C52
80	5	3427	PAR	O43-C13-O52-C52
80	5	3428	PAR	C23-C13-O52-C52
80	5	3428	PAR	O43-C13-O52-C52
80	7	202	PAR	C23-C13-O52-C52
80	7	202	PAR	O43-C13-O52-C52
80	7	202	PAR	C24-C14-O33-C33
80	8	202	PAR	C23-C13-O52-C52
80	8	202	PAR	O43-C13-O52-C52
80	n3	201	PAR	C21-C11-O11-C42

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Mol	Chain	Res	Type	Atoms
80	n3	201	PAR	C32-C42-O11-C11
80	n3	201	PAR	C23-C13-O52-C52
80	n3	201	PAR	O43-C13-O52-C52
80	o2	201	PAR	C23-C33-O33-C14
80	6	1901	PAR	C23-C13-O52-C52
80	6	1902	PAR	C21-C11-O11-C42
80	6	1902	PAR	C43-C33-O33-C14
80	6	1902	PAR	C24-C14-O33-C33
80	6	1903	PAR	C23-C13-O52-C52
80	6	1904	PAR	C23-C13-O52-C52
80	6	1904	PAR	C24-C14-O33-C33
80	6	1904	PAR	O54-C54-C64-N64
80	6	1905	PAR	C23-C13-O52-C52
80	6	1905	PAR	O43-C13-O52-C52
80	6	1905	PAR	C24-C14-O33-C33
80	6	1906	PAR	C21-C11-O11-C42
80	1	3414	PAR	C62-C52-O52-C13
80	1	3416	PAR	C62-C52-O52-C13
80	3	201	PAR	C62-C52-O52-C13
80	5	3401	PAR	C62-C52-O52-C13
80	5	3415	PAR	C52-C42-O11-C11
80	1	3415	PAR	O54-C14-O33-C33
80	1	3433	PAR	O54-C14-O33-C33
80	5	3403	PAR	O54-C14-O33-C33
80	5	3405	PAR	O54-C14-O33-C33
80	5	3424	PAR	O54-C14-O33-C33
80	6	1904	PAR	O54-C14-O33-C33
80	3	202	PAR	C62-C52-O52-C13
80	2	1902	PAR	C62-C52-O52-C13
80	1	3412	PAR	O51-C11-O11-C42
80	1	3413	PAR	O54-C14-O33-C33
80	5	3401	PAR	O54-C14-O33-C33
80	5	3409	PAR	O54-C14-O33-C33
80	5	3420	PAR	O51-C11-O11-C42
80	1	3431	PAR	C62-C52-O52-C13
80	3	203	PAR	C42-C52-O52-C13
80	1	3403	PAR	O51-C11-O11-C42
80	1	3410	PAR	O54-C14-O33-C33
80	1	3426	PAR	O54-C14-O33-C33
80	1	3435	PAR	O54-C14-O33-C33
80	2	1904	PAR	O54-C14-O33-C33
80	2	1905	PAR	O54-C14-O33-C33

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Mol	Chain	Res	Type	Atoms
80	5	3403	PAR	O51-C11-O11-C42
80	5	3406	PAR	O51-C11-O11-C42
80	5	3415	PAR	O54-C14-O33-C33
80	7	202	PAR	O54-C14-O33-C33
80	8	202	PAR	O54-C14-O33-C33
80	n3	201	PAR	O54-C14-O33-C33
80	1	3414	PAR	O54-C14-O33-C33
80	2	1901	PAR	O51-C11-O11-C42
80	5	3426	PAR	O51-C11-O11-C42
80	1	3411	PAR	O54-C14-O33-C33
80	1	3412	PAR	O54-C14-O33-C33
80	5	3404	PAR	O54-C14-O33-C33
80	6	1902	PAR	O54-C14-O33-C33
80	6	1905	PAR	O54-C14-O33-C33
80	1	3404	PAR	C62-C52-O52-C13
80	1	3425	PAR	C52-C42-O11-C11
80	5	3415	PAR	C42-C52-O52-C13
80	6	1906	PAR	C52-C42-O11-C11
80	1	3402	PAR	O54-C14-O33-C33
80	5	3401	PAR	O43-C43-C53-O53
80	5	3427	PAR	O51-C11-O11-C42
80	n3	201	PAR	O51-C11-O11-C42
80	6	1902	PAR	C62-C52-O52-C13
80	5	3402	PAR	C62-C52-O52-C13
80	1	3405	PAR	O43-C43-C53-O53
80	1	3419	PAR	C52-C42-O11-C11
80	3	202	PAR	O51-C51-C61-O61
80	1	3419	PAR	C42-C52-O52-C13
80	1	3417	PAR	O54-C14-O33-C33
80	5	3401	PAR	C33-C43-C53-O53
80	1	3422	PAR	O51-C51-C61-O61
80	1	3419	PAR	O54-C14-O33-C33
80	5	3423	PAR	C42-C52-O52-C13
80	1	3436	PAR	O51-C51-C61-O61
80	1	3419	PAR	O43-C43-C53-O53
80	5	3417	PAR	O54-C14-O33-C33
80	1	3425	PAR	O43-C43-C53-O53
80	1	3435	PAR	C41-C51-C61-O61
80	1	3430	PAR	O51-C51-C61-O61
80	1	3405	PAR	C33-C43-C53-O53
80	1	3402	PAR	O51-C51-C61-O61
80	5	3404	PAR	O51-C11-O11-C42

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Mol	Chain	Res	Type	Atoms
80	1	3425	PAR	O54-C14-O33-C33
80	1	3419	PAR	C33-C43-C53-O53
80	5	3423	PAR	C62-C52-O52-C13
80	3	202	PAR	C41-C51-C61-O61
80	1	3430	PAR	O51-C11-O11-C42
80	1	3402	PAR	C41-C51-C61-O61
80	5	3409	PAR	C33-C43-C53-O53
80	5	3410	PAR	C41-C51-C61-O61
80	1	3401	PAR	C42-C52-O52-C13
80	1	3420	PAR	O54-C14-O33-C33
80	5	3405	PAR	O51-C11-O11-C42
80	5	3408	PAR	O54-C14-O33-C33
80	5	3411	PAR	C52-C42-O11-C11
80	5	3422	PAR	O54-C14-O33-C33
80	5	3409	PAR	O43-C43-C53-O53
80	1	3425	PAR	O51-C51-C61-O61
80	1	3401	PAR	C62-C52-O52-C13
80	1	3435	PAR	O51-C51-C61-O61
80	5	3419	PAR	O54-C14-O33-C33
80	6	1903	PAR	C33-C43-C53-O53
80	o2	201	PAR	C52-C42-O11-C11
80	5	3408	PAR	O51-C11-O11-C42
80	5	3428	PAR	O43-C43-C53-O53
80	1	3422	PAR	C41-C51-C61-O61
80	o2	201	PAR	O54-C14-O33-C33
80	1	3417	PAR	O51-C11-O11-C42
80	7	201	PAR	O51-C11-O11-C42
80	1	3405	PAR	C62-C52-O52-C13
80	5	3412	PAR	O51-C11-O11-C42
80	1	3401	PAR	O43-C13-O52-C52
80	1	3402	PAR	O43-C13-O52-C52
80	1	3406	PAR	O43-C13-O52-C52
80	1	3408	PAR	O43-C13-O52-C52
80	1	3418	PAR	O43-C13-O52-C52
80	1	3422	PAR	O43-C13-O52-C52
80	1	3424	PAR	O43-C13-O52-C52
80	1	3427	PAR	O43-C13-O52-C52
80	1	3433	PAR	O43-C13-O52-C52
80	1	3435	PAR	O43-C13-O52-C52
80	3	201	PAR	O43-C13-O52-C52
80	3	202	PAR	O43-C13-O52-C52
80	4	202	PAR	O43-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
80	5	3409	PAR	O43-C13-O52-C52
80	5	3413	PAR	O43-C13-O52-C52
80	5	3418	PAR	O43-C13-O52-C52
80	5	3425	PAR	O43-C13-O52-C52
80	o2	201	PAR	O43-C13-O52-C52
80	6	1901	PAR	O43-C13-O52-C52
80	6	1903	PAR	O43-C13-O52-C52
80	1	3436	PAR	O51-C11-O11-C42
80	7	202	PAR	O51-C51-C61-O61
80	6	1906	PAR	C42-C52-O52-C13
80	5	3406	PAR	O51-C51-C61-O61
80	5	3411	PAR	O51-C51-C61-O61
80	5	3410	PAR	O51-C51-C61-O61
80	8	201	PAR	O51-C51-C61-O61
80	o2	201	PAR	C62-C52-O52-C13
80	1	3419	PAR	C62-C52-O52-C13
80	6	1906	PAR	C62-C52-O52-C13
80	1	3409	PAR	O51-C51-C61-O61
80	1	3434	PAR	O51-C51-C61-O61
80	1	3418	PAR	C42-C52-O52-C13
80	1	3405	PAR	C42-C52-O52-C13
80	1	3404	PAR	O54-C14-O33-C33
80	1	3425	PAR	C21-C11-O11-C42
80	3	201	PAR	C44-C54-C64-N64
80	2	1905	PAR	C44-C54-C64-N64
80	1	3418	PAR	C62-C52-O52-C13
80	1	3411	PAR	C42-C52-O52-C13
80	1	3424	PAR	O51-C11-O11-C42
80	n3	201	PAR	C52-C42-O11-C11
80	7	202	PAR	O51-C11-O11-C42
80	6	1903	PAR	O43-C43-C53-O53
80	o2	201	PAR	C42-C52-O52-C13
80	5	3402	PAR	C42-C52-O52-C13
80	1	3430	PAR	C43-C33-O33-C14
80	1	3434	PAR	C23-C33-O33-C14
80	1	3436	PAR	C41-C51-C61-O61
80	1	3423	PAR	C52-C42-O11-C11
80	5	3425	PAR	C41-C51-C61-O61
80	1	3409	PAR	C42-C52-O52-C13
80	1	3425	PAR	C33-C43-C53-O53
80	1	3411	PAR	C62-C52-O52-C13
80	1	3417	PAR	O43-C13-O52-C52

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Mol	Chain	Res	Type	Atoms
80	1	3423	PAR	O43-C13-O52-C52
80	1	3431	PAR	O43-C13-O52-C52
80	5	3415	PAR	O43-C13-O52-C52
80	5	3419	PAR	O43-C13-O52-C52
80	5	3421	PAR	O43-C13-O52-C52
80	5	3424	PAR	O43-C13-O52-C52
80	6	1902	PAR	C52-C42-O11-C11
80	1	3428	PAR	O51-C11-O11-C42
80	5	3416	PAR	O51-C11-O11-C42
80	5	3402	PAR	O54-C14-O33-C33
80	1	3424	PAR	C23-C13-O52-C52
80	4	202	PAR	C23-C13-O52-C52
80	1	3409	PAR	C62-C52-O52-C13
80	5	3415	PAR	C62-C52-O52-C13
80	5	3404	PAR	O43-C43-C53-O53
80	5	3425	PAR	O51-C51-C61-O61
80	1	3428	PAR	C52-C42-O11-C11
80	5	3421	PAR	O51-C11-O11-C42
80	6	1904	PAR	O51-C11-O11-C42
80	5	3411	PAR	C32-C42-O11-C11
80	6	1902	PAR	C42-C52-O52-C13
80	1	3435	PAR	C42-C52-O52-C13
80	1	3404	PAR	O54-C54-C64-N64
80	1	3412	PAR	O54-C54-C64-N64
80	1	3415	PAR	O54-C54-C64-N64
80	1	3418	PAR	O54-C54-C64-N64
80	1	3434	PAR	O54-C54-C64-N64
80	1	3436	PAR	O54-C54-C64-N64
80	4	201	PAR	O54-C54-C64-N64
80	2	1902	PAR	O54-C54-C64-N64
80	2	1903	PAR	O54-C54-C64-N64
80	2	1904	PAR	O54-C54-C64-N64
80	5	3402	PAR	O54-C54-C64-N64
80	5	3410	PAR	O54-C54-C64-N64
80	5	3412	PAR	O54-C54-C64-N64
80	5	3416	PAR	O54-C54-C64-N64
80	5	3417	PAR	O54-C54-C64-N64
80	5	3419	PAR	O54-C54-C64-N64
80	5	3421	PAR	O54-C54-C64-N64
80	5	3422	PAR	O54-C54-C64-N64
80	5	3426	PAR	O54-C54-C64-N64
80	o2	201	PAR	O54-C54-C64-N64

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Mol	Chain	Res	Type	Atoms
80	6	1905	PAR	O54-C54-C64-N64
80	1	3409	PAR	C52-C42-O11-C11
80	5	3407	PAR	O54-C14-O33-C33
80	2	1904	PAR	C52-C42-O11-C11
80	1	3426	PAR	C42-C52-O52-C13
80	1	3416	PAR	C24-C14-O33-C33
80	1	3418	PAR	C24-C14-O33-C33
80	1	3422	PAR	C24-C14-O33-C33
80	1	3429	PAR	C24-C14-O33-C33
80	2	1903	PAR	C44-C54-C64-N64
80	5	3406	PAR	C44-C54-C64-N64
80	5	3411	PAR	C24-C14-O33-C33
80	5	3419	PAR	C44-C54-C64-N64
80	5	3428	PAR	C42-C52-O52-C13
80	1	3409	PAR	O54-C14-O33-C33
80	5	3408	PAR	C41-C51-C61-O61
80	7	201	PAR	O43-C13-O52-C52
80	1	3407	PAR	C62-C52-O52-C13
80	2	1905	PAR	C52-C42-O11-C11
80	4	201	PAR	O54-C14-O33-C33
80	1	3419	PAR	O51-C11-O11-C42
80	1	3407	PAR	C42-C52-O52-C13
80	o2	201	PAR	O43-C43-C53-O53
80	5	3418	PAR	O54-C14-O33-C33
80	5	3412	PAR	O54-C14-O33-C33
80	1	3435	PAR	C62-C52-O52-C13
80	1	3405	PAR	C23-C33-O33-C14
80	1	3413	PAR	C43-C33-O33-C14
80	1	3432	PAR	C23-C33-O33-C14
80	1	3436	PAR	C43-C33-O33-C14
80	3	202	PAR	C43-C33-O33-C14
80	3	203	PAR	C23-C33-O33-C14
80	5	3402	PAR	C23-C33-O33-C14
80	5	3415	PAR	C43-C33-O33-C14
80	8	202	PAR	C43-C33-O33-C14
80	1	3433	PAR	C52-C42-O11-C11
80	5	3407	PAR	C42-C52-O52-C13
80	5	3428	PAR	O51-C51-C61-O61
80	1	3402	PAR	C52-C42-O11-C11
80	1	3426	PAR	C62-C52-O52-C13
80	5	3428	PAR	C62-C52-O52-C13
80	7	202	PAR	C52-C42-O11-C11

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Mol	Chain	Res	Type	Atoms
80	4	202	PAR	O43-C43-C53-O53
80	1	3407	PAR	C52-C42-O11-C11
80	5	3409	PAR	C41-C51-C61-O61
80	5	3407	PAR	O43-C43-C53-O53
80	1	3410	PAR	O51-C11-O11-C42
80	3	201	PAR	O54-C14-O33-C33
80	5	3407	PAR	C62-C52-O52-C13
80	5	3408	PAR	O51-C51-C61-O61
80	5	3419	PAR	O51-C51-C61-O61
80	5	3414	PAR	C52-C42-O11-C11
80	1	3417	PAR	C23-C13-O52-C52
80	2	1903	PAR	C52-C42-O11-C11
80	2	1904	PAR	C62-C52-O52-C13
80	1	3427	PAR	O51-C11-O11-C42
80	5	3426	PAR	C52-C42-O11-C11
80	1	3408	PAR	C42-C52-O52-C13
80	1	3430	PAR	C52-C42-O11-C11
80	2	1905	PAR	C42-C52-O52-C13
80	1	3413	PAR	C21-C11-O11-C42
80	1	3431	PAR	C24-C14-O33-C33
80	1	3434	PAR	C21-C11-O11-C42
80	1	3435	PAR	C44-C54-C64-N64
80	5	3403	PAR	C24-C14-O33-C33
80	5	3411	PAR	C21-C11-O11-C42
80	5	3412	PAR	C44-C54-C64-N64
80	5	3418	PAR	C44-C54-C64-N64
80	5	3426	PAR	C44-C54-C64-N64
80	5	3428	PAR	C21-C11-O11-C42
80	4	201	PAR	O51-C51-C61-O61
80	5	3410	PAR	O54-C14-O33-C33
80	5	3405	PAR	C42-C52-O52-C13
80	5	3402	PAR	C52-C42-O11-C11
80	1	3436	PAR	O43-C43-C53-O53
80	2	1905	PAR	C62-C52-O52-C13
80	o2	201	PAR	C32-C42-O11-C11
80	5	3405	PAR	C62-C52-O52-C13
80	6	1906	PAR	O54-C14-O33-C33
80	1	3402	PAR	C23-C33-O33-C14
80	1	3403	PAR	C23-C33-O33-C14
80	1	3412	PAR	C43-C33-O33-C14
80	1	3413	PAR	C23-C33-O33-C14
80	1	3417	PAR	C43-C33-O33-C14

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Mol	Chain	Res	Type	Atoms
80	1	3421	PAR	C43-C33-O33-C14
80	1	3423	PAR	C23-C33-O33-C14
80	1	3423	PAR	C43-C33-O33-C14
80	1	3428	PAR	C23-C33-O33-C14
80	1	3434	PAR	C43-C33-O33-C14
80	1	3436	PAR	C23-C33-O33-C14
80	3	203	PAR	C43-C33-O33-C14
80	5	3402	PAR	C43-C33-O33-C14
80	5	3404	PAR	C23-C33-O33-C14
80	5	3404	PAR	C43-C33-O33-C14
80	5	3406	PAR	C23-C33-O33-C14
80	5	3406	PAR	C43-C33-O33-C14
80	5	3407	PAR	C43-C33-O33-C14
80	5	3410	PAR	C23-C33-O33-C14
80	5	3417	PAR	C43-C33-O33-C14
80	5	3418	PAR	C23-C33-O33-C14
80	5	3419	PAR	C23-C33-O33-C14
80	5	3421	PAR	C43-C33-O33-C14
80	5	3425	PAR	C23-C33-O33-C14
80	7	202	PAR	C23-C33-O33-C14
80	8	202	PAR	C23-C33-O33-C14
80	n3	201	PAR	C43-C33-O33-C14
80	6	1902	PAR	C23-C33-O33-C14
80	6	1904	PAR	C23-C33-O33-C14
80	6	1905	PAR	C23-C33-O33-C14
80	1	3433	PAR	C42-C52-O52-C13
80	1	3420	PAR	C52-C42-O11-C11
80	5	3428	PAR	O54-C14-O33-C33
80	2	1902	PAR	O54-C14-O33-C33
80	5	3404	PAR	C41-C51-C61-O61
80	2	1904	PAR	C42-C52-O52-C13
80	1	3404	PAR	C42-C52-O52-C13
80	1	3408	PAR	C62-C52-O52-C13
80	5	3409	PAR	O51-C51-C61-O61
80	8	202	PAR	C52-C42-O11-C11
80	2	1903	PAR	O54-C14-O33-C33
80	1	3436	PAR	O54-C14-O33-C33

All (10) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
80	1	3409	PAR	C12-C22-C32-C42-C52-C62

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Mol	Chain	Res	Type	Atoms
80	5	3414	PAR	C12-C22-C32-C42-C52-C62
80	4	201	PAR	C12-C22-C32-C42-C52-C62
80	3	203	PAR	C12-C22-C32-C42-C52-C62
80	1	3418	PAR	C14-C24-C34-C44-C54-O54
80	1	3432	PAR	C12-C22-C32-C42-C52-C62
80	5	3426	PAR	C14-C24-C34-C44-C54-O54
80	1	3419	PAR	C14-C24-C34-C44-C54-O54
80	5	3427	PAR	C12-C22-C32-C42-C52-C62
80	5	3420	PAR	C12-C22-C32-C42-C52-C62

79 monomers are involved in 255 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	1	3413	PAR	2	0
80	1	3417	PAR	2	0
80	2	1902	PAR	3	0
80	1	3404	PAR	1	0
80	1	3403	PAR	1	0
80	3	201	PAR	6	0
80	1	3430	PAR	1	0
80	1	3415	PAR	5	0
80	1	3421	PAR	2	0
80	5	3401	PAR	3	0
80	6	1902	PAR	6	0
80	1	3407	PAR	5	0
80	5	3415	PAR	2	0
80	5	3420	PAR	8	0
80	5	3411	PAR	2	0
80	1	3432	PAR	5	0
80	5	3402	PAR	2	0
80	1	3424	PAR	1	0
80	3	203	PAR	6	0
80	o2	201	PAR	3	0
80	1	3428	PAR	1	0
80	1	3416	PAR	6	0
80	8	202	PAR	1	0
80	5	3421	PAR	2	0
80	3	202	PAR	1	0
80	5	3416	PAR	2	0
80	5	3427	PAR	3	0
80	5	3422	PAR	2	0
80	1	3419	PAR	3	0
80	5	3419	PAR	7	0

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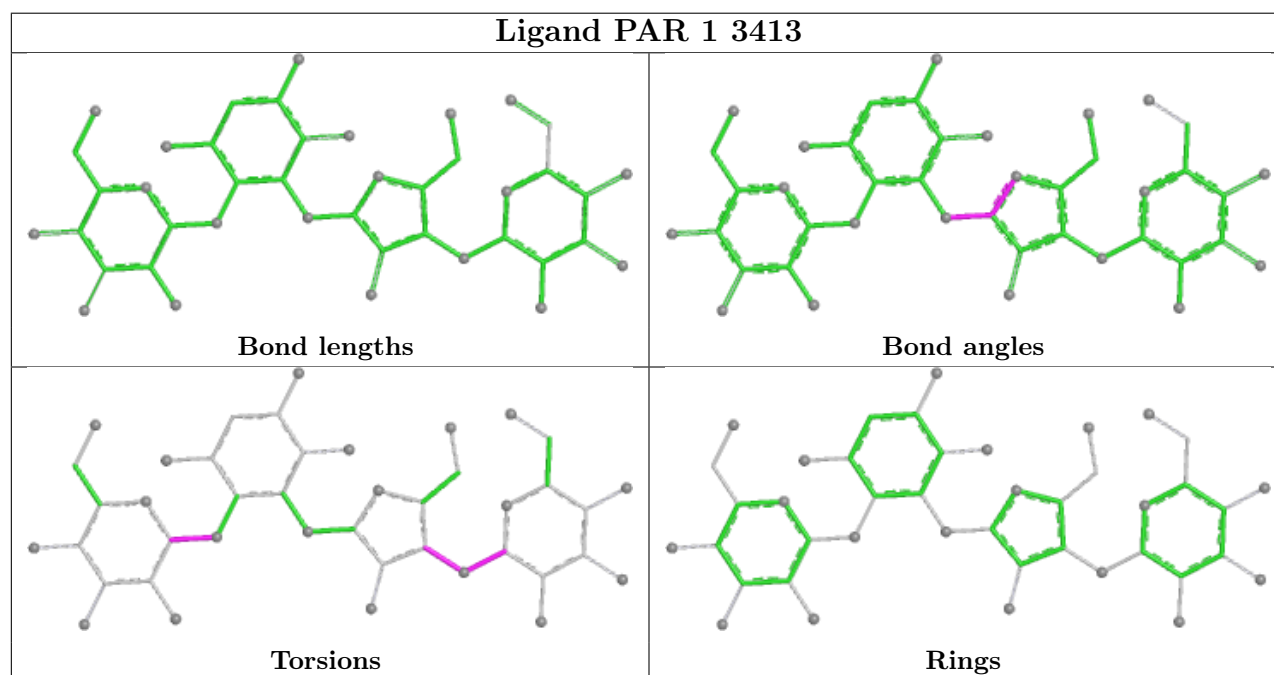
Mol	Chain	Res	Type	Clashes	Symm-Clashes
80	5	3426	PAR	2	0
80	1	3435	PAR	16	0
80	7	202	PAR	2	0
80	1	3425	PAR	7	0
80	1	3420	PAR	2	0
80	2	1901	PAR	2	0
80	5	3428	PAR	8	0
80	1	3406	PAR	1	0
80	6	1904	PAR	6	0
80	1	3412	PAR	3	0
80	6	1903	PAR	3	0
80	1	3411	PAR	3	0
80	1	3426	PAR	2	0
80	5	3414	PAR	1	0
80	2	1904	PAR	5	0
80	1	3427	PAR	1	0
80	5	3408	PAR	3	0
80	6	1906	PAR	4	0
80	1	3405	PAR	3	0
80	1	3414	PAR	2	0
80	1	3429	PAR	1	0
80	5	3412	PAR	2	0
80	5	3406	PAR	2	0
80	5	3424	PAR	7	0
80	1	3422	PAR	1	0
80	5	3423	PAR	5	0
80	2	1903	PAR	1	0
80	4	201	PAR	3	0
80	5	3413	PAR	7	0
80	7	201	PAR	3	0
80	5	3409	PAR	6	0
80	1	3434	PAR	3	0
80	5	3403	PAR	7	0
80	1	3437	PAR	2	0
80	1	3410	PAR	4	0
80	5	3405	PAR	2	0
80	1	3409	PAR	1	0
80	n3	201	PAR	5	0
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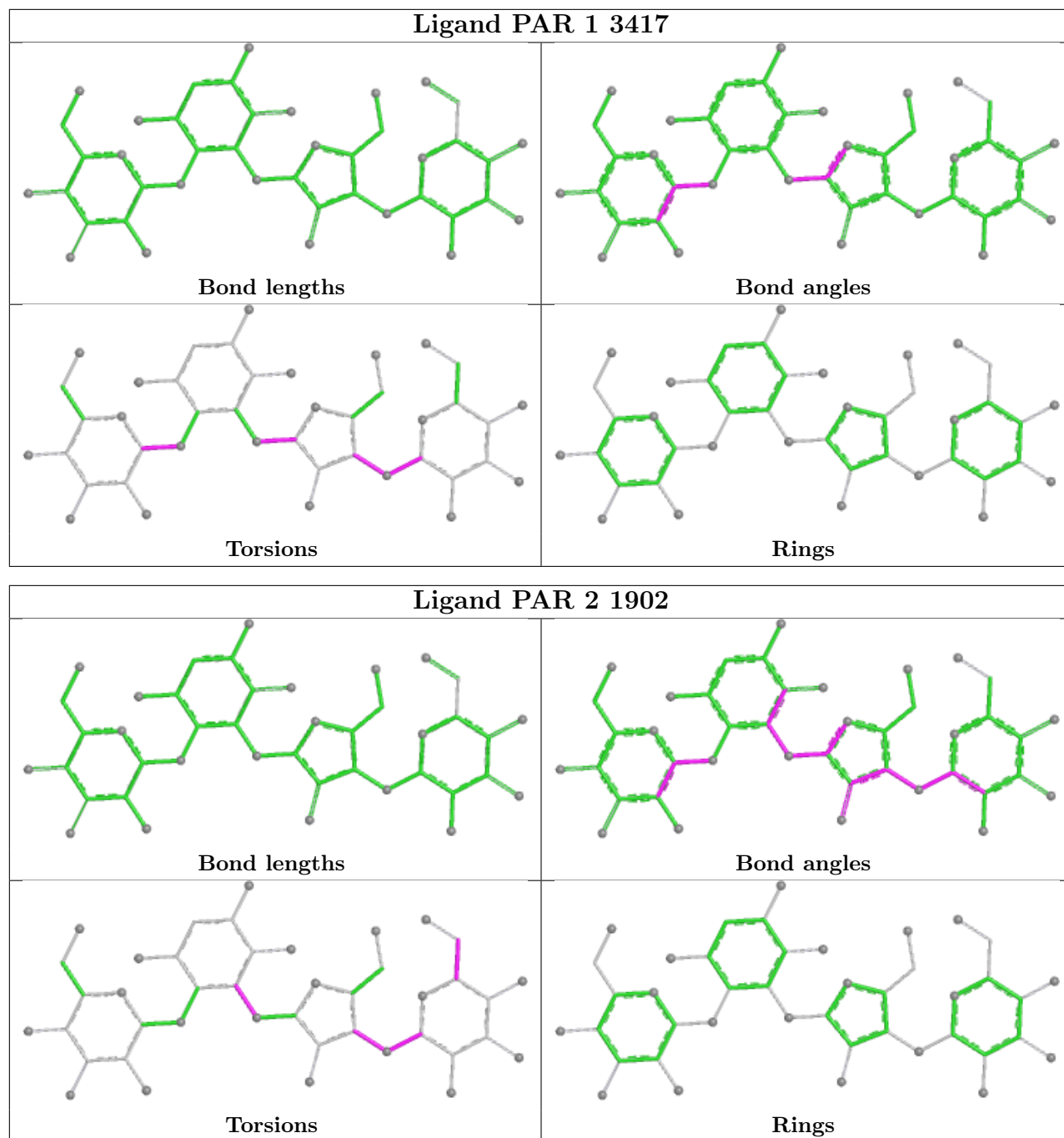
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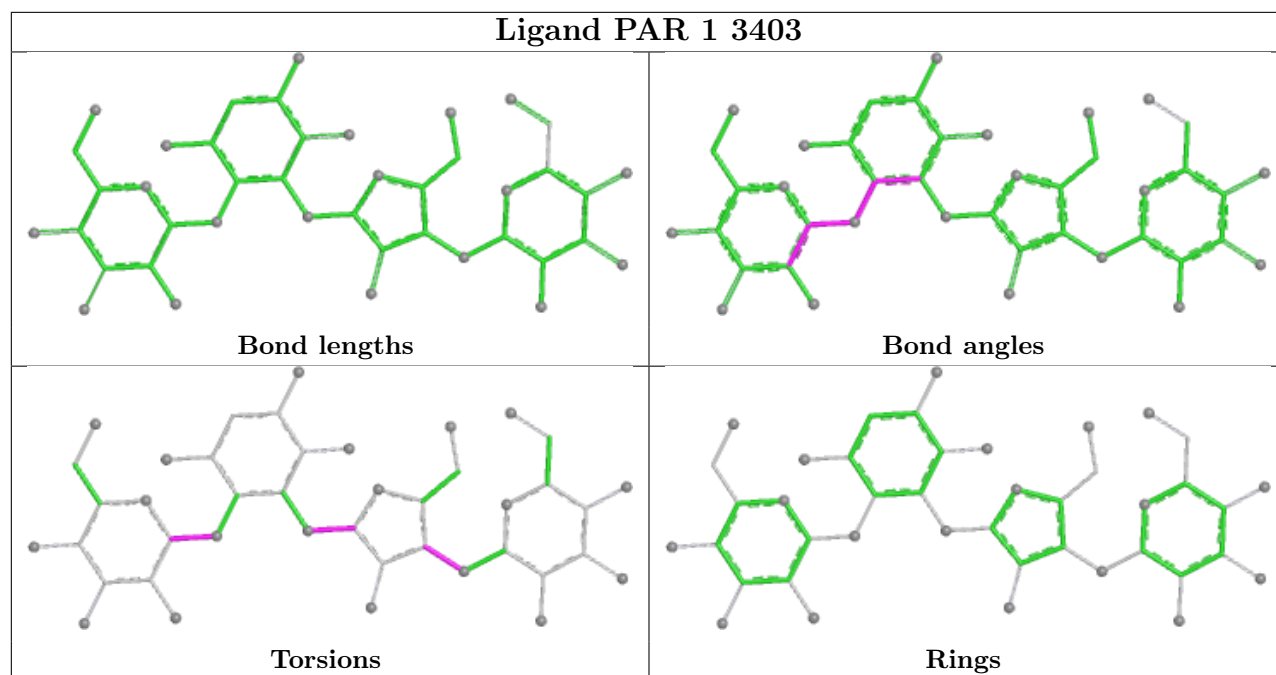
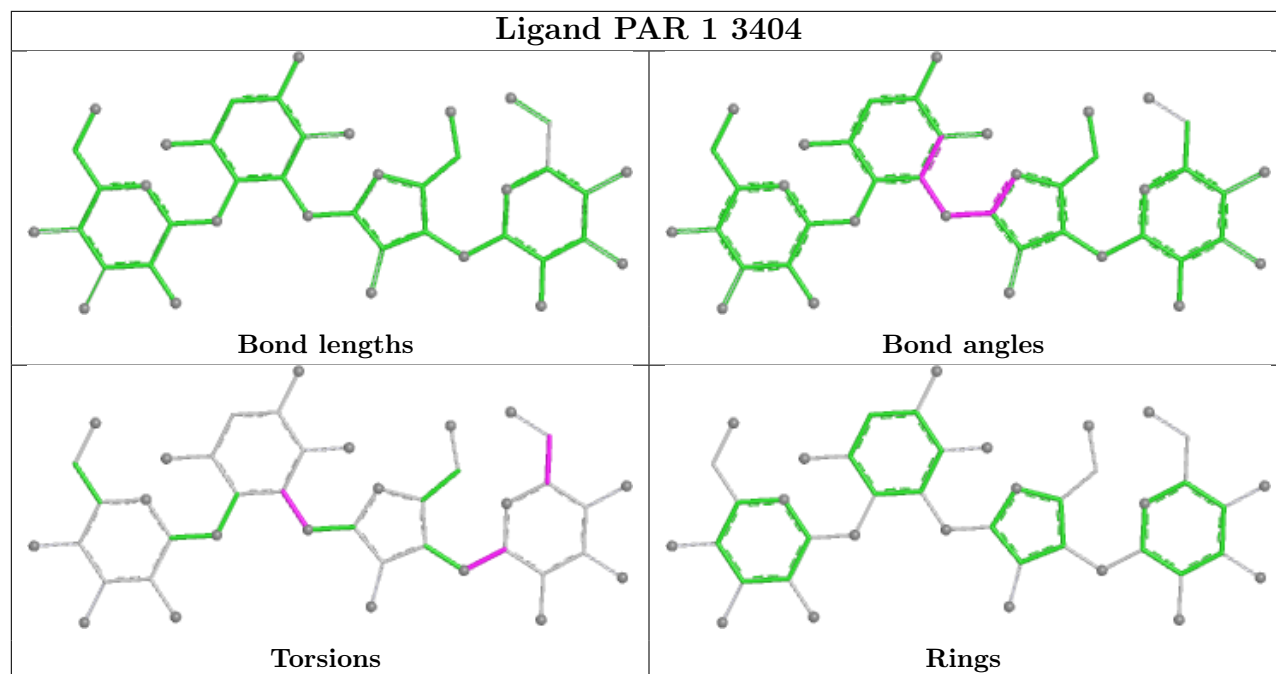
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
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80	5	3425	PAR	1	0
80	5	3404	PAR	4	0
80	1	3431	PAR	1	0
80	1	3423	PAR	1	0
80	2	1905	PAR	5	0
80	4	202	PAR	1	0

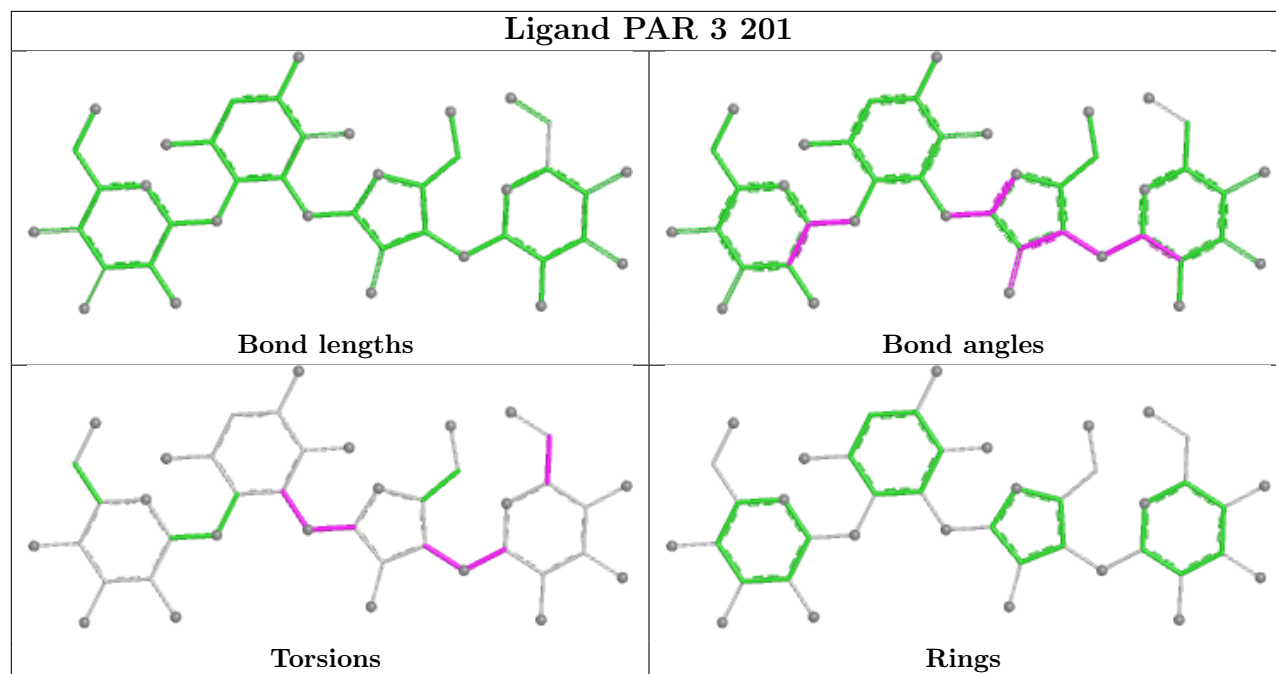
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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



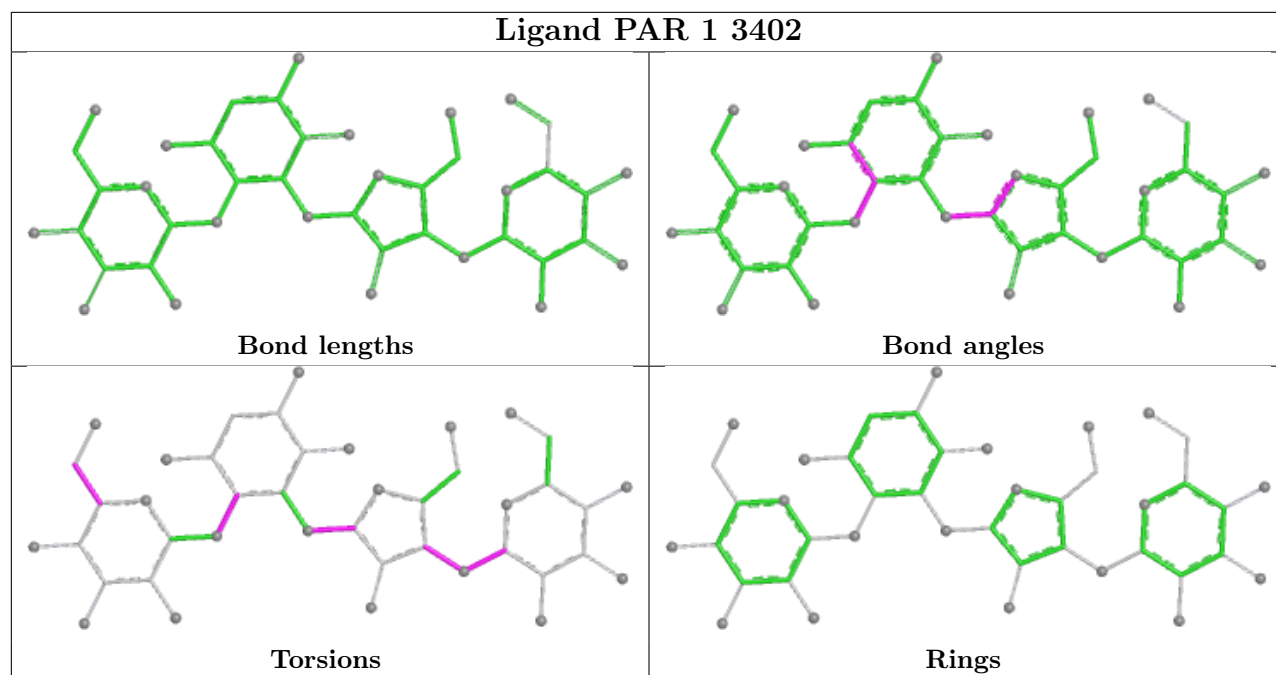


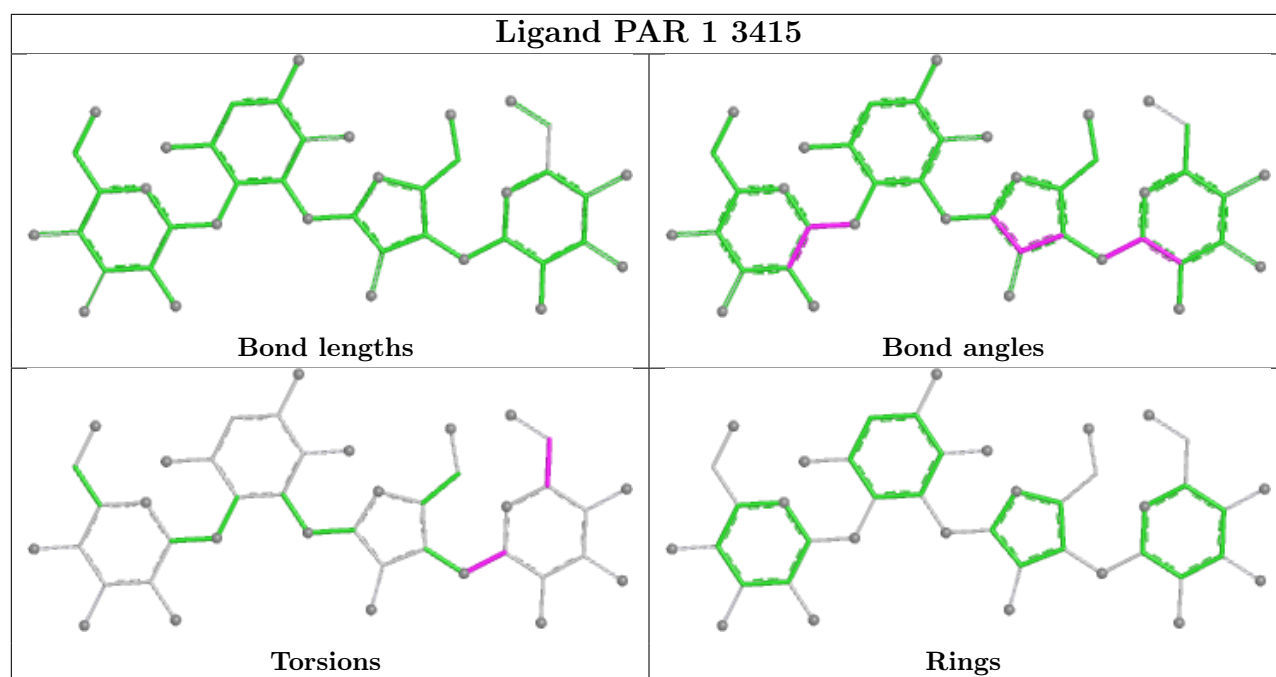
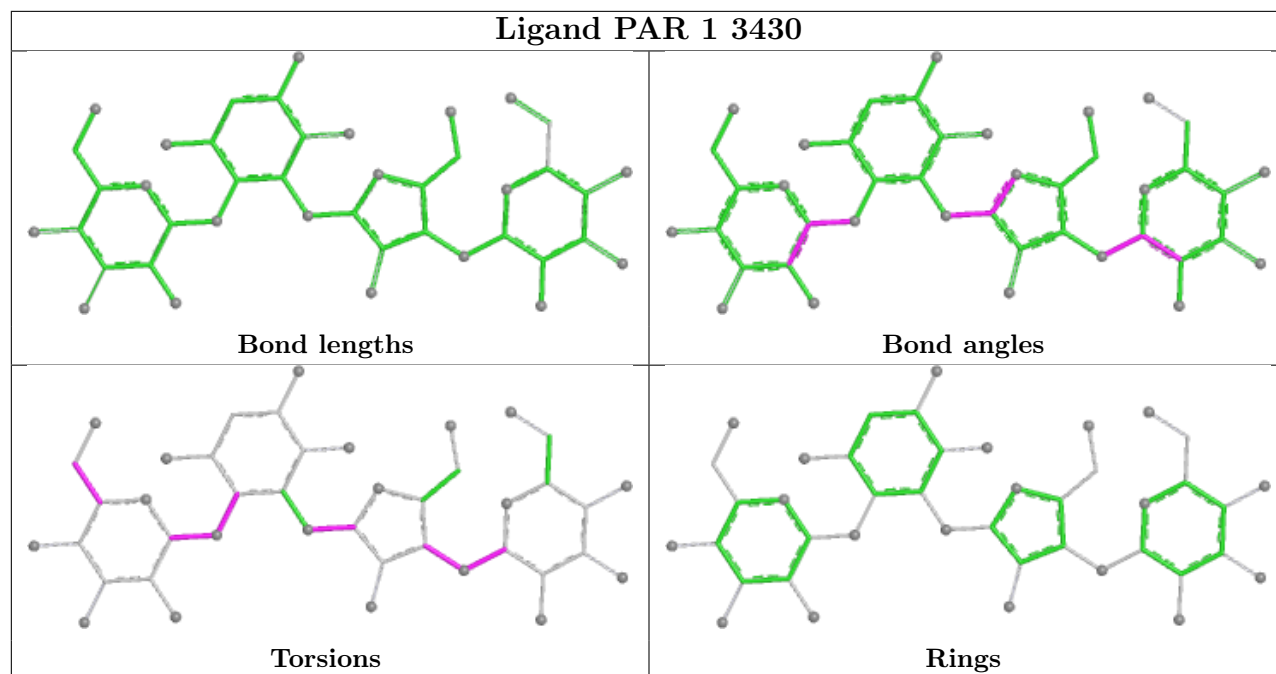


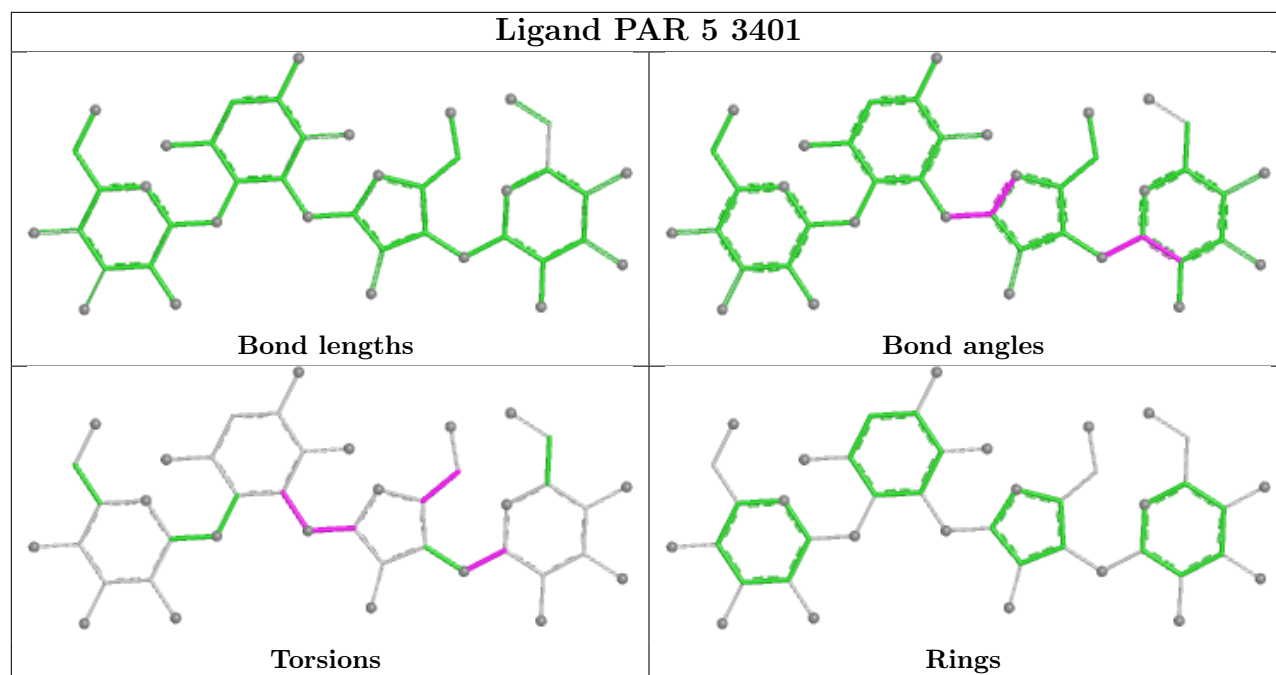
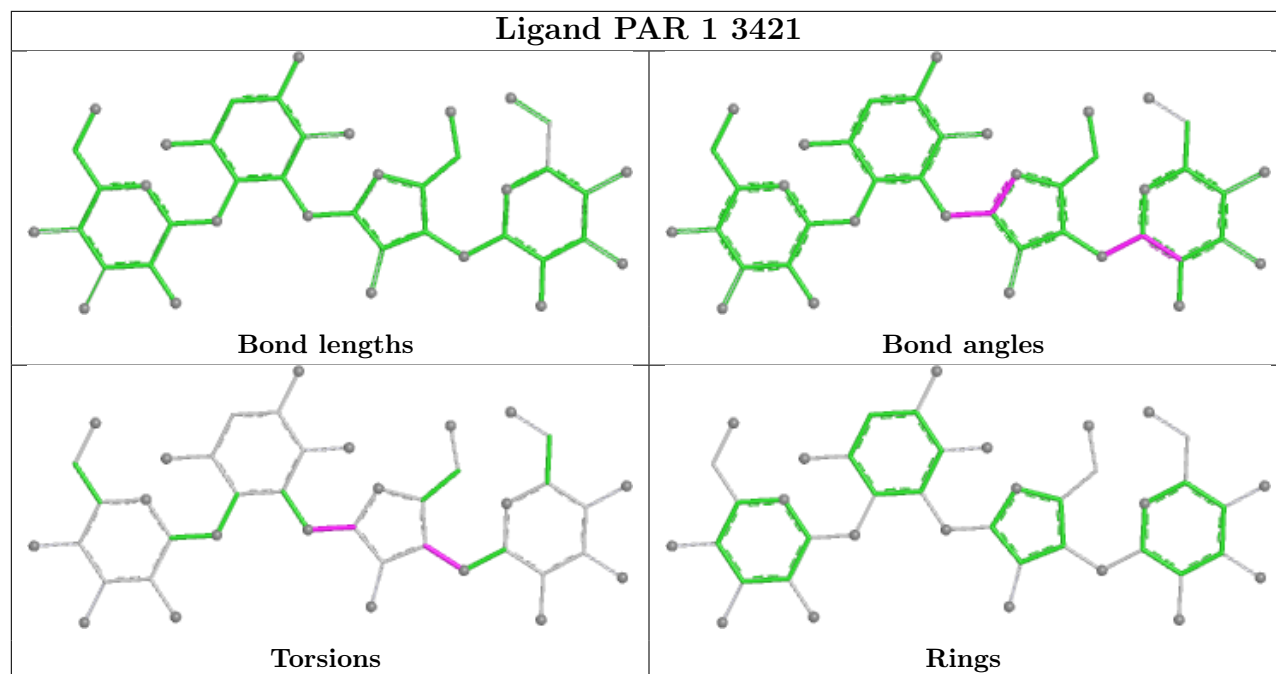
Ligand PAR 3 201

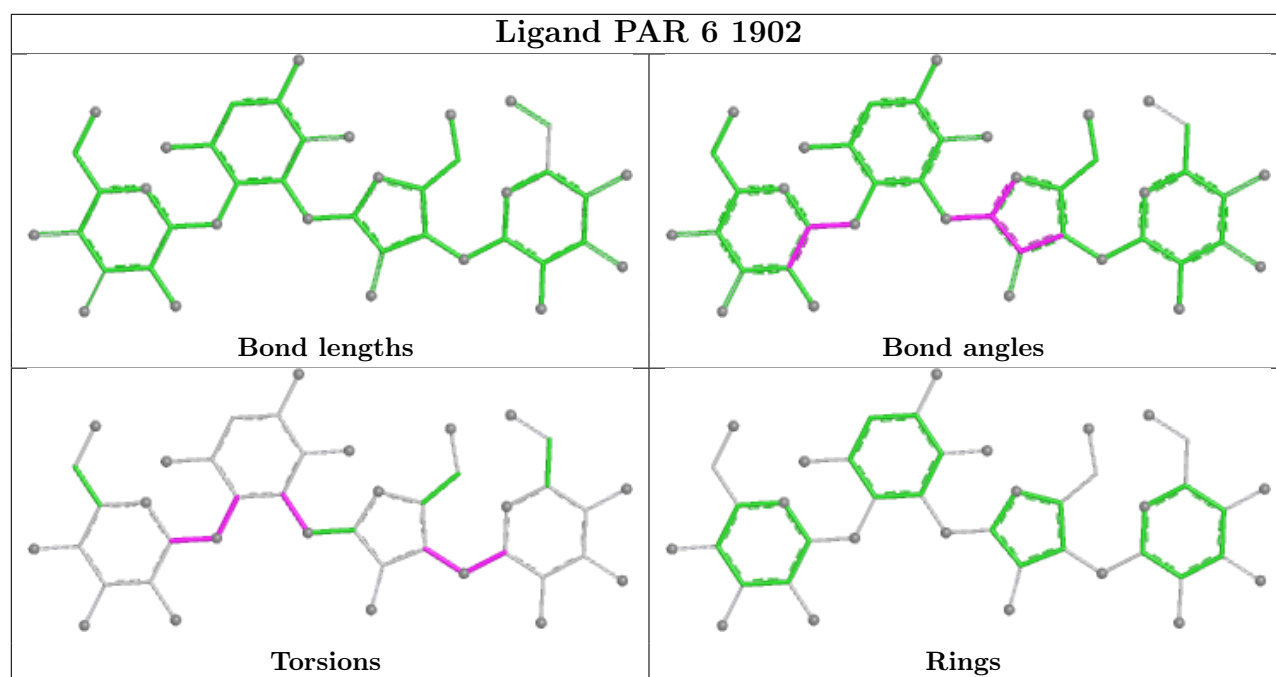
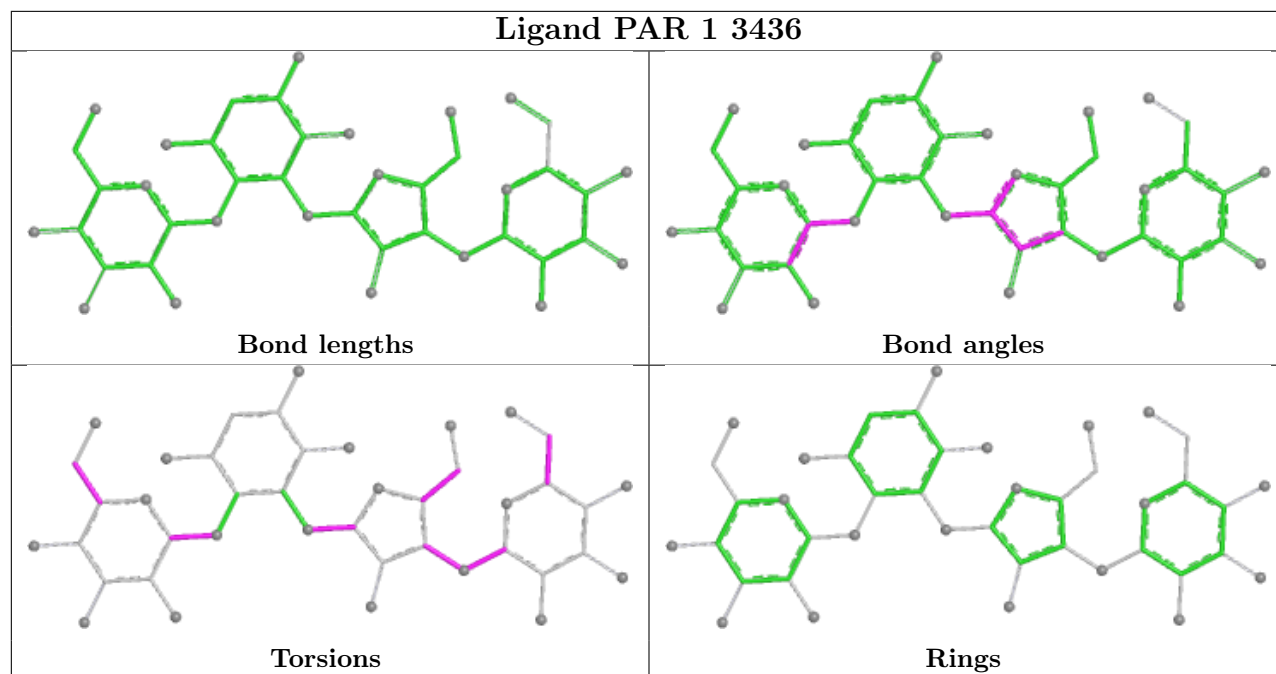


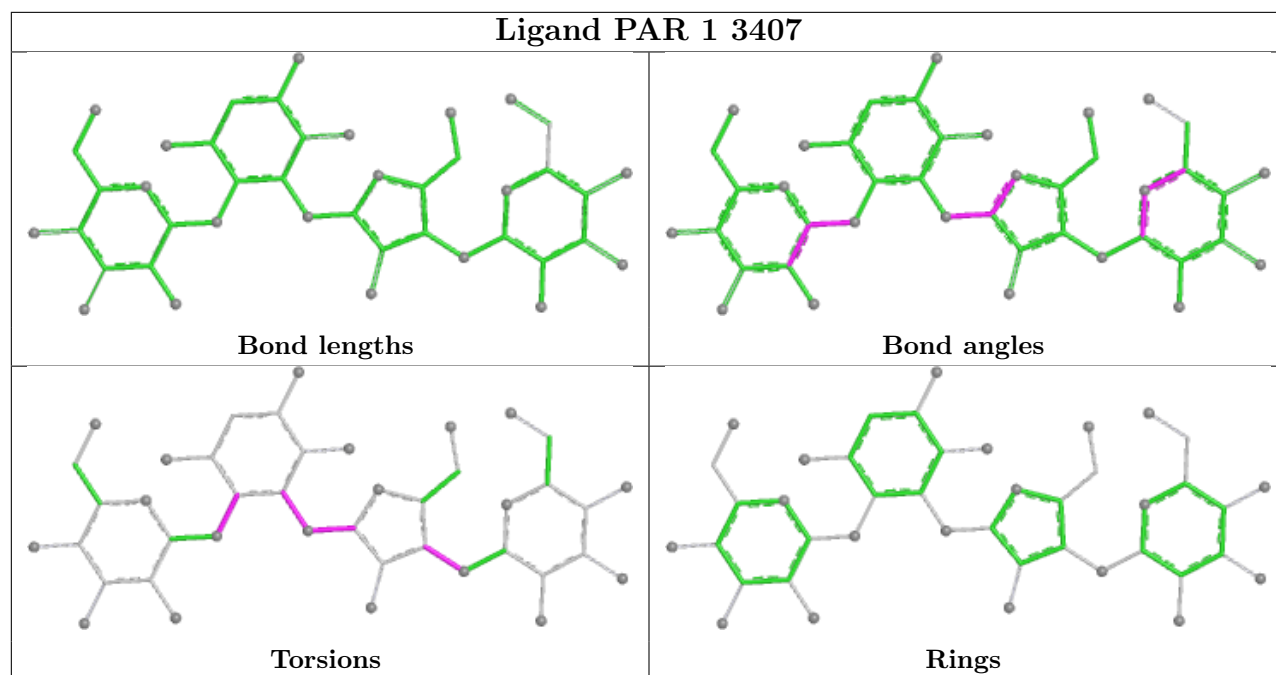
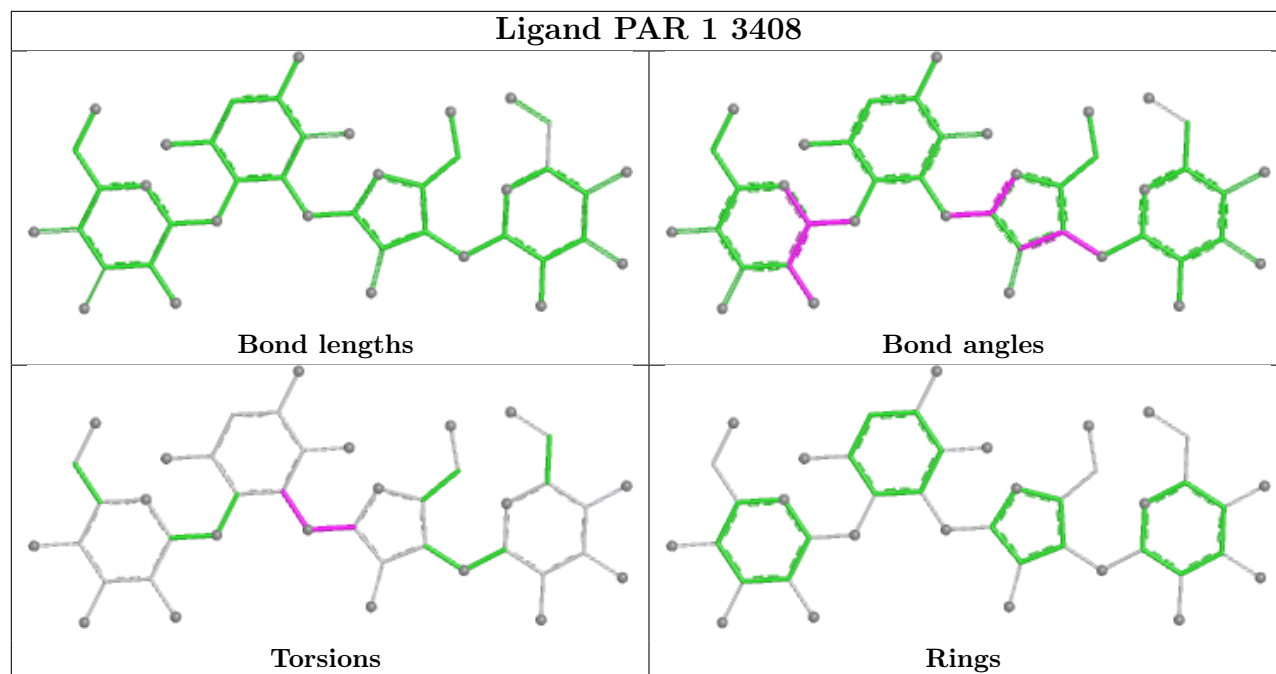
Ligand PAR 1 3402

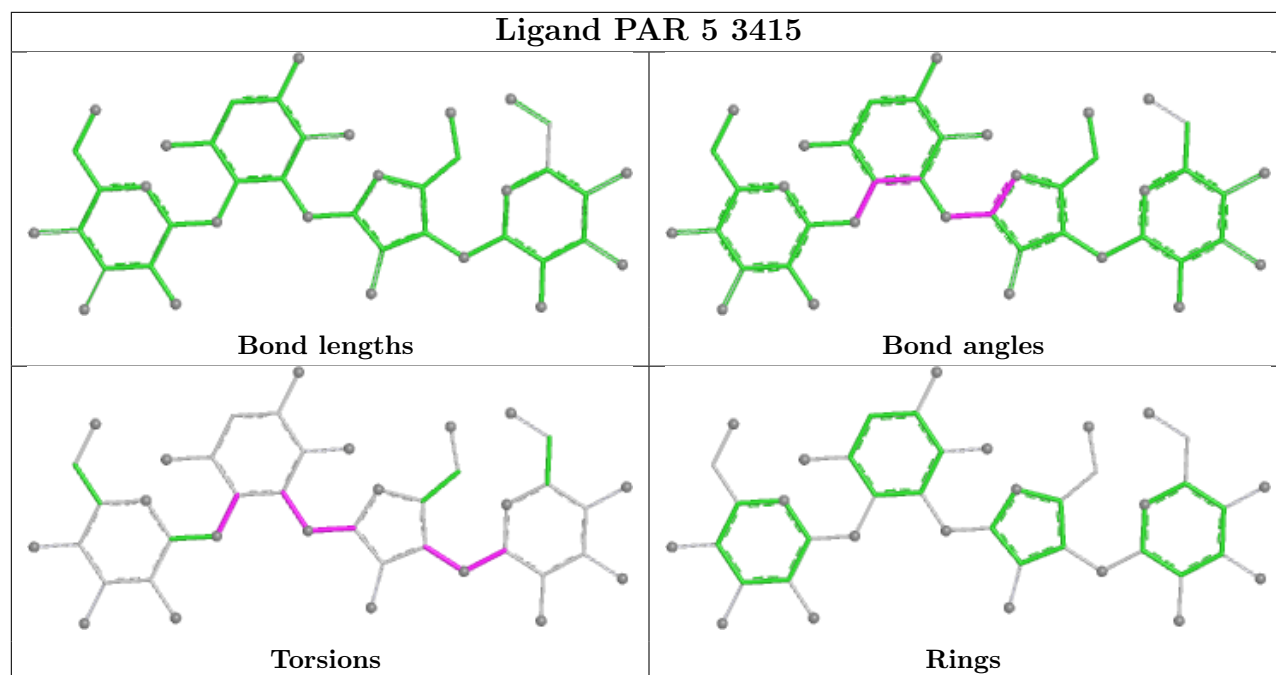
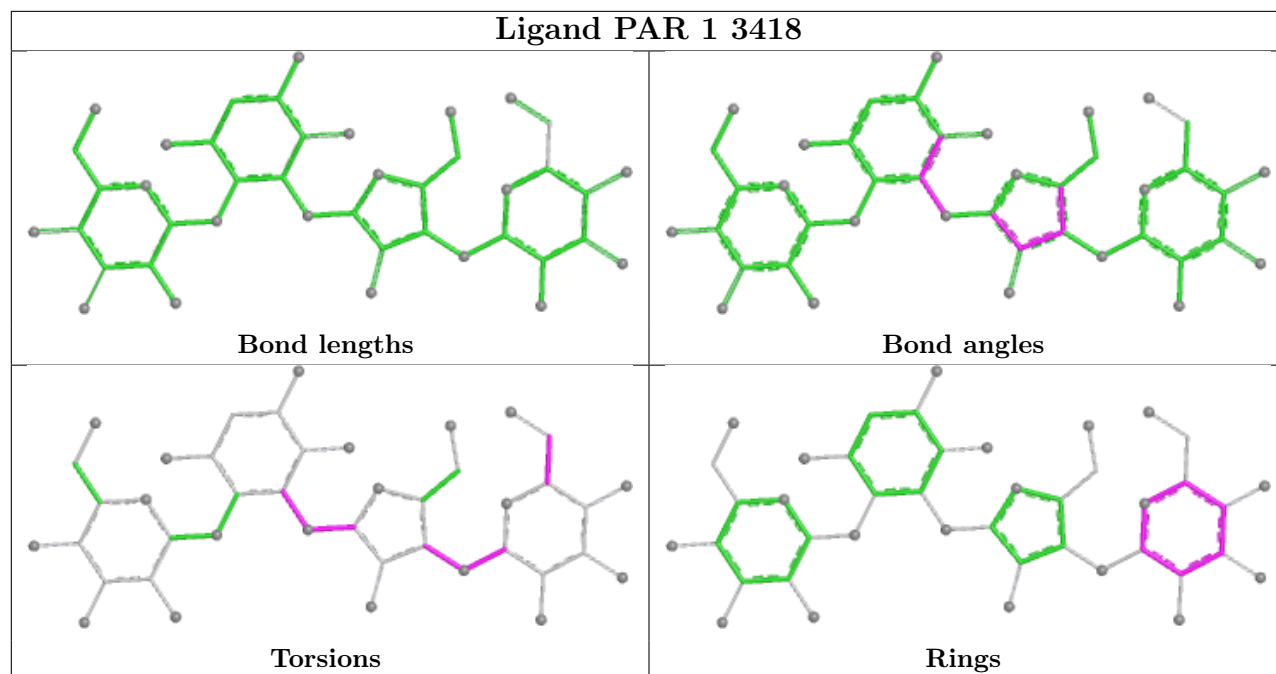


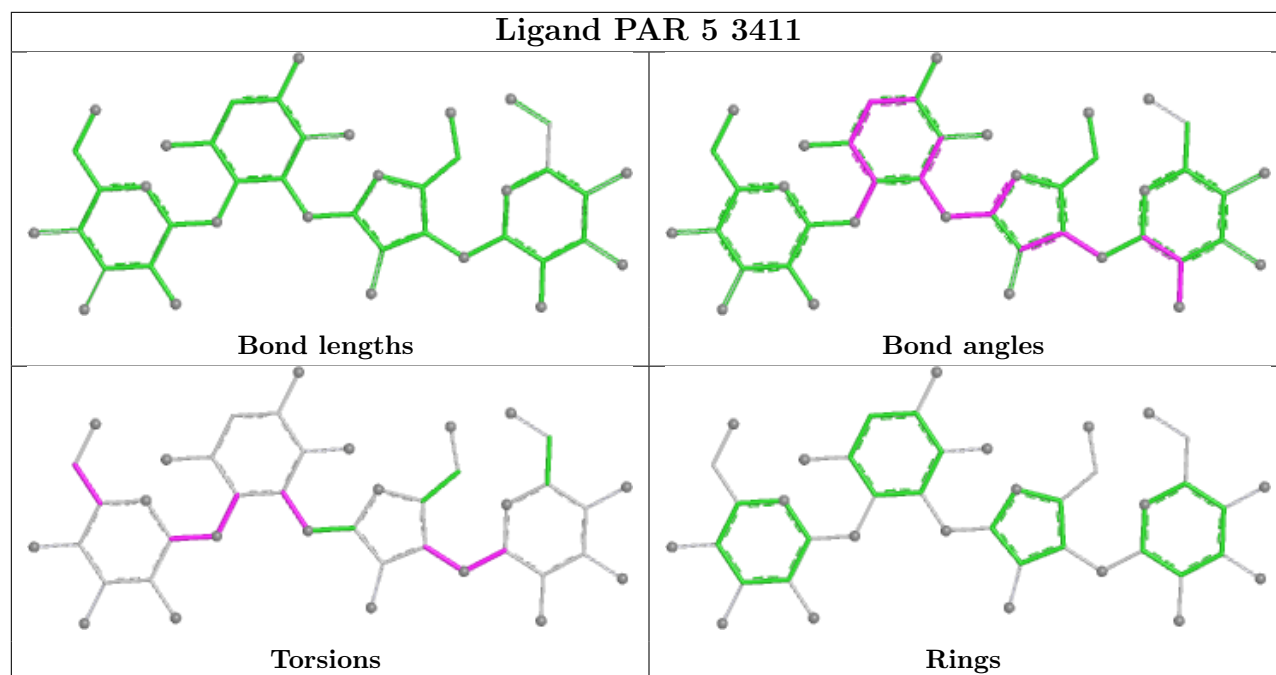
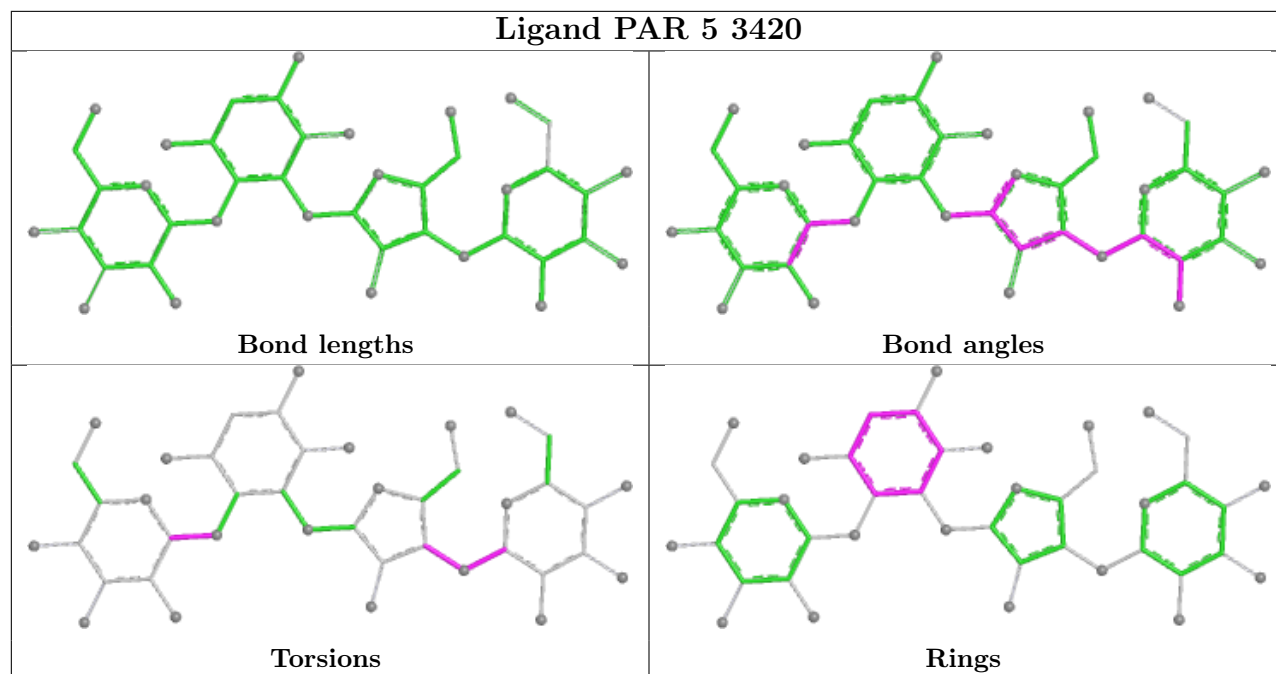


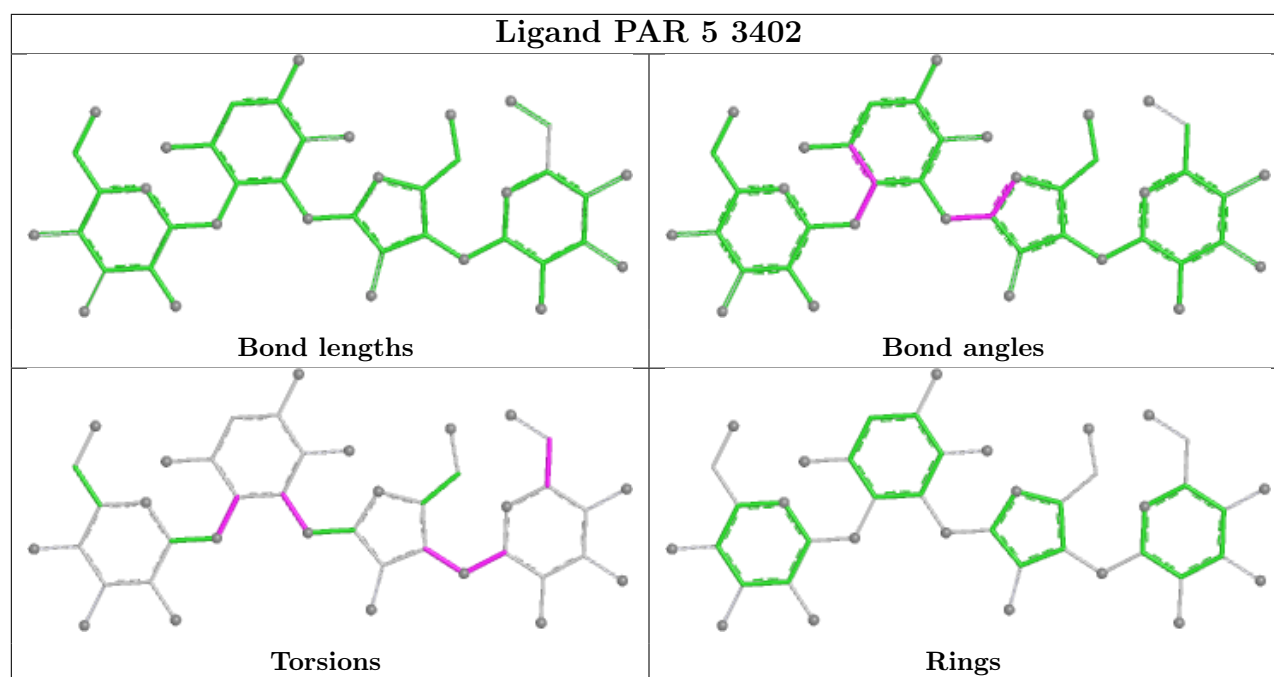
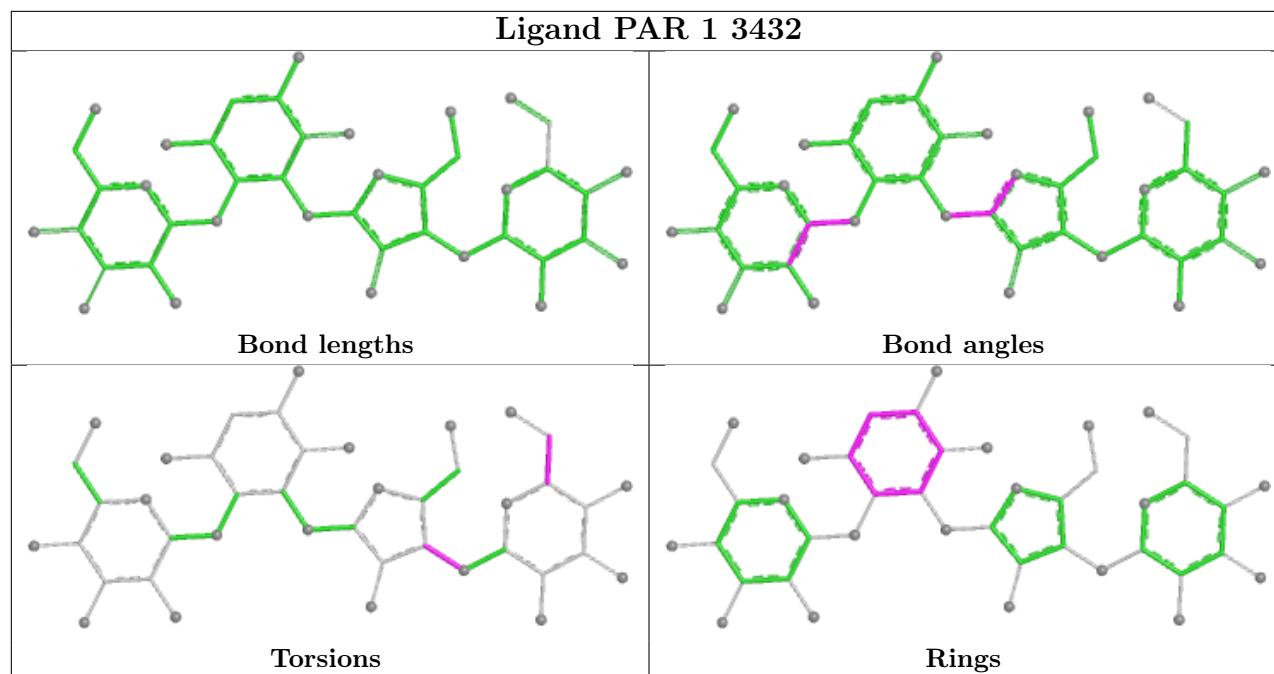


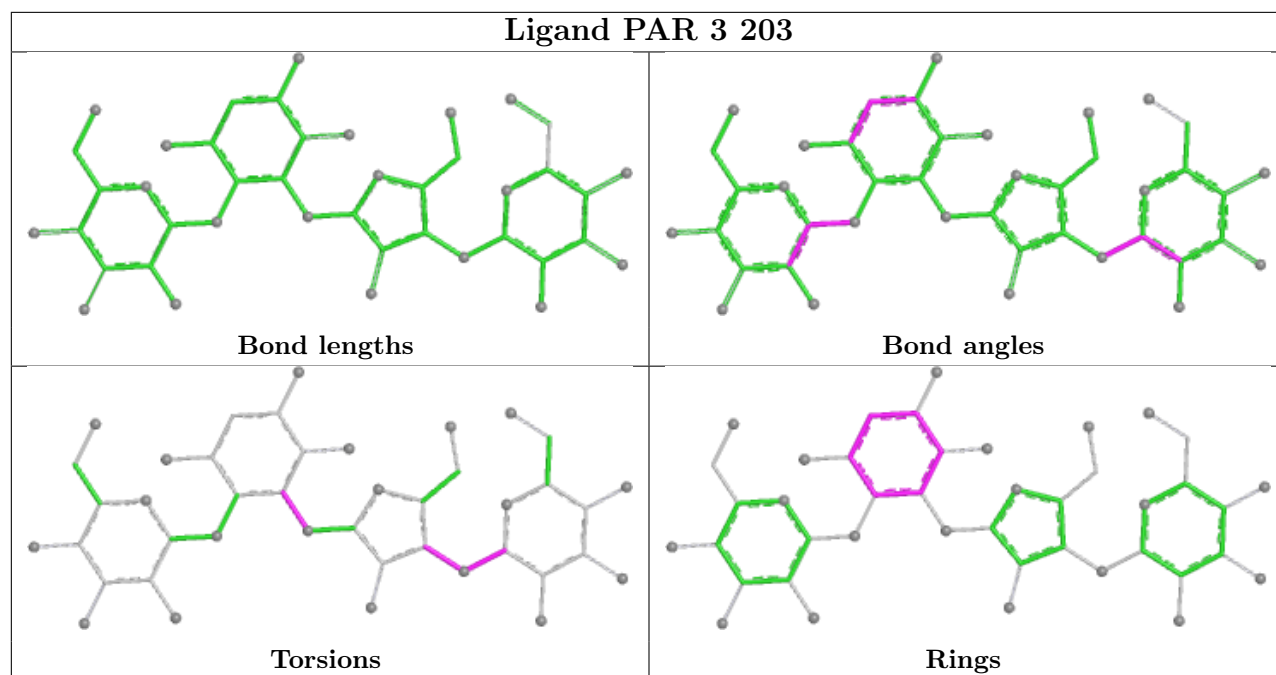
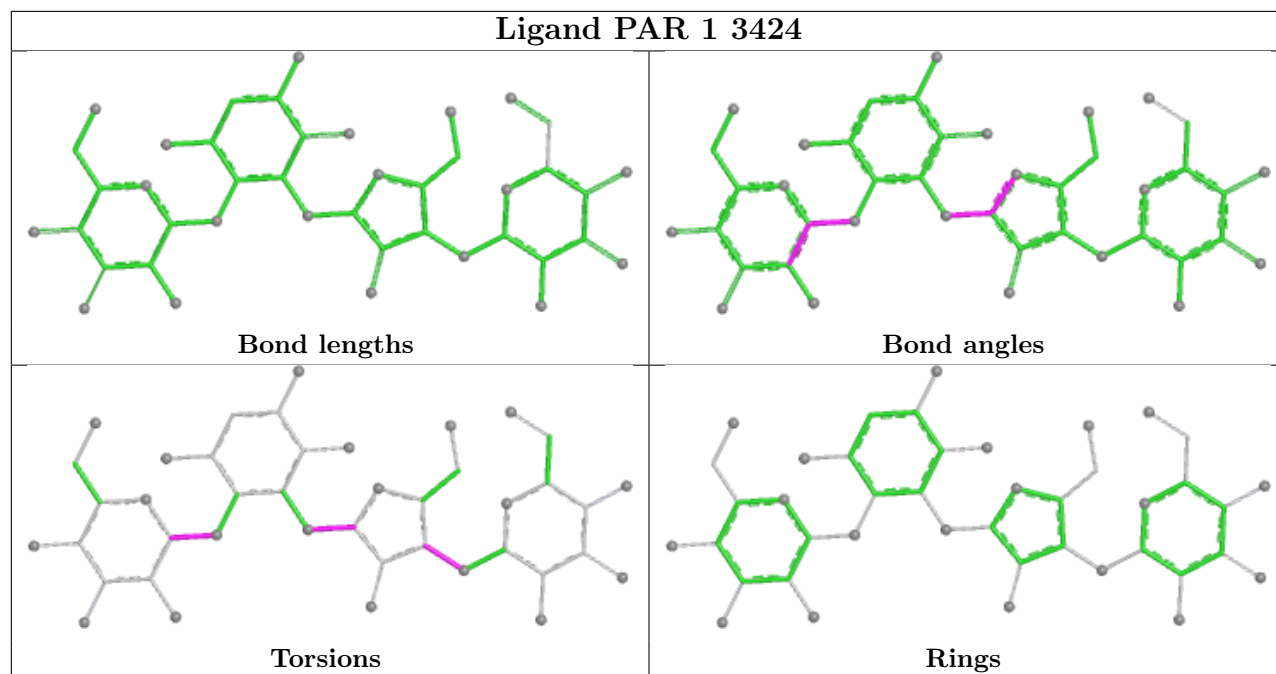


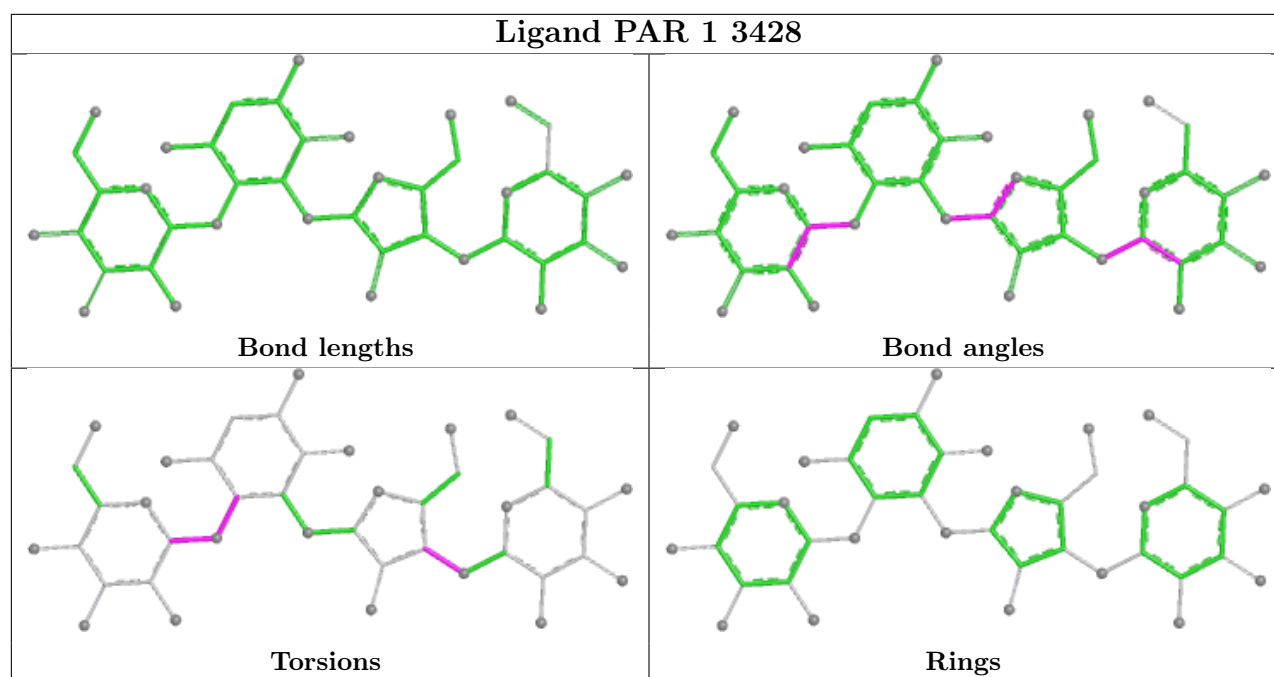
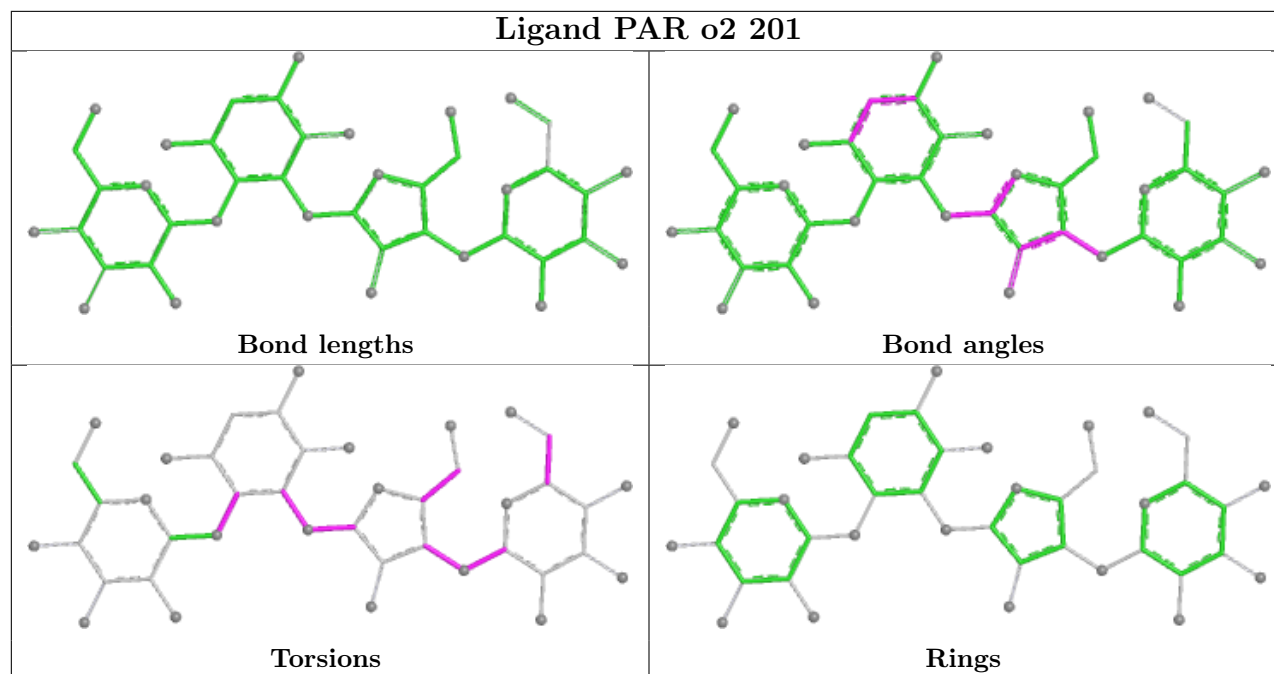


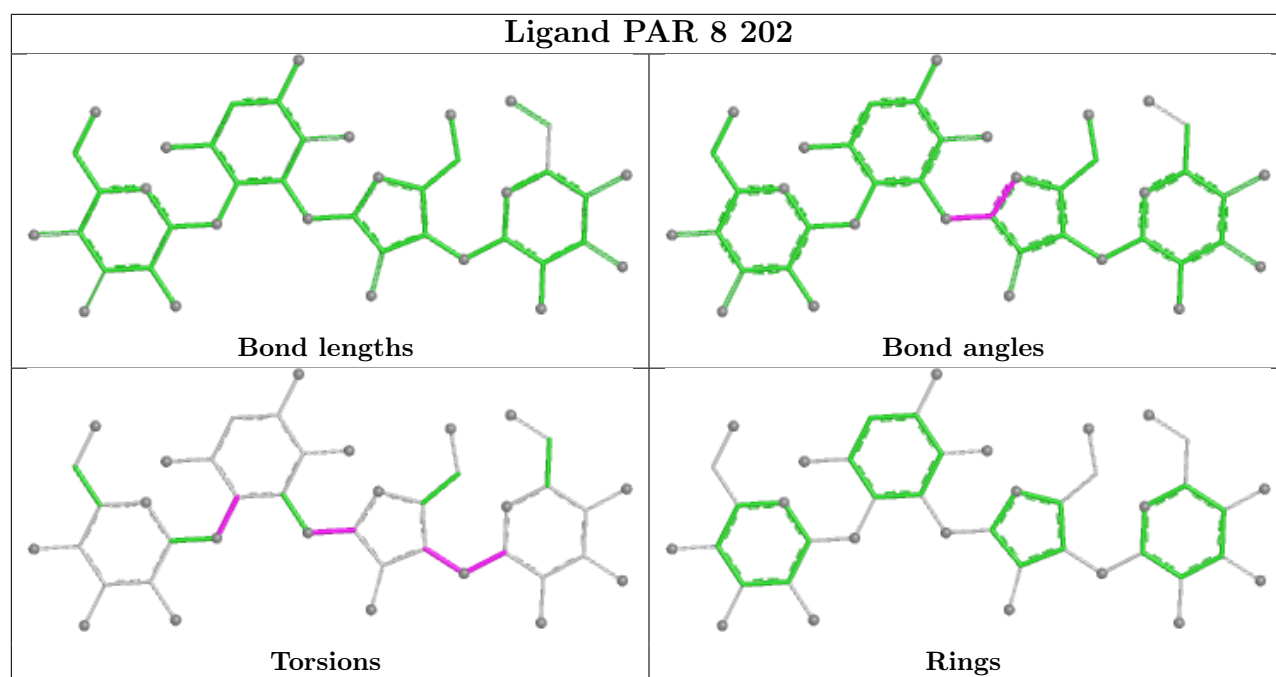
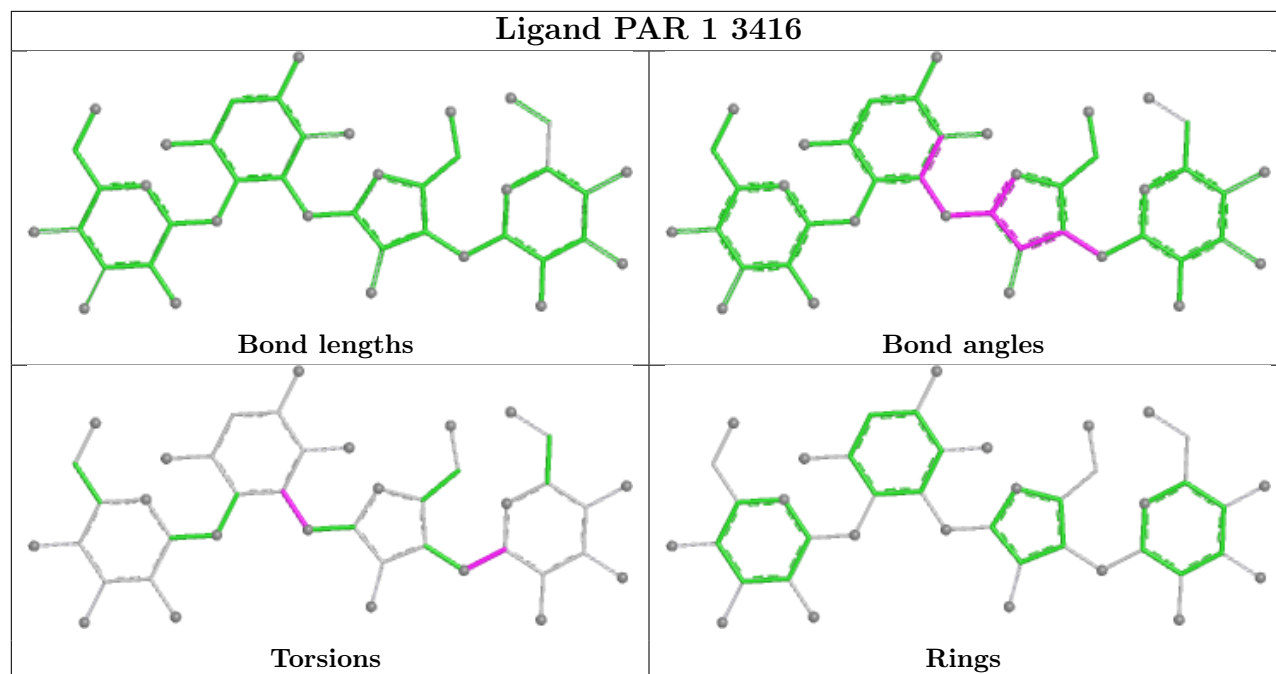




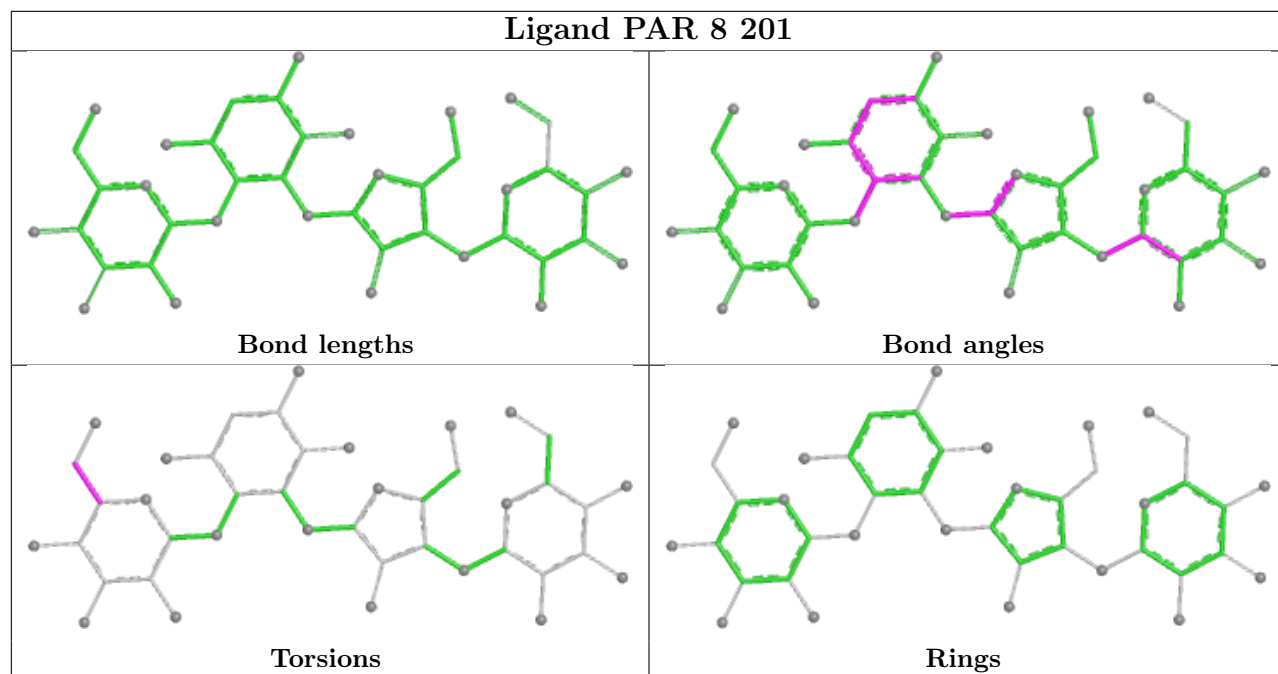




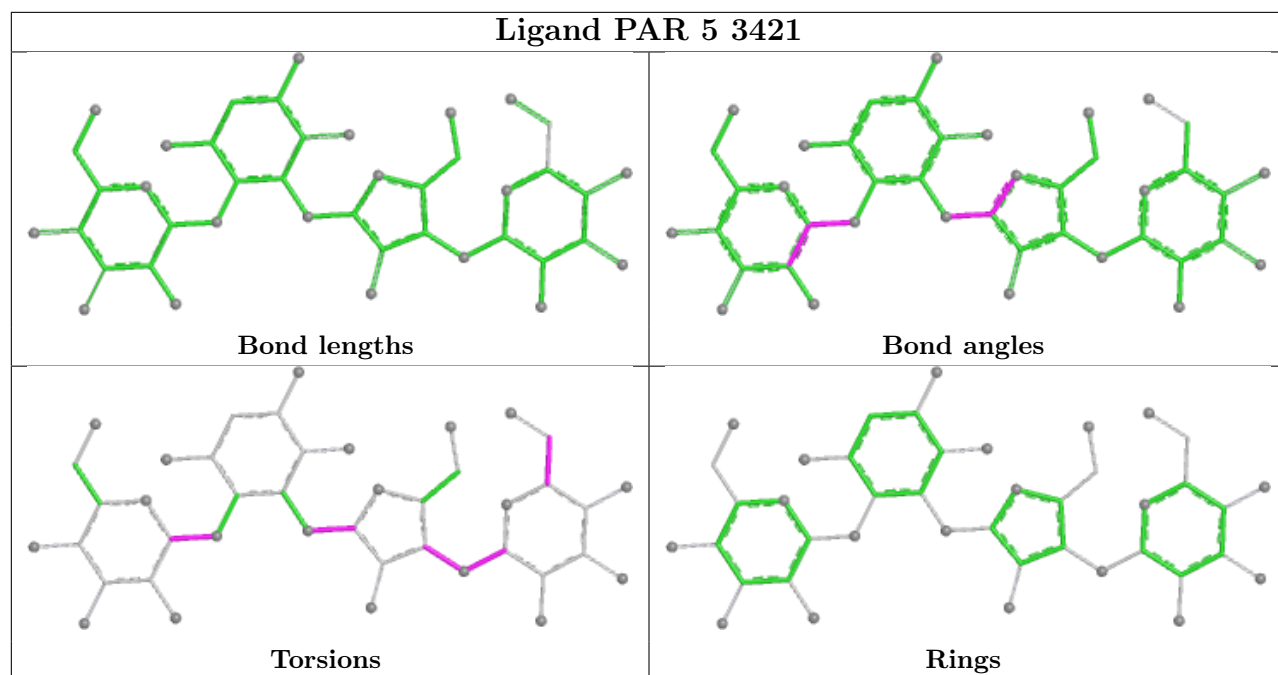




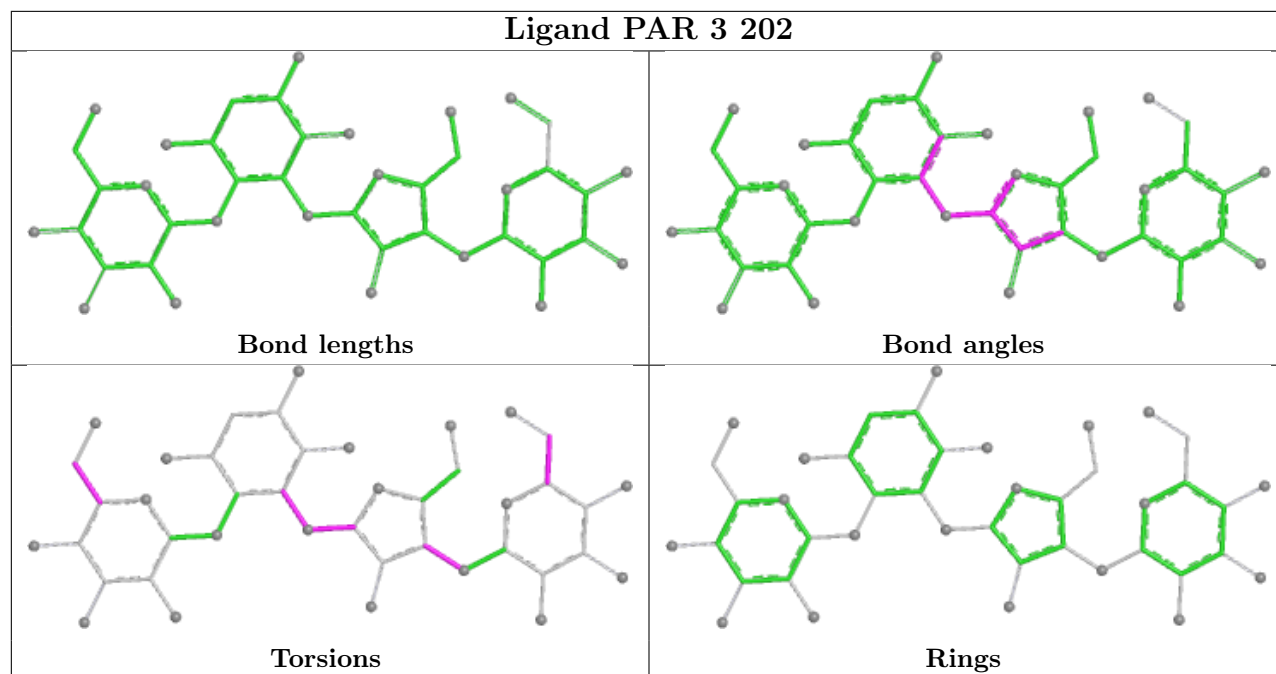
Ligand PAR 8 201



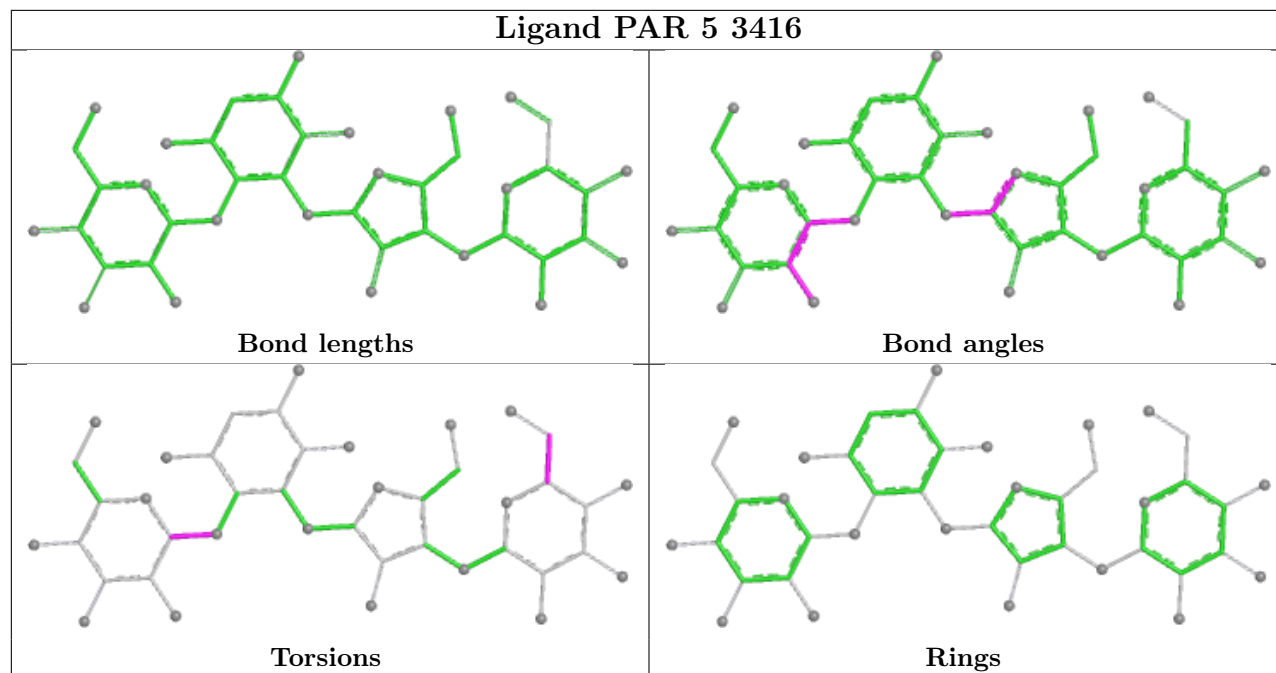
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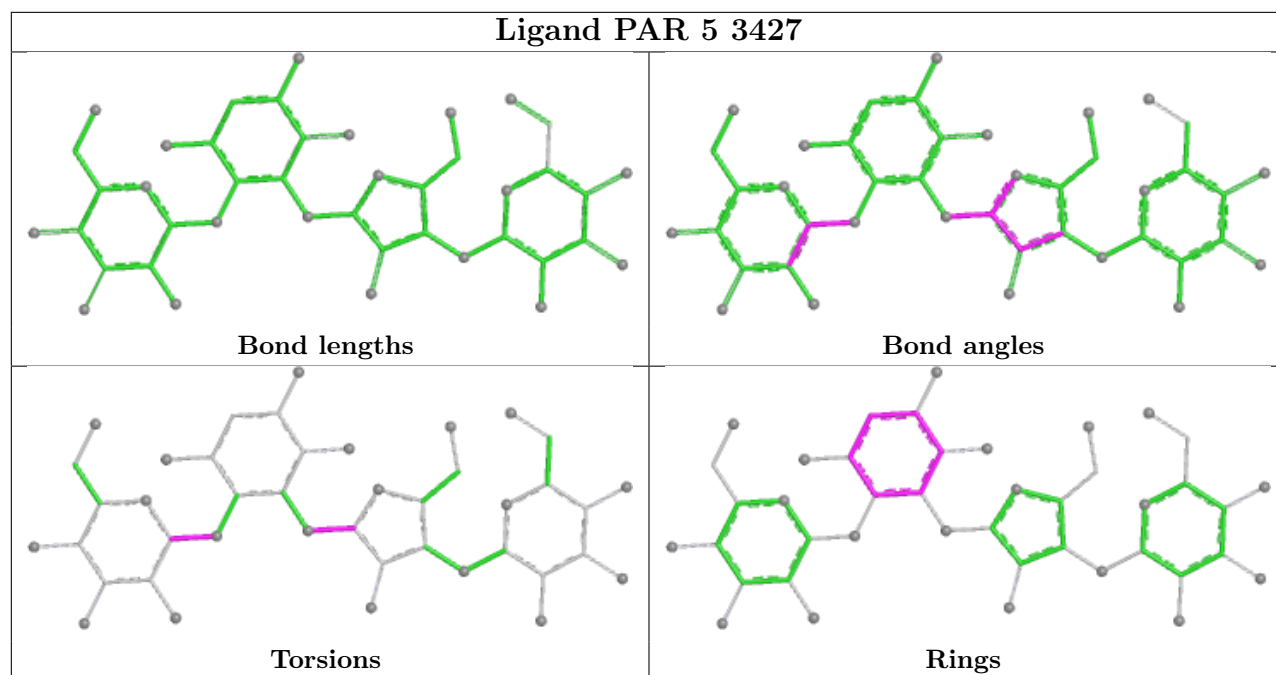
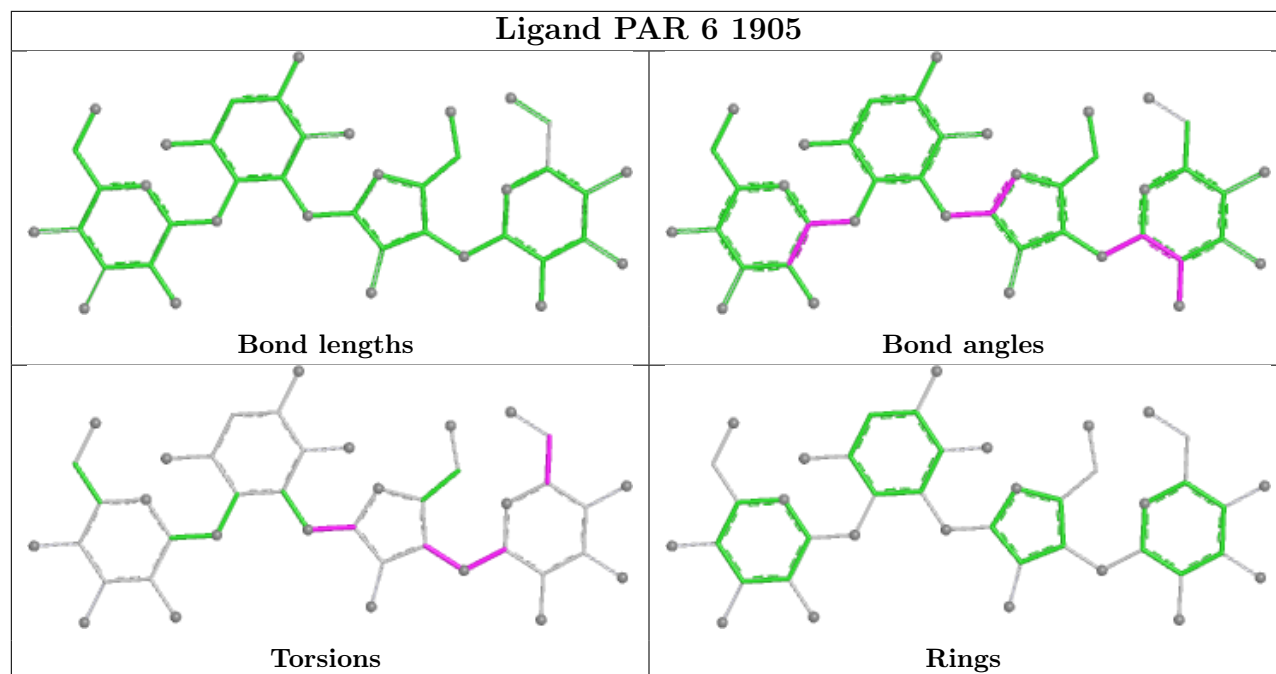


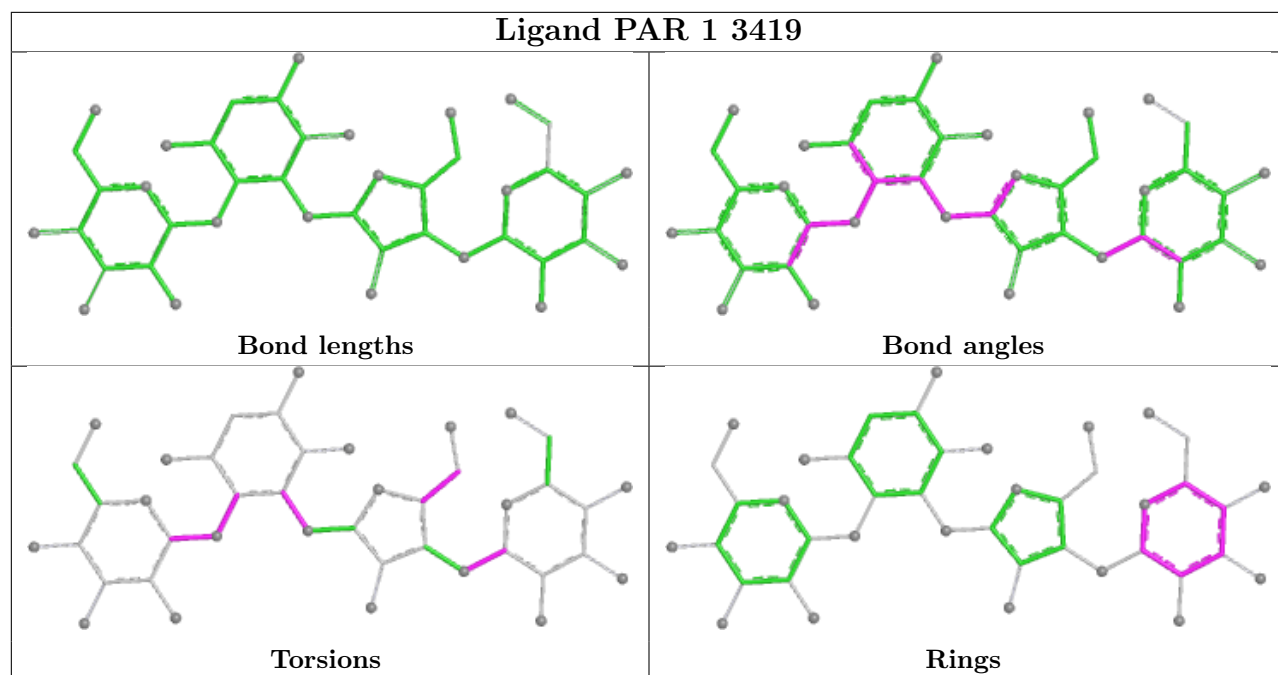
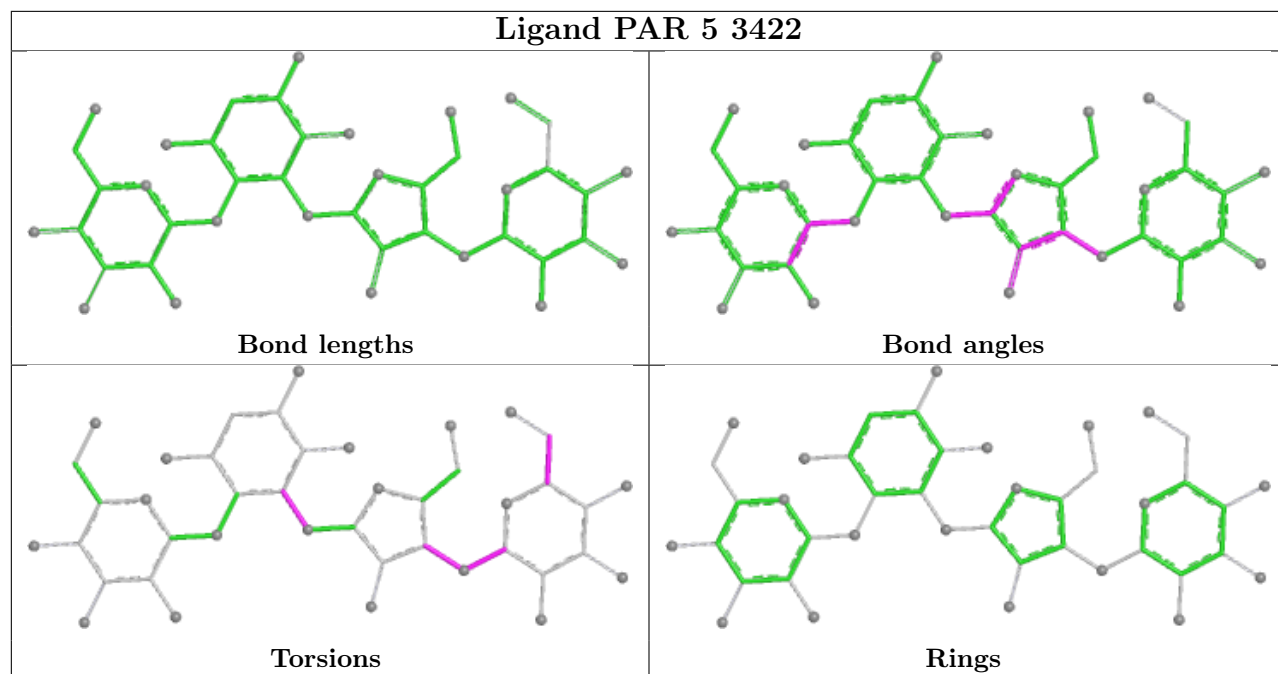
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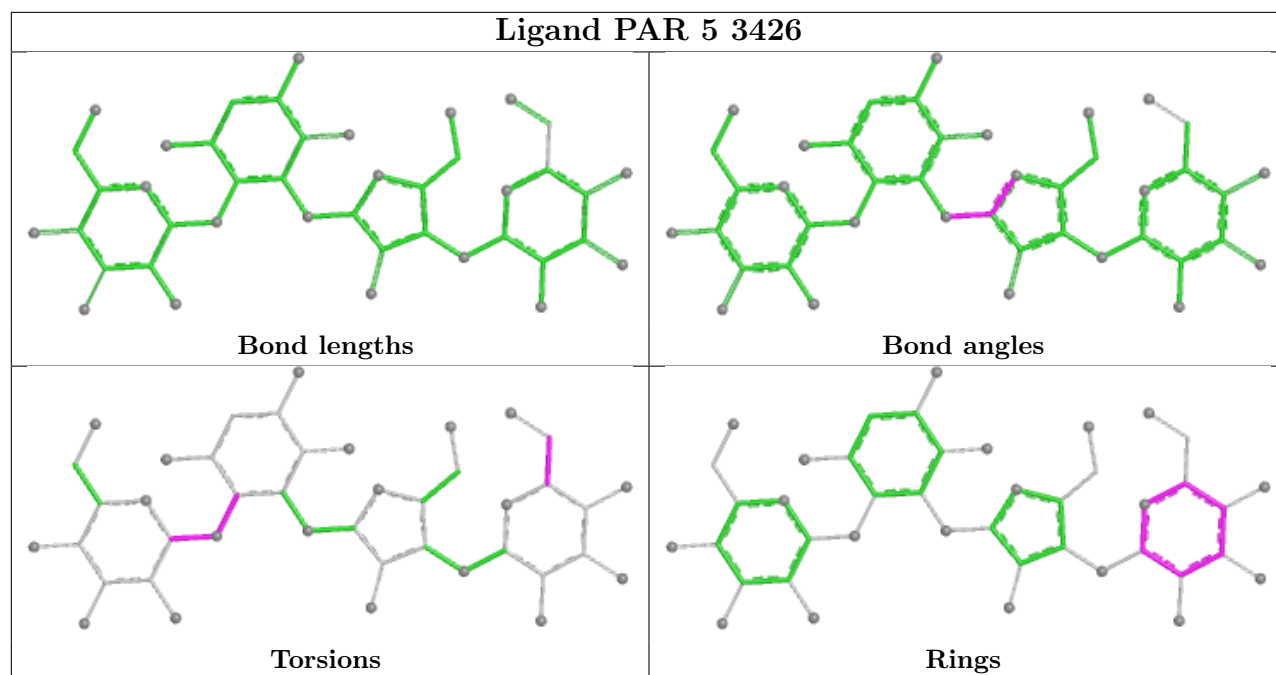
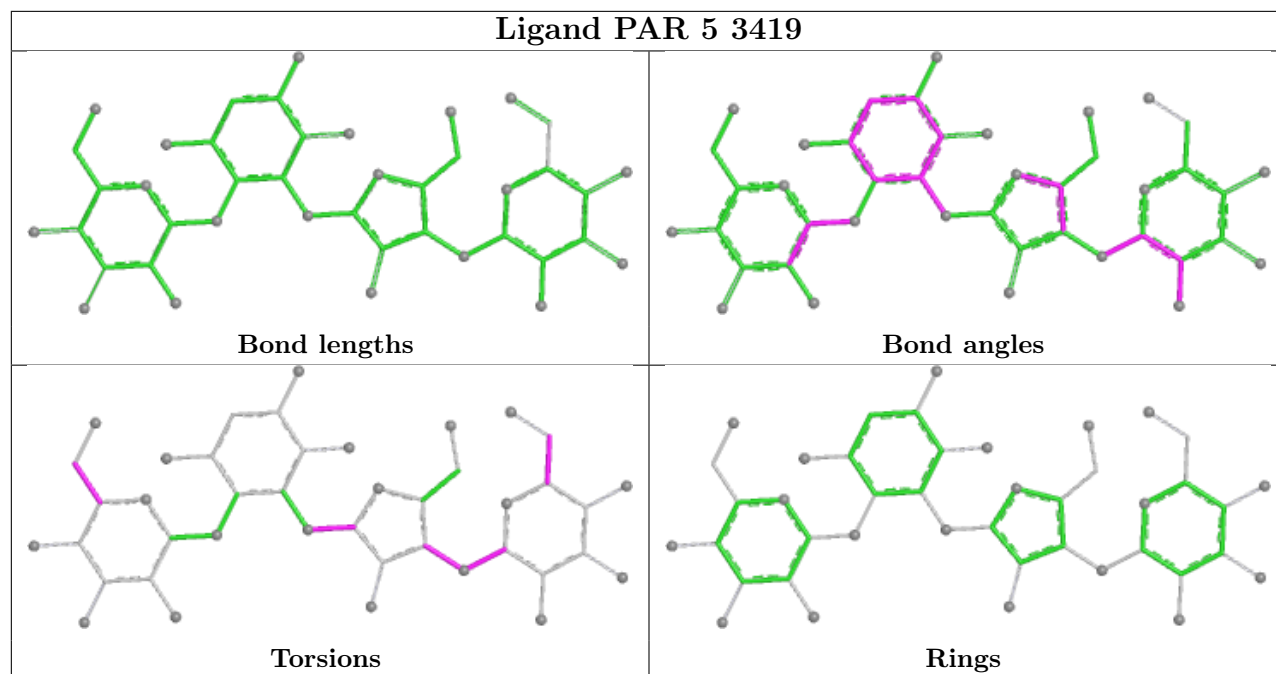


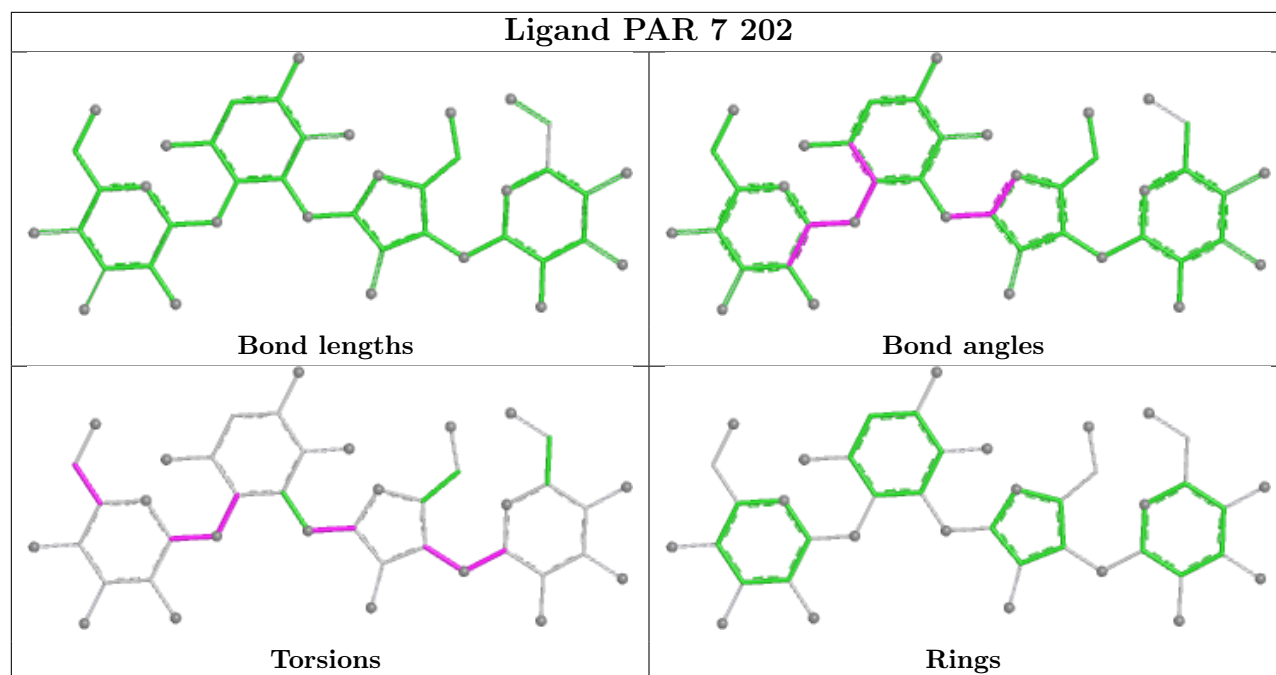
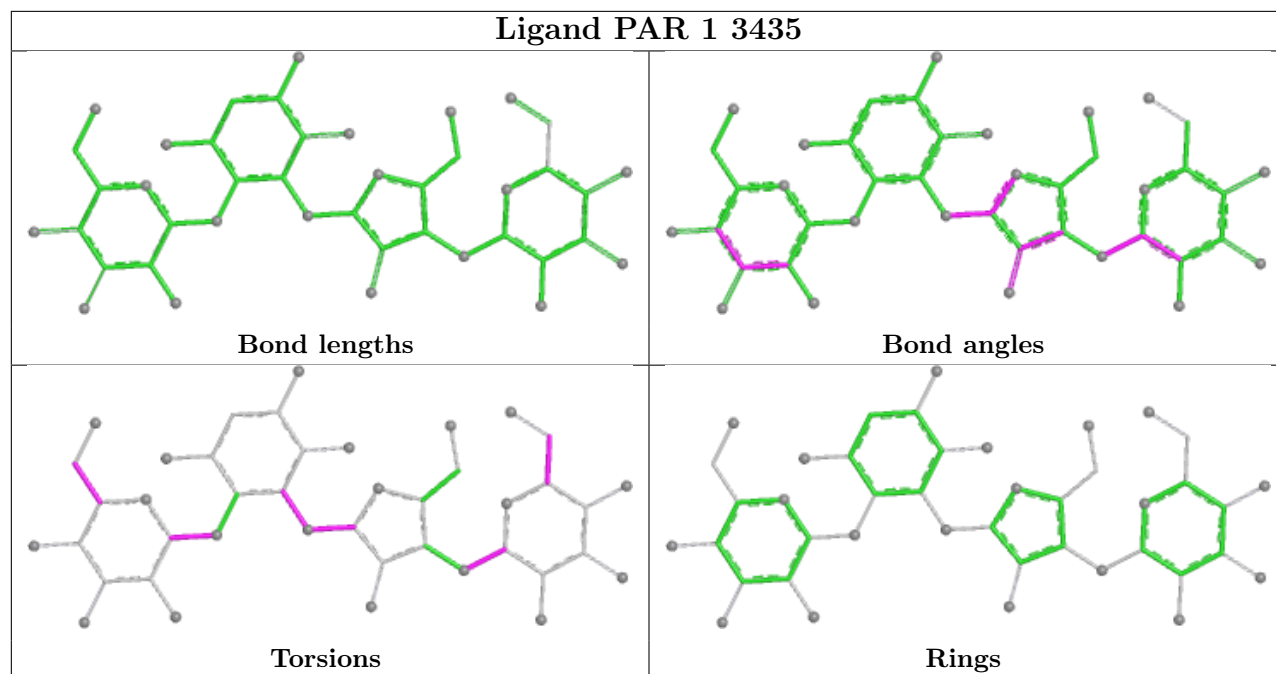
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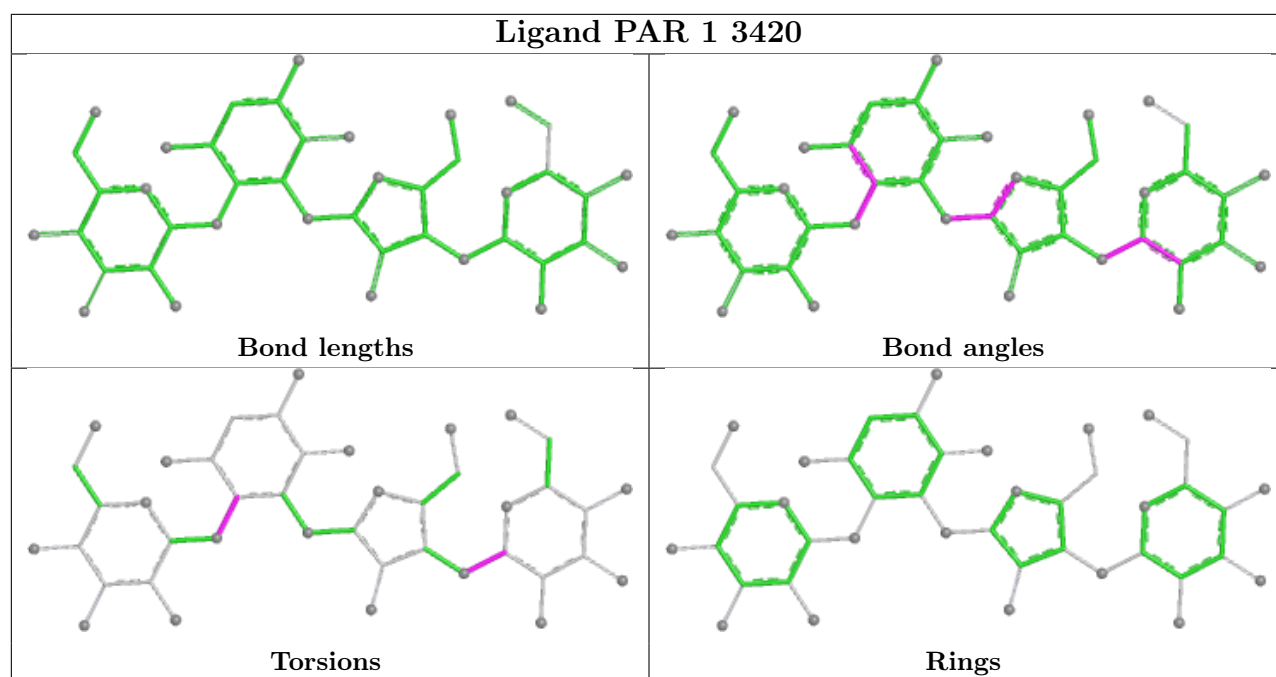
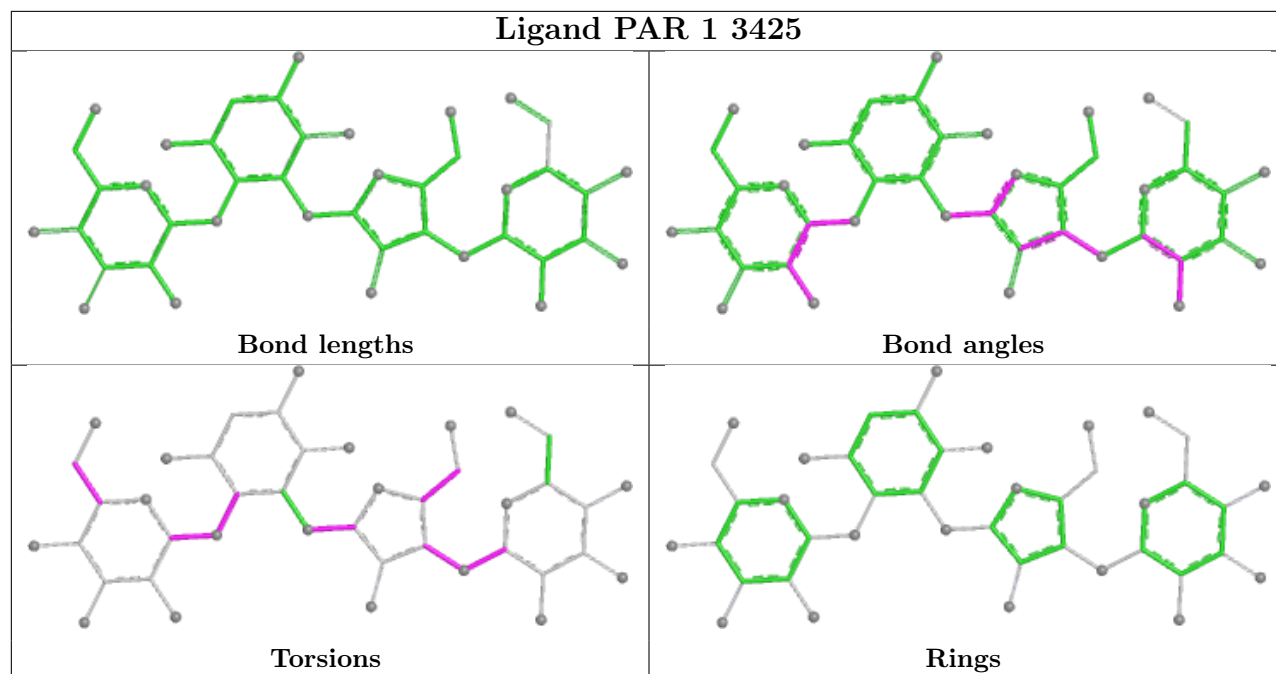


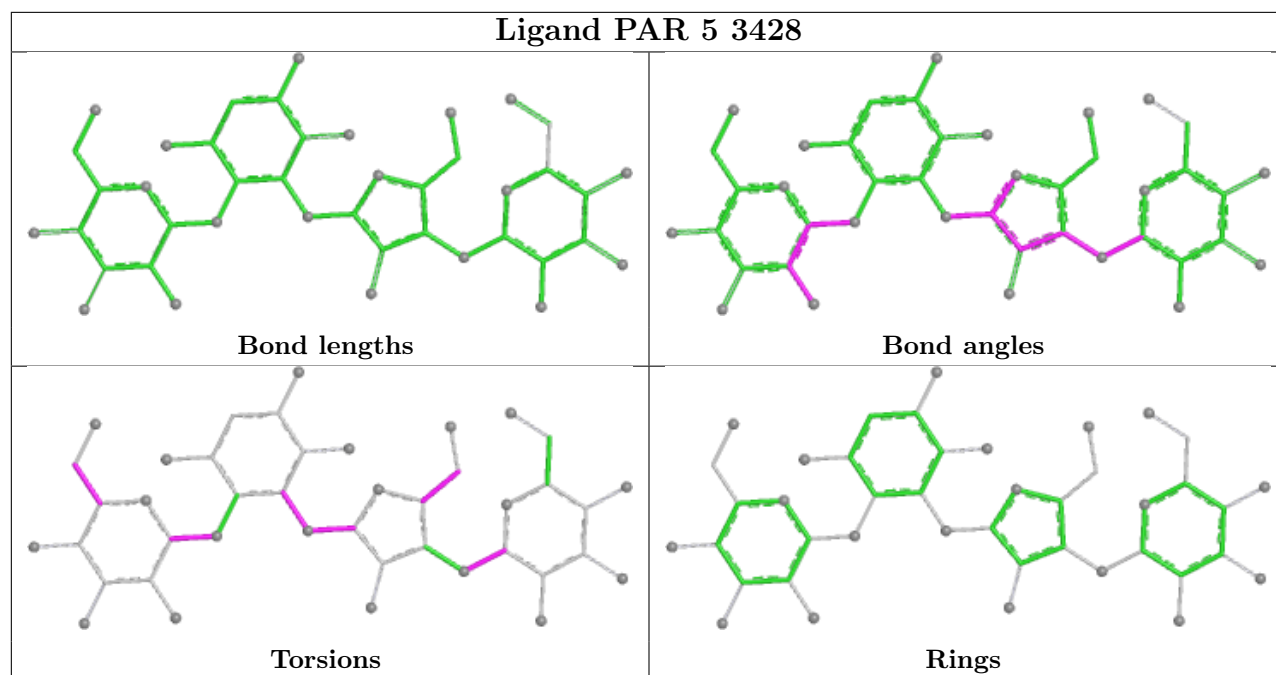
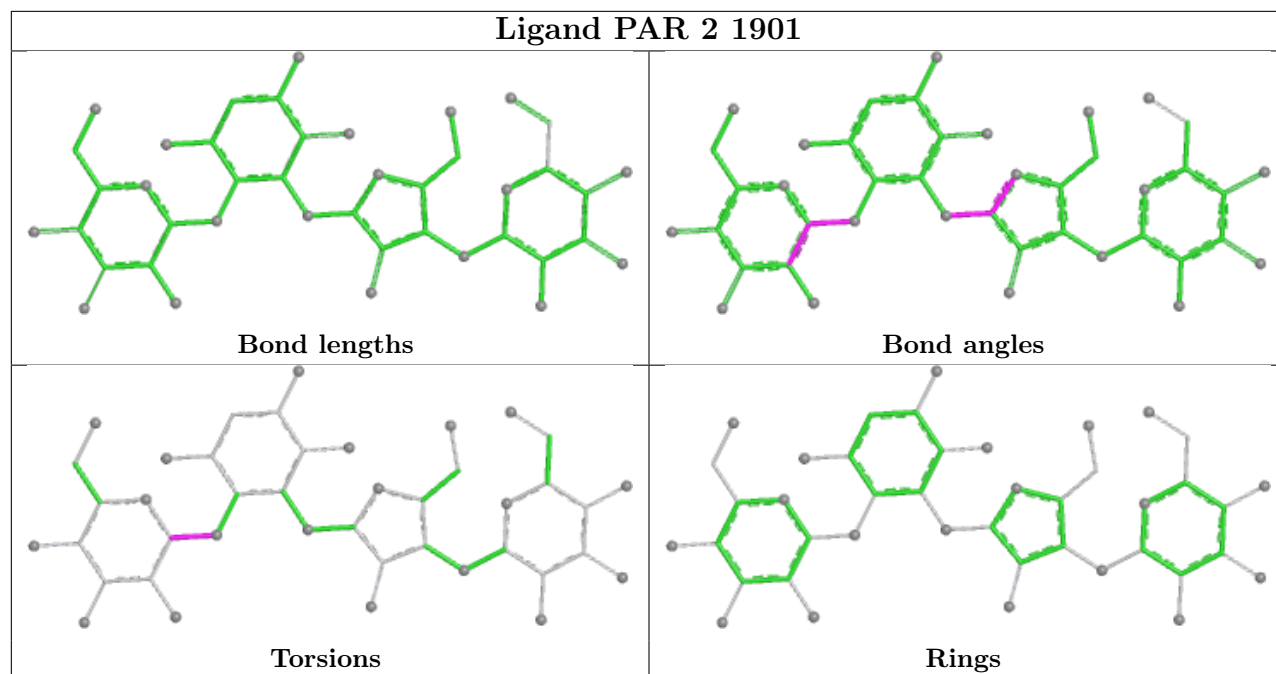


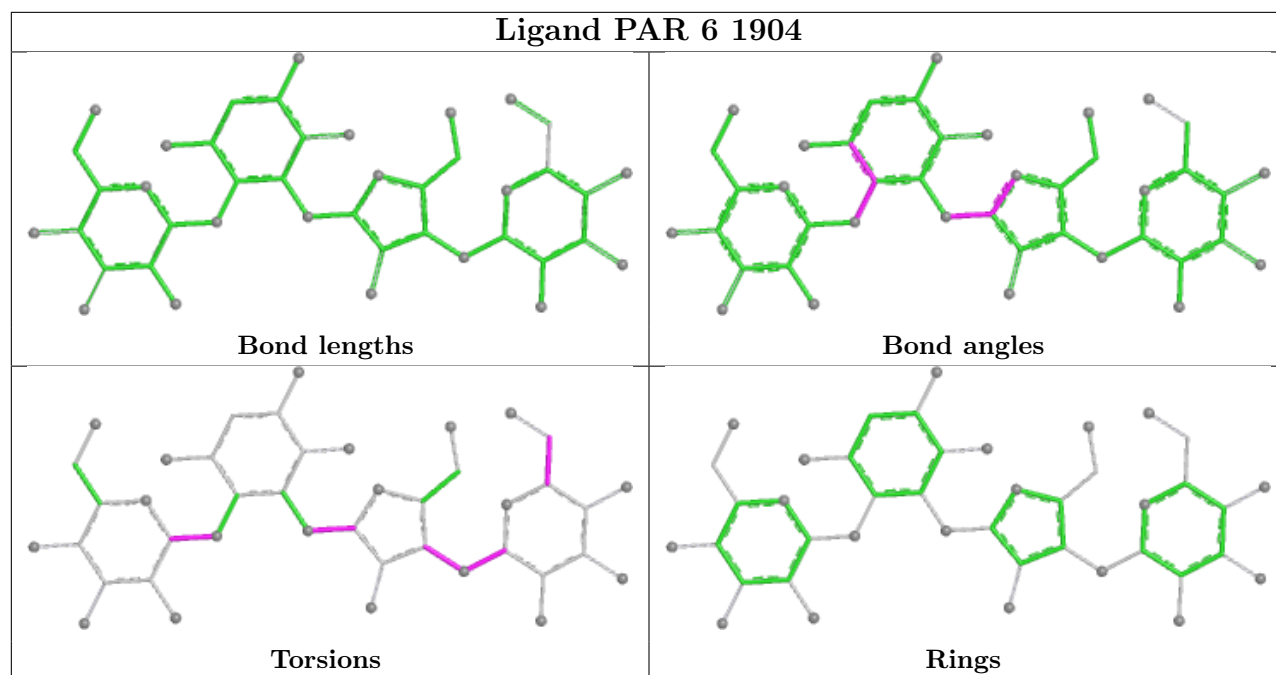
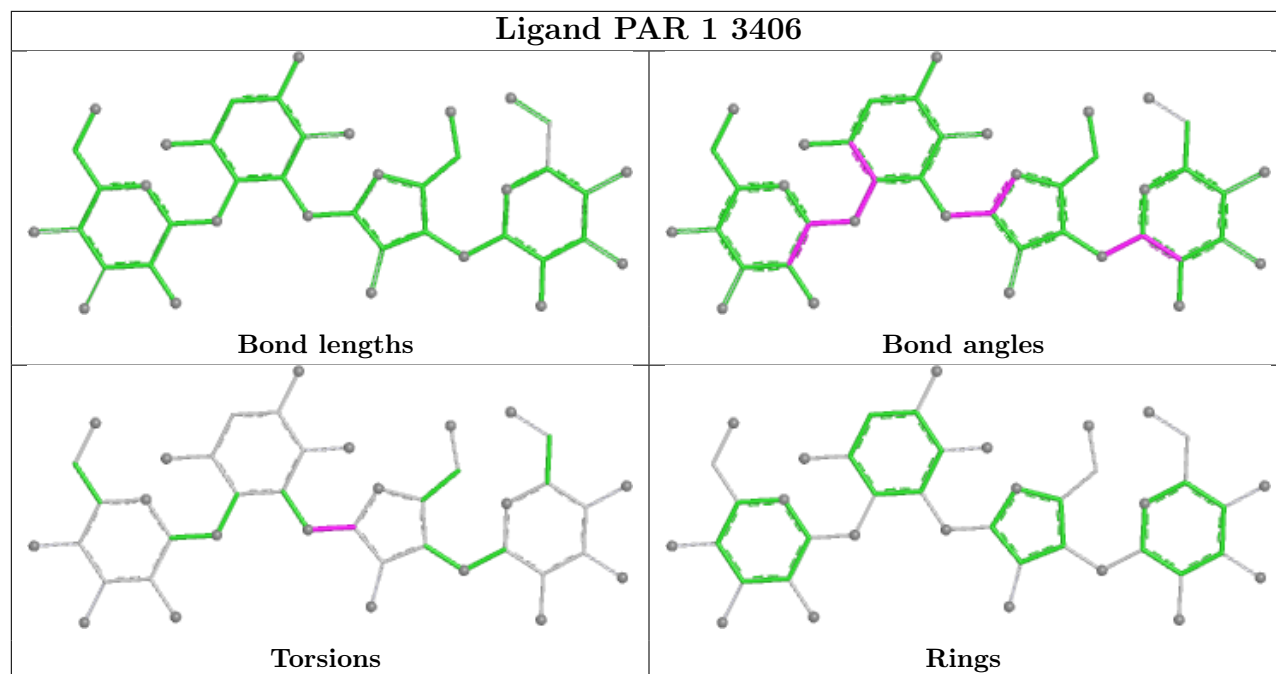


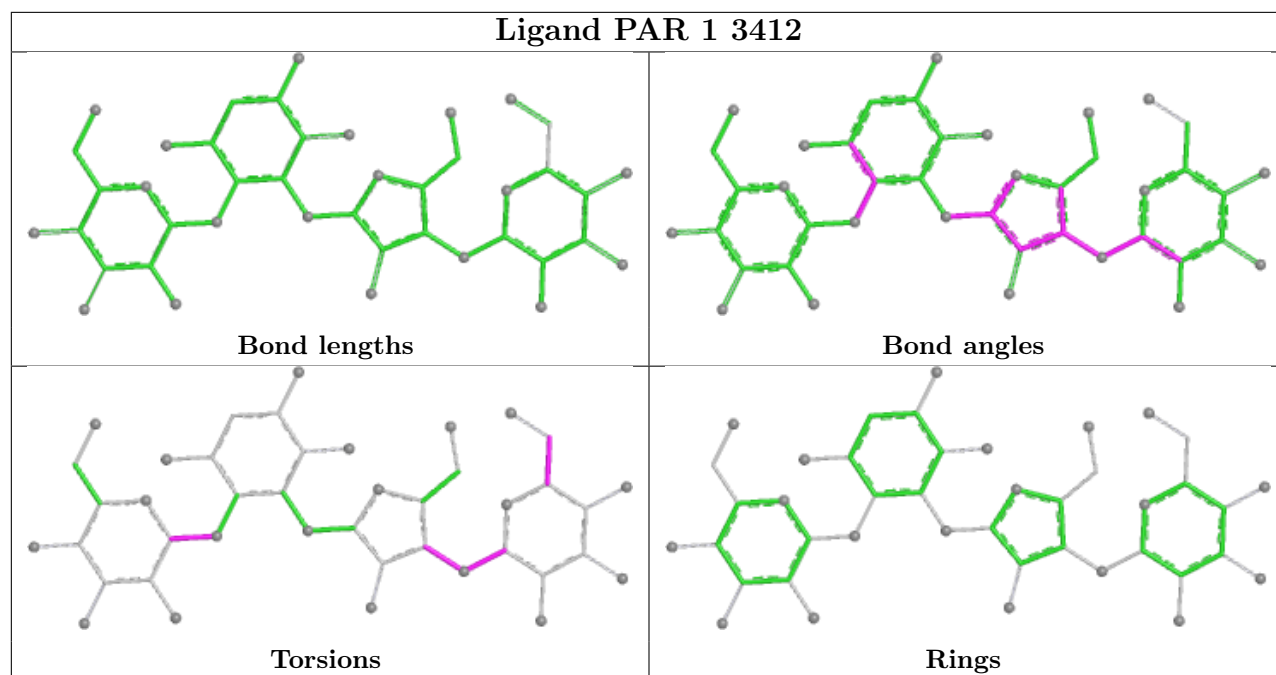
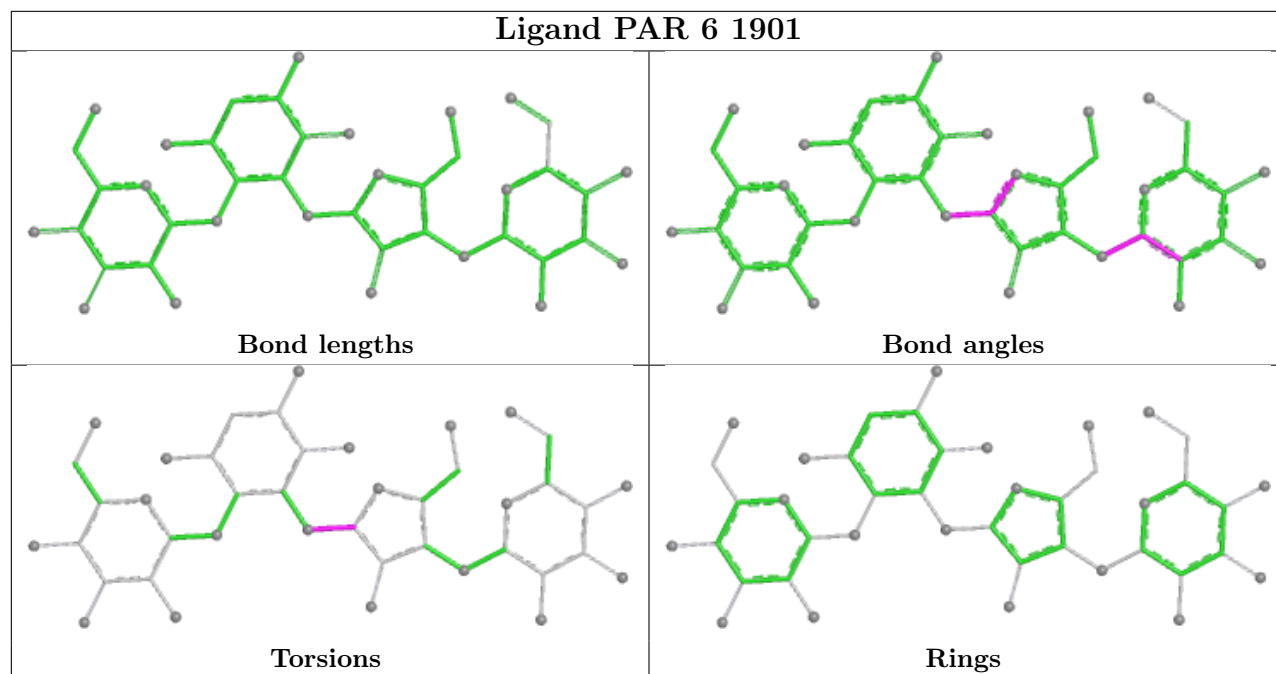


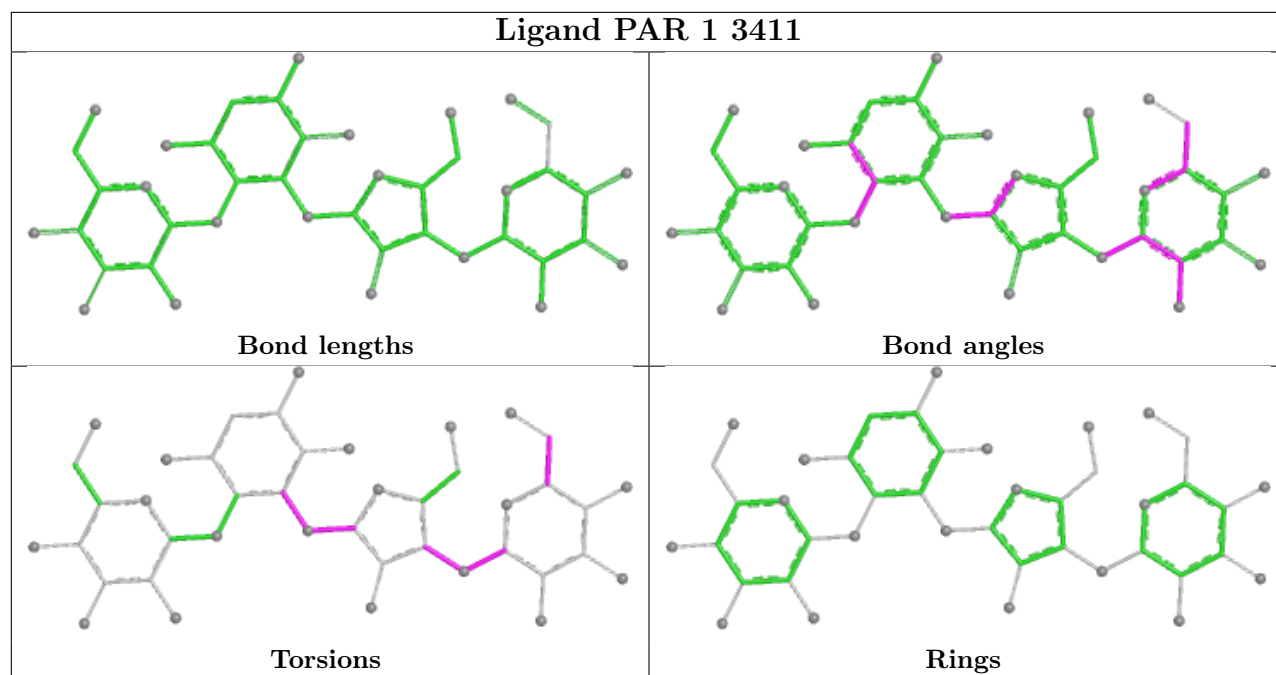
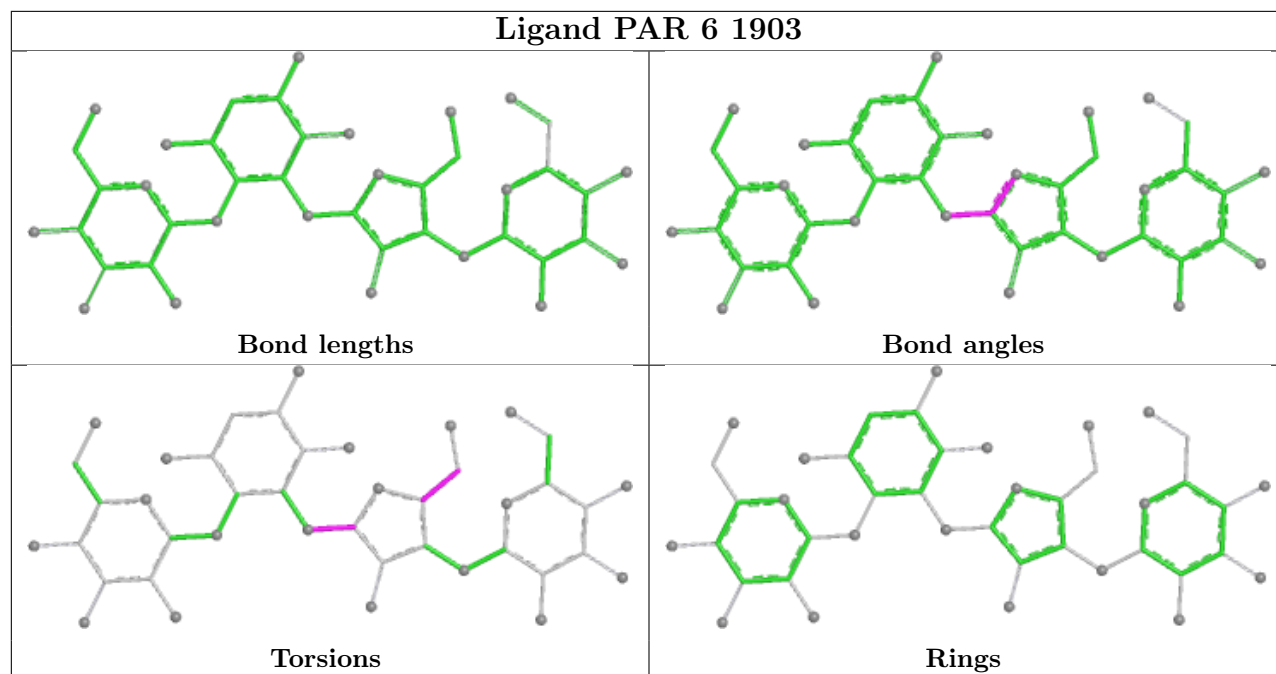


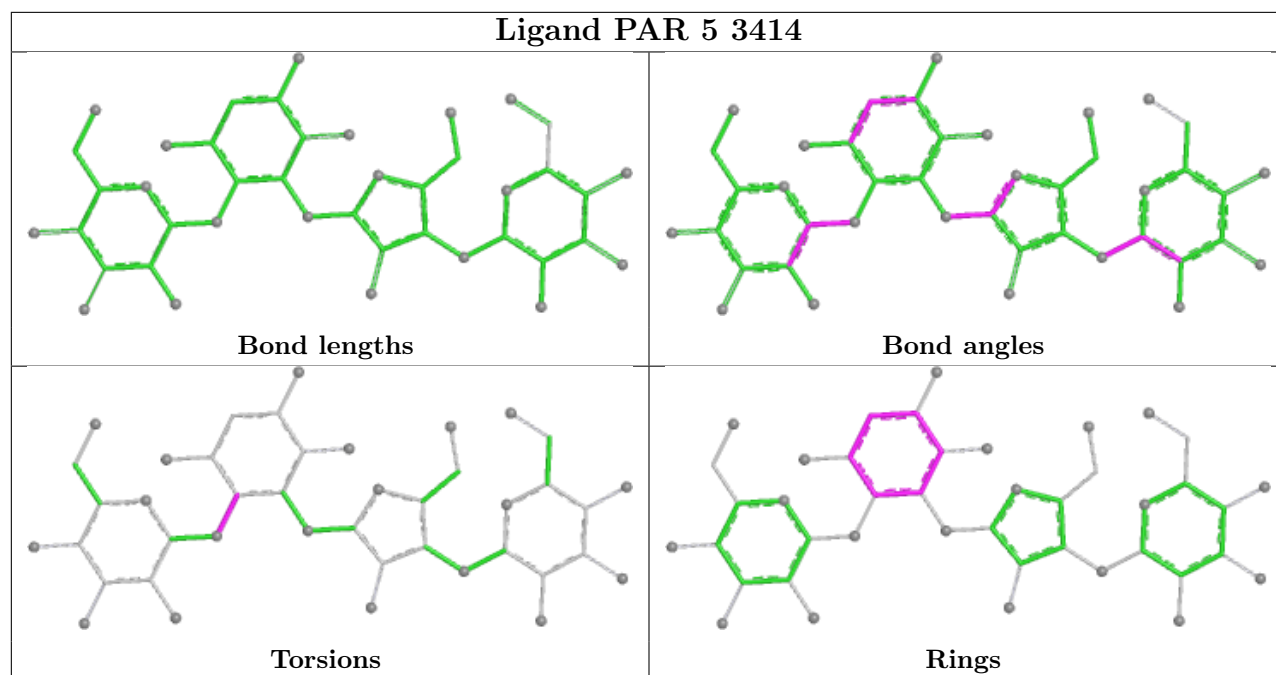
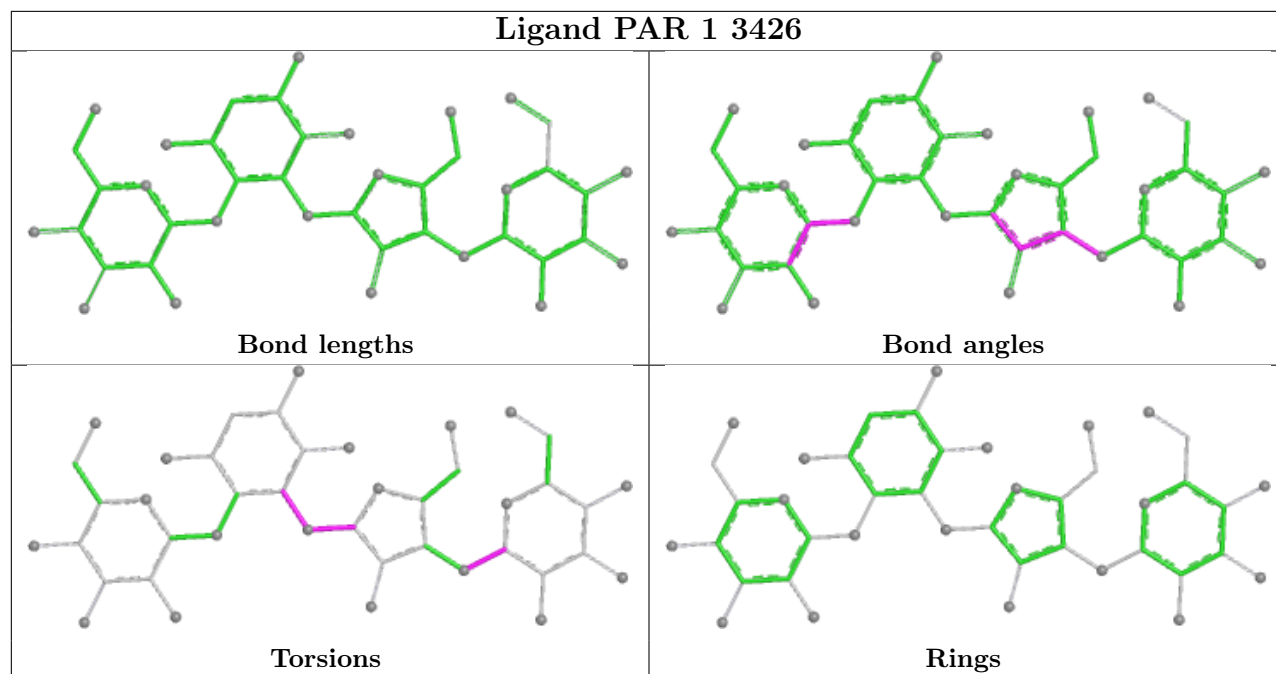


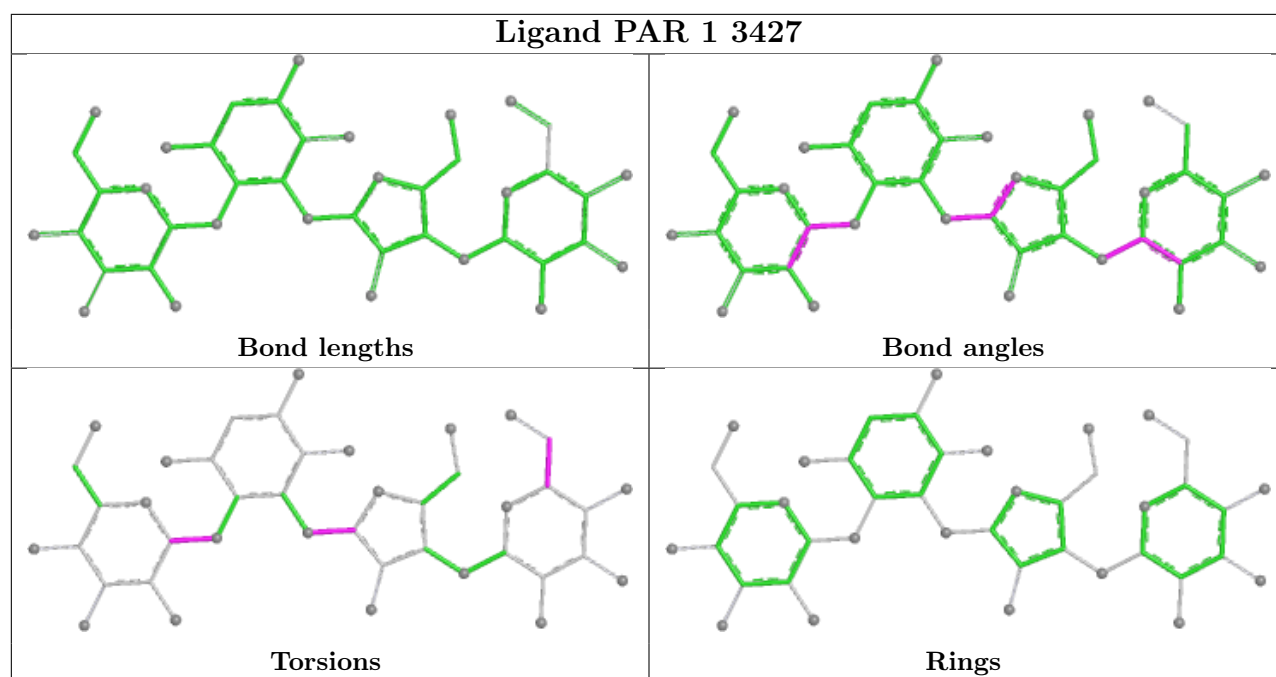
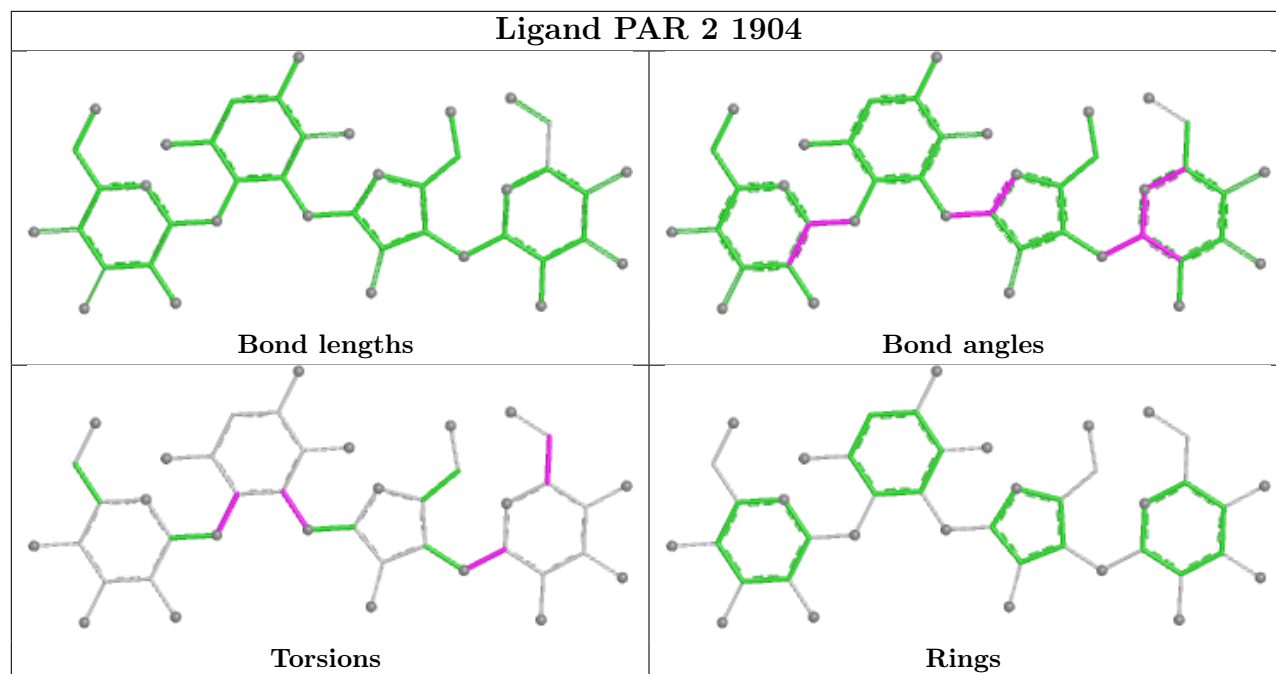


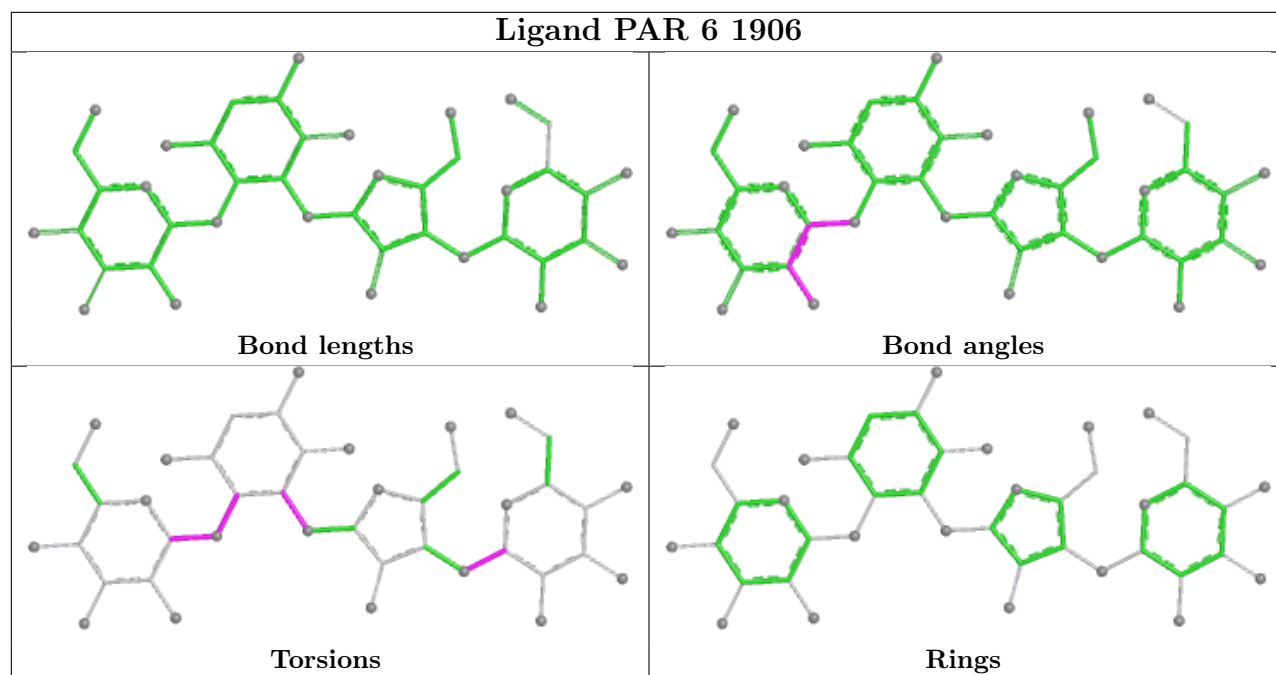
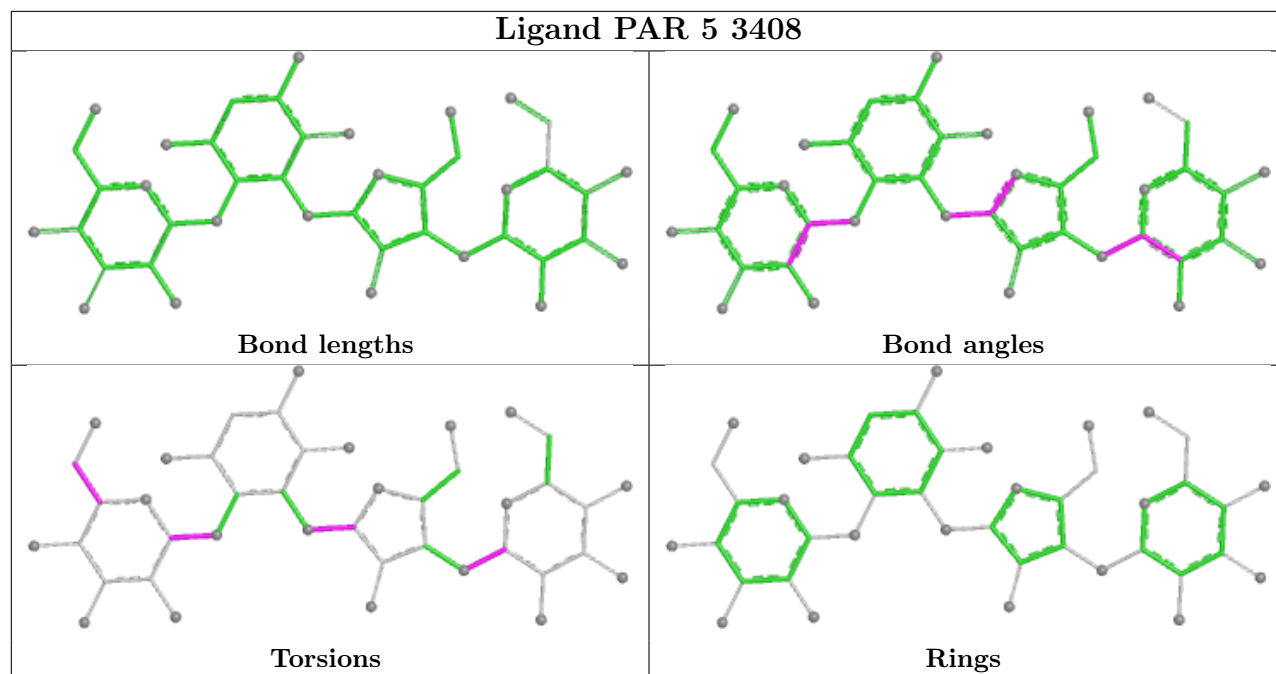


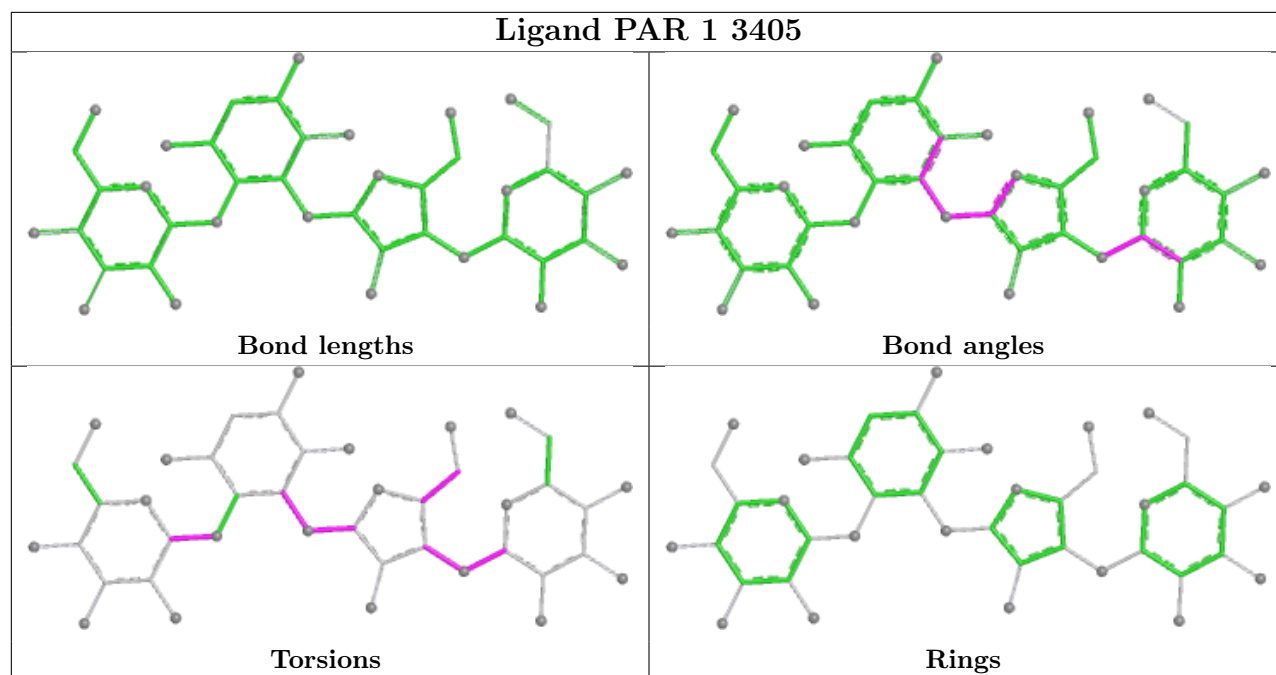
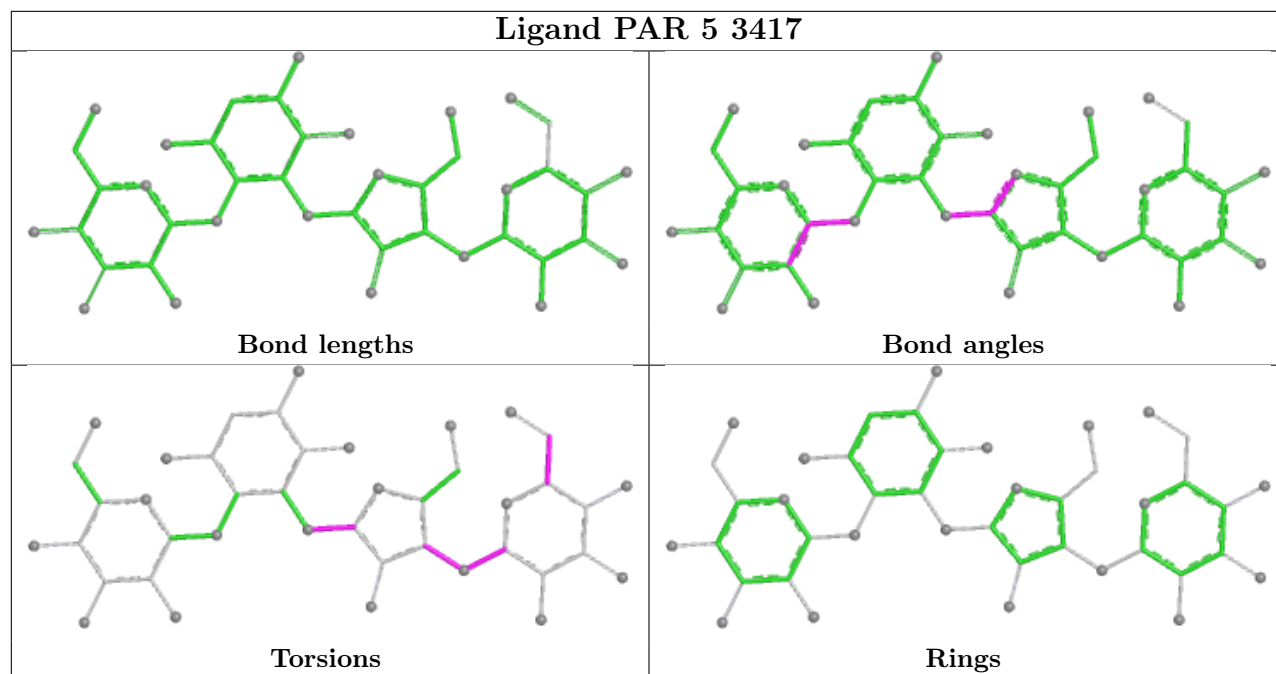


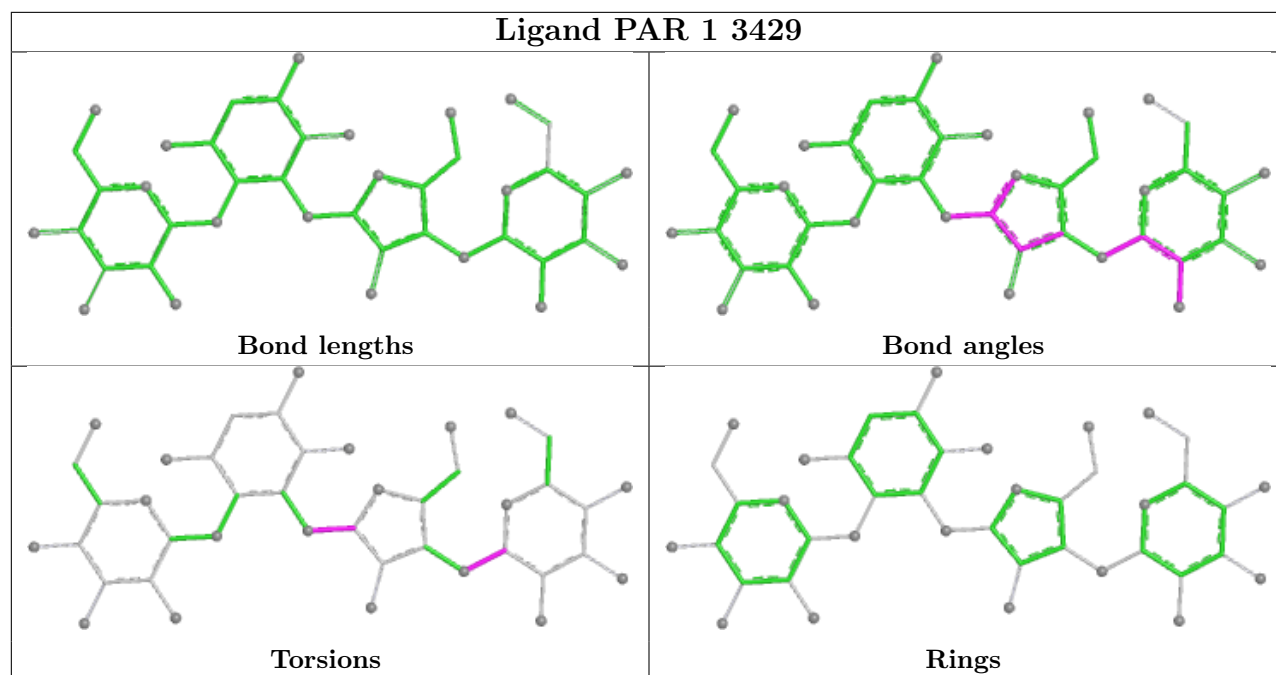
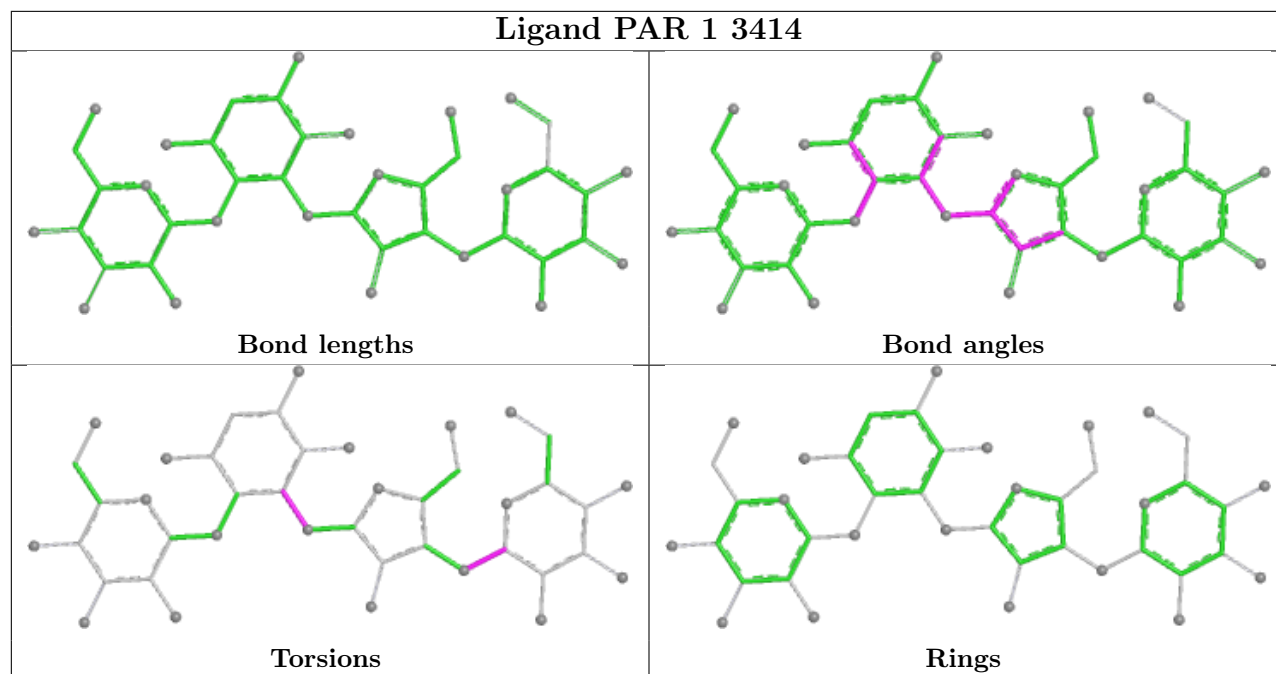


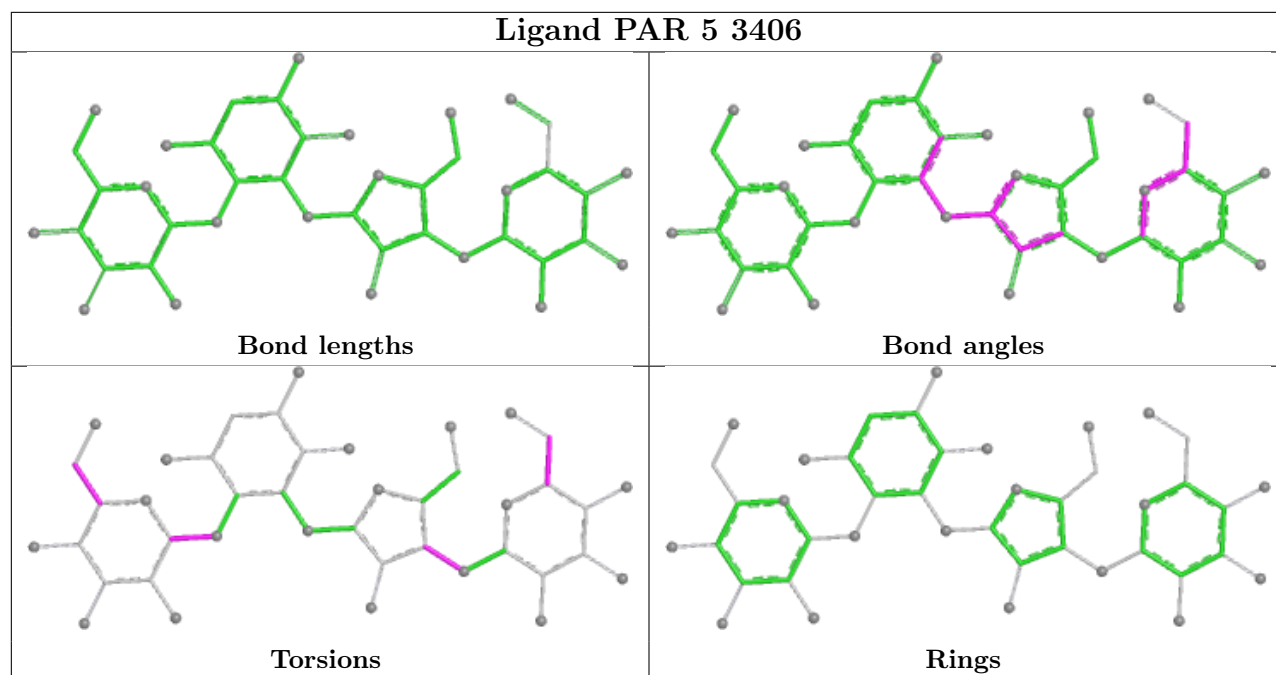
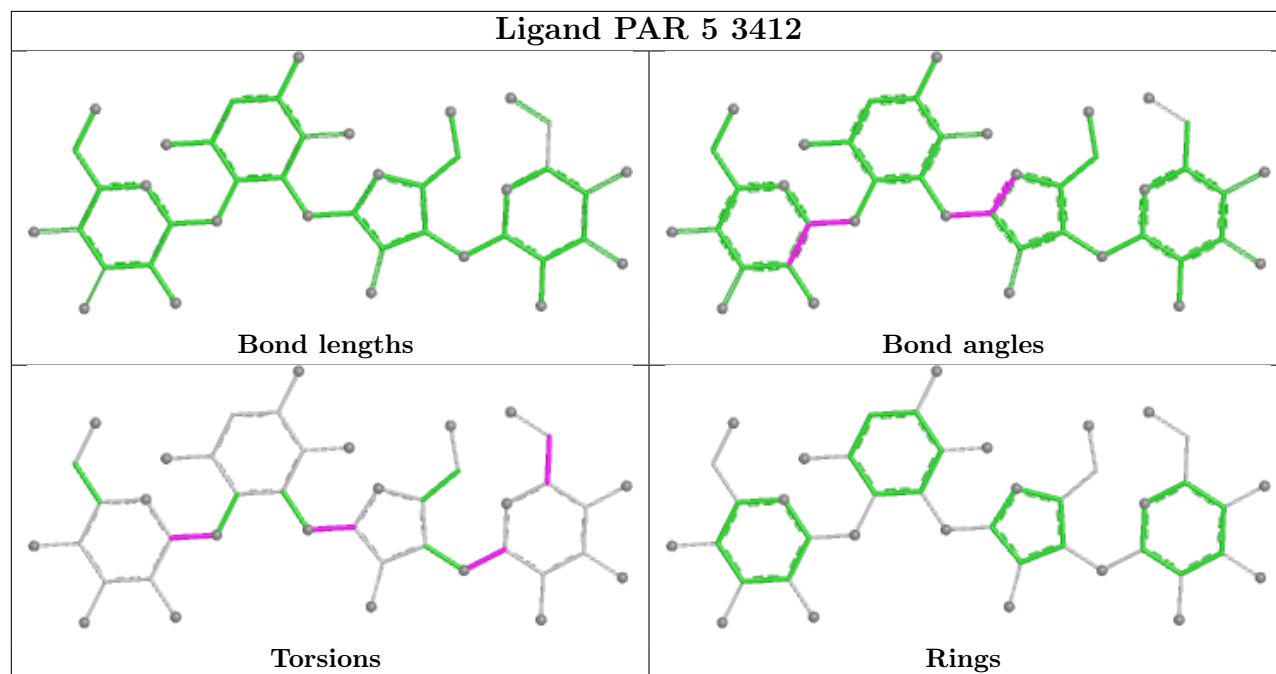


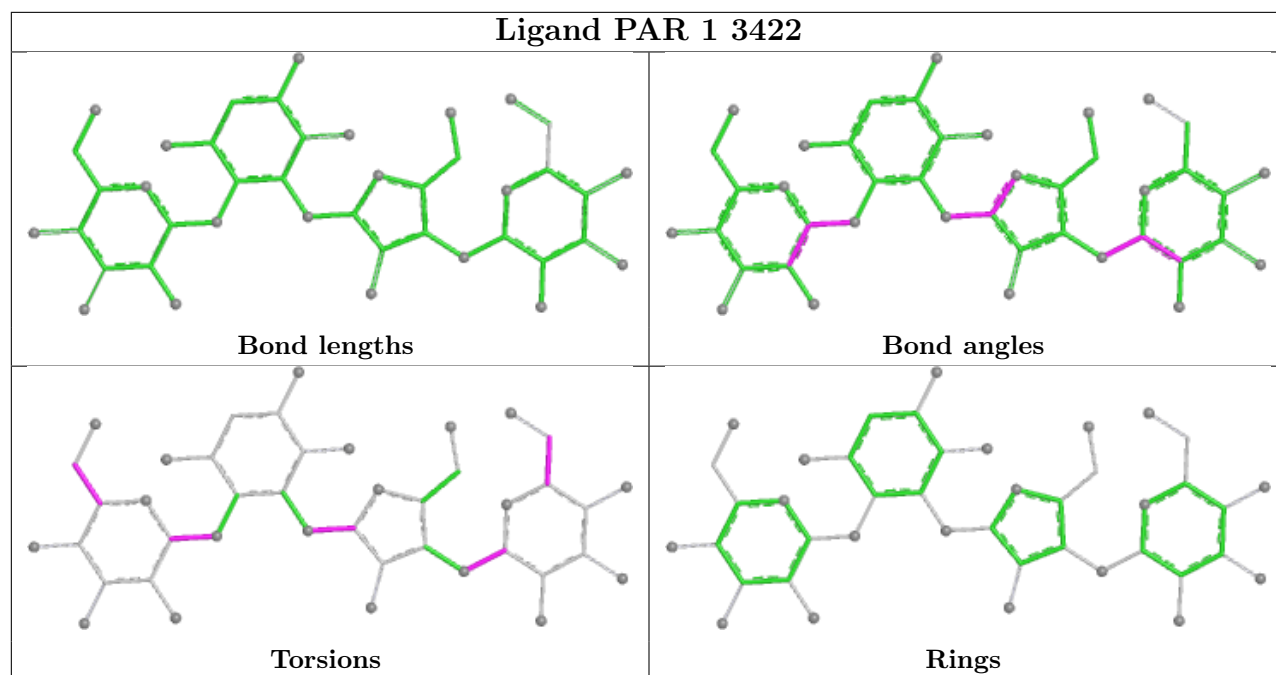
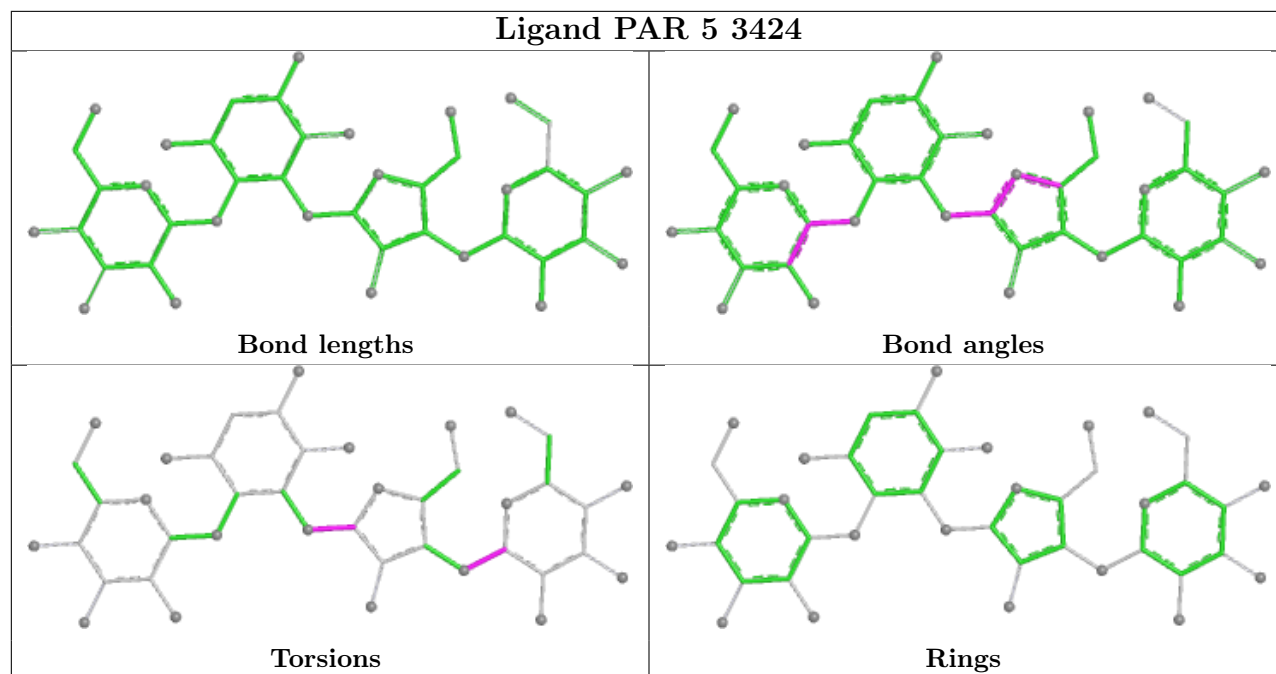


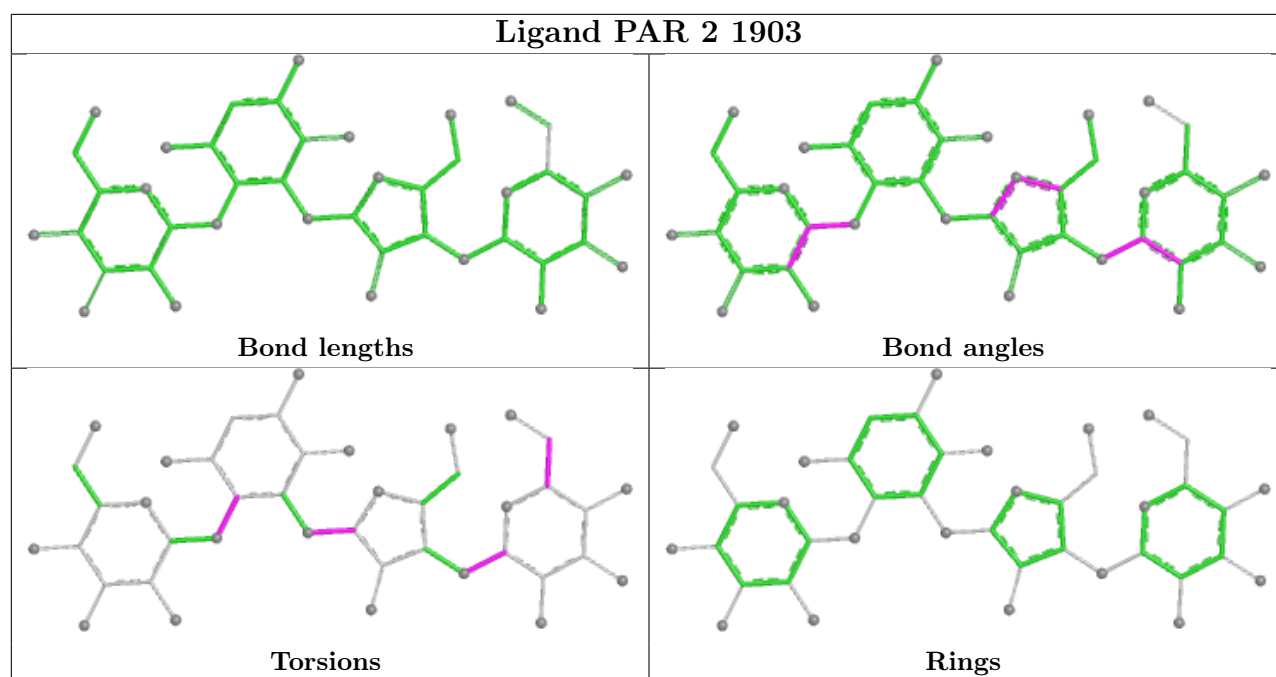
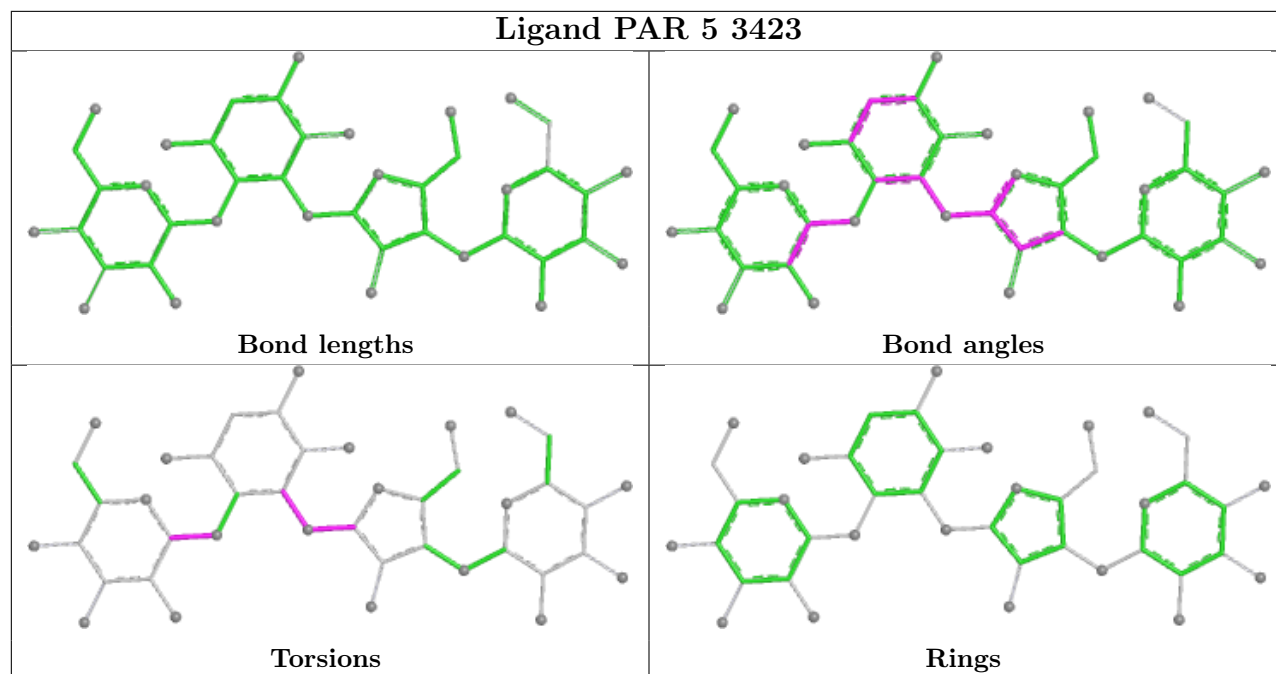




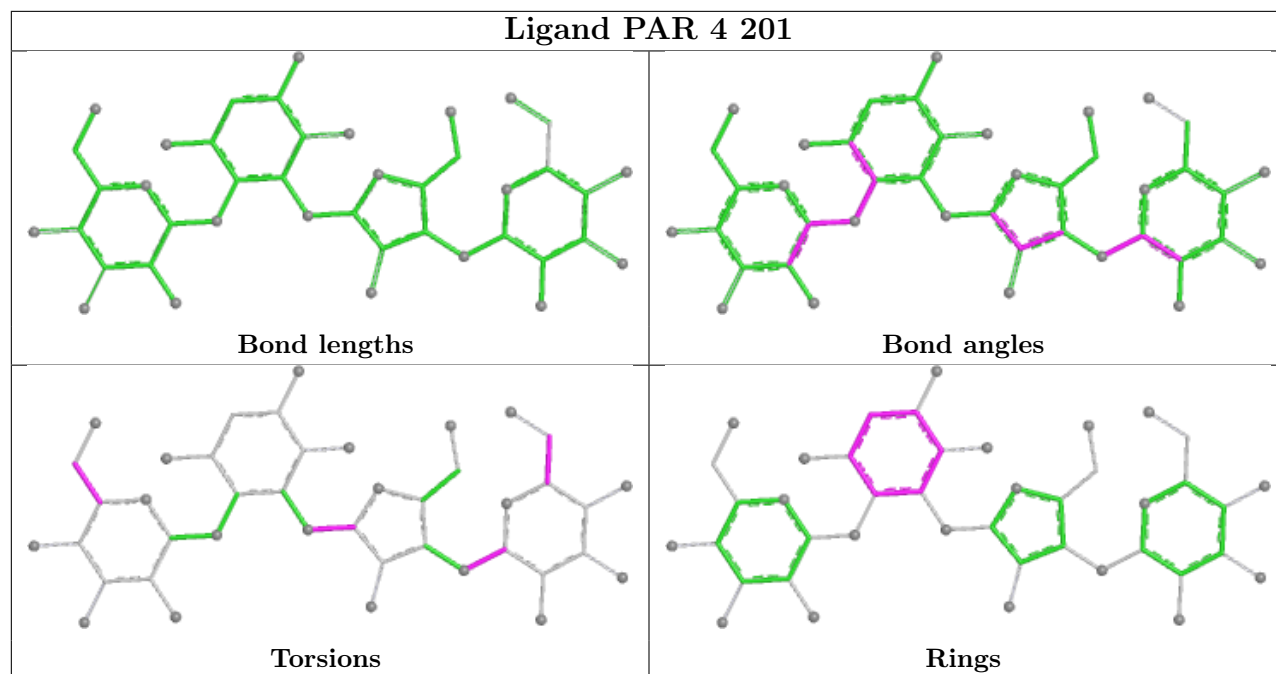




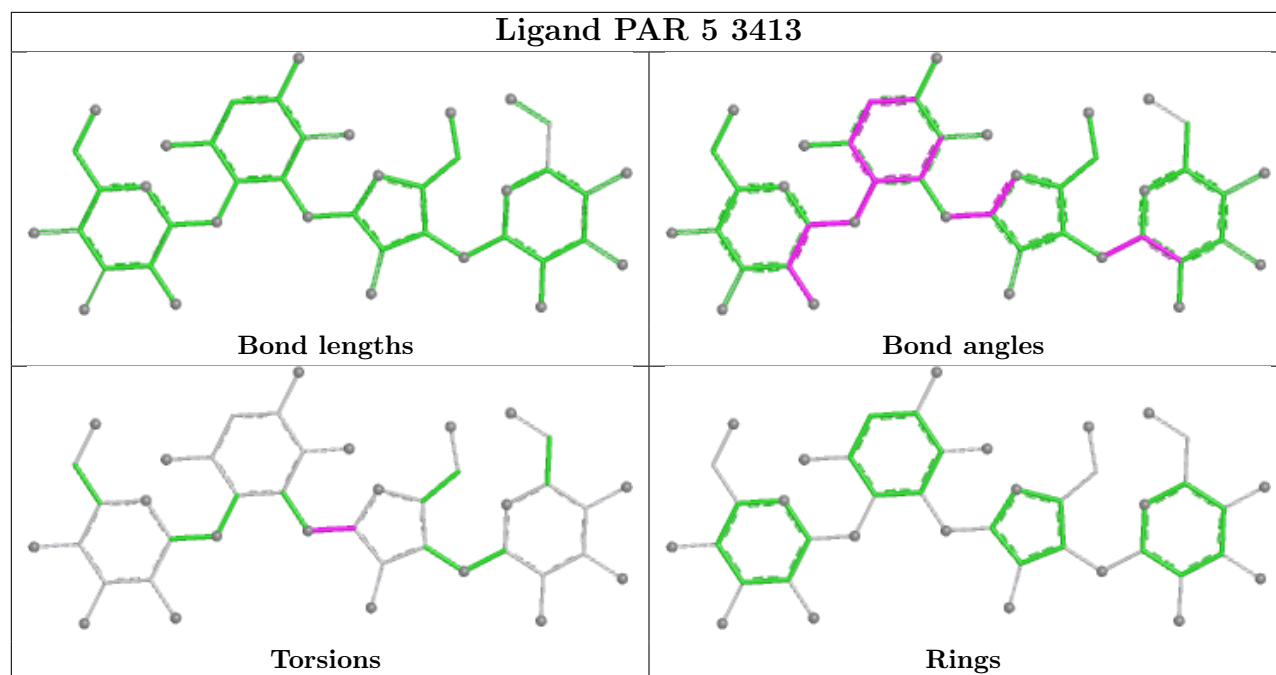




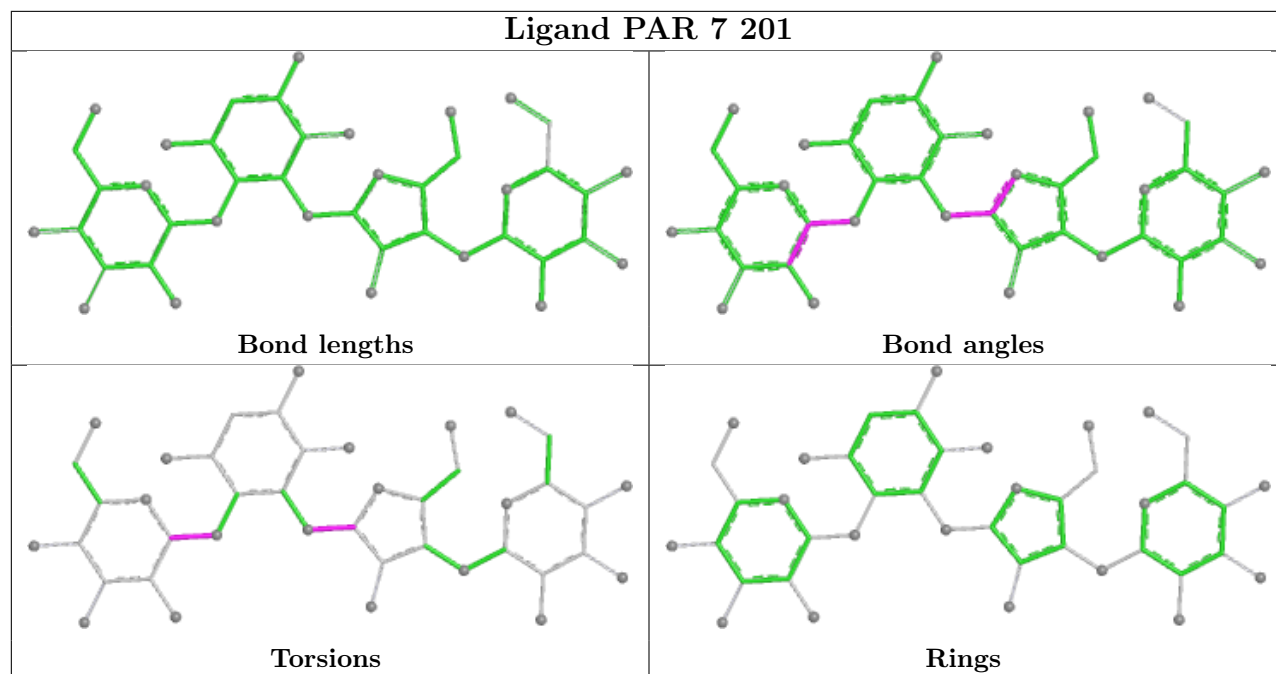
Ligand PAR 4 201



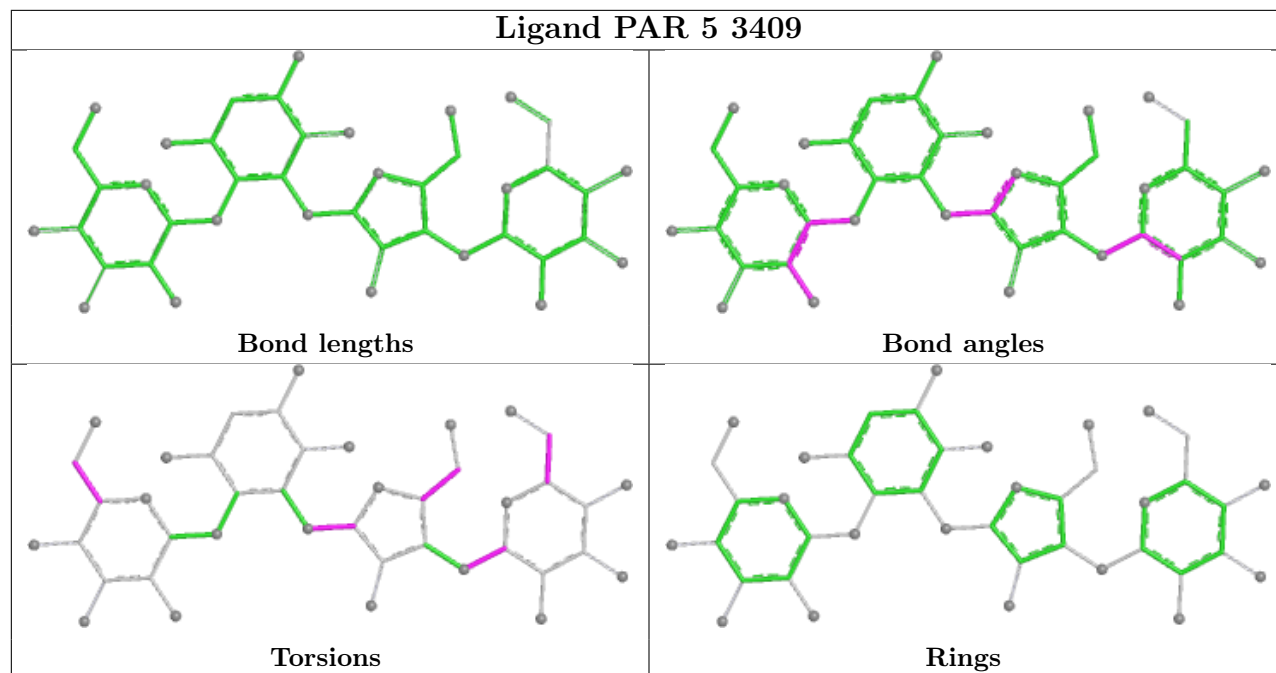
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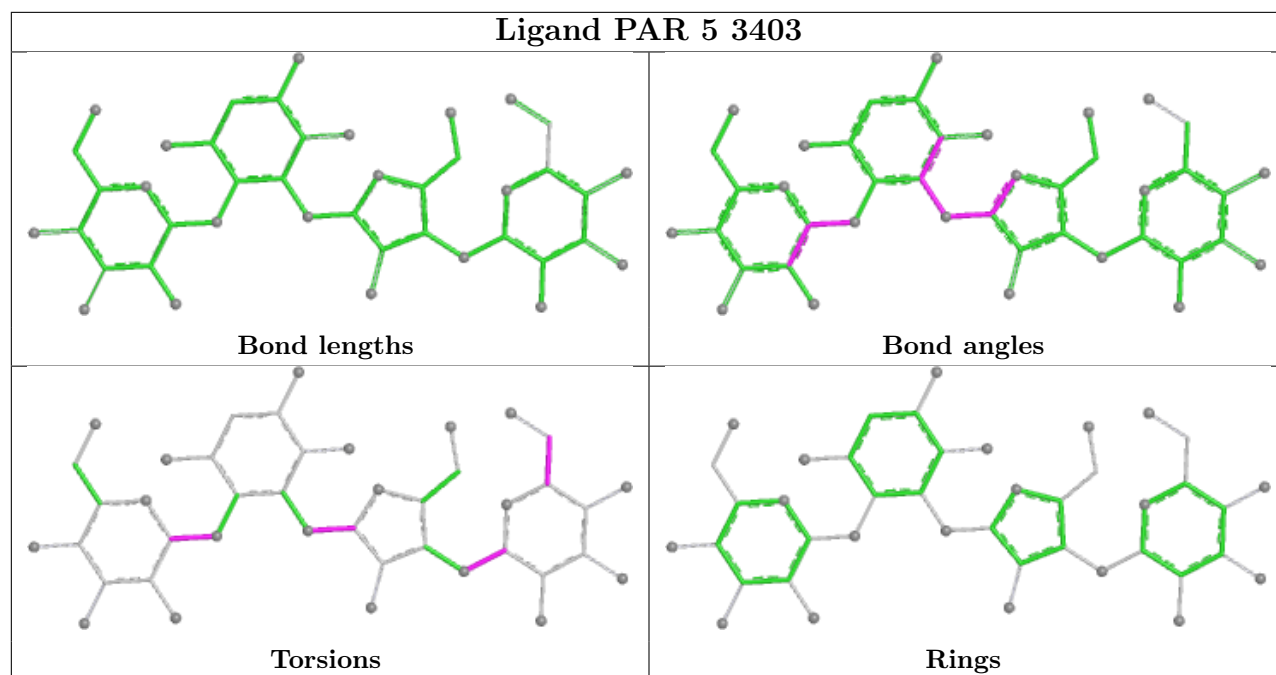
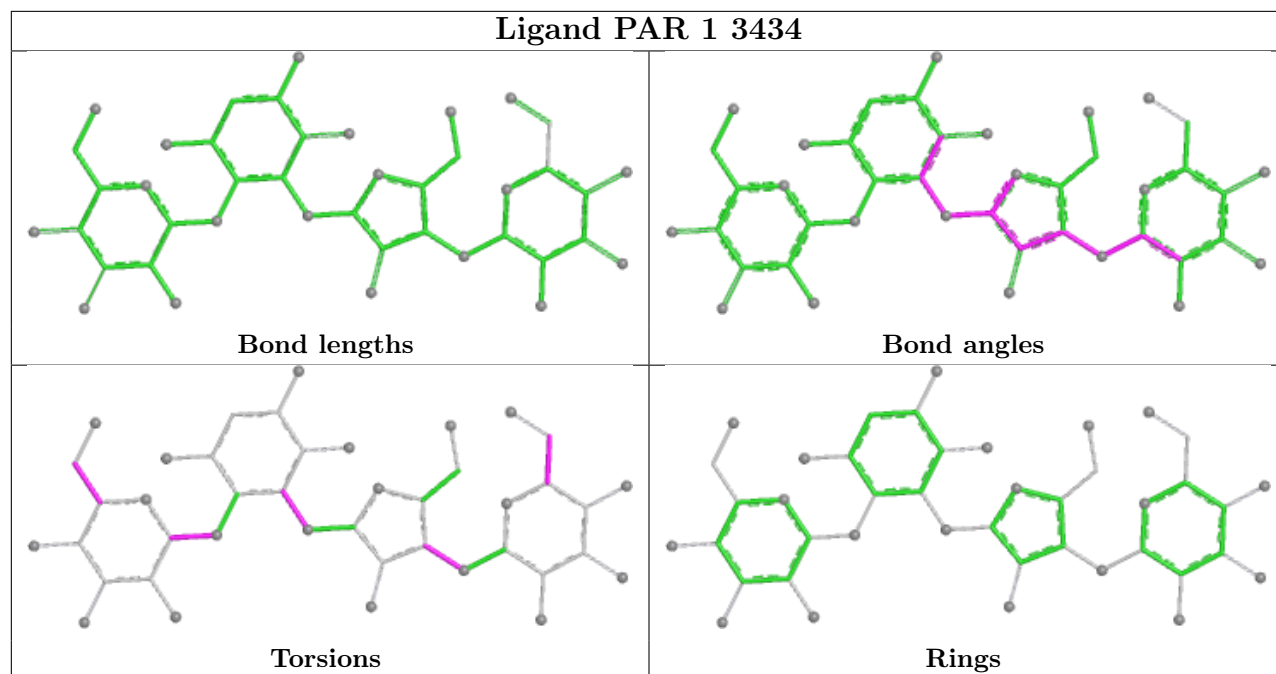


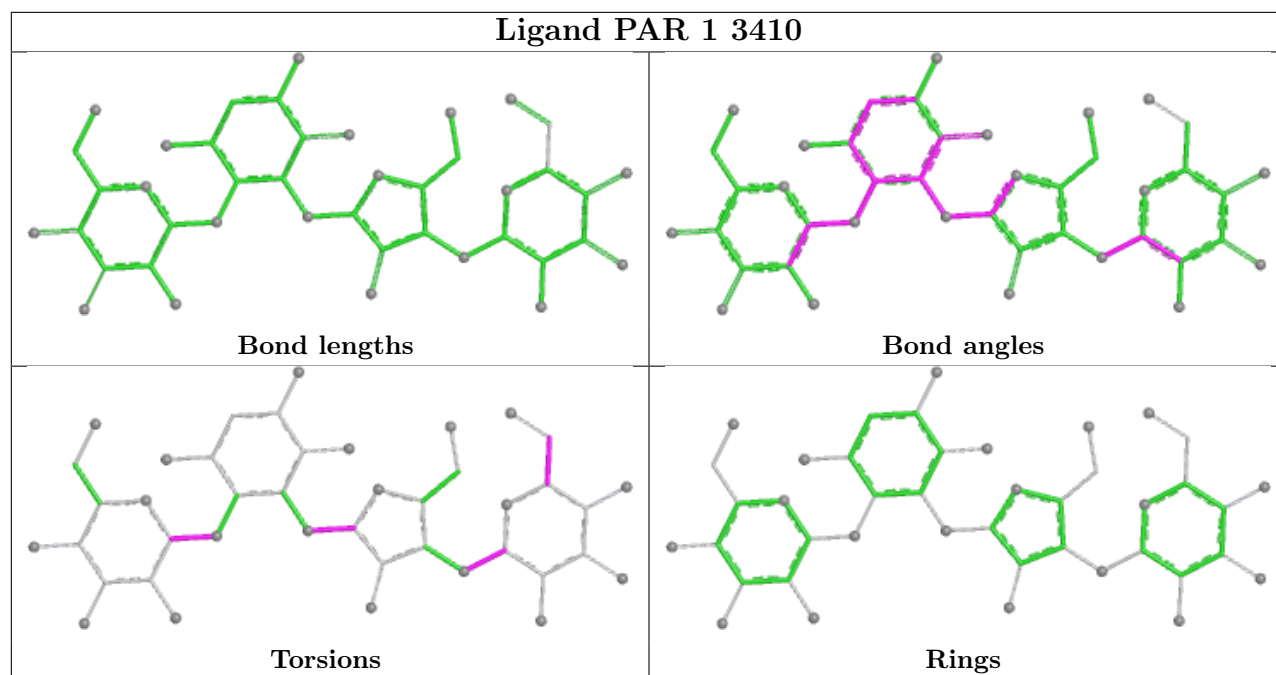
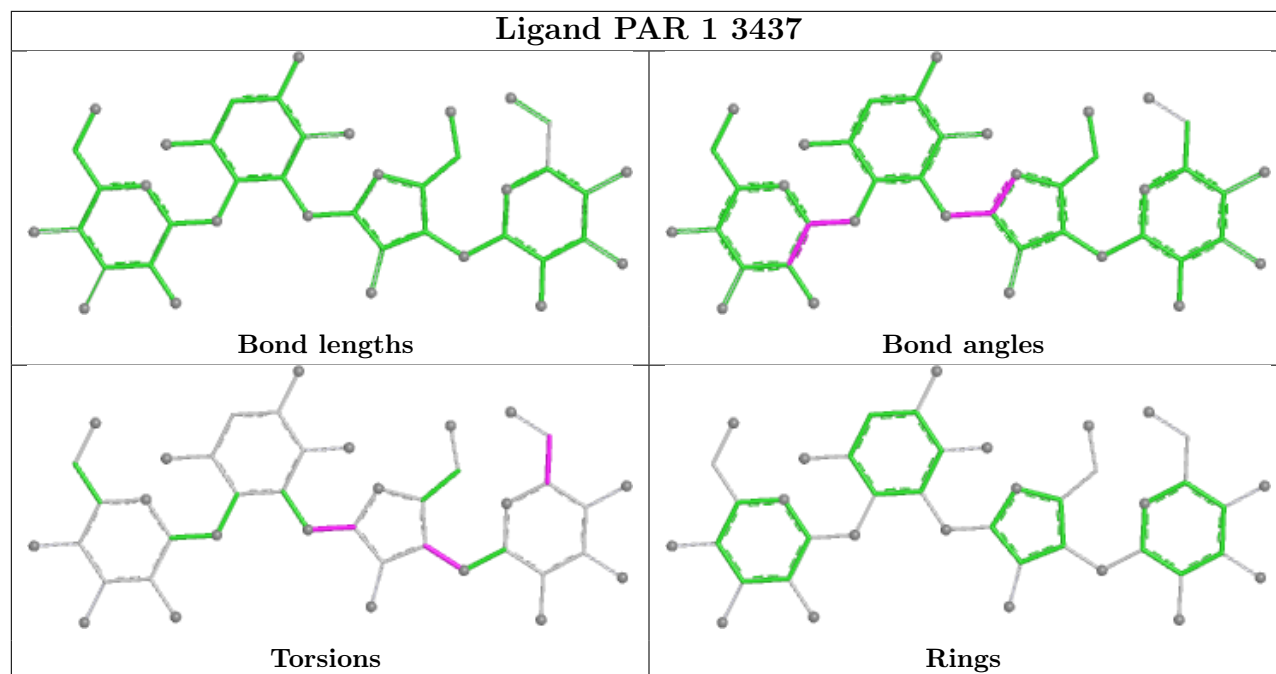
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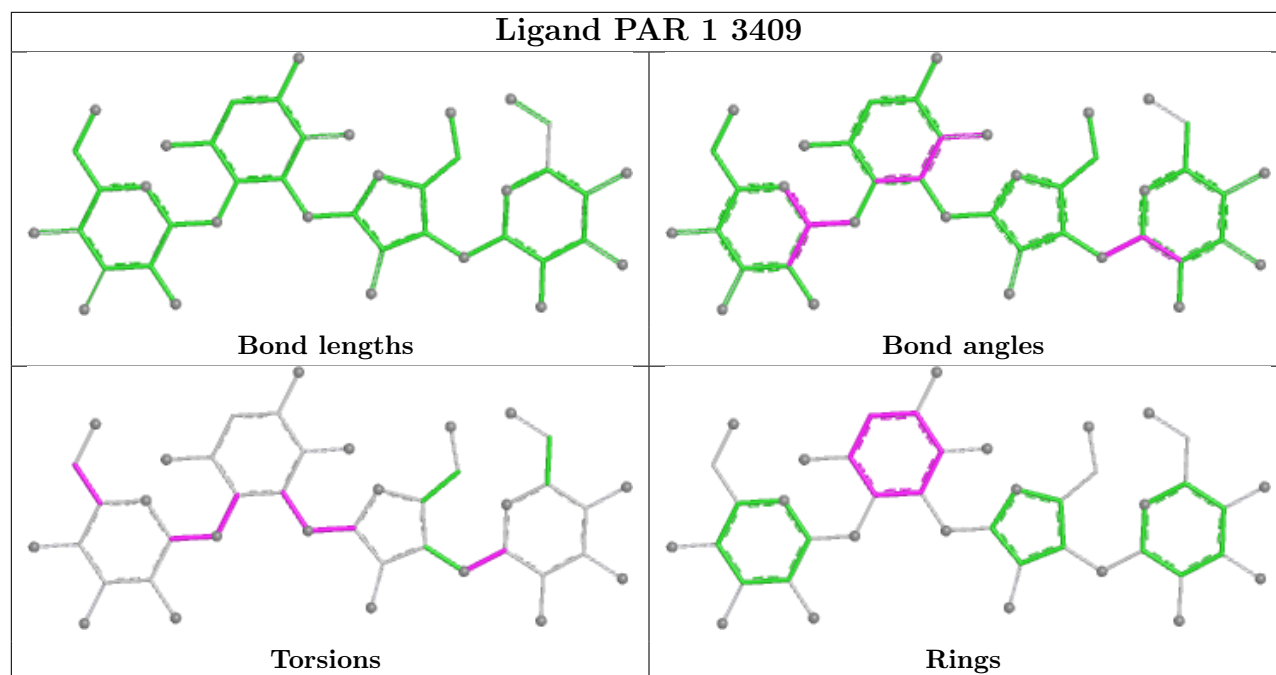
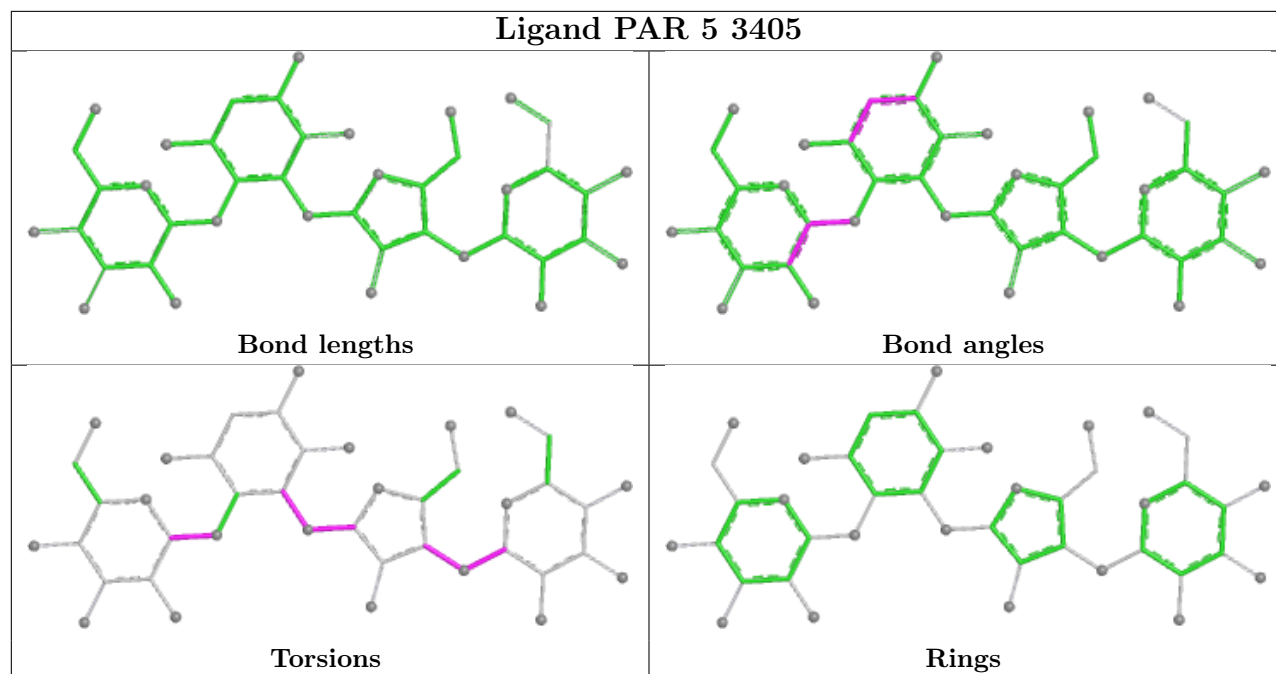


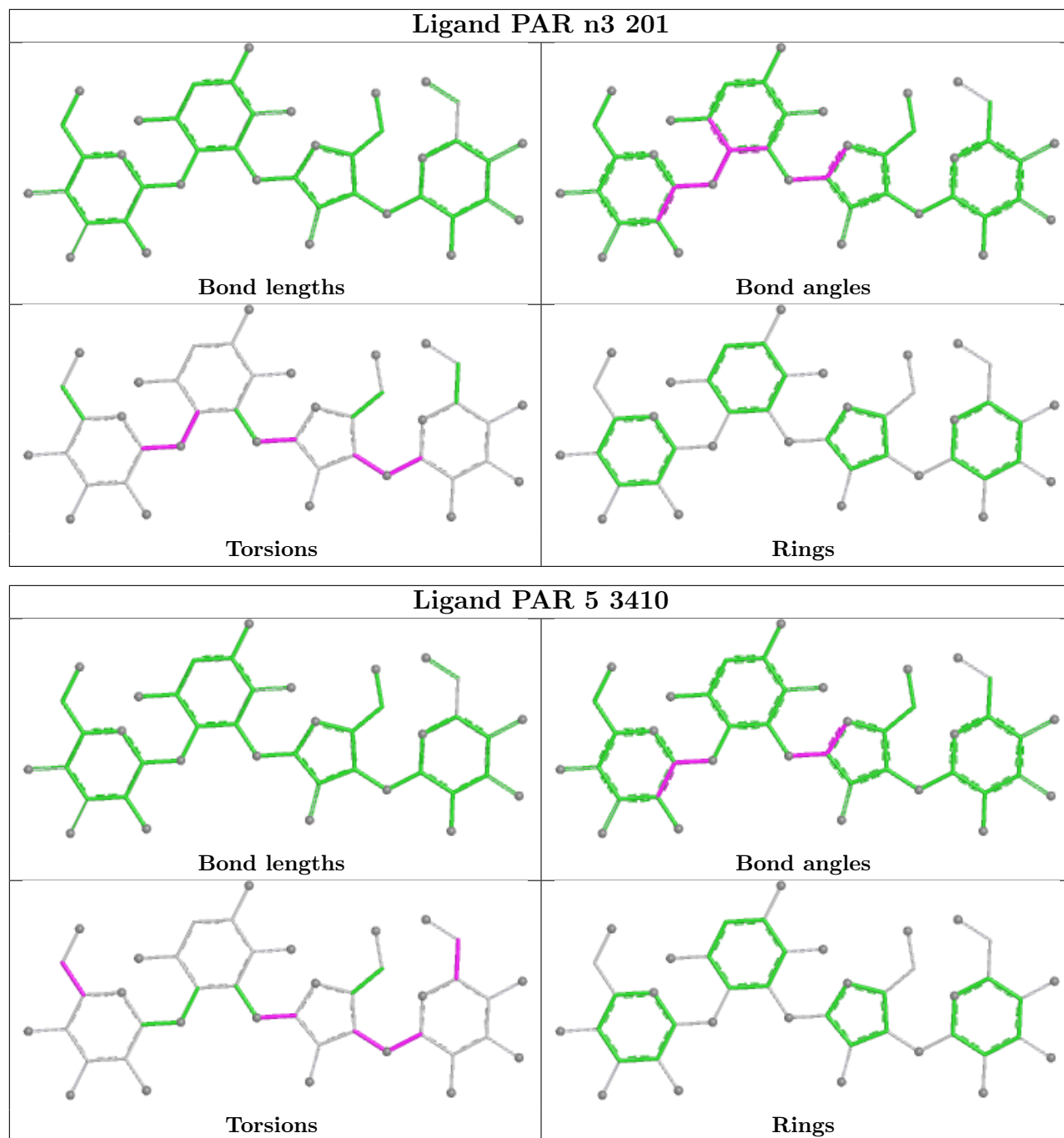
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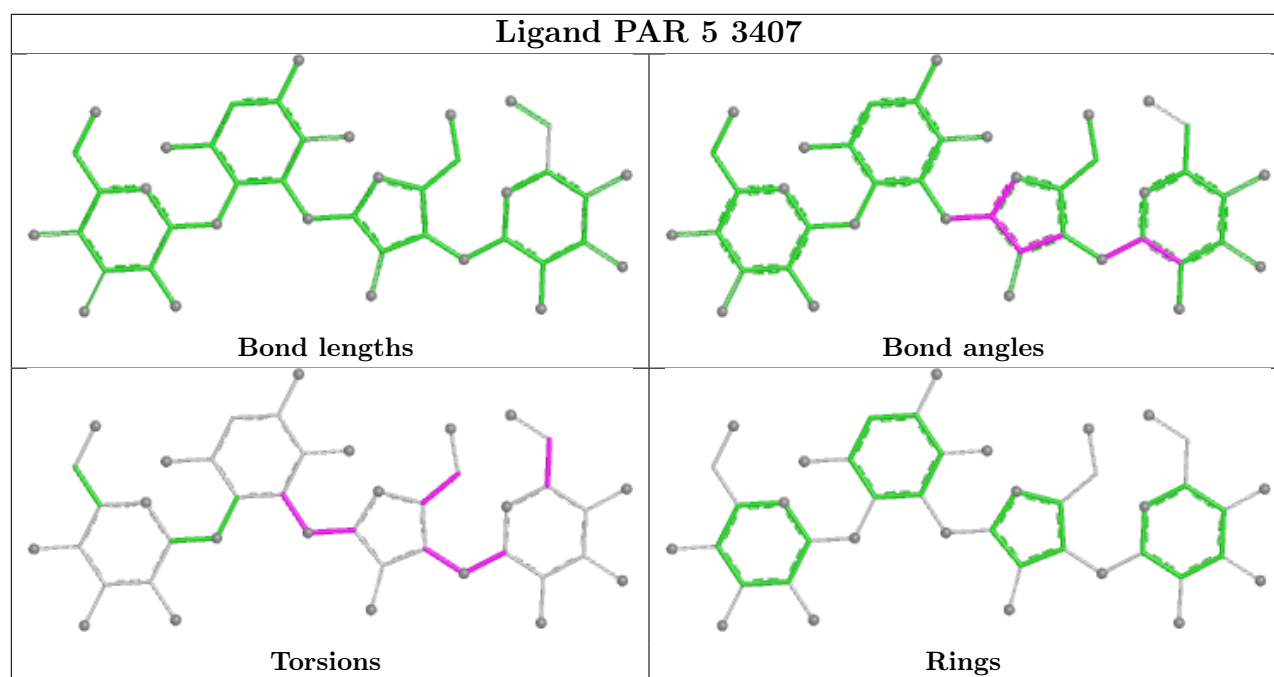
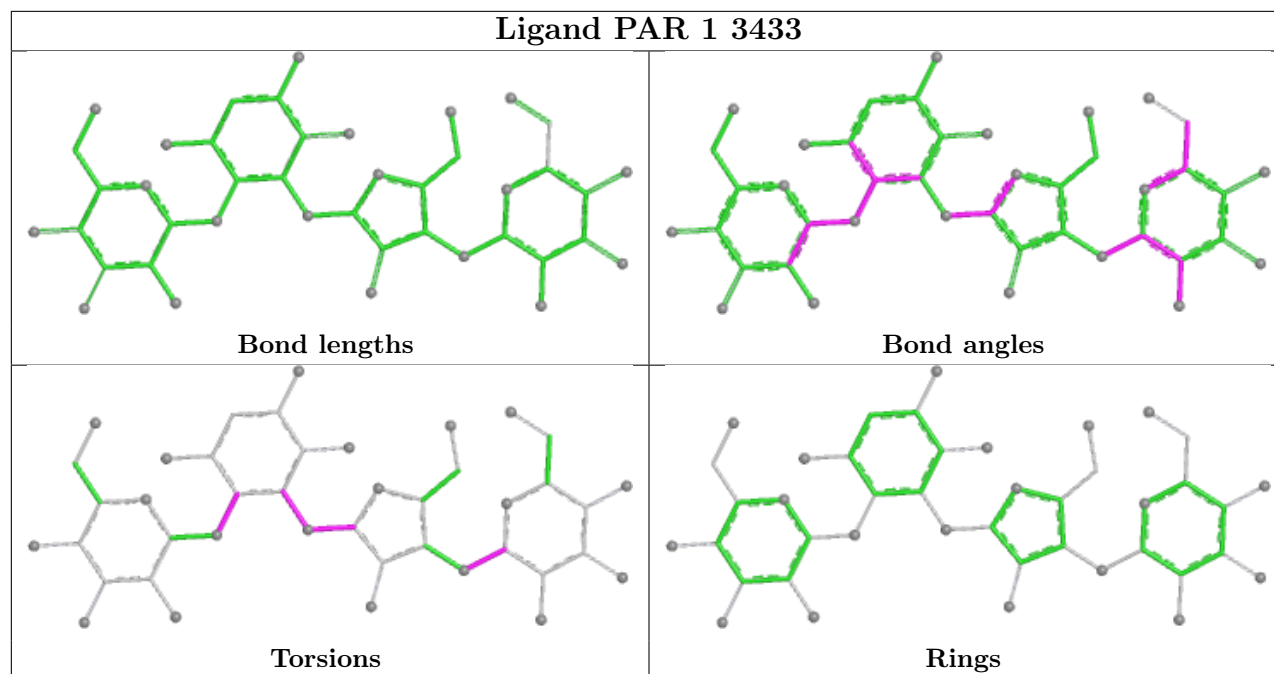


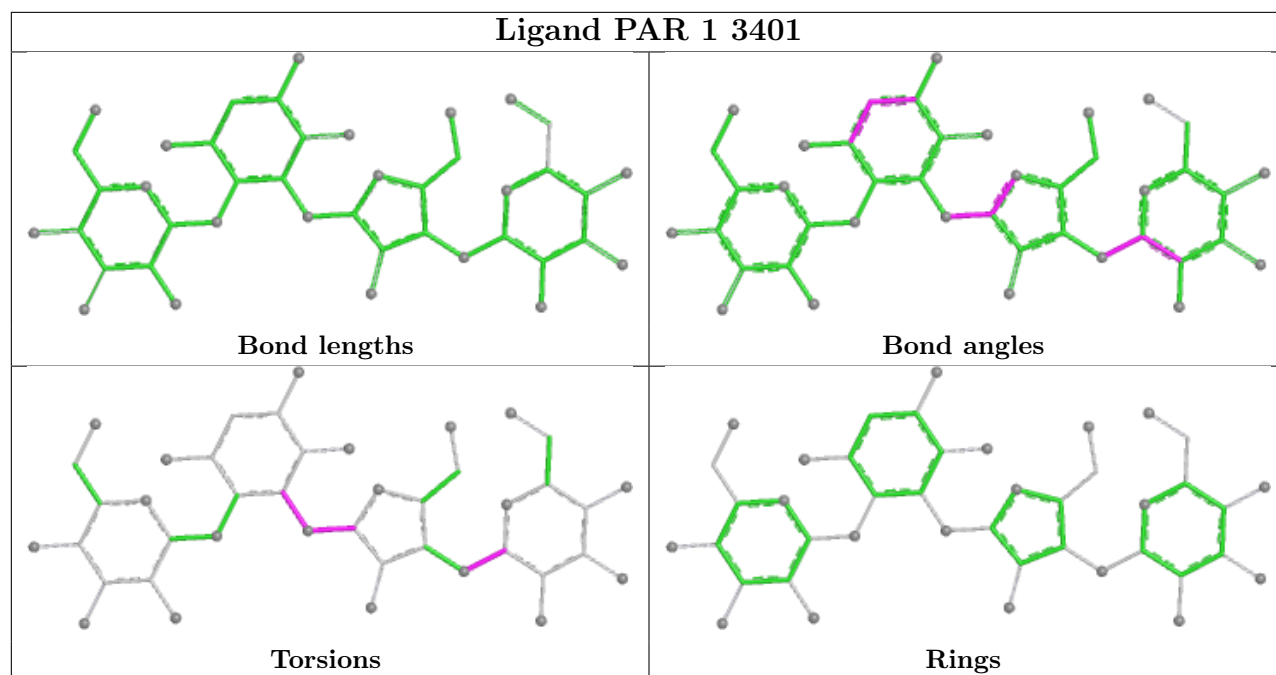
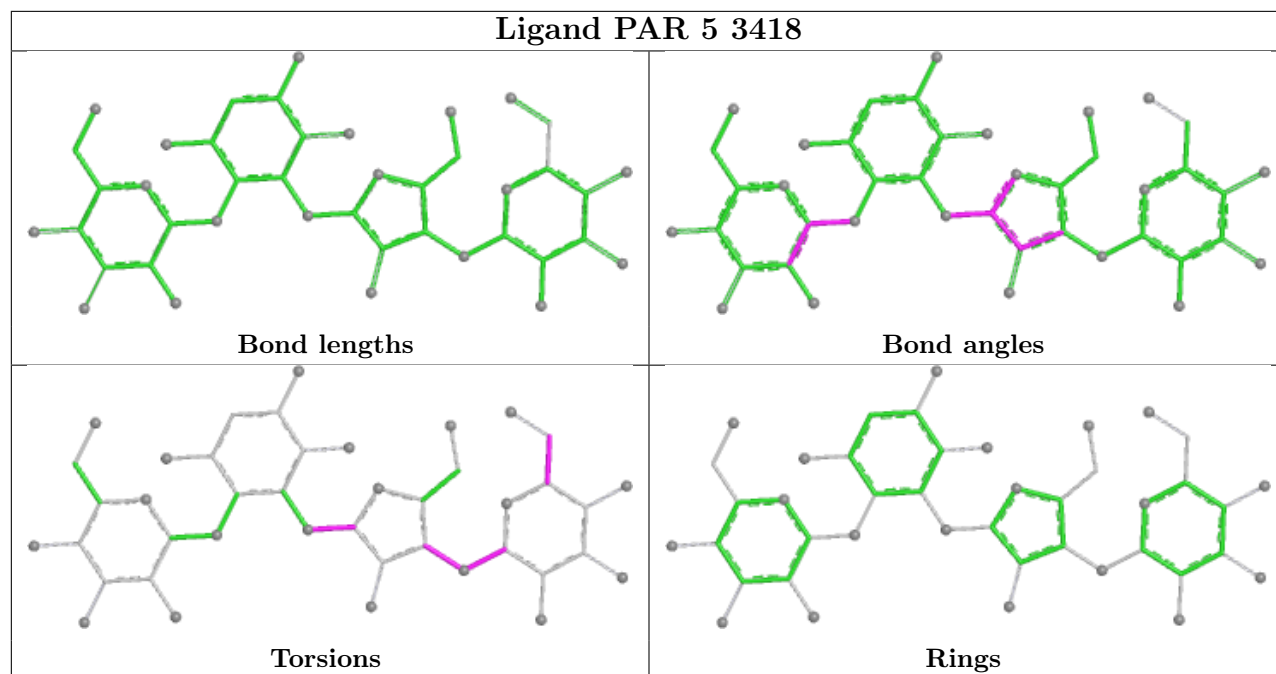


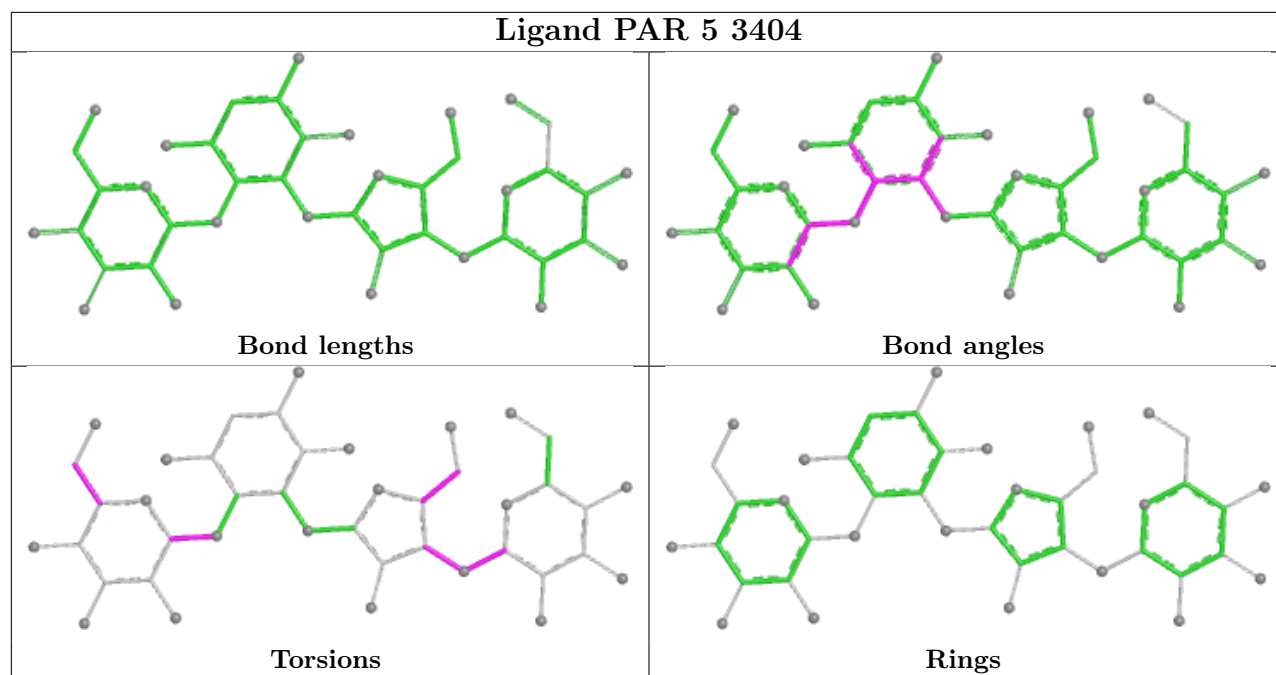
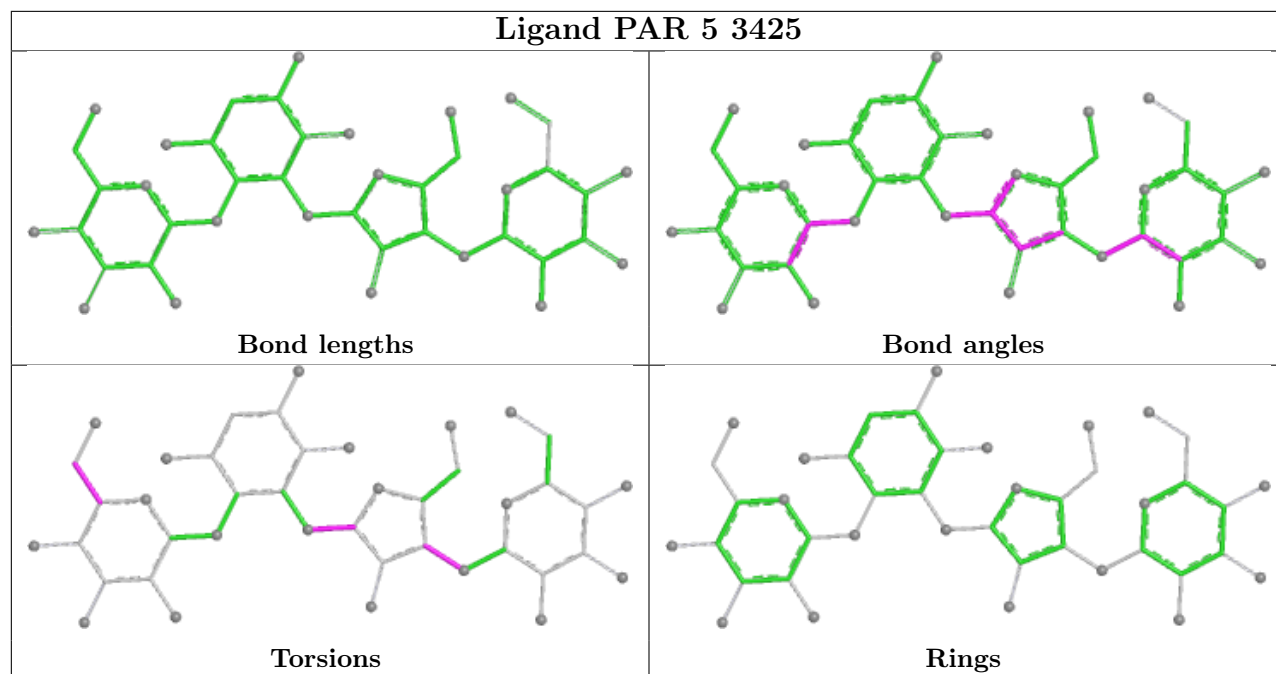


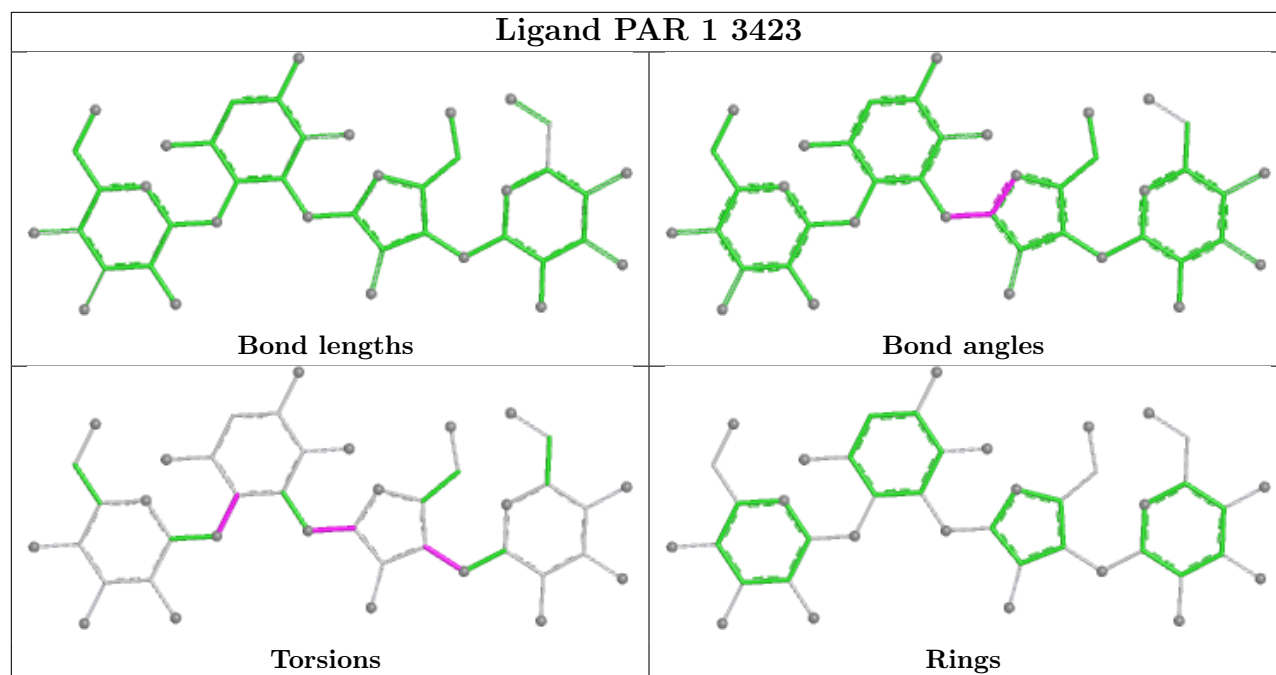
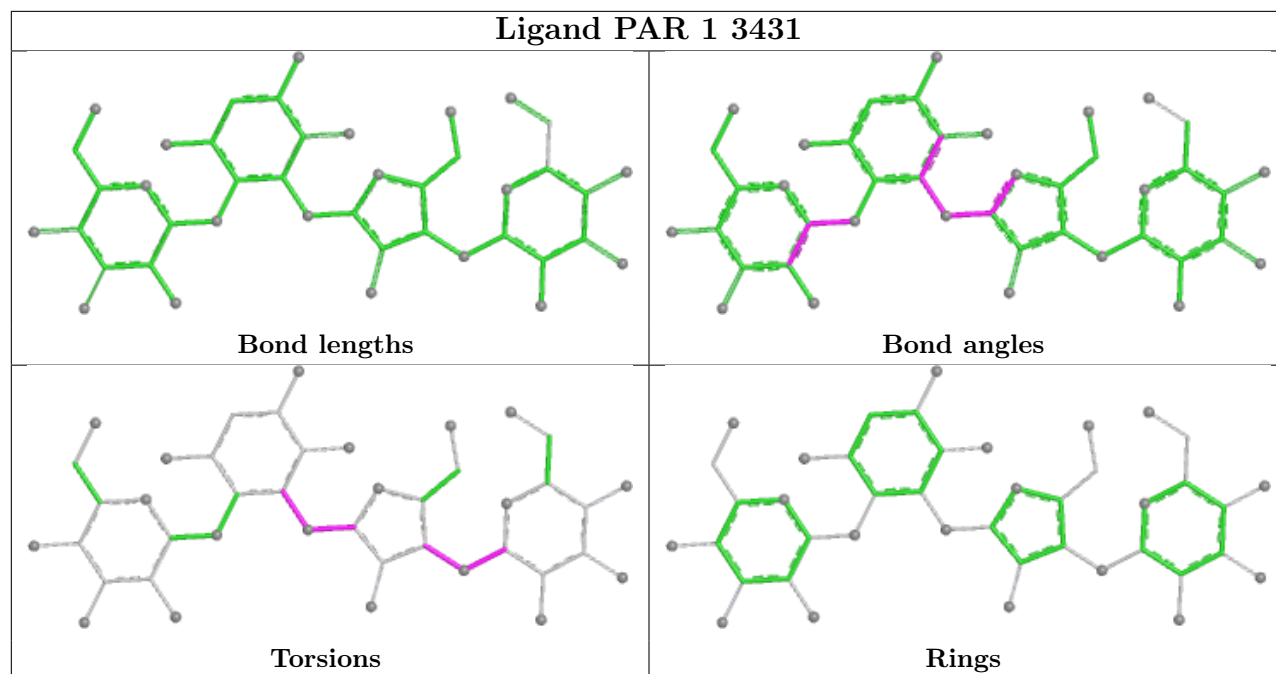


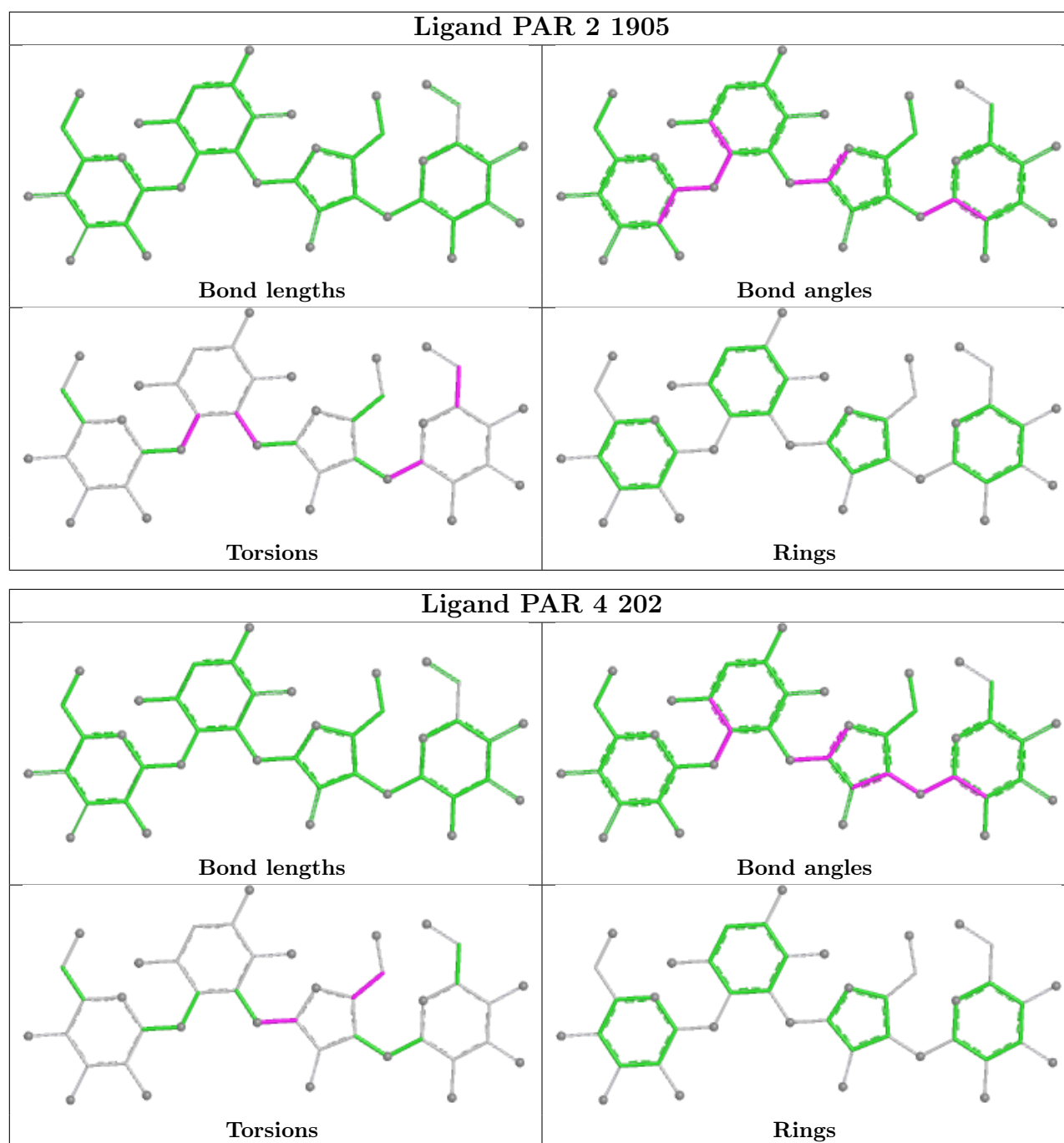












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
78	sM	1
64	C8	1
5	l3	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	sM	51:ARG	C	52:PRO	N	1.62
1	C8	81:ILE	C	82:PRO	N	1.16
1	l3	168:LYS	C	169:THR	N	1.16

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1	3078/3396 (90%)	-0.44	5 (0%) 91 86	29, 61, 151, 275	0
1	5	3087/3396 (90%)	-0.22	17 (0%) 85 73	36, 77, 179, 287	0
2	3	121/121 (100%)	-0.00	0 100 100	49, 98, 117, 142	0
2	7	121/121 (100%)	0.12	1 (0%) 82 68	50, 115, 151, 169	0
3	4	157/158 (99%)	-0.53	0 100 100	36, 58, 138, 255	0
3	8	158/158 (100%)	-0.20	1 (0%) 85 73	48, 90, 161, 264	0
4	L2	248/248 (100%)	-0.21	1 (0%) 88 79	22, 47, 66, 101	0
4	l2	248/248 (100%)	0.45	5 (2%) 65 46	49, 86, 120, 160	0
5	L3	386/386 (100%)	0.19	10 (2%) 57 38	28, 69, 100, 156	0
5	l3	386/386 (100%)	0.07	3 (0%) 82 68	26, 64, 92, 160	0
6	L4	361/361 (100%)	0.03	2 (0%) 85 73	23, 65, 101, 156	0
6	l4	361/361 (100%)	0.37	6 (1%) 69 50	32, 84, 121, 155	0
7	L5	293/296 (98%)	0.63	16 (5%) 30 21	72, 111, 149, 179	0
7	l5	294/296 (99%)	0.81	21 (7%) 22 15	81, 139, 182, 214	0
8	L6	156/176 (88%)	-0.01	1 (0%) 85 73	47, 76, 109, 146	0
8	l6	157/176 (89%)	0.04	1 (0%) 85 73	55, 81, 127, 162	0
9	L7	226/226 (100%)	0.02	0 100 100	37, 63, 117, 200	0
9	l7	223/226 (98%)	0.16	1 (0%) 88 79	43, 70, 123, 195	0
10	L8	231/231 (100%)	0.26	5 (2%) 62 43	48, 83, 139, 171	0
10	l8	231/231 (100%)	1.01	28 (12%) 8 7	93, 143, 197, 244	0
11	L9	189/191 (98%)	0.47	5 (2%) 57 38	56, 87, 120, 156	0
11	l9	191/191 (100%)	0.10	5 (2%) 57 38	52, 77, 100, 189	0
12	M0	217/221 (98%)	0.61	17 (7%) 19 14	47, 83, 141, 196	0
12	m0	219/221 (99%)	0.20	9 (4%) 41 27	49, 76, 148, 220	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	M1	169/169 (100%)	0.57	6 (3%) 46 31	86, 113, 147, 170	0
13	m1	169/169 (100%)	0.75	12 (7%) 22 15	101, 142, 176, 196	0
14	M3	193/194 (99%)	0.15	5 (2%) 57 38	33, 75, 134, 214	0
14	m3	194/194 (100%)	0.51	6 (3%) 51 35	60, 120, 172, 211	0
15	M4	136/137 (99%)	0.13	2 (1%) 72 53	52, 78, 107, 152	0
15	m4	137/137 (100%)	0.27	7 (5%) 33 22	51, 77, 124, 152	0
16	M5	203/203 (100%)	-0.09	0 100 100	26, 50, 67, 80	0
16	m5	203/203 (100%)	0.75	10 (4%) 35 23	62, 96, 123, 139	0
17	M6	197/197 (100%)	0.07	2 (1%) 79 63	36, 57, 97, 118	0
17	m6	197/197 (100%)	0.06	1 (0%) 87 76	35, 54, 107, 138	0
18	M7	175/184 (95%)	-0.03	4 (2%) 61 42	30, 52, 139, 184	0
18	m7	155/184 (84%)	-0.10	0 100 100	39, 55, 86, 143	0
19	M8	185/185 (100%)	0.02	4 (2%) 62 43	43, 65, 91, 111	0
19	m8	185/185 (100%)	0.65	18 (9%) 13 11	53, 93, 121, 143	0
20	M9	185/188 (98%)	0.20	6 (3%) 50 34	45, 72, 158, 198	0
20	m9	188/188 (100%)	0.46	7 (3%) 45 31	50, 83, 212, 255	0
21	N0	172/172 (100%)	0.09	1 (0%) 85 73	51, 72, 105, 144	0
21	n0	172/172 (100%)	-0.08	0 100 100	45, 71, 101, 139	0
22	N1	159/159 (100%)	0.36	4 (2%) 58 39	45, 74, 130, 198	0
22	n1	159/159 (100%)	0.67	8 (5%) 34 23	62, 90, 155, 204	0
23	N2	99/99 (100%)	0.41	0 100 100	77, 110, 147, 168	0
23	n2	98/99 (98%)	0.60	2 (2%) 65 46	85, 120, 146, 169	0
24	N3	132/136 (97%)	0.25	0 100 100	38, 66, 93, 155	0
24	n3	136/136 (100%)	0.02	2 (1%) 72 53	33, 58, 98, 150	0
25	N4	63/155 (40%)	0.27	1 (1%) 70 52	52, 74, 98, 121	0
25	n4	135/155 (87%)	0.44	2 (1%) 72 53	44, 140, 224, 256	0
26	N5	118/120 (98%)	-0.01	1 (0%) 82 68	42, 62, 91, 116	0
26	n5	120/120 (100%)	0.51	6 (5%) 34 23	59, 95, 135, 176	0
27	N6	125/125 (100%)	0.01	0 100 100	34, 71, 101, 131	0
27	n6	123/125 (98%)	0.39	1 (0%) 82 68	55, 85, 123, 139	0
28	N7	135/135 (100%)	0.23	0 100 100	57, 84, 115, 149	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	n7	135/135 (100%)	0.41	4 (2%) 52 35	99, 132, 175, 194	0
29	N8	148/148 (100%)	0.19	3 (2%) 65 46	27, 63, 117, 156	0
29	n8	148/148 (100%)	0.63	10 (6%) 23 16	34, 104, 145, 167	0
30	N9	56/58 (96%)	0.57	5 (8%) 15 12	34, 80, 137, 171	0
30	n9	58/58 (100%)	1.12	12 (20%) 2 2	53, 112, 157, 189	0
31	O0	97/100 (97%)	-0.10	1 (1%) 79 63	51, 76, 110, 145	0
31	o0	100/100 (100%)	0.62	6 (6%) 27 19	82, 117, 167, 201	0
32	O1	106/112 (94%)	0.32	1 (0%) 81 65	50, 77, 130, 149	0
32	o1	109/112 (97%)	0.45	2 (1%) 67 49	43, 75, 137, 178	0
33	O2	125/127 (98%)	-0.14	0 100 100	29, 55, 78, 114	0
33	o2	127/127 (100%)	0.05	0 100 100	35, 65, 92, 147	0
34	O3	106/106 (100%)	-0.14	1 (0%) 81 65	37, 55, 95, 133	0
34	o3	106/106 (100%)	-0.03	0 100 100	37, 59, 106, 127	0
35	O4	112/112 (100%)	0.04	1 (0%) 81 65	41, 61, 123, 175	0
35	o4	112/112 (100%)	0.53	6 (5%) 31 21	60, 96, 167, 193	0
36	O5	119/119 (100%)	0.19	1 (0%) 82 68	42, 75, 107, 130	0
36	o5	119/119 (100%)	0.63	7 (5%) 28 19	78, 108, 138, 167	0
37	O6	97/99 (97%)	0.27	1 (1%) 79 63	51, 75, 108, 125	0
37	o6	99/99 (100%)	0.93	9 (9%) 15 11	95, 131, 170, 205	0
38	O7	84/87 (96%)	-0.05	0 100 100	29, 43, 76, 102	0
38	o7	87/87 (100%)	0.29	0 100 100	37, 71, 122, 180	0
39	O8	77/77 (100%)	0.31	1 (1%) 75 56	63, 94, 148, 185	0
39	o8	77/77 (100%)	0.41	1 (1%) 75 56	87, 121, 154, 182	0
40	O9	50/50 (100%)	0.17	0 100 100	37, 54, 77, 83	0
40	o9	50/50 (100%)	0.51	2 (4%) 42 28	57, 72, 95, 108	0
41	Q0	52/52 (100%)	0.16	1 (1%) 66 48	57, 76, 122, 133	0
41	q0	52/52 (100%)	-0.07	0 100 100	48, 62, 91, 122	0
42	Q1	25/25 (100%)	0.39	0 100 100	52, 66, 82, 94	0
42	q1	25/25 (100%)	0.55	1 (4%) 42 28	61, 74, 90, 92	0
43	Q2	105/105 (100%)	0.03	0 100 100	31, 66, 119, 192	0
43	q2	105/105 (100%)	0.26	1 (0%) 79 63	59, 102, 140, 185	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
44	Q3	91/91 (100%)	-0.07	0	100	100	33, 53, 85, 98	0
44	q3	91/91 (100%)	0.24	0	100	100	44, 83, 118, 135	0
45	2	1712/1800 (95%)	0.22	23 (1%)	75	56	55, 120, 223, 318	0
45	6	1683/1800 (93%)	0.13	8 (0%)	87	76	57, 119, 222, 300	0
46	S0	206/206 (100%)	0.67	15 (7%)	21	15	92, 133, 170, 223	0
46	s0	206/206 (100%)	0.58	10 (4%)	35	23	98, 140, 187, 229	0
47	S1	211/216 (97%)	1.17	33 (15%)	5	4	89, 142, 196, 244	0
47	s1	216/216 (100%)	0.68	13 (6%)	27	19	94, 145, 190, 236	0
48	S2	217/217 (100%)	0.58	11 (5%)	33	22	76, 119, 159, 170	0
48	s2	217/217 (100%)	0.49	12 (5%)	30	21	74, 120, 156, 179	0
49	S3	209/223 (93%)	0.79	17 (8%)	18	13	87, 131, 176, 214	0
49	s3	223/223 (100%)	0.60	14 (6%)	26	17	97, 140, 196, 224	0
50	S4	256/260 (98%)	0.98	19 (7%)	20	15	92, 137, 169, 240	0
50	s4	260/260 (100%)	0.66	14 (5%)	31	21	80, 125, 157, 209	0
51	S5	206/206 (100%)	0.82	18 (8%)	16	12	107, 158, 207, 239	0
51	s5	206/206 (100%)	0.83	20 (9%)	13	11	108, 156, 202, 234	0
52	S6	200/236 (84%)	1.17	39 (19%)	3	3	77, 138, 206, 301	0
53	S7	179/186 (96%)	0.76	13 (7%)	21	15	97, 147, 192, 216	0
53	s7	186/186 (100%)	0.97	25 (13%)	7	6	101, 162, 213, 267	0
54	S8	185/200 (92%)	0.74	12 (6%)	25	17	63, 106, 162, 218	0
54	s8	188/200 (94%)	0.87	13 (6%)	23	16	65, 104, 156, 206	0
55	S9	174/185 (94%)	0.92	16 (9%)	14	11	98, 145, 187, 217	0
55	s9	185/185 (100%)	0.67	10 (5%)	31	21	93, 130, 177, 209	0
56	C0	90/105 (85%)	0.96	10 (11%)	10	9	120, 153, 193, 210	0
56	c0	96/105 (91%)	1.16	18 (18%)	3	3	119, 171, 207, 261	0
57	C1	139/146 (95%)	0.63	6 (4%)	40	25	68, 98, 146, 171	0
57	c1	146/146 (100%)	1.00	20 (13%)	6	5	70, 96, 165, 231	0
58	C2	102/143 (71%)	1.01	13 (12%)	8	6	147, 210, 256, 296	0
58	c2	124/143 (86%)	0.93	10 (8%)	18	13	170, 230, 275, 291	0
59	C3	150/150 (100%)	0.32	2 (1%)	75	56	65, 107, 140, 180	0
59	c3	150/150 (100%)	0.85	15 (10%)	12	10	78, 127, 170, 199	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
60	C4	127/128 (99%)	1.24	24 (18%) 3 3	71, 133, 184, 207	0
60	c4	128/128 (100%)	0.85	9 (7%) 22 15	77, 138, 177, 239	0
61	C5	116/141 (82%)	0.92	11 (9%) 14 11	97, 149, 199, 225	0
61	c5	135/141 (95%)	1.01	18 (13%) 7 6	111, 152, 206, 244	0
62	C6	136/142 (95%)	1.08	21 (15%) 5 4	88, 160, 201, 253	0
62	c6	142/142 (100%)	1.24	23 (16%) 4 4	98, 160, 210, 264	0
63	C7	115/136 (84%)	0.59	2 (1%) 69 50	109, 149, 191, 223	0
63	c7	117/136 (86%)	0.70	7 (5%) 27 19	104, 152, 200, 226	0
64	C8	143/145 (98%)	0.62	8 (5%) 30 20	104, 163, 211, 244	0
64	c8	145/145 (100%)	0.68	12 (8%) 17 13	103, 149, 196, 217	0
65	C9	137/143 (95%)	0.69	3 (2%) 62 43	104, 168, 206, 231	0
65	c9	143/143 (100%)	1.00	17 (11%) 9 7	117, 170, 215, 240	0
66	D0	102/109 (93%)	1.15	16 (15%) 5 4	92, 163, 218, 276	0
66	d0	109/109 (100%)	1.01	17 (15%) 5 4	91, 159, 218, 265	0
67	D1	87/87 (100%)	0.65	2 (2%) 61 42	101, 130, 167, 213	0
67	d1	87/87 (100%)	0.50	3 (3%) 48 32	101, 131, 176, 206	0
68	D2	129/129 (100%)	0.78	7 (5%) 31 21	73, 110, 134, 165	0
68	d2	129/129 (100%)	0.99	15 (11%) 9 8	85, 111, 133, 175	0
69	D3	144/144 (100%)	0.41	2 (1%) 73 55	63, 86, 109, 154	0
69	d3	144/144 (100%)	0.48	5 (3%) 47 31	61, 86, 107, 141	0
70	D4	134/134 (100%)	0.92	11 (8%) 17 13	106, 155, 191, 221	0
70	d4	134/134 (100%)	0.71	9 (6%) 24 16	100, 140, 175, 195	0
71	D5	70/70 (100%)	0.99	9 (12%) 7 6	137, 193, 229, 237	0
71	d5	69/70 (98%)	0.65	3 (4%) 40 25	131, 174, 211, 238	0
72	D6	97/97 (100%)	1.11	15 (15%) 5 4	67, 105, 176, 218	0
72	d6	97/97 (100%)	1.19	12 (12%) 8 6	79, 111, 173, 203	0
73	D7	81/81 (100%)	0.50	2 (2%) 58 39	84, 127, 181, 205	0
73	d7	81/81 (100%)	0.80	1 (1%) 76 58	96, 147, 202, 227	0
74	D8	63/63 (100%)	0.66	1 (1%) 70 52	114, 146, 173, 198	0
74	d8	63/63 (100%)	0.99	7 (11%) 10 9	110, 163, 192, 218	0
75	D9	53/53 (100%)	1.15	9 (16%) 4 4	101, 121, 151, 224	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
75	d9	53/53 (100%)	0.74	3 (5%) 29 20	106, 127, 150, 180	0
76	E0	60/62 (96%)	0.53	2 (3%) 49 33	76, 140, 183, 197	0
76	e0	62/62 (100%)	0.41	4 (6%) 25 17	74, 133, 181, 208	0
77	SR	317/318 (99%)	0.52	10 (3%) 50 34	137, 198, 248, 295	0
77	sR	318/318 (100%)	0.77	21 (6%) 24 16	136, 194, 243, 296	0
78	SM	147/272 (54%)	0.93	21 (14%) 6 5	74, 137, 205, 240	0
78	sM	95/272 (34%)	0.92	10 (10%) 11 9	99, 146, 191, 217	0
79	s6	218/218 (100%)	0.62	12 (5%) 30 21	75, 136, 176, 211	0
All	All	32255/33922 (95%)	0.30	1188 (3%) 45 31	22, 100, 194, 318	0

All (1188) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
51	S5	71	ALA	9.2
52	S6	80	ASN	9.0
70	d4	119	PHE	6.3
50	S4	180	LEU	6.1
51	S5	70	VAL	5.9
7	L5	4	GLN	5.4
20	m9	16	GLY	5.3
71	D5	71	ILE	5.3
10	l8	67	ILE	5.3
10	l8	245	LYS	5.2
52	S6	79	LYS	5.1
49	S3	170	THR	5.0
71	D5	41	ILE	5.0
21	N0	1	MET	4.9
52	S6	181	PRO	4.9
7	L5	5	LYS	4.9
52	S6	157	VAL	4.9
60	C4	121	VAL	4.8
48	S2	96	THR	4.8
12	M0	111	LEU	4.8
52	S6	158	ILE	4.8
36	O5	120	ALA	4.7
68	D2	108	ALA	4.7
64	C8	32	LEU	4.7
77	SR	225	LEU	4.7
74	D8	24	GLY	4.6

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Mol	Chain	Res	Type	RSRZ
78	SM	81	THR	4.6
47	S1	213	ARG	4.6
53	S7	99	LEU	4.6
7	L5	3	PHE	4.6
52	S6	178	LEU	4.6
47	S1	70	LEU	4.5
46	S0	50	VAL	4.5
58	C2	59	LEU	4.4
78	SM	42	ALA	4.4
14	m3	41	THR	4.4
56	c0	59	PHE	4.4
50	s4	165	ALA	4.4
53	s7	3	ALA	4.4
11	l9	59	ASN	4.4
53	s7	2	SER	4.3
50	s4	13	ALA	4.3
57	c1	105	LYS	4.3
78	SM	40	PRO	4.3
52	S6	78	THR	4.3
62	C6	41	PRO	4.3
70	D4	70	VAL	4.3
55	S9	130	THR	4.3
50	S4	47	PHE	4.2
51	S5	108	LEU	4.2
60	C4	83	ILE	4.2
66	D0	20	ILE	4.2
53	S7	142	TYR	4.2
46	s0	36	TYR	4.2
62	C6	24	ALA	4.2
54	S8	53	LYS	4.2
52	S6	69	LEU	4.2
77	sR	50	ASP	4.2
53	s7	70	PHE	4.2
54	S8	179	CYS	4.2
29	n8	66	ALA	4.2
48	s2	92	ALA	4.2
63	c7	103	ASP	4.1
70	D4	72	PHE	4.1
49	S3	174	HIS	4.1
54	s8	179	CYS	4.1
47	s1	84	ILE	4.1
57	c1	4	GLU	4.1

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Mol	Chain	Res	Type	RSRZ
16	m5	183	THR	4.0
12	M0	108	ALA	4.0
55	S9	6	ARG	4.0
57	c1	3	THR	4.0
57	c1	122	ILE	4.0
19	m8	75	GLY	4.0
37	o6	72	VAL	4.0
66	d0	84	MET	4.0
47	s1	100	PHE	4.0
45	2	1360	A	4.0
48	S2	82	ASN	4.0
63	c7	106	THR	4.0
31	o0	84	LEU	4.0
46	s0	18	LEU	3.9
47	S1	211	HIS	3.9
60	C4	42	VAL	3.9
52	S6	135	PRO	3.9
60	C4	50	ALA	3.9
73	D7	2	VAL	3.9
40	o9	4	GLN	3.9
54	S8	55	TYR	3.9
16	m5	91	GLU	3.9
66	D0	78	THR	3.9
75	D9	28	THR	3.9
10	l8	49	TYR	3.8
77	SR	121	MET	3.8
22	N1	100	LYS	3.8
12	M0	112	GLN	3.8
60	c4	137	LEU	3.8
56	c0	64	TYR	3.8
57	c1	106	ASN	3.8
12	m0	105	CYS	3.8
60	C4	39	ILE	3.8
78	sM	53	ARG	3.8
72	d6	39	MET	3.8
65	c9	18	TYR	3.8
11	l9	190	ASP	3.7
47	S1	133	TYR	3.7
14	M3	41	THR	3.7
55	S9	147	MET	3.7
60	C4	28	VAL	3.7
51	S5	90	ILE	3.7

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Mol	Chain	Res	Type	RSRZ
53	s7	13	PRO	3.7
72	d6	40	ALA	3.7
32	o1	31	ARG	3.7
51	S5	100	ASN	3.7
56	c0	58	GLN	3.6
12	M0	114	GLY	3.6
52	S6	92	ARG	3.6
66	D0	80	GLU	3.6
68	d2	83	ILE	3.6
78	SM	45	SER	3.6
7	l5	34	LYS	3.6
29	n8	65	GLN	3.6
1	5	620	U	3.6
47	S1	122	GLU	3.6
19	m8	138	LEU	3.6
53	S7	115	SER	3.6
35	o4	75	ALA	3.6
52	S6	173	PRO	3.6
76	e0	2	ALA	3.6
77	sR	167	VAL	3.6
78	SM	86	ASN	3.6
56	C0	90	THR	3.6
53	s7	5	GLN	3.5
60	C4	30	VAL	3.5
45	2	1363	U	3.5
52	S6	190	GLN	3.5
16	m5	69	GLY	3.5
74	d8	55	VAL	3.5
53	s7	63	PRO	3.5
78	sM	60	ALA	3.5
47	S1	217	LEU	3.5
61	c5	119	PHE	3.5
12	m0	108	ALA	3.5
54	S8	60	ILE	3.5
66	D0	64	LYS	3.5
31	o0	12	GLN	3.5
10	l8	124	ASP	3.5
55	S9	4	ALA	3.5
56	c0	65	TYR	3.5
15	m4	56	GLN	3.5
50	s4	12	LEU	3.5
59	c3	139	TRP	3.5

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Mol	Chain	Res	Type	RSRZ
7	l5	146	LEU	3.4
77	sR	279	ALA	3.4
60	C4	29	HIS	3.4
70	D4	61	ARG	3.4
56	c0	25	LYS	3.4
57	c1	144	ALA	3.4
78	SM	41	SER	3.4
78	sM	55	SER	3.4
47	S1	47	LEU	3.4
79	s6	190	GLN	3.4
50	s4	24	SER	3.4
58	c2	74	LEU	3.4
37	o6	8	ALA	3.4
51	s5	28	PRO	3.4
57	c1	145	ALA	3.3
55	s9	2	PRO	3.3
56	c0	57	THR	3.3
62	c6	41	PRO	3.3
78	sM	155	ASN	3.3
13	m1	104	PHE	3.3
10	l8	203	VAL	3.3
47	S1	181	LEU	3.3
65	c9	9	VAL	3.3
12	M0	218	ALA	3.3
55	s9	130	THR	3.3
7	l5	185	PHE	3.3
12	m0	103	LEU	3.3
50	s4	47	PHE	3.3
53	s7	24	PHE	3.3
47	s1	150	VAL	3.3
72	D6	18	VAL	3.3
72	D6	35	ALA	3.3
1	1	2971	A	3.3
61	c5	11	VAL	3.3
10	l8	237	ILE	3.3
52	S6	161	GLU	3.3
58	C2	69	ALA	3.3
7	L5	6	ASP	3.3
15	m4	62	GLN	3.3
45	2	1361	U	3.3
29	n8	79	TRP	3.3
72	d6	90	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
77	sR	211	ILE	3.3
30	n9	30	PRO	3.2
46	S0	57	LEU	3.2
70	d4	74	LEU	3.2
10	l8	34	PHE	3.2
15	m4	8	LYS	3.2
18	M7	182	ILE	3.2
53	s7	94	ALA	3.2
78	sM	61	ILE	3.2
62	C6	40	GLU	3.2
10	l8	109	LEU	3.2
52	S6	68	LEU	3.2
52	S6	65	GLN	3.2
54	S8	152	ILE	3.2
60	c4	15	GLY	3.2
49	s3	142	LEU	3.2
66	d0	77	LYS	3.2
70	d4	125	LEU	3.2
4	l2	249	SER	3.2
72	d6	41	ILE	3.2
29	n8	149	ALA	3.2
26	n5	40	LEU	3.2
62	c6	89	LEU	3.2
56	c0	62	GLN	3.2
68	d2	55	ASP	3.2
74	d8	53	ILE	3.2
13	M1	98	ALA	3.2
51	s5	75	GLY	3.2
56	c0	28	ASN	3.2
20	m9	45	VAL	3.2
51	S5	184	PHE	3.2
51	s5	26	ALA	3.2
64	c8	138	THR	3.2
13	m1	153	LYS	3.1
68	D2	67	GLY	3.1
72	D6	14	GLY	3.1
55	S9	128	LEU	3.1
29	n8	129	PHE	3.1
66	d0	72	ASN	3.1
30	n9	21	ILE	3.1
62	c6	132	LYS	3.1
74	d8	54	LEU	3.1

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Mol	Chain	Res	Type	RSRZ
46	s0	158	VAL	3.1
13	M1	114	ILE	3.1
12	m0	106	ALA	3.1
11	l9	191	LEU	3.1
72	D6	16	GLY	3.1
78	SM	85	SER	3.1
75	D9	8	PHE	3.1
55	s9	5	PRO	3.1
14	m3	89	TYR	3.1
62	C6	132	LYS	3.1
77	SR	136	ILE	3.1
53	s7	12	ALA	3.1
43	q2	35	LEU	3.1
7	L5	261	THR	3.1
46	s0	6	THR	3.1
49	S3	172	THR	3.1
56	C0	89	GLY	3.1
57	c1	6	THR	3.1
5	L3	262	TRP	3.1
48	S2	86	VAL	3.1
78	SM	43	ASP	3.1
49	S3	184	ILE	3.1
22	n1	86	GLU	3.1
50	s4	10	LYS	3.1
52	S6	131	LYS	3.1
62	C6	65	ILE	3.1
35	O4	111	ALA	3.0
55	S9	28	LEU	3.0
62	C6	52	LEU	3.0
22	N1	103	GLN	3.0
60	c4	98	GLY	3.0
66	d0	81	THR	3.0
56	c0	22	VAL	3.0
7	L5	231	ILE	3.0
16	m5	74	PRO	3.0
61	C5	125	PRO	3.0
64	c8	125	ILE	3.0
72	d6	25	ASN	3.0
79	s6	90	GLY	3.0
52	S6	81	VAL	3.0
45	2	1588	G	3.0
61	C5	123	TYR	3.0

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Mol	Chain	Res	Type	RSRZ
19	m8	180	ARG	3.0
36	o5	84	LYS	3.0
47	s1	92	GLN	3.0
65	c9	3	GLY	3.0
77	sR	15	GLY	3.0
1	5	3278	C	3.0
51	s5	108	LEU	3.0
68	d2	85	ASP	3.0
54	S8	52	ASN	3.0
14	m3	76	THR	3.0
70	d4	118	ILE	3.0
51	S5	93	LEU	3.0
54	s8	187	GLU	3.0
61	C5	87	PRO	3.0
77	sR	32	LEU	3.0
37	o6	68	ARG	3.0
7	l5	44	TYR	3.0
70	d4	135	ASP	3.0
62	c6	7	VAL	3.0
67	D1	21	ASN	3.0
55	S9	109	LEU	2.9
62	c6	105	LEU	2.9
69	D3	3	LYS	2.9
60	C4	98	GLY	2.9
1	5	1803	C	2.9
19	m8	168	THR	2.9
28	n7	51	LEU	2.9
51	S5	74	ALA	2.9
5	L3	220	VAL	2.9
46	S0	58	VAL	2.9
51	s5	70	VAL	2.9
64	c8	22	VAL	2.9
71	D5	93	SER	2.9
50	s4	4	GLY	2.9
65	C9	93	HIS	2.9
11	L9	4	ILE	2.9
7	l5	236	LEU	2.9
37	o6	11	LEU	2.9
78	SM	117	LEU	2.9
51	S5	125	THR	2.9
30	n9	24	PRO	2.9
69	d3	60	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
47	S1	88	VAL	2.9
72	d6	86	VAL	2.9
54	s8	45	SER	2.9
61	c5	121	ILE	2.9
35	o4	2	ALA	2.9
35	o4	11	ASN	2.9
55	S9	148	VAL	2.9
7	l5	31	TYR	2.9
20	m9	18	GLY	2.9
49	s3	178	ARG	2.9
51	S5	43	PHE	2.9
52	S6	31	ARG	2.9
12	m0	111	LEU	2.9
47	S1	84	ILE	2.9
16	m5	72	LYS	2.9
32	o1	27	LYS	2.9
74	d8	15	VAL	2.9
30	n9	27	TYR	2.9
45	2	1193	A	2.9
46	s0	107	PHE	2.9
48	S2	98	PHE	2.9
46	S0	177	LEU	2.9
53	s7	41	LEU	2.9
77	sR	52	GLN	2.8
10	L8	158	ASP	2.8
14	M3	135	ALA	2.8
61	c5	54	ALA	2.8
48	s2	166	THR	2.8
66	D0	81	THR	2.8
61	C5	86	VAL	2.8
78	SM	37	VAL	2.8
49	s3	27	ARG	2.8
41	Q0	83	LYS	2.8
50	s4	6	LYS	2.8
6	l4	299	ILE	2.8
50	s4	244	ILE	2.8
52	S6	133	LEU	2.8
69	d3	38	PHE	2.8
56	C0	63	TYR	2.8
64	c8	92	ILE	2.8
55	S9	133	HIS	2.8
45	2	135	A	2.8

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Mol	Chain	Res	Type	RSRZ
65	c9	2	PRO	2.8
45	2	1192	C	2.8
48	s2	91	ARG	2.8
58	C2	91	VAL	2.8
60	C4	133	ARG	2.8
5	L3	20	LYS	2.8
10	l8	43	LYS	2.8
7	L5	223	PHE	2.8
70	D4	125	LEU	2.8
70	d4	122	GLY	2.8
72	d6	83	ILE	2.8
73	D7	33	LEU	2.8
57	c1	97	TYR	2.8
10	l8	115	ALA	2.8
10	l8	125	ALA	2.8
65	c9	62	ALA	2.8
77	sR	158	PRO	2.8
22	N1	124	VAL	2.8
66	d0	51	VAL	2.8
49	s3	148	LYS	2.8
10	l8	200	LEU	2.8
45	2	1362	U	2.8
62	C6	43	ILE	2.8
47	S1	200	ALA	2.8
52	S6	210	GLN	2.8
58	C2	60	VAL	2.8
58	C2	61	VAL	2.8
58	C2	82	PRO	2.8
66	D0	66	SER	2.8
66	d0	27	THR	2.8
71	D5	75	LEU	2.8
66	D0	65	ILE	2.8
49	S3	183	GLY	2.8
52	S6	90	GLY	2.8
45	2	193	U	2.8
10	l8	113	ALA	2.8
34	O3	2	ALA	2.8
36	o5	78	LYS	2.8
64	c8	136	GLN	2.8
54	s8	46	VAL	2.8
47	S1	61	LEU	2.8
52	S6	180	THR	2.8

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Mol	Chain	Res	Type	RSRZ
55	S9	134	ILE	2.8
60	C4	119	THR	2.8
78	SM	87	THR	2.8
10	l8	156	ASP	2.7
56	C0	65	TYR	2.7
4	l2	247	ARG	2.7
49	S3	173	ARG	2.7
72	d6	82	ARG	2.7
62	c6	20	ALA	2.7
45	2	504	U	2.7
50	S4	227	VAL	2.7
58	c2	30	VAL	2.7
72	D6	84	VAL	2.7
54	S8	8	ARG	2.7
5	L3	126	LYS	2.7
17	M6	65	ASN	2.7
47	S1	92	GLN	2.7
48	s2	199	GLN	2.7
53	S7	98	ILE	2.7
57	c1	20	PHE	2.7
60	c4	83	ILE	2.7
7	l5	217	GLU	2.7
45	6	923	A	2.7
68	d2	45	GLY	2.7
75	D9	26	SER	2.7
5	L3	4	ARG	2.7
52	S6	137	ARG	2.7
57	c1	87	ARG	2.7
72	D6	22	ARG	2.7
54	s8	200	LYS	2.7
69	D3	112	LYS	2.7
19	m8	78	ASN	2.7
51	s5	100	ASN	2.7
63	c7	90	ALA	2.7
62	c6	22	VAL	2.7
22	n1	151	LEU	2.7
77	SR	81	LEU	2.7
57	C1	16	GLN	2.7
13	m1	96	PHE	2.7
51	S5	130	ILE	2.7
51	S5	199	ILE	2.7
53	s7	43	PHE	2.7

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Mol	Chain	Res	Type	RSRZ
72	D6	37	LYS	2.7
10	l8	150	LEU	2.7
31	o0	11	ASN	2.7
58	C2	28	LEU	2.7
58	c2	28	LEU	2.7
53	s7	8	ILE	2.7
48	s2	208	GLU	2.7
64	C8	47	CYS	2.7
72	D6	12	LYS	2.7
77	sR	40	LYS	2.7
71	d5	56	THR	2.7
12	M0	143	SER	2.7
62	c6	6	SER	2.7
10	L8	80	TYR	2.7
19	m8	140	LEU	2.7
46	S0	158	VAL	2.7
52	S6	208	TYR	2.7
53	S7	90	VAL	2.7
64	C8	17	LEU	2.7
16	m5	154	PRO	2.6
57	C1	70	ILE	2.6
61	c5	104	GLN	2.6
20	m9	19	LYS	2.6
53	s7	7	LYS	2.6
50	S4	34	GLY	2.6
77	sR	55	GLY	2.6
10	l8	121	SER	2.6
13	m1	130	VAL	2.6
22	n1	70	SER	2.6
51	s5	71	ALA	2.6
53	S7	172	VAL	2.6
62	C6	48	VAL	2.6
48	S2	83	ILE	2.6
54	S8	43	ILE	2.6
62	c6	85	ILE	2.6
15	m4	24	LYS	2.6
49	S3	8	LYS	2.6
60	c4	14	PHE	2.6
56	c0	67	THR	2.6
37	O6	8	ALA	2.6
48	s2	229	LEU	2.6
55	s9	80	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
68	D2	69	LEU	2.6
29	N8	82	ILE	2.6
35	o4	36	LYS	2.6
50	S4	6	LYS	2.6
62	C6	36	ILE	2.6
47	S1	178	GLY	2.6
1	5	825	U	2.6
1	1	494	G	2.6
16	m5	98	LEU	2.6
46	s0	147	THR	2.6
54	S8	147	ALA	2.6
56	c0	61	TRP	2.6
62	c6	110	THR	2.6
75	D9	7	TRP	2.6
18	M7	176	ILE	2.6
20	M9	76	SER	2.6
77	SR	79	TYR	2.6
62	c6	100	GLN	2.6
7	l5	182	GLY	2.6
10	l8	186	LEU	2.6
75	D9	30	LEU	2.6
6	l4	312	VAL	2.6
7	L5	287	ALA	2.6
47	s1	227	ALA	2.6
51	s5	24	VAL	2.6
76	e0	4	VAL	2.6
78	sM	165	VAL	2.6
3	8	82	U	2.6
60	c4	92	LYS	2.6
61	C5	61	ARG	2.6
78	SM	100	THR	2.6
79	s6	79	LYS	2.6
20	m9	41	ILE	2.6
24	n3	42	SER	2.6
57	c1	147	GLY	2.6
64	c8	130	GLY	2.6
50	s4	9	LEU	2.6
51	s5	42	LEU	2.6
53	S7	126	LEU	2.6
57	c1	5	LEU	2.6
7	l5	15	ARG	2.6
10	l8	205	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
47	s1	43	VAL	2.6
52	S6	67	VAL	2.6
70	D4	35	VAL	2.6
77	SR	227	ALA	2.6
7	l5	153	THR	2.6
62	c6	36	ILE	2.5
66	D0	19	ILE	2.5
59	c3	72	MET	2.5
62	c6	60	PHE	2.5
45	2	194	U	2.5
67	D1	58	TYR	2.5
37	o6	79	SER	2.5
54	s8	170	SER	2.5
37	o6	77	LEU	2.5
46	s0	184	LEU	2.5
51	s5	58	LEU	2.5
77	sR	9	LEU	2.5
7	L5	276	LYS	2.5
18	M7	126	ARG	2.5
30	n9	25	LYS	2.5
53	S7	148	LYS	2.5
62	c6	48	VAL	2.5
23	n2	46	ALA	2.5
45	2	754	A	2.5
49	S3	145	ALA	2.5
71	D5	99	ALA	2.5
7	L5	154	THR	2.5
47	S1	206	PRO	2.5
10	l8	69	LEU	2.5
12	M0	113	GLN	2.5
49	s3	72	LEU	2.5
16	m5	204	LYS	2.5
78	SM	88	ARG	2.5
59	c3	60	VAL	2.5
72	D6	45	VAL	2.5
51	S5	119	ASP	2.5
61	C5	101	ALA	2.5
76	E0	46	ASN	2.5
51	s5	29	ILE	2.5
65	c9	36	ILE	2.5
70	D4	7	ILE	2.5
77	SR	211	ILE	2.5

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Mol	Chain	Res	Type	RSRZ
60	C4	38	THR	2.5
65	c9	54	PHE	2.5
23	n2	78	TYR	2.5
59	c3	40	TYR	2.5
11	L9	161	LEU	2.5
50	S4	134	LYS	2.5
58	c2	32	LEU	2.5
71	d5	97	LYS	2.5
10	l8	79	GLN	2.5
31	o0	9	SER	2.5
56	c0	29	GLN	2.5
19	m8	81	VAL	2.5
36	o5	22	VAL	2.5
47	S1	123	ALA	2.5
48	S2	92	ALA	2.5
65	c9	19	ALA	2.5
73	d7	53	ALA	2.5
45	2	766	U	2.5
49	S3	135	GLU	2.5
30	n9	6	ASN	2.5
52	S6	141	ILE	2.5
62	c6	120	ASP	2.5
72	d6	79	ILE	2.5
77	sR	43	ILE	2.5
46	S0	201	LEU	2.5
47	S1	101	HIS	2.5
61	c5	125	PRO	2.5
51	s5	174	LEU	2.5
57	C1	40	LEU	2.5
61	c5	8	LYS	2.5
30	n9	20	GLY	2.5
35	o4	48	GLY	2.5
78	SM	156	GLN	2.5
79	s6	41	VAL	2.5
45	2	1466	G	2.5
57	c1	2	SER	2.5
57	c1	146	ALA	2.5
17	m6	80	PHE	2.5
47	S1	205	PHE	2.5
60	C4	124	ASP	2.5
78	SM	159	ASN	2.5
1	5	3277	U	2.5

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Mol	Chain	Res	Type	RSRZ
10	l8	65	LEU	2.5
48	S2	207	LEU	2.5
56	C0	88	PRO	2.5
77	SR	91	LEU	2.5
56	C0	22	VAL	2.5
72	D6	21	VAL	2.5
6	L4	260	GLN	2.5
14	M3	43	ALA	2.4
15	m4	138	ALA	2.4
13	M1	102	PHE	2.4
75	D9	43	PHE	2.4
16	m5	90	ASN	2.4
29	n8	76	ASP	2.4
66	d0	85	ARG	2.4
69	d3	27	ASN	2.4
77	sR	34	LEU	2.4
78	SM	82	THR	2.4
50	S4	103	TYR	2.4
7	l5	292	ALA	2.4
49	s3	147	ALA	2.4
61	c5	7	ALA	2.4
15	m4	58	ILE	2.4
60	C4	76	ILE	2.4
62	C6	29	ILE	2.4
7	L5	10	SER	2.4
15	m4	25	LYS	2.4
63	C7	95	ARG	2.4
52	S6	76	LEU	2.4
64	c8	86	LEU	2.4
47	S1	98	THR	2.4
49	S3	207	THR	2.4
53	s7	105	THR	2.4
56	C0	57	THR	2.4
66	d0	79	TRP	2.4
50	S4	79	ASP	2.4
11	L9	30	PRO	2.4
61	c5	87	PRO	2.4
47	S1	212	VAL	2.4
68	d2	48	GLY	2.4
68	d2	121	VAL	2.4
12	m0	219	ALA	2.4
55	S9	159	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
31	o0	7	GLN	2.4
56	C0	62	GLN	2.4
62	c6	29	ILE	2.4
74	d8	27	GLN	2.4
30	n9	28	LYS	2.4
61	C5	52	LYS	2.4
66	D0	83	GLU	2.4
54	S8	4	SER	2.4
61	c5	136	SER	2.4
47	S1	218	LEU	2.4
50	S4	12	LEU	2.4
58	c2	111	ASN	2.4
62	C6	115	THR	2.4
7	l5	156	GLY	2.4
56	c0	66	TYR	2.4
69	d3	29	TYR	2.4
10	l8	103	ALA	2.4
19	m8	165	ILE	2.4
20	M9	54	ALA	2.4
50	S4	13	ALA	2.4
71	D5	50	ILE	2.4
46	s0	33	GLN	2.4
48	S2	87	GLN	2.4
49	S3	177	MET	2.4
62	c6	87	LYS	2.4
65	C9	84	LYS	2.4
55	S9	104	PHE	2.4
12	M0	103	LEU	2.4
25	N4	54	LEU	2.4
26	n5	24	LEU	2.4
45	6	1136	U	2.4
50	S4	9	LEU	2.4
59	c3	54	LEU	2.4
56	c0	60	SER	2.4
5	L3	229	VAL	2.4
19	m8	80	THR	2.4
54	s8	97	THR	2.4
60	C4	120	PRO	2.4
70	D4	129	VAL	2.4
71	D5	40	VAL	2.4
77	sR	56	VAL	2.4
8	l6	67	GLY	2.4

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Mol	Chain	Res	Type	RSRZ
19	M8	22	ASP	2.4
30	n9	48	HIS	2.4
47	s1	102	GLY	2.4
51	S5	75	GLY	2.4
57	c1	73	GLY	2.4
60	C4	68	ALA	2.4
62	C6	81	ILE	2.4
64	C8	28	ILE	2.4
64	c8	146	ALA	2.4
14	m3	68	LYS	2.4
42	q1	25	LYS	2.4
51	s5	213	LYS	2.4
59	c3	100	LYS	2.4
29	n8	147	LEU	2.4
1	5	2971	A	2.4
61	c5	92	SER	2.4
66	d0	76	SER	2.4
7	l5	122	VAL	2.4
46	S0	207	PRO	2.4
57	C1	139	VAL	2.4
61	c5	126	VAL	2.4
72	D6	2	PRO	2.4
77	sR	247	PRO	2.4
12	m0	107	GLY	2.3
12	M0	106	ALA	2.3
75	d9	54	LYS	2.3
13	m1	128	TYR	2.3
30	N9	27	TYR	2.3
62	c6	66	ARG	2.3
54	S8	21	PHE	2.3
51	S5	133	VAL	2.3
59	c3	52	VAL	2.3
12	M0	171	TRP	2.3
78	sM	52	PRO	2.3
22	n1	2	GLY	2.3
68	D2	109	GLY	2.3
76	E0	36	LYS	2.3
22	n1	101	CYS	2.3
52	S6	73	ILE	2.3
68	d2	68	ARG	2.3
79	s6	196	ARG	2.3
65	c9	55	TYR	2.3

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Mol	Chain	Res	Type	RSRZ
1	1	2444	C	2.3
52	S6	77	LEU	2.3
54	s8	21	PHE	2.3
61	c5	112	LEU	2.3
64	C8	18	LEU	2.3
64	c8	54	LEU	2.3
52	S6	203	GLU	2.3
1	5	826	G	2.3
6	l4	142	VAL	2.3
47	s1	91	VAL	2.3
65	c9	4	VAL	2.3
72	D6	86	VAL	2.3
79	s6	179	VAL	2.3
49	S3	187	LYS	2.3
52	S6	194	LYS	2.3
68	d2	124	LYS	2.3
4	L2	247	ARG	2.3
4	l2	248	GLY	2.3
27	n6	124	GLY	2.3
46	S0	76	ILE	2.3
50	S4	25	GLY	2.3
50	s4	147	ILE	2.3
53	S7	8	ILE	2.3
10	l8	198	ALA	2.3
49	s3	3	ALA	2.3
60	c4	91	THR	2.3
72	D6	72	HIS	2.3
20	M9	78	TYR	2.3
54	s8	182	TYR	2.3
66	D0	82	TYR	2.3
61	c5	6	ASN	2.3
63	C7	34	LEU	2.3
75	D9	41	GLN	2.3
19	M8	95	GLU	2.3
47	s1	90	GLU	2.3
25	n4	76	VAL	2.3
68	D2	119	LYS	2.3
7	l5	35	ARG	2.3
10	l8	127	PRO	2.3
11	L9	95	ALA	2.3
20	M9	2	ALA	2.3
31	o0	105	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
46	S0	20	ALA	2.3
56	C0	61	TRP	2.3
58	C2	101	ALA	2.3
64	c8	129	TRP	2.3
63	c7	96	SER	2.3
12	M0	87	LEU	2.3
65	c9	28	LEU	2.3
6	l4	90	PHE	2.3
64	c8	21	ASN	2.3
53	S7	123	ASP	2.3
36	o5	57	VAL	2.3
45	2	1337	A	2.3
79	s6	91	GLU	2.3
1	5	1356	U	2.3
11	L9	41	ILE	2.3
68	D2	83	ILE	2.3
4	l2	25	GLY	2.3
12	M0	195	ALA	2.3
30	n9	51	ALA	2.3
68	d2	116	ALA	2.3
29	N8	79	TRP	2.3
45	2	263	C	2.3
55	s9	7	THR	2.3
65	c9	139	THR	2.3
67	d1	78	LEU	2.3
70	D4	40	LEU	2.3
66	d0	87	HIS	2.3
74	d8	26	THR	2.3
54	s8	55	TYR	2.3
78	SM	155	ASN	2.3
20	M9	68	GLN	2.3
30	N9	14	ARG	2.3
52	S6	176	GLN	2.3
59	C3	62	GLN	2.3
48	S2	101	VAL	2.3
50	S4	76	VAL	2.3
1	1	2522	G	2.2
45	2	539	G	2.2
15	M4	9	ALA	2.2
48	s2	93	GLY	2.2
60	c4	88	GLY	2.2
29	n8	75	LEU	2.2

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Mol	Chain	Res	Type	RSRZ
45	6	75	U	2.2
53	s7	67	LEU	2.2
37	o6	2	THR	2.2
48	s2	90	THR	2.2
62	C6	37	THR	2.2
13	m1	161	SER	2.2
30	n9	22	LYS	2.2
36	o5	40	SER	2.2
56	c0	75	TYR	2.2
60	C4	132	ARG	2.2
24	n3	4	ASN	2.2
26	n5	62	VAL	2.2
51	s5	23	VAL	2.2
52	S6	179	VAL	2.2
53	s7	42	GLN	2.2
53	s7	108	GLN	2.2
63	c7	97	ASN	2.2
70	D4	27	VAL	2.2
78	SM	157	GLN	2.2
61	c5	23	GLU	2.2
12	M0	176	LEU	2.2
51	s5	25	LEU	2.2
1	5	3276	G	2.2
45	2	195	G	2.2
46	S0	134	LYS	2.2
75	D9	54	LYS	2.2
75	d9	55	PHE	2.2
62	C6	17	THR	2.2
78	SM	46	LYS	2.2
7	l5	179	ARG	2.2
12	M0	110	ARG	2.2
14	M3	119	TYR	2.2
1	5	3170	A	2.2
5	l3	297	SER	2.2
15	M4	10	SER	2.2
61	C5	120	SER	2.2
68	D2	58	SER	2.2
20	m9	14	VAL	2.2
47	S1	66	VAL	2.2
47	S1	150	VAL	2.2
49	S3	164	VAL	2.2
66	d0	116	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
75	d9	6	VAL	2.2
29	N8	65	GLN	2.2
77	sR	299	GLN	2.2
59	c3	138	ASN	2.2
53	S7	48	GLU	2.2
1	5	1201	C	2.2
2	7	18	C	2.2
6	L4	66	GLY	2.2
18	M7	177	ALA	2.2
19	m8	77	ALA	2.2
19	m8	85	GLY	2.2
32	O1	71	LEU	2.2
55	S9	118	LEU	2.2
56	c0	7	ASP	2.2
47	s1	139	ALA	2.2
49	s3	114	ALA	2.2
52	S6	130	PRO	2.2
58	c2	88	LEU	2.2
78	sM	54	PRO	2.2
59	c3	94	LYS	2.2
66	d0	64	LYS	2.2
7	l5	160	PHE	2.2
66	D0	79	TRP	2.2
68	d2	46	TYR	2.2
10	l8	253	SER	2.2
60	C4	34	SER	2.2
19	m8	73	GLN	2.2
48	s2	139	ILE	2.2
55	s9	156	ILE	2.2
13	M1	150	ASN	2.2
13	M1	12	LEU	2.2
25	n4	99	GLU	2.2
50	S4	131	LEU	2.2
58	C2	129	GLU	2.2
61	c5	22	LEU	2.2
79	s6	193	LEU	2.2
10	l8	117	ALA	2.2
26	N5	128	ALA	2.2
48	s2	227	PRO	2.2
50	s4	28	ALA	2.2
65	c9	10	ALA	2.2
58	c2	131	ASP	2.2

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Mol	Chain	Res	Type	RSRZ
77	sR	118	LYS	2.2
5	L3	28	ARG	2.2
5	l3	369	ARG	2.2
53	s7	92	PHE	2.2
59	c3	114	ARG	2.2
47	s1	101	HIS	2.2
59	c3	61	THR	2.2
35	o4	29	ILE	2.2
51	s5	170	GLN	2.2
70	D4	69	SER	2.2
7	L5	236	LEU	2.2
10	l8	46	LEU	2.2
39	o8	78	LEU	2.2
48	S2	225	LEU	2.2
8	L6	94	GLU	2.2
12	M0	13	LYS	2.2
14	m3	38	ALA	2.2
19	m8	173	GLU	2.2
22	n1	104	GLU	2.2
37	o6	85	ALA	2.2
40	o9	3	ALA	2.2
59	c3	86	GLU	2.2
65	C9	141	GLU	2.2
78	sM	119	ALA	2.2
78	sM	120	GLU	2.2
12	m0	114	GLY	2.2
12	m0	204	GLY	2.2
30	N9	24	PRO	2.2
50	S4	7	LYS	2.2
45	2	293	U	2.2
51	S5	76	ARG	2.2
57	c1	128	CYS	2.2
28	n7	92	PHE	2.2
48	S2	66	PHE	2.2
55	S9	146	PHE	2.2
62	C6	109	PHE	2.2
6	l4	272	VAL	2.1
13	M1	159	THR	2.1
48	s2	96	THR	2.1
51	S5	33	VAL	2.1
58	c2	31	VAL	2.1
62	C6	39	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
70	d4	24	VAL	2.1
70	d4	25	VAL	2.1
50	S4	246	LEU	2.1
53	s7	126	LEU	2.1
58	C2	62	LEU	2.1
60	C4	33	LEU	2.1
66	D0	93	LEU	2.1
67	d1	79	LEU	2.1
68	d2	104	LEU	2.1
9	l7	228	SER	2.1
11	l9	2	LYS	2.1
62	c6	12	LYS	2.1
76	e0	36	LYS	2.1
19	m8	76	ALA	2.1
47	S1	156	ALA	2.1
59	c3	146	ALA	2.1
60	c4	21	ALA	2.1
53	s7	39	ARG	2.1
55	s9	33	GLU	2.1
46	s0	35	PRO	2.1
62	c6	114	ARG	2.1
69	d3	64	PRO	2.1
78	SM	38	PRO	2.1
62	C6	46	PHE	2.1
65	c9	14	PHE	2.1
63	c7	35	CYS	2.1
29	n8	67	HIS	2.1
54	s8	44	HIS	2.1
57	C1	76	VAL	2.1
64	C8	70	VAL	2.1
68	d2	6	VAL	2.1
77	sR	16	HIS	2.1
79	s6	195	VAL	2.1
7	l5	30	TYR	2.1
13	m1	106	ILE	2.1
54	S8	117	TYR	2.1
61	C5	90	ILE	2.1
62	C6	79	TYR	2.1
64	C8	69	ILE	2.1
49	s3	4	LEU	2.1
53	s7	93	LEU	2.1
58	c2	97	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
62	C6	12	LYS	2.1
62	C6	44	LEU	2.1
45	2	1713	G	2.1
61	C5	89	MET	2.1
37	o6	33	ALA	2.1
46	S0	159	ALA	2.1
52	S6	100	ALA	2.1
60	C4	106	ALA	2.1
74	d8	63	ALA	2.1
13	m1	157	GLU	2.1
19	m8	169	GLY	2.1
51	S5	151	GLY	2.1
60	C4	37	GLU	2.1
66	d0	74	GLU	2.1
19	M8	24	VAL	2.1
53	s7	136	VAL	2.1
55	s9	148	VAL	2.1
58	C2	123	VAL	2.1
60	C4	118	VAL	2.1
72	d6	18	VAL	2.1
7	l5	46	THR	2.1
7	L5	207	TYR	2.1
14	m3	139	LEU	2.1
19	m8	99	THR	2.1
30	N9	25	LYS	2.1
45	6	820	U	2.1
46	S0	160	ILE	2.1
49	s3	184	ILE	2.1
56	c0	76	LEU	2.1
57	c1	66	ILE	2.1
30	N9	29	TYR	2.1
64	C8	54	LEU	2.1
66	D0	77	LYS	2.1
66	d0	82	TYR	2.1
71	D5	97	LYS	2.1
72	d6	73	TYR	2.1
19	M8	180	ARG	2.1
50	s4	39	ARG	2.1
20	M9	131	ALA	2.1
48	s2	89	GLN	2.1
49	s3	149	ALA	2.1
55	s9	4	ALA	2.1

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Mol	Chain	Res	Type	RSRZ
1	1	1580	A	2.1
1	5	827	A	2.1
10	L8	25	PRO	2.1
13	m1	135	GLY	2.1
47	S1	93	GLY	2.1
50	S4	5	PRO	2.1
56	c0	4	PRO	2.1
61	c5	88	GLU	2.1
47	S1	154	SER	2.1
51	s5	205	SER	2.1
61	c5	12	PHE	2.1
63	c7	107	SER	2.1
1	5	1565	G	2.1
5	L3	89	VAL	2.1
45	6	647	G	2.1
47	S1	134	VAL	2.1
49	s3	99	VAL	2.1
71	d5	62	VAL	2.1
45	6	1426	C	2.1
47	S1	116	LYS	2.1
49	S3	7	LYS	2.1
5	l3	387	LEU	2.1
7	l5	92	LEU	2.1
10	l8	75	ILE	2.1
11	l9	4	ILE	2.1
22	N1	106	LEU	2.1
49	s3	113	LEU	2.1
62	C6	28	LEU	2.1
65	c9	124	ILE	2.1
77	SR	141	LEU	2.1
79	s6	158	ILE	2.1
17	M6	184	THR	2.1
55	s9	12	TYR	2.1
19	m8	42	ALA	2.1
54	s8	198	ALA	2.1
58	c2	94	ALA	2.1
71	D5	36	ALA	2.1
72	D6	6	ALA	2.1
14	M3	74	GLY	2.1
70	D4	66	GLY	2.1
13	m1	8	PRO	2.1
26	n5	44	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
51	s5	30	PRO	2.1
59	c3	137	PRO	2.1
66	d0	83	GLU	2.1
50	S4	32	SER	2.1
66	D0	76	SER	2.1
20	m9	17	VAL	2.1
22	n1	126	VAL	2.1
66	D0	62	VAL	2.1
1	5	1874	A	2.1
1	5	3279	A	2.1
7	l5	57	ASN	2.1
45	2	169	A	2.1
49	s3	106	LYS	2.1
65	c9	110	LYS	2.1
68	d2	82	LYS	2.1
7	l5	150	LEU	2.1
31	O0	84	LEU	2.1
54	s8	43	ILE	2.1
66	d0	68	ARG	2.1
60	C4	32	ASP	2.1
60	C4	71	CYS	2.1
72	D6	39	MET	2.1
77	sR	121	MET	2.1
51	s5	61	TYR	2.1
79	s6	71	THR	2.1
45	6	1435	G	2.1
50	s4	84	ALA	2.1
10	L8	79	GLN	2.1
22	n1	149	GLN	2.1
46	S0	30	GLN	2.1
4	l2	16	PHE	2.1
5	L3	82	PRO	2.1
7	L5	160	PHE	2.1
47	S1	190	PRO	2.1
12	M0	79	VAL	2.0
46	S0	29	VAL	2.0
46	s0	156	VAL	2.0
47	S1	91	VAL	2.0
49	S3	175	VAL	2.0
52	S6	36	VAL	2.0
66	d0	62	VAL	2.0
75	D9	6	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
61	C5	16	SER	2.0
62	c6	15	SER	2.0
29	n8	102	ILE	2.0
51	s5	97	LEU	2.0
52	S6	212	LEU	2.0
53	S7	114	ARG	2.0
7	L5	95	TRP	2.0
13	m1	109	HIS	2.0
13	m1	98	ALA	2.0
36	o5	82	ALA	2.0
45	6	793	A	2.0
47	S1	139	ALA	2.0
53	s7	6	ALA	2.0
56	C0	64	TYR	2.0
62	c6	49	TYR	2.0
77	sR	168	THR	2.0
49	S3	24	PHE	2.0
68	d2	123	GLY	2.0
55	S9	18	PRO	2.0
28	n7	47	GLU	2.0
30	n9	3	LYS	2.0
55	S9	72	GLU	2.0
62	c6	104	GLU	2.0
47	s1	48	VAL	2.0
58	C2	116	VAL	2.0
79	s6	157	VAL	2.0
1	5	1592	G	2.0
19	m8	69	ARG	2.0
26	n5	38	LEU	2.0
47	s1	217	LEU	2.0
67	d1	69	LEU	2.0
70	d4	18	LEU	2.0
36	o5	19	SER	2.0
39	O8	56	ILE	2.0
46	S0	2	SER	2.0
47	S1	121	ILE	2.0
47	S1	210	ILE	2.0
49	S3	84	ILE	2.0
50	S4	90	ILE	2.0
53	S7	149	ILE	2.0
57	c1	65	SER	2.0
59	C3	66	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
65	c9	41	SER	2.0
45	2	134	U	2.0
12	M0	102	MET	2.0
5	L3	22	ALA	2.0
6	l4	310	THR	2.0
7	L5	284	ALA	2.0
10	L8	110	THR	2.0
28	n7	44	ALA	2.0
52	S6	192	ALA	2.0
52	S6	224	ALA	2.0
57	C1	74	THR	2.0
64	c8	140	THR	2.0
78	SM	11	ASP	2.0
57	c1	13	PHE	2.0
72	d6	16	GLY	2.0
53	s7	4	PRO	2.0
59	c3	62	GLN	2.0
16	m5	89	VAL	2.0
58	C2	122	VAL	2.0
66	D0	117	VAL	2.0
68	d2	62	VAL	2.0
76	e0	62	VAL	2.0
53	s7	99	LEU	2.0
77	sR	252	LEU	2.0
26	n5	142	ILE	2.0
77	SR	122	ILE	2.0
1	5	1192	C	2.0
45	2	1465	C	2.0

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

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

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
81	MG	5	3796	1/1	-0.37	0.31	165,165,165,165	0
81	MG	5	4076	1/1	0.10	0.21	99,99,99,99	0
81	MG	5	3794	1/1	0.19	0.28	124,124,124,124	0
81	MG	2	2059	1/1	0.28	0.28	114,114,114,114	0
81	MG	2	2062	1/1	0.33	0.23	124,124,124,124	0
81	MG	2	2108	1/1	0.38	0.13	110,110,110,110	0
81	MG	6	2045	1/1	0.38	0.20	117,117,117,117	0
81	MG	2	2115	1/1	0.43	0.24	118,118,118,118	0
81	MG	6	1947	1/1	0.46	0.29	113,113,113,113	0
81	MG	2	2086	1/1	0.48	0.24	95,95,95,95	0
81	MG	2	1986	1/1	0.51	0.24	82,82,82,82	0
81	MG	6	2009	1/1	0.52	0.21	126,126,126,126	0
81	MG	5	3879	1/1	0.52	0.12	137,137,137,137	0
81	MG	6	2061	1/1	0.52	0.32	110,110,110,110	0
81	MG	2	1976	1/1	0.53	0.19	113,113,113,113	0
81	MG	6	2025	1/1	0.53	0.10	85,85,85,85	0
81	MG	1	4035	1/1	0.54	0.16	98,98,98,98	0
81	MG	6	1972	1/1	0.54	0.15	107,107,107,107	0
81	MG	o1	201	1/1	0.54	0.13	72,72,72,72	0
81	MG	c4	203	1/1	0.54	0.21	118,118,118,118	0
81	MG	5	3983	1/1	0.55	0.18	92,92,92,92	0
81	MG	5	3937	1/1	0.55	0.16	76,76,76,76	0
81	MG	5	4090	1/1	0.56	0.27	85,85,85,85	0
81	MG	5	3966	1/1	0.56	0.11	92,92,92,92	0
81	MG	2	2109	1/1	0.56	0.27	103,103,103,103	0
81	MG	6	1965	1/1	0.56	0.26	104,104,104,104	0
81	MG	5	3941	1/1	0.56	0.16	113,113,113,113	0
81	MG	1	4140	1/1	0.58	0.17	56,56,56,56	1
81	MG	6	2028	1/1	0.58	0.21	126,126,126,126	0
81	MG	5	3999	1/1	0.58	0.15	71,71,71,71	0
81	MG	6	2008	1/1	0.58	0.20	98,98,98,98	0
81	MG	5	3793	1/1	0.58	0.22	89,89,89,89	0
81	MG	m5	302	1/1	0.59	0.23	82,82,82,82	0
81	MG	5	4079	1/1	0.59	0.28	105,105,105,105	0
81	MG	6	2058	1/1	0.60	0.28	121,121,121,121	0
81	MG	5	4057	1/1	0.60	0.20	117,117,117,117	0
81	MG	2	2061	1/1	0.60	0.26	105,105,105,105	0
81	MG	5	3878	1/1	0.61	0.32	118,118,118,118	0
81	MG	1	3847	1/1	0.61	0.15	77,77,77,77	0
81	MG	8	213	1/1	0.61	0.18	67,67,67,67	0
81	MG	6	2046	1/1	0.61	0.16	118,118,118,118	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	4070	1/1	0.61	0.16	113,113,113,113	0
81	MG	2	2049	1/1	0.61	0.31	88,88,88,88	0
81	MG	c4	202	1/1	0.61	0.25	119,119,119,119	0
81	MG	6	2014	1/1	0.61	0.25	89,89,89,89	0
81	MG	6	2060	1/1	0.62	0.22	88,88,88,88	0
81	MG	N3	201	1/1	0.62	0.23	82,82,82,82	0
81	MG	1	3632	1/1	0.62	0.15	45,45,45,45	0
81	MG	5	3924	1/1	0.62	0.22	75,75,75,75	0
81	MG	d3	202	1/1	0.62	0.09	87,87,87,87	0
81	MG	5	4034	1/1	0.63	0.20	102,102,102,102	0
81	MG	6	2062	1/1	0.63	0.17	108,108,108,108	0
81	MG	8	220	1/1	0.63	0.22	88,88,88,88	0
81	MG	5	3942	1/1	0.63	0.13	108,108,108,108	0
81	MG	5	4005	1/1	0.63	0.15	85,85,85,85	0
81	MG	1	4100	1/1	0.64	0.33	94,94,94,94	0
81	MG	2	2113	1/1	0.64	0.19	95,95,95,95	0
81	MG	5	4125	1/1	0.64	0.15	78,78,78,78	0
81	MG	1	3876	1/1	0.64	0.14	66,66,66,66	1
81	MG	1	4183	1/1	0.64	0.16	96,96,96,96	0
81	MG	1	4095	1/1	0.64	0.13	86,86,86,86	0
81	MG	5	3847	1/1	0.65	0.20	96,96,96,96	0
81	MG	5	3598	1/1	0.65	0.21	82,82,82,82	0
81	MG	2	2041	1/1	0.65	0.16	126,126,126,126	0
81	MG	6	2054	1/1	0.66	0.12	110,110,110,110	0
81	MG	2	1958	1/1	0.66	0.15	114,114,114,114	0
81	MG	1	4036	1/1	0.66	0.11	80,80,80,80	0
81	MG	1	3874	1/1	0.66	0.09	67,67,67,67	1
81	MG	2	1947	1/1	0.66	0.26	110,110,110,110	0
81	MG	5	4113	1/1	0.66	0.25	74,74,74,74	0
81	MG	5	3910	1/1	0.66	0.12	74,74,74,74	0
81	MG	7	207	1/1	0.66	0.28	118,118,118,118	0
81	MG	2	2095	1/1	0.67	0.17	78,78,78,78	0
81	MG	1	4057	1/1	0.67	0.11	89,89,89,89	0
81	MG	6	2072	1/1	0.67	0.13	74,74,74,74	0
81	MG	1	4160	1/1	0.67	0.08	65,65,65,65	0
81	MG	5	3771	1/1	0.67	0.22	88,88,88,88	0
81	MG	5	4035	1/1	0.67	0.24	85,85,85,85	0
81	MG	1	3607	1/1	0.68	0.20	57,57,57,57	1
81	MG	5	4085	1/1	0.68	0.17	88,88,88,88	0
81	MG	1	4117	1/1	0.68	0.13	114,114,114,114	0
81	MG	2	2040	1/1	0.68	0.12	123,123,123,123	0
81	MG	2	1948	1/1	0.68	0.19	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	6	2038	1/1	0.68	0.21	105,105,105,105	0
81	MG	6	2041	1/1	0.68	0.17	101,101,101,101	0
81	MG	2	2042	1/1	0.68	0.14	126,126,126,126	0
81	MG	1	4136	1/1	0.68	0.15	47,47,47,47	1
81	MG	5	3877	1/1	0.68	0.18	66,66,66,66	0
81	MG	18	301	1/1	0.68	0.17	109,109,109,109	0
81	MG	2	1972	1/1	0.68	0.33	92,92,92,92	0
81	MG	2	2060	1/1	0.68	0.20	103,103,103,103	0
81	MG	6	1941	1/1	0.68	0.13	80,80,80,80	0
81	MG	5	3890	1/1	0.68	0.17	78,78,78,78	0
81	MG	6	1960	1/1	0.68	0.26	110,110,110,110	0
81	MG	5	3570	1/1	0.68	0.21	110,110,110,110	0
81	MG	5	3585	1/1	0.68	0.18	73,73,73,73	0
81	MG	5	3871	1/1	0.69	0.14	75,75,75,75	0
81	MG	3	206	1/1	0.69	0.18	87,87,87,87	0
81	MG	o0	203	1/1	0.69	0.17	102,102,102,102	0
81	MG	2	2084	1/1	0.69	0.18	105,105,105,105	0
81	MG	1	3788	1/1	0.69	0.09	68,68,68,68	0
81	MG	6	2068	1/1	0.69	0.11	71,71,71,71	0
81	MG	5	3887	1/1	0.69	0.13	79,79,79,79	0
81	MG	5	4059	1/1	0.69	0.20	98,98,98,98	0
81	MG	1	3526	1/1	0.69	0.12	48,48,48,48	0
81	MG	5	3904	1/1	0.69	0.16	89,89,89,89	0
81	MG	o2	204	1/1	0.70	0.11	62,62,62,62	0
81	MG	6	1919	1/1	0.70	0.13	85,85,85,85	1
81	MG	6	2042	1/1	0.70	0.32	98,98,98,98	0
81	MG	5	4000	1/1	0.70	0.16	78,78,78,78	0
81	MG	6	1942	1/1	0.70	0.28	105,105,105,105	0
81	MG	2	2071	1/1	0.70	0.14	67,67,67,67	0
81	MG	O1	203	1/1	0.70	0.21	74,74,74,74	0
81	MG	1	3548	1/1	0.70	0.20	67,67,67,67	0
80	PAR	5	3405	42/42	0.70	0.12	131,131,131,131	0
81	MG	5	3707	1/1	0.70	0.14	58,58,58,58	0
81	MG	L5	301	1/1	0.70	0.13	84,84,84,84	0
81	MG	1	4091	1/1	0.70	0.21	82,82,82,82	0
81	MG	2	2063	1/1	0.70	0.22	89,89,89,89	0
81	MG	5	3896	1/1	0.70	0.10	68,68,68,68	0
81	MG	6	2029	1/1	0.70	0.24	77,77,77,77	0
81	MG	C9	202	1/1	0.71	0.15	133,133,133,133	0
81	MG	N8	203	1/1	0.71	0.28	61,61,61,61	1
81	MG	2	2106	1/1	0.71	0.12	84,84,84,84	0
81	MG	1	4072	1/1	0.71	0.22	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3922	1/1	0.71	0.28	87,87,87,87	0
81	MG	5	3660	1/1	0.71	0.16	86,86,86,86	0
81	MG	2	2073	1/1	0.71	0.13	99,99,99,99	0
81	MG	1	3727	1/1	0.71	0.25	39,39,39,39	1
81	MG	6	2075	1/1	0.71	0.17	98,98,98,98	0
81	MG	1	4070	1/1	0.71	0.12	84,84,84,84	0
81	MG	6	1961	1/1	0.71	0.15	98,98,98,98	0
81	MG	5	3943	1/1	0.71	0.09	75,75,75,75	0
81	MG	5	4106	1/1	0.72	0.10	73,73,73,73	0
81	MG	n6	202	1/1	0.72	0.08	69,69,69,69	0
81	MG	2	1940	1/1	0.72	0.23	78,78,78,78	0
81	MG	M4	203	1/1	0.72	0.08	64,64,64,64	0
80	PAR	3	201	42/42	0.72	0.17	95,95,95,95	42
81	MG	1	3855	1/1	0.72	0.08	51,51,51,51	0
81	MG	6	1936	1/1	0.72	0.25	84,84,84,84	0
81	MG	1	4018	1/1	0.72	0.18	50,50,50,50	0
81	MG	2	1932	1/1	0.72	0.25	83,83,83,83	0
81	MG	5	3770	1/1	0.73	0.09	59,59,59,59	0
81	MG	2	2093	1/1	0.73	0.12	69,69,69,69	0
81	MG	1	4101	1/1	0.73	0.19	113,113,113,113	0
81	MG	6	2070	1/1	0.73	0.23	94,94,94,94	0
81	MG	1	3502	1/1	0.73	0.14	66,66,66,66	0
81	MG	1	3851	1/1	0.73	0.10	86,86,86,86	0
81	MG	6	1957	1/1	0.73	0.23	102,102,102,102	0
81	MG	5	3559	1/1	0.73	0.24	75,75,75,75	0
81	MG	5	3893	1/1	0.73	0.15	68,68,68,68	0
81	MG	3	210	1/1	0.74	0.20	91,91,91,91	0
81	MG	5	4004	1/1	0.74	0.10	72,72,72,72	0
81	MG	2	2077	1/1	0.74	0.10	121,121,121,121	0
81	MG	5	3945	1/1	0.74	0.18	103,103,103,103	0
81	MG	2	2104	1/1	0.74	0.20	82,82,82,82	0
81	MG	6	1951	1/1	0.74	0.22	78,78,78,78	0
81	MG	2	2048	1/1	0.74	0.32	84,84,84,84	0
81	MG	6	1959	1/1	0.74	0.23	119,119,119,119	0
81	MG	5	4058	1/1	0.74	0.09	75,75,75,75	0
81	MG	5	4123	1/1	0.74	0.20	84,84,84,84	0
81	MG	1	3956	1/1	0.74	0.07	67,67,67,67	0
81	MG	6	1969	1/1	0.74	0.28	101,101,101,101	0
81	MG	5	3615	1/1	0.75	0.19	82,82,82,82	0
80	PAR	6	1906	42/42	0.75	0.14	120,120,120,120	0
81	MG	6	2044	1/1	0.75	0.08	87,87,87,87	0
81	MG	5	3844	1/1	0.75	0.22	81,81,81,81	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3845	1/1	0.75	0.30	68,68,68,68	0
81	MG	5	3903	1/1	0.75	0.13	87,87,87,87	0
81	MG	6	1940	1/1	0.75	0.21	100,100,100,100	0
81	MG	6	1977	1/1	0.75	0.19	107,107,107,107	0
81	MG	6	1979	1/1	0.75	0.14	90,90,90,90	0
81	MG	1	4131	1/1	0.75	0.08	71,71,71,71	0
81	MG	1	3972	1/1	0.75	0.13	84,84,84,84	0
81	MG	6	1944	1/1	0.75	0.21	95,95,95,95	0
81	MG	6	2020	1/1	0.75	0.28	101,101,101,101	0
81	MG	2	2089	1/1	0.75	0.23	93,93,93,93	0
81	MG	5	3789	1/1	0.75	0.15	70,70,70,70	0
81	MG	6	1954	1/1	0.75	0.24	98,98,98,98	0
81	MG	2	2116	1/1	0.75	0.19	93,93,93,93	0
81	MG	m8	201	1/1	0.76	0.30	72,72,72,72	0
81	MG	2	1909	1/1	0.76	0.08	88,88,88,88	0
81	MG	6	1981	1/1	0.76	0.14	77,77,77,77	0
81	MG	6	2053	1/1	0.76	0.14	123,123,123,123	0
81	MG	6	1993	1/1	0.76	0.18	76,76,76,76	0
81	MG	2	2033	1/1	0.76	0.20	75,75,75,75	0
81	MG	6	1952	1/1	0.76	0.10	103,103,103,103	0
81	MG	1	3998	1/1	0.76	0.14	86,86,86,86	0
81	MG	S6	301	1/1	0.76	0.30	118,118,118,118	0
81	MG	1	3606	1/1	0.76	0.13	74,74,74,74	0
81	MG	6	1924	1/1	0.76	0.22	83,83,83,83	0
81	MG	1	3519	1/1	0.76	0.21	43,43,43,43	0
81	MG	6	2037	1/1	0.76	0.20	102,102,102,102	0
81	MG	2	1978	1/1	0.76	0.16	79,79,79,79	0
81	MG	5	4009	1/1	0.76	0.10	97,97,97,97	0
81	MG	c9	201	1/1	0.76	0.14	115,115,115,115	0
81	MG	5	3772	1/1	0.76	0.18	73,73,73,73	0
81	MG	L5	303	1/1	0.77	0.31	86,86,86,86	0
81	MG	5	3874	1/1	0.77	0.18	75,75,75,75	0
81	MG	1	3968	1/1	0.77	0.15	81,81,81,81	0
81	MG	5	4003	1/1	0.77	0.15	64,64,64,64	0
81	MG	2	2056	1/1	0.77	0.22	80,80,80,80	0
81	MG	1	3498	1/1	0.77	0.17	66,66,66,66	0
81	MG	5	3679	1/1	0.77	0.15	52,52,52,52	0
81	MG	5	3685	1/1	0.77	0.13	59,59,59,59	0
81	MG	5	3697	1/1	0.77	0.11	60,60,60,60	0
81	MG	5	4044	1/1	0.77	0.10	64,64,64,64	0
81	MG	5	4045	1/1	0.77	0.17	67,67,67,67	0
81	MG	1	4094	1/1	0.77	0.22	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4043	1/1	0.77	0.21	91,91,91,91	0
81	MG	1	3896	1/1	0.77	0.27	76,76,76,76	0
81	MG	5	4066	1/1	0.77	0.24	88,88,88,88	0
81	MG	2	2016	1/1	0.77	0.33	84,84,84,84	0
81	MG	2	1916	1/1	0.77	0.25	86,86,86,86	0
80	PAR	1	3433	42/42	0.77	0.15	64,64,64,64	42
81	MG	5	3925	1/1	0.77	0.21	73,73,73,73	0
81	MG	2	2076	1/1	0.77	0.26	92,92,92,92	0
81	MG	5	4099	1/1	0.77	0.12	58,58,58,58	0
81	MG	6	2063	1/1	0.77	0.10	88,88,88,88	0
81	MG	1	4071	1/1	0.77	0.11	78,78,78,78	0
81	MG	5	4108	1/1	0.77	0.17	70,70,70,70	0
81	MG	5	4110	1/1	0.77	0.25	82,82,82,82	0
81	MG	5	3840	1/1	0.77	0.30	89,89,89,89	0
81	MG	2	2082	1/1	0.77	0.14	119,119,119,119	0
81	MG	1	4121	1/1	0.77	0.17	88,88,88,88	0
81	MG	5	3955	1/1	0.77	0.14	54,54,54,54	0
81	MG	2	2085	1/1	0.77	0.20	76,76,76,76	0
81	MG	5	3616	1/1	0.78	0.15	81,81,81,81	0
81	MG	1	4184	1/1	0.78	0.12	67,67,67,67	0
81	MG	3	204	1/1	0.78	0.17	84,84,84,84	0
81	MG	6	1983	1/1	0.78	0.13	88,88,88,88	0
81	MG	1	3903	1/1	0.78	0.12	68,68,68,68	0
81	MG	2	2070	1/1	0.78	0.14	119,119,119,119	0
81	MG	13	406	1/1	0.78	0.08	62,62,62,62	0
81	MG	1	3787	1/1	0.78	0.14	97,97,97,97	0
81	MG	5	4030	1/1	0.78	0.16	88,88,88,88	0
81	MG	2	2072	1/1	0.78	0.16	83,83,83,83	0
81	MG	2	2111	1/1	0.78	0.24	72,72,72,72	0
81	MG	1	4073	1/1	0.78	0.08	80,80,80,80	0
81	MG	5	3909	1/1	0.78	0.10	62,62,62,62	0
81	MG	5	4050	1/1	0.78	0.11	57,57,57,57	1
81	MG	2	2074	1/1	0.78	0.17	89,89,89,89	0
81	MG	1	3965	1/1	0.78	0.14	53,53,53,53	1
81	MG	6	1934	1/1	0.78	0.27	83,83,83,83	0
81	MG	2	2043	1/1	0.78	0.10	85,85,85,85	0
81	MG	5	4062	1/1	0.78	0.20	85,85,85,85	0
81	MG	2	1954	1/1	0.78	0.12	133,133,133,133	0
81	MG	5	3928	1/1	0.78	0.18	76,76,76,76	0
81	MG	5	4073	1/1	0.78	0.23	77,77,77,77	0
81	MG	5	3834	1/1	0.78	0.07	77,77,77,77	0
81	MG	5	3839	1/1	0.78	0.23	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	4082	1/1	0.78	0.24	79,79,79,79	0
81	MG	5	3505	1/1	0.78	0.17	59,59,59,59	0
81	MG	2	2083	1/1	0.78	0.13	101,101,101,101	0
81	MG	5	4091	1/1	0.78	0.16	75,75,75,75	0
81	MG	1	3878	1/1	0.78	0.18	54,54,54,54	1
81	MG	6	2074	1/1	0.78	0.22	81,81,81,81	0
81	MG	1	3785	1/1	0.78	0.09	69,69,69,69	0
81	MG	1	4098	1/1	0.78	0.32	89,89,89,89	0
81	MG	6	1966	1/1	0.78	0.23	88,88,88,88	0
81	MG	1	3899	1/1	0.78	0.19	76,76,76,76	0
81	MG	5	3987	1/1	0.78	0.13	77,77,77,77	0
81	MG	6	1976	1/1	0.79	0.27	89,89,89,89	0
81	MG	2	1915	1/1	0.79	0.26	82,82,82,82	0
81	MG	5	4126	1/1	0.79	0.22	78,78,78,78	0
81	MG	5	3510	1/1	0.79	0.18	68,68,68,68	0
81	MG	5	3513	1/1	0.79	0.20	76,76,76,76	0
81	MG	1	4167	1/1	0.79	0.07	65,65,65,65	0
81	MG	2	2078	1/1	0.79	0.10	100,100,100,100	0
81	MG	2	1919	1/1	0.79	0.17	73,73,73,73	0
81	MG	1	3963	1/1	0.79	0.12	52,52,52,52	0
81	MG	5	4033	1/1	0.79	0.26	88,88,88,88	0
81	MG	6	2022	1/1	0.79	0.15	64,64,64,64	0
81	MG	1	4056	1/1	0.79	0.07	69,69,69,69	0
80	PAR	5	3422	42/42	0.79	0.11	105,105,105,105	0
81	MG	5	3892	1/1	0.79	0.09	66,66,66,66	0
81	MG	2	2051	1/1	0.79	0.18	96,96,96,96	0
81	MG	1	3591	1/1	0.79	0.14	77,77,77,77	0
81	MG	1	3504	1/1	0.79	0.20	58,58,58,58	0
81	MG	1	4119	1/1	0.79	0.16	80,80,80,80	0
81	MG	5	3906	1/1	0.79	0.15	92,92,92,92	0
80	PAR	5	3403	42/42	0.79	0.18	84,84,84,84	42
81	MG	5	3709	1/1	0.79	0.15	54,54,54,54	0
81	MG	1	3620	1/1	0.79	0.13	68,68,68,68	0
81	MG	6	1943	1/1	0.79	0.23	89,89,89,89	0
81	MG	1	4088	1/1	0.79	0.22	79,79,79,79	0
81	MG	2	2064	1/1	0.79	0.17	111,111,111,111	0
81	MG	5	3774	1/1	0.79	0.13	59,59,59,59	1
81	MG	2	2068	1/1	0.79	0.13	78,78,78,78	0
80	PAR	1	3401	42/42	0.79	0.11	87,87,87,87	42
81	MG	2	1987	1/1	0.79	0.22	81,81,81,81	0
81	MG	2	2004	1/1	0.79	0.13	69,69,69,69	0
81	MG	6	2071	1/1	0.79	0.18	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3823	1/1	0.79	0.14	78,78,78,78	0
81	MG	1	4150	1/1	0.79	0.06	62,62,62,62	0
81	MG	6	1963	1/1	0.79	0.28	97,97,97,97	0
81	MG	S9	201	1/1	0.79	0.19	126,126,126,126	0
81	MG	1	3695	1/1	0.79	0.14	50,50,50,50	1
81	MG	D3	202	1/1	0.79	0.12	79,79,79,79	0
81	MG	5	3990	1/1	0.79	0.15	91,91,91,91	0
81	MG	1	4037	1/1	0.80	0.11	97,97,97,97	0
81	MG	2	2029	1/1	0.80	0.34	81,81,81,81	0
80	PAR	6	1902	42/42	0.80	0.20	87,87,87,87	42
81	MG	6	1992	1/1	0.80	0.28	86,86,86,86	0
81	MG	l3	408	1/1	0.80	0.10	71,71,71,71	0
81	MG	1	3875	1/1	0.80	0.17	64,64,64,64	1
81	MG	2	1943	1/1	0.80	0.19	82,82,82,82	0
81	MG	6	2013	1/1	0.80	0.18	83,83,83,83	0
81	MG	1	3900	1/1	0.80	0.13	70,70,70,70	0
81	MG	1	4142	1/1	0.80	0.08	83,83,83,83	0
81	MG	n9	101	1/1	0.80	0.15	65,65,65,65	0
81	MG	2	2081	1/1	0.80	0.07	79,79,79,79	0
81	MG	5	3914	1/1	0.80	0.13	97,97,97,97	0
81	MG	5	3921	1/1	0.80	0.27	91,91,91,91	0
81	MG	N1	203	1/1	0.80	0.11	62,62,62,62	0
81	MG	2	1956	1/1	0.80	0.16	119,119,119,119	0
81	MG	5	3828	1/1	0.80	0.08	64,64,64,64	0
81	MG	5	4069	1/1	0.80	0.12	69,69,69,69	1
81	MG	2	1957	1/1	0.80	0.17	81,81,81,81	0
81	MG	2	2054	1/1	0.80	0.17	86,86,86,86	0
81	MG	1	4062	1/1	0.80	0.11	48,48,48,48	0
81	MG	5	3591	1/1	0.80	0.25	58,58,58,58	0
81	MG	1	3507	1/1	0.80	0.19	65,65,65,65	0
81	MG	6	2055	1/1	0.80	0.12	106,106,106,106	0
81	MG	5	3846	1/1	0.80	0.13	89,89,89,89	0
80	PAR	5	3428	42/42	0.80	0.12	120,120,120,120	0
81	MG	5	3964	1/1	0.80	0.09	67,67,67,67	1
81	MG	5	3853	1/1	0.80	0.10	68,68,68,68	0
81	MG	1	4108	1/1	0.80	0.28	83,83,83,83	0
81	MG	5	3617	1/1	0.80	0.11	69,69,69,69	0
81	MG	5	3875	1/1	0.80	0.21	75,75,75,75	0
81	MG	5	4111	1/1	0.80	0.20	75,75,75,75	0
81	MG	2	1912	1/1	0.80	0.17	92,92,92,92	0
81	MG	5	4120	1/1	0.80	0.14	58,58,58,58	0
81	MG	1	3957	1/1	0.80	0.14	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	c1	201	1/1	0.80	0.24	78,78,78,78	0
81	MG	c4	201	1/1	0.80	0.18	118,118,118,118	0
81	MG	1	3881	1/1	0.80	0.19	72,72,72,72	0
81	MG	2	2008	1/1	0.80	0.26	76,76,76,76	0
81	MG	2	2011	1/1	0.80	0.23	101,101,101,101	0
81	MG	7	208	1/1	0.80	0.14	117,117,117,117	0
81	MG	5	3619	1/1	0.81	0.23	70,70,70,70	0
81	MG	8	222	1/1	0.81	0.12	78,78,78,78	0
81	MG	5	3916	1/1	0.81	0.12	96,96,96,96	0
81	MG	5	3651	1/1	0.81	0.13	63,63,63,63	1
81	MG	5	3843	1/1	0.81	0.26	86,86,86,86	0
81	MG	6	2006	1/1	0.81	0.18	76,76,76,76	0
81	MG	2	2012	1/1	0.81	0.10	104,104,104,104	0
80	PAR	1	3413	42/42	0.81	0.17	64,64,64,64	42
81	MG	n0	205	1/1	0.81	0.15	62,62,62,62	0
81	MG	n6	201	1/1	0.81	0.16	71,71,71,71	0
81	MG	5	3927	1/1	0.81	0.25	75,75,75,75	0
81	MG	1	3501	1/1	0.81	0.14	78,78,78,78	0
80	PAR	5	3411	42/42	0.81	0.17	83,83,83,83	0
81	MG	5	3699	1/1	0.81	0.09	48,48,48,48	0
81	MG	o1	202	1/1	0.81	0.24	69,69,69,69	0
81	MG	5	3706	1/1	0.81	0.09	64,64,64,64	0
81	MG	5	4072	1/1	0.81	0.18	65,65,65,65	0
81	MG	1	3527	1/1	0.81	0.22	32,32,32,32	0
80	PAR	5	3404	42/42	0.81	0.16	90,90,90,90	0
81	MG	5	3876	1/1	0.81	0.17	74,74,74,74	0
81	MG	2	1967	1/1	0.81	0.21	100,100,100,100	0
81	MG	5	3517	1/1	0.81	0.23	57,57,57,57	0
81	MG	5	3971	1/1	0.81	0.10	58,58,58,58	0
81	MG	5	3531	1/1	0.81	0.18	49,49,49,49	0
81	MG	3	209	1/1	0.81	0.30	80,80,80,80	0
81	MG	1	3792	1/1	0.81	0.19	45,45,45,45	0
81	MG	6	1949	1/1	0.81	0.23	83,83,83,83	0
81	MG	1	3640	1/1	0.81	0.19	57,57,57,57	0
81	MG	5	4109	1/1	0.81	0.22	79,79,79,79	0
81	MG	1	3671	1/1	0.81	0.15	52,52,52,52	0
81	MG	1	3982	1/1	0.81	0.16	62,62,62,62	0
81	MG	5	4112	1/1	0.81	0.32	69,69,69,69	0
81	MG	N1	202	1/1	0.81	0.08	61,61,61,61	0
81	MG	5	3825	1/1	0.81	0.12	67,67,67,67	0
81	MG	5	4121	1/1	0.81	0.11	65,65,65,65	0
81	MG	6	1964	1/1	0.81	0.20	108,108,108,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3905	1/1	0.81	0.19	121,121,121,121	0
81	MG	5	4012	1/1	0.81	0.12	80,80,80,80	0
81	MG	5	4018	1/1	0.81	0.10	95,95,95,95	0
81	MG	2	1945	1/1	0.81	0.13	88,88,88,88	0
81	MG	1	3997	1/1	0.81	0.15	80,80,80,80	0
81	MG	5	3835	1/1	0.81	0.11	57,57,57,57	0
81	MG	5	3643	1/1	0.82	0.08	60,60,60,60	0
81	MG	1	3857	1/1	0.82	0.09	57,57,57,57	0
81	MG	4	223	1/1	0.82	0.13	65,65,65,65	0
81	MG	5	4122	1/1	0.82	0.20	68,68,68,68	0
81	MG	5	3671	1/1	0.82	0.14	56,56,56,56	0
81	MG	2	2110	1/1	0.82	0.23	78,78,78,78	0
81	MG	2	2003	1/1	0.82	0.13	66,66,66,66	0
81	MG	2	1920	1/1	0.82	0.21	68,68,68,68	0
81	MG	2	1930	1/1	0.82	0.23	70,70,70,70	0
81	MG	8	212	1/1	0.82	0.20	74,74,74,74	0
81	MG	5	4007	1/1	0.82	0.18	76,76,76,76	0
81	MG	5	4008	1/1	0.82	0.15	59,59,59,59	0
81	MG	1	3893	1/1	0.82	0.12	71,71,71,71	0
81	MG	2	1937	1/1	0.82	0.25	69,69,69,69	0
81	MG	5	4014	1/1	0.82	0.15	71,71,71,71	0
81	MG	17	304	1/1	0.82	0.22	66,66,66,66	0
81	MG	S7	201	1/1	0.82	0.09	89,89,89,89	0
81	MG	1	4034	1/1	0.82	0.12	66,66,66,66	0
81	MG	5	3898	1/1	0.82	0.08	66,66,66,66	0
81	MG	2	2018	1/1	0.82	0.08	99,99,99,99	0
81	MG	2	2024	1/1	0.82	0.10	78,78,78,78	0
81	MG	1	4146	1/1	0.82	0.23	55,55,55,55	0
81	MG	M5	307	1/1	0.82	0.11	43,43,43,43	0
81	MG	1	3858	1/1	0.82	0.05	106,106,106,106	0
80	PAR	5	3418	42/42	0.82	0.12	98,98,98,98	0
80	PAR	6	1905	42/42	0.82	0.12	112,112,112,112	0
81	MG	N3	202	1/1	0.82	0.16	68,68,68,68	0
81	MG	5	3919	1/1	0.82	0.20	58,58,58,58	0
81	MG	2	2047	1/1	0.82	0.15	94,94,94,94	0
81	MG	6	2051	1/1	0.82	0.20	110,110,110,110	0
81	MG	6	1926	1/1	0.82	0.24	70,70,70,70	0
81	MG	5	3826	1/1	0.82	0.23	78,78,78,78	0
81	MG	5	3572	1/1	0.82	0.19	72,72,72,72	0
81	MG	5	3581	1/1	0.82	0.21	55,55,55,55	0
81	MG	1	3550	1/1	0.82	0.10	64,64,64,64	0
81	MG	O1	202	1/1	0.82	0.19	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	1963	1/1	0.82	0.23	112,112,112,112	0
81	MG	5	3841	1/1	0.82	0.13	82,82,82,82	0
81	MG	5	3604	1/1	0.82	0.11	62,62,62,62	0
81	MG	6	1948	1/1	0.82	0.21	111,111,111,111	0
81	MG	1	4054	1/1	0.82	0.17	75,75,75,75	0
81	MG	1	4123	1/1	0.82	0.08	70,70,70,70	1
81	MG	5	3951	1/1	0.82	0.09	55,55,55,55	0
81	MG	1	3791	1/1	0.82	0.13	62,62,62,62	0
81	MG	s6	301	1/1	0.82	0.18	121,121,121,121	0
81	MG	1	4133	1/1	0.82	0.19	69,69,69,69	0
81	MG	6	1958	1/1	0.82	0.17	81,81,81,81	0
81	MG	5	3620	1/1	0.82	0.24	79,79,79,79	0
81	MG	5	3855	1/1	0.82	0.19	74,74,74,74	0
81	MG	5	3974	1/1	0.82	0.11	59,59,59,59	0
81	MG	5	3976	1/1	0.82	0.30	58,58,58,58	0
81	MG	5	4119	1/1	0.83	0.08	89,89,89,89	0
81	MG	1	3904	1/1	0.83	0.10	63,63,63,63	0
81	MG	1	4002	1/1	0.83	0.10	75,75,75,75	0
81	MG	2	1926	1/1	0.83	0.13	62,62,62,62	0
81	MG	2	2091	1/1	0.83	0.19	81,81,81,81	0
81	MG	2	1929	1/1	0.83	0.13	78,78,78,78	0
81	MG	6	1974	1/1	0.83	0.11	110,110,110,110	0
81	MG	6	1975	1/1	0.83	0.06	104,104,104,104	1
81	MG	5	3646	1/1	0.83	0.12	66,66,66,66	0
81	MG	1	4014	1/1	0.83	0.21	70,70,70,70	0
81	MG	2	2098	1/1	0.83	0.17	79,79,79,79	0
81	MG	5	3880	1/1	0.83	0.12	77,77,77,77	0
81	MG	1	4198	1/1	0.83	0.17	68,68,68,68	0
81	MG	6	1989	1/1	0.83	0.13	75,75,75,75	0
81	MG	8	217	1/1	0.83	0.23	69,69,69,69	0
81	MG	1	3932	1/1	0.83	0.12	44,44,44,44	0
81	MG	6	2001	1/1	0.83	0.19	105,105,105,105	0
81	MG	1	4099	1/1	0.83	0.23	85,85,85,85	0
81	MG	8	223	1/1	0.83	0.34	99,99,99,99	0
81	MG	8	225	1/1	0.83	0.14	77,77,77,77	0
81	MG	l3	402	1/1	0.83	0.10	59,59,59,59	0
81	MG	1	3941	1/1	0.83	0.08	72,72,72,72	0
81	MG	6	2017	1/1	0.83	0.18	93,93,93,93	0
81	MG	1	3954	1/1	0.83	0.10	65,65,65,65	0
81	MG	5	4017	1/1	0.83	0.31	67,67,67,67	0
81	MG	1	4102	1/1	0.83	0.10	66,66,66,66	0
81	MG	5	3900	1/1	0.83	0.21	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	4	224	1/1	0.83	0.16	55,55,55,55	0
81	MG	6	2036	1/1	0.83	0.35	80,80,80,80	0
81	MG	1	3786	1/1	0.83	0.15	67,67,67,67	0
80	PAR	1	3436	42/42	0.83	0.13	85,85,85,85	0
81	MG	5	4041	1/1	0.83	0.14	70,70,70,70	0
81	MG	L9	203	1/1	0.83	0.09	71,71,71,71	0
81	MG	6	2043	1/1	0.83	0.13	97,97,97,97	0
81	MG	1	3961	1/1	0.83	0.17	40,40,40,40	0
81	MG	1	3885	1/1	0.83	0.15	67,67,67,67	0
81	MG	1	3680	1/1	0.83	0.12	62,62,62,62	0
81	MG	6	2050	1/1	0.83	0.24	80,80,80,80	0
80	PAR	8	201	42/42	0.83	0.16	79,79,79,79	42
81	MG	D6	102	1/1	0.83	0.26	79,79,79,79	0
80	PAR	5	3402	42/42	0.83	0.11	81,81,81,81	42
81	MG	1	3976	1/1	0.83	0.15	56,56,56,56	0
81	MG	6	2056	1/1	0.83	0.12	126,126,126,126	0
81	MG	N8	202	1/1	0.83	0.11	59,59,59,59	0
81	MG	1	3810	1/1	0.83	0.18	96,96,96,96	0
81	MG	5	3827	1/1	0.83	0.15	70,70,70,70	0
81	MG	O1	201	1/1	0.83	0.13	64,64,64,64	0
81	MG	1	3985	1/1	0.83	0.17	61,61,61,61	0
81	MG	1	3991	1/1	0.83	0.15	41,41,41,41	1
81	MG	1	3654	1/1	0.83	0.10	47,47,47,47	0
81	MG	1	4159	1/1	0.83	0.10	55,55,55,55	1
81	MG	5	3944	1/1	0.83	0.15	118,118,118,118	0
81	MG	2	2080	1/1	0.83	0.13	81,81,81,81	0
81	MG	5	3950	1/1	0.83	0.13	61,61,61,61	0
81	MG	1	4089	1/1	0.83	0.14	89,89,89,89	0
81	MG	5	3595	1/1	0.83	0.26	83,83,83,83	0
81	MG	5	3961	1/1	0.83	0.08	60,60,60,60	0
81	MG	2	2017	1/1	0.83	0.26	93,93,93,93	0
81	MG	1	4161	1/1	0.83	0.10	61,61,61,61	1
81	MG	5	3612	1/1	0.83	0.08	70,70,70,70	0
81	MG	d2	201	1/1	0.83	0.40	84,84,84,84	0
81	MG	2	2020	1/1	0.83	0.12	83,83,83,83	0
81	MG	2	2000	1/1	0.84	0.12	78,78,78,78	0
81	MG	1	3913	1/1	0.84	0.17	66,66,66,66	0
80	PAR	1	3435	42/42	0.84	0.23	40,40,40,40	42
80	PAR	2	1901	42/42	0.84	0.17	82,82,82,82	42
81	MG	6	1980	1/1	0.84	0.15	105,105,105,105	0
81	MG	1	3707	1/1	0.84	0.28	40,40,40,40	0
81	MG	1	3631	1/1	0.84	0.13	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	6	1987	1/1	0.84	0.13	68,68,68,68	0
81	MG	2	2066	1/1	0.84	0.18	82,82,82,82	0
81	MG	2	2014	1/1	0.84	0.20	67,67,67,67	0
81	MG	1	4069	1/1	0.84	0.14	74,74,74,74	0
81	MG	6	1997	1/1	0.84	0.24	80,80,80,80	0
81	MG	1	3752	1/1	0.84	0.14	46,46,46,46	0
81	MG	5	3645	1/1	0.84	0.22	62,62,62,62	0
81	MG	1	3782	1/1	0.84	0.08	82,82,82,82	0
81	MG	5	3929	1/1	0.84	0.10	55,55,55,55	0
81	MG	1	4189	1/1	0.84	0.15	77,77,77,77	0
81	MG	2	2021	1/1	0.84	0.19	73,73,73,73	0
81	MG	6	2016	1/1	0.84	0.21	95,95,95,95	0
81	MG	1	3511	1/1	0.84	0.07	73,73,73,73	0
81	MG	2	2026	1/1	0.84	0.17	69,69,69,69	0
81	MG	5	3681	1/1	0.84	0.17	56,56,56,56	0
81	MG	6	2023	1/1	0.84	0.23	90,90,90,90	0
81	MG	2	1952	1/1	0.84	0.11	132,132,132,132	0
81	MG	6	2026	1/1	0.84	0.13	76,76,76,76	0
81	MG	5	3947	1/1	0.84	0.17	57,57,57,57	0
81	MG	5	3691	1/1	0.84	0.17	58,58,58,58	0
81	MG	6	2035	1/1	0.84	0.30	87,87,87,87	0
81	MG	o1	203	1/1	0.84	0.25	74,74,74,74	0
81	MG	1	4024	1/1	0.84	0.10	61,61,61,61	0
81	MG	1	4084	1/1	0.84	0.08	62,62,62,62	0
81	MG	6	1923	1/1	0.84	0.20	65,65,65,65	0
80	PAR	1	3410	42/42	0.84	0.19	52,52,52,52	42
81	MG	5	4084	1/1	0.84	0.14	69,69,69,69	0
81	MG	6	1932	1/1	0.84	0.16	87,87,87,87	0
81	MG	O2	202	1/1	0.84	0.13	44,44,44,44	0
81	MG	1	3902	1/1	0.84	0.11	61,61,61,61	0
81	MG	6	1937	1/1	0.84	0.21	72,72,72,72	0
81	MG	5	3967	1/1	0.84	0.23	100,100,100,100	0
81	MG	6	2052	1/1	0.84	0.12	72,72,72,72	0
81	MG	5	4092	1/1	0.84	0.14	67,67,67,67	0
81	MG	5	4097	1/1	0.84	0.21	52,52,52,52	0
81	MG	5	3724	1/1	0.84	0.16	78,78,78,78	0
81	MG	5	3881	1/1	0.84	0.12	58,58,58,58	0
81	MG	5	3731	1/1	0.84	0.17	54,54,54,54	0
81	MG	5	3982	1/1	0.84	0.15	75,75,75,75	0
81	MG	5	3547	1/1	0.84	0.10	59,59,59,59	0
81	MG	3	211	1/1	0.84	0.12	86,86,86,86	0
81	MG	5	3989	1/1	0.84	0.22	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	6	2066	1/1	0.84	0.15	55,55,55,55	0
81	MG	5	3560	1/1	0.84	0.12	92,92,92,92	0
81	MG	5	4115	1/1	0.84	0.16	74,74,74,74	0
81	MG	5	3994	1/1	0.84	0.13	59,59,59,59	0
81	MG	3	218	1/1	0.84	0.10	57,57,57,57	0
81	MG	5	3776	1/1	0.84	0.16	48,48,48,48	0
81	MG	5	3899	1/1	0.84	0.09	73,73,73,73	0
81	MG	1	3592	1/1	0.84	0.15	63,63,63,63	0
81	MG	s8	301	1/1	0.84	0.29	70,70,70,70	0
81	MG	5	3901	1/1	0.84	0.06	94,94,94,94	0
81	MG	2	1917	1/1	0.84	0.25	88,88,88,88	0
81	MG	1	4093	1/1	0.84	0.23	86,86,86,86	0
81	MG	6	1967	1/1	0.84	0.29	80,80,80,80	0
80	PAR	5	3427	42/42	0.84	0.16	94,94,94,94	42
81	MG	7	210	1/1	0.84	0.12	53,53,53,53	0
81	MG	7	213	1/1	0.84	0.27	76,76,76,76	0
81	MG	2	1950	1/1	0.85	0.13	133,133,133,133	0
81	MG	M8	201	1/1	0.85	0.07	63,63,63,63	0
81	MG	5	3669	1/1	0.85	0.14	48,48,48,48	0
81	MG	N0	201	1/1	0.85	0.13	60,60,60,60	0
81	MG	5	3993	1/1	0.85	0.10	64,64,64,64	0
81	MG	1	4097	1/1	0.85	0.10	63,63,63,63	0
81	MG	1	4038	1/1	0.85	0.20	83,83,83,83	0
80	PAR	5	3423	42/42	0.85	0.26	86,86,86,86	42
81	MG	5	3883	1/1	0.85	0.17	73,73,73,73	0
81	MG	2	1959	1/1	0.85	0.16	92,92,92,92	0
81	MG	5	3693	1/1	0.85	0.14	51,51,51,51	0
81	MG	2	2117	1/1	0.85	0.26	90,90,90,90	0
81	MG	1	4177	1/1	0.85	0.06	57,57,57,57	0
80	PAR	1	3426	42/42	0.85	0.15	82,82,82,82	0
81	MG	6	1999	1/1	0.85	0.21	82,82,82,82	0
81	MG	2	1970	1/1	0.85	0.12	118,118,118,118	0
81	MG	1	3917	1/1	0.85	0.20	69,69,69,69	0
81	MG	2	1973	1/1	0.85	0.22	82,82,82,82	0
81	MG	5	3729	1/1	0.85	0.10	63,63,63,63	0
81	MG	5	4029	1/1	0.85	0.08	57,57,57,57	0
80	PAR	5	3415	42/42	0.85	0.11	83,83,83,83	0
81	MG	5	4031	1/1	0.85	0.20	91,91,91,91	0
81	MG	5	3751	1/1	0.85	0.18	50,50,50,50	0
81	MG	6	2018	1/1	0.85	0.17	89,89,89,89	0
81	MG	m9	203	1/1	0.85	0.10	78,78,78,78	0
81	MG	m9	205	1/1	0.85	0.16	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3993	1/1	0.85	0.14	46,46,46,46	0
81	MG	n2	201	1/1	0.85	0.22	97,97,97,97	0
81	MG	1	3996	1/1	0.85	0.15	78,78,78,78	0
81	MG	2	2069	1/1	0.85	0.20	96,96,96,96	0
81	MG	1	4118	1/1	0.85	0.16	88,88,88,88	0
81	MG	5	3911	1/1	0.85	0.08	63,63,63,63	0
81	MG	5	3913	1/1	0.85	0.09	74,74,74,74	0
81	MG	O9	101	1/1	0.85	0.37	48,48,48,48	1
81	MG	5	3788	1/1	0.85	0.19	68,68,68,68	0
81	MG	5	3542	1/1	0.85	0.11	50,50,50,50	0
81	MG	6	1915	1/1	0.85	0.19	73,73,73,73	0
81	MG	5	3920	1/1	0.85	0.17	65,65,65,65	0
81	MG	1	3940	1/1	0.85	0.05	37,37,37,37	0
81	MG	5	4067	1/1	0.85	0.28	94,94,94,94	0
81	MG	1	3737	1/1	0.85	0.19	61,61,61,61	0
81	MG	1	3892	1/1	0.85	0.08	72,72,72,72	0
81	MG	5	3805	1/1	0.85	0.17	68,68,68,68	0
81	MG	5	3814	1/1	0.85	0.11	63,63,63,63	0
81	MG	3	213	1/1	0.85	0.14	89,89,89,89	0
80	PAR	2	1904	42/42	0.85	0.10	107,107,107,107	0
81	MG	5	4080	1/1	0.85	0.12	64,64,64,64	0
81	MG	4	205	1/1	0.85	0.12	46,46,46,46	0
81	MG	4	219	1/1	0.85	0.27	54,54,54,54	0
81	MG	5	3590	1/1	0.85	0.25	62,62,62,62	0
81	MG	6	1946	1/1	0.85	0.16	84,84,84,84	0
81	MG	1	3660	1/1	0.85	0.14	55,55,55,55	0
81	MG	1	3898	1/1	0.85	0.08	70,70,70,70	0
81	MG	1	4031	1/1	0.85	0.09	44,44,44,44	1
81	MG	6	2067	1/1	0.85	0.17	75,75,75,75	0
80	PAR	6	1901	42/42	0.85	0.11	90,90,90,90	0
81	MG	5	3610	1/1	0.85	0.14	81,81,81,81	0
81	MG	5	4100	1/1	0.85	0.09	60,60,60,60	0
81	MG	L7	302	1/1	0.85	0.08	62,62,62,62	0
81	MG	2	2025	1/1	0.85	0.28	75,75,75,75	0
81	MG	5	3960	1/1	0.85	0.15	44,44,44,44	0
81	MG	1	3678	1/1	0.85	0.15	58,58,58,58	1
81	MG	s6	302	1/1	0.85	0.06	68,68,68,68	0
81	MG	2	1942	1/1	0.85	0.11	77,77,77,77	0
81	MG	2	2031	1/1	0.85	0.18	98,98,98,98	0
80	PAR	3	203	42/42	0.85	0.14	78,78,78,78	0
81	MG	1	3691	1/1	0.85	0.16	42,42,42,42	0
81	MG	5	3869	1/1	0.85	0.08	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	M6	204	1/1	0.85	0.07	65,65,65,65	0
81	MG	6	1968	1/1	0.85	0.26	77,77,77,77	0
81	MG	M7	202	1/1	0.85	0.24	40,40,40,40	0
81	MG	1	3642	1/1	0.86	0.09	63,63,63,63	0
81	MG	1	4175	1/1	0.86	0.19	69,69,69,69	0
81	MG	1	3768	1/1	0.86	0.11	77,77,77,77	0
81	MG	8	206	1/1	0.86	0.13	56,56,56,56	0
81	MG	N6	202	1/1	0.86	0.13	50,50,50,50	0
81	MG	N7	202	1/1	0.86	0.12	72,72,72,72	0
81	MG	8	214	1/1	0.86	0.08	61,61,61,61	0
81	MG	5	3736	1/1	0.86	0.23	46,46,46,46	0
81	MG	8	218	1/1	0.86	0.15	73,73,73,73	0
81	MG	6	1988	1/1	0.86	0.23	62,62,62,62	0
81	MG	5	3741	1/1	0.86	0.11	58,58,58,58	0
81	MG	5	3474	1/1	0.86	0.21	55,55,55,55	0
81	MG	5	4027	1/1	0.86	0.20	69,69,69,69	0
81	MG	5	3492	1/1	0.86	0.15	47,47,47,47	0
81	MG	5	3497	1/1	0.86	0.25	50,50,50,50	0
81	MG	5	3907	1/1	0.86	0.24	81,81,81,81	0
81	MG	1	3586	1/1	0.86	0.13	41,41,41,41	0
80	PAR	1	3431	42/42	0.86	0.13	67,67,67,67	42
81	MG	17	305	1/1	0.86	0.09	62,62,62,62	0
81	MG	6	2011	1/1	0.86	0.18	69,69,69,69	0
80	PAR	1	3407	42/42	0.86	0.11	69,69,69,69	42
81	MG	19	201	1/1	0.86	0.19	56,56,56,56	0
81	MG	1	4196	1/1	0.86	0.17	46,46,46,46	1
81	MG	1	3673	1/1	0.86	0.16	52,52,52,52	0
81	MG	2	1981	1/1	0.86	0.06	61,61,61,61	0
81	MG	5	4047	1/1	0.86	0.21	68,68,68,68	0
81	MG	5	3546	1/1	0.86	0.12	59,59,59,59	0
81	MG	n0	206	1/1	0.86	0.18	72,72,72,72	0
81	MG	6	2024	1/1	0.86	0.12	119,119,119,119	0
81	MG	2	1983	1/1	0.86	0.09	68,68,68,68	0
80	PAR	1	3403	42/42	0.86	0.26	58,58,58,58	42
81	MG	1	4044	1/1	0.86	0.08	48,48,48,48	0
81	MG	2	1993	1/1	0.86	0.22	83,83,83,83	0
81	MG	6	2030	1/1	0.86	0.24	71,71,71,71	0
81	MG	o0	201	1/1	0.86	0.22	89,89,89,89	0
81	MG	5	4063	1/1	0.86	0.11	80,80,80,80	0
81	MG	1	4104	1/1	0.86	0.09	55,55,55,55	0
81	MG	2	1911	1/1	0.86	0.09	79,79,79,79	0
80	PAR	2	1905	42/42	0.86	0.16	80,80,80,80	42

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	2007	1/1	0.86	0.12	67,67,67,67	0
81	MG	1	4109	1/1	0.86	0.25	78,78,78,78	0
81	MG	1	4111	1/1	0.86	0.09	65,65,65,65	0
81	MG	5	4074	1/1	0.86	0.24	71,71,71,71	0
81	MG	5	3837	1/1	0.86	0.20	53,53,53,53	0
81	MG	6	2048	1/1	0.86	0.25	88,88,88,88	0
81	MG	5	3838	1/1	0.86	0.13	57,57,57,57	0
81	MG	1	3683	1/1	0.86	0.22	49,49,49,49	0
81	MG	2	2013	1/1	0.86	0.18	86,86,86,86	0
80	PAR	1	3405	42/42	0.86	0.19	44,44,44,44	42
81	MG	1	3544	1/1	0.86	0.14	32,32,32,32	0
81	MG	5	4088	1/1	0.86	0.12	70,70,70,70	0
81	MG	5	4089	1/1	0.86	0.17	69,69,69,69	0
81	MG	2	1923	1/1	0.86	0.13	55,55,55,55	0
81	MG	1	3698	1/1	0.86	0.12	62,62,62,62	0
81	MG	1	3852	1/1	0.86	0.08	63,63,63,63	0
81	MG	4	231	1/1	0.86	0.20	49,49,49,49	0
81	MG	2	2092	1/1	0.86	0.13	71,71,71,71	0
81	MG	1	3854	1/1	0.86	0.11	52,52,52,52	0
81	MG	1	3699	1/1	0.86	0.23	51,51,51,51	0
81	MG	2	1939	1/1	0.86	0.17	84,84,84,84	0
81	MG	2	2103	1/1	0.86	0.30	73,73,73,73	0
81	MG	2	2028	1/1	0.86	0.20	73,73,73,73	0
80	PAR	1	3406	42/42	0.86	0.14	68,68,68,68	42
81	MG	6	2073	1/1	0.86	0.26	94,94,94,94	0
81	MG	L9	201	1/1	0.86	0.15	80,80,80,80	0
81	MG	1	4139	1/1	0.86	0.10	50,50,50,50	0
81	MG	1	3918	1/1	0.86	0.19	70,70,70,70	0
81	MG	1	4087	1/1	0.86	0.17	67,67,67,67	0
81	MG	1	4013	1/1	0.86	0.06	70,70,70,70	0
81	MG	1	3634	1/1	0.86	0.15	48,48,48,48	0
81	MG	5	3998	1/1	0.86	0.08	63,63,63,63	0
81	MG	1	4090	1/1	0.86	0.22	66,66,66,66	0
81	MG	5	4124	1/1	0.86	0.36	81,81,81,81	0
81	MG	1	3861	1/1	0.86	0.10	44,44,44,44	0
81	MG	c9	202	1/1	0.86	0.19	124,124,124,124	0
81	MG	5	3891	1/1	0.86	0.17	68,68,68,68	0
81	MG	1	3505	1/1	0.86	0.09	64,64,64,64	0
81	MG	5	3858	1/1	0.87	0.08	62,62,62,62	0
81	MG	5	3861	1/1	0.87	0.13	64,64,64,64	0
81	MG	5	3868	1/1	0.87	0.08	57,57,57,57	0
81	MG	5	3625	1/1	0.87	0.12	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3870	1/1	0.87	0.12	63,63,63,63	0
81	MG	5	3992	1/1	0.87	0.20	59,59,59,59	0
81	MG	2	2030	1/1	0.87	0.26	74,74,74,74	0
81	MG	2	2105	1/1	0.87	0.09	62,62,62,62	0
81	MG	5	3995	1/1	0.87	0.09	49,49,49,49	0
81	MG	7	204	1/1	0.87	0.14	65,65,65,65	0
80	PAR	1	3417	42/42	0.87	0.17	66,66,66,66	42
80	PAR	5	3425	42/42	0.87	0.20	75,75,75,75	42
81	MG	1	3973	1/1	0.87	0.13	71,71,71,71	0
81	MG	1	3974	1/1	0.87	0.10	58,58,58,58	0
81	MG	1	3560	1/1	0.87	0.08	42,42,42,42	0
81	MG	1	3895	1/1	0.87	0.15	65,65,65,65	0
81	MG	1	4085	1/1	0.87	0.06	62,62,62,62	0
81	MG	1	3638	1/1	0.87	0.17	68,68,68,68	0
81	MG	1	3797	1/1	0.87	0.16	53,53,53,53	0
81	MG	1	3803	1/1	0.87	0.09	55,55,55,55	0
81	MG	2	2052	1/1	0.87	0.25	95,95,95,95	0
81	MG	1	3806	1/1	0.87	0.14	50,50,50,50	0
80	PAR	5	3401	42/42	0.87	0.15	78,78,78,78	42
81	MG	6	2004	1/1	0.87	0.14	77,77,77,77	0
81	MG	1	4092	1/1	0.87	0.08	62,62,62,62	0
81	MG	1	3843	1/1	0.87	0.15	48,48,48,48	0
81	MG	l3	404	1/1	0.87	0.17	65,65,65,65	0
81	MG	5	3431	1/1	0.87	0.15	42,42,42,42	0
81	MG	5	3727	1/1	0.87	0.26	55,55,55,55	0
81	MG	5	3473	1/1	0.87	0.17	51,51,51,51	0
81	MG	6	2015	1/1	0.87	0.16	91,91,91,91	0
81	MG	1	3590	1/1	0.87	0.11	49,49,49,49	0
81	MG	2	1979	1/1	0.87	0.21	77,77,77,77	0
81	MG	2	1980	1/1	0.87	0.13	66,66,66,66	0
81	MG	m0	303	1/1	0.87	0.12	69,69,69,69	0
81	MG	6	2021	1/1	0.87	0.16	85,85,85,85	0
81	MG	1	3909	1/1	0.87	0.11	65,65,65,65	0
81	MG	m7	208	1/1	0.87	0.20	43,43,43,43	0
81	MG	1	3719	1/1	0.87	0.09	42,42,42,42	0
81	MG	1	3915	1/1	0.87	0.12	69,69,69,69	0
81	MG	Q1	1301	1/1	0.87	0.22	58,58,58,58	0
81	MG	5	4051	1/1	0.87	0.05	61,61,61,61	0
81	MG	5	3529	1/1	0.87	0.14	55,55,55,55	0
81	MG	n1	201	1/1	0.87	0.26	70,70,70,70	0
81	MG	6	2031	1/1	0.87	0.17	64,64,64,64	0
81	MG	2	1990	1/1	0.87	0.20	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	n3	203	1/1	0.87	0.21	76,76,76,76	0
81	MG	5	3541	1/1	0.87	0.11	41,41,41,41	0
81	MG	5	4061	1/1	0.87	0.12	64,64,64,64	0
81	MG	6	2039	1/1	0.87	0.12	69,69,69,69	0
81	MG	6	2040	1/1	0.87	0.11	66,66,66,66	0
81	MG	n6	204	1/1	0.87	0.15	83,83,83,83	0
81	MG	1	3726	1/1	0.87	0.14	39,39,39,39	1
80	PAR	4	201	42/42	0.87	0.23	43,43,43,43	42
81	MG	o0	202	1/1	0.87	0.17	88,88,88,88	0
81	MG	5	4064	1/1	0.87	0.20	99,99,99,99	0
81	MG	1	3734	1/1	0.87	0.30	43,43,43,43	0
81	MG	6	2047	1/1	0.87	0.11	109,109,109,109	0
80	PAR	1	3430	42/42	0.87	0.13	65,65,65,65	42
81	MG	5	4068	1/1	0.87	0.11	75,75,75,75	0
81	MG	5	3800	1/1	0.87	0.10	62,62,62,62	0
81	MG	6	1907	1/1	0.87	0.23	93,93,93,93	0
80	PAR	n3	201	42/42	0.87	0.16	63,63,63,63	42
81	MG	5	3813	1/1	0.87	0.23	70,70,70,70	0
81	MG	6	1921	1/1	0.87	0.08	70,70,70,70	0
81	MG	6	1922	1/1	0.87	0.12	73,73,73,73	0
81	MG	5	3561	1/1	0.87	0.27	81,81,81,81	0
81	MG	5	3563	1/1	0.87	0.16	85,85,85,85	0
81	MG	1	3946	1/1	0.87	0.09	56,56,56,56	0
81	MG	5	3935	1/1	0.87	0.12	59,59,59,59	0
81	MG	2	2010	1/1	0.87	0.17	64,64,64,64	0
81	MG	5	3578	1/1	0.87	0.23	48,48,48,48	0
81	MG	1	3756	1/1	0.87	0.18	47,47,47,47	0
81	MG	4	217	1/1	0.87	0.16	72,72,72,72	0
81	MG	6	2069	1/1	0.87	0.11	54,54,54,54	0
81	MG	5	4087	1/1	0.87	0.14	85,85,85,85	0
81	MG	5	3586	1/1	0.87	0.20	64,64,64,64	0
81	MG	1	3955	1/1	0.87	0.23	59,59,59,59	0
81	MG	1	4113	1/1	0.87	0.16	79,79,79,79	0
81	MG	1	4115	1/1	0.87	0.08	98,98,98,98	0
81	MG	4	226	1/1	0.87	0.11	60,60,60,60	0
81	MG	4	230	1/1	0.87	0.09	61,61,61,61	0
81	MG	5	4098	1/1	0.87	0.14	48,48,48,48	0
81	MG	5	3956	1/1	0.87	0.08	56,56,56,56	0
81	MG	1	3536	1/1	0.87	0.13	37,37,37,37	0
81	MG	1	3781	1/1	0.87	0.08	51,51,51,51	1
81	MG	1	3675	1/1	0.87	0.16	64,64,64,64	0
81	MG	1	3614	1/1	0.87	0.19	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4058	1/1	0.87	0.22	73,73,73,73	0
81	MG	1	4060	1/1	0.87	0.12	58,58,58,58	0
81	MG	5	3854	1/1	0.87	0.08	65,65,65,65	0
80	PAR	1	3434	42/42	0.87	0.12	85,85,85,85	42
81	MG	d4	201	1/1	0.87	0.17	91,91,91,91	0
81	MG	1	3740	1/1	0.88	0.19	42,42,42,42	0
81	MG	5	3836	1/1	0.88	0.17	51,51,51,51	0
80	PAR	7	202	42/42	0.88	0.15	59,59,59,59	42
81	MG	1	4120	1/1	0.88	0.11	81,81,81,81	0
81	MG	5	4118	1/1	0.88	0.12	66,66,66,66	0
81	MG	1	3947	1/1	0.88	0.07	54,54,54,54	0
81	MG	1	4122	1/1	0.88	0.23	68,68,68,68	0
81	MG	5	3973	1/1	0.88	0.16	47,47,47,47	1
81	MG	1	4077	1/1	0.88	0.08	51,51,51,51	0
81	MG	5	3842	1/1	0.88	0.22	78,78,78,78	0
81	MG	5	3978	1/1	0.88	0.12	72,72,72,72	0
81	MG	5	3981	1/1	0.88	0.09	79,79,79,79	0
81	MG	5	3614	1/1	0.88	0.22	94,94,94,94	0
81	MG	1	4124	1/1	0.88	0.06	69,69,69,69	0
81	MG	5	3984	1/1	0.88	0.15	85,85,85,85	0
80	PAR	1	3419	42/42	0.88	0.11	59,59,59,59	0
81	MG	5	3988	1/1	0.88	0.08	60,60,60,60	0
81	MG	2	1935	1/1	0.88	0.23	78,78,78,78	0
81	MG	7	214	1/1	0.88	0.20	89,89,89,89	0
81	MG	1	4011	1/1	0.88	0.11	54,54,54,54	0
80	PAR	1	3427	42/42	0.88	0.16	65,65,65,65	42
81	MG	5	3621	1/1	0.88	0.26	65,65,65,65	0
81	MG	5	3624	1/1	0.88	0.10	76,76,76,76	0
81	MG	1	4138	1/1	0.88	0.15	55,55,55,55	0
81	MG	5	3639	1/1	0.88	0.13	54,54,54,54	0
81	MG	1	3530	1/1	0.88	0.22	37,37,37,37	0
81	MG	1	4015	1/1	0.88	0.13	65,65,65,65	0
80	PAR	5	3416	42/42	0.88	0.10	75,75,75,75	0
81	MG	1	3593	1/1	0.88	0.12	50,50,50,50	0
81	MG	5	3873	1/1	0.88	0.18	66,66,66,66	0
81	MG	1	3645	1/1	0.88	0.17	44,44,44,44	0
81	MG	5	3662	1/1	0.88	0.08	56,56,56,56	0
81	MG	5	3666	1/1	0.88	0.12	44,44,44,44	0
81	MG	l3	409	1/1	0.88	0.15	55,55,55,55	1
81	MG	1	4153	1/1	0.88	0.07	50,50,50,50	0
81	MG	5	4013	1/1	0.88	0.24	87,87,87,87	0
81	MG	1	4158	1/1	0.88	0.19	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	S2	301	1/1	0.88	0.11	91,91,91,91	0
80	PAR	5	3426	42/42	0.88	0.15	56,56,56,56	42
81	MG	5	4019	1/1	0.88	0.15	86,86,86,86	0
81	MG	5	4025	1/1	0.88	0.12	71,71,71,71	0
80	PAR	1	3432	42/42	0.88	0.18	51,51,51,51	42
81	MG	1	3969	1/1	0.88	0.23	77,77,77,77	0
81	MG	5	3692	1/1	0.88	0.13	56,56,56,56	0
81	MG	6	2034	1/1	0.88	0.09	70,70,70,70	0
81	MG	1	4163	1/1	0.88	0.23	39,39,39,39	1
81	MG	1	4164	1/1	0.88	0.17	69,69,69,69	0
81	MG	1	3873	1/1	0.88	0.10	69,69,69,69	0
81	MG	5	3701	1/1	0.88	0.15	70,70,70,70	0
81	MG	5	3894	1/1	0.88	0.05	57,57,57,57	0
81	MG	2	1964	1/1	0.88	0.13	102,102,102,102	0
81	MG	5	3432	1/1	0.88	0.18	43,43,43,43	0
81	MG	5	3708	1/1	0.88	0.12	59,59,59,59	0
81	MG	5	4048	1/1	0.88	0.19	66,66,66,66	0
81	MG	2	1965	1/1	0.88	0.15	95,95,95,95	0
81	MG	1	4168	1/1	0.88	0.07	64,64,64,64	0
81	MG	N5	201	1/1	0.88	0.17	61,61,61,61	0
81	MG	2	1971	1/1	0.88	0.14	73,73,73,73	0
81	MG	1	3721	1/1	0.88	0.22	47,47,47,47	1
81	MG	1	4176	1/1	0.88	0.18	78,78,78,78	0
81	MG	1	3549	1/1	0.88	0.08	49,49,49,49	0
81	MG	1	3975	1/1	0.88	0.13	71,71,71,71	0
81	MG	5	3759	1/1	0.88	0.21	46,46,46,46	0
81	MG	1	4053	1/1	0.88	0.08	55,55,55,55	0
81	MG	1	4188	1/1	0.88	0.15	57,57,57,57	0
81	MG	5	3537	1/1	0.88	0.15	49,49,49,49	0
81	MG	6	2057	1/1	0.88	0.10	126,126,126,126	0
81	MG	1	3672	1/1	0.88	0.10	57,57,57,57	0
81	MG	1	3978	1/1	0.88	0.10	68,68,68,68	0
81	MG	2	1984	1/1	0.88	0.16	59,59,59,59	0
81	MG	6	1927	1/1	0.88	0.30	73,73,73,73	0
81	MG	O3	201	1/1	0.88	0.09	56,56,56,56	0
81	MG	5	3550	1/1	0.88	0.14	55,55,55,55	0
81	MG	5	3558	1/1	0.88	0.17	70,70,70,70	0
81	MG	5	3795	1/1	0.88	0.07	106,106,106,106	0
81	MG	O4	202	1/1	0.88	0.13	59,59,59,59	0
81	MG	5	3799	1/1	0.88	0.14	47,47,47,47	0
81	MG	2	2075	1/1	0.88	0.08	95,95,95,95	0
81	MG	5	3932	1/1	0.88	0.12	54,54,54,54	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	4086	1/1	0.88	0.14	79,79,79,79	0
81	MG	1	3980	1/1	0.88	0.15	54,54,54,54	0
81	MG	5	3936	1/1	0.88	0.10	60,60,60,60	1
81	MG	s2	301	1/1	0.88	0.12	95,95,95,95	0
81	MG	5	3806	1/1	0.88	0.06	65,65,65,65	0
81	MG	5	3938	1/1	0.88	0.21	74,74,74,74	0
81	MG	1	3802	1/1	0.88	0.10	42,42,42,42	0
81	MG	Q2	505	1/1	0.88	0.14	42,42,42,42	0
81	MG	5	3817	1/1	0.88	0.23	57,57,57,57	0
81	MG	2	1906	1/1	0.88	0.16	80,80,80,80	0
81	MG	5	3824	1/1	0.88	0.12	59,59,59,59	0
81	MG	1	3984	1/1	0.88	0.10	52,52,52,52	0
81	MG	1	3926	1/1	0.88	0.13	53,53,53,53	0
80	PAR	5	3421	42/42	0.88	0.10	102,102,102,102	0
81	MG	1	3624	1/1	0.88	0.10	34,34,34,34	0
81	MG	d3	203	1/1	0.88	0.23	80,80,80,80	0
81	MG	d3	204	1/1	0.88	0.18	69,69,69,69	0
81	MG	3	212	1/1	0.88	0.16	85,85,85,85	0
81	MG	d6	102	1/1	0.88	0.32	85,85,85,85	0
81	MG	5	3849	1/1	0.89	0.11	88,88,88,88	0
81	MG	4	237	1/1	0.89	0.20	68,68,68,68	0
81	MG	1	4145	1/1	0.89	0.12	52,52,52,52	0
81	MG	2	1941	1/1	0.89	0.20	75,75,75,75	0
81	MG	1	3569	1/1	0.89	0.07	61,61,61,61	0
81	MG	1	3818	1/1	0.89	0.11	54,54,54,54	0
81	MG	6	1971	1/1	0.89	0.13	89,89,89,89	0
81	MG	1	3583	1/1	0.89	0.12	49,49,49,49	0
81	MG	1	4155	1/1	0.89	0.12	40,40,40,40	1
80	PAR	8	202	42/42	0.89	0.22	62,62,62,62	42
81	MG	5	3991	1/1	0.89	0.09	66,66,66,66	0
81	MG	5	3674	1/1	0.89	0.15	49,49,49,49	0
81	MG	M5	304	1/1	0.89	0.17	61,61,61,61	0
81	MG	1	3959	1/1	0.89	0.12	52,52,52,52	0
81	MG	5	3682	1/1	0.89	0.12	52,52,52,52	0
81	MG	5	3683	1/1	0.89	0.19	53,53,53,53	0
81	MG	5	3684	1/1	0.89	0.11	55,55,55,55	0
80	PAR	1	3412	42/42	0.89	0.13	67,67,67,67	0
81	MG	8	208	1/1	0.89	0.08	71,71,71,71	0
81	MG	1	4032	1/1	0.89	0.21	41,41,41,41	0
81	MG	5	3454	1/1	0.89	0.23	40,40,40,40	0
81	MG	1	4033	1/1	0.89	0.10	55,55,55,55	0
81	MG	6	1998	1/1	0.89	0.20	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
80	PAR	1	3418	42/42	0.89	0.12	69,69,69,69	42
81	MG	5	3886	1/1	0.89	0.06	75,75,75,75	0
81	MG	6	2002	1/1	0.89	0.20	64,64,64,64	0
81	MG	5	3489	1/1	0.89	0.11	46,46,46,46	0
81	MG	5	4010	1/1	0.89	0.10	74,74,74,74	0
81	MG	5	3889	1/1	0.89	0.21	66,66,66,66	0
81	MG	1	3964	1/1	0.89	0.09	58,58,58,58	0
81	MG	2	2058	1/1	0.89	0.19	58,58,58,58	0
81	MG	5	3503	1/1	0.89	0.22	51,51,51,51	0
81	MG	l3	405	1/1	0.89	0.09	66,66,66,66	0
80	PAR	1	3404	42/42	0.89	0.22	53,53,53,53	42
80	PAR	5	3409	42/42	0.89	0.18	56,56,56,56	42
80	PAR	1	3437	42/42	0.89	0.19	64,64,64,64	42
81	MG	5	3726	1/1	0.89	0.37	69,69,69,69	0
81	MG	1	3496	1/1	0.89	0.24	52,52,52,52	0
81	MG	2	1968	1/1	0.89	0.10	129,129,129,129	0
81	MG	1	4180	1/1	0.89	0.10	55,55,55,55	1
81	MG	5	3902	1/1	0.89	0.14	80,80,80,80	0
81	MG	m5	301	1/1	0.89	0.24	72,72,72,72	0
81	MG	N6	205	1/1	0.89	0.07	67,67,67,67	0
81	MG	1	3860	1/1	0.89	0.15	54,54,54,54	0
81	MG	5	4039	1/1	0.89	0.09	56,56,56,56	0
81	MG	m9	202	1/1	0.89	0.10	80,80,80,80	0
81	MG	1	3910	1/1	0.89	0.07	48,48,48,48	0
81	MG	5	3756	1/1	0.89	0.14	55,55,55,55	0
81	MG	n0	203	1/1	0.89	0.12	60,60,60,60	0
81	MG	2	1975	1/1	0.89	0.15	94,94,94,94	0
81	MG	5	3767	1/1	0.89	0.09	66,66,66,66	0
81	MG	1	3670	1/1	0.89	0.10	57,57,57,57	1
81	MG	1	4114	1/1	0.89	0.07	76,76,76,76	0
81	MG	1	4193	1/1	0.89	0.16	66,66,66,66	0
81	MG	1	3871	1/1	0.89	0.12	59,59,59,59	0
81	MG	1	4116	1/1	0.89	0.15	107,107,107,107	0
81	MG	1	3722	1/1	0.89	0.22	50,50,50,50	0
81	MG	3	205	1/1	0.89	0.22	73,73,73,73	0
81	MG	1	3613	1/1	0.89	0.08	63,63,63,63	0
81	MG	1	3924	1/1	0.89	0.11	58,58,58,58	0
81	MG	Q2	504	1/1	0.89	0.16	42,42,42,42	0
81	MG	1	3795	1/1	0.89	0.09	68,68,68,68	1
81	MG	1	3927	1/1	0.89	0.08	53,53,53,53	0
81	MG	2	1908	1/1	0.89	0.17	104,104,104,104	0
81	MG	1	3986	1/1	0.89	0.14	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	q0	202	1/1	0.89	0.15	67,67,67,67	0
81	MG	q3	502	1/1	0.89	0.24	81,81,81,81	0
80	PAR	5	3414	42/42	0.89	0.11	67,67,67,67	42
81	MG	3	215	1/1	0.89	0.09	72,72,72,72	0
81	MG	3	216	1/1	0.89	0.08	72,72,72,72	0
81	MG	5	3601	1/1	0.89	0.17	93,93,93,93	0
81	MG	1	3933	1/1	0.89	0.05	65,65,65,65	1
81	MG	1	4130	1/1	0.89	0.10	38,38,38,38	1
81	MG	4	212	1/1	0.89	0.07	57,57,57,57	0
81	MG	5	4081	1/1	0.89	0.16	102,102,102,102	0
81	MG	5	3613	1/1	0.89	0.09	80,80,80,80	0
81	MG	6	2064	1/1	0.89	0.19	65,65,65,65	0
81	MG	6	2065	1/1	0.89	0.10	66,66,66,66	0
81	MG	6	1931	1/1	0.89	0.14	94,94,94,94	0
81	MG	5	4083	1/1	0.89	0.20	78,78,78,78	0
81	MG	4	214	1/1	0.89	0.10	63,63,63,63	0
81	MG	2	2101	1/1	0.89	0.15	61,61,61,61	0
81	MG	5	3946	1/1	0.89	0.11	72,72,72,72	0
81	MG	6	1939	1/1	0.89	0.07	104,104,104,104	0
81	MG	1	3934	1/1	0.89	0.10	57,57,57,57	0
81	MG	1	3877	1/1	0.89	0.09	46,46,46,46	0
81	MG	1	3563	1/1	0.89	0.14	55,55,55,55	0
81	MG	1	4001	1/1	0.89	0.10	62,62,62,62	0
81	MG	2	1931	1/1	0.89	0.15	98,98,98,98	0
81	MG	6	1945	1/1	0.89	0.21	71,71,71,71	0
81	MG	5	3958	1/1	0.89	0.08	61,61,61,61	1
81	MG	1	3564	1/1	0.89	0.12	48,48,48,48	0
81	MG	1	3739	1/1	0.89	0.10	43,43,43,43	0
81	MG	5	3963	1/1	0.89	0.07	58,58,58,58	0
81	MG	5	3626	1/1	0.89	0.22	60,60,60,60	0
81	MG	5	4101	1/1	0.89	0.24	67,67,67,67	0
81	MG	5	3629	1/1	0.89	0.10	66,66,66,66	0
81	MG	6	1955	1/1	0.89	0.15	91,91,91,91	0
81	MG	5	3633	1/1	0.89	0.11	56,56,56,56	0
81	MG	5	3635	1/1	0.89	0.10	59,59,59,59	0
81	MG	5	3972	1/1	0.89	0.07	68,68,68,68	0
81	MG	5	3636	1/1	0.89	0.19	53,53,53,53	0
81	MG	2	1936	1/1	0.89	0.09	59,59,59,59	0
81	MG	1	4012	1/1	0.89	0.10	56,56,56,56	0
81	MG	6	1938	1/1	0.90	0.10	99,99,99,99	0
81	MG	5	3730	1/1	0.90	0.16	55,55,55,55	0
81	MG	5	3501	1/1	0.90	0.10	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	2035	1/1	0.90	0.10	116,116,116,116	0
81	MG	5	3915	1/1	0.90	0.19	97,97,97,97	0
81	MG	2	2036	1/1	0.90	0.11	127,127,127,127	0
81	MG	5	3917	1/1	0.90	0.15	72,72,72,72	0
81	MG	5	4077	1/1	0.90	0.13	74,74,74,74	0
81	MG	5	3918	1/1	0.90	0.10	60,60,60,60	0
81	MG	5	3743	1/1	0.90	0.19	54,54,54,54	1
81	MG	4	210	1/1	0.90	0.09	47,47,47,47	0
81	MG	1	3948	1/1	0.90	0.15	42,42,42,42	0
81	MG	1	3763	1/1	0.90	0.10	56,56,56,56	0
81	MG	5	3760	1/1	0.90	0.14	50,50,50,50	0
81	MG	6	1953	1/1	0.90	0.17	96,96,96,96	0
81	MG	5	3765	1/1	0.90	0.13	52,52,52,52	1
81	MG	5	3519	1/1	0.90	0.16	48,48,48,48	0
80	PAR	3	202	42/42	0.90	0.15	55,55,55,55	42
81	MG	2	2044	1/1	0.90	0.12	67,67,67,67	0
81	MG	5	3930	1/1	0.90	0.12	50,50,50,50	0
80	PAR	1	3415	42/42	0.90	0.12	46,46,46,46	42
81	MG	5	3933	1/1	0.90	0.13	42,42,42,42	0
81	MG	6	1962	1/1	0.90	0.14	110,110,110,110	0
81	MG	5	3773	1/1	0.90	0.14	80,80,80,80	0
81	MG	5	4093	1/1	0.90	0.12	60,60,60,60	0
81	MG	5	4095	1/1	0.90	0.10	56,56,56,56	1
80	PAR	5	3417	42/42	0.90	0.08	76,76,76,76	0
81	MG	1	3594	1/1	0.90	0.10	45,45,45,45	0
81	MG	5	3777	1/1	0.90	0.18	45,45,45,45	0
81	MG	2	1938	1/1	0.90	0.19	85,85,85,85	0
81	MG	1	4045	1/1	0.90	0.13	44,44,44,44	0
81	MG	4	227	1/1	0.90	0.13	76,76,76,76	0
81	MG	5	3552	1/1	0.90	0.10	56,56,56,56	1
81	MG	1	3465	1/1	0.90	0.20	34,34,34,34	0
81	MG	1	4134	1/1	0.90	0.11	69,69,69,69	0
81	MG	5	3797	1/1	0.90	0.25	51,51,51,51	0
81	MG	1	3535	1/1	0.90	0.27	36,36,36,36	1
81	MG	L2	305	1/1	0.90	0.11	47,47,47,47	0
81	MG	L3	402	1/1	0.90	0.18	55,55,55,55	0
81	MG	6	1982	1/1	0.90	0.09	86,86,86,86	0
81	MG	1	3882	1/1	0.90	0.11	74,74,74,74	0
81	MG	1	3883	1/1	0.90	0.21	67,67,67,67	0
81	MG	2	1951	1/1	0.90	0.11	134,134,134,134	0
81	MG	5	3816	1/1	0.90	0.15	58,58,58,58	0
81	MG	2	2065	1/1	0.90	0.30	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3884	1/1	0.90	0.09	62,62,62,62	0
81	MG	6	1995	1/1	0.90	0.08	71,71,71,71	0
81	MG	2	2067	1/1	0.90	0.20	75,75,75,75	0
81	MG	5	3587	1/1	0.90	0.10	66,66,66,66	0
81	MG	5	3970	1/1	0.90	0.10	59,59,59,59	0
81	MG	1	3473	1/1	0.90	0.20	38,38,38,38	0
81	MG	1	3484	1/1	0.90	0.19	35,35,35,35	0
81	MG	1	4065	1/1	0.90	0.07	69,69,69,69	0
81	MG	5	3832	1/1	0.90	0.16	52,52,52,52	0
81	MG	6	2007	1/1	0.90	0.13	90,90,90,90	0
81	MG	5	3597	1/1	0.90	0.20	65,65,65,65	0
81	MG	M5	303	1/1	0.90	0.23	44,44,44,44	1
81	MG	6	2010	1/1	0.90	0.09	124,124,124,124	0
81	MG	8	204	1/1	0.90	0.25	69,69,69,69	0
81	MG	1	4148	1/1	0.90	0.12	47,47,47,47	0
81	MG	1	3615	1/1	0.90	0.21	72,72,72,72	0
81	MG	5	3609	1/1	0.90	0.18	59,59,59,59	0
81	MG	M5	308	1/1	0.90	0.14	58,58,58,58	0
81	MG	5	3985	1/1	0.90	0.23	79,79,79,79	0
81	MG	8	215	1/1	0.90	0.20	72,72,72,72	0
81	MG	8	216	1/1	0.90	0.20	82,82,82,82	0
81	MG	5	3986	1/1	0.90	0.09	78,78,78,78	0
81	MG	1	3492	1/1	0.90	0.14	47,47,47,47	0
80	PAR	1	3402	42/42	0.90	0.11	62,62,62,62	42
81	MG	1	3798	1/1	0.90	0.16	56,56,56,56	0
81	MG	1	3626	1/1	0.90	0.11	36,36,36,36	0
81	MG	N1	201	1/1	0.90	0.16	59,59,59,59	0
81	MG	l2	303	1/1	0.90	0.14	66,66,66,66	0
80	PAR	7	201	42/42	0.90	0.11	85,85,85,85	0
81	MG	1	3559	1/1	0.90	0.12	47,47,47,47	0
81	MG	2	1974	1/1	0.90	0.16	101,101,101,101	0
81	MG	6	2032	1/1	0.90	0.16	78,78,78,78	0
81	MG	1	3807	1/1	0.90	0.14	49,49,49,49	0
81	MG	1	3500	1/1	0.90	0.18	71,71,71,71	0
81	MG	1	3908	1/1	0.90	0.07	49,49,49,49	0
81	MG	l4	401	1/1	0.90	0.13	62,62,62,62	0
81	MG	l7	303	1/1	0.90	0.26	69,69,69,69	0
81	MG	1	3988	1/1	0.90	0.11	56,56,56,56	0
81	MG	N6	204	1/1	0.90	0.10	56,56,56,56	0
81	MG	1	3723	1/1	0.90	0.18	34,34,34,34	0
81	MG	1	3825	1/1	0.90	0.09	65,65,65,65	0
81	MG	m0	302	1/1	0.90	0.10	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3830	1/1	0.90	0.15	45,45,45,45	0
81	MG	5	3638	1/1	0.90	0.08	58,58,58,58	0
81	MG	2	2097	1/1	0.90	0.11	62,62,62,62	0
81	MG	5	3872	1/1	0.90	0.13	72,72,72,72	0
81	MG	1	3725	1/1	0.90	0.10	40,40,40,40	1
81	MG	1	3916	1/1	0.90	0.11	68,68,68,68	0
81	MG	1	3844	1/1	0.90	0.17	44,44,44,44	1
81	MG	2	1992	1/1	0.90	0.18	75,75,75,75	0
81	MG	1	3562	1/1	0.90	0.15	44,44,44,44	0
81	MG	1	4004	1/1	0.90	0.07	89,89,89,89	0
81	MG	5	4020	1/1	0.90	0.16	100,100,100,100	0
81	MG	5	4024	1/1	0.90	0.12	52,52,52,52	0
81	MG	n1	202	1/1	0.90	0.09	63,63,63,63	0
81	MG	1	4190	1/1	0.90	0.19	73,73,73,73	0
81	MG	1	4006	1/1	0.90	0.11	64,64,64,64	0
81	MG	5	4028	1/1	0.90	0.10	78,78,78,78	0
81	MG	O7	105	1/1	0.90	0.12	41,41,41,41	0
81	MG	n6	203	1/1	0.90	0.12	76,76,76,76	0
81	MG	1	4010	1/1	0.90	0.08	53,53,53,53	0
81	MG	n8	204	1/1	0.90	0.10	48,48,48,48	0
81	MG	1	3923	1/1	0.90	0.11	45,45,45,45	0
80	PAR	5	3419	42/42	0.90	0.15	57,57,57,57	0
80	PAR	1	3414	42/42	0.90	0.14	63,63,63,63	42
81	MG	1	3735	1/1	0.90	0.15	62,62,62,62	0
80	PAR	5	3413	42/42	0.90	0.16	72,72,72,72	42
81	MG	1	3653	1/1	0.90	0.10	51,51,51,51	0
81	MG	2	1910	1/1	0.90	0.20	80,80,80,80	0
81	MG	1	4022	1/1	0.90	0.15	47,47,47,47	1
81	MG	5	4046	1/1	0.90	0.21	68,68,68,68	0
81	MG	5	3895	1/1	0.90	0.09	56,56,56,56	0
80	PAR	2	1902	42/42	0.90	0.10	74,74,74,74	0
81	MG	1	4026	1/1	0.90	0.14	37,37,37,37	1
81	MG	6	1917	1/1	0.90	0.29	71,71,71,71	0
81	MG	6	1918	1/1	0.90	0.23	71,71,71,71	0
81	MG	2	2023	1/1	0.90	0.13	81,81,81,81	0
81	MG	5	4052	1/1	0.90	0.09	53,53,53,53	0
81	MG	3	214	1/1	0.90	0.08	73,73,73,73	0
81	MG	1	3859	1/1	0.90	0.16	53,53,53,53	0
80	PAR	o2	201	42/42	0.90	0.24	51,51,51,51	42
81	MG	3	217	1/1	0.90	0.17	60,60,60,60	0
81	MG	2	1922	1/1	0.90	0.10	60,60,60,60	1
81	MG	5	3719	1/1	0.90	0.25	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3485	1/1	0.90	0.18	47,47,47,47	0
81	MG	1	3754	1/1	0.90	0.09	52,52,52,52	0
81	MG	2	1924	1/1	0.90	0.11	63,63,63,63	0
80	PAR	5	3424	42/42	0.90	0.16	65,65,65,65	42
82	ZN	D7	101	1/1	0.90	0.08	173,173,173,173	0
81	MG	1	3894	1/1	0.91	0.12	60,60,60,60	0
81	MG	5	3627	1/1	0.91	0.10	59,59,59,59	0
81	MG	1	4016	1/1	0.91	0.13	57,57,57,57	0
80	PAR	5	3420	42/42	0.91	0.12	77,77,77,77	0
80	PAR	5	3412	42/42	0.91	0.12	47,47,47,47	42
81	MG	M5	309	1/1	0.91	0.19	43,43,43,43	0
81	MG	M6	202	1/1	0.91	0.09	52,52,52,52	0
81	MG	1	3757	1/1	0.91	0.17	45,45,45,45	0
81	MG	1	4178	1/1	0.91	0.11	54,54,54,54	0
81	MG	5	3644	1/1	0.91	0.09	59,59,59,59	0
81	MG	1	3693	1/1	0.91	0.10	46,46,46,46	0
81	MG	M9	201	1/1	0.91	0.18	65,65,65,65	0
81	MG	5	3851	1/1	0.91	0.12	61,61,61,61	0
81	MG	1	3491	1/1	0.91	0.20	58,58,58,58	0
81	MG	7	205	1/1	0.91	0.15	93,93,93,93	0
81	MG	5	3657	1/1	0.91	0.10	47,47,47,47	0
81	MG	1	3769	1/1	0.91	0.07	54,54,54,54	0
81	MG	6	1973	1/1	0.91	0.15	113,113,113,113	0
81	MG	7	209	1/1	0.91	0.11	96,96,96,96	0
81	MG	1	4187	1/1	0.91	0.07	50,50,50,50	0
81	MG	7	211	1/1	0.91	0.17	72,72,72,72	0
81	MG	5	3433	1/1	0.91	0.15	46,46,46,46	0
81	MG	5	3867	1/1	0.91	0.14	66,66,66,66	0
81	MG	5	3668	1/1	0.91	0.10	47,47,47,47	1
81	MG	5	3450	1/1	0.91	0.16	49,49,49,49	0
81	MG	1	3967	1/1	0.91	0.20	77,77,77,77	0
81	MG	8	211	1/1	0.91	0.15	66,66,66,66	0
81	MG	6	1986	1/1	0.91	0.20	81,81,81,81	0
81	MG	5	3456	1/1	0.91	0.11	43,43,43,43	0
81	MG	5	3676	1/1	0.91	0.15	42,42,42,42	0
81	MG	5	3677	1/1	0.91	0.15	55,55,55,55	0
81	MG	1	4105	1/1	0.91	0.09	63,63,63,63	0
81	MG	1	3775	1/1	0.91	0.21	47,47,47,47	0
81	MG	5	4006	1/1	0.91	0.17	68,68,68,68	0
81	MG	1	3509	1/1	0.91	0.13	74,74,74,74	0
81	MG	1	4195	1/1	0.91	0.10	60,60,60,60	0
81	MG	5	3490	1/1	0.91	0.17	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	2050	1/1	0.91	0.23	67,67,67,67	0
81	MG	2	1961	1/1	0.91	0.16	76,76,76,76	0
80	PAR	6	1903	42/42	0.91	0.12	74,74,74,74	0
81	MG	1	3706	1/1	0.91	0.24	44,44,44,44	0
81	MG	l3	403	1/1	0.91	0.23	43,43,43,43	1
81	MG	5	4016	1/1	0.91	0.09	77,77,77,77	0
81	MG	5	3696	1/1	0.91	0.12	59,59,59,59	0
81	MG	1	3605	1/1	0.91	0.16	61,61,61,61	0
81	MG	1	4042	1/1	0.91	0.13	63,63,63,63	0
81	MG	6	2012	1/1	0.91	0.27	65,65,65,65	0
81	MG	5	3700	1/1	0.91	0.12	62,62,62,62	0
81	MG	5	4022	1/1	0.91	0.14	64,64,64,64	0
81	MG	5	3511	1/1	0.91	0.19	45,45,45,45	0
81	MG	5	3702	1/1	0.91	0.27	61,61,61,61	0
81	MG	1	3912	1/1	0.91	0.11	44,44,44,44	0
80	PAR	6	1904	42/42	0.91	0.14	72,72,72,72	0
81	MG	1	3977	1/1	0.91	0.13	49,49,49,49	0
81	MG	5	3521	1/1	0.91	0.09	55,55,55,55	0
81	MG	1	4050	1/1	0.91	0.15	48,48,48,48	0
81	MG	1	3652	1/1	0.91	0.28	41,41,41,41	0
81	MG	1	3865	1/1	0.91	0.16	46,46,46,46	1
81	MG	O3	202	1/1	0.91	0.08	56,56,56,56	0
81	MG	5	4036	1/1	0.91	0.24	68,68,68,68	0
81	MG	5	4038	1/1	0.91	0.08	68,68,68,68	0
81	MG	1	3868	1/1	0.91	0.12	39,39,39,39	0
81	MG	O6	201	1/1	0.91	0.11	56,56,56,56	0
81	MG	1	3789	1/1	0.91	0.17	54,54,54,54	0
81	MG	n0	204	1/1	0.91	0.14	63,63,63,63	0
81	MG	5	3549	1/1	0.91	0.16	50,50,50,50	0
81	MG	1	3920	1/1	0.91	0.17	50,50,50,50	0
81	MG	1	3520	1/1	0.91	0.21	51,51,51,51	0
81	MG	5	3553	1/1	0.91	0.11	64,64,64,64	0
81	MG	5	3557	1/1	0.91	0.10	67,67,67,67	0
81	MG	1	3610	1/1	0.91	0.14	58,58,58,58	0
81	MG	1	3989	1/1	0.91	0.11	60,60,60,60	0
81	MG	5	3764	1/1	0.91	0.16	56,56,56,56	0
81	MG	1	3525	1/1	0.91	0.16	54,54,54,54	0
80	PAR	5	3408	42/42	0.91	0.14	58,58,58,58	42
81	MG	n8	202	1/1	0.91	0.14	52,52,52,52	1
81	MG	5	4060	1/1	0.91	0.14	72,72,72,72	0
81	MG	5	3562	1/1	0.91	0.13	94,94,94,94	0
81	MG	2	1988	1/1	0.91	0.08	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
80	PAR	4	202	42/42	0.91	0.13	49,49,49,49	42
81	MG	2	1991	1/1	0.91	0.12	91,91,91,91	0
81	MG	5	4065	1/1	0.91	0.15	100,100,100,100	0
81	MG	1	3728	1/1	0.91	0.07	49,49,49,49	0
81	MG	5	3775	1/1	0.91	0.15	60,60,60,60	0
81	MG	1	3617	1/1	0.91	0.17	75,75,75,75	0
81	MG	o7	503	1/1	0.91	0.11	58,58,58,58	0
81	MG	5	3582	1/1	0.91	0.21	54,54,54,54	0
81	MG	q2	502	1/1	0.91	0.12	70,70,70,70	0
81	MG	5	3583	1/1	0.91	0.20	54,54,54,54	0
81	MG	6	2059	1/1	0.91	0.13	118,118,118,118	0
81	MG	2	1997	1/1	0.91	0.15	81,81,81,81	0
81	MG	5	3792	1/1	0.91	0.15	50,50,50,50	0
81	MG	2	1999	1/1	0.91	0.06	74,74,74,74	0
81	MG	1	4076	1/1	0.91	0.09	61,61,61,61	0
81	MG	2	2002	1/1	0.91	0.12	79,79,79,79	0
81	MG	1	3937	1/1	0.91	0.07	59,59,59,59	0
81	MG	1	4078	1/1	0.91	0.15	71,71,71,71	0
81	MG	2	2087	1/1	0.91	0.27	70,70,70,70	0
81	MG	1	3451	1/1	0.91	0.16	36,36,36,36	0
81	MG	1	3533	1/1	0.91	0.18	33,33,33,33	0
81	MG	2	2009	1/1	0.91	0.22	70,70,70,70	0
81	MG	5	3808	1/1	0.91	0.11	54,54,54,54	1
81	MG	5	3608	1/1	0.91	0.23	52,52,52,52	0
81	MG	6	1933	1/1	0.91	0.32	92,92,92,92	0
81	MG	1	4086	1/1	0.91	0.19	55,55,55,55	0
81	MG	6	1935	1/1	0.91	0.24	78,78,78,78	0
81	MG	1	4005	1/1	0.91	0.07	64,64,64,64	0
81	MG	1	4156	1/1	0.91	0.12	44,44,44,44	1
81	MG	5	3819	1/1	0.91	0.17	60,60,60,60	0
81	MG	5	3822	1/1	0.91	0.07	65,65,65,65	0
81	MG	5	3954	1/1	0.91	0.08	55,55,55,55	0
81	MG	1	3943	1/1	0.91	0.09	40,40,40,40	0
81	MG	L3	405	1/1	0.91	0.09	73,73,73,73	0
80	PAR	1	3429	42/42	0.91	0.13	58,58,58,58	42
81	MG	1	3630	1/1	0.91	0.10	51,51,51,51	0
81	MG	1	3890	1/1	0.91	0.09	52,52,52,52	0
81	MG	5	3962	1/1	0.91	0.06	81,81,81,81	0
81	MG	2	2019	1/1	0.91	0.26	81,81,81,81	0
81	MG	5	4102	1/1	0.91	0.11	48,48,48,48	1
81	MG	1	3820	1/1	0.91	0.13	54,54,54,54	0
81	MG	1	3682	1/1	0.91	0.15	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	2022	1/1	0.91	0.14	79,79,79,79	0
81	MG	1	4166	1/1	0.91	0.09	77,77,77,77	0
81	MG	Q3	503	1/1	0.92	0.09	54,54,54,54	0
81	MG	1	3506	1/1	0.92	0.13	65,65,65,65	0
81	MG	1	3600	1/1	0.92	0.10	52,52,52,52	0
81	MG	5	3965	1/1	0.92	0.13	58,58,58,58	0
80	PAR	5	3406	42/42	0.92	0.11	51,51,51,51	42
81	MG	1	3480	1/1	0.92	0.09	39,39,39,39	0
81	MG	5	3969	1/1	0.92	0.14	55,55,55,55	0
81	MG	1	4047	1/1	0.92	0.09	50,50,50,50	0
81	MG	1	4048	1/1	0.92	0.10	50,50,50,50	0
81	MG	1	3510	1/1	0.92	0.15	68,68,68,68	0
81	MG	4	213	1/1	0.92	0.09	41,41,41,41	0
81	MG	5	3634	1/1	0.92	0.16	55,55,55,55	0
81	MG	1	4128	1/1	0.92	0.06	47,47,47,47	0
81	MG	1	4051	1/1	0.92	0.10	51,51,51,51	0
81	MG	5	3980	1/1	0.92	0.12	97,97,97,97	0
81	MG	1	3821	1/1	0.92	0.23	52,52,52,52	0
81	MG	C8	201	1/1	0.92	0.07	137,137,137,137	0
81	MG	1	3655	1/1	0.92	0.10	52,52,52,52	0
81	MG	1	3658	1/1	0.92	0.12	41,41,41,41	0
81	MG	4	225	1/1	0.92	0.06	62,62,62,62	1
81	MG	2	1925	1/1	0.92	0.10	58,58,58,58	0
81	MG	1	3835	1/1	0.92	0.20	45,45,45,45	0
81	MG	1	3837	1/1	0.92	0.07	63,63,63,63	0
81	MG	5	3659	1/1	0.92	0.14	43,43,43,43	0
81	MG	8	205	1/1	0.92	0.19	55,55,55,55	0
81	MG	1	4059	1/1	0.92	0.15	53,53,53,53	0
81	MG	1	3979	1/1	0.92	0.11	63,63,63,63	0
81	MG	4	232	1/1	0.92	0.10	51,51,51,51	0
81	MG	6	1985	1/1	0.92	0.17	85,85,85,85	0
81	MG	5	3463	1/1	0.92	0.18	44,44,44,44	0
81	MG	2	1933	1/1	0.92	0.16	78,78,78,78	0
81	MG	4	234	1/1	0.92	0.09	46,46,46,46	0
81	MG	5	3482	1/1	0.92	0.21	44,44,44,44	0
81	MG	5	3865	1/1	0.92	0.15	58,58,58,58	0
81	MG	5	3866	1/1	0.92	0.13	68,68,68,68	0
81	MG	1	3608	1/1	0.92	0.12	50,50,50,50	0
81	MG	8	219	1/1	0.92	0.13	60,60,60,60	0
81	MG	L2	301	1/1	0.92	0.18	31,31,31,31	0
81	MG	1	4143	1/1	0.92	0.14	62,62,62,62	0
81	MG	5	3680	1/1	0.92	0.09	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4064	1/1	0.92	0.14	44,44,44,44	0
81	MG	6	2003	1/1	0.92	0.15	71,71,71,71	0
81	MG	1	3666	1/1	0.92	0.13	49,49,49,49	0
81	MG	1	4147	1/1	0.92	0.20	51,51,51,51	0
81	MG	1	4068	1/1	0.92	0.09	51,51,51,51	0
81	MG	L7	301	1/1	0.92	0.08	52,52,52,52	0
81	MG	5	3687	1/1	0.92	0.14	58,58,58,58	0
81	MG	5	3689	1/1	0.92	0.08	59,59,59,59	0
81	MG	5	3506	1/1	0.92	0.14	55,55,55,55	0
81	MG	5	3507	1/1	0.92	0.17	64,64,64,64	0
81	MG	1	3558	1/1	0.92	0.14	36,36,36,36	0
81	MG	17	302	1/1	0.92	0.10	57,57,57,57	0
81	MG	1	3849	1/1	0.92	0.08	56,56,56,56	0
81	MG	5	3882	1/1	0.92	0.22	55,55,55,55	0
80	PAR	5	3407	42/42	0.92	0.11	51,51,51,51	42
81	MG	5	3885	1/1	0.92	0.08	65,65,65,65	0
81	MG	6	2019	1/1	0.92	0.14	107,107,107,107	0
81	MG	2	1949	1/1	0.92	0.14	102,102,102,102	0
81	MG	1	3746	1/1	0.92	0.16	36,36,36,36	0
81	MG	5	3520	1/1	0.92	0.19	47,47,47,47	0
81	MG	1	3853	1/1	0.92	0.06	62,62,62,62	0
81	MG	5	3703	1/1	0.92	0.17	58,58,58,58	0
81	MG	5	3526	1/1	0.92	0.17	52,52,52,52	0
80	PAR	1	3422	42/42	0.92	0.17	51,51,51,51	42
81	MG	2	1953	1/1	0.92	0.14	131,131,131,131	0
81	MG	1	3919	1/1	0.92	0.09	48,48,48,48	0
81	MG	5	3714	1/1	0.92	0.12	58,58,58,58	0
81	MG	5	3897	1/1	0.92	0.07	55,55,55,55	0
81	MG	2	1955	1/1	0.92	0.12	133,133,133,133	0
80	PAR	1	3424	42/42	0.92	0.09	76,76,76,76	0
81	MG	5	3725	1/1	0.92	0.22	63,63,63,63	0
81	MG	1	3674	1/1	0.92	0.28	46,46,46,46	0
81	MG	1	3523	1/1	0.92	0.14	50,50,50,50	0
81	MG	1	3618	1/1	0.92	0.17	68,68,68,68	0
81	MG	1	3679	1/1	0.92	0.06	70,70,70,70	0
81	MG	1	3931	1/1	0.92	0.11	40,40,40,40	0
81	MG	M8	202	1/1	0.92	0.16	52,52,52,52	0
81	MG	1	4173	1/1	0.92	0.10	58,58,58,58	0
81	MG	5	4056	1/1	0.92	0.16	48,48,48,48	0
81	MG	n8	201	1/1	0.92	0.09	55,55,55,55	0
81	MG	2	1966	1/1	0.92	0.15	99,99,99,99	0
81	MG	5	3745	1/1	0.92	0.12	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3750	1/1	0.92	0.14	46,46,46,46	0
80	PAR	1	3425	42/42	0.92	0.13	48,48,48,48	42
81	MG	5	3754	1/1	0.92	0.08	53,53,53,53	0
81	MG	1	3681	1/1	0.92	0.29	53,53,53,53	0
81	MG	1	3778	1/1	0.92	0.09	50,50,50,50	1
80	PAR	1	3409	42/42	0.92	0.12	38,38,38,38	42
80	PAR	1	3411	42/42	0.92	0.11	44,44,44,44	0
81	MG	5	3567	1/1	0.92	0.09	73,73,73,73	0
81	MG	1	3784	1/1	0.92	0.12	56,56,56,56	0
81	MG	1	3441	1/1	0.92	0.17	30,30,30,30	0
81	MG	5	3575	1/1	0.92	0.10	58,58,58,58	0
81	MG	5	3923	1/1	0.92	0.07	112,112,112,112	0
81	MG	5	4071	1/1	0.92	0.06	56,56,56,56	0
81	MG	6	1911	1/1	0.92	0.14	73,73,73,73	0
81	MG	1	3589	1/1	0.92	0.21	49,49,49,49	0
81	MG	N6	203	1/1	0.92	0.15	55,55,55,55	0
81	MG	2	1977	1/1	0.92	0.08	96,96,96,96	0
80	PAR	1	3416	42/42	0.92	0.10	52,52,52,52	0
81	MG	1	3697	1/1	0.92	0.10	58,58,58,58	0
81	MG	1	4021	1/1	0.92	0.09	45,45,45,45	0
81	MG	1	4192	1/1	0.92	0.25	62,62,62,62	0
81	MG	1	3633	1/1	0.92	0.23	49,49,49,49	0
81	MG	1	4194	1/1	0.92	0.07	50,50,50,50	0
81	MG	5	3593	1/1	0.92	0.24	64,64,64,64	0
80	PAR	1	3420	42/42	0.92	0.09	65,65,65,65	42
81	MG	1	3637	1/1	0.92	0.14	45,45,45,45	0
81	MG	1	3470	1/1	0.92	0.07	42,42,42,42	0
81	MG	1	4106	1/1	0.92	0.20	68,68,68,68	0
81	MG	1	3958	1/1	0.92	0.08	59,59,59,59	0
81	MG	1	3709	1/1	0.92	0.10	32,32,32,32	0
81	MG	1	3713	1/1	0.92	0.16	53,53,53,53	0
81	MG	O7	102	1/1	0.92	0.13	43,43,43,43	0
81	MG	5	3611	1/1	0.92	0.20	67,67,67,67	0
81	MG	5	3810	1/1	0.92	0.16	50,50,50,50	0
81	MG	5	3811	1/1	0.92	0.15	54,54,54,54	0
81	MG	5	3952	1/1	0.92	0.12	57,57,57,57	0
81	MG	5	3953	1/1	0.92	0.18	49,49,49,49	0
81	MG	1	3962	1/1	0.92	0.09	44,44,44,44	0
81	MG	1	3891	1/1	0.92	0.10	59,59,59,59	0
81	MG	1	3537	1/1	0.92	0.22	31,31,31,31	0
81	MG	5	3957	1/1	0.92	0.08	54,54,54,54	0
81	MG	1	3641	1/1	0.92	0.08	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	4107	1/1	0.92	0.15	52,52,52,52	0
81	MG	1	4039	1/1	0.92	0.06	72,72,72,72	0
81	MG	2	2006	1/1	0.92	0.09	66,66,66,66	0
81	MG	6	1916	1/1	0.93	0.10	79,79,79,79	0
81	MG	1	3628	1/1	0.93	0.16	54,54,54,54	0
81	MG	1	3599	1/1	0.93	0.09	52,52,52,52	0
81	MG	2	2037	1/1	0.93	0.12	123,123,123,123	0
81	MG	5	3508	1/1	0.93	0.14	59,59,59,59	0
81	MG	5	3509	1/1	0.93	0.07	72,72,72,72	0
81	MG	1	3801	1/1	0.93	0.06	47,47,47,47	0
81	MG	1	3529	1/1	0.93	0.19	38,38,38,38	0
81	MG	6	1925	1/1	0.93	0.22	76,76,76,76	0
81	MG	4	233	1/1	0.93	0.09	57,57,57,57	0
81	MG	1	3888	1/1	0.93	0.06	42,42,42,42	0
81	MG	6	1929	1/1	0.93	0.16	80,80,80,80	0
81	MG	4	236	1/1	0.93	0.23	50,50,50,50	0
81	MG	1	3889	1/1	0.93	0.06	54,54,54,54	0
81	MG	5	3722	1/1	0.93	0.12	74,74,74,74	0
81	MG	5	3723	1/1	0.93	0.18	69,69,69,69	0
81	MG	1	4137	1/1	0.93	0.11	61,61,61,61	0
81	MG	1	3603	1/1	0.93	0.20	52,52,52,52	0
81	MG	1	3804	1/1	0.93	0.17	45,45,45,45	0
81	MG	1	3730	1/1	0.93	0.17	47,47,47,47	0
81	MG	5	3728	1/1	0.93	0.22	61,61,61,61	1
81	MG	5	3536	1/1	0.93	0.09	51,51,51,51	1
81	MG	1	4052	1/1	0.93	0.05	50,50,50,50	0
81	MG	5	4078	1/1	0.93	0.09	63,63,63,63	0
81	MG	5	3539	1/1	0.93	0.16	44,44,44,44	0
81	MG	5	3732	1/1	0.93	0.19	50,50,50,50	0
81	MG	5	3733	1/1	0.93	0.16	55,55,55,55	0
81	MG	5	3540	1/1	0.93	0.10	48,48,48,48	0
81	MG	5	3740	1/1	0.93	0.12	68,68,68,68	0
81	MG	2	1946	1/1	0.93	0.14	74,74,74,74	0
81	MG	2	2055	1/1	0.93	0.13	56,56,56,56	0
81	MG	5	3744	1/1	0.93	0.14	58,58,58,58	0
81	MG	L5	302	1/1	0.93	0.26	68,68,68,68	0
81	MG	5	3747	1/1	0.93	0.12	60,60,60,60	0
81	MG	5	3748	1/1	0.93	0.14	50,50,50,50	0
81	MG	1	3733	1/1	0.93	0.17	41,41,41,41	0
81	MG	5	3926	1/1	0.93	0.09	78,78,78,78	0
81	MG	1	3809	1/1	0.93	0.09	59,59,59,59	0
81	MG	5	3752	1/1	0.93	0.09	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3753	1/1	0.93	0.07	57,57,57,57	0
81	MG	5	4096	1/1	0.93	0.13	52,52,52,52	0
80	PAR	5	3410	42/42	0.93	0.11	75,75,75,75	0
81	MG	5	3755	1/1	0.93	0.19	59,59,59,59	0
81	MG	1	3531	1/1	0.93	0.13	41,41,41,41	0
81	MG	5	3934	1/1	0.93	0.10	58,58,58,58	0
81	MG	5	3758	1/1	0.93	0.14	48,48,48,48	0
81	MG	1	3635	1/1	0.93	0.11	49,49,49,49	0
81	MG	5	4105	1/1	0.93	0.11	54,54,54,54	0
81	MG	1	3438	1/1	0.93	0.13	36,36,36,36	0
81	MG	5	3763	1/1	0.93	0.16	42,42,42,42	0
81	MG	M5	301	1/1	0.93	0.12	39,39,39,39	0
81	MG	1	3822	1/1	0.93	0.18	50,50,50,50	0
81	MG	1	3513	1/1	0.93	0.19	56,56,56,56	0
81	MG	5	3769	1/1	0.93	0.15	53,53,53,53	0
81	MG	1	3743	1/1	0.93	0.21	35,35,35,35	0
81	MG	1	3831	1/1	0.93	0.09	37,37,37,37	0
81	MG	1	3906	1/1	0.93	0.13	38,38,38,38	0
81	MG	1	3609	1/1	0.93	0.08	56,56,56,56	0
81	MG	5	3569	1/1	0.93	0.13	78,78,78,78	0
81	MG	1	3983	1/1	0.93	0.27	51,51,51,51	1
81	MG	1	3686	1/1	0.93	0.12	45,45,45,45	0
81	MG	5	3573	1/1	0.93	0.07	76,76,76,76	0
81	MG	5	3781	1/1	0.93	0.15	49,49,49,49	0
81	MG	M7	205	1/1	0.93	0.09	45,45,45,45	0
81	MG	1	3690	1/1	0.93	0.15	44,44,44,44	0
81	MG	1	3517	1/1	0.93	0.14	43,43,43,43	0
81	MG	6	1990	1/1	0.93	0.10	69,69,69,69	0
80	PAR	2	1903	42/42	0.93	0.10	69,69,69,69	0
81	MG	1	3914	1/1	0.93	0.14	75,75,75,75	0
81	MG	7	206	1/1	0.93	0.16	116,116,116,116	0
81	MG	1	3990	1/1	0.93	0.10	56,56,56,56	0
81	MG	1	4174	1/1	0.93	0.09	54,54,54,54	0
81	MG	1	3848	1/1	0.93	0.07	62,62,62,62	0
81	MG	1	3992	1/1	0.93	0.25	47,47,47,47	1
81	MG	1	3588	1/1	0.93	0.16	47,47,47,47	0
81	MG	7	212	1/1	0.93	0.10	60,60,60,60	0
81	MG	1	3767	1/1	0.93	0.07	62,62,62,62	0
81	MG	5	3968	1/1	0.93	0.14	48,48,48,48	0
80	PAR	1	3423	42/42	0.93	0.10	54,54,54,54	0
81	MG	1	3522	1/1	0.93	0.20	52,52,52,52	0
81	MG	1	3770	1/1	0.93	0.10	45,45,45,45	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	8	207	1/1	0.93	0.12	79,79,79,79	0
81	MG	1	4185	1/1	0.93	0.10	56,56,56,56	0
81	MG	8	209	1/1	0.93	0.14	66,66,66,66	0
81	MG	5	3603	1/1	0.93	0.15	65,65,65,65	0
81	MG	1	3773	1/1	0.93	0.10	47,47,47,47	0
81	MG	5	3975	1/1	0.93	0.12	57,57,57,57	0
81	MG	2	1982	1/1	0.93	0.16	63,63,63,63	0
80	PAR	1	3428	42/42	0.93	0.11	58,58,58,58	0
81	MG	2	2094	1/1	0.93	0.17	95,95,95,95	0
81	MG	5	3821	1/1	0.93	0.13	62,62,62,62	0
81	MG	1	3925	1/1	0.93	0.08	52,52,52,52	1
81	MG	2	2096	1/1	0.93	0.06	76,76,76,76	0
81	MG	1	3776	1/1	0.93	0.16	52,52,52,52	0
81	MG	8	221	1/1	0.93	0.10	86,86,86,86	0
81	MG	1	4007	1/1	0.93	0.07	46,46,46,46	0
81	MG	1	4096	1/1	0.93	0.09	62,62,62,62	0
81	MG	1	3701	1/1	0.93	0.09	46,46,46,46	0
81	MG	1	3928	1/1	0.93	0.07	46,46,46,46	0
81	MG	5	3830	1/1	0.93	0.09	56,56,56,56	0
81	MG	1	3619	1/1	0.93	0.15	58,58,58,58	0
81	MG	1	4197	1/1	0.93	0.14	44,44,44,44	0
81	MG	2	1995	1/1	0.93	0.12	81,81,81,81	0
81	MG	5	3622	1/1	0.93	0.13	69,69,69,69	0
81	MG	l3	407	1/1	0.93	0.06	51,51,51,51	0
81	MG	1	3495	1/1	0.93	0.13	41,41,41,41	0
81	MG	1	4199	1/1	0.93	0.08	47,47,47,47	0
81	MG	1	3862	1/1	0.93	0.25	62,62,62,62	0
81	MG	l7	301	1/1	0.93	0.10	58,58,58,58	0
81	MG	2	2112	1/1	0.93	0.28	72,72,72,72	0
81	MG	2	2001	1/1	0.93	0.11	80,80,80,80	0
81	MG	2	2114	1/1	0.93	0.13	104,104,104,104	0
81	MG	1	3621	1/1	0.93	0.09	49,49,49,49	0
81	MG	1	4103	1/1	0.93	0.14	57,57,57,57	0
81	MG	Q2	503	1/1	0.93	0.06	42,42,42,42	0
81	MG	1	3710	1/1	0.93	0.08	33,33,33,33	0
81	MG	1	3939	1/1	0.93	0.11	49,49,49,49	1
81	MG	Q3	502	1/1	0.93	0.09	51,51,51,51	0
81	MG	1	4020	1/1	0.93	0.08	49,49,49,49	1
81	MG	m6	202	1/1	0.93	0.14	53,53,53,53	0
81	MG	m7	206	1/1	0.93	0.11	50,50,50,50	0
81	MG	5	3852	1/1	0.93	0.11	55,55,55,55	0
81	MG	1	3870	1/1	0.93	0.13	36,36,36,36	1

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	1907	1/1	0.93	0.08	81,81,81,81	0
81	MG	5	4015	1/1	0.93	0.08	78,78,78,78	0
81	MG	m9	204	1/1	0.93	0.19	79,79,79,79	0
81	MG	1	3712	1/1	0.93	0.20	43,43,43,43	0
81	MG	5	3856	1/1	0.93	0.10	51,51,51,51	0
81	MG	1	4023	1/1	0.93	0.11	49,49,49,49	0
81	MG	1	4112	1/1	0.93	0.21	73,73,73,73	0
81	MG	1	3663	1/1	0.93	0.07	48,48,48,48	0
81	MG	1	3944	1/1	0.93	0.23	48,48,48,48	0
81	MG	5	3443	1/1	0.93	0.14	42,42,42,42	0
81	MG	5	3667	1/1	0.93	0.18	53,53,53,53	0
81	MG	n3	202	1/1	0.93	0.12	59,59,59,59	0
81	MG	1	4027	1/1	0.93	0.07	42,42,42,42	0
81	MG	n3	204	1/1	0.93	0.13	50,50,50,50	0
81	MG	1	4030	1/1	0.93	0.09	48,48,48,48	0
81	MG	1	3945	1/1	0.93	0.13	49,49,49,49	0
81	MG	5	3459	1/1	0.93	0.19	45,45,45,45	0
81	MG	2	1918	1/1	0.93	0.16	69,69,69,69	0
81	MG	5	3464	1/1	0.93	0.19	44,44,44,44	0
81	MG	5	3467	1/1	0.93	0.12	49,49,49,49	0
81	MG	5	3468	1/1	0.93	0.15	44,44,44,44	0
81	MG	1	3714	1/1	0.93	0.08	44,44,44,44	0
81	MG	5	4037	1/1	0.93	0.12	65,65,65,65	0
81	MG	1	3664	1/1	0.93	0.18	50,50,50,50	0
81	MG	2	1921	1/1	0.93	0.15	72,72,72,72	0
81	MG	5	3483	1/1	0.93	0.20	53,53,53,53	0
81	MG	1	3622	1/1	0.93	0.18	54,54,54,54	0
81	MG	1	3953	1/1	0.93	0.12	54,54,54,54	0
81	MG	o2	202	1/1	0.93	0.14	53,53,53,53	0
81	MG	o2	203	1/1	0.93	0.08	49,49,49,49	0
80	PAR	1	3408	42/42	0.93	0.11	44,44,44,44	42
81	MG	5	3690	1/1	0.93	0.14	59,59,59,59	0
81	MG	1	3471	1/1	0.93	0.17	37,37,37,37	0
81	MG	5	4049	1/1	0.93	0.11	73,73,73,73	0
81	MG	1	3796	1/1	0.93	0.16	52,52,52,52	0
81	MG	1	4125	1/1	0.93	0.21	58,58,58,58	0
81	MG	5	3502	1/1	0.93	0.25	52,52,52,52	0
81	MG	1	4126	1/1	0.93	0.09	35,35,35,35	0
82	ZN	d7	101	1/1	0.93	0.05	261,261,261,261	0
81	MG	5	3739	1/1	0.94	0.06	50,50,50,50	0
81	MG	1	3960	1/1	0.94	0.12	43,43,43,43	0
81	MG	1	3644	1/1	0.94	0.21	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3602	1/1	0.94	0.11	87,87,87,87	0
81	MG	1	3487	1/1	0.94	0.19	37,37,37,37	0
81	MG	1	3684	1/1	0.94	0.16	43,43,43,43	0
81	MG	5	3607	1/1	0.94	0.12	49,49,49,49	0
81	MG	1	3907	1/1	0.94	0.08	39,39,39,39	0
81	MG	1	3732	1/1	0.94	0.27	50,50,50,50	0
81	MG	1	3646	1/1	0.94	0.06	42,42,42,42	0
81	MG	1	3651	1/1	0.94	0.13	35,35,35,35	0
81	MG	Q2	506	1/1	0.94	0.19	51,51,51,51	0
81	MG	1	3516	1/1	0.94	0.10	47,47,47,47	0
81	MG	5	3470	1/1	0.94	0.10	45,45,45,45	0
81	MG	5	4021	1/1	0.94	0.22	64,64,64,64	0
81	MG	1	4162	1/1	0.94	0.15	63,63,63,63	0
81	MG	5	4023	1/1	0.94	0.07	60,60,60,60	0
81	MG	5	3757	1/1	0.94	0.06	57,57,57,57	0
81	MG	1	3692	1/1	0.94	0.28	33,33,33,33	0
81	MG	5	3475	1/1	0.94	0.28	39,39,39,39	0
81	MG	5	3480	1/1	0.94	0.13	45,45,45,45	0
81	MG	8	224	1/1	0.94	0.15	59,59,59,59	0
81	MG	6	1978	1/1	0.94	0.10	111,111,111,111	0
81	MG	1	3499	1/1	0.94	0.14	52,52,52,52	0
81	MG	1	3538	1/1	0.94	0.13	35,35,35,35	0
81	MG	1	3541	1/1	0.94	0.24	29,29,29,29	0
81	MG	5	3623	1/1	0.94	0.12	59,59,59,59	0
81	MG	1	3863	1/1	0.94	0.09	46,46,46,46	0
81	MG	5	3908	1/1	0.94	0.05	86,86,86,86	0
81	MG	1	4171	1/1	0.94	0.08	52,52,52,52	0
81	MG	5	3491	1/1	0.94	0.06	49,49,49,49	0
81	MG	L2	306	1/1	0.94	0.06	51,51,51,51	0
81	MG	5	3628	1/1	0.94	0.13	59,59,59,59	0
81	MG	5	4040	1/1	0.94	0.07	49,49,49,49	0
81	MG	6	1991	1/1	0.94	0.10	62,62,62,62	0
81	MG	14	403	1/1	0.94	0.07	80,80,80,80	0
81	MG	1	3864	1/1	0.94	0.10	47,47,47,47	0
81	MG	5	4043	1/1	0.94	0.20	66,66,66,66	0
81	MG	2	1989	1/1	0.94	0.08	88,88,88,88	0
81	MG	1	3596	1/1	0.94	0.08	44,44,44,44	0
81	MG	L4	402	1/1	0.94	0.06	54,54,54,54	0
81	MG	17	306	1/1	0.94	0.16	65,65,65,65	0
81	MG	L4	403	1/1	0.94	0.10	39,39,39,39	0
81	MG	5	3785	1/1	0.94	0.12	53,53,53,53	0
81	MG	1	3867	1/1	0.94	0.16	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4041	1/1	0.94	0.07	69,69,69,69	0
81	MG	5	3791	1/1	0.94	0.12	70,70,70,70	0
81	MG	1	3566	1/1	0.94	0.12	43,43,43,43	0
81	MG	m6	201	1/1	0.94	0.08	52,52,52,52	0
81	MG	5	4053	1/1	0.94	0.07	59,59,59,59	0
81	MG	m6	203	1/1	0.94	0.09	55,55,55,55	1
81	MG	m6	204	1/1	0.94	0.21	49,49,49,49	0
81	MG	1	3981	1/1	0.94	0.13	57,57,57,57	0
81	MG	1	4107	1/1	0.94	0.21	64,64,64,64	0
81	MG	m7	209	1/1	0.94	0.13	47,47,47,47	0
81	MG	1	3805	1/1	0.94	0.08	51,51,51,51	0
81	MG	5	3647	1/1	0.94	0.09	56,56,56,56	0
81	MG	5	3649	1/1	0.94	0.25	50,50,50,50	0
81	MG	5	3650	1/1	0.94	0.17	46,46,46,46	0
81	MG	1	3468	1/1	0.94	0.21	33,33,33,33	0
81	MG	5	3803	1/1	0.94	0.21	47,47,47,47	0
81	MG	M4	201	1/1	0.94	0.08	59,59,59,59	0
81	MG	5	3658	1/1	0.94	0.17	61,61,61,61	0
81	MG	5	3518	1/1	0.94	0.08	52,52,52,52	0
81	MG	1	3705	1/1	0.94	0.15	44,44,44,44	0
81	MG	5	3661	1/1	0.94	0.15	47,47,47,47	0
81	MG	1	4186	1/1	0.94	0.12	43,43,43,43	0
81	MG	5	3939	1/1	0.94	0.18	74,74,74,74	0
81	MG	1	3602	1/1	0.94	0.08	55,55,55,55	0
81	MG	1	3573	1/1	0.94	0.14	45,45,45,45	0
81	MG	5	3527	1/1	0.94	0.23	54,54,54,54	0
81	MG	1	3811	1/1	0.94	0.07	64,64,64,64	0
81	MG	1	3765	1/1	0.94	0.08	68,68,68,68	0
81	MG	1	4191	1/1	0.94	0.10	48,48,48,48	0
81	MG	1	3575	1/1	0.94	0.12	38,38,38,38	0
81	MG	1	3577	1/1	0.94	0.12	48,48,48,48	0
81	MG	1	4055	1/1	0.94	0.13	60,60,60,60	0
81	MG	1	3936	1/1	0.94	0.06	65,65,65,65	0
81	MG	1	3711	1/1	0.94	0.13	44,44,44,44	0
81	MG	1	3824	1/1	0.94	0.20	58,58,58,58	0
81	MG	2	2099	1/1	0.94	0.07	57,57,57,57	0
81	MG	1	3580	1/1	0.94	0.22	38,38,38,38	0
81	MG	2	2102	1/1	0.94	0.10	78,78,78,78	0
81	MG	5	3551	1/1	0.94	0.14	54,54,54,54	1
81	MG	5	3688	1/1	0.94	0.08	59,59,59,59	0
81	MG	1	3464	1/1	0.94	0.14	34,34,34,34	0
81	MG	6	2049	1/1	0.94	0.10	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4061	1/1	0.94	0.09	41,41,41,41	1
81	MG	o7	502	1/1	0.94	0.08	48,48,48,48	0
81	MG	5	3554	1/1	0.94	0.20	55,55,55,55	0
81	MG	1	3585	1/1	0.94	0.13	46,46,46,46	0
81	MG	1	3833	1/1	0.94	0.17	39,39,39,39	0
81	MG	2	2107	1/1	0.94	0.07	120,120,120,120	0
81	MG	3	207	1/1	0.94	0.15	83,83,83,83	0
81	MG	1	4003	1/1	0.94	0.16	40,40,40,40	0
80	PAR	1	3421	42/42	0.94	0.13	43,43,43,43	42
81	MG	1	3836	1/1	0.94	0.18	63,63,63,63	0
81	MG	5	3566	1/1	0.94	0.10	81,81,81,81	0
81	MG	1	3676	1/1	0.94	0.13	64,64,64,64	0
81	MG	1	3838	1/1	0.94	0.09	53,53,53,53	0
81	MG	1	3952	1/1	0.94	0.07	63,63,63,63	0
81	MG	1	3840	1/1	0.94	0.19	58,58,58,58	0
81	MG	1	3842	1/1	0.94	0.23	43,43,43,43	1
81	MG	5	3713	1/1	0.94	0.14	56,56,56,56	0
81	MG	5	3979	1/1	0.94	0.15	73,73,73,73	0
81	MG	1	3587	1/1	0.94	0.11	53,53,53,53	0
81	MG	5	3716	1/1	0.94	0.15	58,58,58,58	0
81	MG	6	1928	1/1	0.94	0.20	72,72,72,72	0
81	MG	5	3860	1/1	0.94	0.07	68,68,68,68	0
81	MG	1	3532	1/1	0.94	0.08	48,48,48,48	0
81	MG	5	4114	1/1	0.94	0.08	52,52,52,52	0
81	MG	5	3864	1/1	0.94	0.11	42,42,42,42	0
81	MG	5	4116	1/1	0.94	0.17	61,61,61,61	0
81	MG	5	3720	1/1	0.94	0.11	65,65,65,65	0
81	MG	5	3721	1/1	0.94	0.12	67,67,67,67	0
81	MG	S2	302	1/1	0.94	0.18	84,84,84,84	0
81	MG	2	1960	1/1	0.94	0.14	90,90,90,90	0
81	MG	4	203	1/1	0.94	0.08	44,44,44,44	0
81	MG	5	3584	1/1	0.94	0.26	67,67,67,67	0
81	MG	2	1962	1/1	0.94	0.11	106,106,106,106	0
81	MG	1	4080	1/1	0.94	0.08	64,64,64,64	0
81	MG	C9	201	1/1	0.94	0.05	121,121,121,121	0
81	MG	5	3589	1/1	0.94	0.06	63,63,63,63	0
81	MG	1	4081	1/1	0.94	0.09	63,63,63,63	0
81	MG	2	2046	1/1	0.94	0.08	60,60,60,60	0
81	MG	1	3724	1/1	0.94	0.13	31,31,31,31	0
81	MG	1	3486	1/1	0.94	0.08	38,38,38,38	0
81	MG	d3	205	1/1	0.94	0.23	78,78,78,78	0
81	MG	5	4002	1/1	0.94	0.09	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3734	1/1	0.94	0.21	65,65,65,65	0
81	MG	1	3616	1/1	0.94	0.15	53,53,53,53	0
81	MG	5	3738	1/1	0.94	0.12	54,54,54,54	0
81	MG	o3	201	1/1	0.95	0.12	59,59,59,59	0
81	MG	o4	202	1/1	0.95	0.08	89,89,89,89	0
81	MG	1	3702	1/1	0.95	0.18	42,42,42,42	0
81	MG	2	2039	1/1	0.95	0.07	113,113,113,113	0
81	MG	1	4040	1/1	0.95	0.05	59,59,59,59	0
81	MG	1	3703	1/1	0.95	0.10	40,40,40,40	0
81	MG	4	216	1/1	0.95	0.10	41,41,41,41	0
81	MG	1	3758	1/1	0.95	0.09	45,45,45,45	0
81	MG	6	1908	1/1	0.95	0.13	76,76,76,76	0
81	MG	6	1910	1/1	0.95	0.12	78,78,78,78	0
81	MG	1	3759	1/1	0.95	0.09	38,38,38,38	0
81	MG	4	220	1/1	0.95	0.08	45,45,45,45	0
81	MG	4	222	1/1	0.95	0.07	49,49,49,49	0
81	MG	1	4127	1/1	0.95	0.15	39,39,39,39	0
81	MG	5	3694	1/1	0.95	0.16	52,52,52,52	0
81	MG	5	3884	1/1	0.95	0.10	67,67,67,67	0
81	MG	6	1920	1/1	0.95	0.08	70,70,70,70	1
81	MG	2	1928	1/1	0.95	0.15	75,75,75,75	0
81	MG	1	3966	1/1	0.95	0.11	50,50,50,50	0
81	MG	5	3698	1/1	0.95	0.07	49,49,49,49	0
81	MG	5	3888	1/1	0.95	0.20	61,61,61,61	0
81	MG	1	3828	1/1	0.95	0.21	43,43,43,43	0
81	MG	1	3761	1/1	0.95	0.16	51,51,51,51	0
81	MG	2	2053	1/1	0.95	0.13	100,100,100,100	0
81	MG	1	3897	1/1	0.95	0.18	56,56,56,56	0
81	MG	1	3704	1/1	0.95	0.07	42,42,42,42	0
81	MG	6	1930	1/1	0.95	0.16	86,86,86,86	0
81	MG	5	3705	1/1	0.95	0.11	54,54,54,54	0
81	MG	1	3598	1/1	0.95	0.11	41,41,41,41	0
81	MG	1	3665	1/1	0.95	0.15	54,54,54,54	0
81	MG	1	3570	1/1	0.95	0.12	60,60,60,60	0
81	MG	1	3667	1/1	0.95	0.10	52,52,52,52	0
81	MG	5	3711	1/1	0.95	0.16	54,54,54,54	0
81	MG	5	3712	1/1	0.95	0.25	57,57,57,57	0
81	MG	1	3629	1/1	0.95	0.15	53,53,53,53	0
81	MG	1	3839	1/1	0.95	0.06	47,47,47,47	0
81	MG	1	3771	1/1	0.95	0.13	40,40,40,40	0
81	MG	5	3544	1/1	0.95	0.09	55,55,55,55	0
81	MG	5	3545	1/1	0.95	0.08	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3841	1/1	0.95	0.06	60,60,60,60	0
81	MG	1	3571	1/1	0.95	0.09	40,40,40,40	0
81	MG	5	3548	1/1	0.95	0.16	52,52,52,52	0
81	MG	1	3572	1/1	0.95	0.11	41,41,41,41	0
81	MG	L3	403	1/1	0.95	0.14	57,57,57,57	0
81	MG	1	3911	1/1	0.95	0.17	43,43,43,43	0
81	MG	5	3912	1/1	0.95	0.09	63,63,63,63	0
81	MG	1	4149	1/1	0.95	0.09	44,44,44,44	0
81	MG	1	3545	1/1	0.95	0.09	37,37,37,37	0
81	MG	1	4151	1/1	0.95	0.10	40,40,40,40	0
81	MG	1	4063	1/1	0.95	0.11	47,47,47,47	0
81	MG	5	4094	1/1	0.95	0.13	48,48,48,48	0
81	MG	6	1956	1/1	0.95	0.09	105,105,105,105	0
81	MG	1	3845	1/1	0.95	0.12	38,38,38,38	0
81	MG	1	3604	1/1	0.95	0.08	54,54,54,54	0
81	MG	1	4157	1/1	0.95	0.08	44,44,44,44	0
81	MG	L8	301	1/1	0.95	0.11	73,73,73,73	0
81	MG	5	3735	1/1	0.95	0.07	49,49,49,49	0
81	MG	1	3987	1/1	0.95	0.06	54,54,54,54	0
81	MG	1	3779	1/1	0.95	0.11	41,41,41,41	0
81	MG	5	3565	1/1	0.95	0.13	80,80,80,80	0
81	MG	5	4103	1/1	0.95	0.11	52,52,52,52	0
81	MG	5	4104	1/1	0.95	0.14	52,52,52,52	0
81	MG	L9	204	1/1	0.95	0.14	60,60,60,60	0
81	MG	M0	301	1/1	0.95	0.14	54,54,54,54	0
81	MG	5	3742	1/1	0.95	0.08	53,53,53,53	0
81	MG	1	3574	1/1	0.95	0.06	42,42,42,42	0
81	MG	M4	202	1/1	0.95	0.05	60,60,60,60	0
81	MG	1	3720	1/1	0.95	0.14	40,40,40,40	0
81	MG	5	3931	1/1	0.95	0.08	54,54,54,54	0
81	MG	5	3746	1/1	0.95	0.05	50,50,50,50	0
81	MG	1	3783	1/1	0.95	0.11	57,57,57,57	0
81	MG	5	3574	1/1	0.95	0.19	65,65,65,65	0
81	MG	1	3546	1/1	0.95	0.12	43,43,43,43	0
81	MG	1	4074	1/1	0.95	0.14	57,57,57,57	0
81	MG	5	4117	1/1	0.95	0.06	62,62,62,62	0
81	MG	5	3579	1/1	0.95	0.13	49,49,49,49	0
81	MG	1	4075	1/1	0.95	0.14	55,55,55,55	0
81	MG	1	3547	1/1	0.95	0.13	65,65,65,65	0
81	MG	5	3940	1/1	0.95	0.12	73,73,73,73	0
81	MG	1	3995	1/1	0.95	0.08	47,47,47,47	0
81	MG	2	1969	1/1	0.95	0.11	114,114,114,114	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	4170	1/1	0.95	0.05	56,56,56,56	0
81	MG	1	3452	1/1	0.95	0.23	30,30,30,30	0
81	MG	M6	205	1/1	0.95	0.08	53,53,53,53	0
81	MG	5	3588	1/1	0.95	0.12	69,69,69,69	0
81	MG	5	3762	1/1	0.95	0.27	45,45,45,45	0
81	MG	1	4079	1/1	0.95	0.11	59,59,59,59	0
81	MG	M7	203	1/1	0.95	0.12	45,45,45,45	0
81	MG	1	3856	1/1	0.95	0.10	49,49,49,49	0
81	MG	5	3592	1/1	0.95	0.14	61,61,61,61	1
81	MG	2	2100	1/1	0.95	0.07	58,58,58,58	0
81	MG	5	3594	1/1	0.95	0.20	75,75,75,75	0
81	MG	1	3534	1/1	0.95	0.11	46,46,46,46	0
81	MG	1	4082	1/1	0.95	0.16	54,54,54,54	0
81	MG	1	4000	1/1	0.95	0.06	54,54,54,54	0
81	MG	5	3599	1/1	0.95	0.14	84,84,84,84	0
81	MG	5	3600	1/1	0.95	0.19	93,93,93,93	0
81	MG	M9	202	1/1	0.95	0.14	61,61,61,61	0
81	MG	1	3584	1/1	0.95	0.20	43,43,43,43	0
81	MG	1	3508	1/1	0.95	0.14	72,72,72,72	0
81	MG	5	3782	1/1	0.95	0.08	46,46,46,46	0
81	MG	1	4181	1/1	0.95	0.09	49,49,49,49	0
81	MG	5	3605	1/1	0.95	0.09	71,71,71,71	0
81	MG	5	3606	1/1	0.95	0.09	67,67,67,67	0
81	MG	1	4182	1/1	0.95	0.08	51,51,51,51	0
81	MG	1	3643	1/1	0.95	0.13	55,55,55,55	0
81	MG	1	3929	1/1	0.95	0.12	47,47,47,47	1
81	MG	N3	204	1/1	0.95	0.09	53,53,53,53	0
81	MG	1	3552	1/1	0.95	0.13	61,61,61,61	0
81	MG	1	3794	1/1	0.95	0.07	55,55,55,55	0
81	MG	1	3554	1/1	0.95	0.11	34,34,34,34	0
81	MG	1	4008	1/1	0.95	0.05	50,50,50,50	0
81	MG	5	3977	1/1	0.95	0.13	71,71,71,71	0
81	MG	1	3731	1/1	0.95	0.06	52,52,52,52	0
81	MG	N7	201	1/1	0.95	0.12	64,64,64,64	0
81	MG	2	1994	1/1	0.95	0.10	79,79,79,79	0
81	MG	5	3618	1/1	0.95	0.12	87,87,87,87	0
81	MG	5	3807	1/1	0.95	0.20	60,60,60,60	0
81	MG	1	3935	1/1	0.95	0.08	56,56,56,56	0
81	MG	2	1996	1/1	0.95	0.17	80,80,80,80	0
81	MG	1	3689	1/1	0.95	0.10	48,48,48,48	1
81	MG	6	2033	1/1	0.95	0.14	70,70,70,70	0
81	MG	5	3812	1/1	0.95	0.07	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3455	1/1	0.95	0.11	45,45,45,45	0
81	MG	1	3800	1/1	0.95	0.15	35,35,35,35	0
81	MG	5	3815	1/1	0.95	0.21	55,55,55,55	0
81	MG	1	3869	1/1	0.95	0.08	44,44,44,44	0
81	MG	14	402	1/1	0.95	0.17	57,57,57,57	0
81	MG	1	3477	1/1	0.95	0.12	35,35,35,35	0
81	MG	1	3942	1/1	0.95	0.11	52,52,52,52	0
81	MG	5	3820	1/1	0.95	0.09	59,59,59,59	0
81	MG	1	4019	1/1	0.95	0.17	52,52,52,52	0
81	MG	1	3521	1/1	0.95	0.08	49,49,49,49	1
81	MG	1	3736	1/1	0.95	0.19	58,58,58,58	0
81	MG	5	3632	1/1	0.95	0.15	59,59,59,59	0
81	MG	O4	203	1/1	0.95	0.11	59,59,59,59	0
81	MG	5	3434	1/1	0.95	0.15	46,46,46,46	0
81	MG	5	3436	1/1	0.95	0.15	43,43,43,43	0
81	MG	O4	204	1/1	0.95	0.06	63,63,63,63	0
81	MG	5	3637	1/1	0.95	0.23	53,53,53,53	0
81	MG	1	3539	1/1	0.95	0.11	30,30,30,30	0
81	MG	5	3833	1/1	0.95	0.14	56,56,56,56	0
81	MG	5	3451	1/1	0.95	0.11	42,42,42,42	0
81	MG	5	3640	1/1	0.95	0.07	49,49,49,49	0
81	MG	1	3694	1/1	0.95	0.07	41,41,41,41	0
81	MG	m7	204	1/1	0.95	0.08	53,53,53,53	0
81	MG	5	4011	1/1	0.95	0.20	63,63,63,63	0
81	MG	m7	207	1/1	0.95	0.13	50,50,50,50	0
81	MG	1	3540	1/1	0.95	0.12	33,33,33,33	0
81	MG	1	4025	1/1	0.95	0.05	41,41,41,41	0
81	MG	5	3462	1/1	0.95	0.13	39,39,39,39	0
81	MG	1	3479	1/1	0.95	0.15	37,37,37,37	0
81	MG	5	3648	1/1	0.95	0.14	59,59,59,59	0
81	MG	1	3744	1/1	0.95	0.10	39,39,39,39	0
81	MG	1	4028	1/1	0.95	0.07	45,45,45,45	0
81	MG	1	4029	1/1	0.95	0.08	40,40,40,40	0
81	MG	1	3543	1/1	0.95	0.22	34,34,34,34	0
81	MG	1	3748	1/1	0.95	0.18	31,31,31,31	0
81	MG	1	3812	1/1	0.95	0.14	52,52,52,52	0
81	MG	1	3814	1/1	0.95	0.15	47,47,47,47	0
81	MG	5	3478	1/1	0.95	0.19	49,49,49,49	0
81	MG	1	3815	1/1	0.95	0.14	44,44,44,44	0
81	MG	5	4026	1/1	0.95	0.22	69,69,69,69	0
81	MG	5	3663	1/1	0.95	0.08	57,57,57,57	0
81	MG	5	3665	1/1	0.95	0.08	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3481	1/1	0.95	0.14	47,47,47,47	0
81	MG	1	3886	1/1	0.95	0.19	38,38,38,38	0
81	MG	5	3857	1/1	0.95	0.07	60,60,60,60	0
81	MG	5	4032	1/1	0.95	0.04	75,75,75,75	0
81	MG	1	3623	1/1	0.95	0.10	63,63,63,63	1
81	MG	1	3819	1/1	0.95	0.10	53,53,53,53	0
81	MG	n8	203	1/1	0.95	0.21	51,51,51,51	1
81	MG	4	207	1/1	0.95	0.07	58,58,58,58	0
81	MG	5	3863	1/1	0.95	0.15	55,55,55,55	0
81	MG	4	208	1/1	0.95	0.11	55,55,55,55	0
81	MG	5	3675	1/1	0.95	0.16	50,50,50,50	0
81	MG	2	1913	1/1	0.95	0.11	87,87,87,87	0
81	MG	2	1914	1/1	0.95	0.07	92,92,92,92	0
81	MG	5	3678	1/1	0.95	0.07	50,50,50,50	0
81	MG	4	209	1/1	0.95	0.14	36,36,36,36	0
81	MG	5	3499	1/1	0.95	0.08	56,56,56,56	0
81	MG	1	3449	1/1	0.95	0.14	35,35,35,35	0
81	MG	4	211	1/1	0.95	0.10	47,47,47,47	0
81	MG	1	4066	1/1	0.96	0.14	47,47,47,47	0
81	MG	5	3461	1/1	0.96	0.20	39,39,39,39	0
81	MG	5	3862	1/1	0.96	0.06	65,65,65,65	0
81	MG	5	3996	1/1	0.96	0.11	54,54,54,54	0
81	MG	6	1950	1/1	0.96	0.12	83,83,83,83	0
81	MG	1	4067	1/1	0.96	0.06	54,54,54,54	0
81	MG	5	3596	1/1	0.96	0.14	71,71,71,71	0
81	MG	L2	303	1/1	0.96	0.07	38,38,38,38	0
81	MG	O7	104	1/1	0.96	0.13	43,43,43,43	0
81	MG	5	3465	1/1	0.96	0.09	46,46,46,46	0
81	MG	2	2057	1/1	0.96	0.10	75,75,75,75	0
81	MG	1	3657	1/1	0.96	0.14	49,49,49,49	0
81	MG	5	3469	1/1	0.96	0.13	46,46,46,46	0
81	MG	8	210	1/1	0.96	0.20	62,62,62,62	0
81	MG	1	4017	1/1	0.96	0.09	57,57,57,57	0
81	MG	L3	401	1/1	0.96	0.15	46,46,46,46	0
81	MG	1	3579	1/1	0.96	0.16	51,51,51,51	0
81	MG	1	3659	1/1	0.96	0.07	53,53,53,53	0
81	MG	1	3456	1/1	0.96	0.09	36,36,36,36	0
81	MG	1	3970	1/1	0.96	0.12	55,55,55,55	0
81	MG	1	3971	1/1	0.96	0.06	69,69,69,69	0
81	MG	1	3921	1/1	0.96	0.12	40,40,40,40	0
81	MG	1	4129	1/1	0.96	0.13	56,56,56,56	0
81	MG	1	3661	1/1	0.96	0.09	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	6	1970	1/1	0.96	0.14	86,86,86,86	0
81	MG	5	3486	1/1	0.96	0.22	45,45,45,45	0
81	MG	5	3487	1/1	0.96	0.09	43,43,43,43	0
81	MG	1	3780	1/1	0.96	0.05	42,42,42,42	0
81	MG	2	1985	1/1	0.96	0.14	46,46,46,46	0
81	MG	1	4132	1/1	0.96	0.13	37,37,37,37	0
81	MG	12	301	1/1	0.96	0.05	53,53,53,53	0
81	MG	12	302	1/1	0.96	0.11	56,56,56,56	0
81	MG	1	3662	1/1	0.96	0.14	45,45,45,45	0
81	MG	1	3581	1/1	0.96	0.09	42,42,42,42	0
81	MG	5	3749	1/1	0.96	0.08	45,45,45,45	0
81	MG	5	3498	1/1	0.96	0.06	53,53,53,53	0
81	MG	L9	202	1/1	0.96	0.11	58,58,58,58	0
81	MG	1	4135	1/1	0.96	0.25	37,37,37,37	1
81	MG	6	1984	1/1	0.96	0.09	89,89,89,89	0
81	MG	1	3582	1/1	0.96	0.17	40,40,40,40	0
81	MG	1	3834	1/1	0.96	0.11	31,31,31,31	0
81	MG	5	3504	1/1	0.96	0.12	53,53,53,53	0
81	MG	M3	201	1/1	0.96	0.07	36,36,36,36	0
81	MG	1	3555	1/1	0.96	0.06	38,38,38,38	0
81	MG	1	3930	1/1	0.96	0.09	45,45,45,45	0
81	MG	1	3458	1/1	0.96	0.07	40,40,40,40	0
81	MG	5	3631	1/1	0.96	0.11	62,62,62,62	0
81	MG	1	4141	1/1	0.96	0.10	51,51,51,51	0
81	MG	6	1994	1/1	0.96	0.14	79,79,79,79	0
81	MG	2	1998	1/1	0.96	0.18	79,79,79,79	0
81	MG	6	1996	1/1	0.96	0.07	96,96,96,96	0
81	MG	3	208	1/1	0.96	0.17	43,43,43,43	0
81	MG	5	3512	1/1	0.96	0.16	61,61,61,61	0
81	MG	5	3766	1/1	0.96	0.15	50,50,50,50	0
81	MG	6	2000	1/1	0.96	0.10	107,107,107,107	0
81	MG	1	3488	1/1	0.96	0.07	43,43,43,43	0
81	MG	5	3768	1/1	0.96	0.09	55,55,55,55	0
81	MG	M5	305	1/1	0.96	0.09	52,52,52,52	0
81	MG	2	2088	1/1	0.96	0.15	64,64,64,64	0
81	MG	1	3669	1/1	0.96	0.16	55,55,55,55	0
81	MG	1	3741	1/1	0.96	0.17	37,37,37,37	0
81	MG	5	3641	1/1	0.96	0.07	45,45,45,45	0
81	MG	1	3742	1/1	0.96	0.20	32,32,32,32	0
81	MG	5	3522	1/1	0.96	0.10	54,54,54,54	0
81	MG	5	3525	1/1	0.96	0.16	52,52,52,52	0
81	MG	m7	205	1/1	0.96	0.13	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	2	2005	1/1	0.96	0.07	58,58,58,58	0
81	MG	5	3778	1/1	0.96	0.13	44,44,44,44	0
81	MG	5	4054	1/1	0.96	0.21	49,49,49,49	0
81	MG	2	1927	1/1	0.96	0.10	75,75,75,75	0
81	MG	M6	201	1/1	0.96	0.16	53,53,53,53	0
81	MG	5	3783	1/1	0.96	0.12	55,55,55,55	0
81	MG	5	3530	1/1	0.96	0.06	43,43,43,43	0
81	MG	5	3786	1/1	0.96	0.18	53,53,53,53	0
81	MG	1	3489	1/1	0.96	0.14	37,37,37,37	0
81	MG	n0	201	1/1	0.96	0.08	59,59,59,59	0
81	MG	5	3532	1/1	0.96	0.07	46,46,46,46	0
81	MG	5	3790	1/1	0.96	0.05	76,76,76,76	0
81	MG	5	3652	1/1	0.96	0.21	49,49,49,49	0
81	MG	5	3653	1/1	0.96	0.20	45,45,45,45	0
81	MG	6	2027	1/1	0.96	0.13	131,131,131,131	0
81	MG	5	3533	1/1	0.96	0.08	50,50,50,50	0
81	MG	5	3535	1/1	0.96	0.18	53,53,53,53	0
81	MG	M6	203	1/1	0.96	0.09	56,56,56,56	0
81	MG	1	3612	1/1	0.96	0.05	74,74,74,74	0
81	MG	5	3538	1/1	0.96	0.17	46,46,46,46	0
81	MG	1	3793	1/1	0.96	0.16	43,43,43,43	0
81	MG	M7	201	1/1	0.96	0.15	38,38,38,38	0
81	MG	5	3802	1/1	0.96	0.10	48,48,48,48	1
81	MG	2	1934	1/1	0.96	0.09	75,75,75,75	0
81	MG	1	3561	1/1	0.96	0.08	43,43,43,43	0
81	MG	2	2015	1/1	0.96	0.07	140,140,140,140	0
81	MG	1	3747	1/1	0.96	0.13	36,36,36,36	0
81	MG	1	4152	1/1	0.96	0.08	47,47,47,47	1
81	MG	5	3809	1/1	0.96	0.15	49,49,49,49	0
81	MG	1	3460	1/1	0.96	0.15	33,33,33,33	0
81	MG	5	3673	1/1	0.96	0.12	51,51,51,51	0
81	MG	4	204	1/1	0.96	0.15	51,51,51,51	0
81	MG	1	4154	1/1	0.96	0.09	38,38,38,38	0
81	MG	1	3461	1/1	0.96	0.10	37,37,37,37	0
81	MG	1	3542	1/1	0.96	0.08	38,38,38,38	0
81	MG	1	3755	1/1	0.96	0.09	51,51,51,51	0
81	MG	5	3948	1/1	0.96	0.22	53,53,53,53	0
81	MG	5	3949	1/1	0.96	0.09	58,58,58,58	1
81	MG	1	4046	1/1	0.96	0.09	49,49,49,49	0
81	MG	5	3818	1/1	0.96	0.11	60,60,60,60	0
81	MG	1	3493	1/1	0.96	0.10	50,50,50,50	0
81	MG	5	3556	1/1	0.96	0.15	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3494	1/1	0.96	0.24	44,44,44,44	0
81	MG	2	2027	1/1	0.96	0.09	69,69,69,69	0
81	MG	1	3475	1/1	0.96	0.13	32,32,32,32	0
81	MG	N3	203	1/1	0.96	0.19	45,45,45,45	0
81	MG	1	3949	1/1	0.96	0.08	38,38,38,38	1
81	MG	1	3463	1/1	0.96	0.15	39,39,39,39	0
81	MG	N6	201	1/1	0.96	0.07	57,57,57,57	1
81	MG	5	3564	1/1	0.96	0.08	85,85,85,85	0
81	MG	6	1914	1/1	0.96	0.13	81,81,81,81	0
81	MG	5	3829	1/1	0.96	0.05	76,76,76,76	0
81	MG	1	3760	1/1	0.96	0.14	43,43,43,43	0
81	MG	5	3831	1/1	0.96	0.12	66,66,66,66	0
81	MG	1	4165	1/1	0.96	0.07	42,42,42,42	0
81	MG	1	3648	1/1	0.96	0.11	40,40,40,40	0
81	MG	2	2038	1/1	0.96	0.11	109,109,109,109	0
81	MG	5	3695	1/1	0.96	0.09	56,56,56,56	0
81	MG	4	221	1/1	0.96	0.12	46,46,46,46	1
81	MG	D3	201	1/1	0.96	0.14	75,75,75,75	0
81	MG	1	3762	1/1	0.96	0.10	54,54,54,54	0
81	MG	1	3808	1/1	0.96	0.13	51,51,51,51	0
81	MG	1	3512	1/1	0.96	0.10	59,59,59,59	0
81	MG	1	3453	1/1	0.96	0.08	40,40,40,40	0
81	MG	s4	301	1/1	0.96	0.06	96,96,96,96	0
81	MG	1	4172	1/1	0.96	0.09	41,41,41,41	0
81	MG	5	3580	1/1	0.96	0.10	60,60,60,60	0
81	MG	1	3447	1/1	0.96	0.14	39,39,39,39	0
81	MG	1	3685	1/1	0.96	0.16	41,41,41,41	0
81	MG	1	3466	1/1	0.96	0.08	39,39,39,39	0
81	MG	5	3445	1/1	0.96	0.14	48,48,48,48	0
81	MG	5	3848	1/1	0.96	0.04	95,95,95,95	0
81	MG	5	3447	1/1	0.96	0.06	45,45,45,45	0
81	MG	5	3710	1/1	0.96	0.12	50,50,50,50	0
81	MG	5	3448	1/1	0.96	0.11	49,49,49,49	0
81	MG	d3	201	1/1	0.96	0.17	68,68,68,68	0
81	MG	1	3687	1/1	0.96	0.15	45,45,45,45	0
81	MG	1	3866	1/1	0.96	0.18	38,38,38,38	0
81	MG	7	203	1/1	0.96	0.15	47,47,47,47	0
81	MG	5	3452	1/1	0.96	0.17	47,47,47,47	0
81	MG	1	3518	1/1	0.96	0.15	46,46,46,46	0
81	MG	5	3455	1/1	0.96	0.14	47,47,47,47	0
81	MG	1	3772	1/1	0.96	0.05	49,49,49,49	0
81	MG	5	3859	1/1	0.96	0.16	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3688	1/1	0.97	0.12	39,39,39,39	0
81	MG	O2	201	1/1	0.97	0.07	43,43,43,43	0
81	MG	1	4083	1/1	0.97	0.13	44,44,44,44	0
81	MG	O2	203	1/1	0.97	0.06	38,38,38,38	0
81	MG	5	3670	1/1	0.97	0.19	46,46,46,46	0
81	MG	1	3478	1/1	0.97	0.10	37,37,37,37	0
81	MG	5	3672	1/1	0.97	0.09	40,40,40,40	0
81	MG	8	203	1/1	0.97	0.09	56,56,56,56	0
81	MG	5	3761	1/1	0.97	0.14	45,45,45,45	0
81	MG	6	2005	1/1	0.97	0.15	62,62,62,62	0
81	MG	2	1944	1/1	0.97	0.10	84,84,84,84	0
81	MG	4	206	1/1	0.97	0.13	48,48,48,48	0
81	MG	1	3636	1/1	0.97	0.10	48,48,48,48	0
81	MG	1	3576	1/1	0.97	0.05	39,39,39,39	0
81	MG	1	3823	1/1	0.97	0.17	42,42,42,42	0
81	MG	6	1909	1/1	0.97	0.10	71,71,71,71	0
81	MG	1	3656	1/1	0.97	0.13	48,48,48,48	0
81	MG	1	3715	1/1	0.97	0.09	46,46,46,46	0
81	MG	6	1912	1/1	0.97	0.10	76,76,76,76	0
81	MG	1	3827	1/1	0.97	0.07	35,35,35,35	0
81	MG	5	3514	1/1	0.97	0.10	57,57,57,57	0
81	MG	M5	302	1/1	0.97	0.23	35,35,35,35	0
81	MG	5	4055	1/1	0.97	0.11	56,56,56,56	0
81	MG	5	3959	1/1	0.97	0.10	59,59,59,59	0
81	MG	1	4179	1/1	0.97	0.10	42,42,42,42	0
81	MG	1	4049	1/1	0.97	0.11	51,51,51,51	0
81	MG	Q2	502	1/1	0.97	0.08	38,38,38,38	0
81	MG	5	3686	1/1	0.97	0.20	55,55,55,55	0
81	MG	1	4009	1/1	0.97	0.06	46,46,46,46	0
81	MG	M5	306	1/1	0.97	0.08	40,40,40,40	0
81	MG	5	3523	1/1	0.97	0.10	44,44,44,44	0
81	MG	5	3780	1/1	0.97	0.07	51,51,51,51	0
81	MG	1	3716	1/1	0.97	0.14	44,44,44,44	0
81	MG	5	3435	1/1	0.97	0.07	44,44,44,44	0
81	MG	4	218	1/1	0.97	0.08	39,39,39,39	0
81	MG	5	3437	1/1	0.97	0.09	43,43,43,43	0
81	MG	5	3438	1/1	0.97	0.12	47,47,47,47	0
81	MG	5	3787	1/1	0.97	0.06	59,59,59,59	0
81	MG	1	3829	1/1	0.97	0.06	40,40,40,40	0
81	MG	5	3444	1/1	0.97	0.06	52,52,52,52	0
81	MG	1	3611	1/1	0.97	0.04	60,60,60,60	0
81	MG	5	3534	1/1	0.97	0.06	46,46,46,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3639	1/1	0.97	0.11	78,78,78,78	0
81	MG	1	3745	1/1	0.97	0.15	33,33,33,33	0
81	MG	2	2079	1/1	0.97	0.13	75,75,75,75	0
81	MG	1	3938	1/1	0.97	0.12	49,49,49,49	0
81	MG	1	3556	1/1	0.97	0.08	36,36,36,36	0
81	MG	5	3453	1/1	0.97	0.11	45,45,45,45	0
81	MG	5	3798	1/1	0.97	0.12	50,50,50,50	1
81	MG	1	3777	1/1	0.97	0.13	44,44,44,44	0
81	MG	1	3696	1/1	0.97	0.23	51,51,51,51	0
81	MG	5	3801	1/1	0.97	0.07	52,52,52,52	0
81	MG	1	3677	1/1	0.97	0.12	48,48,48,48	0
81	MG	1	3625	1/1	0.97	0.09	36,36,36,36	1
81	MG	5	3804	1/1	0.97	0.15	48,48,48,48	0
81	MG	m0	301	1/1	0.97	0.04	58,58,58,58	0
81	MG	M7	206	1/1	0.97	0.10	39,39,39,39	0
81	MG	1	3601	1/1	0.97	0.07	49,49,49,49	0
81	MG	1	3872	1/1	0.97	0.09	63,63,63,63	0
81	MG	1	3568	1/1	0.97	0.18	55,55,55,55	0
81	MG	2	2090	1/1	0.97	0.07	102,102,102,102	0
81	MG	5	3715	1/1	0.97	0.18	57,57,57,57	0
81	MG	5	3466	1/1	0.97	0.09	45,45,45,45	0
81	MG	5	3717	1/1	0.97	0.11	55,55,55,55	1
81	MG	5	3718	1/1	0.97	0.11	63,63,63,63	0
81	MG	5	3630	1/1	0.97	0.06	59,59,59,59	0
81	MG	1	3443	1/1	0.97	0.09	32,32,32,32	0
81	MG	4	235	1/1	0.97	0.07	43,43,43,43	0
81	MG	1	3524	1/1	0.97	0.07	52,52,52,52	0
81	MG	5	3555	1/1	0.97	0.24	54,54,54,54	0
81	MG	1	3462	1/1	0.97	0.16	30,30,30,30	0
81	MG	m9	201	1/1	0.97	0.14	63,63,63,63	0
81	MG	5	3472	1/1	0.97	0.09	52,52,52,52	0
81	MG	1	4110	1/1	0.97	0.18	63,63,63,63	0
81	MG	1	3950	1/1	0.97	0.10	53,53,53,53	1
81	MG	1	3951	1/1	0.97	0.05	60,60,60,60	0
81	MG	5	3477	1/1	0.97	0.08	49,49,49,49	0
81	MG	1	3503	1/1	0.97	0.16	56,56,56,56	0
81	MG	5	3642	1/1	0.97	0.06	56,56,56,56	0
81	MG	1	3813	1/1	0.97	0.10	50,50,50,50	0
81	MG	1	3879	1/1	0.97	0.09	61,61,61,61	0
81	MG	1	3880	1/1	0.97	0.11	43,43,43,43	0
81	MG	1	3553	1/1	0.97	0.07	37,37,37,37	0
81	MG	5	3484	1/1	0.97	0.07	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	5	3568	1/1	0.97	0.04	74,74,74,74	0
81	MG	L4	401	1/1	0.97	0.09	49,49,49,49	0
81	MG	2	2045	1/1	0.97	0.10	74,74,74,74	0
81	MG	n5	201	1/1	0.97	0.16	60,60,60,60	0
81	MG	5	3571	1/1	0.97	0.11	92,92,92,92	0
81	MG	1	3994	1/1	0.97	0.14	61,61,61,61	0
81	MG	1	3668	1/1	0.97	0.08	53,53,53,53	0
81	MG	5	3654	1/1	0.97	0.12	48,48,48,48	0
81	MG	5	3655	1/1	0.97	0.15	43,43,43,43	0
81	MG	1	3816	1/1	0.97	0.21	43,43,43,43	0
81	MG	1	3850	1/1	0.97	0.04	57,57,57,57	0
81	MG	1	3817	1/1	0.97	0.10	39,39,39,39	0
81	MG	5	3494	1/1	0.97	0.12	64,64,64,64	0
81	MG	5	3496	1/1	0.97	0.11	44,44,44,44	0
81	MG	1	3999	1/1	0.97	0.12	58,58,58,58	0
81	MG	1	3440	1/1	0.97	0.07	39,39,39,39	0
81	MG	1	4169	1/1	0.97	0.06	48,48,48,48	0
81	MG	5	3577	1/1	0.98	0.11	54,54,54,54	0
81	MG	1	3490	1/1	0.98	0.08	49,49,49,49	0
81	MG	1	3467	1/1	0.98	0.09	31,31,31,31	0
81	MG	5	3516	1/1	0.98	0.06	55,55,55,55	0
81	MG	1	3753	1/1	0.98	0.10	47,47,47,47	0
81	MG	1	3445	1/1	0.98	0.22	28,28,28,28	0
81	MG	1	3469	1/1	0.98	0.10	30,30,30,30	0
81	MG	5	3779	1/1	0.98	0.12	52,52,52,52	0
81	MG	1	3700	1/1	0.98	0.16	38,38,38,38	0
81	MG	5	3457	1/1	0.98	0.08	44,44,44,44	0
81	MG	n0	202	1/1	0.98	0.06	59,59,59,59	0
81	MG	5	3850	1/1	0.98	0.04	51,51,51,51	0
81	MG	1	4144	1/1	0.98	0.08	40,40,40,40	1
81	MG	1	3922	1/1	0.98	0.06	43,43,43,43	0
81	MG	5	3784	1/1	0.98	0.08	50,50,50,50	0
81	MG	5	3524	1/1	0.98	0.05	54,54,54,54	1
81	MG	1	3442	1/1	0.98	0.11	35,35,35,35	0
81	MG	1	3887	1/1	0.98	0.06	40,40,40,40	0
81	MG	1	3481	1/1	0.98	0.06	48,48,48,48	0
81	MG	1	3482	1/1	0.98	0.12	40,40,40,40	0
81	MG	5	3997	1/1	0.98	0.13	51,51,51,51	0
81	MG	5	3656	1/1	0.98	0.11	40,40,40,40	0
81	MG	1	3729	1/1	0.98	0.12	44,44,44,44	0
81	MG	4	215	1/1	0.98	0.07	42,42,42,42	0
81	MG	5	4001	1/1	0.98	0.10	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	1	3483	1/1	0.98	0.07	41,41,41,41	0
81	MG	5	4075	1/1	0.98	0.10	66,66,66,66	0
81	MG	1	3459	1/1	0.98	0.13	34,34,34,34	0
81	MG	1	3826	1/1	0.98	0.09	37,37,37,37	1
81	MG	N8	201	1/1	0.98	0.06	41,41,41,41	0
81	MG	1	3472	1/1	0.98	0.12	39,39,39,39	0
81	MG	1	3515	1/1	0.98	0.17	44,44,44,44	0
81	MG	1	3766	1/1	0.98	0.07	55,55,55,55	0
81	MG	1	3708	1/1	0.98	0.12	39,39,39,39	0
81	MG	1	3439	1/1	0.98	0.07	37,37,37,37	0
81	MG	5	3479	1/1	0.98	0.05	48,48,48,48	0
81	MG	1	3832	1/1	0.98	0.12	45,45,45,45	0
81	MG	5	3543	1/1	0.98	0.09	56,56,56,56	0
81	MG	5	3737	1/1	0.98	0.16	43,43,43,43	0
81	MG	1	3627	1/1	0.98	0.06	34,34,34,34	0
81	MG	1	3901	1/1	0.98	0.07	32,32,32,32	0
81	MG	1	3578	1/1	0.98	0.09	41,41,41,41	0
81	MG	4	228	1/1	0.98	0.05	47,47,47,47	0
81	MG	l3	401	1/1	0.98	0.06	44,44,44,44	0
81	MG	4	229	1/1	0.98	0.05	57,57,57,57	0
81	MG	1	3738	1/1	0.98	0.06	43,43,43,43	0
81	MG	1	3647	1/1	0.98	0.05	39,39,39,39	0
81	MG	5	3488	1/1	0.98	0.04	44,44,44,44	0
81	MG	1	3905	1/1	0.98	0.23	44,44,44,44	1
81	MG	1	3450	1/1	0.98	0.10	29,29,29,29	0
81	MG	2	2032	1/1	0.98	0.08	90,90,90,90	0
81	MG	5	3430	1/1	0.98	0.07	45,45,45,45	0
81	MG	5	3493	1/1	0.98	0.10	66,66,66,66	0
81	MG	6	1913	1/1	0.98	0.06	72,72,72,72	0
81	MG	O7	103	1/1	0.98	0.09	37,37,37,37	0
81	MG	5	3495	1/1	0.98	0.13	46,46,46,46	0
81	MG	2	2034	1/1	0.98	0.05	113,113,113,113	0
81	MG	1	3774	1/1	0.98	0.12	41,41,41,41	0
81	MG	1	3649	1/1	0.98	0.12	37,37,37,37	0
81	MG	1	3650	1/1	0.98	0.21	31,31,31,31	0
81	MG	5	3500	1/1	0.98	0.25	56,56,56,56	0
81	MG	1	3595	1/1	0.98	0.09	46,46,46,46	0
81	MG	1	3717	1/1	0.98	0.12	35,35,35,35	0
81	MG	L2	302	1/1	0.98	0.12	46,46,46,46	0
81	MG	5	3440	1/1	0.98	0.14	47,47,47,47	0
81	MG	M7	204	1/1	0.98	0.07	42,42,42,42	0
81	MG	1	3718	1/1	0.98	0.11	34,34,34,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
81	MG	L2	304	1/1	0.98	0.06	44,44,44,44	0
81	MG	5	4042	1/1	0.98	0.07	69,69,69,69	0
81	MG	5	3446	1/1	0.98	0.08	43,43,43,43	0
81	MG	1	3476	1/1	0.98	0.11	34,34,34,34	0
81	MG	1	3597	1/1	0.98	0.23	43,43,43,43	0
81	MG	5	3449	1/1	0.98	0.06	56,56,56,56	0
81	MG	m7	201	1/1	0.98	0.13	44,44,44,44	0
81	MG	m7	202	1/1	0.98	0.18	48,48,48,48	0
81	MG	m7	203	1/1	0.98	0.05	49,49,49,49	0
81	MG	1	3846	1/1	0.98	0.08	42,42,42,42	0
81	MG	5	3704	1/1	0.98	0.16	51,51,51,51	0
81	MG	5	3576	1/1	0.98	0.15	56,56,56,56	0
81	MG	L3	404	1/1	0.99	0.08	43,43,43,43	0
81	MG	1	3750	1/1	0.99	0.09	38,38,38,38	0
81	MG	5	3515	1/1	0.99	0.03	61,61,61,61	0
81	MG	1	3751	1/1	0.99	0.11	42,42,42,42	0
81	MG	5	3458	1/1	0.99	0.08	40,40,40,40	0
81	MG	O0	201	1/1	0.99	0.06	63,63,63,63	0
81	MG	5	3460	1/1	0.99	0.06	42,42,42,42	0
81	MG	1	3567	1/1	0.99	0.19	48,48,48,48	0
81	MG	1	3497	1/1	0.99	0.08	51,51,51,51	0
81	MG	1	3528	1/1	0.99	0.12	33,33,33,33	0
81	MG	1	3557	1/1	0.99	0.07	34,34,34,34	0
81	MG	1	3790	1/1	0.99	0.03	62,62,62,62	0
81	MG	5	3439	1/1	0.99	0.11	45,45,45,45	0
81	MG	1	3485	1/1	0.99	0.07	32,32,32,32	0
81	MG	5	3441	1/1	0.99	0.06	44,44,44,44	0
81	MG	5	3528	1/1	0.99	0.10	52,52,52,52	0
81	MG	5	3442	1/1	0.99	0.09	40,40,40,40	0
81	MG	1	3454	1/1	0.99	0.04	40,40,40,40	0
81	MG	5	3471	1/1	0.99	0.15	47,47,47,47	0
81	MG	1	3514	1/1	0.99	0.10	63,63,63,63	1
81	MG	1	3448	1/1	0.99	0.09	35,35,35,35	0
81	MG	1	3551	1/1	0.99	0.15	46,46,46,46	0
81	MG	1	3444	1/1	0.99	0.13	32,32,32,32	0
81	MG	5	3476	1/1	0.99	0.10	44,44,44,44	0
81	MG	1	3457	1/1	0.99	0.11	36,36,36,36	0
81	MG	1	3565	1/1	0.99	0.07	46,46,46,46	0
81	MG	1	3799	1/1	0.99	0.20	35,35,35,35	0
81	MG	5	3664	1/1	0.99	0.10	50,50,50,50	0
81	MG	1	3764	1/1	0.99	0.09	55,55,55,55	0
81	MG	1	3474	1/1	0.99	0.12	43,43,43,43	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
82	ZN	O7	101	1/1	0.99	0.04	50,50,50,50	0
82	ZN	D6	101	1/1	0.99	0.04	84,84,84,84	0
81	MG	1	3749	1/1	0.99	0.07	36,36,36,36	0
82	ZN	D9	101	1/1	0.99	0.04	112,112,112,112	0
82	ZN	o4	201	1/1	0.99	0.03	102,102,102,102	0
82	ZN	q2	501	1/1	0.99	0.04	113,113,113,113	0
82	ZN	q3	501	1/1	0.99	0.05	96,96,96,96	0
81	MG	5	3429	1/1	0.99	0.12	42,42,42,42	0
82	ZN	d9	101	1/1	0.99	0.04	123,123,123,123	0
82	ZN	Q2	501	1/1	1.00	0.02	90,90,90,90	0
82	ZN	o7	501	1/1	1.00	0.01	71,71,71,71	0
82	ZN	q0	201	1/1	1.00	0.02	58,58,58,58	0
82	ZN	Q3	501	1/1	1.00	0.03	64,64,64,64	0
82	ZN	O4	201	1/1	1.00	0.03	63,63,63,63	0
82	ZN	d6	101	1/1	1.00	0.04	91,91,91,91	0
81	MG	1	3446	1/1	1.00	0.07	35,35,35,35	0
82	ZN	Q0	500	1/1	1.00	0.02	67,67,67,67	0

6.5 Other polymers [i](#)

There are no such residues in this entry.