Full wwPDB X-ray Structure Validation Report ⓘ

Mar 6, 2026 – 07:57 AM UTC

PDB ID	:	6GSK / pdb_00006gsk
Title	:	Structure of T. thermophilus 70S ribosome complex with mRNA, tRNAfMet and near-cognate tRNAThr in the A-site
Authors	:	Rozov, A.; Yusupov, M.; Yusupova, G.
Deposited on	:	2018-06-14
Resolution	:	3.36 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:

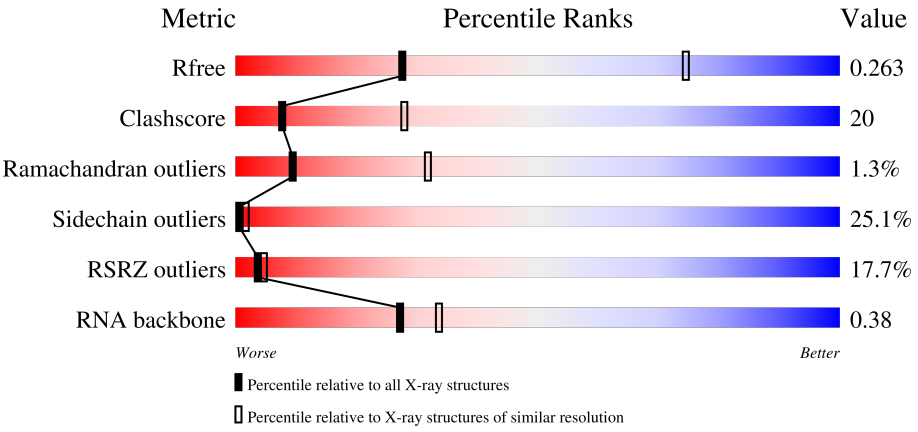
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry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

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 3.36 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	1099 (3.40-3.32)
Clashscore	190562	1116 (3.40-3.32)
Ramachandran outliers	187476	1101 (3.40-3.32)
Sidechain outliers	187428	1101 (3.40-3.32)
RSRZ outliers	180081	1099 (3.40-3.32)
RNA backbone	3983	1110 (3.72-3.00)

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 <=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	13	1522	24% 33% 51% 15% .
1	1G	1522	15% 31% 51% 16% .
2	12	256	29% 36% 31% 14% 19%
2	1E	256	15% 38% 39% 13% 10%

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Mol	Chain	Length	Quality of chain
3	22	239	21% 32% 42% 9% 18%
3	2E	239	16% 45% 33% 8% 14%
4	32	209	16% 43% 49% 8%
4	3E	209	7% 48% 38% 12%
5	42	162	16% 33% 45% 14% 7%
5	4E	162	17% 48% 35% 9% 8%
6	52	101	15% 59% 30% 11%
6	5E	101	17% 47% 49%
7	62	156	7% 32% 47% 9% 12%
7	6E	156	10% 42% 46% 11%
8	72	138	22% 45% 39% 15%
8	7E	138	7% 47% 38% 14%
9	82	128	10% 40% 41% 12% 5%
9	8E	128	23% 34% 55% 10%
10	1A	105	22% 33% 50% 11% 6%
10	1I	105	20% 34% 42% 13% 10%
11	2A	129	4% 44% 37% 6% 12%
11	2I	129	14% 43% 36% 7% 14%
12	3A	132	17% 38% 39% 14% 8%
12	3I	132	17% 39% 39% 13% 8%
13	4A	126	19% 26% 42% 17% 13%
13	4I	126	18% 33% 46% 13% 6%
14	5A	61	25% 43% 41% 11%
14	5I	61	3% 41% 46% 11%
15	6A	89	11% 45% 45% 8%

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Mol	Chain	Length	Quality of chain
15	6I	89	25% 47% 42% 9%
16	7A	88	14% 52% 33% 10% 5%
16	7I	88	19% 36% 48% 10% 6%
17	8A	105	15% 51% 35% 8% 6%
17	8I	105	19% 36% 46% 13% 5%
18	9A	88	3% 40% 31% 7% 22%
18	9I	88	13% 40% 34% 23%
19	AA	93	12% 22% 37% 11% 30%
19	AI	93	14% 35% 38% 13% 12%
20	BA	106	12% 51% 39% 7%
20	BI	106	16% 34% 44% 11% 8%
21	1B	27	41% 30% 11% 19%
21	1F	27	11% 37% 37% 11% 15%
22	1K	76	32% 12% 53% 32%
22	1L	76	22% 20% 50% 28%
23	2K	77	14% 31% 55% 14%
23	2L	77	3% 38% 47% 16%
24	3K	76	28% 21% 36% 38% 5%
24	3L	76	18% 25% 43% 26% 5%
25	4K	27	7% 22% 15% 30% 33%
25	4L	27	19% 11% 19% 48%
26	14	2917	20% 36% 47% 14%
26	1H	2917	15% 37% 45% 13%
27	16	122	6% 42% 45% 13%
27	1J	122	11% 32% 47% 21%

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Mol	Chain	Length	Quality of chain
28	11	276	10% 44% 42% 12%
28	19	276	12% 49% 37% 13%
29	21	206	20% 43% 40% 16%
29	29	206	33% 44% 38% 15%
30	31	210	19% 40% 40% 16%
30	39	210	29% 30% 50% 15%
31	41	182	8% 46% 41% 12%
31	49	182	10% 35% 51% 12%
32	51	180	13% 38% 42% 13%
32	59	180	46% 35% 43% 16% 6%
33	61	148	22% 44% 37% 14%
33	69	148	30% 42% 38% 16%
34	15	140	17% 39% 44% 14%
34	58	140	15% 33% 44% 12% 11%
35	25	122	2% 47% 42% 11%
35	68	122	4% 64% 31% 5%
36	35	150	26% 35% 45% 16%
36	78	150	14% 33% 47% 17%
37	45	141	23% 42% 42% 13%
37	88	141	18% 43% 44% 12%
38	55	118	21% 38% 45% 17%
38	98	118	17% 42% 47% 10%
39	65	112	8% 33% 44% 21%
39	A8	112	9% 37% 46% 16%
40	75	146	15% 40% 42% 12%

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Mol	Chain	Length	Quality of chain
40	B8	146	20% 33% 41% 19% 7%
41	85	118	17% 45% 42% 12%
41	C8	118	12% 50% 40% 8%
42	95	101	20% 45% 43% 9%
42	D8	101	15% 48% 40% 12%
43	A5	113	21% 52% 33% 13%
43	E8	113	18% 50% 34% 12%
44	B5	96	6% 52% 34% 11%
44	F8	96	10% 44% 46% 9%
45	C5	110	16% 25% 18% 5% 53%
45	G8	110	5% 30% 43% 8% 7% 12%
46	D5	206	7% 33% 37% 16% 14%
46	H8	206	9% 33% 35% 12% 17%
47	E5	85	8% 34% 41% 14% 11%
47	I8	85	% 40% 41% 9% 9%
48	F5	98	33% 39% 35% 19%
48	J8	98	35% 40% 40% 16%
49	G5	72	7% 32% 46% 14%
49	K8	72	22% 35% 39% 14% 7% 6%
50	H5	60	12% 50% 38% 8%
50	L8	60	7% 48% 32% 17%
51	M8	71	4% 39% 28% 14% 15%
52	J5	60	37% 47% 37% 10% 7%
52	N8	60	33% 38% 7% 20%
53	L5	49	6% 49% 43% 6%

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Mol	Chain	Length	Quality of chain
53	P8	49	
54	M5	65	
54	Q8	65	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	13	1668	-	-	-	X
55	MG	14	3016	-	-	-	X
55	MG	14	3113	-	-	-	X
55	MG	14	3176	-	-	-	X
55	MG	14	3178	-	-	-	X
55	MG	14	3189	-	-	-	X
55	MG	1G	1618	-	-	-	X
55	MG	1G	1621	-	-	-	X
55	MG	1G	1627	-	-	-	X
55	MG	1G	1630	-	-	-	X
55	MG	1G	1640	-	-	-	X
55	MG	1G	1644	-	-	-	X
55	MG	1G	1662	-	-	-	X
55	MG	1G	1663	-	-	-	X
55	MG	1G	1667	-	-	-	X
55	MG	1G	1685	-	-	-	X
55	MG	1H	3022	-	-	-	X
55	MG	1H	3099	-	-	-	X
55	MG	1H	3102	-	-	-	X
55	MG	1H	3181	-	-	-	X
55	MG	1H	3200	-	-	-	X
55	MG	1H	3211	-	-	-	X
55	MG	1H	3245	-	-	-	X
55	MG	1H	3268	-	-	-	X
55	MG	1H	3277	-	-	-	X
56	SF4	32	302	-	-	X	-

2 Entry composition (i)

There are 58 unique types of molecules in this entry. The entry contains 292640 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 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	13	1500	Total	C	N	O	P	0	0	0
			32246	14352	5978	10416	1500			
1	1G	1490	Total	C	N	O	P	0	0	0
			32028	14255	5932	10351	1490			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
13	1542	G	U	conflict	GB 55771382
1G	1542	G	U	conflict	GB 55771382

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1E	231	Total	C	N	O	S	0	0	0
			1874	1199	334	336	5			
2	12	207	Total	C	N	O	S	0	0	0
			1696	1083	306	303	4			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	2E	205	Total	C	N	O	S	0	0	0
			1605	1011	313	280	1			
3	22	197	Total	C	N	O	S	0	0	0
			1546	978	299	268	1			

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	3E	207	Total	C	N	O	S	0	0	0
			1698	1064	338	289	7			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	32	208	Total	C	N	O	S	0	0	0
			1702	1066	339	290	7			

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	4E	149	Total	C	N	O	S	0	0	0
			1142	722	216	200	4			
5	42	150	Total	C	N	O	S	0	0	0
			1141	719	217	201	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	5E	100	Total	C	N	O	S	0	0	0
			837	528	154	152	3			
6	52	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	154	Total	C	N	O	S	0	0	0
			1242	770	250	216	6			
7	62	138	Total	C	N	O	S	0	0	0
			1110	689	221	194	6			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	7E	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			
8	72	137	Total	C	N	O	S	0	0	0
			1107	700	214	191	2			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	8E	126	Total	C	N	O	0	0	0
			1000	634	196	170			
9	82	121	Total	C	N	O	0	0	0
			953	605	186	162			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1I	94	Total	C	N	O	S	0	0	0
			749	468	147	133	1			
10	1A	99	Total	C	N	O	S	0	0	0
			801	504	157	139	1			

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	2I	111	Total	C	N	O	S	0	0	0
			823	512	154	154	3			
11	2A	113	Total	C	N	O	S	0	0	0
			835	520	156	156	3			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	3I	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			
12	3A	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	4I	119	Total	C	N	O	S	0	0	0
			942	582	194	164	2			
13	4A	109	Total	C	N	O	S	0	0	0
			879	544	181	152	2			

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	5I	60	Total	C	N	O	S	0	0	0
			491	312	104	71	4			
14	5A	59	Total	C	N	O	S	0	0	0
			486	309	103	70	4			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	6I	87	Total	C	N	O	S	0	0	0
			729	457	146	124	2			
15	6A	87	Total	C	N	O	S	0	0	0
			729	457	146	124	2			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	68	Total	C	N	O	0	0	0
			549	352	105	92			
18	9A	69	Total	C	N	O	0	0	0
			554	355	106	93			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	82	Total	C	N	O	S	0	0	0
			661	422	123	114	2			
19	AA	65	Total	C	N	O	S	0	0	0
			510	324	92	92	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	97	Total	C	N	O	S	0	0	0
			746	461	157	126	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BA	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			

- Molecule 21 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	1F	23	Total	C	N	O	0	0	0
			199	122	48	29			
21	1B	22	Total	C	N	O	0	0	0
			188	116	44	28			

- Molecule 22 is a RNA chain called tRNAThr.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	1K	74	Total	C	N	O	P	0	0	0
			1593	712	285	522	74			
22	1L	74	Total	C	N	O	P	0	0	0
			1593	712	285	522	74			

- Molecule 23 is a RNA chain called tRNAfMet.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	2K	77	Total	C	N	O	P	0	0	0
			1644	733	297	537	77			
23	2L	77	Total	C	N	O	P	0	0	0
			1644	733	297	537	77			

- Molecule 24 is a RNA chain called tRNAThr.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	3K	72	Total	C	N	O	P	0	0	0
			1537	686	276	503	72			
24	3L	72	Total	C	N	O	P	0	0	0
			1537	686	276	503	72			

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	4K	18	Total	C	N	O	P	0	0	0
			391	176	79	118	18			
25	4L	14	Total	C	N	O	P	0	0	0
			303	137	62	90	14			

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	1H	2811	Total	C	N	O	P	0	0	0
			60546	26946	11325	19464	2811			
26	14	2811	Total	C	N	O	P	0	0	0
			60561	26951	11337	19462	2811			

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	UNK	conflict	GB 55771382
1H	654A	A	G	conflict	GB 55771382
1H	654E	C	G	conflict	GB 55771382
1H	654P	G	C	conflict	GB 55771382
1H	654T	A	C	conflict	GB 55771382
1H	1058	U	G	conflict	GB 55771382
1H	1080	A	C	conflict	GB 55771382
14	158	U	UNK	conflict	GB 55771382
14	654A	A	G	conflict	GB 55771382
14	654E	C	G	conflict	GB 55771382
14	654P	G	C	conflict	GB 55771382
14	654T	A	C	conflict	GB 55771382
14	1058	U	G	conflict	GB 55771382
14	1080	A	C	conflict	GB 55771382

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
27	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 28 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	11	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			
28	19	274	Total	C	N	O	S	0	0	0
			2125	1341	422	359	3			

- Molecule 29 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	21	205	Total	C	N	O	S	0	0	0
			1556	984	297	269	6			
29	29	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			

- Molecule 30 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
30	39	204	Total	C	N	O	S	0	0	0
			1602	1022	299	279	2			

- Molecule 31 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	41	179	Total	C	N	O	S	0	0	0
			1457	931	265	257	4			
31	49	180	Total	C	N	O	S	0	0	0
			1459	931	266	258	4			

- Molecule 32 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	51	174	Total	C	N	O	S	0	0	0
			1328	842	249	236	1			
32	59	169	Total	C	N	O	S	0	0	0
			1295	823	241	230	1			

- Molecule 33 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	61	145	Total	C	N	O	S	0	0	0
			1131	723	200	207	1			
33	69	145	Total	C	N	O	S	0	0	0
			1131	723	200	207	1			

- Molecule 34 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	58	125	Total	C	N	O	S	0	0	0
			995	645	183	163	4			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	15	137	Total	C	N	O	S	0	0	0
			1096	707	205	181	3			

- Molecule 35 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	68	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			
35	25	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			

- Molecule 36 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	78	148	Total	C	N	O	S	0	0	0
			1127	701	230	193	3			
36	35	147	Total	C	N	O	S	0	0	0
			1122	698	229	192	3			

- Molecule 37 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	88	141	Total	C	N	O	S	0	0	0
			1117	712	211	187	7			
37	45	138	Total	C	N	O	S	0	0	0
			1099	702	208	183	6			

- Molecule 38 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
38	55	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			

- Molecule 39 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	A8	111	Total	C	N	O	0	0	0
			881	556	176	149			
39	65	110	Total	C	N	O	0	0	0
			876	553	175	148			

- Molecule 40 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	B8	136	Total	C	N	O	S	0	0	0
			1128	702	231	194	1			
40	75	140	Total	C	N	O	S	0	0	0
			1164	723	238	202	1			

- Molecule 41 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	C8	115	Total	C	N	O	S	0	0	0
			950	603	199	147	1			
41	85	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 42 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	D8	100	Total	C	N	O	S	0	0	0
			774	499	141	133	1			
42	95	100	Total	C	N	O	S	0	0	0
			770	496	140	133	1			

- Molecule 43 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	E8	110	Total	C	N	O	S	0	0	0
			876	552	171	151	2			
43	A5	111	Total	C	N	O	S	0	0	0
			886	558	174	152	2			

- Molecule 44 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	F8	95	Total	C	N	O	S	0	0	0
			750	488	135	126	1			
44	B5	94	Total	C	N	O		0	0	0
			735	477	133	125				

- Molecule 45 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	G8	97	Total	C	N	O	S	0	0	0
			734	472	140	117	5			
45	C5	52	Total	C	N	O	S	0	0	0
			396	258	72	65	1			

- Molecule 46 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	H8	170	Total	C	N	O	S	0	0	0
			1365	870	246	246	3			
46	D5	177	Total	C	N	O	S	0	0	0
			1411	901	253	255	2			

- Molecule 47 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	I8	77	Total	C	N	O	S	0	0	0
			611	378	129	103	1			
47	E5	76	Total	C	N	O	S	0	0	0
			603	372	128	102	1			

- Molecule 48 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	J8	96	Total	C	N	O	S	0	0	0
			747	469	148	129	1			
48	F5	94	Total	C	N	O	S	0	0	0
			737	463	146	127	1			

- Molecule 49 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	K8	68	Total	C	N	O	S	0	0	0
			575	358	116	100	1			
49	G5	69	Total	C	N	O	S	0	0	0
			576	358	116	101	1			

- Molecule 50 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	L8	58	Total	C	N	O	0	0	0
			459	293	89	77			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
50	H5	58	Total 459	C 293	N 89	O 77	0	0	0

- Molecule 51 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M8	60	Total 475	C 300	N 84	O 86	S 5	0	0	0

- Molecule 52 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	N8	48	Total 369	C 229	N 75	O 60	S 5	0	0	0
52	J5	56	Total 434	C 272	N 87	O 70	S 5	0	0	0

- Molecule 53 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	P8	47	Total 401	C 246	N 99	O 54	S 2	0	0	0
53	L5	48	Total 406	C 249	N 100	O 55	S 2	0	0	0

- Molecule 54 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	Q8	64	Total 516	C 331	N 102	O 81	S 2	0	0	0
54	M5	64	Total 516	C 331	N 102	O 81	S 2	0	0	0

- Molecule 55 is MAGNESIUM ION (CCD ID: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	13	140	Total 140	Mg 140	0	0
55	5I	2	Total 2	Mg 2	0	0
55	8I	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	BI	1	Total Mg 1 1	0	0
55	1F	2	Total Mg 2 2	0	0
55	2K	1	Total Mg 1 1	0	0
55	1H	473	Total Mg 473 473	0	0
55	16	2	Total Mg 2 2	0	0
55	11	1	Total Mg 1 1	0	0
55	21	3	Total Mg 3 3	0	0
55	41	1	Total Mg 1 1	0	0
55	78	2	Total Mg 2 2	0	0
55	88	3	Total Mg 3 3	0	0
55	C8	2	Total Mg 2 2	0	0
55	D8	1	Total Mg 1 1	0	0
55	I8	1	Total Mg 1 1	0	0
55	J8	1	Total Mg 1 1	0	0
55	P8	1	Total Mg 1 1	0	0
55	1G	126	Total Mg 126 126	0	0
55	32	1	Total Mg 1 1	0	0
55	42	2	Total Mg 2 2	0	0
55	2A	1	Total Mg 1 1	0	0
55	4A	1	Total Mg 1 1	0	0
55	7A	1	Total Mg 1 1	0	0

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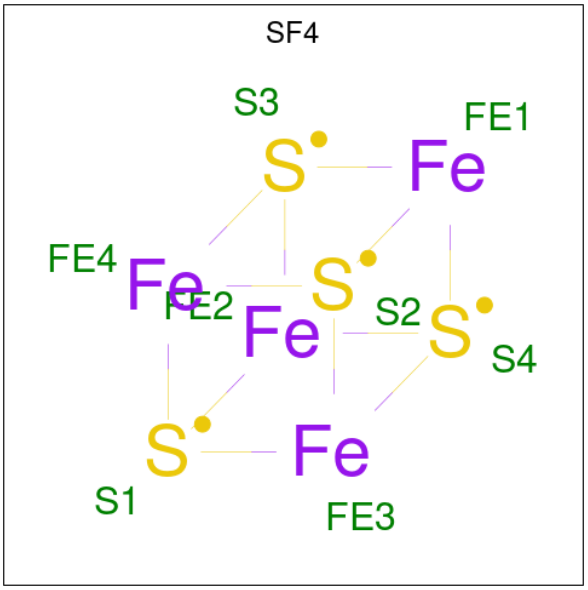
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	BA	1	Total Mg 1 1	0	0
55	2L	1	Total Mg 1 1	0	0
55	14	300	Total Mg 300 300	0	0
55	1J	2	Total Mg 2 2	0	0
55	29	1	Total Mg 1 1	0	0
55	39	1	Total Mg 1 1	0	0
55	35	1	Total Mg 1 1	0	0
55	45	2	Total Mg 2 2	0	0
55	85	1	Total Mg 1 1	0	0
55	E5	1	Total Mg 1 1	0	0
55	F5	1	Total Mg 1 1	0	0

- Molecule 56 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	3E	1	Total Fe S 8 4 4	0	0
56	32	1	Total Fe S 8 4 4	0	0

- Molecule 57 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	5I	1	Total Zn 1 1	0	0
57	5A	1	Total Zn 1 1	0	0

- Molecule 58 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	13	274	Total O 274 274	0	0
58	4E	6	Total O 6 6	0	0
58	8E	1	Total O 1 1	0	0
58	1I	2	Total O 2 2	0	0
58	3I	1	Total O 1 1	0	0
58	4I	2	Total O 2 2	0	0
58	5I	1	Total O 1 1	0	0
58	7I	3	Total O 3 3	0	0
58	1F	1	Total O 1 1	0	0
58	1K	1	Total O 1 1	0	0
58	1H	1010	Total O 1010 1010	0	0
58	16	8	Total O 8 8	0	0
58	11	8	Total O 8 8	0	0
58	21	4	Total O 4 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	31	5	Total O 5 5	0	0
58	58	1	Total O 1 1	0	0
58	78	8	Total O 8 8	0	0
58	98	1	Total O 1 1	0	0
58	D8	1	Total O 1 1	0	0
58	E8	1	Total O 1 1	0	0
58	G8	1	Total O 1 1	0	0
58	I8	3	Total O 3 3	0	0
58	J8	2	Total O 2 2	0	0
58	L8	3	Total O 3 3	0	0
58	Q8	2	Total O 2 2	0	0
58	1G	240	Total O 240 240	0	0
58	32	1	Total O 1 1	0	0
58	42	1	Total O 1 1	0	0
58	7A	4	Total O 4 4	0	0
58	BA	2	Total O 2 2	0	0
58	2L	6	Total O 6 6	0	0
58	4L	1	Total O 1 1	0	0
58	14	586	Total O 586 586	0	0
58	19	7	Total O 7 7	0	0
58	29	2	Total O 2 2	0	0

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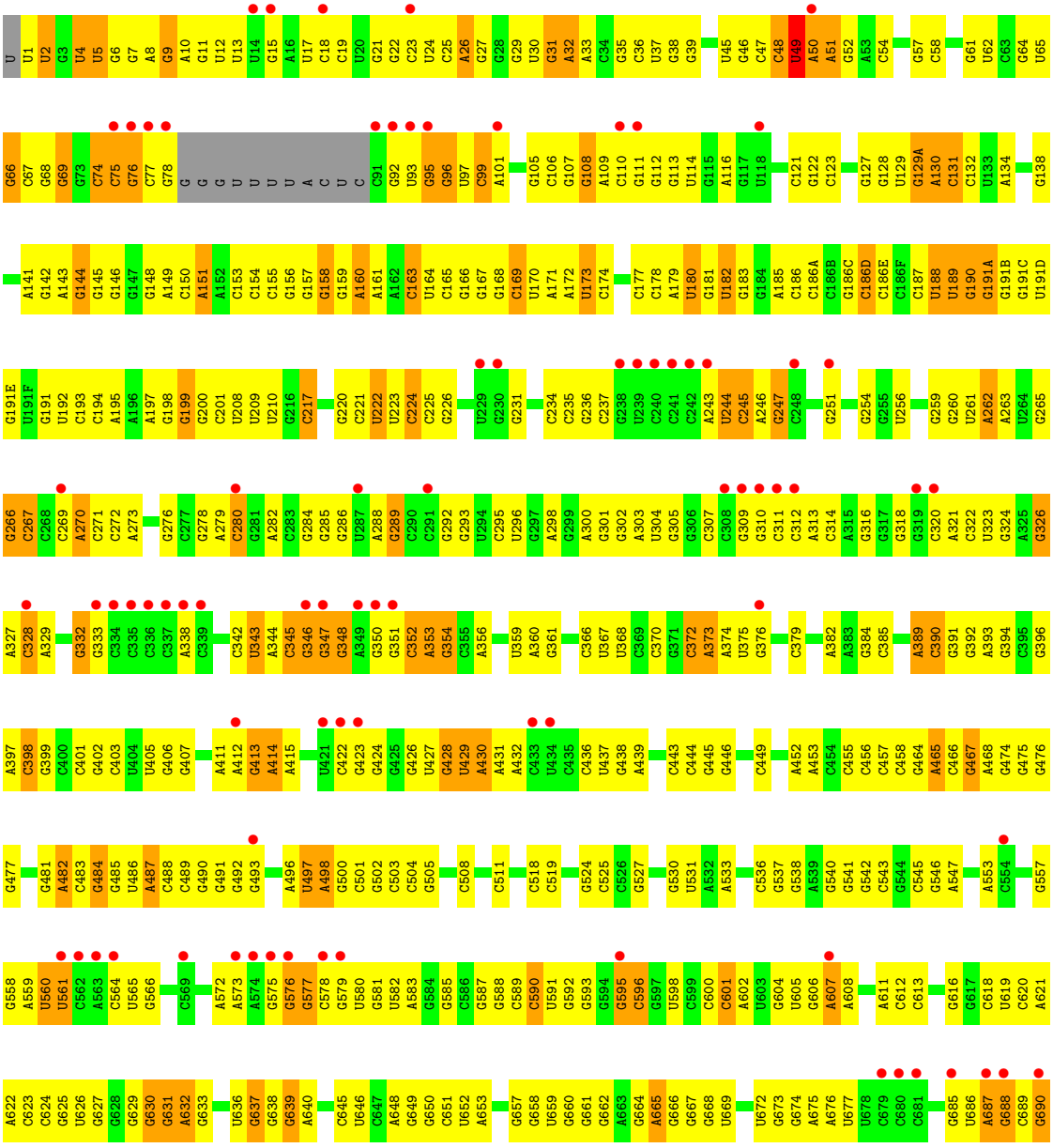
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	39	6	Total O 6 6	0	0
58	35	5	Total O 5 5	0	0
58	45	5	Total O 5 5	0	0
58	B5	2	Total O 2 2	0	0
58	H5	2	Total O 2 2	0	0
58	L5	1	Total O 1 1	0	0

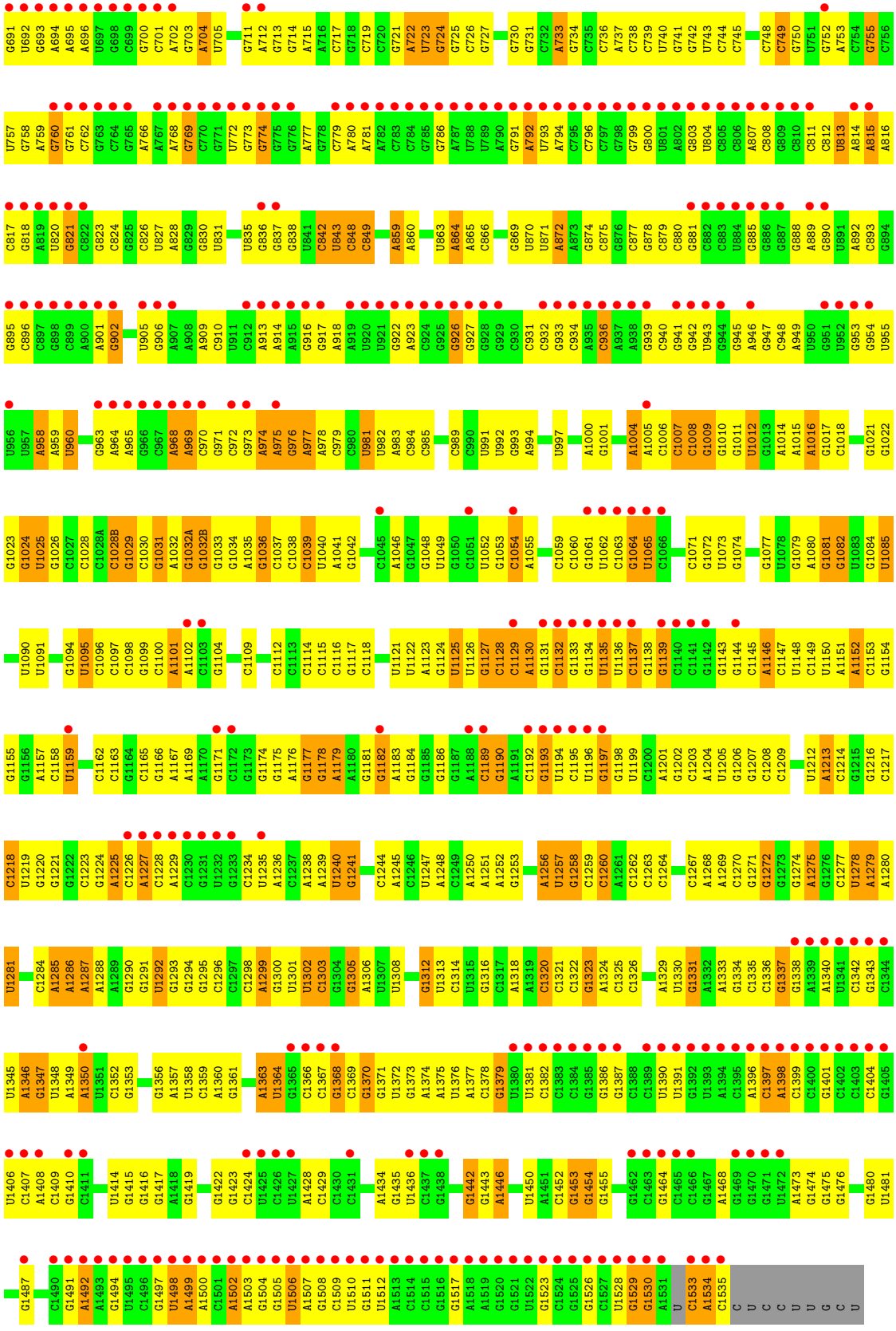
3 Residue-property plots (i)

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: 16S ribosomal RNA

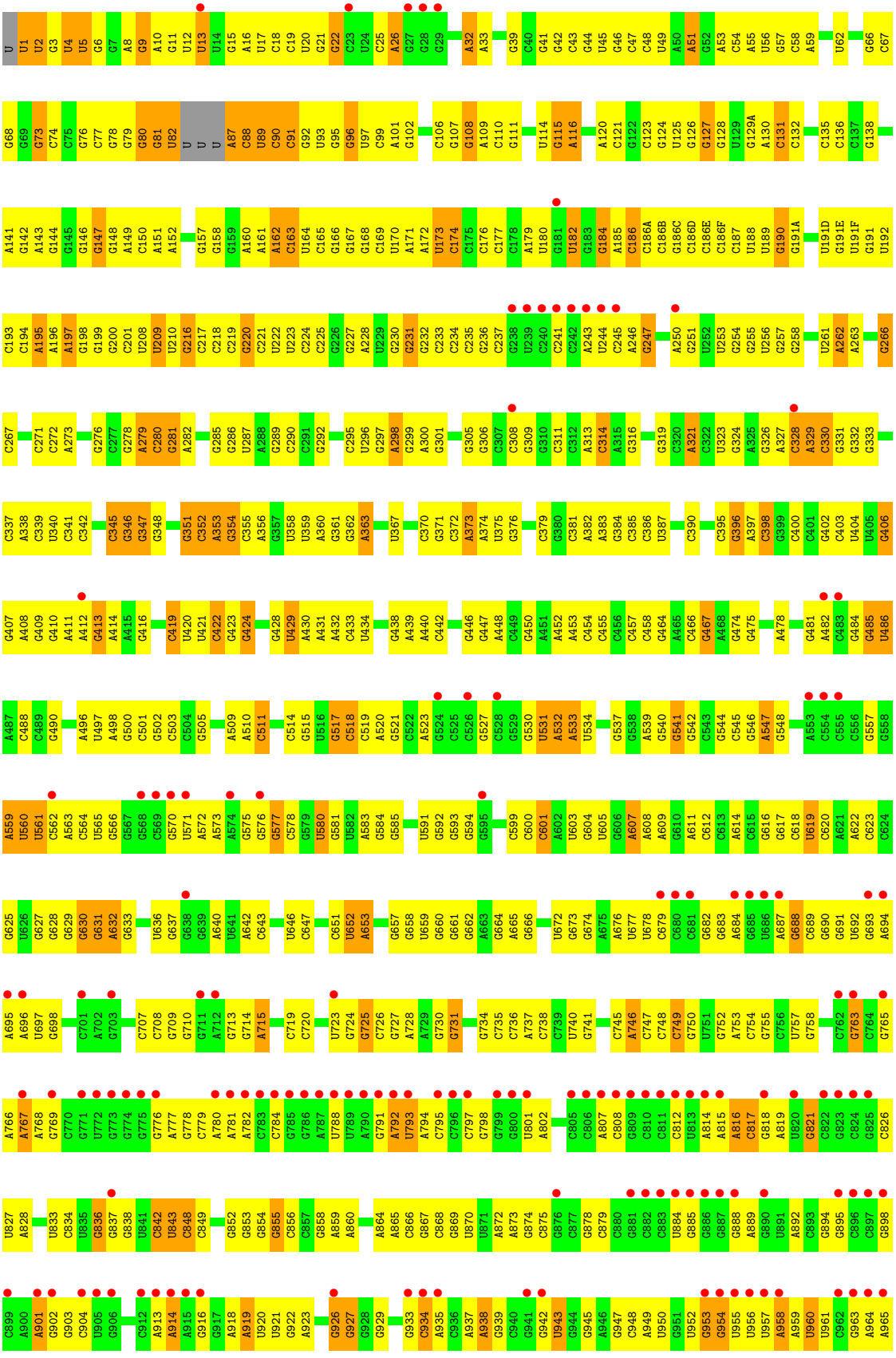
Chain 13:

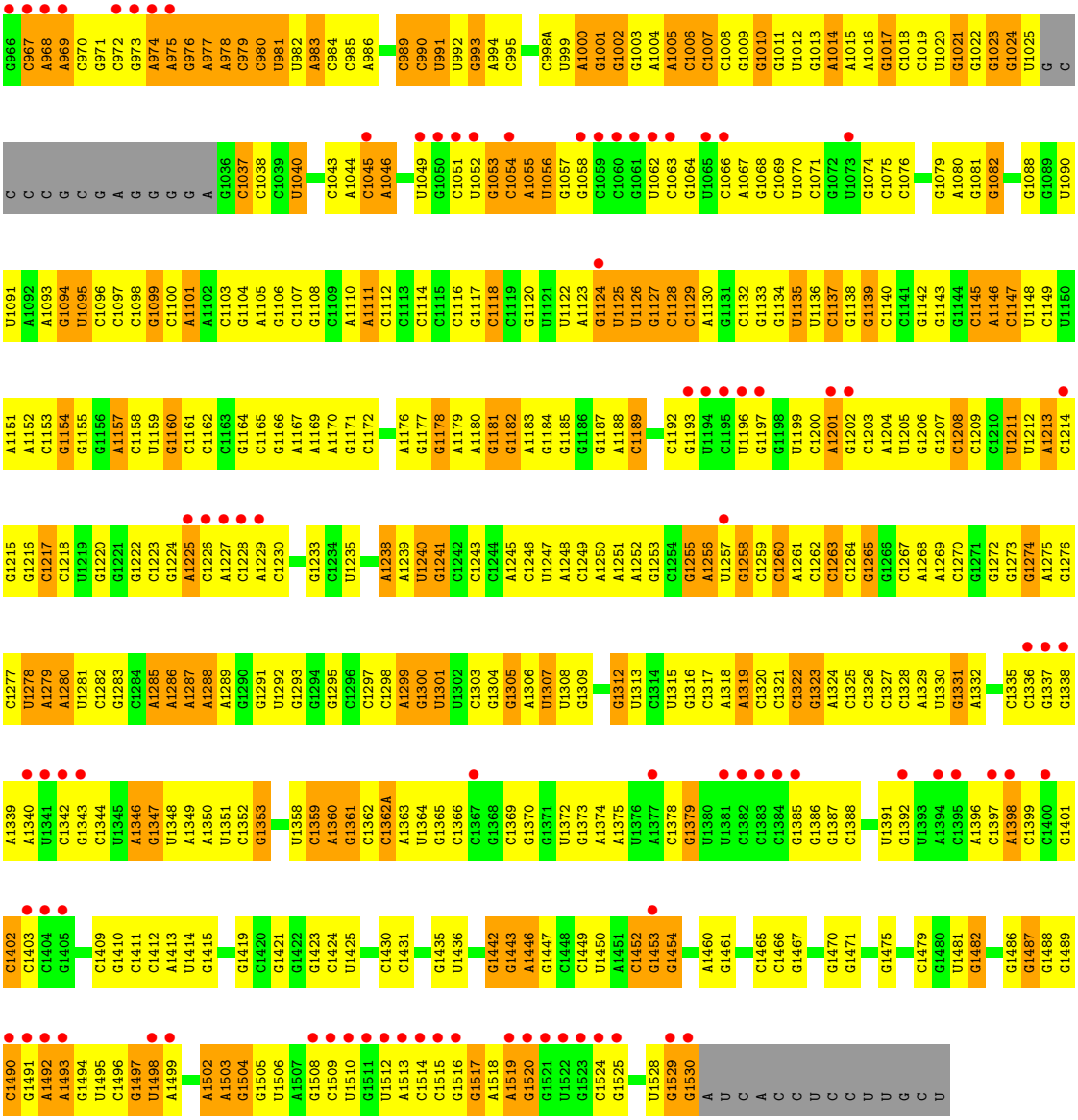




• Molecule 1: 16S ribosomal RNA

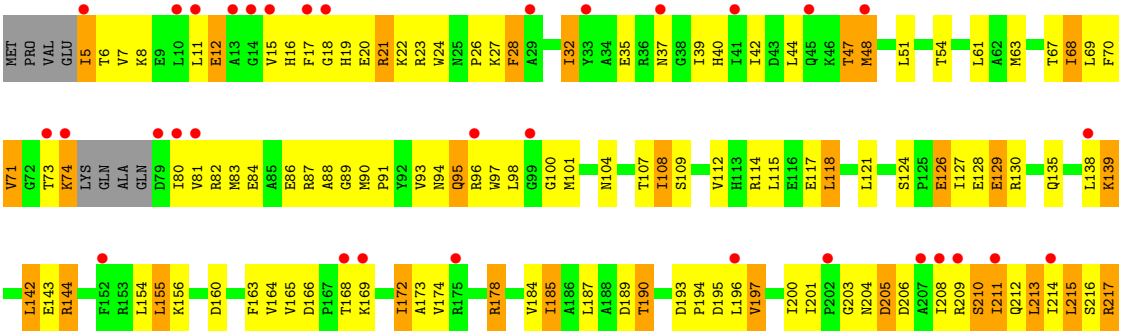
Chain 1G:

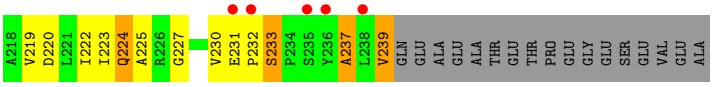




• Molecule 2: 30S ribosomal protein S2

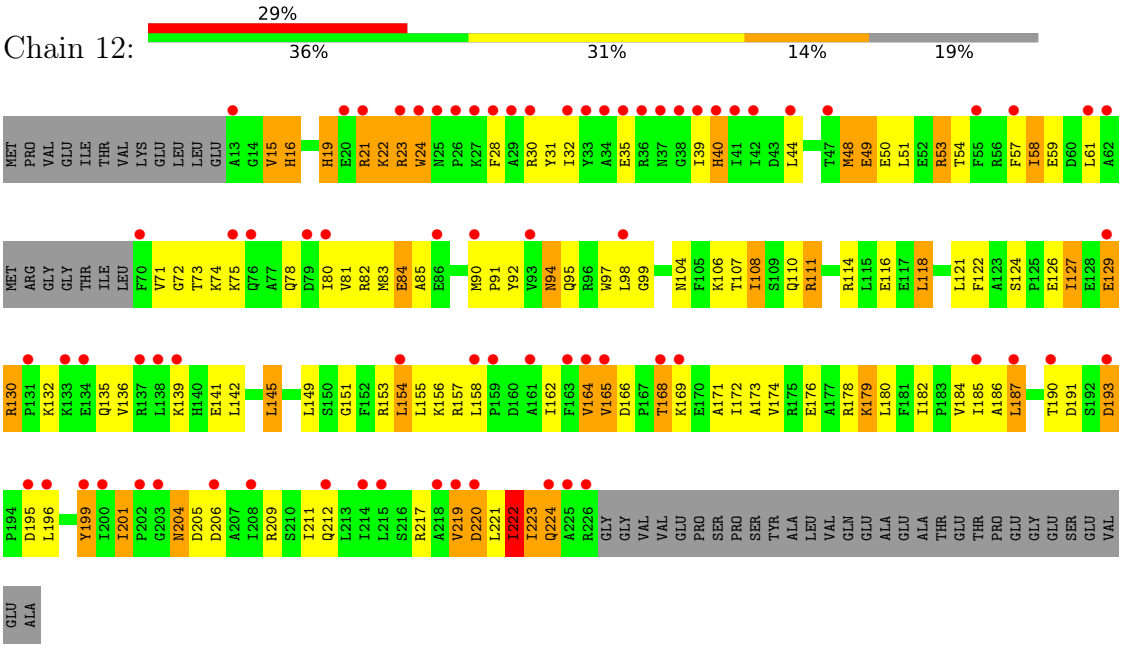
Chain 1E:





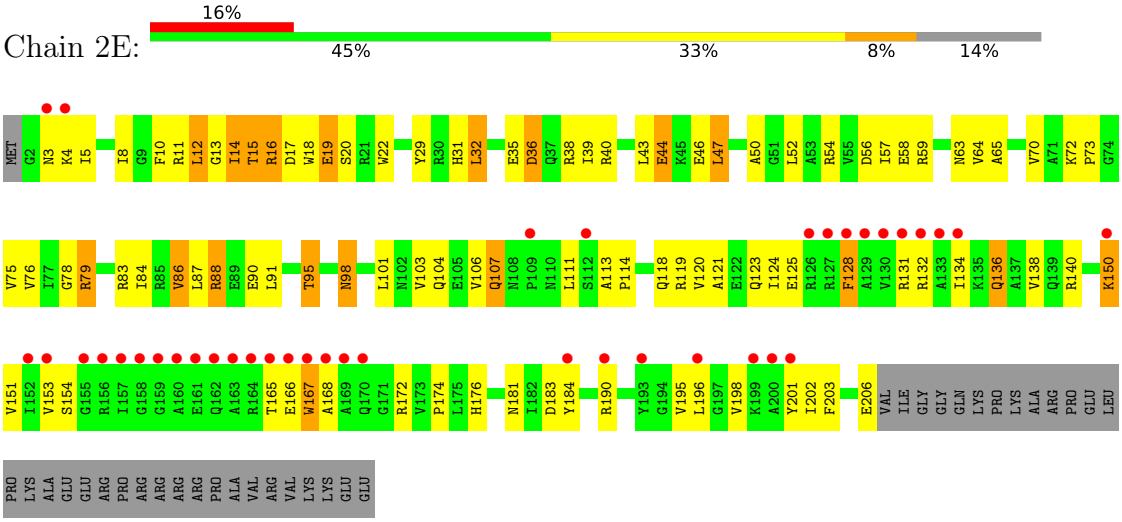
• Molecule 2: 30S ribosomal protein S2

Chain 12:



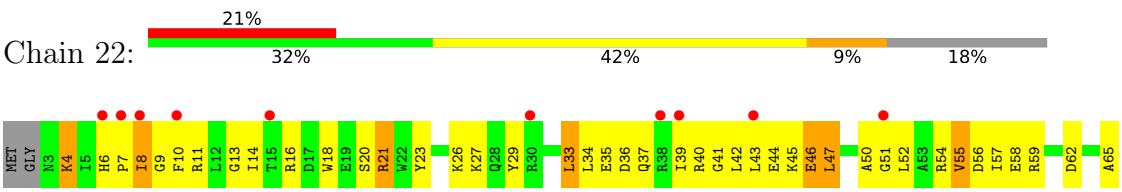
• Molecule 3: 30S ribosomal protein S3

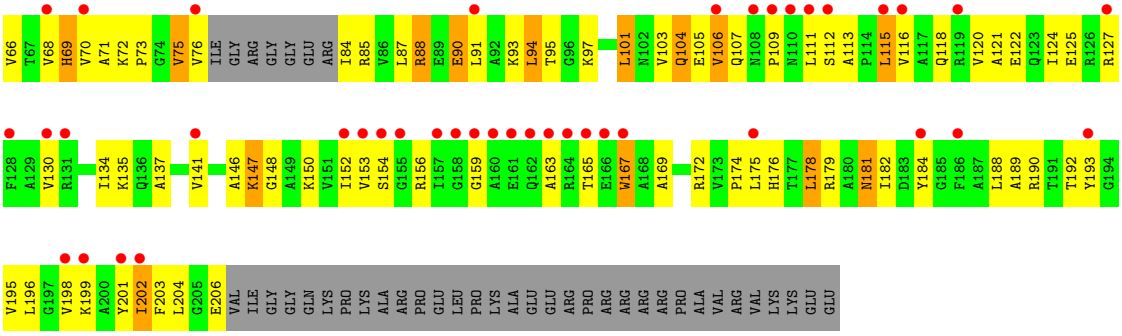
Chain 2E:

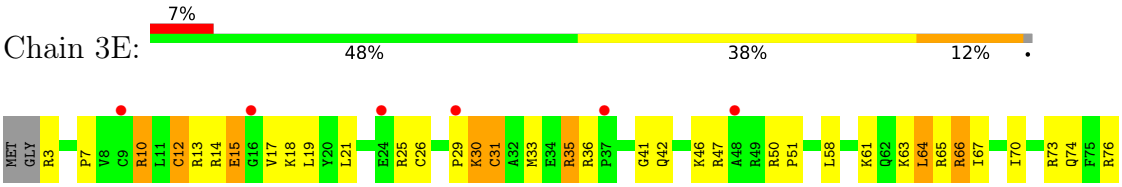


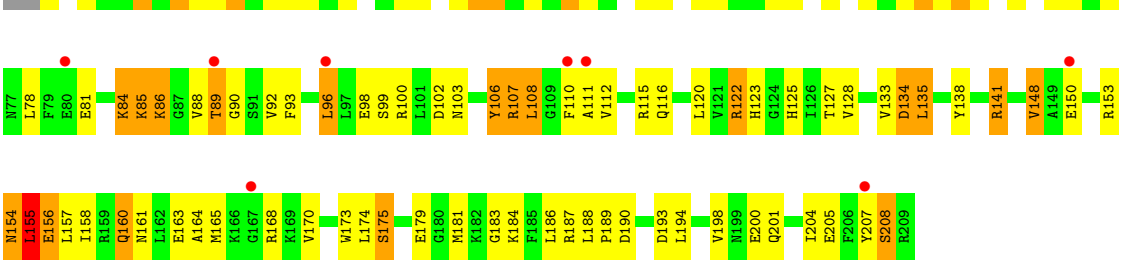
• Molecule 3: 30S ribosomal protein S3

Chain 22:



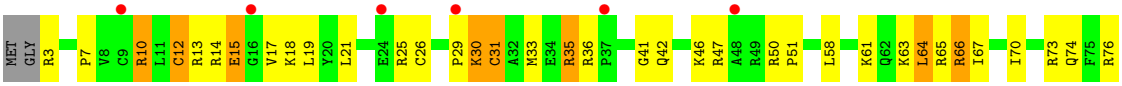






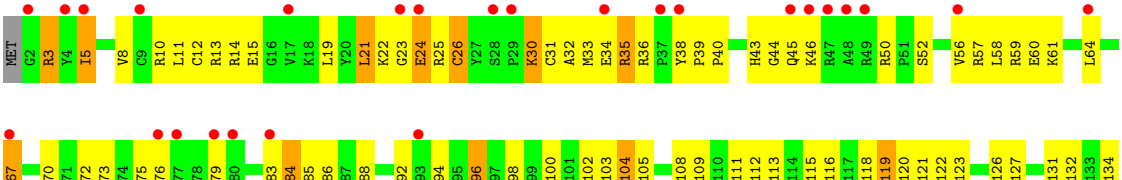
• Molecule 4: 30S ribosomal protein S4

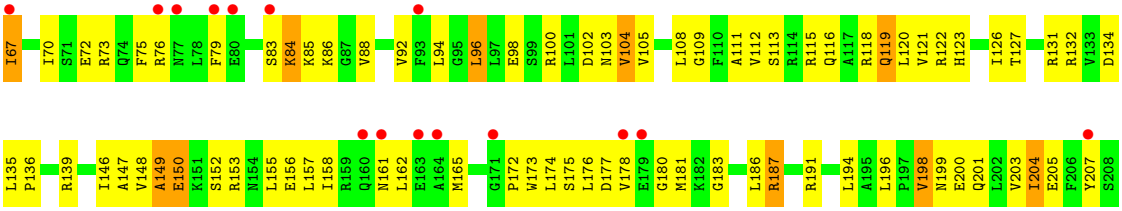
Chain 3E:

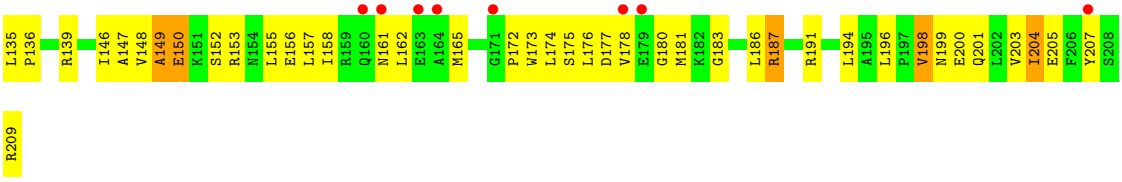


• Molecule 4: 30S ribosomal protein S4

Chain 32:

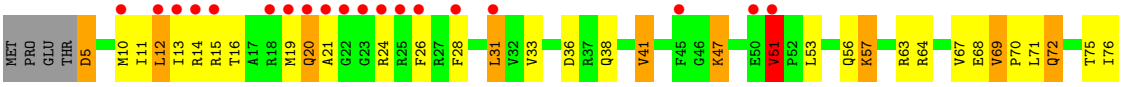


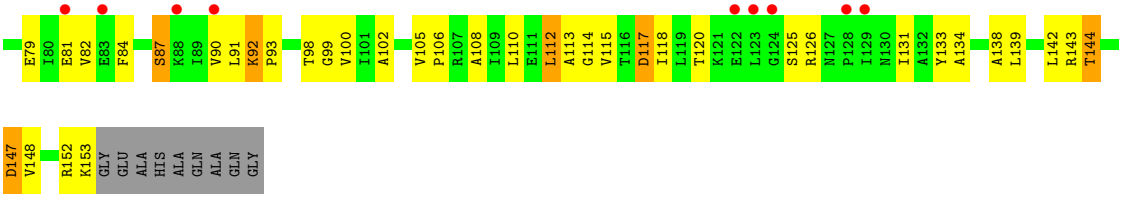




• Molecule 5: 30S ribosomal protein S5

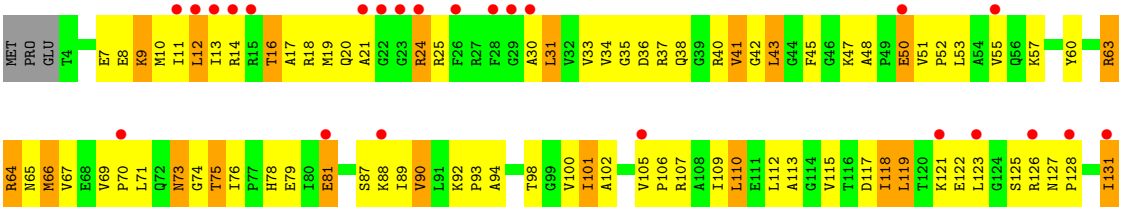
Chain 4E:





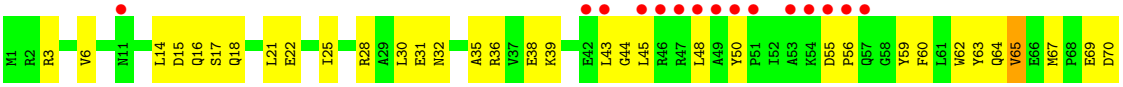
• Molecule 5: 30S ribosomal protein S5

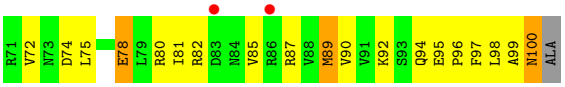
Chain 42:



• Molecule 6: 30S ribosomal protein S6

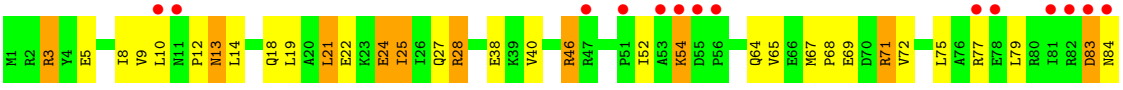
Chain 5E:

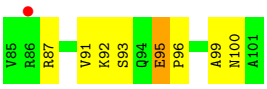




• Molecule 6: 30S ribosomal protein S6

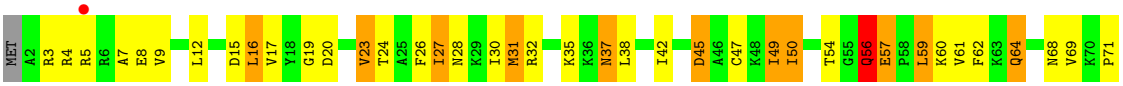
Chain 52:

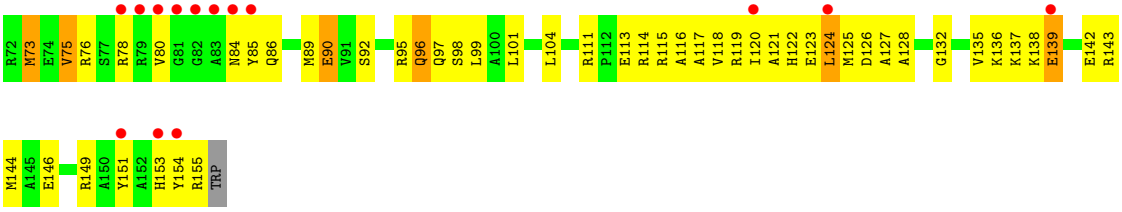




• Molecule 7: 30S ribosomal protein S7

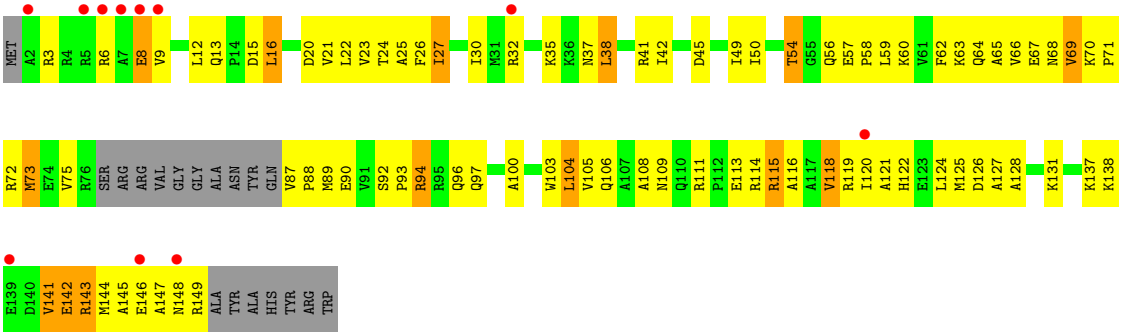
Chain 6E:





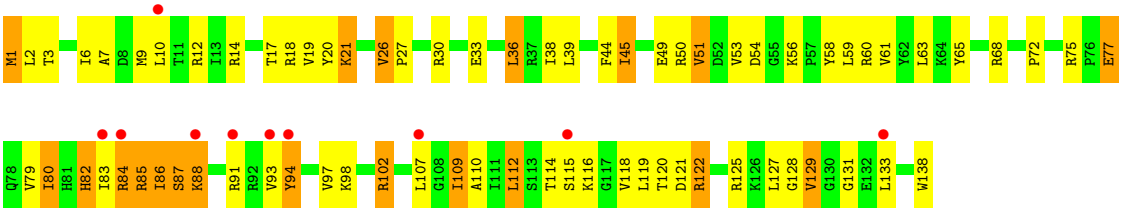
• Molecule 7: 30S ribosomal protein S7

Chain 62:



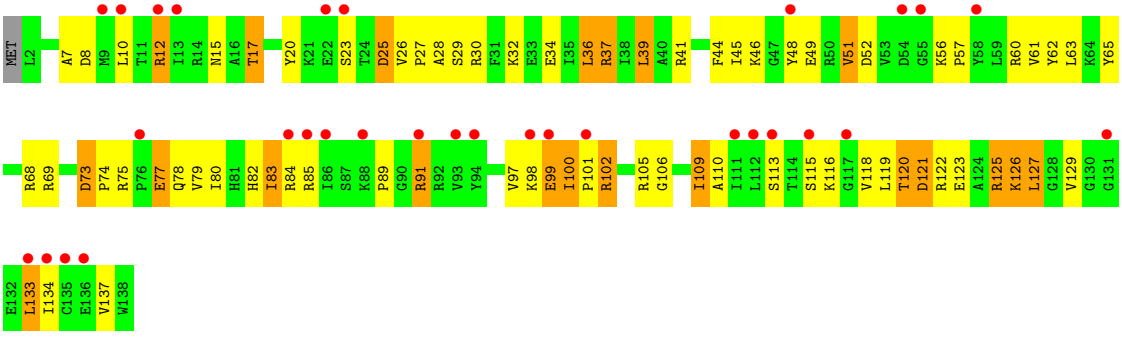
• Molecule 8: 30S ribosomal protein S8

Chain 7E:



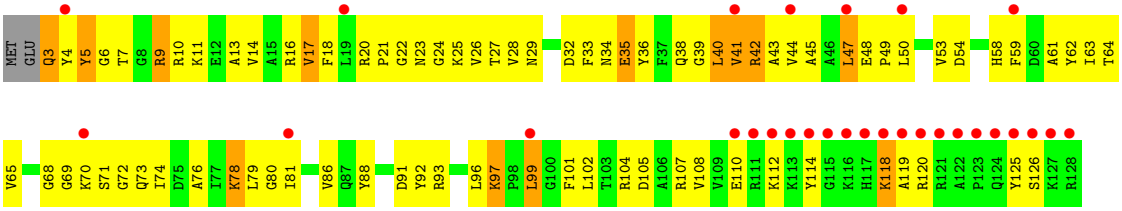
• Molecule 8: 30S ribosomal protein S8

Chain 72:



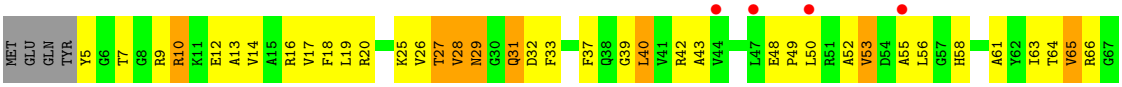
• Molecule 9: 30S ribosomal protein S9

Chain 8E:



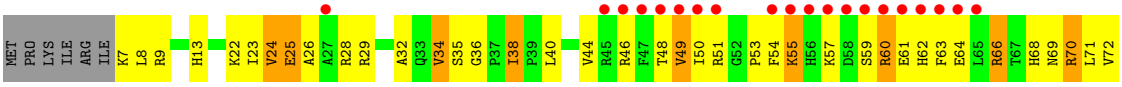
• Molecule 9: 30S ribosomal protein S9

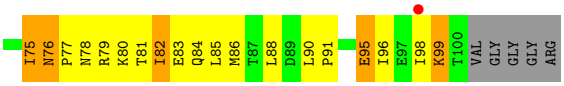
Chain 82:



• Molecule 10: 30S ribosomal protein S10

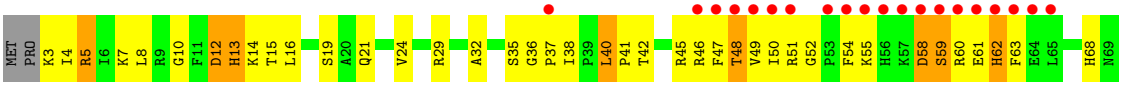
Chain 1I:





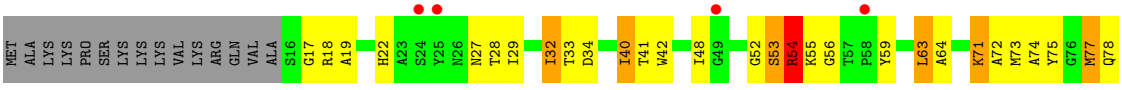
• Molecule 10: 30S ribosomal protein S10

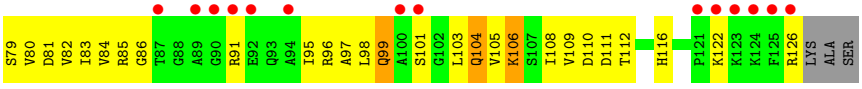
Chain 1A:



• Molecule 11: 30S ribosomal protein S11

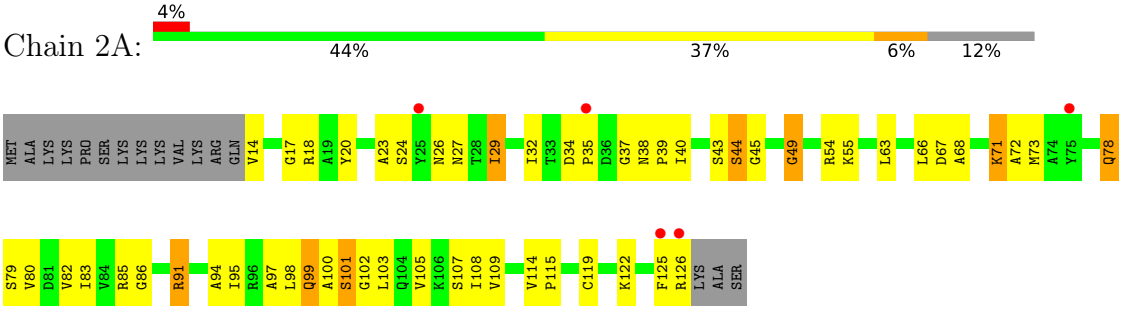
Chain 2I:





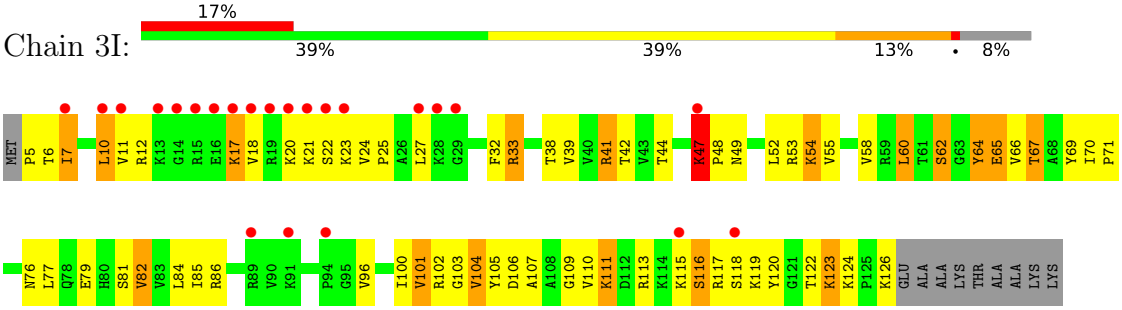
• Molecule 11: 30S ribosomal protein S11

Chain 2A:



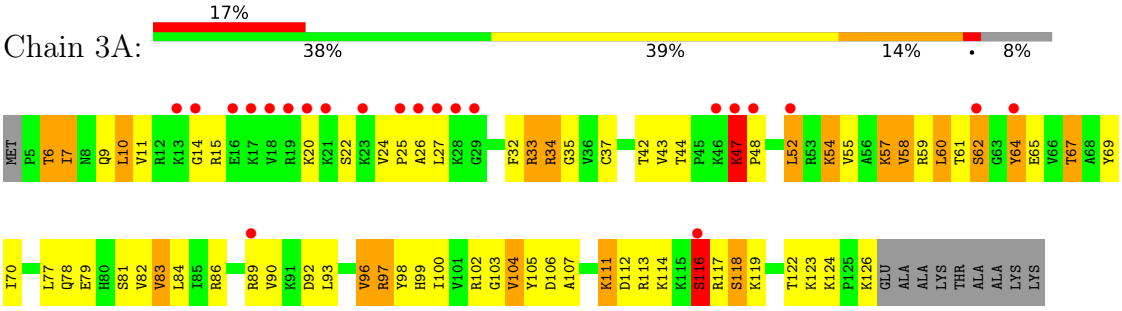
• Molecule 12: 30S ribosomal protein S12

Chain 3I:



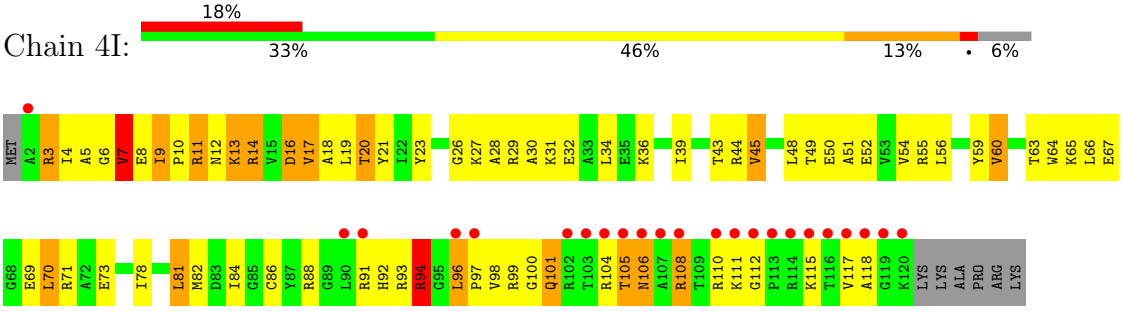
• Molecule 12: 30S ribosomal protein S12

Chain 3A:



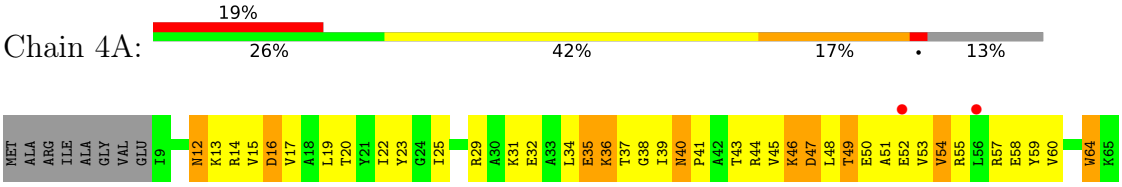
• Molecule 13: 30S ribosomal protein S13

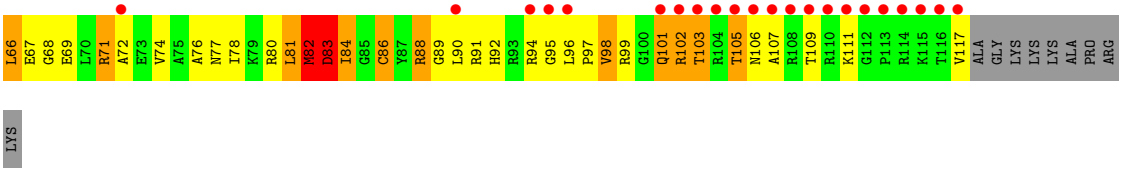
Chain 4I:



• Molecule 13: 30S ribosomal protein S13

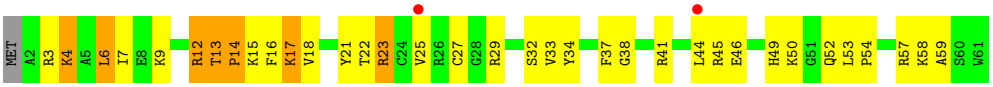
Chain 4A:





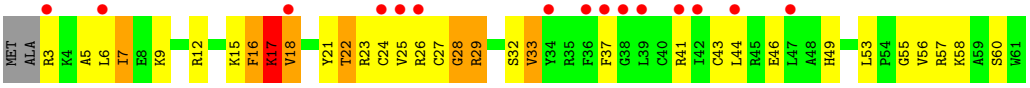
• Molecule 14: 30S ribosomal protein S14 type Z

Chain 5I:



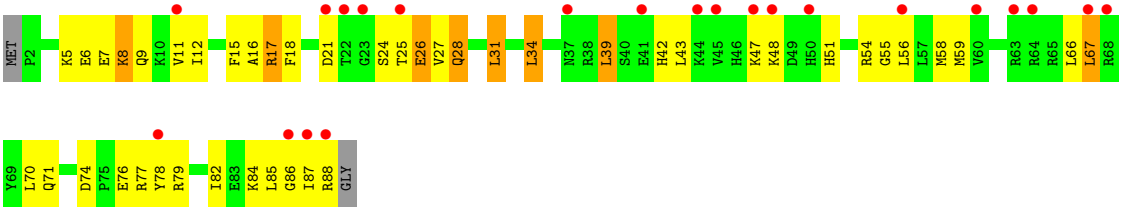
• Molecule 14: 30S ribosomal protein S14 type Z

Chain 5A:



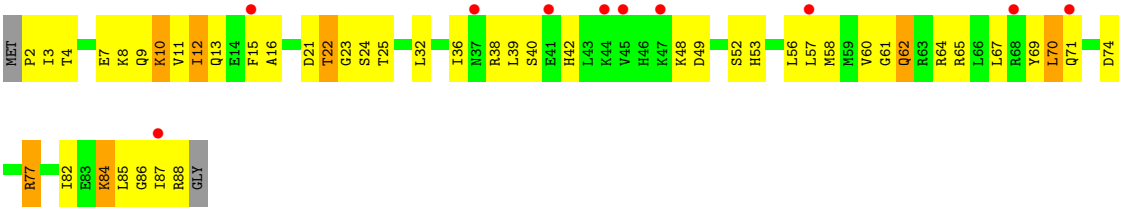
• Molecule 15: 30S ribosomal protein S15

Chain 6I:



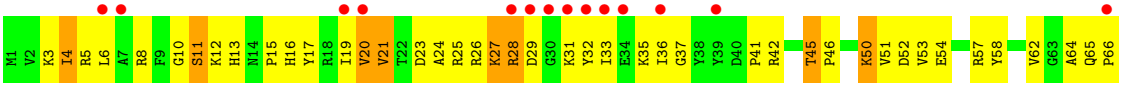
• Molecule 15: 30S ribosomal protein S15

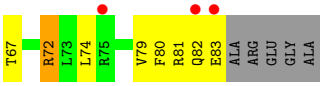
Chain 6A:



• Molecule 16: 30S ribosomal protein S16

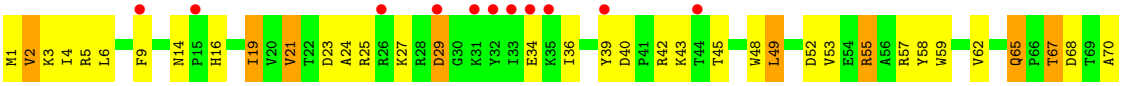
Chain 7I:

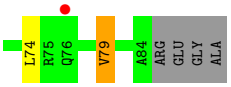




• Molecule 16: 30S ribosomal protein S16

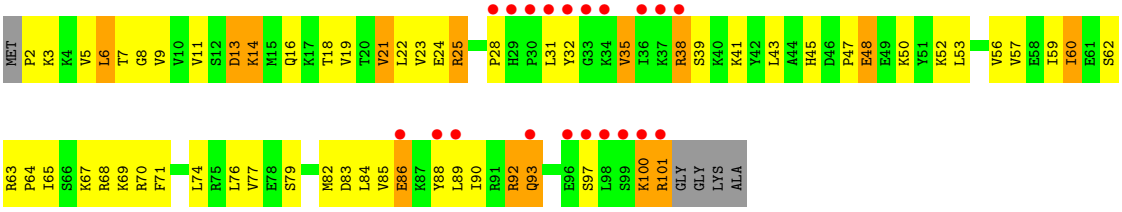
Chain 7A:





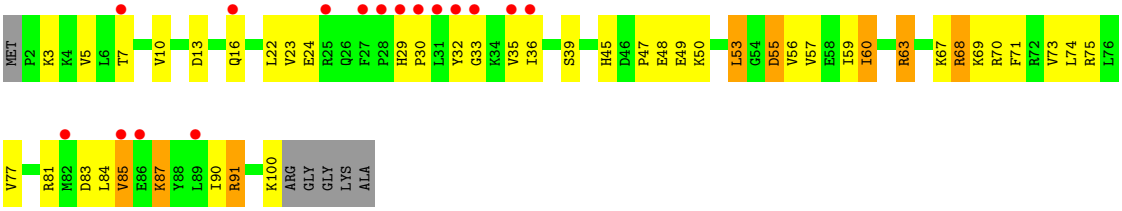
• Molecule 17: 30S ribosomal protein S17

Chain 8I:



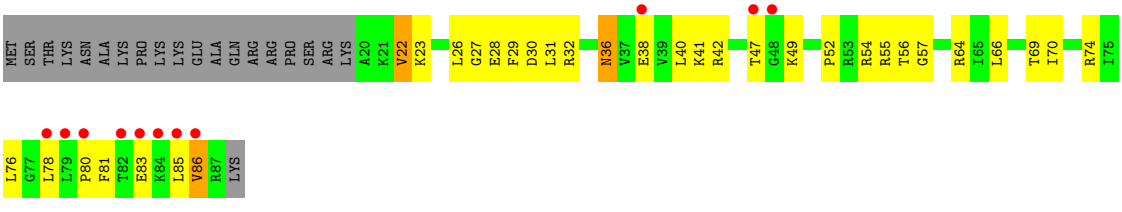
• Molecule 17: 30S ribosomal protein S17

Chain 8A:



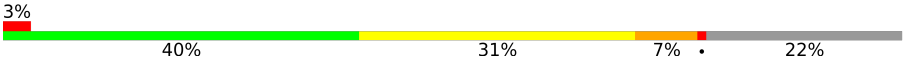
• Molecule 18: 30S ribosomal protein S18

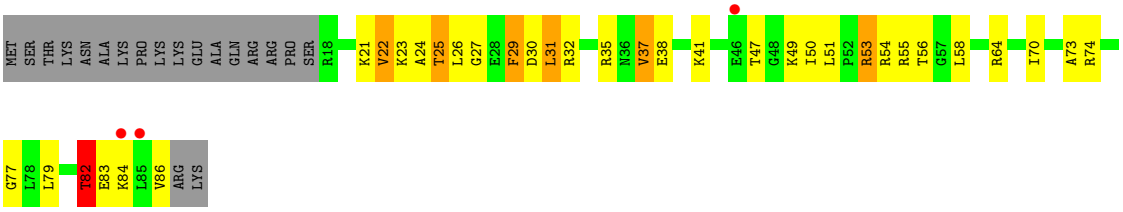
Chain 9I:



• Molecule 18: 30S ribosomal protein S18

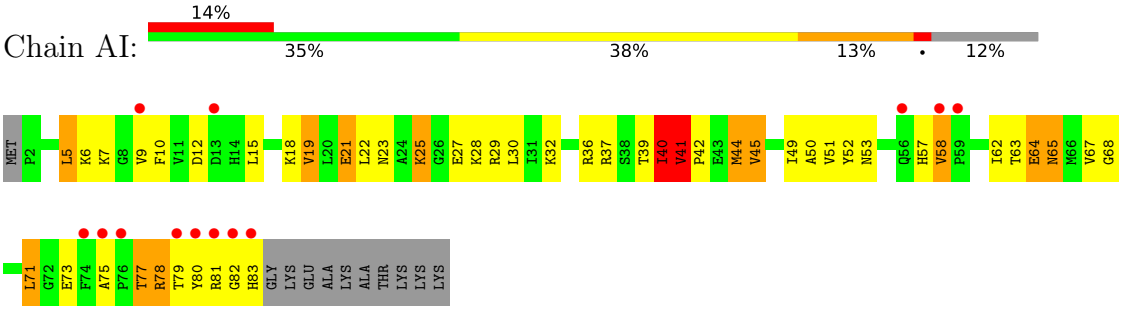
Chain 9A:





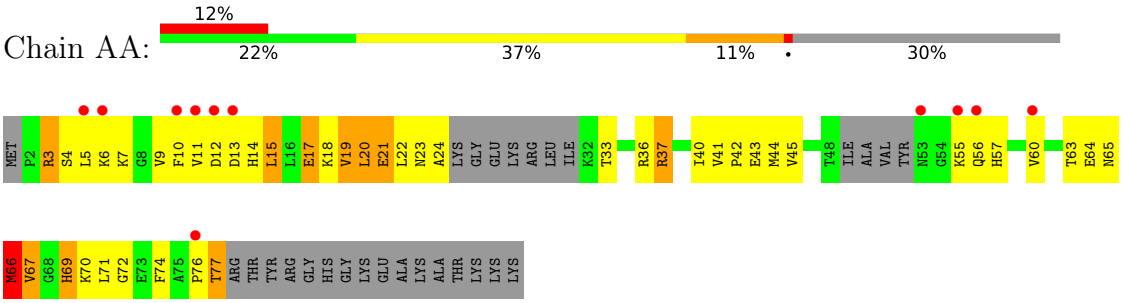
• Molecule 19: 30S ribosomal protein S19

Chain AI:



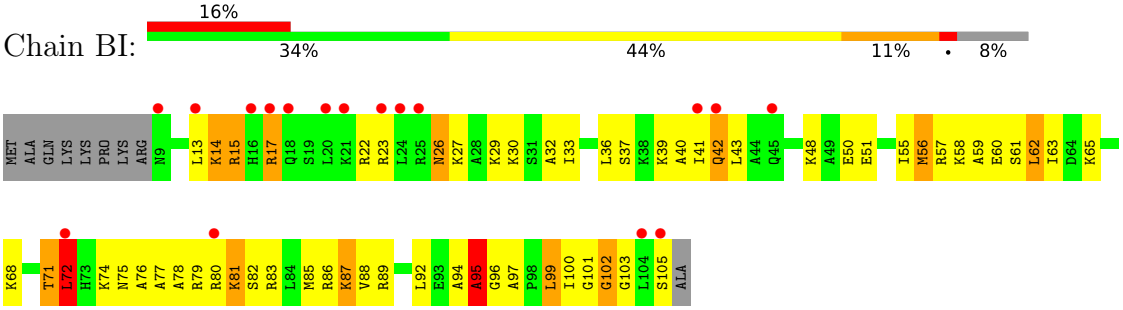
• Molecule 19: 30S ribosomal protein S19

Chain AA:



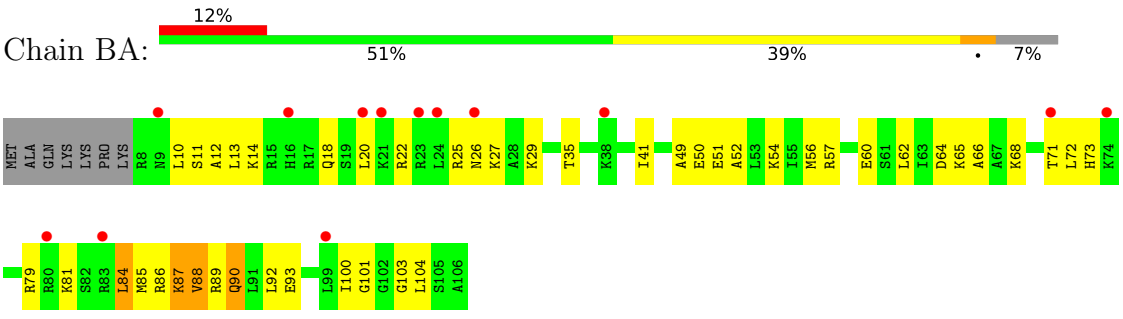
• Molecule 20: 30S ribosomal protein S20

Chain BI:



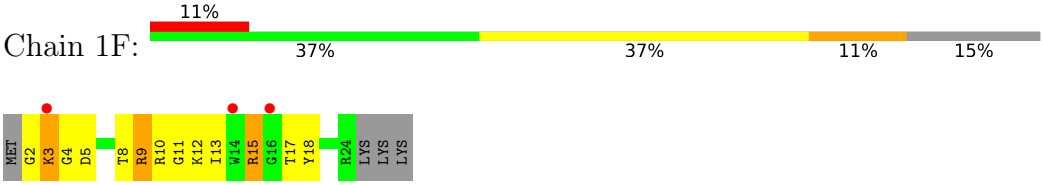
• Molecule 20: 30S ribosomal protein S20

Chain BA:



• Molecule 21: 30S ribosomal protein Thx

Chain 1F:

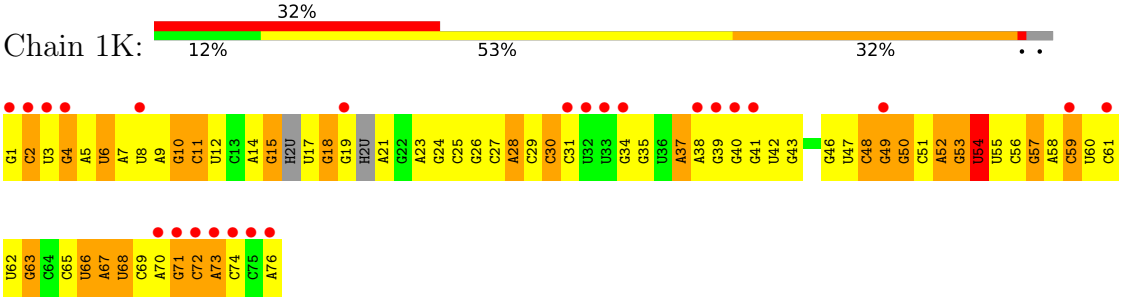


• Molecule 21: 30S ribosomal protein Thx

Chain 1B:

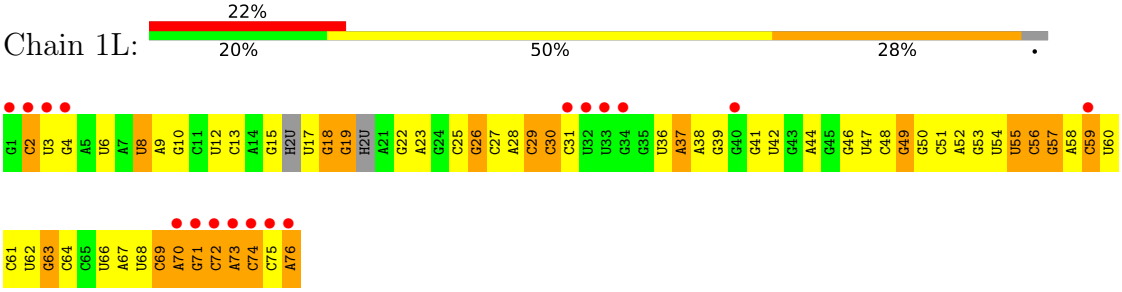
• Molecule 22: tRNAThr

Chain 1K:



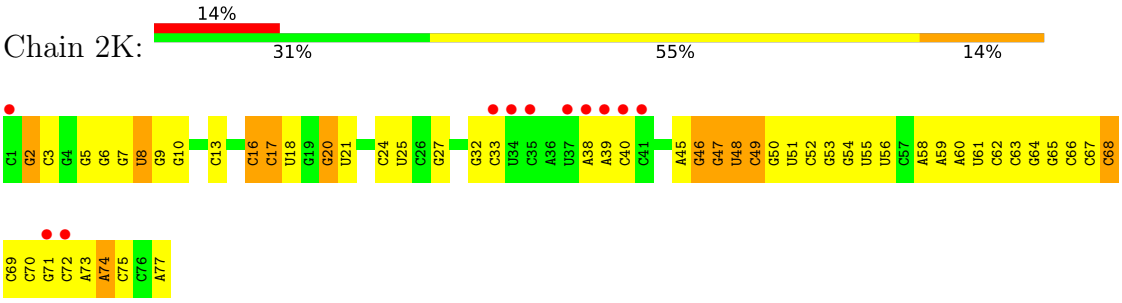
• Molecule 22: tRNAThr

Chain 1L:



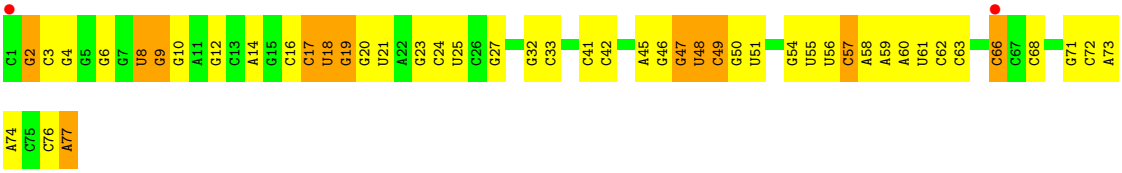
• Molecule 23: tRNAfMet

Chain 2K:

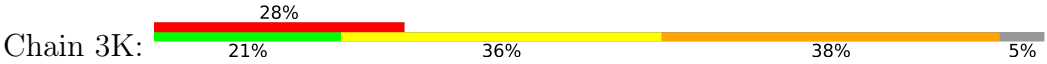


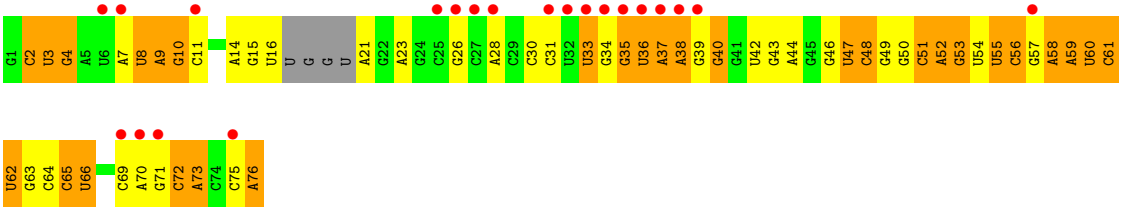
• Molecule 23: tRNAfMet

Chain 2L:

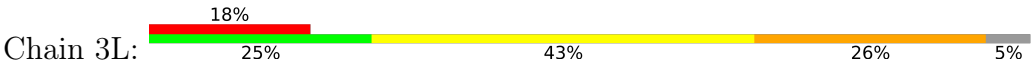


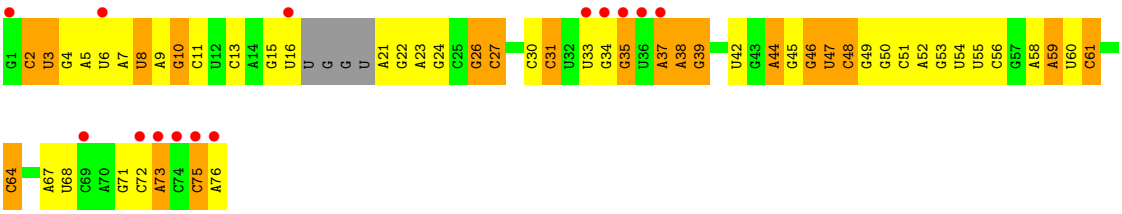
• Molecule 24: tRNAThr



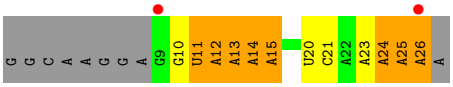


• Molecule 24: tRNAThr

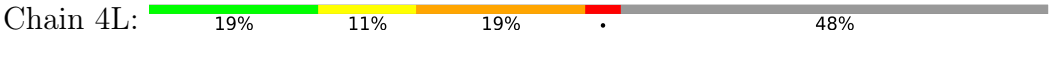




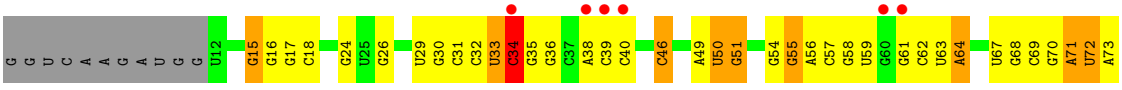
• Molecule 25: mRNA

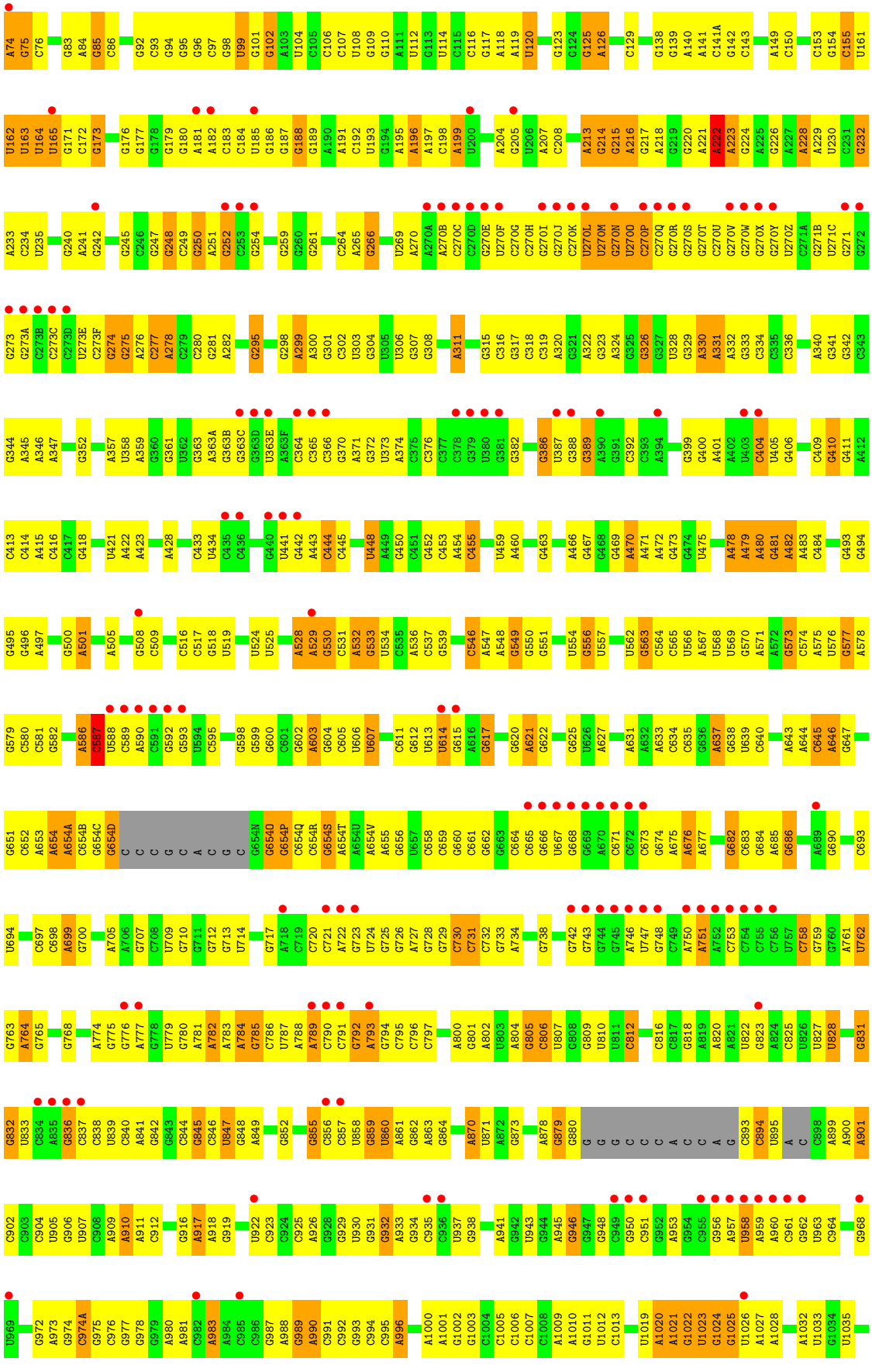


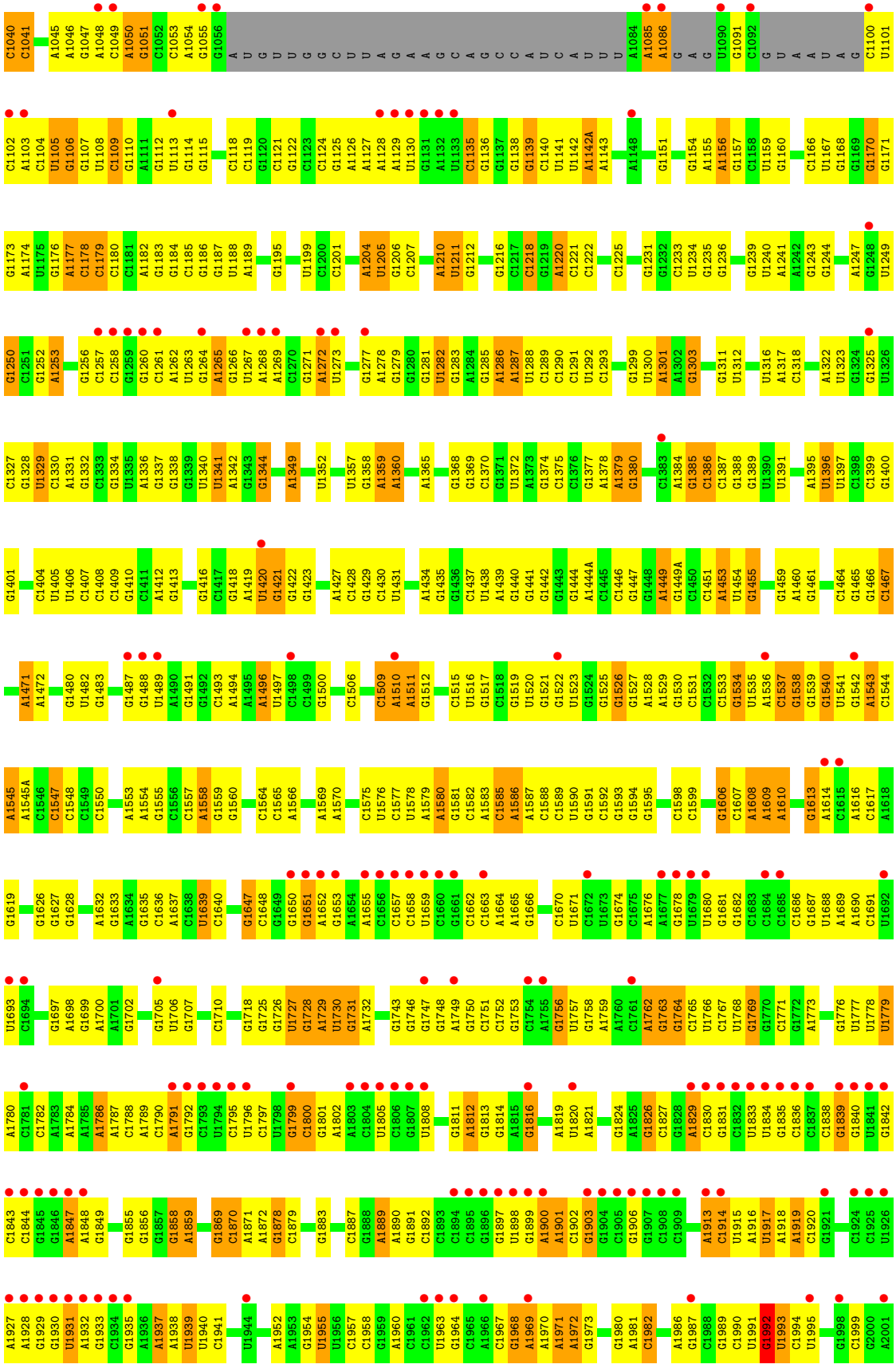
• Molecule 25: mRNA

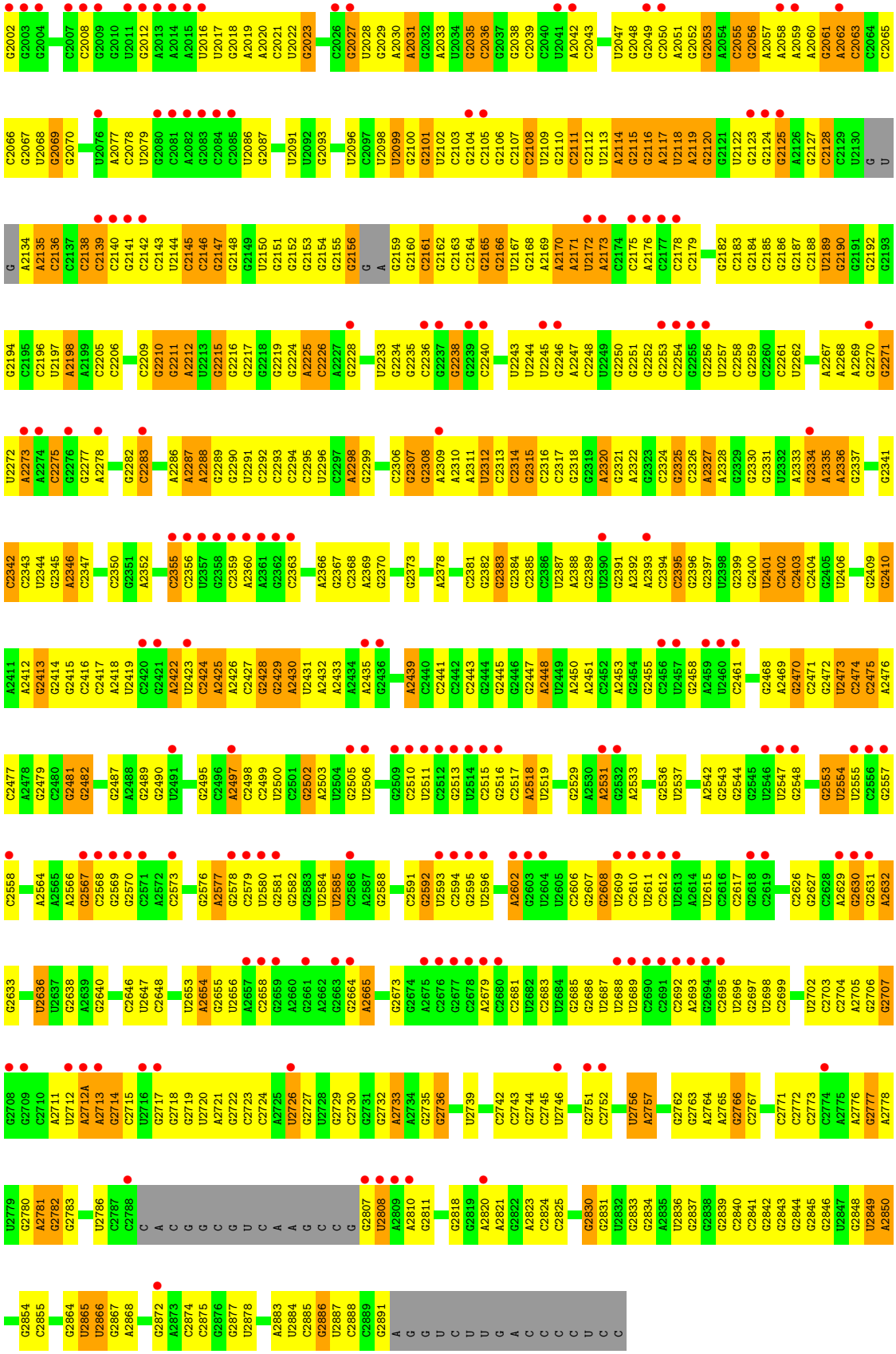


• Molecule 26: 23S ribosomal RNA





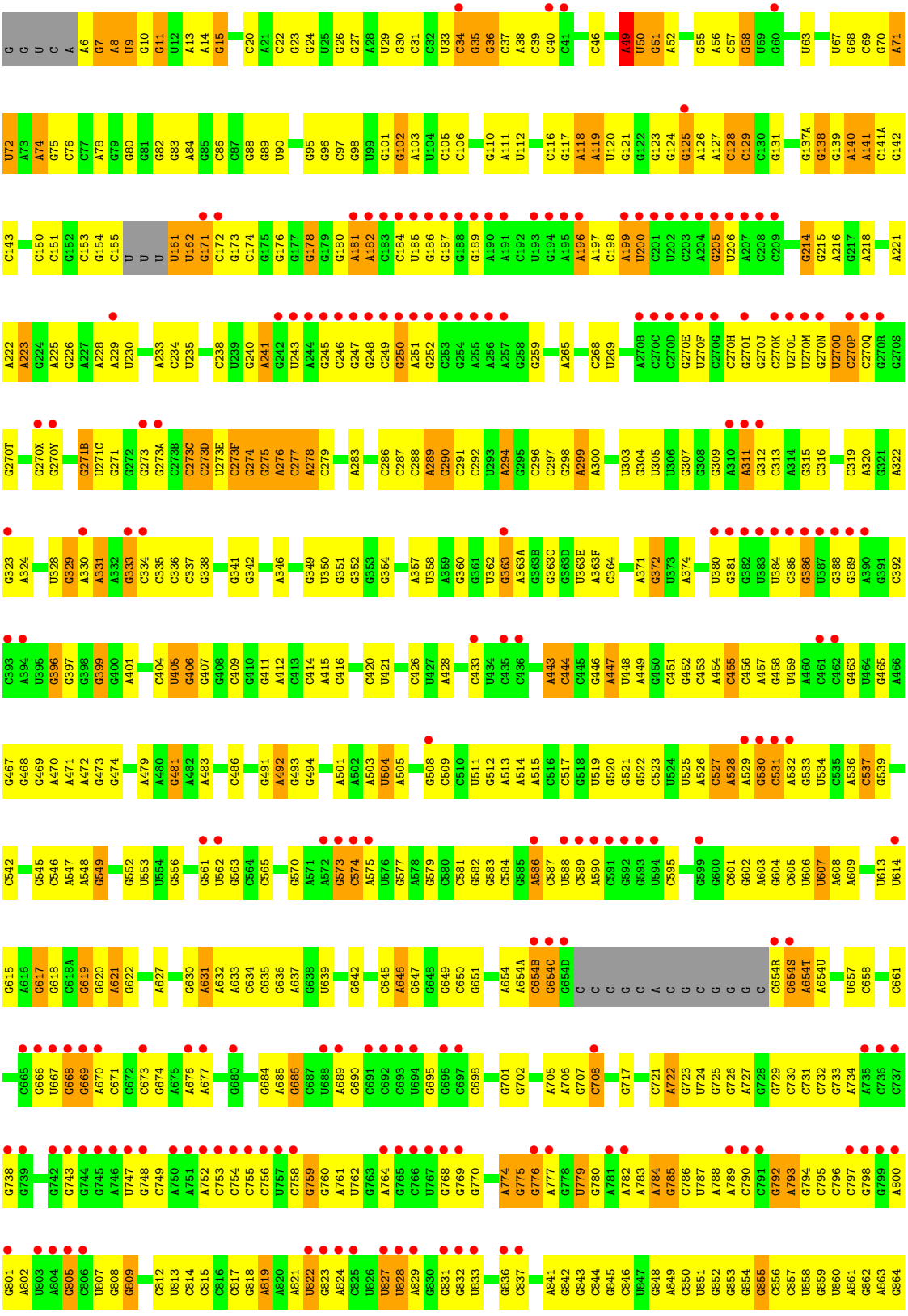




• Molecule 26: 23S ribosomal RNA

Chain 14:

20%
36%
47%
14%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U72 A73 A74 G75 C76 C77 A78 G79 G80 G81 G82 G83 A84 G85 C86 C87 G88 G89 U90 G95 G96 C97 G98 U99 G101 G102 A103 U104 C105 C106 G110 A111 U112 C116 G117 A118 A119 U120 G121 G122 G123 G124 G125 A126 A127 C128 C129 C130 G131 G137A G138 G139 A140 A141 C141A G142
C143 C150 C151 G152 C153 G154 C155 U U U U161 U162 G171 C172 G173 C174 G175 G176 G177 G178 G179 G180 A181 A182 C183 C184 U185 G186 G187 G188 G189 A190 A191 C192 U193 G194 A195 A196 A197 C198 A199 U200 C201 U202 C203 A204 G205 U206 A207 C208 C209 G214 G215 A216 G217 A218 A221
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G270T G270X G270Y G271B U271C G271 G272 G273 G273A C273B C273C C273D U273E C273F G274 G275 A276 C277 A278 C279 A283 C286 C287 C288 A289 G290 C291 C292 U293 A294 G295 C296 C297 G298 A299 A300 U303 G304 U305 U306 G307 G308 G309 A310 A311 G312 C313 A314 G315 C316 C319 A320 G321 A322
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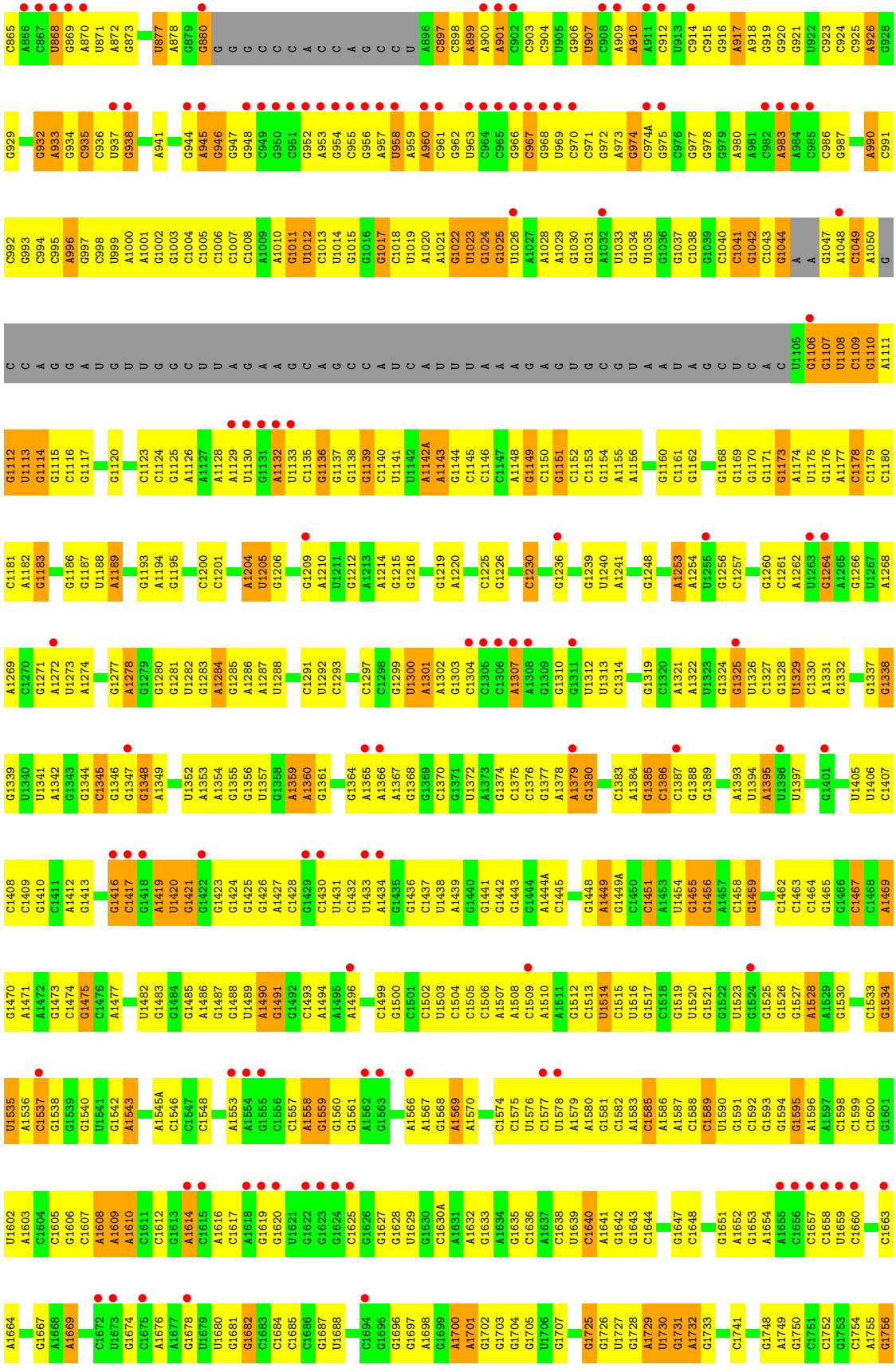
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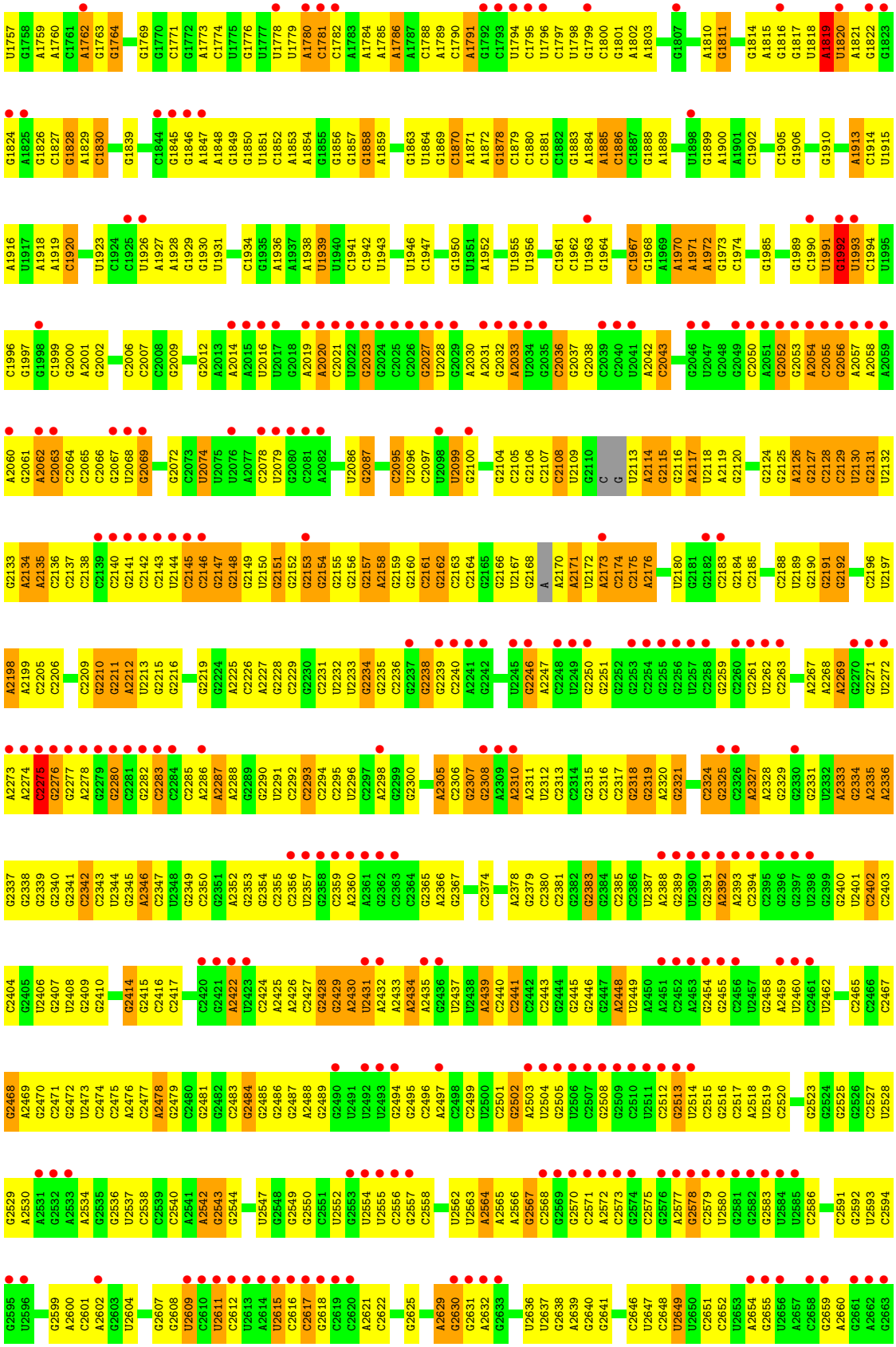
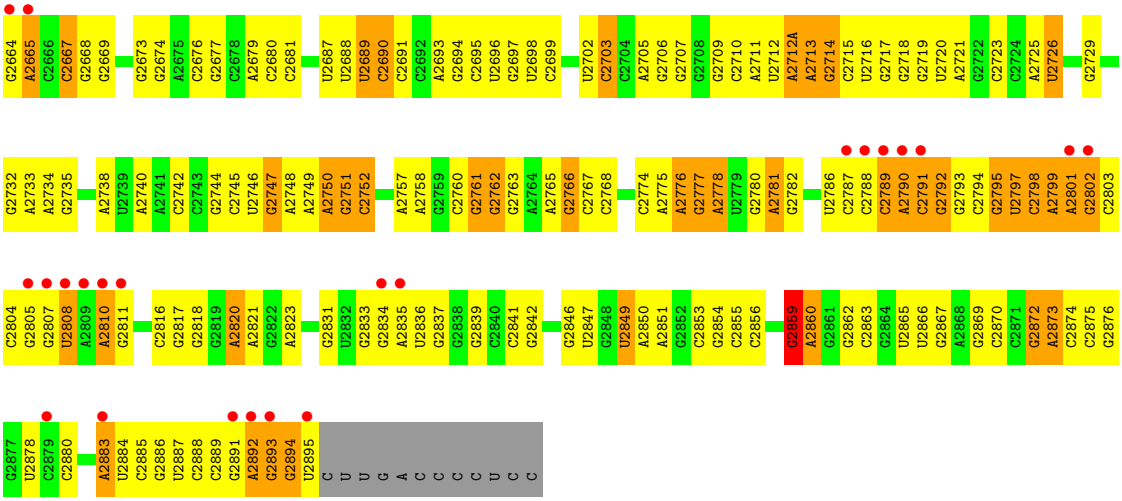
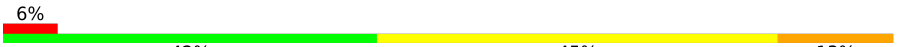
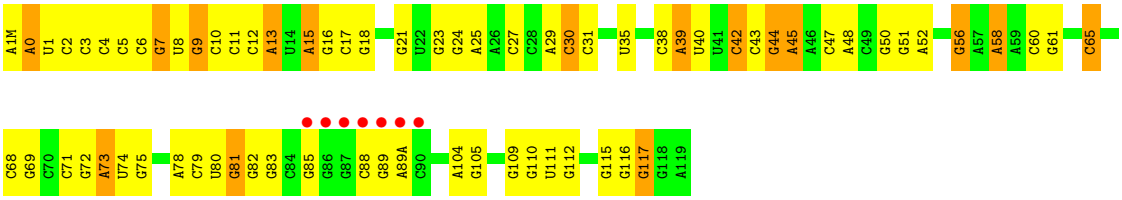




• Molecule 27: 5S ribosomal RNA

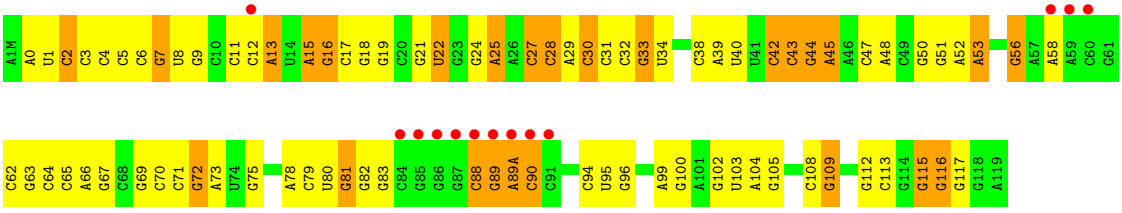
Chain 16:





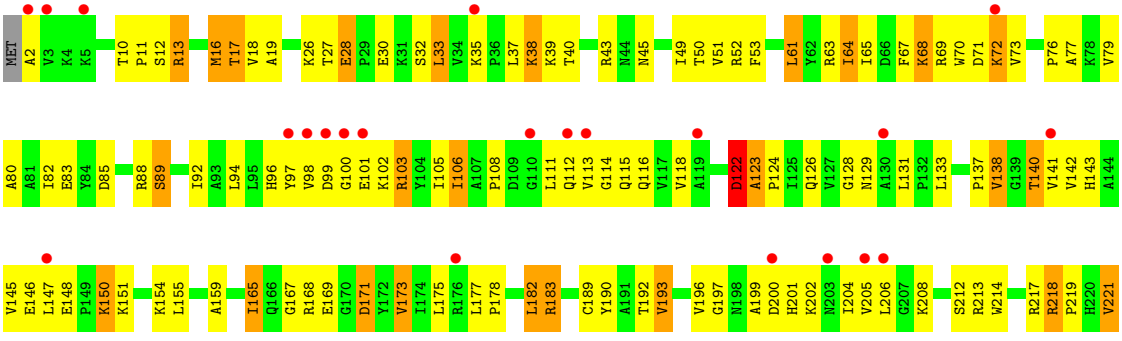
• Molecule 27: 5S ribosomal RNA

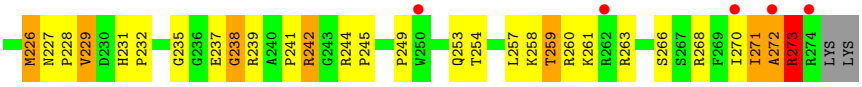
Chain 1J:



• Molecule 28: 50S ribosomal protein L2

Chain 11:





• Molecule 28: 50S ribosomal protein L2

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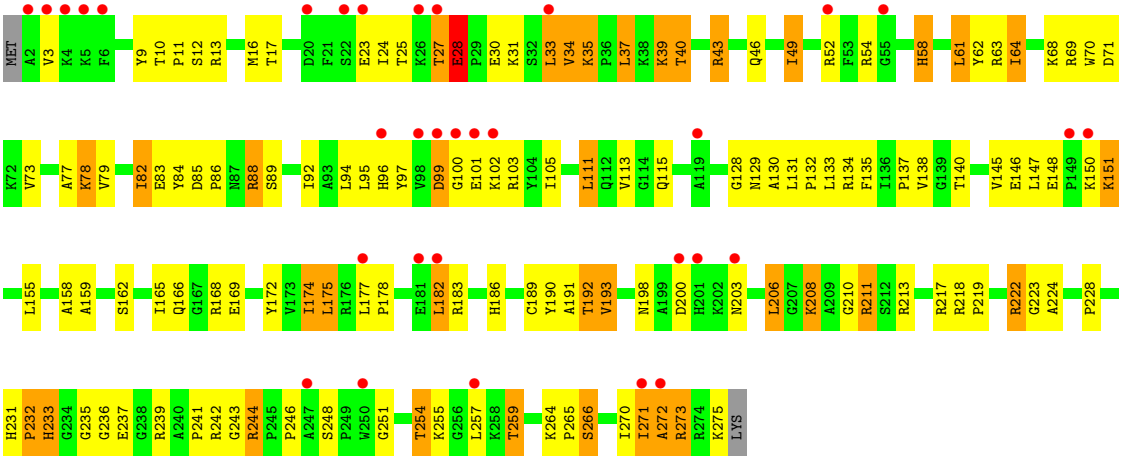
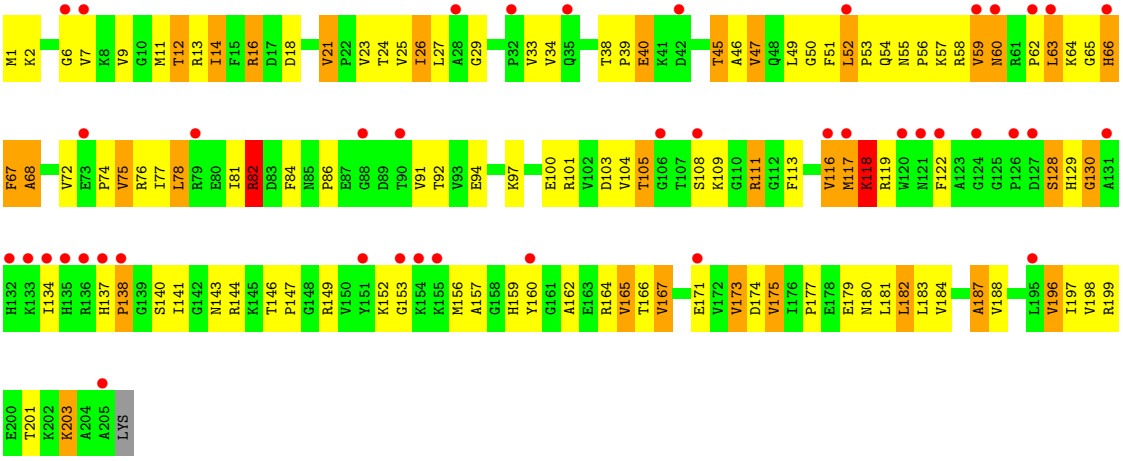


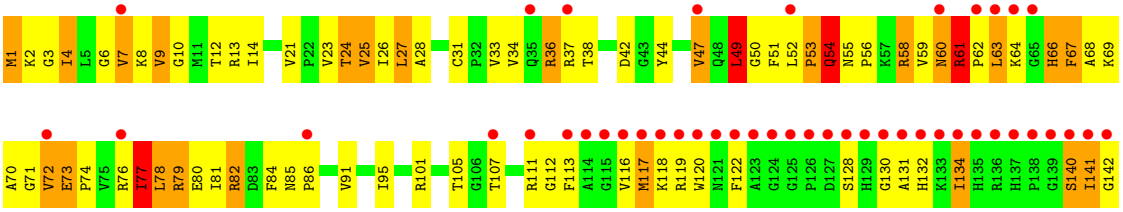
• Molecule 29: 50S ribosomal protein L3

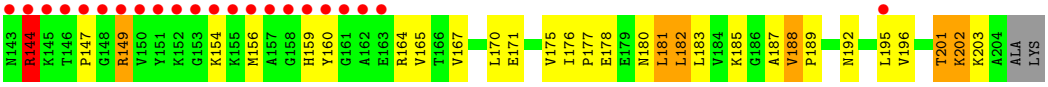
Chain 21:



• Molecule 29: 50S ribosomal protein L3

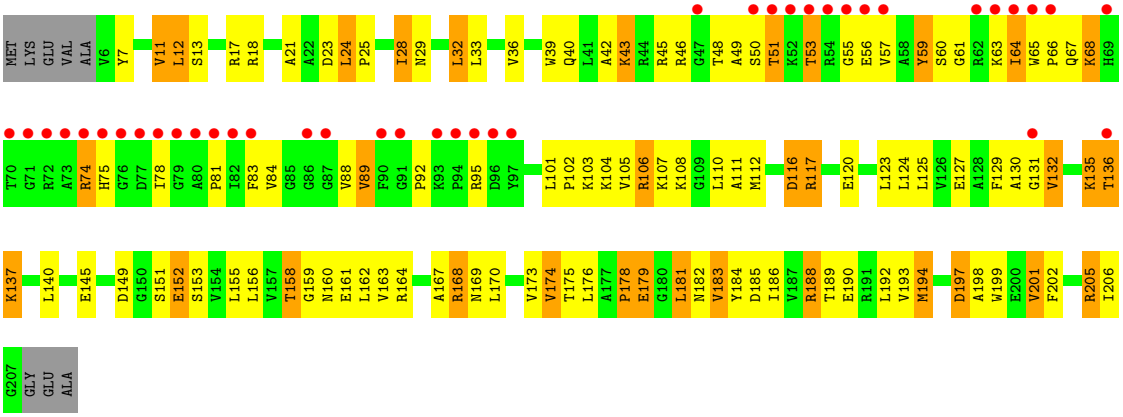
Chain 29:





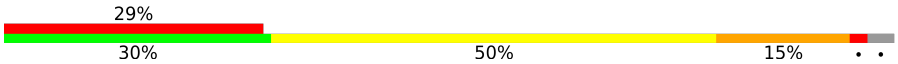
• Molecule 30: 50S ribosomal protein L4

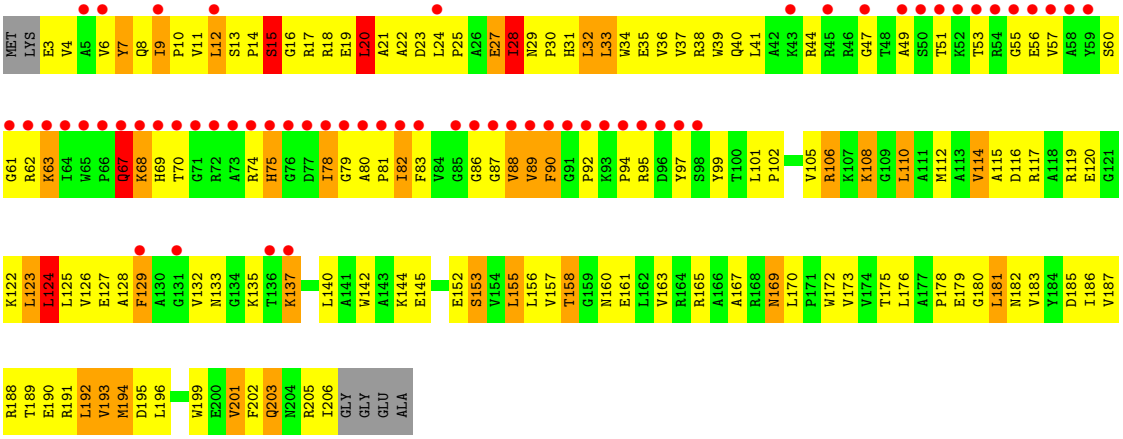
Chain 31:



• Molecule 30: 50S ribosomal protein L4

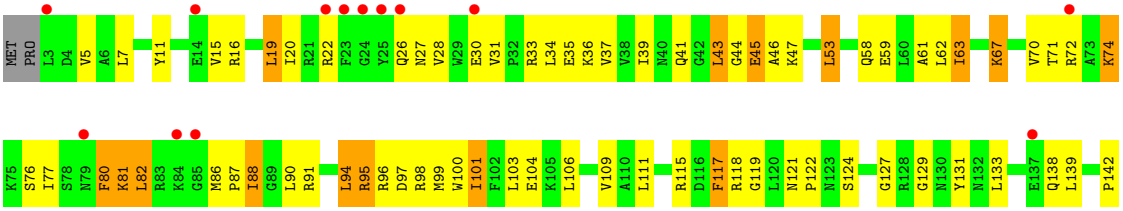
Chain 39:

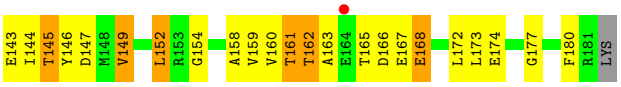




• Molecule 31: 50S ribosomal protein L5

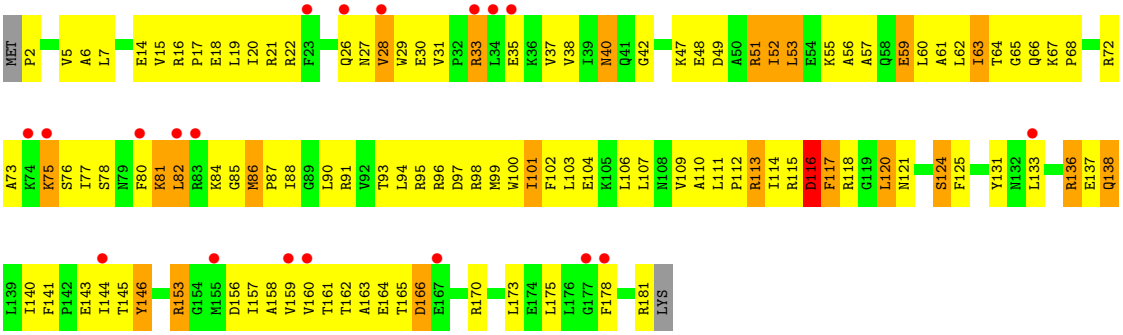
Chain 41:





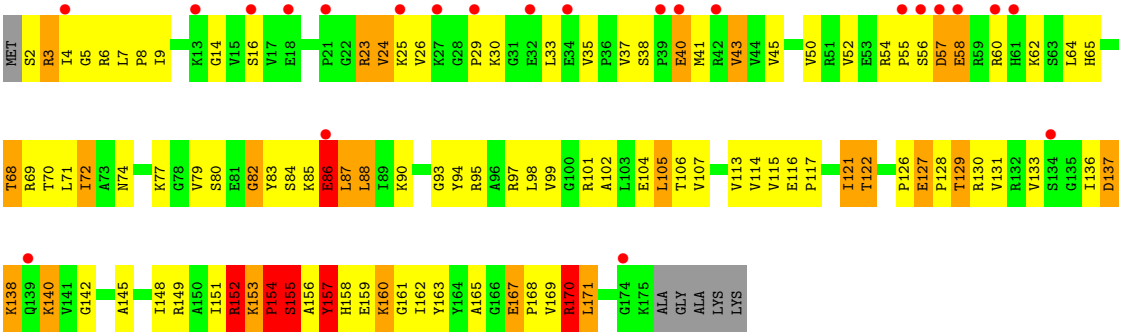
• Molecule 31: 50S ribosomal protein L5

Chain 49:



• Molecule 32: 50S ribosomal protein L6

Chain 51:



• Molecule 32: 50S ribosomal protein L6

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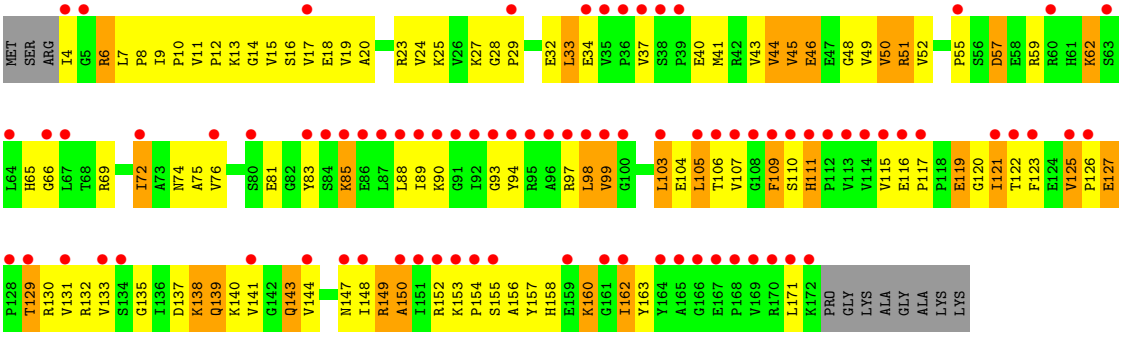
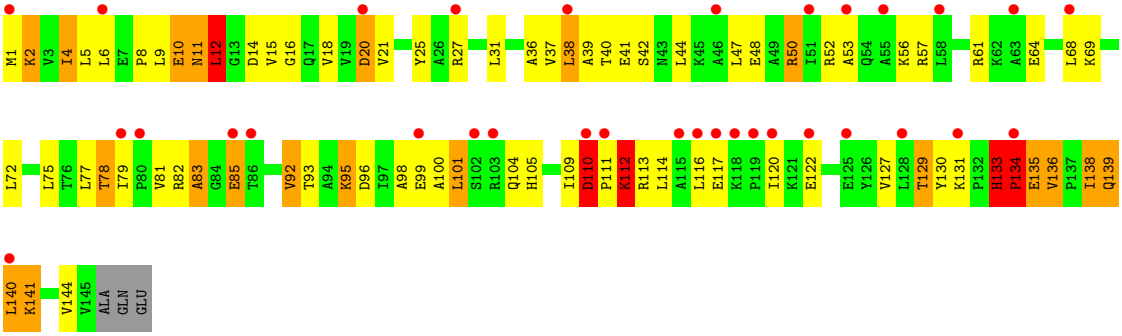


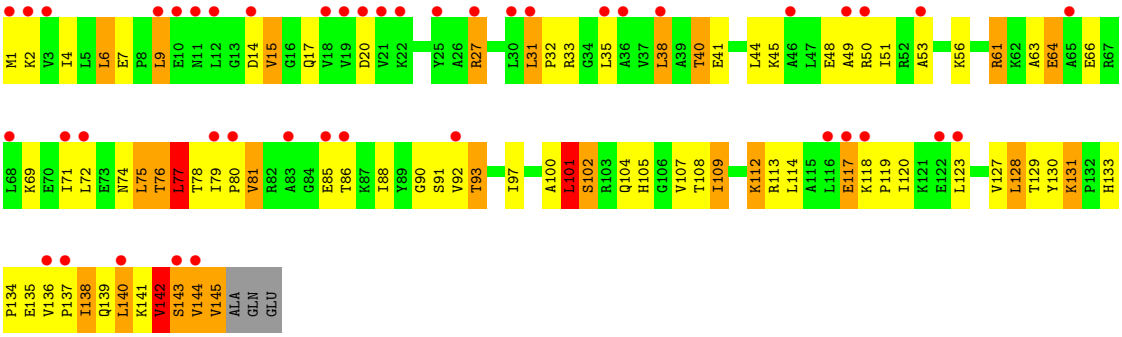
• Molecule 33: 50S ribosomal protein L9

Chain 61:



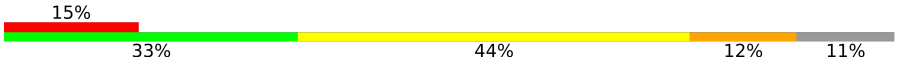
• Molecule 33: 50S ribosomal protein L9

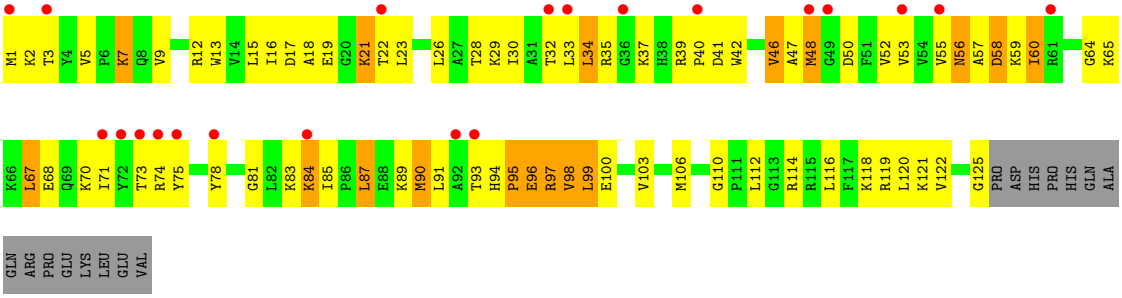
Chain 69:



• Molecule 34: 50S ribosomal protein L13

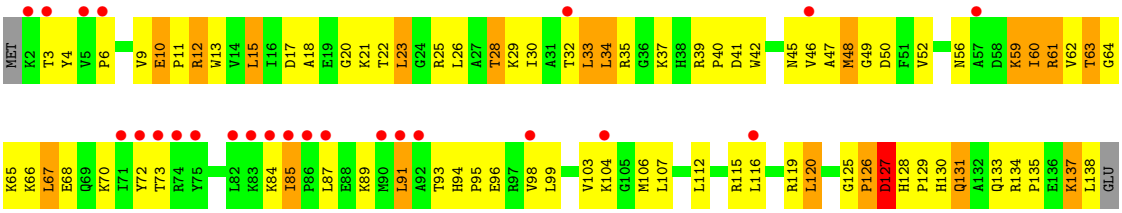
Chain 58:





• Molecule 34: 50S ribosomal protein L13

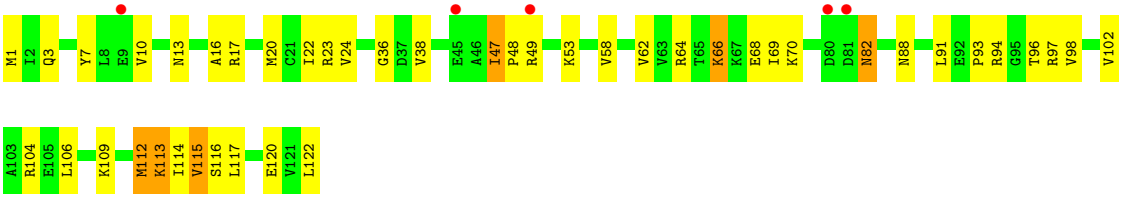
Chain 15:



VAL

• Molecule 35: 50S ribosomal protein L14

Chain 68:



• Molecule 35: 50S ribosomal protein L14

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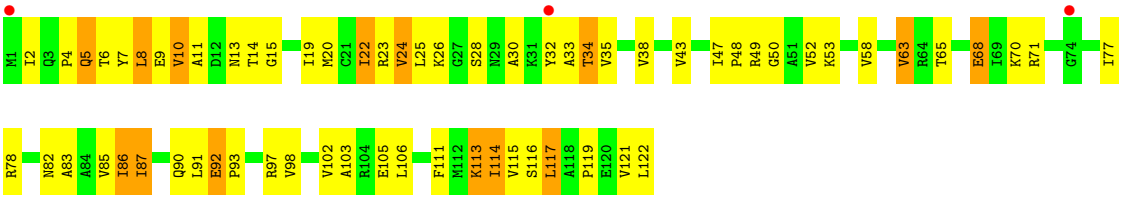
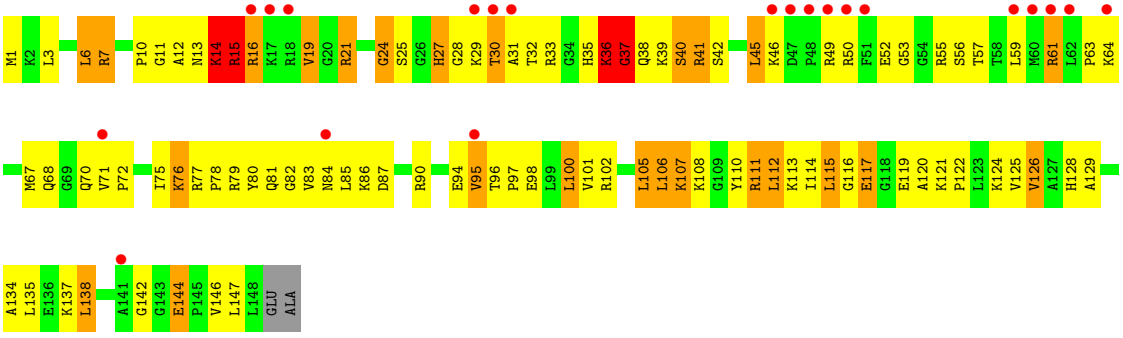


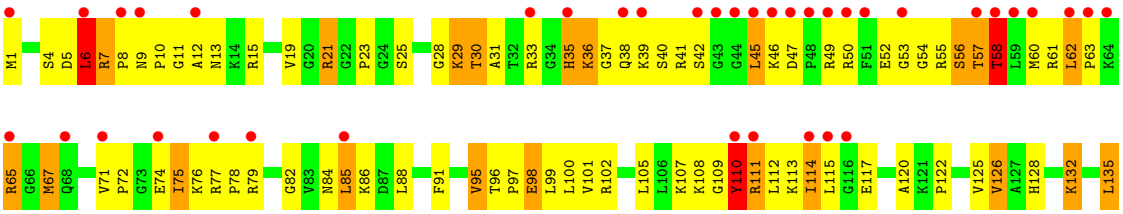
• Molecule 36: 50S ribosomal protein L15

Chain 78:



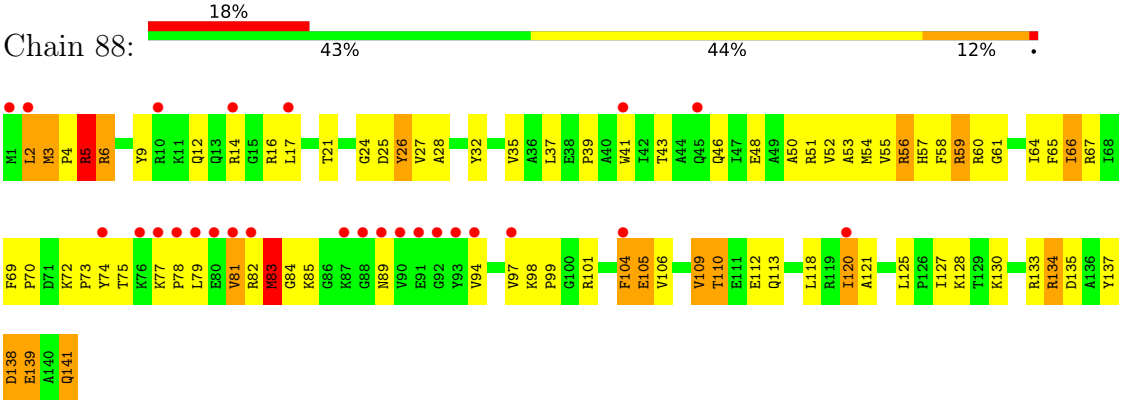
• Molecule 36: 50S ribosomal protein L15

Chain 35:



• Molecule 37: 50S ribosomal protein L16

Chain 88:



• Molecule 37: 50S ribosomal protein L16

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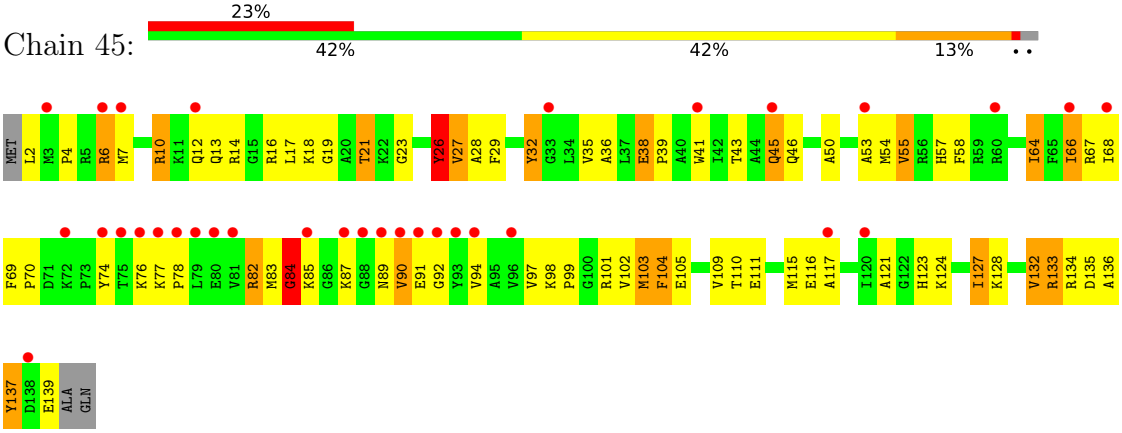
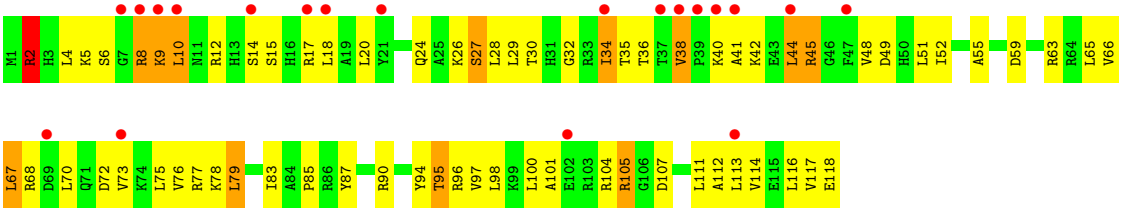


• Molecule 38: 50S ribosomal protein L17

Chain 98:



• Molecule 38: 50S ribosomal protein L17

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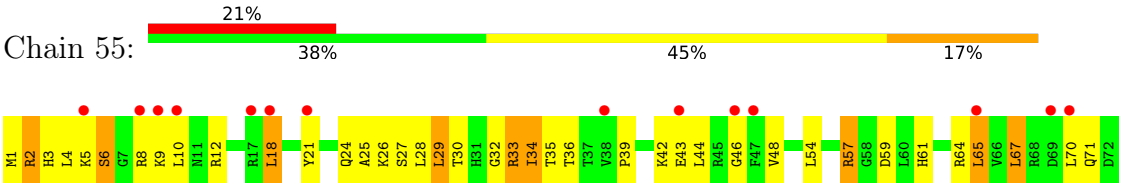
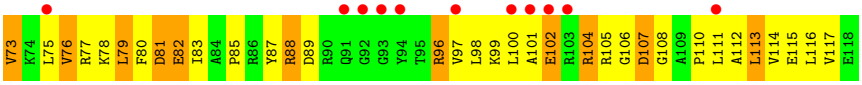
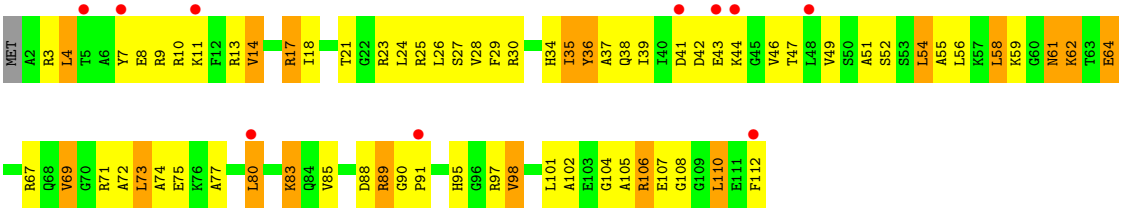




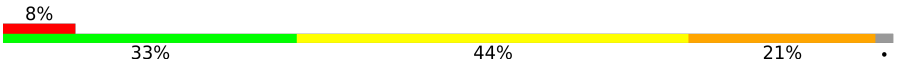
• Molecule 39: 50S ribosomal protein L18

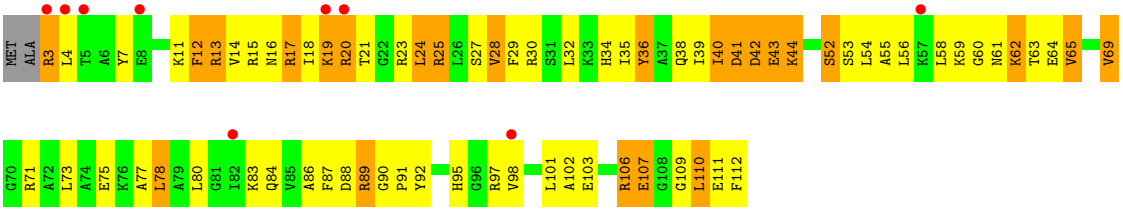
Chain A8:



• Molecule 39: 50S ribosomal protein L18

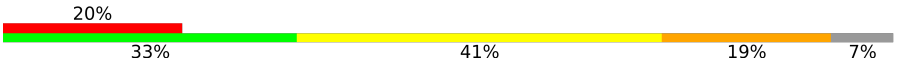
Chain 65:

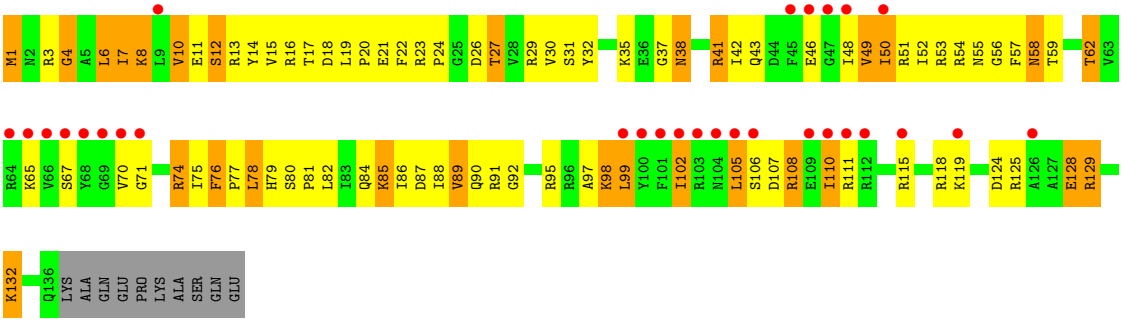




• Molecule 40: 50S ribosomal protein L19

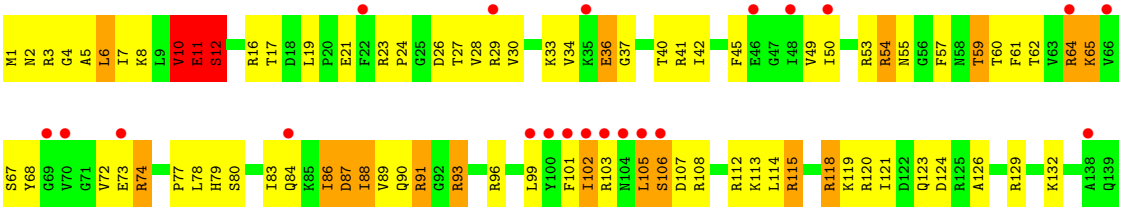
Chain B8:

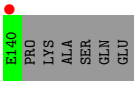




• Molecule 40: 50S ribosomal protein L19

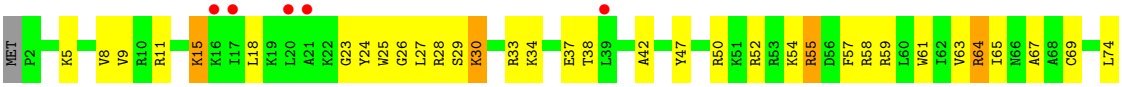
Chain 75:

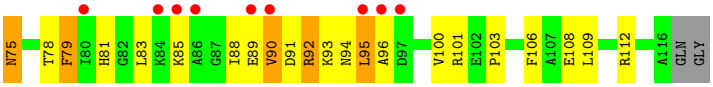




• Molecule 41: 50S ribosomal protein L20

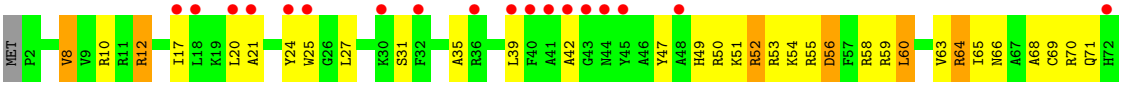
Chain C8:

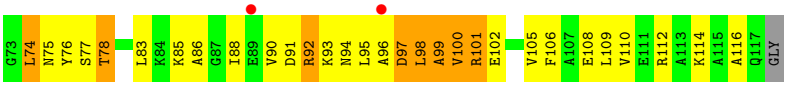




• Molecule 41: 50S ribosomal protein L20

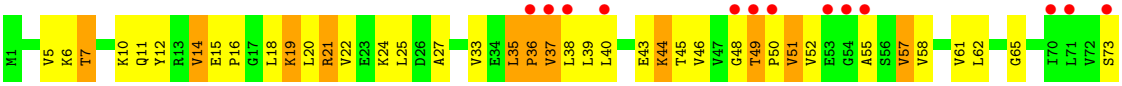
Chain 85:

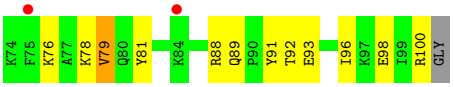




• Molecule 42: 50S ribosomal protein L21

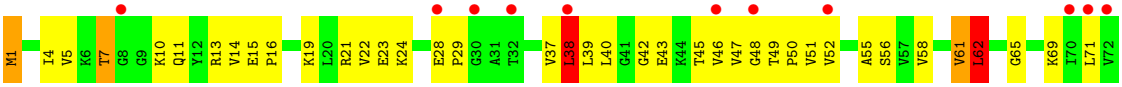
Chain D8:

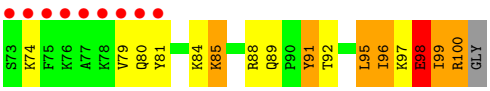




• Molecule 42: 50S ribosomal protein L21

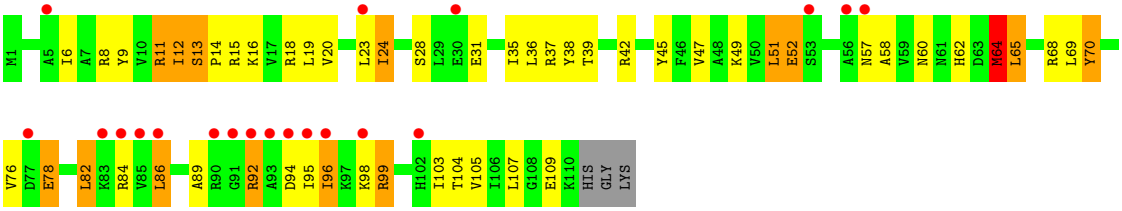
Chain 95:



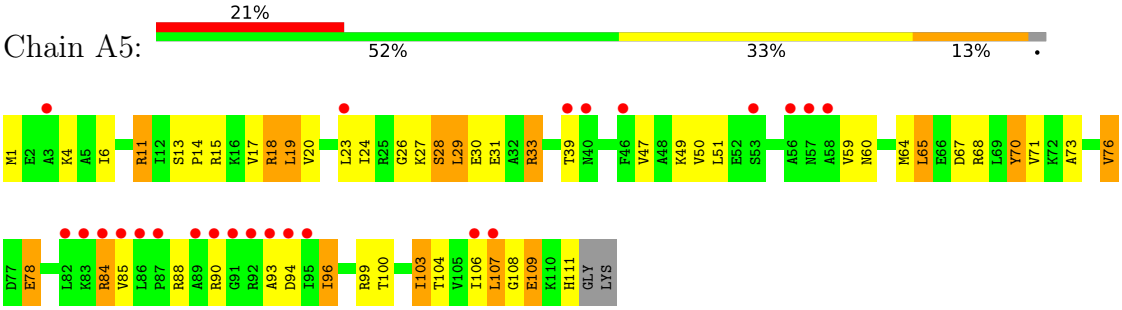


• Molecule 43: 50S ribosomal protein L22

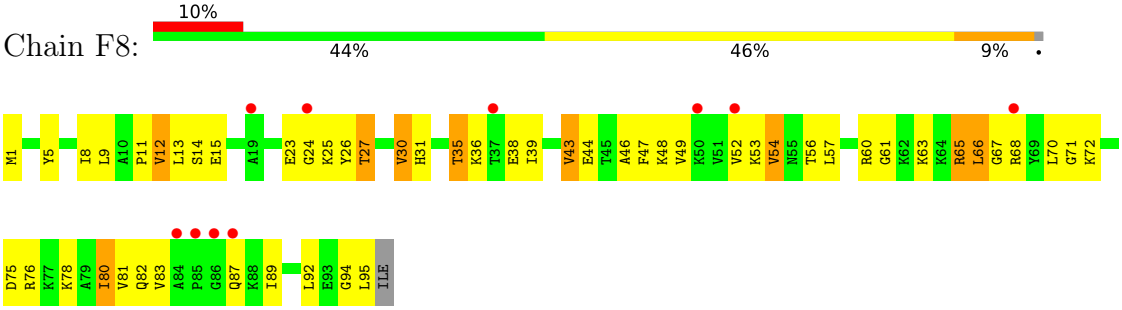
Chain E8:



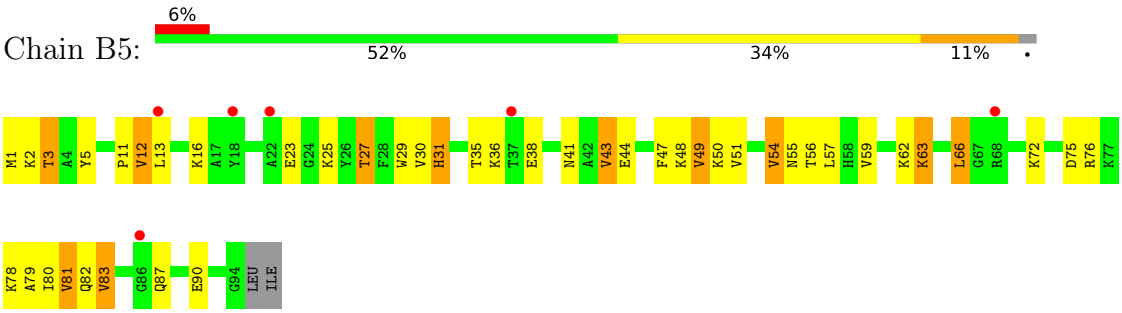
• Molecule 43: 50S ribosomal protein L22



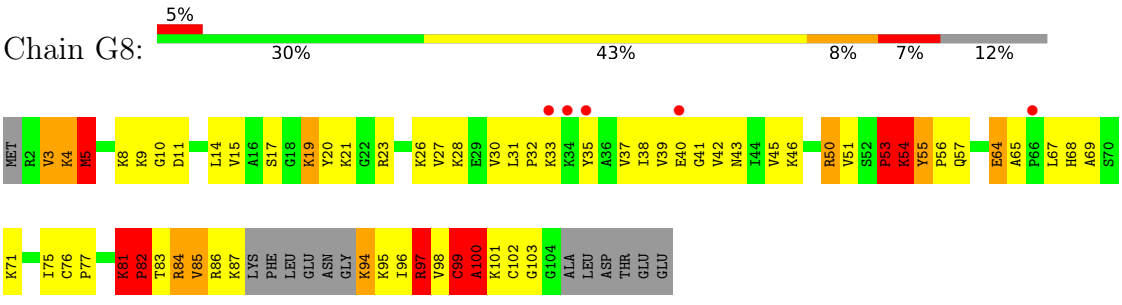
• Molecule 44: 50S ribosomal protein L23



• Molecule 44: 50S ribosomal protein L23

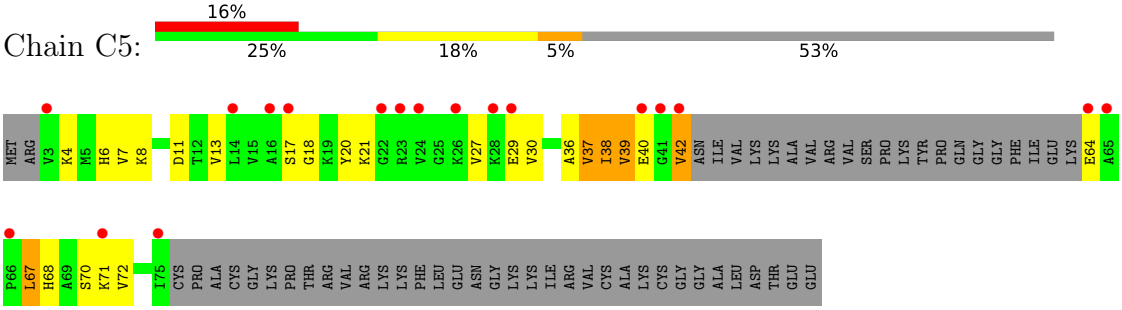


• Molecule 45: 50S ribosomal protein L24



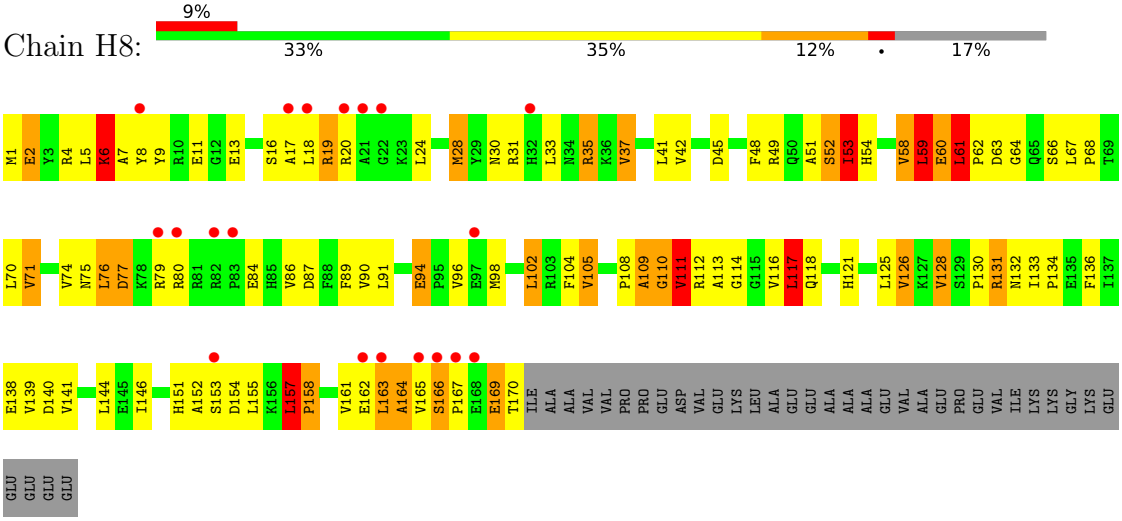
• Molecule 45: 50S ribosomal protein L24

Chain C5:



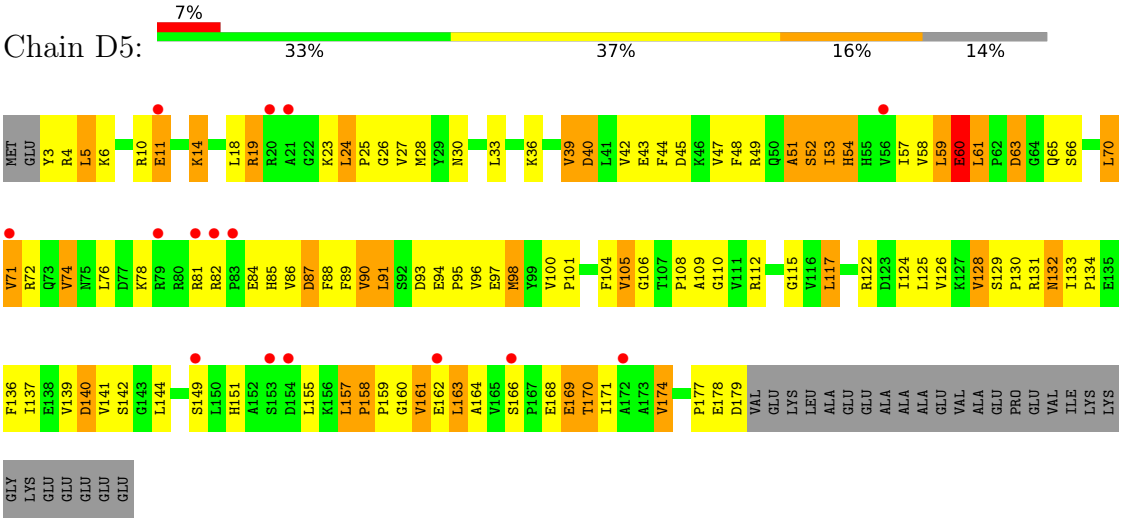
• Molecule 46: 50S ribosomal protein L25

Chain H8:



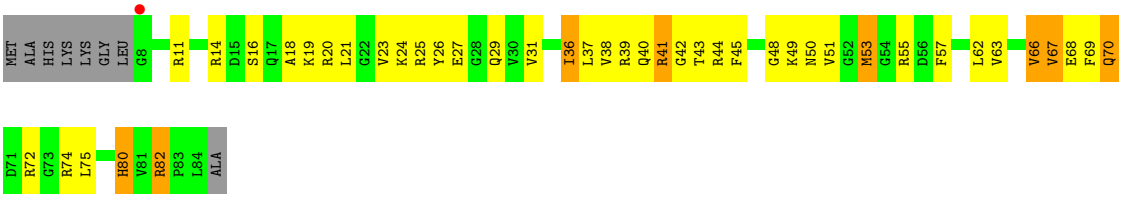
• Molecule 46: 50S ribosomal protein L25

Chain D5:



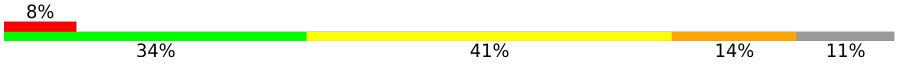
• Molecule 47: 50S ribosomal protein L27

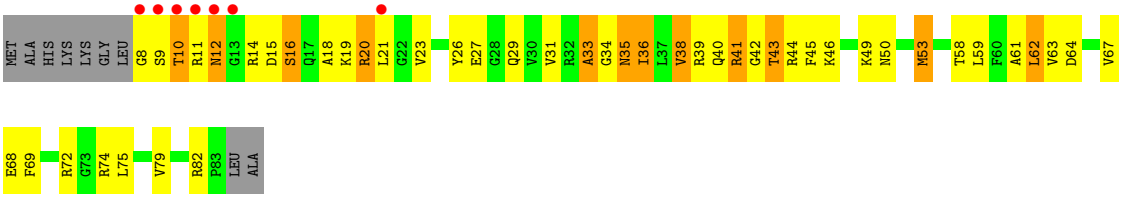
Chain I8:



• Molecule 47: 50S ribosomal protein L27

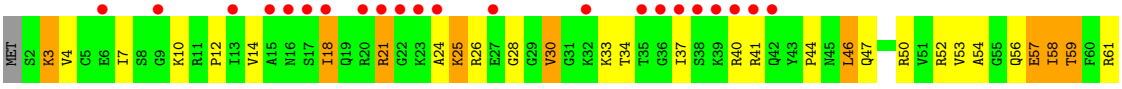
Chain E5:

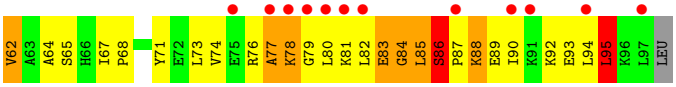




• Molecule 48: 50S ribosomal protein L28

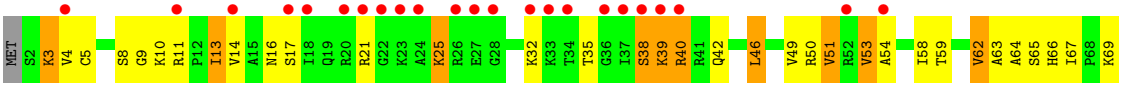
Chain J8:

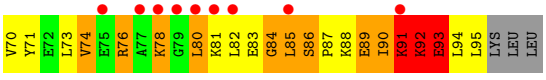




• Molecule 48: 50S ribosomal protein L28

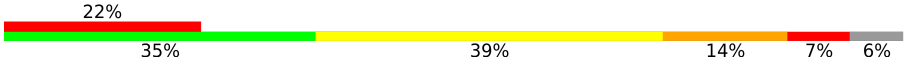
Chain F5:

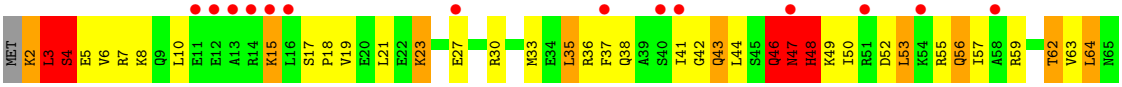


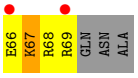


• Molecule 49: 50S ribosomal protein L29

Chain K8:

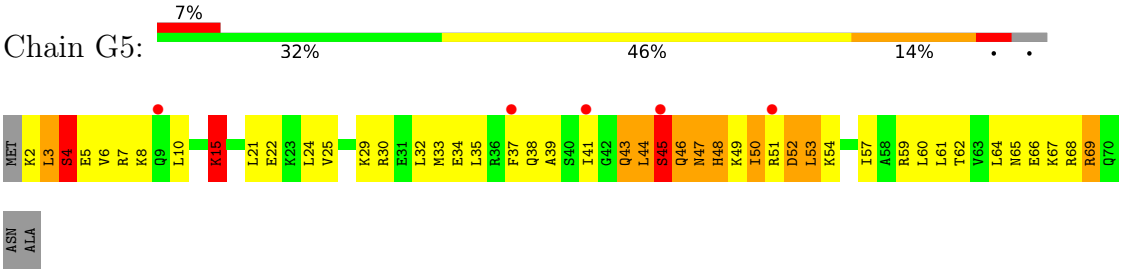






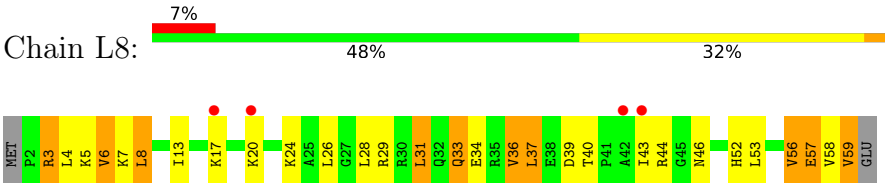
• Molecule 49: 50S ribosomal protein L29

Chain G5:



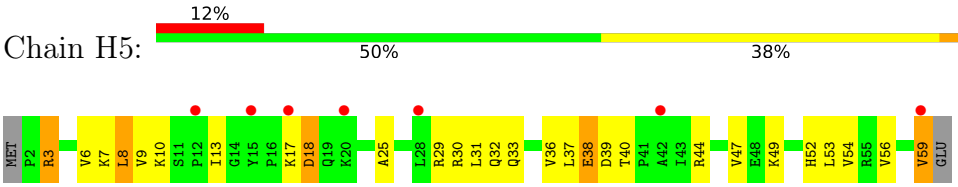
• Molecule 50: 50S ribosomal protein L30

Chain L8:



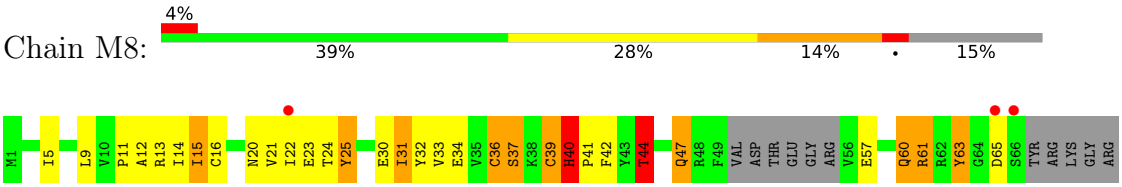
• Molecule 50: 50S ribosomal protein L30

Chain H5:



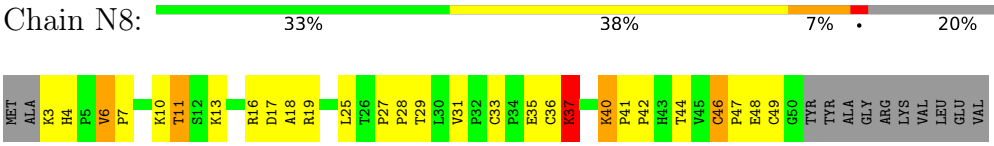
• Molecule 51: 50S ribosomal protein L31

Chain M8:



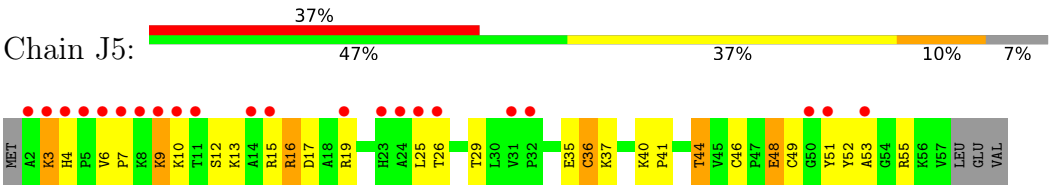
• Molecule 52: 50S ribosomal protein L32

Chain N8:



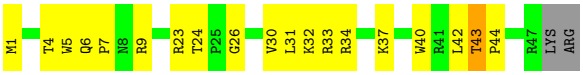
• Molecule 52: 50S ribosomal protein L32

Chain J5:



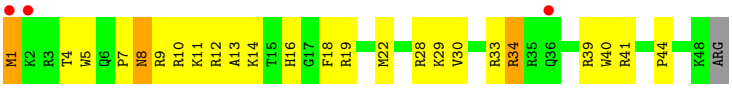
• Molecule 53: 50S ribosomal protein L34

Chain P8:



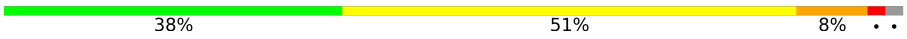
• Molecule 53: 50S ribosomal protein L34

Chain L5:



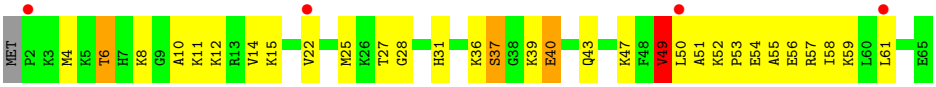
• Molecule 54: 50S ribosomal protein L35

Chain Q8:



• Molecule 54: 50S ribosomal protein L35

Chain M5:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	209.82Å 449.75Å 618.71Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	224.88 – 3.36 224.88 – 3.36	Depositor EDS
% Data completeness (in resolution range)	99.9 (224.88-3.36) 91.0 (224.88-3.36)	Depositor EDS
R_{merge}	0.36	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.88 (at 3.33Å)	Xtriage
Refinement program	PHENIX 1.12_2829	Depositor
R, R_{free}	0.200 , 0.264 0.202 , 0.263	Depositor DCC
R_{free} test set	2000 reflections (0.24%)	wwPDB-VP
Wilson B-factor (Å^2)	101.0	Xtriage
Anisotropy	0.195	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.32 , 181.3	EDS
L-test for twinning[2]	$< \|L\| > = 0.46$, $< L^2 > = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.89	EDS
Total number of atoms	292640	wwPDB-VP
Average B, all atoms (Å^2)	120.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.48% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: PSU, ZN, AET, MG, 5MU, H2U, SF4

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	13	0.41	0/36095	0.61	5/56332 (0.0%)
1	1G	0.41	0/35850	0.62	1/55949 (0.0%)
2	12	0.34	0/1727	0.66	2/2326 (0.1%)
2	1E	0.34	0/1908	0.63	2/2573 (0.1%)
3	22	0.35	0/1569	0.68	1/2116 (0.0%)
3	2E	0.37	0/1629	0.65	1/2195 (0.0%)
4	32	0.35	0/1732	0.67	0/2318
4	3E	0.38	0/1728	0.66	0/2313
5	42	0.35	0/1156	0.58	0/1557
5	4E	0.55	1/1158 (0.1%)	0.64	0/1559
6	52	0.37	0/855	0.58	0/1154
6	5E	0.36	0/850	0.57	0/1147
7	62	0.33	0/1122	0.64	2/1500 (0.1%)
7	6E	0.37	0/1259	0.61	2/1686 (0.1%)
8	72	0.31	0/1127	0.62	0/1517
8	7E	0.34	0/1135	0.61	0/1527
9	82	0.28	0/971	0.59	0/1304
9	8E	0.34	0/1019	0.68	0/1367
10	1A	0.28	0/814	0.61	0/1095
10	1I	0.34	0/762	0.65	0/1027
11	2A	0.35	0/850	0.57	0/1150
11	2I	0.40	0/838	0.72	1/1133 (0.1%)
12	3A	0.41	0/972	0.74	0/1301
12	3I	0.50	0/972	0.76	0/1301
13	4A	0.35	0/889	0.74	1/1192 (0.1%)
13	4I	0.43	0/952	0.86	3/1277 (0.2%)
14	5A	0.36	0/495	0.77	0/657
14	5I	0.42	0/500	0.77	2/664 (0.3%)
15	6A	0.36	0/740	0.56	0/987
15	6I	0.39	0/740	0.66	0/987
16	7A	0.35	0/721	0.66	0/970
16	7I	0.39	0/716	0.63	0/963

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	8A	0.40	0/836	0.61	0/1117
17	8I	0.37	0/847	0.66	0/1131
18	9A	0.37	0/559	0.65	0/746
18	9I	0.37	0/554	0.57	0/739
19	AA	0.39	0/520	0.81	0/700
19	AI	0.39	0/676	0.79	2/910 (0.2%)
20	BA	0.34	0/764	0.57	0/1007
20	BI	0.38	0/748	0.63	1/986 (0.1%)
21	1B	0.28	0/192	0.58	0/252
21	1F	0.35	0/203	0.57	0/266
22	1K	0.36	0/1675	0.60	0/2608
22	1L	0.31	0/1675	0.50	0/2608
23	2K	0.42	0/1791	0.62	0/2791
23	2L	0.39	0/1791	0.62	0/2791
24	3K	0.34	0/1716	0.56	0/2668
24	3L	0.30	0/1716	0.57	0/2668
25	4K	0.51	0/440	0.79	0/684
25	4L	0.57	0/341	1.02	3/529 (0.6%)
26	14	0.50	0/67828	0.69	11/105880 (0.0%)
26	1H	0.58	0/67804	0.75	8/105829 (0.0%)
27	16	0.46	0/2928	0.72	0/4568
27	1J	0.38	0/2928	0.63	0/4568
28	11	0.58	0/2170	0.94	7/2926 (0.2%)
28	19	0.58	0/2175	0.85	3/2933 (0.1%)
29	21	0.55	1/1589 (0.1%)	0.94	4/2145 (0.2%)
29	29	0.49	0/1596	0.91	2/2153 (0.1%)
30	31	0.56	0/1620	0.81	0/2194
30	39	0.43	0/1637	0.78	4/2218 (0.2%)
31	41	0.43	0/1481	0.70	0/1994
31	49	0.36	0/1483	0.71	1/1997 (0.1%)
32	51	0.47	0/1354	0.95	8/1833 (0.4%)
32	59	0.39	0/1320	0.77	2/1787 (0.1%)
33	61	0.41	0/1146	0.85	6/1551 (0.4%)
33	69	0.37	0/1146	0.74	2/1551 (0.1%)
34	15	0.38	0/1123	0.68	0/1515
34	58	0.49	0/1017	0.83	2/1369 (0.1%)
35	25	0.46	0/942	0.72	0/1269
35	68	0.51	0/942	0.69	0/1269
36	35	0.52	0/1139	0.88	3/1514 (0.2%)
36	78	0.56	0/1144	1.01	3/1521 (0.2%)
37	45	0.50	0/1120	0.91	1/1498 (0.1%)
37	88	0.56	0/1138	0.91	5/1523 (0.3%)
38	55	0.45	0/981	0.73	0/1312

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
38	98	0.76	1/981 (0.1%)	0.76	0/1312
39	65	0.39	0/886	0.74	0/1180
39	A8	0.47	0/891	0.80	0/1187
40	75	0.46	1/1178 (0.1%)	0.77	1/1573 (0.1%)
40	B8	0.47	0/1142	0.83	1/1526 (0.1%)
41	85	0.44	0/977	0.72	0/1301
41	C8	0.53	0/968	0.77	0/1289
42	95	0.40	0/781	0.84	0/1048
42	D8	0.46	0/785	0.83	1/1052 (0.1%)
43	A5	0.46	0/897	0.70	0/1204
43	E8	0.53	0/886	0.76	0/1189
44	B5	0.48	0/749	0.73	0/1007
44	F8	0.59	0/764	0.81	0/1025
45	C5	0.51	0/401	0.93	2/535 (0.4%)
45	G8	0.62	0/745	1.12	5/993 (0.5%)
46	D5	0.36	0/1443	0.70	0/1960
46	H8	0.45	1/1395 (0.1%)	0.85	6/1890 (0.3%)
47	E5	0.47	0/611	0.83	0/814
47	I8	0.63	0/619	0.84	0/825
48	F5	0.52	0/744	0.89	2/989 (0.2%)
48	J8	0.57	0/754	0.91	3/1003 (0.3%)
49	G5	0.47	0/578	0.87	2/766 (0.3%)
49	K8	0.60	0/577	0.99	2/763 (0.3%)
50	H5	0.41	0/464	0.65	0/623
50	L8	0.48	0/464	0.81	0/623
51	M8	0.46	0/485	0.91	0/652
52	J5	0.50	0/448	0.81	0/606
52	N8	0.59	0/381	0.79	0/516
53	L5	0.55	0/414	0.88	0/547
53	P8	0.70	0/409	0.87	0/540
54	M5	0.60	0/524	0.88	2/691 (0.3%)
54	Q8	0.59	0/524	0.97	2/691 (0.3%)
All	All	0.48	5/314511 (0.0%)	0.70	130/471182 (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
2	12	0	5
2	1E	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
3	2E	0	1
4	32	0	1
4	3E	0	2
5	4E	0	1
9	82	0	1
9	8E	0	3
10	1A	0	1
10	1I	0	1
11	2A	0	1
11	2I	0	2
12	3A	0	4
12	3I	0	2
13	4A	0	6
13	4I	0	3
14	5A	0	1
18	9A	0	1
19	AA	0	4
19	AI	0	1
20	BA	0	1
20	BI	0	1
28	11	0	4
28	19	0	2
29	21	0	7
29	29	0	10
30	31	0	1
30	39	0	4
31	41	0	1
31	49	0	1
32	51	0	5
32	59	0	1
33	61	0	5
33	69	0	5
34	15	0	1
34	58	0	2
35	68	0	1
36	35	0	3
36	78	0	9
37	45	0	5
37	88	0	3
38	98	0	2
39	65	0	1
39	A8	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
40	75	0	2
40	B8	0	2
41	85	0	2
41	C8	0	4
42	95	0	4
42	D8	0	2
43	E8	0	1
44	B5	0	1
45	C5	0	2
45	G8	0	7
46	D5	0	5
46	H8	0	7
47	I8	0	1
48	F5	0	3
48	J8	0	2
49	G5	0	4
49	K8	0	4
51	M8	0	4
52	N8	0	1
54	M5	0	2
54	Q8	0	2
All	All	0	180

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
38	98	38	VAL	CA-CB	18.20	1.63	1.54
5	4E	51	VAL	CA-CB	13.59	1.61	1.54
29	21	109	LYS	C-N	-7.83	1.29	1.33
46	H8	157	LEU	C-O	6.18	1.26	1.23
40	75	106	SER	CA-CB	5.52	1.70	1.53

All (130) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	45	104	PHE	N-CA-C	10.63	123.35	110.91
28	11	196	VAL	CA-C-N	-9.94	107.02	121.44
28	11	196	VAL	C-N-CA	-9.94	107.02	121.44
13	4I	7	VAL	N-CA-C	-9.23	102.80	111.48
45	G8	81	LYS	CA-C-N	8.68	147.82	127.00
45	G8	81	LYS	C-N-CA	8.68	147.82	127.00
26	1H	1992	G	C2'-C3'-O3'	8.44	122.16	109.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
49	K8	3	LEU	CA-C-N	8.01	136.12	121.70
49	K8	3	LEU	C-N-CA	8.01	136.12	121.70
36	78	15	ARG	CA-C-N	8.01	136.83	121.54
36	78	15	ARG	C-N-CA	8.01	136.83	121.54
32	59	89	ILE	N-CA-C	-7.71	105.05	111.91
26	14	1992	G	C2'-C3'-O3'	7.68	121.02	109.50
32	51	82	GLY	N-CA-C	7.62	131.23	113.18
36	35	46	LYS	CA-C-N	-7.57	103.34	121.80
36	35	46	LYS	C-N-CA	-7.57	103.34	121.80
54	Q8	46	ARG	CA-C-N	7.46	135.12	121.70
54	Q8	46	ARG	C-N-CA	7.46	135.12	121.70
33	61	83	ALA	CA-C-N	-7.37	110.75	121.44
33	61	83	ALA	C-N-CA	-7.37	110.75	121.44
45	G8	81	LYS	C-N-CD	-7.29	104.55	120.60
25	4L	12	A	O4'-C1'-N9	7.00	118.99	108.50
2	12	219	VAL	CA-C-N	6.96	134.23	121.70
2	12	219	VAL	C-N-CA	6.96	134.23	121.70
49	G5	4	SER	CA-C-N	6.75	133.85	121.70
49	G5	4	SER	C-N-CA	6.75	133.85	121.70
3	2E	4	LYS	N-CA-C	6.68	118.72	110.91
7	62	141	VAL	CA-C-N	6.62	133.61	121.70
7	62	141	VAL	C-N-CA	6.62	133.61	121.70
28	11	272	ALA	CA-C-N	6.51	133.98	121.54
28	11	272	ALA	C-N-CA	6.51	133.98	121.54
45	C5	38	ILE	CA-C-N	-6.51	114.81	122.36
45	C5	38	ILE	C-N-CA	-6.51	114.81	122.36
29	21	117	MET	CA-C-N	6.45	133.86	121.54
29	21	117	MET	C-N-CA	6.45	133.86	121.54
33	61	110	ASP	CA-C-N	6.43	142.44	127.00
33	61	110	ASP	C-N-CA	6.43	142.44	127.00
28	19	34	VAL	N-CA-C	6.35	113.01	106.21
26	1H	2439	A	OP1-P-O3'	6.31	126.92	108.00
26	14	2275	C	C4'-C3'-O3'	6.30	118.86	109.40
45	G8	100	ALA	CA-C-N	6.28	133.00	121.70
45	G8	100	ALA	C-N-CA	6.28	133.00	121.70
1	1G	266	G	C2'-C3'-O3'	6.18	118.76	109.50
32	51	155	SER	N-CA-C	6.17	123.93	110.80
26	14	2275	C	P-O3'-C3'	6.11	129.36	120.20
46	H8	111	VAL	CA-C-N	6.10	133.19	121.54
46	H8	111	VAL	C-N-CA	6.10	133.19	121.54
31	49	2	PRO	N-CA-CB	5.92	109.51	103.00
26	1H	1992	G	P-O3'-C3'	5.91	129.07	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	51	87	LEU	N-CA-C	5.90	123.37	110.80
28	11	2	ALA	CA-C-N	5.90	128.63	120.49
28	11	2	ALA	C-N-CA	5.90	128.63	120.49
32	51	85	LYS	CA-C-N	5.89	132.78	121.54
32	51	85	LYS	C-N-CA	5.89	132.78	121.54
14	5I	12	ARG	CA-C-N	5.85	136.07	121.80
14	5I	12	ARG	C-N-CA	5.85	136.07	121.80
42	D8	44	LYS	N-CA-C	5.82	123.20	110.80
11	2I	54	ARG	N-CA-C	-5.75	98.55	110.80
13	4I	6	GLY	CA-C-N	-5.75	117.34	122.97
13	4I	6	GLY	C-N-CA	-5.75	117.34	122.97
33	61	110	ASP	C-N-CD	-5.74	107.97	120.60
26	14	197	A	OP1-P-O3'	-5.74	90.79	108.00
46	H8	59	LEU	CA-C-N	5.73	132.49	121.54
46	H8	59	LEU	C-N-CA	5.73	132.49	121.54
1	13	1498	U	C2'-C3'-O3'	5.68	118.02	109.50
26	14	1786	A	N9-C1'-C2'	5.67	122.51	114.00
2	1E	194	PRO	CA-C-N	5.61	132.25	121.54
2	1E	194	PRO	C-N-CA	5.61	132.25	121.54
48	J8	95	LEU	CA-CB-CG	5.60	135.90	116.30
30	39	68	LYS	CA-C-N	-5.58	112.35	122.50
30	39	68	LYS	C-N-CA	-5.58	112.35	122.50
40	B8	13	ARG	N-CA-C	5.55	126.54	111.00
54	M5	49	VAL	CA-C-N	5.52	131.63	121.70
54	M5	49	VAL	C-N-CA	5.52	131.63	121.70
36	35	11	GLY	CA-C-O	5.51	124.41	118.95
20	BI	95	ALA	N-CA-CB	-5.51	107.89	114.17
26	1H	34	C	O5'-P-OP1	-5.50	91.51	108.00
26	1H	2592	G	O5'-P-OP2	-5.47	91.59	108.00
48	F5	84	GLY	CA-C-N	5.47	131.54	121.70
48	F5	84	GLY	C-N-CA	5.47	131.54	121.70
37	88	66	ILE	CA-C-N	5.47	131.98	121.54
37	88	66	ILE	C-N-CA	5.47	131.98	121.54
30	39	67	GLN	CA-C-N	-5.46	113.76	122.17
30	39	67	GLN	C-N-CA	-5.46	113.76	122.17
26	14	49	A	P-O3'-C3'	5.44	128.36	120.20
32	51	86	GLU	N-CA-C	5.44	122.39	110.80
3	22	141	VAL	N-CA-C	-5.44	107.07	111.91
29	29	54	GLN	N-CA-C	5.42	122.35	110.80
25	4L	12	A	N9-C1'-C2'	5.38	120.08	112.00
29	29	9	VAL	N-CA-C	5.36	115.80	110.23
32	51	170	ARG	N-CA-C	5.36	122.21	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	13	690	G	C4-N9-C1'	5.34	142.51	126.50
26	14	1992	G	P-O3'-C3'	5.33	128.19	120.20
33	61	134	PRO	N-CA-C	5.31	123.42	112.47
34	58	21	LYS	CA-C-N	-5.29	111.43	121.54
34	58	21	LYS	C-N-CA	-5.29	111.43	121.54
28	19	272	ALA	CA-C-N	5.27	135.48	126.32
28	19	272	ALA	C-N-CA	5.27	135.48	126.32
32	51	157	TYR	CB-CA-C	-5.20	100.06	110.42
1	13	49	U	C2'-C3'-O3'	5.20	117.30	109.50
13	4A	95	GLY	N-CA-C	5.18	125.47	113.18
26	1H	222	A	P-O3'-C3'	5.17	127.95	120.20
33	69	131	LYS	CA-C-N	5.16	139.38	127.00
33	69	131	LYS	C-N-CA	5.16	139.38	127.00
7	6E	56	GLN	CA-C-N	5.16	128.78	121.61
7	6E	56	GLN	C-N-CA	5.16	128.78	121.61
37	88	60	ARG	N-CA-C	-5.15	107.36	113.38
26	14	2859	G	C2'-C3'-O3'	5.15	121.42	113.70
40	75	6	LEU	N-CA-C	-5.13	96.63	111.00
1	13	49	U	P-O3'-C3'	5.13	127.90	120.20
48	J8	77	ALA	CA-C-N	5.13	130.93	121.70
48	J8	77	ALA	C-N-CA	5.13	130.93	121.70
26	14	1819	A	C4'-C3'-O3'	5.10	117.05	109.40
26	14	141	A	OP2-P-O3'	5.10	116.41	105.20
1	13	690	G	C8-N9-C1'	-5.08	111.75	127.00
29	21	118	LYS	CA-C-N	-5.08	110.82	121.80
29	21	118	LYS	C-N-CA	-5.08	110.82	121.80
26	1H	587	C	C4'-C3'-O3'	5.07	117.01	109.40
32	59	93	GLY	N-CA-C	5.06	125.17	113.18
37	88	104	PHE	N-CA-C	5.05	121.56	110.80
46	H8	164	ALA	CA-C-N	5.04	128.10	120.13
46	H8	164	ALA	C-N-CA	5.04	128.10	120.13
26	1H	676	A	O4'-C1'-N9	5.04	116.06	108.50
28	11	272	ALA	N-CA-C	5.03	121.52	110.80
19	AI	40	ILE	CA-C-N	5.02	131.42	122.13
19	AI	40	ILE	C-N-CA	5.02	131.42	122.13
25	4L	14	A	O4'-C1'-N9	5.01	115.72	108.20
36	78	16	ARG	N-CA-C	5.01	121.47	110.80
26	14	2859	G	P-O3'-C3'	5.01	127.71	120.20
37	88	24	GLY	N-CA-C	-5.00	101.33	113.18

There are no chirality outliers.

All (180) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
28	11	122	ASP	Peptide
28	11	197	GLY	Peptide
28	11	237	GLU	Peptide
28	11	238	GLY	Peptide
2	12	15	VAL	Peptide
2	12	19	HIS	Peptide
2	12	199	TYR	Peptide
2	12	22	LYS	Peptide
2	12	222	ILE	Peptide
34	15	126	PRO	Peptide
28	19	27	THR	Peptide
28	19	28	GLU	Peptide
10	1A	87	THR	Peptide
2	1E	210	SER	Peptide
10	1I	99	LYS	Peptide
29	21	130	GLY	Peptide
29	21	153	GLY	Peptide
29	21	187	ALA	Peptide
29	21	203	LYS	Peptide
29	21	66	HIS	Peptide
29	21	68	ALA	Peptide
29	21	74	PRO	Peptide
29	29	117	MET	Peptide
29	29	201	THR	Peptide
29	29	49	LEU	Peptide
29	29	53	PRO	Peptide
29	29	60	ASN	Peptide
29	29	61	ARG	Peptide
29	29	67	PHE	Peptide
29	29	69	LYS	Peptide
29	29	77	ILE	Peptide
29	29	79	ARG	Peptide
11	2A	49	GLY	Peptide
3	2E	14	ILE	Peptide
11	2I	53	SER	Peptide
11	2I	54	ARG	Peptide
30	31	132	VAL	Peptide
4	32	84	LYS	Peptide
36	35	110	TYR	Peptide
36	35	35	HIS	Peptide
36	35	6	LEU	Peptide
30	39	12	LEU	Peptide
30	39	14	PRO	Peptide

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Mol	Chain	Res	Type	Group
30	39	20	LEU	Peptide
30	39	89	VAL	Peptide
12	3A	104	VAL	Peptide
12	3A	116	SER	Peptide
12	3A	14	GLY	Peptide
12	3A	47	LYS	Peptide
4	3E	155	LEU	Peptide
4	3E	29	PRO	Peptide
12	3I	104	VAL	Peptide
12	3I	47	LYS	Peptide
31	41	95	ARG	Peptide
37	45	26	TYR	Peptide
37	45	58	PHE	Peptide
37	45	78	PRO	Peptide
37	45	84	GLY	Peptide
37	45	89	ASN	Peptide
31	49	116	ASP	Peptide
13	4A	105	THR	Peptide
13	4A	66	LEU	Peptide
13	4A	82	MET	Peptide
13	4A	83	ASP	Peptide
13	4A	90	LEU	Peptide
13	4A	94	ARG	Peptide
5	4E	114	GLY	Peptide
13	4I	100	GLY	Peptide
13	4I	11	ARG	Peptide
13	4I	94	ARG	Peptide
32	51	137	ASP	Peptide
32	51	152	ARG	Peptide
32	51	154	PRO	Peptide
32	51	156	ALA	Peptide
32	51	170	ARG	Peptide
34	58	56	ASN	Peptide
34	58	95	PRO	Peptide
32	59	150	ALA	Peptide
14	5A	28	GLY	Peptide
33	61	11	ASN	Peptide
33	61	112	LYS	Peptide
33	61	133	HIS	Peptide
33	61	134	PRO	Peptide
33	61	82	ARG	Peptide
39	65	53	SER	Peptide

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Mol	Chain	Res	Type	Group
35	68	96	THR	Peptide
33	69	101	LEU	Peptide
33	69	112	LYS	Peptide
33	69	142	VAL	Peptide
33	69	143	SER	Peptide
33	69	77	LEU	Peptide
40	75	10	VAL	Peptide
40	75	12	SER	Peptide
36	78	11	GLY	Peptide
36	78	115	LEU	Peptide
36	78	14	LYS	Peptide
36	78	15	ARG	Peptide
36	78	24	GLY	Peptide
36	78	35	HIS	Peptide
36	78	36	LYS	Peptide
36	78	37	GLY	Peptide
36	78	70	GLN	Peptide
9	82	117	HIS	Peptide
41	85	98	LEU	Peptide
41	85	99	ALA	Peptide
37	88	139	GLU	Peptide
37	88	58	PHE	Peptide
37	88	83	MET	Peptide
9	8E	110	GLU	Peptide
9	8E	4	TYR	Peptide
9	8E	88	TYR	Peptide
42	95	45	THR	Peptide
42	95	61	VAL	Peptide
42	95	97	LYS	Peptide
42	95	98	GLU	Peptide
38	98	2	ARG	Peptide
38	98	8	ARG	Peptide
18	9A	82	THR	Peptide
39	A8	106	ARG	Peptide
19	AA	11	VAL	Peptide
19	AA	13	ASP	Peptide
19	AA	3	ARG	Peptide
19	AA	66	MET	Peptide
19	AI	41	VAL	Peptide
44	B5	31	HIS	Peptide
40	B8	12	SER	Peptide
40	B8	4	GLY	Peptide

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Mol	Chain	Res	Type	Group
20	BA	101	GLY	Peptide
20	BI	95	ALA	Peptide
45	C5	18	GLY	Peptide
45	C5	39	VAL	Peptide
41	C8	75	ASN	Peptide
41	C8	90	VAL	Peptide
41	C8	92	ARG	Peptide
41	C8	95	LEU	Peptide
46	D5	104	PHE	Peptide
46	D5	158	PRO	Peptide
46	D5	51	ALA	Peptide
46	D5	52	SER	Peptide
46	D5	60	GLU	Peptide
42	D8	36	PRO	Peptide
42	D8	43	GLU	Peptide
43	E8	64	MET	Peptide
48	F5	53	VAL	Peptide
48	F5	81	LYS	Peptide
48	F5	91	LYS	Peptide
49	G5	15	LYS	Peptide
49	G5	4	SER	Peptide
49	G5	43	GLN	Peptide
49	G5	45	SER	Peptide
45	G8	100	ALA	Peptide
45	G8	3	VAL	Peptide
45	G8	4	LYS	Peptide
45	G8	53	PRO	Peptide
45	G8	54	LYS	Peptide
45	G8	84	ARG	Peptide
45	G8	97	ARG	Peptide
46	H8	109	ALA	Peptide
46	H8	110	GLY	Peptide
46	H8	117	LEU	Peptide
46	H8	158	PRO	Peptide
46	H8	52	SER	Peptide
46	H8	61	LEU	Peptide
46	H8	63	ASP	Peptide
47	I8	66	VAL	Peptide
48	J8	84	GLY	Peptide
48	J8	86	SER	Peptide
49	K8	17	SER	Peptide
49	K8	4	SER	Peptide

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Mol	Chain	Res	Type	Group
49	K8	46	GLN	Peptide
49	K8	47	ASN	Peptide
54	M5	40	GLU	Peptide
54	M5	49	VAL	Peptide
51	M8	37	SER	Peptide
51	M8	39	CYS	Peptide
51	M8	40	HIS	Peptide
51	M8	44	THR	Peptide
52	N8	37	LYS	Peptide
54	Q8	49	VAL	Peptide
54	Q8	51	ALA	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32246	0	16277	920	0
1	1G	32028	0	16164	934	0
2	12	1696	0	1730	84	0
2	1E	1874	0	1926	95	0
3	22	1546	0	1608	106	0
3	2E	1605	0	1668	60	0
4	32	1702	0	1765	98	0
4	3E	1698	0	1761	80	0
5	42	1141	0	1198	70	0
5	4E	1142	0	1204	44	0
6	52	842	0	857	23	0
6	5E	837	0	852	34	0
7	62	1110	0	1163	71	0
7	6E	1242	0	1286	70	0
8	72	1107	0	1165	71	0
8	7E	1115	0	1177	53	0
9	82	953	0	983	59	0
9	8E	1000	0	1031	73	0
10	1A	801	0	849	53	0
10	1I	749	0	767	55	0
11	2A	835	0	847	34	0
11	2I	823	0	833	45	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
12	3A	956	0	1046	48	0
12	3I	956	0	1046	48	0
13	4A	879	0	935	84	0
13	4I	942	0	997	64	0
14	5A	486	0	525	28	0
14	5I	491	0	530	28	0
15	6A	729	0	768	37	0
15	6I	729	0	768	41	0
16	7A	705	0	725	34	0
16	7I	700	0	720	43	0
17	8A	823	0	891	36	0
17	8I	834	0	904	56	0
18	9A	554	0	609	22	0
18	9I	549	0	607	28	0
19	AA	510	0	507	36	0
19	AI	661	0	683	45	0
20	BA	762	0	861	38	0
20	BI	746	0	843	58	0
21	1B	188	0	195	9	0
21	1F	199	0	208	12	0
22	1K	1593	0	813	52	0
22	1L	1593	0	813	28	0
23	2K	1644	0	838	34	0
23	2L	1644	0	838	32	0
24	3K	1537	0	779	54	0
24	3L	1537	0	779	32	0
25	4K	391	0	196	13	0
25	4L	303	0	153	10	0
26	14	60561	0	30528	1457	0
26	1H	60546	0	30528	1558	0
27	16	2617	0	1328	59	0
27	1J	2617	0	1328	89	0
28	11	2120	0	2197	117	0
28	19	2125	0	2199	119	0
29	21	1556	0	1612	96	0
29	29	1563	0	1629	99	0
30	31	1585	0	1632	95	0
30	39	1602	0	1649	124	0
31	41	1457	0	1514	80	0
31	49	1459	0	1507	95	0
32	51	1328	0	1396	71	0
32	59	1295	0	1366	86	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
33	61	1131	0	1218	49	0
33	69	1131	0	1218	58	0
34	15	1096	0	1168	72	0
34	58	995	0	1077	63	0
35	25	932	0	996	47	0
35	68	932	0	996	25	0
36	35	1122	0	1206	84	0
36	78	1127	0	1208	89	0
37	45	1099	0	1154	86	0
37	88	1117	0	1168	83	0
38	55	967	0	1033	58	0
38	98	967	0	1033	47	0
39	65	876	0	938	75	0
39	A8	881	0	943	57	0
40	75	1164	0	1221	69	0
40	B8	1128	0	1183	79	0
41	85	959	0	1019	63	0
41	C8	950	0	1011	61	0
42	95	770	0	838	44	0
42	D8	774	0	849	31	0
43	A5	886	0	948	34	0
43	E8	876	0	941	37	0
44	B5	735	0	785	33	0
44	F8	750	0	814	35	0
45	C5	396	0	444	15	0
45	G8	734	0	820	46	0
46	D5	1411	0	1436	93	0
46	H8	1365	0	1391	80	0
47	E5	603	0	620	46	0
47	I8	611	0	631	43	0
48	F5	737	0	813	56	0
48	J8	747	0	817	48	0
49	G5	576	0	625	29	0
49	K8	575	0	634	39	0
50	H5	459	0	512	15	0
50	L8	459	0	512	21	0
51	M8	475	0	465	28	0
52	J5	434	0	454	22	0
52	N8	369	0	388	36	0
53	L5	406	0	438	29	0
53	P8	401	0	436	11	0
54	M5	516	0	582	26	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	Q8	516	0	582	41	0
55	11	1	0	0	0	0
55	13	140	0	0	0	0
55	14	300	0	0	0	0
55	16	2	0	0	0	0
55	1F	2	0	0	0	0
55	1G	126	0	0	0	0
55	1H	473	0	0	0	0
55	1J	2	0	0	0	0
55	21	3	0	0	0	0
55	29	1	0	0	0	0
55	2A	1	0	0	0	0
55	2K	1	0	0	0	0
55	2L	1	0	0	0	0
55	32	1	0	0	0	0
55	35	1	0	0	0	0
55	39	1	0	0	0	0
55	41	1	0	0	0	0
55	42	2	0	0	0	0
55	45	2	0	0	0	0
55	4A	1	0	0	0	0
55	5I	2	0	0	0	0
55	78	2	0	0	0	0
55	7A	1	0	0	0	0
55	85	1	0	0	0	0
55	88	3	0	0	0	0
55	8I	1	0	0	0	0
55	BA	1	0	0	0	0
55	BI	1	0	0	0	0
55	C8	2	0	0	0	0
55	D8	1	0	0	0	0
55	E5	1	0	0	0	0
55	F5	1	0	0	0	0
55	I8	1	0	0	0	0
55	J8	1	0	0	0	0
55	P8	1	0	0	0	0
56	32	8	0	0	2	0
56	3E	8	0	0	1	0
57	5A	1	0	0	0	0
57	5I	1	0	0	0	0
58	11	8	0	0	1	0
58	13	274	0	0	53	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	14	586	0	0	117	0
58	16	8	0	0	0	0
58	19	7	0	0	2	0
58	1F	1	0	0	0	0
58	1G	240	0	0	24	0
58	1H	1010	0	0	224	0
58	1I	2	0	0	0	0
58	1K	1	0	0	0	0
58	21	4	0	0	0	0
58	29	2	0	0	0	0
58	2L	6	0	0	0	0
58	31	5	0	0	0	0
58	32	1	0	0	0	0
58	35	5	0	0	0	0
58	39	6	0	0	0	0
58	3I	1	0	0	0	0
58	42	1	0	0	0	0
58	45	5	0	0	0	0
58	4E	6	0	0	0	0
58	4I	2	0	0	0	0
58	4L	1	0	0	0	0
58	58	1	0	0	0	0
58	5I	1	0	0	0	0
58	78	8	0	0	0	0
58	7A	4	0	0	0	0
58	7I	3	0	0	0	0
58	8E	1	0	0	0	0
58	98	1	0	0	1	0
58	B5	2	0	0	0	0
58	BA	2	0	0	0	0
58	D8	1	0	0	0	0
58	E8	1	0	0	0	0
58	G8	1	0	0	0	0
58	H5	2	0	0	1	0
58	I8	3	0	0	1	0
58	J8	2	0	0	0	0
58	L5	1	0	0	0	0
58	L8	3	0	0	1	0
58	Q8	2	0	0	1	0
All	All	292640	0	194666	9309	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 20.

All (9309) 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)
26:1H:2714:G:OP2	58:1H:3519:HOH:O	1.69	1.07
26:1H:452:G:OP2	58:1H:3521:HOH:O	1.74	1.05
26:1H:1665:A:OP2	58:1H:3520:HOH:O	1.72	1.05
26:14:2499:C:OP2	58:14:3407:HOH:O	1.75	1.04
26:1H:990:A:OP2	58:1H:3522:HOH:O	1.76	1.04
26:1H:943:U:OP2	58:1H:3524:HOH:O	1.76	1.04
26:14:2113:U:H3'	26:14:2114:A:H4'	1.37	1.03
26:1H:586:A:OP2	58:1H:3525:HOH:O	1.77	1.03
26:1H:2615:U:OP1	58:1H:3523:HOH:O	1.76	1.03
46:H8:108:PRO:HB2	46:H8:112:ARG:HA	1.41	1.02
26:1H:2499:C:OP2	58:1H:3526:HOH:O	1.78	1.01
26:1H:810:U:OP1	58:1H:3527:HOH:O	1.79	1.01
1:1G:79:G:H1	1:1G:90:C:H42	1.07	1.01
29:29:50:GLY:HA2	29:29:78:LEU:HB3	1.43	1.01
26:1H:1055:G:H1	26:1H:1104:C:H42	1.08	0.99
49:G5:4:SER:HA	49:G5:6:VAL:H	1.25	0.99
1:1G:1305:G:H22	1:1G:1331:G:H2'	1.24	0.98
26:1H:2448:A:OP2	58:1H:3528:HOH:O	1.83	0.96
28:11:182:LEU:H	28:11:272:ALA:HB3	1.31	0.96
1:1G:1055:A:N7	1:1G:1200:C:N4	2.14	0.96
26:14:2448:A:OP2	58:14:3408:HOH:O	1.83	0.96
26:1H:929:G:O6	58:1H:3529:HOH:O	1.84	0.95
1:13:1197:G:OP1	58:13:1803:HOH:O	1.83	0.95
1:13:970:C:OP2	58:13:1804:HOH:O	1.85	0.95
24:3K:76:A:H8	26:1H:2394:C:H42	1.04	0.94
26:14:910:A:H62	37:45:12:GLN:HA	1.30	0.94
26:14:2414:G:H21	36:35:67:MET:HE1	1.32	0.94
26:1H:2308:G:H1	26:1H:2311:A:H2	1.07	0.94
40:B8:50:ILE:HD11	40:B8:102:ILE:HG13	1.49	0.94
29:29:54:GLN:NE2	29:29:72:VAL:O	2.00	0.94
34:15:56:ASN:H	34:15:125:GLY:HA3	1.31	0.94
26:1H:948:G:O6	58:1H:3530:HOH:O	1.86	0.94
26:1H:592:G:H21	54:Q8:4:MET:HE1	1.30	0.94
40:75:54:ARG:HA	40:75:59:THR:HB	1.50	0.94
26:1H:155:C:H42	26:1H:171:G:H1	1.06	0.93
1:13:601:C:H2'	1:13:602:A:H8	1.33	0.93
26:1H:910:A:H62	37:88:12:GLN:HA	1.30	0.93
26:1H:607:U:H3	26:1H:621:A:H2	1.08	0.93
1:1G:991:U:H4'	1:1G:992:U:H5"	1.50	0.93
26:1H:800:A:OP1	58:1H:3531:HOH:O	1.86	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:49:ILE:HD11	28:19:52:ARG:HA	1.50	0.92
26:14:801:G:OP2	58:14:3409:HOH:O	1.86	0.92
26:1H:1021:A:H62	26:1H:1141:U:H3	1.18	0.92
1:13:953:G:OP2	58:13:1805:HOH:O	1.86	0.91
26:1H:748:G:OP2	58:1H:3532:HOH:O	1.86	0.91
26:1H:400:G:N7	58:1H:3576:HOH:O	2.04	0.91
24:3L:2:C:N4	24:3L:71:G:O6	2.03	0.91
30:39:11:VAL:HG23	30:39:13:SER:HB2	1.52	0.91
26:1H:1234:U:O4	58:1H:3533:HOH:O	1.88	0.91
26:1H:2711:A:OP2	58:1H:3519:HOH:O	1.89	0.91
26:1H:422:A:OP2	58:1H:3537:HOH:O	1.89	0.91
8:72:12:ARG:HH21	8:72:27:PRO:HD3	1.34	0.91
26:14:1325:G:OP1	58:14:3411:HOH:O	1.89	0.91
2:1E:7:VAL:HB	2:1E:217:ARG:HD2	1.52	0.91
1:1G:352:C:OP2	58:1G:1807:HOH:O	1.87	0.91
1:13:963:G:N3	10:1I:55:LYS:NZ	2.18	0.90
26:1H:1187:G:O6	58:1H:3538:HOH:O	1.90	0.90
26:1H:138:G:N2	44:F8:44:GLU:OE2	2.03	0.90
3:22:120:VAL:HG21	3:22:137:ALA:HB2	1.54	0.90
30:39:18:ARG:HH22	30:39:20:LEU:HD12	1.35	0.90
26:14:31:C:OP1	58:14:3410:HOH:O	1.88	0.90
37:45:27:VAL:HB	37:45:28:ALA:HA	1.54	0.90
26:1H:399:G:OP2	58:1H:3534:HOH:O	1.89	0.90
26:1H:2243:U:OP1	58:1H:3536:HOH:O	1.89	0.90
26:14:2329:G:H21	47:E5:41:ARG:HG3	1.36	0.90
1:13:153:C:H42	1:13:168:G:H1	1.19	0.90
28:11:67:PHE:HE1	28:11:106:ILE:HD11	1.37	0.90
8:7E:87:SER:HB2	8:7E:93:VAL:HB	1.53	0.89
10:1A:51:ARG:HB2	10:1A:60:ARG:HA	1.53	0.89
1:13:1367:C:H5'	10:1I:60:ARG:HH11	1.37	0.89
26:1H:862:G:OP2	58:1H:3535:HOH:O	1.89	0.89
26:1H:1186:G:OP2	58:1H:3543:HOH:O	1.91	0.89
26:14:1992:G:N7	58:14:3435:HOH:O	2.05	0.89
49:K8:47:ASN:O	49:K8:49:LYS:N	2.06	0.89
26:14:1300:U:OP2	58:14:3413:HOH:O	1.90	0.89
15:6I:16:ALA:HB1	15:6I:21:ASP:HB3	1.52	0.89
31:41:96:ARG:H	31:41:99:MET:HE2	1.38	0.89
46:H8:52:SER:O	46:H8:54:HIS:N	2.06	0.89
26:14:862:G:OP2	58:14:3412:HOH:O	1.89	0.89
12:3I:117:ARG:HB3	12:3I:122:THR:HB	1.55	0.89
2:12:219:VAL:HA	2:12:220:ASP:HB3	1.53	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:5I:6:LEU:HD12	14:5I:23:ARG:HH22	1.38	0.88
1:1G:330:C:O2	58:1G:1808:HOH:O	1.89	0.88
26:1H:620:G:H4'	26:1H:621:A:H5"	1.55	0.88
34:58:47:ALA:HB2	34:58:112:LEU:HD11	1.55	0.88
1:13:1198:G:OP2	58:13:1803:HOH:O	1.92	0.88
7:62:93:PRO:HD2	7:62:94:ARG:HH21	1.37	0.88
26:1H:240:G:O6	58:1H:3539:HOH:O	1.90	0.88
3:22:70:VAL:HG12	3:22:72:LYS:H	1.37	0.88
26:1H:1231:G:N7	58:1H:3584:HOH:O	2.05	0.88
1:1G:1342:C:H4'	9:82:125:TYR:HB3	1.53	0.88
26:1H:2519:U:OP2	58:1H:3540:HOH:O	1.90	0.88
26:1H:993:G:OP1	41:C8:50:ARG:NH2	2.07	0.88
26:14:2002:G:N7	58:14:3437:HOH:O	2.06	0.88
26:1H:568:U:O4	58:1H:3549:HOH:O	1.92	0.87
1:1G:1128:C:O2	1:1G:1147:C:N4	2.07	0.87
5:42:144:THR:H	5:42:147:ASP:HB2	1.38	0.87
1:13:1372:U:H5"	9:8E:71:SER:HB3	1.57	0.87
38:98:15:SER:OG	58:98:201:HOH:O	1.92	0.87
39:65:12:PHE:O	39:65:16:ASN:ND2	2.08	0.87
1:13:766:A:OP2	58:13:1806:HOH:O	1.92	0.87
1:13:1054:C:OP2	58:13:1807:HOH:O	1.93	0.87
26:14:654(B):C:O2'	26:14:654(S):G:N1	2.08	0.87
37:45:27:VAL:HG13	37:45:136:ALA:HB1	1.53	0.87
26:1H:370:G:OP2	58:1H:3541:HOH:O	1.91	0.87
26:1H:1349:A:OP1	58:1H:3545:HOH:O	1.91	0.87
26:1H:1780:A:OP1	58:1H:3544:HOH:O	1.91	0.87
1:13:963:G:H1	1:13:972:C:H42	1.20	0.86
26:1H:734:A:OP2	58:1H:3548:HOH:O	1.92	0.86
54:M5:37:SER:OG	54:M5:39:LYS:O	1.92	0.86
26:1H:1764:G:OP2	58:1H:3550:HOH:O	1.93	0.86
26:1H:2016:U:OP1	58:1H:3547:HOH:O	1.92	0.86
26:1H:2495:G:O6	58:1H:3553:HOH:O	1.93	0.86
1:1G:1263:C:N4	1:1G:1272:G:O6	2.07	0.86
26:1H:2498:C:OP2	58:1H:3526:HOH:O	1.94	0.86
26:1H:252:G:OP2	36:78:50:ARG:NH1	2.09	0.86
26:1H:1055:G:N2	26:1H:1104:C:N3	2.24	0.86
26:14:2268:A:OP1	58:14:3414:HOH:O	1.92	0.86
1:13:468:A:H5"	16:7I:80:PHE:HB3	1.54	0.86
1:1G:1324:A:H4'	1:1G:1362:C:H4'	1.55	0.86
26:1H:730:C:OP2	58:1H:3542:HOH:O	1.91	0.85
26:1H:733:G:OP2	58:1H:3551:HOH:O	1.93	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:192:C:OP1	58:1H:3552:HOH:O	1.93	0.85
26:1H:2243:U:OP1	58:1H:3552:HOH:O	1.94	0.85
26:1H:2497:A:O2'	58:1H:3546:HOH:O	1.92	0.85
24:3L:8:U:O2	24:3L:48:C:N4	2.08	0.85
28:19:31:LYS:HZ2	28:19:33:LEU:HB2	1.41	0.85
29:29:60:ASN:HB2	29:29:62:PRO:HD2	1.57	0.85
26:14:2712(A):A:OP1	58:14:3415:HOH:O	1.93	0.85
26:14:1455:G:OP2	58:14:3417:HOH:O	1.95	0.85
26:1H:1357:U:OP2	58:1H:3556:HOH:O	1.95	0.85
26:14:67:U:H3	26:14:74:A:H2	1.22	0.85
8:7E:7:ALA:HB2	8:7E:85:ARG:HD2	1.59	0.85
26:1H:1010:A:OP2	58:1H:3554:HOH:O	1.94	0.85
26:14:1359:A:H62	26:14:1372:U:H3	1.24	0.85
26:14:1619:G:N7	58:14:3445:HOH:O	2.08	0.85
26:14:2210:G:H3'	26:14:2211:G:N7	1.91	0.85
48:F5:91:LYS:O	48:F5:93:GLU:N	2.10	0.85
52:N8:36:CYS:SG	52:N8:37:LYS:N	2.49	0.85
6:5E:97:PHE:HB2	18:9I:32:ARG:HH11	1.41	0.84
26:1H:2711:A:OP1	58:1H:3555:HOH:O	1.94	0.84
5:42:33:VAL:HG21	5:42:109:ILE:HG12	1.59	0.84
29:29:3:GLY:HA3	29:29:81:ILE:HG21	1.56	0.84
26:14:2210:G:H3'	26:14:2211:G:C8	2.11	0.84
43:E8:58:ALA:HB1	43:E8:64:MET:HE2	1.58	0.84
45:G8:83:THR:HG22	45:G8:84:ARG:HG2	1.58	0.84
26:14:2227:A:OP2	58:14:3418:HOH:O	1.96	0.84
46:D5:52:SER:O	46:D5:54:HIS:N	2.10	0.84
26:14:1633:G:OP2	58:14:3416:HOH:O	1.94	0.84
26:14:2547:U:O2	35:25:23:ARG:NH2	2.11	0.84
34:15:59:LYS:HE3	34:15:60:ILE:H	1.41	0.84
26:14:1641:A:OP2	58:14:3419:HOH:O	1.96	0.84
49:K8:15:LYS:H	49:K8:67:LYS:HE3	1.43	0.84
10:1I:40:LEU:HB2	10:1I:69:ASN:HB2	1.59	0.84
14:5A:27:CYS:O	14:5A:29:ARG:NH2	2.10	0.84
26:1H:1332:G:N2	26:1H:1609:A:O2'	2.11	0.84
26:1H:1678:G:H21	26:1H:1989:G:H22	1.23	0.84
50:L8:5:LYS:HB2	50:L8:36:VAL:HG13	1.59	0.84
1:1G:1001:G:H22	1:1G:1040:U:H1'	1.40	0.84
36:35:58:THR:HG21	54:M5:54:GLU:HB3	1.60	0.84
46:H8:110:GLY:O	46:H8:112:ARG:N	2.11	0.83
26:14:2781:A:H5"	26:14:2782:G:H5'	1.58	0.83
37:45:135:ASP:N	37:45:136:ALA:HA	1.93	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1189:C:O2	58:1G:1810:HOH:O	1.96	0.83
26:14:1413:G:O6	58:14:3420:HOH:O	1.96	0.83
1:13:1368:G:H5"	9:8E:112:LYS:HB3	1.58	0.83
7:62:113:GLU:HB2	7:62:119:ARG:HG2	1.60	0.83
41:C8:92:ARG:HH21	42:D8:10:LYS:HB3	1.41	0.83
26:1H:818:G:OP2	58:1H:3558:HOH:O	1.95	0.83
1:1G:838:G:H1	1:1G:842:C:HO2'	1.17	0.83
26:14:517:C:OP1	52:J5:16:ARG:NH2	2.10	0.83
46:H8:58:VAL:C	46:H8:60:GLU:H	1.87	0.83
26:14:275:G:N2	26:14:276:A:N7	2.26	0.83
26:14:1019:U:H3	26:14:1142(A):A:H62	1.24	0.83
28:19:242:ARG:O	58:19:301:HOH:O	1.96	0.83
26:1H:248:G:OP1	58:1H:3557:HOH:O	1.95	0.83
8:72:29:SER:HB3	8:72:32:LYS:HG3	1.60	0.82
26:14:2611:U:H6	26:14:2611:U:H5'	1.42	0.82
31:49:61:ALA:HB2	31:49:68:PRO:HD3	1.61	0.82
30:39:167:ALA:HB1	30:39:173:VAL:HG11	1.59	0.82
32:59:6:ARG:HB3	32:59:66:GLY:HA2	1.59	0.82
24:3K:14:A:H61	24:3K:21:A:H2	1.26	0.82
1:1G:1003:G:N2	1:1G:1005:A:OP1	2.12	0.82
1:1G:584:G:H5'	17:8A:91:ARG:HH22	1.43	0.82
1:1G:903:G:OP1	58:1G:1809:HOH:O	1.95	0.82
1:13:443:C:H42	1:13:491:G:H1	1.27	0.82
1:13:1346:A:H5"	9:8E:120:ARG:HH12	1.44	0.82
26:1H:1430:C:H2'	26:1H:1431:U:C6	2.14	0.82
26:1H:2334:G:O6	47:I8:74:ARG:NH2	2.13	0.82
26:1H:1653:G:H3'	38:98:2:ARG:HG3	1.62	0.82
2:12:162:ILE:HD11	2:12:184:VAL:HG12	1.59	0.82
26:1H:1265:A:OP2	58:1H:3559:HOH:O	1.96	0.82
26:14:2068:U:H3	26:14:2430:A:H2	1.24	0.82
24:3K:34:G:HO2'	24:3K:35:G:H8	1.29	0.81
33:61:110:ASP:N	33:61:110:ASP:OD1	2.13	0.81
1:1G:766:A:OP2	58:1G:1811:HOH:O	1.98	0.81
1:1G:1088:G:N2	1:1G:1097:C:O2	2.12	0.81
35:25:14:THR:HG21	35:25:86:ILE:HG13	1.59	0.81
46:D5:30:ASN:HB3	46:D5:90:VAL:HG23	1.61	0.81
26:1H:270(N):G:N3	33:61:50:ARG:NH2	2.27	0.81
26:1H:2688:U:OP2	58:1H:3560:HOH:O	1.98	0.81
1:13:1077:G:N2	1:13:1080:A:OP2	2.13	0.81
26:1H:102:G:OP1	49:K8:7:ARG:NH2	2.13	0.81
26:1H:2588:G:OP1	58:1H:3561:HOH:O	1.99	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:94:LYS:HZ2	45:G8:95:LYS:H	1.26	0.81
26:14:654(B):C:HO2'	26:14:654(S):G:H1	1.28	0.81
26:14:2357:U:OP1	47:E5:20:ARG:NH1	2.13	0.81
1:13:456:C:H42	1:13:476:G:H1	1.26	0.81
22:1K:18:G:N2	22:1K:58:A:OP2	2.13	0.81
1:13:74:C:H42	1:13:96:G:H1	1.25	0.81
7:6E:20:ASP:HB3	7:6E:23:VAL:HB	1.62	0.81
26:1H:1533:C:O2	26:1H:1539:G:N2	2.14	0.81
26:14:1776:G:OP2	58:14:3421:HOH:O	1.97	0.81
50:H5:39:ASP:OD1	50:H5:44:ARG:NH1	2.13	0.81
41:85:110:VAL:O	41:85:114:LYS:NZ	2.14	0.81
23:2L:57:C:O2	31:49:78:SER:OG	1.98	0.81
30:39:32:LEU:HD11	30:39:105:VAL:HG13	1.62	0.81
9:82:112:LYS:HA	9:82:119:ALA:HB2	1.61	0.81
46:D5:54:HIS:HB3	46:D5:101:PRO:HD3	1.63	0.81
26:1H:1009:A:OP2	34:58:37:LYS:NZ	2.13	0.80
29:29:105:THR:HG21	29:29:164:ARG:HE	1.46	0.80
52:J5:16:ARG:NH1	52:J5:17:ASP:OD1	2.14	0.80
11:2I:73:MET:HG2	11:2I:103:LEU:HD13	1.63	0.80
26:14:323:G:HO2'	26:14:1205:U:H3	1.27	0.80
1:13:688:G:H2'	1:13:689:C:H6	1.44	0.80
26:1H:2867:G:OP2	40:B8:119:LYS:NZ	2.12	0.80
39:A8:88:ASP:O	39:A8:90:GLY:N	2.15	0.80
1:1G:975:A:H4'	1:1G:976:G:H5"	1.63	0.80
1:13:145:G:H1	1:13:177:C:H42	1.27	0.80
26:14:1022:G:O2'	26:14:1023:U:OP2	2.00	0.80
1:1G:1011:G:H22	1:1G:1019:C:H1'	1.47	0.80
26:14:1971:A:OP1	58:14:3422:HOH:O	1.98	0.80
1:13:345:C:N4	35:68:116:SER:O	2.14	0.80
36:78:114:ILE:HD13	36:78:125:VAL:HG11	1.61	0.80
26:1H:847:U:OP2	58:1H:3529:HOH:O	1.99	0.80
29:21:105:THR:OG1	29:21:199:ARG:NH2	2.15	0.80
30:31:66:PRO:O	30:31:67:GLN:HB3	1.81	0.80
40:75:64:ARG:HB2	40:75:73:GLU:HG2	1.64	0.80
1:13:727:G:N2	1:13:730:G:OP2	2.15	0.80
1:1G:827:U:H3	1:1G:872:A:H62	1.29	0.80
13:4A:53:VAL:O	13:4A:57:ARG:N	2.11	0.80
27:1J:88:C:H5"	27:1J:89:G:C5	2.16	0.80
1:1G:976:G:N2	1:1G:1362(A):C:OP2	2.12	0.79
28:19:69:ARG:NH2	28:19:128:GLY:O	2.15	0.79
8:72:49:GLU:OE2	8:72:62:TYR:OH	2.00	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:3K:31:C:H42	24:3K:39:G:H1	1.28	0.79
24:3K:43:G:H2'	24:3K:44:A:H8	1.47	0.79
3:22:181:ASN:HB2	3:22:206:GLU:H	1.45	0.79
26:14:1568:G:OP2	28:19:63:ARG:NH2	2.16	0.79
26:14:2712:U:O2'	26:14:2712(A):A:OP2	2.01	0.79
24:3K:39:G:H2'	24:3K:40:G:H8	1.48	0.79
26:14:617:G:OP1	30:39:40:GLN:NE2	2.15	0.79
1:13:863:U:OP1	58:13:1810:HOH:O	2.01	0.79
49:K8:4:SER:H	49:K8:7:ARG:H	1.29	0.79
1:13:486:U:H2'	1:13:487:A:H8	1.47	0.79
1:13:645:C:OP2	58:13:1811:HOH:O	2.01	0.79
24:3K:16:U:H1'	24:3K:61:C:H5'	1.63	0.79
26:1H:188:G:H1	26:1H:208:C:H42	1.31	0.79
26:14:2709:G:O6	58:14:3424:HOH:O	2.01	0.79
1:13:128:G:O2'	17:8I:3:LYS:NZ	2.15	0.79
1:13:749:C:H2'	1:13:750:G:H8	1.48	0.79
1:1G:766:A:OP2	58:1G:1812:HOH:O	2.00	0.79
26:14:528:A:O2'	26:14:529:A:H5'	1.82	0.79
26:1H:370:G:OP2	58:1H:3564:HOH:O	2.00	0.79
26:1H:731:C:OP2	58:1H:3562:HOH:O	1.99	0.79
26:14:529:A:H4'	26:14:530:G:H5'	1.65	0.79
52:J5:41:PRO:O	52:J5:44:THR:OG1	2.01	0.79
1:13:394:G:O6	58:13:1808:HOH:O	1.99	0.78
26:1H:548:A:H2'	26:1H:549:G:H5'	1.65	0.78
26:1H:574:C:OP2	58:1H:3563:HOH:O	2.00	0.78
1:13:578:C:OP1	58:13:1809:HOH:O	2.00	0.78
26:1H:2099:U:N3	26:1H:2190:G:O6	2.16	0.78
1:1G:1513:A:H2'	1:1G:1514:C:C6	2.19	0.78
4:3E:160:GLN:HA	4:3E:163:GLU:HB3	1.64	0.78
8:7E:6:ILE:HB	8:7E:85:ARG:HH12	1.48	0.78
28:11:137:PRO:O	28:11:140:THR:OG1	2.01	0.78
1:13:538:G:O6	58:13:1814:HOH:O	2.01	0.78
1:13:864:A:OP1	58:13:1813:HOH:O	2.01	0.78
1:13:964:A:OP1	58:13:1812:HOH:O	2.01	0.78
18:9A:21:LYS:HD3	18:9A:24:ALA:HB2	1.64	0.78
26:14:1327:C:OP2	58:14:3423:HOH:O	2.00	0.78
26:1H:2068:U:H3	26:1H:2430:A:H2	1.32	0.78
26:1H:2308:G:N1	26:1H:2311:A:H2	1.82	0.78
26:14:125:G:H5"	53:L5:19:ARG:HD3	1.66	0.78
28:19:24:ILE:HG23	28:19:83:GLU:HA	1.66	0.78
32:59:110:SER:O	32:59:111:HIS:ND1	2.17	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:759:G:OP1	58:1H:3565:HOH:O	2.01	0.78
14:5A:27:CYS:SG	14:5A:29:ARG:NH2	2.55	0.78
30:39:123:LEU:O	30:39:125:LEU:N	2.17	0.78
41:85:92:ARG:CZ	42:95:11:GLN:H	1.96	0.78
4:3E:65:ARG:NH1	4:3E:70:ILE:O	2.17	0.78
26:1H:676:A:H8	26:1H:2069:G:H21	1.29	0.78
37:88:14:ARG:HG2	37:88:41:TRP:HH2	1.49	0.78
13:4I:3:ARG:HD3	13:4I:7:VAL:HG13	1.66	0.78
26:14:6:A:H3'	26:14:7:G:H5'	1.65	0.78
26:14:2431:U:O4	58:14:3427:HOH:O	2.02	0.78
1:13:445:G:H1	1:13:489:C:H42	1.31	0.78
26:1H:1240:U:OP1	58:1H:3571:HOH:O	2.02	0.78
26:1H:2419:U:O4	58:1H:3569:HOH:O	2.02	0.78
31:41:161:THR:HG22	31:41:163:ALA:H	1.49	0.78
1:1G:612:C:O2	1:1G:629:G:N2	2.17	0.78
26:14:2033:A:OP1	58:14:3426:HOH:O	2.02	0.78
31:49:161:THR:HG22	31:49:163:ALA:H	1.48	0.78
3:2E:15:THR:HG21	3:2E:181:ASN:HA	1.66	0.77
1:1G:1348:U:H3	1:1G:1374:A:H2	1.31	0.77
26:14:1632:A:N7	58:14:3466:HOH:O	2.17	0.77
1:13:1503:A:O2'	25:4K:12:A:N6	2.17	0.77
33:61:8:PRO:HD3	33:61:15:VAL:HG23	1.65	0.77
36:35:122:PRO:HB3	36:35:141:ALA:HB1	1.64	0.77
26:14:2196:C:OP2	58:14:3428:HOH:O	2.02	0.77
26:14:2745:C:O2	32:59:139:GLN:NE2	2.17	0.77
1:13:838:G:H1	1:13:848:C:H42	1.29	0.77
1:1G:1160:G:H1	1:1G:1176:A:H61	1.30	0.77
26:14:452:G:OP2	58:14:3429:HOH:O	2.02	0.77
26:14:2162:G:O2'	26:14:2173:A:OP1	2.02	0.77
2:1E:63:MET:HB2	2:1E:225:ALA:HB1	1.66	0.77
22:1K:15:G:H1	22:1K:48:C:N4	1.82	0.77
26:1H:1312:U:OP2	44:F8:63:LYS:NZ	2.16	0.77
26:1H:1778:U:H2'	26:1H:1784:A:N6	1.99	0.77
7:62:148:ASN:ND2	7:62:148:ASN:O	2.17	0.77
27:1J:21:G:H1	27:1J:62:C:H42	1.30	0.77
26:1H:2588:G:OP1	58:1H:3570:HOH:O	2.02	0.77
26:14:1332:G:C8	26:14:1332:G:H5'	2.20	0.77
1:13:1048:G:H5"	14:5I:3:ARG:HG2	1.65	0.77
4:3E:98:GLU:OE2	4:3E:107:ARG:NH1	2.17	0.77
26:14:2143:C:H42	26:14:2148:G:H1	1.31	0.77
2:1E:73:THR:HG22	2:1E:74:LYS:HG2	1.67	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:989:C:O2	1:1G:1216:G:N2	2.18	0.77
9:82:5:TYR:N	9:82:87:GLN:OE1	2.17	0.77
26:14:1729:A:H2'	26:14:1731:G:N2	2.00	0.77
26:14:2638:G:OP2	29:29:82:ARG:NH2	2.17	0.77
1:13:1271:G:H2'	1:13:1272:G:H5"	1.67	0.77
26:1H:270(I):G:H22	26:1H:270(R):G:H1'	1.49	0.77
26:1H:1899:G:H22	26:1H:1902:C:H41	1.28	0.77
39:A8:35:ILE:HD11	39:A8:101:LEU:HD22	1.67	0.77
15:6A:39:LEU:HD12	15:6A:56:LEU:HD13	1.67	0.77
26:14:1168:G:O6	26:14:1181:C:N4	2.18	0.77
24:3L:76:A:H8	26:14:2394:C:H42	1.29	0.76
28:19:182:LEU:H	28:19:272:ALA:HB3	1.50	0.76
9:8E:13:ALA:HB2	9:8E:68:GLY:HA3	1.67	0.76
24:3K:35:G:O6	25:4K:14:A:N6	2.17	0.76
26:1H:2183:C:H2'	26:1H:2184:G:H8	1.50	0.76
26:1H:2292:C:OP1	39:A8:17:ARG:NH2	2.18	0.76
49:K8:3:LEU:H	49:K8:4:SER:C	1.93	0.76
52:N8:40:LYS:HG2	52:N8:46:CYS:HA	1.67	0.76
41:85:83:LEU:HB3	41:85:88:ILE:HB	1.67	0.76
26:1H:1651:G:O6	58:1H:3567:HOH:O	2.02	0.76
7:62:144:MET:SD	7:62:145:ALA:N	2.59	0.76
33:69:76:THR:OG1	33:69:77:LEU:N	2.09	0.76
26:1H:1689:A:H62	26:1H:1698:A:H2	1.32	0.76
45:G8:53:PRO:HA	45:G8:56:PRO:HB3	1.65	0.76
26:14:607:U:H3	26:14:621:A:H2	1.31	0.76
26:14:686:G:H5"	53:L5:11:LYS:HE2	1.66	0.76
1:13:158:G:N2	1:13:163:C:O2	2.18	0.76
26:1H:946:G:OP1	58:1H:3566:HOH:O	2.02	0.76
1:1G:1129:C:H5"	1:1G:1139:G:N7	2.00	0.76
26:14:815:C:OP1	42:95:85:LYS:NZ	2.17	0.76
26:14:1516:U:H2'	26:14:1517:G:H8	1.51	0.76
26:14:2711:A:OP2	58:14:3425:HOH:O	2.01	0.76
1:13:1131:G:N2	1:13:1139:G:O6	2.18	0.76
9:82:53:VAL:HG13	9:82:95:LYS:HE3	1.67	0.76
38:55:67:LEU:HD23	38:55:76:VAL:HG21	1.67	0.76
46:D5:97:GLU:HB3	46:D5:125:LEU:HD11	1.66	0.76
54:M5:40:GLU:H	54:M5:43:GLN:HG3	1.51	0.76
26:1H:722:A:H2'	26:1H:723:G:C8	2.21	0.76
1:1G:1116:C:H42	1:1G:1184:G:H1	1.33	0.76
26:14:1106:G:H3'	26:14:1107:G:H8	1.50	0.76
26:14:1141:U:OP2	34:15:63:THR:OG1	2.04	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:91:PRO:HG3	2:12:154:LEU:HB2	1.67	0.76
19:AA:3:ARG:HB2	19:AA:4:SER:HA	1.67	0.76
26:14:1942:C:OP2	26:14:1943:U:O2'	2.02	0.76
27:1J:18:G:H1	27:1J:65:C:H42	1.33	0.76
23:2K:5:G:N2	23:2K:69:C:O2	2.19	0.76
26:1H:2327:A:H2'	26:1H:2328:A:C8	2.21	0.76
13:4A:13:LYS:HD3	13:4A:14:ARG:H	1.49	0.76
13:4A:48:LEU:HD12	13:4A:52:GLU:HB2	1.67	0.76
26:1H:357:A:H2'	26:1H:358:U:H6	1.51	0.76
1:1G:235:C:H5'	17:8A:70:ARG:HG2	1.68	0.76
24:3K:38:A:H3'	24:3K:39:G:H8	1.51	0.75
26:1H:31:C:OP1	58:1H:3572:HOH:O	2.03	0.75
26:1H:1521:G:N7	58:1H:3665:HOH:O	2.18	0.75
1:1G:158:G:H1	1:1G:163:C:H42	1.35	0.75
26:14:1047:G:H21	26:14:1111:A:H61	1.33	0.75
37:45:135:ASP:H	37:45:136:ALA:HA	1.49	0.75
26:1H:1516:U:H2'	26:1H:1517:G:H8	1.50	0.75
26:1H:2712(A):A:OP1	58:1H:3583:HOH:O	2.04	0.75
37:88:54:MET:HE3	37:88:64:ILE:HD13	1.69	0.75
1:1G:834:C:O2	1:1G:852:G:N2	2.16	0.75
20:BI:43:LEU:HD13	20:BI:51:GLU:HB3	1.68	0.75
26:1H:273(F):C:H3'	26:1H:274:G:H5"	1.68	0.75
42:D8:65:GLY:HA3	42:D8:91:TYR:CZ	2.21	0.75
26:14:86:C:O2	26:14:96:G:N2	2.18	0.75
26:14:1456:G:OP2	58:14:3430:HOH:O	2.03	0.75
1:13:1446:A:O2'	40:B8:125:ARG:NH1	2.19	0.75
26:1H:46:C:O2	26:1H:179:G:N2	2.20	0.75
46:H8:30:ASN:HD22	46:H8:90:VAL:HB	1.49	0.75
7:62:68:ASN:ND2	7:62:127:ALA:O	2.15	0.75
26:14:2115:G:O2'	26:14:2171:A:N6	2.19	0.75
37:45:68:ILE:HD13	37:45:103:MET:HB3	1.68	0.75
1:13:503:C:O2	1:13:542:G:N2	2.18	0.75
26:1H:860:U:H5	26:1H:917:A:C2	2.05	0.75
28:11:228:PRO:O	58:11:401:HOH:O	2.03	0.75
5:42:73:ASN:O	5:42:73:ASN:ND2	2.18	0.75
26:14:83:G:N2	26:14:102:G:O2'	2.19	0.75
47:E5:18:ALA:HB3	47:E5:20:ARG:HH21	1.51	0.75
49:G5:4:SER:CA	49:G5:6:VAL:H	2.00	0.75
1:13:972:C:OP1	58:13:1815:HOH:O	2.04	0.75
17:8I:13:ASP:OD1	17:8I:13:ASP:N	2.20	0.75
26:1H:578:A:OP2	58:1H:3574:HOH:O	2.03	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1265:A:OP1	58:1H:3523:HOH:O	2.04	0.75
26:1H:1635:G:OP1	58:1H:3582:HOH:O	2.04	0.75
26:1H:2763:G:O6	58:1H:3568:HOH:O	2.02	0.75
26:1H:2773:C:OP1	29:21:164:ARG:NH1	2.18	0.75
9:82:112:LYS:HE2	9:82:118:LYS:H	1.51	0.75
22:1L:36:U:H2'	22:1L:37:AET:H8	1.69	0.75
45:C5:68:HIS:H	45:C5:71:LYS:HZ3	1.32	0.75
33:61:75:LEU:HD21	33:61:105:HIS:HB3	1.69	0.75
26:14:1970:A:OP1	58:14:3433:HOH:O	2.04	0.75
1:13:1256:A:N6	1:13:1278:U:OP2	2.20	0.75
3:2E:172:ARG:HH21	3:2E:203:PHE:HZ	1.34	0.75
26:1H:2593:U:H2'	26:1H:2594:C:H6	1.51	0.75
26:1H:2705:A:OP2	58:1H:3580:HOH:O	2.04	0.75
29:21:116:VAL:H	29:21:157:ALA:HB2	1.52	0.75
1:1G:191(E):G:H2'	1:1G:191(F):U:C6	2.21	0.75
1:1G:1023:G:H5"	1:1G:1024:G:H21	1.51	0.75
39:65:106:ARG:NH2	39:65:107:GLU:OE1	2.19	0.75
2:1E:174:VAL:HG13	2:1E:184:VAL:HG11	1.69	0.75
13:4I:13:LYS:O	13:4I:44:ARG:NH1	2.20	0.75
26:1H:1784:A:OP1	58:1H:3579:HOH:O	2.04	0.75
31:41:111:LEU:HB3	31:41:117:PHE:HE2	1.52	0.75
45:G8:30:VAL:HG12	45:G8:32:PRO:HD3	1.69	0.75
26:14:1629:U:O4	58:14:3431:HOH:O	2.03	0.75
26:1H:582:G:N7	58:1H:3674:HOH:O	2.19	0.74
26:1H:1676:A:N7	58:1H:3664:HOH:O	2.18	0.74
26:1H:2136:C:N4	26:1H:2155:G:O6	2.19	0.74
26:1H:2846:G:N7	58:1H:3673:HOH:O	2.19	0.74
52:N8:16:ARG:NH1	52:N8:17:ASP:OD1	2.19	0.74
7:62:111:ARG:NH1	7:62:126:ASP:OD2	2.20	0.74
21:1B:2:GLY:O	21:1B:4:GLY:N	2.20	0.74
26:14:1817:G:OP1	28:19:88:ARG:NH2	2.18	0.74
30:39:20:LEU:HD22	30:39:203:GLN:HE22	1.50	0.74
1:13:1247:U:H3	1:13:1290:G:H1	1.35	0.74
26:1H:2850:A:N7	26:1H:2868:A:O2'	2.20	0.74
32:51:157:TYR:O	32:51:158:HIS:ND1	2.19	0.74
1:1G:353:A:H5'	1:1G:353:A:H8	1.52	0.74
1:1G:1305:G:N2	1:1G:1331:G:H2'	2.01	0.74
22:1L:26:G:O6	22:1L:44:A:N6	2.17	0.74
1:1G:371:G:H1	1:1G:390:C:H42	1.35	0.74
10:1A:29:ARG:HD3	10:1A:84:GLN:HE22	1.52	0.74
26:14:818:G:OP2	58:14:3434:HOH:O	2.05	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1970:A:OP1	58:14:3432:HOH:O	2.04	0.74
29:29:1:MET:HA	29:29:84:PHE:HB2	1.67	0.74
30:39:53:THR:HG22	30:39:56:GLU:HG2	1.69	0.74
38:55:82:GLU:H	38:55:85:PRO:HG2	1.52	0.74
2:1E:18:GLY:H	2:1E:42:ILE:HB	1.52	0.74
4:3E:155:LEU:O	4:3E:157:LEU:N	2.21	0.74
26:1H:792:G:H5"	26:1H:793:A:H5'	1.70	0.74
26:1H:1377:G:OP2	58:1H:3588:HOH:O	2.05	0.74
26:14:289:A:H3'	26:14:290:G:H8	1.53	0.74
26:14:1757:U:H3	26:14:1762:A:H2	1.36	0.74
28:19:79:VAL:HG21	28:19:111:LEU:HD11	1.69	0.74
40:75:2:ASN:HB3	40:75:4:GLY:O	1.87	0.74
1:13:1122:U:O4	1:13:1123:A:N6	2.20	0.74
5:4E:15:ARG:HE	5:4E:26:PHE:HE2	1.33	0.74
26:1H:1899:G:H22	26:1H:1902:C:N4	1.83	0.74
28:11:69:ARG:NH2	28:11:128:GLY:O	2.18	0.74
41:C8:65:ILE:HG13	41:C8:96:ALA:HB2	1.68	0.74
15:6A:87:ILE:HG22	15:6A:88:ARG:HG3	1.69	0.74
19:AA:3:ARG:O	19:AA:6:LYS:NZ	2.21	0.74
29:29:34:VAL:HG21	29:29:78:LEU:HD22	1.69	0.74
1:13:1159:U:O4'	1:13:1182:G:N2	2.21	0.74
7:6E:15:ASP:HB3	7:6E:20:ASP:H	1.50	0.74
22:1K:15:G:H1	22:1K:48:C:H41	1.34	0.74
31:41:16:ARG:HH22	31:41:31:VAL:HG21	1.51	0.74
37:88:2:LEU:H	37:88:2:LEU:HD12	1.52	0.74
17:8A:67:LYS:HA	17:8A:70:ARG:HH12	1.52	0.74
39:65:61:ASN:HB3	39:65:64:GLU:HB2	1.70	0.74
15:6I:82:ILE:O	15:6I:86:GLY:N	2.19	0.74
26:1H:2061:G:OP2	58:1H:3578:HOH:O	2.04	0.74
1:1G:1137:C:O2	1:1G:1138:G:N2	2.19	0.74
5:42:43:LEU:HD22	5:42:136:MET:HG3	1.69	0.74
26:1H:259:G:O2'	26:1H:621:A:O2'	2.06	0.74
26:1H:413:C:OP2	58:1H:3585:HOH:O	2.05	0.74
48:J8:53:VAL:HG22	48:J8:74:VAL:HG23	1.69	0.74
1:1G:222:U:H2'	1:1G:223:U:C6	2.23	0.74
1:1G:1179:A:OP2	9:82:93:ARG:NH1	2.19	0.74
26:14:2055:C:N3	58:14:3477:HOH:O	2.19	0.74
5:4E:102:ALA:HB1	5:4E:106:PRO:HG2	1.70	0.74
26:1H:563:G:OP2	58:1H:3591:HOH:O	2.06	0.74
26:1H:1265:A:OP1	58:1H:3592:HOH:O	2.06	0.74
26:1H:2062:A:OP1	58:1H:3577:HOH:O	2.04	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1762:A:N6	58:14:3478:HOH:O	2.19	0.74
31:49:61:ALA:O	31:49:65:GLY:N	2.21	0.74
7:6E:111:ARG:NH1	7:6E:113:GLU:OE2	2.20	0.74
26:1H:1236:G:O6	58:1H:3575:HOH:O	2.03	0.74
26:1H:2576:G:OP1	58:1H:3581:HOH:O	2.04	0.74
13:4A:46:LYS:NZ	13:4A:47:ASP:OD1	2.21	0.74
32:59:137:ASP:HB3	32:59:140:LYS:HB3	1.70	0.74
1:13:1126:U:O2'	1:13:1281:U:O4'	2.06	0.73
54:Q8:37:SER:O	54:Q8:40:GLU:N	2.21	0.73
47:E5:27:GLU:HB2	47:E5:69:PHE:HD2	1.52	0.73
26:1H:991:C:OP2	58:1H:3543:HOH:O	2.07	0.73
26:1H:1006:C:OP2	58:1H:3589:HOH:O	2.05	0.73
26:1H:1138:G:H21	34:58:106:MET:HE3	1.51	0.73
26:1H:1516:U:H2'	26:1H:1517:G:C8	2.24	0.73
45:G8:28:LYS:NZ	45:G8:64:GLU:OE2	2.20	0.73
1:1G:1204:A:OP1	14:5A:3:ARG:NH1	2.22	0.73
37:45:97:VAL:HG11	37:45:103:MET:HE3	1.70	0.73
26:14:698:C:O2'	26:14:734:A:N6	2.21	0.73
26:14:1627:G:OP1	58:14:3440:HOH:O	2.07	0.73
32:59:6:ARG:NH2	32:59:62:LYS:O	2.21	0.73
4:3E:50:ARG:HD2	4:3E:51:PRO:HD2	1.71	0.73
26:1H:270(L):U:C2	33:61:50:ARG:HG2	2.23	0.73
26:1H:968:G:O6	58:1H:3586:HOH:O	2.05	0.73
46:H8:116:VAL:HG22	46:H8:146:ILE:HG12	1.70	0.73
1:1G:564:C:O2'	8:72:91:ARG:NH2	2.22	0.73
1:1G:1315:U:HO2'	1:1G:1360:A:HO2'	1.28	0.73
5:42:35:GLY:HA3	5:42:41:VAL:HG23	1.70	0.73
26:1H:918:A:N3	27:16:80:U:O2'	2.20	0.73
26:1H:2048:G:N7	58:1H:3685:HOH:O	2.20	0.73
1:1G:411:A:H62	1:1G:413:G:H21	1.35	0.73
1:1G:1127:G:O2'	1:1G:1148:U:O2	2.05	0.73
26:14:1019:U:H2'	26:14:1020:A:H8	1.54	0.73
1:13:613:C:H42	1:13:627:G:H1	1.37	0.73
26:1H:1342:A:OP2	58:1H:3590:HOH:O	2.06	0.73
29:21:63:LEU:O	29:21:66:HIS:N	2.21	0.73
36:78:49:ARG:HD2	54:Q8:61:LEU:HD23	1.69	0.73
1:1G:54:C:N4	1:1G:353:A:OP2	2.20	0.73
6:52:68:PRO:HG2	6:52:71:ARG:HG3	1.70	0.73
26:14:2681:C:H5	26:14:2725:A:H62	1.36	0.73
50:H5:13:ILE:O	58:H5:101:HOH:O	2.05	0.73
26:1H:1344:G:N7	58:1H:3683:HOH:O	2.20	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2887:U:H2'	26:14:2888:C:H6	1.54	0.73
26:1H:958:U:OP2	37:88:14:ARG:NH1	2.21	0.73
26:1H:1728:G:H8	26:1H:1732:A:H62	1.34	0.73
40:B8:58:ASN:O	40:B8:58:ASN:ND2	2.21	0.73
26:1H:796:C:H2'	26:1H:797:C:C6	2.24	0.73
1:1G:1452:C:H4'	1:1G:1453:G:H5'	1.69	0.73
4:32:57:ARG:NH2	4:32:205:GLU:OE1	2.21	0.73
8:72:28:ALA:HB3	8:72:57:PRO:HB2	1.71	0.73
12:3A:60:LEU:HB3	12:3A:62:SER:H	1.53	0.73
26:14:774:A:O2'	26:14:775:G:O5'	2.07	0.73
26:14:2156:G:N7	26:14:2157:G:N2	2.37	0.73
41:85:27:LEU:HD12	41:85:31:SER:HB3	1.70	0.73
41:85:85:LYS:HB3	41:85:116:ALA:HB1	1.71	0.72
20:BI:26:ASN:HB2	20:BI:71:THR:OG1	1.89	0.72
28:11:171:ASP:OD1	28:11:171:ASP:N	2.21	0.72
32:51:157:TYR:H	32:51:171:LEU:HA	1.53	0.72
22:1L:56:C:H3'	22:1L:57:G:H5"	1.71	0.72
26:14:1011:G:O2'	26:14:1012:U:OP1	2.06	0.72
26:14:2306:C:N4	31:49:42:GLY:O	2.21	0.72
1:13:1506:U:O2'	58:13:1816:HOH:O	2.06	0.72
1:1G:584:G:OP1	17:8A:91:ARG:NH1	2.22	0.72
10:1A:47:PHE:HB2	10:1A:63:PHE:HB2	1.71	0.72
26:14:141:A:H8	26:14:1595:G:H21	1.34	0.72
4:3E:15:GLU:OE1	4:3E:66:ARG:NH1	2.17	0.72
13:4I:4:ILE:HG22	13:4I:5:ALA:H	1.52	0.72
26:1H:1639:U:OP1	58:1H:3594:HOH:O	2.07	0.72
26:1H:2844:G:O6	58:1H:3573:HOH:O	2.03	0.72
1:1G:985:C:H42	1:1G:1220:G:H1	1.37	0.72
5:42:31:LEU:HD22	5:42:45:PHE:HB2	1.71	0.72
48:F5:76:ARG:O	48:F5:78:LYS:NZ	2.21	0.72
1:13:881:G:P	12:3I:12:ARG:HH22	2.11	0.72
7:6E:78:ARG:NH1	7:6E:154:TYR:O	2.23	0.72
15:6I:25:THR:HG21	15:6I:70:LEU:HB2	1.72	0.72
52:N8:41:PRO:O	52:N8:44:THR:OG1	2.06	0.72
5:42:16:THR:OG1	5:42:17:ALA:N	2.21	0.72
9:82:40:LEU:HB3	9:82:43:ALA:HB2	1.70	0.72
16:7I:53:VAL:HG13	16:7I:79:VAL:HG22	1.71	0.72
26:1H:409:C:OP1	58:1H:3587:HOH:O	2.05	0.72
26:1H:617:G:OP1	30:31:40:GLN:NE2	2.22	0.72
1:1G:617:G:N7	58:1G:1822:HOH:O	2.21	0.72
11:2A:29:ILE:HG22	11:2A:44:SER:HB2	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1345:C:OP2	58:14:3436:HOH:O	2.05	0.72
11:2I:22:HIS:HB3	11:2I:29:ILE:HG23	1.70	0.72
26:1H:1204:A:H62	26:1H:1241:A:H2	1.38	0.72
29:21:111:ARG:HG3	29:21:160:TYR:CD2	2.24	0.72
37:88:66:ILE:HA	37:88:104:PHE:HA	1.70	0.72
1:1G:1281:U:OP2	1:1G:1282:C:N4	2.21	0.72
2:12:130:ARG:O	2:12:135:GLN:NE2	2.22	0.72
38:55:100:LEU:HD21	38:55:113:LEU:HD13	1.72	0.72
51:M8:14:ILE:HG22	51:M8:24:THR:HG22	1.71	0.72
26:14:2823:A:OP1	29:29:113:PHE:HB2	1.90	0.72
30:39:10:PRO:HA	30:39:127:GLU:HG2	1.72	0.72
26:1H:592:G:N2	54:Q8:4:MET:HE1	2.03	0.72
26:14:1386:C:H2'	26:14:1387:C:H6	1.54	0.72
20:BI:33:ILE:O	20:BI:37:SER:OG	2.06	0.72
26:1H:1266:G:O5'	43:E8:15:ARG:NH2	2.22	0.72
10:1A:48:THR:HA	10:1A:62:HIS:HB3	1.72	0.72
13:4A:12:ASN:H	13:4A:45:VAL:HB	1.53	0.72
26:1H:2739:U:OP2	58:1H:3598:HOH:O	2.08	0.71
8:72:12:ARG:NH2	8:72:27:PRO:HD3	2.04	0.71
19:AA:9:VAL:CB	19:AA:10:PHE:HA	2.20	0.71
26:14:84:A:N6	26:14:102:G:O2'	2.22	0.71
26:14:240:G:O6	58:14:3441:HOH:O	2.07	0.71
26:14:1899:G:H21	26:14:1902:C:N4	1.87	0.71
31:49:136:ARG:HD3	31:49:137:GLU:H	1.55	0.71
34:15:128:HIS:ND1	34:15:129:PRO:O	2.22	0.71
46:D5:157:LEU:HA	46:D5:161:VAL:HG11	1.71	0.71
54:M5:40:GLU:HA	54:M5:43:GLN:HB2	1.71	0.71
26:1H:1613:G:N7	58:1H:3691:HOH:O	2.21	0.71
1:1G:1273:G:H3'	1:1G:1274:G:H8	1.55	0.71
5:42:143:ARG:NH2	8:72:77:GLU:OE1	2.23	0.71
46:D5:10:ARG:NH2	46:D5:26:GLY:O	2.23	0.71
1:13:936:C:O2	1:13:1382:C:N4	2.23	0.71
26:1H:587:C:N3	36:78:33:ARG:NH1	2.39	0.71
40:B8:62:THR:HB	40:B8:75:ILE:HG12	1.72	0.71
1:13:243:A:H4'	1:13:244:U:H3'	1.72	0.71
13:4I:17:VAL:O	13:4I:20:THR:OG1	2.08	0.71
26:1H:326:G:N7	58:1H:3696:HOH:O	2.22	0.71
26:1H:445:C:OP1	58:1H:3597:HOH:O	2.08	0.71
26:1H:852:G:H1	26:1H:925:C:H42	1.38	0.71
26:1H:1176:G:N7	26:1H:1177:A:N6	2.37	0.71
9:82:28:VAL:HG22	9:82:63:ILE:HB	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:848:G:H2'	26:14:849:A:C8	2.25	0.71
29:29:61:ARG:HA	29:29:63:LEU:HD22	1.72	0.71
1:13:179:A:H2'	1:13:180:U:H6	1.56	0.71
1:13:768:A:OP2	58:13:1818:HOH:O	2.08	0.71
11:2I:54:ARG:O	11:2I:56:GLY:N	2.24	0.71
26:1H:155:C:N4	26:1H:171:G:H1	1.86	0.71
26:1H:1399:C:N4	58:1H:3697:HOH:O	2.22	0.71
39:A8:27:SER:HA	39:A8:88:ASP:HB3	1.71	0.71
26:14:1614:A:OP1	26:14:1617:C:N4	2.24	0.71
26:14:2295:C:H5	39:65:13:ARG:HH22	1.39	0.71
26:1H:818:G:OP2	58:1H:3538:HOH:O	2.08	0.71
28:11:85:ASP:OD2	28:11:88:ARG:NH1	2.24	0.71
2:12:193:ASP:OD1	2:12:193:ASP:N	2.23	0.71
26:14:49:A:H4'	26:14:50:U:H5"	1.73	0.71
26:14:729:G:OP2	28:19:13:ARG:NH1	2.24	0.71
26:14:2404:C:O3'	36:35:77:ARG:NH2	2.23	0.71
1:13:1329:A:H5'	13:4I:29:ARG:HD2	1.73	0.71
4:3E:122:ARG:NH1	4:3E:134:ASP:O	2.23	0.71
26:1H:274:G:N2	26:1H:276:A:H61	1.88	0.71
26:1H:1007:C:OP2	58:1H:3605:HOH:O	2.09	0.71
28:11:17:THR:HG22	28:11:204:ILE:HA	1.72	0.71
26:14:958:U:OP2	37:45:14:ARG:NH1	2.20	0.71
1:13:662:G:H1	1:13:743:U:H3	1.38	0.71
8:7E:45:ILE:HG22	8:7E:63:LEU:HA	1.71	0.71
26:1H:646:A:H2'	26:1H:647:G:O4'	1.91	0.71
44:F8:24:GLY:O	44:F8:82:GLN:HA	1.90	0.71
26:14:2272:U:O4	58:14:3438:HOH:O	2.06	0.71
26:14:2711:A:OP1	58:14:3447:HOH:O	2.09	0.71
29:29:37:ARG:NH1	29:29:80:GLU:OE2	2.24	0.71
41:85:66:ASN:CG	41:85:76:TYR:HB2	2.16	0.71
26:14:2287:A:N6	26:14:2344:U:H3	1.89	0.71
1:13:588:G:OP1	58:13:1820:HOH:O	2.09	0.71
1:13:1284:C:O2	58:13:1819:HOH:O	2.08	0.71
26:1H:463:G:N7	58:1H:3702:HOH:O	2.23	0.71
26:1H:2105:C:H2'	26:1H:2106:G:H8	1.56	0.71
12:3A:60:LEU:HB2	12:3A:64:TYR:H	1.56	0.71
26:14:1394:U:OP1	58:14:3443:HOH:O	2.08	0.71
31:49:73:ALA:HB3	31:49:84:LYS:HA	1.73	0.71
26:1H:376:C:OP1	58:1H:3602:HOH:O	2.09	0.70
1:1G:79:G:H1	1:1G:90:C:N4	1.87	0.70
1:1G:688:G:H2'	1:1G:689:C:H6	1.55	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:727:G:N2	1:1G:730:G:OP2	2.21	0.70
34:15:6:PRO:HG3	34:15:41:ASP:HB3	1.73	0.70
2:1E:11:LEU:HD21	2:1E:209:ARG:HH21	1.55	0.70
5:4E:98:THR:HB	5:4E:117:ASP:HB3	1.70	0.70
15:6I:24:SER:HB3	15:6I:27:VAL:HG23	1.72	0.70
26:1H:567:A:OP1	58:1H:3599:HOH:O	2.09	0.70
26:1H:1055:G:O2'	26:1H:1086:A:N6	2.24	0.70
26:1H:1210:A:H5"	26:1H:1212:G:H5'	1.73	0.70
26:1H:1800:C:OP2	28:11:183:ARG:NH2	2.22	0.70
28:11:124:PRO:O	28:11:129:ASN:ND2	2.23	0.70
28:11:221:VAL:HG22	28:11:226:MET:HE3	1.73	0.70
41:C8:92:ARG:O	41:C8:94:ASN:N	2.25	0.70
26:14:833:U:O2	36:35:55:ARG:NH1	2.24	0.70
26:14:2062:A:O2'	26:14:2063:C:OP1	2.09	0.70
26:14:2810:A:N6	26:14:2891:G:O2'	2.24	0.70
1:13:579:G:N2	1:13:762:C:O2	2.16	0.70
51:M8:12:ALA:O	51:M8:24:THR:OG1	2.08	0.70
1:1G:1123:A:H4'	10:1A:36:GLY:HA3	1.72	0.70
3:22:172:ARG:HG2	3:22:174:PRO:HD3	1.71	0.70
24:3L:15:G:N2	24:3L:21:A:N3	2.39	0.70
26:14:1111:A:O3'	26:14:1112:G:H4'	1.90	0.70
26:14:1633:G:O6	58:14:3439:HOH:O	2.06	0.70
26:14:1664:A:OP2	58:14:3442:HOH:O	2.07	0.70
46:H8:128:VAL:HB	46:H8:161:VAL:HG12	1.72	0.70
1:1G:191(F):U:H2'	1:1G:191:G:H8	1.56	0.70
1:1G:1248:A:N6	1:1G:1288:A:OP2	2.24	0.70
24:3L:15:G:H2'	24:3L:59:A:N6	2.07	0.70
26:14:399:G:OP2	58:14:3444:HOH:O	2.08	0.70
26:14:602:G:HO2'	26:14:604:G:HO2'	1.35	0.70
26:14:1049:C:N4	26:14:2751:G:N7	2.39	0.70
32:59:46:GLU:OE2	32:59:51:ARG:NH1	2.25	0.70
1:13:811:C:N3	58:13:1844:HOH:O	2.23	0.70
3:2E:19:GLU:O	3:2E:40:ARG:NH2	2.24	0.70
16:7I:50:LYS:HE3	16:7I:51:VAL:H	1.56	0.70
26:1H:972:G:O2'	58:1H:3604:HOH:O	2.09	0.70
26:1H:974(A):C:OP1	58:1H:3603:HOH:O	2.09	0.70
26:1H:1385:G:N7	58:1H:3707:HOH:O	2.24	0.70
26:1H:1676:A:OP2	58:1H:3593:HOH:O	2.07	0.70
52:N8:36:CYS:HB2	52:N8:49:CYS:SG	2.32	0.70
26:14:2873:A:H8	38:55:6:SER:H	1.37	0.70
29:29:36:ARG:NH2	29:29:86:PRO:O	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:153:SER:HB2	30:39:190:GLU:H	1.56	0.70
46:D5:10:ARG:HD2	46:D5:36:LYS:HE2	1.74	0.70
7:6E:16:LEU:HD11	9:8E:45:ALA:HB2	1.74	0.70
13:4I:117:VAL:HG13	13:4I:118:ALA:H	1.55	0.70
24:3K:43:G:H2'	24:3K:44:A:C8	2.27	0.70
40:B8:20:PRO:HD2	40:B8:86:ILE:HG23	1.73	0.70
1:1G:1205:U:O3'	3:22:190:ARG:NH2	2.25	0.70
4:32:108:LEU:HD21	4:32:183:GLY:HA3	1.74	0.70
26:14:945:A:N3	58:14:3497:HOH:O	2.24	0.70
26:14:1106:G:H3'	26:14:1107:G:C8	2.27	0.70
48:F5:92:LYS:O	48:F5:95:LEU:N	2.25	0.70
26:1H:24:G:O6	58:1H:3608:HOH:O	2.09	0.70
26:1H:1287:A:N7	38:98:107:ASP:HB2	2.06	0.70
34:58:120:LEU:HD21	34:58:122:VAL:HG23	1.73	0.70
44:F8:27:THR:HB	44:F8:80:ILE:HB	1.73	0.70
23:2L:41:C:H2'	23:2L:42:C:H6	1.56	0.70
26:14:761:A:N6	58:14:3401:HOH:O	2.22	0.70
41:85:97:ASP:OD2	41:85:101:ARG:NH2	2.25	0.70
1:13:501:C:H2'	1:13:502:G:C8	2.26	0.70
26:1H:1632:A:OP2	58:1H:3601:HOH:O	2.09	0.70
1:1G:929:G:H1	1:1G:1388:C:H42	1.38	0.70
1:1G:967:C:O2'	9:82:125:TYR:OH	2.09	0.70
3:22:7:PRO:HB2	3:22:11:ARG:HH12	1.55	0.70
26:14:676:A:H8	26:14:2069:G:H21	1.40	0.70
29:29:49:LEU:HD22	29:29:91:VAL:HG21	1.74	0.70
1:13:266:G:H5"	1:13:267:C:H5	1.55	0.70
8:7E:86:ILE:HG22	8:7E:87:SER:H	1.56	0.70
26:1H:661:C:O2'	36:78:13:ASN:O	2.09	0.70
26:1H:1515:C:H2'	26:1H:1516:U:H6	1.57	0.70
1:1G:19:C:OP1	5:42:125:SER:OG	2.09	0.70
1:1G:438:G:H4'	4:32:123:HIS:HD2	1.56	0.70
1:1G:1105:A:H2'	1:1G:1106:G:H8	1.56	0.70
1:1G:1110:A:OP2	58:1G:1813:HOH:O	2.09	0.70
3:22:111:LEU:HD23	3:22:146:ALA:HB2	1.73	0.70
26:14:1756:G:OP2	58:14:3446:HOH:O	2.09	0.70
1:13:1144:G:H21	1:13:1146:A:H62	1.37	0.70
15:6I:55:GLY:HA2	15:6I:58:MET:HE3	1.74	0.70
26:1H:2401:U:H2'	26:1H:2402:C:O4'	1.92	0.70
1:1G:933:G:O6	7:62:3:ARG:NH2	2.25	0.70
13:4A:64:TRP:HB2	13:4A:66:LEU:HD23	1.74	0.70
26:14:1727:U:H3	26:14:1733:G:H1	1.36	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:25:111:PHE:HB3	35:25:114:ILE:HG13	1.73	0.70
1:13:35:G:O2'	12:3I:118:SER:O	2.10	0.69
1:13:259:G:OP2	20:BI:83:ARG:NH1	2.24	0.69
2:1E:178:ARG:NH1	2:1E:196:LEU:O	2.20	0.69
12:3I:32:PHE:HB3	12:3I:84:LEU:HD11	1.72	0.69
26:1H:450:G:O6	58:1H:3606:HOH:O	2.09	0.69
26:1H:963:U:OP1	58:1H:3615:HOH:O	2.10	0.69
26:1H:1379:A:H4'	26:1H:1380:G:OP2	1.91	0.69
26:1H:1454:U:O2'	26:1H:1455:G:N7	2.25	0.69
40:B8:77:PRO:HG2	40:B8:80:SER:HB2	1.72	0.69
40:B8:107:ASP:O	40:B8:111:ARG:NH1	2.25	0.69
1:1G:629:G:H2'	1:1G:630:G:O4'	1.91	0.69
22:1L:51:C:N4	22:1L:63:G:O6	2.16	0.69
26:14:2146:C:H4'	26:14:2147:G:C8	2.27	0.69
26:14:2788:C:OP1	29:29:61:ARG:NH1	2.25	0.69
1:13:524:G:H2'	1:13:525:C:C6	2.26	0.69
1:13:1291:G:OP1	7:6E:37:ASN:ND2	2.25	0.69
6:5E:15:ASP:OD1	6:5E:18:GLN:N	2.25	0.69
33:61:2:LYS:HB2	33:61:39:ALA:HB3	1.75	0.69
1:1G:1052:U:O2'	1:1G:1055:A:OP2	2.09	0.69
11:2A:82:VAL:HB	11:2A:108:ILE:HG12	1.73	0.69
26:14:1014:U:H3	26:14:1148:A:H61	1.38	0.69
26:14:1499:C:H2'	26:14:1500:G:H8	1.57	0.69
1:13:407:G:OP1	4:3E:115:ARG:NH2	2.24	0.69
19:AI:64:GLU:OE2	51:M8:60:GLN:NE2	2.26	0.69
26:1H:820:A:N6	58:1H:3701:HOH:O	2.23	0.69
26:1H:1664:A:OP2	58:1H:3611:HOH:O	2.10	0.69
34:58:30:ILE:HG23	34:58:52:VAL:HG11	1.74	0.69
54:M5:14:VAL:HG11	54:M5:22:VAL:HG13	1.74	0.69
1:13:1:U:H4'	1:13:2:U:O5'	1.92	0.69
1:13:536:C:OP2	58:13:1817:HOH:O	2.08	0.69
2:1E:98:LEU:HB2	2:1E:101:MET:HE3	1.74	0.69
26:1H:1410:G:O6	26:1H:1592:C:N4	2.15	0.69
26:1H:1710:C:H42	26:1H:1748:G:H1	1.41	0.69
26:1H:1858:G:O6	58:1H:3600:HOH:O	2.09	0.69
1:1G:1132:C:H2'	1:1G:1133:G:C8	2.27	0.69
1:1G:1256:A:N6	1:1G:1278:U:OP2	2.22	0.69
26:14:1266:G:O5'	43:A5:15:ARG:NH2	2.26	0.69
26:14:1757:U:N3	26:14:1762:A:H2	1.89	0.69
27:1J:42:C:O2'	31:49:67:LYS:O	2.03	0.69
27:1J:89:G:N2	27:1J:89(A):A:N1	2.40	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:29:116:VAL:HG23	29:29:120:TRP:HB2	1.74	0.69
33:69:77:LEU:HB3	33:69:78:THR:OG1	1.92	0.69
1:13:153:C:N4	1:13:168:G:H1	1.90	0.69
1:13:542:G:OP1	4:3E:10:ARG:NH2	2.26	0.69
26:1H:71:A:C8	26:1H:71:A:H5'	2.27	0.69
26:1H:862:G:OP2	58:1H:3609:HOH:O	2.10	0.69
26:1H:1253:A:C8	58:1H:3527:HOH:O	2.45	0.69
32:51:4:ILE:HG22	32:51:69:ARG:HG2	1.73	0.69
34:15:4:TYR:O	41:85:64:ARG:NH1	2.25	0.69
54:M5:28:GLY:O	54:M5:36:LYS:NZ	2.24	0.69
1:13:1348:U:H2'	1:13:1349:A:H8	1.55	0.69
5:4E:110:LEU:HD13	5:4E:118:ILE:HG21	1.74	0.69
26:1H:571:A:OP2	58:1H:3612:HOH:O	2.10	0.69
26:14:2238:G:N7	58:14:3494:HOH:O	2.24	0.69
28:19:31:LYS:NZ	28:19:33:LEU:HB2	2.07	0.69
36:35:29:LYS:HG2	36:35:30:THR:N	2.05	0.69
38:55:24:GLN:OE1	38:55:36:THR:HG21	1.92	0.69
24:3K:49:G:N2	24:3K:65:C:O2'	2.24	0.69
26:1H:1607:C:H4'	26:1H:1608:A:O5'	1.93	0.69
1:1G:186(A):C:H2'	1:1G:186(B):C:H6	1.58	0.69
32:59:125:VAL:HG22	32:59:126:PRO:HA	1.74	0.69
40:75:80:SER:HB3	40:75:83:ILE:HG13	1.73	0.69
24:3K:50:G:O2'	24:3K:64:C:N4	2.25	0.69
26:1H:2061:G:H5"	26:1H:2503:A:C2	2.28	0.69
32:51:9:ILE:HD11	32:51:69:ARG:HD2	1.75	0.69
35:68:120:GLU:OE1	40:B8:67:SER:OG	2.10	0.69
40:B8:55:ASN:H	40:B8:59:THR:HB	1.57	0.69
1:1G:136:C:H42	1:1G:227:G:H1	1.41	0.69
4:32:31:CYS:HB2	4:32:33:MET:H	1.56	0.69
13:4A:71:ARG:HD3	13:4A:71:ARG:H	1.58	0.69
26:14:1653:G:H3'	38:55:2:ARG:HG2	1.73	0.69
31:49:7:LEU:HD12	31:49:104:GLU:HA	1.73	0.69
1:13:130:A:OP2	17:8I:63:ARG:NH2	2.26	0.69
26:1H:1189:A:OP2	58:1H:3616:HOH:O	2.11	0.69
26:1H:1900:A:H5'	26:1H:1900:A:H8	1.57	0.69
26:1H:2433:A:OP2	58:1H:3607:HOH:O	2.09	0.69
46:H8:169:GLU:OE1	46:H8:170:THR:N	2.19	0.69
51:M8:36:CYS:SG	51:M8:37:SER:N	2.65	0.69
1:1G:1396:A:H4'	1:1G:1397:C:H5"	1.74	0.69
26:14:855:G:H5'	26:14:856:C:OP2	1.93	0.69
34:15:18:ALA:HA	34:15:21:LYS:HD2	1.75	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:45:21:THR:HG22	37:45:23:GLY:HA3	1.74	0.69
47:E5:27:GLU:HG3	47:E5:68:GLU:HA	1.75	0.69
1:13:737:A:H2'	1:13:738:C:H6	1.57	0.69
26:1H:1386:C:H2'	26:1H:1387:C:H6	1.57	0.69
26:1H:2706:G:O6	58:1H:3610:HOH:O	2.10	0.69
32:51:40:GLU:OE1	32:51:60:ARG:NH2	2.25	0.69
1:1G:194:C:H2'	1:1G:195:A:H5"	1.74	0.69
1:1G:989:C:N3	1:1G:1216:G:N1	2.40	0.69
1:1G:1425:U:H3	1:1G:1475:G:H1	1.40	0.69
8:72:41:ARG:NH2	8:72:123:GLU:OE2	2.23	0.69
26:14:140:A:H8	26:14:1408:C:HO2'	1.41	0.69
26:14:534:U:H5'	41:85:42:ALA:HB1	1.73	0.69
26:14:1138:G:H21	34:15:106:MET:HE3	1.58	0.69
44:B5:43:VAL:HG23	44:B5:51:VAL:HG21	1.74	0.69
1:13:503:C:OP2	12:3I:116:SER:OG	2.11	0.68
26:1H:2402:C:H1'	26:1H:2403:C:H5	1.58	0.68
50:L8:5:LYS:HE3	50:L8:57:GLU:OE2	1.93	0.68
26:14:1346:G:OP2	58:14:3449:HOH:O	2.10	0.68
46:D5:149:SER:HA	46:D5:170:THR:HB	1.75	0.68
1:13:286:G:O6	58:13:1821:HOH:O	2.09	0.68
26:1H:587:C:OP2	36:78:21:ARG:NH2	2.27	0.68
26:1H:2128:C:N4	26:1H:2160:G:O6	2.17	0.68
28:11:10:THR:OG1	28:11:13:ARG:HB2	1.93	0.68
45:G8:85:VAL:HG23	45:G8:96:ILE:HB	1.75	0.68
51:M8:14:ILE:HG23	51:M8:21:VAL:HB	1.75	0.68
12:3A:62:SER:HB2	12:3A:64:TYR:HD2	1.58	0.68
22:1L:49:G:H1	22:1L:59:C:H5"	1.58	0.68
26:14:2074:U:OP1	58:14:3448:HOH:O	2.10	0.68
26:14:2153:G:N2	26:14:2154:G:O6	2.26	0.68
31:49:53:LEU:HD13	31:49:90:LEU:HD21	1.73	0.68
33:69:117:GLU:HB2	33:69:118:LYS:HE2	1.76	0.68
18:9I:38:GLU:OE1	18:9I:41:LYS:NZ	2.26	0.68
26:1H:964:C:OP1	58:1H:3613:HOH:O	2.10	0.68
26:1H:1250:G:OP1	58:1H:3614:HOH:O	2.10	0.68
26:1H:1900:A:H5'	26:1H:1900:A:C8	2.28	0.68
26:1H:2210:G:H2'	26:1H:2211:G:C5	2.28	0.68
3:22:16:ARG:HH22	3:22:182:ILE:H	1.39	0.68
5:42:122:GLU:O	5:42:126:ARG:NH1	2.27	0.68
11:2A:109:VAL:HG12	18:9A:86:VAL:HG13	1.74	0.68
26:14:2883:A:H5'	26:14:2884:U:H5'	1.75	0.68
30:39:117:ARG:NH1	30:39:120:GLU:OE1	2.26	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:59:149:ARG:HA	32:59:162:ILE:HD12	1.75	0.68
36:35:71:VAL:HG13	36:35:72:PRO:HD3	1.74	0.68
4:3E:88:VAL:HG12	4:3E:89:THR:HG22	1.74	0.68
13:4I:108:ARG:NH1	13:4I:112:GLY:O	2.27	0.68
26:1H:500:G:N7	58:1H:3718:HOH:O	2.25	0.68
26:1H:690:G:O6	58:1H:3617:HOH:O	2.11	0.68
4:32:157:LEU:O	4:32:161:ASN:ND2	2.27	0.68
31:49:116:ASP:OD2	31:49:118:ARG:NH2	2.26	0.68
26:1H:1858:G:O6	58:1H:3595:HOH:O	2.08	0.68
26:1H:2712(A):A:OP1	58:1H:3555:HOH:O	2.11	0.68
34:15:56:ASN:N	34:15:125:GLY:HA3	2.06	0.68
39:65:24:LEU:HD12	39:65:41:ASP:HB2	1.74	0.68
1:13:1226:C:O2'	13:4I:111:LYS:NZ	2.26	0.68
26:1H:193:U:OP1	58:1H:3618:HOH:O	2.11	0.68
26:1H:1776:G:OP2	58:1H:3622:HOH:O	2.12	0.68
26:14:389:G:N1	36:35:71:VAL:HG12	2.09	0.68
26:14:399:G:OP2	58:14:3450:HOH:O	2.11	0.68
43:A5:24:ILE:HA	43:A5:27:LYS:HG2	1.74	0.68
1:13:964:A:N3	1:13:969:A:O2'	2.21	0.68
9:8E:45:ALA:O	9:8E:78:LYS:NZ	2.27	0.68
26:1H:723:G:H2'	26:1H:724:U:O4'	1.94	0.68
1:1G:353:A:N7	58:1G:1832:HOH:O	2.26	0.68
11:2A:32:ILE:HD13	11:2A:72:ALA:HB2	1.75	0.68
1:13:446:G:H1	1:13:488:C:H42	1.42	0.68
1:1G:1300:G:O2'	1:1G:1301:U:O5'	2.11	0.68
26:14:1499:C:H2'	26:14:1500:G:C8	2.28	0.68
26:14:1858:G:O2'	26:14:1883:G:N2	2.26	0.68
31:49:40:ASN:HB2	31:49:91:ARG:HG2	1.76	0.68
10:1I:9:ARG:NH2	10:1I:95:GLU:OE2	2.26	0.68
49:K8:63:VAL:HA	49:K8:66:GLU:HG2	1.76	0.68
26:14:2365:G:N7	54:M5:39:LYS:NZ	2.42	0.68
28:19:63:ARG:HD3	28:19:63:ARG:H	1.59	0.68
39:65:28:VAL:HG11	39:65:98:VAL:HG13	1.74	0.68
40:75:88:ILE:HD11	40:75:91:ARG:HG2	1.74	0.68
1:13:411:A:OP1	4:3E:30:LYS:NZ	2.27	0.68
6:5E:96:PRO:HB3	18:9I:30:ASP:CG	2.19	0.68
11:2I:95:ILE:HG13	11:2I:96:ARG:H	1.59	0.68
27:16:11:C:O2	27:16:15:A:N6	2.27	0.68
39:A8:88:ASP:C	39:A8:90:GLY:H	1.99	0.68
1:1G:474:G:H2'	1:1G:475:G:H8	1.59	0.68
1:1G:659:U:OP2	15:6A:8:LYS:NZ	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:35:ARG:HH11	4:32:35:ARG:HB2	1.59	0.68
13:4A:68:GLY:HA3	31:49:116:ASP:OD2	1.94	0.68
26:14:389:G:H1	36:35:71:VAL:HG12	1.59	0.68
29:29:10:GLY:HA2	29:29:192:ASN:ND2	2.07	0.68
34:15:104:LYS:HA	34:15:107:LEU:HD12	1.76	0.68
36:35:78:PRO:HA	36:35:110:TYR:HD2	1.58	0.68
52:J5:46:CYS:SG	52:J5:48:GLU:HG2	2.34	0.68
54:M5:22:VAL:HB	54:M5:55:ALA:HB1	1.75	0.68
2:1E:118:LEU:HB3	2:1E:142:LEU:HD12	1.75	0.67
5:4E:115:VAL:HG11	5:4E:118:ILE:HB	1.75	0.67
20:BI:56:MET:HG3	20:BI:88:VAL:HG21	1.77	0.67
26:1H:1053:C:H42	26:1H:1106:G:H1	1.42	0.67
26:1H:2256:G:N7	58:1H:3726:HOH:O	2.26	0.67
5:4E:81:GLU:HG2	5:4E:90:VAL:HG23	1.74	0.67
12:3I:39:VAL:HG12	12:3I:41:ARG:HG2	1.76	0.67
43:A5:13:SER:HA	43:A5:99:ARG:HB2	1.74	0.67
24:3K:39:G:H2'	24:3K:40:G:C8	2.29	0.67
26:1H:85:G:OP2	45:G8:9:LYS:HB2	1.94	0.67
26:1H:1210:A:OP1	58:1H:3620:HOH:O	2.12	0.67
26:1H:1702:G:O6	58:1H:3596:HOH:O	2.08	0.67
1:1G:458:C:H2'	1:1G:464:G:H8	1.59	0.67
26:14:33:U:O4	26:14:446:G:O2'	2.11	0.67
27:1J:48:A:H4'	39:65:95:HIS:HD2	1.60	0.67
29:29:54:GLN:HA	29:29:74:PRO:HA	1.74	0.67
1:13:766:A:OP2	58:13:1823:HOH:O	2.12	0.67
1:13:1346:A:H5"	9:8E:120:ARG:NH1	2.08	0.67
26:1H:1952:A:C2	35:68:22:ILE:HG23	2.29	0.67
26:1H:2154:G:H2'	26:1H:2155:G:C8	2.29	0.67
34:58:67:LEU:HA	34:58:87:LEU:HD12	1.76	0.67
44:F8:61:GLY:N	44:F8:75:ASP:OD1	2.27	0.67
48:J8:81:LYS:NZ	48:J8:83:GLU:O	2.26	0.67
1:1G:363:A:OP1	12:3A:33:ARG:HG3	1.94	0.67
1:1G:1208:C:H2'	1:1G:1209:C:H6	1.60	0.67
1:1G:1095:U:P	1:1G:1108:G:H1	2.17	0.67
1:1G:1160:G:N2	1:1G:1176:A:N1	2.43	0.67
26:14:275:G:O2'	26:14:276:A:O4'	2.12	0.67
1:13:113:G:H2'	1:13:114:U:C6	2.30	0.67
1:13:580:U:OP1	15:6I:54:ARG:NH2	2.28	0.67
26:1H:392:C:OP1	58:1H:3621:HOH:O	2.12	0.67
37:88:138:ASP:OD1	37:88:138:ASP:N	2.27	0.67
26:14:1530:G:O6	26:14:1542:G:N2	2.28	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:53:THR:HG23	30:39:55:GLY:H	1.59	0.67
39:65:14:VAL:HG11	39:65:89:ARG:HH11	1.59	0.67
40:B8:19:LEU:HD22	40:B8:86:ILE:HG22	1.76	0.67
1:1G:664:G:H22	1:1G:741:G:H1	1.42	0.67
33:69:78:THR:HG21	33:69:104:GLN:HG3	1.76	0.67
40:75:77:PRO:HG2	40:75:80:SER:HB2	1.77	0.67
1:13:661:G:H1	1:13:744:C:H42	1.40	0.67
1:13:1239:A:O2'	7:6E:114:ARG:O	2.13	0.67
22:1K:1:G:N7	22:1K:73:A:N6	2.42	0.67
26:1H:95:G:H4'	49:K8:46:GLN:HG3	1.75	0.67
26:1H:363(B):G:H2'	26:1H:363(C):G:H8	1.60	0.67
26:1H:871:U:OP2	37:88:5:ARG:NH2	2.26	0.67
1:1G:1454:G:H5"	20:BA:35:THR:HG21	1.77	0.67
3:22:73:PRO:HA	3:22:76:VAL:HG13	1.75	0.67
26:14:1680:U:N3	26:14:1764:G:OP2	2.27	0.67
31:49:115:ARG:HB2	31:49:136:ARG:HH21	1.59	0.67
15:6I:39:LEU:HB3	15:6I:56:LEU:HD12	1.77	0.67
26:1H:387:U:OP1	58:1H:3619:HOH:O	2.11	0.67
26:1H:602:G:HO2'	26:1H:604:G:HO2'	1.35	0.67
26:1H:731:C:OP2	58:1H:3542:HOH:O	2.13	0.67
26:1H:2210:G:H5"	26:1H:2211:G:N7	2.09	0.67
44:B5:51:VAL:HG13	44:B5:81:VAL:HG23	1.77	0.67
1:13:153:C:N3	1:13:168:G:N2	2.42	0.67
26:1H:1021:A:H8	26:1H:1021:A:H3'	1.59	0.67
26:1H:1547:C:H2'	26:1H:1548:C:C6	2.29	0.67
26:1H:2154:G:H2'	26:1H:2155:G:H8	1.59	0.67
1:1G:1218:C:OP2	14:5A:9:LYS:NZ	2.20	0.67
26:14:938:G:OP2	54:M5:52:LYS:NZ	2.26	0.67
41:85:53:ARG:HA	41:85:56:ASP:HB2	1.77	0.67
1:13:1241:G:OP1	7:6E:35:LYS:NZ	2.22	0.66
26:1H:49:A:N7	26:1H:120:U:H5	1.92	0.66
26:1H:187:G:OP2	58:1H:3623:HOH:O	2.13	0.66
26:1H:1021:A:H3'	26:1H:1021:A:C8	2.30	0.66
26:1H:1534:G:H21	26:1H:1538:G:N2	1.91	0.66
26:1H:2713:A:OP2	58:1H:3625:HOH:O	2.13	0.66
26:14:182:A:N6	26:14:214:G:O6	2.28	0.66
26:14:1824:G:OP1	28:19:52:ARG:NH1	2.27	0.66
1:13:674:G:H2'	1:13:675:A:H8	1.58	0.66
4:3E:150:GLU:HA	4:3E:153:ARG:HG3	1.77	0.66
26:1H:270(L):U:N1	33:61:50:ARG:HG2	2.10	0.66
26:1H:1833:U:H2'	26:1H:1834:U:H6	1.60	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2404:C:O3'	36:78:77:ARG:NH2	2.27	0.66
26:1H:2469:A:H61	26:1H:2481:G:H1'	1.60	0.66
37:88:104:PHE:HE2	37:88:125:LEU:HD11	1.59	0.66
1:1G:195:A:OP2	58:1G:1816:HOH:O	2.13	0.66
23:2L:24:C:H2'	23:2L:25:U:C6	2.30	0.66
26:14:862:G:OP2	58:14:3451:HOH:O	2.11	0.66
26:14:2839:G:H5'	38:55:46:GLY:HA2	1.75	0.66
48:F5:91:LYS:HZ3	48:F5:91:LYS:HA	1.59	0.66
7:6E:111:ARG:HD2	7:6E:123:GLU:HB2	1.77	0.66
9:8E:5:TYR:HH	9:8E:7:THR:HG1	1.41	0.66
26:1H:1021:A:H8	26:1H:1022:G:H5"	1.60	0.66
26:1H:1681:G:N2	58:1H:3736:HOH:O	2.28	0.66
30:31:155:LEU:HD13	30:31:185:ASP:HB3	1.77	0.66
8:72:17:THR:O	8:72:78:GLN:NE2	2.27	0.66
26:14:1864:U:OP1	26:14:2410:G:O2'	2.13	0.66
26:14:2324:C:H5"	26:14:2325:G:H5'	1.78	0.66
26:14:2400:G:H2'	26:14:2401:U:C6	2.30	0.66
40:75:50:ILE:HD11	40:75:102:ILE:HD11	1.76	0.66
26:1H:2732:G:OP1	29:21:203:LYS:NZ	2.28	0.66
32:51:24:VAL:HG13	32:51:35:VAL:HB	1.76	0.66
41:C8:92:ARG:HD2	42:D8:11:GLN:HB2	1.76	0.66
1:1G:666:G:OP2	1:1G:725:G:N2	2.24	0.66
11:2A:67:ASP:OD2	11:2A:71:LYS:NZ	2.28	0.66
16:7A:57:ARG:HE	16:7A:79:VAL:HG12	1.59	0.66
26:14:2267:A:OP2	58:14:3453:HOH:O	2.12	0.66
46:D5:23:LYS:HD3	46:D5:40:ASP:HA	1.78	0.66
1:13:307:C:OP2	58:13:1826:HOH:O	2.13	0.66
26:1H:517:C:OP1	52:N8:16:ARG:NH2	2.27	0.66
26:1H:722:A:H2'	26:1H:723:G:H8	1.60	0.66
35:68:88:ASN:O	35:68:91:LEU:N	2.27	0.66
4:32:96:LEU:HB3	4:32:139:ARG:HH12	1.61	0.66
26:14:1028:A:H2'	26:14:1029:A:C8	2.31	0.66
26:14:2415:G:H4'	36:35:67:MET:N	2.10	0.66
36:35:79:ARG:HG2	36:35:110:TYR:HB2	1.78	0.66
1:13:737:A:H2'	1:13:738:C:C6	2.31	0.66
12:3I:62:SER:HB2	12:3I:64:TYR:CD1	2.30	0.66
26:1H:453:C:OP1	58:1H:3606:HOH:O	2.14	0.66
26:1H:1032:A:H2	26:1H:1122:G:H22	1.42	0.66
31:41:97:ASP:HA	31:41:100:TRP:HD1	1.60	0.66
48:J8:93:GLU:C	48:J8:95:LEU:H	2.02	0.66
1:1G:382:A:H2'	1:1G:383:A:C8	2.30	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:173:TRP:CD1	4:32:174:LEU:HG	2.31	0.66
8:72:7:ALA:HB2	8:72:85:ARG:HD3	1.77	0.66
9:82:27:THR:OG1	9:82:31:GLN:O	2.12	0.66
1:13:973:G:H3'	1:13:974:A:H5"	1.78	0.66
26:1H:1430:C:H2'	26:1H:1431:U:H6	1.56	0.66
41:C8:106:PHE:HA	41:C8:109:LEU:HD12	1.77	0.66
51:M8:13:ARG:HH12	51:M8:22:ILE:HG23	1.61	0.66
3:22:36:ASP:O	3:22:40:ARG:NH1	2.28	0.66
14:5A:23:ARG:NH1	14:5A:28:GLY:O	2.28	0.66
20:BA:49:ALA:HA	20:BA:52:ALA:HB3	1.78	0.66
32:59:9:ILE:HG21	32:59:51:ARG:HE	1.61	0.66
1:13:504:C:OP1	58:13:1824:HOH:O	2.13	0.66
26:1H:31:C:OP1	58:1H:3628:HOH:O	2.14	0.66
26:1H:70:G:H21	26:1H:71:A:N6	1.92	0.66
32:51:64:LEU:O	32:51:68:THR:OG1	2.13	0.66
32:51:83:TYR:CZ	32:51:138:LYS:HD2	2.30	0.66
7:62:147:ALA:O	7:62:149:ARG:NH1	2.28	0.66
26:14:67:U:N3	26:14:74:A:H2	1.94	0.66
26:14:1678:G:N2	26:14:1989:G:H22	1.93	0.66
31:49:166:ASP:N	31:49:166:ASP:OD1	2.27	0.66
5:4E:15:ARG:HD2	25:4K:26:A:OP1	1.96	0.66
8:7E:9:MET:HG3	8:7E:26:VAL:HG21	1.77	0.66
17:8I:18:THR:OG1	17:8I:69:LYS:NZ	2.25	0.66
1:1G:186(D):C:H2'	1:1G:186(E):C:C6	2.31	0.66
11:2A:98:LEU:HA	11:2A:101:SER:HB3	1.76	0.66
13:4A:84:ILE:HG23	19:AA:63:THR:HG21	1.78	0.66
26:14:1525:G:H2'	26:14:1526:G:H8	1.61	0.66
34:15:47:ALA:HB2	34:15:112:LEU:HD11	1.76	0.66
39:65:36:TYR:HA	39:65:52:SER:HB3	1.77	0.66
46:D5:74:VAL:HG13	46:D5:86:VAL:HG22	1.77	0.66
17:8I:82:MET:HA	17:8I:85:VAL:HG12	1.77	0.66
26:1H:2140:C:H42	26:1H:2151:G:H1	1.43	0.66
26:14:2292:C:OP1	39:65:17:ARG:NH2	2.28	0.66
26:14:2801:A:H2'	26:14:2802:G:C8	2.31	0.66
30:39:129:PHE:HB3	30:39:142:TRP:CE2	2.31	0.66
43:A5:26:GLY:H	43:A5:71:VAL:HB	1.61	0.66
26:1H:330:A:HO2'	26:1H:331:A:H8	1.41	0.65
26:1H:634:C:H2'	26:1H:635:C:C6	2.31	0.65
26:1H:1657:C:H2'	26:1H:1658:C:H6	1.61	0.65
26:1H:2762:G:OP2	58:1H:3626:HOH:O	2.14	0.65
41:C8:34:LYS:NZ	41:C8:37:GLU:OE1	2.25	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:L8:39:ASP:OD2	50:L8:44:ARG:NH2	2.28	0.65
1:1G:1095:U:H2'	1:1G:1096:C:C6	2.31	0.65
1:13:67:C:H2'	1:13:68:G:H8	1.61	0.65
1:13:405:U:OP2	4:3E:3:ARG:NH1	2.29	0.65
1:13:590:C:H5"	8:7E:30:ARG:HG3	1.79	0.65
26:1H:1771:C:HO2'	26:1H:1786:A:H8	1.43	0.65
28:11:177:LEU:HD11	28:11:183:ARG:HG2	1.78	0.65
39:A8:34:HIS:CE1	39:A8:54:LEU:HD23	2.31	0.65
1:1G:8:A:C6	4:32:209:ARG:HB2	2.31	0.65
7:62:59:LEU:HD21	7:62:63:LYS:HZ2	1.61	0.65
26:14:72:U:OP1	58:14:3460:HOH:O	2.15	0.65
26:14:1022:G:H22	26:14:1142(A):A:H2	1.44	0.65
26:14:1635:G:OP1	58:14:3459:HOH:O	2.15	0.65
26:14:1990:C:OP2	58:14:3456:HOH:O	2.14	0.65
30:39:25:PRO:HB2	30:39:27:GLU:HB2	1.78	0.65
1:13:1052:U:OP2	58:13:1825:HOH:O	2.13	0.65
1:13:1104:G:OP1	2:1E:144:ARG:NH1	2.29	0.65
1:13:1345:U:OP1	58:13:1827:HOH:O	2.14	0.65
26:1H:1728:G:H2'	26:1H:1731:G:O6	1.97	0.65
34:58:19:GLU:HG3	34:58:59:LYS:HB3	1.77	0.65
8:72:120:THR:HG23	8:72:122:ARG:H	1.61	0.65
26:14:870:A:H5"	37:45:6:ARG:HB3	1.78	0.65
26:14:910:A:C5	37:45:13:GLN:HG3	2.32	0.65
26:14:2148:G:H2'	26:14:2149:G:H8	1.60	0.65
30:39:101:LEU:O	30:39:106:ARG:NH1	2.30	0.65
43:A5:6:ILE:HG12	43:A5:104:THR:HG23	1.77	0.65
1:13:266:G:H5"	1:13:267:C:C5	2.32	0.65
1:13:1356:G:OP2	58:13:1828:HOH:O	2.14	0.65
7:6E:42:ILE:HG12	7:6E:116:ALA:HB3	1.78	0.65
7:6E:144:MET:HE1	24:3K:40:G:H21	1.61	0.65
24:3K:34:G:O2'	24:3K:35:G:H8	1.80	0.65
26:1H:1178:C:H4'	26:1H:1179:C:OP1	1.96	0.65
26:1H:1386:C:H2'	26:1H:1387:C:C6	2.32	0.65
1:1G:243:A:H4'	1:1G:244:U:H5"	1.78	0.65
1:1G:1224:G:C6	1:1G:1322:C:H1'	2.31	0.65
1:1G:1502:A:H2	1:1G:1505:G:H1	1.43	0.65
26:14:779:U:OP1	28:19:49:ILE:HG22	1.96	0.65
26:14:857:C:H4'	47:E5:23:VAL:HG21	1.77	0.65
1:13:396:G:O2'	1:13:398:C:OP1	2.13	0.65
1:13:590:C:H2'	1:13:591:U:H6	1.62	0.65
1:13:1131:G:OP1	9:8E:3:GLN:NE2	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1367:C:H5'	10:1I:60:ARG:NH1	2.10	0.65
26:1H:1303:G:OP1	58:1H:3630:HOH:O	2.14	0.65
28:11:89:SER:HB2	28:11:159:ALA:H	1.61	0.65
36:78:63:PRO:HB2	54:Q8:30:ARG:HH21	1.62	0.65
38:98:100:LEU:HD11	38:98:113:LEU:HD13	1.79	0.65
1:1G:808:C:OP1	15:6A:48:LYS:NZ	2.20	0.65
1:1G:1014:A:H2'	1:1G:1015:A:C8	2.31	0.65
26:14:2497:A:O2'	58:14:3455:HOH:O	2.14	0.65
30:39:110:LEU:HD21	30:39:181:LEU:HD12	1.77	0.65
1:13:192:U:H2'	1:13:193:C:C6	2.32	0.65
1:13:592:G:H2'	1:13:593:G:H8	1.62	0.65
2:1E:114:ARG:HA	2:1E:117:GLU:HB3	1.77	0.65
4:3E:31:CYS:SG	4:3E:33:MET:HB2	2.36	0.65
26:1H:1359:A:H2'	26:1H:1360:A:H5'	1.79	0.65
30:31:28:ILE:HD13	30:31:116:ASP:HB2	1.78	0.65
46:H8:19:ARG:HH11	46:H8:84:GLU:HB2	1.62	0.65
3:22:47:LEU:HD12	3:22:52:LEU:HB3	1.78	0.65
5:42:42:GLY:HA3	5:42:66:MET:HA	1.79	0.65
26:14:1797:C:HO2'	28:19:259:THR:HG1	1.44	0.65
26:14:2680:C:H5'	29:29:189:PRO:HA	1.78	0.65
27:1J:13:A:N1	27:1J:69:G:O2'	2.27	0.65
43:A5:28:SER:OG	43:A5:31:GLU:OE1	2.14	0.65
9:8E:71:SER:HA	9:8E:74:ILE:HD12	1.79	0.65
26:1H:906:G:OP1	37:88:26:TYR:OH	2.15	0.65
26:1H:1189:A:OP2	58:1H:3632:HOH:O	2.14	0.65
28:11:38:LYS:O	28:11:38:LYS:NZ	2.25	0.65
29:21:105:THR:HG1	29:21:199:ARG:HH21	1.44	0.65
37:88:66:ILE:HD12	37:88:67:ARG:H	1.62	0.65
45:G8:10:GLY:O	45:G8:26:LYS:NZ	2.20	0.65
1:1G:692:U:OP2	11:2A:26:ASN:ND2	2.29	0.65
15:6A:32:LEU:HD13	15:6A:62:GLN:HB3	1.79	0.65
26:14:588:U:H2'	26:14:589:C:C6	2.32	0.65
26:14:831:G:OP1	58:14:3454:HOH:O	2.13	0.65
28:19:63:ARG:HD3	28:19:63:ARG:N	2.11	0.65
1:13:624:C:O3'	16:7I:10:GLY:HA2	1.96	0.65
48:J8:18:ILE:HG13	48:J8:37:ILE:HG12	1.78	0.65
1:1G:557:G:OP1	58:1G:1818:HOH:O	2.14	0.65
5:42:76:ILE:HG23	5:42:142:LEU:HD13	1.79	0.65
17:8A:48:GLU:HB2	17:8A:50:LYS:HB2	1.78	0.65
18:9A:31:LEU:HD23	18:9A:31:LEU:H	1.61	0.65
26:14:102:G:OP1	49:G5:7:ARG:NH2	2.30	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:307:G:O5'	26:14:307:G:H8	1.80	0.65
26:14:708:C:H42	26:14:723:G:H1	1.44	0.65
26:14:760:G:OP1	58:14:3462:HOH:O	2.15	0.65
26:14:2269:A:OP1	58:14:3458:HOH:O	2.14	0.65
28:19:12:SER:HB2	28:19:208:LYS:HB3	1.78	0.65
34:15:13:TRP:O	34:15:135:PRO:HD2	1.97	0.65
39:65:24:LEU:HD22	39:65:24:LEU:H	1.60	0.65
41:85:98:LEU:HB2	41:85:102:GLU:HB2	1.77	0.65
26:1H:801:G:OP2	58:1H:3633:HOH:O	2.15	0.65
26:1H:1406:U:H2'	26:1H:1407:C:C6	2.32	0.65
27:16:1:U:H2'	27:16:2:C:C6	2.32	0.65
29:21:2:LYS:NZ	29:21:100:GLU:OE2	2.29	0.65
42:D8:14:VAL:HB	42:D8:96:ILE:HG13	1.79	0.65
1:1G:8:A:N6	4:32:209:ARG:HB2	2.12	0.65
1:1G:186(B):C:OP1	20:BA:86:ARG:NH2	2.30	0.65
1:1G:547:A:OP1	58:1G:1817:HOH:O	2.13	0.65
1:1G:1006:C:N4	1:1G:1038:C:O2'	2.29	0.65
26:14:2012:G:OP1	43:A5:11:ARG:NH2	2.29	0.65
42:95:62:LEU:HD11	42:95:95:LEU:HB2	1.78	0.65
1:13:576:G:OP1	58:13:1829:HOH:O	2.14	0.65
1:13:1347:G:H5"	9:8E:107:ARG:HB3	1.79	0.65
4:3E:161:ASN:O	4:3E:165:MET:HB2	1.96	0.65
11:2I:27:ASN:OD1	11:2I:28:THR:N	2.30	0.65
26:1H:410:G:OP2	58:1H:3634:HOH:O	2.15	0.65
26:1H:1664:A:O5'	58:1H:3520:HOH:O	2.15	0.65
36:78:50:ARG:HD3	54:Q8:7:HIS:CD2	2.31	0.65
38:98:51:LEU:HD22	38:98:66:VAL:HG13	1.79	0.65
38:98:96:ARG:HD2	38:98:98:LEU:HD11	1.79	0.65
2:1E:212:GLN:NE2	2:1E:233:SER:O	2.28	0.64
26:1H:1678:G:H8	26:1H:1678:G:O5'	1.80	0.64
29:21:39:PRO:HD3	29:21:45:THR:HG23	1.80	0.64
49:K8:4:SER:O	49:K8:4:SER:OG	2.07	0.64
30:39:127:GLU:HG3	30:39:128:ALA:HB2	1.79	0.64
31:49:66:GLN:HE21	31:49:98:ARG:HD2	1.62	0.64
36:35:37:GLY:O	36:35:40:SER:OG	2.15	0.64
46:D5:10:ARG:HH21	46:D5:26:GLY:H	1.44	0.64
1:13:579:G:N1	1:13:762:C:N3	2.42	0.64
1:13:652:U:O4	1:13:752:G:O2'	2.12	0.64
26:1H:1041:C:H42	26:1H:1114:G:H1	1.43	0.64
1:1G:584:G:H5'	17:8A:91:ARG:NH2	2.12	0.64
13:4A:54:VAL:HA	13:4A:57:ARG:HB3	1.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1209:G:OP2	58:14:3457:HOH:O	2.14	0.64
32:59:137:ASP:OD1	32:59:138:LYS:N	2.30	0.64
36:35:5:ASP:HA	36:35:7:ARG:HH21	1.62	0.64
40:75:91:ARG:NH1	40:75:124:ASP:OD2	2.25	0.64
46:D5:19:ARG:HH11	46:D5:84:GLU:HB2	1.62	0.64
46:D5:157:LEU:HB3	46:D5:161:VAL:HG21	1.77	0.64
10:1A:50:ILE:HD13	10:1A:60:ARG:HD3	1.79	0.64
32:59:10:PRO:HD2	32:59:50:VAL:O	1.97	0.64
32:59:152:ARG:HG2	32:59:153:LYS:HG3	1.80	0.64
41:85:92:ARG:HH22	42:95:10:LYS:HA	1.63	0.64
1:13:310:G:OP2	16:7I:27:LYS:NZ	2.31	0.64
1:13:1124:G:N7	1:13:1145:C:O2'	2.25	0.64
10:1I:63:PHE:HE1	14:5I:58:LYS:HG2	1.62	0.64
26:1H:67:U:H3	26:1H:74:A:H2	1.43	0.64
26:1H:699:A:H2'	26:1H:700:G:O4'	1.98	0.64
26:1H:1187:G:N7	58:1H:3712:HOH:O	2.30	0.64
26:1H:1520:U:OP2	58:1H:3629:HOH:O	2.14	0.64
26:1H:1678:G:N2	26:1H:1989:G:H22	1.95	0.64
31:41:16:ARG:NH2	31:41:31:VAL:HG21	2.12	0.64
31:41:97:ASP:O	31:41:101:ILE:HG23	1.97	0.64
39:A8:74:ALA:HB1	39:A8:108:GLY:HA3	1.79	0.64
26:14:363:G:H2'	26:14:363(A):A:H8	1.62	0.64
26:14:1021:A:H62	26:14:1141:U:H3	1.43	0.64
30:39:4:VAL:HA	30:39:19:GLU:HB3	1.80	0.64
31:49:111:LEU:HB3	31:49:117:PHE:CZ	2.32	0.64
38:55:33:ARG:HD3	38:55:115:GLU:HB3	1.80	0.64
44:B5:63:LYS:HA	44:B5:72:LYS:HA	1.80	0.64
1:13:601:C:H2'	1:13:602:A:C8	2.24	0.64
1:13:624:C:H4'	16:7I:11:SER:N	2.13	0.64
6:5E:97:PHE:HB2	18:9I:32:ARG:NH1	2.12	0.64
26:1H:2309:A:N6	26:1H:2310:A:H62	1.95	0.64
26:1H:2315:G:OP1	31:41:36:LYS:NZ	2.27	0.64
27:16:42:C:O2'	31:41:67:LYS:NZ	2.31	0.64
29:21:38:THR:HB	29:21:40:GLU:HG2	1.78	0.64
48:J8:86:SER:HB3	48:J8:89:GLU:H	1.62	0.64
1:1G:124:G:H1	1:1G:237:C:H42	1.45	0.64
26:14:547:A:H2'	26:14:548:A:C8	2.32	0.64
26:14:977:G:H2'	26:14:978:G:H8	1.62	0.64
26:14:2306:C:H3'	26:14:2307:G:H5"	1.78	0.64
30:39:21:ALA:C	30:39:23:ASP:H	2.06	0.64
20:BI:30:LYS:NZ	20:BI:80:ARG:HH12	1.94	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:270(Q):C:H3'	26:1H:270(R):G:H8	1.62	0.64
26:1H:602:G:H21	26:1H:655:A:H8	1.45	0.64
1:1G:682:G:H1	1:1G:708:C:H42	1.46	0.64
1:1G:976:G:O6	58:1G:1814:HOH:O	2.11	0.64
26:14:2615:U:C2	52:J5:7:PRO:HA	2.32	0.64
28:19:148:GLU:HB2	28:19:151:LYS:HD3	1.78	0.64
32:59:155:SER:O	32:59:155:SER:OG	2.14	0.64
2:1E:223:ILE:O	2:1E:227:GLY:N	2.30	0.64
9:8E:26:VAL:HB	9:8E:33:PHE:HB2	1.80	0.64
11:2I:54:ARG:NH2	24:3K:39:G:O3'	2.29	0.64
21:1F:8:THR:HG23	21:1F:11:GLY:H	1.63	0.64
26:1H:1707:G:O2'	26:1H:1758:G:N2	2.31	0.64
26:1H:1903:G:OP2	28:11:241:PRO:HB2	1.98	0.64
27:16:7:G:H4'	39:A8:29:PHE:CD2	2.32	0.64
35:68:112:MET:HA	35:68:115:VAL:HG13	1.80	0.64
1:1G:957:U:H1'	1:1G:960:U:C5	2.33	0.64
26:14:259:G:O2'	26:14:621:A:O2'	2.15	0.64
26:14:2106:G:N2	26:14:2107:C:O2	2.31	0.64
26:14:2118:U:O2	26:14:2147:G:N2	2.31	0.64
26:14:2415:G:H4'	36:35:67:MET:H	1.61	0.64
29:29:10:GLY:HA2	29:29:192:ASN:HD21	1.63	0.64
1:13:127:G:O2'	17:8I:2:PRO:O	2.16	0.64
6:5E:45:LEU:HD12	6:5E:59:TYR:HD1	1.61	0.64
26:1H:2698:U:H2'	26:1H:2699:C:C6	2.32	0.64
48:J8:93:GLU:O	48:J8:95:LEU:N	2.30	0.64
50:L8:8:LEU:HB2	50:L8:28:LEU:HD22	1.78	0.64
52:N8:40:LYS:NZ	52:N8:46:CYS:HB2	2.13	0.64
1:1G:128:G:H4'	17:8A:3:LYS:HG2	1.80	0.64
4:32:153:ARG:NH1	4:32:180:GLY:O	2.27	0.64
5:42:19:MET:HE1	5:42:24:ARG:HE	1.63	0.64
16:7A:34:GLU:OE1	16:7A:55:ARG:NH1	2.31	0.64
26:14:1771:C:HO2'	26:14:1786:A:H8	1.41	0.64
30:39:24:LEU:HD11	30:39:119:ARG:HB3	1.80	0.64
40:75:10:VAL:O	40:75:12:SER:N	2.26	0.64
45:C5:39:VAL:O	45:C5:40:GLU:HB2	1.98	0.64
1:13:812:C:O2	58:13:1822:HOH:O	2.12	0.64
1:13:1347:G:H22	1:13:1374:A:P	2.20	0.64
26:1H:1657:C:H2'	26:1H:1658:C:C6	2.32	0.64
30:31:63:LYS:HE3	30:31:67:GLN:HB2	1.79	0.64
32:51:5:GLY:HA2	32:51:69:ARG:HB2	1.80	0.64
1:1G:740:U:O2'	15:6A:52:SER:OG	2.15	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:920:U:H2'	1:1G:921:U:C6	2.33	0.64
1:1G:1002:G:H1	1:1G:1038:C:N4	1.95	0.64
3:22:16:ARG:NH2	3:22:182:ILE:H	1.96	0.64
5:42:69:VAL:O	5:42:71:LEU:N	2.31	0.64
26:14:2697:G:O6	58:14:3452:HOH:O	2.12	0.64
49:G5:44:LEU:O	49:G5:49:LYS:NZ	2.31	0.64
26:1H:270(N):G:H4'	26:1H:270(O):U:C4	2.33	0.64
26:1H:951:C:OP1	58:1H:3637:HOH:O	2.15	0.64
32:51:2:SER:C	32:51:4:ILE:H	2.06	0.64
26:14:1728:G:H8	26:14:1732:A:H62	1.46	0.64
26:14:2378:A:H4'	39:65:23:ARG:NH1	2.12	0.64
30:39:40:GLN:HE22	30:39:182:ASN:HB2	1.63	0.64
39:65:3:ARG:HD2	39:65:4:LEU:N	2.12	0.64
1:13:390:C:O3'	16:7I:28:ARG:NH2	2.31	0.63
1:13:1223:C:OP1	19:AI:78:ARG:NH1	2.31	0.63
1:13:1285:A:OP1	58:13:1831:HOH:O	2.14	0.63
4:3E:25:ARG:NH1	4:3E:30:LYS:O	2.31	0.63
26:1H:780:G:H21	26:1H:783:A:H62	1.44	0.63
26:1H:2270:G:OP2	58:1H:3636:HOH:O	2.15	0.63
58:1H:3590:HOH:O	44:F8:56:THR:O	2.15	0.63
48:J8:44:PRO:HB2	48:J8:46:LEU:HD13	1.80	0.63
1:1G:167:G:H2'	1:1G:168:G:H8	1.62	0.63
1:1G:523:A:N6	12:3A:92:ASP:OD1	2.27	0.63
26:14:606:U:H4'	26:14:658:C:H4'	1.78	0.63
26:14:819:A:OP2	26:14:1187:G:N2	2.27	0.63
36:35:98:GLU:HA	36:35:101:VAL:HG12	1.80	0.63
41:85:106:PHE:O	41:85:109:LEU:N	2.30	0.63
1:13:649:G:H2'	1:13:650:G:H8	1.62	0.63
24:3K:58:A:H1'	24:3K:60:U:H5'	1.80	0.63
26:1H:582:G:H1	26:1H:1258:C:H42	1.46	0.63
26:1H:1918:A:O2'	26:1H:1920:C:N4	2.31	0.63
45:G8:30:VAL:HG22	45:G8:37:VAL:HG12	1.79	0.63
1:1G:262:A:H2'	1:1G:263:A:C8	2.34	0.63
1:1G:1075:C:OP1	2:12:179:LYS:NZ	2.30	0.63
19:AA:12:ASP:OD1	19:AA:37:ARG:NH1	2.31	0.63
27:1J:16:G:H2'	27:1J:17:C:C6	2.33	0.63
37:45:27:VAL:HG22	37:45:137:TYR:O	1.99	0.63
40:75:10:VAL:C	40:75:12:SER:H	2.06	0.63
46:D5:19:ARG:NH1	46:D5:84:GLU:O	2.31	0.63
1:13:13:U:O2'	58:13:1830:HOH:O	2.14	0.63
1:13:625:G:H4'	16:7I:16:HIS:CG	2.33	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1167:A:H2'	1:13:1169:A:C8	2.33	0.63
1:13:1263:C:N4	1:13:1272:G:O6	2.16	0.63
32:51:56:SER:OG	32:51:57:ASP:N	2.29	0.63
40:B8:12:SER:OG	40:B8:15:VAL:N	2.21	0.63
1:1G:222:U:H2'	1:1G:223:U:H6	1.63	0.63
26:14:705:A:H1'	28:19:9:TYR:CE2	2.33	0.63
26:14:2037:G:H2'	26:14:2038:G:C8	2.33	0.63
26:14:2239:G:OP2	28:19:244:ARG:NH2	2.31	0.63
26:14:2328:A:H2'	26:14:2329:G:C8	2.33	0.63
26:14:2439:A:C8	26:14:2439:A:H5"	2.32	0.63
35:25:122:LEU:HD13	40:75:72:VAL:HG11	1.80	0.63
48:F5:53:VAL:HG12	48:F5:54:ALA:H	1.63	0.63
1:13:1435:G:H2'	1:13:1436:U:C6	2.34	0.63
3:2E:19:GLU:HA	3:2E:54:ARG:HH12	1.64	0.63
4:3E:154:ASN:OD1	4:3E:154:ASN:N	2.30	0.63
8:7E:87:SER:HB2	8:7E:93:VAL:CB	2.28	0.63
22:1K:52:A:H61	22:1K:62:U:H3	1.45	0.63
26:1H:822:U:OP2	58:1H:3635:HOH:O	2.15	0.63
26:1H:2685:G:H5'	35:68:68:GLU:OE2	1.98	0.63
34:58:70:LYS:HG2	34:58:87:LEU:HB2	1.79	0.63
1:1G:142:G:H2'	1:1G:143:A:C8	2.34	0.63
1:1G:258:G:N7	58:1G:1841:HOH:O	2.30	0.63
1:1G:1264:C:O2	1:1G:1272:G:N1	2.30	0.63
26:14:184:C:H2'	26:14:185:U:C6	2.34	0.63
26:14:654(C):G:N1	26:14:654(R):C:O2'	2.31	0.63
26:14:1292:U:H2'	26:14:1293:C:C6	2.33	0.63
26:14:1628:G:N7	58:14:3517:HOH:O	2.30	0.63
33:69:88:ILE:HG22	33:69:90:GLY:H	1.63	0.63
34:15:96:GLU:H	34:15:96:GLU:CD	2.07	0.63
1:13:67:C:H2'	1:13:68:G:C8	2.34	0.63
9:8E:112:LYS:HA	9:8E:119:ALA:HB2	1.81	0.63
26:1H:71:A:H4'	26:1H:72:U:H5"	1.80	0.63
26:1H:1530:G:O6	26:1H:1542:G:N2	2.32	0.63
1:1G:571:U:O4	1:1G:864:A:N6	2.31	0.63
26:14:1113:U:OP1	26:14:2751:G:N2	2.30	0.63
26:14:1169:G:H1	26:14:1180:C:H42	1.47	0.63
26:14:1451:C:H42	26:14:1459:G:H1	1.45	0.63
27:1J:6:C:N3	27:1J:115:G:N2	2.46	0.63
29:29:101:ARG:CZ	29:29:171:GLU:HB2	2.28	0.63
48:F5:92:LYS:O	48:F5:94:LEU:N	2.32	0.63
1:13:276:G:O2'	17:8I:68:ARG:NH1	2.32	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:70:PHE:HE2	2:1E:90:MET:HB3	1.63	0.63
12:3I:62:SER:HB2	12:3I:64:TYR:HD1	1.64	0.63
18:9I:85:LEU:HG	18:9I:86:VAL:N	2.12	0.63
20:BI:58:LYS:HE3	20:BI:62:LEU:HD21	1.80	0.63
33:61:21:VAL:HG21	33:61:25:TYR:HD2	1.64	0.63
35:68:7:TYR:HE1	35:68:20:MET:HE3	1.64	0.63
1:1G:67:C:H2'	1:1G:68:G:C8	2.32	0.63
8:72:120:THR:HG22	8:72:123:GLU:H	1.63	0.63
26:14:1299:G:N7	58:14:3514:HOH:O	2.30	0.63
26:1H:2400:G:H2'	26:1H:2401:U:H6	1.64	0.63
32:51:88:LEU:HD22	32:51:130:ARG:HG2	1.79	0.63
39:65:69:VAL:HG13	39:65:101:LEU:HD13	1.81	0.63
40:75:26:ASP:O	40:75:49:VAL:HG22	1.98	0.63
41:85:49:HIS:HD2	41:85:52:ARG:HD2	1.62	0.63
42:95:52:VAL:HG21	42:95:55:ALA:HB3	1.79	0.63
1:13:1007:C:H42	1:13:1022:G:H1	1.45	0.63
31:41:37:VAL:HG22	31:41:159:VAL:HA	1.80	0.63
50:L8:5:LYS:HB3	50:L8:57:GLU:OE1	1.98	0.63
1:1G:17:U:H2'	1:1G:18:C:C6	2.34	0.63
1:1G:888:G:O2'	1:1G:1488:G:O2'	2.16	0.63
1:1G:1273:G:H3'	1:1G:1274:G:C8	2.33	0.63
3:22:76:VAL:HG23	3:22:87:LEU:HD13	1.81	0.63
26:14:2130:U:O2'	26:14:2158:A:N6	2.31	0.63
4:3E:98:GLU:O	4:3E:103:ASN:ND2	2.31	0.63
5:4E:41:VAL:HG13	5:4E:113:ALA:HB2	1.80	0.63
20:BI:83:ARG:HA	20:BI:86:ARG:HB2	1.80	0.63
26:1H:989:G:OP1	26:1H:1157:G:O2'	2.16	0.63
26:1H:2843:G:N7	58:1H:3747:HOH:O	2.31	0.63
27:16:8:U:O3'	39:A8:25:ARG:NH2	2.31	0.63
47:I8:70:GLN:HB2	47:I8:80:HIS:HE2	1.63	0.63
1:1G:59:A:N1	58:1G:1843:HOH:O	2.31	0.63
1:1G:677:U:H3	1:1G:713:G:H22	1.45	0.63
3:22:58:GLU:HB2	3:22:65:ALA:HB3	1.81	0.63
26:14:49:A:H5"	26:14:51:G:O4'	1.98	0.63
36:35:101:VAL:HA	36:35:105:LEU:O	1.99	0.63
1:13:8:A:N7	4:3E:208:SER:HB3	2.14	0.62
1:13:148:G:H2'	1:13:149:A:C8	2.34	0.62
1:13:192:U:H1'	20:BI:103:GLY:HA2	1.81	0.62
1:13:1202:G:N2	14:5I:46:GLU:OE1	2.30	0.62
26:1H:2287:A:H2	26:1H:2346:A:H2	1.47	0.62
1:1G:337:C:H2'	1:1G:338:A:C8	2.34	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:539:A:H2'	1:1G:540:G:C8	2.34	0.62
23:2L:48:U:H4'	23:2L:49:C:H5'	1.81	0.62
26:14:1329:U:H5"	26:14:1330:C:H5	1.63	0.62
28:19:264:LYS:HD3	28:19:266:SER:HB3	1.81	0.62
41:85:83:LEU:HD22	41:85:88:ILE:HD12	1.79	0.62
50:H5:39:ASP:O	50:H5:44:ARG:NH1	2.30	0.62
1:13:223:U:H2'	1:13:224:C:H6	1.63	0.62
1:13:1028(B):C:H41	1:13:1032(A):G:H21	1.47	0.62
3:2E:29:TYR:OH	14:5I:54:PRO:O	2.16	0.62
26:1H:1292:U:H2'	26:1H:1293:C:C6	2.33	0.62
26:1H:2470:G:H5'	37:88:56:ARG:NH2	2.13	0.62
39:A8:42:ASP:C	39:A8:44:LYS:H	2.07	0.62
1:1G:1343:G:H2'	1:1G:1344:C:C6	2.34	0.62
26:14:2019:A:OP2	52:J5:9:LYS:NZ	2.29	0.62
26:14:2849:U:H1'	26:14:2866:U:O2	1.99	0.62
33:69:79:ILE:HG13	33:69:140:LEU:HD21	1.81	0.62
1:13:645:C:H2'	1:13:646:U:O4'	1.99	0.62
9:8E:40:LEU:HB3	9:8E:43:ALA:HB2	1.81	0.62
13:4I:49:THR:HG22	13:4I:51:ALA:H	1.64	0.62
23:2K:48:U:O2'	23:2K:49:C:OP2	2.12	0.62
26:1H:62:C:H42	26:1H:92:G:H1	1.48	0.62
1:1G:148:G:H1	1:1G:174:C:H42	1.46	0.62
2:12:162:ILE:HG23	2:12:182:ILE:HG21	1.81	0.62
26:14:1012:U:H3	34:15:25:ARG:NH1	1.97	0.62
32:59:59:ARG:HG2	32:59:62:LYS:HE3	1.80	0.62
48:F5:89:GLU:O	48:F5:93:GLU:HB2	1.99	0.62
1:13:191(C):G:H2'	1:13:191(D):U:O4'	1.98	0.62
12:3I:71:PRO:O	12:3I:102:ARG:NH1	2.31	0.62
18:9I:74:ARG:HH21	18:9I:81:PHE:HA	1.64	0.62
26:1H:620:G:H4'	26:1H:621:A:C5'	2.29	0.62
26:1H:2023:G:H5'	26:1H:2617:C:H4'	1.80	0.62
45:G8:76:CYS:SG	45:G8:97:ARG:HB2	2.40	0.62
51:M8:39:CYS:HB3	51:M8:41:PRO:HD2	1.81	0.62
12:3A:70:ILE:HG12	12:3A:100:ILE:HD12	1.79	0.62
26:14:1384:A:N3	26:14:1405:U:H1'	2.14	0.62
26:14:1669:A:O4'	35:25:5:GLN:NE2	2.32	0.62
35:25:63:VAL:HG11	35:25:85:VAL:HG23	1.80	0.62
41:85:60:LEU:HA	41:85:63:VAL:HG12	1.81	0.62
1:13:674:G:N2	1:13:717:C:O2	2.31	0.62
1:13:1126:U:C5	1:13:1127:G:C8	2.87	0.62
1:13:1144:G:N2	1:13:1146:A:H62	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2E:50:ALA:HB2	3:2E:75:VAL:HB	1.82	0.62
24:3K:28:A:H61	24:3K:42:U:H3	1.44	0.62
31:41:122:PRO:HB3	31:41:180:PHE:HD1	1.64	0.62
46:H8:134:PRO:HD3	46:H8:161:VAL:HG11	1.80	0.62
46:H8:151:HIS:HA	46:H8:170:THR:HA	1.81	0.62
1:1G:501:C:H2'	1:1G:502:G:H8	1.64	0.62
26:14:1516:U:H2'	26:14:1517:G:C8	2.34	0.62
30:39:178:PRO:HB2	30:39:201:VAL:HG11	1.81	0.62
31:49:49:ASP:HB3	31:49:52:ILE:HG22	1.82	0.62
33:69:81:VAL:H	33:69:143:SER:HB3	1.65	0.62
26:1H:1154:G:OP2	41:C8:58:ARG:NH2	2.32	0.62
26:1H:1520:U:H2'	26:1H:1521:G:O4'	2.00	0.62
26:1H:2428:G:H21	36:78:61:ARG:HH12	1.44	0.62
31:41:109:VAL:HG22	51:M8:33:VAL:HG11	1.81	0.62
44:F8:11:PRO:HG2	44:F8:13:LEU:HD21	1.81	0.62
1:1G:565:U:H3'	1:1G:566:G:H2'	1.81	0.62
26:14:639:U:H3	26:14:649:G:H1	1.45	0.62
26:14:2853:C:H2'	26:14:2854:G:H8	1.65	0.62
32:59:10:PRO:HG2	32:59:50:VAL:HG13	1.80	0.62
41:85:65:ILE:HD11	41:85:96:ALA:HB3	1.81	0.62
45:C5:68:HIS:H	45:C5:71:LYS:NZ	1.97	0.62
6:5E:50:TYR:OH	18:9I:74:ARG:O	2.10	0.62
26:1H:270(M):U:OP2	33:61:57:ARG:NH2	2.25	0.62
26:1H:1805:U:O2	28:11:50:THR:HB	2.00	0.62
26:1H:2248:C:OP2	58:1H:3643:HOH:O	2.16	0.62
29:21:57:LYS:HG3	29:21:59:VAL:HG12	1.82	0.62
35:68:13:ASN:ND2	35:68:97:ARG:HB2	2.15	0.62
1:1G:1189:C:P	10:1A:51:ARG:HH22	2.23	0.62
2:12:21:ARG:HH22	2:12:23:ARG:HH11	1.46	0.62
53:L5:12:ARG:HH21	53:L5:44:PRO:HB3	1.63	0.62
1:13:1149:C:H2'	1:13:1150:U:H6	1.65	0.62
1:13:1366:C:H2'	1:13:1367:C:H6	1.65	0.62
26:1H:2314:C:H2'	26:1H:2315:G:H8	1.65	0.62
34:58:97:ARG:HA	34:58:100:GLU:HB2	1.81	0.62
3:22:182:ILE:HG12	3:22:203:PHE:HA	1.80	0.62
26:14:1110:G:H2'	26:14:1111:A:C8	2.35	0.62
41:85:69:CYS:HB3	41:85:106:PHE:CE2	2.35	0.62
45:C5:6:HIS:ND1	45:C5:7:VAL:HG13	2.15	0.62
1:13:353:A:H8	1:13:353:A:H5'	1.64	0.62
8:7E:91:ARG:NE	17:8I:32:TYR:O	2.25	0.62
19:AI:15:LEU:HD12	19:AI:18:LYS:HD2	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BI:59:ALA:HA	20:BI:62:LEU:HD12	1.82	0.62
26:1H:2593:U:H2'	26:1H:2594:C:C6	2.33	0.62
36:78:64:LYS:HD2	54:Q8:12:LYS:HG2	1.82	0.62
46:H8:110:GLY:C	46:H8:112:ARG:H	2.08	0.62
4:32:34:GLU:HB2	4:32:35:ARG:NH2	2.14	0.62
11:2A:32:ILE:HD11	11:2A:68:ALA:HB1	1.81	0.62
15:6A:2:PRO:C	15:6A:38:ARG:HH22	2.06	0.62
24:3L:67:A:H2'	24:3L:68:U:C6	2.34	0.62
26:14:732:C:OP2	58:14:3464:HOH:O	2.16	0.62
26:14:1567:A:H3'	28:19:86:PRO:HG3	1.80	0.62
27:1J:16:G:H2'	27:1J:17:C:H6	1.63	0.62
3:2E:11:ARG:O	3:2E:13:GLY:N	2.31	0.62
9:8E:93:ARG:O	9:8E:96:LEU:N	2.33	0.62
17:8I:100:LYS:HG2	17:8I:101:ARG:HE	1.65	0.62
24:3K:37:A:H2'	24:3K:38:A:O4'	1.99	0.62
30:31:164:ARG:HG2	30:31:175:THR:HB	1.81	0.62
34:58:60:ILE:H	34:58:60:ILE:HD13	1.65	0.62
46:H8:165:VAL:HB	46:H8:166:SER:HA	1.80	0.62
1:1G:1411:C:H2'	1:1G:1412:C:C6	2.35	0.62
4:32:150:GLU:HA	4:32:153:ARG:HG2	1.82	0.62
5:42:18:ARG:HH21	5:42:25:ARG:HB3	1.65	0.62
26:14:486:C:O2'	43:A5:60:ASN:ND2	2.33	0.62
26:14:792:G:N3	26:14:2072:G:O2'	2.30	0.62
26:14:1183:G:O3'	50:H5:29:ARG:NH2	2.33	0.62
26:14:1257:C:H4'	30:39:83:PHE:CD1	2.35	0.62
1:13:881:G:OP2	12:3I:12:ARG:NH2	2.33	0.61
26:1H:308:G:C4	26:1H:501:A:C8	2.88	0.61
29:21:29:GLY:HA2	29:21:180:ASN:HB3	1.81	0.61
36:78:101:VAL:HA	36:78:105:LEU:O	2.00	0.61
46:H8:130:PRO:HA	46:H8:133:ILE:HD11	1.80	0.61
2:12:104:ASN:O	2:12:108:ILE:N	2.32	0.61
4:32:127:THR:HG21	4:32:149:ALA:HB2	1.81	0.61
13:4A:49:THR:HB	13:4A:51:ALA:H	1.65	0.61
26:14:957:A:H5'	37:45:76:LYS:HD3	1.82	0.61
29:29:76:ARG:NH1	29:29:76:ARG:HA	2.15	0.61
41:85:95:LEU:HD22	42:95:13:ARG:HB2	1.81	0.61
1:13:260:G:H2'	1:13:261:U:C6	2.35	0.61
1:13:342:C:H2'	1:13:343:U:H5'	1.80	0.61
1:13:1097:C:O2'	1:13:1169:A:N3	2.27	0.61
1:13:1133:G:H2'	1:13:1134:G:H8	1.64	0.61
15:6I:17:ARG:HD3	15:6I:77:ARG:NH2	2.16	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8I:100:LYS:HD2	17:8I:101:ARG:HH11	1.65	0.61
20:BI:100:ILE:HG12	20:BI:101:GLY:H	1.65	0.61
24:3K:2:C:O2'	24:3K:3:U:OP1	2.17	0.61
29:21:9:VAL:HG13	40:B8:3:ARG:HB2	1.83	0.61
36:78:49:ARG:HD3	54:Q8:60:LEU:HB3	1.82	0.61
44:F8:39:ILE:O	44:F8:43:VAL:HG23	2.00	0.61
1:1G:89:U:O2'	1:1G:90:C:O5'	2.14	0.61
3:22:8:ILE:HG13	3:22:184:TYR:HB3	1.81	0.61
26:14:900:A:H3'	26:14:901:A:H8	1.64	0.61
26:14:1030:G:OP2	37:45:128:LYS:HE2	2.01	0.61
38:55:29:LEU:HB3	38:55:75:LEU:HD21	1.82	0.61
47:E5:18:ALA:HB3	47:E5:20:ARG:NH2	2.15	0.61
1:13:939:G:H2'	1:13:940:C:C6	2.36	0.61
17:8I:90:ILE:HA	17:8I:93:GLN:HB2	1.82	0.61
26:1H:270(I):G:N2	26:1H:270(R):G:H1'	2.14	0.61
26:1H:956:G:OP2	37:88:14:ARG:NH2	2.33	0.61
26:1H:1107:G:H2'	26:1H:1108:U:H6	1.65	0.61
1:1G:749:C:H2'	1:1G:750:G:H8	1.65	0.61
1:1G:1071:C:H42	1:1G:1104:G:H1	1.48	0.61
7:62:63:LYS:HA	7:62:66:VAL:HG12	1.82	0.61
24:3L:53:G:H2'	24:3L:54:U:H5'	1.82	0.61
26:14:1534:G:H3'	26:14:1535:U:H5"	1.82	0.61
26:14:1568:G:P	28:19:63:ARG:HH22	2.22	0.61
40:75:3:ARG:HA	40:75:6:LEU:HB3	1.81	0.61
1:13:953:G:OP1	58:13:1835:HOH:O	2.16	0.61
26:1H:581:C:H2'	26:1H:582:G:C8	2.35	0.61
26:1H:1534:G:O2'	26:1H:1535:U:O4'	2.15	0.61
28:11:26:LYS:HD3	28:11:28:GLU:O	2.00	0.61
40:B8:4:GLY:HA2	40:B8:7:ILE:HD13	1.80	0.61
1:1G:1279:A:O2'	1:1G:1281:U:OP2	2.13	0.61
2:12:16:HIS:HB3	2:12:209:ARG:CZ	2.30	0.61
6:52:96:PRO:HB3	18:9A:30:ASP:CG	2.25	0.61
26:14:288:C:H2'	26:14:289:A:C8	2.34	0.61
26:14:2455:G:O6	58:14:3461:HOH:O	2.15	0.61
26:14:2710:C:N4	58:14:3531:HOH:O	2.34	0.61
27:1J:7:G:N3	39:65:38:GLN:NE2	2.36	0.61
29:29:54:GLN:HG3	29:29:73:GLU:O	2.00	0.61
31:49:72:ARG:HB3	31:49:85:GLY:HA2	1.81	0.61
32:59:119:GLU:HB3	32:59:140:LYS:HZ2	1.65	0.61
33:69:14:ASP:N	33:69:17:GLN:OE1	2.28	0.61
37:45:57:HIS:CG	37:45:117:ALA:HB2	2.36	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:158:G:H2'	1:13:159:G:H8	1.66	0.61
26:1H:1103:A:H3'	26:1H:1104:C:C6	2.35	0.61
26:1H:1593:G:H2'	26:1H:1594:G:C8	2.35	0.61
26:1H:2679:A:H4'	29:21:165:VAL:HG11	1.83	0.61
29:21:174:ASP:OD1	29:21:175:VAL:N	2.33	0.61
37:88:4:PRO:HD3	37:88:70:PRO:O	2.00	0.61
1:1G:179:A:H2'	1:1G:180:U:C6	2.35	0.61
14:5A:21:TYR:CE1	14:5A:23:ARG:HB2	2.36	0.61
26:14:259:G:H21	26:14:621:A:H8	1.48	0.61
26:14:273(F):C:H3'	26:14:274:G:H5"	1.81	0.61
26:14:2210:G:H5'	26:14:2211:G:N7	2.15	0.61
26:14:2485:G:H5"	37:45:46:GLN:HE21	1.64	0.61
31:49:47:LYS:HE3	31:49:81:LYS:HD2	1.83	0.61
36:35:52:GLU:O	36:35:54:GLY:N	2.33	0.61
41:85:92:ARG:C	41:85:94:ASN:H	2.08	0.61
49:G5:50:ILE:HD12	49:G5:51:ARG:H	1.64	0.61
1:13:560:U:O2'	1:13:561:U:OP2	2.18	0.61
1:13:673:G:H2'	1:13:674:G:C8	2.36	0.61
26:1H:249:C:OP1	58:1H:3640:HOH:O	2.16	0.61
26:1H:1538:G:H2'	26:1H:1539:G:C8	2.35	0.61
26:1H:2209:C:O2	26:1H:2216:G:C2	2.54	0.61
26:1H:2210:G:H2'	26:1H:2211:G:C6	2.35	0.61
29:21:12:THR:OG1	29:21:13:ARG:N	2.33	0.61
29:21:47:VAL:HG11	29:21:86:PRO:HD2	1.82	0.61
49:K8:64:LEU:HD22	49:K8:68:ARG:HD2	1.83	0.61
1:1G:180:U:O4	58:1G:1815:HOH:O	2.12	0.61
1:1G:1238:A:N3	1:1G:1241:G:O2'	2.32	0.61
26:14:2287:A:H61	26:14:2344:U:H3	1.47	0.61
34:15:73:THR:HG22	34:15:84:LYS:HB3	1.82	0.61
1:13:177:C:OP2	20:BI:65:LYS:NZ	2.27	0.61
1:13:600:C:H4'	8:7E:128:GLY:O	2.00	0.61
26:1H:2275:C:O2'	37:88:85:LYS:HA	2.00	0.61
39:A8:83:LYS:O	39:A8:110:LEU:HA	2.00	0.61
40:B8:26:ASP:HB2	40:B8:90:GLN:O	2.01	0.61
51:M8:15:ILE:HB	51:M8:32:TYR:CD1	2.35	0.61
1:1G:853:G:H2'	1:1G:854:G:H8	1.66	0.61
1:1G:1435:G:H2'	1:1G:1436:U:C6	2.36	0.61
3:22:150:LYS:HG3	3:22:169:ALA:HB2	1.80	0.61
15:6A:16:ALA:HB1	15:6A:21:ASP:HB3	1.83	0.61
26:14:769:G:H2'	26:14:770:G:H8	1.65	0.61
26:14:1171:G:O2'	26:14:1173:G:O4'	2.17	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:53:LEU:O	31:49:57:ALA:N	2.33	0.61
37:45:32:TYR:HA	37:45:133:ARG:HA	1.82	0.61
1:13:553:A:H5"	12:3I:24:VAL:HG21	1.81	0.61
1:13:1071:C:H2'	1:13:1072:G:H8	1.66	0.61
1:13:1223:C:P	19:AI:78:ARG:HH12	2.22	0.61
3:2E:78:GLY:HA3	3:2E:83:ARG:HB3	1.81	0.61
5:4E:11:ILE:HD12	5:4E:105:VAL:HG13	1.82	0.61
13:4I:91:ARG:HB2	13:4I:98:VAL:HG12	1.83	0.61
19:AI:22:LEU:O	19:AI:28:LYS:NZ	2.29	0.61
20:BI:71:THR:HG22	20:BI:72:LEU:H	1.65	0.61
26:1H:1040:C:H42	26:1H:1115:G:H1	1.47	0.61
45:G8:99:CYS:SG	45:G8:100:ALA:N	2.74	0.61
51:M8:15:ILE:HB	51:M8:32:TYR:HD1	1.65	0.61
1:1G:261:U:OP2	20:BA:79:ARG:NH2	2.34	0.61
1:1G:1320:C:N3	19:AA:36:ARG:NH2	2.48	0.61
26:14:796:C:H2'	26:14:797:C:C6	2.36	0.61
26:14:1257:C:H4'	30:39:83:PHE:CE1	2.34	0.61
26:14:2537:U:H2'	26:14:2538:C:C6	2.35	0.61
26:14:2867:G:OP2	40:75:119:LYS:NZ	2.29	0.61
32:59:98:LEU:HD22	32:59:126:PRO:HB3	1.82	0.61
50:H5:10:LYS:HB3	50:H5:53:LEU:HA	1.83	0.61
1:13:145:G:N2	1:13:177:C:N3	2.37	0.61
1:13:309:G:O6	58:13:1832:HOH:O	2.15	0.61
1:13:352:C:O2'	1:13:354:G:OP1	2.19	0.61
1:13:659:U:H2'	1:13:660:G:H8	1.66	0.61
1:13:877:C:H5"	8:7E:88:LYS:HD3	1.82	0.61
6:5E:99:ALA:HB1	18:9I:23:LYS:HD2	1.83	0.61
17:8I:45:HIS:HB2	17:8I:65:ILE:HD13	1.82	0.61
26:1H:270(C):C:H42	26:1H:270(W):G:H1	1.47	0.61
26:1H:1334:G:N7	58:1H:3751:HOH:O	2.31	0.61
44:F8:30:VAL:HG21	44:F8:39:ILE:HD11	1.83	0.61
15:6A:82:ILE:HG22	15:6A:87:ILE:HB	1.82	0.61
26:14:467:G:OP1	53:L5:33:ARG:NH1	2.33	0.61
26:14:1620:G:O4'	53:L5:1:MET:N	2.34	0.61
26:14:2331:G:H4'	47:E5:43:THR:H	1.65	0.61
32:59:120:GLY:HA3	32:59:135:GLY:HA2	1.82	0.61
35:25:98:VAL:HG12	35:25:117:LEU:HB3	1.83	0.61
39:65:11:LYS:HG3	39:65:91:PRO:HD3	1.82	0.61
1:13:356:A:H2	1:13:368:U:O2	1.84	0.61
1:13:438:G:H4'	4:3E:123:HIS:CD2	2.36	0.61
12:3I:47:LYS:HA	12:3I:49:ASN:H	1.65	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:654(C):G:H1	26:1H:654(Q):C:N4	1.99	0.61
26:1H:1221:C:H2'	26:1H:1222:C:C6	2.36	0.61
26:1H:1316:U:H2'	26:1H:1317:A:C8	2.35	0.61
26:1H:2656:U:H3	26:1H:2665:A:H2	1.48	0.61
37:88:28:ALA:N	37:88:105:GLU:OE2	2.30	0.61
1:1G:227:G:H2'	1:1G:228:A:C8	2.36	0.61
2:12:73:THR:HG21	2:12:97:TRP:H	1.65	0.61
31:49:86:MET:HG2	31:49:87:PRO:HD2	1.83	0.61
26:1H:1055:G:H1	26:1H:1104:C:N4	1.90	0.60
26:1H:1184:G:H5'	50:L8:29:ARG:HH11	1.66	0.60
43:E8:19:LEU:HB3	52:N8:25:LEU:HD11	1.83	0.60
1:1G:1016:A:O2'	1:1G:1217:C:O2'	2.18	0.60
13:4A:91:ARG:NH1	13:4A:97:PRO:O	2.33	0.60
22:1L:63:G:H2'	22:1L:64:C:O4'	2.01	0.60
26:14:793:A:O2'	26:14:794:G:OP2	2.18	0.60
24:3K:4:G:H1	24:3K:65:C:H42	1.47	0.60
26:1H:270(V):G:H2'	26:1H:270(W):G:H8	1.64	0.60
26:1H:484:C:OP1	45:G8:51:VAL:HG22	2.01	0.60
26:1H:674:G:O2'	30:31:74:ARG:HG3	2.01	0.60
26:1H:1278:A:OP1	38:98:36:THR:HG22	2.00	0.60
26:1H:2287:A:H2	26:1H:2346:A:C2	2.19	0.60
36:78:84:ASN:HD22	36:78:86:LYS:HE2	1.66	0.60
1:1G:1387:G:H2'	1:1G:1388:C:C6	2.35	0.60
26:14:2387:U:O2'	47:E5:41:ARG:NH1	2.34	0.60
40:75:78:LEU:HD23	40:75:79:HIS:CE1	2.37	0.60
1:13:674:G:H2'	1:13:675:A:C8	2.36	0.60
1:13:974:A:OP2	14:5I:41:ARG:NH1	2.34	0.60
26:1H:1797:C:O2'	28:11:259:THR:OG1	2.12	0.60
27:16:30:C:H2'	27:16:31:C:H5'	1.83	0.60
30:31:178:PRO:HB3	30:31:198:ALA:HB2	1.82	0.60
35:68:36:GLY:HA2	35:68:106:LEU:HD23	1.83	0.60
46:H8:58:VAL:O	46:H8:60:GLU:N	2.33	0.60
1:1G:540:G:H2'	1:1G:541:G:O4'	2.00	0.60
1:1G:1490:C:H2'	1:1G:1491:G:O4'	2.00	0.60
5:42:9:LYS:HB2	5:42:112:LEU:HD11	1.82	0.60
23:2L:61:U:OP2	23:2L:62:C:N4	2.28	0.60
26:14:581:C:H2'	26:14:582:G:C8	2.37	0.60
26:14:768:G:O2'	26:14:1379:A:N6	2.34	0.60
26:14:971:C:O2'	26:14:983:A:N3	2.35	0.60
26:14:1636:C:OP2	58:14:3459:HOH:O	2.15	0.60
27:1J:104:A:H2'	27:1J:105:G:O4'	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:28:ILE:HA	30:39:112:MET:HG2	1.83	0.60
36:35:111:ARG:HB3	36:35:128:HIS:CG	2.37	0.60
36:35:144:GLU:OE1	36:35:144:GLU:N	2.34	0.60
37:45:101:ARG:HG3	37:45:102:VAL:H	1.67	0.60
46:D5:52:SER:O	46:D5:52:SER:OG	2.14	0.60
10:1I:46:ARG:NH2	10:1I:64:GLU:OE1	2.34	0.60
29:21:59:VAL:HG13	29:21:60:ASN:H	1.66	0.60
29:21:116:VAL:O	29:21:117:MET:HB3	2.00	0.60
32:51:86:GLU:HB2	32:51:165:ALA:HB3	1.83	0.60
1:1G:1423:G:OP1	35:25:49:ARG:NH2	2.35	0.60
12:3A:83:VAL:HG21	12:3A:100:ILE:HD13	1.83	0.60
19:AA:3:ARG:HB3	19:AA:7:LYS:HZ3	1.66	0.60
26:14:852:G:H2'	26:14:853:G:C8	2.36	0.60
26:14:1007:C:OP1	34:15:37:LYS:NZ	2.30	0.60
26:14:1007:C:OP1	34:15:35:ARG:NH1	2.34	0.60
26:14:1178:C:H2'	26:14:1179:C:C6	2.36	0.60
26:14:1796:U:H2'	26:14:1797:C:C6	2.36	0.60
34:15:59:LYS:HE3	34:15:60:ILE:N	2.15	0.60
1:13:688:G:H2'	1:13:689:C:C6	2.32	0.60
1:13:1062:U:H2'	1:13:1063:C:C6	2.37	0.60
3:2E:114:PRO:O	3:2E:118:GLN:NE2	2.31	0.60
28:11:145:VAL:HG12	28:11:146:GLU:O	2.01	0.60
3:22:37:GLN:O	3:22:41:GLY:N	2.27	0.60
16:7A:36:ILE:O	16:7A:36:ILE:HG13	2.01	0.60
26:14:1639:U:OP1	58:14:3463:HOH:O	2.16	0.60
30:39:155:LEU:HD11	30:39:176:LEU:HD22	1.82	0.60
52:J5:36:CYS:HB3	52:J5:49:CYS:SG	2.40	0.60
1:13:345:C:H4'	1:13:346:G:N7	2.17	0.60
1:13:347:G:H2'	1:13:348:G:O4'	2.02	0.60
3:2E:8:ILE:HG23	3:2E:16:ARG:HG2	1.84	0.60
10:1I:64:GLU:HG2	14:5I:59:ALA:HB2	1.83	0.60
30:31:67:GLN:HG3	30:31:67:GLN:O	1.99	0.60
37:88:110:THR:HG23	37:88:113:GLN:OE1	2.02	0.60
45:G8:87:LYS:H	45:G8:94:LYS:HG2	1.67	0.60
46:H8:111:VAL:HG11	46:H8:146:ILE:HG13	1.81	0.60
1:1G:1401:G:OP1	25:4L:18:G:O2'	2.18	0.60
2:12:71:VAL:HG11	2:12:164:VAL:HG13	1.83	0.60
26:14:923:C:H2'	26:14:924:C:C6	2.37	0.60
37:45:10:ARG:NH1	37:45:10:ARG:HA	2.17	0.60
40:75:24:PRO:HA	40:75:49:VAL:HG23	1.82	0.60
1:13:150:C:H2'	1:13:151:A:H8	1.65	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:303:A:H2'	1:13:304:U:O4'	2.02	0.60
1:13:501:C:H2'	1:13:502:G:H8	1.66	0.60
1:13:975:A:H4'	1:13:976:G:H5"	1.81	0.60
1:13:1342:C:H2'	1:13:1343:G:H8	1.65	0.60
2:1E:231:GLU:OE1	2:1E:231:GLU:N	2.33	0.60
26:1H:64:A:H1'	44:F8:66:LEU:HD23	1.84	0.60
26:1H:270(K):C:H1'	26:1H:270(N):G:H22	1.67	0.60
1:1G:359:U:H2'	1:1G:360:A:H8	1.67	0.60
1:1G:631:G:H1'	1:1G:632:A:H5'	1.82	0.60
5:42:51:VAL:HB	5:42:52:PRO:HD3	1.82	0.60
24:3L:76:A:O2'	26:14:2394:C:N3	2.32	0.60
26:14:2012:G:H4'	43:A5:96:ILE:HD12	1.82	0.60
26:14:2734:A:H2'	26:14:2735:G:O4'	2.01	0.60
40:75:87:ASP:N	40:75:87:ASP:OD1	2.34	0.60
48:F5:87:PRO:O	48:F5:90:ILE:N	2.32	0.60
1:13:890:G:O2'	1:13:906:G:O6	2.15	0.60
1:13:1194:U:H2'	1:13:1195:C:C6	2.37	0.60
25:4K:24:A:H4'	25:4K:25:A:OP1	2.01	0.60
26:1H:973:A:OP1	58:1H:3644:HOH:O	2.16	0.60
26:1H:1899:G:N2	26:1H:1902:C:H41	1.99	0.60
37:88:66:ILE:HD12	37:88:67:ARG:N	2.17	0.60
1:1G:300:A:O2'	1:1G:564:C:N3	2.28	0.60
1:1G:1492:A:OP1	12:3A:47:LYS:HG2	2.02	0.60
4:32:13:ARG:C	4:32:15:GLU:H	2.10	0.60
22:1L:50:G:N2	22:1L:63:G:O6	2.35	0.60
26:14:446:G:H8	58:14:3465:HOH:O	1.85	0.60
26:14:944:G:H5"	26:14:945:A:O5'	2.00	0.60
26:14:1011:G:OP2	41:85:70:ARG:NH2	2.35	0.60
26:14:2591:C:OP2	28:19:239:ARG:HB3	2.02	0.60
38:55:100:LEU:HG	38:55:112:ALA:HA	1.83	0.60
46:D5:130:PRO:HA	46:D5:133:ILE:HD11	1.84	0.60
1:13:719:C:O2'	18:9I:49:LYS:HB3	2.01	0.60
1:13:1342:C:H2'	1:13:1343:G:C8	2.37	0.60
13:4I:45:VAL:HA	13:4I:48:LEU:HD22	1.83	0.60
26:1H:2807:G:H3'	26:1H:2808:U:H5"	1.83	0.60
39:A8:26:LEU:HD11	39:A8:73:LEU:HD13	1.84	0.60
41:C8:92:ARG:NH2	42:D8:10:LYS:HB3	2.15	0.60
26:14:1416:G:H1	26:14:1582:C:H42	1.47	0.60
26:14:1651:G:H1	26:14:2006:C:H42	1.49	0.60
28:19:31:LYS:HE3	28:19:102:LYS:HD3	1.84	0.60
32:59:144:VAL:HA	32:59:147:ASN:HB3	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:95:98:GLU:HG2	42:95:100:ARG:HG2	1.84	0.60
1:13:182:U:H5	1:13:183:G:C4	2.20	0.60
1:13:768:A:OP2	58:13:1833:HOH:O	2.16	0.60
3:2E:172:ARG:HG2	3:2E:174:PRO:HG3	1.84	0.60
13:4I:26:GLY:C	13:4I:28:ALA:H	2.09	0.60
23:2K:10:G:N2	23:2K:27:G:H1'	2.17	0.60
26:1H:2584:U:H2'	26:1H:2585:U:H2'	1.83	0.60
39:A8:38:GLN:HG3	39:A8:47:THR:HG21	1.84	0.60
44:F8:12:VAL:HG13	44:F8:27:THR:O	2.01	0.60
46:H8:28:MET:HE3	46:H8:33:LEU:HD21	1.83	0.60
51:M8:16:CYS:HA	51:M8:33:VAL:O	2.02	0.60
1:1G:216:G:H2'	1:1G:217:C:C6	2.37	0.60
1:1G:272:C:H2'	1:1G:273:A:H8	1.66	0.60
10:1A:61:GLU:HG3	14:5A:58:LYS:HE2	1.83	0.60
17:8A:83:ASP:O	17:8A:87:LYS:HG2	2.01	0.60
19:AA:21:GLU:HA	19:AA:24:ALA:HB3	1.83	0.60
26:14:10:G:N7	26:14:2629:A:N6	2.49	0.60
26:14:1593:G:H2'	26:14:1594:G:C8	2.36	0.60
26:14:2467:C:H4'	37:45:123:HIS:CE1	2.37	0.60
30:39:169:ASN:O	30:39:169:ASN:ND2	2.35	0.60
1:13:235:C:H2'	1:13:236:G:C8	2.37	0.59
1:13:271:C:H2'	1:13:272:C:H6	1.67	0.59
1:13:1298:C:OP2	7:6E:114:ARG:NH2	2.32	0.59
2:1E:88:ALA:HB2	2:1E:219:VAL:HG13	1.83	0.59
19:AI:40:ILE:HG12	19:AI:41:VAL:HG13	1.84	0.59
26:1H:768:G:O2'	26:1H:1379:A:N6	2.34	0.59
30:31:155:LEU:HB2	30:31:189:THR:HG21	1.84	0.59
46:H8:108:PRO:CB	46:H8:112:ARG:HA	2.25	0.59
4:32:149:ALA:O	4:32:152:SER:OG	2.18	0.59
5:42:50:GLU:HB3	5:42:53:LEU:HB2	1.84	0.59
5:42:102:ALA:HB1	5:42:106:PRO:HG2	1.84	0.59
16:7A:43:LYS:HG2	16:7A:48:TRP:CD2	2.37	0.59
26:14:2020:A:O2'	26:14:2021:C:H5'	2.02	0.59
26:14:2720:U:H3	26:14:2873:A:H2	1.50	0.59
26:14:2749:A:N1	26:14:2750:A:N6	2.50	0.59
26:14:2807:G:H1	26:14:2892:A:H62	1.50	0.59
27:1J:15:A:H5'	27:1J:16:G:C8	2.37	0.59
37:45:10:ARG:HA	37:45:10:ARG:HH11	1.66	0.59
43:A5:17:VAL:HG21	43:A5:103:ILE:HD13	1.83	0.59
3:2E:123:GLN:O	3:2E:128:PHE:HB2	2.03	0.59
20:BI:60:GLU:OE2	20:BI:85:MET:HE2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1231:G:O6	58:1H:3631:HOH:O	2.14	0.59
26:1H:1515:C:H2'	26:1H:1516:U:C6	2.35	0.59
26:1H:2136:C:N3	26:1H:2155:G:N1	2.49	0.59
30:31:7:TYR:O	30:31:21:ALA:HA	2.02	0.59
1:1G:142:G:H2'	1:1G:143:A:H8	1.65	0.59
26:14:2050:C:H1'	29:29:156:MET:HE2	1.84	0.59
26:14:2062:A:N6	26:14:2503:A:N7	2.50	0.59
26:14:2791:C:N4	26:14:2797:U:O2'	2.35	0.59
33:69:63:ALA:HA	33:69:66:GLU:HG2	1.85	0.59
45:C5:20:TYR:CE2	45:C5:42:VAL:HB	2.37	0.59
1:13:271:C:H2'	1:13:272:C:C6	2.36	0.59
1:13:403:C:O3'	4:3E:122:ARG:HD2	2.02	0.59
1:13:677:U:H3	1:13:713:G:H22	1.49	0.59
1:13:838:G:H1	1:13:848:C:N4	2.00	0.59
2:1E:15:VAL:HG11	2:1E:210:SER:HA	1.84	0.59
7:6E:115:ARG:HB3	7:6E:118:VAL:HG12	1.84	0.59
8:7E:54:ASP:O	8:7E:56:LYS:NZ	2.27	0.59
26:1H:592:G:H1	26:1H:665:C:H42	1.50	0.59
26:1H:607:U:OP1	30:31:103:LYS:N	2.29	0.59
26:1H:1199:U:OP1	58:1H:3642:HOH:O	2.16	0.59
26:1H:2287:A:C2	26:1H:2346:A:H2	2.19	0.59
33:61:92:VAL:HG13	33:61:120:ILE:HG23	1.83	0.59
50:L8:3:ARG:HB2	50:L8:59:VAL:HG22	1.84	0.59
1:1G:1:U:H4'	1:1G:2:U:O5'	2.01	0.59
1:1G:604:G:H2'	1:1G:605:U:O4'	2.02	0.59
1:1G:826:C:H5'	8:72:12:ARG:HH11	1.66	0.59
26:14:71:A:H8	26:14:71:A:H5'	1.67	0.59
26:14:897:C:N3	26:14:898:C:N4	2.49	0.59
26:14:2607:G:H2'	26:14:2608:G:O4'	2.02	0.59
26:14:2887:U:H2'	26:14:2888:C:C6	2.36	0.59
29:29:27:LEU:HA	29:29:180:ASN:O	2.02	0.59
34:15:39:ARG:NH1	34:15:41:ASP:OD2	2.35	0.59
34:15:103:VAL:HG11	34:15:120:LEU:HD13	1.84	0.59
1:13:1316:G:N2	1:13:1318:A:H3'	2.17	0.59
7:6E:62:PHE:HA	7:6E:124:LEU:HD21	1.85	0.59
15:6I:39:LEU:O	15:6I:42:HIS:N	2.36	0.59
20:BI:48:LYS:HB3	20:BI:51:GLU:HB2	1.84	0.59
21:1F:2:GLY:O	21:1F:4:GLY:N	2.35	0.59
26:1H:270(X):G:O6	58:1H:3646:HOH:O	2.16	0.59
29:21:167:VAL:HG11	29:21:187:ALA:HB1	1.83	0.59
31:41:163:ALA:HB1	31:41:168:GLU:HB2	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:126:PRO:HG2	32:51:130:ARG:NH2	2.17	0.59
1:1G:411:A:H62	1:1G:413:G:N2	2.00	0.59
1:1G:448:A:OP2	1:1G:485:G:N2	2.26	0.59
1:1G:981:U:O4	1:1G:1223:C:N4	2.35	0.59
1:1G:1249:C:O2'	9:82:73:GLN:OE1	2.20	0.59
11:2A:54:ARG:NH2	24:3L:39:G:O3'	2.35	0.59
26:14:11:G:H5'	26:14:2799:A:H62	1.65	0.59
26:14:2129:C:N4	26:14:2159:G:O6	2.35	0.59
36:35:82:GLY:HA2	36:35:113:LYS:O	2.01	0.59
41:85:86:ALA:HB2	41:85:116:ALA:HB2	1.83	0.59
1:13:877:C:OP1	8:7E:88:LYS:NZ	2.27	0.59
26:1H:1166:C:H42	26:1H:1183:G:H1	1.50	0.59
26:1H:2056:G:OP2	58:1H:3647:HOH:O	2.16	0.59
31:41:16:ARG:O	31:41:20:ILE:HG13	2.01	0.59
35:68:10:VAL:HG11	35:68:16:ALA:HB3	1.85	0.59
42:D8:76:LYS:HB2	42:D8:81:TYR:HB3	1.83	0.59
1:1G:165:C:H2'	1:1G:166:G:H8	1.67	0.59
19:AA:42:PRO:HA	19:AA:45:VAL:HG13	1.84	0.59
24:3L:15:G:H2'	24:3L:59:A:H62	1.67	0.59
26:14:479:A:N3	26:14:481:G:H5"	2.16	0.59
26:14:2105:C:H2'	26:14:2106:G:O4'	2.03	0.59
26:14:2542:A:H4'	26:14:2542:A:OP1	2.02	0.59
28:19:10:THR:OG1	28:19:13:ARG:HB2	2.02	0.59
32:59:18:GLU:HB2	32:59:25:LYS:HD3	1.84	0.59
1:13:474:G:H2'	1:13:475:G:C8	2.38	0.59
1:13:1126:U:O2'	1:13:1281:U:O2	2.10	0.59
1:13:1143:G:H2'	1:13:1144:G:H8	1.67	0.59
1:13:1369:C:H2'	1:13:1370:G:C8	2.37	0.59
1:13:1396:A:H4'	1:13:1397:C:H5"	1.85	0.59
16:7I:3:LYS:O	16:7I:21:VAL:HA	2.03	0.59
26:1H:307:G:H21	26:1H:330:A:N6	1.99	0.59
26:1H:1627:G:OP1	58:1H:3645:HOH:O	2.16	0.59
26:1H:1779:U:OP2	26:1H:1784:A:N6	2.36	0.59
28:11:112:GLN:O	28:11:115:GLN:HG2	2.03	0.59
28:11:182:LEU:H	28:11:272:ALA:CB	2.11	0.59
33:61:78:THR:O	33:61:104:GLN:NE2	2.35	0.59
33:61:98:ALA:HB2	33:61:111:PRO:HB3	1.83	0.59
43:E8:12:ILE:HG13	43:E8:42:ARG:HH11	1.67	0.59
53:P8:26:GLY:O	53:P8:30:VAL:HG23	2.03	0.59
1:1G:1118:C:H1'	1:1G:1179:A:C4	2.38	0.59
24:3L:8:U:H5'	24:3L:49:G:OP2	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:666:G:H1'	54:M5:4:MET:HE3	1.85	0.59
29:29:7:VAL:HG12	29:29:8:LYS:H	1.67	0.59
29:29:34:VAL:HG12	29:29:64:LYS:HE3	1.83	0.59
39:65:110:LEU:HD13	39:65:112:PHE:CE1	2.38	0.59
26:1H:1167:U:H2'	26:1H:1168:G:C8	2.37	0.59
26:1H:1332:G:N2	26:1H:1610:A:C8	2.70	0.59
26:1H:2712(A):A:OP2	58:1H:3625:HOH:O	2.17	0.59
28:11:68:LYS:HB3	28:11:70:TRP:CH2	2.38	0.59
38:98:67:LEU:HD22	38:98:76:VAL:HG21	1.85	0.59
39:A8:11:LYS:HD3	39:A8:91:PRO:HD3	1.83	0.59
40:B8:11:GLU:OE1	40:B8:57:PHE:HD2	1.86	0.59
54:Q8:54:GLU:O	54:Q8:58:ILE:HG13	2.02	0.59
1:1G:382:A:H2'	1:1G:383:A:H8	1.66	0.59
1:1G:396:G:O2'	1:1G:398:C:OP1	2.15	0.59
1:1G:501:C:H2'	1:1G:502:G:C8	2.38	0.59
1:1G:1292:U:H2'	1:1G:1293:G:C8	2.38	0.59
2:12:72:GLY:HA2	2:12:165:VAL:HG21	1.84	0.59
24:3L:35:G:H1	25:4L:14:A:N6	2.00	0.59
26:14:205:G:O2'	26:14:206:U:OP2	2.18	0.59
26:14:1815:A:OP2	28:19:54:ARG:NH2	2.26	0.59
26:14:2056:G:C2	26:14:2057:A:C8	2.90	0.59
27:1J:52:A:O2'	27:1J:53:A:N7	2.34	0.59
1:13:598:U:H4'	8:7E:94:TYR:CG	2.37	0.59
1:13:1316:G:H5"	14:5I:17:LYS:HE3	1.83	0.59
12:3I:110:VAL:HG23	12:3I:120:TYR:HB3	1.83	0.59
26:1H:17:G:H2'	26:1H:18:C:C6	2.38	0.59
26:1H:336:C:OP1	45:G8:83:THR:HG23	2.02	0.59
26:1H:1187:G:H5"	42:D8:81:TYR:CE1	2.37	0.59
28:11:155:LEU:HD23	28:11:177:LEU:HD22	1.83	0.59
29:21:27:LEU:HD13	40:B8:1:MET:HE2	1.85	0.59
29:21:94:GLU:OE2	29:21:177:PRO:HB3	2.03	0.59
1:1G:191:G:H1'	20:BA:104:LEU:O	2.02	0.59
1:1G:1216:G:H2'	1:1G:1217:C:C6	2.38	0.59
1:1G:1238:A:N7	1:1G:1303:C:H1'	2.18	0.59
2:12:81:VAL:O	2:12:85:ALA:N	2.36	0.59
3:22:23:TYR:CE1	10:1A:95:GLU:HB2	2.38	0.59
8:72:20:TYR:HD1	8:72:65:TYR:HE2	1.49	0.59
26:14:1313:U:OP1	58:14:3468:HOH:O	2.17	0.59
26:14:2131:G:N2	26:14:2157:G:O2'	2.36	0.59
26:14:2655:G:N2	26:14:2665:A:OP2	2.36	0.59
27:1J:103:U:O2'	46:D5:72:ARG:HG2	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:25:115:VAL:HG13	35:25:121:VAL:HG21	1.85	0.59
22:1K:1:G:H3'	22:1K:2:C:C6	2.37	0.59
26:1H:931:G:O2'	50:L8:24:LYS:NZ	2.26	0.59
26:1H:1771:C:O2'	26:1H:1786:A:H8	1.86	0.59
27:16:52:A:OP2	39:A8:59:LYS:NZ	2.32	0.59
36:78:49:ARG:HD2	54:Q8:61:LEU:CD2	2.31	0.59
1:1G:186(A):C:H2'	1:1G:186(B):C:C6	2.38	0.59
4:32:156:GLU:OE1	4:32:156:GLU:N	2.32	0.59
5:42:88:LYS:HB3	5:42:123:LEU:HB2	1.85	0.59
13:4A:92:HIS:HE2	13:4A:98:VAL:HG11	1.68	0.59
26:14:270(I):G:H2'	26:14:270(J):G:H8	1.67	0.59
26:14:1810:A:H2'	26:14:1811:G:O4'	2.02	0.59
26:14:2467:C:H4'	37:45:123:HIS:ND1	2.18	0.59
26:14:2652:C:H42	26:14:2668:G:H1	1.51	0.59
41:85:49:HIS:O	41:85:53:ARG:N	2.35	0.59
47:E5:9:SER:OG	47:E5:10:THR:N	2.34	0.59
1:13:95:G:H3'	1:13:96:G:H8	1.68	0.59
5:4E:142:LEU:O	5:4E:143:ARG:NH1	2.35	0.59
9:8E:5:TYR:HB2	9:8E:18:PHE:CD1	2.38	0.59
21:1F:5:ASP:O	21:1F:8:THR:HG22	2.03	0.59
30:31:29:ASN:H	30:31:112:MET:HE1	1.67	0.59
36:78:101:VAL:HG21	36:78:108:LYS:HG2	1.83	0.59
1:1G:1011:G:N2	1:1G:1019:C:H1'	2.17	0.59
1:1G:1258:G:H2'	1:1G:1259:C:H6	1.68	0.59
3:22:40:ARG:O	3:22:44:GLU:N	2.26	0.59
7:62:93:PRO:CD	7:62:94:ARG:HH21	2.10	0.59
8:72:29:SER:H	8:72:32:LYS:HB2	1.67	0.59
12:3A:59:ARG:HG3	12:3A:65:GLU:HB2	1.84	0.59
26:14:972:G:OP2	26:14:973:A:O2'	2.18	0.59
26:14:2009:G:O6	58:14:3467:HOH:O	2.17	0.59
29:29:77:ILE:C	29:29:78:LEU:HG	2.28	0.59
37:45:136:ALA:N	37:45:137:TYR:HA	2.17	0.59
39:65:78:LEU:HD11	39:65:107:GLU:HB3	1.85	0.59
46:D5:158:PRO:HB2	46:D5:159:PRO:HD2	1.85	0.59
47:E5:72:ARG:HE	47:E5:75:LEU:HD12	1.68	0.59
1:13:1248:A:H2	9:8E:70:LYS:HD2	1.68	0.58
13:4I:81:LEU:O	13:4I:84:ILE:HG22	2.03	0.58
26:1H:444:C:H4'	30:31:49:ALA:HB2	1.83	0.58
26:1H:2215:G:H2'	26:1H:2216:G:H8	1.68	0.58
26:1H:2296:U:OP2	39:A8:9:ARG:NH1	2.28	0.58
26:1H:2849:U:OP2	40:B8:95:ARG:NH1	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:256:U:H2'	1:1G:257:G:C8	2.38	0.58
2:12:97:TRP:HZ3	2:12:99:GLY:HA2	1.68	0.58
13:4A:81:LEU:HD11	13:4A:86:CYS:SG	2.42	0.58
26:14:1337:G:H2'	26:14:1338:G:H8	1.68	0.58
26:14:1579:A:H2'	26:14:1580:A:C8	2.38	0.58
27:1J:6:C:H2'	27:1J:7:G:H5"	1.84	0.58
36:35:50:ARG:HH11	36:35:50:ARG:HG3	1.68	0.58
48:F5:84:GLY:HA3	48:F5:86:SER:H	1.67	0.58
1:13:486:U:H2'	1:13:487:A:C8	2.34	0.58
12:3I:24:VAL:HB	12:3I:27:LEU:HD12	1.85	0.58
26:1H:2313:C:H4'	31:41:91:ARG:HG3	1.83	0.58
7:62:92:SER:HB2	7:62:94:ARG:CZ	2.33	0.58
9:82:121:ARG:NH1	9:82:122:ALA:O	2.35	0.58
13:4A:81:LEU:HB3	13:4A:89:GLY:HA3	1.84	0.58
17:8A:83:ASP:OD1	17:8A:84:LEU:N	2.36	0.58
26:14:1226:G:H4'	42:95:84:LYS:HG3	1.85	0.58
26:14:2129:C:H5"	26:14:2130:U:H5	1.68	0.58
26:14:2149:G:N1	26:14:2150:U:O2	2.36	0.58
29:29:31:CYS:SG	29:29:51:PHE:HB2	2.43	0.58
31:49:97:ASP:HA	31:49:100:TRP:HD1	1.68	0.58
34:15:135:PRO:O	34:15:137:LYS:NZ	2.36	0.58
1:13:279:A:H4'	1:13:280:C:H5"	1.84	0.58
1:13:540:G:H2'	1:13:541:G:O4'	2.03	0.58
1:13:1032(A):G:N2	1:13:1032(B):G:O6	2.36	0.58
26:1H:1113:U:H2'	26:1H:1114:G:C8	2.39	0.58
26:1H:1359:A:H61	26:1H:1372:U:H3	1.51	0.58
26:1H:2341:G:H2'	26:1H:2342:C:C6	2.37	0.58
29:21:65:GLY:HA2	29:21:67:PHE:O	2.03	0.58
39:A8:14:VAL:O	39:A8:18:ILE:HD13	2.02	0.58
43:E8:6:ILE:HG12	43:E8:104:THR:HG23	1.85	0.58
46:H8:45:ASP:CG	46:H8:49:ARG:HH12	2.10	0.58
1:1G:1178:G:H5"	9:82:93:ARG:NH2	2.18	0.58
1:1G:1309:G:OP2	13:4A:99:ARG:NH2	2.35	0.58
13:4A:82:MET:HE1	13:4A:92:HIS:HB3	1.84	0.58
26:14:1048:A:N6	26:14:1111:A:O2'	2.35	0.58
26:14:1788:C:C2	26:14:1789:A:C8	2.90	0.58
26:14:2883:A:C5'	26:14:2884:U:H5'	2.32	0.58
28:19:146:GLU:HB2	28:19:189:CYS:HB3	1.86	0.58
1:13:129(A):G:H4'	1:13:130:A:H5"	1.85	0.58
1:13:138:G:H1	1:13:225:C:H42	1.52	0.58
1:13:158:G:N1	1:13:163:C:N3	2.50	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:186(E):C:H42	1:13:191(B):G:H1	1.51	0.58
1:13:1149:C:OP1	9:8E:9:ARG:NH2	2.36	0.58
26:1H:306:U:C5	26:1H:307:G:C5	2.91	0.58
36:78:37:GLY:HA2	36:78:41:ARG:HD3	1.85	0.58
48:J8:47:GLN:N	48:J8:62:VAL:O	2.35	0.58
1:1G:1188:A:OP1	9:82:114:TYR:OH	2.11	0.58
3:22:90:GLU:H	3:22:90:GLU:CD	2.10	0.58
26:14:13:A:N1	26:14:525:U:H2'	2.18	0.58
26:14:1041:C:H42	26:14:1114:G:H1	1.50	0.58
26:14:2689:U:P	26:14:2719:G:H22	2.26	0.58
28:19:182:LEU:N	28:19:272:ALA:HB3	2.18	0.58
30:39:192:LEU:HD22	30:39:194:MET:HE2	1.84	0.58
46:D5:155:LEU:HB2	46:D5:157:LEU:HD13	1.86	0.58
1:13:456:C:N4	1:13:476:G:H1	2.00	0.58
2:1E:208:ILE:HG22	2:1E:211:ILE:HD11	1.86	0.58
3:2E:40:ARG:O	3:2E:44:GLU:HG2	2.03	0.58
13:4I:78:ILE:O	13:4I:82:MET:N	2.34	0.58
26:1H:530:G:O2'	58:1H:3641:HOH:O	2.16	0.58
26:1H:603:A:O4'	26:1H:655:A:N6	2.35	0.58
26:1H:606:U:H4'	26:1H:658:C:H4'	1.84	0.58
26:1H:2656:U:N3	26:1H:2665:A:H2	2.01	0.58
27:16:3:C:H42	27:16:117:G:H1	1.51	0.58
29:21:183:LEU:HD21	40:B8:10:VAL:HG21	1.86	0.58
3:22:18:TRP:HB2	3:22:21:ARG:HG2	1.84	0.58
5:42:42:GLY:HA3	5:42:65:ASN:O	2.04	0.58
18:9A:56:THR:HB	18:9A:58:LEU:HD12	1.85	0.58
26:14:446:G:OP2	58:14:3465:HOH:O	2.16	0.58
26:14:823:G:H2'	26:14:824:A:C8	2.38	0.58
26:14:2471:C:N4	26:14:2476:A:O2'	2.34	0.58
26:14:2820:A:C5	38:55:4:LEU:HD11	2.37	0.58
35:25:24:VAL:HG12	35:25:33:ALA:HB2	1.85	0.58
1:13:372:C:H42	1:13:389:A:H62	1.52	0.58
1:13:700:G:H4'	1:13:704:A:H1'	1.86	0.58
8:7E:112:LEU:HB3	8:7E:133:LEU:HA	1.84	0.58
11:2I:96:ARG:HD2	11:2I:99:GLN:HE21	1.68	0.58
26:1H:34:C:O2'	26:1H:35:G:OP2	2.19	0.58
26:1H:125:G:H5'	26:1H:125:G:C8	2.38	0.58
26:1H:242:G:H5"	54:Q8:64:TYR:CE2	2.38	0.58
26:1H:1210:A:H5'	26:1H:1210:A:H8	1.68	0.58
30:31:111:ALA:HB2	30:31:206:ILE:HG21	1.86	0.58
32:51:86:GLU:H	32:51:86:GLU:CD	2.09	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:B8:37:GLY:O	40:B8:38:ASN:ND2	2.36	0.58
1:1G:1124:G:O2'	1:1G:1145:C:N4	2.36	0.58
1:1G:1228:C:H2'	1:1G:1229:A:H8	1.69	0.58
12:3A:25:PRO:O	12:3A:27:LEU:N	2.36	0.58
22:1L:50:G:N2	22:1L:51:C:N3	2.51	0.58
26:14:574:C:H1'	26:14:2055:C:C6	2.39	0.58
26:14:1040:C:H2'	26:14:1041:C:C6	2.39	0.58
26:14:1778:U:H2'	26:14:1784:A:N6	2.18	0.58
27:1J:89(A):A:C8	27:1J:90:C:H1'	2.39	0.58
1:13:376:G:H5"	16:7I:5:ARG:HD2	1.85	0.58
2:1E:11:LEU:HG	2:1E:15:VAL:HG23	1.86	0.58
2:1E:98:LEU:HD23	2:1E:108:ILE:HD11	1.85	0.58
17:8I:11:VAL:HG12	17:8I:85:VAL:HG23	1.86	0.58
26:1H:232:G:O5'	26:1H:232:G:H8	1.87	0.58
26:1H:1899:G:N2	26:1H:1902:C:C5	2.72	0.58
26:1H:2101:G:H1	26:1H:2188:C:H42	1.51	0.58
29:21:9:VAL:HB	29:21:25:VAL:HG13	1.83	0.58
29:21:105:THR:HG21	29:21:164:ARG:CZ	2.33	0.58
1:1G:42:G:H1	1:1G:400:C:H42	1.52	0.58
5:42:36:ASP:OD1	5:42:38:GLN:N	2.25	0.58
26:14:34:C:O2'	26:14:35:G:O5'	2.22	0.58
26:14:993:G:OP2	41:85:51:LYS:NZ	2.29	0.58
26:14:2335:A:C8	26:14:2337:G:C5	2.92	0.58
27:1J:116:G:H5"	39:65:55:ALA:HB2	1.85	0.58
29:29:24:THR:HG21	29:29:188:VAL:HG13	1.86	0.58
1:13:345:C:H4'	1:13:346:G:C8	2.39	0.58
1:13:757:U:H2'	1:13:758:G:O4'	2.04	0.58
1:13:864:A:H2'	1:13:865:A:C8	2.39	0.58
10:1I:49:VAL:HG23	14:5I:41:ARG:HB2	1.85	0.58
26:1H:2052:G:H4'	29:21:143:ASN:O	2.03	0.58
26:1H:2854:G:H2'	26:1H:2855:C:C6	2.38	0.58
32:51:58:GLU:O	32:51:60:ARG:N	2.37	0.58
40:B8:21:GLU:HG3	40:B8:91:ARG:HH22	1.68	0.58
46:H8:165:VAL:HG12	46:H8:167:PRO:HD3	1.86	0.58
1:1G:1171:G:H2'	1:1G:1172:C:H6	1.68	0.58
1:1G:1460:A:OP2	20:BA:27:LYS:NZ	2.37	0.58
10:1A:51:ARG:NH2	10:1A:61:GLU:HB2	2.19	0.58
30:39:89:VAL:HG12	30:39:90:PHE:H	1.69	0.58
31:49:145:THR:O	31:49:146:TYR:HB3	2.02	0.58
32:59:12:PRO:HB3	32:59:15:VAL:HG22	1.86	0.58
40:75:123:GLN:HA	40:75:126:ALA:HB3	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:837:G:OP2	1:13:842:C:N4	2.36	0.58
12:3I:58:VAL:O	12:3I:65:GLU:HA	2.04	0.58
26:1H:220:G:O2'	26:1H:233:A:N3	2.35	0.58
26:1H:2287:A:O2'	26:1H:2288:A:H5"	2.03	0.58
45:G8:94:LYS:HZ2	45:G8:95:LYS:N	2.00	0.58
1:1G:41:G:H2'	1:1G:42:G:C8	2.39	0.58
1:1G:1421:G:H1	1:1G:1479:C:H42	1.51	0.58
7:62:93:PRO:HA	7:62:96:GLN:HB2	1.85	0.58
13:4A:84:ILE:H	13:4A:84:ILE:HD12	1.69	0.58
22:1L:4:G:O6	22:1L:69:C:N4	2.37	0.58
26:14:545:G:H21	26:14:547:A:H8	1.52	0.58
26:14:780:G:H21	26:14:783:A:H62	1.51	0.58
30:39:155:LEU:HD23	30:39:186:ILE:HD13	1.85	0.58
39:65:88:ASP:C	39:65:90:GLY:H	2.10	0.58
46:D5:91:LEU:HD12	46:D5:91:LEU:H	1.67	0.58
1:13:280:C:C2	17:8I:38:ARG:HG3	2.39	0.58
3:2E:124:ILE:HG21	3:2E:196:LEU:HD12	1.85	0.58
26:1H:275:G:N7	26:1H:363:G:C2	2.72	0.58
26:1H:852:G:H8	26:1H:852:G:O5'	1.87	0.58
26:1H:1980:G:O2'	26:1H:1982:C:OP2	2.16	0.58
26:1H:2345:G:N3	26:1H:2381:C:H2'	2.19	0.58
45:G8:85:VAL:HG22	45:G8:98:VAL:HB	1.86	0.58
1:1G:407:G:OP1	4:32:115:ARG:NH2	2.37	0.58
20:BA:22:ARG:O	20:BA:26:ASN:ND2	2.37	0.58
26:14:528:A:C2	26:14:2042:A:H2'	2.39	0.58
26:14:1012:U:H3	34:15:25:ARG:HH11	1.52	0.58
26:14:1434:A:H61	26:14:1558:A:N6	2.01	0.58
26:14:1537:C:H2'	26:14:1538:G:C8	2.39	0.58
26:14:1946:U:H2'	26:14:1947:C:C6	2.37	0.58
28:19:9:TYR:HD1	28:19:10:THR:HG23	1.69	0.58
30:39:75:HIS:HD2	30:39:82:ILE:HD13	1.68	0.58
30:39:160:ASN:OD1	30:39:163:VAL:N	2.37	0.58
35:25:47:ILE:HB	35:25:48:PRO:HD2	1.86	0.58
1:13:31:G:O2'	1:13:48:C:N4	2.37	0.57
1:13:45:U:H2'	1:13:46:G:C8	2.38	0.57
1:13:979:C:N4	58:13:1862:HOH:O	2.36	0.57
1:13:1292:U:H2'	1:13:1293:G:C8	2.39	0.57
50:L8:37:LEU:HD22	50:L8:43:ILE:HD12	1.85	0.57
1:1G:1090:U:H4'	1:1G:1170:A:H2	1.69	0.57
1:1G:1255:G:H5'	1:1G:1256:A:OP2	2.04	0.57
5:42:30:ALA:O	5:42:45:PHE:HA	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:58:VAL:O	12:3A:65:GLU:HA	2.04	0.57
26:14:2329:G:N2	47:E5:41:ARG:HG3	2.11	0.57
29:29:37:ARG:HD2	29:29:44:TYR:OH	2.04	0.57
47:E5:10:THR:OG1	47:E5:11:ARG:N	2.37	0.57
1:13:1424:C:H42	1:13:1476:G:H1	1.52	0.57
2:1E:54:THR:HG21	2:1E:201:ILE:HD11	1.85	0.57
26:1H:654(C):G:H1	26:1H:654(Q):C:H42	1.50	0.57
26:1H:931:G:C4	26:1H:933:A:C8	2.92	0.57
26:1H:1243:G:O2'	36:78:7:ARG:NH2	2.37	0.57
26:1H:2153:G:H2'	26:1H:2154:G:O4'	2.04	0.57
26:1H:2261:C:C5	47:I8:16:SER:HB3	2.39	0.57
30:31:116:ASP:O	30:31:120:GLU:HG3	2.04	0.57
45:G8:38:ILE:HD11	45:G8:64:GLU:HG3	1.86	0.57
45:G8:45:VAL:HG22	45:G8:46:LYS:H	1.68	0.57
51:M8:57:GLU:O	51:M8:61:ARG:NH1	2.32	0.57
1:1G:149:A:H2'	1:1G:150:C:C6	2.39	0.57
2:12:174:VAL:HG11	2:12:196:LEU:HD13	1.85	0.57
7:62:111:ARG:NH2	7:62:113:GLU:OE2	2.33	0.57
8:72:36:LEU:HB2	8:72:48:TYR:CD1	2.39	0.57
26:14:29:U:H2'	26:14:30:G:C8	2.39	0.57
26:14:1012:U:H5	34:15:28:THR:HG21	1.69	0.57
30:39:129:PHE:HA	30:39:142:TRP:NE1	2.19	0.57
36:35:47:ASP:HB3	36:35:50:ARG:H	1.69	0.57
1:13:142:G:H2'	1:13:143:A:C8	2.40	0.57
1:13:222:U:H2'	1:13:223:U:C6	2.39	0.57
1:13:403:C:OP2	4:3E:74:GLN:NE2	2.37	0.57
1:13:1291:G:O3'	9:8E:39:GLY:HA3	2.05	0.57
9:8E:22:GLY:N	9:8E:58:HIS:O	2.38	0.57
26:1H:2002:G:N7	58:1H:3705:HOH:O	2.32	0.57
30:31:184:TYR:O	30:31:188:ARG:HG3	2.04	0.57
32:51:97:ARG:HH21	32:51:104:GLU:CD	2.12	0.57
1:1G:448:A:P	1:1G:485:G:H22	2.25	0.57
8:72:110:ALA:H	8:72:121:ASP:HB3	1.69	0.57
26:14:127:A:H5"	26:14:128:C:C6	2.39	0.57
26:14:994:C:H3'	41:85:54:LYS:HE3	1.86	0.57
26:14:2147:G:H2'	26:14:2148:G:H4'	1.87	0.57
28:19:3:VAL:HG12	28:19:17:THR:HB	1.86	0.57
30:39:20:LEU:HD13	30:39:203:GLN:OE1	2.04	0.57
31:49:118:ARG:HB3	31:49:181:ARG:HD3	1.86	0.57
46:D5:11:GLU:O	46:D5:36:LYS:NZ	2.22	0.57
1:13:108:G:N2	1:13:109:A:N1	2.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:611:A:H61	1:13:629:G:H1	1.52	0.57
11:2I:53:SER:HA	11:2I:54:ARG:O	2.05	0.57
26:1H:125:G:H5'	26:1H:125:G:H8	1.69	0.57
26:1H:330:A:O2'	26:1H:331:A:H8	1.87	0.57
26:1H:2197:U:H1'	26:1H:2198:A:C8	2.40	0.57
26:1H:2887:U:H2'	26:1H:2888:C:C6	2.40	0.57
41:C8:52:ARG:HA	41:C8:55:ARG:HG3	1.87	0.57
1:1G:161:A:H2'	1:1G:162:A:C8	2.40	0.57
1:1G:611:A:H2	1:1G:630:G:H22	1.49	0.57
1:1G:1239:A:H4'	1:1G:1240:U:H5'	1.86	0.57
3:22:125:GLU:O	3:22:127:ARG:NH1	2.36	0.57
38:55:79:LEU:HA	38:55:83:ILE:HB	1.86	0.57
52:J5:16:ARG:HH11	52:J5:16:ARG:HG2	1.68	0.57
1:13:350:G:H2'	1:13:351:G:C8	2.40	0.57
10:1I:38:ILE:HG13	10:1I:71:LEU:HB3	1.86	0.57
15:6I:67:LEU:HD23	15:6I:78:TYR:CE1	2.39	0.57
26:1H:709:U:H2'	26:1H:710:G:C8	2.40	0.57
26:1H:1179:C:H2'	26:1H:1180:C:C6	2.39	0.57
26:1H:1891:G:O6	58:1H:3627:HOH:O	2.14	0.57
26:1H:2139:C:N4	26:1H:2152:G:H1	2.03	0.57
29:21:50:GLY:C	29:21:75:VAL:HG11	2.30	0.57
34:58:7:LYS:H	34:58:7:LYS:NZ	2.02	0.57
39:A8:89:ARG:HG2	39:A8:89:ARG:O	2.04	0.57
2:12:130:ARG:HB2	2:12:135:GLN:HE21	1.70	0.57
3:22:41:GLY:O	3:22:45:LYS:HG3	2.04	0.57
16:7A:14:ASN:OD1	16:7A:42:ARG:NH2	2.38	0.57
26:14:185:U:H4'	26:14:218:A:H4'	1.86	0.57
26:14:303:U:H2'	26:14:304:G:C8	2.39	0.57
26:14:661:C:O3'	58:14:3471:HOH:O	2.17	0.57
26:14:1043:C:H2'	26:14:1044:G:H5'	1.86	0.57
26:14:1152:C:H4'	41:85:77:SER:HA	1.86	0.57
26:14:1310:G:OP2	53:L5:9:ARG:NE	2.30	0.57
26:14:1599:C:C6	26:14:1600:C:H5	2.23	0.57
34:15:125:GLY:HA2	34:15:126:PRO:O	2.03	0.57
1:13:235:C:H2'	1:13:236:G:H8	1.70	0.57
1:13:354:G:OP1	58:13:1836:HOH:O	2.17	0.57
1:13:946:A:H2'	1:13:947:G:C8	2.39	0.57
1:13:1302:U:OP2	13:4I:21:TYR:OH	2.22	0.57
1:13:1422:G:H5'	35:68:48:PRO:HB3	1.86	0.57
9:8E:33:PHE:CE2	9:8E:47:LEU:HD11	2.39	0.57
18:9I:66:LEU:O	18:9I:70:ILE:HG13	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:71:A:H5'	26:1H:71:A:H8	1.70	0.57
26:1H:299:A:H5'	26:1H:300:A:OP2	2.04	0.57
26:1H:994:C:H3'	41:C8:54:LYS:HE3	1.85	0.57
26:1H:1021:A:C8	26:1H:1022:G:H5"	2.38	0.57
28:11:96:HIS:CE1	28:11:102:LYS:HE2	2.39	0.57
31:41:143:GLU:OE2	31:41:143:GLU:N	2.36	0.57
1:1G:149:A:H2'	1:1G:150:C:H6	1.69	0.57
1:1G:165:C:H2'	1:1G:166:G:C8	2.40	0.57
1:1G:1308:U:H5"	13:4A:98:VAL:HG22	1.86	0.57
3:22:36:ASP:HA	3:22:39:ILE:HD12	1.85	0.57
7:62:64:GLN:O	7:62:128:ALA:HA	2.04	0.57
8:72:34:GLU:OE1	8:72:37:ARG:NH1	2.38	0.57
12:3A:52:LEU:O	12:3A:54:LYS:NZ	2.37	0.57
26:14:946:G:H2'	26:14:947:G:H8	1.70	0.57
29:29:76:ARG:HA	29:29:76:ARG:CZ	2.35	0.57
31:49:103:LEU:HD23	31:49:106:LEU:HD23	1.86	0.57
39:65:15:ARG:O	39:65:19:LYS:HG3	2.05	0.57
43:A5:73:ALA:HB3	43:A5:106:ILE:HD11	1.85	0.57
47:E5:50:ASN:O	47:E5:62:LEU:HB2	2.04	0.57
1:13:165:C:H2'	1:13:166:G:H8	1.69	0.57
1:13:316:G:OP2	1:13:351:G:O2'	2.20	0.57
1:13:964:A:N6	58:13:1863:HOH:O	2.37	0.57
1:13:1165:C:H2'	1:13:1166:G:O4'	2.04	0.57
13:4I:16:ASP:OD1	13:4I:16:ASP:N	2.35	0.57
20:BI:22:ARG:O	20:BI:26:ASN:ND2	2.37	0.57
26:1H:270:A:OP1	58:1H:3650:HOH:O	2.17	0.57
26:1H:574:C:OP2	58:1H:3651:HOH:O	2.17	0.57
26:1H:614:U:OP2	26:1H:614:U:H6	1.86	0.57
26:1H:2016:U:O2	52:N8:7:PRO:HG2	2.04	0.57
26:1H:2068:U:N3	26:1H:2430:A:H2	2.01	0.57
26:1H:2287:A:C2	26:1H:2346:A:C2	2.93	0.57
28:11:263:ARG:NH1	28:11:263:ARG:HB2	2.20	0.57
37:88:109:VAL:HG13	37:88:113:GLN:HB3	1.87	0.57
41:C8:28:ARG:HD3	41:C8:38:THR:OG1	2.04	0.57
52:N8:33:CYS:SG	52:N8:40:LYS:HD3	2.44	0.57
3:22:73:PRO:HB3	3:22:103:VAL:HG11	1.87	0.57
9:82:9:ARG:HG2	9:82:14:VAL:HG13	1.87	0.57
24:3L:76:A:H8	26:14:2394:C:N4	2.02	0.57
26:14:363:G:H2'	26:14:363(A):A:C8	2.40	0.57
26:14:833:U:H1'	36:35:55:ARG:HH12	1.70	0.57
26:14:1999:C:H4'	26:14:2723:C:O2	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2475:C:H3'	26:14:2476:A:H5"	1.86	0.57
26:14:2550:G:H1	26:14:2558:C:H42	1.51	0.57
26:14:2562:U:H4'	35:25:25:LEU:HD21	1.87	0.57
29:29:134:ILE:HD12	29:29:134:ILE:O	2.04	0.57
35:25:7:TYR:HE1	35:25:20:MET:HE3	1.70	0.57
40:75:5:ALA:HB1	40:75:8:LYS:HB2	1.86	0.57
46:D5:45:ASP:CG	46:D5:49:ARG:HE	2.12	0.57
47:E5:26:TYR:HB2	47:E5:29:GLN:OE1	2.04	0.57
1:13:923:A:O2'	1:13:1399:C:OP2	2.20	0.57
1:13:963:G:H21	10:1I:55:LYS:CE	2.18	0.57
1:13:1034:G:N2	1:13:1035:A:N7	2.52	0.57
4:3E:141:ARG:HB2	4:3E:141:ARG:NH1	2.19	0.57
26:1H:270:A:OP2	26:1H:270(Y):G:N2	2.28	0.57
26:1H:732:C:H3'	58:1H:3551:HOH:O	2.05	0.57
26:1H:1626:G:OP2	58:1H:3656:HOH:O	2.18	0.57
26:1H:1689:A:N6	26:1H:1698:A:H2	2.03	0.57
38:98:41:ALA:O	38:98:44:LEU:N	2.37	0.57
3:22:9:GLY:HA3	14:5A:49:HIS:HA	1.87	0.57
3:22:44:GLU:HG3	3:22:52:LEU:HD11	1.86	0.57
3:22:44:GLU:HG3	3:22:52:LEU:HD21	1.85	0.57
4:32:32:ALA:H	4:32:35:ARG:HH11	1.52	0.57
26:14:758:C:H2'	26:14:759:G:H8	1.70	0.57
26:14:1425:G:H2'	26:14:1426:G:O4'	2.05	0.57
27:1J:9:G:P	39:65:25:ARG:HH22	2.27	0.57
27:1J:104:A:OP1	46:D5:72:ARG:NH2	2.38	0.57
34:15:42:TRP:HA	34:15:48:MET:HE1	1.87	0.57
1:13:376:G:O3'	16:7I:5:ARG:NH1	2.25	0.57
4:3E:112:VAL:HG12	4:3E:116:GLN:OE1	2.05	0.57
5:4E:147:ASP:OD1	5:4E:147:ASP:N	2.22	0.57
26:1H:75:G:N2	26:1H:112:U:O2	2.38	0.57
26:1H:858:U:O2	26:1H:2268:A:H2'	2.05	0.57
26:1H:1289:C:H2'	26:1H:1290:C:H6	1.70	0.57
26:1H:2194:G:OP1	28:11:268:ARG:NH2	2.38	0.57
26:1H:2312:U:H5'	31:41:88:ILE:HD11	1.86	0.57
26:1H:2516:G:C6	26:1H:2517:C:N4	2.72	0.57
37:88:54:MET:O	37:88:57:HIS:N	2.36	0.57
48:J8:81:LYS:O	48:J8:83:GLU:HG2	2.05	0.57
50:L8:13:ILE:O	58:L8:101:HOH:O	2.17	0.57
1:1G:129(A):G:C6	1:1G:188:U:H4'	2.40	0.57
9:82:117:HIS:HB2	9:82:121:ARG:O	2.05	0.57
26:14:468:G:N7	53:L5:39:ARG:NH2	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:649:G:H2'	26:14:650:C:C6	2.40	0.57
26:14:1525:G:H2'	26:14:1526:G:C8	2.40	0.57
37:45:27:VAL:HG13	37:45:136:ALA:CB	2.30	0.57
48:F5:40:ARG:NH2	48:F5:42:GLN:HG2	2.20	0.57
1:13:359:U:H2'	1:13:360:A:C8	2.39	0.57
1:13:664:G:H22	1:13:741:G:H1	1.53	0.57
8:7E:98:LYS:H	8:7E:98:LYS:HD2	1.70	0.57
26:1H:1658:C:H2'	26:1H:1659:U:C6	2.39	0.57
26:1H:2432:A:C4	48:J8:33:LYS:HG2	2.39	0.57
26:1H:2781:A:H5"	26:1H:2782:G:H5'	1.85	0.57
39:A8:27:SER:HA	39:A8:88:ASP:CB	2.35	0.57
54:Q8:30:ARG:NH1	58:Q8:101:HOH:O	2.37	0.57
54:Q8:33:ASN:HA	54:Q8:36:LYS:HD2	1.86	0.57
1:1G:375:U:H2'	1:1G:376:G:H8	1.70	0.57
1:1G:826:C:H5'	8:72:12:ARG:NH1	2.20	0.57
1:1G:1043:C:H2'	1:1G:1044:A:C8	2.39	0.57
13:4A:31:LYS:HA	13:4A:34:LEU:HB2	1.86	0.57
15:6A:49:ASP:CG	15:6A:52:SER:HB2	2.30	0.57
20:BA:64:ASP:OD2	20:BA:81:LYS:NZ	2.33	0.57
23:2L:2:G:H5'	47:E5:8:GLY:HA2	1.86	0.57
26:14:798:G:OP1	58:14:3469:HOH:O	2.17	0.57
26:14:1210:A:H5'	26:14:1210:A:H8	1.68	0.57
28:19:228:PRO:HD3	28:19:235:GLY:N	2.19	0.57
37:45:27:VAL:HB	37:45:28:ALA:CA	2.29	0.57
37:45:139:GLU:N	37:45:139:GLU:OE2	2.37	0.57
1:13:975:A:H5"	1:13:975:A:H8	1.69	0.56
1:13:1145:C:H4'	1:13:1146:A:H5'	1.85	0.56
26:1H:1247:A:OP1	30:31:95:ARG:NH2	2.36	0.56
26:1H:1316:U:H2'	26:1H:1317:A:H8	1.68	0.56
26:1H:2243:U:H2'	26:1H:2244:U:C6	2.40	0.56
26:1H:2531:A:H5'	32:51:157:TYR:CZ	2.40	0.56
26:1H:2688:U:H5	26:1H:2720:U:OP2	1.88	0.56
32:51:155:SER:OG	32:51:158:HIS:O	2.23	0.56
36:78:115:LEU:HA	36:78:134:ALA:HB2	1.86	0.56
48:J8:90:ILE:C	48:J8:92:LYS:H	2.12	0.56
49:K8:18:PRO:HA	49:K8:21:LEU:HD12	1.86	0.56
1:1G:67:C:H2'	1:1G:68:G:H8	1.70	0.56
1:1G:189:U:O2'	17:8A:63:ARG:NH2	2.37	0.56
1:1G:373:A:N3	1:1G:374:A:C8	2.73	0.56
2:12:15:VAL:HB	2:12:16:HIS:CE1	2.39	0.56
6:52:83:ASP:OD1	6:52:83:ASP:N	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2557:G:H2'	26:14:2558:C:C6	2.40	0.56
26:14:2889:C:H2'	26:14:2891:G:O4'	2.04	0.56
30:39:108:LYS:O	30:39:112:MET:HB2	2.05	0.56
30:39:179:GLU:N	30:39:179:GLU:OE1	2.38	0.56
1:13:652:U:O2'	1:13:653:A:O5'	2.20	0.56
1:13:659:U:H2'	1:13:660:G:C8	2.40	0.56
1:13:693:G:H2'	1:13:694:A:C8	2.40	0.56
1:13:749:C:H2'	1:13:750:G:C8	2.37	0.56
1:13:1263:C:N3	1:13:1272:G:N1	2.43	0.56
2:1E:100:GLY:O	2:1E:104:ASN:N	2.28	0.56
26:1H:259:G:H21	26:1H:621:A:H8	1.51	0.56
26:1H:643:A:N1	26:1H:2369:A:O2'	2.34	0.56
26:1H:1109:C:O2'	26:1H:1110:G:O4'	2.23	0.56
26:1H:2448:A:H5'	58:1H:3528:HOH:O	2.05	0.56
28:11:77:ALA:HB2	28:11:97:TYR:CG	2.40	0.56
30:31:36:VAL:HG11	30:31:183:VAL:HG11	1.86	0.56
49:K8:42:GLY:O	49:K8:44:LEU:N	2.38	0.56
4:32:34:GLU:HB2	4:32:35:ARG:HH22	1.69	0.56
26:14:459:U:H4'	53:L5:40:TRP:CZ3	2.40	0.56
26:14:491:G:O6	43:A5:49:LYS:HE2	2.05	0.56
26:14:1048:A:H62	26:14:1111:A:H1'	1.70	0.56
26:14:1796:U:H2'	26:14:1797:C:H6	1.68	0.56
26:14:2106:G:H1	26:14:2183:C:H42	1.52	0.56
26:14:2432:A:H2'	26:14:2433:A:C8	2.40	0.56
27:1J:117:G:O5'	27:1J:117:G:H8	1.87	0.56
28:19:71:ASP:OD2	28:19:103:ARG:NH1	2.38	0.56
29:29:111:ARG:HG2	38:55:1:MET:HE1	1.87	0.56
31:49:95:ARG:O	31:49:99:MET:HG2	2.05	0.56
33:69:9:LEU:HD11	33:69:35:LEU:HB3	1.86	0.56
35:25:34:THR:OG1	35:25:35:VAL:N	2.37	0.56
40:75:7:ILE:O	40:75:11:GLU:HB2	2.04	0.56
46:D5:4:ARG:HB3	46:D5:58:VAL:HB	1.88	0.56
46:D5:157:LEU:CB	46:D5:161:VAL:HG21	2.35	0.56
48:F5:51:VAL:HG23	48:F5:58:ILE:HB	1.86	0.56
1:13:186(C):G:H2'	1:13:186(D):C:C6	2.40	0.56
1:13:384:G:H2'	1:13:385:C:C6	2.40	0.56
1:13:631:G:O2'	1:13:632:A:O5'	2.23	0.56
1:13:843:U:H3'	1:13:848:C:C6	2.40	0.56
8:7E:86:ILE:HG21	8:7E:133:LEU:HD13	1.86	0.56
13:4I:23:TYR:CE2	13:4I:71:ARG:HG3	2.40	0.56
22:1K:66:U:H3'	22:1K:67:A:C5'	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1535:U:H5"	26:1H:1537:C:N4	2.20	0.56
26:1H:2252:G:H2'	26:1H:2253:G:C8	2.40	0.56
28:11:108:PRO:HG3	28:11:143:HIS:CE1	2.39	0.56
32:51:5:GLY:H	32:51:69:ARG:HG2	1.70	0.56
36:78:59:LEU:O	54:Q8:13:ARG:HD2	2.05	0.56
38:98:38:VAL:HG22	38:98:112:ALA:HB2	1.87	0.56
39:A8:26:LEU:HD12	39:A8:39:ILE:HD11	1.87	0.56
45:G8:94:LYS:NZ	45:G8:95:LYS:H	2.00	0.56
46:H8:60:GLU:HA	46:H8:66:SER:HA	1.86	0.56
47:I8:38:VAL:HG12	47:I8:40:GLN:HG2	1.87	0.56
48:J8:71:TYR:HA	48:J8:74:VAL:HG12	1.87	0.56
1:1G:385:C:H2'	1:1G:386:C:C6	2.41	0.56
4:32:150:GLU:C	4:32:152:SER:H	2.12	0.56
6:52:9:VAL:HB	6:52:87:ARG:HB2	1.88	0.56
10:1A:47:PHE:O	10:1A:63:PHE:N	2.37	0.56
20:BA:14:LYS:HE2	20:BA:18:GLN:HE21	1.71	0.56
26:14:184:C:H2'	26:14:185:U:H6	1.70	0.56
26:14:748:G:O6	43:A5:90:ARG:NH1	2.38	0.56
26:14:2068:U:N3	26:14:2430:A:H2	1.97	0.56
26:14:2591:C:OP1	28:19:239:ARG:HG2	2.05	0.56
29:29:12:THR:O	29:29:23:VAL:HG22	2.05	0.56
30:39:152:GLU:HA	30:39:190:GLU:OE2	2.05	0.56
34:15:17:ASP:OD2	34:15:56:ASN:ND2	2.38	0.56
44:B5:11:PRO:HG2	44:B5:13:LEU:HD21	1.87	0.56
1:13:269:C:H2'	1:13:270:A:C8	2.39	0.56
1:13:345:C:H4'	1:13:346:G:C5	2.40	0.56
22:1K:28:A:N6	22:1K:41:G:O6	2.39	0.56
26:1H:2210:G:H3'	26:1H:2211:G:C8	2.41	0.56
26:1H:2335:A:C8	26:1H:2337:G:C5	2.93	0.56
26:1H:2469:A:H2	26:1H:2481:G:H21	1.51	0.56
29:21:104:VAL:HG13	29:21:198:VAL:HG22	1.86	0.56
31:41:16:ARG:HH12	31:41:31:VAL:HG21	1.70	0.56
35:68:93:PRO:HG3	35:68:114:ILE:HG13	1.87	0.56
36:78:116:GLY:H	36:78:134:ALA:HB2	1.70	0.56
50:L8:3:ARG:HB3	50:L8:59:VAL:HG13	1.88	0.56
1:1G:740:U:HO2'	15:6A:52:SER:HG	1.43	0.56
1:1G:865:A:N3	1:1G:918:A:O2'	2.34	0.56
1:1G:1122:U:N3	1:1G:1123:A:N7	2.54	0.56
1:1G:1132:C:H2'	1:1G:1133:G:H8	1.67	0.56
4:32:26:CYS:HB3	56:32:302:SF4:S1	2.45	0.56
5:42:42:GLY:HA2	5:42:136:MET:HE1	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:42:PRO:HD3	19:AA:67:VAL:HG13	1.87	0.56
26:14:331:A:N6	26:14:1210:A:OP2	2.32	0.56
26:14:511:U:H5	26:14:512:G:C5	2.24	0.56
26:14:1204:A:O2'	26:14:1205:U:OP2	2.21	0.56
26:14:1416:G:O2'	26:14:1417:C:O5'	2.17	0.56
26:14:2575:C:H5'	29:29:144:ARG:HG2	1.87	0.56
33:69:75:LEU:HA	33:69:139:GLN:HG3	1.87	0.56
49:G5:29:LYS:HE2	49:G5:57:ILE:HG21	1.87	0.56
1:13:123:C:OP1	1:13:311:C:O2'	2.17	0.56
1:13:1151:A:O2'	1:13:1152:A:O5'	2.21	0.56
2:1E:21:ARG:O	2:1E:23:ARG:N	2.36	0.56
4:3E:84:LYS:HB3	4:3E:86:LYS:HG3	1.86	0.56
7:6E:139:GLU:HA	7:6E:142:GLU:HG3	1.88	0.56
23:2K:24:C:H2'	23:2K:25:U:C6	2.41	0.56
26:1H:2864:G:H2'	26:1H:2865:U:C6	2.41	0.56
28:11:168:ARG:HG2	28:11:173:VAL:HG12	1.88	0.56
3:22:8:ILE:HG23	3:22:16:ARG:HG2	1.87	0.56
19:AA:66:MET:HG3	19:AA:69:HIS:CE1	2.40	0.56
26:14:2648:C:H2'	26:14:2649:U:C6	2.40	0.56
30:39:32:LEU:O	30:39:36:VAL:HG23	2.04	0.56
40:75:33:LYS:HE3	40:75:40:THR:HG21	1.87	0.56
48:F5:83:GLU:O	48:F5:87:PRO:HD3	2.05	0.56
1:13:110:C:H2'	1:13:111:G:O4'	2.05	0.56
1:13:607:A:C2	16:7I:31:LYS:HG3	2.40	0.56
1:13:1347:G:HO2'	1:13:1373:G:H1	1.50	0.56
3:2E:32:LEU:HD13	3:2E:59:ARG:HH11	1.69	0.56
6:5E:95:GLU:N	6:5E:95:GLU:OE1	2.36	0.56
8:7E:116:LYS:HG2	8:7E:129:VAL:HG11	1.87	0.56
11:2I:32:ILE:HD12	11:2I:72:ALA:HB2	1.88	0.56
26:1H:1028:A:N6	26:1H:1125:G:H2'	2.21	0.56
26:1H:1729:A:O2'	26:1H:1730:U:O5'	2.22	0.56
26:1H:2392:A:H2	26:1H:2424:C:H42	1.53	0.56
26:1H:2646:C:H2'	26:1H:2647:U:O4'	2.06	0.56
27:16:111:U:H2'	27:16:112:G:C8	2.40	0.56
30:31:101:LEU:O	30:31:106:ARG:NH1	2.39	0.56
38:98:24:GLN:OE1	38:98:36:THR:HG21	2.06	0.56
40:B8:12:SER:HA	40:B8:14:TYR:H	1.70	0.56
40:B8:24:PRO:HA	40:B8:49:VAL:HG22	1.88	0.56
10:1A:91:PRO:HB3	10:1A:96:ILE:HD11	1.86	0.56
26:14:1918:A:N3	26:14:1919:A:N6	2.53	0.56
26:14:2273:A:H2'	26:14:2274:A:C8	2.41	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2468:G:H3'	26:14:2476:A:N1	2.20	0.56
1:13:278:G:OP2	17:8I:92:ARG:NH1	2.39	0.56
1:13:1036:G:H5'	1:13:1037:C:OP2	2.06	0.56
4:3E:165:MET:SD	4:3E:168:ARG:HD3	2.45	0.56
11:2I:79:SER:HB2	11:2I:106:LYS:HE2	1.87	0.56
26:1H:910:A:N6	37:88:12:GLN:HA	2.10	0.56
26:1H:2576:G:OP1	58:1H:3649:HOH:O	2.17	0.56
26:1H:2786:U:O2'	29:21:62:PRO:O	2.19	0.56
28:11:33:LEU:O	28:11:64:ILE:HG23	2.06	0.56
30:31:29:ASN:N	30:31:112:MET:HE1	2.20	0.56
46:H8:58:VAL:C	46:H8:60:GLU:N	2.62	0.56
1:1G:1134:G:C2	1:1G:1135:U:H1'	2.41	0.56
14:5A:37:PHE:CE1	14:5A:53:LEU:HD13	2.41	0.56
26:14:247:G:H4'	26:14:386:G:C5	2.40	0.56
26:14:323:G:O2'	26:14:1205:U:N3	2.32	0.56
26:14:1990:C:H2'	26:14:1991:U:C6	2.41	0.56
26:14:2342:C:O2	26:14:2374:C:H4'	2.06	0.56
32:59:14:GLY:O	32:59:29:PRO:HD3	2.06	0.56
33:69:14:ASP:O	33:69:17:GLN:HB2	2.06	0.56
36:35:55:ARG:HG2	36:35:56:SER:H	1.70	0.56
39:65:18:ILE:O	39:65:20:ARG:N	2.39	0.56
1:13:10:A:H2'	1:13:11:G:H8	1.71	0.56
1:13:619:U:H3	4:3E:135:LEU:HD11	1.70	0.56
26:1H:836:G:H5"	26:1H:837:C:OP2	2.05	0.56
26:1H:1290:C:H2'	26:1H:1291:C:C6	2.41	0.56
26:1H:2101:G:H1	26:1H:2188:C:N4	2.04	0.56
26:1H:2818:G:OP2	38:98:42:LYS:NZ	2.39	0.56
32:51:169:VAL:HG13	32:51:170:ARG:HG3	1.88	0.56
38:98:104:ARG:NH1	38:98:107:ASP:OD2	2.34	0.56
43:E8:14:PRO:HG2	43:E8:78:GLU:HB2	1.87	0.56
1:1G:337:C:H2'	1:1G:338:A:H8	1.70	0.56
1:1G:1247:U:H2'	1:1G:1248:A:O4'	2.06	0.56
1:1G:1442:G:H1	1:1G:1461:G:H21	1.52	0.56
26:14:1486:A:H2'	26:14:1487:G:H8	1.71	0.56
1:13:940:C:H2'	1:13:941:G:C8	2.40	0.56
1:13:1167:A:H8	1:13:1167:A:OP1	1.89	0.56
2:1E:121:LEU:O	2:1E:139:LYS:NZ	2.20	0.56
4:3E:110:PHE:CE2	4:3E:148:VAL:HG23	2.41	0.56
7:6E:54:THR:HG22	7:6E:125:MET:SD	2.46	0.56
10:1I:54:PHE:CG	10:1I:55:LYS:HG3	2.41	0.56
26:1H:64:A:O3'	44:F8:71:GLY:HA3	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:248:G:H5'	26:1H:250:G:N7	2.20	0.56
26:1H:1206:G:C6	26:1H:1207:C:C4	2.94	0.56
32:51:116:GLU:HG3	32:51:117:PRO:HD2	1.87	0.56
1:1G:458:C:H2'	1:1G:464:G:C8	2.39	0.56
1:1G:1171:G:H2'	1:1G:1172:C:C6	2.41	0.56
1:1G:1320:C:H42	19:AA:36:ARG:HE	1.54	0.56
13:4A:91:ARG:HB2	13:4A:98:VAL:HG12	1.88	0.56
26:14:320:A:OP1	30:39:135:LYS:NZ	2.39	0.56
26:14:646:A:H2'	26:14:647:G:O4'	2.05	0.56
26:14:1348:G:H5"	26:14:1349:A:OP2	2.06	0.56
26:14:1814:G:H5"	28:19:54:ARG:NH1	2.20	0.56
26:14:1899:G:H21	26:14:1902:C:H42	1.54	0.56
28:19:273:ARG:O	28:19:275:LYS:N	2.39	0.56
30:39:27:GLU:O	30:39:29:ASN:N	2.38	0.56
30:39:67:GLN:HG3	30:39:67:GLN:O	2.04	0.56
48:F5:5:CYS:HG	48:F5:8:SER:HG	1.48	0.56
1:13:323:U:H5'	20:BI:23:ARG:HB2	1.88	0.56
5:4E:84:PHE:HB3	5:4E:134:ALA:HB2	1.88	0.56
22:1K:65:C:H5	22:1K:67:A:H62	1.54	0.56
26:1H:728:G:H4'	28:11:13:ARG:HD3	1.88	0.56
26:1H:784:A:C5	28:11:229:VAL:HG21	2.41	0.56
26:1H:1590:U:H2'	26:1H:1591:G:C8	2.41	0.56
26:1H:1613:G:C2	26:1H:1619:G:C5	2.94	0.56
26:1H:2400:G:H2'	26:1H:2401:U:C6	2.41	0.56
43:E8:78:GLU:OE1	43:E8:99:ARG:HG2	2.06	0.56
45:G8:68:HIS:HB3	45:G8:71:LYS:HG2	1.88	0.56
46:H8:108:PRO:HG2	46:H8:113:ALA:H	1.71	0.56
1:1G:280:C:H3'	1:1G:281:G:H5'	1.87	0.56
1:1G:673:G:H2'	1:1G:674:G:C8	2.41	0.56
1:1G:1353:G:N2	1:1G:1370:G:N3	2.54	0.56
4:32:112:VAL:HG12	4:32:116:GLN:OE1	2.06	0.56
26:14:986:C:HO2'	26:14:1001:A:HO2'	1.51	0.56
26:14:1482:U:H3	26:14:1512:G:H1	1.54	0.56
26:14:2414:G:OP1	48:F5:25:LYS:NZ	2.39	0.56
31:49:111:LEU:HD23	31:49:120:LEU:HD21	1.88	0.56
37:45:74:TYR:N	37:45:92:GLY:O	2.39	0.56
38:55:97:VAL:HG12	38:55:114:VAL:HG22	1.88	0.56
39:65:61:ASN:O	39:65:65:VAL:HB	2.06	0.56
2:1E:126:GLU:HA	2:1E:129:GLU:CD	2.31	0.55
2:1E:126:GLU:HA	2:1E:129:GLU:OE2	2.07	0.55
11:2I:85:ARG:HG2	11:2I:112:THR:H	1.69	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:389:G:N1	36:78:71:VAL:HG12	2.21	0.55
26:1H:495:G:H1'	43:E8:57:ASN:OD1	2.06	0.55
26:1H:857:C:H4'	47:I8:23:VAL:HG21	1.87	0.55
26:1H:1053:C:N4	26:1H:1106:G:H1	2.03	0.55
26:1H:1535:U:OP2	26:1H:1538:G:N2	2.40	0.55
1:1G:276:G:O3'	17:8A:68:ARG:NH1	2.39	0.55
1:1G:503:C:OP2	12:3A:116:SER:OG	2.23	0.55
1:1G:678:U:H2'	1:1G:679:C:C6	2.40	0.55
1:1G:731:G:OP1	1:1G:766:A:H1'	2.05	0.55
1:1G:1015:A:N3	1:1G:1218:C:O2'	2.35	0.55
5:42:98:THR:HB	5:42:117:ASP:HB3	1.87	0.55
10:1A:10:GLY:HA3	10:1A:16:LEU:HD21	1.88	0.55
12:3A:10:LEU:HB3	17:8A:32:TYR:CE2	2.41	0.55
15:6A:9:GLN:HA	15:6A:12:ILE:HD12	1.88	0.55
26:14:161:U:H5"	26:14:171:G:H21	1.70	0.55
26:14:783:A:H8	26:14:784:A:H4'	1.71	0.55
26:14:1496:A:H8	26:14:1577:C:O2'	1.88	0.55
26:14:1687:G:N1	26:14:1700:A:OP1	2.36	0.55
26:14:2057:A:H2'	26:14:2058:A:C8	2.41	0.55
26:14:2099:U:H3	26:14:2190:G:H1	1.53	0.55
29:29:51:PHE:CG	29:29:52:LEU:N	2.75	0.55
30:39:6:VAL:HG23	30:39:124:LEU:HA	1.89	0.55
45:C5:17:SER:CB	45:C5:71:LYS:HD2	2.36	0.55
1:13:502:G:H1	1:13:543:C:H42	1.53	0.55
1:13:591:U:H2'	1:13:592:G:C8	2.42	0.55
1:13:1228:C:H2'	1:13:1229:A:H8	1.70	0.55
7:6E:20:ASP:OD2	7:6E:23:VAL:N	2.39	0.55
13:4I:69:GLU:HG3	31:41:118:ARG:HH22	1.70	0.55
20:BI:40:ALA:HB2	20:BI:55:ILE:HG22	1.87	0.55
26:1H:1437:C:H2'	26:1H:1438:U:H6	1.70	0.55
33:61:4:ILE:HG21	33:61:47:LEU:HD13	1.88	0.55
44:F8:9:LEU:O	49:K8:36:ARG:NE	2.39	0.55
47:I8:24:LYS:O	47:I8:25:ARG:NH1	2.38	0.55
1:1G:138:G:N7	58:1G:1845:HOH:O	2.33	0.55
1:1G:994:A:C5	1:1G:1216:G:H4'	2.41	0.55
1:1G:1062:U:H2'	1:1G:1063:C:C6	2.42	0.55
1:1G:1067:A:O2'	1:1G:1093:A:O2'	2.16	0.55
1:1G:1208:C:H2'	1:1G:1209:C:C6	2.40	0.55
1:1G:1277:C:O2'	1:1G:1279:A:H8	1.89	0.55
3:22:33:LEU:O	3:22:36:ASP:HB2	2.06	0.55
26:14:1328:G:H2'	26:14:1330:C:C5	2.41	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2175:C:N4	26:14:2176:A:N7	2.54	0.55
26:14:2467:C:H4'	37:45:123:HIS:CG	2.41	0.55
27:1J:50:G:OP1	39:65:63:THR:OG1	2.16	0.55
28:19:70:TRP:CD1	28:19:70:TRP:C	2.83	0.55
28:19:148:GLU:OE1	28:19:151:LYS:NZ	2.35	0.55
29:29:9:VAL:HA	40:75:3:ARG:HD2	1.88	0.55
32:59:59:ARG:HA	32:59:62:LYS:HG2	1.87	0.55
39:65:27:SER:HA	39:65:88:ASP:HB2	1.88	0.55
39:65:106:ARG:HA	39:65:110:LEU:HD11	1.88	0.55
44:B5:29:TRP:CE3	44:B5:78:LYS:HB3	2.41	0.55
48:F5:62:VAL:HG21	48:F5:70:VAL:HG21	1.87	0.55
1:13:1190:G:H5"	3:2E:176:HIS:CE1	2.40	0.55
26:1H:245:G:O6	54:Q8:8:LYS:NZ	2.38	0.55
26:1H:363(B):G:H2'	26:1H:363(C):G:C8	2.41	0.55
26:1H:660:G:H21	36:78:12:ALA:HA	1.70	0.55
40:B8:54:ARG:HA	40:B8:59:THR:OG1	2.07	0.55
45:G8:5:MET:HE1	45:G8:32:PRO:HG3	1.87	0.55
50:L8:6:VAL:HG13	50:L8:56:VAL:HG13	1.88	0.55
7:62:27:ILE:HA	7:62:30:ILE:HD12	1.87	0.55
8:72:12:ARG:HE	8:72:26:VAL:HG12	1.71	0.55
11:2A:100:ALA:O	11:2A:102:GLY:N	2.39	0.55
26:14:686:G:H1	53:L5:16:HIS:CD2	2.25	0.55
26:14:880:G:H1'	26:14:898:C:H42	1.71	0.55
29:29:52:LEU:O	29:29:74:PRO:HB2	2.06	0.55
37:45:32:TYR:CD2	37:45:133:ARG:HG3	2.41	0.55
37:45:98:LYS:HB3	37:45:99:PRO:HD2	1.88	0.55
39:65:11:LYS:HE2	39:65:15:ARG:HH22	1.71	0.55
1:13:177:C:H2'	1:13:178:C:C6	2.41	0.55
1:13:179:A:H2'	1:13:180:U:C6	2.38	0.55
1:13:1118:C:H1'	1:13:1179:A:C4	2.41	0.55
26:1H:228:A:C8	26:1H:230:U:H1'	2.42	0.55
26:1H:389:G:H1	36:78:71:VAL:HG12	1.71	0.55
26:1H:666:G:H1'	54:Q8:4:MET:HE2	1.87	0.55
26:1H:831:G:N2	36:78:53:GLY:O	2.39	0.55
26:1H:1049:C:H1'	26:1H:1113:U:H4'	1.89	0.55
26:1H:1168:G:C2	26:1H:1182:A:C2	2.94	0.55
27:16:48:A:P	39:A8:30:ARG:HH22	2.29	0.55
30:31:28:ILE:HA	30:31:112:MET:HE3	1.87	0.55
43:E8:24:ILE:HG12	43:E8:36:LEU:HD21	1.87	0.55
1:1G:184:G:H2'	1:1G:185:A:C8	2.41	0.55
1:1G:548:G:OP1	58:1G:1821:HOH:O	2.18	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1493:A:H2'	26:14:1913:A:N1	2.20	0.55
4:32:31:CYS:C	4:32:33:MET:H	2.13	0.55
46:D5:57:ILE:HG22	46:D5:59:LEU:HB2	1.89	0.55
1:13:192:U:H2'	1:13:193:C:H6	1.72	0.55
1:13:1133:G:H2'	1:13:1134:G:C8	2.41	0.55
8:7E:20:TYR:HE2	8:7E:75:ARG:HD2	1.70	0.55
14:5I:15:LYS:HG2	14:5I:16:PHE:CE2	2.41	0.55
26:1H:185:U:H4'	26:1H:218:A:H4'	1.89	0.55
26:1H:270(W):G:O6	58:1H:3652:HOH:O	2.17	0.55
26:1H:1187:G:OP2	58:1H:3660:HOH:O	2.18	0.55
26:1H:2431:U:OP2	58:1H:3661:HOH:O	2.18	0.55
48:J8:77:ALA:N	48:J8:78:LYS:HB2	2.21	0.55
1:1G:404:U:OP1	4:32:118:ARG:NH1	2.40	0.55
1:1G:1177:G:O2'	1:1G:1178:G:O4'	2.24	0.55
1:1G:1391:U:H2'	1:1G:1392:G:C8	2.42	0.55
2:12:71:VAL:HG21	2:12:164:VAL:HA	1.87	0.55
3:22:112:SER:HB3	3:22:115:LEU:HB2	1.87	0.55
4:32:33:MET:C	4:32:35:ARG:HH12	2.15	0.55
26:14:1019:U:H2'	26:14:1020:A:C8	2.38	0.55
26:14:1820:U:H4'	26:14:1821:A:OP2	2.06	0.55
26:14:2065:C:H2'	26:14:2066:C:C6	2.41	0.55
26:14:2280:G:O2'	26:14:2388:A:N1	2.31	0.55
33:69:81:VAL:H	33:69:143:SER:CB	2.19	0.55
1:13:37:U:O2'	1:13:500:G:H4'	2.07	0.55
1:13:397:A:O2'	1:13:399:G:OP2	2.20	0.55
2:1E:87:ARG:NH2	2:1E:232:PRO:HB3	2.22	0.55
4:3E:148:VAL:HG12	4:3E:153:ARG:HG2	1.89	0.55
6:5E:3:ARG:NH1	6:5E:38:GLU:OE2	2.39	0.55
10:1I:78:ASN:O	10:1I:81:THR:OG1	2.15	0.55
17:8I:45:HIS:NE2	17:8I:47:PRO:HG3	2.21	0.55
22:1K:29:C:H2'	22:1K:30:C:O4'	2.07	0.55
26:1H:450:G:P	58:1H:3680:HOH:O	2.65	0.55
26:1H:1332:G:N2	26:1H:1610:A:H8	2.04	0.55
26:1H:1652:A:OP1	38:98:8:ARG:NH1	2.37	0.55
26:1H:1778:U:H2'	26:1H:1784:A:H62	1.71	0.55
38:98:52:ILE:O	38:98:55:ALA:N	2.39	0.55
44:F8:11:PRO:HB3	44:F8:92:LEU:HD21	1.89	0.55
46:H8:158:PRO:O	46:H8:161:VAL:HG22	2.07	0.55
1:1G:1387:G:H2'	1:1G:1388:C:H6	1.71	0.55
8:72:116:LYS:HD2	8:72:129:VAL:HG11	1.88	0.55
9:82:81:ILE:HG22	9:82:85:LEU:HD23	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:35:GLU:C	13:4A:38:GLY:H	2.15	0.55
20:BA:41:ILE:HD13	20:BA:87:LYS:HD2	1.89	0.55
24:3L:47:U:O3'	24:3L:48:C:H4'	2.06	0.55
26:14:2150:U:H2'	26:14:2151:G:C8	2.42	0.55
39:65:34:HIS:CE1	39:65:54:LEU:HD12	2.42	0.55
41:85:66:ASN:OD1	41:85:76:TYR:N	2.38	0.55
44:B5:29:TRP:CZ3	44:B5:78:LYS:HB3	2.42	0.55
1:13:1147:C:O2'	9:8E:16:ARG:HD3	2.07	0.55
10:1I:28:ARG:HG3	10:1I:34:VAL:HG22	1.88	0.55
11:2I:17:GLY:N	11:2I:77:MET:SD	2.77	0.55
13:4I:10:PRO:HB2	13:4I:18:ALA:HB1	1.88	0.55
29:21:46:ALA:HB2	29:21:82:ARG:HA	1.88	0.55
31:41:37:VAL:O	31:41:94:LEU:HD23	2.06	0.55
34:58:110:GLY:O	34:58:114:ARG:HG3	2.05	0.55
37:88:17:LEU:HD21	37:88:41:TRP:NE1	2.22	0.55
42:D8:27:ALA:HB3	42:D8:61:VAL:HG21	1.87	0.55
1:1G:838:G:N2	1:1G:848:C:N3	2.55	0.55
1:1G:855:G:H2'	1:1G:856:C:C6	2.42	0.55
2:12:54:THR:HA	2:12:57:PHE:CD2	2.40	0.55
8:72:113:SER:HB2	8:72:134:ILE:HD11	1.88	0.55
26:14:30:G:H2'	26:14:31:C:C6	2.42	0.55
26:14:1028:A:N6	26:14:1125:G:H2'	2.22	0.55
26:14:1300:U:H5'	58:14:3413:HOH:O	2.05	0.55
26:14:2016:U:O2	52:J5:7:PRO:HG2	2.06	0.55
28:19:85:ASP:HB2	28:19:92:ILE:HD13	1.88	0.55
48:F5:80:LEU:HD12	48:F5:82:LEU:HB2	1.89	0.55
48:F5:92:LYS:O	48:F5:93:GLU:C	2.50	0.55
1:13:69:G:H1	1:13:99:C:H42	1.54	0.55
1:13:393:A:OP2	16:7I:12:LYS:NZ	2.28	0.55
3:2E:131:ARG:HD3	3:2E:131:ARG:H	1.71	0.55
26:1H:370:G:H8	58:1H:3541:HOH:O	1.90	0.55
26:1H:1257:C:H4'	30:31:83:PHE:CD1	2.42	0.55
26:1H:2502:G:OP2	58:1H:3654:HOH:O	2.17	0.55
31:41:111:LEU:HB3	31:41:117:PHE:CE2	2.40	0.55
40:B8:3:ARG:HA	40:B8:6:LEU:HB2	1.88	0.55
1:1G:62:U:O2'	1:1G:379:C:O2	2.23	0.55
1:1G:542:G:OP1	4:32:10:ARG:NH2	2.37	0.55
1:1G:1147:C:O2'	9:82:5:TYR:OH	2.23	0.55
1:1G:1470:G:O6	58:1G:1820:HOH:O	2.18	0.55
5:42:151:LEU:O	5:42:152:ARG:NH1	2.40	0.55
8:72:63:LEU:HB3	8:72:65:TYR:CE1	2.41	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2294:C:P	39:65:89:ARG:HH22	2.30	0.55
27:1J:11:C:H3'	27:1J:12:C:H6	1.71	0.55
1:13:163:C:O2'	1:13:164:U:O4'	2.25	0.55
1:13:269:C:H2'	1:13:270:A:H8	1.72	0.55
1:13:692:U:O4	11:2I:53:SER:OG	2.13	0.55
1:13:963:G:N2	1:13:972:C:N3	2.38	0.55
4:3E:81:GLU:O	4:3E:84:LYS:HB2	2.07	0.55
27:16:9:G:H8	27:16:9:G:H5"	1.72	0.55
29:21:60:ASN:HB2	29:21:62:PRO:HD2	1.89	0.55
1:1G:45:U:H2'	1:1G:46:G:C8	2.42	0.55
1:1G:164:U:H2'	1:1G:165:C:C6	2.41	0.55
1:1G:192:U:H2'	1:1G:193:C:C6	2.41	0.55
1:1G:298:A:H5"	1:1G:299:G:OP2	2.06	0.55
1:1G:546:G:OP1	4:32:73:ARG:NH1	2.39	0.55
1:1G:709:G:H2'	1:1G:710:G:H8	1.71	0.55
3:22:69:HIS:CE1	3:22:106:VAL:HG22	2.42	0.55
19:AA:19:VAL:HG12	19:AA:20:LEU:HD22	1.88	0.55
23:2L:20:G:N2	31:49:78:SER:OG	2.40	0.55
26:14:583:G:OP2	41:85:10:ARG:HD2	2.07	0.55
26:14:605:C:O2	26:14:657:U:O2'	2.25	0.55
26:14:1520:U:H2'	26:14:1521:G:O4'	2.07	0.55
26:14:2875:C:OP1	40:75:3:ARG:NH2	2.40	0.55
30:39:9:ILE:HA	30:39:11:VAL:O	2.06	0.55
32:59:127:GLU:HG3	32:59:129:THR:H	1.71	0.55
39:65:18:ILE:O	39:65:21:THR:HG22	2.06	0.55
1:13:640:A:O2'	8:7E:115:SER:O	2.24	0.55
1:13:1007:C:N4	1:13:1022:G:H1	2.05	0.55
7:6E:56:GLN:HG3	7:6E:60:LYS:HE2	1.87	0.55
18:9I:47:THR:HA	18:9I:83:GLU:HB2	1.87	0.55
23:2K:67:C:H2'	23:2K:68:C:C6	2.42	0.55
26:1H:459:U:H4'	53:P8:40:TRP:CZ3	2.42	0.55
26:1H:1221:C:H2'	26:1H:1222:C:H6	1.71	0.55
26:1H:1538:G:H2'	26:1H:1539:G:H8	1.71	0.55
26:1H:2577:A:H5"	26:1H:2578:G:H5'	1.87	0.55
1:1G:21:G:OP1	58:1G:1819:HOH:O	2.18	0.55
1:1G:1250:A:H4'	9:82:68:GLY:H	1.72	0.55
1:1G:1285:A:H8	1:1G:1285:A:OP1	1.90	0.55
4:32:96:LEU:HB3	4:32:139:ARG:NH1	2.21	0.55
13:4A:51:ALA:O	13:4A:55:ARG:N	2.32	0.55
13:4A:86:CYS:SG	13:4A:88:ARG:HG3	2.46	0.55
15:6A:10:LYS:HA	15:6A:13:GLN:HB2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BA:11:SER:HA	20:BA:13:LEU:HD23	1.88	0.55
26:14:67:U:H2'	26:14:68:G:H8	1.72	0.55
26:14:755:C:H2'	26:14:756:C:C6	2.42	0.55
26:14:973:A:H5'	26:14:1188:U:H1'	1.88	0.55
26:14:1204:A:C2	26:14:1206:G:C2	2.95	0.55
30:39:30:PRO:O	30:39:33:LEU:N	2.39	0.55
31:49:16:ARG:NH1	31:49:28:VAL:HG22	2.22	0.55
32:59:33:LEU:HD23	32:59:34:GLU:H	1.72	0.55
1:13:468:A:H5"	16:7I:80:PHE:CB	2.34	0.54
1:13:690:G:H2'	1:13:691:G:O4'	2.07	0.54
1:13:1356:G:H2'	1:13:1357:A:C8	2.42	0.54
2:1E:11:LEU:HB3	2:1E:213:LEU:HD13	1.87	0.54
24:3K:56:C:H1'	26:1H:2169:A:N6	2.21	0.54
26:1H:116:C:H2'	26:1H:117:G:C8	2.42	0.54
26:1H:860:U:H5	26:1H:917:A:H2	1.54	0.54
26:1H:909:A:H2'	26:1H:912:C:H5	1.72	0.54
26:1H:1439:A:C2	26:1H:1553:A:C4	2.95	0.54
33:61:38:LEU:H	33:61:38:LEU:HD12	1.72	0.54
41:C8:90:VAL:O	41:C8:92:ARG:N	2.40	0.54
46:H8:139:VAL:HG22	46:H8:155:LEU:HD22	1.88	0.54
47:I8:68:GLU:HG3	47:I8:80:HIS:CD2	2.43	0.54
49:K8:53:LEU:O	49:K8:57:ILE:HG13	2.07	0.54
1:1G:135:C:O2	16:7A:1:MET:HB3	2.06	0.54
2:12:168:THR:HA	2:12:171:ALA:HB2	1.88	0.54
6:52:22:GLU:OE1	6:52:84:ASN:ND2	2.40	0.54
8:72:63:LEU:HB3	8:72:65:TYR:HE1	1.70	0.54
8:72:85:ARG:HH12	8:72:134:ILE:HG23	1.72	0.54
19:AA:56:GLN:CD	19:AA:57:HIS:H	2.15	0.54
23:2L:3:C:H42	23:2L:71:G:H1	1.55	0.54
26:14:852:G:H2'	26:14:853:G:H8	1.70	0.54
26:14:1926:U:H2'	26:14:1928:A:OP2	2.06	0.54
26:14:2378:A:O2'	39:65:21:THR:HG21	2.07	0.54
31:49:73:ALA:HB2	31:49:82:LEU:HD22	1.89	0.54
31:49:115:ARG:HB2	31:49:136:ARG:NH2	2.21	0.54
32:59:150:ALA:O	32:59:154:PRO:HG3	2.07	0.54
34:15:23:LEU:HD13	34:15:60:ILE:HG21	1.89	0.54
36:35:126:VAL:HG12	36:35:147:LEU:HD22	1.89	0.54
47:E5:38:VAL:HG13	47:E5:59:LEU:HB2	1.89	0.54
54:M5:49:VAL:HA	54:M5:50:LEU:HB3	1.89	0.54
1:13:1028(B):C:N3	1:13:1029:G:O2'	2.38	0.54
2:1E:74:LYS:HG3	2:1E:208:ILE:HG21	1.89	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:91:PRO:HG3	2:1E:155:LEU:HB2	1.88	0.54
9:8E:27:THR:N	9:8E:61:ALA:O	2.40	0.54
12:3I:86:ARG:HG3	12:3I:101:VAL:HG22	1.89	0.54
22:1K:76:A:OP2	26:1H:2602:A:N6	2.41	0.54
26:1H:1100:C:H2'	26:1H:1101:U:C6	2.42	0.54
26:1H:1332:G:H5'	26:1H:1332:G:C8	2.42	0.54
26:1H:1670:C:OP1	58:1H:3658:HOH:O	2.18	0.54
26:1H:2061:G:P	58:1H:3578:HOH:O	2.65	0.54
28:11:118:VAL:HG11	28:11:123:ALA:HA	1.89	0.54
37:88:39:PRO:HA	37:88:97:VAL:O	2.07	0.54
47:I8:72:ARG:NH1	47:I8:75:LEU:HD12	2.21	0.54
1:1G:57:G:H2'	1:1G:58:C:C6	2.41	0.54
1:1G:791:G:C6	1:1G:792:A:N7	2.75	0.54
1:1G:963:G:H21	10:1A:55:LYS:HE2	1.72	0.54
1:1G:1492:A:H5"	12:3A:47:LYS:HB3	1.88	0.54
14:5A:21:TYR:HE1	14:5A:23:ARG:HE	1.56	0.54
15:6A:56:LEU:O	15:6A:60:VAL:HG23	2.08	0.54
26:14:474:G:O6	58:14:3472:HOH:O	2.18	0.54
26:14:690:G:O2'	28:19:43:ARG:NH2	2.40	0.54
26:14:1971:A:C4	28:19:241:PRO:HD3	2.42	0.54
50:H5:7:LYS:HE2	50:H5:32:GLN:HG3	1.88	0.54
54:M5:52:LYS:O	54:M5:56:GLU:N	2.35	0.54
1:13:1:U:C6	1:13:630:G:H2'	2.43	0.54
1:13:474:G:H5"	16:7I:81:ARG:CZ	2.36	0.54
1:13:953:G:N7	13:4I:104:ARG:NH2	2.55	0.54
2:1E:21:ARG:HB2	2:1E:39:ILE:HG12	1.89	0.54
24:3K:42:U:H2'	24:3K:43:G:C8	2.42	0.54
26:1H:779:U:OP1	28:11:49:ILE:HG13	2.07	0.54
26:1H:1235:G:O6	58:1H:3639:HOH:O	2.16	0.54
26:1H:2151:G:H2'	26:1H:2152:G:H8	1.72	0.54
26:1H:2246:G:H2'	26:1H:2247:A:C8	2.42	0.54
26:1H:2315:G:H5"	26:1H:2316:C:OP2	2.06	0.54
26:1H:2891:G:O5'	26:1H:2891:G:H8	1.90	0.54
30:31:185:ASP:OD1	30:31:188:ARG:NH1	2.36	0.54
46:H8:9:TYR:HE2	46:H8:35:ARG:HD3	1.72	0.54
52:N8:16:ARG:HG3	52:N8:17:ASP:N	2.21	0.54
1:1G:92:G:H2'	1:1G:93:U:C6	2.42	0.54
1:1G:241:C:H42	1:1G:285:G:H1	1.56	0.54
1:1G:1148:U:H2'	1:1G:1149:C:O4'	2.06	0.54
1:1G:1512:U:H2'	1:1G:1513:A:C8	2.43	0.54
7:62:105:VAL:O	7:62:109:ASN:ND2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:41:VAL:HG23	19:AA:43:GLU:H	1.72	0.54
26:14:6:A:H62	34:15:131:GLN:HB3	1.72	0.54
26:14:123:G:O6	58:14:3470:HOH:O	2.17	0.54
26:14:2777:G:OP2	26:14:2781:A:O2'	2.19	0.54
35:25:8:LEU:HD13	35:25:82:ASN:HB3	1.90	0.54
1:13:626:U:C2	1:13:627:G:C8	2.96	0.54
1:13:1117:G:H5"	9:8E:104:ARG:NH1	2.22	0.54
7:6E:122:HIS:HA	7:6E:125:MET:HE2	1.90	0.54
12:3I:47:LYS:HG3	12:3I:47:LYS:O	2.06	0.54
19:AI:51:VAL:O	19:AI:57:HIS:HA	2.08	0.54
22:1K:37:AET:O2'	26:1H:1913:A:N1	2.40	0.54
26:1H:1932:A:H2'	26:1H:1933:G:O4'	2.07	0.54
26:1H:2387:U:OP1	47:I8:55:ARG:NH1	2.33	0.54
26:1H:2402:C:H1'	26:1H:2403:C:C5	2.42	0.54
26:1H:2428:G:N2	36:78:61:ARG:HH12	2.06	0.54
35:68:68:GLU:CD	35:68:68:GLU:H	2.14	0.54
1:1G:419:C:H42	1:1G:424:G:H1	1.55	0.54
1:1G:1245:A:H8	1:1G:1245:A:O5'	1.90	0.54
1:1G:1251:A:H2'	1:1G:1252:A:C8	2.42	0.54
1:1G:1252:A:H2'	1:1G:1253:G:O4'	2.07	0.54
8:72:97:VAL:HG22	8:72:129:VAL:O	2.07	0.54
19:AA:3:ARG:HH21	19:AA:10:PHE:C	2.15	0.54
26:14:189:G:H1	26:14:205:G:HO2'	1.55	0.54
29:29:68:ALA:HB1	29:29:70:ALA:O	2.07	0.54
32:59:139:GLN:O	32:59:143:GLN:HB2	2.07	0.54
35:25:68:GLU:H	35:25:68:GLU:CD	2.16	0.54
37:45:57:HIS:ND1	37:45:117:ALA:HB2	2.22	0.54
37:45:132:VAL:HG21	46:D5:81:ARG:HG2	1.88	0.54
45:C5:17:SER:HB3	45:C5:71:LYS:HB3	1.90	0.54
1:13:188:U:H2'	1:13:189:U:H5"	1.89	0.54
1:13:1114:C:H42	1:13:1186:G:H1	1.56	0.54
1:13:1296:C:OP1	13:4I:44:ARG:NH2	2.40	0.54
22:1K:18:G:O2'	22:1K:57:G:H2'	2.06	0.54
26:1H:330:A:O2'	26:1H:331:A:C8	2.61	0.54
26:1H:459:U:H2'	26:1H:460:A:H8	1.72	0.54
26:1H:1204:A:H61	26:1H:1240:U:H2'	1.72	0.54
26:1H:1263:U:O2'	52:N8:11:THR:HG23	2.08	0.54
26:1H:2553:G:H5"	26:1H:2554:U:OP2	2.06	0.54
28:11:80:ALA:HB2	28:11:96:HIS:CD2	2.42	0.54
29:21:101:ARG:CZ	29:21:171:GLU:HB2	2.38	0.54
31:41:174:GLU:O	31:41:177:GLY:N	2.30	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:98:42:LYS:O	38:98:45:ARG:HD2	2.07	0.54
40:B8:51:ARG:HG3	40:B8:98:LYS:HD3	1.89	0.54
44:F8:36:LYS:HG2	44:F8:54:VAL:HB	1.89	0.54
1:1G:359:U:H2'	1:1G:360:A:C8	2.42	0.54
1:1G:735:C:H2'	1:1G:736:C:H6	1.73	0.54
1:1G:1291:G:O3'	9:82:39:GLY:HA3	2.08	0.54
1:1G:1346:A:H5"	9:82:120:ARG:HH12	1.72	0.54
2:12:165:VAL:HG23	2:12:166:ASP:H	1.73	0.54
4:32:176:LEU:HG	4:32:178:VAL:HG22	1.88	0.54
8:72:39:LEU:HB3	8:72:45:ILE:HG12	1.88	0.54
22:1L:2:C:O2	22:1L:71:G:N2	2.41	0.54
26:14:1011:G:HO2'	26:14:1012:U:P	2.28	0.54
28:19:133:LEU:HD13	28:19:175:LEU:HD21	1.90	0.54
29:29:47:VAL:HG21	29:29:85:ASN:HA	1.90	0.54
29:29:56:PRO:O	29:29:58:ARG:HG3	2.08	0.54
32:59:8:PRO:HB2	32:59:69:ARG:CZ	2.38	0.54
37:45:4:PRO:HD3	37:45:70:PRO:O	2.08	0.54
2:1E:154:LEU:H	2:1E:154:LEU:HD12	1.73	0.54
10:1I:8:LEU:HB2	10:1I:70:ARG:HB3	1.90	0.54
13:4I:93:ARG:O	13:4I:94:ARG:HD3	2.08	0.54
20:BI:97:ALA:O	20:BI:99:LEU:HD12	2.07	0.54
26:1H:1766:U:H2'	26:1H:1767:C:H6	1.72	0.54
26:1H:2029:G:H2'	26:1H:2031:A:OP1	2.07	0.54
26:1H:2109:U:N3	26:1H:2110:G:O6	2.40	0.54
29:21:18:ASP:HB3	40:B8:82:LEU:HD21	1.88	0.54
34:58:57:ALA:C	34:58:59:LYS:H	2.16	0.54
46:H8:17:ALA:HA	46:H8:20:ARG:HD2	1.90	0.54
1:1G:520:A:OP1	12:3A:52:LEU:HB2	2.08	0.54
1:1G:689:C:OP1	11:2A:44:SER:OG	2.15	0.54
2:12:91:PRO:HA	2:12:154:LEU:HD12	1.88	0.54
18:9A:82:THR:OG1	18:9A:83:GLU:O	2.24	0.54
26:14:1488:G:C2	26:14:1489:U:O2	2.60	0.54
26:14:2876:G:H4'	40:75:2:ASN:ND2	2.23	0.54
27:1J:94:C:H2'	27:1J:95:U:C6	2.43	0.54
30:39:172:TRP:CD1	30:39:172:TRP:H	2.25	0.54
1:13:1081:G:H2'	1:13:1082:G:H8	1.73	0.54
3:2E:63:ASN:OD1	3:2E:98:ASN:ND2	2.38	0.54
26:1H:795:C:H2'	26:1H:796:C:C6	2.43	0.54
26:1H:860:U:C5	26:1H:917:A:C2	2.91	0.54
26:1H:992:C:H2'	26:1H:993:G:H8	1.72	0.54
26:1H:2102:U:O2	26:1H:2187:G:N2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2402:C:O2'	26:1H:2403:C:OP2	2.21	0.54
30:31:182:ASN:O	30:31:186:ILE:HG13	2.08	0.54
34:58:95:PRO:C	34:58:96:GLU:O	2.51	0.54
1:1G:1206:G:O2'	3:22:193:TYR:HA	2.08	0.54
1:1G:1349:A:H2'	1:1G:1350:A:O4'	2.08	0.54
2:12:182:ILE:H	2:12:182:ILE:HD12	1.72	0.54
26:14:27:G:N2	26:14:512:G:H1'	2.23	0.54
26:14:2850:A:C2	26:14:2851:A:C4	2.96	0.54
28:19:206:LEU:HD22	28:19:211:ARG:HG2	1.89	0.54
36:35:126:VAL:HA	36:35:145:PRO:HD2	1.89	0.54
46:D5:174:VAL:HG22	46:D5:177:PRO:HG3	1.90	0.54
13:4I:78:ILE:O	13:4I:81:LEU:N	2.40	0.54
17:8I:76:LEU:HD12	17:8I:77:VAL:H	1.72	0.54
20:BI:30:LYS:HA	20:BI:33:ILE:HD12	1.90	0.54
24:3K:51:C:H2'	24:3K:52:A:C8	2.43	0.54
26:1H:214:G:H4'	26:1H:214:G:OP1	2.06	0.54
26:1H:382:G:H1	26:1H:392:C:H42	1.55	0.54
26:1H:1325:G:OP1	58:1H:3657:HOH:O	2.18	0.54
26:1H:1748:G:H2'	26:1H:1749:A:C8	2.43	0.54
26:1H:2399:G:H1	26:1H:2417:C:H42	1.55	0.54
26:1H:2711:A:OP1	58:1H:3655:HOH:O	2.17	0.54
26:1H:2726:U:O2'	26:1H:2727:G:H8	1.91	0.54
33:61:1:MET:O	33:61:20:ASP:HA	2.07	0.54
35:68:97:ARG:H	35:68:117:LEU:HD22	1.72	0.54
1:1G:1126:U:H1'	1:1G:1127:G:OP1	2.08	0.54
3:22:72:LYS:HG3	3:22:75:VAL:HG23	1.89	0.54
5:42:11:ILE:HG22	5:42:12:LEU:HB2	1.89	0.54
11:2A:125:PHE:C	11:2A:126:ARG:HG3	2.33	0.54
13:4A:25:ILE:O	13:4A:29:ARG:HB2	2.07	0.54
26:14:71:A:H5'	26:14:71:A:C8	2.42	0.54
26:14:577:G:O2'	26:14:1254:A:OP1	2.24	0.54
26:14:1599:C:H2'	26:14:1600:C:H6	1.73	0.54
26:14:1771:C:O2'	26:14:1786:A:H8	1.91	0.54
33:69:128:LEU:O	33:69:138:ILE:HG22	2.08	0.54
1:13:244:U:H4'	1:13:245:C:O5'	2.07	0.54
1:13:587:G:N2	1:13:755:G:C5	2.76	0.54
1:13:589:C:H42	1:13:650:G:H1	1.56	0.54
1:13:1005:A:H1'	1:13:1036:G:N2	2.23	0.54
26:1H:16:G:H2'	26:1H:17:G:H8	1.72	0.54
26:1H:860:U:H1'	26:1H:2268:A:H5'	1.89	0.54
26:1H:2531:A:O2'	26:1H:2658:C:O2'	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:B8:16:ARG:HB3	40:B8:18:ASP:OD1	2.08	0.54
47:I8:51:VAL:N	47:I8:62:LEU:HD12	2.23	0.54
1:1G:754:C:H6	15:6A:69:TYR:CE2	2.26	0.54
1:1G:763:G:N3	1:1G:763:G:H2'	2.23	0.54
1:1G:878:G:H5'	8:72:89:PRO:HG2	1.89	0.54
3:22:47:LEU:HD13	3:22:50:ALA:HB3	1.90	0.54
7:62:71:PRO:HD2	7:62:96:GLN:HA	1.90	0.54
7:62:141:VAL:HA	7:62:142:GLU:HB2	1.88	0.54
23:2L:41:C:H2'	23:2L:42:C:C6	2.40	0.54
23:2L:71:G:H8	23:2L:71:G:O5'	1.90	0.54
26:14:491:G:H2'	26:14:492:A:C8	2.43	0.54
26:14:724:U:H2'	26:14:725:G:O4'	2.08	0.54
26:14:924:C:H2'	26:14:925:C:C6	2.43	0.54
26:14:1330:C:OP1	58:14:3473:HOH:O	2.18	0.54
26:14:1486:A:H2'	26:14:1487:G:C8	2.42	0.54
26:14:2807:G:H2'	26:14:2808:U:O4'	2.07	0.54
37:45:66:ILE:HG22	37:45:104:PHE:HE1	1.72	0.54
44:B5:36:LYS:HG2	44:B5:54:VAL:HB	1.90	0.54
1:13:345:C:O2'	1:13:346:G:N3	2.39	0.54
1:13:949:A:OP1	13:4I:101:GLN:HB3	2.08	0.54
1:13:1148:U:H2'	1:13:1149:C:O4'	2.08	0.54
3:2E:79:ARG:NH1	11:2A:99:GLN:OE1	2.41	0.54
13:4I:26:GLY:O	13:4I:28:ALA:N	2.39	0.54
26:1H:2154:G:H8	26:1H:2154:G:O5'	1.91	0.54
26:1H:2331:G:H4'	47:I8:43:THR:H	1.72	0.54
45:G8:20:TYR:HD2	45:G8:43:ASN:HD22	1.55	0.54
15:6A:15:PHE:HZ	15:6A:84:LYS:HG3	1.73	0.54
22:1L:62:U:H2'	22:1L:63:G:C8	2.43	0.54
24:3L:50:G:H1	24:3L:64:C:H42	1.56	0.54
26:14:57:C:H2'	26:14:58:G:O4'	2.07	0.54
26:14:1154:G:OP2	41:85:58:ARG:NH1	2.41	0.54
26:14:1784:A:H5"	58:14:3557:HOH:O	2.07	0.54
27:1J:80:U:H2'	27:1J:81:G:H21	1.72	0.54
6:5E:100:ASN:HB2	18:9I:28:GLU:HA	1.90	0.53
9:8E:9:ARG:HB3	9:8E:14:VAL:HG13	1.88	0.53
9:8E:28:VAL:HA	9:8E:63:ILE:O	2.08	0.53
26:1H:49:A:C8	26:1H:120:U:H5	2.26	0.53
26:1H:109:G:N7	58:1H:3764:HOH:O	2.33	0.53
26:1H:270(K):C:C1'	26:1H:270(N):G:H22	2.21	0.53
26:1H:1899:G:N2	26:1H:1902:C:H5	2.05	0.53
26:1H:2050:C:H1'	29:21:156:MET:HE2	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2103:C:H2'	26:1H:2104:G:C8	2.43	0.53
26:1H:2321:G:H5"	26:1H:2322:A:OP2	2.08	0.53
26:1H:2849:U:H4'	26:1H:2868:A:C2	2.43	0.53
1:1G:298:A:O5'	1:1G:298:A:H8	1.91	0.53
1:1G:929:G:H1	1:1G:1388:C:N4	2.05	0.53
5:42:75:THR:HA	5:42:115:VAL:HG13	1.89	0.53
10:1A:58:ASP:N	10:1A:58:ASP:OD1	2.39	0.53
13:4A:23:TYR:HB3	13:4A:67:GLU:HA	1.90	0.53
26:14:1011:G:C2	26:14:1151:G:C2	2.96	0.53
26:14:1149:G:C2	26:14:1150:C:N3	2.76	0.53
26:14:2816:C:O3'	38:55:99:LYS:NZ	2.41	0.53
27:1J:72:G:O2'	27:1J:104:A:N6	2.41	0.53
37:45:17:LEU:HD21	37:45:41:TRP:NE1	2.22	0.53
43:A5:26:GLY:HA2	43:A5:71:VAL:O	2.08	0.53
1:13:452:A:O2'	16:7I:72:ARG:HG3	2.09	0.53
1:13:605:U:H2'	1:13:606:G:O4'	2.08	0.53
1:13:989:C:H42	1:13:1216:G:H1	1.56	0.53
13:4I:39:ILE:HD11	13:4I:52:GLU:HB2	1.89	0.53
26:1H:780:G:H21	26:1H:783:A:N6	2.05	0.53
26:1H:816:C:OP2	58:1H:3659:HOH:O	2.18	0.53
26:1H:1534:G:H2'	26:1H:1535:U:C6	2.43	0.53
26:1H:2843:G:H1	26:1H:2874:C:H42	1.54	0.53
1:1G:80:G:C6	1:1G:81:G:C6	2.96	0.53
1:1G:80:G:H2'	1:1G:81:G:C8	2.43	0.53
1:1G:141:A:H1'	1:1G:182:U:O2	2.07	0.53
3:22:69:HIS:CE1	3:22:104:GLN:HB3	2.43	0.53
10:1A:3:LYS:HD2	10:1A:77:PRO:HG3	1.91	0.53
13:4A:16:ASP:OD1	13:4A:16:ASP:N	2.42	0.53
26:14:1581:G:H2'	26:14:1582:C:O4'	2.07	0.53
26:14:1599:C:C5	26:14:1600:C:H5	2.26	0.53
37:45:17:LEU:HD21	37:45:41:TRP:HE1	1.73	0.53
52:J5:36:CYS:SG	52:J5:37:LYS:N	2.82	0.53
1:13:618:C:H5"	1:13:619:U:H5"	1.90	0.53
1:13:859:A:H2'	1:13:860:A:C8	2.43	0.53
1:13:1124:G:H5"	10:1I:35:SER:OG	2.07	0.53
2:1E:18:GLY:H	2:1E:42:ILE:CB	2.19	0.53
26:1H:319:C:C2	26:1H:333:G:N2	2.77	0.53
26:1H:693:C:H2'	26:1H:694:U:O4'	2.08	0.53
26:1H:848:G:H2'	26:1H:849:A:C8	2.43	0.53
26:1H:1291:C:H2'	26:1H:1292:U:C6	2.43	0.53
26:1H:2205:C:H2'	26:1H:2206:C:H6	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2533:A:OP2	58:1H:3663:HOH:O	2.18	0.53
48:J8:53:VAL:HB	48:J8:58:ILE:HD11	1.89	0.53
50:L8:7:LYS:HD2	50:L8:34:GLU:CD	2.33	0.53
1:1G:127:G:H1	1:1G:234:C:H42	1.57	0.53
1:1G:346:G:N2	1:1G:347:G:C8	2.77	0.53
1:1G:362:G:H4'	12:3A:33:ARG:HH21	1.72	0.53
18:9A:73:ALA:HB3	18:9A:79:LEU:HD12	1.90	0.53
23:2L:47:G:H4'	23:2L:48:U:OP1	2.09	0.53
26:14:2331:G:H5'	47:E5:44:ARG:HG3	1.89	0.53
26:14:2807:G:H22	26:14:2892:A:N6	2.07	0.53
32:59:88:LEU:HD22	32:59:163:TYR:HB2	1.90	0.53
33:69:91:SER:HB3	33:69:119:PRO:HB3	1.90	0.53
34:15:91:LEU:O	34:15:95:PRO:HB3	2.08	0.53
37:45:111:GLU:HG3	37:45:115:MET:HE3	1.90	0.53
38:55:57:ARG:HB3	38:55:59:ASP:OD1	2.09	0.53
41:85:90:VAL:HG22	42:95:38:LEU:HD11	1.90	0.53
53:L5:5:TRP:CD1	53:L5:7:PRO:HG3	2.43	0.53
1:13:691:G:H2'	1:13:692:U:C6	2.44	0.53
15:6I:11:VAL:HG21	15:6I:34:LEU:HD13	1.90	0.53
26:1H:188:G:H1	26:1H:208:C:N4	2.02	0.53
26:1H:249:C:OP1	58:1H:3669:HOH:O	2.19	0.53
26:1H:534:U:H5'	41:C8:42:ALA:HB1	1.91	0.53
26:1H:674:G:H1'	30:31:74:ARG:HD3	1.89	0.53
26:1H:1525:G:H2'	26:1H:1526:G:H8	1.71	0.53
26:1H:2766:G:H2'	26:1H:2766:G:N3	2.24	0.53
28:11:38:LYS:HG2	28:11:40:THR:HG23	1.90	0.53
33:61:69:LYS:HG3	33:61:136:VAL:HB	1.91	0.53
2:12:173:ALA:HA	2:12:176:GLU:HB2	1.90	0.53
14:5A:21:TYR:HE1	14:5A:23:ARG:HB2	1.70	0.53
20:BA:14:LYS:HE2	20:BA:18:GLN:NE2	2.23	0.53
26:14:910:A:N6	37:45:12:GLN:HA	2.13	0.53
26:14:993:G:OP1	41:85:50:ARG:NH2	2.41	0.53
26:14:1420:U:O2'	26:14:1421:G:OP1	2.26	0.53
26:14:1636:C:O5'	58:14:3474:HOH:O	2.19	0.53
26:14:2356:C:O3'	47:E5:20:ARG:HD2	2.08	0.53
26:14:2579:C:H4'	29:29:134:ILE:HG12	1.91	0.53
39:65:30:ARG:HD2	39:65:97:ARG:HD3	1.89	0.53
1:13:190:G:H3'	1:13:191(A):G:C5'	2.38	0.53
1:13:1510:U:H2'	1:13:1511:G:C8	2.44	0.53
7:6E:68:ASN:ND2	7:6E:128:ALA:O	2.41	0.53
7:6E:73:MET:HA	7:6E:90:GLU:HA	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:183:C:H42	26:1H:213:A:H61	1.57	0.53
26:1H:860:U:C5	26:1H:917:A:H2	2.26	0.53
26:1H:974(A):C:H4'	26:1H:974(A):C:OP2	2.09	0.53
26:1H:2120:G:N2	26:1H:2178:C:O2	2.34	0.53
26:1H:2134:A:N7	26:1H:2156:G:O2'	2.41	0.53
26:1H:2287:A:N6	26:1H:2344:U:N3	2.56	0.53
31:41:72:ARG:NH1	31:41:87:PRO:HD3	2.22	0.53
37:88:78:PRO:O	37:88:79:LEU:HB3	2.09	0.53
41:C8:92:ARG:HD3	41:C8:94:ASN:HB3	1.89	0.53
43:E8:20:VAL:HG23	43:E8:47:VAL:HG21	1.89	0.53
1:1G:152:A:N6	1:1G:170:U:C2	2.77	0.53
1:1G:345:C:O3'	40:75:41:ARG:NH2	2.41	0.53
1:1G:1104:G:H4'	2:12:111:ARG:CZ	2.38	0.53
2:12:166:ASP:OD2	2:12:169:LYS:HB2	2.08	0.53
3:22:73:PRO:O	3:22:76:VAL:HG22	2.09	0.53
25:4L:12:A:O2'	25:4L:13:A:P	2.65	0.53
26:14:443:A:H5"	26:14:444:C:OP1	2.08	0.53
26:14:1043:C:H42	26:14:1112:G:H1	1.56	0.53
26:14:1359:A:N6	26:14:1372:U:H3	2.01	0.53
26:14:1504:C:H2'	26:14:1505:C:H6	1.73	0.53
26:14:2199:A:OP1	48:F5:50:ARG:NH2	2.42	0.53
28:19:134:ARG:HG3	28:19:135:PHE:CD1	2.43	0.53
29:29:76:ARG:HD3	29:29:77:ILE:H	1.74	0.53
30:39:15:SER:OG	30:39:16:GLY:N	2.41	0.53
33:69:133:HIS:CE1	33:69:134:PRO:HD3	2.43	0.53
39:65:106:ARG:NE	39:65:106:ARG:O	2.40	0.53
42:95:28:GLU:O	42:95:61:VAL:HG11	2.08	0.53
45:C5:17:SER:O	45:C5:21:LYS:HB2	2.09	0.53
1:13:143:A:H2	1:13:220:G:H1	1.55	0.53
1:13:234:C:H2'	1:13:235:C:C6	2.43	0.53
1:13:1031:G:H2'	1:13:1032:A:H5'	1.89	0.53
26:1H:184:C:H2'	26:1H:185:U:H6	1.72	0.53
26:1H:1449:A:H5'	26:1H:1449(A):G:OP2	2.08	0.53
26:1H:1902:C:N3	26:1H:1903:G:H1'	2.24	0.53
26:1H:2343:C:O2'	26:1H:2373:G:O2'	2.15	0.53
43:E8:37:ARG:HD3	43:E8:38:TYR:CE2	2.43	0.53
1:1G:197:A:C6	1:1G:221:C:H4'	2.44	0.53
1:1G:922:G:H21	1:1G:1398:A:H2	1.57	0.53
1:1G:967:C:H5"	1:1G:968:A:H2'	1.89	0.53
1:1G:1352:C:H42	1:1G:1370:G:H1	1.55	0.53
26:14:854:G:H2'	26:14:855:G:C8	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2320:A:C6	26:14:2333:A:C8	2.97	0.53
28:19:28:GLU:N	28:19:28:GLU:OE2	2.42	0.53
29:29:13:ARG:NH2	40:75:77:PRO:HB3	2.24	0.53
37:45:136:ALA:H	37:45:137:TYR:HA	1.73	0.53
46:D5:87:ASP:N	46:D5:87:ASP:OD1	2.41	0.53
1:13:165:C:H2'	1:13:166:G:C8	2.43	0.53
1:13:1410:G:C4	1:13:1491:G:N2	2.77	0.53
10:1I:51:ARG:H	10:1I:60:ARG:HA	1.74	0.53
17:8I:13:ASP:OD1	17:8I:14:LYS:NZ	2.35	0.53
17:8I:31:LEU:HD22	17:8I:32:TYR:CE1	2.44	0.53
26:1H:270(Q):C:H3'	26:1H:270(R):G:C8	2.42	0.53
26:1H:707:G:H1	26:1H:724:U:H3	1.57	0.53
26:1H:1322:A:H2'	26:1H:1323:U:H6	1.73	0.53
26:1H:1525:G:H2'	26:1H:1526:G:C8	2.44	0.53
26:1H:1664:A:P	58:1H:3520:HOH:O	2.66	0.53
26:1H:1990:C:OP2	58:1H:3662:HOH:O	2.18	0.53
30:31:178:PRO:HB3	30:31:198:ALA:CB	2.38	0.53
31:41:95:ARG:HA	31:41:99:MET:HB2	1.90	0.53
32:51:169:VAL:HG22	32:51:170:ARG:H	1.73	0.53
41:C8:69:CYS:HG	41:C8:79:PHE:HD2	1.56	0.53
45:G8:42:VAL:HG23	45:G8:43:ASN:N	2.24	0.53
45:G8:87:LYS:N	45:G8:94:LYS:HG2	2.24	0.53
46:H8:45:ASP:OD1	46:H8:49:ARG:NH2	2.41	0.53
46:H8:53:ILE:HA	46:H8:71:VAL:HG13	1.90	0.53
1:1G:1325:C:OP2	21:1B:15:ARG:NH2	2.42	0.53
12:3A:57:LYS:HA	12:3A:67:THR:HA	1.91	0.53
13:4A:66:LEU:CD1	13:4A:67:GLU:H	2.22	0.53
22:1L:37:AET:HM62	22:1L:38:A:N6	2.23	0.53
26:14:2152:G:N3	26:14:2152:G:H2'	2.24	0.53
31:49:81:LYS:HD3	31:49:86:MET:HE1	1.90	0.53
32:59:156:ALA:HB3	32:59:160:LYS:O	2.09	0.53
40:75:7:ILE:HG13	40:75:8:LYS:N	2.23	0.53
3:2E:10:PHE:HB3	3:2E:11:ARG:HH11	1.72	0.53
4:3E:30:LYS:HA	4:3E:35:ARG:HE	1.73	0.53
10:1I:54:PHE:CD2	10:1I:55:LYS:HG3	2.44	0.53
13:4I:39:ILE:HD12	13:4I:56:LEU:HD21	1.90	0.53
26:1H:1480:G:O6	26:1H:1510:A:H1'	2.09	0.53
26:1H:1935:G:H1'	26:1H:1964:G:N2	2.23	0.53
32:51:40:GLU:HB3	32:51:55:PRO:HG2	1.91	0.53
32:51:54:ARG:NH2	32:51:62:LYS:HG2	2.24	0.53
33:61:52:ARG:O	33:61:56:LYS:N	2.40	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:58:96:GLU:HB2	34:58:122:VAL:HG12	1.91	0.53
40:B8:12:SER:HA	40:B8:14:TYR:N	2.24	0.53
41:C8:88:ILE:C	41:C8:90:VAL:H	2.16	0.53
46:H8:126:VAL:HG12	46:H8:163:LEU:HA	1.89	0.53
1:1G:446:G:H1	1:1G:488:C:H42	1.56	0.53
1:1G:609:A:N7	58:1G:1846:HOH:O	2.34	0.53
1:1G:1250:A:H4'	9:82:68:GLY:N	2.24	0.53
1:1G:1260:C:H3'	1:1G:1260:C:H6	1.74	0.53
1:1G:1347:G:O2'	1:1G:1373:G:O6	2.20	0.53
4:32:108:LEU:HD11	4:32:175:SER:O	2.09	0.53
17:8A:22:LEU:HD11	17:8A:39:SER:HB2	1.91	0.53
18:9A:22:VAL:HG22	18:9A:56:THR:HA	1.91	0.53
19:AA:63:THR:OG1	19:AA:65:ASN:O	2.26	0.53
26:14:1408:C:O2	26:14:1595:G:N2	2.42	0.53
26:14:1667:G:O2'	26:14:1991:U:O4	2.22	0.53
26:14:2129:C:H5"	26:14:2130:U:C5	2.44	0.53
30:39:4:VAL:HG13	30:39:19:GLU:OE1	2.08	0.53
33:69:69:LYS:NZ	33:69:135:GLU:O	2.36	0.53
36:35:63:PRO:HD3	54:M5:27:THR:HG22	1.89	0.53
37:45:32:TYR:HD2	37:45:133:ARG:HG3	1.73	0.53
1:13:57:G:C5	1:13:58:C:C4	2.97	0.53
30:31:7:TYR:HD2	30:31:21:ALA:HB1	1.73	0.53
32:51:149:ARG:HG3	32:51:162:ILE:O	2.09	0.53
54:Q8:29:LYS:HD2	54:Q8:44:LYS:HB3	1.91	0.53
13:4A:84:ILE:HG12	19:AA:63:THR:HB	1.90	0.53
26:14:789:A:H5"	58:14:3667:HOH:O	2.07	0.53
27:1J:30:C:OP2	39:65:32:LEU:HD11	2.09	0.53
28:19:236:GLY:O	28:19:237:GLU:C	2.51	0.53
30:39:80:ALA:O	30:39:83:PHE:HB2	2.09	0.53
32:59:85:LYS:HG2	32:59:141:VAL:HG22	1.91	0.53
46:D5:93:ASP:HB2	46:D5:131:ARG:HH21	1.74	0.53
1:13:1:U:C5	1:13:630:G:H2'	2.44	0.53
1:13:725:G:H2'	1:13:726:C:H6	1.74	0.53
4:3E:173:TRP:CG	4:3E:189:PRO:HG3	2.44	0.53
13:4I:82:MET:HE3	13:4I:93:ARG:HD3	1.90	0.53
15:6I:18:PHE:CZ	15:6I:21:ASP:HB2	2.44	0.53
19:AI:15:LEU:O	19:AI:18:LYS:HG2	2.08	0.53
26:1H:322:A:OP1	30:31:168:ARG:NH2	2.33	0.53
26:1H:1595:G:O6	58:1H:3624:HOH:O	2.13	0.53
28:11:142:VAL:HG23	28:11:193:VAL:HA	1.90	0.53
30:31:102:PRO:HB2	30:31:105:VAL:HG23	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:170:ARG:HB2	32:51:170:ARG:CZ	2.38	0.53
39:A8:37:ALA:HB2	39:A8:101:LEU:HD21	1.90	0.53
46:H8:117:LEU:HD12	46:H8:118:GLN:H	1.73	0.53
1:1G:316:G:OP2	1:1G:351:G:O2'	2.26	0.53
1:1G:599:C:H2'	1:1G:600:C:H6	1.74	0.53
1:1G:1152:A:H5'	10:1A:13:HIS:CE1	2.43	0.53
20:BA:25:ARG:O	20:BA:29:LYS:HG3	2.08	0.53
26:14:743:G:OP1	29:29:130:GLY:HA2	2.07	0.53
26:14:776:G:H4'	26:14:777:A:O5'	2.09	0.53
26:14:1268:A:H2'	26:14:1269:A:O4'	2.09	0.53
26:14:1503:U:H2'	26:14:1504:C:C6	2.43	0.53
29:29:111:ARG:HD2	29:29:160:TYR:CD2	2.44	0.53
30:39:63:LYS:HE3	30:39:67:GLN:HB3	1.90	0.53
30:39:156:LEU:HA	30:39:193:VAL:HG12	1.89	0.53
2:1E:73:THR:H	2:1E:165:VAL:HG21	1.74	0.52
17:8I:28:PRO:HA	17:8I:35:VAL:HA	1.90	0.52
17:8I:56:VAL:O	17:8I:77:VAL:HB	2.09	0.52
26:1H:730:C:H3'	58:1H:3542:HOH:O	2.08	0.52
26:1H:1678:G:H21	26:1H:1989:G:N2	1.99	0.52
26:1H:2017:U:O2	52:N8:10:LYS:HB2	2.10	0.52
26:1H:2058:A:OP1	58:1H:3668:HOH:O	2.19	0.52
28:11:85:ASP:HB2	28:11:92:ILE:HG12	1.91	0.52
29:21:103:ASP:OD1	29:21:201:THR:HG23	2.09	0.52
40:B8:81:PRO:HG2	40:B8:82:LEU:HD12	1.90	0.52
40:B8:108:ARG:O	40:B8:110:ILE:N	2.42	0.52
46:H8:30:ASN:ND2	46:H8:90:VAL:HB	2.22	0.52
4:32:157:LEU:HD12	4:32:161:ASN:HD21	1.74	0.52
7:62:116:ALA:HA	7:62:119:ARG:HE	1.74	0.52
26:14:171:G:H2'	26:14:172:C:C6	2.44	0.52
26:14:357:A:H2'	26:14:358:U:C6	2.44	0.52
26:14:2556:C:H2'	26:14:2557:G:O4'	2.10	0.52
35:25:4:PRO:O	35:25:5:GLN:HB2	2.09	0.52
36:35:107:LYS:O	36:35:109:GLY:N	2.42	0.52
53:L5:19:ARG:HG2	53:L5:19:ARG:HH11	1.72	0.52
1:13:865:A:C2	1:13:918:A:H4'	2.44	0.52
1:13:1305:G:H22	1:13:1331:G:H2'	1.74	0.52
2:1E:118:LEU:HD12	2:1E:142:LEU:HB2	1.91	0.52
3:2E:120:VAL:O	3:2E:124:ILE:HG13	2.10	0.52
4:3E:186:LEU:HB2	4:3E:187:ARG:HG2	1.90	0.52
11:2I:17:GLY:O	11:2I:80:VAL:HA	2.09	0.52
12:3I:54:LYS:HD3	12:3I:54:LYS:N	2.23	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8I:70:ARG:C	17:8I:71:PHE:HD1	2.17	0.52
22:1K:23:A:H2'	22:1K:24:G:H8	1.74	0.52
26:1H:1188:U:H4'	42:D8:79:VAL:HG22	1.91	0.52
26:1H:1419:A:C8	26:1H:1421:G:C6	2.98	0.52
26:1H:1444:G:O6	58:1H:3653:HOH:O	2.17	0.52
26:1H:2118:U:H1'	26:1H:2147:G:N1	2.24	0.52
33:61:110:ASP:HB2	33:61:112:LYS:HG2	1.90	0.52
1:1G:176:C:H2'	1:1G:177:C:H6	1.73	0.52
1:1G:616:G:H2'	1:1G:617:G:H8	1.74	0.52
1:1G:666:G:H5'	1:1G:726:C:H1'	1.91	0.52
5:42:41:VAL:HB	5:42:113:ALA:HA	1.91	0.52
26:14:1341:U:OP2	26:14:1394:U:O2'	2.18	0.52
26:14:1585:C:O2	26:14:1585:C:H2'	2.08	0.52
26:14:1871:A:H2'	26:14:1872:A:C8	2.44	0.52
27:1J:28:C:H42	27:1J:56:G:H1	1.56	0.52
30:39:129:PHE:CE1	30:39:163:VAL:HG21	2.44	0.52
31:49:82:LEU:HD21	31:49:88:ILE:HG12	1.91	0.52
37:45:19:GLY:O	37:45:99:PRO:HD2	2.10	0.52
42:95:40:LEU:H	42:95:46:VAL:HG12	1.74	0.52
1:13:723:U:H5"	1:13:724:G:OP2	2.10	0.52
1:13:1227:A:OP2	13:4I:111:LYS:HE3	2.09	0.52
1:13:1348:U:H4'	9:8E:120:ARG:HD2	1.91	0.52
7:6E:118:VAL:HG22	7:6E:122:HIS:CE1	2.43	0.52
11:2I:95:ILE:HG13	11:2I:96:ARG:N	2.22	0.52
19:AI:32:LYS:HA	19:AI:50:ALA:HB3	1.90	0.52
26:1H:95:G:O2'	49:K8:48:HIS:HB3	2.10	0.52
26:1H:320:A:H2'	30:31:136:THR:HG21	1.91	0.52
26:1H:415:A:H2'	26:1H:416:C:O4'	2.09	0.52
26:1H:581:C:H2'	26:1H:582:G:H8	1.73	0.52
26:1H:994:C:O2'	26:1H:996:A:OP1	2.23	0.52
26:1H:1019:U:H3	26:1H:1142(A):A:H62	1.58	0.52
26:1H:2139:C:H42	26:1H:2152:G:H1	1.56	0.52
26:1H:2287:A:N6	26:1H:2344:U:H3	2.07	0.52
26:1H:2567:G:H2'	26:1H:2568:C:C6	2.44	0.52
29:21:147:PRO:HB2	29:21:149:ARG:HG2	1.91	0.52
49:K8:42:GLY:C	49:K8:44:LEU:H	2.17	0.52
1:1G:281:G:H8	1:1G:281:G:OP2	1.93	0.52
1:1G:662:G:O2'	1:1G:836:G:OP1	2.26	0.52
1:1G:1184:G:H2'	1:1G:1185:G:C8	2.45	0.52
2:12:75:LYS:HA	2:12:78:GLN:HB2	1.90	0.52
4:32:39:PRO:HB2	4:32:44:GLY:HA2	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:82:113:LYS:HD2	9:82:119:ALA:HB1	1.90	0.52
15:6A:25:THR:HG21	15:6A:70:LEU:HB2	1.92	0.52
22:1L:28:A:H61	22:1L:42:U:H3	1.57	0.52
26:14:996:A:N6	26:14:1160:G:C6	2.78	0.52
26:14:2336:A:H3'	26:14:2337:G:H8	1.74	0.52
26:14:2427:C:H5"	26:14:2428:G:OP1	2.09	0.52
26:14:2519:U:H4'	26:14:2520:C:OP1	2.09	0.52
26:14:2693:A:H2'	26:14:2694:G:H8	1.75	0.52
26:14:2747:G:H21	26:14:2757:A:H62	1.57	0.52
27:1J:24:G:N3	27:1J:27:C:N4	2.56	0.52
34:15:112:LEU:O	34:15:115:ARG:N	2.41	0.52
41:85:75:ASN:OD1	41:85:78:THR:OG1	2.26	0.52
1:13:582:U:H2'	1:13:583:A:C8	2.44	0.52
1:13:713:G:H2'	1:13:714:G:C8	2.44	0.52
4:3E:108:LEU:HD23	4:3E:110:PHE:CE1	2.45	0.52
6:5E:69:GLU:O	6:5E:72:VAL:HG12	2.10	0.52
18:9I:74:ARG:NE	18:9I:80:PRO:O	2.39	0.52
26:1H:840:C:OP2	26:1H:932:G:N2	2.31	0.52
26:1H:893:C:O2'	26:1H:894:C:O5'	2.26	0.52
42:D8:35:LEU:HB2	42:D8:57:VAL:HG12	1.91	0.52
46:H8:9:TYR:OH	46:H8:61:LEU:HD21	2.09	0.52
1:1G:542:G:P	4:32:10:ARG:HH22	2.32	0.52
1:1G:1226:C:H2'	13:4A:103:THR:HB	1.92	0.52
5:42:146:ALA:HB1	5:42:150:ARG:HH21	1.74	0.52
6:52:8:ILE:HD11	6:52:79:LEU:HD13	1.91	0.52
26:14:270(I):G:H2'	26:14:270(J):G:C8	2.45	0.52
26:14:315:G:H2'	26:14:316:C:C6	2.44	0.52
26:14:1171:G:H8	26:14:1173:G:H21	1.56	0.52
26:14:1299:G:O3'	58:14:3475:HOH:O	2.19	0.52
26:14:2630:G:H1'	26:14:2894:G:C8	2.45	0.52
26:14:2792:G:H2'	26:14:2792:G:N3	2.23	0.52
32:59:59:ARG:HG2	32:59:62:LYS:HG2	1.91	0.52
35:25:102:VAL:HB	35:25:106:LEU:HD12	1.92	0.52
41:85:70:ARG:HA	41:85:74:LEU:O	2.09	0.52
1:13:453:A:H4'	16:7I:72:ARG:HB2	1.91	0.52
1:13:465:A:H2'	1:13:467:G:N7	2.25	0.52
1:13:1137:C:H4'	1:13:1137:C:OP1	2.09	0.52
1:13:1352:C:OP1	21:1F:3:LYS:NZ	2.40	0.52
9:8E:10:ARG:HD3	9:8E:11:LYS:HG3	1.91	0.52
26:1H:71:A:H5"	26:1H:73:A:C8	2.45	0.52
26:1H:459:U:H2'	26:1H:460:A:C8	2.44	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:781:A:C8	28:11:219:PRO:HG2	2.44	0.52
26:1H:1049:C:H2'	26:1H:1050:A:H5'	1.92	0.52
26:1H:1341:U:H2'	26:1H:1397:U:O2	2.10	0.52
26:1H:1633:G:O6	58:1H:3671:HOH:O	2.19	0.52
26:1H:1914:C:H2'	26:1H:1915:U:O4'	2.09	0.52
33:61:78:THR:HA	33:61:141:LYS:HZ2	1.74	0.52
39:A8:30:ARG:HG3	39:A8:30:ARG:O	2.10	0.52
1:1G:17:U:O2'	1:1G:1079:G:O2'	2.27	0.52
1:1G:374:A:N3	1:1G:374:A:H2'	2.24	0.52
1:1G:539:A:H2'	1:1G:540:G:H8	1.72	0.52
1:1G:1442:G:O2'	1:1G:1443:G:OP1	2.25	0.52
5:42:94:ALA:HB1	5:42:98:THR:OG1	2.09	0.52
10:1A:54:PHE:CE2	10:1A:55:LYS:HD3	2.44	0.52
24:3L:3:U:H2'	24:3L:4:G:O4'	2.10	0.52
26:14:331:A:H1'	58:14:3742:HOH:O	2.09	0.52
26:14:491:G:H2'	26:14:492:A:H8	1.74	0.52
26:14:1019:U:H3	26:14:1142(A):A:N6	2.02	0.52
27:1J:11:C:H3'	27:1J:12:C:C6	2.45	0.52
28:19:17:THR:O	28:19:211:ARG:NH2	2.42	0.52
32:59:72:ILE:HA	32:59:75:ALA:HB3	1.90	0.52
40:75:4:GLY:N	40:75:5:ALA:C	2.68	0.52
44:B5:11:PRO:HD3	49:G5:37:PHE:CD2	2.44	0.52
44:B5:63:LYS:H	44:B5:63:LYS:HE3	1.75	0.52
1:13:22:G:H2'	1:13:23:C:C6	2.45	0.52
1:13:109:A:C6	1:13:326:G:C6	2.97	0.52
1:13:611:A:H2	1:13:630:G:H22	1.58	0.52
1:13:1135:U:H2'	1:13:1137:C:O2	2.10	0.52
1:13:1252:A:H2'	1:13:1253:G:C8	2.45	0.52
1:13:1347:G:O2'	1:13:1373:G:N1	2.36	0.52
4:3E:173:TRP:CD1	4:3E:189:PRO:HG3	2.45	0.52
9:8E:99:LEU:HD12	9:8E:101:PHE:CE2	2.44	0.52
15:6I:8:LYS:HE2	15:6I:12:ILE:HD11	1.91	0.52
17:8I:48:GLU:O	17:8I:50:LYS:N	2.42	0.52
26:1H:39:C:O2	30:31:46:ARG:NH2	2.42	0.52
26:1H:345:A:N3	26:1H:347:A:N6	2.57	0.52
26:1H:466:A:N3	26:1H:683:C:H1'	2.24	0.52
26:1H:528:A:N1	26:1H:2042:A:H2'	2.25	0.52
26:1H:1359:A:N6	26:1H:1372:U:H3	2.08	0.52
29:21:55:ASN:OD1	29:21:58:ARG:HD2	2.10	0.52
36:78:29:LYS:HG2	36:78:30:THR:N	2.24	0.52
45:G8:35:TYR:CD2	45:G8:69:ALA:HB3	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:Q8:9:GLY:O	54:Q8:13:ARG:HG2	2.08	0.52
1:1G:272:C:H2'	1:1G:273:A:C8	2.45	0.52
1:1G:564:C:OP1	12:3A:15:ARG:NH2	2.42	0.52
1:1G:570:G:H2'	1:1G:571:U:C6	2.45	0.52
2:12:145:LEU:O	2:12:149:LEU:HB2	2.09	0.52
8:72:36:LEU:HA	8:72:39:LEU:HD23	1.91	0.52
12:3A:77:LEU:HD21	12:3A:107:ALA:HA	1.91	0.52
22:1L:18:G:H3'	22:1L:19:G:H5"	1.91	0.52
24:3L:22:G:N7	24:3L:46:G:N2	2.56	0.52
26:14:769:G:H2'	26:14:770:G:C8	2.44	0.52
26:14:2147:G:C5	26:14:2148:G:H1'	2.45	0.52
27:1J:18:G:H2'	27:1J:19:G:C8	2.45	0.52
29:29:76:ARG:HD2	29:29:195:LEU:HD22	1.90	0.52
36:35:85:LEU:HA	36:35:88:LEU:HD13	1.91	0.52
38:55:2:ARG:HA	38:55:5:LYS:HG3	1.92	0.52
1:13:396:G:O6	58:13:1834:HOH:O	2.16	0.52
1:13:1162:C:H2'	1:13:1163:C:H6	1.73	0.52
2:1E:118:LEU:HD11	2:1E:138:LEU:O	2.10	0.52
2:1E:189:ASP:HB3	2:1E:205:ASP:HB3	1.91	0.52
10:1I:24:VAL:O	10:1I:28:ARG:HB2	2.10	0.52
16:7I:28:ARG:HG3	16:7I:29:ASP:N	2.23	0.52
22:1K:18:G:C8	22:1K:57:G:C8	2.97	0.52
26:1H:1108:U:O4	26:1H:1109:C:N4	2.43	0.52
26:1H:1756:G:H1'	26:1H:1758:G:C2	2.45	0.52
26:1H:1919:A:H5"	26:1H:1920:C:OP2	2.10	0.52
26:1H:2104:G:C2	26:1H:2186:G:C2	2.98	0.52
26:1H:2105:C:H2'	26:1H:2106:G:C8	2.43	0.52
26:1H:2756:U:H1'	26:1H:2757:A:H5"	1.91	0.52
28:11:214:TRP:CD1	28:11:214:TRP:H	2.28	0.52
36:78:37:GLY:O	36:78:39:LYS:N	2.42	0.52
36:78:84:ASN:OD1	36:78:115:LEU:HD12	2.10	0.52
46:H8:102:LEU:HD12	46:H8:104:PHE:HE1	1.75	0.52
1:1G:11:G:C5	1:1G:12:U:C5	2.98	0.52
1:1G:296:U:H2'	1:1G:297:G:C8	2.44	0.52
1:1G:683:G:C6	1:1G:684:A:C6	2.98	0.52
1:1G:1142:G:H3'	1:1G:1143:G:C8	2.45	0.52
1:1G:1312:G:H2'	1:1G:1313:U:H6	1.73	0.52
2:12:48:MET:HE2	2:12:51:LEU:HD21	1.91	0.52
26:14:289:A:H3'	26:14:290:G:C8	2.41	0.52
26:14:522:G:H2'	26:14:523:C:C6	2.45	0.52
26:14:849:A:H5"	26:14:850:C:OP2	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:957:A:N6	26:14:2459:A:C8	2.78	0.52
26:14:1406:U:H2'	26:14:1407:C:C6	2.45	0.52
26:14:1515:C:H2'	26:14:1516:U:H6	1.75	0.52
26:14:2128:C:H42	26:14:2160:G:N2	2.08	0.52
26:14:2233:U:H2'	26:14:2234:G:C8	2.45	0.52
30:39:47:GLY:O	30:39:94:PRO:HA	2.09	0.52
31:49:121:ASN:O	31:49:131:TYR:OH	2.24	0.52
46:D5:163:LEU:HD23	46:D5:163:LEU:H	1.75	0.52
48:F5:10:LYS:NZ	48:F5:65:SER:OG	2.42	0.52
1:13:468:A:H2'	1:13:474:G:O4'	2.10	0.52
1:13:1376:U:H2'	1:13:1377:A:C8	2.45	0.52
1:13:1423:G:OP1	35:68:49:ARG:NH2	2.43	0.52
26:1H:273(C):C:H42	26:1H:363(C):G:H1	1.57	0.52
26:1H:421:U:O2'	58:1H:3667:HOH:O	2.19	0.52
26:1H:758:C:O2'	26:1H:1981:A:N3	2.38	0.52
26:1H:820:A:C6	58:1H:3701:HOH:O	2.63	0.52
26:1H:1633:G:O6	58:1H:3638:HOH:O	2.15	0.52
26:1H:1790:C:H5"	26:1H:1791:A:OP1	2.09	0.52
26:1H:2516:G:O6	26:1H:2517:C:N4	2.43	0.52
27:16:44:G:C2	27:16:48:A:C2	2.97	0.52
37:88:53:ALA:HB1	37:88:120:ILE:HG22	1.90	0.52
38:98:87:TYR:HD1	38:98:90:ARG:HD2	1.73	0.52
1:1G:190:G:H8	1:1G:190:G:OP1	1.92	0.52
1:1G:1465:C:OP2	40:75:108:ARG:NH1	2.40	0.52
7:62:115:ARG:O	7:62:118:VAL:HG22	2.10	0.52
11:2A:29:ILE:CG2	11:2A:44:SER:HB2	2.39	0.52
22:1L:69:C:H1'	22:1L:70:A:C8	2.45	0.52
26:14:298:G:O5'	26:14:298:G:H8	1.92	0.52
26:14:396:G:O4'	48:F5:13:ILE:HD11	2.08	0.52
26:14:654(A):A:H2'	26:14:654(T):A:N6	2.25	0.52
26:14:2712(A):A:H5"	26:14:2713:A:OP2	2.09	0.52
27:1J:88:C:H5"	27:1J:89:G:C6	2.45	0.52
32:59:12:PRO:HG2	32:59:48:GLY:C	2.35	0.52
40:75:2:ASN:HB3	40:75:4:GLY:C	2.34	0.52
1:13:51:A:OP2	1:13:52:G:H8	1.93	0.52
1:13:142:G:H2'	1:13:143:A:H8	1.74	0.52
1:13:625:G:H4'	16:7I:16:HIS:ND1	2.24	0.52
1:13:859:A:H2'	1:13:860:A:H8	1.75	0.52
1:13:1037:C:H2'	1:13:1038:C:C5	2.45	0.52
2:1E:28:PHE:HD2	2:1E:190:THR:HG23	1.74	0.52
10:1I:32:ALA:HB3	10:1I:76:ASN:O	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:5I:4:LYS:HZ2	14:5I:7:ILE:HD11	1.74	0.52
15:6I:8:LYS:HG3	15:6I:9:GLN:N	2.24	0.52
22:1K:6:U:H2'	22:1K:7:A:C8	2.45	0.52
22:1K:59:C:O2'	22:1K:60:U:OP2	2.28	0.52
24:3K:76:A:H8	26:1H:2394:C:N4	1.88	0.52
26:1H:686:G:H8	53:P8:6:GLN:O	1.92	0.52
26:1H:1189:A:P	58:1H:3616:HOH:O	2.68	0.52
26:1H:2470:G:H5'	37:88:56:ARG:HH22	1.74	0.52
26:1H:2688:U:H1'	26:1H:2721:A:H61	1.75	0.52
26:1H:2842:G:H1	26:1H:2875:C:H42	1.56	0.52
29:21:11:MET:HG2	29:21:24:THR:HA	1.92	0.52
30:31:64:ILE:HG23	30:31:65:TRP:CD1	2.45	0.52
41:C8:65:ILE:CG1	41:C8:96:ALA:HB2	2.36	0.52
46:H8:79:ARG:HD2	46:H8:80:ARG:NH2	2.25	0.52
46:H8:161:VAL:HG23	46:H8:161:VAL:O	2.09	0.52
52:N8:40:LYS:HZ1	52:N8:48:GLU:H	1.58	0.52
1:1G:1203:C:H2'	1:1G:1204:A:C8	2.45	0.52
7:62:13:GLN:O	7:62:24:THR:HG21	2.09	0.52
12:3A:34:ARG:HG3	12:3A:35:GLY:N	2.25	0.52
12:3A:70:ILE:HD13	12:3A:77:LEU:HD12	1.91	0.52
19:AA:77:THR:O	19:AA:77:THR:OG1	2.18	0.52
26:14:71:A:H2	44:B5:31:HIS:NE2	2.08	0.52
26:14:380:U:H2'	26:14:381:G:H8	1.75	0.52
26:14:1383:C:O5'	26:14:1383:C:H6	1.93	0.52
26:14:2138:C:H42	26:14:2153:G:N2	2.08	0.52
26:14:2331:G:O3'	47:E5:43:THR:HG22	2.10	0.52
29:29:33:VAL:HG11	29:29:36:ARG:HE	1.75	0.52
35:25:9:GLU:O	35:25:83:ALA:HA	2.09	0.52
40:75:2:ASN:OD1	40:75:4:GLY:HA3	2.10	0.52
48:F5:64:ALA:HA	48:F5:67:ILE:HG12	1.92	0.52
1:13:598:U:H4'	8:7E:94:TYR:CD1	2.44	0.52
1:13:1162:C:H2'	1:13:1163:C:C6	2.44	0.52
1:13:1533:C:H4'	1:13:1534:A:H8	1.74	0.52
2:1E:16:HIS:HE1	2:1E:210:SER:HB3	1.75	0.52
11:2I:48:ILE:HD11	11:2I:64:ALA:HA	1.91	0.52
14:5I:13:THR:N	14:5I:14:PRO:HD2	2.25	0.52
23:2K:2:G:H2'	23:2K:3:C:C6	2.45	0.52
26:1H:49:A:N7	26:1H:120:U:C5	2.76	0.52
26:1H:315:G:H2'	26:1H:316:C:C6	2.45	0.52
26:1H:469:G:O6	53:P8:37:LYS:HE2	2.10	0.52
26:1H:1429:G:H2'	26:1H:1430:C:C6	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1812:A:O2'	28:11:45:ASN:N	2.38	0.52
28:11:228:PRO:HD3	28:11:235:GLY:CA	2.40	0.52
36:78:28:GLY:O	36:78:31:ALA:N	2.42	0.52
36:78:80:TYR:CD1	36:78:111:ARG:HB3	2.45	0.52
38:98:101:ALA:HB3	52:N8:47:PRO:HD3	1.92	0.52
48:J8:3:LYS:O	48:J8:12:PRO:HD3	2.09	0.52
1:1G:115:G:H1'	1:1G:116:A:N7	2.25	0.52
7:62:141:VAL:HA	7:62:142:GLU:CB	2.40	0.52
8:72:99:GLU:O	8:72:102:ARG:NH1	2.42	0.52
13:4A:83:ASP:O	13:4A:84:ILE:C	2.52	0.52
16:7A:58:TYR:O	16:7A:62:VAL:HG22	2.10	0.52
22:1L:8:U:H3'	22:1L:13:C:N4	2.25	0.52
26:14:118:A:N3	26:14:178:G:H1'	2.25	0.52
26:14:1504:C:H2'	26:14:1505:C:C6	2.45	0.52
30:39:185:ASP:OD1	30:39:188:ARG:NE	2.42	0.52
31:49:102:PHE:O	31:49:106:LEU:HB2	2.10	0.52
38:55:104:ARG:O	38:55:108:GLY:HA2	2.10	0.52
16:7I:3:LYS:HG3	16:7I:24:ALA:HB2	1.92	0.51
26:1H:958:U:OP1	37:88:74:TYR:OH	2.13	0.51
26:1H:1396:U:O2	26:1H:1396:U:H2'	2.10	0.51
26:1H:2343:C:HO2'	26:1H:2373:G:HO2'	1.49	0.51
33:61:83:ALA:HB2	33:61:144:VAL:HG22	1.92	0.51
40:B8:22:PHE:HA	40:B8:91:ARG:HH12	1.75	0.51
46:H8:9:TYR:HE2	46:H8:35:ARG:HH11	1.57	0.51
1:1G:66:G:H4'	1:1G:173:U:C5	2.45	0.51
5:42:144:THR:N	5:42:147:ASP:HB2	2.15	0.51
7:62:69:VAL:HG12	7:62:103:TRP:HE3	1.75	0.51
7:62:87:VAL:HG23	7:62:148:ASN:HA	1.92	0.51
26:14:458:G:O2'	26:14:469:G:O6	2.25	0.51
26:14:1433:U:O2	26:14:1561:G:C2	2.63	0.51
26:14:1784:A:H4'	26:14:1785:A:O5'	2.10	0.51
26:14:2283:C:C2	26:14:2389:G:C2	2.98	0.51
37:45:43:THR:OG1	37:45:46:GLN:N	2.37	0.51
46:D5:141:VAL:O	46:D5:144:LEU:HD23	2.10	0.51
1:13:1333:A:H2'	1:13:1334:G:O4'	2.09	0.51
3:2E:15:THR:CG2	3:2E:181:ASN:HA	2.40	0.51
12:3I:5:PRO:HG2	12:3I:10:LEU:HD21	1.92	0.51
26:1H:176:G:O2'	26:1H:177:G:H5'	2.11	0.51
26:1H:282:A:C4	26:1H:359:A:C2	2.98	0.51
26:1H:298:G:OP1	45:G8:85:VAL:HA	2.10	0.51
26:1H:579:G:H2'	26:1H:580:C:C6	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:742:G:H2'	26:1H:743:G:C8	2.46	0.51
26:1H:1511:A:H2'	26:1H:1512:G:O4'	2.11	0.51
26:1H:1842:G:H1	26:1H:1898:U:H3	1.58	0.51
29:21:50:GLY:O	29:21:75:VAL:HG21	2.10	0.51
34:58:97:ARG:H	34:58:100:GLU:HG3	1.74	0.51
36:78:81:GLN:OE1	36:78:106:LEU:HA	2.10	0.51
41:C8:92:ARG:NE	42:D8:11:GLN:H	2.07	0.51
1:1G:1374:A:H2'	1:1G:1375:A:H5'	1.92	0.51
26:14:273(E):U:H2'	26:14:273(F):C:O4'	2.10	0.51
30:39:10:PRO:HD2	30:39:13:SER:HB3	1.91	0.51
32:59:144:VAL:HG12	32:59:148:ILE:HG12	1.92	0.51
47:E5:29:GLN:O	47:E5:67:VAL:HG23	2.09	0.51
1:13:62:U:O2'	1:13:379:C:O2	2.28	0.51
1:13:313:A:H2'	1:13:314:C:C6	2.45	0.51
1:13:428:G:O4'	1:13:430:A:C8	2.64	0.51
1:13:575:G:O2'	1:13:821:G:OP2	2.25	0.51
1:13:580:U:P	15:6I:54:ARG:HH21	2.33	0.51
1:13:608:A:OP2	58:13:1839:HOH:O	2.19	0.51
1:13:1248:A:C2	9:8E:70:LYS:HD2	2.45	0.51
22:1K:27:C:H2'	22:1K:28:A:C8	2.45	0.51
23:2K:62:C:H2'	23:2K:63:C:H6	1.76	0.51
23:2K:64:G:O5'	23:2K:64:G:H8	1.93	0.51
26:1H:996:A:H4'	41:C8:92:ARG:HG2	1.92	0.51
26:1H:1496:A:C8	26:1H:1577:C:O2'	2.61	0.51
26:1H:2751:G:N7	32:51:3:ARG:NH2	2.59	0.51
28:11:147:LEU:HD13	28:11:155:LEU:HD11	1.91	0.51
30:31:185:ASP:HA	30:31:188:ARG:HD3	1.91	0.51
1:1G:99:C:H2'	1:1G:101:A:C8	2.45	0.51
1:1G:209:U:H5'	1:1G:209:U:O2	2.10	0.51
1:1G:292:G:OP2	1:1G:305:G:N2	2.29	0.51
1:1G:352:C:O2'	1:1G:354:G:OP1	2.21	0.51
1:1G:1018:C:H2'	1:1G:1019:C:O4'	2.10	0.51
1:1G:1256:A:N6	1:1G:1277:C:H3'	2.25	0.51
4:32:108:LEU:HD13	4:32:174:LEU:HD22	1.93	0.51
8:72:10:LEU:HD22	8:72:83:ILE:HD11	1.92	0.51
15:6A:4:THR:OG1	15:6A:7:GLU:HG3	2.10	0.51
26:14:674:G:H1'	30:39:74:ARG:NE	2.25	0.51
26:14:1430:C:H2'	26:14:1431:U:C6	2.45	0.51
26:14:1515:C:H2'	26:14:1516:U:C6	2.45	0.51
26:14:1669:A:O2'	26:14:2549:G:OP1	2.28	0.51
26:14:1996:C:O3'	58:14:3476:HOH:O	2.19	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2502:G:H5”	26:14:2503:A:H5”	1.91	0.51
26:14:2836:U:H2’	26:14:2837:G:C8	2.44	0.51
27:1J:44:G:H1’	27:1J:47:C:N4	2.24	0.51
30:39:21:ALA:O	30:39:23:ASP:N	2.43	0.51
34:15:15:LEU:HD23	34:15:134:ARG:HD2	1.90	0.51
41:85:69:CYS:HB3	41:85:106:PHE:CZ	2.46	0.51
1:13:113:G:H2’	1:13:114:U:H6	1.72	0.51
1:13:637:G:H2’	1:13:638:G:H8	1.75	0.51
1:13:859:A:H2’	1:13:860:A:O4’	2.10	0.51
1:13:1129:C:H1’	1:13:1146:A:H61	1.75	0.51
1:13:1407:C:O2	1:13:1494:G:N2	2.38	0.51
4:3E:156:GLU:O	4:3E:160:GLN:HG2	2.10	0.51
6:5E:36:ARG:NH2	6:5E:38:GLU:OE2	2.44	0.51
10:1I:25:GLU:O	10:1I:29:ARG:HG2	2.10	0.51
11:2I:91:ARG:O	11:2I:91:ARG:HD3	2.11	0.51
22:1K:53:G:H2’	22:1K:54:5MU:O4’	2.11	0.51
26:1H:198:C:H42	26:1H:248:G:H1	1.58	0.51
26:1H:832:G:H5’	36:78:45:LEU:HD11	1.91	0.51
26:1H:2726:U:H4’	35:68:1:MET:HE1	1.92	0.51
47:I8:68:GLU:HG3	47:I8:80:HIS:HD2	1.75	0.51
1:1G:533:A:O2’	1:1G:534:U:H5”	2.09	0.51
1:1G:714:G:H2’	1:1G:715:A:C8	2.45	0.51
1:1G:1007:C:H1’	1:1G:1023:G:C2	2.46	0.51
3:22:16:ARG:HH22	3:22:182:ILE:N	2.06	0.51
9:82:97:LYS:HB3	9:82:98:PRO:HD3	1.92	0.51
26:14:469:G:C6	53:L5:39:ARG:NH1	2.79	0.51
26:14:2097:C:H42	26:14:2192:G:H1	1.58	0.51
26:14:2335:A:N7	26:14:2337:G:C4	2.78	0.51
32:59:57:ASP:O	32:59:62:LYS:HE2	2.10	0.51
32:59:153:LYS:HD2	32:59:160:LYS:HE2	1.92	0.51
34:15:28:THR:HG22	34:15:29:LYS:HD3	1.91	0.51
53:L5:8:ASN:C	53:L5:8:ASN:OD1	2.54	0.51
26:1H:1021:A:C8	26:1H:1021:A:C3’	2.93	0.51
26:1H:1127:A:O2’	26:1H:2518:A:OP1	2.16	0.51
26:1H:1210:A:H5’	26:1H:1210:A:C8	2.45	0.51
26:1H:1533:C:H6	26:1H:1534:G:H5”	1.75	0.51
26:1H:2286:A:H4’	26:1H:2287:A:O5’	2.10	0.51
26:1H:2472:G:H2’	26:1H:2475:C:H42	1.75	0.51
28:11:69:ARG:HH11	28:11:69:ARG:HG3	1.75	0.51
32:51:107:VAL:HB	32:51:152:ARG:HG2	1.92	0.51
35:68:120:GLU:HG2	35:68:122:LEU:HG	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:C8:79:PHE:HE2	41:C8:106:PHE:CZ	2.29	0.51
53:P8:43:THR:HG22	53:P8:44:PRO:O	2.11	0.51
1:1G:4:U:O4	8:72:105:ARG:HA	2.10	0.51
1:1G:1019:C:H2'	1:1G:1020:U:C6	2.45	0.51
1:1G:1154:G:H2'	1:1G:1155:G:H8	1.75	0.51
4:32:32:ALA:N	4:32:35:ARG:HH11	2.08	0.51
24:3L:26:G:H2'	24:3L:27:C:H5'	1.93	0.51
26:14:1307:A:N6	26:14:1606:G:O2'	2.44	0.51
26:14:1754:C:OP1	40:75:96:ARG:NH1	2.43	0.51
26:14:2851:A:O2'	38:55:64:ARG:NH2	2.43	0.51
40:75:106:SER:N	40:75:107:ASP:OD1	2.43	0.51
42:95:37:VAL:HG12	42:95:52:VAL:HG11	1.93	0.51
1:13:1314:C:OP1	19:AI:6:LYS:NZ	2.44	0.51
26:1H:184:C:H2'	26:1H:185:U:C6	2.45	0.51
26:1H:988:A:H8	26:1H:988:A:O5'	1.94	0.51
26:1H:1420:U:O2'	26:1H:1421:G:OP1	2.27	0.51
26:1H:1748:G:H2'	26:1H:1749:A:H8	1.75	0.51
26:1H:2306:C:H3'	26:1H:2307:G:C5'	2.40	0.51
31:41:96:ARG:N	31:41:99:MET:HE2	2.19	0.51
38:98:96:ARG:NH2	38:98:117:VAL:HG23	2.26	0.51
41:C8:88:ILE:HD11	41:C8:112:ARG:HB3	1.91	0.51
43:E8:92:ARG:NH1	43:E8:94:ASP:OD1	2.44	0.51
1:1G:464:G:N2	1:1G:467:G:N7	2.58	0.51
1:1G:561:U:O2'	1:1G:562:C:OP2	2.27	0.51
1:1G:1255:G:H22	1:1G:1283:G:H1'	1.76	0.51
1:1G:1322:C:O2'	1:1G:1323:G:O5'	2.27	0.51
1:1G:1347:G:O6	9:82:10:ARG:NH2	2.44	0.51
12:3A:32:PHE:HD1	12:3A:86:ARG:HA	1.74	0.51
26:14:780:G:OP1	28:19:218:ARG:NH2	2.44	0.51
26:14:2032:G:OP2	26:14:2454:G:O2'	2.25	0.51
26:14:2129:C:H5'	26:14:2130:U:OP2	2.10	0.51
26:14:2478:A:H3'	26:14:2479:G:H8	1.76	0.51
26:14:2726:U:H5'	26:14:2726:U:O2	2.10	0.51
29:29:2:LYS:HG2	29:29:95:ILE:CG2	2.41	0.51
36:35:39:LYS:HD2	36:35:45:LEU:HD21	1.93	0.51
36:35:107:LYS:C	36:35:109:GLY:H	2.19	0.51
43:A5:17:VAL:HG13	43:A5:76:VAL:HG21	1.92	0.51
46:D5:60:GLU:HA	46:D5:66:SER:HA	1.93	0.51
46:D5:128:VAL:HG23	46:D5:160:GLY:O	2.10	0.51
1:13:468:A:H3'	1:13:474:G:H8	1.76	0.51
15:6I:39:LEU:HD13	15:6I:56:LEU:HD12	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:2:C:H42	22:1K:71:G:H1	1.59	0.51
26:1H:1328:G:H2'	26:1H:1330:C:C5	2.46	0.51
26:1H:1547:C:H2'	26:1H:1548:C:H6	1.72	0.51
26:1H:1756:G:O2'	26:1H:1758:G:H5"	2.11	0.51
26:1H:2212:A:H1'	26:1H:2215:G:C4	2.45	0.51
27:16:40:U:H1'	27:16:45:A:H61	1.75	0.51
28:11:16:MET:HE1	28:11:208:LYS:HD3	1.93	0.51
33:61:27:ARG:NH2	48:J8:68:PRO:HG3	2.25	0.51
36:78:78:PRO:HB3	36:78:111:ARG:NH2	2.25	0.51
46:H8:109:ALA:H	46:H8:112:ARG:HG3	1.76	0.51
47:I8:14:ARG:NH1	58:I8:201:HOH:O	2.42	0.51
1:1G:92:G:H2'	1:1G:93:U:H6	1.76	0.51
1:1G:385:C:H2'	1:1G:386:C:H6	1.76	0.51
1:1G:793:U:O2	1:1G:1516:G:H4'	2.11	0.51
1:1G:991:U:H1'	1:1G:993:G:C8	2.46	0.51
1:1G:1105:A:H2'	1:1G:1106:G:C8	2.40	0.51
2:12:75:LYS:H	2:12:78:GLN:HG3	1.74	0.51
6:52:12:PRO:HG2	6:52:13:ASN:OD1	2.11	0.51
10:1A:12:ASP:OD2	10:1A:15:THR:N	2.42	0.51
12:3A:90:VAL:HG11	12:3A:93:LEU:HD12	1.92	0.51
23:2L:10:G:N2	23:2L:27:G:H1'	2.25	0.51
26:14:548:A:C5	26:14:549:G:H1'	2.44	0.51
26:14:1017:G:N2	26:14:1018:C:O2	2.43	0.51
26:14:1200:C:P	58:14:3542:HOH:O	2.68	0.51
26:14:1752:C:OP1	40:75:115:ARG:NH2	2.43	0.51
27:1J:5:C:H42	27:1J:115:G:H1	1.57	0.51
27:1J:88:C:H5"	27:1J:89:G:N7	2.26	0.51
30:39:51:THR:HB	30:39:88:VAL:HG11	1.93	0.51
31:49:17:PRO:HA	31:49:20:ILE:HD12	1.92	0.51
36:35:95:VAL:O	36:35:126:VAL:HG23	2.11	0.51
36:35:110:TYR:N	36:35:110:TYR:CD1	2.79	0.51
37:45:57:HIS:NE2	37:45:116:GLU:HG2	2.25	0.51
46:D5:70:LEU:HD11	46:D5:98:MET:HE3	1.93	0.51
46:D5:161:VAL:HG23	46:D5:162:GLU:H	1.76	0.51
49:G5:32:LEU:HA	49:G5:53:LEU:HD13	1.92	0.51
4:3E:63:LYS:O	4:3E:67:ILE:HG13	2.10	0.51
13:4I:14:ARG:HG3	13:4I:44:ARG:CZ	2.40	0.51
26:1H:748:G:C8	43:E8:89:ALA:HB1	2.46	0.51
26:1H:1405:U:H2'	26:1H:1406:U:C6	2.46	0.51
26:1H:1816:G:H1	28:11:35:LYS:NZ	2.09	0.51
26:1H:1954:G:O2'	26:1H:1955:U:OP2	2.22	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2252:G:H2'	26:1H:2253:G:H8	1.75	0.51
26:1H:2638:G:P	29:21:82:ARG:HH22	2.34	0.51
31:41:152:LEU:H	31:41:152:LEU:HD12	1.76	0.51
34:58:18:ALA:HA	34:58:21:LYS:HD2	1.92	0.51
4:32:64:LEU:HB2	4:32:198:VAL:HG21	1.92	0.51
5:42:18:ARG:HG2	5:42:19:MET:H	1.75	0.51
10:1A:49:VAL:O	10:1A:60:ARG:HB2	2.10	0.51
10:1A:54:PHE:C	10:1A:55:LYS:HD2	2.36	0.51
13:4A:102:ARG:HH11	13:4A:105:THR:H	1.59	0.51
20:BA:51:GLU:HA	20:BA:54:LYS:HE3	1.92	0.51
23:2L:73:A:C6	23:2L:74:A:C6	2.99	0.51
26:14:492:A:H2'	26:14:493:G:O4'	2.11	0.51
26:14:565:C:H4'	26:14:1253:A:C6	2.45	0.51
26:14:1488:G:N2	26:14:1502:C:C2	2.79	0.51
26:14:1956:U:H1'	26:14:2552:U:OP1	2.11	0.51
26:14:2143:C:N3	26:14:2148:G:N2	2.55	0.51
26:14:2211:G:H4'	26:14:2212:A:O5'	2.08	0.51
27:1J:12:C:H6	27:1J:12:C:OP2	1.94	0.51
29:29:201:THR:HG22	29:29:202:LYS:N	2.26	0.51
30:39:32:LEU:HB3	30:39:112:MET:HE1	1.93	0.51
30:39:158:THR:HB	30:39:195:ASP:HB2	1.91	0.51
33:69:71:ILE:HG22	33:69:72:LEU:HD23	1.93	0.51
46:D5:94:GLU:HB3	46:D5:96:VAL:HG23	1.93	0.51
1:13:626:U:N3	1:13:627:G:N7	2.58	0.51
1:13:917:G:H2'	1:13:918:A:C8	2.45	0.51
1:13:940:C:H2'	1:13:941:G:H8	1.74	0.51
1:13:1079:G:C6	1:13:1080:A:N6	2.78	0.51
1:13:1473:A:H2'	1:13:1474:G:C8	2.46	0.51
1:13:1507:A:H2'	1:13:1508:G:C8	2.45	0.51
2:1E:128:GLU:OE1	2:1E:135:GLN:NE2	2.44	0.51
4:3E:90:GLY:O	4:3E:93:PHE:HB3	2.10	0.51
17:8I:41:LYS:HD2	17:8I:88:TYR:HE2	1.76	0.51
22:1K:42:U:H2'	22:1K:43:G:C8	2.45	0.51
25:4K:13:A:C8	25:4K:14:A:N7	2.79	0.51
26:1H:86:C:H4'	26:1H:104:U:H1'	1.93	0.51
26:1H:1234:U:OP2	58:1H:3666:HOH:O	2.19	0.51
26:1H:1359:A:N1	26:1H:1372:U:O4	2.44	0.51
26:1H:1409:C:H42	26:1H:1593:G:H1	1.58	0.51
26:1H:1937:A:N7	26:1H:1939:U:H2'	2.25	0.51
26:1H:1999:C:H5"	26:1H:2723:C:O2'	2.11	0.51
26:1H:2679:A:H5'	29:21:165:VAL:HG21	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:38:LYS:HB3	28:11:39:LYS:HA	1.93	0.51
28:11:77:ALA:HB2	28:11:97:TYR:CD2	2.46	0.51
40:B8:128:GLU:O	40:B8:132:LYS:HB2	2.10	0.51
43:E8:31:GLU:O	43:E8:35:ILE:HG13	2.11	0.51
46:H8:113:ALA:N	46:H8:114:GLY:HA2	2.26	0.51
54:Q8:34:TRP:CE2	54:Q8:35:GLN:OE1	2.64	0.51
1:1G:167:G:H2'	1:1G:168:G:C8	2.44	0.51
1:1G:299:G:H2'	1:1G:300:A:C8	2.46	0.51
1:1G:560:U:O2'	1:1G:561:U:OP2	2.24	0.51
1:1G:1372:U:H2'	1:1G:1373:G:O4'	2.11	0.51
3:22:29:TYR:O	3:22:33:LEU:HB3	2.10	0.51
3:22:62:ASP:H	3:22:97:LYS:HZ1	1.59	0.51
7:62:72:ARG:CZ	7:62:138:LYS:HE3	2.41	0.51
9:82:50:LEU:HG	9:82:81:ILE:HG21	1.93	0.51
13:4A:15:VAL:O	13:4A:19:LEU:HG	2.11	0.51
20:BA:90:GLN:HA	20:BA:93:GLU:HG3	1.93	0.51
26:14:80:G:O2'	26:14:294:A:N1	2.34	0.51
26:14:581:C:H2'	26:14:582:G:H8	1.75	0.51
26:14:955:C:OP1	37:45:87:LYS:NZ	2.37	0.51
26:14:2695:C:H2'	26:14:2696:U:H6	1.76	0.51
27:1J:1:U:O2'	27:1J:2:C:H5'	2.11	0.51
27:1J:70:C:H2'	27:1J:71:C:H6	1.76	0.51
32:59:20:ALA:HB1	32:59:23:ARG:HG3	1.93	0.51
1:13:110:C:O2'	16:7I:25:ARG:O	2.27	0.51
1:13:963:G:H1	1:13:972:C:N4	2.00	0.51
1:13:1128:C:H42	1:13:1144:G:H1	1.57	0.51
1:13:1197:G:OP2	58:13:1807:HOH:O	2.20	0.51
1:13:1240:U:OP2	7:6E:116:ALA:N	2.43	0.51
2:1E:18:GLY:N	2:1E:42:ILE:HB	2.24	0.51
3:2E:35:GLU:HG2	3:2E:39:ILE:HD11	1.92	0.51
9:8E:18:PHE:HB2	9:8E:62:TYR:HB3	1.91	0.51
24:3K:37:A:N1	25:4K:13:A:H2	2.09	0.51
26:1H:479:A:H4'	26:1H:480:A:OP1	2.11	0.51
26:1H:566:U:OP1	36:78:29:LYS:HD2	2.11	0.51
26:1H:600:G:N2	26:1H:605:C:O3'	2.44	0.51
26:1H:1140:C:OP1	34:58:23:LEU:HB3	2.11	0.51
26:1H:2052:G:C8	29:21:141:ILE:HD11	2.46	0.51
30:31:184:TYR:HE1	36:78:3:LEU:HD11	1.76	0.51
31:41:124:SER:HB2	31:41:131:TYR:CE2	2.46	0.51
32:51:54:ARG:HD3	32:51:65:HIS:ND1	2.25	0.51
34:58:42:TRP:HA	34:58:48:MET:HE1	1.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:F8:35:THR:HG23	44:F8:38:GLU:HB3	1.92	0.51
1:1G:580:U:H2'	1:1G:581:G:O4'	2.11	0.51
1:1G:827:U:H3	1:1G:872:A:N6	2.02	0.51
1:1G:901:A:C5	1:1G:902:G:H1'	2.46	0.51
1:1G:1170:A:N6	1:1G:1171:G:N3	2.58	0.51
13:4A:84:ILE:HD11	19:AA:64:GLU:OE2	2.11	0.51
24:3L:45:G:H5"	24:3L:46:G:OP2	2.11	0.51
26:14:526:A:N1	26:14:2625:G:O2'	2.43	0.51
26:14:2115:G:N1	26:14:2117:A:N7	2.59	0.51
26:14:2143:C:N4	26:14:2148:G:H1	2.05	0.51
26:14:2259:G:H1'	26:14:2427:C:C2	2.46	0.51
27:1J:15:A:OP2	27:1J:69:G:N2	2.38	0.51
31:49:18:GLU:OE2	31:49:21:ARG:NH2	2.44	0.51
32:59:97:ARG:HG2	32:59:98:LEU:H	1.75	0.51
32:59:105:LEU:HD11	32:59:115:VAL:HG23	1.93	0.51
33:69:81:VAL:HG12	33:69:143:SER:HB3	1.92	0.51
44:B5:59:VAL:N	44:B5:76:ARG:O	2.37	0.51
1:13:134:A:H61	16:7I:25:ARG:HH12	1.58	0.50
1:13:186:C:H2'	1:13:186(A):C:C6	2.47	0.50
1:13:222:U:H2'	1:13:223:U:H6	1.76	0.50
1:13:475:G:H2'	1:13:476:G:O4'	2.11	0.50
1:13:1492:A:OP1	12:3I:47:LYS:N	2.40	0.50
3:2E:107:GLN:H	3:2E:107:GLN:CD	2.19	0.50
26:1H:1680:U:O2	26:1H:1763:G:H3'	2.11	0.50
26:1H:2224:G:H4'	26:1H:2226:C:C2	2.46	0.50
26:1H:2756:U:H4'	26:1H:2757:A:OP1	2.09	0.50
30:31:160:ASN:OD1	30:31:163:VAL:HG23	2.11	0.50
31:41:16:ARG:NH1	31:41:31:VAL:HG21	2.26	0.50
39:A8:67:ARG:O	39:A8:71:ARG:HG3	2.11	0.50
45:G8:43:ASN:OD1	45:G8:65:ALA:HB3	2.11	0.50
1:1G:12:U:H2'	1:1G:13:U:H5"	1.93	0.50
1:1G:114:U:H2'	1:1G:115:G:C8	2.47	0.50
1:1G:157:G:C2	1:1G:165:C:C2	2.99	0.50
1:1G:191(F):U:H2'	1:1G:191:G:C8	2.43	0.50
1:1G:1226:C:O2'	13:4A:111:LYS:NZ	2.20	0.50
1:1G:1320:C:H42	19:AA:36:ARG:NE	2.08	0.50
3:22:20:SER:OG	3:22:36:ASP:OD2	2.26	0.50
4:32:127:THR:OG1	4:32:131:ARG:N	2.44	0.50
7:62:115:ARG:HB3	7:62:118:VAL:HG13	1.92	0.50
10:1A:37:PRO:HA	10:1A:72:VAL:HG22	1.93	0.50
16:7A:52:ASP:CG	16:7A:55:ARG:HB2	2.36	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:392:C:H5”	26:14:409:C:H5”	1.93	0.50
26:14:906:G:OP1	37:45:26:TYR:OH	2.15	0.50
26:14:1116:C:H2’	26:14:1117:G:C8	2.46	0.50
26:14:1215:G:H2’	26:14:1216:G:H8	1.76	0.50
26:14:2184:G:H2’	26:14:2185:C:C6	2.46	0.50
26:14:2616:C:C2’	26:14:2617:C:H5’	2.41	0.50
39:65:89:ARG:O	39:65:92:TYR:N	2.43	0.50
42:95:48:GLY:HA3	42:95:51:VAL:C	2.36	0.50
49:G5:43:GLN:HB2	49:G5:46:GLN:OE1	2.11	0.50
1:13:1171:G:H8	1:13:1171:G:O5’	1.94	0.50
1:13:1218:C:H2’	1:13:1219:U:C6	2.47	0.50
6:5E:14:LEU:HD22	6:5E:18:GLN:HB3	1.92	0.50
10:1I:48:THR:O	14:5I:34:TYR:OH	2.30	0.50
12:3I:102:ARG:HB3	12:3I:109:GLY:HA2	1.94	0.50
13:4I:9:ILE:HD13	13:4I:11:ARG:HH22	1.76	0.50
26:1H:721:C:H2’	26:1H:722:A:C8	2.46	0.50
26:1H:828:U:H4’	26:1H:831:G:N1	2.26	0.50
26:1H:960:A:C8	26:1H:962:G:C8	2.99	0.50
26:1H:1336:A:O2’	26:1H:1337:G:H5’	2.11	0.50
26:1H:1971:A:C4	28:11:241:PRO:HD3	2.46	0.50
26:1H:2093:G:H1	26:1H:2196:C:H42	1.60	0.50
26:1H:2150:U:H2’	26:1H:2151:G:C8	2.47	0.50
30:31:29:ASN:HB3	30:31:112:MET:HE1	1.93	0.50
50:L8:26:LEU:HD21	50:L8:46:ASN:HB3	1.93	0.50
1:1G:87:A:C6	1:1G:88:C:C4	2.99	0.50
1:1G:1262:C:H2’	1:1G:1263:C:O4’	2.11	0.50
1:1G:1326:C:H2’	1:1G:1327:C:C6	2.46	0.50
4:32:14:ARG:HB2	4:32:40:PRO:HD2	1.93	0.50
12:3A:6:THR:HG23	12:3A:9:GLN:HG3	1.93	0.50
13:4A:68:GLY:HA3	31:49:116:ASP:CG	2.36	0.50
16:7A:43:LYS:HG2	16:7A:48:TRP:CG	2.46	0.50
26:14:13:A:O2’	26:14:15:G:O6	2.28	0.50
26:14:71:A:OP2	26:14:71:A:H3’	2.11	0.50
26:14:2238:G:H2’	26:14:2238:G:N3	2.26	0.50
26:14:2306:C:H2’	26:14:2307:G:H21	1.77	0.50
29:29:68:ALA:HA	29:29:71:GLY:HA3	1.92	0.50
39:65:109:GLY:O	39:65:111:GLU:N	2.40	0.50
41:85:92:ARG:NH1	42:95:11:GLN:H	2.07	0.50
1:13:2:U:O2	1:13:612:C:O2’	2.28	0.50
1:13:109:A:C6	1:13:327:A:C6	2.99	0.50
1:13:673:G:H5”	6:5E:87:ARG:NH1	2.27	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:826:C:H2'	1:13:827:U:O2	2.10	0.50
1:13:1199:U:H4'	10:1I:54:PHE:CZ	2.47	0.50
1:13:1480:G:H2'	1:13:1481:U:O4'	2.11	0.50
3:2E:59:ARG:HA	3:2E:63:ASN:O	2.10	0.50
4:3E:108:LEU:HD23	4:3E:110:PHE:HE1	1.76	0.50
10:1I:54:PHE:CE1	10:1I:55:LYS:HE3	2.47	0.50
26:1H:992:C:H2'	26:1H:993:G:C8	2.46	0.50
26:1H:1179:C:H2'	26:1H:1180:C:H6	1.75	0.50
26:1H:1182:A:H2'	26:1H:1183:G:O4'	2.11	0.50
26:1H:1400:G:H2'	26:1H:1401:G:C8	2.47	0.50
26:1H:1995:U:OP2	58:1H:3670:HOH:O	2.19	0.50
30:31:178:PRO:HG2	30:31:179:GLU:HG3	1.94	0.50
32:51:102:ALA:HA	32:51:117:PRO:HD3	1.94	0.50
33:61:53:ALA:O	33:61:57:ARG:NH1	2.45	0.50
36:78:111:ARG:HG2	36:78:128:HIS:CG	2.47	0.50
37:88:26:TYR:O	37:88:26:TYR:CD1	2.65	0.50
48:J8:86:SER:HB3	48:J8:89:GLU:HB2	1.92	0.50
1:1G:295:C:H2'	1:1G:296:U:O4'	2.12	0.50
1:1G:611:A:N1	1:1G:630:G:N1	2.59	0.50
1:1G:1151:A:O2'	1:1G:1152:A:O5'	2.30	0.50
1:1G:1312:G:H2'	1:1G:1313:U:C6	2.46	0.50
2:12:22:LYS:HB3	2:12:40:HIS:CE1	2.46	0.50
2:12:118:LEU:HD22	2:12:142:LEU:HB2	1.94	0.50
13:4A:102:ARG:NH1	13:4A:105:THR:HG23	2.26	0.50
26:14:634:C:H2'	26:14:635:C:C6	2.46	0.50
26:14:1437:C:H2'	26:14:1438:U:H6	1.76	0.50
26:14:2448:A:N6	58:14:3555:HOH:O	2.40	0.50
28:19:273:ARG:O	28:19:273:ARG:HG2	2.12	0.50
30:39:132:VAL:HG22	30:39:133:ASN:H	1.77	0.50
37:45:26:TYR:CD1	37:45:27:VAL:HG23	2.47	0.50
38:55:32:GLY:HA2	38:55:116:LEU:HD12	1.93	0.50
40:75:99:LEU:HD22	40:75:101:PHE:HE1	1.76	0.50
45:C5:68:HIS:O	45:C5:71:LYS:HG3	2.10	0.50
47:E5:34:GLY:HA2	47:E5:61:ALA:O	2.12	0.50
1:13:5:U:C4	4:3E:85:LYS:HD2	2.46	0.50
1:13:234:C:H2'	1:13:235:C:H6	1.77	0.50
1:13:389:A:H2'	1:13:390:C:O4'	2.11	0.50
4:3E:108:LEU:HB3	4:3E:110:PHE:HD1	1.76	0.50
4:3E:175:SER:HB3	4:3E:186:LEU:HD21	1.92	0.50
8:7E:51:VAL:HG11	8:7E:60:ARG:HD2	1.93	0.50
14:5I:6:LEU:HD12	14:5I:23:ARG:NH2	2.17	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9I:56:THR:OG1	18:9I:57:GLY:N	2.45	0.50
26:1H:33:U:H4'	26:1H:34:C:OP1	2.11	0.50
26:1H:654:A:N3	26:1H:654(A):A:H5"	2.26	0.50
26:1H:1252:G:O4'	41:C8:33:ARG:HD2	2.11	0.50
26:1H:1756:G:OP2	58:1H:3679:HOH:O	2.20	0.50
26:1H:1992:G:H5'	26:1H:1994:C:H41	1.76	0.50
26:1H:2735:G:H2'	26:1H:2736:G:C8	2.45	0.50
26:1H:2864:G:OP1	40:B8:119:LYS:HD2	2.11	0.50
30:31:167:ALA:HB1	30:31:173:VAL:HG11	1.93	0.50
40:B8:4:GLY:O	40:B8:8:LYS:HG3	2.11	0.50
50:L8:5:LYS:HE3	50:L8:57:GLU:CD	2.35	0.50
1:1G:5:U:C4	4:32:86:LYS:HD2	2.46	0.50
1:1G:490:G:P	4:32:132:ARG:HH22	2.33	0.50
1:1G:855:G:H2'	1:1G:856:C:H6	1.75	0.50
1:1G:866:C:O2'	1:1G:919:A:OP1	2.28	0.50
1:1G:1223:C:H5"	1:1G:1224:G:H5"	1.92	0.50
1:1G:1274:G:N2	1:1G:1275:A:H62	2.08	0.50
2:12:223:ILE:HG23	2:12:224:GLN:NE2	2.27	0.50
4:32:52:SER:O	4:32:56:VAL:HG23	2.11	0.50
9:82:79:LEU:HD23	9:82:101:PHE:O	2.12	0.50
10:1A:51:ARG:HH21	10:1A:61:GLU:HB2	1.76	0.50
18:9A:21:LYS:HE3	18:9A:23:LYS:HB3	1.93	0.50
26:14:36:G:H4'	26:14:451:C:C2	2.46	0.50
26:14:380:U:H2'	26:14:381:G:C8	2.47	0.50
26:14:774:A:HO2'	26:14:775:G:P	2.34	0.50
26:14:2086:U:H2'	26:14:2087:G:C8	2.47	0.50
26:14:2484:G:C2	26:14:2485:G:C8	2.99	0.50
32:59:121:ILE:HG23	32:59:133:VAL:HG22	1.92	0.50
43:A5:68:ARG:O	43:A5:109:GLU:HA	2.12	0.50
47:E5:27:GLU:HB2	47:E5:69:PHE:CD2	2.41	0.50
1:13:592:G:C6	1:13:648:A:C6	3.00	0.50
1:13:600:C:H2'	1:13:601:C:C6	2.47	0.50
1:13:895:G:H2'	1:13:896:C:C6	2.46	0.50
1:13:1193:G:P	3:2E:167:TRP:HZ3	2.34	0.50
1:13:1198:G:N7	58:13:1859:HOH:O	2.34	0.50
1:13:1374:A:O3'	7:6E:28:ASN:ND2	2.45	0.50
8:7E:121:ASP:HB2	8:7E:125:ARG:NH2	2.26	0.50
26:1H:455:C:N3	26:1H:473:G:H5'	2.26	0.50
26:1H:1686:C:H2'	26:1H:1687:G:O4'	2.10	0.50
30:31:158:THR:OG1	30:31:159:GLY:N	2.44	0.50
36:78:144:GLU:OE2	36:78:144:GLU:N	2.45	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:H8:152:ALA:O	46:H8:155:LEU:HG	2.12	0.50
48:J8:81:LYS:C	48:J8:83:GLU:H	2.19	0.50
1:1G:192:U:H2'	1:1G:193:C:H6	1.76	0.50
1:1G:328:C:O2	1:1G:328:C:H2'	2.10	0.50
1:1G:1095:U:OP1	1:1G:1108:G:N1	2.44	0.50
1:1G:1255:G:OP1	10:1A:45:ARG:NH2	2.42	0.50
18:9A:25:THR:O	18:9A:25:THR:OG1	2.20	0.50
26:14:620:G:N3	26:14:620:G:H5'	2.27	0.50
26:14:809:G:OP2	58:14:3479:HOH:O	2.19	0.50
26:14:1312:U:H2'	44:B5:63:LYS:HE2	1.92	0.50
26:14:1858:G:N2	26:14:1883:G:H2'	2.27	0.50
26:14:2027:G:H2'	26:14:2028:U:O4'	2.12	0.50
26:14:2540:C:O2'	26:14:2740:A:N3	2.40	0.50
26:14:2689:U:H4'	26:14:2690:C:H5'	1.94	0.50
27:1J:45:A:O4'	31:49:95:ARG:NH2	2.45	0.50
32:59:50:VAL:HG23	32:59:51:ARG:N	2.26	0.50
32:59:98:LEU:HD13	32:59:125:VAL:HG21	1.93	0.50
32:59:154:PRO:HA	32:59:162:ILE:HG13	1.94	0.50
33:69:75:LEU:HG	33:69:76:THR:N	2.27	0.50
36:35:57:THR:HB	36:35:60:MET:HB2	1.94	0.50
37:45:84:GLY:HA2	37:45:85:LYS:HG2	1.94	0.50
1:13:322:C:H4'	20:BI:23:ARG:HD2	1.93	0.50
1:13:578:C:OP1	58:13:1837:HOH:O	2.19	0.50
1:13:1386:G:O2'	1:13:1387:G:H5'	2.12	0.50
9:8E:5:TYR:HE2	9:8E:16:ARG:HG2	1.76	0.50
26:1H:934:G:H2'	26:1H:935:C:H6	1.76	0.50
26:1H:1322:A:H2'	26:1H:1323:U:C6	2.47	0.50
26:1H:1434:A:H61	26:1H:1558:A:N6	2.09	0.50
26:1H:2125:G:H21	26:1H:2173:A:H62	1.57	0.50
34:58:116:LEU:O	34:58:119:ARG:N	2.43	0.50
37:88:32:TYR:CD1	37:88:133:ARG:HA	2.47	0.50
37:88:135:ASP:O	37:88:138:ASP:N	2.25	0.50
42:D8:49:THR:O	42:D8:50:PRO:C	2.53	0.50
42:D8:49:THR:OG1	42:D8:50:PRO:HD2	2.11	0.50
46:H8:58:VAL:HG23	46:H8:60:GLU:H	1.76	0.50
1:1G:147:G:O2'	1:1G:148:G:H5'	2.10	0.50
1:1G:1054:C:H4'	1:1G:1055:A:H5"	1.93	0.50
1:1G:1288:A:O3'	21:1B:10:ARG:NH2	2.45	0.50
4:32:104:VAL:HG11	4:32:146:ILE:HG12	1.93	0.50
5:42:141:GLN:HA	5:42:143:ARG:NH1	2.26	0.50
26:14:932:G:H4'	26:14:933:A:O5'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1667:G:N1	58:14:3520:HOH:O	2.33	0.50
26:14:1750:G:O2'	26:14:2860:A:N1	2.40	0.50
26:14:1754:C:H2'	26:14:1755:A:C8	2.47	0.50
26:14:2611:U:C4	52:J5:3:LYS:HG3	2.46	0.50
27:1J:8:U:O3'	39:65:25:ARG:NH2	2.44	0.50
29:29:60:ASN:HB2	29:29:62:PRO:CD	2.38	0.50
35:25:11:ALA:O	35:25:98:VAL:HG23	2.11	0.50
37:45:39:PRO:HB3	37:45:99:PRO:HD3	1.94	0.50
38:55:21:TYR:OH	38:55:43:GLU:HG2	2.12	0.50
1:13:24:U:H2'	1:13:25:C:C6	2.47	0.50
1:13:975:A:H5"	1:13:975:A:C8	2.46	0.50
1:13:1285:A:H4'	1:13:1286:A:C5'	2.41	0.50
1:13:1372:U:OP1	9:8E:72:GLY:N	2.29	0.50
6:5E:6:VAL:HG22	6:5E:90:VAL:HG22	1.93	0.50
9:8E:45:ALA:HA	9:8E:48:GLU:OE1	2.11	0.50
12:3I:25:PRO:O	12:3I:27:LEU:N	2.45	0.50
15:6I:82:ILE:O	15:6I:85:LEU:N	2.43	0.50
22:1K:5:A:H2'	22:1K:5:A:N3	2.27	0.50
26:1H:55:G:C2	26:1H:116:C:N3	2.79	0.50
26:1H:698:C:O2'	26:1H:734:A:N6	2.45	0.50
26:1H:1466:G:H2'	26:1H:1547:C:N4	2.27	0.50
26:1H:1635:G:N3	26:1H:1635:G:H2'	2.27	0.50
26:1H:2053:G:H5'	29:21:144:ARG:O	2.11	0.50
26:1H:2145:C:H5"	26:1H:2146:C:OP2	2.12	0.50
26:1H:2776:A:H4'	26:1H:2777:G:H5"	1.93	0.50
29:21:64:LYS:HA	29:21:67:PHE:O	2.12	0.50
32:51:7:LEU:HD12	32:51:8:PRO:HD2	1.94	0.50
32:51:94:TYR:HA	32:51:106:THR:O	2.11	0.50
34:58:90:MET:O	34:58:94:HIS:N	2.39	0.50
36:78:125:VAL:O	36:78:144:GLU:HB2	2.12	0.50
40:B8:87:ASP:O	40:B8:89:VAL:HG12	2.12	0.50
43:E8:68:ARG:O	43:E8:109:GLU:HA	2.11	0.50
47:I8:23:VAL:HA	47:I8:38:VAL:HG22	1.94	0.50
48:J8:50:ARG:HG2	48:J8:59:THR:OG1	2.11	0.50
52:N8:40:LYS:HZ1	52:N8:46:CYS:HB2	1.76	0.50
54:Q8:26:LYS:HG2	54:Q8:48:PHE:CD1	2.47	0.50
1:1G:710:G:OP1	6:52:54:LYS:HE2	2.12	0.50
1:1G:779:C:H2'	1:1G:780:A:O4'	2.11	0.50
1:1G:934:C:O2'	1:1G:1344:C:OP2	2.15	0.50
2:12:186:ALA:O	2:12:201:ILE:HB	2.12	0.50
3:22:43:LEU:HD23	3:22:47:LEU:HB2	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:72:23:SER:HB2	8:72:60:ARG:HG2	1.92	0.50
24:3L:59:A:H2'	24:3L:59:A:N3	2.27	0.50
26:14:1436:G:H1'	26:14:1477:A:O2'	2.11	0.50
26:14:1607:C:H4'	26:14:1608:A:O5'	2.11	0.50
26:14:2032:G:N2	26:14:2572:A:OP2	2.45	0.50
26:14:2841:C:H2'	26:14:2842:G:C8	2.47	0.50
27:1J:42:C:O2	31:49:93:THR:N	2.37	0.50
31:49:16:ARG:O	31:49:20:ILE:HG13	2.12	0.50
40:75:55:ASN:H	40:75:59:THR:HG22	1.75	0.50
41:85:66:ASN:CB	41:85:76:TYR:HB2	2.42	0.50
1:13:76:G:N7	1:13:95:G:N1	2.60	0.50
1:13:1208:C:H2'	1:13:1209:C:C6	2.47	0.50
1:13:1251:A:H2'	1:13:1252:A:C8	2.47	0.50
1:13:1257:U:H5'	1:13:1258:G:C8	2.47	0.50
1:13:1347:G:N2	1:13:1374:A:OP2	2.42	0.50
2:1E:48:MET:HA	2:1E:51:LEU:HB2	1.94	0.50
3:2E:56:ASP:O	3:2E:57:ILE:HG13	2.11	0.50
4:3E:90:GLY:C	4:3E:93:PHE:H	2.19	0.50
9:8E:26:VAL:HG13	9:8E:61:ALA:HB3	1.93	0.50
25:4K:14:A:H4'	25:4K:15:A:H5'	1.93	0.50
26:1H:1106:G:H2'	26:1H:1107:G:C8	2.47	0.50
26:1H:1289:C:H2'	26:1H:1290:C:C6	2.47	0.50
26:1H:2262:U:H4'	26:1H:2328:A:C2	2.47	0.50
26:1H:2324:C:H5"	26:1H:2325:G:H5'	1.93	0.50
31:41:11:TYR:O	31:41:15:VAL:HB	2.12	0.50
33:61:134:PRO:HA	33:61:135:GLU:HG3	1.93	0.50
37:88:16:ARG:O	37:88:17:LEU:HD23	2.11	0.50
38:98:2:ARG:O	38:98:5:LYS:HG3	2.12	0.50
38:98:49:ASP:OD1	38:98:95:THR:OG1	2.30	0.50
47:I8:23:VAL:HB	47:I8:26:TYR:HE1	1.76	0.50
49:K8:23:LYS:HE3	49:K8:27:GLU:OE2	2.11	0.50
51:M8:16:CYS:SG	51:M8:36:CYS:HB3	2.52	0.50
1:1G:125:U:H2'	1:1G:126:G:C8	2.46	0.50
1:1G:176:C:H2'	1:1G:177:C:C6	2.46	0.50
1:1G:411:A:C5	1:1G:413:G:H1'	2.47	0.50
1:1G:1430:C:H2'	1:1G:1431:C:C6	2.47	0.50
6:52:5:GLU:HG3	6:52:93:SER:OG	2.11	0.50
9:82:77:ILE:O	9:82:81:ILE:HG12	2.12	0.50
17:8A:29:HIS:CG	17:8A:30:PRO:HD2	2.46	0.50
26:14:817:C:H2'	26:14:818:G:O4'	2.11	0.50
26:14:2062:A:HO2'	26:14:2063:C:P	2.34	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2429:G:O6	36:35:61:ARG:NH2	2.44	0.50
26:14:2786:U:O2	29:29:62:PRO:HB3	2.12	0.50
28:19:39:LYS:O	28:19:40:THR:HG23	2.12	0.50
29:29:50:GLY:O	29:29:74:PRO:HG3	2.11	0.50
29:29:91:VAL:HB	29:29:95:ILE:HD11	1.94	0.50
32:59:97:ARG:NH2	32:59:99:VAL:HB	2.26	0.50
34:15:20:GLY:O	34:15:61:ARG:HG2	2.11	0.50
35:25:93:PRO:HD2	35:25:113:LYS:HD3	1.93	0.50
40:75:2:ASN:C	40:75:4:GLY:HA3	2.37	0.50
44:B5:41:ASN:HA	44:B5:44:GLU:HB2	1.93	0.50
48:F5:84:GLY:HA3	48:F5:86:SER:N	2.27	0.50
1:13:145:G:H1	1:13:177:C:N4	2.03	0.50
1:13:265:G:N2	1:13:267:C:H5'	2.26	0.50
1:13:272:C:H2'	1:13:273:A:C8	2.47	0.50
1:13:657:G:N2	1:13:749:C:O2	2.35	0.50
1:13:689:C:OP2	11:2I:55:LYS:NZ	2.40	0.50
4:3E:93:PHE:HA	4:3E:96:LEU:HD22	1.93	0.50
4:3E:108:LEU:HB3	4:3E:110:PHE:CD1	2.47	0.50
13:4I:36:LYS:HG2	13:4I:59:TYR:OH	2.11	0.50
24:3K:53:G:H2'	24:3K:54:U:H5'	1.93	0.50
26:1H:582:G:H1	26:1H:1258:C:N4	2.10	0.50
26:1H:667:U:O2	54:Q8:2:PRO:HD2	2.12	0.50
26:1H:1429:G:H2'	26:1H:1430:C:H6	1.77	0.50
26:1H:1496:A:H8	26:1H:1577:C:HO2'	1.55	0.50
26:1H:2125:G:H21	26:1H:2173:A:N6	2.09	0.50
26:1H:2259:G:C2	26:1H:2282:G:C6	3.00	0.50
26:1H:2547:U:H2'	26:1H:2548:G:C8	2.47	0.50
28:11:182:LEU:N	28:11:272:ALA:HB3	2.13	0.50
38:98:34:ILE:HG22	38:98:114:VAL:HB	1.92	0.50
40:B8:57:PHE:CE1	40:B8:79:HIS:HB2	2.47	0.50
43:E8:52:GLU:OE1	43:E8:52:GLU:HA	2.11	0.50
1:1G:57:G:C6	1:1G:58:C:C4	2.99	0.50
1:1G:108:G:H5"	1:1G:108:G:N3	2.27	0.50
1:1G:559:A:H4'	1:1G:560:U:H5"	1.94	0.50
1:1G:781:A:H5'	1:1G:782:A:OP2	2.11	0.50
1:1G:1305:G:H8	1:1G:1305:G:OP2	1.95	0.50
1:1G:1496:C:H2'	1:1G:1497:G:C8	2.47	0.50
19:AA:17:GLU:O	19:AA:21:GLU:HG2	2.12	0.50
26:14:548:A:C6	26:14:549:G:H1'	2.46	0.50
26:14:2320:A:H1'	26:14:2321:G:C6	2.47	0.50
26:14:2340:G:O2'	26:14:2341:G:H5'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2816:C:H2'	26:14:2817:G:H8	1.77	0.50
34:15:50:ASP:O	34:15:52:VAL:HG23	2.11	0.50
38:55:97:VAL:HA	38:55:113:LEU:O	2.12	0.50
39:65:87:PHE:CZ	39:65:102:ALA:HB2	2.47	0.50
41:85:100:VAL:HG12	41:85:101:ARG:HD3	1.94	0.50
52:J5:12:SER:O	52:J5:15:ARG:N	2.45	0.50
7:6E:28:ASN:HA	7:6E:31:MET:HE2	1.93	0.49
8:7E:116:LYS:HG3	8:7E:127:LEU:HD12	1.94	0.49
26:1H:125:G:H4'	26:1H:126:A:OP2	2.12	0.49
26:1H:207:A:H2'	26:1H:208:C:O4'	2.11	0.49
26:1H:1388:G:H2'	26:1H:1389:G:C8	2.46	0.49
26:1H:1519:G:H2'	26:1H:1520:U:O4'	2.12	0.49
26:1H:2543:G:H2'	26:1H:2544:G:C8	2.47	0.49
27:16:12:C:O2'	47:I8:74:ARG:HG2	2.12	0.49
32:51:133:VAL:HG21	32:51:145:ALA:HB2	1.94	0.49
32:51:153:LYS:HB2	32:51:155:SER:H	1.77	0.49
26:14:698:C:HO2'	26:14:734:A:N6	2.09	0.49
26:14:990:A:H5'	26:14:990:A:H8	1.77	0.49
26:14:1342:A:H2	26:14:1602:U:H3	1.59	0.49
26:14:1354:A:C8	26:14:1355:G:C8	2.99	0.49
26:14:1870:C:H2'	26:14:1871:A:C8	2.45	0.49
30:39:89:VAL:O	30:39:90:PHE:C	2.55	0.49
30:39:102:PRO:HB2	30:39:105:VAL:HG23	1.95	0.49
31:49:97:ASP:O	31:49:101:ILE:HG23	2.11	0.49
37:45:101:ARG:HG3	37:45:102:VAL:N	2.27	0.49
1:13:262:A:H2'	1:13:263:A:C8	2.47	0.49
1:13:1128:C:N4	1:13:1144:G:H1	2.11	0.49
1:13:1366:C:H2'	1:13:1367:C:C6	2.45	0.49
2:1E:220:ASP:O	2:1E:224:GLN:HB2	2.12	0.49
4:3E:64:LEU:HB2	4:3E:198:VAL:HG21	1.93	0.49
5:4E:67:VAL:HG22	5:4E:69:VAL:HG22	1.94	0.49
26:1H:107:C:H2'	26:1H:108:U:H6	1.77	0.49
26:1H:455:C:N3	26:1H:472:A:H2'	2.27	0.49
26:1H:551:G:H8	26:1H:551:G:O5'	1.95	0.49
26:1H:775:G:C5	26:1H:794:G:C8	3.00	0.49
26:1H:806:C:OP2	36:78:41:ARG:NH2	2.43	0.49
26:1H:990:A:H5'	26:1H:1157:G:OP1	2.11	0.49
26:1H:1614:A:OP2	58:1H:3676:HOH:O	2.20	0.49
26:1H:1743:G:C2	26:1H:1746:G:C8	3.00	0.49
26:1H:2172:U:H4'	26:1H:2173:A:OP1	2.11	0.49
30:31:116:ASP:OD2	36:78:1:MET:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:152:ARG:HD2	32:51:153:LYS:HG3	1.94	0.49
38:98:27:SER:HB3	38:98:34:ILE:HD11	1.95	0.49
42:D8:21:ARG:HG2	42:D8:91:TYR:CD1	2.47	0.49
1:1G:376:G:H1	1:1G:387:U:H3	1.60	0.49
1:1G:600:C:H2'	1:1G:601:C:C6	2.47	0.49
1:1G:801:U:H2'	1:1G:802:A:C8	2.47	0.49
2:12:19:HIS:CD2	2:12:204:ASN:HB3	2.47	0.49
2:12:116:GLU:OE2	2:12:156:LYS:NZ	2.45	0.49
4:32:31:CYS:H	4:32:35:ARG:CZ	2.25	0.49
17:8A:56:VAL:O	17:8A:77:VAL:HB	2.13	0.49
23:2L:12:G:H1'	26:14:1923:U:O2'	2.11	0.49
26:14:863:A:H2'	26:14:864:G:C8	2.47	0.49
26:14:1640:C:H2'	26:14:1641:A:C8	2.47	0.49
26:14:2512:C:H5"	26:14:2513:G:OP2	2.12	0.49
26:14:2629:A:H2'	26:14:2629:A:N3	2.27	0.49
28:19:68:LYS:HB3	28:19:70:TRP:CH2	2.47	0.49
30:39:49:ALA:O	30:39:92:PRO:HB2	2.12	0.49
31:49:63:ILE:HD12	31:49:141:PHE:CG	2.46	0.49
32:59:17:VAL:HG12	32:59:45:VAL:HB	1.94	0.49
38:55:77:ARG:O	38:55:80:PHE:N	2.38	0.49
1:13:221:C:H2'	1:13:222:U:C6	2.47	0.49
1:13:224:C:H2'	1:13:225:C:C6	2.48	0.49
1:13:401:C:O2'	1:13:621:A:N3	2.46	0.49
1:13:685:G:O2'	1:13:686:U:H5'	2.12	0.49
1:13:1149:C:H2'	1:13:1150:U:C6	2.45	0.49
7:6E:73:MET:HG3	7:6E:90:GLU:HA	1.94	0.49
9:8E:25:LYS:O	9:8E:61:ALA:N	2.46	0.49
9:8E:65:VAL:HG21	9:8E:73:GLN:HB3	1.94	0.49
13:4I:69:GLU:HG3	31:41:118:ARG:NH2	2.27	0.49
26:1H:183:C:N4	26:1H:213:A:H61	2.10	0.49
26:1H:644:A:H4'	26:1H:645:C:H5	1.76	0.49
26:1H:676:A:H2	26:1H:802:A:H61	1.61	0.49
26:1H:2067:G:O2'	26:1H:2069:G:H5"	2.11	0.49
26:1H:2262:U:H4'	26:1H:2328:A:H2	1.77	0.49
26:1H:2658:C:H5"	32:51:158:HIS:CD2	2.48	0.49
27:16:50:G:OP2	39:A8:62:LYS:HG3	2.12	0.49
27:16:116:G:H5'	39:A8:55:ALA:HB2	1.95	0.49
1:1G:123:C:H2'	1:1G:124:G:C8	2.48	0.49
1:1G:186(D):C:H2'	1:1G:186(E):C:H6	1.76	0.49
1:1G:707:C:OP1	11:2A:85:ARG:NH1	2.45	0.49
1:1G:865:A:O5'	1:1G:865:A:H8	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:973:G:O4'	10:1A:55:LYS:HG3	2.13	0.49
1:1G:1070:U:H2'	1:1G:1071:C:H6	1.77	0.49
1:1G:1211:U:H1'	1:1G:1213:A:C2	2.47	0.49
1:1G:1243:C:O2	1:1G:1295:G:N2	2.45	0.49
1:1G:1385:G:C2	1:1G:1386:G:C8	3.00	0.49
7:62:26:PHE:O	7:62:30:ILE:HG13	2.12	0.49
10:1A:40:LEU:HG	10:1A:41:PRO:HD2	1.94	0.49
26:14:2149:G:C2	26:14:2150:U:H1'	2.47	0.49
26:14:2711:A:H5"	58:14:3447:HOH:O	2.12	0.49
27:1J:7:G:H4'	39:65:29:PHE:CD2	2.47	0.49
37:45:43:THR:OG1	37:45:45:GLN:HG2	2.13	0.49
38:55:8:ARG:HH11	38:55:39:PRO:HB3	1.77	0.49
39:65:7:TYR:CE1	39:65:91:PRO:HG3	2.47	0.49
42:95:51:VAL:HG12	42:95:52:VAL:H	1.76	0.49
42:95:51:VAL:HG12	42:95:52:VAL:N	2.27	0.49
46:D5:45:ASP:OD1	46:D5:49:ARG:NE	2.46	0.49
47:E5:69:PHE:CE1	47:E5:79:VAL:HG22	2.48	0.49
1:13:46:G:H2'	1:13:366:C:C5	2.47	0.49
1:13:449:C:H5	16:7I:42:ARG:HH11	1.59	0.49
1:13:859:A:OP2	1:13:869:G:N2	2.44	0.49
1:13:1127:G:H2'	1:13:1128:C:O4'	2.12	0.49
3:2E:16:ARG:HH22	3:2E:183:ASP:HA	1.77	0.49
5:4E:11:ILE:HD11	5:4E:31:LEU:HD13	1.93	0.49
9:8E:21:PRO:HA	9:8E:59:PHE:HA	1.93	0.49
20:BI:57:ARG:HH12	20:BI:100:ILE:HD13	1.76	0.49
24:3K:37:A:C2	25:4K:13:A:H2	2.30	0.49
24:3K:50:G:H1'	24:3K:64:C:H41	1.78	0.49
26:1H:38:A:H2'	26:1H:39:C:C6	2.47	0.49
26:1H:164:U:H4'	26:1H:164:U:OP1	2.11	0.49
26:1H:414:C:H2'	26:1H:415:A:C8	2.47	0.49
26:1H:1287:A:C8	38:98:107:ASP:HB2	2.46	0.49
26:1H:1580:A:H5'	26:1H:1581:G:OP2	2.13	0.49
31:41:145:THR:C	31:41:147:ASP:H	2.18	0.49
33:61:6:LEU:HD13	33:61:36:ALA:HA	1.94	0.49
34:58:34:LEU:HD21	34:58:120:LEU:HB2	1.93	0.49
37:88:17:LEU:HD21	37:88:41:TRP:HE1	1.76	0.49
1:1G:49:U:C2	1:1G:361:G:N2	2.80	0.49
1:1G:56:U:H2'	1:1G:57:G:C8	2.47	0.49
1:1G:157:G:H2'	1:1G:158:G:C8	2.48	0.49
1:1G:157:G:H2'	1:1G:158:G:H8	1.78	0.49
1:1G:937:A:H1'	1:1G:1379:G:N2	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1328:C:O2'	13:4A:29:ARG:NH2	2.42	0.49
21:1B:2:GLY:C	21:1B:4:GLY:H	2.21	0.49
26:14:273(F):C:H3'	26:14:274:G:C5'	2.42	0.49
26:14:1153:C:OP1	41:85:93:LYS:NZ	2.46	0.49
26:14:1797:C:O2'	28:19:259:THR:OG1	2.15	0.49
26:14:1857:G:C6	26:14:1858:G:C6	2.99	0.49
26:14:2863:C:OP1	40:75:93:ARG:NH2	2.45	0.49
26:14:2873:A:H8	38:55:6:SER:N	2.08	0.49
31:49:18:GLU:CD	31:49:21:ARG:HH21	2.20	0.49
37:45:26:TYR:HD1	37:45:27:VAL:H	1.58	0.49
42:95:62:LEU:H	42:95:62:LEU:HD13	1.76	0.49
44:B5:80:ILE:O	44:B5:80:ILE:HG13	2.12	0.49
1:13:1306:A:N6	1:13:1331:G:H1'	2.28	0.49
2:1E:6:THR:OG1	2:1E:7:VAL:N	2.45	0.49
4:3E:134:ASP:HB3	4:3E:135:LEU:HD13	1.95	0.49
22:1K:21:A:C6	22:1K:46:G:C6	3.00	0.49
23:2K:17:C:OP2	23:2K:18:U:O2'	2.23	0.49
26:1H:973:A:OP2	58:1H:3549:HOH:O	2.18	0.49
26:1H:1535:U:H3'	26:1H:1537:C:C4	2.46	0.49
26:1H:1839:G:H5"	26:1H:1840:G:OP2	2.13	0.49
26:1H:2388:A:N7	26:1H:2389:G:C6	2.80	0.49
28:11:118:VAL:HG11	28:11:124:PRO:HD2	1.94	0.49
32:51:43:VAL:HB	32:51:52:VAL:HG22	1.94	0.49
34:58:95:PRO:O	34:58:96:GLU:O	2.30	0.49
36:78:122:PRO:HA	36:78:142:GLY:HA3	1.93	0.49
1:1G:191(E):G:H2'	1:1G:191(F):U:H6	1.75	0.49
1:1G:1142:G:H3'	1:1G:1143:G:H8	1.76	0.49
1:1G:1269:A:C2	1:1G:1313:U:H1'	2.47	0.49
7:62:122:HIS:O	7:62:126:ASP:N	2.41	0.49
26:14:443:A:H1'	26:14:1201:C:O4'	2.12	0.49
26:14:969:U:OP1	50:H5:17:LYS:N	2.45	0.49
26:14:1186:G:H2'	26:14:1187:G:O4'	2.12	0.49
30:39:41:LEU:O	30:39:44:ARG:HG2	2.12	0.49
32:59:10:PRO:C	32:59:12:PRO:HD3	2.37	0.49
33:69:79:ILE:O	33:69:143:SER:HA	2.13	0.49
1:13:143:A:OP1	1:13:144:G:H5'	2.11	0.49
1:13:455:C:H42	1:13:477:G:N2	2.09	0.49
1:13:1434:A:H2'	1:13:1435:G:O4'	2.12	0.49
7:6E:15:ASP:O	7:6E:19:GLY:HA2	2.11	0.49
8:7E:97:VAL:HG21	8:7E:128:GLY:HA2	1.94	0.49
13:4I:23:TYR:HD2	13:4I:67:GLU:HA	1.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:250:G:H2'	26:1H:251:A:C8	2.47	0.49
26:1H:307:G:H21	26:1H:330:A:H62	1.59	0.49
26:1H:725:G:C6	26:1H:726:G:N1	2.80	0.49
26:1H:973:A:O4'	26:1H:1188:U:C6	2.65	0.49
26:1H:2506:U:O2	26:1H:2506:U:H2'	2.12	0.49
26:1H:2646:C:OP2	26:1H:2732:G:O2'	2.23	0.49
27:16:27:C:O3'	39:A8:36:TYR:OH	2.30	0.49
30:31:101:LEU:HG	30:31:102:PRO:HD2	1.95	0.49
30:31:184:TYR:CE1	36:78:3:LEU:HD11	2.47	0.49
32:51:104:GLU:HB2	32:51:114:VAL:HG22	1.95	0.49
46:H8:110:GLY:C	46:H8:112:ARG:N	2.65	0.49
48:J8:77:ALA:HA	48:J8:79:GLY:N	2.28	0.49
1:1G:224:C:H2'	1:1G:225:C:C6	2.48	0.49
1:1G:532:A:H61	3:22:193:TYR:HB2	1.77	0.49
1:1G:998(A):C:H2'	1:1G:999:U:C6	2.48	0.49
1:1G:1157:A:N7	1:1G:1181:G:H1'	2.26	0.49
1:1G:1240:U:C2	7:62:32:ARG:HG3	2.47	0.49
3:22:87:LEU:HB2	3:22:88:ARG:HH21	1.76	0.49
4:32:12:CYS:SG	4:32:19:LEU:N	2.71	0.49
4:32:24:GLU:OE2	4:32:24:GLU:N	2.43	0.49
13:4A:66:LEU:HD12	13:4A:67:GLU:H	1.77	0.49
14:5A:29:ARG:NE	14:5A:29:ARG:H	2.11	0.49
26:14:586:A:N1	26:14:809:G:O2'	2.33	0.49
26:14:999:U:H5"	26:14:1154:G:O6	2.12	0.49
26:14:1439:A:C2	26:14:1553:A:C4	3.01	0.49
26:14:1443:G:N7	58:14:3534:HOH:O	2.34	0.49
26:14:1827:C:C2'	26:14:1828:G:H5'	2.43	0.49
26:14:1967:C:H2'	26:14:1968:G:O4'	2.12	0.49
26:14:2134:A:H2	26:14:2135:A:N7	2.11	0.49
26:14:2232:U:P	48:F5:40:ARG:HH12	2.35	0.49
26:14:2520:C:H41	26:14:2542:A:H62	1.59	0.49
27:1J:31:C:H4'	31:49:29:TRP:CH2	2.47	0.49
33:69:133:HIS:ND1	33:69:134:PRO:HD3	2.28	0.49
36:35:120:ALA:HB1	36:35:138:LEU:HD22	1.95	0.49
39:65:42:ASP:C	39:65:44:LYS:H	2.21	0.49
43:A5:27:LYS:HB3	43:A5:31:GLU:CD	2.38	0.49
44:B5:63:LYS:H	44:B5:63:LYS:CE	2.25	0.49
45:C5:13:VAL:HB	45:C5:72:VAL:HB	1.94	0.49
46:D5:28:MET:HE1	46:D5:61:LEU:HD11	1.95	0.49
46:D5:126:VAL:HG12	46:D5:163:LEU:HA	1.95	0.49
48:F5:16:ASN:HA	48:F5:39:LYS:HA	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:M5:8:LYS:HB3	54:M5:12:LYS:HE3	1.94	0.49
1:13:186:C:H2'	1:13:186(A):C:H6	1.78	0.49
1:13:468:A:H3'	1:13:474:G:C8	2.48	0.49
1:13:580:U:H2'	1:13:581:G:O4'	2.13	0.49
1:13:772:U:C4	1:13:773:G:N7	2.81	0.49
1:13:815:A:OP2	1:13:816:A:H5"	2.13	0.49
1:13:1239:A:H62	1:13:1299:A:H62	1.59	0.49
2:1E:12:GLU:HA	2:1E:16:HIS:HB2	1.93	0.49
2:1E:19:HIS:NE2	2:1E:206:ASP:HB2	2.28	0.49
2:1E:28:PHE:CE2	2:1E:190:THR:HA	2.47	0.49
3:2E:20:SER:HB2	14:5I:54:PRO:HG3	1.94	0.49
3:2E:134:ILE:HD11	3:2E:153:VAL:HG23	1.95	0.49
5:4E:68:GLU:O	5:4E:70:PRO:HD3	2.12	0.49
15:6I:39:LEU:HD13	15:6I:56:LEU:HB2	1.95	0.49
16:7I:20:VAL:HG21	16:7I:32:TYR:CD2	2.47	0.49
26:1H:363:G:N2	26:1H:363(A):A:C4	2.81	0.49
26:1H:475:U:C4	26:1H:481:G:O6	2.66	0.49
26:1H:1465:G:O2'	26:1H:1545(A):A:N1	2.44	0.49
26:1H:1526:G:H2'	26:1H:1527:G:O4'	2.13	0.49
26:1H:1606:G:H5"	26:1H:1607:C:OP1	2.12	0.49
26:1H:2115:G:C8	26:1H:2116:G:H8	2.31	0.49
26:1H:2205:C:H2'	26:1H:2206:C:C6	2.48	0.49
29:21:174:ASP:HB3	29:21:183:LEU:HD13	1.94	0.49
31:41:47:LYS:HE3	31:41:81:LYS:HG3	1.94	0.49
36:78:39:LYS:HD2	36:78:45:LEU:HD21	1.94	0.49
38:98:55:ALA:HB2	38:98:79:LEU:HD13	1.94	0.49
41:C8:8:VAL:HG23	41:C8:11:ARG:NH2	2.28	0.49
41:C8:26:GLY:O	41:C8:30:LYS:HE2	2.12	0.49
54:Q8:28:GLY:HA3	54:Q8:44:LYS:HD3	1.95	0.49
54:Q8:29:LYS:HG3	54:Q8:44:LYS:HG2	1.95	0.49
1:1G:1504:G:H4'	1:1G:1505:G:O4'	2.13	0.49
6:52:100:ASN:HB2	18:9A:27:GLY:C	2.38	0.49
7:62:50:ILE:O	7:62:54:THR:HG23	2.12	0.49
26:14:684:G:O2'	26:14:788:A:N7	2.42	0.49
26:14:833:U:H1'	36:35:55:ARG:NH1	2.27	0.49
26:14:1274:A:N3	26:14:1297:C:H1'	2.28	0.49
26:14:1291:C:H2'	26:14:1292:U:C6	2.48	0.49
26:14:1961:C:O2'	26:14:1962:C:H5'	2.12	0.49
28:19:228:PRO:O	58:19:302:HOH:O	2.20	0.49
30:39:63:LYS:NZ	30:39:75:HIS:O	2.34	0.49
30:39:125:LEU:HD22	30:39:199:TRP:CD1	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:35:79:ARG:HG2	36:35:110:TYR:CB	2.42	0.49
53:L5:5:TRP:NE1	53:L5:7:PRO:HG3	2.27	0.49
53:L5:18:PHE:CE1	53:L5:22:MET:HG3	2.47	0.49
1:13:148:G:H2'	1:13:149:A:H8	1.78	0.49
1:13:288:A:H2'	1:13:289:G:H4'	1.95	0.49
1:13:321:A:N7	1:13:328:C:O2'	2.39	0.49
1:13:1081:G:H2'	1:13:1082:G:C8	2.47	0.49
1:13:1125:U:H2'	1:13:1125:U:OP2	2.13	0.49
1:13:1271:G:C2'	1:13:1272:G:H5"	2.41	0.49
15:6I:17:ARG:HH11	15:6I:77:ARG:HH22	1.61	0.49
17:8I:68:ARG:H	17:8I:70:ARG:NH1	2.11	0.49
20:BI:50:GLU:HB2	20:BI:99:LEU:HB3	1.95	0.49
26:1H:873:G:C2	26:1H:905:U:O2	2.65	0.49
26:1H:1019:U:HO2'	26:1H:1021:A:H2	1.56	0.49
26:1H:1434:A:H61	26:1H:1558:A:H62	1.61	0.49
26:1H:1826:G:H2'	26:1H:1827:C:O4'	2.12	0.49
26:1H:1993:U:H4'	29:21:128:SER:HB3	1.95	0.49
28:11:244:ARG:HB2	28:11:245:PRO:HD2	1.95	0.49
31:41:122:PRO:HB3	31:41:180:PHE:CD1	2.45	0.49
40:B8:7:ILE:O	40:B8:11:GLU:HB2	2.12	0.49
40:B8:29:ARG:HG3	40:B8:46:GLU:HB2	1.95	0.49
43:E8:35:ILE:HG23	52:N8:28:PRO:HD2	1.94	0.49
43:E8:62:HIS:HB2	43:E8:64:MET:HG3	1.94	0.49
1:1G:224:C:H2'	1:1G:225:C:H6	1.76	0.49
1:1G:271:C:H2'	1:1G:272:C:H6	1.78	0.49
1:1G:652:U:H1'	1:1G:653:A:H2	1.77	0.49
1:1G:690:G:H2'	1:1G:691:G:O4'	2.13	0.49
1:1G:922:G:H4'	5:42:20:GLN:HA	1.95	0.49
1:1G:1240:U:N3	7:62:32:ARG:HG3	2.28	0.49
2:12:19:HIS:CE1	2:12:206:ASP:HB2	2.48	0.49
12:3A:55:VAL:HG12	12:3A:69:TYR:HA	1.95	0.49
15:6A:82:ILE:O	15:6A:86:GLY:N	2.43	0.49
20:BA:60:GLU:OE1	20:BA:85:MET:HE1	2.12	0.49
26:14:397:G:O2'	26:14:2231:C:H1'	2.13	0.49
26:14:587:C:OP2	36:35:21:ARG:NH2	2.46	0.49
26:14:987:G:O2'	26:14:1000:A:N3	2.41	0.49
26:14:1033:U:H3'	26:14:1033:U:H6	1.78	0.49
26:14:1434:A:H61	26:14:1558:A:H62	1.60	0.49
26:14:1848:A:H2'	26:14:1849:G:O4'	2.12	0.49
27:1J:116:G:C5'	39:65:55:ALA:HB2	2.41	0.49
29:29:112:GLY:O	29:29:159:HIS:HA	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:56:ALA:HB2	31:49:153:ARG:NE	2.27	0.49
33:69:102:SER:HA	33:69:107:VAL:O	2.12	0.49
36:35:57:THR:O	36:35:58:THR:C	2.56	0.49
1:13:131:C:O2	1:13:131:C:H2'	2.13	0.49
1:13:585:G:H8	1:13:585:G:O5'	1.96	0.49
2:1E:209:ARG:HD2	2:1E:239:VAL:HG22	1.95	0.49
2:1E:209:ARG:HH11	2:1E:239:VAL:HG13	1.76	0.49
5:4E:33:VAL:HG11	5:4E:108:ALA:O	2.13	0.49
5:4E:82:VAL:HG21	5:4E:138:ALA:HA	1.95	0.49
8:7E:21:LYS:O	8:7E:63:LEU:HD23	2.12	0.49
17:8I:67:LYS:HA	17:8I:70:ARG:HH12	1.78	0.49
19:AI:41:VAL:HG23	19:AI:42:PRO:HA	1.95	0.49
26:1H:524:U:H2'	26:1H:525:U:C6	2.48	0.49
26:1H:573:G:O2'	26:1H:574:C:H3'	2.13	0.49
26:1H:652:C:N4	26:1H:653:A:N1	2.61	0.49
26:1H:1262:A:H2	52:N8:10:LYS:HD2	1.78	0.49
26:1H:1441:G:N2	26:1H:1442:G:C4	2.81	0.49
26:1H:1453:A:O2'	26:1H:1454:U:H2'	2.12	0.49
26:1H:1534:G:H2'	26:1H:1535:U:H6	1.78	0.49
26:1H:1838:C:C2	26:1H:1898:U:C4	3.00	0.49
26:1H:2542:A:H4'	26:1H:2543:G:C8	2.48	0.49
43:E8:70:TYR:HD1	43:E8:70:TYR:H	1.61	0.49
1:1G:196:A:OP1	20:BA:68:LYS:NZ	2.42	0.49
1:1G:693:G:H2'	1:1G:694:A:C8	2.48	0.49
1:1G:1287:A:N3	1:1G:1353:G:O2'	2.45	0.49
2:12:80:ILE:HG21	2:12:211:ILE:HG21	1.94	0.49
3:22:54:ARG:O	3:22:68:VAL:HA	2.13	0.49
3:22:156:ARG:HB2	3:22:193:TYR:HE2	1.78	0.49
4:32:127:THR:HG23	4:32:147:ALA:HB3	1.94	0.49
4:32:152:SER:HA	4:32:155:LEU:HD12	1.94	0.49
7:62:15:ASP:OD1	7:62:16:LEU:N	2.46	0.49
26:14:26:G:H1'	26:14:515:A:H61	1.78	0.49
26:14:1638:C:H4'	26:14:2710:C:O2	2.13	0.49
26:14:1680:U:H2'	26:14:1681:G:O4'	2.13	0.49
26:14:2439:A:H5"	26:14:2439:A:H8	1.77	0.49
26:14:2695:C:H2'	26:14:2696:U:C6	2.48	0.49
26:14:2869:G:H2'	26:14:2870:C:O4'	2.13	0.49
27:1J:56:G:H5'	31:49:27:ASN:ND2	2.27	0.49
34:15:128:HIS:H	34:15:128:HIS:CD2	2.30	0.49
36:35:23:PRO:HB3	42:95:80:GLN:HB3	1.94	0.49
36:35:110:TYR:N	36:35:110:TYR:HD1	2.11	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:55:10:LEU:O	38:55:12:ARG:HG3	2.13	0.49
41:85:66:ASN:HB2	41:85:76:TYR:HB2	1.94	0.49
41:85:92:ARG:HG3	41:85:94:ASN:HB3	1.95	0.49
46:D5:59:LEU:O	46:D5:61:LEU:N	2.43	0.49
47:E5:40:GLN:HG3	47:E5:42:GLY:O	2.13	0.49
48:F5:4:VAL:HG11	48:F5:11:ARG:NH1	2.28	0.49
1:13:191:G:O2'	20:BI:102:GLY:O	2.27	0.49
1:13:338:A:H2	1:13:351:G:H22	1.61	0.49
1:13:588:G:OP2	58:13:1838:HOH:O	2.19	0.49
1:13:830:G:H2'	1:13:831:U:O4'	2.13	0.49
3:2E:47:LEU:HB3	3:2E:52:LEU:HD13	1.95	0.49
3:2E:73:PRO:HA	3:2E:76:VAL:HG22	1.95	0.49
7:6E:5:ARG:HG3	7:6E:7:ALA:H	1.77	0.49
9:8E:91:ASP:N	9:8E:91:ASP:OD1	2.45	0.49
19:AI:41:VAL:HA	19:AI:44:MET:HG3	1.95	0.49
22:1K:65:C:H2'	22:1K:66:U:H5"	1.94	0.49
26:1H:295:G:C5	26:1H:344:G:C2	3.00	0.49
26:1H:705:A:C8	26:1H:727:A:C2	3.00	0.49
26:1H:782:A:H5'	26:1H:783:A:C2	2.48	0.49
26:1H:1690:A:C8	26:1H:1691:C:C6	3.00	0.49
26:1H:1843:C:H2'	26:1H:1844:C:C6	2.48	0.49
28:11:63:ARG:HG2	28:11:92:ILE:HD13	1.95	0.49
33:61:112:LYS:HB2	33:61:113:ARG:HG3	1.95	0.49
37:88:2:LEU:HB3	37:88:69:PHE:CE1	2.48	0.49
38:98:32:GLY:HA2	38:98:116:LEU:CD1	2.43	0.49
42:D8:37:VAL:HG23	42:D8:51:VAL:HG21	1.94	0.49
1:1G:376:G:N2	1:1G:387:U:O2	2.34	0.49
1:1G:1306:A:C2	1:1G:1307:U:H1'	2.48	0.49
3:22:40:ARG:HG2	3:22:55:VAL:HG11	1.95	0.49
3:22:181:ASN:HB2	3:22:206:GLU:N	2.21	0.49
12:3A:117:ARG:NH2	12:3A:124:LYS:HB2	2.28	0.49
13:4A:96:LEU:CD2	13:4A:97:PRO:HD2	2.43	0.49
26:14:161:U:H5"	26:14:171:G:N2	2.27	0.49
26:14:631:A:O2'	36:35:67:MET:HB3	2.12	0.49
26:14:807:U:H2'	26:14:808:G:H8	1.77	0.49
26:14:1155:A:O2'	26:14:1156:A:H2'	2.12	0.49
26:14:1344:G:H4'	26:14:1384:A:N7	2.28	0.49
26:14:1685:C:O2	26:14:1704:G:N2	2.46	0.49
26:14:2053:G:H1	26:14:2616:C:H42	1.60	0.49
26:14:2578:G:N7	29:29:140:SER:HB2	2.28	0.49
27:1J:11:C:O5'	27:1J:12:C:H5	1.96	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:136:ARG:HD3	31:49:137:GLU:N	2.24	0.49
38:55:33:ARG:HD2	38:55:113:LEU:HG	1.94	0.49
1:13:295:C:H2'	1:13:296:U:O4'	2.13	0.48
3:2E:11:ARG:HB3	3:2E:14:ILE:HG23	1.95	0.48
10:1I:63:PHE:CE1	14:5I:58:LYS:HG2	2.47	0.48
11:2I:122:LYS:HE2	11:2I:122:LYS:HB3	1.57	0.48
12:3I:103:GLY:N	12:3I:107:ALA:O	2.46	0.48
16:7I:13:HIS:C	16:7I:15:PRO:HD3	2.37	0.48
19:AI:80:TYR:HD1	19:AI:82:GLY:N	2.11	0.48
26:1H:140:A:C8	26:1H:1408:C:O2'	2.66	0.48
26:1H:581:C:OP1	41:C8:33:ARG:HG3	2.13	0.48
26:1H:785:G:H2'	26:1H:786:C:H6	1.78	0.48
26:1H:822:U:O2	26:1H:823:G:C8	2.66	0.48
26:1H:1449:A:H5"	26:1H:1449:A:H8	1.77	0.48
26:1H:1764:G:H2'	26:1H:1765:C:H6	1.77	0.48
26:1H:2065:C:H2'	26:1H:2066:C:C6	2.48	0.48
26:1H:2086:U:H2'	26:1H:2087:G:C8	2.47	0.48
26:1H:2228:G:OP2	28:11:263:ARG:NH2	2.44	0.48
26:1H:2383:G:O2'	26:1H:2384:G:H5'	2.13	0.48
26:1H:2883:A:H5'	26:1H:2884:U:H5'	1.94	0.48
26:1H:2886:G:N2	26:1H:2887:U:C2	2.81	0.48
34:58:12:ARG:HG2	34:58:13:TRP:N	2.27	0.48
34:58:75:TYR:HA	34:58:81:GLY:O	2.13	0.48
40:B8:56:GLY:O	40:B8:59:THR:HG22	2.13	0.48
46:H8:19:ARG:NH1	46:H8:84:GLU:O	2.46	0.48
1:1G:255:G:H2'	1:1G:256:U:C6	2.48	0.48
1:1G:376:G:H5"	16:7A:5:ARG:HB2	1.94	0.48
1:1G:958:A:H5"	1:1G:959:A:OP2	2.12	0.48
1:1G:1245:A:H2'	1:1G:1246:C:O4'	2.12	0.48
1:1G:1248:A:N3	9:82:70:LYS:NZ	2.45	0.48
2:12:84:GLU:OE2	2:12:212:GLN:HG3	2.13	0.48
7:62:22:LEU:HD23	7:62:63:LYS:HE2	1.95	0.48
10:1A:12:ASP:CG	10:1A:14:LYS:H	2.21	0.48
20:BA:41:ILE:HG12	20:BA:87:LYS:HG2	1.96	0.48
20:BA:50:GLU:HA	20:BA:100:ILE:HG21	1.94	0.48
26:14:374:A:C2	26:14:401:A:C4	3.01	0.48
26:14:455:C:N3	26:14:473:G:H5'	2.28	0.48
26:14:2290:G:C2	26:14:2343:C:O2	2.66	0.48
26:14:2346:A:H5"	26:14:2383:G:H1'	1.95	0.48
26:14:2593:U:H2'	26:14:2594:C:C6	2.48	0.48
26:14:2712:U:H1'	26:14:2712(A):A:C8	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:264:LYS:HG2	28:19:265:PRO:HD2	1.94	0.48
33:69:93:THR:HG23	33:69:119:PRO:HG3	1.94	0.48
35:25:15:GLY:O	35:25:47:ILE:HG12	2.13	0.48
36:35:28:GLY:O	36:35:31:ALA:N	2.39	0.48
1:13:95:G:H3'	1:13:96:G:C8	2.47	0.48
1:13:909:A:H2'	1:13:910:C:O4'	2.13	0.48
1:13:1011:G:H2'	1:13:1012:U:O4'	2.13	0.48
1:13:1349:A:OP2	9:8E:118:LYS:NZ	2.46	0.48
1:13:1404:C:H6	1:13:1404:C:O5'	1.97	0.48
1:13:1409:C:H2'	1:13:1410:G:H8	1.77	0.48
2:1E:97:TRP:CZ3	2:1E:172:ILE:HB	2.48	0.48
19:AI:27:GLU:N	19:AI:27:GLU:OE1	2.45	0.48
24:3K:49:G:H1'	24:3K:66:U:C2	2.48	0.48
26:1H:139:G:N3	26:1H:141:A:N1	2.61	0.48
26:1H:270(G):C:H2'	26:1H:270(H):C:O4'	2.13	0.48
26:1H:879:G:N3	26:1H:879:G:H2'	2.29	0.48
26:1H:931:G:C5	26:1H:933:A:N7	2.82	0.48
26:1H:1769:G:O2'	26:1H:1958:C:OP1	2.25	0.48
26:1H:1820:U:H4'	26:1H:1821:A:OP2	2.13	0.48
26:1H:2830:G:H5"	26:1H:2830:G:H8	1.78	0.48
36:78:94:GLU:HG3	36:78:124:LYS:HD3	1.95	0.48
48:J8:84:GLY:C	48:J8:85:LEU:HD22	2.39	0.48
1:1G:868:C:H2'	1:1G:869:G:O4'	2.13	0.48
1:1G:1043:C:H2'	1:1G:1044:A:H8	1.78	0.48
2:12:22:LYS:HB3	2:12:40:HIS:HE1	1.78	0.48
3:22:113:ALA:HA	3:22:202:ILE:HD11	1.95	0.48
5:42:41:VAL:O	5:42:67:VAL:N	2.47	0.48
7:62:12:LEU:HD21	7:62:25:ALA:HB2	1.95	0.48
10:1A:82:ILE:O	10:1A:86:MET:HB2	2.13	0.48
14:5A:24:CYS:SG	14:5A:25:VAL:N	2.86	0.48
16:7A:29:ASP:OD1	16:7A:29:ASP:N	2.44	0.48
26:14:918:A:O2'	27:1J:96:G:N2	2.46	0.48
26:14:987:G:OP2	58:14:3482:HOH:O	2.20	0.48
26:14:1139:G:O5'	34:15:70:LYS:NZ	2.44	0.48
26:14:1794:U:H2'	26:14:1795:C:C6	2.49	0.48
26:14:2052:G:C8	29:29:141:ILE:HD11	2.48	0.48
26:14:2062:A:O2'	26:14:2063:C:P	2.70	0.48
28:19:30:GLU:HB2	28:19:35:LYS:NZ	2.28	0.48
30:39:78:ILE:HA	30:39:83:PHE:CD2	2.49	0.48
41:85:92:ARG:NH2	42:95:10:LYS:HA	2.28	0.48
45:C5:36:ALA:O	45:C5:37:VAL:HG13	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:284:G:H2'	1:13:285:G:H8	1.77	0.48
1:13:1424:C:N4	1:13:1476:G:H1	2.10	0.48
1:13:1455:G:H5'	20:BI:32:ALA:HB2	1.95	0.48
12:3I:53:ARG:HB3	12:3I:69:TYR:HE1	1.78	0.48
26:1H:97:C:H5"	49:K8:2:LYS:HB2	1.95	0.48
26:1H:185:U:C2	26:1H:186:G:C8	3.01	0.48
26:1H:529:A:H8	26:1H:530:G:C6	2.31	0.48
26:1H:844:C:H2'	26:1H:845:G:O4'	2.12	0.48
27:16:1(M):A:H8	27:16:0:A:C8	2.31	0.48
31:41:53:LEU:HD12	31:41:53:LEU:HA	1.63	0.48
43:E8:23:LEU:HD22	52:N8:25:LEU:HD13	1.96	0.48
46:H8:98:MET:O	46:H8:125:LEU:HA	2.13	0.48
47:I8:72:ARG:HH11	47:I8:75:LEU:HD12	1.78	0.48
49:K8:38:GLN:O	49:K8:44:LEU:HB2	2.13	0.48
1:1G:286:G:H2'	1:1G:287:U:C6	2.49	0.48
1:1G:428:G:C8	1:1G:430:A:C5	3.01	0.48
1:1G:502:G:H2'	1:1G:503:C:O4'	2.13	0.48
1:1G:652:U:O2'	1:1G:653:A:N3	2.43	0.48
1:1G:719:C:O2'	18:9A:49:LYS:HB3	2.12	0.48
1:1G:1128:C:H1'	1:1G:1147:C:H42	1.78	0.48
5:42:81:GLU:HA	5:42:89:ILE:O	2.12	0.48
13:4A:82:MET:N	13:4A:82:MET:SD	2.86	0.48
17:8A:45:HIS:CD2	17:8A:47:PRO:HD3	2.47	0.48
26:14:38:A:H2'	26:14:39:C:C6	2.47	0.48
26:14:299:A:N3	26:14:319:C:O2'	2.40	0.48
26:14:522:G:H2'	26:14:523:C:H6	1.77	0.48
26:14:900:A:H3'	26:14:901:A:C8	2.46	0.48
26:14:971:C:H2'	26:14:972:G:O4'	2.14	0.48
26:14:1338:G:N3	26:14:1393:A:H2	2.10	0.48
26:14:1366:A:H2'	26:14:1367:A:O4'	2.13	0.48
26:14:2527:C:H2'	26:14:2528:U:O4'	2.12	0.48
31:49:124:SER:HB2	31:49:131:TYR:CE2	2.47	0.48
42:95:79:VAL:O	42:95:81:TYR:N	2.46	0.48
46:D5:44:PHE:HE2	46:D5:88:PHE:HZ	1.61	0.48
46:D5:48:PHE:HA	46:D5:51:ALA:HB3	1.96	0.48
47:E5:21:LEU:HD21	47:E5:41:ARG:NH2	2.29	0.48
52:J5:16:ARG:NH1	52:J5:16:ARG:HG2	2.29	0.48
1:13:292:G:C2	1:13:309:G:C2	3.02	0.48
1:13:1017:G:H2'	1:13:1018:C:O4'	2.13	0.48
2:1E:94:ASN:OD1	2:1E:95:GLN:N	2.46	0.48
2:1E:165:VAL:HG23	2:1E:166:ASP:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6E:47:CYS:HA	7:6E:50:ILE:HB	1.95	0.48
26:1H:1103:A:H3'	26:1H:1104:C:H6	1.76	0.48
26:1H:1107:G:H2'	26:1H:1108:U:C6	2.45	0.48
26:1H:1533:C:C6	26:1H:1534:G:H5"	2.48	0.48
26:1H:1972:A:H2'	26:1H:1973:G:H8	1.78	0.48
26:1H:2306:C:H3'	26:1H:2307:G:H5'	1.94	0.48
27:16:9:G:C6	27:16:10:C:C4	3.01	0.48
30:31:39:TRP:CZ3	30:31:106:ARG:HD2	2.49	0.48
33:61:10:GLU:O	33:61:11:ASN:HB2	2.13	0.48
36:78:71:VAL:CG1	36:78:72:PRO:HD3	2.43	0.48
39:A8:14:VAL:HG11	39:A8:89:ARG:HH21	1.78	0.48
44:F8:5:TYR:HD1	49:K8:33:MET:HE2	1.78	0.48
1:1G:161:A:C6	1:1G:162:A:C6	3.02	0.48
1:1G:1019:C:H2'	1:1G:1020:U:C5	2.49	0.48
1:1G:1056:U:O5'	3:22:163:ALA:HB2	2.14	0.48
2:12:61:LEU:HD13	2:12:90:MET:SD	2.53	0.48
2:12:127:ILE:HG12	2:12:130:ARG:NH2	2.29	0.48
3:22:91:LEU:HD21	3:22:101:LEU:HD11	1.95	0.48
5:42:145:LYS:O	5:42:149:GLU:HB2	2.13	0.48
8:72:83:ILE:HB	8:72:137:VAL:HG13	1.96	0.48
9:82:70:LYS:O	9:82:74:ILE:HG13	2.14	0.48
16:7A:21:VAL:HG21	16:7A:59:TRP:CD2	2.49	0.48
26:14:226:G:H21	26:14:228:A:H62	1.62	0.48
26:14:674:G:H1'	30:39:74:ARG:HE	1.79	0.48
26:14:868:U:C2	26:14:869:G:C8	3.01	0.48
26:14:948:G:N2	26:14:970:C:O2	2.46	0.48
26:14:2109:U:H3	26:14:2180:U:H3	1.62	0.48
26:14:2142:C:H2'	26:14:2143:C:C6	2.48	0.48
26:14:2150:U:H2'	26:14:2151:G:H8	1.77	0.48
26:14:2441:C:OP2	26:14:2586:C:O2'	2.29	0.48
26:14:2557:G:H2'	26:14:2558:C:H6	1.76	0.48
26:14:2564:A:H5"	26:14:2565:A:OP2	2.13	0.48
26:14:2577:A:O4'	52:J5:3:LYS:HB2	2.13	0.48
31:49:166:ASP:O	31:49:170:ARG:N	2.46	0.48
34:15:62:VAL:HG22	34:15:66:LYS:HE3	1.96	0.48
46:D5:105:VAL:HG13	46:D5:106:GLY:H	1.78	0.48
49:G5:37:PHE:C	49:G5:39:ALA:H	2.20	0.48
1:13:666:G:OP2	1:13:725:G:N2	2.34	0.48
1:13:1074:G:O2'	1:13:1101:A:N1	2.45	0.48
7:6E:80:VAL:HG22	7:6E:85:TYR:CE1	2.47	0.48
8:7E:114:THR:HG22	8:7E:131:GLY:HA3	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1I:53:PRO:O	14:5I:41:ARG:NH2	2.46	0.48
11:2I:19:ALA:HB3	11:2I:82:VAL:HG22	1.95	0.48
12:3I:47:LYS:HE3	25:4K:21:C:OP1	2.14	0.48
15:6I:26:GLU:OE2	15:6I:77:ARG:HG2	2.13	0.48
16:7I:57:ARG:HH21	16:7I:79:VAL:HA	1.77	0.48
26:1H:270(K):C:C2'	26:1H:270(N):G:H22	2.27	0.48
26:1H:318:C:H2'	26:1H:319:C:H6	1.79	0.48
26:1H:972:G:H3'	26:1H:973:A:H2'	1.95	0.48
26:1H:1420:U:HO2'	26:1H:1421:G:P	2.36	0.48
26:1H:1471:A:C2	26:1H:1472:A:C4	3.02	0.48
26:1H:1528:A:H2	26:1H:1542:G:C2	2.31	0.48
26:1H:2391:G:O6	26:1H:2425:A:H8	1.95	0.48
30:31:188:ARG:HG3	30:31:188:ARG:H	1.44	0.48
37:88:59:ARG:HD3	37:88:113:GLN:HE22	1.79	0.48
38:98:78:LYS:HE2	38:98:83:ILE:HD11	1.95	0.48
46:H8:2:GLU:OE2	46:H8:4:ARG:NH2	2.34	0.48
48:J8:18:ILE:HG23	48:J8:34:THR:HG23	1.95	0.48
1:1G:160:A:H2'	1:1G:161:A:O4'	2.13	0.48
1:1G:583:A:H2'	1:1G:584:G:O4'	2.14	0.48
1:1G:1320:C:C4	1:1G:1321:C:C4	3.01	0.48
4:32:111:ALA:HB2	4:32:120:LEU:HD12	1.95	0.48
5:42:51:VAL:O	5:42:55:VAL:HG23	2.14	0.48
10:1A:84:GLN:O	10:1A:88:LEU:HB2	2.12	0.48
20:BA:50:GLU:N	20:BA:100:ILE:HG12	2.28	0.48
23:2L:8:U:H5'	23:2L:9:G:OP2	2.12	0.48
23:2L:71:G:H2'	23:2L:72:C:O4'	2.13	0.48
26:14:68:G:H2'	26:14:69:C:H6	1.78	0.48
26:14:323:G:H2'	30:39:169:ASN:ND2	2.29	0.48
26:14:537:C:H5'	26:14:539:G:OP2	2.14	0.48
26:14:635:C:O2'	26:14:639:U:OP1	2.24	0.48
26:14:2334:G:O6	47:E5:74:ARG:NH1	2.43	0.48
26:14:2495:G:OP1	37:45:82:ARG:HD2	2.13	0.48
26:14:2729:G:H1'	29:29:187:ALA:HB3	1.95	0.48
26:14:2865:U:C4	26:14:2866:U:C4	3.01	0.48
28:19:35:LYS:HA	28:19:64:ILE:HG22	1.96	0.48
30:39:79:GLY:HA2	30:39:86:GLY:HA2	1.94	0.48
34:15:95:PRO:O	34:15:98:VAL:HG22	2.13	0.48
35:25:119:PRO:HB2	40:75:68:TYR:CE2	2.49	0.48
46:D5:53:ILE:HG22	46:D5:71:VAL:HG13	1.95	0.48
46:D5:63:ASP:OD1	46:D5:65:GLN:HG3	2.13	0.48
48:F5:88:LYS:HA	48:F5:90:ILE:HG22	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:145:G:H2'	1:13:146:G:C8	2.48	0.48
1:13:983:A:H1'	1:13:1049:U:O2	2.13	0.48
1:13:1046:A:H61	1:13:1213:A:H61	1.60	0.48
1:13:1286:A:C8	1:13:1287:A:H4'	2.48	0.48
6:5E:100:ASN:ND2	18:9I:27:GLY:O	2.46	0.48
9:8E:48:GLU:N	9:8E:49:PRO:HD2	2.29	0.48
10:1I:44:VAL:HG21	10:1I:66:ARG:HH21	1.78	0.48
11:2I:91:ARG:HD3	11:2I:91:ARG:C	2.37	0.48
15:6I:67:LEU:HD23	15:6I:78:TYR:HE1	1.76	0.48
20:BI:57:ARG:HH22	20:BI:100:ILE:HD13	1.78	0.48
26:1H:57:C:H2'	26:1H:58:G:O4'	2.13	0.48
26:1H:275:G:N2	26:1H:278:A:H61	2.10	0.48
26:1H:671:C:OP1	36:78:42:SER:O	2.31	0.48
26:1H:1264:G:H5'	52:N8:11:THR:HG21	1.96	0.48
26:1H:1762:A:OP1	26:1H:1762:A:H4'	2.13	0.48
26:1H:2397:G:H5"	48:J8:28:GLY:HA2	1.96	0.48
26:1H:2646:C:O5'	26:1H:2646:C:H6	1.96	0.48
27:16:6:C:C2	27:16:115:G:N2	2.82	0.48
30:31:110:LEU:HG	30:31:202:PHE:HE1	1.79	0.48
31:41:33:ARG:O	31:41:162:THR:HG23	2.13	0.48
1:1G:200:G:H2'	1:1G:201:C:C6	2.48	0.48
1:1G:737:A:H2'	1:1G:738:C:C6	2.49	0.48
1:1G:983:A:H2	1:1G:984:C:C6	2.32	0.48
1:1G:1306:A:C6	1:1G:1307:U:C2	3.01	0.48
2:12:71:VAL:HG11	2:12:164:VAL:HA	1.96	0.48
4:32:172:PRO:HB2	4:32:187:ARG:NH1	2.29	0.48
8:72:68:ARG:HD3	8:72:69:ARG:O	2.13	0.48
10:1A:32:ALA:HB2	10:1A:81:THR:HG21	1.94	0.48
17:8A:5:VAL:HG22	17:8A:60:ILE:HG12	1.95	0.48
18:9A:53:ARG:HA	18:9A:56:THR:OG1	2.13	0.48
26:14:286:C:H2'	26:14:287:C:C6	2.48	0.48
26:14:929:G:H8	26:14:929:G:O5'	1.96	0.48
26:14:1042:G:H2'	26:14:1043:C:C6	2.48	0.48
26:14:1420:U:HO2'	26:14:1421:G:P	2.36	0.48
26:14:1684:C:C2	26:14:1705:G:N2	2.81	0.48
26:14:2037:G:H2'	26:14:2038:G:H8	1.78	0.48
26:14:2647:U:H2'	26:14:2648:C:C6	2.48	0.48
26:14:2674:G:H4'	35:25:30:ALA:HB2	1.95	0.48
26:14:2762:G:H5'	26:14:2763:G:OP2	2.14	0.48
1:13:166:G:H2'	1:13:167:G:H8	1.78	0.48
1:13:300:A:C5	1:13:301:G:H1'	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:346:G:H21	1:13:347:G:H1'	1.77	0.48
1:13:730:G:C5	1:13:731:G:H1'	2.49	0.48
1:13:973:G:C4	10:1I:55:LYS:HE2	2.49	0.48
1:13:1182:G:H4'	1:13:1183:A:H5"	1.95	0.48
10:1I:50:ILE:CG1	10:1I:60:ARG:HH21	2.26	0.48
11:2I:54:ARG:C	11:2I:56:GLY:H	2.22	0.48
24:3K:71:G:C2	24:3K:72:C:H1'	2.49	0.48
26:1H:306:U:H2'	26:1H:307:G:O4'	2.14	0.48
26:1H:751:A:C6	26:1H:789:A:C5	3.01	0.48
26:1H:1170:G:N2	26:1H:1180:C:C2	2.82	0.48
26:1H:1185:C:P	58:1H:3693:HOH:O	2.71	0.48
26:1H:1216:G:O6	58:1H:3677:HOH:O	2.20	0.48
26:1H:1467:C:OP2	26:1H:1547:C:H5	1.97	0.48
26:1H:1710:C:N4	26:1H:1748:G:H1	2.08	0.48
26:1H:2313:C:H5"	31:41:91:ARG:HD3	1.96	0.48
26:1H:2544:G:H8	26:1H:2544:G:O5'	1.96	0.48
29:21:128:SER:OG	29:21:129:HIS:N	2.47	0.48
32:51:155:SER:HB3	32:51:160:LYS:O	2.13	0.48
45:G8:39:VAL:O	45:G8:42:VAL:HG22	2.13	0.48
1:1G:66:G:C2	1:1G:67:C:C6	3.02	0.48
1:1G:1378:C:H5	1:1G:1379:G:C4	2.31	0.48
1:1G:1446:A:OP1	1:1G:1446:A:H4'	2.13	0.48
13:4A:40:ASN:ND2	13:4A:43:THR:H	2.12	0.48
13:4A:52:GLU:HA	13:4A:55:ARG:HB2	1.94	0.48
26:14:270(P):C:O5'	26:14:270(P):C:H6	1.97	0.48
26:14:755:C:H2'	26:14:756:C:H6	1.79	0.48
26:14:805:G:O4'	36:35:38:GLN:NE2	2.47	0.48
26:14:2580:U:H5"	29:29:130:GLY:O	2.13	0.48
35:25:19:ILE:HG22	35:25:43:VAL:HA	1.96	0.48
35:25:103:ALA:HB1	35:25:105:GLU:OE1	2.14	0.48
37:45:36:ALA:HB2	37:45:103:MET:SD	2.53	0.48
39:65:38:GLN:HB2	39:65:40:ILE:HD11	1.96	0.48
41:85:95:LEU:HD13	42:95:4:ILE:HG23	1.96	0.48
53:L5:8:ASN:OD1	53:L5:9:ARG:N	2.47	0.48
53:L5:12:ARG:NH2	53:L5:44:PRO:HB3	2.28	0.48
1:13:191(A):G:H5'	1:13:191(A):G:H8	1.78	0.48
1:13:392:G:H5'	16:7I:12:LYS:HE3	1.96	0.48
1:13:413:G:O2'	1:13:428:G:N2	2.46	0.48
1:13:1274:G:H2'	1:13:1275:A:C8	2.49	0.48
1:13:1375:A:P	7:6E:28:ASN:HD22	2.37	0.48
15:6I:26:GLU:H	15:6I:26:GLU:HG2	1.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1F:2:GLY:C	21:1F:4:GLY:H	2.21	0.48
26:1H:638:G:C5	26:1H:651:G:C2	3.01	0.48
26:1H:639:U:H2'	26:1H:640:C:C6	2.49	0.48
26:1H:825:C:H4'	26:1H:2428:G:C5	2.49	0.48
26:1H:1340:U:H4'	26:1H:1341:U:OP2	2.13	0.48
26:1H:1368:G:C2	26:1H:1369:G:C8	3.02	0.48
26:1H:2655:G:N2	26:1H:2665:A:OP2	2.45	0.48
39:A8:10:ARG:O	39:A8:14:VAL:HG13	2.14	0.48
42:D8:24:LYS:HA	42:D8:92:THR:HG23	1.95	0.48
1:1G:409:G:N2	1:1G:434:U:C2	2.81	0.48
1:1G:778:G:H8	1:1G:778:G:O5'	1.96	0.48
2:12:40:HIS:NE2	2:12:190:THR:HG21	2.29	0.48
3:22:106:VAL:HB	3:22:109:PRO:HB3	1.95	0.48
4:32:64:LEU:HD22	4:32:198:VAL:HG21	1.94	0.48
11:2A:14:VAL:HG11	11:2A:35:PRO:HD3	1.96	0.48
26:14:125:G:H4'	26:14:126:A:OP2	2.13	0.48
26:14:243:U:OP1	54:M5:6:THR:OG1	2.22	0.48
26:14:916:G:C2'	26:14:917:A:H5"	2.44	0.48
26:14:2295:C:N3	26:14:2296:U:H5	2.12	0.48
26:14:2761:G:H1'	32:59:143:GLN:OE1	2.14	0.48
27:1J:2:C:H2'	27:1J:3:C:C6	2.49	0.48
27:1J:15:A:H1'	27:1J:109:G:C4	2.49	0.48
28:19:182:LEU:O	28:19:271:ILE:HG13	2.13	0.48
31:49:116:ASP:O	31:49:118:ARG:NH1	2.46	0.48
33:69:14:ASP:OD1	33:69:15:VAL:N	2.47	0.48
41:85:25:TRP:CD1	41:85:25:TRP:C	2.91	0.48
43:A5:64:MET:HE1	43:A5:108:GLY:HA2	1.96	0.48
47:E5:53:MET:HA	47:E5:58:THR:O	2.14	0.48
1:13:455:C:H42	1:13:477:G:H22	1.60	0.48
1:13:575:G:H4'	1:13:576:G:C5'	2.44	0.48
1:13:591:U:H2'	1:13:592:G:H8	1.79	0.48
1:13:960:U:C6	1:13:1225:A:C8	3.02	0.48
1:13:1053:G:H4'	1:13:1054:C:H5'	1.95	0.48
1:13:1174:G:H2'	1:13:1175:G:C8	2.48	0.48
2:1E:187:LEU:HA	2:1E:201:ILE:HB	1.95	0.48
4:3E:165:MET:O	4:3E:168:ARG:HD2	2.14	0.48
8:7E:33:GLU:HA	8:7E:36:LEU:HD12	1.96	0.48
12:3I:82:VAL:HG23	12:3I:106:ASP:OD2	2.14	0.48
17:8I:9:VAL:HG21	17:8I:84:LEU:HD12	1.95	0.48
17:8I:76:LEU:HD21	17:8I:79:SER:CB	2.44	0.48
26:1H:141:A:OP2	26:1H:141(A):C:N4	2.44	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:675:A:OP1	30:31:63:LYS:HE2	2.14	0.48
29:21:116:VAL:N	29:21:157:ALA:HB2	2.26	0.48
30:31:125:LEU:HA	30:31:194:MET:O	2.14	0.48
30:31:197:ASP:O	30:31:198:ALA:HB3	2.13	0.48
36:78:28:GLY:O	36:78:29:LYS:C	2.56	0.48
38:98:85:PRO:O	38:98:87:TYR:N	2.47	0.48
43:E8:45:TYR:CZ	43:E8:49:LYS:HD2	2.49	0.48
48:J8:86:SER:HB2	48:J8:89:GLU:CD	2.39	0.48
1:1G:186(C):G:C6	1:1G:191(E):G:C6	3.02	0.48
1:1G:396:G:C2	1:1G:398:C:C4	3.02	0.48
1:1G:539:A:OP1	12:3A:114:LYS:HE2	2.13	0.48
1:1G:757:U:O2'	1:1G:879:C:O2	2.31	0.48
1:1G:788:U:O2	1:1G:795:C:N4	2.44	0.48
1:1G:1206:G:H5'	3:22:190:ARG:HH12	1.79	0.48
1:1G:1298:C:H4'	1:1G:1299:A:C5	2.49	0.48
6:52:91:VAL:HG12	6:52:92:LYS:O	2.14	0.48
7:62:22:LEU:HG	7:62:62:PHE:HE2	1.78	0.48
23:2L:9:G:N3	23:2L:46:G:H2'	2.29	0.48
24:3L:2:C:C4	24:3L:3:U:C4	3.02	0.48
26:14:273:G:H1	26:14:364:C:H42	1.62	0.48
26:14:1491:G:H5'	28:19:99:ASP:OD1	2.14	0.48
27:1J:32:C:C4	27:1J:33:G:N7	2.82	0.48
27:1J:83:G:H4'	50:H5:52:HIS:CG	2.49	0.48
28:19:213:ARG:NH2	28:19:218:ARG:HD2	2.29	0.48
34:15:22:THR:HA	34:15:61:ARG:O	2.14	0.48
40:75:53:ARG:NH1	40:75:60:THR:HG23	2.29	0.48
48:F5:78:LYS:HZ1	48:F5:94:LEU:HD11	1.78	0.48
1:13:8:A:H4'	1:13:9:G:OP1	2.13	0.48
1:13:200:G:H1	1:13:217:C:H42	1.60	0.48
1:13:329:A:C5	1:13:332:G:C6	3.01	0.48
1:13:661:G:H1	1:13:744:C:N4	2.10	0.48
1:13:1287:A:H2'	1:13:1288:A:C8	2.48	0.48
2:1E:18:GLY:H	2:1E:42:ILE:CG1	2.27	0.48
3:2E:18:TRP:HB3	3:2E:20:SER:O	2.13	0.48
8:7E:82:HIS:CD2	8:7E:138:TRP:CE2	3.02	0.48
9:8E:5:TYR:CG	9:8E:6:GLY:N	2.82	0.48
24:3K:59:A:O5'	24:3K:60:U:H5"	2.14	0.48
26:1H:274:G:H1'	26:1H:276:A:C2	2.49	0.48
26:1H:442:G:H1'	30:31:48:THR:HG21	1.96	0.48
26:1H:635:C:O2'	26:1H:639:U:OP1	2.32	0.48
26:1H:1610:A:OP1	58:1H:3678:HOH:O	2.20	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1707:G:H1	26:1H:1751:C:H42	1.62	0.48
26:1H:2182:G:H2'	26:1H:2183:C:O4'	2.13	0.48
26:1H:2839:G:O2'	38:98:49:ASP:OD2	2.32	0.48
30:31:152:GLU:HB3	30:31:190:GLU:HB2	1.95	0.48
41:C8:92:ARG:HB2	42:D8:11:GLN:CD	2.39	0.48
42:D8:76:LYS:HG3	42:D8:81:TYR:CD2	2.48	0.48
47:I8:82:ARG:O	47:I8:82:ARG:HG3	2.14	0.48
49:K8:63:VAL:O	49:K8:67:LYS:HB2	2.14	0.48
1:1G:255:G:P	17:8A:69:LYS:HZ3	2.37	0.48
1:1G:964:A:N3	1:1G:969:A:O2'	2.40	0.48
1:1G:1112:C:C2	3:22:178:LEU:HB2	2.49	0.48
5:42:137:GLU:O	5:42:141:GLN:HG3	2.14	0.48
10:1A:13:HIS:HB3	10:1A:68:HIS:CD2	2.49	0.48
11:2A:44:SER:OG	11:2A:45:GLY:N	2.47	0.48
13:4A:29:ARG:HD3	13:4A:64:TRP:CZ3	2.49	0.48
15:6A:39:LEU:CD1	15:6A:56:LEU:HB2	2.43	0.48
24:3L:44:A:H2'	24:3L:45:G:O4'	2.14	0.48
26:14:631:A:H2'	26:14:632:A:O4'	2.14	0.48
26:14:848:G:H2'	26:14:849:A:H8	1.75	0.48
26:14:1141:U:OP1	34:15:25:ARG:NE	2.27	0.48
26:14:1639:U:O2'	26:14:2699:C:H4'	2.14	0.48
26:14:2000:G:N7	58:14:3538:HOH:O	2.35	0.48
26:14:2128:C:H42	26:14:2160:G:H1	1.62	0.48
26:14:2516:G:C6	26:14:2517:C:C4	3.02	0.48
26:14:2820:A:C6	38:55:4:LEU:HD11	2.49	0.48
27:1J:2:C:H2'	27:1J:3:C:H6	1.78	0.48
27:1J:78:A:H2'	27:1J:79:C:O4'	2.13	0.48
27:1J:80:U:H2'	27:1J:81:G:N2	2.28	0.48
30:39:15:SER:OG	30:39:17:ARG:N	2.46	0.48
36:35:52:GLU:OE1	36:35:55:ARG:NH2	2.47	0.48
39:65:54:LEU:C	39:65:56:LEU:H	2.22	0.48
40:75:91:ARG:HD2	40:75:124:ASP:OD2	2.13	0.48
41:85:21:ALA:HA	41:85:24:TYR:CE2	2.49	0.48
42:95:56:SER:O	42:95:100:ARG:HG3	2.14	0.48
46:D5:169:GLU:HG2	46:D5:171:ILE:HD13	1.96	0.48
1:13:1061:G:OP1	10:1I:59:SER:OG	2.30	0.47
1:13:1371:G:O3'	9:8E:69:GLY:HA3	2.14	0.47
1:13:1510:U:H1'	1:13:1526:G:N2	2.29	0.47
2:1E:22:LYS:HA	2:1E:24:TRP:CD1	2.49	0.47
2:1E:112:VAL:O	2:1E:115:LEU:HB3	2.14	0.47
5:4E:53:LEU:O	5:4E:56:GLN:HB3	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1I:79:ARG:HD3	10:1I:79:ARG:HA	1.69	0.47
13:4I:105:THR:OG1	13:4I:106:ASN:N	2.45	0.47
19:AI:39:THR:HG22	19:AI:40:ILE:H	1.79	0.47
24:3K:35:G:H2'	24:3K:36:U:O4'	2.13	0.47
26:1H:191:A:H2'	26:1H:192:C:C6	2.48	0.47
26:1H:721:C:H2'	26:1H:722:A:H8	1.77	0.47
26:1H:996:A:H4'	41:C8:92:ARG:CG	2.44	0.47
26:1H:996:A:OP2	41:C8:92:ARG:NH2	2.47	0.47
26:1H:1285:G:H2'	26:1H:1329:U:O4	2.14	0.47
26:1H:1533:C:H3'	26:1H:1534:G:H5"	1.96	0.47
26:1H:1688:U:H2'	26:1H:1698:A:N6	2.29	0.47
26:1H:2077:A:H2'	26:1H:2078:C:H6	1.78	0.47
26:1H:2836:U:H2'	26:1H:2837:G:C8	2.49	0.47
27:16:71:C:C4	27:16:72:G:N7	2.82	0.47
29:21:16:ARG:NH2	29:21:173:VAL:HG22	2.29	0.47
31:41:138:GLN:NE2	31:41:149:VAL:HG12	2.29	0.47
33:61:127:VAL:HA	33:61:138:ILE:O	2.13	0.47
34:58:96:GLU:HB2	34:58:122:VAL:CG1	2.44	0.47
36:78:41:ARG:HD2	36:78:41:ARG:N	2.29	0.47
48:J8:81:LYS:O	48:J8:83:GLU:N	2.43	0.47
1:1G:25:C:H2'	1:1G:26:A:C8	2.49	0.47
1:1G:55:A:C5	1:1G:56:U:C5	3.02	0.47
1:1G:135:C:C2	16:7A:1:MET:HB3	2.49	0.47
1:1G:147:G:H2'	1:1G:148:G:C8	2.49	0.47
1:1G:561:U:HO2'	1:1G:562:C:P	2.37	0.47
1:1G:989:C:N4	1:1G:1216:G:O6	2.47	0.47
1:1G:1167:A:H2'	1:1G:1169:A:O4'	2.14	0.47
4:32:64:LEU:HB2	4:32:198:VAL:HG11	1.94	0.47
7:62:65:ALA:HB1	7:62:127:ALA:HB3	1.94	0.47
10:1A:13:HIS:C	10:1A:13:HIS:CD2	2.92	0.47
11:2A:34:ASP:HB2	11:2A:35:PRO:HD2	1.96	0.47
26:14:139:G:N2	26:14:141:A:N1	2.61	0.47
26:14:270(F):U:H3	26:14:270(T):G:H1	1.62	0.47
26:14:783:A:O2'	26:14:785:G:OP1	2.25	0.47
26:14:1021:A:C2	26:14:1023:U:C2	3.01	0.47
26:14:1239:G:H2'	26:14:1240:U:O4'	2.13	0.47
26:14:1260:G:H2'	26:14:1261:C:C6	2.50	0.47
26:14:1341:U:C5	26:14:1395:A:H2	2.32	0.47
26:14:1899:G:N2	26:14:1902:C:N4	2.59	0.47
26:14:2157:G:OP1	26:14:2157:G:H4'	2.14	0.47
26:14:2285:C:N3	26:14:2346:A:N6	2.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:3:GLU:OE1	30:39:3:GLU:N	2.47	0.47
31:49:6:ALA:O	31:49:7:LEU:HD23	2.14	0.47
31:49:97:ASP:H	31:49:100:TRP:CD1	2.33	0.47
35:25:87:ILE:HD12	35:25:87:ILE:HA	1.77	0.47
40:75:91:ARG:HG3	40:75:121:ILE:HG13	1.94	0.47
42:95:14:VAL:HB	42:95:96:ILE:HG21	1.95	0.47
44:B5:5:TYR:CE2	49:G5:30:ARG:HB2	2.48	0.47
1:13:322:C:OP2	1:13:328:C:N4	2.47	0.47
1:13:498:A:H4'	1:13:500:G:OP1	2.13	0.47
1:13:865:A:H2	1:13:918:A:H4'	1.78	0.47
1:13:1037:C:H2'	1:13:1038:C:C6	2.48	0.47
1:13:1326:C:OP1	21:1F:17:THR:OG1	2.24	0.47
2:1E:32:ILE:HG21	2:1E:40:HIS:HB3	1.97	0.47
10:1I:75:ILE:O	10:1I:77:PRO:HD3	2.14	0.47
11:2I:19:ALA:HA	11:2I:32:ILE:HG22	1.97	0.47
13:4I:117:VAL:HG13	13:4I:118:ALA:N	2.26	0.47
15:6I:82:ILE:HG23	15:6I:87:ILE:H	1.79	0.47
23:2K:16:C:H5'	23:2K:17:C:C5	2.50	0.47
26:1H:276:A:C8	26:1H:278:A:N1	2.82	0.47
26:1H:1277:G:O2'	38:98:24:GLN:HG2	2.14	0.47
26:1H:1281:G:O2'	26:1H:1282:U:H5'	2.14	0.47
26:1H:1747:G:H2'	26:1H:1748:G:H8	1.78	0.47
26:1H:2250:G:C5	37:88:83:MET:HB3	2.49	0.47
29:21:2:LYS:HA	29:21:84:PHE:CE1	2.49	0.47
29:21:53:PRO:HA	29:21:75:VAL:HA	1.95	0.47
30:31:42:ALA:HA	30:31:45:ARG:HG3	1.94	0.47
31:41:47:LYS:HD2	31:41:82:LEU:H	1.79	0.47
31:41:117:PHE:HD1	31:41:119:GLY:H	1.61	0.47
54:Q8:8:LYS:O	54:Q8:12:LYS:HB2	2.14	0.47
1:1G:1291:G:OP1	7:62:41:ARG:NH2	2.47	0.47
2:12:49:GLU:HG3	2:12:53:ARG:HH22	1.79	0.47
4:32:19:LEU:HB2	4:32:21:LEU:CD2	2.44	0.47
4:32:100:ARG:NH1	4:32:136:PRO:O	2.47	0.47
6:52:99:ALA:HB3	18:9A:29:PHE:HE1	1.80	0.47
26:14:1022:G:C6	26:14:1140:C:C4	3.02	0.47
26:14:2712:U:OP1	26:14:2714:G:H4'	2.14	0.47
26:14:2767:C:H2'	26:14:2768:C:C6	2.49	0.47
27:1J:112:G:H2'	27:1J:113:C:C6	2.49	0.47
36:35:50:ARG:HG3	54:M5:61:LEU:HD11	1.96	0.47
39:65:84:GLN:HG2	39:65:109:GLY:HA3	1.95	0.47
46:D5:30:ASN:HA	46:D5:89:PHE:HE1	1.78	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:17:U:H2'	1:13:18:C:C6	2.49	0.47
1:13:36:C:O2'	1:13:501:C:OP1	2.32	0.47
1:13:246:A:C4	1:13:282:A:N6	2.82	0.47
1:13:345:C:O2'	1:13:346:G:C4	2.66	0.47
1:13:600:C:H42	1:13:638:G:H1	1.61	0.47
1:13:1285:A:H4'	1:13:1286:A:O5'	2.15	0.47
4:3E:128:VAL:HB	4:3E:133:VAL:HG21	1.95	0.47
19:AI:63:THR:OG1	19:AI:65:ASN:OD1	2.14	0.47
26:1H:602:G:N2	26:1H:655:A:C8	2.79	0.47
26:1H:795:C:H2'	26:1H:796:C:H6	1.76	0.47
26:1H:1628:G:H8	26:1H:1628:G:O5'	1.97	0.47
26:1H:1664:A:OP1	58:1H:3682:HOH:O	2.20	0.47
26:1H:2184:G:C6	26:1H:2185:C:C4	3.02	0.47
26:1H:2308:G:H2'	26:1H:2308:G:N3	2.29	0.47
26:1H:2311:A:H8	31:41:88:ILE:HG21	1.80	0.47
26:1H:2345:G:O2'	26:1H:2381:C:O2'	2.22	0.47
27:16:13:A:N1	27:16:69:G:O2'	2.46	0.47
31:41:5:VAL:HG21	31:41:101:ILE:HG22	1.97	0.47
36:78:120:ALA:HB1	36:78:138:LEU:HD22	1.96	0.47
37:88:26:TYR:CE2	37:88:141:GLN:HG2	2.49	0.47
41:C8:91:ASP:O	41:C8:95:LEU:HB2	2.14	0.47
43:E8:23:LEU:HD11	52:N8:27:PRO:HA	1.95	0.47
45:G8:85:VAL:O	45:G8:86:ARG:HD2	2.14	0.47
51:M8:15:ILE:HG23	51:M8:20:ASN:OD1	2.14	0.47
1:1G:309:G:H1'	1:1G:608:A:C2	2.49	0.47
1:1G:660:G:H1	1:1G:745:C:H42	1.62	0.47
1:1G:765:G:C6	1:1G:812:C:C2	3.01	0.47
1:1G:1114:C:O2'	14:5A:60:SER:O	2.31	0.47
1:1G:1145:C:H1'	1:1G:1146:A:N7	2.29	0.47
2:12:24:TRP:C	2:12:24:TRP:CD1	2.91	0.47
10:1A:40:LEU:HD13	10:1A:71:LEU:HB2	1.96	0.47
25:4L:23:A:H4'	25:4L:24:A:OP1	2.14	0.47
26:14:1542:G:O6	26:14:1543:A:N6	2.48	0.47
26:14:2067:G:O2'	26:14:2069:G:H5"	2.14	0.47
26:14:2275:C:C6	26:14:2275:C:H5'	2.50	0.47
29:29:113:PHE:HA	29:29:159:HIS:HD2	1.79	0.47
30:39:114:VAL:HG21	30:39:202:PHE:CE1	2.49	0.47
32:59:120:GLY:O	32:59:121:ILE:HG12	2.14	0.47
32:59:122:THR:HG22	32:59:123:PHE:H	1.78	0.47
37:45:66:ILE:O	37:45:67:ARG:HB2	2.14	0.47
47:E5:35:ASN:OD1	47:E5:35:ASN:N	2.38	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:389:A:H5'	1:13:389:A:C8	2.50	0.47
1:13:1125:U:C4	1:13:1126:U:O4	2.67	0.47
1:13:1512:U:H3	1:13:1523:G:H1	1.63	0.47
10:1I:86:MET:SD	10:1I:86:MET:N	2.87	0.47
11:2I:85:ARG:HG3	11:2I:111:ASP:HB3	1.95	0.47
13:4I:7:VAL:HB	31:41:115:ARG:NH2	2.30	0.47
14:5I:37:PHE:CE1	14:5I:53:LEU:HD13	2.49	0.47
26:1H:84:A:N1	26:1H:98:G:O2'	2.42	0.47
26:1H:592:G:H1	26:1H:665:C:N4	2.11	0.47
26:1H:625:G:N7	36:78:107:LYS:NZ	2.62	0.47
26:1H:675:A:C8	26:1H:804:A:C6	3.02	0.47
26:1H:1239:G:OP1	58:1H:3675:HOH:O	2.19	0.47
26:1H:2402:C:OP2	26:1H:2402:C:C6	2.67	0.47
26:1H:2424:C:O2	26:1H:2429:G:O2'	2.27	0.47
26:1H:2845:G:H2'	26:1H:2846:G:H8	1.79	0.47
29:21:57:LYS:HG3	29:21:59:VAL:CG1	2.43	0.47
29:21:134:ILE:O	29:21:137:HIS:HB2	2.13	0.47
33:61:27:ARG:HD3	48:J8:71:TYR:HE2	1.80	0.47
52:N8:40:LYS:HE2	52:N8:47:PRO:N	2.30	0.47
1:1G:1117:G:N2	1:1G:1180:A:H1'	2.29	0.47
1:1G:1443:G:N2	40:75:119:LYS:HB2	2.30	0.47
2:12:219:VAL:CA	2:12:220:ASP:HB3	2.35	0.47
7:62:54:THR:OG1	7:62:56:GLN:N	2.46	0.47
8:72:17:THR:HG23	8:72:78:GLN:NE2	2.30	0.47
9:82:48:GLU:N	9:82:49:PRO:HD2	2.29	0.47
12:3A:89:ARG:HB2	12:3A:97:ARG:HA	1.96	0.47
22:1L:49:G:H1	22:1L:59:C:C5'	2.26	0.47
23:2L:77:A:H2'	23:2L:77:A:N3	2.30	0.47
26:14:24:G:O2'	43:A5:78:GLU:O	2.27	0.47
26:14:39:C:H2'	26:14:40:C:C6	2.49	0.47
26:14:67:U:H2'	26:14:68:G:C8	2.47	0.47
26:14:270(H):C:H2'	26:14:270(I):G:C8	2.49	0.47
26:14:1014:U:H3	26:14:1148:A:N6	2.10	0.47
26:14:1337:G:H2'	26:14:1338:G:C8	2.48	0.47
26:14:1388:G:H2'	26:14:1389:G:H8	1.78	0.47
26:14:1454:U:H5	38:55:73:VAL:HG12	1.79	0.47
26:14:1589:C:H2'	26:14:1590:U:H6	1.79	0.47
26:14:1614:A:N1	43:A5:93:ALA:HB2	2.29	0.47
26:14:2517:C:O2'	26:14:2519:U:H5	1.97	0.47
27:1J:115:G:H8	27:1J:115:G:OP2	1.97	0.47
28:19:96:HIS:CD2	28:19:102:LYS:HG2	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:19:264:LYS:CD	28:19:266:SER:HB3	2.44	0.47
29:29:66:HIS:C	29:29:68:ALA:H	2.23	0.47
29:29:131:ALA:O	29:29:132:HIS:C	2.58	0.47
31:49:64:THR:HB	31:49:94:LEU:HD21	1.96	0.47
32:59:41:MET:HE1	32:59:55:PRO:HD3	1.97	0.47
42:95:21:ARG:CZ	42:95:91:TYR:HE2	2.27	0.47
44:B5:50:LYS:O	44:B5:51:VAL:C	2.56	0.47
49:G5:61:LEU:HD23	49:G5:61:LEU:HA	1.65	0.47
1:13:401:C:H2'	1:13:402:G:C8	2.49	0.47
1:13:591:U:P	8:7E:30:ARG:HD2	2.54	0.47
1:13:648:A:C6	1:13:649:G:C6	3.03	0.47
1:13:803:G:C6	1:13:804:U:C4	3.03	0.47
6:5E:16:GLN:HG2	6:5E:17:SER:N	2.30	0.47
7:6E:64:GLN:HB3	7:6E:128:ALA:HB1	1.96	0.47
13:4I:56:LEU:O	13:4I:60:VAL:HG23	2.15	0.47
15:6I:17:ARG:HH11	15:6I:77:ARG:NH2	2.12	0.47
26:1H:938:G:OP1	54:Q8:52:LYS:NZ	2.46	0.47
26:1H:1824:G:N3	28:11:254:THR:OG1	2.47	0.47
26:1H:1892:C:O5'	26:1H:1892:C:H6	1.97	0.47
26:1H:2647:U:H2'	26:1H:2648:C:C6	2.50	0.47
27:16:11:C:H3'	27:16:12:C:H6	1.78	0.47
28:11:199:ALA:C	28:11:201:HIS:H	2.22	0.47
34:58:16:ILE:HG21	34:58:26:LEU:HD11	1.95	0.47
38:98:85:PRO:C	38:98:87:TYR:H	2.22	0.47
40:B8:105:LEU:C	40:B8:107:ASP:H	2.22	0.47
46:H8:13:GLU:HB3	46:H8:18:LEU:HD11	1.96	0.47
47:I8:49:LYS:HB2	47:I8:80:HIS:HB3	1.96	0.47
1:1G:96:G:H2'	1:1G:97:U:O4'	2.15	0.47
1:1G:162:A:O5'	1:1G:162:A:H8	1.98	0.47
1:1G:1272:G:H2'	1:1G:1273:G:O4'	2.13	0.47
1:1G:1347:G:N2	1:1G:1374:A:OP2	2.40	0.47
24:3L:37:A:C2	24:3L:38:A:H1'	2.50	0.47
26:14:453:C:H4'	26:14:472:A:N6	2.29	0.47
26:14:1017:G:N2	26:14:1146:C:C2	2.83	0.47
26:14:1022:G:HO2'	26:14:1023:U:P	2.30	0.47
26:14:1342:A:C6	26:14:1397:U:C6	3.03	0.47
26:14:1419:A:N6	26:14:1421:G:N3	2.63	0.47
26:14:1542:G:O5'	26:14:1543:A:H5"	2.14	0.47
26:14:1910:G:H1	26:14:1920:C:H42	1.61	0.47
26:14:2052:G:O4'	29:29:142:GLY:HA3	2.15	0.47
26:14:2698:U:H2'	26:14:2699:C:C6	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:122:LYS:HD2	30:39:191:ARG:HE	1.78	0.47
33:69:93:THR:O	33:69:97:ILE:HG13	2.14	0.47
35:25:5:GLN:HG3	35:25:20:MET:HE2	1.95	0.47
36:35:35:HIS:O	36:35:36:LYS:O	2.32	0.47
46:D5:48:PHE:HE1	46:D5:71:VAL:HG21	1.79	0.47
47:E5:12:ASN:HA	47:E5:14:ARG:HH21	1.80	0.47
1:13:129:U:H2'	1:13:131:C:H5	1.79	0.47
1:13:714:G:H2'	1:13:715:A:C8	2.49	0.47
1:13:968:A:H4'	1:13:969:A:OP2	2.14	0.47
1:13:1154:G:C4	1:13:1155:G:C8	3.02	0.47
1:13:1464:G:OP1	40:B8:108:ARG:HD3	2.14	0.47
1:13:1529:G:O2'	1:13:1530:G:OP1	2.24	0.47
3:2E:36:ASP:O	3:2E:40:ARG:HG3	2.15	0.47
7:6E:121:ALA:O	7:6E:125:MET:HG2	2.15	0.47
13:4I:23:TYR:CD2	13:4I:67:GLU:HA	2.50	0.47
15:6I:8:LYS:HB2	15:6I:8:LYS:HE3	1.72	0.47
24:3K:49:G:H1'	24:3K:66:U:O2	2.14	0.47
26:1H:1141:U:C5	34:58:64:GLY:HA3	2.49	0.47
26:1H:1301:A:H2	26:1H:1626:G:N3	2.12	0.47
26:1H:2028:U:H2'	26:1H:2029:G:O4'	2.15	0.47
26:1H:2331:G:O2'	26:1H:2336:A:N1	2.39	0.47
26:1H:2751:G:P	26:1H:2751:G:H8	2.37	0.47
26:1H:2808:U:H5'	26:1H:2891:G:O6	2.15	0.47
27:16:7:G:H5"	27:16:7:G:H8	1.78	0.47
30:31:11:VAL:HG13	30:31:125:LEU:HB2	1.96	0.47
31:41:138:GLN:HE21	31:41:149:VAL:HG12	1.78	0.47
32:51:127:GLU:O	32:51:129:THR:N	2.48	0.47
33:61:95:LYS:NZ	33:61:99:GLU:OE1	2.35	0.47
34:58:58:ASP:HB3	34:58:95:PRO:HB2	1.97	0.47
43:E8:64:MET:HE3	43:E8:69:LEU:HD21	1.96	0.47
43:E8:84:ARG:O	43:E8:96:ILE:HD13	2.14	0.47
46:H8:53:ILE:HG22	46:H8:71:VAL:HG22	1.95	0.47
1:1G:255:G:H2'	1:1G:256:U:H6	1.80	0.47
1:1G:323:U:O3'	20:BA:22:ARG:HD3	2.14	0.47
1:1G:985:C:H2'	1:1G:986:A:H8	1.79	0.47
1:1G:1007:C:H1'	1:1G:1023:G:N1	2.30	0.47
8:72:69:ARG:HB2	8:72:74:PRO:O	2.14	0.47
9:82:48:GLU:O	9:82:52:ALA:N	2.47	0.47
10:1A:79:ARG:HA	10:1A:82:ILE:HB	1.95	0.47
14:5A:17:LYS:NZ	14:5A:18:VAL:HG13	2.30	0.47
21:1B:5:ASP:O	21:1B:11:GLY:HA3	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:68:G:H2'	26:14:69:C:C6	2.49	0.47
26:14:667:U:H2'	26:14:668:G:O4'	2.14	0.47
26:14:868:U:C4	26:14:869:G:N7	2.82	0.47
26:14:1288:U:C2	26:14:1327:C:O2	2.67	0.47
26:14:1707:G:C5	26:14:1756:G:C6	3.03	0.47
26:14:2542:A:N3	26:14:2542:A:H5"	2.29	0.47
30:39:36:VAL:HG11	30:39:183:VAL:HG21	1.96	0.47
31:49:138:GLN:HE22	31:49:153:ARG:H	1.63	0.47
36:35:78:PRO:HA	36:35:110:TYR:CD2	2.45	0.47
43:A5:88:ARG:HD3	43:A5:94:ASP:OD2	2.14	0.47
47:E5:64:ASP:OD1	47:E5:64:ASP:N	2.48	0.47
1:13:7:G:H5'	1:13:298:A:O4'	2.14	0.47
1:13:21:G:H2'	1:13:22:G:C8	2.49	0.47
1:13:389:A:H5'	1:13:389:A:H8	1.79	0.47
1:13:429:U:OP2	4:3E:36:ARG:NH2	2.48	0.47
1:13:457:C:N3	1:13:476:G:N2	2.62	0.47
1:13:736:C:H2'	1:13:737:A:C8	2.49	0.47
1:13:816:A:OP1	1:13:1526:G:O2'	2.26	0.47
1:13:1059:C:O2	10:1I:53:PRO:HG3	2.15	0.47
1:13:1244:C:H2'	1:13:1245:A:C8	2.49	0.47
1:13:1305:G:N2	1:13:1331:G:C4	2.83	0.47
3:2E:70:VAL:N	3:2E:106:VAL:HG23	2.30	0.47
3:2E:87:LEU:O	3:2E:90:GLU:N	2.45	0.47
5:4E:33:VAL:HG12	5:4E:112:LEU:HD12	1.95	0.47
5:4E:87:SER:HB3	5:4E:125:SER:O	2.14	0.47
12:3I:70:ILE:HG12	12:3I:100:ILE:HD12	1.97	0.47
12:3I:110:VAL:CG2	12:3I:120:TYR:HB3	2.44	0.47
14:5I:21:TYR:HE2	14:5I:23:ARG:NE	2.13	0.47
19:AI:58:VAL:HG11	19:AI:75:ALA:HB1	1.97	0.47
19:AI:80:TYR:HD1	19:AI:82:GLY:H	1.62	0.47
20:BI:89:ARG:HH22	20:BI:105:SER:H	1.63	0.47
26:1H:323:G:O2'	26:1H:1205:U:N3	2.43	0.47
26:1H:340:A:H2'	26:1H:341:G:O4'	2.15	0.47
26:1H:389:G:H22	36:78:72:PRO:HD3	1.77	0.47
26:1H:787:U:H5"	26:1H:788:A:H5'	1.95	0.47
26:1H:844:C:H3'	26:1H:845:G:H8	1.79	0.47
26:1H:937:U:H2'	26:1H:938:G:O4'	2.14	0.47
26:1H:1001:A:H2'	26:1H:1002:G:O4'	2.15	0.47
26:1H:1264:G:OP1	52:N8:19:ARG:NH1	2.42	0.47
26:1H:1281:G:H2'	26:1H:1282:U:H6	1.79	0.47
26:1H:1488:G:C5	26:1H:1489:U:C5	3.03	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1510:A:H2'	26:1H:1510:A:N3	2.30	0.47
26:1H:1786:A:C2	26:1H:2606:C:H1'	2.50	0.47
26:1H:1795:C:H2'	26:1H:1796:U:O4'	2.15	0.47
26:1H:2114:A:H5"	26:1H:2117:A:H5'	1.97	0.47
26:1H:2160:G:N7	26:1H:2161:C:H1'	2.30	0.47
26:1H:2235:G:H2'	26:1H:2236:C:C6	2.50	0.47
26:1H:2363:C:O2	47:I8:39:ARG:NH2	2.43	0.47
26:1H:2412:A:H2'	26:1H:2413:G:O4'	2.15	0.47
26:1H:2732:G:H3'	26:1H:2733:A:O4'	2.14	0.47
26:1H:2743:C:C2	26:1H:2762:G:N2	2.82	0.47
26:1H:2845:G:H2'	26:1H:2846:G:C8	2.49	0.47
27:16:74:U:H2'	27:16:75:G:O4'	2.14	0.47
27:16:80:U:O2'	27:16:81:G:H5"	2.14	0.47
28:11:27:THR:OG1	28:11:28:GLU:N	2.47	0.47
28:11:61:LEU:HD13	28:11:61:LEU:HA	1.72	0.47
28:11:71:ASP:OD1	28:11:71:ASP:N	2.46	0.47
29:21:2:LYS:HA	29:21:84:PHE:CD1	2.50	0.47
31:41:61:ALA:HB2	31:41:67:LYS:HA	1.96	0.47
32:51:113:VAL:HG11	32:51:151:ILE:HD13	1.96	0.47
35:68:47:ILE:HG13	35:68:48:PRO:HD2	1.97	0.47
37:88:35:VAL:HG13	37:88:130:LYS:HB3	1.97	0.47
37:88:59:ARG:C	37:88:61:GLY:N	2.73	0.47
41:C8:78:THR:O	41:C8:81:HIS:N	2.47	0.47
41:C8:101:ARG:C	41:C8:103:PRO:HD3	2.39	0.47
48:J8:93:GLU:C	48:J8:95:LEU:N	2.69	0.47
1:1G:278:G:O4'	1:1G:282:A:H1'	2.15	0.47
1:1G:403:C:O3'	4:32:122:ARG:HD2	2.15	0.47
1:1G:559:A:H4'	1:1G:560:U:C5'	2.44	0.47
1:1G:740:U:H4'	15:6A:42:HIS:CD2	2.49	0.47
1:1G:895:G:H1	1:1G:904:C:H42	1.60	0.47
1:1G:926:G:H5"	1:1G:927:G:O5'	2.14	0.47
1:1G:1120:G:H1	1:1G:1152:A:H61	1.62	0.47
1:1G:1281:U:P	1:1G:1282:C:H41	2.34	0.47
1:1G:1489:G:O2'	1:1G:1490:C:H5'	2.15	0.47
3:22:113:ALA:HB2	3:22:202:ILE:HG13	1.97	0.47
4:32:31:CYS:H	4:32:35:ARG:NH1	2.11	0.47
4:32:60:GLU:OE2	4:32:199:ASN:N	2.48	0.47
4:32:148:VAL:HG23	4:32:181:MET:O	2.14	0.47
5:42:141:GLN:O	5:42:143:ARG:HD3	2.14	0.47
6:52:25:ILE:HA	6:52:28:ARG:HB2	1.97	0.47
8:72:25:ASP:OD1	8:72:25:ASP:N	2.46	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:82:17:VAL:HG22	9:82:63:ILE:HD13	1.96	0.47
13:4A:99:ARG:HB2	13:4A:101:GLN:NE2	2.30	0.47
18:9A:37:VAL:O	18:9A:41:LYS:N	2.34	0.47
19:AA:41:VAL:HG23	19:AA:43:GLU:N	2.30	0.47
20:BA:89:ARG:HD2	20:BA:104:LEU:HD13	1.96	0.47
23:2L:24:C:H2'	23:2L:25:U:H6	1.75	0.47
26:14:124:G:O6	58:14:3481:HOH:O	2.20	0.47
26:14:299:A:H8	26:14:299:A:OP2	1.98	0.47
26:14:328:U:H4'	45:C5:68:HIS:ND1	2.30	0.47
26:14:337:C:H2'	26:14:338:G:O4'	2.15	0.47
26:14:587:C:O2	36:35:33:ARG:NH1	2.48	0.47
26:14:900:A:H2'	26:14:900:A:N3	2.30	0.47
26:14:995:C:O2	34:15:3:THR:OG1	2.27	0.47
26:14:1278:A:OP1	38:55:36:THR:HG22	2.15	0.47
26:14:1819:A:H4'	26:14:1820:U:O5'	2.14	0.47
26:14:1993:U:H4'	29:29:128:SER:HB2	1.96	0.47
26:14:2646:C:O5'	26:14:2646:C:H6	1.98	0.47
26:14:2745:C:C4	26:14:2746:U:C4	3.02	0.47
26:14:2873:A:C8	38:55:5:LYS:HA	2.50	0.47
29:29:52:LEU:HD12	29:29:52:LEU:HA	1.59	0.47
30:39:34:TRP:NE1	36:35:8:PRO:HD3	2.29	0.47
30:39:116:ASP:OD2	36:35:1:MET:HG2	2.15	0.47
30:39:155:LEU:O	30:39:157:VAL:HG23	2.15	0.47
32:59:57:ASP:OD2	32:59:62:LYS:NZ	2.41	0.47
33:69:76:THR:O	33:69:77:LEU:HB2	2.14	0.47
33:69:101:LEU:HD23	33:69:101:LEU:H	1.79	0.47
36:35:47:ASP:OD2	36:35:50:ARG:NH1	2.48	0.47
37:45:66:ILE:HG22	37:45:104:PHE:CE1	2.49	0.47
41:85:90:VAL:HA	42:95:38:LEU:HD11	1.96	0.47
42:95:29:PRO:HA	42:95:61:VAL:HG11	1.96	0.47
46:D5:19:ARG:NH1	46:D5:84:GLU:HB2	2.29	0.47
46:D5:24:LEU:HD12	46:D5:25:PRO:O	2.14	0.47
1:13:247:G:O6	1:13:278:G:C6	2.68	0.47
1:13:389:A:O2'	1:13:390:C:OP1	2.28	0.47
1:13:1305:G:H22	1:13:1331:G:C2'	2.28	0.47
23:2K:20:G:C2	23:2K:58:A:N3	2.82	0.47
26:1H:71:A:H2	44:F8:31:HIS:HE2	1.61	0.47
26:1H:484:C:OP2	45:G8:50:ARG:NH2	2.48	0.47
26:1H:2447:G:O2'	58:1H:3684:HOH:O	2.20	0.47
34:58:17:ASP:O	34:58:56:ASN:HB2	2.14	0.47
37:88:5:ARG:O	37:88:6:ARG:C	2.57	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:C8:69:CYS:SG	41:C8:79:PHE:HD2	2.38	0.47
49:K8:46:GLN:O	49:K8:49:LYS:HG3	2.15	0.47
1:1G:32:A:C2	1:1G:33:A:C4	3.02	0.47
1:1G:87:A:H1'	1:1G:88:C:O4'	2.15	0.47
1:1G:194:C:C2'	1:1G:195:A:H5"	2.44	0.47
1:1G:419:C:H5'	1:1G:420:U:OP2	2.15	0.47
1:1G:518:C:H5"	1:1G:519:C:C6	2.50	0.47
1:1G:937:A:H8	1:1G:937:A:O5'	1.98	0.47
1:1G:1006:C:H2'	1:1G:1007:C:C6	2.49	0.47
5:42:34:VAL:HG21	5:42:63:ARG:HH11	1.79	0.47
5:42:60:TYR:HB3	5:42:64:ARG:NH2	2.29	0.47
5:42:92:LYS:HG2	5:42:93:PRO:HD2	1.94	0.47
20:BA:10:LEU:O	20:BA:12:ALA:N	2.45	0.47
26:14:273(C):C:H5'	26:14:273(D):C:OP2	2.14	0.47
26:14:527:C:H4'	26:14:528:A:O5'	2.15	0.47
26:14:573:G:O2'	26:14:574:C:H3'	2.14	0.47
26:14:1136:G:H2'	26:14:1137:G:H8	1.78	0.47
26:14:1332:G:H5'	26:14:1332:G:H8	1.75	0.47
26:14:1990:C:H2'	26:14:1991:U:H6	1.79	0.47
26:14:2009:G:H1'	38:55:107:ASP:HA	1.96	0.47
26:14:2378:A:H4'	39:65:23:ARG:HH11	1.76	0.47
26:14:2408:U:H2'	26:14:2409:G:C8	2.50	0.47
26:14:2688:U:H1'	26:14:2721:A:N6	2.29	0.47
26:14:2892:A:C5	26:14:2893:G:H1'	2.50	0.47
32:59:6:ARG:NH1	32:59:66:GLY:H	2.13	0.47
37:45:134:ARG:HH12	46:D5:122:ARG:NH1	2.13	0.47
50:H5:3:ARG:HG3	50:H5:59:VAL:C	2.40	0.47
1:13:22:G:C6	1:13:23:C:C4	3.03	0.47
1:13:190:G:H3'	1:13:191(A):G:H5"	1.97	0.47
1:13:772:U:C2	1:13:773:G:C8	3.02	0.47
1:13:1193:G:OP1	3:2E:167:TRP:HZ3	1.98	0.47
9:8E:26:VAL:HG22	9:8E:61:ALA:HB3	1.97	0.47
11:2I:41:THR:HG22	11:2I:42:TRP:N	2.30	0.47
17:8I:25:ARG:O	17:8I:25:ARG:HG2	2.14	0.47
22:1K:39:G:H2'	22:1K:40:G:C8	2.49	0.47
22:1K:66:U:H3'	22:1K:67:A:H5'	1.95	0.47
26:1H:172:C:H2'	26:1H:173:G:C8	2.50	0.47
26:1H:273(F):C:H3'	26:1H:274:G:C5'	2.41	0.47
26:1H:775:G:C4	26:1H:794:G:C8	3.02	0.47
26:1H:1331:A:O2'	26:1H:1332:G:H8	1.98	0.47
26:1H:1564:C:O2'	26:1H:1565:C:H5'	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2102:U:H3	26:1H:2187:G:H1	1.63	0.47
26:1H:2111:C:N4	26:1H:2147:G:O6	2.48	0.47
30:31:178:PRO:HB2	30:31:201:VAL:HG11	1.97	0.47
34:58:35:ARG:HH21	34:58:42:TRP:HZ2	1.61	0.47
34:58:87:LEU:O	34:58:91:LEU:HD12	2.15	0.47
36:78:36:LYS:O	36:78:40:SER:HB3	2.15	0.47
37:88:104:PHE:CE2	37:88:125:LEU:HD11	2.47	0.47
44:F8:94:GLY:O	44:F8:95:LEU:HB2	2.15	0.47
46:H8:157:LEU:O	46:H8:158:PRO:C	2.57	0.47
1:1G:10:A:OP2	5:42:126:ARG:HG2	2.15	0.47
1:1G:151:A:H2'	1:1G:152:A:O4'	2.15	0.47
1:1G:300:A:H1'	1:1G:565:U:O2	2.14	0.47
1:1G:340:U:H2'	1:1G:341:C:C6	2.50	0.47
1:1G:600:C:H2'	1:1G:601:C:H6	1.80	0.47
1:1G:625:G:OP1	16:7A:9:PHE:HB3	2.14	0.47
1:1G:640:A:N3	8:72:115:SER:HB2	2.30	0.47
1:1G:1069:C:O2'	1:1G:1192:C:O2	2.22	0.47
1:1G:1529:G:O2'	1:1G:1530:G:OP1	2.33	0.47
2:12:141:GLU:O	2:12:145:LEU:HB2	2.14	0.47
3:22:8:ILE:HD13	3:22:16:ARG:HG2	1.96	0.47
4:32:24:GLU:HG2	4:32:25:ARG:N	2.29	0.47
22:1L:72:C:C2'	22:1L:73:A:H5'	2.45	0.47
26:14:997:G:O2'	26:14:998:C:H5'	2.15	0.47
26:14:2235:G:H2'	26:14:2236:C:C6	2.50	0.47
26:14:2259:G:C2	26:14:2282:G:N1	2.83	0.47
26:14:2416:C:O5'	26:14:2416:C:H6	1.98	0.47
28:19:242:ARG:HG2	28:19:246:PRO:HG3	1.96	0.47
30:39:128:ALA:O	30:39:129:PHE:C	2.57	0.47
37:45:27:VAL:CB	37:45:28:ALA:HA	2.30	0.47
39:65:11:LYS:HE3	39:65:91:PRO:HD3	1.95	0.47
39:65:35:ILE:HB	39:65:97:ARG:NH2	2.30	0.47
46:D5:51:ALA:HB1	46:D5:57:ILE:HD11	1.97	0.47
1:13:106:C:O2'	1:13:107:G:H5'	2.15	0.47
1:13:166:G:H2'	1:13:167:G:C8	2.50	0.47
1:13:375:U:H4'	16:7I:6:LEU:HD23	1.96	0.47
1:13:645:C:P	58:13:1811:HOH:O	2.72	0.47
1:13:668:G:C6	1:13:669:U:C5	3.03	0.47
1:13:872:A:C5	1:13:874:G:C8	3.03	0.47
1:13:1274:G:H2'	1:13:1275:A:H8	1.79	0.47
3:2E:121:ALA:O	3:2E:125:GLU:HG3	2.15	0.47
7:6E:127:ALA:HA	7:6E:132:GLY:H	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1I:26:ALA:HA	10:1I:29:ARG:CZ	2.45	0.47
12:3I:118:SER:OG	12:3I:119:LYS:N	2.48	0.47
13:4I:88:ARG:O	13:4I:92:HIS:HD2	1.98	0.47
19:AI:65:ASN:OD1	19:AI:65:ASN:N	2.38	0.47
23:2K:53:G:C4	23:2K:54:G:C8	3.03	0.47
26:1H:50:U:H3'	26:1H:51:G:H5'	1.97	0.47
26:1H:189:G:H2'	26:1H:205:G:N2	2.29	0.47
26:1H:443:A:N7	30:31:45:ARG:HG2	2.30	0.47
26:1H:546:C:O2	26:1H:546:C:H2'	2.15	0.47
26:1H:550:G:O2'	26:1H:1220:A:N3	2.35	0.47
26:1H:662:G:O4'	36:78:14:LYS:HG2	2.15	0.47
26:1H:676:A:H8	26:1H:2069:G:N2	2.03	0.47
26:1H:846:C:C4	26:1H:930:U:C4	3.03	0.47
26:1H:1006:C:O2	34:58:106:MET:HG2	2.15	0.47
26:1H:1040:C:N4	26:1H:1115:G:H1	2.13	0.47
26:1H:1290:C:H2'	26:1H:1291:C:H6	1.80	0.47
26:1H:1829:A:H2'	26:1H:1830:C:O4'	2.14	0.47
26:1H:2287:A:N3	26:1H:2289:G:C8	2.83	0.47
26:1H:2735:G:H2'	26:1H:2736:G:H8	1.80	0.47
29:21:49:LEU:HA	29:21:49:LEU:HD12	1.67	0.47
29:21:64:LYS:HA	29:21:65:GLY:HA2	1.54	0.47
32:51:154:PRO:HB2	32:51:163:TYR:CZ	2.50	0.47
36:78:113:LYS:HA	36:78:129:ALA:O	2.14	0.47
37:88:81:VAL:HG23	37:88:82:ARG:O	2.15	0.47
38:98:97:VAL:HA	38:98:113:LEU:O	2.15	0.47
39:A8:61:ASN:O	39:A8:64:GLU:N	2.46	0.47
39:A8:102:ALA:O	39:A8:105:ALA:N	2.41	0.47
1:1G:57:G:C6	1:1G:58:C:N4	2.82	0.47
1:1G:230:G:C2	1:1G:231:G:C4	3.03	0.47
1:1G:395:C:N4	58:1G:1866:HOH:O	2.47	0.47
1:1G:1001:G:N2	1:1G:1040:U:O2	2.48	0.47
5:42:48:ALA:HB2	5:42:57:LYS:HD3	1.96	0.47
17:8A:81:ARG:HA	17:8A:81:ARG:HE	1.80	0.47
26:14:182:A:N3	26:14:433:C:O2'	2.43	0.47
26:14:977:G:C4	26:14:978:G:C8	3.02	0.47
26:14:1636:C:O2'	26:14:1760:A:N3	2.36	0.47
26:14:1869:G:N2	26:14:1872:A:C8	2.83	0.47
26:14:2030:A:C2	26:14:2499:C:H5"	2.50	0.47
26:14:2095:C:H2'	26:14:2096:U:O4'	2.15	0.47
26:14:2291:U:H5"	26:14:2380:C:O2'	2.14	0.47
26:14:2345:G:N3	26:14:2381:C:H2'	2.30	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:18:GLU:O	31:49:22:ARG:HG2	2.15	0.47
31:49:51:ARG:O	31:49:55:LYS:HG2	2.14	0.47
44:B5:27:THR:HB	44:B5:80:ILE:HG22	1.97	0.47
47:E5:36:ILE:HD12	47:E5:58:THR:HG23	1.97	0.47
1:13:15:G:H4'	5:4E:24:ARG:NH1	2.30	0.46
1:13:170:U:H2'	1:13:171:A:H8	1.78	0.46
1:13:604:G:H2'	1:13:605:U:O4'	2.15	0.46
2:1E:216:SER:HB3	2:1E:232:PRO:HG3	1.97	0.46
3:2E:22:TRP:CZ2	14:5I:54:PRO:HG2	2.50	0.46
5:4E:72:GLN:HE22	5:4E:144:THR:HG22	1.79	0.46
19:AI:40:ILE:HG22	19:AI:68:GLY:HA2	1.97	0.46
24:3K:38:A:H3'	24:3K:39:G:C8	2.39	0.46
26:1H:247:G:H4'	26:1H:386:G:C5	2.50	0.46
26:1H:586:A:N1	26:1H:809:G:O2'	2.39	0.46
26:1H:730:C:H5'	58:1H:3542:HOH:O	2.15	0.46
26:1H:764:A:N3	28:11:213:ARG:NH1	2.63	0.46
26:1H:1859:A:N6	26:1H:1883:G:O2'	2.48	0.46
26:1H:2810:A:H2'	26:1H:2811:G:O4'	2.16	0.46
28:11:64:ILE:O	28:11:64:ILE:HG13	2.15	0.46
30:31:64:ILE:HG23	30:31:65:TRP:NE1	2.30	0.46
31:41:67:LYS:NZ	31:41:67:LYS:O	2.37	0.46
34:58:26:LEU:O	34:58:30:ILE:HG13	2.14	0.46
37:88:52:VAL:O	37:88:56:ARG:HB2	2.16	0.46
41:C8:47:TYR:CD1	41:C8:47:TYR:C	2.93	0.46
41:C8:61:TRP:CE2	41:C8:94:ASN:HA	2.49	0.46
41:C8:65:ILE:HG13	41:C8:96:ALA:CB	2.39	0.46
1:1G:327:A:O2'	1:1G:329:A:H5"	2.15	0.46
1:1G:1353:G:C2	1:1G:1370:G:C2	3.03	0.46
1:1G:1486:G:H2'	1:1G:1487:G:C8	2.50	0.46
3:22:159:GLY:HA2	3:22:193:TYR:CE2	2.49	0.46
4:32:13:ARG:C	4:32:15:GLU:N	2.71	0.46
5:42:110:LEU:HD12	5:42:118:ILE:HG21	1.97	0.46
8:72:49:GLU:O	8:72:51:VAL:HG13	2.15	0.46
13:4A:91:ARG:CB	13:4A:98:VAL:HG12	2.44	0.46
14:5A:22:THR:HB	14:5A:33:VAL:HG21	1.98	0.46
16:7A:43:LYS:HG2	16:7A:48:TRP:CE2	2.50	0.46
22:1L:8:U:H2'	22:1L:46:G:H21	1.79	0.46
26:14:39:C:H2'	26:14:40:C:H6	1.80	0.46
26:14:511:U:C5	26:14:512:G:C5	3.03	0.46
26:14:528:A:C2	26:14:2043:C:H4'	2.50	0.46
26:14:844:C:C5	26:14:845:G:C6	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:956:G:H4'	37:45:83:MET:HE1	1.98	0.46
26:14:994:C:OP1	41:85:53:ARG:NH2	2.48	0.46
26:14:1169:G:H1	26:14:1180:C:N4	2.10	0.46
26:14:1283:G:O2'	26:14:1285:G:N7	2.43	0.46
30:39:7:TYR:CE1	30:39:10:PRO:HD3	2.49	0.46
34:15:61:ARG:HA	34:15:61:ARG:HH11	1.80	0.46
37:45:27:VAL:HG12	37:45:134:ARG:HE	1.80	0.46
46:D5:109:ALA:HB1	46:D5:117:LEU:HD11	1.98	0.46
54:M5:52:LYS:N	54:M5:53:PRO:HD2	2.30	0.46
1:13:247:G:OP2	17:8I:100:LYS:HB3	2.15	0.46
1:13:292:G:N7	1:13:293:G:H1'	2.29	0.46
1:13:431:A:H2'	1:13:432:A:O4'	2.16	0.46
1:13:465:A:H8	1:13:465:A:OP1	1.97	0.46
8:7E:80:ILE:H	8:7E:80:ILE:HG12	1.57	0.46
12:3I:33:ARG:HG2	12:3I:60:LEU:CD1	2.45	0.46
26:1H:673:C:H5"	30:31:81:PRO:HD2	1.96	0.46
26:1H:800:A:P	58:1H:3531:HOH:O	2.63	0.46
26:1H:804:A:H5"	26:1H:805:G:OP1	2.15	0.46
26:1H:1466:G:H2'	26:1H:1547:C:C4	2.50	0.46
26:1H:1663:C:H2'	58:1H:3611:HOH:O	2.14	0.46
26:1H:1889:A:N1	26:1H:2234:G:H1'	2.30	0.46
26:1H:2290:G:H2'	26:1H:2291:U:O4'	2.16	0.46
26:1H:2687:U:H2'	26:1H:2688:U:O4'	2.16	0.46
27:16:12:C:OP2	27:16:12:C:C6	2.69	0.46
28:11:270:ILE:C	28:11:271:ILE:HG12	2.39	0.46
29:21:51:PHE:CE2	29:21:52:LEU:HD23	2.50	0.46
29:21:181:LEU:HD21	40:B8:6:LEU:HD12	1.97	0.46
32:51:152:ARG:HG3	32:51:161:GLY:HA2	1.96	0.46
36:78:63:PRO:HD3	54:Q8:27:THR:HG22	1.97	0.46
38:98:4:LEU:HA	38:98:4:LEU:HD23	1.53	0.46
43:E8:14:PRO:O	43:E8:18:ARG:HB2	2.15	0.46
46:H8:153:SER:O	46:H8:157:LEU:HD21	2.15	0.46
1:1G:171:A:H2'	1:1G:172:A:C8	2.51	0.46
1:1G:500:G:N2	1:1G:546:G:H1'	2.31	0.46
1:1G:709:G:C5	1:1G:710:G:N7	2.83	0.46
1:1G:979:C:H5	1:1G:980:C:C2	2.32	0.46
1:1G:1399:C:C2	1:1G:1502:A:N6	2.84	0.46
12:3A:82:VAL:O	12:3A:106:ASP:HB2	2.16	0.46
13:4A:92:HIS:NE2	13:4A:98:VAL:HG11	2.30	0.46
15:6A:15:PHE:CZ	15:6A:84:LYS:HG3	2.51	0.46
17:8A:29:HIS:HB3	17:8A:33:GLY:H	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:205:G:HO2'	26:14:206:U:P	2.35	0.46
26:14:404:C:O2'	26:14:405:U:OP2	2.30	0.46
26:14:467:G:H2'	26:14:468:G:O4'	2.15	0.46
26:14:1449:A:N6	26:14:1449(A):G:N3	2.63	0.46
26:14:1567:A:H5'	28:19:58:HIS:CD2	2.50	0.46
26:14:1591:G:H2'	26:14:1592:C:O4'	2.15	0.46
26:14:1780:A:H3'	26:14:1781:C:H2'	1.96	0.46
26:14:1824:G:N3	28:19:254:THR:OG1	2.47	0.46
26:14:2019:A:N6	26:14:2020:A:N7	2.64	0.46
26:14:2023:G:OP2	26:14:2617:C:H4'	2.15	0.46
26:14:2738:A:H2	26:14:2766:G:H22	1.61	0.46
28:19:158:ALA:O	28:19:159:ALA:C	2.59	0.46
30:39:27:GLU:C	30:39:29:ASN:H	2.23	0.46
33:69:109:ILE:HB	33:69:130:TYR:OH	2.16	0.46
33:69:109:ILE:HB	33:69:130:TYR:CZ	2.50	0.46
42:95:7:THR:HG23	42:95:22:VAL:HG21	1.96	0.46
43:A5:70:TYR:O	43:A5:107:LEU:HD12	2.16	0.46
48:F5:17:SER:N	48:F5:38:SER:O	2.37	0.46
1:13:601:C:C2	1:13:602:A:C8	3.04	0.46
1:13:1321:C:C5	1:13:1322:C:C2	3.03	0.46
1:13:1367:C:H5"	9:8E:114:TYR:HB3	1.98	0.46
17:8I:76:LEU:HD11	17:8I:79:SER:H	1.81	0.46
20:BI:63:ILE:HG21	20:BI:81:LYS:HG3	1.95	0.46
20:BI:74:LYS:HB3	20:BI:74:LYS:HE2	1.53	0.46
23:2K:3:C:H42	23:2K:71:G:H1	1.61	0.46
26:1H:1264:G:OP1	52:N8:19:ARG:NH2	2.45	0.46
26:1H:1268:A:H2'	26:1H:1269:A:O4'	2.15	0.46
26:1H:1992:G:O2'	26:1H:1993:U:OP2	2.23	0.46
26:1H:2062:A:H5"	58:1H:4145:HOH:O	2.14	0.46
26:1H:2270:G:C2'	26:1H:2271:G:H5'	2.44	0.46
26:1H:2721:A:H2'	26:1H:2722:G:O4'	2.15	0.46
27:16:38:C:H2'	27:16:39:A:O4'	2.15	0.46
31:41:77:ILE:HG22	31:41:82:LEU:HD12	1.97	0.46
34:58:1:MET:HE1	41:C8:95:LEU:HD21	1.97	0.46
35:68:7:TYR:CE1	35:68:20:MET:HE3	2.47	0.46
42:D8:14:VAL:HG23	42:D8:96:ILE:HG21	1.96	0.46
47:I8:29:GLN:O	47:I8:67:VAL:HG12	2.15	0.46
1:1G:1017:G:H2'	1:1G:1018:C:O4'	2.15	0.46
1:1G:1329:A:H5"	13:4A:25:ILE:C	2.40	0.46
4:32:35:ARG:HB2	4:32:35:ARG:NH1	2.27	0.46
7:62:126:ASP:HB3	7:62:131:LYS:O	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:82:55:ALA:HB1	9:82:58:HIS:HB2	1.96	0.46
15:6A:53:HIS:O	15:6A:56:LEU:HB3	2.15	0.46
26:14:98:G:H5"	49:G5:3:LEU:HD23	1.97	0.46
26:14:273(C):C:H42	26:14:363(C):G:H1	1.63	0.46
26:14:573:G:O2'	26:14:574:C:H5'	2.15	0.46
26:14:828:U:C5	26:14:2247:A:H4'	2.50	0.46
26:14:907:U:O2'	37:45:101:ARG:NH2	2.43	0.46
26:14:2062:A:N6	26:14:2503:A:H62	2.13	0.46
26:14:2549:G:H2'	26:14:2550:G:H8	1.81	0.46
26:14:2750:A:H8	26:14:2752:C:N4	2.13	0.46
34:15:10:GLU:HG3	34:15:11:PRO:HD2	1.97	0.46
34:15:59:LYS:HE2	34:15:61:ARG:HH12	1.79	0.46
53:L5:29:LYS:O	53:L5:33:ARG:HG3	2.16	0.46
1:13:223:U:H2'	1:13:224:C:C6	2.47	0.46
1:13:373:A:H2'	1:13:374:A:H8	1.80	0.46
1:13:575:G:H4'	1:13:576:G:H5"	1.98	0.46
1:13:1278:U:H5'	1:13:1279:A:O4'	2.15	0.46
2:1E:80:ILE:HG23	2:1E:84:GLU:HG3	1.97	0.46
7:6E:45:ASP:O	7:6E:49:ILE:HG13	2.15	0.46
13:4I:14:ARG:O	13:4I:18:ALA:HB2	2.14	0.46
14:5I:4:LYS:NZ	14:5I:7:ILE:HD11	2.31	0.46
17:8I:64:PRO:HA	17:8I:70:ARG:HG3	1.96	0.46
20:BI:71:THR:O	20:BI:72:LEU:C	2.59	0.46
23:2K:52:C:O2	23:2K:64:G:N2	2.38	0.46
26:1H:637:A:H5"	36:78:117:GLU:OE1	2.16	0.46
26:1H:1007:C:H5"	34:58:35:ARG:HH11	1.80	0.46
26:1H:1871:A:H2'	26:1H:1872:A:C8	2.50	0.46
26:1H:2591:C:OP2	28:11:239:ARG:HG2	2.15	0.46
26:1H:2607:G:H2'	26:1H:2608:G:O4'	2.15	0.46
29:21:117:MET:O	29:21:118:LYS:HB3	2.15	0.46
30:31:192:LEU:HD21	30:31:194:MET:HE2	1.96	0.46
34:58:84:LYS:HE2	34:58:84:LYS:HB3	1.49	0.46
36:78:97:PRO:HD3	36:78:126:VAL:O	2.16	0.46
41:C8:79:PHE:CD1	41:C8:79:PHE:C	2.93	0.46
48:J8:92:LYS:HE3	48:J8:92:LYS:HB3	1.65	0.46
1:1G:628:G:H2'	1:1G:629:G:C8	2.50	0.46
1:1G:709:G:C4	1:1G:710:G:C8	3.04	0.46
1:1G:746:A:H2'	1:1G:747:C:C6	2.51	0.46
1:1G:833:U:H2'	1:1G:834:C:H6	1.80	0.46
1:1G:926:G:C6	1:1G:1505:G:C6	3.02	0.46
1:1G:976:G:H8	1:1G:1358:U:O2'	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1125:U:O4	10:1A:5:ARG:NH2	2.48	0.46
1:1G:1224:G:N1	1:1G:1322:C:H1'	2.30	0.46
1:1G:1515:C:H2'	1:1G:1516:G:C8	2.50	0.46
2:12:24:TRP:HE3	2:12:40:HIS:HE1	1.63	0.46
3:22:122:GLU:HA	3:22:125:GLU:OE1	2.16	0.46
24:3L:45:G:H8	24:3L:45:G:O5'	1.99	0.46
26:14:142:G:H2'	26:14:143:C:H6	1.80	0.46
26:14:1162:G:H1'	42:95:23:GLU:CD	2.41	0.46
26:14:2158:A:H2'	26:14:2158:A:N3	2.30	0.46
26:14:2572:A:OP1	29:29:144:ARG:HB2	2.14	0.46
32:59:6:ARG:HH22	32:59:62:LYS:HG3	1.79	0.46
32:59:149:ARG:HB2	32:59:149:ARG:HH11	1.80	0.46
33:69:6:LEU:HD12	33:69:6:LEU:HA	1.71	0.46
54:M5:10:ALA:O	54:M5:12:LYS:N	2.48	0.46
54:M5:14:VAL:CG1	54:M5:22:VAL:HG13	2.43	0.46
1:13:11:G:C2	1:13:12:U:C6	3.04	0.46
1:13:484:G:H5'	1:13:486:U:O4'	2.16	0.46
1:13:691:G:H2'	1:13:692:U:C5	2.51	0.46
1:13:722:A:C2	1:13:724:G:C5	3.04	0.46
2:1E:163:PHE:HA	2:1E:185:ILE:O	2.16	0.46
4:3E:111:ALA:HB1	4:3E:116:GLN:OE1	2.15	0.46
7:6E:97:GLN:O	7:6E:101:LEU:HG	2.15	0.46
8:7E:87:SER:CB	8:7E:93:VAL:H	2.29	0.46
22:1K:65:C:H41	22:1K:67:A:N6	2.14	0.46
24:3K:70:A:H2'	24:3K:71:G:C8	2.51	0.46
26:1H:909:A:H2'	26:1H:912:C:C5	2.50	0.46
26:1H:934:G:H2'	26:1H:935:C:C6	2.51	0.46
26:1H:1553:A:C6	26:1H:1555:G:H1'	2.49	0.46
26:1H:1582:C:H2'	26:1H:1583:A:O4'	2.16	0.46
26:1H:1693:U:H3	26:1H:1829:A:H61	1.62	0.46
26:1H:1789:A:OP1	28:11:221:VAL:HA	2.16	0.46
26:1H:1813:G:O3'	28:11:40:THR:HG21	2.15	0.46
26:1H:2422:A:N7	54:Q8:31:HIS:HE1	2.12	0.46
27:16:12:C:N3	47:I8:74:ARG:NH1	2.64	0.46
27:16:29:A:O2'	27:16:58:A:N1	2.46	0.46
37:88:43:THR:O	37:88:46:GLN:N	2.47	0.46
39:A8:49:VAL:HG11	39:A8:77:ALA:HB2	1.97	0.46
40:B8:26:ASP:CB	40:B8:91:ARG:HA	2.45	0.46
40:B8:50:ILE:O	40:B8:99:LEU:HD12	2.15	0.46
40:B8:99:LEU:O	40:B8:102:ILE:HD11	2.15	0.46
1:1G:450:G:N7	1:1G:481:G:C6	2.84	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:485:G:O2'	1:1G:486:U:O5'	2.33	0.46
1:1G:1074:G:O2'	1:1G:1101:A:N1	2.32	0.46
1:1G:1347:G:C8	9:82:107:ARG:HB3	2.51	0.46
1:1G:1442:G:C6	1:1G:1446:A:N6	2.83	0.46
2:12:195:ASP:O	8:72:74:PRO:HG3	2.16	0.46
3:22:35:GLU:O	3:22:39:ILE:HG13	2.16	0.46
3:22:55:VAL:HG13	3:22:68:VAL:HG22	1.98	0.46
10:1A:84:GLN:HA	10:1A:88:LEU:HD13	1.98	0.46
26:14:251:A:C5	26:14:252:G:H1'	2.51	0.46
26:14:725:G:H8	26:14:725:G:O5'	1.99	0.46
26:14:946:G:H2'	26:14:947:G:C8	2.49	0.46
26:14:992:C:H2'	26:14:993:G:H8	1.81	0.46
26:14:1523:U:O5'	26:14:1523:U:H6	1.97	0.46
26:14:2276:G:C2	26:14:2277:G:C8	3.04	0.46
26:14:2473:U:O2	26:14:2473:U:H2'	2.16	0.46
28:19:223:GLY:HA2	28:19:231:HIS:CD2	2.51	0.46
29:29:117:MET:HA	29:29:122:PHE:N	2.31	0.46
33:69:40:THR:O	33:69:44:LEU:N	2.45	0.46
40:75:129:ARG:HA	40:75:132:LYS:HD2	1.97	0.46
41:85:47:TYR:HA	41:85:50:ARG:NH2	2.30	0.46
48:F5:86:SER:N	48:F5:87:PRO:CD	2.79	0.46
1:13:66:G:C6	1:13:67:C:C4	3.04	0.46
1:13:178:C:H2'	1:13:179:A:O4'	2.15	0.46
1:13:376:G:O6	58:13:1841:HOH:O	2.21	0.46
1:13:664:G:N2	1:13:741:G:H1	2.13	0.46
1:13:917:G:H2'	1:13:918:A:H8	1.81	0.46
1:13:1174:G:H2'	1:13:1175:G:H8	1.80	0.46
7:6E:69:VAL:O	7:6E:138:LYS:HG3	2.15	0.46
8:7E:91:ARG:HB2	12:3I:7:ILE:HD12	1.97	0.46
11:2I:18:ARG:HB2	11:2I:33:THR:OG1	2.15	0.46
17:8I:8:GLY:C	17:8I:21:VAL:HG12	2.41	0.46
17:8I:13:ASP:OD2	17:8I:53:LEU:N	2.49	0.46
22:1K:49:G:H3'	22:1K:50:G:H2'	1.97	0.46
22:1K:71:G:H2'	22:1K:72:C:C2	2.51	0.46
26:1H:459:U:H5"	53:P8:40:TRP:CD2	2.50	0.46
26:1H:569:U:O2'	26:1H:983:A:N1	2.41	0.46
26:1H:1437:C:C2	26:1H:1438:U:C5	3.04	0.46
26:1H:1529:A:C8	26:1H:1530:G:C8	3.03	0.46
26:1H:1581:G:H2'	26:1H:1582:C:O4'	2.15	0.46
26:1H:1986:A:OP1	58:1H:3687:HOH:O	2.21	0.46
27:16:3:C:N4	27:16:117:G:H1	2.12	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:17:THR:CG2	28:11:204:ILE:HA	2.43	0.46
30:31:63:LYS:NZ	30:31:75:HIS:O	2.28	0.46
34:58:39:ARG:NH1	34:58:48:MET:HE2	2.30	0.46
34:58:96:GLU:C	34:58:98:VAL:H	2.24	0.46
46:H8:60:GLU:O	46:H8:61:LEU:HB2	2.15	0.46
1:1G:45:U:H2'	1:1G:46:G:H8	1.80	0.46
1:1G:198:G:H2'	1:1G:199:G:C8	2.50	0.46
1:1G:247:G:OP2	17:8A:100:LYS:N	2.48	0.46
1:1G:1010:G:C2	1:1G:1011:G:C4	3.04	0.46
1:1G:1321:C:O2	19:AA:36:ARG:NH2	2.48	0.46
1:1G:1386:G:C2	1:1G:1387:G:C8	3.04	0.46
7:62:93:PRO:HD2	7:62:94:ARG:NH2	2.18	0.46
9:82:14:VAL:O	9:82:65:VAL:HG23	2.16	0.46
9:82:16:ARG:O	9:82:63:ILE:HG23	2.16	0.46
13:4A:23:TYR:CE2	13:4A:71:ARG:HG3	2.50	0.46
23:2L:24:C:C2	23:2L:25:U:C5	3.03	0.46
26:14:843:G:N2	26:14:936:C:C2	2.83	0.46
26:14:996:A:H1'	41:85:92:ARG:NH2	2.31	0.46
26:14:1657:C:H2'	26:14:1658:C:C6	2.51	0.46
26:14:1827:C:OP2	28:19:222:ARG:HD2	2.15	0.46
26:14:1972:A:H2'	26:14:1973:G:C8	2.51	0.46
26:14:2115:G:H1'	26:14:2171:A:N1	2.31	0.46
26:14:2148:G:H2'	26:14:2149:G:C8	2.47	0.46
26:14:2317:C:H2'	26:14:2318:G:O4'	2.15	0.46
26:14:2776:A:OP1	26:14:2776:A:H3'	2.15	0.46
26:14:2859:G:C8	26:14:2859:G:H3'	2.50	0.46
31:49:37:VAL:HG13	31:49:158:ALA:O	2.15	0.46
31:49:104:GLU:C	31:49:106:LEU:H	2.24	0.46
39:65:7:TYR:CZ	39:65:91:PRO:HG3	2.51	0.46
53:L5:30:VAL:O	53:L5:34:ARG:HG3	2.15	0.46
1:13:651:C:H2'	1:13:652:U:C6	2.51	0.46
1:13:704:A:H5"	1:13:705:U:OP2	2.15	0.46
1:13:813:U:OP2	1:13:816:A:N6	2.46	0.46
1:13:1126:U:H3'	1:13:1126:U:C6	2.50	0.46
1:13:1244:C:N3	1:13:1294:G:N2	2.63	0.46
1:13:1267:C:C5	1:13:1268:A:C5	3.04	0.46
1:13:1295:G:O3'	13:4I:14:ARG:NH1	2.49	0.46
1:13:1363:A:N6	58:13:1869:HOH:O	2.40	0.46
1:13:1446:A:OP1	1:13:1446:A:H4'	2.15	0.46
2:1E:17:PHE:HD2	2:1E:44:LEU:HD11	1.81	0.46
3:2E:70:VAL:H	3:2E:106:VAL:HG23	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:4E:5:ASP:OD1	5:4E:5:ASP:N	2.49	0.46
8:7E:17:THR:HG21	8:7E:80:ILE:HG13	1.97	0.46
11:2I:95:ILE:O	11:2I:98:LEU:N	2.45	0.46
26:1H:270(F):U:H2'	26:1H:270(G):C:C6	2.51	0.46
26:1H:1726:G:C6	26:1H:1727:U:C4	3.04	0.46
26:1H:1799:G:O2'	26:1H:1800:C:OP2	2.32	0.46
26:1H:2111:C:C4	26:1H:2145:C:C2	3.03	0.46
26:1H:2309:A:C5	26:1H:2310:A:N7	2.83	0.46
28:11:131:LEU:O	28:11:190:TYR:HA	2.15	0.46
30:31:29:ASN:H	30:31:112:MET:CE	2.27	0.46
30:31:117:ARG:HD3	30:31:117:ARG:HA	1.43	0.46
31:41:142:PRO:O	51:M8:31:ILE:HG21	2.15	0.46
31:41:145:THR:O	31:41:146:TYR:HB3	2.16	0.46
37:88:39:PRO:HB3	37:88:99:PRO:HD3	1.97	0.46
39:A8:42:ASP:C	39:A8:44:LYS:N	2.73	0.46
40:B8:27:THR:HG23	40:B8:90:GLN:HB3	1.97	0.46
42:D8:37:VAL:HG12	42:D8:55:ALA:O	2.16	0.46
46:H8:131:ARG:H	46:H8:131:ARG:HG2	1.55	0.46
51:M8:22:ILE:C	51:M8:24:THR:HG23	2.41	0.46
1:1G:338:A:H2'	1:1G:339:C:C6	2.51	0.46
1:1G:500:G:H2'	1:1G:501:C:C6	2.51	0.46
1:1G:969:A:H2'	1:1G:970:C:O4'	2.16	0.46
1:1G:1187:G:H4'	9:82:111:ARG:HH11	1.80	0.46
1:1G:1321:C:H5"	1:1G:1322:C:H5"	1.97	0.46
3:22:106:VAL:CG2	3:22:109:PRO:HB3	2.46	0.46
4:32:98:GLU:OE2	4:32:103:ASN:ND2	2.35	0.46
12:3A:104:VAL:CG1	12:3A:105:TYR:H	2.29	0.46
13:4A:74:VAL:O	13:4A:78:ILE:HG12	2.15	0.46
13:4A:81:LEU:HA	13:4A:81:LEU:HD13	1.48	0.46
16:7A:67:THR:H	16:7A:70:ALA:HB3	1.81	0.46
26:14:82:G:N1	26:14:103:A:OP2	2.48	0.46
26:14:125:G:H1'	53:L5:13:ALA:HB1	1.97	0.46
26:14:335:C:H2'	26:14:336:C:H6	1.81	0.46
26:14:528:A:H2	26:14:2043:C:C5'	2.29	0.46
26:14:620:G:H4'	26:14:621:A:H5"	1.97	0.46
26:14:1341:U:O4	44:B5:16:LYS:HE2	2.16	0.46
26:14:1915:U:H2'	26:14:1916:A:H5'	1.97	0.46
26:14:2320:A:H4'	26:14:2321:G:N7	2.31	0.46
26:14:2543:G:H2'	26:14:2544:G:C8	2.51	0.46
26:14:2600:A:H2'	26:14:2601:C:C6	2.51	0.46
30:39:194:MET:HE3	30:39:194:MET:HB2	1.71	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:31:LEU:HD21	33:69:38:LEU:HG	1.97	0.46
36:35:6:LEU:HA	36:35:6:LEU:HD12	1.60	0.46
37:45:69:PHE:CD1	37:45:70:PRO:HD2	2.50	0.46
40:75:10:VAL:C	40:75:12:SER:N	2.72	0.46
40:75:64:ARG:NH1	40:75:103:ARG:HA	2.31	0.46
46:D5:158:PRO:O	46:D5:161:VAL:HG22	2.16	0.46
1:13:595:G:H1'	1:13:596:C:H5	1.81	0.46
1:13:799:G:C6	1:13:800:G:C4	3.04	0.46
1:13:1378:C:C5	1:13:1379:G:C8	3.04	0.46
2:1E:11:LEU:HD23	2:1E:213:LEU:HD21	1.97	0.46
2:1E:16:HIS:CE1	2:1E:210:SER:HB3	2.50	0.46
6:5E:74:ASP:OD1	6:5E:74:ASP:N	2.48	0.46
16:7I:23:ASP:O	16:7I:26:ARG:HB2	2.16	0.46
18:9I:54:ARG:HG3	18:9I:55:ARG:HD2	1.98	0.46
19:AI:18:LYS:HE2	19:AI:18:LYS:HB3	1.68	0.46
26:1H:1055:G:H1'	26:1H:1085:A:N1	2.30	0.46
26:1H:1171:G:C5	26:1H:1174:A:N6	2.83	0.46
28:11:228:PRO:HD3	28:11:235:GLY:N	2.31	0.46
30:31:155:LEU:HD11	30:31:176:LEU:HD22	1.98	0.46
31:41:109:VAL:HG21	51:M8:14:ILE:CD1	2.46	0.46
33:61:1:MET:HB3	33:61:21:VAL:O	2.15	0.46
36:78:138:LEU:HD12	36:78:144:GLU:OE2	2.16	0.46
37:88:65:PHE:HB2	37:88:105:GLU:O	2.16	0.46
37:88:137:TYR:HD1	46:H8:74:VAL:HG11	1.81	0.46
45:G8:14:LEU:HD12	45:G8:23:ARG:O	2.16	0.46
48:J8:21:ARG:HE	48:J8:21:ARG:HB3	1.39	0.46
1:1G:362:G:H4'	12:3A:33:ARG:NH2	2.31	0.46
1:1G:370:C:H2'	1:1G:371:G:H8	1.81	0.46
1:1G:983:A:H3'	1:1G:983:A:N3	2.31	0.46
1:1G:1082:G:H8	1:1G:1082:G:OP2	1.99	0.46
1:1G:1492:A:O4'	12:3A:47:LYS:HD3	2.16	0.46
7:62:71:PRO:HD3	7:62:103:TRP:CZ3	2.50	0.46
23:2L:62:C:H2'	23:2L:63:C:H6	1.80	0.46
25:4L:23:A:O2'	25:4L:24:A:H5"	2.15	0.46
26:14:98:G:OP1	49:G5:3:LEU:HB3	2.15	0.46
26:14:303:U:H2'	26:14:304:G:H8	1.81	0.46
26:14:634:C:H2'	26:14:635:C:H6	1.80	0.46
26:14:635:C:H2'	26:14:636:G:O4'	2.16	0.46
26:14:947:G:H2'	26:14:948:G:C8	2.50	0.46
26:14:975:G:H1'	26:14:990:A:C2	2.51	0.46
26:14:1364:G:OP1	48:F5:3:LYS:HD2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1574:C:H2'	26:14:1575:C:C6	2.50	0.46
26:14:2319:G:N1	26:14:2334:G:OP2	2.49	0.46
26:14:2356:C:H4'	47:E5:20:ARG:HG3	1.98	0.46
26:14:2637:U:C4	26:14:2638:G:C6	3.04	0.46
29:29:68:ALA:C	29:29:70:ALA:N	2.73	0.46
31:49:76:SER:OG	31:49:84:LYS:N	2.49	0.46
36:35:49:ARG:CZ	54:M5:61:LEU:HD12	2.46	0.46
40:75:118:ARG:HA	40:75:118:ARG:HD3	1.64	0.46
46:D5:30:ASN:HA	46:D5:89:PHE:CE1	2.51	0.46
48:F5:73:LEU:O	48:F5:76:ARG:HG2	2.16	0.46
1:13:265:G:H5'	17:8I:64:PRO:O	2.16	0.46
1:13:1014:A:C2	1:13:1219:U:H1'	2.51	0.46
1:13:1143:G:H2'	1:13:1144:G:C8	2.48	0.46
2:1E:20:GLU:O	2:1E:40:HIS:HD2	1.99	0.46
5:4E:76:ILE:HG13	5:4E:93:PRO:HG3	1.97	0.46
8:7E:14:ARG:O	8:7E:18:ARG:HG3	2.16	0.46
9:8E:92:TYR:O	9:8E:96:LEU:HD13	2.15	0.46
10:1I:61:GLU:OE2	14:5I:45:ARG:NH1	2.49	0.46
26:1H:110:G:O6	58:1H:3686:HOH:O	2.21	0.46
26:1H:995:C:O2	34:58:3:THR:OG1	2.28	0.46
26:1H:2290:G:C6	26:1H:2291:U:N3	2.83	0.46
26:1H:2409:G:H2'	26:1H:2410:G:O4'	2.16	0.46
26:1H:2712:U:H1'	26:1H:2712(A):A:C8	2.51	0.46
26:1H:2729:G:H2'	26:1H:2730:C:C6	2.51	0.46
29:21:9:VAL:HG12	40:B8:7:ILE:HG22	1.96	0.46
32:51:33:LEU:HD21	32:51:136:ILE:HG22	1.98	0.46
37:88:104:PHE:O	37:88:105:GLU:C	2.59	0.46
39:A8:3:ARG:HG3	39:A8:4:LEU:HB2	1.98	0.46
45:G8:15:VAL:HG21	45:G8:42:VAL:HG11	1.98	0.46
46:H8:16:SER:HB2	46:H8:20:ARG:NH2	2.31	0.46
51:M8:39:CYS:HB3	51:M8:41:PRO:CD	2.46	0.46
1:1G:62:U:H1'	1:1G:379:C:H1'	1.96	0.46
1:1G:591:U:H2'	1:1G:592:G:C8	2.51	0.46
1:1G:1286:A:H8	1:1G:1286:A:H3'	1.81	0.46
1:1G:1362:C:H2'	1:1G:1362(A):C:H5"	1.98	0.46
7:62:50:ILE:HG21	7:62:58:PRO:HA	1.97	0.46
26:14:117:G:C6	26:14:119:A:C6	3.04	0.46
26:14:990:A:N6	26:14:1186:G:H1'	2.30	0.46
26:14:1116:C:H2'	26:14:1117:G:H8	1.81	0.46
26:14:1188:U:C2'	26:14:1189:A:H5'	2.46	0.46
26:14:1204:A:N1	26:14:1241:A:C2	2.84	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2078:C:C4	26:14:2079:U:C4	3.04	0.46
26:14:2392:A:C8	36:35:61:ARG:HD2	2.51	0.46
26:14:2681:C:H5	26:14:2725:A:N6	2.08	0.46
26:14:2794:C:H42	26:14:2803:C:H2'	1.80	0.46
28:19:61:LEU:O	28:19:63:ARG:NH1	2.49	0.46
28:19:77:ALA:HB2	28:19:97:TYR:CG	2.51	0.46
30:39:81:PRO:HB3	30:39:87:GLY:O	2.16	0.46
31:49:47:LYS:HA	31:49:87:PRO:HG2	1.97	0.46
43:A5:18:ARG:HG2	43:A5:18:ARG:HH11	1.81	0.46
1:13:66:G:O4'	1:13:173:U:C4	2.69	0.46
1:13:141:A:C2	1:13:142:G:C5	3.04	0.46
1:13:246:A:C6	1:13:279:A:C2	3.04	0.46
1:13:1189:C:H5"	1:13:1190:G:OP2	2.16	0.46
1:13:1260:C:H3'	1:13:1260:C:H6	1.81	0.46
1:13:1313:U:OP1	19:AI:5:LEU:HB3	2.16	0.46
1:13:1409:C:H2'	1:13:1410:G:C8	2.51	0.46
4:3E:89:THR:OG1	4:3E:90:GLY:N	2.47	0.46
9:8E:36:TYR:OH	9:8E:73:GLN:NE2	2.31	0.46
26:1H:365:C:H2'	26:1H:366:C:O4'	2.17	0.46
26:1H:724:U:H2'	26:1H:725:G:O4'	2.16	0.46
26:1H:1528:A:C6	26:1H:1529:A:C6	3.04	0.46
26:1H:2310:A:C2	31:41:80:PHE:HZ	2.34	0.46
33:61:101:LEU:HD12	33:61:105:HIS:HB2	1.96	0.46
40:B8:65:LYS:HE2	40:B8:67:SER:HB2	1.98	0.46
46:H8:105:VAL:HG13	46:H8:139:VAL:C	2.40	0.46
52:N8:4:HIS:HD2	52:N8:6:VAL:HG23	1.80	0.46
1:1G:173:U:H1'	1:1G:197:A:C6	2.51	0.46
1:1G:370:C:H2'	1:1G:371:G:C8	2.51	0.46
1:1G:457:C:H2'	1:1G:458:C:C6	2.51	0.46
1:1G:965:A:C2	1:1G:969:A:C2	3.04	0.46
1:1G:1320:C:N4	19:AA:36:ARG:HB3	2.31	0.46
1:1G:1442:G:H1	1:1G:1461:G:N2	2.14	0.46
3:22:130:VAL:O	3:22:134:ILE:HG12	2.16	0.46
4:32:22:LYS:O	4:32:113:SER:HB3	2.16	0.46
4:32:70:ILE:HG13	4:32:75:PHE:HB2	1.98	0.46
26:14:333:G:H5"	26:14:334:C:OP2	2.16	0.46
26:14:503:A:H4'	26:14:504:U:H5"	1.97	0.46
26:14:531:C:OP1	26:14:561:G:N2	2.48	0.46
26:14:1114:G:H2'	26:14:1115:G:C8	2.50	0.46
26:14:1264:G:OP1	52:J5:19:ARG:NH2	2.33	0.46
26:14:1385:G:C4	26:14:1386:C:C5	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1386:C:C2	26:14:1387:C:C5	3.03	0.46
26:14:1488:G:N2	26:14:1502:C:N3	2.64	0.46
26:14:2639:A:C2	26:14:2778:A:C8	3.04	0.46
27:1J:21:G:H2'	27:1J:22:U:O4'	2.16	0.46
32:59:9:ILE:CG2	32:59:51:ARG:HE	2.28	0.46
34:15:21:LYS:O	34:15:61:ARG:N	2.48	0.46
34:15:34:LEU:O	34:15:49:GLY:HA3	2.15	0.46
34:15:47:ALA:CB	34:15:112:LEU:HD21	2.45	0.46
40:75:102:ILE:HA	40:75:105:LEU:HD12	1.97	0.46
44:B5:43:VAL:HG12	44:B5:47:PHE:CD2	2.51	0.46
46:D5:44:PHE:HE2	46:D5:88:PHE:CZ	2.33	0.46
49:G5:2:LYS:HA	49:G5:3:LEU:HA	1.67	0.46
1:13:245:C:C2	1:13:284:G:C2	3.03	0.45
1:13:953:G:H2'	1:13:954:G:O4'	2.16	0.45
1:13:1176:A:H2'	1:13:1177:G:O4'	2.16	0.45
1:13:1533:C:H4'	1:13:1534:A:C8	2.50	0.45
2:1E:21:ARG:O	2:1E:21:ARG:NE	2.44	0.45
2:1E:27:LYS:HD3	2:1E:193:ASP:HB2	1.97	0.45
9:8E:41:VAL:C	9:8E:43:ALA:H	2.22	0.45
13:4I:65:LYS:HE3	13:4I:69:GLU:HG2	1.97	0.45
23:2K:47:G:O2'	23:2K:48:U:H6	1.99	0.45
26:1H:586:A:H5'	30:31:89:VAL:HG11	1.98	0.45
26:1H:873:G:N2	26:1H:905:U:O2	2.49	0.45
26:1H:1050:A:H2'	26:1H:1051:G:O4'	2.16	0.45
26:1H:1528:A:N6	26:1H:1529:A:N1	2.64	0.45
26:1H:2135:A:O2'	26:1H:2159:G:O2'	2.28	0.45
26:1H:2331:G:O3'	47:I8:43:THR:HG22	2.17	0.45
26:1H:2771:C:H2'	26:1H:2772:C:C6	2.51	0.45
27:16:110:G:H2'	27:16:111:U:O4'	2.16	0.45
29:21:16:ARG:O	29:21:16:ARG:HG3	2.16	0.45
32:51:157:TYR:O	32:51:158:HIS:CG	2.69	0.45
46:H8:30:ASN:OD1	46:H8:33:LEU:N	2.49	0.45
46:H8:105:VAL:HG22	46:H8:140:ASP:HA	1.97	0.45
47:I8:18:ALA:O	47:I8:20:ARG:NH1	2.48	0.45
50:L8:8:LEU:HD13	50:L8:31:LEU:HD23	1.98	0.45
1:1G:362:G:O2'	12:3A:33:ARG:NH2	2.49	0.45
1:1G:676:A:H1'	11:2A:115:PRO:HB3	1.97	0.45
1:1G:1053:G:C6	1:1G:1199:U:H2'	2.51	0.45
1:1G:1104:G:H2'	1:1G:1105:A:C8	2.51	0.45
1:1G:1378:C:C5	1:1G:1379:G:C4	3.04	0.45
3:22:50:ALA:HB1	3:22:70:VAL:HG11	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:73:ARG:NH1	4:32:73:ARG:HB2	2.31	0.45
13:4A:69:GLU:HA	13:4A:72:ALA:HB3	1.98	0.45
17:8A:13:ASP:H	17:8A:53:LEU:HD12	1.81	0.45
26:14:406:G:H1	26:14:421:U:H3	1.64	0.45
26:14:579:G:O2'	26:14:2019:A:OP1	2.29	0.45
26:14:1225:C:H1'	42:95:85:LYS:HD3	1.98	0.45
26:14:2673:G:O3'	35:25:26:LYS:NZ	2.49	0.45
26:14:2709:G:H1'	58:14:3646:HOH:O	2.16	0.45
32:59:6:ARG:HB2	32:59:65:HIS:CE1	2.51	0.45
34:15:42:TRP:CA	34:15:48:MET:HE1	2.46	0.45
39:65:18:ILE:C	39:65:20:ARG:H	2.23	0.45
40:75:114:LEU:HD23	40:75:114:LEU:HA	1.77	0.45
50:H5:18:ASP:OD1	50:H5:18:ASP:N	2.45	0.45
1:13:5:U:C5	4:3E:85:LYS:HD2	2.51	0.45
1:13:169:C:H2'	1:13:170:U:H5'	1.99	0.45
1:13:304:U:H2'	1:13:305:G:C8	2.51	0.45
1:13:346:G:N3	1:13:346:G:H2'	2.32	0.45
1:13:711:G:O2'	1:13:712:A:H5'	2.15	0.45
1:13:1454:G:OP1	20:BI:39:LYS:NZ	2.28	0.45
2:1E:237:ALA:O	2:1E:239:VAL:HG23	2.17	0.45
7:6E:69:VAL:HG21	7:6E:104:LEU:HD21	1.98	0.45
8:7E:122:ARG:HD3	8:7E:122:ARG:HA	1.82	0.45
11:2I:34:ASP:N	11:2I:40:ILE:HD11	2.30	0.45
14:5I:27:CYS:SG	14:5I:29:ARG:HB2	2.57	0.45
20:BI:87:LYS:HD2	20:BI:87:LYS:HA	1.72	0.45
26:1H:161:U:H2'	26:1H:162:U:H3'	1.98	0.45
26:1H:270(S):G:H5"	48:J8:76:ARG:HH21	1.81	0.45
26:1H:273(A):G:C2	26:1H:364:C:N3	2.84	0.45
26:1H:863:A:H2'	26:1H:864:G:H8	1.81	0.45
26:1H:2018:G:H2'	26:1H:2019:A:O4'	2.16	0.45
26:1H:2138:C:N3	26:1H:2154:G:N2	2.65	0.45
26:1H:2766:G:H5"	26:1H:2767:C:OP2	2.16	0.45
26:1H:2877:G:H2'	26:1H:2878:U:O4'	2.15	0.45
31:41:45:GLU:H	31:41:45:GLU:HG2	1.49	0.45
40:B8:124:ASP:O	40:B8:128:GLU:HB3	2.15	0.45
45:G8:82:PRO:HB3	45:G8:99:CYS:H	1.81	0.45
46:H8:136:PHE:HE1	46:H8:138:GLU:HG2	1.80	0.45
47:I8:41:ARG:NE	47:I8:41:ARG:HA	2.31	0.45
49:K8:44:LEU:N	49:K8:44:LEU:HD23	2.31	0.45
1:1G:191(F):U:O2'	1:1G:191:G:H5'	2.17	0.45
1:1G:619:U:N3	4:32:134:ASP:OD1	2.44	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:867:G:H2'	1:1G:868:C:H6	1.80	0.45
1:1G:1120:G:N2	1:1G:1153:C:O2	2.46	0.45
1:1G:1305:G:O2'	1:1G:1306:A:H8	1.99	0.45
1:1G:1324:A:C4'	1:1G:1362:C:H4'	2.38	0.45
2:12:58:ILE:HG21	2:12:222:ILE:HG12	1.98	0.45
3:22:172:ARG:HH11	3:22:174:PRO:HG3	1.82	0.45
5:42:105:VAL:HG21	5:42:128:PRO:HB3	1.97	0.45
22:1L:75:C:H2'	22:1L:76:A:C4	2.51	0.45
26:14:415:A:H2'	26:14:416:C:O4'	2.15	0.45
26:14:872:A:C6	26:14:906:G:C2	3.04	0.45
26:14:1284:A:H5"	26:14:1285:G:OP2	2.16	0.45
26:14:1589:C:H2'	26:14:1590:U:C6	2.52	0.45
26:14:1830:C:O5'	26:14:1830:C:H6	1.99	0.45
26:14:2408:U:H2'	26:14:2409:G:H8	1.80	0.45
26:14:2516:G:C5	26:14:2517:C:C4	3.04	0.45
26:14:2787:C:O2'	26:14:2810:A:O2'	2.31	0.45
26:14:2831:G:O6	58:14:3483:HOH:O	2.20	0.45
31:49:173:LEU:HD13	31:49:178:PHE:CD2	2.51	0.45
32:59:10:PRO:CG	32:59:50:VAL:HG22	2.46	0.45
35:25:10:VAL:HG12	35:25:19:ILE:HG12	1.98	0.45
37:45:54:MET:HE2	37:45:121:ALA:HB2	1.98	0.45
42:95:91:TYR:CD1	42:95:91:TYR:C	2.94	0.45
53:L5:5:TRP:HA	53:L5:5:TRP:CE3	2.51	0.45
1:13:323:U:O3'	20:BI:22:ARG:HD3	2.17	0.45
1:13:491:G:H2'	1:13:492:G:O4'	2.16	0.45
1:13:660:G:OP1	15:6I:5:LYS:HD3	2.16	0.45
1:13:740:U:O2'	1:13:741:G:H5'	2.16	0.45
1:13:963:G:H21	10:1I:55:LYS:HE2	1.82	0.45
1:13:1198:G:OP1	58:13:1840:HOH:O	2.21	0.45
1:13:1250:A:H4'	9:8E:68:GLY:N	2.30	0.45
1:13:1267:C:H5	1:13:1268:A:C5	2.34	0.45
1:13:1320:C:H1'	19:AI:73:GLU:HG2	1.98	0.45
2:1E:166:ASP:C	2:1E:168:THR:H	2.23	0.45
4:3E:7:PRO:HB2	4:3E:10:ARG:HD2	1.97	0.45
7:6E:113:GLU:HB3	7:6E:118:VAL:HG13	1.98	0.45
23:2K:64:G:H2'	23:2K:65:G:H8	1.81	0.45
26:1H:39:C:O2'	26:1H:40:C:H5'	2.15	0.45
26:1H:654(C):G:H2'	26:1H:654(D):G:O4'	2.16	0.45
26:1H:709:U:H2'	26:1H:710:G:H8	1.81	0.45
26:1H:785:G:H2'	26:1H:786:C:C6	2.51	0.45
26:1H:812:C:H5"	26:1H:1250:G:O2'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1204:A:H8	26:1H:1204:A:OP1	2.00	0.45
26:1H:1418:G:OP1	26:1H:1588:C:O2'	2.26	0.45
26:1H:1446:C:H2'	26:1H:1447:G:H8	1.82	0.45
27:16:5:C:H42	27:16:115:G:H1	1.64	0.45
33:61:139:GLN:C	33:61:140:LEU:HG	2.39	0.45
39:A8:38:GLN:HG3	39:A8:47:THR:CG2	2.46	0.45
40:B8:12:SER:OG	40:B8:14:TYR:N	2.46	0.45
41:C8:58:ARG:HA	41:C8:61:TRP:CE3	2.52	0.45
1:1G:87:A:H4'	1:1G:88:C:OP1	2.16	0.45
1:1G:123:C:H2'	1:1G:124:G:H8	1.80	0.45
1:1G:186:C:H5'	1:1G:186(A):C:OP2	2.16	0.45
1:1G:611:A:C2	1:1G:630:G:N1	2.81	0.45
1:1G:642:A:C6	1:1G:643:C:N4	2.84	0.45
1:1G:1128:C:C2	1:1G:1147:C:N4	2.84	0.45
1:1G:1251:A:O2'	1:1G:1369:C:O2'	2.32	0.45
1:1G:1502:A:H4'	1:1G:1503:A:OP2	2.16	0.45
5:42:100:VAL:CG2	5:42:107:ARG:HG3	2.46	0.45
7:62:20:ASP:HB3	7:62:23:VAL:HB	1.99	0.45
7:62:121:ALA:O	7:62:125:MET:HG3	2.16	0.45
9:82:13:ALA:HB2	9:82:68:GLY:HA3	1.99	0.45
13:4A:81:LEU:CD2	13:4A:88:ARG:HH21	2.28	0.45
16:7A:45:THR:O	16:7A:48:TRP:HD1	1.99	0.45
26:14:290:G:H2'	26:14:291:C:H6	1.81	0.45
26:14:311:A:C6	26:14:328:U:C4	3.04	0.45
26:14:960:A:C8	26:14:962:G:C8	3.04	0.45
26:14:1048:A:H2'	26:14:1048:A:N3	2.31	0.45
26:14:1639:U:P	58:14:3491:HOH:O	2.74	0.45
26:14:2100:G:C4	26:14:2190:G:C2	3.05	0.45
26:14:2152:G:C5	26:14:2153:G:H1'	2.50	0.45
28:19:224:ALA:HA	28:19:233:HIS:O	2.16	0.45
29:29:37:ARG:HA	29:29:42:ASP:OD2	2.17	0.45
33:69:45:LYS:HA	33:69:48:GLU:HB3	1.98	0.45
39:65:29:PHE:HD1	39:65:30:ARG:N	2.14	0.45
42:95:15:GLU:HG2	42:95:16:PRO:HD2	1.97	0.45
44:B5:55:ASN:HB2	44:B5:80:ILE:HG13	1.97	0.45
49:G5:22:GLU:HA	49:G5:25:VAL:HG22	1.98	0.45
1:13:23:C:N4	1:13:24:U:O4	2.49	0.45
1:13:164:U:H2'	1:13:165:C:C6	2.51	0.45
1:13:1228:C:OP1	13:4I:108:ARG:NH2	2.46	0.45
4:3E:19:LEU:HB3	4:3E:21:LEU:HD21	1.98	0.45
5:4E:143:ARG:NE	8:7E:77:GLU:OE1	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:8E:17:VAL:HG21	9:8E:80:GLY:HA3	1.98	0.45
11:2I:78:GLN:O	11:2I:103:LEU:HD12	2.16	0.45
20:BI:37:SER:O	20:BI:41:ILE:HG12	2.17	0.45
24:3K:47:U:O2'	24:3K:48:C:H4'	2.17	0.45
26:1H:107:C:H2'	26:1H:108:U:C6	2.52	0.45
26:1H:277:C:H3'	26:1H:278:A:O4'	2.16	0.45
26:1H:547:A:O2'	26:1H:548:A:H8	2.00	0.45
26:1H:750:A:C2	26:1H:753:C:C6	3.04	0.45
26:1H:762:U:H4'	26:1H:763:G:O5'	2.17	0.45
26:1H:1655:A:H1'	29:21:113:PHE:CD1	2.51	0.45
26:1H:2256:G:C6	26:1H:2257:U:C4	3.04	0.45
26:1H:2369:A:C2	26:1H:2370:G:C8	3.05	0.45
26:1H:2751:G:H8	26:1H:2751:G:O5'	1.99	0.45
30:31:32:LEU:HD21	30:31:105:VAL:HG13	1.99	0.45
30:31:151:SER:C	30:31:152:GLU:HG3	2.41	0.45
32:51:77:LYS:O	32:51:77:LYS:HG2	2.16	0.45
32:51:115:VAL:HG21	32:51:148:ILE:HD13	1.99	0.45
33:61:50:ARG:HD2	33:61:53:ALA:HB3	1.99	0.45
37:88:5:ARG:CZ	37:88:5:ARG:HB2	2.46	0.45
37:88:109:VAL:HG22	37:88:113:GLN:OE1	2.17	0.45
37:88:138:ASP:HA	37:88:139:GLU:HA	1.67	0.45
38:98:104:ARG:HD2	38:98:107:ASP:OD2	2.16	0.45
39:A8:34:HIS:NE2	39:A8:54:LEU:HD23	2.31	0.45
44:F8:26:TYR:O	44:F8:81:VAL:HG12	2.17	0.45
48:J8:24:ALA:HB1	48:J8:26:ARG:HG3	1.98	0.45
49:K8:52:ASP:O	49:K8:56:GLN:HB2	2.16	0.45
1:1G:977:A:O2'	1:1G:981:U:N3	2.48	0.45
1:1G:1127:G:H2'	1:1G:1128:C:C6	2.52	0.45
1:1G:1502:A:H2	1:1G:1505:G:N1	2.12	0.45
2:12:169:LYS:O	2:12:169:LYS:HD3	2.16	0.45
3:22:39:ILE:HG21	3:22:57:ILE:HD11	1.98	0.45
5:42:100:VAL:HG22	5:42:107:ARG:HG3	1.98	0.45
5:42:152:ARG:HD3	5:42:152:ARG:HA	1.78	0.45
22:1L:38:A:H2'	22:1L:39:G:O4'	2.16	0.45
24:3L:75:C:H5"	24:3L:76:A:OP1	2.17	0.45
26:14:795:C:H2'	26:14:796:C:C6	2.51	0.45
26:14:1782:C:O4'	26:14:2609:U:C2	2.70	0.45
26:14:2054:A:H5"	26:14:2055:C:O5'	2.17	0.45
26:14:2209:C:O2	26:14:2216:G:C2	2.70	0.45
26:14:2528:U:H2'	26:14:2530:A:O5'	2.16	0.45
29:29:176:ILE:HD12	29:29:181:LEU:HD23	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:21:ALA:C	30:39:23:ASP:N	2.74	0.45
30:39:178:PRO:HG2	30:39:179:GLU:OE1	2.16	0.45
31:49:37:VAL:HG23	31:49:99:MET:HE3	1.99	0.45
38:55:34:ILE:HD12	38:55:34:ILE:HA	1.71	0.45
38:55:96:ARG:CZ	38:55:117:VAL:HG23	2.46	0.45
47:E5:74:ARG:O	47:E5:74:ARG:HG2	2.16	0.45
1:13:4:U:C4	8:7E:102:ARG:HG3	2.52	0.45
1:13:332:G:H2'	1:13:333:G:H8	1.81	0.45
1:13:665:A:C5	1:13:733:A:C5	3.05	0.45
1:13:983:A:H3'	1:13:983:A:N3	2.32	0.45
1:13:1286:A:H8	1:13:1287:A:H4'	1.82	0.45
4:3E:106:TYR:CD1	4:3E:107:ARG:HD2	2.51	0.45
9:8E:42:ARG:HE	9:8E:42:ARG:HB2	1.30	0.45
12:3I:84:LEU:HB2	12:3I:105:TYR:CE2	2.51	0.45
13:4I:66:LEU:O	13:4I:70:LEU:HB2	2.17	0.45
20:BI:14:LYS:HA	20:BI:17:ARG:HH21	1.81	0.45
23:2K:47:G:O2'	23:2K:48:U:C6	2.70	0.45
24:3K:28:A:N6	24:3K:42:U:H3	2.12	0.45
26:1H:493:G:H2'	26:1H:494:G:O4'	2.17	0.45
26:1H:1889:A:H2'	26:1H:1890:A:O4'	2.16	0.45
26:1H:1931:U:H5	26:1H:1969:A:N7	2.15	0.45
26:1H:2093:G:C6	26:1H:2225:A:C8	3.04	0.45
26:1H:2138:C:H2'	26:1H:2139:C:C6	2.51	0.45
26:1H:2261:C:C6	47:I8:16:SER:HB3	2.51	0.45
29:21:92:THR:OG1	29:21:94:GLU:HG2	2.17	0.45
29:21:111:ARG:H	29:21:111:ARG:HG2	1.44	0.45
31:41:117:PHE:CD1	31:41:117:PHE:C	2.95	0.45
31:41:127:GLY:HA2	31:41:166:ASP:OD2	2.16	0.45
32:51:74:ASN:OD1	32:51:138:LYS:HD3	2.16	0.45
33:61:79:ILE:HB	33:61:141:LYS:O	2.16	0.45
34:58:90:MET:HG3	34:58:94:HIS:O	2.17	0.45
40:B8:41:ARG:NH1	40:B8:42:ILE:O	2.50	0.45
41:C8:59:ARG:O	41:C8:63:VAL:HG23	2.16	0.45
47:I8:49:LYS:O	47:I8:50:ASN:HB2	2.16	0.45
1:1G:324:G:N2	1:1G:326:G:H3'	2.31	0.45
1:1G:455:C:O5'	1:1G:455:C:H6	2.00	0.45
1:1G:571:U:O2	1:1G:918:A:H5'	2.16	0.45
1:1G:730:G:C5	1:1G:731:G:H1'	2.52	0.45
1:1G:1018:C:O5'	1:1G:1018:C:H6	1.98	0.45
1:1G:1301:U:O2	1:1G:1301:U:H2'	2.16	0.45
1:1G:1505:G:H2'	25:4L:15:A:OP2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8A:7:THR:O	17:8A:23:VAL:HG13	2.16	0.45
20:BA:11:SER:HA	20:BA:13:LEU:CD2	2.46	0.45
23:2L:14:A:C6	23:2L:23:G:C6	3.05	0.45
26:14:186:G:H2'	26:14:187:G:H8	1.81	0.45
26:14:198:C:C2'	26:14:199:A:H5'	2.47	0.45
26:14:842:G:N2	26:14:937:U:O2	2.50	0.45
26:14:1030:G:H1	26:14:1124:C:H42	1.64	0.45
26:14:1513:C:O5'	26:14:1513:C:H6	2.00	0.45
26:14:1569:A:O2'	28:19:37:LEU:HD23	2.17	0.45
26:14:1728:G:C6	26:14:1730:U:H5'	2.51	0.45
26:14:2036:C:H5'	26:14:2036:C:H6	1.81	0.45
26:14:2622:C:H5'	29:29:159:HIS:ND1	2.31	0.45
27:1J:94:C:H2'	27:1J:95:U:H6	1.80	0.45
32:59:88:LEU:HD13	32:59:163:TYR:O	2.17	0.45
32:59:117:PRO:HB3	32:59:121:ILE:HB	1.99	0.45
37:45:54:MET:HE1	37:45:104:PHE:HB3	1.99	0.45
46:D5:157:LEU:HG	46:D5:161:VAL:HG21	1.98	0.45
1:13:370:C:HO2'	1:13:482:A:HO2'	1.60	0.45
1:13:468:A:O2'	16:7I:81:ARG:HA	2.16	0.45
1:13:721:G:H5'	1:13:722:A:C8	2.52	0.45
1:13:985:C:C2	1:13:1221:G:N2	2.85	0.45
1:13:1306:A:H61	1:13:1331:G:H1'	1.82	0.45
1:13:1316:G:N7	19:AI:7:LYS:NZ	2.63	0.45
10:1I:80:LYS:HA	10:1I:83:GLU:HB3	1.99	0.45
11:2I:71:LYS:HA	11:2I:74:ALA:HB3	1.97	0.45
15:6I:15:PHE:CE1	15:6I:84:LYS:HD3	2.52	0.45
17:8I:68:ARG:HG3	17:8I:68:ARG:O	2.15	0.45
22:1K:72:C:C5	22:1K:73:A:H2	2.35	0.45
23:2K:16:C:O2'	23:2K:61:U:O3'	2.35	0.45
26:1H:64:A:C1'	44:F8:66:LEU:HD23	2.46	0.45
26:1H:154:G:H2'	26:1H:155:C:C6	2.52	0.45
26:1H:977:G:C2	26:1H:978:G:C8	3.04	0.45
26:1H:1054:A:H2	26:1H:1105:U:H3	1.65	0.45
26:1H:1288:U:C2	26:1H:1327:C:O2	2.70	0.45
26:1H:1327:C:O3'	38:98:105:ARG:NH2	2.49	0.45
26:1H:1589:C:H2'	26:1H:1590:U:H6	1.81	0.45
26:1H:2283:C:C4	26:1H:2389:G:C4	3.05	0.45
28:11:70:TRP:CD1	28:11:70:TRP:C	2.93	0.45
28:11:76:PRO:O	28:11:98:VAL:HG22	2.15	0.45
37:88:59:ARG:HD3	37:88:113:GLN:NE2	2.32	0.45
40:B8:24:PRO:HD3	40:B8:52:ILE:HD12	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:L8:28:LEU:HA	50:L8:33:GLN:OE1	2.17	0.45
1:1G:657:G:H21	15:6A:22:THR:HB	1.80	0.45
1:1G:1181:G:N7	1:1G:1182:G:N2	2.60	0.45
1:1G:1517:G:C6	1:1G:1518:A:C5	3.04	0.45
2:12:71:VAL:HG21	2:12:165:VAL:N	2.32	0.45
3:22:7:PRO:HA	3:22:10:PHE:HB3	1.99	0.45
3:22:148:GLY:HA3	3:22:172:ARG:O	2.17	0.45
8:72:102:ARG:H	8:72:102:ARG:HG2	1.49	0.45
13:4A:81:LEU:CG	13:4A:89:GLY:HA3	2.47	0.45
16:7A:19:ILE:HB	16:7A:36:ILE:O	2.16	0.45
26:14:234:C:H2'	26:14:235:U:H6	1.82	0.45
26:14:807:U:C2	26:14:808:G:C8	3.04	0.45
26:14:814:C:O2'	26:14:1225:C:N3	2.50	0.45
26:14:1359:A:N7	26:14:1372:U:O4	2.48	0.45
26:14:1374:G:H2'	26:14:1375:C:C6	2.51	0.45
26:14:1464:C:H2'	26:14:1465:G:C8	2.52	0.45
26:14:1526:G:C6	26:14:1527:G:C2	3.05	0.45
26:14:1633:G:O6	58:14:3484:HOH:O	2.20	0.45
26:14:1798:U:H5'	28:19:259:THR:OG1	2.16	0.45
26:14:1992:G:C8	26:14:1992:G:O5'	2.69	0.45
26:14:2020:A:P	41:85:27:LEU:HD23	2.57	0.45
26:14:2534:A:O5'	26:14:2534:A:H8	2.00	0.45
26:14:2710:C:OP1	58:14:3485:HOH:O	2.21	0.45
27:1J:24:G:H5'	27:1J:25:A:C8	2.51	0.45
28:19:35:LYS:HB3	28:19:35:LYS:HE2	1.39	0.45
29:29:64:LYS:N	29:29:73:GLU:OE2	2.49	0.45
35:25:50:GLY:N	35:25:53:LYS:HZ1	2.15	0.45
36:35:10:PRO:C	36:35:12:ALA:H	2.25	0.45
44:B5:25:LYS:HG2	44:B5:82:GLN:OE1	2.17	0.45
46:D5:70:LEU:O	46:D5:89:PHE:N	2.39	0.45
1:13:224:C:H2'	1:13:225:C:H6	1.81	0.45
1:13:322:C:O2	1:13:332:G:N2	2.49	0.45
1:13:953:G:H5'	1:13:965:A:H61	1.81	0.45
1:13:1071:C:H2'	1:13:1072:G:C8	2.50	0.45
3:2E:88:ARG:HD3	3:2E:101:LEU:HB3	1.99	0.45
3:2E:91:LEU:O	3:2E:95:THR:HG23	2.17	0.45
6:5E:63:TYR:HB3	6:5E:65:VAL:HG12	1.98	0.45
15:6I:15:PHE:HE1	15:6I:84:LYS:HD3	1.82	0.45
22:1K:76:A:O2'	26:1H:2585:U:O4	2.28	0.45
26:1H:975:G:H1'	26:1H:990:A:C2	2.52	0.45
26:1H:2356:C:O3'	47:I8:20:ARG:HD3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2557:G:H2'	26:1H:2558:C:H6	1.80	0.45
28:11:11:PRO:O	28:11:12:SER:OG	2.27	0.45
32:51:38:SER:HB2	32:51:64:LEU:HD13	1.98	0.45
33:61:8:PRO:HG3	33:61:15:VAL:H	1.82	0.45
33:61:109:ILE:HB	33:61:130:TYR:CZ	2.51	0.45
40:B8:22:PHE:HA	40:B8:91:ARG:NH1	2.30	0.45
53:P8:30:VAL:O	53:P8:34:ARG:HG3	2.17	0.45
1:1G:409:G:H1	1:1G:433:C:N4	2.13	0.45
1:1G:413:G:H2'	1:1G:428:G:H22	1.81	0.45
1:1G:977:A:H2'	1:1G:978:A:H5'	1.98	0.45
1:1G:983:A:N1	1:1G:1222:G:N2	2.57	0.45
1:1G:1213:A:N6	1:1G:1215:G:N3	2.65	0.45
11:2A:94:ALA:O	11:2A:97:ALA:N	2.50	0.45
13:4A:14:ARG:HG3	13:4A:44:ARG:NE	2.32	0.45
15:6A:74:ASP:HB3	15:6A:77:ARG:HG2	1.97	0.45
17:8A:67:LYS:C	17:8A:69:LYS:H	2.24	0.45
18:9A:70:ILE:O	18:9A:74:ARG:HD2	2.17	0.45
19:AA:66:MET:O	19:AA:69:HIS:HB2	2.17	0.45
20:BA:54:LYS:HA	20:BA:57:ARG:CZ	2.47	0.45
26:14:492:A:C2	26:14:493:G:H1'	2.52	0.45
26:14:972:G:OP1	26:14:974:G:H5'	2.17	0.45
26:14:1219:G:H1	26:14:1230:C:N4	2.15	0.45
26:14:1441:G:H2'	26:14:1442:G:C8	2.52	0.45
26:14:1473:G:H2'	26:14:1474:C:O4'	2.17	0.45
26:14:1515:C:C2	26:14:1516:U:C5	3.05	0.45
26:14:2462:U:C2	26:14:2489:G:N2	2.84	0.45
27:1J:43:C:O2	31:49:93:THR:HG21	2.16	0.45
28:19:166:GLN:HB3	28:19:174:ILE:HG22	1.99	0.45
29:29:59:VAL:HG21	29:29:63:LEU:HD11	1.99	0.45
40:75:4:GLY:O	40:75:6:LEU:HB2	2.17	0.45
41:85:92:ARG:O	41:85:94:ASN:N	2.49	0.45
48:F5:71:TYR:O	48:F5:74:VAL:HG22	2.16	0.45
1:13:5:U:C5	4:3E:85:LYS:HB3	2.52	0.45
1:13:648:A:N6	1:13:649:G:O6	2.49	0.45
1:13:1048:G:OP1	58:13:1842:HOH:O	2.21	0.45
1:13:1152:A:O3'	10:1I:13:HIS:NE2	2.49	0.45
1:13:1333:A:H3'	1:13:1334:G:H8	1.82	0.45
2:1E:187:LEU:HD11	2:1E:204:ASN:O	2.16	0.45
3:2E:195:VAL:O	3:2E:196:LEU:HD23	2.17	0.45
13:4I:23:TYR:CZ	13:4I:71:ARG:HG3	2.52	0.45
17:8I:86:GLU:O	17:8I:90:ILE:HG12	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9I:38:GLU:HA	18:9I:41:LYS:HZ3	1.82	0.45
20:BI:92:LEU:HB3	20:BI:96:GLY:HA2	1.98	0.45
23:2K:45:A:H2'	23:2K:46:G:O4'	2.17	0.45
26:1H:374:A:C2	26:1H:401:A:C4	3.05	0.45
26:1H:537:C:H2'	26:1H:539:G:C8	2.51	0.45
26:1H:713:G:H2'	26:1H:714:U:C6	2.52	0.45
29:21:67:PHE:O	29:21:67:PHE:HD1	2.00	0.45
31:41:129:GLY:O	31:41:161:THR:HB	2.16	0.45
35:68:64:ARG:O	35:68:82:ASN:HA	2.16	0.45
39:A8:85:VAL:HG22	39:A8:110:LEU:HB3	1.98	0.45
40:B8:16:ARG:NH2	40:B8:19:LEU:HD21	2.31	0.45
46:H8:60:GLU:HG2	46:H8:66:SER:OG	2.17	0.45
46:H8:70:LEU:HD23	46:H8:70:LEU:HA	1.83	0.45
49:K8:3:LEU:O	49:K8:6:VAL:HB	2.17	0.45
1:1G:1206:G:P	3:22:190:ARG:HH22	2.40	0.45
1:1G:1508:G:H2'	1:1G:1509:C:C6	2.51	0.45
3:22:23:TYR:HB3	10:1A:93:GLY:O	2.17	0.45
3:22:43:LEU:HD21	3:22:68:VAL:HG21	1.99	0.45
4:32:24:GLU:HG2	4:32:25:ARG:H	1.82	0.45
4:32:31:CYS:O	4:32:32:ALA:HB3	2.17	0.45
5:42:37:ARG:HG2	5:42:112:LEU:HA	1.98	0.45
8:72:44:PHE:HD1	8:72:80:ILE:HG13	1.81	0.45
9:82:29:ASN:O	9:82:31:GLN:HG2	2.17	0.45
16:7A:40:ASP:HB3	16:7A:48:TRP:HB2	1.99	0.45
26:14:588:U:O4	26:14:670:A:H1'	2.16	0.45
26:14:725:G:C6	26:14:726:G:N1	2.84	0.45
26:14:946:G:O6	26:14:972:G:N2	2.49	0.45
26:14:1012:U:C5	34:15:28:THR:HG21	2.52	0.45
26:14:1144:G:C2	26:14:1145:C:C2	3.04	0.45
26:14:1856:G:H1	26:14:1886:C:H42	1.65	0.45
26:14:2696:U:H2'	26:14:2697:G:C8	2.52	0.45
27:1J:3:C:H2'	27:1J:4:C:C6	2.52	0.45
27:1J:38:C:O4'	39:65:95:HIS:NE2	2.50	0.45
30:39:7:TYR:HD2	30:39:18:ARG:H	1.65	0.45
30:39:37:VAL:O	30:39:41:LEU:HG	2.16	0.45
32:59:11:VAL:O	32:59:13:LYS:HG3	2.17	0.45
33:69:41:GLU:O	33:69:45:LYS:HG2	2.17	0.45
36:35:132:LYS:HE2	36:35:132:LYS:O	2.17	0.45
50:H5:8:LEU:O	50:H5:32:GLN:N	2.38	0.45
52:J5:52:TYR:CD1	52:J5:53:ALA:N	2.85	0.45
1:13:32:A:C2	1:13:33:A:C4	3.05	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:530:G:O6	25:4K:21:C:H1'	2.17	0.45
1:13:575:G:C4	1:13:881:G:C2	3.05	0.45
1:13:1346:A:N1	1:13:1374:A:H5"	2.32	0.45
8:7E:116:LYS:HB2	8:7E:119:LEU:HD11	1.97	0.45
9:8E:47:LEU:H	9:8E:47:LEU:HD22	1.82	0.45
11:2I:59:TYR:CZ	11:2I:63:LEU:HD11	2.52	0.45
13:4I:84:ILE:HG23	13:4I:86:CYS:H	1.82	0.45
26:1H:30:G:H2'	26:1H:31:C:C6	2.52	0.45
26:1H:270(T):G:H2'	26:1H:270(U):C:C6	2.51	0.45
26:1H:301:G:C4	26:1H:302:C:C5	3.05	0.45
26:1H:922:U:H2'	26:1H:923:C:C6	2.52	0.45
26:1H:1009:A:P	34:58:37:LYS:NZ	2.90	0.45
26:1H:1440:G:H2'	26:1H:1441:G:H8	1.82	0.45
26:1H:2415:G:H4'	36:78:67:MET:N	2.31	0.45
26:1H:2510:C:C4	26:1H:2511:U:C4	3.05	0.45
27:16:24:G:N7	27:16:56:G:H2'	2.32	0.45
30:31:60:SER:OG	30:31:61:GLY:N	2.50	0.45
44:F8:25:LYS:HA	44:F8:81:VAL:O	2.17	0.45
44:F8:65:ARG:HG3	44:F8:70:LEU:HD13	1.99	0.45
46:H8:7:ALA:O	46:H8:62:PRO:HD3	2.16	0.45
1:1G:375:U:H2'	1:1G:376:G:C8	2.52	0.45
1:1G:419:C:N4	1:1G:424:G:H1	2.14	0.45
1:1G:420:U:H2'	1:1G:422:C:O2	2.17	0.45
1:1G:545:C:H5'	4:32:72:GLU:HB2	1.98	0.45
1:1G:885:G:O2'	1:1G:914:A:N1	2.41	0.45
1:1G:999:U:H2'	1:1G:1000:A:C8	2.52	0.45
10:1A:48:THR:OG1	10:1A:62:HIS:ND1	2.50	0.45
26:14:96:G:H2'	26:14:97:C:H6	1.82	0.45
26:14:871:U:H4'	37:45:69:PHE:CD2	2.52	0.45
26:14:1282:U:H2'	26:14:1283:G:O4'	2.17	0.45
26:14:1423:G:C4	26:14:1424:G:C8	3.05	0.45
26:14:1919:A:H2'	26:14:1919:A:N3	2.32	0.45
30:39:110:LEU:O	30:39:114:VAL:HG23	2.16	0.45
31:49:100:TRP:O	31:49:103:LEU:N	2.49	0.45
32:59:8:PRO:HB2	32:59:69:ARG:NH2	2.32	0.45
32:59:13:LYS:NZ	32:59:13:LYS:HB3	2.32	0.45
32:59:44:VAL:O	32:59:50:VAL:HA	2.17	0.45
35:25:22:ILE:HA	35:25:22:ILE:HD13	1.45	0.45
37:45:26:TYR:HD1	37:45:27:VAL:N	2.15	0.45
38:55:87:TYR:O	38:55:89:ASP:N	2.50	0.45
46:D5:27:VAL:CG1	46:D5:87:ASP:HB3	2.46	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:D5:70:LEU:HD11	46:D5:98:MET:CE	2.47	0.45
46:D5:94:GLU:HG3	46:D5:95:PRO:HD2	1.99	0.45
48:F5:87:PRO:O	48:F5:90:ILE:HG22	2.17	0.45
1:13:444:C:H42	1:13:490:G:H1	1.64	0.45
1:13:501:C:OP1	12:3I:117:ARG:NH2	2.42	0.45
1:13:624:C:H4'	16:7I:11:SER:H	1.79	0.45
1:13:639:G:C2	1:13:640:A:C8	3.05	0.45
1:13:1032(B):G:H2'	1:13:1033:G:O4'	2.17	0.45
1:13:1293:G:H2'	1:13:1294:G:O4'	2.17	0.45
2:1E:89:GLY:O	2:1E:90:MET:HE2	2.17	0.45
2:1E:187:LEU:HA	2:1E:201:ILE:O	2.17	0.45
5:4E:11:ILE:HG12	5:4E:31:LEU:HB3	1.99	0.45
6:5E:60:PHE:CE2	18:9I:78:LEU:HD21	2.52	0.45
7:6E:95:ARG:O	7:6E:99:LEU:HG	2.17	0.45
7:6E:115:ARG:HG3	7:6E:116:ALA:H	1.82	0.45
12:3I:21:LYS:HE2	12:3I:21:LYS:HB3	1.84	0.45
20:BI:27:LYS:O	20:BI:30:LYS:N	2.50	0.45
26:1H:274:G:H2'	26:1H:275:G:C1'	2.47	0.45
26:1H:1049:C:C2'	26:1H:1050:A:H5'	2.47	0.45
26:1H:1267:U:H2'	26:1H:1268:A:H8	1.82	0.45
26:1H:1317:A:H2'	26:1H:1318:C:C6	2.52	0.45
26:1H:2270:G:H2'	26:1H:2271:G:H5'	1.99	0.45
27:16:78:A:H2'	27:16:79:C:O4'	2.17	0.45
27:16:79:C:H2'	27:16:80:U:O4'	2.17	0.45
29:21:38:THR:CB	29:21:40:GLU:HG2	2.44	0.45
30:31:149:ASP:OD1	30:31:149:ASP:N	2.50	0.45
31:41:109:VAL:HG21	51:M8:14:ILE:HD11	1.99	0.45
32:51:68:THR:O	32:51:72:ILE:HG13	2.17	0.45
36:78:13:ASN:O	36:78:15:ARG:N	2.48	0.45
37:88:14:ARG:HG2	37:88:41:TRP:CH2	2.40	0.45
40:B8:32:TYR:CE1	40:B8:76:PHE:HD2	2.34	0.45
43:E8:64:MET:HE3	43:E8:64:MET:HB3	1.67	0.45
46:H8:31:ARG:NH1	46:H8:94:GLU:OE2	2.28	0.45
1:1G:59:A:H3'	1:1G:331:G:H22	1.82	0.45
1:1G:1256:A:H62	1:1G:1277:C:H3'	1.80	0.45
1:1G:1260:C:H3'	1:1G:1260:C:C6	2.52	0.45
1:1G:1323:G:H2'	1:1G:1324:A:O4'	2.17	0.45
1:1G:1512:U:H2'	1:1G:1513:A:H8	1.81	0.45
3:22:70:VAL:O	3:22:105:GLU:HA	2.16	0.45
4:32:61:LYS:HB2	4:32:203:VAL:HG22	1.99	0.45
8:72:73:ASP:O	8:72:73:ASP:CG	2.60	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:10:PHE:HB2	19:AA:41:VAL:HG12	1.98	0.45
23:2L:49:C:C2	23:2L:60:A:H1'	2.52	0.45
24:3L:72:C:H2'	24:3L:73:A:H5"	1.99	0.45
26:14:595:C:H6	26:14:595:C:H5"	1.81	0.45
26:14:754:C:H2'	26:14:755:C:H6	1.82	0.45
26:14:1043:C:C2'	26:14:1044:G:H5'	2.46	0.45
26:14:1140:C:P	34:15:66:LYS:HZ2	2.36	0.45
26:14:1210:A:H5'	26:14:1210:A:C8	2.51	0.45
26:14:2745:C:H2'	26:14:2746:U:O4'	2.17	0.45
29:29:6:GLY:O	29:29:195:LEU:HD12	2.17	0.45
30:39:203:GLN:HA	30:39:206:ILE:HG12	1.99	0.45
32:59:149:ARG:HA	32:59:162:ILE:HG21	1.99	0.45
33:69:107:VAL:HG12	33:69:108:THR:N	2.32	0.45
44:B5:83:VAL:HG22	44:B5:87:GLN:HB2	1.99	0.45
52:J5:4:HIS:O	52:J5:6:VAL:HG23	2.17	0.45
1:13:157:G:H2'	1:13:158:G:C8	2.52	0.44
1:13:542:G:H5'	4:3E:41:GLY:HA3	2.00	0.44
1:13:658:G:C6	1:13:659:U:C4	3.05	0.44
1:13:672:U:H2'	1:13:673:G:H8	1.82	0.44
3:2E:83:ARG:O	3:2E:86:VAL:HG22	2.17	0.44
6:5E:62:TRP:CZ3	6:5E:64:GLN:HB2	2.53	0.44
6:5E:78:GLU:O	6:5E:81:ILE:HG22	2.17	0.44
7:6E:69:VAL:HG22	7:6E:135:VAL:HG22	1.98	0.44
9:8E:125:TYR:HD1	9:8E:126:SER:H	1.65	0.44
10:1I:22:LYS:HD2	10:1I:90:LEU:HD22	1.98	0.44
10:1I:48:THR:HG1	10:1I:62:HIS:CE1	2.35	0.44
11:2I:55:LYS:HG2	11:2I:55:LYS:O	2.17	0.44
17:8I:13:ASP:HA	17:8I:19:VAL:HG12	1.97	0.44
23:2K:20:G:C4	23:2K:58:A:C2	3.05	0.44
26:1H:270(E):G:C2	26:1H:270(V):G:C6	3.05	0.44
26:1H:838:C:C2	26:1H:839:U:C6	3.05	0.44
26:1H:1048:A:H5'	26:1H:1049:C:OP2	2.18	0.44
26:1H:1437:C:H2'	26:1H:1438:U:C6	2.50	0.44
26:1H:1464:C:H2'	26:1H:1465:G:C8	2.53	0.44
26:1H:2461:C:H42	26:1H:2489:G:H1	1.63	0.44
26:1H:2836:U:C4	26:1H:2883:A:N6	2.85	0.44
29:21:7:VAL:HG21	40:B8:1:MET:HE1	1.98	0.44
29:21:167:VAL:HG11	29:21:187:ALA:CB	2.47	0.44
34:58:7:LYS:H	34:58:7:LYS:CE	2.30	0.44
37:88:32:TYR:O	37:88:105:GLU:HA	2.17	0.44
37:88:50:ALA:HB1	37:88:121:ALA:HB1	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:Q8:7:HIS:CG	54:Q8:61:LEU:HD13	2.52	0.44
1:1G:20:U:H2'	1:1G:21:G:O4'	2.17	0.44
1:1G:373:A:C2	1:1G:374:A:C8	3.05	0.44
1:1G:814:A:H2'	1:1G:816:A:H5"	1.99	0.44
1:1G:947:G:H2'	1:1G:948:C:O4'	2.17	0.44
1:1G:1120:G:H1	1:1G:1152:A:N6	2.15	0.44
1:1G:1199:U:H4'	10:1A:54:PHE:CE1	2.52	0.44
1:1G:1349:A:P	9:82:118:LYS:HZ3	2.40	0.44
2:12:97:TRP:CZ3	2:12:99:GLY:HA2	2.51	0.44
5:42:89:ILE:HD13	5:42:131:ILE:HD12	1.99	0.44
8:72:126:LYS:HD2	8:72:127:LEU:HD22	2.00	0.44
13:4A:29:ARG:HD3	13:4A:64:TRP:CH2	2.52	0.44
13:4A:102:ARG:O	13:4A:107:ALA:HB2	2.17	0.44
19:AA:37:ARG:H	19:AA:37:ARG:HG3	1.43	0.44
26:14:76:C:O3'	49:G5:59:ARG:HG3	2.16	0.44
26:14:218:A:H2	26:14:235:U:H4'	1.81	0.44
26:14:447:A:C8	26:14:473:G:C6	3.06	0.44
26:14:706:A:H2'	26:14:707:G:O4'	2.17	0.44
26:14:785:G:C5	26:14:786:C:C5	3.05	0.44
26:14:829:A:H4'	58:14:3678:HOH:O	2.17	0.44
26:14:860:U:C2	26:14:2268:A:C8	3.05	0.44
26:14:869:G:C2	26:14:909:A:C2	3.05	0.44
26:14:920:G:C2	26:14:921:G:C4	3.05	0.44
26:14:1006:C:O2'	34:15:106:MET:O	2.31	0.44
26:14:1028:A:H61	26:14:1125:G:H2'	1.80	0.44
26:14:1204:A:H61	26:14:1240:U:H2'	1.82	0.44
26:14:1352:U:O2	26:14:1570:A:H2	2.00	0.44
26:14:1443:G:H1	26:14:1548:C:H42	1.65	0.44
26:14:1701:A:H5"	26:14:1702:G:OP2	2.17	0.44
26:14:2138:C:H42	26:14:2153:G:H22	1.64	0.44
26:14:2853:C:H2'	26:14:2854:G:C8	2.48	0.44
27:1J:17:C:H2'	27:1J:18:G:O4'	2.16	0.44
35:25:77:ILE:HG12	35:25:78:ARG:N	2.32	0.44
36:35:135:LEU:HA	36:35:135:LEU:HD22	1.75	0.44
38:55:25:ALA:O	38:55:29:LEU:HB2	2.17	0.44
38:55:106:GLY:O	38:55:107:ASP:HB3	2.17	0.44
40:75:90:GLN:HG3	40:75:121:ILE:HD11	1.99	0.44
42:95:65:GLY:CA	42:95:91:TYR:HE1	2.31	0.44
43:A5:47:VAL:HA	43:A5:50:VAL:HG12	1.97	0.44
46:D5:33:LEU:HD12	46:D5:33:LEU:HA	1.72	0.44
48:F5:5:CYS:O	48:F5:9:GLY:N	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:29:G:O2'	1:13:30:U:H5'	2.18	0.44
1:13:342:C:C2	1:13:348:G:C2	3.05	0.44
1:13:436:C:H2'	1:13:437:U:O4'	2.17	0.44
1:13:481:G:H1'	1:13:483:C:N4	2.32	0.44
1:13:768:A:H2'	1:13:769:G:O4'	2.17	0.44
1:13:1358:U:H2'	1:13:1359:C:O4'	2.15	0.44
1:13:1502:A:H2	1:13:1505:G:H1	1.64	0.44
1:13:1529:G:HO2'	1:13:1530:G:P	2.39	0.44
5:4E:15:ARG:NE	5:4E:26:PHE:CE2	2.80	0.44
20:BI:48:LYS:HD3	20:BI:51:GLU:HG3	1.98	0.44
21:1F:9:ARG:O	21:1F:13:ILE:HG13	2.17	0.44
22:1K:1:G:C2	22:1K:2:C:H1'	2.53	0.44
24:3K:72:C:H2'	24:3K:73:A:H5"	1.98	0.44
26:1H:275:G:O6	26:1H:363:G:H1'	2.17	0.44
26:1H:467:G:O5'	26:1H:467:G:H8	2.00	0.44
26:1H:606:U:OP2	30:31:104:LYS:HE3	2.17	0.44
26:1H:654(R):C:O2'	26:1H:654(S):G:H5'	2.16	0.44
26:1H:750:A:OP2	58:1H:3688:HOH:O	2.21	0.44
26:1H:957:A:N1	26:1H:2458:G:H4'	2.32	0.44
26:1H:1422:G:O2'	26:1H:1496:A:N6	2.51	0.44
26:1H:1541:U:H2'	26:1H:1542:G:O4'	2.17	0.44
26:1H:1693:U:H3	26:1H:1829:A:N6	2.15	0.44
26:1H:1833:U:H2'	26:1H:1834:U:C6	2.47	0.44
26:1H:2518:A:H8	26:1H:2518:A:H5'	1.82	0.44
26:1H:2840:C:H2'	26:1H:2841:C:C6	2.52	0.44
27:16:44:G:N2	27:16:48:A:C4	2.85	0.44
30:31:24:LEU:HA	30:31:25:PRO:HD2	1.82	0.44
33:61:27:ARG:HD3	48:J8:71:TYR:CE2	2.53	0.44
36:78:84:ASN:HA	36:78:115:LEU:O	2.16	0.44
37:88:78:PRO:HB2	37:88:81:VAL:HG11	1.99	0.44
38:98:48:VAL:O	38:98:49:ASP:C	2.60	0.44
41:C8:8:VAL:HG23	41:C8:11:ARG:HH21	1.82	0.44
1:1G:1:U:OP1	1:1G:630:G:O2'	2.33	0.44
1:1G:1241:G:OP1	7:62:35:LYS:NZ	2.51	0.44
1:1G:1285:A:H4'	1:1G:1286:A:O5'	2.17	0.44
4:32:13:ARG:HD2	4:32:38:TYR:O	2.17	0.44
6:52:24:GLU:O	6:52:28:ARG:HD2	2.16	0.44
9:82:99:LEU:HD12	9:82:101:PHE:CE1	2.52	0.44
12:3A:42:THR:HG22	12:3A:54:LYS:HG3	2.00	0.44
18:9A:54:ARG:HG2	18:9A:55:ARG:HD2	1.99	0.44
22:1L:73:A:O2'	22:1L:74:C:O5'	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:631:A:OP2	54:M5:47:LYS:NZ	2.27	0.44
26:14:764:A:H2	28:19:219:PRO:HG3	1.79	0.44
26:14:1277:G:O2'	38:55:24:GLN:HG2	2.18	0.44
26:14:1519:G:C6	26:14:1520:U:C4	3.04	0.44
26:14:1642:G:H2'	26:14:1643:G:O4'	2.18	0.44
26:14:1729:A:H2'	26:14:1731:G:H22	1.81	0.44
26:14:1757:U:C2	26:14:1762:A:H2	2.35	0.44
26:14:1817:G:C6	26:14:1818:U:C4	3.05	0.44
26:14:2555:U:C5	26:14:2556:C:C2	3.05	0.44
28:19:233:HIS:CD2	28:19:233:HIS:N	2.84	0.44
30:39:53:THR:HG22	30:39:56:GLU:CG	2.42	0.44
31:49:16:ARG:HH11	31:49:28:VAL:HG22	1.81	0.44
31:49:29:TRP:HE3	31:49:33:ARG:NH1	2.15	0.44
34:15:65:LYS:O	34:15:67:LEU:N	2.50	0.44
37:45:35:VAL:HA	37:45:101:ARG:O	2.17	0.44
41:85:92:ARG:HB3	42:95:11:GLN:OE1	2.17	0.44
43:A5:71:VAL:HA	43:A5:107:LEU:HD12	1.99	0.44
1:13:112:G:H4'	1:13:389:A:H4'	1.99	0.44
1:13:372:C:H42	1:13:389:A:N6	2.15	0.44
1:13:579:G:C6	1:13:580:U:C4	3.06	0.44
1:13:742:G:H4'	15:6I:58:MET:HE1	1.99	0.44
1:13:947:G:OP1	13:4I:108:ARG:HB3	2.17	0.44
1:13:1000:A:H2'	1:13:1001:G:C8	2.52	0.44
1:13:1030:C:H2'	1:13:1031:G:C8	2.52	0.44
1:13:1117:G:H5"	9:8E:104:ARG:CZ	2.46	0.44
1:13:1348:U:H3	1:13:1374:A:H2	1.65	0.44
1:13:1453:G:H3'	20:BI:39:LYS:HE2	1.99	0.44
2:1E:16:HIS:O	2:1E:44:LEU:HD21	2.18	0.44
5:4E:98:THR:HG22	5:4E:99:GLY:O	2.17	0.44
7:6E:56:GLN:CD	7:6E:57:GLU:H	2.25	0.44
14:5I:50:LYS:HB2	14:5I:52:GLN:HG3	2.00	0.44
26:1H:30:G:C5	26:1H:31:C:C4	3.06	0.44
26:1H:433:C:H2'	26:1H:434:U:C6	2.52	0.44
26:1H:579:G:H2'	26:1H:580:C:H6	1.81	0.44
26:1H:873:G:H1	26:1H:904:C:H42	1.65	0.44
26:1H:2047:U:O2'	26:1H:2823:A:N1	2.45	0.44
26:1H:2688:U:H1'	26:1H:2721:A:N6	2.32	0.44
27:16:1(M):A:C8	27:16:0:A:C8	3.05	0.44
28:11:214:TRP:CD1	28:11:214:TRP:N	2.85	0.44
31:41:117:PHE:HD1	31:41:117:PHE:C	2.26	0.44
32:51:129:THR:O	32:51:129:THR:OG1	2.33	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:51:152:ARG:HA	32:51:152:ARG:HD3	1.42	0.44
44:F8:67:GLY:O	44:F8:68:ARG:HB3	2.17	0.44
46:H8:111:VAL:HG21	46:H8:146:ILE:HG13	1.99	0.44
51:M8:63:TYR:C	51:M8:63:TYR:HD1	2.26	0.44
52:N8:35:GLU:HG2	52:N8:49:CYS:SG	2.58	0.44
1:1G:410:G:N1	1:1G:429:U:O2	2.50	0.44
1:1G:952:U:H4'	1:1G:964:A:N1	2.32	0.44
1:1G:953:G:H5'	1:1G:965:A:H61	1.82	0.44
1:1G:1112:C:O2	3:22:179:ARG:HG3	2.17	0.44
1:1G:1288:A:N3	1:1G:1352:C:O2'	2.45	0.44
4:32:64:LEU:HD23	4:32:203:VAL:HG21	2.00	0.44
15:6A:39:LEU:HD11	15:6A:56:LEU:HB2	1.99	0.44
23:2L:20:G:C4	23:2L:58:A:C2	3.06	0.44
26:14:296:C:H2'	26:14:297:C:H6	1.81	0.44
26:14:601:C:O2'	26:14:605:C:H5"	2.18	0.44
26:14:796:C:H2'	26:14:797:C:H6	1.81	0.44
26:14:966:G:H2'	26:14:967:C:C6	2.53	0.44
26:14:996:A:OP2	41:85:94:ASN:ND2	2.50	0.44
26:14:1347:G:C6	26:14:1348:G:N7	2.85	0.44
26:14:1488:G:C2	26:14:1502:C:N3	2.85	0.44
26:14:2232:U:P	48:F5:40:ARG:HH22	2.40	0.44
26:14:2250:G:C8	26:14:2496:C:H5"	2.51	0.44
26:14:2760:C:O2'	32:59:143:GLN:NE2	2.51	0.44
26:14:2811:G:N2	26:14:2891:G:H1'	2.31	0.44
27:1J:24:G:C8	27:1J:56:G:C5	3.06	0.44
31:49:16:ARG:HG3	31:49:31:VAL:HG11	1.99	0.44
37:45:43:THR:HG23	37:45:46:GLN:CD	2.42	0.44
39:65:87:PHE:CE1	39:65:102:ALA:HB2	2.53	0.44
44:B5:57:LEU:HD21	44:B5:78:LYS:HG3	1.99	0.44
46:D5:5:LEU:HD12	46:D5:47:VAL:HG21	1.99	0.44
46:D5:53:ILE:HA	46:D5:71:VAL:HG13	2.00	0.44
50:H5:3:ARG:NH2	50:H5:38:GLU:OE1	2.51	0.44
1:13:738:C:H2'	1:13:739:C:C6	2.52	0.44
1:13:821:G:H5"	58:13:2030:HOH:O	2.17	0.44
1:13:1046:A:N6	1:13:1213:A:H61	2.15	0.44
1:13:1298:C:C4	7:6E:114:ARG:HD3	2.51	0.44
19:AI:41:VAL:HG12	19:AI:44:MET:CB	2.47	0.44
26:1H:182:A:H2'	26:1H:183:C:O4'	2.16	0.44
26:1H:470:A:OP1	30:31:59:TYR:HE1	1.99	0.44
26:1H:607:U:OP1	30:31:102:PRO:HA	2.17	0.44
26:1H:742:G:H2'	26:1H:743:G:H8	1.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:911:A:C5	37:88:9:TYR:CD2	3.06	0.44
26:1H:1055:G:H1'	26:1H:1085:A:C2	2.53	0.44
26:1H:1218:C:OP2	41:C8:15:LYS:NZ	2.50	0.44
26:1H:1233:C:H2'	26:1H:1234:U:O4'	2.17	0.44
26:1H:1500:G:O2'	28:11:100:GLY:O	2.30	0.44
26:1H:1766:U:H2'	26:1H:1767:C:C6	2.52	0.44
26:1H:2206:C:C2	26:1H:2219:G:C2	3.06	0.44
26:1H:2427:C:H5"	26:1H:2428:G:OP1	2.17	0.44
28:11:123:ALA:HA	28:11:124:PRO:HD2	1.69	0.44
29:21:1:MET:HE2	29:21:1:MET:HB2	1.84	0.44
33:61:5:LEU:HD21	33:61:12:LEU:HB3	1.98	0.44
34:58:12:ARG:HB3	34:58:50:ASP:OD1	2.18	0.44
40:B8:78:LEU:O	40:B8:78:LEU:HD13	2.17	0.44
1:1G:1206:G:H4'	3:22:192:THR:O	2.17	0.44
1:1G:1279:A:O2'	1:1G:1282:C:N4	2.50	0.44
1:1G:1309:G:H4'	13:4A:74:VAL:HG13	2.00	0.44
1:1G:1465:C:H2'	1:1G:1466:C:O4'	2.17	0.44
1:1G:1503:A:C8	25:4L:12:A:N6	2.85	0.44
3:22:90:GLU:N	3:22:90:GLU:OE2	2.50	0.44
5:42:101:ILE:HG13	5:42:119:LEU:HA	1.98	0.44
10:1A:15:THR:O	10:1A:19:SER:OG	2.24	0.44
13:4A:77:ASN:O	13:4A:81:LEU:HD23	2.17	0.44
14:5A:53:LEU:HD23	14:5A:53:LEU:HA	1.58	0.44
16:7A:67:THR:HG22	16:7A:68:ASP:H	1.81	0.44
17:8A:87:LYS:O	17:8A:90:ILE:HG22	2.18	0.44
23:2L:19:G:C4	23:2L:59:A:C2	3.06	0.44
23:2L:32:G:H2'	23:2L:33:C:H6	1.82	0.44
24:3L:76:A:H61	26:14:2422:A:H5"	1.82	0.44
26:14:312:G:H4'	26:14:331:A:C2	2.52	0.44
26:14:821:A:H2'	26:14:946:G:H5"	1.99	0.44
26:14:1639:U:C2'	26:14:1640:C:H5'	2.48	0.44
26:14:1639:U:H2'	26:14:1640:C:H5'	1.99	0.44
26:14:1663:C:H2'	58:14:3442:HOH:O	2.18	0.44
26:14:1682:G:C5	26:14:1757:U:C6	3.05	0.44
26:14:2104:G:H2'	26:14:2105:C:H6	1.83	0.44
26:14:2392:A:C2	26:14:2429:G:C2	3.05	0.44
26:14:2446:G:C2	26:14:2501:C:C5	3.06	0.44
26:14:2454:G:H1'	58:14:3594:HOH:O	2.16	0.44
27:1J:33:G:C2	27:1J:34:U:C2	3.05	0.44
30:39:34:TRP:CE2	36:35:8:PRO:HD3	2.53	0.44
37:45:38:GLU:CD	37:45:128:LYS:H	2.25	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:45:41:TRP:HB3	37:45:94:VAL:HG21	1.98	0.44
38:55:82:GLU:H	38:55:85:PRO:CG	2.28	0.44
47:E5:53:MET:HG2	47:E5:59:LEU:HD23	1.98	0.44
48:F5:76:ARG:HG3	48:F5:94:LEU:HD13	2.00	0.44
48:F5:95:LEU:HD12	48:F5:95:LEU:HA	1.84	0.44
1:13:134:A:H61	16:7I:25:ARG:NH1	2.15	0.44
1:13:736:C:H2'	1:13:737:A:H8	1.82	0.44
2:1E:237:ALA:O	2:1E:239:VAL:N	2.51	0.44
8:7E:21:LYS:O	8:7E:65:TYR:OH	2.35	0.44
13:4I:12:ASN:O	13:4I:13:LYS:C	2.60	0.44
15:6I:25:THR:HG22	15:6I:70:LEU:HD22	1.99	0.44
22:1K:10:G:H2'	22:1K:10:G:N3	2.33	0.44
22:1K:49:G:O6	22:1K:59:C:H5"	2.18	0.44
26:1H:56:A:C2	26:1H:57:C:C2	3.06	0.44
26:1H:96:G:H4'	49:K8:48:HIS:CD2	2.52	0.44
26:1H:270(T):G:C6	26:1H:270(U):C:C4	3.06	0.44
26:1H:423:A:OP1	58:1H:3689:HOH:O	2.21	0.44
26:1H:1051:G:OP2	26:1H:1051:G:H8	2.01	0.44
26:1H:1359:A:N1	26:1H:1372:U:C4	2.85	0.44
26:1H:1530:G:C5	26:1H:1531:C:C4	3.06	0.44
26:1H:1878:G:H2'	26:1H:1879:C:C6	2.52	0.44
26:1H:1899:G:H1	26:1H:1902:C:H41	1.66	0.44
26:1H:2330:G:H2'	26:1H:2331:G:O4'	2.17	0.44
26:1H:2453:A:H61	26:1H:2500:U:H3	1.65	0.44
26:1H:2824:C:H2'	26:1H:2825:C:O4'	2.17	0.44
28:11:18:VAL:HG12	28:11:19:ALA:N	2.33	0.44
33:61:8:PRO:HB3	33:61:14:ASP:HA	2.00	0.44
38:98:26:LYS:HE2	38:98:70:LEU:O	2.17	0.44
39:A8:28:VAL:HG11	39:A8:98:VAL:HG13	1.98	0.44
39:A8:36:TYR:N	39:A8:36:TYR:CD1	2.85	0.44
40:B8:26:ASP:HB3	40:B8:92:GLY:H	1.83	0.44
48:J8:52:ARG:HA	48:J8:57:GLU:HA	1.99	0.44
1:1G:81:G:H8	1:1G:81:G:O5'	2.01	0.44
1:1G:87:A:C5	1:1G:88:C:C5	3.05	0.44
1:1G:737:A:H2'	1:1G:738:C:H6	1.82	0.44
3:22:182:ILE:HD11	3:22:203:PHE:HD1	1.82	0.44
4:32:50:ARG:HH11	5:42:10:MET:HE2	1.82	0.44
9:82:26:VAL:HG22	9:82:61:ALA:N	2.32	0.44
22:1L:19:G:C1'	22:1L:57:G:H1	2.31	0.44
23:2L:76:C:H3'	23:2L:77:A:H5"	2.00	0.44
26:14:89:G:OP2	26:14:90:U:O2'	2.29	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:250:G:O5'	36:35:60:MET:HE1	2.17	0.44
26:14:676:A:H2	26:14:802:A:H61	1.66	0.44
26:14:685:A:C2	26:14:689:A:C6	3.06	0.44
26:14:868:U:N3	26:14:869:G:N7	2.65	0.44
26:14:869:G:C2	26:14:870:A:C8	3.05	0.44
26:14:1034:G:H8	26:14:1034:G:OP1	2.01	0.44
26:14:1356:G:C6	26:14:1357:U:C4	3.05	0.44
26:14:1386:C:H2'	26:14:1387:C:C6	2.44	0.44
26:14:1731:G:H2'	26:14:1732:A:O4'	2.18	0.44
26:14:2448:A:P	58:14:3408:HOH:O	2.64	0.44
27:1J:71:C:C4	27:1J:72:G:N7	2.85	0.44
28:19:132:PRO:HG3	28:19:190:TYR:CE1	2.53	0.44
28:19:172:TYR:CD1	28:19:186:HIS:HA	2.52	0.44
33:69:45:LYS:O	33:69:49:ALA:N	2.40	0.44
37:45:133:ARG:O	37:45:134:ARG:HD2	2.17	0.44
39:65:62:LYS:H	39:65:62:LYS:HG2	1.57	0.44
54:M5:49:VAL:HG23	54:M5:50:LEU:O	2.18	0.44
1:13:27:G:C5	1:13:557:G:C2	3.05	0.44
1:13:145:G:H2'	1:13:146:G:H8	1.81	0.44
1:13:160:A:C2	1:13:161:A:C8	3.05	0.44
1:13:1277:C:O2'	1:13:1279:A:H1'	2.17	0.44
1:13:1502:A:H2	1:13:1505:G:H22	1.64	0.44
3:2E:136:GLN:HE22	3:2E:140:ARG:HH11	1.63	0.44
10:1I:90:LEU:N	10:1I:91:PRO:HD2	2.33	0.44
17:8I:67:LYS:HA	17:8I:70:ARG:NH1	2.32	0.44
18:9I:52:PRO:O	18:9I:56:THR:HG23	2.17	0.44
20:BI:89:ARG:HH22	20:BI:105:SER:N	2.16	0.44
26:1H:270(J):G:H1	26:1H:270(P):C:H42	1.63	0.44
26:1H:516:C:P	52:N8:13:LYS:HZ1	2.39	0.44
26:1H:720:C:H2'	26:1H:721:C:C6	2.53	0.44
26:1H:852:G:H1	26:1H:925:C:N4	2.10	0.44
26:1H:911:A:H2'	37:88:9:TYR:OH	2.17	0.44
26:1H:918:A:C6	26:1H:919:G:H1'	2.52	0.44
26:1H:1442:G:C2	26:1H:1550:C:O2	2.70	0.44
26:1H:2367:G:H2'	26:1H:2368:C:H6	1.83	0.44
26:1H:2401:U:H3'	26:1H:2402:C:H6	1.82	0.44
26:1H:2518:A:H5'	26:1H:2518:A:C8	2.53	0.44
27:16:24:G:C2	27:16:56:G:C2	3.05	0.44
29:21:11:MET:HA	29:21:23:VAL:O	2.18	0.44
29:21:13:ARG:NH2	40:B8:77:PRO:HB3	2.32	0.44
30:31:123:LEU:HD12	30:31:124:LEU:H	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:I8:19:LYS:HD3	47:I8:19:LYS:HA	1.53	0.44
49:K8:18:PRO:O	49:K8:21:LEU:HB2	2.18	0.44
49:K8:47:ASN:C	49:K8:49:LYS:H	2.07	0.44
51:M8:14:ILE:HG22	51:M8:24:THR:CG2	2.45	0.44
1:1G:131:C:H2'	1:1G:132:C:C6	2.53	0.44
1:1G:416:G:O5'	1:1G:416:G:H8	2.01	0.44
1:1G:1206:G:C6	1:1G:1207:G:C6	3.06	0.44
1:1G:1415:G:C6	1:1G:1486:G:C6	3.06	0.44
6:52:18:GLN:HA	6:52:21:LEU:HB2	1.99	0.44
26:14:608:A:H2'	26:14:609:A:C8	2.52	0.44
26:14:754:C:H2'	26:14:755:C:C6	2.53	0.44
26:14:873:G:H1	26:14:904:C:H42	1.64	0.44
26:14:880:G:H1'	26:14:898:C:N3	2.33	0.44
26:14:1504:C:O2'	26:14:1505:C:H5'	2.17	0.44
26:14:1971:A:C5	28:19:241:PRO:HD3	2.53	0.44
26:14:2115:G:H1'	26:14:2171:A:H61	1.81	0.44
26:14:2862:G:H2'	26:14:2863:C:H6	1.83	0.44
27:1J:80:U:C2	27:1J:81:G:N2	2.85	0.44
28:19:31:LYS:HZ2	28:19:33:LEU:HD13	1.83	0.44
28:19:145:VAL:HG22	28:19:191:ALA:HB1	1.99	0.44
28:19:239:ARG:O	28:19:239:ARG:HG3	2.17	0.44
31:49:75:LYS:HB2	31:49:75:LYS:HE2	1.84	0.44
37:45:28:ALA:HB3	37:45:105:GLU:OE2	2.17	0.44
40:75:2:ASN:CB	40:75:4:GLY:HA3	2.48	0.44
43:A5:4:LYS:CB	43:A5:106:ILE:HG22	2.48	0.44
45:C5:36:ALA:HA	45:C5:67:LEU:O	2.17	0.44
46:D5:132:ASN:OD1	46:D5:132:ASN:N	2.49	0.44
47:E5:72:ARG:HH21	47:E5:75:LEU:CD1	2.30	0.44
1:13:237:C:H5"	17:8I:25:ARG:CZ	2.48	0.44
1:13:374:A:C6	1:13:375:U:C4	3.05	0.44
1:13:976:G:H5'	1:13:1358:U:O2'	2.18	0.44
1:13:1090:U:H2'	1:13:1091:U:C6	2.53	0.44
1:13:1285:A:H4'	1:13:1286:A:H5'	2.00	0.44
5:4E:28:PHE:CD2	5:4E:51:VAL:HG23	2.52	0.44
5:4E:92:LYS:HE2	5:4E:92:LYS:HB3	1.73	0.44
6:5E:39:LYS:HB2	6:5E:62:TRP:HZ3	1.83	0.44
9:8E:112:LYS:CA	9:8E:119:ALA:HB2	2.47	0.44
10:1I:48:THR:OG1	10:1I:62:HIS:CE1	2.71	0.44
13:4I:96:LEU:HD13	13:4I:97:PRO:HD2	2.00	0.44
13:4I:98:VAL:HG23	13:4I:99:ARG:N	2.32	0.44
17:8I:76:LEU:HD21	17:8I:79:SER:HB2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8I:90:ILE:O	17:8I:93:GLN:HB2	2.18	0.44
19:AI:18:LYS:HA	19:AI:21:GLU:HB3	1.99	0.44
26:1H:870:A:OP1	37:88:6:ARG:NH2	2.51	0.44
26:1H:907:U:O2'	37:88:101:ARG:NH2	2.49	0.44
26:1H:1024:G:O5'	26:1H:1024:G:H8	2.01	0.44
26:1H:1124:C:H2'	26:1H:1125:G:O4'	2.17	0.44
26:1H:1171:G:N2	26:1H:1178:C:O2	2.50	0.44
26:1H:1408:C:C2	26:1H:1595:G:N2	2.86	0.44
26:1H:1766:U:O2'	26:1H:1767:C:H5'	2.18	0.44
26:1H:2142:C:H2'	26:1H:2143:C:C6	2.53	0.44
26:1H:2320:A:H2'	26:1H:2320:A:N3	2.32	0.44
29:21:152:LYS:HG2	34:58:78:TYR:CE1	2.52	0.44
31:41:19:LEU:HD11	31:41:172:LEU:HA	1.99	0.44
33:61:27:ARG:HH22	48:J8:68:PRO:HG3	1.83	0.44
36:78:76:LYS:HD3	36:78:76:LYS:HA	1.73	0.44
37:88:37:LEU:HB2	37:88:128:LYS:O	2.18	0.44
37:88:51:ARG:HE	37:88:51:ARG:HB3	1.65	0.44
40:B8:12:SER:CA	40:B8:14:TYR:H	2.29	0.44
42:D8:35:LEU:HD22	42:D8:35:LEU:HA	1.79	0.44
45:G8:28:LYS:HE3	45:G8:28:LYS:HB2	1.68	0.44
49:K8:18:PRO:O	49:K8:21:LEU:N	2.51	0.44
54:Q8:31:HIS:O	54:Q8:36:LYS:NZ	2.51	0.44
1:1G:341:C:H2'	1:1G:342:C:H6	1.82	0.44
1:1G:518:C:H2'	1:1G:530:G:C8	2.53	0.44
1:1G:585:G:N3	1:1G:879:C:H4'	2.33	0.44
1:1G:697:U:H5"	1:1G:698:G:OP2	2.17	0.44
1:1G:838:G:N1	1:1G:842:C:O2'	2.24	0.44
1:1G:1288:A:H2'	1:1G:1289:A:H8	1.83	0.44
1:1G:1513:A:H2'	1:1G:1514:C:H6	1.79	0.44
2:12:54:THR:HG23	2:12:57:PHE:HD2	1.83	0.44
2:12:91:PRO:HG2	2:12:155:LEU:HG	1.99	0.44
3:22:18:TRP:CD1	14:5A:55:GLY:H	2.36	0.44
3:22:103:VAL:HG12	3:22:104:GLN:N	2.33	0.44
5:42:7:GLU:OE1	5:42:37:ARG:NE	2.49	0.44
8:72:73:ASP:HB2	8:72:75:ARG:NH2	2.32	0.44
11:2A:73:MET:SD	11:2A:103:LEU:HD13	2.58	0.44
20:BA:56:MET:HG3	20:BA:84:LEU:HD22	1.99	0.44
26:14:274:G:H2'	26:14:275:G:H1'	2.00	0.44
26:14:1651:G:N2	26:14:2007:C:C2	2.86	0.44
26:14:1849:G:H2'	26:14:1850:G:H8	1.83	0.44
26:14:1879:C:O5'	26:14:1879:C:H6	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2465:C:O2	26:14:2486:G:C2	2.71	0.44
26:14:2617:C:C4	26:14:2618:G:C5	3.06	0.44
26:14:2680:C:N4	26:14:2681:C:H42	2.16	0.44
26:14:2774:C:H2'	26:14:2775:A:C8	2.52	0.44
29:29:26:ILE:HG22	29:29:28:ALA:N	2.32	0.44
30:39:7:TYR:HE1	30:39:10:PRO:HD3	1.82	0.44
30:39:82:ILE:H	30:39:82:ILE:HG13	1.55	0.44
34:15:30:ILE:O	34:15:34:LEU:HD22	2.18	0.44
40:75:19:LEU:HD22	40:75:86:ILE:CG2	2.47	0.44
40:75:65:LYS:HD2	40:75:67:SER:HB2	1.99	0.44
44:B5:12:VAL:HG22	44:B5:27:THR:OG1	2.18	0.44
46:D5:14:LYS:H	46:D5:14:LYS:CD	2.31	0.44
1:13:129(A):G:N1	1:13:188:U:O2'	2.51	0.44
1:13:848:C:H2'	1:13:849:C:O4'	2.18	0.44
1:13:994:A:N7	1:13:1216:G:H4'	2.32	0.44
1:13:1234:C:O2'	1:13:1235:U:H5'	2.18	0.44
1:13:1349:A:H2'	1:13:1350:A:C8	2.52	0.44
1:13:1397:C:H4'	1:13:1398:A:OP2	2.18	0.44
1:13:1453:G:HO2'	1:13:1454:G:P	2.40	0.44
2:1E:87:ARG:CZ	2:1E:232:PRO:HB3	2.48	0.44
4:3E:26:CYS:HA	56:3E:301:SF4:S3	2.58	0.44
6:5E:48:LEU:HB2	6:5E:56:PRO:O	2.17	0.44
7:6E:16:LEU:HD23	9:8E:42:ARG:HA	1.98	0.44
7:6E:50:ILE:O	7:6E:54:THR:N	2.38	0.44
7:6E:61:VAL:HG12	7:6E:124:LEU:HD22	1.99	0.44
10:1I:7:LYS:NZ	10:1I:9:ARG:HH11	2.16	0.44
13:4I:7:VAL:HB	31:41:115:ARG:CZ	2.47	0.44
20:BI:76:ALA:O	20:BI:80:ARG:HG2	2.18	0.44
26:1H:17:G:H2'	26:1H:18:C:H6	1.80	0.44
26:1H:322:A:OP2	30:31:169:ASN:HB2	2.18	0.44
26:1H:577:G:OP1	26:1H:2502:G:O2'	2.28	0.44
26:1H:580:C:C2	26:1H:581:C:C5	3.06	0.44
26:1H:653:A:O2'	26:1H:654:A:H5'	2.17	0.44
26:1H:981:A:N1	26:1H:2027:G:O2'	2.44	0.44
26:1H:1388:G:H2'	26:1H:1389:G:H8	1.83	0.44
26:1H:1579:A:H2'	26:1H:1580:A:C8	2.53	0.44
26:1H:1814:G:H4'	28:11:51:VAL:HG21	1.99	0.44
26:1H:1848:A:H2'	26:1H:1849:G:O4'	2.17	0.44
26:1H:2292:C:P	39:A8:17:ARG:NH2	2.91	0.44
26:1H:2473:U:O2'	26:1H:2474:C:OP1	2.35	0.44
27:16:60:C:H2'	27:16:61:G:H8	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:31:158:THR:C	30:31:178:PRO:HD3	2.43	0.44
32:51:2:SER:O	32:51:4:ILE:N	2.50	0.44
32:51:52:VAL:O	32:51:65:HIS:NE2	2.38	0.44
37:88:3:MET:HE2	37:88:3:MET:HB3	1.77	0.44
39:A8:51:ALA:HB1	39:A8:69:VAL:HG23	2.00	0.44
44:F8:92:LEU:HD23	44:F8:92:LEU:HA	1.71	0.44
46:H8:28:MET:O	46:H8:35:ARG:N	2.45	0.44
52:N8:6:VAL:HG13	52:N8:7:PRO:HD2	1.98	0.44
52:N8:40:LYS:CG	52:N8:47:PRO:HD2	2.48	0.44
1:1G:292:G:H8	1:1G:292:G:O5'	2.00	0.44
1:1G:374:A:C6	1:1G:375:U:C4	3.06	0.44
1:1G:837:G:H1	1:1G:849:C:N4	2.16	0.44
1:1G:1016:A:H1'	1:1G:1218:C:H1'	2.00	0.44
1:1G:1267:C:O2	1:1G:1267:C:H2'	2.17	0.44
1:1G:1274:G:H21	1:1G:1275:A:H62	1.65	0.44
1:1G:1274:G:H2'	1:1G:1275:A:H8	1.83	0.44
1:1G:1402:C:H2'	1:1G:1403:C:O4'	2.18	0.44
2:12:78:GLN:O	2:12:94:ASN:ND2	2.35	0.44
2:12:116:GLU:HG2	2:12:153:ARG:HH21	1.83	0.44
2:12:217:ARG:O	2:12:219:VAL:HG13	2.18	0.44
10:1A:21:GLN:O	10:1A:24:VAL:HB	2.18	0.44
11:2A:91:ARG:O	11:2A:95:ILE:HG12	2.18	0.44
13:4A:32:GLU:O	13:4A:36:LYS:HB2	2.17	0.44
13:4A:76:ALA:O	13:4A:80:ARG:HB2	2.17	0.44
16:7A:14:ASN:O	16:7A:16:HIS:HD2	2.00	0.44
23:2L:17:C:H3'	23:2L:18:U:H2'	2.00	0.44
26:14:198:C:O2'	26:14:199:A:H5'	2.18	0.44
26:14:214:G:H4'	26:14:214:G:OP1	2.17	0.44
26:14:570:G:C6	26:14:2030:A:C2	3.06	0.44
26:14:1884:A:C2	26:14:1885:A:C8	3.06	0.44
30:39:28:ILE:C	30:39:112:MET:HE3	2.43	0.44
31:49:103:LEU:O	31:49:107:LEU:HG	2.18	0.44
36:35:45:LEU:HD22	36:35:45:LEU:H	1.83	0.44
36:35:63:PRO:HD2	54:M5:25:MET:HB2	2.00	0.44
37:45:66:ILE:HD12	37:45:67:ARG:N	2.32	0.44
40:75:23:ARG:NH2	40:75:120:ARG:HD3	2.33	0.44
44:B5:66:LEU:HD22	44:B5:66:LEU:HA	1.82	0.44
46:D5:10:ARG:HH21	46:D5:26:GLY:N	2.12	0.44
54:M5:52:LYS:H	54:M5:53:PRO:HD2	1.82	0.44
1:13:254:G:O3'	17:8I:69:LYS:NZ	2.41	0.44
1:13:372:C:N4	1:13:389:A:H62	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:373:A:N6	1:13:391:G:H21	2.16	0.44
1:13:942:G:H2'	1:13:943:U:C6	2.52	0.44
1:13:1205:U:H2'	1:13:1206:G:C8	2.53	0.44
1:13:1260:C:N4	1:13:1274:G:O6	2.51	0.44
1:13:1269:A:H2	1:13:1312:G:N3	2.16	0.44
5:4E:57:LYS:H	5:4E:57:LYS:HG2	1.57	0.44
21:1F:9:ARG:HD3	21:1F:13:ILE:HD11	2.00	0.44
26:1H:18:C:H4'	41:C8:23:GLY:O	2.18	0.44
26:1H:1706:U:C2	26:1H:1757:U:H5'	2.53	0.44
26:1H:2091:U:O2'	48:J8:47:GLN:HG3	2.18	0.44
26:1H:2830:G:H5"	26:1H:2830:G:C8	2.53	0.44
29:21:1:MET:H3	29:21:84:PHE:HB2	1.83	0.44
29:21:14:ILE:HB	29:21:21:VAL:HG22	1.99	0.44
29:21:78:LEU:HD13	29:21:78:LEU:HA	1.78	0.44
34:58:99:LEU:O	34:58:103:VAL:HG23	2.18	0.44
37:88:77:LYS:HE3	37:88:84:GLY:O	2.17	0.44
48:J8:90:ILE:C	48:J8:92:LYS:N	2.76	0.44
1:1G:406:G:H21	4:32:119:GLN:NE2	2.16	0.44
1:1G:1108:G:H5'	3:22:176:HIS:ND1	2.33	0.44
3:22:42:LEU:O	3:22:46:GLU:HG2	2.18	0.44
4:32:19:LEU:HD22	4:32:67:ILE:HG13	1.99	0.44
4:32:26:CYS:HA	56:32:302:SF4:S2	2.58	0.44
7:62:71:PRO:HD3	7:62:103:TRP:HZ3	1.83	0.44
11:2A:86:GLY:O	11:2A:91:ARG:NH1	2.50	0.44
14:5A:7:ILE:HB	14:5A:23:ARG:HD3	2.00	0.44
14:5A:37:PHE:HZ	14:5A:56:VAL:HG21	1.83	0.44
26:14:22:C:H2'	26:14:23:G:O4'	2.17	0.44
26:14:29:U:H2'	26:14:30:G:H8	1.80	0.44
26:14:72:U:P	58:14:3460:HOH:O	2.76	0.44
26:14:278:A:OP2	26:14:278:A:H2'	2.18	0.44
26:14:726:G:O2'	26:14:727:A:OP2	2.30	0.44
26:14:1754:C:P	40:75:96:ARG:HH12	2.41	0.44
26:14:1973:G:H2'	26:14:1974:C:C6	2.53	0.44
26:14:2274:A:O3'	26:14:2275:C:H3'	2.18	0.44
26:14:2687:U:C4	26:14:2688:U:C5	3.05	0.44
26:14:2712:U:O2'	26:14:2713:A:H5'	2.18	0.44
26:14:2855:C:H2'	26:14:2856:C:H6	1.83	0.44
28:19:140:THR:O	28:19:165:ILE:HG13	2.17	0.44
30:39:68:LYS:HG3	30:39:69:HIS:CE1	2.52	0.44
30:39:115:ALA:O	30:39:119:ARG:HG3	2.18	0.44
32:59:150:ALA:O	32:59:152:ARG:N	2.51	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:25:116:SER:OG	35:25:117:LEU:N	2.50	0.44
1:13:105:G:H2'	1:13:106:C:C6	2.53	0.43
1:13:156:G:H1	1:13:165:C:H42	1.65	0.43
1:13:191:G:H1'	20:BI:105:SER:HB3	2.00	0.43
1:13:590:C:H2'	1:13:591:U:C6	2.49	0.43
1:13:1227:A:C8	1:13:1227:A:H3'	2.53	0.43
9:8E:6:GLY:O	9:8E:17:VAL:HG23	2.18	0.43
15:6I:74:ASP:OD2	15:6I:77:ARG:HB2	2.18	0.43
19:AI:42:PRO:O	19:AI:45:VAL:HG12	2.18	0.43
19:AI:49:ILE:HD13	19:AI:71:LEU:HD11	1.99	0.43
20:BI:68:LYS:HE3	20:BI:68:LYS:HB2	1.75	0.43
26:1H:274:G:N3	26:1H:276:A:N1	2.65	0.43
26:1H:518:G:H2'	26:1H:519:U:C6	2.53	0.43
26:1H:658:C:H2'	26:1H:659:C:C6	2.53	0.43
26:1H:1598:C:O2'	26:1H:1599:C:H5'	2.18	0.43
26:1H:1788:C:H2'	26:1H:1789:A:O4'	2.17	0.43
26:1H:2027:G:C5	26:1H:2028:U:C5	3.07	0.43
26:1H:2656:U:C5	26:1H:2664:G:N2	2.86	0.43
28:11:26:LYS:HG2	28:11:27:THR:N	2.33	0.43
30:31:49:ALA:O	30:31:92:PRO:HB2	2.17	0.43
33:61:85:GLU:OE2	33:61:85:GLU:HA	2.18	0.43
34:58:39:ARG:O	34:58:41:ASP:N	2.51	0.43
36:78:68:GLN:CD	54:Q8:12:LYS:HG3	2.43	0.43
37:88:133:ARG:O	37:88:134:ARG:HB2	2.18	0.43
38:98:9:LYS:HA	38:98:17:ARG:NE	2.33	0.43
40:B8:12:SER:CB	40:B8:14:TYR:H	2.31	0.43
42:D8:15:GLU:HB3	42:D8:16:PRO:HD2	1.99	0.43
44:F8:5:TYR:CE2	49:K8:30:ARG:HB2	2.53	0.43
47:I8:45:PHE:HE2	47:I8:69:PHE:HE2	1.66	0.43
1:1G:9:G:OP1	5:42:122:GLU:HB2	2.17	0.43
1:1G:78:G:H1	1:1G:91:C:H42	1.64	0.43
1:1G:313:A:H2'	1:1G:314:C:C6	2.52	0.43
1:1G:530:G:H2'	1:1G:530:G:N3	2.33	0.43
1:1G:646:U:H2'	1:1G:647:C:C6	2.53	0.43
1:1G:734:G:H2'	1:1G:734:G:N3	2.33	0.43
1:1G:791:G:H2'	1:1G:792:A:H5'	2.00	0.43
1:1G:1045:C:H2'	1:1G:1046:A:O4'	2.18	0.43
1:1G:1095:U:OP1	1:1G:1108:G:N2	2.50	0.43
1:1G:1187:G:H2'	1:1G:1188:A:O4'	2.18	0.43
1:1G:1240:U:O2'	1:1G:1241:G:OP1	2.36	0.43
2:12:106:LYS:O	2:12:110:GLN:HG3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:185:ILE:HG23	2:12:199:TYR:HB2	2.00	0.43
3:22:56:ASP:O	3:22:66:VAL:HA	2.17	0.43
4:32:36:ARG:O	4:32:38:TYR:N	2.50	0.43
5:42:11:ILE:HB	5:42:31:LEU:HB3	2.00	0.43
7:62:56:GLN:CD	7:62:60:LYS:HE2	2.42	0.43
8:72:101:PRO:CG	8:72:133:LEU:HD11	2.48	0.43
15:6A:32:LEU:CD1	15:6A:62:GLN:HB3	2.47	0.43
16:7A:14:ASN:OD1	16:7A:16:HIS:NE2	2.51	0.43
22:1L:74:C:H1'	26:14:2555:U:H3	1.83	0.43
24:3L:54:U:H1'	24:3L:61:C:C2	2.53	0.43
26:14:116:C:H2'	26:14:117:G:O4'	2.18	0.43
26:14:574:C:H1'	26:14:2055:C:C5	2.53	0.43
26:14:821:A:H5'	26:14:822:U:H6	1.83	0.43
26:14:1697:G:OP2	26:14:1698:A:O2'	2.13	0.43
26:14:1939:U:OP1	26:14:2604:U:O2'	2.36	0.43
26:14:2151:G:N2	26:14:2152:G:H1'	2.32	0.43
26:14:2750:A:H8	26:14:2752:C:H41	1.66	0.43
26:14:2795:G:H4'	26:14:2798:C:C5	2.53	0.43
28:19:159:ALA:HB1	28:19:198:ASN:O	2.17	0.43
29:29:9:VAL:HB	29:29:25:VAL:HB	2.00	0.43
29:29:201:THR:HB	29:29:203:LYS:HB3	1.99	0.43
30:39:180:GLY:O	30:39:181:LEU:C	2.61	0.43
41:85:92:ARG:C	41:85:94:ASN:N	2.76	0.43
48:F5:91:LYS:HE2	48:F5:91:LYS:HB2	1.48	0.43
49:G5:37:PHE:C	49:G5:39:ALA:N	2.75	0.43
1:13:193:C:O2'	1:13:194:C:H5'	2.18	0.43
1:13:626:U:H2'	1:13:627:G:C8	2.54	0.43
1:13:820:U:H4'	1:13:821:G:OP2	2.19	0.43
1:13:1178:G:OP2	9:8E:93:ARG:NH1	2.50	0.43
3:2E:58:GLU:O	3:2E:59:ARG:HG3	2.18	0.43
23:2K:2:G:H2'	23:2K:3:C:H6	1.82	0.43
23:2K:17:C:C4	23:2K:18:U:C4	3.06	0.43
23:2K:17:C:OP1	23:2K:61:U:O2'	2.34	0.43
26:1H:223:A:O4'	26:1H:422:A:H5'	2.18	0.43
26:1H:443:A:H1'	26:1H:1201:C:O4'	2.18	0.43
26:1H:794:G:H2'	26:1H:795:C:C6	2.53	0.43
26:1H:1690:A:H3'	26:1H:1691:C:H6	1.82	0.43
26:1H:2108:C:H2'	26:1H:2109:U:O4'	2.18	0.43
26:1H:2244:U:O2'	26:1H:2245:U:H5'	2.18	0.43
37:88:65:PHE:HB2	37:88:105:GLU:HB3	1.99	0.43
40:B8:132:LYS:HB3	40:B8:132:LYS:HE3	1.62	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:19:LYS:HE3	45:G8:19:LYS:HB3	1.93	0.43
46:H8:19:ARG:NH1	46:H8:84:GLU:HB2	2.30	0.43
47:I8:21:LEU:HD11	47:I8:41:ARG:CZ	2.48	0.43
51:M8:13:ARG:O	51:M8:30:GLU:HA	2.18	0.43
54:Q8:52:LYS:H	54:Q8:53:PRO:HD2	1.83	0.43
1:1G:57:G:C5	1:1G:58:C:C4	3.06	0.43
1:1G:136:C:O2'	16:7A:65:GLN:OE1	2.32	0.43
1:1G:191:G:O2'	20:BA:103:GLY:N	2.51	0.43
1:1G:218:C:H2'	1:1G:219:C:C6	2.53	0.43
1:1G:347:G:H2'	1:1G:348:G:O4'	2.19	0.43
1:1G:938:A:N6	1:1G:939:G:C5	2.86	0.43
1:1G:1116:C:N3	1:1G:1184:G:N2	2.46	0.43
3:22:113:ALA:O	3:22:116:VAL:HG12	2.18	0.43
5:42:92:LYS:O	5:42:119:LEU:HD12	2.18	0.43
8:72:125:ARG:HE	8:72:125:ARG:HB2	1.29	0.43
12:3A:83:VAL:HG13	12:3A:84:LEU:N	2.34	0.43
26:14:96:G:H4'	49:G5:48:HIS:CE1	2.54	0.43
26:14:372:G:OP2	48:F5:69:LYS:HE2	2.18	0.43
26:14:453:C:H4'	26:14:472:A:H61	1.83	0.43
26:14:880:G:C1'	26:14:898:C:H42	2.32	0.43
26:14:910:A:N7	37:45:13:GLN:HG3	2.33	0.43
26:14:1011:G:C4	26:14:1151:G:N2	2.86	0.43
26:14:1041:C:H42	26:14:1114:G:H22	1.66	0.43
26:14:1047:G:N2	26:14:1111:A:H61	2.09	0.43
26:14:2107:C:H2'	26:14:2108:C:O4'	2.17	0.43
26:14:2199:A:H3'	26:14:2205:C:H6	1.83	0.43
26:14:2261:C:O2'	26:14:2262:U:H5'	2.18	0.43
26:14:2352:A:C2	47:E5:33:ALA:O	2.71	0.43
28:19:183:ARG:HG2	28:19:183:ARG:HH11	1.83	0.43
29:29:63:LEU:HD13	29:29:63:LEU:HA	1.77	0.43
29:29:101:ARG:NH1	29:29:171:GLU:HB2	2.33	0.43
37:45:21:THR:HG21	37:45:101:ARG:HD2	2.01	0.43
38:55:110:PRO:O	38:55:111:LEU:HD23	2.18	0.43
39:65:27:SER:N	39:65:38:GLN:O	2.50	0.43
46:D5:134:PRO:HB2	46:D5:136:PHE:O	2.17	0.43
46:D5:140:ASP:OD1	46:D5:140:ASP:N	2.50	0.43
48:F5:53:VAL:HG12	48:F5:54:ALA:N	2.32	0.43
53:L5:34:ARG:NE	53:L5:39:ARG:HG3	2.33	0.43
1:13:414:A:H2'	1:13:415:A:O4'	2.18	0.43
1:13:426:G:H2'	1:13:427:U:C6	2.53	0.43
1:13:696:A:N3	1:13:786:G:O2'	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:835:U:OP1	18:9I:64:ARG:NH1	2.48	0.43
1:13:926:G:O2'	25:4K:12:A:N7	2.45	0.43
6:5E:35:ALA:HA	6:5E:67:MET:HB3	2.00	0.43
8:7E:27:PRO:HA	8:7E:58:TYR:CD1	2.53	0.43
18:9I:36:ASN:OD1	18:9I:36:ASN:N	2.41	0.43
19:AI:41:VAL:HG21	19:AI:45:VAL:HB	1.99	0.43
26:1H:862:G:H2'	26:1H:863:A:O4'	2.17	0.43
26:1H:1299:G:OP1	58:1H:3690:HOH:O	2.21	0.43
26:1H:1870:C:H2'	26:1H:1871:A:O4'	2.18	0.43
26:1H:1916:A:H2'	26:1H:1917:U:O4'	2.18	0.43
26:1H:2171:A:O2'	26:1H:2172:U:O5'	2.36	0.43
26:1H:2272:U:O4	58:1H:3672:HOH:O	2.19	0.43
36:78:15:ARG:HA	36:78:15:ARG:HD2	1.46	0.43
51:M8:63:TYR:C	51:M8:63:TYR:CD1	2.96	0.43
1:1G:77:C:H2'	1:1G:78:G:H8	1.82	0.43
1:1G:81:G:HO2'	1:1G:82:U:P	2.41	0.43
1:1G:193:C:H2'	1:1G:194:C:H6	1.84	0.43
1:1G:791:G:H8	1:1G:791:G:O5'	2.01	0.43
1:1G:986:A:H4'	19:AA:55:LYS:HE2	1.99	0.43
1:1G:1095:U:H2'	1:1G:1096:C:H6	1.79	0.43
1:1G:1264:C:H1'	1:1G:1272:G:H22	1.82	0.43
1:1G:1421:G:H1	1:1G:1479:C:N4	2.15	0.43
1:1G:1515:C:H2'	1:1G:1516:G:H8	1.84	0.43
2:12:178:ARG:NH1	2:12:196:LEU:O	2.42	0.43
3:22:135:LYS:HB3	3:22:135:LYS:HE3	1.76	0.43
4:32:126:ILE:HG22	4:32:127:THR:N	2.34	0.43
4:32:177:ASP:OD2	4:32:180:GLY:HA3	2.18	0.43
7:62:142:GLU:C	7:62:144:MET:H	2.26	0.43
8:72:51:VAL:HG11	8:72:60:ARG:HB2	2.00	0.43
9:82:26:VAL:HG13	9:82:61:ALA:O	2.18	0.43
10:1A:99:LYS:HD3	10:1A:100:THR:N	2.33	0.43
13:4A:47:ASP:OD1	13:4A:47:ASP:N	2.51	0.43
20:BA:50:GLU:HA	20:BA:100:ILE:CG2	2.48	0.43
26:14:271(B):G:N7	26:14:421:U:H2'	2.32	0.43
26:14:357:A:H2'	26:14:358:U:H6	1.83	0.43
26:14:861:A:N3	27:1J:79:C:O2'	2.50	0.43
26:14:906:G:H4'	37:45:67:ARG:HH21	1.83	0.43
26:14:1557:C:OP2	26:14:1558:A:O2'	2.35	0.43
26:14:2400:G:C2	26:14:2417:C:C2	3.06	0.43
29:29:21:VAL:O	29:29:23:VAL:HG13	2.18	0.43
31:49:15:VAL:HG13	31:49:175:LEU:HB3	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:112:PRO:HA	31:49:117:PHE:CD2	2.54	0.43
34:15:41:ASP:O	41:85:64:ARG:NH2	2.51	0.43
35:25:90:GLN:O	35:25:91:LEU:HB2	2.18	0.43
35:25:119:PRO:HB2	40:75:68:TYR:CZ	2.53	0.43
40:75:36:GLU:HG2	40:75:37:GLY:N	2.32	0.43
53:L5:10:ARG:HG2	53:L5:14:LYS:HG3	1.99	0.43
53:L5:19:ARG:HG2	53:L5:19:ARG:NH1	2.33	0.43
1:13:487:A:H2'	1:13:487:A:N3	2.33	0.43
1:13:626:U:H2'	1:13:627:G:H8	1.83	0.43
1:13:695:A:OP1	11:2I:52:GLY:HA3	2.18	0.43
1:13:1015:A:H2'	1:13:1016:A:C8	2.53	0.43
2:1E:81:VAL:HG23	2:1E:82:ARG:N	2.34	0.43
3:2E:131:ARG:HG3	3:2E:166:GLU:OE2	2.19	0.43
4:3E:12:CYS:SG	4:3E:19:LEU:N	2.69	0.43
4:3E:100:ARG:HB3	4:3E:102:ASP:OD1	2.18	0.43
5:4E:112:LEU:HD23	5:4E:112:LEU:HA	1.60	0.43
7:6E:23:VAL:O	7:6E:27:ILE:HB	2.18	0.43
7:6E:146:GLU:O	7:6E:149:ARG:HB2	2.17	0.43
11:2I:126:ARG:HG2	11:2I:126:ARG:HH11	1.83	0.43
13:4I:66:LEU:HA	13:4I:66:LEU:HD23	1.53	0.43
22:1K:6:U:H3	22:1K:68:U:H3	1.66	0.43
26:1H:270(Y):G:C2	26:1H:270(Z):U:O4	2.71	0.43
26:1H:633:A:H2'	26:1H:634:C:H5'	2.00	0.43
26:1H:1210:A:H5"	26:1H:1212:G:C5'	2.46	0.43
26:1H:1582:C:O2'	26:1H:1586:A:C8	2.67	0.43
26:1H:1844:C:H5"	28:11:258:LYS:HG3	1.99	0.43
26:1H:2038:G:H2'	26:1H:2039:C:C6	2.54	0.43
26:1H:2516:G:C6	26:1H:2517:C:C4	3.06	0.43
31:41:41:GLN:HB3	31:41:43:LEU:HD21	2.00	0.43
34:58:42:TRP:HA	34:58:48:MET:CE	2.49	0.43
37:88:75:THR:HA	37:88:89:ASN:O	2.18	0.43
1:1G:109:A:C6	1:1G:326:G:C6	3.07	0.43
1:1G:517:G:N2	1:1G:531:U:H5"	2.34	0.43
1:1G:631:G:H5"	8:72:98:LYS:NZ	2.33	0.43
1:1G:1379:G:P	7:62:6:ARG:HH21	2.41	0.43
1:1G:1466:C:H2'	1:1G:1467:G:O4'	2.18	0.43
4:32:72:GLU:OE1	4:32:207:TYR:OH	2.37	0.43
11:2A:20:TYR:CZ	11:2A:83:ILE:HD12	2.53	0.43
11:2A:98:LEU:O	11:2A:101:SER:OG	2.28	0.43
12:3A:11:VAL:HG11	17:8A:36:ILE:HG21	1.98	0.43
13:4A:14:ARG:HA	13:4A:43:THR:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9A:41:LYS:O	18:9A:41:LYS:HD3	2.18	0.43
21:1B:12:LYS:HB3	21:1B:17:THR:O	2.18	0.43
26:14:105:C:H2'	26:14:106:C:H6	1.82	0.43
26:14:1138:G:O2'	34:15:106:MET:HG3	2.18	0.43
26:14:1219:G:H1	26:14:1230:C:H42	1.66	0.43
26:14:1301:A:N3	26:14:1301:A:H2'	2.34	0.43
26:14:1332:G:N2	26:14:1609:A:H2'	2.33	0.43
26:14:1635:G:N3	26:14:1635:G:H2'	2.32	0.43
26:14:2115:G:N2	26:14:2116:G:N7	2.66	0.43
26:14:2705:A:H2'	26:14:2706:G:O4'	2.17	0.43
26:14:2807:G:C2	26:14:2808:U:C2	3.07	0.43
29:29:171:GLU:OE1	29:29:185:LYS:NZ	2.44	0.43
31:49:82:LEU:HD23	31:49:82:LEU:HA	1.75	0.43
33:69:93:THR:CG2	33:69:119:PRO:HG3	2.47	0.43
34:15:6:PRO:CG	34:15:41:ASP:HB3	2.43	0.43
36:35:60:MET:HE3	36:35:60:MET:HB3	1.89	0.43
37:45:77:LYS:NZ	37:45:84:GLY:HA3	2.34	0.43
39:65:56:LEU:O	39:65:58:LEU:HG	2.19	0.43
46:D5:61:LEU:HD22	46:D5:61:LEU:HA	1.87	0.43
52:J5:12:SER:O	52:J5:13:LYS:C	2.61	0.43
1:13:154:C:H2'	1:13:155:C:C6	2.54	0.43
1:13:807:A:H2'	1:13:808:C:C6	2.53	0.43
1:13:814:A:N7	1:13:816:A:C4	2.86	0.43
4:3E:74:GLN:O	4:3E:78:LEU:HG	2.19	0.43
5:4E:100:VAL:HG13	5:4E:118:ILE:HG22	2.00	0.43
17:8I:60:ILE:O	17:8I:62:SER:OG	2.34	0.43
18:9I:70:ILE:O	18:9I:74:ARG:HG3	2.18	0.43
19:AI:53:ASN:O	19:AI:77:THR:HG22	2.18	0.43
22:1K:37:AET:H2'	22:1K:38:A:O4'	2.19	0.43
22:1K:72:C:H2'	22:1K:73:A:H5'	2.00	0.43
26:1H:29:U:O5'	26:1H:29:U:H6	2.02	0.43
26:1H:142:G:H2'	26:1H:143:C:C6	2.52	0.43
26:1H:270(E):G:H2'	26:1H:270(F):U:O4'	2.19	0.43
26:1H:270(J):G:N2	26:1H:270(P):C:N3	2.65	0.43
26:1H:281:G:O2'	26:1H:282:A:O4'	2.29	0.43
26:1H:482:A:H5"	26:1H:483:A:OP1	2.19	0.43
26:1H:929:G:H8	26:1H:929:G:O5'	2.01	0.43
26:1H:1139:G:O2'	26:1H:1143:A:N1	2.40	0.43
26:1H:1166:C:N4	26:1H:1183:G:H1	2.17	0.43
26:1H:1311:G:N7	53:P8:9:ARG:NH2	2.66	0.43
26:1H:1614:A:P	26:1H:1614:A:H8	2.42	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1680:U:C4	26:1H:1681:G:C6	3.07	0.43
26:1H:2020:A:O2'	26:1H:2021:C:H5'	2.18	0.43
26:1H:2035:G:H4'	26:1H:2036:C:OP2	2.18	0.43
26:1H:2061:G:C2	26:1H:2063:C:C4	3.06	0.43
26:1H:2118:U:H1'	26:1H:2147:G:H1	1.83	0.43
26:1H:2312:U:OP1	31:41:74:LYS:HG2	2.18	0.43
26:1H:2383:G:H2'	26:1H:2384:G:C8	2.52	0.43
26:1H:2626:C:H2'	26:1H:2627:G:O4'	2.19	0.43
26:1H:2681:C:C4	26:1H:2724:C:C5	3.06	0.43
26:1H:2771:C:H2'	26:1H:2772:C:H6	1.83	0.43
27:16:12:C:H6	27:16:12:C:OP2	2.01	0.43
31:41:44:GLY:C	31:41:46:ALA:H	2.26	0.43
36:78:83:VAL:O	36:78:114:ILE:HA	2.18	0.43
38:98:44:LEU:O	38:98:45:ARG:C	2.61	0.43
41:C8:29:SER:OG	41:C8:30:LYS:HD3	2.18	0.43
41:C8:79:PHE:C	41:C8:79:PHE:HD1	2.24	0.43
42:D8:7:THR:HG23	42:D8:12:TYR:HE1	1.82	0.43
46:H8:48:PHE:HA	46:H8:51:ALA:HB3	2.01	0.43
46:H8:108:PRO:O	46:H8:144:LEU:HB2	2.18	0.43
1:1G:111:G:H8	1:1G:111:G:O5'	2.01	0.43
1:1G:603:U:O5'	1:1G:603:U:H6	2.01	0.43
1:1G:1261:A:C6	1:1G:1262:C:C2	3.06	0.43
3:22:106:VAL:HG23	3:22:109:PRO:HB3	2.00	0.43
6:52:52:ILE:HD11	18:9A:77:GLY:HA3	2.00	0.43
9:82:37:PHE:HB3	9:82:43:ALA:CB	2.49	0.43
16:7A:23:ASP:OD1	16:7A:25:ARG:HG3	2.19	0.43
26:14:276:A:H2'	26:14:277:C:C4	2.53	0.43
26:14:1108:U:H5	26:14:1109:C:C2	2.37	0.43
26:14:1448:G:H1'	26:14:1528:A:H62	1.83	0.43
26:14:1491:G:O2'	28:19:101:GLU:HB2	2.19	0.43
26:14:2536:G:C2	26:14:2537:U:C2	3.06	0.43
26:14:2575:C:H2'	26:14:2578:G:O6	2.18	0.43
26:14:2817:G:H21	26:14:2836:U:H1'	1.84	0.43
27:1J:75:G:N1	27:1J:102:G:N2	2.67	0.43
28:19:177:LEU:HB3	28:19:178:PRO:CD	2.48	0.43
30:39:170:LEU:HD13	30:39:172:TRP:CZ2	2.54	0.43
33:69:79:ILE:HD11	33:69:100:ALA:HB2	2.00	0.43
33:69:142:VAL:HG12	33:69:143:SER:H	1.83	0.43
39:65:109:GLY:C	39:65:111:GLU:H	2.24	0.43
46:D5:44:PHE:CE2	46:D5:88:PHE:HZ	2.36	0.43
46:D5:110:GLY:H	46:D5:142:SER:HB3	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:E5:15:ASP:OD1	47:E5:16:SER:N	2.44	0.43
49:G5:43:GLN:HA	49:G5:45:SER:H	1.84	0.43
1:13:1260:C:H3'	1:13:1260:C:C6	2.54	0.43
9:8E:24:GLY:HA2	9:8E:59:PHE:O	2.18	0.43
9:8E:73:GLN:O	9:8E:76:ALA:N	2.50	0.43
12:3I:42:THR:HA	12:3I:53:ARG:O	2.18	0.43
20:BI:94:ALA:O	20:BI:95:ALA:HB3	2.18	0.43
23:2K:38:A:H2'	23:2K:39:A:O4'	2.19	0.43
25:4K:11:U:H4'	25:4K:12:A:OP2	2.17	0.43
26:1H:592:G:O2'	54:Q8:4:MET:HB2	2.19	0.43
26:1H:855:G:C5	26:1H:856:C:C5	3.07	0.43
26:1H:1438:U:O2'	26:1H:1439:A:H5'	2.19	0.43
26:1H:2022:U:O2'	26:1H:2617:C:H5'	2.18	0.43
26:1H:2315:G:H2'	26:1H:2315:G:N3	2.32	0.43
26:1H:2745:C:H4'	32:51:142:GLY:O	2.18	0.43
29:21:179:GLU:HB3	29:21:181:LEU:HD13	2.00	0.43
31:41:63:ILE:CG2	31:41:144:ILE:HD11	2.48	0.43
32:51:163:TYR:HD2	32:51:167:GLU:HG2	1.81	0.43
33:61:133:HIS:O	33:61:133:HIS:CG	2.70	0.43
36:78:147:LEU:HD23	36:78:147:LEU:HA	1.85	0.43
37:88:118:LEU:HA	37:88:118:LEU:HD23	1.63	0.43
43:E8:20:VAL:O	43:E8:23:LEU:HB3	2.18	0.43
44:F8:43:VAL:O	44:F8:44:GLU:C	2.61	0.43
45:G8:17:SER:CB	45:G8:71:LYS:HZ2	2.32	0.43
47:I8:11:ARG:O	47:I8:14:ARG:NH2	2.52	0.43
47:I8:53:MET:HE2	47:I8:53:MET:HB3	1.57	0.43
1:1G:57:G:H8	1:1G:57:G:O5'	2.02	0.43
1:1G:622:A:C8	1:1G:623:C:C6	3.07	0.43
1:1G:750:G:H21	15:6A:23:GLY:C	2.26	0.43
1:1G:973:G:H1'	10:1A:55:LYS:CE	2.49	0.43
1:1G:994:A:C2	14:5A:5:ALA:HB2	2.54	0.43
1:1G:1021:G:H2'	1:1G:1022:G:C8	2.54	0.43
1:1G:1037:C:H2'	1:1G:1038:C:C5	2.54	0.43
8:72:37:ARG:HH12	8:72:118:VAL:HB	1.82	0.43
13:4A:36:LYS:HB3	13:4A:36:LYS:HE2	1.88	0.43
17:8A:87:LYS:O	17:8A:91:ARG:HG3	2.19	0.43
20:BA:62:LEU:HD23	20:BA:62:LEU:HA	1.78	0.43
26:14:469:G:O6	53:L5:39:ARG:NH1	2.51	0.43
26:14:528:A:H2	26:14:2043:C:H5'	1.83	0.43
26:14:1558:A:H4'	26:14:1559:G:H5'	2.01	0.43
26:14:2734:A:C8	26:14:2735:G:C8	3.07	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2867:G:C8	40:75:23:ARG:NH1	2.86	0.43
32:59:121:ILE:HG23	32:59:133:VAL:HG13	2.00	0.43
39:65:19:LYS:HG3	39:65:19:LYS:H	1.58	0.43
39:65:106:ARG:H	39:65:106:ARG:HG3	1.51	0.43
48:F5:87:PRO:C	48:F5:89:GLU:N	2.76	0.43
1:13:947:G:H2'	1:13:948:C:O4'	2.18	0.43
1:13:965:A:C2	1:13:969:A:C2	3.06	0.43
1:13:1125:U:C2	1:13:1126:U:C4	3.06	0.43
1:13:1153:C:H2'	1:13:1154:G:O4'	2.19	0.43
1:13:1318:A:OP1	19:AI:7:LYS:HE2	2.18	0.43
2:1E:93:VAL:HG11	2:1E:97:TRP:HD1	1.84	0.43
3:2E:32:LEU:HD13	3:2E:59:ARG:NH1	2.33	0.43
6:5E:22:GLU:CD	6:5E:82:ARG:HH21	2.26	0.43
7:6E:73:MET:HE2	7:6E:90:GLU:HB3	1.99	0.43
22:1K:31:C:H42	22:1K:39:G:H1	1.66	0.43
22:1K:52:A:N6	22:1K:62:U:H3	2.16	0.43
23:2K:51:U:H2'	23:2K:52:C:C6	2.53	0.43
26:1H:68:G:H2'	26:1H:69:C:O4'	2.19	0.43
26:1H:76:C:O2'	49:K8:62:THR:HG21	2.19	0.43
26:1H:180:G:N2	26:1H:215:G:O6	2.52	0.43
26:1H:274:G:H2'	26:1H:275:G:H1'	2.01	0.43
26:1H:684:G:H22	26:1H:787:U:H2'	1.82	0.43
26:1H:810:U:O5'	26:1H:810:U:H6	2.02	0.43
26:1H:820:A:N1	58:1H:3701:HOH:O	2.37	0.43
26:1H:828:U:H3'	26:1H:828:U:O2	2.19	0.43
26:1H:1718:G:C2	26:1H:1725:G:C8	3.07	0.43
26:1H:1751:C:H2'	26:1H:1752:C:C6	2.54	0.43
26:1H:1856:G:C2	26:1H:1887:C:C2	3.06	0.43
26:1H:1957:C:H2'	26:1H:1958:C:C6	2.54	0.43
26:1H:2134:A:H2'	26:1H:2135:A:H8	1.84	0.43
26:1H:2712:U:OP1	26:1H:2714:G:H4'	2.19	0.43
26:1H:2849:U:O4	40:B8:23:ARG:NH2	2.51	0.43
28:11:138:VAL:HG21	28:11:167:GLY:HA2	2.00	0.43
28:11:205:VAL:O	28:11:206:LEU:C	2.62	0.43
28:11:232:PRO:HB3	28:11:244:ARG:NH1	2.33	0.43
30:31:18:ARG:H	30:31:18:ARG:HG3	1.53	0.43
30:31:51:THR:OG1	30:31:92:PRO:O	2.37	0.43
34:58:58:ASP:HA	34:58:91:LEU:HD23	2.00	0.43
37:88:21:THR:OG1	37:88:101:ARG:HB2	2.19	0.43
38:98:94:TYR:C	38:98:117:VAL:HG12	2.43	0.43
42:D8:98:GLU:OE1	42:D8:100:ARG:NH1	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:E8:16:LYS:O	43:E8:19:LEU:HB2	2.18	0.43
46:H8:6:LYS:HE3	46:H8:8:TYR:CE2	2.54	0.43
1:1G:1104:G:H4'	2:12:111:ARG:NH2	2.33	0.43
5:42:75:THR:OG1	5:42:117:ASP:O	2.20	0.43
7:62:26:PHE:CE2	7:62:30:ILE:HD11	2.52	0.43
15:6A:57:LEU:O	15:6A:61:GLY:N	2.47	0.43
17:8A:53:LEU:HD21	17:8A:85:VAL:HG11	2.00	0.43
26:14:388:G:H5'	48:F5:25:LYS:HB2	2.01	0.43
26:14:897:C:H2'	26:14:898:C:C6	2.53	0.43
26:14:1003:G:O2'	26:14:1010:A:N1	2.37	0.43
26:14:1024:G:H5"	26:14:1025:G:H5"	2.01	0.43
26:14:1379:A:H4'	26:14:1380:G:OP2	2.19	0.43
26:14:1451:C:N4	26:14:1459:G:H1	2.15	0.43
26:14:1728:G:H8	26:14:1732:A:N6	2.16	0.43
26:14:2458:G:H1'	26:14:2460:U:O4	2.19	0.43
26:14:2495:G:O6	58:14:3486:HOH:O	2.21	0.43
27:1J:75:G:H21	46:D5:85:HIS:CE1	2.37	0.43
30:39:39:TRP:HD1	30:39:99:TYR:CE1	2.37	0.43
32:59:15:VAL:HA	32:59:28:GLY:HA2	2.00	0.43
40:75:3:ARG:N	40:75:4:GLY:O	2.51	0.43
42:95:19:LYS:H	42:95:19:LYS:HG2	1.52	0.43
43:A5:30:GLU:HG3	43:A5:31:GLU:N	2.34	0.43
1:13:45:U:H2'	1:13:46:G:H8	1.83	0.43
1:13:359:U:H2'	1:13:360:A:H8	1.83	0.43
1:13:474:G:H5"	16:7I:81:ARG:NE	2.33	0.43
1:13:592:G:N3	1:13:593:G:C8	2.87	0.43
1:13:803:G:H2'	1:13:804:U:O4'	2.19	0.43
1:13:1090:U:H2'	1:13:1091:U:H6	1.84	0.43
1:13:1130:A:H5'	9:8E:18:PHE:CE2	2.54	0.43
1:13:1258:G:H2'	1:13:1259:C:C6	2.53	0.43
6:5E:82:ARG:HB2	6:5E:85:VAL:HG23	2.01	0.43
6:5E:96:PRO:HB3	18:9I:30:ASP:OD2	2.18	0.43
11:2I:32:ILE:CD1	11:2I:72:ALA:HB2	2.49	0.43
13:4I:65:LYS:HE2	13:4I:73:GLU:OE1	2.18	0.43
22:1K:37:AET:N1	22:1K:37:AET:N11	2.56	0.43
26:1H:16:G:N3	26:1H:17:G:C8	2.86	0.43
26:1H:247:G:N7	26:1H:249:C:C2	2.86	0.43
26:1H:2238:G:H2'	26:1H:2238:G:N3	2.33	0.43
26:1H:2745:C:C4	26:1H:2746:U:C4	3.06	0.43
27:16:111:U:H2'	27:16:112:G:H8	1.83	0.43
28:11:38:LYS:HG3	28:11:39:LYS:C	2.44	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:31:40:GLN:O	30:31:43:LYS:HG2	2.19	0.43
30:31:53:THR:HG23	30:31:56:GLU:OE2	2.19	0.43
31:41:35:GLU:HG3	31:41:36:LYS:HB3	2.00	0.43
34:58:89:LYS:O	34:58:93:THR:OG1	2.36	0.43
38:98:20:LEU:HD21	38:98:40:LYS:HD3	2.00	0.43
41:C8:88:ILE:C	41:C8:90:VAL:N	2.77	0.43
41:C8:112:ARG:NH2	42:D8:48:GLY:H	2.17	0.43
42:D8:7:THR:HG23	42:D8:12:TYR:CE1	2.54	0.43
45:G8:86:ARG:O	45:G8:96:ILE:HD12	2.19	0.43
46:H8:28:MET:HE2	46:H8:35:ARG:HB3	2.00	0.43
51:M8:11:PRO:HA	51:M8:25:TYR:HA	2.00	0.43
1:1G:15:G:H2'	1:1G:16:A:C8	2.54	0.43
1:1G:73:G:H2'	1:1G:74:C:H6	1.84	0.43
1:1G:371:G:H1	1:1G:390:C:N4	2.10	0.43
1:1G:1023:G:H5"	1:1G:1024:G:N2	2.25	0.43
1:1G:1263:C:H2'	1:1G:1264:C:O4'	2.19	0.43
1:1G:1319:A:H61	1:1G:1361:G:H21	1.65	0.43
4:32:88:VAL:O	4:32:92:VAL:HG23	2.19	0.43
4:32:121:VAL:O	4:32:134:ASP:HA	2.18	0.43
13:4A:60:VAL:HG13	13:4A:64:TRP:HE1	1.84	0.43
13:4A:81:LEU:CB	13:4A:89:GLY:HA3	2.48	0.43
23:2L:50:G:H1	23:2L:66:C:H42	1.66	0.43
24:3L:10:G:N1	24:3L:26:G:N7	2.66	0.43
26:14:71:A:C2	44:B5:31:HIS:NE2	2.87	0.43
26:14:459:U:H4'	53:L5:40:TRP:CH2	2.53	0.43
26:14:702:G:C2	26:14:731:C:C2	3.07	0.43
26:14:1160:G:C6	26:14:1161:C:C4	3.07	0.43
26:14:1799:G:N2	26:14:1818:U:O2'	2.51	0.43
26:14:1997:G:H5"	58:14:3689:HOH:O	2.19	0.43
26:14:2197:U:H1'	26:14:2198:A:C8	2.54	0.43
26:14:2300:G:N2	26:14:2317:C:H1'	2.34	0.43
26:14:2401:U:H2'	26:14:2402:C:C6	2.54	0.43
26:14:2515:C:O2	26:14:2570:G:C2	2.72	0.43
26:14:2563:U:H4'	35:25:28:SER:HA	2.01	0.43
26:14:2567:G:H2'	26:14:2568:C:C6	2.54	0.43
28:19:137:PRO:HG2	28:19:140:THR:OG1	2.19	0.43
29:29:51:PHE:O	29:29:76:ARG:HB3	2.19	0.43
31:49:100:TRP:O	31:49:104:GLU:N	2.33	0.43
32:59:109:PHE:HD1	32:59:109:PHE:HA	1.69	0.43
38:55:2:ARG:O	38:55:3:HIS:HD2	2.02	0.43
39:65:77:ALA:O	39:65:80:LEU:N	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:J5:40:LYS:HE2	52:J5:44:THR:O	2.18	0.43
1:13:637:G:H2'	1:13:638:G:C8	2.54	0.43
1:13:981:U:O5'	1:13:981:U:H6	2.01	0.43
1:13:1207:G:C6	1:13:1208:C:C4	3.07	0.43
2:1E:24:TRP:CZ3	2:1E:26:PRO:HA	2.54	0.43
2:1E:47:THR:O	2:1E:51:LEU:N	2.49	0.43
2:1E:139:LYS:O	2:1E:142:LEU:HB3	2.19	0.43
3:2E:3:ASN:OD1	3:2E:3:ASN:N	2.51	0.43
3:2E:43:LEU:O	3:2E:47:LEU:HB2	2.19	0.43
4:3E:110:PHE:CD2	4:3E:148:VAL:HG23	2.53	0.43
4:3E:138:TYR:CD1	4:3E:138:TYR:C	2.97	0.43
9:8E:26:VAL:HA	9:8E:61:ALA:HB3	2.01	0.43
11:2I:97:ALA:O	11:2I:101:SER:HB3	2.18	0.43
12:3I:85:ILE:HD13	12:3I:85:ILE:HA	1.59	0.43
24:3K:8:U:OP1	24:3K:49:G:H5'	2.18	0.43
26:1H:556:G:H2'	26:1H:557:U:C6	2.53	0.43
26:1H:569:U:C4	26:1H:570:G:C6	3.07	0.43
26:1H:779:U:H5"	28:11:49:ILE:HD11	2.00	0.43
26:1H:783:A:H8	26:1H:784:A:H4'	1.84	0.43
26:1H:863:A:H2'	26:1H:864:G:C8	2.53	0.43
26:1H:994:C:O2	42:D8:10:LYS:HE2	2.18	0.43
26:1H:1412:A:H2'	26:1H:1413:G:C8	2.54	0.43
26:1H:1557:C:H5"	26:1H:1558:A:OP2	2.19	0.43
26:1H:1665:A:H2'	26:1H:1666:G:O4'	2.18	0.43
26:1H:1799:G:H5'	26:1H:1819:A:H61	1.84	0.43
26:1H:2830:G:H5'	26:1H:2831:G:OP2	2.19	0.43
28:11:68:LYS:HB3	28:11:70:TRP:CZ2	2.52	0.43
31:41:33:ARG:HB2	31:41:162:THR:HG21	1.99	0.43
32:51:93:GLY:C	32:51:95:ARG:HH21	2.26	0.43
35:68:113:LYS:O	35:68:113:LYS:HD3	2.19	0.43
36:78:19:VAL:HG22	36:78:27:HIS:HB3	2.01	0.43
36:78:79:ARG:HD2	36:78:110:TYR:CE2	2.54	0.43
43:E8:8:ARG:HB3	43:E8:9:TYR:CD2	2.54	0.43
43:E8:31:GLU:H	43:E8:31:GLU:HG2	1.49	0.43
44:F8:26:TYR:CE2	44:F8:89:ILE:HB	2.53	0.43
52:N8:40:LYS:HG3	52:N8:47:PRO:HD2	2.00	0.43
1:1G:17:U:H2'	1:1G:18:C:H6	1.80	0.43
1:1G:858:G:OP2	1:1G:858:G:H8	2.02	0.43
1:1G:980:C:H5'	1:1G:981:U:OP2	2.19	0.43
1:1G:990:C:O5'	1:1G:990:C:H6	2.02	0.43
1:1G:1246:C:O2	1:1G:1291:G:N2	2.21	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1470:G:H2'	1:1G:1471:G:O4'	2.19	0.43
7:62:100:ALA:O	7:62:104:LEU:HB2	2.19	0.43
8:72:20:TYR:CZ	8:72:75:ARG:HB3	2.54	0.43
16:7A:74:LEU:O	16:7A:79:VAL:HG23	2.19	0.43
20:BA:66:ALA:HB1	20:BA:71:THR:HB	2.01	0.43
26:14:6:A:N7	34:15:131:GLN:HB2	2.33	0.43
26:14:196:A:N3	26:14:196:A:H2'	2.34	0.43
26:14:315:G:H2'	26:14:316:C:H6	1.84	0.43
26:14:350:U:H2'	26:14:351:G:O4'	2.19	0.43
26:14:547:A:C5	26:14:548:A:N6	2.87	0.43
26:14:857:C:N3	26:14:858:U:C4	2.87	0.43
26:14:1286:A:H1'	26:14:1288:U:OP2	2.19	0.43
26:14:1288:U:O4	38:55:106:GLY:HA3	2.19	0.43
26:14:1376:C:N4	26:14:1377:G:C6	2.87	0.43
26:14:1443:G:H8	26:14:1443:G:O5'	2.02	0.43
26:14:1489:U:O3'	26:14:1490:A:H8	2.01	0.43
26:14:1652:A:C2	26:14:2006:C:N3	2.86	0.43
26:14:1788:C:H2'	26:14:1789:A:H8	1.83	0.43
26:14:2400:G:N2	26:14:2417:C:C2	2.86	0.43
28:19:28:GLU:N	28:19:28:GLU:CD	2.77	0.43
31:49:47:LYS:HD2	31:49:86:MET:SD	2.59	0.43
31:49:51:ARG:O	31:49:51:ARG:HG3	2.18	0.43
39:65:21:THR:HG23	39:65:23:ARG:HG2	2.01	0.43
40:75:53:ARG:HG3	40:75:53:ARG:O	2.19	0.43
1:13:19:C:OP1	5:4E:125:SER:OG	2.16	0.43
1:13:114:U:H1'	1:13:353:A:H1'	2.00	0.43
1:13:376:G:OP1	16:7I:5:ARG:HB2	2.19	0.43
1:13:667:G:H4'	15:6I:51:HIS:CE1	2.54	0.43
1:13:791:G:H2'	1:13:792:A:H5'	2.01	0.43
1:13:960:U:C5	1:13:1225:A:C8	3.06	0.43
1:13:1079:G:H2'	1:13:1080:A:C8	2.54	0.43
1:13:1239:A:H62	1:13:1299:A:N6	2.16	0.43
1:13:1474:G:C2	1:13:1475:G:C8	3.07	0.43
5:4E:28:PHE:O	5:4E:47:LYS:HA	2.19	0.43
8:7E:59:LEU:O	8:7E:61:VAL:HG23	2.18	0.43
9:8E:50:LEU:HA	9:8E:53:VAL:HG22	2.00	0.43
12:3I:77:LEU:HD21	12:3I:107:ALA:HA	2.00	0.43
15:6I:78:TYR:CZ	15:6I:82:ILE:HD11	2.54	0.43
17:8I:6:LEU:HD12	17:8I:23:VAL:HG21	2.00	0.43
20:BI:63:ILE:HG22	20:BI:77:ALA:HB1	2.01	0.43
26:1H:580:C:H2'	26:1H:581:C:H6	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1439:A:H2'	26:1H:1440:G:O4'	2.18	0.43
26:1H:1593:G:H2'	26:1H:1594:G:H8	1.82	0.43
26:1H:1688:U:O2	26:1H:1700:A:H5"	2.18	0.43
26:1H:1763:G:OP1	26:1H:1763:G:H4'	2.19	0.43
26:1H:2272:U:H5"	26:1H:2273:A:OP1	2.18	0.43
26:1H:2312:U:O3'	31:41:71:THR:HG21	2.18	0.43
29:21:16:ARG:NH2	29:21:171:GLU:OE2	2.49	0.43
30:31:135:LYS:HB3	30:31:137:LYS:HG3	2.00	0.43
36:78:100:LEU:O	36:78:105:LEU:HD12	2.19	0.43
39:A8:102:ALA:C	39:A8:104:GLY:H	2.26	0.43
40:B8:31:SER:OG	40:B8:84:GLN:HB3	2.19	0.43
40:B8:125:ARG:O	40:B8:129:ARG:N	2.37	0.43
41:C8:92:ARG:NH1	41:C8:94:ASN:OD1	2.52	0.43
48:J8:64:ALA:HA	48:J8:67:ILE:HG13	2.01	0.43
49:K8:35:LEU:HA	49:K8:35:LEU:HD13	1.56	0.43
1:1G:321:A:H62	1:1G:328:C:H1'	1.84	0.43
1:1G:766:A:H2'	1:1G:767:A:O4'	2.19	0.43
1:1G:973:G:H1'	10:1A:55:LYS:HE3	2.00	0.43
1:1G:1057:G:H2'	1:1G:1058:G:C8	2.54	0.43
1:1G:1111:A:H2'	1:1G:1112:C:C6	2.54	0.43
1:1G:1145:C:H4'	1:1G:1146:A:O5'	2.19	0.43
1:1G:1359:C:H4'	1:1G:1360:A:OP2	2.17	0.43
2:12:91:PRO:HB3	2:12:151:GLY:O	2.19	0.43
3:22:51:GLY:O	3:22:70:VAL:HG13	2.18	0.43
8:72:20:TYR:HA	8:72:65:TYR:OH	2.19	0.43
9:82:17:VAL:HG11	9:82:81:ILE:HD13	2.01	0.43
12:3A:7:ILE:HD11	17:8A:32:TYR:HB3	1.99	0.43
16:7A:1:MET:HE2	16:7A:2:VAL:O	2.18	0.43
25:4L:12:A:O2'	25:4L:13:A:O5'	2.37	0.43
26:14:55:G:H2'	26:14:56:A:C8	2.54	0.43
26:14:88:G:O2'	26:14:89:G:H5'	2.19	0.43
26:14:138:G:N2	44:B5:44:GLU:OE2	2.43	0.43
26:14:226:G:N2	26:14:228:A:H62	2.17	0.43
26:14:270(O):U:H3'	26:14:270(P):C:H5'	2.01	0.43
26:14:270(X):G:C6	26:14:270(Y):G:N1	2.87	0.43
26:14:536:A:H2'	26:14:537:C:O4'	2.19	0.43
26:14:721:C:H2'	26:14:722:A:C8	2.54	0.43
26:14:821:A:H5'	26:14:822:U:C6	2.54	0.43
26:14:948:G:C2	26:14:970:C:O2	2.72	0.43
26:14:957:A:C6	26:14:2459:A:C8	3.07	0.43
26:14:1239:G:H5"	58:14:3596:HOH:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1473:G:C2	26:14:1474:C:C2	3.07	0.43
26:14:1599:C:C5	26:14:1600:C:C5	3.07	0.43
26:14:1993:U:H4'	29:29:128:SER:CB	2.49	0.43
26:14:1999:C:H5"	26:14:2723:C:O2'	2.19	0.43
26:14:2163:C:H5	26:14:2164:C:C4	2.37	0.43
26:14:2342:C:O2'	26:14:2374:C:H5"	2.19	0.43
26:14:2711:A:OP1	26:14:2712(A):A:OP1	2.37	0.43
26:14:2776:A:H4'	26:14:2777:G:O5'	2.19	0.43
27:1J:1:U:C2'	27:1J:2:C:H5'	2.48	0.43
27:1J:38:C:N3	27:1J:39:A:C8	2.87	0.43
28:19:31:LYS:NZ	28:19:33:LEU:HD13	2.34	0.43
29:29:27:LEU:HA	29:29:181:LEU:HD12	2.00	0.43
30:39:3:GLU:O	30:39:19:GLU:HB2	2.19	0.43
33:69:129:THR:HG22	33:69:137:PRO:HG3	2.00	0.43
37:45:68:ILE:CD1	37:45:103:MET:HB3	2.45	0.43
42:95:21:ARG:NH1	42:95:91:TYR:HE2	2.16	0.43
42:95:98:GLU:OE2	42:95:100:ARG:NH2	2.52	0.43
49:G5:38:GLN:NE2	49:G5:44:LEU:HB2	2.34	0.43
1:13:284:G:H2'	1:13:285:G:C8	2.55	0.42
1:13:324:G:N2	1:13:327:A:OP2	2.48	0.42
1:13:676:A:H2'	1:13:677:U:C6	2.54	0.42
1:13:954:G:C6	1:13:955:U:C4	3.07	0.42
1:13:963:G:N7	58:13:1864:HOH:O	2.37	0.42
1:13:1022:G:H2'	1:13:1023:G:O4'	2.19	0.42
1:13:1123:A:H4'	10:1I:36:GLY:HA3	2.00	0.42
1:13:1399:C:C2	1:13:1401:G:C5	3.07	0.42
2:1E:189:ASP:CG	2:1E:205:ASP:HB3	2.44	0.42
4:3E:153:ARG:HB3	4:3E:181:MET:SD	2.58	0.42
4:3E:201:GLN:HA	4:3E:204:ILE:HD12	2.00	0.42
6:5E:28:ARG:O	6:5E:32:ASN:ND2	2.32	0.42
10:1I:85:LEU:HB2	10:1I:86:MET:SD	2.59	0.42
13:4I:96:LEU:HD22	13:4I:97:PRO:HD3	2.00	0.42
16:7I:17:TYR:HE2	16:7I:41:PRO:HG3	1.84	0.42
17:8I:101:ARG:HB2	17:8I:101:ARG:NH2	2.34	0.42
22:1K:21:A:N6	22:1K:48:C:O4'	2.52	0.42
24:3K:42:U:H2'	24:3K:43:G:H8	1.83	0.42
24:3K:50:G:N3	24:3K:64:C:H5	2.16	0.42
26:1H:242:G:H5"	54:Q8:64:TYR:CZ	2.54	0.42
26:1H:248:G:H2'	58:1H:3669:HOH:O	2.19	0.42
26:1H:270(V):G:H2'	26:1H:270(W):G:C8	2.50	0.42
26:1H:274:G:C8	26:1H:274:G:H3'	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:533:G:H5'	41:C8:24:TYR:CE1	2.54	0.42
26:1H:784:A:H5'	26:1H:785:G:OP1	2.18	0.42
26:1H:841:A:C2	26:1H:938:G:C2	3.07	0.42
26:1H:1021:A:H2'	26:1H:1023:U:H5'	2.00	0.42
26:1H:1465:G:C4	26:1H:1466:G:C8	3.06	0.42
26:1H:1799:G:H8	26:1H:1799:G:H2'	1.73	0.42
28:11:37:LEU:HA	28:11:37:LEU:HD23	1.75	0.42
28:11:69:ARG:HG3	28:11:69:ARG:NH1	2.34	0.42
28:11:146:GLU:HB2	28:11:189:CYS:HB3	2.01	0.42
29:21:116:VAL:HG11	29:21:138:PRO:HB3	2.01	0.42
30:31:129:PHE:C	30:31:131:GLY:N	2.77	0.42
31:41:82:LEU:HD22	31:41:82:LEU:HA	1.75	0.42
33:61:77:LEU:HD21	33:61:101:LEU:HD13	2.01	0.42
34:58:120:LEU:CD2	34:58:122:VAL:HG23	2.44	0.42
36:78:41:ARG:HD2	36:78:41:ARG:H	1.84	0.42
36:78:82:GLY:HA2	36:78:113:LYS:O	2.19	0.42
42:D8:19:LYS:HD3	42:D8:62:LEU:HD23	2.01	0.42
44:F8:14:SER:O	44:F8:15:GLU:C	2.62	0.42
54:Q8:7:HIS:HB3	54:Q8:61:LEU:HB3	2.00	0.42
1:1G:42:G:H2'	1:1G:43:C:O4'	2.18	0.42
1:1G:130:A:H5'	17:8A:63:ARG:NH2	2.33	0.42
1:1G:363:A:OP1	12:3A:61:THR:HG21	2.18	0.42
1:1G:636:U:H2'	1:1G:637:G:H8	1.83	0.42
1:1G:1235:U:O2'	1:1G:1305:G:O5'	2.36	0.42
1:1G:1399:C:C2	1:1G:1401:G:C5	3.07	0.42
2:12:127:ILE:C	2:12:129:GLU:H	2.27	0.42
3:22:121:ALA:HB1	3:22:189:ALA:HB2	2.01	0.42
6:52:3:ARG:H	6:52:3:ARG:HG2	1.45	0.42
9:82:119:ALA:O	9:82:120:ARG:HB2	2.19	0.42
11:2A:78:GLN:HA	11:2A:103:LEU:HD11	2.01	0.42
13:4A:84:ILE:CG2	19:AA:63:THR:HG21	2.46	0.42
23:2L:62:C:H2'	23:2L:63:C:C6	2.54	0.42
26:14:6:A:C4	34:15:129:PRO:HG2	2.53	0.42
26:14:463:G:N2	26:14:465:G:H3'	2.34	0.42
26:14:841:A:C2	26:14:938:G:C2	3.07	0.42
26:14:1314:C:C2	26:14:1339:G:N2	2.87	0.42
26:14:1324:G:C4	26:14:1328:G:O6	2.72	0.42
26:14:1467:C:H42	26:14:1525:G:H1	1.67	0.42
26:14:2262:U:H5	47:E5:16:SER:OG	2.02	0.42
26:14:2872:G:C4	26:14:2873:A:C2	3.07	0.42
27:1J:31:C:N4	39:65:32:LEU:HD23	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:44:G:H1'	27:1J:47:C:H42	1.84	0.42
27:1J:44:G:C2	27:1J:48:A:C2	3.07	0.42
27:1J:78:A:C2	27:1J:99:A:C4	3.06	0.42
30:39:31:HIS:HB2	36:35:9:ASN:OD1	2.19	0.42
31:49:27:ASN:HB3	31:49:30:GLU:HG3	2.01	0.42
34:15:137:LYS:HB3	34:15:137:LYS:HZ2	1.84	0.42
37:45:50:ALA:O	37:45:53:ALA:HB3	2.19	0.42
41:85:96:ALA:HA	41:85:98:LEU:HG	2.00	0.42
42:95:37:VAL:O	42:95:39:LEU:N	2.52	0.42
43:A5:13:SER:O	43:A5:14:PRO:C	2.61	0.42
1:13:272:C:H2'	1:13:273:A:H8	1.84	0.42
1:13:313:A:H2'	1:13:314:C:H6	1.83	0.42
1:13:537:G:H5"	12:3I:113:ARG:NH1	2.34	0.42
1:13:931:C:O2'	1:13:932:C:H5'	2.19	0.42
1:13:1065:U:H5	1:13:1190:G:C4	2.37	0.42
1:13:1220:G:O3'	19:AI:36:ARG:HD3	2.19	0.42
7:6E:143:ARG:NH1	24:3K:42:U:H5'	2.34	0.42
8:7E:110:ALA:HB3	8:7E:121:ASP:HB3	2.01	0.42
12:3I:111:LYS:HD3	12:3I:111:LYS:HA	1.90	0.42
15:6I:43:LEU:HD12	15:6I:56:LEU:HD13	2.01	0.42
26:1H:198:C:N4	26:1H:248:G:H1	2.18	0.42
26:1H:221:A:H4'	26:1H:222:A:H5"	2.01	0.42
26:1H:652:C:C4	26:1H:653:A:N1	2.87	0.42
26:1H:818:G:H5'	26:1H:839:U:OP1	2.18	0.42
26:1H:977:G:C6	26:1H:987:G:C6	3.07	0.42
26:1H:1019:U:OP1	26:1H:1035:U:O2'	2.26	0.42
26:1H:1211:U:O2	58:1H:3681:HOH:O	2.20	0.42
26:1H:1435:G:O5'	26:1H:1435:G:H8	2.02	0.42
26:1H:1444:G:C2	26:1H:1548:C:N3	2.87	0.42
26:1H:1491:G:H5'	28:11:99:ASP:OD1	2.19	0.42
26:1H:2298:A:H62	26:1H:2318:G:H8	1.66	0.42
26:1H:2418:A:OP2	54:Q8:29:LYS:NZ	2.42	0.42
26:1H:2557:G:H2'	26:1H:2558:C:C6	2.54	0.42
26:1H:2631:G:H2'	26:1H:2632:A:H8	1.84	0.42
26:1H:2711:A:P	58:1H:3771:HOH:O	2.77	0.42
26:1H:2849:U:H1'	26:1H:2866:U:O2	2.19	0.42
27:16:6:C:H2'	27:16:7:G:H5"	2.01	0.42
27:16:40:U:C1'	27:16:45:A:H61	2.32	0.42
36:78:19:VAL:HG13	36:78:31:ALA:HB1	2.01	0.42
37:88:12:GLN:HG2	37:88:73:PRO:HD2	1.99	0.42
39:A8:49:VAL:HG12	39:A8:73:LEU:HD23	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:97:ARG:NE	45:G8:103:GLY:O	2.52	0.42
1:1G:1151:A:H5"	10:1A:42:THR:OG1	2.19	0.42
1:1G:1279:A:H5"	1:1G:1280:A:P	2.58	0.42
5:42:70:PRO:HD2	5:42:142:LEU:HB2	2.00	0.42
13:4A:46:LYS:HZ2	13:4A:46:LYS:HG3	1.62	0.42
26:14:180:G:H5"	26:14:181:A:OP1	2.20	0.42
26:14:309:G:N3	26:14:329:G:O2'	2.52	0.42
26:14:952:G:C6	26:14:966:G:C6	3.07	0.42
26:14:971:C:N4	26:14:972:G:C2	2.87	0.42
26:14:1432:C:H2'	26:14:1433:U:O4'	2.20	0.42
26:14:1519:G:H2'	26:14:1520:U:O4'	2.19	0.42
26:14:1658:C:H2'	26:14:1659:U:C6	2.54	0.42
26:14:2488:A:H8	26:14:2488:A:O5'	2.01	0.42
26:14:2508:G:H1	26:14:2580:U:H3	1.67	0.42
26:14:2525:G:O3'	26:14:2742:C:O2'	2.37	0.42
26:14:2698:U:C4	58:14:3424:HOH:O	2.67	0.42
26:14:2718:G:O2'	26:14:2847:U:OP1	2.32	0.42
26:14:2807:G:H22	26:14:2892:A:H62	1.66	0.42
58:14:3409:HOH:O	30:39:55:GLY:HA2	2.18	0.42
28:19:129:ASN:O	28:19:193:VAL:HG12	2.19	0.42
28:19:244:ARG:HB2	28:19:244:ARG:HH11	1.84	0.42
29:29:68:ALA:HB1	29:29:70:ALA:C	2.43	0.42
29:29:80:GLU:O	29:29:81:ILE:C	2.60	0.42
30:39:31:HIS:O	30:39:35:GLU:HG3	2.19	0.42
32:59:103:LEU:O	32:59:103:LEU:HG	2.19	0.42
33:69:61:ARG:O	33:69:64:GLU:HB3	2.19	0.42
36:35:71:VAL:CG1	36:35:72:PRO:HD3	2.45	0.42
38:55:79:LEU:O	38:55:79:LEU:HD22	2.18	0.42
39:65:7:TYR:O	39:65:11:LYS:HB2	2.19	0.42
45:C5:20:TYR:CZ	45:C5:42:VAL:HB	2.54	0.42
45:C5:42:VAL:O	45:C5:64:GLU:HA	2.18	0.42
46:D5:100:VAL:O	46:D5:124:ILE:HG22	2.18	0.42
47:E5:45:PHE:CE2	47:E5:69:PHE:HE1	2.37	0.42
54:M5:49:VAL:HA	54:M5:50:LEU:CB	2.48	0.42
1:13:171:A:C2	1:13:172:A:C4	3.07	0.42
1:13:254:G:O2'	17:8I:16:GLN:O	2.26	0.42
1:13:352:C:H6	1:13:352:C:H5"	1.85	0.42
1:13:1004:A:N1	1:13:1005:A:N6	2.68	0.42
1:13:1240:U:C5	7:6E:32:ARG:HD2	2.55	0.42
1:13:1298:C:P	7:6E:114:ARG:HH22	2.41	0.42
1:13:1308:U:OP1	13:4I:98:VAL:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1373:G:O5'	1:13:1373:G:H8	2.02	0.42
1:13:1442:G:C6	1:13:1446:A:C6	3.07	0.42
5:4E:20:GLN:HG2	5:4E:21:ALA:H	1.84	0.42
10:1I:8:LEU:O	10:1I:70:ARG:N	2.53	0.42
16:7I:45:THR:HG22	16:7I:46:PRO:HD2	2.01	0.42
16:7I:51:VAL:HG12	16:7I:52:ASP:N	2.35	0.42
19:AI:10:PHE:C	19:AI:10:PHE:CD1	2.97	0.42
19:AI:19:VAL:HG11	19:AI:44:MET:HB3	2.01	0.42
24:3K:64:C:H5'	24:3K:65:C:OP2	2.20	0.42
26:1H:34:C:HO2'	26:1H:35:G:P	2.39	0.42
26:1H:106:C:H2'	26:1H:107:C:C6	2.54	0.42
26:1H:654:A:N3	26:1H:654:A:H3'	2.35	0.42
26:1H:1118:C:H2'	26:1H:1119:C:C6	2.54	0.42
26:1H:1291:C:OP1	26:1H:1536:A:H4'	2.20	0.42
26:1H:1658:C:H2'	26:1H:1659:U:H6	1.84	0.42
26:1H:2359:C:H2'	26:1H:2360:A:O4'	2.18	0.42
26:1H:2395:C:H5"	26:1H:2396:G:OP2	2.20	0.42
26:1H:2432:A:C5	48:J8:33:LYS:HG2	2.54	0.42
26:1H:2515:C:O2	26:1H:2570:G:C2	2.72	0.42
26:1H:2564:A:C2	26:1H:2647:U:H4'	2.54	0.42
26:1H:2726:U:C4'	35:68:1:MET:HE1	2.49	0.42
28:11:165:ILE:H	28:11:165:ILE:HG12	1.66	0.42
29:21:6:GLY:HA2	29:21:51:PHE:CE2	2.55	0.42
29:21:97:LYS:N	29:21:100:GLU:OE1	2.30	0.42
37:88:35:VAL:CG1	37:88:130:LYS:HB3	2.48	0.42
37:88:50:ALA:O	37:88:53:ALA:HB3	2.18	0.42
38:98:10:LEU:O	38:98:12:ARG:NH1	2.53	0.42
39:A8:56:LEU:HB2	39:A8:58:LEU:HD21	2.00	0.42
40:B8:74:ARG:HD3	40:B8:76:PHE:CE2	2.54	0.42
1:1G:88:C:H2'	1:1G:89:U:C6	2.54	0.42
1:1G:223:U:C4	1:1G:224:C:C5	3.07	0.42
1:1G:408:A:H2'	1:1G:409:G:O4'	2.19	0.42
1:1G:652:U:O2'	1:1G:653:A:O5'	2.37	0.42
1:1G:1166:G:N2	1:1G:1170:A:OP2	2.53	0.42
1:1G:1229:A:H2'	1:1G:1230:C:C6	2.54	0.42
3:22:97:LYS:HB3	3:22:97:LYS:HE3	1.84	0.42
3:22:152:ILE:HG12	3:22:167:TRP:HB2	2.00	0.42
5:42:90:VAL:HG23	5:42:121:LYS:O	2.19	0.42
7:62:56:GLN:NE2	7:62:60:LYS:HE2	2.34	0.42
7:62:88:PRO:HG3	7:62:145:ALA:HA	1.99	0.42
8:72:123:GLU:HA	8:72:126:LYS:HE2	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:40:ASN:ND2	13:4A:43:THR:HG23	2.34	0.42
15:6A:61:GLY:O	15:6A:65:ARG:HG2	2.20	0.42
26:14:785:G:C6	26:14:786:C:C4	3.06	0.42
26:14:925:C:H2'	26:14:926:A:H8	1.84	0.42
26:14:1659:U:C4	26:14:1660:C:C5	3.08	0.42
26:14:1839:G:C8	26:14:1927:A:H1'	2.54	0.42
26:14:2359:C:H2'	26:14:2360:A:O4'	2.19	0.42
26:14:2437:U:HO2'	26:14:2599:G:HO2'	1.66	0.42
26:14:2630:G:H5"	26:14:2631:G:OP2	2.19	0.42
26:14:2689:U:OP2	26:14:2719:G:N2	2.52	0.42
26:14:2715:C:H2'	26:14:2716:U:H6	1.84	0.42
27:1J:12:C:C6	27:1J:12:C:OP2	2.72	0.42
29:29:181:LEU:HD12	29:29:181:LEU:HA	1.74	0.42
37:45:66:ILE:CG1	37:45:67:ARG:H	2.32	0.42
41:85:8:VAL:HB	41:85:12:ARG:HE	1.84	0.42
1:13:22:G:H2'	1:13:23:C:H6	1.82	0.42
1:13:346:G:H21	1:13:347:G:C1'	2.32	0.42
1:13:361:G:H8	1:13:361:G:O5'	2.01	0.42
1:13:504:C:H5"	58:13:1824:HOH:O	2.18	0.42
1:13:791:G:C2'	1:13:792:A:H5'	2.48	0.42
1:13:866:C:O5'	1:13:866:C:H6	2.02	0.42
1:13:977:A:C8	1:13:1223:C:N3	2.87	0.42
1:13:1024:G:N2	1:13:1025:U:O4	2.49	0.42
1:13:1046:A:H61	1:13:1213:A:N6	2.16	0.42
1:13:1236:A:OP1	21:1F:3:LYS:HE3	2.18	0.42
1:13:1348:U:N3	1:13:1374:A:H2	2.18	0.42
8:7E:1:MET:HB3	8:7E:2:LEU:H	1.66	0.42
9:8E:17:VAL:HG13	9:8E:63:ILE:HG12	2.01	0.42
12:3I:123:LYS:H	12:3I:123:LYS:HG2	1.40	0.42
17:8I:69:LYS:C	17:8I:70:ARG:HD2	2.45	0.42
26:1H:49:A:H4'	26:1H:50:U:H5"	2.01	0.42
26:1H:141(A):C:H2'	26:1H:142:G:O4'	2.19	0.42
26:1H:280:C:C2	26:1H:361:G:N2	2.87	0.42
26:1H:598:G:H2'	26:1H:599:G:O4'	2.20	0.42
26:1H:774:A:H2	26:1H:787:U:HO2'	1.64	0.42
26:1H:1159:U:H2'	26:1H:1160:G:C8	2.55	0.42
26:1H:1257:C:OP1	30:31:75:HIS:HE1	2.02	0.42
26:1H:1697:G:OP2	26:1H:1698:A:O2'	2.17	0.42
26:1H:1727:U:H5"	26:1H:1728:G:OP2	2.18	0.42
26:1H:1776:G:C2	26:1H:1777:U:C6	3.07	0.42
26:1H:2016:U:H1'	52:N8:6:VAL:HG13	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2101:G:N1	26:1H:2189:U:O2	2.52	0.42
27:16:10:C:H2'	27:16:11:C:H6	1.83	0.42
27:16:83:G:H4'	50:L8:52:HIS:CG	2.55	0.42
29:21:116:VAL:HG13	29:21:122:PHE:CD2	2.55	0.42
31:41:41:GLN:HG2	31:41:154:GLY:O	2.19	0.42
32:51:30:LYS:HB2	32:51:79:VAL:HA	2.01	0.42
37:88:39:PRO:HD3	37:88:99:PRO:HG3	2.01	0.42
41:C8:75:ASN:HB2	41:C8:78:THR:OG1	2.19	0.42
48:J8:80:LEU:O	48:J8:81:LYS:C	2.61	0.42
1:1G:9:G:C6	1:1G:26:A:N6	2.88	0.42
1:1G:1104:G:H2'	1:1G:1105:A:H8	1.84	0.42
1:1G:1495:U:C4	1:1G:1496:C:C5	3.07	0.42
2:12:136:VAL:O	2:12:139:LYS:HG2	2.19	0.42
7:62:105:VAL:O	7:62:108:ALA:HB3	2.18	0.42
11:2A:122:LYS:HB3	11:2A:122:LYS:HE2	1.70	0.42
26:14:58:G:N2	26:14:70:G:C4	2.87	0.42
26:14:414:C:OP1	26:14:1879:C:O2'	2.36	0.42
26:14:708:C:N4	26:14:723:G:H1	2.13	0.42
26:14:1287:A:N7	38:55:106:GLY:O	2.51	0.42
26:14:1535:U:O4	26:14:1536:A:N6	2.53	0.42
26:14:1576:U:H2'	26:14:1577:C:H6	1.84	0.42
26:14:2126:A:O2'	26:14:2127:G:H5"	2.19	0.42
28:19:210:GLY:O	28:19:213:ARG:N	2.52	0.42
31:49:51:ARG:NH1	31:49:55:LYS:HE2	2.34	0.42
31:49:75:LYS:HA	31:49:84:LYS:HG2	2.00	0.42
32:59:97:ARG:HG2	32:59:98:LEU:N	2.34	0.42
40:75:16:ARG:NH2	40:75:19:LEU:HD21	2.34	0.42
1:13:8:A:N6	4:3E:205:GLU:O	2.53	0.42
1:13:565:U:OP2	1:13:566:G:O2'	2.36	0.42
1:13:1009:G:C2	1:13:1010:G:C8	3.06	0.42
1:13:1024:G:H5'	1:13:1025:U:OP2	2.19	0.42
1:13:1347:G:N2	1:13:1374:A:O5'	2.52	0.42
2:1E:42:ILE:HD13	2:1E:203:GLY:HA2	2.00	0.42
11:2I:103:LEU:O	11:2I:104:GLN:C	2.61	0.42
12:3I:60:LEU:HD22	12:3I:60:LEU:HA	1.86	0.42
16:7I:4:ILE:O	16:7I:66:PRO:HA	2.19	0.42
17:8I:22:LEU:HD11	17:8I:39:SER:HB3	2.02	0.42
20:BI:42:GLN:HG3	20:BI:43:LEU:HD23	2.02	0.42
26:1H:99:U:C6	26:1H:102:G:C2	3.07	0.42
26:1H:265:A:H1'	26:1H:266:G:O4'	2.19	0.42
26:1H:587:C:C2	36:78:33:ARG:NH1	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:592:G:C2	54:Q8:4:MET:HE1	2.55	0.42
26:1H:654(O):G:H8	26:1H:654(P):G:N3	2.18	0.42
26:1H:661:C:H2'	26:1H:662:G:C8	2.55	0.42
26:1H:822:U:P	58:1H:3635:HOH:O	2.77	0.42
26:1H:861:A:N3	27:16:79:C:O2'	2.50	0.42
26:1H:1155:A:O2'	26:1H:1156:A:H2'	2.19	0.42
26:1H:1174:A:H2'	26:1H:1176:G:H4'	2.02	0.42
26:1H:1288:U:O2'	26:1H:1647:G:N2	2.52	0.42
26:1H:1454:U:OP1	38:98:77:ARG:NH1	2.52	0.42
26:1H:1635:G:C2	26:1H:1636:C:C2	3.08	0.42
26:1H:2343:C:H4'	26:1H:2373:G:O3'	2.19	0.42
26:1H:2630:G:H2'	26:1H:2631:G:C8	2.54	0.42
28:11:67:PHE:CE1	28:11:106:ILE:HD11	2.30	0.42
31:41:16:ARG:NH2	31:41:31:VAL:HG11	2.35	0.42
31:41:27:ASN:HB3	31:41:30:GLU:HG3	2.01	0.42
33:61:114:LEU:HA	33:61:129:THR:O	2.20	0.42
41:C8:85:LYS:HD2	41:C8:85:LYS:HA	1.74	0.42
41:C8:112:ARG:HH21	42:D8:48:GLY:H	1.68	0.42
43:E8:82:LEU:HB2	43:E8:98:LYS:HB2	2.00	0.42
45:G8:102:CYS:SG	45:G8:103:GLY:N	2.92	0.42
49:K8:4:SER:N	49:K8:7:ARG:H	2.05	0.42
54:Q8:26:LYS:HE3	54:Q8:48:PHE:CG	2.55	0.42
1:1G:232:G:H2'	1:1G:233:C:O4'	2.20	0.42
1:1G:355:C:C4	1:1G:356:A:N7	2.88	0.42
1:1G:428:G:H4'	1:1G:429:U:O5'	2.19	0.42
1:1G:976:G:OP1	14:5A:32:SER:N	2.44	0.42
1:1G:1248:A:N1	1:1G:1249:C:N4	2.68	0.42
1:1G:1308:U:OP1	13:4A:101:GLN:NE2	2.53	0.42
2:12:217:ARG:O	2:12:219:VAL:N	2.50	0.42
7:62:45:ASP:O	7:62:49:ILE:HG12	2.19	0.42
7:62:131:LYS:HB3	7:62:131:LYS:HE3	1.69	0.42
10:1A:45:ARG:HB3	10:1A:47:PHE:CE1	2.55	0.42
13:4A:19:LEU:HB3	13:4A:25:ILE:HG21	2.01	0.42
13:4A:88:ARG:NH1	13:4A:88:ARG:HB2	2.35	0.42
20:BA:88:VAL:O	20:BA:92:LEU:HG	2.19	0.42
26:14:8:A:H2'	26:14:9:U:C6	2.55	0.42
26:14:617:G:P	30:39:40:GLN:HE21	2.38	0.42
26:14:797:C:H2'	26:14:798:G:O4'	2.19	0.42
26:14:977:G:H2'	26:14:978:G:C8	2.48	0.42
26:14:1031:G:H1	26:14:1123:C:H42	1.67	0.42
26:14:2246:G:H2'	26:14:2247:A:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2286:A:H4'	26:14:2287:A:O4'	2.19	0.42
26:14:2335:A:O2'	26:14:2336:A:H5"	2.18	0.42
26:14:2799:A:H5'	26:14:2801:A:H1'	2.00	0.42
27:1J:99:A:C4	27:1J:100:G:C8	3.08	0.42
28:19:24:ILE:HD13	28:19:84:TYR:HB2	2.00	0.42
28:19:232:PRO:HG2	28:19:248:SER:O	2.18	0.42
30:39:28:ILE:O	30:39:29:ASN:C	2.62	0.42
30:39:34:TRP:CZ3	36:35:8:PRO:HB3	2.54	0.42
30:39:182:ASN:O	30:39:186:ILE:HG12	2.19	0.42
30:39:182:ASN:HD21	30:39:185:ASP:CG	2.28	0.42
31:49:38:VAL:HG22	31:49:93:THR:OG1	2.19	0.42
31:49:136:ARG:NH1	31:49:137:GLU:HG3	2.34	0.42
32:59:6:ARG:HD2	32:59:66:GLY:CA	2.50	0.42
32:59:103:LEU:HD13	32:59:123:PHE:CZ	2.55	0.42
34:15:12:ARG:NH1	34:15:50:ASP:OD2	2.52	0.42
34:15:40:PRO:HB3	41:85:68:ALA:HB2	2.01	0.42
35:25:92:GLU:HB3	35:25:113:LYS:NZ	2.34	0.42
39:65:43:GLU:HB2	47:E5:49:LYS:NZ	2.35	0.42
1:13:587:G:C2	1:13:755:G:C6	3.08	0.42
1:13:592:G:O2'	1:13:593:G:H5'	2.20	0.42
1:13:619:U:O2	4:3E:135:LEU:HD21	2.20	0.42
1:13:1360:A:H2'	1:13:1361:G:C8	2.55	0.42
1:13:1414:U:H2'	1:13:1415:G:H8	1.84	0.42
2:1E:5:ILE:HG13	2:1E:6:THR:N	2.35	0.42
2:1E:178:ARG:HG3	8:7E:72:PRO:HA	2.02	0.42
3:2E:44:GLU:HG2	3:2E:44:GLU:H	1.58	0.42
5:4E:126:ARG:HG3	5:4E:126:ARG:HH11	1.84	0.42
19:AI:41:VAL:HG12	19:AI:44:MET:CG	2.50	0.42
26:1H:370:G:H4'	26:1H:371:A:OP2	2.18	0.42
26:1H:463:G:C6	26:1H:467:G:C6	3.08	0.42
26:1H:697:C:C2	26:1H:698:C:C5	3.07	0.42
26:1H:841:A:H2'	26:1H:842:G:O4'	2.19	0.42
26:1H:844:C:H3'	26:1H:845:G:C8	2.55	0.42
26:1H:1680:U:N3	58:1H:3550:HOH:O	2.35	0.42
26:1H:2313:C:O2'	26:1H:2314:C:H5'	2.20	0.42
26:1H:2334:G:H3'	26:1H:2335:A:H5'	2.01	0.42
27:16:88:C:H2'	27:16:89:G:O4'	2.19	0.42
30:31:11:VAL:HG12	30:31:12:LEU:H	1.83	0.42
36:78:1:MET:CE	36:78:6:LEU:HD13	2.50	0.42
40:B8:16:ARG:NH1	40:B8:18:ASP:OD2	2.52	0.42
40:B8:31:SER:HG	40:B8:85:LYS:H	1.62	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:G8:84:ARG:O	45:G8:85:VAL:HG13	2.19	0.42
49:K8:15:LYS:HA	49:K8:15:LYS:HD3	1.87	0.42
1:1G:197:A:N6	1:1G:220:G:O2'	2.51	0.42
1:1G:262:A:C6	1:1G:263:A:N6	2.88	0.42
1:1G:1320:C:N3	19:AA:72:GLY:HA3	2.35	0.42
1:1G:1365:G:H2'	1:1G:1366:C:C6	2.55	0.42
7:62:8:GLU:H	7:62:8:GLU:HG3	1.54	0.42
9:82:96:LEU:HD12	9:82:96:LEU:HA	1.89	0.42
23:2L:50:G:H2'	23:2L:51:U:O4'	2.20	0.42
26:14:320:A:H4'	26:14:322:A:C8	2.54	0.42
26:14:1312:U:H4'	26:14:1313:U:O5'	2.20	0.42
26:14:1500:G:O2'	28:19:100:GLY:O	2.37	0.42
26:14:2308:G:H3'	26:14:2310:A:OP2	2.19	0.42
26:14:2391:G:O6	26:14:2425:A:H8	2.02	0.42
26:14:2483:C:N3	37:45:124:LYS:NZ	2.68	0.42
26:14:2611:U:H5'	26:14:2611:U:C6	2.35	0.42
28:19:243:GLY:C	28:19:244:ARG:HG3	2.43	0.42
29:29:4:ILE:HD13	29:29:28:ALA:HB1	2.01	0.42
31:49:56:ALA:HA	31:49:59:GLU:HB3	2.01	0.42
31:49:111:LEU:HD23	31:49:117:PHE:HZ	1.85	0.42
35:25:117:LEU:HD13	35:25:117:LEU:HA	1.89	0.42
36:35:85:LEU:O	36:35:88:LEU:N	2.47	0.42
38:55:78:LYS:O	38:55:83:ILE:HG13	2.20	0.42
39:65:59:LYS:CD	39:65:60:GLY:H	2.33	0.42
48:F5:5:CYS:SG	48:F5:8:SER:OG	2.58	0.42
49:G5:33:MET:O	49:G5:37:PHE:HD1	2.03	0.42
53:L5:22:MET:HE3	53:L5:22:MET:HB3	1.79	0.42
1:13:823:G:C6	1:13:878:G:N1	2.88	0.42
1:13:973:G:OP1	10:1I:57:LYS:HD3	2.20	0.42
1:13:1060:C:H5"	10:1I:51:ARG:HG2	2.02	0.42
1:13:1325:C:OP1	21:1F:15:ARG:NE	2.50	0.42
1:13:1511:G:H2'	1:13:1512:U:O4'	2.20	0.42
2:1E:22:LYS:C	2:1E:24:TRP:H	2.27	0.42
2:1E:61:LEU:HD23	2:1E:68:ILE:HD11	2.02	0.42
10:1I:80:LYS:O	10:1I:84:GLN:HG2	2.19	0.42
22:1K:48:C:O2'	22:1K:49:G:O5'	2.37	0.42
24:3K:9:A:H3'	24:3K:10:G:C8	2.54	0.42
26:1H:496:G:C6	26:1H:497:A:C4	3.08	0.42
26:1H:565:C:H2'	26:1H:566:U:O4'	2.19	0.42
26:1H:589:C:H2'	26:1H:590:A:C8	2.55	0.42
26:1H:1359:A:H5'	26:1H:1359:A:N3	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1613:G:N2	26:1H:1619:G:C8	2.88	0.42
26:1H:1753:G:N1	26:1H:1756:G:C2	2.88	0.42
26:1H:1968:G:H5"	26:1H:1969:A:P	2.59	0.42
26:1H:1969:A:H1'	26:1H:1973:G:O4'	2.18	0.42
26:1H:2399:G:H1	26:1H:2417:C:N4	2.17	0.42
26:1H:2399:G:N2	26:1H:2417:C:N3	2.58	0.42
26:1H:2579:C:H2'	26:1H:2580:U:O4'	2.20	0.42
28:11:273:ARG:HD2	28:11:273:ARG:O	2.19	0.42
29:21:81:ILE:O	29:21:81:ILE:HG22	2.19	0.42
31:41:98:ARG:O	31:41:101:ILE:HD13	2.20	0.42
34:58:37:LYS:O	41:C8:67:ALA:HB2	2.20	0.42
34:58:94:HIS:C	34:58:95:PRO:O	2.56	0.42
36:78:3:LEU:HD23	36:78:3:LEU:HA	1.70	0.42
36:78:64:LYS:HD2	54:Q8:12:LYS:CG	2.47	0.42
36:78:86:LYS:HG3	36:78:87:ASP:N	2.34	0.42
40:B8:48:ILE:CD1	40:B8:110:ILE:HD11	2.50	0.42
43:E8:86:LEU:C	43:E8:86:LEU:HD12	2.45	0.42
44:F8:26:TYR:HB3	44:F8:92:LEU:HD12	2.01	0.42
46:H8:125:LEU:C	46:H8:164:ALA:HB3	2.44	0.42
1:1G:147:G:H2'	1:1G:148:G:H8	1.84	0.42
1:1G:243:A:C2	1:1G:245:C:N3	2.88	0.42
1:1G:537:G:H5"	12:3A:113:ARG:NH1	2.34	0.42
1:1G:689:C:H2'	1:1G:690:G:H5'	2.02	0.42
1:1G:837:G:H2'	1:1G:838:G:O4'	2.20	0.42
1:1G:843:U:H3'	1:1G:848:C:O4'	2.20	0.42
1:1G:1250:A:H2	1:1G:1353:G:H21	1.67	0.42
1:1G:1272:G:C5	1:1G:1273:G:C8	3.08	0.42
1:1G:1409:C:H5'	26:14:1916:A:N1	2.35	0.42
2:12:50:GLU:H	2:12:50:GLU:CD	2.28	0.42
2:12:157:ARG:HG2	2:12:158:LEU:H	1.84	0.42
2:12:187:LEU:HA	2:12:201:ILE:HG22	2.01	0.42
3:22:87:LEU:HB2	3:22:88:ARG:NH2	2.34	0.42
7:62:67:GLU:OE2	7:62:70:LYS:HE2	2.19	0.42
11:2A:66:LEU:HA	11:2A:66:LEU:HD23	1.87	0.42
16:7A:70:ALA:O	16:7A:74:LEU:HB2	2.20	0.42
17:8A:29:HIS:HB3	17:8A:33:GLY:N	2.34	0.42
17:8A:59:ILE:CG2	17:8A:71:PHE:HB3	2.49	0.42
19:AA:40:ILE:HA	19:AA:44:MET:SD	2.59	0.42
26:14:123:G:H2'	26:14:124:G:O4'	2.20	0.42
26:14:200:U:O2	26:14:386:G:N2	2.52	0.42
26:14:241:A:H5'	26:14:243:U:O4'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:877:U:H3	26:14:899:A:N6	2.18	0.42
26:14:1322:A:O3'	43:A5:84:ARG:NH1	2.52	0.42
26:14:1360:A:H5"	26:14:1361:G:OP2	2.19	0.42
26:14:1630(A):C:H2'	58:14:3523:HOH:O	2.20	0.42
26:14:1779:U:OP2	26:14:1784:A:N6	2.47	0.42
26:14:2037:G:C6	26:14:2038:G:C6	3.08	0.42
26:14:2113:U:H5"	26:14:2114:A:H1'	2.02	0.42
26:14:2790:A:H8	26:14:2790:A:OP2	2.02	0.42
27:1J:75:G:H1	27:1J:102:G:N2	2.17	0.42
29:29:182:LEU:C	29:29:183:LEU:HD12	2.45	0.42
33:69:74:ASN:O	33:69:75:LEU:HB2	2.20	0.42
33:69:109:ILE:HB	33:69:130:TYR:CE2	2.55	0.42
36:35:76:LYS:HB3	36:35:76:LYS:HE3	1.84	0.42
38:55:29:LEU:O	38:55:75:LEU:HD21	2.18	0.42
1:13:875:C:O2'	8:7E:14:ARG:HD2	2.20	0.42
1:13:958:A:C6	1:13:959:A:N1	2.87	0.42
1:13:1131:G:H3'	1:13:1132:C:C6	2.54	0.42
1:13:1330:U:C4	1:13:1331:G:C2	3.07	0.42
2:1E:19:HIS:HB3	2:1E:20:GLU:HG2	2.01	0.42
8:7E:109:ILE:HG13	8:7E:120:THR:HB	2.02	0.42
10:1I:51:ARG:N	10:1I:60:ARG:HA	2.35	0.42
15:6I:24:SER:O	15:6I:28:GLN:NE2	2.46	0.42
19:AI:36:ARG:NH1	19:AI:52:TYR:O	2.47	0.42
19:AI:51:VAL:N	19:AI:58:VAL:O	2.50	0.42
20:BI:29:LYS:O	20:BI:33:ILE:HG13	2.20	0.42
24:3K:8:U:N3	24:3K:14:A:N7	2.43	0.42
26:1H:36:G:N3	26:1H:450:G:O2'	2.52	0.42
26:1H:592:G:N2	26:1H:665:C:N3	2.57	0.42
26:1H:1260:G:C6	26:1H:1261:C:C4	3.07	0.42
26:1H:1299:G:H3'	26:1H:1639:U:O4	2.20	0.42
26:1H:1419:A:C8	26:1H:1421:G:C5	3.08	0.42
26:1H:2053:G:P	58:1H:3746:HOH:O	2.77	0.42
26:1H:2107:C:H2'	26:1H:2108:C:O4'	2.19	0.42
26:1H:2171:A:O2'	26:1H:2172:U:O4'	2.36	0.42
26:1H:2233:U:H2'	26:1H:2234:G:C8	2.55	0.42
27:16:16:G:H1	27:16:68:C:H42	1.67	0.42
27:16:73:A:C4	27:16:104:A:C2	3.08	0.42
29:21:108:SER:O	29:21:162:ALA:HA	2.20	0.42
32:51:105:LEU:HD23	32:51:113:VAL:HB	2.01	0.42
32:51:121:ILE:HG12	32:51:140:LYS:HD3	2.02	0.42
39:A8:69:VAL:HA	39:A8:72:ALA:HB3	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:B8:53:ARG:HG3	40:B8:53:ARG:O	2.20	0.42
45:G8:40:GLU:HA	45:G8:41:GLY:HA2	1.73	0.42
45:G8:81:LYS:HB3	45:G8:82:PRO:HA	2.01	0.42
46:H8:60:GLU:O	46:H8:66:SER:HA	2.19	0.42
52:N8:16:ARG:HG3	52:N8:17:ASP:H	1.85	0.42
1:1G:106:C:C2'	1:1G:107:G:H5'	2.50	0.42
1:1G:474:G:H2'	1:1G:475:G:C8	2.48	0.42
1:1G:814:A:N7	1:1G:816:A:C4	2.87	0.42
1:1G:1068:G:N7	1:1G:1094:G:C8	2.87	0.42
1:1G:1099:G:C6	1:1G:1100:C:O2	2.73	0.42
1:1G:1127:G:H3'	1:1G:1127:G:OP2	2.20	0.42
1:1G:1385:G:C4	1:1G:1386:G:C8	3.08	0.42
1:1G:1509:C:H2'	1:1G:1510:U:O4'	2.20	0.42
2:12:19:HIS:HE1	2:12:206:ASP:HB2	1.85	0.42
3:22:103:VAL:HG12	3:22:104:GLN:H	1.84	0.42
3:22:175:LEU:HD23	3:22:175:LEU:O	2.19	0.42
5:42:41:VAL:HG11	5:42:113:ALA:HB2	2.02	0.42
7:62:38:LEU:O	7:62:42:ILE:HG13	2.19	0.42
8:72:30:ARG:O	8:72:34:GLU:HG2	2.19	0.42
15:6A:36:ILE:O	15:6A:40:SER:N	2.46	0.42
16:7A:39:TYR:HB2	16:7A:49:LEU:HD13	2.02	0.42
18:9A:51:LEU:HD22	18:9A:55:ARG:HG3	2.01	0.42
24:3L:30:C:H2'	24:3L:31:C:O4'	2.20	0.42
26:14:472:A:H8	26:14:472:A:O5'	2.03	0.42
26:14:519:U:H2'	26:14:520:G:C8	2.55	0.42
26:14:1345:C:OP2	58:14:3449:HOH:O	2.21	0.42
26:14:1545(A):A:N7	26:14:1546:C:C2	2.88	0.42
26:14:1863:G:H2'	26:14:1864:U:C6	2.55	0.42
26:14:1880:C:H2'	26:14:1881:C:H6	1.83	0.42
26:14:2117:A:H2'	26:14:2118:U:C5	2.54	0.42
26:14:2173:A:O2'	26:14:2174:C:OP1	2.27	0.42
26:14:2228:G:C5	26:14:2229:C:C4	3.08	0.42
26:14:2426:A:H4'	26:14:2427:C:OP2	2.20	0.42
28:19:61:LEU:HD12	28:19:61:LEU:HA	1.80	0.42
31:49:114:ILE:HG22	31:49:117:PHE:HB2	2.01	0.42
31:49:125:PHE:HB3	31:49:166:ASP:HB2	2.02	0.42
50:H5:37:LEU:HD23	50:H5:37:LEU:HA	1.63	0.42
1:13:824:C:O2'	8:7E:1:MET:HB3	2.20	0.42
3:2E:150:LYS:HG3	3:2E:151:VAL:N	2.33	0.42
4:3E:110:PHE:HE2	4:3E:148:VAL:HG23	1.83	0.42
7:6E:5:ARG:CZ	7:6E:7:ALA:HA	2.50	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6E:56:GLN:NE2	7:6E:56:GLN:HA	2.34	0.42
7:6E:149:ARG:HD3	11:2I:59:TYR:CZ	2.55	0.42
15:6I:12:ILE:HG12	15:6I:31:LEU:HD11	2.01	0.42
16:7I:74:LEU:HB3	16:7I:79:VAL:HG21	2.01	0.42
19:AI:40:ILE:HG23	19:AI:41:VAL:N	2.35	0.42
23:2K:24:C:H2'	23:2K:25:U:H6	1.85	0.42
23:2K:64:G:H2'	23:2K:65:G:C8	2.55	0.42
26:1H:184:C:C2	26:1H:185:U:C5	3.07	0.42
26:1H:303:U:H2'	26:1H:304:G:H8	1.85	0.42
26:1H:444:C:H2'	26:1H:445:C:H6	1.85	0.42
26:1H:607:U:N3	26:1H:621:A:C2	2.74	0.42
26:1H:784:A:O4'	28:11:227:ASN:ND2	2.52	0.42
26:1H:805:G:O5'	36:78:41:ARG:HG2	2.19	0.42
26:1H:1440:G:C4	26:1H:1441:G:C8	3.07	0.42
26:1H:1540:G:C6	26:1H:1541:U:C4	3.08	0.42
26:1H:1582:C:HO2'	26:1H:1586:A:H8	1.60	0.42
26:1H:1816:G:H1	28:11:35:LYS:HZ2	1.68	0.42
26:1H:2058:A:H5"	26:1H:2059:A:OP2	2.20	0.42
26:1H:2401:U:H3'	26:1H:2402:C:C6	2.55	0.42
27:16:38:C:H1'	39:A8:95:HIS:HE1	1.84	0.42
32:51:101:ARG:HH22	32:51:122:THR:HA	1.85	0.42
33:61:4:ILE:HG22	33:61:16:GLY:HA2	2.02	0.42
33:61:109:ILE:HB	33:61:130:TYR:OH	2.19	0.42
38:98:14:SER:OG	38:98:15:SER:N	2.51	0.42
45:G8:8:LYS:HG2	45:G8:11:ASP:OD1	2.19	0.42
46:H8:4:ARG:NH1	46:H8:58:VAL:HG21	2.35	0.42
47:I8:48:GLY:HA3	47:I8:80:HIS:ND1	2.35	0.42
48:J8:73:LEU:HD13	48:J8:92:LYS:O	2.19	0.42
1:1G:17:U:H1'	1:1G:1080:A:H1'	2.02	0.42
1:1G:373:A:N3	1:1G:373:A:H2'	2.35	0.42
1:1G:453:A:C5	1:1G:454:C:C4	3.08	0.42
1:1G:514:C:H2'	1:1G:515:G:H8	1.85	0.42
1:1G:672:U:H2'	1:1G:673:G:C8	2.55	0.42
1:1G:689:C:C2'	1:1G:690:G:H5'	2.50	0.42
1:1G:801:U:H2'	1:1G:802:A:H8	1.85	0.42
1:1G:942:G:C2	1:1G:1342:C:C2	3.07	0.42
1:1G:955:U:H2'	1:1G:956:U:O4'	2.20	0.42
1:1G:960:U:O2	1:1G:1225:A:C5	2.73	0.42
1:1G:963:G:N2	10:1A:55:LYS:HE2	2.34	0.42
1:1G:1157:A:H61	1:1G:1177:G:H1	1.68	0.42
1:1G:1281:U:H3'	1:1G:1282:C:C5	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1286:A:H3'	1:1G:1286:A:C8	2.54	0.42
1:1G:1410:G:H2'	1:1G:1411:C:O4'	2.20	0.42
2:12:82:ARG:NE	2:12:92:TYR:OH	2.53	0.42
3:22:4:LYS:HB2	3:22:4:LYS:HE2	1.92	0.42
3:22:6:HIS:CD2	14:5A:49:HIS:HB3	2.54	0.42
3:22:84:ILE:N	3:22:87:LEU:HD21	2.35	0.42
7:62:141:VAL:C	7:62:143:ARG:H	2.28	0.42
8:72:110:ALA:O	8:72:121:ASP:N	2.52	0.42
8:72:120:THR:CG2	8:72:122:ARG:H	2.30	0.42
10:1A:50:ILE:HG22	10:1A:52:GLY:H	1.84	0.42
11:2A:24:SER:OG	11:2A:27:ASN:O	2.25	0.42
13:4A:59:TYR:HD2	13:4A:60:VAL:HG22	1.85	0.42
13:4A:80:ARG:CZ	19:AA:66:MET:HG2	2.49	0.42
16:7A:3:LYS:HG3	16:7A:24:ALA:HB2	2.02	0.42
21:1B:22:ARG:HA	21:1B:23:PRO:HD2	1.82	0.42
22:1L:76:A:H1'	26:14:2583:G:N2	2.35	0.42
26:14:300:A:N6	58:14:3593:HOH:O	2.51	0.42
26:14:313:C:H5'	58:14:3729:HOH:O	2.20	0.42
26:14:513:A:C2	26:14:514:A:C4	3.07	0.42
26:14:953:A:C5	26:14:954:G:N7	2.88	0.42
26:14:1008:C:H4'	41:85:59:ARG:HH22	1.85	0.42
26:14:1475:G:C4	26:14:1519:G:N2	2.88	0.42
26:14:1878:G:C5	26:14:1879:C:C4	3.07	0.42
26:14:2305:A:H8	31:49:156:ASP:OD1	2.03	0.42
26:14:2335:A:C8	26:14:2337:G:N7	2.88	0.42
26:14:2393:A:H4'	36:35:62:LEU:O	2.20	0.42
28:19:11:PRO:C	28:19:13:ARG:H	2.27	0.42
30:39:156:LEU:HD21	30:39:163:VAL:HG12	2.01	0.42
33:69:79:ILE:HG21	33:69:92:VAL:HG21	2.01	0.42
36:35:101:VAL:HG21	36:35:108:LYS:N	2.35	0.42
39:65:86:ALA:O	39:65:87:PHE:HB2	2.19	0.42
41:85:90:VAL:HG22	42:95:38:LEU:CD1	2.50	0.42
43:A5:29:LEU:HG	43:A5:33:ARG:NH1	2.35	0.42
43:A5:64:MET:HE3	43:A5:109:GLU:HG2	2.02	0.42
46:D5:19:ARG:HH11	46:D5:84:GLU:CB	2.31	0.42
46:D5:45:ASP:O	46:D5:49:ARG:HG2	2.20	0.42
47:E5:53:MET:HE3	47:E5:53:MET:HB3	1.73	0.42
1:13:143:A:H5"	1:13:144:G:O5'	2.20	0.42
1:13:192:U:C1'	20:BI:103:GLY:HA2	2.49	0.42
1:13:405:U:O2'	1:13:497:U:H5'	2.19	0.42
1:13:977:A:H8	1:13:1223:C:N3	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1084:G:C5	1:13:1085:U:C4	3.07	0.42
2:1E:80:ILE:HG21	2:1E:215:LEU:HD23	2.01	0.42
7:6E:75:VAL:HG21	7:6E:86:GLN:HB3	2.01	0.42
7:6E:111:ARG:CD	7:6E:123:GLU:HB2	2.46	0.42
8:7E:82:HIS:CE1	8:7E:84:ARG:HB3	2.54	0.42
9:8E:18:PHE:N	9:8E:62:TYR:O	2.53	0.42
11:2I:86:GLY:HA2	11:2I:112:THR:HG23	2.02	0.42
13:4I:11:ARG:HG2	13:4I:12:ASN:H	1.85	0.42
26:1H:62:C:N4	26:1H:92:G:H1	2.14	0.42
26:1H:153:C:H2'	26:1H:154:G:C8	2.54	0.42
26:1H:199:A:C8	26:1H:2433:A:N6	2.88	0.42
26:1H:478:A:C6	26:1H:480:A:C6	3.08	0.42
26:1H:528:A:OP2	34:58:114:ARG:NH1	2.53	0.42
26:1H:975:G:O2'	26:1H:976:C:H5'	2.20	0.42
26:1H:1410:G:H22	26:1H:1593:G:H1'	1.85	0.42
26:1H:1800:C:OP1	28:11:266:SER:OG	2.33	0.42
26:1H:1931:U:O2	26:1H:1931:U:O4'	2.38	0.42
26:1H:2012:G:OP1	43:E8:11:ARG:NH2	2.46	0.42
26:1H:2378:A:H4'	39:A8:23:ARG:CZ	2.50	0.42
26:1H:2490:G:N3	26:1H:2490:G:H2'	2.34	0.42
26:1H:2780:G:OP2	34:58:118:LYS:HD3	2.20	0.42
30:31:192:LEU:HD23	30:31:193:VAL:N	2.35	0.42
34:58:46:VAL:O	34:58:47:ALA:HB3	2.20	0.42
37:88:5:ARG:HB2	37:88:5:ARG:NH1	2.35	0.42
41:C8:79:PHE:CE2	41:C8:106:PHE:CZ	3.08	0.42
41:C8:83:LEU:HG	41:C8:88:ILE:HB	2.02	0.42
48:J8:86:SER:O	48:J8:88:LYS:N	2.53	0.42
53:P8:5:TRP:NE1	53:P8:7:PRO:HG3	2.34	0.42
1:1G:146:G:C2	1:1G:147:G:C8	3.08	0.42
1:1G:173:U:H1'	1:1G:197:A:N1	2.34	0.42
1:1G:279:A:C8	1:1G:281:G:C2	3.08	0.42
1:1G:402:G:O6	58:1G:1823:HOH:O	2.21	0.42
1:1G:519:C:H2'	1:1G:520:A:O4'	2.19	0.42
1:1G:757:U:H2'	1:1G:758:G:O4'	2.20	0.42
1:1G:980:C:H3'	1:1G:981:U:H6	1.85	0.42
1:1G:1103:C:C2	1:1G:1104:G:C8	3.07	0.42
1:1G:1178:G:H5"	9:82:93:ARG:CZ	2.50	0.42
1:1G:1276:G:H2'	1:1G:1277:C:C6	2.55	0.42
2:12:98:LEU:HD23	2:12:98:LEU:HA	1.80	0.42
4:32:32:ALA:N	4:32:35:ARG:NH1	2.68	0.42
11:2A:103:LEU:HD12	11:2A:103:LEU:HA	1.58	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:111:LYS:HD3	12:3A:112:ASP:H	1.84	0.42
15:6A:67:LEU:O	15:6A:71:GLN:HB2	2.20	0.42
16:7A:57:ARG:HH21	16:7A:79:VAL:HA	1.84	0.42
20:BA:10:LEU:C	20:BA:12:ALA:H	2.27	0.42
22:1L:8:U:H3'	22:1L:13:C:H42	1.85	0.42
22:1L:49:G:H22	22:1L:59:C:P	2.43	0.42
24:3L:50:G:H2'	24:3L:51:C:C6	2.55	0.42
26:14:26:G:C6	26:14:27:G:N1	2.88	0.42
26:14:162:U:H4'	26:14:171:G:O4'	2.20	0.42
26:14:341:G:C6	26:14:342:G:C5	3.08	0.42
26:14:455:C:N3	26:14:472:A:H2'	2.35	0.42
26:14:607:U:OP1	30:39:102:PRO:HA	2.19	0.42
26:14:669:G:C2	26:14:801:G:C6	3.08	0.42
26:14:671:C:OP1	36:35:42:SER:O	2.38	0.42
26:14:850:C:O3'	50:H5:49:LYS:HE2	2.20	0.42
26:14:2494:G:C4	26:14:2495:G:C8	3.08	0.42
26:14:2611:U:H3'	26:14:2611:U:OP2	2.20	0.42
26:14:2640:G:O5'	26:14:2640:G:H8	2.03	0.42
27:1J:6:C:C2	27:1J:115:G:N2	2.87	0.42
28:19:70:TRP:CH2	28:19:150:LYS:HA	2.55	0.42
30:39:157:VAL:HB	30:39:194:MET:HG3	2.02	0.42
38:55:87:TYR:O	38:55:88:ARG:C	2.63	0.42
40:75:2:ASN:HB3	40:75:4:GLY:HA3	2.00	0.42
46:D5:40:ASP:OD1	46:D5:43:GLU:N	2.31	0.42
47:E5:72:ARG:HB3	47:E5:75:LEU:HB2	2.02	0.42
49:G5:48:HIS:O	49:G5:52:ASP:HB2	2.20	0.42
1:13:186:C:H5'	20:BI:78:ALA:HB1	2.02	0.41
1:13:262:A:H5"	1:13:263:A:OP2	2.20	0.41
1:13:322:C:O2'	20:BI:23:ARG:HD2	2.20	0.41
1:13:328:C:H4'	1:13:329:A:H5'	2.00	0.41
1:13:724:G:C2	1:13:725:G:C8	3.07	0.41
1:13:983:A:H5'	1:13:984:C:OP2	2.20	0.41
1:13:1016:A:H2'	1:13:1017:G:O4'	2.20	0.41
1:13:1305:G:H22	1:13:1331:G:C1'	2.33	0.41
1:13:1428:A:H2'	1:13:1429:C:C6	2.56	0.41
1:13:1528:U:O2	1:13:1530:G:H8	2.03	0.41
9:8E:29:ASN:OD1	9:8E:64:THR:HA	2.20	0.41
11:2I:85:ARG:CG	11:2I:111:ASP:HB3	2.50	0.41
15:6I:24:SER:OG	15:6I:25:THR:N	2.53	0.41
17:8I:100:LYS:CG	17:8I:101:ARG:HE	2.32	0.41
22:1K:4:G:C2	22:1K:5:A:C8	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:52:A:C2	22:1K:63:G:C2	3.08	0.41
26:1H:226:G:H21	26:1H:228:A:H2	1.68	0.41
26:1H:299:A:C6	26:1H:300:A:C6	3.08	0.41
26:1H:654:A:C4	26:1H:654(A):A:H8	2.38	0.41
26:1H:1422:G:C6	26:1H:1423:G:C5	3.08	0.41
26:1H:1791:A:H3'	26:1H:1792:G:H8	1.85	0.41
26:1H:2119:A:H61	26:1H:2170:A:N6	2.18	0.41
26:1H:2653:U:OP2	26:1H:2654:A:O2'	2.32	0.41
29:21:14:ILE:HD13	29:21:14:ILE:HA	1.68	0.41
30:31:23:ASP:CG	30:31:24:LEU:H	2.27	0.41
30:31:32:LEU:HA	30:31:32:LEU:HD22	1.54	0.41
30:31:108:LYS:HB3	30:31:108:LYS:HE2	1.72	0.41
32:51:90:LYS:HE3	32:51:90:LYS:HB3	1.78	0.41
32:51:159:GLU:C	32:51:160:LYS:HG2	2.45	0.41
32:51:169:VAL:HG13	32:51:170:ARG:N	2.35	0.41
33:61:57:ARG:O	33:61:61:ARG:HG2	2.19	0.41
37:88:59:ARG:C	37:88:61:GLY:H	2.26	0.41
38:98:72:ASP:OD2	38:98:75:LEU:HB2	2.20	0.41
45:G8:55:TYR:N	45:G8:56:PRO:HD3	2.35	0.41
45:G8:85:VAL:N	45:G8:96:ILE:O	2.51	0.41
46:H8:28:MET:N	46:H8:35:ARG:O	2.38	0.41
48:J8:53:VAL:CG2	48:J8:74:VAL:HG23	2.46	0.41
49:K8:33:MET:HG3	49:K8:37:PHE:CE1	2.55	0.41
49:K8:46:GLN:NE2	49:K8:46:GLN:HA	2.33	0.41
1:1G:77:C:H2'	1:1G:78:G:C8	2.55	0.41
1:1G:308:C:H2'	1:1G:309:G:H8	1.85	0.41
1:1G:338:A:H61	1:1G:351:G:H1	1.68	0.41
1:1G:502:G:OP1	12:3A:118:SER:HB3	2.20	0.41
1:1G:607:A:H2'	1:1G:608:A:O4'	2.19	0.41
1:1G:866:C:H4'	1:1G:919:A:H5'	2.02	0.41
1:1G:984:C:H2'	1:1G:985:C:C6	2.54	0.41
2:12:71:VAL:HB	2:12:165:VAL:HG22	2.02	0.41
2:12:153:ARG:HG3	2:12:154:LEU:HD23	2.01	0.41
2:12:180:LEU:HB2	2:12:182:ILE:CD1	2.50	0.41
9:82:25:LYS:HD2	9:82:26:VAL:H	1.84	0.41
19:AA:15:LEU:O	19:AA:18:LYS:HB2	2.19	0.41
19:AA:74:PHE:O	19:AA:76:PRO:HD3	2.20	0.41
26:14:273:G:C2	26:14:273(A):G:C8	3.08	0.41
26:14:685:A:C8	26:14:774:A:C6	3.08	0.41
26:14:850:C:O2'	26:14:851:U:H5'	2.20	0.41
26:14:1001:A:C8	26:14:1002:G:C8	3.07	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1803:A:N1	26:14:1822:G:O2'	2.46	0.41
26:14:2118:U:O2'	26:14:2145:C:O2	2.29	0.41
26:14:2239:G:P	58:14:3586:HOH:O	2.78	0.41
26:14:2327:A:H2'	26:14:2328:A:O4'	2.20	0.41
26:14:2523:G:O5'	26:14:2523:G:H8	2.03	0.41
26:14:2592:G:C6	26:14:2593:U:C2	3.08	0.41
26:14:2693:A:H2'	26:14:2694:G:C8	2.52	0.41
26:14:2831:G:OP1	29:29:58:ARG:NH1	2.50	0.41
27:1J:16:G:O6	27:1J:66:A:H2	2.03	0.41
37:45:55:VAL:HG23	37:45:64:ILE:HD12	2.01	0.41
38:55:73:VAL:H	38:55:73:VAL:HG22	1.57	0.41
44:B5:1:MET:HA	44:B5:2:LYS:HA	1.50	0.41
48:F5:63:ALA:O	48:F5:64:ALA:C	2.62	0.41
48:F5:90:ILE:C	48:F5:91:LYS:O	2.62	0.41
48:F5:91:LYS:C	48:F5:93:GLU:N	2.78	0.41
1:13:129(A):G:C2	1:13:188:U:O2'	2.73	0.41
1:13:323:U:H4'	20:BI:22:ARG:HB2	2.02	0.41
1:13:1099:G:C2	1:13:1100:C:C2	3.08	0.41
1:13:1152:A:H4'	10:1I:13:HIS:CD2	2.55	0.41
1:13:1226:C:H4'	1:13:1227:A:OP1	2.20	0.41
1:13:1323:G:H2'	1:13:1324:A:C8	2.55	0.41
4:3E:164:ALA:O	4:3E:168:ARG:NE	2.53	0.41
5:4E:75:THR:OG1	5:4E:76:ILE:N	2.53	0.41
7:6E:75:VAL:HG11	7:6E:144:MET:HB3	2.01	0.41
8:7E:39:LEU:O	8:7E:44:PHE:N	2.52	0.41
9:8E:97:LYS:HB2	9:8E:102:LEU:HD12	2.02	0.41
11:2I:78:GLN:C	11:2I:103:LEU:HD12	2.45	0.41
11:2I:85:ARG:HG2	11:2I:112:THR:N	2.34	0.41
12:3I:17:LYS:H	12:3I:17:LYS:HD2	1.85	0.41
12:3I:84:LEU:O	12:3I:101:VAL:HG23	2.20	0.41
24:3K:61:C:H2'	24:3K:62:U:C6	2.55	0.41
24:3K:76:A:H5"	48:J8:30:VAL:HG11	2.02	0.41
26:1H:780:G:C2	26:1H:782:A:C2	3.08	0.41
26:1H:855:G:O2'	47:I8:27:GLU:OE2	2.28	0.41
26:1H:906:G:H4'	37:88:67:ARG:NH2	2.35	0.41
26:1H:1019:U:O2'	26:1H:1021:A:H2	2.03	0.41
26:1H:1101:U:O2'	26:1H:1102:C:H5'	2.20	0.41
26:1H:1671:U:O5'	26:1H:1671:U:H6	2.03	0.41
26:1H:2393:A:H62	26:1H:2422:A:H61	1.66	0.41
26:1H:2704:C:H2'	26:1H:2705:A:O4'	2.20	0.41
28:11:53:PHE:C	28:11:218:ARG:HG3	2.44	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:16:ARG:CZ	31:41:31:VAL:HG21	2.49	0.41
31:41:35:GLU:O	31:41:160:VAL:HB	2.20	0.41
31:41:59:GLU:O	31:41:63:ILE:HG23	2.20	0.41
32:51:3:ARG:H	32:51:6:ARG:HG3	1.85	0.41
34:58:56:ASN:HA	34:58:125:GLY:H	1.85	0.41
37:88:48:GLU:O	37:88:48:GLU:HG3	2.20	0.41
39:A8:7:TYR:HA	39:A8:10:ARG:NH2	2.35	0.41
43:E8:65:LEU:HD13	43:E8:65:LEU:HA	1.74	0.41
49:K8:33:MET:O	49:K8:37:PHE:HD1	2.03	0.41
52:N8:31:VAL:CG2	52:N8:42:PRO:HG3	2.51	0.41
54:Q8:48:PHE:CZ	54:Q8:50:LEU:HD23	2.56	0.41
1:1G:1:U:H4'	1:1G:2:U:C5'	2.50	0.41
1:1G:194:C:H5"	20:BA:65:LYS:HG2	2.02	0.41
1:1G:358:U:H2'	1:1G:359:U:C6	2.55	0.41
1:1G:498:A:H4'	1:1G:500:G:OP1	2.20	0.41
1:1G:898:G:N2	1:1G:901:A:OP2	2.50	0.41
4:32:105:VAL:O	4:32:109:GLY:N	2.51	0.41
6:52:38:GLU:OE2	6:52:64:GLN:HG2	2.20	0.41
6:52:95:GLU:H	6:52:95:GLU:HG2	1.61	0.41
7:62:12:LEU:HD13	7:62:21:VAL:O	2.20	0.41
8:72:51:VAL:HG23	8:72:52:ASP:N	2.35	0.41
9:82:113:LYS:HD2	9:82:119:ALA:CB	2.51	0.41
10:1A:62:HIS:H	10:1A:62:HIS:CD2	2.38	0.41
19:AA:66:MET:HB3	19:AA:69:HIS:CG	2.55	0.41
20:BA:56:MET:HE2	20:BA:56:MET:HB3	1.95	0.41
26:14:55:G:O2'	26:14:127:A:N1	2.42	0.41
26:14:199:A:N6	26:14:2434:A:C5	2.87	0.41
26:14:221:A:N6	26:14:265:A:H8	2.18	0.41
26:14:729:G:O4'	28:19:208:LYS:NZ	2.53	0.41
26:14:1182:A:H2'	26:14:1183:G:O4'	2.20	0.41
26:14:1226:G:OP1	42:95:69:LYS:NZ	2.51	0.41
26:14:1356:G:C6	26:14:1357:U:N3	2.88	0.41
26:14:1514:U:H2'	26:14:1515:C:C6	2.54	0.41
26:14:1814:G:H5"	28:19:54:ARG:HH12	1.81	0.41
26:14:2104:G:C4	26:14:2105:C:C5	3.09	0.41
26:14:2161:C:C4	26:14:2162:G:C8	3.07	0.41
26:14:2162:G:H2'	26:14:2163:C:H5'	2.01	0.41
26:14:2298:A:H1'	26:14:2321:G:N2	2.35	0.41
26:14:2338:G:C2	26:14:2339:G:C8	3.09	0.41
26:14:2537:U:C2	26:14:2538:C:C5	3.09	0.41
26:14:2555:U:H5	26:14:2556:C:C2	2.38	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2570:G:H2'	26:14:2571:C:O4'	2.20	0.41
27:1J:28:C:N4	27:1J:56:G:H1	2.18	0.41
28:19:223:GLY:CA	28:19:231:HIS:CD2	3.03	0.41
30:39:36:VAL:O	30:39:40:GLN:HG3	2.21	0.41
30:39:39:TRP:HD1	30:39:99:TYR:CD1	2.37	0.41
34:15:21:LYS:C	34:15:61:ARG:HB2	2.46	0.41
34:15:45:ASN:OD1	34:15:46:VAL:HG23	2.19	0.41
35:25:91:LEU:HD12	35:25:111:PHE:HE2	1.85	0.41
46:D5:139:VAL:HG13	46:D5:141:VAL:HG23	2.02	0.41
48:F5:53:VAL:O	48:F5:54:ALA:C	2.64	0.41
54:M5:49:VAL:HG23	54:M5:51:ALA:HB2	2.02	0.41
1:13:26:A:N6	1:13:558:G:O2'	2.54	0.41
1:13:49:U:C2	1:13:361:G:N2	2.88	0.41
1:13:158:G:C4	1:13:159:G:C8	3.07	0.41
1:13:760:G:H2'	1:13:761:G:H5'	2.02	0.41
1:13:892:A:O2'	1:13:1415:G:H4'	2.19	0.41
1:13:945:G:C2	1:13:1337:G:C2	3.09	0.41
1:13:1074:G:N3	1:13:1102:A:C2	2.88	0.41
1:13:1250:A:H2'	1:13:1251:A:C8	2.55	0.41
1:13:1507:A:H2'	1:13:1508:G:H8	1.86	0.41
2:1E:17:PHE:CD2	2:1E:44:LEU:HD11	2.56	0.41
5:4E:100:VAL:HG13	5:4E:118:ILE:CG2	2.50	0.41
7:6E:71:PRO:HD2	7:6E:96:GLN:HB3	2.03	0.41
7:6E:95:ARG:HH21	7:6E:99:LEU:HD11	1.85	0.41
9:8E:32:ASP:HB3	9:8E:35:GLU:HB2	2.02	0.41
11:2I:59:TYR:CE2	11:2I:63:LEU:HD11	2.55	0.41
12:3I:52:LEU:O	12:3I:54:LYS:NZ	2.47	0.41
15:6I:17:ARG:HG2	15:6I:21:ASP:OD2	2.20	0.41
16:7I:35:LYS:HE3	16:7I:37:GLY:H	1.86	0.41
18:9I:22:VAL:HG13	18:9I:55:ARG:O	2.20	0.41
24:3K:53:G:H2'	24:3K:53:G:N3	2.35	0.41
26:1H:1337:G:H2'	26:1H:1338:G:H8	1.85	0.41
26:1H:1591:G:H2'	26:1H:1592:C:H6	1.84	0.41
26:1H:1799:G:O6	28:11:178:PRO:HD2	2.21	0.41
26:1H:2294:C:P	39:A8:89:ARG:HH22	2.43	0.41
26:1H:2345:G:H1'	26:1H:2382:G:H5'	2.01	0.41
26:1H:2443:C:OP1	30:31:68:LYS:HD3	2.21	0.41
29:21:143:ASN:HB2	29:21:147:PRO:HD2	2.02	0.41
30:31:67:GLN:O	30:31:68:LYS:HG3	2.20	0.41
36:78:112:LEU:HD22	36:78:113:LYS:N	2.35	0.41
36:78:115:LEU:HA	36:78:134:ALA:CB	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:C8:88:ILE:O	41:C8:90:VAL:N	2.53	0.41
45:G8:28:LYS:HE3	45:G8:40:GLU:HB2	2.02	0.41
48:J8:7:ILE:HG12	48:J8:62:VAL:HG13	2.02	0.41
48:J8:10:LYS:HZ1	48:J8:65:SER:CB	2.33	0.41
1:1G:300:A:C5	1:1G:301:G:H1'	2.56	0.41
1:1G:627:G:O2'	1:1G:628:G:H5'	2.20	0.41
1:1G:807:A:H2'	1:1G:808:C:C6	2.55	0.41
1:1G:1130:A:H1'	1:1G:1146:A:C2	2.55	0.41
1:1G:1330:U:H4'	13:4A:23:TYR:CE1	2.56	0.41
1:1G:1412:C:H2'	1:1G:1413:A:C8	2.54	0.41
5:42:33:VAL:HG22	5:42:43:LEU:HB2	2.02	0.41
7:62:72:ARG:C	7:62:73:MET:HG2	2.44	0.41
10:1A:48:THR:CA	10:1A:62:HIS:HB3	2.45	0.41
13:4A:48:LEU:HB2	13:4A:52:GLU:CD	2.45	0.41
24:3L:37:A:H2'	24:3L:38:A:O4'	2.20	0.41
26:14:20:C:C2	26:14:521:G:N2	2.89	0.41
26:14:128:C:H2'	26:14:129:C:C6	2.56	0.41
26:14:221:A:N1	26:14:265:A:O2'	2.50	0.41
26:14:552:G:C5	26:14:553:U:C5	3.08	0.41
26:14:1047:G:H2'	26:14:1047:G:N3	2.36	0.41
26:14:1260:G:C6	26:14:1261:C:C4	3.07	0.41
26:14:1485:G:H2'	26:14:1486:A:H8	1.86	0.41
26:14:1612:C:O3'	53:L5:5:TRP:HB3	2.21	0.41
26:14:1653:G:C6	38:55:9:LYS:HB2	2.55	0.41
26:14:1794:U:H2'	26:14:1795:C:H6	1.84	0.41
26:14:1794:U:O2'	26:14:1795:C:H5'	2.20	0.41
26:14:1845:G:C2'	26:14:1846:G:H5'	2.51	0.41
26:14:2846:G:H2'	26:14:2847:U:O4'	2.20	0.41
28:19:130:ALA:HA	28:19:192:THR:HA	2.03	0.41
28:19:231:HIS:ND1	28:19:232:PRO:N	2.68	0.41
38:55:18:LEU:HD23	38:55:18:LEU:HA	1.74	0.41
42:95:58:VAL:HB	42:95:98:GLU:HB3	2.01	0.41
48:F5:8:SER:HB3	48:F5:66:HIS:CD2	2.55	0.41
1:13:1095:U:H2'	1:13:1096:C:C6	2.55	0.41
1:13:1216:G:C2	1:13:1217:C:C5	3.08	0.41
1:13:1263:C:H2'	1:13:1264:C:H6	1.84	0.41
1:13:1301:U:H2'	1:13:1303:C:H5	1.85	0.41
1:13:1318:A:H4'	19:AI:10:PHE:CD2	2.55	0.41
6:5E:89:MET:HE2	18:9I:76:LEU:HD13	2.02	0.41
10:1I:82:ILE:HG22	10:1I:86:MET:HE1	2.01	0.41
22:1K:37:AET:HM62	22:1K:38:A:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:59:U:O2'	26:1H:73:A:H2'	2.21	0.41
26:1H:164:U:H5'	26:1H:165:U:OP2	2.20	0.41
26:1H:274:G:H2'	26:1H:275:G:O4'	2.21	0.41
26:1H:275:G:N7	26:1H:363:G:N1	2.68	0.41
26:1H:833:U:H1'	36:78:55:ARG:NH1	2.36	0.41
26:1H:950:G:H2'	26:1H:951:C:C6	2.55	0.41
26:1H:1185:C:OP1	58:1H:3693:HOH:O	2.22	0.41
26:1H:1272:A:H3'	26:1H:1273:U:H5"	2.01	0.41
26:1H:1480:G:C6	26:1H:1482:U:C4	3.08	0.41
26:1H:2018:G:C6	26:1H:2019:A:C5	3.08	0.41
26:1H:2098:U:H2'	26:1H:2099:U:O4'	2.20	0.41
26:1H:2115:G:H5"	26:1H:2166:G:O2'	2.20	0.41
26:1H:2163:C:C5	26:1H:2164:C:C2	3.07	0.41
26:1H:2409:G:H8	26:1H:2409:G:O5'	2.03	0.41
28:11:11:PRO:C	28:11:13:ARG:H	2.28	0.41
28:11:79:VAL:HG21	28:11:111:LEU:HD11	2.02	0.41
28:11:148:GLU:HB2	28:11:151:LYS:HD2	2.02	0.41
30:31:106:ARG:H	30:31:106:ARG:HG2	1.54	0.41
32:51:23:ARG:HD3	32:51:25:LYS:NZ	2.34	0.41
34:58:39:ARG:C	34:58:41:ASP:H	2.28	0.41
34:58:40:PRO:O	41:C8:64:ARG:HG2	2.21	0.41
34:58:70:LYS:C	34:58:71:ILE:HG13	2.44	0.41
35:68:104:ARG:NH2	40:B8:43:GLN:OE1	2.45	0.41
40:B8:35:LYS:HE3	40:B8:38:ASN:HA	2.02	0.41
50:L8:28:LEU:HD23	50:L8:33:GLN:HG3	2.03	0.41
1:1G:768:A:H5'	1:1G:1524:C:H1'	2.01	0.41
1:1G:1002:G:H1	1:1G:1038:C:H42	1.66	0.41
1:1G:1164:G:C6	1:1G:1165:C:C4	3.09	0.41
1:1G:1216:G:H2'	1:1G:1217:C:H6	1.84	0.41
1:1G:1338:G:C6	1:1G:1339:A:N1	2.88	0.41
1:1G:1350:A:H2'	1:1G:1351:U:O4'	2.21	0.41
1:1G:1497:G:H2'	1:1G:1498:U:H5'	2.01	0.41
2:12:28:PHE:CE1	2:12:31:TYR:HD2	2.39	0.41
6:52:67:MET:HB2	6:52:68:PRO:HD2	2.01	0.41
8:72:56:LYS:HE3	8:72:56:LYS:HB2	1.65	0.41
9:82:16:ARG:HD2	9:82:18:PHE:CZ	2.55	0.41
10:1A:87:THR:HA	10:1A:89:ASP:H	1.85	0.41
11:2A:38:ASN:HA	11:2A:39:PRO:HD3	1.90	0.41
26:14:292:C:C2	26:14:349:G:N2	2.89	0.41
26:14:695:G:C2	26:14:768:G:C5	3.09	0.41
26:14:1000:A:C6	26:14:1001:A:N1	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1153:C:H2'	26:14:1154:G:O4'	2.21	0.41
26:14:1470:G:C6	26:14:1521:G:N7	2.88	0.41
26:14:2106:G:C2	26:14:2184:G:C6	3.09	0.41
26:14:2128:C:H42	26:14:2160:G:H22	1.68	0.41
26:14:2294:C:H2'	26:14:2295:C:O4'	2.21	0.41
26:14:2592:G:C6	26:14:2593:U:N3	2.88	0.41
26:14:2646:C:H2'	26:14:2647:U:O4'	2.20	0.41
26:14:2715:C:H2'	26:14:2716:U:C6	2.55	0.41
26:14:2795:G:H2'	26:14:2795:G:N3	2.36	0.41
26:14:2854:G:C2	26:14:2855:C:C2	3.08	0.41
28:19:16:MET:HG3	28:19:206:LEU:O	2.20	0.41
28:19:34:VAL:HB	28:19:64:ILE:HG23	2.02	0.41
28:19:35:LYS:HB2	28:19:62:TYR:O	2.21	0.41
28:19:70:TRP:O	28:19:73:VAL:HG23	2.21	0.41
28:19:148:GLU:CB	28:19:151:LYS:HD3	2.48	0.41
29:29:147:PRO:HB2	29:29:149:ARG:HD3	2.01	0.41
31:49:170:ARG:HA	31:49:170:ARG:HD2	1.82	0.41
32:59:15:VAL:HB	32:59:27:LYS:O	2.20	0.41
37:45:32:TYR:CD1	37:45:32:TYR:N	2.88	0.41
38:55:59:ASP:OD2	38:55:61:HIS:HB3	2.20	0.41
42:95:24:LYS:HA	42:95:92:THR:OG1	2.21	0.41
48:F5:84:GLY:CA	48:F5:85:LEU:HB3	2.51	0.41
1:13:438:G:OP1	4:3E:125:HIS:HE1	2.03	0.41
1:13:619:U:N3	4:3E:135:LEU:HD11	2.34	0.41
1:13:1072:G:C2	1:13:1073:U:C2	3.09	0.41
1:13:1112:C:O5'	1:13:1112:C:H6	2.03	0.41
4:3E:13:ARG:O	4:3E:14:ARG:C	2.64	0.41
7:6E:117:ALA:O	7:6E:121:ALA:N	2.46	0.41
9:8E:21:PRO:HA	9:8E:59:PHE:HD1	1.86	0.41
14:5I:25:VAL:HG22	14:5I:38:GLY:O	2.20	0.41
17:8I:76:LEU:HD12	17:8I:77:VAL:N	2.35	0.41
23:2K:7:G:H3'	23:2K:8:U:H5'	2.03	0.41
26:1H:106:C:H2'	26:1H:107:C:H6	1.85	0.41
26:1H:193:U:OP1	58:1H:3692:HOH:O	2.22	0.41
26:1H:729:G:O5'	28:11:208:LYS:NZ	2.48	0.41
26:1H:1283:G:N2	26:1H:1286:A:C8	2.88	0.41
26:1H:1374:G:C6	26:1H:1375:C:C4	3.09	0.41
26:1H:2309:A:H2'	26:1H:2310:A:O4'	2.21	0.41
26:1H:2517:C:C5	26:1H:2542:A:C5	3.09	0.41
30:31:53:THR:O	30:31:55:GLY:N	2.53	0.41
31:41:74:LYS:HA	31:41:74:LYS:HD2	1.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:41:142:PRO:HB2	51:M8:31:ILE:HD12	2.02	0.41
33:61:10:GLU:O	33:61:10:GLU:HG3	2.21	0.41
40:B8:4:GLY:HA2	40:B8:7:ILE:HG23	2.02	0.41
43:E8:51:LEU:HD23	43:E8:51:LEU:HA	1.91	0.41
46:H8:28:MET:HB2	46:H8:37:VAL:HG11	2.02	0.41
46:H8:30:ASN:HA	46:H8:89:PHE:HE1	1.85	0.41
46:H8:48:PHE:HE1	46:H8:71:VAL:HG11	1.86	0.41
46:H8:76:LEU:HD23	46:H8:76:LEU:H	1.85	0.41
48:J8:93:GLU:OE1	48:J8:93:GLU:N	2.53	0.41
1:1G:750:G:N2	15:6A:23:GLY:O	2.37	0.41
1:1G:837:G:H1	1:1G:849:C:H42	1.67	0.41
1:1G:1243:C:OP1	21:1B:10:ARG:HG3	2.21	0.41
1:1G:1320:C:H2'	1:1G:1321:C:O4'	2.20	0.41
1:1G:1321:C:C4	1:1G:1322:C:C4	3.08	0.41
1:1G:1481:U:H2'	1:1G:1482:G:C8	2.56	0.41
2:12:21:ARG:HD3	2:12:21:ARG:H	1.86	0.41
2:12:114:ARG:O	2:12:118:LEU:HD12	2.21	0.41
5:42:143:ARG:HH21	8:72:77:GLU:CD	2.23	0.41
10:1A:78:ASN:C	10:1A:80:LYS:N	2.77	0.41
13:4A:88:ARG:HG3	13:4A:88:ARG:H	1.42	0.41
17:8A:55:ASP:OD1	17:8A:55:ASP:N	2.52	0.41
25:4L:13:A:H2'	25:4L:13:A:N3	2.36	0.41
26:14:26:G:C6	26:14:27:G:C6	3.08	0.41
26:14:71:A:OP1	26:14:112:U:O2'	2.28	0.41
26:14:151:C:C2	26:14:176:G:N2	2.88	0.41
26:14:250:G:P	36:35:60:MET:HE1	2.61	0.41
26:14:304:G:H2'	26:14:305:U:C6	2.56	0.41
26:14:513:A:C2	26:14:514:A:C5	3.09	0.41
26:14:630:G:N2	26:14:633:A:OP2	2.46	0.41
26:14:1608:A:H1'	26:14:1610:A:OP2	2.21	0.41
26:14:1754:C:OP2	40:75:113:LYS:NZ	2.54	0.41
26:14:1950:G:H8	26:14:1950:G:O5'	2.04	0.41
26:14:2315:G:H2'	26:14:2316:C:C6	2.56	0.41
26:14:2352:A:C2	47:E5:33:ALA:HB1	2.56	0.41
26:14:2616:C:H2'	26:14:2617:C:H5'	2.01	0.41
27:1J:15:A:H1'	27:1J:109:G:C8	2.56	0.41
27:1J:28:C:N3	27:1J:56:G:N2	2.58	0.41
27:1J:81:G:C6	27:1J:82:G:C5	3.09	0.41
30:39:60:SER:OG	30:39:61:GLY:N	2.52	0.41
33:69:31:LEU:N	33:69:32:PRO:HD2	2.35	0.41
33:69:79:ILE:HD12	33:69:79:ILE:HG23	1.76	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:92:VAL:O	33:69:120:ILE:HG12	2.20	0.41
38:55:26:LYS:HE2	38:55:70:LEU:O	2.19	0.41
38:55:65:LEU:HD12	38:55:65:LEU:HA	1.79	0.41
42:95:1:MET:HG2	42:95:42:GLY:O	2.20	0.41
46:D5:52:SER:C	46:D5:54:HIS:N	2.78	0.41
46:D5:109:ALA:N	46:D5:142:SER:OG	2.53	0.41
48:F5:88:LYS:HG2	48:F5:88:LYS:O	2.21	0.41
49:G5:54:LYS:HA	49:G5:57:ILE:HD12	2.03	0.41
49:G5:57:ILE:H	49:G5:57:ILE:HG13	1.65	0.41
1:13:487:A:H5"	1:13:488:C:OP2	2.20	0.41
1:13:668:G:C5	1:13:669:U:C5	3.09	0.41
1:13:739:C:HO2'	15:6I:42:HIS:CE1	2.28	0.41
1:13:774:G:OP1	28:11:202:LYS:NZ	2.43	0.41
1:13:954:G:H2'	1:13:955:U:C6	2.56	0.41
1:13:1033:G:H2'	1:13:1034:G:H5'	2.02	0.41
1:13:1064:G:N2	1:13:1190:G:H1'	2.35	0.41
1:13:1203:C:H2'	1:13:1204:A:O4'	2.20	0.41
2:1E:197:VAL:HB	2:1E:200:ILE:HG13	2.03	0.41
4:3E:173:TRP:CD1	4:3E:174:LEU:HG	2.56	0.41
12:3I:76:ASN:OD1	12:3I:76:ASN:N	2.39	0.41
15:6I:39:LEU:HD23	15:6I:39:LEU:HA	1.88	0.41
19:AI:50:ALA:HA	19:AI:58:VAL:O	2.21	0.41
20:BI:30:LYS:CE	20:BI:80:ARG:HH12	2.33	0.41
26:1H:274:G:C4	26:1H:274:G:OP1	2.74	0.41
26:1H:1138:G:N2	34:58:106:MET:HE3	2.29	0.41
26:1H:1352:U:O2'	26:1H:1570:A:N3	2.44	0.41
26:1H:1357:U:H2'	26:1H:1358:G:O4'	2.21	0.41
26:1H:1404:C:O2'	26:1H:1405:U:H5'	2.21	0.41
26:1H:2031:A:C6	26:1H:2498:C:H1'	2.55	0.41
26:1H:2396:G:H5"	48:J8:25:LYS:HE2	2.03	0.41
26:1H:2578:G:C5	29:21:140:SER:HB2	2.56	0.41
26:1H:2591:C:O5'	26:1H:2591:C:H6	2.03	0.41
26:1H:2640:G:H5"	34:58:74:ARG:NH1	2.36	0.41
26:1H:2683:C:OP1	40:B8:53:ARG:NH2	2.47	0.41
26:1H:2848:G:C8	40:B8:97:ALA:HB2	2.55	0.41
27:16:71:C:N3	27:16:72:G:C8	2.88	0.41
28:11:12:SER:O	28:11:16:MET:HB2	2.21	0.41
28:11:213:ARG:HA	28:11:213:ARG:HD2	1.91	0.41
32:51:54:ARG:HH21	32:51:62:LYS:HG2	1.85	0.41
32:51:83:TYR:CE1	32:51:138:LYS:HD2	2.56	0.41
33:61:96:ASP:O	33:61:100:ALA:N	2.47	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:78:94:GLU:O	36:78:95:VAL:C	2.63	0.41
36:78:121:LYS:HB3	36:78:121:LYS:HE2	1.78	0.41
37:88:5:ARG:O	37:88:6:ARG:O	2.39	0.41
37:88:56:ARG:HA	37:88:56:ARG:HD2	1.76	0.41
38:98:44:LEU:HD23	38:98:44:LEU:HA	1.83	0.41
39:A8:8:GLU:H	39:A8:8:GLU:HG2	1.55	0.41
47:I8:42:GLY:O	47:I8:57:PHE:CD2	2.74	0.41
54:Q8:8:LYS:O	54:Q8:12:LYS:HE3	2.20	0.41
1:1G:110:C:O2'	16:7A:25:ARG:O	2.38	0.41
1:1G:236:G:C5	1:1G:237:C:C5	3.08	0.41
1:1G:244:U:C6	1:1G:894:G:N2	2.89	0.41
1:1G:577:G:C4	1:1G:578:C:C5	3.09	0.41
1:1G:695:A:H2'	1:1G:696:A:C8	2.55	0.41
1:1G:933:G:OP2	7:62:3:ARG:HB2	2.21	0.41
1:1G:1067:A:H4'	1:1G:1068:G:O5'	2.19	0.41
1:1G:1225:A:OP2	1:1G:1225:A:H8	2.03	0.41
1:1G:1262:C:H42	1:1G:1273:G:H1	1.68	0.41
1:1G:1322:C:HO2'	1:1G:1323:G:P	2.44	0.41
2:12:223:ILE:HA	2:12:224:GLN:HA	1.73	0.41
4:32:19:LEU:HB2	4:32:21:LEU:HD21	2.03	0.41
4:32:126:ILE:HG22	4:32:127:THR:H	1.84	0.41
9:82:84:ALA:O	9:82:87:GLN:HB3	2.20	0.41
11:2A:17:GLY:O	11:2A:80:VAL:HA	2.20	0.41
13:4A:37:THR:O	13:4A:55:ARG:NH2	2.39	0.41
25:4L:14:A:C6	25:4L:15:A:C2	3.09	0.41
26:14:121:G:C2	26:14:131:G:C4	3.09	0.41
26:14:273(C):C:N4	26:14:363(C):G:H1	2.18	0.41
26:14:642:G:H3'	26:14:642:G:C8	2.56	0.41
26:14:747:U:O2	26:14:2014:A:H1'	2.21	0.41
26:14:849:A:N1	50:H5:25:ALA:HB2	2.36	0.41
26:14:1331:A:O2'	26:14:1332:G:C8	2.74	0.41
26:14:1496:A:C8	26:14:1577:C:O2'	2.72	0.41
26:14:1759:A:H4'	26:14:2715:C:O4'	2.20	0.41
29:29:13:ARG:HA	29:29:21:VAL:O	2.21	0.41
30:39:4:VAL:HG12	30:39:17:ARG:HG2	2.02	0.41
30:39:51:THR:HG23	30:39:92:PRO:HG2	2.03	0.41
30:39:63:LYS:CE	30:39:67:GLN:HB3	2.51	0.41
30:39:137:LYS:H	30:39:137:LYS:HG2	1.56	0.41
36:35:7:ARG:HA	36:35:8:PRO:HD2	1.95	0.41
36:35:79:ARG:HG2	36:35:110:TYR:H	1.86	0.41
37:45:103:MET:HE1	37:45:127:ILE:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:65:62:LYS:HB2	39:65:97:ARG:NE	2.36	0.41
39:65:103:GLU:O	39:65:106:ARG:HD3	2.20	0.41
41:85:17:ILE:HG23	41:85:39:LEU:HD12	2.03	0.41
41:85:91:ASP:C	41:85:93:LYS:H	2.28	0.41
43:A5:65:LEU:HD12	43:A5:68:ARG:CZ	2.51	0.41
46:D5:48:PHE:CE1	46:D5:71:VAL:HG21	2.56	0.41
46:D5:94:GLU:O	46:D5:129:SER:HA	2.20	0.41
47:E5:19:LYS:C	47:E5:20:ARG:HG2	2.45	0.41
49:G5:62:THR:O	49:G5:65:ASN:HB2	2.19	0.41
49:G5:69:ARG:N	49:G5:69:ARG:HD3	2.36	0.41
1:13:198:G:H2'	1:13:199:G:H8	1.84	0.41
1:13:467:G:H3'	1:13:467:G:OP2	2.20	0.41
1:13:621:A:H2'	1:13:622:A:C8	2.56	0.41
1:13:661:G:N2	1:13:745:C:C2	2.88	0.41
1:13:826:C:H6	1:13:826:C:O5'	2.04	0.41
2:1E:114:ARG:O	2:1E:118:LEU:HD23	2.20	0.41
5:4E:14:ARG:HH11	5:4E:14:ARG:HD2	1.76	0.41
5:4E:36:ASP:CG	5:4E:38:GLN:HB2	2.45	0.41
8:7E:12:ARG:CZ	8:7E:27:PRO:HD3	2.49	0.41
10:1I:22:LYS:HZ2	10:1I:90:LEU:HD13	1.85	0.41
26:1H:83:G:N2	26:1H:102:G:H1'	2.35	0.41
26:1H:234:C:H2'	26:1H:235:U:O4'	2.21	0.41
26:1H:317:G:C2	26:1H:318:C:C2	3.08	0.41
26:1H:537:C:H2'	26:1H:539:G:H8	1.84	0.41
26:1H:859:G:O2'	26:1H:916:G:O6	2.31	0.41
26:1H:1279:G:N2	26:1H:1292:U:C2	2.88	0.41
26:1H:1509:C:H3'	26:1H:1509:C:H6	1.86	0.41
26:1H:1575:C:H2'	26:1H:1576:U:O4'	2.20	0.41
26:1H:1767:C:H2'	26:1H:1768:U:O4'	2.20	0.41
26:1H:1824:G:O3'	28:11:249:PRO:HD3	2.20	0.41
26:1H:1830:C:C2'	26:1H:1831:G:H5'	2.51	0.41
26:1H:2317:C:H2'	26:1H:2318:G:O4'	2.20	0.41
26:1H:2422:A:H4'	26:1H:2422:A:OP1	2.20	0.41
26:1H:2692:C:H2'	26:1H:2693:A:O4'	2.21	0.41
28:11:70:TRP:CH2	28:11:150:LYS:HA	2.56	0.41
28:11:182:LEU:O	28:11:271:ILE:HG13	2.21	0.41
29:21:51:PHE:O	29:21:75:VAL:HG13	2.21	0.41
39:A8:106:ARG:HB3	39:A8:112:PHE:HE1	1.84	0.41
51:M8:41:PRO:HA	51:M8:47:GLN:OE1	2.21	0.41
51:M8:42:PHE:O	51:M8:44:THR:N	2.53	0.41
1:1G:87:A:C5	1:1G:88:C:C4	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:330:C:OP2	58:1G:1824:HOH:O	2.22	0.41
1:1G:375:U:C2	1:1G:376:G:C8	3.09	0.41
1:1G:446:G:H2'	1:1G:447:G:O4'	2.21	0.41
1:1G:592:G:N2	1:1G:647:C:N3	2.63	0.41
1:1G:611:A:H2	1:1G:630:G:N2	2.18	0.41
1:1G:797:C:O2'	1:1G:798:G:H5'	2.20	0.41
1:1G:875:C:H1'	8:72:15:ASN:HD21	1.86	0.41
1:1G:974:A:H5'	1:1G:974:A:N3	2.35	0.41
1:1G:1054:C:H4'	1:1G:1055:A:C5'	2.51	0.41
1:1G:1081:G:H2'	1:1G:1082:G:C8	2.56	0.41
1:1G:1316:G:N2	1:1G:1318:A:H3'	2.35	0.41
1:1G:1321:C:C4	1:1G:1322:C:N4	2.89	0.41
1:1G:1378:C:C5	1:1G:1379:G:N9	2.89	0.41
3:22:13:GLY:HA2	14:5A:57:ARG:NH1	2.36	0.41
3:22:13:GLY:N	14:5A:57:ARG:HD2	2.35	0.41
3:22:73:PRO:CG	3:22:105:GLU:HB2	2.51	0.41
4:32:23:GLY:HA3	4:32:112:VAL:HG22	2.03	0.41
4:32:30:LYS:HA	4:32:35:ARG:CD	2.50	0.41
4:32:150:GLU:C	4:32:152:SER:N	2.79	0.41
8:72:101:PRO:HG2	8:72:133:LEU:HD11	2.02	0.41
9:82:32:ASP:OD1	9:82:33:PHE:N	2.53	0.41
9:82:114:TYR:HE2	10:1A:59:SER:HA	1.85	0.41
13:4A:37:THR:HG22	13:4A:55:ARG:HE	1.84	0.41
13:4A:57:ARG:HH11	31:49:113:ARG:NH2	2.19	0.41
13:4A:81:LEU:HG	13:4A:89:GLY:HA3	2.03	0.41
26:14:472:A:H2'	26:14:473:G:H5'	2.03	0.41
26:14:493:G:H2'	26:14:494:G:O4'	2.20	0.41
26:14:733:G:OP2	58:14:3489:HOH:O	2.22	0.41
26:14:836:G:C5	26:14:837:C:C4	3.09	0.41
26:14:1012:U:O4	34:15:25:ARG:HA	2.21	0.41
26:14:1412:A:H2'	26:14:1413:G:C8	2.55	0.41
26:14:1462:C:H4'	26:14:2703:C:O4'	2.20	0.41
26:14:1725:G:C2	26:14:1741:C:C2	3.09	0.41
26:14:1748:G:C2	26:14:1749:A:C4	3.08	0.41
26:14:1790:C:H2'	26:14:1791:A:C5	2.55	0.41
26:14:1851:U:H2'	26:14:1852:C:O4'	2.20	0.41
26:14:2676:C:H2'	26:14:2677:G:C8	2.56	0.41
26:14:2795:G:H4'	26:14:2798:C:H5	1.85	0.41
31:49:106:LEU:HD12	31:49:110:ALA:HB3	2.03	0.41
32:59:43:VAL:HA	32:59:51:ARG:O	2.20	0.41
32:59:154:PRO:O	32:59:162:ILE:N	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:69:27:ARG:HB2	48:F5:71:TYR:CZ	2.56	0.41
33:69:38:LEU:HG	33:69:38:LEU:H	1.70	0.41
36:35:86:LYS:HB2	36:35:117:GLU:O	2.21	0.41
36:35:147:LEU:HD13	36:35:147:LEU:HA	1.89	0.41
37:45:26:TYR:CD1	37:45:27:VAL:N	2.89	0.41
38:55:81:ASP:OD1	38:55:81:ASP:N	2.53	0.41
38:55:102:GLU:H	38:55:102:GLU:HG2	1.60	0.41
40:75:16:ARG:NH1	40:75:80:SER:O	2.54	0.41
44:B5:44:GLU:HG2	44:B5:49:VAL:O	2.20	0.41
46:D5:93:ASP:N	46:D5:130:PRO:HG2	2.36	0.41
46:D5:132:ASN:ND2	46:D5:159:PRO:HG2	2.36	0.41
49:G5:15:LYS:H	49:G5:67:LYS:NZ	2.18	0.41
1:13:692:U:O4	11:2I:53:SER:CB	2.68	0.41
1:13:1227:A:H3'	1:13:1227:A:H8	1.85	0.41
1:13:1352:C:N4	58:13:1891:HOH:O	2.54	0.41
1:13:1390:U:H2'	1:13:1391:U:C6	2.55	0.41
2:1E:155:LEU:HD23	2:1E:155:LEU:HA	1.89	0.41
2:1E:156:LYS:HD2	2:1E:156:LYS:HA	1.87	0.41
4:3E:108:LEU:HD21	4:3E:183:GLY:HA3	2.01	0.41
7:6E:59:LEU:O	7:6E:59:LEU:HD23	2.21	0.41
7:6E:71:PRO:HD2	7:6E:96:GLN:HA	2.03	0.41
7:6E:89:MET:HE2	7:6E:89:MET:HB3	1.96	0.41
7:6E:92:SER:O	7:6E:95:ARG:N	2.52	0.41
12:3I:25:PRO:C	12:3I:27:LEU:H	2.28	0.41
13:4I:8:GLU:O	13:4I:10:PRO:HD3	2.21	0.41
24:3K:56:C:H2'	24:3K:57:G:O4'	2.20	0.41
26:1H:149:A:C6	26:1H:150:C:C4	3.09	0.41
26:1H:162:U:HO2'	26:1H:163:U:P	2.44	0.41
26:1H:216:A:C4	26:1H:217:G:C8	3.09	0.41
26:1H:242:G:O2'	26:1H:254:G:O6	2.33	0.41
26:1H:655:A:H2'	26:1H:656:G:O4'	2.19	0.41
26:1H:1178:C:H3'	26:1H:1178:C:OP2	2.21	0.41
26:1H:1847:A:H8	26:1H:1847:A:OP1	2.03	0.41
26:1H:1869:G:H5"	26:1H:1869:G:H8	1.86	0.41
26:1H:1972:A:H2'	26:1H:1973:G:C8	2.55	0.41
26:1H:2056:G:C2	26:1H:2057:A:C8	3.09	0.41
26:1H:2093:G:H1	26:1H:2196:C:N4	2.18	0.41
26:1H:2309:A:C6	26:1H:2310:A:N7	2.89	0.41
26:1H:2355:C:O2	47:I8:39:ARG:NH2	2.51	0.41
26:1H:2471:C:O2	26:1H:2479:G:N2	2.43	0.41
26:1H:2632:A:C2	26:1H:2633:G:C5	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:16:43:C:C4	27:16:45:A:C6	3.09	0.41
34:58:12:ARG:HG2	34:58:13:TRP:H	1.86	0.41
36:78:71:VAL:HG13	36:78:72:PRO:HD3	2.02	0.41
39:A8:77:ALA:O	39:A8:80:LEU:HD12	2.20	0.41
40:B8:84:GLN:HG2	40:B8:85:LYS:HD3	2.02	0.41
1:1G:187:C:H2'	1:1G:188:U:O4'	2.21	0.41
1:1G:1224:G:C2	1:1G:1322:C:H4'	2.56	0.41
1:1G:1263:C:C2	1:1G:1273:G:N2	2.89	0.41
1:1G:1304:G:N1	1:1G:1332:A:OP2	2.37	0.41
4:32:3:ARG:NH1	4:32:5:ILE:HG23	2.36	0.41
4:32:120:LEU:HA	4:32:120:LEU:HD23	1.76	0.41
4:32:174:LEU:HD23	4:32:174:LEU:HA	1.89	0.41
6:52:79:LEU:HD23	6:52:79:LEU:HA	1.87	0.41
7:62:72:ARG:NE	7:62:138:LYS:HE3	2.36	0.41
7:62:93:PRO:O	7:62:97:GLN:N	2.53	0.41
8:72:39:LEU:HD12	8:72:44:PHE:HB2	2.02	0.41
12:3A:89:ARG:O	12:3A:89:ARG:HG3	2.21	0.41
12:3A:93:LEU:O	12:3A:96:VAL:HG13	2.20	0.41
15:6A:10:LYS:HZ3	15:6A:11:VAL:N	2.18	0.41
26:14:139:G:N2	26:14:1596:A:H4'	2.36	0.41
26:14:270(P):C:H2'	26:14:270(Q):C:C6	2.55	0.41
26:14:459:U:OP2	53:L5:39:ARG:NH1	2.54	0.41
26:14:774:A:H2	26:14:787:U:O2'	2.03	0.41
26:14:813:U:C2	26:14:1195:G:N2	2.89	0.41
26:14:2115:G:C6	26:14:2117:A:C8	3.09	0.41
26:14:2379:G:O2'	39:65:17:ARG:NH1	2.48	0.41
26:14:2853:C:O2'	26:14:2854:G:H5'	2.20	0.41
28:19:25:THR:HG1	28:19:82:ILE:H	1.67	0.41
32:59:103:LEU:HD11	32:59:115:VAL:O	2.21	0.41
33:69:50:ARG:HA	33:69:53:ALA:HB3	2.02	0.41
34:15:47:ALA:HB2	34:15:112:LEU:HD21	2.01	0.41
42:95:43:GLU:HG2	42:95:43:GLU:O	2.20	0.41
43:A5:19:LEU:HB3	52:J5:25:LEU:HD11	2.03	0.41
49:G5:49:LYS:O	49:G5:53:LEU:HB2	2.20	0.41
1:13:38:G:C2	1:13:397:A:C2	3.09	0.41
1:13:108:G:C6	20:BI:15:ARG:HD2	2.56	0.41
1:13:623:C:O5'	1:13:623:C:H6	2.04	0.41
1:13:779:C:H2'	1:13:780:A:O4'	2.21	0.41
1:13:1008:C:N4	1:13:1021:G:O6	2.44	0.41
1:13:1080:A:H5"	1:13:1081:G:OP2	2.21	0.41
1:13:1095:U:H5'	1:13:1109:C:O2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1190:G:H5”	3:2E:176:HIS:NE2	2.36	0.41
1:13:1234:C:H1’	1:13:1364:U:O2	2.20	0.41
1:13:1240:U:P	7:6E:116:ALA:HB2	2.60	0.41
1:13:1301:U:H2’	1:13:1303:C:C5	2.56	0.41
1:13:1316:G:H4’	14:5I:18:VAL:CG1	2.50	0.41
1:13:1408:A:C5	1:13:1409:C:C5	3.09	0.41
1:13:1416:G:C6	1:13:1417:G:C5	3.08	0.41
2:1E:5:ILE:HG22	2:1E:224:GLN:HE22	1.85	0.41
3:2E:167:TRP:CD1	3:2E:168:ALA:N	2.89	0.41
3:2E:201:TYR:C	3:2E:202:ILE:HG12	2.44	0.41
4:3E:120:LEU:HD23	4:3E:120:LEU:HA	1.89	0.41
9:8E:42:ARG:NH1	9:8E:71:SER:OG	2.48	0.41
13:4I:26:GLY:C	13:4I:28:ALA:N	2.77	0.41
14:5I:9:LYS:HA	14:5I:12:ARG:HG2	2.02	0.41
15:6I:27:VAL:HG12	15:6I:31:LEU:HD22	2.02	0.41
17:8I:76:LEU:HD11	17:8I:79:SER:CA	2.51	0.41
19:AI:9:VAL:HG21	51:M8:63:TYR:CD2	2.56	0.41
19:AI:25:LYS:HA	19:AI:25:LYS:HD3	1.75	0.41
19:AI:80:TYR:CD1	19:AI:80:TYR:C	2.99	0.41
20:BI:61:SER:O	20:BI:65:LYS:HB2	2.20	0.41
22:1K:74:C:H1’	26:1H:2555:U:O2	2.21	0.41
24:3K:33:U:H2’	24:3K:34:G:C8	2.56	0.41
24:3K:75:C:H5”	24:3K:76:A:OP1	2.21	0.41
26:1H:15:G:O2’	52:N8:18:ALA:HA	2.21	0.41
26:1H:270(B):A:H2	26:1H:273:G:N3	2.18	0.41
26:1H:562:U:C4	26:1H:2036:C:O4’	2.74	0.41
26:1H:654(B):C:H2’	26:1H:654(C):G:O4’	2.21	0.41
26:1H:656:G:O5’	26:1H:656:G:H8	2.03	0.41
26:1H:686:G:N2	26:1H:788:A:H61	2.19	0.41
26:1H:785:G:C5	26:1H:786:C:C5	3.09	0.41
26:1H:818:G:H4’	26:1H:838:C:O3’	2.20	0.41
26:1H:1020:A:H4’	26:1H:1021:A:O5’	2.21	0.41
26:1H:1108:U:C2’	26:1H:1109:C:H5’	2.51	0.41
26:1H:1262:A:C2	52:N8:10:LYS:HD2	2.55	0.41
26:1H:1283:G:N2	26:1H:1285:G:H3’	2.36	0.41
26:1H:1332:G:H21	26:1H:1610:A:H8	1.68	0.41
26:1H:1534:G:OP1	26:1H:1534:G:O4’	2.39	0.41
26:1H:1593:G:C2	26:1H:1594:G:C5	3.08	0.41
26:1H:1799:G:H5’	26:1H:1819:A:N6	2.35	0.41
26:1H:1820:U:N3	28:11:202:LYS:HD2	2.35	0.41
26:1H:1833:U:C2	26:1H:1834:U:C5	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1927:A:C6	26:1H:1928:A:C6	3.09	0.41
26:1H:2257:U:O2'	26:1H:2258:C:H5'	2.21	0.41
26:1H:2293:C:H5"	39:A8:89:ARG:HH12	1.85	0.41
26:1H:2450:A:C2	26:1H:2451:A:C4	3.08	0.41
26:1H:2475:C:H6	26:1H:2475:C:H5"	1.86	0.41
26:1H:2536:G:C6	26:1H:2537:U:C4	3.09	0.41
26:1H:2638:G:P	29:21:82:ARG:NH2	2.94	0.41
26:1H:2695:C:H2'	26:1H:2696:U:C6	2.55	0.41
26:1H:2707:G:H5"	38:98:68:ARG:HH21	1.86	0.41
26:1H:2717:G:C6	26:1H:2718:G:C5	3.08	0.41
26:1H:2807:G:H5'	26:1H:2808:U:OP2	2.20	0.41
27:16:4:C:H2'	27:16:5:C:O4'	2.21	0.41
29:21:55:ASN:O	29:21:56:PRO:C	2.64	0.41
29:21:67:PHE:HA	29:21:68:ALA:HA	1.76	0.41
31:41:7:LEU:N	31:41:104:GLU:OE1	2.52	0.41
31:41:11:TYR:O	31:41:16:ARG:HG3	2.20	0.41
36:78:24:GLY:O	36:78:25:SER:HB3	2.21	0.41
36:78:31:ALA:O	36:78:32:THR:OG1	2.33	0.41
36:78:52:GLU:HG2	36:78:55:ARG:HH11	1.86	0.41
41:C8:79:PHE:HE1	41:C8:83:LEU:HD21	1.86	0.41
42:D8:21:ARG:HD2	42:D8:93:GLU:OE2	2.21	0.41
43:E8:13:SER:O	43:E8:14:PRO:C	2.63	0.41
44:F8:46:ALA:HB1	49:K8:33:MET:HE1	2.02	0.41
46:H8:77:ASP:OD1	46:H8:80:ARG:HD2	2.20	0.41
46:H8:111:VAL:HG11	46:H8:146:ILE:H	1.84	0.41
47:I8:25:ARG:HD3	47:I8:25:ARG:HA	1.84	0.41
47:I8:50:ASN:HB3	47:I8:63:VAL:HG22	2.03	0.41
1:1G:21:G:H2'	1:1G:22:G:C8	2.56	0.41
1:1G:102:G:O2'	1:1G:151:A:N3	2.51	0.41
1:1G:176:C:OP1	20:BA:29:LYS:NZ	2.49	0.41
1:1G:186(C):G:H2'	1:1G:186(D):C:C6	2.55	0.41
1:1G:254:G:N2	17:8A:16:GLN:OE1	2.49	0.41
1:1G:262:A:C6	1:1G:263:A:C6	3.09	0.41
1:1G:358:U:H2'	1:1G:359:U:H6	1.86	0.41
1:1G:474:G:C4	1:1G:475:G:C8	3.09	0.41
1:1G:562:C:H4'	1:1G:563:A:O5'	2.21	0.41
1:1G:577:G:H2'	1:1G:578:C:H6	1.85	0.41
1:1G:815:A:O4'	1:1G:817:C:N4	2.54	0.41
1:1G:827:U:C4	1:1G:870:U:N3	2.89	0.41
1:1G:953:G:C6	1:1G:954:G:C4	3.09	0.41
1:1G:1124:G:H2'	1:1G:1145:C:C5	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1126:U:H5"	1:1G:1281:U:O2	2.21	0.41
1:1G:1157:A:N7	1:1G:1181:G:N3	2.69	0.41
1:1G:1329:A:H5"	13:4A:25:ILE:O	2.21	0.41
1:1G:1487:G:O5'	1:1G:1487:G:H8	2.04	0.41
1:1G:1519:A:H5"	1:1G:1520:G:C8	2.56	0.41
3:22:18:TRP:NE1	14:5A:55:GLY:H	2.19	0.41
3:22:70:VAL:HG12	3:22:71:ALA:N	2.36	0.41
4:32:39:PRO:HA	4:32:40:PRO:HD3	1.92	0.41
4:32:79:PHE:HE1	4:32:204:ILE:HG12	1.86	0.41
4:32:102:ASP:OD1	4:32:102:ASP:N	2.54	0.41
5:42:10:MET:HE3	5:42:10:MET:HB3	1.89	0.41
8:72:63:LEU:HD13	8:72:63:LEU:HA	1.88	0.41
8:72:97:VAL:HA	8:72:100:ILE:HG13	2.03	0.41
8:72:106:GLY:O	8:72:122:ARG:NH2	2.54	0.41
8:72:109:ILE:HG22	8:72:137:VAL:HB	2.03	0.41
9:82:99:LEU:HD12	9:82:101:PHE:HE1	1.85	0.41
12:3A:90:VAL:CG2	12:3A:99:HIS:HE2	2.33	0.41
17:8A:59:ILE:HG22	17:8A:71:PHE:CD2	2.56	0.41
23:2L:48:U:H1'	23:2L:49:C:OP2	2.20	0.41
26:14:218:A:C2	26:14:235:U:H4'	2.55	0.41
26:14:228:A:H2'	26:14:230:U:O4'	2.20	0.41
26:14:270(E):G:C6	26:14:270(F):U:C4	3.08	0.41
26:14:270(N):G:H2'	26:14:270(O):U:H5'	2.02	0.41
26:14:676:A:H1'	26:14:2443:C:H1'	2.03	0.41
26:14:833:U:O2'	36:35:52:GLU:HG2	2.21	0.41
26:14:1132:A:H2'	26:14:1133:U:C6	2.56	0.41
26:14:1379:A:H1'	26:14:1380:G:OP1	2.20	0.41
26:14:1408:C:C2	26:14:1595:G:N2	2.89	0.41
26:14:1464:C:HO2'	26:14:1528:A:H8	1.68	0.41
26:14:1780:A:H4'	26:14:1780:A:OP1	2.21	0.41
26:14:1952:A:C5	35:25:22:ILE:HD11	2.56	0.41
26:14:2063:C:C4	26:14:2064:C:C5	3.09	0.41
26:14:2064:C:H2'	26:14:2065:C:H6	1.84	0.41
26:14:2191:G:H5'	26:14:2192:G:OP2	2.21	0.41
26:14:2293:C:H5'	39:65:89:ARG:NH2	2.36	0.41
26:14:2349:G:OP1	58:14:3488:HOH:O	2.22	0.41
26:14:2366:A:H2'	26:14:2367:G:O4'	2.21	0.41
26:14:2651:C:H42	26:14:2669:G:H1	1.69	0.41
26:14:2664:G:H8	26:14:2664:G:O5'	2.04	0.41
28:19:78:LYS:HB2	28:19:115:GLN:O	2.21	0.41
29:29:85:ASN:ND2	29:29:85:ASN:O	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:39:155:LEU:HB2	30:39:189:THR:HG21	2.02	0.41
31:49:28:VAL:O	31:49:31:VAL:HB	2.21	0.41
32:59:17:VAL:HG11	32:59:50:VAL:HG12	2.01	0.41
32:59:90:LYS:NZ	32:59:160:LYS:HA	2.36	0.41
35:25:25:LEU:HD23	35:25:25:LEU:HA	1.86	0.41
46:D5:126:VAL:HA	46:D5:164:ALA:H	1.86	0.41
46:D5:161:VAL:HG22	46:D5:161:VAL:H	1.52	0.41
47:E5:36:ILE:HD11	47:E5:39:ARG:HG2	2.02	0.41
1:13:49:U:O2'	1:13:50:A:H3'	2.22	0.41
1:13:107:G:O6	20:BI:15:ARG:HG3	2.21	0.41
1:13:187:C:H1'	1:13:191(A):G:N2	2.35	0.41
1:13:492:G:C6	1:13:493:G:C4	3.09	0.41
1:13:545:C:H2'	1:13:546:G:O4'	2.21	0.41
1:13:577:G:H1'	1:13:816:A:C4	2.56	0.41
1:13:968:A:H5"	58:13:1861:HOH:O	2.21	0.41
1:13:1038:C:H2'	1:13:1039:C:O4'	2.21	0.41
1:13:1121:U:C4	1:13:1122:U:C4	3.09	0.41
1:13:1228:C:H2'	1:13:1229:A:C8	2.54	0.41
1:13:1533:C:H2'	1:13:1533:C:O2	2.21	0.41
3:2E:84:ILE:HG13	3:2E:101:LEU:HD22	2.03	0.41
4:3E:141:ARG:HB2	4:3E:141:ARG:HH11	1.84	0.41
4:3E:150:GLU:HG3	4:3E:153:ARG:HE	1.86	0.41
8:7E:118:VAL:O	8:7E:119:LEU:HD23	2.21	0.41
11:2I:97:ALA:O	11:2I:98:LEU:HD23	2.21	0.41
16:7I:58:TYR:O	16:7I:62:VAL:HG22	2.21	0.41
19:AI:19:VAL:C	19:AI:22:LEU:H	2.28	0.41
20:BI:23:ARG:O	20:BI:27:LYS:HB3	2.21	0.41
21:1F:9:ARG:HE	21:1F:9:ARG:HB2	1.58	0.41
22:1K:11:C:H2'	22:1K:12:U:C6	2.56	0.41
22:1K:72:C:H3'	22:1K:72:C:H6	1.85	0.41
23:2K:40:C:H6	23:2K:40:C:O5'	2.04	0.41
24:3K:55:U:OP1	24:3K:55:U:H4'	2.21	0.41
26:1H:94:G:H2'	26:1H:95:G:O4'	2.20	0.41
26:1H:516:C:OP1	52:N8:13:LYS:NZ	2.43	0.41
26:1H:712:G:C6	26:1H:713:G:C5	3.09	0.41
26:1H:972:G:OP2	26:1H:973:A:O2'	2.33	0.41
26:1H:1543:A:H8	26:1H:1545:A:OP2	2.04	0.41
26:1H:1582:C:O2'	26:1H:1586:A:H8	2.04	0.41
26:1H:1583:A:H5'	26:1H:1585:C:OP1	2.20	0.41
26:1H:1657:C:O2'	26:1H:1658:C:H5'	2.21	0.41
26:1H:1662:C:O2'	26:1H:2687:U:OP1	2.30	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1820:U:O2	28:11:202:LYS:HB3	2.21	0.41
26:1H:2035:G:H5"	26:1H:2036:C:H5	1.85	0.41
26:1H:2251:G:OP2	37:88:82:ARG:NH1	2.53	0.41
26:1H:2254:C:H3'	58:1H:3708:HOH:O	2.20	0.41
26:1H:2298:A:H2'	26:1H:2299:G:O4'	2.21	0.41
26:1H:2308:G:H3'	26:1H:2310:A:OP2	2.21	0.41
26:1H:2320:A:C8	26:1H:2333:A:N6	2.89	0.41
27:16:29:A:H2'	27:16:30:C:C6	2.56	0.41
28:11:231:HIS:ND1	28:11:232:PRO:HD2	2.36	0.41
29:21:182:LEU:HD11	29:21:184:VAL:HG13	2.03	0.41
31:41:67:LYS:HZ2	31:41:67:LYS:N	2.19	0.41
39:A8:74:ALA:O	39:A8:75:GLU:C	2.64	0.41
40:B8:57:PHE:HE1	40:B8:79:HIS:HB2	1.86	0.41
47:I8:45:PHE:CE2	47:I8:69:PHE:HE2	2.39	0.41
48:J8:90:ILE:HD13	48:J8:90:ILE:HG21	1.86	0.41
50:L8:8:LEU:HD13	50:L8:31:LEU:HA	2.03	0.41
1:1G:4:U:C5	8:72:105:ARG:HD3	2.55	0.41
1:1G:19:C:H2'	1:1G:20:U:C6	2.56	0.41
1:1G:413:G:H2'	1:1G:428:G:N2	2.35	0.41
1:1G:511:C:H4'	4:32:43:HIS:CD2	2.56	0.41
1:1G:593:G:H2'	1:1G:594:G:O4'	2.22	0.41
1:1G:784:C:H42	1:1G:798:G:H1	1.68	0.41
1:1G:1264:C:H2'	1:1G:1265:G:C8	2.56	0.41
1:1G:1275:A:C6	1:1G:1276:G:C5	3.09	0.41
5:42:76:ILE:O	5:42:93:PRO:HB3	2.20	0.41
7:62:62:PHE:HD2	7:62:63:LYS:HD2	1.86	0.41
13:4A:96:LEU:HD22	13:4A:97:PRO:HD2	2.02	0.41
16:7A:1:MET:HE3	16:7A:1:MET:HB2	1.71	0.41
26:14:110:G:C2	26:14:111:A:C8	3.09	0.41
26:14:245:G:N3	26:14:246:C:C6	2.89	0.41
26:14:447:A:H4'	26:14:449:A:C8	2.56	0.41
26:14:601:C:O2	26:14:605:C:H4'	2.21	0.41
26:14:827:U:O2	26:14:2246:G:H4'	2.20	0.41
26:14:855:G:C2	26:14:856:C:C2	3.09	0.41
26:14:909:A:N6	26:14:912:C:O2	2.54	0.41
26:14:918:A:O5'	26:14:918:A:H8	2.04	0.41
26:14:962:G:C2	26:14:963:U:C2	3.09	0.41
26:14:1156:A:H8	26:14:1156:A:O5'	2.03	0.41
26:14:1209:G:H21	26:14:1210:A:H62	1.69	0.41
26:14:1280:G:C6	26:14:1281:G:C5	3.09	0.41
26:14:1409:C:H2'	26:14:1410:G:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1463:C:H2'	26:14:1464:C:H6	1.86	0.41
26:14:1489:U:O3'	26:14:1490:A:C8	2.74	0.41
26:14:2579:C:H2'	26:14:2580:U:O4'	2.20	0.41
26:14:2789:C:H2'	26:14:2790:A:C8	2.55	0.41
27:1J:63:G:C2	27:1J:64:C:C2	3.09	0.41
29:29:12:THR:HG21	40:75:11:GLU:OE1	2.21	0.41
29:29:66:HIS:CG	29:29:67:PHE:N	2.86	0.41
31:49:97:ASP:CA	31:49:100:TRP:HD1	2.34	0.41
33:69:78:THR:C	33:69:80:PRO:HD3	2.45	0.41
34:15:64:GLY:O	34:15:66:LYS:N	2.54	0.41
34:15:96:GLU:OE1	34:15:96:GLU:N	2.37	0.41
44:B5:56:THR:HG22	44:B5:79:ALA:HB2	2.02	0.41
46:D5:14:LYS:H	46:D5:14:LYS:CE	2.34	0.41
46:D5:39:VAL:HG21	46:D5:44:PHE:HB2	2.02	0.41
46:D5:54:HIS:N	46:D5:54:HIS:ND1	2.69	0.41
1:13:7:G:O2'	5:4E:120:THR:O	2.39	0.40
1:13:15:G:H4'	5:4E:24:ARG:HH12	1.86	0.40
1:13:687:A:N1	1:13:700:G:O2'	2.50	0.40
1:13:892:A:C2	1:13:893:C:C2	3.08	0.40
1:13:901:A:C5	1:13:902:G:H1'	2.56	0.40
1:13:939:G:C6	1:13:940:C:N4	2.89	0.40
1:13:1320:C:C1'	19:AI:73:GLU:HG2	2.51	0.40
1:13:1508:G:H2'	1:13:1509:C:H6	1.86	0.40
2:1E:97:TRP:CE2	2:1E:173:ALA:HB2	2.56	0.40
7:6E:151:TYR:HA	7:6E:153:HIS:CE1	2.56	0.40
13:4I:110:ARG:HG3	13:4I:110:ARG:O	2.20	0.40
17:8I:3:LYS:O	17:8I:5:VAL:HG23	2.21	0.40
17:8I:48:GLU:H	17:8I:48:GLU:HG3	1.47	0.40
18:9I:40:LEU:O	18:9I:42:ARG:N	2.53	0.40
22:1K:5:A:N6	22:1K:68:U:C2	2.89	0.40
22:1K:50:G:N2	22:1K:65:C:H42	2.19	0.40
24:3K:2:C:HO2'	24:3K:3:U:P	2.41	0.40
26:1H:17:G:H4'	41:C8:25:TRP:NE1	2.36	0.40
26:1H:311:A:C6	26:1H:328:U:C4	3.08	0.40
26:1H:448:U:H1'	30:31:84:VAL:HG11	2.03	0.40
26:1H:524:U:H4'	26:1H:554:U:H4'	2.03	0.40
26:1H:576:U:C2'	26:1H:577:G:H5'	2.51	0.40
26:1H:611:C:H2'	26:1H:612:G:O4'	2.21	0.40
26:1H:1025:G:C4	26:1H:1135:C:H1'	2.55	0.40
26:1H:1050:A:O2'	26:1H:2752:C:H1'	2.21	0.40
26:1H:1166:C:O2	26:1H:1184:G:N2	2.53	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1539:G:C2	26:1H:1540:G:C5	3.09	0.40
26:1H:1753:G:C2	26:1H:1756:G:N2	2.89	0.40
26:1H:1776:G:C5	26:1H:1777:U:C5	3.09	0.40
26:1H:1915:U:H2'	26:1H:1916:A:O4'	2.21	0.40
26:1H:2110:G:O2'	26:1H:2120:G:OP2	2.27	0.40
26:1H:2165:G:N7	26:1H:2166:G:N2	2.69	0.40
26:1H:2294:C:C4	26:1H:2295:C:C5	3.08	0.40
26:1H:2352:A:C4	26:1H:2366:A:C2	3.10	0.40
26:1H:2547:U:H2'	26:1H:2548:G:H8	1.85	0.40
28:11:260:ARG:HG2	28:11:261:LYS:O	2.21	0.40
29:21:26:ILE:HD12	29:21:196:VAL:HG21	2.03	0.40
30:31:155:LEU:HA	30:31:174:VAL:HG13	2.03	0.40
30:31:181:LEU:O	30:31:205:ARG:NH2	2.53	0.40
31:41:82:LEU:HA	31:41:86:MET:CE	2.51	0.40
32:51:14:GLY:O	32:51:29:PRO:HD3	2.20	0.40
32:51:69:ARG:HG3	32:51:70:THR:N	2.35	0.40
40:B8:70:VAL:HG12	40:B8:71:GLY:O	2.21	0.40
41:C8:18:LEU:HD23	41:C8:18:LEU:HA	1.87	0.40
46:H8:140:ASP:O	46:H8:141:VAL:C	2.64	0.40
54:Q8:37:SER:C	54:Q8:39:LYS:N	2.79	0.40
1:1G:73:G:H2'	1:1G:74:C:C6	2.56	0.40
1:1G:431:A:H2'	1:1G:432:A:O4'	2.21	0.40
1:1G:575:G:O2'	1:1G:821:G:H5'	2.21	0.40
1:1G:580:U:H2'	1:1G:581:G:C8	2.56	0.40
1:1G:658:G:O6	1:1G:746:A:N6	2.54	0.40
1:1G:1076:C:C2	1:1G:1082:G:N2	2.89	0.40
7:62:90:GLU:H	7:62:90:GLU:HG2	1.74	0.40
8:72:23:SER:HA	8:72:61:VAL:O	2.21	0.40
11:2A:23:ALA:O	11:2A:86:GLY:HA3	2.20	0.40
12:3A:104:VAL:CG1	12:3A:105:TYR:N	2.84	0.40
12:3A:123:LYS:H	12:3A:123:LYS:HG2	1.61	0.40
20:BA:25:ARG:HG2	20:BA:29:LYS:HE2	2.03	0.40
26:14:150:C:H2'	26:14:151:C:C6	2.56	0.40
26:14:223:A:O2'	26:14:420:C:O2	2.38	0.40
26:14:296:C:H2'	26:14:297:C:C6	2.56	0.40
26:14:323:G:H2'	30:39:169:ASN:HD21	1.86	0.40
26:14:384:U:H2'	26:14:385:C:H6	1.86	0.40
26:14:815:C:O2	26:14:1193:G:C2	2.74	0.40
26:14:977:G:C6	26:14:987:G:C6	3.09	0.40
26:14:1049:C:C4	26:14:2751:G:N7	2.89	0.40
26:14:1488:G:N1	26:14:1489:U:O2	2.54	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1815:A:C5	26:14:1817:G:C6	3.09	0.40
26:14:1971:A:C8	28:19:241:PRO:HB3	2.56	0.40
26:14:1991:U:H2'	26:14:1992:G:H5"	2.03	0.40
33:69:33:ARG:HB2	33:69:35:LEU:HG	2.03	0.40
37:45:28:ALA:C	37:45:29:PHE:HD1	2.29	0.40
39:65:23:ARG:NH2	39:65:84:GLN:OE1	2.53	0.40
39:65:88:ASP:C	39:65:90:GLY:N	2.73	0.40
44:B5:3:THR:O	44:B5:5:TYR:N	2.54	0.40
44:B5:35:THR:HG23	44:B5:38:GLU:H	1.85	0.40
48:F5:51:VAL:N	48:F5:58:ILE:O	2.52	0.40
1:13:68:G:N2	1:13:69:G:H1'	2.36	0.40
1:13:75:C:O2'	1:13:76:G:O5'	2.35	0.40
1:13:312:C:C2	1:13:313:A:C8	3.09	0.40
1:13:320:C:H42	1:13:333:G:H1	1.70	0.40
1:13:458:C:H2'	1:13:464:G:C8	2.57	0.40
1:13:994:A:N3	1:13:994:A:H2'	2.37	0.40
1:13:1286:A:C2	21:1F:18:TYR:OH	2.72	0.40
3:2E:12:LEU:HD23	3:2E:12:LEU:HA	1.85	0.40
3:2E:113:ALA:HB3	3:2E:114:PRO:HD3	2.03	0.40
5:4E:12:LEU:HD23	5:4E:31:LEU:HD12	2.03	0.40
8:7E:87:SER:HB2	8:7E:93:VAL:H	1.85	0.40
9:8E:34:ASN:OD1	9:8E:34:ASN:N	2.51	0.40
12:3I:20:LYS:HG2	12:3I:21:LYS:N	2.35	0.40
12:3I:66:VAL:HG22	12:3I:67:THR:H	1.86	0.40
13:4I:3:ARG:NE	13:4I:9:ILE:HD11	2.36	0.40
13:4I:28:ALA:C	13:4I:30:ALA:H	2.29	0.40
13:4I:34:LEU:HD23	13:4I:34:LEU:HA	1.85	0.40
14:5I:6:LEU:HD13	14:5I:6:LEU:HA	1.87	0.40
22:1K:50:G:H22	22:1K:65:C:N4	2.19	0.40
23:2K:72:C:H2'	23:2K:73:A:O4'	2.21	0.40
26:1H:196:A:N3	26:1H:196:A:H2'	2.35	0.40
26:1H:573:G:H5'	58:1H:3563:HOH:O	2.21	0.40
26:1H:958:U:O2	27:16:89(A):A:H4'	2.21	0.40
26:1H:1318:C:H5	58:1H:4332:HOH:O	2.03	0.40
26:1H:1759:A:H4'	26:1H:2715:C:O4'	2.21	0.40
26:1H:1826:G:O2'	28:11:242:ARG:NH2	2.54	0.40
26:1H:1858:G:H1'	26:1H:1883:G:N2	2.36	0.40
26:1H:1935:G:H1'	26:1H:1964:G:C2	2.56	0.40
26:1H:2216:G:C2	26:1H:2217:G:C4	3.10	0.40
26:1H:2415:G:C6	26:1H:2416:C:C4	3.09	0.40
29:21:52:LEU:HD22	29:21:52:LEU:HA	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:31:197:ASP:C	30:31:199:TRP:H	2.30	0.40
35:68:113:LYS:O	35:68:117:LEU:HD12	2.21	0.40
36:78:37:GLY:HA2	36:78:41:ARG:CD	2.51	0.40
37:88:32:TYR:CE1	37:88:133:ARG:HG3	2.56	0.40
37:88:54:MET:SD	37:88:118:LEU:HD23	2.62	0.40
41:C8:92:ARG:CZ	42:D8:11:GLN:H	2.33	0.40
44:F8:5:TYR:O	49:K8:36:ARG:NH2	2.54	0.40
44:F8:47:PHE:O	44:F8:48:LYS:C	2.64	0.40
46:H8:67:LEU:HA	46:H8:68:PRO:HD3	1.91	0.40
50:L8:6:VAL:HG12	50:L8:56:VAL:HG22	2.03	0.40
53:P8:31:LEU:O	53:P8:32:LYS:C	2.63	0.40
1:1G:51:A:C6	1:1G:353:A:C2	3.09	0.40
1:1G:625:G:H4'	16:7A:16:HIS:CG	2.57	0.40
1:1G:818:G:O2'	1:1G:819:A:H5'	2.22	0.40
1:1G:892:A:O2'	1:1G:1415:G:H4'	2.21	0.40
1:1G:923:A:OP1	5:42:21:ALA:HB2	2.21	0.40
1:1G:1161:C:H2'	1:1G:1162:C:C6	2.56	0.40
1:1G:1184:G:H2'	1:1G:1185:G:H8	1.86	0.40
1:1G:1277:C:O2'	1:1G:1279:A:C8	2.72	0.40
1:1G:1352:C:OP1	21:1B:3:LYS:NZ	2.41	0.40
1:1G:1423:G:H2'	1:1G:1424:C:O4'	2.21	0.40
3:22:36:ASP:OD1	3:22:57:ILE:HG21	2.21	0.40
5:42:71:LEU:HB3	5:42:74:GLY:HA2	2.03	0.40
7:62:116:ALA:O	7:62:120:ILE:HG12	2.21	0.40
12:3A:103:GLY:N	12:3A:107:ALA:O	2.54	0.40
22:1L:29:C:H2'	22:1L:30:C:O4'	2.21	0.40
26:14:141(A):C:H6	26:14:141(A):C:O5'	2.04	0.40
26:14:287:C:H2'	26:14:288:C:C6	2.56	0.40
26:14:315:G:C6	26:14:316:C:C4	3.08	0.40
26:14:768:G:H2'	26:14:769:G:H8	1.85	0.40
26:14:864:G:O2'	26:14:865:C:H5'	2.22	0.40
26:14:916:G:H2'	26:14:917:A:H5"	2.03	0.40
26:14:1139:G:O2'	26:14:1143:A:N1	2.45	0.40
26:14:1262:A:H2	52:J5:10:LYS:HD2	1.87	0.40
26:14:1605:C:C5	26:14:1606:G:C5	3.09	0.40
26:14:1688:U:O2	26:14:1700:A:H5'	2.21	0.40
26:14:2130:U:HO2'	26:14:2158:A:H62	1.62	0.40
26:14:2206:C:C2	26:14:2219:G:C2	3.09	0.40
26:14:2468:G:C6	26:14:2481:G:C2	3.09	0.40
26:14:2474:C:O2	26:14:2474:C:H2'	2.21	0.40
26:14:2674:G:O3'	35:25:30:ALA:HA	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2867:G:N7	40:75:23:ARG:HD2	2.36	0.40
26:14:2889:C:H3'	26:14:2891:G:C8	2.56	0.40
28:19:31:LYS:HZ2	28:19:33:LEU:CB	2.24	0.40
28:19:85:ASP:HB2	28:19:92:ILE:CD1	2.51	0.40
29:29:177:PRO:HG2	29:29:178:GLU:OE2	2.20	0.40
31:49:64:THR:HB	31:49:94:LEU:HD11	2.02	0.40
32:59:122:THR:HG22	32:59:123:PHE:N	2.36	0.40
35:25:13:ASN:C	35:25:15:GLY:N	2.78	0.40
35:25:35:VAL:HG13	35:25:65:THR:HG23	2.04	0.40
36:35:50:ARG:HG3	36:35:50:ARG:NH1	2.33	0.40
36:35:75:ILE:HD13	36:35:75:ILE:N	2.37	0.40
38:55:2:ARG:NH2	38:55:5:LYS:H	2.19	0.40
38:55:101:ALA:HB2	52:J5:44:THR:HB	2.04	0.40
48:F5:91:LYS:NZ	48:F5:95:LEU:HD22	2.36	0.40
1:13:11:G:C6	1:13:12:U:C5	3.10	0.40
1:13:131:C:H2'	1:13:132:C:C6	2.56	0.40
1:13:160:A:H2'	1:13:160:A:N3	2.36	0.40
1:13:267:C:OP1	17:8I:67:LYS:HD2	2.22	0.40
1:13:370:C:C2	1:13:392:G:C2	3.10	0.40
1:13:491:G:H8	1:13:491:G:O5'	2.04	0.40
1:13:585:G:N3	1:13:879:C:H4'	2.36	0.40
1:13:701:C:O2	1:13:703:G:N1	2.55	0.40
4:3E:76:ARG:HD2	4:3E:207:TYR:HE2	1.86	0.40
6:5E:98:LEU:HA	18:9I:29:PHE:O	2.21	0.40
9:8E:10:ARG:HE	9:8E:105:ASP:CB	2.35	0.40
16:7I:4:ILE:HG12	16:7I:64:ALA:HB1	2.02	0.40
17:8I:83:ASP:O	17:8I:86:GLU:HB2	2.21	0.40
23:2K:65:G:C2	23:2K:66:C:C2	3.09	0.40
26:1H:389:G:O5'	26:1H:389:G:H8	2.05	0.40
26:1H:441:U:H2'	26:1H:442:G:C8	2.56	0.40
26:1H:536:A:H2'	26:1H:537:C:C6	2.56	0.40
26:1H:570:G:H2'	26:1H:2030:A:C5	2.57	0.40
26:1H:654(P):G:N7	26:1H:654(Q):C:N4	2.69	0.40
26:1H:682:G:N2	26:1H:796:C:C2	2.89	0.40
26:1H:1021:A:H3'	26:1H:1022:G:H5"	2.02	0.40
26:1H:1341:U:OP1	26:1H:1397:U:N3	2.48	0.40
26:1H:1729:A:H1'	26:1H:1730:U:C5	2.57	0.40
26:1H:2031:A:N3	26:1H:2455:G:O2'	2.44	0.40
26:1H:2106:G:H2'	26:1H:2107:C:H5'	2.03	0.40
26:1H:2636:U:H1'	26:1H:2783:G:N2	2.36	0.40
27:16:18:G:H1	27:16:65:C:H42	1.69	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:11:16:MET:CE	28:11:208:LYS:HD3	2.51	0.40
35:68:66:LYS:HB3	35:68:66:LYS:HE2	1.55	0.40
37:88:21:THR:HA	37:88:98:LYS:HB2	2.03	0.40
39:A8:69:VAL:HG13	39:A8:101:LEU:HD13	2.03	0.40
43:E8:51:LEU:HD23	43:E8:105:VAL:HG11	2.04	0.40
44:F8:57:LEU:HD21	44:F8:78:LYS:CG	2.51	0.40
47:I8:49:LYS:H	47:I8:80:HIS:HB3	1.87	0.40
1:1G:89:U:HO2'	1:1G:90:C:P	2.40	0.40
1:1G:90:C:H3'	1:1G:91:C:H5"	2.04	0.40
1:1G:197:A:H1'	1:1G:198:G:O4'	2.22	0.40
1:1G:376:G:H5"	16:7A:5:ARG:HD2	2.03	0.40
1:1G:384:G:H2'	1:1G:385:C:C6	2.56	0.40
1:1G:949:A:H2'	1:1G:950:U:O4'	2.21	0.40
1:1G:1010:G:C2	1:1G:1020:U:C2	3.09	0.40
1:1G:1217:C:H5"	14:5A:9:LYS:HE2	2.02	0.40
1:1G:1413:A:H2'	1:1G:1414:U:O4'	2.21	0.40
1:1G:1517:G:C6	1:1G:1518:A:C6	3.09	0.40
3:22:40:ARG:HA	3:22:43:LEU:HB3	2.03	0.40
3:22:199:LYS:HB3	3:22:201:TYR:HE1	1.86	0.40
4:32:31:CYS:C	4:32:33:MET:N	2.79	0.40
6:52:46:ARG:HE	6:52:46:ARG:HB3	1.70	0.40
7:62:124:LEU:HA	7:62:124:LEU:HD23	1.74	0.40
13:4A:34:LEU:HD21	13:4A:41:PRO:HA	2.02	0.40
15:6A:21:ASP:OD2	15:6A:24:SER:OG	2.19	0.40
18:9A:22:VAL:HA	18:9A:25:THR:CG2	2.51	0.40
26:14:589:C:H2'	26:14:590:A:C8	2.55	0.40
26:14:609:A:H62	26:14:619:G:H21	1.69	0.40
26:14:843:G:H1	26:14:935:C:H42	1.69	0.40
26:14:864:G:C6	26:14:865:C:N4	2.89	0.40
26:14:1353:A:C8	26:14:1377:G:N2	2.89	0.40
26:14:1387:C:H5'	26:14:1469:A:H4'	2.03	0.40
26:14:1858:G:H1'	26:14:1884:A:N6	2.36	0.40
26:14:2001:A:H2'	26:14:2002:G:C8	2.56	0.40
26:14:2239:G:H5'	28:19:251:GLY:HA3	2.04	0.40
26:14:2646:C:OP2	26:14:2732:G:O2'	2.35	0.40
26:14:2717:G:C6	26:14:2718:G:C5	3.10	0.40
27:1J:33:G:C6	27:1J:34:U:C4	3.10	0.40
27:1J:48:A:H4'	39:65:95:HIS:CD2	2.47	0.40
28:19:177:LEU:HB3	28:19:178:PRO:HD2	2.02	0.40
29:29:54:GLN:HA	29:29:74:PRO:CA	2.44	0.40
30:39:137:LYS:HE2	30:39:137:LYS:HB3	1.72	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:49:33:ARG:CZ	31:49:162:THR:HG21	2.50	0.40
32:59:119:GLU:HB3	32:59:140:LYS:NZ	2.36	0.40
33:69:76:THR:OG1	33:69:140:LEU:HD12	2.21	0.40
36:35:65:ARG:HA	36:35:65:ARG:HD2	1.79	0.40
40:75:45:PHE:CE2	40:75:74:ARG:HB2	2.57	0.40
43:A5:20:VAL:HG23	43:A5:47:VAL:HG21	2.02	0.40
46:D5:70:LEU:HD23	46:D5:70:LEU:HA	1.86	0.40
48:F5:46:LEU:HD12	48:F5:46:LEU:HA	1.70	0.40
1:13:57:G:H2'	1:13:58:C:C6	2.56	0.40
1:13:263:A:OP2	20:BI:79:ARG:NH1	2.55	0.40
1:13:636:U:H2'	1:13:637:G:C8	2.56	0.40
1:13:1115:C:H2'	1:13:1116:C:C6	2.56	0.40
1:13:1212:U:H5"	1:13:1213:A:O5'	2.22	0.40
2:1E:71:VAL:O	2:1E:165:VAL:HG22	2.21	0.40
3:2E:58:GLU:HB2	3:2E:65:ALA:HB3	2.02	0.40
4:3E:12:CYS:SG	4:3E:19:LEU:HB2	2.62	0.40
6:5E:39:LYS:N	6:5E:39:LYS:HD2	2.37	0.40
7:6E:26:PHE:CG	7:6E:62:PHE:HE2	2.38	0.40
9:8E:28:VAL:HG22	9:8E:63:ILE:HB	2.03	0.40
18:9I:74:ARG:NH2	18:9I:81:PHE:HA	2.33	0.40
23:2K:59:A:H4'	23:2K:60:A:OP1	2.21	0.40
23:2K:69:C:H2'	23:2K:70:C:H6	1.86	0.40
26:1H:31:C:O2'	26:1H:32:C:H5'	2.22	0.40
26:1H:271(B):G:H1	26:1H:404:C:H42	1.69	0.40
26:1H:467:G:OP1	53:P8:33:ARG:HD2	2.21	0.40
26:1H:532:A:H4'	26:1H:533:G:C8	2.56	0.40
26:1H:729:G:OP2	28:11:13:ARG:NH1	2.54	0.40
26:1H:1000:A:C6	26:1H:1001:A:C6	3.09	0.40
26:1H:1106:G:H2'	26:1H:1107:G:H8	1.86	0.40
26:1H:1410:G:N2	26:1H:1593:G:H1'	2.36	0.40
26:1H:1705:G:C6	26:1H:1706:U:C4	3.10	0.40
26:1H:1824:G:OP1	28:11:52:ARG:HD3	2.21	0.40
26:1H:2078:C:H2'	26:1H:2079:U:C6	2.57	0.40
26:1H:2244:U:H2'	26:1H:2245:U:O4'	2.22	0.40
29:21:59:VAL:HG22	29:21:60:ASN:N	2.37	0.40
37:88:70:PRO:HA	37:88:94:VAL:O	2.22	0.40
39:A8:3:ARG:HG3	39:A8:4:LEU:N	2.36	0.40
39:A8:102:ALA:C	39:A8:104:GLY:N	2.79	0.40
44:F8:35:THR:OG1	44:F8:36:LYS:N	2.52	0.40
47:I8:36:ILE:HG12	47:I8:37:LEU:N	2.34	0.40
49:K8:64:LEU:CD2	49:K8:68:ARG:HD2	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:123:C:OP1	1:1G:311:C:O2'	2.32	0.40
1:1G:217:C:O2'	1:1G:218:C:H5'	2.22	0.40
1:1G:321:A:C2	1:1G:333:G:C2	3.09	0.40
1:1G:631:G:H5"	8:72:98:LYS:HZ3	1.86	0.40
1:1G:664:G:P	18:9A:64:ARG:HH21	2.45	0.40
1:1G:922:G:N3	1:1G:1398:A:H2	2.20	0.40
1:1G:943:U:H1'	9:82:124:GLN:OE1	2.21	0.40
1:1G:1049:U:H1'	1:1G:1201:A:C8	2.57	0.40
1:1G:1321:C:OP1	1:1G:1322:C:H3'	2.22	0.40
3:22:42:LEU:HA	3:22:45:LYS:HE2	2.02	0.40
3:22:147:LYS:HA	3:22:147:LYS:HD3	1.75	0.40
14:5A:15:LYS:C	14:5A:16:PHE:CG	2.99	0.40
20:BA:71:THR:O	20:BA:72:LEU:HD12	2.22	0.40
26:14:30:G:C2	26:14:511:U:O2	2.73	0.40
26:14:52:A:C5	26:14:118:A:C2	3.09	0.40
26:14:814:C:C2	26:14:1194:A:C2	3.10	0.40
26:14:977:G:N3	26:14:978:G:C8	2.89	0.40
26:14:1204:A:HO2'	26:14:1205:U:P	2.44	0.40
26:14:1505:C:H2'	26:14:1506:C:H6	1.86	0.40
26:14:1817:G:C5	26:14:1818:U:C5	3.09	0.40
26:14:1853:A:H2'	26:14:1854:A:C8	2.56	0.40
26:14:2116:G:OP2	26:14:2167:U:N3	2.54	0.40
26:14:2262:U:H2'	26:14:2263:C:H6	1.86	0.40
26:14:2269:A:P	58:14:3458:HOH:O	2.76	0.40
28:19:228:PRO:HD3	28:19:235:GLY:CA	2.51	0.40
29:29:14:ILE:O	29:29:21:VAL:N	2.49	0.40
30:39:95:ARG:HG3	30:39:97:TYR:CE1	2.56	0.40
32:59:6:ARG:NH2	32:59:62:LYS:HG3	2.36	0.40
32:59:16:SER:N	32:59:27:LYS:O	2.35	0.40
33:69:7:GLU:C	33:69:15:VAL:HG22	2.46	0.40
34:15:41:ASP:O	34:15:42:TRP:C	2.63	0.40
34:15:126:PRO:HB2	34:15:127:ASP:H	1.51	0.40
35:25:71:ARG:HH22	35:25:122:LEU:C	2.28	0.40
36:35:114:ILE:O	36:35:115:LEU:HD23	2.21	0.40
40:75:7:ILE:HG13	40:75:8:LYS:H	1.85	0.40
41:85:21:ALA:HB2	41:85:35:ALA:HB1	2.04	0.40
41:85:68:ALA:HB1	41:85:99:ALA:HB1	2.03	0.40
46:D5:19:ARG:HE	46:D5:19:ARG:HB2	1.27	0.40
48:F5:67:ILE:HD13	48:F5:67:ILE:HA	1.75	0.40
1:13:113:G:O4'	1:13:354:G:H4'	2.21	0.40
1:13:322:C:H41	1:13:328:C:H6	1.67	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:452:A:O2'	1:13:453:A:O4'	2.38	0.40
1:13:625:G:H2'	1:13:626:U:C6	2.56	0.40
1:13:872:A:C4	1:13:874:G:N7	2.90	0.40
1:13:977:A:H2'	1:13:978:A:H5"	2.02	0.40
1:13:1206:G:C6	1:13:1207:G:C5	3.10	0.40
1:13:1468:A:H8	1:13:1468:A:O5'	2.04	0.40
1:13:1499:A:C2	1:13:1500:A:C8	3.10	0.40
6:5E:17:SER:O	6:5E:21:LEU:N	2.42	0.40
6:5E:44:GLY:O	6:5E:60:PHE:N	2.46	0.40
7:6E:137:LYS:O	7:6E:137:LYS:HD3	2.22	0.40
10:1I:57:LYS:O	10:1I:60:ARG:NH2	2.55	0.40
13:4I:59:TYR:O	13:4I:63:THR:OG1	2.33	0.40
16:7I:4:ILE:HB	16:7I:66:PRO:HB3	2.03	0.40
20:BI:82:SER:C	20:BI:86:ARG:HG3	2.46	0.40
22:1K:35:G:H1	25:4K:20:U:H3	1.70	0.40
23:2K:73:A:C6	23:2K:74:A:C6	3.10	0.40
26:1H:176:G:C2'	26:1H:177:G:H5'	2.51	0.40
26:1H:333:G:O5'	26:1H:333:G:C8	2.75	0.40
26:1H:901:A:H5'	26:1H:902:C:OP2	2.21	0.40
26:1H:910:A:N1	26:1H:2277:G:H1'	2.37	0.40
26:1H:918:A:C5	26:1H:919:G:H1'	2.57	0.40
26:1H:1434:A:H2'	26:1H:1435:G:C8	2.57	0.40
26:1H:1637:A:H4'	26:1H:2711:A:O2'	2.21	0.40
26:1H:1650:G:C2	26:1H:2008:C:C2	3.10	0.40
26:1H:1689:A:C6	26:1H:1700:A:C2	3.09	0.40
26:1H:1855:G:H2'	26:1H:1856:G:O4'	2.21	0.40
26:1H:1900:A:O2'	26:1H:1901:A:OP1	2.32	0.40
26:1H:2055:C:H4'	26:1H:2056:G:H5"	2.03	0.40
26:1H:2145:C:H3'	26:1H:2146:C:H5'	2.03	0.40
26:1H:2184:G:C2	26:1H:2185:C:C2	3.10	0.40
26:1H:2469:A:C8	26:1H:2482:G:C4	3.09	0.40
26:1H:2519:U:C6	26:1H:2542:A:N6	2.90	0.40
26:1H:2592:G:C6	26:1H:2593:U:N3	2.90	0.40
27:16:60:C:H2'	27:16:61:G:C8	2.57	0.40
28:11:72:LYS:HG3	28:11:103:ARG:NH2	2.36	0.40
28:11:133:LEU:HA	28:11:133:LEU:HD23	1.82	0.40
29:21:116:VAL:HG13	29:21:122:PHE:CG	2.57	0.40
31:41:37:VAL:HG13	31:41:158:ALA:O	2.22	0.40
47:I8:44:ARG:HH11	47:I8:44:ARG:HD2	1.72	0.40
1:1G:246:A:C4	1:1G:279:A:N6	2.89	0.40
1:1G:262:A:H5'	20:BA:73:HIS:CB	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:279:A:H5'	1:1G:279:A:N3	2.36	0.40
1:1G:438:G:C4'	4:32:123:HIS:HD2	2.28	0.40
1:1G:682:G:N3	1:1G:709:G:C2	2.90	0.40
1:1G:750:G:H1'	15:6A:22:THR:HB	2.04	0.40
1:1G:1012:U:H2'	1:1G:1013:G:C8	2.56	0.40
2:12:72:GLY:C	2:12:74:LYS:H	2.30	0.40
2:12:130:ARG:HB2	2:12:130:ARG:HE	1.54	0.40
2:12:132:LYS:HD2	2:12:132:LYS:HA	1.93	0.40
3:22:57:ILE:HD13	3:22:65:ALA:O	2.22	0.40
3:22:94:LEU:H	3:22:94:LEU:HG	1.80	0.40
5:42:19:MET:HB2	5:42:19:MET:HE2	1.78	0.40
6:52:54:LYS:HA	6:52:54:LYS:HD3	1.42	0.40
7:62:64:GLN:O	7:62:64:GLN:HG3	2.21	0.40
8:72:97:VAL:O	8:72:100:ILE:HG13	2.22	0.40
9:82:9:ARG:HG2	9:82:14:VAL:HG22	2.02	0.40
9:82:20:ARG:O	9:82:20:ARG:HG3	2.20	0.40
11:2A:18:ARG:HH21	11:2A:37:GLY:N	2.20	0.40
15:6A:85:LEU:HD23	15:6A:85:LEU:HA	1.94	0.40
17:8A:10:VAL:HG12	17:8A:55:ASP:O	2.21	0.40
26:14:673:C:H5"	30:39:81:PRO:HD2	2.03	0.40
26:14:1387:C:O2	26:14:1388:G:C8	2.74	0.40
26:14:1654:A:OP1	38:55:1:MET:HA	2.21	0.40
26:14:2158:A:H1'	26:14:2159:G:C8	2.57	0.40
26:14:2313:C:H5"	31:49:91:ARG:HG3	2.03	0.40
26:14:2459:A:C5	26:14:2460:U:C5	3.10	0.40
26:14:2667:C:H6	26:14:2667:C:OP2	2.05	0.40
26:14:2714:G:P	58:14:3425:HOH:O	2.79	0.40
28:19:133:LEU:HA	28:19:133:LEU:HD23	1.72	0.40
30:39:62:ARG:O	30:39:63:LYS:C	2.64	0.40
32:59:59:ARG:HA	32:59:62:LYS:HB3	2.04	0.40
32:59:153:LYS:N	32:59:154:PRO:HD3	2.36	0.40
33:69:2:LYS:HD3	33:69:20:ASP:HB2	2.04	0.40
33:69:88:ILE:HG22	33:69:90:GLY:N	2.34	0.40
33:69:144:VAL:O	33:69:145:VAL:HG12	2.21	0.40
34:15:33:LEU:HD13	34:15:33:LEU:HA	1.88	0.40
34:15:72:TYR:HB2	34:15:85:ILE:HD12	2.03	0.40
34:15:116:LEU:O	34:15:119:ARG:N	2.37	0.40
35:25:2:ILE:HD12	35:25:6:THR:HG21	2.03	0.40
36:35:97:PRO:C	36:35:99:LEU:H	2.30	0.40
37:45:111:GLU:O	37:45:115:MET:HG2	2.22	0.40
39:65:25:ARG:O	39:65:39:ILE:HA	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:95:98:GLU:O	42:95:98:GLU:HG3	2.20	0.40
46:D5:151:HIS:ND1	46:D5:170:THR:HG22	2.36	0.40
48:F5:82:LEU:HB3	48:F5:83:GLU:H	1.56	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	12	203/256 (79%)	156 (77%)	46 (23%)	1 (0%)	24	52
2	1E	227/256 (89%)	184 (81%)	42 (18%)	1 (0%)	30	58
3	22	193/239 (81%)	165 (86%)	27 (14%)	1 (0%)	24	52
3	2E	203/239 (85%)	165 (81%)	36 (18%)	2 (1%)	12	38
4	32	206/209 (99%)	166 (81%)	39 (19%)	1 (0%)	24	52
4	3E	205/209 (98%)	178 (87%)	26 (13%)	1 (0%)	24	52
5	42	148/162 (91%)	137 (93%)	11 (7%)	0	100	100
5	4E	147/162 (91%)	137 (93%)	10 (7%)	0	100	100
6	52	99/101 (98%)	90 (91%)	9 (9%)	0	100	100
6	5E	98/101 (97%)	90 (92%)	8 (8%)	0	100	100
7	62	134/156 (86%)	123 (92%)	11 (8%)	0	100	100
7	6E	152/156 (97%)	135 (89%)	17 (11%)	0	100	100
8	72	135/138 (98%)	122 (90%)	12 (9%)	1 (1%)	18	46
8	7E	136/138 (99%)	120 (88%)	14 (10%)	2 (2%)	8	29
9	82	119/128 (93%)	103 (87%)	14 (12%)	2 (2%)	7	27
9	8E	124/128 (97%)	103 (83%)	21 (17%)	0	100	100
10	1A	97/105 (92%)	81 (84%)	16 (16%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
10	1I	92/105 (88%)	80 (87%)	10 (11%)	2 (2%)	5 23
11	2A	111/129 (86%)	96 (86%)	13 (12%)	2 (2%)	6 26
11	2I	109/129 (84%)	91 (84%)	17 (16%)	1 (1%)	14 41
12	3A	120/132 (91%)	94 (78%)	24 (20%)	2 (2%)	7 27
12	3I	120/132 (91%)	96 (80%)	23 (19%)	1 (1%)	16 44
13	4A	107/126 (85%)	79 (74%)	27 (25%)	1 (1%)	14 41
13	4I	117/126 (93%)	90 (77%)	25 (21%)	2 (2%)	7 27
14	5A	57/61 (93%)	44 (77%)	12 (21%)	1 (2%)	6 26
14	5I	58/61 (95%)	50 (86%)	6 (10%)	2 (3%)	3 16
15	6A	85/89 (96%)	79 (93%)	6 (7%)	0	100 100
15	6I	85/89 (96%)	74 (87%)	11 (13%)	0	100 100
16	7A	82/88 (93%)	73 (89%)	9 (11%)	0	100 100
16	7I	81/88 (92%)	72 (89%)	9 (11%)	0	100 100
17	8A	97/105 (92%)	88 (91%)	9 (9%)	0	100 100
17	8I	98/105 (93%)	81 (83%)	17 (17%)	0	100 100
18	9A	67/88 (76%)	60 (90%)	7 (10%)	0	100 100
18	9I	66/88 (75%)	59 (89%)	7 (11%)	0	100 100
19	AA	59/93 (63%)	46 (78%)	13 (22%)	0	100 100
19	AI	80/93 (86%)	67 (84%)	12 (15%)	1 (1%)	9 32
20	BA	97/106 (92%)	82 (84%)	15 (16%)	0	100 100
20	BI	95/106 (90%)	72 (76%)	21 (22%)	2 (2%)	5 23
21	1B	20/27 (74%)	19 (95%)	0	1 (5%)	1 10
21	1F	21/27 (78%)	18 (86%)	2 (10%)	1 (5%)	2 11
28	11	271/276 (98%)	231 (85%)	35 (13%)	5 (2%)	6 26
28	19	272/276 (99%)	233 (86%)	39 (14%)	0	100 100
29	21	203/206 (98%)	157 (77%)	42 (21%)	4 (2%)	6 24
29	29	202/206 (98%)	145 (72%)	52 (26%)	5 (2%)	4 20
30	31	200/210 (95%)	172 (86%)	25 (12%)	3 (2%)	8 29
30	39	202/210 (96%)	155 (77%)	42 (21%)	5 (2%)	4 20
31	41	177/182 (97%)	152 (86%)	24 (14%)	1 (1%)	21 49
31	49	178/182 (98%)	151 (85%)	24 (14%)	3 (2%)	7 27

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
32	51	172/180 (96%)	132 (77%)	30 (17%)	10 (6%)	1 8
32	59	167/180 (93%)	129 (77%)	38 (23%)	0	100 100
33	61	143/148 (97%)	110 (77%)	30 (21%)	3 (2%)	5 23
33	69	143/148 (97%)	109 (76%)	30 (21%)	4 (3%)	4 19
34	15	135/140 (96%)	115 (85%)	19 (14%)	1 (1%)	18 46
34	58	123/140 (88%)	101 (82%)	20 (16%)	2 (2%)	7 28
35	25	120/122 (98%)	110 (92%)	10 (8%)	0	100 100
35	68	120/122 (98%)	114 (95%)	6 (5%)	0	100 100
36	35	145/150 (97%)	117 (81%)	25 (17%)	3 (2%)	5 23
36	78	146/150 (97%)	104 (71%)	35 (24%)	7 (5%)	2 11
37	45	136/141 (96%)	104 (76%)	29 (21%)	3 (2%)	5 23
37	88	139/141 (99%)	114 (82%)	22 (16%)	3 (2%)	5 23
38	55	116/118 (98%)	100 (86%)	15 (13%)	1 (1%)	14 41
38	98	116/118 (98%)	102 (88%)	14 (12%)	0	100 100
39	65	108/112 (96%)	83 (77%)	24 (22%)	1 (1%)	14 41
39	A8	109/112 (97%)	84 (77%)	24 (22%)	1 (1%)	14 41
40	75	138/146 (94%)	118 (86%)	18 (13%)	2 (1%)	9 30
40	B8	134/146 (92%)	104 (78%)	30 (22%)	0	100 100
41	85	114/118 (97%)	92 (81%)	22 (19%)	0	100 100
41	C8	113/118 (96%)	100 (88%)	11 (10%)	2 (2%)	6 26
42	95	98/101 (97%)	78 (80%)	16 (16%)	4 (4%)	2 14
42	D8	98/101 (97%)	83 (85%)	15 (15%)	0	100 100
43	A5	109/113 (96%)	96 (88%)	13 (12%)	0	100 100
43	E8	108/113 (96%)	97 (90%)	11 (10%)	0	100 100
44	B5	92/96 (96%)	79 (86%)	13 (14%)	0	100 100
44	F8	93/96 (97%)	83 (89%)	10 (11%)	0	100 100
45	C5	48/110 (44%)	36 (75%)	12 (25%)	0	100 100
45	G8	93/110 (84%)	67 (72%)	19 (20%)	7 (8%)	1 5
46	D5	175/206 (85%)	122 (70%)	48 (27%)	5 (3%)	3 18
46	H8	168/206 (82%)	123 (73%)	38 (23%)	7 (4%)	2 13
47	E5	74/85 (87%)	58 (78%)	15 (20%)	1 (1%)	9 30

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
47	I8	75/85 (88%)	63 (84%)	12 (16%)	0	100 100
48	F5	92/98 (94%)	77 (84%)	12 (13%)	3 (3%)	3 17
48	J8	94/98 (96%)	76 (81%)	13 (14%)	5 (5%)	1 9
49	G5	67/72 (93%)	59 (88%)	7 (10%)	1 (2%)	8 29
49	K8	66/72 (92%)	56 (85%)	7 (11%)	3 (4%)	2 12
50	H5	56/60 (93%)	51 (91%)	5 (9%)	0	100 100
50	L8	56/60 (93%)	51 (91%)	5 (9%)	0	100 100
51	M8	56/71 (79%)	36 (64%)	18 (32%)	2 (4%)	2 15
52	J5	54/60 (90%)	46 (85%)	8 (15%)	0	100 100
52	N8	46/60 (77%)	41 (89%)	5 (11%)	0	100 100
53	L5	46/49 (94%)	45 (98%)	1 (2%)	0	100 100
53	P8	45/49 (92%)	39 (87%)	6 (13%)	0	100 100
54	M5	62/65 (95%)	55 (89%)	7 (11%)	0	100 100
54	Q8	62/65 (95%)	45 (73%)	14 (23%)	3 (5%)	2 11
All	All	10925/11875 (92%)	9065 (83%)	1719 (16%)	141 (1%)	9 32

All (141) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
32	51	157	TYR
33	61	134	PRO
34	58	96	GLU
36	78	36	LYS
36	78	37	GLY
45	G8	54	LYS
45	G8	99	CYS
46	H8	53	ILE
46	H8	61	LEU
46	H8	111	VAL
48	J8	54	ALA
48	J8	87	PRO
49	K8	48	HIS
51	M8	40	HIS
9	82	118	LYS
30	39	124	LEU
33	69	77	LEU
36	35	36	LYS

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Mol	Chain	Res	Type
40	75	11	GLU
46	D5	53	ILE
46	D5	60	GLU
48	F5	92	LYS
3	2E	12	LEU
4	3E	156	GLU
11	2I	54	ARG
14	5I	14	PRO
14	5I	17	LYS
19	AI	41	VAL
28	11	238	GLY
28	11	273	ARG
29	21	60	ASN
29	21	72	VAL
36	78	15	ARG
37	88	6	ARG
41	C8	89	GLU
41	C8	93	LYS
45	G8	81	LYS
51	M8	25	TYR
11	2A	101	SER
14	5A	17	LYS
21	1B	3	LYS
33	69	75	LEU
33	69	113	ARG
33	69	144	VAL
37	45	84	GLY
38	55	107	ASP
40	75	10	VAL
42	95	38	LEU
42	95	99	ILE
8	7E	86	ILE
8	7E	87	SER
12	3I	48	PRO
13	4I	13	LYS
20	BI	72	LEU
20	BI	102	GLY
30	31	130	ALA
31	41	117	PHE
32	51	170	ARG
32	51	171	LEU
33	61	12	LEU

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Mol	Chain	Res	Type
37	88	134	ARG
45	G8	5	MET
45	G8	53	PRO
46	H8	6	LYS
48	J8	86	SER
49	K8	43	GLN
54	Q8	35	GLN
2	12	223	ILE
13	4A	84	ILE
29	29	54	GLN
30	39	15	SER
30	39	22	ALA
30	39	28	ILE
30	39	90	PHE
36	35	58	THR
47	E5	33	ALA
3	2E	15	THR
13	4I	27	LYS
21	1F	3	LYS
29	21	130	GLY
32	51	137	ASP
32	51	138	LYS
33	61	133	HIS
46	H8	59	LEU
46	H8	60	GLU
48	J8	88	LYS
49	K8	47	ASN
4	32	149	ALA
9	82	120	ARG
29	29	144	ARG
31	49	5	VAL
31	49	117	PHE
34	15	127	ASP
36	35	53	GLY
39	65	110	LEU
46	D5	112	ARG
48	F5	91	LYS
48	F5	93	GLU
10	1I	99	LYS
28	11	122	ASP
32	51	128	PRO
34	58	22	THR

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Mol	Chain	Res	Type
36	78	7	ARG
36	78	16	ARG
36	78	38	GLN
37	88	5	ARG
39	A8	13	ARG
45	G8	82	PRO
46	H8	64	GLY
48	J8	78	LYS
54	Q8	47	LYS
12	3A	26	ALA
31	49	81	LYS
42	95	62	LEU
2	1E	237	ALA
29	21	82	ARG
30	31	59	TYR
12	3A	48	PRO
37	45	27	VAL
49	G5	47	ASN
32	51	82	GLY
54	Q8	38	GLY
29	29	55	ASN
42	95	50	PRO
46	D5	108	PRO
28	11	114	GLY
28	11	123	ALA
32	51	127	GLU
3	22	14	ILE
11	2A	49	GLY
37	45	90	VAL
46	D5	115	GLY
32	51	168	PRO
36	78	95	VAL
10	1I	98	ILE
8	72	100	ILE
29	29	53	PRO
29	29	61	ARG
30	31	178	PRO
45	G8	77	PRO
32	51	154	PRO

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	12	179/220 (81%)	132 (74%)	47 (26%)	0	1
2	1E	200/220 (91%)	147 (74%)	53 (26%)	0	1
3	22	154/188 (82%)	115 (75%)	39 (25%)	0	1
3	2E	159/188 (85%)	124 (78%)	35 (22%)	1	3
4	32	180/181 (99%)	144 (80%)	36 (20%)	1	4
4	3E	180/181 (99%)	134 (74%)	46 (26%)	0	1
5	42	114/123 (93%)	82 (72%)	32 (28%)	0	1
5	4E	115/123 (94%)	84 (73%)	31 (27%)	0	1
6	52	90/90 (100%)	69 (77%)	21 (23%)	1	2
6	5E	90/90 (100%)	76 (84%)	14 (16%)	2	10
7	62	114/127 (90%)	92 (81%)	22 (19%)	1	5
7	6E	125/127 (98%)	90 (72%)	35 (28%)	0	1
8	72	118/119 (99%)	92 (78%)	26 (22%)	1	3
8	7E	119/119 (100%)	90 (76%)	29 (24%)	1	2
9	82	92/99 (93%)	68 (74%)	24 (26%)	0	1
9	8E	97/99 (98%)	75 (77%)	22 (23%)	1	3
10	1A	89/92 (97%)	67 (75%)	22 (25%)	1	2
10	1I	81/92 (88%)	63 (78%)	18 (22%)	1	3
11	2A	85/99 (86%)	70 (82%)	15 (18%)	2	8
11	2I	84/99 (85%)	67 (80%)	17 (20%)	1	4
12	3A	103/109 (94%)	69 (67%)	34 (33%)	0	0
12	3I	103/109 (94%)	71 (69%)	32 (31%)	0	1
13	4A	90/101 (89%)	61 (68%)	29 (32%)	0	0
13	4I	94/101 (93%)	68 (72%)	26 (28%)	0	1
14	5A	49/50 (98%)	35 (71%)	14 (29%)	0	1
14	5I	49/50 (98%)	39 (80%)	10 (20%)	1	4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
15	6A	79/80 (99%)	69 (87%)	10 (13%)	4 17
15	6I	79/80 (99%)	61 (77%)	18 (23%)	1 3
16	7A	72/74 (97%)	59 (82%)	13 (18%)	2 7
16	7I	72/74 (97%)	54 (75%)	18 (25%)	0 2
17	8A	94/97 (97%)	79 (84%)	15 (16%)	2 10
17	8I	95/97 (98%)	72 (76%)	23 (24%)	1 2
18	9A	58/77 (75%)	44 (76%)	14 (24%)	1 2
18	9I	58/77 (75%)	52 (90%)	6 (10%)	7 25
19	AA	56/80 (70%)	38 (68%)	18 (32%)	0 0
19	AI	72/80 (90%)	48 (67%)	24 (33%)	0 0
20	BA	76/82 (93%)	71 (93%)	5 (7%)	15 42
20	BI	75/82 (92%)	60 (80%)	15 (20%)	1 4
21	1B	17/22 (77%)	15 (88%)	2 (12%)	5 19
21	1F	18/22 (82%)	14 (78%)	4 (22%)	1 3
28	11	214/218 (98%)	160 (75%)	54 (25%)	0 1
28	19	214/218 (98%)	159 (74%)	55 (26%)	0 1
29	21	162/166 (98%)	123 (76%)	39 (24%)	1 2
29	29	165/166 (99%)	128 (78%)	37 (22%)	1 3
30	31	161/166 (97%)	114 (71%)	47 (29%)	0 1
30	39	163/166 (98%)	116 (71%)	47 (29%)	0 1
31	41	153/156 (98%)	116 (76%)	37 (24%)	1 2
31	49	152/156 (97%)	111 (73%)	41 (27%)	0 1
32	51	143/148 (97%)	109 (76%)	34 (24%)	1 2
32	59	140/148 (95%)	88 (63%)	52 (37%)	0 0
33	61	122/124 (98%)	82 (67%)	40 (33%)	0 0
33	69	122/124 (98%)	86 (70%)	36 (30%)	0 1
34	15	116/119 (98%)	85 (73%)	31 (27%)	0 1
34	58	105/119 (88%)	76 (72%)	29 (28%)	0 1
35	25	100/100 (100%)	80 (80%)	20 (20%)	1 4
35	68	100/100 (100%)	80 (80%)	20 (20%)	1 4
36	35	114/116 (98%)	73 (64%)	41 (36%)	0 0

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
36	78	114/116 (98%)	78 (68%)	36 (32%)	0	1
37	45	109/111 (98%)	85 (78%)	24 (22%)	1	3
37	88	110/111 (99%)	89 (81%)	21 (19%)	1	6
38	55	101/101 (100%)	71 (70%)	30 (30%)	0	1
38	98	101/101 (100%)	78 (77%)	23 (23%)	1	3
39	65	87/88 (99%)	60 (69%)	27 (31%)	0	1
39	A8	87/88 (99%)	62 (71%)	25 (29%)	0	1
40	75	122/127 (96%)	90 (74%)	32 (26%)	0	1
40	B8	118/127 (93%)	86 (73%)	32 (27%)	0	1
41	85	93/94 (99%)	75 (81%)	18 (19%)	1	5
41	C8	92/94 (98%)	80 (87%)	12 (13%)	4	16
42	95	81/82 (99%)	63 (78%)	18 (22%)	1	3
42	D8	82/82 (100%)	52 (63%)	30 (37%)	0	0
43	A5	91/92 (99%)	67 (74%)	24 (26%)	0	1
43	E8	90/92 (98%)	68 (76%)	22 (24%)	1	2
44	B5	74/78 (95%)	58 (78%)	16 (22%)	1	3
44	F8	77/78 (99%)	57 (74%)	20 (26%)	0	1
45	C5	43/91 (47%)	32 (74%)	11 (26%)	0	1
45	G8	79/91 (87%)	58 (73%)	21 (27%)	0	1
46	D5	156/179 (87%)	114 (73%)	42 (27%)	0	1
46	H8	151/179 (84%)	113 (75%)	38 (25%)	0	1
47	E5	61/67 (91%)	46 (75%)	15 (25%)	1	2
47	I8	62/67 (92%)	53 (86%)	9 (14%)	3	13
48	F5	79/83 (95%)	53 (67%)	26 (33%)	0	0
48	J8	79/83 (95%)	58 (73%)	21 (27%)	0	1
49	G5	63/67 (94%)	40 (64%)	23 (36%)	0	0
49	K8	64/67 (96%)	40 (62%)	24 (38%)	0	0
50	H5	50/52 (96%)	35 (70%)	15 (30%)	0	1
50	L8	50/52 (96%)	34 (68%)	16 (32%)	0	1
51	M8	52/63 (82%)	38 (73%)	14 (27%)	0	1
52	J5	48/52 (92%)	37 (77%)	11 (23%)	1	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
52	N8	43/52 (83%)	36 (84%)	7 (16%)	2 10
53	L5	38/42 (90%)	32 (84%)	6 (16%)	2 10
53	P8	38/42 (90%)	32 (84%)	6 (16%)	2 10
54	M5	54/55 (98%)	45 (83%)	9 (17%)	2 9
54	Q8	54/55 (98%)	44 (82%)	10 (18%)	1 7
All	All	9213/9831 (94%)	6905 (75%)	2308 (25%)	0 2

All (2308) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	1E	5	ILE
2	1E	8	LYS
2	1E	12	GLU
2	1E	21	ARG
2	1E	28	PHE
2	1E	32	ILE
2	1E	35	GLU
2	1E	37	ASN
2	1E	47	THR
2	1E	48	MET
2	1E	67	THR
2	1E	68	ILE
2	1E	69	LEU
2	1E	71	VAL
2	1E	74	LYS
2	1E	83	MET
2	1E	86	GLU
2	1E	95	GLN
2	1E	96	ARG
2	1E	107	THR
2	1E	108	ILE
2	1E	109	SER
2	1E	118	LEU
2	1E	124	SER
2	1E	126	GLU
2	1E	127	ILE
2	1E	129	GLU
2	1E	130	ARG
2	1E	139	LYS
2	1E	142	LEU

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Mol	Chain	Res	Type
2	1E	143	GLU
2	1E	144	ARG
2	1E	155	LEU
2	1E	160	ASP
2	1E	164	VAL
2	1E	169	LYS
2	1E	172	ILE
2	1E	178	ARG
2	1E	185	ILE
2	1E	190	THR
2	1E	195	ASP
2	1E	197	VAL
2	1E	205	ASP
2	1E	211	ILE
2	1E	213	LEU
2	1E	214	ILE
2	1E	215	LEU
2	1E	217	ARG
2	1E	222	ILE
2	1E	224	GLN
2	1E	230	VAL
2	1E	233	SER
2	1E	239	VAL
3	2E	5	ILE
3	2E	16	ARG
3	2E	17	ASP
3	2E	19	GLU
3	2E	31	HIS
3	2E	32	LEU
3	2E	36	ASP
3	2E	38	ARG
3	2E	44	GLU
3	2E	46	GLU
3	2E	47	LEU
3	2E	64	VAL
3	2E	72	LYS
3	2E	79	ARG
3	2E	86	VAL
3	2E	88	ARG
3	2E	95	THR
3	2E	98	ASN
3	2E	103	VAL

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Mol	Chain	Res	Type
3	2E	104	GLN
3	2E	107	GLN
3	2E	111	LEU
3	2E	119	ARG
3	2E	128	PHE
3	2E	132	ARG
3	2E	136	GLN
3	2E	138	VAL
3	2E	150	LYS
3	2E	154	SER
3	2E	165	THR
3	2E	167	TRP
3	2E	184	TYR
3	2E	190	ARG
3	2E	198	VAL
3	2E	206	GLU
4	3E	10	ARG
4	3E	12	CYS
4	3E	15	GLU
4	3E	17	VAL
4	3E	18	LYS
4	3E	30	LYS
4	3E	31	CYS
4	3E	35	ARG
4	3E	42	GLN
4	3E	46	LYS
4	3E	47	ARG
4	3E	58	LEU
4	3E	61	LYS
4	3E	64	LEU
4	3E	66	ARG
4	3E	73	ARG
4	3E	84	LYS
4	3E	85	LYS
4	3E	86	LYS
4	3E	89	THR
4	3E	92	VAL
4	3E	96	LEU
4	3E	99	SER
4	3E	106	TYR
4	3E	107	ARG
4	3E	108	LEU

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Mol	Chain	Res	Type
4	3E	122	ARG
4	3E	127	THR
4	3E	134	ASP
4	3E	135	LEU
4	3E	141	ARG
4	3E	148	VAL
4	3E	154	ASN
4	3E	155	LEU
4	3E	158	ILE
4	3E	160	GLN
4	3E	170	VAL
4	3E	175	SER
4	3E	179	GLU
4	3E	184	LYS
4	3E	188	LEU
4	3E	190	ASP
4	3E	193	ASP
4	3E	194	LEU
4	3E	200	GLU
4	3E	208	SER
5	4E	5	ASP
5	4E	10	MET
5	4E	12	LEU
5	4E	13	ILE
5	4E	16	THR
5	4E	19	MET
5	4E	20	GLN
5	4E	31	LEU
5	4E	41	VAL
5	4E	47	LYS
5	4E	51	VAL
5	4E	57	LYS
5	4E	63	ARG
5	4E	64	ARG
5	4E	69	VAL
5	4E	71	LEU
5	4E	72	GLN
5	4E	79	GLU
5	4E	87	SER
5	4E	91	LEU
5	4E	92	LYS
5	4E	112	LEU

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Mol	Chain	Res	Type
5	4E	117	ASP
5	4E	131	ILE
5	4E	133	TYR
5	4E	139	LEU
5	4E	144	THR
5	4E	147	ASP
5	4E	148	VAL
5	4E	152	ARG
5	4E	153	LYS
6	5E	25	ILE
6	5E	30	LEU
6	5E	31	GLU
6	5E	43	LEU
6	5E	55	ASP
6	5E	65	VAL
6	5E	70	ASP
6	5E	75	LEU
6	5E	78	GLU
6	5E	80	ARG
6	5E	89	MET
6	5E	92	LYS
6	5E	94	GLN
6	5E	100	ASN
7	6E	3	ARG
7	6E	4	ARG
7	6E	8	GLU
7	6E	9	VAL
7	6E	12	LEU
7	6E	16	LEU
7	6E	17	VAL
7	6E	23	VAL
7	6E	24	THR
7	6E	27	ILE
7	6E	30	ILE
7	6E	31	MET
7	6E	37	ASN
7	6E	38	LEU
7	6E	45	ASP
7	6E	49	ILE
7	6E	50	ILE
7	6E	56	GLN
7	6E	57	GLU

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Mol	Chain	Res	Type
7	6E	59	LEU
7	6E	64	GLN
7	6E	73	MET
7	6E	75	VAL
7	6E	76	ARG
7	6E	84	ASN
7	6E	90	GLU
7	6E	96	GLN
7	6E	98	SER
7	6E	119	ARG
7	6E	120	ILE
7	6E	124	LEU
7	6E	126	ASP
7	6E	136	LYS
7	6E	139	GLU
7	6E	155	ARG
8	7E	1	MET
8	7E	3	THR
8	7E	10	LEU
8	7E	19	VAL
8	7E	21	LYS
8	7E	26	VAL
8	7E	36	LEU
8	7E	38	ILE
8	7E	45	ILE
8	7E	49	GLU
8	7E	50	ARG
8	7E	51	VAL
8	7E	53	VAL
8	7E	68	ARG
8	7E	77	GLU
8	7E	79	VAL
8	7E	80	ILE
8	7E	82	HIS
8	7E	83	ILE
8	7E	84	ARG
8	7E	85	ARG
8	7E	88	LYS
8	7E	94	TYR
8	7E	102	ARG
8	7E	107	LEU
8	7E	109	ILE

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Mol	Chain	Res	Type
8	7E	112	LEU
8	7E	122	ARG
8	7E	129	VAL
9	8E	3	GLN
9	8E	5	TYR
9	8E	9	ARG
9	8E	17	VAL
9	8E	20	ARG
9	8E	23	ASN
9	8E	35	GLU
9	8E	38	GLN
9	8E	40	LEU
9	8E	41	VAL
9	8E	42	ARG
9	8E	44	VAL
9	8E	47	LEU
9	8E	54	ASP
9	8E	78	LYS
9	8E	79	LEU
9	8E	81	ILE
9	8E	86	VAL
9	8E	97	LYS
9	8E	99	LEU
9	8E	108	VAL
9	8E	118	LYS
10	1I	23	ILE
10	1I	24	VAL
10	1I	25	GLU
10	1I	34	VAL
10	1I	38	ILE
10	1I	49	VAL
10	1I	55	LYS
10	1I	60	ARG
10	1I	66	ARG
10	1I	68	HIS
10	1I	70	ARG
10	1I	72	VAL
10	1I	75	ILE
10	1I	76	ASN
10	1I	82	ILE
10	1I	88	LEU
10	1I	95	GLU

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Mol	Chain	Res	Type
10	1I	96	ILE
11	2I	32	ILE
11	2I	40	ILE
11	2I	63	LEU
11	2I	71	LYS
11	2I	75	TYR
11	2I	77	MET
11	2I	81	ASP
11	2I	83	ILE
11	2I	84	VAL
11	2I	99	GLN
11	2I	104	GLN
11	2I	105	VAL
11	2I	106	LYS
11	2I	108	ILE
11	2I	109	VAL
11	2I	110	ASP
11	2I	116	HIS
12	3I	6	THR
12	3I	7	ILE
12	3I	10	LEU
12	3I	11	VAL
12	3I	17	LYS
12	3I	18	VAL
12	3I	22	SER
12	3I	23	LYS
12	3I	33	ARG
12	3I	38	THR
12	3I	41	ARG
12	3I	44	THR
12	3I	47	LYS
12	3I	54	LYS
12	3I	55	VAL
12	3I	60	LEU
12	3I	62	SER
12	3I	64	TYR
12	3I	65	GLU
12	3I	67	THR
12	3I	79	GLU
12	3I	81	SER
12	3I	82	VAL
12	3I	96	VAL

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Mol	Chain	Res	Type
12	3I	101	VAL
12	3I	104	VAL
12	3I	111	LYS
12	3I	115	LYS
12	3I	116	SER
12	3I	123	LYS
12	3I	124	LYS
12	3I	126	LYS
13	4I	3	ARG
13	4I	7	VAL
13	4I	9	ILE
13	4I	14	ARG
13	4I	16	ASP
13	4I	17	VAL
13	4I	19	LEU
13	4I	20	THR
13	4I	31	LYS
13	4I	32	GLU
13	4I	43	THR
13	4I	45	VAL
13	4I	50	GLU
13	4I	54	VAL
13	4I	55	ARG
13	4I	60	VAL
13	4I	64	TRP
13	4I	70	LEU
13	4I	81	LEU
13	4I	94	ARG
13	4I	96	LEU
13	4I	101	GLN
13	4I	105	THR
13	4I	106	ASN
13	4I	108	ARG
13	4I	115	LYS
14	5I	4	LYS
14	5I	6	LEU
14	5I	13	THR
14	5I	22	THR
14	5I	23	ARG
14	5I	32	SER
14	5I	33	VAL
14	5I	44	LEU

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Mol	Chain	Res	Type
14	5I	49	HIS
14	5I	57	ARG
15	6I	6	GLU
15	6I	7	GLU
15	6I	8	LYS
15	6I	17	ARG
15	6I	26	GLU
15	6I	28	GLN
15	6I	31	LEU
15	6I	34	LEU
15	6I	39	LEU
15	6I	47	LYS
15	6I	48	LYS
15	6I	59	MET
15	6I	66	LEU
15	6I	67	LEU
15	6I	71	GLN
15	6I	76	GLU
15	6I	79	ARG
15	6I	88	ARG
16	7I	4	ILE
16	7I	8	ARG
16	7I	11	SER
16	7I	19	ILE
16	7I	20	VAL
16	7I	21	VAL
16	7I	27	LYS
16	7I	28	ARG
16	7I	33	ILE
16	7I	36	ILE
16	7I	45	THR
16	7I	50	LYS
16	7I	54	GLU
16	7I	65	GLN
16	7I	67	THR
16	7I	72	ARG
16	7I	82	GLN
16	7I	83	GLU
17	8I	6	LEU
17	8I	7	THR
17	8I	13	ASP
17	8I	14	LYS

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Mol	Chain	Res	Type
17	8I	21	VAL
17	8I	24	GLU
17	8I	25	ARG
17	8I	35	VAL
17	8I	38	ARG
17	8I	43	LEU
17	8I	48	GLU
17	8I	52	LYS
17	8I	57	VAL
17	8I	59	ILE
17	8I	60	ILE
17	8I	74	LEU
17	8I	86	GLU
17	8I	89	LEU
17	8I	92	ARG
17	8I	93	GLN
17	8I	97	SER
17	8I	100	LYS
17	8I	101	ARG
18	9I	22	VAL
18	9I	26	LEU
18	9I	31	LEU
18	9I	36	ASN
18	9I	69	THR
18	9I	86	VAL
19	AI	5	LEU
19	AI	12	ASP
19	AI	19	VAL
19	AI	21	GLU
19	AI	23	ASN
19	AI	25	LYS
19	AI	29	ARG
19	AI	30	LEU
19	AI	37	ARG
19	AI	40	ILE
19	AI	41	VAL
19	AI	44	MET
19	AI	45	VAL
19	AI	58	VAL
19	AI	62	ILE
19	AI	64	GLU
19	AI	65	ASN

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Mol	Chain	Res	Type
19	AI	67	VAL
19	AI	71	LEU
19	AI	77	THR
19	AI	78	ARG
19	AI	79	THR
19	AI	81	ARG
19	AI	83	HIS
20	BI	13	LEU
20	BI	14	LYS
20	BI	15	ARG
20	BI	17	ARG
20	BI	26	ASN
20	BI	36	LEU
20	BI	42	GLN
20	BI	56	MET
20	BI	62	LEU
20	BI	71	THR
20	BI	72	LEU
20	BI	75	ASN
20	BI	81	LYS
20	BI	87	LYS
20	BI	99	LEU
21	1F	9	ARG
21	1F	10	ARG
21	1F	12	LYS
21	1F	15	ARG
28	11	13	ARG
28	11	16	MET
28	11	17	THR
28	11	28	GLU
28	11	30	GLU
28	11	32	SER
28	11	33	LEU
28	11	38	LYS
28	11	43	ARG
28	11	61	LEU
28	11	64	ILE
28	11	65	ILE
28	11	68	LYS
28	11	72	LYS
28	11	73	VAL
28	11	82	ILE

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Mol	Chain	Res	Type
28	11	83	GLU
28	11	89	SER
28	11	94	LEU
28	11	101	GLU
28	11	103	ARG
28	11	105	ILE
28	11	106	ILE
28	11	113	VAL
28	11	116	GLN
28	11	122	ASP
28	11	126	GLN
28	11	138	VAL
28	11	140	THR
28	11	141	VAL
28	11	150	LYS
28	11	154	LYS
28	11	165	ILE
28	11	169	GLU
28	11	171	ASP
28	11	173	VAL
28	11	175	LEU
28	11	182	LEU
28	11	183	ARG
28	11	192	THR
28	11	193	VAL
28	11	200	ASP
28	11	212	SER
28	11	217	ARG
28	11	218	ARG
28	11	221	VAL
28	11	226	MET
28	11	229	VAL
28	11	242	ARG
28	11	253	GLN
28	11	257	LEU
28	11	259	THR
28	11	271	ILE
28	11	273	ARG
29	21	12	THR
29	21	14	ILE
29	21	16	ARG
29	21	21	VAL

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Mol	Chain	Res	Type
29	21	26	ILE
29	21	33	VAL
29	21	34	VAL
29	21	40	GLU
29	21	45	THR
29	21	47	VAL
29	21	52	LEU
29	21	54	GLN
29	21	59	VAL
29	21	63	LEU
29	21	67	PHE
29	21	75	VAL
29	21	76	ARG
29	21	77	ILE
29	21	78	LEU
29	21	82	ARG
29	21	91	VAL
29	21	105	THR
29	21	111	ARG
29	21	116	VAL
29	21	118	LYS
29	21	119	ARG
29	21	128	SER
29	21	138	PRO
29	21	146	THR
29	21	159	HIS
29	21	165	VAL
29	21	166	THR
29	21	167	VAL
29	21	173	VAL
29	21	175	VAL
29	21	182	LEU
29	21	188	VAL
29	21	196	VAL
29	21	197	ILE
30	31	11	VAL
30	31	12	LEU
30	31	13	SER
30	31	17	ARG
30	31	24	LEU
30	31	28	ILE
30	31	32	LEU

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Mol	Chain	Res	Type
30	31	33	LEU
30	31	43	LYS
30	31	50	SER
30	31	51	THR
30	31	53	THR
30	31	57	VAL
30	31	64	ILE
30	31	68	LYS
30	31	74	ARG
30	31	78	ILE
30	31	88	VAL
30	31	89	VAL
30	31	106	ARG
30	31	107	LYS
30	31	116	ASP
30	31	117	ARG
30	31	127	GLU
30	31	132	VAL
30	31	135	LYS
30	31	136	THR
30	31	137	LYS
30	31	140	LEU
30	31	145	GLU
30	31	152	GLU
30	31	153	SER
30	31	156	LEU
30	31	158	THR
30	31	161	GLU
30	31	162	LEU
30	31	168	ARG
30	31	170	LEU
30	31	174	VAL
30	31	179	GLU
30	31	181	LEU
30	31	183	VAL
30	31	188	ARG
30	31	194	MET
30	31	197	ASP
30	31	201	VAL
30	31	205	ARG
31	41	19	LEU
31	41	22	ARG

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Mol	Chain	Res	Type
31	41	26	GLN
31	41	28	VAL
31	41	34	LEU
31	41	39	ILE
31	41	43	LEU
31	41	45	GLU
31	41	53	LEU
31	41	58	GLN
31	41	62	LEU
31	41	63	ILE
31	41	67	LYS
31	41	70	VAL
31	41	74	LYS
31	41	76	SER
31	41	80	PHE
31	41	81	LYS
31	41	82	LEU
31	41	88	ILE
31	41	90	LEU
31	41	94	LEU
31	41	101	ILE
31	41	103	LEU
31	41	106	LEU
31	41	121	ASN
31	41	133	LEU
31	41	139	LEU
31	41	145	THR
31	41	149	VAL
31	41	152	LEU
31	41	161	THR
31	41	162	THR
31	41	165	THR
31	41	167	GLU
31	41	168	GLU
31	41	173	LEU
32	51	3	ARG
32	51	16	SER
32	51	23	ARG
32	51	24	VAL
32	51	26	VAL
32	51	37	VAL
32	51	40	GLU

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Mol	Chain	Res	Type
32	51	41	MET
32	51	43	VAL
32	51	45	VAL
32	51	50	VAL
32	51	57	ASP
32	51	58	GLU
32	51	68	THR
32	51	71	LEU
32	51	72	ILE
32	51	80	SER
32	51	84	SER
32	51	86	GLU
32	51	87	LEU
32	51	88	LEU
32	51	98	LEU
32	51	99	VAL
32	51	105	LEU
32	51	121	ILE
32	51	122	THR
32	51	129	THR
32	51	131	VAL
32	51	140	LYS
32	51	152	ARG
32	51	153	LYS
32	51	155	SER
32	51	160	LYS
32	51	167	GLU
33	61	2	LYS
33	61	4	ILE
33	61	9	LEU
33	61	10	GLU
33	61	12	LEU
33	61	18	VAL
33	61	20	ASP
33	61	31	LEU
33	61	37	VAL
33	61	38	LEU
33	61	40	THR
33	61	41	GLU
33	61	42	SER
33	61	44	LEU
33	61	48	GLU

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Mol	Chain	Res	Type
33	61	50	ARG
33	61	64	GLU
33	61	68	LEU
33	61	72	LEU
33	61	78	THR
33	61	81	VAL
33	61	85	GLU
33	61	92	VAL
33	61	93	THR
33	61	95	LYS
33	61	101	LEU
33	61	110	ASP
33	61	112	LYS
33	61	116	LEU
33	61	117	GLU
33	61	122	GLU
33	61	129	THR
33	61	131	LYS
33	61	133	HIS
33	61	135	GLU
33	61	136	VAL
33	61	138	ILE
33	61	139	GLN
33	61	140	LEU
33	61	141	LYS
34	58	2	LYS
34	58	5	VAL
34	58	7	LYS
34	58	9	VAL
34	58	15	LEU
34	58	28	THR
34	58	29	LYS
34	58	32	THR
34	58	33	LEU
34	58	34	LEU
34	58	46	VAL
34	58	48	MET
34	58	53	VAL
34	58	55	VAL
34	58	58	ASP
34	58	60	ILE
34	58	65	LYS

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Mol	Chain	Res	Type
34	58	67	LEU
34	58	68	GLU
34	58	73	THR
34	58	83	LYS
34	58	84	LYS
34	58	85	ILE
34	58	87	LEU
34	58	90	MET
34	58	97	ARG
34	58	98	VAL
34	58	99	LEU
34	58	121	LYS
35	68	3	GLN
35	68	17	ARG
35	68	23	ARG
35	68	24	VAL
35	68	38	VAL
35	68	47	ILE
35	68	53	LYS
35	68	58	VAL
35	68	62	VAL
35	68	66	LYS
35	68	69	ILE
35	68	70	LYS
35	68	82	ASN
35	68	94	ARG
35	68	98	VAL
35	68	102	VAL
35	68	109	LYS
35	68	112	MET
35	68	113	LYS
35	68	115	VAL
36	78	6	LEU
36	78	10	PRO
36	78	14	LYS
36	78	15	ARG
36	78	19	VAL
36	78	21	ARG
36	78	27	HIS
36	78	30	THR
36	78	40	SER
36	78	41	ARG

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Mol	Chain	Res	Type
36	78	45	LEU
36	78	46	LYS
36	78	56	SER
36	78	57	THR
36	78	61	ARG
36	78	75	ILE
36	78	76	LYS
36	78	85	LEU
36	78	90	ARG
36	78	96	THR
36	78	98	GLU
36	78	100	LEU
36	78	102	ARG
36	78	105	LEU
36	78	106	LEU
36	78	107	LYS
36	78	111	ARG
36	78	112	LEU
36	78	117	GLU
36	78	119	GLU
36	78	126	VAL
36	78	135	LEU
36	78	137	LYS
36	78	138	LEU
36	78	144	GLU
36	78	146	VAL
37	88	2	LEU
37	88	3	MET
37	88	5	ARG
37	88	25	ASP
37	88	26	TYR
37	88	27	VAL
37	88	55	VAL
37	88	56	ARG
37	88	59	ARG
37	88	72	LYS
37	88	81	VAL
37	88	83	MET
37	88	105	GLU
37	88	106	VAL
37	88	109	VAL
37	88	110	THR

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Mol	Chain	Res	Type
37	88	112	GLU
37	88	120	ILE
37	88	127	ILE
37	88	138	ASP
37	88	141	GLN
38	98	2	ARG
38	98	6	SER
38	98	9	LYS
38	98	10	LEU
38	98	18	LEU
38	98	27	SER
38	98	28	LEU
38	98	29	LEU
38	98	30	THR
38	98	34	ILE
38	98	35	THR
38	98	44	LEU
38	98	45	ARG
38	98	59	ASP
38	98	63	ARG
38	98	65	LEU
38	98	67	LEU
38	98	73	VAL
38	98	79	LEU
38	98	95	THR
38	98	105	ARG
38	98	111	LEU
38	98	118	GLU
39	A8	4	LEU
39	A8	14	VAL
39	A8	17	ARG
39	A8	21	THR
39	A8	24	LEU
39	A8	35	ILE
39	A8	36	TYR
39	A8	41	ASP
39	A8	43	GLU
39	A8	46	VAL
39	A8	52	SER
39	A8	54	LEU
39	A8	58	LEU
39	A8	61	ASN

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Mol	Chain	Res	Type
39	A8	62	LYS
39	A8	64	GLU
39	A8	69	VAL
39	A8	73	LEU
39	A8	80	LEU
39	A8	83	LYS
39	A8	89	ARG
39	A8	97	ARG
39	A8	98	VAL
39	A8	107	GLU
39	A8	110	LEU
40	B8	1	MET
40	B8	6	LEU
40	B8	7	ILE
40	B8	8	LYS
40	B8	10	VAL
40	B8	17	THR
40	B8	27	THR
40	B8	30	VAL
40	B8	38	ASN
40	B8	41	ARG
40	B8	49	VAL
40	B8	50	ILE
40	B8	58	ASN
40	B8	62	THR
40	B8	74	ARG
40	B8	76	PHE
40	B8	78	LEU
40	B8	85	LYS
40	B8	88	ILE
40	B8	89	VAL
40	B8	98	LYS
40	B8	99	LEU
40	B8	102	ILE
40	B8	105	LEU
40	B8	106	SER
40	B8	108	ARG
40	B8	110	ILE
40	B8	115	ARG
40	B8	118	ARG
40	B8	128	GLU
40	B8	129	ARG

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Mol	Chain	Res	Type
40	B8	132	LYS
41	C8	5	LYS
41	C8	9	VAL
41	C8	15	LYS
41	C8	27	LEU
41	C8	30	LYS
41	C8	55	ARG
41	C8	57	PHE
41	C8	64	ARG
41	C8	74	LEU
41	C8	79	PHE
41	C8	100	VAL
41	C8	108	GLU
42	D8	5	VAL
42	D8	6	LYS
42	D8	7	THR
42	D8	14	VAL
42	D8	18	LEU
42	D8	19	LYS
42	D8	20	LEU
42	D8	21	ARG
42	D8	22	VAL
42	D8	25	LEU
42	D8	33	VAL
42	D8	35	LEU
42	D8	36	PRO
42	D8	37	VAL
42	D8	38	LEU
42	D8	39	LEU
42	D8	40	LEU
42	D8	44	LYS
42	D8	45	THR
42	D8	46	VAL
42	D8	49	THR
42	D8	51	VAL
42	D8	52	VAL
42	D8	57	VAL
42	D8	58	VAL
42	D8	73	SER
42	D8	78	LYS
42	D8	79	VAL
42	D8	88	ARG

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Mol	Chain	Res	Type
42	D8	89	GLN
43	E8	11	ARG
43	E8	12	ILE
43	E8	13	SER
43	E8	24	ILE
43	E8	28	SER
43	E8	39	THR
43	E8	51	LEU
43	E8	52	GLU
43	E8	60	ASN
43	E8	64	MET
43	E8	65	LEU
43	E8	70	TYR
43	E8	76	VAL
43	E8	78	GLU
43	E8	82	LEU
43	E8	86	LEU
43	E8	92	ARG
43	E8	95	ILE
43	E8	96	ILE
43	E8	99	ARG
43	E8	103	ILE
43	E8	107	LEU
44	F8	1	MET
44	F8	8	ILE
44	F8	12	VAL
44	F8	23	GLU
44	F8	27	THR
44	F8	30	VAL
44	F8	35	THR
44	F8	43	VAL
44	F8	49	VAL
44	F8	52	VAL
44	F8	53	LYS
44	F8	54	VAL
44	F8	60	ARG
44	F8	65	ARG
44	F8	66	LEU
44	F8	72	LYS
44	F8	76	ARG
44	F8	80	ILE
44	F8	83	VAL

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Mol	Chain	Res	Type
44	F8	87	GLN
45	G8	3	VAL
45	G8	4	LYS
45	G8	5	MET
45	G8	19	LYS
45	G8	21	LYS
45	G8	27	VAL
45	G8	31	LEU
45	G8	33	LYS
45	G8	50	ARG
45	G8	54	LYS
45	G8	55	TYR
45	G8	57	GLN
45	G8	64	GLU
45	G8	67	LEU
45	G8	75	ILE
45	G8	82	PRO
45	G8	85	VAL
45	G8	94	LYS
45	G8	97	ARG
45	G8	99	CYS
45	G8	101	LYS
46	H8	1	MET
46	H8	2	GLU
46	H8	5	LEU
46	H8	6	LYS
46	H8	11	GLU
46	H8	19	ARG
46	H8	24	LEU
46	H8	28	MET
46	H8	35	ARG
46	H8	37	VAL
46	H8	41	LEU
46	H8	42	VAL
46	H8	53	ILE
46	H8	58	VAL
46	H8	59	LEU
46	H8	71	VAL
46	H8	75	ASN
46	H8	76	LEU
46	H8	77	ASP
46	H8	86	VAL

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Mol	Chain	Res	Type
46	H8	87	ASP
46	H8	91	LEU
46	H8	94	GLU
46	H8	96	VAL
46	H8	102	LEU
46	H8	105	VAL
46	H8	117	LEU
46	H8	121	HIS
46	H8	126	VAL
46	H8	128	VAL
46	H8	131	ARG
46	H8	132	ASN
46	H8	154	ASP
46	H8	157	LEU
46	H8	162	GLU
46	H8	163	LEU
46	H8	166	SER
46	H8	169	GLU
47	I8	31	VAL
47	I8	36	ILE
47	I8	41	ARG
47	I8	53	MET
47	I8	66	VAL
47	I8	67	VAL
47	I8	70	GLN
47	I8	80	HIS
47	I8	82	ARG
48	J8	3	LYS
48	J8	4	VAL
48	J8	14	VAL
48	J8	18	ILE
48	J8	21	ARG
48	J8	25	LYS
48	J8	30	VAL
48	J8	40	ARG
48	J8	41	ARG
48	J8	46	LEU
48	J8	56	GLN
48	J8	57	GLU
48	J8	58	ILE
48	J8	59	THR
48	J8	61	ARG

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Mol	Chain	Res	Type
48	J8	62	VAL
48	J8	82	LEU
48	J8	83	GLU
48	J8	85	LEU
48	J8	94	LEU
48	J8	95	LEU
49	K8	2	LYS
49	K8	3	LEU
49	K8	4	SER
49	K8	5	GLU
49	K8	8	LYS
49	K8	10	LEU
49	K8	15	LYS
49	K8	19	VAL
49	K8	23	LYS
49	K8	35	LEU
49	K8	41	ILE
49	K8	43	GLN
49	K8	46	GLN
49	K8	47	ASN
49	K8	48	HIS
49	K8	50	ILE
49	K8	53	LEU
49	K8	55	ARG
49	K8	56	GLN
49	K8	59	ARG
49	K8	62	THR
49	K8	64	LEU
49	K8	67	LYS
49	K8	69	ARG
50	L8	3	ARG
50	L8	4	LEU
50	L8	6	VAL
50	L8	8	LEU
50	L8	17	LYS
50	L8	20	LYS
50	L8	31	LEU
50	L8	33	GLN
50	L8	36	VAL
50	L8	37	LEU
50	L8	40	THR
50	L8	53	LEU

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Mol	Chain	Res	Type
50	L8	56	VAL
50	L8	57	GLU
50	L8	58	VAL
50	L8	59	VAL
51	M8	5	ILE
51	M8	9	LEU
51	M8	15	ILE
51	M8	23	GLU
51	M8	31	ILE
51	M8	34	GLU
51	M8	36	CYS
51	M8	40	HIS
51	M8	44	THR
51	M8	47	GLN
51	M8	60	GLN
51	M8	61	ARG
51	M8	63	TYR
51	M8	65	ASP
52	N8	3	LYS
52	N8	6	VAL
52	N8	11	THR
52	N8	29	THR
52	N8	37	LYS
52	N8	40	LYS
52	N8	46	CYS
53	P8	1	MET
53	P8	4	THR
53	P8	23	ARG
53	P8	24	THR
53	P8	42	LEU
53	P8	43	THR
54	Q8	11	LYS
54	Q8	14	VAL
54	Q8	21	LYS
54	Q8	31	HIS
54	Q8	35	GLN
54	Q8	47	LYS
54	Q8	49	VAL
54	Q8	50	LEU
54	Q8	60	LEU
54	Q8	62	LEU
2	12	16	HIS

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Mol	Chain	Res	Type
2	12	21	ARG
2	12	23	ARG
2	12	24	TRP
2	12	30	ARG
2	12	32	ILE
2	12	35	GLU
2	12	39	ILE
2	12	40	HIS
2	12	44	LEU
2	12	48	MET
2	12	49	GLU
2	12	53	ARG
2	12	58	ILE
2	12	59	GLU
2	12	83	MET
2	12	84	GLU
2	12	94	ASN
2	12	95	GLN
2	12	107	THR
2	12	108	ILE
2	12	111	ARG
2	12	118	LEU
2	12	121	LEU
2	12	122	PHE
2	12	124	SER
2	12	126	GLU
2	12	127	ILE
2	12	129	GLU
2	12	130	ARG
2	12	145	LEU
2	12	154	LEU
2	12	164	VAL
2	12	165	VAL
2	12	168	THR
2	12	172	ILE
2	12	179	LYS
2	12	187	LEU
2	12	191	ASP
2	12	193	ASP
2	12	201	ILE
2	12	204	ASN
2	12	205	ASP

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Mol	Chain	Res	Type
2	12	220	ASP
2	12	221	LEU
2	12	222	ILE
2	12	224	GLN
3	22	4	LYS
3	22	8	ILE
3	22	21	ARG
3	22	26	LYS
3	22	27	LYS
3	22	33	LEU
3	22	34	LEU
3	22	46	GLU
3	22	47	LEU
3	22	55	VAL
3	22	59	ARG
3	22	69	HIS
3	22	75	VAL
3	22	85	ARG
3	22	88	ARG
3	22	90	GLU
3	22	93	LYS
3	22	94	LEU
3	22	95	THR
3	22	101	LEU
3	22	104	GLN
3	22	106	VAL
3	22	107	GLN
3	22	115	LEU
3	22	118	GLN
3	22	124	ILE
3	22	147	LYS
3	22	153	VAL
3	22	154	SER
3	22	165	THR
3	22	167	TRP
3	22	178	LEU
3	22	181	ASN
3	22	188	LEU
3	22	195	VAL
3	22	196	LEU
3	22	198	VAL
3	22	202	ILE

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Mol	Chain	Res	Type
3	22	204	LEU
4	32	3	ARG
4	32	5	ILE
4	32	8	VAL
4	32	11	LEU
4	32	21	LEU
4	32	24	GLU
4	32	26	CYS
4	32	30	LYS
4	32	35	ARG
4	32	45	GLN
4	32	46	LYS
4	32	58	LEU
4	32	59	ARG
4	32	67	ILE
4	32	76	ARG
4	32	83	SER
4	32	84	LYS
4	32	85	LYS
4	32	94	LEU
4	32	96	LEU
4	32	104	VAL
4	32	119	GLN
4	32	135	LEU
4	32	150	GLU
4	32	158	ILE
4	32	162	LEU
4	32	165	MET
4	32	186	LEU
4	32	187	ARG
4	32	191	ARG
4	32	194	LEU
4	32	196	LEU
4	32	198	VAL
4	32	200	GLU
4	32	201	GLN
4	32	204	ILE
5	42	8	GLU
5	42	9	LYS
5	42	12	LEU
5	42	13	ILE
5	42	14	ARG

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Mol	Chain	Res	Type
5	42	16	THR
5	42	24	ARG
5	42	31	LEU
5	42	40	ARG
5	42	41	VAL
5	42	43	LEU
5	42	47	LYS
5	42	50	GLU
5	42	63	ARG
5	42	64	ARG
5	42	66	MET
5	42	73	ASN
5	42	75	THR
5	42	78	HIS
5	42	79	GLU
5	42	81	GLU
5	42	87	SER
5	42	90	VAL
5	42	101	ILE
5	42	110	LEU
5	42	118	ILE
5	42	119	LEU
5	42	127	ASN
5	42	131	ILE
5	42	150	ARG
5	42	151	LEU
5	42	152	ARG
6	52	3	ARG
6	52	10	LEU
6	52	13	ASN
6	52	14	LEU
6	52	19	LEU
6	52	21	LEU
6	52	24	GLU
6	52	25	ILE
6	52	27	GLN
6	52	28	ARG
6	52	40	VAL
6	52	46	ARG
6	52	54	LYS
6	52	65	VAL
6	52	69	GLU

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Mol	Chain	Res	Type
6	52	71	ARG
6	52	72	VAL
6	52	75	LEU
6	52	77	ARG
6	52	83	ASP
6	52	95	GLU
7	62	8	GLU
7	62	9	VAL
7	62	16	LEU
7	62	27	ILE
7	62	37	ASN
7	62	38	LEU
7	62	54	THR
7	62	57	GLU
7	62	69	VAL
7	62	73	MET
7	62	75	VAL
7	62	89	MET
7	62	94	ARG
7	62	104	LEU
7	62	106	GLN
7	62	114	ARG
7	62	115	ARG
7	62	118	VAL
7	62	137	LYS
7	62	142	GLU
7	62	143	ARG
7	62	146	GLU
8	72	8	ASP
8	72	12	ARG
8	72	17	THR
8	72	25	ASP
8	72	36	LEU
8	72	37	ARG
8	72	39	LEU
8	72	46	LYS
8	72	51	VAL
8	72	73	ASP
8	72	77	GLU
8	72	79	VAL
8	72	82	HIS
8	72	83	ILE

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Mol	Chain	Res	Type
8	72	84	ARG
8	72	91	ARG
8	72	99	GLU
8	72	102	ARG
8	72	109	ILE
8	72	119	LEU
8	72	120	THR
8	72	121	ASP
8	72	125	ARG
8	72	126	LYS
8	72	127	LEU
8	72	133	LEU
9	82	7	THR
9	82	10	ARG
9	82	12	GLU
9	82	19	LEU
9	82	27	THR
9	82	28	VAL
9	82	29	ASN
9	82	31	GLN
9	82	40	LEU
9	82	42	ARG
9	82	53	VAL
9	82	56	LEU
9	82	64	THR
9	82	65	VAL
9	82	66	ARG
9	82	79	LEU
9	82	95	LYS
9	82	96	LEU
9	82	99	LEU
9	82	102	LEU
9	82	110	GLU
9	82	113	LYS
9	82	117	HIS
9	82	124	GLN
10	1A	4	ILE
10	1A	5	ARG
10	1A	7	LYS
10	1A	8	LEU
10	1A	12	ASP
10	1A	13	HIS

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Mol	Chain	Res	Type
10	1A	35	SER
10	1A	38	ILE
10	1A	40	LEU
10	1A	46	ARG
10	1A	48	THR
10	1A	58	ASP
10	1A	59	SER
10	1A	62	HIS
10	1A	70	ARG
10	1A	79	ARG
10	1A	80	LYS
10	1A	90	LEU
10	1A	92	THR
10	1A	98	ILE
10	1A	100	THR
10	1A	101	VAL
11	2A	29	ILE
11	2A	40	ILE
11	2A	43	SER
11	2A	44	SER
11	2A	55	LYS
11	2A	63	LEU
11	2A	71	LYS
11	2A	78	GLN
11	2A	79	SER
11	2A	91	ARG
11	2A	99	GLN
11	2A	105	VAL
11	2A	107	SER
11	2A	114	VAL
11	2A	119	CYS
12	3A	6	THR
12	3A	7	ILE
12	3A	10	LEU
12	3A	20	LYS
12	3A	22	SER
12	3A	24	VAL
12	3A	33	ARG
12	3A	34	ARG
12	3A	37	CYS
12	3A	43	VAL
12	3A	44	THR

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Mol	Chain	Res	Type
12	3A	47	LYS
12	3A	52	LEU
12	3A	54	LYS
12	3A	57	LYS
12	3A	58	VAL
12	3A	60	LEU
12	3A	62	SER
12	3A	64	TYR
12	3A	67	THR
12	3A	78	GLN
12	3A	79	GLU
12	3A	81	SER
12	3A	83	VAL
12	3A	96	VAL
12	3A	97	ARG
12	3A	98	TYR
12	3A	102	ARG
12	3A	111	LYS
12	3A	116	SER
12	3A	118	SER
12	3A	119	LYS
12	3A	122	THR
12	3A	126	LYS
13	4A	12	ASN
13	4A	16	ASP
13	4A	17	VAL
13	4A	20	THR
13	4A	22	ILE
13	4A	35	GLU
13	4A	36	LYS
13	4A	39	ILE
13	4A	40	ASN
13	4A	46	LYS
13	4A	47	ASP
13	4A	49	THR
13	4A	50	GLU
13	4A	54	VAL
13	4A	58	GLU
13	4A	64	TRP
13	4A	71	ARG
13	4A	81	LEU
13	4A	82	MET

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Mol	Chain	Res	Type
13	4A	83	ASP
13	4A	86	CYS
13	4A	88	ARG
13	4A	98	VAL
13	4A	101	GLN
13	4A	102	ARG
13	4A	103	THR
13	4A	106	ASN
13	4A	109	THR
13	4A	117	VAL
14	5A	6	LEU
14	5A	7	ILE
14	5A	12	ARG
14	5A	16	PHE
14	5A	17	LYS
14	5A	18	VAL
14	5A	22	THR
14	5A	26	ARG
14	5A	29	ARG
14	5A	33	VAL
14	5A	41	ARG
14	5A	43	CYS
14	5A	44	LEU
14	5A	46	GLU
15	6A	3	ILE
15	6A	10	LYS
15	6A	12	ILE
15	6A	22	THR
15	6A	58	MET
15	6A	62	GLN
15	6A	64	ARG
15	6A	70	LEU
15	6A	77	ARG
15	6A	84	LYS
16	7A	2	VAL
16	7A	4	ILE
16	7A	6	LEU
16	7A	19	ILE
16	7A	21	VAL
16	7A	27	LYS
16	7A	29	ASP
16	7A	49	LEU

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Mol	Chain	Res	Type
16	7A	53	VAL
16	7A	55	ARG
16	7A	65	GLN
16	7A	67	THR
16	7A	79	VAL
17	8A	24	GLU
17	8A	35	VAL
17	8A	49	GLU
17	8A	53	LEU
17	8A	55	ASP
17	8A	57	VAL
17	8A	60	ILE
17	8A	63	ARG
17	8A	68	ARG
17	8A	73	VAL
17	8A	74	LEU
17	8A	75	ARG
17	8A	85	VAL
17	8A	87	LYS
17	8A	91	ARG
18	9A	22	VAL
18	9A	25	THR
18	9A	26	LEU
18	9A	29	PHE
18	9A	31	LEU
18	9A	32	ARG
18	9A	35	ARG
18	9A	37	VAL
18	9A	38	GLU
18	9A	47	THR
18	9A	50	ILE
18	9A	53	ARG
18	9A	82	THR
18	9A	84	LYS
19	AA	5	LEU
19	AA	14	HIS
19	AA	15	LEU
19	AA	17	GLU
19	AA	19	VAL
19	AA	20	LEU
19	AA	21	GLU
19	AA	22	LEU

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Mol	Chain	Res	Type
19	AA	23	ASN
19	AA	33	THR
19	AA	37	ARG
19	AA	60	VAL
19	AA	66	MET
19	AA	67	VAL
19	AA	69	HIS
19	AA	70	LYS
19	AA	71	LEU
19	AA	77	THR
20	BA	20	LEU
20	BA	84	LEU
20	BA	87	LYS
20	BA	88	VAL
20	BA	90	GLN
21	1B	10	ARG
21	1B	15	ARG
28	19	23	GLU
28	19	27	THR
28	19	28	GLU
28	19	33	LEU
28	19	35	LYS
28	19	37	LEU
28	19	39	LYS
28	19	40	THR
28	19	43	ARG
28	19	46	GLN
28	19	49	ILE
28	19	58	HIS
28	19	61	LEU
28	19	64	ILE
28	19	78	LYS
28	19	82	ILE
28	19	88	ARG
28	19	89	SER
28	19	94	LEU
28	19	95	LEU
28	19	99	ASP
28	19	105	ILE
28	19	111	LEU
28	19	113	VAL
28	19	131	LEU

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Mol	Chain	Res	Type
28	19	138	VAL
28	19	147	LEU
28	19	151	LYS
28	19	155	LEU
28	19	162	SER
28	19	168	ARG
28	19	169	GLU
28	19	174	ILE
28	19	175	LEU
28	19	182	LEU
28	19	192	THR
28	19	193	VAL
28	19	200	ASP
28	19	203	ASN
28	19	206	LEU
28	19	208	LYS
28	19	211	ARG
28	19	217	ARG
28	19	222	ARG
28	19	232	PRO
28	19	233	HIS
28	19	244	ARG
28	19	254	THR
28	19	255	LYS
28	19	257	LEU
28	19	259	THR
28	19	266	SER
28	19	270	ILE
28	19	271	ILE
28	19	273	ARG
29	29	1	MET
29	29	4	ILE
29	29	7	VAL
29	29	24	THR
29	29	25	VAL
29	29	27	LEU
29	29	36	ARG
29	29	38	THR
29	29	47	VAL
29	29	49	LEU
29	29	58	ARG
29	29	63	LEU

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Mol	Chain	Res	Type
29	29	66	HIS
29	29	72	VAL
29	29	73	GLU
29	29	77	ILE
29	29	78	LEU
29	29	79	ARG
29	29	82	ARG
29	29	107	THR
29	29	118	LYS
29	29	119	ARG
29	29	134	ILE
29	29	140	SER
29	29	141	ILE
29	29	144	ARG
29	29	149	ARG
29	29	154	LYS
29	29	165	VAL
29	29	167	VAL
29	29	170	LEU
29	29	175	VAL
29	29	181	LEU
29	29	182	LEU
29	29	188	VAL
29	29	196	VAL
29	29	202	LYS
30	39	7	TYR
30	39	8	GLN
30	39	9	ILE
30	39	12	LEU
30	39	15	SER
30	39	20	LEU
30	39	27	GLU
30	39	28	ILE
30	39	32	LEU
30	39	33	LEU
30	39	38	ARG
30	39	57	VAL
30	39	63	LYS
30	39	67	GLN
30	39	70	THR
30	39	75	HIS
30	39	78	ILE

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Mol	Chain	Res	Type
30	39	82	ILE
30	39	88	VAL
30	39	106	ARG
30	39	108	LYS
30	39	110	LEU
30	39	114	VAL
30	39	123	LEU
30	39	124	LEU
30	39	126	VAL
30	39	129	PHE
30	39	137	LYS
30	39	140	LEU
30	39	144	LYS
30	39	145	GLU
30	39	153	SER
30	39	155	LEU
30	39	158	THR
30	39	161	GLU
30	39	165	ARG
30	39	169	ASN
30	39	175	THR
30	39	181	LEU
30	39	187	VAL
30	39	192	LEU
30	39	193	VAL
30	39	194	MET
30	39	196	LEU
30	39	201	VAL
30	39	203	GLN
30	39	205	ARG
31	49	14	GLU
31	49	19	LEU
31	49	26	GLN
31	49	28	VAL
31	49	33	ARG
31	49	35	GLU
31	49	40	ASN
31	49	48	GLU
31	49	51	ARG
31	49	52	ILE
31	49	53	LEU
31	49	59	GLU

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Mol	Chain	Res	Type
31	49	60	LEU
31	49	62	LEU
31	49	63	ILE
31	49	75	LYS
31	49	77	ILE
31	49	80	PHE
31	49	82	LEU
31	49	86	MET
31	49	96	ARG
31	49	101	ILE
31	49	109	VAL
31	49	113	ARG
31	49	116	ASP
31	49	120	LEU
31	49	124	SER
31	49	133	LEU
31	49	136	ARG
31	49	138	GLN
31	49	140	ILE
31	49	143	GLU
31	49	144	ILE
31	49	146	TYR
31	49	153	ARG
31	49	157	ILE
31	49	159	VAL
31	49	160	VAL
31	49	164	GLU
31	49	165	THR
31	49	166	ASP
32	59	4	ILE
32	59	6	ARG
32	59	7	LEU
32	59	19	VAL
32	59	24	VAL
32	59	32	GLU
32	59	33	LEU
32	59	37	VAL
32	59	40	GLU
32	59	44	VAL
32	59	45	VAL
32	59	46	GLU
32	59	49	VAL

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Mol	Chain	Res	Type
32	59	50	VAL
32	59	51	ARG
32	59	52	VAL
32	59	57	ASP
32	59	62	LYS
32	59	72	ILE
32	59	74	ASN
32	59	76	VAL
32	59	81	GLU
32	59	83	TYR
32	59	85	LYS
32	59	94	TYR
32	59	98	LEU
32	59	99	VAL
32	59	103	LEU
32	59	104	GLU
32	59	105	LEU
32	59	106	THR
32	59	107	VAL
32	59	109	PHE
32	59	111	HIS
32	59	116	GLU
32	59	119	GLU
32	59	121	ILE
32	59	125	VAL
32	59	127	GLU
32	59	129	THR
32	59	130	ARG
32	59	131	VAL
32	59	132	ARG
32	59	138	LYS
32	59	139	GLN
32	59	143	GLN
32	59	149	ARG
32	59	157	TYR
32	59	158	HIS
32	59	160	LYS
32	59	162	ILE
32	59	171	LEU
33	69	1	MET
33	69	4	ILE
33	69	6	LEU

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Mol	Chain	Res	Type
33	69	9	LEU
33	69	15	VAL
33	69	27	ARG
33	69	31	LEU
33	69	38	LEU
33	69	40	THR
33	69	51	ILE
33	69	56	LYS
33	69	61	ARG
33	69	64	GLU
33	69	76	THR
33	69	77	LEU
33	69	81	VAL
33	69	85	GLU
33	69	86	THR
33	69	93	THR
33	69	101	LEU
33	69	102	SER
33	69	105	HIS
33	69	109	ILE
33	69	112	LYS
33	69	114	LEU
33	69	117	GLU
33	69	123	LEU
33	69	127	VAL
33	69	128	LEU
33	69	131	LYS
33	69	136	VAL
33	69	138	ILE
33	69	140	LEU
33	69	141	LYS
33	69	142	VAL
33	69	145	VAL
34	15	9	VAL
34	15	10	GLU
34	15	12	ARG
34	15	15	LEU
34	15	23	LEU
34	15	26	LEU
34	15	28	THR
34	15	32	THR
34	15	33	LEU

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Mol	Chain	Res	Type
34	15	34	LEU
34	15	48	MET
34	15	59	LYS
34	15	60	ILE
34	15	61	ARG
34	15	63	THR
34	15	67	LEU
34	15	68	GLU
34	15	85	ILE
34	15	87	LEU
34	15	89	LYS
34	15	91	LEU
34	15	93	THR
34	15	94	HIS
34	15	99	LEU
34	15	120	LEU
34	15	127	ASP
34	15	130	HIS
34	15	131	GLN
34	15	133	GLN
34	15	137	LYS
34	15	138	LEU
35	25	5	GLN
35	25	8	LEU
35	25	10	VAL
35	25	22	ILE
35	25	24	VAL
35	25	32	TYR
35	25	34	THR
35	25	38	VAL
35	25	52	VAL
35	25	58	VAL
35	25	63	VAL
35	25	68	GLU
35	25	70	LYS
35	25	86	ILE
35	25	87	ILE
35	25	92	GLU
35	25	97	ARG
35	25	113	LYS
35	25	114	ILE
35	25	117	LEU

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Mol	Chain	Res	Type
36	35	4	SER
36	35	6	LEU
36	35	7	ARG
36	35	13	ASN
36	35	15	ARG
36	35	19	VAL
36	35	21	ARG
36	35	25	SER
36	35	29	LYS
36	35	30	THR
36	35	41	ARG
36	35	45	LEU
36	35	56	SER
36	35	57	THR
36	35	58	THR
36	35	62	LEU
36	35	65	ARG
36	35	67	MET
36	35	74	GLU
36	35	75	ILE
36	35	84	ASN
36	35	85	LEU
36	35	91	PHE
36	35	95	VAL
36	35	96	THR
36	35	98	GLU
36	35	100	LEU
36	35	102	ARG
36	35	110	TYR
36	35	111	ARG
36	35	112	LEU
36	35	114	ILE
36	35	125	VAL
36	35	126	VAL
36	35	132	LYS
36	35	135	LEU
36	35	138	LEU
36	35	139	LYS
36	35	144	GLU
36	35	146	VAL
36	35	147	LEU
37	45	2	LEU

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Mol	Chain	Res	Type
37	45	6	ARG
37	45	7	MET
37	45	10	ARG
37	45	16	ARG
37	45	18	LYS
37	45	21	THR
37	45	26	TYR
37	45	32	TYR
37	45	38	GLU
37	45	45	GLN
37	45	55	VAL
37	45	64	ILE
37	45	66	ILE
37	45	82	ARG
37	45	90	VAL
37	45	91	GLU
37	45	103	MET
37	45	109	VAL
37	45	110	THR
37	45	127	ILE
37	45	132	VAL
37	45	133	ARG
37	45	137	TYR
38	55	2	ARG
38	55	6	SER
38	55	18	LEU
38	55	27	SER
38	55	28	LEU
38	55	29	LEU
38	55	30	THR
38	55	33	ARG
38	55	34	ILE
38	55	35	THR
38	55	42	LYS
38	55	44	LEU
38	55	48	VAL
38	55	54	LEU
38	55	57	ARG
38	55	65	LEU
38	55	67	LEU
38	55	71	GLN
38	55	73	VAL

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Mol	Chain	Res	Type
38	55	76	VAL
38	55	79	LEU
38	55	81	ASP
38	55	82	GLU
38	55	88	ARG
38	55	96	ARG
38	55	98	LEU
38	55	102	GLU
38	55	104	ARG
38	55	105	ARG
38	55	113	LEU
39	65	3	ARG
39	65	12	PHE
39	65	13	ARG
39	65	17	ARG
39	65	19	LYS
39	65	20	ARG
39	65	24	LEU
39	65	25	ARG
39	65	28	VAL
39	65	36	TYR
39	65	40	ILE
39	65	41	ASP
39	65	42	ASP
39	65	43	GLU
39	65	44	LYS
39	65	52	SER
39	65	62	LYS
39	65	65	VAL
39	65	69	VAL
39	65	71	ARG
39	65	73	LEU
39	65	75	GLU
39	65	78	LEU
39	65	83	LYS
39	65	89	ARG
39	65	106	ARG
39	65	107	GLU
40	75	1	MET
40	75	11	GLU
40	75	12	SER
40	75	17	THR

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Mol	Chain	Res	Type
40	75	21	GLU
40	75	27	THR
40	75	28	VAL
40	75	29	ARG
40	75	30	VAL
40	75	34	VAL
40	75	36	GLU
40	75	42	ILE
40	75	54	ARG
40	75	57	PHE
40	75	59	THR
40	75	61	PHE
40	75	62	THR
40	75	64	ARG
40	75	65	LYS
40	75	74	ARG
40	75	84	GLN
40	75	86	ILE
40	75	87	ASP
40	75	88	ILE
40	75	89	VAL
40	75	91	ARG
40	75	93	ARG
40	75	102	ILE
40	75	105	LEU
40	75	112	ARG
40	75	115	ARG
40	75	118	ARG
41	85	8	VAL
41	85	12	ARG
41	85	20	LEU
41	85	52	ARG
41	85	55	ARG
41	85	56	ASP
41	85	60	LEU
41	85	64	ARG
41	85	71	GLN
41	85	74	LEU
41	85	78	THR
41	85	92	ARG
41	85	97	ASP
41	85	100	VAL

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Mol	Chain	Res	Type
41	85	101	ARG
41	85	105	VAL
41	85	108	GLU
41	85	112	ARG
42	95	1	MET
42	95	5	VAL
42	95	7	THR
42	95	38	LEU
42	95	47	VAL
42	95	49	THR
42	95	62	LEU
42	95	71	LEU
42	95	74	LYS
42	95	85	LYS
42	95	88	ARG
42	95	89	GLN
42	95	91	TYR
42	95	95	LEU
42	95	96	ILE
42	95	98	GLU
42	95	99	ILE
42	95	100	ARG
43	A5	1	MET
43	A5	11	ARG
43	A5	18	ARG
43	A5	19	LEU
43	A5	23	LEU
43	A5	28	SER
43	A5	29	LEU
43	A5	33	ARG
43	A5	39	THR
43	A5	51	LEU
43	A5	59	VAL
43	A5	65	LEU
43	A5	67	ASP
43	A5	70	TYR
43	A5	76	VAL
43	A5	78	GLU
43	A5	84	ARG
43	A5	85	VAL
43	A5	96	ILE
43	A5	100	THR

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Mol	Chain	Res	Type
43	A5	103	ILE
43	A5	107	LEU
43	A5	109	GLU
43	A5	111	HIS
44	B5	3	THR
44	B5	12	VAL
44	B5	23	GLU
44	B5	27	THR
44	B5	30	VAL
44	B5	43	VAL
44	B5	48	LYS
44	B5	49	VAL
44	B5	54	VAL
44	B5	62	LYS
44	B5	63	LYS
44	B5	66	LEU
44	B5	75	ASP
44	B5	81	VAL
44	B5	83	VAL
44	B5	90	GLU
45	C5	4	LYS
45	C5	8	LYS
45	C5	11	ASP
45	C5	27	VAL
45	C5	29	GLU
45	C5	30	VAL
45	C5	37	VAL
45	C5	38	ILE
45	C5	42	VAL
45	C5	67	LEU
45	C5	70	SER
46	D5	3	TYR
46	D5	5	LEU
46	D5	6	LYS
46	D5	11	GLU
46	D5	14	LYS
46	D5	18	LEU
46	D5	19	ARG
46	D5	24	LEU
46	D5	39	VAL
46	D5	40	ASP
46	D5	42	VAL

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Mol	Chain	Res	Type
46	D5	54	HIS
46	D5	59	LEU
46	D5	60	GLU
46	D5	61	LEU
46	D5	63	ASP
46	D5	70	LEU
46	D5	71	VAL
46	D5	74	VAL
46	D5	76	LEU
46	D5	78	LYS
46	D5	82	ARG
46	D5	87	ASP
46	D5	90	VAL
46	D5	91	LEU
46	D5	98	MET
46	D5	105	VAL
46	D5	117	LEU
46	D5	128	VAL
46	D5	132	ASN
46	D5	137	ILE
46	D5	140	ASP
46	D5	157	LEU
46	D5	161	VAL
46	D5	163	LEU
46	D5	166	SER
46	D5	168	GLU
46	D5	169	GLU
46	D5	170	THR
46	D5	174	VAL
46	D5	178	GLU
46	D5	179	ASP
47	E5	10	THR
47	E5	12	ASN
47	E5	16	SER
47	E5	20	ARG
47	E5	31	VAL
47	E5	35	ASN
47	E5	36	ILE
47	E5	38	VAL
47	E5	41	ARG
47	E5	43	THR
47	E5	46	LYS

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Mol	Chain	Res	Type
47	E5	53	MET
47	E5	62	LEU
47	E5	63	VAL
47	E5	82	ARG
48	F5	3	LYS
48	F5	13	ILE
48	F5	14	VAL
48	F5	21	ARG
48	F5	25	LYS
48	F5	32	LYS
48	F5	35	THR
48	F5	38	SER
48	F5	39	LYS
48	F5	40	ARG
48	F5	46	LEU
48	F5	49	VAL
48	F5	51	VAL
48	F5	59	THR
48	F5	62	VAL
48	F5	74	VAL
48	F5	76	ARG
48	F5	78	LYS
48	F5	80	LEU
48	F5	85	LEU
48	F5	86	SER
48	F5	89	GLU
48	F5	90	ILE
48	F5	91	LYS
48	F5	92	LYS
48	F5	93	GLU
49	G5	3	LEU
49	G5	5	GLU
49	G5	8	LYS
49	G5	10	LEU
49	G5	15	LYS
49	G5	21	LEU
49	G5	24	LEU
49	G5	34	GLU
49	G5	35	LEU
49	G5	41	ILE
49	G5	44	LEU
49	G5	45	SER

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Mol	Chain	Res	Type
49	G5	46	GLN
49	G5	47	ASN
49	G5	48	HIS
49	G5	50	ILE
49	G5	52	ASP
49	G5	53	LEU
49	G5	60	LEU
49	G5	64	LEU
49	G5	66	GLU
49	G5	68	ARG
49	G5	69	ARG
50	H5	3	ARG
50	H5	6	VAL
50	H5	8	LEU
50	H5	9	VAL
50	H5	18	ASP
50	H5	30	ARG
50	H5	31	LEU
50	H5	33	GLN
50	H5	36	VAL
50	H5	38	GLU
50	H5	40	THR
50	H5	47	VAL
50	H5	54	VAL
50	H5	56	VAL
50	H5	59	VAL
52	J5	3	LYS
52	J5	9	LYS
52	J5	16	ARG
52	J5	26	THR
52	J5	29	THR
52	J5	35	GLU
52	J5	36	CYS
52	J5	44	THR
52	J5	48	GLU
52	J5	51	TYR
52	J5	55	ARG
53	L5	1	MET
53	L5	4	THR
53	L5	8	ASN
53	L5	28	ARG
53	L5	34	ARG

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Mol	Chain	Res	Type
53	L5	41	ARG
54	M5	6	THR
54	M5	11	LYS
54	M5	15	LYS
54	M5	31	HIS
54	M5	37	SER
54	M5	49	VAL
54	M5	57	ARG
54	M5	58	ILE
54	M5	59	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (76) such sidechains are listed below:

Mol	Chain	Res	Type
2	1E	16	HIS
2	1E	40	HIS
2	1E	135	GLN
2	1E	140	HIS
3	2E	108	ASN
4	3E	42	GLN
4	3E	103	ASN
4	3E	199	ASN
6	5E	57	GLN
7	6E	37	ASN
9	8E	3	GLN
11	2I	93	GLN
11	2I	99	GLN
13	4I	62	ASN
13	4I	92	HIS
15	6I	37	ASN
15	6I	62	GLN
16	7I	76	GLN
19	AI	69	HIS
28	11	253	GLN
30	31	203	GLN
31	41	123	ASN
32	51	74	ASN
36	78	84	ASN
39	A8	95	HIS
42	D8	80	GLN
46	H8	73	GLN
46	H8	75	ASN

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Mol	Chain	Res	Type
49	K8	43	GLN
49	K8	46	GLN
2	12	37	ASN
2	12	40	HIS
2	12	224	GLN
3	22	3	ASN
3	22	6	HIS
3	22	69	HIS
4	32	119	GLN
4	32	160	GLN
4	32	161	ASN
4	32	199	ASN
4	32	201	GLN
6	52	7	ASN
6	52	73	ASN
7	62	109	ASN
7	62	110	GLN
8	72	15	ASN
10	1A	84	GLN
13	4A	40	ASN
13	4A	101	GLN
15	6A	37	ASN
20	BA	18	GLN
20	BA	75	ASN
28	19	143	HIS
29	29	35	GLN
29	29	192	ASN
30	39	8	GLN
30	39	75	HIS
31	49	26	GLN
32	59	139	GLN
32	59	143	GLN
34	15	45	ASN
35	25	89	ASN
35	25	90	GLN
36	35	38	GLN
37	45	123	HIS
38	55	61	HIS
40	75	79	HIS
40	75	90	GLN
41	85	104	GLN
43	A5	34	ASN

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Mol	Chain	Res	Type
43	A5	40	ASN
43	A5	60	ASN
48	F5	66	HIS
49	G5	38	GLN
49	G5	48	HIS
49	G5	56	GLN

5.3.3 RNA

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1498/1522 (98%)	347 (23%)	28 (1%)
1	1G	1489/1522 (97%)	370 (24%)	32 (2%)
22	1K	71/76 (93%)	37 (52%)	2 (2%)
22	1L	71/76 (93%)	41 (57%)	3 (4%)
23	2K	76/77 (98%)	20 (26%)	1 (1%)
23	2L	76/77 (98%)	19 (25%)	3 (3%)
24	3K	69/76 (90%)	38 (55%)	2 (2%)
24	3L	69/76 (90%)	36 (52%)	2 (2%)
25	4K	17/27 (62%)	10 (58%)	3 (17%)
25	4L	14/27 (51%)	6 (42%)	3 (21%)
26	14	2805/2917 (96%)	693 (24%)	36 (1%)
26	1H	2800/2917 (95%)	628 (22%)	41 (1%)
27	16	121/122 (99%)	27 (22%)	1 (0%)
27	1J	121/122 (99%)	34 (28%)	1 (0%)
All	All	9297/9634 (96%)	2306 (24%)	158 (1%)

All (2306) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	2	U
1	13	4	U
1	13	5	U
1	13	6	G
1	13	9	G
1	13	26	A
1	13	32	A
1	13	39	G
1	13	47	C
1	13	48	C
1	13	49	U
1	13	50	A

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Mol	Chain	Res	Type
1	13	51	A
1	13	54	C
1	13	61	G
1	13	64	G
1	13	65	U
1	13	66	G
1	13	69	G
1	13	74	C
1	13	75	C
1	13	76	G
1	13	77	C
1	13	78	G
1	13	92	G
1	13	93	U
1	13	95	G
1	13	96	G
1	13	97	U
1	13	99	C
1	13	101	A
1	13	108	G
1	13	116	A
1	13	121	C
1	13	122	G
1	13	129(A)	G
1	13	130	A
1	13	131	C
1	13	144	G
1	13	151	A
1	13	158	G
1	13	160	A
1	13	163	C
1	13	169	C
1	13	173	U
1	13	174	C
1	13	180	U
1	13	182	U
1	13	185	A
1	13	186(D)	C
1	13	188	U
1	13	189	U
1	13	190	G
1	13	191(A)	G

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Mol	Chain	Res	Type
1	13	191(E)	G
1	13	195	A
1	13	197	A
1	13	199	G
1	13	201	C
1	13	208	U
1	13	209	U
1	13	210	U
1	13	217	C
1	13	222	U
1	13	224	C
1	13	226	G
1	13	231	G
1	13	245	C
1	13	247	G
1	13	251	G
1	13	256	U
1	13	262	A
1	13	266	G
1	13	267	C
1	13	270	A
1	13	280	C
1	13	289	G
1	13	302	G
1	13	318	G
1	13	326	G
1	13	328	C
1	13	332	G
1	13	343	U
1	13	344	A
1	13	345	C
1	13	346	G
1	13	347	G
1	13	348	G
1	13	352	C
1	13	353	A
1	13	354	G
1	13	367	U
1	13	372	C
1	13	373	A
1	13	382	A
1	13	390	C

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Mol	Chain	Res	Type
1	13	398	C
1	13	406	G
1	13	412	A
1	13	413	G
1	13	414	A
1	13	422	C
1	13	423	G
1	13	424	G
1	13	428	G
1	13	429	U
1	13	430	A
1	13	439	A
1	13	465	A
1	13	466	C
1	13	467	G
1	13	482	A
1	13	485	G
1	13	487	A
1	13	496	A
1	13	497	U
1	13	498	A
1	13	505	G
1	13	508	C
1	13	511	C
1	13	518	C
1	13	519	C
1	13	527	G
1	13	531	U
1	13	533	A
1	13	547	A
1	13	559	A
1	13	561	U
1	13	564	C
1	13	572	A
1	13	573	A
1	13	576	G
1	13	577	G
1	13	590	C
1	13	595	G
1	13	596	C
1	13	601	C
1	13	607	A

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Mol	Chain	Res	Type
1	13	616	G
1	13	620	C
1	13	630	G
1	13	631	G
1	13	632	A
1	13	633	G
1	13	637	G
1	13	639	G
1	13	665	A
1	13	687	A
1	13	688	G
1	13	702	A
1	13	704	A
1	13	722	A
1	13	723	U
1	13	724	G
1	13	733	A
1	13	734	G
1	13	748	C
1	13	749	C
1	13	753	A
1	13	755	G
1	13	759	A
1	13	760	G
1	13	769	G
1	13	774	G
1	13	777	A
1	13	781	A
1	13	792	A
1	13	793	U
1	13	794	A
1	13	796	C
1	13	813	U
1	13	815	A
1	13	817	C
1	13	818	G
1	13	821	G
1	13	828	A
1	13	836	G
1	13	842	C
1	13	843	U
1	13	848	C

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Mol	Chain	Res	Type
1	13	849	C
1	13	859	A
1	13	864	A
1	13	870	U
1	13	871	U
1	13	872	A
1	13	880	C
1	13	885	G
1	13	888	G
1	13	889	A
1	13	902	G
1	13	905	U
1	13	914	A
1	13	916	G
1	13	922	G
1	13	926	G
1	13	927	G
1	13	933	G
1	13	934	C
1	13	936	C
1	13	958	A
1	13	960	U
1	13	968	A
1	13	969	A
1	13	971	G
1	13	974	A
1	13	975	A
1	13	976	G
1	13	977	A
1	13	981	U
1	13	982	U
1	13	991	U
1	13	992	U
1	13	993	G
1	13	997	U
1	13	1004	A
1	13	1006	C
1	13	1007	C
1	13	1008	C
1	13	1009	G
1	13	1012	U
1	13	1016	A

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Mol	Chain	Res	Type
1	13	1024	G
1	13	1025	U
1	13	1026	G
1	13	1028	C
1	13	1028(B)	C
1	13	1029	G
1	13	1031	G
1	13	1032(A)	G
1	13	1032(B)	G
1	13	1036	G
1	13	1039	C
1	13	1040	U
1	13	1041	A
1	13	1042	G
1	13	1054	C
1	13	1055	A
1	13	1064	G
1	13	1065	U
1	13	1081	G
1	13	1082	G
1	13	1085	U
1	13	1094	G
1	13	1095	U
1	13	1098	C
1	13	1101	A
1	13	1125	U
1	13	1127	G
1	13	1129	C
1	13	1130	A
1	13	1132	C
1	13	1135	U
1	13	1136	U
1	13	1137	C
1	13	1138	G
1	13	1139	G
1	13	1146	A
1	13	1152	A
1	13	1157	A
1	13	1158	C
1	13	1159	U
1	13	1177	G
1	13	1178	G

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Mol	Chain	Res	Type
1	13	1179	A
1	13	1181	G
1	13	1182	G
1	13	1184	G
1	13	1189	C
1	13	1190	G
1	13	1192	C
1	13	1193	G
1	13	1196	U
1	13	1197	G
1	13	1201	A
1	13	1213	A
1	13	1214	C
1	13	1218	C
1	13	1224	G
1	13	1225	A
1	13	1227	A
1	13	1238	A
1	13	1240	U
1	13	1241	G
1	13	1256	A
1	13	1257	U
1	13	1258	G
1	13	1260	C
1	13	1262	C
1	13	1270	C
1	13	1272	G
1	13	1275	A
1	13	1278	U
1	13	1279	A
1	13	1280	A
1	13	1281	U
1	13	1286	A
1	13	1287	A
1	13	1292	U
1	13	1299	A
1	13	1300	G
1	13	1302	U
1	13	1303	C
1	13	1305	G
1	13	1312	G
1	13	1320	C

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Mol	Chain	Res	Type
1	13	1323	G
1	13	1331	G
1	13	1335	C
1	13	1336	C
1	13	1337	G
1	13	1338	G
1	13	1340	A
1	13	1346	A
1	13	1347	G
1	13	1350	A
1	13	1353	G
1	13	1363	A
1	13	1364	U
1	13	1368	G
1	13	1370	G
1	13	1379	G
1	13	1381	U
1	13	1397	C
1	13	1398	A
1	13	1406	U
1	13	1419	G
1	13	1442	G
1	13	1443	G
1	13	1446	A
1	13	1450	U
1	13	1452	C
1	13	1453	G
1	13	1454	G
1	13	1487	G
1	13	1492	A
1	13	1497	G
1	13	1498	U
1	13	1499	A
1	13	1502	A
1	13	1504	G
1	13	1506	U
1	13	1517	G
1	13	1529	G
1	13	1530	G
1	13	1534	A
1	13	1535	C
22	1K	3	U

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Mol	Chain	Res	Type
22	1K	4	G
22	1K	6	U
22	1K	8	U
22	1K	9	A
22	1K	10	G
22	1K	11	C
22	1K	14	A
22	1K	15	G
22	1K	18	G
22	1K	19	G
22	1K	25	C
22	1K	26	G
22	1K	28	A
22	1K	30	C
22	1K	34	G
22	1K	47	U
22	1K	48	C
22	1K	49	G
22	1K	50	G
22	1K	51	C
22	1K	52	A
22	1K	53	G
22	1K	54	5MU
22	1K	56	C
22	1K	57	G
22	1K	59	C
22	1K	61	C
22	1K	63	G
22	1K	66	U
22	1K	67	A
22	1K	68	U
22	1K	69	C
22	1K	70	A
22	1K	71	G
22	1K	72	C
22	1K	73	A
23	2K	2	G
23	2K	6	G
23	2K	8	U
23	2K	9	G
23	2K	13	C
23	2K	16	C

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Mol	Chain	Res	Type
23	2K	17	C
23	2K	20	G
23	2K	21	U
23	2K	32	G
23	2K	33	C
23	2K	46	G
23	2K	47	G
23	2K	48	U
23	2K	49	C
23	2K	50	G
23	2K	68	C
23	2K	74	A
23	2K	75	C
23	2K	77	A
24	3K	2	C
24	3K	3	U
24	3K	4	G
24	3K	7	A
24	3K	8	U
24	3K	9	A
24	3K	10	G
24	3K	11	C
24	3K	15	G
24	3K	23	A
24	3K	26	G
24	3K	30	C
24	3K	33	U
24	3K	35	G
24	3K	36	U
24	3K	37	A
24	3K	38	A
24	3K	40	G
24	3K	46	G
24	3K	47	U
24	3K	48	C
24	3K	51	C
24	3K	52	A
24	3K	53	G
24	3K	55	U
24	3K	56	C
24	3K	58	A
24	3K	59	A

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Mol	Chain	Res	Type
24	3K	60	U
24	3K	61	C
24	3K	62	U
24	3K	63	G
24	3K	65	C
24	3K	66	U
24	3K	69	C
24	3K	72	C
24	3K	73	A
24	3K	76	A
25	4K	10	G
25	4K	11	U
25	4K	12	A
25	4K	13	A
25	4K	14	A
25	4K	15	A
25	4K	23	A
25	4K	24	A
25	4K	25	A
25	4K	26	A
26	1H	15	G
26	1H	26	G
26	1H	34	C
26	1H	46	C
26	1H	50	U
26	1H	51	G
26	1H	54	G
26	1H	55	G
26	1H	61	G
26	1H	63	U
26	1H	64	A
26	1H	71	A
26	1H	72	U
26	1H	74	A
26	1H	75	G
26	1H	85	G
26	1H	93	C
26	1H	99	U
26	1H	101	G
26	1H	102	G
26	1H	114	U
26	1H	118	A

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Mol	Chain	Res	Type
26	1H	119	A
26	1H	120	U
26	1H	123	G
26	1H	125	G
26	1H	126	A
26	1H	129	C
26	1H	155	C
26	1H	162	U
26	1H	163	U
26	1H	164	U
26	1H	165	U
26	1H	173	G
26	1H	181	A
26	1H	188	G
26	1H	196	A
26	1H	197	A
26	1H	199	A
26	1H	204	A
26	1H	213	A
26	1H	214	G
26	1H	215	G
26	1H	216	A
26	1H	222	A
26	1H	223	A
26	1H	224	G
26	1H	228	A
26	1H	229	A
26	1H	232	G
26	1H	241	A
26	1H	248	G
26	1H	250	G
26	1H	252	G
26	1H	261	G
26	1H	264	C
26	1H	266	G
26	1H	269	U
26	1H	270(L)	U
26	1H	270(M)	U
26	1H	270(N)	G
26	1H	270(O)	U
26	1H	270(P)	C
26	1H	271(C)	U

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Mol	Chain	Res	Type
26	1H	271	G
26	1H	273(E)	U
26	1H	274	G
26	1H	275	G
26	1H	277	C
26	1H	278	A
26	1H	295	G
26	1H	299	A
26	1H	311	A
26	1H	324	A
26	1H	326	G
26	1H	329	G
26	1H	330	A
26	1H	331	A
26	1H	332	A
26	1H	334	C
26	1H	342	G
26	1H	346	A
26	1H	352	G
26	1H	363(E)	U
26	1H	372	G
26	1H	373	U
26	1H	386	G
26	1H	388	G
26	1H	389	G
26	1H	405	U
26	1H	406	G
26	1H	410	G
26	1H	411	G
26	1H	418	G
26	1H	428	A
26	1H	444	C
26	1H	448	U
26	1H	454	A
26	1H	455	C
26	1H	470	A
26	1H	471	A
26	1H	478	A
26	1H	480	A
26	1H	481	G
26	1H	482	A
26	1H	501	A

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Mol	Chain	Res	Type
26	1H	505	A
26	1H	508	G
26	1H	509	C
26	1H	529	A
26	1H	530	G
26	1H	531	C
26	1H	532	A
26	1H	533	G
26	1H	546	C
26	1H	549	G
26	1H	556	G
26	1H	563	G
26	1H	564	C
26	1H	573	G
26	1H	575	A
26	1H	577	G
26	1H	586	A
26	1H	588	U
26	1H	593	G
26	1H	595	C
26	1H	603	A
26	1H	607	U
26	1H	613	U
26	1H	614	U
26	1H	615	G
26	1H	617	G
26	1H	621	A
26	1H	622	G
26	1H	627	A
26	1H	631	A
26	1H	637	A
26	1H	645	C
26	1H	646	A
26	1H	654	A
26	1H	654(A)	A
26	1H	654(D)	G
26	1H	654(O)	G
26	1H	654(P)	G
26	1H	654(S)	G
26	1H	654(T)	A
26	1H	654(V)	A
26	1H	664	C

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Mol	Chain	Res	Type
26	1H	668	G
26	1H	677	A
26	1H	682	G
26	1H	686	G
26	1H	699	A
26	1H	717	G
26	1H	730	C
26	1H	731	C
26	1H	738	G
26	1H	746	A
26	1H	747	U
26	1H	751	A
26	1H	758	C
26	1H	761	A
26	1H	762	U
26	1H	764	A
26	1H	765	G
26	1H	776	G
26	1H	777	A
26	1H	782	A
26	1H	784	A
26	1H	785	G
26	1H	789	A
26	1H	790	C
26	1H	791	C
26	1H	792	G
26	1H	793	A
26	1H	805	G
26	1H	806	C
26	1H	807	U
26	1H	812	C
26	1H	827	U
26	1H	828	U
26	1H	831	G
26	1H	832	G
26	1H	836	G
26	1H	845	G
26	1H	847	U
26	1H	855	G
26	1H	859	G
26	1H	860	U
26	1H	870	A

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Mol	Chain	Res	Type
26	1H	878	A
26	1H	879	G
26	1H	880	G
26	1H	894	C
26	1H	895	U
26	1H	899	A
26	1H	900	A
26	1H	901	A
26	1H	910	A
26	1H	917	A
26	1H	926	A
26	1H	932	G
26	1H	941	A
26	1H	945	A
26	1H	946	G
26	1H	953	A
26	1H	958	U
26	1H	959	A
26	1H	961	C
26	1H	974	G
26	1H	974(A)	C
26	1H	980	A
26	1H	983	A
26	1H	989	G
26	1H	990	A
26	1H	996	A
26	1H	1003	G
26	1H	1005	C
26	1H	1011	G
26	1H	1012	U
26	1H	1013	C
26	1H	1020	A
26	1H	1021	A
26	1H	1022	G
26	1H	1023	U
26	1H	1024	G
26	1H	1025	G
26	1H	1026	U
26	1H	1027	A
26	1H	1033	U
26	1H	1040	C
26	1H	1041	C

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Mol	Chain	Res	Type
26	1H	1045	A
26	1H	1046	A
26	1H	1047	G
26	1H	1050	A
26	1H	1051	G
26	1H	1085	A
26	1H	1086	A
26	1H	1091	G
26	1H	1105	U
26	1H	1106	G
26	1H	1109	C
26	1H	1112	G
26	1H	1121	C
26	1H	1126	A
26	1H	1128	A
26	1H	1129	A
26	1H	1130	U
26	1H	1135	C
26	1H	1136	G
26	1H	1139	G
26	1H	1142	U
26	1H	1142(A)	A
26	1H	1151	G
26	1H	1156	A
26	1H	1170	G
26	1H	1173	G
26	1H	1177	A
26	1H	1178	C
26	1H	1179	C
26	1H	1195	G
26	1H	1204	A
26	1H	1205	U
26	1H	1210	A
26	1H	1211	U
26	1H	1218	C
26	1H	1220	A
26	1H	1225	C
26	1H	1244	G
26	1H	1249	U
26	1H	1250	G
26	1H	1253	A
26	1H	1256	G

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Mol	Chain	Res	Type
26	1H	1265	A
26	1H	1271	G
26	1H	1272	A
26	1H	1282	U
26	1H	1286	A
26	1H	1287	A
26	1H	1300	U
26	1H	1301	A
26	1H	1303	G
26	1H	1329	U
26	1H	1341	U
26	1H	1344	G
26	1H	1349	A
26	1H	1359	A
26	1H	1360	A
26	1H	1365	A
26	1H	1370	C
26	1H	1378	A
26	1H	1380	G
26	1H	1384	A
26	1H	1385	G
26	1H	1386	C
26	1H	1391	U
26	1H	1395	A
26	1H	1416	G
26	1H	1420	U
26	1H	1421	G
26	1H	1427	A
26	1H	1428	C
26	1H	1444(A)	A
26	1H	1449	A
26	1H	1451	C
26	1H	1453	A
26	1H	1455	G
26	1H	1459	G
26	1H	1460	A
26	1H	1461	G
26	1H	1467	C
26	1H	1471	A
26	1H	1483	G
26	1H	1487	G
26	1H	1493	C

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Mol	Chain	Res	Type
26	1H	1494	A
26	1H	1496	A
26	1H	1497	U
26	1H	1506	C
26	1H	1509	C
26	1H	1510	A
26	1H	1511	A
26	1H	1522	G
26	1H	1523	U
26	1H	1526	G
26	1H	1534	G
26	1H	1537	C
26	1H	1538	G
26	1H	1540	G
26	1H	1543	A
26	1H	1544	C
26	1H	1545	A
26	1H	1547	C
26	1H	1554	A
26	1H	1558	A
26	1H	1559	G
26	1H	1560	G
26	1H	1566	A
26	1H	1569	A
26	1H	1578	U
26	1H	1580	A
26	1H	1585	C
26	1H	1586	A
26	1H	1587	A
26	1H	1606	G
26	1H	1608	A
26	1H	1609	A
26	1H	1610	A
26	1H	1613	G
26	1H	1616	A
26	1H	1617	C
26	1H	1639	U
26	1H	1640	C
26	1H	1647	G
26	1H	1648	C
26	1H	1651	G
26	1H	1674	G

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Mol	Chain	Res	Type
26	1H	1682	G
26	1H	1699	G
26	1H	1727	U
26	1H	1728	G
26	1H	1729	A
26	1H	1730	U
26	1H	1731	G
26	1H	1750	G
26	1H	1756	G
26	1H	1762	A
26	1H	1763	G
26	1H	1764	G
26	1H	1769	G
26	1H	1773	A
26	1H	1779	U
26	1H	1782	C
26	1H	1786	A
26	1H	1787	A
26	1H	1791	A
26	1H	1799	G
26	1H	1800	C
26	1H	1801	G
26	1H	1802	A
26	1H	1808	U
26	1H	1811	G
26	1H	1812	A
26	1H	1816	G
26	1H	1826	G
26	1H	1829	A
26	1H	1835	G
26	1H	1836	C
26	1H	1839	G
26	1H	1847	A
26	1H	1859	A
26	1H	1869	G
26	1H	1870	C
26	1H	1878	G
26	1H	1889	A
26	1H	1897	G
26	1H	1900	A
26	1H	1901	A
26	1H	1903	G

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Mol	Chain	Res	Type
26	1H	1906	G
26	1H	1913	A
26	1H	1914	C
26	1H	1917	U
26	1H	1919	A
26	1H	1929	G
26	1H	1930	G
26	1H	1931	U
26	1H	1937	A
26	1H	1938	A
26	1H	1939	U
26	1H	1940	U
26	1H	1941	C
26	1H	1955	U
26	1H	1960	A
26	1H	1963	U
26	1H	1967	C
26	1H	1968	G
26	1H	1969	A
26	1H	1970	A
26	1H	1971	A
26	1H	1972	A
26	1H	1982	C
26	1H	1987	G
26	1H	1991	U
26	1H	1992	G
26	1H	1993	U
26	1H	2023	G
26	1H	2027	G
26	1H	2031	A
26	1H	2033	A
26	1H	2035	G
26	1H	2036	C
26	1H	2043	C
26	1H	2049	G
26	1H	2051	A
26	1H	2053	G
26	1H	2055	C
26	1H	2056	G
26	1H	2060	A
26	1H	2061	G
26	1H	2062	A

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Mol	Chain	Res	Type
26	1H	2063	C
26	1H	2069	G
26	1H	2070	G
26	1H	2096	U
26	1H	2099	U
26	1H	2100	G
26	1H	2101	G
26	1H	2108	C
26	1H	2111	C
26	1H	2112	G
26	1H	2113	U
26	1H	2114	A
26	1H	2115	G
26	1H	2116	G
26	1H	2117	A
26	1H	2118	U
26	1H	2119	A
26	1H	2120	G
26	1H	2122	U
26	1H	2123	G
26	1H	2124	G
26	1H	2125	G
26	1H	2127	G
26	1H	2128	C
26	1H	2135	A
26	1H	2136	C
26	1H	2138	C
26	1H	2139	C
26	1H	2141	G
26	1H	2144	U
26	1H	2145	C
26	1H	2146	C
26	1H	2147	G
26	1H	2148	G
26	1H	2156	G
26	1H	2161	C
26	1H	2162	G
26	1H	2165	G
26	1H	2166	G
26	1H	2167	U
26	1H	2168	G
26	1H	2170	A

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Mol	Chain	Res	Type
26	1H	2171	A
26	1H	2173	A
26	1H	2175	C
26	1H	2176	A
26	1H	2179	C
26	1H	2189	U
26	1H	2190	G
26	1H	2192	G
26	1H	2198	A
26	1H	2210	G
26	1H	2211	G
26	1H	2212	A
26	1H	2215	G
26	1H	2225	A
26	1H	2226	C
26	1H	2238	G
26	1H	2240	C
26	1H	2267	A
26	1H	2269	A
26	1H	2271	G
26	1H	2273	A
26	1H	2275	C
26	1H	2278	A
26	1H	2283	C
26	1H	2287	A
26	1H	2288	A
26	1H	2298	A
26	1H	2307	G
26	1H	2308	G
26	1H	2312	U
26	1H	2314	C
26	1H	2315	G
26	1H	2320	A
26	1H	2325	G
26	1H	2326	C
26	1H	2327	A
26	1H	2334	G
26	1H	2335	A
26	1H	2336	A
26	1H	2342	C
26	1H	2346	A
26	1H	2347	C

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Mol	Chain	Res	Type
26	1H	2350	C
26	1H	2355	C
26	1H	2383	G
26	1H	2385	C
26	1H	2395	C
26	1H	2401	U
26	1H	2402	C
26	1H	2403	C
26	1H	2406	U
26	1H	2410	G
26	1H	2413	G
26	1H	2414	G
26	1H	2422	A
26	1H	2423	U
26	1H	2424	C
26	1H	2425	A
26	1H	2426	A
26	1H	2428	G
26	1H	2429	G
26	1H	2430	A
26	1H	2435	A
26	1H	2439	A
26	1H	2441	C
26	1H	2445	G
26	1H	2448	A
26	1H	2468	G
26	1H	2470	G
26	1H	2474	C
26	1H	2475	C
26	1H	2476	A
26	1H	2477	C
26	1H	2482	G
26	1H	2487	G
26	1H	2497	A
26	1H	2502	G
26	1H	2505	G
26	1H	2513	G
26	1H	2518	A
26	1H	2529	G
26	1H	2531	A
26	1H	2553	G
26	1H	2554	U

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Mol	Chain	Res	Type
26	1H	2566	A
26	1H	2567	G
26	1H	2569	G
26	1H	2573	C
26	1H	2577	A
26	1H	2581	G
26	1H	2582	G
26	1H	2585	U
26	1H	2595	G
26	1H	2596	U
26	1H	2602	A
26	1H	2608	G
26	1H	2609	U
26	1H	2610	C
26	1H	2611	U
26	1H	2612	C
26	1H	2629	A
26	1H	2630	G
26	1H	2632	A
26	1H	2636	U
26	1H	2654	A
26	1H	2665	A
26	1H	2673	G
26	1H	2686	G
26	1H	2689	U
26	1H	2697	G
26	1H	2702	U
26	1H	2703	C
26	1H	2707	G
26	1H	2712(A)	A
26	1H	2713	A
26	1H	2714	G
26	1H	2719	G
26	1H	2726	U
26	1H	2733	A
26	1H	2736	G
26	1H	2742	C
26	1H	2744	G
26	1H	2756	U
26	1H	2757	A
26	1H	2764	A
26	1H	2765	A

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Mol	Chain	Res	Type
26	1H	2766	G
26	1H	2777	G
26	1H	2778	A
26	1H	2781	A
26	1H	2782	G
26	1H	2808	U
26	1H	2820	A
26	1H	2821	A
26	1H	2830	G
26	1H	2833	G
26	1H	2834	G
26	1H	2849	U
26	1H	2850	A
26	1H	2865	U
26	1H	2866	U
26	1H	2872	G
26	1H	2885	C
26	1H	2886	G
27	16	0	A
27	16	7	G
27	16	9	G
27	16	13	A
27	16	15	A
27	16	17	C
27	16	21	G
27	16	23	G
27	16	25	A
27	16	30	C
27	16	35	U
27	16	39	A
27	16	42	C
27	16	44	G
27	16	45	A
27	16	47	C
27	16	51	G
27	16	56	G
27	16	58	A
27	16	65	C
27	16	73	A
27	16	81	G
27	16	82	G
27	16	85	G

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Mol	Chain	Res	Type
27	16	105	G
27	16	109	G
27	16	117	G
1	1G	2	U
1	1G	3	G
1	1G	4	U
1	1G	5	U
1	1G	6	G
1	1G	9	G
1	1G	13	U
1	1G	22	G
1	1G	26	A
1	1G	32	A
1	1G	39	G
1	1G	44	G
1	1G	47	C
1	1G	48	C
1	1G	51	A
1	1G	53	A
1	1G	73	G
1	1G	76	G
1	1G	81	G
1	1G	82	U
1	1G	88	C
1	1G	90	C
1	1G	91	C
1	1G	95	G
1	1G	96	G
1	1G	108	G
1	1G	115	G
1	1G	116	A
1	1G	120	A
1	1G	121	C
1	1G	127	G
1	1G	131	C
1	1G	144	G
1	1G	147	G
1	1G	162	A
1	1G	163	C
1	1G	169	C
1	1G	173	U
1	1G	174	C

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Mol	Chain	Res	Type
1	1G	182	U
1	1G	184	G
1	1G	186	C
1	1G	186(F)	C
1	1G	190	G
1	1G	191(A)	G
1	1G	191(D)	U
1	1G	195	A
1	1G	197	A
1	1G	208	U
1	1G	209	U
1	1G	210	U
1	1G	216	G
1	1G	220	G
1	1G	231	G
1	1G	247	G
1	1G	250	A
1	1G	251	G
1	1G	253	U
1	1G	262	A
1	1G	266	G
1	1G	267	C
1	1G	279	A
1	1G	280	C
1	1G	281	G
1	1G	289	G
1	1G	290	C
1	1G	298	A
1	1G	306	G
1	1G	314	C
1	1G	319	G
1	1G	321	A
1	1G	328	C
1	1G	329	A
1	1G	330	C
1	1G	332	G
1	1G	346	G
1	1G	347	G
1	1G	351	G
1	1G	352	C
1	1G	353	A
1	1G	354	G

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Mol	Chain	Res	Type
1	1G	363	A
1	1G	367	U
1	1G	372	C
1	1G	373	A
1	1G	381	C
1	1G	396	G
1	1G	397	A
1	1G	398	C
1	1G	406	G
1	1G	412	A
1	1G	413	G
1	1G	414	A
1	1G	419	C
1	1G	421	U
1	1G	422	C
1	1G	423	G
1	1G	424	G
1	1G	429	U
1	1G	439	A
1	1G	440	A
1	1G	442	C
1	1G	452	A
1	1G	466	C
1	1G	467	G
1	1G	478	A
1	1G	482	A
1	1G	484	G
1	1G	485	G
1	1G	486	U
1	1G	496	A
1	1G	497	U
1	1G	505	G
1	1G	509	A
1	1G	510	A
1	1G	511	C
1	1G	517	G
1	1G	518	C
1	1G	521	G
1	1G	527	G
1	1G	531	U
1	1G	532	A
1	1G	533	A

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Mol	Chain	Res	Type
1	1G	541	G
1	1G	544	G
1	1G	547	A
1	1G	559	A
1	1G	561	U
1	1G	572	A
1	1G	573	A
1	1G	576	G
1	1G	577	G
1	1G	580	U
1	1G	601	C
1	1G	607	A
1	1G	614	A
1	1G	618	C
1	1G	619	U
1	1G	620	C
1	1G	630	G
1	1G	631	G
1	1G	632	A
1	1G	633	G
1	1G	651	C
1	1G	652	U
1	1G	653	A
1	1G	661	G
1	1G	665	A
1	1G	687	A
1	1G	688	G
1	1G	715	A
1	1G	720	C
1	1G	723	U
1	1G	724	G
1	1G	725	G
1	1G	728	A
1	1G	731	G
1	1G	746	A
1	1G	749	C
1	1G	752	G
1	1G	753	A
1	1G	755	G
1	1G	763	G
1	1G	767	A
1	1G	769	G

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Mol	Chain	Res	Type
1	1G	776	G
1	1G	777	A
1	1G	792	A
1	1G	793	U
1	1G	794	A
1	1G	816	A
1	1G	817	C
1	1G	821	G
1	1G	828	A
1	1G	836	G
1	1G	842	C
1	1G	843	U
1	1G	848	C
1	1G	855	G
1	1G	859	A
1	1G	860	A
1	1G	873	A
1	1G	874	G
1	1G	889	A
1	1G	901	A
1	1G	914	A
1	1G	916	G
1	1G	919	A
1	1G	926	G
1	1G	927	G
1	1G	934	C
1	1G	935	A
1	1G	938	A
1	1G	943	U
1	1G	945	G
1	1G	953	G
1	1G	954	G
1	1G	958	A
1	1G	960	U
1	1G	961	U
1	1G	967	C
1	1G	968	A
1	1G	969	A
1	1G	971	G
1	1G	972	C
1	1G	974	A
1	1G	975	A

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Mol	Chain	Res	Type
1	1G	976	G
1	1G	977	A
1	1G	978	A
1	1G	979	C
1	1G	980	C
1	1G	981	U
1	1G	982	U
1	1G	983	A
1	1G	989	C
1	1G	990	C
1	1G	991	U
1	1G	993	G
1	1G	995	C
1	1G	1000	A
1	1G	1001	G
1	1G	1002	G
1	1G	1004	A
1	1G	1005	A
1	1G	1006	C
1	1G	1007	C
1	1G	1008	C
1	1G	1009	G
1	1G	1010	G
1	1G	1014	A
1	1G	1017	G
1	1G	1021	G
1	1G	1023	G
1	1G	1024	G
1	1G	1025	U
1	1G	1037	C
1	1G	1040	U
1	1G	1045	C
1	1G	1046	A
1	1G	1051	C
1	1G	1053	G
1	1G	1054	C
1	1G	1055	A
1	1G	1056	U
1	1G	1064	G
1	1G	1066	C
1	1G	1082	G
1	1G	1091	U

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Mol	Chain	Res	Type
1	1G	1094	G
1	1G	1095	U
1	1G	1098	C
1	1G	1099	G
1	1G	1101	A
1	1G	1107	C
1	1G	1111	A
1	1G	1118	C
1	1G	1124	G
1	1G	1125	U
1	1G	1127	G
1	1G	1128	C
1	1G	1129	C
1	1G	1135	U
1	1G	1136	U
1	1G	1137	C
1	1G	1139	G
1	1G	1140	C
1	1G	1146	A
1	1G	1147	C
1	1G	1154	G
1	1G	1157	A
1	1G	1158	C
1	1G	1159	U
1	1G	1160	G
1	1G	1178	G
1	1G	1181	G
1	1G	1182	G
1	1G	1183	A
1	1G	1189	C
1	1G	1193	G
1	1G	1196	U
1	1G	1197	G
1	1G	1201	A
1	1G	1202	G
1	1G	1208	C
1	1G	1211	U
1	1G	1212	U
1	1G	1213	A
1	1G	1214	C
1	1G	1217	C
1	1G	1225	A

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Mol	Chain	Res	Type
1	1G	1227	A
1	1G	1233	G
1	1G	1238	A
1	1G	1240	U
1	1G	1241	G
1	1G	1255	G
1	1G	1256	A
1	1G	1257	U
1	1G	1258	G
1	1G	1260	C
1	1G	1263	C
1	1G	1265	G
1	1G	1268	A
1	1G	1270	C
1	1G	1274	G
1	1G	1278	U
1	1G	1279	A
1	1G	1280	A
1	1G	1286	A
1	1G	1287	A
1	1G	1288	A
1	1G	1297	C
1	1G	1299	A
1	1G	1300	G
1	1G	1301	U
1	1G	1305	G
1	1G	1307	U
1	1G	1312	G
1	1G	1317	C
1	1G	1319	A
1	1G	1322	C
1	1G	1323	G
1	1G	1331	G
1	1G	1335	C
1	1G	1336	C
1	1G	1337	G
1	1G	1340	A
1	1G	1346	A
1	1G	1347	G
1	1G	1353	G
1	1G	1359	C
1	1G	1360	A

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Mol	Chain	Res	Type
1	1G	1361	G
1	1G	1362(A)	C
1	1G	1363	A
1	1G	1364	U
1	1G	1379	G
1	1G	1398	A
1	1G	1402	C
1	1G	1419	G
1	1G	1442	G
1	1G	1443	G
1	1G	1446	A
1	1G	1447	G
1	1G	1449	C
1	1G	1450	U
1	1G	1452	C
1	1G	1453	G
1	1G	1454	G
1	1G	1482	G
1	1G	1487	G
1	1G	1490	C
1	1G	1492	A
1	1G	1493	A
1	1G	1494	G
1	1G	1497	G
1	1G	1498	U
1	1G	1499	A
1	1G	1502	A
1	1G	1503	A
1	1G	1504	G
1	1G	1506	U
1	1G	1517	G
1	1G	1519	A
1	1G	1520	G
1	1G	1525	G
1	1G	1528	U
1	1G	1529	G
1	1G	1530	G
22	1L	2	C
22	1L	3	U
22	1L	6	U
22	1L	8	U
22	1L	9	A

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Mol	Chain	Res	Type
22	1L	10	G
22	1L	12	U
22	1L	15	G
22	1L	18	G
22	1L	19	G
22	1L	22	G
22	1L	23	A
22	1L	25	C
22	1L	26	G
22	1L	27	C
22	1L	29	C
22	1L	30	C
22	1L	31	C
22	1L	41	G
22	1L	47	U
22	1L	48	C
22	1L	49	G
22	1L	52	A
22	1L	53	G
22	1L	55	PSU
22	1L	56	C
22	1L	57	G
22	1L	58	A
22	1L	59	C
22	1L	61	C
22	1L	63	G
22	1L	66	U
22	1L	67	A
22	1L	68	U
22	1L	69	C
22	1L	70	A
22	1L	71	G
22	1L	72	C
22	1L	73	A
22	1L	74	C
22	1L	76	A
23	2L	2	G
23	2L	4	G
23	2L	6	G
23	2L	8	U
23	2L	9	G
23	2L	16	C

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Mol	Chain	Res	Type
23	2L	17	C
23	2L	18	U
23	2L	19	G
23	2L	21	U
23	2L	45	A
23	2L	47	G
23	2L	48	U
23	2L	49	C
23	2L	54	G
23	2L	57	C
23	2L	66	C
23	2L	68	C
23	2L	77	A
24	3L	2	C
24	3L	3	U
24	3L	6	U
24	3L	7	A
24	3L	8	U
24	3L	9	A
24	3L	10	G
24	3L	11	C
24	3L	13	C
24	3L	16	U
24	3L	23	A
24	3L	24	G
24	3L	26	G
24	3L	27	C
24	3L	31	C
24	3L	33	U
24	3L	34	G
24	3L	35	G
24	3L	37	A
24	3L	38	A
24	3L	39	G
24	3L	42	U
24	3L	44	A
24	3L	46	G
24	3L	47	U
24	3L	48	C
24	3L	52	A
24	3L	55	U
24	3L	56	C

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Mol	Chain	Res	Type
24	3L	58	A
24	3L	59	A
24	3L	60	U
24	3L	61	C
24	3L	64	C
24	3L	73	A
24	3L	75	C
25	4L	13	A
25	4L	15	A
25	4L	22	A
25	4L	23	A
25	4L	24	A
25	4L	25	A
26	14	7	G
26	14	8	A
26	14	9	U
26	14	11	G
26	14	14	A
26	14	15	G
26	14	34	C
26	14	35	G
26	14	36	G
26	14	37	C
26	14	46	C
26	14	49	A
26	14	50	U
26	14	51	G
26	14	58	G
26	14	63	U
26	14	71	A
26	14	72	U
26	14	74	A
26	14	75	G
26	14	78	A
26	14	95	G
26	14	101	G
26	14	102	G
26	14	118	A
26	14	119	A
26	14	120	U
26	14	125	G
26	14	129	C

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Mol	Chain	Res	Type
26	14	137(A)	G
26	14	138	G
26	14	140	A
26	14	153	C
26	14	154	G
26	14	155	C
26	14	161	U
26	14	162	U
26	14	171	G
26	14	173	G
26	14	174	C
26	14	178	G
26	14	181	A
26	14	182	A
26	14	196	A
26	14	199	A
26	14	200	U
26	14	205	G
26	14	214	G
26	14	215	G
26	14	216	A
26	14	222	A
26	14	223	A
26	14	225	A
26	14	229	A
26	14	233	A
26	14	238	C
26	14	241	A
26	14	248	G
26	14	249	C
26	14	250	G
26	14	268	C
26	14	269	U
26	14	270(K)	C
26	14	270(L)	U
26	14	270(M)	U
26	14	270(O)	U
26	14	270(P)	C
26	14	271(B)	G
26	14	271(C)	U
26	14	271	G
26	14	273(C)	C

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Mol	Chain	Res	Type
26	14	273(D)	C
26	14	273(F)	C
26	14	274	G
26	14	275	G
26	14	276	A
26	14	277	C
26	14	278	A
26	14	279	C
26	14	283	A
26	14	289	A
26	14	290	G
26	14	294	A
26	14	299	A
26	14	311	A
26	14	324	A
26	14	329	G
26	14	330	A
26	14	331	A
26	14	333	G
26	14	346	A
26	14	352	G
26	14	354	G
26	14	360	G
26	14	362	U
26	14	363	G
26	14	363(E)	U
26	14	363(F)	A
26	14	371	A
26	14	372	G
26	14	386	G
26	14	396	G
26	14	399	G
26	14	405	U
26	14	406	G
26	14	407	G
26	14	411	G
26	14	412	A
26	14	426	C
26	14	428	A
26	14	443	A
26	14	444	C
26	14	447	A

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Mol	Chain	Res	Type
26	14	448	U
26	14	454	A
26	14	455	C
26	14	456	C
26	14	457	A
26	14	470	A
26	14	471	A
26	14	481	G
26	14	483	A
26	14	492	A
26	14	501	A
26	14	504	U
26	14	505	A
26	14	508	G
26	14	509	C
26	14	527	C
26	14	528	A
26	14	530	G
26	14	531	C
26	14	532	A
26	14	533	G
26	14	537	C
26	14	542	C
26	14	546	C
26	14	549	G
26	14	556	G
26	14	563	G
26	14	573	G
26	14	574	C
26	14	575	A
26	14	584	C
26	14	586	A
26	14	603	A
26	14	607	U
26	14	613	U
26	14	614	U
26	14	615	G
26	14	617	G
26	14	618	G
26	14	619	G
26	14	621	A
26	14	622	G

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Mol	Chain	Res	Type
26	14	627	A
26	14	631	A
26	14	637	A
26	14	645	C
26	14	646	A
26	14	651	G
26	14	654	A
26	14	654(B)	C
26	14	654(C)	G
26	14	654(S)	G
26	14	654(T)	A
26	14	654(U)	A
26	14	668	G
26	14	677	A
26	14	686	G
26	14	701	G
26	14	708	C
26	14	717	G
26	14	722	A
26	14	730	C
26	14	738	G
26	14	749	C
26	14	752	A
26	14	753	C
26	14	759	G
26	14	762	U
26	14	775	G
26	14	776	G
26	14	779	U
26	14	782	A
26	14	784	A
26	14	785	G
26	14	790	C
26	14	792	G
26	14	800	A
26	14	805	G
26	14	809	G
26	14	812	C
26	14	819	A
26	14	822	U
26	14	827	U
26	14	828	U

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Mol	Chain	Res	Type
26	14	832	G
26	14	846	C
26	14	855	G
26	14	859	G
26	14	868	U
26	14	877	U
26	14	878	A
26	14	880	G
26	14	897	C
26	14	899	A
26	14	901	A
26	14	903	C
26	14	907	U
26	14	910	A
26	14	914	C
26	14	915	C
26	14	917	A
26	14	919	G
26	14	926	A
26	14	932	G
26	14	933	A
26	14	934	G
26	14	935	C
26	14	938	G
26	14	941	A
26	14	945	A
26	14	946	G
26	14	958	U
26	14	959	A
26	14	961	C
26	14	967	C
26	14	968	G
26	14	974	G
26	14	974(A)	C
26	14	980	A
26	14	983	A
26	14	990	A
26	14	991	C
26	14	996	A
26	14	1004	C
26	14	1005	C
26	14	1012	U

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Mol	Chain	Res	Type
26	14	1013	C
26	14	1015	G
26	14	1017	G
26	14	1022	G
26	14	1023	U
26	14	1024	G
26	14	1025	G
26	14	1026	U
26	14	1035	U
26	14	1037	G
26	14	1038	C
26	14	1041	C
26	14	1042	G
26	14	1044	G
26	14	1049	C
26	14	1050	A
26	14	1106	G
26	14	1107	G
26	14	1108	U
26	14	1109	C
26	14	1110	G
26	14	1112	G
26	14	1113	U
26	14	1114	G
26	14	1120	G
26	14	1126	A
26	14	1128	A
26	14	1129	A
26	14	1130	U
26	14	1132	A
26	14	1135	C
26	14	1136	G
26	14	1139	G
26	14	1142(A)	A
26	14	1143	A
26	14	1149	G
26	14	1151	G
26	14	1170	G
26	14	1173	G
26	14	1174	A
26	14	1175	U
26	14	1176	G

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Mol	Chain	Res	Type
26	14	1177	A
26	14	1178	C
26	14	1183	G
26	14	1189	A
26	14	1204	A
26	14	1205	U
26	14	1212	G
26	14	1214	A
26	14	1220	A
26	14	1230	C
26	14	1236	G
26	14	1248	G
26	14	1253	A
26	14	1256	G
26	14	1264	G
26	14	1271	G
26	14	1272	A
26	14	1273	U
26	14	1278	A
26	14	1284	A
26	14	1300	U
26	14	1301	A
26	14	1302	A
26	14	1303	G
26	14	1304	C
26	14	1307	A
26	14	1319	G
26	14	1321	A
26	14	1325	G
26	14	1326	U
26	14	1329	U
26	14	1338	G
26	14	1345	C
26	14	1348	G
26	14	1359	A
26	14	1360	A
26	14	1365	A
26	14	1368	G
26	14	1370	C
26	14	1378	A
26	14	1380	G
26	14	1385	G

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Mol	Chain	Res	Type
26	14	1386	C
26	14	1395	A
26	14	1416	G
26	14	1417	C
26	14	1419	A
26	14	1420	U
26	14	1421	G
26	14	1427	A
26	14	1428	C
26	14	1444(A)	A
26	14	1445	C
26	14	1449	A
26	14	1451	C
26	14	1455	G
26	14	1456	G
26	14	1458	C
26	14	1459	G
26	14	1467	C
26	14	1469	A
26	14	1471	A
26	14	1475	G
26	14	1483	G
26	14	1490	A
26	14	1491	G
26	14	1493	C
26	14	1494	A
26	14	1507	A
26	14	1508	A
26	14	1509	C
26	14	1510	A
26	14	1514	U
26	14	1528	A
26	14	1533	C
26	14	1534	G
26	14	1535	U
26	14	1537	C
26	14	1540	G
26	14	1543	A
26	14	1558	A
26	14	1559	G
26	14	1560	G
26	14	1566	A

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Mol	Chain	Res	Type
26	14	1569	A
26	14	1578	U
26	14	1583	A
26	14	1585	C
26	14	1586	A
26	14	1587	A
26	14	1588	C
26	14	1589	C
26	14	1595	G
26	14	1598	C
26	14	1603	A
26	14	1608	A
26	14	1609	A
26	14	1610	A
26	14	1614	A
26	14	1616	A
26	14	1625	C
26	14	1640	C
26	14	1644	C
26	14	1647	G
26	14	1648	C
26	14	1669	A
26	14	1674	G
26	14	1676	A
26	14	1682	G
26	14	1696	G
26	14	1700	A
26	14	1701	A
26	14	1703	G
26	14	1725	G
26	14	1726	G
26	14	1729	A
26	14	1730	U
26	14	1731	G
26	14	1732	A
26	14	1756	G
26	14	1762	A
26	14	1763	G
26	14	1764	G
26	14	1769	G
26	14	1773	A
26	14	1774	C

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Mol	Chain	Res	Type
26	14	1780	A
26	14	1781	C
26	14	1791	A
26	14	1800	C
26	14	1801	G
26	14	1802	A
26	14	1811	G
26	14	1816	G
26	14	1819	A
26	14	1820	U
26	14	1826	G
26	14	1828	G
26	14	1829	A
26	14	1830	C
26	14	1847	A
26	14	1858	G
26	14	1859	A
26	14	1870	C
26	14	1878	G
26	14	1885	A
26	14	1886	C
26	14	1888	G
26	14	1889	A
26	14	1900	A
26	14	1905	C
26	14	1906	G
26	14	1913	A
26	14	1914	C
26	14	1920	C
26	14	1929	G
26	14	1930	G
26	14	1931	U
26	14	1934	C
26	14	1936	A
26	14	1938	A
26	14	1941	C
26	14	1955	U
26	14	1963	U
26	14	1964	G
26	14	1967	C
26	14	1970	A
26	14	1971	A

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Mol	Chain	Res	Type
26	14	1972	A
26	14	1985	G
26	14	1991	U
26	14	1993	U
26	14	1994	C
26	14	2020	A
26	14	2023	G
26	14	2027	G
26	14	2031	A
26	14	2033	A
26	14	2036	C
26	14	2043	C
26	14	2052	G
26	14	2054	A
26	14	2055	C
26	14	2056	G
26	14	2060	A
26	14	2061	G
26	14	2062	A
26	14	2063	C
26	14	2069	G
26	14	2074	U
26	14	2087	G
26	14	2095	C
26	14	2099	U
26	14	2108	C
26	14	2114	A
26	14	2115	G
26	14	2117	A
26	14	2119	A
26	14	2120	G
26	14	2124	G
26	14	2125	G
26	14	2126	A
26	14	2127	G
26	14	2128	C
26	14	2129	C
26	14	2130	U
26	14	2131	G
26	14	2132	U
26	14	2133	G
26	14	2134	A

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Mol	Chain	Res	Type
26	14	2135	A
26	14	2136	C
26	14	2137	C
26	14	2140	C
26	14	2141	G
26	14	2144	U
26	14	2145	C
26	14	2146	C
26	14	2147	G
26	14	2148	G
26	14	2151	G
26	14	2153	G
26	14	2154	G
26	14	2155	G
26	14	2157	G
26	14	2158	A
26	14	2161	C
26	14	2162	G
26	14	2166	G
26	14	2168	G
26	14	2170	A
26	14	2171	A
26	14	2172	U
26	14	2173	A
26	14	2174	C
26	14	2175	C
26	14	2176	A
26	14	2188	C
26	14	2189	U
26	14	2191	G
26	14	2192	G
26	14	2198	A
26	14	2210	G
26	14	2211	G
26	14	2212	A
26	14	2213	U
26	14	2215	G
26	14	2225	A
26	14	2226	C
26	14	2234	G
26	14	2238	G
26	14	2240	C

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Mol	Chain	Res	Type
26	14	2246	G
26	14	2251	G
26	14	2269	A
26	14	2271	G
26	14	2275	C
26	14	2276	G
26	14	2278	A
26	14	2280	G
26	14	2283	C
26	14	2287	A
26	14	2288	A
26	14	2293	C
26	14	2305	A
26	14	2307	G
26	14	2308	G
26	14	2310	A
26	14	2311	A
26	14	2312	U
26	14	2318	G
26	14	2319	G
26	14	2321	G
26	14	2324	C
26	14	2325	G
26	14	2327	A
26	14	2333	A
26	14	2334	G
26	14	2335	A
26	14	2336	A
26	14	2342	C
26	14	2346	A
26	14	2347	C
26	14	2350	C
26	14	2353	G
26	14	2354	G
26	14	2355	C
26	14	2383	G
26	14	2385	C
26	14	2392	A
26	14	2402	C
26	14	2403	C
26	14	2406	U
26	14	2407	G

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Mol	Chain	Res	Type
26	14	2414	G
26	14	2422	A
26	14	2424	C
26	14	2428	G
26	14	2429	G
26	14	2430	A
26	14	2431	U
26	14	2434	A
26	14	2435	A
26	14	2439	A
26	14	2440	C
26	14	2441	C
26	14	2445	G
26	14	2448	A
26	14	2449	U
26	14	2468	G
26	14	2469	A
26	14	2470	G
26	14	2472	G
26	14	2477	C
26	14	2478	A
26	14	2484	G
26	14	2487	G
26	14	2502	G
26	14	2504	U
26	14	2505	G
26	14	2513	G
26	14	2514	U
26	14	2518	A
26	14	2529	G
26	14	2542	A
26	14	2543	G
26	14	2554	U
26	14	2564	A
26	14	2566	A
26	14	2567	G
26	14	2573	C
26	14	2578	G
26	14	2602	A
26	14	2609	U
26	14	2611	U
26	14	2612	C

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Mol	Chain	Res	Type
26	14	2615	U
26	14	2617	C
26	14	2621	A
26	14	2629	A
26	14	2630	G
26	14	2632	A
26	14	2636	U
26	14	2641	G
26	14	2649	U
26	14	2654	A
26	14	2659	G
26	14	2660	A
26	14	2665	A
26	14	2667	C
26	14	2679	A
26	14	2689	U
26	14	2690	C
26	14	2691	C
26	14	2702	U
26	14	2703	C
26	14	2707	G
26	14	2712(A)	A
26	14	2713	A
26	14	2714	G
26	14	2726	U
26	14	2733	A
26	14	2744	G
26	14	2747	G
26	14	2748	A
26	14	2750	A
26	14	2751	G
26	14	2752	C
26	14	2758	A
26	14	2761	G
26	14	2762	G
26	14	2765	A
26	14	2766	G
26	14	2777	G
26	14	2778	A
26	14	2780	G
26	14	2781	A
26	14	2789	C

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Mol	Chain	Res	Type
26	14	2790	A
26	14	2791	C
26	14	2792	G
26	14	2793	G
26	14	2795	G
26	14	2797	U
26	14	2798	C
26	14	2799	A
26	14	2801	A
26	14	2802	G
26	14	2804	C
26	14	2805	G
26	14	2808	U
26	14	2810	A
26	14	2818	G
26	14	2820	A
26	14	2821	A
26	14	2833	G
26	14	2834	G
26	14	2835	A
26	14	2849	U
26	14	2860	A
26	14	2872	G
26	14	2873	A
26	14	2874	C
26	14	2878	U
26	14	2880	C
26	14	2883	A
26	14	2885	C
26	14	2886	G
26	14	2892	A
26	14	2893	G
26	14	2894	G
26	14	2895	U
27	1J	0	A
27	1J	2	C
27	1J	7	G
27	1J	13	A
27	1J	15	A
27	1J	16	G
27	1J	22	U
27	1J	25	A

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Mol	Chain	Res	Type
27	1J	27	C
27	1J	28	C
27	1J	29	A
27	1J	30	C
27	1J	33	G
27	1J	40	U
27	1J	42	C
27	1J	43	C
27	1J	44	G
27	1J	45	A
27	1J	51	G
27	1J	53	A
27	1J	56	G
27	1J	58	A
27	1J	67	G
27	1J	72	G
27	1J	73	A
27	1J	81	G
27	1J	88	C
27	1J	89	G
27	1J	89(A)	A
27	1J	90	C
27	1J	108	C
27	1J	109	G
27	1J	115	G
27	1J	116	G

All (158) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	31	G
1	13	49	U
1	13	50	A
1	13	181	G
1	13	244	U
1	13	266	G
1	13	389	A
1	13	429	U
1	13	484	G
1	13	560	U
1	13	687	A

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Mol	Chain	Res	Type
1	13	748	C
1	13	793	U
1	13	871	U
1	13	913	A
1	13	1025	U
1	13	1128	C
1	13	1129	C
1	13	1157	A
1	13	1256	A
1	13	1285	A
1	13	1336	C
1	13	1363	A
1	13	1397	C
1	13	1453	G
1	13	1498	U
1	13	1533	C
22	1K	2	C
22	1K	69	C
23	2K	48	U
24	3K	2	C
24	3K	46	G
25	4K	11	U
25	4K	12	A
25	4K	24	A
26	1H	33	U
26	1H	99	U
26	1H	125	G
26	1H	162	U
26	1H	195	A
26	1H	196	A
26	1H	222	A
26	1H	404	C
26	1H	479	A
26	1H	508	G
26	1H	528	A
26	1H	587	C
26	1H	627	A
26	1H	685	A
26	1H	746	A
26	1H	764	A
26	1H	1022	G
26	1H	1026	U

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Mol	Chain	Res	Type
26	1H	1085	A
26	1H	1178	C
26	1H	1210	A
26	1H	1379	A
26	1H	1396	U
26	1H	1420	U
26	1H	1509	C
26	1H	1558	A
26	1H	1608	A
26	1H	1609	A
26	1H	1799	G
26	1H	1858	G
26	1H	1900	A
26	1H	1939	U
26	1H	1970	A
26	1H	1992	G
26	1H	2035	G
26	1H	2062	A
26	1H	2172	U
26	1H	2225	A
26	1H	2473	U
26	1H	2481	G
26	1H	2756	U
27	16	44	G
1	1G	1	U
1	1G	5	U
1	1G	80	G
1	1G	87	A
1	1G	89	U
1	1G	115	G
1	1G	250	A
1	1G	266	G
1	1G	345	C
1	1G	351	G
1	1G	367	U
1	1G	412	A
1	1G	485	G
1	1G	509	A
1	1G	560	U
1	1G	687	A
1	1G	748	C
1	1G	884	U

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Mol	Chain	Res	Type
1	1G	913	A
1	1G	974	A
1	1G	1053	G
1	1G	1126	U
1	1G	1145	C
1	1G	1157	A
1	1G	1285	A
1	1G	1300	G
1	1G	1359	C
1	1G	1442	G
1	1G	1453	G
1	1G	1492	A
1	1G	1498	U
1	1G	1506	U
22	1L	60	U
22	1L	69	C
22	1L	73	A
23	2L	8	U
23	2L	47	G
23	2L	48	U
24	3L	5	A
24	3L	8	U
25	4L	12	A
25	4L	22	A
25	4L	23	A
26	14	49	A
26	14	71	A
26	14	128	C
26	14	196	A
26	14	249	C
26	14	278	A
26	14	562	U
26	14	669	G
26	14	752	A
26	14	774	A
26	14	793	A
26	14	960	A
26	14	974	G
26	14	1011	G
26	14	1022	G
26	14	1379	A
26	14	1420	U

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Mol	Chain	Res	Type
26	14	1558	A
26	14	1608	A
26	14	1609	A
26	14	1819	A
26	14	1939	U
26	14	1963	U
26	14	1992	G
26	14	2062	A
26	14	2211	G
26	14	2275	C
26	14	2406	U
26	14	2439	A
26	14	2611	U
26	14	2629	A
26	14	2689	U
26	14	2776	A
26	14	2791	C
26	14	2833	G
26	14	2859	G
27	1J	88	C

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

12 non-standard protein/DNA/RNA residues are modelled in this entry.

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	$\#\|Z\| > 2$
22	PSU	1K	55	22	18,21,22	1.30	1 (5%)	21,30,33	2.02	5 (23%)
22	H2U	1L	17	22	18,21,22	2.32	4 (22%)	19,30,33	1.64	4 (21%)
23	PSU	2K	56	23	18,21,22	1.24	2 (11%)	21,30,33	2.42	5 (23%)
23	PSU	2L	56	23	18,21,22	1.29	2 (11%)	21,30,33	1.91	3 (14%)
23	5MU	2L	55	23	19,22,23	3.89	5 (26%)	27,32,35	3.25	10 (37%)
23	5MU	2K	55	23	19,22,23	3.96	5 (26%)	27,32,35	3.25	8 (29%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
22	H2U	1K	17	22	18,21,22	2.24	4 (22%)	19,30,33	1.61	4 (21%)
22	AET	1L	37	22	32,35,36	2.70	6 (18%)	43,51,54	2.17	14 (32%)
22	PSU	1L	55	22	18,21,22	1.24	1 (5%)	21,30,33	1.81	4 (19%)
22	AET	1K	37	22	32,35,36	3.02	6 (18%)	43,51,54	2.28	14 (32%)
22	5MU	1L	54	22	19,22,23	4.09	5 (26%)	27,32,35	3.22	9 (33%)
22	5MU	1K	54	22	19,22,23	4.01	5 (26%)	27,32,35	3.36	9 (33%)

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
22	PSU	1K	55	22	-	2/7/25/26	0/2/2/2
22	H2U	1L	17	22	-	5/7/38/39	0/2/2/2
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
23	PSU	2L	56	23	-	0/7/25/26	0/2/2/2
23	5MU	2L	55	23	-	0/7/25/26	0/2/2/2
23	5MU	2K	55	23	-	0/7/25/26	0/2/2/2
22	H2U	1K	17	22	-	4/7/38/39	0/2/2/2
22	AET	1L	37	22	-	8/27/45/46	0/3/3/3
22	PSU	1L	55	22	-	3/7/25/26	0/2/2/2
22	AET	1K	37	22	-	8/27/45/46	0/3/3/3
22	5MU	1L	54	22	-	0/7/25/26	0/2/2/2
22	5MU	1K	54	22	-	4/7/25/26	0/2/2/2

All (46) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	1L	54	5MU	C2-N1	13.32	1.59	1.38
22	1K	54	5MU	C2-N1	13.15	1.59	1.38
22	1K	37	AET	C10-N6	12.92	1.55	1.37
23	2K	55	5MU	C2-N1	12.91	1.58	1.38
23	2L	55	5MU	C2-N1	12.22	1.57	1.38
22	1L	37	AET	C10-N6	11.22	1.52	1.37
22	1K	37	AET	C10-N11	7.86	1.52	1.35
22	1L	37	AET	C10-N11	7.25	1.51	1.35
22	1L	17	H2U	C2-N1	7.17	1.45	1.35
22	1K	17	H2U	C2-N1	6.91	1.45	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	55	5MU	C4-N3	-6.26	1.27	1.38
22	1L	54	5MU	C2-N3	6.18	1.48	1.38
22	1K	54	5MU	C4-N3	-6.10	1.27	1.38
22	1L	54	5MU	C4-N3	-5.97	1.27	1.38
22	1L	54	5MU	C6-N1	5.95	1.48	1.38
23	2K	55	5MU	C4-N3	-5.84	1.27	1.38
22	1K	54	5MU	C2-N3	5.80	1.48	1.38
23	2K	55	5MU	C2-N3	5.78	1.48	1.38
23	2L	55	5MU	C6-N1	5.74	1.47	1.38
23	2L	55	5MU	C2-N3	5.72	1.47	1.38
22	1K	54	5MU	C6-N1	5.66	1.47	1.38
23	2K	55	5MU	C4-C5	5.58	1.53	1.44
23	2K	55	5MU	C6-N1	5.41	1.47	1.38
23	2L	55	5MU	C4-C5	5.22	1.53	1.44
22	1L	54	5MU	C4-C5	5.14	1.53	1.44
22	1K	54	5MU	C4-C5	4.87	1.52	1.44
22	1K	37	AET	C6-N6	4.63	1.49	1.39
22	1L	37	AET	C6-N6	4.51	1.49	1.39
22	1K	55	PSU	C6-C5	4.48	1.40	1.35
22	1L	17	H2U	C2-N3	4.46	1.45	1.38
22	1K	17	H2U	C2-N3	4.34	1.45	1.38
22	1L	55	PSU	C6-C5	4.27	1.40	1.35
23	2K	56	PSU	C6-C5	4.14	1.39	1.35
23	2L	56	PSU	C6-C5	3.84	1.39	1.35
22	1K	17	H2U	C4-N3	3.64	1.43	1.37
22	1L	17	H2U	C4-N3	3.46	1.43	1.37
22	1K	37	AET	C5-C4	-2.63	1.34	1.39
22	1L	37	AET	C5-N7	-2.52	1.34	1.39
23	2L	56	PSU	C2-N1	2.49	1.39	1.36
22	1L	17	H2U	C6-N1	-2.38	1.42	1.47
22	1K	37	AET	C5-N7	-2.37	1.34	1.39
22	1L	37	AET	C5-C4	-2.23	1.35	1.39
22	1K	17	H2U	C6-N1	-2.22	1.43	1.47
23	2K	56	PSU	C4-C5	-2.20	1.38	1.44
22	1K	37	AET	C4-N9	-2.11	1.33	1.37
22	1L	37	AET	C8-N9	-2.03	1.34	1.37

All (89) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1K	54	5MU	C5-C4-N3	10.86	124.76	115.32
23	2L	55	5MU	C5-C4-N3	10.67	124.60	115.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1L	54	5MU	C5-C4-N3	9.66	123.72	115.32
23	2K	55	5MU	C5-C4-N3	9.21	123.33	115.32
23	2K	55	5MU	C6-C5-C4	7.02	123.81	118.02
22	1K	37	AET	N3-C2-N1	-7.00	117.98	128.58
23	2K	55	5MU	C5-C6-N1	-6.51	116.24	123.31
22	1K	54	5MU	C4-N3-C2	-6.46	118.87	127.34
23	2L	55	5MU	C4-N3-C2	-6.42	118.92	127.34
22	1L	54	5MU	C6-C5-C4	6.21	123.14	118.02
22	1L	54	5MU	C4-N3-C2	-6.12	119.32	127.34
23	2K	55	5MU	C4-N3-C2	-6.10	119.34	127.34
23	2L	55	5MU	C5-C6-N1	-5.98	116.82	123.31
22	1L	37	AET	N3-C2-N1	-5.93	119.61	128.58
23	2K	56	PSU	N1-C2-N3	5.87	121.36	115.17
22	1K	54	5MU	O4-C4-C5	-5.65	118.46	124.92
22	1K	54	5MU	C6-C5-C4	5.48	122.54	118.02
22	1K	54	5MU	C5-C6-N1	-5.44	117.41	123.31
23	2L	55	5MU	C6-C5-C4	5.36	122.44	118.02
22	1L	54	5MU	C5-C6-N1	-5.27	117.59	123.31
23	2K	55	5MU	C5M-C5-C6	-5.25	115.75	122.85
22	1K	55	PSU	N1-C2-N3	5.21	120.66	115.17
22	1K	37	AET	C2-N1-C6	4.97	123.96	111.83
22	1K	55	PSU	C4-N3-C2	-4.92	119.60	126.37
22	1L	54	5MU	O4-C4-C5	-4.89	119.33	124.92
22	1L	37	AET	C5-C4-N3	-4.85	120.04	126.72
23	2L	56	PSU	C4-N3-C2	-4.75	119.83	126.37
23	2K	56	PSU	C4-N3-C2	-4.66	119.95	126.37
23	2L	55	5MU	O4-C4-C5	-4.48	119.79	124.92
22	1K	37	AET	C5-C4-N9	4.44	110.65	105.81
22	1L	55	PSU	C4-N3-C2	-4.43	120.26	126.37
22	1L	55	PSU	N1-C2-N3	4.41	119.82	115.17
22	1K	17	H2U	C5-C4-N3	4.34	121.31	116.69
23	2K	56	PSU	C6-N1-C2	-4.32	118.68	122.69
23	2K	55	5MU	O4-C4-C5	-4.26	120.04	124.92
23	2K	56	PSU	O2-C2-N1	-4.18	118.48	122.79
22	1L	54	5MU	C5M-C5-C6	-4.09	117.32	122.85
22	1K	37	AET	N9-C8-N7	-4.08	108.15	113.94
23	2L	56	PSU	N1-C2-N3	4.04	119.43	115.17
22	1L	54	5MU	C6-N1-C2	-4.03	117.29	121.30
22	1K	54	5MU	C5M-C5-C6	-3.99	117.44	122.85
22	1K	37	AET	C4-C5-N7	-3.99	106.02	110.58
22	1L	37	AET	C2-N1-C6	3.90	121.35	111.83
23	2K	56	PSU	C6-C5-C4	3.86	120.78	118.17

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1L	37	AET	C4-C5-C6	3.86	119.90	115.91
22	1K	37	AET	C12-N11-C10	3.81	132.36	122.64
22	1L	37	AET	N9-C8-N7	-3.79	108.56	113.94
22	1L	17	H2U	N3-C2-N1	3.79	120.45	116.65
23	2L	55	5MU	C5M-C5-C6	-3.78	117.73	122.85
22	1L	17	H2U	C5-C6-N1	3.69	122.67	111.52
22	1K	37	AET	C5-C4-N3	-3.49	121.91	126.72
22	1L	37	AET	O10-C10-N6	-3.47	118.39	122.19
22	1L	37	AET	C2-N3-C4	3.39	120.12	111.83
22	1K	37	AET	C2-N3-C4	3.36	120.05	111.83
23	2L	56	PSU	C6-C5-C4	3.33	120.42	118.17
22	1K	37	AET	C5-N7-C8	3.28	108.60	103.45
22	1K	17	H2U	N3-C2-N1	3.23	119.89	116.65
22	1K	17	H2U	C5-C6-N1	3.22	121.25	111.52
22	1L	17	H2U	C5-C4-N3	3.21	120.11	116.69
22	1K	54	5MU	C6-N1-C2	-3.21	118.11	121.30
22	1L	37	AET	C12-N11-C10	3.20	130.79	122.64
22	1L	54	5MU	N3-C2-N1	3.11	118.94	114.89
22	1L	37	AET	C5-N7-C8	3.10	108.32	103.45
22	1K	54	5MU	C1'-N1-C2	3.08	123.13	117.59
22	1K	37	AET	O10-C10-N6	-2.89	119.02	122.19
22	1K	55	PSU	C6-N1-C2	-2.88	120.02	122.69
23	2L	55	5MU	N3-C2-N1	2.82	118.56	114.89
22	1L	37	AET	C4-C5-N7	-2.78	107.40	110.58
22	1K	37	AET	C13-C12-N11	2.75	116.21	110.17
22	1L	37	AET	N3-C4-N9	2.68	131.73	127.17
22	1L	55	PSU	C6-N1-C2	-2.68	120.20	122.69
23	2L	55	5MU	C6-N1-C2	-2.65	118.67	121.30
22	1K	55	PSU	O2-C2-N1	-2.64	120.07	122.79
22	1K	54	5MU	N3-C2-N1	2.63	118.32	114.89
22	1L	37	AET	N1-C6-N6	2.62	119.21	116.36
23	2K	55	5MU	N3-C2-N1	2.61	118.29	114.89
22	1L	55	PSU	O2-C2-N1	-2.48	120.23	122.79
23	2L	55	5MU	O4-C4-N3	-2.39	115.61	120.11
23	2L	55	5MU	O2-C2-N1	-2.37	119.71	122.80
23	2K	55	5MU	C6-N1-C2	-2.33	118.98	121.30
22	1L	37	AET	C14-C12-N11	2.31	117.82	111.70
22	1K	37	AET	ODB-C13-C12	2.25	121.97	114.15
22	1L	37	AET	C5-C4-N9	2.22	108.23	105.81
22	1K	37	AET	C4-C5-C6	2.12	118.11	115.91
22	1K	37	AET	ODB-C13-ODA	-2.10	119.33	124.08
22	1K	17	H2U	O2-C2-N1	-2.07	120.62	123.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	1L	54	5MU	O2-C2-N1	-2.04	120.14	122.80
22	1K	55	PSU	C6-C5-C4	2.01	119.53	118.17
22	1L	17	H2U	O2-C2-N3	-2.01	117.78	121.49

There are no chirality outliers.

All (34) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	1K	17	H2U	O4'-C1'-N1-C6
22	1K	17	H2U	C2'-C1'-N1-C2
22	1K	17	H2U	C2'-C1'-N1-C6
22	1L	17	H2U	O4'-C1'-N1-C2
22	1L	17	H2U	O4'-C1'-N1-C6
22	1K	37	AET	C5-C6-N6-C10
22	1K	37	AET	N1-C6-N6-C10
22	1K	37	AET	C13-C12-C14-O14
22	1K	37	AET	C13-C12-C14-C15
22	1L	37	AET	C14-C12-N11-C10
22	1L	55	PSU	C2'-C1'-C5-C4
22	1K	54	5MU	C3'-C4'-C5'-O5'
22	1K	54	5MU	O4'-C4'-C5'-O5'
22	1L	37	AET	N11-C12-C14-O14
22	1K	55	PSU	C3'-C4'-C5'-O5'
22	1L	55	PSU	C3'-C4'-C5'-O5'
22	1K	37	AET	N1-C6-N6-CM6
22	1L	55	PSU	O4'-C4'-C5'-O5'
22	1K	17	H2U	O4'-C1'-N1-C2
22	1L	37	AET	C13-C12-C14-C15
22	1K	55	PSU	O4'-C4'-C5'-O5'
22	1L	37	AET	N1-C6-N6-CM6
22	1K	37	AET	C5-C6-N6-CM6
22	1K	37	AET	C14-C12-N11-C10
22	1L	37	AET	C5-C6-N6-C10
22	1L	37	AET	C13-C12-C14-O14
22	1L	17	H2U	O4'-C4'-C5'-O5'
22	1K	37	AET	N11-C12-C14-C15
22	1L	37	AET	C5-C6-N6-CM6
22	1L	37	AET	N1-C6-N6-C10
22	1L	17	H2U	C2'-C1'-N1-C6
22	1L	17	H2U	C3'-C4'-C5'-O5'
22	1K	54	5MU	C2'-C1'-N1-C2
22	1K	54	5MU	C2'-C1'-N1-C6

There are no ring outliers.

3 monomers are involved in 7 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	1L	37	AET	2	0
22	1K	37	AET	4	0
22	1K	54	5MU	1	0

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

Of 1086 ligands modelled in this entry, 1084 are monoatomic - leaving 2 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	$\#\|Z\| > 2$
56	SF4	32	302	4	0,12,12	-	-	-		
56	SF4	3E	301	-	0,12,12	-	-	-		

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
56	SF4	32	302	4	-	-	0/6/5/5
56	SF4	3E	301	-	-	-	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	32	302	SF4	2	0
56	3E	301	SF4	1	0

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
24	3L	1
24	3K	1
26	1H	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	3L	48:C	O3'	49:G	P	5.47
1	3K	48:C	O3'	49:G	P	4.84
1	1H	1053:C	O3'	1054:A	P	3.77

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} 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	13	1500/1522 (98%)	1.26	371 (24%) 2 3	76, 125, 184, 245	0
1	1G	1490/1522 (97%)	0.78	227 (15%) 5 6	83, 128, 188, 248	0
2	12	207/256 (80%)	1.77	74 (35%) 1 1	161, 184, 195, 199	0
2	1E	231/256 (90%)	1.06	38 (16%) 4 5	141, 166, 184, 190	0
3	22	197/239 (82%)	1.35	51 (25%) 1 2	154, 171, 186, 191	0
3	2E	205/239 (85%)	1.12	39 (19%) 3 4	111, 131, 153, 161	0
4	32	208/209 (99%)	0.90	34 (16%) 4 5	120, 138, 152, 159	0
4	3E	207/209 (99%)	0.49	14 (6%) 23 18	110, 133, 148, 155	0
5	42	150/162 (92%)	1.15	26 (17%) 4 5	125, 140, 157, 169	0
5	4E	149/162 (91%)	1.02	28 (18%) 3 4	103, 125, 139, 144	0
6	52	101/101 (100%)	0.99	15 (14%) 5 6	115, 130, 143, 149	0
6	5E	100/101 (99%)	1.11	17 (17%) 4 5	111, 130, 143, 148	0
7	62	138/156 (88%)	0.62	11 (7%) 18 15	141, 152, 160, 165	0
7	6E	154/156 (98%)	0.94	15 (9%) 13 12	121, 144, 164, 171	0
8	72	137/138 (99%)	1.31	31 (22%) 2 3	124, 148, 161, 164	0
8	7E	138/138 (100%)	0.58	10 (7%) 21 17	114, 133, 143, 154	0
9	82	121/128 (94%)	0.81	13 (10%) 11 11	136, 172, 180, 189	0
9	8E	126/128 (98%)	1.84	29 (23%) 2 3	113, 159, 175, 182	0
10	1A	99/105 (94%)	1.79	23 (23%) 2 3	151, 177, 186, 190	0
10	1I	94/105 (89%)	1.52	21 (22%) 2 3	108, 151, 170, 173	0
11	2A	113/129 (87%)	0.60	5 (4%) 39 28	107, 132, 147, 153	0
11	2I	111/129 (86%)	1.20	18 (16%) 4 5	100, 132, 150, 165	0
12	3A	122/132 (92%)	1.16	22 (18%) 3 4	112, 126, 140, 147	0
12	3I	122/132 (92%)	0.96	23 (18%) 3 4	89, 102, 123, 138	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	4A	109/126 (86%)	1.65	24 (22%) 2 3	147, 174, 184, 192	0
13	4I	119/126 (94%)	1.48	23 (19%) 3 4	108, 141, 151, 161	0
14	5A	59/61 (96%)	1.63	15 (25%) 1 3	155, 172, 184, 193	0
14	5I	60/61 (98%)	0.29	2 (3%) 49 35	113, 123, 140, 142	0
15	6A	87/89 (97%)	0.74	10 (11%) 9 10	113, 133, 149, 153	0
15	6I	87/89 (97%)	1.09	22 (25%) 1 3	110, 126, 142, 148	0
16	7A	84/88 (95%)	0.91	12 (14%) 6 7	110, 128, 147, 175	0
16	7I	83/88 (94%)	1.15	17 (20%) 2 4	127, 142, 164, 175	0
17	8A	99/105 (94%)	0.88	16 (16%) 4 5	116, 127, 140, 145	0
17	8I	100/105 (95%)	1.45	20 (20%) 3 4	111, 128, 138, 139	0
18	9A	69/88 (78%)	0.25	3 (4%) 40 28	118, 135, 151, 160	0
18	9I	68/88 (77%)	0.73	11 (16%) 4 5	114, 132, 145, 153	0
19	AA	65/93 (69%)	0.92	11 (16%) 4 5	170, 188, 195, 196	0
19	AI	82/93 (88%)	0.97	13 (15%) 5 5	116, 140, 164, 171	0
20	BA	99/106 (93%)	0.85	13 (13%) 7 8	116, 133, 153, 156	0
20	BI	97/106 (91%)	1.02	17 (17%) 4 5	124, 143, 162, 165	0
21	1B	22/27 (81%)	0.22	0 100 100	138, 161, 164, 166	0
21	1F	23/27 (85%)	0.34	3 (13%) 7 8	117, 127, 134, 141	0
22	1K	70/76 (92%)	1.97	24 (34%) 1 1	118, 199, 215, 218	0
22	1L	70/76 (92%)	1.82	17 (24%) 2 3	137, 224, 235, 238	0
23	2K	75/77 (97%)	0.62	11 (14%) 6 6	84, 118, 147, 158	0
23	2L	75/77 (97%)	0.28	2 (2%) 56 41	94, 135, 158, 169	0
24	3K	72/76 (94%)	1.71	21 (29%) 1 2	88, 208, 234, 241	0
24	3L	72/76 (94%)	1.20	14 (19%) 3 4	100, 201, 226, 230	0
25	4K	18/27 (66%)	0.20	2 (11%) 10 10	96, 147, 195, 200	0
25	4L	14/27 (51%)	0.05	0 100 100	118, 164, 175, 177	0
26	14	2811/2917 (96%)	0.87	572 (20%) 3 4	64, 104, 193, 248	0
26	1H	2811/2917 (96%)	0.60	452 (16%) 4 5	56, 89, 174, 260	0
27	16	122/122 (100%)	0.35	7 (5%) 29 22	87, 112, 131, 182	0
27	1J	122/122 (100%)	0.51	13 (10%) 11 11	117, 142, 157, 190	0
28	11	273/276 (98%)	0.63	27 (9%) 13 12	57, 82, 102, 113	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
28	19	274/276 (99%)	0.67	33 (12%) 9 9	59, 90, 108, 119	0
29	21	205/206 (99%)	0.97	42 (20%) 2 4	66, 100, 134, 144	0
29	29	204/206 (99%)	2.24	67 (32%) 1 1	76, 114, 145, 159	0
30	31	202/210 (96%)	1.19	40 (19%) 3 4	60, 93, 126, 139	0
30	39	204/210 (97%)	2.10	60 (29%) 1 2	74, 123, 157, 170	0
31	41	179/182 (98%)	0.56	14 (7%) 19 15	105, 125, 147, 157	0
31	49	180/182 (98%)	0.72	19 (10%) 11 11	139, 158, 176, 187	0
32	51	174/180 (96%)	0.83	23 (13%) 7 8	99, 119, 132, 147	0
32	59	169/180 (93%)	2.68	83 (49%) 0 0	174, 207, 224, 229	0
33	61	145/148 (97%)	1.22	33 (22%) 2 3	97, 148, 162, 167	0
33	69	145/148 (97%)	1.73	44 (30%) 1 1	100, 142, 160, 165	0
34	15	137/140 (97%)	1.16	24 (17%) 4 5	94, 127, 154, 162	0
34	58	125/140 (89%)	0.99	21 (16%) 4 5	84, 101, 118, 135	0
35	25	122/122 (100%)	0.35	3 (2%) 58 43	82, 104, 119, 128	0
35	68	122/122 (100%)	0.35	5 (4%) 41 29	73, 94, 112, 126	0
36	35	147/150 (98%)	1.47	39 (26%) 1 2	74, 122, 150, 161	0
36	78	148/150 (98%)	0.60	21 (14%) 6 7	63, 98, 121, 128	0
37	45	138/141 (97%)	1.46	33 (23%) 2 3	91, 125, 148, 160	0
37	88	141/141 (100%)	1.31	26 (18%) 3 4	74, 98, 119, 144	0
38	55	118/118 (100%)	1.04	25 (21%) 2 4	79, 101, 115, 124	0
38	98	118/118 (100%)	0.81	20 (16%) 4 5	78, 97, 116, 131	0
39	65	110/112 (98%)	0.46	9 (8%) 17 15	116, 134, 146, 155	0
39	A8	111/112 (99%)	0.62	10 (9%) 15 13	93, 108, 124, 136	0
40	75	140/146 (95%)	1.07	22 (15%) 5 6	97, 114, 166, 177	0
40	B8	136/146 (93%)	1.18	29 (21%) 2 4	89, 108, 150, 175	0
41	85	116/118 (98%)	1.23	20 (17%) 4 5	82, 117, 146, 155	0
41	C8	115/118 (97%)	0.74	14 (12%) 8 9	68, 94, 121, 131	0
42	95	100/101 (99%)	1.16	20 (20%) 3 4	82, 141, 153, 159	0
42	D8	100/101 (99%)	0.93	15 (15%) 5 6	66, 112, 131, 136	0
43	A5	111/113 (98%)	1.32	24 (21%) 2 4	77, 95, 124, 143	0
43	E8	110/113 (97%)	1.29	20 (18%) 3 4	68, 87, 111, 124	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
44	B5	94/96 (97%)	0.44	6 (6%) 25 19	91, 104, 118, 125	0
44	F8	95/96 (98%)	0.74	10 (10%) 11 11	71, 85, 112, 122	0
45	C5	52/110 (47%)	1.78	18 (34%) 1 1	109, 122, 135, 145	0
45	G8	97/110 (88%)	0.73	5 (5%) 33 23	91, 107, 131, 142	0
46	D5	177/206 (85%)	0.68	15 (8%) 16 14	132, 166, 217, 221	0
46	H8	170/206 (82%)	0.68	19 (11%) 10 10	105, 137, 187, 195	0
47	E5	76/85 (89%)	0.57	7 (9%) 14 13	95, 109, 124, 131	0
47	I8	77/85 (90%)	0.03	1 (1%) 75 61	76, 88, 110, 120	0
48	F5	94/98 (95%)	1.84	32 (34%) 1 1	78, 104, 133, 138	0
48	J8	96/98 (97%)	1.65	34 (35%) 1 1	72, 94, 142, 152	0
49	G5	69/72 (95%)	0.58	5 (7%) 21 17	107, 128, 145, 156	0
49	K8	68/72 (94%)	1.19	16 (23%) 2 3	78, 99, 116, 136	0
50	H5	58/60 (96%)	0.78	7 (12%) 8 9	100, 121, 137, 150	0
50	L8	58/60 (96%)	0.43	4 (6%) 23 18	72, 93, 122, 124	0
51	M8	60/71 (84%)	0.50	3 (5%) 34 24	126, 154, 167, 170	0
52	J5	56/60 (93%)	1.92	22 (39%) 1 1	74, 103, 138, 151	0
52	N8	48/60 (80%)	0.49	0 100 100	64, 98, 126, 133	0
53	L5	48/49 (97%)	-0.06	3 (6%) 26 19	70, 78, 110, 114	0
53	P8	47/49 (95%)	-0.16	0 100 100	61, 68, 90, 98	0
54	M5	64/65 (98%)	0.56	4 (6%) 26 19	83, 97, 115, 126	0
54	Q8	64/65 (98%)	0.18	0 100 100	68, 83, 101, 110	0
All	All	20451/21509 (95%)	0.95	3618 (17%) 4 5	56, 119, 186, 260	0

All (3618) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
32	59	151	ILE	23.1
22	1L	76	A	17.9
9	8E	127	LYS	17.3
13	4I	120	LYS	16.9
9	82	115	GLY	16.7
30	39	72	ARG	15.3
9	8E	126	SER	14.8
30	39	56	GLU	14.7
1	13	1394	A	14.7

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Mol	Chain	Res	Type	RSRZ
9	8E	115	GLY	14.7
32	59	169	VAL	14.5
1	1G	966	G	14.1
40	B8	104	ASN	14.0
1	13	1531	A	13.6
12	3A	19	ARG	13.5
7	6E	81	GLY	13.4
30	31	66	PRO	13.4
1	13	1516	G	13.3
13	4A	117	VAL	13.2
10	1I	58	ASP	13.0
43	E8	92	ARG	12.7
9	8E	125	TYR	12.7
40	75	104	ASN	12.7
26	1H	790	C	12.7
43	A5	92	ARG	12.6
10	1A	58	ASP	12.6
9	8E	116	LYS	12.6
34	15	84	LYS	12.5
30	39	65	TRP	12.5
30	31	72	ARG	12.5
29	29	151	TYR	12.5
13	4A	113	PRO	12.4
7	6E	80	VAL	12.4
5	4E	23	GLY	12.3
1	13	1384	C	12.2
13	4I	119	GLY	12.2
30	31	65	TRP	12.1
3	2E	165	THR	11.9
9	8E	117	HIS	11.8
32	59	148	ILE	11.6
9	8E	123	PRO	11.5
1	13	796	C	11.5
36	35	46	LYS	11.4
27	1J	88	C	11.4
22	1L	75	C	11.3
29	29	116	VAL	11.3
1	13	1383	C	11.1
43	E8	93	ALA	11.0
1	13	1397	C	11.0
6	5E	47	ARG	11.0
30	31	64	ILE	10.9

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Mol	Chain	Res	Type	RSRZ
30	39	96	ASP	10.9
14	5A	38	GLY	10.8
40	B8	106	SER	10.8
28	19	5	LYS	10.7
1	1G	1202	G	10.7
1	13	1515	C	10.7
1	13	1196	U	10.7
1	13	1385	G	10.6
1	13	1529	G	10.6
1	13	1509	C	10.6
1	13	1508	G	10.6
1	13	965	A	10.5
13	4I	117	VAL	10.5
10	1I	60	ARG	10.5
11	2I	125	PHE	10.4
11	2I	124	LYS	10.4
32	59	88	LEU	10.3
12	3I	19	ARG	10.3
32	51	39	PRO	10.3
1	13	966	G	10.2
29	29	123	ALA	10.1
24	3K	34	G	10.1
1	13	1403	C	10.1
43	A5	93	ALA	10.1
30	39	62	ARG	10.0
24	3K	35	G	10.0
1	13	1195	C	10.0
26	14	668	G	9.9
13	4A	111	LYS	9.9
1	13	773	G	9.9
1	1G	915	A	9.9
26	14	669	G	9.8
30	39	93	LYS	9.8
33	69	11	ASN	9.8
14	5A	39	LEU	9.8
29	29	133	LYS	9.8
1	13	1510	U	9.8
1	13	793	U	9.7
1	13	968	A	9.7
17	8I	101	ARG	9.7
1	13	1514	C	9.6
9	8E	121	ARG	9.6

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Mol	Chain	Res	Type	RSRZ
13	4A	95	GLY	9.6
9	8E	128	ARG	9.6
1	13	1520	G	9.6
42	D8	37	VAL	9.6
8	7E	91	ARG	9.6
29	29	122	PHE	9.5
29	29	126	PRO	9.5
7	6E	82	GLY	9.5
29	29	124	GLY	9.5
12	3A	21	LYS	9.5
26	14	2611	U	9.4
10	1I	47	PHE	9.4
10	1A	47	PHE	9.4
30	39	70	THR	9.4
26	14	958	U	9.4
9	8E	114	TYR	9.3
29	29	149	ARG	9.3
17	8I	32	TYR	9.3
30	39	64	ILE	9.3
1	13	1511	G	9.3
26	14	790	C	9.3
1	13	815	A	9.2
10	1A	61	GLU	9.2
1	13	1382	C	9.2
26	1H	2690	C	9.2
6	52	83	ASP	9.2
26	14	2506	U	9.2
13	4I	118	ALA	9.1
3	2E	167	TRP	9.1
26	1H	1930	G	9.1
1	13	693	G	9.1
40	B8	69	GLY	9.1
37	88	80	GLU	9.0
29	29	135	HIS	9.0
3	2E	166	GLU	9.0
5	4E	21	ALA	9.0
22	1K	72	C	9.0
1	13	1193	G	9.0
26	14	667	U	9.0
26	1H	2611	U	8.9
29	29	136	ARG	8.9
43	E8	85	VAL	8.9

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Mol	Chain	Res	Type	RSRZ
3	22	158	GLY	8.9
13	4A	115	LYS	8.9
30	31	56	GLU	8.9
10	1A	49	VAL	8.9
1	1G	965	A	8.9
29	29	128	SER	8.8
30	39	69	HIS	8.8
29	29	134	ILE	8.8
1	13	1381	U	8.8
29	29	145	LYS	8.8
37	45	91	GLU	8.8
30	39	63	LYS	8.8
43	A5	90	ARG	8.8
33	69	1	MET	8.7
1	13	698	G	8.7
22	1K	76	A	8.7
5	4E	24	ARG	8.7
33	69	20	ASP	8.7
1	13	1342	C	8.7
13	4I	111	LYS	8.7
26	1H	2612	C	8.6
1	13	967	C	8.6
37	88	91	GLU	8.6
19	AI	81	ARG	8.6
26	14	229	A	8.5
36	35	51	PHE	8.5
26	1H	958	U	8.5
9	8E	122	ALA	8.5
30	39	55	GLY	8.4
1	1G	1195	C	8.4
6	5E	56	PRO	8.4
1	13	926	G	8.4
1	13	1530	G	8.4
29	29	115	GLY	8.4
29	29	150	VAL	8.4
32	59	165	ALA	8.4
29	29	125	GLY	8.3
1	13	1400	C	8.3
26	1H	2062	A	8.3
1	13	1343	G	8.3
5	4E	22	GLY	8.3
43	A5	85	VAL	8.3

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Mol	Chain	Res	Type	RSRZ
30	39	66	PRO	8.3
26	14	387	U	8.3
33	69	2	LYS	8.2
26	1H	1931	U	8.2
26	14	2609	U	8.2
41	85	40	PHE	8.2
1	13	769	G	8.2
1	1G	968	A	8.2
26	1H	1026	U	8.2
3	2E	164	ARG	8.2
10	1I	59	SER	8.2
13	4A	112	GLY	8.1
26	14	1026	U	8.1
28	11	2	ALA	8.1
1	13	809	G	8.1
26	14	200	U	8.0
13	4I	115	LYS	8.0
24	3L	74	C	8.0
30	39	82	ILE	8.0
1	13	1398	A	8.0
12	3I	16	GLU	8.0
26	14	2505	G	8.0
30	31	70	THR	8.0
26	14	2015	A	7.9
30	39	90	PHE	7.9
1	13	799	G	7.9
1	13	1405	G	7.9
26	14	252	G	7.9
30	39	68	LYS	7.9
1	13	1341	U	7.9
8	72	86	ILE	7.9
48	F5	36	GLY	7.9
45	C5	64	GLU	7.9
29	29	130	GLY	7.9
29	29	152	LYS	7.9
1	13	789	U	7.8
22	1K	3	U	7.8
1	1G	809	G	7.8
29	29	114	ALA	7.8
1	13	1519	A	7.8
33	69	85	GLU	7.8
12	3A	28	LYS	7.8

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Mol	Chain	Res	Type	RSRZ
29	29	148	GLY	7.8
29	29	155	LYS	7.8
1	13	1513	A	7.8
43	E8	94	ASP	7.8
26	14	382	G	7.8
30	39	83	PHE	7.7
1	1G	886	G	7.7
24	3L	34	G	7.7
29	29	153	GLY	7.7
32	59	152	ARG	7.7
24	3L	35	G	7.7
10	1A	59	SER	7.7
1	1G	1400	C	7.7
34	15	85	ILE	7.6
1	13	890	G	7.6
32	59	91	GLY	7.6
24	3L	75	C	7.6
1	13	800	G	7.6
13	4I	113	PRO	7.6
1	13	1523	G	7.6
10	1I	61	GLU	7.6
17	8I	30	PRO	7.6
32	59	113	VAL	7.6
26	14	2610	C	7.5
1	13	1227	A	7.5
36	35	47	ASP	7.5
1	13	1194	U	7.5
26	1H	1932	A	7.5
1	13	1392	G	7.5
26	14	2581	G	7.5
29	29	137	HIS	7.5
36	35	74	GLU	7.5
6	5E	54	LYS	7.5
1	13	933	G	7.5
1	1G	887	G	7.5
3	2E	168	ALA	7.4
13	4I	114	ARG	7.4
30	39	75	HIS	7.4
1	1G	912	C	7.4
26	1H	1658	C	7.4
37	88	79	LEU	7.4
3	22	157	ILE	7.4

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Mol	Chain	Res	Type	RSRZ
26	1H	1929	G	7.4
7	6E	84	ASN	7.4
3	2E	128	PHE	7.4
24	3K	36	U	7.4
15	6A	47	LYS	7.4
10	1A	54	PHE	7.4
26	1H	1835	G	7.4
26	14	767	U	7.4
41	C8	86	ALA	7.3
17	8I	31	LEU	7.3
11	2I	123	LYS	7.3
30	31	69	HIS	7.3
1	13	562	C	7.3
26	14	196	A	7.3
26	1H	2513	G	7.3
26	14	961	C	7.3
26	14	204	A	7.3
1	13	1527	C	7.2
43	E8	91	GLY	7.2
1	13	1528	U	7.2
26	1H	387	U	7.2
26	14	1847	A	7.2
52	J5	2	ALA	7.2
26	1H	746	A	7.2
26	1H	1933	G	7.2
1	13	787	A	7.2
34	58	73	THR	7.2
1	13	771	G	7.2
17	8I	96	GLU	7.2
14	5A	37	PHE	7.2
13	4A	107	ALA	7.2
32	59	111	HIS	7.2
26	14	591	C	7.1
1	13	790	A	7.1
2	12	26	PRO	7.1
29	29	147	PRO	7.1
40	75	69	GLY	7.1
9	8E	118	LYS	7.1
1	1G	811	C	7.1
49	K8	12	GLU	7.1
32	59	92	ILE	7.1
1	13	884	U	7.1

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Mol	Chain	Res	Type	RSRZ
26	1H	1660	C	7.1
9	8E	120	ARG	7.1
40	75	106	SER	7.1
32	59	87	LEU	7.0
37	45	79	LEU	7.0
26	14	590	A	7.0
7	6E	79	ARG	7.0
36	35	50	ARG	7.0
29	29	157	ALA	7.0
1	13	783	C	7.0
1	13	1404	C	7.0
9	8E	113	LYS	7.0
2	12	33	TYR	7.0
29	29	127	ASP	7.0
1	13	935	A	6.9
30	39	52	LYS	6.9
28	11	5	LYS	6.9
29	29	117	MET	6.9
26	1H	1963	U	6.9
1	13	791	G	6.9
26	1H	1906	G	6.9
30	39	78	ILE	6.9
48	F5	37	ILE	6.9
8	72	91	ARG	6.9
1	13	797	C	6.9
22	1K	75	C	6.9
26	1H	1925	C	6.9
9	8E	119	ALA	6.9
1	13	772	U	6.9
1	13	1393	U	6.9
10	1A	60	ARG	6.9
26	1H	1926	U	6.9
33	69	21	VAL	6.9
48	F5	20	ARG	6.9
1	13	1521	G	6.9
26	14	205	G	6.9
30	31	78	ILE	6.8
30	39	80	ALA	6.8
30	39	95	ARG	6.8
1	13	1506	U	6.8
30	39	79	GLY	6.8
22	1K	74	C	6.8

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Mol	Chain	Res	Type	RSRZ
26	14	2055	C	6.8
32	59	168	PRO	6.8
11	2I	25	TYR	6.8
1	13	1367	C	6.8
26	1H	591	C	6.8
1	13	792	A	6.8
26	1H	747	U	6.8
26	14	383	U	6.8
26	14	2357	U	6.8
9	82	116	LYS	6.8
37	45	76	LYS	6.8
30	39	77	ASP	6.8
36	35	45	LEU	6.8
27	16	87	G	6.8
28	19	2	ALA	6.7
33	69	83	ALA	6.7
2	12	36	ARG	6.7
27	16	88	C	6.7
2	12	24	TRP	6.7
1	13	784	C	6.7
1	13	1391	U	6.7
17	8I	29	HIS	6.7
26	14	743	G	6.7
29	29	141	ILE	6.7
1	13	788	U	6.7
37	88	78	PRO	6.6
1	13	1533	C	6.6
2	12	23	ARG	6.6
20	BI	17	ARG	6.6
26	14	1379	A	6.6
24	3K	33	U	6.6
26	1H	1836	C	6.6
10	1I	62	HIS	6.6
26	1H	1900	A	6.6
26	14	801	G	6.6
40	B8	109	GLU	6.6
26	1H	1659	U	6.6
26	1H	751	A	6.6
1	13	1386	G	6.6
1	1G	693	G	6.6
1	1G	775	G	6.6
6	52	54	LYS	6.6

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Mol	Chain	Res	Type	RSRZ
18	9A	84	LYS	6.6
29	29	132	HIS	6.6
22	1L	72	C	6.5
26	14	251	A	6.5
43	E8	95	ILE	6.5
13	4A	102	ARG	6.5
26	1H	1816	G	6.5
29	29	131	ALA	6.5
43	A5	94	ASP	6.5
30	31	93	LYS	6.5
24	3K	37	A	6.5
26	1H	2014	A	6.5
1	13	774	G	6.5
1	1G	973	G	6.5
26	14	2423	U	6.5
1	1G	967	C	6.5
26	14	766	C	6.5
1	1G	810	C	6.5
2	1E	208	ILE	6.5
26	14	201	C	6.5
32	59	162	ILE	6.5
9	82	123	PRO	6.5
1	13	969	A	6.5
1	13	1503	A	6.5
32	59	114	VAL	6.5
27	1J	89	G	6.4
12	3A	64	TYR	6.4
1	13	1526	G	6.4
1	1G	975	A	6.4
10	1A	50	ILE	6.4
26	1H	1846	G	6.4
1	13	883	C	6.4
26	1H	2357	U	6.4
43	A5	95	ILE	6.4
48	J8	32	LYS	6.4
20	BA	9	ASN	6.4
8	7E	93	VAL	6.4
40	B8	105	LEU	6.3
1	13	912	C	6.3
1	13	934	C	6.3
1	1G	883	C	6.3
26	1H	1845	G	6.3

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Mol	Chain	Res	Type	RSRZ
26	14	1131	G	6.3
1	13	1340	A	6.3
1	1G	773	G	6.3
7	6E	85	TYR	6.3
26	1H	1847	A	6.3
30	39	57	VAL	6.3
10	1A	55	LYS	6.3
41	C8	84	LYS	6.3
30	39	61	GLY	6.3
11	2A	75	TYR	6.3
37	45	74	TYR	6.3
1	13	1396	A	6.3
26	14	2058	A	6.3
26	1H	2613	U	6.3
13	4A	116	THR	6.3
26	14	2612	C	6.3
1	13	780	A	6.3
1	1G	1227	A	6.2
30	39	97	TYR	6.2
1	1G	1061	G	6.2
26	1H	1653	G	6.2
7	62	2	ALA	6.2
1	13	802	A	6.2
26	14	752	A	6.2
33	69	10	GLU	6.2
13	4I	96	LEU	6.2
1	13	924	C	6.2
1	1G	808	C	6.2
10	1I	49	VAL	6.2
10	1A	56	HIS	6.2
26	14	203	C	6.2
1	1G	913	A	6.2
26	1H	789	A	6.2
10	1A	48	THR	6.2
29	21	195	LEU	6.2
10	1A	62	HIS	6.1
20	BI	18	GLN	6.1
26	1H	1657	C	6.1
32	59	39	PRO	6.1
22	1K	73	A	6.1
26	1H	2712(A)	A	6.1
26	14	2309	A	6.1

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Mol	Chain	Res	Type	RSRZ
12	3A	20	LYS	6.1
26	1H	1130	U	6.1
1	13	1402	C	6.1
3	22	159	GLY	6.1
1	13	1507	A	6.1
2	12	29	ALA	6.1
32	59	90	LYS	6.1
20	BI	20	LEU	6.1
1	13	775	G	6.1
1	13	1338	G	6.1
1	13	699	C	6.1
48	F5	32	LYS	6.1
30	39	53	THR	6.1
33	61	117	GLU	6.1
13	4I	102	ARG	6.1
1	1G	772	U	6.1
26	1H	2872	G	6.1
26	14	125	G	6.1
30	31	96	ASP	6.1
1	13	795	C	6.1
41	85	20	LEU	6.1
7	6E	78	ARG	6.0
41	85	17	ILE	6.0
1	13	810	C	6.0
47	E5	9	SER	6.0
12	3I	28	LYS	6.0
22	1L	73	A	6.0
26	14	1614	A	6.0
26	14	2278	A	6.0
2	12	34	ALA	6.0
8	72	133	LEU	6.0
30	39	94	PRO	6.0
36	35	68	GLN	6.0
30	39	89	VAL	6.0
23	2K	1	C	6.0
33	69	12	LEU	6.0
13	4A	94	ARG	6.0
48	J8	27	GLU	6.0
26	1H	2610	C	6.0
26	1H	590	A	6.0
18	9A	85	LEU	6.0
24	3L	33	U	6.0

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Mol	Chain	Res	Type	RSRZ
26	1H	2084	C	5.9
43	A5	86	LEU	5.9
26	14	968	G	5.9
1	13	1512	U	5.9
22	1L	74	C	5.9
26	14	951	C	5.9
1	13	785	G	5.9
26	14	832	G	5.9
46	D5	79	ARG	5.9
3	22	160	ALA	5.9
30	31	77	ASP	5.9
5	4E	128	PRO	5.9
1	13	1501	C	5.9
1	1G	807	A	5.9
26	14	909	A	5.9
1	13	692	U	5.9
26	14	202	U	5.9
26	1H	1650	G	5.9
37	45	92	GLY	5.9
12	3I	7	ILE	5.9
48	F5	77	ALA	5.9
26	1H	1905	C	5.8
10	1I	63	PHE	5.8
41	85	39	LEU	5.8
1	13	786	G	5.8
1	13	1517	G	5.8
1	1G	890	G	5.8
22	1K	1	G	5.8
26	14	250	G	5.8
48	J8	21	ARG	5.8
33	61	118	LYS	5.8
37	45	81	VAL	5.8
40	B8	66	VAL	5.8
30	39	54	ARG	5.8
1	13	906	G	5.8
26	1H	1678	G	5.8
1	13	1063	C	5.8
1	13	915	A	5.8
1	13	801	U	5.8
10	1I	64	GLU	5.8
10	1A	64	GLU	5.8
7	6E	153	HIS	5.8

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Mol	Chain	Res	Type	RSRZ
1	13	1497	G	5.8
6	5E	57	GLN	5.8
26	14	754	C	5.8
1	13	697	U	5.8
1	13	1425	U	5.8
48	F5	22	GLY	5.8
16	7I	29	ASP	5.7
4	3E	24	GLU	5.7
37	88	77	LYS	5.7
17	8I	99	SER	5.7
1	13	1525	G	5.7
1	1G	28	G	5.7
26	14	2141	G	5.7
22	1L	3	U	5.7
6	5E	55	ASP	5.7
14	5A	25	VAL	5.7
48	F5	38	SER	5.7
10	1I	48	THR	5.7
26	14	194	G	5.7
26	14	751	A	5.7
29	29	138	PRO	5.7
46	H8	20	ARG	5.7
13	4I	116	THR	5.7
29	29	129	HIS	5.7
26	14	386	G	5.7
31	49	35	GLU	5.7
26	14	2584	U	5.7
1	13	1535	C	5.7
26	14	589	C	5.7
34	15	74	ARG	5.7
1	13	782	A	5.7
26	1H	2015	A	5.7
26	14	1566	A	5.7
3	2E	160	ALA	5.7
30	31	75	HIS	5.7
20	BA	24	LEU	5.7
6	52	84	ASN	5.7
6	5E	46	ARG	5.7
36	35	48	PRO	5.6
26	1H	2013	A	5.6
13	4A	114	ARG	5.6
43	E8	83	LYS	5.6

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Mol	Chain	Res	Type	RSRZ
30	31	94	PRO	5.6
42	95	73	SER	5.6
26	14	747	U	5.6
26	1H	1907	G	5.6
26	1H	2082	A	5.6
7	6E	83	ALA	5.6
11	2I	126	ARG	5.6
29	29	113	PHE	5.6
1	1G	789	U	5.6
41	C8	85	LYS	5.6
12	3A	16	GLU	5.6
32	59	167	GLU	5.6
26	14	1658	C	5.6
6	52	53	ALA	5.6
7	6E	154	TYR	5.6
26	1H	752	A	5.6
26	14	2274	A	5.6
1	1G	963	G	5.6
26	14	748	G	5.6
37	45	89	ASN	5.6
13	4I	108	ARG	5.6
1	13	564	C	5.6
13	4A	103	THR	5.6
1	1G	553	A	5.6
48	F5	18	ILE	5.6
26	1H	1792	G	5.5
26	14	388	G	5.5
1	1G	1196	U	5.5
26	14	2034	U	5.5
48	J8	17	SER	5.5
26	1H	756	C	5.5
38	55	101	ALA	5.5
48	J8	20	ARG	5.5
17	8I	89	LEU	5.5
32	59	93	GLY	5.5
1	13	882	C	5.5
26	1H	1694	C	5.5
1	13	1500	A	5.5
26	14	2059	A	5.5
22	1L	1	G	5.5
26	1H	1839	G	5.5
44	F8	85	PRO	5.5

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Mol	Chain	Res	Type	RSRZ
1	1G	1403	C	5.5
43	E8	90	ARG	5.5
1	1G	1194	U	5.5
1	13	798	G	5.5
1	13	1231	G	5.5
26	14	952	G	5.5
1	13	1395	C	5.4
1	1G	1509	C	5.4
26	1H	1832	C	5.4
26	1H	2081	C	5.4
26	14	1657	C	5.4
26	14	2602	A	5.4
30	39	59	TYR	5.4
1	13	776	G	5.4
31	49	160	VAL	5.4
6	52	55	ASP	5.4
1	1G	1404	C	5.4
1	13	1518	A	5.4
1	1G	969	A	5.4
1	1G	1492	A	5.4
27	1J	89(A)	A	5.4
1	13	1390	U	5.4
26	14	1963	U	5.4
26	14	242	G	5.4
1	1G	1384	C	5.4
27	1J	90	C	5.4
1	1G	787	A	5.4
26	1H	2602	A	5.4
26	14	2082	A	5.4
15	6A	37	ASN	5.4
47	E5	12	ASN	5.4
13	4I	112	GLY	5.4
40	75	103	ARG	5.4
37	88	90	VAL	5.4
45	C5	24	VAL	5.4
26	1H	1651	G	5.4
26	14	1816	G	5.4
1	1G	1398	A	5.4
26	1H	1928	A	5.4
37	88	81	VAL	5.3
1	13	760	G	5.3
1	1G	953	G	5.3

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Mol	Chain	Res	Type	RSRZ
26	14	745	G	5.3
26	14	823	G	5.3
19	AI	13	ASP	5.3
1	13	694	A	5.3
26	14	2510	C	5.3
1	1G	801	U	5.3
43	E8	96	ILE	5.3
29	29	163	GLU	5.3
20	BI	23	ARG	5.3
4	32	48	ALA	5.3
26	14	867	C	5.3
26	14	2893	G	5.3
29	29	162	ALA	5.3
1	13	1522	U	5.3
26	1H	2423	U	5.3
33	61	111	PRO	5.3
45	C5	29	GLU	5.3
1	1G	1394	A	5.3
23	2L	1	C	5.3
26	14	949	C	5.3
26	1H	2083	G	5.3
31	41	26	GLN	5.3
10	1I	50	ILE	5.3
36	35	62	LEU	5.2
5	4E	19	MET	5.2
1	13	1437	C	5.2
26	1H	589	C	5.2
26	14	970	C	5.2
45	C5	65	ALA	5.2
26	14	247	G	5.2
32	59	112	PRO	5.2
10	1I	57	LYS	5.2
1	13	1498	U	5.2
1	13	1228	C	5.2
1	1G	1397	C	5.2
26	14	829	A	5.2
26	14	1430	C	5.2
26	14	2054	A	5.2
30	39	74	ARG	5.2
26	14	799	G	5.2
26	14	1429	G	5.2
32	59	107	VAL	5.2

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Mol	Chain	Res	Type	RSRZ
2	1E	207	ALA	5.2
3	2E	199	LYS	5.2
5	4E	88	LYS	5.2
6	5E	83	ASP	5.2
15	6A	44	LYS	5.2
30	39	81	PRO	5.2
26	1H	2512	C	5.2
1	13	78	G	5.2
26	1H	748	G	5.2
26	14	950	G	5.2
42	95	75	PHE	5.2
1	13	1232	U	5.2
19	AI	56	GLN	5.2
26	14	2076	U	5.2
26	14	670	A	5.1
26	14	1554	A	5.1
3	2E	193	TYR	5.1
9	82	114	TYR	5.1
12	3A	18	VAL	5.1
26	14	805	G	5.1
26	14	2659	G	5.1
48	F5	27	GLU	5.1
41	85	41	ALA	5.1
1	1G	974	A	5.1
26	1H	1966	A	5.1
26	1H	2556	C	5.1
26	14	1132	A	5.1
4	32	76	ARG	5.1
9	8E	124	GLN	5.1
20	BI	21	LYS	5.1
26	1H	745	G	5.1
26	14	530	G	5.1
1	13	311	C	5.1
6	52	81	ILE	5.1
30	31	83	PHE	5.1
26	14	248	G	5.1
26	14	1824	G	5.1
26	1H	1898	U	5.1
26	14	384	U	5.1
32	51	27	LYS	5.1
1	13	1490	C	5.1
26	1H	1258	C	5.1

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Mol	Chain	Res	Type	RSRZ
26	1H	1830	C	5.1
26	14	385	C	5.1
26	14	955	C	5.1
26	14	1306	C	5.1
26	14	2081	C	5.1
3	22	199	LYS	5.1
6	52	82	ARG	5.1
54	M5	2	PRO	5.1
30	39	73	ALA	5.0
26	14	614	U	5.0
1	1G	1338	G	5.0
26	14	2508	G	5.0
18	9I	86	VAL	5.0
3	22	164	ARG	5.0
5	42	88	LYS	5.0
30	31	62	ARG	5.0
1	13	1499	A	5.0
26	1H	1086	A	5.0
20	BA	20	LEU	5.0
52	J5	4	HIS	5.0
26	14	666	G	5.0
10	1A	63	PHE	5.0
24	3K	27	C	5.0
26	14	2283	C	5.0
4	32	29	PRO	5.0
26	1H	1833	U	5.0
26	1H	1904	G	5.0
1	1G	914	A	5.0
26	1H	1927	A	5.0
30	39	71	GLY	5.0
26	14	436	C	5.0
6	5E	53	ALA	5.0
26	14	206	U	5.0
5	4E	123	LEU	5.0
29	29	158	GLY	5.0
1	13	807	A	4.9
2	12	79	ASP	4.9
26	1H	669	G	4.9
26	14	2254	C	4.9
26	14	2356	C	4.9
15	6I	64	ARG	4.9
32	59	99	VAL	4.9

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Mol	Chain	Res	Type	RSRZ
36	35	60	MET	4.9
26	14	1130	U	4.9
34	58	72	TYR	4.9
12	3I	13	LYS	4.9
35	68	81	ASP	4.9
1	13	808	C	4.9
26	1H	2676	C	4.9
26	14	574	C	4.9
26	14	746	A	4.9
26	1H	2003	G	4.9
2	12	27	LYS	4.9
36	35	44	GLY	4.9
44	F8	86	GLY	4.9
52	J5	26	THR	4.9
1	13	695	A	4.9
1	13	1230	C	4.9
26	1H	2659	G	4.9
26	14	696	G	4.9
26	14	966	G	4.9
26	14	2421	G	4.9
38	55	103	ARG	4.9
3	22	30	ARG	4.9
41	85	36	ARG	4.9
37	45	78	PRO	4.9
1	1G	412	A	4.9
26	1H	2085	C	4.9
27	16	89(A)	A	4.9
24	3L	36	U	4.9
26	1H	744	G	4.9
26	14	592	G	4.9
26	14	2080	G	4.9
27	16	89	G	4.9
19	AI	82	GLY	4.8
41	85	43	GLY	4.8
7	62	146	GLU	4.8
33	69	118	LYS	4.8
37	45	80	GLU	4.8
42	95	74	LYS	4.8
3	2E	201	TYR	4.8
1	1G	1063	C	4.8
5	42	15	ARG	4.8
5	42	22	GLY	4.8

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Mol	Chain	Res	Type	RSRZ
26	14	181	A	4.8
26	14	2050	C	4.8
26	14	2461	C	4.8
37	88	76	LYS	4.8
1	13	239	U	4.8
28	11	112	GLN	4.8
37	45	77	LYS	4.8
46	D5	81	ARG	4.8
42	D8	54	GLY	4.8
48	J8	22	GLY	4.8
31	49	167	GLU	4.8
36	35	38	GLN	4.8
1	13	334	C	4.8
26	14	394	A	4.8
26	14	753	C	4.8
26	1H	2514	U	4.8
41	C8	20	LEU	4.8
34	15	72	TYR	4.8
29	21	136	ARG	4.8
1	1G	685	G	4.8
26	1H	615	G	4.8
26	1H	668	G	4.8
26	14	245	G	4.8
43	A5	83	LYS	4.8
1	13	1534	A	4.8
1	1G	1514	C	4.8
26	14	2068	U	4.8
7	62	8	GLU	4.8
32	59	86	GLU	4.8
1	13	691	G	4.8
1	13	1491	G	4.8
26	14	956	G	4.8
33	69	68	LEU	4.8
30	39	51	THR	4.8
32	51	21	PRO	4.8
36	35	64	LYS	4.8
17	8I	33	GLY	4.7
26	1H	2712	U	4.7
26	14	246	C	4.7
26	14	755	C	4.7
26	14	967	C	4.7
17	8I	98	LEU	4.7

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Mol	Chain	Res	Type	RSRZ
1	13	941	G	4.7
1	1G	774	G	4.7
1	1G	825	G	4.7
22	1K	71	G	4.7
26	14	944	G	4.7
29	21	133	LYS	4.7
1	1G	788	U	4.7
1	1G	962	C	4.7
26	1H	2361	A	4.7
26	1H	2693	A	4.7
17	8I	36	ILE	4.7
2	12	163	PHE	4.7
37	45	6	ARG	4.7
38	55	102	GLU	4.7
26	1H	592	G	4.7
26	1H	2567	G	4.7
26	14	2396	G	4.7
26	14	2509	G	4.7
29	29	120	TRP	4.7
1	1G	884	U	4.7
16	7A	29	ASP	4.7
26	1H	2594	C	4.7
26	1H	2713	A	4.7
26	14	249	C	4.7
28	11	100	GLY	4.7
29	29	64	LYS	4.7
38	55	10	LEU	4.7
42	95	71	LEU	4.7
17	8A	29	HIS	4.7
1	1G	1385	G	4.7
26	14	1620	G	4.7
26	14	2024	G	4.7
37	45	88	GLY	4.7
28	11	274	ARG	4.7
1	1G	781	A	4.7
1	13	970	C	4.7
22	1L	2	C	4.7
26	14	965	C	4.7
48	J8	79	GLY	4.6
32	59	94	TYR	4.6
4	32	164	ALA	4.6
1	1G	1381	U	4.6

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Mol	Chain	Res	Type	RSRZ
26	1H	273(A)	G	4.6
26	14	744	G	4.6
26	14	2032	G	4.6
24	3L	37	A	4.6
26	1H	2356	C	4.6
26	14	1509	C	4.6
26	14	2142	C	4.6
48	F5	39	LYS	4.6
29	29	159	HIS	4.6
32	51	16	SER	4.6
15	6A	41	GLU	4.6
32	59	29	PRO	4.6
1	13	1062	U	4.6
26	1H	2596	U	4.6
37	88	41	TRP	4.6
32	59	98	LEU	4.6
20	BI	16	HIS	4.6
20	BA	16	HIS	4.6
24	3L	73	A	4.6
26	14	739	G	4.6
1	1G	897	C	4.6
26	14	2275	C	4.6
36	35	110	TYR	4.6
41	C8	89	GLU	4.6
49	K8	41	ILE	4.6
26	14	2580	U	4.6
2	1E	33	TYR	4.6
1	13	338	A	4.6
26	1H	1614	A	4.6
26	14	244	A	4.6
1	13	770	C	4.6
1	1G	776	G	4.6
1	1G	1520	G	4.6
26	1H	40	C	4.6
26	1H	2788	C	4.6
26	14	2270	G	4.6
26	14	2271	G	4.6
27	16	86	G	4.6
42	D8	38	LEU	4.6
39	65	5	THR	4.6
37	45	90	VAL	4.6
12	3A	23	LYS	4.5

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Mol	Chain	Res	Type	RSRZ
26	1H	2076	U	4.5
40	B8	68	TYR	4.5
48	F5	21	ARG	4.5
23	2K	40	C	4.5
26	1H	2691	C	4.5
1	13	1471	G	4.5
12	3I	14	GLY	4.5
22	1L	4	G	4.5
26	1H	273	G	4.5
48	J8	36	GLY	4.5
30	31	73	ALA	4.5
52	J5	11	THR	4.5
32	59	128	PRO	4.5
2	1E	231	GLU	4.5
36	35	59	LEU	4.5
11	2A	125	PHE	4.5
36	35	71	VAL	4.5
38	98	7	GLY	4.5
1	13	1344	C	4.5
4	32	49	ARG	4.5
26	14	381	G	4.5
26	14	2532	G	4.5
26	14	2569	G	4.5
5	42	81	GLU	4.5
32	51	58	GLU	4.5
26	1H	380	U	4.5
26	1H	1420	U	4.5
26	14	2585	U	4.5
44	F8	52	VAL	4.5
41	85	44	ASN	4.5
29	21	135	HIS	4.5
2	12	32	ILE	4.5
1	13	1229	A	4.5
26	1H	1652	A	4.5
26	14	2062	A	4.5
26	14	2360	A	4.5
1	13	936	C	4.5
1	13	1465	C	4.5
1	1G	680	C	4.5
26	1H	1656	C	4.5
26	14	673	C	4.5
49	K8	66	GLU	4.5

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Mol	Chain	Res	Type	RSRZ
52	J5	3	LYS	4.5
16	7A	76	GLN	4.5
40	B8	70	VAL	4.5
1	13	916	G	4.5
1	1G	1491	G	4.5
3	2E	159	GLY	4.5
26	1H	1831	G	4.5
26	14	954	G	4.5
48	F5	17	SER	4.5
1	1G	1062	U	4.5
13	4I	105	THR	4.5
49	K8	15	LYS	4.5
30	31	95	ARG	4.5
40	75	101	PHE	4.5
1	13	241	C	4.4
1	13	805	C	4.4
1	13	899	C	4.4
26	1H	1793	C	4.4
26	14	1672	C	4.4
26	14	1782	C	4.4
26	14	2420	C	4.4
5	4E	13	ILE	4.4
29	21	134	ILE	4.4
32	59	122	THR	4.4
52	J5	25	LEU	4.4
26	14	2041	U	4.4
26	14	2272	U	4.4
1	13	310	G	4.4
1	1G	1058	G	4.4
14	5A	34	TYR	4.4
3	2E	153	VAL	4.4
37	45	96	VAL	4.4
46	H8	21	ALA	4.4
1	13	819	A	4.4
1	13	923	A	4.4
13	4I	90	LEU	4.4
26	1H	273(B)	C	4.4
26	14	2579	C	4.4
37	88	74	TYR	4.4
4	32	37	PRO	4.4
1	13	14	U	4.4
26	14	1820	U	4.4

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Mol	Chain	Res	Type	RSRZ
3	22	166	GLU	4.4
49	K8	11	GLU	4.4
3	2E	158	GLY	4.4
1	1G	771	G	4.4
26	1H	2569	G	4.4
26	1H	2595	G	4.4
26	14	742	G	4.4
26	14	2494	G	4.4
27	1J	86	G	4.4
2	12	25	ASN	4.4
50	L8	17	LYS	4.4
38	55	8	ARG	4.4
1	13	1366	C	4.4
1	1G	554	C	4.4
5	42	123	LEU	4.4
1	13	1505	G	4.4
22	1L	71	G	4.4
26	1H	2358	G	4.4
26	14	2513	G	4.4
29	21	138	PRO	4.4
30	39	76	GLY	4.4
47	I8	8	GLY	4.4
48	F5	79	GLY	4.4
1	13	901	A	4.4
20	BI	45	GLN	4.4
26	14	1780	A	4.4
26	14	2273	A	4.4
1	1G	806	C	4.4
26	1H	588	U	4.4
26	14	822	U	4.4
28	11	203	ASN	4.4
26	1H	508	G	4.3
26	1H	743	G	4.3
40	75	50	ILE	4.3
2	1E	209	ARG	4.3
1	13	781	A	4.3
26	14	2361	A	4.3
26	14	2456	C	4.3
46	H8	153	SER	4.3
16	7I	30	GLY	4.3
33	69	27	ARG	4.3
1	1G	916	G	4.3

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Mol	Chain	Res	Type	RSRZ
26	14	508	G	4.3
1	13	794	A	4.3
26	1H	777	A	4.3
29	29	154	LYS	4.3
31	41	84	LYS	4.3
48	F5	78	LYS	4.3
1	1G	882	C	4.3
26	1H	436	C	4.3
26	1H	1754	C	4.3
26	14	1305	C	4.3
26	14	969	U	4.3
5	42	24	ARG	4.3
37	88	10	ARG	4.3
43	E8	84	ARG	4.3
48	F5	34	THR	4.3
5	42	12	LEU	4.3
38	98	69	ASP	4.3
2	12	37	ASN	4.3
26	1H	2237	G	4.3
26	14	2362	G	4.3
27	1J	87	G	4.3
26	14	900	A	4.3
26	14	1272	A	4.3
26	14	2057	A	4.3
1	1G	796	C	4.3
26	1H	2008	C	4.3
26	14	253	C	4.3
26	14	2144	U	4.3
52	J5	10	LYS	4.3
9	82	50	LEU	4.3
5	4E	15	ARG	4.3
28	11	176	ARG	4.3
1	13	898	G	4.2
1	1G	964	A	4.2
26	1H	254	G	4.2
26	1H	2511	U	4.2
26	14	798	G	4.2
26	14	2052	G	4.2
17	8I	28	PRO	4.2
26	1H	270(C)	C	4.2
5	42	131	ILE	4.2
16	7A	32	TYR	4.2

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Mol	Chain	Res	Type	RSRZ
40	B8	71	GLY	4.2
5	42	28	PHE	4.2
19	AI	59	PRO	4.2
29	21	131	ALA	4.2
32	59	150	ALA	4.2
1	1G	239	U	4.2
5	42	23	GLY	4.2
26	1H	1803	A	4.2
26	14	255	A	4.2
43	A5	91	GLY	4.2
1	1G	241	C	4.2
26	1H	2080	G	4.2
26	14	2282	G	4.2
32	59	85	LYS	4.2
33	69	144	VAL	4.2
31	49	133	LEU	4.2
5	42	128	PRO	4.2
6	52	56	PRO	4.2
19	AA	76	PRO	4.2
28	19	271	ILE	4.2
52	J5	5	PRO	4.2
34	58	84	LYS	4.2
2	12	134	GLU	4.2
1	1G	1201	A	4.2
26	14	2051	A	4.2
29	29	76	ARG	4.2
40	B8	67	SER	4.2
1	1G	240	C	4.2
26	14	270(P)	C	4.2
26	14	1656	C	4.2
38	98	10	LEU	4.2
1	13	902	G	4.2
26	1H	388	G	4.2
26	14	561	G	4.2
26	14	2397	G	4.2
3	22	155	GLY	4.2
48	J8	80	LEU	4.2
26	1H	165	U	4.2
26	14	594	U	4.2
26	14	2492	U	4.2
26	14	2511	U	4.2
37	88	89	ASN	4.2

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Mol	Chain	Res	Type	RSRZ
30	39	92	PRO	4.2
1	13	779	C	4.2
1	13	806	C	4.2
1	13	1389	C	4.2
1	1G	896	C	4.2
1	1G	1490	C	4.2
24	3K	75	C	4.2
29	29	146	THR	4.2
1	13	925	G	4.2
1	13	1470	G	4.2
26	1H	270(X)	G	4.2
26	1H	2505	G	4.2
26	14	1555	G	4.2
44	B5	68	ARG	4.2
3	2E	163	ALA	4.1
3	22	167	TRP	4.1
37	88	87	LYS	4.1
29	29	142	GLY	4.1
16	7I	32	TYR	4.1
26	14	1307	A	4.1
1	1G	562	C	4.1
26	1H	1804	C	4.1
26	14	183	C	4.1
26	14	756	C	4.1
2	12	35	GLU	4.1
8	72	9	MET	4.1
26	14	2631	G	4.1
42	95	80	GLN	4.1
32	59	153	LYS	4.1
2	1E	232	PRO	4.1
33	61	80	PRO	4.1
10	1A	51	ARG	4.1
22	1K	33	U	4.1
26	1H	2506	U	4.1
17	8A	32	TYR	4.1
32	59	105	LEU	4.1
33	69	35	LEU	4.1
15	6I	87	ILE	4.1
17	8I	97	SER	4.1
41	85	25	TRP	4.1
1	13	895	G	4.1
26	1H	1259	G	4.1

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Mol	Chain	Res	Type	RSRZ
26	1H	2002	G	4.1
13	4I	103	THR	4.1
26	14	2613	U	4.1
38	55	9	LYS	4.1
2	12	39	ILE	4.1
1	13	964	A	4.1
1	13	1466	C	4.1
1	13	1524	C	4.1
26	14	2263	C	4.1
31	49	34	LEU	4.1
12	3I	20	LYS	4.1
17	8I	34	LYS	4.1
1	1G	800	G	4.1
8	72	84	ARG	4.1
15	6I	63	ARG	4.1
26	1H	440	G	4.1
26	14	2256	G	4.1
26	14	2279	G	4.1
26	14	2578	G	4.1
22	1K	32	U	4.1
26	1H	1273	U	4.1
26	1H	1794	U	4.1
26	14	1659	U	4.1
12	3A	29	GLY	4.1
8	7E	10	LEU	4.0
3	2E	4	LYS	4.0
26	14	789	A	4.0
26	14	2031	A	4.0
34	15	73	THR	4.0
1	13	91	C	4.0
1	1G	1367	C	4.0
26	1H	366	C	4.0
26	14	2146	C	4.0
2	12	86	GLU	4.0
5	4E	50	GLU	4.0
11	2A	126	ARG	4.0
13	4A	110	ARG	4.0
30	39	58	ALA	4.0
17	8A	30	PRO	4.0
29	21	32	PRO	4.0
43	A5	82	LEU	4.0
48	F5	28	GLY	4.0

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Mol	Chain	Res	Type	RSRZ
26	1H	2609	U	4.0
26	14	2493	U	4.0
26	1H	242	G	4.0
26	1H	2570	G	4.0
26	14	2664	G	4.0
28	19	4	LYS	4.0
53	L5	1	MET	4.0
2	1E	80	ILE	4.0
5	4E	28	PHE	4.0
5	42	13	ILE	4.0
11	2A	25	TYR	4.0
31	49	178	PHE	4.0
39	A8	43	GLU	4.0
1	13	896	C	4.0
26	14	665	C	4.0
18	9I	85	LEU	4.0
29	29	161	GLY	4.0
30	39	88	VAL	4.0
19	AI	83	HIS	4.0
1	1G	955	U	4.0
26	1H	614	U	4.0
30	39	98	SER	4.0
37	45	93	TYR	4.0
42	D8	49	THR	4.0
26	1H	270(R)	G	4.0
26	14	186	G	4.0
26	14	2277	G	4.0
26	14	2389	G	4.0
11	2I	121	PRO	4.0
28	19	3	VAL	4.0
26	1H	2058	A	4.0
26	1H	2360	A	4.0
26	14	2892	A	4.0
26	1H	936	C	4.0
26	1H	1806	C	4.0
27	1J	91	C	4.0
1	13	921	U	4.0
1	13	1406	U	4.0
8	7E	88	LYS	4.0
5	4E	20	GLN	4.0
8	72	93	VAL	4.0
14	5I	25	VAL	4.0

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Mol	Chain	Res	Type	RSRZ
12	3A	14	GLY	4.0
30	39	86	GLY	4.0
1	1G	933	G	4.0
26	14	2618	G	4.0
2	12	200	ILE	4.0
13	4I	106	ASN	4.0
26	14	824	A	4.0
1	1G	824	C	4.0
2	1E	168	THR	4.0
42	95	81	TYR	4.0
2	1E	10	LEU	4.0
32	59	115	VAL	3.9
37	88	88	GLY	3.9
39	65	20	ARG	3.9
40	75	64	ARG	3.9
30	31	90	PHE	3.9
19	AA	55	LYS	3.9
45	G8	34	LYS	3.9
4	32	207	TYR	3.9
1	1G	954	G	3.9
26	1H	2004	G	3.9
1	13	702	A	3.9
1	1G	780	A	3.9
26	1H	2059	A	3.9
26	14	2014	A	3.9
26	14	2632	A	3.9
32	59	125	VAL	3.9
1	1G	681	C	3.9
10	1I	46	ARG	3.9
32	59	117	PRO	3.9
26	1H	1795	C	3.9
26	1H	2571	C	3.9
26	14	902	C	3.9
3	22	162	GLN	3.9
1	1G	686	U	3.9
26	14	243	U	3.9
33	69	22	LYS	3.9
29	29	160	TYR	3.9
5	42	55	VAL	3.9
43	A5	84	ARG	3.9
29	21	35	GLN	3.9
26	14	654(D)	G	3.9

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Mol	Chain	Res	Type	RSRZ
26	14	2459	A	3.9
26	14	2583	G	3.9
1	13	681	C	3.9
26	1H	1894	C	3.9
33	61	116	LEU	3.9
26	1H	1834	U	3.9
28	11	97	TYR	3.9
28	19	100	GLY	3.9
3	2E	152	ILE	3.9
40	B8	65	LYS	3.9
53	L5	2	LYS	3.9
33	69	9	LEU	3.9
1	13	897	C	3.9
1	13	1424	C	3.9
1	1G	1226	C	3.9
26	1H	949	C	3.9
26	1H	2532	G	3.9
26	1H	2603	G	3.9
26	14	836	G	3.9
26	14	2027	G	3.9
32	59	34	GLU	3.9
26	1H	1820	U	3.9
26	1H	2547	U	3.9
26	14	2257	U	3.9
2	12	214	ILE	3.9
28	11	99	ASP	3.9
34	58	92	ALA	3.9
48	J8	15	ALA	3.9
32	59	97	ARG	3.8
28	11	3	VAL	3.8
3	22	161	GLU	3.8
19	AI	80	TYR	3.8
1	13	975	A	3.8
2	1E	74	LYS	3.8
11	2I	122	LYS	3.8
26	1H	38	A	3.8
26	1H	1272	A	3.8
26	14	901	A	3.8
32	59	100	GLY	3.8
1	1G	934	C	3.8
26	1H	2510	C	3.8
1	13	1064	G	3.8

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Mol	Chain	Res	Type	RSRZ
22	1K	34	G	3.8
26	1H	956	G	3.8
26	14	2023	G	3.8
31	49	26	GLN	3.8
34	15	91	LEU	3.8
32	59	76	VAL	3.8
30	31	97	TYR	3.8
33	69	117	GLU	3.8
40	75	102	ILE	3.8
48	J8	18	ILE	3.8
47	E5	21	LEU	3.8
48	F5	80	LEU	3.8
1	1G	687	A	3.8
10	1I	51	ARG	3.8
26	1H	791	C	3.8
26	1H	1837	C	3.8
26	14	964	C	3.8
28	11	98	VAL	3.8
1	1G	568	G	3.8
1	1G	1405	G	3.8
1	1G	1511	G	3.8
15	6I	47	LYS	3.8
26	1H	2677	G	3.8
17	8I	86	GLU	3.8
38	55	21	TYR	3.8
30	31	131	GLY	3.8
32	59	89	ILE	3.8
40	B8	101	PHE	3.8
3	22	131	ARG	3.8
13	4A	108	ARG	3.8
32	59	110	SER	3.8
33	61	20	ASP	3.8
35	68	80	ASP	3.8
16	7A	31	LYS	3.8
1	1G	790	A	3.8
26	14	2393	A	3.8
1	1G	1512	U	3.8
1	13	1192	C	3.8
1	1G	812	C	3.8
26	1H	2359	C	3.8
26	14	2556	C	3.8
29	21	6	GLY	3.8

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Mol	Chain	Res	Type	RSRZ
49	G5	41	ILE	3.8
31	49	82	LEU	3.8
36	35	57	THR	3.8
22	1K	39	G	3.8
26	1H	379	G	3.8
26	14	254	G	3.8
26	14	1619	G	3.8
27	1J	85	G	3.8
9	82	122	ALA	3.8
7	62	9	VAL	3.8
9	82	44	VAL	3.8
30	31	52	LYS	3.8
7	6E	151	TYR	3.8
12	3I	29	GLY	3.8
19	AI	76	PRO	3.8
30	39	87	GLY	3.8
46	H8	22	GLY	3.8
32	59	103	LEU	3.8
36	78	59	LEU	3.8
1	13	913	A	3.8
1	13	1472	U	3.8
26	1H	1536	A	3.8
26	14	380	U	3.8
26	14	1618	A	3.8
1	13	242	C	3.7
1	13	679	C	3.7
26	14	1615	C	3.7
26	14	2507	C	3.7
30	39	6	VAL	3.7
3	22	109	PRO	3.7
6	5E	48	LEU	3.7
8	72	10	LEU	3.7
18	9I	78	LEU	3.7
38	55	18	LEU	3.7
2	12	75	LYS	3.7
30	31	80	ALA	3.7
36	78	46	LYS	3.7
37	45	72	LYS	3.7
3	22	198	VAL	3.7
26	1H	2689	U	3.7
1	13	814	A	3.7
13	4A	106	ASN	3.7

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Mol	Chain	Res	Type	RSRZ
1	1G	1515	C	3.7
26	1H	753	C	3.7
26	14	1675	C	3.7
26	14	2788	C	3.7
2	1E	96	ARG	3.7
5	42	14	ARG	3.7
32	59	109	PHE	3.7
32	59	126	PRO	3.7
33	69	80	PRO	3.7
1	13	761	G	3.7
1	13	944	G	3.7
25	4K	9	G	3.7
26	1H	968	G	3.7
26	14	270(N)	G	3.7
19	AA	56	GLN	3.7
2	12	40	HIS	3.7
34	58	74	ARG	3.7
3	22	152	ILE	3.7
26	14	1396	U	3.7
26	14	2460	U	3.7
30	39	50	SER	3.7
1	13	1399	C	3.7
26	1H	2658	C	3.7
26	14	2512	C	3.7
50	H5	20	LYS	3.7
43	A5	89	ALA	3.7
36	35	49	ARG	3.7
1	13	238	G	3.7
1	13	351	G	3.7
1	13	818	G	3.7
1	13	1401	G	3.7
9	8E	99	LEU	3.7
26	1H	1325	G	3.7
26	14	2069	G	3.7
26	14	2255	G	3.7
3	22	128	PHE	3.7
22	1L	32	U	3.7
26	14	193	U	3.7
30	31	50	SER	3.7
51	M8	65	ASP	3.7
1	13	768	A	3.7
26	1H	2809	A	3.7

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Mol	Chain	Res	Type	RSRZ
26	14	2432	A	3.7
18	9I	82	THR	3.7
1	13	569	C	3.7
1	1G	1336	C	3.7
26	1H	1257	C	3.7
26	14	2078	C	3.7
17	8I	93	GLN	3.7
3	2E	157	ILE	3.7
34	15	82	LEU	3.7
48	J8	91	LYS	3.7
31	41	23	PHE	3.7
1	13	1133	G	3.6
26	1H	272	G	3.6
26	14	2035	G	3.6
26	14	2455	G	3.6
26	14	2582	G	3.6
26	14	2663	G	3.6
50	H5	15	TYR	3.6
1	13	905	U	3.6
1	1G	813	U	3.6
15	6I	88	ARG	3.6
26	14	2555	U	3.6
36	78	50	ARG	3.6
36	35	65	ARG	3.6
1	1G	1493	A	3.6
26	1H	1677	A	3.6
37	45	87	LYS	3.6
1	1G	569	C	3.6
1	1G	1059	C	3.6
26	1H	665	C	3.6
26	1H	755	C	3.6
2	12	70	PHE	3.6
12	3A	25	PRO	3.6
3	2E	129	ALA	3.6
17	8I	100	LYS	3.6
44	F8	87	GLN	3.6
1	13	1387	G	3.6
1	13	1438	G	3.6
26	1H	2578	G	3.6
26	14	189	G	3.6
26	14	831	G	3.6
26	14	1623	G	3.6

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Mol	Chain	Res	Type	RSRZ
29	21	122	PHE	3.6
1	1G	958	A	3.6
26	1H	270(B)	A	3.6
26	14	572	A	3.6
40	B8	112	ARG	3.6
26	1H	270(K)	C	3.6
26	1H	364	C	3.6
26	14	2568	C	3.6
27	1J	84	C	3.6
17	8A	82	MET	3.6
2	12	139	LYS	3.6
2	12	168	THR	3.6
13	4A	109	THR	3.6
2	12	21	ARG	3.6
29	21	116	VAL	3.6
1	13	1139	G	3.6
1	1G	885	G	3.6
26	1H	1840	G	3.6
26	14	738	G	3.6
26	14	2553	G	3.6
26	14	804	A	3.6
40	75	100	TYR	3.6
1	1G	1045	C	3.6
26	1H	2236	C	3.6
26	14	2284	C	3.6
26	14	2573	C	3.6
37	45	41	TRP	3.6
9	8E	41	VAL	3.6
41	85	42	ALA	3.6
1	13	1135	U	3.6
1	13	1380	U	3.6
1	1G	956	U	3.6
3	2E	150	LYS	3.6
4	32	80	GLU	3.6
9	8E	112	LYS	3.6
15	6I	48	LYS	3.6
32	51	18	GLU	3.6
50	H5	17	LYS	3.6
32	59	171	LEU	3.6
38	98	21	TYR	3.6
15	6I	22	THR	3.6
1	13	412	A	3.5

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Mol	Chain	Res	Type	RSRZ
1	13	573	A	3.5
1	13	1492	A	3.5
1	1G	1521	G	3.5
13	4A	104	ARG	3.5
26	1H	270(J)	G	3.5
26	14	195	A	3.5
26	14	593	G	3.5
26	14	769	G	3.5
26	14	1823	G	3.5
26	14	2358	G	3.5
2	1E	14	GLY	3.5
23	2K	33	C	3.5
26	1H	270(P)	C	3.5
12	3I	11	VAL	3.5
19	AA	53	ASN	3.5
28	19	203	ASN	3.5
32	59	159	GLU	3.5
7	62	6	ARG	3.5
30	31	51	THR	3.5
29	29	35	GLN	3.5
2	1E	99	GLY	3.5
2	12	93	VAL	3.5
10	1A	57	LYS	3.5
1	13	696	A	3.5
2	12	202	PRO	3.5
23	2K	39	A	3.5
26	14	190	A	3.5
26	14	911	A	3.5
26	14	2577	A	3.5
2	12	187	LEU	3.5
33	69	123	LEU	3.5
1	13	77	C	3.5
1	13	269	C	3.5
26	1H	34	C	3.5
32	59	164	TYR	3.5
17	8A	27	PHE	3.5
26	1H	1841	U	3.5
26	1H	2604	U	3.5
29	21	124	GLY	3.5
30	31	79	GLY	3.5
29	29	63	LEU	3.5
8	7E	84	ARG	3.5

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Mol	Chain	Res	Type	RSRZ
14	5A	41	ARG	3.5
17	8I	38	ARG	3.5
40	75	46	GLU	3.5
26	1H	2001	A	3.5
32	59	83	TYR	3.5
7	62	148	ASN	3.5
1	1G	328	C	3.5
26	1H	2177	C	3.5
1	13	1134	G	3.5
1	1G	785	G	3.5
12	3I	47	LYS	3.5
15	6I	44	LYS	3.5
26	1H	1131	G	3.5
26	1H	1705	G	3.5
26	1H	2256	G	3.5
19	AA	11	VAL	3.5
32	59	84	SER	3.5
43	E8	53	SER	3.5
5	42	21	ALA	3.5
41	85	18	LEU	3.5
1	1G	1341	U	3.5
52	J5	32	PRO	3.5
15	6A	87	ILE	3.5
15	6I	37	ASN	3.5
20	BA	38	LYS	3.5
29	21	155	LYS	3.5
48	J8	78	LYS	3.5
24	3K	38	A	3.5
26	1H	1132	A	3.5
26	14	1365	A	3.5
30	31	71	GLY	3.5
2	12	161	ALA	3.5
3	22	112	SER	3.5
12	3A	26	ALA	3.5
32	59	63	SER	3.5
38	98	18	LEU	3.5
51	M8	66	SER	3.5
26	1H	270(Q)	C	3.5
26	14	985	C	3.5
28	11	200	ASP	3.5
32	59	72	ILE	3.5
1	1G	27	G	3.5

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Mol	Chain	Res	Type	RSRZ
1	1G	1193	G	3.5
1	1G	1516	G	3.5
26	1H	2012	G	3.5
26	14	2655	G	3.5
40	B8	103	ARG	3.5
26	14	185	U	3.5
26	14	1433	U	3.5
26	14	2398	U	3.5
31	49	75	LYS	3.4
36	35	39	LYS	3.4
29	29	121	ASN	3.4
29	29	143	ASN	3.4
4	3E	96	LEU	3.4
29	21	66	HIS	3.4
37	88	45	GLN	3.4
13	4I	97	PRO	3.4
16	7A	26	ARG	3.4
37	45	120	ILE	3.4
26	1H	2274	A	3.4
26	14	2451	A	3.4
1	13	1132	C	3.4
1	1G	701	C	3.4
26	14	270(Q)	C	3.4
26	14	2025	C	3.4
26	14	2039	C	3.4
26	14	2620	C	3.4
26	14	2789	C	3.4
45	C5	28	LYS	3.4
1	13	576	G	3.4
1	13	1131	G	3.4
1	1G	1065	U	3.4
24	3K	26	G	3.4
26	1H	1897	G	3.4
26	14	188	G	3.4
26	14	803	U	3.4
26	14	948	G	3.4
26	14	1796	U	3.4
26	14	2047	U	3.4
20	BI	13	LEU	3.4
38	55	92	GLY	3.4
30	31	81	PRO	3.4
20	BI	105	SER	3.4

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Mol	Chain	Res	Type	RSRZ
38	98	47	PHE	3.4
9	82	125	TYR	3.4
8	72	112	LEU	3.4
1	13	680	C	3.4
1	1G	783	C	3.4
26	1H	961	C	3.4
26	1H	982	C	3.4
26	1H	2678	C	3.4
41	C8	96	ALA	3.4
26	1H	1679	U	3.4
26	14	2615	U	3.4
48	J8	90	ILE	3.4
1	1G	1392	G	3.4
26	1H	270(N)	G	3.4
2	12	129	GLU	3.4
33	69	38	LEU	3.4
45	C5	14	LEU	3.4
48	F5	14	VAL	3.4
37	88	82	ARG	3.4
3	2E	155	GLY	3.4
3	2E	200	ALA	3.4
13	4A	72	ALA	3.4
3	22	39	ILE	3.4
26	14	182	A	3.4
12	3I	17	LYS	3.4
28	19	102	LYS	3.4
1	13	1066	C	3.4
1	1G	1051	C	3.4
26	14	2554	U	3.4
2	12	165	VAL	3.4
14	5A	6	LEU	3.4
28	19	20	ASP	3.4
26	1H	2255	G	3.4
26	14	1264	G	3.4
26	14	1325	G	3.4
16	7I	33	ILE	3.4
16	7I	36	ILE	3.4
37	45	85	LYS	3.4
1	13	767	A	3.3
26	14	2614	A	3.3
15	6A	45	VAL	3.3
26	1H	856	C	3.3

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Mol	Chain	Res	Type	RSRZ
26	1H	2026	C	3.3
26	1H	2515	C	3.3
26	14	1795	C	3.3
42	95	72	VAL	3.3
3	2E	184	TYR	3.3
39	A8	44	LYS	3.3
41	85	30	LYS	3.3
43	E8	56	ALA	3.3
44	F8	50	LYS	3.3
45	C5	22	GLY	3.3
14	5A	42	ILE	3.3
2	12	159	PRO	3.3
29	29	62	PRO	3.3
32	59	36	PRO	3.3
1	1G	818	G	3.3
24	3L	1	G	3.3
26	1H	742	G	3.3
26	1H	2557	G	3.3
26	1H	2717	G	3.3
26	1H	2751	G	3.3
7	62	5	ARG	3.3
38	98	8	ARG	3.3
3	22	76	VAL	3.3
33	69	18	VAL	3.3
37	45	94	VAL	3.3
48	J8	97	LEU	3.3
1	13	687	A	3.3
26	1H	2176	A	3.3
26	14	256	A	3.3
3	2E	169	ALA	3.3
26	1H	270(L)	U	3.3
26	14	2028	U	3.3
26	14	2596	U	3.3
1	1G	1342	C	3.3
26	14	393	C	3.3
16	7I	66	PRO	3.3
19	AI	79	THR	3.3
5	4E	25	ARG	3.3
45	C5	23	ARG	3.3
45	C5	3	VAL	3.3
28	19	23	GLU	3.3
33	61	85	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
1	13	928	G	3.3
9	8E	81	ILE	3.3
12	3I	22	SER	3.3
16	7I	19	ILE	3.3
26	1H	1661	G	3.3
26	1H	1935	G	3.3
26	1H	1964	G	3.3
26	14	2630	G	3.3
2	12	203	GLY	3.3
22	1K	38	A	3.3
26	14	2662	A	3.3
26	14	2810	A	3.3
28	19	149	PRO	3.3
43	A5	87	PRO	3.3
26	1H	2016	U	3.3
34	15	3	THR	3.3
37	45	45	GLN	3.3
52	J5	23	HIS	3.3
26	1H	1843	C	3.3
26	14	1537	C	3.3
33	61	122	GLU	3.3
37	88	1	MET	3.3
36	78	141	ALA	3.3
37	45	68	ILE	3.3
29	29	139	GLY	3.3
32	59	95	ARG	3.3
32	59	170	ARG	3.3
46	H8	82	ARG	3.3
49	K8	69	ARG	3.3
1	13	309	G	3.3
1	13	803	G	3.3
1	1G	941	G	3.3
3	22	165	THR	3.3
26	1H	1056	G	3.3
29	29	195	LEU	3.3
34	58	22	THR	3.3
39	65	57	LYS	3.3
26	14	764	A	3.3
26	14	953	A	3.3
26	14	2504	U	3.3
1	1G	795	C	3.3
1	1G	805	C	3.3

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Mol	Chain	Res	Type	RSRZ
26	1H	365	C	3.3
26	1H	2420	C	3.3
32	51	40	GLU	3.3
43	E8	86	LEU	3.2
30	31	63	LYS	3.2
32	59	131	VAL	3.2
43	A5	3	ALA	3.2
48	F5	24	ALA	3.2
1	1G	799	G	3.2
5	4E	83	GLU	3.2
26	1H	381	G	3.2
26	14	333	G	3.2
26	1H	1913	A	3.2
26	1H	2820	A	3.2
48	F5	11	ARG	3.2
2	1E	236	TYR	3.2
40	B8	100	TYR	3.2
1	13	328	C	3.2
1	1G	1228	C	3.2
22	1K	31	C	3.2
26	1H	1934	C	3.2
26	1H	2692	C	3.2
29	21	63	LEU	3.2
41	C8	39	LEU	3.2
32	59	144	VAL	3.2
29	29	107	THR	3.2
40	75	48	ILE	3.2
42	95	77	ALA	3.2
6	5E	11	ASN	3.2
15	6I	68	ARG	3.2
28	11	262	ARG	3.2
34	15	104	LYS	3.2
36	78	29	LYS	3.2
26	1H	2593	U	3.2
1	13	575	G	3.2
1	13	700	G	3.2
1	13	763	G	3.2
1	13	1061	G	3.2
1	13	1188	A	3.2
1	1G	815	A	3.2
26	1H	1848	A	3.2
26	1H	1987	G	3.2

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Mol	Chain	Res	Type	RSRZ
26	1H	2657	A	3.2
26	14	1347	G	3.2
26	14	2067	G	3.2
26	14	2557	G	3.2
1	13	822	C	3.2
1	13	1463	C	3.2
26	1H	435	C	3.2
26	1H	2695	C	3.2
6	52	77	ARG	3.2
9	82	121	ARG	3.2
4	32	34	GLU	3.2
42	D8	84	LYS	3.2
36	78	62	LEU	3.2
31	41	25	TYR	3.2
4	32	79	PHE	3.2
6	5E	51	PRO	3.2
3	22	106	VAL	3.2
1	13	820	U	3.2
4	32	45	GLN	3.2
26	14	1993	U	3.2
28	19	22	SER	3.2
3	2E	156	ARG	3.2
32	59	106	THR	3.2
1	13	1339	A	3.2
1	1G	782	A	3.2
1	1G	1225	A	3.2
26	1H	1829	A	3.2
1	13	15	G	3.2
1	13	929	G	3.2
1	13	1469	G	3.2
26	1H	270(Y)	G	3.2
26	1H	776	G	3.2
26	1H	1842	G	3.2
26	14	654(S)	G	3.2
26	14	2253	G	3.2
29	29	65	GLY	3.2
45	C5	41	GLY	3.2
1	13	336	C	3.2
1	13	701	C	3.2
1	13	817	C	3.2
26	1H	1685	C	3.2
26	1H	1908	C	3.2

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Mol	Chain	Res	Type	RSRZ
26	1H	2774	C	3.2
26	14	982	C	3.2
26	14	2571	C	3.2
29	29	60	ASN	3.2
3	22	184	TYR	3.2
15	6A	15	PHE	3.2
17	8A	85	VAL	3.2
3	2E	132	ARG	3.2
3	22	6	HIS	3.2
31	41	72	ARG	3.2
2	12	206	ASP	3.1
24	3K	32	U	3.1
17	8A	89	LEU	3.1
19	AA	5	LEU	3.1
48	F5	75	GLU	3.1
26	1H	957	A	3.1
26	14	2533	A	3.1
36	35	63	PRO	3.1
46	H8	167	PRO	3.1
1	13	811	C	3.1
1	13	1140	C	3.1
1	1G	1343	G	3.1
26	1H	2124	G	3.1
26	14	2616	C	3.1
48	J8	37	ILE	3.1
40	75	84	GLN	3.1
2	12	225	ALA	3.1
29	21	90	THR	3.1
31	41	3	LEU	3.1
26	1H	1796	U	3.1
26	14	270(M)	U	3.1
40	75	66	VAL	3.1
13	4I	104	ARG	3.1
17	8A	28	PRO	3.1
30	31	74	ARG	3.1
26	1H	1755	A	3.1
26	14	800	A	3.1
26	14	2453	A	3.1
26	14	2835	A	3.1
27	1J	58	A	3.1
27	1J	59	A	3.1
33	61	120	ILE	3.1

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Mol	Chain	Res	Type	RSRZ
33	61	131	LYS	3.1
3	2E	162	GLN	3.1
52	J5	53	ALA	3.1
26	1H	721	C	3.1
26	1H	2139	C	3.1
26	14	2040	C	3.1
2	1E	196	LEU	3.1
36	78	30	THR	3.1
39	A8	48	LEU	3.1
46	D5	153	SER	3.1
48	J8	38	SER	3.1
1	13	76	G	3.1
1	13	922	G	3.1
1	1G	1529	G	3.1
26	1H	1522	G	3.1
26	14	389	G	3.1
26	14	1799	G	3.1
26	14	2246	G	3.1
26	14	2454	G	3.1
41	85	89	GLU	3.1
42	95	28	GLU	3.1
3	2E	130	VAL	3.1
6	52	86	ARG	3.1
46	H8	79	ARG	3.1
3	22	8	ILE	3.1
26	14	757	U	3.1
3	2E	133	ALA	3.1
2	12	98	LEU	3.1
1	13	574	A	3.1
1	13	1502	A	3.1
26	1H	2173	A	3.1
26	1H	2810	A	3.1
26	14	270(B)	A	3.1
26	14	2286	A	3.1
37	88	92	GLY	3.1
1	13	308	C	3.1
1	1G	555	C	3.1
26	1H	270(D)	C	3.1
26	1H	2140	C	3.1
26	1H	2558	C	3.1
26	14	184	C	3.1
26	14	708	C	3.1

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Mol	Chain	Res	Type	RSRZ
26	14	1625	C	3.1
29	21	127	ASP	3.1
32	51	42	ARG	3.1
32	59	133	VAL	3.1
1	13	1182	G	3.1
1	13	1233	G	3.1
1	13	1368	G	3.1
22	1K	4	G	3.1
26	14	187	G	3.1
26	14	2046	G	3.1
26	14	2053	G	3.1
34	15	75	TYR	3.1
13	4A	96	LEU	3.1
26	1H	1090	U	3.1
26	1H	2726	U	3.1
26	14	2390	U	3.1
3	2E	127	ARG	3.1
3	22	154	SER	3.1
43	A5	46	PHE	3.1
26	1H	1269	A	3.1
31	49	74	LYS	3.1
43	E8	77	ASP	3.1
29	21	117	MET	3.1
8	72	135	CYS	3.1
1	13	1141	C	3.0
22	1K	59	C	3.0
26	1H	1663	C	3.0
26	1H	2573	C	3.0
2	1E	238	LEU	3.0
1	13	927	G	3.0
1	13	953	G	3.0
1	13	1494	G	3.0
11	2I	91	ARG	3.0
26	1H	60	G	3.0
26	1H	2663	G	3.0
26	14	869	G	3.0
30	39	85	GLY	3.0
40	B8	64	ARG	3.0
40	75	29	ARG	3.0
2	12	164	VAL	3.0
24	3L	6	U	3.0
19	AI	74	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
2	1E	41	ILE	3.0
8	72	13	ILE	3.0
29	29	156	MET	3.0
42	95	70	ILE	3.0
45	C5	66	PRO	3.0
2	1E	79	ASP	3.0
3	22	193	TYR	3.0
10	1A	71	LEU	3.0
33	69	36	ALA	3.0
2	12	76	GLN	3.0
20	BI	80	ARG	3.0
1	13	337	C	3.0
1	13	422	C	3.0
26	1H	837	C	3.0
26	1H	2579	C	3.0
52	J5	50	GLY	3.0
17	8A	86	GLU	3.0
32	59	116	GLU	3.0
2	1E	235	SER	3.0
23	2K	37	U	3.0
1	13	887	G	3.0
1	13	1487	G	3.0
1	1G	238	G	3.0
1	1G	823	G	3.0
26	1H	2253	G	3.0
26	14	2239	G	3.0
26	14	2570	G	3.0
13	4I	110	ARG	3.0
4	32	161	ASN	3.0
20	BI	9	ASN	3.0
30	31	55	GLY	3.0
30	39	67	GLN	3.0
42	D8	48	GLY	3.0
42	95	78	LYS	3.0
1	13	919	A	3.0
26	1H	835	A	3.0
26	1H	1969	A	3.0
26	14	529	A	3.0
26	14	575	A	3.0
26	14	1553	A	3.0
26	14	2572	A	3.0
11	2I	87	THR	3.0

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Mol	Chain	Res	Type	RSRZ
5	42	50	GLU	3.0
16	7A	33	ILE	3.0
26	1H	1844	C	3.0
26	14	691	C	3.0
26	14	1925	C	3.0
26	14	2619	C	3.0
30	31	82	ILE	3.0
34	15	90	MET	3.0
37	88	2	LEU	3.0
12	3I	15	ARG	3.0
1	1G	905	U	3.0
26	1H	403	U	3.0
26	14	270(L)	U	3.0
26	14	2895	U	3.0
12	3A	47	LYS	3.0
1	1G	906	G	3.0
1	1G	1124	G	3.0
1	1G	1530	G	3.0
22	1K	40	G	3.0
26	1H	252	G	3.0
26	1H	442	G	3.0
26	1H	836	G	3.0
26	1H	2509	G	3.0
26	14	2891	G	3.0
2	1E	37	ASN	3.0
37	45	75	THR	3.0
8	72	134	ILE	3.0
17	8A	36	ILE	3.0
2	12	61	LEU	3.0
3	2E	161	GLU	3.0
26	14	2503	A	3.0
34	15	87	LEU	3.0
45	G8	66	PRO	3.0
16	7I	28	ARG	3.0
2	1E	13	ALA	3.0
41	85	96	ALA	3.0
12	3I	91	LYS	3.0
16	7I	39	TYR	3.0
26	1H	2050	C	3.0
8	72	54	ASP	3.0
5	4E	51	VAL	3.0
29	29	47	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
41	C8	90	VAL	3.0
9	82	124	GLN	3.0
26	14	828	U	3.0
1	1G	926	G	2.9
2	12	131	PRO	2.9
33	61	27	ARG	2.9
49	K8	51	ARG	2.9
26	1H	270(W)	G	2.9
26	1H	723	G	2.9
26	1H	2362	G	2.9
26	1H	2516	G	2.9
32	51	25	LYS	2.9
40	75	138	ALA	2.9
46	D5	21	ALA	2.9
1	13	1408	A	2.9
1	13	1493	A	2.9
26	1H	670	A	2.9
26	1H	1103	A	2.9
26	14	957	A	2.9
46	H8	165	VAL	2.9
28	19	6	PHE	2.9
1	13	280	C	2.9
26	14	2143	C	2.9
1	1G	957	U	2.9
1	1G	1522	U	2.9
2	12	154	LEU	2.9
8	72	12	ARG	2.9
20	BI	24	LEU	2.9
28	19	182	LEU	2.9
33	69	140	LEU	2.9
47	E5	13	GLY	2.9
1	13	765	G	2.9
1	13	837	G	2.9
22	1K	19	G	2.9
26	1H	2548	G	2.9
26	1H	2630	G	2.9
26	1H	2694	G	2.9
26	14	2029	G	2.9
26	14	2633	G	2.9
32	59	123	PHE	2.9
40	B8	45	PHE	2.9
2	12	224	GLN	2.9

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Mol	Chain	Res	Type	RSRZ
39	A8	41	ASP	2.9
1	1G	250	A	2.9
1	1G	1513	A	2.9
26	1H	2679	A	2.9
37	88	14	ARG	2.9
5	42	121	LYS	2.9
20	BA	71	THR	2.9
43	E8	57	ASN	2.9
21	1F	14	TRP	2.9
26	1H	404	C	2.9
26	1H	951	C	2.9
26	14	825	C	2.9
26	14	1694	C	2.9
26	14	2363	C	2.9
26	14	2791	C	2.9
32	51	34	GLU	2.9
46	H8	17	ALA	2.9
49	K8	13	ALA	2.9
26	1H	1693	U	2.9
26	14	1778	U	2.9
15	6I	78	TYR	2.9
28	19	55	GLY	2.9
47	E5	8	GLY	2.9
4	3E	110	PHE	2.9
3	22	115	LEU	2.9
32	59	64	LEU	2.9
50	H5	28	LEU	2.9
8	72	88	LYS	2.9
9	8E	70	LYS	2.9
1	13	821	G	2.9
1	13	917	G	2.9
1	1G	765	G	2.9
4	32	163	GLU	2.9
5	4E	81	GLU	2.9
8	72	136	GLU	2.9
26	1H	1799	G	2.9
26	1H	2618	G	2.9
26	1H	2664	G	2.9
26	14	975	G	2.9
28	11	119	ALA	2.9
34	15	92	ALA	2.9
1	13	243	A	2.9

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Mol	Chain	Res	Type	RSRZ
26	1H	390	A	2.9
26	14	984	A	2.9
26	14	2020	A	2.9
1	13	335	C	2.9
1	13	764	C	2.9
1	13	1426	C	2.9
1	1G	1383	C	2.9
23	2K	72	C	2.9
24	3K	69	C	2.9
26	1H	273(C)	C	2.9
26	1H	672	C	2.9
26	1H	985	C	2.9
26	1H	1049	C	2.9
26	14	270(C)	C	2.9
26	14	1304	C	2.9
26	14	2240	C	2.9
27	1J	60	C	2.9
26	1H	441	U	2.9
26	1H	1692	U	2.9
26	14	688	U	2.9
26	14	1673	U	2.9
5	4E	14	ARG	2.9
31	49	23	PHE	2.9
28	11	206	LEU	2.9
29	29	140	SER	2.9
36	35	35	HIS	2.9
46	H8	32	HIS	2.9
2	12	169	LYS	2.9
41	C8	21	ALA	2.9
38	98	102	GLU	2.9
46	D5	11	GLU	2.9
3	22	68	VAL	2.9
33	69	19	VAL	2.9
7	6E	5	ARG	2.9
29	29	119	ARG	2.9
52	J5	15	ARG	2.9
1	13	50	A	2.9
1	13	95	G	2.9
1	13	1142	G	2.9
1	13	1462	G	2.9
1	1G	570	G	2.9
1	1G	895	G	2.9

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Mol	Chain	Res	Type	RSRZ
24	3K	28	A	2.9
26	1H	1791	A	2.9
26	14	390	A	2.9
26	14	573	G	2.9
26	14	676	A	2.9
26	14	1401	G	2.9
26	14	2019	A	2.9
26	14	2576	G	2.9
26	14	2809	A	2.9
2	12	44	LEU	2.9
2	12	215	LEU	2.9
31	49	144	ILE	2.9
33	61	58	LEU	2.9
35	25	1	MET	2.9
38	55	111	LEU	2.9
40	75	105	LEU	2.9
26	1H	1781	C	2.8
26	1H	2390	U	2.8
26	14	737	C	2.8
26	14	837	C	2.8
26	14	1133	U	2.8
31	41	30	GLU	2.8
35	68	45	GLU	2.8
4	32	178	VAL	2.8
31	49	159	VAL	2.8
3	22	119	ARG	2.8
10	1A	46	ARG	2.8
36	35	33	ARG	2.8
2	12	55	PHE	2.8
8	72	98	LYS	2.8
31	41	24	GLY	2.8
42	95	76	LYS	2.8
52	J5	8	LYS	2.8
2	12	199	TYR	2.8
41	85	24	TYR	2.8
26	14	2298	A	2.8
1	13	952	U	2.8
1	13	1136	U	2.8
1	13	1159	U	2.8
1	13	1197	G	2.8
1	1G	1197	G	2.8
26	1H	1489	U	2.8

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Mol	Chain	Res	Type	RSRZ
26	1H	2125	G	2.8
26	1H	2239	G	2.8
26	1H	2436	G	2.8
26	14	270(X)	G	2.8
26	14	654(C)	G	2.8
26	14	765	G	2.8
26	14	2595	G	2.8
26	14	2656	U	2.8
3	2E	126	ARG	2.8
3	22	116	VAL	2.8
4	32	17	VAL	2.8
9	8E	44	VAL	2.8
26	1H	2456	C	2.8
26	14	34	C	2.8
28	19	26	LYS	2.8
29	29	118	LYS	2.8
2	1E	11	LEU	2.8
11	2I	90	GLY	2.8
14	5A	24	CYS	2.8
32	59	155	SER	2.8
45	C5	17	SER	2.8
3	2E	131	ARG	2.8
33	69	3	VAL	2.8
34	58	55	VAL	2.8
46	H8	97	GLU	2.8
48	J8	35	THR	2.8
54	M5	22	VAL	2.8
8	72	99	GLU	2.8
16	7I	83	GLU	2.8
26	14	199	A	2.8
26	14	870	A	2.8
26	14	2388	A	2.8
28	19	200	ASP	2.8
30	39	43	LYS	2.8
9	82	47	LEU	2.8
10	1I	65	LEU	2.8
26	1H	2491	U	2.8
30	39	47	GLY	2.8
1	13	1365	G	2.8
1	1G	763	G	2.8
1	1G	791	G	2.8
26	1H	270(I)	G	2.8

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Mol	Chain	Res	Type	RSRZ
26	1H	1248	G	2.8
26	1H	2581	G	2.8
26	14	680	G	2.8
26	14	697	C	2.8
26	14	1236	G	2.8
26	14	1678	G	2.8
26	14	2811	G	2.8
11	2I	94	ALA	2.8
45	C5	16	ALA	2.8
40	B8	111	ARG	2.8
46	D5	20	ARG	2.8
12	3I	23	LYS	2.8
14	5A	18	VAL	2.8
41	C8	95	LEU	2.8
48	J8	6	GLU	2.8
39	65	82	ILE	2.8
50	L8	43	ILE	2.8
32	59	166	GLY	2.8
1	13	956	U	2.8
1	13	1065	U	2.8
1	1G	684	A	2.8
1	1G	712	A	2.8
1	1G	1510	U	2.8
3	22	201	TYR	2.8
26	1H	667	U	2.8
26	14	868	U	2.8
26	14	1825	A	2.8
26	14	2310	A	2.8
26	14	2801	A	2.8
29	21	137	HIS	2.8
1	13	75	C	2.8
4	32	46	LYS	2.8
12	3A	13	LYS	2.8
13	4A	101	GLN	2.8
22	1L	59	C	2.8
24	3K	25	C	2.8
26	1H	2142	C	2.8
26	14	2145	C	2.8
26	14	2258	C	2.8
32	59	172	LYS	2.8
43	E8	98	LYS	2.8
1	13	92	G	2.8

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Mol	Chain	Res	Type	RSRZ
1	13	688	G	2.8
1	13	942	G	2.8
1	1G	595	G	2.8
23	2K	71	G	2.8
26	1H	271	G	2.8
26	1H	2027	G	2.8
26	1H	2421	G	2.8
26	14	1418	G	2.8
26	14	1624	G	2.8
26	14	2330	G	2.8
27	16	85	G	2.8
38	98	73	VAL	2.8
50	H5	12	PRO	2.8
9	8E	47	LEU	2.8
16	7I	6	LEU	2.8
4	3E	89	THR	2.8
33	61	125	GLU	2.8
43	A5	39	THR	2.8
3	2E	3	ASN	2.7
29	21	60	ASN	2.7
8	72	58	TYR	2.7
3	2E	190	ARG	2.7
1	13	900	A	2.7
1	13	1436	U	2.7
26	1H	1808	U	2.7
26	14	694	U	2.7
26	14	827	U	2.7
26	14	937	U	2.7
26	14	1926	U	2.7
26	14	2435	A	2.7
48	J8	42	GLN	2.7
52	J5	6	VAL	2.7
7	6E	124	LEU	2.7
40	B8	9	LEU	2.7
1	13	110	C	2.7
1	13	1054	C	2.7
1	13	1496	C	2.7
1	1G	1382	C	2.7
3	22	186	PHE	2.7
5	4E	10	MET	2.7
15	6I	41	GLU	2.7
26	1H	1962	C	2.7

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Mol	Chain	Res	Type	RSRZ
26	14	736	C	2.7
26	14	2021	C	2.7
26	14	2879	C	2.7
29	21	106	GLY	2.7
1	13	1171	G	2.7
1	1G	711	G	2.7
1	1G	898	G	2.7
26	1H	823	G	2.7
26	1H	1899	G	2.7
26	1H	1903	G	2.7
26	1H	2228	G	2.7
26	14	1622	G	2.7
2	12	30	ARG	2.7
29	29	144	ARG	2.7
36	78	64	LYS	2.7
13	4I	2	ALA	2.7
52	J5	24	ALA	2.7
3	22	130	VAL	2.7
33	69	92	VAL	2.7
3	22	7	PRO	2.7
8	72	76	PRO	2.7
39	65	4	LEU	2.7
1	13	118	U	2.7
5	4E	45	PHE	2.7
40	B8	110	ILE	2.7
28	11	101	GLU	2.7
1	1G	696	A	2.7
4	32	2	GLY	2.7
4	32	171	GLY	2.7
26	14	781	A	2.7
28	19	27	THR	2.7
46	D5	166	SER	2.7
2	12	226	ARG	2.7
4	32	47	ARG	2.7
36	78	49	ARG	2.7
45	C5	26	LYS	2.7
1	1G	762	C	2.7
26	14	2452	C	2.7
9	82	117	HIS	2.7
36	35	12	ALA	2.7
15	6I	60	VAL	2.7
48	F5	82	LEU	2.7

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Mol	Chain	Res	Type	RSRZ
2	1E	45	GLN	2.7
11	2I	58	PRO	2.7
26	1H	2661	G	2.7
26	14	1846	G	2.7
26	14	2574	G	2.7
29	21	62	PRO	2.7
36	35	8	PRO	2.7
49	G5	9	GLN	2.7
10	1I	54	PHE	2.7
33	69	79	ILE	2.7
34	58	71	ILE	2.7
8	72	22	GLU	2.7
5	4E	18	ARG	2.7
17	8A	25	ARG	2.7
18	9I	48	GLY	2.7
38	55	93	GLY	2.7
39	65	8	GLU	2.7
8	72	115	SER	2.7
12	3I	21	LYS	2.7
12	3A	46	LYS	2.7
47	E5	10	THR	2.7
46	H8	166	SER	2.7
26	1H	1805	U	2.7
1	13	946	A	2.7
26	1H	722	A	2.7
26	14	207	A	2.7
26	14	257	A	2.7
26	14	1308	A	2.7
7	62	7	ALA	2.7
1	13	248	C	2.7
1	13	578	C	2.7
10	1A	98	ILE	2.7
18	9I	80	PRO	2.7
22	1L	31	C	2.7
26	1H	1914	C	2.7
26	14	2395	C	2.7
2	12	80	ILE	2.7
32	59	55	PRO	2.7
33	61	134	PRO	2.7
2	12	90	MET	2.7
7	62	139	GLU	2.7
10	1I	55	LYS	2.7

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Mol	Chain	Res	Type	RSRZ
30	39	137	LYS	2.7
34	58	49	GLY	2.7
1	13	881	G	2.7
26	1H	950	G	2.7
26	14	2325	G	2.7
46	D5	149	SER	2.7
37	45	53	ALA	2.7
1	13	1495	U	2.7
3	22	70	VAL	2.7
26	14	2016	U	2.7
34	58	78	TYR	2.7
43	E8	23	LEU	2.7
46	H8	8	TYR	2.7
2	12	195	ASP	2.7
1	13	937	A	2.6
2	12	212	GLN	2.6
24	3K	7	A	2.6
26	1H	2497	A	2.6
26	14	311	A	2.6
26	14	960	A	2.6
26	14	2665	A	2.6
36	78	48	PRO	2.6
28	11	35	LYS	2.6
40	75	35	LYS	2.6
1	13	240	C	2.6
1	1G	1066	C	2.6
24	3K	11	C	2.6
26	1H	39	C	2.6
26	1H	273(D)	C	2.6
26	1H	1092	C	2.6
26	1H	2175	C	2.6
26	14	270(D)	C	2.6
26	14	806	C	2.6
46	D5	162	GLU	2.6
13	4A	105	THR	2.6
3	2E	196	LEU	2.6
4	3E	111	ALA	2.6
4	32	56	VAL	2.6
12	3I	118	SER	2.6
19	AA	60	VAL	2.6
33	69	25	TYR	2.6
39	A8	7	TYR	2.6

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Mol	Chain	Res	Type	RSRZ
1	13	350	G	2.6
1	13	690	G	2.6
1	13	885	G	2.6
5	42	11	ILE	2.6
10	1I	98	ILE	2.6
26	1H	1807	G	2.6
34	58	40	PRO	2.6
38	98	17	ARG	2.6
1	13	1427	U	2.6
1	1G	1498	U	2.6
26	1H	2011	U	2.6
26	1H	2546	U	2.6
28	11	110	GLY	2.6
29	21	153	GLY	2.6
1	1G	1229	A	2.6
23	2K	38	A	2.6
46	H8	168	GLU	2.6
3	22	163	ALA	2.6
4	32	64	LEU	2.6
16	7I	20	VAL	2.6
1	13	23	C	2.6
1	13	433	C	2.6
1	1G	242	C	2.6
1	1G	308	C	2.6
1	1G	904	C	2.6
11	2I	24	SER	2.6
26	1H	1924	C	2.6
26	1H	2007	C	2.6
26	1H	2568	C	2.6
26	14	1387	C	2.6
26	14	1793	C	2.6
12	3A	89	ARG	2.6
28	19	96	HIS	2.6
33	69	14	ASP	2.6
31	41	85	GLY	2.6
1	1G	820	U	2.6
16	7I	34	GLU	2.6
45	C5	40	GLU	2.6
1	1G	29	G	2.6
26	1H	363(D)	G	2.6
26	14	768	G	2.6
26	14	2056	G	2.6

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Mol	Chain	Res	Type	RSRZ
26	14	2807	G	2.6
42	95	46	VAL	2.6
1	1G	694	A	2.6
26	1H	1148	A	2.6
26	14	866	A	2.6
26	14	2531	A	2.6
32	51	60	ARG	2.6
2	1E	214	ILE	2.6
4	32	38	TYR	2.6
32	59	38	SER	2.6
37	45	66	ILE	2.6
8	72	101	PRO	2.6
41	85	32	PHE	2.6
26	1H	834	C	2.6
26	1H	1261	C	2.6
26	1H	2254	C	2.6
38	55	91	GLN	2.6
15	6I	86	GLY	2.6
20	BA	26	ASN	2.6
48	J8	16	ASN	2.6
30	31	57	VAL	2.6
1	13	804	U	2.6
26	1H	2716	U	2.6
35	68	49	ARG	2.6
48	J8	40	ARG	2.6
2	12	42	ILE	2.6
1	13	333	G	2.6
1	1G	576	G	2.6
1	1G	786	G	2.6
1	1G	1337	G	2.6
8	7E	115	SER	2.6
26	1H	2334	G	2.6
26	14	2237	G	2.6
32	51	61	HIS	2.6
10	1A	53	PRO	2.6
1	1G	1340	A	2.6
26	1H	1048	A	2.6
26	14	1129	A	2.6
38	98	44	LEU	2.6
1	13	339	C	2.6
1	13	972	C	2.6
26	1H	673	C	2.6

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Mol	Chain	Res	Type	RSRZ
26	1H	1498	C	2.6
26	14	433	C	2.6
26	14	693	C	2.6
26	14	1417	C	2.6
33	61	99	GLU	2.6
32	59	35	VAL	2.6
39	65	3	ARG	2.6
48	F5	4	VAL	2.6
2	1E	169	LYS	2.6
48	J8	81	LYS	2.6
49	K8	58	ALA	2.6
2	1E	73	THR	2.6
34	58	32	THR	2.6
51	M8	22	ILE	2.5
2	1E	48	MET	2.5
1	1G	244	U	2.5
26	14	270(F)	U	2.5
37	88	93	TYR	2.5
41	85	72	HIS	2.5
11	2A	35	PRO	2.5
29	21	126	PRO	2.5
42	D8	36	PRO	2.5
5	42	29	GLY	2.5
21	1F	16	GLY	2.5
30	31	87	GLY	2.5
2	12	158	LEU	2.5
13	4A	56	LEU	2.5
17	8A	31	LEU	2.5
1	13	423	G	2.5
6	52	78	GLU	2.5
7	6E	139	GLU	2.5
16	7I	31	LYS	2.5
26	1H	61	G	2.5
26	1H	1488	G	2.5
26	14	273(A)	G	2.5
26	14	2276	G	2.5
29	21	59	VAL	2.5
34	15	46	VAL	2.5
39	65	19	LYS	2.5
43	A5	40	ASN	2.5
48	J8	39	LYS	2.5
6	5E	49	ALA	2.5

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Mol	Chain	Res	Type	RSRZ
25	4K	26	A	2.5
26	1H	1085	A	2.5
26	14	983	A	2.5
26	14	2241	A	2.5
44	B5	22	ALA	2.5
48	J8	77	ALA	2.5
49	K8	27	GLU	2.5
50	L8	42	ALA	2.5
52	J5	14	ALA	2.5
41	C8	80	ILE	2.5
1	1G	822	C	2.5
2	1E	17	PHE	2.5
26	1H	2619	C	2.5
26	14	912	C	2.5
30	39	129	PHE	2.5
1	13	434	U	2.5
3	2E	170	GLN	2.5
26	1H	922	U	2.5
26	14	963	U	2.5
26	14	2079	U	2.5
32	51	139	GLN	2.5
29	21	154	LYS	2.5
38	55	69	ASP	2.5
40	B8	46	GLU	2.5
48	J8	24	ALA	2.5
20	BI	41	ILE	2.5
32	59	121	ILE	2.5
44	B5	37	THR	2.5
3	22	10	PHE	2.5
1	13	712	A	2.5
1	1G	574	A	2.5
1	1G	792	A	2.5
1	1G	901	A	2.5
26	1H	960	A	2.5
26	14	945	A	2.5
26	14	2392	A	2.5
1	13	685	G	2.5
1	1G	769	G	2.5
1	1G	876	G	2.5
1	1G	1523	G	2.5
22	1K	49	G	2.5
26	1H	1747	G	2.5

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Mol	Chain	Res	Type	RSRZ
26	1H	2141	G	2.5
26	14	2242	G	2.5
1	13	1103	C	2.5
1	1G	23	C	2.5
1	1G	1054	C	2.5
8	72	85	ARG	2.5
20	BA	21	LYS	2.5
33	61	6	LEU	2.5
34	15	116	LEU	2.5
43	A5	107	LEU	2.5
46	H8	18	LEU	2.5
48	J8	41	ARG	2.5
48	J8	82	LEU	2.5
23	2K	35	C	2.5
26	1H	378	C	2.5
26	1H	2105	C	2.5
26	14	435	C	2.5
26	14	462	C	2.5
26	14	1660	C	2.5
26	14	2359	C	2.5
27	16	90	C	2.5
32	59	161	GLY	2.5
36	35	116	GLY	2.5
42	95	8	GLY	2.5
48	F5	91	LYS	2.5
33	61	102	SER	2.5
37	45	12	GLN	2.5
42	D8	73	SER	2.5
2	12	13	ALA	2.5
33	61	46	ALA	2.5
36	78	31	ALA	2.5
4	3E	80	GLU	2.5
26	1H	2746	U	2.5
26	14	833	U	2.5
26	14	2017	U	2.5
26	14	2245	U	2.5
48	J8	75	GLU	2.5
48	J8	13	ILE	2.5
31	49	155	MET	2.5
5	4E	26	PHE	2.5
29	21	120	TRP	2.5
6	5E	43	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
15	6I	50	HIS	2.5
20	BI	25	ARG	2.5
29	21	52	LEU	2.5
29	21	79	ARG	2.5
36	78	17	LYS	2.5
36	78	61	ARG	2.5
48	J8	23	LYS	2.5
1	13	563	A	2.5
1	13	607	A	2.5
11	2I	49	GLY	2.5
36	35	43	GLY	2.5
3	22	141	VAL	2.5
32	59	17	VAL	2.5
1	13	346	G	2.5
1	13	579	G	2.5
1	13	886	G	2.5
1	13	1504	G	2.5
2	12	218	ALA	2.5
26	14	171	G	2.5
26	14	1822	G	2.5
26	14	2661	G	2.5
1	13	932	C	2.5
1	1G	528	C	2.5
18	9I	83	GLU	2.5
31	41	137	GLU	2.5
40	B8	102	ILE	2.5
26	1H	1102	C	2.5
26	14	758	C	2.5
26	14	914	C	2.5
26	14	1844	C	2.5
42	D8	53	GLU	2.5
29	21	121	ASN	2.5
31	41	79	ASN	2.5
38	55	47	PHE	2.5
1	13	421	U	2.5
1	13	561	U	2.5
1	13	1235	U	2.5
26	1H	1267	U	2.5
26	14	588	U	2.5
26	14	2262	U	2.5
30	39	136	THR	2.5
10	1A	37	PRO	2.5

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Mol	Chain	Res	Type	RSRZ
14	5I	44	LEU	2.5
17	8I	88	TYR	2.5
52	J5	51	TYR	2.5
2	12	38	GLY	2.5
31	49	177	GLY	2.5
17	8A	35	VAL	2.5
19	AI	9	VAL	2.5
38	55	38	VAL	2.5
20	BI	42	GLN	2.5
28	19	272	ALA	2.4
29	21	28	ALA	2.4
40	B8	126	ALA	2.4
1	1G	1519	A	2.4
26	1H	182	A	2.4
26	1H	2309	A	2.4
26	14	2654	A	2.4
35	68	9	GLU	2.4
36	78	51	PHE	2.4
3	22	38	ARG	2.4
31	49	83	ARG	2.4
46	D5	154	ASP	2.4
47	E5	11	ARG	2.4
1	13	973	G	2.4
1	1G	703	G	2.4
1	1G	1453	G	2.4
22	1L	34	G	2.4
26	1H	270(E)	G	2.4
26	1H	671	C	2.4
26	1H	857	C	2.4
26	1H	1260	G	2.4
26	1H	2680	C	2.4
26	14	270(E)	G	2.4
26	14	692	C	2.4
26	14	1311	G	2.4
26	14	1524	G	2.4
26	14	1563	G	2.4
26	14	2250	G	2.4
26	14	2834	G	2.4
28	19	33	LEU	2.4
36	35	6	LEU	2.4
39	A8	5	THR	2.4
1	13	287	U	2.4

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Mol	Chain	Res	Type	RSRZ
1	13	920	U	2.4
26	1H	969	U	2.4
41	85	45	TYR	2.4
28	19	98	VAL	2.4
37	88	94	VAL	2.4
41	85	48	ALA	2.4
2	1E	211	ILE	2.4
40	B8	48	ILE	2.4
4	3E	150	GLU	2.4
18	9I	38	GLU	2.4
32	51	134	SER	2.4
38	98	14	SER	2.4
2	12	133	LYS	2.4
4	32	93	PHE	2.4
28	11	72	LYS	2.4
30	39	45	ARG	2.4
31	49	33	ARG	2.4
5	4E	12	LEU	2.4
30	39	24	LEU	2.4
38	55	70	LEU	2.4
33	69	86	THR	2.4
36	78	84	ASN	2.4
1	1G	243	A	2.4
1	1G	814	A	2.4
24	3K	70	A	2.4
26	1H	529	A	2.4
26	1H	959	A	2.4
26	1H	2273	A	2.4
26	1H	2531	A	2.4
26	14	310	A	2.4
26	14	777	A	2.4
26	14	2422	A	2.4
8	72	94	TYR	2.4
15	6I	23	GLY	2.4
30	39	91	GLY	2.4
32	51	174	GLY	2.4
1	1G	784	C	2.4
1	13	347	G	2.4
1	1G	723	U	2.4
1	1G	902	G	2.4
2	12	208	ILE	2.4
26	14	334	C	2.4

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Mol	Chain	Res	Type	RSRZ
26	14	2658	C	2.4
28	19	247	ALA	2.4
33	69	53	ALA	2.4
33	69	71	ILE	2.4
40	B8	50	ILE	2.4
44	F8	84	ALA	2.4
4	32	160	GLN	2.4
22	1L	33	U	2.4
23	2K	34	U	2.4
26	1H	363(E)	U	2.4
26	1H	1680	U	2.4
26	1H	1896	G	2.4
26	1H	2276	G	2.4
12	3I	89	ARG	2.4
33	69	122	GLU	2.4
49	G5	45	SER	2.4
2	12	138	LEU	2.4
12	3I	10	LEU	2.4
14	5A	44	LEU	2.4
37	88	17	LEU	2.4
38	98	113	LEU	2.4
29	29	86	PRO	2.4
45	C5	42	VAL	2.4
8	7E	94	TYR	2.4
10	1I	56	HIS	2.4
13	4I	107	ALA	2.4
32	59	96	ALA	2.4
33	61	115	ALA	2.4
22	1L	70	A	2.4
26	1H	74	A	2.4
26	14	689	A	2.4
41	C8	17	ILE	2.4
21	1F	3	LYS	2.4
36	35	111	ARG	2.4
46	H8	80	ARG	2.4
49	K8	54	LYS	2.4
49	G5	51	ARG	2.4
52	J5	19	ARG	2.4
14	5A	36	PHE	2.4
1	13	1045	C	2.4
1	13	1189	C	2.4
1	13	1411	C	2.4

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Mol	Chain	Res	Type	RSRZ
1	1G	526	C	2.4
26	1H	754	C	2.4
26	1H	1895	C	2.4
26	1H	2688	U	2.4
26	14	40	C	2.4
26	14	1255	U	2.4
36	35	85	LEU	2.4
38	55	75	LEU	2.4
1	1G	524	G	2.4
1	1G	837	G	2.4
4	3E	9	CYS	2.4
26	1H	270(S)	G	2.4
26	14	599	G	2.4
28	19	250	TRP	2.4
5	4E	90	VAL	2.4
17	8A	7	THR	2.4
30	31	53	THR	2.4
32	51	29	PRO	2.4
34	58	3	THR	2.4
36	35	58	THR	2.4
8	72	117	GLY	2.4
6	5E	50	TYR	2.4
19	AA	12	ASP	2.4
9	82	55	ALA	2.4
19	AI	75	ALA	2.4
29	21	151	TYR	2.4
33	69	49	ALA	2.4
43	A5	58	ALA	2.4
45	G8	35	TYR	2.4
20	BA	23	ARG	2.4
36	35	1	MET	2.4
19	AA	10	PHE	2.4
2	12	196	LEU	2.4
1	1G	935	A	2.4
4	32	179	GLU	2.4
31	41	14	GLU	2.4
3	2E	112	SER	2.4
8	72	113	SER	2.4
11	2I	101	SER	2.4
1	13	943	U	2.4
1	1G	1052	U	2.4
6	52	51	PRO	2.4

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Mol	Chain	Res	Type	RSRZ
26	1H	2580	U	2.4
26	1H	2808	U	2.4
32	59	154	PRO	2.4
36	78	71	VAL	2.4
46	D5	71	VAL	2.4
26	1H	253	C	2.3
26	1H	2240	C	2.3
26	14	908	C	2.3
26	14	1577	C	2.3
26	14	2281	C	2.3
8	72	131	GLY	2.3
32	59	66	GLY	2.3
3	2E	134	ILE	2.3
20	BA	74	LYS	2.3
32	59	60	ARG	2.3
33	61	79	ILE	2.3
43	A5	56	ALA	2.3
43	A5	106	ILE	2.3
52	J5	9	LYS	2.3
1	13	836	G	2.3
1	13	951	G	2.3
22	1K	41	G	2.3
24	3K	39	G	2.3
26	1H	363(C)	G	2.3
26	1H	1277	G	2.3
26	1H	2009	G	2.3
26	1H	2709	G	2.3
26	14	273	G	2.3
26	14	2391	G	2.3
3	22	175	LEU	2.3
33	61	38	LEU	2.3
33	61	68	LEU	2.3
44	B5	13	LEU	2.3
49	K8	16	LEU	2.3
18	9A	46	GLU	2.3
40	75	70	VAL	2.3
12	3A	48	PRO	2.3
33	61	119	PRO	2.3
1	1G	482	A	2.3
1	1G	767	A	2.3
4	32	23	GLY	2.3
16	7A	35	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
17	8I	37	LYS	2.3
26	1H	181	A	2.3
26	1H	2393	A	2.3
26	1H	2675	A	2.3
26	14	1032	A	2.3
26	14	2060	A	2.3
2	1E	29	ALA	2.3
2	12	185	ILE	2.3
14	5A	3	ARG	2.3
29	29	37	ARG	2.3
34	58	36	GLY	2.3
48	J8	9	GLY	2.3
32	51	4	ILE	2.3
32	59	4	ILE	2.3
1	1G	571	U	2.3
1	1G	1257	U	2.3
9	8E	4	TYR	2.3
26	1H	185	U	2.3
26	1H	200	U	2.3
33	61	1	MET	2.3
1	1G	1060	C	2.3
8	7E	107	LEU	2.3
8	7E	133	LEU	2.3
23	2K	41	C	2.3
26	1H	2355	C	2.3
26	1H	2586	C	2.3
26	14	2026	C	2.3
26	14	2063	C	2.3
26	14	2183	C	2.3
26	14	2326	C	2.3
28	19	257	LEU	2.3
40	B8	99	LEU	2.3
1	13	752	G	2.3
1	13	1410	G	2.3
1	1G	888	G	2.3
2	12	219	VAL	2.3
15	6I	45	VAL	2.3
26	1H	2123	G	2.3
26	1H	2631	G	2.3
26	14	2049	G	2.3
28	11	205	VAL	2.3
34	15	83	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
38	55	5	LYS	2.3
40	B8	115	ARG	2.3
42	D8	50	PRO	2.3
4	32	28	SER	2.3
12	3A	116	SER	2.3
33	69	143	SER	2.3
35	25	74	GLY	2.3
40	B8	47	GLY	2.3
42	95	48	GLY	2.3
44	B5	86	GLY	2.3
48	F5	54	ALA	2.3
49	K8	40	SER	2.3
34	58	1	MET	2.3
29	29	52	LEU	2.3
1	1G	695	A	2.3
26	1H	2435	A	2.3
26	14	1048	A	2.3
49	G5	37	PHE	2.3
15	6I	21	ASP	2.3
26	14	1794	U	2.3
2	12	20	GLU	2.3
9	8E	110	GLU	2.3
31	41	164	GLU	2.3
38	55	43	GLU	2.3
40	75	73	GLU	2.3
1	13	1129	C	2.3
24	3L	72	C	2.3
26	1H	1684	C	2.3
26	1H	2283	C	2.3
26	14	461	C	2.3
26	14	974(A)	C	2.3
26	14	2787	C	2.3
27	1J	12	C	2.3
29	29	7	VAL	2.3
5	42	126	ARG	2.3
44	F8	68	ARG	2.3
4	3E	37	PRO	2.3
37	88	120	ILE	2.3
38	98	34	ILE	2.3
44	F8	19	ALA	2.3
43	A5	53	SER	2.3
14	5A	47	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
20	BI	72	LEU	2.3
40	75	99	LEU	2.3
54	M5	61	LEU	2.3
1	13	319	G	2.3
1	13	376	G	2.3
1	13	493	G	2.3
1	13	954	G	2.3
1	13	963	G	2.3
1	1G	1050	G	2.3
5	42	26	PHE	2.3
22	1L	40	G	2.3
26	1H	270(V)	G	2.3
26	1H	2246	G	2.3
26	1H	2708	G	2.3
26	14	270(Y)	G	2.3
26	14	1792	G	2.3
26	14	2308	G	2.3
3	22	110	ASN	2.3
32	51	57	ASP	2.3
50	L8	20	LYS	2.3
1	13	938	A	2.3
1	1G	1377	A	2.3
26	1H	270(A)	A	2.3
26	1H	394	A	2.3
26	1H	1268	A	2.3
26	14	750	A	2.3
26	14	2883	A	2.3
34	15	98	VAL	2.3
48	F5	40	ARG	2.3
1	13	93	U	2.3
26	1H	2555	U	2.3
4	32	5	ILE	2.3
34	15	86	PRO	2.3
30	31	76	GLY	2.3
1	1G	899	C	2.3
24	3K	31	C	2.3
26	1H	1761	C	2.3
26	1H	2752	C	2.3
26	14	2139	C	2.3
10	1A	65	LEU	2.3
18	9I	47	THR	2.3
38	55	100	LEU	2.3

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Mol	Chain	Res	Type	RSRZ
29	21	108	SER	2.3
12	3A	17	LYS	2.3
32	51	13	LYS	2.3
41	C8	16	LYS	2.3
43	A5	57	ASN	2.3
16	7I	82	GLN	2.3
45	G8	33	LYS	2.3
5	42	105	VAL	2.3
29	29	72	VAL	2.3
4	32	24	GLU	2.2
5	4E	122	GLU	2.2
32	51	86	GLU	2.2
1	13	939	G	2.2
26	1H	2807	G	2.2
33	69	137	PRO	2.2
28	11	272	ALA	2.2
33	69	65	ALA	2.2
2	1E	138	LEU	2.2
26	1H	270(F)	U	2.2
26	1H	1655	A	2.2
26	14	532	A	2.2
26	14	1263	U	2.2
26	14	1578	U	2.2
26	14	1655	A	2.2
26	14	2497	A	2.2
28	19	177	LEU	2.2
33	61	140	LEU	2.2
42	95	38	LEU	2.2
28	11	250	TRP	2.2
2	12	28	PHE	2.2
32	59	129	THR	2.2
33	61	86	THR	2.2
45	C5	71	LYS	2.2
48	F5	33	LYS	2.2
48	F5	81	LYS	2.2
1	13	1226	C	2.2
1	1G	1524	C	2.2
6	52	47	ARG	2.2
14	5A	26	ARG	2.2
26	1H	935	C	2.2
26	14	208	C	2.2
26	14	209	C	2.2

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Mol	Chain	Res	Type	RSRZ
26	14	2248	C	2.2
26	14	2617	C	2.2
36	78	16	ARG	2.2
38	55	97	VAL	2.2
28	19	99	ASP	2.2
7	62	120	ILE	2.2
34	15	71	ILE	2.2
2	1E	18	GLY	2.2
17	8A	33	GLY	2.2
37	45	7	MET	2.2
38	98	39	PRO	2.2
42	95	30	GLY	2.2
40	B8	119	LYS	2.2
40	75	22	PHE	2.2
1	13	1144	G	2.2
1	1G	942	G	2.2
26	1H	593	G	2.2
26	1H	962	G	2.2
26	1H	1264	G	2.2
26	1H	2049	G	2.2
26	14	1416	G	2.2
26	14	2436	G	2.2
26	14	2802	G	2.2
34	58	93	THR	2.2
1	13	229	U	2.2
8	72	48	TYR	2.2
15	6A	68	ARG	2.2
26	1H	1944	U	2.2
26	1H	2460	U	2.2
26	14	2249	U	2.2
26	14	2431	U	2.2
26	14	2514	U	2.2
31	41	22	ARG	2.2
33	69	50	ARG	2.2
1	13	1102	A	2.2
26	1H	1749	A	2.2
26	1H	2459	A	2.2
26	14	191	A	2.2
26	14	2790	A	2.2
10	1A	72	VAL	2.2
28	11	141	VAL	2.2
33	69	136	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
37	88	97	VAL	2.2
38	98	38	VAL	2.2
1	1G	972	C	2.2
26	1H	2178	C	2.2
26	14	531	C	2.2
26	14	1781	C	2.2
2	12	62	ALA	2.2
3	2E	109	PRO	2.2
3	22	43	LEU	2.2
15	6A	57	LEU	2.2
33	61	110	ASP	2.2
16	7I	7	ALA	2.2
28	19	119	ALA	2.2
30	39	5	ALA	2.2
32	59	108	GLY	2.2
34	58	33	LEU	2.2
34	15	6	PRO	2.2
39	A8	91	PRO	2.2
38	98	40	LYS	2.2
37	88	104	PHE	2.2
6	5E	86	ARG	2.2
10	1I	45	ARG	2.2
13	4I	91	ARG	2.2
20	BA	83	ARG	2.2
34	15	32	THR	2.2
12	3I	18	VAL	2.2
1	1G	1073	U	2.2
22	1K	8	U	2.2
26	1H	1133	U	2.2
26	1H	2172	U	2.2
26	1H	2245	U	2.2
36	35	114	ILE	2.2
1	13	711	G	2.2
1	1G	181	G	2.2
1	1G	881	G	2.2
26	1H	750	A	2.2
26	1H	1998	G	2.2
26	1H	2042	A	2.2
26	1H	2104	G	2.2
26	14	60	G	2.2
26	14	312	G	2.2
26	14	735	A	2.2

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Mol	Chain	Res	Type	RSRZ
26	14	782	A	2.2
26	14	1845	G	2.2
26	14	1998	G	2.2
36	35	9	ASN	2.2
38	55	65	LEU	2.2
39	A8	80	LEU	2.2
4	3E	16	GLY	2.2
12	3I	94	PRO	2.2
36	35	53	GLY	2.2
46	D5	83	PRO	2.2
52	J5	7	PRO	2.2
16	7I	75	ARG	2.2
37	45	60	ARG	2.2
48	F5	26	ARG	2.2
26	1H	1615	C	2.2
26	14	172	C	2.2
26	14	2394	C	2.2
3	22	15	THR	2.2
44	F8	37	THR	2.2
2	1E	15	VAL	2.2
19	AI	58	VAL	2.2
31	49	28	VAL	2.2
38	55	94	TYR	2.2
8	72	111	ILE	2.2
32	51	56	SER	2.2
32	59	134	SER	2.2
33	61	51	ILE	2.2
9	8E	50	LEU	2.2
12	3I	27	LEU	2.2
33	61	128	LEU	2.2
5	42	30	ALA	2.2
40	75	140	GLU	2.2
3	22	51	GLY	2.2
5	4E	124	GLY	2.2
16	7A	15	PRO	2.2
24	3L	16	U	2.2
26	14	2098	U	2.2
26	14	2808	U	2.2
32	59	5	GLY	2.2
2	1E	175	ARG	2.2
34	58	61	ARG	2.2
48	F5	52	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
2	12	193	ASP	2.2
29	21	42	ASP	2.2
1	13	349	A	2.2
1	13	889	A	2.2
1	13	907	A	2.2
1	13	914	A	2.2
1	1G	1499	A	2.2
26	1H	1128	A	2.2
26	1H	2278	A	2.2
26	14	1762	A	2.2
1	13	595	G	2.2
1	13	1464	G	2.2
26	1H	666	G	2.2
26	14	363	G	2.2
26	14	2182	G	2.2
26	14	2280	G	2.2
28	19	201	HIS	2.2
29	21	132	HIS	2.2
15	6I	25	THR	2.1
30	31	136	THR	2.1
34	15	5	VAL	2.1
4	3E	207	TYR	2.1
1	13	18	C	2.1
1	1G	483	C	2.1
23	2L	66	C	2.1
26	14	270(K)	C	2.1
26	14	791	C	2.1
48	F5	85	LEU	2.1
12	3I	115	LYS	2.1
39	A8	11	LYS	2.1
33	61	63	ALA	2.1
37	45	117	ALA	2.1
43	E8	5	ALA	2.1
4	3E	29	PRO	2.1
4	3E	167	GLY	2.1
20	BA	80	ARG	2.1
30	31	47	GLY	2.1
36	35	77	ARG	2.1
39	A8	112	PHE	2.1
42	D8	75	PHE	2.1
1	1G	13	U	2.1
26	1H	2457	U	2.1

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Mol	Chain	Res	Type	RSRZ
28	11	113	VAL	2.1
2	12	190	THR	2.1
1	13	101	A	2.1
2	12	41	ILE	2.1
4	32	4	TYR	2.1
5	42	133	TYR	2.1
16	7A	39	TYR	2.1
24	3L	76	A	2.1
26	1H	718	A	2.1
26	1H	793	A	2.1
26	14	330	A	2.1
26	14	677	A	2.1
26	14	1496	A	2.1
30	39	9	ILE	2.1
35	25	32	TYR	2.1
45	C5	75	ILE	2.1
18	9I	84	LYS	2.1
20	BA	99	LEU	2.1
28	19	150	LYS	2.1
30	39	12	LEU	2.1
34	15	2	LYS	2.1
1	1G	1508	G	2.1
9	8E	111	ARG	2.1
17	8A	16	GLN	2.1
24	3K	57	G	2.1
26	14	1992	G	2.1
26	14	2153	G	2.1
11	2I	89	ALA	2.1
11	2I	100	ALA	2.1
29	29	111	ARG	2.1
4	32	83	SER	2.1
13	4A	52	GLU	2.1
16	7A	34	GLU	2.1
30	39	131	GLY	2.1
32	51	32	GLU	2.1
37	45	33	GLY	2.1
1	1G	1214	C	2.1
22	1K	2	C	2.1
26	1H	1383	C	2.1
26	14	41	C	2.1
26	14	654(B)	C	2.1
26	14	797	C	2.1

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Mol	Chain	Res	Type	RSRZ
26	14	2140	C	2.1
26	14	2261	C	2.1
16	7A	9	PHE	2.1
49	K8	47	ASN	2.1
3	22	153	VAL	2.1
32	59	37	VAL	2.1
36	78	95	VAL	2.1
37	45	138	ASP	2.1
42	95	52	VAL	2.1
2	12	47	THR	2.1
3	22	91	LEU	2.1
24	3K	6	U	2.1
26	14	1898	U	2.1
28	11	270	ILE	2.1
34	58	75	TYR	2.1
38	98	9	LYS	2.1
42	D8	40	LEU	2.1
42	D8	70	ILE	2.1
29	21	160	TYR	2.1
44	B5	18	TYR	2.1
54	M5	50	LEU	2.1
36	35	79	ARG	2.1
37	45	3	MET	2.1
38	55	17	ARG	2.1
46	D5	82	ARG	2.1
15	6A	71	GLN	2.1
28	11	130	ALA	2.1
30	39	49	ALA	2.1
33	61	55	ALA	2.1
33	69	46	ALA	2.1
38	98	41	ALA	2.1
1	13	1350	A	2.1
8	72	55	GLY	2.1
11	2I	92	GLU	2.1
22	1K	70	A	2.1
26	14	1366	A	2.1
26	14	2173	A	2.1
30	31	86	GLY	2.1
46	H8	162	GLU	2.1
12	3A	62	SER	2.1
32	59	80	SER	2.1
3	22	108	ASN	2.1

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Mol	Chain	Res	Type	RSRZ
6	52	11	ASN	2.1
32	59	147	ASN	2.1
1	1G	1525	G	2.1
26	1H	2270	G	2.1
26	14	270(R)	G	2.1
26	14	776	G	2.1
26	14	1209	G	2.1
26	14	1807	G	2.1
26	14	2100	G	2.1
26	14	2490	G	2.1
39	65	98	VAL	2.1
50	H5	59	VAL	2.1
52	J5	31	VAL	2.1
1	1G	245	C	2.1
1	1G	1395	C	2.1
26	1H	1100	C	2.1
26	14	654(R)	C	2.1
26	14	2260	C	2.1
19	AA	6	LYS	2.1
3	22	111	LEU	2.1
4	32	9	CYS	2.1
6	5E	45	LEU	2.1
6	52	10	LEU	2.1
19	AA	13	ASP	2.1
32	59	67	LEU	2.1
33	69	30	LEU	2.1
33	69	72	LEU	2.1
36	78	47	ASP	2.1
42	D8	71	LEU	2.1
33	61	103	ARG	2.1
4	3E	48	ALA	2.1
29	21	205	ALA	2.1
42	D8	55	ALA	2.1
26	1H	1995	U	2.1
26	1H	2041	U	2.1
2	1E	152	PHE	2.1
9	8E	59	PHE	2.1
32	51	55	PRO	2.1
8	72	23	SER	2.1
36	35	42	SER	2.1
29	21	7	VAL	2.1
26	1H	689	A	2.1

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Mol	Chain	Res	Type	RSRZ
26	14	586	A	2.1
26	14	2033	A	2.1
7	6E	120	ILE	2.1
7	62	32	ARG	2.1
18	9I	79	LEU	2.1
20	BI	104	LEU	2.1
36	35	115	LEU	2.1
48	J8	94	LEU	2.1
43	E8	102	HIS	2.1
36	78	60	MET	2.1
1	13	312	C	2.1
1	13	1137	C	2.1
1	13	1172	C	2.1
1	13	1431	C	2.1
1	1G	679	C	2.1
24	3L	69	C	2.1
26	1H	2461	C	2.1
26	14	270(G)	C	2.1
1	13	230	G	2.1
1	13	251	G	2.1
24	3K	71	G	2.1
26	1H	205	G	2.1
26	1H	1542	G	2.1
26	1H	1921	G	2.1
26	14	270(I)	G	2.1
26	14	323	G	2.1
26	14	880	G	2.1
26	14	938	G	2.1
34	15	57	ALA	2.1
46	D5	172	ALA	2.1
2	1E	202	PRO	2.1
5	42	70	PRO	2.1
28	19	181	GLU	2.1
29	21	171	GLU	2.1
31	49	80	PHE	2.1
49	K8	37	PHE	2.1
1	1G	793	U	2.0
1	1G	1049	U	2.0
2	1E	81	VAL	2.0
5	42	148	VAL	2.0
26	14	2022	U	2.0
48	F5	23	LYS	2.0

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Mol	Chain	Res	Type	RSRZ
4	32	77	ASN	2.0
5	4E	31	LEU	2.0
5	4E	129	ILE	2.0
8	7E	83	ILE	2.0
12	3A	52	LEU	2.0
15	6I	67	LEU	2.0
30	31	54	ARG	2.0
43	A5	23	LEU	2.0
49	K8	14	ARG	2.0
34	58	48	MET	2.0
26	1H	1510	A	2.0
26	14	1434	A	2.0
33	61	53	ALA	2.0
42	95	32	THR	2.0
50	H5	42	ALA	2.0
2	12	57	PHE	2.0
30	31	91	GLY	2.0
46	H8	83	PRO	2.0
48	J8	87	PRO	2.0
28	19	101	GLU	2.0
29	21	73	GLU	2.0
45	G8	40	GLU	2.0
1	13	320	C	2.0
1	13	1407	C	2.0
15	6I	11	VAL	2.0
22	1K	61	C	2.0
26	1H	1909	C	2.0
26	14	1663	C	2.0
26	14	1990	C	2.0
42	95	79	VAL	2.0
46	D5	56	VAL	2.0
1	13	111	G	2.0
1	1G	638	G	2.0
2	12	137	ARG	2.0
9	8E	19	LEU	2.0
12	3A	27	LEU	2.0
13	4A	90	LEU	2.0
26	1H	1055	G	2.0
26	1H	1487	G	2.0
26	14	1106	G	2.0
26	14	1422	G	2.0
26	14	2805	G	2.0

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Mol	Chain	Res	Type	RSRZ
28	11	147	LEU	2.0
28	19	52	ARG	2.0
46	H8	163	LEU	2.0
2	1E	5	ILE	2.0
4	32	67	ILE	2.0
26	1H	1113	U	2.0
26	14	562	U	2.0
10	1I	27	ALA	2.0
16	7A	44	THR	2.0
38	98	37	THR	2.0
41	85	21	ALA	2.0
2	12	220	ASP	2.0
41	C8	97	ASP	2.0
29	21	88	GLY	2.0
38	55	46	GLY	2.0
44	F8	24	GLY	2.0
53	L5	36	GLN	2.0
1	13	1005	A	2.0
6	5E	42	GLU	2.0
26	1H	1129	A	2.0
26	1H	2629	A	2.0
26	14	1562	A	2.0
32	59	141	VAL	2.0
34	58	53	VAL	2.0
43	E8	30	GLU	2.0
3	22	127	ARG	2.0
36	78	18	ARG	2.0
15	6I	56	LEU	2.0
33	69	31	LEU	2.0
33	69	116	LEU	2.0
3	22	202	ILE	2.0
1	13	291	C	2.0
1	13	554	C	2.0
1	13	762	C	2.0
1	13	1051	C	2.0
1	1G	797	C	2.0
26	1H	955	C	2.0
26	1H	1672	C	2.0
26	1H	2363	C	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95^{th} 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
22	PSU	1L	55	20/21	0.55	0.12	169,202,215,222	0
22	5MU	1L	54	21/22	0.56	0.14	171,182,192,193	0
22	H2U	1K	17	20/21	0.56	0.15	199,211,220,220	0
22	H2U	1L	17	20/21	0.57	0.23	213,231,237,237	0
22	5MU	1K	54	21/22	0.60	0.17	139,156,165,170	0
23	5MU	2L	55	21/22	0.68	0.11	129,139,144,146	0
22	PSU	1K	55	20/21	0.74	0.13	146,178,188,189	0
22	AET	1L	37	33/34	0.76	0.30	156,171,176,178	0
23	5MU	2K	55	21/22	0.80	0.10	118,124,135,139	0
22	AET	1K	37	33/34	0.82	0.39	112,124,147,151	0
23	PSU	2L	56	20/21	0.82	0.07	126,136,143,146	0
23	PSU	2K	56	20/21	0.84	0.09	113,119,131,132	0

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, 95^{th} 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
55	MG	13	1663	1/1	-0.20	0.39	123,123,123,123	0
55	MG	1G	1642	1/1	-0.17	0.35	154,154,154,154	0
55	MG	1G	1630	1/1	-0.13	0.42	135,135,135,135	0
55	MG	14	3176	1/1	0.06	0.45	109,109,109,109	0
55	MG	1G	1621	1/1	0.15	0.50	115,115,115,115	0
55	MG	1H	3208	1/1	0.16	0.37	113,113,113,113	0
55	MG	14	3138	1/1	0.17	0.38	134,134,134,134	0
55	MG	14	3016	1/1	0.17	0.47	110,110,110,110	0
55	MG	1H	3277	1/1	0.25	0.43	103,103,103,103	0
55	MG	1G	1662	1/1	0.26	0.49	116,116,116,116	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3113	1/1	0.27	0.47	120,120,120,120	0
55	MG	1G	1666	1/1	0.29	0.37	136,136,136,136	0
55	MG	1H	3254	1/1	0.30	0.39	97,97,97,97	0
55	MG	13	1631	1/1	0.31	0.35	132,132,132,132	0
55	MG	13	1668	1/1	0.32	0.53	121,121,121,121	0
55	MG	14	3137	1/1	0.32	0.34	151,151,151,151	0
55	MG	1H	3246	1/1	0.35	0.39	117,117,117,117	0
55	MG	1G	1663	1/1	0.35	0.49	121,121,121,121	0
55	MG	1G	1638	1/1	0.35	0.26	151,151,151,151	0
55	MG	13	1656	1/1	0.35	0.31	124,124,124,124	0
55	MG	1G	1680	1/1	0.36	0.30	138,138,138,138	0
55	MG	13	1670	1/1	0.36	0.16	137,137,137,137	0
55	MG	13	1642	1/1	0.36	0.24	149,149,149,149	0
55	MG	14	3028	1/1	0.38	0.33	114,114,114,114	0
55	MG	1G	1669	1/1	0.40	0.23	131,131,131,131	0
55	MG	1H	3200	1/1	0.40	0.44	88,88,88,88	0
55	MG	14	3190	1/1	0.41	0.30	100,100,100,100	0
55	MG	1G	1611	1/1	0.42	0.35	112,112,112,112	0
55	MG	1H	3148	1/1	0.43	0.40	100,100,100,100	0
55	MG	14	3189	1/1	0.43	0.40	99,99,99,99	0
55	MG	14	3146	1/1	0.43	0.36	92,92,92,92	0
55	MG	13	1666	1/1	0.44	0.33	115,115,115,115	0
55	MG	13	1634	1/1	0.44	0.34	120,120,120,120	0
55	MG	1G	1639	1/1	0.45	0.38	106,106,106,106	0
55	MG	1G	1602	1/1	0.45	0.32	109,109,109,109	0
55	MG	1G	1625	1/1	0.46	0.32	118,118,118,118	0
55	MG	13	1605	1/1	0.46	0.27	122,122,122,122	0
55	MG	1G	1640	1/1	0.46	0.47	103,103,103,103	0
55	MG	13	1688	1/1	0.47	0.30	122,122,122,122	0
55	MG	13	1647	1/1	0.47	0.11	116,116,116,116	0
55	MG	1H	3034	1/1	0.48	0.35	77,77,77,77	0
55	MG	13	1628	1/1	0.48	0.32	120,120,120,120	0
55	MG	42	202	1/1	0.48	0.36	135,135,135,135	0
55	MG	1H	3221	1/1	0.48	0.32	100,100,100,100	0
55	MG	1H	3233	1/1	0.49	0.32	102,102,102,102	0
55	MG	14	3094	1/1	0.50	0.18	108,108,108,108	0
55	MG	1G	1667	1/1	0.50	0.51	101,101,101,101	0
55	MG	1G	1622	1/1	0.50	0.26	104,104,104,104	0
55	MG	1H	3213	1/1	0.50	0.38	100,100,100,100	0
55	MG	14	3069	1/1	0.51	0.25	107,107,107,107	0
55	MG	1H	3164	1/1	0.51	0.34	98,98,98,98	0
55	MG	1H	3102	1/1	0.51	0.44	105,105,105,105	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3111	1/1	0.52	0.30	110,110,110,110	0
55	MG	1H	3009	1/1	0.52	0.28	95,95,95,95	0
55	MG	13	1665	1/1	0.52	0.32	115,115,115,115	0
55	MG	1H	3242	1/1	0.52	0.27	94,94,94,94	0
55	MG	1H	3015	1/1	0.53	0.35	93,93,93,93	0
55	MG	1H	3109	1/1	0.53	0.22	109,109,109,109	0
55	MG	14	3004	1/1	0.53	0.21	66,66,66,66	0
55	MG	1G	1659	1/1	0.53	0.25	99,99,99,99	0
55	MG	13	1679	1/1	0.53	0.24	111,111,111,111	0
55	MG	14	3164	1/1	0.54	0.31	95,95,95,95	0
55	MG	1H	3135	1/1	0.54	0.31	75,75,75,75	0
55	MG	1G	1636	1/1	0.54	0.29	123,123,123,123	0
55	MG	1H	3181	1/1	0.54	0.54	89,89,89,89	0
55	MG	BI	201	1/1	0.55	0.33	110,110,110,110	0
55	MG	1H	3180	1/1	0.55	0.23	112,112,112,112	0
55	MG	14	3103	1/1	0.55	0.39	113,113,113,113	0
55	MG	14	3029	1/1	0.55	0.32	99,99,99,99	0
55	MG	14	3059	1/1	0.56	0.20	105,105,105,105	0
55	MG	1H	3195	1/1	0.57	0.24	114,114,114,114	0
55	MG	1G	1645	1/1	0.57	0.29	118,118,118,118	0
55	MG	1H	3023	1/1	0.57	0.31	85,85,85,85	0
55	MG	13	1681	1/1	0.58	0.25	113,113,113,113	0
55	MG	1H	3055	1/1	0.58	0.29	91,91,91,91	0
55	MG	1H	3022	1/1	0.59	0.40	77,77,77,77	0
55	MG	1H	3144	1/1	0.59	0.27	106,106,106,106	0
55	MG	1H	3192	1/1	0.59	0.18	114,114,114,114	0
55	MG	1H	3167	1/1	0.59	0.38	93,93,93,93	0
55	MG	1H	3172	1/1	0.59	0.23	101,101,101,101	0
55	MG	13	1625	1/1	0.60	0.19	101,101,101,101	0
55	MG	13	1640	1/1	0.60	0.36	99,99,99,99	0
55	MG	1H	3110	1/1	0.61	0.22	93,93,93,93	0
55	MG	1H	3211	1/1	0.61	0.41	93,93,93,93	0
55	MG	13	1626	1/1	0.61	0.27	123,123,123,123	0
55	MG	1G	1635	1/1	0.61	0.14	139,139,139,139	0
55	MG	1H	3006	1/1	0.61	0.37	49,49,49,49	0
55	MG	1H	3037	1/1	0.62	0.24	76,76,76,76	0
55	MG	1H	3027	1/1	0.62	0.39	75,75,75,75	0
55	MG	14	3169	1/1	0.62	0.34	97,97,97,97	0
55	MG	1G	1647	1/1	0.62	0.22	120,120,120,120	0
55	MG	1G	1648	1/1	0.62	0.21	115,115,115,115	0
55	MG	14	3144	1/1	0.62	0.15	114,114,114,114	0
55	MG	1H	3223	1/1	0.63	0.17	99,99,99,99	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	13	1651	1/1	0.63	0.30	110,110,110,110	0
55	MG	1G	1665	1/1	0.63	0.33	130,130,130,130	0
55	MG	13	1660	1/1	0.64	0.29	120,120,120,120	0
55	MG	1H	3031	1/1	0.64	0.27	83,83,83,83	0
55	MG	1H	3042	1/1	0.64	0.26	96,96,96,96	0
55	MG	14	3121	1/1	0.64	0.38	94,94,94,94	0
55	MG	14	3122	1/1	0.64	0.31	103,103,103,103	0
55	MG	1G	1682	1/1	0.64	0.24	101,101,101,101	0
55	MG	14	3099	1/1	0.64	0.21	90,90,90,90	0
55	MG	13	1661	1/1	0.65	0.28	117,117,117,117	0
55	MG	1H	3196	1/1	0.65	0.15	107,107,107,107	0
55	MG	13	1613	1/1	0.65	0.35	129,129,129,129	0
55	MG	14	3007	1/1	0.65	0.28	97,97,97,97	0
55	MG	1H	3113	1/1	0.65	0.11	83,83,83,83	0
55	MG	1H	3114	1/1	0.66	0.24	92,92,92,92	0
55	MG	14	3141	1/1	0.66	0.22	104,104,104,104	0
55	MG	1H	3106	1/1	0.66	0.29	100,100,100,100	0
55	MG	1H	3174	1/1	0.66	0.14	129,129,129,129	0
55	MG	14	3151	1/1	0.66	0.28	96,96,96,96	0
55	MG	1H	3178	1/1	0.66	0.26	94,94,94,94	0
55	MG	13	1637	1/1	0.66	0.25	101,101,101,101	0
55	MG	1G	1632	1/1	0.66	0.15	127,127,127,127	0
55	MG	14	3178	1/1	0.66	0.43	98,98,98,98	0
55	MG	1H	3100	1/1	0.66	0.36	65,65,65,65	0
55	MG	1H	3049	1/1	0.66	0.22	74,74,74,74	0
55	MG	16	201	1/1	0.67	0.25	92,92,92,92	0
55	MG	13	1618	1/1	0.67	0.29	115,115,115,115	0
55	MG	1G	1685	1/1	0.67	0.40	94,94,94,94	0
55	MG	13	1632	1/1	0.68	0.36	109,109,109,109	0
55	MG	1H	3099	1/1	0.68	0.46	79,79,79,79	0
55	MG	1G	1624	1/1	0.68	0.28	94,94,94,94	0
55	MG	1G	1668	1/1	0.68	0.26	125,125,125,125	0
55	MG	1H	3206	1/1	0.68	0.37	108,108,108,108	0
55	MG	1H	3020	1/1	0.68	0.38	77,77,77,77	0
55	MG	1G	1614	1/1	0.68	0.31	123,123,123,123	0
55	MG	1G	1681	1/1	0.69	0.26	92,92,92,92	0
55	MG	13	1673	1/1	0.69	0.17	113,113,113,113	0
55	MG	14	3112	1/1	0.69	0.14	96,96,96,96	0
55	MG	1H	3168	1/1	0.69	0.35	109,109,109,109	0
55	MG	14	3048	1/1	0.69	0.23	94,94,94,94	0
55	MG	42	201	1/1	0.69	0.31	115,115,115,115	0
55	MG	1G	1644	1/1	0.69	0.44	97,97,97,97	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1G	1664	1/1	0.69	0.22	105,105,105,105	0
55	MG	1G	1656	1/1	0.69	0.18	115,115,115,115	0
55	MG	1H	3122	1/1	0.70	0.20	98,98,98,98	0
55	MG	13	1648	1/1	0.70	0.17	110,110,110,110	0
55	MG	1H	3268	1/1	0.70	0.45	74,74,74,74	0
55	MG	14	3010	1/1	0.70	0.39	78,78,78,78	0
55	MG	14	3183	1/1	0.70	0.25	99,99,99,99	0
55	MG	14	3184	1/1	0.70	0.38	96,96,96,96	0
55	MG	13	1639	1/1	0.70	0.24	110,110,110,110	0
55	MG	1G	1650	1/1	0.70	0.21	107,107,107,107	0
55	MG	1H	3160	1/1	0.71	0.29	81,81,81,81	0
55	MG	13	1623	1/1	0.71	0.29	112,112,112,112	0
55	MG	1H	3045	1/1	0.71	0.13	80,80,80,80	0
55	MG	1H	3071	1/1	0.72	0.14	72,72,72,72	0
55	MG	1H	3281	1/1	0.72	0.09	96,96,96,96	0
55	MG	14	3139	1/1	0.72	0.24	103,103,103,103	0
55	MG	1H	3253	1/1	0.72	0.37	98,98,98,98	0
55	MG	14	3120	1/1	0.72	0.24	106,106,106,106	0
55	MG	14	3030	1/1	0.72	0.20	110,110,110,110	0
55	MG	14	3013	1/1	0.72	0.22	96,96,96,96	0
55	MG	14	3152	1/1	0.72	0.29	90,90,90,90	0
55	MG	1H	3212	1/1	0.73	0.37	91,91,91,91	0
55	MG	1G	1649	1/1	0.73	0.16	151,151,151,151	0
55	MG	1H	3216	1/1	0.73	0.16	89,89,89,89	0
55	MG	14	3125	1/1	0.73	0.37	97,97,97,97	0
55	MG	1H	3229	1/1	0.73	0.11	70,70,70,70	0
55	MG	14	3083	1/1	0.74	0.21	105,105,105,105	0
55	MG	14	3163	1/1	0.74	0.33	102,102,102,102	0
55	MG	1H	3138	1/1	0.74	0.34	98,98,98,98	0
55	MG	1H	3265	1/1	0.74	0.25	63,63,63,63	0
55	MG	1H	3214	1/1	0.74	0.31	84,84,84,84	0
55	MG	1G	1618	1/1	0.74	0.43	98,98,98,98	0
55	MG	14	3038	1/1	0.74	0.27	91,91,91,91	0
55	MG	13	1649	1/1	0.74	0.12	127,127,127,127	0
55	MG	13	1627	1/1	0.74	0.18	94,94,94,94	0
55	MG	1H	3189	1/1	0.74	0.24	71,71,71,71	0
55	MG	1H	3187	1/1	0.75	0.25	99,99,99,99	0
55	MG	14	3003	1/1	0.75	0.30	85,85,85,85	0
55	MG	1H	3247	1/1	0.75	0.37	101,101,101,101	0
55	MG	1G	1627	1/1	0.75	0.57	122,122,122,122	0
55	MG	14	3079	1/1	0.75	0.24	100,100,100,100	0
55	MG	14	3172	1/1	0.75	0.33	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3251	1/1	0.75	0.29	87,87,87,87	0
55	MG	1H	3238	1/1	0.75	0.16	94,94,94,94	0
55	MG	1H	3282	1/1	0.75	0.29	101,101,101,101	0
55	MG	1H	3182	1/1	0.75	0.36	114,114,114,114	0
55	MG	32	301	1/1	0.75	0.15	138,138,138,138	0
55	MG	1G	1623	1/1	0.75	0.15	161,161,161,161	0
55	MG	13	1676	1/1	0.76	0.25	104,104,104,104	0
55	MG	1G	1607	1/1	0.76	0.31	94,94,94,94	0
55	MG	1H	3199	1/1	0.76	0.32	69,69,69,69	0
55	MG	1H	3272	1/1	0.76	0.29	83,83,83,83	0
55	MG	14	3047	1/1	0.76	0.38	83,83,83,83	0
55	MG	1H	3228	1/1	0.76	0.30	86,86,86,86	0
55	MG	13	1608	1/1	0.76	0.17	131,131,131,131	0
55	MG	14	3114	1/1	0.76	0.23	101,101,101,101	0
55	MG	13	1659	1/1	0.76	0.25	105,105,105,105	0
55	MG	1H	3175	1/1	0.76	0.18	114,114,114,114	0
55	MG	1J	202	1/1	0.76	0.16	129,129,129,129	0
55	MG	1H	3065	1/1	0.77	0.31	87,87,87,87	0
55	MG	1H	3245	1/1	0.77	0.42	76,76,76,76	0
55	MG	14	3127	1/1	0.77	0.28	64,64,64,64	0
55	MG	14	3001	1/1	0.77	0.27	94,94,94,94	0
55	MG	13	1671	1/1	0.77	0.12	117,117,117,117	0
55	MG	1H	3021	1/1	0.77	0.24	78,78,78,78	0
55	MG	1H	3173	1/1	0.77	0.17	94,94,94,94	0
55	MG	13	1636	1/1	0.77	0.33	91,91,91,91	0
55	MG	14	3066	1/1	0.77	0.26	82,82,82,82	0
55	MG	1H	3137	1/1	0.77	0.22	75,75,75,75	0
55	MG	88	201	1/1	0.77	0.30	94,94,94,94	0
55	MG	45	201	1/1	0.77	0.12	121,121,121,121	0
55	MG	14	3076	1/1	0.78	0.40	90,90,90,90	0
55	MG	13	1674	1/1	0.78	0.30	109,109,109,109	0
55	MG	1G	1679	1/1	0.78	0.28	79,79,79,79	0
55	MG	14	3186	1/1	0.78	0.25	85,85,85,85	0
55	MG	14	3053	1/1	0.78	0.25	91,91,91,91	0
55	MG	1H	3218	1/1	0.78	0.22	95,95,95,95	0
55	MG	1F	102	1/1	0.78	0.10	125,125,125,125	0
55	MG	1H	3285	1/1	0.78	0.34	89,89,89,89	0
55	MG	14	3118	1/1	0.79	0.10	99,99,99,99	0
55	MG	14	3155	1/1	0.79	0.34	92,92,92,92	0
55	MG	1H	3090	1/1	0.79	0.18	88,88,88,88	0
55	MG	13	1687	1/1	0.79	0.19	88,88,88,88	0
55	MG	1H	3241	1/1	0.79	0.14	110,110,110,110	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3084	1/1	0.79	0.26	91,91,91,91	0
55	MG	1H	3064	1/1	0.79	0.23	85,85,85,85	0
55	MG	14	3136	1/1	0.79	0.14	120,120,120,120	0
55	MG	13	1675	1/1	0.79	0.10	104,104,104,104	0
55	MG	1H	3225	1/1	0.79	0.26	109,109,109,109	0
55	MG	14	3107	1/1	0.79	0.31	88,88,88,88	0
55	MG	1H	3279	1/1	0.79	0.16	81,81,81,81	0
55	MG	1H	3115	1/1	0.79	0.27	76,76,76,76	0
55	MG	14	3067	1/1	0.79	0.27	97,97,97,97	0
55	MG	13	1653	1/1	0.79	0.13	120,120,120,120	0
55	MG	13	1617	1/1	0.80	0.25	92,92,92,92	0
55	MG	1H	3127	1/1	0.80	0.25	87,87,87,87	0
55	MG	1H	3169	1/1	0.80	0.20	75,75,75,75	0
55	MG	1H	3171	1/1	0.80	0.24	91,91,91,91	0
55	MG	13	1690	1/1	0.80	0.15	123,123,123,123	0
55	MG	14	3019	1/1	0.80	0.09	85,85,85,85	0
55	MG	1H	3087	1/1	0.80	0.22	74,74,74,74	0
55	MG	14	3130	1/1	0.80	0.16	106,106,106,106	0
55	MG	14	3177	1/1	0.80	0.15	79,79,79,79	0
55	MG	14	3133	1/1	0.80	0.20	99,99,99,99	0
55	MG	1G	1658	1/1	0.80	0.23	114,114,114,114	0
55	MG	1H	3050	1/1	0.80	0.30	79,79,79,79	0
55	MG	14	3185	1/1	0.80	0.12	88,88,88,88	0
55	MG	1H	3143	1/1	0.80	0.18	89,89,89,89	0
55	MG	1H	3092	1/1	0.80	0.16	92,92,92,92	0
55	MG	13	1662	1/1	0.80	0.13	99,99,99,99	0
55	MG	13	1677	1/1	0.80	0.31	100,100,100,100	0
55	MG	39	301	1/1	0.80	0.25	109,109,109,109	0
55	MG	1H	3121	1/1	0.80	0.23	91,91,91,91	0
55	MG	1H	3057	1/1	0.81	0.17	57,57,57,57	0
55	MG	1H	3060	1/1	0.81	0.23	68,68,68,68	0
55	MG	14	3166	1/1	0.81	0.26	82,82,82,82	0
55	MG	1H	3116	1/1	0.81	0.17	91,91,91,91	0
55	MG	1H	3141	1/1	0.81	0.19	89,89,89,89	0
55	MG	1H	3191	1/1	0.81	0.30	93,93,93,93	0
55	MG	1G	1654	1/1	0.81	0.23	107,107,107,107	0
55	MG	1H	3039	1/1	0.81	0.26	73,73,73,73	0
55	MG	1G	1683	1/1	0.81	0.17	122,122,122,122	0
55	MG	1H	3219	1/1	0.81	0.26	91,91,91,91	0
55	MG	14	3110	1/1	0.81	0.30	103,103,103,103	0
55	MG	13	1630	1/1	0.81	0.15	109,109,109,109	0
55	MG	1H	3024	1/1	0.81	0.17	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3150	1/1	0.81	0.28	79,79,79,79	0
55	MG	1H	3133	1/1	0.81	0.27	85,85,85,85	0
55	MG	1H	3161	1/1	0.81	0.18	86,86,86,86	0
55	MG	1H	3162	1/1	0.81	0.20	87,87,87,87	0
55	MG	13	1646	1/1	0.82	0.18	122,122,122,122	0
55	MG	13	1657	1/1	0.82	0.21	123,123,123,123	0
55	MG	1H	3101	1/1	0.82	0.23	89,89,89,89	0
55	MG	1H	3117	1/1	0.82	0.15	88,88,88,88	0
55	MG	14	3115	1/1	0.82	0.08	103,103,103,103	0
55	MG	78	201	1/1	0.82	0.29	90,90,90,90	0
55	MG	1H	3145	1/1	0.82	0.17	84,84,84,84	0
55	MG	1H	3085	1/1	0.82	0.21	74,74,74,74	0
55	MG	1G	1605	1/1	0.82	0.17	98,98,98,98	0
55	MG	14	3005	1/1	0.82	0.17	85,85,85,85	0
55	MG	1H	3103	1/1	0.82	0.15	77,77,77,77	0
55	MG	14	3180	1/1	0.82	0.17	81,81,81,81	0
55	MG	13	1612	1/1	0.82	0.28	85,85,85,85	0
55	MG	1H	3255	1/1	0.82	0.24	78,78,78,78	0
55	MG	14	3085	1/1	0.82	0.15	94,94,94,94	0
55	MG	14	3086	1/1	0.82	0.11	97,97,97,97	0
55	MG	1H	3048	1/1	0.82	0.23	93,93,93,93	0
55	MG	13	1645	1/1	0.82	0.15	97,97,97,97	0
55	MG	1H	3095	1/1	0.82	0.29	63,63,63,63	0
55	MG	1H	3165	1/1	0.82	0.23	90,90,90,90	0
55	MG	1H	3240	1/1	0.82	0.13	114,114,114,114	0
55	MG	13	1615	1/1	0.83	0.12	71,71,71,71	0
55	MG	1H	3086	1/1	0.83	0.12	79,79,79,79	0
55	MG	1G	1617	1/1	0.83	0.17	91,91,91,91	0
55	MG	14	3088	1/1	0.83	0.19	109,109,109,109	0
55	MG	1H	3252	1/1	0.83	0.20	69,69,69,69	0
55	MG	13	1711	1/1	0.83	0.09	154,154,154,154	0
55	MG	14	3131	1/1	0.83	0.51	88,88,88,88	0
55	MG	1H	3179	1/1	0.83	0.19	86,86,86,86	0
55	MG	14	3009	1/1	0.83	0.10	90,90,90,90	0
55	MG	1H	3017	1/1	0.83	0.27	75,75,75,75	0
55	MG	1H	3158	1/1	0.83	0.24	92,92,92,92	0
55	MG	14	3014	1/1	0.83	0.14	78,78,78,78	0
55	MG	13	1683	1/1	0.83	0.18	103,103,103,103	0
55	MG	14	3078	1/1	0.83	0.21	100,100,100,100	0
55	MG	13	1633	1/1	0.83	0.14	85,85,85,85	0
55	MG	14	3116	1/1	0.83	0.19	89,89,89,89	0
55	MG	13	1629	1/1	0.83	0.30	109,109,109,109	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3119	1/1	0.83	0.25	101,101,101,101	0
55	MG	1H	3140	1/1	0.84	0.19	80,80,80,80	0
55	MG	14	3140	1/1	0.84	0.11	86,86,86,86	0
55	MG	1G	1651	1/1	0.84	0.18	91,91,91,91	0
55	MG	1H	3205	1/1	0.84	0.35	80,80,80,80	0
55	MG	1H	3066	1/1	0.84	0.22	78,78,78,78	0
55	MG	14	3031	1/1	0.84	0.21	77,77,77,77	0
55	MG	1G	1693	1/1	0.84	0.09	148,148,148,148	0
55	MG	1G	1601	1/1	0.84	0.16	101,101,101,101	0
55	MG	14	3162	1/1	0.84	0.28	57,57,57,57	0
55	MG	1F	101	1/1	0.84	0.07	107,107,107,107	0
55	MG	1H	3081	1/1	0.84	0.20	72,72,72,72	0
55	MG	14	3057	1/1	0.84	0.15	90,90,90,90	0
55	MG	4A	201	1/1	0.84	0.15	136,136,136,136	0
55	MG	14	3117	1/1	0.84	0.14	91,91,91,91	0
55	MG	14	3062	1/1	0.84	0.23	87,87,87,87	0
55	MG	1H	3084	1/1	0.84	0.10	71,71,71,71	0
55	MG	13	1689	1/1	0.84	0.22	85,85,85,85	0
55	MG	1H	3270	1/1	0.84	0.28	62,62,62,62	0
55	MG	14	3181	1/1	0.84	0.13	71,71,71,71	0
55	MG	1H	3176	1/1	0.84	0.12	107,107,107,107	0
55	MG	1H	3194	1/1	0.84	0.18	113,113,113,113	0
55	MG	14	3008	1/1	0.84	0.13	81,81,81,81	0
55	MG	1H	3244	1/1	0.84	0.16	87,87,87,87	0
55	MG	1H	3177	1/1	0.84	0.17	82,82,82,82	0
55	MG	1G	1671	1/1	0.84	0.15	100,100,100,100	0
55	MG	1J	201	1/1	0.84	0.16	106,106,106,106	0
55	MG	1H	3002	1/1	0.84	0.21	55,55,55,55	0
55	MG	1H	3151	1/1	0.84	0.17	100,100,100,100	0
55	MG	14	3093	1/1	0.84	0.12	94,94,94,94	0
55	MG	1H	3041	1/1	0.85	0.17	65,65,65,65	0
55	MG	13	1619	1/1	0.85	0.16	86,86,86,86	0
55	MG	1G	1722	1/1	0.85	0.19	161,161,161,161	0
55	MG	1G	1629	1/1	0.85	0.16	131,131,131,131	0
55	MG	1H	3119	1/1	0.85	0.13	105,105,105,105	0
55	MG	1H	3104	1/1	0.85	0.11	74,74,74,74	0
55	MG	1H	3105	1/1	0.85	0.21	93,93,93,93	0
55	MG	14	3134	1/1	0.85	0.14	105,105,105,105	0
55	MG	13	1621	1/1	0.85	0.09	117,117,117,117	0
55	MG	1G	1606	1/1	0.85	0.11	109,109,109,109	0
55	MG	1H	3129	1/1	0.85	0.30	92,92,92,92	0
55	MG	1H	3032	1/1	0.85	0.20	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3275	1/1	0.85	0.25	62,62,62,62	0
55	MG	1G	1616	1/1	0.85	0.22	93,93,93,93	0
55	MG	1H	3193	1/1	0.85	0.10	73,73,73,73	0
55	MG	5I	102	1/1	0.85	0.08	119,119,119,119	0
55	MG	1H	3035	1/1	0.85	0.25	71,71,71,71	0
55	MG	8I	201	1/1	0.85	0.27	107,107,107,107	0
55	MG	1H	3018	1/1	0.85	0.13	68,68,68,68	0
55	MG	1H	3436	1/1	0.85	0.17	96,96,96,96	0
55	MG	14	3036	1/1	0.86	0.24	80,80,80,80	0
55	MG	5I	101	1/1	0.86	0.09	105,105,105,105	0
55	MG	1G	1657	1/1	0.86	0.18	98,98,98,98	0
55	MG	1H	3098	1/1	0.86	0.06	54,54,54,54	0
55	MG	13	1610	1/1	0.86	0.14	130,130,130,130	0
55	MG	14	3054	1/1	0.86	0.06	113,113,113,113	0
55	MG	1H	3004	1/1	0.86	0.27	64,64,64,64	0
55	MG	2L	101	1/1	0.86	0.09	147,147,147,147	0
55	MG	1G	1634	1/1	0.86	0.17	109,109,109,109	0
55	MG	14	3167	1/1	0.86	0.18	100,100,100,100	0
55	MG	13	1635	1/1	0.86	0.24	82,82,82,82	0
55	MG	14	3171	1/1	0.86	0.24	98,98,98,98	0
55	MG	1H	3163	1/1	0.86	0.27	82,82,82,82	0
55	MG	1H	3267	1/1	0.86	0.22	67,67,67,67	0
55	MG	1H	3062	1/1	0.86	0.24	85,85,85,85	0
55	MG	1H	3207	1/1	0.86	0.20	77,77,77,77	0
55	MG	13	1694	1/1	0.86	0.26	117,117,117,117	0
55	MG	14	3128	1/1	0.86	0.15	54,54,54,54	0
55	MG	1H	3274	1/1	0.86	0.35	78,78,78,78	0
55	MG	14	3012	1/1	0.86	0.14	95,95,95,95	0
55	MG	1G	1677	1/1	0.86	0.16	110,110,110,110	0
55	MG	1H	3142	1/1	0.86	0.19	76,76,76,76	0
55	MG	1H	3088	1/1	0.86	0.32	81,81,81,81	0
55	MG	13	1602	1/1	0.86	0.09	115,115,115,115	0
55	MG	1H	3036	1/1	0.86	0.22	74,74,74,74	0
55	MG	1H	3108	1/1	0.86	0.08	58,58,58,58	0
55	MG	1H	3128	1/1	0.86	0.08	92,92,92,92	0
55	MG	1H	3249	1/1	0.86	0.10	70,70,70,70	0
55	MG	13	1686	1/1	0.87	0.10	73,73,73,73	0
55	MG	14	3090	1/1	0.87	0.10	69,69,69,69	0
55	MG	14	3015	1/1	0.87	0.22	70,70,70,70	0
55	MG	14	3142	1/1	0.87	0.14	105,105,105,105	0
55	MG	1G	1674	1/1	0.87	0.13	89,89,89,89	0
55	MG	1G	1641	1/1	0.87	0.10	107,107,107,107	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	13	1603	1/1	0.87	0.15	85,85,85,85	0
55	MG	1H	3243	1/1	0.87	0.20	85,85,85,85	0
55	MG	1H	3126	1/1	0.87	0.16	78,78,78,78	0
55	MG	14	3161	1/1	0.87	0.10	73,73,73,73	0
55	MG	1G	1615	1/1	0.87	0.17	141,141,141,141	0
55	MG	13	1641	1/1	0.87	0.27	94,94,94,94	0
55	MG	1H	3014	1/1	0.87	0.19	64,64,64,64	0
55	MG	1H	3280	1/1	0.87	0.09	73,73,73,73	0
55	MG	13	1678	1/1	0.87	0.17	116,116,116,116	0
55	MG	1H	3222	1/1	0.87	0.21	101,101,101,101	0
55	MG	1H	3283	1/1	0.87	0.17	83,83,83,83	0
55	MG	1H	3029	1/1	0.87	0.15	68,68,68,68	0
55	MG	1H	3296	1/1	0.87	0.09	122,122,122,122	0
55	MG	14	3060	1/1	0.87	0.29	84,84,84,84	0
55	MG	1H	3405	1/1	0.87	0.12	108,108,108,108	0
55	MG	1G	1660	1/1	0.87	0.07	118,118,118,118	0
55	MG	14	3123	1/1	0.87	0.10	99,99,99,99	0
55	MG	13	1624	1/1	0.87	0.11	98,98,98,98	0
55	MG	13	1604	1/1	0.87	0.06	87,87,87,87	0
55	MG	21	301	1/1	0.87	0.08	82,82,82,82	0
55	MG	1H	3183	1/1	0.87	0.29	82,82,82,82	0
55	MG	14	3188	1/1	0.87	0.19	89,89,89,89	0
55	MG	1H	3153	1/1	0.87	0.12	91,91,91,91	0
55	MG	14	3081	1/1	0.87	0.23	88,88,88,88	0
55	MG	1H	3236	1/1	0.87	0.24	72,72,72,72	0
55	MG	1H	3155	1/1	0.87	0.11	78,78,78,78	0
55	MG	13	1622	1/1	0.87	0.20	88,88,88,88	0
55	MG	1G	1670	1/1	0.87	0.20	101,101,101,101	0
55	MG	1H	3082	1/1	0.88	0.18	77,77,77,77	0
55	MG	1H	3284	1/1	0.88	0.09	60,60,60,60	0
55	MG	13	1652	1/1	0.88	0.12	97,97,97,97	0
55	MG	1H	3294	1/1	0.88	0.23	83,83,83,83	0
55	MG	1G	1626	1/1	0.88	0.10	100,100,100,100	0
55	MG	13	1704	1/1	0.88	0.08	147,147,147,147	0
55	MG	14	3143	1/1	0.88	0.10	97,97,97,97	0
55	MG	1H	3322	1/1	0.88	0.20	124,124,124,124	0
55	MG	14	3092	1/1	0.88	0.15	81,81,81,81	0
55	MG	1H	3325	1/1	0.88	0.09	122,122,122,122	0
55	MG	1G	1631	1/1	0.88	0.17	95,95,95,95	0
55	MG	1H	3044	1/1	0.88	0.09	72,72,72,72	0
55	MG	14	3156	1/1	0.88	0.21	80,80,80,80	0
55	MG	14	3100	1/1	0.88	0.13	91,91,91,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3063	1/1	0.88	0.16	63,63,63,63	0
55	MG	14	3017	1/1	0.88	0.17	83,83,83,83	0
55	MG	1H	3107	1/1	0.88	0.18	92,92,92,92	0
55	MG	13	1705	1/1	0.88	0.13	130,130,130,130	0
55	MG	1G	1672	1/1	0.88	0.19	102,102,102,102	0
55	MG	1H	3198	1/1	0.88	0.11	68,68,68,68	0
55	MG	78	202	1/1	0.88	0.09	55,55,55,55	0
55	MG	13	1643	1/1	0.88	0.08	124,124,124,124	0
55	MG	1H	3019	1/1	0.88	0.13	57,57,57,57	0
55	MG	14	3044	1/1	0.88	0.22	85,85,85,85	0
55	MG	1H	3069	1/1	0.88	0.18	77,77,77,77	0
55	MG	13	1734	1/1	0.88	0.10	133,133,133,133	0
55	MG	1H	3271	1/1	0.88	0.35	82,82,82,82	0
55	MG	1G	1646	1/1	0.88	0.18	101,101,101,101	0
55	MG	1H	3237	1/1	0.88	0.19	79,79,79,79	0
55	MG	1G	1697	1/1	0.88	0.05	172,172,172,172	0
55	MG	1H	3073	1/1	0.88	0.19	74,74,74,74	0
55	MG	1H	3079	1/1	0.88	0.23	71,71,71,71	0
55	MG	1H	3209	1/1	0.88	0.14	84,84,84,84	0
55	MG	1H	3210	1/1	0.88	0.39	90,90,90,90	0
55	MG	14	3197	1/1	0.88	0.15	114,114,114,114	0
55	MG	1H	3030	1/1	0.88	0.26	77,77,77,77	0
55	MG	1G	1655	1/1	0.88	0.26	84,84,84,84	0
55	MG	1H	3166	1/1	0.88	0.19	74,74,74,74	0
55	MG	1H	3118	1/1	0.88	0.19	89,89,89,89	0
55	MG	1H	3146	1/1	0.89	0.16	80,80,80,80	0
55	MG	14	3145	1/1	0.89	0.15	86,86,86,86	0
55	MG	1H	3008	1/1	0.89	0.31	82,82,82,82	0
55	MG	1H	3293	1/1	0.89	0.09	124,124,124,124	0
55	MG	1H	3124	1/1	0.89	0.29	69,69,69,69	0
55	MG	14	3154	1/1	0.89	0.14	65,65,65,65	0
55	MG	1H	3295	1/1	0.89	0.15	83,83,83,83	0
55	MG	1H	3139	1/1	0.89	0.24	60,60,60,60	0
55	MG	1H	3312	1/1	0.89	0.17	105,105,105,105	0
55	MG	13	1667	1/1	0.89	0.10	101,101,101,101	0
55	MG	1H	3154	1/1	0.89	0.18	61,61,61,61	0
55	MG	1H	3215	1/1	0.89	0.10	78,78,78,78	0
55	MG	14	3165	1/1	0.89	0.32	83,83,83,83	0
55	MG	1H	3269	1/1	0.89	0.25	55,55,55,55	0
55	MG	1G	1661	1/1	0.89	0.18	77,77,77,77	0
55	MG	1H	3052	1/1	0.89	0.25	64,64,64,64	0
55	MG	14	3064	1/1	0.89	0.19	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	11	301	1/1	0.89	0.22	52,52,52,52	0
55	MG	1H	3112	1/1	0.89	0.28	68,68,68,68	0
55	MG	14	3006	1/1	0.89	0.07	91,91,91,91	0
55	MG	1H	3010	1/1	0.89	0.07	70,70,70,70	0
55	MG	14	3077	1/1	0.89	0.35	89,89,89,89	0
55	MG	1H	3184	1/1	0.89	0.19	87,87,87,87	0
55	MG	1H	3185	1/1	0.89	0.13	72,72,72,72	0
55	MG	88	203	1/1	0.89	0.42	77,77,77,77	0
55	MG	J8	101	1/1	0.89	0.25	74,74,74,74	0
55	MG	1H	3120	1/1	0.89	0.16	81,81,81,81	0
55	MG	1H	3278	1/1	0.89	0.20	75,75,75,75	0
55	MG	1H	3224	1/1	0.89	0.11	102,102,102,102	0
55	MG	1H	3248	1/1	0.89	0.22	86,86,86,86	0
55	MG	13	1672	1/1	0.89	0.12	123,123,123,123	0
55	MG	1H	3250	1/1	0.89	0.21	53,53,53,53	0
55	MG	14	3027	1/1	0.89	0.07	72,72,72,72	0
55	MG	1G	1612	1/1	0.89	0.25	85,85,85,85	0
55	MG	1H	3226	1/1	0.89	0.13	90,90,90,90	0
55	MG	85	201	1/1	0.89	0.33	72,72,72,72	0
55	MG	1H	3286	1/1	0.90	0.21	67,67,67,67	0
55	MG	1G	1604	1/1	0.90	0.14	102,102,102,102	0
55	MG	1H	3075	1/1	0.90	0.33	72,72,72,72	0
55	MG	13	1680	1/1	0.90	0.10	108,108,108,108	0
55	MG	1H	3197	1/1	0.90	0.09	77,77,77,77	0
55	MG	1G	1609	1/1	0.90	0.16	105,105,105,105	0
55	MG	1G	1678	1/1	0.90	0.24	99,99,99,99	0
55	MG	1H	3007	1/1	0.90	0.24	62,62,62,62	0
55	MG	14	3021	1/1	0.90	0.12	90,90,90,90	0
55	MG	1H	3300	1/1	0.90	0.24	104,104,104,104	0
55	MG	1H	3311	1/1	0.90	0.17	97,97,97,97	0
55	MG	1H	3097	1/1	0.90	0.15	66,66,66,66	0
55	MG	1H	3319	1/1	0.90	0.08	123,123,123,123	0
55	MG	13	1685	1/1	0.90	0.20	107,107,107,107	0
55	MG	14	3109	1/1	0.90	0.12	102,102,102,102	0
55	MG	1G	1690	1/1	0.90	0.12	144,144,144,144	0
55	MG	1H	3220	1/1	0.90	0.22	85,85,85,85	0
55	MG	14	3040	1/1	0.90	0.09	62,62,62,62	0
55	MG	14	3043	1/1	0.90	0.13	54,54,54,54	0
55	MG	1G	1620	1/1	0.90	0.09	81,81,81,81	0
55	MG	1G	1701	1/1	0.90	0.10	137,137,137,137	0
55	MG	1G	1707	1/1	0.90	0.12	122,122,122,122	0
55	MG	14	3049	1/1	0.90	0.20	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3337	1/1	0.90	0.06	127,127,127,127	0
55	MG	1H	3397	1/1	0.90	0.08	81,81,81,81	0
55	MG	1H	3201	1/1	0.90	0.26	68,68,68,68	0
55	MG	1H	3204	1/1	0.90	0.20	80,80,80,80	0
55	MG	14	3182	1/1	0.90	0.16	88,88,88,88	0
55	MG	13	1719	1/1	0.90	0.14	107,107,107,107	0
55	MG	14	3061	1/1	0.90	0.12	92,92,92,92	0
55	MG	1H	3156	1/1	0.90	0.26	75,75,75,75	0
55	MG	14	3063	1/1	0.90	0.15	82,82,82,82	0
55	MG	1H	3067	1/1	0.90	0.19	65,65,65,65	0
55	MG	1H	3125	1/1	0.90	0.10	125,125,125,125	0
55	MG	13	1664	1/1	0.90	0.07	87,87,87,87	0
55	MG	1H	3061	1/1	0.90	0.13	66,66,66,66	0
55	MG	14	3198	1/1	0.90	0.12	109,109,109,109	0
55	MG	14	3298	1/1	0.90	0.10	103,103,103,103	0
55	MG	1H	3230	1/1	0.90	0.10	73,73,73,73	0
55	MG	1H	3040	1/1	0.90	0.18	58,58,58,58	0
55	MG	P8	101	1/1	0.90	0.12	61,61,61,61	0
55	MG	35	201	1/1	0.90	0.17	81,81,81,81	0
55	MG	1H	3089	1/1	0.90	0.23	82,82,82,82	0
55	MG	45	202	1/1	0.90	0.40	116,116,116,116	0
55	MG	14	3080	1/1	0.90	0.21	90,90,90,90	0
55	MG	F5	101	1/1	0.90	0.09	82,82,82,82	0
55	MG	BA	201	1/1	0.91	0.12	127,127,127,127	0
55	MG	13	1698	1/1	0.91	0.09	138,138,138,138	0
55	MG	14	3032	1/1	0.91	0.14	62,62,62,62	0
55	MG	14	3034	1/1	0.91	0.21	77,77,77,77	0
55	MG	1G	1633	1/1	0.91	0.28	96,96,96,96	0
55	MG	14	3082	1/1	0.91	0.12	78,78,78,78	0
55	MG	14	3124	1/1	0.91	0.07	95,95,95,95	0
55	MG	1H	3188	1/1	0.91	0.06	91,91,91,91	0
55	MG	14	3175	1/1	0.91	0.09	85,85,85,85	0
55	MG	13	1706	1/1	0.91	0.27	132,132,132,132	0
55	MG	1H	3266	1/1	0.91	0.12	64,64,64,64	0
55	MG	1G	1637	1/1	0.91	0.13	125,125,125,125	0
55	MG	14	3087	1/1	0.91	0.47	66,66,66,66	0
55	MG	1H	3190	1/1	0.91	0.09	106,106,106,106	0
55	MG	1H	3203	1/1	0.91	0.10	81,81,81,81	0
55	MG	14	3091	1/1	0.91	0.12	105,105,105,105	0
55	MG	1G	1684	1/1	0.91	0.22	89,89,89,89	0
55	MG	1H	3332	1/1	0.91	0.16	125,125,125,125	0
55	MG	1H	3170	1/1	0.91	0.13	80,80,80,80	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1G	1603	1/1	0.91	0.12	95,95,95,95	0
55	MG	1H	3016	1/1	0.91	0.18	62,62,62,62	0
55	MG	1H	3132	1/1	0.91	0.22	79,79,79,79	0
55	MG	1H	3077	1/1	0.91	0.22	60,60,60,60	0
55	MG	14	3108	1/1	0.91	0.26	87,87,87,87	0
55	MG	14	3202	1/1	0.91	0.14	106,106,106,106	0
55	MG	14	3214	1/1	0.91	0.10	96,96,96,96	0
55	MG	14	3285	1/1	0.91	0.15	99,99,99,99	0
55	MG	14	3296	1/1	0.91	0.07	119,119,119,119	0
55	MG	1G	1720	1/1	0.91	0.11	152,152,152,152	0
55	MG	13	1601	1/1	0.91	0.17	77,77,77,77	0
55	MG	1G	1628	1/1	0.91	0.11	118,118,118,118	0
55	MG	14	3026	1/1	0.91	0.14	76,76,76,76	0
55	MG	1H	3033	1/1	0.91	0.06	60,60,60,60	0
55	MG	1H	3111	1/1	0.91	0.18	86,86,86,86	0
55	MG	14	3072	1/1	0.91	0.20	91,91,91,91	0
55	MG	14	3075	1/1	0.91	0.09	99,99,99,99	0
55	MG	41	201	1/1	0.91	0.17	88,88,88,88	0
55	MG	1H	3096	1/1	0.92	0.14	79,79,79,79	0
55	MG	1H	3005	1/1	0.92	0.10	51,51,51,51	0
55	MG	13	1638	1/1	0.92	0.07	80,80,80,80	0
55	MG	21	302	1/1	0.92	0.11	50,50,50,50	0
55	MG	13	1710	1/1	0.92	0.20	143,143,143,143	0
55	MG	14	3071	1/1	0.92	0.16	84,84,84,84	0
55	MG	1G	1652	1/1	0.92	0.09	105,105,105,105	0
55	MG	14	3170	1/1	0.92	0.15	69,69,69,69	0
55	MG	1G	1653	1/1	0.92	0.14	103,103,103,103	0
55	MG	1H	3053	1/1	0.92	0.12	77,77,77,77	0
55	MG	13	1701	1/1	0.92	0.07	137,137,137,137	0
55	MG	1G	1691	1/1	0.92	0.12	115,115,115,115	0
55	MG	1H	3262	1/1	0.92	0.21	74,74,74,74	0
55	MG	1H	3056	1/1	0.92	0.17	46,46,46,46	0
55	MG	13	1712	1/1	0.92	0.06	96,96,96,96	0
55	MG	1G	1704	1/1	0.92	0.09	130,130,130,130	0
55	MG	1H	3083	1/1	0.92	0.32	85,85,85,85	0
55	MG	1G	1714	1/1	0.92	0.09	133,133,133,133	0
55	MG	1H	3038	1/1	0.92	0.16	83,83,83,83	0
55	MG	1H	3301	1/1	0.92	0.07	100,100,100,100	0
55	MG	13	1658	1/1	0.92	0.15	114,114,114,114	0
55	MG	1H	3025	1/1	0.92	0.25	55,55,55,55	0
55	MG	13	1724	1/1	0.92	0.06	128,128,128,128	0
55	MG	2K	101	1/1	0.92	0.22	71,71,71,71	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3191	1/1	0.92	0.12	102,102,102,102	0
55	MG	13	1695	1/1	0.92	0.06	139,139,139,139	0
55	MG	1H	3003	1/1	0.92	0.16	49,49,49,49	0
55	MG	1H	3334	1/1	0.92	0.12	94,94,94,94	0
55	MG	14	3050	1/1	0.92	0.20	54,54,54,54	0
55	MG	14	3237	1/1	0.92	0.18	96,96,96,96	0
55	MG	14	3052	1/1	0.92	0.09	64,64,64,64	0
55	MG	1H	3335	1/1	0.92	0.06	134,134,134,134	0
55	MG	14	3105	1/1	0.92	0.25	81,81,81,81	0
55	MG	14	3147	1/1	0.92	0.15	63,63,63,63	0
55	MG	14	3149	1/1	0.92	0.11	61,61,61,61	0
55	MG	1H	3046	1/1	0.92	0.14	69,69,69,69	0
55	MG	1H	3157	1/1	0.92	0.15	73,73,73,73	0
55	MG	13	1738	1/1	0.92	0.22	134,134,134,134	0
55	MG	1G	1673	1/1	0.92	0.11	93,93,93,93	0
55	MG	1H	3136	1/1	0.92	0.08	87,87,87,87	0
55	MG	1H	3450	1/1	0.92	0.07	132,132,132,132	0
55	MG	1H	3078	1/1	0.93	0.19	63,63,63,63	0
55	MG	14	3104	1/1	0.93	0.11	91,91,91,91	0
55	MG	13	1609	1/1	0.93	0.09	99,99,99,99	0
55	MG	14	3106	1/1	0.93	0.11	90,90,90,90	0
55	MG	1H	3298	1/1	0.93	0.18	89,89,89,89	0
55	MG	1H	3080	1/1	0.93	0.13	64,64,64,64	0
55	MG	1H	3011	1/1	0.93	0.11	48,48,48,48	0
55	MG	13	1620	1/1	0.93	0.06	70,70,70,70	0
55	MG	1H	3047	1/1	0.93	0.19	66,66,66,66	0
55	MG	1H	3159	1/1	0.93	0.31	79,79,79,79	0
55	MG	14	3168	1/1	0.93	0.08	72,72,72,72	0
55	MG	1H	3321	1/1	0.93	0.07	123,123,123,123	0
55	MG	13	1713	1/1	0.93	0.08	81,81,81,81	0
55	MG	13	1616	1/1	0.93	0.15	93,93,93,93	0
55	MG	1H	3276	1/1	0.93	0.11	74,74,74,74	0
55	MG	1H	3026	1/1	0.93	0.08	82,82,82,82	0
55	MG	1G	1675	1/1	0.93	0.19	77,77,77,77	0
55	MG	13	1723	1/1	0.93	0.13	103,103,103,103	0
55	MG	1H	3028	1/1	0.93	0.15	80,80,80,80	0
55	MG	14	3179	1/1	0.93	0.10	70,70,70,70	0
55	MG	1H	3378	1/1	0.93	0.09	75,75,75,75	0
55	MG	1G	1613	1/1	0.93	0.15	94,94,94,94	0
55	MG	13	1709	1/1	0.93	0.07	147,147,147,147	0
55	MG	14	3074	1/1	0.93	0.08	92,92,92,92	0
55	MG	13	1725	1/1	0.93	0.16	119,119,119,119	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3410	1/1	0.93	0.14	95,95,95,95	0
55	MG	1H	3425	1/1	0.93	0.13	102,102,102,102	0
55	MG	13	1655	1/1	0.93	0.10	95,95,95,95	0
55	MG	14	3023	1/1	0.93	0.15	99,99,99,99	0
55	MG	14	3132	1/1	0.93	0.21	100,100,100,100	0
55	MG	14	3025	1/1	0.93	0.10	90,90,90,90	0
55	MG	1G	1619	1/1	0.93	0.08	98,98,98,98	0
55	MG	1H	3147	1/1	0.93	0.09	54,54,54,54	0
55	MG	1H	3452	1/1	0.93	0.07	108,108,108,108	0
55	MG	14	3205	1/1	0.93	0.11	118,118,118,118	0
55	MG	1H	3463	1/1	0.93	0.08	110,110,110,110	0
55	MG	1H	3468	1/1	0.93	0.23	88,88,88,88	0
55	MG	14	3269	1/1	0.93	0.13	104,104,104,104	0
55	MG	1H	3076	1/1	0.93	0.20	70,70,70,70	0
55	MG	14	3288	1/1	0.93	0.19	86,86,86,86	0
55	MG	14	3290	1/1	0.93	0.10	115,115,115,115	0
55	MG	1H	3059	1/1	0.93	0.12	78,78,78,78	0
55	MG	1G	1708	1/1	0.93	0.10	100,100,100,100	0
55	MG	14	3300	1/1	0.93	0.15	140,140,140,140	0
55	MG	1G	1712	1/1	0.93	0.06	131,131,131,131	0
55	MG	1H	3259	1/1	0.93	0.18	53,53,53,53	0
55	MG	14	3039	1/1	0.93	0.13	75,75,75,75	0
55	MG	1G	1715	1/1	0.93	0.13	126,126,126,126	0
55	MG	14	3041	1/1	0.93	0.13	61,61,61,61	0
55	MG	14	3095	1/1	0.93	0.13	88,88,88,88	0
55	MG	1H	3235	1/1	0.93	0.24	57,57,57,57	0
55	MG	E5	101	1/1	0.93	0.10	90,90,90,90	0
55	MG	1H	3131	1/1	0.93	0.22	73,73,73,73	0
55	MG	13	1692	1/1	0.94	0.08	107,107,107,107	0
55	MG	14	3018	1/1	0.94	0.21	84,84,84,84	0
55	MG	1H	3043	1/1	0.94	0.16	72,72,72,72	0
55	MG	1H	3313	1/1	0.94	0.17	112,112,112,112	0
55	MG	14	3022	1/1	0.94	0.12	91,91,91,91	0
55	MG	1G	1698	1/1	0.94	0.05	176,176,176,176	0
55	MG	1G	1699	1/1	0.94	0.08	121,121,121,121	0
55	MG	14	3173	1/1	0.94	0.07	66,66,66,66	0
55	MG	1H	3318	1/1	0.94	0.07	93,93,93,93	0
55	MG	13	1732	1/1	0.94	0.14	108,108,108,108	0
55	MG	1H	3320	1/1	0.94	0.12	127,127,127,127	0
55	MG	1H	3231	1/1	0.94	0.11	65,65,65,65	0
55	MG	1H	3232	1/1	0.94	0.10	76,76,76,76	0
55	MG	1H	3323	1/1	0.94	0.13	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	13	1682	1/1	0.94	0.12	118,118,118,118	0
55	MG	14	3129	1/1	0.94	0.13	90,90,90,90	0
55	MG	14	3033	1/1	0.94	0.08	76,76,76,76	0
55	MG	1H	3328	1/1	0.94	0.09	114,114,114,114	0
55	MG	1H	3329	1/1	0.94	0.07	119,119,119,119	0
55	MG	1H	3130	1/1	0.94	0.08	66,66,66,66	0
55	MG	13	1606	1/1	0.94	0.09	83,83,83,83	0
55	MG	1H	3256	1/1	0.94	0.21	53,53,53,53	0
55	MG	14	3089	1/1	0.94	0.06	79,79,79,79	0
55	MG	1H	3336	1/1	0.94	0.06	127,127,127,127	0
55	MG	1H	3217	1/1	0.94	0.17	43,43,43,43	0
55	MG	1H	3340	1/1	0.94	0.06	139,139,139,139	0
55	MG	1H	3360	1/1	0.94	0.15	62,62,62,62	0
55	MG	1H	3202	1/1	0.94	0.06	87,87,87,87	0
55	MG	1H	3263	1/1	0.94	0.14	53,53,53,53	0
55	MG	14	3097	1/1	0.94	0.13	55,55,55,55	0
55	MG	14	3098	1/1	0.94	0.20	78,78,78,78	0
55	MG	1G	1676	1/1	0.94	0.16	83,83,83,83	0
55	MG	13	1708	1/1	0.94	0.07	145,145,145,145	0
55	MG	14	3148	1/1	0.94	0.13	57,57,57,57	0
55	MG	14	3291	1/1	0.94	0.15	114,114,114,114	0
55	MG	1H	3058	1/1	0.94	0.14	58,58,58,58	0
55	MG	14	3150	1/1	0.94	0.14	89,89,89,89	0
55	MG	13	1654	1/1	0.94	0.13	81,81,81,81	0
55	MG	14	3055	1/1	0.94	0.10	80,80,80,80	0
55	MG	1H	3123	1/1	0.94	0.10	79,79,79,79	0
55	MG	1H	3445	1/1	0.94	0.09	91,91,91,91	0
55	MG	1H	3149	1/1	0.94	0.10	76,76,76,76	0
55	MG	1H	3451	1/1	0.94	0.15	81,81,81,81	0
55	MG	13	1669	1/1	0.94	0.15	100,100,100,100	0
55	MG	1H	3093	1/1	0.94	0.24	70,70,70,70	0
55	MG	1H	3152	1/1	0.94	0.25	49,49,49,49	0
55	MG	14	3065	1/1	0.94	0.15	68,68,68,68	0
55	MG	1G	1689	1/1	0.95	0.06	125,125,125,125	0
55	MG	D8	201	1/1	0.95	0.11	84,84,84,84	0
55	MG	14	3153	1/1	0.95	0.12	59,59,59,59	0
55	MG	1H	3438	1/1	0.95	0.08	93,93,93,93	0
55	MG	1G	1692	1/1	0.95	0.05	118,118,118,118	0
55	MG	13	1731	1/1	0.95	0.15	79,79,79,79	0
55	MG	14	3195	1/1	0.95	0.07	67,67,67,67	0
55	MG	1G	1696	1/1	0.95	0.13	137,137,137,137	0
55	MG	1H	3264	1/1	0.95	0.08	72,72,72,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3273	1/1	0.95	0.15	63,63,63,63	0
55	MG	14	3204	1/1	0.95	0.15	106,106,106,106	0
55	MG	14	3068	1/1	0.95	0.06	71,71,71,71	0
55	MG	1H	3299	1/1	0.95	0.06	84,84,84,84	0
55	MG	1G	1700	1/1	0.95	0.08	142,142,142,142	0
55	MG	14	3249	1/1	0.95	0.06	110,110,110,110	0
55	MG	1H	3341	1/1	0.95	0.05	129,129,129,129	0
55	MG	14	3272	1/1	0.95	0.06	93,93,93,93	0
55	MG	1H	3347	1/1	0.95	0.09	65,65,65,65	0
55	MG	14	3287	1/1	0.95	0.05	110,110,110,110	0
55	MG	14	3011	1/1	0.95	0.10	66,66,66,66	0
55	MG	1H	3072	1/1	0.95	0.15	53,53,53,53	0
55	MG	13	1607	1/1	0.95	0.05	110,110,110,110	0
55	MG	14	3292	1/1	0.95	0.19	103,103,103,103	0
55	MG	14	3294	1/1	0.95	0.10	117,117,117,117	0
55	MG	1H	3396	1/1	0.95	0.08	64,64,64,64	0
55	MG	1H	3091	1/1	0.95	0.16	70,70,70,70	0
55	MG	1H	3258	1/1	0.95	0.16	73,73,73,73	0
55	MG	1H	3330	1/1	0.95	0.06	78,78,78,78	0
55	MG	1H	3422	1/1	0.95	0.05	121,121,121,121	0
55	MG	14	3051	1/1	0.95	0.08	67,67,67,67	0
55	MG	1G	1725	1/1	0.95	0.12	130,130,130,130	0
55	MG	14	3020	1/1	0.95	0.06	81,81,81,81	0
55	MG	1G	1726	1/1	0.95	0.10	136,136,136,136	0
55	MG	13	1733	1/1	0.95	0.10	92,92,92,92	0
55	MG	1H	3134	1/1	0.95	0.18	61,61,61,61	0
55	MG	1G	1687	1/1	0.95	0.15	108,108,108,108	0
55	MG	13	1735	1/1	0.96	0.06	100,100,100,100	0
55	MG	13	1700	1/1	0.96	0.07	151,151,151,151	0
55	MG	1H	3094	1/1	0.96	0.09	95,95,95,95	0
55	MG	13	1740	1/1	0.96	0.07	123,123,123,123	0
55	MG	C8	202	1/1	0.96	0.21	70,70,70,70	0
55	MG	13	1693	1/1	0.96	0.10	100,100,100,100	0
55	MG	13	1702	1/1	0.96	0.08	110,110,110,110	0
55	MG	14	3174	1/1	0.96	0.08	60,60,60,60	0
55	MG	1H	3350	1/1	0.96	0.07	71,71,71,71	0
55	MG	13	1703	1/1	0.96	0.09	110,110,110,110	0
55	MG	1H	3365	1/1	0.96	0.09	82,82,82,82	0
55	MG	13	1644	1/1	0.96	0.10	109,109,109,109	0
55	MG	1H	3305	1/1	0.96	0.19	110,110,110,110	0
55	MG	1H	3308	1/1	0.96	0.05	107,107,107,107	0
55	MG	1H	3309	1/1	0.96	0.12	108,108,108,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3227	1/1	0.96	0.12	61,61,61,61	0
55	MG	1G	1608	1/1	0.96	0.09	114,114,114,114	0
55	MG	14	3126	1/1	0.96	0.24	48,48,48,48	0
55	MG	1H	3419	1/1	0.96	0.09	115,115,115,115	0
55	MG	1G	1694	1/1	0.96	0.06	151,151,151,151	0
55	MG	14	3187	1/1	0.96	0.08	74,74,74,74	0
55	MG	1H	3421	1/1	0.96	0.08	113,113,113,113	0
55	MG	13	1691	1/1	0.96	0.09	113,113,113,113	0
55	MG	13	1696	1/1	0.96	0.09	117,117,117,117	0
55	MG	14	3024	1/1	0.96	0.11	51,51,51,51	0
55	MG	14	3193	1/1	0.96	0.08	87,87,87,87	0
55	MG	14	3194	1/1	0.96	0.07	132,132,132,132	0
55	MG	13	1727	1/1	0.96	0.18	100,100,100,100	0
55	MG	14	3196	1/1	0.96	0.07	85,85,85,85	0
55	MG	13	1728	1/1	0.96	0.12	114,114,114,114	0
55	MG	14	3135	1/1	0.96	0.20	91,91,91,91	0
55	MG	1H	3440	1/1	0.96	0.08	54,54,54,54	0
55	MG	1H	3442	1/1	0.96	0.05	111,111,111,111	0
55	MG	1G	1706	1/1	0.96	0.14	138,138,138,138	0
55	MG	14	3207	1/1	0.96	0.11	117,117,117,117	0
55	MG	13	1707	1/1	0.96	0.04	133,133,133,133	0
55	MG	14	3217	1/1	0.96	0.05	97,97,97,97	0
55	MG	14	3220	1/1	0.96	0.05	84,84,84,84	0
55	MG	1H	3051	1/1	0.96	0.11	95,95,95,95	0
55	MG	14	3239	1/1	0.96	0.06	106,106,106,106	0
55	MG	14	3246	1/1	0.96	0.07	105,105,105,105	0
55	MG	1H	3234	1/1	0.96	0.12	92,92,92,92	0
55	MG	14	3250	1/1	0.96	0.13	99,99,99,99	0
55	MG	14	3253	1/1	0.96	0.11	83,83,83,83	0
55	MG	14	3268	1/1	0.96	0.07	82,82,82,82	0
55	MG	13	1697	1/1	0.96	0.09	146,146,146,146	0
55	MG	1H	3453	1/1	0.96	0.11	99,99,99,99	0
55	MG	14	3276	1/1	0.96	0.06	109,109,109,109	0
55	MG	14	3281	1/1	0.96	0.10	92,92,92,92	0
55	MG	14	3284	1/1	0.96	0.07	98,98,98,98	0
55	MG	14	3035	1/1	0.96	0.11	68,68,68,68	0
55	MG	1G	1719	1/1	0.96	0.14	123,123,123,123	0
55	MG	14	3037	1/1	0.96	0.05	54,54,54,54	0
55	MG	14	3289	1/1	0.96	0.16	84,84,84,84	0
55	MG	1H	3456	1/1	0.96	0.05	111,111,111,111	0
55	MG	1G	1721	1/1	0.96	0.14	123,123,123,123	0
55	MG	13	1614	1/1	0.96	0.09	100,100,100,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3293	1/1	0.96	0.05	130,130,130,130	0
55	MG	14	3096	1/1	0.96	0.20	55,55,55,55	0
55	MG	14	3295	1/1	0.96	0.05	104,104,104,104	0
55	MG	1H	3465	1/1	0.96	0.07	98,98,98,98	0
55	MG	14	3042	1/1	0.96	0.12	80,80,80,80	0
55	MG	14	3299	1/1	0.96	0.09	89,89,89,89	0
55	MG	1H	3326	1/1	0.96	0.06	109,109,109,109	0
55	MG	1H	3469	1/1	0.96	0.19	110,110,110,110	0
55	MG	14	3101	1/1	0.96	0.06	88,88,88,88	0
55	MG	29	301	1/1	0.96	0.07	64,64,64,64	0
55	MG	13	1699	1/1	0.96	0.07	116,116,116,116	0
55	MG	1H	3260	1/1	0.96	0.18	53,53,53,53	0
55	MG	2A	201	1/1	0.96	0.12	101,101,101,101	0
55	MG	1H	3261	1/1	0.96	0.06	70,70,70,70	0
55	MG	1H	3074	1/1	0.96	0.15	65,65,65,65	0
55	MG	21	303	1/1	0.96	0.09	63,63,63,63	0
55	MG	1H	3239	1/1	0.96	0.07	103,103,103,103	0
55	MG	1H	3431	1/1	0.97	0.05	62,62,62,62	0
55	MG	14	3192	1/1	0.97	0.04	104,104,104,104	0
55	MG	1H	3432	1/1	0.97	0.04	71,71,71,71	0
55	MG	1H	3307	1/1	0.97	0.05	100,100,100,100	0
55	MG	14	3045	1/1	0.97	0.11	89,89,89,89	0
55	MG	14	3046	1/1	0.97	0.04	76,76,76,76	0
55	MG	1H	3346	1/1	0.97	0.06	63,63,63,63	0
55	MG	1H	3287	1/1	0.97	0.12	58,58,58,58	0
55	MG	13	1736	1/1	0.97	0.17	137,137,137,137	0
55	MG	1H	3357	1/1	0.97	0.05	89,89,89,89	0
55	MG	1H	3447	1/1	0.97	0.05	102,102,102,102	0
55	MG	14	3206	1/1	0.97	0.05	131,131,131,131	0
55	MG	1H	3449	1/1	0.97	0.19	99,99,99,99	0
55	MG	14	3102	1/1	0.97	0.07	83,83,83,83	0
55	MG	14	3215	1/1	0.97	0.11	111,111,111,111	0
55	MG	14	3216	1/1	0.97	0.06	68,68,68,68	0
55	MG	1H	3327	1/1	0.97	0.04	121,121,121,121	0
55	MG	1H	3363	1/1	0.97	0.07	61,61,61,61	0
55	MG	14	3227	1/1	0.97	0.05	79,79,79,79	0
55	MG	14	3230	1/1	0.97	0.05	76,76,76,76	0
55	MG	14	3231	1/1	0.97	0.14	65,65,65,65	0
55	MG	1H	3364	1/1	0.97	0.07	74,74,74,74	0
55	MG	14	3238	1/1	0.97	0.05	83,83,83,83	0
55	MG	14	3056	1/1	0.97	0.14	60,60,60,60	0
55	MG	14	3241	1/1	0.97	0.14	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	14	3243	1/1	0.97	0.12	116,116,116,116	0
55	MG	14	3244	1/1	0.97	0.05	105,105,105,105	0
55	MG	1H	3070	1/1	0.97	0.13	55,55,55,55	0
55	MG	1H	3369	1/1	0.97	0.11	63,63,63,63	0
55	MG	14	3158	1/1	0.97	0.13	51,51,51,51	0
55	MG	14	3251	1/1	0.97	0.07	65,65,65,65	0
55	MG	14	3160	1/1	0.97	0.09	86,86,86,86	0
55	MG	14	3254	1/1	0.97	0.04	108,108,108,108	0
55	MG	14	3258	1/1	0.97	0.09	97,97,97,97	0
55	MG	14	3259	1/1	0.97	0.06	75,75,75,75	0
55	MG	14	3261	1/1	0.97	0.11	92,92,92,92	0
55	MG	14	3265	1/1	0.97	0.05	65,65,65,65	0
55	MG	1H	3457	1/1	0.97	0.07	133,133,133,133	0
55	MG	1H	3458	1/1	0.97	0.06	126,126,126,126	0
55	MG	14	3270	1/1	0.97	0.10	85,85,85,85	0
55	MG	1H	3461	1/1	0.97	0.04	119,119,119,119	0
55	MG	14	3274	1/1	0.97	0.04	110,110,110,110	0
55	MG	1H	3371	1/1	0.97	0.17	85,85,85,85	0
55	MG	13	1737	1/1	0.97	0.11	111,111,111,111	0
55	MG	1H	3466	1/1	0.97	0.22	111,111,111,111	0
55	MG	1H	3394	1/1	0.97	0.06	75,75,75,75	0
55	MG	14	3286	1/1	0.97	0.09	97,97,97,97	0
55	MG	1H	3013	1/1	0.97	0.08	63,63,63,63	0
55	MG	1H	3471	1/1	0.97	0.10	79,79,79,79	0
55	MG	1H	3331	1/1	0.97	0.10	109,109,109,109	0
55	MG	16	202	1/1	0.97	0.06	118,118,118,118	0
55	MG	1G	1709	1/1	0.97	0.09	127,127,127,127	0
55	MG	14	3073	1/1	0.97	0.07	69,69,69,69	0
55	MG	1G	1710	1/1	0.97	0.12	125,125,125,125	0
55	MG	1G	1711	1/1	0.97	0.18	139,139,139,139	0
55	MG	1H	3400	1/1	0.97	0.17	78,78,78,78	0
55	MG	1H	3316	1/1	0.97	0.04	115,115,115,115	0
55	MG	14	3297	1/1	0.97	0.06	115,115,115,115	0
55	MG	13	1726	1/1	0.97	0.11	103,103,103,103	0
55	MG	1G	1717	1/1	0.97	0.08	137,137,137,137	0
55	MG	1G	1718	1/1	0.97	0.12	112,112,112,112	0
55	MG	1H	3412	1/1	0.97	0.21	128,128,128,128	0
55	MG	1H	3416	1/1	0.97	0.09	119,119,119,119	0
55	MG	1H	3418	1/1	0.97	0.06	99,99,99,99	0
55	MG	13	1650	1/1	0.97	0.06	106,106,106,106	0
55	MG	13	1716	1/1	0.97	0.05	103,103,103,103	0
55	MG	1H	3001	1/1	0.97	0.07	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	C8	201	1/1	0.97	0.09	76,76,76,76	0
55	MG	1H	3423	1/1	0.97	0.05	102,102,102,102	0
55	MG	13	1611	1/1	0.97	0.06	81,81,81,81	0
55	MG	1H	3429	1/1	0.97	0.06	92,92,92,92	0
57	ZN	5A	101	1/1	0.97	0.09	159,159,159,159	0
55	MG	1H	3370	1/1	0.98	0.06	59,59,59,59	0
55	MG	14	3203	1/1	0.98	0.07	95,95,95,95	0
55	MG	1H	3454	1/1	0.98	0.08	109,109,109,109	0
55	MG	1H	3291	1/1	0.98	0.05	98,98,98,98	0
55	MG	1H	3373	1/1	0.98	0.10	106,106,106,106	0
55	MG	1H	3310	1/1	0.98	0.08	109,109,109,109	0
55	MG	14	3212	1/1	0.98	0.09	67,67,67,67	0
55	MG	14	3213	1/1	0.98	0.04	77,77,77,77	0
55	MG	1H	3381	1/1	0.98	0.04	68,68,68,68	0
55	MG	1H	3388	1/1	0.98	0.06	56,56,56,56	0
55	MG	1H	3464	1/1	0.98	0.17	67,67,67,67	0
55	MG	1H	3393	1/1	0.98	0.07	79,79,79,79	0
55	MG	14	3218	1/1	0.98	0.09	69,69,69,69	0
55	MG	14	3219	1/1	0.98	0.06	63,63,63,63	0
55	MG	13	1729	1/1	0.98	0.06	86,86,86,86	0
55	MG	14	3223	1/1	0.98	0.05	81,81,81,81	0
55	MG	14	3224	1/1	0.98	0.04	84,84,84,84	0
55	MG	14	3226	1/1	0.98	0.03	59,59,59,59	0
55	MG	1G	1686	1/1	0.98	0.04	112,112,112,112	0
55	MG	14	3228	1/1	0.98	0.07	72,72,72,72	0
55	MG	14	3229	1/1	0.98	0.05	74,74,74,74	0
55	MG	1H	3467	1/1	0.98	0.09	106,106,106,106	0
55	MG	1G	1688	1/1	0.98	0.13	94,94,94,94	0
55	MG	14	3235	1/1	0.98	0.10	73,73,73,73	0
55	MG	1H	3186	1/1	0.98	0.05	80,80,80,80	0
55	MG	13	1714	1/1	0.98	0.10	121,121,121,121	0
55	MG	1H	3315	1/1	0.98	0.05	112,112,112,112	0
55	MG	14	3240	1/1	0.98	0.17	135,135,135,135	0
55	MG	1H	3472	1/1	0.98	0.05	64,64,64,64	0
55	MG	1H	3401	1/1	0.98	0.05	72,72,72,72	0
55	MG	1H	3403	1/1	0.98	0.11	87,87,87,87	0
55	MG	14	3245	1/1	0.98	0.03	117,117,117,117	0
55	MG	1H	3404	1/1	0.98	0.04	76,76,76,76	0
55	MG	14	3247	1/1	0.98	0.04	125,125,125,125	0
55	MG	14	3248	1/1	0.98	0.04	86,86,86,86	0
55	MG	13	1720	1/1	0.98	0.12	117,117,117,117	0
55	MG	1H	3409	1/1	0.98	0.07	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3317	1/1	0.98	0.05	106,106,106,106	0
55	MG	14	3157	1/1	0.98	0.09	61,61,61,61	0
55	MG	1G	1643	1/1	0.98	0.13	105,105,105,105	0
55	MG	14	3257	1/1	0.98	0.13	99,99,99,99	0
55	MG	1H	3411	1/1	0.98	0.05	81,81,81,81	0
55	MG	1H	3338	1/1	0.98	0.09	105,105,105,105	0
55	MG	14	3260	1/1	0.98	0.10	110,110,110,110	0
55	MG	1H	3413	1/1	0.98	0.18	93,93,93,93	0
55	MG	1H	3297	1/1	0.98	0.07	86,86,86,86	0
55	MG	1H	3417	1/1	0.98	0.08	108,108,108,108	0
55	MG	13	1684	1/1	0.98	0.05	89,89,89,89	0
55	MG	1H	3343	1/1	0.98	0.05	56,56,56,56	0
55	MG	1H	3420	1/1	0.98	0.07	96,96,96,96	0
55	MG	14	3273	1/1	0.98	0.04	89,89,89,89	0
55	MG	I8	101	1/1	0.98	0.17	87,87,87,87	0
55	MG	14	3275	1/1	0.98	0.17	94,94,94,94	0
55	MG	1G	1713	1/1	0.98	0.15	144,144,144,144	0
55	MG	14	3278	1/1	0.98	0.04	109,109,109,109	0
55	MG	14	3279	1/1	0.98	0.05	107,107,107,107	0
55	MG	14	3280	1/1	0.98	0.06	101,101,101,101	0
55	MG	1H	3345	1/1	0.98	0.07	63,63,63,63	0
55	MG	14	3282	1/1	0.98	0.04	117,117,117,117	0
55	MG	13	1739	1/1	0.98	0.14	128,128,128,128	0
55	MG	13	1718	1/1	0.98	0.06	113,113,113,113	0
55	MG	1H	3348	1/1	0.98	0.05	54,54,54,54	0
55	MG	1H	3054	1/1	0.98	0.02	77,77,77,77	0
55	MG	1H	3430	1/1	0.98	0.05	54,54,54,54	0
55	MG	1H	3352	1/1	0.98	0.05	55,55,55,55	0
55	MG	1H	3353	1/1	0.98	0.03	59,59,59,59	0
55	MG	1G	1723	1/1	0.98	0.03	113,113,113,113	0
55	MG	1G	1724	1/1	0.98	0.05	120,120,120,120	0
55	MG	1H	3433	1/1	0.98	0.10	87,87,87,87	0
55	MG	1H	3434	1/1	0.98	0.05	59,59,59,59	0
55	MG	1H	3355	1/1	0.98	0.05	83,83,83,83	0
55	MG	1G	1610	1/1	0.98	0.07	100,100,100,100	0
55	MG	1H	3437	1/1	0.98	0.08	95,95,95,95	0
55	MG	1H	3356	1/1	0.98	0.06	59,59,59,59	0
55	MG	14	3058	1/1	0.98	0.06	95,95,95,95	0
55	MG	1H	3304	1/1	0.98	0.15	96,96,96,96	0
55	MG	7A	101	1/1	0.98	0.07	116,116,116,116	0
55	MG	1H	3324	1/1	0.98	0.06	115,115,115,115	0
55	MG	1H	3362	1/1	0.98	0.06	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3012	1/1	0.98	0.07	47,47,47,47	0
55	MG	14	3002	1/1	0.98	0.09	53,53,53,53	0
55	MG	1H	3448	1/1	0.98	0.05	72,72,72,72	0
55	MG	1H	3306	1/1	0.98	0.04	93,93,93,93	0
55	MG	1H	3257	1/1	0.98	0.14	53,53,53,53	0
55	MG	1H	3367	1/1	0.98	0.10	92,92,92,92	0
55	MG	1H	3289	1/1	0.98	0.04	102,102,102,102	0
55	MG	14	3070	1/1	0.98	0.07	72,72,72,72	0
55	MG	1H	3427	1/1	0.99	0.07	68,68,68,68	0
55	MG	1H	3428	1/1	0.99	0.07	66,66,66,66	0
55	MG	1H	3333	1/1	0.99	0.03	80,80,80,80	0
55	MG	14	3159	1/1	0.99	0.06	83,83,83,83	0
55	MG	1H	3382	1/1	0.99	0.10	93,93,93,93	0
55	MG	14	3232	1/1	0.99	0.04	59,59,59,59	0
55	MG	14	3233	1/1	0.99	0.12	89,89,89,89	0
55	MG	14	3234	1/1	0.99	0.08	82,82,82,82	0
55	MG	1H	3383	1/1	0.99	0.04	60,60,60,60	0
55	MG	14	3236	1/1	0.99	0.14	98,98,98,98	0
55	MG	1H	3384	1/1	0.99	0.04	76,76,76,76	0
55	MG	1G	1716	1/1	0.99	0.12	123,123,123,123	0
55	MG	1H	3385	1/1	0.99	0.04	63,63,63,63	0
55	MG	1H	3386	1/1	0.99	0.05	56,56,56,56	0
55	MG	1H	3435	1/1	0.99	0.02	80,80,80,80	0
55	MG	14	3242	1/1	0.99	0.03	89,89,89,89	0
55	MG	1H	3387	1/1	0.99	0.04	67,67,67,67	0
55	MG	1H	3351	1/1	0.99	0.06	70,70,70,70	0
55	MG	1H	3390	1/1	0.99	0.09	74,74,74,74	0
55	MG	1H	3439	1/1	0.99	0.04	69,69,69,69	0
55	MG	1H	3391	1/1	0.99	0.04	81,81,81,81	0
55	MG	1H	3441	1/1	0.99	0.02	64,64,64,64	0
55	MG	1H	3392	1/1	0.99	0.03	47,47,47,47	0
55	MG	1H	3443	1/1	0.99	0.03	73,73,73,73	0
55	MG	1H	3444	1/1	0.99	0.04	50,50,50,50	0
55	MG	14	3252	1/1	0.99	0.09	66,66,66,66	0
55	MG	13	1715	1/1	0.99	0.03	99,99,99,99	0
55	MG	1H	3290	1/1	0.99	0.09	79,79,79,79	0
55	MG	14	3255	1/1	0.99	0.06	80,80,80,80	0
55	MG	14	3256	1/1	0.99	0.12	87,87,87,87	0
55	MG	1H	3395	1/1	0.99	0.04	67,67,67,67	0
55	MG	1H	3354	1/1	0.99	0.03	61,61,61,61	0
55	MG	13	1721	1/1	0.99	0.05	87,87,87,87	0
55	MG	1H	3398	1/1	0.99	0.03	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1H	3399	1/1	0.99	0.04	86,86,86,86	0
55	MG	14	3262	1/1	0.99	0.06	60,60,60,60	0
55	MG	14	3263	1/1	0.99	0.08	76,76,76,76	0
55	MG	14	3264	1/1	0.99	0.10	88,88,88,88	0
55	MG	1H	3292	1/1	0.99	0.06	103,103,103,103	0
55	MG	14	3266	1/1	0.99	0.03	83,83,83,83	0
55	MG	14	3267	1/1	0.99	0.14	88,88,88,88	0
55	MG	1H	3302	1/1	0.99	0.04	120,120,120,120	0
55	MG	1H	3455	1/1	0.99	0.05	85,85,85,85	0
55	MG	1H	3358	1/1	0.99	0.03	60,60,60,60	0
55	MG	14	3271	1/1	0.99	0.04	56,56,56,56	0
55	MG	1H	3339	1/1	0.99	0.07	78,78,78,78	0
55	MG	1H	3314	1/1	0.99	0.02	113,113,113,113	0
55	MG	1H	3459	1/1	0.99	0.03	112,112,112,112	0
55	MG	1H	3406	1/1	0.99	0.03	70,70,70,70	0
55	MG	1H	3462	1/1	0.99	0.10	106,106,106,106	0
55	MG	14	3277	1/1	0.99	0.10	74,74,74,74	0
55	MG	1H	3407	1/1	0.99	0.04	76,76,76,76	0
55	MG	1H	3303	1/1	0.99	0.10	98,98,98,98	0
55	MG	1H	3342	1/1	0.99	0.07	60,60,60,60	0
55	MG	1H	3068	1/1	0.99	0.03	53,53,53,53	0
55	MG	1H	3366	1/1	0.99	0.15	75,75,75,75	0
55	MG	14	3283	1/1	0.99	0.06	106,106,106,106	0
55	MG	1H	3344	1/1	0.99	0.03	72,72,72,72	0
55	MG	1H	3414	1/1	0.99	0.06	82,82,82,82	0
55	MG	14	3199	1/1	0.99	0.05	97,97,97,97	0
55	MG	14	3200	1/1	0.99	0.07	70,70,70,70	0
55	MG	14	3201	1/1	0.99	0.07	101,101,101,101	0
55	MG	1H	3470	1/1	0.99	0.03	69,69,69,69	0
55	MG	1H	3415	1/1	0.99	0.05	88,88,88,88	0
55	MG	1H	3368	1/1	0.99	0.09	83,83,83,83	0
55	MG	1H	3473	1/1	0.99	0.02	74,74,74,74	0
55	MG	1G	1695	1/1	0.99	0.13	130,130,130,130	0
55	MG	13	1730	1/1	0.99	0.14	125,125,125,125	0
55	MG	14	3208	1/1	0.99	0.04	70,70,70,70	0
55	MG	14	3209	1/1	0.99	0.08	65,65,65,65	0
55	MG	14	3211	1/1	0.99	0.04	84,84,84,84	0
55	MG	13	1722	1/1	0.99	0.03	106,106,106,106	0
55	MG	13	1717	1/1	0.99	0.15	109,109,109,109	0
55	MG	1H	3372	1/1	0.99	0.17	94,94,94,94	0
55	MG	1H	3288	1/1	0.99	0.09	99,99,99,99	0
55	MG	1H	3375	1/1	0.99	0.06	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
55	MG	1G	1702	1/1	0.99	0.05	83,83,83,83	0
55	MG	1H	3349	1/1	0.99	0.05	67,67,67,67	0
55	MG	1G	1705	1/1	0.99	0.11	102,102,102,102	0
55	MG	1H	3424	1/1	0.99	0.03	68,68,68,68	0
55	MG	14	3221	1/1	0.99	0.04	67,67,67,67	0
55	MG	14	3222	1/1	0.99	0.04	67,67,67,67	0
55	MG	1H	3380	1/1	0.99	0.03	83,83,83,83	0
55	MG	1H	3426	1/1	0.99	0.13	97,97,97,97	0
56	SF4	3E	301	8/8	0.99	0.04	96,110,122,122	0
56	SF4	32	302	8/8	0.99	0.03	112,135,144,151	0
57	ZN	5I	103	1/1	0.99	0.03	109,109,109,109	0
55	MG	88	202	1/1	0.99	0.66	62,62,62,62	0
55	MG	1H	3359	1/1	1.00	0.04	51,51,51,51	0
55	MG	1H	3402	1/1	1.00	0.03	66,66,66,66	0
55	MG	1H	3376	1/1	1.00	0.02	58,58,58,58	0
55	MG	1H	3460	1/1	1.00	0.03	64,64,64,64	0
55	MG	1H	3389	1/1	1.00	0.06	68,68,68,68	0
55	MG	1G	1703	1/1	1.00	0.02	94,94,94,94	0
55	MG	14	3210	1/1	1.00	0.02	60,60,60,60	0
55	MG	1H	3377	1/1	1.00	0.03	58,58,58,58	0
55	MG	14	3225	1/1	1.00	0.05	63,63,63,63	0
55	MG	1H	3361	1/1	1.00	0.02	53,53,53,53	0
55	MG	1H	3379	1/1	1.00	0.03	76,76,76,76	0
55	MG	1H	3408	1/1	1.00	0.03	58,58,58,58	0
55	MG	1H	3374	1/1	1.00	0.03	47,47,47,47	0
55	MG	1H	3446	1/1	1.00	0.02	88,88,88,88	0

6.5 Other polymers (i)

There are no such residues in this entry.