



# Full wwPDB X-ray Structure Validation Report ⓘ

Jun 2, 2020 – 08:46 am BST

PDB ID : 4V9Q  
Title : Crystal Structure of Blasticidin S Bound to Thermus Thermophilus 70S Ribosome.  
Authors : Svidritskiy, E.; Ling, C.; Ermolenko, D.N.; Korostelev, A.A.  
Deposited on : 2013-06-12  
Resolution : 3.40 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

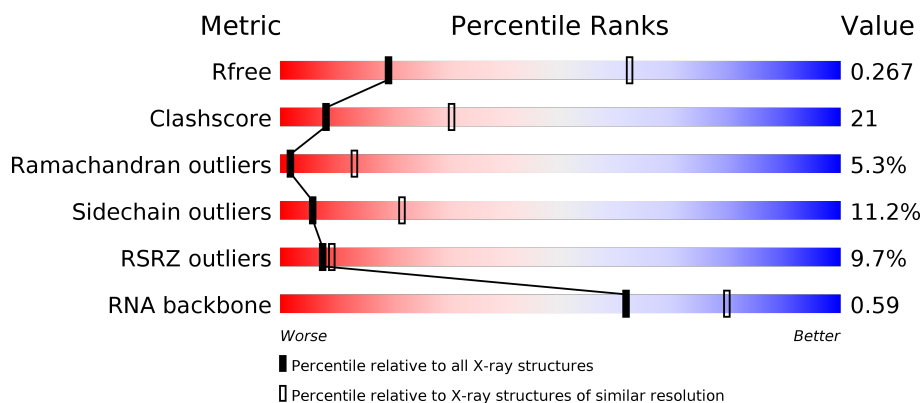
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.40 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.



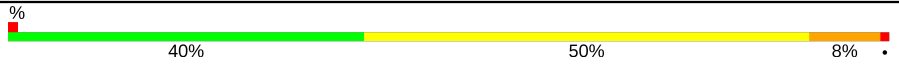
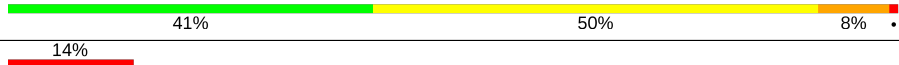

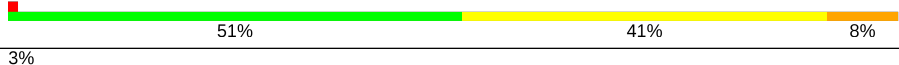
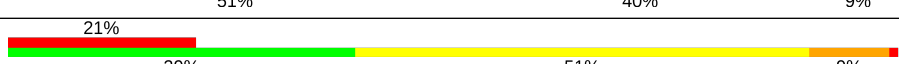
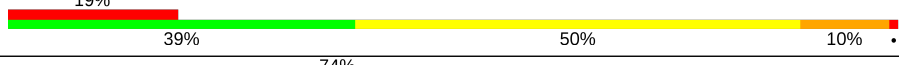



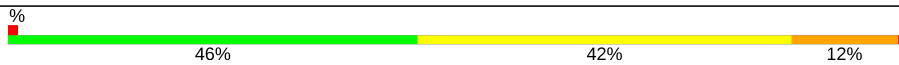

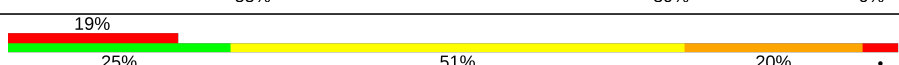
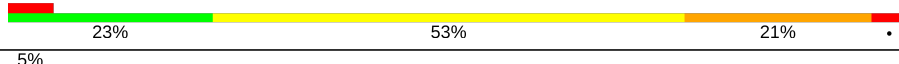
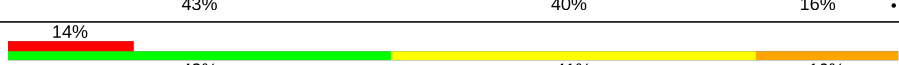
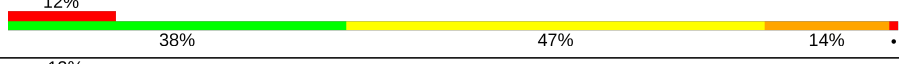
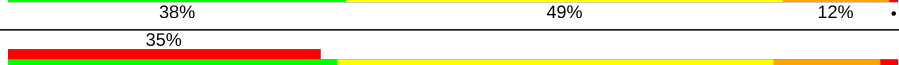




Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1026 (3.48-3.32)
Clashscore	141614	1055 (3.48-3.32)
Ramachandran outliers	138981	1038 (3.48-3.32)
Sidechain outliers	138945	1038 (3.48-3.32)
RSRZ outliers	127900	2173 (3.50-3.30)
RNA backbone	3102	1006 (3.84-2.96)

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

Mol	Chain	Length	Quality of chain
1	AA	2879	<div> <div>4%</div> <div> <div></div> <div>50%</div> <div>39%</div> <div>10%</div> </div> </div>
1	CA	2879	<div> <div>4%</div> <div> <div></div> <div>50%</div> <div>39%</div> <div>10%</div> </div> </div>
2	AB	119	<div> <div>2%</div> <div> <div></div> <div>55%</div> <div>39%</div> <div>6%</div> </div> </div>
2	CB	119	<div> <div>0%</div> <div> <div></div> <div>52%</div> <div>42%</div> <div>6%</div> </div> </div>

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Mol	Chain	Length	Quality of chain
3	AD	271	
3	CD	271	
4	AE	204	
4	CE	204	
5	AF	202	
5	CF	202	
6	AG	181	
6	CG	181	
7	AH	159	
7	CH	159	
8	AI	145	
8	CI	145	
9	AJ	137	
9	CJ	137	
10	AK	122	
10	CK	122	
11	AL	146	
11	CL	146	
12	AM	134	
12	CM	134	
13	AN	117	
13	CN	117	
14	AO	98	
14	CO	98	
15	AP	137	

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Mol	Chain	Length	Quality of chain
15	CP	137	
16	AQ	117	
16	CQ	117	
17	AR	101	
17	CR	101	
18	AS	112	
18	CS	112	
19	AT	92	
19	CT	92	
20	AU	100	
20	CU	100	
21	AV	187	
21	CV	187	
22	AW	76	
22	CW	76	
23	AX	88	
23	CX	88	
24	AY	62	
24	CY	62	
25	AZ	59	
25	CZ	59	
26	A1	30	
26	C1	30	
27	A2	52	
27	C2	52	

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Mol	Chain	Length	Quality of chain
28	A3	44	
28	C3	44	
29	A4	48	
29	C4	48	
30	A5	63	
30	C5	63	
31	BA	1504	
31	DA	1504	
32	BB	234	
32	DB	234	
33	BC	206	
33	DC	206	
34	BD	208	
34	DD	208	
35	BE	151	
35	DE	151	
36	BF	101	
36	DF	101	
37	BG	155	
37	DG	155	
38	BH	138	
38	DH	138	
39	BI	127	
39	DI	127	
40	BJ	98	

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Mol	Chain	Length	Quality of chain
40	DJ	98	
41	BK	114	
41	DK	114	
42	BL	122	
42	DL	122	
43	BM	117	
43	DM	117	
44	BN	60	
44	DN	60	
45	BO	88	
45	DO	88	
46	BP	83	
46	DP	83	
47	BQ	99	
47	DQ	99	
48	BR	70	
48	DR	70	
49	BS	78	
49	DS	78	
50	BT	99	
50	DT	99	
51	BU	24	
51	DU	24	
52	BV	77	
52	BW	77	

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Mol	Chain	Length	Quality of chain
52	DV	77	
52	DW	77	
53	BX	5	
53	DX	5	

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	AA	4011	-	-	-	X
55	MG	AA	4017	-	-	-	X
55	MG	AA	4023	-	-	-	X
55	MG	AA	4025	-	-	-	X
55	MG	AA	4032	-	-	-	X
55	MG	AA	4035	-	-	-	X
55	MG	AA	4047	-	-	-	X
55	MG	AA	4054	-	-	-	X
55	MG	AA	4057	-	-	-	X
55	MG	AA	4067	-	-	-	X
55	MG	AA	4069	-	-	-	X
55	MG	AA	4074	-	-	-	X
55	MG	AA	4084	-	-	-	X
55	MG	AA	4086	-	-	-	X
55	MG	AA	4089	-	-	-	X
55	MG	AA	4096	-	-	-	X
55	MG	AA	4097	-	-	-	X
55	MG	AA	4099	-	-	-	X
55	MG	AA	4110	-	-	-	X
55	MG	AA	4113	-	-	-	X
55	MG	AA	4114	-	-	-	X
55	MG	AA	4120	-	-	-	X
55	MG	AA	4121	-	-	-	X
55	MG	AA	4123	-	-	-	X
55	MG	AA	4129	-	-	-	X
55	MG	AA	4130	-	-	-	X
55	MG	AA	4135	-	-	-	X
55	MG	AA	4150	-	-	-	X
55	MG	AA	4151	-	-	-	X
55	MG	AA	4159	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	AA	4162	-	-	-	X
55	MG	AA	4169	-	-	-	X
55	MG	AA	4290	-	-	-	X
55	MG	AA	4293	-	-	-	X
55	MG	AA	4305	-	-	-	X
55	MG	AA	4310	-	-	-	X
55	MG	AA	4328	-	-	-	X
55	MG	AA	4342	-	-	-	X
55	MG	AA	4354	-	-	-	X
55	MG	AA	4355	-	-	-	X
55	MG	AA	4363	-	-	-	X
55	MG	AA	4375	-	-	-	X
55	MG	AA	4377	-	-	-	X
55	MG	AA	4391	-	-	-	X
55	MG	AA	4397	-	-	-	X
55	MG	AA	4421	-	-	-	X
55	MG	AA	4442	-	-	-	X
55	MG	AA	4447	-	-	-	X
55	MG	AA	4453	-	-	-	X
55	MG	AA	4473	-	-	-	X
55	MG	AA	4481	-	-	-	X
55	MG	AA	4499	-	-	-	X
55	MG	AA	4502	-	-	-	X
55	MG	AA	4510	-	-	-	X
55	MG	AA	4511	-	-	-	X
55	MG	AA	4514	-	-	-	X
55	MG	AA	4524	-	-	-	X
55	MG	AA	4529	-	-	-	X
55	MG	AA	4535	-	-	-	X
55	MG	AA	4539	-	-	-	X
55	MG	AA	4546	-	-	-	X
55	MG	AA	4549	-	-	-	X
55	MG	AA	4567	-	-	-	X
55	MG	AA	4584	-	-	-	X
55	MG	AA	4590	-	-	-	X
55	MG	AA	4593	-	-	-	X
55	MG	AA	4594	-	-	-	X
55	MG	AA	4606	-	-	-	X
55	MG	AA	4616	-	-	-	X
55	MG	AA	4625	-	-	-	X
55	MG	AA	4628	-	-	-	X
55	MG	AA	4635	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	AA	4650	-	-	-	X
55	MG	AA	4653	-	-	-	X
55	MG	AA	4656	-	-	-	X
55	MG	AA	4664	-	-	-	X
55	MG	AA	4667	-	-	-	X
55	MG	AA	4678	-	-	-	X
55	MG	AA	4680	-	-	-	X
55	MG	AA	4684	-	-	-	X
55	MG	AA	4688	-	-	-	X
55	MG	AA	4696	-	-	-	X
55	MG	AA	4697	-	-	-	X
55	MG	AA	4702	-	-	-	X
55	MG	AA	4708	-	-	-	X
55	MG	AA	4715	-	-	-	X
55	MG	AA	4716	-	-	-	X
55	MG	AA	4723	-	-	-	X
55	MG	AA	4732	-	-	-	X
55	MG	AA	4737	-	-	-	X
55	MG	AA	4741	-	-	-	X
55	MG	AA	4749	-	-	-	X
55	MG	AA	4750	-	-	-	X
55	MG	AA	4755	-	-	-	X
55	MG	AA	4756	-	-	-	X
55	MG	AA	4759	-	-	-	X
55	MG	AA	4763	-	-	-	X
55	MG	AA	4767	-	-	-	X
55	MG	AA	4769	-	-	-	X
55	MG	AA	4770	-	-	-	X
55	MG	AA	4773	-	-	-	X
55	MG	AA	4779	-	-	-	X
55	MG	AA	4780	-	-	-	X
55	MG	AA	4788	-	-	-	X
55	MG	AA	4797	-	-	-	X
55	MG	AA	4798	-	-	-	X
55	MG	AA	4803	-	-	-	X
55	MG	AA	4804	-	-	-	X
55	MG	AA	4807	-	-	-	X
55	MG	AA	4809	-	-	-	X
55	MG	AA	4810	-	-	-	X
55	MG	AA	4818	-	-	-	X
55	MG	AA	4822	-	-	-	X
55	MG	AA	4826	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	AA	4833	-	-	-	X
55	MG	AA	4835	-	-	-	X
55	MG	AA	4841	-	-	-	X
55	MG	AA	4842	-	-	-	X
55	MG	AA	4844	-	-	-	X
55	MG	AA	4865	-	-	-	X
55	MG	AA	4870	-	-	-	X
55	MG	AA	4874	-	-	-	X
55	MG	AA	4906	-	-	-	X
55	MG	AA	4918	-	-	-	X
55	MG	AA	4923	-	-	-	X
55	MG	AA	4945	-	-	-	X
55	MG	AA	4947	-	-	-	X
55	MG	AA	4958	-	-	-	X
55	MG	AA	4965	-	-	-	X
55	MG	AA	4972	-	-	-	X
55	MG	AA	4973	-	-	-	X
55	MG	AA	4979	-	-	-	X
55	MG	AA	4982	-	-	-	X
55	MG	AA	4986	-	-	-	X
55	MG	AA	4994	-	-	-	X
55	MG	AA	4997	-	-	-	X
55	MG	AA	5002	-	-	-	X
55	MG	AA	5010	-	-	-	X
55	MG	AA	5020	-	-	-	X
55	MG	AA	5023	-	-	-	X
55	MG	AA	5032	-	-	-	X
55	MG	AA	5037	-	-	-	X
55	MG	AA	5039	-	-	-	X
55	MG	AA	5044	-	-	-	X
55	MG	AA	5047	-	-	-	X
55	MG	AA	5059	-	-	-	X
55	MG	AA	5063	-	-	-	X
55	MG	AA	5075	-	-	-	X
55	MG	AA	5078	-	-	-	X
55	MG	AA	5086	-	-	-	X
55	MG	AA	5090	-	-	-	X
55	MG	AA	5100	-	-	-	X
55	MG	AA	5110	-	-	-	X
55	MG	AA	5117	-	-	-	X
55	MG	AA	5119	-	-	-	X
55	MG	AA	5137	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	AA	5142	-	-	-	X
55	MG	AA	5143	-	-	-	X
55	MG	AA	5147	-	-	-	X
55	MG	AA	5154	-	-	-	X
55	MG	AA	5159	-	-	-	X
55	MG	AA	5160	-	-	-	X
55	MG	AA	5169	-	-	-	X
55	MG	AA	5177	-	-	-	X
55	MG	AA	5178	-	-	-	X
55	MG	AA	5179	-	-	-	X
55	MG	AA	5190	-	-	-	X
55	MG	AA	5200	-	-	-	X
55	MG	AA	5201	-	-	-	X
55	MG	AA	5202	-	-	-	X
55	MG	AA	5219	-	-	-	X
55	MG	AA	5223	-	-	-	X
55	MG	AA	5228	-	-	-	X
55	MG	AA	5229	-	-	-	X
55	MG	AA	5235	-	-	-	X
55	MG	AA	5236	-	-	-	X
55	MG	AA	5239	-	-	-	X
55	MG	AA	5240	-	-	-	X
55	MG	AA	5245	-	-	-	X
55	MG	AA	5247	-	-	-	X
55	MG	AA	5248	-	-	-	X
55	MG	AA	5249	-	-	-	X
55	MG	AA	5250	-	-	-	X
55	MG	AA	5251	-	-	-	X
55	MG	AA	5264	-	-	-	X
55	MG	AA	5265	-	-	-	X
55	MG	AA	5267	-	-	-	X
55	MG	AA	5268	-	-	-	X
55	MG	AA	5279	-	-	-	X
55	MG	AA	5292	-	-	-	X
55	MG	AA	5297	-	-	-	X
55	MG	AB	202	-	-	-	X
55	MG	AB	204	-	-	-	X
55	MG	AB	205	-	-	-	X
55	MG	AB	216	-	-	-	X
55	MG	AB	218	-	-	-	X
55	MG	AB	237	-	-	-	X
55	MG	AB	243	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	AE	303	-	-	-	X
55	MG	AF	301	-	-	-	X
55	MG	AG	202	-	-	-	X
55	MG	AN	204	-	-	-	X
55	MG	AS	205	-	-	-	X
55	MG	BA	1604	-	-	-	X
55	MG	BA	1608	-	-	-	X
55	MG	BA	1610	-	-	-	X
55	MG	BA	1615	-	-	-	X
55	MG	BA	1624	-	-	-	X
55	MG	BA	1625	-	-	-	X
55	MG	BA	1626	-	-	-	X
55	MG	BA	1628	-	-	-	X
55	MG	BA	1634	-	-	-	X
55	MG	BA	1639	-	-	-	X
55	MG	BA	1641	-	-	-	X
55	MG	BA	1645	-	-	-	X
55	MG	BA	1647	-	-	-	X
55	MG	BA	1648	-	-	-	X
55	MG	BA	1649	-	-	-	X
55	MG	BA	1652	-	-	-	X
55	MG	BA	1653	-	-	-	X
55	MG	BA	1656	-	-	-	X
55	MG	BA	1659	-	-	-	X
55	MG	BA	1673	-	-	-	X
55	MG	BA	1680	-	-	-	X
55	MG	BA	1717	-	-	-	X
55	MG	BA	1724	-	-	-	X
55	MG	BA	1731	-	-	-	X
55	MG	BA	1739	-	-	-	X
55	MG	BA	1752	-	-	-	X
55	MG	BA	1761	-	-	-	X
55	MG	BA	1775	-	-	-	X
55	MG	BA	1781	-	-	-	X
55	MG	BA	1788	-	-	-	X
55	MG	BA	1792	-	-	-	X
55	MG	BA	1801	-	-	-	X
55	MG	BA	1803	-	-	-	X
55	MG	BA	1808	-	-	-	X
55	MG	BA	1810	-	-	-	X
55	MG	BA	1818	-	-	-	X
55	MG	BA	1827	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	BA	1833	-	-	-	X
55	MG	BA	1840	-	-	-	X
55	MG	BA	1843	-	-	-	X
55	MG	BA	1852	-	-	-	X
55	MG	BA	1859	-	-	-	X
55	MG	BA	1863	-	-	-	X
55	MG	BA	1867	-	-	-	X
55	MG	BA	1875	-	-	-	X
55	MG	BA	1879	-	-	-	X
55	MG	BA	1898	-	-	-	X
55	MG	BA	1900	-	-	-	X
55	MG	BA	1901	-	-	-	X
55	MG	BA	1902	-	-	-	X
55	MG	BA	1904	-	-	-	X
55	MG	BA	1911	-	-	-	X
55	MG	BA	1913	-	-	-	X
55	MG	BA	1923	-	-	-	X
55	MG	BA	1925	-	-	-	X
55	MG	BA	1929	-	-	-	X
55	MG	BA	1931	-	-	-	X
55	MG	BA	1943	-	-	-	X
55	MG	BA	1945	-	-	-	X
55	MG	BA	1947	-	-	-	X
55	MG	BA	1949	-	-	-	X
55	MG	BA	1967	-	-	-	X
55	MG	BA	1972	-	-	-	X
55	MG	BA	1975	-	-	-	X
55	MG	BA	1992	-	-	-	X
55	MG	BA	2002	-	-	-	X
55	MG	BA	2008	-	-	-	X
55	MG	BA	2009	-	-	-	X
55	MG	BA	2010	-	-	-	X
55	MG	BA	2033	-	-	-	X
55	MG	BA	2046	-	-	-	X
55	MG	BA	2053	-	-	-	X
55	MG	BA	2057	-	-	-	X
55	MG	BA	2060	-	-	-	X
55	MG	BA	2082	-	-	-	X
55	MG	BA	2086	-	-	-	X
55	MG	BA	2093	-	-	-	X
55	MG	BA	2094	-	-	-	X
55	MG	BA	2097	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	BA	2098	-	-	-	X
55	MG	BA	2099	-	-	-	X
55	MG	BA	2102	-	-	-	X
55	MG	BA	2103	-	-	-	X
55	MG	BA	2106	-	-	-	X
55	MG	BA	2109	-	-	-	X
55	MG	BA	2114	-	-	-	X
55	MG	BA	2123	-	-	-	X
55	MG	BA	2125	-	-	-	X
55	MG	BA	2126	-	-	-	X
55	MG	BA	2127	-	-	-	X
55	MG	BA	2129	-	-	-	X
55	MG	BA	2132	-	-	-	X
55	MG	BA	2133	-	-	-	X
55	MG	BA	2134	-	-	-	X
55	MG	BA	2137	-	-	-	X
55	MG	BA	2139	-	-	-	X
55	MG	BA	2140	-	-	-	X
55	MG	BA	2152	-	-	-	X
55	MG	BC	301	-	-	-	X
55	MG	BO	101	-	-	-	X
55	MG	BR	101	-	-	-	X
55	MG	BV	102	-	-	-	X
55	MG	BV	116	-	-	-	X
55	MG	BW	117	-	-	-	X
55	MG	BW	118	-	-	-	X
55	MG	C4	103	-	-	-	X
55	MG	CA	2902	-	-	-	X
55	MG	CA	2903	-	-	-	X
55	MG	CA	2907	-	-	-	X
55	MG	CA	2914	-	-	-	X
55	MG	CA	2919	-	-	-	X
55	MG	CA	2920	-	-	-	X
55	MG	CA	2926	-	-	-	X
55	MG	CA	2938	-	-	-	X
55	MG	CA	2941	-	-	-	X
55	MG	CA	2944	-	-	-	X
55	MG	CA	2950	-	-	-	X
55	MG	CA	2960	-	-	-	X
55	MG	CA	2972	-	-	-	X
55	MG	CA	2973	-	-	-	X
55	MG	CA	2977	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	CA	2981	-	-	-	X
55	MG	CA	2984	-	-	-	X
55	MG	CA	2994	-	-	-	X
55	MG	CA	2996	-	-	-	X
55	MG	CA	3002	-	-	-	X
55	MG	CA	3004	-	-	-	X
55	MG	CA	3008	-	-	-	X
55	MG	CA	3010	-	-	-	X
55	MG	CA	3013	-	-	-	X
55	MG	CA	3022	-	-	-	X
55	MG	CA	3024	-	-	-	X
55	MG	CA	3054	-	-	-	X
55	MG	CA	3058	-	-	-	X
55	MG	CA	3059	-	-	-	X
55	MG	CA	3062	-	-	-	X
55	MG	CA	3065	-	-	-	X
55	MG	CA	3072	-	-	-	X
55	MG	CA	3075	-	-	-	X
55	MG	CA	3080	-	-	-	X
55	MG	CA	3082	-	-	-	X
55	MG	CA	3085	-	-	-	X
55	MG	CA	3090	-	-	-	X
55	MG	CA	3165	-	-	-	X
55	MG	CA	3166	-	-	-	X
55	MG	CA	3310	-	-	-	X
55	MG	CA	3321	-	-	-	X
55	MG	CA	3322	-	-	-	X
55	MG	CA	3326	-	-	-	X
55	MG	CA	3356	-	-	-	X
55	MG	CA	3382	-	-	-	X
55	MG	CA	3388	-	-	-	X
55	MG	CA	3399	-	-	-	X
55	MG	CA	3401	-	-	-	X
55	MG	CA	3435	-	-	-	X
55	MG	CA	3436	-	-	-	X
55	MG	CA	3450	-	-	-	X
55	MG	CA	3453	-	-	-	X
55	MG	CA	3455	-	-	-	X
55	MG	CA	3460	-	-	-	X
55	MG	CA	3462	-	-	-	X
55	MG	CA	3489	-	-	-	X
55	MG	CA	3493	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	CA	3497	-	-	-	X
55	MG	CA	3499	-	-	-	X
55	MG	CA	3500	-	-	-	X
55	MG	CA	3517	-	-	-	X
55	MG	CA	3522	-	-	-	X
55	MG	CA	3525	-	-	-	X
55	MG	CA	3528	-	-	-	X
55	MG	CA	3532	-	-	-	X
55	MG	CA	3535	-	-	-	X
55	MG	CA	3540	-	-	-	X
55	MG	CA	3546	-	-	-	X
55	MG	CA	3551	-	-	-	X
55	MG	CA	3561	-	-	-	X
55	MG	CA	3583	-	-	-	X
55	MG	CA	3586	-	-	-	X
55	MG	CA	3593	-	-	-	X
55	MG	CA	3623	-	-	-	X
55	MG	CA	3626	-	-	-	X
55	MG	CA	3647	-	-	-	X
55	MG	CA	3649	-	-	-	X
55	MG	CA	3650	-	-	-	X
55	MG	CA	3653	-	-	-	X
55	MG	CA	3677	-	-	-	X
55	MG	CA	3686	-	-	-	X
55	MG	CA	3692	-	-	-	X
55	MG	CA	3706	-	-	-	X
55	MG	CA	3709	-	-	-	X
55	MG	CA	3713	-	-	-	X
55	MG	CA	3716	-	-	-	X
55	MG	CA	3718	-	-	-	X
55	MG	CA	3720	-	-	-	X
55	MG	CA	3727	-	-	-	X
55	MG	CA	3760	-	-	-	X
55	MG	CA	3764	-	-	-	X
55	MG	CA	3782	-	-	-	X
55	MG	CA	3786	-	-	-	X
55	MG	CA	3788	-	-	-	X
55	MG	CA	3789	-	-	-	X
55	MG	CA	3795	-	-	-	X
55	MG	CA	3797	-	-	-	X
55	MG	CA	3799	-	-	-	X
55	MG	CA	3800	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	CA	3803	-	-	-	X
55	MG	CA	3804	-	-	-	X
55	MG	CA	3807	-	-	-	X
55	MG	CA	3824	-	-	-	X
55	MG	CA	3830	-	-	-	X
55	MG	CA	3844	-	-	-	X
55	MG	CA	3849	-	-	-	X
55	MG	CA	3857	-	-	-	X
55	MG	CA	3858	-	-	-	X
55	MG	CA	3859	-	-	-	X
55	MG	CA	3862	-	-	-	X
55	MG	CA	3864	-	-	-	X
55	MG	CA	3871	-	-	-	X
55	MG	CA	3877	-	-	-	X
55	MG	CA	3881	-	-	-	X
55	MG	CA	3883	-	-	-	X
55	MG	CA	3885	-	-	-	X
55	MG	CA	3888	-	-	-	X
55	MG	CA	3891	-	-	-	X
55	MG	CA	3892	-	-	-	X
55	MG	CA	3898	-	-	-	X
55	MG	CA	3915	-	-	-	X
55	MG	CA	3917	-	-	-	X
55	MG	CA	3920	-	-	-	X
55	MG	CA	3932	-	-	-	X
55	MG	CA	3935	-	-	-	X
55	MG	CA	3936	-	-	-	X
55	MG	CA	3938	-	-	-	X
55	MG	CA	3941	-	-	-	X
55	MG	CA	3942	-	-	-	X
55	MG	CA	3945	-	-	-	X
55	MG	CA	3948	-	-	-	X
55	MG	CA	3949	-	-	-	X
55	MG	CA	3958	-	-	-	X
55	MG	CA	3964	-	-	-	X
55	MG	CA	3986	-	-	-	X
55	MG	CA	3995	-	-	-	X
55	MG	CA	4004	-	-	-	X
55	MG	CA	4035	-	-	-	X
55	MG	CA	4041	-	-	-	X
55	MG	CA	4046	-	-	-	X
55	MG	CA	4050	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	CA	4058	-	-	-	X
55	MG	CA	4063	-	-	-	X
55	MG	CA	4068	-	-	-	X
55	MG	CA	4070	-	-	-	X
55	MG	CA	4100	-	-	-	X
55	MG	CA	4102	-	-	-	X
55	MG	CA	4109	-	-	-	X
55	MG	CA	4117	-	-	-	X
55	MG	CA	4119	-	-	-	X
55	MG	CA	4122	-	-	-	X
55	MG	CA	4136	-	-	-	X
55	MG	CA	4137	-	-	-	X
55	MG	CA	4141	-	-	-	X
55	MG	CA	4144	-	-	-	X
55	MG	CA	4146	-	-	-	X
55	MG	CA	4147	-	-	-	X
55	MG	CA	4151	-	-	-	X
55	MG	CA	4157	-	-	-	X
55	MG	CA	4163	-	-	-	X
55	MG	CA	4183	-	-	-	X
55	MG	CA	4194	-	-	-	X
55	MG	CA	4195	-	-	-	X
55	MG	CA	4205	-	-	-	X
55	MG	CA	4209	-	-	-	X
55	MG	CA	4213	-	-	-	X
55	MG	CA	4221	-	-	-	X
55	MG	CA	4222	-	-	-	X
55	MG	CA	4228	-	-	-	X
55	MG	CA	4233	-	-	-	X
55	MG	CA	4235	-	-	-	X
55	MG	CA	4239	-	-	-	X
55	MG	CA	4248	-	-	-	X
55	MG	CA	4257	-	-	-	X
55	MG	CA	4263	-	-	-	X
55	MG	CA	4266	-	-	-	X
55	MG	CA	4273	-	-	-	X
55	MG	CA	4278	-	-	-	X
55	MG	CA	4280	-	-	-	X
55	MG	CA	4294	-	-	-	X
55	MG	CA	4300	-	-	-	X
55	MG	CA	4325	-	-	-	X
55	MG	CA	4326	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	CA	4337	-	-	-	X
55	MG	CA	4339	-	-	-	X
55	MG	CA	4347	-	-	-	X
55	MG	CA	4348	-	-	-	X
55	MG	CA	4349	-	-	-	X
55	MG	CA	4352	-	-	-	X
55	MG	CA	4358	-	-	-	X
55	MG	CA	4359	-	-	-	X
55	MG	CA	4362	-	-	-	X
55	MG	CA	4367	-	-	-	X
55	MG	CA	4369	-	-	-	X
55	MG	CA	4373	-	-	-	X
55	MG	CA	4388	-	-	-	X
55	MG	CA	4394	-	-	-	X
55	MG	CA	4395	-	-	-	X
55	MG	CA	4404	-	-	-	X
55	MG	CB	212	-	-	-	X
55	MG	CB	237	-	-	-	X
55	MG	CB	257	-	-	-	X
55	MG	CB	262	-	-	-	X
55	MG	CD	306	-	-	-	X
55	MG	CF	303	-	-	-	X
55	MG	CQ	205	-	-	-	X
55	MG	CR	202	-	-	-	X
55	MG	CV	201	-	-	-	X
55	MG	CW	103	-	-	-	X
55	MG	CX	101	-	-	-	X
55	MG	DA	1602	-	-	-	X
55	MG	DA	1607	-	-	-	X
55	MG	DA	1611	-	-	-	X
55	MG	DA	1612	-	-	-	X
55	MG	DA	1619	-	-	-	X
55	MG	DA	1622	-	-	-	X
55	MG	DA	1626	-	-	-	X
55	MG	DA	1630	-	-	-	X
55	MG	DA	1638	-	-	-	X
55	MG	DA	1648	-	-	-	X
55	MG	DA	1649	-	-	-	X
55	MG	DA	1650	-	-	-	X
55	MG	DA	1651	-	-	-	X
55	MG	DA	1671	-	-	-	X
55	MG	DA	1672	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	DA	1673	-	-	-	X
55	MG	DA	1676	-	-	-	X
55	MG	DA	1677	-	-	-	X
55	MG	DA	1678	-	-	-	X
55	MG	DA	1681	-	-	-	X
55	MG	DA	1682	-	-	-	X
55	MG	DA	1684	-	-	-	X
55	MG	DA	1690	-	-	-	X
55	MG	DA	1705	-	-	-	X
55	MG	DA	1717	-	-	-	X
55	MG	DA	1748	-	-	-	X
55	MG	DA	1752	-	-	-	X
55	MG	DA	1761	-	-	-	X
55	MG	DA	1763	-	-	-	X
55	MG	DA	1794	-	-	-	X
55	MG	DA	1795	-	-	-	X
55	MG	DA	1811	-	-	-	X
55	MG	DA	1818	-	-	-	X
55	MG	DA	1826	-	-	-	X
55	MG	DA	1841	-	-	-	X
55	MG	DA	1845	-	-	-	X
55	MG	DA	1863	-	-	-	X
55	MG	DA	1865	-	-	-	X
55	MG	DA	1872	-	-	-	X
55	MG	DA	1896	-	-	-	X
55	MG	DA	1898	-	-	-	X
55	MG	DA	1901	-	-	-	X
55	MG	DA	1907	-	-	-	X
55	MG	DA	1910	-	-	-	X
55	MG	DA	1913	-	-	-	X
55	MG	DA	1916	-	-	-	X
55	MG	DA	1921	-	-	-	X
55	MG	DA	1924	-	-	-	X
55	MG	DA	1928	-	-	-	X
55	MG	DA	1932	-	-	-	X
55	MG	DA	1933	-	-	-	X
55	MG	DA	1935	-	-	-	X
55	MG	DA	1937	-	-	-	X
55	MG	DA	1939	-	-	-	X
55	MG	DA	1949	-	-	-	X
55	MG	DA	1951	-	-	-	X
55	MG	DA	1952	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
55	MG	DA	1967	-	-	-	X
55	MG	DA	1973	-	-	-	X
55	MG	DA	1991	-	-	-	X
55	MG	DA	1995	-	-	-	X
55	MG	DA	1999	-	-	-	X
55	MG	DA	2028	-	-	-	X
55	MG	DA	2037	-	-	-	X
55	MG	DA	2051	-	-	-	X
55	MG	DA	2055	-	-	-	X
55	MG	DA	2066	-	-	-	X
55	MG	DA	2067	-	-	-	X
55	MG	DA	2069	-	-	-	X
55	MG	DA	2083	-	-	-	X
55	MG	DA	2087	-	-	-	X
55	MG	DA	2099	-	-	-	X
55	MG	DA	2117	-	-	-	X
55	MG	DA	2121	-	-	-	X
55	MG	DA	2123	-	-	-	X
55	MG	DA	2125	-	-	-	X
55	MG	DA	2127	-	-	-	X
55	MG	DA	2144	-	-	-	X
55	MG	DA	2150	-	-	-	X
55	MG	DA	2153	-	-	-	X
55	MG	DA	2169	-	-	-	X
55	MG	DA	2172	-	-	-	X
55	MG	DA	2180	-	-	-	X
55	MG	DA	2181	-	-	-	X
55	MG	DA	2184	-	-	-	X
55	MG	DA	2191	-	-	-	X
55	MG	DA	2192	-	-	-	X
55	MG	DA	2195	-	-	-	X
55	MG	DA	2198	-	-	-	X
55	MG	DA	2200	-	-	-	X
55	MG	DH	202	-	-	-	X
55	MG	DI	201	-	-	-	X
55	MG	DL	202	-	-	-	X
55	MG	DO	102	-	-	-	X

## 2 Entry composition [i](#)

There are 56 unique types of molecules in this entry. The entry contains 293113 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 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	2832	Total	C	N	O	P	0	0	0
			60991	27143	11396	19620	2832			
1	CA	2832	Total	C	N	O	P	0	0	0
			60991	27143	11396	19620	2832			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AA	276	C	A	CONFLICT	GB AE017221.1
AA	277	A	C	CONFLICT	GB AE017221.1
AA	1142	U	C	CONFLICT	GB AE017221.1
AA	2825	U	G	CONFLICT	GB AE017221.1
CA	276	C	A	CONFLICT	GB AE017221.1
CA	277	A	C	CONFLICT	GB AE017221.1
CA	1142	U	C	CONFLICT	GB AE017221.1
CA	2825	U	G	CONFLICT	GB AE017221.1

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	119	Total	C	N	O	P	0	0	0
			2555	1136	471	829	119			
2	CB	119	Total	C	N	O	P	0	0	0
			2555	1136	471	829	119			

- Molecule 3 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AD	271	Total	C	N	O	S	0	0	0
			2105	1329	416	357	3			
3	CD	271	Total	C	N	O	S	0	0	0
			2105	1329	416	357	3			

- Molecule 4 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AE	204	Total	C	N	O	S	0	0	0
			1564	988	299	271	6			
4	CE	204	Total	C	N	O	S	0	0	0
			1564	988	299	271	6			

- Molecule 5 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AF	202	Total	C	N	O	S	0	0	0
			1587	1011	297	276	3			
5	CF	202	Total	C	N	O	S	0	0	0
			1587	1011	297	276	3			

- Molecule 6 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AG	181	Total	C	N	O	S	0	0	0
			1475	943	268	260	4			
6	CG	181	Total	C	N	O	S	0	0	0
			1475	943	268	260	4			

- Molecule 7 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AH	159	Total	C	N	O	S	0	0	0
			1223	773	228	221	1			
7	CH	159	Total	C	N	O	S	0	0	0
			1223	773	228	221	1			

- Molecule 8 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AI	145	Total	C	N	O	S	0	0	0
			1133	724	200	208	1			
8	CI	145	Total	C	N	O	S	0	0	0
			1133	724	200	208	1			

- Molecule 9 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AJ	137	Total	C	N	O	S	0	0	0
			1097	707	205	182	3			
9	CJ	137	Total	C	N	O	S	0	0	0
			1097	707	205	182	3			

- Molecule 10 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AK	122	Total	C	N	O	S	0	0	0
			932	587	171	170	4			
10	CK	122	Total	C	N	O	S	0	0	0
			932	587	171	170	4			

- Molecule 11 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AL	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			
11	CL	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			

- Molecule 12 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AM	134	Total	C	N	O	S	0	0	0
			1065	680	201	179	5			
12	CM	134	Total	C	N	O	S	0	0	0
			1065	680	201	179	5			

- Molecule 13 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AN	117	Total	C	N	O		0	0	0
			960	599	202	159				
13	CN	117	Total	C	N	O		0	0	0
			960	599	202	159				

- Molecule 14 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AO	98	Total	C	N	O		0	0	0
			771	486	154	131				

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	CO	98	Total	C	N	O	0	0	0
			771	486	154	131			

- Molecule 15 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AP	137	Total	C	N	O	S	0	0	0
			1144	713	234	196	1			
15	CP	137	Total	C	N	O	S	0	0	0
			1144	713	234	196	1			

- Molecule 16 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AQ	117	Total	C	N	O	S	0	0	0
			964	610	202	151	1			
16	CQ	117	Total	C	N	O	S	0	0	0
			964	610	202	151	1			

- Molecule 17 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AR	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
17	CR	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 18 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AS	112	Total	C	N	O	S	0	0	0
			891	560	175	154	2			
18	CS	112	Total	C	N	O	S	0	0	0
			891	560	175	154	2			

- Molecule 19 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
19	AT	92	Total	C	N	O	0	0	0
			726	471	131	124			
19	CT	92	Total	C	N	O	0	0	0
			726	471	131	124			

- Molecule 20 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AU	100	Total	C	N	O	S	0	0	0
			776	500	148	124	4			
20	CU	100	Total	C	N	O	S	0	0	0
			776	500	148	124	4			

- Molecule 21 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AV	187	Total	C	N	O	S	0	0	0
			1483	945	264	272	2			
21	CV	187	Total	C	N	O	S	0	0	0
			1483	945	264	272	2			

- Molecule 22 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AW	76	Total	C	N	O	S	0	0	0
			605	376	126	102	1			
22	CW	76	Total	C	N	O	S	0	0	0
			605	376	126	102	1			

- Molecule 23 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
23	AX	88	Total	C	N	O	0	0	0
			695	435	141	119			
23	CX	88	Total	C	N	O	0	0	0
			695	435	141	119			

- Molecule 24 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AY	62	Total	C	N	O	S	0	0	0
			521	325	102	92	2			
24	CY	62	Total	C	N	O	S	0	0	0
			521	325	102	92	2			

- Molecule 25 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	AZ	59	Total	C	N	O	S	0	0	0
			468	298	90	79	1			
25	CZ	59	Total	C	N	O	S	0	0	0
			468	298	90	79	1			

- Molecule 26 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	A1	30	Total	C	N	O	S	0	0	0
			226	142	36	44	4			
26	C1	30	Total	C	N	O	S	0	0	0
			226	142	36	44	4			

- Molecule 27 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	A2	52	Total	C	N	O	S	0	0	0
			405	255	79	66	5			
27	C2	52	Total	C	N	O	S	0	0	0
			405	255	79	66	5			

- Molecule 28 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	A3	44	Total	C	N	O	S	0	0	0
			381	235	77	65	4			
28	C3	44	Total	C	N	O	S	0	0	0
			381	235	77	65	4			

- Molecule 29 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	A4	48	Total	C	N	O	S	0	0	0
			419	257	104	56	2			
29	C4	48	Total	C	N	O	S	0	0	0
			419	257	104	56	2			

- Molecule 30 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	A5	63	Total	C	N	O	S	0	0	0
			508	326	101	79	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	C5	63	Total	C	N	O	S	0	0	0
			508	326	101	79	2			

- Molecule 31 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BA	1504	Total	C	N	O	P	0	0	0
			32336	14391	5994	10447	1504			
31	DA	1504	Total	C	N	O	P	0	0	0
			32336	14391	5994	10447	1504			

- Molecule 32 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			
32	DB	234	Total	C	N	O	S	0	0	0
			1901	1213	341	342	5			

- Molecule 33 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			
33	DC	206	Total	C	N	O	S	0	0	0
			1613	1016	314	282	1			

- Molecule 34 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
34	DD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

- Molecule 35 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BE	151	Total	C	N	O	S	0	0	0
			1156	729	218	205	4			
35	DE	151	Total	C	N	O	S	0	0	0
			1156	729	218	205	4			

- Molecule 36 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
36	DF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 37 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
37	DG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 38 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
38	DH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 39 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	BI	127	Total	C	N	O	0	0	0
			1011	639	198	174			
39	DI	127	Total	C	N	O	0	0	0
			1011	639	198	174			

- Molecule 40 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			
40	DJ	98	Total	C	N	O	S	0	0	0
			795	499	156	139	1			

- Molecule 41 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BK	114	Total	C	N	O	S	0	0	0
			843	522	159	159	3			
41	DK	114	Total	C	N	O	S	0	0	0
			843	522	159	159	3			

- Molecule 42 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BL	122	Total	C	N	O	S	0	0	0
			957	603	193	160	1			
42	DL	122	Total	C	N	O	S	0	0	0
			957	603	193	160	1			

- Molecule 43 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BM	117	Total	C	N	O	S	0	0	0
			934	577	192	163	2			
43	DM	117	Total	C	N	O	S	0	0	0
			934	577	192	163	2			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BM	118	ALA	-	EXPRESSION TAG	UNP P62655

- Molecule 44 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			
44	DN	60	Total	C	N	O	S	0	0	0
			492	312	104	72	4			

- Molecule 45 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
45	DO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

- Molecule 46 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			
46	DP	83	Total	C	N	O	S	0	0	0
			701	443	139	118	1			

- Molecule 47 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BQ	99	Total	C	N	O	S	0	0	0
			824	528	152	142	2			
47	DQ	99	Total	C	N	O	S	0	0	0
			824	528	152	142	2			

- Molecule 48 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	BR	70	Total	C	N	O		0	0	0
			574	367	112	95				
48	DR	70	Total	C	N	O		0	0	0
			574	367	112	95				

- Molecule 49 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BS	78	Total	C	N	O	S	0	0	0
			630	403	114	111	2			
49	DS	78	Total	C	N	O	S	0	0	0
			630	403	114	111	2			

- Molecule 50 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			
50	DT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			

- Molecule 51 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BU	24	Total	C	N	O		0	0	0
			209	128	50	31				

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	DU	24	Total	C	N	O	0	0	0
			209	128	50	31			

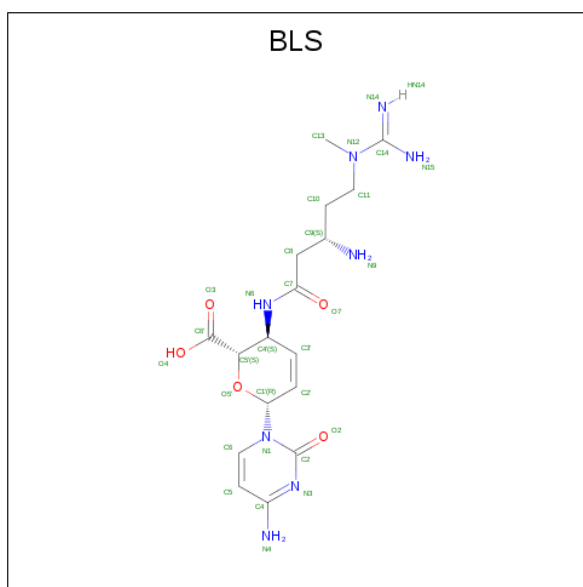
- Molecule 52 is a RNA chain called tRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BV	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			
52	BW	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			
52	DV	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			
52	DW	77	Total	C	N	O	P	0	0	0
			1640	732	297	535	76			

- Molecule 53 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BX	5	Total	C	N	O	P	0	0	0
			109	49	22	33	5			
53	DX	5	Total	C	N	O	P	0	0	0
			109	49	22	33	5			

- Molecule 54 is BLASTICIDIN S (three-letter code: BLS) (formula: C<sub>17</sub>H<sub>26</sub>N<sub>8</sub>O<sub>5</sub>).





Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
54	AA	1	Total	C	N	O	0	0
			30	17	8	5		
54	CA	1	Total	C	N	O	0	0
			30	17	8	5		

- Molecule 55 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	AP	2	Total	Mg	0	0
			2	2		
55	DX	1	Total	Mg	0	0
			1	1		
55	BA	570	Total	Mg	0	0
			570	570		
55	AK	2	Total	Mg	0	0
			2	2		
55	DQ	1	Total	Mg	0	0
			1	1		
55	C5	3	Total	Mg	0	0
			3	3		
55	AB	50	Total	Mg	0	0
			50	50		
55	BL	2	Total	Mg	0	0
			2	2		
55	CV	4	Total	Mg	0	0
			4	4		
55	C3	2	Total	Mg	0	0
			2	2		
55	BE	5	Total	Mg	0	0
			5	5		
55	CR	2	Total	Mg	0	0
			2	2		
55	AN	4	Total	Mg	0	0
			4	4		
55	BP	1	Total	Mg	0	0
			1	1		
55	AX	6	Total	Mg	0	0
			6	6		
55	CN	3	Total	Mg	0	0
			3	3		
55	DR	2	Total	Mg	0	0
			2	2		
55	BI	2	Total	Mg	0	0
			2	2		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	AS	6	Total 6	Mg 6	0	0
55	CA	1504	Total 1504	Mg 1504	0	0
55	BB	2	Total 2	Mg 2	0	0
55	AJ	1	Total 1	Mg 1	0	0
55	BT	1	Total 1	Mg 1	0	0
55	C4	4	Total 4	Mg 4	0	0
55	AE	4	Total 4	Mg 4	0	0
55	DG	1	Total 1	Mg 1	0	0
55	CF	7	Total 7	Mg 7	0	0
55	DT	1	Total 1	Mg 1	0	0
55	DL	2	Total 2	Mg 2	0	0
55	AV	2	Total 2	Mg 2	0	0
55	CY	2	Total 2	Mg 2	0	0
55	AA	1296	Total 1296	Mg 1296	0	0
55	BQ	2	Total 2	Mg 2	0	0
55	CQ	5	Total 5	Mg 5	0	0
55	A5	2	Total 2	Mg 2	0	0
55	AR	5	Total 5	Mg 5	0	0
55	DV	24	Total 24	Mg 24	0	0
55	DM	1	Total 1	Mg 1	0	0
55	BC	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	AM	3	Total 3	Mg 3	0	0
55	BU	1	Total 1	Mg 1	0	0
55	DK	1	Total 1	Mg 1	0	0
55	AD	4	Total 4	Mg 4	0	0
55	DD	2	Total 2	Mg 2	0	0
55	CT	1	Total 1	Mg 1	0	0
55	DH	3	Total 3	Mg 3	0	0
55	CG	1	Total 1	Mg 1	0	0
55	BG	2	Total 2	Mg 2	0	0
55	DE	2	Total 2	Mg 2	0	0
55	CJ	2	Total 2	Mg 2	0	0
55	BR	1	Total 1	Mg 1	0	0
55	CP	1	Total 1	Mg 1	0	0
55	A4	5	Total 5	Mg 5	0	0
55	DA	604	Total 604	Mg 604	0	0
55	CE	6	Total 6	Mg 6	0	0
55	DW	22	Total 22	Mg 22	0	0
55	CK	2	Total 2	Mg 2	0	0
55	AL	2	Total 2	Mg 2	0	0
55	BV	30	Total 30	Mg 30	0	0
55	AG	2	Total 2	Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
55	BO	1	Total	Mg	0	0
			1	1		
55	CS	4	Total	Mg	0	0
			4	4		
55	CX	3	Total	Mg	0	0
			3	3		
55	DI	1	Total	Mg	0	0
			1	1		
55	CB	65	Total	Mg	0	0
			65	65		
55	DJ	1	Total	Mg	0	0
			1	1		
55	DO	2	Total	Mg	0	0
			2	2		
55	CO	1	Total	Mg	0	0
			1	1		
55	CI	1	Total	Mg	0	0
			1	1		
55	CW	4	Total	Mg	0	0
			4	4		
55	CD	6	Total	Mg	0	0
			6	6		
55	CL	7	Total	Mg	0	0
			7	7		
55	C2	2	Total	Mg	0	0
			2	2		
55	AO	1	Total	Mg	0	0
			1	1		
55	BW	19	Total	Mg	0	0
			19	19		
55	AY	1	Total	Mg	0	0
			1	1		
55	A3	3	Total	Mg	0	0
			3	3		
55	AF	6	Total	Mg	0	0
			6	6		
55	BH	1	Total	Mg	0	0
			1	1		

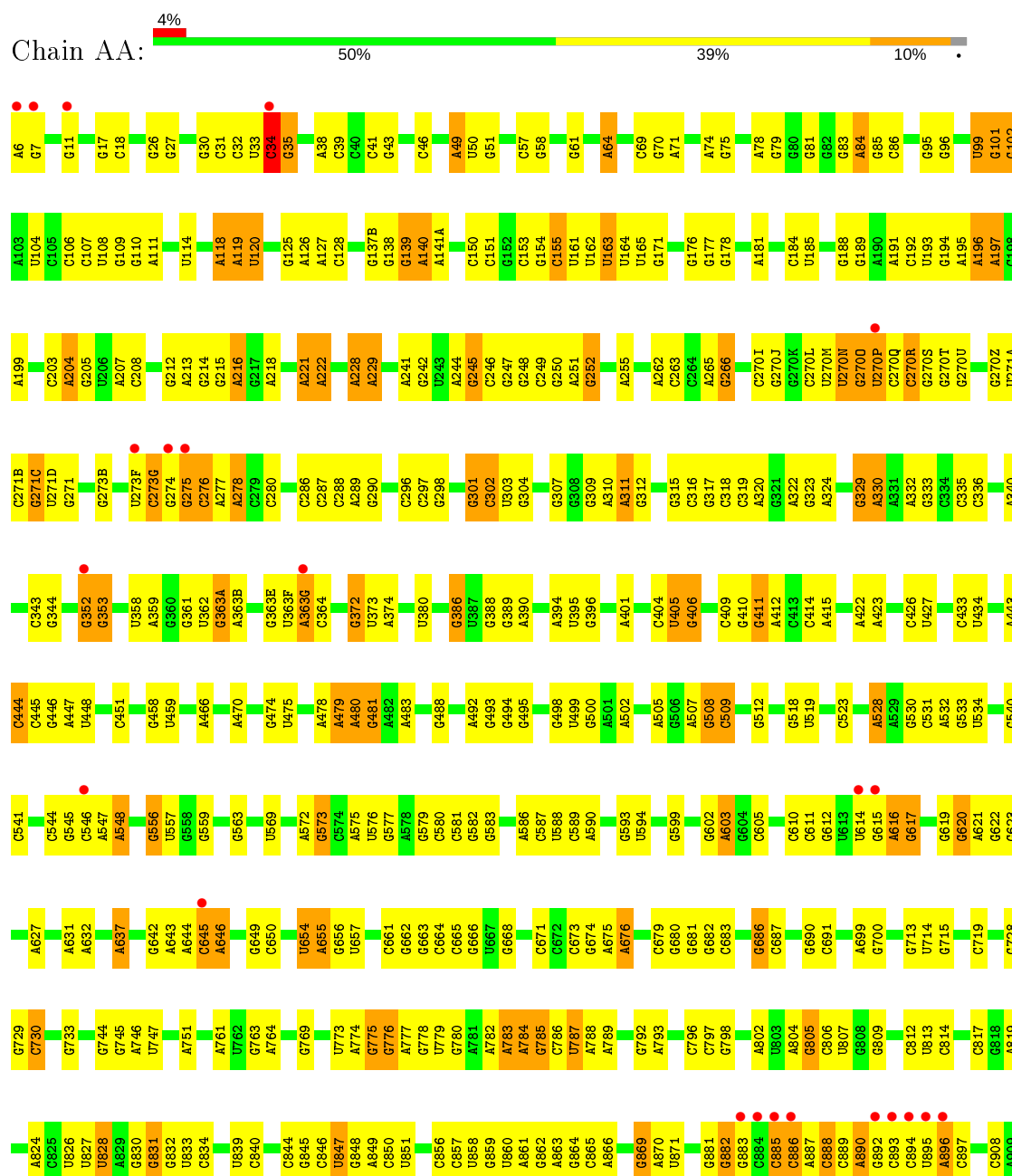
- Molecule 56 is ZINC ION (three-letter code: ZN) (formula: Zn).

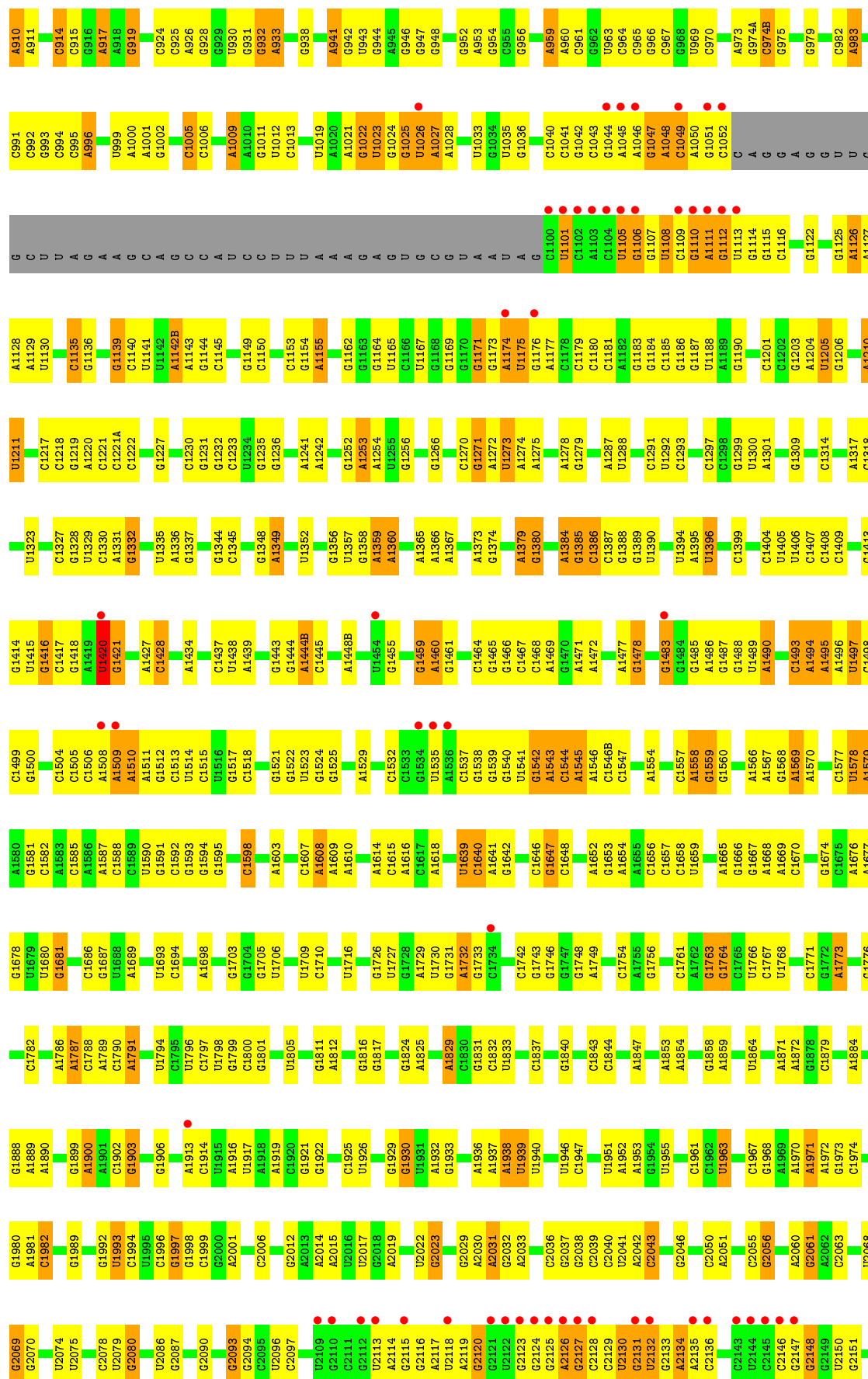
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	DN	1	Total 1	Zn 1	0	0
56	BD	1	Total 1	Zn 1	0	0
56	BN	1	Total 1	Zn 1	0	0
56	DD	1	Total 1	Zn 1	0	0

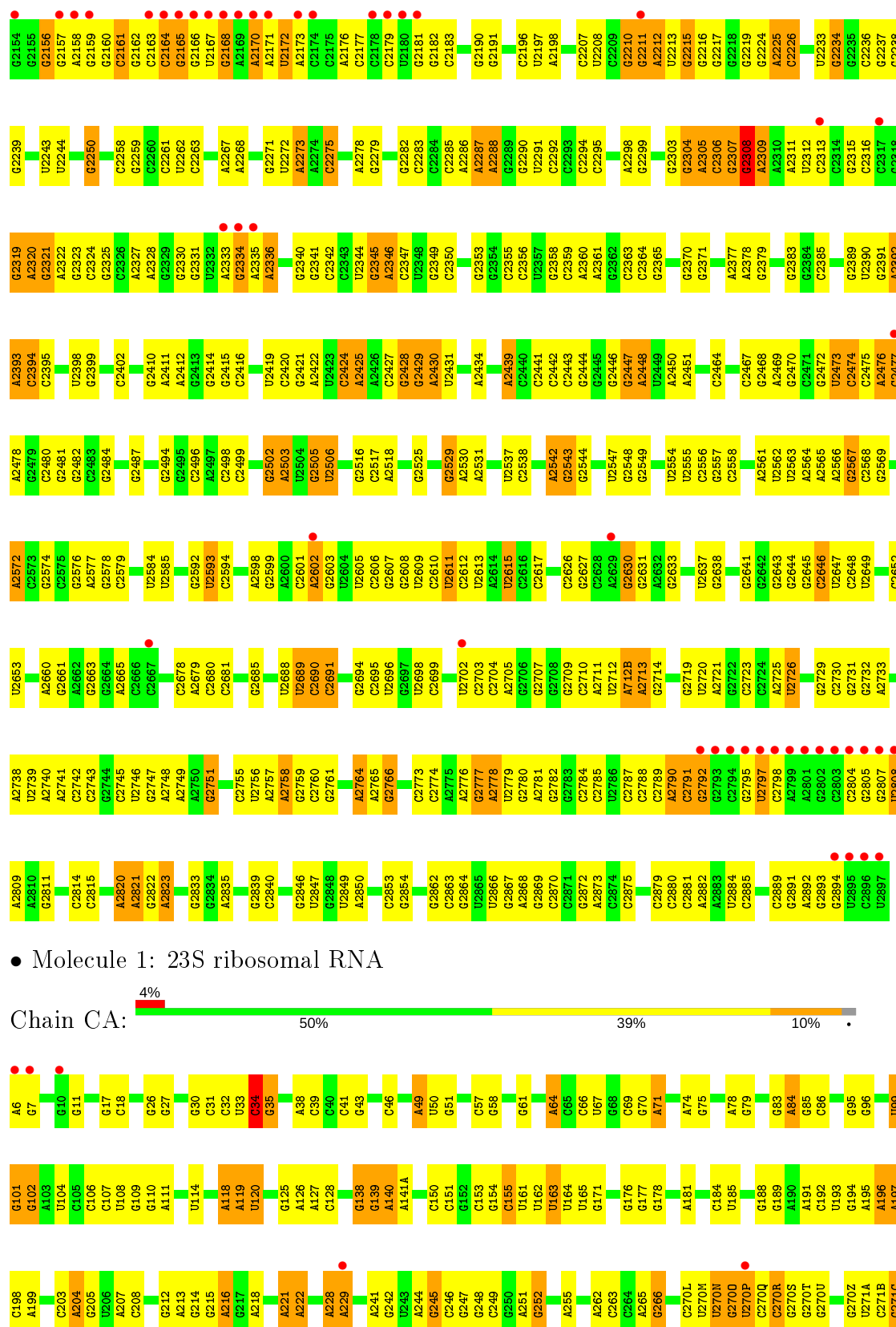
### 3 Residue-property plots

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

#### • Molecule 1: 23S ribosomal RNA



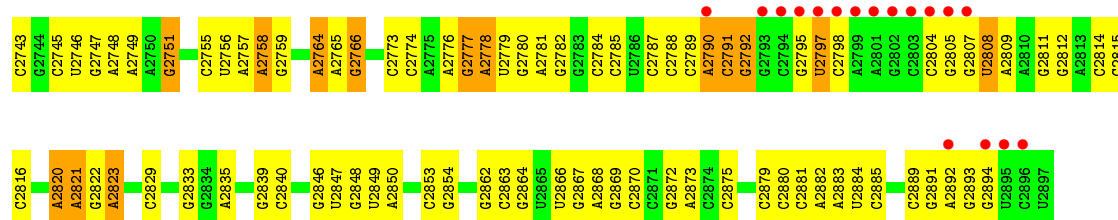




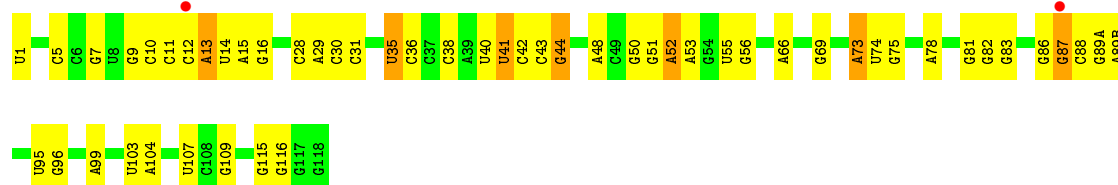


G1429	G1430	A1434	C1437	U1438	A1439	G1443	G1444	A1444B	C1445	A1448B	G1455	G1459	A1460	A1461	C1464	G1465	G1377	A1379	G1380	A1384	G1385	C1386	C1387	G1388	G1389	U1394	A1395	U1396	C1399	G1404	U1405	U1406	C1407	A1494	A1495	A1496	U1497	C1498	C1499	G1500	C1501	C1504	C1505	C1506	A1508	A1509	A1510					
G1227	C1230	G1231	G1232	C1233	U1234	G1235	G1236	G1252	A1253	G1256	G1266	U1267	A1268	A1269	C1270	G1271	A1272	U1273	A1274	A1275	A1278	G1279	A1287	U1288	C1291	U1292	C1293	C1297	G1298	G1299	U1300	A1301	G1309	C1314	A1317	C1318	U1323	C1327	G1328	U1329	C1330	A1331	G1332	A1333	A1334	A1335						
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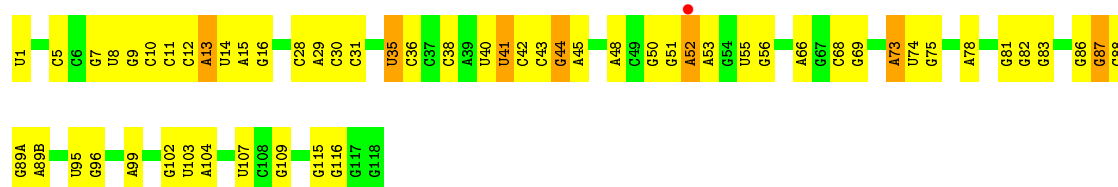
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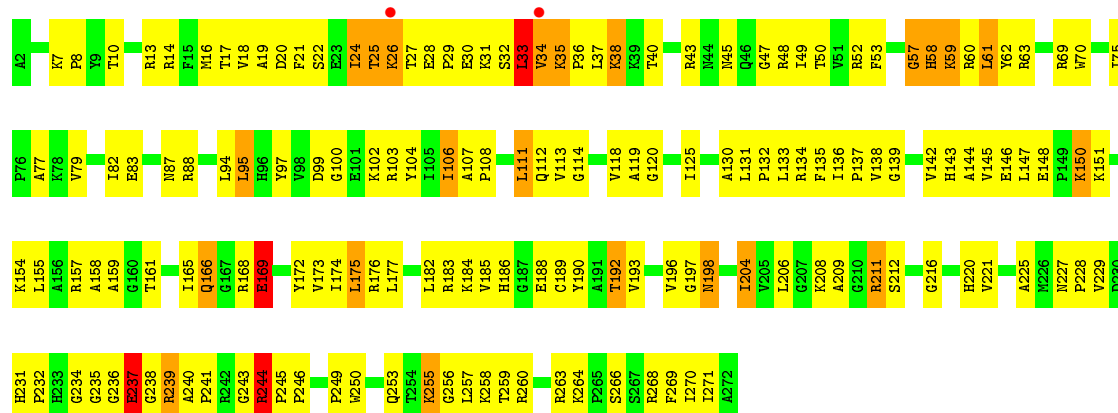
• Molecule 2: 5S ribosomal RNA



• Molecule 2: 5S ribosomal RNA

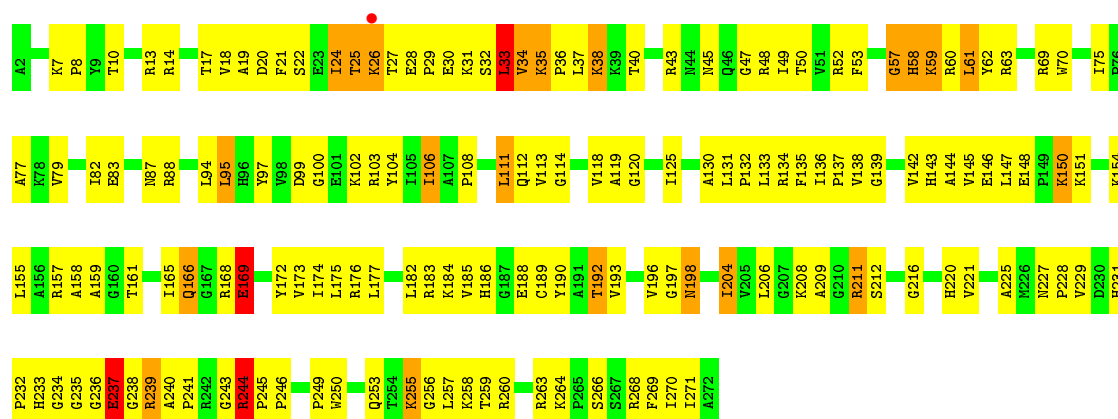


• Molecule 3: 50S ribosomal protein L2

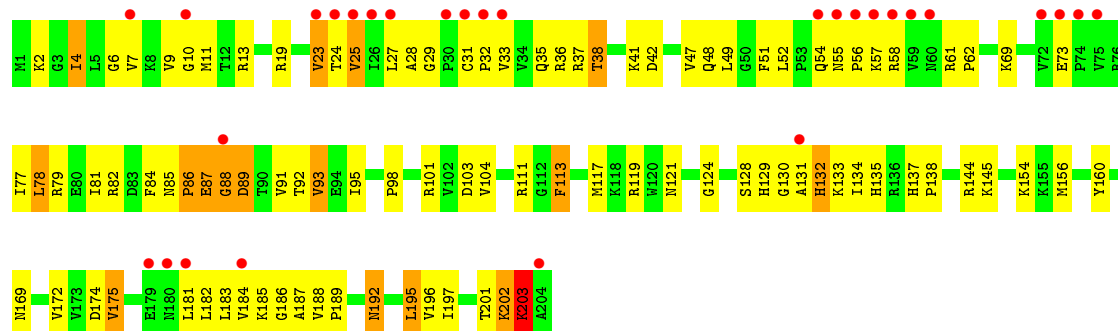


• Molecule 3: 50S ribosomal protein L2

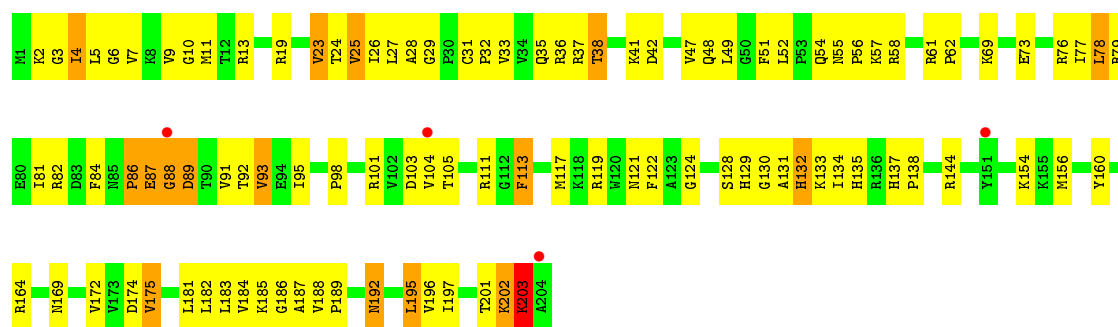




• Molecule 4: 50S ribosomal protein L3

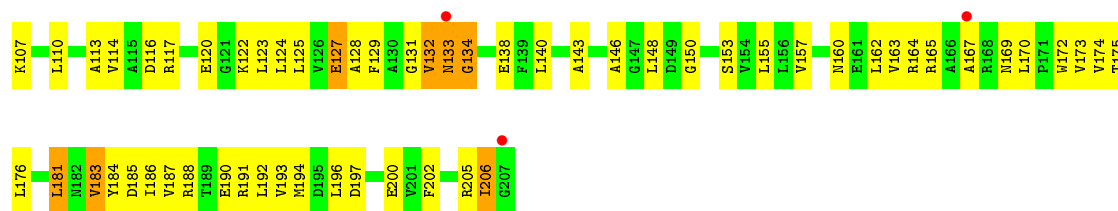


• Molecule 4: 50S ribosomal protein L3

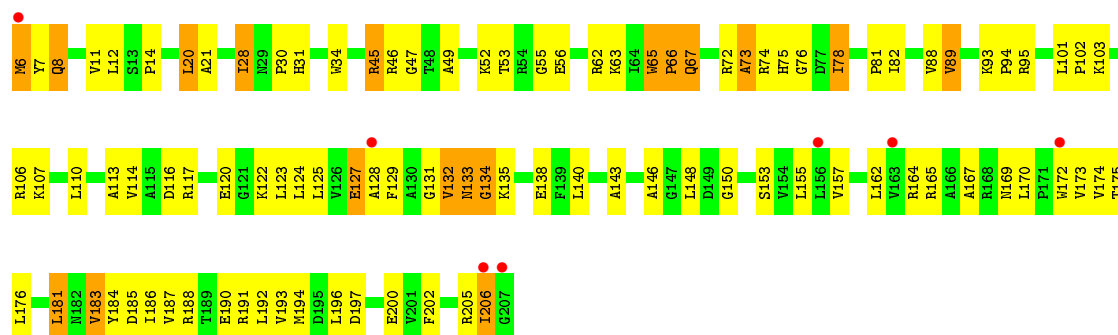


• Molecule 5: 50S ribosomal protein L4

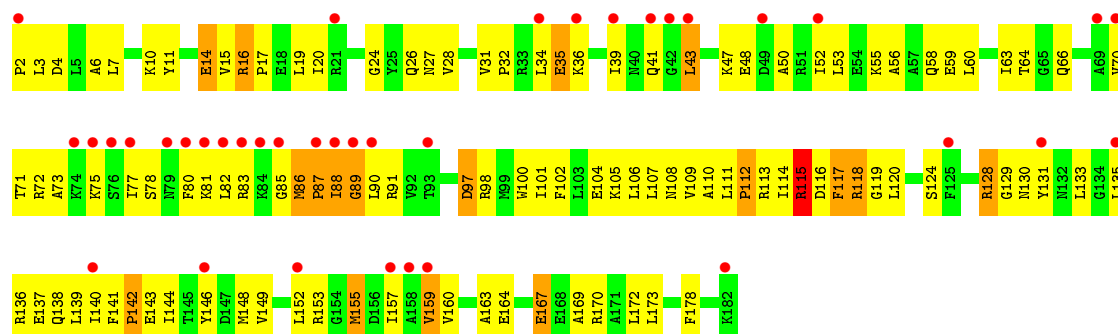




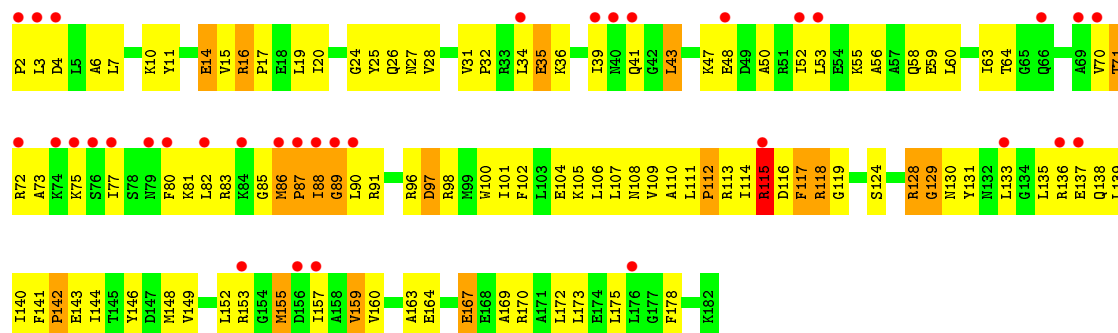
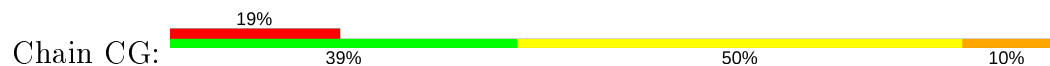
- Molecule 5: 50S ribosomal protein L4



- Molecule 6: 50S ribosomal protein L5

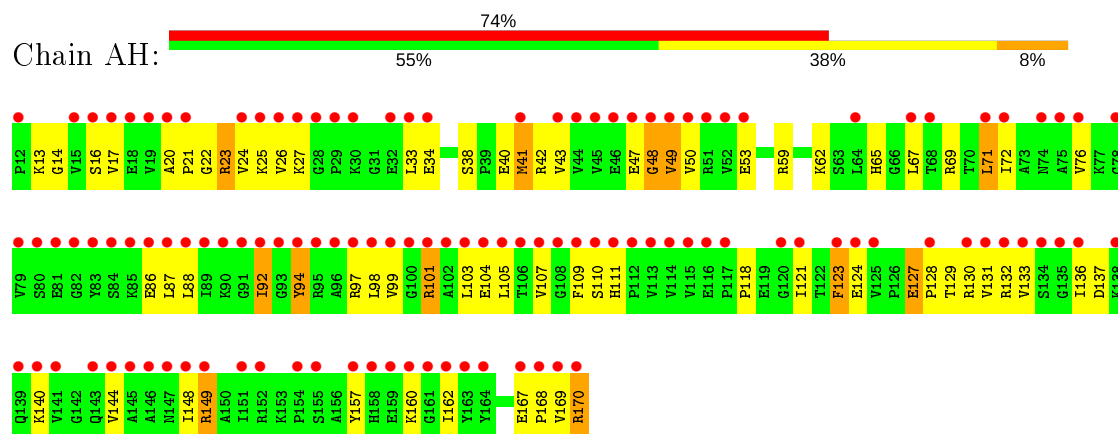


- Molecule 6: 50S ribosomal protein L5



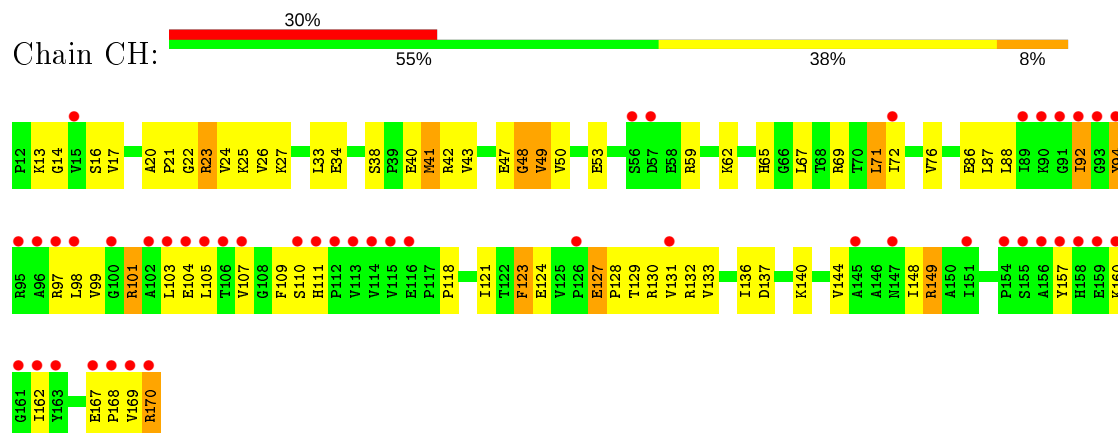
- Molecule 7: 50S ribosomal protein L6

Chain AH:



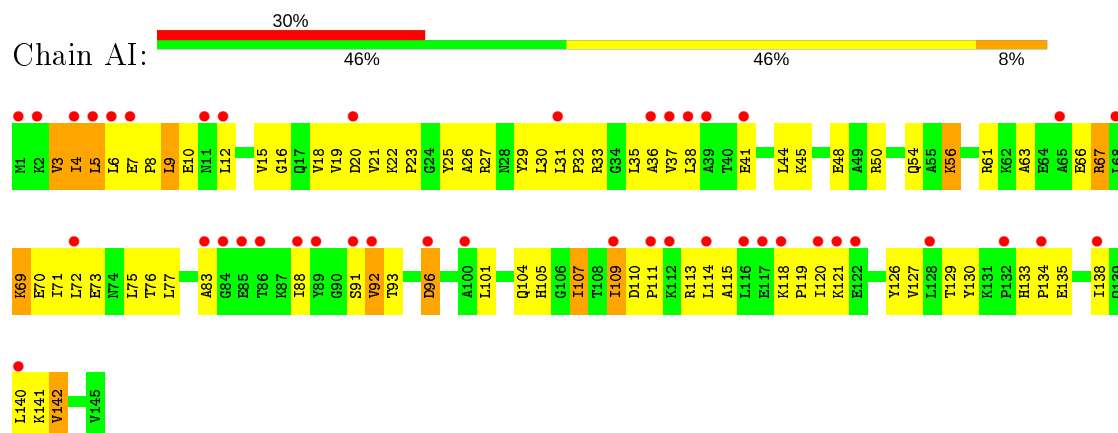
- Molecule 7: 50S ribosomal protein L6

Chain CH:



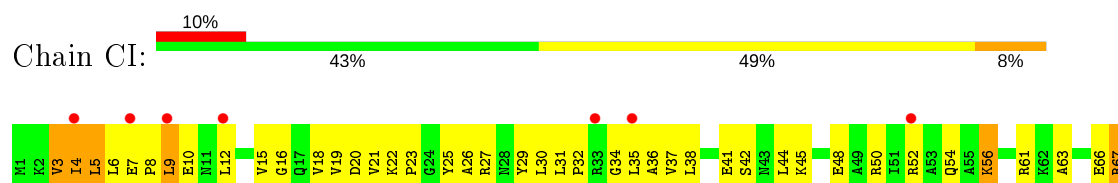
- Molecule 8: 50S ribosomal protein L9

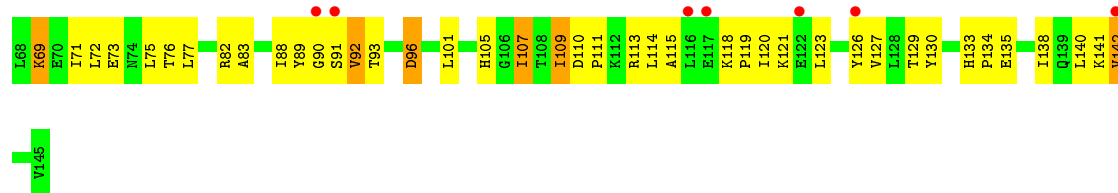
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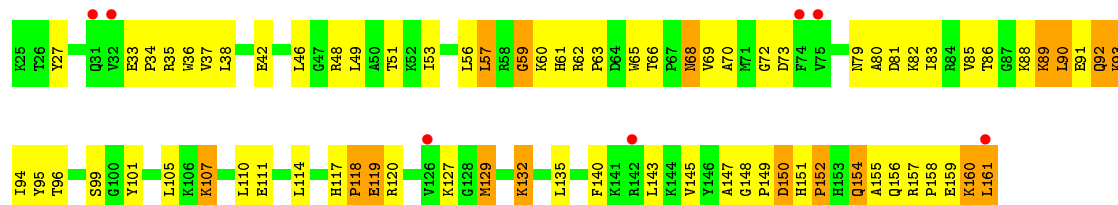
- Molecule 8: 50S ribosomal protein L9

Chain CI:

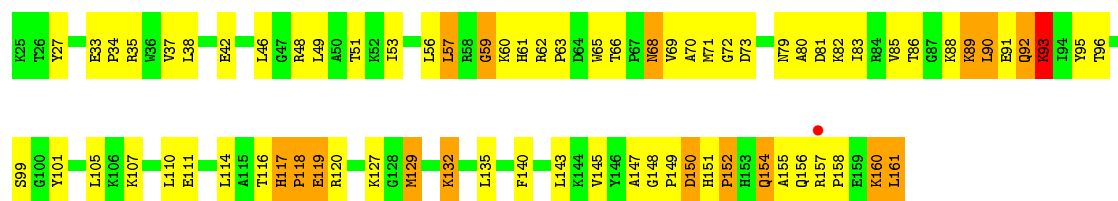




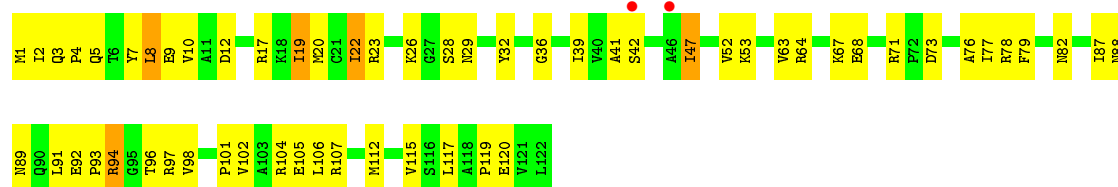
- Molecule 9: 50S ribosomal protein L13



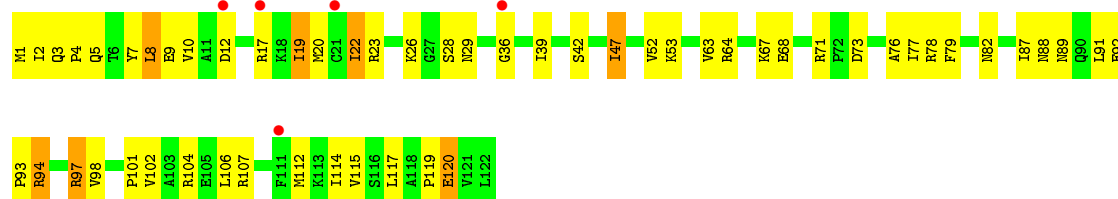
- Molecule 9: 50S ribosomal protein L13



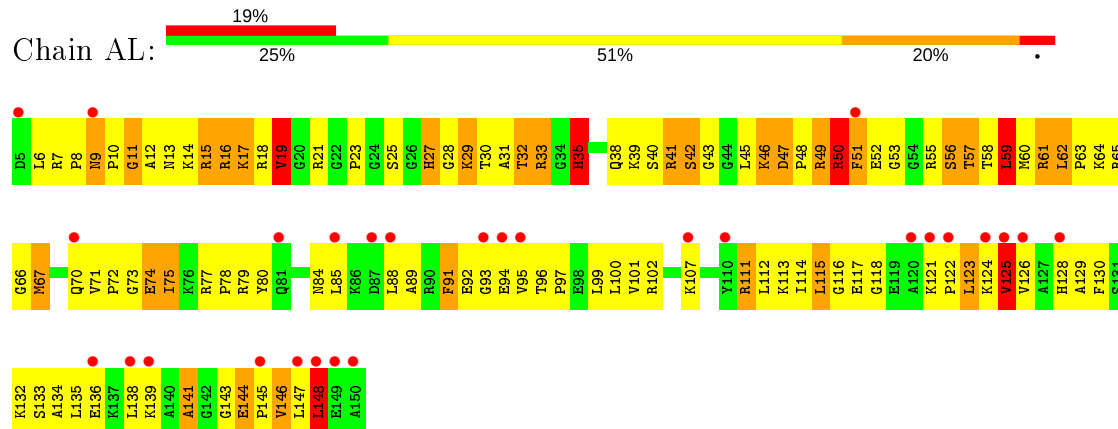
- Molecule 10: 50S ribosomal protein L14



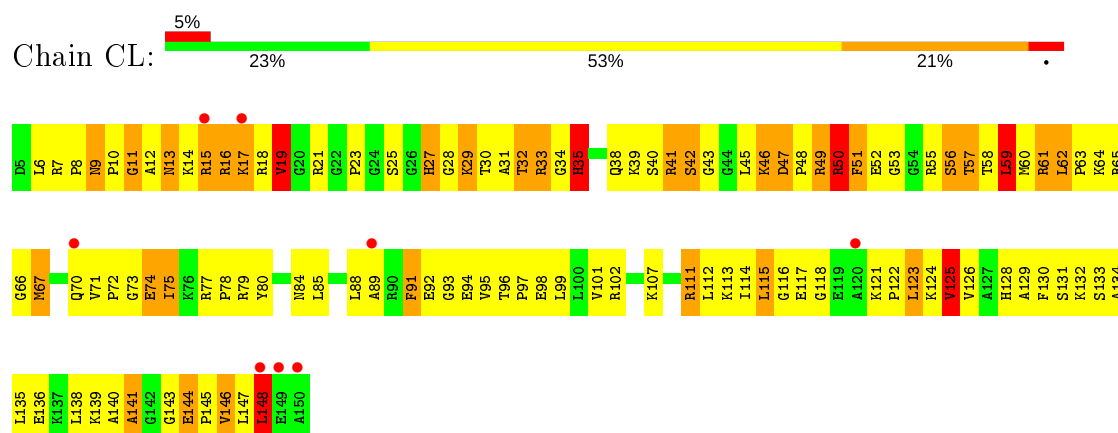
- Molecule 10: 50S ribosomal protein L14



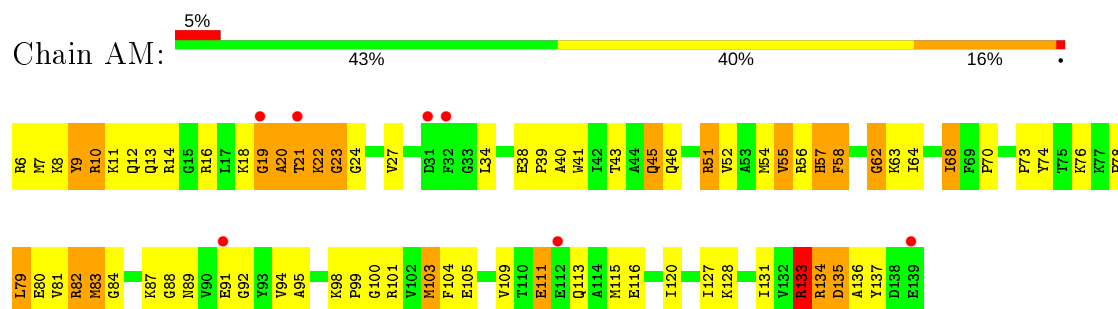
- Molecule 11: 50S ribosomal protein L15



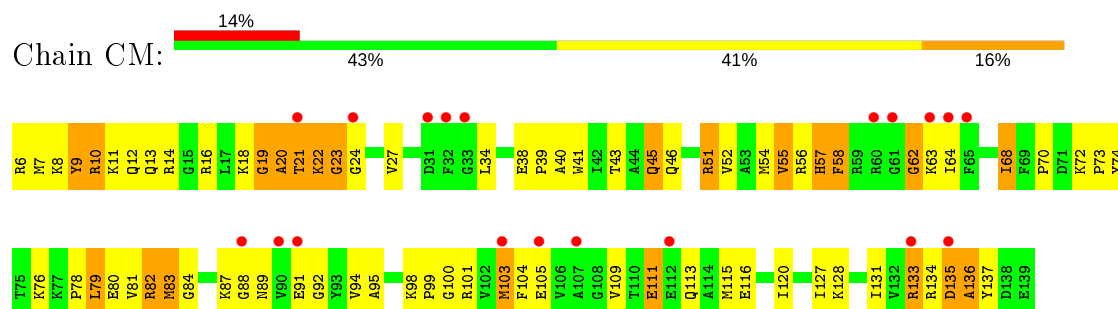
- Molecule 11: 50S ribosomal protein L15



- Molecule 12: 50S ribosomal protein L16

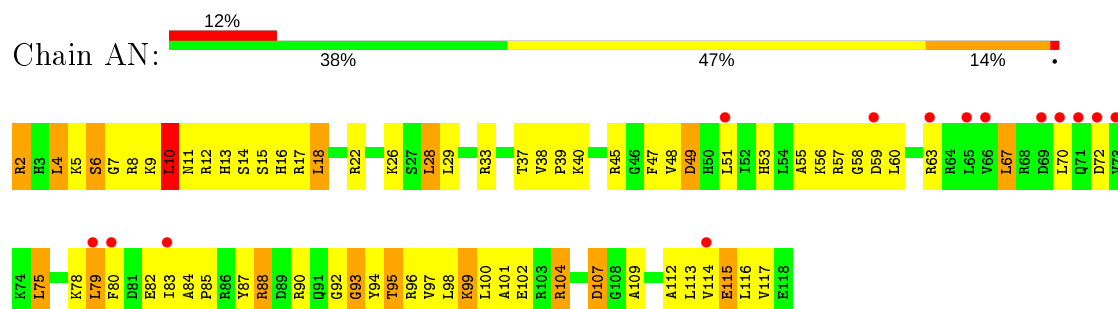


- Molecule 12: 50S ribosomal protein L16

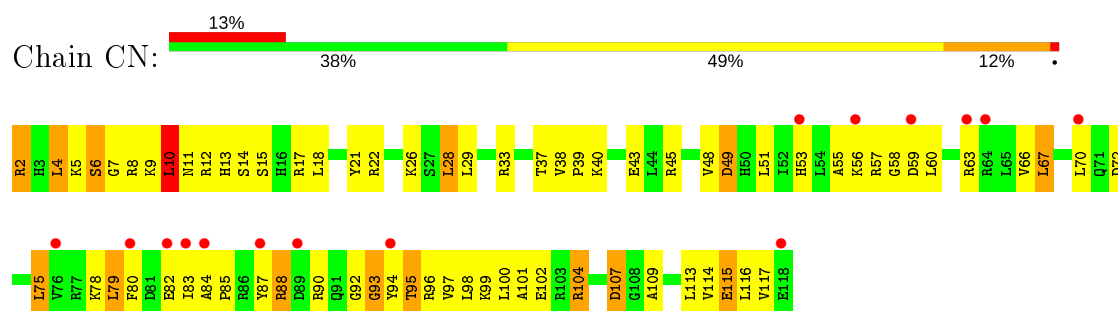




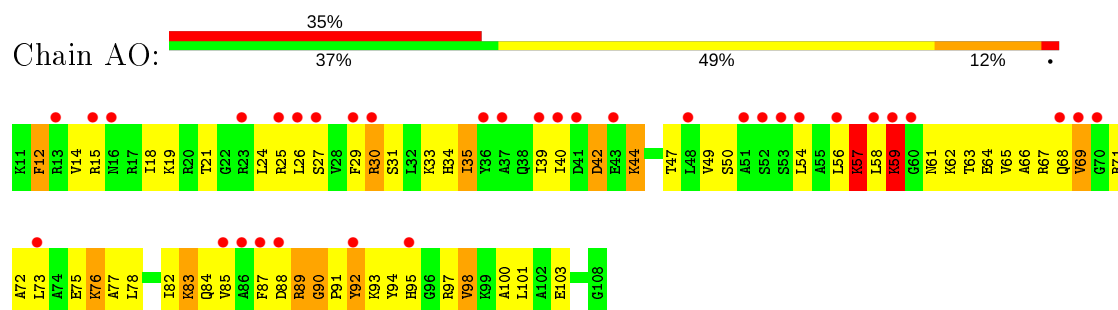
- Molecule 13: 50S ribosomal protein L17



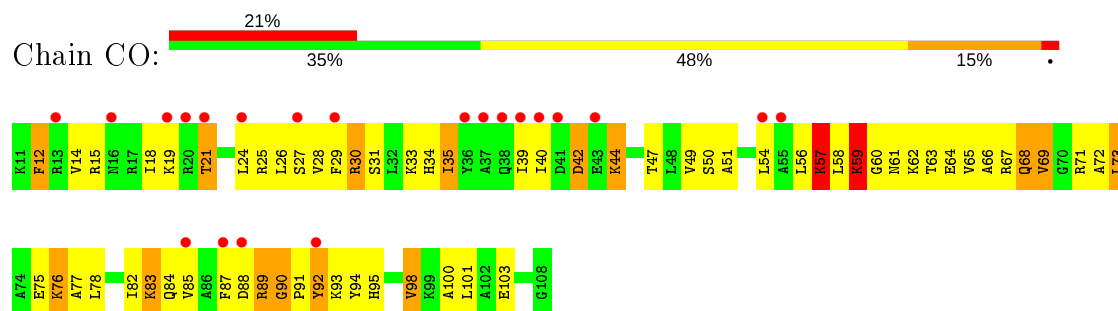
- Molecule 13: 50S ribosomal protein L17



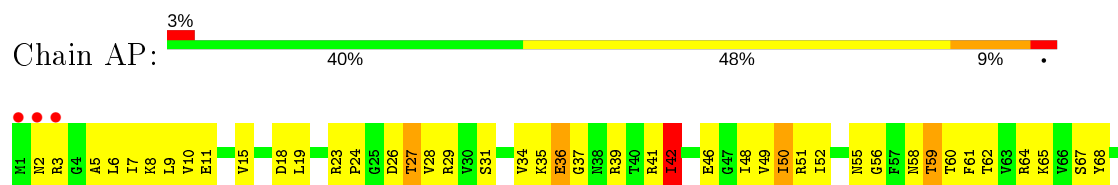
- Molecule 14: 50S ribosomal protein L18



- Molecule 14: 50S ribosomal protein L18

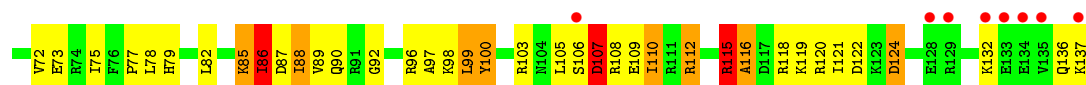
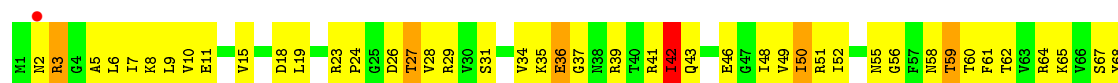


- Molecule 15: 50S ribosomal protein L19

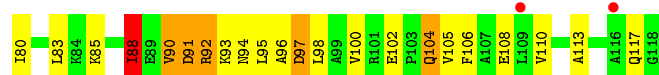




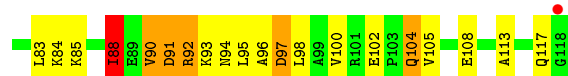
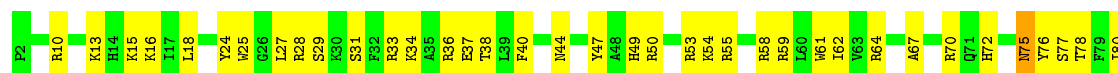
- Molecule 15: 50S ribosomal protein L19



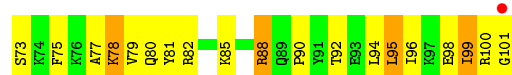
- Molecule 16: 50S ribosomal protein L20



- Molecule 16: 50S ribosomal protein L20

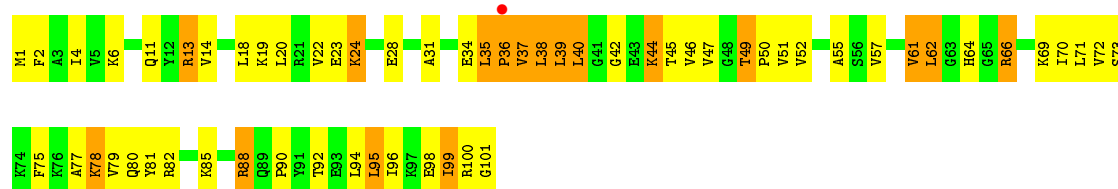


- Molecule 17: 50S ribosomal protein L21

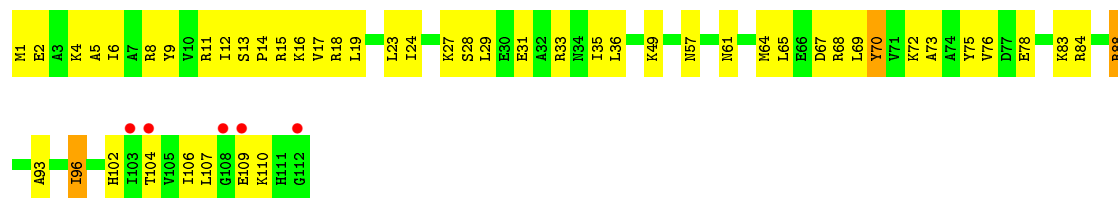


- Molecule 17: 50S ribosomal protein L21





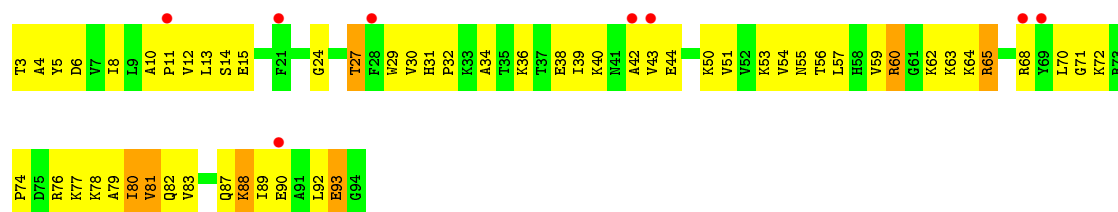
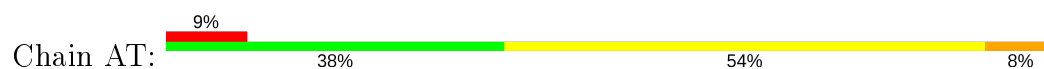
- Molecule 18: 50S ribosomal protein L22



- Molecule 18: 50S ribosomal protein L22



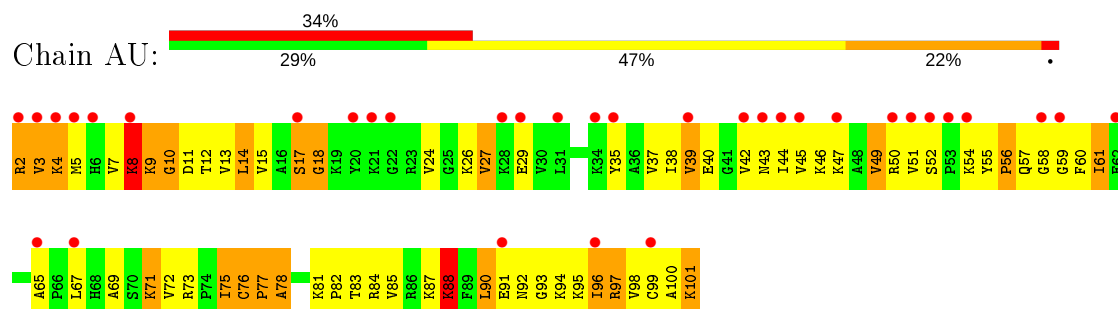
- Molecule 19: 50S ribosomal protein L23



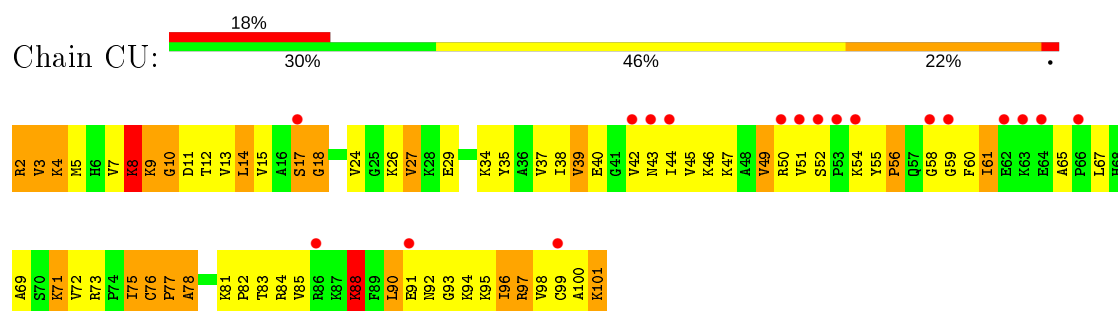
- Molecule 19: 50S ribosomal protein L23



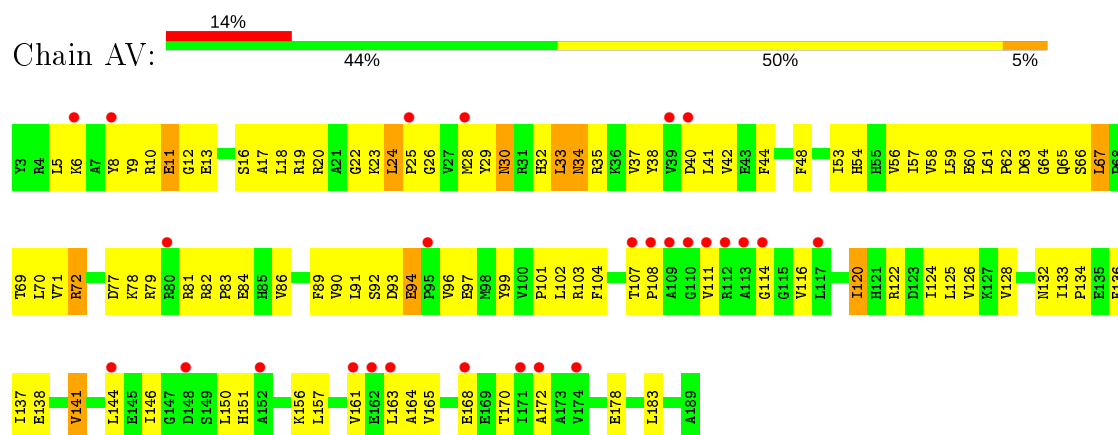
- Molecule 20: 50S ribosomal protein L24



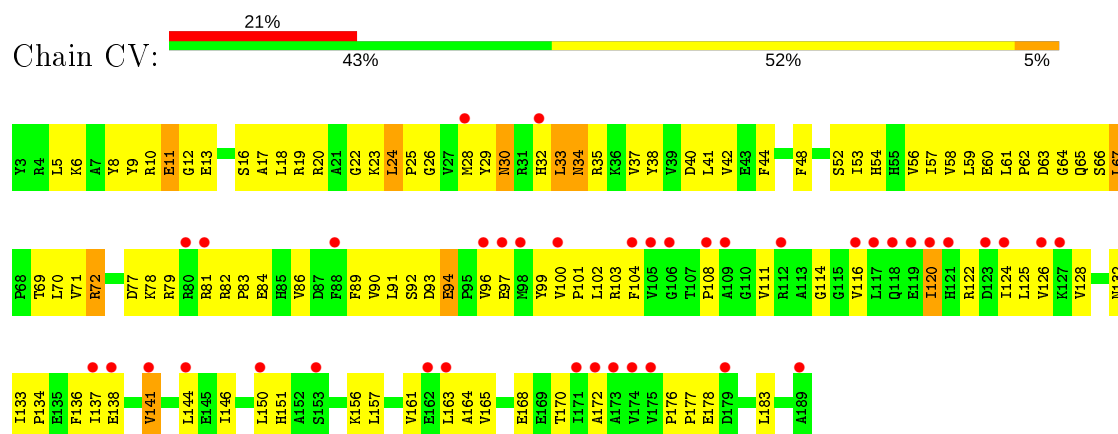
- Molecule 20: 50S ribosomal protein L24



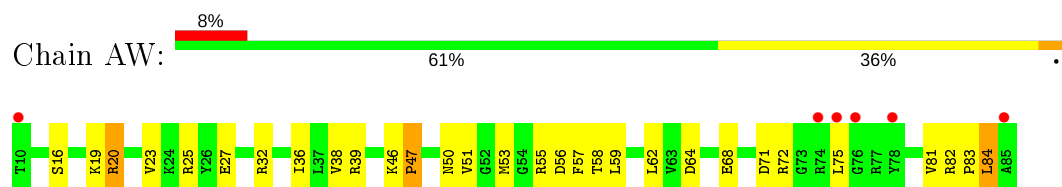
- Molecule 21: 50S ribosomal protein L25



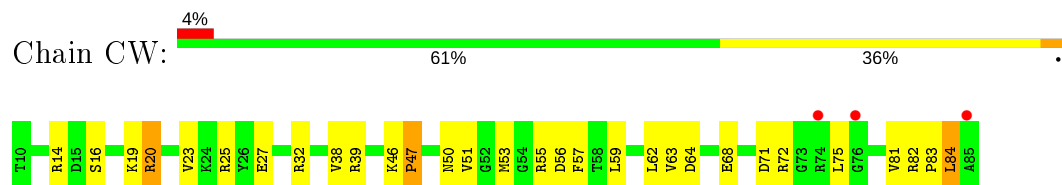
- Molecule 21: 50S ribosomal protein L25



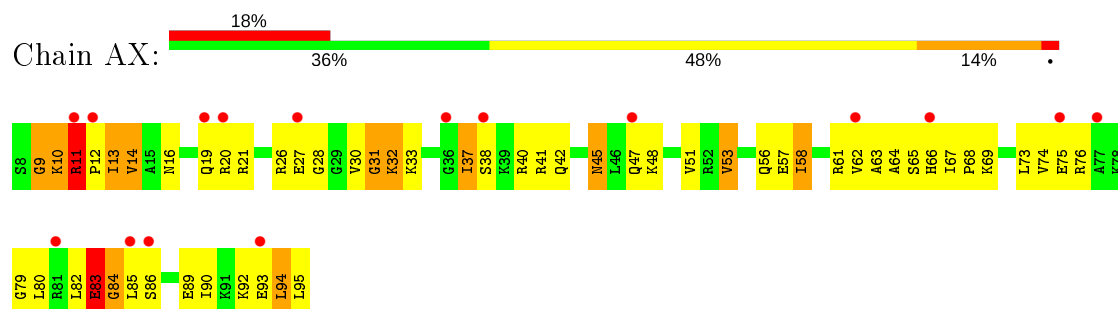
- Molecule 22: 50S ribosomal protein L27



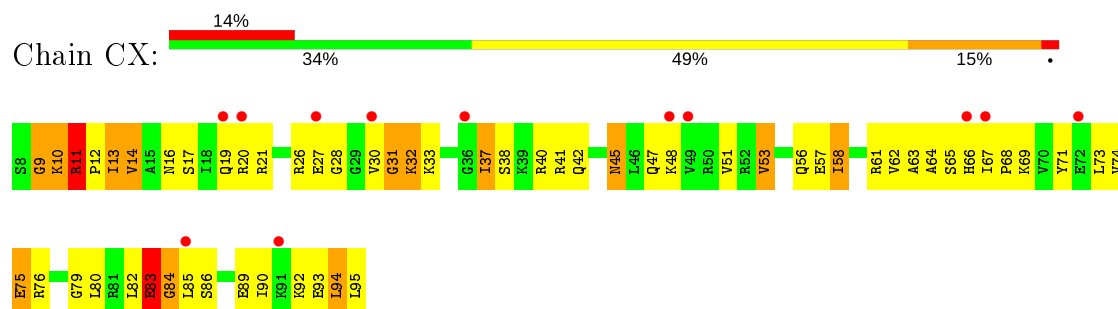
- Molecule 22: 50S ribosomal protein L27



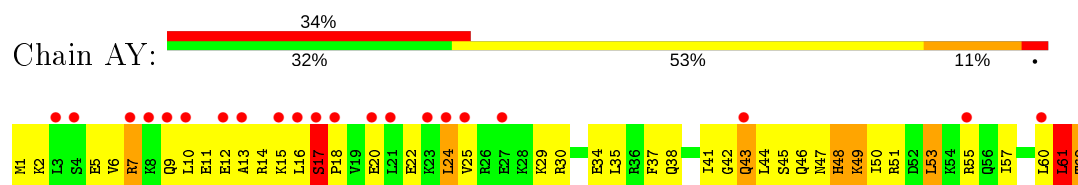
- Molecule 23: 50S ribosomal protein L28



- Molecule 23: 50S ribosomal protein L28



- Molecule 24: 50S ribosomal protein L29

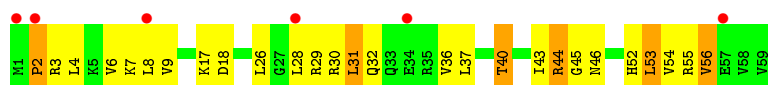


- Molecule 24: 50S ribosomal protein L29

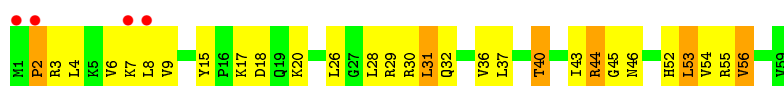




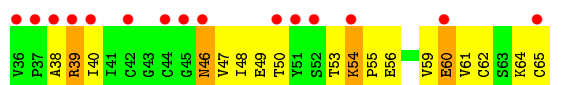
- Molecule 25: 50S ribosomal protein L30



- Molecule 25: 50S ribosomal protein L30



- Molecule 26: 50S ribosomal protein L31



- Molecule 26: 50S ribosomal protein L31



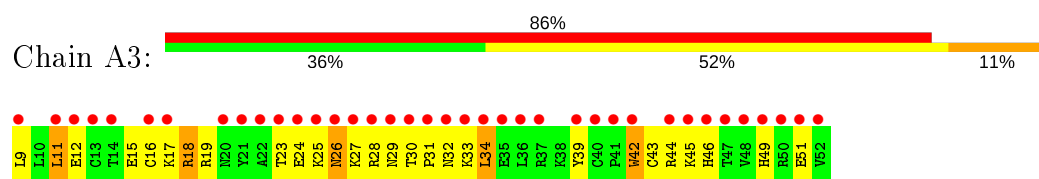
- Molecule 27: 50S ribosomal protein L32



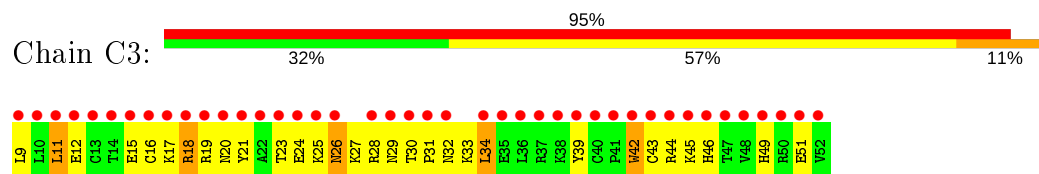
- Molecule 27: 50S ribosomal protein L32



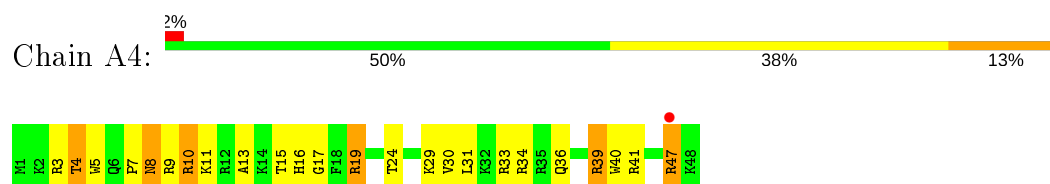
- Molecule 28: 50S ribosomal protein L33



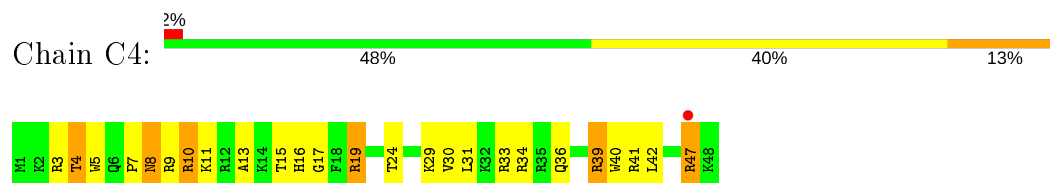
- Molecule 28: 50S ribosomal protein L33



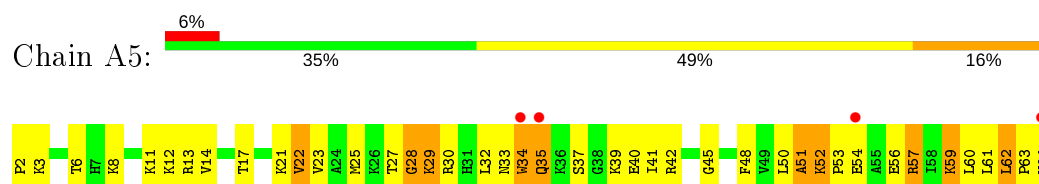
- Molecule 29: 50S ribosomal protein L34



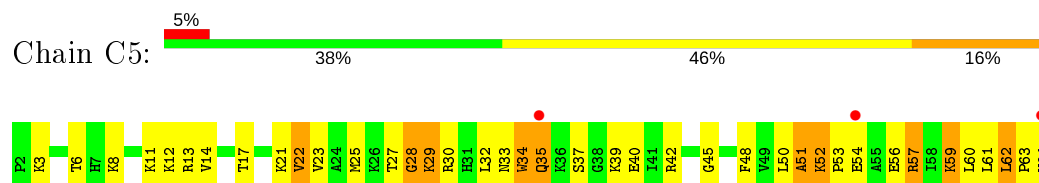
- Molecule 29: 50S ribosomal protein L34



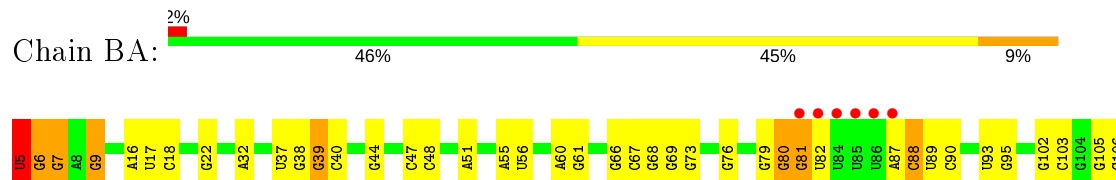
- Molecule 30: 50S ribosomal protein L35



- Molecule 30: 50S ribosomal protein L35

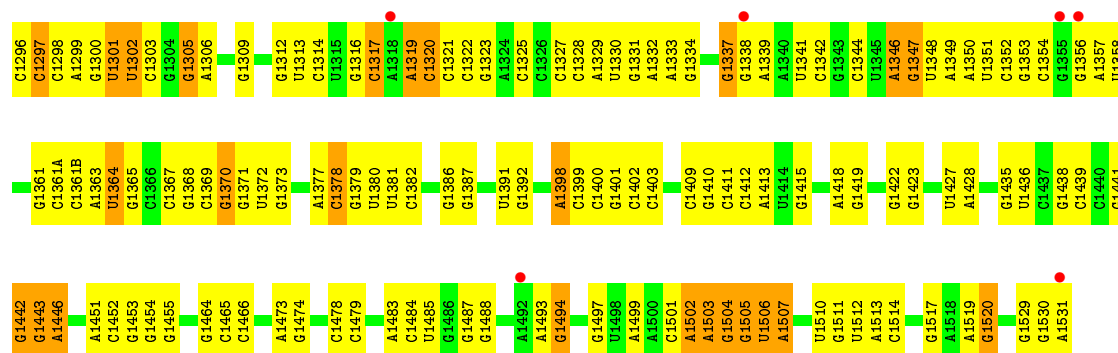


- Molecule 31: 16S ribosomal RNA

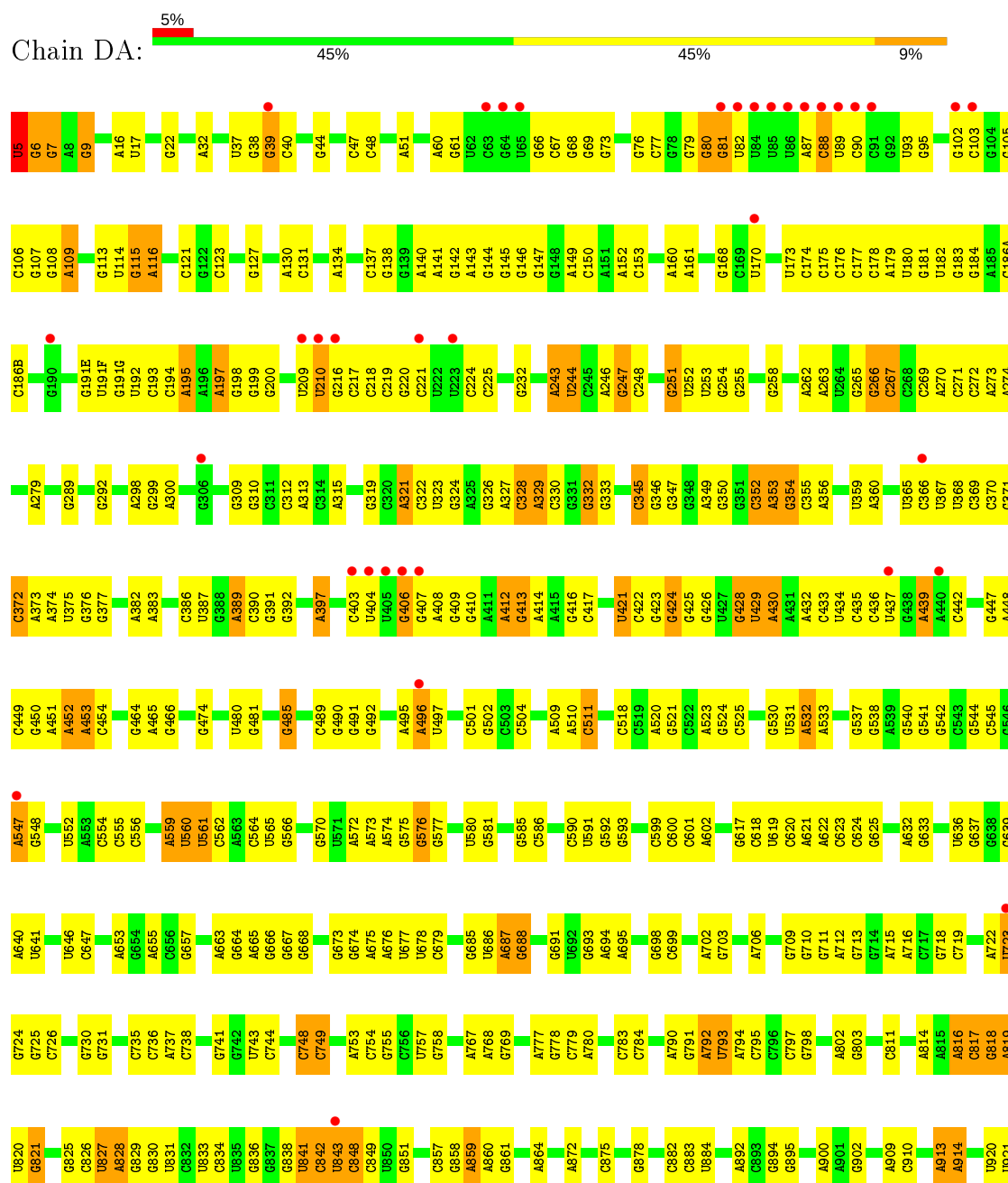


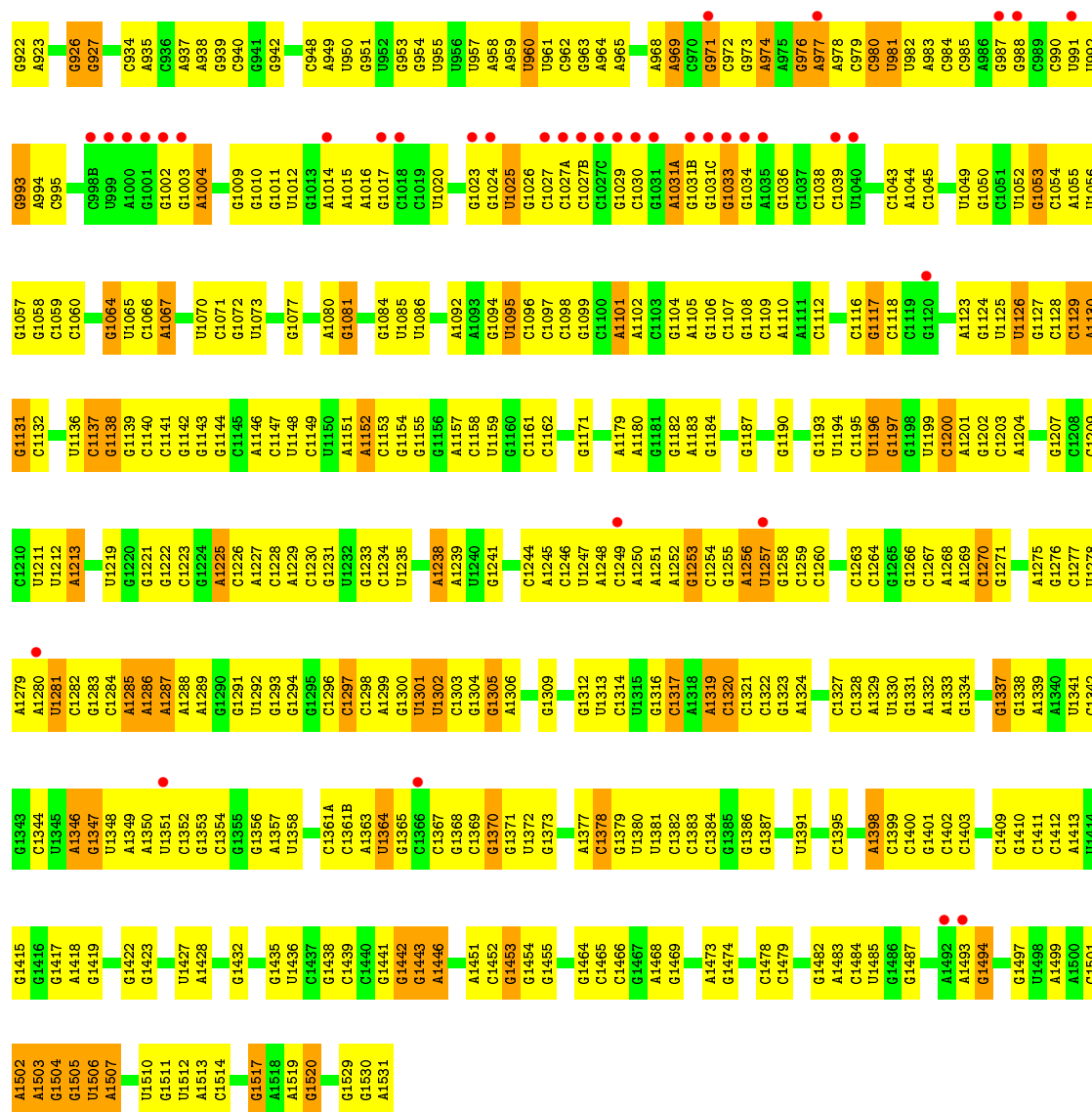
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C1234	A1156	U1086	G1023	C349	C744	A653	U554	A465	G377	G289	C186E	A109
U1235	A1157	G1024	U1025	G851	C745	G657	C555	G466	C380	G292	G191E	G113
A1238	U1158	A1093	G1026	C857	C746	A663	A559	G474	G381	A298	U191F	U114
A1239	G1160	A958	U1095	G858	G750	G664	U560	G475	A382	G299	G191G	G115
U1240	C1161	U1096	C1027	A859	A753	A665	U561	G476	A383	A300	U192	A116
G1241	G1162	C1027A	G1027B	G861	G755	G666	C562	U480	C386	G309	C194	C121
G1244	G1171	G1027C	U1027D	C875	C756	G667	A563	G481	U487	G310	A195	G127
A1245	A1179	G1100	C1030	G878	U757	G668	U565	G485	G388	A313	A196	A130
C1246	A1180	A1101	G1031	G879	G758	G674	U566	C489	C390	G315	A197	C131
U1247	G1181	A1102	A1031A	G882	A767	A674	G567	G490	G391	A315	G198	A134
C1249	A1182	C1103	G1031B	C883	A768	U677	G568	G491	A393	G319	G199	G137
A1250	A1183	A1104	G1031C	C884	G769	U678	C569	G492	A397	C320	G216	G138
A1251	G1184	A1105	G1033	G888	A777	C679	U571	A495	C403	A321	C217	G139
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G1253	G1188	A1108	A1035	A892	C779	U686	A573	U497	U405	U323	C219	A141
G1254	G1190	C1109	G1036	C893	A780	A687	A574	A509	G406	G324	G220	G142
G1255	A1191	G976	C1037	G894	A783	G688	G575	C501	G407	A325	G221	A143
A1256	G1192	A977	G1038	G895	C783	G689	G577	G502	A408	G326	G144	G144
U1257	G1193	C1111	C1039	A900	C784	G699	U578	G503	G409	C327	G145	G146
G1258	U1194	C979	C1043	A901	A790	U692	C579	C504	A412	C328	G147	G147
C1259	C1195	U981	A1044	G902	A791	G693	U580	A510	G413	A329	G232	G148
G1260	G1196	U982	C1045	G909	A792	A694	C581	C511	A414	G330	A243	C150
A1261	A1197	A983	U1049	C910	A793	A695	G585	C518	U421	G332	U244	A151
C1262	U1198	C984	G1050	C913	C795	G698	C586	C519	C422	G333	A246	C153
G1263	A1201	U986	C1051	A914	A802	C699	C599	A520	G423	C345	G247	G168
A1264	A1204	G988	G1052	U920	G803	A702	C600	G521	G424	G346	C248	C169
G1265	U1205	C989	C1053	U921	C811	G703	C601	C522	G425	G347	U256	U170
G1266	G1206	C990	A1054	U922	C817	A706	A621	G529	G428	C348	G251	A161
A1267	G1209	U991	U1056	G922	C818	G709	A622	U531	U429	A349	U252	A162
U1268	U1211	U992	G1057	A923	G819	G710	C624	A533	A430	G350	U253	C163
A1269	U1212	A994	C1058	G926	A819	U619	G625	G537	A431	C352	G254	G168
G1270	A1213	C995	C1060	G927	U820	U620	U626	U538	A432	A353	G255	C169
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A1275	G1210	C996B	U1065	A935	C826	G718	G633	G540	U434	A356	G257	U173
G1276	U1211	U999	C1066	C936	U827	C719	U636	G541	C435	U359	G258	C174
C1277	U1212	A1000	A1067	C937	A828	G725	U637	G542	C436	A263	U264	C175
U1278	A1213	G1002	G1068	A938	G829	A722	G638	G544	U437	G265	G266	C176
A1279	C1214	G1003	U1070	G939	G830	U723	U626	G545	G438	G267	G268	C177
C1280	U1136	A1004	C1071	C940	U831	G724	A632	G546	A439	A360	G269	U182
G1281	G1137	G998A	G1072	C941	C832	G726	G633	G547	A440	U365	C271	G184
G1282	G1138	C998B	U1073	G942	U833	C726	U636	G548	C442	C366	C272	A185
C1283	G1139	U999	A1068	G943	C834	G735	U637	G549	U447	U367	A273	C186A
G1284	C1140	A1000	G1069	G944	U835	A737	G638	G550	A448	U368	A274	C186B
A1285	G1141	G1001	G1069	C948	U836	U738	G639	G551	C449	C369		
C1286	G1142	G1002	U1071	C949	G837	G738	U641	G552	G450	G371		
U1287	G1143	A1003	C1072	C949	U838	G741			A451	C372		
A1288	G1144	A1004	U1073	C951	C842				A452	A374		
C1289	G1145	G1009	G1074						A453			
U1290	A1146	U1010	U1075									
A1291	C1147	G1011	U1076									
G1292	U1148	U1012	U1077									
U1293	C1149	G1013	U1078									
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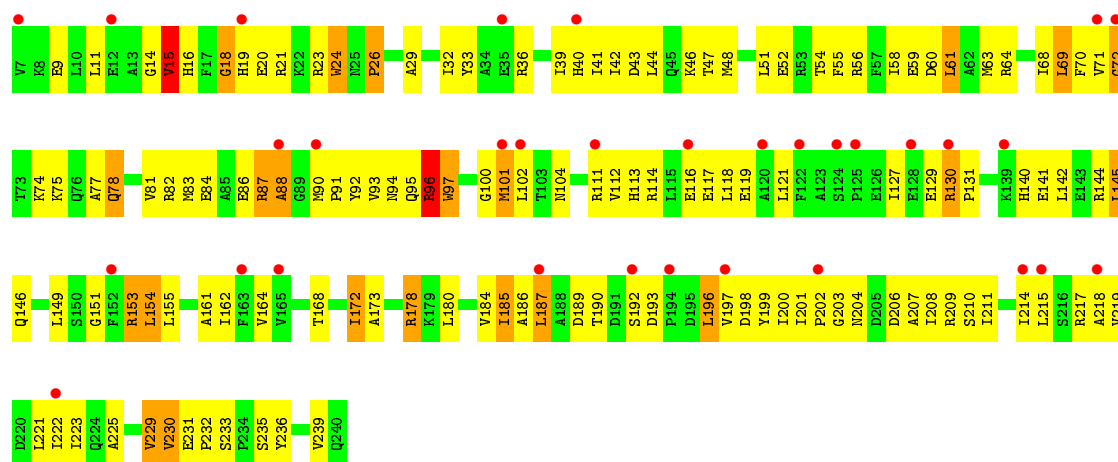
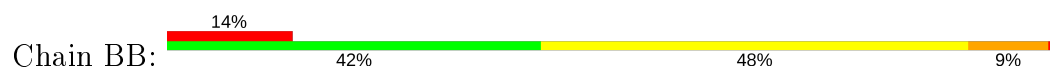


• Molecule 31: 16S ribosomal RNA

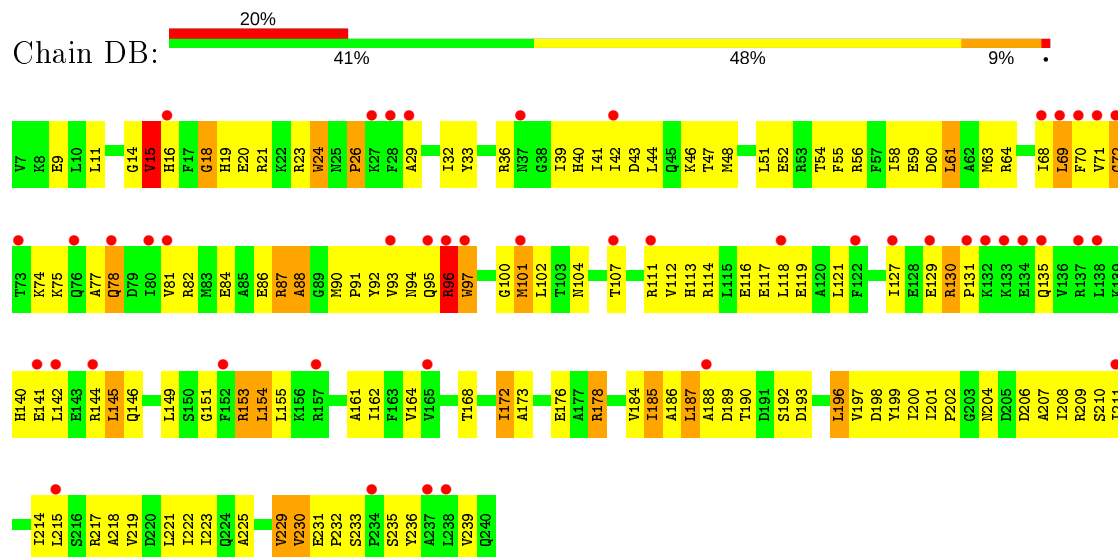




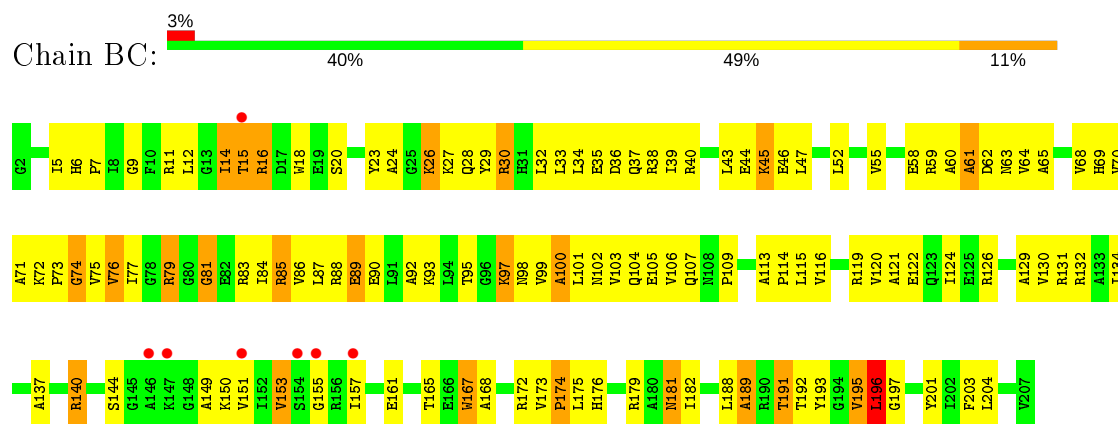
• Molecule 32: 30S ribosomal protein S2



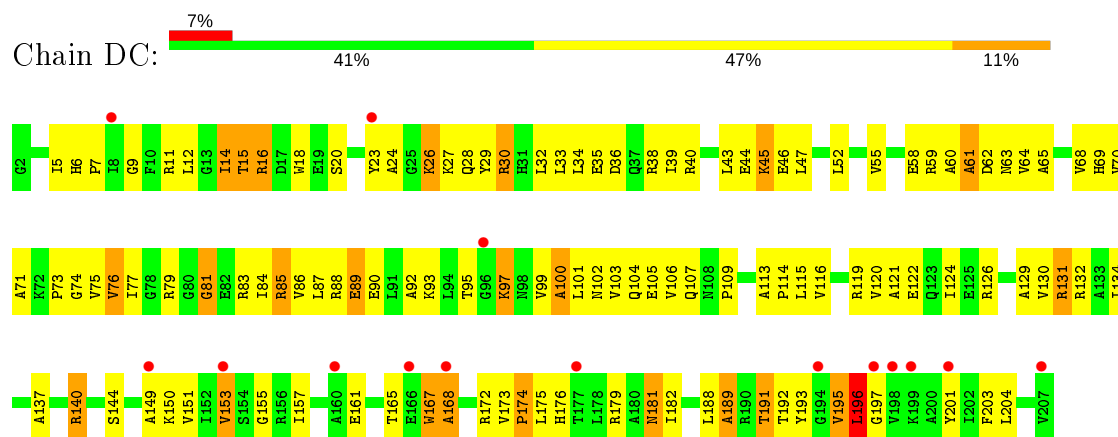
• Molecule 32: 30S ribosomal protein S2



• Molecule 33: 30S ribosomal protein S3

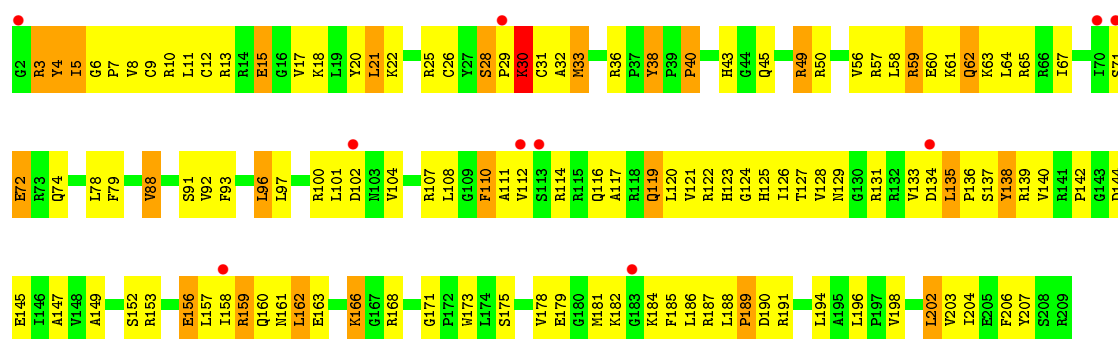


• Molecule 33: 30S ribosomal protein S3

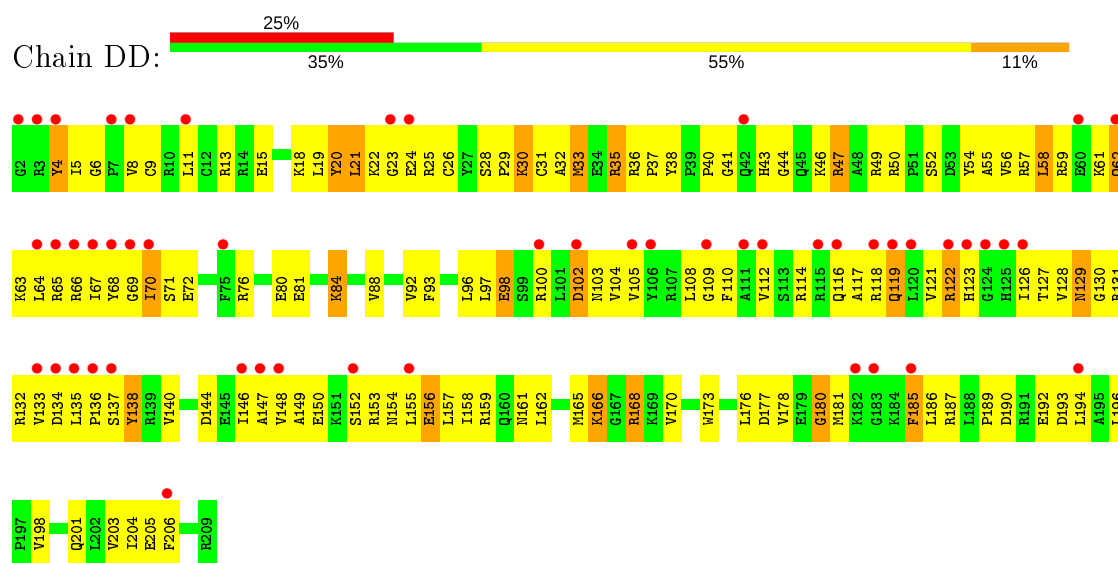


• Molecule 34: 30S ribosomal protein S4

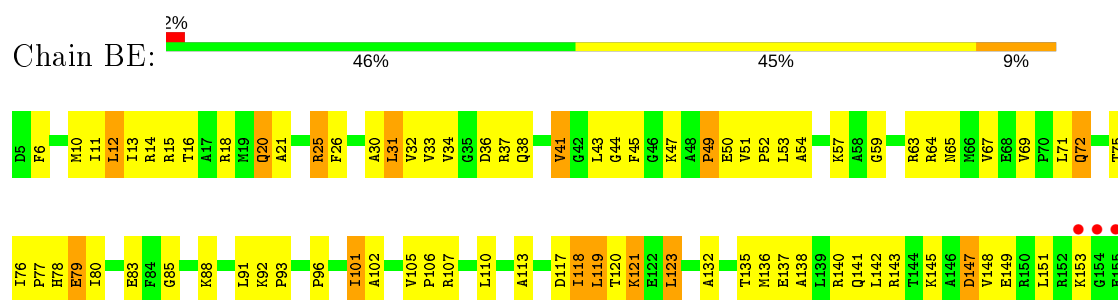




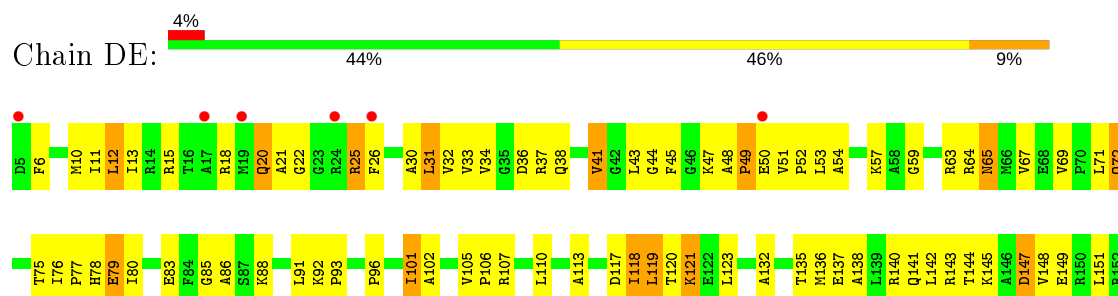
• Molecule 34: 30S ribosomal protein S4



• Molecule 35: 30S ribosomal protein S5



• Molecule 35: 30S ribosomal protein S5

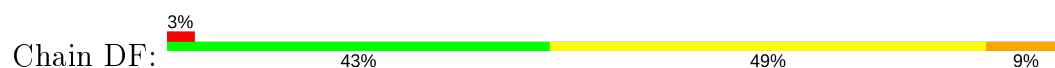




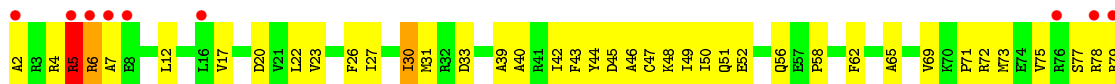
- Molecule 36: 30S ribosomal protein S6



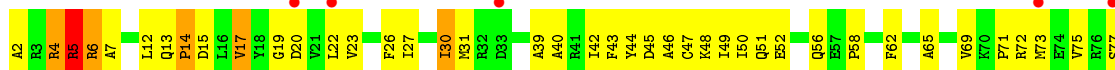
- Molecule 36: 30S ribosomal protein S6



- Molecule 37: 30S ribosomal protein S7

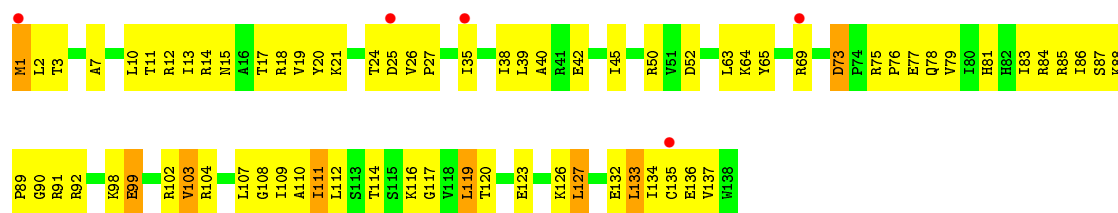


- Molecule 37: 30S ribosomal protein S7

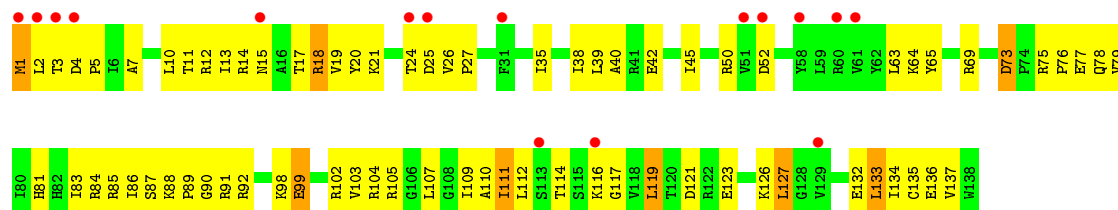


- Molecule 38: 30S ribosomal protein S8

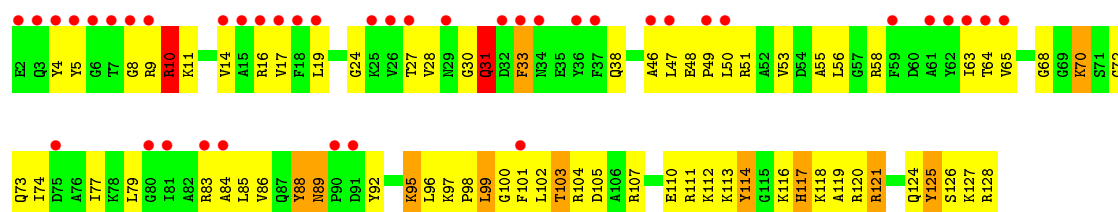
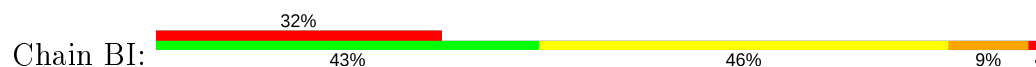




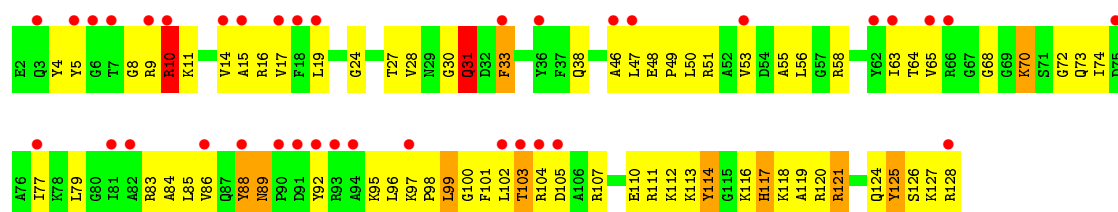
• Molecule 38: 30S ribosomal protein S8



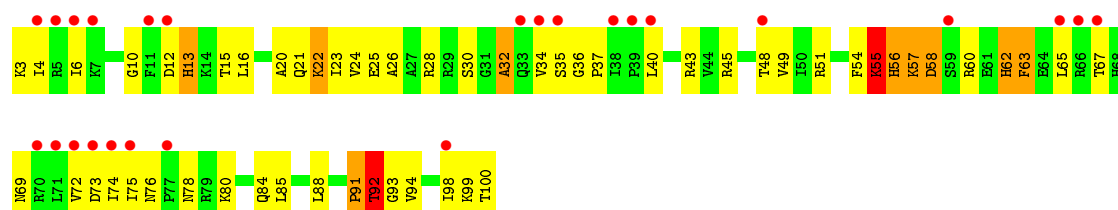
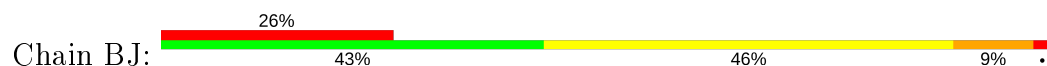
• Molecule 39: 30S ribosomal protein S9



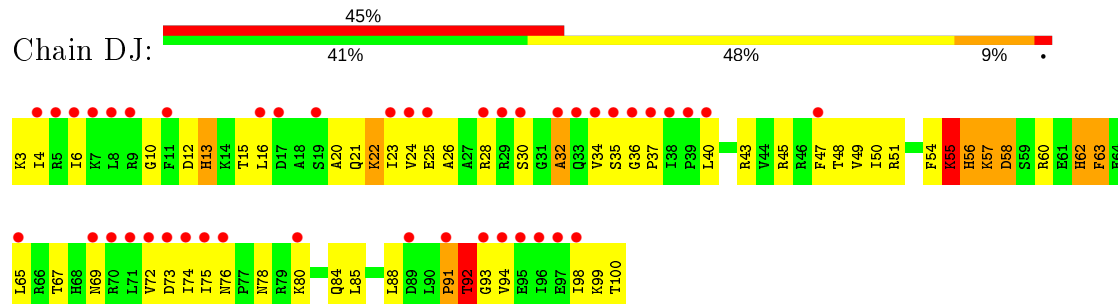
• Molecule 39: 30S ribosomal protein S9



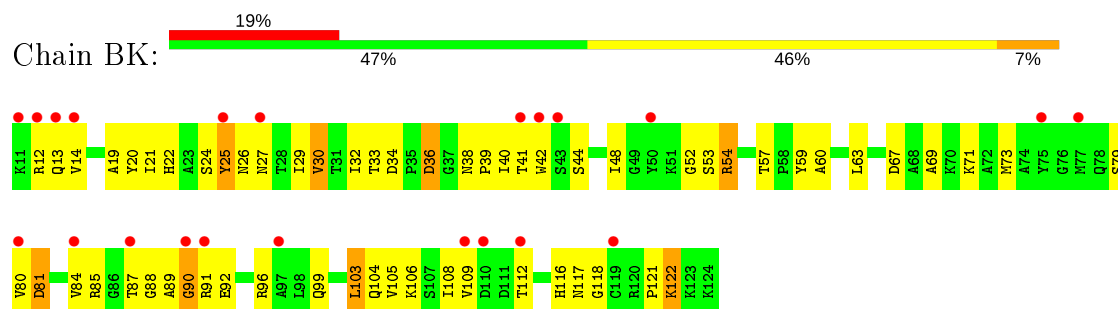
• Molecule 40: 30S ribosomal protein S10



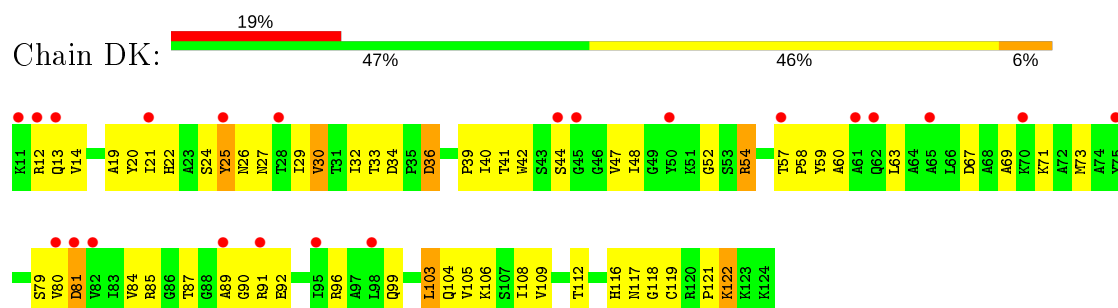
- Molecule 40: 30S ribosomal protein S10



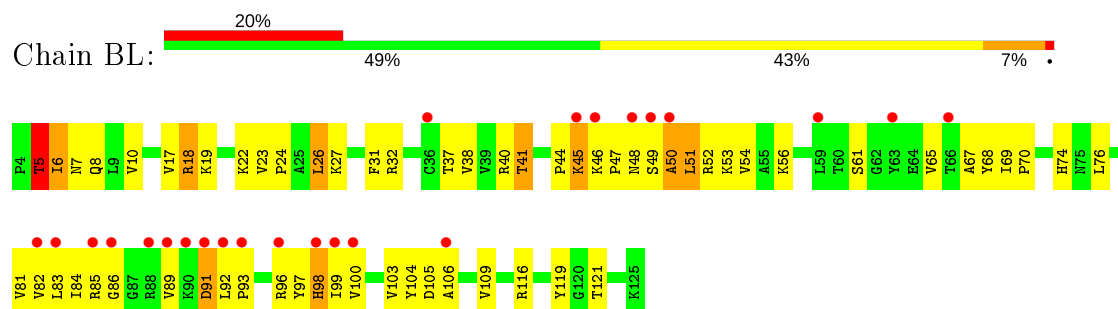
- Molecule 41: 30S ribosomal protein S11



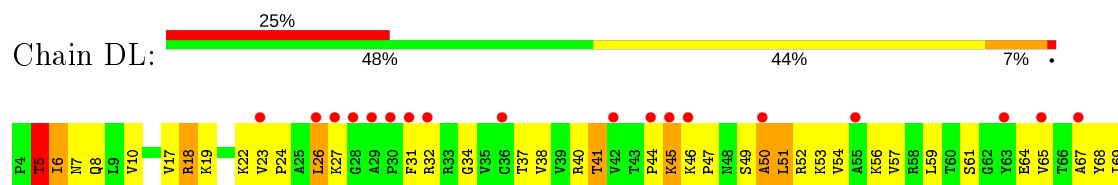
- Molecule 41: 30S ribosomal protein S11

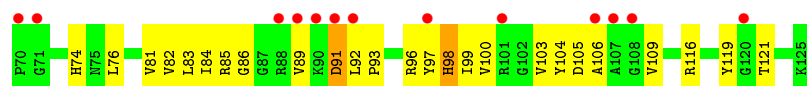


- Molecule 42: 30S ribosomal protein S12

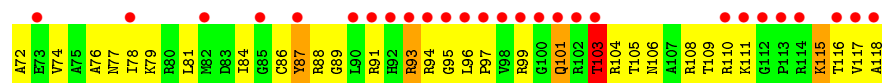
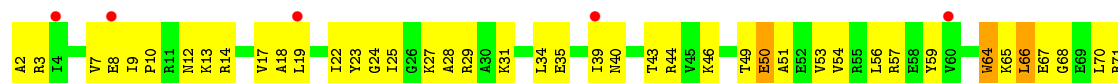


- Molecule 42: 30S ribosomal protein S12

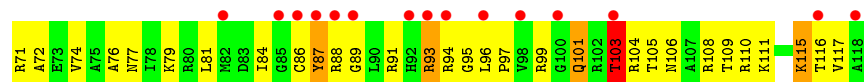
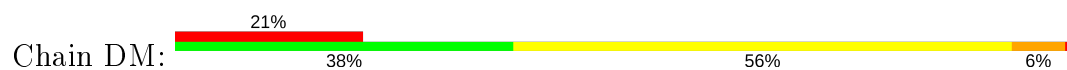




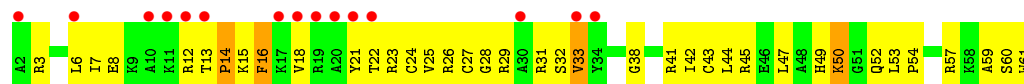
- Molecule 43: 30S ribosomal protein S13



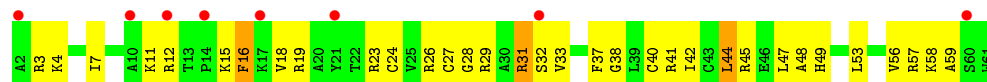
- Molecule 43: 30S ribosomal protein S13



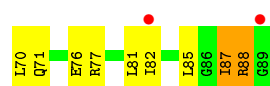
- Molecule 44: 30S ribosomal protein S14



- Molecule 44: 30S ribosomal protein S14

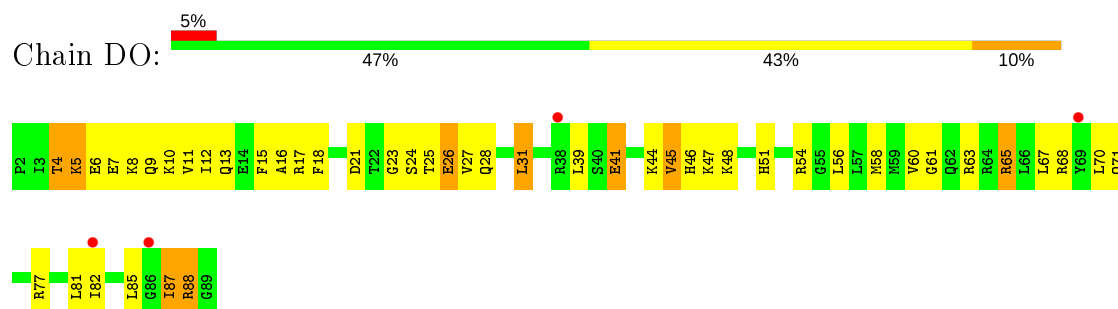


- Molecule 45: 30S ribosomal protein S15

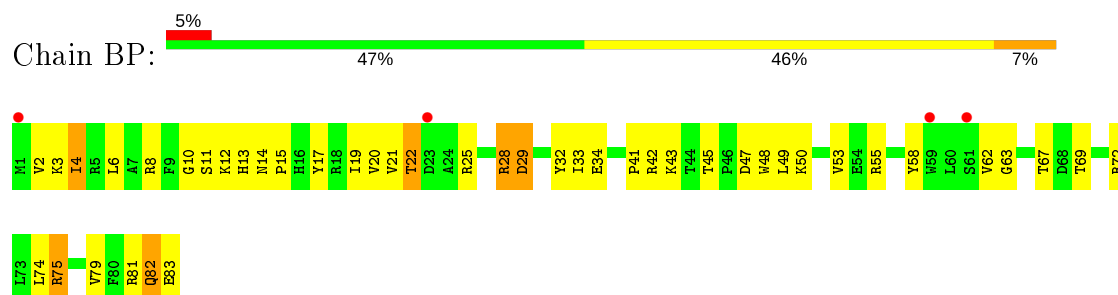




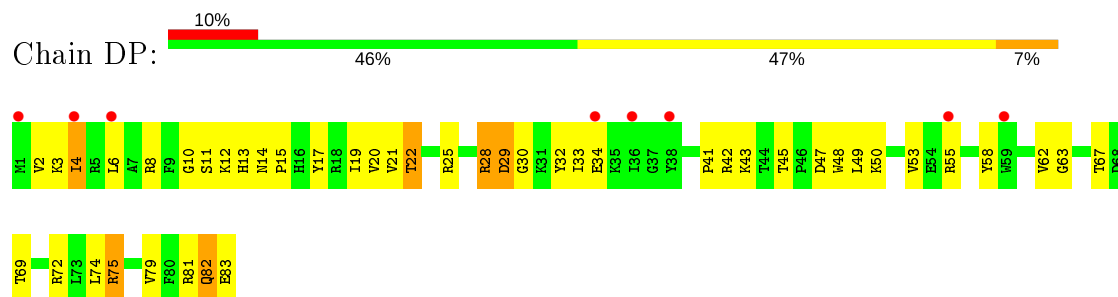
- Molecule 45: 30S ribosomal protein S15



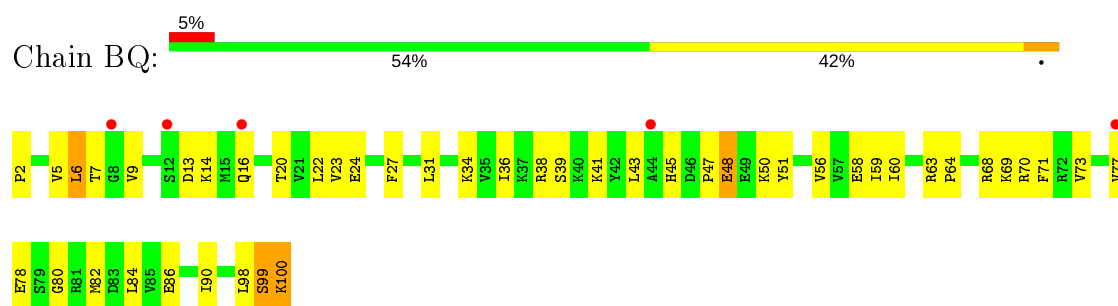
- Molecule 46: 30S ribosomal protein S16



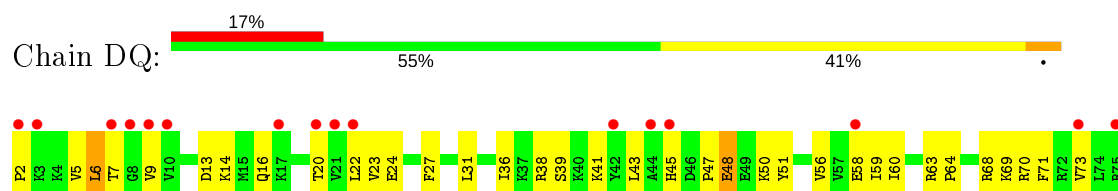
- Molecule 46: 30S ribosomal protein S16



- Molecule 47: 30S ribosomal protein S17

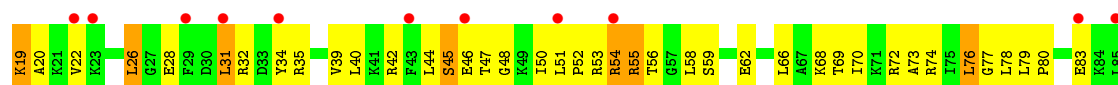
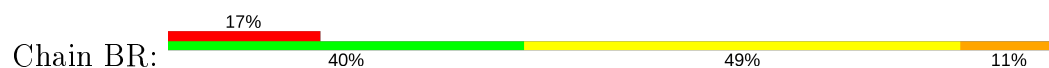


- Molecule 47: 30S ribosomal protein S17

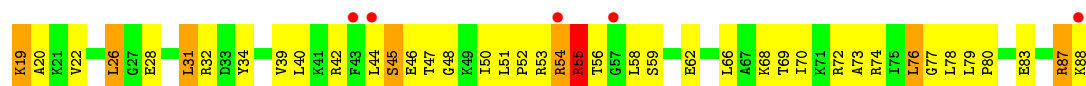
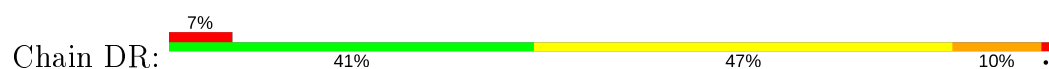




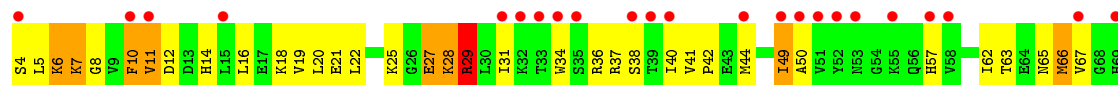
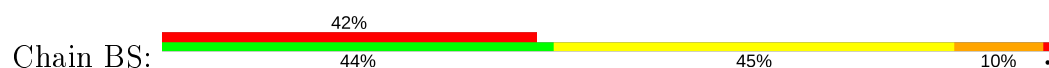
- Molecule 48: 30S ribosomal protein S18



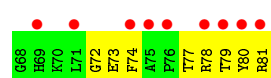
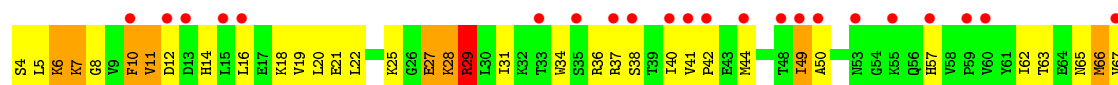
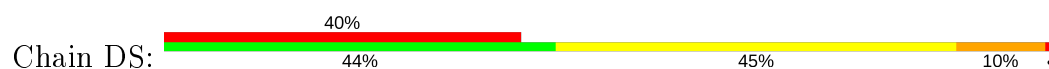
- Molecule 48: 30S ribosomal protein S18



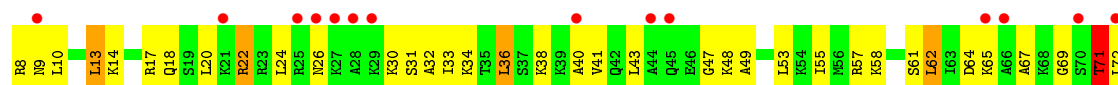
- Molecule 49: 30S ribosomal protein S19



- Molecule 49: 30S ribosomal protein S19

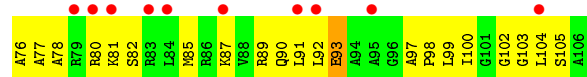
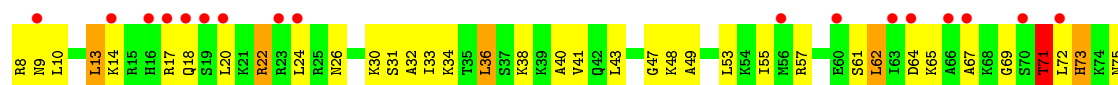
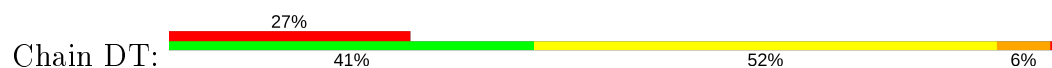


- Molecule 50: 30S ribosomal protein S20

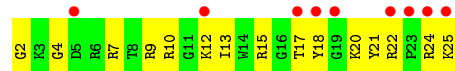
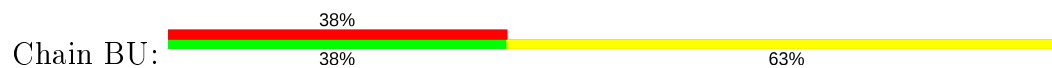




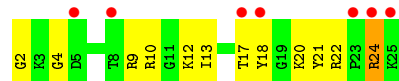
- Molecule 50: 30S ribosomal protein S20



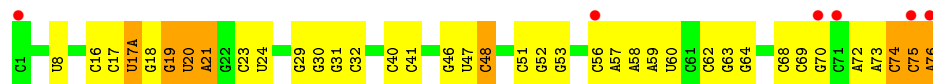
- Molecule 51: 30S ribosomal protein Thx



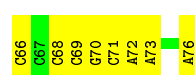
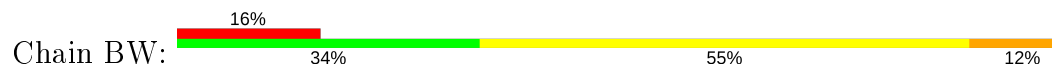
- Molecule 51: 30S ribosomal protein Thx



- Molecule 52: tRNA

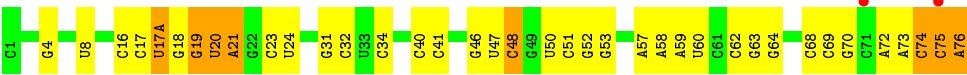


- Molecule 52: tRNA



- Molecule 52: tRNA

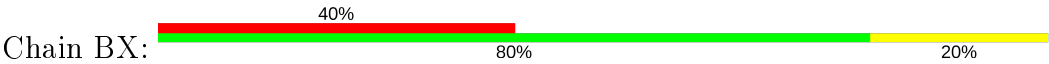




● Molecule 52: tRNA



● Molecule 53: mRNA



● Molecule 53: mRNA



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	211.53Å 454.44Å 620.87Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	49.98 – 3.40 69.27 – 3.39	Depositor EDS
% Data completeness (in resolution range)	99.8 (49.98-3.40) 99.6 (69.27-3.39)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.64 (at 3.41Å)	Xtriage
Refinement program	PHENIX (phenix.refine: 1.6.4_486), CNS	Depositor
R, $R_{free}$	0.231 , 0.268 0.230 , 0.267	Depositor DCC
$R_{free}$ test set	16247 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	82.8	Xtriage
Anisotropy	0.105	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.28 , 88.6	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.89	EDS
Total number of atoms	293113	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	94.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.61% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

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

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

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	AA	0.34	1/68308 (0.0%)	0.64	11/106635 (0.0%)
1	CA	0.38	1/68308 (0.0%)	0.67	15/106635 (0.0%)
2	AB	0.31	1/2857 (0.0%)	0.52	0/4455
2	CB	0.32	1/2857 (0.0%)	0.53	0/4455
3	AD	0.31	0/2155	0.52	0/2905
3	CD	0.33	0/2155	0.53	0/2905
4	AE	0.27	0/1597	0.49	0/2153
4	CE	0.28	0/1597	0.49	0/2153
5	AF	0.27	0/1622	0.47	0/2194
5	CF	0.28	0/1622	0.47	0/2194
6	AG	0.22	0/1500	0.41	0/2017
6	CG	0.23	0/1500	0.41	0/2017
7	AH	0.22	0/1246	0.43	0/1682
7	CH	0.24	0/1246	0.44	0/1682
8	AI	0.22	0/1148	0.42	0/1552
8	CI	0.24	0/1148	0.43	0/1552
9	AJ	0.26	0/1124	0.49	0/1515
9	CJ	0.29	0/1124	0.50	0/1515
10	AK	0.28	0/942	0.46	0/1268
10	CK	0.28	0/942	0.46	0/1268
11	AL	0.31	0/1131	0.61	0/1504
11	CL	0.33	0/1131	0.62	0/1504
12	AM	0.28	0/1085	0.49	0/1449
12	CM	0.29	0/1085	0.49	0/1449
13	AN	0.28	0/974	0.47	0/1302
13	CN	0.28	0/974	0.48	0/1302
14	AO	0.24	0/779	0.43	0/1036
14	CO	0.25	0/779	0.43	0/1036
15	AP	0.27	0/1158	0.45	0/1544
15	CP	0.27	0/1158	0.45	0/1544
16	AQ	0.28	0/982	0.44	0/1306
16	CQ	0.30	0/982	0.45	0/1306

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AR	0.29	0/790	0.51	0/1057
17	CR	0.31	0/790	0.52	0/1057
18	AS	0.28	0/902	0.46	0/1209
18	CS	0.30	0/902	0.47	0/1209
19	AT	0.29	0/740	0.46	0/993
19	CT	0.32	0/740	0.46	0/993
20	AU	0.30	0/789	0.46	0/1051
20	CU	0.31	0/789	0.47	0/1051
21	AV	0.22	0/1515	0.42	0/2056
21	CV	0.22	0/1515	0.42	0/2056
22	AW	0.28	0/613	0.47	0/816
22	CW	0.27	0/613	0.47	0/816
23	AX	0.32	0/702	0.56	0/932
23	CX	0.34	0/702	0.57	0/932
24	AY	0.27	0/523	0.49	0/690
24	CY	0.30	0/523	0.51	0/690
25	AZ	0.24	0/473	0.46	0/634
25	CZ	0.26	0/473	0.47	0/634
26	A1	0.20	0/229	0.42	0/309
26	C1	0.20	0/229	0.42	0/309
27	A2	0.28	0/419	0.52	0/567
27	C2	0.30	0/419	0.53	0/567
28	A3	0.21	0/388	0.44	0/518
28	C3	0.22	0/388	0.45	0/518
29	A4	0.31	0/427	0.50	0/561
29	C4	0.34	0/427	0.50	0/561
30	A5	0.32	0/516	0.52	0/679
30	C5	0.32	0/516	0.52	0/679
31	BA	0.28	1/36198 (0.0%)	0.55	0/56497
31	DA	0.27	1/36198 (0.0%)	0.55	0/56497
32	BB	0.22	0/1936	0.40	0/2609
32	DB	0.22	0/1936	0.40	0/2609
33	BC	0.22	0/1637	0.40	0/2205
33	DC	0.21	0/1637	0.40	0/2205
34	BD	0.27	0/1733	0.45	0/2318
34	DD	0.25	0/1733	0.42	0/2318
35	BE	0.24	0/1172	0.43	0/1576
35	DE	0.24	0/1172	0.42	0/1576
36	BF	0.24	0/856	0.43	0/1154
36	DF	0.25	0/856	0.44	0/1154
37	BG	0.22	0/1276	0.36	0/1709
37	DG	0.22	0/1276	0.37	0/1709
38	BH	0.23	0/1136	0.44	0/1527

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	DH	0.23	0/1136	0.44	0/1527
39	BI	0.22	0/1029	0.39	0/1378
39	DI	0.22	0/1029	0.39	0/1378
40	BJ	0.21	0/808	0.41	0/1085
40	DJ	0.21	0/808	0.41	0/1085
41	BK	0.23	0/857	0.44	0/1157
41	DK	0.23	0/857	0.44	0/1157
42	BL	0.25	0/973	0.46	0/1301
42	DL	0.25	0/973	0.46	0/1301
43	BM	0.21	0/944	0.41	0/1265
43	DM	0.21	0/944	0.41	0/1265
44	BN	0.24	0/501	0.39	0/664
44	DN	0.23	0/501	0.42	0/664
45	BO	0.25	0/745	0.40	0/992
45	DO	0.25	0/745	0.40	0/992
46	BP	0.26	0/717	0.45	0/963
46	DP	0.23	0/717	0.45	0/963
47	BQ	0.25	0/837	0.42	0/1117
47	DQ	0.25	0/837	0.42	0/1117
48	BR	0.24	0/579	0.44	0/768
48	DR	0.25	0/579	0.44	0/768
49	BS	0.20	0/643	0.40	0/865
49	DS	0.20	0/643	0.40	0/865
50	BT	0.24	0/764	0.42	0/1006
50	DT	0.22	0/764	0.41	0/1006
51	BU	0.20	0/213	0.37	0/277
51	DU	0.20	0/213	0.37	0/277
52	BV	0.21	0/1832	0.48	0/2855
52	BW	0.17	0/1832	0.44	0/2855
52	DV	0.21	0/1832	0.49	0/2855
52	DW	0.17	0/1832	0.44	0/2855
53	BX	0.26	0/122	0.47	0/188
53	DX	0.29	0/122	0.48	0/188
All	All	0.31	6/313948 (0.0%)	0.58	26/469840 (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
13	AN	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
13	CN	0	1
All	All	0	2

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	BA	5	U	OP3-P	-10.80	1.48	1.61
31	DA	5	U	OP3-P	-10.71	1.48	1.61
2	AB	1	U	OP3-P	-10.65	1.48	1.61
2	CB	1	U	OP3-P	-10.63	1.48	1.61
1	CA	6	A	OP3-P	-10.61	1.48	1.61
1	AA	6	A	OP3-P	-10.59	1.48	1.61

All (26) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1420	U	C2-N1-C1'	6.88	125.96	117.70
1	CA	1420	U	C2-N1-C1'	6.84	125.91	117.70
1	CA	1420	U	C6-N1-C1'	-6.61	111.95	121.20
1	AA	1420	U	C6-N1-C1'	-6.57	112.00	121.20
1	CA	2593	U	N3-C4-C5	-6.13	110.92	114.60
1	CA	34	C	C6-N1-C1'	-6.00	113.61	120.80
1	AA	34	C	C6-N1-C1'	-5.98	113.63	120.80
1	CA	676	A	N7-C8-N9	5.96	116.78	113.80
1	CA	330	A	C2-N3-C4	-5.84	107.68	110.60
1	CA	1899	G	C2-N3-C4	-5.83	108.99	111.90
1	CA	34	C	N3-C4-C5	5.77	124.21	121.90
1	AA	2593	U	N3-C4-C5	-5.67	111.20	114.60
1	AA	34	C	N3-C4-C5	5.57	124.13	121.90
1	CA	783	A	C5-N7-C8	-5.49	101.16	103.90
1	CA	676	A	C5-N7-C8	-5.45	101.17	103.90
1	AA	676	A	N7-C8-N9	5.43	116.51	113.80
1	AA	944	G	C4-N9-C1'	5.42	133.55	126.50
1	CA	1602	U	N3-C4-C5	-5.24	111.46	114.60
1	AA	2308	G	C3'-C2'-C1'	5.19	105.65	101.50
1	CA	2308	G	C3'-C2'-C1'	5.18	105.64	101.50
1	AA	676	A	C5-N7-C8	-5.15	101.32	103.90
1	CA	450	G	C5-C6-N1	-5.15	108.92	111.50
1	AA	676	A	C2-N3-C4	-5.13	108.03	110.60
1	AA	783	A	C5-N7-C8	-5.13	101.33	103.90
1	CA	944	G	C4-N9-C1'	5.13	133.17	126.50
1	CA	1627	G	N1-C6-O6	5.04	122.92	119.90

There are no chirality outliers.

All (2) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
13	AN	10	LEU	Peptide
13	CN	10	LEU	Peptide

## 5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	60991	0	30744	1335	0
1	CA	60991	0	30744	1337	0
2	AB	2555	0	1294	52	0
2	CB	2555	0	1294	59	0
3	AD	2105	0	2182	184	0
3	CD	2105	0	2182	187	0
4	AE	1564	0	1629	103	0
4	CE	1564	0	1629	115	0
5	AF	1587	0	1632	102	0
5	CF	1587	0	1632	102	0
6	AG	1475	0	1537	127	0
6	CG	1475	0	1537	127	0
7	AH	1223	0	1282	65	0
7	CH	1223	0	1282	65	0
8	AI	1133	0	1220	75	0
8	CI	1133	0	1220	87	0
9	AJ	1097	0	1168	80	0
9	CJ	1097	0	1168	82	0
10	AK	932	0	994	50	0
10	CK	932	0	994	48	0
11	AL	1114	0	1187	196	0
11	CL	1114	0	1187	203	0
12	AM	1065	0	1114	93	0
12	CM	1065	0	1114	97	0
13	AN	960	0	1021	81	0
13	CN	960	0	1021	76	0
14	AO	771	0	832	62	0
14	CO	771	0	832	66	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	AP	1144	0	1211	75	0
15	CP	1144	0	1211	91	0
16	AQ	964	0	1022	77	0
16	CQ	964	0	1022	79	0
17	AR	779	0	852	79	0
17	CR	779	0	852	82	0
18	AS	891	0	951	50	0
18	CS	891	0	951	58	0
19	AT	726	0	778	60	0
19	CT	726	0	778	59	0
20	AU	776	0	870	94	0
20	CU	776	0	870	93	0
21	AV	1483	0	1507	88	0
21	CV	1483	0	1507	92	0
22	AW	605	0	628	28	0
22	CW	605	0	628	27	0
23	AX	695	0	764	85	0
23	CX	695	0	764	88	0
24	AY	521	0	575	62	0
24	CY	521	0	575	67	0
25	AZ	468	0	523	23	0
25	CZ	468	0	523	25	0
26	A1	226	0	225	22	0
26	C1	226	0	225	22	0
27	A2	405	0	420	43	0
27	C2	405	0	420	44	0
28	A3	381	0	391	33	0
28	C3	381	0	391	34	0
29	A4	419	0	467	29	0
29	C4	419	0	467	29	0
30	A5	508	0	576	64	0
30	C5	508	0	576	64	0
31	BA	32336	0	16317	778	0
31	DA	32336	0	16317	795	0
32	BB	1901	0	1951	125	0
32	DB	1901	0	1951	124	0
33	BC	1613	0	1677	117	0
33	DC	1613	0	1677	112	0
34	BD	1703	0	1764	135	0
34	DD	1703	0	1764	168	0
35	BE	1156	0	1213	73	0
35	DE	1156	0	1213	78	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
36	BF	843	0	857	62	0
36	DF	843	0	857	64	0
37	BG	1257	0	1296	52	0
37	DG	1257	0	1296	53	0
38	BH	1116	0	1177	67	0
38	DH	1116	0	1177	65	0
39	BI	1011	0	1043	95	0
39	DI	1011	0	1043	93	0
40	BJ	795	0	840	62	0
40	DJ	795	0	840	65	0
41	BK	843	0	859	54	0
41	DK	843	0	859	58	0
42	BL	957	0	1046	68	0
42	DL	957	0	1046	67	0
43	BM	934	0	992	76	0
43	DM	934	0	992	79	0
44	BN	492	0	531	46	0
44	DN	492	0	531	36	0
45	BO	734	0	771	45	0
45	DO	734	0	771	42	0
46	BP	701	0	720	51	0
46	DP	701	0	720	54	0
47	BQ	824	0	893	42	0
47	DQ	824	0	893	42	0
48	BR	574	0	644	47	0
48	DR	574	0	644	47	0
49	BS	630	0	652	57	0
49	DS	630	0	652	56	0
50	BT	762	0	859	45	0
50	DT	762	0	859	46	0
51	BU	209	0	221	19	0
51	DU	209	0	221	14	0
52	BV	1640	0	837	41	0
52	BW	1640	0	837	52	0
52	DV	1640	0	837	40	0
52	DW	1640	0	837	46	0
53	BX	109	0	55	0	0
53	DX	109	0	55	1	0
54	AA	30	0	24	6	0
54	CA	30	0	24	6	0
55	A3	3	0	0	0	0
55	A4	5	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	A5	2	0	0	0	0
55	AA	1296	0	0	0	0
55	AB	50	0	0	0	0
55	AD	4	0	0	0	0
55	AE	4	0	0	0	0
55	AF	6	0	0	0	0
55	AG	2	0	0	0	0
55	AJ	1	0	0	0	0
55	AK	2	0	0	0	0
55	AL	2	0	0	0	0
55	AM	3	0	0	0	0
55	AN	4	0	0	0	0
55	AO	1	0	0	0	0
55	AP	2	0	0	0	0
55	AR	5	0	0	0	0
55	AS	6	0	0	0	0
55	AV	2	0	0	0	0
55	AX	6	0	0	0	0
55	AY	1	0	0	0	0
55	BA	570	0	0	0	0
55	BB	2	0	0	0	0
55	BC	3	0	0	0	0
55	BE	5	0	0	0	0
55	BG	2	0	0	0	0
55	BH	1	0	0	0	0
55	BI	2	0	0	0	0
55	BL	2	0	0	0	0
55	BO	1	0	0	0	0
55	BP	1	0	0	0	0
55	BQ	2	0	0	0	0
55	BR	1	0	0	0	0
55	BT	1	0	0	0	0
55	BU	1	0	0	0	0
55	BV	30	0	0	0	0
55	BW	19	0	0	0	0
55	C2	2	0	0	0	0
55	C3	2	0	0	0	0
55	C4	4	0	0	0	0
55	C5	3	0	0	0	0
55	CA	1504	0	0	0	0
55	CB	65	0	0	0	0
55	CD	6	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
55	CE	6	0	0	0	0
55	CF	7	0	0	0	0
55	CG	1	0	0	0	0
55	CI	1	0	0	0	0
55	CJ	2	0	0	0	0
55	CK	2	0	0	0	0
55	CL	7	0	0	0	0
55	CN	3	0	0	0	0
55	CO	1	0	0	0	0
55	CP	1	0	0	0	0
55	CQ	5	0	0	0	0
55	CR	2	0	0	0	0
55	CS	4	0	0	0	0
55	CT	1	0	0	0	0
55	CV	4	0	0	0	0
55	CW	4	0	0	0	0
55	CX	3	0	0	0	0
55	CY	2	0	0	0	0
55	DA	604	0	0	0	0
55	DD	2	0	0	0	0
55	DE	2	0	0	0	0
55	DG	1	0	0	0	0
55	DH	3	0	0	0	0
55	DI	1	0	0	0	0
55	DJ	1	0	0	0	0
55	DK	1	0	0	0	0
55	DL	2	0	0	0	0
55	DM	1	0	0	0	0
55	DO	2	0	0	0	0
55	DQ	1	0	0	0	0
55	DR	2	0	0	0	0
55	DT	1	0	0	0	0
55	DV	24	0	0	0	0
55	DW	22	0	0	0	0
55	DX	1	0	0	0	0
56	BD	1	0	0	0	0
56	BN	1	0	0	0	0
56	DD	1	0	0	0	0
56	DN	1	0	0	0	0
All	All	293113	0	195344	10300	0

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

All (10300) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1541:U:H3'	1:AA:1542:G:H3'	1.16	1.16
1:CA:2502:G:H5'	1:CA:2503:A:H5''	1.29	1.14
1:AA:2502:G:H5'	1:AA:2503:A:H5''	1.28	1.14
1:CA:1541:U:H3'	1:CA:1542:G:H3'	1.16	1.12
1:CA:2303:G:H2'	1:CA:2304:G:H5''	1.33	1.10
1:AA:2303:G:H2'	1:AA:2304:G:H5''	1.33	1.10
1:AA:1899:G:N2	1:AA:1902:C:H41	1.48	1.09
1:CA:1899:G:N2	1:CA:1902:C:H41	1.49	1.08
23:CX:11:ARG:HB3	23:CX:12:PRO:HD2	1.34	1.08
11:CL:23:PRO:HB2	11:CL:33:ARG:HG3	1.35	1.06
23:AX:11:ARG:HB3	23:AX:12:PRO:HD2	1.34	1.05
5:AF:45:ARG:HG2	5:AF:45:ARG:HH11	1.15	1.05
20:CU:17:SER:HB2	20:CU:71:LYS:HE2	1.40	1.04
1:AA:2393:A:H5'	11:AL:62:LEU:HD12	1.36	1.03
11:CL:41:ARG:HE	11:CL:41:ARG:HA	1.22	1.03
20:CU:76:CYS:SG	20:CU:77:PRO:HD2	1.98	1.03
20:AU:17:SER:HB2	20:AU:71:LYS:HE2	1.38	1.03
31:DA:979:C:H3'	31:DA:980:C:H5''	1.40	1.03
5:CF:45:ARG:HH11	5:CF:45:ARG:HG2	1.16	1.03
1:CA:2393:A:H5'	11:CL:62:LEU:HD12	1.36	1.02
1:AA:274:G:H3'	1:AA:275:G:H4'	1.41	1.02
1:CA:274:G:H3'	1:CA:275:G:H4'	1.41	1.02
1:CA:34:C:O2'	1:CA:35:G:H5'	1.59	1.01
11:CL:49:ARG:HG3	11:CL:49:ARG:HH11	1.25	1.01
52:BV:74:C:H5''	52:BV:75:C:H5''	1.43	1.01
1:AA:34:C:O2'	1:AA:35:G:H5'	1.60	1.00
11:AL:23:PRO:HB2	11:AL:33:ARG:HG3	1.37	1.00
11:AL:49:ARG:HG3	11:AL:49:ARG:HH11	1.25	1.00
23:AX:19:GLN:HG2	23:AX:41:ARG:HB3	1.44	1.00
31:DA:559:A:H4'	31:DA:560:U:H3'	1.43	1.00
20:AU:76:CYS:SG	20:AU:77:PRO:HD2	2.02	1.00
11:CL:128:HIS:HA	11:CL:147:LEU:HB3	1.41	1.00
1:AA:2287:A:H62	1:AA:2344:U:H3	1.06	1.00
26:C1:60:GLU:HB2	43:DM:57:ARG:HD2	1.44	1.00
7:CH:42:ARG:HB2	7:CH:53:GLU:HB2	1.44	1.00
7:AH:42:ARG:HB2	7:AH:53:GLU:HB2	1.44	0.99
11:AL:41:ARG:HE	11:AL:41:ARG:HA	1.23	0.99
31:BA:979:C:H3'	31:BA:980:C:H5''	1.40	0.99
39:DI:28:VAL:HG22	39:DI:63:ILE:HB	1.42	0.99
27:A2:4:HIS:HB3	27:A2:5:PRO:HD3	1.44	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:103:ARG:HH11	3:CD:103:ARG:HG2	1.27	0.98
8:AI:93:THR:HG22	8:AI:119:PRO:HB3	1.44	0.98
1:CA:960:A:H61	12:CM:82:ARG:HH21	1.09	0.98
31:BA:545:C:H5'	34:BD:72:GLU:HG3	1.42	0.98
23:CX:19:GLN:HG2	23:CX:41:ARG:HB3	1.43	0.98
27:C2:4:HIS:HB3	27:C2:5:PRO:HD3	1.44	0.97
32:DB:204:ASN:HD21	32:DB:207:ALA:H	1.06	0.97
29:A4:19:ARG:HG3	29:A4:19:ARG:HH11	1.28	0.97
30:A5:22:VAL:HB	30:A5:54:GLU:HG3	1.45	0.97
33:BC:33:LEU:HD21	44:BN:53:LEU:HD22	1.46	0.97
39:BI:28:VAL:HG22	39:BI:63:ILE:HB	1.42	0.97
1:CA:1614:A:N1	18:CS:93:ALA:HB2	1.80	0.97
1:AA:2579:C:O2'	4:AE:131:ALA:HB2	1.65	0.97
11:AL:128:HIS:HA	11:AL:147:LEU:HB3	1.42	0.97
8:CI:93:THR:HG22	8:CI:119:PRO:HB3	1.47	0.96
1:AA:1190:G:H5''	11:AL:35:HIS:HA	1.47	0.96
18:CS:24:ILE:HG21	18:CS:36:LEU:HD11	1.47	0.96
31:BA:559:A:H4'	31:BA:560:U:H3'	1.45	0.96
30:C5:22:VAL:HB	30:C5:54:GLU:HG3	1.42	0.96
52:DV:74:C:H5''	52:DV:75:C:H5''	1.44	0.96
3:AD:103:ARG:HH11	3:AD:103:ARG:HG2	1.27	0.96
32:BB:204:ASN:HD21	32:BB:207:ALA:H	1.07	0.96
1:AA:960:A:H61	12:AM:82:ARG:HH21	1.11	0.95
1:CA:2579:C:O2'	4:CE:131:ALA:HB2	1.66	0.95
9:CJ:160:LYS:HZ2	9:CJ:161:LEU:H	1.08	0.95
18:AS:24:ILE:HG21	18:AS:36:LEU:HD11	1.47	0.95
1:CA:1190:G:H5''	11:CL:35:HIS:HA	1.48	0.95
1:AA:1614:A:N1	18:AS:93:ALA:HB2	1.82	0.95
42:BL:46:LYS:HG3	42:BL:47:PRO:HD3	1.49	0.95
38:DH:7:ALA:HB2	38:DH:85:ARG:HD3	1.50	0.94
1:AA:676:A:H8	1:AA:2069:G:H21	1.08	0.94
46:BP:75:ARG:HG3	46:BP:75:ARG:HH11	1.33	0.94
29:C4:19:ARG:HG3	29:C4:19:ARG:HH11	1.27	0.94
11:AL:57:THR:HB	11:AL:59:LEU:H	1.32	0.94
47:BQ:7:THR:HG22	47:BQ:58:GLU:HG2	1.50	0.94
24:CY:50:ILE:HD12	24:CY:51:ARG:N	1.82	0.94
47:DQ:7:THR:HG22	47:DQ:58:GLU:HG2	1.49	0.94
37:DG:151:TYR:HE2	41:DK:54:ARG:HH21	1.15	0.93
1:CA:676:A:H8	1:CA:2069:G:H21	1.10	0.93
1:CA:959:A:N6	12:CM:82:ARG:HH22	1.65	0.93
1:CA:2287:A:H62	1:CA:2344:U:H3	1.05	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AJ:160:LYS:HZ2	9:AJ:161:LEU:H	1.06	0.93
35:DE:11:ILE:HD13	35:DE:31:LEU:HD12	1.49	0.93
8:CI:5:LEU:H	8:CI:5:LEU:HD23	1.32	0.93
3:AD:79:VAL:HG11	3:AD:111:LEU:HD11	1.51	0.93
10:AK:97:ARG:H	10:AK:117:LEU:HD23	1.34	0.93
1:CA:1109:C:H5	1:CA:1110:G:H1'	1.32	0.93
1:AA:1109:C:H5	1:AA:1110:G:H1'	1.32	0.92
1:CA:1899:G:H21	1:CA:1902:C:H41	1.17	0.92
17:AR:49:THR:HG22	17:AR:50:PRO:HD2	1.50	0.92
42:DL:46:LYS:HG3	42:DL:47:PRO:HD3	1.48	0.92
24:AY:50:ILE:HD12	24:AY:51:ARG:N	1.84	0.92
40:BJ:49:VAL:HG23	44:BN:41:ARG:HB2	1.52	0.92
40:BJ:63:PHE:HA	44:BN:59:ALA:H	1.34	0.92
52:BW:1:C:H42	52:BW:72:A:H61	1.17	0.92
9:AJ:132:LYS:H	9:AJ:132:LYS:HD3	1.33	0.92
1:CA:1689:A:H62	1:CA:1698:A:H2	1.18	0.92
52:DW:54:U:H3	52:DW:58:A:H62	1.17	0.92
52:BW:54:U:H3	52:BW:58:A:H62	1.16	0.92
8:AI:5:LEU:H	8:AI:5:LEU:HD23	1.35	0.92
3:CD:106:ILE:H	3:CD:106:ILE:HD13	1.35	0.92
9:CJ:132:LYS:H	9:CJ:132:LYS:HD3	1.33	0.92
11:CL:57:THR:HB	11:CL:59:LEU:H	1.34	0.92
35:BE:11:ILE:HD13	35:BE:31:LEU:HD12	1.51	0.91
10:CK:97:ARG:H	10:CK:117:LEU:HD23	1.34	0.91
1:CA:846:C:H4'	1:CA:847:U:H5'	1.52	0.91
1:AA:1541:U:C3'	1:AA:1542:G:H3'	2.00	0.91
1:AA:846:C:H4'	1:AA:847:U:H5'	1.53	0.91
1:AA:1541:U:H3'	1:AA:1542:G:C3'	2.00	0.91
1:CA:1541:U:H3'	1:CA:1542:G:C3'	2.00	0.91
36:DF:97:PHE:HD2	48:DR:31:LEU:HD21	1.35	0.91
17:CR:49:THR:HG22	17:CR:50:PRO:HD2	1.52	0.91
52:DW:1:C:H42	52:DW:72:A:H61	1.17	0.91
1:AA:774:A:H2	1:AA:787:U:HO2'	0.96	0.91
31:DA:972:C:H4'	40:DJ:57:LYS:HG3	1.53	0.91
1:AA:959:A:N6	12:AM:82:ARG:HH22	1.68	0.91
3:AD:106:ILE:H	3:AD:106:ILE:HD13	1.35	0.91
1:CA:1541:U:C3'	1:CA:1542:G:H3'	2.00	0.91
1:CA:2473:U:O2'	1:CA:2474:C:H5'	1.71	0.91
38:BH:7:ALA:HB2	38:BH:85:ARG:HD3	1.51	0.90
38:BH:114:THR:HG23	38:BH:116:LYS:H	1.36	0.90
11:CL:64:LYS:HB2	30:C5:25:MET:HG3	1.52	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DH:86:ILE:HG21	38:DH:133:LEU:HD13	1.54	0.90
38:BH:86:ILE:HG21	38:BH:133:LEU:HD13	1.53	0.90
42:DL:37:THR:HG23	42:DL:38:VAL:HG23	1.53	0.90
1:AA:806:C:OP2	11:AL:39:LYS:HG3	1.71	0.90
1:CA:140:A:H8	1:CA:1408:C:HO2'	0.90	0.90
1:AA:1899:G:H21	1:AA:1902:C:H41	1.15	0.90
3:CD:79:VAL:HG11	3:CD:111:LEU:HD11	1.54	0.90
1:CA:2090:G:H21	23:CX:45:ASN:HD21	1.19	0.90
20:CU:81:LYS:HD3	20:CU:97:ARG:HB3	1.55	0.89
17:AR:14:VAL:HG11	17:AR:96:ILE:HG12	1.54	0.89
1:CA:2681:C:H5	1:CA:2725:A:H62	1.19	0.89
4:CE:57:LYS:HG3	4:CE:58:ARG:H	1.36	0.89
40:DJ:50:ILE:HB	44:DN:41:ARG:HE	1.37	0.89
46:DP:75:ARG:HH11	46:DP:75:ARG:HG3	1.34	0.89
36:BF:97:PHE:HD2	48:BR:31:LEU:HD21	1.34	0.89
1:AA:2473:U:O2'	1:AA:2474:C:H5'	1.71	0.89
42:BL:37:THR:HG23	42:BL:38:VAL:HG23	1.54	0.89
34:DD:100:ARG:HE	34:DD:137:SER:HA	1.37	0.89
40:DJ:49:VAL:HG23	44:DN:41:ARG:HB2	1.53	0.89
31:BA:972:C:H4'	40:BJ:57:LYS:HG3	1.54	0.88
4:AE:57:LYS:HG3	4:AE:58:ARG:H	1.37	0.88
1:CA:2729:G:H1'	4:CE:187:ALA:HB2	1.55	0.88
38:DH:114:THR:HG23	38:DH:116:LYS:H	1.38	0.88
1:AA:1689:A:H62	1:AA:1698:A:H2	1.19	0.88
11:CL:91:PHE:H	11:CL:91:PHE:HD1	1.21	0.88
17:CR:14:VAL:HG11	17:CR:96:ILE:HG12	1.54	0.88
11:AL:91:PHE:HD1	11:AL:91:PHE:H	1.21	0.88
1:CA:942:G:H5'	11:CL:35:HIS:HB2	1.55	0.88
6:CG:53:LEU:HD13	6:CG:88:ILE:HG21	1.56	0.88
1:CA:273(G):C:H42	1:CA:363(A):G:H1	1.22	0.88
1:CA:1348:G:H2'	1:CA:1349:A:H5''	1.53	0.88
30:C5:52:LYS:HE3	30:C5:52:LYS:HA	1.56	0.88
3:CD:108:PRO:HB3	3:CD:143:HIS:CE1	2.09	0.88
6:CG:88:ILE:HD13	6:CG:89:GLY:H	1.39	0.87
24:AY:14:ARG:HA	24:AY:17:SER:HB2	1.57	0.87
3:AD:108:PRO:HB3	3:AD:143:HIS:CE1	2.09	0.87
11:CL:38:GLN:HG3	11:CL:39:LYS:H	1.38	0.87
1:AA:2303:G:C2'	1:AA:2304:G:H5''	2.05	0.87
46:BP:49:LEU:HD23	46:BP:50:LYS:N	1.90	0.87
1:AA:2090:G:H21	23:AX:45:ASN:HD21	1.21	0.87
6:AG:105:LYS:HD2	6:AG:142:PRO:HG3	1.56	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1678:G:H22	1:CA:1989:G:H22	1.19	0.87
1:AA:2729:G:H1'	4:AE:187:ALA:HB2	1.56	0.87
8:AI:4:ILE:HG22	8:AI:18:VAL:HG22	1.54	0.87
12:AM:23:GLY:HA3	12:AM:98:LYS:HB2	1.55	0.87
8:CI:4:ILE:HG22	8:CI:18:VAL:HG22	1.55	0.87
11:AL:64:LYS:HB2	30:A5:25:MET:HG3	1.55	0.87
20:AU:81:LYS:HD3	20:AU:97:ARG:HB3	1.56	0.87
1:CA:774:A:H2	1:CA:787:U:HO2'	1.22	0.87
32:DB:16:HIS:HD2	32:DB:210:SER:HA	1.39	0.87
1:AA:1348:G:H2'	1:AA:1349:A:H5''	1.57	0.86
1:AA:1678:G:H22	1:AA:1989:G:H22	1.20	0.86
1:AA:2681:C:H5	1:AA:2725:A:H62	1.17	0.86
3:CD:108:PRO:HB3	3:CD:143:HIS:HE1	1.40	0.86
1:AA:942:G:H5'	11:AL:35:HIS:HB2	1.56	0.86
49:DS:63:THR:H	49:DS:66:MET:HE3	1.40	0.86
39:DI:125:TYR:HD2	39:DI:126:SER:H	1.23	0.86
31:DA:1305:G:H5''	51:DU:4:GLY:HA3	1.55	0.86
1:AA:273(G):C:H42	1:AA:363(A):G:H1	1.24	0.86
1:CA:806:C:OP2	11:CL:39:LYS:HG3	1.74	0.86
15:CP:119:LYS:HA	31:DA:1443:G:N2	1.91	0.86
20:AU:50:ARG:HA	20:AU:58:GLY:HA3	1.57	0.86
6:AG:88:ILE:HD13	6:AG:89:GLY:H	1.39	0.86
41:DK:41:THR:HG22	41:DK:42:TRP:H	1.41	0.86
35:BE:50:GLU:HG2	35:BE:52:PRO:HD2	1.58	0.85
3:CD:25:THR:CG2	3:CD:82:ILE:H	1.89	0.85
32:BB:16:HIS:HD2	32:BB:210:SER:HA	1.40	0.85
37:BG:151:TYR:HE2	41:BK:54:ARG:HH21	1.24	0.85
1:CA:1109:C:C5	1:CA:1110:G:H1'	2.12	0.85
1:CA:675:A:H4'	5:CF:67:GLN:NE2	1.91	0.85
24:CY:14:ARG:HA	24:CY:17:SER:HB2	1.57	0.85
30:A5:52:LYS:HE3	30:A5:52:LYS:HA	1.57	0.85
45:DO:82:ILE:HG23	45:DO:87:ILE:HG22	1.58	0.85
4:CE:201:THR:HG22	4:CE:202:LYS:H	1.41	0.85
4:CE:201:THR:HG22	4:CE:202:LYS:N	1.90	0.85
32:DB:69:LEU:HB3	32:DB:162:ILE:HG22	1.58	0.85
42:DL:86:GLY:HA2	42:DL:97:TYR:HA	1.58	0.85
6:CG:105:LYS:HD2	6:CG:142:PRO:HG3	1.56	0.85
4:AE:201:THR:HG22	4:AE:202:LYS:N	1.92	0.85
1:CA:2303:G:C2'	1:CA:2304:G:H5''	2.05	0.85
46:DP:49:LEU:HD23	46:DP:50:LYS:N	1.91	0.85
29:A4:9:ARG:HE	29:A4:47:ARG:HB2	1.41	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:908:C:OP1	12:CM:22:LYS:HD2	1.77	0.85
3:AD:25:THR:CG2	3:AD:82:ILE:H	1.89	0.84
1:CA:2447:G:H4'	1:CA:2448:A:O5'	1.77	0.84
5:AF:45:ARG:HH11	5:AF:45:ARG:CG	1.89	0.84
5:CF:45:ARG:CG	5:CF:45:ARG:HH11	1.89	0.84
12:CM:43:THR:HA	12:CM:94:VAL:HG12	1.59	0.84
11:AL:59:LEU:HA	11:AL:61:ARG:NE	1.92	0.84
5:CF:6:MET:HG2	5:CF:7:TYR:HD1	1.38	0.84
14:CO:31:SER:HB3	14:CO:34:HIS:HB2	1.60	0.84
31:DA:1117:G:H4'	39:DI:104:ARG:HH21	1.42	0.84
1:AA:1174:A:H3'	1:AA:1175:U:H5''	1.60	0.84
1:AA:140:A:H8	1:AA:1408:C:O2'	1.59	0.84
6:AG:53:LEU:HD13	6:AG:88:ILE:HG21	1.57	0.84
20:CU:50:ARG:HA	20:CU:58:GLY:HA3	1.59	0.84
1:AA:1210:A:H5'	1:AA:1210:A:H8	1.42	0.84
5:AF:6:MET:HG2	5:AF:7:TYR:HD1	1.40	0.84
41:BK:41:THR:HG22	41:BK:42:TRP:H	1.43	0.84
45:BO:82:ILE:HG23	45:BO:87:ILE:HG22	1.58	0.84
3:AD:108:PRO:HB3	3:AD:143:HIS:HE1	1.40	0.84
4:AE:201:THR:HG22	4:AE:202:LYS:H	1.43	0.84
1:AA:1109:C:C5	1:AA:1110:G:H1'	2.12	0.83
12:AM:10:ARG:HA	12:AM:10:ARG:CZ	2.08	0.83
17:AR:28:GLU:HB3	17:AR:31:ALA:HB2	1.60	0.83
31:BA:1117:G:H4'	39:BI:104:ARG:HH21	1.42	0.83
12:CM:10:ARG:HA	12:CM:10:ARG:CZ	2.07	0.83
12:CM:23:GLY:HA3	12:CM:98:LYS:HB2	1.58	0.83
11:AL:38:GLN:HG3	11:AL:39:LYS:H	1.41	0.83
1:AA:908:C:OP1	12:AM:22:LYS:HD2	1.78	0.83
16:AQ:62:ILE:HD11	16:AQ:93:LYS:HD3	1.61	0.83
12:AM:43:THR:HA	12:AM:94:VAL:HG12	1.59	0.83
31:BA:436:C:H2'	31:BA:437:U:H6	1.42	0.83
1:CA:1309:G:H4'	29:C4:7:PRO:HB2	1.61	0.83
1:CA:1210:A:H8	1:CA:1210:A:H5'	1.44	0.83
1:CA:602:G:H2'	1:CA:655:A:H61	1.44	0.83
29:C4:9:ARG:HE	29:C4:47:ARG:HB2	1.42	0.83
1:CA:1902:C:H1'	3:CD:244:ARG:HD2	1.61	0.83
27:A2:4:HIS:CB	27:A2:5:PRO:HD3	2.08	0.83
5:AF:103:LYS:HA	5:AF:106:ARG:HG3	1.61	0.83
5:CF:67:GLN:HG3	5:CF:67:GLN:O	1.78	0.83
39:BI:113:LYS:HG2	39:BI:119:ALA:HA	1.61	0.82
1:CA:886:C:H2'	1:CA:887:A:O4'	1.79	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:140:A:H8	1:AA:1408:C:HO2'	0.87	0.82
1:AA:773:U:H4'	3:AD:47:GLY:HA3	1.61	0.82
36:DF:7:ASN:HD21	48:DR:34:TYR:HE1	1.27	0.82
1:AA:780:G:H21	1:AA:783:A:H62	1.24	0.82
40:DJ:63:PHE:HA	44:DN:59:ALA:H	1.44	0.82
1:AA:1051:G:H1	1:AA:1107:G:H22	1.27	0.82
36:BF:35:ALA:HB1	36:BF:65:VAL:HG21	1.61	0.82
39:BI:125:TYR:HD2	39:BI:126:SER:H	1.22	0.82
35:DE:50:GLU:HG2	35:DE:52:PRO:HD2	1.60	0.82
1:CA:140:A:H8	1:CA:1408:C:O2'	1.61	0.82
1:CA:2502:G:H5'	1:CA:2503:A:C5'	2.10	0.82
1:CA:1006:C:H1'	9:CJ:129:MET:HG2	1.61	0.82
1:CA:661:C:O3'	11:CL:18:ARG:HG2	1.80	0.82
11:CL:62:LEU:HD22	11:CL:62:LEU:H	1.45	0.82
1:CA:959:A:H62	12:CM:82:ARG:HH22	1.25	0.82
31:DA:841:U:O2'	31:DA:842:C:H5''	1.78	0.82
11:AL:45:LEU:HD23	11:AL:46:LYS:H	1.45	0.82
31:BA:501:C:H2'	31:BA:502:G:H8	1.45	0.82
42:BL:86:GLY:HA2	42:BL:97:TYR:HA	1.61	0.82
1:CA:1174:A:H3'	1:CA:1175:U:H5''	1.59	0.82
1:AA:1420:U:O2'	1:AA:1421:G:H5'	1.78	0.82
1:AA:2790:A:H2'	1:AA:2791:C:H5''	1.62	0.82
11:AL:125:VAL:HG11	11:AL:138:LEU:HD21	1.59	0.82
31:BA:841:U:O2'	31:BA:842:C:H5''	1.79	0.82
32:BB:69:LEU:HB3	32:BB:162:ILE:HG22	1.60	0.82
1:AA:2447:G:H4'	1:AA:2448:A:O5'	1.77	0.82
1:AA:1006:C:H1'	9:AJ:129:MET:HG2	1.62	0.82
1:CA:780:G:H21	1:CA:783:A:H62	1.23	0.82
21:CV:69:THR:HG22	21:CV:90:VAL:HG22	1.60	0.82
23:CX:13:ILE:HG21	23:CX:63:ALA:H	1.45	0.82
49:BS:63:THR:H	49:BS:66:MET:HE3	1.40	0.82
1:CA:1420:U:O2'	1:CA:1421:G:H5'	1.79	0.82
3:CD:255:LYS:HD2	3:CD:255:LYS:H	1.45	0.82
11:CL:59:LEU:HA	11:CL:61:ARG:NE	1.95	0.82
23:CX:10:LYS:C	23:CX:13:ILE:HD11	2.01	0.82
11:CL:125:VAL:HG11	11:CL:138:LEU:HD21	1.60	0.81
21:AV:69:THR:HG22	21:AV:90:VAL:HG22	1.60	0.81
31:BA:976:G:N2	31:BA:1361(A):C:H2'	1.95	0.81
9:AJ:156:GLN:C	9:AJ:158:PRO:HD3	2.01	0.81
45:DO:16:ALA:HB1	45:DO:21:ASP:HB3	1.62	0.81
1:AA:886:C:H2'	1:AA:887:A:O4'	1.80	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1281:U:H5'	31:BA:1282:C:C5	2.16	0.81
1:CA:2790:A:H2'	1:CA:2791:C:H5''	1.62	0.81
5:CF:134:GLY:H	5:CF:162:LEU:HD22	1.44	0.81
9:CJ:156:GLN:C	9:CJ:158:PRO:HD3	2.00	0.81
11:CL:41:ARG:HE	11:CL:41:ARG:CA	1.90	0.81
36:DF:35:ALA:HB1	36:DF:65:VAL:HG21	1.63	0.81
1:AA:1537:C:H2'	1:AA:1538:G:O4'	1.80	0.81
1:AA:1902:C:H1'	3:AD:244:ARG:HD2	1.62	0.81
27:C2:4:HIS:CB	27:C2:5:PRO:HD3	2.09	0.81
1:CA:1537:C:H2'	1:CA:1538:G:O4'	1.80	0.81
14:AO:31:SER:HB3	14:AO:34:HIS:HB2	1.61	0.81
31:BA:1268:A:H4'	51:BU:20:LYS:HA	1.62	0.81
1:CA:773:U:H4'	3:CD:47:GLY:HA3	1.62	0.81
31:DA:1281:U:H5'	31:DA:1282:C:C5	2.15	0.81
1:AA:1678:G:N2	1:AA:1989:G:H22	1.78	0.81
6:AG:167:GLU:HA	6:AG:170:ARG:HB3	1.62	0.81
1:AA:661:C:O3'	11:AL:18:ARG:HG2	1.81	0.81
11:AL:62:LEU:H	11:AL:62:LEU:HD22	1.44	0.81
1:CA:302:C:H2'	1:CA:303:U:H6	1.46	0.81
2:AB:89(A):G:H2'	2:AB:89(B):A:C8	2.16	0.81
23:AX:13:ILE:HG21	23:AX:63:ALA:H	1.45	0.81
31:BA:818:G:O2'	31:BA:819:A:H5''	1.80	0.81
31:DA:501:C:H2'	31:DA:502:G:H8	1.43	0.81
31:DA:1305:G:C5'	51:DU:4:GLY:HA3	2.11	0.81
1:AA:675:A:H4'	5:AF:67:GLN:NE2	1.95	0.80
7:AH:169:VAL:C	7:AH:170:ARG:HE	1.85	0.80
1:CA:141(A):A:H8	1:CA:1595:G:H21	1.29	0.80
31:DA:436:C:H2'	31:DA:437:U:H6	1.43	0.80
23:AX:10:LYS:C	23:AX:13:ILE:HD11	2.01	0.80
1:CA:1678:G:N2	1:CA:1989:G:H22	1.78	0.80
11:CL:16:ARG:NH2	11:CL:18:ARG:H	1.79	0.80
16:CQ:62:ILE:HD11	16:CQ:93:LYS:HD3	1.63	0.80
46:DP:22:THR:HA	46:DP:33:ILE:HG12	1.63	0.80
23:AX:13:ILE:HD12	23:AX:14:VAL:H	1.45	0.80
29:C4:19:ARG:CG	29:C4:19:ARG:HH11	1.95	0.80
24:CY:46:GLN:HB2	24:CY:49:LYS:NZ	1.97	0.80
2:CB:89(A):G:H2'	2:CB:89(B):A:C8	2.16	0.80
5:CF:103:LYS:HA	5:CF:106:ARG:HG3	1.62	0.80
36:DF:10:LEU:HD13	36:DF:61:LEU:HD13	1.64	0.80
39:DI:113:LYS:HG2	39:DI:119:ALA:HA	1.61	0.80
1:AA:330:A:H2	1:AA:1210:A:H2'	1.47	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:602:G:H2'	1:AA:655:A:H61	1.45	0.80
34:BD:189:PRO:HB2	34:BD:194:LEU:HD21	1.62	0.80
41:BK:22:HIS:HB3	41:BK:29:ILE:HG13	1.63	0.80
6:CG:167:GLU:HA	6:CG:170:ARG:HB3	1.63	0.80
11:CL:23:PRO:HB2	11:CL:33:ARG:CG	2.12	0.80
6:AG:43:LEU:H	6:AG:43:LEU:HD12	1.47	0.80
7:CH:169:VAL:C	7:CH:170:ARG:HE	1.85	0.80
15:CP:24:PRO:HA	15:CP:49:VAL:HG13	1.61	0.80
5:AF:67:GLN:HG3	5:AF:67:GLN:O	1.81	0.80
15:AP:24:PRO:HA	15:AP:49:VAL:HG13	1.62	0.80
41:BK:57:THR:HG23	41:BK:60:ALA:H	1.46	0.80
1:AA:1309:G:H4'	29:A4:7:PRO:HB2	1.61	0.80
42:DL:38:VAL:HB	42:DL:56:LYS:HD3	1.64	0.80
34:BD:29:PRO:HG2	34:BD:30:LYS:HZ1	1.47	0.80
40:BJ:48:THR:HA	40:BJ:62:HIS:HB3	1.62	0.80
43:BM:10:PRO:HB2	43:BM:18:ALA:HB1	1.64	0.80
1:CA:2749:A:H4'	7:CH:62:LYS:HB3	1.63	0.80
3:CD:28:GLU:HB3	3:CD:29:PRO:HD3	1.64	0.80
1:AA:2749:A:H4'	7:AH:62:LYS:HB3	1.64	0.79
46:BP:22:THR:HA	46:BP:33:ILE:HG12	1.62	0.79
11:CL:45:LEU:HD23	11:CL:46:LYS:H	1.45	0.79
40:DJ:48:THR:HA	40:DJ:62:HIS:HB3	1.62	0.79
15:AP:50:ILE:HG12	15:AP:99:LEU:HD12	1.64	0.79
28:C3:26:ASN:HD22	28:C3:28:ARG:H	1.29	0.79
31:BA:1281:U:H4'	31:BA:1282:C:OP2	1.82	0.79
44:BN:27:CYS:SG	44:BN:29:ARG:HG3	2.21	0.79
41:DK:57:THR:HG23	41:DK:60:ALA:H	1.46	0.79
1:AA:274:G:H3'	1:AA:275:G:C4'	2.12	0.79
11:AL:16:ARG:NH2	11:AL:18:ARG:H	1.80	0.79
1:CA:2150:U:H2'	1:CA:2151:G:C8	2.18	0.79
9:CJ:154:GLN:HE21	9:CJ:155:ALA:HB3	1.45	0.79
34:DD:173:TRP:CZ3	34:DD:193:ASP:HB3	2.17	0.79
32:BB:208:ILE:HD12	32:BB:208:ILE:H	1.48	0.79
33:BC:43:LEU:O	33:BC:47:LEU:HB3	1.83	0.79
1:CA:2287:A:N6	1:CA:2344:U:H3	1.80	0.79
1:AA:2502:G:H5'	1:AA:2503:A:C5'	2.10	0.79
23:CX:13:ILE:HD12	23:CX:14:VAL:H	1.46	0.79
9:AJ:160:LYS:HA	9:AJ:160:LYS:HZ3	1.48	0.79
29:C4:8:ASN:HD22	29:C4:8:ASN:C	1.86	0.79
1:CA:274:G:H3'	1:CA:275:G:C4'	2.13	0.79
34:DD:128:VAL:HG12	34:DD:129:ASN:H	1.47	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:119:GLN:HG3	34:BD:123:HIS:CD2	2.18	0.79
41:DK:22:HIS:HB3	41:DK:29:ILE:HG13	1.63	0.79
1:AA:2689:U:H4'	1:AA:2690:C:O5'	1.81	0.79
5:AF:107:LYS:HZ2	5:AF:205:ARG:HG3	1.48	0.79
17:AR:38:LEU:O	17:AR:39:LEU:HD13	1.83	0.79
23:AX:11:ARG:HB3	23:AX:12:PRO:CD	2.13	0.79
1:CA:1287:A:N7	13:CN:107:ASP:HB2	1.98	0.79
33:DC:47:LEU:HD21	33:DC:68:VAL:HG11	1.63	0.79
40:BJ:92:THR:HG23	40:BJ:93:GLY:H	1.48	0.78
42:BL:38:VAL:HB	42:BL:56:LYS:HD3	1.65	0.78
31:DA:1281:U:H4'	31:DA:1282:C:OP2	1.83	0.78
49:DS:50:ALA:HB1	49:DS:57:HIS:HB3	1.65	0.78
1:AA:302:C:H2'	1:AA:303:U:H6	1.45	0.78
3:AD:255:LYS:HD2	3:AD:255:LYS:H	1.46	0.78
1:CA:1051:G:H1	1:CA:1107:G:H22	1.27	0.78
32:DB:208:ILE:H	32:DB:208:ILE:HD12	1.48	0.78
17:CR:28:GLU:HB3	17:CR:31:ALA:HB2	1.63	0.78
32:DB:154:LEU:HD13	32:DB:154:LEU:H	1.48	0.78
33:DC:43:LEU:O	33:DC:47:LEU:HB3	1.83	0.78
1:AA:655:A:H2'	1:AA:656:G:O4'	1.81	0.78
6:AG:36:LYS:HB3	6:AG:160:VAL:HB	1.65	0.78
31:BA:1031(A):A:H5''	31:BA:1031(B):G:OP2	1.82	0.78
34:DD:9:CYS:HB3	34:DD:32:ALA:HB3	1.65	0.78
1:AA:919:G:H5'	2:AB:81:G:H1'	1.64	0.78
1:AA:1287:A:N7	13:AN:107:ASP:HB2	1.99	0.78
45:BO:16:ALA:HB1	45:BO:21:ASP:HB3	1.64	0.78
1:CA:1019:U:H3	1:CA:1142(B):A:H62	1.30	0.78
3:CD:31:LYS:HG3	3:CD:33:LEU:HG	1.66	0.78
28:A3:23:THR:HB	30:A5:35:GLN:HA	1.65	0.78
1:AA:2150:U:H2'	1:AA:2151:G:C8	2.18	0.78
17:CR:38:LEU:O	17:CR:39:LEU:HD13	1.84	0.78
31:DA:1301:U:H3'	31:DA:1302:U:H5''	1.66	0.78
40:DJ:4:ILE:HB	40:DJ:74:ILE:HB	1.66	0.78
32:BB:154:LEU:HD13	32:BB:154:LEU:H	1.49	0.78
40:DJ:92:THR:HG23	40:DJ:93:GLY:H	1.48	0.78
31:DA:1226:C:H2'	43:DM:103:THR:HG22	1.66	0.78
1:AA:959:A:H62	12:AM:82:ARG:HH22	1.27	0.78
5:AF:45:ARG:HG2	5:AF:45:ARG:NH1	1.88	0.78
11:AL:23:PRO:HB2	11:AL:33:ARG:CG	2.14	0.78
40:BJ:4:ILE:HB	40:BJ:74:ILE:HB	1.65	0.78
1:CA:1478:G:HO2'	1:CA:1558:A:H2	1.32	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:919:G:H5'	2:CB:81:G:H1'	1.64	0.78
3:AD:31:LYS:HG3	3:AD:33:LEU:HG	1.66	0.78
16:AQ:90:VAL:HG13	16:AQ:91:ASP:H	1.49	0.78
36:BF:10:LEU:HD13	36:BF:61:LEU:HD13	1.64	0.78
30:C5:50:LEU:HB2	30:C5:54:GLU:HB2	1.65	0.78
43:DM:10:PRO:HB2	43:DM:18:ALA:HB1	1.64	0.78
32:BB:18:GLY:H	32:BB:42:ILE:HG22	1.48	0.78
31:DA:1324:A:H4'	31:DA:1361(A):C:H4'	1.65	0.78
1:AA:2807:G:H22	1:AA:2893:G:H22	1.32	0.77
5:AF:134:GLY:H	5:AF:162:LEU:HD22	1.48	0.77
19:AT:60:ARG:HH21	29:A4:47:ARG:CZ	1.97	0.77
32:BB:172:ILE:HD12	32:BB:173:ALA:H	1.48	0.77
49:BS:50:ALA:HB1	49:BS:57:HIS:HB3	1.64	0.77
1:CA:655:A:H2'	1:CA:656:G:O4'	1.83	0.77
31:DA:1285:A:H1'	31:DA:1286:A:OP2	1.85	0.77
31:DA:818:G:O2'	31:DA:819:A:H5''	1.84	0.77
32:DB:18:GLY:H	32:DB:42:ILE:HG22	1.48	0.77
29:A4:9:ARG:HH21	29:A4:47:ARG:HG3	1.48	0.77
16:AQ:92:ARG:CD	16:AQ:94:ASN:HB3	2.14	0.77
31:BA:1285:A:H1'	31:BA:1286:A:OP2	1.84	0.77
34:BD:117:ALA:O	34:BD:121:VAL:HG23	1.84	0.77
1:CA:330:A:H2	1:CA:1210:A:H2'	1.48	0.77
6:CG:43:LEU:HD12	6:CG:43:LEU:H	1.46	0.77
1:AA:141(A):A:H8	1:AA:1595:G:H21	1.28	0.77
9:AJ:154:GLN:HE21	9:AJ:155:ALA:HB3	1.49	0.77
29:C4:9:ARG:HH21	29:C4:47:ARG:HG3	1.49	0.77
11:CL:148:LEU:HD13	11:CL:148:LEU:H	1.49	0.77
1:AA:1019:U:H3	1:AA:1142(B):A:H62	1.32	0.77
15:CP:50:ILE:HG12	15:CP:99:LEU:HD12	1.65	0.77
23:CX:11:ARG:HB3	23:CX:12:PRO:CD	2.13	0.77
6:AG:88:ILE:HD13	6:AG:89:GLY:N	2.00	0.77
1:CA:910:A:C5	12:CM:13:GLN:HG3	2.18	0.77
4:CE:91:VAL:HB	4:CE:95:ILE:HD11	1.66	0.77
16:CQ:92:ARG:CD	16:CQ:94:ASN:HB3	2.14	0.77
42:DL:32:ARG:HD3	42:DL:61:SER:HB3	1.67	0.77
52:DW:9:G:H5'	52:DW:46:G:H1'	1.67	0.77
29:A4:19:ARG:HH11	29:A4:19:ARG:CG	1.96	0.77
30:A5:50:LEU:HB2	30:A5:54:GLU:HB2	1.66	0.77
14:CO:61:ASN:HD22	14:CO:64:GLU:H	1.31	0.77
1:CA:380:U:O2'	23:CX:20:ARG:HB3	1.84	0.77
13:AN:57:ARG:HG2	13:AN:58:GLY:H	1.48	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BF:7:ASN:HD21	48:BR:34:TYR:HE1	1.31	0.77
29:A4:8:ASN:HD22	29:A4:8:ASN:C	1.88	0.77
1:AA:910:A:C5	12:AM:13:GLN:HG3	2.19	0.77
11:AL:58:THR:O	11:AL:61:ARG:HG3	1.84	0.77
33:BC:47:LEU:HD21	33:BC:68:VAL:HG11	1.65	0.77
1:CA:274:G:C3'	1:CA:275:G:H4'	2.15	0.77
5:CF:45:ARG:NH1	5:CF:45:ARG:HG2	1.89	0.77
28:A3:26:ASN:HD22	28:A3:28:ARG:H	1.30	0.77
4:AE:47:VAL:HG21	4:AE:86:PRO:HD3	1.67	0.77
11:AL:148:LEU:HD13	11:AL:148:LEU:H	1.49	0.77
19:CT:60:ARG:HH21	29:C4:47:ARG:CZ	1.97	0.77
31:DA:1128:C:H4'	39:DI:16:ARG:HH12	1.50	0.77
42:DL:51:LEU:H	42:DL:51:LEU:HD23	1.50	0.77
1:AA:2015:A:H1'	27:A2:2:ALA:HA	1.66	0.77
31:BA:624:C:H4'	46:BP:10:GLY:HA2	1.67	0.77
9:CJ:160:LYS:HZ2	9:CJ:161:LEU:N	1.83	0.77
11:CL:58:THR:O	11:CL:61:ARG:HG3	1.85	0.77
13:CN:57:ARG:HG2	13:CN:58:GLY:H	1.49	0.77
16:CQ:90:VAL:HG13	16:CQ:91:ASP:H	1.49	0.77
32:DB:172:ILE:HD12	32:DB:173:ALA:H	1.50	0.77
31:DA:1348:U:H4'	39:DI:120:ARG:HD2	1.67	0.77
6:CG:88:ILE:HD13	6:CG:89:GLY:N	1.99	0.76
28:C3:23:THR:HB	30:C5:35:GLN:HA	1.64	0.76
1:AA:2287:A:N6	1:AA:2344:U:H3	1.80	0.76
31:DA:37:U:H2'	31:DA:38:G:H8	1.50	0.76
11:AL:80:TYR:CD1	11:AL:111:ARG:HB3	2.20	0.76
31:BA:1128:C:H4'	39:BI:16:ARG:HH12	1.49	0.76
4:CE:132:HIS:CD2	4:CE:135:HIS:NE2	2.54	0.76
7:AH:25:LYS:HD2	7:AH:27:LYS:HE2	1.67	0.76
11:CL:80:TYR:CD1	11:CL:111:ARG:HB3	2.20	0.76
5:CF:34:TRP:CZ2	11:CL:12:ALA:HB2	2.21	0.76
44:DN:44:LEU:O	44:DN:44:LEU:HD12	1.85	0.76
50:DT:30:LYS:HD2	50:DT:34:LYS:HE3	1.68	0.76
1:AA:1902:C:H4'	3:AD:244:ARG:HB2	1.67	0.76
2:AB:9:G:H5'	14:AO:25:ARG:HH22	1.51	0.76
9:AJ:160:LYS:HZ2	9:AJ:161:LEU:N	1.84	0.76
36:BF:33:TYR:HB2	36:BF:75:LEU:HD12	1.68	0.76
42:BL:51:LEU:H	42:BL:51:LEU:HD23	1.50	0.76
3:AD:25:THR:O	3:AD:27:THR:HG22	1.85	0.76
1:AA:380:U:O2'	23:AX:20:ARG:HB3	1.85	0.76
18:CS:1:MET:HG2	18:CS:2:GLU:H	1.51	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:22:LYS:HB2	34:DD:26:CYS:SG	2.26	0.76
3:AD:227:ASN:HB3	3:AD:228:PRO:HD2	1.68	0.76
18:AS:1:MET:HG2	18:AS:2:GLU:H	1.51	0.76
31:BA:134:A:H61	46:BP:25:ARG:HH12	1.31	0.76
37:BG:115:ARG:O	37:BG:118:VAL:HG22	1.86	0.76
40:BJ:49:VAL:O	40:BJ:60:ARG:HB2	1.86	0.76
49:BS:31:ILE:HG23	49:BS:49:ILE:HA	1.67	0.76
45:DO:4:THR:HG23	45:DO:7:GLU:HB2	1.68	0.76
32:BB:55:PHE:HE1	32:BB:218:ALA:HA	1.51	0.76
1:CA:1902:C:H4'	3:CD:244:ARG:HB2	1.68	0.76
31:DA:1513:A:H2'	31:DA:1514:C:C6	2.21	0.76
34:DD:21:LEU:HD12	34:DD:22:LYS:H	1.51	0.76
1:AA:1899:G:N2	1:AA:1902:C:N4	2.32	0.75
31:BA:1226:C:H2'	43:BM:103:THR:HG22	1.67	0.75
1:CA:1379:A:H4'	1:CA:1380:G:OP2	1.86	0.75
1:CA:2689:U:H4'	1:CA:2690:C:O5'	1.83	0.75
4:AE:91:VAL:HB	4:AE:95:ILE:HD11	1.67	0.75
14:AO:61:ASN:HD22	14:AO:64:GLU:H	1.32	0.75
31:BA:1301:U:H3'	31:BA:1302:U:H5''	1.66	0.75
31:BA:1329:A:H62	51:BU:7:ARG:NH2	1.85	0.75
1:CA:195:A:OP1	11:CL:46:LYS:HE2	1.86	0.75
10:CK:71:ARG:HH21	10:CK:77:ILE:HG21	1.51	0.75
32:DB:24:TRP:CZ3	32:DB:26:PRO:HA	2.22	0.75
40:DJ:49:VAL:O	40:DJ:60:ARG:HB2	1.86	0.75
49:DS:31:ILE:HG23	49:DS:49:ILE:HA	1.67	0.75
1:AA:274:G:C3'	1:AA:275:G:H4'	2.14	0.75
13:AN:51:LEU:HD13	13:AN:70:LEU:HD11	1.68	0.75
21:AV:24:LEU:HD11	21:AV:86:VAL:HG23	1.69	0.75
31:BA:1513:A:H2'	31:BA:1514:C:C6	2.22	0.75
13:CN:70:LEU:HD23	13:CN:75:LEU:HD12	1.69	0.75
31:DA:134:A:H61	46:DP:25:ARG:HH12	1.32	0.75
3:AD:28:GLU:HB3	3:AD:29:PRO:HD3	1.67	0.75
9:AJ:160:LYS:HA	9:AJ:160:LYS:NZ	2.00	0.75
1:AA:195:A:OP1	11:AL:46:LYS:HE2	1.85	0.75
31:BA:1342:C:H4'	39:BI:125:TYR:HB3	1.69	0.75
52:BW:9:G:H5'	52:BW:46:G:H1'	1.66	0.75
4:CE:47:VAL:HG21	4:CE:86:PRO:HD3	1.68	0.75
4:AE:57:LYS:HG3	4:AE:58:ARG:N	2.01	0.75
11:AL:47:ASP:HB3	11:AL:48:PRO:HA	1.67	0.75
1:CA:2015:A:H1'	27:C2:2:ALA:HA	1.67	0.75
20:AU:37:VAL:HG21	20:AU:72:VAL:HG21	1.69	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:5:ILE:HG22	34:DD:6:GLY:H	1.51	0.75
37:DG:115:ARG:O	37:DG:118:VAL:HG22	1.85	0.75
31:BA:1348:U:H4'	39:BI:120:ARG:HD2	1.67	0.75
39:BI:16:ARG:HB2	39:BI:64:THR:HG22	1.69	0.75
3:CD:227:ASN:HB3	3:CD:228:PRO:HD2	1.67	0.75
11:CL:47:ASP:HB3	11:CL:48:PRO:HA	1.66	0.75
13:CN:51:LEU:HD13	13:CN:70:LEU:HD11	1.68	0.75
36:DF:33:TYR:HB2	36:DF:75:LEU:HD12	1.68	0.75
11:AL:71:VAL:HB	11:AL:72:PRO:HD3	1.67	0.75
42:BL:45:LYS:HG2	42:BL:46:LYS:H	1.52	0.75
30:C5:22:VAL:HB	30:C5:54:GLU:CG	2.17	0.75
3:CD:25:THR:O	3:CD:27:THR:HG22	1.86	0.75
43:BM:39:ILE:HG13	43:BM:56:LEU:HD21	1.69	0.75
6:CG:36:LYS:HB3	6:CG:160:VAL:HB	1.66	0.75
11:CL:71:VAL:HB	11:CL:72:PRO:HD3	1.68	0.75
31:DA:1347:G:N2	31:DA:1373:G:H2'	2.02	0.75
1:AA:1379:A:H4'	1:AA:1380:G:OP2	1.86	0.74
5:AF:63:LYS:HA	5:AF:76:GLY:O	1.87	0.74
18:AS:29:LEU:HD21	18:AS:33:ARG:HH21	1.52	0.74
19:AT:63:LYS:NZ	19:AT:72:LYS:HB3	2.02	0.74
42:BL:32:ARG:HD3	42:BL:61:SER:HB3	1.68	0.74
50:BT:20:LEU:O	50:BT:24:LEU:HD23	1.87	0.74
5:CF:185:ASP:HA	5:CF:188:ARG:HD3	1.69	0.74
7:CH:25:LYS:HD2	7:CH:27:LYS:HE2	1.67	0.74
33:BC:92:ALA:HA	33:BC:95:THR:HB	1.69	0.74
1:AA:773:U:C4'	3:AD:47:GLY:HA3	2.16	0.74
51:BU:18:TYR:HA	51:BU:22:ARG:HE	1.52	0.74
4:CE:57:LYS:HG3	4:CE:58:ARG:N	2.01	0.74
23:CX:86:SER:HB2	23:CX:89:GLU:HB2	1.69	0.74
31:DA:624:C:H4'	46:DP:10:GLY:HA2	1.67	0.74
46:DP:20:VAL:HG21	46:DP:32:TYR:CG	2.23	0.74
8:AI:77:LEU:HD11	8:AI:101:LEU:HB2	1.69	0.74
11:AL:41:ARG:HE	11:AL:41:ARG:CA	1.91	0.74
24:AY:46:GLN:HB2	24:AY:49:LYS:NZ	2.02	0.74
45:BO:4:THR:HG23	45:BO:7:GLU:HB2	1.68	0.74
33:DC:92:ALA:HA	33:DC:95:THR:HB	1.69	0.74
35:DE:121:LYS:HG3	35:DE:123:LEU:HD13	1.69	0.74
39:DI:16:ARG:HB2	39:DI:64:THR:HG22	1.68	0.74
1:AA:273(F):U:H2'	1:AA:273(G):C:H5''	1.68	0.74
5:AF:185:ASP:HA	5:AF:188:ARG:HD3	1.69	0.74
38:BH:114:THR:HG22	38:BH:117:GLY:O	1.87	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CJ:160:LYS:HA	9:CJ:160:LYS:NZ	2.01	0.74
1:CA:273(F):U:H2'	1:CA:273(G):C:H5''	1.69	0.74
3:CD:7:LYS:HG2	3:CD:8:PRO:HD2	1.68	0.74
12:CM:74:TYR:HD2	12:CM:91:GLU:HB2	1.53	0.74
16:CQ:92:ARG:HD3	16:CQ:94:ASN:HB3	1.70	0.74
52:DV:62:C:H2'	52:DV:63:G:C8	2.22	0.74
3:AD:35:LYS:HG2	3:AD:104:TYR:CE2	2.22	0.74
38:BH:89:PRO:HA	38:BH:92:ARG:HH11	1.53	0.74
4:AE:132:HIS:HA	4:AE:135:HIS:CE1	2.22	0.74
50:BT:72:LEU:HD11	50:BT:77:ALA:HA	1.70	0.74
27:C2:4:HIS:HB3	27:C2:5:PRO:CD	2.18	0.74
31:DA:67:C:H2'	31:DA:68:G:C8	2.23	0.74
32:DB:204:ASN:ND2	32:DB:207:ALA:H	1.84	0.74
32:DB:55:PHE:HE1	32:DB:218:ALA:HA	1.52	0.74
4:AE:132:HIS:CD2	4:AE:135:HIS:NE2	2.56	0.74
13:AN:70:LEU:HD23	13:AN:75:LEU:HD12	1.69	0.74
16:AQ:92:ARG:HD3	16:AQ:94:ASN:HB3	1.70	0.74
31:BA:1004:A:H5''	31:BA:1024:G:H22	1.53	0.74
44:BN:50:LYS:HD3	44:BN:52:GLN:HG3	1.70	0.74
3:CD:35:LYS:HG2	3:CD:104:TYR:CE2	2.22	0.74
12:CM:51:ARG:HB3	12:CM:51:ARG:HH11	1.51	0.74
20:CU:17:SER:CB	20:CU:71:LYS:HE2	2.16	0.74
31:DA:1342:C:H4'	39:DI:125:TYR:HB3	1.68	0.74
33:DC:52:LEU:HD13	33:DC:68:VAL:HG13	1.70	0.74
43:DM:39:ILE:HG13	43:DM:56:LEU:HD21	1.68	0.74
1:AA:1024:G:H3'	1:AA:1025:G:H5''	1.70	0.73
1:CA:1024:G:H3'	1:CA:1025:G:H5''	1.69	0.73
1:AA:2884:U:H5	1:AA:2885:C:C2	2.06	0.73
12:AM:74:TYR:HD2	12:AM:91:GLU:HB2	1.53	0.73
31:BA:368:U:H3	8:CI:89:TYR:HB3	1.52	0.73
42:BL:68:TYR:HB3	42:BL:98:HIS:CD2	2.23	0.73
31:BA:134:A:N6	46:BP:25:ARG:HH12	1.85	0.73
1:CA:2884:U:H5	1:CA:2885:C:C2	2.06	0.73
1:CA:2807:G:H22	1:CA:2893:G:H22	1.34	0.73
2:CB:9:G:H5'	14:CO:25:ARG:HH22	1.53	0.73
4:CE:132:HIS:HA	4:CE:135:HIS:CE1	2.24	0.73
1:CA:323:G:H2'	5:CF:169:ASN:OD1	1.88	0.73
8:CI:56:LYS:HZ2	8:CI:56:LYS:HB3	1.52	0.73
8:CI:77:LEU:HD11	8:CI:101:LEU:HB2	1.70	0.73
15:CP:60:THR:HG22	15:CP:77:PRO:HA	1.69	0.73
36:DF:23:LYS:O	36:DF:27:GLN:HG2	1.87	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AP:26:ASP:O	15:AP:49:VAL:HG12	1.88	0.73
15:AP:60:THR:HG22	15:AP:77:PRO:HA	1.70	0.73
23:AX:51:VAL:HG21	23:AX:74:VAL:HG21	1.70	0.73
23:AX:86:SER:HB2	23:AX:89:GLU:HB2	1.70	0.73
5:CF:63:LYS:HA	5:CF:76:GLY:O	1.87	0.73
21:CV:24:LEU:HD11	21:CV:86:VAL:HG23	1.69	0.73
23:CX:51:VAL:HG21	23:CX:74:VAL:HG21	1.70	0.73
42:DL:45:LYS:HG2	42:DL:46:LYS:H	1.53	0.73
27:A2:4:HIS:HB3	27:A2:5:PRO:CD	2.18	0.73
38:DH:24:THR:HG22	38:DH:25:ASP:H	1.52	0.73
4:CE:111:ARG:HG3	4:CE:160:TYR:CD1	2.24	0.73
4:CE:24:THR:HB	4:CE:186:GLY:HA2	1.70	0.73
42:DL:31:PHE:HE2	42:DL:85:ARG:HG3	1.54	0.73
6:CG:116:ASP:OD2	43:DM:68:GLY:HA3	1.88	0.73
36:DF:99:ALA:HB2	48:DR:31:LEU:HD22	1.71	0.73
1:AA:2119:A:N6	1:AA:2170:A:N6	2.37	0.73
36:BF:99:ALA:HB2	48:BR:31:LEU:HD22	1.70	0.73
43:BM:67:GLU:HG3	43:BM:68:GLY:H	1.53	0.73
52:BV:62:C:H2'	52:BV:63:G:C8	2.22	0.73
18:CS:29:LEU:HD21	18:CS:33:ARG:HH21	1.53	0.73
31:DA:134:A:N6	46:DP:25:ARG:HH12	1.86	0.73
32:BB:24:TRP:CZ3	32:BB:26:PRO:HA	2.22	0.73
50:DT:20:LEU:O	50:DT:24:LEU:HD23	1.87	0.73
50:DT:72:LEU:HD11	50:DT:77:ALA:HA	1.69	0.73
5:AF:20:LEU:HD22	5:AF:21:ALA:H	1.54	0.73
31:BA:67:C:H2'	31:BA:68:G:C8	2.24	0.73
34:BD:49:ARG:HA	34:BD:49:ARG:CZ	2.19	0.73
31:DA:328:C:H4'	31:DA:329:A:H5'	1.70	0.73
42:DL:27:LYS:HE2	42:DL:32:ARG:HH22	1.54	0.73
32:BB:48:MET:HA	32:BB:51:LEU:HD12	1.71	0.73
27:C2:40:LYS:HD3	27:C2:46:CYS:HB3	1.70	0.73
1:CA:773:U:C4'	3:CD:47:GLY:HA3	2.18	0.73
51:DU:18:TYR:HA	51:DU:22:ARG:HE	1.53	0.73
3:AD:7:LYS:HG2	3:AD:8:PRO:HD2	1.69	0.72
4:AE:24:THR:HB	4:AE:186:GLY:HA2	1.69	0.72
31:BA:243:A:H4'	31:BA:244:U:O5'	1.88	0.72
34:DD:47:ARG:HE	34:DD:47:ARG:HA	1.54	0.72
4:AE:111:ARG:HB2	4:AE:160:TYR:HB3	1.71	0.72
16:AQ:58:ARG:O	16:AQ:62:ILE:HG12	1.89	0.72
31:BA:37:U:H2'	31:BA:38:G:H8	1.53	0.72
34:BD:100:ARG:NH1	34:BD:137:SER:HA	2.04	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BL:31:PHE:HE2	42:BL:85:ARG:HG3	1.52	0.72
31:DA:1238:A:C8	31:DA:1303:C:H1'	2.24	0.72
1:AA:322:A:OP2	5:AF:169:ASN:HB2	1.89	0.72
38:BH:12:ARG:HH12	38:BH:27:PRO:HD3	1.53	0.72
38:BH:24:THR:HG22	38:BH:25:ASP:H	1.54	0.72
50:BT:30:LYS:HD2	50:BT:34:LYS:HE3	1.70	0.72
19:CT:63:LYS:NZ	19:CT:72:LYS:HB3	2.03	0.72
31:DA:1363:A:H4'	31:DA:1364:U:H5''	1.69	0.72
1:AA:2712:U:H1'	1:AA:712(B):A:C8	2.25	0.72
4:AE:111:ARG:HG3	4:AE:160:TYR:CD1	2.24	0.72
1:AA:2680:C:H5'	4:AE:189:PRO:HA	1.72	0.72
31:BA:1347:G:N2	31:BA:1373:G:H2'	2.04	0.72
35:BE:43:LEU:HD11	35:BE:132:ALA:HB1	1.71	0.72
36:BF:23:LYS:O	36:BF:27:GLN:HG2	1.88	0.72
5:CF:20:LEU:HD22	5:CF:21:ALA:H	1.53	0.72
12:CM:10:ARG:HA	12:CM:10:ARG:NE	2.05	0.72
32:DB:16:HIS:CD2	32:DB:210:SER:HA	2.24	0.72
38:DH:114:THR:HG22	38:DH:117:GLY:O	1.89	0.72
39:DI:97:LYS:HD3	39:DI:102:LEU:HD22	1.72	0.72
12:AM:51:ARG:HB3	12:AM:51:ARG:HH11	1.54	0.72
32:BB:16:HIS:CD2	32:BB:210:SER:HA	2.25	0.72
42:BL:27:LYS:HE2	42:BL:32:ARG:HH22	1.53	0.72
43:BM:49:THR:HG22	43:BM:51:ALA:H	1.55	0.72
9:CJ:68:ASN:H	9:CJ:68:ASN:HD22	1.35	0.72
30:A5:30:ARG:HA	30:A5:30:ARG:HE	1.54	0.72
31:BA:1327:C:OP1	51:BU:20:LYS:HB3	1.90	0.72
11:AL:95:VAL:HA	11:AL:99:LEU:HD22	1.70	0.72
15:CP:26:ASP:O	15:CP:49:VAL:HG12	1.90	0.72
16:CQ:58:ARG:O	16:CQ:62:ILE:HG12	1.90	0.72
17:CR:35:LEU:C	17:CR:37:VAL:H	1.92	0.72
34:DD:108:LEU:HB3	34:DD:110:PHE:HE1	1.55	0.72
17:AR:66:ARG:HD2	17:AR:88:ARG:CZ	2.19	0.72
31:BA:1182:G:H4'	31:BA:1183:A:H5''	1.72	0.72
31:BA:664:G:H22	31:BA:741:G:H1	1.36	0.72
52:BV:74:C:H3'	52:BV:75:C:H4'	1.69	0.72
21:CV:126:VAL:HG12	21:CV:163:LEU:HA	1.71	0.72
52:DV:74:C:H3'	52:DV:75:C:H4'	1.70	0.72
1:AA:83:G:N2	1:AA:102:G:H2'	2.05	0.72
20:AU:17:SER:CB	20:AU:71:LYS:HE2	2.16	0.72
31:BA:192:U:H4'	50:BT:103:GLY:H	1.52	0.72
46:BP:49:LEU:HD23	46:BP:50:LYS:H	1.53	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CM:12:GLN:HB2	12:CM:73:PRO:HD2	1.72	0.72
54:CA:4405:BLS:H2'	52:DV:76:A:H1'	1.69	0.72
6:AG:82:LEU:HA	6:AG:86:MET:HE1	1.72	0.72
33:BC:86:VAL:O	33:BC:90:GLU:HG2	1.90	0.72
34:BD:119:GLN:HG3	34:BD:123:HIS:HD2	1.52	0.72
38:BH:19:VAL:HG22	38:BH:21:LYS:HG2	1.72	0.72
7:CH:123:PHE:HB3	7:CH:133:VAL:HA	1.72	0.72
20:CU:7:VAL:C	20:CU:8:LYS:HG3	2.10	0.72
46:DP:49:LEU:HD23	46:DP:50:LYS:H	1.55	0.72
11:AL:50:ARG:HG2	11:AL:51:PHE:N	2.05	0.71
1:AA:388:G:OP1	23:AX:33:LYS:HB3	1.90	0.71
35:BE:121:LYS:HG3	35:BE:123:LEU:HD13	1.71	0.71
7:CH:168:PRO:HG2	7:CH:170:ARG:HD3	1.71	0.71
1:AA:2001:A:H5''	1:AA:2689:U:O2'	1.89	0.71
1:AA:276:C:H2'	1:AA:277:A:H8	1.54	0.71
8:AI:72:LEU:HD11	8:AI:101:LEU:HD11	1.71	0.71
31:BA:1238:A:C8	31:BA:1303:C:H1'	2.25	0.71
54:AA:4001:BLS:H2'	52:BV:76:A:H1'	1.70	0.71
30:C5:30:ARG:HE	30:C5:30:ARG:HA	1.55	0.71
1:CA:1899:G:N2	1:CA:1902:C:N4	2.34	0.71
33:DC:86:VAL:O	33:DC:90:GLU:HG2	1.90	0.71
45:DO:63:ARG:O	45:DO:67:LEU:HD13	1.90	0.71
11:AL:62:LEU:CD2	30:A5:25:MET:HB2	2.20	0.71
1:AA:887:A:H2'	1:AA:888:C:H5''	1.72	0.71
17:AR:35:LEU:C	17:AR:37:VAL:H	1.93	0.71
31:BA:1004:A:N1	31:BA:1025:U:H4'	2.04	0.71
1:CA:2001:A:H5''	1:CA:2689:U:O2'	1.90	0.71
1:CA:2807:G:H1	1:CA:2893:G:H1	1.39	0.71
3:CD:144:ALA:HB3	3:CD:192:THR:HG23	1.72	0.71
8:CI:72:LEU:HD11	8:CI:101:LEU:HD11	1.72	0.71
11:CL:50:ARG:HG2	11:CL:51:PHE:N	2.05	0.71
11:CL:64:LYS:O	11:CL:66:GLY:N	2.18	0.71
11:CL:95:VAL:HA	11:CL:99:LEU:HD22	1.73	0.71
20:CU:95:LYS:HG3	20:CU:100:ALA:HA	1.73	0.71
32:DB:48:MET:HA	32:DB:51:LEU:HD12	1.70	0.71
9:AJ:80:ALA:O	9:AJ:83:ILE:HG13	1.91	0.71
12:AM:12:GLN:HB2	12:AM:73:PRO:HD2	1.73	0.71
15:AP:28:VAL:HG23	15:AP:88:ILE:HA	1.71	0.71
33:BC:52:LEU:HD13	33:BC:68:VAL:HG13	1.71	0.71
1:CA:2446:G:C2'	1:CA:2447:G:H5''	2.20	0.71
20:AU:95:LYS:HG3	20:AU:100:ALA:HA	1.72	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CL:62:LEU:CD2	30:C5:25:MET:HB2	2.20	0.71
1:CA:2119:A:N6	1:CA:2170:A:N6	2.37	0.71
4:CE:10:GLY:HA3	15:CP:8:LYS:HE3	1.71	0.71
31:DA:1323:G:H4'	31:DA:1361(B):C:N3	2.05	0.71
31:BA:328:C:H4'	31:BA:329:A:H5'	1.71	0.71
54:CA:4405:BLS:H151	54:CA:4405:BLS:H102	1.56	0.71
17:CR:34:GLU:O	17:CR:36:PRO:HD3	1.90	0.71
32:DB:84:GLU:HB3	32:DB:219:VAL:HG21	1.73	0.71
30:A5:22:VAL:HB	30:A5:54:GLU:CG	2.21	0.71
8:AI:92:VAL:HG23	8:AI:96:ASP:HB2	1.71	0.71
9:AJ:68:ASN:H	9:AJ:68:ASN:HD22	1.37	0.71
1:CA:2712:U:H1'	1:CA:712(B):A:C8	2.25	0.71
10:CK:4:PRO:O	10:CK:5:GLN:HB2	1.90	0.71
31:DA:1105:A:H2'	31:DA:1106:G:H8	1.56	0.71
31:DA:141:A:H1'	31:DA:182:U:O2	1.91	0.71
31:DA:501:C:H2'	31:DA:502:G:C8	2.26	0.71
16:AQ:34:LYS:HA	16:AQ:34:LYS:HE2	1.73	0.71
23:CX:80:LEU:HD22	23:CX:82:LEU:HB3	1.73	0.71
31:DA:1004:A:N1	31:DA:1025:U:H4'	2.05	0.71
31:DA:833:U:H2'	31:DA:834:C:H6	1.55	0.71
38:DH:89:PRO:HA	38:DH:92:ARG:HH11	1.53	0.71
37:BG:45:ASP:O	37:BG:49:ILE:HG13	1.90	0.71
1:CA:605:C:H1'	1:CA:657:U:O2'	1.90	0.71
1:CA:480:A:OP2	20:CU:46:LYS:HE2	1.89	0.71
1:AA:2415:G:H4'	11:AL:67:MET:N	2.05	0.71
13:AN:57:ARG:HG2	13:AN:58:GLY:N	2.04	0.71
31:BA:495:A:H4'	31:BA:496:A:OP1	1.91	0.71
50:BT:100:ILE:HG22	50:BT:102:GLY:H	1.54	0.71
1:CA:2680:C:H5'	4:CE:189:PRO:HA	1.72	0.71
31:DA:192:U:H4'	50:DT:103:GLY:H	1.54	0.71
35:DE:101:ILE:H	35:DE:101:ILE:HD13	1.55	0.71
35:DE:51:VAL:HB	35:DE:52:PRO:HD3	1.73	0.71
43:DM:49:THR:HG22	43:DM:51:ALA:H	1.55	0.71
50:DT:100:ILE:HG22	50:DT:102:GLY:H	1.56	0.71
1:AA:1386:C:H2'	1:AA:1387:C:H6	1.56	0.70
1:AA:605:C:H1'	1:AA:657:U:O2'	1.90	0.70
3:AD:144:ALA:HB3	3:AD:192:THR:HG23	1.73	0.70
31:BA:978:A:OP2	31:BA:1361(B):C:N4	2.24	0.70
34:BD:9:CYS:HB3	34:BD:32:ALA:HB2	1.71	0.70
4:CE:103:ASP:OD1	4:CE:201:THR:HG23	1.91	0.70
11:CL:62:LEU:HD22	11:CL:62:LEU:N	2.06	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CN:57:ARG:HG2	13:CN:58:GLY:N	2.05	0.70
16:CQ:92:ARG:CB	16:CQ:92:ARG:HH11	2.04	0.70
31:DA:1296:C:H4'	31:DA:1302:U:O4	1.90	0.70
35:DE:43:LEU:HD11	35:DE:132:ALA:HB1	1.72	0.70
46:DP:53:VAL:HG12	46:DP:79:VAL:HG22	1.72	0.70
1:AA:2446:G:C2'	1:AA:2447:G:H5''	2.21	0.70
1:AA:2807:G:H1	1:AA:2893:G:H1	1.39	0.70
17:AR:34:GLU:O	17:AR:36:PRO:HD3	1.91	0.70
23:AX:80:LEU:HD22	23:AX:82:LEU:HB3	1.72	0.70
39:BI:97:LYS:HD3	39:BI:102:LEU:HD22	1.72	0.70
46:BP:20:VAL:HG21	46:BP:32:TYR:CG	2.24	0.70
3:CD:57:GLY:H	3:CD:216:GLY:HA2	1.55	0.70
32:DB:204:ASN:HD21	32:DB:207:ALA:N	1.87	0.70
43:DM:67:GLU:HG3	43:DM:68:GLY:H	1.54	0.70
5:AF:157:VAL:HB	5:AF:194:MET:HB3	1.73	0.70
1:AA:2094:G:H5'	8:AI:25:TYR:CD2	2.26	0.70
49:BS:18:LYS:HG2	49:BS:31:ILE:HD13	1.74	0.70
1:CA:1359:A:H2'	1:CA:1360:A:H5'	1.73	0.70
1:CA:276:C:H2'	1:CA:277:A:H8	1.54	0.70
5:CF:113:ALA:HB1	5:CF:186:ILE:HG21	1.73	0.70
6:CG:82:LEU:HA	6:CG:86:MET:HE1	1.73	0.70
8:CI:92:VAL:HG23	8:CI:96:ASP:HB2	1.73	0.70
15:CP:28:VAL:HG23	15:CP:88:ILE:HA	1.71	0.70
25:CZ:8:LEU:HB2	25:CZ:28:LEU:HD23	1.72	0.70
1:AA:1359:A:H2'	1:AA:1360:A:H5'	1.72	0.70
9:AJ:57:LEU:O	9:AJ:72:GLY:HA3	1.91	0.70
31:BA:1296:C:H4'	31:BA:1302:U:O4	1.91	0.70
34:BD:49:ARG:HH21	34:BD:50:ARG:HG2	1.55	0.70
1:CA:602:G:H2'	1:CA:655:A:N6	2.06	0.70
33:DC:75:VAL:O	33:DC:83:ARG:HG2	1.91	0.70
34:DD:28:SER:HB2	34:DD:29:PRO:HD2	1.74	0.70
34:DD:5:ILE:HG22	34:DD:6:GLY:N	2.06	0.70
38:DH:12:ARG:HH12	38:DH:27:PRO:HD3	1.54	0.70
1:AA:2473:U:O2	1:AA:2473:U:C2'	2.40	0.70
5:AF:113:ALA:HB1	5:AF:186:ILE:HG21	1.74	0.70
7:AH:123:PHE:HB3	7:AH:133:VAL:HA	1.73	0.70
7:AH:168:PRO:HG2	7:AH:170:ARG:HD3	1.71	0.70
8:AI:88:ILE:O	8:AI:121:LYS:HE3	1.91	0.70
16:AQ:92:ARG:HH11	16:AQ:92:ARG:CB	2.05	0.70
16:AQ:108:GLU:HG3	17:AR:44:LYS:HG2	1.74	0.70
31:BA:141:A:H1'	31:BA:182:U:O2	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1858:G:H1'	1:CA:1884:A:N6	2.07	0.70
1:CA:2446:G:H2'	1:CA:2447:G:H5''	1.72	0.70
42:DL:68:TYR:HB3	42:DL:98:HIS:CD2	2.26	0.70
1:AA:1210:A:C5'	1:AA:1210:A:H8	2.05	0.70
31:BA:833:U:H2'	31:BA:834:C:H6	1.55	0.70
20:CU:37:VAL:HG21	20:CU:72:VAL:HG21	1.72	0.70
31:DA:1004:A:H5''	31:DA:1024:G:H22	1.54	0.70
31:BA:1142:G:H2'	31:BA:1143:G:O4'	1.92	0.70
1:CA:1045:A:H5'	1:CA:1047:G:H5'	1.73	0.70
1:CA:744:G:OP1	4:CE:132:HIS:HB3	1.90	0.70
4:CE:111:ARG:HB2	4:CE:160:TYR:HB3	1.74	0.70
11:CL:62:LEU:HD23	30:C5:25:MET:HB2	1.73	0.70
12:CM:58:PHE:HD1	12:CM:58:PHE:O	1.75	0.70
23:CX:27:GLU:HB2	23:CX:33:LYS:HA	1.73	0.70
31:DA:1182:G:H4'	31:DA:1183:A:H5''	1.72	0.70
31:DA:664:G:H22	31:DA:741:G:H1	1.40	0.70
1:AA:2393:A:H5'	11:AL:62:LEU:CD1	2.20	0.70
20:AU:81:LYS:CD	20:AU:97:ARG:HB3	2.22	0.70
21:AV:126:VAL:HG12	21:AV:163:LEU:HA	1.72	0.70
21:AV:30:ASN:HD22	21:AV:32:HIS:H	1.39	0.70
41:BK:21:ILE:HB	41:BK:84:VAL:HG12	1.73	0.70
8:CI:92:VAL:HG13	8:CI:120:ILE:HG13	1.72	0.70
11:CL:29:LYS:HD2	11:CL:29:LYS:N	2.07	0.70
33:DC:71:ALA:HB2	33:DC:115:LEU:HD21	1.73	0.70
27:A2:40:LYS:HD3	27:A2:46:CYS:HB3	1.72	0.70
1:AA:1405:U:H2'	1:AA:1406:U:C6	2.26	0.70
4:AE:10:GLY:HA3	15:AP:8:LYS:HE3	1.73	0.70
5:AF:28:ILE:HD13	5:AF:28:ILE:H	1.57	0.70
11:AL:64:LYS:O	11:AL:66:GLY:N	2.20	0.70
22:AW:23:VAL:HA	22:AW:38:VAL:HG22	1.74	0.70
20:CU:90:LEU:HD23	20:CU:90:LEU:H	1.56	0.70
20:CU:81:LYS:CD	20:CU:97:ARG:HB3	2.21	0.70
32:DB:24:TRP:HZ3	32:DB:29:ALA:HB2	1.56	0.70
45:DO:39:LEU:HB3	45:DO:56:LEU:HD12	1.74	0.70
47:DQ:9:VAL:HG12	47:DQ:56:VAL:HG22	1.72	0.70
1:AA:1805:U:O2	3:AD:50:THR:HB	1.92	0.70
3:AD:57:GLY:H	3:AD:216:GLY:HA2	1.55	0.70
8:AI:92:VAL:HG13	8:AI:120:ILE:HG13	1.73	0.70
11:AL:62:LEU:N	11:AL:62:LEU:HD22	2.05	0.70
9:CJ:57:LEU:O	9:CJ:72:GLY:HA3	1.92	0.70
9:CJ:80:ALA:O	9:CJ:83:ILE:HG13	1.92	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2394:C:OP1	11:CL:63:PRO:HD2	1.92	0.70
17:CR:66:ARG:HD2	17:CR:88:ARG:CZ	2.22	0.70
31:DA:1142:G:H2'	31:DA:1143:G:O4'	1.92	0.70
31:DA:1227:A:N3	31:DA:1227:A:H2'	2.06	0.70
1:AA:2446:G:H2'	1:AA:2447:G:H5''	1.73	0.69
4:AE:47:VAL:HG23	4:AE:84:PHE:O	1.92	0.69
10:AK:71:ARG:HH21	10:AK:77:ILE:HG21	1.56	0.69
34:BD:29:PRO:HG2	34:BD:30:LYS:NZ	2.06	0.69
35:BE:101:ILE:HD13	35:BE:101:ILE:H	1.57	0.69
1:CA:2210:G:H3'	1:CA:2210:G:N3	2.07	0.69
5:CF:28:ILE:H	5:CF:28:ILE:HD13	1.56	0.69
15:CP:27:THR:HG23	15:CP:90:GLN:HB3	1.74	0.69
31:DA:243:A:H4'	31:DA:244:U:O5'	1.90	0.69
12:AM:10:ARG:HA	12:AM:10:ARG:NE	2.06	0.69
15:AP:56:GLY:O	15:AP:59:THR:HG22	1.92	0.69
25:AZ:52:HIS:CD2	25:AZ:52:HIS:H	2.10	0.69
12:CM:103:MET:HB2	12:CM:104:PHE:HD1	1.56	0.69
25:CZ:52:HIS:H	25:CZ:52:HIS:CD2	2.09	0.69
31:DA:1004:A:H1'	31:DA:1036:G:H22	1.57	0.69
36:DF:69:GLU:O	36:DF:72:VAL:HG12	1.92	0.69
38:DH:64:LYS:HG2	38:DH:79:VAL:HG21	1.74	0.69
27:A2:33:CYS:SG	27:A2:40:LYS:HE3	2.31	0.69
54:AA:4001:BLS:H151	54:AA:4001:BLS:H102	1.57	0.69
31:BA:1004:A:H1'	31:BA:1036:G:H22	1.58	0.69
32:BB:204:ASN:ND2	32:BB:207:ALA:H	1.85	0.69
39:BI:4:TYR:HB2	39:BI:19:LEU:HB2	1.75	0.69
41:BK:79:SER:HA	41:BK:104:GLN:HB3	1.73	0.69
43:BM:40:ASN:HB3	43:BM:43:THR:HG23	1.75	0.69
52:BW:21:A:H2'	52:BW:46:G:O6	1.92	0.69
1:CA:1386:C:H2'	1:CA:1387:C:H6	1.57	0.69
34:DD:109:GLY:HA3	34:DD:165:MET:HG2	1.74	0.69
49:DS:18:LYS:HG2	49:DS:31:ILE:HD13	1.74	0.69
52:DW:21:A:H2'	52:DW:46:G:O6	1.92	0.69
1:AA:1858:G:H1'	1:AA:1884:A:N6	2.06	0.69
24:AY:14:ARG:HA	24:AY:17:SER:CB	2.23	0.69
33:BC:71:ALA:HB2	33:BC:115:LEU:HD21	1.73	0.69
49:BS:22:LEU:HD13	49:BS:27:GLU:HB2	1.74	0.69
16:CQ:34:LYS:HE2	16:CQ:34:LYS:HA	1.73	0.69
24:CY:14:ARG:HG2	24:CY:17:SER:OG	1.92	0.69
37:DG:45:ASP:O	37:DG:49:ILE:HG13	1.91	0.69
41:DK:79:SER:HA	41:DK:104:GLN:HB3	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DS:22:LEU:HD13	49:DS:27:GLU:HB2	1.75	0.69
1:AA:2747:G:O6	1:AA:2755:C:H5''	1.91	0.69
12:AM:103:MET:HB2	12:AM:104:PHE:HD1	1.57	0.69
1:AA:960:A:N6	12:AM:82:ARG:HH21	1.89	0.69
23:AX:53:VAL:HG22	23:AX:74:VAL:HG13	1.74	0.69
25:AZ:8:LEU:HB2	25:AZ:28:LEU:HD23	1.74	0.69
46:BP:53:VAL:HG12	46:BP:79:VAL:HG22	1.74	0.69
43:DM:3:ARG:NH2	43:DM:7:VAL:HG12	2.07	0.69
4:AE:9:VAL:HG13	4:AE:25:VAL:O	1.92	0.69
11:AL:29:LYS:N	11:AL:29:LYS:HD2	2.06	0.69
15:AP:27:THR:HG23	15:AP:90:GLN:HB3	1.74	0.69
20:AU:90:LEU:HD23	20:AU:90:LEU:H	1.56	0.69
31:BA:1031:G:H2'	31:BA:1031(A):A:O4'	1.91	0.69
31:BA:1105:A:H2'	31:BA:1106:G:H8	1.56	0.69
1:CA:1210:A:C5'	1:CA:1210:A:H8	2.06	0.69
1:CA:1405:U:H2'	1:CA:1406:U:C6	2.26	0.69
1:CA:2747:G:O6	1:CA:2755:C:H5''	1.91	0.69
1:CA:887:A:H2'	1:CA:888:C:H5''	1.73	0.69
15:CP:41:ARG:NH2	31:DA:346:G:OP1	2.26	0.69
1:CA:388:G:OP1	23:CX:33:LYS:HB3	1.92	0.69
31:DA:532:A:H2	31:DA:1207:G:H4'	1.56	0.69
31:DA:436:C:H2'	31:DA:437:U:C6	2.26	0.69
10:AK:4:PRO:O	10:AK:5:GLN:HB2	1.92	0.69
20:AU:7:VAL:C	20:AU:8:LYS:HG3	2.11	0.69
23:AX:51:VAL:HG13	23:AX:58:ILE:HG23	1.75	0.69
47:BQ:9:VAL:HG12	47:BQ:56:VAL:HG22	1.75	0.69
31:DA:826:C:H5'	38:DH:12:ARG:HH21	1.58	0.69
3:AD:21:PHE:HB3	3:AD:24:ILE:HD12	1.72	0.69
5:AF:6:MET:HG2	5:AF:7:TYR:CD1	2.27	0.69
23:AX:10:LYS:O	23:AX:13:ILE:HD11	1.92	0.69
24:AY:13:ALA:O	24:AY:17:SER:HA	1.92	0.69
3:CD:21:PHE:HB3	3:CD:24:ILE:HD12	1.73	0.69
9:CJ:79:ASN:H	9:CJ:148:GLY:HA3	1.58	0.69
12:CM:10:ARG:HD3	12:CM:11:LYS:H	1.57	0.69
21:CV:30:ASN:HD22	21:CV:32:HIS:H	1.38	0.69
23:CX:10:LYS:O	23:CX:13:ILE:HD11	1.92	0.69
40:DJ:6:ILE:HD11	40:DJ:72:VAL:HB	1.75	0.69
1:CA:1854:A:H62	1:CA:1888:G:H8	1.41	0.69
31:DA:748:C:H1'	31:DA:749:C:OP2	1.93	0.69
1:AA:118:A:H5'	1:AA:119:A:H8	1.58	0.69
9:AJ:79:ASN:H	9:AJ:148:GLY:HA3	1.58	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:14:ARG:HG2	24:AY:17:SER:OG	1.92	0.69
31:BA:1227:A:H2'	31:BA:1227:A:N3	2.07	0.69
31:BA:1438:G:H2'	31:BA:1439:C:H6	1.58	0.69
31:BA:748:C:H1'	31:BA:749:C:OP2	1.93	0.69
32:BB:84:GLU:HB3	32:BB:219:VAL:HG21	1.73	0.69
32:BB:24:TRP:HZ3	32:BB:29:ALA:HB2	1.56	0.69
43:BM:91:ARG:HD2	49:BS:81:ARG:HH22	1.56	0.69
1:CA:2473:U:O2	1:CA:2473:U:C2'	2.41	0.69
3:CD:255:LYS:HD3	3:CD:255:LYS:O	1.92	0.69
16:CQ:108:GLU:HG3	17:CR:44:LYS:HG2	1.75	0.69
35:DE:76:ILE:HG13	35:DE:77:PRO:HD2	1.75	0.69
37:DG:27:ILE:HD12	37:DG:40:ALA:HA	1.75	0.69
39:DI:70:LYS:O	39:DI:74:ILE:HG12	1.93	0.69
42:DL:53:LYS:N	42:DL:53:LYS:HD2	2.08	0.69
11:AL:29:LYS:HD2	11:AL:29:LYS:H	1.58	0.69
1:AA:494:G:H21	18:AS:57:ASN:HD21	1.41	0.69
33:BC:189:ALA:HB3	33:BC:196:LEU:HB3	1.75	0.69
48:BR:47:THR:HA	48:BR:83:GLU:HB2	1.74	0.69
41:DK:21:ILE:HB	41:DK:84:VAL:HG12	1.74	0.69
43:DM:91:ARG:HD2	49:DS:81:ARG:HH22	1.57	0.69
3:AD:255:LYS:O	3:AD:255:LYS:HD3	1.93	0.68
31:BA:1363:A:H4'	31:BA:1364:U:H5''	1.73	0.68
32:BB:21:ARG:HB3	32:BB:39:ILE:HA	1.75	0.68
40:BJ:6:ILE:HD11	40:BJ:72:VAL:HB	1.74	0.68
48:BR:51:LEU:HD22	48:BR:55:ARG:HH21	1.56	0.68
27:C2:33:CYS:SG	27:C2:40:LYS:HE3	2.32	0.68
1:CA:2756:U:H4'	1:CA:2757:A:OP1	1.93	0.68
1:CA:494:G:H21	18:CS:57:ASN:HD21	1.39	0.68
3:CD:103:ARG:HH11	3:CD:103:ARG:CG	2.05	0.68
24:CY:13:ALA:O	24:CY:17:SER:HA	1.92	0.68
1:AA:860:U:H5	1:AA:917:A:N7	1.91	0.68
31:BA:191(G):G:C4	50:BT:105:SER:HB3	2.27	0.68
45:BO:63:ARG:O	45:BO:67:LEU:HD13	1.93	0.68
1:CA:1805:U:O2	3:CD:50:THR:HB	1.93	0.68
12:CM:62:GLY:HA2	21:CV:116:VAL:HG21	1.75	0.68
31:DA:1438:G:H2'	31:DA:1439:C:H6	1.59	0.68
48:DR:51:LEU:HD22	48:DR:55:ARG:HH21	1.59	0.68
30:A5:51:ALA:O	30:A5:54:GLU:HB3	1.93	0.68
1:AA:1854:A:H62	1:AA:1888:G:H8	1.40	0.68
1:AA:2210:G:H3'	1:AA:2210:G:N3	2.08	0.68
4:AE:103:ASP:OD1	4:AE:201:THR:HG23	1.93	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:436:C:H2'	31:BA:437:U:C6	2.27	0.68
31:BA:826:C:H5'	38:BH:12:ARG:HH21	1.57	0.68
33:BC:130:VAL:O	33:BC:134:ILE:HG13	1.93	0.68
39:BI:70:LYS:O	39:BI:74:ILE:HG12	1.94	0.68
47:BQ:86:GLU:O	47:BQ:90:ILE:HG12	1.93	0.68
1:CA:2267:A:H5''	1:CA:2268:A:H5'	1.76	0.68
23:CX:40:ARG:NH1	23:CX:42:GLN:HG2	2.09	0.68
31:DA:191(G):G:C4	50:DT:105:SER:HB3	2.28	0.68
32:DB:21:ARG:HB3	32:DB:39:ILE:HA	1.75	0.68
1:AA:1529:A:H62	1:AA:1542:G:N2	1.91	0.68
23:AX:40:ARG:NH1	23:AX:42:GLN:HG2	2.09	0.68
36:BF:69:GLU:O	36:BF:72:VAL:HG12	1.93	0.68
1:CA:1709:U:H2'	1:CA:1710:C:C6	2.29	0.68
1:CA:273(G):C:N4	1:CA:363(A):G:H1	1.91	0.68
8:CI:88:ILE:O	8:CI:121:LYS:HE3	1.93	0.68
15:CP:56:GLY:O	15:CP:59:THR:HG22	1.94	0.68
31:DA:328:C:H4'	31:DA:329:A:C5'	2.22	0.68
47:DQ:86:GLU:O	47:DQ:90:ILE:HG12	1.92	0.68
15:AP:115:ARG:HD3	15:AP:115:ARG:H	1.59	0.68
43:BM:3:ARG:NH2	43:BM:7:VAL:HG12	2.09	0.68
9:CJ:157:ARG:N	9:CJ:158:PRO:HD3	2.08	0.68
1:CA:2415:G:H4'	11:CL:67:MET:N	2.07	0.68
31:DA:974:A:H8	31:DA:974:A:OP1	1.76	0.68
39:DI:4:TYR:HB2	39:DI:19:LEU:HB2	1.75	0.68
39:DI:48:GLU:N	39:DI:49:PRO:HD2	2.08	0.68
1:AA:602:G:H2'	1:AA:655:A:N6	2.07	0.68
5:AF:133:ASN:HA	5:AF:162:LEU:HD13	1.76	0.68
12:AM:58:PHE:HD1	12:AM:58:PHE:O	1.76	0.68
20:AU:42:VAL:HG12	20:AU:65:ALA:HB3	1.75	0.68
32:BB:204:ASN:HD21	32:BB:207:ALA:N	1.88	0.68
39:BI:127:LYS:NZ	39:BI:128:ARG:HH11	1.91	0.68
49:BS:16:LEU:O	49:BS:20:LEU:HG	1.94	0.68
27:C2:40:LYS:CD	27:C2:46:CYS:HB3	2.23	0.68
1:CA:118:A:H5'	1:CA:119:A:H8	1.58	0.68
1:CA:860:U:H5	1:CA:917:A:N7	1.92	0.68
31:DA:817:C:H1'	31:DA:819:A:H5'	1.74	0.68
38:DH:19:VAL:HG22	38:DH:21:LYS:HG2	1.73	0.68
39:DI:127:LYS:HZ3	39:DI:128:ARG:HH11	1.41	0.68
1:AA:1045:A:H5'	1:AA:1047:G:H5'	1.74	0.68
1:AA:1659:U:OP2	4:AE:132:HIS:HE1	1.76	0.68
11:AL:62:LEU:HD23	30:A5:25:MET:HB2	1.75	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:7:PRO:HB2	34:BD:10:ARG:HD2	1.76	0.68
34:BD:61:LYS:HA	34:BD:203:VAL:HG22	1.76	0.68
35:BE:91:LEU:HA	35:BE:120:THR:HG22	1.76	0.68
35:BE:76:ILE:HG13	35:BE:77:PRO:HD2	1.76	0.68
39:BI:125:TYR:HD2	39:BI:126:SER:N	1.92	0.68
39:BI:48:GLU:N	39:BI:49:PRO:HD2	2.08	0.68
1:AA:1386:C:H2'	1:AA:1387:C:C6	2.29	0.68
1:AA:1709:U:H2'	1:AA:1710:C:C6	2.28	0.68
1:AA:744:G:OP1	4:AE:132:HIS:HB3	1.93	0.68
11:AL:23:PRO:HD2	11:AL:33:ARG:NH2	2.09	0.68
1:AA:2394:C:OP1	11:AL:63:PRO:HD2	1.94	0.68
31:BA:817:C:H1'	31:BA:819:A:H5'	1.76	0.68
33:BC:20:SER:HB2	33:BC:40:ARG:HH22	1.59	0.68
34:BD:64:LEU:HD13	34:BD:198:VAL:HG21	1.75	0.68
1:CA:83:G:N2	1:CA:102:G:H2'	2.09	0.68
1:AA:270(T):G:H2'	1:AA:270(U):G:H8	1.58	0.68
17:AR:14:VAL:CG1	17:AR:96:ILE:HG12	2.24	0.68
38:BH:64:LYS:HG2	38:BH:79:VAL:HG21	1.74	0.68
27:C2:29:ILE:HD12	27:C2:29:ILE:O	1.93	0.68
1:CA:1416:G:H2'	1:CA:1417:C:C6	2.28	0.68
4:CE:49:LEU:HD23	4:CE:81:ILE:HG12	1.76	0.68
31:DA:1238:A:N7	31:DA:1303:C:H1'	2.09	0.68
11:AL:77:ARG:HB2	11:AL:78:PRO:HD2	1.75	0.68
1:CA:270(T):G:H2'	1:CA:270(U):G:H8	1.58	0.68
20:CU:42:VAL:HG12	20:CU:65:ALA:HB3	1.76	0.68
24:CY:14:ARG:HA	24:CY:17:SER:CB	2.23	0.68
32:DB:162:ILE:HD11	32:DB:184:VAL:HA	1.75	0.68
4:AE:2:LYS:HD3	4:AE:95:ILE:HG22	1.76	0.67
7:AH:118:PRO:HG2	7:AH:121:ILE:HD13	1.76	0.67
46:BP:43:LYS:HG3	46:BP:48:TRP:CE3	2.29	0.67
1:CA:1386:C:H2'	1:CA:1387:C:C6	2.29	0.67
33:DC:189:ALA:HB3	33:DC:196:LEU:HB3	1.76	0.67
34:DD:121:VAL:HA	34:DD:126:ILE:HD13	1.77	0.67
23:AX:27:GLU:HB2	23:AX:33:LYS:HA	1.76	0.67
31:BA:1238:A:N7	31:BA:1303:C:H1'	2.10	0.67
1:CA:1529:A:H62	1:CA:1542:G:N2	1.91	0.67
4:CE:47:VAL:HG23	4:CE:84:PHE:O	1.93	0.67
1:AA:1416:G:H2'	1:AA:1417:C:C6	2.29	0.67
8:AI:63:ALA:O	8:AI:66:GLU:HB3	1.94	0.67
23:AX:40:ARG:HD2	23:AX:41:ARG:N	2.09	0.67
24:AY:14:ARG:HG2	24:AY:17:SER:CB	2.24	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1438:G:H2'	31:BA:1439:C:C6	2.29	0.67
31:BA:328:C:H4'	31:BA:329:A:C5'	2.23	0.67
31:BA:1092:A:H5''	37:BG:4:ARG:NH2	2.10	0.67
39:BI:103:THR:HG22	39:BI:105:ASP:H	1.58	0.67
1:CA:1005:C:O2'	9:CJ:51:THR:HG21	1.94	0.67
9:CJ:160:LYS:HA	9:CJ:160:LYS:HZ3	1.58	0.67
11:CL:23:PRO:HD2	11:CL:33:ARG:NH2	2.07	0.67
24:CY:14:ARG:HG2	24:CY:17:SER:CB	2.25	0.67
31:DA:1031(A):A:H5''	31:DA:1031(B):G:OP2	1.95	0.67
31:DA:495:A:H4'	31:DA:496:A:OP1	1.92	0.67
32:DB:61:LEU:HD21	32:DB:68:ILE:HD11	1.76	0.67
35:DE:91:LEU:HA	35:DE:120:THR:HG22	1.77	0.67
48:DR:66:LEU:O	48:DR:70:ILE:HG12	1.94	0.67
4:AE:49:LEU:HD23	4:AE:81:ILE:HG12	1.75	0.67
6:AG:71:THR:HG22	6:AG:89:GLY:N	2.08	0.67
11:AL:23:PRO:HB3	11:AL:29:LYS:HB3	1.77	0.67
12:AM:10:ARG:HD3	12:AM:11:LYS:H	1.57	0.67
31:BA:501:C:H2'	31:BA:502:G:C8	2.27	0.67
32:BB:162:ILE:HD11	32:BB:184:VAL:HA	1.74	0.67
32:BB:61:LEU:HD21	32:BB:68:ILE:HD11	1.77	0.67
45:BO:39:LEU:HB3	45:BO:56:LEU:HD12	1.76	0.67
48:BR:50:ILE:HD11	48:BR:74:ARG:NH1	2.10	0.67
52:BV:74:C:H5'	52:BV:75:C:OP2	1.95	0.67
1:CA:2116:G:N2	1:CA:2163:C:H41	1.92	0.67
16:CQ:24:TYR:HB2	16:CQ:29:SER:HB3	1.76	0.67
16:CQ:92:ARG:HD2	16:CQ:95:LEU:HG	1.74	0.67
21:CV:125:LEU:HD13	21:CV:164:ALA:HB3	1.75	0.67
48:DR:47:THR:HA	48:DR:83:GLU:HB2	1.75	0.67
1:AA:2840:C:H4'	13:AN:53:HIS:CD2	2.30	0.67
6:AG:41:GLN:HB2	6:AG:43:LEU:HD11	1.76	0.67
33:BC:134:ILE:HG22	33:BC:168:ALA:HB3	1.75	0.67
33:BC:75:VAL:O	33:BC:83:ARG:HG2	1.91	0.67
11:CL:64:LYS:HB2	30:C5:25:MET:CG	2.25	0.67
1:CA:2393:A:H5'	11:CL:62:LEU:CD1	2.21	0.67
1:CA:34:C:O2'	1:CA:35:G:C5'	2.40	0.67
1:CA:814:C:H41	11:CL:27:HIS:CD2	2.13	0.67
11:CL:46:LYS:HB3	11:CL:52:GLU:HG3	1.77	0.67
22:CW:23:VAL:HA	22:CW:38:VAL:HG22	1.76	0.67
31:DA:1297:C:OP1	43:DM:13:LYS:HE3	1.95	0.67
31:DA:537:G:H2'	31:DA:538:G:H8	1.60	0.67
34:DD:110:PHE:HE2	34:DD:148:VAL:HG23	1.59	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DM:40:ASN:HB3	43:DM:43:THR:HG23	1.75	0.67
1:AA:1045:A:H5''	1:AA:1046:A:H3'	1.76	0.67
1:AA:2756:U:H4'	1:AA:2757:A:OP1	1.93	0.67
1:AA:480:A:OP2	20:AU:46:LYS:HE2	1.93	0.67
45:BO:9:GLN:O	45:BO:13:GLN:HG2	1.94	0.67
48:BR:66:LEU:O	48:BR:70:ILE:HG12	1.94	0.67
31:BA:186(B):C:O2'	50:BT:89:ARG:HD2	1.93	0.67
4:CE:172:VAL:HG13	4:CE:182:LEU:HD11	1.76	0.67
4:CE:7:VAL:HG22	4:CE:27:LEU:HB3	1.76	0.67
31:DA:1092:A:H5''	37:DG:4:ARG:NH2	2.09	0.67
1:AA:1332:G:H21	1:AA:1610:A:H8	1.43	0.67
1:AA:1981:A:H5''	1:AA:1982:C:OP2	1.94	0.67
19:AT:55:ASN:HB2	19:AT:80:ILE:HG13	1.76	0.67
33:BC:191:THR:HG21	33:BC:193:TYR:CZ	2.29	0.67
1:CA:1045:A:H5''	1:CA:1046:A:H3'	1.76	0.67
1:CA:528:A:H2	1:CA:2043:C:H5'	1.59	0.67
5:CF:6:MET:HG2	5:CF:7:TYR:CD1	2.26	0.67
6:CG:71:THR:HG22	6:CG:89:GLY:N	2.09	0.67
42:DL:40:ARG:CG	42:DL:41:THR:H	2.08	0.67
15:CP:115:ARG:H	15:CP:115:ARG:HD3	1.59	0.67
19:CT:5:TYR:CE2	24:CY:30:ARG:HG3	2.29	0.67
1:AA:1005:C:O2'	9:AJ:51:THR:HG21	1.95	0.67
5:AF:12:LEU:HD13	5:AF:124:LEU:HD11	1.77	0.67
37:BG:27:ILE:HD12	37:BG:40:ALA:HA	1.75	0.67
42:BL:53:LYS:HD2	42:BL:53:LYS:N	2.09	0.67
31:BA:1297:C:OP1	43:BM:13:LYS:HE3	1.95	0.67
1:CA:1332:G:H21	1:CA:1610:A:H8	1.40	0.67
1:CA:2601:C:H3'	1:CA:2602:A:H5''	1.76	0.67
14:CO:26:LEU:HG	14:CO:39:ILE:HD11	1.77	0.67
35:DE:136:MET:HB3	35:DE:140:ARG:HH21	1.60	0.67
42:DL:40:ARG:HG2	42:DL:41:THR:H	1.59	0.67
45:DO:9:GLN:O	45:DO:13:GLN:HG2	1.95	0.67
9:AJ:157:ARG:N	9:AJ:158:PRO:HD3	2.09	0.67
11:AL:41:ARG:NE	11:AL:41:ARG:HA	2.06	0.67
52:BW:54:U:H3	52:BW:58:A:N6	1.91	0.67
5:CF:157:VAL:HB	5:CF:194:MET:HB3	1.75	0.67
17:CR:14:VAL:CG1	17:CR:96:ILE:HG12	2.24	0.67
19:CT:55:ASN:HB2	19:CT:80:ILE:HG13	1.76	0.67
34:DD:30:LYS:C	34:DD:32:ALA:H	1.99	0.67
1:AA:943:U:OP1	11:AL:38:GLN:HB3	1.95	0.66
3:AD:238:GLY:O	3:AD:239:ARG:C	2.33	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:974:A:H8	31:BA:974:A:OP1	1.77	0.66
39:BI:97:LYS:HB3	39:BI:98:PRO:HD3	1.76	0.66
44:BN:24:CYS:HB3	44:BN:29:ARG:H	1.60	0.66
31:DA:1438:G:H2'	31:DA:1439:C:C6	2.30	0.66
34:DD:31:CYS:C	34:DD:33:MET:H	1.96	0.66
1:AA:127:A:H5''	1:AA:128:C:C6	2.30	0.66
1:AA:1902:C:C4'	3:AD:244:ARG:HB2	2.25	0.66
7:AH:33:LEU:HD11	7:AH:136:ILE:HG22	1.76	0.66
18:AS:73:ALA:HB3	18:AS:106:ILE:HD11	1.76	0.66
33:BC:35:GLU:HA	33:BC:38:ARG:HG2	1.77	0.66
1:CA:1981:A:H5''	1:CA:1982:C:OP2	1.96	0.66
33:DC:20:SER:HB2	33:DC:40:ARG:HH22	1.60	0.66
13:AN:29:LEU:HD12	13:AN:70:LEU:HD21	1.77	0.66
21:AV:9:TYR:OH	21:AV:61:LEU:HD13	1.95	0.66
41:BK:29:ILE:HD12	41:BK:29:ILE:C	2.16	0.66
1:CA:302:C:H2'	1:CA:303:U:C6	2.30	0.66
3:CD:25:THR:HG23	3:CD:82:ILE:H	1.59	0.66
22:CW:53:MET:HB3	22:CW:59:LEU:HD23	1.76	0.66
42:DL:5:THR:HG23	42:DL:8:GLN:NE2	2.11	0.66
31:DA:186(B):C:O2'	50:DT:89:ARG:HD2	1.95	0.66
1:AA:1270:C:H5''	1:AA:1271:G:O5'	1.95	0.66
1:AA:2116:G:N2	1:AA:2163:C:H41	1.92	0.66
31:BA:88:C:H2'	31:BA:89:U:O4'	1.96	0.66
11:CL:126:VAL:HG22	11:CL:145:PRO:HG2	1.78	0.66
11:CL:29:LYS:HD2	11:CL:29:LYS:H	1.60	0.66
1:CA:2840:C:H4'	13:CN:53:HIS:CD2	2.30	0.66
1:AA:2562:U:H1'	10:AK:23:ARG:NH1	2.10	0.66
3:AD:103:ARG:NH1	3:AD:103:ARG:HG2	2.06	0.66
11:AL:6:LEU:H	11:AL:6:LEU:HD23	1.60	0.66
19:AT:50:LYS:N	19:AT:87:GLN:HE22	1.93	0.66
33:BC:95:THR:HG22	33:BC:97:LYS:H	1.60	0.66
42:BL:17:VAL:HG23	42:BL:18:ARG:H	1.60	0.66
15:CP:55:ASN:H	15:CP:59:THR:HB	1.61	0.66
31:DA:1225:A:H2'	31:DA:1225:A:N3	2.10	0.66
33:DC:130:VAL:O	33:DC:134:ILE:HG13	1.95	0.66
34:DD:64:LEU:HA	34:DD:67:ILE:HD12	1.77	0.66
41:DK:41:THR:HG22	41:DK:42:TRP:N	2.09	0.66
46:DP:43:LYS:HG3	46:DP:48:TRP:CE3	2.31	0.66
48:DR:32:ARG:HA	48:DR:69:THR:HG21	1.78	0.66
1:AA:2039:C:H2'	1:AA:2040:C:H6	1.60	0.66
1:AA:784:A:C5	3:AD:229:VAL:HG21	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:63:G:H2'	52:BW:64:G:C8	2.31	0.66
1:CA:2147:G:H2'	1:CA:2148:G:O4'	1.96	0.66
6:CG:90:LEU:H	6:CG:90:LEU:HD22	1.59	0.66
20:CU:81:LYS:HG3	20:CU:82:PRO:HD2	1.78	0.66
34:DD:201:GLN:O	34:DD:204:ILE:HG22	1.94	0.66
27:A2:40:LYS:CD	27:A2:46:CYS:HB3	2.24	0.66
1:AA:996:A:H4'	16:AQ:92:ARG:NH1	2.10	0.66
8:AI:56:LYS:HB3	8:AI:56:LYS:HZ2	1.61	0.66
11:AL:46:LYS:HB3	11:AL:52:GLU:HG3	1.78	0.66
15:AP:98:LYS:HB3	15:AP:100:TYR:CE1	2.30	0.66
21:AV:125:LEU:HD13	21:AV:164:ALA:HB3	1.77	0.66
21:AV:72:ARG:HG2	21:AV:89:PHE:HB2	1.78	0.66
22:AW:56:ASP:O	22:AW:57:PHE:HB2	1.96	0.66
22:AW:53:MET:HB3	22:AW:59:LEU:HD23	1.77	0.66
35:BE:136:MET:HB3	35:BE:140:ARG:HH21	1.59	0.66
30:C5:61:LEU:HB3	30:C5:64:TYR:HB2	1.78	0.66
1:CA:1348:G:C2'	1:CA:1349:A:H5''	2.24	0.66
1:CA:1902:C:C4'	3:CD:244:ARG:HB2	2.25	0.66
6:CG:41:GLN:HB2	6:CG:43:LEU:HD11	1.78	0.66
15:CP:8:LYS:O	15:CP:11:GLU:HB3	1.96	0.66
15:CP:98:LYS:HB3	15:CP:100:TYR:CE1	2.30	0.66
23:CX:27:GLU:HG3	23:CX:33:LYS:CE	2.25	0.66
34:DD:108:LEU:HB3	34:DD:110:PHE:CE1	2.30	0.66
39:DI:97:LYS:HB3	39:DI:98:PRO:HD3	1.76	0.66
42:DL:17:VAL:HG23	42:DL:18:ARG:H	1.60	0.66
48:DR:50:ILE:HD11	48:DR:74:ARG:NH1	2.11	0.66
1:AA:2688:U:H5	1:AA:2720:U:OP2	1.79	0.66
1:AA:547:A:H2'	1:AA:548:A:C2	2.31	0.66
4:AE:7:VAL:HG22	4:AE:27:LEU:HB3	1.76	0.66
43:BM:95:GLY:O	43:BM:110:ARG:HB3	1.96	0.66
1:CA:1389:G:C2	1:CA:1399:C:O2	2.49	0.66
1:CA:2688:U:H5	1:CA:2720:U:OP2	1.78	0.66
9:CJ:154:GLN:NE2	9:CJ:155:ALA:HB3	2.10	0.66
11:CL:89:ALA:HB1	11:CL:121:LYS:HD3	1.78	0.66
33:DC:191:THR:HG21	33:DC:193:TYR:CZ	2.31	0.66
33:DC:35:GLU:HA	33:DC:38:ARG:HG2	1.78	0.66
33:DC:95:THR:HG22	33:DC:97:LYS:H	1.61	0.66
39:DI:103:THR:HG22	39:DI:105:ASP:H	1.59	0.66
39:DI:127:LYS:NZ	39:DI:128:ARG:HH11	1.92	0.66
1:AA:528:A:H2	1:AA:2043:C:H5'	1.61	0.66
1:AA:2147:G:H2'	1:AA:2148:G:O4'	1.96	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2601:C:H3'	1:AA:2602:A:H5''	1.77	0.66
6:AG:90:LEU:HD22	6:AG:90:LEU:H	1.61	0.66
19:AT:5:TYR:CE2	24:AY:30:ARG:HG3	2.31	0.66
1:CA:276:C:H2'	1:CA:277:A:C8	2.31	0.66
1:CA:784:A:C5	3:CD:229:VAL:HG21	2.31	0.66
11:CL:49:ARG:CG	11:CL:49:ARG:HH11	2.04	0.66
16:CQ:90:VAL:HG22	16:CQ:91:ASP:N	2.10	0.66
18:CS:73:ALA:HB3	18:CS:106:ILE:HD11	1.76	0.66
31:DA:88:C:H2'	31:DA:89:U:O4'	1.96	0.66
39:DI:16:ARG:O	39:DI:63:ILE:HG23	1.96	0.66
27:A2:29:ILE:O	27:A2:29:ILE:HD12	1.95	0.66
1:AA:1270:C:H5''	1:AA:1271:G:C5'	2.26	0.66
1:AA:2267:A:H5''	1:AA:2268:A:H5'	1.78	0.66
15:AP:107:ASP:H	15:AP:110:ILE:HB	1.60	0.66
16:AQ:92:ARG:NH2	17:AR:11:GLN:H	1.93	0.66
12:AM:62:GLY:HA2	21:AV:116:VAL:HG21	1.76	0.66
1:CA:1647:G:H3'	1:CA:1647:G:OP2	1.96	0.66
1:CA:2225:A:H4'	1:CA:2226:C:O5'	1.95	0.66
3:CD:238:GLY:O	3:CD:239:ARG:C	2.33	0.66
5:CF:123:LEU:HD12	5:CF:124:LEU:H	1.61	0.66
32:DB:219:VAL:O	32:DB:222:ILE:HG12	1.96	0.66
1:AA:2115:G:H2'	1:AA:2116:G:C8	2.32	0.65
1:AA:2225:A:H4'	1:AA:2226:C:O5'	1.94	0.65
6:AG:137:GLU:HG2	6:AG:152:LEU:HD22	1.78	0.65
15:AP:8:LYS:O	15:AP:11:GLU:HB3	1.96	0.65
23:AX:27:GLU:HG3	23:AX:33:LYS:CE	2.26	0.65
31:BA:1109:C:H2'	31:BA:1110:A:O4'	1.96	0.65
48:BR:32:ARG:HA	48:BR:69:THR:HG21	1.78	0.65
28:C3:42:TRP:CE3	28:C3:42:TRP:HA	2.30	0.65
4:CE:77:ILE:HD13	4:CE:195:LEU:HD13	1.79	0.65
5:CF:107:LYS:HZ2	5:CF:205:ARG:HG3	1.60	0.65
8:CI:91:SER:OG	8:CI:119:PRO:HB2	1.96	0.65
13:CN:2:ARG:O	13:CN:2:ARG:HD2	1.96	0.65
1:AA:273(G):C:N4	1:AA:363(A):G:H1	1.92	0.65
13:AN:2:ARG:HD2	13:AN:2:ARG:O	1.96	0.65
1:AA:518:G:H4'	18:AS:18:ARG:NH1	2.11	0.65
20:AU:54:LYS:HG2	20:AU:55:TYR:H	1.60	0.65
30:C5:51:ALA:O	30:C5:54:GLU:HB3	1.96	0.65
1:CA:518:G:H4'	18:CS:18:ARG:NH1	2.10	0.65
1:CA:534:U:O2'	16:CQ:49:HIS:HD2	1.79	0.65
1:CA:996:A:H4'	16:CQ:92:ARG:NH1	2.11	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1647:G:OP2	1:AA:1647:G:H3'	1.95	0.65
4:AE:172:VAL:HG13	4:AE:182:LEU:HD11	1.77	0.65
5:AF:34:TRP:CZ2	11:AL:12:ALA:HB2	2.31	0.65
34:BD:9:CYS:SG	34:BD:32:ALA:HB2	2.35	0.65
45:BO:4:THR:OG1	45:BO:6:GLU:HG2	1.96	0.65
36:BF:97:PHE:CD2	48:BR:31:LEU:HD21	2.25	0.65
1:CA:2115:G:H2'	1:CA:2116:G:C8	2.31	0.65
3:CD:238:GLY:O	3:CD:240:ALA:N	2.29	0.65
5:CF:8:GLN:HA	5:CF:20:LEU:O	1.96	0.65
11:CL:16:ARG:NH1	11:CL:18:ARG:HB2	2.12	0.65
1:CA:960:A:N6	12:CM:82:ARG:HH21	1.88	0.65
23:CX:53:VAL:HG22	23:CX:74:VAL:HG13	1.78	0.65
39:DI:125:TYR:HD2	39:DI:126:SER:N	1.92	0.65
49:DS:16:LEU:O	49:DS:20:LEU:HG	1.95	0.65
52:DV:74:C:H5'	52:DV:75:C:OP2	1.95	0.65
52:DW:63:G:H2'	52:DW:64:G:C8	2.32	0.65
11:AL:51:PHE:H	11:AL:57:THR:HG23	1.61	0.65
20:AU:81:LYS:HG3	20:AU:82:PRO:HD2	1.79	0.65
44:BN:3:ARG:O	44:BN:7:ILE:HG13	1.97	0.65
1:CA:2308:G:O2'	1:CA:2309:A:OP2	2.15	0.65
24:CY:17:SER:HB3	24:CY:18:PRO:HD3	1.79	0.65
31:DA:1109:C:H2'	31:DA:1110:A:O4'	1.96	0.65
31:DA:560:U:H4'	31:DA:561:U:O5'	1.95	0.65
28:A3:42:TRP:HA	28:A3:42:TRP:CE3	2.30	0.65
1:AA:1478:G:HO2'	1:AA:1558:A:H2	1.45	0.65
2:AB:115:G:H5'	14:AO:50:SER:OG	1.97	0.65
31:BA:537:G:H2'	31:BA:538:G:H8	1.62	0.65
38:BH:12:ARG:HH11	38:BH:26:VAL:HA	1.61	0.65
1:CA:185:U:H4'	1:CA:218:A:H4'	1.79	0.65
1:CA:1659:U:OP2	4:CE:132:HIS:HE1	1.79	0.65
31:DA:757:U:H2'	31:DA:758:G:O4'	1.96	0.65
43:DM:95:GLY:O	43:DM:110:ARG:HB3	1.95	0.65
1:AA:2320:A:N3	1:AA:2320:A:H2'	2.12	0.65
1:AA:814:C:H41	11:AL:27:HIS:CD2	2.14	0.65
16:AQ:24:TYR:HB2	16:AQ:29:SER:HB3	1.79	0.65
31:BA:1285:A:H4'	31:BA:1286:A:O5'	1.96	0.65
31:BA:560:U:H4'	31:BA:561:U:O5'	1.96	0.65
31:BA:1108:G:H5'	33:BC:176:HIS:CD2	2.31	0.65
41:BK:41:THR:HG22	41:BK:42:TRP:N	2.11	0.65
30:C5:52:LYS:N	30:C5:52:LYS:HD2	2.11	0.65
1:CA:1639:U:H2'	1:CA:1640:C:H5''	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:115:G:H5'	14:CO:50:SER:OG	1.97	0.65
1:CA:2562:U:H1'	10:CK:23:ARG:NH1	2.11	0.65
33:DC:134:ILE:HG22	33:DC:168:ALA:HB3	1.77	0.65
37:DG:113:GLU:HG3	37:DG:118:VAL:HG23	1.79	0.65
39:DI:46:ALA:HB2	39:DI:74:ILE:HG23	1.77	0.65
1:AA:1175:U:H5	1:AA:1177:A:N6	1.95	0.65
1:AA:34:C:O2'	1:AA:35:G:C5'	2.41	0.65
16:AQ:92:ARG:HD2	16:AQ:95:LEU:HG	1.78	0.65
31:BA:757:U:H2'	31:BA:758:G:O4'	1.95	0.65
34:BD:189:PRO:HB2	34:BD:194:LEU:CD2	2.26	0.65
34:BD:58:LEU:HD23	34:BD:62:GLN:HG3	1.78	0.65
42:BL:5:THR:HG23	42:BL:8:GLN:NE2	2.10	0.65
46:BP:75:ARG:CG	46:BP:75:ARG:HH11	2.08	0.65
1:CA:1174:A:H3'	1:CA:1175:U:C5'	2.27	0.65
1:CA:1416:G:H2'	1:CA:1417:C:H6	1.62	0.65
1:CA:7:G:H4'	9:CJ:152:PRO:HB3	1.79	0.65
23:CX:51:VAL:HG13	23:CX:58:ILE:HG23	1.77	0.65
25:CZ:40:THR:HG23	25:CZ:43:ILE:HG12	1.77	0.65
1:AA:302:C:H2'	1:AA:303:U:C6	2.30	0.65
1:AA:534:U:O2'	16:AQ:49:HIS:CD2	2.50	0.65
11:AL:89:ALA:HB1	11:AL:121:LYS:HD3	1.78	0.65
1:CA:1175:U:H5	1:CA:1177:A:N6	1.95	0.65
1:CA:270(L):C:H2'	1:CA:270(M):U:H2'	1.79	0.65
1:CA:547:A:H2'	1:CA:548:A:C2	2.31	0.65
5:CF:11:VAL:HG22	5:CF:125:LEU:HB2	1.78	0.65
19:CT:50:LYS:N	19:CT:87:GLN:HE22	1.95	0.65
21:CV:72:ARG:HG2	21:CV:89:PHE:HB2	1.78	0.65
40:DJ:34:VAL:HG22	40:DJ:74:ILE:HG12	1.79	0.65
41:DK:32:ILE:HD12	41:DK:32:ILE:O	1.97	0.65
5:AF:11:VAL:HG22	5:AF:125:LEU:HB2	1.79	0.65
11:AL:16:ARG:NH1	11:AL:18:ARG:HB2	2.12	0.65
1:CA:2090:G:H21	23:CX:45:ASN:ND2	1.92	0.65
11:CL:23:PRO:HB3	11:CL:29:LYS:HB3	1.78	0.65
11:CL:51:PHE:H	11:CL:57:THR:HG23	1.61	0.65
15:CP:107:ASP:H	15:CP:110:ILE:HB	1.61	0.65
31:DA:1064:G:H21	31:DA:1190:G:H2'	1.62	0.65
31:DA:1285:A:H4'	31:DA:1286:A:O5'	1.96	0.65
39:DI:113:LYS:H	39:DI:119:ALA:HA	1.62	0.65
41:DK:29:ILE:HD12	41:DK:29:ILE:C	2.16	0.65
30:A5:52:LYS:N	30:A5:52:LYS:HD2	2.12	0.65
1:AA:270(R):C:H2'	1:AA:270(S):G:H8	1.61	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2863:C:H5''	31:BA:1443:G:O6	1.97	0.65
11:AL:49:ARG:HH11	11:AL:49:ARG:CG	2.05	0.65
25:AZ:40:THR:HG23	25:AZ:43:ILE:HG12	1.77	0.65
39:BI:46:ALA:HB2	39:BI:74:ILE:HG23	1.78	0.65
1:CA:1270:C:H5''	1:CA:1271:G:O5'	1.96	0.65
1:CA:774:A:H2	1:CA:787:U:O2'	1.80	0.65
5:CF:12:LEU:HD13	5:CF:124:LEU:HD11	1.78	0.65
5:CF:20:LEU:CD2	5:CF:21:ALA:H	2.09	0.65
7:CH:118:PRO:HG2	7:CH:121:ILE:HD13	1.77	0.65
31:DA:1108:G:H5'	33:DC:176:HIS:CD2	2.32	0.65
47:DQ:63:ARG:HG2	47:DQ:64:PRO:HD2	1.79	0.65
5:AF:20:LEU:CD2	5:AF:21:ALA:H	2.09	0.64
1:CA:2320:A:N3	1:CA:2320:A:H2'	2.11	0.64
12:CM:22:LYS:C	12:CM:22:LYS:HD3	2.17	0.64
1:CA:534:U:O2'	16:CQ:49:HIS:CD2	2.49	0.64
1:AA:1490:A:H5'	1:AA:1494:A:N1	2.13	0.64
1:AA:2090:G:H21	23:AX:45:ASN:ND2	1.94	0.64
3:AD:238:GLY:O	3:AD:240:ALA:N	2.30	0.64
19:AT:24:GLY:O	19:AT:83:VAL:HG22	1.97	0.64
41:BK:54:ARG:O	41:BK:57:THR:HG22	1.97	0.64
1:CA:127:A:H5''	1:CA:128:C:C6	2.32	0.64
1:CA:2814:C:O2'	27:C2:29:ILE:HG21	1.97	0.64
4:CE:92:THR:O	4:CE:95:ILE:HG13	1.97	0.64
19:CT:24:GLY:O	19:CT:83:VAL:HG22	1.97	0.64
20:CU:54:LYS:HG2	20:CU:55:TYR:H	1.60	0.64
23:CX:40:ARG:HD2	23:CX:41:ARG:N	2.11	0.64
1:AA:1899:G:O2'	1:AA:1900:A:H5''	1.98	0.64
20:AU:98:VAL:HG13	20:AU:99:CYS:H	1.63	0.64
31:BA:1064:G:H21	31:BA:1190:G:H2'	1.62	0.64
34:BD:139:ARG:HH11	34:BD:139:ARG:HG3	1.61	0.64
1:CA:270(R):C:H2'	1:CA:270(S):G:H8	1.61	0.64
1:CA:2729:G:H1'	4:CE:187:ALA:CB	2.26	0.64
3:CD:125:ILE:HG12	3:CD:137:PRO:CD	2.28	0.64
5:CF:34:TRP:HB2	11:CL:10:PRO:O	1.97	0.64
6:CG:137:GLU:HG2	6:CG:152:LEU:HD22	1.80	0.64
16:CQ:92:ARG:NH2	17:CR:11:GLN:H	1.94	0.64
23:CX:13:ILE:HG23	23:CX:62:VAL:HG22	1.79	0.64
28:A3:25:LYS:HD3	30:A5:34:TRP:CZ3	2.32	0.64
1:AA:1113:U:H2'	1:AA:1114:G:C8	2.32	0.64
5:AF:8:GLN:HA	5:AF:20:LEU:O	1.97	0.64
31:BA:1118:C:OP1	39:BI:104:ARG:HG3	1.98	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:101:LEU:HB2	34:BD:138:TYR:HB3	1.78	0.64
1:CA:2577:A:H5''	1:CA:2578:G:H5'	1.80	0.64
1:CA:943:U:OP1	11:CL:38:GLN:HB3	1.97	0.64
4:CE:2:LYS:HD3	4:CE:95:ILE:HG22	1.80	0.64
10:CK:76:ALA:HB3	15:CP:75:ILE:HD13	1.79	0.64
22:CW:56:ASP:O	22:CW:57:PHE:HB2	1.96	0.64
38:DH:40:ALA:HB2	38:DH:45:ILE:HG13	1.80	0.64
31:DA:1118:C:OP1	39:DI:104:ARG:HG3	1.98	0.64
42:DL:74:HIS:HD2	42:DL:76:LEU:H	1.45	0.64
49:DS:28:LYS:HB3	49:DS:29:ARG:HH11	1.62	0.64
27:A2:4:HIS:CB	27:A2:5:PRO:CD	2.76	0.64
28:A3:39:TYR:HB3	28:A3:49:HIS:CE1	2.31	0.64
4:AE:77:ILE:HD13	4:AE:195:LEU:HD13	1.79	0.64
11:AL:18:ARG:O	11:AL:18:ARG:HD2	1.97	0.64
23:AX:13:ILE:HG21	23:AX:63:ALA:HB3	1.79	0.64
23:AX:13:ILE:HG23	23:AX:62:VAL:HG22	1.80	0.64
35:BE:51:VAL:HB	35:BE:52:PRO:HD3	1.78	0.64
46:BP:43:LYS:HA	46:BP:48:TRP:CB	2.28	0.64
16:CQ:85:LYS:HD3	16:CQ:85:LYS:O	1.98	0.64
21:CV:9:TYR:OH	21:CV:61:LEU:HD13	1.96	0.64
34:DD:116:GLN:NE2	34:DD:157:LEU:HD21	2.13	0.64
34:DD:9:CYS:HB3	34:DD:32:ALA:CB	2.28	0.64
1:AA:1348:G:C2'	1:AA:1349:A:H5''	2.26	0.64
1:AA:2630:G:O4'	1:AA:2894:G:H1'	1.98	0.64
10:AK:107:ARG:HH22	15:AP:36:GLU:HG3	1.63	0.64
31:BA:1225:A:N3	31:BA:1225:A:H2'	2.11	0.64
39:BI:16:ARG:O	39:BI:63:ILE:HG23	1.96	0.64
40:BJ:45:ARG:HB2	40:BJ:65:LEU:HB3	1.79	0.64
26:C1:46:ASN:HD22	26:C1:47:VAL:H	1.45	0.64
21:CV:5:LEU:HD23	21:CV:6:LYS:N	2.13	0.64
31:DA:979:C:H3'	31:DA:980:C:C5'	2.23	0.64
45:DO:4:THR:OG1	45:DO:6:GLU:HG2	1.96	0.64
3:AD:25:THR:HG23	3:AD:82:ILE:H	1.61	0.64
6:AG:114:ILE:HD13	6:AG:140:ILE:HG21	1.80	0.64
12:AM:22:LYS:C	12:AM:22:LYS:HD3	2.18	0.64
31:BA:1004:A:H61	31:BA:1025:U:H4'	1.63	0.64
32:BB:219:VAL:O	32:BB:222:ILE:HG12	1.97	0.64
43:BM:27:LYS:HE2	43:BM:31:LYS:HE3	1.80	0.64
1:CA:1514:U:H2'	1:CA:1515:C:H6	1.62	0.64
6:CG:117:PHE:HD1	6:CG:118:ARG:N	1.95	0.64
6:CG:115:ARG:HG3	43:DM:7:VAL:HG11	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DN:16:PHE:HB3	44:DN:18:VAL:HG23	1.79	0.64
1:AA:1416:G:H2'	1:AA:1417:C:H6	1.62	0.64
5:AF:123:LEU:HD12	5:AF:124:LEU:H	1.61	0.64
8:AI:133:HIS:HE1	8:AI:135:GLU:HB3	1.63	0.64
11:AL:126:VAL:HG22	11:AL:145:PRO:HG2	1.78	0.64
31:BA:1136:U:H5''	31:BA:1137:C:OP2	1.97	0.64
42:BL:40:ARG:CG	42:BL:41:THR:H	2.10	0.64
1:CA:1113:U:H2'	1:CA:1114:G:C8	2.32	0.64
1:CA:2630:G:O4'	1:CA:2894:G:H1'	1.98	0.64
8:CI:63:ALA:O	8:CI:66:GLU:HB3	1.97	0.64
11:CL:77:ARG:HB2	11:CL:78:PRO:HD2	1.77	0.64
10:CK:107:ARG:HH22	15:CP:36:GLU:HG3	1.62	0.64
17:CR:39:LEU:HA	17:CR:47:VAL:CG1	2.28	0.64
33:DC:29:TYR:HE1	33:DC:33:LEU:HD22	1.63	0.64
1:AA:271(C):G:H4'	1:AA:271(D):U:H5'	1.80	0.64
1:AA:276:C:H2'	1:AA:277:A:C8	2.31	0.64
1:AA:892:G:H2'	1:AA:893:C:C6	2.33	0.64
16:AQ:90:VAL:HG22	16:AQ:91:ASP:N	2.13	0.64
33:BC:134:ILE:CG2	33:BC:168:ALA:HB3	2.28	0.64
47:BQ:14:LYS:H	47:BQ:14:LYS:HD2	1.63	0.64
28:C3:39:TYR:HB3	28:C3:49:HIS:CE1	2.32	0.64
1:CA:1490:A:H5'	1:CA:1494:A:N1	2.13	0.64
3:CD:8:PRO:HB3	3:CD:14:ARG:HB2	1.79	0.64
11:CL:6:LEU:HD23	11:CL:6:LEU:H	1.62	0.64
13:CN:29:LEU:HD12	13:CN:70:LEU:HD21	1.79	0.64
19:CT:57:LEU:HD11	19:CT:78:LYS:HD2	1.80	0.64
31:DA:878:G:H5'	38:DH:89:PRO:HG2	1.80	0.64
38:DH:69:ARG:HD3	38:DH:76:PRO:HA	1.80	0.64
26:A1:46:ASN:HD22	26:A1:47:VAL:H	1.44	0.64
1:AA:1567:A:H5'	3:AD:58:HIS:ND1	2.12	0.64
31:BA:1325:C:P	51:BU:15:ARG:HH21	2.20	0.64
28:C3:25:LYS:HD3	30:C5:34:TRP:CZ3	2.33	0.64
1:CA:2039:C:H2'	1:CA:2040:C:H6	1.63	0.64
8:CI:133:HIS:HE1	8:CI:135:GLU:HB3	1.63	0.64
24:CY:2:LYS:HA	24:CY:5:GLU:CD	2.18	0.64
31:DA:559:A:C4'	31:DA:560:U:H3'	2.24	0.64
31:DA:1057:G:H4'	33:DC:197:GLY:H	1.63	0.64
1:AA:2473:U:O2	1:AA:2473:U:H2'	1.98	0.63
1:AA:655:A:O2'	1:AA:656:G:H5'	1.98	0.63
5:AF:14:PRO:HD3	5:AF:128:ALA:HB2	1.79	0.63
1:AA:7:G:H4'	9:AJ:152:PRO:HB3	1.79	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AK:119:PRO:HB2	15:AP:68:TYR:CE2	2.33	0.63
31:BA:1427:U:H2'	31:BA:1428:A:C8	2.33	0.63
37:BG:113:GLU:HG3	37:BG:118:VAL:HG23	1.79	0.63
38:BH:69:ARG:HD3	38:BH:76:PRO:HA	1.80	0.63
48:BR:19:LYS:HE3	48:BR:19:LYS:HA	1.80	0.63
52:BV:74:C:H3'	52:BV:75:C:C4'	2.28	0.63
1:CA:892:G:H2'	1:CA:893:C:C6	2.33	0.63
5:CF:14:PRO:HD3	5:CF:128:ALA:HB2	1.80	0.63
11:CL:18:ARG:O	11:CL:18:ARG:HD2	1.97	0.63
52:DW:63:G:H2'	52:DW:64:G:H8	1.63	0.63
1:AA:1796:U:H2'	1:AA:1797:C:C6	2.33	0.63
13:AN:2:ARG:HD2	13:AN:2:ARG:C	2.18	0.63
21:AV:5:LEU:HD23	21:AV:6:LYS:N	2.13	0.63
39:BI:113:LYS:H	39:BI:119:ALA:HA	1.62	0.63
42:BL:40:ARG:HG2	42:BL:41:THR:H	1.62	0.63
3:CD:27:THR:O	3:CD:27:THR:HG23	1.98	0.63
6:CG:115:ARG:HH22	6:CG:136:ARG:H	1.45	0.63
31:DA:974:A:OP1	44:DN:31:ARG:HD3	1.97	0.63
35:DE:10:MET:HG3	35:DE:13:ILE:HD11	1.80	0.63
35:DE:69:VAL:O	35:DE:71:LEU:HD12	1.97	0.63
37:DG:77:SER:HB3	37:DG:84:ASN:OD1	1.98	0.63
40:DJ:45:ARG:HB2	40:DJ:65:LEU:HB3	1.80	0.63
31:DA:995:C:H1'	44:DN:4:LYS:HE3	1.79	0.63
6:AG:115:ARG:HH22	6:AG:136:ARG:H	1.45	0.63
37:BG:77:SER:HB3	37:BG:84:ASN:OD1	1.98	0.63
39:BI:8:GLY:HA2	39:BI:79:LEU:HD12	1.80	0.63
1:CA:1658:C:OP1	4:CE:132:HIS:ND1	2.31	0.63
1:CA:2115:G:H4'	1:CA:2166:G:H2'	1.79	0.63
4:CE:9:VAL:HG13	4:CE:25:VAL:O	1.97	0.63
5:CF:133:ASN:HA	5:CF:162:LEU:HD13	1.79	0.63
6:CG:114:ILE:HD13	6:CG:140:ILE:HG21	1.80	0.63
13:CN:2:ARG:C	13:CN:2:ARG:HD2	2.18	0.63
31:DA:922:G:H2'	31:DA:923:A:C8	2.33	0.63
1:AA:2469:A:H2	1:AA:2481:G:H21	1.46	0.63
9:AJ:154:GLN:NE2	9:AJ:155:ALA:HB3	2.13	0.63
40:BJ:48:THR:HG22	40:BJ:62:HIS:ND1	2.14	0.63
42:BL:74:HIS:HD2	42:BL:76:LEU:H	1.46	0.63
1:CA:1796:U:H2'	1:CA:1797:C:C6	2.34	0.63
15:CP:118:ARG:NH1	31:DA:1443:G:C8	2.66	0.63
36:DF:67:MET:HB2	36:DF:68:PRO:HD2	1.81	0.63
31:DA:636:U:H5'	47:DQ:2:PRO:HD3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1011:G:H5''	16:AQ:77:SER:OG	1.99	0.63
1:AA:270(L):C:H2'	1:AA:270(M):U:H2'	1.79	0.63
1:AA:2787:C:O4'	4:AE:62:PRO:HB3	1.99	0.63
4:AE:92:THR:O	4:AE:95:ILE:HG13	1.98	0.63
31:BA:1502:A:C8	31:BA:1505:G:N2	2.66	0.63
31:BA:913:A:H4'	31:BA:914:A:O5'	1.99	0.63
32:BB:59:GLU:HB2	32:BB:221:LEU:HD11	1.81	0.63
37:BG:73:MET:HA	37:BG:91:VAL:HG23	1.79	0.63
1:CA:1899:G:O2'	1:CA:1900:A:H5''	1.99	0.63
1:CA:1899:G:H22	1:CA:1902:C:H41	1.44	0.63
1:CA:2473:U:O2	1:CA:2473:U:H2'	1.98	0.63
7:CH:33:LEU:HD11	7:CH:136:ILE:HG22	1.79	0.63
11:CL:94:GLU:HG3	11:CL:124:LYS:HB3	1.80	0.63
1:CA:1217:C:P	16:CQ:15:LYS:HZ1	2.21	0.63
24:CY:24:LEU:HD22	24:CY:60:LEU:HD11	1.79	0.63
31:DA:1502:A:C8	31:DA:1505:G:N2	2.65	0.63
31:DA:359:U:H2'	31:DA:360:A:C8	2.34	0.63
37:DG:51:GLN:HG3	37:DG:58:PRO:HD3	1.81	0.63
38:DH:12:ARG:HH11	38:DH:26:VAL:HA	1.62	0.63
46:DP:28:ARG:HG2	46:DP:29:ASP:OD1	1.98	0.63
1:AA:1514:U:H2'	1:AA:1515:C:H6	1.62	0.63
1:AA:185:U:H4'	1:AA:218:A:H4'	1.79	0.63
3:AD:125:ILE:HG12	3:AD:137:PRO:CD	2.28	0.63
3:AD:8:PRO:HB3	3:AD:14:ARG:HB2	1.79	0.63
14:AO:26:LEU:HG	14:AO:39:ILE:HD11	1.79	0.63
31:BA:1302:U:C5	43:BM:17:VAL:HG11	2.34	0.63
38:BH:40:ALA:HB2	38:BH:45:ILE:HG13	1.80	0.63
39:BI:127:LYS:HZ3	39:BI:128:ARG:HH11	1.44	0.63
49:BS:28:LYS:HB3	49:BS:29:ARG:HH11	1.64	0.63
17:CR:77:ALA:O	17:CR:79:VAL:HG22	1.99	0.63
31:DA:430:A:OP1	34:DD:9:CYS:HB2	1.97	0.63
31:DA:737:A:H2'	31:DA:738:C:C6	2.33	0.63
33:DC:134:ILE:CG2	33:DC:168:ALA:HB3	2.29	0.63
34:DD:38:TYR:HB2	34:DD:44:GLY:O	1.98	0.63
1:AA:1658:C:OP1	4:AE:132:HIS:ND1	2.32	0.63
1:AA:534:U:O2'	16:AQ:49:HIS:HD2	1.80	0.63
10:AK:76:ALA:HB3	15:AP:75:ILE:HD13	1.81	0.63
31:BA:1117:G:H5'	31:BA:1118:C:OP2	1.98	0.63
31:BA:624:C:H2'	31:BA:625:G:H8	1.63	0.63
42:BL:23:VAL:O	42:BL:23:VAL:HG12	1.98	0.63
50:BT:26:ASN:OD1	50:BT:71:THR:HG23	1.98	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CP:86:ILE:O	15:CP:86:ILE:HG12	1.99	0.63
16:CQ:75:ASN:ND2	16:CQ:78:THR:H	1.97	0.63
18:CS:24:ILE:HG21	18:CS:36:LEU:CD1	2.27	0.63
34:DD:25:ARG:HH22	34:DD:30:LYS:HD2	1.64	0.63
39:DI:8:GLY:HA2	39:DI:79:LEU:HD12	1.79	0.63
1:AA:1639:U:H2'	1:AA:1640:C:H5''	1.79	0.63
1:AA:2115:G:H4'	1:AA:2166:G:H2'	1.79	0.63
5:AF:155:LEU:HA	5:AF:174:VAL:HG23	1.80	0.63
8:AI:25:TYR:CE1	8:AI:30:LEU:HD11	2.33	0.63
17:AR:39:LEU:HA	17:AR:47:VAL:CG1	2.28	0.63
24:AY:17:SER:HB3	24:AY:18:PRO:HD3	1.79	0.63
31:BA:1057:G:H4'	33:BC:197:GLY:H	1.64	0.63
33:BC:29:TYR:HE1	33:BC:33:LEU:HD22	1.63	0.63
35:BE:10:MET:HG3	35:BE:13:ILE:HD11	1.81	0.63
36:BF:21:LEU:O	36:BF:24:GLU:HB3	1.98	0.63
38:BH:102:ARG:HD2	38:BH:102:ARG:H	1.63	0.63
41:BK:32:ILE:HD12	41:BK:32:ILE:O	1.99	0.63
45:BO:63:ARG:CZ	45:BO:87:ILE:HD11	2.28	0.63
6:CG:77:ILE:HB	6:CG:82:LEU:HD12	1.81	0.63
7:CH:94:TYR:HD1	7:CH:94:TYR:H	1.46	0.63
8:CI:133:HIS:CE1	8:CI:135:GLU:HB3	2.34	0.63
31:DA:1004:A:H61	31:DA:1025:U:H4'	1.64	0.63
31:DA:1503:A:O2'	31:DA:1504:G:O5'	2.15	0.63
31:DA:818:G:C2'	31:DA:819:A:H5''	2.29	0.63
27:A2:33:CYS:HB3	27:A2:40:LYS:HD2	1.80	0.63
1:AA:1493:C:H2'	1:AA:1493:C:O2	1.99	0.63
1:AA:1678:G:N2	1:AA:1989:G:N2	2.47	0.63
8:AI:3:VAL:HG23	8:AI:37:VAL:O	1.98	0.63
11:AL:41:ARG:NE	11:AL:41:ARG:CA	2.62	0.63
15:AP:107:ASP:O	15:AP:110:ILE:HG22	1.99	0.63
15:AP:86:ILE:O	15:AP:86:ILE:HG12	1.97	0.63
17:AR:13:ARG:HD3	17:AR:13:ARG:O	1.99	0.63
38:BH:102:ARG:N	38:BH:102:ARG:HD2	2.14	0.63
1:CA:1270:C:H5''	1:CA:1271:G:C5'	2.29	0.63
1:CA:2792:G:H1'	1:CA:2805:G:H22	1.64	0.63
19:CT:3:THR:HA	19:CT:6:ASP:OD2	1.99	0.63
20:CU:98:VAL:HG13	20:CU:99:CYS:H	1.64	0.63
37:DG:73:MET:HA	37:DG:91:VAL:HG23	1.80	0.63
39:DI:83:ARG:HA	39:DI:86:VAL:HG12	1.81	0.63
44:DN:3:ARG:O	44:DN:7:ILE:HG13	1.98	0.63
1:AA:2131:G:H5'	1:AA:2132:U:H3'	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2572:A:OP1	1:AA:2574:G:H4'	1.99	0.62
15:AP:55:ASN:H	15:AP:59:THR:HB	1.63	0.62
1:AA:1155:A:OP2	16:AQ:55:ARG:HD3	1.99	0.62
31:BA:1313:U:OP1	49:BS:6:LYS:HG3	1.99	0.62
52:BW:63:G:H2'	52:BW:64:G:H8	1.62	0.62
1:CA:1678:G:N2	1:CA:1989:G:N2	2.47	0.62
11:CL:23:PRO:CB	11:CL:33:ARG:HG3	2.23	0.62
23:CX:13:ILE:HG21	23:CX:63:ALA:HB3	1.81	0.62
31:DA:1227:A:H2	31:DA:1228:C:H1'	1.63	0.62
34:DD:176:LEU:HG	34:DD:178:VAL:HG22	1.80	0.62
1:AA:1187:G:H5''	17:AR:81:TYR:CE2	2.34	0.62
1:AA:1899:G:H22	1:AA:1902:C:H41	1.43	0.62
3:AD:139:GLY:H	3:AD:165:ILE:HB	1.64	0.62
30:C5:61:LEU:O	30:C5:63:PRO:HD2	1.99	0.62
1:CA:1466:G:H2'	1:CA:1547:C:H41	1.64	0.62
1:CA:2787:C:O4'	4:CE:62:PRO:HB3	1.99	0.62
5:CF:52:LYS:HB3	5:CF:56:GLU:HB2	1.81	0.62
11:CL:41:ARG:NE	11:CL:41:ARG:CA	2.62	0.62
8:CI:27:ARG:HD3	23:CX:71:TYR:CE1	2.34	0.62
1:AA:2113:U:H2'	1:AA:2114:A:C8	2.35	0.62
5:AF:143:ALA:HB1	5:AF:148:LEU:HB2	1.81	0.62
8:AI:91:SER:OG	8:AI:119:PRO:HB2	1.97	0.62
52:BW:71:C:H2'	52:BW:72:A:C8	2.34	0.62
1:CA:1567:A:H5'	3:CD:58:HIS:ND1	2.14	0.62
1:CA:404:C:H4'	1:CA:405:U:H5'	1.81	0.62
2:CB:40:U:H3'	2:CB:41:U:C5'	2.29	0.62
4:CE:28:ALA:HB3	4:CE:93:VAL:HG22	1.80	0.62
36:DF:97:PHE:CD2	48:DR:31:LEU:HD21	2.26	0.62
1:AA:2308:G:O2'	1:AA:2309:A:OP2	2.15	0.62
6:AG:117:PHE:HD1	6:AG:118:ARG:N	1.96	0.62
31:BA:1435:G:H2'	31:BA:1436:U:C6	2.35	0.62
31:BA:646:U:H2'	31:BA:647:C:C6	2.35	0.62
31:BA:922:G:H2'	31:BA:923:A:C8	2.34	0.62
32:BB:11:LEU:HD12	32:BB:217:ARG:HH22	1.65	0.62
34:BD:67:ILE:HD13	34:BD:196:LEU:HD22	1.81	0.62
35:BE:69:VAL:O	35:BE:71:LEU:HD12	1.98	0.62
38:BH:109:ILE:HG12	38:BH:110:ALA:H	1.64	0.62
42:BL:23:VAL:HG13	42:BL:97:TYR:CE2	2.35	0.62
30:C5:52:LYS:CE	30:C5:52:LYS:HA	2.28	0.62
31:DA:1136:U:H5''	31:DA:1137:C:OP2	1.98	0.62
33:DC:73:PRO:HD3	33:DC:105:GLU:HG2	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DV:74:C:H3'	52:DV:75:C:C4'	2.29	0.62
11:AL:94:GLU:HG3	11:AL:124:LYS:HB3	1.81	0.62
32:BB:95:GLN:HA	32:BB:96:ARG:NH2	2.15	0.62
31:BA:636:U:H5'	47:BQ:2:PRO:HD3	1.81	0.62
52:BV:62:C:H2'	52:BV:63:G:H8	1.64	0.62
1:CA:1187:G:H5''	17:CR:81:TYR:CE2	2.33	0.62
1:CA:2469:A:H2	1:CA:2481:G:H21	1.47	0.62
3:CD:43:ARG:HB2	3:CD:48:ARG:O	1.99	0.62
3:CD:30:GLU:HG3	3:CD:63:ARG:CZ	2.29	0.62
1:CA:2867:G:C5	15:CP:23:ARG:NH1	2.68	0.62
36:DF:50:TYR:HE1	48:DR:74:ARG:O	1.81	0.62
39:DI:9:ARG:HG2	39:DI:14:VAL:HG22	1.82	0.62
40:DJ:37:PRO:HA	40:DJ:72:VAL:HG22	1.82	0.62
47:DQ:14:LYS:H	47:DQ:14:LYS:HD2	1.65	0.62
11:AL:64:LYS:HB2	30:A5:25:MET:CG	2.26	0.62
1:AA:2287:A:N1	1:AA:2346:A:H2	1.97	0.62
3:AD:186:HIS:CD2	3:AD:188:GLU:H	2.18	0.62
16:AQ:85:LYS:HD3	16:AQ:85:LYS:O	1.98	0.62
31:BA:878:G:H5'	38:BH:89:PRO:HG2	1.81	0.62
43:BM:14:ARG:HG2	43:BM:44:ARG:CZ	2.30	0.62
27:C2:33:CYS:HB3	27:C2:40:LYS:HD2	1.81	0.62
1:CA:1155:A:OP2	16:CQ:55:ARG:HD3	1.99	0.62
1:CA:34:C:H41	1:CA:447:A:H61	1.48	0.62
3:CD:38:LYS:N	3:CD:38:LYS:HD2	2.14	0.62
4:CE:192:ASN:N	4:CE:192:ASN:HD22	1.98	0.62
6:CG:106:LEU:HA	6:CG:110:ALA:HB3	1.81	0.62
42:DL:6:ILE:O	42:DL:10:VAL:HG23	2.00	0.62
50:DT:57:ARG:HH12	50:DT:100:ILE:HG21	1.65	0.62
1:AA:1174:A:H3'	1:AA:1175:U:C5'	2.27	0.62
1:AA:1871:A:H2'	1:AA:1872:A:C8	2.34	0.62
6:AG:106:LEU:HA	6:AG:110:ALA:HB3	1.80	0.62
8:AI:133:HIS:CE1	8:AI:135:GLU:HB3	2.33	0.62
31:BA:1227:A:H2	31:BA:1228:C:H1'	1.64	0.62
31:BA:1228:C:OP1	43:BM:115:LYS:HE3	1.99	0.62
11:CL:41:ARG:NE	11:CL:41:ARG:HA	2.05	0.62
15:CP:132:LYS:O	15:CP:136:GLN:HG3	2.00	0.62
31:DA:1065:U:C5	31:DA:1190:G:H1'	2.35	0.62
38:DH:102:ARG:HD2	38:DH:102:ARG:H	1.63	0.62
38:DH:102:ARG:HD2	38:DH:102:ARG:N	2.14	0.62
48:DR:19:LYS:HA	48:DR:19:LYS:HE3	1.81	0.62
1:AA:2814:C:O2'	27:A2:29:ILE:HG21	1.99	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AN:104:ARG:NH1	13:AN:109:ALA:HB3	2.14	0.62
31:BA:922:G:N3	31:BA:1398:A:H2	1.97	0.62
31:BA:1503:A:O2'	31:BA:1504:G:O5'	2.17	0.62
31:BA:224:C:H2'	31:BA:225:C:H6	1.65	0.62
31:BA:559:A:C4'	31:BA:560:U:H3'	2.25	0.62
31:BA:818:G:C2'	31:BA:819:A:H5''	2.29	0.62
34:BD:58:LEU:CD2	34:BD:62:GLN:HG3	2.30	0.62
31:BA:1080:A:H5''	35:BE:16:THR:HG21	1.82	0.62
40:BJ:37:PRO:HA	40:BJ:72:VAL:HG22	1.81	0.62
42:BL:81:VAL:O	42:BL:105:ASP:HB2	1.99	0.62
5:CF:34:TRP:CE2	11:CL:12:ALA:HB2	2.35	0.62
8:CI:3:VAL:HG23	8:CI:37:VAL:O	2.00	0.62
21:CV:10:ARG:HH21	21:CV:26:GLY:H	1.46	0.62
45:DO:63:ARG:CZ	45:DO:87:ILE:HD11	2.29	0.62
30:A5:61:LEU:HB3	30:A5:64:TYR:HB2	1.80	0.62
1:AA:404:C:H4'	1:AA:405:U:H5'	1.80	0.62
2:AB:40:U:H3'	2:AB:41:U:C5'	2.30	0.62
12:AM:54:MET:HE3	12:AM:64:ILE:HD12	1.82	0.62
20:AU:14:LEU:HB2	20:AU:24:VAL:HG22	1.82	0.62
20:AU:13:VAL:CG1	20:AU:27:VAL:HG12	2.30	0.62
24:AY:2:LYS:HA	24:AY:5:GLU:CD	2.20	0.62
31:BA:365:U:H5''	31:BA:366:C:OP1	1.99	0.62
37:BG:51:GLN:HG3	37:BG:58:PRO:HD3	1.82	0.62
38:BH:109:ILE:HG12	38:BH:110:ALA:N	2.15	0.62
39:BI:83:ARG:HA	39:BI:86:VAL:HG12	1.81	0.62
1:CA:270(O):G:O2'	1:CA:270(Q):C:H5'	2.00	0.62
9:CJ:132:LYS:N	9:CJ:132:LYS:HD3	2.12	0.62
14:CO:56:LEU:HD23	14:CO:57:LYS:NZ	2.15	0.62
23:CX:11:ARG:HG2	23:CX:61:ARG:O	1.99	0.62
32:DB:187:LEU:HD23	32:DB:201:ILE:O	1.99	0.62
32:DB:11:LEU:HD12	32:DB:217:ARG:HH22	1.65	0.62
35:DE:101:ILE:HG12	35:DE:119:LEU:HA	1.81	0.62
36:DF:26:ILE:O	36:DF:30:LEU:HD13	2.00	0.62
38:DH:12:ARG:NH1	38:DH:26:VAL:HA	2.15	0.62
42:DL:81:VAL:O	42:DL:105:ASP:HB2	2.00	0.62
43:DM:50:GLU:HA	43:DM:53:VAL:HB	1.82	0.62
1:AA:1009:A:H5''	16:AQ:59:ARG:HD3	1.82	0.62
2:AB:66:A:H61	2:AB:107:U:H2'	1.65	0.62
23:AX:11:ARG:HG2	23:AX:61:ARG:O	2.00	0.62
24:AY:11:GLU:O	24:AY:14:ARG:HG3	1.99	0.62
24:AY:24:LEU:HD22	24:AY:60:LEU:HD11	1.81	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BL:6:ILE:O	42:BL:10:VAL:HG23	2.00	0.62
44:BN:47:LEU:O	44:BN:50:LYS:HG3	1.98	0.62
1:CA:1011:G:H5'	16:CQ:77:SER:OG	1.99	0.62
3:CD:154:LYS:HA	3:CD:157:ARG:HD3	1.81	0.62
31:DA:359:U:H2'	31:DA:360:A:H8	1.65	0.62
46:DP:43:LYS:HA	46:DP:48:TRP:CB	2.30	0.62
26:A1:39:ARG:HA	26:A1:39:ARG:HE	1.65	0.61
1:AA:1466:G:H2'	1:AA:1547:C:H41	1.65	0.61
1:AA:2473:U:O2'	1:AA:2474:C:C5'	2.46	0.61
5:AF:131:GLY:HA2	5:AF:138:GLU:OE1	1.99	0.61
17:AR:47:VAL:HG12	17:AR:52:VAL:HB	1.82	0.61
31:BA:127:G:O2'	47:BQ:2:PRO:HA	2.00	0.61
1:CA:1493:C:O2	1:CA:1493:C:H2'	2.00	0.61
8:CI:8:PRO:HD3	8:CI:15:VAL:HG22	1.82	0.61
16:CQ:83:LEU:HD12	16:CQ:113:ALA:HB2	1.82	0.61
1:CA:495:G:H1'	18:CS:57:ASN:ND2	2.14	0.61
18:CS:70:TYR:H	18:CS:70:TYR:HD2	1.48	0.61
31:DA:1427:U:H2'	31:DA:1428:A:C8	2.35	0.61
31:DA:960:U:H2'	31:DA:1225:A:H62	1.64	0.61
15:AP:132:LYS:O	15:AP:136:GLN:HG3	2.00	0.61
23:AX:13:ILE:O	23:AX:14:VAL:HB	2.01	0.61
26:C1:39:ARG:HA	26:C1:39:ARG:HE	1.65	0.61
11:CL:17:LYS:HB3	11:CL:19:VAL:HG22	1.81	0.61
31:DA:1117:G:H5'	31:DA:1118:C:OP2	2.00	0.61
31:DA:922:G:N3	31:DA:1398:A:H2	1.98	0.61
50:DT:72:LEU:HD11	50:DT:77:ALA:CA	2.30	0.61
1:AA:1420:U:O2'	1:AA:1421:G:C5'	2.48	0.61
1:AA:2096:U:H2'	1:AA:2097:C:C6	2.35	0.61
31:BA:555:C:H2'	31:BA:556:C:C6	2.35	0.61
50:BT:57:ARG:HH12	50:BT:100:ILE:HG21	1.64	0.61
1:CA:2113:U:H2'	1:CA:2114:A:C8	2.34	0.61
1:CA:2119:A:N6	1:CA:2170:A:H61	1.98	0.61
10:CK:63:VAL:HB	10:CK:102:VAL:HG12	1.82	0.61
12:CM:54:MET:HE3	12:CM:64:ILE:HD12	1.83	0.61
31:DA:1435:G:H2'	31:DA:1436:U:C6	2.35	0.61
15:CP:118:ARG:NH1	31:DA:1443:G:C5	2.65	0.61
34:DD:152:SER:O	34:DD:158:ILE:HD12	2.00	0.61
52:DW:71:C:H2'	52:DW:72:A:C8	2.35	0.61
1:AA:2134:A:H8	1:AA:2157:G:H21	1.49	0.61
1:AA:2792:G:H1'	1:AA:2805:G:H22	1.63	0.61
3:AD:154:LYS:HA	3:AD:157:ARG:HD3	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AQ:83:LEU:HD12	16:AQ:113:ALA:HB2	1.82	0.61
12:AM:64:ILE:HG12	21:AV:178:GLU:HG3	1.81	0.61
31:BA:109:A:C6	31:BA:326:G:C6	2.89	0.61
36:BF:67:MET:HB2	36:BF:68:PRO:HD2	1.81	0.61
49:BS:18:LYS:O	49:BS:22:LEU:HD23	2.00	0.61
1:CA:1871:A:H2'	1:CA:1872:A:C8	2.35	0.61
1:CA:394:A:O2'	1:CA:395:U:H5'	2.00	0.61
2:CB:86:G:H2'	2:CB:87:G:C8	2.35	0.61
3:CD:131:LEU:HA	3:CD:190:TYR:CE2	2.36	0.61
8:CI:25:TYR:CE1	8:CI:30:LEU:HD11	2.35	0.61
9:CJ:59:GLY:O	9:CJ:61:HIS:N	2.33	0.61
20:CU:14:LEU:HB2	20:CU:24:VAL:HG22	1.82	0.61
20:CU:2:ARG:N	20:CU:4:LYS:HZ2	1.98	0.61
31:DA:1148:U:H2'	31:DA:1149:C:O4'	2.00	0.61
31:DA:1263:C:H2'	31:DA:1264:C:H6	1.65	0.61
31:DA:1302:U:C5	43:DM:17:VAL:HG11	2.34	0.61
31:DA:1313:U:OP1	49:DS:6:LYS:HG3	2.00	0.61
31:DA:224:C:H2'	31:DA:225:C:H6	1.63	0.61
31:DA:913:A:H4'	31:DA:914:A:O5'	1.99	0.61
32:DB:162:ILE:CD1	32:DB:184:VAL:HA	2.30	0.61
41:DK:54:ARG:O	41:DK:57:THR:HG22	2.01	0.61
52:DW:54:U:H3	52:DW:58:A:N6	1.92	0.61
1:AA:1731:G:HO2'	1:AA:1732:A:H8	1.48	0.61
1:AA:207:A:H2'	1:AA:208:C:O4'	2.00	0.61
1:AA:2364:C:H4'	22:AW:56:ASP:OD1	2.01	0.61
1:AA:2577:A:H5''	1:AA:2578:G:H5'	1.82	0.61
1:AA:270(O):G:O2'	1:AA:270(Q):C:H5'	2.00	0.61
11:AL:47:ASP:HB3	11:AL:48:PRO:CA	2.30	0.61
17:AR:18:LEU:HD22	17:AR:19:LYS:N	2.15	0.61
31:BA:1148:U:H2'	31:BA:1149:C:O4'	2.00	0.61
34:BD:61:LYS:HD3	34:BD:62:GLN:N	2.14	0.61
43:BM:67:GLU:HG3	43:BM:68:GLY:N	2.14	0.61
46:BP:28:ARG:HG2	46:BP:29:ASP:OD1	2.00	0.61
1:CA:271(C):G:H4'	1:CA:271(D):U:H5'	1.80	0.61
1:CA:528:A:C2	1:CA:2043:C:H5'	2.34	0.61
31:DA:1441:G:H5''	31:DA:1442:G:O5'	2.00	0.61
31:DA:1104:G:O5'	32:DB:111:ARG:HD2	2.00	0.61
32:DB:95:GLN:HA	32:DB:96:ARG:NH2	2.15	0.61
27:A2:25:LEU:HD12	27:A2:25:LEU:H	1.64	0.61
1:AA:1019:U:H2'	1:AA:1021:A:H2	1.66	0.61
1:AA:1022:G:O2'	1:AA:1023:U:OP2	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:38:LYS:HD2	3:AD:38:LYS:N	2.15	0.61
5:AF:78:ILE:HD12	5:AF:78:ILE:H	1.65	0.61
16:AQ:75:ASN:ND2	16:AQ:78:THR:H	1.97	0.61
18:AS:70:TYR:H	18:AS:70:TYR:HD2	1.47	0.61
18:AS:73:ALA:O	18:AS:106:ILE:HG13	2.00	0.61
23:AX:13:ILE:CG2	23:AX:63:ALA:HB3	2.30	0.61
31:BA:979:C:H3'	31:BA:980:C:C5'	2.23	0.61
35:BE:101:ILE:HG12	35:BE:119:LEU:HA	1.83	0.61
39:BI:112:LYS:HA	39:BI:119:ALA:HB2	1.82	0.61
1:CA:2287:A:N1	1:CA:2346:A:H2	1.99	0.61
11:CL:7:ARG:O	11:CL:10:PRO:HD2	2.00	0.61
13:CN:49:ASP:OD2	13:CN:95:THR:HB	2.01	0.61
16:CQ:91:ASP:OD1	16:CQ:96:ALA:HB2	2.01	0.61
20:CU:13:VAL:HG12	20:CU:27:VAL:HG12	1.82	0.61
24:CY:11:GLU:O	24:CY:14:ARG:HG3	1.99	0.61
32:DB:20:GLU:HG3	32:DB:189:ASP:OD1	2.00	0.61
32:DB:54:THR:HG21	32:DB:201:ILE:HD11	1.82	0.61
43:DM:27:LYS:HE2	43:DM:31:LYS:HE3	1.81	0.61
31:DA:127:G:O2'	47:DQ:2:PRO:HA	2.00	0.61
50:DT:26:ASN:OD1	50:DT:71:THR:HG23	2.00	0.61
52:DW:71:C:H2'	52:DW:72:A:H8	1.66	0.61
1:AA:2119:A:N6	1:AA:2170:A:H61	1.98	0.61
1:AA:273(F):U:C2'	1:AA:273(G):C:H5''	2.30	0.61
1:AA:528:A:C2	1:AA:2043:C:H5'	2.35	0.61
3:AD:43:ARG:HB2	3:AD:48:ARG:O	2.01	0.61
4:AE:201:THR:CG2	4:AE:202:LYS:N	2.62	0.61
13:AN:13:HIS:HE1	13:AN:15:SER:HB2	1.64	0.61
21:AV:28:MET:HE1	21:AV:67:LEU:HD13	1.82	0.61
31:BA:269:C:H2'	31:BA:270:A:C8	2.36	0.61
32:BB:187:LEU:HD23	32:BB:201:ILE:O	2.00	0.61
37:BG:120:ILE:O	37:BG:124:LEU:HB2	2.01	0.61
50:BT:72:LEU:HD11	50:BT:77:ALA:CA	2.30	0.61
52:BW:59:A:H2'	52:BW:60:U:H5'	1.81	0.61
28:C3:42:TRP:HA	28:C3:42:TRP:HE3	1.65	0.61
1:CA:2134:A:H8	1:CA:2157:G:H21	1.48	0.61
11:CL:125:VAL:HG13	11:CL:144:GLU:HB3	1.82	0.61
11:CL:47:ASP:HB3	11:CL:48:PRO:CA	2.30	0.61
33:DC:7:PRO:O	33:DC:11:ARG:HG2	2.00	0.61
42:DL:23:VAL:HG13	42:DL:97:TYR:CE2	2.36	0.61
43:DM:67:GLU:HG3	43:DM:68:GLY:N	2.15	0.61
1:AA:2729:G:H1'	4:AE:187:ALA:CB	2.28	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:394:A:O2'	1:AA:395:U:H5'	2.01	0.61
6:AG:77:ILE:HB	6:AG:82:LEU:HD12	1.82	0.61
8:AI:8:PRO:HD3	8:AI:15:VAL:HG22	1.82	0.61
12:AM:24:GLY:HA2	12:AM:101:ARG:HA	1.83	0.61
23:AX:10:LYS:O	23:AX:11:ARG:HB2	2.01	0.61
31:BA:1263:C:H2'	31:BA:1264:C:H6	1.66	0.61
35:BE:45:PHE:CE2	35:BE:47:LYS:HD2	2.36	0.61
1:CA:32:C:O2'	1:CA:33:U:H5'	2.00	0.61
3:CD:206:LEU:HD22	3:CD:211:ARG:HG2	1.82	0.61
12:CM:64:ILE:HG12	21:CV:178:GLU:HG3	1.81	0.61
17:CR:52:VAL:HG13	17:CR:55:ALA:HB3	1.81	0.61
23:CX:13:ILE:HD12	23:CX:14:VAL:N	2.16	0.61
33:DC:6:HIS:HB3	44:DN:49:HIS:HB3	1.81	0.61
36:DF:21:LEU:O	36:DF:24:GLU:HB3	2.00	0.61
31:DA:1305:G:H5''	51:DU:4:GLY:CA	2.28	0.61
52:DW:59:A:H2'	52:DW:60:U:H5'	1.82	0.61
1:AA:1858:G:H1'	1:AA:1884:A:H62	1.66	0.61
1:AA:2392:A:H2	1:AA:2424:C:H42	1.49	0.61
11:AL:125:VAL:HG13	11:AL:144:GLU:HB3	1.82	0.61
16:AQ:95:LEU:HD13	17:AR:4:ILE:HD12	1.82	0.61
31:BA:1510:U:H2'	31:BA:1511:G:C8	2.36	0.61
1:CA:2529:G:H5''	1:CA:2530:A:H5''	1.83	0.61
4:CE:201:THR:CG2	4:CE:202:LYS:H	2.12	0.61
20:CU:14:LEU:HD12	20:CU:15:VAL:N	2.16	0.61
21:CV:94:GLU:CD	21:CV:94:GLU:H	2.04	0.61
25:CZ:54:VAL:O	25:CZ:55:ARG:HD3	2.00	0.61
31:DA:833:U:H2'	31:DA:834:C:C6	2.36	0.61
40:DJ:48:THR:HG22	40:DJ:62:HIS:ND1	2.16	0.61
43:DM:10:PRO:HD3	43:DM:22:ILE:HD11	1.83	0.61
3:AD:27:THR:O	3:AD:27:THR:HG23	2.00	0.61
11:AL:7:ARG:O	11:AL:10:PRO:HD2	2.01	0.61
14:AO:56:LEU:HD23	14:AO:57:LYS:NZ	2.15	0.61
20:AU:76:CYS:HB3	20:AU:96:ILE:HD13	1.83	0.61
31:BA:1014:A:C2	31:BA:1219:U:H1'	2.36	0.61
33:BC:73:PRO:HD3	33:BC:105:GLU:HG2	1.82	0.61
38:BH:12:ARG:NH1	38:BH:26:VAL:HA	2.15	0.61
40:BJ:34:VAL:HG22	40:BJ:74:ILE:HG12	1.81	0.61
43:BM:50:GLU:HA	43:BM:53:VAL:HB	1.82	0.61
30:C5:22:VAL:CB	30:C5:54:GLU:HG3	2.26	0.61
3:CD:186:HIS:CD2	3:CD:188:GLU:H	2.19	0.61
12:CM:83:MET:C	12:CM:83:MET:SD	2.80	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CR:13:ARG:HD3	17:CR:13:ARG:O	2.00	0.61
37:DG:120:ILE:O	37:DG:124:LEU:HB2	2.00	0.61
38:DH:109:ILE:HG12	38:DH:110:ALA:H	1.66	0.61
43:DM:14:ARG:HG2	43:DM:44:ARG:CZ	2.30	0.61
28:A3:42:TRP:HA	28:A3:42:TRP:HE3	1.66	0.60
29:A4:8:ASN:ND2	29:A4:11:LYS:H	1.99	0.60
4:AE:28:ALA:HB3	4:AE:93:VAL:HG22	1.82	0.60
21:AV:10:ARG:HG2	21:AV:11:GLU:H	1.66	0.60
32:BB:162:ILE:CD1	32:BB:184:VAL:HA	2.30	0.60
39:BI:9:ARG:HG2	39:BI:14:VAL:HG22	1.83	0.60
43:BM:10:PRO:HD3	43:BM:22:ILE:HD11	1.83	0.60
1:CA:1840:G:H1	1:CA:1902:C:H42	1.48	0.60
1:CA:273(F):U:C2'	1:CA:273(G):C:H5''	2.31	0.60
5:CF:131:GLY:HA2	5:CF:138:GLU:OE1	2.00	0.60
21:CV:10:ARG:HG2	21:CV:11:GLU:H	1.66	0.60
31:DA:1014:A:C2	31:DA:1219:U:H1'	2.36	0.60
31:DA:464:G:O6	31:DA:466:G:H5''	2.01	0.60
34:DD:57:ARG:HB3	34:DD:206:PHE:HB2	1.83	0.60
35:DE:45:PHE:CE2	35:DE:47:LYS:HD2	2.36	0.60
37:DG:42:ILE:HD13	37:DG:116:ALA:HB3	1.83	0.60
30:A5:61:LEU:O	30:A5:63:PRO:HD2	1.99	0.60
1:AA:2309:A:O5'	1:AA:2309:A:H8	1.84	0.60
7:AH:94:TYR:H	7:AH:94:TYR:HD1	1.47	0.60
9:AJ:59:GLY:O	9:AJ:61:HIS:N	2.33	0.60
17:AR:35:LEU:HB2	17:AR:57:VAL:HG13	1.83	0.60
21:AV:78:LYS:O	21:AV:79:ARG:HB3	2.01	0.60
23:AX:13:ILE:HG21	23:AX:63:ALA:CB	2.31	0.60
25:AZ:54:VAL:O	25:AZ:55:ARG:HD3	2.00	0.60
31:BA:1065:U:C5	31:BA:1190:G:H1'	2.36	0.60
31:BA:67:C:H2'	31:BA:68:G:H8	1.65	0.60
32:BB:20:GLU:HG3	32:BB:189:ASP:OD1	2.00	0.60
32:BB:11:LEU:HD12	32:BB:217:ARG:NH2	2.17	0.60
33:BC:7:PRO:O	33:BC:11:ARG:HG2	2.00	0.60
1:CA:2096:U:H2'	1:CA:2097:C:C6	2.36	0.60
4:CE:201:THR:CG2	4:CE:202:LYS:N	2.61	0.60
5:CF:143:ALA:HB1	5:CF:148:LEU:HB2	1.81	0.60
31:DA:1510:U:H2'	31:DA:1511:G:C8	2.35	0.60
32:DB:59:GLU:HB2	32:DB:221:LEU:HD11	1.81	0.60
34:DD:61:LYS:HD3	34:DD:206:PHE:CE2	2.35	0.60
31:DA:1228:C:OP1	43:DM:115:LYS:HE3	2.01	0.60
28:A3:26:ASN:ND2	28:A3:28:ARG:H	1.99	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:30:GLU:HG3	3:AD:63:ARG:CZ	2.30	0.60
24:AY:57:ILE:HG22	24:AY:61:LEU:HD23	1.82	0.60
31:BA:464:G:O6	31:BA:466:G:H5'	2.01	0.60
31:BA:542:G:OP1	34:BD:10:ARG:NH2	2.33	0.60
1:CA:1420:U:O2'	1:CA:1421:G:C5'	2.48	0.60
1:CA:1913:A:C2	31:DA:1493:A:H1'	2.37	0.60
1:CA:2473:U:O2'	1:CA:2474:C:C5'	2.46	0.60
6:CG:60:LEU:O	6:CG:64:THR:HG22	2.01	0.60
13:CN:104:ARG:NH1	13:CN:109:ALA:HB3	2.17	0.60
13:CN:33:ARG:NE	13:CN:115:GLU:HG3	2.16	0.60
13:CN:4:LEU:O	13:CN:4:LEU:HD13	2.01	0.60
31:DA:365:U:H5'	31:DA:366:C:OP1	2.01	0.60
37:DG:113:GLU:HG2	37:DG:119:ARG:HG2	1.83	0.60
1:AA:1614:A:H61	18:AS:88:ARG:H	1.47	0.60
1:AA:2023:G:H5'	1:AA:2617:C:H4'	1.83	0.60
2:AB:81:G:H5'	2:AB:82:G:OP2	2.02	0.60
3:AD:133:LEU:HB3	3:AD:173:VAL:HG11	1.84	0.60
17:AR:52:VAL:HG13	17:AR:55:ALA:HB3	1.83	0.60
32:BB:91:PRO:HA	32:BB:154:LEU:HD21	1.84	0.60
42:BL:6:ILE:HD12	42:BL:7:ASN:H	1.66	0.60
1:CA:1858:G:H1'	1:CA:1884:A:H62	1.66	0.60
3:CD:139:GLY:H	3:CD:165:ILE:HB	1.65	0.60
5:CF:155:LEU:HA	5:CF:174:VAL:HG23	1.82	0.60
11:CL:125:VAL:CG1	11:CL:138:LEU:HD21	2.31	0.60
1:CA:2364:C:H4'	22:CW:56:ASP:OD1	2.01	0.60
31:DA:269:C:H2'	31:DA:270:A:C8	2.36	0.60
31:DA:987:G:H2'	31:DA:988:G:H8	1.66	0.60
34:DD:18:LYS:HD3	34:DD:20:TYR:CZ	2.35	0.60
45:DO:45:VAL:HG22	45:DO:46:HIS:ND1	2.15	0.60
1:AA:784:A:H5'	1:AA:785:G:OP1	2.01	0.60
6:AG:19:LEU:HD11	6:AG:172:LEU:HD13	1.84	0.60
11:AL:17:LYS:HB3	11:AL:19:VAL:HG22	1.82	0.60
14:AO:26:LEU:HD13	14:AO:87:PHE:HD1	1.67	0.60
31:BA:737:A:H2'	31:BA:738:C:C6	2.36	0.60
39:BI:4:TYR:CE2	39:BI:88:TYR:HB3	2.37	0.60
40:BJ:40:LEU:HB2	40:BJ:69:ASN:HB2	1.84	0.60
52:BW:71:C:H2'	52:BW:72:A:H8	1.65	0.60
1:CA:1019:U:H2'	1:CA:1021:A:H2	1.66	0.60
1:CA:1022:G:H22	1:CA:1142(B):A:H2	1.48	0.60
1:CA:2029:G:H2'	1:CA:2031:A:OP1	2.01	0.60
1:CA:207:A:H2'	1:CA:208:C:O4'	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:245:G:H5'	11:CL:73:GLY:HA3	1.83	0.60
31:DA:1337:G:H5''	31:DA:1338:G:OP1	2.02	0.60
34:DD:127:THR:HG23	34:DD:147:ALA:HB3	1.81	0.60
42:DL:6:ILE:HD12	42:DL:7:ASN:H	1.66	0.60
47:DQ:45:HIS:HE2	47:DQ:47:PRO:HB3	1.66	0.60
50:DT:49:ALA:HB2	50:DT:92:LEU:HD22	1.83	0.60
1:AA:1840:G:H1	1:AA:1902:C:H42	1.50	0.60
1:AA:2698:U:H2'	1:AA:2699:C:C6	2.37	0.60
1:AA:2306:C:H4'	6:AG:136:ARG:NH1	2.16	0.60
31:BA:922:G:H4'	35:BE:20:GLN:HA	1.83	0.60
44:BN:41:ARG:HG3	44:BN:42:ILE:N	2.16	0.60
1:CA:1292:U:H2'	1:CA:1293:C:C6	2.36	0.60
3:CD:172:TYR:CD1	3:CD:186:HIS:HA	2.37	0.60
10:CK:3:GLN:HB2	10:CK:4:PRO:HD2	1.84	0.60
15:CP:107:ASP:O	15:CP:110:ILE:HG22	2.01	0.60
23:CX:57:GLU:HG2	23:CX:58:ILE:H	1.67	0.60
31:DA:555:C:H2'	31:DA:556:C:C6	2.36	0.60
1:AA:1022:G:H22	1:AA:1142(B):A:H2	1.47	0.60
3:AD:131:LEU:HA	3:AD:190:TYR:CE2	2.37	0.60
6:AG:60:LEU:O	6:AG:64:THR:HG22	2.01	0.60
20:AU:13:VAL:HG12	20:AU:27:VAL:HG12	1.81	0.60
25:AZ:6:VAL:HG22	25:AZ:56:VAL:HG12	1.84	0.60
47:BQ:45:HIS:HE2	47:BQ:47:PRO:HB3	1.67	0.60
1:CA:2306:C:H4'	6:CG:136:ARG:NH1	2.16	0.60
18:CS:9:TYR:H	18:CS:102:HIS:HD2	1.50	0.60
1:AA:1270:C:H5''	1:AA:1271:G:H5'	1.82	0.60
1:AA:1510:A:H2'	1:AA:1511:A:C8	2.37	0.60
1:AA:277:A:C5	1:AA:278:A:H1'	2.36	0.60
6:AG:141:PHE:HB3	6:AG:142:PRO:HD2	1.84	0.60
1:AA:494:G:N2	18:AS:57:ASN:HD21	1.98	0.60
21:AV:94:GLU:CD	21:AV:94:GLU:H	2.04	0.60
23:AX:13:ILE:HD12	23:AX:14:VAL:N	2.15	0.60
31:BA:537:G:H2'	31:BA:538:G:C8	2.37	0.60
31:BA:960:U:H2'	31:BA:1225:A:H62	1.65	0.60
34:BD:57:ARG:HB3	34:BD:206:PHE:HB2	1.83	0.60
45:BO:5:LYS:HD3	45:BO:6:GLU:H	1.66	0.60
1:CA:2572:A:OP1	1:CA:2574:G:H4'	2.01	0.60
1:CA:2645:G:H8	1:CA:2645:G:OP2	1.85	0.60
3:CD:31:LYS:HE3	3:CD:33:LEU:HD11	1.84	0.60
10:CK:119:PRO:HB2	15:CP:68:TYR:CE2	2.37	0.60
31:DA:67:C:H2'	31:DA:68:G:H8	1.65	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DL:23:VAL:HG12	42:DL:23:VAL:O	2.01	0.60
1:AA:2306:C:H4'	6:AG:136:ARG:HH12	1.67	0.60
1:AA:86:C:H4'	1:AA:104:U:H1'	1.83	0.60
3:AD:106:ILE:O	3:AD:108:PRO:HD3	2.02	0.60
3:AD:31:LYS:HE3	3:AD:33:LEU:HD11	1.84	0.60
8:AI:71:ILE:HG13	8:AI:72:LEU:HD22	1.84	0.60
19:AT:57:LEU:HD11	19:AT:78:LYS:HD2	1.84	0.60
20:AU:2:ARG:N	20:AU:4:LYS:HZ2	2.00	0.60
21:AV:120:ILE:HG12	21:AV:172:ALA:HA	1.82	0.60
36:BF:44:GLY:HA2	36:BF:59:TYR:CZ	2.37	0.60
36:BF:50:TYR:HE1	48:BR:74:ARG:O	1.84	0.60
37:BG:23:VAL:O	37:BG:27:ILE:HG12	2.02	0.60
49:BS:6:LYS:H	49:BS:6:LYS:HD2	1.67	0.60
50:BT:49:ALA:HB2	50:BT:92:LEU:HD22	1.82	0.60
29:C4:9:ARG:HE	29:C4:47:ARG:CB	2.14	0.60
1:CA:1510:A:H2'	1:CA:1511:A:C8	2.37	0.60
1:CA:2564:A:C2	1:CA:2647:U:H4'	2.37	0.60
1:CA:847:U:H5	1:CA:933:A:H62	1.50	0.60
17:CR:18:LEU:HD22	17:CR:19:LYS:N	2.17	0.60
20:CU:47:LYS:HA	20:CU:60:PHE:CD2	2.37	0.60
31:DA:1411:C:H2'	31:DA:1412:C:C6	2.37	0.60
31:DA:624:C:H2'	31:DA:625:G:H8	1.65	0.60
38:DH:109:ILE:HG12	38:DH:110:ALA:N	2.16	0.60
31:DA:377:G:OP1	46:DP:3:LYS:HD2	2.01	0.60
1:AA:1019:U:C2'	1:AA:1021:A:H2	2.15	0.60
2:AB:86:G:H2'	2:AB:87:G:C8	2.36	0.60
4:AE:201:THR:CG2	4:AE:202:LYS:H	2.13	0.60
5:AF:181:LEU:HD21	5:AF:186:ILE:HD11	1.84	0.60
5:AF:52:LYS:HB3	5:AF:56:GLU:HB2	1.84	0.60
10:AK:63:VAL:HB	10:AK:102:VAL:HG12	1.83	0.60
13:AN:33:ARG:NE	13:AN:115:GLU:HG3	2.16	0.60
13:AN:4:LEU:HD13	13:AN:4:LEU:O	2.01	0.60
18:AS:9:TYR:H	18:AS:102:HIS:HD2	1.50	0.60
23:AX:57:GLU:HG2	23:AX:58:ILE:H	1.67	0.60
31:BA:1106:G:H2'	31:BA:1107:C:C6	2.36	0.60
31:BA:677:U:H3	31:BA:713:G:H22	1.49	0.60
31:BA:913:A:H1'	31:BA:914:A:OP2	2.02	0.60
40:BJ:26:ALA:HB3	40:BJ:85:LEU:HD21	1.84	0.60
45:BO:26:GLU:HA	45:BO:81:LEU:HD11	1.84	0.60
29:C4:19:ARG:HG3	29:C4:19:ARG:NH1	2.07	0.60
29:C4:8:ASN:ND2	29:C4:11:LYS:H	2.00	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2131:G:H5'	1:CA:2132:U:H3'	1.82	0.60
1:CA:2543:G:H2'	1:CA:2544:G:C8	2.37	0.60
3:CD:79:VAL:HG23	3:CD:113:VAL:HA	1.84	0.60
5:CF:202:PHE:CE1	5:CF:206:ILE:HD11	2.37	0.60
18:CS:73:ALA:O	18:CS:106:ILE:HG13	2.02	0.60
23:CX:13:ILE:O	23:CX:14:VAL:HB	2.01	0.60
25:CZ:7:LYS:HE2	25:CZ:32:GLN:NE2	2.17	0.60
31:DA:424:G:H2'	31:DA:425:G:H8	1.67	0.60
1:CA:1837:C:OP1	31:DA:784:C:H4'	2.02	0.60
37:DG:78:ARG:HE	37:DG:80:VAL:HG11	1.66	0.60
52:DW:23:C:H2'	52:DW:24:U:C6	2.37	0.60
1:AA:32:C:O2'	1:AA:33:U:H5'	2.01	0.59
15:AP:23:ARG:HE	15:AP:120:ARG:HD3	1.67	0.59
32:BB:54:THR:HG21	32:BB:201:ILE:HD11	1.84	0.59
52:BW:23:C:H2'	52:BW:24:U:C6	2.37	0.59
1:CA:58:G:N2	1:CA:70:G:C4	2.70	0.59
6:CG:141:PHE:HB3	6:CG:142:PRO:HD2	1.83	0.59
31:BA:368:U:OP1	8:CI:91:SER:HB3	2.01	0.59
1:CA:2090:G:N2	23:CX:45:ASN:HD21	1.96	0.59
23:CX:64:ALA:HA	23:CX:67:ILE:HG13	1.84	0.59
31:DA:1144:G:H21	31:DA:1146:A:H62	1.49	0.59
1:AA:2236:C:H2'	1:AA:2237:G:O4'	2.02	0.59
1:AA:2529:G:H5''	1:AA:2530:A:H5''	1.84	0.59
1:AA:2598:A:OP1	3:AD:235:GLY:HA3	2.01	0.59
1:AA:2688:U:C5	1:AA:2720:U:OP2	2.56	0.59
1:AA:2867:G:C5	15:AP:23:ARG:NH1	2.70	0.59
3:AD:172:TYR:CD1	3:AD:186:HIS:HA	2.37	0.59
3:AD:186:HIS:HD2	3:AD:188:GLU:H	1.50	0.59
1:AA:2531:A:H5''	7:AH:157:TYR:CE2	2.37	0.59
12:AM:52:VAL:HA	12:AM:55:VAL:HG13	1.84	0.59
31:BA:1101:A:H4'	31:BA:1102:A:O5'	2.02	0.59
28:C3:26:ASN:ND2	28:C3:27:LYS:H	1.99	0.59
1:CA:2210:G:N2	1:CA:2211:G:H5'	2.17	0.59
3:CD:177:LEU:HD11	3:CD:183:ARG:HD2	1.84	0.59
7:CH:168:PRO:HG2	7:CH:170:ARG:NH1	2.17	0.59
11:CL:23:PRO:HD2	11:CL:33:ARG:HH21	1.65	0.59
12:CM:52:VAL:HA	12:CM:55:VAL:HG13	1.84	0.59
15:CP:118:ARG:HA	15:CP:121:ILE:HB	1.84	0.59
25:CZ:6:VAL:HG22	25:CZ:56:VAL:HG12	1.84	0.59
33:DC:33:LEU:HD21	44:DN:53:LEU:HD22	1.84	0.59
40:DJ:55:LYS:O	40:DJ:56:HIS:CG	2.55	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DM:99:ARG:HB2	43:DM:101:GLN:HE21	1.67	0.59
49:DS:49:ILE:HD12	49:DS:49:ILE:H	1.67	0.59
1:AA:847:U:H5	1:AA:933:A:H62	1.50	0.59
13:AN:56:LYS:HE3	13:AN:87:TYR:O	2.02	0.59
15:AP:35:LYS:O	15:AP:35:LYS:HG3	2.02	0.59
1:AA:1227:G:OP1	16:AQ:13:LYS:HG2	2.01	0.59
31:BA:1301:U:H3'	31:BA:1302:U:C5'	2.32	0.59
31:BA:1337:G:H5''	31:BA:1338:G:OP1	2.01	0.59
31:BA:149:A:H2'	31:BA:150:C:C6	2.38	0.59
45:BO:45:VAL:HG22	45:BO:46:HIS:ND1	2.16	0.59
1:CA:2309:A:H8	1:CA:2309:A:O5'	1.85	0.59
1:CA:494:G:N2	18:CS:57:ASN:HD21	1.99	0.59
5:CF:78:ILE:HD12	5:CF:78:ILE:H	1.67	0.59
12:CM:24:GLY:HA2	12:CM:101:ARG:HA	1.83	0.59
13:CN:13:HIS:HE1	13:CN:15:SER:HB2	1.66	0.59
14:CO:64:GLU:HG2	14:CO:67:ARG:HH21	1.67	0.59
15:CP:118:ARG:HD3	31:DA:1446:A:C6	2.38	0.59
20:CU:13:VAL:HG23	20:CU:73:ARG:O	2.02	0.59
20:CU:13:VAL:CG1	20:CU:27:VAL:HG12	2.31	0.59
23:CX:10:LYS:O	23:CX:11:ARG:HB2	2.02	0.59
24:CY:57:ILE:HG22	24:CY:61:LEU:HD23	1.83	0.59
32:DB:11:LEU:HD12	32:DB:217:ARG:NH2	2.17	0.59
32:DB:214:ILE:HD12	32:DB:214:ILE:H	1.66	0.59
1:AA:154:G:H2'	1:AA:155:C:O4'	2.02	0.59
1:AA:245:G:H5'	11:AL:73:GLY:HA3	1.83	0.59
1:AA:2615:U:C2	27:A2:7:PRO:HA	2.36	0.59
1:AA:2645:G:H3'	1:AA:2646:C:H5'	1.83	0.59
4:AE:192:ASN:N	4:AE:192:ASN:HD22	1.99	0.59
5:AF:202:PHE:CE1	5:AF:206:ILE:HD11	2.36	0.59
11:AL:125:VAL:CG1	11:AL:138:LEU:HD21	2.30	0.59
16:AQ:83:LEU:HG	16:AQ:88:ILE:HD12	1.84	0.59
19:AT:12:VAL:HG12	19:AT:29:TRP:CE2	2.37	0.59
20:AU:47:LYS:HA	20:AU:60:PHE:CD2	2.36	0.59
31:BA:668:G:H1'	45:BO:46:HIS:HD2	1.67	0.59
34:BD:133:VAL:HG11	34:BD:138:TYR:HD2	1.67	0.59
37:BG:113:GLU:HG2	37:BG:119:ARG:HG2	1.84	0.59
47:BQ:63:ARG:HG2	47:BQ:64:PRO:HD2	1.83	0.59
36:BF:50:TYR:CE1	48:BR:77:GLY:HA2	2.36	0.59
27:C2:25:LEU:H	27:C2:25:LEU:HD12	1.67	0.59
1:CA:1614:A:H61	18:CS:88:ARG:H	1.51	0.59
1:CA:277:A:C5	1:CA:278:A:H1'	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:106:ILE:O	3:CD:108:PRO:HD3	2.02	0.59
6:CG:107:LEU:HD21	6:CG:178:PHE:CD1	2.37	0.59
9:CJ:160:LYS:NZ	9:CJ:161:LEU:H	1.93	0.59
1:CA:941:A:H4'	11:CL:35:HIS:CD2	2.37	0.59
11:CL:49:ARG:NH1	11:CL:49:ARG:HG3	2.05	0.59
17:CR:39:LEU:HA	17:CR:47:VAL:HG13	1.84	0.59
17:CR:47:VAL:HG12	17:CR:52:VAL:HB	1.83	0.59
23:CX:31:GLY:O	23:CX:32:LYS:HB2	2.03	0.59
23:CX:56:GLN:HE21	23:CX:85:LEU:HD23	1.67	0.59
32:DB:100:GLY:HA3	32:DB:104:ASN:HB3	1.84	0.59
34:DD:162:LEU:HD13	34:DD:181:MET:HG2	1.84	0.59
34:DD:196:LEU:HB3	34:DD:198:VAL:HG22	1.84	0.59
34:DD:57:ARG:HH21	35:DE:107:ARG:NH1	2.00	0.59
1:AA:1025:G:OP1	1:AA:1025:G:H8	1.85	0.59
3:AD:57:GLY:N	3:AD:216:GLY:HA2	2.16	0.59
17:AR:72:VAL:HG23	17:AR:85:LYS:HB2	1.85	0.59
41:BK:29:ILE:HG22	41:BK:44:SER:CB	2.31	0.59
1:CA:2306:C:H4'	6:CG:136:ARG:HH12	1.67	0.59
6:CG:139:LEU:HD23	6:CG:139:LEU:H	1.68	0.59
7:CH:13:LYS:HD3	7:CH:14:GLY:N	2.17	0.59
15:CP:23:ARG:HE	15:CP:120:ARG:HD3	1.68	0.59
23:CX:13:ILE:CG2	23:CX:63:ALA:HB3	2.32	0.59
31:DA:646:U:H2'	31:DA:647:C:C6	2.37	0.59
32:DB:14:GLY:O	32:DB:15:VAL:HG13	2.02	0.59
39:DI:125:TYR:CD2	39:DI:126:SER:N	2.71	0.59
1:AA:2567:G:H2'	1:AA:2568:C:C6	2.37	0.59
6:AG:107:LEU:HD21	6:AG:178:PHE:CD1	2.37	0.59
13:AN:70:LEU:HD12	13:AN:70:LEU:H	1.67	0.59
19:AT:3:THR:HA	19:AT:6:ASP:OD2	2.02	0.59
31:BA:1196:U:H5'	31:BA:1197:G:C5'	2.33	0.59
31:BA:1411:C:H2'	31:BA:1412:C:C6	2.37	0.59
31:BA:180:U:H2'	31:BA:181:G:H5''	1.84	0.59
31:BA:209:U:H5''	31:BA:210:U:OP1	2.02	0.59
31:BA:359:U:H2'	31:BA:360:A:C8	2.37	0.59
34:BD:29:PRO:O	34:BD:30:LYS:HB3	2.01	0.59
52:BW:48:C:H5''	52:BW:49:G:H5''	1.85	0.59
1:CA:1227:G:OP1	16:CQ:13:LYS:HG2	2.02	0.59
1:CA:1578:U:H2'	1:CA:1579:A:H5'	1.85	0.59
1:CA:2414:G:H21	11:CL:67:MET:CE	2.15	0.59
1:CA:2023:G:H5'	1:CA:2617:C:H4'	1.84	0.59
1:CA:2645:G:H3'	1:CA:2646:C:H5'	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:57:GLY:N	3:CD:216:GLY:HA2	2.16	0.59
5:CF:181:LEU:HD21	5:CF:186:ILE:HD11	1.84	0.59
6:CG:130:ASN:OD1	6:CG:160:VAL:HA	2.03	0.59
1:CA:270(M):U:C2	8:CI:50:ARG:HB2	2.38	0.59
9:CJ:90:LEU:H	9:CJ:90:LEU:HD12	1.68	0.59
15:CP:24:PRO:HD3	15:CP:52:ILE:HD12	1.84	0.59
21:CV:78:LYS:O	21:CV:79:ARG:HB3	2.01	0.59
31:DA:109:A:C6	31:DA:326:G:C6	2.90	0.59
31:DA:1301:U:H3'	31:DA:1302:U:C5'	2.32	0.59
32:DB:69:LEU:HD23	32:DB:155:LEU:HD22	1.85	0.59
39:DI:112:LYS:HA	39:DI:119:ALA:HB2	1.83	0.59
45:DO:26:GLU:HA	45:DO:81:LEU:HD11	1.84	0.59
1:AA:2564:A:C2	1:AA:2647:U:H4'	2.38	0.59
5:AF:117:ARG:HD2	5:AF:190:GLU:O	2.02	0.59
11:AL:23:PRO:CB	11:AL:33:ARG:HG3	2.25	0.59
17:AR:77:ALA:O	17:AR:79:VAL:HG22	2.01	0.59
1:AA:2090:G:N2	23:AX:45:ASN:HD21	1.97	0.59
31:BA:987:G:H2'	31:BA:988:G:H8	1.67	0.59
32:BB:14:GLY:O	32:BB:15:VAL:HG13	2.03	0.59
31:BA:406:G:C5'	34:BD:5:ILE:HD12	2.32	0.59
1:CA:860:U:C5	1:CA:917:A:N7	2.71	0.59
14:CO:26:LEU:HD13	14:CO:87:PHE:HD1	1.67	0.59
16:CQ:44:ASN:HD21	17:CR:75:PHE:HB3	1.67	0.59
17:CR:35:LEU:HB2	17:CR:57:VAL:HG13	1.83	0.59
31:DA:1196:U:H5'	31:DA:1197:G:C5'	2.33	0.59
32:DB:91:PRO:HA	32:DB:154:LEU:HD21	1.85	0.59
34:DD:166:LYS:O	34:DD:166:LYS:HD2	2.02	0.59
34:DD:173:TRP:HZ3	34:DD:193:ASP:HB3	1.67	0.59
37:DG:23:VAL:O	37:DG:27:ILE:HG12	2.03	0.59
39:DI:4:TYR:CE2	39:DI:88:TYR:HB3	2.37	0.59
28:A3:26:ASN:ND2	28:A3:27:LYS:H	2.00	0.59
6:AG:7:LEU:HD11	6:AG:107:LEU:HD12	1.83	0.59
7:AH:137:ASP:HB3	7:AH:140:LYS:HG3	1.84	0.59
19:AT:50:LYS:H	19:AT:87:GLN:HE22	1.51	0.59
42:BL:100:VAL:O	42:BL:103:VAL:HG22	2.02	0.59
1:CA:1495:A:N3	1:CA:1495:A:H2'	2.17	0.59
1:CA:1921:G:H2'	1:CA:1922:G:H8	1.68	0.59
16:CQ:83:LEU:HG	16:CQ:88:ILE:HD12	1.85	0.59
21:CV:120:ILE:HG12	21:CV:172:ALA:HA	1.84	0.59
21:CV:136:PHE:C	21:CV:137:ILE:HD12	2.23	0.59
21:CV:28:MET:HE1	21:CV:67:LEU:HD13	1.85	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:332:G:OP2	50:DT:10:LEU:HD23	2.02	0.59
49:DS:6:LYS:H	49:DS:6:LYS:HD2	1.67	0.59
1:AA:1544:C:OP1	1:AA:1544:C:H6	1.86	0.59
1:AA:495:G:H1'	18:AS:57:ASN:ND2	2.17	0.59
3:AD:206:LEU:HD22	3:AD:211:ARG:HG2	1.83	0.59
3:AD:62:TYR:HA	3:AD:87:ASN:HD21	1.67	0.59
1:AA:674:G:H1'	5:AF:74:ARG:HD3	1.85	0.59
17:AR:38:LEU:HD23	17:AR:39:LEU:H	1.67	0.59
25:AZ:7:LYS:HE2	25:AZ:32:GLN:NE2	2.17	0.59
31:BA:1286:A:H3'	31:BA:1287:A:H5''	1.85	0.59
33:BC:134:ILE:HG23	33:BC:151:VAL:HB	1.84	0.59
37:BG:42:ILE:HD13	37:BG:116:ALA:HB3	1.84	0.59
44:BN:22:THR:OG1	44:BN:33:VAL:HG21	2.03	0.59
1:CA:2615:U:C2	27:C2:7:PRO:HA	2.38	0.59
3:CD:132:PRO:HD3	3:CD:190:TYR:CZ	2.38	0.59
3:CD:255:LYS:CD	3:CD:255:LYS:H	2.16	0.59
4:CE:69:LYS:O	4:CE:69:LYS:HD3	2.03	0.59
7:CH:20:ALA:HB1	7:CH:21:PRO:HD2	1.85	0.59
31:DA:209:U:H5''	31:DA:210:U:OP1	2.03	0.59
43:DM:50:GLU:CD	43:DM:50:GLU:H	2.06	0.59
36:DF:50:TYR:CE1	48:DR:77:GLY:HA2	2.38	0.59
49:DS:18:LYS:O	49:DS:22:LEU:HD23	2.02	0.59
1:CA:2169:A:C5	52:DW:56:C:OP1	2.56	0.59
1:AA:1598:C:H5'	19:AT:36:LYS:HB2	1.84	0.59
3:AD:79:VAL:HG23	3:AD:113:VAL:HA	1.85	0.59
6:AG:130:ASN:OD1	6:AG:160:VAL:HA	2.02	0.59
7:AH:13:LYS:HD3	7:AH:14:GLY:N	2.18	0.59
11:AL:61:ARG:C	11:AL:62:LEU:HD13	2.23	0.59
21:AV:92:SER:HB2	21:AV:94:GLU:OE1	2.03	0.59
31:BA:833:U:H2'	31:BA:834:C:C6	2.36	0.59
32:BB:121:LEU:HB3	32:BB:127:ILE:HD11	1.85	0.59
43:BM:99:ARG:HB2	43:BM:101:GLN:HE21	1.67	0.59
1:CA:1598:C:H5'	19:CT:36:LYS:HB2	1.83	0.59
1:CA:2282:G:H4'	1:CA:2389:G:O2'	2.03	0.59
1:CA:2688:U:C5	1:CA:2720:U:OP2	2.55	0.59
1:CA:270(R):C:H2'	1:CA:270(S):G:C8	2.38	0.59
2:CB:81:G:H5'	2:CB:82:G:OP2	2.03	0.59
15:CP:35:LYS:HG3	15:CP:35:LYS:O	2.03	0.59
1:CA:1009:A:H5''	16:CQ:59:ARG:HD3	1.85	0.59
17:CR:39:LEU:HD12	17:CR:50:PRO:O	2.03	0.59
20:CU:76:CYS:HB3	20:CU:96:ILE:HD13	1.83	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:9:GLN:HA	24:CY:12:GLU:HB3	1.85	0.59
24:CY:9:GLN:O	24:CY:12:GLU:HB3	2.03	0.59
31:DA:262:A:C6	31:DA:263:A:C6	2.91	0.59
42:DL:100:VAL:O	42:DL:103:VAL:HG22	2.03	0.59
45:DO:5:LYS:HD3	45:DO:6:GLU:H	1.67	0.59
1:AA:203:C:H3'	1:AA:204:A:H5''	1.85	0.58
1:AA:2543:G:H2'	1:AA:2544:G:C8	2.38	0.58
1:AA:34:C:H41	1:AA:447:A:H61	1.51	0.58
4:AE:69:LYS:O	4:AE:69:LYS:HD3	2.02	0.58
9:AJ:132:LYS:N	9:AJ:132:LYS:HD3	2.12	0.58
10:AK:3:GLN:HB2	10:AK:4:PRO:HD2	1.83	0.58
15:AP:118:ARG:HA	15:AP:121:ILE:HB	1.84	0.58
15:AP:36:GLU:HB2	15:AP:41:ARG:HD3	1.84	0.58
16:AQ:44:ASN:HD21	17:AR:75:PHE:HB3	1.67	0.58
24:AY:9:GLN:O	24:AY:12:GLU:HB3	2.03	0.58
32:BB:214:ILE:H	32:BB:214:ILE:HD12	1.68	0.58
38:BH:12:ARG:NH1	38:BH:27:PRO:HD3	2.18	0.58
30:C5:50:LEU:O	30:C5:51:ALA:CB	2.51	0.58
1:CA:1019:U:HO2'	1:CA:1021:A:H2	1.51	0.58
1:CA:2236:C:H2'	1:CA:2237:G:O4'	2.02	0.58
1:CA:2698:U:H2'	1:CA:2699:C:C6	2.37	0.58
1:CA:26:G:C6	1:CA:27:G:N1	2.71	0.58
1:CA:780:G:N2	1:CA:783:A:H62	1.98	0.58
6:CG:107:LEU:HD23	6:CG:111:LEU:HD12	1.85	0.58
7:CH:65:HIS:CE1	7:CH:69:ARG:HD3	2.38	0.58
31:DA:1101:A:H4'	31:DA:1102:A:O5'	2.02	0.58
31:DA:1144:G:H21	31:DA:1146:A:N6	2.01	0.58
31:DA:1286:A:H3'	31:DA:1287:A:H5''	1.84	0.58
31:DA:537:G:H2'	31:DA:538:G:C8	2.36	0.58
34:DD:30:LYS:HD3	34:DD:35:ARG:HH12	1.68	0.58
1:AA:1546:A:H2'	1:AA:1546(B):C:H5'	1.84	0.58
1:AA:2356:C:O3'	22:AW:20:ARG:HD3	2.02	0.58
3:AD:264:LYS:HD3	3:AD:266:SER:HB3	1.85	0.58
3:AD:58:HIS:O	3:AD:58:HIS:CG	2.57	0.58
16:AQ:47:TYR:HA	16:AQ:50:ARG:NH2	2.19	0.58
23:AX:64:ALA:HA	23:AX:67:ILE:HG13	1.83	0.58
23:AX:67:ILE:N	23:AX:68:PRO:HD2	2.18	0.58
23:AX:56:GLN:HE21	23:AX:85:LEU:HD23	1.68	0.58
31:BA:113:G:H2'	31:BA:114:U:H6	1.68	0.58
31:BA:1441:G:H5''	31:BA:1442:G:O5'	2.02	0.58
31:BA:7:G:H5'	31:BA:298:A:O4'	2.02	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BC:18:TRP:HZ2	44:BN:57:ARG:HG3	1.68	0.58
34:BD:62:GLN:NE2	34:BD:65:ARG:HH12	2.01	0.58
1:CA:86:C:H4'	1:CA:104:U:H1'	1.86	0.58
6:CG:83:ARG:HB2	6:CG:86:MET:SD	2.43	0.58
31:DA:436:C:H4'	34:DD:156:GLU:OE1	2.04	0.58
40:DJ:26:ALA:HB3	40:DJ:85:LEU:HD21	1.84	0.58
41:DK:29:ILE:HG22	41:DK:44:SER:CB	2.33	0.58
46:DP:75:ARG:HH11	46:DP:75:ARG:CG	2.09	0.58
29:A4:8:ASN:ND2	29:A4:8:ASN:C	2.57	0.58
23:AX:9:GLY:O	23:AX:13:ILE:CD1	2.51	0.58
31:BA:1144:G:H21	31:BA:1146:A:H62	1.50	0.58
31:BA:255:G:H1'	47:BQ:16:GLN:NE2	2.19	0.58
31:BA:37:U:H2'	31:BA:38:G:C8	2.38	0.58
31:BA:547:A:H4'	31:BA:548:G:O5'	2.04	0.58
33:BC:37:GLN:HE22	44:BN:52:GLN:NE2	2.01	0.58
45:BO:24:SER:HB3	45:BO:27:VAL:HG23	1.83	0.58
1:CA:154:G:H2'	1:CA:155:C:O4'	2.02	0.58
1:CA:796:C:H2'	1:CA:797:C:C6	2.38	0.58
23:CX:67:ILE:N	23:CX:68:PRO:HD2	2.17	0.58
31:DA:1347:G:H22	31:DA:1373:G:H2'	1.66	0.58
31:DA:149:A:H2'	31:DA:150:C:C6	2.39	0.58
34:DD:100:ARG:NE	34:DD:137:SER:HA	2.15	0.58
40:DJ:40:LEU:HB2	40:DJ:69:ASN:HB2	1.84	0.58
41:DK:99:GLN:HB3	41:DK:105:VAL:HG21	1.86	0.58
52:DV:19:G:C2	52:DV:57:A:N3	2.71	0.58
52:DW:48:C:H5''	52:DW:49:G:H5''	1.84	0.58
1:AA:1021:A:N6	1:AA:1141:U:H3	2.02	0.58
1:AA:1578:U:H2'	1:AA:1579:A:H5'	1.84	0.58
1:AA:2150:U:H2'	1:AA:2151:G:H8	1.68	0.58
7:AH:65:HIS:CE1	7:AH:69:ARG:HD3	2.39	0.58
20:AU:13:VAL:HG23	20:AU:73:ARG:O	2.02	0.58
20:AU:51:VAL:HG13	20:AU:52:SER:H	1.69	0.58
21:AV:30:ASN:OD1	21:AV:90:VAL:HB	2.02	0.58
31:BA:332:G:OP2	50:BT:10:LEU:HD23	2.02	0.58
32:BB:100:GLY:HA3	32:BB:104:ASN:HB3	1.86	0.58
34:BD:26:CYS:HA	34:BD:31:CYS:HA	1.85	0.58
31:BA:377:G:OP1	46:BP:3:LYS:HD2	2.04	0.58
49:BS:6:LYS:H	49:BS:6:LYS:CD	2.17	0.58
1:CA:1025:G:H8	1:CA:1025:G:OP1	1.86	0.58
1:CA:655:A:O2'	1:CA:656:G:H5'	2.02	0.58
6:CG:19:LEU:HD11	6:CG:172:LEU:HD13	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CK:73:ASP:HB2	15:CP:82:LEU:CD1	2.33	0.58
17:CR:2:PHE:CZ	17:CR:13:ARG:NH2	2.72	0.58
25:CZ:17:LYS:HD3	25:CZ:18:ASP:N	2.18	0.58
31:DA:977:A:H8	31:DA:1223:C:C4	2.22	0.58
31:DA:639:G:O2'	31:DA:640:A:H5'	2.03	0.58
31:DA:979:C:C3'	31:DA:980:C:H5''	2.26	0.58
36:DF:44:GLY:HA2	36:DF:59:TYR:CZ	2.38	0.58
36:DF:52:ILE:HD11	36:DF:86:ARG:HB3	1.85	0.58
46:DP:43:LYS:HA	46:DP:48:TRP:HB3	1.86	0.58
1:AA:860:U:C5	1:AA:917:A:N7	2.71	0.58
7:AH:168:PRO:HG2	7:AH:170:ARG:NH1	2.18	0.58
21:AV:10:ARG:HH21	21:AV:26:GLY:H	1.49	0.58
23:AX:31:GLY:O	23:AX:32:LYS:HB2	2.02	0.58
1:AA:95:G:H4'	24:AY:46:GLN:HB3	1.85	0.58
36:BF:7:ASN:ND2	48:BR:34:TYR:HE1	2.02	0.58
49:BS:49:ILE:HD12	49:BS:49:ILE:H	1.67	0.58
52:BW:68:C:H2'	52:BW:69:C:C6	2.39	0.58
29:C4:8:ASN:ND2	29:C4:8:ASN:C	2.54	0.58
1:CA:1019:U:C2'	1:CA:1021:A:H2	2.16	0.58
1:CA:1021:A:N6	1:CA:1141:U:H3	2.02	0.58
1:CA:2392:A:H2	1:CA:2424:C:H42	1.51	0.58
1:CA:244:A:H4'	11:CL:74:GLU:HB2	1.86	0.58
1:CA:451:C:H4'	5:CF:52:LYS:NZ	2.18	0.58
5:CF:117:ARG:HD2	5:CF:190:GLU:O	2.04	0.58
10:CK:2:ILE:HD11	10:CK:82:ASN:HB3	1.86	0.58
10:CK:88:ASN:HD21	10:CK:92:GLU:HB2	1.67	0.58
31:DA:1106:G:H2'	31:DA:1107:C:C6	2.39	0.58
31:DA:1324:A:C4'	31:DA:1361(A):C:H4'	2.32	0.58
1:CA:1919:A:O3'	31:DA:1517:G:H1'	2.03	0.58
31:DA:180:U:H2'	31:DA:181:G:H5''	1.85	0.58
31:DA:355:C:C4	31:DA:356:A:N7	2.72	0.58
34:DD:127:THR:HA	34:DD:132:ARG:HA	1.86	0.58
35:DE:80:ILE:HD11	35:DE:91:LEU:HD12	1.85	0.58
38:DH:1:MET:HE3	38:DH:3:THR:HG23	1.86	0.58
40:DJ:62:HIS:O	44:DN:59:ALA:HB3	2.04	0.58
49:DS:63:THR:N	49:DS:66:MET:HE3	2.17	0.58
1:AA:270(R):C:H2'	1:AA:270(S):G:C8	2.38	0.58
10:AK:68:GLU:HA	10:AK:78:ARG:HB3	1.85	0.58
11:AL:16:ARG:CZ	11:AL:18:ARG:HB2	2.34	0.58
13:AN:33:ARG:HA	13:AN:115:GLU:HB2	1.85	0.58
31:BA:1144:G:H21	31:BA:1146:A:N6	2.01	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BG:78:ARG:HE	37:BG:80:VAL:HG11	1.68	0.58
46:BP:43:LYS:HA	46:BP:48:TRP:HB3	1.84	0.58
1:CA:278:A:H61	1:CA:362:U:H3	1.51	0.58
1:CA:784:A:H5'	1:CA:785:G:OP1	2.02	0.58
7:CH:92:ILE:H	7:CH:92:ILE:HD12	1.68	0.58
11:CL:16:ARG:CZ	11:CL:18:ARG:HB2	2.33	0.58
15:CP:36:GLU:HB2	15:CP:41:ARG:HD3	1.84	0.58
16:CQ:47:TYR:HA	16:CQ:50:ARG:NH2	2.19	0.58
17:CR:39:LEU:HB3	17:CR:47:VAL:CG2	2.33	0.58
31:DA:1010:G:N2	31:DA:1020:U:H1'	2.19	0.58
31:DA:89:U:H2'	31:DA:90:C:C6	2.39	0.58
31:DA:983:A:N3	31:DA:983:A:H3'	2.19	0.58
32:DB:162:ILE:HD12	32:DB:162:ILE:O	2.04	0.58
1:AA:2355:C:H1'	22:AW:39:ARG:HE	1.68	0.58
3:AD:75:ILE:HG21	3:AD:99:ASP:HB2	1.85	0.58
12:AM:45:GLN:CD	12:AM:45:GLN:H	2.07	0.58
15:AP:24:PRO:HD3	15:AP:52:ILE:HD12	1.85	0.58
21:AV:136:PHE:C	21:AV:137:ILE:HD12	2.24	0.58
34:BD:135:LEU:H	34:BD:135:LEU:HD22	1.67	0.58
52:BV:19:G:H4'	52:BV:20:U:OP2	2.03	0.58
1:CA:1544:C:H6	1:CA:1544:C:OP1	1.86	0.58
1:CA:674:G:H1'	5:CF:74:ARG:HD3	1.84	0.58
6:CG:117:PHE:HD1	6:CG:118:ARG:H	1.50	0.58
6:CG:7:LEU:HD11	6:CG:107:LEU:HD12	1.84	0.58
9:CJ:154:GLN:HE21	9:CJ:155:ALA:CB	2.15	0.58
19:CT:12:VAL:HG12	19:CT:29:TRP:CE2	2.39	0.58
23:CX:9:GLY:O	23:CX:13:ILE:CD1	2.51	0.58
31:DA:255:G:H1'	47:DQ:16:GLN:NE2	2.18	0.58
31:DA:7:G:H5'	31:DA:298:A:O4'	2.03	0.58
33:DC:134:ILE:HG23	33:DC:151:VAL:HB	1.84	0.58
38:DH:35:ILE:O	38:DH:39:LEU:HB2	2.04	0.58
3:AD:132:PRO:HD3	3:AD:190:TYR:CZ	2.38	0.58
4:AE:24:THR:HG22	4:AE:184:VAL:HG23	1.86	0.58
9:AJ:90:LEU:H	9:AJ:90:LEU:HD12	1.67	0.58
10:AK:7:TYR:CE1	10:AK:20:MET:HB2	2.39	0.58
1:AA:941:A:H4'	11:AL:35:HIS:CD2	2.38	0.58
31:BA:1010:G:N2	31:BA:1020:U:H1'	2.18	0.58
31:BA:429:U:H1'	31:BA:430:A:H5''	1.86	0.58
35:BE:80:ILE:HD11	35:BE:91:LEU:HD12	1.85	0.58
43:BM:50:GLU:H	43:BM:50:GLU:CD	2.06	0.58
1:CA:2567:G:H2'	1:CA:2568:C:C6	2.39	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2809:A:N1	1:CA:2892:A:H1'	2.19	0.58
1:CA:830:G:H4'	1:CA:831:G:OP2	2.02	0.58
8:CI:23:PRO:O	8:CI:27:ARG:HB2	2.04	0.58
17:CR:69:LYS:O	17:CR:70:ILE:HD12	2.03	0.58
31:DA:89:U:H2'	31:DA:90:C:H6	1.67	0.58
38:DH:12:ARG:NH1	38:DH:27:PRO:HD3	2.18	0.58
52:DW:68:C:H2'	52:DW:69:C:C6	2.39	0.58
1:AA:1266:G:C8	18:AS:15:ARG:NH2	2.72	0.58
1:AA:2196:C:O2'	1:AA:2197:U:H5'	2.03	0.58
1:AA:2447:G:H4'	1:AA:2448:A:C5'	2.33	0.58
1:AA:323:G:H2'	5:AF:169:ASN:OD1	2.03	0.58
6:AG:73:ALA:HB3	6:AG:85:GLY:HA2	1.86	0.58
9:AJ:127:LYS:HB2	9:AJ:140:PHE:CE1	2.38	0.58
24:AY:49:LYS:O	24:AY:53:LEU:HB2	2.04	0.58
31:BA:153:C:H42	31:BA:168:G:H1	1.52	0.58
31:BA:253:U:H2'	31:BA:254:G:H8	1.69	0.58
31:BA:424:G:H2'	31:BA:425:G:H8	1.68	0.58
36:BF:48:LEU:H	36:BF:48:LEU:HD23	1.69	0.58
36:BF:3:ARG:HD3	36:BF:64:GLN:OE1	2.04	0.58
38:BH:35:ILE:O	38:BH:39:LEU:HB2	2.04	0.58
42:BL:5:THR:HG23	42:BL:8:GLN:HE21	1.68	0.58
52:BV:19:G:C2	52:BV:57:A:N3	2.72	0.58
1:CA:2233:U:H2'	1:CA:2234:G:C8	2.39	0.58
8:CI:109:ILE:HB	8:CI:130:TYR:CE1	2.39	0.58
9:CJ:53:ILE:O	9:CJ:57:LEU:HD22	2.04	0.58
9:CJ:93:LYS:HE2	9:CJ:95:TYR:CZ	2.39	0.58
31:DA:976:G:C8	31:DA:1358:U:H2'	2.39	0.58
34:DD:80:GLU:O	34:DD:84:LYS:HB2	2.04	0.58
45:DO:4:THR:HG23	45:DO:7:GLU:CB	2.33	0.58
1:AA:1389:G:C2	1:AA:1399:C:O2	2.56	0.58
1:AA:1408:C:H2'	1:AA:1409:C:C6	2.39	0.58
1:AA:1494:A:O2'	1:AA:1495:A:H5''	2.04	0.58
1:AA:2809:A:N1	1:AA:2892:A:H1'	2.19	0.58
11:AL:92:GLU:HG3	11:AL:123:LEU:HD13	1.86	0.58
15:AP:100:TYR:HD2	15:AP:103:ARG:HH22	1.51	0.58
31:BA:639:G:O2'	31:BA:640:A:H5'	2.04	0.58
31:BA:843:U:H3'	31:BA:848:C:H5'	1.86	0.58
34:BD:159:ARG:HB3	34:BD:159:ARG:HH11	1.68	0.58
47:BQ:6:LEU:N	47:BQ:6:LEU:HD23	2.17	0.58
2:CB:66:A:H61	2:CB:107:U:H2'	1.69	0.58
3:CD:133:LEU:HB3	3:CD:173:VAL:HG11	1.85	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CH:137:ASP:HB3	7:CH:140:LYS:HG3	1.85	0.58
10:CK:1:MET:HE3	10:CK:67:LYS:HG2	1.85	0.58
15:CP:100:TYR:HD2	15:CP:103:ARG:HH22	1.52	0.58
1:CA:1266:G:C8	18:CS:15:ARG:NH2	2.72	0.58
20:CU:2:ARG:N	20:CU:4:LYS:HD2	2.18	0.58
21:CV:24:LEU:HD12	21:CV:25:PRO:O	2.04	0.58
24:CY:46:GLN:HB2	24:CY:49:LYS:HZ1	1.69	0.58
31:DA:1027:C:H2'	31:DA:1027(A):C:O4'	2.03	0.58
34:DD:65:ARG:HG3	34:DD:70:ILE:HG22	1.85	0.58
34:DD:62:GLN:HE22	34:DD:65:ARG:HH11	1.51	0.58
35:DE:79:GLU:CD	35:DE:79:GLU:H	2.07	0.58
26:A1:53:THR:O	26:A1:54:LYS:HG2	2.04	0.57
1:AA:1794:U:H1'	1:AA:1900:A:C2	2.39	0.57
1:AA:1796:U:H4'	3:AD:256:GLY:H	1.69	0.57
1:AA:2233:U:H2'	1:AA:2234:G:C8	2.39	0.57
3:AD:131:LEU:HG	3:AD:136:ILE:HD11	1.87	0.57
11:AL:23:PRO:HD2	11:AL:33:ARG:HH21	1.67	0.57
11:AL:59:LEU:HA	11:AL:61:ARG:CZ	2.34	0.57
1:AA:244:A:H4'	11:AL:74:GLU:HB2	1.86	0.57
31:BA:619:U:C2	34:BD:135:LEU:HD21	2.39	0.57
40:BJ:55:LYS:O	40:BJ:56:HIS:CG	2.57	0.57
31:BA:1268:A:H4'	51:BU:20:LYS:CA	2.34	0.57
1:CA:1048:A:H2'	1:CA:1048:A:N3	2.18	0.57
1:CA:2808:U:H2'	1:CA:2809:A:H5'	1.86	0.57
3:CD:264:LYS:HD3	3:CD:266:SER:HB3	1.86	0.57
8:CI:4:ILE:HD13	8:CI:4:ILE:H	1.69	0.57
9:CJ:127:LYS:HB2	9:CJ:140:PHE:CE1	2.38	0.57
13:CN:78:LYS:O	13:CN:83:ILE:HG12	2.04	0.57
21:CV:30:ASN:OD1	21:CV:90:VAL:HB	2.04	0.57
31:DA:1029:G:HO2'	31:DA:1030:C:H5	1.50	0.57
34:DD:49:ARG:NH1	34:DD:49:ARG:HA	2.18	0.57
47:DQ:6:LEU:HD23	47:DQ:6:LEU:N	2.19	0.57
49:DS:6:LYS:H	49:DS:6:LYS:CD	2.17	0.57
1:AA:1921:G:H2'	1:AA:1922:G:H8	1.69	0.57
1:AA:2146:C:H4'	1:AA:2147:G:C8	2.39	0.57
1:AA:49:A:H5''	1:AA:51:G:O4'	2.04	0.57
3:AD:255:LYS:CD	3:AD:255:LYS:H	2.15	0.57
6:AG:107:LEU:HD23	6:AG:111:LEU:HD12	1.85	0.57
1:AA:2414:G:H21	11:AL:67:MET:CE	2.17	0.57
14:AO:14:VAL:O	14:AO:18:ILE:HG12	2.04	0.57
17:AR:38:LEU:O	17:AR:52:VAL:HG12	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AS:15:ARG:NE	27:A2:20:ARG:HH12	2.02	0.57
18:AS:83:LYS:C	18:AS:84:ARG:HD2	2.24	0.57
34:BD:104:VAL:HG21	34:BD:140:VAL:HG21	1.85	0.57
42:BL:82:VAL:HG23	42:BL:106:ALA:HB2	1.86	0.57
45:BO:4:THR:HG23	45:BO:7:GLU:CB	2.33	0.57
1:CA:1021:A:C8	1:CA:1021:A:H3'	2.39	0.57
1:CA:2291:U:H2'	1:CA:2292:C:C6	2.39	0.57
1:CA:2355:C:H1'	22:CW:39:ARG:HE	1.70	0.57
1:CA:2879:C:H4'	1:CA:2880:C:OP1	2.04	0.57
3:CD:62:TYR:HA	3:CD:87:ASN:HD21	1.69	0.57
4:CE:47:VAL:HG12	4:CE:49:LEU:HD22	1.84	0.57
14:CO:26:LEU:HD13	14:CO:87:PHE:CD1	2.40	0.57
24:CY:47:ASN:O	24:CY:50:ILE:HG13	2.04	0.57
31:DA:1031(B):G:H2'	31:DA:1031(C):G:O4'	2.03	0.57
31:DA:913:A:H1'	31:DA:914:A:OP2	2.03	0.57
31:DA:922:G:H4'	35:DE:20:GLN:HA	1.85	0.57
32:DB:121:LEU:HB3	32:DB:127:ILE:HD11	1.84	0.57
33:DC:173:VAL:N	33:DC:174:PRO:HD3	2.19	0.57
39:DI:102:LEU:N	39:DI:102:LEU:HD12	2.19	0.57
45:DO:26:GLU:OE2	45:DO:77:ARG:HD2	2.03	0.57
49:DS:63:THR:HG23	49:DS:65:ASN:H	1.70	0.57
1:AA:245:G:O6	30:A5:8:LYS:HE3	2.04	0.57
1:AA:1048:A:H2'	1:AA:1048:A:N3	2.18	0.57
1:AA:265:A:H1'	1:AA:266:G:O4'	2.04	0.57
6:AG:77:ILE:N	6:AG:82:LEU:HB2	2.19	0.57
7:AH:20:ALA:HB1	7:AH:21:PRO:HD2	1.86	0.57
7:AH:92:ILE:HD12	7:AH:92:ILE:H	1.68	0.57
11:AL:49:ARG:HG3	11:AL:49:ARG:NH1	2.05	0.57
17:AR:39:LEU:HA	17:AR:47:VAL:HG13	1.85	0.57
20:AU:14:LEU:HD12	20:AU:15:VAL:N	2.20	0.57
24:AY:9:GLN:HA	24:AY:12:GLU:HB3	1.86	0.57
24:AY:46:GLN:H	24:AY:49:LYS:HE2	1.67	0.57
34:BD:120:LEU:HD21	34:BD:157:LEU:HD23	1.86	0.57
39:BI:102:LEU:HD12	39:BI:102:LEU:N	2.20	0.57
1:CA:1406:U:H2'	1:CA:1407:C:C6	2.39	0.57
1:CA:2598:A:OP1	3:CD:235:GLY:HA3	2.04	0.57
1:CA:49:A:H5''	1:CA:51:G:O4'	2.04	0.57
1:CA:2278:A:OP1	12:CM:10:ARG:HD2	2.04	0.57
15:CP:120:ARG:O	15:CP:124:ASP:HB2	2.04	0.57
31:DA:1228:C:H2'	31:DA:1229:A:H8	1.68	0.57
31:DA:224:C:H2'	31:DA:225:C:C6	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DE:72:GLN:O	35:DE:75:THR:HG22	2.04	0.57
39:DI:117:HIS:HB2	39:DI:121:ARG:HD2	1.86	0.57
44:DN:24:CYS:SG	44:DN:27:CYS:SG	3.03	0.57
1:AA:1493:C:H4'	1:AA:1494:A:OP1	2.04	0.57
1:AA:1824:G:OP1	3:AD:52:ARG:HD3	2.04	0.57
1:AA:2210:G:N2	1:AA:2211:G:H5'	2.19	0.57
4:AE:47:VAL:HG12	4:AE:49:LEU:HD22	1.86	0.57
6:AG:117:PHE:HD1	6:AG:118:ARG:H	1.51	0.57
8:AI:109:ILE:HB	8:AI:130:TYR:CE1	2.39	0.57
13:AN:49:ASP:OD2	13:AN:95:THR:HB	2.04	0.57
14:AO:61:ASN:ND2	14:AO:64:GLU:H	2.01	0.57
21:AV:24:LEU:HD12	21:AV:25:PRO:O	2.04	0.57
31:BA:1031(B):G:H2'	31:BA:1031(C):G:O4'	2.04	0.57
31:BA:859:A:H2'	31:BA:860:A:O4'	2.05	0.57
31:BA:89:U:H2'	31:BA:90:C:H6	1.68	0.57
31:BA:429:U:H2'	34:BD:25:ARG:NH1	2.18	0.57
34:BD:9:CYS:CB	34:BD:32:ALA:HB2	2.32	0.57
1:CA:245:G:O6	30:C5:8:LYS:HE3	2.05	0.57
1:CA:654:U:H5'	1:CA:655:A:OP2	2.05	0.57
1:CA:2531:A:H5''	7:CH:157:TYR:CE2	2.39	0.57
7:CH:25:LYS:HG3	7:CH:34:GLU:HG2	1.87	0.57
21:CV:82:ARG:HG3	21:CV:83:PRO:HD2	1.86	0.57
31:DA:677:U:H3	31:DA:713:G:H22	1.50	0.57
52:DV:62:C:H2'	52:DV:63:G:H8	1.64	0.57
1:AA:1406:U:H2'	1:AA:1407:C:C6	2.39	0.57
1:AA:2294:C:H2'	1:AA:2295:C:H6	1.70	0.57
1:AA:2593:U:H2'	1:AA:2594:C:C6	2.39	0.57
6:AG:83:ARG:HB2	6:AG:86:MET:SD	2.44	0.57
8:AI:23:PRO:O	8:AI:27:ARG:HB2	2.05	0.57
8:AI:6:LEU:O	8:AI:15:VAL:HG13	2.03	0.57
9:AJ:85:VAL:HG22	9:AJ:89:LYS:HG3	1.85	0.57
31:BA:1097:C:H2'	31:BA:1098:C:C6	2.39	0.57
31:BA:976:G:C8	31:BA:1358:U:H2'	2.39	0.57
50:BT:32:ALA:O	50:BT:36:LEU:HB2	2.04	0.57
1:CA:1731:G:HO2'	1:CA:1732:A:H8	1.49	0.57
1:CA:2447:G:H4'	1:CA:2448:A:C5'	2.34	0.57
3:CD:161:THR:O	3:CD:196:VAL:HG23	2.05	0.57
11:CL:61:ARG:C	11:CL:62:LEU:HD13	2.25	0.57
1:CA:2690:C:H5''	13:CN:8:ARG:HH12	1.70	0.57
32:DB:32:ILE:HD11	32:DB:190:THR:HG22	1.87	0.57
46:DP:75:ARG:HG3	46:DP:75:ARG:NH1	2.13	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1495:A:N3	1:AA:1495:A:H2'	2.17	0.57
1:AA:1794:U:H1'	1:AA:1900:A:N3	2.20	0.57
6:AG:139:LEU:HD23	6:AG:139:LEU:H	1.69	0.57
11:AL:91:PHE:CD1	11:AL:91:PHE:N	2.70	0.57
10:AK:73:ASP:HB2	15:AP:82:LEU:CD1	2.34	0.57
17:AR:39:LEU:HD12	17:AR:50:PRO:O	2.05	0.57
17:AR:39:LEU:HD12	17:AR:47:VAL:HG21	1.86	0.57
21:AV:157:LEU:HD11	21:AV:163:LEU:HD22	1.87	0.57
24:AY:35:LEU:HD12	24:AY:53:LEU:HD12	1.87	0.57
34:BD:190:ASP:O	34:BD:194:LEU:HD23	2.05	0.57
36:BF:26:ILE:O	36:BF:30:LEU:HD13	2.04	0.57
36:BF:52:ILE:HD11	36:BF:86:ARG:HB3	1.85	0.57
1:CA:1174:A:C3'	1:CA:1175:U:H5''	2.33	0.57
1:CA:2146:C:H4'	1:CA:2147:G:C8	2.39	0.57
10:CK:7:TYR:CE1	10:CK:20:MET:HB2	2.40	0.57
10:CK:68:GLU:HA	10:CK:78:ARG:HB3	1.86	0.57
13:CN:33:ARG:HA	13:CN:115:GLU:HB2	1.87	0.57
14:CO:61:ASN:ND2	14:CO:64:GLU:H	1.99	0.57
17:CR:38:LEU:HD23	17:CR:39:LEU:H	1.68	0.57
21:CV:92:SER:HB2	21:CV:94:GLU:OE1	2.04	0.57
31:DA:253:U:H2'	31:DA:254:G:H8	1.69	0.57
31:DA:37:U:H2'	31:DA:38:G:C8	2.36	0.57
31:DA:668:G:H1'	45:DO:46:HIS:HD2	1.69	0.57
30:A5:50:LEU:O	30:A5:51:ALA:CB	2.51	0.57
1:AA:1221(A):C:H2'	1:AA:1222:C:H6	1.69	0.57
1:AA:2712:U:O2'	1:AA:712(B):A:P	2.62	0.57
10:AK:2:ILE:HD11	10:AK:82:ASN:HB3	1.86	0.57
11:AL:112:LEU:HD23	11:AL:113:LYS:N	2.18	0.57
15:AP:120:ARG:O	15:AP:124:ASP:HB2	2.05	0.57
31:BA:977:A:H8	31:BA:1223:C:C4	2.22	0.57
31:BA:1412:C:H2'	31:BA:1413:A:C8	2.40	0.57
34:BD:88:VAL:O	34:BD:92:VAL:HG23	2.04	0.57
35:BE:10:MET:HB3	35:BE:32:VAL:HG22	1.87	0.57
39:BI:9:ARG:O	39:BI:10:ARG:HB2	2.04	0.57
52:BW:17:C:H5''	52:BW:17(A):U:OP2	2.04	0.57
26:C1:61:VAL:HG13	26:C1:65:CYS:HB2	1.87	0.57
1:CA:747:U:C4	27:C2:2:ALA:N	2.73	0.57
1:CA:1824:G:OP1	3:CD:52:ARG:HD3	2.04	0.57
1:CA:631:A:OP1	11:CL:64:LYS:HE3	2.03	0.57
3:CD:186:HIS:HD2	3:CD:188:GLU:H	1.51	0.57
3:CD:70:TRP:CH2	3:CD:150:LYS:HA	2.40	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1952:A:C2	10:CK:22:ILE:HG13	2.40	0.57
11:CL:92:GLU:HG3	11:CL:123:LEU:HD13	1.85	0.57
1:CA:2356:C:O3'	22:CW:20:ARG:HD3	2.04	0.57
31:DA:1097:C:H2'	31:DA:1098:C:C6	2.39	0.57
34:DD:161:ASN:O	34:DD:165:MET:HB2	2.05	0.57
36:DF:3:ARG:HD3	36:DF:64:GLN:OE1	2.04	0.57
27:A2:36:CYS:SG	27:A2:37:LYS:N	2.78	0.57
1:AA:2285:C:OP2	28:A3:27:LYS:HD2	2.05	0.57
20:AU:81:LYS:HD2	20:AU:98:VAL:HG12	1.87	0.57
31:BA:262:A:C6	31:BA:263:A:C6	2.92	0.57
33:BC:20:SER:HB2	33:BC:40:ARG:NH2	2.18	0.57
39:BI:117:HIS:HB2	39:BI:121:ARG:HD2	1.86	0.57
42:BL:116:ARG:HB3	42:BL:121:THR:HB	1.86	0.57
48:BR:52:PRO:O	48:BR:56:THR:HG23	2.05	0.57
49:BS:63:THR:N	49:BS:66:MET:HE3	2.17	0.57
50:BT:76:ALA:O	50:BT:80:ARG:HG2	2.05	0.57
26:C1:53:THR:O	26:C1:54:LYS:HG2	2.04	0.57
18:CS:15:ARG:CZ	27:C2:20:ARG:HH12	2.18	0.57
28:C3:26:ASN:ND2	28:C3:28:ARG:H	1.99	0.57
1:CA:1494:A:O2'	1:CA:1495:A:H5''	2.04	0.57
1:CA:2150:U:H2'	1:CA:2151:G:H8	1.68	0.57
1:CA:2850:A:OP2	1:CA:2866:U:H5	1.88	0.57
1:CA:545:G:H21	1:CA:548:A:H62	1.53	0.57
3:CD:75:ILE:HG21	3:CD:99:ASP:HB2	1.85	0.57
7:CH:121:ILE:HD11	7:CH:140:LYS:HB3	1.86	0.57
23:CX:13:ILE:HG21	23:CX:63:ALA:CB	2.33	0.57
24:CY:49:LYS:O	24:CY:53:LEU:HB2	2.04	0.57
33:DC:20:SER:HB2	33:DC:40:ARG:NH2	2.20	0.57
45:DO:24:SER:HB3	45:DO:27:VAL:HG23	1.85	0.57
1:AA:1292:U:H2'	1:AA:1293:C:C6	2.39	0.57
1:AA:2398:U:H2'	1:AA:2399:G:C8	2.40	0.57
1:AA:2645:G:OP2	1:AA:2645:G:H8	1.88	0.57
1:AA:999:U:O2'	1:AA:1000:A:H5'	2.04	0.57
10:AK:101:PRO:O	10:AK:102:VAL:HG13	2.05	0.57
17:AR:69:LYS:O	17:AR:70:ILE:HD12	2.05	0.57
31:BA:1141:C:H2'	31:BA:1142:G:H8	1.70	0.57
33:BC:18:TRP:CZ2	44:BN:57:ARG:HG3	2.39	0.57
39:BI:125:TYR:CD2	39:BI:126:SER:N	2.70	0.57
41:BK:59:TYR:CZ	41:BK:63:LEU:HD11	2.39	0.57
42:BL:5:THR:N	42:BL:8:GLN:HE21	2.01	0.57
1:CA:1270:C:H5''	1:CA:1271:G:H5'	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CF:107:LYS:NZ	5:CF:205:ARG:HG3	2.20	0.57
6:CG:77:ILE:N	6:CG:82:LEU:HB2	2.19	0.57
12:CM:27:VAL:HB	12:CM:134:ARG:HD2	1.86	0.57
16:CQ:75:ASN:HD21	16:CQ:78:THR:H	1.52	0.57
21:CV:157:LEU:HD11	21:CV:163:LEU:HD22	1.86	0.57
31:DA:1151:A:O2'	31:DA:1152:A:H8	1.88	0.57
33:DC:64:VAL:O	33:DC:100:ALA:HB3	2.05	0.57
34:DD:49:ARG:CZ	34:DD:50:ARG:H	2.18	0.57
35:DE:121:LYS:HG3	35:DE:123:LEU:CD1	2.35	0.57
42:DL:116:ARG:HB3	42:DL:121:THR:HB	1.85	0.57
42:DL:5:THR:HG23	42:DL:8:GLN:HE21	1.68	0.57
50:DT:32:ALA:O	50:DT:36:LEU:HB2	2.05	0.57
52:DW:17:C:H5''	52:DW:17(A):U:OP2	2.05	0.57
29:A4:36:GLN:HG2	29:A4:36:GLN:O	2.05	0.57
1:AA:330:A:C2	1:AA:1210:A:H2'	2.36	0.57
1:AA:1328:G:H2'	1:AA:1330:C:C5	2.40	0.57
1:AA:2262:U:H4'	1:AA:2328:A:C2	2.40	0.57
1:AA:2889:C:H2'	1:AA:2891:G:O4'	2.04	0.57
1:AA:832:G:H21	11:AL:53:GLY:HA3	1.70	0.57
3:AD:70:TRP:CH2	3:AD:150:LYS:HA	2.40	0.57
6:AG:105:LYS:CD	6:AG:142:PRO:HG3	2.33	0.57
6:AG:77:ILE:H	6:AG:82:LEU:HB2	1.70	0.57
11:AL:59:LEU:HA	11:AL:61:ARG:CD	2.35	0.57
18:AS:6:ILE:HG12	18:AS:104:THR:HG23	1.87	0.57
25:AZ:31:LEU:HD23	25:AZ:32:GLN:HG2	1.86	0.57
31:BA:1306:A:H1'	31:BA:1332:A:C2	2.40	0.57
31:BA:89:U:H2'	31:BA:90:C:C6	2.40	0.57
1:CA:1221(A):C:H2'	1:CA:1222:C:H6	1.68	0.57
1:CA:1328:G:H2'	1:CA:1330:C:C5	2.40	0.57
1:CA:2086:U:H2'	1:CA:2087:G:C8	2.40	0.57
2:CB:43:C:H2'	2:CB:44:G:H5''	1.86	0.57
10:CK:101:PRO:O	10:CK:102:VAL:HG13	2.04	0.57
13:CN:70:LEU:HD12	13:CN:70:LEU:H	1.70	0.57
31:DA:434:U:H2'	31:DA:435:C:C6	2.40	0.57
52:DV:19:G:H4'	52:DV:20:U:OP2	2.04	0.57
52:DV:74:C:C5'	52:DV:75:C:OP2	2.52	0.57
1:AA:2291:U:H2'	1:AA:2292:C:C6	2.40	0.56
1:AA:2446:G:C3'	1:AA:2447:G:H5''	2.34	0.56
12:AM:27:VAL:HB	12:AM:134:ARG:HD2	1.86	0.56
17:AR:39:LEU:HB3	17:AR:47:VAL:CG2	2.35	0.56
18:AS:24:ILE:HG21	18:AS:36:LEU:CD1	2.29	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AU:81:LYS:HZ3	20:AU:98:VAL:HB	1.70	0.56
32:BB:162:ILE:HD12	32:BB:162:ILE:O	2.05	0.56
33:BC:119:ARG:HG2	33:BC:140:ARG:HH12	1.70	0.56
43:BM:14:ARG:HG2	43:BM:44:ARG:NH1	2.20	0.56
1:CA:2439:A:OP1	54:CA:4405:BLS:H102	2.05	0.56
1:CA:2446:G:C3'	1:CA:2447:G:H5''	2.34	0.56
1:CA:2681:C:H5	1:CA:2725:A:N6	1.97	0.56
1:CA:286:C:H2'	1:CA:287:C:H6	1.69	0.56
11:CL:112:LEU:HD23	11:CL:113:LYS:N	2.20	0.56
12:CM:116:GLU:O	12:CM:120:ILE:HG12	2.04	0.56
17:CR:39:LEU:HD12	17:CR:47:VAL:HG21	1.87	0.56
20:CU:51:VAL:HG13	20:CU:52:SER:H	1.69	0.56
31:DA:412:A:C2	34:DD:35:ARG:HG3	2.40	0.56
32:DB:15:VAL:HG21	32:DB:209:ARG:HE	1.69	0.56
43:DM:14:ARG:HG2	43:DM:44:ARG:NH1	2.20	0.56
43:DM:19:LEU:HA	43:DM:22:ILE:HG12	1.87	0.56
30:A5:52:LYS:CE	30:A5:52:LYS:HA	2.29	0.56
1:AA:2307:G:C5	1:AA:2308:G:C5	2.93	0.56
1:AA:278:A:H61	1:AA:362:U:H3	1.52	0.56
3:AD:161:THR:O	3:AD:196:VAL:HG23	2.04	0.56
13:AN:78:LYS:O	13:AN:83:ILE:HG12	2.05	0.56
31:BA:115:G:H4'	31:BA:116:A:O5'	2.05	0.56
34:BD:110:PHE:N	34:BD:110:PHE:HD1	2.03	0.56
38:BH:10:LEU:HD22	38:BH:83:ILE:HD11	1.87	0.56
41:BK:41:THR:HG21	41:BK:71:LYS:HD3	1.87	0.56
50:BT:69:GLY:O	50:BT:73:HIS:CD2	2.58	0.56
1:CA:1899:G:H21	1:CA:1902:C:N4	1.97	0.56
1:CA:2738:A:C2	1:CA:2739:U:H1'	2.41	0.56
6:CG:16:ARG:O	6:CG:20:ILE:HG13	2.06	0.56
6:CG:77:ILE:H	6:CG:82:LEU:HB2	1.70	0.56
8:CI:5:LEU:HD23	8:CI:5:LEU:N	2.14	0.56
8:CI:72:LEU:HD12	8:CI:140:LEU:HD13	1.87	0.56
9:CJ:59:GLY:H	9:CJ:65:TRP:HZ3	1.53	0.56
11:CL:45:LEU:HD23	11:CL:46:LYS:N	2.17	0.56
12:CM:45:GLN:H	12:CM:45:GLN:CD	2.08	0.56
17:CR:72:VAL:HG23	17:CR:85:LYS:HB2	1.86	0.56
18:CS:6:ILE:HG12	18:CS:104:THR:HG23	1.87	0.56
24:CY:46:GLN:H	24:CY:49:LYS:HE2	1.70	0.56
31:DA:113:G:H2'	31:DA:114:U:H6	1.69	0.56
32:DB:184:VAL:HB	32:DB:198:ASP:H	1.71	0.56
33:DC:9:GLY:HA2	33:DC:12:LEU:HD23	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DG:20:ASP:OD2	37:DG:22:LEU:HB3	2.05	0.56
40:DJ:43:ARG:HB2	40:DJ:67:THR:CG2	2.35	0.56
1:AA:1607:C:H5'	1:AA:1608:A:H5'	1.86	0.56
1:AA:2738:A:C2	1:AA:2739:U:H1'	2.40	0.56
1:AA:2808:U:C2'	1:AA:2809:A:H5'	2.35	0.56
5:AF:34:TRP:HB2	11:AL:10:PRO:O	2.05	0.56
11:AL:40:SER:O	11:AL:41:ARG:NE	2.39	0.56
16:AQ:91:ASP:OD1	16:AQ:96:ALA:HB2	2.05	0.56
20:AU:2:ARG:N	20:AU:4:LYS:HD2	2.19	0.56
25:AZ:2:PRO:O	25:AZ:3:ARG:HG3	2.05	0.56
31:BA:983:A:H3'	31:BA:983:A:N3	2.20	0.56
1:CA:2130:U:H3'	1:CA:2130:U:OP2	2.06	0.56
1:CA:310:A:OP1	20:CU:18:GLY:HA2	2.05	0.56
1:CA:95:G:H4'	24:CY:46:GLN:HB3	1.86	0.56
1:CA:1500:G:H21	3:CD:100:GLY:HA3	1.70	0.56
1:CA:1036:G:OP1	7:CH:59:ARG:HB2	2.05	0.56
31:BA:368:U:N3	8:CI:89:TYR:HB3	2.18	0.56
20:CU:73:ARG:NH2	20:CU:82:PRO:HD3	2.20	0.56
31:DA:843:U:H3'	31:DA:848:C:H5'	1.85	0.56
1:AA:1766:U:H2'	1:AA:1767:C:H6	1.70	0.56
1:AA:247:G:H4'	1:AA:386:G:C5	2.40	0.56
1:AA:654:U:H5'	1:AA:655:A:OP2	2.05	0.56
13:AN:78:LYS:HE2	13:AN:83:ILE:HD11	1.87	0.56
14:AO:49:VAL:HG13	14:AO:76:LYS:HZ2	1.70	0.56
24:AY:47:ASN:O	24:AY:50:ILE:HG13	2.06	0.56
1:AA:61:G:H5'	24:AY:50:ILE:CD1	2.36	0.56
31:BA:1228:C:H2'	31:BA:1229:A:H8	1.69	0.56
31:BA:265:G:C2'	31:BA:266:G:H5'	2.35	0.56
31:BA:321:A:N7	31:BA:328:C:C6	2.74	0.56
31:BA:735:C:H2'	31:BA:736:C:H6	1.69	0.56
32:BB:187:LEU:HA	32:BB:201:ILE:HB	1.88	0.56
33:BC:9:GLY:HA2	33:BC:12:LEU:HD23	1.87	0.56
38:BH:24:THR:HG22	38:BH:25:ASP:N	2.20	0.56
52:BV:74:C:C5'	52:BV:75:C:OP2	2.52	0.56
1:CA:1656:C:H2'	1:CA:1657:C:C6	2.41	0.56
1:CA:1796:U:H4'	3:CD:256:GLY:H	1.70	0.56
1:CA:2584:U:H2'	1:CA:2585:U:H2'	1.87	0.56
4:CE:24:THR:HG22	4:CE:184:VAL:HG23	1.86	0.56
9:CJ:79:ASN:HD21	9:CJ:149:PRO:HD3	1.71	0.56
9:CJ:33:GLU:CD	9:CJ:34:PRO:HD2	2.25	0.56
9:CJ:85:VAL:HG22	9:CJ:89:LYS:HG3	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CT:44:GLU:HG3	19:CT:51:VAL:HG22	1.88	0.56
20:CU:81:LYS:HD3	20:CU:97:ARG:CB	2.33	0.56
20:CU:81:LYS:HZ3	20:CU:98:VAL:HB	1.71	0.56
31:DA:1141:C:H2'	31:DA:1142:G:H8	1.70	0.56
31:DA:1306:A:H1'	31:DA:1332:A:C2	2.40	0.56
33:DC:119:ARG:HG2	33:DC:140:ARG:HH12	1.70	0.56
45:DO:27:VAL:O	45:DO:31:LEU:HB2	2.05	0.56
1:AA:2272:U:H5''	1:AA:2273:A:OP1	2.05	0.56
1:AA:2645:G:H3'	1:AA:2646:C:C5'	2.35	0.56
1:AA:780:G:N2	1:AA:783:A:H62	2.00	0.56
10:AK:88:ASN:HD21	10:AK:92:GLU:HB2	1.70	0.56
13:AN:87:TYR:HD1	13:AN:90:ARG:HD3	1.70	0.56
24:AY:6:VAL:O	24:AY:10:LEU:HG	2.06	0.56
31:BA:1060:C:H5''	40:BJ:51:ARG:HG2	1.87	0.56
31:BA:1128:C:H4'	39:BI:16:ARG:NH1	2.19	0.56
31:BA:1267:C:H5	31:BA:1268:A:C5	2.23	0.56
33:BC:14:ILE:HG23	33:BC:15:THR:N	2.21	0.56
40:BJ:43:ARG:HB2	40:BJ:67:THR:CG2	2.35	0.56
41:BK:99:GLN:HB3	41:BK:105:VAL:HG21	1.86	0.56
29:C4:36:GLN:HG2	29:C4:36:GLN:O	2.06	0.56
1:CA:616:A:C4'	1:CA:617:G:OP1	2.53	0.56
3:CD:131:LEU:HG	3:CD:136:ILE:HD11	1.88	0.56
17:CR:39:LEU:HB3	17:CR:47:VAL:HG21	1.86	0.56
22:CW:51:VAL:HG22	22:CW:81:VAL:HG23	1.85	0.56
24:CY:42:GLY:O	24:CY:44:LEU:N	2.39	0.56
24:CY:53:LEU:O	24:CY:57:ILE:HG13	2.05	0.56
31:DA:1157:A:H4'	31:DA:1158:C:O5'	2.06	0.56
31:DA:524:G:H2'	31:DA:525:C:C6	2.41	0.56
31:DA:859:A:H2'	31:DA:860:A:O4'	2.04	0.56
39:DI:9:ARG:O	39:DI:10:ARG:HB2	2.04	0.56
1:AA:2130:U:OP2	1:AA:2130:U:H3'	2.06	0.56
1:AA:545:G:H21	1:AA:548:A:H62	1.53	0.56
1:AA:58:G:N2	1:AA:70:G:C4	2.74	0.56
2:AB:43:C:H2'	2:AB:44:G:H5''	1.86	0.56
14:AO:26:LEU:HD13	14:AO:87:PHE:CD1	2.40	0.56
20:AU:73:ARG:NH2	20:AU:82:PRO:HD3	2.20	0.56
31:BA:1246:C:H2'	31:BA:1247:U:C6	2.40	0.56
31:BA:1347:G:H22	31:BA:1373:G:H2'	1.68	0.56
31:BA:79:G:H1	31:BA:90:C:H42	1.54	0.56
40:BJ:30:SER:HB2	40:BJ:80:LYS:HG2	1.87	0.56
27:C2:36:CYS:SG	27:C2:37:LYS:N	2.78	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1546:A:H2'	1:CA:1546(B):C:H5'	1.86	0.56
3:CD:130:ALA:HA	3:CD:192:THR:HA	1.87	0.56
8:CI:71:ILE:HG13	8:CI:72:LEU:HD22	1.86	0.56
12:CM:58:PHE:CD1	12:CM:58:PHE:O	2.57	0.56
16:CQ:95:LEU:HD13	17:CR:4:ILE:HD12	1.88	0.56
18:CS:83:LYS:C	18:CS:84:ARG:HD2	2.25	0.56
21:CV:104:PHE:HB3	21:CV:141:VAL:HG11	1.87	0.56
21:CV:53:ILE:HD11	21:CV:99:TYR:HB2	1.87	0.56
24:CY:6:VAL:O	24:CY:10:LEU:HG	2.06	0.56
24:CY:35:LEU:HD12	24:CY:53:LEU:HD12	1.87	0.56
31:DA:1203:C:OP1	44:DN:3:ARG:HD2	2.05	0.56
31:DA:429:U:H1'	31:DA:430:A:H5''	1.87	0.56
31:DA:547:A:H4'	31:DA:548:G:O5'	2.05	0.56
31:DA:673:G:H2'	31:DA:674:G:C8	2.40	0.56
34:DD:67:ILE:HG22	34:DD:114:ARG:HH12	1.71	0.56
43:DM:94:ARG:HH12	49:DS:81:ARG:HD2	1.71	0.56
44:DN:23:ARG:HD2	44:DN:28:GLY:O	2.05	0.56
50:DT:76:ALA:O	50:DT:80:ARG:HG2	2.05	0.56
1:AA:1021:A:H3'	1:AA:1021:A:C8	2.40	0.56
1:AA:2282:G:H4'	1:AA:2389:G:O2'	2.05	0.56
1:AA:2709:G:O2'	1:AA:2710:C:H5'	2.06	0.56
1:AA:2808:U:H2'	1:AA:2809:A:H5'	1.86	0.56
1:AA:2879:C:H4'	1:AA:2880:C:OP1	2.04	0.56
6:AG:107:LEU:HD21	6:AG:178:PHE:CE1	2.40	0.56
16:AQ:75:ASN:HD21	16:AQ:78:THR:H	1.51	0.56
16:AQ:92:ARG:CG	16:AQ:92:ARG:HH11	2.19	0.56
17:AR:39:LEU:HB3	17:AR:47:VAL:HG21	1.88	0.56
18:AS:15:ARG:CZ	27:A2:20:ARG:HH12	2.18	0.56
25:AZ:17:LYS:HD3	25:AZ:18:ASP:N	2.20	0.56
31:BA:1080:A:C5'	35:BE:16:THR:HG21	2.36	0.56
31:BA:434:U:H2'	31:BA:435:C:C6	2.41	0.56
31:BA:87:A:H5''	31:BA:88:C:OP2	2.05	0.56
32:BB:15:VAL:HG21	32:BB:209:ARG:HE	1.69	0.56
32:BB:87:ARG:HB3	32:BB:87:ARG:NH1	2.20	0.56
34:BD:168:ARG:HE	34:BD:168:ARG:HA	1.69	0.56
34:BD:36:ARG:HD3	34:BD:38:TYR:CE1	2.40	0.56
1:CA:247:G:H4'	1:CA:386:G:C5	2.41	0.56
3:CD:17:THR:O	3:CD:204:ILE:HG22	2.06	0.56
3:CD:95:LEU:O	3:CD:95:LEU:HD12	2.06	0.56
4:CE:117:MET:HE1	4:CE:124:GLY:HA3	1.86	0.56
6:CG:41:GLN:HG2	6:CG:155:MET:HB3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CL:23:PRO:O	11:CL:33:ARG:HD2	2.05	0.56
13:CN:87:TYR:HD1	13:CN:90:ARG:HD3	1.71	0.56
21:CV:59:LEU:HD12	21:CV:69:THR:HG21	1.87	0.56
24:CY:18:PRO:O	24:CY:22:GLU:HG3	2.04	0.56
31:DA:1267:C:H5	31:DA:1268:A:C5	2.24	0.56
31:DA:397:A:H3'	31:DA:397:A:N3	2.20	0.56
33:DC:35:GLU:O	33:DC:39:ILE:HG13	2.05	0.56
31:DA:1346:A:H5''	39:DI:120:ARG:NH1	2.21	0.56
40:DJ:3:LYS:O	40:DJ:100:THR:HA	2.06	0.56
52:DV:68:C:H2'	52:DV:69:C:C6	2.40	0.56
1:AA:108:U:H2'	1:AA:109:G:C8	2.41	0.56
1:AA:2320:A:C8	1:AA:2333:A:N6	2.73	0.56
1:AA:2690:C:H5''	13:AN:8:ARG:HH12	1.71	0.56
1:AA:2821:A:OP2	1:AA:2822:G:OP2	2.23	0.56
1:AA:528:A:C2	1:AA:2043:C:H4'	2.41	0.56
1:AA:616:A:C4'	1:AA:617:G:OP1	2.54	0.56
7:AH:121:ILE:HD11	7:AH:140:LYS:HB3	1.87	0.56
8:AI:4:ILE:H	8:AI:4:ILE:HD13	1.71	0.56
9:AJ:160:LYS:NZ	9:AJ:161:LEU:H	1.91	0.56
10:AK:1:MET:HE3	10:AK:67:LYS:HG2	1.86	0.56
14:AO:64:GLU:HG2	14:AO:67:ARG:HH21	1.70	0.56
1:AA:2355:C:O2'	22:AW:39:ARG:HD2	2.06	0.56
24:AY:18:PRO:O	24:AY:22:GLU:HG3	2.05	0.56
31:BA:355:C:C4	31:BA:356:A:N7	2.74	0.56
31:BA:359:U:H2'	31:BA:360:A:H8	1.70	0.56
32:BB:185:ILE:HG23	32:BB:199:TYR:HB2	1.88	0.56
33:BC:35:GLU:O	33:BC:39:ILE:HG13	2.05	0.56
35:BE:79:GLU:H	35:BE:79:GLU:CD	2.07	0.56
31:BA:376:G:OP2	46:BP:67:THR:HG21	2.04	0.56
26:C1:40:ILE:HD12	26:C1:40:ILE:H	1.70	0.56
18:CS:15:ARG:NE	27:C2:20:ARG:HH12	2.03	0.56
1:CA:1022:G:O2'	1:CA:1023:U:OP2	2.17	0.56
1:CA:1732:A:H2'	1:CA:1733:G:O4'	2.06	0.56
1:CA:2126:A:H1'	1:CA:2127:G:H1'	1.88	0.56
1:CA:2285:C:OP2	28:C3:27:LYS:HD2	2.06	0.56
2:CB:83:G:H5''	25:CZ:52:HIS:CE1	2.41	0.56
11:CL:40:SER:O	11:CL:41:ARG:NE	2.38	0.56
17:CR:39:LEU:O	17:CR:40:LEU:HB2	2.06	0.56
17:CR:62:LEU:HD22	17:CR:95:LEU:HB2	1.87	0.56
20:CU:81:LYS:HD2	20:CU:98:VAL:HG12	1.88	0.56
31:DA:353:A:H2'	31:DA:354:G:OP2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:447:G:H2'	31:DA:485:G:N2	2.21	0.56
33:DC:58:GLU:HB2	33:DC:65:ALA:HB3	1.87	0.56
37:DG:46:ALA:O	37:DG:50:ILE:HG12	2.06	0.56
42:DL:45:LYS:HB2	42:DL:91:ASP:O	2.04	0.56
36:DF:7:ASN:ND2	48:DR:34:TYR:HE1	1.99	0.56
52:DW:33:U:H2'	52:DW:35:A:OP2	2.06	0.56
15:AP:51:ARG:HG3	15:AP:98:LYS:HG3	1.87	0.56
1:AA:1217:C:P	16:AQ:15:LYS:HZ1	2.29	0.56
22:AW:51:VAL:HG22	22:AW:81:VAL:HG23	1.86	0.56
31:BA:1151:A:O2'	31:BA:1152:A:H8	1.89	0.56
31:BA:687:A:H1'	31:BA:688:G:OP2	2.04	0.56
31:BA:1346:A:H5''	39:BI:120:ARG:HH12	1.70	0.56
1:CA:1323:U:H5'	18:CS:84:ARG:HH21	1.71	0.56
1:CA:2808:U:C2'	1:CA:2809:A:H5'	2.35	0.56
7:CH:168:PRO:CG	7:CH:170:ARG:HD3	2.36	0.56
11:CL:16:ARG:C	11:CL:16:ARG:HE	2.09	0.56
15:CP:27:THR:HA	15:CP:48:ILE:HA	1.88	0.56
31:DA:1002:G:H2'	31:DA:1003:G:O4'	2.06	0.56
31:DA:937:A:H2	31:DA:1377:A:HO2'	1.54	0.56
31:DA:243:A:C2	31:DA:246:A:C8	2.94	0.56
31:DA:265:G:C2'	31:DA:266:G:H5'	2.36	0.56
40:DJ:30:SER:HB2	40:DJ:80:LYS:HG2	1.87	0.56
46:DP:13:HIS:C	46:DP:15:PRO:HD3	2.25	0.56
1:AA:2029:G:H2'	1:AA:2031:A:OP1	2.05	0.56
1:AA:2777:G:C5'	1:AA:2778:A:H5'	2.36	0.56
1:AA:796:C:H2'	1:AA:797:C:C6	2.41	0.56
2:AB:40:U:H3'	2:AB:41:U:H5''	1.87	0.56
1:AA:1500:G:H21	3:AD:100:GLY:HA3	1.70	0.56
19:AT:89:ILE:HG22	19:AT:92:LEU:H	1.71	0.56
21:AV:82:ARG:HG3	21:AV:83:PRO:HD2	1.88	0.56
2:AB:83:G:H5''	25:AZ:52:HIS:CE1	2.41	0.56
32:BB:19:HIS:NE2	32:BB:206:ASP:HB2	2.21	0.56
32:BB:201:ILE:HG21	32:BB:214:ILE:HG21	1.88	0.56
32:BB:82:ARG:HA	32:BB:92:TYR:CE1	2.41	0.56
34:BD:8:VAL:HB	34:BD:21:LEU:HD22	1.87	0.56
43:BM:84:ILE:HG23	43:BM:86:CYS:H	1.71	0.56
1:CA:593:G:O3'	30:C5:62:LEU:HD22	2.05	0.56
8:CI:6:LEU:O	8:CI:15:VAL:HG13	2.06	0.56
10:CK:17:ARG:HE	10:CK:47:ILE:HD12	1.71	0.56
21:CV:58:VAL:HA	21:CV:67:LEU:O	2.05	0.56
1:CA:2355:C:O2'	22:CW:39:ARG:HD2	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:153:C:H42	31:DA:168:G:H1	1.54	0.56
32:DB:87:ARG:NH1	32:DB:87:ARG:HB3	2.21	0.56
34:DD:61:LYS:HA	34:DD:203:VAL:HG22	1.88	0.56
42:DL:44:PRO:HG3	42:DL:52:ARG:HG3	1.88	0.56
1:AA:1052:C:C5	1:AA:1101:U:H5'	2.41	0.56
1:AA:1731:G:O2'	1:AA:1732:A:H8	1.89	0.56
1:AA:1980:G:O2'	1:AA:1982:C:OP2	2.20	0.56
1:AA:2584:U:H2'	1:AA:2585:U:H2'	1.88	0.56
1:AA:330:A:H2	1:AA:1210:A:C2'	2.19	0.56
2:AB:51:G:N2	2:AB:52:A:H62	2.04	0.56
6:AG:41:GLN:HG2	6:AG:155:MET:HB3	1.88	0.56
9:AJ:68:ASN:N	9:AJ:68:ASN:HD22	2.04	0.56
11:AL:57:THR:HB	11:AL:59:LEU:N	2.14	0.56
11:AL:93:GLY:H	11:AL:123:LEU:HD12	1.71	0.56
31:BA:1118:C:H1'	31:BA:1179:A:C5	2.41	0.56
32:BB:184:VAL:HB	32:BB:198:ASP:H	1.71	0.56
34:BD:74:GLN:O	34:BD:78:LEU:HG	2.05	0.56
31:BA:976:G:P	44:BN:32:SER:H	2.28	0.56
46:BP:13:HIS:C	46:BP:15:PRO:HD3	2.25	0.56
49:BS:63:THR:HG23	49:BS:65:ASN:H	1.69	0.56
1:CA:163:U:H2'	1:CA:164:U:O4'	2.06	0.56
1:CA:203:C:H3'	1:CA:204:A:H5''	1.87	0.56
1:CA:265:A:H1'	1:CA:266:G:O4'	2.06	0.56
1:CA:2889:C:H2'	1:CA:2891:G:O4'	2.06	0.56
7:CH:87:LEU:HB2	7:CH:131:VAL:HB	1.87	0.56
1:CA:2880:C:H1'	13:CN:92:GLY:O	2.06	0.56
31:DA:1105:A:H2'	31:DA:1106:G:C8	2.40	0.56
31:DA:523:A:N1	42:DL:91:ASP:HB2	2.21	0.56
31:DA:926:G:C6	31:DA:1505:G:C6	2.93	0.56
32:DB:32:ILE:CD1	32:DB:190:THR:HG22	2.36	0.56
32:DB:187:LEU:HA	32:DB:201:ILE:HB	1.88	0.56
33:DC:86:VAL:O	33:DC:89:GLU:HG3	2.05	0.56
41:DK:79:SER:HB3	41:DK:106:LYS:HE3	1.87	0.56
42:DL:82:VAL:HG23	42:DL:106:ALA:HB2	1.88	0.56
44:DN:42:ILE:O	44:DN:45:ARG:HB3	2.06	0.56
42:DL:10:VAL:HG11	47:DQ:36:ILE:HG21	1.87	0.56
1:AA:1732:A:H2'	1:AA:1733:G:O4'	2.06	0.55
1:AA:830:G:H4'	1:AA:831:G:OP2	2.05	0.55
3:AD:36:PRO:HA	3:AD:62:TYR:O	2.06	0.55
6:AG:124:SER:HB2	6:AG:131:TYR:CE1	2.41	0.55
7:AH:25:LYS:HG3	7:AH:34:GLU:HG2	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AJ:93:LYS:HE2	9:AJ:95:TYR:CZ	2.41	0.55
19:AT:10:ALA:HB1	19:AT:11:PRO:HD2	1.88	0.55
31:BA:407:G:H5'	34:BD:3:ARG:NH1	2.21	0.55
34:BD:110:PHE:N	34:BD:110:PHE:CD1	2.73	0.55
34:BD:189:PRO:CB	34:BD:194:LEU:HD21	2.35	0.55
35:BE:72:GLN:O	35:BE:75:THR:HG22	2.06	0.55
40:BJ:3:LYS:O	40:BJ:100:THR:HA	2.06	0.55
45:BO:87:ILE:HG23	45:BO:88:ARG:HG2	1.87	0.55
48:BR:44:LEU:HD23	48:BR:80:PRO:HD2	1.87	0.55
1:CA:1021:A:H62	1:CA:1141:U:H3	1.54	0.55
1:CA:1396:U:H2'	1:CA:1396:U:O2	2.05	0.55
1:CA:1408:C:H2'	1:CA:1409:C:C6	2.41	0.55
1:CA:1607:C:H5''	1:CA:1608:A:H5'	1.87	0.55
1:CA:2307:G:C5	1:CA:2308:G:C5	2.93	0.55
10:CK:71:ARG:NH2	10:CK:77:ILE:HG21	2.19	0.55
11:CL:49:ARG:O	11:CL:50:ARG:HB3	2.05	0.55
11:CL:59:LEU:HA	11:CL:61:ARG:CD	2.35	0.55
25:CZ:31:LEU:HD23	25:CZ:32:GLN:HG2	1.87	0.55
31:DA:328:C:H1'	31:DA:329:A:OP2	2.06	0.55
34:DD:88:VAL:O	34:DD:92:VAL:HG23	2.05	0.55
35:DE:10:MET:HB3	35:DE:32:VAL:HG22	1.88	0.55
36:DF:48:LEU:H	36:DF:48:LEU:HD23	1.71	0.55
40:DJ:21:GLN:O	40:DJ:25:GLU:HG3	2.07	0.55
1:AA:1153:C:C2'	1:AA:1154:G:H5'	2.36	0.55
1:AA:163:U:H2'	1:AA:164:U:O4'	2.06	0.55
1:AA:2115:G:C6	1:AA:2117:A:H5''	2.42	0.55
1:AA:2212:A:H1'	1:AA:2215:G:C4	2.42	0.55
7:AH:87:LEU:HB2	7:AH:131:VAL:HB	1.88	0.55
1:AA:631:A:OP1	11:AL:64:LYS:HE3	2.06	0.55
12:AM:83:MET:C	12:AM:83:MET:SD	2.84	0.55
13:AN:9:LYS:O	13:AN:10:LEU:HB3	2.06	0.55
17:AR:2:PHE:CZ	17:AR:13:ARG:NH2	2.74	0.55
21:AV:54:HIS:CG	21:AV:101:PRO:HG3	2.41	0.55
21:AV:59:LEU:HD12	21:AV:69:THR:HG21	1.87	0.55
24:AY:53:LEU:O	24:AY:57:ILE:HG13	2.04	0.55
31:BA:224:C:H2'	31:BA:225:C:C6	2.41	0.55
31:BA:243:A:H1'	31:BA:244:U:OP2	2.05	0.55
31:BA:251:G:C6	31:BA:266:G:C6	2.94	0.55
34:BD:163:GLU:O	34:BD:166:LYS:HG3	2.07	0.55
31:BA:523:A:N1	42:BL:91:ASP:HB2	2.21	0.55
45:BO:27:VAL:O	45:BO:31:LEU:HB2	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2212:A:H1'	1:CA:2215:G:C4	2.42	0.55
1:CA:2341:G:H2'	1:CA:2342:C:O4'	2.06	0.55
2:CB:51:G:N2	2:CB:52:A:H62	2.03	0.55
20:CU:11:ASP:O	20:CU:27:VAL:HG13	2.06	0.55
23:CX:13:ILE:HG13	23:CX:62:VAL:HG23	1.87	0.55
31:DA:1060:C:H5''	40:DJ:51:ARG:HG2	1.87	0.55
31:DA:1118:C:H1'	31:DA:1179:A:C5	2.42	0.55
31:DA:1371:G:OP1	39:DI:11:LYS:HG2	2.05	0.55
31:DA:243:A:H1'	31:DA:244:U:OP2	2.06	0.55
39:DI:51:ARG:HG2	39:DI:56:LEU:HB2	1.88	0.55
43:DM:66:LEU:HA	43:DM:70:LEU:HB2	1.87	0.55
45:DO:63:ARG:NH1	45:DO:87:ILE:HD11	2.21	0.55
47:DQ:27:PHE:CZ	47:DQ:36:ILE:HD11	2.41	0.55
48:DR:44:LEU:HD23	48:DR:80:PRO:HD2	1.88	0.55
52:DW:70:G:O2'	52:DW:71:C:H5'	2.06	0.55
26:A1:40:ILE:H	26:A1:40:ILE:HD12	1.70	0.55
1:AA:2123:G:H2'	1:AA:2124:G:C8	2.42	0.55
6:AG:59:GLU:O	6:AG:63:ILE:HG23	2.06	0.55
11:AL:116:GLY:N	11:AL:134:ALA:HB2	2.21	0.55
12:AM:116:GLU:O	12:AM:120:ILE:HG12	2.05	0.55
16:AQ:61:TRP:CH2	16:AQ:94:ASN:HB2	2.41	0.55
19:AT:44:GLU:HG3	19:AT:51:VAL:HG22	1.88	0.55
23:AX:27:GLU:HG3	23:AX:33:LYS:CD	2.36	0.55
23:AX:27:GLU:HB3	23:AX:33:LYS:HG3	1.88	0.55
23:AX:51:VAL:O	23:AX:58:ILE:HG22	2.06	0.55
31:BA:353:A:H2'	31:BA:354:G:OP2	2.06	0.55
31:BA:38:G:C2	31:BA:397:A:C2	2.94	0.55
40:BJ:21:GLN:O	40:BJ:25:GLU:HG3	2.07	0.55
42:BL:31:PHE:HB3	42:BL:83:LEU:HD11	1.89	0.55
46:BP:43:LYS:HG3	46:BP:48:TRP:CD2	2.40	0.55
52:BV:68:C:H2'	52:BV:69:C:C6	2.40	0.55
52:BW:70:G:O2'	52:BW:71:C:H5'	2.06	0.55
8:CI:72:LEU:HD21	8:CI:107:ILE:HG12	1.88	0.55
31:DA:1128:C:H4'	39:DI:16:ARG:NH1	2.20	0.55
31:DA:1246:C:H2'	31:DA:1247:U:C6	2.41	0.55
39:DI:104:ARG:O	39:DI:104:ARG:HD2	2.07	0.55
46:DP:43:LYS:HG3	46:DP:48:TRP:CD2	2.41	0.55
1:AA:1210:A:C8	1:AA:1210:A:C5'	2.88	0.55
1:AA:2262:U:H4'	1:AA:2328:A:H2	1.71	0.55
1:AA:2579:C:O2'	4:AE:131:ALA:CB	2.49	0.55
1:AA:448:U:O4	1:AA:583:G:H1'	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:103:ARG:HH11	3:AD:103:ARG:CG	2.07	0.55
6:AG:16:ARG:O	6:AG:20:ILE:HG13	2.06	0.55
7:AH:88:LEU:HD12	7:AH:129:THR:O	2.06	0.55
8:AI:72:LEU:HD12	8:AI:140:LEU:HD13	1.86	0.55
8:AI:72:LEU:HD21	8:AI:107:ILE:HG12	1.89	0.55
9:AJ:33:GLU:CD	9:AJ:34:PRO:HD2	2.27	0.55
14:AO:30:ARG:HA	14:AO:35:ILE:HA	1.88	0.55
17:AR:6:LYS:O	17:AR:37:VAL:HG21	2.05	0.55
20:AU:4:LYS:N	20:AU:4:LYS:HD3	2.21	0.55
31:BA:1002:G:H2'	31:BA:1003:G:O4'	2.06	0.55
31:BA:1356:G:H2'	31:BA:1357:A:C8	2.42	0.55
32:BB:69:LEU:HD23	32:BB:155:LEU:HD22	1.86	0.55
33:BC:86:VAL:O	33:BC:89:GLU:HG3	2.05	0.55
34:BD:107:ARG:HD3	34:BD:173:TRP:CH2	2.41	0.55
37:BG:20:ASP:OD2	37:BG:22:LEU:HB3	2.06	0.55
38:BH:1:MET:HE3	38:BH:3:THR:HG23	1.88	0.55
42:BL:45:LYS:HB2	42:BL:91:ASP:O	2.06	0.55
43:BM:19:LEU:HA	43:BM:22:ILE:HG12	1.88	0.55
1:CA:528:A:C2	1:CA:2043:C:H4'	2.40	0.55
1:CA:2777:G:C5'	1:CA:2778:A:H5'	2.37	0.55
1:CA:466:A:N3	1:CA:683:C:H1'	2.21	0.55
6:CG:39:ILE:H	6:CG:39:ILE:HD12	1.70	0.55
10:CK:79:PHE:HD2	15:CP:72:VAL:HG22	1.72	0.55
19:CT:71:GLY:C	19:CT:72:LYS:HG3	2.27	0.55
19:CT:89:ILE:HG22	19:CT:92:LEU:H	1.71	0.55
31:DA:1412:C:H2'	31:DA:1413:A:C8	2.41	0.55
32:DB:19:HIS:NE2	32:DB:206:ASP:HB2	2.22	0.55
32:DB:201:ILE:HG21	32:DB:214:ILE:HG21	1.88	0.55
41:DK:41:THR:HG21	41:DK:71:LYS:HD3	1.88	0.55
31:DA:376:G:OP2	46:DP:67:THR:HG21	2.06	0.55
52:DW:8:U:H1'	52:DW:48:C:H1'	1.89	0.55
1:AA:2287:A:N1	1:AA:2346:A:C2	2.74	0.55
1:AA:270(Z):G:C2	1:AA:271(A):U:O4	2.59	0.55
6:AG:63:ILE:HG22	6:AG:144:ILE:HD11	1.89	0.55
7:AH:86:GLU:H	7:AH:86:GLU:CD	2.10	0.55
9:AJ:79:ASN:HD21	9:AJ:149:PRO:HD3	1.70	0.55
17:AR:39:LEU:O	17:AR:40:LEU:HB2	2.06	0.55
21:AV:104:PHE:HB3	21:AV:141:VAL:HG11	1.87	0.55
31:BA:152:A:N6	31:BA:170:U:C2	2.75	0.55
33:BC:58:GLU:HB2	33:BC:65:ALA:HB3	1.88	0.55
34:BD:162:LEU:HD13	34:BD:178:VAL:HG13	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1794:U:H1'	1:CA:1900:A:N3	2.21	0.55
1:CA:2593:U:H2'	1:CA:2594:C:C6	2.41	0.55
3:CD:57:GLY:H	3:CD:216:GLY:CA	2.18	0.55
7:CH:123:PHE:HA	7:CH:132:ARG:O	2.06	0.55
11:CL:59:LEU:HA	11:CL:61:ARG:CZ	2.35	0.55
21:CV:34:ASN:O	21:CV:35:ARG:HG2	2.07	0.55
23:CX:57:GLU:O	23:CX:58:ILE:HB	2.07	0.55
25:CZ:2:PRO:O	25:CZ:3:ARG:HG3	2.06	0.55
31:DA:147:G:H1	31:DA:175:C:H42	1.55	0.55
31:DA:179:A:H2'	31:DA:180:U:H6	1.71	0.55
33:DC:18:TRP:C	33:DC:20:SER:H	2.10	0.55
33:DC:81:GLY:O	33:DC:85:ARG:HD3	2.07	0.55
39:DI:127:LYS:HZ3	39:DI:128:ARG:NH1	2.04	0.55
42:DL:31:PHE:HB3	42:DL:83:LEU:HD11	1.89	0.55
47:DQ:43:LEU:HD22	47:DQ:68:ARG:HB2	1.89	0.55
26:A1:61:VAL:HG13	26:A1:65:CYS:HB2	1.87	0.55
1:AA:1006:C:H1'	9:AJ:129:MET:CG	2.35	0.55
3:AD:130:ALA:HA	3:AD:192:THR:HA	1.89	0.55
6:AG:11:TYR:HA	6:AG:15:VAL:HB	1.89	0.55
6:AG:39:ILE:HD12	6:AG:39:ILE:H	1.71	0.55
13:AN:98:LEU:HB2	13:AN:113:LEU:CD2	2.37	0.55
19:AT:53:LYS:HB3	19:AT:82:GLN:HB3	1.88	0.55
1:AA:310:A:OP1	20:AU:18:GLY:HA2	2.06	0.55
20:AU:50:ARG:NH2	20:AU:55:TYR:HB3	2.21	0.55
31:BA:16:A:O2'	31:BA:17:U:H5'	2.07	0.55
31:BA:559:A:H5''	31:BA:560:U:H3'	1.89	0.55
32:BB:51:LEU:O	32:BB:55:PHE:HD2	1.90	0.55
36:BF:19:LEU:O	36:BF:19:LEU:HD23	2.07	0.55
43:BM:66:LEU:HA	43:BM:70:LEU:HB2	1.87	0.55
43:BM:94:ARG:HH12	49:BS:81:ARG:HD2	1.71	0.55
52:BW:33:U:H2'	52:BW:35:A:OP2	2.07	0.55
1:CA:108:U:H2'	1:CA:109:G:C8	2.41	0.55
1:CA:1493:C:H4'	1:CA:1494:A:OP1	2.05	0.55
1:CA:1668:A:H4'	1:CA:1669:A:O5'	2.06	0.55
1:CA:1766:U:H2'	1:CA:1767:C:H6	1.71	0.55
1:CA:1794:U:H1'	1:CA:1900:A:C2	2.41	0.55
1:CA:2262:U:H4'	1:CA:2328:A:H2	1.71	0.55
1:CA:2320:A:C8	1:CA:2333:A:N6	2.74	0.55
1:CA:2853:C:H2'	1:CA:2854:G:C8	2.42	0.55
1:CA:286:C:H2'	1:CA:287:C:C6	2.42	0.55
2:CB:103:U:O2'	2:CB:104:A:H5'	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:27:THR:CG2	3:CD:83:GLU:HG2	2.36	0.55
3:CD:36:PRO:HA	3:CD:62:TYR:O	2.07	0.55
9:CJ:154:GLN:HG2	9:CJ:155:ALA:N	2.21	0.55
13:CN:9:LYS:O	13:CN:10:LEU:HB3	2.05	0.55
14:CO:14:VAL:O	14:CO:18:ILE:HG12	2.07	0.55
32:DB:161:ALA:HB1	32:DB:185:ILE:HD11	1.89	0.55
33:DC:58:GLU:O	33:DC:59:ARG:HG3	2.07	0.55
41:DK:59:TYR:CZ	41:DK:63:LEU:HD11	2.42	0.55
1:AA:1126:A:H4'	1:AA:1127:A:O5'	2.07	0.55
1:AA:1021:A:H62	1:AA:1141:U:H3	1.53	0.55
1:AA:26:G:C6	1:AA:27:G:N1	2.74	0.55
3:AD:148:GLU:HB2	3:AD:151:LYS:HD2	1.89	0.55
3:AD:17:THR:O	3:AD:204:ILE:HG22	2.06	0.55
1:AA:1036:G:OP1	7:AH:59:ARG:HB2	2.06	0.55
9:AJ:69:VAL:O	9:AJ:70:ALA:HB3	2.07	0.55
11:AL:116:GLY:H	11:AL:134:ALA:HB2	1.72	0.55
1:AA:2278:A:OP1	12:AM:10:ARG:HD2	2.06	0.55
12:AM:38:GLU:HB2	12:AM:127:ILE:HD12	1.89	0.55
35:BE:121:LYS:HG3	35:BE:123:LEU:CD1	2.37	0.55
47:BQ:27:PHE:CZ	47:BQ:36:ILE:HD11	2.42	0.55
50:BT:43:LEU:HD12	50:BT:55:ILE:HD12	1.89	0.55
28:C3:15:GLU:HG2	28:C3:16:CYS:N	2.22	0.55
1:CA:2262:U:H4'	1:CA:2328:A:C2	2.41	0.55
1:CA:405:U:H3'	1:CA:406:G:C5'	2.37	0.55
1:CA:832:G:H21	11:CL:53:GLY:HA3	1.71	0.55
7:CH:168:PRO:HG2	7:CH:170:ARG:HH11	1.72	0.55
11:CL:116:GLY:N	11:CL:134:ALA:HB2	2.21	0.55
13:CN:12:ARG:HH11	13:CN:12:ARG:HG3	1.72	0.55
14:CO:56:LEU:HD23	14:CO:57:LYS:HZ1	1.71	0.55
19:CT:29:TRP:CZ3	19:CT:78:LYS:HB2	2.40	0.55
31:DA:976:G:H8	31:DA:1358:U:H2'	1.71	0.55
34:DD:92:VAL:O	34:DD:96:LEU:HD23	2.07	0.55
35:DE:83:GLU:HG2	35:DE:88:LYS:HG3	1.89	0.55
31:DA:1346:A:H5''	39:DI:120:ARG:HH12	1.71	0.55
42:DL:82:VAL:HG21	42:DL:99:ILE:HG13	1.88	0.55
47:DQ:77:VAL:HG12	47:DQ:78:GLU:HG2	1.88	0.55
50:DT:43:LEU:HD12	50:DT:55:ILE:HD12	1.88	0.55
1:AA:2126:A:H1'	1:AA:2127:G:H1'	1.88	0.55
1:AA:832:G:H21	11:AL:53:GLY:CA	2.19	0.55
1:AA:881:G:H1	1:AA:895:U:H3	1.54	0.55
3:AD:177:LEU:HD11	3:AD:183:ARG:HD2	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:37:LEU:C	3:AD:38:LYS:HD2	2.27	0.55
9:AJ:154:GLN:HG2	9:AJ:155:ALA:N	2.21	0.55
17:AR:62:LEU:HD22	17:AR:95:LEU:HB2	1.88	0.55
19:AT:12:VAL:HG22	19:AT:27:THR:O	2.06	0.55
31:BA:1157:A:H4'	31:BA:1158:C:O5'	2.06	0.55
31:BA:1493:A:C2'	31:BA:1494:G:H5'	2.37	0.55
31:BA:1346:A:H5''	39:BI:120:ARG:NH1	2.20	0.55
47:BQ:77:VAL:HG12	47:BQ:78:GLU:HG2	1.89	0.55
49:BS:22:LEU:CD1	49:BS:27:GLU:HB2	2.37	0.55
1:CA:1049:C:P	1:CA:1103:A:OP1	2.65	0.55
1:CA:1656:C:H2'	1:CA:1657:C:H6	1.70	0.55
1:CA:270(Z):G:C2	1:CA:271(A):U:O4	2.59	0.55
3:CD:10:THR:OG1	3:CD:13:ARG:HB2	2.06	0.55
3:CD:147:LEU:HD13	3:CD:155:LEU:HD11	1.89	0.55
4:CE:24:THR:CG2	4:CE:184:VAL:HG23	2.37	0.55
12:CM:70:PRO:HA	12:CM:95:ALA:HB2	1.87	0.55
13:CN:78:LYS:HE2	13:CN:83:ILE:HD11	1.88	0.55
15:CP:51:ARG:HG3	15:CP:98:LYS:HG3	1.88	0.55
31:DA:1356:G:H2'	31:DA:1357:A:C8	2.42	0.55
41:DK:84:VAL:HG22	41:DK:109:VAL:O	2.07	0.55
43:DM:84:ILE:HG23	43:DM:86:CYS:H	1.71	0.55
50:DT:69:GLY:O	50:DT:73:HIS:CD2	2.59	0.55
1:AA:2086:U:H2'	1:AA:2087:G:C8	2.41	0.55
1:AA:296:C:H2'	1:AA:297:C:H6	1.72	0.55
20:AU:54:LYS:HG2	20:AU:55:TYR:N	2.22	0.55
32:BB:75:LYS:HA	32:BB:78:GLN:HB2	1.89	0.55
33:BC:150:LYS:HB3	33:BC:201:TYR:HB2	1.89	0.55
37:BG:69:VAL:O	37:BG:71:PRO:HD3	2.06	0.55
47:BQ:14:LYS:HD2	47:BQ:14:LYS:N	2.21	0.55
47:BQ:43:LEU:HD22	47:BQ:68:ARG:HB2	1.89	0.55
1:CA:2420:C:OP1	30:C5:34:TRP:HA	2.07	0.55
1:CA:1052:C:C5	1:CA:1101:U:H5'	2.41	0.55
1:CA:443:A:H1'	1:CA:1201:C:O4'	2.06	0.55
1:CA:996:A:H4'	16:CQ:92:ARG:CZ	2.36	0.55
3:CD:58:HIS:CG	3:CD:58:HIS:O	2.59	0.55
7:CH:86:GLU:CD	7:CH:86:GLU:H	2.10	0.55
10:CK:112:MET:O	10:CK:115:VAL:HG22	2.07	0.55
15:CP:119:LYS:HA	31:DA:1443:G:H22	1.72	0.55
17:CR:38:LEU:O	17:CR:52:VAL:HG12	2.06	0.55
31:DA:687:A:H1'	31:DA:688:G:OP2	2.07	0.55
36:DF:60:PHE:C	36:DF:61:LEU:HD12	2.28	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:738:C:H5'	36:DF:69:GLU:HB2	1.89	0.55
31:DA:390:C:H4'	46:DP:28:ARG:HH21	1.72	0.55
1:AA:1657:C:H2'	1:AA:1658:C:H6	1.72	0.55
1:AA:286:C:H2'	1:AA:287:C:H6	1.70	0.55
1:AA:451:C:H4'	5:AF:52:LYS:NZ	2.21	0.55
3:AD:231:HIS:CG	3:AD:232:PRO:HD2	2.41	0.55
3:AD:95:LEU:O	3:AD:95:LEU:HD12	2.07	0.55
5:AF:110:LEU:HD11	5:AF:181:LEU:HD22	1.89	0.55
16:AQ:62:ILE:HD12	16:AQ:76:TYR:CZ	2.42	0.55
31:BA:673:G:H2'	31:BA:674:G:C8	2.41	0.55
32:BB:32:ILE:HD11	32:BB:190:THR:HG22	1.88	0.55
33:BC:173:VAL:N	33:BC:174:PRO:HD3	2.21	0.55
44:BN:24:CYS:SG	44:BN:27:CYS:SG	3.05	0.55
39:BI:128:ARG:HD3	52:BV:32:C:OP2	2.07	0.55
1:CA:2123:G:H2'	1:CA:2124:G:C8	2.42	0.55
1:CA:733:G:C8	1:CA:761:A:N6	2.75	0.55
3:CD:132:PRO:HD3	3:CD:190:TYR:CE2	2.42	0.55
3:CD:37:LEU:C	3:CD:38:LYS:HD2	2.26	0.55
7:CH:103:LEU:HD23	7:CH:104:GLU:N	2.22	0.55
7:CH:88:LEU:HD12	7:CH:129:THR:O	2.06	0.55
7:CH:17:VAL:HG12	7:CH:26:VAL:HG22	1.89	0.55
13:CN:63:ARG:HA	13:CN:80:PHE:CZ	2.41	0.55
14:CO:27:SER:HA	14:CO:88:ASP:HB3	1.88	0.55
15:CP:118:ARG:NH1	31:DA:1443:G:C4	2.75	0.55
15:CP:48:ILE:HD12	15:CP:48:ILE:H	1.72	0.55
17:CR:6:LYS:O	17:CR:37:VAL:HG21	2.07	0.55
19:CT:53:LYS:NZ	19:CT:55:ASN:HD21	2.05	0.55
31:DA:1352:C:H2'	31:DA:1353:G:C8	2.41	0.55
31:DA:1493:A:C2'	31:DA:1494:G:H5'	2.36	0.55
38:DH:24:THR:HG22	38:DH:25:ASP:N	2.19	0.55
1:AA:947:G:H2'	1:AA:948:G:H8	1.72	0.54
3:AD:235:GLY:O	3:AD:237:GLU:N	2.40	0.54
3:AD:57:GLY:H	3:AD:216:GLY:CA	2.19	0.54
7:AH:17:VAL:HG12	7:AH:26:VAL:HG22	1.89	0.54
8:AI:101:LEU:HD22	8:AI:109:ILE:HD12	1.88	0.54
8:AI:75:LEU:HD12	8:AI:76:THR:H	1.72	0.54
15:AP:105:LEU:HD21	15:AP:109:GLU:HG3	1.89	0.54
31:BA:1029:G:HO2'	31:BA:1030:C:H5	1.54	0.54
31:BA:1106:G:H2'	31:BA:1107:C:H6	1.72	0.54
47:BQ:5:VAL:HG22	47:BQ:60:ILE:HG13	1.89	0.54
30:C5:61:LEU:O	30:C5:62:LEU:HB2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1434:A:H61	1:CA:1558:A:H62	1.55	0.54
1:CA:2272:U:H5''	1:CA:2273:A:OP1	2.08	0.54
1:CA:2645:G:H3'	1:CA:2646:C:C5'	2.36	0.54
3:CD:155:LEU:HD23	3:CD:177:LEU:HD22	1.89	0.54
12:CM:10:ARG:HD3	12:CM:11:LYS:N	2.22	0.54
16:CQ:62:ILE:HD12	16:CQ:76:TYR:CZ	2.42	0.54
16:CQ:92:ARG:CG	16:CQ:92:ARG:HH11	2.20	0.54
20:CU:4:LYS:N	20:CU:4:LYS:HD3	2.22	0.54
1:CA:85:G:OP1	20:CU:9:LYS:HB2	2.07	0.54
21:CV:54:HIS:CG	21:CV:101:PRO:HG3	2.42	0.54
31:DA:622:A:C8	31:DA:623:C:C6	2.96	0.54
31:DA:878:G:OP1	38:DH:90:GLY:HA3	2.06	0.54
32:DB:77:ALA:O	32:DB:81:VAL:HG23	2.07	0.54
32:DB:82:ARG:HA	32:DB:92:TYR:CE1	2.42	0.54
33:DC:34:LEU:HD22	33:DC:38:ARG:HE	1.72	0.54
52:DW:43:A:H2'	52:DW:44:A:C8	2.41	0.54
1:AA:1587:A:H2'	1:AA:1588:C:C6	2.41	0.54
1:AA:188:G:H2'	1:AA:189:G:H5'	1.89	0.54
1:AA:2563:U:H2'	1:AA:2565:A:OP2	2.07	0.54
3:AD:131:LEU:HG	3:AD:136:ILE:CD1	2.37	0.54
4:AE:101:ARG:HD3	4:AE:169:ASN:ND2	2.21	0.54
7:AH:123:PHE:HA	7:AH:132:ARG:O	2.07	0.54
14:AO:27:SER:HA	14:AO:88:ASP:HB3	1.88	0.54
15:AP:115:ARG:CD	15:AP:115:ARG:H	2.17	0.54
18:AS:31:GLU:O	18:AS:35:ILE:HG13	2.06	0.54
21:AV:34:ASN:O	21:AV:35:ARG:HG2	2.07	0.54
31:BA:738:C:H5''	36:BF:69:GLU:HB2	1.89	0.54
32:BB:32:ILE:CD1	32:BB:190:THR:HG22	2.38	0.54
45:BO:47:LYS:HD2	45:BO:47:LYS:H	1.72	0.54
30:C5:8:LYS:O	30:C5:12:LYS:HG3	2.06	0.54
1:CA:1514:U:H2'	1:CA:1515:C:C6	2.42	0.54
1:CA:1587:A:H2'	1:CA:1588:C:C6	2.42	0.54
1:CA:188:G:H2'	1:CA:189:G:H5'	1.89	0.54
1:CA:1916:A:N1	31:DA:1409:C:H5'	2.22	0.54
1:CA:2630:G:C8	1:CA:2894:G:C2	2.95	0.54
4:CE:101:ARG:HD3	4:CE:169:ASN:ND2	2.22	0.54
6:CG:107:LEU:HD21	6:CG:178:PHE:CE1	2.42	0.54
6:CG:73:ALA:HB3	6:CG:85:GLY:HA2	1.89	0.54
9:CJ:66:THR:O	9:CJ:69:VAL:HG12	2.06	0.54
18:CS:31:GLU:O	18:CS:35:ILE:HG13	2.08	0.54
20:CU:50:ARG:NH2	20:CU:55:TYR:HB3	2.22	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1367:C:O2'	40:DJ:48:THR:HG21	2.07	0.54
31:DA:16:A:O2'	31:DA:17:U:H5'	2.07	0.54
31:DA:38:G:C2	31:DA:397:A:C2	2.95	0.54
31:DA:87:A:H5''	31:DA:88:C:OP2	2.07	0.54
33:DC:14:ILE:HG23	33:DC:15:THR:N	2.21	0.54
33:DC:16:ARG:NH1	33:DC:16:ARG:HB2	2.23	0.54
34:DD:8:VAL:O	34:DD:11:LEU:HG	2.07	0.54
34:DD:173:TRP:CD2	34:DD:189:PRO:HB3	2.42	0.54
42:DL:5:THR:N	42:DL:8:GLN:HE21	2.05	0.54
1:AA:108:U:H2'	1:AA:109:G:H8	1.73	0.54
1:AA:1668:A:H4'	1:AA:1669:A:O5'	2.07	0.54
1:AA:1889:A:H2'	1:AA:1890:A:C8	2.43	0.54
1:AA:252:G:OP2	11:AL:50:ARG:NH1	2.40	0.54
1:AA:2789:C:H5''	1:AA:2790:A:OP1	2.07	0.54
3:AD:155:LEU:HD23	3:AD:177:LEU:HD22	1.89	0.54
4:AE:24:THR:CB	4:AE:186:GLY:HA2	2.36	0.54
15:AP:31:SER:OG	15:AP:85:LYS:HE2	2.06	0.54
23:AX:13:ILE:HG21	23:AX:63:ALA:N	2.21	0.54
31:BA:976:G:H22	31:BA:1361(A):C:H2'	1.71	0.54
31:BA:1367:C:O2'	40:BJ:48:THR:HG21	2.07	0.54
31:BA:386:C:O2'	31:BA:387:U:H5'	2.07	0.54
31:BA:397:A:N3	31:BA:397:A:H3'	2.22	0.54
31:BA:678:U:H2'	31:BA:679:C:C6	2.43	0.54
32:BB:88:ALA:HB2	32:BB:219:VAL:HG13	1.88	0.54
39:BI:111:ARG:HH12	39:BI:113:LYS:HA	1.73	0.54
39:BI:28:VAL:HA	39:BI:63:ILE:O	2.06	0.54
42:BL:65:VAL:HG11	42:BL:97:TYR:CE1	2.42	0.54
45:BO:44:LYS:O	45:BO:47:LYS:HE3	2.07	0.54
52:BW:43:A:H2'	52:BW:44:A:C8	2.42	0.54
27:C2:42:PRO:O	27:C2:44:THR:HG23	2.08	0.54
29:C4:8:ASN:HD21	29:C4:10:ARG:HB3	1.73	0.54
1:CA:1529:A:H62	1:CA:1542:G:H22	1.55	0.54
1:CA:2579:C:O2'	4:CE:131:ALA:CB	2.49	0.54
1:CA:2822:G:H2'	1:CA:2823:A:H5''	1.89	0.54
1:CA:448:U:O4	1:CA:583:G:H1'	2.08	0.54
3:CD:235:GLY:O	3:CD:237:GLU:N	2.39	0.54
1:CA:2784:C:H1'	4:CE:37:ARG:HH12	1.73	0.54
6:CG:59:GLU:O	6:CG:63:ILE:HG23	2.07	0.54
11:CL:122:PRO:O	11:CL:123:LEU:HB3	2.08	0.54
19:CT:63:LYS:HD2	19:CT:72:LYS:HG2	1.88	0.54
31:DA:115:G:H4'	31:DA:116:A:O5'	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:197:A:N6	31:DA:221:C:H5'	2.23	0.54
31:DA:386:C:O2'	31:DA:387:U:H5'	2.07	0.54
37:DG:69:VAL:O	37:DG:71:PRO:HD3	2.08	0.54
40:DJ:10:GLY:HA3	40:DJ:16:LEU:HD21	1.88	0.54
42:DL:96:ARG:HB2	42:DL:97:TYR:CE1	2.42	0.54
29:A4:9:ARG:HE	29:A4:47:ARG:CB	2.14	0.54
1:AA:1514:U:H2'	1:AA:1515:C:C6	2.41	0.54
1:AA:1656:C:H2'	1:AA:1657:C:C6	2.43	0.54
1:AA:2630:G:C8	1:AA:2894:G:C2	2.96	0.54
9:AJ:154:GLN:HE21	9:AJ:155:ALA:CB	2.18	0.54
13:AN:96:ARG:NH2	13:AN:117:VAL:HG23	2.22	0.54
15:AP:23:ARG:HH21	15:AP:120:ARG:HD3	1.73	0.54
20:AU:11:ASP:O	20:AU:27:VAL:HG13	2.08	0.54
1:AA:85:G:OP1	20:AU:9:LYS:HB2	2.07	0.54
31:BA:818:G:C3'	31:BA:819:A:H5''	2.37	0.54
33:BC:43:LEU:HD12	33:BC:55:VAL:HG21	1.90	0.54
33:BC:58:GLU:O	33:BC:59:ARG:HG3	2.07	0.54
39:BI:104:ARG:O	39:BI:104:ARG:HD2	2.07	0.54
41:BK:79:SER:HB3	41:BK:106:LYS:HE3	1.88	0.54
42:BL:83:LEU:HB3	42:BL:103:VAL:HG21	1.89	0.54
42:BL:82:VAL:HG21	42:BL:99:ILE:HG13	1.89	0.54
1:CA:999:U:O2'	1:CA:1000:A:H5'	2.07	0.54
1:CA:1142(B):A:H4'	9:CJ:48:ARG:HH22	1.72	0.54
1:CA:1210:A:C5'	1:CA:1210:A:C8	2.89	0.54
1:CA:162:U:H2'	1:CA:163:U:C6	2.43	0.54
1:CA:2294:C:H2'	1:CA:2295:C:H6	1.72	0.54
11:CL:59:LEU:CA	11:CL:61:ARG:NE	2.70	0.54
19:CT:12:VAL:HG22	19:CT:27:THR:O	2.07	0.54
19:CT:31:HIS:ND1	19:CT:32:PRO:HD2	2.23	0.54
31:DA:1027(B):C:C2	31:DA:1033:G:C2	2.96	0.54
15:CP:119:LYS:CA	31:DA:1443:G:N2	2.67	0.54
31:DA:397:A:N7	31:DA:548:G:C8	2.76	0.54
31:DA:735:C:H2'	31:DA:736:C:H6	1.71	0.54
38:DH:10:LEU:HD22	38:DH:83:ILE:HD11	1.89	0.54
40:DJ:43:ARG:HB2	40:DJ:67:THR:HG23	1.89	0.54
48:DR:52:PRO:O	48:DR:56:THR:HG23	2.08	0.54
31:DA:1327:C:OP1	51:DU:20:LYS:HB3	2.07	0.54
52:DW:48:C:C4	52:DW:59:A:C8	2.96	0.54
1:AA:2420:C:OP1	30:A5:34:TRP:HA	2.08	0.54
1:AA:1656:C:H2'	1:AA:1657:C:H6	1.73	0.54
1:AA:1854:A:N6	1:AA:1888:G:H8	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:655:A:C2'	1:AA:656:G:H5'	2.37	0.54
7:AH:105:LEU:O	7:AH:105:LEU:HD12	2.08	0.54
7:AH:168:PRO:HG2	7:AH:170:ARG:HH11	1.72	0.54
1:AA:2758:A:C4	7:AH:67:LEU:HD21	2.42	0.54
9:AJ:96:THR:HB	9:AJ:105:LEU:HD11	1.88	0.54
1:AA:2562:U:H1'	10:AK:23:ARG:HH11	1.73	0.54
19:AT:29:TRP:CZ3	19:AT:78:LYS:HB2	2.43	0.54
31:BA:406:G:H2'	31:BA:407:G:H8	1.73	0.54
31:BA:546:G:P	34:BD:72:GLU:HB2	2.47	0.54
34:BD:127:THR:HG22	34:BD:147:ALA:O	2.07	0.54
36:BF:60:PHE:C	36:BF:61:LEU:HD12	2.27	0.54
45:BO:26:GLU:OE2	45:BO:77:ARG:HD2	2.07	0.54
31:BA:390:C:H4'	46:BP:28:ARG:HH21	1.73	0.54
31:BA:279:A:C5	47:BQ:98:LEU:HD13	2.43	0.54
52:BV:48:C:C2	52:BV:59:A:H1'	2.42	0.54
1:CA:1731:G:O2'	1:CA:1732:A:H8	1.90	0.54
1:CA:1889:A:H2'	1:CA:1890:A:C8	2.43	0.54
2:CB:40:U:H3'	2:CB:41:U:H5''	1.88	0.54
11:CL:38:GLN:HG3	11:CL:39:LYS:N	2.17	0.54
14:CO:71:ARG:O	14:CO:75:GLU:HG2	2.08	0.54
19:CT:50:LYS:H	19:CT:87:GLN:HE22	1.55	0.54
31:DA:1296:C:H4'	31:DA:1302:U:C4	2.43	0.54
31:DA:198:G:H2'	31:DA:199:G:C8	2.43	0.54
31:DA:429:U:H4'	31:DA:430:A:O5'	2.08	0.54
31:DA:818:G:C3'	31:DA:819:A:H5''	2.37	0.54
35:DE:147:ASP:O	35:DE:151:LEU:HG	2.08	0.54
45:DO:87:ILE:HG23	45:DO:88:ARG:HG2	1.88	0.54
30:A5:8:LYS:O	30:A5:12:LYS:HG3	2.07	0.54
1:AA:2271:G:H2'	1:AA:2272:U:C6	2.42	0.54
1:AA:2698:U:H2'	1:AA:2699:C:H6	1.73	0.54
2:AB:95:U:H2'	2:AB:96:G:C8	2.43	0.54
12:AM:10:ARG:HD3	12:AM:11:LYS:N	2.23	0.54
17:AR:49:THR:HG22	17:AR:50:PRO:CD	2.33	0.54
21:AV:60:GLU:OE1	21:AV:66:SER:HB3	2.08	0.54
31:BA:790:A:C6	31:BA:791:G:C6	2.95	0.54
31:BA:938:A:C6	31:BA:939:G:C5	2.96	0.54
33:BC:121:ALA:O	33:BC:124:ILE:HB	2.07	0.54
33:BC:73:PRO:O	33:BC:76:VAL:HG22	2.07	0.54
41:BK:44:SER:O	41:BK:48:ILE:HG12	2.07	0.54
44:BN:26:ARG:HH21	44:BN:43:CYS:HB2	1.71	0.54
36:BF:48:LEU:HB2	48:BR:77:GLY:O	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:50:U:H2'	52:BW:51:C:C6	2.42	0.54
1:CA:1358:G:O2'	1:CA:1359:A:H5''	2.08	0.54
1:CA:1529:A:N6	1:CA:1542:G:N2	2.56	0.54
1:CA:1730:U:O2	1:CA:1730:U:H2'	2.07	0.54
1:CA:34:C:N4	1:CA:447:A:H61	2.05	0.54
1:CA:38:A:H2'	1:CA:39:C:C6	2.42	0.54
3:CD:103:ARG:HG2	3:CD:103:ARG:NH1	2.06	0.54
3:CD:231:HIS:CG	3:CD:232:PRO:HD2	2.43	0.54
3:CD:58:HIS:O	3:CD:59:LYS:O	2.26	0.54
8:CI:25:TYR:O	8:CI:29:TYR:HB3	2.08	0.54
13:CN:90:ARG:HG3	13:CN:90:ARG:O	2.07	0.54
15:CP:23:ARG:HH21	15:CP:120:ARG:HD3	1.73	0.54
15:CP:35:LYS:HE2	15:CP:37:GLY:O	2.08	0.54
21:CV:63:ASP:HB3	21:CV:65:GLN:HG3	1.90	0.54
31:DA:1381:U:H5	31:DA:1382:C:C4	2.26	0.54
42:DL:65:VAL:HG11	42:DL:97:TYR:CE1	2.43	0.54
49:DS:36:ARG:HB2	49:DS:72:GLY:CA	2.38	0.54
1:AA:2880:C:H1'	13:AN:92:GLY:O	2.07	0.54
1:AA:479:A:H4'	1:AA:480:A:O5'	2.08	0.54
3:AD:132:PRO:HD3	3:AD:190:TYR:CE2	2.42	0.54
5:AF:101:LEU:HD12	5:AF:102:PRO:HD2	1.89	0.54
19:AT:31:HIS:ND1	19:AT:32:PRO:HD2	2.23	0.54
21:AV:58:VAL:HA	21:AV:67:LEU:O	2.07	0.54
24:AY:42:GLY:O	24:AY:44:LEU:N	2.40	0.54
33:BC:181:ASN:ND2	33:BC:204:LEU:HB2	2.22	0.54
35:BE:10:MET:CB	35:BE:32:VAL:HG22	2.38	0.54
1:CA:2125:G:H2'	1:CA:2126:A:C8	2.43	0.54
1:CA:593:G:O2'	30:C5:62:LEU:HD13	2.08	0.54
2:CB:95:U:H2'	2:CB:96:G:C8	2.43	0.54
1:CA:2758:A:C4	7:CH:67:LEU:HD21	2.43	0.54
12:CM:68:ILE:HD13	12:CM:68:ILE:H	1.73	0.54
13:CN:98:LEU:HB2	13:CN:113:LEU:CD2	2.38	0.54
13:CN:96:ARG:NH2	13:CN:117:VAL:HG23	2.23	0.54
20:CU:2:ARG:HD2	20:CU:3:VAL:HG23	1.90	0.54
31:DA:1288:A:H1'	31:DA:1352:C:O2'	2.07	0.54
31:DA:938:A:C6	31:DA:939:G:C5	2.95	0.54
31:DA:954:G:H2'	31:DA:955:U:O4'	2.08	0.54
31:DA:1104:G:H4'	32:DB:111:ARG:NH1	2.22	0.54
34:DD:126:ILE:N	34:DD:126:ILE:HD12	2.22	0.54
31:DA:736:C:OP1	48:DR:68:LYS:HE2	2.07	0.54
49:DS:40:ILE:HG21	49:DS:62:ILE:HD11	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1344:G:H4'	1:AA:1384:A:C5	2.43	0.54
1:AA:1730:U:H2'	1:AA:1730:U:O2	2.07	0.54
1:AA:2125:G:H2'	1:AA:2126:A:C8	2.42	0.54
3:AD:10:THR:OG1	3:AD:13:ARG:HB2	2.07	0.54
3:AD:27:THR:CG2	3:AD:83:GLU:HG2	2.38	0.54
8:AI:25:TYR:O	8:AI:29:TYR:HB3	2.07	0.54
1:AA:389:G:C6	11:AL:71:VAL:HG23	2.43	0.54
31:BA:1057:G:C4	31:BA:1204:A:C2	2.96	0.54
31:BA:147:G:H1	31:BA:175:C:H42	1.55	0.54
31:BA:328:C:H1'	31:BA:329:A:OP2	2.07	0.54
34:BD:21:LEU:HD12	34:BD:22:LYS:H	1.73	0.54
37:BG:12:LEU:HD23	37:BG:12:LEU:N	2.22	0.54
45:BO:63:ARG:NH1	45:BO:87:ILE:HD11	2.22	0.54
1:CA:296:C:H2'	1:CA:297:C:H6	1.71	0.54
3:CD:148:GLU:HB2	3:CD:151:LYS:HD2	1.90	0.54
4:CE:104:VAL:HG12	4:CE:196:VAL:CG2	2.38	0.54
11:CL:38:GLN:O	11:CL:39:LYS:HB2	2.08	0.54
11:CL:51:PHE:CE1	11:CL:59:LEU:HD13	2.42	0.54
15:CP:31:SER:OG	15:CP:85:LYS:HE2	2.08	0.54
18:CS:68:ARG:O	18:CS:110:LYS:HB2	2.08	0.54
19:CT:53:LYS:HB3	19:CT:82:GLN:HB3	1.88	0.54
20:CU:54:LYS:HG2	20:CU:55:TYR:N	2.21	0.54
31:DA:1226:C:N4	43:DM:104:ARG:HB2	2.23	0.54
31:DA:1418:A:C2	31:DA:1483:A:C2	2.96	0.54
31:DA:279:A:C5	47:DQ:98:LEU:HD13	2.42	0.54
31:DA:790:A:C6	31:DA:791:G:C6	2.96	0.54
32:DB:88:ALA:HB2	32:DB:219:VAL:HG13	1.88	0.54
35:DE:80:ILE:HG22	38:DH:104:ARG:HH12	1.72	0.54
39:DI:28:VAL:HA	39:DI:63:ILE:O	2.07	0.54
52:DV:17:C:H5''	52:DV:17(A):U:OP2	2.08	0.54
27:A2:42:PRO:O	27:A2:44:THR:HG23	2.08	0.54
1:AA:1005:C:H2'	1:AA:1006:C:C6	2.43	0.54
4:AE:203:LYS:HD2	4:AE:203:LYS:O	2.08	0.54
6:AG:173:LEU:HD13	6:AG:178:PHE:CE2	2.43	0.54
7:AH:16:SER:HB2	7:AH:27:LYS:HB2	1.90	0.54
9:AJ:59:GLY:H	9:AJ:65:TRP:HZ3	1.55	0.54
13:AN:63:ARG:HA	13:AN:80:PHE:CZ	2.43	0.54
13:AN:90:ARG:O	13:AN:90:ARG:HG3	2.08	0.54
1:AA:996:A:H4'	16:AQ:92:ARG:CZ	2.38	0.54
23:AX:27:GLU:CB	23:AX:33:LYS:HG3	2.38	0.54
23:AX:13:ILE:HG13	23:AX:62:VAL:HG23	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1256:A:H2	31:BA:1277:C:C4	2.25	0.54
33:BC:34:LEU:HD22	33:BC:38:ARG:HE	1.73	0.54
39:BI:73:GLN:O	39:BI:77:ILE:HG12	2.08	0.54
1:CA:1153:C:C2'	1:CA:1154:G:H5'	2.38	0.54
1:CA:2115:G:C6	1:CA:2117:A:H5''	2.42	0.54
1:CA:2307:G:C8	1:CA:2308:G:N7	2.76	0.54
1:CA:273(B):G:C2	1:CA:364:C:N3	2.76	0.54
3:CD:70:TRP:CZ2	3:CD:150:LYS:HA	2.43	0.54
5:CF:107:LYS:HZ2	5:CF:205:ARG:CG	2.21	0.54
6:CG:63:ILE:HG22	6:CG:144:ILE:HD11	1.90	0.54
11:CL:93:GLY:H	11:CL:123:LEU:HD12	1.71	0.54
13:CN:56:LYS:HE3	13:CN:87:TYR:O	2.07	0.54
17:CR:24:LYS:HA	17:CR:92:THR:HG23	1.89	0.54
31:DA:1064:G:N2	31:DA:1190:G:H2'	2.22	0.54
33:DC:181:ASN:ND2	33:DC:204:LEU:HB2	2.22	0.54
33:DC:40:ARG:O	33:DC:44:GLU:HG2	2.08	0.54
33:DC:73:PRO:O	33:DC:76:VAL:HG22	2.07	0.54
41:DK:85:ARG:HA	41:DK:112:THR:OG1	2.08	0.54
1:AA:1529:A:N6	1:AA:1542:G:N2	2.56	0.54
1:AA:1299:G:H22	1:AA:1640:C:H5'	1.73	0.54
1:AA:508:G:O2'	1:AA:509:C:H5''	2.08	0.54
1:AA:2275:C:O2	12:AM:83:MET:HG3	2.08	0.54
13:AN:70:LEU:N	13:AN:70:LEU:HD12	2.22	0.54
15:AP:27:THR:HA	15:AP:48:ILE:HA	1.89	0.54
15:AP:48:ILE:HD12	15:AP:48:ILE:H	1.72	0.54
31:BA:1225:A:H5''	31:BA:1226:C:H5	1.73	0.54
31:BA:1263:C:H2'	31:BA:1264:C:C6	2.43	0.54
31:BA:179:A:H2'	31:BA:180:U:H6	1.73	0.54
31:BA:447:G:H2'	31:BA:485:G:N2	2.22	0.54
31:BA:622:A:C8	31:BA:623:C:C6	2.96	0.54
31:BA:811:C:H4'	31:BA:900:A:N6	2.23	0.54
31:BA:942:G:H21	39:BI:124:GLN:NE2	2.06	0.54
31:BA:954:G:H2'	31:BA:955:U:O4'	2.07	0.54
32:BB:161:ALA:HB1	32:BB:185:ILE:HD11	1.88	0.54
35:BE:147:ASP:O	35:BE:151:LEU:HG	2.08	0.54
35:BE:43:LEU:HD23	35:BE:44:GLY:N	2.23	0.54
31:BA:1371:G:OP1	39:BI:11:LYS:HG2	2.07	0.54
40:BJ:10:GLY:HA3	40:BJ:16:LEU:HD21	1.88	0.54
41:BK:84:VAL:HG22	41:BK:109:VAL:O	2.08	0.54
41:BK:81:ASP:OD1	41:BK:106:LYS:HD2	2.07	0.54
42:BL:5:THR:H	42:BL:8:GLN:HE21	1.55	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1344:G:H4'	1:CA:1384:A:C5	2.42	0.54
1:CA:2398:U:H2'	1:CA:2399:G:C8	2.43	0.54
1:CA:2795:G:H3'	1:CA:2797:U:C5'	2.38	0.54
1:CA:676:A:H2	1:CA:802:A:H61	1.53	0.54
11:CL:6:LEU:HG	11:CL:8:PRO:HD2	1.90	0.54
15:CP:115:ARG:H	15:CP:115:ARG:CD	2.17	0.54
31:DA:152:A:N6	31:DA:170:U:C2	2.76	0.54
31:DA:251:G:C6	31:DA:266:G:C6	2.95	0.54
31:DA:980:C:H1'	44:DN:19:ARG:HG2	1.90	0.54
52:DV:48:C:C2	52:DV:59:A:H1'	2.43	0.54
1:AA:1558:A:H1'	1:AA:1559:G:OP2	2.08	0.53
1:AA:2822:G:H2'	1:AA:2823:A:H5''	1.90	0.53
1:AA:860:U:O4'	1:AA:860:U:O2	2.24	0.53
1:AA:881:G:C2	1:AA:882:G:H1'	2.43	0.53
1:AA:2311:A:H5'	6:AG:77:ILE:HD11	1.91	0.53
19:AT:59:VAL:O	19:AT:59:VAL:HG23	2.09	0.53
31:BA:1409:C:H2'	31:BA:1410:G:C8	2.43	0.53
31:BA:81:G:H5''	31:BA:82:U:OP2	2.08	0.53
32:BB:219:VAL:O	32:BB:223:ILE:HG13	2.08	0.53
33:BC:81:GLY:O	33:BC:85:ARG:HD3	2.07	0.53
39:BI:51:ARG:HG2	39:BI:56:LEU:HB2	1.89	0.53
52:BW:48:C:C4	52:BW:59:A:C8	2.96	0.53
1:CA:1005:C:H2'	1:CA:1006:C:C6	2.42	0.53
4:CE:10:GLY:O	4:CE:25:VAL:HG23	2.08	0.53
5:CF:110:LEU:HD11	5:CF:181:LEU:HD22	1.90	0.53
6:CG:72:ARG:HD2	6:CG:85:GLY:O	2.08	0.53
12:CM:54:MET:CE	12:CM:64:ILE:HD12	2.37	0.53
31:DA:1256:A:H2	31:DA:1277:C:C4	2.26	0.53
31:DA:300:A:H1'	31:DA:565:U:O2	2.08	0.53
31:DA:44:G:OP2	46:DP:12:LYS:HE3	2.08	0.53
31:DA:827:U:H5''	31:DA:828:A:OP2	2.08	0.53
31:DA:942:G:H21	39:DI:124:GLN:NE2	2.06	0.53
32:DB:51:LEU:O	32:DB:55:PHE:HD2	1.90	0.53
32:DB:74:LYS:HZ2	32:DB:74:LYS:CB	2.21	0.53
34:DD:31:CYS:C	34:DD:33:MET:N	2.61	0.53
1:AA:2764:A:N6	1:AA:2766:G:C2	2.76	0.53
1:AA:586:A:N1	1:AA:809:G:O2'	2.35	0.53
10:AK:17:ARG:HE	10:AK:47:ILE:HD12	1.72	0.53
13:AN:22:ARG:O	13:AN:26:LYS:HG3	2.08	0.53
14:AO:71:ARG:O	14:AO:75:GLU:HG2	2.08	0.53
15:AP:35:LYS:HE2	15:AP:37:GLY:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AQ:76:TYR:CZ	16:AQ:80:ILE:HG13	2.43	0.53
21:AV:48:PHE:HE2	21:AV:71:VAL:HG11	1.72	0.53
31:BA:1296:C:H4'	31:BA:1302:U:C4	2.43	0.53
31:BA:1352:C:H2'	31:BA:1353:G:C8	2.42	0.53
31:BA:1381:U:H5	31:BA:1382:C:C4	2.27	0.53
31:BA:198:G:H2'	31:BA:199:G:C8	2.44	0.53
1:AA:1837:C:OP1	31:BA:784:C:H4'	2.09	0.53
31:BA:979:C:C3'	31:BA:980:C:H5''	2.26	0.53
32:BB:77:ALA:O	32:BB:81:VAL:HG23	2.08	0.53
49:BS:36:ARG:HB2	49:BS:72:GLY:CA	2.38	0.53
28:C3:18:ARG:HH21	28:C3:44:ARG:HH11	1.56	0.53
1:CA:675:A:H4'	5:CF:67:GLN:HE22	1.69	0.53
3:CD:145:VAL:HB	3:CD:155:LEU:HB2	1.90	0.53
9:CJ:96:THR:HB	9:CJ:105:LEU:HD11	1.89	0.53
1:CA:498:G:H1'	20:CU:47:LYS:NZ	2.23	0.53
31:DA:1225:A:H5'	43:DM:103:THR:OG1	2.09	0.53
31:DA:1225:A:H5''	31:DA:1226:C:H5	1.74	0.53
31:DA:1263:C:H2'	31:DA:1264:C:C6	2.42	0.53
31:DA:321:A:N7	31:DA:328:C:C6	2.76	0.53
31:DA:79:G:H1	31:DA:90:C:H42	1.54	0.53
41:DK:33:THR:HG22	41:DK:39:PRO:HA	1.90	0.53
1:AA:593:G:O3'	30:A5:62:LEU:HD22	2.08	0.53
1:AA:1396:U:O2	1:AA:1396:U:H2'	2.07	0.53
1:AA:2307:G:C8	1:AA:2308:G:N7	2.76	0.53
1:AA:2341:G:H2'	1:AA:2342:C:O4'	2.07	0.53
1:AA:405:U:H3'	1:AA:406:G:C5'	2.37	0.53
6:AG:72:ARG:HD2	6:AG:85:GLY:O	2.09	0.53
7:AH:131:VAL:HG12	7:AH:133:VAL:HG23	1.91	0.53
9:AJ:66:THR:O	9:AJ:69:VAL:HG12	2.08	0.53
10:AK:79:PHE:HD2	15:AP:72:VAL:HG22	1.72	0.53
20:AU:2:ARG:HD2	20:AU:3:VAL:HG23	1.89	0.53
20:AU:77:PRO:O	20:AU:78:ALA:HB2	2.08	0.53
33:BC:18:TRP:C	33:BC:20:SER:H	2.11	0.53
34:BD:18:LYS:HD3	34:BD:20:TYR:OH	2.08	0.53
40:BJ:4:ILE:O	40:BJ:73:ASP:HA	2.08	0.53
37:BG:150:ALA:HB1	41:BK:57:THR:HG21	1.90	0.53
49:BS:40:ILE:HG21	49:BS:62:ILE:HD11	1.90	0.53
18:CS:19:LEU:O	27:C2:25:LEU:HD11	2.09	0.53
1:CA:1998:G:H2'	1:CA:1999:C:H6	1.73	0.53
1:CA:2130:U:H3'	1:CA:2130:U:P	2.49	0.53
1:CA:2119:A:H61	1:CA:2170:A:N6	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2709:G:O2'	1:CA:2710:C:H5'	2.07	0.53
1:CA:479:A:H4'	1:CA:480:A:O5'	2.08	0.53
1:CA:508:G:O2'	1:CA:509:C:H5''	2.08	0.53
1:CA:881:G:H1	1:CA:895:U:H3	1.54	0.53
1:CA:960:A:H61	12:CM:82:ARG:NH2	1.93	0.53
4:CE:24:THR:CB	4:CE:186:GLY:HA2	2.37	0.53
5:CF:148:LEU:HD11	5:CF:193:VAL:HG21	1.90	0.53
7:CH:105:LEU:HD12	7:CH:105:LEU:O	2.08	0.53
8:CI:5:LEU:H	8:CI:5:LEU:CD2	2.13	0.53
11:CL:116:GLY:H	11:CL:134:ALA:HB2	1.73	0.53
1:CA:2275:C:O2	12:CM:83:MET:HG3	2.08	0.53
31:DA:559:A:H5''	31:DA:560:U:H3'	1.89	0.53
33:DC:191:THR:HG22	33:DC:192:THR:H	1.74	0.53
35:DE:80:ILE:HG22	38:DH:104:ARG:NH1	2.22	0.53
42:DL:83:LEU:HB3	42:DL:103:VAL:HG21	1.90	0.53
52:DW:48:C:H2'	52:DW:59:A:H1'	1.90	0.53
1:AA:1543:A:H5'	1:AA:1544:C:OP2	2.08	0.53
1:AA:2114:A:N6	1:AA:2115:G:C2	2.77	0.53
1:AA:2853:C:H2'	1:AA:2854:G:C8	2.43	0.53
1:AA:2850:A:OP2	1:AA:2866:U:H5	1.91	0.53
1:AA:411:G:N2	11:AL:71:VAL:HG11	2.23	0.53
1:AA:806:C:P	11:AL:39:LYS:HG3	2.49	0.53
5:AF:45:ARG:NH1	5:AF:45:ARG:CG	2.59	0.53
6:AG:16:ARG:NH1	6:AG:31:VAL:HG11	2.24	0.53
7:AH:103:LEU:HD23	7:AH:104:GLU:N	2.23	0.53
12:AM:9:TYR:O	12:AM:9:TYR:CD2	2.61	0.53
17:AR:35:LEU:HB3	17:AR:37:VAL:HG23	1.91	0.53
19:AT:71:GLY:C	19:AT:72:LYS:HG3	2.27	0.53
21:AV:53:ILE:HD11	21:AV:99:TYR:HB2	1.89	0.53
31:BA:1105:A:H2'	31:BA:1106:G:C8	2.40	0.53
31:BA:1064:G:N2	31:BA:1190:G:H2'	2.23	0.53
31:BA:1226:C:N4	43:BM:104:ARG:HB2	2.23	0.53
31:BA:1288:A:H1'	31:BA:1352:C:O2'	2.08	0.53
33:BC:14:ILE:HG13	33:BC:15:THR:H	1.73	0.53
34:BD:30:LYS:C	34:BD:32:ALA:H	2.11	0.53
35:BE:145:LYS:O	35:BE:149:GLU:HG2	2.08	0.53
39:BI:127:LYS:HZ3	39:BI:128:ARG:NH1	2.06	0.53
28:C3:18:ARG:HG2	28:C3:19:ARG:H	1.74	0.53
29:C4:5:TRP:NE1	29:C4:7:PRO:HG3	2.23	0.53
1:CA:1006:C:H1'	9:CJ:129:MET:CG	2.37	0.53
1:CA:1657:C:H2'	1:CA:1658:C:H6	1.72	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2287:A:N1	1:CA:2346:A:C2	2.76	0.53
1:CA:2712:U:O2'	1:CA:712(B):A:P	2.66	0.53
1:CA:2821:A:OP2	1:CA:2822:G:OP2	2.25	0.53
1:CA:363(F):U:O2'	1:CA:363(G):A:O5'	2.27	0.53
1:CA:498:G:O2'	20:CU:47:LYS:HD3	2.09	0.53
3:CD:131:LEU:HG	3:CD:136:ILE:CD1	2.39	0.53
1:CA:1824:G:O3'	3:CD:249:PRO:HD3	2.09	0.53
6:CG:105:LYS:CD	6:CG:142:PRO:HG3	2.33	0.53
8:CI:56:LYS:NZ	8:CI:56:LYS:HB3	2.23	0.53
1:CA:389:G:C6	11:CL:71:VAL:HG23	2.44	0.53
17:CR:35:LEU:HB3	17:CR:37:VAL:HG23	1.91	0.53
31:DA:1010:G:H2'	31:DA:1011:G:C8	2.44	0.53
31:DA:691:G:C6	41:DK:52:GLY:HA2	2.43	0.53
48:DR:56:THR:HB	48:DR:58:LEU:HD13	1.90	0.53
52:DW:50:U:H2'	52:DW:51:C:C6	2.43	0.53
1:AA:1142(B):A:H4'	9:AJ:48:ARG:HH22	1.73	0.53
1:AA:2795:G:H3'	1:AA:2797:U:C5'	2.38	0.53
1:AA:886:C:N3	1:AA:890:A:N6	2.57	0.53
1:AA:960:A:H61	12:AM:82:ARG:NH2	1.94	0.53
2:AB:103:U:O2'	2:AB:104:A:H5'	2.08	0.53
4:AE:104:VAL:HG12	4:AE:196:VAL:CG2	2.39	0.53
19:AT:53:LYS:NZ	19:AT:55:ASN:HD21	2.06	0.53
31:BA:372:C:H4'	31:BA:373:A:OP1	2.09	0.53
31:BA:524:G:H2'	31:BA:525:C:C6	2.43	0.53
33:BC:64:VAL:O	33:BC:100:ALA:HB3	2.08	0.53
40:BJ:43:ARG:HB2	40:BJ:67:THR:HG23	1.89	0.53
41:BK:85:ARG:HA	41:BK:112:THR:OG1	2.08	0.53
52:BV:17:C:H5''	52:BV:17(A):U:OP2	2.09	0.53
28:C3:33:LYS:HB2	28:C3:34:LEU:HD13	1.91	0.53
1:CA:212:G:O2'	1:CA:213:A:H5'	2.08	0.53
1:CA:363(F):U:O2'	1:CA:363(G):A:O4'	2.26	0.53
1:CA:1903:G:OP2	3:CD:241:PRO:HB2	2.09	0.53
8:CI:75:LEU:HD12	8:CI:76:THR:H	1.72	0.53
1:CA:252:G:OP2	11:CL:50:ARG:NH1	2.41	0.53
14:CO:57:LYS:HD2	14:CO:58:LEU:N	2.23	0.53
15:CP:105:LEU:HD21	15:CP:109:GLU:HG3	1.90	0.53
15:CP:106:SER:HA	15:CP:110:ILE:HB	1.91	0.53
16:CQ:102:GLU:HG3	17:CR:2:PHE:CE1	2.44	0.53
16:CQ:62:ILE:HD12	16:CQ:76:TYR:CE1	2.43	0.53
21:CV:6:LYS:HD2	21:CV:60:GLU:O	2.08	0.53
21:CV:60:GLU:OE1	21:CV:66:SER:HB3	2.07	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1252:A:H2'	31:DA:1253:G:O4'	2.09	0.53
32:DB:185:ILE:HG23	32:DB:199:TYR:HB2	1.90	0.53
32:DB:75:LYS:HA	32:DB:78:GLN:HB2	1.90	0.53
33:DC:121:ALA:O	33:DC:124:ILE:HB	2.08	0.53
40:DJ:75:ILE:HG13	40:DJ:76:ASN:N	2.23	0.53
42:DL:46:LYS:CG	42:DL:47:PRO:HD3	2.32	0.53
1:CA:2169:A:C4	52:DW:56:C:OP1	2.61	0.53
28:A3:18:ARG:HH21	28:A3:44:ARG:HH11	1.57	0.53
1:AA:443:A:H1'	1:AA:1201:C:O4'	2.08	0.53
1:AA:212:G:O2'	1:AA:213:A:H5'	2.08	0.53
1:AA:38:A:H2'	1:AA:39:C:C6	2.43	0.53
3:AD:147:LEU:HD13	3:AD:155:LEU:HD11	1.91	0.53
8:AI:5:LEU:H	8:AI:5:LEU:CD2	2.14	0.53
24:AY:16:LEU:HB2	24:AY:20:GLU:HG2	1.90	0.53
37:BG:150:ALA:HA	41:BK:59:TYR:HB3	1.90	0.53
43:BM:89:GLY:O	43:BM:93:ARG:HD2	2.08	0.53
48:BR:73:ALA:HB3	48:BR:79:LEU:HD12	1.91	0.53
52:BW:8:U:H1'	52:BW:48:C:H1'	1.89	0.53
27:C2:4:HIS:CB	27:C2:5:PRO:CD	2.77	0.53
1:CA:1190:G:H5''	11:CL:35:HIS:CA	2.31	0.53
1:CA:1437:C:H2'	1:CA:1438:U:C6	2.44	0.53
1:CA:832:G:H21	11:CL:53:GLY:CA	2.22	0.53
33:DC:43:LEU:HD12	33:DC:55:VAL:HG21	1.90	0.53
33:DC:92:ALA:HB2	33:DC:99:VAL:HG13	1.90	0.53
43:DM:84:ILE:HG13	49:DS:74:PHE:HE1	1.74	0.53
44:DN:44:LEU:O	44:DN:48:ALA:HB2	2.08	0.53
30:A5:14:VAL:CG1	30:A5:22:VAL:HG13	2.39	0.53
1:AA:1323:U:H5'	18:AS:84:ARG:HH21	1.74	0.53
1:AA:1437:C:H2'	1:AA:1438:U:C6	2.44	0.53
1:AA:2349:G:OP2	30:A5:42:ARG:HD3	2.09	0.53
1:AA:286:C:H2'	1:AA:287:C:C6	2.43	0.53
1:AA:352:G:O2'	1:AA:353:G:C8	2.62	0.53
1:AA:363(F):U:O2'	1:AA:363(G):A:O5'	2.27	0.53
1:AA:1659:U:OP2	4:AE:132:HIS:CE1	2.60	0.53
11:AL:51:PHE:CE1	11:AL:59:LEU:HD13	2.44	0.53
17:AR:96:ILE:HD12	17:AR:96:ILE:N	2.24	0.53
1:AA:153:C:OP1	23:AX:92:LYS:HD2	2.09	0.53
31:BA:736:C:OP1	48:BR:68:LYS:HE2	2.08	0.53
34:BD:153:ARG:HH11	34:BD:181:MET:HE3	1.73	0.53
35:BE:80:ILE:HG22	38:BH:104:ARG:NH1	2.24	0.53
39:BI:88:TYR:O	39:BI:89:ASN:HB2	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:973:A:H5'	1:CA:1188:U:H1'	1.90	0.53
1:CA:2789:C:H5''	1:CA:2790:A:OP1	2.07	0.53
1:CA:322:A:C5	1:CA:340:A:C2	2.97	0.53
4:CE:101:ARG:HD3	4:CE:169:ASN:HD21	1.74	0.53
5:CF:65:TRP:CZ2	5:CF:75:HIS:HD2	2.26	0.53
21:CV:53:ILE:CD1	21:CV:99:TYR:HB2	2.38	0.53
24:CY:16:LEU:HB2	24:CY:20:GLU:HG2	1.90	0.53
31:DA:960:U:C5	31:DA:1225:A:C8	2.97	0.53
34:DD:150:GLU:H	34:DD:150:GLU:CD	2.11	0.53
35:DE:92:LYS:O	35:DE:119:LEU:HD12	2.08	0.53
45:DO:8:LYS:O	45:DO:12:ILE:HG13	2.08	0.53
47:DQ:14:LYS:N	47:DQ:14:LYS:HD2	2.23	0.53
48:DR:53:ARG:HE	48:DR:59:SER:C	2.12	0.53
28:A3:15:GLU:HG2	28:A3:16:CYS:N	2.23	0.53
1:AA:1358:G:O2'	1:AA:1359:A:H5''	2.08	0.53
4:AE:101:ARG:HD3	4:AE:169:ASN:HD21	1.74	0.53
7:AH:168:PRO:CG	7:AH:170:ARG:HD3	2.37	0.53
9:AJ:53:ILE:O	9:AJ:57:LEU:HD22	2.09	0.53
1:AA:390:A:C5	11:AL:71:VAL:HG21	2.44	0.53
14:AO:61:ASN:HB3	14:AO:64:GLU:HB2	1.91	0.53
16:AQ:102:GLU:HG3	17:AR:2:PHE:CE1	2.44	0.53
17:AR:99:ILE:N	17:AR:99:ILE:HD13	2.24	0.53
18:AS:15:ARG:NE	27:A2:20:ARG:NH1	2.57	0.53
31:BA:987:G:H2'	31:BA:988:G:C8	2.43	0.53
40:BJ:75:ILE:HG13	40:BJ:76:ASN:N	2.23	0.53
41:BK:29:ILE:HG22	41:BK:44:SER:HB3	1.90	0.53
42:BL:46:LYS:CG	42:BL:47:PRO:HD3	2.33	0.53
46:BP:75:ARG:NH1	46:BP:75:ARG:HG3	2.12	0.53
42:BL:10:VAL:HG11	47:BQ:36:ILE:HG21	1.91	0.53
48:BR:56:THR:HB	48:BR:58:LEU:HD13	1.91	0.53
52:BW:48:C:H2'	52:BW:59:A:H1'	1.90	0.53
1:CA:214:G:H1'	1:CA:216:A:O2'	2.08	0.53
1:CA:2271:G:H2'	1:CA:2272:U:C6	2.43	0.53
3:CD:174:ILE:HD12	3:CD:174:ILE:N	2.24	0.53
5:CF:150:GLY:HA2	5:CF:172:TRP:CD2	2.44	0.53
9:CJ:69:VAL:O	9:CJ:70:ALA:HB3	2.07	0.53
12:CM:80:GLU:HA	12:CM:80:GLU:OE2	2.09	0.53
16:CQ:61:TRP:CH2	16:CQ:94:ASN:HB2	2.44	0.53
19:CT:10:ALA:HB1	19:CT:11:PRO:HD2	1.90	0.53
23:CX:27:GLU:HG3	23:CX:33:LYS:CD	2.38	0.53
31:DA:1202:G:O2'	44:DN:27:CYS:HB2	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1379:G:N7	37:DG:2:ALA:HB3	2.24	0.53
31:DA:1427:U:H2'	31:DA:1428:A:H8	1.74	0.53
33:DC:14:ILE:HG13	33:DC:15:THR:H	1.74	0.53
33:DC:81:GLY:O	33:DC:85:ARG:HB2	2.09	0.53
37:DG:12:LEU:HD23	37:DG:12:LEU:N	2.24	0.53
49:DS:22:LEU:CD1	49:DS:27:GLU:HB2	2.38	0.53
30:A5:59:LYS:HB3	30:A5:59:LYS:HZ2	1.74	0.53
1:AA:1288:U:C2	1:AA:1327:C:O2	2.61	0.53
1:AA:2681:C:H5	1:AA:2725:A:N6	1.96	0.53
9:AJ:66:THR:HG22	9:AJ:68:ASN:ND2	2.23	0.53
11:AL:16:ARG:C	11:AL:16:ARG:HE	2.12	0.53
12:AM:9:TYR:CD2	12:AM:9:TYR:C	2.82	0.53
18:AS:68:ARG:O	18:AS:110:LYS:HB2	2.09	0.53
23:AX:10:LYS:O	23:AX:11:ARG:CB	2.56	0.53
23:AX:13:ILE:HG23	23:AX:62:VAL:CG2	2.38	0.53
31:BA:754:C:O2	31:BA:754:C:H3'	2.09	0.53
33:BC:36:ASP:HA	33:BC:39:ILE:HD12	1.91	0.53
48:BR:44:LEU:HD11	48:BR:50:ILE:HD13	1.90	0.53
1:CA:1543:A:H5'	1:CA:1544:C:OP2	2.08	0.53
1:CA:1615:C:O2'	1:CA:1616:A:H5'	2.07	0.53
1:CA:411:G:N2	11:CL:71:VAL:HG11	2.24	0.53
1:CA:881:G:C2	1:CA:882:G:H1'	2.43	0.53
6:CG:124:SER:HB2	6:CG:131:TYR:CE1	2.43	0.53
14:CO:25:ARG:HG2	14:CO:88:ASP:HB2	1.90	0.53
17:CR:96:ILE:HD12	17:CR:96:ILE:N	2.23	0.53
18:CS:29:LEU:HG	18:CS:33:ARG:HE	1.74	0.53
31:DA:273:A:N6	31:DA:274:A:N6	2.57	0.53
31:DA:81:G:H5''	31:DA:82:U:OP2	2.09	0.53
31:DA:811:C:H4'	31:DA:900:A:N6	2.24	0.53
32:DB:219:VAL:O	32:DB:223:ILE:HG13	2.08	0.53
39:DI:70:LYS:HD3	39:DI:70:LYS:H	1.73	0.53
1:AA:1278:A:H2'	1:AA:1279:G:C8	2.44	0.53
1:AA:2068:U:H3	1:AA:2430:A:H2	1.56	0.53
1:AA:214:G:H1'	1:AA:216:A:O2'	2.08	0.53
1:AA:2211:G:H3'	1:AA:2211:G:N3	2.24	0.53
1:AA:2439:A:OP1	54:AA:4001:BLS:H102	2.09	0.53
1:AA:2506:U:H3'	1:AA:2506:U:H6	1.74	0.53
1:AA:2730:C:O2'	1:AA:2731:G:H5'	2.09	0.53
1:AA:611:C:O2'	1:AA:612:G:H5'	2.09	0.53
4:AE:24:THR:CG2	4:AE:184:VAL:HG23	2.39	0.53
11:AL:45:LEU:HD23	11:AL:46:LYS:N	2.18	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:54:MET:CE	12:AM:64:ILE:HD12	2.38	0.53
14:AO:40:ILE:HG22	14:AO:47:THR:HA	1.91	0.53
23:AX:51:VAL:HG13	23:AX:58:ILE:CG2	2.39	0.53
31:BA:243:A:C2	31:BA:246:A:C8	2.96	0.53
33:BC:181:ASN:HD22	33:BC:204:LEU:HB2	1.74	0.53
33:BC:81:GLY:O	33:BC:85:ARG:HB2	2.09	0.53
35:BE:36:ASP:O	35:BE:37:ARG:HB2	2.09	0.53
39:BI:70:LYS:HD3	39:BI:70:LYS:H	1.74	0.53
43:BM:84:ILE:HG13	49:BS:74:PHE:HE1	1.73	0.53
1:CA:2285:C:C5	28:C3:27:LYS:HE3	2.44	0.53
1:CA:2695:C:H2'	1:CA:2696:U:C6	2.44	0.53
1:CA:2698:U:H2'	1:CA:2699:C:H6	1.73	0.53
1:CA:1790:C:O2'	3:CD:209:ALA:HB2	2.09	0.53
6:CG:173:LEU:HD13	6:CG:178:PHE:CE2	2.44	0.53
12:CM:10:ARG:HH11	12:CM:11:LYS:N	2.06	0.53
13:CN:53:HIS:HD2	13:CN:94:TYR:OH	1.91	0.53
14:CO:30:ARG:HA	14:CO:35:ILE:HA	1.90	0.53
40:DJ:58:ASP:C	40:DJ:60:ARG:H	2.11	0.53
42:DL:81:VAL:HG13	42:DL:104:TYR:HB3	1.90	0.53
50:DT:13:LEU:H	50:DT:13:LEU:HD13	1.74	0.53
1:AA:1022:G:C6	1:AA:1140:C:C4	2.97	0.52
1:AA:195:A:N7	1:AA:197:A:OP1	2.42	0.52
1:AA:2130:U:P	1:AA:2130:U:H3'	2.49	0.52
1:AA:1824:G:O3'	3:AD:249:PRO:HD3	2.09	0.52
6:AG:86:MET:SD	6:AG:87:PRO:HD3	2.49	0.52
12:AM:10:ARG:HH11	12:AM:11:LYS:N	2.07	0.52
12:AM:58:PHE:O	12:AM:58:PHE:CD1	2.58	0.52
16:AQ:92:ARG:HD2	16:AQ:95:LEU:H	1.75	0.52
17:AR:24:LYS:HA	17:AR:92:THR:HG23	1.91	0.52
21:AV:10:ARG:HG2	21:AV:11:GLU:N	2.24	0.52
21:AV:40:ASP:OD1	21:AV:42:VAL:HG12	2.10	0.52
31:BA:273:A:N6	31:BA:274:A:N6	2.57	0.52
31:BA:827:U:H5''	31:BA:828:A:OP2	2.09	0.52
34:BD:49:ARG:HA	34:BD:49:ARG:NH1	2.23	0.52
36:BF:91:VAL:HG11	48:BR:72:ARG:NH1	2.24	0.52
37:BG:46:ALA:O	37:BG:50:ILE:HG12	2.08	0.52
42:BL:44:PRO:HG3	42:BL:52:ARG:HG3	1.91	0.52
1:CA:1980:G:O2'	1:CA:1982:C:OP2	2.22	0.52
1:CA:2321:G:H5''	1:CA:2322:A:OP2	2.09	0.52
3:CD:172:TYR:HB3	3:CD:184:LYS:HB3	1.92	0.52
4:CE:130:GLY:O	4:CE:131:ALA:HB3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CG:11:TYR:HA	6:CG:15:VAL:HB	1.91	0.52
10:CK:97:ARG:N	10:CK:117:LEU:HD23	2.14	0.52
11:CL:57:THR:HB	11:CL:59:LEU:N	2.15	0.52
16:CQ:25:TRP:C	16:CQ:25:TRP:CD1	2.81	0.52
17:CR:99:ILE:HD13	17:CR:99:ILE:N	2.24	0.52
34:DD:5:ILE:CG2	34:DD:6:GLY:H	2.21	0.52
35:DE:36:ASP:O	35:DE:37:ARG:HB2	2.09	0.52
40:DJ:4:ILE:O	40:DJ:73:ASP:HA	2.08	0.52
41:DK:81:ASP:OD1	41:DK:106:LYS:HD2	2.09	0.52
52:DW:68:C:H2'	52:DW:69:C:H6	1.74	0.52
6:AG:109:VAL:HG22	26:A1:59:VAL:HG21	1.91	0.52
1:AA:1843:C:H5'	3:AD:253:GLN:OE1	2.09	0.52
1:AA:1916:A:H2'	1:AA:1917:U:O4'	2.09	0.52
1:AA:322:A:C5	1:AA:340:A:C2	2.96	0.52
2:AB:28:C:H2'	2:AB:29:A:C8	2.45	0.52
5:AF:148:LEU:HD11	5:AF:193:VAL:HG21	1.91	0.52
11:AL:122:PRO:O	11:AL:123:LEU:HB3	2.08	0.52
15:AP:106:SER:HA	15:AP:110:ILE:HB	1.90	0.52
16:AQ:25:TRP:CD1	16:AQ:25:TRP:C	2.82	0.52
21:AV:8:TYR:HB2	21:AV:38:TYR:CE2	2.44	0.52
1:AA:850:C:O2'	25:AZ:46:ASN:ND2	2.41	0.52
31:BA:1427:U:H2'	31:BA:1428:A:H8	1.73	0.52
40:BJ:6:ILE:HD12	40:BJ:23:ILE:HD12	1.91	0.52
31:BA:1225:A:H5'	43:BM:103:THR:OG1	2.09	0.52
52:BV:68:C:H2'	52:BV:69:C:H6	1.75	0.52
30:C5:14:VAL:CG1	30:C5:22:VAL:HG13	2.39	0.52
1:CA:1005:C:H2'	1:CA:1006:C:H6	1.75	0.52
1:CA:108:U:H2'	1:CA:109:G:H8	1.73	0.52
1:CA:1854:A:N6	1:CA:1888:G:H8	2.06	0.52
1:CA:2764:A:N6	1:CA:2766:G:C2	2.77	0.52
4:CE:38:THR:H	4:CE:42:ASP:HB2	1.74	0.52
1:CA:2311:A:H5'	6:CG:77:ILE:HD11	1.90	0.52
14:CO:40:ILE:HG22	14:CO:47:THR:HA	1.90	0.52
21:CV:40:ASP:OD1	21:CV:42:VAL:HG12	2.09	0.52
1:CA:850:C:O2'	25:CZ:46:ASN:ND2	2.41	0.52
31:DA:406:G:H2'	31:DA:407:G:H8	1.73	0.52
31:DA:1057:G:H4'	33:DC:197:GLY:N	2.24	0.52
40:DJ:6:ILE:HD12	40:DJ:23:ILE:HD12	1.91	0.52
45:DO:16:ALA:CB	45:DO:21:ASP:HB3	2.37	0.52
26:A1:38:ALA:HA	26:A1:55:PRO:HA	1.92	0.52
1:AA:57:C:H2'	1:AA:58:G:O4'	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1971:A:C2	3:AD:241:PRO:HD3	2.44	0.52
16:AQ:62:ILE:HD12	16:AQ:76:TYR:CE1	2.44	0.52
1:AA:498:G:H1'	20:AU:47:LYS:NZ	2.24	0.52
21:AV:53:ILE:CD1	21:AV:99:TYR:HB2	2.39	0.52
21:AV:70:LEU:HD12	21:AV:91:LEU:HD21	1.92	0.52
31:BA:1038:C:H2'	31:BA:1039:C:C6	2.44	0.52
31:BA:1182:G:H4'	31:BA:1183:A:C5'	2.38	0.52
31:BA:960:U:C5	31:BA:1225:A:C8	2.97	0.52
33:BC:40:ARG:O	33:BC:44:GLU:HG2	2.09	0.52
35:BE:102:ALA:HB1	35:BE:106:PRO:HG2	1.91	0.52
35:BE:80:ILE:HG22	38:BH:104:ARG:HH12	1.74	0.52
38:BH:73:ASP:C	38:BH:75:ARG:H	2.13	0.52
41:BK:20:TYR:O	41:BK:30:VAL:HA	2.10	0.52
42:BL:26:LEU:HD13	42:BL:27:LYS:N	2.24	0.52
27:C2:16:ARG:CG	27:C2:20:ARG:HE	2.22	0.52
1:CA:1641:A:H2'	1:CA:1642:G:O4'	2.09	0.52
1:CA:2114:A:N6	1:CA:2115:G:C2	2.77	0.52
1:CA:2730:C:O2'	1:CA:2731:G:H5'	2.07	0.52
1:CA:860:U:O4'	1:CA:860:U:O2	2.25	0.52
4:CE:57:LYS:CG	4:CE:58:ARG:H	2.17	0.52
7:CH:13:LYS:C	7:CH:13:LYS:HD3	2.30	0.52
8:CI:50:ARG:O	8:CI:54:GLN:HB2	2.10	0.52
9:CJ:66:THR:HG22	9:CJ:68:ASN:ND2	2.24	0.52
16:CQ:92:ARG:HD2	16:CQ:95:LEU:H	1.74	0.52
20:CU:81:LYS:NZ	20:CU:98:VAL:HB	2.23	0.52
21:CV:19:ARG:HH12	21:CV:84:GLU:CA	2.22	0.52
31:DA:1409:C:H2'	31:DA:1410:G:C8	2.44	0.52
40:DJ:91:PRO:HB3	40:DJ:94:VAL:HB	1.92	0.52
1:AA:973:A:H5'	1:AA:1188:U:H1'	1.90	0.52
1:AA:572:A:H5''	1:AA:573:G:OP2	2.09	0.52
2:AB:78:A:O3'	12:AM:21:THR:HG22	2.10	0.52
4:AE:11:MET:HB2	4:AE:23:VAL:O	2.10	0.52
5:AF:107:LYS:NZ	5:AF:205:ARG:HG3	2.23	0.52
12:AM:68:ILE:H	12:AM:68:ILE:HD13	1.73	0.52
16:AQ:61:TRP:CZ3	16:AQ:94:ASN:HB2	2.44	0.52
31:BA:1070:U:H2'	31:BA:1071:C:H6	1.74	0.52
32:BB:229:VAL:HG12	32:BB:230:VAL:N	2.25	0.52
31:BA:1057:G:H4'	33:BC:197:GLY:N	2.24	0.52
1:CA:886:C:N3	1:CA:890:A:N6	2.58	0.52
18:CS:72:LYS:HB3	18:CS:106:ILE:HD12	1.90	0.52
21:CV:8:TYR:HB2	21:CV:38:TYR:CE2	2.45	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1038:C:H2'	31:DA:1039:C:C6	2.45	0.52
31:DA:983:A:H1'	31:DA:1049:U:O2	2.09	0.52
31:DA:428:G:H4'	31:DA:429:U:O5'	2.10	0.52
31:DA:987:G:H2'	31:DA:988:G:C8	2.43	0.52
32:DB:24:TRP:CZ3	32:DB:29:ALA:HB2	2.43	0.52
34:DD:138:TYR:C	34:DD:138:TYR:CD1	2.83	0.52
34:DD:62:GLN:HE22	34:DD:65:ARG:NH1	2.07	0.52
35:DE:102:ALA:HB1	35:DE:106:PRO:HG2	1.92	0.52
36:DF:19:LEU:HD23	36:DF:19:LEU:O	2.09	0.52
36:DF:91:VAL:HG11	48:DR:72:ARG:NH1	2.25	0.52
39:DI:88:TYR:O	39:DI:89:ASN:HB2	2.09	0.52
47:DQ:7:THR:CG2	47:DQ:58:GLU:HG2	2.31	0.52
1:AA:1210:A:C8	1:AA:1210:A:H5'	2.33	0.52
1:AA:162:U:H2'	1:AA:163:U:C6	2.43	0.52
1:AA:363(F):U:O2'	1:AA:363(G):A:O4'	2.27	0.52
54:AA:4001:BLS:H102	54:AA:4001:BLS:N15	2.25	0.52
1:AA:466:A:N3	1:AA:683:C:H1'	2.24	0.52
3:AD:58:HIS:O	3:AD:59:LYS:O	2.28	0.52
4:AE:117:MET:HE1	4:AE:124:GLY:HA3	1.91	0.52
5:AF:150:GLY:HA2	5:AF:172:TRP:CD2	2.44	0.52
12:AM:70:PRO:HA	12:AM:95:ALA:HB2	1.90	0.52
20:AU:81:LYS:NZ	20:AU:98:VAL:HB	2.24	0.52
31:BA:430:A:OP1	34:BD:9:CYS:HB2	2.09	0.52
31:BA:554:C:H2'	31:BA:555:C:C6	2.44	0.52
34:BD:152:SER:HB3	34:BD:158:ILE:CD1	2.40	0.52
42:BL:89:VAL:HG12	42:BL:92:LEU:H	1.75	0.52
44:BN:12:ARG:HG2	44:BN:14:PRO:HD3	1.92	0.52
45:BO:15:PHE:CZ	45:BO:85:LEU:HD21	2.44	0.52
1:CA:1126:A:H4'	1:CA:1127:A:O5'	2.09	0.52
1:CA:1203:G:C6	1:CA:1204:A:N6	2.78	0.52
1:CA:2563:U:H2'	1:CA:2565:A:OP2	2.09	0.52
1:CA:1843:C:H5'	3:CD:253:GLN:OE1	2.09	0.52
5:CF:101:LEU:HD12	5:CF:102:PRO:HD2	1.91	0.52
8:CI:4:ILE:HG12	8:CI:4:ILE:O	2.08	0.52
12:CM:89:ASN:O	12:CM:92:GLY:N	2.43	0.52
14:CO:61:ASN:HB3	14:CO:64:GLU:HB2	1.92	0.52
21:CV:29:TYR:HB3	21:CV:34:ASN:HB2	1.90	0.52
23:CX:13:ILE:HG23	23:CX:62:VAL:CG2	2.38	0.52
24:CY:43:GLN:O	24:CY:44:LEU:HG	2.10	0.52
31:DA:1070:U:H2'	31:DA:1071:C:H6	1.74	0.52
34:DD:140:VAL:HG11	34:DD:146:ILE:HD11	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:166:LYS:C	34:DD:166:LYS:HD2	2.29	0.52
38:DH:11:THR:HA	38:DH:14:ARG:NH1	2.24	0.52
39:DI:73:GLN:O	39:DI:77:ILE:HG12	2.09	0.52
42:DL:89:VAL:HG12	42:DL:92:LEU:H	1.75	0.52
45:DO:25:THR:HG21	45:DO:70:LEU:HB2	1.91	0.52
36:DF:60:PHE:CE2	48:DR:78:LEU:HD21	2.44	0.52
49:DS:11:VAL:HG23	49:DS:38:SER:OG	2.10	0.52
52:DW:50:U:H3	52:DW:64:G:H1	1.58	0.52
1:AA:1544:C:OP1	1:AA:1544:C:C6	2.62	0.52
1:AA:2307:G:N7	1:AA:2308:G:C5	2.78	0.52
1:AA:273(B):G:C2	1:AA:364:C:N3	2.77	0.52
1:AA:498:G:O2'	20:AU:47:LYS:HD3	2.09	0.52
1:AA:773:U:C5'	3:AD:47:GLY:HA3	2.38	0.52
1:AA:2784:C:H1'	4:AE:37:ARG:HH12	1.75	0.52
7:AH:13:LYS:HD3	7:AH:13:LYS:C	2.30	0.52
8:AI:50:ARG:O	8:AI:54:GLN:HB2	2.10	0.52
10:AK:102:VAL:HB	10:AK:106:LEU:HD12	1.92	0.52
11:AL:124:LYS:HA	11:AL:143:GLY:O	2.10	0.52
11:AL:23:PRO:O	11:AL:33:ARG:HD2	2.10	0.52
13:AN:53:HIS:HD2	13:AN:94:TYR:OH	1.92	0.52
21:AV:6:LYS:HD2	21:AV:60:GLU:O	2.08	0.52
23:AX:57:GLU:O	23:AX:58:ILE:HB	2.09	0.52
31:BA:66:G:H4'	31:BA:173:U:C5	2.45	0.52
31:BA:197:A:N6	31:BA:221:C:H5'	2.24	0.52
38:BH:64:LYS:CG	38:BH:79:VAL:HG21	2.39	0.52
40:BJ:58:ASP:C	40:BJ:60:ARG:H	2.12	0.52
44:BN:26:ARG:NH2	44:BN:43:CYS:HB2	2.25	0.52
1:CA:1252:G:C2	1:CA:1253:A:C2	2.98	0.52
1:CA:1544:C:OP1	1:CA:1544:C:C6	2.63	0.52
1:CA:528:A:C2	1:CA:2043:C:C5'	2.93	0.52
1:CA:2128:C:H2'	1:CA:2129:C:N1	2.24	0.52
1:CA:947:G:H2'	1:CA:948:G:H8	1.75	0.52
1:CA:2787:C:H1'	4:CE:62:PRO:HG3	1.91	0.52
8:CI:101:LEU:HD22	8:CI:109:ILE:HD12	1.90	0.52
16:CQ:95:LEU:HD12	17:CR:11:GLN:HE21	1.75	0.52
18:CS:15:ARG:NE	27:C2:20:ARG:NH1	2.58	0.52
31:DA:1195:C:H5''	31:DA:1196:U:OP2	2.10	0.52
31:DA:386:C:C2'	31:DA:387:U:H5'	2.40	0.52
31:DA:639:G:H2'	31:DA:640:A:H8	1.75	0.52
33:DC:28:GLN:O	33:DC:32:LEU:HG	2.10	0.52
35:DE:10:MET:CB	35:DE:32:VAL:HG22	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DK:44:SER:O	41:DK:48:ILE:HG12	2.09	0.52
52:DV:58:A:H2	52:DV:60:U:HO2'	1.57	0.52
26:A1:48:ILE:HG22	26:A1:49:GLU:N	2.25	0.52
1:AA:1024:G:OP2	1:AA:1025:G:H3'	2.10	0.52
1:AA:2128:C:H2'	1:AA:2129:C:N1	2.25	0.52
1:AA:2068:U:N3	1:AA:2430:A:H2	2.07	0.52
1:AA:826:U:H2'	1:AA:828:U:O4'	2.10	0.52
1:AA:784:A:N7	3:AD:229:VAL:HG21	2.24	0.52
9:AJ:66:THR:HG22	9:AJ:68:ASN:HD22	1.74	0.52
15:AP:92:GLY:HA2	15:AP:116:ALA:HA	1.91	0.52
19:AT:63:LYS:HD2	19:AT:72:LYS:HG2	1.91	0.52
31:BA:976:G:H8	31:BA:1358:U:H2'	1.71	0.52
35:BE:11:ILE:HD12	35:BE:11:ILE:N	2.25	0.52
41:BK:29:ILE:HG22	41:BK:44:SER:HB2	1.91	0.52
44:BN:26:ARG:HH21	44:BN:43:CYS:CB	2.22	0.52
47:BQ:43:LEU:HB3	47:BQ:69:LYS:HG2	1.91	0.52
1:CA:2427:C:H5''	1:CA:2428:G:OP1	2.10	0.52
1:CA:2472:G:H3'	1:CA:2473:U:H5''	1.92	0.52
1:CA:61:G:H5'	24:CY:50:ILE:CD1	2.39	0.52
6:CG:111:LEU:HB3	6:CG:117:PHE:HE2	1.75	0.52
6:CG:86:MET:SD	6:CG:87:PRO:HD3	2.50	0.52
18:CS:9:TYR:H	18:CS:102:HIS:CD2	2.27	0.52
23:CX:10:LYS:O	23:CX:11:ARG:CB	2.56	0.52
33:DC:181:ASN:HD22	33:DC:204:LEU:HB2	1.74	0.52
33:DC:36:ASP:HA	33:DC:39:ILE:HD12	1.91	0.52
34:DD:70:ILE:HD11	34:DD:100:ARG:HH12	1.73	0.52
34:DD:150:GLU:HA	34:DD:153:ARG:NH2	2.25	0.52
46:DP:75:ARG:CG	46:DP:75:ARG:NH1	2.71	0.52
1:AA:1529:A:H62	1:AA:1542:G:H22	1.55	0.52
1:AA:2134:A:O2'	1:AA:2159:G:H1'	2.10	0.52
1:AA:2392:A:H2	1:AA:2424:C:N4	2.07	0.52
1:AA:747:U:O2	1:AA:2014:A:H1'	2.10	0.52
8:AI:31:LEU:HB2	8:AI:32:PRO:HD3	1.92	0.52
12:AM:80:GLU:HA	12:AM:80:GLU:OE2	2.09	0.52
13:AN:79:LEU:HD22	13:AN:83:ILE:HB	1.92	0.52
31:BA:1252:A:H2'	31:BA:1253:G:O4'	2.09	0.52
31:BA:116:A:H61	31:BA:313:A:H1'	1.75	0.52
31:BA:973:G:H3'	31:BA:974:A:H5''	1.92	0.52
32:BB:74:LYS:HZ2	32:BB:74:LYS:CB	2.23	0.52
37:BG:65:ALA:HB1	37:BG:127:ALA:HB3	1.92	0.52
31:BA:878:G:OP1	38:BH:90:GLY:HA3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BH:98:LYS:HB2	38:BH:99:GLU:OE2	2.10	0.52
42:BL:91:ASP:O	42:BL:93:PRO:HD3	2.10	0.52
1:CA:330:A:C2	1:CA:1210:A:H2'	2.37	0.52
1:CA:1288:U:C2	1:CA:1327:C:O2	2.62	0.52
1:CA:1385:G:H4'	1:CA:1386:C:OP1	2.10	0.52
1:CA:2017:U:O2	27:C2:10:LYS:HB2	2.10	0.52
1:CA:2882:A:H5'	13:CN:96:ARG:HG3	1.91	0.52
11:CL:91:PHE:CD1	11:CL:91:PHE:N	2.70	0.52
13:CN:22:ARG:O	13:CN:26:LYS:HG3	2.09	0.52
31:DA:1279:A:H62	33:DC:26:LYS:HE2	1.75	0.52
31:DA:191(F):U:O2	50:DT:105:SER:HB2	2.10	0.52
31:DA:564:C:C5	47:DQ:31:LEU:HD11	2.45	0.52
43:DM:89:GLY:O	43:DM:93:ARG:HD2	2.09	0.52
45:DO:15:PHE:CZ	45:DO:85:LEU:HD21	2.45	0.52
45:DO:47:LYS:H	45:DO:47:LYS:HD2	1.73	0.52
49:DS:6:LYS:HG2	49:DS:7:LYS:HD3	1.91	0.52
26:A1:60:GLU:CD	26:A1:60:GLU:H	2.14	0.52
26:A1:60:GLU:HB2	43:BM:57:ARG:HD2	1.91	0.52
28:A3:18:ARG:HG2	28:A3:19:ARG:H	1.74	0.52
1:AA:1434:A:H61	1:AA:1558:A:H62	1.57	0.52
1:AA:926:A:H2'	1:AA:928:G:H8	1.75	0.52
5:AF:65:TRP:CZ2	5:AF:75:HIS:HD2	2.27	0.52
9:AJ:149:PRO:O	9:AJ:150:ASP:HB2	2.10	0.52
15:AP:88:ILE:HG13	15:AP:88:ILE:O	2.10	0.52
18:AS:72:LYS:HB3	18:AS:106:ILE:HD12	1.92	0.52
21:AV:63:ASP:HB3	21:AV:65:GLN:HG3	1.92	0.52
31:BA:1131:G:H2'	31:BA:1132:C:C6	2.45	0.52
31:BA:1391:U:H2'	31:BA:1392:G:C8	2.45	0.52
31:BA:1499:A:H1'	31:BA:1520:G:H5'	1.91	0.52
31:BA:191(F):U:O2	50:BT:105:SER:HB2	2.10	0.52
33:BC:92:ALA:HB2	33:BC:99:VAL:HG13	1.91	0.52
34:BD:134:ASP:O	34:BD:136:PRO:HD3	2.10	0.52
36:BF:60:PHE:CE2	48:BR:78:LEU:HD21	2.44	0.52
38:BH:20:TYR:HD1	38:BH:65:TYR:CD2	2.27	0.52
29:C4:19:ARG:CG	29:C4:19:ARG:NH1	2.65	0.52
1:CA:2068:U:N3	1:CA:2430:A:H2	2.08	0.52
1:CA:2506:U:H3'	1:CA:2506:U:H6	1.75	0.52
1:CA:773:U:C5'	3:CD:47:GLY:HA3	2.38	0.52
2:CB:28:C:H2'	2:CB:29:A:C8	2.45	0.52
6:CG:109:VAL:HG22	26:C1:59:VAL:HG21	1.91	0.52
11:CL:41:ARG:HH22	11:CL:45:LEU:HD12	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CM:78:PRO:O	12:CM:79:LEU:HB2	2.10	0.52
12:CM:9:TYR:C	12:CM:9:TYR:CD2	2.83	0.52
24:CY:24:LEU:HD13	24:CY:60:LEU:HD21	1.92	0.52
31:DA:1131:G:H2'	31:DA:1132:C:C6	2.45	0.52
34:DD:112:VAL:HG12	34:DD:116:GLN:OE1	2.10	0.52
34:DD:153:ARG:HH11	34:DD:181:MET:HE2	1.75	0.52
36:DF:50:TYR:CE1	48:DR:74:ARG:O	2.62	0.52
36:DF:83:ASP:OD1	36:DF:83:ASP:N	2.40	0.52
40:DJ:12:ASP:OD1	40:DJ:15:THR:HG23	2.10	0.52
28:A3:33:LYS:HB2	28:A3:34:LEU:HD13	1.91	0.52
29:A4:19:ARG:NH1	29:A4:19:ARG:HG3	2.08	0.52
30:A5:21:LYS:HA	30:A5:54:GLU:OE2	2.10	0.52
1:AA:2882:A:H5'	13:AN:96:ARG:HG3	1.90	0.52
3:AD:70:TRP:CZ2	3:AD:150:LYS:HA	2.44	0.52
4:AE:10:GLY:O	4:AE:25:VAL:HG23	2.09	0.52
21:AV:29:TYR:HB3	21:AV:34:ASN:HB2	1.91	0.52
24:AY:43:GLN:O	24:AY:44:LEU:HG	2.10	0.52
31:BA:1066:C:H5'	31:BA:1067:A:OP2	2.10	0.52
31:BA:892:A:O2'	31:BA:1415:G:H4'	2.09	0.52
31:BA:1422:G:H2'	31:BA:1423:G:H8	1.75	0.52
31:BA:44:G:OP2	46:BP:12:LYS:HE3	2.10	0.52
31:BA:523:A:H61	42:BL:91:ASP:HB2	1.75	0.52
31:BA:820:U:H4'	31:BA:821:G:OP2	2.10	0.52
33:BC:16:ARG:HB2	33:BC:16:ARG:NH1	2.24	0.52
33:BC:191:THR:HG22	33:BC:192:THR:H	1.74	0.52
34:BD:88:VAL:HG12	34:BD:91:SER:H	1.75	0.52
38:BH:89:PRO:HA	38:BH:92:ARG:NH1	2.24	0.52
52:BW:50:U:H3	52:BW:64:G:H1	1.57	0.52
1:CA:1024:G:OP2	1:CA:1025:G:H3'	2.10	0.52
1:CA:1049:C:C5	1:CA:1050:A:N7	2.78	0.52
1:CA:2211:G:N3	1:CA:2211:G:H3'	2.25	0.52
1:CA:2892:A:N7	1:CA:2893:G:C4	2.78	0.52
1:CA:57:C:H2'	1:CA:58:G:O4'	2.10	0.52
1:CA:926:A:H2'	1:CA:928:G:H8	1.75	0.52
1:CA:1971:A:C2	3:CD:241:PRO:HD3	2.45	0.52
17:CR:35:LEU:HB2	17:CR:57:VAL:CG1	2.40	0.52
19:CT:59:VAL:HG23	19:CT:59:VAL:O	2.10	0.52
31:DA:1057:G:C4	31:DA:1204:A:C2	2.97	0.52
31:DA:66:G:H4'	31:DA:173:U:C5	2.45	0.52
31:DA:192:U:H2'	31:DA:193:C:C6	2.44	0.52
31:DA:372:C:H4'	31:DA:373:A:OP1	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DE:79:GLU:HB3	35:DE:92:LYS:HA	1.91	0.52
38:DH:64:LYS:CG	38:DH:79:VAL:HG21	2.39	0.52
46:DP:20:VAL:HG21	46:DP:32:TYR:CB	2.40	0.52
27:A2:16:ARG:CG	27:A2:20:ARG:HE	2.23	0.51
1:AA:747:U:C4	27:A2:2:ALA:N	2.78	0.51
29:A4:5:TRP:NE1	29:A4:7:PRO:HG3	2.26	0.51
1:AA:405:U:H3'	1:AA:406:G:H5'	1.92	0.51
11:AL:49:ARG:O	11:AL:50:ARG:HB3	2.09	0.51
1:AA:2415:G:O3'	11:AL:66:GLY:HA3	2.10	0.51
15:AP:65:LYS:HE3	15:AP:67:SER:HB2	1.91	0.51
31:BA:1010:G:H2'	31:BA:1011:G:C8	2.45	0.51
31:BA:1004:A:N6	31:BA:1025:U:H4'	2.24	0.51
31:BA:983:A:H1'	31:BA:1049:U:O2	2.09	0.51
31:BA:838:G:N2	31:BA:849:C:C2	2.78	0.51
31:BA:977:A:H2'	31:BA:978:A:H5''	1.92	0.51
32:BB:71:VAL:HG12	32:BB:93:VAL:O	2.11	0.51
34:BD:206:PHE:HD2	34:BD:207:TYR:CD2	2.27	0.51
36:BF:50:TYR:CE2	36:BF:52:ILE:HG22	2.45	0.51
38:BH:42:GLU:HG3	38:BH:109:ILE:HD12	1.92	0.51
31:BA:691:G:C6	41:BK:52:GLY:HA2	2.46	0.51
52:BV:74:C:C5'	52:BV:75:C:H5''	2.30	0.51
54:AA:4001:BLS:H2'	52:BV:76:A:N3	2.25	0.51
1:CA:1019:U:H2'	1:CA:1021:A:C2	2.45	0.51
1:CA:1022:G:C6	1:CA:1140:C:C4	2.98	0.51
1:CA:2476:A:H2'	1:CA:2477:C:H5''	1.91	0.51
1:CA:301:G:H4'	1:CA:301:G:OP1	2.10	0.51
1:CA:616:A:H4'	1:CA:617:G:OP1	2.10	0.51
3:CD:145:VAL:HG12	3:CD:146:GLU:O	2.10	0.51
4:CE:31:CYS:HB3	4:CE:49:LEU:HD12	1.92	0.51
11:CL:114:ILE:HD13	11:CL:130:PHE:CE1	2.44	0.51
11:CL:14:LYS:O	11:CL:15:ARG:HB2	2.10	0.51
11:CL:61:ARG:HA	11:CL:62:LEU:HD13	1.92	0.51
21:CV:163:LEU:HD23	21:CV:163:LEU:H	1.75	0.51
31:DA:820:U:H4'	31:DA:821:G:OP2	2.10	0.51
31:DA:977:A:H2'	31:DA:978:A:H5''	1.92	0.51
39:DI:46:ALA:HB2	39:DI:74:ILE:CG2	2.39	0.51
31:DA:523:A:H61	42:DL:91:ASP:HB2	1.75	0.51
1:AA:1005:C:H2'	1:AA:1006:C:H6	1.75	0.51
1:AA:1903:G:OP2	3:AD:241:PRO:HB2	2.10	0.51
1:AA:2321:G:H5''	1:AA:2322:A:OP2	2.11	0.51
1:AA:2330:G:H2'	1:AA:2331:G:O4'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2427:C:H5''	1:AA:2428:G:OP1	2.10	0.51
1:AA:2787:C:H1'	4:AE:62:PRO:HG3	1.91	0.51
1:AA:426:C:H2'	1:AA:427:U:H6	1.75	0.51
8:AI:129:THR:HA	8:AI:138:ILE:O	2.10	0.51
11:AL:61:ARG:HD2	30:A5:13:ARG:HD2	1.92	0.51
13:AN:88:ARG:HA	13:AN:88:ARG:HH21	1.75	0.51
16:AQ:95:LEU:O	16:AQ:98:LEU:HG	2.11	0.51
21:AV:163:LEU:HD23	21:AV:163:LEU:H	1.75	0.51
31:BA:1009:G:H2'	31:BA:1010:G:H8	1.75	0.51
31:BA:192:U:H2'	31:BA:193:C:C6	2.45	0.51
31:BA:300:A:H1'	31:BA:565:U:O2	2.10	0.51
31:BA:564:C:C5	47:BQ:31:LEU:HD11	2.46	0.51
31:BA:983:A:H5'	31:BA:984:C:OP2	2.10	0.51
32:BB:200:ILE:H	32:BB:200:ILE:HD12	1.74	0.51
32:BB:69:LEU:HD22	32:BB:91:PRO:HB2	1.92	0.51
45:BO:54:ARG:CZ	45:BO:58:MET:HE3	2.41	0.51
48:BR:70:ILE:O	48:BR:74:ARG:HG3	2.11	0.51
1:CA:1754:C:OP1	15:CP:96:ARG:NH1	2.39	0.51
1:CA:1916:A:H2'	1:CA:1917:U:O4'	2.10	0.51
1:CA:1996:C:H4'	1:CA:1997:G:OP1	2.10	0.51
1:CA:2015:A:N3	27:C2:2:ALA:N	2.58	0.51
1:CA:2392:A:H2	1:CA:2424:C:N4	2.08	0.51
1:CA:655:A:C2'	1:CA:656:G:H5'	2.39	0.51
7:CH:16:SER:HB2	7:CH:27:LYS:HB2	1.92	0.51
1:CA:390:A:C5	11:CL:71:VAL:HG21	2.45	0.51
13:CN:38:VAL:HB	13:CN:39:PRO:HD3	1.91	0.51
20:CU:77:PRO:O	20:CU:78:ALA:HB2	2.09	0.51
31:DA:1009:G:H2'	31:DA:1010:G:H8	1.75	0.51
15:CP:108:ARG:HH22	31:DA:1465:C:P	2.33	0.51
42:DL:26:LEU:HD13	42:DL:27:LYS:N	2.24	0.51
1:AA:2015:A:N3	27:A2:2:ALA:N	2.57	0.51
1:AA:1278:A:H2'	1:AA:1279:G:H8	1.75	0.51
1:AA:2163:C:H2'	1:AA:2163:C:O2	2.09	0.51
1:AA:2311:A:N3	6:AG:82:LEU:HD11	2.25	0.51
1:AA:2476:A:H2'	1:AA:2477:C:H5''	1.92	0.51
4:AE:117:MET:O	4:AE:121:ASN:HA	2.09	0.51
7:AH:40:GLU:C	7:AH:41:MET:HG2	2.30	0.51
8:AI:31:LEU:HD11	8:AI:38:LEU:HD22	1.92	0.51
10:AK:112:MET:O	10:AK:115:VAL:HG22	2.10	0.51
11:AL:59:LEU:CA	11:AL:61:ARG:NE	2.69	0.51
21:AV:19:ARG:HH12	21:AV:84:GLU:CA	2.23	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AV:17:ALA:HA	21:AV:20:ARG:HD3	1.92	0.51
31:BA:937:A:H1'	31:BA:1379:G:N2	2.26	0.51
33:BC:120:VAL:O	33:BC:124:ILE:HG12	2.10	0.51
46:BP:43:LYS:HA	46:BP:48:TRP:HB2	1.92	0.51
31:BA:186(A):C:H5'	50:BT:78:ALA:HB1	1.92	0.51
26:C1:48:ILE:HG22	26:C1:49:GLU:N	2.25	0.51
1:CA:1488:G:C5	1:CA:1489:U:C5	2.99	0.51
1:CA:1587:A:H2'	1:CA:1588:C:H6	1.74	0.51
1:CA:2134:A:O2'	1:CA:2159:G:H1'	2.10	0.51
1:CA:2330:G:H2'	1:CA:2331:G:O4'	2.10	0.51
1:CA:675:A:N6	1:CA:676:A:N6	2.59	0.51
1:CA:1658:C:OP1	4:CE:132:HIS:O	2.29	0.51
4:CE:192:ASN:HD22	4:CE:192:ASN:H	1.59	0.51
5:CF:67:GLN:CG	5:CF:67:GLN:O	2.54	0.51
1:CA:17:G:H4'	16:CQ:25:TRP:CZ3	2.46	0.51
16:CQ:61:TRP:CZ3	16:CQ:94:ASN:HB2	2.46	0.51
17:CR:20:LEU:HG	17:CR:22:VAL:HG23	1.92	0.51
23:CX:27:GLU:HB3	23:CX:33:LYS:HG3	1.91	0.51
23:CX:51:VAL:O	23:CX:58:ILE:HG22	2.10	0.51
31:DA:1072:G:N2	32:DB:107:THR:HG21	2.25	0.51
31:DA:353:A:C2'	31:DA:354:G:OP2	2.58	0.51
33:DC:150:LYS:HB3	33:DC:201:TYR:HB2	1.91	0.51
34:DD:153:ARG:HG3	34:DD:181:MET:CE	2.41	0.51
35:DE:11:ILE:HD11	35:DE:33:VAL:HG23	1.93	0.51
36:DF:53:ALA:O	36:DF:54:LYS:HB2	2.10	0.51
42:DL:91:ASP:O	42:DL:93:PRO:HD3	2.11	0.51
47:DQ:43:LEU:HB3	47:DQ:69:LYS:HG2	1.91	0.51
1:AA:1019:U:O2'	1:AA:1021:A:H2	1.92	0.51
1:AA:1190:G:H5''	11:AL:35:HIS:CA	2.31	0.51
1:AA:2285:C:C5	28:A3:27:LYS:HE3	2.46	0.51
1:AA:498:G:H1'	20:AU:47:LYS:HZ2	1.74	0.51
1:AA:733:G:C8	1:AA:761:A:N6	2.79	0.51
2:AB:66:A:N6	2:AB:107:U:H2'	2.26	0.51
4:AE:38:THR:H	4:AE:42:ASP:HB2	1.75	0.51
4:AE:4:ILE:HD13	4:AE:28:ALA:HB1	1.91	0.51
5:AF:140:LEU:HD21	5:AF:170:LEU:HD21	1.92	0.51
7:AH:136:ILE:HD12	7:AH:136:ILE:N	2.25	0.51
8:AI:56:LYS:HB3	8:AI:56:LYS:NZ	2.24	0.51
8:AI:67:ARG:HE	8:AI:67:ARG:HA	1.75	0.51
18:AS:12:ILE:HD13	18:AS:17:VAL:HG12	1.93	0.51
23:AX:69:LYS:O	23:AX:73:LEU:HB2	2.09	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1015:A:H2'	31:BA:1016:A:C8	2.45	0.51
31:BA:1079:G:O3'	35:BE:14:ARG:NH2	2.44	0.51
31:BA:1195:C:H5''	31:BA:1196:U:OP2	2.10	0.51
31:BA:1285:A:H8	31:BA:1285:A:OP1	1.93	0.51
31:BA:1478:C:H2'	31:BA:1479:C:H6	1.75	0.51
31:BA:149:A:O2'	31:BA:150:C:H5'	2.10	0.51
31:BA:324:G:N2	31:BA:327:A:C8	2.79	0.51
31:BA:617:G:H5'	46:BP:45:THR:HG22	1.92	0.51
31:BA:1379:G:N7	37:BG:2:ALA:HB3	2.25	0.51
40:BJ:6:ILE:CD1	40:BJ:72:VAL:HB	2.40	0.51
31:BA:1221:G:OP1	49:BS:36:ARG:HD3	2.10	0.51
26:C1:60:GLU:CD	26:C1:60:GLU:H	2.13	0.51
11:CL:61:ARG:HD2	30:C5:13:ARG:HD2	1.92	0.51
1:CA:1023:U:H2'	1:CA:1024:G:H5'	1.92	0.51
1:CA:2349:G:OP2	30:C5:42:ARG:HD3	2.10	0.51
1:CA:2630:G:H2'	1:CA:2631:G:H8	1.76	0.51
1:CA:806:C:P	11:CL:39:LYS:HG3	2.49	0.51
4:CE:203:LYS:O	4:CE:203:LYS:HD2	2.10	0.51
7:CH:136:ILE:N	7:CH:136:ILE:HD12	2.25	0.51
8:CI:31:LEU:HD11	8:CI:38:LEU:HD22	1.93	0.51
9:CJ:68:ASN:N	9:CJ:68:ASN:HD22	2.02	0.51
15:CP:92:GLY:HA2	15:CP:116:ALA:HA	1.92	0.51
1:CA:483:A:H4'	20:CU:49:VAL:HG22	1.92	0.51
31:DA:678:U:H2'	31:DA:679:C:C6	2.45	0.51
32:DB:15:VAL:HG23	32:DB:16:HIS:CE1	2.46	0.51
32:DB:229:VAL:HG12	32:DB:230:VAL:N	2.24	0.51
33:DC:68:VAL:HG12	33:DC:70:VAL:HG23	1.93	0.51
34:DD:201:GLN:O	34:DD:205:GLU:HG3	2.10	0.51
33:DC:131:ARG:HD2	35:DE:50:GLU:OE2	2.10	0.51
37:DG:151:TYR:HE2	41:DK:54:ARG:NH2	1.96	0.51
39:DI:111:ARG:HH12	39:DI:113:LYS:HA	1.75	0.51
39:DI:14:VAL:O	39:DI:65:VAL:HG23	2.10	0.51
41:DK:33:THR:HA	41:DK:40:ILE:HG12	1.93	0.51
41:DK:29:ILE:HG22	41:DK:44:SER:HB2	1.93	0.51
52:DV:21:A:C2	52:DV:46:G:C2	2.99	0.51
52:DV:19:G:C2	52:DV:57:A:C2	2.97	0.51
1:AA:1858:G:O2'	1:AA:1859:A:H8	1.93	0.51
1:AA:2892:A:N7	1:AA:2893:G:C4	2.79	0.51
5:AF:129:PHE:O	5:AF:132:VAL:HG13	2.11	0.51
13:AN:115:GLU:HG2	13:AN:116:LEU:N	2.24	0.51
14:AO:33:LYS:O	14:AO:54:LEU:HG	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AS:29:LEU:HD22	18:AS:69:LEU:HD11	1.91	0.51
23:AX:73:LEU:HD21	23:AX:94:LEU:O	2.11	0.51
24:AY:24:LEU:HD13	24:AY:60:LEU:HD21	1.92	0.51
31:BA:115:G:H1'	31:BA:116:A:OP2	2.11	0.51
38:BH:88:LYS:HB3	38:BH:89:PRO:HD2	1.92	0.51
39:BI:14:VAL:O	39:BI:65:VAL:HG23	2.10	0.51
50:BT:13:LEU:HD13	50:BT:13:LEU:H	1.75	0.51
52:BV:19:G:C2	52:BV:57:A:C2	2.98	0.51
1:CA:1952:A:C6	1:CA:1953:A:N1	2.78	0.51
1:CA:2163:C:H2'	1:CA:2163:C:O2	2.09	0.51
1:CA:611:C:C2'	1:CA:612:G:H5'	2.41	0.51
1:CA:2823:A:OP1	4:CE:113:PHE:HB2	2.11	0.51
6:CG:16:ARG:NH1	6:CG:31:VAL:HG11	2.24	0.51
8:CI:31:LEU:HB2	8:CI:32:PRO:HD3	1.92	0.51
9:CJ:149:PRO:O	9:CJ:150:ASP:HB2	2.10	0.51
11:CL:124:LYS:HA	11:CL:143:GLY:O	2.11	0.51
12:CM:81:VAL:O	12:CM:82:ARG:HG2	2.10	0.51
21:CV:10:ARG:HG2	21:CV:11:GLU:N	2.24	0.51
21:CV:70:LEU:HD12	21:CV:91:LEU:HD21	1.93	0.51
31:DA:1321:C:H5	31:DA:1322:C:HO2'	1.59	0.51
31:DA:937:A:H1'	31:DA:1379:G:N2	2.26	0.51
31:DA:892:A:O2'	31:DA:1415:G:H4'	2.10	0.51
32:DB:200:ILE:H	32:DB:200:ILE:HD12	1.75	0.51
34:DD:102:ASP:OD2	34:DD:102:ASP:N	2.33	0.51
34:DD:118:ARG:O	34:DD:122:ARG:HB2	2.11	0.51
34:DD:59:ARG:NE	34:DD:59:ARG:HA	2.26	0.51
35:DE:145:LYS:O	35:DE:149:GLU:HG2	2.10	0.51
40:DJ:6:ILE:CD1	40:DJ:72:VAL:HB	2.40	0.51
29:A4:8:ASN:HD21	29:A4:10:ARG:HB3	1.74	0.51
1:AA:1153:C:O2'	1:AA:1154:G:H5'	2.10	0.51
1:AA:274:G:H4'	1:AA:275:G:OP2	2.10	0.51
3:AD:145:VAL:HB	3:AD:155:LEU:HB2	1.92	0.51
6:AG:163:ALA:HB3	6:AG:169:ALA:HB2	1.92	0.51
1:AA:807:U:OP2	11:AL:39:LYS:HG2	2.11	0.51
11:AL:61:ARG:HA	11:AL:62:LEU:HD13	1.92	0.51
12:AM:109:VAL:HB	12:AM:113:GLN:HB2	1.93	0.51
12:AM:78:PRO:O	12:AM:79:LEU:HB2	2.11	0.51
14:AO:57:LYS:HD2	14:AO:58:LEU:N	2.24	0.51
25:AZ:26:LEU:HB2	25:AZ:28:LEU:HD13	1.92	0.51
31:BA:1329:A:P	43:BM:28:ALA:HB3	2.51	0.51
31:BA:802:A:H2'	31:BA:803:G:O4'	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:59:ARG:HE	34:BD:59:ARG:HA	1.74	0.51
49:BS:11:VAL:HG23	49:BS:38:SER:OG	2.10	0.51
11:CL:62:LEU:HD11	30:C5:27:THR:HA	1.92	0.51
1:CA:2307:G:N7	1:CA:2308:G:C5	2.78	0.51
1:CA:833:U:H2'	1:CA:834:C:C6	2.46	0.51
2:CB:28:C:H2'	2:CB:29:A:O4'	2.11	0.51
1:CA:1568:G:H5'	3:CD:60:ARG:HA	1.93	0.51
1:CA:444:C:H4'	5:CF:49:ALA:HB2	1.91	0.51
7:CH:40:GLU:C	7:CH:41:MET:HG2	2.29	0.51
7:CH:67:LEU:HG	7:CH:71:LEU:CD2	2.40	0.51
14:CO:49:VAL:HG13	14:CO:76:LYS:HZ2	1.76	0.51
1:CA:559:G:H22	16:CQ:49:HIS:CD2	2.29	0.51
23:CX:13:ILE:HG21	23:CX:63:ALA:N	2.21	0.51
25:CZ:26:LEU:HB2	25:CZ:28:LEU:HD13	1.93	0.51
31:DA:1015:A:H2'	31:DA:1016:A:C8	2.46	0.51
31:DA:324:G:N2	31:DA:327:A:C8	2.79	0.51
31:DA:620:C:C2	34:DD:135:LEU:HG	2.46	0.51
33:DC:120:VAL:O	33:DC:124:ILE:HG12	2.11	0.51
31:DA:436:C:H4'	34:DD:156:GLU:CD	2.30	0.51
34:DD:156:GLU:CD	34:DD:157:LEU:H	2.14	0.51
34:DD:21:LEU:CD1	34:DD:22:LYS:H	2.22	0.51
39:DI:114:TYR:HE1	40:DJ:60:ARG:O	1.93	0.51
31:DA:186(A):C:H5'	50:DT:78:ALA:HB1	1.91	0.51
1:AA:1174:A:C3'	1:AA:1175:U:H5''	2.34	0.51
1:AA:1578:U:C2'	1:AA:1579:A:H5'	2.41	0.51
1:AA:1844:C:O3'	3:AD:258:LYS:HE2	2.11	0.51
1:AA:2472:G:H3'	1:AA:2473:U:H5''	1.92	0.51
1:AA:947:G:H2'	1:AA:948:G:C8	2.46	0.51
3:AD:174:ILE:HD12	3:AD:174:ILE:N	2.26	0.51
4:AE:57:LYS:CG	4:AE:58:ARG:H	2.18	0.51
8:AI:4:ILE:O	8:AI:4:ILE:HG12	2.10	0.51
20:AU:17:SER:OG	20:AU:18:GLY:N	2.43	0.51
31:BA:664:G:N2	31:BA:741:G:H1	2.08	0.51
32:BB:15:VAL:HG21	32:BB:209:ARG:HH21	1.75	0.51
31:BA:673:G:H5''	36:BF:87:ARG:NH1	2.26	0.51
38:BH:20:TYR:HA	38:BH:65:TYR:CE2	2.46	0.51
38:BH:20:TYR:HE2	38:BH:75:ARG:NH1	2.09	0.51
40:BJ:12:ASP:OD1	40:BJ:15:THR:HG23	2.10	0.51
46:BP:74:LEU:O	46:BP:79:VAL:HG23	2.10	0.51
1:CA:1336:A:H2'	1:CA:1337:G:H8	1.76	0.51
1:CA:307:G:H21	1:CA:330:A:H62	1.59	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CE:37:ARG:HA	4:CE:42:ASP:OD2	2.10	0.51
11:CL:95:VAL:HG22	11:CL:125:VAL:HB	1.93	0.51
11:CL:50:ARG:HG2	11:CL:51:PHE:HB2	1.92	0.51
21:CV:125:LEU:HD22	21:CV:126:VAL:N	2.25	0.51
1:CA:153:C:OP1	23:CX:92:LYS:HD2	2.10	0.51
24:CY:14:ARG:HG2	24:CY:17:SER:HB2	1.92	0.51
31:DA:1095:U:H2'	31:DA:1096:C:C6	2.46	0.51
31:DA:1221:G:OP1	49:DS:36:ARG:HD3	2.10	0.51
31:DA:1478:C:H2'	31:DA:1479:C:H6	1.76	0.51
31:DA:735:C:H6	31:DA:735:C:O5'	1.94	0.51
33:DC:11:ARG:HB3	33:DC:15:THR:HB	1.92	0.51
34:DD:138:TYR:HD1	34:DD:138:TYR:C	2.13	0.51
38:DH:20:TYR:HD1	38:DH:65:TYR:CD2	2.28	0.51
31:DA:1329:A:P	43:DM:28:ALA:HB3	2.50	0.51
47:DQ:5:VAL:HG22	47:DQ:60:ILE:HG13	1.93	0.51
54:CA:4405:BLS:H2'	52:DV:76:A:N3	2.25	0.51
30:A5:51:ALA:H	30:A5:54:GLU:HB2	1.75	0.51
1:AA:118:A:H1'	1:AA:178:G:O4'	2.11	0.51
1:AA:1336:A:H2'	1:AA:1337:G:H8	1.75	0.51
1:AA:1996:C:H4'	1:AA:1997:G:OP1	2.10	0.51
1:AA:1998:G:H2'	1:AA:1999:C:H6	1.76	0.51
1:AA:277:A:C6	1:AA:278:A:H1'	2.46	0.51
1:AA:580:C:H2'	1:AA:581:C:C6	2.46	0.51
2:AB:11:C:OP2	2:AB:12:C:H5	1.94	0.51
5:AF:205:ARG:HG2	5:AF:206:ILE:HG23	1.93	0.51
14:AO:25:ARG:HG2	14:AO:88:ASP:HB2	1.92	0.51
23:AX:30:VAL:O	23:AX:30:VAL:HG12	2.11	0.51
31:BA:145:G:H2'	31:BA:146:G:H8	1.76	0.51
31:BA:386:C:C2'	31:BA:387:U:H5'	2.40	0.51
31:BA:489:C:H2'	31:BA:490:G:H8	1.76	0.51
34:BD:111:ALA:HA	34:BD:161:ASN:HD22	1.76	0.51
36:BF:83:ASP:OD1	36:BF:83:ASP:N	2.41	0.51
26:C1:40:ILE:HD12	26:C1:40:ILE:N	2.26	0.51
1:CA:2250:G:N3	1:CA:2250:G:H5''	2.26	0.51
1:CA:2542:A:N3	1:CA:2542:A:H5''	2.26	0.51
1:CA:2637:U:C4	1:CA:2638:G:C6	2.99	0.51
4:CE:11:MET:HB2	4:CE:23:VAL:O	2.11	0.51
5:CF:140:LEU:HD21	5:CF:170:LEU:HD21	1.93	0.51
1:CA:2312:U:H4'	6:CG:71:THR:HG21	1.93	0.51
7:CH:98:LEU:HD12	7:CH:99:VAL:H	1.76	0.51
8:CI:129:THR:HA	8:CI:138:ILE:O	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CM:87:LYS:O	12:CM:89:ASN:OD1	2.29	0.51
13:CN:11:ASN:CG	13:CN:12:ARG:H	2.14	0.51
13:CN:70:LEU:HD12	13:CN:70:LEU:N	2.25	0.51
19:CT:63:LYS:HZ1	19:CT:72:LYS:HB3	1.73	0.51
32:DB:214:ILE:HD12	32:DB:214:ILE:N	2.24	0.51
35:DE:11:ILE:HD12	35:DE:11:ILE:N	2.25	0.51
35:DE:43:LEU:HD23	35:DE:44:GLY:N	2.26	0.51
39:DI:128:ARG:HD3	52:DV:32:C:OP2	2.10	0.51
11:AL:62:LEU:HD11	30:A5:27:THR:HA	1.92	0.51
1:AA:1766:U:H2'	1:AA:1767:C:C6	2.46	0.51
1:AA:676:A:H2	1:AA:802:A:H61	1.55	0.51
3:AD:125:ILE:HG22	3:AD:125:ILE:O	2.10	0.51
4:AE:33:VAL:HG23	4:AE:47:VAL:HG13	1.93	0.51
4:AE:6:GLY:HA2	4:AE:51:PHE:CZ	2.46	0.51
13:AN:10:LEU:HD22	13:AN:17:ARG:CZ	2.41	0.51
13:AN:12:ARG:HG3	13:AN:12:ARG:HH11	1.75	0.51
17:AR:4:ILE:HB	17:AR:39:LEU:O	2.10	0.51
31:BA:1095:U:H2'	31:BA:1096:C:C6	2.46	0.51
31:BA:1161:C:H2'	31:BA:1162:C:C6	2.46	0.51
31:BA:1285:A:C1'	31:BA:1286:A:OP2	2.58	0.51
31:BA:452:A:HO2'	31:BA:453:A:H8	1.58	0.51
31:BA:639:G:H2'	31:BA:640:A:H8	1.76	0.51
33:BC:11:ARG:HB3	33:BC:15:THR:HB	1.93	0.51
33:BC:18:TRP:HE3	33:BC:18:TRP:H	1.59	0.51
36:BF:44:GLY:HA2	36:BF:59:TYR:CE2	2.46	0.51
40:BJ:91:PRO:HB3	40:BJ:94:VAL:HB	1.92	0.51
42:BL:81:VAL:HG13	42:BL:104:TYR:HB3	1.93	0.51
45:BO:25:THR:HG21	45:BO:70:LEU:HB2	1.93	0.51
48:BR:53:ARG:HE	48:BR:59:SER:C	2.15	0.51
30:C5:21:LYS:HA	30:C5:54:GLU:OE2	2.11	0.51
2:CB:78:A:O3'	12:CM:21:THR:HG22	2.11	0.51
5:CF:101:LEU:HB3	5:CF:106:ARG:HD3	1.92	0.51
1:CA:443:A:N7	5:CF:45:ARG:HD2	2.26	0.51
8:CI:61:ARG:O	8:CI:61:ARG:HD2	2.10	0.51
10:CK:87:ILE:HG22	10:CK:93:PRO:HA	1.93	0.51
12:CM:9:TYR:O	12:CM:9:TYR:CD2	2.64	0.51
15:CP:65:LYS:HE3	15:CP:67:SER:HB2	1.93	0.51
16:CQ:76:TYR:CZ	16:CQ:80:ILE:HG13	2.46	0.51
20:CU:13:VAL:HG23	20:CU:73:ARG:C	2.32	0.51
31:DA:1106:G:H2'	31:DA:1107:C:H6	1.74	0.51
31:DA:1138:G:N3	31:DA:1138:G:H3'	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1285:A:H8	31:DA:1285:A:OP1	1.94	0.51
1:CA:1915:U:O4	31:DA:1409:C:H4'	2.11	0.51
31:DA:179:A:H2'	31:DA:180:U:C6	2.45	0.51
32:DB:52:GLU:O	32:DB:56:ARG:HG3	2.11	0.51
33:DC:29:TYR:CE1	33:DC:33:LEU:HD22	2.45	0.51
40:DJ:98:ILE:HD12	40:DJ:98:ILE:N	2.26	0.51
43:DM:76:ALA:HA	43:DM:79:LYS:CE	2.41	0.51
48:DR:44:LEU:HD11	48:DR:50:ILE:HD13	1.92	0.51
52:DV:68:C:H2'	52:DV:69:C:H6	1.75	0.51
1:AA:616:A:H4'	1:AA:617:G:OP1	2.10	0.51
1:AA:2712:U:H1'	1:AA:712(B):A:H8	1.74	0.51
3:AD:159:ALA:HB1	3:AD:198:ASN:O	2.11	0.51
8:AI:75:LEU:HD11	8:AI:105:HIS:NE2	2.26	0.51
1:AA:1665:A:H1'	10:AK:1:MET:HG2	1.92	0.51
11:AL:128:HIS:HA	11:AL:147:LEU:CB	2.30	0.51
19:AT:11:PRO:HB3	19:AT:92:LEU:HD21	1.91	0.51
1:AA:483:A:H4'	20:AU:49:VAL:HG22	1.93	0.51
31:BA:949:A:C4	31:BA:1233:G:N2	2.79	0.51
31:BA:1275:A:H2'	31:BA:1276:G:H8	1.75	0.51
31:BA:345:C:H1'	31:BA:346:G:N2	2.26	0.51
31:BA:429:U:H4'	31:BA:430:A:O5'	2.09	0.51
32:BB:97:TRP:CH2	32:BB:173:ALA:HA	2.46	0.51
39:BI:85:LEU:HD12	39:BI:86:VAL:N	2.26	0.51
41:BK:33:THR:HA	41:BK:40:ILE:HG12	1.93	0.51
31:BA:979:C:H42	44:BN:18:VAL:HG12	1.76	0.51
46:BP:22:THR:HG22	46:BP:32:TYR:HB2	1.93	0.51
52:BW:65:C:H2'	52:BW:66:C:H6	1.76	0.51
1:CA:274:G:H4'	1:CA:275:G:OP2	2.10	0.51
1:CA:330:A:H2	1:CA:1210:A:C2'	2.21	0.51
1:CA:352:G:O2'	1:CA:353:G:C8	2.63	0.51
1:CA:280:C:C2	1:CA:361:G:N2	2.79	0.51
2:CB:11:C:OP2	2:CB:12:C:H5	1.94	0.51
3:CD:63:ARG:HD3	3:CD:63:ARG:N	2.26	0.51
7:CH:94:TYR:CD1	7:CH:94:TYR:N	2.79	0.51
1:CA:1665:A:H1'	10:CK:1:MET:HG2	1.93	0.51
11:CL:85:LEU:HD23	11:CL:88:LEU:HD23	1.93	0.51
12:CM:109:VAL:HB	12:CM:113:GLN:HB2	1.93	0.51
12:CM:20:ALA:HA	12:CM:98:LYS:HB3	1.93	0.51
19:CT:11:PRO:HB3	19:CT:92:LEU:HD21	1.93	0.51
24:CY:34:GLU:O	24:CY:38:GLN:HG2	2.10	0.51
31:DA:116:A:H61	31:DA:313:A:H1'	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:983:A:H5'	31:DA:984:C:OP2	2.10	0.51
32:DB:71:VAL:HG12	32:DB:93:VAL:O	2.11	0.51
37:DG:89:MET:HB3	37:DG:155:ARG:HG2	1.93	0.51
41:DK:29:ILE:HG22	41:DK:44:SER:HB3	1.91	0.51
31:DA:453:A:H5'	46:DP:72:ARG:HG3	1.92	0.51
50:DT:67:ALA:HA	50:DT:72:LEU:O	2.11	0.51
30:A5:61:LEU:O	30:A5:62:LEU:HB2	2.10	0.50
1:AA:1590:U:H2'	1:AA:1591:G:C8	2.46	0.50
1:AA:2074:U:H2'	1:AA:2075:U:C6	2.46	0.50
1:AA:2307:G:N7	1:AA:2308:G:C6	2.79	0.50
1:AA:273(B):G:C2	1:AA:364:C:C2	2.99	0.50
1:AA:588:U:H2'	1:AA:589:C:C6	2.45	0.50
6:AG:111:LEU:HB3	6:AG:117:PHE:HE2	1.75	0.50
11:AL:30:THR:O	11:AL:32:THR:N	2.44	0.50
20:AU:83:THR:HG22	20:AU:84:ARG:N	2.27	0.50
31:BA:1418:A:C2	31:BA:1483:A:C2	2.99	0.50
31:BA:397:A:N7	31:BA:548:G:C8	2.79	0.50
33:BC:28:GLN:O	33:BC:32:LEU:HG	2.10	0.50
37:BG:62:PHE:CD1	37:BG:124:LEU:HD21	2.46	0.50
40:BJ:48:THR:HA	40:BJ:62:HIS:CB	2.37	0.50
41:BK:25:TYR:N	41:BK:25:TYR:CD1	2.79	0.50
47:BQ:7:THR:CG2	47:BQ:58:GLU:HG2	2.31	0.50
50:BT:33:ILE:CD1	50:BT:62:LEU:HD22	2.41	0.50
1:CA:1019:U:O2'	1:CA:1021:A:H2	1.94	0.50
4:CE:132:HIS:CD2	4:CE:135:HIS:CE1	2.99	0.50
4:CE:93:VAL:HG11	4:CE:181:LEU:O	2.11	0.50
4:CE:4:ILE:HD13	4:CE:28:ALA:HB1	1.92	0.50
5:CF:184:TYR:O	5:CF:188:ARG:HG3	2.11	0.50
12:CM:127:ILE:HG22	12:CM:128:LYS:O	2.11	0.50
13:CN:88:ARG:HH21	13:CN:88:ARG:HA	1.74	0.50
17:CR:71:LEU:N	17:CR:71:LEU:HD12	2.26	0.50
21:CV:17:ALA:HA	21:CV:20:ARG:HD3	1.93	0.50
21:CV:10:ARG:HH21	21:CV:26:GLY:N	2.08	0.50
31:DA:802:A:H2'	31:DA:803:G:O4'	2.11	0.50
31:DA:838:G:N2	31:DA:849:C:C2	2.79	0.50
32:DB:208:ILE:N	32:DB:208:ILE:HD12	2.22	0.50
35:DE:148:VAL:HG21	38:DH:107:LEU:HD22	1.94	0.50
38:DH:20:TYR:HE2	38:DH:75:ARG:NH1	2.08	0.50
38:DH:73:ASP:C	38:DH:75:ARG:H	2.14	0.50
38:DH:98:LYS:HB2	38:DH:99:GLU:OE2	2.11	0.50
39:DI:85:LEU:HD12	39:DI:86:VAL:N	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1019:U:HO2'	1:AA:1021:A:H2	1.57	0.50
1:AA:1139:G:O2'	1:AA:1143:A:N1	2.41	0.50
1:AA:2542:A:N3	1:AA:2542:A:H5''	2.25	0.50
1:AA:270(T):G:H2'	1:AA:270(U):G:C8	2.43	0.50
4:AE:192:ASN:HD22	4:AE:192:ASN:H	1.59	0.50
1:AA:322:A:H3'	5:AF:169:ASN:HD21	1.76	0.50
7:AH:169:VAL:HG13	7:AH:170:ARG:H	1.76	0.50
8:AI:61:ARG:HH12	8:AI:133:HIS:HB2	1.75	0.50
9:AJ:37:VAL:HG12	9:AJ:38:LEU:N	2.27	0.50
11:AL:6:LEU:HG	11:AL:8:PRO:HD2	1.91	0.50
14:AO:93:LYS:HD3	14:AO:95:HIS:HB2	1.93	0.50
17:AR:66:ARG:HD2	17:AR:88:ARG:NH1	2.27	0.50
20:AU:29:GLU:HB3	20:AU:38:ILE:HB	1.92	0.50
31:BA:428:G:H4'	31:BA:429:U:O5'	2.11	0.50
31:BA:723:U:H5''	31:BA:724:G:OP2	2.11	0.50
31:BA:792:A:H4'	31:BA:793:U:O5'	2.11	0.50
34:BD:173:TRP:C	34:BD:186:LEU:HD12	2.32	0.50
43:BM:81:LEU:HD11	43:BM:88:ARG:HH21	1.76	0.50
50:BT:67:ALA:HA	50:BT:72:LEU:O	2.10	0.50
1:CA:1485:G:H2'	1:CA:1486:A:H8	1.76	0.50
1:CA:1496:A:C8	1:CA:1577:C:O2'	2.65	0.50
1:CA:1578:U:C2'	1:CA:1579:A:H5'	2.41	0.50
1:CA:2428:G:H5''	1:CA:2429:G:O5'	2.11	0.50
1:CA:2562:U:H1'	10:CK:23:ARG:HH11	1.74	0.50
1:CA:270(T):G:H2'	1:CA:270(U):G:C8	2.42	0.50
1:CA:747:U:O2	1:CA:2014:A:H1'	2.11	0.50
1:CA:826:U:H2'	1:CA:828:U:O4'	2.11	0.50
2:CB:51:G:H21	2:CB:52:A:H62	1.58	0.50
3:CD:134:ARG:HG3	3:CD:135:PHE:CD1	2.47	0.50
1:CA:1844:C:O3'	3:CD:258:LYS:HE2	2.11	0.50
5:CF:181:LEU:CD2	5:CF:186:ILE:HD11	2.41	0.50
8:CI:61:ARG:HH12	8:CI:133:HIS:HB2	1.75	0.50
10:CK:102:VAL:HB	10:CK:106:LEU:HD12	1.93	0.50
1:CA:807:U:OP2	11:CL:39:LYS:HG2	2.10	0.50
14:CO:93:LYS:HD3	14:CO:95:HIS:HB2	1.92	0.50
16:CQ:95:LEU:O	16:CQ:98:LEU:HG	2.11	0.50
20:CU:29:GLU:HB3	20:CU:38:ILE:HB	1.92	0.50
23:CX:69:LYS:O	23:CX:73:LEU:HB2	2.11	0.50
24:CY:47:ASN:O	24:CY:49:LYS:N	2.44	0.50
31:DA:1402:C:H2'	31:DA:1403:C:O4'	2.11	0.50
31:DA:142:G:H2'	31:DA:143:A:H8	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:145:G:H2'	31:DA:146:G:H8	1.76	0.50
31:DA:149:A:O2'	31:DA:150:C:H5'	2.11	0.50
31:DA:345:C:H1'	31:DA:346:G:N2	2.26	0.50
31:DA:554:C:H2'	31:DA:555:C:C6	2.45	0.50
31:DA:894:G:H2'	31:DA:895:G:O4'	2.11	0.50
32:DB:111:ARG:HA	32:DB:111:ARG:NE	2.26	0.50
32:DB:69:LEU:HD22	32:DB:91:PRO:HB2	1.93	0.50
34:DD:117:ALA:O	34:DD:121:VAL:HG23	2.12	0.50
34:DD:128:VAL:O	34:DD:130:GLY:N	2.44	0.50
34:DD:146:ILE:N	34:DD:146:ILE:HD12	2.27	0.50
37:DG:62:PHE:CD1	37:DG:124:LEU:HD21	2.45	0.50
43:DM:24:GLY:C	43:DM:25:ILE:HD12	2.31	0.50
46:DP:22:THR:HG22	46:DP:32:TYR:HB2	1.93	0.50
49:DS:29:ARG:O	49:DS:31:ILE:HG22	2.11	0.50
51:DU:21:TYR:O	51:DU:22:ARG:HG3	2.12	0.50
26:A1:40:ILE:N	26:A1:40:ILE:HD12	2.26	0.50
1:AA:1427:A:H4'	1:AA:1428:C:O5'	2.12	0.50
1:AA:1509:A:O3'	1:AA:1510:A:O4'	2.29	0.50
1:AA:1658:C:OP1	4:AE:132:HIS:O	2.28	0.50
1:AA:2017:U:O2	27:A2:10:LYS:HB2	2.11	0.50
9:AJ:63:PRO:O	16:AQ:64:ARG:HD2	2.11	0.50
9:AJ:35:ARG:O	9:AJ:73:ASP:HB3	2.12	0.50
11:AL:50:ARG:HG2	11:AL:51:PHE:HB2	1.93	0.50
11:AL:58:THR:C	11:AL:61:ARG:HE	2.13	0.50
1:AA:994:C:OP1	16:AQ:53:ARG:NH2	2.43	0.50
17:AR:35:LEU:C	17:AR:37:VAL:N	2.63	0.50
31:BA:1161:C:H2'	31:BA:1162:C:H6	1.76	0.50
32:BB:15:VAL:HG23	32:BB:16:HIS:CE1	2.46	0.50
34:BD:168:ARG:NE	34:BD:168:ARG:HA	2.27	0.50
43:BM:24:GLY:C	43:BM:25:ILE:HD12	2.31	0.50
26:C1:38:ALA:HA	26:C1:55:PRO:HA	1.92	0.50
1:CA:2593:U:H2'	1:CA:2594:C:H6	1.75	0.50
2:CB:78:A:C2	2:CB:99:A:C4	2.99	0.50
4:CE:117:MET:O	4:CE:121:ASN:HA	2.11	0.50
8:CI:67:ARG:HE	8:CI:67:ARG:HA	1.77	0.50
9:CJ:161:LEU:HD23	9:CJ:161:LEU:N	2.27	0.50
12:CM:38:GLU:HB2	12:CM:127:ILE:HD12	1.92	0.50
17:CR:4:ILE:HB	17:CR:39:LEU:O	2.11	0.50
20:CU:17:SER:OG	20:CU:18:GLY:N	2.43	0.50
32:DB:70:PHE:HB2	32:DB:92:TYR:HB2	1.94	0.50
33:DC:182:ILE:HG13	33:DC:203:PHE:HA	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:430:A:OP2	34:DD:8:VAL:HG22	2.12	0.50
40:DJ:51:ARG:H	40:DJ:60:ARG:HA	1.76	0.50
36:DF:48:LEU:HB2	48:DR:77:GLY:O	2.10	0.50
1:AA:1615:C:O2'	1:AA:1616:A:H5'	2.11	0.50
1:AA:559:G:H22	16:AQ:49:HIS:CD2	2.29	0.50
1:AA:611:C:C2'	1:AA:612:G:H5'	2.41	0.50
1:AA:778:G:C6	1:AA:779:U:N3	2.80	0.50
10:AK:71:ARG:NH2	10:AK:77:ILE:HG21	2.23	0.50
11:AL:85:LEU:HD23	11:AL:88:LEU:HD23	1.93	0.50
18:AS:36:LEU:HD12	18:AS:36:LEU:N	2.25	0.50
23:AX:27:GLU:HG2	23:AX:28:GLY:N	2.26	0.50
31:BA:1016:A:H2'	31:BA:1017:G:O4'	2.11	0.50
31:BA:1270:C:H2'	31:BA:1271:G:C8	2.47	0.50
31:BA:957:U:O2	31:BA:959:A:C8	2.65	0.50
34:BD:138:TYR:HD1	34:BD:139:ARG:N	2.08	0.50
37:BG:89:MET:HB3	37:BG:155:ARG:HG2	1.93	0.50
39:BI:114:TYR:HE1	40:BJ:60:ARG:O	1.94	0.50
47:BQ:59:ILE:O	47:BQ:59:ILE:HD12	2.12	0.50
47:BQ:59:ILE:HG22	47:BQ:73:VAL:HA	1.94	0.50
48:BR:40:LEU:HD22	48:BR:70:ILE:HD13	1.93	0.50
49:BS:6:LYS:HG2	49:BS:7:LYS:HD3	1.93	0.50
52:BV:74:C:H3'	52:BV:75:C:C5'	2.41	0.50
1:CA:1108:U:H2'	1:CA:1109:C:C5	2.46	0.50
1:CA:1427:A:H4'	1:CA:1428:C:O5'	2.11	0.50
1:CA:1558:A:H1'	1:CA:1559:G:OP2	2.10	0.50
5:CF:101:LEU:O	5:CF:106:ARG:NH1	2.45	0.50
18:CS:28:SER:OG	18:CS:31:GLU:HG2	2.12	0.50
18:CS:36:LEU:N	18:CS:36:LEU:HD12	2.27	0.50
24:CY:51:ARG:O	24:CY:55:ARG:HG2	2.11	0.50
25:CZ:40:THR:HG23	25:CZ:43:ILE:CG1	2.42	0.50
31:DA:1285:A:C1'	31:DA:1286:A:OP2	2.58	0.50
15:CP:107:ASP:HB2	31:DA:1432:G:OP1	2.12	0.50
31:DA:160:A:H2'	31:DA:161:A:O4'	2.11	0.50
31:DA:451:A:C2	31:DA:480:U:C4	3.00	0.50
31:DA:949:A:C4	31:DA:1233:G:N2	2.80	0.50
33:DC:36:ASP:O	33:DC:40:ARG:HG3	2.12	0.50
31:DA:619:U:N3	34:DD:135:LEU:HD21	2.26	0.50
38:DH:20:TYR:HA	38:DH:65:TYR:CE2	2.46	0.50
1:AA:2056:G:H22	27:A2:4:HIS:C	2.15	0.50
1:AA:195:A:H5''	1:AA:196:A:OP2	2.11	0.50
1:AA:270(S):G:H1'	23:AX:79:GLY:HA3	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:264:LYS:HG2	3:AD:266:SER:HB3	1.94	0.50
3:AD:63:ARG:N	3:AD:63:ARG:HD3	2.27	0.50
11:AL:62:LEU:N	11:AL:62:LEU:HD13	2.27	0.50
15:AP:28:VAL:HA	15:AP:89:VAL:HG12	1.94	0.50
16:AQ:85:LYS:HD3	16:AQ:85:LYS:C	2.31	0.50
17:AR:71:LEU:HD12	17:AR:71:LEU:N	2.26	0.50
21:AV:125:LEU:HD22	21:AV:126:VAL:N	2.27	0.50
22:AW:56:ASP:O	22:AW:57:PHE:CB	2.60	0.50
24:AY:14:ARG:HG2	24:AY:17:SER:HB2	1.91	0.50
1:AA:1184:G:OP1	25:AZ:29:ARG:HD3	2.11	0.50
31:BA:1023:G:H2'	31:BA:1024:G:O4'	2.12	0.50
31:BA:1279:A:H62	33:BC:26:LYS:HE2	1.75	0.50
31:BA:1455:G:H5''	50:BT:31:SER:OG	2.12	0.50
31:BA:192:U:H2'	31:BA:193:C:H6	1.77	0.50
31:BA:254:G:C2	31:BA:255:G:C8	2.99	0.50
32:BB:111:ARG:NE	32:BB:111:ARG:HA	2.26	0.50
33:BC:113:ALA:HB3	33:BC:114:PRO:HD3	1.93	0.50
33:BC:182:ILE:HG13	33:BC:203:PHE:HA	1.92	0.50
35:BE:92:LYS:O	35:BE:119:LEU:HD12	2.11	0.50
38:BH:11:THR:HA	38:BH:14:ARG:NH1	2.26	0.50
39:BI:5:TYR:HE2	39:BI:16:ARG:HB3	1.77	0.50
40:BJ:84:GLN:HG3	40:BJ:88:LEU:HD22	1.93	0.50
43:BM:96:LEU:HB3	43:BM:97:PRO:HD2	1.93	0.50
1:CA:118:A:H1'	1:CA:178:G:O4'	2.11	0.50
1:CA:1657:C:H2'	1:CA:1658:C:C6	2.46	0.50
1:CA:195:A:N7	1:CA:197:A:OP1	2.45	0.50
1:CA:2516:G:C6	1:CA:2517:C:N4	2.80	0.50
1:CA:426:C:H2'	1:CA:427:U:H6	1.76	0.50
54:CA:4405:BLS:N15	54:CA:4405:BLS:H102	2.24	0.50
1:CA:784:A:N7	3:CD:229:VAL:HG21	2.26	0.50
3:CD:27:THR:HG23	3:CD:83:GLU:HG2	1.93	0.50
5:CF:47:GLY:HA3	5:CF:95:ARG:H	1.76	0.50
7:CH:131:VAL:HG12	7:CH:133:VAL:HG23	1.93	0.50
1:CA:2415:G:O3'	11:CL:66:GLY:HA3	2.12	0.50
31:DA:1016:A:H2'	31:DA:1017:G:O4'	2.11	0.50
31:DA:1023:G:H2'	31:DA:1024:G:O4'	2.12	0.50
31:DA:1066:C:H5'	31:DA:1067:A:OP2	2.10	0.50
31:DA:792:A:H4'	31:DA:793:U:O5'	2.11	0.50
34:DD:31:CYS:O	34:DD:31:CYS:SG	2.70	0.50
34:BD:20:TYR:HE1	36:DF:15:ASP:HA	1.76	0.50
37:DG:65:ALA:HB1	37:DG:127:ALA:HB3	1.92	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DH:88:LYS:HB3	38:DH:89:PRO:HD2	1.94	0.50
31:DA:972:C:C4'	40:DJ:57:LYS:HG3	2.36	0.50
52:DV:74:C:H3'	52:DV:75:C:C5'	2.42	0.50
52:DW:20:U:C5	52:DW:59:A:N6	2.80	0.50
1:AA:1252:G:C2	1:AA:1253:A:C2	3.00	0.50
1:AA:1373:A:H2'	1:AA:1374:G:O4'	2.10	0.50
1:AA:1587:A:H2'	1:AA:1588:C:H6	1.75	0.50
1:AA:1641:A:H2'	1:AA:1642:G:O4'	2.11	0.50
1:AA:1657:C:H2'	1:AA:1658:C:C6	2.47	0.50
1:AA:2428:G:H5''	1:AA:2429:G:O5'	2.11	0.50
1:AA:2695:C:H2'	1:AA:2696:U:C6	2.46	0.50
1:AA:2712:U:O2'	1:AA:712(B):A:OP2	2.28	0.50
5:AF:183:VAL:O	5:AF:187:VAL:HG23	2.12	0.50
11:AL:23:PRO:HA	11:AL:29:LYS:HB2	1.93	0.50
13:AN:55:ALA:HA	13:AN:80:PHE:CE1	2.47	0.50
16:AQ:33:ARG:O	16:AQ:37:GLU:HG3	2.12	0.50
16:AQ:95:LEU:HD12	17:AR:11:GLN:HE21	1.75	0.50
17:AR:39:LEU:HA	17:AR:47:VAL:HG11	1.94	0.50
18:AS:29:LEU:HG	18:AS:33:ARG:HE	1.76	0.50
24:AY:34:GLU:O	24:AY:38:GLN:HG2	2.11	0.50
24:AY:51:ARG:O	24:AY:55:ARG:HG2	2.12	0.50
31:BA:1338:G:C6	31:BA:1339:A:C6	3.00	0.50
31:BA:451:A:C2	31:BA:480:U:C4	2.99	0.50
32:BB:72:GLY:O	32:BB:94:ASN:HB2	2.11	0.50
35:BE:11:ILE:HD11	35:BE:33:VAL:HG23	1.93	0.50
39:BI:46:ALA:HB2	39:BI:74:ILE:CG2	2.41	0.50
42:BL:65:VAL:HG11	42:BL:97:TYR:HE1	1.76	0.50
44:BN:25:VAL:HG23	44:BN:38:GLY:O	2.10	0.50
45:BO:16:ALA:CB	45:BO:21:ASP:HB3	2.38	0.50
30:C5:6:THR:HG21	30:C5:64:TYR:HD1	1.76	0.50
1:CA:1438:U:O2'	1:CA:1439:A:H5'	2.12	0.50
1:CA:1858:G:O2'	1:CA:1859:A:H8	1.95	0.50
3:CD:269:PHE:CD1	3:CD:269:PHE:N	2.79	0.50
5:CF:184:TYR:CE2	5:CF:188:ARG:HD2	2.46	0.50
6:CG:163:ALA:HB3	6:CG:169:ALA:HB2	1.94	0.50
9:CJ:66:THR:HG22	9:CJ:68:ASN:HD22	1.76	0.50
18:CS:29:LEU:HD22	18:CS:69:LEU:HD11	1.92	0.50
1:CA:480:A:O4'	20:CU:44:ILE:HG21	2.11	0.50
22:CW:27:GLU:HG3	22:CW:68:GLU:HA	1.94	0.50
23:CX:27:GLU:CB	23:CX:33:LYS:HG3	2.40	0.50
8:CI:38:LEU:HB2	23:CX:75:GLU:OE2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:105:G:C6	31:DA:106:C:N4	2.80	0.50
31:DA:1086:U:H3	31:DA:1099:G:H22	1.58	0.50
31:DA:1182:G:H4'	31:DA:1183:A:C5'	2.39	0.50
31:DA:719:C:C2	48:DR:50:ILE:HG12	2.47	0.50
32:DB:47:THR:HA	32:DB:202:PRO:HG2	1.94	0.50
36:DF:36:ARG:O	36:DF:65:VAL:HG23	2.12	0.50
36:DF:50:TYR:CE2	36:DF:52:ILE:HG22	2.47	0.50
41:DK:25:TYR:N	41:DK:25:TYR:CD1	2.80	0.50
48:DR:70:ILE:O	48:DR:74:ARG:HG3	2.11	0.50
26:A1:46:ASN:HD22	26:A1:47:VAL:N	2.09	0.50
1:AA:1108:U:H2'	1:AA:1109:C:C5	2.47	0.50
1:AA:1496:A:C8	1:AA:1577:C:O2'	2.65	0.50
1:AA:528:A:C2	1:AA:2043:C:C5'	2.94	0.50
1:AA:280:C:C2	1:AA:361:G:N2	2.80	0.50
1:AA:631:A:H2'	1:AA:632:A:O4'	2.11	0.50
2:AB:28:C:H2'	2:AB:29:A:O4'	2.11	0.50
2:AB:51:G:H21	2:AB:52:A:H62	1.58	0.50
3:AD:145:VAL:HG12	3:AD:146:GLU:O	2.11	0.50
5:AF:47:GLY:HA3	5:AF:95:ARG:H	1.76	0.50
7:AH:67:LEU:HG	7:AH:71:LEU:CD2	2.42	0.50
9:AJ:114:LEU:HA	9:AJ:118:PRO:HB3	1.94	0.50
11:AL:114:ILE:HD13	11:AL:130:PHE:CE1	2.47	0.50
32:BB:54:THR:O	32:BB:58:ILE:HG12	2.11	0.50
34:BD:28:SER:CB	34:BD:29:PRO:HD2	2.42	0.50
40:BJ:98:ILE:N	40:BJ:98:ILE:HD12	2.27	0.50
41:BK:33:THR:HG22	41:BK:39:PRO:HA	1.93	0.50
1:CA:1459:G:H5'	1:CA:1460:A:P	2.52	0.50
1:CA:1468:C:H2'	1:CA:1469:A:C8	2.47	0.50
1:CA:273(B):G:C2	1:CA:364:C:C2	2.99	0.50
1:CA:2853:C:H2'	1:CA:2854:G:H8	1.77	0.50
1:CA:777:A:C2	1:CA:778:G:C4	3.00	0.50
1:CA:932:G:H4'	1:CA:933:A:O5'	2.12	0.50
3:CD:159:ALA:HB1	3:CD:198:ASN:O	2.12	0.50
6:CG:133:LEU:HD21	6:CG:157:ILE:HB	1.93	0.50
1:CA:1190:G:O3'	11:CL:35:HIS:HB3	2.12	0.50
16:CQ:92:ARG:HG2	17:CR:11:GLN:NE2	2.27	0.50
31:DA:1161:C:H2'	31:DA:1162:C:H6	1.76	0.50
34:DD:110:PHE:HE2	34:DD:148:VAL:CG2	2.24	0.50
34:DD:178:VAL:C	34:DD:180:GLY:H	2.13	0.50
36:DF:44:GLY:HA2	36:DF:59:TYR:CE2	2.46	0.50
40:DJ:84:GLN:HG3	40:DJ:88:LEU:HD22	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DK:24:SER:HB2	41:DK:27:ASN:O	2.12	0.50
48:DR:73:ALA:HB3	48:DR:79:LEU:HD12	1.94	0.50
1:AA:1049:C:C5	1:AA:1050:A:N7	2.79	0.50
1:AA:1496:A:O2'	1:AA:1497:U:H5''	2.12	0.50
1:AA:1952:A:C6	1:AA:1953:A:N1	2.79	0.50
1:AA:2773:C:H2'	1:AA:2774:C:H6	1.77	0.50
1:AA:943:U:OP2	11:AL:38:GLN:CD	2.51	0.50
2:AB:38:C:O2	2:AB:48:A:H1'	2.12	0.50
3:AD:154:LYS:C	3:AD:155:LEU:HD12	2.33	0.50
3:AD:172:TYR:HB3	3:AD:184:LYS:HB3	1.92	0.50
13:AN:98:LEU:HB2	13:AN:113:LEU:HD21	1.94	0.50
31:BA:179:A:H2'	31:BA:180:U:C6	2.47	0.50
31:BA:735:C:H6	31:BA:735:C:O5'	1.94	0.50
32:BB:208:ILE:HD12	32:BB:208:ILE:N	2.23	0.50
33:BC:191:THR:HG21	33:BC:193:TYR:CE2	2.46	0.50
37:BG:121:ALA:O	37:BG:125:MET:HG3	2.12	0.50
37:BG:51:GLN:CG	37:BG:58:PRO:HD3	2.42	0.50
49:BS:29:ARG:O	49:BS:31:ILE:HG22	2.11	0.50
1:CA:405:U:H3'	1:CA:406:G:H5'	1.93	0.50
1:CA:631:A:H2'	1:CA:632:A:O4'	2.11	0.50
1:CA:2393:A:C5'	11:CL:62:LEU:HB3	2.42	0.50
15:CP:62:THR:HG22	15:CP:75:ILE:HG13	1.94	0.50
19:CT:70:LEU:HD13	19:CT:71:GLY:N	2.27	0.50
22:CW:51:VAL:CG2	22:CW:81:VAL:HG23	2.42	0.50
31:DA:1161:C:H2'	31:DA:1162:C:C6	2.46	0.50
34:DD:133:VAL:HG11	34:DD:138:TYR:CD2	2.47	0.50
42:DL:5:THR:H	42:DL:8:GLN:HE21	1.59	0.50
45:DO:44:LYS:O	45:DO:47:LYS:HE3	2.12	0.50
1:AA:106:C:H2'	1:AA:107:C:H6	1.77	0.50
1:AA:1388:G:H4'	1:AA:1525:G:O2'	2.11	0.50
1:AA:2823:A:OP1	4:AE:113:PHE:HB2	2.11	0.50
5:AF:107:LYS:HZ2	5:AF:205:ARG:CG	2.20	0.50
5:AF:184:TYR:O	5:AF:188:ARG:HG3	2.12	0.50
5:AF:206:ILE:O	5:AF:206:ILE:HG12	2.10	0.50
1:AA:2312:U:H4'	6:AG:71:THR:HG21	1.93	0.50
9:AJ:161:LEU:N	9:AJ:161:LEU:HD23	2.26	0.50
11:AL:38:GLN:O	11:AL:39:LYS:HB2	2.12	0.50
13:AN:38:VAL:HB	13:AN:39:PRO:HD3	1.94	0.50
19:AT:89:ILE:O	19:AT:93:GLU:HG2	2.12	0.50
21:AV:22:GLY:O	21:AV:41:LEU:HB2	2.12	0.50
31:BA:1138:G:N3	31:BA:1138:G:H3'	2.26	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1401:G:C2	31:BA:1402:C:H1'	2.46	0.50
31:BA:353:A:C2'	31:BA:354:G:OP2	2.60	0.50
31:BA:995:C:H5'	44:BN:8:GLU:HG2	1.94	0.50
34:BD:28:SER:HB2	34:BD:29:PRO:HD2	1.94	0.50
39:BI:114:TYR:CD2	39:BI:114:TYR:N	2.80	0.50
52:BW:68:C:H2'	52:BW:69:C:H6	1.75	0.50
1:CA:1577:C:H2'	1:CA:1578:U:C6	2.47	0.50
1:CA:1932:A:H2'	1:CA:1933:G:O4'	2.12	0.50
1:CA:2311:A:N3	6:CG:82:LEU:HD11	2.27	0.50
1:CA:277:A:C6	1:CA:278:A:H1'	2.46	0.50
1:CA:30:G:H2'	1:CA:31:C:O4'	2.12	0.50
1:CA:572:A:H5''	1:CA:573:G:OP2	2.11	0.50
13:CN:115:GLU:HG2	13:CN:116:LEU:N	2.26	0.50
31:DA:1187:G:H5'	39:DI:113:LYS:HE2	1.94	0.50
31:DA:1275:A:H2'	31:DA:1276:G:H8	1.76	0.50
31:DA:1422:G:H2'	31:DA:1423:G:H8	1.76	0.50
31:DA:216:G:C6	31:DA:217:C:N4	2.79	0.50
32:DB:15:VAL:HG21	32:DB:209:ARG:HH21	1.76	0.50
32:DB:54:THR:O	32:DB:58:ILE:HG12	2.12	0.50
37:DG:51:GLN:CG	37:DG:58:PRO:HD3	2.41	0.50
1:AA:1019:U:H2'	1:AA:1021:A:C2	2.45	0.49
1:AA:1023:U:H2'	1:AA:1024:G:H5'	1.93	0.49
1:AA:1050:A:C2	1:AA:2751:G:C4	3.00	0.49
1:AA:244:A:C2	1:AA:255:A:C4	3.00	0.49
1:AA:2557:G:H2'	1:AA:2558:C:C6	2.47	0.49
1:AA:2853:C:H2'	1:AA:2854:G:H8	1.77	0.49
1:AA:30:G:H2'	1:AA:31:C:O4'	2.12	0.49
1:AA:713:G:H2'	1:AA:714:U:C6	2.47	0.49
1:AA:1568:G:H5'	3:AD:60:ARG:HA	1.94	0.49
6:AG:131:TYR:HB3	6:AG:159:VAL:HG13	1.94	0.49
7:AH:94:TYR:CD1	7:AH:94:TYR:N	2.80	0.49
11:AL:14:LYS:O	11:AL:15:ARG:HB2	2.11	0.49
12:AM:81:VAL:O	12:AM:82:ARG:HG2	2.12	0.49
18:AS:4:LYS:HG2	18:AS:5:ALA:N	2.27	0.49
31:BA:1086:U:H3	31:BA:1099:G:H22	1.60	0.49
31:BA:113:G:H2'	31:BA:114:U:C6	2.47	0.49
31:BA:1402:C:H2'	31:BA:1403:C:O4'	2.12	0.49
35:BE:83:GLU:HG2	35:BE:88:LYS:HG3	1.94	0.49
31:BA:453:A:H5'	46:BP:72:ARG:HG3	1.92	0.49
26:C1:46:ASN:HD22	26:C1:47:VAL:N	2.09	0.49
1:CA:1766:U:H2'	1:CA:1767:C:C6	2.46	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2498:C:O2'	1:CA:2499:C:H5'	2.12	0.49
1:CA:2747:G:C2	1:CA:2756:U:C5	2.99	0.49
1:CA:844:C:C2'	1:CA:845:G:H5'	2.42	0.49
5:CF:206:ILE:HG12	5:CF:206:ILE:O	2.11	0.49
7:CH:169:VAL:HG13	7:CH:170:ARG:H	1.77	0.49
10:CK:4:PRO:O	10:CK:5:GLN:CB	2.59	0.49
16:CQ:85:LYS:HD3	16:CQ:85:LYS:C	2.31	0.49
31:DA:1004:A:N6	31:DA:1025:U:H4'	2.26	0.49
31:DA:1411:C:H2'	31:DA:1412:C:H6	1.77	0.49
41:DK:20:TYR:O	41:DK:30:VAL:HA	2.11	0.49
42:DL:40:ARG:HG2	42:DL:41:THR:N	2.25	0.49
44:DN:7:ILE:O	44:DN:11:LYS:HG2	2.11	0.49
48:DR:40:LEU:HD22	48:DR:70:ILE:HD13	1.93	0.49
27:A2:47:PRO:O	27:A2:48:GLU:HB3	2.12	0.49
1:AA:1045:A:O2'	1:AA:1047:G:C6	2.65	0.49
1:AA:1495:A:N3	1:AA:1496:A:C2	2.81	0.49
1:AA:2494:G:OP1	52:BV:75:C:N4	2.44	0.49
1:AA:307:G:H21	1:AA:330:A:H62	1.60	0.49
1:AA:813:U:H2'	1:AA:814:C:C6	2.47	0.49
7:AH:98:LEU:HD12	7:AH:99:VAL:H	1.77	0.49
12:AM:87:LYS:O	12:AM:89:ASN:OD1	2.30	0.49
13:AN:13:HIS:CE1	13:AN:15:SER:HB2	2.47	0.49
1:AA:17:G:H4'	16:AQ:25:TRP:CZ3	2.47	0.49
19:AT:70:LEU:HD13	19:AT:71:GLY:N	2.28	0.49
20:AU:13:VAL:HG23	20:AU:73:ARG:C	2.32	0.49
23:AX:21:ARG:HB2	23:AX:38:SER:O	2.12	0.49
31:BA:926:G:C6	31:BA:1505:G:C5	3.00	0.49
32:BB:87:ARG:HE	32:BB:233:SER:H	1.61	0.49
33:BC:36:ASP:O	33:BC:40:ARG:HG3	2.12	0.49
35:BE:6:PHE:HB2	35:BE:34:VAL:HG13	1.93	0.49
31:BA:673:G:H5''	36:BF:87:ARG:HH12	1.77	0.49
45:BO:8:LYS:O	45:BO:12:ILE:HG13	2.11	0.49
52:BV:21:A:C2	52:BV:46:G:C2	3.00	0.49
52:BV:20:U:H5'	52:BV:21:A:OP2	2.12	0.49
52:BW:10:G:N2	52:BW:26:G:H1'	2.27	0.49
1:CA:1278:A:H2'	1:CA:1279:G:C8	2.46	0.49
1:CA:1509:A:O3'	1:CA:1510:A:O4'	2.29	0.49
1:CA:270(S):G:H1'	23:CX:79:GLY:HA3	1.94	0.49
1:CA:973:A:O4'	1:CA:1188:U:C6	2.64	0.49
11:CL:23:PRO:HB2	11:CL:33:ARG:CD	2.42	0.49
21:CV:22:GLY:O	21:CV:41:LEU:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:72:ARG:HB2	22:CW:75:LEU:HB2	1.95	0.49
31:DA:1196:U:H5'	31:DA:1197:G:O5'	2.12	0.49
34:DD:13:ARG:HB3	34:DD:38:TYR:O	2.12	0.49
38:DH:42:GLU:HG3	38:DH:109:ILE:HD12	1.93	0.49
42:DL:17:VAL:HG23	42:DL:18:ARG:N	2.27	0.49
46:DP:74:LEU:O	46:DP:79:VAL:HG23	2.12	0.49
48:DR:54:ARG:HD2	48:DR:54:ARG:N	2.27	0.49
31:DA:1304:G:OP1	51:DU:2:GLY:N	2.45	0.49
1:AA:1512:G:H2'	1:AA:1513:C:O4'	2.11	0.49
1:AA:1559:G:N3	1:AA:1559:G:H5'	2.28	0.49
1:AA:1570:A:H4'	3:AD:38:LYS:NZ	2.27	0.49
1:AA:2115:G:H2'	1:AA:2116:G:N7	2.28	0.49
1:AA:2562:U:H2'	1:AA:2563:U:H5'	1.95	0.49
1:AA:2630:G:H2'	1:AA:2631:G:H8	1.76	0.49
3:AD:134:ARG:HG3	3:AD:135:PHE:CD1	2.47	0.49
3:AD:269:PHE:CD1	3:AD:269:PHE:N	2.81	0.49
4:AE:137:HIS:HB3	4:AE:138:PRO:HD2	1.94	0.49
5:AF:34:TRP:CE2	11:AL:12:ALA:HB2	2.48	0.49
10:AK:97:ARG:N	10:AK:117:LEU:HD23	2.15	0.49
10:AK:8:LEU:N	10:AK:8:LEU:HD23	2.27	0.49
11:AL:41:ARG:HH22	11:AL:45:LEU:HD12	1.76	0.49
14:AO:56:LEU:HD23	14:AO:57:LYS:HZ1	1.77	0.49
18:AS:9:TYR:H	18:AS:102:HIS:CD2	2.27	0.49
19:AT:63:LYS:HZ2	19:AT:72:LYS:HB3	1.75	0.49
22:AW:27:GLU:HG3	22:AW:68:GLU:HA	1.94	0.49
31:BA:1049:U:H4'	31:BA:1050:G:H5''	1.94	0.49
31:BA:216:G:C6	31:BA:217:C:N4	2.80	0.49
31:BA:55:A:C6	8:CI:89:TYR:CD1	3.00	0.49
31:BA:894:G:H2'	31:BA:895:G:O4'	2.11	0.49
34:BD:4:TYR:HE1	34:BD:6:GLY:O	1.95	0.49
18:CS:23:LEU:HD13	27:C2:25:LEU:HD13	1.93	0.49
27:C2:47:PRO:O	27:C2:48:GLU:HB3	2.12	0.49
28:C3:18:ARG:NH1	28:C3:43:CYS:O	2.45	0.49
1:CA:1273:U:O2'	1:CA:1275:A:OP1	2.30	0.49
1:CA:1496:A:O2'	1:CA:1497:U:H5''	2.11	0.49
1:CA:1590:U:H2'	1:CA:1591:G:C8	2.47	0.49
1:CA:2117:A:N6	1:CA:2172:U:C2	2.80	0.49
1:CA:611:C:O2'	1:CA:612:G:H5'	2.12	0.49
1:CA:792:G:H5''	1:CA:793:A:H5'	1.93	0.49
1:CA:828:U:O2	1:CA:828:U:H3'	2.13	0.49
1:CA:894:C:O2'	1:CA:895:U:H5'	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:125:ILE:HG22	3:CD:125:ILE:O	2.12	0.49
3:CD:158:ALA:HB3	3:CD:161:THR:HG21	1.94	0.49
1:CA:589:C:O3'	5:CF:95:ARG:NH1	2.45	0.49
6:CG:52:ILE:HD12	6:CG:52:ILE:H	1.77	0.49
11:CL:112:LEU:H	11:CL:128:HIS:CD2	2.30	0.49
23:CX:30:VAL:O	23:CX:30:VAL:HG12	2.12	0.49
31:DA:1049:U:H4'	31:DA:1050:G:H5''	1.94	0.49
31:DA:1338:G:C6	31:DA:1339:A:C6	2.99	0.49
31:DA:1443:G:H3'	31:DA:1446:A:H5'	1.94	0.49
31:DA:1499:A:H1'	31:DA:1520:G:H5'	1.92	0.49
31:DA:349:A:O2'	31:DA:350:G:H5'	2.12	0.49
31:DA:709:G:H2'	31:DA:710:G:H8	1.78	0.49
37:DG:121:ALA:O	37:DG:125:MET:HG3	2.11	0.49
40:DJ:22:LYS:HD2	40:DJ:22:LYS:O	2.13	0.49
31:DA:1328:C:H5''	43:DM:28:ALA:HB1	1.93	0.49
43:DM:96:LEU:HB3	43:DM:97:PRO:HD2	1.94	0.49
1:AA:2211:G:C2'	1:AA:2212:A:H5''	2.42	0.49
1:AA:593:G:O2'	30:A5:62:LEU:HD13	2.12	0.49
1:AA:885:C:H2'	1:AA:886:C:H5''	1.94	0.49
1:AA:894:C:O2'	1:AA:895:U:H5'	2.12	0.49
2:AB:78:A:C2	2:AB:99:A:C4	3.00	0.49
4:AE:132:HIS:O	4:AE:135:HIS:CD2	2.65	0.49
6:AG:2:PRO:C	6:AG:3:LEU:HD12	2.33	0.49
13:AN:94:TYR:C	13:AN:117:VAL:HG12	2.33	0.49
21:AV:48:PHE:CE2	21:AV:71:VAL:HG11	2.47	0.49
31:BA:1196:U:H5'	31:BA:1197:G:O5'	2.12	0.49
34:BD:36:ARG:HD3	34:BD:38:TYR:OH	2.12	0.49
36:BF:2:ARG:HD2	36:BF:69:GLU:HB3	1.95	0.49
45:BO:7:GLU:HA	45:BO:10:LYS:HD2	1.94	0.49
51:BU:9:ARG:O	51:BU:13:ILE:HG13	2.12	0.49
52:BW:20:U:C5	52:BW:59:A:N6	2.80	0.49
29:C4:9:ARG:NE	29:C4:47:ARG:HB2	2.21	0.49
1:CA:1299:G:H22	1:CA:1640:C:H5'	1.77	0.49
1:CA:1434:A:H61	1:CA:1558:A:N6	2.08	0.49
1:CA:1999:C:H4'	1:CA:2723:C:O2	2.12	0.49
3:CD:264:LYS:HG2	3:CD:266:SER:HB3	1.94	0.49
11:CL:58:THR:C	11:CL:61:ARG:HE	2.15	0.49
12:CM:89:ASN:C	12:CM:92:GLY:H	2.16	0.49
13:CN:79:LEU:HD22	13:CN:83:ILE:HB	1.93	0.49
1:CA:994:C:OP1	16:CQ:53:ARG:NH2	2.45	0.49
19:CT:55:ASN:HB2	19:CT:80:ILE:CG1	2.42	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:483:A:O3'	20:CU:49:VAL:HG22	2.12	0.49
31:DA:1305:G:H1'	31:DA:1306:A:C8	2.48	0.49
31:DA:489:C:H2'	31:DA:490:G:H8	1.77	0.49
31:DA:748:C:O2	31:DA:749:C:H5	1.95	0.49
32:DB:72:GLY:O	32:DB:94:ASN:HB2	2.13	0.49
52:DW:10:G:N2	52:DW:26:G:H1'	2.27	0.49
1:AA:1349:A:N6	1:AA:1598:C:N4	2.61	0.49
1:AA:1899:G:H21	1:AA:1902:C:N4	1.96	0.49
1:AA:193:U:H2'	1:AA:194:G:H8	1.78	0.49
1:AA:2393:A:C5'	11:AL:62:LEU:HB3	2.43	0.49
1:AA:892:G:H2'	1:AA:893:C:C5	2.47	0.49
4:AE:23:VAL:HA	4:AE:184:VAL:O	2.12	0.49
1:AA:443:A:N7	5:AF:45:ARG:HD2	2.27	0.49
31:BA:1287:A:H2'	31:BA:1288:A:C8	2.48	0.49
31:BA:1370:G:C2	31:BA:1371:G:C8	3.00	0.49
32:BB:47:THR:HA	32:BB:202:PRO:HG2	1.94	0.49
34:BD:9:CYS:HB3	34:BD:32:ALA:CB	2.41	0.49
38:BH:86:ILE:HG22	38:BH:87:SER:N	2.28	0.49
41:BK:41:THR:CG2	41:BK:42:TRP:H	2.21	0.49
49:BS:6:LYS:H	49:BS:6:LYS:CE	2.26	0.49
1:CA:1164:G:H2'	1:CA:1165:U:C6	2.47	0.49
1:CA:2307:G:N7	1:CA:2308:G:C6	2.80	0.49
1:CA:2773:C:H2'	1:CA:2774:C:H6	1.77	0.49
1:CA:372:G:HO2'	1:CA:373:U:P	2.35	0.49
12:CM:83:MET:HG2	12:CM:84:GLY:N	2.27	0.49
1:CA:857:C:H4'	22:CW:23:VAL:HG21	1.93	0.49
23:CX:27:GLU:CB	23:CX:33:LYS:HA	2.42	0.49
23:CX:48:LYS:HG3	23:CX:61:ARG:HH11	1.77	0.49
31:DA:791:G:C5	31:DA:792:A:N7	2.81	0.49
34:DD:100:ARG:HE	34:DD:137:SER:CA	2.17	0.49
36:DF:10:LEU:HD13	36:DF:61:LEU:CD1	2.40	0.49
38:DH:20:TYR:HA	38:DH:65:TYR:CZ	2.47	0.49
39:DI:92:TYR:O	39:DI:96:LEU:HB2	2.12	0.49
41:DK:34:ASP:N	41:DK:40:ILE:HD11	2.27	0.49
42:DL:56:LYS:N	42:DL:56:LYS:HD2	2.27	0.49
46:DP:34:GLU:OE2	46:DP:55:ARG:HD3	2.13	0.49
1:AA:1438:U:O2'	1:AA:1439:A:H5'	2.13	0.49
1:AA:1459:G:H5''	1:AA:1460:A:P	2.52	0.49
1:AA:192:C:H2'	1:AA:193:U:H5'	1.95	0.49
1:AA:2119:A:H61	1:AA:2170:A:N6	2.07	0.49
1:AA:1790:C:O2'	3:AD:209:ALA:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AE:132:HIS:CD2	4:AE:135:HIS:CE1	3.00	0.49
12:AM:20:ALA:HA	12:AM:98:LYS:HB3	1.94	0.49
13:AN:57:ARG:HD3	13:AN:59:ASP:CG	2.33	0.49
25:AZ:40:THR:HG23	25:AZ:43:ILE:CG1	2.42	0.49
31:BA:160:A:H2'	31:BA:161:A:O4'	2.12	0.49
1:CA:1388:G:H4'	1:CA:1525:G:O2'	2.12	0.49
1:CA:1417:C:H42	1:CA:1581:G:H1	1.59	0.49
1:CA:2128:C:H2'	1:CA:2129:C:C2	2.47	0.49
1:CA:2688:U:H1'	1:CA:2721:A:N6	2.27	0.49
1:CA:813:U:H2'	1:CA:814:C:C6	2.47	0.49
4:CE:128:SER:O	4:CE:129:HIS:HB2	2.12	0.49
4:CE:23:VAL:HA	4:CE:184:VAL:O	2.12	0.49
5:CF:117:ARG:HD3	5:CF:120:GLU:OE2	2.12	0.49
1:CA:443:A:C5	5:CF:45:ARG:HD2	2.47	0.49
11:CL:30:THR:O	11:CL:32:THR:N	2.46	0.49
22:CW:56:ASP:O	22:CW:57:PHE:CB	2.61	0.49
31:DA:184:G:C4'	31:DA:224:C:H4'	2.43	0.49
31:DA:272:C:H2'	31:DA:273:A:H8	1.77	0.49
31:DA:309:G:O2'	31:DA:310:G:H5'	2.13	0.49
32:DB:97:TRP:CH2	32:DB:173:ALA:HA	2.47	0.49
34:DD:5:ILE:CG2	34:DD:6:GLY:N	2.75	0.49
35:DE:6:PHE:HB2	35:DE:34:VAL:HG13	1.93	0.49
39:DI:33:PHE:HE2	39:DI:47:LEU:HB2	1.78	0.49
1:AA:1485:G:H2'	1:AA:1486:A:H8	1.76	0.49
1:AA:1932:A:H2'	1:AA:1933:G:O4'	2.13	0.49
1:AA:2117:A:N6	1:AA:2172:U:C2	2.81	0.49
1:AA:2605:U:H2'	1:AA:2606:C:C6	2.47	0.49
1:AA:451:C:H4'	5:AF:52:LYS:HZ2	1.77	0.49
1:AA:49:A:H4'	1:AA:50:U:H5''	1.93	0.49
1:AA:844:C:C2'	1:AA:845:G:H5'	2.43	0.49
4:AE:31:CYS:HB3	4:AE:49:LEU:HD12	1.93	0.49
4:AE:93:VAL:HG11	4:AE:181:LEU:O	2.13	0.49
5:AF:167:ALA:HB1	5:AF:173:VAL:HG11	1.94	0.49
1:AA:1009:A:H4'	16:AQ:59:ARG:HG3	1.95	0.49
18:AS:28:SER:OG	18:AS:31:GLU:HG2	2.13	0.49
20:AU:81:LYS:HD3	20:AU:97:ARG:CB	2.34	0.49
23:AX:12:PRO:O	23:AX:14:VAL:HG23	2.13	0.49
31:BA:1291:G:H4'	39:BI:38:GLN:O	2.13	0.49
31:BA:349:A:O2'	31:BA:350:G:H5'	2.13	0.49
31:BA:575:G:H4'	31:BA:576:G:H5''	1.94	0.49
33:BC:68:VAL:HG12	33:BC:70:VAL:HG23	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:17:VAL:HG12	34:BD:18:LYS:N	2.27	0.49
35:BE:79:GLU:HB3	35:BE:92:LYS:HA	1.93	0.49
41:BK:34:ASP:N	41:BK:40:ILE:HD11	2.28	0.49
40:BJ:63:PHE:HB3	44:BN:57:ARG:O	2.13	0.49
46:BP:20:VAL:HG21	46:BP:32:TYR:CB	2.43	0.49
36:BF:50:TYR:CE1	48:BR:74:ARG:O	2.66	0.49
30:C5:14:VAL:HG21	30:C5:57:ARG:HD3	1.95	0.49
1:CA:1742:C:H2'	1:CA:1743:G:O4'	2.13	0.49
1:CA:249:C:O2	30:C5:12:LYS:HE3	2.13	0.49
1:CA:2605:U:H2'	1:CA:2606:C:C6	2.47	0.49
1:CA:1050:A:C2	1:CA:2751:G:C4	3.00	0.49
5:CF:205:ARG:HG2	5:CF:206:ILE:HG23	1.94	0.49
14:CO:33:LYS:O	14:CO:54:LEU:HG	2.11	0.49
17:CR:35:LEU:C	17:CR:37:VAL:N	2.62	0.49
23:CX:27:GLU:HB2	23:CX:33:LYS:CA	2.43	0.49
31:DA:1316:G:H2'	31:DA:1317:C:H5''	1.95	0.49
31:DA:552:U:H5'	42:DL:85:ARG:HE	1.77	0.49
31:DA:620:C:H2'	31:DA:621:A:O4'	2.12	0.49
32:DB:87:ARG:HE	32:DB:233:SER:H	1.60	0.49
39:DI:5:TYR:HE2	39:DI:16:ARG:HB3	1.77	0.49
46:DP:43:LYS:HA	46:DP:48:TRP:HB2	1.94	0.49
51:DU:9:ARG:O	51:DU:13:ILE:HG13	2.12	0.49
1:AA:1488:G:C5	1:AA:1489:U:C5	3.00	0.49
1:AA:1963:U:O2	1:AA:1963:U:H2'	2.12	0.49
1:AA:580:C:H2'	1:AA:581:C:H6	1.77	0.49
2:AB:29:A:C2	2:AB:56:G:C2	3.01	0.49
2:AB:81:G:O6	2:AB:95:U:O2	2.31	0.49
5:AF:181:LEU:CD2	5:AF:186:ILE:HD11	2.42	0.49
6:AG:97:ASP:HA	6:AG:100:TRP:HD1	1.77	0.49
19:AT:30:VAL:HG11	19:AT:39:ILE:HD11	1.93	0.49
24:AY:47:ASN:O	24:AY:49:LYS:N	2.45	0.49
31:BA:1316:G:H2'	31:BA:1317:C:H5''	1.94	0.49
31:BA:722:A:HO2'	31:BA:723:U:H6	1.57	0.49
43:BM:76:ALA:HA	43:BM:79:LYS:CE	2.42	0.49
44:BN:22:THR:HB	44:BN:33:VAL:HG11	1.94	0.49
46:BP:34:GLU:OE2	46:BP:55:ARG:HD3	2.12	0.49
31:BA:1313:U:OP2	49:BS:6:LYS:HB3	2.12	0.49
52:BW:9:G:H5'	52:BW:46:G:C1'	2.42	0.49
1:CA:1187:G:O5'	1:CA:1187:G:H8	1.96	0.49
1:CA:1373:A:H2'	1:CA:1374:G:O4'	2.11	0.49
1:CA:2602:A:H5'	52:DV:75:C:OP1	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:892:G:H2'	1:CA:893:C:C5	2.48	0.49
3:CD:154:LYS:C	3:CD:155:LEU:HD12	2.33	0.49
3:CD:168:ARG:HD2	3:CD:168:ARG:N	2.26	0.49
3:CD:172:TYR:HD1	3:CD:185:VAL:C	2.16	0.49
9:CJ:37:VAL:HG12	9:CJ:38:LEU:N	2.27	0.49
1:CA:1952:A:N3	10:CK:22:ILE:HG13	2.27	0.49
10:CK:8:LEU:N	10:CK:8:LEU:HD23	2.28	0.49
13:CN:94:TYR:C	13:CN:117:VAL:HG12	2.33	0.49
17:CR:66:ARG:HD2	17:CR:88:ARG:NH1	2.28	0.49
20:CU:90:LEU:HG	20:CU:91:GLU:H	1.78	0.49
23:CX:73:LEU:HD21	23:CX:94:LEU:O	2.13	0.49
32:DB:208:ILE:CD1	32:DB:208:ILE:H	2.23	0.49
34:DD:153:ARG:HG3	34:DD:181:MET:HE2	1.94	0.49
40:DJ:48:THR:HA	40:DJ:62:HIS:CB	2.36	0.49
43:DM:12:ASN:HA	43:DM:46:LYS:HE2	1.95	0.49
50:DT:81:LYS:O	50:DT:85:MET:HG2	2.13	0.49
26:A1:39:ARG:NH2	26:A1:47:VAL:HG12	2.28	0.49
28:A3:11:LEU:HD13	28:A3:12:GLU:N	2.28	0.49
1:AA:1786:A:C2	1:AA:2606:C:H1'	2.48	0.49
1:AA:2190:G:H2'	1:AA:2191:G:H8	1.78	0.49
1:AA:2473:U:H2'	1:AA:2474:C:H6	1.77	0.49
1:AA:2652:C:H2'	1:AA:2653:U:O4'	2.13	0.49
1:AA:2688:U:H1'	1:AA:2721:A:N6	2.28	0.49
1:AA:411:G:C2	11:AL:71:VAL:HG11	2.48	0.49
1:AA:932:G:H4'	1:AA:933:A:O5'	2.12	0.49
5:AF:184:TYR:CE2	5:AF:188:ARG:HD2	2.48	0.49
8:AI:127:VAL:HG12	8:AI:141:LYS:HG3	1.94	0.49
11:AL:23:PRO:HB2	11:AL:33:ARG:CD	2.43	0.49
11:AL:95:VAL:HG22	11:AL:125:VAL:HB	1.94	0.49
12:AM:127:ILE:HG22	12:AM:128:LYS:O	2.13	0.49
14:AO:89:ARG:HD3	14:AO:94:TYR:HB2	1.95	0.49
19:AT:55:ASN:HB2	19:AT:80:ILE:CG1	2.41	0.49
24:AY:37:PHE:O	24:AY:41:ILE:HG23	2.12	0.49
31:BA:184:G:C4'	31:BA:224:C:H4'	2.42	0.49
31:BA:955:U:H1'	31:BA:1227:A:N6	2.28	0.49
32:BB:97:TRP:CE2	32:BB:101:MET:HG3	2.48	0.49
31:BA:545:C:C5'	34:BD:72:GLU:HG3	2.29	0.49
38:BH:20:TYR:HA	38:BH:65:TYR:CZ	2.48	0.49
41:BK:26:ASN:O	41:BK:27:ASN:HB2	2.13	0.49
45:BO:87:ILE:HG23	45:BO:88:ARG:N	2.27	0.49
48:BR:54:ARG:HD2	48:BR:54:ARG:N	2.27	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:C1:39:ARG:NH2	26:C1:47:VAL:HG12	2.27	0.49
18:CS:19:LEU:HD12	27:C2:25:LEU:HG	1.95	0.49
28:C3:15:GLU:OE2	28:C3:18:ARG:CZ	2.61	0.49
1:CA:1658:C:OP1	4:CE:132:HIS:CE1	2.66	0.49
1:CA:2190:G:H2'	1:CA:2191:G:H8	1.78	0.49
1:CA:2557:G:H2'	1:CA:2558:C:C6	2.48	0.49
1:CA:580:C:H2'	1:CA:581:C:C6	2.47	0.49
1:CA:847:U:O2'	1:CA:848:G:H8	1.96	0.49
6:CG:113:ARG:HD3	26:C1:60:GLU:OE2	2.13	0.49
8:CI:41:GLU:HA	8:CI:44:LEU:HB2	1.95	0.49
8:CI:75:LEU:HD11	8:CI:105:HIS:NE2	2.26	0.49
9:CJ:119:GLU:HB2	9:CJ:145:VAL:HG12	1.94	0.49
13:CN:57:ARG:HD3	13:CN:59:ASP:CG	2.33	0.49
17:CR:35:LEU:O	17:CR:37:VAL:N	2.45	0.49
17:CR:38:LEU:HD23	17:CR:39:LEU:N	2.27	0.49
21:CV:48:PHE:HE2	21:CV:71:VAL:HG11	1.76	0.49
23:CX:12:PRO:O	23:CX:14:VAL:HG23	2.13	0.49
33:DC:15:THR:HG21	33:DC:181:ASN:HA	1.95	0.49
33:DC:52:LEU:HD13	33:DC:68:VAL:CG1	2.40	0.49
34:DD:116:GLN:O	34:DD:119:GLN:HB3	2.12	0.49
34:DD:128:VAL:HG12	34:DD:129:ASN:N	2.23	0.49
46:DP:20:VAL:HG23	46:DP:34:GLU:O	2.12	0.49
31:DA:323:U:O3'	50:DT:22:ARG:HG2	2.13	0.49
27:A2:25:LEU:N	27:A2:25:LEU:HD12	2.26	0.49
1:AA:1045:A:H5'	1:AA:1047:G:C5'	2.42	0.49
9:AJ:61:HIS:CD2	9:AJ:62:ARG:HG3	2.47	0.49
12:AM:134:ARG:NH2	12:AM:137:TYR:O	2.46	0.49
12:AM:83:MET:HG2	12:AM:84:GLY:N	2.28	0.49
13:AN:11:ASN:CG	13:AN:12:ARG:H	2.14	0.49
15:AP:62:THR:HG22	15:AP:75:ILE:HG13	1.94	0.49
17:AR:22:VAL:CG1	17:AR:23:GLU:N	2.75	0.49
18:AS:23:LEU:HD13	27:A2:25:LEU:HD13	1.94	0.49
20:AU:50:ARG:HG3	20:AU:52:SER:O	2.13	0.49
31:BA:438:G:H4'	34:BD:123:HIS:ND1	2.27	0.49
31:BA:748:C:O2	31:BA:749:C:H5	1.95	0.49
35:BE:10:MET:HA	35:BE:32:VAL:HA	1.95	0.49
31:BA:1187:G:H5'	39:BI:113:LYS:HE2	1.94	0.49
40:BJ:51:ARG:HB2	40:BJ:60:ARG:HA	1.95	0.49
51:BU:21:TYR:O	51:BU:22:ARG:HG3	2.13	0.49
30:C5:52:LYS:N	30:C5:52:LYS:CD	2.76	0.49
1:CA:1113:U:H2'	1:CA:1114:G:H8	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1782:C:H1'	1:CA:2609:U:H5''	1.95	0.49
1:CA:1998:G:H2'	1:CA:1999:C:C6	2.48	0.49
1:CA:244:A:C2	1:CA:255:A:C4	3.00	0.49
1:CA:2731:G:C6	1:CA:2732:G:O6	2.66	0.49
1:CA:2892:A:H2'	1:CA:2893:G:O4'	2.13	0.49
1:CA:779:U:OP1	3:CD:49:ILE:HG13	2.13	0.49
2:CB:73:A:C4	2:CB:104:A:C2	3.01	0.49
5:CF:53:THR:C	5:CF:55:GLY:H	2.16	0.49
6:CG:2:PRO:C	6:CG:3:LEU:HD12	2.33	0.49
11:CL:38:GLN:CG	11:CL:39:LYS:H	2.12	0.49
17:CR:51:VAL:HG12	17:CR:52:VAL:N	2.28	0.49
31:DA:685:G:O2'	31:DA:686:U:H5'	2.13	0.49
31:DA:723:U:H5''	31:DA:724:G:OP2	2.12	0.49
31:DA:754:C:O2	31:DA:754:C:H3'	2.12	0.49
31:DA:826:C:H2'	31:DA:827:U:C6	2.48	0.49
31:DA:957:U:O2	31:DA:959:A:C8	2.66	0.49
31:DA:973:G:H3'	31:DA:974:A:H5''	1.93	0.49
34:DD:25:ARG:NH1	34:DD:25:ARG:HB3	2.28	0.49
34:DD:13:ARG:NH2	34:DD:40:PRO:HA	2.27	0.49
43:DM:81:LEU:HD11	43:DM:88:ARG:HH21	1.78	0.49
52:DW:40:C:H2'	52:DW:41:C:C6	2.48	0.49
52:DW:4:G:O2'	52:DW:5:G:H5'	2.13	0.49
28:A3:15:GLU:OE2	28:A3:18:ARG:CZ	2.61	0.48
30:A5:22:VAL:CB	30:A5:54:GLU:HG3	2.30	0.48
1:AA:1164:G:H2'	1:AA:1165:U:C6	2.48	0.48
1:AA:1385:G:H4'	1:AA:1386:C:OP1	2.11	0.48
1:AA:1946:U:H2'	1:AA:1947:C:C6	2.48	0.48
1:AA:973:A:O4'	1:AA:1188:U:C6	2.65	0.48
3:AD:168:ARG:N	3:AD:168:ARG:HD2	2.28	0.48
1:AA:444:C:H4'	5:AF:49:ALA:HB2	1.94	0.48
9:AJ:119:GLU:HB2	9:AJ:145:VAL:HG12	1.94	0.48
10:AK:87:ILE:HG22	10:AK:93:PRO:HA	1.95	0.48
17:AR:35:LEU:HB2	17:AR:57:VAL:CG1	2.41	0.48
19:AT:62:LYS:O	19:AT:63:LYS:HD3	2.13	0.48
1:AA:483:A:O3'	20:AU:49:VAL:HG22	2.13	0.48
31:BA:1230:C:H2'	31:BA:1231:G:H8	1.78	0.48
31:BA:1409:C:H2'	31:BA:1410:G:H8	1.77	0.48
31:BA:1411:C:H2'	31:BA:1412:C:H6	1.76	0.48
34:BD:149:ALA:HB3	34:BD:152:SER:HG	1.77	0.48
35:BE:92:LYS:O	35:BE:118:ILE:HG13	2.13	0.48
39:BI:99:LEU:HB3	39:BI:101:PHE:HE1	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BJ:51:ARG:H	40:BJ:60:ARG:HA	1.77	0.48
42:BL:17:VAL:HG23	42:BL:18:ARG:N	2.26	0.48
43:BM:22:ILE:HB	43:BM:25:ILE:HD13	1.95	0.48
31:BA:1328:C:H5''	43:BM:28:ALA:HB1	1.94	0.48
49:BS:12:ASP:HB3	49:BS:14:HIS:CE1	2.48	0.48
1:CA:1028:A:N6	1:CA:1125:G:H2'	2.28	0.48
1:CA:1497:U:H5'	1:CA:1498:C:H5	1.77	0.48
1:CA:1568:G:O5'	3:CD:61:LEU:HD22	2.13	0.48
1:CA:193:U:H2'	1:CA:194:G:H8	1.77	0.48
1:CA:2115:G:H2'	1:CA:2116:G:N7	2.27	0.48
4:CE:137:HIS:HB3	4:CE:138:PRO:HD2	1.94	0.48
1:CA:2312:U:H4'	6:CG:71:THR:CG2	2.43	0.48
11:CL:122:PRO:HA	11:CL:141:ALA:O	2.13	0.48
13:CN:53:HIS:HA	13:CN:56:LYS:HB2	1.94	0.48
14:CO:90:GLY:O	14:CO:92:TYR:N	2.46	0.48
43:DM:2:ALA:HB1	43:DM:57:ARG:NH1	2.28	0.48
31:DA:617:G:H5'	46:DP:45:THR:HG22	1.94	0.48
47:DQ:59:ILE:HG22	47:DQ:73:VAL:HA	1.95	0.48
49:DS:6:LYS:H	49:DS:6:LYS:CE	2.26	0.48
1:AA:1203:G:C6	1:AA:1204:A:N6	2.81	0.48
1:AA:1205:U:H4'	1:AA:1206:G:OP2	2.14	0.48
1:AA:2176:A:H2'	1:AA:2177:C:C6	2.49	0.48
1:AA:2421:G:C6	52:BW:76:A:C2	3.00	0.48
1:AA:2892:A:H2'	1:AA:2893:G:O4'	2.13	0.48
4:AE:130:GLY:O	4:AE:131:ALA:HB3	2.13	0.48
4:AE:154:LYS:O	4:AE:156:MET:HG3	2.14	0.48
11:AL:38:GLN:CG	11:AL:39:LYS:H	2.15	0.48
19:AT:43:VAL:HG11	19:AT:81:VAL:HG11	1.95	0.48
25:AZ:7:LYS:O	25:AZ:9:VAL:HG23	2.13	0.48
31:BA:1305:G:H1'	31:BA:1306:A:C8	2.47	0.48
31:BA:1443:G:H3'	31:BA:1446:A:H5'	1.94	0.48
36:BF:45:LEU:O	36:BF:46:ARG:HG2	2.14	0.48
50:BT:33:ILE:HD11	50:BT:62:LEU:HD22	1.94	0.48
51:BU:12:LYS:HB3	51:BU:17:THR:O	2.13	0.48
52:BW:40:C:H2'	52:BW:41:C:C6	2.47	0.48
1:CA:1022:G:N2	1:CA:1142(B):A:C2	2.79	0.48
1:CA:1205:U:H4'	1:CA:1206:G:OP2	2.12	0.48
1:CA:139:G:N3	1:CA:141(A):A:N1	2.61	0.48
1:CA:1464:C:H2'	1:CA:1465:G:C8	2.48	0.48
1:CA:1512:G:H2'	1:CA:1513:C:O4'	2.13	0.48
1:CA:1559:G:N3	1:CA:1559:G:H5'	2.28	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2063:C:O2	1:CA:2450:A:N1	2.45	0.48
1:CA:2443:C:O2'	1:CA:2444:G:H5'	2.14	0.48
1:CA:414:C:H2'	1:CA:415:A:C8	2.48	0.48
1:CA:637:A:OP2	11:CL:115:LEU:HB2	2.12	0.48
1:CA:844:C:O2'	1:CA:845:G:H5'	2.13	0.48
3:CD:106:ILE:H	3:CD:106:ILE:CD1	2.04	0.48
5:CF:129:PHE:O	5:CF:132:VAL:HG13	2.12	0.48
6:CG:131:TYR:HB3	6:CG:159:VAL:HG13	1.95	0.48
9:CJ:114:LEU:HA	9:CJ:118:PRO:HB3	1.95	0.48
1:CA:663:G:OP1	11:CL:21:ARG:HG2	2.13	0.48
19:CT:43:VAL:HG11	19:CT:81:VAL:HG11	1.95	0.48
19:CT:8:ILE:HD12	19:CT:8:ILE:H	1.78	0.48
21:CV:56:VAL:HG12	21:CV:57:ILE:N	2.27	0.48
25:CZ:29:ARG:HG3	25:CZ:30:ARG:H	1.77	0.48
31:DA:1401:G:C2	31:DA:1402:C:H1'	2.48	0.48
31:DA:939:G:H2'	31:DA:940:C:C6	2.49	0.48
33:DC:113:ALA:HB3	33:DC:114:PRO:HD3	1.94	0.48
37:DG:26:PHE:CE2	37:DG:30:ILE:HD11	2.48	0.48
37:DG:48:LYS:O	37:DG:52:GLU:HG3	2.14	0.48
52:DW:65:C:H2'	52:DW:66:C:H6	1.77	0.48
1:AA:1028:A:N6	1:AA:1125:G:H2'	2.28	0.48
1:AA:1499:C:H2'	1:AA:1500:G:O4'	2.13	0.48
1:AA:1782:C:H1'	1:AA:2609:U:H5''	1.96	0.48
1:AA:1790:C:H4'	3:AD:209:ALA:CB	2.44	0.48
1:AA:17:G:H2'	1:AA:18:C:C6	2.48	0.48
1:AA:2250:G:N3	1:AA:2250:G:H5''	2.27	0.48
1:AA:228:A:H3'	1:AA:229:A:C5'	2.43	0.48
1:AA:2647:U:H2'	1:AA:2648:C:C6	2.48	0.48
1:AA:2691:C:C4	1:AA:2719:G:N2	2.81	0.48
1:AA:301:G:OP1	1:AA:301:G:H4'	2.13	0.48
1:AA:1190:G:O3'	11:AL:35:HIS:HB3	2.12	0.48
11:AL:55:ARG:HG3	11:AL:56:SER:N	2.28	0.48
1:AA:2822:G:O6	13:AN:4:LEU:HD12	2.14	0.48
14:AO:90:GLY:O	14:AO:92:TYR:N	2.47	0.48
17:AR:35:LEU:O	17:AR:37:VAL:N	2.46	0.48
31:BA:1234:C:H4'	31:BA:1364:U:H1'	1.96	0.48
31:BA:620:C:H2'	31:BA:621:A:O4'	2.12	0.48
31:BA:939:G:H2'	31:BA:940:C:C6	2.49	0.48
32:BB:70:PHE:HB2	32:BB:92:TYR:HB2	1.94	0.48
34:BD:49:ARG:NE	34:BD:50:ARG:H	2.12	0.48
36:BF:53:ALA:O	36:BF:54:LYS:HB2	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BM:12:ASN:HA	43:BM:46:LYS:HE2	1.94	0.48
30:C5:51:ALA:H	30:C5:54:GLU:HB2	1.78	0.48
1:CA:195:A:H5''	1:CA:196:A:OP2	2.13	0.48
1:CA:1963:U:O2	1:CA:1963:U:H2'	2.13	0.48
1:CA:2250:G:C8	1:CA:2496:C:H5''	2.48	0.48
1:CA:262:A:H2'	1:CA:263:C:O4'	2.14	0.48
1:CA:2873:A:C2	13:CN:6:SER:HB2	2.48	0.48
4:CE:6:GLY:HA2	4:CE:51:PHE:CZ	2.48	0.48
5:CF:167:ALA:HB1	5:CF:173:VAL:HG11	1.94	0.48
7:CH:23:ARG:N	7:CH:23:ARG:HD3	2.28	0.48
8:CI:92:VAL:HG13	8:CI:120:ILE:CG1	2.43	0.48
13:CN:10:LEU:HD22	13:CN:17:ARG:CZ	2.43	0.48
15:CP:88:ILE:HG13	15:CP:88:ILE:O	2.12	0.48
23:CX:51:VAL:HG13	23:CX:58:ILE:CG2	2.42	0.48
34:DD:173:TRP:CE2	34:DD:189:PRO:HB3	2.48	0.48
41:DK:26:ASN:O	41:DK:27:ASN:HB2	2.12	0.48
43:DM:22:ILE:HB	43:DM:25:ILE:HD13	1.96	0.48
44:DN:27:CYS:SG	44:DN:29:ARG:HB2	2.53	0.48
1:AA:2593:U:H2'	1:AA:2594:C:H6	1.75	0.48
1:AA:2866:U:C6	1:AA:2868:A:H1'	2.49	0.48
1:AA:833:U:H2'	1:AA:834:C:C6	2.48	0.48
1:AA:952:G:C6	1:AA:953:A:N7	2.81	0.48
11:AL:39:LYS:NZ	11:AL:42:SER:OG	2.46	0.48
12:AM:20:ALA:HB2	12:AM:99:PRO:HD2	1.96	0.48
13:AN:53:HIS:HA	13:AN:56:LYS:HB2	1.96	0.48
24:AY:50:ILE:HD12	24:AY:51:ARG:H	1.74	0.48
25:AZ:29:ARG:HG3	25:AZ:30:ARG:H	1.77	0.48
31:BA:105:G:C6	31:BA:106:C:N4	2.81	0.48
31:BA:1464:G:O2'	31:BA:1465:C:H5'	2.13	0.48
31:BA:489:C:H2'	31:BA:490:G:C8	2.48	0.48
31:BA:841:U:C2'	31:BA:842:C:H5''	2.43	0.48
31:BA:574:A:N3	31:BA:883:C:H1'	2.29	0.48
32:BB:19:HIS:CD2	32:BB:20:GLU:HG2	2.49	0.48
32:BB:69:LEU:HD13	32:BB:92:TYR:HA	1.95	0.48
44:BN:23:ARG:HD2	44:BN:28:GLY:O	2.12	0.48
30:C5:53:PRO:O	30:C5:57:ARG:NH1	2.47	0.48
1:CA:1175:U:H5	1:CA:1177:A:C6	2.31	0.48
1:CA:1499:C:H2'	1:CA:1500:G:O4'	2.13	0.48
1:CA:1665:A:H4'	10:CK:67:LYS:HB2	1.94	0.48
1:CA:2285:C:OP1	28:C3:30:THR:HG21	2.13	0.48
1:CA:588:U:H2'	1:CA:589:C:C6	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:29:A:C2	2:CB:56:G:C2	3.01	0.48
8:CI:133:HIS:CE1	8:CI:135:GLU:H	2.32	0.48
1:CA:2094:G:H5'	8:CI:25:TYR:CD2	2.48	0.48
11:CL:79:ARG:O	11:CL:111:ARG:HB2	2.12	0.48
12:CM:9:TYR:HD2	12:CM:10:ARG:HB2	1.78	0.48
21:CV:99:TYR:CE1	21:CV:125:LEU:HB2	2.47	0.48
31:DA:1234:C:H4'	31:DA:1364:U:H1'	1.94	0.48
31:DA:1270:C:H2'	31:DA:1271:G:C8	2.47	0.48
31:DA:792:A:H4'	31:DA:793:U:C5'	2.43	0.48
31:DA:841:U:C2'	31:DA:842:C:H5''	2.43	0.48
34:DD:49:ARG:HH11	34:DD:49:ARG:HA	1.78	0.48
39:DI:99:LEU:HB3	39:DI:101:PHE:HE1	1.78	0.48
50:DT:33:ILE:HD11	50:DT:62:LEU:HD22	1.95	0.48
1:AA:1110:G:H4'	1:AA:1110:G:OP1	2.13	0.48
1:AA:1468:C:H2'	1:AA:1469:A:C8	2.48	0.48
1:AA:1532:C:C2	1:AA:1540:G:N2	2.82	0.48
1:AA:2037:G:C6	1:AA:2038:G:C6	3.01	0.48
1:AA:2050:C:H1'	4:AE:156:MET:CE	2.44	0.48
1:AA:2312:U:H4'	6:AG:71:THR:CG2	2.43	0.48
1:AA:2602:A:H5'	52:BV:75:C:OP1	2.13	0.48
2:AB:89(A):G:C6	2:AB:89(B):A:N6	2.82	0.48
3:AD:264:LYS:HG2	3:AD:266:SER:H	1.78	0.48
1:AA:1568:G:O5'	3:AD:61:LEU:HD22	2.14	0.48
5:AF:101:LEU:O	5:AF:106:ARG:NH1	2.46	0.48
7:AH:92:ILE:N	7:AH:92:ILE:HD12	2.29	0.48
1:AA:2414:G:H21	11:AL:67:MET:HE1	1.78	0.48
16:AQ:92:ARG:HG2	17:AR:11:GLN:NE2	2.28	0.48
17:AR:20:LEU:HG	17:AR:22:VAL:HG23	1.94	0.48
19:AT:88:LYS:HZ3	19:AT:90:GLU:HG2	1.78	0.48
20:AU:4:LYS:H	20:AU:4:LYS:HD3	1.78	0.48
21:AV:10:ARG:HH21	21:AV:26:GLY:N	2.11	0.48
23:AX:58:ILE:HD12	23:AX:90:ILE:HG22	1.95	0.48
32:BB:214:ILE:HD12	32:BB:214:ILE:N	2.27	0.48
34:BD:15:GLU:HG2	34:BD:63:LYS:HG3	1.95	0.48
41:BK:12:ARG:HB3	41:BK:12:ARG:CZ	2.43	0.48
42:BL:40:ARG:HG2	42:BL:41:THR:N	2.28	0.48
31:BA:1327:C:OP1	51:BU:21:TYR:CD1	2.67	0.48
1:CA:1235:G:C6	1:CA:1236:G:N1	2.81	0.48
1:CA:1973:G:H2'	1:CA:1974:C:H6	1.78	0.48
1:CA:2473:U:H2'	1:CA:2474:C:H6	1.78	0.48
1:CA:2691:C:C4	1:CA:2719:G:N2	2.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:81:G:O6	2:CB:95:U:O2	2.30	0.48
1:CA:1657:C:H4'	4:CE:133:LYS:HG2	1.96	0.48
6:CG:39:ILE:N	6:CG:39:ILE:HD12	2.29	0.48
6:CG:97:ASP:HA	6:CG:100:TRP:HD1	1.78	0.48
9:CJ:89:LYS:O	9:CJ:90:LEU:C	2.52	0.48
10:CK:36:GLY:HA2	10:CK:106:LEU:HD23	1.95	0.48
11:CL:101:VAL:HG13	11:CL:102:ARG:N	2.28	0.48
31:DA:718:G:H5'	41:DK:117:ASN:ND2	2.29	0.48
32:DB:24:TRP:H	32:DB:24:TRP:HD1	1.60	0.48
33:DC:75:VAL:O	33:DC:75:VAL:HG12	2.14	0.48
46:DP:3:LYS:O	46:DP:21:VAL:HA	2.14	0.48
48:DR:26:LEU:HG	48:DR:42:ARG:NH1	2.29	0.48
1:AA:101:G:O2'	1:AA:102:G:P	2.71	0.48
1:AA:1022:G:N2	1:AA:1142(B):A:C2	2.77	0.48
1:AA:1187:G:H8	1:AA:1187:G:O5'	1.97	0.48
1:AA:1417:C:H42	1:AA:1581:G:H1	1.61	0.48
4:AE:128:SER:O	4:AE:129:HIS:HB2	2.13	0.48
5:AF:101:LEU:HB3	5:AF:106:ARG:HD3	1.95	0.48
8:AI:61:ARG:O	8:AI:61:ARG:HD2	2.14	0.48
11:AL:101:VAL:HG13	11:AL:102:ARG:N	2.28	0.48
31:BA:1077:G:N2	31:BA:1080:A:OP2	2.45	0.48
31:BA:559:A:C5'	31:BA:560:U:H3'	2.44	0.48
31:BA:687:A:H4'	31:BA:688:G:O5'	2.14	0.48
31:BA:791:G:C5	31:BA:792:A:N7	2.81	0.48
32:BB:141:GLU:O	32:BB:145:LEU:HB2	2.14	0.48
35:BE:135:THR:O	35:BE:138:ALA:HB3	2.14	0.48
39:BI:51:ARG:HD3	39:BI:56:LEU:HD22	1.95	0.48
41:BK:24:SER:HB2	41:BK:27:ASN:O	2.13	0.48
31:BA:192:U:C4'	50:BT:103:GLY:H	2.22	0.48
29:C4:30:VAL:O	29:C4:34:ARG:HG2	2.13	0.48
1:CA:1042:G:C6	1:CA:1043:C:C4	3.02	0.48
1:CA:1153:C:O2'	1:CA:1154:G:H5'	2.12	0.48
1:CA:1570:A:H4'	3:CD:38:LYS:NZ	2.29	0.48
1:CA:2050:C:H2'	1:CA:2051:A:O4'	2.13	0.48
1:CA:2712:U:H1'	1:CA:712(B):A:H8	1.75	0.48
1:CA:288:C:H2'	1:CA:289:A:H8	1.79	0.48
3:CD:33:LEU:O	3:CD:35:LYS:N	2.46	0.48
13:CN:72:ASP:HB3	13:CN:75:LEU:HB2	1.96	0.48
23:CX:58:ILE:HD12	23:CX:90:ILE:HG22	1.96	0.48
1:CA:1184:G:OP1	25:CZ:29:ARG:HD3	2.13	0.48
31:DA:1291:G:H4'	39:DI:38:GLN:O	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DC:191:THR:HG21	33:DC:193:TYR:CE2	2.48	0.48
31:DA:410:G:OP2	34:DD:25:ARG:HG2	2.14	0.48
36:DF:45:LEU:O	36:DF:46:ARG:HG2	2.14	0.48
39:DI:17:VAL:HG22	39:DI:63:ILE:HD13	1.96	0.48
41:DK:12:ARG:HB3	41:DK:12:ARG:CZ	2.44	0.48
45:DO:7:GLU:HA	45:DO:10:LYS:HD2	1.96	0.48
51:DU:9:ARG:HH21	51:DU:10:ARG:HD2	1.78	0.48
52:DW:59:A:C5	52:DW:60:U:C5	3.01	0.48
52:DW:65:C:H2'	52:DW:66:C:C6	2.49	0.48
1:AA:1434:A:H61	1:AA:1558:A:N6	2.11	0.48
1:AA:1754:C:OP1	15:AP:96:ARG:NH1	2.41	0.48
3:AD:220:HIS:HD2	3:AD:221:VAL:N	2.11	0.48
6:AG:133:LEU:HD21	6:AG:157:ILE:HB	1.94	0.48
9:AJ:151:HIS:HB2	9:AJ:152:PRO:HD2	1.96	0.48
12:AM:10:ARG:HA	12:AM:10:ARG:NH1	2.28	0.48
14:AO:49:VAL:HG21	14:AO:77:ALA:HA	1.96	0.48
9:AJ:27:TYR:CD2	16:AQ:100:VAL:HG11	2.48	0.48
23:AX:13:ILE:CD1	23:AX:14:VAL:N	2.77	0.48
25:AZ:4:LEU:O	25:AZ:36:VAL:HA	2.12	0.48
31:BA:719:C:C2	48:BR:50:ILE:HG12	2.49	0.48
31:BA:80:G:O6	31:BA:88:C:N4	2.47	0.48
31:BA:818:G:C3'	31:BA:819:A:C5'	2.92	0.48
32:BB:172:ILE:HD12	32:BB:173:ALA:N	2.25	0.48
35:BE:64:ARG:HG3	35:BE:65:ASN:N	2.28	0.48
31:BA:875:C:H1'	38:BH:15:ASN:HD21	1.79	0.48
39:BI:92:TYR:O	39:BI:96:LEU:HB2	2.13	0.48
42:BL:45:LYS:HG2	42:BL:46:LYS:HG2	1.96	0.48
52:BV:58:A:H2	52:BV:60:U:HO2'	1.57	0.48
29:C4:29:LYS:O	29:C4:33:ARG:HB2	2.14	0.48
1:CA:2211:G:C2'	1:CA:2212:A:H5''	2.43	0.48
1:CA:586:A:N1	1:CA:809:G:O2'	2.37	0.48
6:CG:36:LYS:HD3	6:CG:160:VAL:HG21	1.94	0.48
11:CL:21:ARG:O	11:CL:23:PRO:HD3	2.14	0.48
12:CM:10:ARG:NH1	12:CM:10:ARG:HA	2.28	0.48
12:CM:116:GLU:HA	12:CM:116:GLU:OE1	2.14	0.48
12:CM:63:LYS:HA	21:CV:178:GLU:HG2	1.95	0.48
19:CT:34:ALA:HA	19:CT:38:GLU:OE2	2.14	0.48
31:DA:1327:C:H2'	31:DA:1328:C:C6	2.49	0.48
31:DA:575:G:H4'	31:DA:576:G:H5''	1.96	0.48
31:DA:979:C:H42	44:DN:18:VAL:HG12	1.78	0.48
31:DA:1313:U:OP2	49:DS:6:LYS:HB3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DS:6:LYS:HD2	49:DS:7:LYS:H	1.78	0.48
28:A3:11:LEU:HD21	28:A3:51:GLU:HG2	1.95	0.48
1:AA:643:A:N7	28:A3:42:TRP:CH2	2.82	0.48
1:AA:1106:G:H2'	1:AA:1107:G:H5'	1.96	0.48
1:AA:1175:U:H5	1:AA:1177:A:C6	2.31	0.48
1:AA:1951:U:O2	1:AA:1953:A:H8	1.97	0.48
1:AA:2285:C:OP1	28:A3:30:THR:HG21	2.13	0.48
1:AA:1999:C:H4'	1:AA:2723:C:O2	2.14	0.48
1:AA:2747:G:C2	1:AA:2756:U:C5	3.02	0.48
2:AB:73:A:C4	2:AB:104:A:C2	3.02	0.48
2:AB:95:U:H2'	2:AB:96:G:H8	1.79	0.48
3:AD:168:ARG:O	3:AD:169:GLU:HB2	2.12	0.48
20:AU:10:GLY:HA2	20:AU:27:VAL:HG22	1.96	0.48
23:AX:48:LYS:HG3	23:AX:61:ARG:HH11	1.78	0.48
25:AZ:53:LEU:HD23	25:AZ:53:LEU:N	2.29	0.48
31:BA:1275:A:H2'	31:BA:1276:G:C8	2.49	0.48
31:BA:1312:G:H2'	31:BA:1313:U:C6	2.48	0.48
31:BA:663:A:O2'	31:BA:664:G:H5'	2.13	0.48
31:BA:993:G:H4'	31:BA:994:A:OP2	2.14	0.48
32:BB:97:TRP:HZ2	32:BB:102:LEU:HD13	1.78	0.48
33:BC:137:ALA:O	33:BC:140:ARG:HD2	2.14	0.48
1:CA:1278:A:H2'	1:CA:1279:G:H8	1.77	0.48
1:CA:363(E):G:O2'	1:CA:363(F):U:H5'	2.14	0.48
1:CA:885:C:H2'	1:CA:886:C:H5''	1.95	0.48
1:CA:947:G:H2'	1:CA:948:G:C8	2.48	0.48
3:CD:269:PHE:HD1	3:CD:269:PHE:N	2.12	0.48
3:CD:35:LYS:HZ2	3:CD:35:LYS:HA	1.79	0.48
1:CA:2579:C:HO2'	4:CE:131:ALA:HB2	1.75	0.48
5:CF:183:VAL:O	5:CF:187:VAL:HG23	2.14	0.48
6:CG:52:ILE:HD12	6:CG:52:ILE:N	2.29	0.48
12:CM:34:LEU:HD13	12:CM:131:ILE:HD13	1.96	0.48
14:CO:93:LYS:CD	14:CO:95:HIS:HB2	2.44	0.48
16:CQ:90:VAL:O	16:CQ:91:ASP:C	2.52	0.48
20:CU:50:ARG:HG3	20:CU:52:SER:O	2.14	0.48
23:CX:27:GLU:HG2	23:CX:28:GLY:N	2.27	0.48
31:DA:1230:C:H2'	31:DA:1231:G:H8	1.78	0.48
31:DA:559:A:C5'	31:DA:560:U:H3'	2.43	0.48
31:DA:791:G:C6	31:DA:792:A:N7	2.82	0.48
32:DB:178:ARG:HH22	32:DB:196:LEU:HA	1.79	0.48
34:DD:194:LEU:HB3	34:DD:196:LEU:HD13	1.95	0.48
34:DD:62:GLN:HE21	34:DD:62:GLN:HA	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DI:33:PHE:HE2	39:DI:47:LEU:HD22	1.79	0.48
42:DL:67:ALA:CB	42:DL:84:ILE:HD11	2.43	0.48
49:DS:36:ARG:HB2	49:DS:72:GLY:HA2	1.96	0.48
28:A3:18:ARG:NH1	28:A3:43:CYS:O	2.46	0.48
30:A5:57:ARG:HB2	30:A5:57:ARG:NH1	2.28	0.48
1:AA:1051:G:H1	1:AA:1107:G:N2	2.06	0.48
1:AA:1022:G:C5	1:AA:1140:C:N4	2.81	0.48
1:AA:1336:A:H2'	1:AA:1337:G:C8	2.48	0.48
1:AA:1993:U:H2'	1:AA:1994:C:O4'	2.14	0.48
1:AA:480:A:O4'	20:AU:44:ILE:HG21	2.13	0.48
1:AA:602:G:O5'	1:AA:602:G:H8	1.96	0.48
1:AA:637:A:OP2	11:AL:115:LEU:HB2	2.13	0.48
1:AA:847:U:O2'	1:AA:848:G:H8	1.97	0.48
2:AB:50:G:OP2	14:AO:62:LYS:HD2	2.14	0.48
3:AD:31:LYS:HE2	3:AD:102:LYS:HD3	1.95	0.48
3:AD:97:TYR:CE1	3:AD:103:ARG:HD2	2.49	0.48
4:AE:37:ARG:HA	4:AE:42:ASP:OD2	2.13	0.48
5:AF:170:LEU:HD13	5:AF:172:TRP:CZ2	2.49	0.48
8:AI:133:HIS:CE1	8:AI:135:GLU:H	2.32	0.48
15:AP:100:TYR:CD1	15:AP:100:TYR:N	2.81	0.48
1:AA:298:G:OP2	20:AU:85:VAL:HG22	2.14	0.48
31:BA:1330:U:O4	31:BA:1331:G:N1	2.47	0.48
31:BA:309:G:O2'	31:BA:310:G:H5'	2.14	0.48
31:BA:453:A:H2'	31:BA:454:C:C6	2.48	0.48
31:BA:965:A:C2	31:BA:969:A:C2	3.02	0.48
33:BC:52:LEU:HD13	33:BC:68:VAL:CG1	2.40	0.48
39:BI:97:LYS:HA	39:BI:102:LEU:CD1	2.44	0.48
39:BI:33:PHE:HE2	39:BI:47:LEU:HB2	1.78	0.48
1:CA:1951:U:O2	1:CA:1953:A:H8	1.96	0.48
1:CA:2216:G:C4	1:CA:2217:G:C8	3.02	0.48
1:CA:2068:U:N3	1:CA:2430:A:C2	2.82	0.48
1:CA:2494:G:OP1	52:DV:75:C:N4	2.44	0.48
1:CA:2601:C:O2'	1:CA:2602:A:H4'	2.14	0.48
1:CA:690:G:H2'	1:CA:691:C:C6	2.49	0.48
1:CA:2712:U:O2'	1:CA:712(B):A:OP2	2.31	0.48
11:CL:23:PRO:HD2	11:CL:33:ARG:CZ	2.44	0.48
11:CL:55:ARG:HG3	11:CL:56:SER:N	2.29	0.48
18:CS:57:ASN:O	18:CS:61:ASN:HB2	2.14	0.48
25:CZ:4:LEU:O	25:CZ:36:VAL:HA	2.14	0.48
25:CZ:53:LEU:N	25:CZ:53:LEU:HD23	2.28	0.48
31:DA:1194:U:H2'	31:DA:1195:C:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:253:U:H2'	31:DA:254:G:C8	2.48	0.48
31:DA:255:G:O6	31:DA:266:G:O6	2.32	0.48
32:DB:114:ARG:O	32:DB:118:LEU:HG	2.14	0.48
32:DB:19:HIS:CD2	32:DB:20:GLU:HG2	2.49	0.48
32:DB:60:ASP:O	32:DB:64:ARG:HG2	2.14	0.48
33:DC:18:TRP:HE3	33:DC:18:TRP:H	1.61	0.48
47:DQ:45:HIS:CD2	47:DQ:47:PRO:HD3	2.49	0.48
26:A1:46:ASN:ND2	26:A1:47:VAL:H	2.10	0.48
29:A4:29:LYS:O	29:A4:33:ARG:HB2	2.14	0.48
1:AA:1478:G:O2'	1:AA:1558:A:C2	2.66	0.48
1:AA:1973:G:H2'	1:AA:1974:C:H6	1.78	0.48
1:AA:2873:A:C2	13:AN:6:SER:HB2	2.48	0.48
1:AA:288:C:H2'	1:AA:289:A:H8	1.79	0.48
1:AA:478:A:C6	1:AA:480:A:C6	3.01	0.48
1:AA:804:A:H5''	1:AA:805:G:OP1	2.14	0.48
3:AD:172:TYR:HD1	3:AD:185:VAL:C	2.17	0.48
12:AM:89:ASN:O	12:AM:92:GLY:N	2.47	0.48
18:AS:65:LEU:HB2	18:AS:68:ARG:HB2	1.96	0.48
19:AT:8:ILE:HD12	19:AT:8:ILE:H	1.78	0.48
23:AX:9:GLY:O	23:AX:13:ILE:HD11	2.14	0.48
23:AX:11:ARG:HB2	23:AX:13:ILE:HG13	1.96	0.48
24:AY:46:GLN:HB2	24:AY:49:LYS:HZ1	1.78	0.48
31:BA:142:G:H2'	31:BA:143:A:H8	1.78	0.48
31:BA:255:G:O6	31:BA:266:G:O6	2.32	0.48
31:BA:439:A:C4	31:BA:496:A:C2	3.01	0.48
34:BD:153:ARG:HH11	34:BD:181:MET:CE	2.26	0.48
40:BJ:22:LYS:O	40:BJ:22:LYS:HD2	2.14	0.48
40:BJ:35:SER:O	40:BJ:72:VAL:HG13	2.14	0.48
42:BL:96:ARG:HB2	42:BL:97:TYR:CE1	2.47	0.48
31:BA:1225:A:H5'	43:BM:103:THR:CB	2.44	0.48
43:BM:2:ALA:HB1	43:BM:57:ARG:NH1	2.29	0.48
44:BN:44:LEU:HD12	44:BN:44:LEU:O	2.13	0.48
46:BP:6:LEU:HG	46:BP:19:ILE:HD13	1.96	0.48
52:BW:59:A:C5	52:BW:60:U:C5	3.02	0.48
28:C3:11:LEU:HD13	28:C3:12:GLU:N	2.28	0.48
1:CA:643:A:N7	28:C3:42:TRP:CH2	2.82	0.48
1:CA:1252:G:H21	16:CQ:33:ARG:NH1	2.12	0.48
1:CA:1478:G:O2'	1:CA:1558:A:C2	2.67	0.48
1:CA:2074:U:H2'	1:CA:2075:U:C6	2.48	0.48
1:CA:2472:G:H3'	1:CA:2473:U:C5'	2.44	0.48
1:CA:2630:G:H2'	1:CA:2631:G:C8	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:411:G:C2	11:CL:71:VAL:HG11	2.48	0.48
1:CA:729:G:O2'	1:CA:763:G:H4'	2.14	0.48
4:CE:33:VAL:HG23	4:CE:47:VAL:HG13	1.95	0.48
8:CI:127:VAL:HG12	8:CI:141:LYS:HG3	1.96	0.48
9:CJ:61:HIS:CD2	9:CJ:62:ARG:HG3	2.49	0.48
13:CN:98:LEU:HB2	13:CN:113:LEU:HD21	1.95	0.48
14:CO:49:VAL:HG21	14:CO:77:ALA:HA	1.95	0.48
15:CP:122:ASP:OD1	31:DA:1443:G:O2'	2.30	0.48
9:CJ:27:TYR:CD2	16:CQ:100:VAL:HG11	2.49	0.48
19:CT:54:VAL:C	19:CT:55:ASN:HD22	2.17	0.48
21:CV:125:LEU:CD1	21:CV:164:ALA:HB3	2.42	0.48
31:DA:115:G:H1'	31:DA:116:A:OP2	2.13	0.48
31:DA:254:G:C2	31:DA:255:G:C8	3.01	0.48
32:DB:75:LYS:HD3	32:DB:75:LYS:C	2.34	0.48
36:DF:91:VAL:HG12	36:DF:92:LYS:O	2.14	0.48
38:DH:38:ILE:HD11	38:DH:119:LEU:HA	1.96	0.48
40:DJ:51:ARG:HB2	40:DJ:60:ARG:HA	1.95	0.48
41:DK:57:THR:CG2	41:DK:60:ALA:H	2.23	0.48
42:DL:52:ARG:HB3	42:DL:68:TYR:HE1	1.79	0.48
45:DO:21:ASP:OD2	45:DO:24:SER:HB2	2.14	0.48
31:DA:657:G:H4'	45:DO:28:GLN:HG2	1.96	0.48
46:DP:14:ASN:HD22	46:DP:42:ARG:NH2	2.12	0.48
50:DT:14:LYS:O	50:DT:18:GLN:HG3	2.14	0.48
6:AG:112:PRO:HB3	26:A1:62:CYS:HA	1.96	0.47
1:AA:1497:U:H5'	1:AA:1498:C:H5	1.79	0.47
1:AA:2050:C:H2'	1:AA:2051:A:O4'	2.14	0.47
1:AA:2182:G:H2'	1:AA:2183:C:C6	2.49	0.47
1:AA:2207:C:H2'	1:AA:2208:U:O4'	2.14	0.47
1:AA:528:A:C2	1:AA:2042:A:H2'	2.49	0.47
1:AA:828:U:H3'	1:AA:828:U:O2	2.14	0.47
3:AD:113:VAL:HG12	3:AD:114:GLY:N	2.29	0.47
12:AM:9:TYR:HD2	12:AM:10:ARG:HB2	1.77	0.47
12:AM:76:LYS:N	12:AM:88:GLY:HA3	2.28	0.47
14:AO:34:HIS:HA	14:AO:54:LEU:HD23	1.96	0.47
19:AT:40:LYS:HG3	19:AT:51:VAL:HG23	1.96	0.47
21:AV:56:VAL:HG12	21:AV:57:ILE:N	2.29	0.47
31:BA:265:G:O2'	31:BA:266:G:H5'	2.14	0.47
31:BA:407:G:H5'	34:BD:3:ARG:HH11	1.79	0.47
32:BB:43:ASP:OD2	32:BB:46:LYS:HB2	2.14	0.47
32:BB:60:ASP:O	32:BB:64:ARG:HG2	2.14	0.47
33:BC:88:ARG:HG2	33:BC:101:LEU:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BE:107:ARG:HG3	35:BE:107:ARG:HH11	1.77	0.47
35:BE:77:PRO:HD2	35:BE:142:LEU:HD22	1.96	0.47
38:BH:114:THR:HG23	38:BH:116:LYS:N	2.18	0.47
39:BI:33:PHE:HE2	39:BI:47:LEU:HD22	1.79	0.47
49:BS:36:ARG:HB2	49:BS:72:GLY:HA2	1.96	0.47
28:C3:9:LEU:HD13	28:C3:28:ARG:HB2	1.96	0.47
1:CA:1110:G:H5'	1:CA:1111:A:OP1	2.14	0.47
1:CA:2068:U:H3	1:CA:2430:A:H2	1.58	0.47
1:CA:228:A:H3'	1:CA:229:A:C5'	2.44	0.47
1:CA:2562:U:H2'	1:CA:2563:U:H5'	1.96	0.47
1:CA:778:G:C6	1:CA:779:U:N3	2.82	0.47
1:CA:952:G:C6	1:CA:953:A:N7	2.81	0.47
5:CF:127:GLU:HB2	5:CF:196:LEU:HD12	1.96	0.47
5:CF:93:LYS:HB3	5:CF:94:PRO:HD2	1.96	0.47
9:CJ:151:HIS:HB2	9:CJ:152:PRO:HD2	1.96	0.47
17:CR:28:GLU:HB3	17:CR:31:ALA:CB	2.40	0.47
18:CS:65:LEU:HB2	18:CS:68:ARG:HG3	1.96	0.47
20:CU:13:VAL:HA	20:CU:75:ILE:HG22	1.96	0.47
20:CU:83:THR:HG22	20:CU:84:ARG:N	2.28	0.47
31:DA:955:U:H1'	31:DA:1227:A:N6	2.28	0.47
31:DA:1258:G:O2'	31:DA:1259:C:H5'	2.14	0.47
31:DA:1323:G:H4'	31:DA:1361(B):C:C2	2.49	0.47
31:DA:192:U:H2'	31:DA:193:C:H6	1.78	0.47
31:DA:489:C:H2'	31:DA:490:G:C8	2.49	0.47
31:DA:938:A:N6	31:DA:939:G:C6	2.82	0.47
34:DD:19:LEU:C	34:DD:21:LEU:H	2.18	0.47
35:DE:64:ARG:HG3	35:DE:65:ASN:N	2.28	0.47
35:DE:76:ILE:HG13	35:DE:77:PRO:CD	2.44	0.47
35:DE:79:GLU:CD	35:DE:79:GLU:N	2.68	0.47
43:DM:14:ARG:HB2	43:DM:17:VAL:HG22	1.96	0.47
51:DU:18:TYR:O	51:DU:22:ARG:HB2	2.14	0.47
1:AA:1464:C:H2'	1:AA:1465:G:C8	2.49	0.47
1:AA:2063:C:O2	1:AA:2450:A:N1	2.47	0.47
1:AA:2261:C:C5	22:AW:16:SER:HB3	2.49	0.47
1:AA:2250:G:C8	1:AA:2496:C:H5''	2.49	0.47
1:AA:792:G:H5''	1:AA:793:A:H5'	1.95	0.47
2:AB:9:G:H2'	2:AB:10:C:H6	1.80	0.47
3:AD:25:THR:O	3:AD:26:LYS:C	2.52	0.47
3:AD:33:LEU:O	3:AD:35:LYS:N	2.47	0.47
1:AA:773:U:H5'	3:AD:47:GLY:HA3	1.96	0.47
9:AJ:70:ALA:HB2	9:AJ:135:LEU:HD11	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:19:GLY:C	12:AM:21:THR:H	2.17	0.47
18:AS:15:ARG:O	18:AS:19:LEU:HD23	2.14	0.47
1:AA:1614:A:N6	18:AS:88:ARG:H	2.11	0.47
1:AA:857:C:H4'	22:AW:23:VAL:HG21	1.96	0.47
31:BA:1329:A:H62	51:BU:7:ARG:HH21	1.60	0.47
31:BA:253:U:H2'	31:BA:254:G:C8	2.47	0.47
31:BA:368:U:O5'	8:CI:90:GLY:HA2	2.14	0.47
31:BA:376:G:O2'	31:BA:377:G:H5'	2.14	0.47
31:BA:403:C:O2'	31:BA:404:U:H5'	2.14	0.47
31:BA:709:G:H2'	31:BA:710:G:H8	1.79	0.47
31:BA:878:G:C5'	38:BH:89:PRO:HG2	2.44	0.47
31:BA:939:G:C6	31:BA:940:C:N4	2.82	0.47
32:BB:184:VAL:HG12	32:BB:197:VAL:HG13	1.96	0.47
33:BC:15:THR:HG21	33:BC:181:ASN:HA	1.95	0.47
34:BD:156:GLU:O	34:BD:160:GLN:HB2	2.14	0.47
34:BD:30:LYS:C	34:BD:32:ALA:N	2.68	0.47
6:AG:116:ASP:OD2	43:BM:68:GLY:HA3	2.14	0.47
47:BQ:69:LYS:C	47:BQ:70:ARG:HD2	2.35	0.47
26:C1:46:ASN:ND2	26:C1:47:VAL:H	2.11	0.47
27:C2:40:LYS:CE	27:C2:46:CYS:HB3	2.43	0.47
28:C3:11:LEU:HD21	28:C3:51:GLU:HG2	1.96	0.47
1:CA:1035:U:H2'	1:CA:1036:G:C8	2.49	0.47
1:CA:1110:G:OP1	1:CA:1110:G:H4'	2.13	0.47
1:CA:1538:G:O2'	1:CA:1539:G:H5'	2.14	0.47
1:CA:1681:G:H8	1:CA:1681:G:OP2	1.97	0.47
1:CA:1993:U:H2'	1:CA:1994:C:O4'	2.14	0.47
1:CA:2290:G:C6	1:CA:2291:U:C4	3.02	0.47
1:CA:2370:G:H2'	1:CA:2371:G:C8	2.49	0.47
1:CA:2780:G:H4'	1:CA:2781:A:OP2	2.14	0.47
4:CE:154:LYS:O	4:CE:156:MET:HG3	2.14	0.47
1:CA:2050:C:H1'	4:CE:156:MET:HE2	1.96	0.47
13:CN:55:ALA:HA	13:CN:80:PHE:CE1	2.48	0.47
16:CQ:33:ARG:O	16:CQ:37:GLU:HG3	2.13	0.47
23:CX:40:ARG:HH12	23:CX:42:GLN:HG2	1.80	0.47
31:DA:1064:G:OP2	31:DA:1386:G:H4'	2.15	0.47
31:DA:1225:A:H5'	43:DM:103:THR:CB	2.43	0.47
31:DA:352:C:OP1	31:DA:352:C:H6	1.96	0.47
31:DA:453:A:H2'	31:DA:454:C:C6	2.49	0.47
31:DA:939:G:C6	31:DA:940:C:N4	2.82	0.47
31:DA:93:U:H2'	31:DA:95:G:H8	1.79	0.47
32:DB:97:TRP:CE2	32:DB:101:MET:HG3	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DB:33:TYR:HB2	32:DB:43:ASP:HA	1.96	0.47
31:DA:619:U:C2	34:DD:135:LEU:HD21	2.48	0.47
35:DE:107:ARG:HG3	35:DE:107:ARG:HH11	1.79	0.47
39:DI:51:ARG:HD3	39:DI:56:LEU:HD22	1.95	0.47
40:DJ:35:SER:O	40:DJ:72:VAL:HG13	2.13	0.47
48:DR:51:LEU:CD2	48:DR:52:PRO:HD2	2.44	0.47
43:DM:86:CYS:HA	49:DS:73:GLU:O	2.14	0.47
1:AA:1235:G:C6	1:AA:1236:G:N1	2.82	0.47
1:AA:140:A:C8	1:AA:1408:C:O2'	2.47	0.47
1:AA:1538:G:O2'	1:AA:1539:G:H5'	2.14	0.47
1:AA:1902:C:H2'	1:AA:1903:G:O4'	2.14	0.47
1:AA:2015:A:H1'	27:A2:2:ALA:CA	2.41	0.47
1:AA:2128:C:H2'	1:AA:2129:C:C2	2.48	0.47
1:AA:2498:C:O2'	1:AA:2499:C:H5'	2.13	0.47
1:AA:34:C:N4	1:AA:447:A:H61	2.10	0.47
1:AA:363(E):G:O2'	1:AA:363(F):U:H5'	2.14	0.47
3:AD:240:ALA:HB1	3:AD:241:PRO:HD2	1.96	0.47
13:AN:88:ARG:HH21	13:AN:88:ARG:CA	2.27	0.47
17:AR:38:LEU:HD23	17:AR:39:LEU:N	2.27	0.47
18:AS:19:LEU:O	27:A2:25:LEU:HD11	2.14	0.47
31:BA:1505:G:H5''	31:BA:1506:U:H5''	1.95	0.47
32:BB:208:ILE:CD1	32:BB:208:ILE:H	2.23	0.47
32:BB:24:TRP:H	32:BB:24:TRP:HD1	1.62	0.47
32:BB:52:GLU:O	32:BB:56:ARG:HG3	2.14	0.47
32:BB:75:LYS:C	32:BB:77:ALA:H	2.18	0.47
33:BC:75:VAL:HG12	33:BC:75:VAL:O	2.13	0.47
35:BE:79:GLU:N	35:BE:79:GLU:CD	2.68	0.47
37:BG:27:ILE:HD11	37:BG:43:PHE:CD2	2.49	0.47
31:BA:948:C:C5	43:BM:106:ASN:ND2	2.82	0.47
43:BM:86:CYS:HA	49:BS:73:GLU:O	2.14	0.47
46:BP:20:VAL:HG23	46:BP:34:GLU:O	2.14	0.47
46:BP:75:ARG:NH1	46:BP:75:ARG:CG	2.71	0.47
30:C5:17:THR:HG23	30:C5:21:LYS:O	2.15	0.47
30:C5:37:SER:HB3	30:C5:40:GLU:HG2	1.96	0.47
1:CA:1494:A:N3	1:CA:1494:A:H2'	2.30	0.47
1:CA:1495:A:N3	1:CA:1496:A:C2	2.82	0.47
1:CA:1532:C:C2	1:CA:1540:G:N2	2.83	0.47
1:CA:1812:A:O2'	3:CD:45:ASN:HB3	2.13	0.47
1:CA:2875:C:O2'	15:CP:5:ALA:HB3	2.14	0.47
1:CA:34:C:H41	1:CA:447:A:N6	2.12	0.47
1:CA:804:A:H5''	1:CA:805:G:OP1	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:99:U:C4'	1:CA:102:G:H1'	2.43	0.47
2:CB:89(A):G:C6	2:CB:89(B):A:N6	2.83	0.47
6:CG:167:GLU:CA	6:CG:170:ARG:HB3	2.39	0.47
7:CH:149:ARG:HA	7:CH:162:ILE:HB	1.97	0.47
7:CH:38:SER:OG	7:CH:40:GLU:HG2	2.14	0.47
9:CJ:160:LYS:C	9:CJ:161:LEU:HD23	2.34	0.47
11:CL:23:PRO:HA	11:CL:29:LYS:HB2	1.96	0.47
11:CL:48:PRO:C	11:CL:50:ARG:N	2.67	0.47
11:CL:62:LEU:HD13	11:CL:62:LEU:N	2.28	0.47
21:CV:63:ASP:C	21:CV:65:GLN:H	2.18	0.47
31:DA:376:G:O2'	31:DA:377:G:H5'	2.14	0.47
31:DA:663:A:O2'	31:DA:664:G:H5'	2.14	0.47
37:DG:102:ARG:O	37:DG:106:GLN:HG3	2.14	0.47
38:DH:123:GLU:O	38:DH:126:LYS:HB3	2.14	0.47
31:DA:875:C:H1'	38:DH:15:ASN:HD21	1.79	0.47
42:DL:27:LYS:HE2	42:DL:32:ARG:NH2	2.26	0.47
43:DM:23:TYR:CZ	43:DM:71:ARG:HD3	2.49	0.47
46:DP:6:LEU:HG	46:DP:19:ILE:HD13	1.96	0.47
51:DU:12:LYS:HB3	51:DU:17:THR:O	2.14	0.47
27:A2:40:LYS:CE	27:A2:46:CYS:HB3	2.44	0.47
1:AA:1577:C:H2'	1:AA:1578:U:C6	2.48	0.47
1:AA:2165:G:C6	1:AA:2166:G:H1'	2.50	0.47
1:AA:2391:G:O6	1:AA:2425:A:H8	1.98	0.47
1:AA:2601:C:O2'	1:AA:2602:A:H4'	2.14	0.47
1:AA:27:G:N2	1:AA:512:G:H1'	2.29	0.47
1:AA:857:C:N4	1:AA:858:U:O4	2.48	0.47
4:AE:202:LYS:HZ2	4:AE:202:LYS:N	2.12	0.47
6:AG:115:ARG:NH2	6:AG:136:ARG:H	2.12	0.47
7:AH:23:ARG:N	7:AH:23:ARG:HD3	2.29	0.47
11:AL:79:ARG:O	11:AL:111:ARG:HB2	2.14	0.47
14:AO:93:LYS:CD	14:AO:95:HIS:HB2	2.45	0.47
24:AY:10:LEU:O	24:AY:13:ALA:HB3	2.14	0.47
31:BA:352:C:OP1	31:BA:352:C:H6	1.97	0.47
31:BA:552:U:H5'	42:BL:85:ARG:HE	1.78	0.47
31:BA:826:C:H2'	31:BA:827:U:C6	2.49	0.47
33:BC:30:ARG:HH11	44:BN:38:GLY:CA	2.27	0.47
33:BC:30:ARG:HH11	44:BN:38:GLY:HA3	1.80	0.47
38:BH:77:GLU:HG3	38:BH:78:GLN:N	2.29	0.47
50:BT:14:LYS:O	50:BT:18:GLN:HG3	2.14	0.47
50:BT:87:LYS:O	50:BT:91:LEU:HG	2.15	0.47
1:CA:1705:G:C6	1:CA:1706:U:C4	3.02	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1790:C:H4'	3:CD:209:ALA:CB	2.43	0.47
1:CA:2811:G:C6	1:CA:2891:G:N2	2.82	0.47
1:CA:363(A):G:N2	1:CA:363(B):A:C4	2.83	0.47
3:CD:168:ARG:O	3:CD:169:GLU:HB2	2.14	0.47
1:CA:773:U:H5'	3:CD:47:GLY:HA3	1.94	0.47
12:CM:134:ARG:HG2	21:CV:122:ARG:HH12	1.79	0.47
12:CM:19:GLY:C	12:CM:21:THR:H	2.17	0.47
14:CO:42:ASP:C	14:CO:44:LYS:H	2.17	0.47
18:CS:12:ILE:HD13	18:CS:17:VAL:HG12	1.96	0.47
23:CX:11:ARG:HB2	23:CX:13:ILE:HG13	1.95	0.47
8:CI:27:ARG:CD	23:CX:71:TYR:CE1	2.97	0.47
31:DA:1127:G:H1'	31:DA:1148:U:H3	1.79	0.47
31:DA:836:G:C6	31:DA:851:G:C6	3.03	0.47
31:DA:80:G:O6	31:DA:88:C:N4	2.47	0.47
31:DA:950:U:H2'	31:DA:951:G:H8	1.80	0.47
32:DB:184:VAL:HG12	32:DB:197:VAL:HG13	1.95	0.47
34:DD:121:VAL:HG11	34:DD:136:PRO:HA	1.97	0.47
38:DH:84:ARG:O	38:DH:135:CYS:HB2	2.15	0.47
39:DI:97:LYS:HA	39:DI:102:LEU:CD1	2.44	0.47
45:DO:87:ILE:HG23	45:DO:88:ARG:N	2.29	0.47
46:DP:12:LYS:C	46:DP:14:ASN:H	2.18	0.47
49:DS:12:ASP:HB3	49:DS:14:HIS:CE1	2.48	0.47
1:AA:1040:C:O2'	1:AA:1041:C:H5'	2.15	0.47
1:AA:1812:A:O2'	3:AD:45:ASN:HB3	2.15	0.47
1:AA:2389:G:H5''	1:AA:2390:U:O4'	2.15	0.47
1:AA:2516:G:C6	1:AA:2517:C:N4	2.82	0.47
1:AA:2731:G:C6	1:AA:2732:G:O6	2.67	0.47
1:AA:84:A:H61	1:AA:102:G:C2'	2.27	0.47
4:AE:131:ALA:HB1	4:AE:134:ILE:HG12	1.96	0.47
10:AK:36:GLY:HA2	10:AK:106:LEU:HD23	1.97	0.47
14:AO:12:PHE:C	14:AO:12:PHE:CD1	2.88	0.47
15:AP:80:SER:HA	15:AP:81:PRO:HD3	1.78	0.47
21:AV:91:LEU:HD22	21:AV:96:VAL:HG11	1.96	0.47
21:AV:99:TYR:CE1	21:AV:125:LEU:HB2	2.48	0.47
22:AW:51:VAL:CG2	22:AW:81:VAL:HG23	2.43	0.47
24:AY:46:GLN:HB2	24:AY:49:LYS:HZ3	1.78	0.47
31:BA:1258:G:O2'	31:BA:1259:C:H5'	2.15	0.47
31:BA:69:G:C2	31:BA:73:G:C5	3.02	0.47
33:BC:15:THR:HG22	33:BC:16:ARG:N	2.30	0.47
31:BA:1106:G:OP1	33:BC:172:ARG:HD3	2.14	0.47
43:BM:14:ARG:HB2	43:BM:17:VAL:HG22	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BV:23:C:H2'	52:BV:24:U:C6	2.49	0.47
52:BW:65:C:H2'	52:BW:66:C:C6	2.49	0.47
30:C5:32:LEU:HD23	30:C5:33:ASN:H	1.80	0.47
1:CA:1009:A:H5'	1:CA:1009:A:H8	1.79	0.47
1:CA:1040:C:O2'	1:CA:1041:C:H5'	2.15	0.47
1:CA:1142(B):A:C4	1:CA:1144:G:N7	2.82	0.47
1:CA:2165:G:C6	1:CA:2166:G:H1'	2.50	0.47
1:CA:2815:C:H5'	27:C2:29:ILE:HG12	1.97	0.47
1:CA:380:U:H4'	23:CX:21:ARG:O	2.14	0.47
1:CA:478:A:C6	1:CA:480:A:C6	3.02	0.47
2:CB:50:G:OP2	14:CO:62:LYS:HD2	2.14	0.47
1:CA:919:G:H4'	2:CB:81:G:O2'	2.14	0.47
4:CE:132:HIS:O	4:CE:135:HIS:CD2	2.67	0.47
8:CI:3:VAL:HG22	8:CI:36:ALA:HB1	1.96	0.47
12:CM:76:LYS:N	12:CM:88:GLY:HA3	2.29	0.47
13:CN:37:THR:OG1	13:CN:40:LYS:HB2	2.15	0.47
15:CP:28:VAL:HA	15:CP:89:VAL:HG12	1.95	0.47
15:CP:64:ARG:HD2	15:CP:73:GLU:HG2	1.96	0.47
19:CT:62:LYS:O	19:CT:63:LYS:HD3	2.14	0.47
21:CV:29:TYR:HA	21:CV:33:LEU:O	2.14	0.47
31:DA:1287:A:H2'	31:DA:1288:A:C8	2.49	0.47
31:DA:545:C:H5'	34:DD:72:GLU:HB2	1.97	0.47
32:DB:97:TRP:HZ2	32:DB:102:LEU:HD13	1.80	0.47
34:DD:58:LEU:O	34:DD:61:LYS:HB3	2.14	0.47
31:DA:673:G:H5''	36:DF:87:ARG:NH1	2.30	0.47
40:DJ:24:VAL:HG13	40:DJ:28:ARG:HD2	1.96	0.47
42:DL:49:SER:O	42:DL:50:ALA:HB2	2.14	0.47
45:DO:7:GLU:O	45:DO:11:VAL:HG23	2.14	0.47
31:DA:265:G:H5'	47:DQ:64:PRO:O	2.14	0.47
50:DT:87:LYS:O	50:DT:91:LEU:HG	2.14	0.47
50:DT:49:ALA:HB3	50:DT:99:LEU:HD12	1.96	0.47
52:DV:20:U:H5'	52:DV:21:A:OP2	2.14	0.47
1:AA:1024:G:C3'	1:AA:1025:G:H5''	2.43	0.47
1:AA:1042:G:C6	1:AA:1043:C:C4	3.02	0.47
1:AA:1496:A:H1'	1:AA:1577:C:O2'	2.14	0.47
1:AA:1973:G:H2'	1:AA:1974:C:C6	2.49	0.47
1:AA:2630:G:H2'	1:AA:2631:G:C8	2.49	0.47
1:AA:589:C:O3'	5:AF:95:ARG:NH1	2.47	0.47
6:AG:52:ILE:HD12	6:AG:52:ILE:H	1.78	0.47
9:AJ:160:LYS:C	9:AJ:161:LEU:HD23	2.35	0.47
11:AL:61:ARG:CA	11:AL:62:LEU:HD13	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:34:LEU:HD13	12:AM:131:ILE:HD13	1.96	0.47
31:BA:1004:A:C6	31:BA:1025:U:H4'	2.49	0.47
31:BA:1009:G:H2'	31:BA:1010:G:C8	2.50	0.47
31:BA:1327:C:H2'	31:BA:1328:C:C6	2.50	0.47
31:BA:272:C:H2'	31:BA:273:A:H8	1.79	0.47
31:BA:938:A:N6	31:BA:939:G:C6	2.83	0.47
32:BB:112:VAL:O	32:BB:116:GLU:HG2	2.14	0.47
37:BG:48:LYS:O	37:BG:52:GLU:HG3	2.15	0.47
31:BA:1316:G:O6	49:BS:5:LEU:HD23	2.14	0.47
1:CA:1210:A:C8	1:CA:1210:A:H5'	2.34	0.47
1:CA:1471:A:C6	1:CA:1522:G:C2	3.03	0.47
1:CA:1659:U:OP2	4:CE:132:HIS:CE1	2.63	0.47
1:CA:2182:G:H2'	1:CA:2183:C:C6	2.49	0.47
1:CA:2572:A:C5	4:CE:144:ARG:NH2	2.82	0.47
6:CG:56:ALA:HB2	6:CG:153:ARG:NE	2.30	0.47
13:CN:88:ARG:HH21	13:CN:88:ARG:CA	2.26	0.47
16:CQ:36:ARG:HD3	16:CQ:40:PHE:CZ	2.49	0.47
18:CS:4:LYS:HG2	18:CS:5:ALA:N	2.29	0.47
31:DA:1330:U:O4	31:DA:1331:G:N1	2.47	0.47
31:DA:560:U:H5'	31:DA:566:G:N2	2.30	0.47
31:DA:819:A:H4'	31:DA:820:U:OP2	2.14	0.47
31:DA:965:A:C2	31:DA:969:A:C2	3.03	0.47
34:DD:126:ILE:H	34:DD:126:ILE:HD12	1.79	0.47
31:DA:691:G:N1	41:DK:52:GLY:HA2	2.28	0.47
43:DM:54:VAL:HA	43:DM:57:ARG:HB2	1.97	0.47
40:DJ:49:VAL:HG21	44:DN:41:ARG:O	2.14	0.47
46:DP:20:VAL:CG2	46:DP:32:TYR:HB2	2.44	0.47
30:A5:53:PRO:O	30:A5:57:ARG:NH1	2.47	0.47
1:AA:1824:G:O2'	1:AA:1825:A:H5'	2.15	0.47
1:AA:2290:G:C6	1:AA:2291:U:C4	3.03	0.47
1:AA:663:G:OP1	11:AL:21:ARG:HG2	2.15	0.47
1:AA:848:G:N9	1:AA:933:A:H8	2.13	0.47
1:AA:2050:C:H1'	4:AE:156:MET:HE2	1.97	0.47
14:AO:61:ASN:O	14:AO:65:VAL:HG23	2.14	0.47
21:AV:5:LEU:HD11	21:AV:44:PHE:HA	1.96	0.47
31:BA:382:A:O2'	31:BA:383:A:H5'	2.15	0.47
31:BA:722:A:O2'	31:BA:723:U:H6	1.97	0.47
31:BA:926:G:C6	31:BA:1505:G:C6	3.02	0.47
33:BC:29:TYR:CE1	33:BC:33:LEU:HD22	2.46	0.47
38:BH:38:ILE:O	38:BH:42:GLU:HG2	2.15	0.47
39:BI:110:GLU:HG2	39:BI:119:ALA:HB1	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BJ:24:VAL:HG13	40:BJ:28:ARG:HD2	1.96	0.47
27:C2:25:LEU:HD12	27:C2:25:LEU:N	2.29	0.47
30:C5:50:LEU:O	30:C5:51:ALA:HB3	2.13	0.47
1:CA:106:C:H2'	1:CA:107:C:H6	1.79	0.47
1:CA:1022:G:C5	1:CA:1140:C:N4	2.83	0.47
1:CA:270(R):C:H4'	8:CI:42:SER:OG	2.14	0.47
1:CA:2789:C:O3'	1:CA:2790:A:H4'	2.15	0.47
1:CA:713:G:H2'	1:CA:714:U:C6	2.50	0.47
1:CA:857:C:N4	1:CA:858:U:O4	2.48	0.47
3:CD:176:ARG:HA	3:CD:182:LEU:HD23	1.97	0.47
6:CG:128:ARG:HA	6:CG:164:GLU:O	2.15	0.47
6:CG:146:TYR:O	6:CG:149:VAL:HG22	2.15	0.47
11:CL:51:PHE:HE1	11:CL:59:LEU:HD13	1.80	0.47
13:CN:45:ARG:HA	13:CN:95:THR:HG21	1.96	0.47
14:CO:89:ARG:HD3	14:CO:94:TYR:HB2	1.96	0.47
18:CS:83:LYS:O	18:CS:84:ARG:HD2	2.15	0.47
21:CV:91:LEU:HD22	21:CV:96:VAL:HG11	1.95	0.47
24:CY:37:PHE:O	24:CY:41:ILE:HG23	2.14	0.47
31:DA:1370:G:C2	31:DA:1371:G:C8	3.02	0.47
31:DA:1409:C:H2'	31:DA:1410:G:H8	1.79	0.47
31:DA:950:U:H2'	31:DA:951:G:C8	2.50	0.47
31:DA:984:C:H2'	31:DA:985:C:C6	2.49	0.47
31:DA:993:G:H4'	31:DA:994:A:OP2	2.14	0.47
33:DC:15:THR:HG22	33:DC:16:ARG:N	2.29	0.47
36:DF:2:ARG:HD2	36:DF:69:GLU:HB3	1.96	0.47
31:DA:878:G:C5'	38:DH:89:PRO:HG2	2.42	0.47
18:AS:19:LEU:HD12	27:A2:25:LEU:HG	1.96	0.47
1:AA:150:C:H2'	1:AA:151:C:C6	2.50	0.47
1:AA:1858:G:O2'	1:AA:1859:A:C8	2.68	0.47
1:AA:2811:G:C6	1:AA:2891:G:N2	2.82	0.47
1:AA:320:A:H4'	1:AA:322:A:N7	2.29	0.47
1:AA:587:C:C6	1:AA:671:C:H1'	2.49	0.47
1:AA:779:U:OP1	3:AD:49:ILE:HG13	2.15	0.47
8:AI:44:LEU:O	8:AI:48:GLU:HG2	2.15	0.47
9:AJ:59:GLY:C	9:AJ:61:HIS:H	2.17	0.47
16:AQ:88:ILE:HG22	16:AQ:90:VAL:CG1	2.45	0.47
19:AT:56:THR:HB	19:AT:77:LYS:HE2	1.97	0.47
20:AU:4:LYS:H	20:AU:4:LYS:CD	2.28	0.47
31:BA:1225:A:C2'	31:BA:1225:A:N3	2.77	0.47
31:BA:408:A:H4'	34:BD:112:VAL:HG21	1.95	0.47
32:BB:142:LEU:HD11	32:BB:146:GLN:HE21	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BB:75:LYS:C	32:BB:75:LYS:HD3	2.35	0.47
36:BF:39:LYS:HB3	36:BF:39:LYS:NZ	2.29	0.47
51:BU:9:ARG:HH21	51:BU:10:ARG:HD2	1.80	0.47
30:C5:57:ARG:HB2	30:C5:57:ARG:NH1	2.30	0.47
1:CA:99:U:H4'	1:CA:102:G:H1'	1.97	0.47
1:CA:1106:G:H2'	1:CA:1107:G:H5'	1.96	0.47
1:CA:140:A:C8	1:CA:1408:C:O2'	2.49	0.47
1:CA:1786:A:C2	1:CA:2606:C:H1'	2.50	0.47
2:CB:9:G:H2'	2:CB:10:C:H6	1.80	0.47
3:CD:25:THR:O	3:CD:26:LYS:C	2.53	0.47
5:CF:153:SER:OG	5:CF:190:GLU:HG3	2.14	0.47
9:CJ:119:GLU:CD	9:CJ:119:GLU:H	2.18	0.47
10:CK:7:TYR:HE1	10:CK:20:MET:HB2	1.80	0.47
11:CL:128:HIS:HB3	11:CL:147:LEU:HD23	1.96	0.47
11:CL:57:THR:HG22	11:CL:58:THR:H	1.80	0.47
13:CN:13:HIS:CE1	13:CN:15:SER:HB2	2.49	0.47
16:CQ:44:ASN:N	16:CQ:44:ASN:HD22	2.12	0.47
18:CS:15:ARG:O	18:CS:19:LEU:HD23	2.14	0.47
18:CS:75:TYR:CE2	18:CS:104:THR:HB	2.50	0.47
23:CX:80:LEU:HD23	23:CX:80:LEU:C	2.35	0.47
31:DA:1058:G:H2'	31:DA:1059:C:O4'	2.15	0.47
31:DA:106:C:H2'	31:DA:107:G:H8	1.79	0.47
31:DA:177:C:H2'	31:DA:178:C:H6	1.79	0.47
31:DA:509:A:C6	31:DA:510:A:N1	2.82	0.47
31:DA:664:G:N2	31:DA:741:G:H1	2.11	0.47
31:DA:574:A:N3	31:DA:883:C:H1'	2.29	0.47
33:DC:137:ALA:O	33:DC:140:ARG:HD2	2.15	0.47
50:DT:33:ILE:CD1	50:DT:62:LEU:HD22	2.44	0.47
28:A3:9:LEU:HD13	28:A3:28:ARG:HB2	1.96	0.47
1:AA:1394:U:C4	1:AA:1395:A:C5	3.02	0.47
1:AA:1742:C:H2'	1:AA:1743:G:O4'	2.14	0.47
1:AA:2129:C:N3	1:AA:2159:G:O6	2.48	0.47
1:AA:2211:G:H2'	1:AA:2212:A:H5''	1.97	0.47
1:AA:2389:G:H5''	1:AA:2390:U:H5'	1.97	0.47
1:AA:2637:U:C4	1:AA:2638:G:C6	3.02	0.47
1:AA:363(A):G:N2	1:AA:363(B):A:C4	2.83	0.47
1:AA:414:C:H2'	1:AA:415:A:C8	2.50	0.47
1:AA:1993:U:H5''	4:AE:128:SER:HB3	1.96	0.47
4:AE:188:VAL:CG2	4:AE:189:PRO:HD2	2.44	0.47
6:AG:101:ILE:HD12	6:AG:102:PHE:N	2.30	0.47
2:AB:55:U:H4'	6:AG:27:ASN:HD21	1.80	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AL:57:THR:HG22	11:AL:58:THR:H	1.80	0.47
12:AM:116:GLU:HA	12:AM:116:GLU:OE1	2.14	0.47
21:AV:29:TYR:HA	21:AV:33:LEU:O	2.14	0.47
22:AW:72:ARG:HB2	22:AW:75:LEU:HB2	1.97	0.47
31:BA:791:G:C6	31:BA:792:A:N7	2.83	0.47
31:BA:819:A:H4'	31:BA:820:U:OP2	2.15	0.47
35:BE:51:VAL:O	35:BE:54:ALA:HB3	2.15	0.47
37:BG:26:PHE:CE2	37:BG:30:ILE:HD11	2.50	0.47
42:BL:52:ARG:HB3	42:BL:68:TYR:HE1	1.79	0.47
46:BP:14:ASN:HD22	46:BP:42:ARG:NH2	2.13	0.47
48:BR:26:LEU:HG	48:BR:42:ARG:NH1	2.29	0.47
1:CA:1021:A:C8	1:CA:1021:A:C3'	2.96	0.47
1:CA:1169:G:N2	1:CA:1181:C:C2	2.83	0.47
1:CA:1336:A:H2'	1:CA:1337:G:C8	2.49	0.47
1:CA:1496:A:H1'	1:CA:1577:C:O2'	2.14	0.47
1:CA:161:U:H1'	1:CA:171:G:N2	2.29	0.47
1:CA:2056:G:H2'	1:CA:2056:G:N3	2.30	0.47
1:CA:409:C:O2'	1:CA:410:G:H5'	2.15	0.47
1:CA:602:G:H8	1:CA:602:G:O5'	1.96	0.47
9:CJ:63:PRO:O	16:CQ:64:ARG:HD2	2.15	0.47
11:CL:57:THR:HB	11:CL:59:LEU:HB3	1.96	0.47
19:CT:89:ILE:O	19:CT:93:GLU:HG2	2.14	0.47
24:CY:17:SER:O	24:CY:18:PRO:C	2.53	0.47
31:DA:1106:G:OP1	33:DC:172:ARG:HD3	2.14	0.47
31:DA:1285:A:OP1	31:DA:1285:A:C8	2.68	0.47
31:DA:722:A:O2'	31:DA:723:U:H6	1.98	0.47
31:DA:69:G:C2	31:DA:73:G:C5	3.03	0.47
36:DF:53:ALA:HB2	36:DF:86:ARG:HD2	1.97	0.47
31:DA:673:G:H5''	36:DF:87:ARG:HH12	1.80	0.47
42:DL:40:ARG:CG	42:DL:41:THR:N	2.78	0.47
42:DL:82:VAL:HG22	42:DL:83:LEU:N	2.30	0.47
47:DQ:69:LYS:C	47:DQ:70:ARG:HD2	2.35	0.47
31:DA:192:U:C4'	50:DT:103:GLY:H	2.23	0.47
30:A5:53:PRO:HA	30:A5:56:GLU:HB2	1.96	0.47
30:A5:6:THR:HG21	30:A5:64:TYR:HD1	1.79	0.47
1:AA:1044:G:N3	1:AA:1111:A:H2	2.13	0.47
1:AA:1110:G:H5'	1:AA:1111:A:OP1	2.14	0.47
1:AA:1494:A:N3	1:AA:1494:A:H2'	2.30	0.47
1:AA:2377:A:H2'	1:AA:2378:A:C8	2.50	0.47
1:AA:2398:U:H2'	1:AA:2399:G:H8	1.78	0.47
1:AA:99:U:C4'	1:AA:102:G:H1'	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:103:ARG:NH1	3:AD:103:ARG:CG	2.70	0.47
3:AD:158:ALA:HB3	3:AD:161:THR:HG21	1.96	0.47
5:AF:28:ILE:CD1	5:AF:28:ILE:H	2.25	0.47
6:AG:167:GLU:CA	6:AG:170:ARG:HB3	2.39	0.47
6:AG:77:ILE:HG22	6:AG:77:ILE:O	2.14	0.47
14:AO:18:ILE:O	14:AO:21:THR:HB	2.15	0.47
16:AQ:44:ASN:HD22	16:AQ:44:ASN:N	2.12	0.47
19:AT:63:LYS:HZ1	19:AT:72:LYS:HB3	1.75	0.47
23:AX:27:GLU:HB2	23:AX:33:LYS:CA	2.45	0.47
31:BA:38:G:H22	31:BA:397:A:H5'	1.80	0.47
31:BA:511:C:C4	31:BA:541:G:N2	2.83	0.47
31:BA:984:C:H2'	31:BA:985:C:C6	2.50	0.47
34:BD:187:ARG:HG3	34:BD:188:LEU:O	2.15	0.47
35:BE:36:ASP:OD2	35:BE:38:GLN:HB2	2.15	0.47
37:BG:147:ALA:HB1	52:BW:40:C:O3'	2.15	0.47
39:BI:17:VAL:HG22	39:BI:63:ILE:HD13	1.96	0.47
46:BP:12:LYS:C	46:BP:14:ASN:H	2.17	0.47
46:BP:3:LYS:O	46:BP:21:VAL:HA	2.15	0.47
49:BS:21:GLU:HG3	49:BS:22:LEU:HD22	1.97	0.47
49:BS:6:LYS:HD2	49:BS:7:LYS:H	1.79	0.47
50:BT:49:ALA:HB3	50:BT:99:LEU:HD12	1.96	0.47
1:CA:2176:A:H2'	1:CA:2177:C:C6	2.50	0.47
1:CA:2219:G:H2'	1:CA:2224:G:H5'	1.97	0.47
1:CA:2327:A:H2'	1:CA:2328:A:C8	2.50	0.47
1:CA:2391:G:O6	1:CA:2425:A:H8	1.98	0.47
1:CA:2480:C:H2'	1:CA:2481:G:H5'	1.97	0.47
1:CA:2647:U:H2'	1:CA:2648:C:C6	2.50	0.47
1:CA:2652:C:H2'	1:CA:2653:U:O4'	2.14	0.47
1:CA:500:G:N2	1:CA:502:A:H3'	2.29	0.47
1:CA:528:A:C2	1:CA:2042:A:H2'	2.50	0.47
1:CA:729:G:C8	3:CD:208:LYS:HD2	2.50	0.47
4:CE:188:VAL:CG2	4:CE:189:PRO:HD2	2.45	0.47
6:CG:107:LEU:HD23	6:CG:111:LEU:CD1	2.45	0.47
6:CG:112:PRO:HB3	26:C1:62:CYS:HA	1.96	0.47
14:CO:12:PHE:CD1	14:CO:12:PHE:C	2.88	0.47
14:CO:15:ARG:O	14:CO:19:LYS:HG3	2.15	0.47
20:CU:10:GLY:HA2	20:CU:27:VAL:HG22	1.96	0.47
21:CV:5:LEU:HD11	21:CV:44:PHE:HA	1.97	0.47
23:CX:13:ILE:CD1	23:CX:14:VAL:N	2.78	0.47
23:CX:93:GLU:C	23:CX:95:LEU:H	2.18	0.47
31:DA:1312:G:H2'	31:DA:1313:U:C6	2.49	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:818:G:C3'	31:DA:819:A:C5'	2.93	0.47
31:DA:962:C:H2'	31:DA:963:G:O4'	2.14	0.47
32:DB:84:GLU:HA	32:DB:87:ARG:HB2	1.96	0.47
36:DF:39:LYS:HB3	36:DF:39:LYS:NZ	2.30	0.47
37:DG:27:ILE:HD11	37:DG:43:PHE:CD2	2.50	0.47
42:DL:45:LYS:HG2	42:DL:46:LYS:HG2	1.96	0.47
43:DM:76:ALA:HA	43:DM:79:LYS:HE3	1.97	0.47
43:DM:87:TYR:O	43:DM:91:ARG:HG2	2.15	0.47
1:CA:2451:A:H5'	52:DV:76:A:N6	2.30	0.47
1:AA:1487:G:H2'	1:AA:1488:G:H8	1.80	0.47
1:AA:2327:A:H2'	1:AA:2328:A:C8	2.50	0.47
1:AA:2561:A:H2'	1:AA:2562:U:O4'	2.14	0.47
1:AA:2815:C:H5'	27:A2:29:ILE:HG12	1.97	0.47
1:AA:540:G:H2'	1:AA:541:C:C6	2.49	0.47
1:AA:448:U:C4	1:AA:583:G:H1'	2.50	0.47
1:AA:848:G:H2'	1:AA:849:A:C8	2.49	0.47
11:AL:21:ARG:O	11:AL:23:PRO:HD3	2.15	0.47
12:AM:89:ASN:C	12:AM:92:GLY:H	2.19	0.47
18:AS:65:LEU:HB2	18:AS:68:ARG:HG3	1.95	0.47
12:AM:63:LYS:HA	21:AV:178:GLU:HG2	1.97	0.47
22:AW:71:ASP:C	22:AW:72:ARG:HG2	2.35	0.47
31:BA:1058:G:H2'	31:BA:1059:C:O4'	2.14	0.47
31:BA:1127:G:H1'	31:BA:1148:U:H3	1.79	0.47
31:BA:1285:A:OP1	31:BA:1285:A:C8	2.68	0.47
31:BA:748:C:H4'	31:BA:749:C:O5'	2.15	0.47
31:BA:792:A:H4'	31:BA:793:U:C5'	2.44	0.47
32:BB:33:TYR:HB2	32:BB:43:ASP:HA	1.97	0.47
42:BL:24:PRO:C	42:BL:26:LEU:H	2.17	0.47
42:BL:56:LYS:HD2	42:BL:56:LYS:N	2.30	0.47
43:BM:87:TYR:O	43:BM:91:ARG:HG2	2.15	0.47
30:C5:59:LYS:HA	30:C5:59:LYS:HZ3	1.80	0.47
1:CA:101:G:O2'	1:CA:102:G:P	2.73	0.47
1:CA:2211:G:H2'	1:CA:2212:A:H5''	1.97	0.47
1:CA:2389:G:H5''	1:CA:2390:U:O4'	2.14	0.47
1:CA:2517:C:C2	1:CA:2542:A:N1	2.83	0.47
1:CA:451:C:H4'	5:CF:52:LYS:HZ1	1.80	0.47
1:CA:448:U:C4	1:CA:583:G:H1'	2.50	0.47
1:CA:886:C:C2'	1:CA:887:A:O4'	2.57	0.47
2:CB:82:G:O2'	2:CB:83:G:H5'	2.15	0.47
1:CA:2784:C:H1'	4:CE:37:ARG:NH1	2.30	0.47
5:CF:65:TRP:CB	5:CF:66:PRO:HD2	2.45	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CI:3:VAL:CG2	8:CI:36:ALA:HB1	2.45	0.47
8:CI:7:GLU:HB3	8:CI:35:LEU:HD13	1.97	0.47
9:CJ:101:TYR:N	9:CJ:101:TYR:CD1	2.83	0.47
10:CK:10:VAL:HG12	10:CK:12:ASP:OD2	2.15	0.47
31:DA:1372:U:H2'	31:DA:1373:G:O4'	2.15	0.47
31:DA:555:C:H2'	31:DA:556:C:H6	1.77	0.47
31:DA:748:C:C1'	31:DA:749:C:OP2	2.63	0.47
32:DB:141:GLU:O	32:DB:145:LEU:HB2	2.14	0.47
33:DC:155:GLY:HA3	33:DC:196:LEU:HD22	1.97	0.47
36:DF:14:LEU:HD12	36:DF:15:ASP:O	2.15	0.47
37:DG:72:ARG:HG3	37:DG:142:GLU:OE2	2.15	0.47
38:DH:19:VAL:HG23	38:DH:19:VAL:O	2.14	0.47
47:DQ:9:VAL:HG11	47:DQ:84:LEU:HD12	1.97	0.47
49:DS:25:LYS:HB3	49:DS:27:GLU:CD	2.36	0.47
1:AA:2019:A:H62	27:A2:9:LYS:NZ	2.13	0.46
1:AA:1408:C:C2	1:AA:1595:G:N2	2.84	0.46
1:AA:2370:G:H2'	1:AA:2371:G:C8	2.50	0.46
1:AA:603:A:C5	1:AA:655:A:C2	3.03	0.46
6:AG:146:TYR:O	6:AG:149:VAL:HG22	2.15	0.46
7:AH:149:ARG:HA	7:AH:162:ILE:HB	1.97	0.46
8:AI:77:LEU:HB2	8:AI:142:VAL:HG12	1.96	0.46
12:AM:81:VAL:HG12	12:AM:82:ARG:HB2	1.96	0.46
16:AQ:36:ARG:HD3	16:AQ:40:PHE:CZ	2.50	0.46
20:AU:90:LEU:HG	20:AU:91:GLU:H	1.79	0.46
31:BA:1422:G:H2'	31:BA:1423:G:C8	2.50	0.46
31:BA:1501:C:OP2	31:BA:1504:G:H2'	2.14	0.46
37:BG:72:ARG:HG3	37:BG:142:GLU:OE2	2.16	0.46
39:BI:50:LEU:O	39:BI:53:VAL:HG22	2.15	0.46
47:BQ:99:SER:C	47:BQ:100:LYS:HD2	2.35	0.46
52:BW:4:G:O2'	52:BW:5:G:H5'	2.14	0.46
1:CA:1009:A:H4'	16:CQ:59:ARG:HG3	1.97	0.46
1:CA:1349:A:N6	1:CA:1598:C:N4	2.63	0.46
1:CA:1394:U:C4	1:CA:1395:A:C5	3.03	0.46
1:CA:540:G:H2'	1:CA:541:C:C6	2.49	0.46
9:CJ:49:LEU:O	9:CJ:53:ILE:HG13	2.14	0.46
13:CN:33:ARG:N	13:CN:33:ARG:HD2	2.31	0.46
31:DA:1256:A:H5'	31:DA:1257:U:OP1	2.15	0.46
31:DA:1349:A:H5''	39:DI:121:ARG:HB2	1.97	0.46
31:DA:1381:U:H5	31:DA:1382:C:C5	2.33	0.46
32:DB:69:LEU:HD13	32:DB:92:TYR:HA	1.97	0.46
45:DO:21:ASP:OD1	45:DO:24:SER:HB2	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1455:G:H5''	50:DT:31:SER:OG	2.15	0.46
52:DV:23:C:H2'	52:DV:24:U:C6	2.50	0.46
1:AA:249:C:O2	30:A5:12:LYS:HE3	2.15	0.46
1:AA:1179:C:O2'	1:AA:1180:C:H5'	2.15	0.46
1:AA:2212:A:H1'	1:AA:2215:G:C5	2.50	0.46
1:AA:2792:G:H1'	1:AA:2805:G:N2	2.29	0.46
1:AA:881:G:H22	1:AA:895:U:H3	1.63	0.46
3:AD:106:ILE:CD1	3:AD:106:ILE:H	2.04	0.46
3:AD:27:THR:HG23	3:AD:83:GLU:HG2	1.95	0.46
5:AF:93:LYS:HB3	5:AF:94:PRO:HD2	1.96	0.46
1:AA:1952:A:C2	10:AK:22:ILE:HG13	2.50	0.46
11:AL:57:THR:HB	11:AL:59:LEU:HB3	1.96	0.46
12:AM:134:ARG:HG2	21:AV:122:ARG:HH12	1.79	0.46
13:AN:37:THR:OG1	13:AN:40:LYS:HB2	2.15	0.46
14:AO:90:GLY:C	14:AO:92:TYR:H	2.18	0.46
18:AS:14:PRO:O	18:AS:18:ARG:HB2	2.16	0.46
31:BA:106:C:H2'	31:BA:107:G:H8	1.80	0.46
31:BA:177:C:H2'	31:BA:178:C:H6	1.80	0.46
31:BA:769:G:H4'	31:BA:1513:A:H4'	1.98	0.46
32:BB:47:THR:O	32:BB:51:LEU:HG	2.15	0.46
34:BD:18:LYS:HD3	34:BD:20:TYR:CZ	2.50	0.46
39:BI:10:ARG:HG2	39:BI:104:ARG:O	2.15	0.46
43:BM:3:ARG:HH21	43:BM:7:VAL:HG12	1.81	0.46
45:BO:21:ASP:OD1	45:BO:24:SER:HB2	2.15	0.46
1:CA:1044:G:N3	1:CA:1111:A:H2	2.13	0.46
1:CA:1045:A:H5'	1:CA:1047:G:C5'	2.41	0.46
1:CA:1487:G:H2'	1:CA:1488:G:H8	1.80	0.46
1:CA:150:C:H2'	1:CA:151:C:C6	2.50	0.46
1:CA:317:G:C2	1:CA:318:C:C2	3.03	0.46
1:CA:317:G:N2	1:CA:318:C:H1'	2.30	0.46
1:CA:664:C:H4'	1:CA:941:A:OP1	2.15	0.46
1:CA:943:U:OP2	11:CL:38:GLN:CD	2.54	0.46
1:CA:871:U:OP1	12:CM:6:ARG:HA	2.16	0.46
17:CR:52:VAL:O	17:CR:52:VAL:HG13	2.14	0.46
21:CV:48:PHE:CE2	21:CV:71:VAL:HG11	2.50	0.46
31:DA:1009:G:H2'	31:DA:1010:G:C8	2.50	0.46
31:DA:1130:A:C2	31:DA:1146:A:C5	3.03	0.46
31:DA:149:A:H2'	31:DA:150:C:H6	1.81	0.46
31:DA:743:U:H2'	31:DA:744:C:C6	2.50	0.46
31:DA:87:A:H3'	31:DA:88:C:O4'	2.15	0.46
32:DB:112:VAL:O	32:DB:116:GLU:HG2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:168:ARG:C	34:DD:170:VAL:H	2.19	0.46
43:DM:40:ASN:HB3	43:DM:43:THR:CG2	2.43	0.46
45:DO:18:PHE:O	45:DO:21:ASP:HB2	2.15	0.46
31:DA:375:U:H4'	46:DP:17:TYR:CE2	2.51	0.46
49:DS:21:GLU:HG3	49:DS:22:LEU:HD22	1.97	0.46
1:AA:1009:A:H5'	1:AA:1009:A:H8	1.80	0.46
1:AA:1025:G:C4	1:AA:1135:C:H1'	2.50	0.46
1:AA:1048:A:H2	1:AA:1112:G:N3	2.13	0.46
1:AA:1716:U:O2	1:AA:1746:G:C2	2.69	0.46
1:AA:2472:G:H3'	1:AA:2473:U:C5'	2.45	0.46
1:AA:2789:C:O3'	1:AA:2790:A:H4'	2.15	0.46
1:AA:690:G:H2'	1:AA:691:C:C6	2.50	0.46
5:AF:117:ARG:HD3	5:AF:120:GLU:OE2	2.15	0.46
8:AI:41:GLU:HA	8:AI:44:LEU:HB2	1.98	0.46
10:AK:7:TYR:HE1	10:AK:20:MET:HB2	1.78	0.46
11:AL:112:LEU:H	11:AL:128:HIS:CD2	2.34	0.46
15:AP:34:VAL:HG12	15:AP:35:LYS:N	2.31	0.46
20:AU:75:ILE:HD12	20:AU:76:CYS:H	1.80	0.46
23:AX:73:LEU:CD2	23:AX:94:LEU:HD22	2.44	0.46
31:BA:939:G:H1	31:BA:1344:C:H42	1.63	0.46
42:BL:49:SER:O	42:BL:50:ALA:HB2	2.14	0.46
47:BQ:24:GLU:HA	47:BQ:39:SER:HB3	1.97	0.46
31:BA:265:G:H5'	47:BQ:64:PRO:O	2.15	0.46
1:CA:1973:G:H2'	1:CA:1974:C:C6	2.50	0.46
1:CA:2212:A:H1'	1:CA:2215:G:C5	2.50	0.46
1:CA:2287:A:N6	1:CA:2344:U:N3	2.56	0.46
1:CA:2377:A:H2'	1:CA:2378:A:C8	2.50	0.46
1:CA:320:A:H4'	1:CA:322:A:N7	2.30	0.46
1:CA:587:C:C6	1:CA:671:C:H1'	2.50	0.46
1:CA:674:G:C1'	5:CF:74:ARG:HD3	2.45	0.46
7:CH:144:VAL:O	7:CH:148:ILE:HG12	2.15	0.46
8:CI:77:LEU:HB2	8:CI:142:VAL:HG12	1.98	0.46
12:CM:20:ALA:HB2	12:CM:99:PRO:HD2	1.97	0.46
14:CO:18:ILE:O	14:CO:21:THR:HB	2.16	0.46
14:CO:56:LEU:HB3	14:CO:57:LYS:HZ2	1.80	0.46
14:CO:67:ARG:HD3	14:CO:103:GLU:OE1	2.16	0.46
15:CP:107:ASP:HB2	15:CP:108:ARG:H	1.57	0.46
19:CT:88:LYS:NZ	19:CT:90:GLU:HG2	2.30	0.46
21:CV:11:GLU:HG3	21:CV:12:GLY:H	1.80	0.46
22:CW:32:ARG:HH11	22:CW:32:ARG:HB3	1.80	0.46
23:CX:58:ILE:HD12	23:CX:90:ILE:CG2	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1225:A:H5''	31:DA:1226:C:C5	2.51	0.46
31:DA:939:G:H1	31:DA:1344:C:H42	1.63	0.46
31:DA:1501:C:OP2	31:DA:1504:G:H2'	2.16	0.46
31:DA:38:G:H22	31:DA:397:A:H5'	1.80	0.46
31:DA:748:C:H4'	31:DA:749:C:O5'	2.15	0.46
32:DB:47:THR:O	32:DB:51:LEU:HG	2.15	0.46
33:DC:83:ARG:O	33:DC:87:LEU:HG	2.15	0.46
34:DD:70:ILE:HG23	34:DD:71:SER:O	2.16	0.46
34:DD:93:PHE:CE2	34:DD:97:LEU:HD21	2.50	0.46
35:DE:77:PRO:HD2	35:DE:142:LEU:HD22	1.96	0.46
38:DH:86:ILE:HG22	38:DH:87:SER:N	2.30	0.46
39:DI:99:LEU:HB3	39:DI:101:PHE:CE1	2.51	0.46
41:DK:12:ARG:HB3	41:DK:12:ARG:NH1	2.31	0.46
44:DN:33:VAL:HG22	44:DN:40:CYS:HA	1.97	0.46
6:AG:113:ARG:HD3	26:A1:60:GLU:OE2	2.15	0.46
1:AA:99:U:H4'	1:AA:102:G:H1'	1.97	0.46
1:AA:1035:U:H2'	1:AA:1036:G:C8	2.50	0.46
1:AA:195:A:C8	1:AA:197:A:OP1	2.69	0.46
1:AA:2210:G:H21	1:AA:2211:G:H5'	1.80	0.46
1:AA:262:A:H2'	1:AA:263:C:O4'	2.14	0.46
1:AA:2780:G:H4'	1:AA:2781:A:OP2	2.15	0.46
1:AA:2893:G:H5''	1:AA:2894:G:O4'	2.16	0.46
1:AA:589:C:H2'	1:AA:590:A:C8	2.50	0.46
1:AA:844:C:O2'	1:AA:845:G:H5'	2.15	0.46
3:AD:35:LYS:HB3	3:AD:36:PRO:HD3	1.97	0.46
4:AE:134:ILE:HA	4:AE:137:HIS:CD2	2.51	0.46
6:AG:52:ILE:N	6:AG:52:ILE:HD12	2.30	0.46
15:AP:19:LEU:HD23	15:AP:86:ILE:HG21	1.98	0.46
17:AR:52:VAL:HG13	17:AR:52:VAL:O	2.15	0.46
19:AT:34:ALA:HA	19:AT:38:GLU:OE2	2.15	0.46
20:AU:97:ARG:HD3	20:AU:97:ARG:C	2.36	0.46
31:BA:1504:G:OP1	31:BA:1507:A:H4'	2.16	0.46
31:BA:657:G:H4'	45:BO:28:GLN:HG2	1.97	0.46
31:BA:677:U:H2'	31:BA:678:U:C6	2.51	0.46
31:BA:962:C:H2'	31:BA:963:G:O4'	2.15	0.46
32:BB:178:ARG:HH22	32:BB:196:LEU:HA	1.79	0.46
33:BC:97:LYS:HB2	33:BC:98:ASN:H	1.54	0.46
37:BG:102:ARG:O	37:BG:106:GLN:HG3	2.16	0.46
31:BA:691:G:N1	41:BK:52:GLY:HA2	2.30	0.46
42:BL:27:LYS:HE2	42:BL:32:ARG:NH2	2.26	0.46
49:BS:49:ILE:N	49:BS:49:ILE:HD12	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:C2:40:LYS:HE2	27:C2:46:CYS:SG	2.55	0.46
1:CA:1024:G:C3'	1:CA:1025:G:H5''	2.42	0.46
1:CA:1045:A:O2'	1:CA:1047:G:C6	2.65	0.46
1:CA:191:A:H2'	1:CA:192:C:C6	2.51	0.46
1:CA:1993:U:H5''	4:CE:128:SER:HB3	1.96	0.46
1:CA:2261:C:C5	22:CW:16:SER:HB3	2.50	0.46
1:CA:2398:U:H2'	1:CA:2399:G:H8	1.81	0.46
1:CA:479:A:HO2'	1:CA:481:G:H8	1.62	0.46
2:CB:103:U:C2'	2:CB:104:A:H5'	2.46	0.46
2:CB:13:A:O2'	2:CB:14:U:H3'	2.16	0.46
2:CB:38:C:O2	2:CB:48:A:H1'	2.13	0.46
2:CB:55:U:H4'	6:CG:27:ASN:HD21	1.80	0.46
5:CF:28:ILE:H	5:CF:28:ILE:CD1	2.25	0.46
6:CG:101:ILE:HD12	6:CG:102:PHE:N	2.30	0.46
11:CL:128:HIS:HA	11:CL:147:LEU:CB	2.29	0.46
16:CQ:27:LEU:HD22	16:CQ:31:SER:CB	2.45	0.46
17:CR:61:VAL:HG22	17:CR:61:VAL:O	2.15	0.46
23:CX:47:GLN:N	23:CX:62:VAL:O	2.49	0.46
19:CT:11:PRO:HD3	24:CY:37:PHE:CD2	2.51	0.46
24:CY:50:ILE:HD12	24:CY:51:ARG:H	1.72	0.46
31:DA:1031(C):G:H2'	31:DA:1033:G:H8	1.79	0.46
31:DA:1227:A:H2	31:DA:1228:C:C1'	2.28	0.46
31:DA:1320:C:H2'	31:DA:1321:C:O4'	2.16	0.46
31:DA:298:A:C6	31:DA:299:G:C2	3.03	0.46
31:DA:321:A:C2	31:DA:333:G:C2	3.03	0.46
31:DA:957:U:O2	31:DA:959:A:H8	1.99	0.46
32:DB:75:LYS:C	32:DB:77:ALA:H	2.18	0.46
34:DD:185:PHE:HE2	34:DD:189:PRO:HD3	1.80	0.46
34:DD:54:TYR:CE1	34:DD:206:PHE:HE1	2.33	0.46
35:DE:10:MET:HA	35:DE:32:VAL:HA	1.96	0.46
35:DE:135:THR:O	35:DE:138:ALA:HB3	2.14	0.46
39:DI:114:TYR:CD2	39:DI:114:TYR:N	2.81	0.46
31:DA:948:C:C5	43:DM:106:ASN:ND2	2.83	0.46
48:DR:55:ARG:HG3	48:DR:55:ARG:HH11	1.80	0.46
30:A5:50:LEU:O	30:A5:51:ALA:HB3	2.15	0.46
1:AA:1665:A:H4'	10:AK:67:LYS:HB2	1.96	0.46
1:AA:2224:G:H4'	1:AA:2226:C:C2	2.51	0.46
1:AA:2243:U:H2'	1:AA:2244:U:C6	2.50	0.46
1:AA:2315:G:C6	1:AA:2316:C:C4	3.04	0.46
1:AA:2781:A:H5''	1:AA:2782:G:H5'	1.98	0.46
1:AA:886:C:C2'	1:AA:887:A:O4'	2.58	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1657:C:H4'	4:AE:133:LYS:HG2	1.95	0.46
4:AE:169:ASN:OD1	4:AE:201:THR:HG21	2.16	0.46
6:AG:10:LYS:O	6:AG:15:VAL:HG23	2.15	0.46
6:AG:36:LYS:HD3	6:AG:160:VAL:HG21	1.96	0.46
8:AI:3:VAL:HG22	8:AI:36:ALA:HB1	1.97	0.46
9:AJ:119:GLU:H	9:AJ:119:GLU:CD	2.19	0.46
11:AL:48:PRO:C	11:AL:50:ARG:N	2.69	0.46
13:AN:90:ARG:O	13:AN:90:ARG:CG	2.63	0.46
13:AN:45:ARG:HA	13:AN:95:THR:HG21	1.96	0.46
13:AN:8:ARG:HG2	13:AN:9:LYS:N	2.31	0.46
15:AP:100:TYR:HD2	15:AP:103:ARG:NH2	2.13	0.46
31:BA:685:G:O2'	31:BA:686:U:H5'	2.15	0.46
31:BA:818:G:H3'	31:BA:819:A:C5'	2.46	0.46
34:BD:79:PHE:CE1	34:BD:204:ILE:HD13	2.50	0.46
39:BI:27:THR:HG23	39:BI:31:GLN:O	2.15	0.46
47:BQ:45:HIS:CD2	47:BQ:47:PRO:HD3	2.50	0.46
30:C5:52:LYS:CE	30:C5:52:LYS:CA	2.94	0.46
1:CA:2050:C:H1'	4:CE:156:MET:CE	2.45	0.46
1:CA:2134:A:H2	1:CA:2159:G:H4'	1.81	0.46
1:CA:2646:C:H2'	1:CA:2647:U:O4'	2.15	0.46
3:CD:264:LYS:HG2	3:CD:266:SER:H	1.81	0.46
9:CJ:35:ARG:O	9:CJ:73:ASP:HB3	2.14	0.46
12:CM:134:ARG:O	12:CM:135:ASP:C	2.54	0.46
14:CO:90:GLY:C	14:CO:92:TYR:N	2.69	0.46
17:CR:22:VAL:CG1	17:CR:23:GLU:N	2.78	0.46
17:CR:39:LEU:HA	17:CR:47:VAL:HG11	1.94	0.46
20:CU:4:LYS:H	20:CU:4:LYS:HD3	1.79	0.46
20:CU:75:ILE:HD12	20:CU:76:CYS:H	1.81	0.46
24:CY:1:MET:O	24:CY:1:MET:SD	2.74	0.46
31:DA:1049:U:H4'	31:DA:1050:G:C5'	2.45	0.46
31:DA:113:G:H2'	31:DA:114:U:C6	2.49	0.46
31:DA:882:C:O2'	31:DA:883:C:H5'	2.16	0.46
34:DD:70:ILE:HD11	34:DD:100:ARG:NH1	2.31	0.46
35:DE:41:VAL:O	35:DE:67:VAL:HG12	2.16	0.46
37:DG:75:VAL:CG1	37:DG:145:ALA:HA	2.46	0.46
38:DH:38:ILE:O	38:DH:42:GLU:HG2	2.15	0.46
31:DA:1317:C:O4'	44:DN:16:PHE:CZ	2.68	0.46
45:DO:41:GLU:HA	45:DO:44:LYS:HB2	1.97	0.46
50:DT:8:ARG:C	50:DT:10:LEU:H	2.19	0.46
30:A5:39:LYS:HA	30:A5:42:ARG:NH2	2.31	0.46
1:AA:1542:G:OP2	1:AA:1543:A:OP1	2.33	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1658:C:OP1	4:AE:132:HIS:CE1	2.68	0.46
1:AA:2116:G:N2	1:AA:2163:C:N4	2.62	0.46
4:AE:195:LEU:HG	4:AE:196:VAL:N	2.30	0.46
4:AE:98:PRO:HG3	4:AE:175:VAL:HG12	1.96	0.46
6:AG:107:LEU:HD23	6:AG:111:LEU:CD1	2.45	0.46
9:AJ:89:LYS:O	9:AJ:90:LEU:C	2.53	0.46
11:AL:122:PRO:HA	11:AL:141:ALA:O	2.16	0.46
12:AM:134:ARG:O	12:AM:135:ASP:C	2.53	0.46
13:AN:10:LEU:HB2	13:AN:17:ARG:HE	1.80	0.46
14:AO:42:ASP:C	14:AO:44:LYS:H	2.19	0.46
14:AO:56:LEU:HB3	14:AO:57:LYS:HZ2	1.81	0.46
18:AS:75:TYR:CE2	18:AS:104:THR:HB	2.51	0.46
18:AS:83:LYS:O	18:AS:84:ARG:HD2	2.15	0.46
23:AX:19:GLN:HG2	23:AX:41:ARG:HE	1.80	0.46
31:BA:555:C:H2'	31:BA:556:C:H6	1.77	0.46
31:BA:955:U:H1'	31:BA:1227:A:H61	1.81	0.46
32:BB:168:THR:OG1	32:BB:192:SER:HA	2.15	0.46
32:BB:83:MET:HE1	32:BB:233:SER:HB2	1.98	0.46
33:BC:149:ALA:HA	33:BC:201:TYR:O	2.16	0.46
34:BD:31:CYS:O	34:BD:32:ALA:HB3	2.16	0.46
34:BD:71:SER:OG	34:BD:74:GLN:HB2	2.16	0.46
38:BH:119:LEU:HD13	38:BH:127:LEU:HD21	1.98	0.46
41:BK:36:ASP:OD1	41:BK:36:ASP:N	2.48	0.46
41:BK:67:ASP:OD1	41:BK:71:LYS:HE3	2.15	0.46
42:BL:67:ALA:CB	42:BL:84:ILE:HD11	2.45	0.46
45:BO:21:ASP:OD2	45:BO:24:SER:HB2	2.15	0.46
46:BP:8:ARG:NH2	46:BP:15:PRO:HG3	2.31	0.46
46:BP:4:ILE:HA	46:BP:20:VAL:O	2.16	0.46
51:BU:18:TYR:O	51:BU:22:ARG:HB2	2.14	0.46
1:CA:1639:U:C2'	1:CA:1640:C:H5''	2.45	0.46
1:CA:1946:U:H2'	1:CA:1947:C:C6	2.51	0.46
1:CA:2116:G:N2	1:CA:2163:C:N4	2.62	0.46
1:CA:2210:G:H21	1:CA:2211:G:H5'	1.79	0.46
1:CA:2866:U:C6	1:CA:2868:A:H1'	2.50	0.46
1:CA:956:G:OP2	12:CM:14:ARG:NH2	2.48	0.46
3:CD:244:ARG:HA	3:CD:245:PRO:HA	1.80	0.46
3:CD:31:LYS:HE2	3:CD:102:LYS:HD3	1.97	0.46
6:CG:77:ILE:O	6:CG:77:ILE:HG22	2.15	0.46
8:CI:109:ILE:N	8:CI:109:ILE:HD13	2.31	0.46
8:CI:44:LEU:O	8:CI:48:GLU:HG2	2.16	0.46
15:CP:19:LEU:HD23	15:CP:86:ILE:HG21	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CQ:88:ILE:HG22	16:CQ:90:VAL:CG1	2.46	0.46
19:CT:30:VAL:HG11	19:CT:39:ILE:HD11	1.97	0.46
21:CV:151:HIS:NE2	21:CV:170:THR:HG22	2.31	0.46
31:DA:1072:G:C5	31:DA:1073:U:C4	3.03	0.46
31:DA:955:U:H1'	31:DA:1227:A:H61	1.81	0.46
31:DA:355:C:H5'	31:DA:389:A:OP2	2.16	0.46
31:DA:439:A:C4	31:DA:496:A:C2	3.03	0.46
31:DA:687:A:H4'	31:DA:688:G:O5'	2.16	0.46
32:DB:172:ILE:HD12	32:DB:173:ALA:N	2.26	0.46
33:DC:45:LYS:HG3	33:DC:46:GLU:HG3	1.97	0.46
47:DQ:99:SER:C	47:DQ:100:LYS:HD2	2.36	0.46
31:DA:1316:G:O6	49:DS:5:LEU:HD23	2.15	0.46
50:DT:85:MET:HB2	50:DT:104:LEU:HD21	1.98	0.46
1:AA:1113:U:H2'	1:AA:1114:G:H8	1.77	0.46
1:AA:2216:G:C4	1:AA:2217:G:C8	3.03	0.46
1:AA:2415:G:H4'	11:AL:66:GLY:C	2.36	0.46
1:AA:2807:G:N2	1:AA:2893:G:H22	2.07	0.46
1:AA:330:A:H2	1:AA:1210:A:HO2'	1.63	0.46
1:AA:335:C:H2'	1:AA:336:C:H6	1.81	0.46
1:AA:777:A:C2	1:AA:778:G:C4	3.04	0.46
3:AD:35:LYS:HG2	3:AD:104:TYR:CD2	2.51	0.46
6:AG:39:ILE:HD12	6:AG:39:ILE:N	2.29	0.46
23:AX:27:GLU:CB	23:AX:33:LYS:HA	2.44	0.46
23:AX:93:GLU:C	23:AX:95:LEU:H	2.19	0.46
31:BA:1064:G:OP2	31:BA:1386:G:H4'	2.16	0.46
31:BA:1118:C:H1'	31:BA:1179:A:C4	2.51	0.46
31:BA:1226:C:C4	43:BM:104:ARG:HB2	2.51	0.46
31:BA:450:G:N7	31:BA:481:G:C6	2.84	0.46
32:BB:211:ILE:O	32:BB:215:LEU:HB2	2.16	0.46
35:BE:101:ILE:O	35:BE:101:ILE:HG12	2.15	0.46
35:BE:11:ILE:CD1	35:BE:33:VAL:HG23	2.46	0.46
38:BH:123:GLU:O	38:BH:126:LYS:HB3	2.15	0.46
43:BM:109:THR:HG22	43:BM:109:THR:O	2.16	0.46
44:BN:24:CYS:O	44:BN:28:GLY:HA2	2.15	0.46
45:BO:18:PHE:O	45:BO:21:ASP:HB2	2.14	0.46
45:BO:56:LEU:O	45:BO:60:VAL:HG23	2.16	0.46
1:CA:242:G:O5'	30:C5:3:LYS:HE3	2.15	0.46
1:CA:1001:A:H2'	1:CA:1002:G:O4'	2.16	0.46
1:CA:769:G:H5'	1:CA:1379:A:N6	2.31	0.46
1:CA:1517:G:H2'	1:CA:1518:C:C6	2.51	0.46
1:CA:1854:A:N6	1:CA:1888:G:C8	2.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:245:G:H2'	1:CA:246:C:H6	1.80	0.46
1:CA:848:G:N9	1:CA:933:A:H8	2.13	0.46
1:CA:84:A:H61	1:CA:102:G:C2'	2.27	0.46
4:CE:98:PRO:HG3	4:CE:175:VAL:HG12	1.97	0.46
6:CG:70:VAL:HA	6:CG:88:ILE:HD11	1.98	0.46
12:CM:24:GLY:HA2	12:CM:100:GLY:C	2.36	0.46
12:CM:134:ARG:NH2	12:CM:137:TYR:O	2.49	0.46
13:CN:90:ARG:O	13:CN:90:ARG:CG	2.64	0.46
15:CP:34:VAL:HG12	15:CP:35:LYS:N	2.31	0.46
23:CX:9:GLY:O	23:CX:13:ILE:HD11	2.15	0.46
31:DA:292:G:N2	31:DA:309:G:C4	2.84	0.46
31:DA:830:G:H2'	31:DA:831:U:O4'	2.16	0.46
31:DA:909:A:H2'	31:DA:910:C:O4'	2.16	0.46
32:DB:43:ASP:OD2	32:DB:46:LYS:HB2	2.15	0.46
38:DH:77:GLU:HG3	38:DH:78:GLN:N	2.30	0.46
42:DL:65:VAL:HG11	42:DL:97:TYR:HE1	1.79	0.46
43:DM:19:LEU:O	43:DM:22:ILE:HG12	2.15	0.46
1:AA:1705:G:C6	1:AA:1706:U:C4	3.04	0.46
1:AA:1997:G:O2'	1:AA:1998:G:H5'	2.16	0.46
1:AA:2419:U:H2'	1:AA:2420:C:C6	2.51	0.46
1:AA:245:G:H2'	1:AA:246:C:H6	1.80	0.46
1:AA:675:A:N6	1:AA:676:A:N6	2.63	0.46
2:AB:30:C:C2'	2:AB:31:C:H5'	2.45	0.46
2:AB:82:G:O2'	2:AB:83:G:H5'	2.16	0.46
4:AE:181:LEU:HD11	15:AP:7:ILE:CG2	2.46	0.46
4:AE:9:VAL:HG13	4:AE:25:VAL:C	2.35	0.46
6:AG:137:GLU:HB3	6:AG:139:LEU:HD23	1.98	0.46
7:AH:144:VAL:O	7:AH:148:ILE:HG12	2.15	0.46
13:AN:33:ARG:HD2	13:AN:33:ARG:N	2.30	0.46
19:AT:53:LYS:HZ2	19:AT:55:ASN:HD21	1.63	0.46
20:AU:27:VAL:O	20:AU:27:VAL:HG22	2.16	0.46
20:AU:13:VAL:HA	20:AU:75:ILE:HG22	1.97	0.46
21:AV:11:GLU:HG3	21:AV:12:GLY:H	1.80	0.46
31:BA:1029:G:N1	31:BA:1031(B):G:C6	2.83	0.46
34:BD:21:LEU:H	34:BD:21:LEU:HD12	1.81	0.46
35:BE:59:GLY:O	35:BE:63:ARG:HG3	2.16	0.46
47:BQ:13:ASP:H	47:BQ:14:LYS:HD2	1.80	0.46
30:C5:39:LYS:HA	30:C5:42:ARG:NH2	2.31	0.46
1:CA:1542:G:OP2	1:CA:1543:A:OP1	2.33	0.46
1:CA:2315:G:C6	1:CA:2316:C:C4	3.03	0.46
1:CA:2395:C:O2'	23:CX:32:LYS:HE3	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2748:A:N6	1:CA:2749:A:C6	2.84	0.46
1:CA:49:A:H4'	1:CA:50:U:H5''	1.96	0.46
3:CD:35:LYS:HG2	3:CD:104:TYR:CD2	2.51	0.46
4:CE:195:LEU:HG	4:CE:196:VAL:N	2.30	0.46
5:CF:78:ILE:CD1	5:CF:78:ILE:H	2.26	0.46
9:CJ:154:GLN:CG	9:CJ:155:ALA:N	2.78	0.46
9:CJ:90:LEU:HA	9:CJ:110:LEU:HD12	1.98	0.46
11:CL:17:LYS:C	11:CL:19:VAL:H	2.20	0.46
11:CL:27:HIS:CG	11:CL:28:GLY:N	2.78	0.46
13:CN:97:VAL:HG22	13:CN:114:VAL:HG23	1.98	0.46
9:CJ:65:TRP:O	16:CQ:64:ARG:HD3	2.16	0.46
16:CQ:95:LEU:C	16:CQ:97:ASP:H	2.18	0.46
20:CU:50:ARG:HD3	20:CU:51:VAL:H	1.81	0.46
21:CV:141:VAL:HG22	21:CV:141:VAL:O	2.16	0.46
24:CY:29:LYS:HG2	24:CY:57:ILE:HD13	1.97	0.46
31:DA:1275:A:H2'	31:DA:1276:G:C8	2.50	0.46
31:DA:991:U:O2'	31:DA:993:G:C8	2.68	0.46
34:DD:126:ILE:HG22	34:DD:127:THR:N	2.30	0.46
39:DI:50:LEU:O	39:DI:53:VAL:HG22	2.15	0.46
30:A5:32:LEU:HD23	30:A5:33:ASN:H	1.80	0.46
1:AA:1011:G:H5''	16:AQ:77:SER:HG	1.81	0.46
1:AA:1021:A:C3'	1:AA:1021:A:C8	2.97	0.46
1:AA:139:G:N3	1:AA:141(A):A:N1	2.63	0.46
1:AA:1786:A:H4'	1:AA:1787:A:OP2	2.15	0.46
1:AA:2219:G:H2'	1:AA:2224:G:H5'	1.98	0.46
1:AA:335:C:H2'	1:AA:336:C:C6	2.50	0.46
1:AA:479:A:N3	1:AA:481:G:H5''	2.31	0.46
1:AA:773:U:H4'	3:AD:47:GLY:CA	2.40	0.46
1:AA:783:A:C4	1:AA:785:G:H1'	2.51	0.46
1:AA:919:G:H4'	2:AB:81:G:O2'	2.16	0.46
8:AI:56:LYS:HD2	8:AI:56:LYS:O	2.16	0.46
11:AL:113:LYS:HA	11:AL:129:ALA:O	2.16	0.46
13:AN:72:ASP:HB3	13:AN:75:LEU:HB2	1.97	0.46
18:AS:9:TYR:N	18:AS:9:TYR:CD2	2.84	0.46
21:AV:63:ASP:C	21:AV:65:GLN:H	2.19	0.46
31:BA:1052:U:C2	31:BA:1200:C:N4	2.84	0.46
31:BA:1228:C:H4'	43:BM:116:THR:O	2.16	0.46
31:BA:1372:U:H2'	31:BA:1373:G:O4'	2.16	0.46
31:BA:1504:G:C4'	31:BA:1505:G:OP2	2.64	0.46
31:BA:323:U:O3'	50:BT:22:ARG:HG2	2.16	0.46
31:BA:432:A:N7	31:BA:433:C:C4	2.84	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:693:G:C6	31:BA:694:A:C6	3.04	0.46
31:BA:87:A:H3'	31:BA:88:C:O4'	2.16	0.46
31:BA:950:U:H2'	31:BA:951:G:C8	2.51	0.46
32:BB:149:LEU:O	32:BB:153:ARG:HG2	2.16	0.46
34:BD:149:ALA:HB3	34:BD:152:SER:OG	2.16	0.46
43:BM:74:VAL:HA	43:BM:77:ASN:HD22	1.81	0.46
44:BN:45:ARG:O	44:BN:49:HIS:HD2	1.99	0.46
45:BO:21:ASP:CG	45:BO:24:SER:HB2	2.36	0.46
31:BA:375:U:H4'	46:BP:17:TYR:CE2	2.51	0.46
49:BS:41:VAL:CG1	49:BS:42:PRO:HD2	2.46	0.46
1:CA:1763:G:H2'	1:CA:1764:G:O5'	2.16	0.46
4:CE:131:ALA:HB1	4:CE:134:ILE:HG12	1.96	0.46
4:CE:134:ILE:HG13	4:CE:134:ILE:O	2.12	0.46
6:CG:41:GLN:HG2	6:CG:155:MET:HG2	1.98	0.46
12:CM:51:ARG:NH1	12:CM:51:ARG:HB3	2.24	0.46
16:CQ:92:ARG:HD2	16:CQ:94:ASN:HB3	1.95	0.46
19:CT:40:LYS:HG3	19:CT:51:VAL:HG23	1.97	0.46
19:CT:56:THR:HB	19:CT:77:LYS:HE2	1.97	0.46
20:CU:97:ARG:HD3	20:CU:97:ARG:C	2.37	0.46
31:DA:1225:A:N3	31:DA:1225:A:C2'	2.77	0.46
34:DD:57:ARG:NH2	35:DE:107:ARG:HD3	2.31	0.46
35:DE:25:ARG:HD2	35:DE:25:ARG:N	2.31	0.46
36:DF:37:VAL:HG12	36:DF:38:GLU:N	2.31	0.46
39:DI:27:THR:HG23	39:DI:31:GLN:O	2.15	0.46
41:DK:36:ASP:N	41:DK:36:ASP:OD1	2.49	0.46
41:DK:41:THR:CG2	41:DK:42:TRP:H	2.19	0.46
43:DM:109:THR:O	43:DM:109:THR:HG22	2.16	0.46
1:AA:1169:G:N2	1:AA:1181:C:C2	2.84	0.46
1:AA:2363:C:O2'	1:AA:2364:C:H5'	2.16	0.46
1:AA:2393:A:P	30:A5:28:GLY:H	2.39	0.46
1:AA:2547:U:H2'	1:AA:2548:G:C8	2.51	0.46
1:AA:2748:A:N6	1:AA:2749:A:C6	2.84	0.46
1:AA:309:G:N3	1:AA:329:G:O2'	2.49	0.46
1:AA:322:A:H2'	5:AF:169:ASN:ND2	2.30	0.46
1:AA:523:C:H4'	1:AA:541:C:O2	2.15	0.46
1:AA:751:A:C6	1:AA:789:A:C5	3.04	0.46
3:AD:62:TYR:HA	3:AD:87:ASN:ND2	2.31	0.46
6:AG:41:GLN:HG2	6:AG:155:MET:HG2	1.97	0.46
12:AM:22:LYS:O	12:AM:24:GLY:N	2.48	0.46
19:AT:88:LYS:NZ	19:AT:90:GLU:HG2	2.30	0.46
20:AU:81:LYS:CG	20:AU:97:ARG:HB3	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AW:32:ARG:HH11	22:AW:32:ARG:HB3	1.80	0.46
31:BA:1049:U:H4'	31:BA:1050:G:C5'	2.46	0.46
31:BA:1129:C:H1'	31:BA:1132:C:H5	1.81	0.46
31:BA:1130:A:C2	31:BA:1146:A:C5	3.03	0.46
31:BA:1128:C:O2'	31:BA:1130:A:C8	2.61	0.46
31:BA:1225:A:H5''	31:BA:1226:C:C5	2.50	0.46
31:BA:1381:U:H5	31:BA:1382:C:C5	2.34	0.46
31:BA:718:G:H5'	41:BK:117:ASN:ND2	2.31	0.46
31:BA:957:U:O2	31:BA:959:A:H8	1.97	0.46
32:BB:114:ARG:O	32:BB:118:LEU:HG	2.15	0.46
35:BE:11:ILE:HG21	35:BE:105:VAL:HG22	1.98	0.46
38:BH:19:VAL:HG23	38:BH:19:VAL:O	2.16	0.46
45:BO:56:LEU:HD23	45:BO:56:LEU:C	2.37	0.46
49:BS:25:LYS:HB3	49:BS:27:GLU:CD	2.35	0.46
1:CA:1417:C:H2'	1:CA:1418:G:O4'	2.16	0.46
1:CA:2019:A:H5''	16:CQ:27:LEU:CD1	2.46	0.46
1:CA:2313:C:H5''	6:CG:91:ARG:HD3	1.98	0.46
1:CA:2419:U:H2'	1:CA:2420:C:C6	2.51	0.46
1:CA:2792:G:N2	1:CA:2804:C:O2	2.49	0.46
1:CA:580:C:H2'	1:CA:581:C:H6	1.80	0.46
3:CD:118:VAL:HG22	3:CD:119:ALA:N	2.31	0.46
3:CD:240:ALA:HB1	3:CD:241:PRO:HD2	1.97	0.46
10:CK:88:ASN:ND2	10:CK:92:GLU:HB2	2.30	0.46
1:CA:390:A:C6	11:CL:71:VAL:HG21	2.50	0.46
1:CA:1614:A:N6	18:CS:88:ARG:H	2.14	0.46
20:CU:50:ARG:CZ	20:CU:58:GLY:HA2	2.46	0.46
31:DA:1298:C:C5	37:DG:114:ARG:HD3	2.51	0.46
31:DA:1328:C:H5''	43:DM:28:ALA:CB	2.46	0.46
31:DA:1505:G:H5''	31:DA:1506:U:H5''	1.97	0.46
15:CP:41:ARG:NH1	31:DA:345:C:H5'	2.31	0.46
31:DA:39:G:N7	31:DA:547:A:H8	2.14	0.46
31:DA:408:A:H4'	34:DD:112:VAL:HG11	1.98	0.46
31:DA:927:G:N2	31:DA:1391:U:H1'	2.31	0.46
34:DD:134:ASP:O	34:DD:136:PRO:HD3	2.15	0.46
34:DD:104:VAL:HG21	34:DD:140:VAL:HG21	1.97	0.46
34:DD:129:ASN:OD1	34:DD:144:ASP:HA	2.16	0.46
34:DD:149:ALA:HB3	34:DD:152:SER:HB2	1.99	0.46
37:DG:5:ARG:HB3	37:DG:6:ARG:H	1.49	0.46
39:DI:10:ARG:HG2	39:DI:104:ARG:O	2.16	0.46
39:DI:110:GLU:HG2	39:DI:119:ALA:HB1	1.97	0.46
31:DA:1250:A:H4'	39:DI:68:GLY:N	2.31	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DJ:6:ILE:CG1	40:DJ:72:VAL:HB	2.46	0.46
42:DL:24:PRO:C	42:DL:26:LEU:H	2.18	0.46
45:DO:56:LEU:O	45:DO:60:VAL:HG23	2.16	0.46
46:DP:8:ARG:NH2	46:DP:15:PRO:HG3	2.31	0.46
47:DQ:13:ASP:H	47:DQ:14:LYS:HD2	1.81	0.46
50:DT:47:GLY:O	50:DT:49:ALA:N	2.49	0.46
52:DW:17(A):U:H1'	52:DW:18:G:P	2.56	0.46
1:AA:1105:U:O2'	1:AA:1106:G:H5'	2.16	0.45
1:AA:1149:G:H2'	1:AA:1150:C:C6	2.51	0.45
1:AA:1763:G:H2'	1:AA:1764:G:O5'	2.16	0.45
1:AA:1817:G:OP1	3:AD:88:ARG:NH2	2.47	0.45
1:AA:1998:G:H2'	1:AA:1999:C:C6	2.50	0.45
1:AA:865:C:H4'	1:AA:866:A:N7	2.31	0.45
1:AA:956:G:OP2	12:AM:14:ARG:NH2	2.50	0.45
2:AB:13:A:O2'	2:AB:14:U:H3'	2.16	0.45
2:AB:30:C:H2'	2:AB:31:C:H5'	1.97	0.45
3:AD:176:ARG:HA	3:AD:182:LEU:HD23	1.97	0.45
5:AF:53:THR:C	5:AF:55:GLY:H	2.18	0.45
1:AA:797:C:OP2	5:AF:62:ARG:HG3	2.16	0.45
5:AF:63:LYS:NZ	5:AF:67:GLN:HE21	2.15	0.45
8:AI:109:ILE:HD13	8:AI:109:ILE:N	2.31	0.45
17:AR:61:VAL:HA	17:AR:94:LEU:HD23	1.97	0.45
21:AV:125:LEU:CD1	21:AV:164:ALA:HB3	2.45	0.45
21:AV:9:TYR:CZ	21:AV:61:LEU:HD13	2.51	0.45
23:AX:11:ARG:HD3	23:AX:11:ARG:HA	1.63	0.45
31:BA:1194:U:H2'	31:BA:1195:C:C6	2.51	0.45
31:BA:1277:C:C2'	31:BA:1278:U:H5'	2.46	0.45
31:BA:1349:A:H5''	39:BI:121:ARG:HB2	1.97	0.45
31:BA:927:G:N2	31:BA:1391:U:H1'	2.32	0.45
31:BA:321:A:C2	31:BA:333:G:C2	3.04	0.45
31:BA:560:U:H5'	31:BA:566:G:N2	2.30	0.45
34:BD:139:ARG:HG3	34:BD:139:ARG:NH1	2.29	0.45
34:BD:147:ALA:HB2	34:BD:182:LYS:HG2	1.96	0.45
43:BM:91:ARG:HH21	43:BM:97:PRO:HG2	1.81	0.45
1:CA:2019:A:H62	27:C2:9:LYS:NZ	2.14	0.45
1:CA:1108:U:C2	1:CA:1109:C:N4	2.83	0.45
1:CA:1568:G:C5'	3:CD:61:LEU:HD22	2.46	0.45
1:CA:1805:U:H5''	3:CD:250:TRP:CE2	2.51	0.45
1:CA:2056:G:H22	27:C2:4:HIS:C	2.19	0.45
1:CA:2389:G:H5''	1:CA:2390:U:H5'	1.97	0.45
1:CA:309:G:N3	1:CA:329:G:O2'	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:974(B):C:H4'	1:CA:974(B):C:OP2	2.16	0.45
2:CB:30:C:H2'	2:CB:31:C:H5'	1.98	0.45
3:CD:220:HIS:HD2	3:CD:221:VAL:N	2.14	0.45
3:CD:35:LYS:HB3	3:CD:36:PRO:HD3	1.97	0.45
6:CG:98:ARG:O	6:CG:101:ILE:HG13	2.15	0.45
19:CT:80:ILE:C	19:CT:80:ILE:HD12	2.36	0.45
19:CT:92:LEU:HD23	19:CT:92:LEU:HA	1.83	0.45
1:CA:298:G:OP2	20:CU:85:VAL:HG22	2.16	0.45
24:CY:2:LYS:HA	24:CY:5:GLU:OE2	2.17	0.45
31:DA:1084:G:C5	31:DA:1085:U:C4	3.04	0.45
31:DA:1112:C:O2	33:DC:179:ARG:HG3	2.16	0.45
31:DA:1244:C:H2'	31:DA:1245:A:C8	2.51	0.45
31:DA:737:A:H2'	31:DA:738:C:H6	1.79	0.45
31:DA:93:U:H2'	31:DA:95:G:C8	2.50	0.45
34:DD:192:GLU:H	34:DD:192:GLU:CD	2.20	0.45
40:DJ:47:PHE:CE1	44:DN:37:PHE:HE2	2.34	0.45
50:DT:90:GLN:HA	50:DT:93:GLU:HB3	1.97	0.45
31:DA:1269:A:OP1	51:DU:24:ARG:HG2	2.16	0.45
29:A4:9:ARG:NE	29:A4:47:ARG:HB2	2.21	0.45
11:AL:62:LEU:HD21	30:A5:25:MET:HB2	1.96	0.45
30:A5:37:SER:HB3	30:A5:40:GLU:HG2	1.97	0.45
30:A5:11:LYS:HE3	30:A5:64:TYR:CE2	2.52	0.45
1:AA:176:G:O2'	1:AA:177:G:H5'	2.15	0.45
1:AA:358:U:O2'	1:AA:359:A:H5'	2.17	0.45
1:AA:2599:G:C8	3:AD:237:GLU:HG3	2.52	0.45
3:AD:32:SER:O	3:AD:34:VAL:N	2.49	0.45
8:AI:61:ARG:NH2	8:AI:133:HIS:HD2	2.14	0.45
9:AJ:42:GLU:HA	9:AJ:82:LYS:O	2.16	0.45
14:AO:49:VAL:HG13	14:AO:76:LYS:NZ	2.30	0.45
21:AV:141:VAL:HG22	21:AV:141:VAL:O	2.16	0.45
31:BA:1056:U:H2'	31:BA:1056:U:O2	2.16	0.45
31:BA:1256:A:H5'	31:BA:1257:U:OP1	2.15	0.45
31:BA:909:A:H2'	31:BA:910:C:O4'	2.15	0.45
31:BA:93:U:H2'	31:BA:95:G:H8	1.81	0.45
31:BA:972:C:OP2	40:BJ:57:LYS:HD3	2.16	0.45
32:BB:86:GLU:C	32:BB:88:ALA:H	2.20	0.45
34:BD:56:VAL:HG12	34:BD:202:LEU:HD11	1.97	0.45
31:BA:474:G:OP2	46:BP:75:ARG:NH1	2.50	0.45
27:C2:18:ALA:O	27:C2:21:SER:HB2	2.17	0.45
1:CA:1105:U:H2'	1:CA:1106:G:C8	2.52	0.45
1:CA:1840:G:H1	1:CA:1902:C:N4	2.13	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2129:C:N3	1:CA:2159:G:O6	2.49	0.45
1:CA:2305:A:H3'	1:CA:2306:C:H5''	1.98	0.45
1:CA:2599:G:C8	3:CD:237:GLU:HG3	2.51	0.45
1:CA:2601:C:OP2	54:CA:4405:BLS:H131	2.16	0.45
1:CA:2846:G:H2'	1:CA:2847:U:O4'	2.16	0.45
1:CA:289:A:H2'	1:CA:290:G:O4'	2.16	0.45
1:CA:881:G:H22	1:CA:895:U:H3	1.63	0.45
1:CA:896:A:O4'	21:CV:146:ILE:HD12	2.17	0.45
3:CD:175:LEU:HD21	3:CD:185:VAL:HG23	1.98	0.45
3:CD:32:SER:O	3:CD:34:VAL:N	2.49	0.45
5:CF:28:ILE:O	5:CF:30:PRO:HD3	2.16	0.45
6:CG:109:VAL:C	6:CG:112:PRO:HD2	2.37	0.45
6:CG:135:LEU:HD23	6:CG:140:ILE:HD11	1.98	0.45
8:CI:83:ALA:CB	8:CI:88:ILE:HA	2.46	0.45
9:CJ:119:GLU:CD	9:CJ:119:GLU:N	2.69	0.45
11:CL:61:ARG:CA	11:CL:62:LEU:HD13	2.46	0.45
14:CO:90:GLY:C	14:CO:92:TYR:H	2.18	0.45
20:CU:81:LYS:CG	20:CU:97:ARG:HB3	2.46	0.45
24:CY:15:LYS:HA	24:CY:15:LYS:HE2	1.98	0.45
31:DA:1129:C:H1'	31:DA:1132:C:H5	1.81	0.45
31:DA:174:C:H6	31:DA:174:C:O5'	1.99	0.45
31:DA:511:C:C4	31:DA:541:G:N2	2.84	0.45
31:DA:677:U:H2'	31:DA:678:U:C6	2.51	0.45
32:DB:168:THR:OG1	32:DB:192:SER:HA	2.16	0.45
35:DE:11:ILE:HG21	35:DE:105:VAL:HG22	1.97	0.45
31:DA:1254:C:OP1	40:DJ:45:ARG:HD3	2.17	0.45
1:AA:197:A:H5'	1:AA:197:A:H8	1.82	0.45
1:AA:2134:A:P	1:AA:2157:G:H22	2.39	0.45
1:AA:2364:C:H2'	1:AA:2365:G:O4'	2.17	0.45
1:AA:2729:G:H2'	1:AA:2730:C:C6	2.51	0.45
1:AA:500:G:N2	1:AA:502:A:H3'	2.30	0.45
1:AA:583:G:OP2	16:AQ:10:ARG:HD2	2.16	0.45
3:AD:245:PRO:HB2	3:AD:255:LYS:CE	2.46	0.45
12:AM:43:THR:OG1	12:AM:46:GLN:HG3	2.17	0.45
17:AR:47:VAL:HB	17:AR:50:PRO:O	2.16	0.45
17:AR:51:VAL:HG12	17:AR:52:VAL:N	2.31	0.45
20:AU:12:THR:HA	20:AU:26:LYS:HA	1.98	0.45
22:AW:32:ARG:NH1	22:AW:32:ARG:HB3	2.31	0.45
23:AX:40:ARG:HH12	23:AX:42:GLN:HG2	1.81	0.45
31:BA:1031(C):G:H2'	31:BA:1033:G:O4'	2.17	0.45
31:BA:1084:G:C5	31:BA:1085:U:C4	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1250:A:H4'	39:BI:68:GLY:N	2.32	0.45
31:BA:173:U:C6	31:BA:197:A:C2	3.04	0.45
31:BA:748:C:C1'	31:BA:749:C:OP2	2.63	0.45
31:BA:836:G:C6	31:BA:851:G:C6	3.04	0.45
31:BA:93:U:H2'	31:BA:95:G:C8	2.52	0.45
31:BA:1112:C:O2	33:BC:179:ARG:HG3	2.15	0.45
34:BD:112:VAL:HG13	34:BD:116:GLN:OE1	2.16	0.45
35:BE:20:GLN:O	35:BE:21:ALA:C	2.55	0.45
35:BE:30:ALA:O	35:BE:45:PHE:HA	2.17	0.45
36:BF:10:LEU:HD13	36:BF:61:LEU:CD1	2.41	0.45
36:BF:12:PRO:HG3	36:BF:57:GLN:O	2.16	0.45
45:BO:7:GLU:O	45:BO:11:VAL:HG23	2.15	0.45
48:BR:51:LEU:CD2	48:BR:52:PRO:HD2	2.46	0.45
52:BW:17(A):U:H1'	52:BW:18:G:P	2.57	0.45
1:CA:119:A:H4'	1:CA:120:U:OP1	2.16	0.45
1:CA:1568:G:H5''	3:CD:61:LEU:HD22	1.98	0.45
1:CA:2037:G:C6	1:CA:2038:G:C6	3.03	0.45
1:CA:228:A:H2'	1:CA:229:A:H5''	1.99	0.45
1:CA:488:G:O2'	18:CS:49:LYS:HE3	2.16	0.45
1:CA:540:G:H2'	1:CA:541:C:H6	1.82	0.45
2:CB:66:A:N6	2:CB:107:U:H2'	2.30	0.45
3:CD:37:LEU:O	3:CD:38:LYS:HG3	2.17	0.45
11:CL:59:LEU:CA	11:CL:61:ARG:CZ	2.95	0.45
12:CM:27:VAL:HA	12:CM:105:GLU:OE1	2.16	0.45
13:CN:10:LEU:HB2	13:CN:17:ARG:HE	1.80	0.45
14:CO:100:ALA:HA	14:CO:103:GLU:HB3	1.99	0.45
14:CO:65:VAL:O	14:CO:69:VAL:HG12	2.16	0.45
21:CV:62:PRO:C	21:CV:64:GLY:H	2.20	0.45
23:CX:73:LEU:CD2	23:CX:94:LEU:HD22	2.46	0.45
31:DA:1004:A:C6	31:DA:1025:U:H4'	2.50	0.45
31:DA:1056:U:H2'	31:DA:1056:U:O2	2.16	0.45
31:DA:1277:C:C2'	31:DA:1278:U:H5'	2.46	0.45
31:DA:1504:G:C4'	31:DA:1505:G:OP2	2.64	0.45
32:DB:235:SER:O	32:DB:239:VAL:HG23	2.15	0.45
31:DA:403:C:H4'	34:DD:122:ARG:NH2	2.32	0.45
35:DE:11:ILE:CD1	35:DE:33:VAL:HG23	2.47	0.45
35:DE:51:VAL:CB	35:DE:52:PRO:HD3	2.46	0.45
35:DE:51:VAL:O	35:DE:54:ALA:HB3	2.17	0.45
36:DF:7:ASN:O	36:DF:8:ILE:HD13	2.16	0.45
39:DI:114:TYR:CE1	40:DJ:60:ARG:O	2.69	0.45
45:DO:21:ASP:CG	45:DO:24:SER:HB2	2.37	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DS:41:VAL:CG1	49:DS:42:PRO:HD2	2.46	0.45
50:DT:61:SER:O	50:DT:65:LYS:HG2	2.17	0.45
31:DA:1269:A:H5''	51:DU:24:ARG:HH12	1.81	0.45
29:A4:15:THR:HG22	29:A4:16:HIS:CE1	2.52	0.45
1:AA:1417:C:H2'	1:AA:1418:G:O4'	2.16	0.45
1:AA:1786:A:H1'	1:AA:1938:A:N6	2.32	0.45
1:AA:1773:A:C5	1:AA:1829:A:H1'	2.52	0.45
1:AA:2056:G:H2'	1:AA:2056:G:N3	2.31	0.45
1:AA:2335:A:O2'	1:AA:2336:A:H5''	2.16	0.45
1:AA:2647:U:H2'	1:AA:2648:C:H6	1.80	0.45
1:AA:390:A:C6	11:AL:71:VAL:HG21	2.52	0.45
3:AD:245:PRO:HB2	3:AD:255:LYS:NZ	2.32	0.45
4:AE:196:VAL:HG22	4:AE:197:ILE:N	2.31	0.45
6:AG:135:LEU:HD23	6:AG:140:ILE:HD11	1.99	0.45
6:AG:56:ALA:HB2	6:AG:153:ARG:NE	2.30	0.45
7:AH:38:SER:OG	7:AH:40:GLU:HG2	2.16	0.45
7:AH:72:ILE:O	7:AH:76:VAL:HG23	2.17	0.45
8:AI:133:HIS:HE1	8:AI:135:GLU:CB	2.29	0.45
8:AI:3:VAL:CG2	8:AI:36:ALA:HB1	2.47	0.45
8:AI:5:LEU:HD23	8:AI:5:LEU:N	2.16	0.45
15:AP:105:LEU:CD2	15:AP:109:GLU:HG3	2.47	0.45
18:AS:18:ARG:HG3	18:AS:76:VAL:CG1	2.47	0.45
21:AV:151:HIS:NE2	21:AV:170:THR:HG22	2.32	0.45
31:BA:105:G:C6	31:BA:106:C:C4	3.05	0.45
31:BA:991:U:O2'	31:BA:993:G:C8	2.69	0.45
33:BC:155:GLY:HA3	33:BC:196:LEU:HD22	1.98	0.45
34:BD:36:ARG:HD3	34:BD:38:TYR:HE1	1.80	0.45
36:BF:91:VAL:HG12	36:BF:92:LYS:O	2.16	0.45
40:BJ:6:ILE:CG1	40:BJ:72:VAL:HB	2.46	0.45
42:BL:40:ARG:CG	42:BL:41:THR:N	2.80	0.45
50:BT:81:LYS:O	50:BT:85:MET:HG2	2.15	0.45
29:C4:3:ARG:HG3	29:C4:4:THR:H	1.80	0.45
1:CA:1652:A:N6	1:CA:1653:G:N1	2.64	0.45
1:CA:1668:A:N3	1:CA:1670:C:C4	2.84	0.45
1:CA:1787:A:H2'	1:CA:1787:A:N3	2.31	0.45
1:CA:1824:G:O2'	1:CA:1825:A:H5'	2.15	0.45
1:CA:2134:A:P	1:CA:2157:G:H22	2.40	0.45
1:CA:2207:C:H2'	1:CA:2208:U:O4'	2.16	0.45
1:CA:2729:G:H2'	1:CA:2730:C:C6	2.52	0.45
1:CA:848:G:H2'	1:CA:849:A:C8	2.51	0.45
3:CD:113:VAL:HG12	3:CD:114:GLY:N	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CD:97:TYR:CE1	3:CD:103:ARG:HD2	2.51	0.45
1:CA:586:A:H5'	5:CF:89:VAL:HG21	1.99	0.45
10:CK:53:LYS:HD2	10:CK:53:LYS:N	2.31	0.45
11:CL:128:HIS:CA	11:CL:147:LEU:HB3	2.30	0.45
11:CL:25:SER:O	11:CL:30:THR:HG23	2.17	0.45
11:CL:27:HIS:CD2	11:CL:28:GLY:N	2.85	0.45
13:CN:101:ALA:HB2	27:C2:44:THR:OG1	2.16	0.45
13:CN:10:LEU:HB3	13:CN:17:ARG:HD3	1.99	0.45
13:CN:8:ARG:HG2	13:CN:9:LYS:N	2.31	0.45
18:CS:65:LEU:HB2	18:CS:68:ARG:HB2	1.98	0.45
20:CU:4:LYS:H	20:CU:4:LYS:CD	2.30	0.45
23:CX:19:GLN:HG2	23:CX:41:ARG:HE	1.79	0.45
23:CX:65:SER:OG	23:CX:66:HIS:HD2	1.99	0.45
31:DA:403:C:O2'	31:DA:404:U:H5'	2.15	0.45
31:DA:693:G:C6	31:DA:694:A:C6	3.04	0.45
32:DB:142:LEU:HD11	32:DB:146:GLN:HE21	1.80	0.45
33:DC:88:ARG:HG2	33:DC:101:LEU:HB3	1.97	0.45
34:DD:30:LYS:C	34:DD:32:ALA:N	2.65	0.45
34:DD:43:HIS:HB2	34:DD:44:GLY:H	1.62	0.45
35:DE:101:ILE:O	35:DE:101:ILE:HG12	2.16	0.45
35:DE:96:PRO:HA	35:DE:117:ASP:OD2	2.17	0.45
37:DG:146:GLU:C	37:DG:148:ASN:H	2.20	0.45
38:DH:64:LYS:HD2	38:DH:79:VAL:HG11	1.99	0.45
38:DH:73:ASP:HB3	38:DH:75:ARG:HG2	1.98	0.45
49:DS:49:ILE:HD12	49:DS:49:ILE:N	2.31	0.45
27:A2:45:VAL:HG22	27:A2:51:TYR:CE1	2.52	0.45
1:AA:1001:A:H2'	1:AA:1002:G:O4'	2.16	0.45
1:AA:1142(B):A:C4	1:AA:1144:G:N7	2.84	0.45
1:AA:1394:U:C4	1:AA:1395:A:C6	3.05	0.45
1:AA:1472:A:N6	1:AA:1521:G:H1'	2.32	0.45
1:AA:188:G:C2'	1:AA:189:G:H5'	2.45	0.45
1:AA:228:A:H2'	1:AA:229:A:H5''	1.99	0.45
1:AA:2792:G:N2	1:AA:2804:C:O2	2.49	0.45
1:AA:34:C:HO2'	1:AA:35:G:H5'	1.75	0.45
3:AD:246:PRO:HB2	3:AD:255:LYS:HG3	1.98	0.45
10:AK:10:VAL:HG12	10:AK:12:ASP:OD2	2.17	0.45
13:AN:101:ALA:HB2	27:A2:44:THR:OG1	2.17	0.45
13:AN:97:VAL:HG22	13:AN:114:VAL:HG23	1.99	0.45
14:AO:100:ALA:HA	14:AO:103:GLU:HB3	1.99	0.45
17:AR:55:ALA:HA	17:AR:101:GLY:HA2	1.99	0.45
18:AS:4:LYS:HA	18:AS:106:ILE:HG22	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1298:C:C5	37:BG:114:ARG:HD3	2.52	0.45
31:BA:743:U:H2'	31:BA:744:C:C6	2.50	0.45
31:BA:830:G:H2'	31:BA:831:U:O4'	2.17	0.45
35:BE:76:ILE:HG13	35:BE:77:PRO:CD	2.44	0.45
39:BI:48:GLU:N	39:BI:49:PRO:CD	2.78	0.45
39:BI:114:TYR:CE1	40:BJ:60:ARG:O	2.70	0.45
43:BM:23:TYR:CZ	43:BM:71:ARG:HD3	2.51	0.45
43:BM:81:LEU:HD11	43:BM:88:ARG:NH2	2.32	0.45
47:BQ:36:ILE:O	47:BQ:36:ILE:HD12	2.16	0.45
50:BT:72:LEU:C	50:BT:72:LEU:HD13	2.37	0.45
30:C5:53:PRO:HA	30:C5:56:GLU:HB2	1.98	0.45
1:CA:1504:C:H2'	1:CA:1505:C:C6	2.52	0.45
1:CA:1773:A:C5	1:CA:1829:A:H1'	2.52	0.45
1:CA:1912:A:O2'	31:DA:1494:G:H2'	2.17	0.45
1:CA:192:C:H2'	1:CA:193:U:H5'	1.98	0.45
2:CB:30:C:C2'	2:CB:31:C:H5'	2.47	0.45
1:CA:1812:A:O2'	3:CD:45:ASN:N	2.50	0.45
10:CK:73:ASP:HB2	15:CP:82:LEU:HD11	1.97	0.45
15:CP:78:LEU:HD12	15:CP:79:HIS:CD2	2.51	0.45
18:CS:13:SER:HB3	18:CS:16:LYS:HD2	1.97	0.45
21:CV:138:GLU:HB2	21:CV:156:LYS:HD3	1.99	0.45
31:DA:1464:G:O2'	31:DA:1465:C:H5'	2.16	0.45
31:DA:272:C:H2'	31:DA:273:A:C8	2.51	0.45
31:DA:328:C:H4'	31:DA:329:A:O5'	2.16	0.45
31:DA:432:A:N7	31:DA:433:C:C4	2.84	0.45
32:DB:211:ILE:O	32:DB:215:LEU:HB2	2.16	0.45
32:DB:86:GLU:C	32:DB:88:ALA:H	2.20	0.45
35:DE:92:LYS:O	35:DE:118:ILE:HG13	2.16	0.45
38:DH:89:PRO:HA	38:DH:92:ARG:NH1	2.25	0.45
43:DM:25:ILE:N	43:DM:25:ILE:HD12	2.32	0.45
43:DM:91:ARG:HH21	43:DM:97:PRO:HG2	1.82	0.45
26:A1:54:LYS:HA	26:A1:55:PRO:HD3	1.76	0.45
27:A2:40:LYS:HE2	27:A2:46:CYS:SG	2.57	0.45
1:AA:1668:A:N3	1:AA:1670:C:C4	2.84	0.45
1:AA:2469:A:OP2	1:AA:2476:A:H8	2.00	0.45
1:AA:2480:C:H2'	1:AA:2481:G:H5'	1.98	0.45
1:AA:2602:A:H2'	52:BV:75:C:OP1	2.16	0.45
1:AA:2790:A:H2'	1:AA:2791:C:C5'	2.41	0.45
1:AA:769:G:H5'	1:AA:1379:A:N6	2.31	0.45
3:AD:154:LYS:HB3	3:AD:154:LYS:HE2	1.73	0.45
1:AA:2784:C:H1'	4:AE:37:ARG:NH1	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AF:127:GLU:HB2	5:AF:196:LEU:HD12	1.99	0.45
5:AF:65:TRP:CB	5:AF:66:PRO:HD2	2.45	0.45
7:AH:109:PHE:C	7:AH:111:HIS:H	2.19	0.45
9:AJ:90:LEU:HA	9:AJ:110:LEU:HD12	1.99	0.45
10:AK:73:ASP:HB2	15:AP:82:LEU:HD11	1.99	0.45
11:AL:47:ASP:OD1	11:AL:49:ARG:N	2.50	0.45
12:AM:24:GLY:HA2	12:AM:100:GLY:C	2.37	0.45
16:AQ:95:LEU:C	16:AQ:97:ASP:H	2.19	0.45
17:AR:78:LYS:HG2	17:AR:79:VAL:HG13	1.98	0.45
18:AS:70:TYR:CD2	18:AS:70:TYR:N	2.85	0.45
20:AU:50:ARG:HD3	20:AU:51:VAL:H	1.81	0.45
23:AX:31:GLY:O	23:AX:32:LYS:CB	2.64	0.45
31:BA:1123:A:H4'	40:BJ:36:GLY:HA3	1.99	0.45
31:BA:413:G:H21	31:BA:428:G:H1'	1.81	0.45
31:BA:5:U:O2'	31:BA:6:G:O5'	2.34	0.45
32:BB:84:GLU:HA	32:BB:87:ARG:HB2	1.97	0.45
34:BD:107:ARG:HH21	34:BD:114:ARG:NH2	2.14	0.45
34:BD:116:GLN:HG2	34:BD:116:GLN:O	2.16	0.45
34:BD:3:ARG:HD2	34:BD:5:ILE:HG12	1.98	0.45
35:BE:41:VAL:O	35:BE:67:VAL:HG12	2.16	0.45
36:BF:14:LEU:HD12	36:BF:15:ASP:O	2.16	0.45
38:BH:38:ILE:HD11	38:BH:119:LEU:HA	1.98	0.45
44:BN:14:PRO:HG2	44:BN:15:LYS:H	1.82	0.45
46:BP:20:VAL:CG2	46:BP:32:TYR:HB2	2.47	0.45
48:BR:55:ARG:HG3	48:BR:55:ARG:HH11	1.81	0.45
50:BT:8:ARG:C	50:BT:10:LEU:H	2.19	0.45
28:C3:28:ARG:HG3	28:C3:29:ASN:HD22	1.82	0.45
1:CA:1444(B):A:OP2	1:CA:1445:C:H5	2.00	0.45
1:CA:188:G:C2'	1:CA:189:G:H5'	2.46	0.45
1:CA:1902:C:H2'	1:CA:1903:G:O4'	2.16	0.45
1:CA:2335:A:O2'	1:CA:2336:A:H5''	2.17	0.45
1:CA:2547:U:H2'	1:CA:2548:G:C8	2.52	0.45
1:CA:2561:A:H2'	1:CA:2562:U:O4'	2.16	0.45
1:CA:2602:A:H2'	52:DV:75:C:OP1	2.17	0.45
1:CA:2850:A:OP2	1:CA:2866:U:C5	2.69	0.45
1:CA:322:A:OP2	5:CF:169:ASN:HB2	2.17	0.45
1:CA:330:A:H2	1:CA:1210:A:HO2'	1.65	0.45
3:CD:243:GLY:O	3:CD:244:ARG:HB3	2.16	0.45
3:CD:245:PRO:HB2	3:CD:255:LYS:CE	2.46	0.45
5:CF:170:LEU:HD13	5:CF:172:TRP:CZ2	2.51	0.45
1:CA:797:C:OP2	5:CF:62:ARG:HG3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CH:94:TYR:CE1	7:CH:160:LYS:HE2	2.52	0.45
9:CJ:157:ARG:N	9:CJ:158:PRO:CD	2.77	0.45
11:CL:51:PHE:N	11:CL:57:THR:HG23	2.30	0.45
12:CM:22:LYS:O	12:CM:24:GLY:N	2.49	0.45
12:CM:43:THR:HG23	12:CM:46:GLN:CD	2.37	0.45
1:CA:2822:G:O6	13:CN:4:LEU:HD12	2.16	0.45
15:CP:51:ARG:CG	15:CP:98:LYS:HG3	2.46	0.45
18:CS:4:LYS:HA	18:CS:106:ILE:HG22	1.99	0.45
18:CS:64:MET:HA	18:CS:109:GLU:OE2	2.17	0.45
21:CV:102:LEU:HD11	21:CV:124:ILE:HD11	1.99	0.45
22:CW:32:ARG:NH1	22:CW:32:ARG:HB3	2.31	0.45
22:CW:71:ASP:C	22:CW:72:ARG:HG2	2.37	0.45
23:CX:11:ARG:HA	23:CX:11:ARG:HD3	1.63	0.45
31:DA:977:A:C8	31:DA:1223:C:C4	3.04	0.45
34:DD:11:LEU:O	34:DD:15:GLU:HB2	2.16	0.45
34:DD:155:LEU:O	34:DD:159:ARG:HB2	2.17	0.45
31:DA:9:G:OP2	35:DE:121:LYS:HE2	2.16	0.45
31:DA:673:G:H4'	36:DF:87:ARG:HH12	1.82	0.45
43:DM:3:ARG:HH21	43:DM:7:VAL:HG12	1.78	0.45
43:DM:56:LEU:HA	43:DM:59:TYR:HB3	1.98	0.45
45:DO:56:LEU:HD23	45:DO:56:LEU:C	2.37	0.45
46:DP:20:VAL:HG21	46:DP:32:TYR:HB2	1.98	0.45
52:DW:5:G:O2'	52:DW:6:G:P	2.74	0.45
1:AA:2046:G:O5'	27:A2:19:ARG:HA	2.17	0.45
28:A3:28:ARG:HG3	28:A3:29:ASN:HD22	1.81	0.45
1:AA:1517:G:H2'	1:AA:1518:C:C6	2.51	0.45
1:AA:1899:G:H2'	1:AA:1900:A:OP2	2.17	0.45
1:AA:2306:C:C5	1:AA:2307:G:O4'	2.69	0.45
1:AA:2323:G:H2'	1:AA:2324:C:O4'	2.17	0.45
1:AA:2745:C:C4	1:AA:2746:U:C4	3.04	0.45
1:AA:380:U:H4'	23:AX:21:ARG:O	2.16	0.45
1:AA:729:G:O2'	1:AA:763:G:H4'	2.17	0.45
1:AA:78:A:H5'	24:AY:7:ARG:HH12	1.81	0.45
1:AA:1568:G:C5'	3:AD:61:LEU:HD22	2.46	0.45
4:AE:144:ARG:HB3	4:AE:145:LYS:H	1.53	0.45
5:AF:72:ARG:O	5:AF:73:ALA:O	2.35	0.45
6:AG:108:ASN:C	6:AG:112:PRO:HG2	2.37	0.45
6:AG:70:VAL:HA	6:AG:88:ILE:HD11	1.98	0.45
8:AI:69:LYS:HD2	8:AI:73:GLU:HB2	1.98	0.45
8:AI:83:ALA:CB	8:AI:88:ILE:HA	2.47	0.45
14:AO:15:ARG:O	14:AO:19:LYS:HG3	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AO:67:ARG:HD3	14:AO:103:GLU:OE1	2.16	0.45
15:AP:78:LEU:HD12	15:AP:79:HIS:CD2	2.52	0.45
23:AX:65:SER:OG	23:AX:66:HIS:HD2	2.00	0.45
23:AX:58:ILE:HD12	23:AX:90:ILE:CG2	2.46	0.45
24:AY:61:LEU:HD13	24:AY:61:LEU:HA	1.62	0.45
31:BA:1350:A:C6	31:BA:1351:U:N3	2.85	0.45
34:BD:175:SER:HB2	34:BD:186:LEU:HD21	1.97	0.45
34:BD:78:LEU:HB2	34:BD:93:PHE:HE2	1.82	0.45
35:BE:76:ILE:HG22	35:BE:93:PRO:HB3	1.99	0.45
36:BF:36:ARG:O	36:BF:65:VAL:HG23	2.17	0.45
36:BF:7:ASN:O	36:BF:8:ILE:HD13	2.17	0.45
37:BG:75:VAL:CG1	37:BG:145:ALA:HA	2.46	0.45
40:BJ:40:LEU:HB2	40:BJ:69:ASN:CB	2.46	0.45
41:BK:12:ARG:HB3	41:BK:12:ARG:NH1	2.31	0.45
43:BM:19:LEU:O	43:BM:22:ILE:HG12	2.16	0.45
43:BM:76:ALA:HA	43:BM:79:LYS:HE3	1.97	0.45
47:BQ:9:VAL:HG11	47:BQ:84:LEU:HD12	1.97	0.45
31:BA:1014:A:C2	49:BS:34:TRP:CD1	3.05	0.45
49:BS:62:ILE:HD12	49:BS:66:MET:SD	2.57	0.45
52:BV:18:G:C2	52:BV:58:A:C5	3.04	0.45
1:CA:1049:C:N4	1:CA:1050:A:H62	2.15	0.45
1:CA:1048:A:H2	1:CA:1112:G:N3	2.14	0.45
1:CA:1543:A:H2'	1:CA:1545:A:H4'	1.99	0.45
1:CA:1408:C:C2	1:CA:1595:G:N2	2.84	0.45
1:CA:176:G:O2'	1:CA:177:G:H5'	2.17	0.45
1:CA:2893:G:H5''	1:CA:2894:G:O4'	2.16	0.45
1:CA:459:U:H4'	29:C4:40:TRP:CZ3	2.52	0.45
1:CA:773:U:H4'	3:CD:47:GLY:CA	2.42	0.45
3:CD:268:ARG:C	3:CD:269:PHE:HD1	2.20	0.45
4:CE:134:ILE:HA	4:CE:137:HIS:CD2	2.51	0.45
5:CF:175:THR:O	5:CF:176:LEU:HB2	2.16	0.45
11:CL:146:VAL:HG13	11:CL:147:LEU:N	2.31	0.45
12:CM:81:VAL:HG12	12:CM:82:ARG:HB2	1.98	0.45
17:CR:61:VAL:HA	17:CR:94:LEU:HD23	1.98	0.45
23:CX:13:ILE:CD1	23:CX:14:VAL:H	2.24	0.45
24:CY:10:LEU:O	24:CY:13:ALA:HB3	2.17	0.45
31:DA:105:G:C6	31:DA:106:C:C4	3.04	0.45
31:DA:1107:C:C4	31:DA:1108:G:C8	3.05	0.45
31:DA:216:G:C2	31:DA:217:C:N3	2.85	0.45
31:DA:265:G:O2'	31:DA:266:G:H5'	2.16	0.45
33:DC:116:VAL:O	33:DC:119:ARG:HB3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:105:VAL:HG21	34:DD:126:ILE:HG12	1.97	0.45
36:DF:101:ALA:HA	48:DR:28:GLU:CD	2.37	0.45
36:DF:5:GLU:HB3	36:DF:62:TRP:NE1	2.32	0.45
36:DF:97:PHE:HB3	48:DR:31:LEU:HD23	1.98	0.45
40:DJ:40:LEU:HB2	40:DJ:69:ASN:CB	2.46	0.45
41:DK:54:ARG:H	41:DK:54:ARG:HG2	1.53	0.45
31:DA:1228:C:H4'	43:DM:116:THR:O	2.17	0.45
46:DP:20:VAL:HG22	46:DP:21:VAL:N	2.32	0.45
47:DQ:23:VAL:HG23	47:DQ:23:VAL:O	2.16	0.45
49:DS:28:LYS:HB3	49:DS:29:ARG:NH1	2.30	0.45
50:DT:36:LEU:HD13	50:DT:36:LEU:HA	1.61	0.45
1:AA:1459:G:H5''	1:AA:1460:A:OP2	2.17	0.45
1:AA:1568:G:H5''	3:AD:61:LEU:HD22	1.99	0.45
1:AA:1681:G:H8	1:AA:1681:G:OP2	2.00	0.45
1:AA:2134:A:H2	1:AA:2159:G:H4'	1.81	0.45
1:AA:2305:A:H3'	1:AA:2306:C:H5''	1.99	0.45
1:AA:2313:C:H5''	6:AG:91:ARG:HD3	1.99	0.45
1:AA:2443:C:O2'	1:AA:2444:G:H5'	2.16	0.45
1:AA:2517:C:C2	1:AA:2542:A:N1	2.85	0.45
1:AA:459:U:H4'	29:A4:40:TRP:CZ3	2.51	0.45
1:AA:556:G:H2'	1:AA:557:U:C6	2.52	0.45
1:AA:576:U:H2'	1:AA:577:G:C8	2.52	0.45
3:AD:118:VAL:HG22	3:AD:119:ALA:N	2.32	0.45
5:AF:153:SER:OG	5:AF:190:GLU:HG3	2.17	0.45
6:AG:98:ARG:HG2	6:AG:98:ARG:H	1.59	0.45
11:AL:23:PRO:HD2	11:AL:33:ARG:CZ	2.45	0.45
13:AN:2:ARG:HD3	13:AN:5:LYS:NZ	2.31	0.45
15:AP:118:ARG:HB2	15:AP:118:ARG:CZ	2.46	0.45
15:AP:51:ARG:CG	15:AP:98:LYS:HG3	2.47	0.45
16:AQ:90:VAL:O	16:AQ:91:ASP:C	2.55	0.45
17:AR:49:THR:O	17:AR:50:PRO:C	2.54	0.45
19:AT:63:LYS:HD2	19:AT:72:LYS:HA	1.97	0.45
19:AT:80:ILE:C	19:AT:80:ILE:HD12	2.36	0.45
19:AT:27:THR:HB	19:AT:80:ILE:HG22	1.98	0.45
21:AV:102:LEU:HD11	21:AV:124:ILE:HD11	1.99	0.45
21:AV:19:ARG:HH12	21:AV:84:GLU:HA	1.82	0.45
31:BA:1072:G:C5	31:BA:1073:U:C4	3.04	0.45
31:BA:174:C:O5'	31:BA:174:C:H6	1.99	0.45
31:BA:355:C:H5'	31:BA:389:A:OP2	2.17	0.45
31:BA:922:G:H2'	31:BA:923:A:H8	1.80	0.45
35:BE:12:LEU:HD22	35:BE:12:LEU:C	2.37	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1328:C:H5''	43:BM:28:ALA:CB	2.46	0.45
43:BM:54:VAL:HA	43:BM:57:ARG:HB2	1.98	0.45
36:BF:101:ALA:HA	48:BR:28:GLU:CD	2.36	0.45
50:BT:85:MET:HB2	50:BT:104:LEU:HD21	1.98	0.45
11:CL:62:LEU:HD21	30:C5:25:MET:HB2	1.98	0.45
1:CA:1105:U:O2'	1:CA:1106:G:H5'	2.16	0.45
1:CA:1179:C:O2'	1:CA:1180:C:H5'	2.17	0.45
1:CA:1472:A:N6	1:CA:1521:G:H1'	2.32	0.45
1:CA:2224:G:H4'	1:CA:2226:C:C2	2.51	0.45
1:CA:498:G:H1'	20:CU:47:LYS:HZ2	1.79	0.45
3:CD:35:LYS:HZ3	3:CD:35:LYS:HB2	1.82	0.45
8:CI:61:ARG:NH2	8:CI:133:HIS:HD2	2.14	0.45
20:CU:12:THR:HA	20:CU:26:LYS:HA	1.98	0.45
31:DA:1399:C:H4'	31:DA:1400:C:O5'	2.17	0.45
31:DA:1422:G:H2'	31:DA:1423:G:C8	2.50	0.45
31:DA:1513:A:H2'	31:DA:1514:C:H6	1.75	0.45
31:DA:818:G:H3'	31:DA:819:A:C5'	2.46	0.45
31:DA:88:C:H2'	31:DA:89:U:C1'	2.47	0.45
34:DD:18:LYS:HZ2	34:DD:31:CYS:HB3	1.82	0.45
35:DE:76:ILE:HG22	35:DE:93:PRO:HB3	1.98	0.45
36:DF:35:ALA:CB	36:DF:65:VAL:HG21	2.41	0.45
47:DQ:59:ILE:HD12	47:DQ:59:ILE:O	2.17	0.45
31:DA:186(A):C:C5'	50:DT:78:ALA:HB1	2.47	0.45
52:DV:52:G:H2'	52:DV:53:G:H8	1.82	0.45
1:AA:1185:C:H5''	1:AA:1186:G:OP1	2.17	0.45
1:AA:1726:G:C6	1:AA:1727:U:C4	3.05	0.45
1:AA:686:G:N2	1:AA:788:A:H61	2.14	0.45
3:AD:264:LYS:CG	3:AD:266:SER:HB3	2.47	0.45
11:AL:88:LEU:HD11	11:AL:95:VAL:HG21	1.99	0.45
12:AM:74:TYR:CD2	12:AM:91:GLU:HB2	2.42	0.45
1:AA:2019:A:H5''	16:AQ:27:LEU:CD1	2.46	0.45
16:AQ:27:LEU:HD22	16:AQ:31:SER:CB	2.47	0.45
19:AT:30:VAL:HG21	19:AT:79:ALA:HB3	1.99	0.45
31:BA:1442:G:C8	31:BA:1446:A:C2	3.04	0.45
31:BA:292:G:N2	31:BA:309:G:C4	2.84	0.45
31:BA:722:A:O2'	31:BA:723:U:C6	2.66	0.45
31:BA:88:C:H2'	31:BA:89:U:C1'	2.47	0.45
33:BC:89:GLU:OE2	33:BC:93:LYS:HD2	2.16	0.45
35:BE:25:ARG:HD2	35:BE:25:ARG:N	2.31	0.45
43:BM:56:LEU:HA	43:BM:59:TYR:HB3	1.99	0.45
50:BT:90:GLN:HA	50:BT:93:GLU:HB3	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:C5:59:LYS:HZ2	30:C5:59:LYS:HB3	1.82	0.45
1:CA:1142(B):A:C4	1:CA:1144:G:C8	3.05	0.45
1:CA:1394:U:C4	1:CA:1395:A:C6	3.05	0.45
1:CA:2306:C:C5	1:CA:2307:G:O4'	2.69	0.45
1:CA:2745:C:C4	1:CA:2746:U:C4	3.04	0.45
1:CA:2781:A:H5''	1:CA:2782:G:H5'	1.98	0.45
1:CA:589:C:H2'	1:CA:590:A:C8	2.52	0.45
6:CG:141:PHE:CB	6:CG:142:PRO:HD2	2.47	0.45
9:CJ:70:ALA:HB2	9:CJ:135:LEU:HD11	1.97	0.45
11:CL:96:THR:HB	11:CL:97:PRO:HD2	1.99	0.45
12:CM:24:GLY:HA2	12:CM:101:ARG:CA	2.47	0.45
12:CM:39:PRO:HB3	12:CM:99:PRO:HD3	1.99	0.45
15:CP:100:TYR:HD2	15:CP:103:ARG:NH2	2.14	0.45
17:CR:98:GLU:OE1	17:CR:100:ARG:HD3	2.17	0.45
16:CQ:90:VAL:HB	17:CR:39:LEU:HG	1.99	0.45
18:CS:18:ARG:HG3	18:CS:76:VAL:CG1	2.46	0.45
31:DA:1123:A:H4'	40:DJ:36:GLY:HA3	1.99	0.45
31:DA:1286:A:H3'	31:DA:1287:A:C5'	2.47	0.45
31:DA:1465:C:H2'	31:DA:1466:C:O4'	2.17	0.45
31:DA:1504:G:OP1	31:DA:1507:A:H4'	2.16	0.45
33:DC:71:ALA:HA	33:DC:106:VAL:HB	1.99	0.45
36:DF:5:GLU:HB3	36:DF:62:TRP:HE1	1.82	0.45
46:DP:4:ILE:HA	46:DP:20:VAL:O	2.16	0.45
31:DA:1014:A:C2	49:DS:34:TRP:CD1	3.04	0.45
29:A4:30:VAL:O	29:A4:34:ARG:HG2	2.17	0.45
30:A5:51:ALA:H	30:A5:54:GLU:CB	2.30	0.45
1:AA:1420:U:H2'	1:AA:1420:U:H6	1.36	0.45
1:AA:2127:G:H2'	1:AA:2128:C:C2	2.52	0.45
1:AA:2306:C:C6	1:AA:2307:G:O4'	2.70	0.45
1:AA:2537:U:H2'	1:AA:2538:C:C6	2.52	0.45
1:AA:1669:A:O3'	1:AA:2549:G:H5'	2.16	0.45
1:AA:409:C:O2'	1:AA:410:G:H5'	2.16	0.45
1:AA:498:G:O2'	1:AA:499:U:H5'	2.17	0.45
1:AA:775:G:H4'	1:AA:776:G:O5'	2.17	0.45
2:AB:42:C:C4	6:AG:91:ARG:NH2	2.85	0.45
3:AD:269:PHE:N	3:AD:269:PHE:HD1	2.14	0.45
3:AD:35:LYS:HZ2	3:AD:35:LYS:HA	1.82	0.45
6:AG:128:ARG:HA	6:AG:164:GLU:O	2.16	0.45
8:AI:7:GLU:HB3	8:AI:35:LEU:HD13	1.97	0.45
9:AJ:90:LEU:HA	9:AJ:110:LEU:HB3	1.99	0.45
11:AL:38:GLN:HG3	11:AL:39:LYS:N	2.20	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:51:ARG:HB3	12:AM:51:ARG:NH1	2.27	0.45
1:AA:2820:A:C4'	13:AN:5:LYS:HG2	2.47	0.45
14:AO:82:ILE:HG22	14:AO:83:LYS:N	2.32	0.45
18:AS:64:MET:HA	18:AS:109:GLU:OE2	2.17	0.45
24:AY:15:LYS:HE2	24:AY:15:LYS:HA	1.98	0.45
31:BA:1244:C:H2'	31:BA:1245:A:C8	2.52	0.45
31:BA:1248:A:H2'	31:BA:1249:C:H6	1.81	0.45
31:BA:232:G:H1'	31:BA:262:A:N1	2.32	0.45
31:BA:328:C:H4'	31:BA:329:A:O5'	2.17	0.45
31:BA:520:A:N7	31:BA:521:G:C8	2.85	0.45
31:BA:950:U:H2'	31:BA:951:G:H8	1.81	0.45
32:BB:172:ILE:HG13	32:BB:172:ILE:H	1.53	0.45
36:BF:53:ALA:HB2	36:BF:86:ARG:HD2	1.99	0.45
46:BP:82:GLN:O	46:BP:83:GLU:HB2	2.17	0.45
47:BQ:100:LYS:HD2	47:BQ:100:LYS:N	2.32	0.45
36:BF:97:PHE:HB3	48:BR:31:LEU:HD23	1.98	0.45
1:CA:1149:G:H2'	1:CA:1150:C:C6	2.52	0.45
1:CA:1459:G:H5''	1:CA:1460:A:OP2	2.17	0.45
1:CA:1669:A:O3'	1:CA:2549:G:H5'	2.16	0.45
1:CA:1726:G:C5	1:CA:1727:U:C5	3.05	0.45
1:CA:17:G:H2'	1:CA:18:C:C6	2.52	0.45
1:CA:2363:C:O2'	1:CA:2364:C:H5'	2.16	0.45
1:CA:686:G:N2	1:CA:788:A:H61	2.15	0.45
2:CB:95:U:H2'	2:CB:96:G:H8	1.78	0.45
5:CF:72:ARG:O	5:CF:73:ALA:O	2.35	0.45
6:CG:60:LEU:O	6:CG:63:ILE:HG13	2.17	0.45
7:CH:109:PHE:C	7:CH:111:HIS:H	2.20	0.45
17:CR:49:THR:HG22	17:CR:50:PRO:CD	2.35	0.45
17:CR:78:LYS:HG2	17:CR:79:VAL:HG13	1.97	0.45
21:CV:56:VAL:HG12	21:CV:57:ILE:H	1.81	0.45
23:CX:37:ILE:CG1	23:CX:38:SER:N	2.80	0.45
31:DA:1128:C:O2'	31:DA:1130:A:C8	2.61	0.45
31:DA:1473:A:O2'	31:DA:1474:G:H5'	2.17	0.45
31:DA:266:G:H4'	31:DA:267:C:C5	2.52	0.45
31:DA:450:G:N7	31:DA:481:G:C6	2.85	0.45
34:DD:36:ARG:HB3	34:DD:38:TYR:CZ	2.51	0.45
34:DD:4:TYR:CE2	34:DD:66:ARG:HG2	2.52	0.45
34:DD:4:TYR:HA	34:DD:4:TYR:HD1	1.69	0.45
35:DE:20:GLN:O	35:DE:21:ALA:C	2.55	0.45
35:DE:36:ASP:OD2	35:DE:38:GLN:HB2	2.17	0.45
37:DG:44:TYR:HA	37:DG:47:CYS:HB2	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DK:41:THR:CG2	41:DK:42:TRP:N	2.79	0.45
41:DK:67:ASP:OD1	41:DK:71:LYS:HE3	2.17	0.45
31:DA:1225:A:H5'	43:DM:103:THR:HB	1.99	0.45
6:CG:115:ARG:CG	43:DM:7:VAL:HG11	2.47	0.45
46:DP:55:ARG:HB3	46:DP:55:ARG:NH1	2.32	0.45
31:DA:1222:G:H5''	49:DS:78:ARG:HE	1.83	0.45
1:AA:1049:C:N4	1:AA:1050:A:H62	2.15	0.44
1:AA:1105:U:C2	1:AA:1106:G:N7	2.85	0.44
1:AA:1105:U:H2'	1:AA:1106:G:C8	2.52	0.44
1:AA:1543:A:H2'	1:AA:1545:A:H4'	1.98	0.44
1:AA:1557:C:H5''	1:AA:1558:A:OP2	2.18	0.44
1:AA:191:A:H2'	1:AA:192:C:C6	2.52	0.44
1:AA:2846:G:H2'	1:AA:2847:U:O4'	2.16	0.44
1:AA:317:G:C2	1:AA:318:C:C2	3.05	0.44
1:AA:372:G:O2'	1:AA:373:U:OP2	2.33	0.44
1:AA:851:U:O2'	25:AZ:45:GLY:HA3	2.18	0.44
1:AA:871:U:OP1	12:AM:6:ARG:HA	2.17	0.44
1:AA:924:C:H2'	1:AA:925:C:C6	2.52	0.44
1:AA:974(B):C:H4'	1:AA:974(B):C:OP2	2.16	0.44
2:AB:103:U:C2'	2:AB:104:A:H5'	2.47	0.44
3:AD:120:GLY:O	3:AD:131:LEU:HB3	2.17	0.44
5:AF:47:GLY:HA3	5:AF:95:ARG:O	2.17	0.44
6:AG:86:MET:N	6:AG:87:PRO:CD	2.80	0.44
9:AJ:154:GLN:CG	9:AJ:155:ALA:N	2.78	0.44
10:AK:4:PRO:O	10:AK:5:GLN:CB	2.61	0.44
11:AL:146:VAL:HG13	11:AL:147:LEU:N	2.31	0.44
11:AL:148:LEU:H	11:AL:148:LEU:CD1	2.23	0.44
11:AL:39:LYS:HD2	11:AL:39:LYS:HA	1.83	0.44
14:AO:19:LYS:O	14:AO:21:THR:N	2.50	0.44
17:AR:66:ARG:HB2	17:AR:88:ARG:HD3	1.99	0.44
21:AV:103:ARG:HD2	21:AV:136:PHE:CD1	2.51	0.44
1:AA:2353:G:H4'	22:AW:32:ARG:NH1	2.32	0.44
31:BA:1152:A:H4'	40:BJ:13:HIS:CD2	2.52	0.44
31:BA:1386:G:H2'	31:BA:1387:G:H8	1.81	0.44
33:BC:116:VAL:O	33:BC:119:ARG:HB3	2.17	0.44
34:BD:124:GLY:C	34:BD:126:ILE:H	2.21	0.44
36:BF:37:VAL:HG12	36:BF:38:GLU:N	2.33	0.44
38:BH:112:LEU:HD22	38:BH:133:LEU:HA	1.99	0.44
38:BH:73:ASP:HB3	38:BH:75:ARG:HG2	1.99	0.44
39:BI:33:PHE:CE2	39:BI:47:LEU:HB2	2.52	0.44
42:BL:82:VAL:HG22	42:BL:83:LEU:N	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BM:25:ILE:N	43:BM:25:ILE:HD12	2.31	0.44
31:BA:1222:G:H5''	49:BS:78:ARG:HE	1.82	0.44
52:BW:17:C:OP1	52:BW:61:C:H5'	2.17	0.44
52:BW:5:G:O2'	52:BW:6:G:P	2.75	0.44
1:CA:1021:A:N6	1:CA:1141:U:N3	2.65	0.44
1:CA:1557:C:H5''	1:CA:1558:A:OP2	2.17	0.44
1:CA:2135:A:H4'	1:CA:2160:G:H5'	1.99	0.44
1:CA:2419:U:H2'	1:CA:2420:C:H6	1.82	0.44
1:CA:2792:G:H1'	1:CA:2805:G:N2	2.30	0.44
1:CA:2884:U:C6	1:CA:2885:C:C6	3.04	0.44
1:CA:358:U:O2'	1:CA:359:A:H5'	2.17	0.44
1:CA:498:G:O2'	1:CA:499:U:H5'	2.17	0.44
1:CA:643:A:C2	1:CA:644:A:C4	3.05	0.44
1:CA:662:G:P	11:CL:18:ARG:HG2	2.57	0.44
1:CA:969:U:H2'	1:CA:970:C:C6	2.52	0.44
2:CB:51:G:H21	2:CB:52:A:N6	2.15	0.44
6:CG:10:LYS:O	6:CG:14:GLU:HB3	2.17	0.44
7:CH:92:ILE:N	7:CH:92:ILE:HD12	2.30	0.44
11:CL:113:LYS:HA	11:CL:129:ALA:O	2.18	0.44
1:CA:587:C:C4	11:CL:33:ARG:HG2	2.53	0.44
15:CP:118:ARG:HB2	15:CP:118:ARG:CZ	2.47	0.44
1:CA:1754:C:P	15:CP:96:ARG:HH12	2.39	0.44
31:DA:1142:G:C2	31:DA:1143:G:H1'	2.52	0.44
31:DA:1143:G:H2'	31:DA:1144:G:C8	2.52	0.44
31:DA:1248:A:H2'	31:DA:1249:C:H6	1.82	0.44
31:DA:1350:A:C6	31:DA:1351:U:N3	2.86	0.44
31:DA:5:U:O2'	31:DA:6:G:O5'	2.34	0.44
33:DC:140:ARG:O	33:DC:144:SER:HB2	2.18	0.44
34:DD:176:LEU:HG	34:DD:178:VAL:CG2	2.47	0.44
36:DF:7:ASN:ND2	48:DR:76:LEU:HD11	2.32	0.44
46:DP:82:GLN:O	46:DP:83:GLU:HB2	2.17	0.44
30:A5:17:THR:HG23	30:A5:21:LYS:O	2.17	0.44
1:AA:1459:G:H2'	1:AA:1461:G:O4'	2.18	0.44
1:AA:2411:A:O2'	1:AA:2412:A:H5'	2.17	0.44
1:AA:2022:U:O2'	1:AA:2617:C:H5'	2.17	0.44
1:AA:2694:G:C6	1:AA:2695:C:C4	3.06	0.44
1:AA:2884:U:C6	1:AA:2885:C:C6	3.05	0.44
1:AA:664:C:H4'	1:AA:941:A:OP1	2.17	0.44
1:AA:674:G:C1'	5:AF:74:ARG:HD3	2.46	0.44
8:AI:92:VAL:HG13	8:AI:120:ILE:CG1	2.44	0.44
10:AK:19:ILE:HB	10:AK:42:SER:O	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AR:28:GLU:HB3	17:AR:31:ALA:CB	2.37	0.44
20:AU:47:LYS:HB2	20:AU:47:LYS:HE3	1.75	0.44
24:AY:17:SER:O	24:AY:18:PRO:C	2.56	0.44
24:AY:46:GLN:N	24:AY:49:LYS:HE2	2.31	0.44
31:BA:1154:G:H2'	31:BA:1155:G:H8	1.81	0.44
31:BA:1226:C:OP2	43:BM:103:THR:HG21	2.17	0.44
31:BA:216:G:C2	31:BA:217:C:N3	2.86	0.44
31:BA:920:U:H2'	31:BA:921:U:C6	2.52	0.44
32:BB:235:SER:O	32:BB:239:VAL:HG23	2.16	0.44
33:BC:45:LYS:HG3	33:BC:46:GLU:HG3	1.98	0.44
33:BC:83:ARG:O	33:BC:87:LEU:HG	2.16	0.44
35:BE:96:PRO:HA	35:BE:117:ASP:OD2	2.17	0.44
35:BE:149:GLU:O	35:BE:153:LYS:HB2	2.18	0.44
39:BI:114:TYR:HD2	39:BI:114:TYR:N	2.16	0.44
44:BN:15:LYS:HD2	44:BN:16:PHE:CD2	2.52	0.44
47:BQ:20:THR:HG21	47:BQ:41:LYS:HD2	1.98	0.44
31:BA:1320:C:C4	49:BS:36:ARG:HG3	2.53	0.44
1:CA:2415:G:H2'	1:CA:2416:C:H6	1.81	0.44
1:CA:335:C:H2'	1:CA:336:C:C6	2.52	0.44
1:CA:865:C:H4'	1:CA:866:A:N7	2.32	0.44
1:CA:991:C:H2'	1:CA:992:C:H6	1.81	0.44
3:CD:146:GLU:HB2	3:CD:189:CYS:HB3	1.99	0.44
8:CI:133:HIS:HE1	8:CI:135:GLU:CB	2.29	0.44
8:CI:56:LYS:O	8:CI:56:LYS:HD2	2.16	0.44
11:CL:132:LYS:O	11:CL:136:GLU:HG2	2.18	0.44
16:CQ:91:ASP:OD2	16:CQ:96:ALA:HB2	2.18	0.44
24:CY:49:LYS:H	24:CY:49:LYS:HD2	1.81	0.44
25:CZ:7:LYS:O	25:CZ:9:VAL:HG23	2.17	0.44
31:DA:1154:G:H2'	31:DA:1155:G:H8	1.82	0.44
31:DA:968:A:H4'	31:DA:969:A:OP2	2.17	0.44
33:DC:149:ALA:HA	33:DC:201:TYR:O	2.17	0.44
34:DD:47:ARG:HE	34:DD:47:ARG:CA	2.21	0.44
35:DE:59:GLY:O	35:DE:63:ARG:HG3	2.18	0.44
36:DF:61:LEU:HD12	36:DF:61:LEU:N	2.32	0.44
43:DM:67:GLU:CG	43:DM:68:GLY:H	2.21	0.44
47:DQ:20:THR:HG21	47:DQ:41:LYS:HD2	1.99	0.44
52:DW:9:G:H5'	52:DW:46:G:C1'	2.42	0.44
6:AG:143:GLU:HB2	26:A1:54:LYS:HE2	1.99	0.44
1:AA:1047:G:HO2'	1:AA:1110:G:H1	1.64	0.44
1:AA:1805:U:H5''	3:AD:250:TRP:CE2	2.53	0.44
1:AA:2646:C:OP2	1:AA:2732:G:O2'	2.32	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:540:G:H2'	1:AA:541:C:H6	1.82	0.44
1:AA:775:G:H1'	1:AA:776:G:OP2	2.18	0.44
4:AE:85:ASN:HA	4:AE:86:PRO:HD3	1.80	0.44
6:AG:16:ARG:N	6:AG:17:PRO:HD2	2.33	0.44
9:AJ:101:TYR:N	9:AJ:101:TYR:CD1	2.85	0.44
11:AL:126:VAL:HG22	11:AL:145:PRO:CG	2.46	0.44
11:AL:59:LEU:CA	11:AL:61:ARG:CZ	2.95	0.44
11:AL:59:LEU:HA	11:AL:61:ARG:HD2	1.99	0.44
12:AM:40:ALA:CB	12:AM:127:ILE:HD11	2.47	0.44
31:BA:1511:G:H2'	31:BA:1512:U:O4'	2.18	0.44
31:BA:272:C:H2'	31:BA:273:A:C8	2.52	0.44
31:BA:600:C:O2'	31:BA:601:C:H5'	2.18	0.44
31:BA:646:U:H2'	31:BA:647:C:H6	1.81	0.44
32:BB:24:TRP:CZ3	32:BB:29:ALA:HB2	2.42	0.44
34:BD:145:GLU:OE1	34:BD:184:LYS:HE2	2.17	0.44
34:BD:175:SER:CB	34:BD:186:LEU:HD21	2.47	0.44
34:BD:63:LYS:HD2	34:BD:198:VAL:HG12	1.98	0.44
39:BI:30:GLY:O	39:BI:31:GLN:O	2.35	0.44
39:BI:99:LEU:HB3	39:BI:101:PHE:CE1	2.51	0.44
49:BS:63:THR:HG22	49:BS:66:MET:HG2	1.98	0.44
52:BV:51:C:H2'	52:BV:52:G:C8	2.52	0.44
52:BV:52:G:H2'	52:BV:53:G:H8	1.82	0.44
1:CA:2353:G:H4'	22:CW:32:ARG:NH1	2.32	0.44
1:CA:2694:G:C6	1:CA:2695:C:C4	3.05	0.44
2:CB:44:G:C2	2:CB:48:A:C2	3.05	0.44
1:CA:2633:G:O2'	4:CE:61:ARG:HD3	2.17	0.44
8:CI:133:HIS:CD2	8:CI:134:PRO:HD2	2.52	0.44
9:CJ:59:GLY:C	9:CJ:61:HIS:H	2.17	0.44
14:CO:59:LYS:HB2	14:CO:59:LYS:NZ	2.33	0.44
15:CP:6:LEU:O	15:CP:10:VAL:HG23	2.17	0.44
17:CR:75:PHE:C	17:CR:75:PHE:CD1	2.91	0.44
18:CS:70:TYR:N	18:CS:70:TYR:CD2	2.85	0.44
20:CU:43:ASN:O	20:CU:44:ILE:HD13	2.17	0.44
21:CV:103:ARG:HD2	21:CV:136:PHE:CD1	2.52	0.44
21:CV:19:ARG:HH12	21:CV:84:GLU:HA	1.82	0.44
21:CV:81:ARG:O	21:CV:82:ARG:HB2	2.17	0.44
22:CW:50:ASN:C	22:CW:62:LEU:HD12	2.38	0.44
31:DA:1043:C:H2'	31:DA:1044:A:H8	1.83	0.44
31:DA:1152:A:H4'	40:DJ:13:HIS:CD2	2.52	0.44
31:DA:1118:C:H1'	31:DA:1179:A:C4	2.51	0.44
31:DA:1321:C:H5	31:DA:1322:C:O2'	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:769:G:H4'	31:DA:1513:A:H4'	1.98	0.44
31:DA:667:G:H4'	45:DO:51:HIS:ND1	2.31	0.44
31:DA:883:C:O2'	31:DA:884:U:H5'	2.17	0.44
33:DC:167:TRP:O	33:DC:168:ALA:HB2	2.17	0.44
34:DD:49:ARG:NH1	34:DD:50:ARG:H	2.15	0.44
34:DD:63:LYS:O	34:DD:67:ILE:HG13	2.18	0.44
35:DE:30:ALA:O	35:DE:45:PHE:HA	2.18	0.44
39:DI:48:GLU:N	39:DI:49:PRO:CD	2.79	0.44
46:DP:6:LEU:HB3	46:DP:17:TYR:HB3	1.99	0.44
47:DQ:24:GLU:HA	47:DQ:39:SER:HB3	1.98	0.44
30:A5:52:LYS:N	30:A5:52:LYS:CD	2.77	0.44
1:AA:1045:A:C5'	1:AA:1046:A:H3'	2.44	0.44
1:AA:1317:A:H2'	1:AA:1318:C:C6	2.52	0.44
1:AA:289:A:H2'	1:AA:290:G:O4'	2.16	0.44
1:AA:642:G:N2	1:AA:645:C:OP2	2.50	0.44
1:AA:643:A:C2	1:AA:644:A:C4	3.05	0.44
1:AA:664:C:H2'	1:AA:665:C:H6	1.83	0.44
1:AA:2633:G:O2'	4:AE:61:ARG:HD3	2.16	0.44
8:AI:15:VAL:HG12	8:AI:16:GLY:N	2.32	0.44
9:AJ:119:GLU:N	9:AJ:119:GLU:CD	2.70	0.44
9:AJ:157:ARG:N	9:AJ:158:PRO:CD	2.78	0.44
11:AL:128:HIS:HB3	11:AL:147:LEU:HD23	1.99	0.44
11:AL:6:LEU:N	11:AL:6:LEU:HD23	2.31	0.44
15:AP:36:GLU:O	15:AP:39:ARG:HG3	2.17	0.44
19:AT:54:VAL:C	19:AT:55:ASN:HD22	2.19	0.44
22:AW:82:ARG:O	22:AW:82:ARG:HG3	2.18	0.44
23:AX:83:GLU:HB3	23:AX:84:GLY:H	1.58	0.44
25:AZ:44:ARG:HE	25:AZ:44:ARG:HB2	1.43	0.44
31:BA:149:A:H2'	31:BA:150:C:H6	1.79	0.44
31:BA:79:G:H1	31:BA:90:C:N4	2.15	0.44
32:BB:236:TYR:HA	32:BB:239:VAL:CG2	2.47	0.44
34:BD:121:VAL:O	34:BD:134:ASP:HA	2.17	0.44
37:BG:100:ALA:O	37:BG:104:LEU:HD23	2.17	0.44
35:BE:148:VAL:HG21	38:BH:107:LEU:HD22	1.98	0.44
38:BH:114:THR:CG2	38:BH:119:LEU:HD21	2.48	0.44
44:BN:6:LEU:HB3	44:BN:23:ARG:HH22	1.83	0.44
50:BT:36:LEU:HD13	50:BT:36:LEU:HA	1.60	0.44
29:C4:15:THR:HG22	29:C4:16:HIS:CE1	2.53	0.44
1:CA:1025:G:C4	1:CA:1135:C:H1'	2.52	0.44
1:CA:1105:U:C2	1:CA:1106:G:N7	2.86	0.44
1:CA:197:A:H5'	1:CA:197:A:H8	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2364:C:H2'	1:CA:2365:G:O4'	2.16	0.44
1:CA:2884:U:H5	1:CA:2885:C:N1	2.15	0.44
1:CA:593:G:C6	1:CA:594:U:C4	3.06	0.44
1:CA:603:A:C5	1:CA:655:A:C2	3.05	0.44
3:CD:264:LYS:CG	3:CD:266:SER:HB3	2.47	0.44
5:CF:53:THR:C	5:CF:55:GLY:N	2.70	0.44
5:CF:63:LYS:NZ	5:CF:67:GLN:HE21	2.15	0.44
6:CG:111:LEU:HB2	6:CG:112:PRO:HD3	1.99	0.44
8:CI:19:VAL:HG22	8:CI:20:ASP:N	2.32	0.44
11:CL:59:LEU:HA	11:CL:61:ARG:HD2	1.98	0.44
12:CM:40:ALA:CB	12:CM:127:ILE:HD11	2.47	0.44
14:CO:61:ASN:O	14:CO:65:VAL:HG23	2.16	0.44
14:CO:82:ILE:HG22	14:CO:83:LYS:N	2.31	0.44
15:CP:100:TYR:HB3	15:CP:103:ARG:NH1	2.32	0.44
15:CP:105:LEU:CD2	15:CP:109:GLU:HG3	2.47	0.44
24:CY:60:LEU:C	24:CY:62:THR:H	2.21	0.44
31:DA:1226:C:C4	43:DM:104:ARG:HB2	2.52	0.44
31:DA:1442:G:C8	31:DA:1446:A:C2	3.06	0.44
31:DA:580:U:H2'	31:DA:581:G:O4'	2.17	0.44
37:DG:115:ARG:HB2	37:DG:118:VAL:HG13	1.99	0.44
31:DA:706:A:O2'	41:DK:29:ILE:HD11	2.18	0.44
31:DA:1226:C:OP2	43:DM:103:THR:HG21	2.17	0.44
48:DR:45:SER:OG	48:DR:46:GLU:N	2.51	0.44
49:DS:63:THR:HG22	49:DS:66:MET:HG2	2.00	0.44
49:DS:62:ILE:HD12	49:DS:66:MET:SD	2.57	0.44
28:A3:28:ARG:HA	28:A3:28:ARG:HD2	1.86	0.44
1:AA:161:U:H1'	1:AA:171:G:N2	2.32	0.44
1:AA:1726:G:C5	1:AA:1727:U:C5	3.05	0.44
1:AA:1771:C:O2'	1:AA:1786:A:H8	2.01	0.44
1:AA:2482:G:H21	12:AM:56:ARG:HH21	1.64	0.44
1:AA:675:A:H4'	5:AF:67:GLN:HE22	1.75	0.44
7:AH:24:VAL:HG12	7:AH:25:LYS:N	2.32	0.44
16:AQ:61:TRP:CD2	16:AQ:94:ASN:HA	2.52	0.44
17:AR:64:HIS:CG	17:AR:92:THR:HG22	2.52	0.44
19:AT:14:SER:O	19:AT:15:GLU:C	2.56	0.44
21:AV:56:VAL:HG12	21:AV:57:ILE:H	1.82	0.44
23:AX:80:LEU:C	23:AX:80:LEU:HD23	2.37	0.44
31:BA:1298:C:C4	37:BG:114:ARG:HD3	2.52	0.44
31:BA:137:C:H2'	31:BA:138:G:H8	1.82	0.44
31:BA:186(A):C:C5'	50:BT:78:ALA:HB1	2.48	0.44
33:BC:167:TRP:O	33:BC:168:ALA:HB2	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BD:128:VAL:O	34:BD:129:ASN:HB2	2.18	0.44
36:BF:5:GLU:HB3	36:BF:62:TRP:NE1	2.33	0.44
42:BL:31:PHE:CE2	42:BL:85:ARG:HG3	2.43	0.44
31:BA:1225:A:H5'	43:BM:103:THR:HB	2.00	0.44
43:BM:40:ASN:HB3	43:BM:43:THR:CG2	2.42	0.44
46:BP:55:ARG:HB3	46:BP:55:ARG:NH1	2.33	0.44
52:BV:40:C:O2'	52:BV:41:C:H5'	2.18	0.44
52:BW:58:A:O2'	52:BW:60:U:C5	2.67	0.44
6:CG:143:GLU:HB2	26:C1:54:LYS:HE2	1.99	0.44
28:C3:34:LEU:H	28:C3:34:LEU:HD22	1.81	0.44
30:C5:35:GLN:HG2	30:C5:35:GLN:O	2.18	0.44
1:CA:1483:G:C2	1:CA:1508:A:C2	3.06	0.44
1:CA:1592:C:H2'	1:CA:1593:G:C8	2.53	0.44
1:CA:2127:G:H2'	1:CA:2128:C:C2	2.52	0.44
1:CA:2537:U:H2'	1:CA:2538:C:C6	2.52	0.44
3:CD:120:GLY:O	3:CD:131:LEU:HB3	2.18	0.44
3:CD:77:ALA:HB2	3:CD:97:TYR:HA	1.99	0.44
4:CE:31:CYS:HA	4:CE:32:PRO:HD3	1.82	0.44
5:CF:31:HIS:O	5:CF:34:TRP:HB3	2.17	0.44
6:CG:104:GLU:HB3	26:C1:50:THR:HG21	2.00	0.44
7:CH:72:ILE:O	7:CH:76:VAL:HG23	2.18	0.44
11:CL:139:LYS:NZ	11:CL:139:LYS:HB2	2.33	0.44
11:CL:39:LYS:NZ	11:CL:42:SER:OG	2.50	0.44
13:CN:100:LEU:HD21	13:CN:113:LEU:HD22	1.99	0.44
14:CO:19:LYS:O	14:CO:21:THR:N	2.51	0.44
19:CT:14:SER:O	19:CT:15:GLU:C	2.55	0.44
19:CT:30:VAL:HG21	19:CT:79:ALA:HB3	1.99	0.44
20:CU:4:LYS:O	20:CU:5:MET:C	2.56	0.44
22:CW:82:ARG:O	22:CW:82:ARG:HG3	2.17	0.44
23:CX:31:GLY:O	23:CX:32:LYS:CB	2.65	0.44
31:DA:1108:G:H2'	31:DA:1108:G:N3	2.33	0.44
31:DA:173:U:C6	31:DA:197:A:C2	3.06	0.44
31:DA:6:G:H4'	31:DA:298:A:H4'	1.99	0.44
31:DA:964:A:OP1	31:DA:1199:U:OP1	2.35	0.44
31:DA:977:A:O2'	31:DA:981:U:N3	2.50	0.44
32:DB:236:TYR:HA	32:DB:239:VAL:CG2	2.48	0.44
32:DB:36:ARG:H	32:DB:41:ILE:HD13	1.82	0.44
34:DD:35:ARG:O	34:DD:37:PRO:HD3	2.17	0.44
35:DE:137:GLU:O	35:DE:141:GLN:HG3	2.18	0.44
35:DE:149:GLU:O	35:DE:153:LYS:HB2	2.18	0.44
37:DG:113:GLU:CG	37:DG:119:ARG:HG2	2.47	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DG:147:ALA:HB1	52:DW:40:C:O3'	2.18	0.44
31:DA:1179:A:O2'	39:DI:103:THR:HG23	2.17	0.44
42:DL:86:GLY:H	42:DL:98:HIS:H	1.66	0.44
50:DT:71:THR:HB	50:DT:72:LEU:H	1.55	0.44
52:DV:18:G:C2	52:DV:58:A:C5	3.06	0.44
28:A3:44:ARG:HB3	28:A3:45:LYS:H	1.57	0.44
30:A5:14:VAL:HG21	30:A5:57:ARG:HD3	2.00	0.44
30:A5:52:LYS:CA	30:A5:52:LYS:CE	2.95	0.44
1:AA:1504:C:H2'	1:AA:1505:C:C6	2.52	0.44
1:AA:1543:A:H2'	1:AA:1545:A:C4'	2.48	0.44
1:AA:1639:U:C2'	1:AA:1640:C:H5''	2.46	0.44
1:AA:2050:C:N4	1:AA:2051:A:C6	2.86	0.44
1:AA:747:U:C4	1:AA:2613:U:C4	3.05	0.44
1:AA:2758:A:C2	1:AA:2759:G:H1'	2.53	0.44
1:AA:2839:G:H4'	13:AN:49:ASP:HB3	2.00	0.44
1:AA:389:G:N1	11:AL:70:GLN:HG3	2.33	0.44
1:AA:649:G:H2'	1:AA:650:C:O4'	2.17	0.44
3:AD:231:HIS:ND1	3:AD:232:PRO:HD2	2.33	0.44
6:AG:111:LEU:HB2	6:AG:112:PRO:HD3	1.99	0.44
6:AG:173:LEU:HB3	6:AG:178:PHE:CD2	2.52	0.44
6:AG:98:ARG:O	6:AG:101:ILE:HG13	2.17	0.44
10:AK:39:ILE:O	10:AK:39:ILE:HG13	2.17	0.44
11:AL:51:PHE:HE1	11:AL:59:LEU:HD13	1.81	0.44
12:AM:27:VAL:HA	12:AM:105:GLU:OE1	2.17	0.44
18:AS:57:ASN:O	18:AS:61:ASN:HB2	2.17	0.44
21:AV:144:LEU:HD21	21:AV:150:LEU:HD11	2.00	0.44
23:AX:13:ILE:CD1	23:AX:14:VAL:H	2.22	0.44
31:BA:105:G:H2'	31:BA:106:C:C6	2.53	0.44
31:BA:176:C:H2'	31:BA:177:C:C6	2.52	0.44
31:BA:968:A:H4'	31:BA:969:A:OP2	2.18	0.44
33:BC:71:ALA:HA	33:BC:106:VAL:HB	1.99	0.44
35:BE:137:GLU:O	35:BE:141:GLN:HG3	2.17	0.44
41:BK:80:VAL:HG22	41:BK:103:LEU:HD12	2.00	0.44
44:BN:13:THR:N	44:BN:14:PRO:HD3	2.32	0.44
31:BA:1268:A:H4'	51:BU:20:LYS:CB	2.47	0.44
43:BM:118:ALA:HB3	52:BV:29:G:H5'	1.99	0.44
30:C5:8:LYS:HB3	30:C5:12:LYS:HE2	2.00	0.44
1:CA:1045:A:C5'	1:CA:1046:A:H3'	2.44	0.44
1:CA:1726:G:C6	1:CA:1727:U:C4	3.06	0.44
1:CA:2015:A:H1'	27:C2:2:ALA:CA	2.43	0.44
1:CA:221:A:H4'	1:CA:222:A:O5'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2555:U:C5	1:CA:2556:C:C2	3.05	0.44
1:CA:481:G:C4	1:CA:507:A:C2	3.06	0.44
1:CA:661:C:O2'	11:CL:18:ARG:HA	2.18	0.44
1:CA:663:G:C6	1:CA:664:C:C4	3.06	0.44
3:CD:166:GLN:HE21	3:CD:166:GLN:CA	2.29	0.44
5:CF:47:GLY:HA3	5:CF:95:ARG:O	2.17	0.44
6:CG:111:LEU:O	6:CG:117:PHE:HD2	2.01	0.44
7:CH:20:ALA:HB3	7:CH:23:ARG:O	2.18	0.44
12:CM:78:PRO:O	12:CM:79:LEU:CB	2.65	0.44
1:CA:2880:C:O2	13:CN:93:GLY:HA3	2.18	0.44
14:CO:66:ALA:O	14:CO:69:VAL:HG13	2.18	0.44
17:CR:39:LEU:CD1	17:CR:51:VAL:HA	2.48	0.44
23:CX:21:ARG:HB2	23:CX:38:SER:O	2.17	0.44
24:CY:46:GLN:HB2	24:CY:49:LYS:HZ3	1.77	0.44
31:DA:1320:C:C4	49:DS:36:ARG:HG3	2.52	0.44
31:DA:1386:G:H2'	31:DA:1387:G:H8	1.81	0.44
31:DA:176:C:H2'	31:DA:177:C:C6	2.53	0.44
31:DA:270:A:H2'	31:DA:271:C:C6	2.53	0.44
31:DA:356:A:H1'	31:DA:368:U:O2'	2.17	0.44
31:DA:60:A:H4'	31:DA:61:G:O5'	2.16	0.44
35:DE:142:LEU:O	35:DE:143:ARG:HD3	2.17	0.44
36:DF:7:ASN:N	36:DF:7:ASN:OD1	2.51	0.44
39:DI:114:TYR:HD2	39:DI:114:TYR:N	2.16	0.44
39:DI:33:PHE:CE2	39:DI:47:LEU:HB2	2.53	0.44
39:DI:63:ILE:HG22	39:DI:64:THR:N	2.33	0.44
41:DK:121:PRO:O	41:DK:122:LYS:O	2.36	0.44
43:DM:74:VAL:HA	43:DM:77:ASN:HD22	1.82	0.44
50:DT:72:LEU:HD13	50:DT:72:LEU:C	2.38	0.44
28:A3:34:LEU:H	28:A3:34:LEU:HD22	1.82	0.44
29:A4:13:ALA:O	29:A4:17:GLY:HA3	2.18	0.44
1:AA:1232:G:H2'	1:AA:1233:C:H6	1.83	0.44
1:AA:1471:A:C6	1:AA:1522:G:C2	3.05	0.44
1:AA:2093:G:H4'	8:AI:25:TYR:N	2.33	0.44
1:AA:270(P):U:H4'	1:AA:270(Q):C:OP2	2.18	0.44
1:AA:969:U:H2'	1:AA:970:C:C6	2.53	0.44
5:AF:28:ILE:O	5:AF:30:PRO:HD3	2.18	0.44
11:AL:85:LEU:HB2	11:AL:118:GLY:HA3	2.00	0.44
12:AM:39:PRO:O	12:AM:40:ALA:HB2	2.18	0.44
12:AM:82:ARG:HD3	12:AM:82:ARG:HA	1.74	0.44
14:AO:12:PHE:C	14:AO:12:PHE:HD1	2.20	0.44
15:AP:49:VAL:O	15:AP:49:VAL:HG13	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AU:50:ARG:CZ	20:AU:58:GLY:HA2	2.47	0.44
31:BA:1142:G:C2	31:BA:1143:G:H1'	2.52	0.44
31:BA:1309:G:C6	31:BA:1329:A:C2	3.06	0.44
31:BA:1320:C:H2'	31:BA:1321:C:O4'	2.17	0.44
31:BA:374:A:C6	31:BA:375:U:C4	3.05	0.44
31:BA:509:A:C6	31:BA:510:A:N1	2.86	0.44
31:BA:667:G:H4'	45:BO:51:HIS:ND1	2.32	0.44
32:BB:87:ARG:NH2	32:BB:232:PRO:HA	2.33	0.44
34:BD:58:LEU:O	34:BD:61:LYS:HB3	2.18	0.44
37:BG:44:TYR:HA	37:BG:47:CYS:HB2	2.00	0.44
31:BA:972:C:C4'	40:BJ:57:LYS:HG3	2.36	0.44
46:BP:58:TYR:O	46:BP:62:VAL:HG22	2.18	0.44
48:BR:59:SER:H	48:BR:62:GLU:CD	2.20	0.44
30:C5:30:ARG:NE	30:C5:30:ARG:HA	2.30	0.44
1:CA:1108:U:H2'	1:CA:1109:C:C6	2.53	0.44
1:CA:1232:G:H2'	1:CA:1233:C:H6	1.82	0.44
1:CA:2116:G:P	1:CA:2166:G:HO2'	2.41	0.44
1:CA:2467:C:H2'	1:CA:2468:G:O4'	2.18	0.44
1:CA:2469:A:OP2	1:CA:2476:A:H8	2.01	0.44
1:CA:2031:A:C6	1:CA:2498:C:H1'	2.53	0.44
1:CA:2854:G:C2	1:CA:2864:G:C2	3.05	0.44
1:CA:953:A:O2'	1:CA:954:G:H5'	2.18	0.44
1:CA:993:G:OP1	16:CQ:50:ARG:NH2	2.51	0.44
2:CB:7:G:H4'	14:CO:29:PHE:CB	2.48	0.44
6:CG:10:LYS:O	6:CG:15:VAL:HG23	2.17	0.44
12:CM:81:VAL:HG12	12:CM:82:ARG:N	2.32	0.44
15:CP:9:LEU:HA	15:CP:9:LEU:HD23	1.77	0.44
19:CT:63:LYS:HZ2	19:CT:72:LYS:HB3	1.80	0.44
22:CW:81:VAL:O	22:CW:83:PRO:HD3	2.17	0.44
31:DA:105:G:H2'	31:DA:106:C:C6	2.53	0.44
31:DA:1116:C:H2'	31:DA:1117:G:O4'	2.18	0.44
31:DA:1052:U:C2	31:DA:1200:C:N4	2.86	0.44
32:DB:20:GLU:CD	32:DB:23:ARG:HH12	2.20	0.44
33:DC:161:GLU:OE1	33:DC:161:GLU:HA	2.18	0.44
38:DH:132:GLU:HG2	38:DH:134:ILE:HD13	2.00	0.44
42:DL:85:ARG:HB2	42:DL:100:VAL:HG22	1.99	0.44
1:AA:1327:C:H2'	1:AA:1328:G:O4'	2.18	0.44
1:AA:1444(B):A:OP2	1:AA:1445:C:H5	2.01	0.44
1:AA:1686:C:H2'	1:AA:1687:G:O4'	2.18	0.44
1:AA:2421:G:C6	52:BW:76:A:N3	2.86	0.44
1:AA:2747:G:O2'	7:AH:67:LEU:HD13	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AE:181:LEU:HD11	15:AP:7:ILE:HG23	1.99	0.44
6:AG:77:ILE:HG22	6:AG:80:PHE:N	2.33	0.44
8:AI:19:VAL:HG22	8:AI:20:ASP:N	2.33	0.44
9:AJ:118:PRO:C	9:AJ:120:ARG:N	2.71	0.44
11:AL:132:LYS:O	11:AL:136:GLU:HG2	2.17	0.44
11:AL:75:ILE:HD12	11:AL:75:ILE:H	1.82	0.44
15:AP:100:TYR:HB3	15:AP:103:ARG:NH1	2.33	0.44
16:AQ:113:ALA:O	16:AQ:117:GLN:HG2	2.18	0.44
21:AV:23:LYS:HB3	21:AV:38:TYR:CD1	2.52	0.44
31:BA:1143:G:H2'	31:BA:1144:G:C8	2.53	0.44
31:BA:1053:G:N7	31:BA:1200:C:H5'	2.32	0.44
31:BA:1321:C:H5	31:BA:1322:C:O2'	2.00	0.44
31:BA:39:G:N7	31:BA:547:A:H8	2.16	0.44
31:BA:602:A:C2	31:BA:637:G:C2	3.06	0.44
37:BG:113:GLU:CG	37:BG:119:ARG:HG2	2.48	0.44
38:BH:84:ARG:O	38:BH:135:CYS:HB2	2.17	0.44
39:BI:118:LYS:C	39:BI:120:ARG:H	2.21	0.44
52:BW:36:U:H2'	52:BW:37:A:O4'	2.18	0.44
52:BW:49:G:C2'	52:BW:50:U:H5'	2.48	0.44
28:C3:28:ARG:HG3	28:C3:29:ASN:N	2.33	0.44
1:CA:1459:G:H2'	1:CA:1461:G:O4'	2.18	0.44
1:CA:2078:C:H2'	1:CA:2079:U:C6	2.53	0.44
1:CA:2543:G:H2'	1:CA:2544:G:H8	1.81	0.44
1:CA:2704:C:H2'	1:CA:2705:A:O4'	2.17	0.44
1:CA:729:G:H5'	1:CA:730:C:H5''	2.00	0.44
1:CA:924:C:H2'	1:CA:925:C:C6	2.53	0.44
1:CA:926:A:H2'	1:CA:928:G:C8	2.53	0.44
3:CD:125:ILE:HG12	3:CD:137:PRO:HD3	1.97	0.44
3:CD:263:ARG:HB2	3:CD:263:ARG:CZ	2.47	0.44
4:CE:181:LEU:HD11	15:CP:7:ILE:CG2	2.47	0.44
7:CH:101:ARG:H	7:CH:101:ARG:NE	2.15	0.44
7:CH:24:VAL:HG12	7:CH:25:LYS:N	2.32	0.44
9:CJ:93:LYS:HE2	9:CJ:95:TYR:CE2	2.53	0.44
11:CL:16:ARG:NE	11:CL:16:ARG:O	2.51	0.44
12:CM:43:THR:OG1	12:CM:46:GLN:HG3	2.17	0.44
14:CO:34:HIS:HA	14:CO:54:LEU:HD23	1.97	0.44
14:CO:49:VAL:HG13	14:CO:76:LYS:NZ	2.32	0.44
17:CR:55:ALA:HA	17:CR:101:GLY:HA2	2.00	0.44
17:CR:47:VAL:HB	17:CR:50:PRO:O	2.17	0.44
17:CR:66:ARG:HB2	17:CR:88:ARG:HD3	2.00	0.44
20:CU:27:VAL:O	20:CU:27:VAL:HG22	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CU:34:LYS:HE2	20:CU:34:LYS:HB3	1.87	0.44
20:CU:95:LYS:HG2	20:CU:96:ILE:O	2.18	0.44
24:CY:15:LYS:C	24:CY:16:LEU:HD22	2.38	0.44
31:DA:1298:C:C4	37:DG:114:ARG:HD3	2.52	0.44
31:DA:137:C:H2'	31:DA:138:G:H8	1.83	0.44
31:DA:382:A:O2'	31:DA:383:A:H5'	2.17	0.44
33:DC:173:VAL:O	33:DC:173:VAL:HG12	2.18	0.44
41:DK:57:THR:OG1	41:DK:58:PRO:HD2	2.18	0.44
52:DW:17:C:OP1	52:DW:61:C:H5'	2.18	0.44
28:A3:17:LYS:HD3	28:A3:17:LYS:HA	1.72	0.44
28:A3:28:ARG:HG3	28:A3:29:ASN:N	2.33	0.44
29:A4:9:ARG:NH2	29:A4:47:ARG:HG3	2.25	0.44
30:A5:35:GLN:HG2	30:A5:35:GLN:O	2.18	0.44
1:AA:1108:U:C2	1:AA:1109:C:N4	2.86	0.44
1:AA:1241:A:O2'	1:AA:1242:A:H5'	2.18	0.44
1:AA:2124:G:H3'	1:AA:2125:G:C8	2.53	0.44
1:AA:2315:G:H2'	1:AA:2316:C:C6	2.53	0.44
1:AA:2469:A:OP2	1:AA:2476:A:C8	2.71	0.44
1:AA:2704:C:H2'	1:AA:2705:A:O4'	2.17	0.44
1:AA:896:A:O4'	21:AV:146:ILE:HD12	2.17	0.44
3:AD:131:LEU:N	3:AD:131:LEU:HD23	2.33	0.44
3:AD:166:GLN:CA	3:AD:166:GLN:HE21	2.30	0.44
6:AG:10:LYS:O	6:AG:14:GLU:HB3	2.17	0.44
6:AG:139:LEU:HA	6:AG:144:ILE:HG21	2.00	0.44
7:AH:94:TYR:CE1	7:AH:160:LYS:HE2	2.52	0.44
13:AN:10:LEU:HB3	13:AN:17:ARG:HD3	1.98	0.44
14:AO:90:GLY:C	14:AO:92:TYR:N	2.70	0.44
20:AU:35:TYR:CE1	20:AU:69:ALA:HB3	2.53	0.44
24:AY:1:MET:SD	24:AY:1:MET:O	2.76	0.44
31:BA:1179:A:O2'	39:BI:103:THR:HG23	2.18	0.44
31:BA:17:U:H2'	31:BA:18:C:C6	2.53	0.44
31:BA:356:A:H1'	31:BA:368:U:O2'	2.18	0.44
31:BA:39:G:O2'	31:BA:40:C:H5'	2.18	0.44
31:BA:464:G:C6	31:BA:466:G:H5''	2.53	0.44
31:BA:736:C:H2'	31:BA:737:A:C8	2.53	0.44
31:BA:926:G:H5''	31:BA:927:G:O5'	2.17	0.44
37:BG:146:GLU:C	37:BG:148:ASN:H	2.21	0.44
38:BH:111:ILE:O	38:BH:112:LEU:HD23	2.18	0.44
31:BA:1254:C:OP1	40:BJ:45:ARG:HD3	2.18	0.44
6:AG:83:ARG:HH22	52:BV:19:G:H1	1.65	0.44
1:CA:102:G:C4'	1:CA:102:G:OP1	2.66	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1144:G:H2'	1:CA:1145:C:C6	2.53	0.44
1:CA:1464:C:H2'	1:CA:1465:G:H8	1.82	0.44
1:CA:2208:U:O4'	3:CD:151:LYS:HE2	2.18	0.44
1:CA:2306:C:C6	1:CA:2307:G:O4'	2.70	0.44
1:CA:2315:G:H2'	1:CA:2316:C:C6	2.53	0.44
1:CA:2787:C:H2'	1:CA:2788:C:C6	2.53	0.44
1:CA:27:G:N2	1:CA:512:G:H1'	2.32	0.44
1:CA:783:A:C4	1:CA:785:G:H1'	2.52	0.44
1:CA:828:U:O2	1:CA:828:U:C2'	2.66	0.44
3:CD:106:ILE:N	3:CD:106:ILE:HD13	2.17	0.44
3:CD:132:PRO:HB2	3:CD:135:PHE:HD1	1.81	0.44
1:CA:1798:U:H5'	3:CD:259:THR:OG1	2.17	0.44
4:CE:174:ASP:O	4:CE:182:LEU:HD12	2.18	0.44
8:CI:114:LEU:HD12	8:CI:115:ALA:H	1.82	0.44
11:CL:85:LEU:HB2	11:CL:118:GLY:HA3	2.00	0.44
13:CN:10:LEU:HD12	13:CN:10:LEU:C	2.38	0.44
12:CM:52:VAL:HG23	21:CV:183:LEU:HD13	1.99	0.44
31:DA:1305:G:N2	31:DA:1331:G:H1'	2.32	0.44
31:DA:232:G:H1'	31:DA:262:A:N1	2.32	0.44
33:DC:122:GLU:O	33:DC:126:ARG:HG2	2.18	0.44
38:DH:114:THR:CG2	38:DH:119:LEU:HD21	2.48	0.44
39:DI:30:GLY:O	39:DI:31:GLN:O	2.35	0.44
45:DO:67:LEU:O	45:DO:71:GLN:HB2	2.18	0.44
46:DP:58:TYR:O	46:DP:62:VAL:HG22	2.18	0.44
47:DQ:22:LEU:HD11	47:DQ:39:SER:HB2	2.00	0.44
50:DT:53:LEU:O	50:DT:57:ARG:HD3	2.18	0.44
52:DW:1:C:C2	52:DW:73:A:C2	3.06	0.44
1:AA:1464:C:H2'	1:AA:1465:G:H8	1.84	0.43
1:AA:1652:A:N6	1:AA:1653:G:N1	2.65	0.43
1:AA:2776:A:H4'	1:AA:2777:G:H5''	2.00	0.43
1:AA:2880:C:O2	13:AN:93:GLY:HA3	2.18	0.43
1:AA:374:A:C2	1:AA:401:A:C4	3.06	0.43
1:AA:518:G:H2'	1:AA:519:U:C6	2.53	0.43
1:AA:663:G:C6	1:AA:664:C:C4	3.05	0.43
1:AA:930:U:O2	1:AA:930:U:O4'	2.36	0.43
4:AE:196:VAL:CG2	4:AE:197:ILE:N	2.81	0.43
6:AG:104:GLU:HB3	26:A1:50:THR:HG21	1.99	0.43
6:AG:73:ALA:H	6:AG:85:GLY:HA2	1.83	0.43
11:AL:95:VAL:CG2	11:AL:125:VAL:HB	2.48	0.43
11:AL:17:LYS:C	11:AL:19:VAL:H	2.20	0.43
1:AA:587:C:C4	11:AL:33:ARG:HG2	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AL:61:ARG:CD	30:A5:13:ARG:HD2	2.48	0.43
11:AL:62:LEU:N	11:AL:62:LEU:CD2	2.74	0.43
1:AA:389:G:O6	11:AL:71:VAL:HG23	2.18	0.43
14:AO:78:LEU:HD13	14:AO:78:LEU:O	2.18	0.43
15:AP:75:ILE:N	15:AP:75:ILE:HD12	2.32	0.43
16:AQ:92:ARG:HD2	16:AQ:94:ASN:HB3	1.95	0.43
1:AA:488:G:O2'	18:AS:49:LYS:HE3	2.17	0.43
20:AU:50:ARG:HD3	20:AU:51:VAL:N	2.33	0.43
19:AT:11:PRO:HD3	24:AY:37:PHE:CD2	2.52	0.43
31:BA:1011:G:C6	31:BA:1012:U:C4	3.06	0.43
31:BA:1070:U:OP1	35:BE:25:ARG:NH1	2.50	0.43
31:BA:1399:C:H4'	31:BA:1400:C:O5'	2.18	0.43
31:BA:977:A:O2'	31:BA:981:U:N3	2.49	0.43
33:BC:45:LYS:HG3	33:BC:46:GLU:N	2.33	0.43
34:BD:56:VAL:HG12	34:BD:202:LEU:CD1	2.47	0.43
34:BD:58:LEU:C	34:BD:58:LEU:HD23	2.38	0.43
36:BF:61:LEU:HD12	36:BF:61:LEU:N	2.33	0.43
49:BS:63:THR:HG22	49:BS:66:MET:CE	2.48	0.43
41:BK:54:ARG:NH1	52:BW:39:C:O3'	2.51	0.43
1:CA:2046:G:O5'	27:C2:19:ARG:HA	2.18	0.43
1:CA:1218:C:O2'	1:CA:1219:G:H5'	2.18	0.43
1:CA:1274:A:N3	1:CA:1297:C:H1'	2.33	0.43
1:CA:1317:A:H2'	1:CA:1318:C:C6	2.53	0.43
1:CA:1443:G:O2'	1:CA:1444:G:H5'	2.18	0.43
1:CA:1477:A:C4	1:CA:1517:G:N2	2.86	0.43
1:CA:2094:G:OP1	8:CI:22:LYS:HG3	2.18	0.43
1:CA:479:A:N3	1:CA:481:G:H5''	2.32	0.43
1:CA:579:G:H2'	1:CA:580:C:C6	2.53	0.43
1:CA:699:A:H2'	1:CA:700:G:O4'	2.18	0.43
1:CA:864:G:H1'	1:CA:914:C:H42	1.82	0.43
1:CA:930:U:O2	1:CA:930:U:O4'	2.34	0.43
2:CB:16:G:N2	2:CB:69:G:H1'	2.33	0.43
6:CG:143:GLU:O	6:CG:144:ILE:HD13	2.18	0.43
6:CG:77:ILE:HG22	6:CG:80:PHE:N	2.33	0.43
6:CG:86:MET:N	6:CG:87:PRO:CD	2.81	0.43
16:CQ:113:ALA:O	16:CQ:117:GLN:HG2	2.18	0.43
17:CR:64:HIS:CG	17:CR:92:THR:HG22	2.53	0.43
18:CS:9:TYR:N	18:CS:9:TYR:CD2	2.85	0.43
31:DA:1286:A:H3'	31:DA:1286:A:N3	2.33	0.43
31:DA:780:A:C2	31:DA:803:G:N1	2.85	0.43
32:DB:193:ASP:OD1	32:DB:196:LEU:HG	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DC:12:LEU:HD12	33:DC:18:TRP:CZ2	2.53	0.43
34:DD:133:VAL:HG21	34:DD:138:TYR:CE2	2.53	0.43
34:DD:150:GLU:O	34:DD:153:ARG:HB3	2.17	0.43
40:DJ:32:ALA:HB3	40:DJ:76:ASN:HB2	2.00	0.43
44:DN:32:SER:O	44:DN:40:CYS:HA	2.18	0.43
45:DO:61:GLY:O	45:DO:65:ARG:HD2	2.17	0.43
48:DR:54:ARG:H	48:DR:54:ARG:HD2	1.83	0.43
52:DV:51:C:H2'	52:DV:52:G:C8	2.52	0.43
1:AA:1523:U:H2'	1:AA:1524:G:C8	2.53	0.43
1:AA:1676:A:H2'	1:AA:1677:A:O4'	2.18	0.43
1:AA:2262:U:O2'	1:AA:2263:C:H5'	2.18	0.43
1:AA:2068:U:N3	1:AA:2430:A:C2	2.80	0.43
1:AA:270(N):U:H1'	1:AA:270(O):G:N7	2.33	0.43
1:AA:343:C:O2'	1:AA:344:G:H5'	2.18	0.43
1:AA:358:U:C2'	1:AA:359:A:H5'	2.48	0.43
1:AA:389:G:N1	11:AL:71:VAL:HG23	2.32	0.43
2:AB:50:G:OP1	14:AO:63:THR:HG23	2.18	0.43
2:AB:52:A:C6	2:AB:53:A:C5	3.06	0.43
3:AD:220:HIS:CD2	3:AD:220:HIS:C	2.91	0.43
5:AF:175:THR:O	5:AF:176:LEU:HB2	2.18	0.43
1:AA:2641:G:H5''	9:AJ:99:SER:HB2	2.00	0.43
10:AK:22:ILE:HA	10:AK:22:ILE:HD12	1.73	0.43
31:BA:1226:C:H2'	43:BM:103:THR:CG2	2.44	0.43
31:BA:6:G:H4'	31:BA:298:A:H4'	1.99	0.43
31:BA:860:A:H2'	31:BA:861:G:O4'	2.18	0.43
32:BB:193:ASP:OD1	32:BB:196:LEU:HG	2.18	0.43
36:BF:48:LEU:CD2	36:BF:48:LEU:H	2.30	0.43
36:BF:33:TYR:CE1	36:BF:75:LEU:HA	2.53	0.43
36:BF:7:ASN:N	36:BF:7:ASN:OD1	2.51	0.43
38:BH:17:THR:HG22	38:BH:63:LEU:HD13	1.99	0.43
31:BA:1226:C:N4	43:BM:104:ARG:HD2	2.34	0.43
46:BP:6:LEU:HB3	46:BP:17:TYR:HB3	2.00	0.43
1:CA:2393:A:P	30:C5:28:GLY:H	2.41	0.43
1:CA:1047:G:HO2'	1:CA:1110:G:H1	1.65	0.43
1:CA:1185:C:H5''	1:CA:1186:G:OP1	2.17	0.43
1:CA:1376:C:N4	1:CA:1377:G:C6	2.86	0.43
1:CA:1444:G:H2'	1:CA:1445:C:C5	2.54	0.43
1:CA:1899:G:H2'	1:CA:1900:A:OP2	2.18	0.43
1:CA:2742:C:O2'	1:CA:2743:C:H5'	2.19	0.43
1:CA:373:U:O2	1:CA:423:A:H2	2.01	0.43
1:CA:556:G:H2'	1:CA:557:U:C6	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:751:A:C6	1:CA:789:A:C5	3.05	0.43
6:CG:173:LEU:HB3	6:CG:178:PHE:CD2	2.52	0.43
9:CJ:85:VAL:O	9:CJ:85:VAL:HG13	2.18	0.43
1:CA:2641:G:H5''	9:CJ:99:SER:HB2	2.00	0.43
1:CA:666:G:OP1	11:CL:47:ASP:O	2.36	0.43
12:CM:39:PRO:O	12:CM:40:ALA:HB2	2.18	0.43
20:CU:35:TYR:CE1	20:CU:69:ALA:HB3	2.54	0.43
24:CY:9:GLN:CA	24:CY:12:GLU:HB3	2.49	0.43
31:DA:1144:G:N2	31:DA:1146:A:H62	2.15	0.43
31:DA:1381:U:C5	31:DA:1382:C:C5	3.06	0.43
31:DA:926:G:C6	31:DA:1505:G:C5	3.06	0.43
31:DA:198:G:H2'	31:DA:199:G:H8	1.83	0.43
31:DA:464:G:C6	31:DA:466:G:H5''	2.53	0.43
31:DA:585:G:C6	31:DA:586:C:C4	3.06	0.43
34:DD:100:ARG:O	34:DD:104:VAL:HG23	2.17	0.43
34:DD:135:LEU:HD22	34:DD:135:LEU:N	2.33	0.43
34:DD:148:VAL:HG12	34:DD:149:ALA:O	2.19	0.43
36:DF:38:GLU:HB2	36:DF:64:GLN:HG2	2.00	0.43
39:DI:99:LEU:HD12	39:DI:101:PHE:HE1	1.83	0.43
31:DA:1317:C:C6	44:DN:16:PHE:CE2	3.06	0.43
49:DS:16:LEU:O	49:DS:19:VAL:HG12	2.19	0.43
30:A5:11:LYS:HG3	30:A5:64:TYR:CZ	2.54	0.43
1:AA:1022:G:N2	1:AA:1142(B):A:H2	2.14	0.43
1:AA:1494:A:OP1	1:AA:1494:A:H4'	2.17	0.43
1:AA:2135:A:H4'	1:AA:2160:G:H5'	2.00	0.43
1:AA:2601:C:OP2	54:AA:4001:BLS:H131	2.18	0.43
1:AA:991:C:H2'	1:AA:992:C:H6	1.83	0.43
3:AD:132:PRO:HB2	3:AD:135:PHE:HD1	1.83	0.43
6:AG:143:GLU:O	6:AG:144:ILE:HD13	2.18	0.43
9:AJ:49:LEU:O	9:AJ:53:ILE:HG13	2.18	0.43
10:AK:88:ASN:ND2	10:AK:92:GLU:HB2	2.32	0.43
11:AL:96:THR:HB	11:AL:97:PRO:HD2	1.99	0.43
12:AM:81:VAL:HG12	12:AM:82:ARG:N	2.33	0.43
13:AN:84:ALA:HB3	13:AN:85:PRO:HD3	2.01	0.43
13:AN:9:LYS:HG3	13:AN:10:LEU:N	2.34	0.43
14:AO:59:LYS:HB2	14:AO:59:LYS:NZ	2.33	0.43
15:AP:113:LYS:HD2	15:AP:113:LYS:HA	1.89	0.43
15:AP:29:ARG:HA	15:AP:46:GLU:HA	2.00	0.43
17:AR:1:MET:HB3	17:AR:42:GLY:HA3	1.98	0.43
21:AV:138:GLU:HB2	21:AV:156:LYS:HD3	1.99	0.43
23:AX:51:VAL:HG22	23:AX:53:VAL:HG23	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1251:A:H2'	31:BA:1252:A:O4'	2.17	0.43
31:BA:69:G:C2	31:BA:73:G:N7	2.86	0.43
32:BB:55:PHE:CE1	32:BB:218:ALA:HA	2.42	0.43
34:BD:142:PRO:HA	34:BD:185:PHE:HD2	1.83	0.43
34:BD:188:LEU:HG	34:BD:189:PRO:HD2	1.99	0.43
31:BA:546:G:OP2	34:BD:72:GLU:HB2	2.18	0.43
44:BN:53:LEU:HA	44:BN:54:PRO:HD3	1.87	0.43
31:BA:450:G:H4'	46:BP:41:PRO:O	2.19	0.43
28:C3:30:THR:O	28:C3:32:ASN:N	2.52	0.43
1:CA:550:G:O2'	1:CA:1220:A:N3	2.41	0.43
1:CA:1517:G:H2'	1:CA:1518:C:H6	1.84	0.43
3:CD:235:GLY:C	3:CD:237:GLU:H	2.21	0.43
4:CE:196:VAL:HG22	4:CE:197:ILE:N	2.33	0.43
11:CL:46:LYS:HG2	11:CL:52:GLU:CD	2.38	0.43
20:CU:59:GLY:C	20:CU:61:ILE:H	2.22	0.43
21:CV:9:TYR:CZ	21:CV:61:LEU:HD13	2.52	0.43
24:CY:60:LEU:HA	24:CY:60:LEU:HD23	1.85	0.43
24:CY:6:VAL:HG12	24:CY:10:LEU:HD11	2.00	0.43
31:DA:1400:C:C5	52:DV:34:C:C4	3.05	0.43
31:DA:520:A:OP2	42:DL:50:ALA:HB1	2.18	0.43
31:DA:691:G:O6	41:DK:52:GLY:HA2	2.18	0.43
31:DA:797:C:O2'	31:DA:798:G:H5'	2.18	0.43
31:DA:922:G:H2'	31:DA:923:A:H8	1.79	0.43
31:DA:958:A:OP1	49:DS:79:THR:HG21	2.18	0.43
33:DC:11:ARG:O	33:DC:14:ILE:O	2.35	0.43
35:DE:51:VAL:HB	35:DE:52:PRO:CD	2.44	0.43
38:DH:119:LEU:HD13	38:DH:127:LEU:HD21	1.98	0.43
40:DJ:32:ALA:CB	40:DJ:76:ASN:HB2	2.49	0.43
43:DM:81:LEU:HD11	43:DM:88:ARG:NH2	2.34	0.43
31:DA:137:C:O4'	46:DP:63:GLY:HA2	2.19	0.43
31:DA:474:G:OP2	46:DP:75:ARG:NH1	2.51	0.43
47:DQ:59:ILE:HD13	47:DQ:71:PHE:CD1	2.54	0.43
52:DW:36:U:H2'	52:DW:37:A:O4'	2.18	0.43
28:A3:44:ARG:O	28:A3:45:LYS:HG2	2.18	0.43
29:A4:39:ARG:HA	29:A4:39:ARG:HD2	1.77	0.43
1:AA:1026:U:H5'	1:AA:1027:A:OP2	2.18	0.43
1:AA:1274:A:N3	1:AA:1297:C:H1'	2.34	0.43
1:AA:184:C:H2'	1:AA:185:U:C6	2.53	0.43
1:AA:1925:C:O2'	1:AA:1926:U:H5'	2.18	0.43
1:AA:2611:U:O2	27:A2:3:LYS:HG3	2.19	0.43
1:AA:2006:C:O2'	1:AA:2823:A:N3	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:317:G:N2	1:AA:318:C:H1'	2.33	0.43
1:AA:311:A:C8	1:AA:332:A:N7	2.86	0.43
1:AA:481:G:C4	1:AA:507:A:C2	3.06	0.43
1:AA:582:G:H2'	1:AA:583:G:C8	2.52	0.43
1:AA:910:A:C6	12:AM:13:GLN:HG3	2.52	0.43
3:AD:155:LEU:HD23	3:AD:177:LEU:CD2	2.48	0.43
6:AG:131:TYR:HB3	6:AG:159:VAL:CG1	2.48	0.43
6:AG:60:LEU:O	6:AG:63:ILE:HG13	2.17	0.43
1:AA:661:C:O2'	11:AL:18:ARG:HA	2.18	0.43
1:AA:2820:A:H4'	13:AN:5:LYS:HG2	1.99	0.43
1:AA:1754:C:P	15:AP:96:ARG:HH12	2.41	0.43
17:AR:18:LEU:CD1	17:AR:20:LEU:HB2	2.48	0.43
17:AR:61:VAL:O	17:AR:61:VAL:HG22	2.17	0.43
22:AW:53:MET:HB3	22:AW:59:LEU:CD2	2.46	0.43
31:BA:17:U:O2'	31:BA:1079:G:H1'	2.18	0.43
31:BA:1238:A:N3	31:BA:1238:A:H2'	2.32	0.43
31:BA:1299:A:N7	31:BA:1301:U:N3	2.66	0.43
31:BA:518:C:C2	31:BA:529:G:C6	3.07	0.43
31:BA:882:C:O2'	31:BA:883:C:H5'	2.18	0.43
32:BB:16:HIS:HA	32:BB:210:SER:OG	2.19	0.43
34:BD:188:LEU:O	34:BD:189:PRO:O	2.36	0.43
39:BI:33:PHE:CE2	39:BI:47:LEU:HD22	2.53	0.43
39:BI:99:LEU:HD12	39:BI:101:PHE:HE1	1.83	0.43
42:BL:24:PRO:C	42:BL:26:LEU:N	2.72	0.43
50:BT:47:GLY:O	50:BT:49:ALA:N	2.50	0.43
30:C5:17:THR:HG23	30:C5:21:LYS:C	2.39	0.43
1:CA:2695:C:H2'	1:CA:2696:U:H6	1.82	0.43
1:CA:2815:C:O2'	27:C2:42:PRO:HB2	2.19	0.43
1:CA:311:A:C8	1:CA:332:A:N7	2.86	0.43
1:CA:576:U:H2'	1:CA:577:G:C8	2.53	0.43
1:CA:610:C:H2'	1:CA:611:C:H6	1.84	0.43
1:CA:719:C:H6	1:CA:719:C:O5'	2.02	0.43
3:CD:125:ILE:HD11	3:CD:131:LEU:HD11	2.00	0.43
3:CD:246:PRO:HB2	3:CD:255:LYS:HG3	2.00	0.43
4:CE:35:GLN:HB3	4:CE:48:GLN:HE21	1.84	0.43
4:CE:9:VAL:HG13	4:CE:25:VAL:C	2.39	0.43
6:CG:106:LEU:HD12	6:CG:110:ALA:HB3	2.00	0.43
6:CG:137:GLU:HB3	6:CG:139:LEU:HD23	1.99	0.43
9:CJ:90:LEU:HA	9:CJ:110:LEU:HB3	1.99	0.43
9:CJ:81:ASP:OD1	9:CJ:147:ALA:O	2.37	0.43
10:CK:89:ASN:O	10:CK:91:LEU:HD22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CO:59:LYS:HB2	14:CO:60:GLY:H	1.51	0.43
20:CU:50:ARG:HD3	20:CU:51:VAL:N	2.33	0.43
20:CU:13:VAL:HG21	20:CU:72:VAL:HB	1.99	0.43
20:CU:98:VAL:HG13	20:CU:99:CYS:N	2.32	0.43
21:CV:134:PRO:HG3	21:CV:161:VAL:HG21	2.00	0.43
31:DA:1053:G:N7	31:DA:1200:C:H5'	2.33	0.43
31:DA:413:G:H21	31:DA:428:G:H1'	1.83	0.43
31:DA:452:A:HO2'	31:DA:453:A:H8	1.62	0.43
31:DA:778:G:H2'	31:DA:779:C:O4'	2.18	0.43
31:DA:920:U:H2'	31:DA:921:U:C6	2.53	0.43
32:DB:87:ARG:NH2	32:DB:232:PRO:HA	2.32	0.43
34:DD:104:VAL:HG11	34:DD:146:ILE:HG12	1.99	0.43
34:DD:33:MET:SD	34:DD:37:PRO:HA	2.58	0.43
41:DK:19:ALA:HB2	41:DK:32:ILE:HG22	2.00	0.43
44:DN:26:ARG:CD	44:DN:47:LEU:HD11	2.49	0.43
48:DR:44:LEU:HG	48:DR:48:GLY:HA2	2.00	0.43
52:DW:49:G:C2'	52:DW:50:U:H5'	2.48	0.43
1:AA:687:C:H5'	29:A4:4:THR:O	2.19	0.43
1:AA:1021:A:N6	1:AA:1141:U:N3	2.66	0.43
1:AA:1404:C:O2'	1:AA:1405:U:H5'	2.19	0.43
1:AA:1444:G:H2'	1:AA:1445:C:C5	2.54	0.43
1:AA:273(F):U:C3'	1:AA:273(G):C:H5''	2.49	0.43
3:AD:175:LEU:HD21	3:AD:185:VAL:HG23	2.01	0.43
3:AD:268:ARG:C	3:AD:269:PHE:HD1	2.21	0.43
4:AE:174:ASP:O	4:AE:182:LEU:HD12	2.18	0.43
4:AE:31:CYS:HA	4:AE:32:PRO:HD3	1.82	0.43
7:AH:48:GLY:O	7:AH:49:VAL:HG13	2.19	0.43
1:AA:637:A:OP1	11:AL:133:SER:HB2	2.18	0.43
13:AN:87:TYR:OH	13:AN:116:LEU:HB3	2.19	0.43
14:AO:65:VAL:O	14:AO:69:VAL:HG12	2.17	0.43
31:BA:491:G:H2'	31:BA:492:G:H8	1.83	0.43
31:BA:685:G:C2	31:BA:686:U:C4	3.06	0.43
31:BA:9:G:OP2	35:BE:121:LYS:HE2	2.18	0.43
32:BB:164:VAL:HB	32:BB:186:ALA:HB2	2.00	0.43
32:BB:36:ARG:H	32:BB:41:ILE:HD13	1.83	0.43
33:BC:161:GLU:OE1	33:BC:161:GLU:HA	2.18	0.43
33:BC:61:ALA:O	33:BC:62:ASP:HB2	2.18	0.43
34:BD:92:VAL:O	34:BD:96:LEU:HD22	2.19	0.43
31:BA:673:G:H4'	36:BF:87:ARG:HH12	1.82	0.43
45:BO:6:GLU:O	45:BO:10:LYS:HG3	2.19	0.43
31:BA:958:A:OP1	49:BS:79:THR:HG21	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:40:ALA:HB2	50:BT:55:ILE:CG2	2.47	0.43
29:C4:9:ARG:NH2	29:C4:47:ARG:HG3	2.26	0.43
30:C5:29:LYS:NZ	30:C5:45:GLY:HA2	2.33	0.43
1:CA:1506:C:H2'	1:CA:1508:A:C8	2.54	0.43
1:CA:1523:U:H2'	1:CA:1524:G:C8	2.53	0.43
1:CA:1786:A:H4'	1:CA:1787:A:OP2	2.19	0.43
1:CA:2411:A:O2'	1:CA:2412:A:H5'	2.19	0.43
1:CA:610:C:H2'	1:CA:611:C:C6	2.53	0.43
8:CI:69:LYS:HD2	8:CI:73:GLU:HB2	1.99	0.43
10:CK:19:ILE:HB	10:CK:42:SER:O	2.19	0.43
11:CL:58:THR:C	11:CL:60:MET:H	2.21	0.43
14:CO:25:ARG:O	14:CO:39:ILE:HA	2.18	0.43
15:CP:49:VAL:O	15:CP:49:VAL:HG13	2.18	0.43
16:CQ:91:ASP:CG	16:CQ:96:ALA:HB2	2.39	0.43
17:CR:49:THR:O	17:CR:50:PRO:C	2.56	0.43
24:CY:2:LYS:HZ2	24:CY:2:LYS:N	2.16	0.43
31:DA:1251:A:H2'	31:DA:1252:A:O4'	2.18	0.43
31:DA:200:G:N2	31:DA:218:C:C2	2.85	0.43
31:DA:247:G:C2	31:DA:248:C:C6	3.07	0.43
33:DC:45:LYS:HG3	33:DC:46:GLU:N	2.33	0.43
31:DA:972:C:OP2	40:DJ:57:LYS:HD3	2.18	0.43
40:DJ:63:PHE:HA	44:DN:59:ALA:N	2.24	0.43
1:AA:1048:A:C2	1:AA:1112:G:N3	2.86	0.43
1:AA:1639:U:H4'	1:AA:2699:C:H4'	2.01	0.43
1:AA:2340:G:O2'	1:AA:2341:G:H5'	2.18	0.43
1:AA:2419:U:H2'	1:AA:2420:C:H6	1.82	0.43
1:AA:242:G:O5'	30:A5:3:LYS:HE3	2.17	0.43
1:AA:2555:U:C5	1:AA:2556:C:C2	3.06	0.43
1:AA:2695:C:H2'	1:AA:2696:U:H6	1.84	0.43
1:AA:712(B):A:H5''	1:AA:2713:A:OP2	2.19	0.43
1:AA:2854:G:C2	1:AA:2864:G:C2	3.06	0.43
1:AA:2875:C:O2'	15:AP:5:ALA:HB3	2.18	0.43
1:AA:681:G:H2'	1:AA:682:G:O4'	2.19	0.43
1:AA:943:U:OP2	11:AL:38:GLN:OE1	2.36	0.43
2:AB:44:G:C2	2:AB:48:A:C2	3.07	0.43
3:AD:125:ILE:HD11	3:AD:131:LEU:HD11	2.00	0.43
3:AD:263:ARG:HB2	3:AD:263:ARG:CZ	2.48	0.43
3:AD:35:LYS:HZ3	3:AD:35:LYS:HB2	1.84	0.43
1:AA:2563:U:H4'	10:AK:28:SER:HA	1.99	0.43
11:AL:27:HIS:CD2	11:AL:28:GLY:N	2.87	0.43
12:AM:104:PHE:CD1	12:AM:104:PHE:N	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AM:78:PRO:O	12:AM:79:LEU:CB	2.66	0.43
2:AB:7:G:H4'	14:AO:29:PHE:CB	2.49	0.43
14:AO:40:ILE:HG22	14:AO:47:THR:HG23	2.01	0.43
14:AO:25:ARG:HD3	14:AO:88:ASP:OD1	2.18	0.43
17:AR:35:LEU:HD22	17:AR:35:LEU:H	1.83	0.43
19:AT:92:LEU:HA	19:AT:92:LEU:HD23	1.85	0.43
20:AU:4:LYS:O	20:AU:5:MET:C	2.56	0.43
21:AV:62:PRO:C	21:AV:64:GLY:H	2.21	0.43
23:AX:9:GLY:O	23:AX:10:LYS:O	2.37	0.43
25:AZ:7:LYS:HE2	25:AZ:32:GLN:HE21	1.82	0.43
31:BA:1033:G:H2'	31:BA:1034:G:H8	1.83	0.43
31:BA:1108:G:H2'	31:BA:1108:G:N3	2.34	0.43
31:BA:1126:U:H2'	31:BA:1127:G:O4'	2.19	0.43
31:BA:1465:C:H2'	31:BA:1466:C:O4'	2.18	0.43
31:BA:200:G:N2	31:BA:218:C:C2	2.86	0.43
31:BA:544:G:H2'	31:BA:545:C:H6	1.83	0.43
31:BA:580:U:H2'	31:BA:581:G:O4'	2.18	0.43
32:BB:63:MET:HG3	32:BB:225:ALA:HB1	2.01	0.43
33:BC:129:ALA:HB3	33:BC:132:ARG:HB3	2.00	0.43
37:BG:115:ARG:HB2	37:BG:118:VAL:HG13	2.00	0.43
38:BH:111:ILE:HD13	38:BH:111:ILE:H	1.83	0.43
40:BJ:54:PHE:CG	40:BJ:55:LYS:N	2.87	0.43
45:BO:41:GLU:HA	45:BO:44:LYS:HB2	2.00	0.43
49:BS:16:LEU:O	49:BS:19:VAL:HG12	2.19	0.43
1:AA:2451:A:H5'	52:BV:76:A:N6	2.33	0.43
52:BW:1:C:C2	52:BW:73:A:C2	3.06	0.43
1:CA:1230:C:H2'	1:CA:1231:G:C8	2.54	0.43
1:CA:1686:C:H2'	1:CA:1687:G:O4'	2.18	0.43
1:CA:1997:G:O2'	1:CA:1998:G:H5'	2.19	0.43
1:CA:2392:A:H2'	1:CA:2393:A:O4'	2.19	0.43
1:CA:523:C:H4'	1:CA:541:C:O2	2.17	0.43
3:CD:245:PRO:HB2	3:CD:255:LYS:NZ	2.33	0.43
3:CD:62:TYR:HA	3:CD:87:ASN:ND2	2.33	0.43
5:CF:174:VAL:O	5:CF:174:VAL:HG23	2.18	0.43
6:CG:139:LEU:HA	6:CG:144:ILE:HG21	2.01	0.43
6:CG:82:LEU:HD22	6:CG:87:PRO:HG2	2.01	0.43
8:CI:123:LEU:HD23	8:CI:123:LEU:C	2.39	0.43
1:CA:910:A:C6	12:CM:13:GLN:HG3	2.53	0.43
14:CO:78:LEU:O	14:CO:78:LEU:HD13	2.18	0.43
15:CP:105:LEU:HG	15:CP:109:GLU:HB2	2.00	0.43
19:CT:63:LYS:HD2	19:CT:72:LYS:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CU:73:ARG:HH21	20:CU:82:PRO:HD3	1.82	0.43
20:CU:88:LYS:N	20:CU:88:LYS:HD3	2.34	0.43
31:DA:1126:U:H2'	31:DA:1127:G:O4'	2.19	0.43
31:DA:600:C:O2'	31:DA:601:C:H5'	2.18	0.43
31:DA:673:G:H4'	36:DF:87:ARG:NH1	2.34	0.43
32:DB:63:MET:HG3	32:DB:225:ALA:HB1	2.00	0.43
33:DC:89:GLU:OE2	33:DC:93:LYS:HD2	2.17	0.43
34:DD:146:ILE:HG22	34:DD:146:ILE:O	2.17	0.43
31:DA:710:G:OP1	36:DF:54:LYS:HE3	2.18	0.43
36:DF:12:PRO:HG3	36:DF:57:GLN:O	2.18	0.43
38:DH:111:ILE:O	38:DH:112:LEU:HD23	2.19	0.43
43:DM:29:ARG:HD3	43:DM:64:TRP:CH2	2.54	0.43
47:DQ:48:GLU:HG3	47:DQ:50:LYS:HG2	2.00	0.43
30:A5:41:ILE:HD12	30:A5:41:ILE:C	2.39	0.43
1:AA:1335:U:OP1	19:AT:65:ARG:HG3	2.19	0.43
1:AA:1506:C:H2'	1:AA:1508:A:C8	2.54	0.43
1:AA:1853:A:N1	1:AA:2087:G:H1'	2.34	0.43
1:AA:2415:G:H2'	1:AA:2416:C:H6	1.83	0.43
1:AA:2643:G:C2'	1:AA:2644:G:H5'	2.48	0.43
1:AA:458:G:O2'	29:A4:39:ARG:HD3	2.18	0.43
1:AA:603:A:C5	1:AA:655:A:N3	2.86	0.43
6:AG:109:VAL:C	6:AG:112:PRO:HD2	2.39	0.43
1:AA:2531:A:H4'	7:AH:157:TYR:CD2	2.53	0.43
12:AM:54:MET:O	12:AM:57:HIS:HB3	2.19	0.43
14:AO:66:ALA:O	14:AO:69:VAL:HG13	2.19	0.43
16:AQ:90:VAL:HB	17:AR:39:LEU:HG	2.00	0.43
20:AU:42:VAL:O	20:AU:42:VAL:HG12	2.19	0.43
21:AV:16:SER:O	21:AV:20:ARG:HD2	2.18	0.43
21:AV:81:ARG:O	21:AV:82:ARG:HB2	2.18	0.43
1:AA:856:C:O4'	22:AW:27:GLU:HB3	2.19	0.43
22:AW:81:VAL:O	22:AW:83:PRO:HD3	2.17	0.43
31:BA:1107:C:C4	31:BA:1108:G:C8	3.06	0.43
31:BA:1116:C:H2'	31:BA:1117:G:O4'	2.19	0.43
31:BA:1286:A:N3	31:BA:1286:A:H3'	2.34	0.43
31:BA:1333:A:H2'	31:BA:1334:G:O4'	2.19	0.43
33:BC:77:ILE:HA	33:BC:84:ILE:HB	2.01	0.43
34:BD:30:LYS:HB2	34:BD:33:MET:O	2.18	0.43
36:BF:38:GLU:HB2	36:BF:64:GLN:HG2	2.00	0.43
37:BG:31:MET:HA	37:BG:39:ALA:HB2	2.01	0.43
42:BL:85:ARG:HB2	42:BL:100:VAL:HG22	2.00	0.43
45:BO:67:LEU:O	45:BO:71:GLN:HB2	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:137:C:O4'	46:BP:63:GLY:HA2	2.19	0.43
49:BS:28:LYS:HB3	49:BS:29:ARG:NH1	2.32	0.43
30:C5:23:VAL:HA	30:C5:48:PHE:O	2.18	0.43
30:C5:51:ALA:H	30:C5:54:GLU:CB	2.32	0.43
1:CA:1705:G:O2'	1:CA:1706:U:H5'	2.18	0.43
1:CA:1716:U:O2	1:CA:1746:G:C2	2.71	0.43
1:CA:2164:C:C6	1:CA:2165:G:H5'	2.54	0.43
1:CA:2212:A:N3	1:CA:2215:G:C2	2.87	0.43
1:CA:270(N):U:H1'	1:CA:270(O):G:N7	2.34	0.43
1:CA:2758:A:C2	1:CA:2759:G:H1'	2.53	0.43
1:CA:2820:A:O3'	13:CN:5:LYS:HE3	2.19	0.43
1:CA:2006:C:O2'	1:CA:2823:A:N3	2.50	0.43
1:CA:492:A:H2'	1:CA:493:G:O4'	2.19	0.43
1:CA:681:G:H2'	1:CA:682:G:O4'	2.18	0.43
1:CA:1570:A:H4'	3:CD:38:LYS:HZ1	1.84	0.43
6:CG:108:ASN:C	6:CG:112:PRO:HG2	2.39	0.43
1:CA:2531:A:H4'	7:CH:157:TYR:CD2	2.53	0.43
7:CH:20:ALA:HB1	7:CH:21:PRO:CD	2.48	0.43
9:CJ:42:GLU:HA	9:CJ:82:LYS:O	2.19	0.43
12:CM:41:TRP:HB3	12:CM:94:VAL:HG21	1.99	0.43
13:CN:11:ASN:OD1	13:CN:12:ARG:N	2.31	0.43
13:CN:2:ARG:HD3	13:CN:5:LYS:NZ	2.33	0.43
9:CJ:61:HIS:O	16:CQ:67:ALA:HB1	2.18	0.43
16:CQ:92:ARG:O	16:CQ:94:ASN:N	2.52	0.43
18:CS:14:PRO:O	18:CS:18:ARG:HB2	2.17	0.43
21:CV:28:MET:O	21:CV:34:ASN:HA	2.18	0.43
21:CV:23:LYS:HB3	21:CV:38:TYR:CD1	2.53	0.43
24:CY:2:LYS:H	24:CY:2:LYS:NZ	2.16	0.43
31:DA:1277:C:H2'	31:DA:1278:U:H5'	2.01	0.43
31:DA:1299:A:N7	31:DA:1301:U:N3	2.66	0.43
31:DA:1333:A:H2'	31:DA:1334:G:O4'	2.18	0.43
1:CA:1959:G:H1'	31:DA:1418:A:N3	2.34	0.43
31:DA:1454:G:H2'	31:DA:1455:G:H8	1.84	0.43
31:DA:39:G:O2'	31:DA:40:C:H5'	2.19	0.43
31:DA:520:A:N7	31:DA:521:G:C8	2.87	0.43
33:DC:6:HIS:HD2	33:DC:7:PRO:HD2	1.84	0.43
34:DD:119:GLN:O	34:DD:123:HIS:HD2	2.02	0.43
36:DF:48:LEU:H	36:DF:48:LEU:CD2	2.31	0.43
44:DN:15:LYS:HE2	44:DN:16:PHE:CE2	2.54	0.43
45:DO:54:ARG:CZ	45:DO:58:MET:HE3	2.49	0.43
31:DA:450:G:H4'	46:DP:41:PRO:O	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DQ:100:LYS:HD2	47:DQ:100:LYS:N	2.33	0.43
47:DQ:64:PRO:HA	47:DQ:70:ARG:HG3	2.01	0.43
36:DF:7:ASN:HD22	48:DR:76:LEU:HD11	1.84	0.43
30:A5:8:LYS:HB3	30:A5:12:LYS:HE2	2.00	0.43
1:AA:1705:G:O2'	1:AA:1706:U:H5'	2.18	0.43
1:AA:1787:A:N3	1:AA:1787:A:H2'	2.32	0.43
1:AA:1824:G:C2'	1:AA:1825:A:H5'	2.49	0.43
1:AA:2572:A:C5	4:AE:144:ARG:NH2	2.84	0.43
1:AA:2678:C:H2'	1:AA:2679:A:O4'	2.18	0.43
1:AA:593:G:C6	1:AA:594:U:C4	3.07	0.43
1:AA:715:G:O4'	45:BO:60:VAL:HG11	2.18	0.43
1:AA:744:G:H2'	1:AA:745:G:O4'	2.19	0.43
3:AD:106:ILE:N	3:AD:106:ILE:HD13	2.17	0.43
3:AD:185:VAL:HG12	3:AD:186:HIS:N	2.34	0.43
6:AG:107:LEU:HA	6:AG:111:LEU:HD12	2.01	0.43
9:AJ:36:TRP:O	9:AJ:158:PRO:HG2	2.19	0.43
1:AA:663:G:H5''	11:AL:21:ARG:HD2	2.01	0.43
12:AM:52:VAL:HG23	21:AV:183:LEU:HD13	1.99	0.43
13:AN:47:PHE:HE2	13:AN:51:LEU:HD11	1.83	0.43
20:AU:56:PRO:HB2	20:AU:57:GLN:H	1.52	0.43
20:AU:88:LYS:N	20:AU:88:LYS:HD3	2.33	0.43
20:AU:90:LEU:HD23	20:AU:90:LEU:N	2.28	0.43
22:AW:46:LYS:HB3	22:AW:47:PRO:HD2	2.00	0.43
24:AY:2:LYS:HA	24:AY:5:GLU:OE2	2.18	0.43
31:BA:1043:C:H2'	31:BA:1044:A:H8	1.84	0.43
31:BA:504:C:C2	31:BA:542:G:C2	3.06	0.43
31:BA:76:G:C6	31:BA:95:G:C6	3.07	0.43
31:BA:783:C:H2'	31:BA:784:C:C6	2.53	0.43
33:BC:122:GLU:O	33:BC:126:ARG:HG2	2.19	0.43
34:BD:111:ALA:HA	34:BD:161:ASN:ND2	2.32	0.43
35:BE:47:LYS:N	35:BE:47:LYS:HD3	2.34	0.43
36:BF:5:GLU:HB3	36:BF:62:TRP:HE1	1.83	0.43
41:BK:32:ILE:HD11	41:BK:41:THR:HB	2.00	0.43
31:BA:520:A:OP2	42:BL:50:ALA:HB1	2.18	0.43
31:BA:523:A:N6	42:BL:91:ASP:HB2	2.34	0.43
45:BO:61:GLY:O	45:BO:65:ARG:HD2	2.18	0.43
1:CA:1309:G:H3'	29:C4:9:ARG:NH1	2.33	0.43
1:CA:1472:A:H61	1:CA:1521:G:H1'	1.84	0.43
1:CA:1493:C:N4	1:CA:2210:G:H1'	2.34	0.43
1:CA:1540:G:H2'	1:CA:1541:U:O4'	2.18	0.43
1:CA:1543:A:C5'	1:CA:1544:C:OP2	2.67	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1788:C:H2'	1:CA:1789:A:O4'	2.19	0.43
1:CA:2124:G:H3'	1:CA:2125:G:C8	2.53	0.43
1:CA:2359:C:H2'	1:CA:2360:A:O4'	2.19	0.43
1:CA:2415:G:H4'	11:CL:66:GLY:C	2.38	0.43
1:CA:839:U:H2'	1:CA:840:C:C6	2.53	0.43
1:CA:864:G:C6	1:CA:865:C:N4	2.87	0.43
2:CB:7:G:H4'	14:CO:29:PHE:CG	2.54	0.43
9:CJ:33:GLU:OE1	9:CJ:33:GLU:HA	2.19	0.43
11:CL:101:VAL:HG13	11:CL:102:ARG:H	1.84	0.43
11:CL:126:VAL:HG22	11:CL:145:PRO:CG	2.45	0.43
11:CL:49:ARG:HB2	30:C5:60:LEU:HD21	2.01	0.43
1:CA:995:C:OP2	16:CQ:54:LYS:HE3	2.19	0.43
17:CR:4:ILE:HG22	17:CR:39:LEU:HD23	2.01	0.43
12:CM:62:GLY:CA	21:CV:116:VAL:HG21	2.47	0.43
23:CX:26:ARG:O	23:CX:27:GLU:HB3	2.18	0.43
23:CX:51:VAL:HG22	23:CX:53:VAL:HG23	1.99	0.43
23:CX:56:GLN:HE22	23:CX:86:SER:H	1.66	0.43
31:DA:491:G:H2'	31:DA:492:G:H8	1.83	0.43
31:DA:504:C:C2	31:DA:542:G:C2	3.07	0.43
33:DC:61:ALA:O	33:DC:62:ASP:HB2	2.19	0.43
34:DD:67:ILE:HG22	34:DD:114:ARG:NH1	2.32	0.43
31:DA:1377:A:H2'	37:DG:2:ALA:HB2	2.01	0.43
37:DG:31:MET:HA	37:DG:39:ALA:HB2	2.01	0.43
40:DJ:35:SER:HB3	40:DJ:73:ASP:HB2	2.00	0.43
31:DA:1226:C:N4	43:DM:104:ARG:HD2	2.33	0.43
28:A3:30:THR:O	28:A3:32:ASN:N	2.52	0.43
1:AA:1021:A:H2'	1:AA:1023:U:H5'	2.01	0.43
1:AA:119:A:H4'	1:AA:120:U:OP1	2.19	0.43
1:AA:1356:G:C5	1:AA:1357:U:C5	3.07	0.43
1:AA:1540:G:H2'	1:AA:1541:U:O4'	2.19	0.43
1:AA:1543:A:C5'	1:AA:1544:C:OP2	2.67	0.43
1:AA:1680:U:N3	1:AA:1764:G:OP2	2.51	0.43
1:AA:1788:C:H2'	1:AA:1789:A:O4'	2.19	0.43
1:AA:2208:U:O4'	3:AD:151:LYS:HE2	2.18	0.43
1:AA:2359:C:H2'	1:AA:2360:A:O4'	2.19	0.43
1:AA:2395:C:O2'	23:AX:32:LYS:HE3	2.18	0.43
1:AA:2773:C:H2'	1:AA:2774:C:C6	2.54	0.43
1:AA:2787:C:H1'	4:AE:62:PRO:CG	2.49	0.43
1:AA:2884:U:H5	1:AA:2885:C:N1	2.16	0.43
1:AA:610:C:H2'	1:AA:611:C:C6	2.53	0.43
1:AA:646:A:N3	1:AA:646:A:H5'	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:51:G:H21	2:AB:52:A:N6	2.16	0.43
3:AD:130:ALA:HB2	3:AD:192:THR:HB	2.01	0.43
5:AF:31:HIS:O	5:AF:34:TRP:HB3	2.18	0.43
11:AL:139:LYS:NZ	11:AL:139:LYS:HB2	2.34	0.43
11:AL:49:ARG:HB2	30:A5:60:LEU:HD21	2.00	0.43
11:AL:58:THR:C	11:AL:60:MET:H	2.21	0.43
1:AA:2393:A:H5'	11:AL:62:LEU:HB3	2.01	0.43
11:AL:66:GLY:O	11:AL:67:MET:HB3	2.18	0.43
12:AM:41:TRP:HB3	12:AM:94:VAL:HG21	2.01	0.43
15:AP:64:ARG:HD2	15:AP:73:GLU:HG2	2.00	0.43
21:AV:13:GLU:HB3	21:AV:18:LEU:HD11	2.00	0.43
31:BA:1031:G:C2'	31:BA:1031(A):A:H5'	2.49	0.43
31:BA:102:G:C6	31:BA:103:C:C4	3.06	0.43
31:BA:1227:A:OP2	43:BM:111:LYS:HE3	2.19	0.43
31:BA:1270:C:H2'	31:BA:1271:G:H8	1.84	0.43
31:BA:1305:G:N2	31:BA:1331:G:H1'	2.34	0.43
31:BA:1454:G:H2'	31:BA:1455:G:H8	1.84	0.43
31:BA:1513:A:H2'	31:BA:1514:C:H6	1.74	0.43
31:BA:623:C:O5'	31:BA:623:C:H6	2.02	0.43
31:BA:673:G:H4'	36:BF:87:ARG:NH1	2.33	0.43
31:BA:984:C:H2'	31:BA:985:C:H6	1.84	0.43
33:BC:103:VAL:CG1	33:BC:104:GLN:N	2.82	0.43
33:BC:70:VAL:HG12	33:BC:71:ALA:N	2.34	0.43
34:BD:126:ILE:HG22	34:BD:127:THR:N	2.33	0.43
46:BP:20:VAL:HG22	46:BP:21:VAL:N	2.33	0.43
46:BP:82:GLN:HG2	46:BP:83:GLU:N	2.33	0.43
1:CA:1011:G:H5'	16:CQ:77:SER:HG	1.83	0.43
1:CA:165:U:O2	1:CA:165:U:H3'	2.19	0.43
1:CA:1798:U:H5'	3:CD:260:ARG:HB2	1.99	0.43
1:CA:2116:G:H21	1:CA:2163:C:H41	1.65	0.43
1:CA:2711:A:OP1	1:CA:712(B):A:P	2.77	0.43
5:CF:114:VAL:HG21	5:CF:202:PHE:CE1	2.54	0.43
8:CI:71:ILE:HG13	8:CI:72:LEU:CD2	2.48	0.43
14:CO:25:ARG:HD3	14:CO:88:ASP:OD1	2.17	0.43
15:CP:115:ARG:N	15:CP:115:ARG:HD3	2.30	0.43
17:CR:13:ARG:HD3	17:CR:13:ARG:C	2.39	0.43
24:CY:7:ARG:HD3	24:CY:7:ARG:C	2.39	0.43
31:DA:1511:G:H2'	31:DA:1512:U:O4'	2.19	0.43
31:DA:69:G:C2	31:DA:73:G:N7	2.87	0.43
31:DA:976:G:N7	31:DA:1358:U:C2	2.87	0.43
32:DB:154:LEU:HD22	32:DB:155:LEU:H	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:18:LYS:NZ	34:DD:31:CYS:CB	2.82	0.43
39:DI:16:ARG:HB2	39:DI:64:THR:CG2	2.43	0.43
39:DI:33:PHE:CE2	39:DI:47:LEU:HD22	2.54	0.43
40:DJ:98:ILE:H	40:DJ:98:ILE:HD12	1.84	0.43
41:DK:80:VAL:HG22	41:DK:103:LEU:HD12	2.00	0.43
41:DK:99:GLN:HB3	41:DK:105:VAL:CG2	2.48	0.43
42:DL:24:PRO:C	42:DL:26:LEU:N	2.72	0.43
46:DP:82:GLN:HG2	46:DP:83:GLU:N	2.33	0.43
1:AA:1210:A:H4'	1:AA:1211:U:O5'	2.19	0.43
1:AA:1483:G:C2	1:AA:1508:A:C2	3.06	0.43
1:AA:1854:A:N6	1:AA:1888:G:C8	2.83	0.43
1:AA:2219:G:C2'	1:AA:2224:G:H5'	2.49	0.43
1:AA:2395:C:O2'	23:AX:32:LYS:HG3	2.19	0.43
1:AA:2579:C:H4'	4:AE:134:ILE:HG21	2.00	0.43
1:AA:2748:A:C6	1:AA:2749:A:C5	3.07	0.43
1:AA:869:G:C4	1:AA:870:A:C8	3.06	0.43
2:AB:5:C:C2	2:AB:116:G:N2	2.87	0.43
3:AD:18:VAL:HG22	3:AD:19:ALA:N	2.34	0.43
4:AE:134:ILE:HG13	4:AE:134:ILE:O	2.19	0.43
5:AF:53:THR:C	5:AF:55:GLY:N	2.72	0.43
11:AL:51:PHE:N	11:AL:57:THR:HG23	2.31	0.43
16:AQ:16:LYS:HE2	16:AQ:16:LYS:HB3	1.77	0.43
21:AV:134:PRO:HG3	21:AV:161:VAL:HG21	2.00	0.43
24:AY:12:GLU:C	24:AY:14:ARG:H	2.23	0.43
24:AY:60:LEU:HA	24:AY:60:LEU:HD23	1.87	0.43
31:BA:1438:G:C4	31:BA:1439:C:C5	3.07	0.43
33:BC:59:ARG:HA	33:BC:63:ASN:O	2.19	0.43
34:BD:43:HIS:O	34:BD:45:GLN:N	2.49	0.43
35:BE:76:ILE:HD12	35:BE:76:ILE:HA	1.91	0.43
39:BI:63:ILE:HG22	39:BI:64:THR:N	2.34	0.43
42:BL:69:ILE:HA	42:BL:70:PRO:HD3	1.86	0.43
44:BN:21:TYR:HD2	44:BN:22:THR:O	2.01	0.43
46:BP:20:VAL:HG21	46:BP:32:TYR:HB2	2.01	0.43
1:CA:1047:G:OP2	1:CA:1105:U:P	2.77	0.43
1:CA:2161:C:H2'	1:CA:2162:G:O4'	2.19	0.43
1:CA:2340:G:O2'	1:CA:2341:G:H5'	2.19	0.43
1:CA:2469:A:OP2	1:CA:2476:A:C8	2.72	0.43
1:CA:273(F):U:C3'	1:CA:273(G):C:H5''	2.49	0.43
1:CA:317:G:N2	1:CA:318:C:C2	2.87	0.43
1:CA:642:G:N2	1:CA:645:C:OP2	2.52	0.43
1:CA:851:U:O2'	25:CZ:45:GLY:HA3	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CE:169:ASN:OD1	4:CE:201:THR:HG21	2.19	0.43
7:CH:94:TYR:CE2	7:CH:107:VAL:O	2.71	0.43
11:CL:61:ARG:CD	30:C5:13:ARG:HD2	2.49	0.43
13:CN:9:LYS:HG3	13:CN:10:LEU:N	2.34	0.43
13:CN:84:ALA:HB3	13:CN:85:PRO:HD3	2.01	0.43
14:CO:61:ASN:ND2	14:CO:64:GLU:HG3	2.34	0.43
15:CP:35:LYS:HB2	15:CP:35:LYS:HE3	1.92	0.43
15:CP:36:GLU:O	15:CP:39:ARG:HG3	2.18	0.43
16:CQ:28:ARG:CG	16:CQ:38:THR:OG1	2.67	0.43
18:CS:17:VAL:CG2	18:CS:76:VAL:HG21	2.49	0.43
19:CT:63:LYS:HD2	19:CT:72:LYS:CG	2.49	0.43
19:CT:71:GLY:O	19:CT:72:LYS:HG3	2.19	0.43
21:CV:100:VAL:HA	21:CV:101:PRO:HD3	1.90	0.43
31:DA:409:G:OP1	34:DD:24:GLU:N	2.51	0.43
31:DA:599:C:H2'	31:DA:600:C:H6	1.83	0.43
31:DA:722:A:O2'	31:DA:723:U:C6	2.66	0.43
31:DA:860:A:H2'	31:DA:861:G:O4'	2.18	0.43
31:DA:89:U:H6	31:DA:89:U:O5'	2.00	0.43
33:DC:129:ALA:HB3	33:DC:132:ARG:HB3	2.00	0.43
34:DD:187:ARG:NH1	34:DD:189:PRO:HA	2.34	0.43
34:DD:80:GLU:HA	34:DD:80:GLU:OE2	2.19	0.43
36:DF:33:TYR:CE1	36:DF:75:LEU:HA	2.54	0.43
37:DG:51:GLN:HG2	37:DG:56:GLN:O	2.19	0.43
38:DH:17:THR:HG22	38:DH:63:LEU:HD13	2.01	0.43
41:DK:32:ILE:HD11	41:DK:41:THR:HB	2.01	0.43
43:DM:70:LEU:O	43:DM:74:VAL:HG23	2.18	0.43
50:DT:64:ASP:HA	50:DT:67:ALA:HB3	2.01	0.43
30:A5:23:VAL:HA	30:A5:48:PHE:O	2.18	0.42
1:AA:102:G:OP1	1:AA:102:G:C4'	2.67	0.42
1:AA:1291:C:H2'	1:AA:1292:U:C6	2.54	0.42
1:AA:165:U:O2	1:AA:165:U:H3'	2.19	0.42
1:AA:2156:G:C6	1:AA:2157:G:C2	3.07	0.42
1:AA:2212:A:N3	1:AA:2215:G:C2	2.87	0.42
1:AA:2294:C:H2'	1:AA:2295:C:C6	2.53	0.42
1:AA:2370:G:C6	1:AA:2371:G:C6	3.07	0.42
1:AA:2815:C:O2'	27:A2:42:PRO:HB2	2.19	0.42
1:AA:363(E):G:C6	1:AA:363(F):U:C4	3.07	0.42
1:AA:433:C:C4	1:AA:434:U:O4	2.71	0.42
1:AA:729:G:C8	3:AD:208:LYS:HD2	2.53	0.42
1:AA:926:A:H2'	1:AA:928:G:C8	2.52	0.42
1:AA:963:U:H2'	1:AA:964:C:C6	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AD:37:LEU:O	3:AD:38:LYS:HG3	2.18	0.42
5:AF:114:VAL:HG21	5:AF:202:PHE:CE1	2.54	0.42
5:AF:65:TRP:HB2	5:AF:66:PRO:HD2	2.01	0.42
6:AG:148:MET:CE	6:AG:148:MET:HA	2.49	0.42
6:AG:50:ALA:O	6:AG:53:LEU:HB3	2.19	0.42
7:AH:121:ILE:N	7:AH:121:ILE:HD12	2.33	0.42
21:AV:23:LYS:HB3	21:AV:38:TYR:HD1	1.84	0.42
31:BA:1029:G:N1	31:BA:1031(A):A:OP2	2.52	0.42
31:BA:406:G:H5'	34:BD:5:ILE:HD12	1.99	0.42
38:BH:120:THR:OG1	38:BH:123:GLU:HG3	2.19	0.42
48:BR:45:SER:OG	48:BR:46:GLU:N	2.52	0.42
49:BS:63:THR:HG22	49:BS:66:MET:HE2	2.01	0.42
1:CA:1327:C:H2'	1:CA:1328:G:O4'	2.19	0.42
1:CA:1676:A:H2'	1:CA:1677:A:O4'	2.19	0.42
1:CA:1763:G:C2'	1:CA:1764:G:O5'	2.67	0.42
1:CA:1680:U:N3	1:CA:1764:G:OP2	2.52	0.42
1:CA:1786:A:H1'	1:CA:1938:A:N6	2.33	0.42
1:CA:1952:A:C5	1:CA:1953:A:C6	3.07	0.42
1:CA:2323:G:H2'	1:CA:2324:C:O4'	2.19	0.42
1:CA:2370:G:C6	1:CA:2371:G:C6	3.06	0.42
1:CA:2393:A:H5'	11:CL:62:LEU:HB3	2.01	0.42
1:CA:2563:U:H4'	10:CK:28:SER:HA	2.01	0.42
1:CA:2688:U:O2	1:CA:2688:U:H3'	2.19	0.42
1:CA:270(P):U:H4'	1:CA:270(Q):C:OP2	2.17	0.42
1:CA:280:C:N3	1:CA:361:G:N2	2.67	0.42
1:CA:451:C:H4'	5:CF:52:LYS:HZ2	1.84	0.42
1:CA:78:A:H2'	1:CA:79:G:C8	2.54	0.42
6:CG:50:ALA:O	6:CG:53:LEU:HB3	2.19	0.42
7:CH:67:LEU:HG	7:CH:71:LEU:HD21	2.01	0.42
8:CI:76:THR:HG22	8:CI:141:LYS:HB2	2.01	0.42
12:CM:68:ILE:HD13	12:CM:68:ILE:N	2.32	0.42
13:CN:87:TYR:OH	13:CN:116:LEU:HB3	2.18	0.42
14:CO:26:LEU:HG	14:CO:39:ILE:CD1	2.47	0.42
17:CR:78:LYS:HG3	17:CR:78:LYS:O	2.17	0.42
21:CV:16:SER:O	21:CV:20:ARG:HD2	2.19	0.42
24:CY:14:ARG:CA	24:CY:17:SER:HB2	2.40	0.42
24:CY:25:VAL:HG22	24:CY:60:LEU:HB3	2.01	0.42
31:DA:1072:G:C6	31:DA:1073:U:C4	3.08	0.42
31:DA:1123:A:O3'	40:DJ:36:GLY:HA3	2.19	0.42
31:DA:1195:C:H5''	31:DA:1196:U:P	2.59	0.42
31:DA:1260:C:H4'	31:DA:1284:C:H5'	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1347:G:C8	39:DI:107:ARG:HB3	2.54	0.42
31:DA:678:U:H2'	31:DA:679:C:H6	1.84	0.42
31:DA:698:G:C6	31:DA:699:C:C4	3.06	0.42
31:DA:570:G:H1'	31:DA:820:U:C4	2.54	0.42
33:DC:14:ILE:O	33:DC:16:ARG:N	2.52	0.42
35:DE:76:ILE:HD11	35:DE:142:LEU:HD13	2.01	0.42
35:DE:18:ARG:O	35:DE:18:ARG:HG3	2.19	0.42
38:DH:4:ASP:HA	38:DH:5:PRO:HD3	1.81	0.42
39:DI:114:TYR:C	39:DI:116:LYS:H	2.22	0.42
42:DL:69:ILE:HD12	42:DL:69:ILE:N	2.34	0.42
47:DQ:14:LYS:H	47:DQ:14:LYS:CD	2.32	0.42
49:DS:16:LEU:HA	49:DS:19:VAL:HG12	2.01	0.42
51:DU:2:GLY:C	51:DU:4:GLY:H	2.22	0.42
29:A4:3:ARG:HG3	29:A4:4:THR:H	1.83	0.42
1:AA:106:C:H2'	1:AA:107:C:C6	2.53	0.42
1:AA:1106:G:C2'	1:AA:1107:G:H5'	2.49	0.42
1:AA:1167:U:C2	1:AA:1183:G:N2	2.87	0.42
1:AA:1252:G:H21	16:AQ:33:ARG:NH1	2.16	0.42
1:AA:1607:C:H4'	1:AA:1608:A:C5'	2.49	0.42
1:AA:1919:A:H2'	1:AA:1919:A:N3	2.34	0.42
1:AA:1952:A:C5	1:AA:1953:A:C6	3.07	0.42
1:AA:2134:A:C6	1:AA:2157:G:O2'	2.72	0.42
1:AA:2116:G:H21	1:AA:2163:C:H41	1.64	0.42
1:AA:2287:A:N6	1:AA:2344:U:N3	2.57	0.42
1:AA:2308:G:O2'	1:AA:2309:A:P	2.77	0.42
1:AA:2473:U:HO2'	1:AA:2474:C:H5'	1.79	0.42
1:AA:864:G:H1'	1:AA:914:C:H42	1.84	0.42
5:AF:155:LEU:HD23	5:AF:186:ILE:HD13	2.01	0.42
10:AK:89:ASN:O	10:AK:91:LEU:HD22	2.18	0.42
11:AL:25:SER:O	11:AL:30:THR:HG23	2.18	0.42
2:AB:50:G:OP2	14:AO:62:LYS:HB2	2.20	0.42
15:AP:105:LEU:HG	15:AP:109:GLU:HB2	2.01	0.42
16:AQ:104:GLN:OE1	16:AQ:105:VAL:HG23	2.19	0.42
16:AQ:47:TYR:CD2	16:AQ:47:TYR:C	2.92	0.42
17:AR:47:VAL:HG12	17:AR:52:VAL:CA	2.49	0.42
31:BA:1072:G:C6	31:BA:1073:U:C4	3.07	0.42
31:BA:1195:C:H5''	31:BA:1196:U:P	2.59	0.42
31:BA:1314:C:H41	49:BS:4:SER:N	2.17	0.42
31:BA:978:A:C4	31:BA:1319:A:C2	3.06	0.42
31:BA:1330:U:O4	31:BA:1331:G:C6	2.72	0.42
31:BA:1473:A:O2'	31:BA:1474:G:H5'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:266:G:H4'	31:BA:267:C:C5	2.54	0.42
31:BA:448:A:H2'	31:BA:449:C:C6	2.54	0.42
32:BB:20:GLU:CD	32:BB:23:ARG:HH12	2.22	0.42
33:BC:12:LEU:HD12	33:BC:18:TRP:CZ2	2.54	0.42
40:BJ:32:ALA:HB3	40:BJ:76:ASN:HB2	2.00	0.42
40:BJ:6:ILE:HD13	40:BJ:23:ILE:HG21	2.01	0.42
41:BK:38:ASN:HA	41:BK:39:PRO:HD3	1.77	0.42
49:BS:6:LYS:N	49:BS:6:LYS:HD2	2.34	0.42
50:BT:14:LYS:HA	50:BT:17:ARG:HH21	1.84	0.42
50:BT:53:LEU:O	50:BT:57:ARG:HD3	2.19	0.42
1:CA:2815:C:O2	27:C2:43:HIS:HE1	2.03	0.42
28:C3:25:LYS:HD3	30:C5:34:TRP:HZ3	1.82	0.42
1:CA:1232:G:H2'	1:CA:1233:C:C6	2.54	0.42
1:CA:1607:C:H4'	1:CA:1608:A:C5'	2.50	0.42
1:CA:2475:C:H2'	1:CA:2477:C:OP1	2.18	0.42
1:CA:2516:G:C6	1:CA:2517:C:C4	3.06	0.42
1:CA:2643:G:C2'	1:CA:2644:G:H5'	2.49	0.42
1:CA:2776:A:H4'	1:CA:2777:G:H5''	2.01	0.42
1:CA:458:G:O2'	29:C4:39:ARG:HD3	2.19	0.42
1:CA:649:G:H2'	1:CA:650:C:O4'	2.20	0.42
6:CG:115:ARG:NH2	6:CG:136:ARG:H	2.12	0.42
6:CG:82:LEU:HD22	6:CG:87:PRO:CG	2.49	0.42
12:CM:22:LYS:C	12:CM:22:LYS:CD	2.87	0.42
12:CM:82:ARG:HA	12:CM:82:ARG:HD3	1.73	0.42
16:CQ:47:TYR:CD2	16:CQ:47:TYR:C	2.92	0.42
16:CQ:92:ARG:CG	16:CQ:92:ARG:NH1	2.80	0.42
17:CR:47:VAL:HG12	17:CR:52:VAL:CA	2.49	0.42
18:CS:9:TYR:HD2	18:CS:102:HIS:HE2	1.61	0.42
20:CU:42:VAL:HG21	20:CU:67:LEU:HG	2.00	0.42
20:CU:85:VAL:HA	20:CU:94:LYS:HA	2.01	0.42
24:CY:61:LEU:HD13	24:CY:61:LEU:HA	1.59	0.42
1:CA:78:A:H5'	24:CY:7:ARG:HH12	1.84	0.42
25:CZ:44:ARG:HE	25:CZ:44:ARG:HB2	1.42	0.42
31:DA:79:G:H1	31:DA:90:C:N4	2.15	0.42
33:DC:153:VAL:HG22	33:DC:157:ILE:HD11	2.01	0.42
34:DD:25:ARG:HH11	34:DD:25:ARG:HB3	1.83	0.42
39:DI:97:LYS:HA	39:DI:102:LEU:HD13	2.01	0.42
40:DJ:6:ILE:HD13	40:DJ:23:ILE:HG21	2.01	0.42
41:DK:32:ILE:HG13	41:DK:32:ILE:H	1.64	0.42
41:DK:87:THR:HG22	41:DK:87:THR:O	2.17	0.42
46:DP:81:ARG:HG2	46:DP:83:GLU:OE1	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DR:59:SER:H	48:DR:62:GLU:CD	2.21	0.42
31:DA:1320:C:N4	49:DS:36:ARG:HG3	2.35	0.42
50:DT:40:ALA:HB2	50:DT:55:ILE:CG2	2.49	0.42
52:DW:58:A:O2'	52:DW:60:U:C5	2.67	0.42
1:AA:1309:G:H3'	29:A4:9:ARG:NH1	2.34	0.42
1:AA:1666:G:C2'	1:AA:1667:G:H5'	2.49	0.42
1:AA:2258:C:H4'	1:AA:2259:G:OP2	2.20	0.42
1:AA:2475:C:H2'	1:AA:2477:C:OP1	2.19	0.42
1:AA:251:A:C5	1:AA:252:G:H1'	2.54	0.42
1:AA:2646:C:H2'	1:AA:2647:U:O4'	2.18	0.42
1:AA:603:A:C8	1:AA:655:A:H2	2.37	0.42
1:AA:839:U:H2'	1:AA:840:C:C6	2.54	0.42
6:AG:32:PRO:HB2	6:AG:172:LEU:HD22	2.00	0.42
7:AH:94:TYR:CE2	7:AH:107:VAL:O	2.72	0.42
8:AI:26:ALA:HB1	8:AI:31:LEU:CD2	2.49	0.42
9:AJ:65:TRP:O	16:AQ:64:ARG:HD3	2.18	0.42
12:AM:133:ARG:HB3	12:AM:134:ARG:H	1.44	0.42
14:AO:26:LEU:HG	14:AO:39:ILE:CD1	2.48	0.42
1:AA:2012:G:O3'	18:AS:96:ILE:HG13	2.19	0.42
20:AU:87:LYS:HE2	20:AU:87:LYS:HB3	1.82	0.42
20:AU:98:VAL:HG13	20:AU:99:CYS:N	2.31	0.42
24:AY:29:LYS:HG2	24:AY:57:ILE:HD13	2.01	0.42
2:AB:83:G:H4'	25:AZ:52:HIS:CG	2.54	0.42
31:BA:174:C:H2'	31:BA:175:C:H6	1.85	0.42
31:BA:370:C:O2'	31:BA:371:G:H5'	2.19	0.42
31:BA:617:G:N1	31:BA:618:C:C4	2.88	0.42
31:BA:780:A:C2	31:BA:803:G:N1	2.87	0.42
31:BA:979:C:C5	31:BA:980:C:C6	3.07	0.42
33:BC:140:ARG:O	33:BC:144:SER:HB2	2.19	0.42
33:BC:153:VAL:HG22	33:BC:157:ILE:HD11	2.01	0.42
38:BH:64:LYS:HD2	38:BH:79:VAL:HG11	2.01	0.42
40:BJ:35:SER:HB3	40:BJ:73:ASP:HB2	2.00	0.42
42:BL:109:VAL:HG23	42:BL:119:TYR:HB3	2.00	0.42
47:BQ:48:GLU:HG3	47:BQ:50:LYS:HG2	2.00	0.42
48:BR:58:LEU:HA	48:BR:62:GLU:OE1	2.20	0.42
6:AG:78:SER:HB3	52:BV:56:C:O2'	2.19	0.42
28:C3:44:ARG:O	28:C3:45:LYS:HG2	2.19	0.42
30:C5:11:LYS:HG3	30:C5:64:TYR:CZ	2.54	0.42
1:CA:1021:A:H2'	1:CA:1023:U:H5'	2.01	0.42
1:CA:1356:G:C5	1:CA:1357:U:C5	3.07	0.42
1:CA:195:A:C8	1:CA:197:A:OP1	2.73	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2127:G:C6	1:CA:2160:G:O6	2.72	0.42
1:CA:2415:G:H2'	1:CA:2416:C:C6	2.55	0.42
1:CA:2647:U:H2'	1:CA:2648:C:H6	1.83	0.42
1:CA:2678:C:H2'	1:CA:2679:A:O4'	2.19	0.42
1:CA:518:G:H2'	1:CA:519:U:C6	2.55	0.42
1:CA:646:A:H5'	1:CA:646:A:N3	2.35	0.42
2:CB:7:G:H4'	14:CO:29:PHE:HB2	2.02	0.42
3:CD:7:LYS:CG	3:CD:8:PRO:HD2	2.44	0.42
4:CE:55:ASN:O	4:CE:57:LYS:N	2.51	0.42
5:CF:65:TRP:HB2	5:CF:66:PRO:HD2	2.01	0.42
6:CG:148:MET:CE	6:CG:148:MET:HA	2.49	0.42
6:CG:16:ARG:N	6:CG:17:PRO:HD2	2.34	0.42
8:CI:109:ILE:HB	8:CI:130:TYR:CZ	2.54	0.42
11:CL:95:VAL:CG2	11:CL:125:VAL:HB	2.48	0.42
1:CA:637:A:OP1	11:CL:133:SER:HB2	2.18	0.42
20:CU:92:ASN:OD1	20:CU:93:GLY:N	2.52	0.42
21:CV:151:HIS:HD2	21:CV:168:GLU:O	2.02	0.42
21:CV:23:LYS:HB3	21:CV:38:TYR:HD1	1.85	0.42
24:CY:2:LYS:H	24:CY:2:LYS:HZ2	1.67	0.42
31:DA:130:A:C8	47:DQ:63:ARG:HG3	2.55	0.42
31:DA:1369:C:H2'	31:DA:1370:G:C8	2.54	0.42
31:DA:193:C:H2'	31:DA:194:C:C6	2.54	0.42
31:DA:374:A:C6	31:DA:375:U:C4	3.06	0.42
31:DA:88:C:C2'	31:DA:89:U:O4'	2.64	0.42
31:DA:926:G:H5''	31:DA:927:G:O5'	2.18	0.42
32:DB:16:HIS:HA	32:DB:210:SER:OG	2.20	0.42
34:DD:98:GLU:HA	34:DD:103:ASN:ND2	2.35	0.42
42:DL:27:LYS:HE2	42:DL:32:ARG:HH12	1.84	0.42
42:DL:34:GLY:HA3	42:DL:59:LEU:HD13	2.01	0.42
52:DV:59:A:C8	52:DV:60:U:C5	3.07	0.42
1:AA:1218:C:O2'	1:AA:1219:G:H5'	2.19	0.42
1:AA:2019:A:H62	27:A2:9:LYS:HZ3	1.67	0.42
1:AA:2161:C:H2'	1:AA:2162:G:O4'	2.19	0.42
1:AA:2415:G:C5	1:AA:2416:C:C5	3.07	0.42
1:AA:2592:G:C5	1:AA:2593:U:C5	3.07	0.42
1:AA:2688:U:O2	1:AA:2688:U:H3'	2.19	0.42
1:AA:699:A:H2'	1:AA:700:G:O4'	2.19	0.42
1:AA:786:C:O2'	1:AA:787:U:H5'	2.20	0.42
1:AA:848:G:C4	1:AA:933:A:H8	2.38	0.42
3:AD:206:LEU:HD23	3:AD:206:LEU:HA	1.78	0.42
5:AF:117:ARG:HA	5:AF:117:ARG:HD3	1.82	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:56:ALA:HB2	6:AG:153:ARG:HE	1.84	0.42
7:AH:20:ALA:HB3	7:AH:23:ARG:O	2.18	0.42
9:AJ:81:ASP:OD1	9:AJ:147:ALA:O	2.37	0.42
15:AP:9:LEU:HA	15:AP:9:LEU:HD23	1.76	0.42
20:AU:95:LYS:HA	20:AU:101:LYS:H	1.84	0.42
20:AU:95:LYS:HG2	20:AU:96:ILE:O	2.18	0.42
31:BA:1147:C:H6	31:BA:1147:C:O5'	2.02	0.42
31:BA:964:A:OP1	31:BA:1199:U:OP1	2.37	0.42
31:BA:442:C:O5'	31:BA:442:C:H6	2.02	0.42
31:BA:575:G:H4'	31:BA:576:G:C5'	2.48	0.42
31:BA:585:G:C6	31:BA:586:C:C4	3.07	0.42
34:BD:60:GLU:HG2	34:BD:202:LEU:HB2	2.02	0.42
37:BG:12:LEU:HD23	37:BG:12:LEU:H	1.84	0.42
40:BJ:32:ALA:CB	40:BJ:76:ASN:HB2	2.49	0.42
33:BC:12:LEU:HB3	44:BN:57:ARG:HG2	2.02	0.42
48:BR:44:LEU:HG	48:BR:48:GLY:HA2	2.01	0.42
48:BR:54:ARG:HD2	48:BR:54:ARG:H	1.84	0.42
1:CA:1051:G:H1	1:CA:1107:G:N2	2.06	0.42
1:CA:1204:A:O4'	1:CA:1204:A:N3	2.52	0.42
1:CA:1543:A:H2'	1:CA:1545:A:C4'	2.50	0.42
1:CA:1748:G:O2'	1:CA:1749:A:H5'	2.20	0.42
1:CA:1939:U:H3'	1:CA:1940:U:C5'	2.49	0.42
1:CA:2156:G:C6	1:CA:2157:G:C2	3.07	0.42
1:CA:2298:A:H2'	1:CA:2299:G:O4'	2.20	0.42
1:CA:2820:A:C4'	13:CN:5:LYS:HG2	2.49	0.42
1:CA:2839:G:H4'	13:CN:49:ASP:HB3	2.00	0.42
1:CA:896:A:H5''	21:CV:146:ILE:HG13	2.02	0.42
1:CA:910:A:C6	1:CA:911:A:C6	3.07	0.42
2:CB:83:G:H4'	25:CZ:52:HIS:CG	2.55	0.42
3:CD:53:PHE:HE1	3:CD:221:VAL:HG12	1.84	0.42
5:CF:140:LEU:CD2	5:CF:170:LEU:HD11	2.48	0.42
6:CG:32:PRO:HB3	6:CG:163:ALA:HB2	2.01	0.42
7:CH:121:ILE:N	7:CH:121:ILE:HD12	2.34	0.42
1:CA:389:G:O6	11:CL:71:VAL:HG23	2.19	0.42
2:CB:50:G:OP2	14:CO:62:LYS:HB2	2.19	0.42
20:CU:95:LYS:HA	20:CU:101:LYS:H	1.85	0.42
21:CV:24:LEU:C	21:CV:24:LEU:HD12	2.39	0.42
31:DA:1011:G:C6	31:DA:1012:U:C4	3.07	0.42
31:DA:1193:G:N2	31:DA:1194:U:C2	2.88	0.42
31:DA:1053:G:C6	31:DA:1199:U:C2	3.07	0.42
31:DA:1378:C:C5	31:DA:1379:G:N9	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1438:G:C4	31:DA:1439:C:C5	3.08	0.42
31:DA:145:G:H2'	31:DA:146:G:C8	2.54	0.42
31:DA:322:C:H5	31:DA:328:C:H5	1.67	0.42
31:DA:39:G:C2	31:DA:40:C:C6	3.06	0.42
31:DA:725:G:H2'	31:DA:726:C:H6	1.84	0.42
31:DA:978:A:C4	31:DA:1319:A:C2	3.08	0.42
33:DC:59:ARG:HA	33:DC:63:ASN:O	2.19	0.42
38:DH:111:ILE:H	38:DH:111:ILE:HD13	1.84	0.42
38:DH:117:GLY:O	38:DH:119:LEU:HD23	2.19	0.42
39:DI:118:LYS:C	39:DI:120:ARG:H	2.23	0.42
42:DL:109:VAL:HG23	42:DL:119:TYR:HB3	2.01	0.42
31:DA:523:A:N6	42:DL:91:ASP:HB2	2.34	0.42
45:DO:5:LYS:HD3	45:DO:6:GLU:N	2.34	0.42
48:DR:51:LEU:CD2	48:DR:55:ARG:HH21	2.30	0.42
31:DA:1314:C:H41	49:DS:4:SER:N	2.17	0.42
28:A3:25:LYS:HD3	30:A5:34:TRP:HZ3	1.80	0.42
30:A5:17:THR:HG23	30:A5:21:LYS:C	2.40	0.42
1:AA:1108:U:H2'	1:AA:1109:C:C6	2.54	0.42
1:AA:1590:U:H2'	1:AA:1591:G:H8	1.85	0.42
1:AA:2516:G:C4	1:AA:2569:G:N2	2.88	0.42
1:AA:2648:C:H2'	1:AA:2649:U:C6	2.55	0.42
1:AA:679:C:O2'	1:AA:680:G:H5'	2.20	0.42
1:AA:1812:A:O2'	3:AD:45:ASN:N	2.51	0.42
6:AG:111:LEU:O	6:AG:117:PHE:HD2	2.02	0.42
7:AH:86:GLU:CD	7:AH:86:GLU:N	2.72	0.42
9:AJ:151:HIS:HE1	9:AJ:157:ARG:HE	1.68	0.42
9:AJ:85:VAL:HG13	9:AJ:85:VAL:O	2.19	0.42
12:AM:24:GLY:HA2	12:AM:101:ARG:CA	2.47	0.42
15:AP:107:ASP:HB2	15:AP:108:ARG:H	1.60	0.42
16:AQ:92:ARG:O	16:AQ:94:ASN:N	2.53	0.42
17:AR:47:VAL:HG12	17:AR:52:VAL:CB	2.49	0.42
31:BA:1266:G:C5	31:BA:1268:A:OP2	2.73	0.42
31:BA:429:U:C1'	31:BA:430:A:H5''	2.50	0.42
31:BA:60:A:H4'	31:BA:61:G:O5'	2.19	0.42
31:BA:968:A:OP1	31:BA:968:A:H8	2.03	0.42
33:BC:188:LEU:HD22	33:BC:188:LEU:N	2.34	0.42
34:BD:3:ARG:HD3	34:BD:4:TYR:N	2.34	0.42
34:BD:93:PHE:O	34:BD:97:LEU:HG	2.19	0.42
39:BI:10:ARG:HA	39:BI:104:ARG:HH11	1.85	0.42
41:BK:69:ALA:O	41:BK:73:MET:HG2	2.19	0.42
43:BM:54:VAL:HG22	43:BM:57:ARG:HH21	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BT:38:LYS:HA	50:BT:41:VAL:HG22	2.01	0.42
30:C5:11:LYS:HE3	30:C5:64:TYR:CE2	2.53	0.42
1:CA:1048:A:C2	1:CA:1112:G:N3	2.86	0.42
1:CA:125:G:H4'	1:CA:126:A:OP2	2.20	0.42
1:CA:1331:A:O2'	1:CA:1332:G:H8	2.02	0.42
1:CA:1420:U:H6	1:CA:1420:U:H2'	1.35	0.42
1:CA:1569:A:H2'	1:CA:1570:A:O4'	2.19	0.42
1:CA:1693:U:H4'	1:CA:1694:C:OP2	2.20	0.42
1:CA:184:C:H2'	1:CA:185:U:C6	2.55	0.42
1:CA:1919:A:H2'	1:CA:1919:A:N3	2.34	0.42
1:CA:1268:A:C2	1:CA:2013:A:C4	3.08	0.42
1:CA:2243:U:H2'	1:CA:2244:U:C6	2.54	0.42
1:CA:2262:U:O2'	1:CA:2263:C:H5'	2.20	0.42
1:CA:2611:U:O2	27:C2:3:LYS:HG3	2.20	0.42
1:CA:747:U:C4	1:CA:2613:U:C4	3.08	0.42
1:CA:2784:C:H2'	1:CA:2785:C:C6	2.55	0.42
1:CA:363(E):G:C6	1:CA:363(F):U:C4	3.07	0.42
1:CA:943:U:OP2	11:CL:38:GLN:OE1	2.37	0.42
2:CB:11:C:OP1	22:CW:72:ARG:HD2	2.18	0.42
2:CB:52:A:C6	2:CB:53:A:C5	3.07	0.42
3:CD:18:VAL:HG22	3:CD:19:ALA:N	2.34	0.42
4:CE:181:LEU:HD11	15:CP:7:ILE:HG23	2.02	0.42
5:CF:117:ARG:HD3	5:CF:117:ARG:HA	1.80	0.42
5:CF:11:VAL:HA	5:CF:125:LEU:O	2.20	0.42
6:CG:55:LYS:O	6:CG:58:GLN:HG2	2.20	0.42
31:DA:730:G:C5	31:DA:731:G:H1'	2.55	0.42
31:DA:76:G:C6	31:DA:95:G:C6	3.08	0.42
33:DC:16:ARG:HH11	33:DC:16:ARG:HB2	1.84	0.42
33:DC:77:ILE:HA	33:DC:84:ILE:HB	2.02	0.42
34:DD:185:PHE:CE2	34:DD:189:PRO:HD3	2.54	0.42
35:DE:12:LEU:HD22	35:DE:12:LEU:C	2.39	0.42
37:DG:115:ARG:HA	37:DG:115:ARG:HD3	1.86	0.42
43:DM:2:ALA:HB1	43:DM:57:ARG:HH12	1.83	0.42
52:DV:40:C:O2'	52:DV:41:C:H5'	2.20	0.42
52:DV:51:C:O2	52:DV:64:G:C2	2.73	0.42
1:AA:2815:C:O2	27:A2:43:HIS:HE1	2.02	0.42
1:AA:1379:A:C4'	1:AA:1380:G:OP2	2.61	0.42
1:AA:1796:U:H2'	1:AA:1797:C:H6	1.83	0.42
1:AA:1798:U:H5'	3:AD:259:THR:OG1	2.20	0.42
1:AA:2078:C:H2'	1:AA:2079:U:C6	2.54	0.42
1:AA:221:A:H4'	1:AA:222:A:O5'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2685:G:O2'	1:AA:2726:U:H5	2.03	0.42
1:AA:2742:C:O2'	1:AA:2743:C:H5'	2.20	0.42
1:AA:303:U:C2	1:AA:304:G:C8	3.07	0.42
1:AA:445:C:O2'	1:AA:446:G:H5'	2.19	0.42
1:AA:719:C:H6	1:AA:719:C:O5'	2.02	0.42
3:AD:146:GLU:HB2	3:AD:189:CYS:HB3	2.00	0.42
5:AF:164:ARG:CD	5:AF:175:THR:HB	2.50	0.42
6:AG:55:LYS:O	6:AG:58:GLN:HG2	2.20	0.42
10:AK:22:ILE:H	10:AK:41:ALA:HA	1.85	0.42
13:AN:55:ALA:HB3	13:AN:79:LEU:HD13	2.01	0.42
1:AA:2820:A:O3'	13:AN:5:LYS:HE3	2.19	0.42
1:AA:994:C:OP2	16:AQ:50:ARG:HG2	2.20	0.42
21:AV:28:MET:O	21:AV:34:ASN:HA	2.20	0.42
22:AW:50:ASN:C	22:AW:62:LEU:HD12	2.40	0.42
31:BA:1105:A:O2'	31:BA:1106:G:H5'	2.20	0.42
31:BA:1154:G:O2'	31:BA:1155:G:H5'	2.19	0.42
31:BA:1158:C:H3'	31:BA:1158:C:O2	2.19	0.42
31:BA:937:A:H2	31:BA:1377:A:HO2'	1.66	0.42
31:BA:39:G:C2	31:BA:40:C:C6	3.07	0.42
31:BA:428:G:O4'	31:BA:430:A:C8	2.73	0.42
31:BA:56:U:H4'	8:CI:82:ARG:CZ	2.49	0.42
35:BE:43:LEU:CD1	35:BE:132:ALA:HB1	2.45	0.42
35:BE:15:ARG:HD2	35:BE:26:PHE:CD2	2.53	0.42
31:BA:1377:A:H2'	37:BG:2:ALA:HB2	2.00	0.42
38:BH:117:GLY:O	38:BH:119:LEU:HD23	2.20	0.42
38:BH:132:GLU:HG2	38:BH:134:ILE:HD13	2.00	0.42
39:BI:46:ALA:HB1	39:BI:77:ILE:HB	2.01	0.42
40:BJ:98:ILE:H	40:BJ:98:ILE:HD12	1.85	0.42
40:BJ:98:ILE:HG22	40:BJ:99:LYS:N	2.35	0.42
42:BL:27:LYS:HE2	42:BL:32:ARG:HH12	1.84	0.42
49:BS:10:PHE:CD1	49:BS:10:PHE:N	2.88	0.42
1:CA:2058:A:N6	1:CA:2059:A:N6	2.67	0.42
1:CA:2308:G:O2'	1:CA:2309:A:P	2.77	0.42
1:CA:2395:C:O2'	23:CX:32:LYS:HG3	2.19	0.42
1:CA:2607:G:H2'	1:CA:2608:G:O4'	2.20	0.42
1:CA:2643:G:H2'	1:CA:2644:G:O4'	2.20	0.42
1:CA:2773:C:H2'	1:CA:2774:C:C6	2.53	0.42
1:CA:2787:C:H1'	4:CE:62:PRO:CG	2.50	0.42
1:CA:664:C:H2'	1:CA:665:C:H6	1.84	0.42
1:CA:673:C:H2'	1:CA:674:G:H5'	2.01	0.42
3:CD:103:ARG:CG	3:CD:103:ARG:NH1	2.69	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:2572:A:C4	4:CE:144:ARG:NH2	2.88	0.42
7:CH:127:GLU:CD	7:CH:128:PRO:HD2	2.40	0.42
7:CH:48:GLY:O	7:CH:49:VAL:HG13	2.19	0.42
10:CK:22:ILE:HA	10:CK:22:ILE:HD12	1.70	0.42
14:CO:12:PHE:HD1	14:CO:12:PHE:C	2.21	0.42
15:CP:119:LYS:CA	31:DA:1443:G:H22	2.32	0.42
15:CP:61:PHE:CD2	15:CP:78:LEU:HD23	2.54	0.42
16:CQ:61:TRP:CD2	16:CQ:94:ASN:HA	2.55	0.42
17:CR:47:VAL:HG12	17:CR:52:VAL:N	2.35	0.42
20:CU:90:LEU:HD23	20:CU:90:LEU:N	2.28	0.42
21:CV:176:PRO:HA	21:CV:177:PRO:HD3	1.82	0.42
21:CV:24:LEU:HD11	21:CV:86:VAL:CG2	2.46	0.42
21:CV:30:ASN:O	21:CV:32:HIS:N	2.52	0.42
24:CY:17:SER:HB3	24:CY:18:PRO:CD	2.43	0.42
24:CY:9:GLN:HG2	24:CY:9:GLN:O	2.20	0.42
31:DA:191(E):G:H2'	31:DA:191(F):U:C6	2.55	0.42
31:DA:544:G:H2'	31:DA:545:C:H6	1.84	0.42
31:DA:995:C:H1'	44:DN:4:LYS:CE	2.48	0.42
32:DB:88:ALA:CB	32:DB:222:ILE:HD11	2.50	0.42
35:DE:47:LYS:HD3	35:DE:47:LYS:N	2.34	0.42
35:DE:53:LEU:O	35:DE:57:LYS:HG3	2.19	0.42
38:DH:13:ILE:O	38:DH:17:THR:HG23	2.19	0.42
50:DT:73:HIS:O	50:DT:76:ALA:HB3	2.20	0.42
1:AA:1024:G:C6	1:AA:1025:G:C6	3.07	0.42
1:AA:1232:G:H2'	1:AA:1233:C:C6	2.55	0.42
1:AA:1569:A:H2'	1:AA:1570:A:O4'	2.20	0.42
1:AA:2023:G:H4'	1:AA:2617:C:O3'	2.20	0.42
1:AA:2127:G:C6	1:AA:2160:G:O6	2.72	0.42
1:AA:2480:C:N4	1:AA:2481:G:C6	2.88	0.42
1:AA:610:C:H2'	1:AA:611:C:H6	1.84	0.42
1:AA:612:G:C2	1:AA:617:G:C6	3.07	0.42
1:AA:78:A:H2'	1:AA:79:G:H8	1.85	0.42
1:AA:863:A:OP1	12:AM:21:THR:HB	2.20	0.42
7:AH:13:LYS:CD	7:AH:14:GLY:N	2.83	0.42
7:AH:17:VAL:HG21	7:AH:50:VAL:CG2	2.49	0.42
12:AM:39:PRO:HB3	12:AM:99:PRO:HD3	2.01	0.42
13:AN:10:LEU:C	13:AN:10:LEU:HD12	2.39	0.42
14:AO:61:ASN:ND2	14:AO:64:GLU:HG3	2.35	0.42
15:AP:26:ASP:HB2	15:AP:90:GLN:O	2.19	0.42
20:AU:73:ARG:HH21	20:AU:82:PRO:HD3	1.83	0.42
21:AV:24:LEU:C	21:AV:24:LEU:HD12	2.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AW:53:MET:HE1	22:AW:57:PHE:CD1	2.55	0.42
24:AY:9:GLN:O	24:AY:13:ALA:N	2.53	0.42
24:AY:17:SER:HB3	24:AY:18:PRO:CD	2.45	0.42
24:AY:7:ARG:HD3	24:AY:7:ARG:C	2.39	0.42
31:BA:1323:G:H4'	31:BA:1361(B):C:C2	2.54	0.42
31:BA:298:A:C6	31:BA:299:G:C2	3.07	0.42
31:BA:778:G:H2'	31:BA:779:C:O4'	2.18	0.42
34:BD:100:ARG:HG2	34:BD:102:ASP:OD1	2.20	0.42
39:BI:11:LYS:H	39:BI:104:ARG:NH1	2.18	0.42
41:BK:121:PRO:O	41:BK:122:LYS:O	2.37	0.42
43:BM:29:ARG:HD3	43:BM:64:TRP:CH2	2.54	0.42
52:BV:51:C:O2	52:BV:64:G:C2	2.73	0.42
52:BW:5:G:HO2'	52:BW:6:G:P	2.42	0.42
29:C4:42:LEU:HA	29:C4:42:LEU:HD23	1.80	0.42
1:CA:1167:U:C2	1:CA:1183:G:N2	2.87	0.42
1:CA:1654:A:C2	4:CE:113:PHE:CD1	3.08	0.42
1:CA:164:U:C5	1:CA:165:U:C4	3.08	0.42
1:CA:2748:A:C6	1:CA:2749:A:C5	3.08	0.42
1:CA:2790:A:H2'	1:CA:2791:C:C5'	2.41	0.42
1:CA:673:C:C2'	1:CA:674:G:H5'	2.50	0.42
2:CB:42:C:C4	6:CG:91:ARG:NH2	2.87	0.42
3:CD:197:GLY:O	3:CD:198:ASN:C	2.58	0.42
5:CF:122:LYS:HE2	5:CF:190:GLU:O	2.19	0.42
5:CF:164:ARG:CD	5:CF:175:THR:HB	2.50	0.42
6:CG:128:ARG:O	6:CG:129:GLY:C	2.58	0.42
6:CG:131:TYR:HB3	6:CG:159:VAL:CG1	2.50	0.42
11:CL:6:LEU:CG	11:CL:8:PRO:HD2	2.50	0.42
12:CM:74:TYR:CD2	12:CM:91:GLU:HB2	2.42	0.42
19:CT:27:THR:HB	19:CT:80:ILE:HG22	2.02	0.42
23:CX:9:GLY:O	23:CX:13:ILE:HD13	2.20	0.42
31:DA:1227:A:OP2	43:DM:111:LYS:HE3	2.19	0.42
31:DA:1292:U:H2'	31:DA:1293:G:C8	2.54	0.42
31:DA:1316:G:N1	31:DA:1319:A:OP2	2.53	0.42
31:DA:564:C:C6	47:DQ:31:LEU:HD11	2.55	0.42
31:DA:590:C:H2'	31:DA:591:U:H6	1.84	0.42
31:DA:617:G:N1	31:DA:618:C:C4	2.88	0.42
31:DA:655:A:C2	31:DA:754:C:N4	2.88	0.42
31:DA:979:C:C5	31:DA:980:C:C6	3.08	0.42
26:A1:38:ALA:O	26:A1:49:GLU:HG2	2.20	0.42
1:AA:1144:G:H2'	1:AA:1145:C:C6	2.54	0.42
1:AA:1477:A:C4	1:AA:1517:G:N2	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1763:G:C2'	1:AA:1764:G:O5'	2.67	0.42
1:AA:2039:C:H2'	1:AA:2040:C:C6	2.49	0.42
1:AA:2543:G:H2'	1:AA:2544:G:H8	1.82	0.42
1:AA:2869:G:H2'	1:AA:2870:C:O4'	2.19	0.42
1:AA:322:A:O4'	1:AA:340:A:H1'	2.20	0.42
1:AA:422:A:C6	1:AA:423:A:C6	3.07	0.42
1:AA:861:A:H2'	1:AA:862:G:O4'	2.20	0.42
1:AA:995:C:OP2	16:AQ:54:LYS:HE3	2.20	0.42
3:AD:27:THR:HG21	3:AD:83:GLU:HG2	2.02	0.42
7:AH:101:ARG:NE	7:AH:101:ARG:H	2.17	0.42
7:AH:127:GLU:CD	7:AH:128:PRO:HD2	2.39	0.42
8:AI:69:LYS:HG3	8:AI:70:GLU:N	2.35	0.42
10:AK:64:ARG:HG2	10:AK:79:PHE:CD1	2.54	0.42
15:AP:115:ARG:N	15:AP:115:ARG:HD3	2.30	0.42
21:AV:151:HIS:HD2	21:AV:168:GLU:O	2.02	0.42
24:AY:49:LYS:HD2	24:AY:49:LYS:H	1.83	0.42
31:BA:1151:A:O2'	31:BA:1152:A:O5'	2.38	0.42
31:BA:1255:G:C2	31:BA:1283:G:C2	3.08	0.42
31:BA:1286:A:H3'	31:BA:1287:A:C5'	2.48	0.42
31:BA:1347:G:C8	39:BI:107:ARG:HB3	2.55	0.42
31:BA:209:U:H4'	31:BA:216:G:C2	2.55	0.42
31:BA:55:A:N1	8:CI:89:TYR:CG	2.88	0.42
31:BA:564:C:C6	47:BQ:31:LEU:HD11	2.55	0.42
31:BA:599:C:H2'	31:BA:600:C:H6	1.84	0.42
31:BA:624:C:H2'	31:BA:625:G:C8	2.50	0.42
31:BA:632:A:C2'	31:BA:633:G:H5'	2.50	0.42
35:BE:53:LEU:O	35:BE:57:LYS:HG3	2.20	0.42
37:BG:75:VAL:O	37:BG:75:VAL:HG23	2.20	0.42
39:BI:114:TYR:C	39:BI:116:LYS:H	2.22	0.42
31:BA:706:A:O2'	41:BK:29:ILE:HD11	2.19	0.42
50:BT:64:ASP:HA	50:BT:67:ALA:HB3	2.02	0.42
28:C3:44:ARG:HB3	28:C3:45:LYS:H	1.57	0.42
29:C4:13:ALA:O	29:C4:17:GLY:HA3	2.20	0.42
1:CA:1024:G:C6	1:CA:1025:G:C6	3.08	0.42
1:CA:1106:G:C2'	1:CA:1107:G:H5'	2.49	0.42
1:CA:1614:A:N1	18:CS:93:ALA:CB	2.69	0.42
1:CA:2079:U:H2'	1:CA:2080:G:O4'	2.20	0.42
1:CA:2219:G:C2'	1:CA:2224:G:H5'	2.49	0.42
1:CA:2415:G:C5	1:CA:2416:C:C5	3.07	0.42
1:CA:2816:C:O2	1:CA:2883:A:O2'	2.37	0.42
1:CA:374:A:C2	1:CA:401:A:C4	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:433:C:C4	1:CA:434:U:O4	2.73	0.42
1:CA:994:C:OP2	16:CQ:50:ARG:HG2	2.20	0.42
2:CB:35:U:O2'	2:CB:36:C:H5'	2.19	0.42
3:CD:130:ALA:HB2	3:CD:192:THR:HB	2.01	0.42
4:CE:196:VAL:CG2	4:CE:197:ILE:N	2.82	0.42
5:CF:155:LEU:HD23	5:CF:186:ILE:HD13	2.01	0.42
8:CI:15:VAL:HG12	8:CI:16:GLY:N	2.33	0.42
8:CI:9:LEU:CD1	8:CI:12:LEU:HD23	2.50	0.42
9:CJ:143:LEU:CD1	9:CJ:145:VAL:HG23	2.50	0.42
9:CJ:151:HIS:HE1	9:CJ:157:ARG:HE	1.68	0.42
9:CJ:53:ILE:HG22	9:CJ:57:LEU:CD2	2.50	0.42
11:CL:32:THR:O	11:CL:33:ARG:O	2.37	0.42
11:CL:75:ILE:HD12	11:CL:75:ILE:H	1.84	0.42
12:CM:104:PHE:N	12:CM:104:PHE:CD1	2.87	0.42
12:CM:54:MET:O	12:CM:57:HIS:HB3	2.19	0.42
12:CM:72:LYS:HA	12:CM:73:PRO:HD3	1.87	0.42
17:CR:47:VAL:HG12	17:CR:52:VAL:CB	2.50	0.42
19:CT:38:GLU:O	19:CT:42:ALA:HB2	2.20	0.42
22:CW:53:MET:HB3	22:CW:59:LEU:CD2	2.46	0.42
24:CY:12:GLU:C	24:CY:14:ARG:H	2.22	0.42
31:DA:1309:G:C6	31:DA:1329:A:C2	3.07	0.42
31:DA:1330:U:O4	31:DA:1331:G:C6	2.72	0.42
31:DA:575:G:H4'	31:DA:576:G:C5'	2.50	0.42
33:DC:188:LEU:HD22	33:DC:188:LEU:N	2.35	0.42
39:DI:83:ARG:HA	39:DI:86:VAL:CG1	2.49	0.42
42:DL:57:VAL:O	42:DL:64:GLU:HA	2.20	0.42
48:DR:53:ARG:C	48:DR:55:ARG:H	2.23	0.42
49:DS:10:PHE:CD1	49:DS:10:PHE:N	2.88	0.42
49:DS:63:THR:HG22	49:DS:66:MET:CE	2.50	0.42
52:DW:17(A):U:O2'	52:DW:18:G:O5'	2.38	0.42
1:AA:1517:G:H2'	1:AA:1518:C:H6	1.84	0.42
1:AA:17:G:H2'	1:AA:18:C:H6	1.83	0.42
1:AA:2068:U:C2	1:AA:2430:A:H2	2.37	0.42
1:AA:2467:C:H2'	1:AA:2468:G:O4'	2.20	0.42
1:AA:2839:G:H4'	13:AN:49:ASP:CB	2.50	0.42
1:AA:2862:G:H2'	1:AA:2863:C:H6	1.84	0.42
1:AA:336:C:H5''	20:AU:7:VAL:HG11	2.01	0.42
1:AA:41:C:H2'	1:AA:43:G:O4'	2.20	0.42
1:AA:666:G:OP1	11:AL:47:ASP:O	2.38	0.42
1:AA:953:A:O2'	1:AA:954:G:H5'	2.20	0.42
3:AD:20:ASP:C	3:AD:22:SER:H	2.23	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:443:A:C5	5:AF:45:ARG:HD2	2.55	0.42
6:AG:108:ASN:O	26:A1:62:CYS:HB2	2.20	0.42
6:AG:64:THR:HG23	6:AG:66:GLN:H	1.85	0.42
6:AG:77:ILE:HG22	6:AG:80:PHE:H	1.84	0.42
6:AG:81:LYS:HD3	6:AG:81:LYS:N	2.34	0.42
7:AH:127:GLU:C	7:AH:129:THR:H	2.23	0.42
9:AJ:33:GLU:OE1	9:AJ:33:GLU:HA	2.20	0.42
9:AJ:88:LYS:O	9:AJ:89:LYS:C	2.58	0.42
13:AN:13:HIS:CE1	13:AN:16:HIS:H	2.37	0.42
19:AT:56:THR:HG22	19:AT:79:ALA:HB2	2.02	0.42
20:AU:59:GLY:C	20:AU:61:ILE:H	2.22	0.42
20:AU:13:VAL:HG21	20:AU:72:VAL:HB	2.02	0.42
22:AW:71:ASP:O	22:AW:72:ARG:HG2	2.20	0.42
31:BA:1117:G:O5'	39:BI:104:ARG:NH2	2.53	0.42
31:BA:1234:C:O2'	31:BA:1235:U:H5'	2.20	0.42
31:BA:1292:U:H2'	31:BA:1293:G:C8	2.54	0.42
31:BA:69:G:H2'	31:BA:73:G:H8	1.85	0.42
35:BE:142:LEU:O	35:BE:143:ARG:HD3	2.20	0.42
39:BI:88:TYR:HA	39:BI:88:TYR:HD2	1.73	0.42
50:BT:40:ALA:HB2	50:BT:55:ILE:HG22	2.01	0.42
52:BV:16:C:O2	52:BV:60:U:H4'	2.20	0.42
30:C5:32:LEU:HD23	30:C5:33:ASN:N	2.34	0.42
30:C5:61:LEU:O	30:C5:62:LEU:CB	2.67	0.42
1:CA:1819:A:H5''	3:CD:161:THR:HG21	2.02	0.42
1:CA:2011:U:H2'	1:CA:2012:G:O4'	2.20	0.42
1:CA:2129:C:O2	1:CA:2160:G:C2	2.73	0.42
1:CA:2261:C:C2	1:CA:2280:G:C2	3.07	0.42
1:CA:2777:G:H5''	1:CA:2778:A:OP1	2.20	0.42
1:CA:2839:G:H4'	13:CN:49:ASP:CB	2.50	0.42
1:CA:389:G:N1	11:CL:70:GLN:HG3	2.35	0.42
1:CA:775:G:H4'	1:CA:776:G:O5'	2.19	0.42
1:CA:883:G:H22	1:CA:894:C:H1'	1.85	0.42
2:CB:5:C:C2	2:CB:116:G:N2	2.88	0.42
3:CD:77:ALA:CB	3:CD:97:TYR:HA	2.50	0.42
4:CE:183:LEU:HD12	4:CE:183:LEU:N	2.34	0.42
4:CE:3:GLY:O	4:CE:4:ILE:HB	2.20	0.42
6:CG:73:ALA:H	6:CG:85:GLY:HA2	1.85	0.42
7:CH:137:ASP:HB3	7:CH:140:LYS:CG	2.49	0.42
11:CL:84:ASN:HB3	11:CL:117:GLU:O	2.20	0.42
1:CA:663:G:H5''	11:CL:21:ARG:HD2	2.02	0.42
1:CA:390:A:C6	11:CL:71:VAL:CG2	3.03	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CN:28:LEU:HD12	13:CN:48:VAL:HG21	2.02	0.42
2:CB:8:U:H5''	14:CO:15:ARG:NH2	2.35	0.42
17:CR:1:MET:HB3	17:CR:42:GLY:HA3	2.01	0.42
18:CS:18:ARG:NH1	18:CS:76:VAL:O	2.53	0.42
31:DA:1077:G:C6	31:DA:1081:G:C6	3.08	0.42
31:DA:1151:A:C2	31:DA:1152:A:C5	3.07	0.42
31:DA:1153:C:N3	31:DA:1154:G:C8	2.88	0.42
31:DA:1353:G:H2'	31:DA:1354:C:C6	2.55	0.42
31:DA:540:G:H2'	31:DA:541:G:O4'	2.20	0.42
31:DA:984:C:H2'	31:DA:985:C:H6	1.84	0.42
34:DD:70:ILE:CD1	34:DD:100:ARG:HH12	2.33	0.42
34:DD:61:LYS:HE2	34:DD:62:GLN:HG2	2.02	0.42
31:DA:677:U:H1'	41:DK:119:CYS:SG	2.60	0.42
41:DK:13:GLN:O	41:DK:14:VAL:HG13	2.19	0.42
41:DK:69:ALA:O	41:DK:73:MET:HG2	2.20	0.42
47:DQ:50:LYS:HG3	47:DQ:51:TYR:CD1	2.55	0.42
48:DR:22:VAL:HG23	48:DR:55:ARG:O	2.19	0.42
48:DR:58:LEU:HA	48:DR:62:GLU:OE1	2.20	0.42
52:DV:16:C:O2	52:DV:60:U:H4'	2.20	0.42
30:A5:29:LYS:NZ	30:A5:45:GLY:HA2	2.35	0.42
1:AA:110:G:O2'	1:AA:111:A:H5'	2.19	0.42
1:AA:1414:G:O2'	1:AA:1415:U:H5'	2.20	0.42
1:AA:1798:U:H5''	3:AD:260:ARG:HB2	2.01	0.42
1:AA:1840:G:H1	1:AA:1902:C:N4	2.15	0.42
1:AA:2113:U:H2'	1:AA:2114:A:O4'	2.20	0.42
1:AA:2134:A:C2	1:AA:2159:G:H4'	2.55	0.42
1:AA:2129:C:O2	1:AA:2160:G:C2	2.73	0.42
1:AA:2164:C:C6	1:AA:2165:G:H5'	2.54	0.42
1:AA:69:C:O2'	1:AA:70:G:H5'	2.20	0.42
2:AB:7:G:H4'	14:AO:29:PHE:CG	2.55	0.42
4:AE:35:GLN:HB3	4:AE:48:GLN:HE21	1.85	0.42
1:AA:322:A:C3'	5:AF:169:ASN:HD21	2.33	0.42
6:AG:106:LEU:HD12	6:AG:110:ALA:HB3	2.01	0.42
6:AG:90:LEU:CD2	6:AG:90:LEU:H	2.30	0.42
8:AI:33:ARG:HB3	8:AI:35:LEU:HD23	2.01	0.42
9:AJ:61:HIS:O	16:AQ:67:ALA:HB1	2.20	0.42
9:AJ:92:GLN:O	9:AJ:93:LYS:O	2.38	0.42
13:AN:104:ARG:HH12	13:AN:109:ALA:HB3	1.82	0.42
14:AO:25:ARG:O	14:AO:39:ILE:HA	2.19	0.42
16:AQ:106:PHE:O	16:AQ:110:VAL:HG23	2.19	0.42
16:AQ:95:LEU:HD13	17:AR:4:ILE:HG23	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AR:13:ARG:HD3	17:AR:13:ARG:C	2.40	0.42
17:AR:39:LEU:CD1	17:AR:51:VAL:HA	2.50	0.42
19:AT:57:LEU:CD1	19:AT:78:LYS:HB3	2.50	0.42
20:AU:85:VAL:HA	20:AU:94:LYS:HA	2.02	0.42
21:AV:103:ARG:HD2	21:AV:136:PHE:CE1	2.55	0.42
23:AX:37:ILE:CG1	23:AX:38:SER:N	2.81	0.42
23:AX:56:GLN:HE22	23:AX:86:SER:H	1.67	0.42
24:AY:15:LYS:C	24:AY:16:LEU:HD22	2.39	0.42
24:AY:2:LYS:NZ	24:AY:2:LYS:H	2.18	0.42
31:BA:1068:G:N2	31:BA:1191:A:N3	2.64	0.42
31:BA:88:C:C2'	31:BA:89:U:O4'	2.64	0.42
32:BB:154:LEU:HD22	32:BB:155:LEU:H	1.85	0.42
33:BC:11:ARG:O	33:BC:14:ILE:O	2.37	0.42
33:BC:95:THR:CG2	33:BC:97:LYS:HG2	2.50	0.42
34:BD:162:LEU:HA	34:BD:162:LEU:HD22	1.75	0.42
34:BD:13:ARG:NH2	34:BD:40:PRO:HA	2.35	0.42
35:BE:79:GLU:O	35:BE:80:ILE:HG23	2.20	0.42
31:BA:710:G:OP1	36:BF:54:LYS:HE3	2.20	0.42
37:BG:51:GLN:HG2	37:BG:56:GLN:O	2.19	0.42
39:BI:5:TYR:HA	39:BI:17:VAL:O	2.20	0.42
40:BJ:67:THR:HG23	40:BJ:67:THR:O	2.20	0.42
42:BL:6:ILE:CD1	42:BL:7:ASN:H	2.33	0.42
44:BN:26:ARG:HH12	44:BN:47:LEU:HD21	1.84	0.42
31:BA:624:C:O3'	46:BP:10:GLY:HA2	2.20	0.42
48:BR:53:ARG:C	48:BR:55:ARG:H	2.23	0.42
52:BV:59:A:C8	52:BV:60:U:C5	3.08	0.42
26:C1:38:ALA:O	26:C1:49:GLU:HG2	2.19	0.42
1:CA:1590:U:H2'	1:CA:1591:G:H8	1.85	0.42
1:CA:2041:U:H2'	1:CA:2042:A:C8	2.55	0.42
1:CA:2050:C:N4	1:CA:2051:A:C6	2.88	0.42
1:CA:251:A:C5	1:CA:252:G:H1'	2.54	0.42
1:CA:2808:U:H2'	1:CA:2809:A:C5'	2.50	0.42
1:CA:358:U:C2'	1:CA:359:A:H5'	2.49	0.42
1:CA:71:A:H2	19:CT:31:HIS:CE1	2.38	0.42
1:CA:776:G:OP2	1:CA:776:G:H8	2.03	0.42
1:CA:865:C:H4'	1:CA:866:A:OP1	2.20	0.42
1:CA:882:G:N2	1:CA:883:G:C6	2.88	0.42
6:CG:90:LEU:H	6:CG:90:LEU:CD2	2.29	0.42
7:CH:17:VAL:HG21	7:CH:50:VAL:CG2	2.49	0.42
8:CI:9:LEU:HD11	8:CI:12:LEU:HD23	2.02	0.42
11:CL:47:ASP:OD1	11:CL:49:ARG:N	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CV:30:ASN:HD22	21:CV:30:ASN:C	2.23	0.42
24:CY:46:GLN:N	24:CY:49:LYS:HE2	2.33	0.42
31:DA:1270:C:H2'	31:DA:1271:G:H8	1.84	0.42
31:DA:174:C:H2'	31:DA:175:C:H6	1.85	0.42
31:DA:602:A:C2	31:DA:637:G:C2	3.07	0.42
31:DA:685:G:C2	31:DA:686:U:C4	3.08	0.42
31:DA:968:A:OP1	31:DA:968:A:H8	2.02	0.42
32:DB:32:ILE:HG21	32:DB:40:HIS:HD2	1.85	0.42
34:DD:102:ASP:OD2	34:DD:136:PRO:O	2.37	0.42
31:DA:1372:U:OP1	39:DI:72:GLY:N	2.52	0.42
39:DI:46:ALA:HB1	39:DI:77:ILE:HB	2.01	0.42
1:AA:1047:G:H4'	1:AA:1048:A:O4'	2.20	0.41
1:AA:1107:G:H2'	1:AA:1107:G:N3	2.35	0.41
1:AA:1331:A:O2'	1:AA:1332:G:H8	2.02	0.41
1:AA:1546:A:C2'	1:AA:1546(B):C:H5'	2.50	0.41
1:AA:1693:U:H4'	1:AA:1694:C:OP2	2.20	0.41
1:AA:1767:C:C2'	1:AA:1768:U:H5'	2.50	0.41
1:AA:1902:C:H5''	3:AD:246:PRO:HD3	2.02	0.41
1:AA:1971:A:N3	3:AD:241:PRO:HD3	2.35	0.41
1:AA:2287:A:O2'	1:AA:2288:A:H5''	2.20	0.41
1:AA:2784:C:H2'	1:AA:2785:C:C6	2.55	0.41
1:AA:2808:U:H2'	1:AA:2809:A:C5'	2.50	0.41
1:AA:280:C:N3	1:AA:361:G:N2	2.68	0.41
1:AA:882:G:N2	1:AA:883:G:C6	2.88	0.41
1:AA:979:G:C4	1:AA:982:C:N4	2.88	0.41
2:AB:88:C:H2'	2:AB:89(A):G:O4'	2.20	0.41
3:AD:77:ALA:HB2	3:AD:97:TYR:HA	2.01	0.41
4:AE:188:VAL:HG23	4:AE:189:PRO:HD2	2.02	0.41
6:AG:32:PRO:HB3	6:AG:163:ALA:HB2	2.02	0.41
7:AH:20:ALA:HB1	7:AH:21:PRO:CD	2.49	0.41
8:AI:76:THR:HG22	8:AI:141:LYS:HB2	2.01	0.41
11:AL:6:LEU:CG	11:AL:8:PRO:HD2	2.50	0.41
15:AP:112:ARG:H	15:AP:112:ARG:HG3	1.69	0.41
19:AT:38:GLU:O	19:AT:42:ALA:HB2	2.19	0.41
20:AU:13:VAL:HG22	20:AU:14:LEU:N	2.35	0.41
31:BA:1117:G:H4'	39:BI:104:ARG:NH2	2.23	0.41
31:BA:977:A:C8	31:BA:1223:C:C4	3.05	0.41
31:BA:1341:U:H6	31:BA:1341:U:H3'	1.85	0.41
31:BA:140:A:H2'	31:BA:141:A:H8	1.85	0.41
31:BA:255:G:H2'	31:BA:256:U:C6	2.55	0.41
31:BA:270:A:H2'	31:BA:271:C:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:406:G:H2'	31:BA:407:G:C8	2.54	0.41
31:BA:725:G:H2'	31:BA:726:C:H6	1.85	0.41
31:BA:976:G:N7	31:BA:1358:U:C2	2.87	0.41
31:BA:994:A:H2'	31:BA:994:A:N3	2.35	0.41
32:BB:113:HIS:O	32:BB:117:GLU:HG3	2.20	0.41
32:BB:32:ILE:HG21	32:BB:40:HIS:HD2	1.85	0.41
33:BC:11:ARG:HG2	33:BC:11:ARG:HH11	1.85	0.41
33:BC:34:LEU:HD23	33:BC:34:LEU:O	2.20	0.41
38:BH:103:VAL:HG12	38:BH:108:GLY:HA3	2.02	0.41
39:BI:16:ARG:HB2	39:BI:64:THR:CG2	2.45	0.41
47:BQ:14:LYS:H	47:BQ:14:LYS:CD	2.30	0.41
47:BQ:50:LYS:HG3	47:BQ:51:TYR:CD1	2.55	0.41
50:BT:61:SER:O	50:BT:65:LYS:HG2	2.19	0.41
27:C2:41:PRO:HA	27:C2:42:PRO:HD3	1.95	0.41
1:CA:1414:G:O2'	1:CA:1415:U:H5'	2.20	0.41
1:CA:1817:G:OP1	3:CD:88:ARG:NH2	2.48	0.41
1:CA:1858:G:HO2'	1:CA:1859:A:H8	1.59	0.41
1:CA:910:A:N1	1:CA:2277:G:H1'	2.35	0.41
1:CA:2414:G:H21	11:CL:67:MET:HE1	1.83	0.41
1:CA:2473:U:HO2'	1:CA:2474:C:H5'	1.81	0.41
1:CA:335:C:H2'	1:CA:336:C:H6	1.84	0.41
1:CA:603:A:C5	1:CA:655:A:N3	2.88	0.41
1:CA:848:G:C4	1:CA:933:A:H8	2.38	0.41
4:CE:36:ARG:HH21	4:CE:88:GLY:HA2	1.85	0.41
6:CG:56:ALA:HB2	6:CG:153:ARG:HE	1.84	0.41
6:CG:81:LYS:N	6:CG:81:LYS:HD3	2.35	0.41
7:CH:13:LYS:CD	7:CH:14:GLY:N	2.82	0.41
12:CM:40:ALA:HB3	12:CM:127:ILE:HD11	2.02	0.41
14:CO:76:LYS:HG2	14:CO:76:LYS:H	1.49	0.41
16:CQ:84:LYS:HD2	16:CQ:84:LYS:HA	1.81	0.41
19:CT:31:HIS:HA	19:CT:32:PRO:HD3	1.93	0.41
23:CX:9:GLY:O	23:CX:10:LYS:O	2.38	0.41
31:DA:102:G:C6	31:DA:103:C:C4	3.08	0.41
31:DA:1147:C:H6	31:DA:1147:C:O5'	2.03	0.41
31:DA:1158:C:H3'	31:DA:1158:C:O2	2.20	0.41
31:DA:1221:G:H4'	49:DS:77:THR:CG2	2.50	0.41
31:DA:1379:G:C6	31:DA:1380:U:O4	2.73	0.41
31:DA:140:A:H2'	31:DA:141:A:H8	1.85	0.41
31:DA:783:C:H2'	31:DA:784:C:C6	2.54	0.41
31:DA:825:G:N2	38:DH:11:THR:HG21	2.35	0.41
31:DA:828:A:H2'	31:DA:829:G:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DB:149:LEU:O	32:DB:153:ARG:HG2	2.20	0.41
33:DC:23:TYR:CG	33:DC:24:ALA:N	2.88	0.41
38:DH:105:ARG:HA	38:DH:105:ARG:HD3	1.90	0.41
47:DQ:63:ARG:HG2	47:DQ:64:PRO:CD	2.47	0.41
1:AA:1443:G:O2'	1:AA:1444:G:H5'	2.20	0.41
1:AA:2031:A:C6	1:AA:2498:C:H1'	2.54	0.41
1:AA:322:A:C6	1:AA:340:A:C2	3.08	0.41
1:AA:479:A:HO2'	1:AA:481:G:H8	1.63	0.41
1:AA:603:A:C8	1:AA:655:A:C2	3.08	0.41
4:AE:55:ASN:O	4:AE:57:LYS:N	2.51	0.41
5:AF:122:LYS:HE2	5:AF:190:GLU:O	2.20	0.41
6:AG:143:GLU:CD	6:AG:143:GLU:H	2.23	0.41
6:AG:82:LEU:HD22	6:AG:87:PRO:HG2	2.02	0.41
7:AH:118:PRO:HG2	7:AH:121:ILE:CD1	2.48	0.41
8:AI:6:LEU:N	8:AI:6:LEU:HD23	2.35	0.41
12:AM:68:ILE:N	12:AM:68:ILE:HD13	2.33	0.41
19:AT:71:GLY:O	19:AT:72:LYS:HG3	2.20	0.41
20:AU:42:VAL:HG21	20:AU:67:LEU:HG	2.02	0.41
31:BA:1104:G:C6	31:BA:1105:A:C5	3.08	0.41
31:BA:1281:U:H5'	31:BA:1282:C:H5	1.79	0.41
31:BA:1372:U:OP1	39:BI:72:GLY:N	2.52	0.41
31:BA:191(E):G:H2'	31:BA:191(F):U:C6	2.55	0.41
31:BA:421:U:H5'	31:BA:421:U:O2	2.20	0.41
31:BA:625:G:H2'	31:BA:626:U:H6	1.85	0.41
33:BC:101:LEU:HD23	33:BC:102:ASN:N	2.35	0.41
33:BC:14:ILE:O	33:BC:16:ARG:N	2.52	0.41
36:BF:62:TRP:CG	48:BR:35:ARG:NH1	2.89	0.41
31:BA:673:G:C5'	36:BF:87:ARG:HH12	2.33	0.41
36:BF:5:GLU:HG3	36:BF:93:SER:OG	2.20	0.41
28:C3:20:ASN:CG	28:C3:21:TYR:N	2.74	0.41
1:CA:110:G:O2'	1:CA:111:A:H5'	2.20	0.41
1:CA:1181:C:H2'	1:CA:1182:A:C8	2.55	0.41
1:CA:1858:G:O2'	1:CA:1859:A:C8	2.69	0.41
1:CA:1925:C:O2'	1:CA:1926:U:H5'	2.19	0.41
1:CA:2305:A:O2'	6:CG:136:ARG:NE	2.53	0.41
1:CA:2512:C:H4'	4:CE:122:PHE:CE2	2.55	0.41
1:CA:775:G:H1'	1:CA:776:G:OP2	2.20	0.41
1:CA:1902:C:H5''	3:CD:246:PRO:HD3	2.02	0.41
4:CE:78:LEU:HD23	4:CE:78:LEU:N	2.35	0.41
6:CG:143:GLU:CD	6:CG:143:GLU:H	2.23	0.41
12:CM:43:THR:HG1	12:CM:46:GLN:HG3	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CO:28:VAL:HG11	14:CO:98:VAL:HG12	2.02	0.41
17:CR:69:LYS:C	17:CR:70:ILE:HD12	2.40	0.41
1:CA:751:A:H5'	18:CS:90:ARG:HA	2.03	0.41
19:CT:12:VAL:O	19:CT:13:LEU:HD23	2.20	0.41
20:CU:75:ILE:HD12	20:CU:76:CYS:N	2.35	0.41
21:CV:128:VAL:CG1	21:CV:132:ASN:HB2	2.50	0.41
31:DA:1004:A:C1'	31:DA:1036:G:H22	2.30	0.41
31:DA:1077:G:N2	31:DA:1080:A:OP2	2.48	0.41
31:DA:1151:A:O2'	31:DA:1152:A:O5'	2.37	0.41
31:DA:370:C:O2'	31:DA:371:G:H5'	2.20	0.41
31:DA:409:G:H1	31:DA:433:C:H42	1.67	0.41
31:DA:448:A:H2'	31:DA:449:C:C6	2.55	0.41
31:DA:711:G:O2'	31:DA:712:A:H5'	2.20	0.41
31:DA:958:A:C6	31:DA:959:A:C6	3.08	0.41
39:DI:28:VAL:HG13	39:DI:63:ILE:O	2.20	0.41
40:DJ:58:ASP:C	40:DJ:60:ARG:N	2.74	0.41
41:DK:96:ARG:HA	41:DK:96:ARG:HD3	1.80	0.41
31:DA:624:C:O3'	46:DP:10:GLY:HA2	2.19	0.41
49:DS:78:ARG:HB2	49:DS:81:ARG:HG2	2.02	0.41
30:A5:32:LEU:HD23	30:A5:33:ASN:N	2.35	0.41
1:AA:1273:U:O2'	1:AA:1275:A:OP1	2.35	0.41
1:AA:1459:G:O3'	1:AA:1460:A:H3'	2.21	0.41
1:AA:1592:C:H2'	1:AA:1593:G:C8	2.55	0.41
1:AA:1864:U:H5''	1:AA:2410:G:O2'	2.20	0.41
1:AA:2777:G:H5'	1:AA:2778:A:H5'	2.03	0.41
1:AA:404:C:C4'	1:AA:405:U:H5'	2.49	0.41
1:AA:729:G:H5'	1:AA:730:C:H5''	2.02	0.41
3:AD:53:PHE:HE1	3:AD:221:VAL:HG12	1.85	0.41
3:AD:256:GLY:O	3:AD:257:LEU:HB3	2.21	0.41
8:AI:133:HIS:CE1	8:AI:135:GLU:CB	3.03	0.41
8:AI:7:GLU:CD	8:AI:8:PRO:HD2	2.40	0.41
9:AJ:93:LYS:HE2	9:AJ:95:TYR:CE2	2.56	0.41
10:AK:53:LYS:HD2	10:AK:53:LYS:N	2.34	0.41
11:AL:101:VAL:HG13	11:AL:102:ARG:H	1.84	0.41
11:AL:9:ASN:C	11:AL:11:GLY:N	2.73	0.41
16:AQ:28:ARG:CG	16:AQ:38:THR:OG1	2.68	0.41
19:AT:40:LYS:HG3	19:AT:51:VAL:CG2	2.50	0.41
19:AT:62:LYS:C	19:AT:63:LYS:HD3	2.40	0.41
31:BA:1123:A:O3'	40:BJ:36:GLY:HA3	2.20	0.41
31:BA:1260:C:H4'	31:BA:1284:C:H5'	2.01	0.41
31:BA:1351:U:O4'	37:BG:33:ASP:HB3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1353:G:H2'	31:BA:1354:C:C6	2.55	0.41
32:BB:88:ALA:CB	32:BB:222:ILE:HD11	2.50	0.41
37:BG:115:ARG:HD3	37:BG:115:ARG:HA	1.86	0.41
37:BG:26:PHE:O	37:BG:30:ILE:HG12	2.21	0.41
38:BH:13:ILE:O	38:BH:17:THR:HG23	2.20	0.41
39:BI:97:LYS:HA	39:BI:102:LEU:HD13	2.01	0.41
42:BL:68:TYR:HB3	42:BL:98:HIS:HD2	1.80	0.41
43:BM:74:VAL:O	43:BM:78:ILE:HD13	2.21	0.41
45:BO:76:GLU:OE2	45:BO:76:GLU:HA	2.21	0.41
47:BQ:59:ILE:HD13	47:BQ:71:PHE:CD1	2.55	0.41
49:BS:22:LEU:HA	49:BS:27:GLU:OE1	2.20	0.41
50:BT:61:SER:OG	50:BT:62:LEU:N	2.53	0.41
52:BW:17(A):U:H1'	52:BW:18:G:O5'	2.21	0.41
28:C3:24:GLU:CD	28:C3:25:LYS:H	2.23	0.41
1:CA:1930:G:N2	1:CA:1968:G:H2'	2.35	0.41
1:CA:303:U:C2	1:CA:304:G:C8	3.08	0.41
1:CA:459:U:H5'	29:C4:40:TRP:CD2	2.55	0.41
1:CA:66:C:C4	1:CA:67:U:C5	3.08	0.41
5:CF:117:ARG:HA	5:CF:120:GLU:OE2	2.20	0.41
8:CI:12:LEU:HD13	8:CI:12:LEU:HA	1.93	0.41
8:CI:26:ALA:HB1	8:CI:31:LEU:CD2	2.51	0.41
10:CK:73:ASP:OD1	10:CK:73:ASP:C	2.58	0.41
12:CM:20:ALA:HB1	12:CM:99:PRO:O	2.20	0.41
17:CR:81:TYR:C	17:CR:82:ARG:HD2	2.40	0.41
1:CA:856:C:O4'	22:CW:27:GLU:HB3	2.20	0.41
23:CX:83:GLU:HB3	23:CX:84:GLY:H	1.59	0.41
31:DA:1238:A:N3	31:DA:1238:A:H2'	2.34	0.41
31:DA:416:G:C6	31:DA:417:C:N3	2.88	0.41
31:DA:421:U:H5'	31:DA:421:U:O2	2.20	0.41
31:DA:599:C:H2'	31:DA:600:C:C6	2.55	0.41
32:DB:151:GLY:O	32:DB:154:LEU:HD21	2.20	0.41
33:DC:165:THR:O	33:DC:165:THR:HG23	2.19	0.41
33:DC:23:TYR:CD2	33:DC:24:ALA:N	2.88	0.41
33:DC:52:LEU:HD21	33:DC:55:VAL:HB	2.02	0.41
40:DJ:98:ILE:HG22	40:DJ:99:LYS:N	2.35	0.41
44:DN:24:CYS:HB3	44:DN:27:CYS:SG	2.60	0.41
52:DW:1:C:N3	52:DW:72:A:N1	2.68	0.41
1:AA:1142(B):A:C4	1:AA:1144:G:C8	3.07	0.41
1:AA:125:G:H4'	1:AA:126:A:OP2	2.20	0.41
1:AA:1939:U:H3'	1:AA:1940:U:C5'	2.49	0.41
1:AA:2298:A:H2'	1:AA:2299:G:O4'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:2516:G:C6	1:AA:2517:C:C4	3.08	0.41
1:AA:2607:G:H2'	1:AA:2608:G:O4'	2.20	0.41
1:AA:2821:A:O2'	1:AA:2822:G:H5'	2.21	0.41
1:AA:274:G:O6	1:AA:363(A):G:C2	2.73	0.41
1:AA:579:G:H2'	1:AA:580:C:C6	2.55	0.41
3:AD:107:ALA:HA	3:AD:108:PRO:HD2	1.97	0.41
6:AG:167:GLU:HA	6:AG:170:ARG:CB	2.43	0.41
8:AI:110:ASP:OD2	8:AI:113:ARG:HG2	2.20	0.41
9:AJ:89:LYS:O	9:AJ:92:GLN:N	2.53	0.41
10:AK:105:GLU:N	10:AK:105:GLU:OE1	2.52	0.41
11:AL:27:HIS:CG	11:AL:28:GLY:N	2.80	0.41
11:AL:66:GLY:O	11:AL:67:MET:CB	2.68	0.41
11:AL:84:ASN:HB3	11:AL:117:GLU:O	2.20	0.41
12:AM:43:THR:HG1	12:AM:45:GLN:HG2	1.85	0.41
16:AQ:48:ALA:O	16:AQ:52:ARG:HG3	2.20	0.41
17:AR:6:LYS:HB3	17:AR:11:GLN:HG2	2.02	0.41
20:AU:67:LEU:N	20:AU:67:LEU:HD12	2.36	0.41
21:AV:108:PRO:HD2	21:AV:111:VAL:HB	2.02	0.41
31:BA:1151:A:C2	31:BA:1152:A:C5	3.08	0.41
31:BA:1277:C:H2'	31:BA:1278:U:H5'	2.01	0.41
31:BA:1312:G:H2'	31:BA:1313:U:H6	1.85	0.41
31:BA:1378:C:C5	31:BA:1379:G:N9	2.88	0.41
31:BA:678:U:H2'	31:BA:679:C:H6	1.83	0.41
31:BA:958:A:C6	31:BA:959:A:C6	3.08	0.41
32:BB:15:VAL:C	32:BB:16:HIS:CG	2.93	0.41
32:BB:90:MET:HA	32:BB:91:PRO:HD3	1.93	0.41
33:BC:16:ARG:HH11	33:BC:16:ARG:HB2	1.86	0.41
31:BA:1057:G:O3'	33:BC:197:GLY:HA3	2.20	0.41
33:BC:79:ARG:HD2	41:DK:96:ARG:HH12	1.86	0.41
34:BD:102:ASP:HB3	34:BD:136:PRO:HB3	2.02	0.41
43:BM:68:GLY:O	43:BM:72:ALA:N	2.53	0.41
46:BP:81:ARG:HG2	46:BP:83:GLU:OE1	2.20	0.41
47:BQ:22:LEU:HD11	47:BQ:39:SER:HB2	2.01	0.41
47:BQ:23:VAL:HG23	47:BQ:23:VAL:O	2.20	0.41
49:BS:16:LEU:HA	49:BS:19:VAL:HG12	2.02	0.41
52:BV:72:A:C6	52:BV:73:A:C6	3.08	0.41
28:C3:28:ARG:HD2	28:C3:28:ARG:HA	1.85	0.41
28:C3:34:LEU:N	28:C3:34:LEU:HD13	2.36	0.41
1:CA:1026:U:H5'	1:CA:1027:A:OP2	2.20	0.41
1:CA:1406:U:H2'	1:CA:1407:C:H6	1.84	0.41
1:CA:1466:G:H2'	1:CA:1547:C:N4	2.34	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1952:A:C6	1:CA:1953:A:C6	3.09	0.41
1:CA:2113:U:H2'	1:CA:2114:A:O4'	2.20	0.41
1:CA:2126:A:O3'	1:CA:2127:G:C4'	2.68	0.41
1:CA:2287:A:O2'	1:CA:2288:A:H5''	2.20	0.41
1:CA:2319:G:C2	1:CA:2320:A:N1	2.89	0.41
1:CA:297:C:H5''	20:CU:85:VAL:HG21	2.01	0.41
1:CA:654:U:C5'	1:CA:655:A:OP2	2.68	0.41
1:CA:963:U:H2'	1:CA:964:C:C6	2.56	0.41
2:CB:45:A:N3	2:CB:45:A:H2'	2.35	0.41
5:CF:150:GLY:HA2	5:CF:172:TRP:CE3	2.56	0.41
9:CJ:92:GLN:O	9:CJ:93:LYS:O	2.37	0.41
11:CL:140:ALA:O	11:CL:141:ALA:HB2	2.21	0.41
1:CA:389:G:N1	11:CL:71:VAL:HG23	2.34	0.41
14:CO:69:VAL:HA	14:CO:72:ALA:HB3	2.02	0.41
14:CO:89:ARG:HD2	14:CO:94:TYR:H	1.85	0.41
15:CP:26:ASP:HB2	15:CP:90:GLN:O	2.20	0.41
17:CR:35:LEU:HD22	17:CR:35:LEU:H	1.85	0.41
19:CT:62:LYS:C	19:CT:63:LYS:HD3	2.41	0.41
21:CV:103:ARG:HD2	21:CV:136:PHE:CE1	2.56	0.41
21:CV:53:ILE:C	21:CV:53:ILE:HD12	2.41	0.41
22:CW:14:ARG:HE	22:CW:14:ARG:HB3	1.63	0.41
25:CZ:53:LEU:H	25:CZ:53:LEU:HD23	1.86	0.41
31:DA:1211:U:H1'	31:DA:1213:A:C2	2.56	0.41
31:DA:1255:G:C2	31:DA:1283:G:C2	3.08	0.41
31:DA:715:A:H2'	31:DA:716:A:C8	2.55	0.41
33:DC:103:VAL:CG1	33:DC:104:GLN:N	2.83	0.41
33:DC:52:LEU:CD1	33:DC:68:VAL:HG13	2.47	0.41
33:DC:70:VAL:HG12	33:DC:71:ALA:N	2.35	0.41
35:DE:79:GLU:O	35:DE:80:ILE:HG23	2.21	0.41
39:DI:5:TYR:C	39:DI:84:ALA:HA	2.41	0.41
43:DM:31:LYS:O	43:DM:35:GLU:HG3	2.20	0.41
45:DO:48:LYS:HE2	45:DO:48:LYS:HA	2.02	0.41
1:AA:1204:A:N1	1:AA:1241:A:N1	2.68	0.41
1:AA:164:U:C5	1:AA:165:U:C4	3.08	0.41
1:AA:2464:C:C2	1:AA:2487:G:N2	2.89	0.41
1:AA:315:G:C5	1:AA:316:C:C4	3.08	0.41
1:AA:883:G:H22	1:AA:894:C:H1'	1.85	0.41
1:AA:569:U:O2'	1:AA:983:A:N1	2.47	0.41
2:AB:74:U:C4	2:AB:75:G:C5	3.09	0.41
4:AE:13:ARG:HA	4:AE:23:VAL:HG23	2.02	0.41
4:AE:78:LEU:N	4:AE:78:LEU:HD23	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AG:91:ARG:NH1	6:AG:91:ARG:HB3	2.35	0.41
8:AI:133:HIS:CD2	8:AI:134:PRO:HD2	2.54	0.41
8:AI:21:VAL:HG21	8:AI:26:ALA:HB2	2.03	0.41
1:AA:250:G:O3'	11:AL:51:PHE:CZ	2.73	0.41
12:AM:43:THR:HG23	12:AM:46:GLN:CD	2.41	0.41
13:AN:99:LYS:HA	13:AN:112:ALA:CB	2.51	0.41
20:AU:39:VAL:O	20:AU:40:GLU:CD	2.58	0.41
1:AA:297:C:H5''	20:AU:85:VAL:HG21	2.02	0.41
21:AV:94:GLU:CD	21:AV:94:GLU:N	2.73	0.41
24:AY:6:VAL:HG12	24:AY:10:LEU:HD11	2.02	0.41
31:BA:1143:G:H2'	31:BA:1144:G:H8	1.86	0.41
31:BA:1211:U:H1'	31:BA:1213:A:C2	2.55	0.41
31:BA:1227:A:H2	31:BA:1228:C:C1'	2.30	0.41
31:BA:1381:U:C5	31:BA:1382:C:C5	3.08	0.41
31:BA:145:G:H2'	31:BA:146:G:C8	2.54	0.41
31:BA:599:C:H2'	31:BA:600:C:C6	2.55	0.41
31:BA:795:C:H6	31:BA:795:C:O5'	2.04	0.41
33:BC:173:VAL:HG12	33:BC:173:VAL:O	2.20	0.41
34:BD:11:LEU:O	34:BD:12:CYS:C	2.58	0.41
34:BD:198:VAL:O	34:BD:198:VAL:HG23	2.21	0.41
34:BD:63:LYS:O	34:BD:67:ILE:HG13	2.21	0.41
36:BF:35:ALA:CB	36:BF:65:VAL:HG21	2.40	0.41
41:BK:87:THR:O	41:BK:87:THR:HG22	2.21	0.41
41:BK:99:GLN:HB3	41:BK:105:VAL:CG2	2.48	0.41
43:BM:8:GLU:HG3	43:BM:67:GLU:OE1	2.20	0.41
48:BR:26:LEU:CD1	48:BR:39:VAL:HG13	2.51	0.41
49:BS:11:VAL:O	49:BS:12:ASP:C	2.59	0.41
50:BT:58:LYS:O	50:BT:62:LEU:HB2	2.20	0.41
52:BW:17(A):U:C1'	52:BW:18:G:P	3.09	0.41
1:CA:1153:C:H2'	1:CA:1154:G:O4'	2.21	0.41
1:CA:1864:U:H5''	1:CA:2410:G:O2'	2.21	0.41
1:CA:2394:C:N3	52:DW:76:A:O2'	2.46	0.41
1:CA:2564:A:OP1	1:CA:2648:C:H4'	2.20	0.41
1:CA:2740:A:C6	1:CA:2741:A:C6	3.08	0.41
1:CA:2862:G:H2'	1:CA:2863:C:H6	1.86	0.41
1:CA:2884:U:C5	1:CA:2885:C:N1	2.89	0.41
1:CA:274:G:O6	1:CA:363(A):G:C2	2.73	0.41
1:CA:404:C:C4'	1:CA:405:U:H5'	2.49	0.41
1:CA:744:G:H2'	1:CA:745:G:O4'	2.20	0.41
3:CD:33:LEU:C	3:CD:35:LYS:N	2.73	0.41
3:CD:38:LYS:N	3:CD:38:LYS:CD	2.81	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CG:108:ASN:O	26:C1:62:CYS:HB2	2.21	0.41
6:CG:77:ILE:HG22	6:CG:80:PHE:H	1.85	0.41
8:CI:32:PRO:C	8:CI:34:GLY:H	2.24	0.41
8:CI:6:LEU:HD23	8:CI:6:LEU:N	2.35	0.41
11:CL:40:SER:O	11:CL:41:ARG:CZ	2.69	0.41
16:CQ:104:GLN:OE1	16:CQ:105:VAL:HG23	2.20	0.41
1:CA:583:G:OP2	16:CQ:10:ARG:HD2	2.20	0.41
19:CT:53:LYS:HZ2	19:CT:55:ASN:HD21	1.67	0.41
20:CU:60:PHE:O	20:CU:61:ILE:C	2.59	0.41
20:CU:92:ASN:OD1	20:CU:92:ASN:C	2.59	0.41
21:CV:63:ASP:CB	21:CV:65:GLN:HG3	2.50	0.41
23:CX:56:GLN:NE2	23:CX:85:LEU:HA	2.35	0.41
23:CX:13:ILE:CG2	23:CX:63:ALA:H	2.25	0.41
31:DA:219:C:H2'	31:DA:220:G:O4'	2.21	0.41
31:DA:426:G:H4'	34:DD:41:GLY:O	2.20	0.41
31:DA:81:G:C5'	31:DA:82:U:OP2	2.69	0.41
32:DB:144:ARG:HG3	32:DB:145:LEU:N	2.35	0.41
32:DB:15:VAL:C	32:DB:16:HIS:CG	2.93	0.41
34:DD:64:LEU:O	34:DD:67:ILE:HB	2.20	0.41
35:DE:15:ARG:HD2	35:DE:26:PHE:CD2	2.55	0.41
39:DI:30:GLY:C	39:DI:31:GLN:HG2	2.41	0.41
40:DJ:67:THR:HG23	40:DJ:67:THR:O	2.19	0.41
1:AA:1025:G:OP1	1:AA:1025:G:C8	2.70	0.41
1:AA:1105:U:C2'	1:AA:1106:G:H5'	2.51	0.41
1:AA:1493:C:C2'	1:AA:1493:C:O2	2.68	0.41
1:AA:1748:G:O2'	1:AA:1749:A:H5'	2.20	0.41
1:AA:2334:G:H4'	1:AA:2335:A:OP2	2.21	0.41
1:AA:2862:G:H2'	1:AA:2863:C:C6	2.56	0.41
1:AA:728:G:C6	1:AA:730:C:C4	3.09	0.41
1:AA:883:G:N1	1:AA:894:C:O2	2.54	0.41
1:AA:910:A:C6	1:AA:911:A:C6	3.09	0.41
2:AB:16:G:N2	2:AB:69:G:H1'	2.35	0.41
3:AD:31:LYS:CE	3:AD:102:LYS:HZ2	2.33	0.41
5:AF:150:GLY:HA2	5:AF:172:TRP:CE3	2.56	0.41
5:AF:206:ILE:HD13	5:AF:206:ILE:N	2.35	0.41
1:AA:2094:G:OP1	8:AI:22:LYS:HG3	2.20	0.41
8:AI:9:LEU:HD11	8:AI:12:LEU:HD23	2.03	0.41
10:AK:104:ARG:O	10:AK:107:ARG:HB3	2.21	0.41
11:AL:16:ARG:O	11:AL:17:LYS:C	2.58	0.41
12:AM:40:ALA:HB3	12:AM:127:ILE:HD11	2.02	0.41
12:AM:62:GLY:O	21:AV:178:GLU:HG2	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AO:69:VAL:HA	14:AO:72:ALA:HB3	2.02	0.41
17:AR:75:PHE:CD1	17:AR:75:PHE:C	2.94	0.41
19:AT:57:LEU:O	19:AT:57:LEU:HD12	2.21	0.41
21:AV:99:TYR:CD1	21:AV:99:TYR:N	2.88	0.41
24:AY:25:VAL:HG22	24:AY:60:LEU:HB3	2.02	0.41
24:AY:9:GLN:HG2	24:AY:9:GLN:O	2.21	0.41
31:BA:1320:C:N4	49:BS:36:ARG:HG3	2.36	0.41
31:BA:570:G:H1'	31:BA:820:U:C4	2.55	0.41
32:BB:42:ILE:HD13	32:BB:203:GLY:HA2	2.03	0.41
35:BE:102:ALA:HB2	35:BE:120:THR:OG1	2.20	0.41
38:BH:40:ALA:CB	38:BH:45:ILE:HG13	2.49	0.41
39:BI:30:GLY:C	39:BI:31:GLN:HG2	2.41	0.41
43:BM:2:ALA:HB1	43:BM:57:ARG:HH12	1.84	0.41
45:BO:48:LYS:HA	45:BO:48:LYS:HE2	2.03	0.41
31:BA:130:A:C8	47:BQ:63:ARG:HG3	2.56	0.41
49:BS:40:ILE:HD13	49:BS:62:ILE:CD1	2.51	0.41
31:BA:1221:G:H4'	49:BS:77:THR:CG2	2.50	0.41
31:BA:1305:G:C5'	51:BU:4:GLY:HA3	2.50	0.41
52:BV:69:C:H2'	52:BV:70:G:C8	2.55	0.41
1:CA:1163:G:O2'	1:CA:1164:G:H5'	2.20	0.41
1:CA:1493:C:O2	1:CA:1493:C:C2'	2.69	0.41
1:CA:1523:U:H2'	1:CA:1524:G:H8	1.86	0.41
1:CA:1794:U:O2'	1:CA:1795:C:H5'	2.20	0.41
1:CA:2116:G:O6	1:CA:2166:G:N2	2.54	0.41
1:CA:476:G:H4'	1:CA:502:A:N1	2.36	0.41
1:CA:883:G:N1	1:CA:894:C:O2	2.53	0.41
2:CB:74:U:C4	2:CB:75:G:C5	3.08	0.41
3:CD:131:LEU:N	3:CD:131:LEU:HD23	2.35	0.41
3:CD:142:VAL:HG23	3:CD:193:VAL:HA	2.01	0.41
3:CD:220:HIS:C	3:CD:220:HIS:CD2	2.93	0.41
6:CG:107:LEU:HA	6:CG:111:LEU:HD12	2.01	0.41
7:CH:23:ARG:O	7:CH:23:ARG:HG2	2.21	0.41
9:CJ:69:VAL:HG11	9:CJ:71:MET:HE2	2.02	0.41
10:CK:64:ARG:HG2	10:CK:79:PHE:CD1	2.55	0.41
11:CL:9:ASN:C	11:CL:11:GLY:H	2.23	0.41
15:CP:136:GLN:C	15:CP:137:LYS:HD2	2.41	0.41
16:CQ:27:LEU:HD22	16:CQ:31:SER:HB2	2.03	0.41
17:CR:6:LYS:HB3	17:CR:11:GLN:HG2	2.02	0.41
17:CR:18:LEU:CD1	17:CR:20:LEU:HB2	2.51	0.41
19:CT:63:LYS:HD2	19:CT:72:LYS:CB	2.50	0.41
25:CZ:28:LEU:HD12	25:CZ:28:LEU:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1117:G:O5'	39:DI:104:ARG:NH2	2.54	0.41
31:DA:1266:G:C5	31:DA:1268:A:OP2	2.74	0.41
31:DA:194:C:H2'	31:DA:195:A:H5''	2.03	0.41
31:DA:209:U:H4'	31:DA:216:G:C2	2.55	0.41
31:DA:123:C:OP1	31:DA:312:C:H5'	2.21	0.41
31:DA:391:G:C6	31:DA:392:G:C5	3.08	0.41
31:DA:406:G:H2'	31:DA:407:G:C8	2.54	0.41
32:DB:24:TRP:HZ3	32:DB:26:PRO:HA	1.80	0.41
34:DD:177:ASP:O	34:DD:181:MET:N	2.54	0.41
34:DD:13:ARG:HA	34:DD:33:MET:HE1	2.03	0.41
36:DF:4:TYR:HA	36:DF:91:VAL:O	2.21	0.41
37:DG:12:LEU:H	37:DG:12:LEU:HD23	1.86	0.41
38:DH:121:ASP:N	38:DH:121:ASP:OD1	2.54	0.41
40:DJ:54:PHE:CG	40:DJ:55:LYS:N	2.88	0.41
43:DM:10:PRO:CD	43:DM:22:ILE:HD11	2.50	0.41
43:DM:54:VAL:HG22	43:DM:57:ARG:HH21	1.85	0.41
49:DS:6:LYS:HG2	49:DS:7:LYS:N	2.36	0.41
52:DW:49:G:H2'	52:DW:50:U:H5'	2.03	0.41
28:A3:24:GLU:CD	28:A3:25:LYS:H	2.23	0.41
30:A5:61:LEU:O	30:A5:62:LEU:CB	2.69	0.41
1:AA:1416:G:N2	1:AA:1582:C:O2	2.49	0.41
1:AA:2126:A:O3'	1:AA:2127:G:C4'	2.68	0.41
1:AA:2117:A:N6	1:AA:2172:U:N1	2.69	0.41
1:AA:2392:A:H2'	1:AA:2393:A:O4'	2.21	0.41
1:AA:302:C:C2	1:AA:303:U:C5	3.08	0.41
1:AA:828:U:H4'	1:AA:831:G:N1	2.36	0.41
4:AE:183:LEU:N	4:AE:183:LEU:HD12	2.35	0.41
5:AF:160:ASN:ND2	5:AF:163:VAL:HG23	2.36	0.41
5:AF:206:ILE:HD13	5:AF:206:ILE:H	1.86	0.41
1:AA:2305:A:O2'	6:AG:136:ARG:NE	2.53	0.41
6:AG:32:PRO:CB	6:AG:172:LEU:HD22	2.51	0.41
6:AG:77:ILE:HB	6:AG:82:LEU:CD1	2.49	0.41
6:AG:82:LEU:HD22	6:AG:87:PRO:CG	2.50	0.41
7:AH:137:ASP:HB3	7:AH:140:LYS:CG	2.49	0.41
8:AI:109:ILE:HB	8:AI:130:TYR:CZ	2.55	0.41
11:AL:9:ASN:C	11:AL:11:GLY:H	2.22	0.41
14:AO:24:LEU:HD12	14:AO:84:GLN:HB3	2.03	0.41
15:AP:41:ARG:O	15:AP:42:ILE:HG23	2.21	0.41
18:AS:13:SER:HB3	18:AS:16:LYS:HD2	2.02	0.41
20:AU:92:ASN:OD1	20:AU:93:GLY:N	2.54	0.41
20:AU:96:ILE:HG12	20:AU:99:CYS:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AX:47:GLN:N	23:AX:62:VAL:O	2.53	0.41
31:BA:1053:G:C6	31:BA:1199:U:C2	3.08	0.41
31:BA:1369:C:H2'	31:BA:1370:G:C8	2.56	0.41
31:BA:251:G:N1	31:BA:266:G:C6	2.89	0.41
31:BA:322:C:H5	31:BA:328:C:H5	1.68	0.41
39:BI:28:VAL:CG2	39:BI:63:ILE:HB	2.31	0.41
40:BJ:30:SER:HB2	40:BJ:80:LYS:CG	2.49	0.41
40:BJ:58:ASP:C	40:BJ:60:ARG:N	2.74	0.41
40:BJ:48:THR:HG22	40:BJ:62:HIS:HB3	2.02	0.41
43:BM:31:LYS:O	43:BM:35:GLU:HG3	2.20	0.41
43:BM:70:LEU:O	43:BM:74:VAL:HG23	2.20	0.41
46:BP:82:GLN:HE21	46:BP:82:GLN:HB3	1.72	0.41
27:C2:16:ARG:HG3	27:C2:20:ARG:HE	1.85	0.41
27:C2:45:VAL:HG22	27:C2:51:TYR:CE1	2.55	0.41
1:CA:1107:G:N3	1:CA:1107:G:H2'	2.34	0.41
1:CA:1162:G:O2'	17:CR:90:PRO:HG2	2.20	0.41
1:CA:1417:C:C2'	1:CA:1418:G:H5'	2.51	0.41
1:CA:1299:G:N2	1:CA:1640:C:H5'	2.36	0.41
1:CA:2022:U:O2'	1:CA:2617:C:H5'	2.20	0.41
1:CA:2881:C:H2'	1:CA:2882:A:O4'	2.20	0.41
2:CB:88:C:H2'	2:CB:89(A):G:O4'	2.20	0.41
4:CE:131:ALA:O	4:CE:133:LYS:N	2.45	0.41
4:CE:188:VAL:HG23	4:CE:189:PRO:HD2	2.02	0.41
1:CA:673:C:H5''	5:CF:81:PRO:HD2	2.02	0.41
8:CI:21:VAL:HG21	8:CI:26:ALA:HB2	2.03	0.41
9:CJ:90:LEU:O	9:CJ:111:GLU:HG3	2.21	0.41
9:CJ:118:PRO:HD2	9:CJ:119:GLU:H	1.84	0.41
10:CK:93:PRO:HB3	10:CK:114:ILE:HD11	2.02	0.41
11:CL:85:LEU:HA	11:CL:88:LEU:HB3	2.03	0.41
11:CL:9:ASN:C	11:CL:11:GLY:N	2.74	0.41
12:CM:111:GLU:O	12:CM:115:MET:HG2	2.21	0.41
12:CM:135:ASP:O	12:CM:136:ALA:HB2	2.20	0.41
12:CM:80:GLU:CA	12:CM:80:GLU:OE2	2.68	0.41
14:CO:24:LEU:HD12	14:CO:84:GLN:HB3	2.03	0.41
15:CP:3:ARG:NH1	15:CP:6:LEU:HD23	2.36	0.41
21:CV:144:LEU:HD21	21:CV:150:LEU:HD11	2.02	0.41
24:CY:48:HIS:O	24:CY:49:LYS:C	2.59	0.41
31:DA:1453:G:O4'	31:DA:1453:G:OP1	2.39	0.41
31:DA:412:A:N1	34:DD:35:ARG:HG3	2.35	0.41
31:DA:953:G:H2'	31:DA:954:G:O4'	2.21	0.41
31:DA:976:G:P	44:DN:32:SER:H	2.43	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:994:A:N3	31:DA:994:A:H2'	2.35	0.41
32:DB:113:HIS:O	32:DB:117:GLU:HG3	2.20	0.41
32:DB:130:ARG:HA	32:DB:131:PRO:HD2	1.97	0.41
33:DC:18:TRP:C	33:DC:20:SER:N	2.73	0.41
43:DM:8:GLU:HG3	43:DM:67:GLU:OE1	2.21	0.41
50:DT:14:LYS:HA	50:DT:17:ARG:HH21	1.85	0.41
1:AA:1389:G:C2	1:AA:1390:U:C2	3.09	0.41
1:AA:1570:A:H4'	3:AD:38:LYS:HZ3	1.84	0.41
1:AA:1790:C:H2'	1:AA:1791:A:C5	2.56	0.41
1:AA:1799:G:OP1	3:AD:260:ARG:NE	2.51	0.41
1:AA:1493:C:N4	1:AA:2210:G:H1'	2.35	0.41
1:AA:2315:G:C6	1:AA:2316:C:N4	2.89	0.41
1:AA:2711:A:OP1	1:AA:712(B):A:P	2.79	0.41
1:AA:2777:G:H5''	1:AA:2778:A:OP1	2.21	0.41
1:AA:2787:C:H2'	1:AA:2788:C:C6	2.56	0.41
1:AA:587:C:OP2	11:AL:33:ARG:NH1	2.54	0.41
1:AA:64:A:H5'	19:AT:64:LYS:HE3	2.03	0.41
3:AD:53:PHE:CE1	3:AD:221:VAL:HG12	2.56	0.41
6:AG:117:PHE:HD1	6:AG:119:GLY:H	1.68	0.41
8:AI:71:ILE:HG13	8:AI:72:LEU:CD2	2.48	0.41
9:AJ:79:ASN:HA	9:AJ:147:ALA:O	2.20	0.41
10:AK:73:ASP:OD1	10:AK:73:ASP:C	2.59	0.41
10:AK:64:ARG:O	10:AK:82:ASN:HA	2.20	0.41
1:AA:390:A:C6	11:AL:71:VAL:CG2	3.03	0.41
13:AN:63:ARG:O	13:AN:67:LEU:HB2	2.21	0.41
17:AR:99:ILE:H	17:AR:99:ILE:HD13	1.85	0.41
20:AU:45:VAL:HG12	20:AU:47:LYS:HG3	2.02	0.41
20:AU:4:LYS:N	20:AU:4:LYS:CD	2.83	0.41
21:AV:53:ILE:C	21:AV:53:ILE:HD12	2.41	0.41
23:AX:27:GLU:HG3	23:AX:33:LYS:HD2	2.03	0.41
31:BA:1144:G:N2	31:BA:1146:A:H62	2.16	0.41
31:BA:1193:G:N2	31:BA:1194:U:C2	2.89	0.41
31:BA:1050:G:N2	31:BA:1209:C:H1'	2.35	0.41
31:BA:1361:G:C2'	31:BA:1361(A):C:H5'	2.51	0.41
31:BA:1438:G:C5	31:BA:1439:C:C5	3.08	0.41
31:BA:1484:C:H2'	31:BA:1485:U:O4'	2.21	0.41
31:BA:219:C:H2'	31:BA:220:G:O4'	2.20	0.41
31:BA:540:G:H2'	31:BA:541:G:O4'	2.20	0.41
31:BA:622:A:C8	31:BA:623:C:C5	3.09	0.41
31:BA:857:C:H2'	31:BA:858:G:O4'	2.21	0.41
31:BA:89:U:O5'	31:BA:89:U:H6	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:878:G:C1'	38:BH:3:THR:HG21	2.51	0.41
39:BI:5:TYR:C	39:BI:84:ALA:HA	2.40	0.41
31:BA:529:G:O6	42:BL:48:ASN:ND2	2.54	0.41
43:BM:67:GLU:HA	43:BM:67:GLU:OE2	2.20	0.41
44:BN:26:ARG:NH1	44:BN:47:LEU:HD21	2.36	0.41
48:BR:40:LEU:HD22	48:BR:70:ILE:CD1	2.51	0.41
36:BF:7:ASN:ND2	48:BR:76:LEU:HD11	2.36	0.41
27:C2:32:PRO:HA	27:C2:38:ALA:O	2.21	0.41
1:CA:1115:G:O2'	1:CA:1116:C:H5'	2.21	0.41
1:CA:1268:A:H2'	1:CA:1269:A:O4'	2.21	0.41
1:CA:1680:U:O2	1:CA:1763:G:H3'	2.21	0.41
1:CA:1767:C:C2'	1:CA:1768:U:H5'	2.50	0.41
1:CA:177:G:H2'	1:CA:177:G:N3	2.36	0.41
1:CA:1824:G:C2'	1:CA:1825:A:H5'	2.50	0.41
1:CA:2258:C:H4'	1:CA:2259:G:OP2	2.21	0.41
1:CA:2480:C:N4	1:CA:2481:G:C6	2.88	0.41
1:CA:322:A:C6	1:CA:340:A:C2	3.08	0.41
1:CA:343:C:O2'	1:CA:344:G:H5'	2.21	0.41
1:CA:422:A:C6	1:CA:423:A:C6	3.08	0.41
1:CA:587:C:OP2	11:CL:33:ARG:NH1	2.53	0.41
1:CA:64:A:H5'	19:CT:64:LYS:HE3	2.03	0.41
1:CA:841:A:C2	1:CA:938:G:C2	3.09	0.41
1:CA:869:G:C4	1:CA:870:A:C8	3.08	0.41
1:CA:817:C:H4'	1:CA:932:G:C6	2.55	0.41
1:CA:959:A:H62	12:CM:82:ARG:NH2	2.05	0.41
3:CD:155:LEU:HD23	3:CD:177:LEU:CD2	2.50	0.41
3:CD:256:GLY:O	3:CD:257:LEU:HB3	2.21	0.41
3:CD:27:THR:HG21	3:CD:83:GLU:HG2	2.01	0.41
5:CF:206:ILE:N	5:CF:206:ILE:HD13	2.36	0.41
6:CG:114:ILE:HA	6:CG:114:ILE:HD13	1.96	0.41
6:CG:32:PRO:HB2	6:CG:172:LEU:HD22	2.01	0.41
6:CG:91:ARG:HB3	6:CG:91:ARG:NH1	2.35	0.41
8:CI:110:ASP:HA	8:CI:111:PRO:HD2	1.88	0.41
9:CJ:151:HIS:CE1	9:CJ:157:ARG:HE	2.39	0.41
10:CK:64:ARG:O	10:CK:82:ASN:HA	2.21	0.41
11:CL:115:LEU:HB3	11:CL:131:SER:HB2	2.02	0.41
11:CL:6:LEU:HD23	11:CL:6:LEU:N	2.32	0.41
13:CN:100:LEU:HA	13:CN:100:LEU:HD13	1.86	0.41
13:CN:75:LEU:HD22	13:CN:75:LEU:HA	1.77	0.41
14:CO:34:HIS:ND1	14:CO:54:LEU:HB2	2.36	0.41
25:CZ:15:TYR:O	25:CZ:20:LYS:HE2	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1027:C:P	31:DA:1027(A):C:OP2	2.79	0.41
31:DA:1154:G:O2'	31:DA:1155:G:H5'	2.20	0.41
31:DA:1341:U:H6	31:DA:1341:U:H3'	1.85	0.41
31:DA:1356:G:H2'	31:DA:1357:A:H8	1.84	0.41
31:DA:1417:G:C6	31:DA:1482:G:C6	3.09	0.41
31:DA:182:U:C5	31:DA:183:G:C4	3.09	0.41
31:DA:452:A:OP1	46:DP:43:LYS:NZ	2.49	0.41
31:DA:452:A:O2'	31:DA:453:A:H8	2.03	0.41
31:DA:736:C:H2'	31:DA:737:A:C8	2.55	0.41
31:DA:990:C:H2'	31:DA:991:U:O4'	2.21	0.41
32:DB:164:VAL:HB	32:DB:186:ALA:HB2	2.03	0.41
32:DB:90:MET:CE	32:DB:90:MET:HA	2.51	0.41
33:DC:34:LEU:O	33:DC:34:LEU:HD23	2.20	0.41
34:DD:93:PHE:O	34:DD:96:LEU:HB2	2.21	0.41
35:DE:48:ALA:HA	35:DE:49:PRO:HD3	1.89	0.41
37:DG:69:VAL:O	37:DG:69:VAL:HG12	2.21	0.41
38:DH:127:LEU:H	38:DH:127:LEU:HD22	1.86	0.41
43:DM:44:ARG:HB3	43:DM:46:LYS:HG2	2.03	0.41
49:DS:11:VAL:O	49:DS:12:ASP:C	2.59	0.41
50:DT:36:LEU:HD12	50:DT:55:ILE:HG23	2.01	0.41
52:DV:69:C:H2'	52:DV:70:G:C8	2.56	0.41
28:A3:34:LEU:N	28:A3:34:LEU:HD13	2.36	0.41
1:AA:459:U:H5'	29:A4:40:TRP:CD2	2.56	0.41
30:A5:2:PRO:O	30:A5:3:LYS:HB3	2.20	0.41
1:AA:2070:G:C2	1:AA:2442:C:C2	3.09	0.41
1:AA:746:A:HO2'	1:AA:2611:U:HO2'	1.67	0.41
1:AA:2564:A:OP1	1:AA:2648:C:H4'	2.21	0.41
1:AA:319:C:H2'	1:AA:320:A:O4'	2.21	0.41
1:AA:373:U:O2	1:AA:423:A:H2	2.04	0.41
1:AA:483:A:H4'	20:AU:49:VAL:CG2	2.51	0.41
1:AA:620:G:H8	1:AA:622:G:O6	2.02	0.41
1:AA:817:C:H4'	1:AA:932:G:C6	2.56	0.41
3:AD:33:LEU:C	3:AD:35:LYS:N	2.75	0.41
4:AE:36:ARG:HH21	4:AE:88:GLY:HA2	1.85	0.41
5:AF:20:LEU:HD12	5:AF:125:LEU:HD12	2.03	0.41
5:AF:170:LEU:HD13	5:AF:172:TRP:CE2	2.56	0.41
6:AG:120:LEU:HB3	6:AG:131:TYR:OH	2.21	0.41
7:AH:23:ARG:O	7:AH:23:ARG:HG2	2.20	0.41
9:AJ:143:LEU:CD1	9:AJ:145:VAL:HG23	2.50	0.41
1:AA:1952:A:N3	10:AK:22:ILE:HG13	2.35	0.41
11:AL:138:LEU:HD23	11:AL:144:GLU:HG2	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AL:96:THR:O	11:AL:100:LEU:HD23	2.21	0.41
13:AN:98:LEU:HB2	13:AN:113:LEU:HD23	2.03	0.41
1:AA:58:G:OP1	19:AT:74:PRO:HA	2.21	0.41
23:AX:19:GLN:CG	23:AX:41:ARG:HE	2.34	0.41
24:AY:60:LEU:C	24:AY:62:THR:H	2.23	0.41
24:AY:9:GLN:C	24:AY:12:GLU:HB3	2.41	0.41
1:AA:850:C:H5'	25:AZ:17:LYS:HZ3	1.86	0.41
31:BA:1179:A:H2'	31:BA:1180:A:O4'	2.20	0.41
31:BA:1206:G:H4'	33:BC:192:THR:O	2.21	0.41
31:BA:1262:C:C6	51:BU:25:LYS:HE2	2.56	0.41
31:BA:1298:C:H4'	31:BA:1299:A:O4'	2.21	0.41
31:BA:1503:A:O2'	31:BA:1504:G:C5'	2.69	0.41
31:BA:542:G:H2'	31:BA:543:C:C6	2.56	0.41
31:BA:828:A:H2'	31:BA:829:G:O4'	2.21	0.41
31:BA:939:G:H2'	31:BA:940:C:H6	1.86	0.41
32:BB:61:LEU:HD11	32:BB:68:ILE:HG13	2.03	0.41
32:BB:90:MET:CE	32:BB:90:MET:HA	2.51	0.41
31:BA:673:G:C5'	36:BF:87:ARG:NH1	2.84	0.41
37:BG:79:ARG:HA	37:BG:84:ASN:HA	2.03	0.41
40:BJ:20:ALA:O	40:BJ:24:VAL:HG23	2.21	0.41
40:BJ:51:ARG:HG3	44:BN:45:ARG:CZ	2.50	0.41
41:BK:13:GLN:O	41:BK:14:VAL:HG13	2.20	0.41
31:BA:1115:C:H1'	44:BN:61:TRP:OXT	2.21	0.41
49:BS:78:ARG:HB2	49:BS:81:ARG:HG2	2.02	0.41
51:BU:2:GLY:C	51:BU:4:GLY:H	2.24	0.41
1:CA:1157:G:O2'	25:CZ:31:LEU:HD22	2.21	0.41
1:CA:1520:U:H2'	1:CA:1521:G:O4'	2.21	0.41
1:CA:1863:G:C2	1:CA:1880:C:O2	2.74	0.41
1:CA:30:G:H2'	1:CA:31:C:C6	2.56	0.41
2:CB:102:G:O2'	2:CB:103:U:H5'	2.20	0.41
3:CD:231:HIS:ND1	3:CD:232:PRO:HD2	2.36	0.41
4:CE:87:GLU:O	4:CE:89:ASP:N	2.54	0.41
6:CG:117:PHE:HD1	6:CG:119:GLY:H	1.67	0.41
9:CJ:118:PRO:C	9:CJ:120:ARG:N	2.72	0.41
11:CL:88:LEU:HD11	11:CL:95:VAL:HG21	2.01	0.41
15:CP:29:ARG:HA	15:CP:46:GLU:HA	2.02	0.41
17:CR:99:ILE:HD13	17:CR:99:ILE:H	1.86	0.41
20:CU:42:VAL:HG12	20:CU:42:VAL:O	2.21	0.41
20:CU:2:ARG:C	20:CU:4:LYS:H	2.24	0.41
21:CV:52:SER:OG	21:CV:54:HIS:CD2	2.74	0.41
24:CY:9:GLN:C	24:CY:12:GLU:HB3	2.41	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1097:C:C4	31:DA:1098:C:N4	2.89	0.41
31:DA:675:A:H2'	31:DA:676:A:O4'	2.20	0.41
32:DB:131:PRO:O	32:DB:135:GLN:HG3	2.21	0.41
32:DB:231:GLU:HA	32:DB:232:PRO:HD3	1.98	0.41
33:DC:101:LEU:HD23	33:DC:102:ASN:N	2.36	0.41
35:DE:43:LEU:CD1	35:DE:132:ALA:HB1	2.46	0.41
35:DE:144:THR:O	35:DE:148:VAL:HG23	2.21	0.41
37:DG:15:ASP:HB3	37:DG:19:GLY:N	2.35	0.41
37:DG:75:VAL:HG23	37:DG:75:VAL:O	2.21	0.41
38:DH:18:ARG:N	38:DH:18:ARG:HD2	2.36	0.41
41:DK:44:SER:OG	41:DK:47:VAL:HG23	2.21	0.41
45:DO:6:GLU:O	45:DO:10:LYS:HG3	2.20	0.41
48:DR:26:LEU:CD1	48:DR:39:VAL:HG13	2.51	0.41
48:DR:56:THR:O	48:DR:58:LEU:HD12	2.21	0.41
27:A2:51:TYR:HA	27:A2:51:TYR:HD2	1.78	0.41
1:AA:1110:G:H2'	1:AA:1111:A:C8	2.56	0.41
1:AA:2079:U:H2'	1:AA:2080:G:O4'	2.21	0.41
1:AA:2415:G:H2'	1:AA:2416:C:C6	2.56	0.41
1:AA:2660:A:H2'	1:AA:2661:G:O4'	2.21	0.41
1:AA:270(I):C:H2'	1:AA:270(J):G:C8	2.56	0.41
1:AA:2740:A:C6	1:AA:2741:A:C6	3.08	0.41
1:AA:2850:A:OP2	1:AA:2866:U:C5	2.71	0.41
1:AA:528:A:C8	1:AA:528:A:H3'	2.56	0.41
1:AA:622:G:H2'	1:AA:623:G:H8	1.86	0.41
1:AA:81:G:C2	1:AA:106:C:C2	3.08	0.41
1:AA:966:G:C6	1:AA:967:C:N4	2.88	0.41
1:AA:96:G:O5'	24:AY:48:HIS:CE1	2.74	0.41
3:AD:16:MET:HG3	3:AD:211:ARG:HH21	1.86	0.41
6:AG:41:GLN:HA	6:AG:155:MET:HB3	2.03	0.41
8:AI:114:LEU:HD12	8:AI:115:ALA:H	1.86	0.41
9:AJ:151:HIS:CE1	9:AJ:157:ARG:HE	2.39	0.41
13:AN:47:PHE:CE2	13:AN:51:LEU:HD11	2.55	0.41
14:AO:34:HIS:ND1	14:AO:54:LEU:HB2	2.36	0.41
17:AR:4:ILE:HG22	17:AR:39:LEU:HD23	2.03	0.41
17:AR:98:GLU:OE1	17:AR:100:ARG:HD3	2.20	0.41
21:AV:128:VAL:CG1	21:AV:132:ASN:HB2	2.51	0.41
23:AX:26:ARG:O	23:AX:27:GLU:HB3	2.20	0.41
23:AX:56:GLN:NE2	23:AX:85:LEU:HA	2.36	0.41
31:BA:1293:G:H2'	31:BA:1294:G:C8	2.56	0.41
31:BA:1353:G:OP1	51:BU:10:ARG:NH2	2.54	0.41
31:BA:826:C:H5'	38:BH:12:ARG:NH2	2.30	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BB:231:GLU:HA	32:BB:232:PRO:HD3	1.97	0.41
33:BC:23:TYR:CG	33:BC:24:ALA:N	2.88	0.41
33:BC:37:GLN:HE22	44:BN:52:GLN:HE21	1.67	0.41
34:BD:135:LEU:N	34:BD:135:LEU:HD22	2.35	0.41
35:BE:18:ARG:HG3	35:BE:18:ARG:O	2.21	0.41
41:BK:108:ILE:O	48:BR:87:ARG:HA	2.21	0.41
41:BK:88:GLY:O	41:BK:90:GLY:N	2.54	0.41
44:BN:15:LYS:HD2	44:BN:16:PHE:H	1.86	0.41
44:BN:32:SER:OG	44:BN:41:ARG:HB3	2.21	0.41
48:BR:31:LEU:HD23	48:BR:31:LEU:H	1.86	0.41
52:BW:17(A):U:O2'	52:BW:18:G:O5'	2.39	0.41
52:BW:49:G:H2'	52:BW:50:U:H5'	2.03	0.41
52:BW:6:G:O2'	52:BW:7:G:H5'	2.21	0.41
29:C4:39:ARG:HD2	29:C4:39:ARG:HA	1.77	0.41
30:C5:32:LEU:HD23	30:C5:33:ASN:HD22	1.86	0.41
1:CA:138:G:H2'	1:CA:139:G:H5'	2.02	0.41
1:CA:1404:C:O2'	1:CA:1405:U:H5'	2.21	0.41
1:CA:1799:G:OP1	3:CD:260:ARG:NE	2.51	0.41
1:CA:2134:A:C2	1:CA:2159:G:H4'	2.55	0.41
1:CA:2134:A:C6	1:CA:2157:G:O2'	2.72	0.41
1:CA:2250:G:OP1	1:CA:2275:C:O2'	2.30	0.41
1:CA:2869:G:H2'	1:CA:2870:C:O4'	2.21	0.41
1:CA:321:G:OP2	5:CF:135:LYS:HD3	2.20	0.41
1:CA:41:C:H2'	1:CA:43:G:O4'	2.20	0.41
1:CA:78:A:H2'	1:CA:79:G:H8	1.85	0.41
1:CA:861:A:H2'	1:CA:862:G:O4'	2.20	0.41
2:CB:16:G:C6	2:CB:69:G:C2	3.09	0.41
4:CE:192:ASN:N	4:CE:192:ASN:ND2	2.68	0.41
6:CG:15:VAL:HG13	6:CG:175:LEU:HD12	2.01	0.41
6:CG:41:GLN:HB2	6:CG:43:LEU:CD1	2.48	0.41
6:CG:77:ILE:HD12	6:CG:77:ILE:N	2.36	0.41
1:CA:2747:G:O2'	7:CH:67:LEU:HD13	2.20	0.41
9:CJ:88:LYS:O	9:CJ:89:LYS:C	2.59	0.41
10:CK:39:ILE:O	10:CK:39:ILE:HG13	2.21	0.41
11:CL:48:PRO:C	11:CL:50:ARG:H	2.24	0.41
11:CL:75:ILE:CD1	11:CL:75:ILE:H	2.34	0.41
1:CA:910:A:N7	12:CM:13:GLN:HG3	2.36	0.41
14:CO:51:ALA:HB3	14:CO:73:LEU:HG	2.03	0.41
15:CP:42:ILE:O	15:CP:43:GLN:C	2.58	0.41
16:CQ:16:LYS:HB3	16:CQ:16:LYS:HE2	1.75	0.41
20:CU:39:VAL:O	20:CU:40:GLU:CD	2.59	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:CX:27:GLU:HG3	23:CX:33:LYS:NZ	2.36	0.41
31:DA:1050:G:N2	31:DA:1209:C:H1'	2.36	0.41
31:DA:1179:A:H2'	31:DA:1180:A:O4'	2.20	0.41
31:DA:1234:C:C4'	31:DA:1364:U:H1'	2.50	0.41
31:DA:251:G:H4'	31:DA:252:U:O5'	2.21	0.41
31:DA:590:C:H2'	31:DA:591:U:C6	2.56	0.41
31:DA:69:G:H2'	31:DA:73:G:H8	1.86	0.41
31:DA:76:G:C6	31:DA:77:C:C4	3.09	0.41
31:DA:878:G:C1'	38:DH:3:THR:HG21	2.51	0.41
32:DB:52:GLU:HG2	32:DB:56:ARG:HE	1.85	0.41
33:DC:11:ARG:HH11	33:DC:11:ARG:HG2	1.86	0.41
31:DA:1057:G:O3'	33:DC:197:GLY:HA3	2.20	0.41
33:DC:83:ARG:O	33:DC:86:VAL:HG22	2.21	0.41
34:DD:110:PHE:CE2	34:DD:148:VAL:CG2	3.04	0.41
34:DD:140:VAL:CG1	34:DD:185:PHE:HD1	2.34	0.41
34:DD:52:SER:H	34:DD:55:ALA:HB3	1.86	0.41
36:DF:15:ASP:OD2	36:DF:18:GLN:HB2	2.20	0.41
43:DM:34:LEU:HD22	43:DM:39:ILE:HB	2.02	0.41
43:DM:68:GLY:O	43:DM:72:ALA:N	2.54	0.41
33:DC:6:HIS:CB	44:DN:49:HIS:HB3	2.50	0.41
49:DS:6:LYS:HD3	49:DS:7:LYS:HE3	2.03	0.41
52:DW:17(A):U:C1'	52:DW:18:G:P	3.09	0.41
1:AA:1162:G:O2'	17:AR:90:PRO:HG2	2.21	0.41
1:AA:1230:C:H2'	1:AA:1231:G:C8	2.55	0.41
1:AA:1788:C:H5''	3:AD:225:ALA:HB1	2.02	0.41
1:AA:2120:G:N2	1:AA:2179:C:C2	2.89	0.41
1:AA:2306:C:H4'	6:AG:136:ARG:CZ	2.51	0.41
1:AA:2643:G:H2'	1:AA:2644:G:O4'	2.21	0.41
1:AA:508:G:H2'	1:AA:509:C:OP2	2.21	0.41
1:AA:78:A:H2'	1:AA:79:G:C8	2.55	0.41
3:AD:197:GLY:O	3:AD:198:ASN:C	2.60	0.41
3:AD:79:VAL:O	3:AD:113:VAL:HG13	2.21	0.41
5:AF:11:VAL:HA	5:AF:125:LEU:O	2.20	0.41
6:AG:16:ARG:HH12	6:AG:28:VAL:CG1	2.33	0.41
7:AH:137:ASP:HB3	7:AH:140:LYS:CD	2.51	0.41
8:AI:104:GLN:HG2	8:AI:105:HIS:CE1	2.56	0.41
9:AJ:94:ILE:HD11	9:AJ:107:LYS:HE2	2.03	0.41
9:AJ:90:LEU:O	9:AJ:111:GLU:HG3	2.21	0.41
10:AK:1:MET:HB2	10:AK:32:TYR:HB3	2.03	0.41
12:AM:111:GLU:O	12:AM:115:MET:HG2	2.20	0.41
13:AN:28:LEU:HD12	13:AN:48:VAL:HG21	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AR:81:TYR:C	17:AR:82:ARG:HD2	2.41	0.41
20:AU:2:ARG:C	20:AU:4:LYS:H	2.24	0.41
20:AU:43:ASN:O	20:AU:44:ILE:HD13	2.21	0.41
31:BA:1026:G:H1	31:BA:1036:G:N2	2.18	0.41
31:BA:162:A:C5	31:BA:163:C:H1'	2.56	0.41
32:BB:52:GLU:HG2	32:BB:56:ARG:HE	1.86	0.41
34:BD:29:PRO:C	34:BD:30:LYS:HE3	2.42	0.41
36:BF:15:ASP:OD2	36:BF:18:GLN:HB2	2.20	0.41
41:BK:96:ARG:HD3	41:BK:96:ARG:HA	1.81	0.41
42:BL:84:ILE:HA	42:BL:84:ILE:HD12	1.93	0.41
45:BO:26:GLU:H	45:BO:26:GLU:HG2	1.58	0.41
26:C1:56:GLU:HA	26:C1:56:GLU:OE1	2.20	0.41
1:CA:1049:C:OP1	1:CA:1103:A:OP1	2.39	0.41
1:CA:1429:G:H2'	1:CA:1430:C:C6	2.56	0.41
1:CA:1992:G:C2	1:CA:1997:G:C5	3.09	0.41
1:CA:2023:G:H4'	1:CA:2617:C:O3'	2.21	0.41
1:CA:2120:G:N2	1:CA:2179:C:C2	2.89	0.41
1:CA:2579:C:H4'	4:CE:134:ILE:HG21	2.02	0.41
1:CA:2648:C:H2'	1:CA:2649:U:C6	2.56	0.41
1:CA:2777:G:H5'	1:CA:2778:A:H5'	2.02	0.41
1:CA:69:C:O2'	1:CA:70:G:H5'	2.21	0.41
1:CA:712(B):A:H5"	1:CA:2713:A:OP2	2.21	0.41
1:CA:96:G:O5'	24:CY:48:HIS:CE1	2.74	0.41
3:CD:174:ILE:CD1	3:CD:174:ILE:N	2.83	0.41
4:CE:25:VAL:O	4:CE:26:ILE:HD13	2.21	0.41
7:CH:103:LEU:HD23	7:CH:103:LEU:C	2.42	0.41
7:CH:87:LEU:O	7:CH:130:ARG:HA	2.21	0.41
8:CI:110:ASP:OD2	8:CI:113:ARG:HG2	2.21	0.41
10:CK:88:ASN:ND2	10:CK:92:GLU:O	2.51	0.41
11:CL:64:LYS:C	11:CL:66:GLY:H	2.13	0.41
19:CT:32:PRO:HA	19:CT:77:LYS:HB2	2.03	0.41
19:CT:40:LYS:HG3	19:CT:51:VAL:CG2	2.51	0.41
20:CU:7:VAL:O	20:CU:8:LYS:HG3	2.19	0.41
20:CU:96:ILE:HG12	20:CU:99:CYS:O	2.21	0.41
21:CV:108:PRO:HD2	21:CV:111:VAL:HB	2.03	0.41
21:CV:99:TYR:CD1	21:CV:99:TYR:N	2.89	0.41
24:CY:46:GLN:HB2	24:CY:49:LYS:CE	2.50	0.41
1:CA:95:G:O2'	24:CY:46:GLN:O	2.39	0.41
31:DA:1010:G:H2'	31:DA:1011:G:H8	1.86	0.41
31:DA:1293:G:H2'	31:DA:1294:G:C8	2.56	0.41
31:DA:1395:C:O2	31:DA:1395:C:H2'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CP:118:ARG:CD	31:DA:1446:A:C6	3.04	0.41
31:DA:1502:A:H8	31:DA:1505:G:N2	2.17	0.41
32:DB:97:TRP:CZ2	32:DB:101:MET:HB2	2.56	0.41
32:DB:90:MET:HA	32:DB:91:PRO:HD3	1.94	0.41
33:DC:109:PRO:HB3	33:DC:115:LEU:HD23	2.03	0.41
36:DF:5:GLU:HG3	36:DF:93:SER:OG	2.21	0.41
39:DI:28:VAL:HG13	39:DI:63:ILE:C	2.41	0.41
41:DK:108:ILE:O	48:DR:87:ARG:HA	2.21	0.41
42:DL:56:LYS:H	42:DL:56:LYS:HD2	1.85	0.41
42:DL:81:VAL:HG12	42:DL:105:ASP:CG	2.42	0.41
47:DQ:63:ARG:HA	47:DQ:64:PRO:HD3	1.95	0.41
48:DR:40:LEU:HD22	48:DR:70:ILE:CD1	2.50	0.41
49:DS:31:ILE:HG13	49:DS:49:ILE:HG23	2.03	0.41
43:DM:84:ILE:HD11	49:DS:66:MET:SD	2.61	0.41
50:DT:38:LYS:HA	50:DT:41:VAL:HG22	2.02	0.41
30:A5:30:ARG:HA	30:A5:30:ARG:NE	2.29	0.40
1:AA:1299:G:N2	1:AA:1640:C:H5'	2.35	0.40
1:AA:137(B):G:O6	1:AA:139:G:O2'	2.36	0.40
1:AA:1413:G:C4	1:AA:1414:G:C8	3.09	0.40
1:AA:1472:A:H61	1:AA:1521:G:H1'	1.86	0.40
1:AA:155:C:H2'	1:AA:161:U:H5'	2.03	0.40
1:AA:1952:A:C6	1:AA:1953:A:C6	3.08	0.40
1:AA:1930:G:N2	1:AA:1968:G:H2'	2.36	0.40
1:AA:2061:G:H5''	1:AA:2503:A:C2	2.56	0.40
1:AA:2114:A:N1	1:AA:2171:A:N1	2.69	0.40
1:AA:2729:G:H2'	1:AA:2730:C:H6	1.86	0.40
1:AA:2760:C:O2'	1:AA:2761:G:H5'	2.21	0.40
1:AA:809:G:H4'	1:AA:1254:A:O4'	2.21	0.40
3:AD:125:ILE:HG12	3:AD:137:PRO:HD3	1.99	0.40
4:AE:87:GLU:O	4:AE:89:ASP:N	2.54	0.40
6:AG:77:ILE:N	6:AG:77:ILE:HD12	2.36	0.40
10:AK:117:LEU:N	10:AK:117:LEU:HD12	2.36	0.40
13:AN:88:ARG:HA	13:AN:88:ARG:HD3	1.87	0.40
19:AT:12:VAL:O	19:AT:13:LEU:HD23	2.21	0.40
31:BA:1029:G:N2	31:BA:1031(A):A:C8	2.89	0.40
31:BA:1316:G:N1	31:BA:1319:A:OP2	2.53	0.40
31:BA:579:G:C6	31:BA:580:U:C4	3.10	0.40
32:BB:97:TRP:CZ2	32:BB:101:MET:HB2	2.55	0.40
32:BB:130:ARG:HA	32:BB:131:PRO:HD2	1.97	0.40
32:BB:178:ARG:HH11	32:BB:178:ARG:HB2	1.86	0.40
33:BC:165:THR:O	33:BC:165:THR:HG23	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BC:18:TRP:C	33:BC:20:SER:N	2.74	0.40
33:BC:36:ASP:HB3	33:BC:40:ARG:HH12	1.85	0.40
34:BD:206:PHE:CD2	34:BD:207:TYR:CD2	3.08	0.40
37:BG:107:ALA:O	37:BG:110:GLN:HB2	2.21	0.40
39:BI:111:ARG:NH1	39:BI:113:LYS:HA	2.34	0.40
39:BI:92:TYR:HA	39:BI:95:LYS:HD2	2.03	0.40
43:BM:34:LEU:HD22	43:BM:39:ILE:HB	2.03	0.40
43:BM:84:ILE:HD11	49:BS:66:MET:SD	2.61	0.40
18:CS:15:ARG:NH2	27:C2:20:ARG:HH12	2.18	0.40
19:CT:60:ARG:NH2	29:C4:47:ARG:CZ	2.75	0.40
1:CA:1047:G:H4'	1:CA:1048:A:O4'	2.21	0.40
1:CA:198:C:H6	1:CA:198:C:O5'	2.05	0.40
1:CA:2053:G:H5'	4:CE:144:ARG:O	2.21	0.40
1:CA:2334:G:C4	14:CO:12:PHE:CZ	3.09	0.40
1:CA:2334:G:H4'	1:CA:2335:A:OP2	2.21	0.40
1:CA:2365:G:O6	30:C5:39:LYS:HE3	2.21	0.40
1:CA:2461:C:H2'	1:CA:2462:U:C6	2.56	0.40
1:CA:679:C:O2'	1:CA:680:G:H5'	2.21	0.40
2:CB:40:U:H1'	2:CB:43:C:H5	1.86	0.40
3:CD:53:PHE:CE1	3:CD:221:VAL:HG12	2.55	0.40
4:CE:105:THR:HG21	4:CE:164:ARG:CZ	2.51	0.40
4:CE:5:LEU:HD23	4:CE:5:LEU:N	2.36	0.40
5:CF:197:ASP:O	5:CF:200:GLU:HB3	2.21	0.40
8:CI:48:GLU:O	8:CI:52:ARG:HB2	2.20	0.40
11:CL:107:LYS:HD2	11:CL:107:LYS:HA	1.92	0.40
1:CA:2482:G:H21	12:CM:56:ARG:HH21	1.69	0.40
13:CN:21:TYR:OH	13:CN:43:GLU:HG2	2.21	0.40
13:CN:63:ARG:O	13:CN:67:LEU:HB2	2.21	0.40
13:CN:66:VAL:HG12	13:CN:70:LEU:HD13	2.03	0.40
13:CN:55:ALA:HB3	13:CN:79:LEU:HD13	2.01	0.40
14:CO:58:LEU:HD11	14:CO:68:GLN:HB3	2.03	0.40
15:CP:112:ARG:H	15:CP:112:ARG:HG3	1.69	0.40
1:CA:1335:U:OP1	19:CT:65:ARG:HG3	2.21	0.40
19:CT:92:LEU:C	19:CT:94:GLY:H	2.25	0.40
1:CA:483:A:H4'	20:CU:49:VAL:CG2	2.50	0.40
20:CU:4:LYS:CD	20:CU:4:LYS:N	2.84	0.40
21:CV:13:GLU:HB3	21:CV:18:LEU:HD11	2.02	0.40
22:CW:46:LYS:HB3	22:CW:47:PRO:HD2	2.02	0.40
23:CX:19:GLN:CG	23:CX:41:ARG:HE	2.33	0.40
31:DA:1026:G:H1	31:DA:1036:G:N2	2.19	0.40
31:DA:1105:A:O2'	31:DA:1106:G:H5'	2.20	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1143:G:H2'	31:DA:1144:G:H8	1.85	0.40
31:DA:1298:C:H4'	31:DA:1299:A:O4'	2.20	0.40
31:DA:1399:C:H4'	31:DA:1400:C:C5'	2.52	0.40
31:DA:1503:A:O2'	31:DA:1504:G:C5'	2.68	0.40
31:DA:354:G:H2'	31:DA:354:G:N3	2.35	0.40
31:DA:767:A:H2'	31:DA:768:A:O4'	2.21	0.40
31:DA:795:C:O5'	31:DA:795:C:H6	2.04	0.40
31:DA:971:G:H1'	31:DA:1365:G:O2'	2.21	0.40
32:DB:187:LEU:HD23	32:DB:188:ALA:H	1.85	0.40
32:DB:97:TRP:HH2	32:DB:176:GLU:CG	2.34	0.40
34:DD:19:LEU:HD22	34:DD:67:ILE:HG12	2.02	0.40
34:DD:68:TYR:CD1	34:DD:68:TYR:N	2.88	0.40
34:DD:57:ARG:NH2	35:DE:107:ARG:NH1	2.68	0.40
35:DE:110:LEU:O	35:DE:113:ALA:HB3	2.22	0.40
31:DA:1194:U:H4'	35:DE:22:GLY:O	2.22	0.40
37:DG:15:ASP:C	37:DG:17:VAL:H	2.25	0.40
39:DI:10:ARG:HA	39:DI:104:ARG:HH11	1.85	0.40
39:DI:14:VAL:HG12	39:DI:15:ALA:N	2.36	0.40
52:DV:50:U:H2'	52:DV:51:C:C6	2.56	0.40
52:DV:72:A:C6	52:DV:73:A:C6	3.08	0.40
26:A1:56:GLU:OE1	26:A1:56:GLU:HA	2.21	0.40
1:AA:1153:C:H2'	1:AA:1154:G:O4'	2.22	0.40
1:AA:1831:G:H2'	1:AA:1832:C:C6	2.55	0.40
1:AA:2319:G:C2	1:AA:2320:A:N1	2.89	0.40
1:AA:2562:U:C2'	1:AA:2563:U:H5'	2.50	0.40
1:AA:2626:C:H2'	1:AA:2627:G:O4'	2.21	0.40
1:AA:673:C:C2'	1:AA:674:G:H5'	2.50	0.40
5:AF:117:ARG:HA	5:AF:120:GLU:OE2	2.21	0.40
8:AI:9:LEU:CD1	8:AI:12:LEU:HD23	2.52	0.40
10:AK:96:THR:O	10:AK:97:ARG:HB3	2.21	0.40
11:AL:10:PRO:O	11:AL:11:GLY:C	2.60	0.40
11:AL:46:LYS:HG2	11:AL:52:GLU:CD	2.41	0.40
12:AM:20:ALA:HB1	12:AM:99:PRO:O	2.21	0.40
12:AM:80:GLU:CA	12:AM:80:GLU:OE2	2.68	0.40
13:AN:100:LEU:HA	13:AN:100:LEU:HD13	1.87	0.40
13:AN:70:LEU:CD1	13:AN:70:LEU:H	2.32	0.40
15:AP:6:LEU:O	15:AP:10:VAL:HG23	2.21	0.40
15:AP:61:PHE:CD2	15:AP:78:LEU:HD23	2.57	0.40
20:AU:60:PHE:O	20:AU:61:ILE:C	2.59	0.40
21:AV:107:THR:HA	21:AV:108:PRO:HD3	1.87	0.40
21:AV:128:VAL:HG22	21:AV:161:VAL:HA	2.02	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:AY:41:ILE:O	24:AY:41:ILE:HD12	2.21	0.40
31:BA:1004:A:C1'	31:BA:1036:G:H22	2.31	0.40
31:BA:1493:A:O2'	31:BA:1494:G:H5'	2.21	0.40
31:BA:694:A:P	41:BK:53:SER:HG	2.45	0.40
31:BA:888:G:H4'	31:BA:1488:G:O2'	2.20	0.40
31:BA:990:C:H2'	31:BA:991:U:O4'	2.21	0.40
32:BB:102:LEU:HB3	32:BB:180:LEU:HD12	2.03	0.40
32:BB:151:GLY:O	32:BB:154:LEU:HD21	2.21	0.40
33:BC:109:PRO:HB3	33:BC:115:LEU:HD23	2.02	0.40
38:BH:127:LEU:H	38:BH:127:LEU:HD22	1.85	0.40
39:BI:28:VAL:HG13	39:BI:63:ILE:C	2.42	0.40
39:BI:83:ARG:HA	39:BI:86:VAL:CG1	2.49	0.40
42:BL:69:ILE:HD12	42:BL:69:ILE:N	2.36	0.40
44:BN:12:ARG:HG2	44:BN:14:PRO:HG3	2.04	0.40
47:BQ:34:LYS:O	47:BQ:36:ILE:HG23	2.21	0.40
26:C1:46:ASN:ND2	26:C1:47:VAL:N	2.69	0.40
1:CA:1144:G:H2'	1:CA:1145:C:H6	1.87	0.40
1:CA:1210:A:H4'	1:CA:1211:U:O5'	2.19	0.40
1:CA:1911:U:C2	1:CA:1918:A:C2	3.10	0.40
1:CA:2114:A:C2	1:CA:2168:G:O4'	2.74	0.40
1:CA:2343:C:O2'	1:CA:2373:G:O2'	2.27	0.40
1:CA:278:A:N6	1:CA:362:U:H3	2.19	0.40
1:CA:445:C:O2'	1:CA:446:G:H5'	2.21	0.40
1:CA:528:A:C8	1:CA:528:A:H3'	2.56	0.40
1:CA:620:G:N3	1:CA:620:G:H5''	2.36	0.40
2:CB:50:G:OP1	14:CO:63:THR:HG23	2.20	0.40
3:CD:206:LEU:HD23	3:CD:206:LEU:HA	1.76	0.40
3:CD:20:ASP:C	3:CD:22:SER:H	2.24	0.40
4:CE:13:ARG:HA	4:CE:23:VAL:HG23	2.01	0.40
5:CF:164:ARG:HD3	5:CF:175:THR:HB	2.02	0.40
9:CJ:117:HIS:HA	9:CJ:118:PRO:HD3	1.76	0.40
9:CJ:90:LEU:N	9:CJ:90:LEU:HD12	2.36	0.40
9:CJ:89:LYS:O	9:CJ:92:GLN:N	2.54	0.40
11:CL:138:LEU:HD23	11:CL:144:GLU:HG2	2.03	0.40
11:CL:16:ARG:O	11:CL:17:LYS:C	2.59	0.40
11:CL:98:GLU:O	11:CL:101:VAL:HG12	2.21	0.40
15:CP:119:LYS:HA	31:DA:1443:G:H21	1.80	0.40
18:CS:1:MET:HG2	18:CS:2:GLU:N	2.28	0.40
1:CA:2012:G:O3'	18:CS:96:ILE:HG13	2.21	0.40
20:CU:45:VAL:HG12	20:CU:47:LYS:HG3	2.02	0.40
20:CU:55:TYR:HA	20:CU:56:PRO:HD3	1.87	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:297:C:H5''	20:CU:85:VAL:CG2	2.51	0.40
24:CY:9:GLN:O	24:CY:13:ALA:N	2.54	0.40
31:DA:1234:C:O2'	31:DA:1235:U:H5'	2.21	0.40
31:DA:1468:A:H2'	31:DA:1469:G:O4'	2.22	0.40
31:DA:442:C:O5'	31:DA:442:C:H6	2.04	0.40
31:DA:709:G:H2'	31:DA:710:G:C8	2.56	0.40
31:DA:814:A:N7	31:DA:816:A:C4	2.90	0.40
31:DA:872:A:N3	31:DA:872:A:H2'	2.36	0.40
32:DB:29:ALA:HA	32:DB:32:ILE:HG12	2.04	0.40
34:DD:126:ILE:CG2	34:DD:146:ILE:HG23	2.52	0.40
34:DD:18:LYS:NZ	34:DD:31:CYS:HB2	2.36	0.40
35:DE:101:ILE:HD13	35:DE:101:ILE:N	2.29	0.40
39:DI:5:TYR:HA	39:DI:17:VAL:O	2.20	0.40
40:DJ:20:ALA:O	40:DJ:24:VAL:HG23	2.21	0.40
43:DM:25:ILE:HG23	43:DM:29:ARG:HB2	2.04	0.40
43:DM:15:VAL:HG13	43:DM:43:THR:O	2.21	0.40
50:DT:40:ALA:HB2	50:DT:55:ILE:HG22	2.03	0.40
19:AT:60:ARG:NH2	29:A4:47:ARG:CZ	2.75	0.40
1:AA:2419:U:O4	30:A5:30:ARG:CZ	2.69	0.40
1:AA:1115:G:O2'	1:AA:1116:C:H5'	2.21	0.40
1:AA:1366:A:H2'	1:AA:1367:A:O4'	2.22	0.40
1:AA:2344:U:H4'	1:AA:2345:G:OP1	2.21	0.40
1:AA:2506:U:C6	1:AA:2506:U:H3'	2.55	0.40
1:AA:2529:G:H5''	1:AA:2530:A:C5'	2.52	0.40
1:AA:372:G:O2'	1:AA:373:U:P	2.80	0.40
1:AA:612:G:N2	1:AA:617:G:C5	2.90	0.40
1:AA:655:A:C2'	1:AA:656:G:C5'	3.00	0.40
1:AA:783:A:C8	1:AA:783:A:H3'	2.56	0.40
1:AA:797:C:H2'	1:AA:798:G:O4'	2.21	0.40
1:AA:824:A:H1'	1:AA:2358:G:N7	2.36	0.40
1:AA:993:G:OP1	16:AQ:50:ARG:NH2	2.52	0.40
3:AD:174:ILE:CD1	3:AD:174:ILE:N	2.84	0.40
5:AF:164:ARG:HD3	5:AF:175:THR:HB	2.03	0.40
1:AA:322:A:C2'	5:AF:169:ASN:HD21	2.35	0.40
5:AF:197:ASP:O	5:AF:200:GLU:HB3	2.21	0.40
7:AH:87:LEU:O	7:AH:130:ARG:HA	2.21	0.40
14:AO:89:ARG:HD2	14:AO:94:TYR:H	1.86	0.40
14:AO:95:HIS:O	14:AO:98:VAL:HG23	2.21	0.40
19:AT:63:LYS:HD2	19:AT:72:LYS:CB	2.50	0.40
20:AU:75:ILE:HD12	20:AU:76:CYS:N	2.35	0.40
20:AU:7:VAL:O	20:AU:8:LYS:HG3	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AV:63:ASP:CB	21:AV:65:GLN:HG3	2.51	0.40
21:AV:70:LEU:HA	21:AV:70:LEU:HD23	1.99	0.40
24:AY:9:GLN:CA	24:AY:12:GLU:HB3	2.49	0.40
31:BA:1234:C:C4'	31:BA:1364:U:H1'	2.51	0.40
31:BA:247:G:C2	31:BA:248:C:C6	3.08	0.40
31:BA:315:A:C2	31:BA:330:C:C2	3.10	0.40
31:BA:392:G:C4	31:BA:393:A:C8	3.09	0.40
31:BA:475:G:H2'	31:BA:476:G:C8	2.56	0.40
32:BB:127:ILE:O	32:BB:127:ILE:HG22	2.21	0.40
32:BB:164:VAL:HB	32:BB:186:ALA:CB	2.50	0.40
33:BC:23:TYR:CD2	33:BC:24:ALA:N	2.90	0.40
34:BD:79:PHE:CZ	34:BD:204:ILE:HD13	2.57	0.40
34:BD:28:SER:CB	34:BD:29:PRO:CD	3.00	0.40
48:BR:51:LEU:CD2	48:BR:55:ARG:HH21	2.28	0.40
49:BS:16:LEU:HD12	49:BS:16:LEU:HA	1.96	0.40
52:BV:29:G:C4	52:BV:30:G:C8	3.09	0.40
52:BW:30:G:H2'	52:BW:31:G:H8	1.86	0.40
52:BW:1:C:N3	52:BW:72:A:N1	2.69	0.40
1:CA:1110:G:H2'	1:CA:1111:A:C8	2.57	0.40
1:CA:1448(B):A:C4	1:CA:1529:A:C2	3.10	0.40
1:CA:1771:C:O2'	1:CA:1786:A:H8	2.04	0.40
1:CA:17:G:H2'	1:CA:18:C:H6	1.86	0.40
1:CA:197:A:H5'	1:CA:197:A:C8	2.56	0.40
1:CA:2400:G:H5'	28:C3:19:ARG:HD2	2.04	0.40
1:CA:197:A:N6	1:CA:2430:A:H2'	2.37	0.40
1:CA:2068:U:C2	1:CA:2430:A:H2	2.39	0.40
1:CA:2821:A:O2'	1:CA:2822:G:H5'	2.22	0.40
1:CA:2829:C:O3'	4:CE:76:ARG:NH2	2.53	0.40
1:CA:2847:U:H2'	1:CA:2848:G:H5'	2.02	0.40
1:CA:2807:G:N2	1:CA:2893:G:H22	2.09	0.40
1:CA:372:G:O2'	1:CA:373:U:P	2.80	0.40
1:CA:620:G:H8	1:CA:622:G:O6	2.05	0.40
2:CB:68:C:H2'	2:CB:69:G:O4'	2.21	0.40
3:CD:33:LEU:HD23	3:CD:33:LEU:N	2.36	0.40
6:CG:16:ARG:HH12	6:CG:28:VAL:CG1	2.33	0.40
7:CH:137:ASP:HB3	7:CH:140:LYS:CD	2.51	0.40
9:CJ:116:THR:HG1	9:CJ:117:HIS:CE1	2.39	0.40
11:CL:46:LYS:CB	11:CL:52:GLU:HG3	2.49	0.40
12:CM:134:ARG:C	12:CM:134:ARG:HE	2.25	0.40
15:CP:3:ARG:O	15:CP:5:ALA:N	2.55	0.40
17:CR:45:THR:CG2	17:CR:52:VAL:HG21	2.51	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DA:1144:G:N2	31:DA:1146:A:N6	2.68	0.40
31:DA:1383:C:H2'	31:DA:1384:C:H6	1.86	0.40
31:DA:315:A:C2	31:DA:330:C:C2	3.08	0.40
31:DA:592:G:C2	31:DA:593:G:C8	3.09	0.40
31:DA:857:C:H2'	31:DA:858:G:O4'	2.21	0.40
32:DB:102:LEU:HD12	32:DB:102:LEU:N	2.36	0.40
33:DC:36:ASP:HB3	33:DC:40:ARG:HH12	1.85	0.40
33:DC:95:THR:CG2	33:DC:97:LYS:HG2	2.50	0.40
37:DG:62:PHE:HA	37:DG:124:LEU:CD2	2.51	0.40
37:DG:13:GLN:HA	37:DG:14:PRO:HD3	1.98	0.40
37:DG:26:PHE:CG	37:DG:62:PHE:HZ	2.39	0.40
40:DJ:30:SER:HB2	40:DJ:80:LYS:CG	2.49	0.40
31:DA:691:G:H1	41:DK:52:GLY:HA2	1.86	0.40
49:DS:40:ILE:HD13	49:DS:62:ILE:CD1	2.52	0.40
27:A2:18:ALA:O	27:A2:21:SER:HB2	2.21	0.40
27:A2:48:GLU:HG2	27:A2:48:GLU:O	2.21	0.40
1:AA:2286:A:H61	28:A3:24:GLU:CD	2.24	0.40
29:A4:3:ARG:HD3	29:A4:3:ARG:HA	1.90	0.40
1:AA:1731:G:O2'	1:AA:1732:A:C8	2.66	0.40
1:AA:2114:A:C2	1:AA:2168:G:O4'	2.74	0.40
1:AA:2320:A:C2	1:AA:2333:A:C8	3.10	0.40
1:AA:2555:U:C4	1:AA:2556:C:C2	3.10	0.40
1:AA:2867:G:OP2	15:AP:119:LYS:HD3	2.21	0.40
1:AA:2881:C:H2'	1:AA:2882:A:O4'	2.21	0.40
1:AA:619:G:H5''	1:AA:620:G:OP2	2.21	0.40
1:AA:864:G:C6	1:AA:865:C:N4	2.89	0.40
2:AB:35:U:O2'	2:AB:36:C:H5'	2.21	0.40
3:AD:142:VAL:HG23	3:AD:193:VAL:HA	2.03	0.40
5:AF:140:LEU:CD2	5:AF:170:LEU:HD11	2.52	0.40
9:AJ:118:PRO:HD2	9:AJ:119:GLU:H	1.87	0.40
9:AJ:158:PRO:O	9:AJ:159:GLU:C	2.60	0.40
11:AL:107:LYS:HA	11:AL:107:LYS:HD2	1.91	0.40
1:AA:662:G:P	11:AL:18:ARG:HG2	2.61	0.40
12:AM:54:MET:CE	12:AM:64:ILE:HG23	2.51	0.40
13:AN:18:LEU:C	13:AN:18:LEU:HD13	2.41	0.40
17:AR:33:VAL:HG23	17:AR:33:VAL:O	2.21	0.40
19:AT:31:HIS:HA	19:AT:32:PRO:HD3	1.93	0.40
2:AB:11:C:OP1	22:AW:72:ARG:HD2	2.22	0.40
23:AX:27:GLU:HG3	23:AX:33:LYS:NZ	2.36	0.40
31:BA:109:A:N6	31:BA:326:G:C6	2.90	0.40
31:BA:1262:C:OP2	51:BU:25:LYS:NZ	2.41	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:1288:A:C6	31:BA:1289:A:C6	3.10	0.40
31:BA:1291:G:C6	31:BA:1292:U:C4	3.10	0.40
31:BA:1379:G:C6	31:BA:1380:U:O4	2.74	0.40
31:BA:186(D):G:C6	31:BA:186(E):C:C4	3.10	0.40
31:BA:452:A:O2'	31:BA:453:A:H8	2.03	0.40
31:BA:691:G:O6	41:BK:52:GLY:HA2	2.21	0.40
31:BA:767:A:H2'	31:BA:768:A:O4'	2.21	0.40
31:BA:971:G:H1'	31:BA:1365:G:O2'	2.21	0.40
33:BC:52:LEU:HD21	33:BC:55:VAL:HB	2.02	0.40
33:BC:6:HIS:HD2	33:BC:7:PRO:HD2	1.86	0.40
35:BE:110:LEU:O	35:BE:113:ALA:HB3	2.21	0.40
31:BA:1071:C:H5''	35:BE:49:PRO:HG2	2.03	0.40
37:BG:69:VAL:HG12	37:BG:69:VAL:O	2.21	0.40
44:BN:23:ARG:HD3	44:BN:29:ARG:O	2.21	0.40
47:BQ:78:GLU:O	47:BQ:78:GLU:HG3	2.21	0.40
48:BR:22:VAL:HG23	48:BR:55:ARG:O	2.20	0.40
52:BW:17(A):U:C1'	52:BW:18:G:OP1	2.70	0.40
1:CA:1379:A:C4'	1:CA:1380:G:OP2	2.62	0.40
1:CA:1500:G:C5	1:CA:1501:C:C4	3.10	0.40
1:CA:2580:U:C5	1:CA:2581:G:C6	3.10	0.40
1:CA:2660:A:H2'	1:CA:2661:G:O4'	2.21	0.40
1:CA:1639:U:H4'	1:CA:2699:C:H4'	2.02	0.40
1:CA:2809:A:C2	1:CA:2892:A:H1'	2.57	0.40
1:CA:2812:G:N2	1:CA:2889:C:C2	2.89	0.40
1:CA:508:G:H2'	1:CA:509:C:OP2	2.21	0.40
1:CA:824:A:H1'	1:CA:2358:G:N7	2.36	0.40
1:CA:1788:C:H5''	3:CD:225:ALA:HB1	2.03	0.40
1:CA:1971:A:N3	3:CD:241:PRO:HD3	2.36	0.40
4:CE:3:GLY:HA3	4:CE:81:ILE:HG21	2.03	0.40
5:CF:65:TRP:CH2	5:CF:75:HIS:HD2	2.40	0.40
6:CG:25:TYR:CZ	6:CG:32:PRO:HD3	2.57	0.40
7:CH:127:GLU:C	7:CH:129:THR:H	2.25	0.40
9:CJ:79:ASN:HA	9:CJ:147:ALA:O	2.21	0.40
11:CL:138:LEU:HA	11:CL:138:LEU:HD12	1.92	0.40
18:CS:106:ILE:HD12	18:CS:106:ILE:O	2.21	0.40
20:CU:13:VAL:HG22	20:CU:14:LEU:N	2.36	0.40
31:DA:1033:G:H2'	31:DA:1034:G:H8	1.85	0.40
31:DA:1288:A:C6	31:DA:1289:A:C6	3.09	0.40
31:DA:1493:A:O2'	31:DA:1494:G:H5'	2.22	0.40
31:DA:632:A:C2'	31:DA:633:G:H5'	2.50	0.40
36:DF:47:ARG:HG2	36:DF:57:GLN:HG2	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DF:30:LEU:HA	36:DF:75:LEU:HD11	2.03	0.40
39:DI:11:LYS:H	39:DI:104:ARG:NH1	2.19	0.40
40:DJ:63:PHE:HB3	44:DN:58:LYS:HA	2.03	0.40
31:DA:624:C:C4'	46:DP:10:GLY:HA2	2.45	0.40
52:DV:48:C:C4	52:DV:59:A:C8	3.10	0.40
1:AA:1050:A:H3'	1:AA:1051:G:C8	2.57	0.40
1:AA:1171:G:H2'	1:AA:1173:G:O4'	2.22	0.40
1:AA:1204:A:O4'	1:AA:1204:A:N3	2.54	0.40
1:AA:1448(B):A:C4	1:AA:1529:A:C2	3.09	0.40
1:AA:1594:G:H2'	1:AA:1595:G:O4'	2.22	0.40
1:AA:2041:U:H2'	1:AA:2042:A:C8	2.57	0.40
1:AA:2320:A:C2'	1:AA:2320:A:N3	2.83	0.40
1:AA:2505:G:O6	1:AA:2576:G:H2'	2.22	0.40
1:AA:310:A:N1	1:AA:312:G:H1'	2.37	0.40
1:AA:30:G:H2'	1:AA:31:C:C6	2.56	0.40
1:AA:414:C:H4'	1:AA:1879:C:O2	2.21	0.40
1:AA:492:A:H2'	1:AA:493:G:O4'	2.22	0.40
1:AA:620:G:N3	1:AA:620:G:H5''	2.36	0.40
1:AA:896:A:H5''	21:AV:146:ILE:HG13	2.02	0.40
3:AD:243:GLY:O	3:AD:244:ARG:HB3	2.20	0.40
6:AG:41:GLN:HG2	6:AG:155:MET:CB	2.52	0.40
8:AI:110:ASP:HA	8:AI:111:PRO:HD2	1.88	0.40
11:AL:32:THR:O	11:AL:33:ARG:O	2.40	0.40
2:AB:7:G:H4'	14:AO:29:PHE:HB2	2.03	0.40
14:AO:62:LYS:HB3	14:AO:97:ARG:NE	2.36	0.40
22:AW:36:ILE:HG23	22:AW:58:THR:HG23	2.04	0.40
23:AX:67:ILE:N	23:AX:68:PRO:CD	2.85	0.40
31:BA:1031:G:C8	31:BA:1031:G:H3'	2.57	0.40
31:BA:1215:G:H2'	31:BA:1216:G:H5'	2.02	0.40
31:BA:354:G:N3	31:BA:354:G:H2'	2.36	0.40
31:BA:409:G:H1	31:BA:433:C:H42	1.69	0.40
31:BA:545:C:H5'	34:BD:72:GLU:CG	2.30	0.40
31:BA:698:G:C6	31:BA:699:C:C4	3.09	0.40
31:BA:81:G:C5'	31:BA:82:U:OP2	2.69	0.40
32:BB:144:ARG:HG3	32:BB:145:LEU:N	2.36	0.40
32:BB:19:HIS:HE2	32:BB:206:ASP:HB2	1.87	0.40
32:BB:81:VAL:HG12	32:BB:92:TYR:HD1	1.86	0.40
33:BC:72:LYS:HG2	33:BC:74:GLY:H	1.87	0.40
37:BG:5:ARG:HB3	37:BG:6:ARG:H	1.50	0.40
38:BH:120:THR:HG23	38:BH:123:GLU:OE1	2.22	0.40
41:BK:19:ALA:HB2	41:BK:32:ILE:HG22	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BA:750:G:N3	45:BO:23:GLY:HA3	2.36	0.40
52:BV:48:C:C4	52:BV:59:A:C8	3.09	0.40
52:BW:10:G:C6	52:BW:26:G:C2	3.10	0.40
28:C3:17:LYS:HA	28:C3:17:LYS:HD3	1.70	0.40
1:CA:1167:U:H2'	1:CA:1168:G:C8	2.57	0.40
1:CA:1291:C:H2'	1:CA:1292:U:C6	2.57	0.40
1:CA:1413:G:C4	1:CA:1414:G:C8	3.10	0.40
1:CA:1494:A:OP1	1:CA:1494:A:H4'	2.16	0.40
1:CA:1859:A:C2	1:CA:1884:A:H1'	2.57	0.40
1:CA:1910:G:C6	1:CA:1921:G:C6	3.09	0.40
1:CA:2117:A:N6	1:CA:2172:U:N1	2.69	0.40
1:CA:860:U:C5	1:CA:2268:A:C8	3.10	0.40
1:CA:2867:G:OP2	15:CP:119:LYS:HD3	2.21	0.40
1:CA:322:A:O4'	1:CA:340:A:H1'	2.21	0.40
1:CA:425:G:H2'	1:CA:426:C:H6	1.86	0.40
1:CA:937:U:H2'	1:CA:938:G:O4'	2.22	0.40
3:CD:133:LEU:HA	3:CD:136:ILE:HD13	2.03	0.40
3:CD:233:HIS:O	3:CD:235:GLY:N	2.53	0.40
4:CE:10:GLY:HA3	15:CP:8:LYS:CE	2.48	0.40
4:CE:38:THR:O	4:CE:42:ASP:HB2	2.22	0.40
5:CF:31:HIS:CG	11:CL:13:ASN:ND2	2.90	0.40
6:CG:140:ILE:C	6:CG:140:ILE:HD12	2.42	0.40
6:CG:41:GLN:HG2	6:CG:155:MET:CG	2.51	0.40
6:CG:83:ARG:HH22	52:DV:19:G:H1	1.67	0.40
8:CI:72:LEU:CD1	8:CI:101:LEU:HD11	2.46	0.40
8:CI:7:GLU:CD	8:CI:8:PRO:HD2	2.42	0.40
10:CK:101:PRO:HA	10:CK:120:GLU:O	2.22	0.40
10:CK:104:ARG:O	10:CK:107:ARG:HB3	2.22	0.40
11:CL:64:LYS:C	11:CL:66:GLY:N	2.70	0.40
11:CL:66:GLY:O	11:CL:67:MET:HB3	2.21	0.40
1:CA:863:A:OP1	12:CM:21:THR:HB	2.22	0.40
17:CR:47:VAL:CG1	17:CR:52:VAL:HB	2.49	0.40
21:CV:144:LEU:N	21:CV:144:LEU:HD22	2.36	0.40
2:CB:104:A:O4'	21:CV:29:TYR:HE1	2.05	0.40
22:CW:50:ASN:HB3	22:CW:63:VAL:HG22	2.03	0.40
31:DA:1312:G:H2'	31:DA:1313:U:H6	1.86	0.40
31:DA:1484:C:H2'	31:DA:1485:U:O4'	2.21	0.40
31:DA:601:C:H2'	31:DA:602:A:C8	2.57	0.40
31:DA:864:A:H5'	35:DE:86:ALA:HB2	2.04	0.40
32:DB:154:LEU:HD22	32:DB:155:LEU:N	2.37	0.40
33:DC:30:ARG:HD3	44:DN:38:GLY:HA3	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DD:110:PHE:H	34:DD:110:PHE:HD1	1.67	0.40
34:DD:29:PRO:O	34:DD:30:LYS:CB	2.69	0.40
34:DD:25:ARG:NH2	34:DD:30:LYS:HD2	2.32	0.40
37:DG:107:ALA:O	37:DG:110:GLN:HB2	2.21	0.40
37:DG:26:PHE:O	37:DG:30:ILE:HG12	2.22	0.40
39:DI:70:LYS:HD3	39:DI:70:LYS:N	2.36	0.40
46:DP:28:ARG:C	46:DP:30:GLY:H	2.24	0.40
46:DP:6:LEU:HD12	46:DP:6:LEU:N	2.36	0.40
52:DV:4:G:N1	52:DV:70:G:C6	2.90	0.40
53:DX:15:A:H5"	53:DX:16:A:OP1	2.21	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles ⓘ

### 5.3.1 Protein backbone ⓘ

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	
3	AD	269/271 (99%)	220 (82%)	35 (13%)	14 (5%)	2	13
3	CD	269/271 (99%)	220 (82%)	35 (13%)	14 (5%)	2	13
4	AE	202/204 (99%)	164 (81%)	27 (13%)	11 (5%)	2	13
4	CE	202/204 (99%)	164 (81%)	27 (13%)	11 (5%)	2	13
5	AF	200/202 (99%)	168 (84%)	24 (12%)	8 (4%)	3	18
5	CF	200/202 (99%)	167 (84%)	25 (12%)	8 (4%)	3	18
6	AG	179/181 (99%)	128 (72%)	38 (21%)	13 (7%)	1	7
6	CG	179/181 (99%)	129 (72%)	36 (20%)	14 (8%)	1	6
7	AH	157/159 (99%)	122 (78%)	29 (18%)	6 (4%)	3	19
7	CH	157/159 (99%)	122 (78%)	29 (18%)	6 (4%)	3	19
8	AI	143/145 (99%)	120 (84%)	22 (15%)	1 (1%)	22	55
8	CI	143/145 (99%)	121 (85%)	21 (15%)	1 (1%)	22	55

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	AJ	135/137 (98%)	104 (77%)	21 (16%)	10 (7%)	1	7
9	CJ	135/137 (98%)	104 (77%)	21 (16%)	10 (7%)	1	7
10	AK	120/122 (98%)	107 (89%)	10 (8%)	3 (2%)	5	26
10	CK	120/122 (98%)	107 (89%)	9 (8%)	4 (3%)	4	22
11	AL	144/146 (99%)	89 (62%)	35 (24%)	20 (14%)	0	1
11	CL	144/146 (99%)	89 (62%)	34 (24%)	21 (15%)	0	1
12	AM	132/134 (98%)	96 (73%)	21 (16%)	15 (11%)	0	3
12	CM	132/134 (98%)	96 (73%)	22 (17%)	14 (11%)	0	3
13	AN	115/117 (98%)	92 (80%)	15 (13%)	8 (7%)	1	7
13	CN	115/117 (98%)	92 (80%)	15 (13%)	8 (7%)	1	7
14	AO	96/98 (98%)	65 (68%)	23 (24%)	8 (8%)	1	5
14	CO	96/98 (98%)	65 (68%)	22 (23%)	9 (9%)	0	4
15	AP	135/137 (98%)	105 (78%)	22 (16%)	8 (6%)	1	11
15	CP	135/137 (98%)	104 (77%)	23 (17%)	8 (6%)	1	11
16	AQ	115/117 (98%)	102 (89%)	10 (9%)	3 (3%)	5	26
16	CQ	115/117 (98%)	102 (89%)	10 (9%)	3 (3%)	5	26
17	AR	99/101 (98%)	79 (80%)	16 (16%)	4 (4%)	3	18
17	CR	99/101 (98%)	78 (79%)	17 (17%)	4 (4%)	3	18
18	AS	110/112 (98%)	102 (93%)	8 (7%)	0	100	100
18	CS	110/112 (98%)	99 (90%)	11 (10%)	0	100	100
19	AT	90/92 (98%)	76 (84%)	12 (13%)	2 (2%)	6	29
19	CT	90/92 (98%)	75 (83%)	13 (14%)	2 (2%)	6	29
20	AU	98/100 (98%)	63 (64%)	23 (24%)	12 (12%)	0	2
20	CU	98/100 (98%)	65 (66%)	21 (21%)	12 (12%)	0	2
21	AV	185/187 (99%)	159 (86%)	19 (10%)	7 (4%)	3	19
21	CV	185/187 (99%)	159 (86%)	19 (10%)	7 (4%)	3	19
22	AW	74/76 (97%)	59 (80%)	13 (18%)	2 (3%)	5	26
22	CW	74/76 (97%)	59 (80%)	13 (18%)	2 (3%)	5	26
23	AX	86/88 (98%)	56 (65%)	19 (22%)	11 (13%)	0	2
23	CX	86/88 (98%)	56 (65%)	19 (22%)	11 (13%)	0	2
24	AY	60/62 (97%)	47 (78%)	8 (13%)	5 (8%)	1	5

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
24	CY	60/62 (97%)	47 (78%)	8 (13%)	5 (8%)	1	5
25	AZ	57/59 (97%)	52 (91%)	4 (7%)	1 (2%)	8	32
25	CZ	57/59 (97%)	52 (91%)	4 (7%)	1 (2%)	8	32
26	A1	28/30 (93%)	13 (46%)	13 (46%)	2 (7%)	1	7
26	C1	28/30 (93%)	13 (46%)	13 (46%)	2 (7%)	1	7
27	A2	50/52 (96%)	45 (90%)	3 (6%)	2 (4%)	3	18
27	C2	50/52 (96%)	45 (90%)	3 (6%)	2 (4%)	3	18
28	A3	42/44 (96%)	26 (62%)	12 (29%)	4 (10%)	0	4
28	C3	42/44 (96%)	26 (62%)	12 (29%)	4 (10%)	0	4
29	A4	46/48 (96%)	44 (96%)	1 (2%)	1 (2%)	6	29
29	C4	46/48 (96%)	44 (96%)	1 (2%)	1 (2%)	6	29
30	A5	61/63 (97%)	46 (75%)	9 (15%)	6 (10%)	0	4
30	C5	61/63 (97%)	46 (75%)	9 (15%)	6 (10%)	0	4
32	BB	232/234 (99%)	183 (79%)	36 (16%)	13 (6%)	2	12
32	DB	232/234 (99%)	183 (79%)	36 (16%)	13 (6%)	2	12
33	BC	204/206 (99%)	159 (78%)	28 (14%)	17 (8%)	1	5
33	DC	204/206 (99%)	158 (78%)	28 (14%)	18 (9%)	1	5
34	BD	206/208 (99%)	161 (78%)	34 (16%)	11 (5%)	2	13
34	DD	206/208 (99%)	161 (78%)	34 (16%)	11 (5%)	2	13
35	BE	149/151 (99%)	120 (80%)	26 (17%)	3 (2%)	7	30
35	DE	149/151 (99%)	120 (80%)	25 (17%)	4 (3%)	5	26
36	BF	99/101 (98%)	88 (89%)	10 (10%)	1 (1%)	15	46
36	DF	99/101 (98%)	89 (90%)	9 (9%)	1 (1%)	15	46
37	BG	153/155 (99%)	131 (86%)	17 (11%)	5 (3%)	4	22
37	DG	153/155 (99%)	131 (86%)	15 (10%)	7 (5%)	2	15
38	BH	136/138 (99%)	114 (84%)	20 (15%)	2 (2%)	10	36
38	DH	136/138 (99%)	113 (83%)	21 (15%)	2 (2%)	10	36
39	BI	125/127 (98%)	92 (74%)	25 (20%)	8 (6%)	1	9
39	DI	125/127 (98%)	92 (74%)	25 (20%)	8 (6%)	1	9
40	BJ	96/98 (98%)	80 (83%)	11 (12%)	5 (5%)	2	13
40	DJ	96/98 (98%)	80 (83%)	11 (12%)	5 (5%)	2	13

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
41	BK	112/114 (98%)	93 (83%)	15 (13%)	4 (4%)	3	21
41	DK	112/114 (98%)	94 (84%)	14 (12%)	4 (4%)	3	21
42	BL	120/122 (98%)	94 (78%)	22 (18%)	4 (3%)	4	22
42	DL	120/122 (98%)	93 (78%)	23 (19%)	4 (3%)	4	22
43	BM	115/117 (98%)	97 (84%)	15 (13%)	3 (3%)	5	26
43	DM	115/117 (98%)	97 (84%)	15 (13%)	3 (3%)	5	26
44	BN	58/60 (97%)	47 (81%)	8 (14%)	3 (5%)	2	13
44	DN	58/60 (97%)	43 (74%)	12 (21%)	3 (5%)	2	13
45	BO	86/88 (98%)	75 (87%)	9 (10%)	2 (2%)	6	28
45	DO	86/88 (98%)	74 (86%)	10 (12%)	2 (2%)	6	28
46	BP	81/83 (98%)	65 (80%)	13 (16%)	3 (4%)	3	20
46	DP	81/83 (98%)	66 (82%)	12 (15%)	3 (4%)	3	20
47	BQ	97/99 (98%)	82 (84%)	12 (12%)	3 (3%)	4	23
47	DQ	97/99 (98%)	80 (82%)	14 (14%)	3 (3%)	4	23
48	BR	68/70 (97%)	55 (81%)	8 (12%)	5 (7%)	1	7
48	DR	68/70 (97%)	55 (81%)	8 (12%)	5 (7%)	1	7
49	BS	76/78 (97%)	57 (75%)	12 (16%)	7 (9%)	1	4
49	DS	76/78 (97%)	58 (76%)	11 (14%)	7 (9%)	1	4
50	BT	97/99 (98%)	75 (77%)	16 (16%)	6 (6%)	1	10
50	DT	97/99 (98%)	75 (77%)	16 (16%)	6 (6%)	1	10
51	BU	22/24 (92%)	16 (73%)	5 (23%)	1 (4%)	2	16
51	DU	22/24 (92%)	16 (73%)	5 (23%)	1 (4%)	2	16
All	All	11120/11312 (98%)	8857 (80%)	1670 (15%)	593 (5%)	2	13

All (593) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	AD	33	LEU
3	AD	40	THR
3	AD	59	LYS
3	AD	239	ARG
4	AE	86	PRO
4	AE	89	ASP
4	AE	132	HIS

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Mol	Chain	Res	Type
5	AF	73	ALA
5	AF	133	ASN
6	AG	75	LYS
9	AJ	60	LYS
9	AJ	93	LYS
10	AK	26	LYS
11	AL	31	ALA
11	AL	65	ARG
11	AL	141	ALA
11	AL	148	LEU
12	AM	8	LYS
12	AM	21	THR
12	AM	135	ASP
12	AM	136	ALA
13	AN	6	SER
14	AO	59	LYS
15	AP	3	ARG
15	AP	97	ALA
15	AP	115	ARG
16	AQ	90	VAL
17	AR	46	VAL
20	AU	3	VAL
20	AU	17	SER
20	AU	49	VAL
20	AU	56	PRO
20	AU	77	PRO
20	AU	78	ALA
22	AW	47	PRO
22	AW	84	LEU
23	AX	10	LYS
23	AX	11	ARG
23	AX	32	LYS
23	AX	58	ILE
24	AY	43	GLN
24	AY	45	SER
25	AZ	2	PRO
27	A2	4	HIS
28	A3	31	PRO
29	A4	47	ARG
30	A5	34	TRP
30	A5	51	ALA
30	A5	62	LEU

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Mol	Chain	Res	Type
32	BB	15	VAL
33	BC	14	ILE
33	BC	79	ARG
33	BC	100	ALA
34	BD	28	SER
34	BD	189	PRO
36	BF	49	ALA
37	BG	5	ARG
40	BJ	91	PRO
41	BK	122	LYS
44	BN	14	PRO
47	BQ	99	SER
49	BS	11	VAL
49	BS	28	LYS
49	BS	80	TYR
50	BT	71	THR
3	CD	33	LEU
3	CD	40	THR
3	CD	59	LYS
3	CD	239	ARG
4	CE	86	PRO
4	CE	89	ASP
4	CE	132	HIS
5	CF	73	ALA
5	CF	133	ASN
6	CG	75	LYS
9	CJ	60	LYS
9	CJ	93	LYS
10	CK	26	LYS
11	CL	65	ARG
11	CL	141	ALA
11	CL	148	LEU
12	CM	8	LYS
12	CM	21	THR
12	CM	135	ASP
12	CM	136	ALA
13	CN	6	SER
14	CO	59	LYS
15	CP	3	ARG
15	CP	97	ALA
15	CP	115	ARG
16	CQ	90	VAL

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Mol	Chain	Res	Type
17	CR	46	VAL
20	CU	3	VAL
20	CU	17	SER
20	CU	49	VAL
20	CU	56	PRO
20	CU	77	PRO
20	CU	78	ALA
22	CW	47	PRO
22	CW	84	LEU
23	CX	10	LYS
23	CX	11	ARG
23	CX	32	LYS
23	CX	58	ILE
24	CY	43	GLN
24	CY	45	SER
25	CZ	2	PRO
27	C2	4	HIS
28	C3	31	PRO
29	C4	47	ARG
30	C5	34	TRP
30	C5	51	ALA
30	C5	62	LEU
32	DB	15	VAL
33	DC	14	ILE
33	DC	79	ARG
33	DC	100	ALA
34	DD	30	LYS
34	DD	129	ASN
36	DF	49	ALA
37	DG	5	ARG
40	DJ	91	PRO
41	DK	122	LYS
47	DQ	99	SER
49	DS	11	VAL
49	DS	28	LYS
49	DS	80	TYR
50	DT	71	THR
51	DU	24	ARG
3	AD	24	ILE
3	AD	26	LYS
3	AD	57	GLY
3	AD	58	HIS

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Mol	Chain	Res	Type
3	AD	237	GLU
4	AE	88	GLY
5	AF	127	GLU
5	AF	146	ALA
6	AG	14	GLU
6	AG	115	ARG
6	AG	129	GLY
6	AG	142	PRO
7	AH	92	ILE
9	AJ	86	THR
9	AJ	89	LYS
9	AJ	154	GLN
11	AL	11	GLY
11	AL	15	ARG
11	AL	17	LYS
11	AL	33	ARG
11	AL	47	ASP
11	AL	56	SER
11	AL	59	LEU
11	AL	111	ARG
12	AM	23	GLY
12	AM	57	HIS
12	AM	62	GLY
13	AN	82	GLU
13	AN	107	ASP
14	AO	57	LYS
15	AP	42	ILE
15	AP	107	ASP
21	AV	93	ASP
21	AV	120	ILE
23	AX	14	VAL
23	AX	84	GLY
26	A1	54	LYS
26	A1	64	LYS
27	A2	49	CYS
30	A5	28	GLY
30	A5	35	GLN
32	BB	9	GLU
32	BB	24	TRP
32	BB	96	ARG
33	BC	15	THR
33	BC	60	ALA

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Mol	Chain	Res	Type
33	BC	181	ASN
33	BC	195	VAL
34	BD	5	ILE
34	BD	88	VAL
34	BD	171	GLY
34	BD	179	GLU
38	BH	2	LEU
38	BH	103	VAL
39	BI	31	GLN
40	BJ	56	HIS
40	BJ	92	THR
41	BK	89	ALA
42	BL	50	ALA
43	BM	101	GLN
43	BM	117	VAL
46	BP	28	ARG
47	BQ	80	GLY
48	BR	87	ARG
49	BS	27	GLU
50	BT	48	LYS
51	BU	24	ARG
3	CD	24	ILE
3	CD	26	LYS
3	CD	57	GLY
3	CD	58	HIS
3	CD	237	GLU
4	CE	88	GLY
5	CF	127	GLU
5	CF	146	ALA
6	CG	14	GLU
6	CG	115	ARG
6	CG	129	GLY
6	CG	142	PRO
7	CH	92	ILE
9	CJ	86	THR
9	CJ	89	LYS
9	CJ	154	GLN
10	CK	29	ASN
11	CL	11	GLY
11	CL	15	ARG
11	CL	17	LYS
11	CL	31	ALA

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Mol	Chain	Res	Type
11	CL	33	ARG
11	CL	47	ASP
11	CL	56	SER
11	CL	59	LEU
11	CL	111	ARG
12	CM	23	GLY
12	CM	57	HIS
12	CM	62	GLY
13	CN	82	GLU
13	CN	107	ASP
14	CO	57	LYS
15	CP	42	ILE
15	CP	107	ASP
21	CV	93	ASP
21	CV	120	ILE
23	CX	14	VAL
23	CX	84	GLY
26	C1	54	LYS
26	C1	64	LYS
27	C2	49	CYS
30	C5	28	GLY
30	C5	35	GLN
32	DB	9	GLU
32	DB	24	TRP
32	DB	96	ARG
33	DC	15	THR
33	DC	60	ALA
33	DC	181	ASN
33	DC	195	VAL
34	DD	46	LYS
34	DD	69	GLY
34	DD	168	ARG
38	DH	2	LEU
38	DH	103	VAL
39	DI	31	GLN
40	DJ	56	HIS
40	DJ	92	THR
41	DK	89	ALA
42	DL	50	ALA
43	DM	101	GLN
43	DM	117	VAL
46	DP	11	SER

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Mol	Chain	Res	Type
46	DP	28	ARG
47	DQ	80	GLY
48	DR	87	ARG
49	DS	27	GLU
50	DT	48	LYS
3	AD	169	GLU
3	AD	236	GLY
4	AE	4	ILE
4	AE	56	PRO
6	AG	4	ASP
6	AG	35	GLU
6	AG	87	PRO
9	AJ	92	GLN
10	AK	29	ASN
11	AL	43	GLY
11	AL	50	ARG
11	AL	74	GLU
12	AM	7	MET
12	AM	18	LYS
12	AM	79	LEU
12	AM	133	ARG
13	AN	14	SER
13	AN	93	GLY
14	AO	42	ASP
15	AP	86	ILE
16	AQ	91	ASP
20	AU	8	LYS
23	AX	31	GLY
23	AX	53	VAL
28	A3	18	ARG
28	A3	26	ASN
28	A3	46	HIS
32	BB	129	GLU
33	BC	27	LYS
33	BC	61	ALA
33	BC	81	GLY
33	BC	196	LEU
34	BD	4	TYR
34	BD	30	LYS
34	BD	33	MET
37	BG	7	ALA
39	BI	10	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
39	BI	24	GLY
39	BI	103	THR
42	BL	18	ARG
44	BN	60	SER
45	BO	23	GLY
46	BP	11	SER
47	BQ	48	GLU
48	BR	45	SER
50	BT	98	PRO
3	CD	169	GLU
3	CD	236	GLY
4	CE	4	ILE
4	CE	56	PRO
6	CG	4	ASP
6	CG	35	GLU
6	CG	87	PRO
9	CJ	92	GLN
11	CL	43	GLY
11	CL	50	ARG
11	CL	74	GLU
12	CM	7	MET
12	CM	18	LYS
12	CM	19	GLY
12	CM	20	ALA
12	CM	79	LEU
12	CM	133	ARG
13	CN	14	SER
14	CO	42	ASP
15	CP	86	ILE
17	CR	78	LYS
20	CU	8	LYS
23	CX	31	GLY
23	CX	53	VAL
28	C3	18	ARG
28	C3	26	ASN
28	C3	46	HIS
32	DB	129	GLU
33	DC	27	LYS
33	DC	61	ALA
33	DC	81	GLY
33	DC	196	LEU
37	DG	7	ALA

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Mol	Chain	Res	Type
39	DI	10	ARG
39	DI	24	GLY
39	DI	103	THR
42	DL	18	ARG
44	DN	12	ARG
45	DO	23	GLY
47	DQ	48	GLU
48	DR	45	SER
50	DT	98	PRO
4	AE	19	ARG
4	AE	52	LEU
4	AE	203	LYS
5	AF	132	VAL
6	AG	6	ALA
6	AG	48	GLU
6	AG	112	PRO
9	AJ	46	LEU
11	AL	9	ASN
12	AM	19	GLY
12	AM	20	ALA
12	AM	82	ARG
14	AO	83	LYS
14	AO	89	ARG
15	AP	116	ALA
17	AR	78	LYS
21	AV	11	GLU
21	AV	114	GLY
23	AX	94	LEU
24	AY	48	HIS
24	AY	61	LEU
32	BB	88	ALA
32	BB	130	ARG
33	BC	26	LYS
33	BC	30	ARG
34	BD	40	PRO
37	BG	6	ARG
39	BI	58	ARG
40	BJ	55	LYS
45	BO	88	ARG
48	BR	55	ARG
49	BS	8	GLY
50	BT	9	ASN

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Mol	Chain	Res	Type
50	BT	82	SER
4	CE	19	ARG
4	CE	52	LEU
4	CE	203	LYS
5	CF	132	VAL
6	CG	6	ALA
6	CG	48	GLU
6	CG	112	PRO
7	CH	49	VAL
9	CJ	46	LEU
13	CN	4	LEU
13	CN	93	GLY
14	CO	83	LYS
14	CO	89	ARG
15	CP	116	ALA
16	CQ	91	ASP
21	CV	11	GLU
21	CV	114	GLY
23	CX	94	LEU
24	CY	48	HIS
24	CY	61	LEU
32	DB	88	ALA
32	DB	130	ARG
33	DC	26	LYS
34	DD	23	GLY
34	DD	154	ASN
34	DD	180	GLY
37	DG	6	ARG
39	DI	58	ARG
40	DJ	55	LYS
42	DL	5	THR
44	DN	16	PHE
45	DO	88	ARG
48	DR	55	ARG
49	DS	8	GLY
50	DT	9	ASN
50	DT	82	SER
3	AD	34	VAL
4	AE	185	LYS
5	AF	66	PRO
7	AH	49	VAL
7	AH	97	ARG

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Mol	Chain	Res	Type
10	AK	94	ARG
11	AL	35	HIS
13	AN	4	LEU
13	AN	10	LEU
14	AO	85	VAL
17	AR	35	LEU
19	AT	4	ALA
19	AT	93	GLU
20	AU	39	VAL
20	AU	88	LYS
21	AV	37	VAL
21	AV	141	VAL
23	AX	83	GLU
24	AY	17	SER
30	A5	29	LYS
32	BB	78	GLN
32	BB	230	VAL
33	BC	45	LYS
34	BD	125	HIS
35	BE	49	PRO
37	BG	131	LYS
39	BI	55	ALA
42	BL	5	THR
42	BL	45	LYS
43	BM	103	THR
46	BP	29	ASP
48	BR	20	ALA
48	BR	54	ARG
49	BS	29	ARG
3	CD	34	VAL
4	CE	185	LYS
5	CF	66	PRO
7	CH	97	ARG
10	CK	94	ARG
11	CL	9	ASN
11	CL	35	HIS
12	CM	82	ARG
13	CN	10	LEU
14	CO	85	VAL
14	CO	90	GLY
17	CR	35	LEU
19	CT	4	ALA

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Mol	Chain	Res	Type
19	CT	93	GLU
20	CU	39	VAL
20	CU	88	LYS
21	CV	37	VAL
21	CV	141	VAL
23	CX	9	GLY
23	CX	83	GLU
24	CY	17	SER
30	C5	29	LYS
32	DB	78	GLN
32	DB	230	VAL
33	DC	30	ARG
33	DC	45	LYS
33	DC	189	ALA
34	DD	186	LEU
35	DE	49	PRO
35	DE	65	ASN
37	DG	131	LYS
39	DI	55	ALA
42	DL	45	LYS
43	DM	103	THR
46	DP	29	ASP
48	DR	20	ALA
48	DR	54	ARG
49	DS	29	ARG
3	AD	234	GLY
6	AG	24	GLY
7	AH	110	SER
8	AI	3	VAL
9	AJ	152	PRO
11	AL	46	LYS
12	AM	134	ARG
14	AO	90	GLY
15	AP	2	ASN
23	AX	9	GLY
32	BB	18	GLY
33	BC	189	ALA
35	BE	85	GLY
39	BI	100	GLY
40	BJ	32	ALA
41	BK	90	GLY
44	BN	16	PHE

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Mol	Chain	Res	Type
50	BT	97	ALA
6	CG	24	GLY
6	CG	96	ARG
7	CH	110	SER
10	CK	97	ARG
11	CL	46	LYS
11	CL	125	VAL
14	CO	21	THR
15	CP	2	ASN
32	DB	18	GLY
32	DB	26	PRO
33	DC	168	ALA
34	DD	20	TYR
35	DE	85	GLY
37	DG	4	ARG
39	DI	100	GLY
40	DJ	32	ALA
41	DK	118	GLY
50	DT	97	ALA
3	AD	244	ARG
9	AJ	59	GLY
9	AJ	118	PRO
11	AL	125	VAL
14	AO	91	PRO
20	AU	18	GLY
32	BB	26	PRO
41	BK	118	GLY
49	BS	67	VAL
3	CD	234	GLY
3	CD	244	ARG
5	CF	134	GLY
8	CI	3	VAL
9	CJ	59	GLY
9	CJ	118	PRO
9	CJ	152	PRO
14	CO	91	PRO
20	CU	18	GLY
20	CU	61	ILE
33	DC	174	PRO
41	DK	90	GLY
49	DS	67	VAL
4	AE	29	GLY

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Mol	Chain	Res	Type
5	AF	134	GLY
7	AH	48	GLY
20	AU	10	GLY
20	AU	61	ILE
32	BB	72	GLY
32	BB	229	VAL
33	BC	74	GLY
33	BC	174	PRO
37	BG	17	VAL
39	BI	89	ASN
20	CU	10	GLY
32	DB	72	GLY
37	DG	17	VAL
5	AF	89	VAL
6	AG	89	GLY
13	AN	7	GLY
17	AR	36	PRO
21	AV	165	VAL
35	BE	118	ILE
4	CE	29	GLY
5	CF	89	VAL
6	CG	89	GLY
7	CH	48	GLY
13	CN	7	GLY
17	CR	36	PRO
21	CV	165	VAL
32	DB	229	VAL
33	DC	74	GLY
34	DD	56	VAL
35	DE	118	ILE
39	DI	89	ASN
44	DN	56	VAL
7	AH	22	GLY
11	AL	19	VAL
16	AQ	88	ILE
7	CH	22	GLY
11	CL	19	VAL
11	CL	34	GLY
37	DG	14	PRO
16	CQ	88	ILE

### 5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	AD	213/213 (100%)	187 (88%)	26 (12%)	5	18
3	CD	213/213 (100%)	188 (88%)	25 (12%)	5	20
4	AE	165/165 (100%)	147 (89%)	18 (11%)	6	23
4	CE	165/165 (100%)	147 (89%)	18 (11%)	6	23
5	AF	161/161 (100%)	143 (89%)	18 (11%)	6	22
5	CF	161/161 (100%)	143 (89%)	18 (11%)	6	22
6	AG	155/155 (100%)	138 (89%)	17 (11%)	6	23
6	CG	155/155 (100%)	137 (88%)	18 (12%)	5	20
7	AH	132/132 (100%)	119 (90%)	13 (10%)	8	28
7	CH	132/132 (100%)	119 (90%)	13 (10%)	8	28
8	AI	122/122 (100%)	107 (88%)	15 (12%)	4	17
8	CI	122/122 (100%)	107 (88%)	15 (12%)	4	17
9	AJ	116/116 (100%)	103 (89%)	13 (11%)	6	22
9	CJ	116/116 (100%)	102 (88%)	14 (12%)	5	18
10	AK	100/100 (100%)	91 (91%)	9 (9%)	9	32
10	CK	100/100 (100%)	91 (91%)	9 (9%)	9	32
11	AL	112/112 (100%)	86 (77%)	26 (23%)	1	2
11	CL	112/112 (100%)	86 (77%)	26 (23%)	1	2
12	AM	105/105 (100%)	92 (88%)	13 (12%)	4	17
12	CM	105/105 (100%)	92 (88%)	13 (12%)	4	17
13	AN	100/100 (100%)	86 (86%)	14 (14%)	3	13
13	CN	100/100 (100%)	86 (86%)	14 (14%)	3	13
14	AO	77/77 (100%)	64 (83%)	13 (17%)	2	8
14	CO	77/77 (100%)	64 (83%)	13 (17%)	2	8
15	AP	121/121 (100%)	102 (84%)	19 (16%)	2	10
15	CP	121/121 (100%)	102 (84%)	19 (16%)	2	10

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	AQ	93/93 (100%)	84 (90%)	9 (10%)	8	28
16	CQ	93/93 (100%)	85 (91%)	8 (9%)	10	35
17	AR	82/82 (100%)	67 (82%)	15 (18%)	1	5
17	CR	82/82 (100%)	66 (80%)	16 (20%)	1	4
18	AS	91/91 (100%)	82 (90%)	9 (10%)	8	27
18	CS	91/91 (100%)	81 (89%)	10 (11%)	6	23
19	AT	74/74 (100%)	66 (89%)	8 (11%)	6	24
19	CT	74/74 (100%)	66 (89%)	8 (11%)	6	24
20	AU	84/84 (100%)	70 (83%)	14 (17%)	2	8
20	CU	84/84 (100%)	70 (83%)	14 (17%)	2	8
21	AV	162/162 (100%)	152 (94%)	10 (6%)	18	48
21	CV	162/162 (100%)	152 (94%)	10 (6%)	18	48
22	AW	61/61 (100%)	55 (90%)	6 (10%)	8	28
22	CW	61/61 (100%)	55 (90%)	6 (10%)	8	28
23	AX	73/73 (100%)	65 (89%)	8 (11%)	6	23
23	CX	73/73 (100%)	64 (88%)	9 (12%)	4	17
24	AY	58/58 (100%)	51 (88%)	7 (12%)	5	18
24	CY	58/58 (100%)	51 (88%)	7 (12%)	5	18
25	AZ	51/51 (100%)	45 (88%)	6 (12%)	5	19
25	CZ	51/51 (100%)	45 (88%)	6 (12%)	5	19
26	A1	27/27 (100%)	24 (89%)	3 (11%)	6	22
26	C1	27/27 (100%)	24 (89%)	3 (11%)	6	22
27	A2	45/45 (100%)	40 (89%)	5 (11%)	6	22
27	C2	45/45 (100%)	40 (89%)	5 (11%)	6	22
28	A3	43/43 (100%)	40 (93%)	3 (7%)	15	44
28	C3	43/43 (100%)	40 (93%)	3 (7%)	15	44
29	A4	41/41 (100%)	33 (80%)	8 (20%)	1	4
29	C4	41/41 (100%)	33 (80%)	8 (20%)	1	4
30	A5	53/53 (100%)	49 (92%)	4 (8%)	13	41
30	C5	53/53 (100%)	49 (92%)	4 (8%)	13	41
32	BB	202/202 (100%)	184 (91%)	18 (9%)	9	33

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	DB	202/202 (100%)	184 (91%)	18 (9%)	9	33
33	BC	160/160 (100%)	144 (90%)	16 (10%)	7	27
33	DC	160/160 (100%)	144 (90%)	16 (10%)	7	27
34	BD	180/180 (100%)	156 (87%)	24 (13%)	4	15
34	DD	180/180 (100%)	159 (88%)	21 (12%)	5	20
35	BE	116/116 (100%)	103 (89%)	13 (11%)	6	22
35	DE	116/116 (100%)	104 (90%)	12 (10%)	7	26
36	BF	90/90 (100%)	78 (87%)	12 (13%)	4	15
36	DF	90/90 (100%)	78 (87%)	12 (13%)	4	15
37	BG	126/126 (100%)	120 (95%)	6 (5%)	25	56
37	DG	126/126 (100%)	120 (95%)	6 (5%)	25	56
38	BH	119/119 (100%)	105 (88%)	14 (12%)	5	19
38	DH	119/119 (100%)	105 (88%)	14 (12%)	5	19
39	BI	98/98 (100%)	87 (89%)	11 (11%)	6	22
39	DI	98/98 (100%)	87 (89%)	11 (11%)	6	22
40	BJ	88/88 (100%)	79 (90%)	9 (10%)	7	26
40	DJ	88/88 (100%)	79 (90%)	9 (10%)	7	26
41	BK	86/86 (100%)	77 (90%)	9 (10%)	7	25
41	DK	86/86 (100%)	77 (90%)	9 (10%)	7	25
42	BL	103/103 (100%)	93 (90%)	10 (10%)	8	28
42	DL	103/103 (100%)	93 (90%)	10 (10%)	8	28
43	BM	94/94 (100%)	83 (88%)	11 (12%)	5	20
43	DM	94/94 (100%)	83 (88%)	11 (12%)	5	20
44	BN	49/49 (100%)	46 (94%)	3 (6%)	18	48
44	DN	49/49 (100%)	46 (94%)	3 (6%)	18	48
45	BO	79/79 (100%)	69 (87%)	10 (13%)	4	16
45	DO	79/79 (100%)	69 (87%)	10 (13%)	4	16
46	BP	72/72 (100%)	65 (90%)	7 (10%)	8	28
46	DP	72/72 (100%)	65 (90%)	7 (10%)	8	28
47	BQ	94/94 (100%)	90 (96%)	4 (4%)	29	59
47	DQ	94/94 (100%)	90 (96%)	4 (4%)	29	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
48	BR	61/61 (100%)	56 (92%)	5 (8%)	11	37
48	DR	61/61 (100%)	55 (90%)	6 (10%)	8	28
49	BS	69/69 (100%)	61 (88%)	8 (12%)	5	20
49	DS	69/69 (100%)	61 (88%)	8 (12%)	5	20
50	BT	76/76 (100%)	68 (90%)	8 (10%)	7	25
50	DT	76/76 (100%)	68 (90%)	8 (10%)	7	25
51	BU	19/19 (100%)	19 (100%)	0	100	100
51	DU	19/19 (100%)	19 (100%)	0	100	100
All	All	9396/9396 (100%)	8342 (89%)	1054 (11%)	6	22

All (1054) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	AD	25	THR
3	AD	33	LEU
3	AD	35	LYS
3	AD	38	LYS
3	AD	61	LEU
3	AD	69	ARG
3	AD	94	LEU
3	AD	95	LEU
3	AD	106	ILE
3	AD	111	LEU
3	AD	112	GLN
3	AD	138	VAL
3	AD	150	LYS
3	AD	166	GLN
3	AD	169	GLU
3	AD	175	LEU
3	AD	192	THR
3	AD	198	ASN
3	AD	204	ILE
3	AD	211	ARG
3	AD	212	SER
3	AD	237	GLU
3	AD	244	ARG
3	AD	255	LYS
3	AD	270	ILE
3	AD	271	ILE

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Mol	Chain	Res	Type
4	AE	23	VAL
4	AE	25	VAL
4	AE	38	THR
4	AE	41	LYS
4	AE	54	GLN
4	AE	73	GLU
4	AE	78	LEU
4	AE	79	ARG
4	AE	82	ARG
4	AE	87	GLU
4	AE	93	VAL
4	AE	113	PHE
4	AE	119	ARG
4	AE	175	VAL
4	AE	192	ASN
4	AE	195	LEU
4	AE	202	LYS
4	AE	203	LYS
5	AF	6	MET
5	AF	8	GLN
5	AF	20	LEU
5	AF	28	ILE
5	AF	45	ARG
5	AF	46	ARG
5	AF	65	TRP
5	AF	67	GLN
5	AF	78	ILE
5	AF	82	ILE
5	AF	88	VAL
5	AF	116	ASP
5	AF	165	ARG
5	AF	181	LEU
5	AF	183	VAL
5	AF	191	ARG
5	AF	192	LEU
5	AF	206	ILE
6	AG	16	ARG
6	AG	26	GLN
6	AG	34	LEU
6	AG	35	GLU
6	AG	43	LEU
6	AG	47	LYS

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Mol	Chain	Res	Type
6	AG	86	MET
6	AG	88	ILE
6	AG	97	ASP
6	AG	115	ARG
6	AG	117	PHE
6	AG	118	ARG
6	AG	128	ARG
6	AG	138	GLN
6	AG	155	MET
6	AG	159	VAL
6	AG	167	GLU
7	AH	23	ARG
7	AH	41	MET
7	AH	43	VAL
7	AH	47	GLU
7	AH	71	LEU
7	AH	94	TYR
7	AH	101	ARG
7	AH	123	PHE
7	AH	124	GLU
7	AH	127	GLU
7	AH	149	ARG
7	AH	167	GLU
7	AH	170	ARG
8	AI	4	ILE
8	AI	5	LEU
8	AI	9	LEU
8	AI	10	GLU
8	AI	45	LYS
8	AI	56	LYS
8	AI	67	ARG
8	AI	69	LYS
8	AI	92	VAL
8	AI	96	ASP
8	AI	107	ILE
8	AI	109	ILE
8	AI	118	LYS
8	AI	126	TYR
8	AI	142	VAL
9	AJ	56	LEU
9	AJ	57	LEU
9	AJ	68	ASN

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Mol	Chain	Res	Type
9	AJ	90	LEU
9	AJ	91	GLU
9	AJ	107	LYS
9	AJ	117	HIS
9	AJ	119	GLU
9	AJ	129	MET
9	AJ	132	LYS
9	AJ	150	ASP
9	AJ	160	LYS
9	AJ	161	LEU
10	AK	8	LEU
10	AK	9	GLU
10	AK	19	ILE
10	AK	22	ILE
10	AK	47	ILE
10	AK	52	VAL
10	AK	94	ARG
10	AK	98	VAL
10	AK	120	GLU
11	AL	13	ASN
11	AL	16	ARG
11	AL	19	VAL
11	AL	27	HIS
11	AL	29	LYS
11	AL	32	THR
11	AL	35	HIS
11	AL	41	ARG
11	AL	42	SER
11	AL	49	ARG
11	AL	50	ARG
11	AL	51	PHE
11	AL	57	THR
11	AL	59	LEU
11	AL	61	ARG
11	AL	62	LEU
11	AL	67	MET
11	AL	75	ILE
11	AL	91	PHE
11	AL	115	LEU
11	AL	123	LEU
11	AL	125	VAL
11	AL	135	LEU

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Mol	Chain	Res	Type
11	AL	144	GLU
11	AL	146	VAL
11	AL	148	LEU
12	AM	9	TYR
12	AM	10	ARG
12	AM	16	ARG
12	AM	22	LYS
12	AM	45	GLN
12	AM	51	ARG
12	AM	55	VAL
12	AM	58	PHE
12	AM	68	ILE
12	AM	83	MET
12	AM	103	MET
12	AM	111	GLU
12	AM	133	ARG
13	AN	2	ARG
13	AN	18	LEU
13	AN	28	LEU
13	AN	49	ASP
13	AN	60	LEU
13	AN	67	LEU
13	AN	75	LEU
13	AN	79	LEU
13	AN	88	ARG
13	AN	95	THR
13	AN	99	LYS
13	AN	102	GLU
13	AN	104	ARG
13	AN	115	GLU
14	AO	12	PHE
14	AO	30	ARG
14	AO	35	ILE
14	AO	44	LYS
14	AO	57	LYS
14	AO	59	LYS
14	AO	68	GLN
14	AO	69	VAL
14	AO	73	LEU
14	AO	76	LYS
14	AO	92	TYR
14	AO	98	VAL

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Mol	Chain	Res	Type
14	AO	101	LEU
15	AP	15	VAL
15	AP	18	ASP
15	AP	27	THR
15	AP	36	GLU
15	AP	42	ILE
15	AP	50	ILE
15	AP	58	ASN
15	AP	59	THR
15	AP	85	LYS
15	AP	86	ILE
15	AP	87	ASP
15	AP	88	ILE
15	AP	99	LEU
15	AP	100	TYR
15	AP	107	ASP
15	AP	110	ILE
15	AP	112	ARG
15	AP	115	ARG
15	AP	124	ASP
16	AQ	18	LEU
16	AQ	64	ARG
16	AQ	70	ARG
16	AQ	72	HIS
16	AQ	75	ASN
16	AQ	88	ILE
16	AQ	92	ARG
16	AQ	97	ASP
16	AQ	104	GLN
17	AR	13	ARG
17	AR	24	LYS
17	AR	37	VAL
17	AR	38	LEU
17	AR	39	LEU
17	AR	44	LYS
17	AR	49	THR
17	AR	61	VAL
17	AR	62	LEU
17	AR	66	ARG
17	AR	73	SER
17	AR	80	GLN
17	AR	88	ARG

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Mol	Chain	Res	Type
17	AR	95	LEU
17	AR	99	ILE
18	AS	8	ARG
18	AS	11	ARG
18	AS	27	LYS
18	AS	67	ASP
18	AS	70	TYR
18	AS	78	GLU
18	AS	88	ARG
18	AS	96	ILE
18	AS	107	LEU
19	AT	27	THR
19	AT	60	ARG
19	AT	65	ARG
19	AT	68	ARG
19	AT	76	ARG
19	AT	80	ILE
19	AT	81	VAL
19	AT	88	LYS
20	AU	2	ARG
20	AU	4	LYS
20	AU	8	LYS
20	AU	9	LYS
20	AU	14	LEU
20	AU	27	VAL
20	AU	71	LYS
20	AU	75	ILE
20	AU	76	CYS
20	AU	88	LYS
20	AU	90	LEU
20	AU	96	ILE
20	AU	97	ARG
20	AU	101	LYS
21	AV	24	LEU
21	AV	30	ASN
21	AV	33	LEU
21	AV	34	ASN
21	AV	67	LEU
21	AV	72	ARG
21	AV	77	ASP
21	AV	94	GLU
21	AV	97	GLU

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Mol	Chain	Res	Type
21	AV	133	ILE
22	AW	19	LYS
22	AW	20	ARG
22	AW	25	ARG
22	AW	55	ARG
22	AW	64	ASP
22	AW	84	LEU
23	AX	11	ARG
23	AX	13	ILE
23	AX	16	ASN
23	AX	37	ILE
23	AX	45	ASN
23	AX	75	GLU
23	AX	76	ARG
23	AX	83	GLU
24	AY	7	ARG
24	AY	17	SER
24	AY	24	LEU
24	AY	49	LYS
24	AY	53	LEU
24	AY	61	LEU
24	AY	62	THR
25	AZ	31	LEU
25	AZ	37	LEU
25	AZ	40	THR
25	AZ	44	ARG
25	AZ	53	LEU
25	AZ	56	VAL
26	A1	39	ARG
26	A1	46	ASN
26	A1	60	GLU
27	A2	6	VAL
27	A2	25	LEU
27	A2	46	CYS
27	A2	49	CYS
27	A2	51	TYR
28	A3	11	LEU
28	A3	34	LEU
28	A3	42	TRP
29	A4	4	THR
29	A4	8	ASN
29	A4	10	ARG

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Mol	Chain	Res	Type
29	A4	19	ARG
29	A4	24	THR
29	A4	31	LEU
29	A4	39	ARG
29	A4	41	ARG
30	A5	22	VAL
30	A5	52	LYS
30	A5	57	ARG
30	A5	59	LYS
32	BB	15	VAL
32	BB	44	LEU
32	BB	61	LEU
32	BB	69	LEU
32	BB	87	ARG
32	BB	96	ARG
32	BB	97	TRP
32	BB	101	MET
32	BB	119	GLU
32	BB	140	HIS
32	BB	145	LEU
32	BB	153	ARG
32	BB	154	LEU
32	BB	172	ILE
32	BB	178	ARG
32	BB	185	ILE
32	BB	187	LEU
32	BB	196	LEU
33	BC	5	ILE
33	BC	16	ARG
33	BC	69	HIS
33	BC	76	VAL
33	BC	85	ARG
33	BC	89	GLU
33	BC	97	LYS
33	BC	107	GLN
33	BC	131	ARG
33	BC	140	ARG
33	BC	153	VAL
33	BC	167	TRP
33	BC	175	LEU
33	BC	191	THR
33	BC	195	VAL

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Mol	Chain	Res	Type
33	BC	196	LEU
34	BD	3	ARG
34	BD	15	GLU
34	BD	21	LEU
34	BD	30	LYS
34	BD	38	TYR
34	BD	49	ARG
34	BD	59	ARG
34	BD	62	GLN
34	BD	72	GLU
34	BD	96	LEU
34	BD	108	LEU
34	BD	110	PHE
34	BD	119	GLN
34	BD	122	ARG
34	BD	131	ARG
34	BD	135	LEU
34	BD	138	TYR
34	BD	144	ASP
34	BD	156	GLU
34	BD	159	ARG
34	BD	162	LEU
34	BD	166	LYS
34	BD	191	ARG
34	BD	202	LEU
35	BE	12	LEU
35	BE	20	GLN
35	BE	25	ARG
35	BE	31	LEU
35	BE	41	VAL
35	BE	72	GLN
35	BE	78	HIS
35	BE	79	GLU
35	BE	101	ILE
35	BE	119	LEU
35	BE	121	LYS
35	BE	123	LEU
35	BE	147	ASP
36	BF	7	ASN
36	BF	14	LEU
36	BF	21	LEU
36	BF	40	VAL

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Mol	Chain	Res	Type
36	BF	46	ARG
36	BF	48	LEU
36	BF	52	ILE
36	BF	65	VAL
36	BF	69	GLU
36	BF	79	LEU
36	BF	83	ASP
36	BF	94	GLN
37	BG	5	ARG
37	BG	30	ILE
37	BG	90	GLU
37	BG	124	LEU
37	BG	140	ASP
37	BG	156	TRP
38	BH	1	MET
38	BH	18	ARG
38	BH	50	ARG
38	BH	52	ASP
38	BH	73	ASP
38	BH	81	HIS
38	BH	91	ARG
38	BH	99	GLU
38	BH	111	ILE
38	BH	119	LEU
38	BH	127	LEU
38	BH	133	LEU
38	BH	136	GLU
38	BH	137	VAL
39	BI	10	ARG
39	BI	31	GLN
39	BI	33	PHE
39	BI	70	LYS
39	BI	88	TYR
39	BI	95	LYS
39	BI	99	LEU
39	BI	114	TYR
39	BI	117	HIS
39	BI	121	ARG
39	BI	125	TYR
40	BJ	13	HIS
40	BJ	22	LYS
40	BJ	55	LYS

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Mol	Chain	Res	Type
40	BJ	57	LYS
40	BJ	58	ASP
40	BJ	62	HIS
40	BJ	63	PHE
40	BJ	78	ASN
40	BJ	92	THR
41	BK	25	TYR
41	BK	30	VAL
41	BK	36	ASP
41	BK	54	ARG
41	BK	81	ASP
41	BK	91	ARG
41	BK	92	GLU
41	BK	103	LEU
41	BK	116	HIS
42	BL	5	THR
42	BL	6	ILE
42	BL	19	LYS
42	BL	22	LYS
42	BL	26	LEU
42	BL	41	THR
42	BL	51	LEU
42	BL	54	VAL
42	BL	91	ASP
42	BL	98	HIS
43	BM	9	ILE
43	BM	50	GLU
43	BM	64	TRP
43	BM	65	LYS
43	BM	66	LEU
43	BM	87	TYR
43	BM	93	ARG
43	BM	103	THR
43	BM	105	THR
43	BM	108	ARG
43	BM	115	LYS
44	BN	31	ARG
44	BN	33	VAL
44	BN	50	LYS
45	BO	4	THR
45	BO	5	LYS
45	BO	17	ARG

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Mol	Chain	Res	Type
45	BO	26	GLU
45	BO	31	LEU
45	BO	41	GLU
45	BO	45	VAL
45	BO	65	ARG
45	BO	68	ARG
45	BO	87	ILE
46	BP	2	VAL
46	BP	4	ILE
46	BP	22	THR
46	BP	47	ASP
46	BP	69	THR
46	BP	75	ARG
46	BP	82	GLN
47	BQ	6	LEU
47	BQ	38	ARG
47	BQ	82	MET
47	BQ	100	LYS
48	BR	19	LYS
48	BR	26	LEU
48	BR	31	LEU
48	BR	76	LEU
48	BR	88	LYS
49	BS	6	LYS
49	BS	7	LYS
49	BS	10	PHE
49	BS	29	ARG
49	BS	37	ARG
49	BS	44	MET
49	BS	49	ILE
49	BS	66	MET
50	BT	13	LEU
50	BT	22	ARG
50	BT	36	LEU
50	BT	62	LEU
50	BT	71	THR
50	BT	73	HIS
50	BT	75	ASN
50	BT	93	GLU
3	CD	25	THR
3	CD	33	LEU
3	CD	35	LYS

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Mol	Chain	Res	Type
3	CD	38	LYS
3	CD	61	LEU
3	CD	69	ARG
3	CD	94	LEU
3	CD	95	LEU
3	CD	106	ILE
3	CD	111	LEU
3	CD	112	GLN
3	CD	138	VAL
3	CD	150	LYS
3	CD	166	GLN
3	CD	169	GLU
3	CD	192	THR
3	CD	198	ASN
3	CD	204	ILE
3	CD	211	ARG
3	CD	212	SER
3	CD	237	GLU
3	CD	244	ARG
3	CD	255	LYS
3	CD	270	ILE
3	CD	271	ILE
4	CE	23	VAL
4	CE	25	VAL
4	CE	38	THR
4	CE	41	LYS
4	CE	54	GLN
4	CE	73	GLU
4	CE	78	LEU
4	CE	79	ARG
4	CE	82	ARG
4	CE	87	GLU
4	CE	93	VAL
4	CE	113	PHE
4	CE	119	ARG
4	CE	175	VAL
4	CE	192	ASN
4	CE	195	LEU
4	CE	202	LYS
4	CE	203	LYS
5	CF	6	MET
5	CF	8	GLN

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Mol	Chain	Res	Type
5	CF	20	LEU
5	CF	28	ILE
5	CF	45	ARG
5	CF	46	ARG
5	CF	65	TRP
5	CF	67	GLN
5	CF	78	ILE
5	CF	82	ILE
5	CF	88	VAL
5	CF	116	ASP
5	CF	165	ARG
5	CF	181	LEU
5	CF	183	VAL
5	CF	191	ARG
5	CF	192	LEU
5	CF	206	ILE
6	CG	16	ARG
6	CG	26	GLN
6	CG	34	LEU
6	CG	35	GLU
6	CG	43	LEU
6	CG	47	LYS
6	CG	71	THR
6	CG	86	MET
6	CG	88	ILE
6	CG	97	ASP
6	CG	115	ARG
6	CG	117	PHE
6	CG	118	ARG
6	CG	128	ARG
6	CG	138	GLN
6	CG	155	MET
6	CG	159	VAL
6	CG	167	GLU
7	CH	23	ARG
7	CH	41	MET
7	CH	43	VAL
7	CH	47	GLU
7	CH	71	LEU
7	CH	94	TYR
7	CH	101	ARG
7	CH	123	PHE

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Mol	Chain	Res	Type
7	CH	124	GLU
7	CH	127	GLU
7	CH	149	ARG
7	CH	167	GLU
7	CH	170	ARG
8	CI	4	ILE
8	CI	5	LEU
8	CI	9	LEU
8	CI	10	GLU
8	CI	45	LYS
8	CI	56	LYS
8	CI	67	ARG
8	CI	69	LYS
8	CI	92	VAL
8	CI	96	ASP
8	CI	107	ILE
8	CI	109	ILE
8	CI	118	LYS
8	CI	126	TYR
8	CI	142	VAL
9	CJ	56	LEU
9	CJ	57	LEU
9	CJ	68	ASN
9	CJ	90	LEU
9	CJ	91	GLU
9	CJ	93	LYS
9	CJ	107	LYS
9	CJ	117	HIS
9	CJ	119	GLU
9	CJ	129	MET
9	CJ	132	LYS
9	CJ	150	ASP
9	CJ	160	LYS
9	CJ	161	LEU
10	CK	8	LEU
10	CK	9	GLU
10	CK	19	ILE
10	CK	22	ILE
10	CK	47	ILE
10	CK	52	VAL
10	CK	94	ARG
10	CK	98	VAL

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Mol	Chain	Res	Type
10	CK	120	GLU
11	CL	13	ASN
11	CL	16	ARG
11	CL	19	VAL
11	CL	27	HIS
11	CL	29	LYS
11	CL	32	THR
11	CL	35	HIS
11	CL	41	ARG
11	CL	42	SER
11	CL	49	ARG
11	CL	50	ARG
11	CL	51	PHE
11	CL	57	THR
11	CL	59	LEU
11	CL	61	ARG
11	CL	62	LEU
11	CL	67	MET
11	CL	75	ILE
11	CL	91	PHE
11	CL	115	LEU
11	CL	123	LEU
11	CL	125	VAL
11	CL	135	LEU
11	CL	144	GLU
11	CL	146	VAL
11	CL	148	LEU
12	CM	9	TYR
12	CM	10	ARG
12	CM	16	ARG
12	CM	22	LYS
12	CM	45	GLN
12	CM	51	ARG
12	CM	55	VAL
12	CM	58	PHE
12	CM	68	ILE
12	CM	83	MET
12	CM	103	MET
12	CM	111	GLU
12	CM	133	ARG
13	CN	2	ARG
13	CN	18	LEU

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Mol	Chain	Res	Type
13	CN	28	LEU
13	CN	49	ASP
13	CN	60	LEU
13	CN	67	LEU
13	CN	75	LEU
13	CN	79	LEU
13	CN	88	ARG
13	CN	95	THR
13	CN	99	LYS
13	CN	102	GLU
13	CN	104	ARG
13	CN	115	GLU
14	CO	12	PHE
14	CO	30	ARG
14	CO	35	ILE
14	CO	44	LYS
14	CO	57	LYS
14	CO	59	LYS
14	CO	68	GLN
14	CO	69	VAL
14	CO	73	LEU
14	CO	76	LYS
14	CO	92	TYR
14	CO	98	VAL
14	CO	101	LEU
15	CP	15	VAL
15	CP	18	ASP
15	CP	27	THR
15	CP	36	GLU
15	CP	42	ILE
15	CP	50	ILE
15	CP	58	ASN
15	CP	59	THR
15	CP	85	LYS
15	CP	86	ILE
15	CP	87	ASP
15	CP	88	ILE
15	CP	99	LEU
15	CP	100	TYR
15	CP	107	ASP
15	CP	110	ILE
15	CP	112	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
15	CP	115	ARG
15	CP	124	ASP
16	CQ	18	LEU
16	CQ	70	ARG
16	CQ	72	HIS
16	CQ	75	ASN
16	CQ	88	ILE
16	CQ	92	ARG
16	CQ	97	ASP
16	CQ	104	GLN
17	CR	13	ARG
17	CR	24	LYS
17	CR	37	VAL
17	CR	38	LEU
17	CR	39	LEU
17	CR	40	LEU
17	CR	44	LYS
17	CR	49	THR
17	CR	61	VAL
17	CR	62	LEU
17	CR	66	ARG
17	CR	73	SER
17	CR	80	GLN
17	CR	88	ARG
17	CR	95	LEU
17	CR	99	ILE
18	CS	8	ARG
18	CS	11	ARG
18	CS	27	LYS
18	CS	39	THR
18	CS	67	ASP
18	CS	70	TYR
18	CS	78	GLU
18	CS	88	ARG
18	CS	96	ILE
18	CS	107	LEU
19	CT	27	THR
19	CT	51	VAL
19	CT	60	ARG
19	CT	65	ARG
19	CT	68	ARG
19	CT	80	ILE

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Mol	Chain	Res	Type
19	CT	81	VAL
19	CT	88	LYS
20	CU	2	ARG
20	CU	4	LYS
20	CU	8	LYS
20	CU	9	LYS
20	CU	14	LEU
20	CU	27	VAL
20	CU	71	LYS
20	CU	75	ILE
20	CU	76	CYS
20	CU	88	LYS
20	CU	90	LEU
20	CU	96	ILE
20	CU	97	ARG
20	CU	101	LYS
21	CV	24	LEU
21	CV	30	ASN
21	CV	33	LEU
21	CV	34	ASN
21	CV	67	LEU
21	CV	72	ARG
21	CV	77	ASP
21	CV	94	GLU
21	CV	97	GLU
21	CV	133	ILE
22	CW	19	LYS
22	CW	20	ARG
22	CW	25	ARG
22	CW	55	ARG
22	CW	64	ASP
22	CW	84	LEU
23	CX	11	ARG
23	CX	13	ILE
23	CX	16	ASN
23	CX	17	SER
23	CX	37	ILE
23	CX	45	ASN
23	CX	75	GLU
23	CX	76	ARG
23	CX	83	GLU
24	CY	7	ARG

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Mol	Chain	Res	Type
24	CY	17	SER
24	CY	24	LEU
24	CY	49	LYS
24	CY	53	LEU
24	CY	61	LEU
24	CY	62	THR
25	CZ	31	LEU
25	CZ	37	LEU
25	CZ	40	THR
25	CZ	44	ARG
25	CZ	53	LEU
25	CZ	56	VAL
26	C1	39	ARG
26	C1	46	ASN
26	C1	60	GLU
27	C2	6	VAL
27	C2	25	LEU
27	C2	46	CYS
27	C2	49	CYS
27	C2	51	TYR
28	C3	11	LEU
28	C3	34	LEU
28	C3	42	TRP
29	C4	4	THR
29	C4	8	ASN
29	C4	10	ARG
29	C4	19	ARG
29	C4	24	THR
29	C4	31	LEU
29	C4	39	ARG
29	C4	41	ARG
30	C5	22	VAL
30	C5	52	LYS
30	C5	57	ARG
30	C5	59	LYS
32	DB	15	VAL
32	DB	44	LEU
32	DB	61	LEU
32	DB	69	LEU
32	DB	87	ARG
32	DB	96	ARG
32	DB	97	TRP

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Mol	Chain	Res	Type
32	DB	101	MET
32	DB	119	GLU
32	DB	140	HIS
32	DB	145	LEU
32	DB	153	ARG
32	DB	154	LEU
32	DB	172	ILE
32	DB	178	ARG
32	DB	185	ILE
32	DB	187	LEU
32	DB	196	LEU
33	DC	5	ILE
33	DC	16	ARG
33	DC	69	HIS
33	DC	76	VAL
33	DC	85	ARG
33	DC	89	GLU
33	DC	97	LYS
33	DC	107	GLN
33	DC	131	ARG
33	DC	140	ARG
33	DC	153	VAL
33	DC	167	TRP
33	DC	175	LEU
33	DC	191	THR
33	DC	195	VAL
33	DC	196	LEU
34	DD	4	TYR
34	DD	21	LEU
34	DD	33	MET
34	DD	35	ARG
34	DD	47	ARG
34	DD	58	LEU
34	DD	62	GLN
34	DD	70	ILE
34	DD	76	ARG
34	DD	81	GLU
34	DD	84	LYS
34	DD	98	GLU
34	DD	102	ASP
34	DD	119	GLN
34	DD	122	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DD	131	ARG
34	DD	138	TYR
34	DD	156	GLU
34	DD	166	LYS
34	DD	185	PHE
34	DD	190	ASP
35	DE	12	LEU
35	DE	20	GLN
35	DE	25	ARG
35	DE	31	LEU
35	DE	41	VAL
35	DE	72	GLN
35	DE	78	HIS
35	DE	79	GLU
35	DE	101	ILE
35	DE	119	LEU
35	DE	121	LYS
35	DE	147	ASP
36	DF	7	ASN
36	DF	14	LEU
36	DF	21	LEU
36	DF	40	VAL
36	DF	46	ARG
36	DF	48	LEU
36	DF	52	ILE
36	DF	65	VAL
36	DF	69	GLU
36	DF	79	LEU
36	DF	83	ASP
36	DF	94	GLN
37	DG	5	ARG
37	DG	30	ILE
37	DG	90	GLU
37	DG	124	LEU
37	DG	140	ASP
37	DG	156	TRP
38	DH	1	MET
38	DH	18	ARG
38	DH	50	ARG
38	DH	52	ASP
38	DH	73	ASP
38	DH	81	HIS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
38	DH	91	ARG
38	DH	99	GLU
38	DH	111	ILE
38	DH	119	LEU
38	DH	127	LEU
38	DH	133	LEU
38	DH	136	GLU
38	DH	137	VAL
39	DI	10	ARG
39	DI	31	GLN
39	DI	33	PHE
39	DI	70	LYS
39	DI	88	TYR
39	DI	95	LYS
39	DI	99	LEU
39	DI	114	TYR
39	DI	117	HIS
39	DI	121	ARG
39	DI	125	TYR
40	DJ	13	HIS
40	DJ	22	LYS
40	DJ	55	LYS
40	DJ	57	LYS
40	DJ	58	ASP
40	DJ	62	HIS
40	DJ	63	PHE
40	DJ	78	ASN
40	DJ	92	THR
41	DK	25	TYR
41	DK	30	VAL
41	DK	36	ASP
41	DK	54	ARG
41	DK	81	ASP
41	DK	91	ARG
41	DK	92	GLU
41	DK	103	LEU
41	DK	116	HIS
42	DL	5	THR
42	DL	6	ILE
42	DL	19	LYS
42	DL	22	LYS
42	DL	26	LEU

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Mol	Chain	Res	Type
42	DL	41	THR
42	DL	51	LEU
42	DL	54	VAL
42	DL	91	ASP
42	DL	98	HIS
43	DM	9	ILE
43	DM	50	GLU
43	DM	64	TRP
43	DM	65	LYS
43	DM	66	LEU
43	DM	87	TYR
43	DM	93	ARG
43	DM	103	THR
43	DM	105	THR
43	DM	108	ARG
43	DM	115	LYS
44	DN	31	ARG
44	DN	44	LEU
44	DN	57	ARG
45	DO	4	THR
45	DO	5	LYS
45	DO	17	ARG
45	DO	26	GLU
45	DO	31	LEU
45	DO	41	GLU
45	DO	45	VAL
45	DO	65	ARG
45	DO	68	ARG
45	DO	87	ILE
46	DP	2	VAL
46	DP	4	ILE
46	DP	22	THR
46	DP	47	ASP
46	DP	69	THR
46	DP	75	ARG
46	DP	82	GLN
47	DQ	6	LEU
47	DQ	38	ARG
47	DQ	82	MET
47	DQ	100	LYS
48	DR	19	LYS
48	DR	26	LEU

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Mol	Chain	Res	Type
48	DR	31	LEU
48	DR	55	ARG
48	DR	76	LEU
48	DR	88	LYS
49	DS	6	LYS
49	DS	7	LYS
49	DS	10	PHE
49	DS	29	ARG
49	DS	37	ARG
49	DS	44	MET
49	DS	49	ILE
49	DS	66	MET
50	DT	13	LEU
50	DT	22	ARG
50	DT	36	LEU
50	DT	62	LEU
50	DT	71	THR
50	DT	73	HIS
50	DT	75	ASN
50	DT	93	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (216) such sidechains are listed below:

Mol	Chain	Res	Type
3	AD	87	ASN
3	AD	96	HIS
3	AD	166	GLN
3	AD	186	HIS
3	AD	198	ASN
3	AD	220	HIS
4	AE	66	HIS
4	AE	132	HIS
4	AE	192	ASN
5	AF	40	GLN
5	AF	67	GLN
5	AF	69	HIS
5	AF	75	HIS
5	AF	169	ASN
6	AG	58	GLN
6	AG	123	ASN
7	AH	61	HIS
8	AI	54	GLN

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Mol	Chain	Res	Type
9	AJ	68	ASN
9	AJ	79	ASN
9	AJ	151	HIS
9	AJ	154	GLN
10	AK	29	ASN
11	AL	13	ASN
11	AL	27	HIS
11	AL	35	HIS
11	AL	68	GLN
11	AL	128	HIS
12	AM	13	GLN
13	AN	13	HIS
13	AN	16	HIS
13	AN	53	HIS
13	AN	61	HIS
14	AO	61	ASN
15	AP	79	HIS
16	AQ	44	ASN
16	AQ	49	HIS
16	AQ	71	GLN
16	AQ	75	ASN
16	AQ	81	HIS
17	AR	11	GLN
18	AS	34	ASN
18	AS	57	ASN
18	AS	61	ASN
19	AT	41	ASN
19	AT	55	ASN
19	AT	87	GLN
20	AU	43	ASN
21	AV	30	ASN
21	AV	54	HIS
21	AV	65	GLN
21	AV	73	GLN
21	AV	75	ASN
21	AV	132	ASN
22	AW	50	ASN
22	AW	70	GLN
23	AX	45	ASN
23	AX	56	GLN
23	AX	66	HIS
25	AZ	19	GLN

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Mol	Chain	Res	Type
25	AZ	46	ASN
25	AZ	52	HIS
26	A1	46	ASN
28	A3	26	ASN
28	A3	29	ASN
29	A4	8	ASN
30	A5	33	ASN
30	A5	35	GLN
32	BB	40	HIS
32	BB	95	GLN
32	BB	146	GLN
32	BB	204	ASN
33	BC	28	GLN
33	BC	136	GLN
33	BC	170	GLN
33	BC	176	HIS
34	BD	45	GLN
34	BD	62	GLN
34	BD	77	ASN
34	BD	119	GLN
34	BD	125	HIS
34	BD	201	GLN
36	BF	27	GLN
36	BF	94	GLN
37	BG	13	GLN
37	BG	86	GLN
37	BG	110	GLN
38	BH	82	HIS
40	BJ	56	HIS
41	BK	26	ASN
41	BK	38	ASN
41	BK	117	ASN
42	BL	7	ASN
42	BL	8	GLN
42	BL	74	HIS
43	BM	77	ASN
43	BM	92	HIS
43	BM	101	GLN
44	BN	49	HIS
44	BN	52	GLN
45	BO	37	ASN
45	BO	42	HIS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
45	BO	46	HIS
46	BP	76	GLN
46	BP	82	GLN
47	BQ	16	GLN
49	BS	14	HIS
49	BS	23	ASN
49	BS	47	HIS
50	BT	73	HIS
50	BT	75	ASN
3	CD	87	ASN
3	CD	96	HIS
3	CD	166	GLN
3	CD	186	HIS
3	CD	198	ASN
4	CE	66	HIS
4	CE	132	HIS
4	CE	192	ASN
5	CF	40	GLN
5	CF	67	GLN
5	CF	69	HIS
5	CF	75	HIS
5	CF	169	ASN
6	CG	58	GLN
6	CG	123	ASN
7	CH	61	HIS
8	CI	54	GLN
9	CJ	68	ASN
9	CJ	79	ASN
9	CJ	151	HIS
9	CJ	154	GLN
10	CK	29	ASN
11	CL	13	ASN
11	CL	27	HIS
11	CL	35	HIS
11	CL	68	GLN
11	CL	128	HIS
12	CM	13	GLN
13	CN	16	HIS
13	CN	53	HIS
13	CN	61	HIS
14	CO	61	ASN
15	CP	79	HIS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
16	CQ	44	ASN
16	CQ	49	HIS
16	CQ	71	GLN
16	CQ	75	ASN
16	CQ	81	HIS
17	CR	11	GLN
17	CR	80	GLN
18	CS	34	ASN
18	CS	57	ASN
18	CS	61	ASN
19	CT	41	ASN
19	CT	55	ASN
19	CT	87	GLN
20	CU	43	ASN
21	CV	30	ASN
21	CV	54	HIS
21	CV	65	GLN
21	CV	73	GLN
21	CV	75	ASN
21	CV	132	ASN
22	CW	50	ASN
22	CW	70	GLN
23	CX	45	ASN
23	CX	56	GLN
23	CX	66	HIS
25	CZ	19	GLN
25	CZ	46	ASN
25	CZ	52	HIS
26	C1	46	ASN
28	C3	26	ASN
28	C3	29	ASN
29	C4	8	ASN
30	C5	33	ASN
32	DB	40	HIS
32	DB	95	GLN
32	DB	146	GLN
32	DB	204	ASN
33	DC	28	GLN
33	DC	136	GLN
33	DC	170	GLN
33	DC	176	HIS
34	DD	45	GLN

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Mol	Chain	Res	Type
34	DD	62	GLN
34	DD	77	ASN
34	DD	103	ASN
36	DF	27	GLN
36	DF	94	GLN
37	DG	13	GLN
37	DG	86	GLN
37	DG	110	GLN
38	DH	15	ASN
38	DH	82	HIS
40	DJ	56	HIS
41	DK	26	ASN
41	DK	38	ASN
41	DK	117	ASN
42	DL	7	ASN
42	DL	8	GLN
42	DL	74	HIS
43	DM	77	ASN
43	DM	92	HIS
43	DM	101	GLN
45	DO	37	ASN
45	DO	42	HIS
45	DO	46	HIS
46	DP	76	GLN
47	DQ	16	GLN
49	DS	14	HIS
49	DS	23	ASN
49	DS	47	HIS
50	DT	73	HIS
50	DT	75	ASN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	2830/2879 (98%)	442 (15%)	15 (0%)
1	CA	2830/2879 (98%)	441 (15%)	15 (0%)
2	AB	118/119 (99%)	9 (7%)	0
2	CB	118/119 (99%)	9 (7%)	0
31	BA	1504/1504 (100%)	204 (13%)	12 (0%)
31	DA	1504/1504 (100%)	205 (13%)	12 (0%)
52	BV	76/77 (98%)	11 (14%)	0

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Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
52	BW	76/77 (98%)	12 (15%)	1 (1%)
52	DV	76/77 (98%)	11 (14%)	0
52	DW	76/77 (98%)	12 (15%)	1 (1%)
53	BX	4/5 (80%)	1 (25%)	0
53	DX	4/5 (80%)	1 (25%)	0
All	All	9216/9322 (98%)	1358 (14%)	56 (0%)

All (1358) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	11	G
1	AA	34	C
1	AA	35	G
1	AA	46	C
1	AA	49	A
1	AA	64	A
1	AA	71	A
1	AA	74	A
1	AA	75	G
1	AA	84	A
1	AA	99	U
1	AA	101	G
1	AA	102	G
1	AA	114	U
1	AA	118	A
1	AA	119	A
1	AA	120	U
1	AA	138	G
1	AA	139	G
1	AA	140	A
1	AA	155	C
1	AA	163	U
1	AA	181	A
1	AA	196	A
1	AA	197	A
1	AA	199	A
1	AA	204	A
1	AA	205	G
1	AA	215	G
1	AA	216	A
1	AA	221	A
1	AA	222	A

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Mol	Chain	Res	Type
1	AA	228	A
1	AA	229	A
1	AA	241	A
1	AA	245	G
1	AA	248	G
1	AA	252	G
1	AA	266	G
1	AA	270(N)	U
1	AA	270(O)	G
1	AA	270(P)	U
1	AA	270(R)	C
1	AA	271(B)	C
1	AA	271(C)	G
1	AA	271	G
1	AA	273(G)	C
1	AA	275	G
1	AA	276	C
1	AA	278	A
1	AA	301	G
1	AA	302	C
1	AA	311	A
1	AA	324	A
1	AA	329	G
1	AA	330	A
1	AA	333	G
1	AA	352	G
1	AA	353	G
1	AA	363(A)	G
1	AA	363(G)	A
1	AA	372	G
1	AA	386	G
1	AA	396	G
1	AA	405	U
1	AA	406	G
1	AA	411	G
1	AA	412	A
1	AA	444	C
1	AA	470	A
1	AA	475	U
1	AA	480	A
1	AA	481	G
1	AA	505	A

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Mol	Chain	Res	Type
1	AA	508	G
1	AA	509	C
1	AA	528	A
1	AA	530	G
1	AA	531	C
1	AA	532	A
1	AA	533	G
1	AA	544	C
1	AA	546	C
1	AA	548	A
1	AA	556	G
1	AA	563	G
1	AA	573	G
1	AA	575	A
1	AA	599	G
1	AA	603	A
1	AA	614	U
1	AA	615	G
1	AA	617	G
1	AA	620	G
1	AA	621	A
1	AA	627	A
1	AA	637	A
1	AA	645	C
1	AA	646	A
1	AA	654	U
1	AA	655	A
1	AA	668	G
1	AA	686	G
1	AA	730	C
1	AA	764	A
1	AA	775	G
1	AA	776	G
1	AA	782	A
1	AA	784	A
1	AA	785	G
1	AA	787	U
1	AA	805	G
1	AA	812	C
1	AA	819	A
1	AA	827	U
1	AA	828	U

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Mol	Chain	Res	Type
1	AA	831	G
1	AA	847	U
1	AA	859	G
1	AA	869	G
1	AA	882	G
1	AA	885	C
1	AA	886	C
1	AA	888	C
1	AA	889	C
1	AA	890	A
1	AA	896	A
1	AA	897	C
1	AA	910	A
1	AA	914	C
1	AA	915	C
1	AA	917	A
1	AA	919	G
1	AA	931	G
1	AA	932	G
1	AA	933	A
1	AA	938	G
1	AA	941	A
1	AA	946	G
1	AA	959	A
1	AA	961	C
1	AA	965	C
1	AA	974(A)	G
1	AA	974(B)	C
1	AA	975	G
1	AA	983	A
1	AA	996	A
1	AA	1005	C
1	AA	1009	A
1	AA	1012	U
1	AA	1013	C
1	AA	1022	G
1	AA	1023	U
1	AA	1025	G
1	AA	1026	U
1	AA	1027	A
1	AA	1033	U
1	AA	1047	G

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Mol	Chain	Res	Type
1	AA	1048	A
1	AA	1049	C
1	AA	1101	U
1	AA	1105	U
1	AA	1106	G
1	AA	1108	U
1	AA	1110	G
1	AA	1111	A
1	AA	1112	G
1	AA	1122	G
1	AA	1126	A
1	AA	1128	A
1	AA	1129	A
1	AA	1130	U
1	AA	1135	C
1	AA	1136	G
1	AA	1139	G
1	AA	1142(B)	A
1	AA	1155	A
1	AA	1171	G
1	AA	1174	A
1	AA	1175	U
1	AA	1176	G
1	AA	1205	U
1	AA	1211	U
1	AA	1220	A
1	AA	1221	C
1	AA	1253	A
1	AA	1256	G
1	AA	1271	G
1	AA	1272	A
1	AA	1273	U
1	AA	1300	U
1	AA	1301	A
1	AA	1314	C
1	AA	1329	U
1	AA	1332	G
1	AA	1345	C
1	AA	1349	A
1	AA	1352	U
1	AA	1359	A
1	AA	1360	A

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Mol	Chain	Res	Type
1	AA	1365	A
1	AA	1380	G
1	AA	1384	A
1	AA	1385	G
1	AA	1386	C
1	AA	1396	U
1	AA	1416	G
1	AA	1420	U
1	AA	1421	G
1	AA	1428	C
1	AA	1444(B)	A
1	AA	1455	G
1	AA	1460	A
1	AA	1467	C
1	AA	1478	G
1	AA	1483	G
1	AA	1490	A
1	AA	1493	C
1	AA	1494	A
1	AA	1495	A
1	AA	1497	U
1	AA	1509	A
1	AA	1510	A
1	AA	1535	U
1	AA	1542	G
1	AA	1543	A
1	AA	1544	C
1	AA	1545	A
1	AA	1554	A
1	AA	1558	A
1	AA	1559	G
1	AA	1560	G
1	AA	1566	A
1	AA	1569	A
1	AA	1578	U
1	AA	1579	A
1	AA	1585	C
1	AA	1598	C
1	AA	1603	A
1	AA	1608	A
1	AA	1609	A
1	AA	1618	A

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Mol	Chain	Res	Type
1	AA	1639	U
1	AA	1640	C
1	AA	1646	C
1	AA	1647	G
1	AA	1648	C
1	AA	1654	A
1	AA	1674	G
1	AA	1681	G
1	AA	1703	G
1	AA	1729	A
1	AA	1732	A
1	AA	1756	G
1	AA	1761	C
1	AA	1763	G
1	AA	1764	G
1	AA	1773	A
1	AA	1776	G
1	AA	1787	A
1	AA	1791	A
1	AA	1800	C
1	AA	1801	G
1	AA	1811	G
1	AA	1816	G
1	AA	1829	A
1	AA	1833	U
1	AA	1847	A
1	AA	1900	A
1	AA	1903	G
1	AA	1906	G
1	AA	1913	A
1	AA	1914	C
1	AA	1929	G
1	AA	1930	G
1	AA	1936	A
1	AA	1937	A
1	AA	1938	A
1	AA	1939	U
1	AA	1955	U
1	AA	1961	C
1	AA	1963	U
1	AA	1967	C
1	AA	1970	A

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Mol	Chain	Res	Type
1	AA	1971	A
1	AA	1972	A
1	AA	1982	C
1	AA	1992	G
1	AA	1993	U
1	AA	1997	G
1	AA	2023	G
1	AA	2030	A
1	AA	2031	A
1	AA	2032	G
1	AA	2033	A
1	AA	2036	C
1	AA	2043	C
1	AA	2055	C
1	AA	2056	G
1	AA	2060	A
1	AA	2061	G
1	AA	2069	G
1	AA	2080	G
1	AA	2093	G
1	AA	2118	U
1	AA	2120	G
1	AA	2126	A
1	AA	2127	G
1	AA	2130	U
1	AA	2131	G
1	AA	2132	U
1	AA	2133	G
1	AA	2134	A
1	AA	2136	C
1	AA	2148	G
1	AA	2156	G
1	AA	2158	A
1	AA	2161	C
1	AA	2164	C
1	AA	2165	G
1	AA	2167	U
1	AA	2168	G
1	AA	2170	A
1	AA	2172	U
1	AA	2173	A
1	AA	2181	G

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Mol	Chain	Res	Type
1	AA	2198	A
1	AA	2210	G
1	AA	2211	G
1	AA	2212	A
1	AA	2213	U
1	AA	2215	G
1	AA	2225	A
1	AA	2226	C
1	AA	2234	G
1	AA	2238	G
1	AA	2239	G
1	AA	2250	G
1	AA	2273	A
1	AA	2275	C
1	AA	2279	G
1	AA	2283	C
1	AA	2287	A
1	AA	2288	A
1	AA	2304	G
1	AA	2305	A
1	AA	2306	C
1	AA	2307	G
1	AA	2308	G
1	AA	2309	A
1	AA	2319	G
1	AA	2320	A
1	AA	2321	G
1	AA	2325	G
1	AA	2334	G
1	AA	2336	A
1	AA	2345	G
1	AA	2346	A
1	AA	2347	C
1	AA	2350	C
1	AA	2361	A
1	AA	2379	G
1	AA	2383	G
1	AA	2385	C
1	AA	2392	A
1	AA	2393	A
1	AA	2394	C
1	AA	2402	C

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Mol	Chain	Res	Type
1	AA	2422	A
1	AA	2424	C
1	AA	2425	A
1	AA	2428	G
1	AA	2429	G
1	AA	2430	A
1	AA	2431	U
1	AA	2434	A
1	AA	2439	A
1	AA	2441	C
1	AA	2447	G
1	AA	2448	A
1	AA	2470	G
1	AA	2473	U
1	AA	2474	C
1	AA	2476	A
1	AA	2477	C
1	AA	2478	A
1	AA	2484	G
1	AA	2502	G
1	AA	2503	A
1	AA	2505	G
1	AA	2506	U
1	AA	2518	A
1	AA	2525	G
1	AA	2529	G
1	AA	2542	A
1	AA	2543	G
1	AA	2554	U
1	AA	2566	A
1	AA	2567	G
1	AA	2572	A
1	AA	2602	A
1	AA	2603	G
1	AA	2610	C
1	AA	2611	U
1	AA	2612	C
1	AA	2615	U
1	AA	2630	G
1	AA	2646	C
1	AA	2663	G
1	AA	2665	A

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Mol	Chain	Res	Type
1	AA	2689	U
1	AA	2690	C
1	AA	2691	C
1	AA	2702	U
1	AA	2703	C
1	AA	2707	G
1	AA	712(B)	A
1	AA	2713	A
1	AA	2714	G
1	AA	2726	U
1	AA	2733	A
1	AA	2751	G
1	AA	2758	A
1	AA	2764	A
1	AA	2765	A
1	AA	2766	G
1	AA	2777	G
1	AA	2778	A
1	AA	2779	U
1	AA	2790	A
1	AA	2791	C
1	AA	2792	G
1	AA	2797	U
1	AA	2798	C
1	AA	2808	U
1	AA	2820	A
1	AA	2821	A
1	AA	2823	A
1	AA	2833	G
1	AA	2835	A
1	AA	2849	U
1	AA	2872	G
2	AB	13	A
2	AB	15	A
2	AB	35	U
2	AB	41	U
2	AB	44	G
2	AB	52	A
2	AB	73	A
2	AB	87	G
2	AB	109	G
31	BA	6	G

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Mol	Chain	Res	Type
31	BA	7	G
31	BA	9	G
31	BA	22	G
31	BA	32	A
31	BA	39	G
31	BA	47	C
31	BA	48	C
31	BA	51	A
31	BA	80	G
31	BA	81	G
31	BA	88	C
31	BA	108	G
31	BA	109	A
31	BA	116	A
31	BA	121	C
31	BA	131	C
31	BA	144	G
31	BA	195	A
31	BA	197	A
31	BA	210	U
31	BA	244	U
31	BA	247	G
31	BA	251	G
31	BA	258	G
31	BA	266	G
31	BA	267	C
31	BA	289	G
31	BA	319	G
31	BA	321	A
31	BA	328	C
31	BA	329	A
31	BA	332	G
31	BA	345	C
31	BA	347	G
31	BA	352	C
31	BA	353	A
31	BA	354	G
31	BA	367	U
31	BA	369	C
31	BA	372	C
31	BA	389	A
31	BA	397	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
31	BA	406	G
31	BA	412	A
31	BA	413	G
31	BA	414	A
31	BA	421	U
31	BA	422	C
31	BA	423	G
31	BA	424	G
31	BA	429	U
31	BA	430	A
31	BA	439	A
31	BA	452	A
31	BA	453	A
31	BA	465	A
31	BA	485	G
31	BA	496	A
31	BA	497	U
31	BA	511	C
31	BA	518	C
31	BA	531	U
31	BA	532	A
31	BA	533	A
31	BA	547	A
31	BA	559	A
31	BA	561	U
31	BA	562	C
31	BA	568	G
31	BA	572	A
31	BA	573	A
31	BA	576	G
31	BA	577	G
31	BA	641	U
31	BA	653	A
31	BA	665	A
31	BA	666	G
31	BA	688	G
31	BA	695	A
31	BA	702	A
31	BA	703	G
31	BA	723	U
31	BA	749	C
31	BA	753	A

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Mol	Chain	Res	Type
31	BA	755	G
31	BA	777	A
31	BA	792	A
31	BA	793	U
31	BA	794	A
31	BA	817	C
31	BA	818	G
31	BA	819	A
31	BA	821	G
31	BA	827	U
31	BA	828	A
31	BA	841	U
31	BA	842	C
31	BA	843	U
31	BA	848	C
31	BA	859	A
31	BA	902	G
31	BA	914	A
31	BA	926	G
31	BA	927	G
31	BA	934	C
31	BA	935	A
31	BA	960	U
31	BA	961	U
31	BA	969	A
31	BA	971	G
31	BA	974	A
31	BA	976	G
31	BA	977	A
31	BA	980	C
31	BA	981	U
31	BA	982	U
31	BA	992	U
31	BA	993	G
31	BA	1004	A
31	BA	1025	U
31	BA	1027(A)	C
31	BA	1029	G
31	BA	1045	C
31	BA	1053	G
31	BA	1054	C
31	BA	1055	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
31	BA	1064	G
31	BA	1067	A
31	BA	1081	G
31	BA	1094	G
31	BA	1095	U
31	BA	1101	A
31	BA	1117	G
31	BA	1124	G
31	BA	1125	U
31	BA	1126	U
31	BA	1129	C
31	BA	1130	A
31	BA	1131	G
31	BA	1137	C
31	BA	1138	G
31	BA	1139	G
31	BA	1140	C
31	BA	1152	A
31	BA	1159	U
31	BA	1171	G
31	BA	1184	G
31	BA	1196	U
31	BA	1197	G
31	BA	1200	C
31	BA	1201	A
31	BA	1212	U
31	BA	1213	A
31	BA	1225	A
31	BA	1238	A
31	BA	1239	A
31	BA	1241	G
31	BA	1253	G
31	BA	1256	A
31	BA	1257	U
31	BA	1270	C
31	BA	1280	A
31	BA	1281	U
31	BA	1286	A
31	BA	1287	A
31	BA	1297	C
31	BA	1300	G
31	BA	1301	U

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Mol	Chain	Res	Type
31	BA	1302	U
31	BA	1305	G
31	BA	1317	C
31	BA	1319	A
31	BA	1320	C
31	BA	1337	G
31	BA	1346	A
31	BA	1347	G
31	BA	1364	U
31	BA	1368	G
31	BA	1370	G
31	BA	1378	C
31	BA	1398	A
31	BA	1419	G
31	BA	1442	G
31	BA	1443	G
31	BA	1446	A
31	BA	1451	A
31	BA	1452	C
31	BA	1453	G
31	BA	1487	G
31	BA	1494	G
31	BA	1497	G
31	BA	1502	A
31	BA	1503	A
31	BA	1504	G
31	BA	1505	G
31	BA	1506	U
31	BA	1507	A
31	BA	1517	G
31	BA	1519	A
31	BA	1520	G
31	BA	1529	G
31	BA	1530	G
31	BA	1531	A
52	BV	8	U
52	BV	17(A)	U
52	BV	19	G
52	BV	20	U
52	BV	21	A
52	BV	31	G
52	BV	47	U

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Mol	Chain	Res	Type
52	BV	48	C
52	BV	74	C
52	BV	75	C
52	BV	76	A
52	BW	6	G
52	BW	10	G
52	BW	17(A)	U
52	BW	18	G
52	BW	19	G
52	BW	20	U
52	BW	37	A
52	BW	47	U
52	BW	48	C
52	BW	49	G
52	BW	50	U
52	BW	52	G
53	BX	16	A
1	CA	11	G
1	CA	34	C
1	CA	35	G
1	CA	46	C
1	CA	49	A
1	CA	64	A
1	CA	71	A
1	CA	74	A
1	CA	75	G
1	CA	84	A
1	CA	99	U
1	CA	101	G
1	CA	102	G
1	CA	114	U
1	CA	118	A
1	CA	119	A
1	CA	120	U
1	CA	138	G
1	CA	139	G
1	CA	140	A
1	CA	155	C
1	CA	163	U
1	CA	181	A
1	CA	196	A
1	CA	197	A

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Mol	Chain	Res	Type
1	CA	199	A
1	CA	204	A
1	CA	205	G
1	CA	215	G
1	CA	216	A
1	CA	221	A
1	CA	222	A
1	CA	228	A
1	CA	229	A
1	CA	241	A
1	CA	245	G
1	CA	248	G
1	CA	252	G
1	CA	266	G
1	CA	270(N)	U
1	CA	270(O)	G
1	CA	270(P)	U
1	CA	270(R)	C
1	CA	271(B)	C
1	CA	271(C)	G
1	CA	271	G
1	CA	273(G)	C
1	CA	275	G
1	CA	276	C
1	CA	278	A
1	CA	301	G
1	CA	302	C
1	CA	311	A
1	CA	324	A
1	CA	329	G
1	CA	330	A
1	CA	333	G
1	CA	352	G
1	CA	353	G
1	CA	363(A)	G
1	CA	363(G)	A
1	CA	372	G
1	CA	386	G
1	CA	396	G
1	CA	405	U
1	CA	406	G
1	CA	411	G

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Mol	Chain	Res	Type
1	CA	412	A
1	CA	444	C
1	CA	470	A
1	CA	475	U
1	CA	480	A
1	CA	481	G
1	CA	505	A
1	CA	508	G
1	CA	509	C
1	CA	528	A
1	CA	530	G
1	CA	531	C
1	CA	532	A
1	CA	533	G
1	CA	544	C
1	CA	546	C
1	CA	548	A
1	CA	556	G
1	CA	563	G
1	CA	573	G
1	CA	575	A
1	CA	599	G
1	CA	603	A
1	CA	614	U
1	CA	615	G
1	CA	617	G
1	CA	620	G
1	CA	621	A
1	CA	627	A
1	CA	637	A
1	CA	645	C
1	CA	646	A
1	CA	654	U
1	CA	655	A
1	CA	668	G
1	CA	686	G
1	CA	730	C
1	CA	764	A
1	CA	775	G
1	CA	776	G
1	CA	782	A
1	CA	784	A

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Mol	Chain	Res	Type
1	CA	785	G
1	CA	787	U
1	CA	805	G
1	CA	812	C
1	CA	819	A
1	CA	827	U
1	CA	828	U
1	CA	831	G
1	CA	847	U
1	CA	859	G
1	CA	869	G
1	CA	882	G
1	CA	885	C
1	CA	886	C
1	CA	888	C
1	CA	889	C
1	CA	890	A
1	CA	896	A
1	CA	897	C
1	CA	910	A
1	CA	914	C
1	CA	915	C
1	CA	917	A
1	CA	919	G
1	CA	931	G
1	CA	932	G
1	CA	933	A
1	CA	938	G
1	CA	941	A
1	CA	946	G
1	CA	959	A
1	CA	961	C
1	CA	965	C
1	CA	974(A)	G
1	CA	974(B)	C
1	CA	975	G
1	CA	983	A
1	CA	996	A
1	CA	1005	C
1	CA	1009	A
1	CA	1012	U
1	CA	1013	C

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Mol	Chain	Res	Type
1	CA	1022	G
1	CA	1023	U
1	CA	1025	G
1	CA	1026	U
1	CA	1027	A
1	CA	1033	U
1	CA	1047	G
1	CA	1048	A
1	CA	1049	C
1	CA	1101	U
1	CA	1105	U
1	CA	1106	G
1	CA	1108	U
1	CA	1110	G
1	CA	1112	G
1	CA	1122	G
1	CA	1126	A
1	CA	1128	A
1	CA	1129	A
1	CA	1130	U
1	CA	1135	C
1	CA	1136	G
1	CA	1139	G
1	CA	1142(B)	A
1	CA	1155	A
1	CA	1171	G
1	CA	1174	A
1	CA	1175	U
1	CA	1176	G
1	CA	1205	U
1	CA	1211	U
1	CA	1220	A
1	CA	1221	C
1	CA	1253	A
1	CA	1256	G
1	CA	1271	G
1	CA	1272	A
1	CA	1273	U
1	CA	1300	U
1	CA	1301	A
1	CA	1314	C
1	CA	1329	U

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Mol	Chain	Res	Type
1	CA	1332	G
1	CA	1345	C
1	CA	1349	A
1	CA	1352	U
1	CA	1359	A
1	CA	1360	A
1	CA	1365	A
1	CA	1380	G
1	CA	1384	A
1	CA	1385	G
1	CA	1386	C
1	CA	1396	U
1	CA	1416	G
1	CA	1420	U
1	CA	1421	G
1	CA	1428	C
1	CA	1444(B)	A
1	CA	1455	G
1	CA	1460	A
1	CA	1467	C
1	CA	1478	G
1	CA	1483	G
1	CA	1490	A
1	CA	1493	C
1	CA	1494	A
1	CA	1495	A
1	CA	1497	U
1	CA	1509	A
1	CA	1510	A
1	CA	1535	U
1	CA	1542	G
1	CA	1543	A
1	CA	1544	C
1	CA	1545	A
1	CA	1554	A
1	CA	1558	A
1	CA	1559	G
1	CA	1560	G
1	CA	1566	A
1	CA	1569	A
1	CA	1578	U
1	CA	1579	A

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Mol	Chain	Res	Type
1	CA	1585	C
1	CA	1598	C
1	CA	1603	A
1	CA	1608	A
1	CA	1609	A
1	CA	1618	A
1	CA	1639	U
1	CA	1640	C
1	CA	1646	C
1	CA	1647	G
1	CA	1648	C
1	CA	1654	A
1	CA	1674	G
1	CA	1681	G
1	CA	1703	G
1	CA	1729	A
1	CA	1732	A
1	CA	1756	G
1	CA	1761	C
1	CA	1763	G
1	CA	1764	G
1	CA	1773	A
1	CA	1776	G
1	CA	1787	A
1	CA	1791	A
1	CA	1800	C
1	CA	1801	G
1	CA	1811	G
1	CA	1816	G
1	CA	1829	A
1	CA	1833	U
1	CA	1847	A
1	CA	1900	A
1	CA	1903	G
1	CA	1906	G
1	CA	1913	A
1	CA	1914	C
1	CA	1929	G
1	CA	1930	G
1	CA	1936	A
1	CA	1937	A
1	CA	1938	A

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Mol	Chain	Res	Type
1	CA	1939	U
1	CA	1955	U
1	CA	1961	C
1	CA	1963	U
1	CA	1967	C
1	CA	1970	A
1	CA	1971	A
1	CA	1972	A
1	CA	1982	C
1	CA	1992	G
1	CA	1993	U
1	CA	1997	G
1	CA	2023	G
1	CA	2030	A
1	CA	2031	A
1	CA	2032	G
1	CA	2033	A
1	CA	2036	C
1	CA	2043	C
1	CA	2051	A
1	CA	2055	C
1	CA	2056	G
1	CA	2060	A
1	CA	2061	G
1	CA	2069	G
1	CA	2080	G
1	CA	2118	U
1	CA	2120	G
1	CA	2126	A
1	CA	2127	G
1	CA	2130	U
1	CA	2131	G
1	CA	2132	U
1	CA	2133	G
1	CA	2134	A
1	CA	2136	C
1	CA	2148	G
1	CA	2156	G
1	CA	2158	A
1	CA	2161	C
1	CA	2164	C
1	CA	2165	G

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Mol	Chain	Res	Type
1	CA	2167	U
1	CA	2168	G
1	CA	2170	A
1	CA	2172	U
1	CA	2173	A
1	CA	2181	G
1	CA	2198	A
1	CA	2210	G
1	CA	2211	G
1	CA	2212	A
1	CA	2213	U
1	CA	2215	G
1	CA	2225	A
1	CA	2226	C
1	CA	2234	G
1	CA	2238	G
1	CA	2239	G
1	CA	2250	G
1	CA	2273	A
1	CA	2275	C
1	CA	2279	G
1	CA	2283	C
1	CA	2287	A
1	CA	2288	A
1	CA	2304	G
1	CA	2305	A
1	CA	2306	C
1	CA	2307	G
1	CA	2308	G
1	CA	2309	A
1	CA	2319	G
1	CA	2320	A
1	CA	2321	G
1	CA	2325	G
1	CA	2334	G
1	CA	2336	A
1	CA	2345	G
1	CA	2346	A
1	CA	2347	C
1	CA	2350	C
1	CA	2361	A
1	CA	2379	G

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Mol	Chain	Res	Type
1	CA	2383	G
1	CA	2385	C
1	CA	2392	A
1	CA	2393	A
1	CA	2402	C
1	CA	2422	A
1	CA	2424	C
1	CA	2425	A
1	CA	2428	G
1	CA	2429	G
1	CA	2430	A
1	CA	2431	U
1	CA	2434	A
1	CA	2439	A
1	CA	2441	C
1	CA	2447	G
1	CA	2448	A
1	CA	2470	G
1	CA	2473	U
1	CA	2474	C
1	CA	2476	A
1	CA	2477	C
1	CA	2478	A
1	CA	2484	G
1	CA	2502	G
1	CA	2503	A
1	CA	2505	G
1	CA	2506	U
1	CA	2518	A
1	CA	2525	G
1	CA	2529	G
1	CA	2542	A
1	CA	2543	G
1	CA	2554	U
1	CA	2566	A
1	CA	2567	G
1	CA	2572	A
1	CA	2602	A
1	CA	2603	G
1	CA	2610	C
1	CA	2611	U
1	CA	2612	C

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Mol	Chain	Res	Type
1	CA	2615	U
1	CA	2630	G
1	CA	2641	G
1	CA	2646	C
1	CA	2663	G
1	CA	2665	A
1	CA	2689	U
1	CA	2690	C
1	CA	2691	C
1	CA	2702	U
1	CA	2703	C
1	CA	2707	G
1	CA	712(B)	A
1	CA	2713	A
1	CA	2714	G
1	CA	2726	U
1	CA	2733	A
1	CA	2751	G
1	CA	2758	A
1	CA	2764	A
1	CA	2765	A
1	CA	2766	G
1	CA	2777	G
1	CA	2778	A
1	CA	2779	U
1	CA	2790	A
1	CA	2791	C
1	CA	2792	G
1	CA	2797	U
1	CA	2798	C
1	CA	2808	U
1	CA	2820	A
1	CA	2821	A
1	CA	2823	A
1	CA	2833	G
1	CA	2835	A
1	CA	2849	U
1	CA	2872	G
2	CB	13	A
2	CB	15	A
2	CB	35	U
2	CB	41	U

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Mol	Chain	Res	Type
2	CB	44	G
2	CB	52	A
2	CB	73	A
2	CB	87	G
2	CB	109	G
31	DA	6	G
31	DA	7	G
31	DA	9	G
31	DA	22	G
31	DA	32	A
31	DA	39	G
31	DA	47	C
31	DA	48	C
31	DA	51	A
31	DA	80	G
31	DA	81	G
31	DA	88	C
31	DA	108	G
31	DA	109	A
31	DA	116	A
31	DA	121	C
31	DA	131	C
31	DA	144	G
31	DA	195	A
31	DA	197	A
31	DA	210	U
31	DA	244	U
31	DA	247	G
31	DA	251	G
31	DA	258	G
31	DA	266	G
31	DA	267	C
31	DA	289	G
31	DA	319	G
31	DA	321	A
31	DA	328	C
31	DA	329	A
31	DA	332	G
31	DA	345	C
31	DA	347	G
31	DA	352	C
31	DA	353	A

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Mol	Chain	Res	Type
31	DA	354	G
31	DA	367	U
31	DA	369	C
31	DA	372	C
31	DA	389	A
31	DA	397	A
31	DA	406	G
31	DA	412	A
31	DA	413	G
31	DA	414	A
31	DA	421	U
31	DA	422	C
31	DA	423	G
31	DA	424	G
31	DA	429	U
31	DA	430	A
31	DA	439	A
31	DA	452	A
31	DA	453	A
31	DA	465	A
31	DA	485	G
31	DA	496	A
31	DA	497	U
31	DA	511	C
31	DA	518	C
31	DA	530	G
31	DA	531	U
31	DA	532	A
31	DA	533	A
31	DA	547	A
31	DA	559	A
31	DA	561	U
31	DA	562	C
31	DA	572	A
31	DA	573	A
31	DA	576	G
31	DA	577	G
31	DA	641	U
31	DA	653	A
31	DA	665	A
31	DA	666	G
31	DA	688	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
31	DA	695	A
31	DA	702	A
31	DA	703	G
31	DA	723	U
31	DA	749	C
31	DA	753	A
31	DA	755	G
31	DA	777	A
31	DA	792	A
31	DA	793	U
31	DA	794	A
31	DA	816	A
31	DA	817	C
31	DA	818	G
31	DA	819	A
31	DA	821	G
31	DA	827	U
31	DA	828	A
31	DA	841	U
31	DA	842	C
31	DA	843	U
31	DA	848	C
31	DA	859	A
31	DA	902	G
31	DA	914	A
31	DA	926	G
31	DA	927	G
31	DA	934	C
31	DA	935	A
31	DA	960	U
31	DA	961	U
31	DA	969	A
31	DA	971	G
31	DA	974	A
31	DA	976	G
31	DA	977	A
31	DA	980	C
31	DA	981	U
31	DA	982	U
31	DA	992	U
31	DA	993	G
31	DA	1004	A

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Mol	Chain	Res	Type
31	DA	1025	U
31	DA	1031(A)	A
31	DA	1033	G
31	DA	1045	C
31	DA	1053	G
31	DA	1054	C
31	DA	1055	A
31	DA	1064	G
31	DA	1067	A
31	DA	1081	G
31	DA	1094	G
31	DA	1095	U
31	DA	1101	A
31	DA	1117	G
31	DA	1124	G
31	DA	1125	U
31	DA	1126	U
31	DA	1129	C
31	DA	1130	A
31	DA	1131	G
31	DA	1137	C
31	DA	1138	G
31	DA	1139	G
31	DA	1140	C
31	DA	1152	A
31	DA	1159	U
31	DA	1171	G
31	DA	1184	G
31	DA	1196	U
31	DA	1197	G
31	DA	1200	C
31	DA	1201	A
31	DA	1212	U
31	DA	1213	A
31	DA	1225	A
31	DA	1238	A
31	DA	1239	A
31	DA	1241	G
31	DA	1253	G
31	DA	1256	A
31	DA	1257	U
31	DA	1270	C

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Mol	Chain	Res	Type
31	DA	1280	A
31	DA	1281	U
31	DA	1286	A
31	DA	1287	A
31	DA	1297	C
31	DA	1300	G
31	DA	1301	U
31	DA	1302	U
31	DA	1305	G
31	DA	1317	C
31	DA	1319	A
31	DA	1320	C
31	DA	1337	G
31	DA	1346	A
31	DA	1347	G
31	DA	1364	U
31	DA	1368	G
31	DA	1370	G
31	DA	1378	C
31	DA	1398	A
31	DA	1419	G
31	DA	1442	G
31	DA	1443	G
31	DA	1446	A
31	DA	1451	A
31	DA	1452	C
31	DA	1453	G
31	DA	1487	G
31	DA	1494	G
31	DA	1497	G
31	DA	1502	A
31	DA	1503	A
31	DA	1504	G
31	DA	1505	G
31	DA	1506	U
31	DA	1507	A
31	DA	1517	G
31	DA	1519	A
31	DA	1520	G
31	DA	1529	G
31	DA	1530	G
31	DA	1531	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
52	DV	8	U
52	DV	17(A)	U
52	DV	19	G
52	DV	20	U
52	DV	21	A
52	DV	31	G
52	DV	47	U
52	DV	48	C
52	DV	74	C
52	DV	75	C
52	DV	76	A
52	DW	6	G
52	DW	10	G
52	DW	17(A)	U
52	DW	18	G
52	DW	19	G
52	DW	20	U
52	DW	37	A
52	DW	47	U
52	DW	48	C
52	DW	49	G
52	DW	50	U
52	DW	52	G
53	DX	16	A

All (56) RNA pucker outliers are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	34	C
1	AA	474	G
1	AA	479	A
1	AA	616	A
1	AA	775	G
1	AA	1022	G
1	AA	1210	A
1	AA	1379	A
1	AA	1420	U
1	AA	1459	G
1	AA	1558	A
1	AA	2225	A
1	AA	2447	G
1	AA	2473	U

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Mol	Chain	Res	Type
1	AA	2689	U
31	BA	5	U
31	BA	115	G
31	BA	243	A
31	BA	328	C
31	BA	428	G
31	BA	429	U
31	BA	560	U
31	BA	687	A
31	BA	748	C
31	BA	913	A
31	BA	1285	A
31	BA	1504	G
52	BW	17(A)	U
1	CA	34	C
1	CA	474	G
1	CA	479	A
1	CA	616	A
1	CA	775	G
1	CA	1022	G
1	CA	1210	A
1	CA	1379	A
1	CA	1420	U
1	CA	1459	G
1	CA	1558	A
1	CA	2225	A
1	CA	2447	G
1	CA	2473	U
1	CA	2689	U
31	DA	5	U
31	DA	115	G
31	DA	243	A
31	DA	328	C
31	DA	428	G
31	DA	429	U
31	DA	560	U
31	DA	687	A
31	DA	748	C
31	DA	913	A
31	DA	1285	A
31	DA	1504	G
52	DW	17(A)	U

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

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

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 4369 ligands modelled in this entry, 4367 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
54	BLS	CA	4405	-	25,31,31	3.33	9 (36%)	23,43,43	2.65	8 (34%)
54	BLS	AA	4001	-	25,31,31	3.33	9 (36%)	23,43,43	2.56	8 (34%)

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
54	BLS	CA	4405	-	-	7/17/38/38	0/2/2/2
54	BLS	AA	4001	-	-	7/17/38/38	0/2/2/2

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	AA	4001	BLS	C14-N12	8.72	1.54	1.35
54	CA	4405	BLS	C14-N12	8.66	1.54	1.35
54	AA	4001	BLS	C7-N6	7.08	1.49	1.34
54	CA	4405	BLS	C7-N6	7.02	1.49	1.34
54	CA	4405	BLS	O5'-C5'	5.91	1.51	1.44
54	AA	4001	BLS	O5'-C5'	5.71	1.51	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	AA	4001	BLS	C11-N12	4.98	1.56	1.47
54	CA	4405	BLS	C3'-C2'	4.80	1.48	1.33
54	CA	4405	BLS	C11-N12	4.79	1.56	1.47
54	AA	4001	BLS	C3'-C2'	4.74	1.47	1.33
54	CA	4405	BLS	C13-N12	4.58	1.61	1.45
54	AA	4001	BLS	C13-N12	4.49	1.61	1.45
54	CA	4405	BLS	C4-N4	4.23	1.47	1.35
54	AA	4001	BLS	C4-N4	4.22	1.47	1.35
54	AA	4001	BLS	C4'-C5'	-3.19	1.48	1.53
54	CA	4405	BLS	C4'-C5'	-3.14	1.48	1.53
54	AA	4001	BLS	C4'-N6	2.64	1.50	1.46
54	CA	4405	BLS	C4'-N6	2.55	1.50	1.46

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	AA	4001	BLS	C1'-C2'-C3'	-8.43	111.48	122.52
54	CA	4405	BLS	C1'-C2'-C3'	-8.05	111.98	122.52
54	CA	4405	BLS	O5'-C1'-C2'	-6.21	109.77	113.13
54	AA	4001	BLS	O5'-C1'-C2'	-4.91	110.48	113.13
54	CA	4405	BLS	C4'-N6-C7	-2.95	119.97	123.13
54	AA	4001	BLS	C2-N3-C4	2.91	119.29	116.34
54	CA	4405	BLS	C2-N3-C4	2.82	119.20	116.34
54	AA	4001	BLS	C13-N12-C11	2.76	121.48	115.89
54	CA	4405	BLS	C13-N12-C11	2.75	121.48	115.89
54	AA	4001	BLS	C4'-N6-C7	-2.51	120.44	123.13
54	AA	4001	BLS	C10-C11-N12	2.51	116.19	112.15
54	AA	4001	BLS	C3'-C4'-N6	-2.37	106.24	110.60
54	CA	4405	BLS	C3'-C4'-N6	-2.30	106.37	110.60
54	CA	4405	BLS	N4-C4-N3	2.25	120.04	116.49
54	AA	4001	BLS	N4-C4-N3	2.14	119.86	116.49
54	CA	4405	BLS	C10-C11-N12	2.09	115.51	112.15

There are no chirality outliers.

All (14) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
54	AA	4001	BLS	C10-C11-N12-C13
54	AA	4001	BLS	C10-C11-N12-C14
54	CA	4405	BLS	C10-C11-N12-C13
54	CA	4405	BLS	C10-C11-N12-C14
54	AA	4001	BLS	N6-C7-C8-C9

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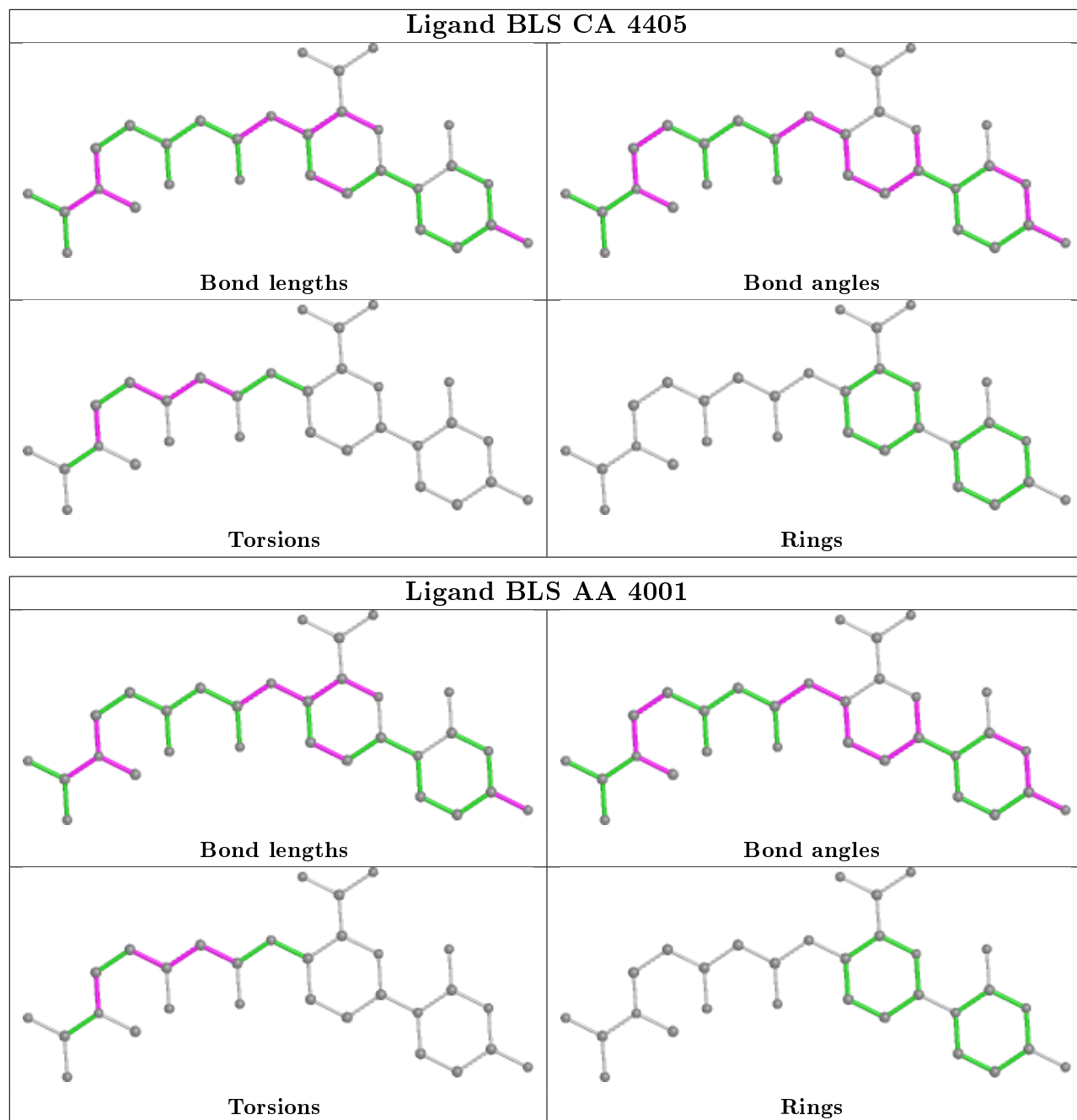
Mol	Chain	Res	Type	Atoms
54	CA	4405	BLS	N6-C7-C8-C9
54	AA	4001	BLS	O7-C7-C8-C9
54	CA	4405	BLS	O7-C7-C8-C9
54	AA	4001	BLS	C11-C10-C9-C8
54	CA	4405	BLS	C11-C10-C9-C8
54	AA	4001	BLS	C11-C10-C9-N9
54	CA	4405	BLS	C11-C10-C9-N9
54	AA	4001	BLS	C7-C8-C9-N9
54	CA	4405	BLS	C7-C8-C9-N9

There are no ring outliers.

2 monomers are involved in 12 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	CA	4405	BLS	6	0
54	AA	4001	BLS	6	0

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



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	AA	2832/2879 (98%)	0.44	125 (4%) 34 34	29, 68, 217, 367	0
1	CA	2832/2879 (98%)	0.39	105 (3%) 41 40	22, 55, 182, 409	0
2	AB	119/119 (100%)	0.11	2 (1%) 70 68	68, 117, 172, 246	0
2	CB	119/119 (100%)	0.09	1 (0%) 86 85	54, 97, 141, 234	0
3	AD	271/271 (100%)	0.01	2 (0%) 87 87	23, 61, 104, 243	0
3	CD	271/271 (100%)	0.09	1 (0%) 92 92	7, 46, 92, 203	0
4	AE	204/204 (100%)	0.79	29 (14%) 2 3	20, 77, 134, 263	0
4	CE	204/204 (100%)	0.23	4 (1%) 65 64	13, 60, 116, 249	0
5	AF	202/202 (100%)	0.49	3 (1%) 73 72	27, 67, 131, 220	0
5	CF	202/202 (100%)	0.47	7 (3%) 44 43	9, 58, 130, 240	0
6	AG	181/181 (100%)	1.20	38 (20%) 1 1	75, 134, 205, 230	0
6	CG	181/181 (100%)	1.01	35 (19%) 1 1	53, 117, 201, 226	0
7	AH	159/159 (100%)	3.32	118 (74%) 0 0	88, 157, 258, 279	0
7	CH	159/159 (100%)	1.33	47 (29%) 0 0	39, 83, 142, 266	0
8	AI	145/145 (100%)	1.34	43 (29%) 0 0	46, 131, 204, 288	0
8	CI	145/145 (100%)	0.75	14 (9%) 7 9	37, 103, 167, 210	0
9	AJ	137/137 (100%)	0.53	7 (5%) 28 28	49, 80, 142, 172	0
9	CJ	137/137 (100%)	0.26	1 (0%) 87 87	28, 62, 113, 213	0
10	AK	122/122 (100%)	0.05	2 (1%) 72 70	30, 68, 109, 168	0
10	CK	122/122 (100%)	0.41	5 (4%) 37 36	21, 60, 105, 134	0
11	AL	146/146 (100%)	1.22	28 (19%) 1 1	19, 91, 177, 263	0
11	CL	146/146 (100%)	0.68	8 (5%) 25 25	17, 80, 168, 236	0
12	AM	134/134 (100%)	0.66	7 (5%) 27 27	41, 82, 166, 289	0
12	CM	134/134 (100%)	1.10	19 (14%) 2 3	26, 68, 159, 293	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å²)	Q<0.9
13	AN	117/117 (100%)	0.89	14 (11%)	4	5	19, 72, 139, 184	0
13	CN	117/117 (100%)	0.84	15 (12%)	3	4	16, 60, 111, 207	0
14	AO	98/98 (100%)	1.63	34 (34%)	0	0	63, 120, 186, 243	0
14	CO	98/98 (100%)	1.08	21 (21%)	0	1	63, 97, 157, 178	0
15	AP	137/137 (100%)	0.24	4 (2%)	51	50	41, 82, 160, 246	0
15	CP	137/137 (100%)	0.41	9 (6%)	18	20	30, 74, 184, 271	0
16	AQ	117/117 (100%)	0.57	4 (3%)	45	44	27, 69, 121, 162	0
16	CQ	117/117 (100%)	0.06	1 (0%)	84	83	21, 50, 108, 206	0
17	AR	101/101 (100%)	0.49	5 (4%)	28	29	30, 93, 142, 223	0
17	CR	101/101 (100%)	0.40	1 (0%)	82	81	27, 68, 117, 256	0
18	AS	112/112 (100%)	0.61	5 (4%)	33	33	32, 61, 131, 252	0
18	CS	112/112 (100%)	0.19	2 (1%)	68	67	20, 48, 103, 203	0
19	AT	92/92 (100%)	0.60	8 (8%)	10	12	38, 81, 117, 172	0
19	CT	92/92 (100%)	0.92	4 (4%)	35	35	23, 59, 107, 160	0
20	AU	100/100 (100%)	1.91	34 (34%)	0	0	49, 97, 234, 307	0
20	CU	100/100 (100%)	1.31	18 (18%)	1	1	32, 75, 247, 286	0
21	AV	187/187 (100%)	0.96	27 (14%)	2	3	61, 121, 189, 251	0
21	CV	187/187 (100%)	1.21	40 (21%)	0	1	36, 113, 183, 227	0
22	AW	76/76 (100%)	0.77	6 (7%)	12	14	40, 74, 133, 245	0
22	CW	76/76 (100%)	0.50	3 (3%)	39	38	36, 70, 138, 207	0
23	AX	88/88 (100%)	1.30	16 (18%)	1	1	28, 69, 147, 186	0
23	CX	88/88 (100%)	1.03	12 (13%)	3	3	25, 59, 136, 242	0
24	AY	62/62 (100%)	1.65	21 (33%)	0	0	49, 98, 175, 228	0
24	CY	62/62 (100%)	0.94	7 (11%)	5	6	20, 69, 165, 252	0
25	AZ	59/59 (100%)	0.87	6 (10%)	6	8	46, 80, 146, 204	0
25	CZ	59/59 (100%)	0.37	4 (6%)	17	19	30, 65, 134, 194	0
26	A1	30/30 (100%)	2.26	15 (50%)	0	0	129, 198, 264, 286	0
26	C1	30/30 (100%)	2.72	21 (70%)	0	0	151, 200, 258, 294	0
27	A2	52/52 (100%)	0.28	2 (3%)	40	39	27, 67, 144, 206	0
27	C2	52/52 (100%)	-0.01	1 (1%)	66	65	12, 57, 127, 206	0
28	A3	44/44 (100%)	4.64	38 (86%)	0	0	99, 175, 241, 280	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	C3	44/44 (100%)	4.97	42 (95%) 0 0	96, 147, 206, 246	0
29	A4	48/48 (100%)	-0.02	1 (2%) 63 62	26, 53, 102, 159	0
29	C4	48/48 (100%)	-0.07	1 (2%) 63 62	11, 31, 82, 126	0
30	A5	63/63 (100%)	0.56	4 (6%) 20 21	38, 66, 133, 226	0
30	C5	63/63 (100%)	0.39	3 (4%) 30 31	16, 62, 135, 154	0
31	BA	1504/1504 (100%)	0.37	35 (2%) 60 59	44, 89, 187, 268	0
31	DA	1504/1504 (100%)	0.60	74 (4%) 29 29	41, 108, 215, 364	0
32	BB	234/234 (100%)	0.93	32 (13%) 3 3	65, 131, 205, 270	0
32	DB	234/234 (100%)	0.97	46 (19%) 1 1	83, 146, 214, 282	0
33	BC	206/206 (100%)	0.22	7 (3%) 45 44	68, 121, 178, 219	0
33	DC	206/206 (100%)	0.55	15 (7%) 15 17	70, 145, 214, 286	0
34	BD	208/208 (100%)	0.59	10 (4%) 30 31	25, 79, 128, 152	0
34	DD	208/208 (100%)	1.27	51 (24%) 0 0	48, 115, 180, 240	0
35	BE	151/151 (100%)	0.36	3 (1%) 65 64	44, 84, 135, 189	0
35	DE	151/151 (100%)	0.51	6 (3%) 38 37	51, 101, 161, 233	0
36	BF	101/101 (100%)	0.58	5 (4%) 28 29	56, 99, 141, 177	0
36	DF	101/101 (100%)	0.22	3 (2%) 50 49	45, 87, 140, 166	0
37	BG	155/155 (100%)	0.75	23 (14%) 2 3	69, 123, 171, 218	0
37	DG	155/155 (100%)	0.67	20 (12%) 3 4	75, 128, 179, 227	0
38	BH	138/138 (100%)	0.60	5 (3%) 42 42	56, 86, 136, 184	0
38	DH	138/138 (100%)	0.74	16 (11%) 4 5	53, 101, 149, 194	0
39	BI	127/127 (100%)	1.60	41 (32%) 0 0	67, 148, 212, 269	0
39	DI	127/127 (100%)	1.30	37 (29%) 0 0	82, 157, 214, 266	0
40	BJ	98/98 (100%)	1.38	25 (25%) 0 0	77, 145, 238, 266	0
40	DJ	98/98 (100%)	2.52	44 (44%) 0 0	89, 177, 249, 277	0
41	BK	114/114 (100%)	1.21	22 (19%) 1 1	46, 91, 139, 207	0
41	DK	114/114 (100%)	1.19	22 (19%) 1 1	50, 84, 144, 196	0
42	BL	122/122 (100%)	1.08	24 (19%) 1 1	36, 78, 126, 184	0
42	DL	122/122 (100%)	1.25	31 (25%) 0 0	47, 98, 147, 236	0
43	BM	117/117 (100%)	1.26	32 (27%) 0 0	80, 146, 214, 228	0
43	DM	117/117 (100%)	1.22	24 (20%) 1 1	84, 150, 203, 267	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	BN	60/60 (100%)	1.21	15 (25%) 0 0	63, 115, 155, 210	0
44	DN	60/60 (100%)	0.93	8 (13%) 3 4	60, 130, 192, 250	0
45	BO	88/88 (100%)	0.75	6 (6%) 17 19	50, 87, 143, 170	0
45	DO	88/88 (100%)	0.49	4 (4%) 33 33	46, 82, 130, 168	0
46	BP	83/83 (100%)	0.67	4 (4%) 30 31	35, 76, 124, 161	0
46	DP	83/83 (100%)	0.90	8 (9%) 8 9	67, 110, 171, 274	0
47	BQ	99/99 (100%)	0.66	5 (5%) 28 28	43, 83, 127, 186	0
47	DQ	99/99 (100%)	1.03	17 (17%) 1 1	57, 93, 134, 200	0
48	BR	70/70 (100%)	1.10	12 (17%) 1 2	45, 95, 159, 191	0
48	DR	70/70 (100%)	0.69	5 (7%) 16 18	49, 92, 161, 188	0
49	BS	78/78 (100%)	1.87	33 (42%) 0 0	103, 145, 213, 241	0
49	DS	78/78 (100%)	1.93	31 (39%) 0 0	93, 158, 216, 254	0
50	BT	99/99 (100%)	1.23	19 (19%) 1 1	42, 95, 175, 218	0
50	DT	99/99 (100%)	1.36	27 (27%) 0 0	66, 122, 199, 230	0
51	BU	24/24 (100%)	1.67	9 (37%) 0 0	107, 163, 225, 270	0
51	DU	24/24 (100%)	1.45	7 (29%) 0 0	73, 151, 199, 257	0
52	BV	77/77 (100%)	0.36	6 (7%) 13 14	80, 135, 208, 244	0
52	BW	77/77 (100%)	0.82	12 (15%) 2 2	71, 190, 252, 308	0
52	DV	77/77 (100%)	0.26	2 (2%) 56 54	77, 122, 191, 213	0
52	DW	77/77 (100%)	0.46	6 (7%) 13 14	62, 173, 228, 302	0
53	BX	5/5 (100%)	1.65	2 (40%) 0 0	72, 73, 112, 168	0
53	DX	5/5 (100%)	1.15	0 100 100	65, 67, 128, 182	0
All	All	20540/20634 (99%)	0.68	1991 (9%) 7 9	7, 85, 195, 409	0

All (1991) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	CA	275	G	20.7
11	AL	150	ALA	15.4
49	BS	81	ARG	14.2
28	A3	26	ASN	14.1
28	A3	14	THR	13.2
20	AU	52	SER	13.0
20	CU	53	PRO	12.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	CU	51	VAL	11.5
20	CU	59	GLY	11.2
1	AA	2798	C	11.0
20	CU	52	SER	10.6
1	AA	884	C	10.4
1	AA	275	G	10.3
49	DS	81	ARG	9.8
40	DJ	8	LEU	9.7
20	AU	53	PRO	9.7
28	A3	12	GLU	9.6
28	C3	14	THR	9.4
1	AA	2169	A	9.4
1	CA	2164	C	9.4
28	A3	51	GLU	9.3
1	CA	2797	U	9.2
43	BM	94	ARG	8.9
1	AA	2797	U	8.9
28	C3	21	TYR	8.9
28	C3	12	GLU	8.8
7	AH	123	PHE	8.8
1	CA	2801	A	8.7
11	AL	149	GLU	8.7
6	CG	2	PRO	8.7
28	A3	13	CYS	8.6
1	AA	2170	A	8.6
1	CA	2170	A	8.5
20	AU	51	VAL	8.4
7	AH	124	GLU	8.3
28	C3	20	ASN	8.2
7	AH	161	GLY	8.2
1	AA	2795	G	8.1
7	AH	104	GLU	8.1
1	AA	2164	C	8.1
5	CF	207	GLY	8.0
1	CA	2798	C	8.0
40	DJ	70	ARG	8.0
22	AW	85	ALA	8.0
31	DA	82	U	8.0
6	AG	77	ILE	7.9
7	AH	45	VAL	7.9
28	C3	31	PRO	7.8
40	DJ	96	ILE	7.7

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Mol	Chain	Res	Type	RSRZ
1	CA	2169	A	7.7
28	C3	51	GLU	7.7
1	AA	2799	A	7.7
31	DA	1002	G	7.6
40	DJ	38	ILE	7.6
31	DA	1030	C	7.6
7	AH	94	TYR	7.5
40	DJ	71	LEU	7.5
49	BS	75	ALA	7.5
7	AH	43	VAL	7.4
24	CY	15	LYS	7.4
1	CA	1104	C	7.4
31	DA	87	A	7.2
1	CA	2159	G	7.1
28	C3	50	ARG	7.1
1	CA	2795	G	7.1
28	C3	26	ASN	7.1
28	A3	32	ASN	7.0
28	A3	52	VAL	7.0
7	CH	168	PRO	7.0
40	BJ	34	VAL	7.0
1	AA	893	C	7.0
28	A3	49	HIS	7.0
40	DJ	39	PRO	7.0
1	CA	1101	U	6.9
40	DJ	72	VAL	6.9
24	CY	16	LEU	6.9
1	AA	1109	C	6.9
28	C3	11	LEU	6.8
4	AE	60	ASN	6.8
7	AH	96	ALA	6.8
28	A3	35	GLU	6.8
37	BG	156	TRP	6.7
52	BW	17	C	6.7
1	CA	2799	A	6.7
28	C3	37	ARG	6.7
1	AA	896	A	6.7
1	CA	1535	U	6.6
7	AH	17	VAL	6.6
6	AG	87	PRO	6.6
33	DC	207	VAL	6.5
49	BS	80	TYR	6.5

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Mol	Chain	Res	Type	RSRZ
31	BA	82	U	6.5
28	C3	19	ARG	6.4
7	AH	132	ARG	6.4
8	AI	111	PRO	6.4
40	DJ	6	ILE	6.4
40	DJ	73	ASP	6.4
6	CG	88	ILE	6.4
40	DJ	74	ILE	6.4
24	AY	4	SER	6.4
18	CS	112	GLY	6.3
7	AH	159	GLU	6.3
34	DD	4	TYR	6.3
1	CA	6	A	6.3
1	AA	2801	A	6.3
7	AH	95	ARG	6.3
28	C3	34	LEU	6.2
21	CV	118	GLN	6.2
31	BA	84	U	6.2
6	AG	2	PRO	6.2
41	BK	11	LYS	6.2
1	CA	884	C	6.2
28	C3	52	VAL	6.2
31	DA	1029	G	6.2
28	C3	35	GLU	6.1
1	AA	2147	G	6.1
28	C3	13	CYS	6.1
1	AA	2158	A	6.1
1	CA	2167	U	6.1
1	CA	2896	C	6.1
7	AH	102	ALA	6.1
40	DJ	5	ARG	6.1
26	A1	51	TYR	6.1
31	DA	1033	G	6.0
1	CA	893	C	6.0
1	CA	1102	C	6.0
1	CA	1536	A	6.0
7	AH	133	VAL	6.0
24	AY	3	LEU	6.0
31	DA	81	G	5.9
28	C3	36	LEU	5.9
20	AU	5	MET	5.9
1	AA	883	G	5.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
44	DN	2	ALA	5.9
28	A3	50	ARG	5.9
7	AH	82	GLY	5.9
28	C3	30	THR	5.9
32	BB	214	ILE	5.9
24	AY	12	GLU	5.9
4	AE	55	ASN	5.8
28	C3	42	TRP	5.8
26	C1	43	GLY	5.8
28	A3	20	ASN	5.8
28	C3	44	ARG	5.8
39	BI	7	THR	5.8
7	AH	101	ARG	5.7
1	CA	270(P)	U	5.7
39	BI	19	LEU	5.7
12	CM	32	PHE	5.7
6	AG	88	ILE	5.7
16	CQ	118	GLY	5.7
49	BS	35	SER	5.6
20	AU	43	ASN	5.6
52	BW	17(A)	U	5.6
24	CY	14	ARG	5.6
6	CG	87	PRO	5.6
40	DJ	69	ASN	5.6
21	CV	106	GLY	5.6
6	AG	82	LEU	5.6
31	DA	1257	U	5.6
1	AA	2145	C	5.6
1	AA	6	A	5.5
49	DS	71	LEU	5.5
7	AH	25	LYS	5.5
28	C3	49	HIS	5.5
7	CH	155	SER	5.5
7	AH	125	VAL	5.5
7	AH	107	VAL	5.5
50	DT	104	LEU	5.5
28	A3	48	VAL	5.4
1	CA	2131	G	5.4
1	CA	2894	G	5.4
28	C3	47	THR	5.4
23	CX	85	LEU	5.4
26	C1	42	CYS	5.4

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Mol	Chain	Res	Type	RSRZ
39	BI	15	ALA	5.4
28	A3	41	PRO	5.3
31	BA	723	U	5.3
34	DD	8	VAL	5.3
1	CA	2171	A	5.3
8	AI	85	GLU	5.3
7	AH	105	LEU	5.3
28	A3	40	CYS	5.3
31	DA	84	U	5.3
28	A3	34	LEU	5.3
5	AF	207	GLY	5.3
7	AH	155	SER	5.3
28	A3	11	LEU	5.3
39	BI	47	LEU	5.3
40	DJ	7	LYS	5.2
39	BI	8	GLY	5.2
7	AH	108	GLY	5.2
49	DS	38	SER	5.2
1	CA	229	A	5.2
49	DS	79	THR	5.2
7	AH	80	SER	5.2
12	CM	21	THR	5.2
7	AH	52	VAL	5.1
49	BS	52	TYR	5.1
15	CP	106	SER	5.1
7	AH	162	ILE	5.1
20	AU	44	ILE	5.1
40	DJ	4	ILE	5.1
1	AA	2131	G	5.1
1	AA	2165	G	5.1
1	CA	2145	C	5.1
7	AH	50	VAL	5.1
1	CA	2173	A	5.0
7	AH	121	ILE	5.0
26	C1	44	CYS	5.0
7	CH	111	HIS	5.0
25	AZ	1	MET	5.0
1	AA	894	C	5.0
41	BK	13	GLN	5.0
1	AA	2794	C	5.0
7	CH	90	LYS	5.0
32	DB	132	LYS	4.9

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Mol	Chain	Res	Type	RSRZ
20	AU	50	ARG	4.9
1	AA	2804	C	4.9
1	CA	2804	C	4.9
52	BW	16	C	4.9
49	BS	71	LEU	4.9
8	AI	11	ASN	4.9
43	DM	5	ALA	4.9
28	A3	16	CYS	4.9
1	CA	2166	G	4.9
24	AY	9	GLN	4.9
7	AH	87	LEU	4.9
26	C1	41	ILE	4.9
31	DA	1034	G	4.9
7	AH	29	PRO	4.9
49	DS	12	ASP	4.9
11	AL	148	LEU	4.9
37	BG	85	TYR	4.9
7	AH	131	VAL	4.8
43	BM	97	PRO	4.8
52	DW	17(A)	U	4.8
43	DM	87	TYR	4.8
1	CA	2165	G	4.8
14	AO	60	GLY	4.8
7	AH	141	VAL	4.8
14	AO	58	LEU	4.8
7	AH	100	GLY	4.8
50	DT	9	ASN	4.8
8	AI	117	GLU	4.8
52	BV	75	C	4.8
7	AH	92	ILE	4.8
28	C3	32	ASN	4.8
1	CA	2135	A	4.8
43	BM	98	VAL	4.8
7	AH	106	THR	4.8
14	AO	87	PHE	4.7
7	AH	41	MET	4.7
1	AA	2793	G	4.7
7	AH	163	TYR	4.7
39	BI	64	THR	4.7
40	BJ	77	PRO	4.7
47	DQ	8	GLY	4.7
28	A3	42	TRP	4.7

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Mol	Chain	Res	Type	RSRZ
1	CA	276	C	4.7
7	AH	144	VAL	4.7
8	AI	1	MET	4.7
26	C1	60	GLU	4.7
1	CA	2144	U	4.7
49	DS	49	ILE	4.7
1	AA	2135	A	4.7
39	DI	93	ARG	4.7
7	AH	89	ILE	4.7
42	DL	91	ASP	4.7
50	DT	64	ASP	4.7
28	C3	22	ALA	4.7
1	AA	892	G	4.7
24	CY	12	GLU	4.7
50	DT	60	GLU	4.7
40	BJ	73	ASP	4.6
7	AH	30	LYS	4.6
40	DJ	98	ILE	4.6
12	CM	107	ALA	4.6
28	C3	39	TYR	4.6
1	CA	1103	A	4.6
8	AI	116	LEU	4.6
1	CA	1109	C	4.6
20	AU	58	GLY	4.6
20	AU	62	GLU	4.6
18	AS	112	GLY	4.6
7	AH	112	PRO	4.6
7	CH	161	GLY	4.5
37	DG	84	ASN	4.5
39	DI	7	THR	4.5
1	AA	1103	A	4.5
43	BM	87	TYR	4.5
39	BI	4	TYR	4.5
20	AU	3	VAL	4.5
7	AH	78	GLY	4.5
32	BB	35	GLU	4.5
49	DS	37	ARG	4.5
15	AP	2	ASN	4.5
12	CM	31	ASP	4.5
49	BS	38	SER	4.5
50	DT	19	SER	4.5
7	AH	83	TYR	4.4

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Mol	Chain	Res	Type	RSRZ
7	AH	111	HIS	4.4
31	DA	1492	A	4.4
7	CH	169	VAL	4.4
28	C3	48	VAL	4.4
24	AY	24	LEU	4.4
43	BM	103	THR	4.4
14	CO	20	ARG	4.4
1	AA	2805	G	4.4
49	DS	41	VAL	4.4
7	AH	32	GLU	4.4
1	CA	2802	G	4.4
13	AN	66	VAL	4.4
21	AV	174	VAL	4.4
7	AH	72	ILE	4.4
39	DI	17	VAL	4.4
1	CA	2125	G	4.4
32	DB	95	GLN	4.4
8	AI	120	ILE	4.4
6	CG	90	LEU	4.4
7	AH	15	VAL	4.4
32	BB	165	VAL	4.4
20	AU	45	VAL	4.4
40	DJ	35	SER	4.4
1	CA	2158	A	4.4
1	CA	1100	C	4.4
49	DS	40	ILE	4.3
1	CA	7	G	4.3
7	AH	103	LEU	4.3
20	AU	47	LYS	4.3
43	DM	98	VAL	4.3
24	AY	20	GLU	4.3
39	BI	32	ASP	4.3
1	AA	2802	G	4.3
1	CA	2793	G	4.3
21	AV	112	ARG	4.3
28	A3	22	ALA	4.3
1	AA	7	G	4.3
31	DA	1001	G	4.3
43	DM	82	MET	4.3
1	AA	1535	U	4.3
23	AX	85	LEU	4.3
37	BG	81	GLY	4.3

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Mol	Chain	Res	Type	RSRZ
6	AG	69	ALA	4.3
6	CG	82	LEU	4.3
7	CH	91	GLY	4.3
7	AH	109	PHE	4.3
1	AA	885	C	4.3
31	DA	1031(C)	G	4.3
21	CV	163	LEU	4.3
34	DD	69	GLY	4.3
39	BI	17	VAL	4.3
7	AH	16	SER	4.3
31	DA	85	U	4.3
31	DA	723	U	4.3
7	AH	53	GLU	4.3
30	A5	35	GLN	4.3
43	DM	88	ARG	4.3
8	AI	83	ALA	4.3
50	DT	79	ARG	4.2
34	DD	66	ARG	4.2
31	DA	1027(C)	C	4.2
40	DJ	37	PRO	4.2
7	AH	18	GLU	4.2
7	AH	47	GLU	4.2
6	CG	41	GLN	4.2
31	DA	1000	A	4.2
12	AM	91	GLU	4.2
1	AA	2125	G	4.2
14	AO	54	LEU	4.2
34	DD	135	LEU	4.2
26	A1	36	VAL	4.2
37	DG	80	VAL	4.2
1	AA	2166	G	4.2
24	AY	15	LYS	4.2
20	AU	17	SER	4.2
34	DD	134	ASP	4.2
32	DB	37	ASN	4.2
20	CU	99	CYS	4.2
31	BA	1030	C	4.2
12	CM	135	ASP	4.2
34	DD	70	ILE	4.2
51	BU	24	ARG	4.2
7	AH	49	VAL	4.2
6	AG	84	LYS	4.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
7	AH	64	LEU	4.1
39	BI	29	ASN	4.1
44	BN	17	LYS	4.1
20	AU	2	ARG	4.1
32	DB	73	THR	4.1
1	AA	1104	C	4.1
1	AA	2896	C	4.1
13	AN	65	LEU	4.1
31	BA	86	U	4.1
6	CG	89	GLY	4.1
7	AH	19	VAL	4.1
31	DA	1031	G	4.1
34	DD	118	ARG	4.1
1	CA	2803	C	4.1
21	AV	6	LYS	4.1
22	AW	76	GLY	4.1
8	CI	117	GLU	4.1
28	C3	43	CYS	4.1
21	CV	105	VAL	4.1
1	AA	2159	G	4.1
14	AO	39	ILE	4.1
6	AG	83	ARG	4.1
52	DW	20	U	4.1
4	AE	88	GLY	4.1
7	CH	114	VAL	4.1
28	C3	24	GLU	4.1
37	DG	156	TRP	4.1
1	AA	1102	C	4.1
6	AG	75	LYS	4.1
7	AH	164	TYR	4.1
37	DG	85	TYR	4.1
28	C3	9	LEU	4.1
39	DI	103	THR	4.1
32	DB	101	MET	4.1
28	A3	9	LEU	4.1
39	BI	63	ILE	4.1
52	BV	76	A	4.1
14	AO	43	GLU	4.0
7	AH	115	VAL	4.0
8	AI	12	LEU	4.0
1	AA	2168	G	4.0
51	DU	18	TYR	4.0

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Mol	Chain	Res	Type	RSRZ
28	A3	24	GLU	4.0
7	AH	20	ALA	4.0
7	AH	93	GLY	4.0
8	AI	109	ILE	4.0
20	CU	17	SER	4.0
1	AA	2126	A	4.0
1	CA	2126	A	4.0
49	BS	74	PHE	4.0
14	AO	52	SER	4.0
6	AG	74	LYS	4.0
7	AH	97	ARG	4.0
28	A3	46	HIS	4.0
37	BG	84	ASN	4.0
1	AA	2167	U	4.0
32	BB	124	SER	4.0
40	DJ	34	VAL	4.0
31	DA	89	U	4.0
31	DA	209	U	4.0
39	BI	33	PHE	4.0
42	DL	92	LEU	4.0
14	AO	53	SER	4.0
34	DD	123	HIS	4.0
31	DA	86	U	3.9
32	BB	116	GLU	3.9
49	DS	15	LEU	3.9
43	BM	82	MET	3.9
28	A3	37	ARG	3.9
7	CH	94	TYR	3.9
42	DL	27	LYS	3.9
21	CV	104	PHE	3.9
6	CG	52	ILE	3.9
11	CL	150	ALA	3.9
28	C3	29	ASN	3.9
26	A1	42	CYS	3.9
50	DT	18	GLN	3.9
7	AH	46	GLU	3.9
43	BM	96	LEU	3.9
38	DH	52	ASP	3.9
6	AG	80	PHE	3.9
8	AI	96	ASP	3.9
13	CN	89	ASP	3.9
8	CI	91	SER	3.9

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Mol	Chain	Res	Type	RSRZ
7	AH	168	PRO	3.9
30	C5	64	TYR	3.9
34	DD	3	ARG	3.9
43	BM	93	ARG	3.9
8	AI	88	ILE	3.9
7	CH	106	THR	3.9
44	BN	2	ALA	3.9
7	AH	85	LYS	3.9
43	BM	95	GLY	3.9
1	CA	892	G	3.9
31	BA	1257	U	3.9
51	DU	17	THR	3.9
1	AA	1045	A	3.9
32	DB	72	GLY	3.8
49	BS	39	THR	3.8
7	CH	151	ILE	3.8
43	BM	92	HIS	3.8
1	CA	2146	C	3.8
21	AV	107	THR	3.8
40	BJ	35	SER	3.8
45	BO	34	LEU	3.8
41	DK	11	LYS	3.8
1	AA	2807	G	3.8
52	DW	17	C	3.8
21	CV	174	VAL	3.8
40	DJ	33	GLN	3.8
6	AG	89	GLY	3.8
1	CA	2168	G	3.8
41	DK	75	TYR	3.8
26	C1	59	VAL	3.8
39	DI	9	ARG	3.8
50	BT	44	ALA	3.8
7	CH	57	ASP	3.8
4	AE	24	THR	3.8
28	A3	25	LYS	3.8
35	DE	50	GLU	3.8
41	DK	25	TYR	3.8
48	BR	88	LYS	3.8
1	AA	2173	A	3.8
8	AI	118	LYS	3.8
28	A3	31	PRO	3.8
51	BU	18	TYR	3.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
52	DV	75	C	3.8
6	AG	90	LEU	3.8
32	DB	215	LEU	3.8
1	AA	2180	U	3.8
7	AH	24	VAL	3.8
39	BI	18	PHE	3.8
28	C3	16	CYS	3.7
36	BF	99	ALA	3.7
42	DL	67	ALA	3.7
43	DM	86	CYS	3.7
21	CV	126	VAL	3.7
31	BA	81	G	3.7
37	DG	22	LEU	3.7
1	AA	1105	U	3.7
21	CV	141	VAL	3.7
37	DG	78	ARG	3.7
39	BI	9	ARG	3.7
40	BJ	5	ARG	3.7
14	AO	37	ALA	3.7
49	BS	69	HIS	3.7
7	CH	110	SER	3.7
43	BM	117	VAL	3.7
1	AA	2146	C	3.7
49	BS	57	HIS	3.7
50	BT	77	ALA	3.7
34	DD	119	GLN	3.7
1	CA	2895	U	3.7
1	AA	2121	G	3.7
1	AA	270(P)	U	3.7
1	AA	2113	U	3.7
7	AH	71	LEU	3.7
34	DD	112	VAL	3.7
34	DD	115	ARG	3.7
39	BI	2	GLU	3.7
12	CM	24	GLY	3.7
8	AI	91	SER	3.7
1	CA	1537	C	3.7
8	AI	89	TYR	3.6
40	DJ	40	LEU	3.6
1	AA	2110	G	3.6
14	AO	27	SER	3.6
21	CV	179	ASP	3.6

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Mol	Chain	Res	Type	RSRZ
4	AE	73	GLU	3.6
21	AV	114	GLY	3.6
31	BA	1492	A	3.6
7	CH	103	LEU	3.6
7	CH	105	LEU	3.6
11	CL	15	ARG	3.6
34	DD	111	ALA	3.6
41	DK	89	ALA	3.6
13	AN	72	ASP	3.6
40	DJ	17	ASP	3.6
31	BA	1002	G	3.6
8	AI	132	PRO	3.6
11	AL	145	PRO	3.6
37	BG	80	VAL	3.6
40	DJ	24	VAL	3.6
7	AH	110	SER	3.6
37	BG	151	TYR	3.6
43	BM	100	GLY	3.6
22	AW	74	ARG	3.6
26	C1	57	ILE	3.6
1	AA	1046	A	3.6
1	CA	1509	A	3.6
4	AE	59	VAL	3.6
11	AL	136	GLU	3.6
42	BL	91	ASP	3.6
32	BB	122	PHE	3.6
37	DG	151	TYR	3.6
1	AA	1536	A	3.6
7	AH	116	GLU	3.6
40	DJ	94	VAL	3.6
39	DI	90	PRO	3.6
14	CO	85	VAL	3.6
21	AV	111	VAL	3.6
43	BM	99	ARG	3.6
49	BS	33	THR	3.6
1	AA	1509	A	3.6
37	BG	8	GLU	3.6
6	CG	80	PHE	3.6
1	AA	2127	G	3.6
1	CA	10	G	3.6
1	CA	2147	G	3.6
14	AO	48	LEU	3.6

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Mol	Chain	Res	Type	RSRZ
14	CO	27	SER	3.6
32	DB	237	ALA	3.6
39	BI	6	GLY	3.6
34	DD	122	ARG	3.5
43	BM	91	ARG	3.5
49	DS	55	LYS	3.5
21	AV	171	ILE	3.5
48	BR	31	LEU	3.5
50	DT	23	ARG	3.5
26	A1	40	ILE	3.5
50	DT	56	MET	3.5
1	AA	2136	C	3.5
28	C3	40	CYS	3.5
1	AA	2895	U	3.5
22	CW	85	ALA	3.5
43	BM	118	ALA	3.5
32	DB	28	PHE	3.5
39	DI	5	TYR	3.5
2	CB	52	A	3.5
7	AH	169	VAL	3.5
43	DM	4	ILE	3.5
50	BT	45	GLN	3.5
1	AA	1049	C	3.5
6	CG	75	LYS	3.5
14	AO	86	ALA	3.5
1	AA	2171	A	3.5
20	CU	64	GLU	3.5
41	DK	12	ARG	3.5
7	AH	26	VAL	3.5
26	A1	44	CYS	3.5
41	DK	91	ARG	3.5
7	AH	81	GLU	3.5
26	C1	49	GLU	3.5
7	AH	44	VAL	3.5
7	AH	88	LEU	3.5
11	AL	138	LEU	3.5
11	AL	122	PRO	3.5
20	CU	50	ARG	3.5
28	C3	17	LYS	3.5
7	AH	75	ALA	3.5
28	A3	45	LYS	3.5
6	AG	52	ILE	3.5

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Mol	Chain	Res	Type	RSRZ
8	AI	5	LEU	3.5
7	AH	158	HIS	3.5
15	CP	134	GLU	3.5
31	DA	999	U	3.5
31	DA	1035	A	3.5
28	A3	36	LEU	3.5
32	DB	152	PHE	3.5
1	AA	645	C	3.4
30	A5	54	GLU	3.4
23	CX	30	VAL	3.4
40	BJ	72	VAL	3.4
15	AP	131	ALA	3.4
32	DB	42	ILE	3.4
14	AO	70	GLY	3.4
1	AA	2211	G	3.4
28	C3	38	LYS	3.4
51	DU	24	ARG	3.4
31	DA	90	C	3.4
1	CA	2602	A	3.4
21	CV	172	ALA	3.4
50	BT	72	LEU	3.4
38	BH	1	MET	3.4
39	BI	46	ALA	3.4
7	AH	143	GLN	3.4
11	AL	88	LEU	3.4
24	AY	16	LEU	3.4
1	CA	1174	A	3.4
31	DA	1003	G	3.4
34	DD	67	ILE	3.4
50	DT	83	ARG	3.4
22	CW	76	GLY	3.4
21	CV	28	MET	3.4
37	BG	78	ARG	3.4
40	BJ	33	GLN	3.4
4	CE	88	GLY	3.4
39	BI	80	GLY	3.4
39	BI	49	PRO	3.4
44	BN	13	THR	3.4
19	CT	90	GLU	3.4
20	CU	91	GLU	3.4
8	CI	33	ARG	3.4
49	DS	76	PRO	3.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	CA	2805	G	3.4
21	AV	39	VAL	3.4
26	A1	46	ASN	3.4
41	DK	45	GLY	3.4
22	AW	75	LEU	3.4
39	BI	14	VAL	3.4
23	AX	20	ARG	3.4
32	DB	238	LEU	3.3
42	DL	28	GLY	3.3
37	BG	155	ARG	3.3
44	BN	10	ALA	3.3
32	DB	133	LYS	3.3
7	CH	115	VAL	3.3
49	DS	35	SER	3.3
52	BV	71	C	3.3
6	CG	72	ARG	3.3
39	BI	81	ILE	3.3
38	BH	25	ASP	3.3
53	BX	14	A	3.3
37	DG	83	ALA	3.3
37	BG	154	TYR	3.3
1	AA	1100	C	3.3
40	DJ	95	GLU	3.3
32	BB	40	HIS	3.3
32	DB	141	GLU	3.3
37	BG	79	ARG	3.3
6	AG	157	ILE	3.3
36	BF	41	GLU	3.3
40	DJ	75	ILE	3.3
40	DJ	97	GLU	3.3
49	BS	31	ILE	3.3
51	BU	19	GLY	3.3
1	AA	2894	G	3.3
7	AH	33	LEU	3.3
21	CV	119	GLU	3.3
42	BL	86	GLY	3.3
7	AH	27	LYS	3.3
40	DJ	30	SER	3.3
43	DM	94	ARG	3.3
43	DM	96	LEU	3.3
48	DR	54	ARG	3.3
14	AO	68	GLN	3.3

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Mol	Chain	Res	Type	RSRZ
24	AY	25	VAL	3.3
20	AU	29	GLU	3.3
48	DR	88	LYS	3.3
15	CP	135	VAL	3.3
21	CV	88	PHE	3.3
23	CX	19	GLN	3.3
15	AP	1	MET	3.3
13	CN	83	ILE	3.3
34	DD	120	LEU	3.3
1	CA	2132	U	3.3
49	BS	77	THR	3.3
32	BB	120	ALA	3.3
38	DH	129	VAL	3.3
31	DA	210	U	3.3
6	CG	48	GLU	3.3
32	BB	222	ILE	3.3
28	A3	39	TYR	3.3
41	BK	110	ASP	3.3
42	DL	31	PHE	3.3
29	C4	47	ARG	3.2
32	BB	192	SER	3.2
20	AU	22	GLY	3.2
34	DD	68	TYR	3.2
32	BB	101	MET	3.2
43	BM	101	GLN	3.2
49	BS	40	ILE	3.2
7	AH	113	VAL	3.2
28	C3	28	ARG	3.2
34	BD	112	VAL	3.2
35	DE	5	ASP	3.2
47	DQ	9	VAL	3.2
49	DS	13	ASP	3.2
3	CD	26	LYS	3.2
7	AH	145	ALA	3.2
33	BC	15	THR	3.2
1	CA	2160	G	3.2
7	AH	128	PRO	3.2
7	AH	149	ARG	3.2
41	BK	25	TYR	3.2
13	CN	59	ASP	3.2
34	DD	183	GLY	3.2
21	AV	95	PRO	3.2

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Mol	Chain	Res	Type	RSRZ
21	AV	113	ALA	3.2
31	DA	1027	C	3.2
39	BI	61	ALA	3.2
7	AH	134	SER	3.2
51	DU	25	LYS	3.2
6	AG	76	SER	3.2
12	AM	31	ASP	3.2
38	DH	1	MET	3.2
41	DK	13	GLN	3.2
21	AV	8	TYR	3.2
42	BL	93	PRO	3.2
7	CH	104	GLU	3.2
39	BI	16	ARG	3.2
42	BL	88	ARG	3.2
50	DT	17	ARG	3.2
43	DM	56	LEU	3.2
50	DT	84	LEU	3.2
1	AA	1026	U	3.2
41	DK	62	GLN	3.2
7	AH	140	LYS	3.2
11	AL	126	VAL	3.2
26	C1	45	GLY	3.2
49	BS	4	SER	3.2
34	DD	125	HIS	3.2
6	CG	76	SER	3.2
43	BM	116	THR	3.2
43	DM	103	THR	3.2
31	BA	998(B)	C	3.2
44	BN	34	TYR	3.2
23	CX	91	LYS	3.2
42	DL	71	GLY	3.2
33	BC	151	VAL	3.2
31	DA	406	G	3.2
49	BS	76	PRO	3.1
14	CO	29	PHE	3.1
7	CH	158	HIS	3.1
4	AE	31	CYS	3.1
34	DD	7	PRO	3.1
1	CA	883	G	3.1
31	DA	405	U	3.1
26	A1	60	GLU	3.1
43	DM	118	ALA	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
37	DG	79	ARG	3.1
43	BM	19	LEU	3.1
1	AA	2112	G	3.1
50	BT	66	ALA	3.1
39	BI	62	TYR	3.1
46	DP	55	ARG	3.1
8	AI	38	LEU	3.1
7	AH	90	LYS	3.1
40	BJ	39	PRO	3.1
40	DJ	89	ASP	3.1
7	AH	76	VAL	3.1
37	BG	87	VAL	3.1
40	DJ	25	GLU	3.1
32	DB	96	ARG	3.1
1	CA	1105	U	3.1
31	BA	85	U	3.1
11	AL	9	ASN	3.1
43	BM	111	LYS	3.1
7	CH	112	PRO	3.1
14	CO	43	GLU	3.1
46	DP	34	GLU	3.1
49	BS	51	VAL	3.1
11	AL	110	TYR	3.1
41	BK	75	TYR	3.1
7	CH	162	ILE	3.1
9	CJ	157	ARG	3.1
49	DS	78	ARG	3.1
1	CA	2794	C	3.1
16	AQ	109	LEU	3.1
42	DL	63	TYR	3.1
40	DJ	9	ARG	3.1
11	AL	94	GLU	3.1
1	AA	1101	U	3.1
8	AI	72	LEU	3.1
8	CI	116	LEU	3.1
1	CA	2892	A	3.1
39	BI	59	PHE	3.1
44	BN	12	ARG	3.1
7	CH	15	VAL	3.1
31	BA	1031(B)	G	3.1
52	BW	20	U	3.1
31	DA	1027(A)	C	3.1

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Mol	Chain	Res	Type	RSRZ
48	BR	54	ARG	3.1
7	CH	93	GLY	3.1
14	CO	40	ILE	3.1
40	DJ	11	PHE	3.1
49	BS	70	LYS	3.1
50	DT	72	LEU	3.1
4	CE	204	ALA	3.1
32	DB	234	PRO	3.0
48	BR	29	PHE	3.0
28	A3	47	THR	3.0
31	DA	1017	G	3.0
39	DI	33	PHE	3.0
7	AH	148	ILE	3.0
23	AX	19	GLN	3.0
26	A1	39	ARG	3.0
21	CV	150	LEU	3.0
40	BJ	71	LEU	3.0
7	CH	145	ALA	3.0
32	BB	88	ALA	3.0
42	BL	46	LYS	3.0
1	AA	1110	G	3.0
50	DT	70	SER	3.0
8	AI	36	ALA	3.0
6	CG	153	ARG	3.0
41	BK	12	ARG	3.0
42	DL	70	PRO	3.0
31	BA	1226	C	3.0
52	DV	71	C	3.0
32	DB	122	PHE	3.0
43	BM	102	ARG	3.0
39	DI	105	ASP	3.0
43	DM	93	ARG	3.0
24	AY	27	GLU	3.0
52	BW	61	C	3.0
39	DI	14	VAL	3.0
42	BL	45	LYS	3.0
42	DL	44	PRO	3.0
51	BU	23	PRO	3.0
11	CL	149	GLU	3.0
21	AV	109	ALA	3.0
42	DL	107	ALA	3.0
21	AV	161	VAL	3.0

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Mol	Chain	Res	Type	RSRZ
8	AI	68	LEU	3.0
42	DL	30	PRO	3.0
26	C1	54	LYS	3.0
21	AV	108	PRO	3.0
49	DS	59	PRO	3.0
7	CH	102	ALA	3.0
12	AM	112	GLU	3.0
14	AO	88	ASP	3.0
34	DD	147	ALA	3.0
42	DL	50	ALA	3.0
43	DM	100	GLY	3.0
39	BI	26	VAL	3.0
28	A3	28	ARG	3.0
21	CV	121	HIS	3.0
27	A2	37	LYS	3.0
7	AH	48	GLY	3.0
13	CN	118	GLU	3.0
15	CP	133	GLU	3.0
37	DG	20	ASP	3.0
24	AY	10	LEU	3.0
4	AE	57	LYS	3.0
35	BE	153	LYS	3.0
21	AV	28	MET	3.0
40	DJ	36	GLY	3.0
5	CF	206	ILE	3.0
20	AU	35	TYR	3.0
33	DC	160	ALA	3.0
39	DI	10	ARG	3.0
11	AL	128	HIS	3.0
28	A3	30	THR	3.0
50	DT	16	HIS	3.0
1	CA	2807	G	2.9
12	AM	21	THR	2.9
14	CO	36	TYR	2.9
20	AU	4	LYS	2.9
20	AU	67	LEU	2.9
34	DD	194	LEU	2.9
49	BS	34	TRP	2.9
7	AH	152	ARG	2.9
14	CO	38	GLN	2.9
42	DL	120	GLY	2.9
14	CO	39	ILE	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
21	CV	100	VAL	2.9
38	DH	3	THR	2.9
40	BJ	6	ILE	2.9
40	DJ	76	ASN	2.9
41	BK	27	ASN	2.9
42	DL	45	LYS	2.9
7	AH	68	THR	2.9
50	BT	92	LEU	2.9
40	BJ	70	ARG	2.9
49	DS	44	MET	2.9
32	DB	81	VAL	2.9
40	BJ	98	ILE	2.9
42	BL	99	ILE	2.9
26	A1	38	ALA	2.9
7	CH	95	ARG	2.9
7	CH	170	ARG	2.9
13	CN	94	TYR	2.9
28	A3	21	TYR	2.9
31	DA	39	G	2.9
40	BJ	67	THR	2.9
1	CA	363(G)	A	2.9
16	AQ	49	HIS	2.9
26	C1	46	ASN	2.9
32	DB	16	HIS	2.9
42	BL	90	LYS	2.9
7	AH	34	GLU	2.9
7	AH	151	ILE	2.9
38	DH	61	VAL	2.9
45	DO	82	ILE	2.9
41	DK	65	ALA	2.9
17	CR	36	PRO	2.9
49	DS	10	PHE	2.9
49	DS	69	HIS	2.9
4	AE	26	ILE	2.9
21	CV	80	ARG	2.9
1	AA	1106	G	2.9
26	C1	56	GLU	2.9
28	C3	41	PRO	2.9
13	AN	73	VAL	2.9
44	BN	11	LYS	2.9
2	AB	12	C	2.9
7	CH	167	GLU	2.9

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Mol	Chain	Res	Type	RSRZ
20	AU	8	LYS	2.9
50	BT	26	ASN	2.9
7	AH	114	VAL	2.9
8	AI	138	ILE	2.9
49	BS	10	PHE	2.9
11	AL	87	ASP	2.9
32	DB	129	GLU	2.9
1	CA	2127	G	2.9
45	DO	69	TYR	2.9
48	BR	23	LYS	2.9
6	AG	43	LEU	2.9
34	DD	148	VAL	2.8
41	BK	109	VAL	2.8
1	AA	2122	U	2.8
37	BG	7	ALA	2.8
1	AA	2181	G	2.8
25	AZ	28	LEU	2.8
40	DJ	29	ARG	2.8
6	AG	182	LYS	2.8
39	DI	94	ALA	2.8
31	DA	88	C	2.8
6	AG	49	ASP	2.8
37	DG	155	ARG	2.8
28	A3	17	LYS	2.8
1	AA	2124	G	2.8
8	CI	122	GLU	2.8
20	CU	62	GLU	2.8
38	DH	15	ASN	2.8
8	AI	128	LEU	2.8
9	AJ	74	PHE	2.8
14	CO	19	LYS	2.8
32	DB	71	VAL	2.8
44	BN	33	VAL	2.8
12	AM	139	GLU	2.8
7	AH	157	TYR	2.8
31	BA	87	A	2.8
28	A3	29	ASN	2.8
1	CA	2115	G	2.8
7	AH	138	LYS	2.8
7	CH	160	LYS	2.8
41	DK	21	ILE	2.8
14	AO	95	HIS	2.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
39	BI	5	TYR	2.8
13	AN	70	LEU	2.8
39	DI	66	ARG	2.8
39	DI	102	LEU	2.8
7	CH	89	ILE	2.8
8	AI	92	VAL	2.8
34	DD	133	VAL	2.8
33	BC	155	GLY	2.8
39	BI	37	PHE	2.8
48	BR	22	VAL	2.8
28	C3	15	GLU	2.8
6	AG	42	GLY	2.8
1	CA	885	C	2.8
14	AO	85	VAL	2.8
34	DD	152	SER	2.8
52	BW	56	C	2.8
39	BI	34	ASN	2.8
8	AI	134	PRO	2.8
20	AU	59	GLY	2.8
6	CG	70	VAL	2.8
1	AA	2123	G	2.8
1	AA	2792	G	2.8
7	AH	86	GLU	2.8
12	CM	91	GLU	2.8
20	CU	63	LYS	2.8
28	A3	44	ARG	2.8
31	DA	1027(B)	C	2.8
7	AH	21	PRO	2.8
7	AH	98	LEU	2.8
21	CV	108	PRO	2.8
39	BI	50	LEU	2.8
39	DI	15	ALA	2.8
36	BF	66	GLU	2.8
4	AE	56	PRO	2.8
37	BG	152	ALA	2.8
41	BK	87	THR	2.8
31	DA	216	G	2.8
26	C1	40	ILE	2.8
52	BW	54	U	2.8
33	DC	96	GLY	2.8
32	BB	163	PHE	2.8
32	BB	194	PRO	2.8

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Mol	Chain	Res	Type	RSRZ
47	DQ	21	VAL	2.8
7	CH	92	ILE	2.7
1	AA	1913	A	2.7
7	CH	156	ALA	2.7
15	CP	2	ASN	2.7
34	DD	23	GLY	2.7
7	AH	12	PRO	2.7
8	AI	20	ASP	2.7
34	DD	116	GLN	2.7
1	CA	2129	C	2.7
1	AA	2897	U	2.7
12	CM	105	GLU	2.7
32	DB	134	GLU	2.7
46	DP	36	ILE	2.7
38	DH	25	ASP	2.7
41	BK	119	CYS	2.7
1	AA	2317	C	2.7
48	BR	34	TYR	2.7
6	CG	137	GLU	2.7
26	A1	37	PRO	2.7
31	DA	1031(B)	G	2.7
47	DQ	45	HIS	2.7
6	CG	115	ARG	2.7
24	AY	21	LEU	2.7
41	BK	77	MET	2.7
41	DK	81	ASP	2.7
35	DE	17	ALA	2.7
40	BJ	11	PHE	2.7
15	CP	137	LYS	2.7
20	AU	21	LYS	2.7
20	CU	54	LYS	2.7
31	DA	991	U	2.7
34	DD	182	LYS	2.7
50	BT	25	ARG	2.7
32	BB	215	LEU	2.7
14	CO	41	ASP	2.7
1	AA	2602	A	2.7
1	CA	896	A	2.7
43	BM	112	GLY	2.7
43	DM	85	GLY	2.7
8	AI	39	ALA	2.7
13	CN	76	VAL	2.7

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Mol	Chain	Res	Type	RSRZ
43	DM	53	VAL	2.7
38	BH	35	ILE	2.7
50	DT	20	LEU	2.7
6	CG	86	MET	2.7
49	DS	53	ASN	2.7
37	DG	81	GLY	2.7
51	DU	5	ASP	2.7
7	AH	79	VAL	2.7
7	CH	113	VAL	2.7
11	AL	125	VAL	2.7
13	CN	87	TYR	2.7
1	CA	2335	A	2.7
31	DA	440	A	2.7
43	DM	19	LEU	2.7
1	AA	2143	C	2.7
1	CA	2122	U	2.7
12	AM	32	PHE	2.7
28	C3	46	HIS	2.7
49	BS	11	VAL	2.7
50	BT	28	ALA	2.7
6	CG	74	LYS	2.7
7	AH	84	SER	2.7
39	DI	97	LYS	2.7
46	BP	61	SER	2.7
31	BA	1224	G	2.7
42	DL	90	LYS	2.7
7	AH	99	VAL	2.7
26	A1	65	CYS	2.7
7	CH	157	TYR	2.7
8	CI	4	ILE	2.7
26	C1	58	TYR	2.7
34	BD	102	ASP	2.7
31	BA	1356	G	2.7
47	DQ	20	THR	2.7
49	DS	48	THR	2.7
12	CM	103	MET	2.7
20	AU	6	HIS	2.7
5	CF	128	ALA	2.7
22	AW	78	TYR	2.7
33	DC	201	TYR	2.7
49	DS	50	ALA	2.7
14	AO	41	ASP	2.7

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Mol	Chain	Res	Type	RSRZ
21	AV	148	ASP	2.7
7	AH	130	ARG	2.7
24	AY	60	LEU	2.7
28	C3	18	ARG	2.7
49	DS	33	THR	2.7
50	BT	83	ARG	2.7
52	BW	60	U	2.7
38	DH	31	PHE	2.7
31	DA	988	G	2.7
7	AH	154	PRO	2.7
21	CV	171	ILE	2.7
21	CV	117	LEU	2.6
39	DI	18	PHE	2.6
8	CI	142	VAL	2.6
18	AS	108	GLY	2.6
1	AA	2803	C	2.6
39	BI	25	LYS	2.6
10	AK	46	ALA	2.6
43	BM	113	PRO	2.6
1	AA	1112	G	2.6
7	CH	98	LEU	2.6
31	BA	944	G	2.6
34	DD	137	SER	2.6
44	BN	6	LEU	2.6
50	DT	24	LEU	2.6
36	BF	7	ASN	2.6
8	AI	121	LYS	2.6
10	CK	21	CYS	2.6
21	CV	124	ILE	2.6
32	BB	111	ARG	2.6
50	DT	80	ARG	2.6
1	AA	2174	C	2.6
35	DE	19	MET	2.6
49	BS	32	LYS	2.6
5	CF	156	LEU	2.6
20	AU	20	TYR	2.6
23	CX	67	ILE	2.6
37	DG	154	TYR	2.6
42	BL	83	LEU	2.6
1	CA	2119	A	2.6
1	CA	2174	C	2.6
8	AI	37	VAL	2.6

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Mol	Chain	Res	Type	RSRZ
17	AR	46	VAL	2.6
23	AX	11	ARG	2.6
47	DQ	58	GLU	2.6
52	BV	56	C	2.6
32	DB	118	LEU	2.6
1	CA	274	G	2.6
31	DA	843	U	2.6
41	DK	50	TYR	2.6
52	BW	18	G	2.6
12	CM	63	LYS	2.6
21	CV	32	HIS	2.6
1	AA	1508	A	2.6
6	AG	85	GLY	2.6
21	CV	97	GLU	2.6
49	BS	53	ASN	2.6
8	AI	65	ALA	2.6
33	DC	23	TYR	2.6
8	CI	52	ARG	2.6
39	BI	90	PRO	2.6
49	DS	42	PRO	2.6
4	AE	7	VAL	2.6
34	DD	105	VAL	2.6
41	DK	82	VAL	2.6
7	AH	74	ASN	2.6
1	CA	2111	C	2.6
1	CA	2140	C	2.6
30	A5	64	TYR	2.6
31	DA	403	C	2.6
40	DJ	32	ALA	2.6
49	DS	80	TYR	2.6
34	DD	136	PRO	2.6
11	AL	95	VAL	2.6
21	CV	96	VAL	2.6
26	C1	47	VAL	2.6
6	AG	93	THR	2.6
41	DK	28	THR	2.6
7	AH	91	GLY	2.6
34	BD	183	GLY	2.6
44	DN	14	PRO	2.6
50	BT	29	LYS	2.6
38	DH	2	LEU	2.6
7	AH	146	ALA	2.6

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Mol	Chain	Res	Type	RSRZ
39	DI	91	ASP	2.6
42	DL	97	TYR	2.6
11	AL	93	GLY	2.6
38	DH	51	VAL	2.6
50	BT	27	LYS	2.6
23	CX	20	ARG	2.6
31	DA	1249	C	2.6
39	DI	47	LEU	2.6
43	BM	114	ARG	2.6
31	DA	1040	U	2.6
31	DA	1351	U	2.6
13	CN	84	ALA	2.6
13	AN	69	ASP	2.6
44	DN	32	SER	2.6
21	AV	162	GLU	2.6
5	AF	133	ASN	2.6
39	DI	65	VAL	2.6
43	BM	60	VAL	2.6
1	CA	2310	A	2.6
11	AL	81	GLN	2.6
35	DE	26	PHE	2.6
40	DJ	47	PHE	2.6
49	BS	50	ALA	2.6
4	AE	75	VAL	2.6
12	CM	60	ARG	2.6
49	DS	67	VAL	2.6
9	AJ	161	LEU	2.6
20	AU	99	CYS	2.6
25	CZ	1	MET	2.6
49	BS	49	ILE	2.6
4	AE	204	ALA	2.5
32	DB	29	ALA	2.5
23	AX	27	GLU	2.5
48	BR	83	GLU	2.5
1	AA	614	U	2.5
1	AA	1483	G	2.5
4	AE	10	GLY	2.5
4	AE	58	ARG	2.5
4	AE	184	VAL	2.5
31	DA	1120	G	2.5
40	DJ	93	GLY	2.5
52	BW	62	C	2.5

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Mol	Chain	Res	Type	RSRZ
23	AX	93	GLU	2.5
42	DL	55	ALA	2.5
13	AN	59	ASP	2.5
31	DA	1023	G	2.5
39	DI	63	ILE	2.5
44	DN	17	LYS	2.5
14	AO	30	ARG	2.5
14	AO	92	TYR	2.5
21	AV	152	ALA	2.5
21	AV	168	GLU	2.5
42	DL	88	ARG	2.5
45	BO	89	GLY	2.5
6	CG	34	LEU	2.5
11	AL	147	LEU	2.5
14	AO	26	LEU	2.5
46	DP	6	LEU	2.5
1	AA	895	U	2.5
40	DJ	91	PRO	2.5
1	AA	546	C	2.5
1	CA	888	C	2.5
8	AI	7	GLU	2.5
9	AJ	31	GLN	2.5
11	CL	70	GLN	2.5
23	AX	62	VAL	2.5
30	A5	34	TRP	2.5
32	DB	135	GLN	2.5
6	AG	81	LYS	2.5
6	CG	4	ASP	2.5
23	AX	81	ARG	2.5
27	A2	39	MET	2.5
32	DB	211	ILE	2.5
34	DD	126	ILE	2.5
34	BD	113	SER	2.5
11	AL	120	ALA	2.5
14	CO	55	ALA	2.5
32	DB	188	ALA	2.5
37	DG	147	ALA	2.5
41	BK	97	ALA	2.5
1	AA	1111	A	2.5
6	CG	53	LEU	2.5
31	BA	1000	A	2.5
6	AG	125	PHE	2.5

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Mol	Chain	Res	Type	RSRZ
8	AI	4	ILE	2.5
14	AO	40	ILE	2.5
8	AI	84	GLY	2.5
19	AT	69	TYR	2.5
20	AU	42	VAL	2.5
34	DD	106	TYR	2.5
50	DT	91	LEU	2.5
22	AW	10	THR	2.5
6	AG	39	ILE	2.5
6	AG	140	ILE	2.5
1	CA	508	G	2.5
7	CH	96	ALA	2.5
24	AY	17	SER	2.5
1	AA	1420	U	2.5
8	CI	12	LEU	2.5
31	DA	404	U	2.5
32	DB	78	GLN	2.5
1	AA	2163	C	2.5
1	CA	277	A	2.5
23	CX	72	GLU	2.5
4	AE	181	LEU	2.5
11	CL	89	ALA	2.5
21	CV	112	ARG	2.5
23	AX	12	PRO	2.5
32	BB	72	GLY	2.5
39	DI	92	TYR	2.5
1	AA	1051	G	2.5
43	BM	8	GLU	2.5
24	AY	55	ARG	2.5
1	CA	1557	C	2.5
8	CI	35	LEU	2.5
24	CY	3	LEU	2.5
42	DL	29	ALA	2.5
39	BI	91	ASP	2.5
8	AI	2	LYS	2.5
19	AT	28	PHE	2.5
43	DM	92	HIS	2.5
1	CA	271(D)	U	2.5
7	AH	167	GLU	2.5
15	AP	3	ARG	2.5
28	A3	23	THR	2.5
40	DJ	28	ARG	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
1	AA	2157	G	2.5
7	CH	107	VAL	2.5
39	BI	36	TYR	2.5
41	DK	80	VAL	2.5
48	DR	57	GLY	2.5
6	CG	84	LYS	2.5
36	DF	55	ASP	2.5
1	AA	2629	A	2.5
23	CX	27	GLU	2.5
31	DA	496	A	2.5
41	BK	42	TRP	2.5
1	AA	273(F)	U	2.5
39	DI	86	VAL	2.5
50	BT	9	ASN	2.5
35	BE	154	GLY	2.5
21	CV	109	ALA	2.5
49	DS	16	LEU	2.5
34	DD	75	PHE	2.5
6	CG	77	ILE	2.5
32	BB	130	ARG	2.5
31	DA	547	A	2.4
47	DQ	3	LYS	2.4
49	DS	60	VAL	2.4
8	AI	100	ALA	2.4
44	BN	21	TYR	2.4
51	DU	8	THR	2.4
23	AX	47	GLN	2.4
37	BG	88	PRO	2.4
39	DI	104	ARG	2.4
15	CP	128	GLU	2.4
38	DH	113	SER	2.4
1	CA	2121	G	2.4
34	DD	2	GLY	2.4
39	DI	36	TYR	2.4
7	AH	51	ARG	2.4
29	A4	47	ARG	2.4
31	DA	1493	A	2.4
41	BK	112	THR	2.4
7	AH	136	ILE	2.4
45	BO	3	ILE	2.4
13	CN	53	HIS	2.4
20	CU	42	VAL	2.4

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Mol	Chain	Res	Type	RSRZ
39	DI	19	LEU	2.4
43	DM	6	GLY	2.4
50	BT	70	SER	2.4
14	AO	23	ARG	2.4
50	DT	66	ALA	2.4
31	DA	63	C	2.4
31	DA	306	G	2.4
32	BB	128	GLU	2.4
1	AA	1113	U	2.4
14	CO	24	LEU	2.4
21	AV	163	LEU	2.4
48	BR	51	LEU	2.4
21	CV	81	ARG	2.4
43	BM	110	ARG	2.4
23	AX	77	ALA	2.4
44	BN	20	ALA	2.4
28	A3	33	LYS	2.4
30	C5	54	GLU	2.4
39	DI	3	GLN	2.4
5	CF	163	VAL	2.4
7	CH	131	VAL	2.4
13	CN	70	LEU	2.4
32	DB	93	VAL	2.4
34	DD	11	LEU	2.4
42	DL	65	VAL	2.4
52	DW	34	C	2.4
1	CA	2334	G	2.4
6	CG	156	ASP	2.4
31	BA	1003	G	2.4
34	BD	134	ASP	2.4
50	DT	14	LYS	2.4
6	CG	39	ILE	2.4
43	BM	73	GLU	2.4
7	CH	97	ARG	2.4
13	CN	64	ARG	2.4
14	CO	16	ASN	2.4
37	BG	6	ARG	2.4
37	BG	91	VAL	2.4
49	BS	72	GLY	2.4
14	CO	88	ASP	2.4
20	AU	54	LYS	2.4
21	CV	123	ASP	2.4

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Mol	Chain	Res	Type	RSRZ
28	C3	45	LYS	2.4
32	BB	19	HIS	2.4
51	BU	25	LYS	2.4
5	AF	167	ALA	2.4
24	AY	13	ALA	2.4
1	AA	11	G	2.4
1	AA	1176	G	2.4
23	AX	38	SER	2.4
31	DA	64	G	2.4
31	DA	407	G	2.4
40	DJ	19	SER	2.4
7	AH	67	LEU	2.4
8	AI	114	LEU	2.4
11	AL	121	LYS	2.4
20	CU	58	GLY	2.4
32	DB	107	THR	2.4
40	BJ	48	THR	2.4
26	C1	51	TYR	2.4
9	AJ	142	ARG	2.4
26	C1	65	CYS	2.4
34	DD	60	GLU	2.4
46	BP	59	TRP	2.4
43	DM	57	ARG	2.4
6	AG	34	LEU	2.4
9	AJ	32	VAL	2.4
11	CL	148	LEU	2.4
14	AO	56	LEU	2.4
1	AA	1534	G	2.4
31	DA	102	G	2.4
42	BL	48	ASN	2.4
14	AO	25	ARG	2.4
34	DD	24	GLU	2.4
21	AV	144	LEU	2.4
25	AZ	8	LEU	2.4
21	CV	98	MET	2.4
4	AE	74	PRO	2.4
31	DA	977	A	2.4
19	AT	42	ALA	2.4
32	DB	144	ARG	2.4
1	AA	1044	G	2.4
31	BA	1031	G	2.4
14	AO	59	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
39	BI	75	ASP	2.4
1	CA	1963	U	2.4
6	AG	70	VAL	2.4
12	CM	65	PHE	2.4
21	CV	153	SER	2.4
34	DD	62	GLN	2.4
32	DB	111	ARG	2.4
37	BG	76	ARG	2.4
25	AZ	34	GLU	2.4
39	BI	27	THR	2.4
41	BK	50	TYR	2.4
45	BO	82	ILE	2.4
42	BL	82	VAL	2.4
52	BV	70	G	2.4
41	DK	61	ALA	2.4
42	BL	92	LEU	2.4
49	BS	15	LEU	2.4
17	AR	101	GLY	2.3
6	AG	41	GLN	2.3
25	CZ	2	PRO	2.3
33	DC	149	ALA	2.3
14	AO	73	LEU	2.3
43	BM	39	ILE	2.3
1	CA	2477	C	2.3
8	AI	86	THR	2.3
41	BK	41	THR	2.3
23	AX	36	GLY	2.3
8	AI	41	GLU	2.3
4	AE	30	PRO	2.3
7	AH	170	ARG	2.3
12	CM	88	GLY	2.3
47	DQ	73	VAL	2.3
41	DK	70	LYS	2.3
1	AA	2178	C	2.3
1	AA	2335	A	2.3
14	CO	37	ALA	2.3
33	BC	146	ALA	2.3
34	DD	155	LEU	2.3
39	DI	88	TYR	2.3
40	DJ	23	ILE	2.3
41	BK	43	SER	2.3
1	CA	2118	U	2.3

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Mol	Chain	Res	Type	RSRZ
19	CT	88	LYS	2.3
33	DC	197	GLY	2.3
39	DI	53	VAL	2.3
41	BK	84	VAL	2.3
45	BO	25	THR	2.3
39	DI	75	ASP	2.3
1	AA	274	G	2.3
1	CA	2143	C	2.3
12	CM	133	ARG	2.3
31	BA	998(A)	G	2.3
31	BA	1027(C)	C	2.3
31	DA	91	C	2.3
31	DA	221	C	2.3
39	BI	83	ARG	2.3
19	CT	26	TYR	2.3
12	CM	90	VAL	2.3
7	CH	100	GLY	2.3
19	AT	21	PHE	2.3
33	BC	154	SER	2.3
31	DA	170	U	2.3
32	DB	76	GLN	2.3
32	DB	157	ARG	2.3
45	DO	38	ARG	2.3
51	BU	17	THR	2.3
6	CG	69	ALA	2.3
7	AH	160	LYS	2.3
11	AL	124	LYS	2.3
18	AS	103	ILE	2.3
39	DI	81	ILE	2.3
42	BL	36	CYS	2.3
42	DL	26	LEU	2.3
32	BB	71	VAL	2.3
21	AV	110	GLY	2.3
32	DB	70	PHE	2.3
33	DC	194	GLY	2.3
1	AA	2132	U	2.3
14	AO	13	ARG	2.3
27	C2	48	GLU	2.3
15	CP	132	LYS	2.3
18	AS	104	THR	2.3
20	AU	28	LYS	2.3
21	CV	137	ILE	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
34	DD	146	ILE	2.3
41	BK	90	GLY	2.3
35	BE	155	GLU	2.3
42	BL	49	SER	2.3
42	BL	98	HIS	2.3
50	BT	81	LYS	2.3
1	AA	2109	U	2.3
21	CV	144	LEU	2.3
24	AY	43	GLN	2.3
49	BS	79	THR	2.3
38	BH	69	ARG	2.3
21	CV	162	GLU	2.3
28	A3	27	LYS	2.3
1	CA	2179	C	2.3
13	AN	83	ILE	2.3
23	AX	66	HIS	2.3
1	CA	2113	U	2.3
40	BJ	75	ILE	2.3
6	AG	79	ASN	2.3
9	AJ	126	VAL	2.3
14	CO	87	PHE	2.3
15	CP	129	ARG	2.3
19	AT	43	VAL	2.3
32	BB	197	VAL	2.3
46	DP	38	TYR	2.3
42	DL	32	ARG	2.3
1	AA	352	G	2.3
11	AL	107	LYS	2.3
11	AL	139	LYS	2.3
31	DA	1014	A	2.3
43	BM	90	LEU	2.3
32	DB	68	ILE	2.3
33	DC	8	ILE	2.3
6	AG	158	ALA	2.3
1	AA	34	C	2.3
1	AA	2179	C	2.3
21	CV	175	VAL	2.3
32	BB	152	PHE	2.3
1	AA	2702	U	2.3
11	CL	17	LYS	2.3
33	DC	177	THR	2.3
42	DL	46	LYS	2.3

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Mol	Chain	Res	Type	RSRZ
43	DM	89	GLY	2.3
50	BT	65	LYS	2.3
4	AE	179	GLU	2.3
25	AZ	2	PRO	2.3
1	AA	2334	G	2.3
31	BA	1318	A	2.3
4	CE	151	TYR	2.3
11	AL	70	GLN	2.3
38	DH	60	ARG	2.3
43	DM	39	ILE	2.3
6	AG	36	LYS	2.3
11	CL	120	ALA	2.3
41	BK	80	VAL	2.3
47	BQ	77	VAL	2.3
50	BT	40	ALA	2.3
50	BT	97	ALA	2.3
1	CA	894	C	2.3
28	C3	23	THR	2.3
31	DA	1366	C	2.3
32	DB	131	PRO	2.3
46	DP	1	MET	2.3
8	AI	112	LYS	2.3
47	DQ	17	LYS	2.3
50	BT	21	LYS	2.3
7	CH	56	SER	2.3
7	CH	163	TYR	2.3
39	DI	62	TYR	2.3
31	BA	1036	G	2.2
37	BG	82	GLY	2.2
41	DK	57	THR	2.2
43	DM	116	THR	2.2
13	CN	80	PHE	2.2
20	CU	44	ILE	2.2
51	DU	23	PRO	2.2
12	CM	61	GLY	2.2
6	AG	135	LEU	2.2
31	BA	1034	G	2.2
11	AL	51	PHE	2.2
31	BA	843	U	2.2
42	BL	63	TYR	2.2
42	DL	89	VAL	2.2
7	CH	159	GLU	2.2

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Mol	Chain	Res	Type	RSRZ
42	BL	106	ALA	2.2
52	BV	1	C	2.2
34	DD	64	LEU	2.2
40	BJ	7	LYS	2.2
49	BS	55	LYS	2.2
50	DT	92	LEU	2.2
7	AH	147	ASN	2.2
7	CH	126	PRO	2.2
7	CH	154	PRO	2.2
22	CW	74	ARG	2.2
31	BA	1025	U	2.2
1	AA	1734	C	2.2
21	AV	117	LEU	2.2
41	DK	98	LEU	2.2
48	DR	44	LEU	2.2
39	DI	77	ILE	2.2
40	BJ	38	ILE	2.2
48	BR	43	PHE	2.2
4	AE	72	VAL	2.2
10	CK	12	ASP	2.2
1	CA	2790	A	2.2
8	CI	126	TYR	2.2
19	AT	90	GLU	2.2
26	C1	37	PRO	2.2
31	BA	1531	A	2.2
32	BB	12	GLU	2.2
38	DH	24	THR	2.2
42	BL	66	THR	2.2
8	AI	140	LEU	2.2
40	DJ	65	LEU	2.2
1	CA	1106	G	2.2
14	AO	29	PHE	2.2
52	BW	2	G	2.2
42	BL	85	ARG	2.2
42	DL	42	VAL	2.2
7	AH	28	GLY	2.2
12	CM	112	GLU	2.2
18	AS	109	GLU	2.2
32	BB	139	LYS	2.2
48	BR	46	GLU	2.2
6	CG	66	GLN	2.2
24	AY	18	PRO	2.2

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Mol	Chain	Res	Type	RSRZ
32	BB	125	PRO	2.2
47	DQ	44	ALA	2.2
50	DT	67	ALA	2.2
6	CG	3	LEU	2.2
6	CG	133	LEU	2.2
1	AA	2118	U	2.2
19	AT	68	ARG	2.2
34	BD	71	SER	2.2
37	DG	73	MET	2.2
42	BL	100	VAL	2.2
42	DL	101	ARG	2.2
48	DR	43	PHE	2.2
49	BS	44	MET	2.2
50	DT	63	ILE	2.2
1	CA	2112	G	2.2
7	AH	135	GLY	2.2
14	AO	36	TYR	2.2
31	DA	1024	G	2.2
34	BD	2	GLY	2.2
14	AO	51	ALA	2.2
21	AV	172	ALA	2.2
44	BN	30	ALA	2.2
5	CF	172	TRP	2.2
44	DN	12	ARG	2.2
43	BM	4	ILE	2.2
25	AZ	57	GLU	2.2
21	CV	173	ALA	2.2
33	DC	168	ALA	2.2
39	DI	82	ALA	2.2
44	DN	10	ALA	2.2
8	AI	31	LEU	2.2
14	CO	54	LEU	2.2
32	BB	187	LEU	2.2
47	DQ	75	ARG	2.2
52	DW	16	C	2.2
20	AU	34	LYS	2.2
31	BA	380	G	2.2
31	DA	190	G	2.2
31	DA	987	G	2.2
34	DD	206	PHE	2.2
33	BC	157	ILE	2.2
43	BM	78	ILE	2.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
46	DP	59	TRP	2.2
1	AA	363(G)	A	2.2
39	BI	3	GLN	2.2
40	BJ	12	ASP	2.2
7	CH	72	ILE	2.2
26	A1	50	THR	2.2
9	AJ	75	VAL	2.2
1	AA	615	G	2.2
1	CA	1176	G	2.2
1	CA	2110	G	2.2
1	CA	1735	U	2.2
16	AQ	48	ALA	2.2
16	AQ	116	ALA	2.2
24	AY	8	LYS	2.2
24	CY	10	LEU	2.2
50	DT	87	LYS	2.2
17	AR	36	PRO	2.2
39	BI	101	PHE	2.2
32	DB	97	TRP	2.2
39	DI	6	GLY	2.2
49	DS	57	HIS	2.2
21	AV	80	ARG	2.2
25	CZ	7	LYS	2.2
42	BL	96	ARG	2.2
32	BB	102	LEU	2.2
23	AX	86	SER	2.2
39	BI	84	ALA	2.2
31	BA	1001	G	2.2
31	BA	1338	G	2.2
52	DW	18	G	2.2
39	BI	65	VAL	2.2
26	C1	50	THR	2.2
47	DQ	7	THR	2.2
40	BJ	40	LEU	2.1
30	C5	35	GLN	2.1
49	DS	74	PHE	2.1
4	AE	23	VAL	2.1
7	CH	116	GLU	2.1
32	BB	202	PRO	2.1
31	BA	1355	G	2.1
34	DD	109	GLY	2.1
42	DL	36	CYS	2.1

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Mol	Chain	Res	Type	RSRZ
14	CO	21	THR	2.1
20	AU	31	LEU	2.1
37	DG	101	LEU	2.1
36	DF	97	PHE	2.1
1	CA	2175	C	2.1
19	AT	11	PRO	2.1
20	CU	86	ARG	2.1
23	CX	49	VAL	2.1
26	A1	52	SER	2.1
32	DB	80	ILE	2.1
39	DI	128	ARG	2.1
40	DJ	80	LYS	2.1
5	CF	6	MET	2.1
7	AH	120	GLY	2.1
21	AV	40	ASP	2.1
6	AG	146	TYR	2.1
1	CA	1913	A	2.1
1	CA	2151	G	2.1
23	CX	48	LYS	2.1
31	DA	1280	A	2.1
4	AE	25	VAL	2.1
32	DB	127	ILE	2.1
40	BJ	74	ILE	2.1
42	DL	108	GLY	2.1
47	BQ	12	SER	2.1
47	DQ	2	PRO	2.1
1	AA	2128	C	2.1
32	DB	142	LEU	2.1
37	BG	16	LEU	2.1
46	BP	23	ASP	2.1
44	DN	21	TYR	2.1
6	CG	79	ASN	2.1
24	AY	23	LYS	2.1
44	BN	22	THR	2.1
4	AE	54	GLN	2.1
14	AO	69	VAL	2.1
36	BF	5	GLU	2.1
23	CX	36	GLY	2.1
28	C3	10	LEU	2.1
34	DD	124	GLY	2.1
52	BW	19	G	2.1
17	AR	44	LYS	2.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
31	DA	1039	C	2.1
33	DC	199	LYS	2.1
8	AI	122	GLU	2.1
20	AU	96	ILE	2.1
21	CV	120	ILE	2.1
32	DB	165	VAL	2.1
17	AR	40	LEU	2.1
32	DB	138	LEU	2.1
37	DG	82	GLY	2.1
45	BO	20	GLY	2.1
47	BQ	8	GLY	2.1
47	DQ	22	LEU	2.1
34	DD	102	ASP	2.1
1	AA	1454	U	2.1
1	AA	2477	C	2.1
1	CA	2136	C	2.1
20	AU	39	VAL	2.1
31	DA	998(B)	C	2.1
32	BB	7	VAL	2.1
33	DC	153	VAL	2.1
49	BS	58	VAL	2.1
4	AE	27	LEU	2.1
25	CZ	8	LEU	2.1
41	BK	91	ARG	2.1
37	BG	2	ALA	2.1
38	DH	58	TYR	2.1
8	CI	7	GLU	2.1
31	DA	65	U	2.1
34	BD	70	ILE	2.1
44	BN	18	VAL	2.1
47	DQ	10	VAL	2.1
1	AA	886	C	2.1
1	CA	2120	G	2.1
1	CA	2124	G	2.1
10	CK	36	GLY	2.1
13	AN	71	GLN	2.1
14	AO	16	ASN	2.1
31	DA	971	G	2.1
32	DB	137	ARG	2.1
38	DH	116	LYS	2.1
47	BQ	16	GLN	2.1
20	CU	66	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
6	AG	131	TYR	2.1
38	BH	135	CYS	2.1
41	DK	44	SER	2.1
43	DM	51	ALA	2.1
47	BQ	44	ALA	2.1
32	DB	27	LYS	2.1
33	DC	198	VAL	2.1
40	BJ	65	LEU	2.1
1	AA	1174	A	2.1
6	CG	40	ASN	2.1
1	AA	2115	G	2.1
1	CA	2123	G	2.1
1	CA	2128	C	2.1
21	CV	138	GLU	2.1
12	CM	64	ILE	2.1
14	CO	13	ARG	2.1
34	DD	65	ARG	2.1
37	DG	77	SER	2.1
44	BN	19	ARG	2.1
6	CG	176	LEU	2.1
7	CH	147	ASN	2.1
31	BA	999	U	2.1
31	DA	223	U	2.1
53	BX	15	A	2.1
40	BJ	66	ARG	2.1
40	BJ	59	SER	2.1
41	DK	95	ILE	2.1
46	DP	4	ILE	2.1
1	AA	2154	G	2.1
43	BM	85	GLY	2.1
51	BU	5	ASP	2.1
14	AO	15	ARG	2.1
21	CV	127	LYS	2.1
28	C3	25	LYS	2.1
31	DA	437	U	2.1
34	DD	100	ARG	2.1
36	DF	47	ARG	2.1
50	DT	81	LYS	2.1
51	BU	12	LYS	2.1
1	AA	2808	U	2.1
47	DQ	42	TYR	2.1
4	CE	104	VAL	2.1

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Mol	Chain	Res	Type	RSRZ
6	CG	157	ILE	2.1
26	A1	45	GLY	2.1
31	BA	1130	A	2.1
1	AA	1052	C	2.1
31	DA	366	C	2.1
44	DN	60	SER	2.1
3	AD	26	LYS	2.0
18	CS	111	HIS	2.1
6	CG	136	ARG	2.0
33	BC	147	LYS	2.0
1	CA	2152	G	2.0
2	AB	87	G	2.0
1	AA	2144	U	2.0
42	BL	89	VAL	2.0
11	AL	85	LEU	2.0
12	AM	19	GLY	2.0
12	CM	33	GLY	2.0
1	AA	2333	A	2.0
13	CN	56	LYS	2.0
34	DD	185	PHE	2.0
1	AA	2667	C	2.0
23	AX	75	GLU	2.0
31	DA	103	C	2.0
21	CV	116	VAL	2.0
42	BL	50	ALA	2.0
50	DT	95	ALA	2.0
4	AE	32	PRO	2.0
7	AH	117	PRO	2.0
13	CN	63	ARG	2.0
26	C1	39	ARG	2.0
32	BB	90	MET	2.0
37	BG	5	ARG	2.0
13	CN	82	GLU	2.0
34	DD	42	GLN	2.0
37	BG	96	GLN	2.0
14	CO	92	TYR	2.0
31	BA	722	A	2.0
31	DA	1018	C	2.0
32	BB	218	ALA	2.0
39	DI	46	ALA	2.0
42	DL	23	VAL	2.0
1	AA	2313	C	2.0

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Mol	Chain	Res	Type	RSRZ
13	AN	51	LEU	2.0
13	AN	79	LEU	2.0
40	DJ	16	LEU	2.0
42	BL	59	LEU	2.0
47	DQ	76	LEU	2.0
10	CK	111	PHE	2.0
13	AN	80	PHE	2.0
20	CU	43	ASN	2.0
34	BD	29	PRO	2.0
45	DO	86	GLY	2.0
51	BU	22	ARG	2.0
1	CA	2130	U	2.0
46	BP	1	MET	2.0
20	AU	91	GLU	2.0
10	AK	42	SER	2.0
23	CX	66	HIS	2.0
4	AE	33	VAL	2.0
37	DG	33	ASP	2.0
8	AI	6	LEU	2.0
20	AU	65	ALA	2.0
26	A1	54	LYS	2.0
49	BS	67	VAL	2.0
34	BD	158	ILE	2.0
42	DL	106	ALA	2.0
6	AG	21	ARG	2.0
8	CI	90	GLY	2.0
13	AN	63	ARG	2.0
24	AY	7	ARG	2.0
19	CT	56	THR	2.0
33	DC	166	GLU	2.0
13	AN	114	VAL	2.0
26	C1	61	VAL	2.0
4	AE	131	ALA	2.0
6	AG	152	LEU	2.0
8	CI	9	LEU	2.0
11	AL	5	ASP	2.0
21	CV	189	ALA	2.0
32	DB	69	LEU	2.0
38	DH	4	ASP	2.0
40	BJ	4	ILE	2.0
48	BR	85	LEU	2.0
49	DS	75	ALA	2.0

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Mol	Chain	Res	Type	RSRZ
21	AV	25	PRO	2.0
4	AE	180	ASN	2.0
37	DG	144	MET	2.0
7	AH	139	GLN	2.0
3	AD	34	VAL	2.0
6	AG	159	VAL	2.0
10	CK	17	ARG	2.0
24	CY	60	LEU	2.0
35	DE	24	ARG	2.0
41	BK	14	VAL	2.0

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

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

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
55	MG	DW	111	1/1	-0.46	0.14	136,136,136,136	0
55	MG	CA	3903	1/1	-0.38	0.29	135,135,135,135	0
55	MG	BA	2106	1/1	-0.24	0.78	124,124,124,124	0
55	MG	CA	3586	1/1	-0.07	1.27	105,105,105,105	0
55	MG	DA	1638	1/1	-0.01	1.01	126,126,126,126	0
55	MG	BA	1610	1/1	0.01	0.64	93,93,93,93	0
55	MG	DA	1953	1/1	0.04	0.11	140,140,140,140	0
55	MG	BA	1653	1/1	0.06	0.76	76,76,76,76	0
55	MG	CA	2977	1/1	0.07	0.86	88,88,88,88	0
55	MG	AA	4684	1/1	0.09	0.61	73,73,73,73	0
55	MG	DA	1939	1/1	0.10	1.19	214,214,214,214	0
55	MG	AA	5267	1/1	0.13	0.76	96,96,96,96	0
55	MG	AA	5264	1/1	0.15	0.99	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2172	1/1	0.16	0.55	96,96,96,96	0
55	MG	CA	3013	1/1	0.17	0.89	128,128,128,128	0
55	MG	CA	4358	1/1	0.19	1.49	78,78,78,78	0
55	MG	DA	1949	1/1	0.19	0.46	88,88,88,88	0
55	MG	CA	3949	1/1	0.19	0.82	110,110,110,110	0
55	MG	DA	1913	1/1	0.19	0.45	93,93,93,93	0
55	MG	AA	4979	1/1	0.20	0.67	83,83,83,83	0
55	MG	DA	1898	1/1	0.20	0.66	96,96,96,96	0
55	MG	CA	4403	1/1	0.20	0.34	175,175,175,175	0
55	MG	DA	2122	1/1	0.22	0.32	150,150,150,150	0
55	MG	DA	1917	1/1	0.22	0.09	143,143,143,143	0
55	MG	DA	1650	1/1	0.23	0.93	116,116,116,116	0
55	MG	CA	3804	1/1	0.24	0.41	97,97,97,97	0
55	MG	AA	4539	1/1	0.24	0.52	90,90,90,90	0
55	MG	DA	1916	1/1	0.24	0.78	87,87,87,87	0
55	MG	BA	2097	1/1	0.24	0.68	95,95,95,95	0
55	MG	AA	4807	1/1	0.26	0.91	88,88,88,88	0
55	MG	AA	4972	1/1	0.26	0.92	171,171,171,171	0
55	MG	CA	4248	1/1	0.27	0.61	88,88,88,88	0
55	MG	DA	1602	1/1	0.28	1.32	94,94,94,94	0
55	MG	AA	4120	1/1	0.28	0.74	92,92,92,92	0
55	MG	CA	3088	1/1	0.28	0.37	76,76,76,76	0
55	MG	DA	1811	1/1	0.29	0.65	73,73,73,73	0
55	MG	AX	101	1/1	0.30	0.29	99,99,99,99	0
55	MG	DA	1676	1/1	0.31	0.41	71,71,71,71	0
55	MG	BA	2152	1/1	0.31	0.71	83,83,83,83	0
55	MG	CA	3776	1/1	0.31	0.26	95,95,95,95	0
55	MG	BA	1867	1/1	0.31	1.12	100,100,100,100	0
55	MG	BA	2125	1/1	0.32	0.80	84,84,84,84	0
55	MG	BA	1879	1/1	0.32	0.84	94,94,94,94	0
55	MG	AA	4007	1/1	0.33	0.20	88,88,88,88	0
55	MG	AA	5023	1/1	0.33	0.97	57,57,57,57	0
55	MG	AA	4822	1/1	0.33	0.85	87,87,87,87	0
55	MG	BA	1792	1/1	0.34	1.75	76,76,76,76	0
55	MG	BA	1615	1/1	0.34	0.56	134,134,134,134	0
55	MG	BV	104	1/1	0.35	0.15	84,84,84,84	0
55	MG	CA	4213	1/1	0.35	0.64	70,70,70,70	0
55	MG	DA	1630	1/1	0.35	1.60	133,133,133,133	0
55	MG	CA	2944	1/1	0.36	0.67	94,94,94,94	0
55	MG	DA	2052	1/1	0.36	0.32	66,66,66,66	0
55	MG	CA	3065	1/1	0.36	0.52	88,88,88,88	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4602	1/1	0.37	0.19	134,134,134,134	0
55	MG	CA	4373	1/1	0.38	0.59	92,92,92,92	0
55	MG	BA	1882	1/1	0.38	0.30	92,92,92,92	0
55	MG	AA	4688	1/1	0.38	0.58	65,65,65,65	0
55	MG	AA	5202	1/1	0.38	0.43	72,72,72,72	0
55	MG	AA	5099	1/1	0.38	0.25	111,111,111,111	0
55	MG	AA	4510	1/1	0.38	0.92	167,167,167,167	0
55	MG	CA	3920	1/1	0.38	0.69	85,85,85,85	0
55	MG	BA	2100	1/1	0.38	0.30	112,112,112,112	0
55	MG	BA	1949	1/1	0.38	0.64	102,102,102,102	0
55	MG	CA	4157	1/1	0.38	0.82	63,63,63,63	0
55	MG	DA	1643	1/1	0.39	0.32	91,91,91,91	0
55	MG	AA	4953	1/1	0.40	0.13	85,85,85,85	0
55	MG	CA	3916	1/1	0.40	0.25	73,73,73,73	0
55	MG	AA	5297	1/1	0.41	1.42	71,71,71,71	0
55	MG	AA	5292	1/1	0.41	0.54	76,76,76,76	0
55	MG	DA	2106	1/1	0.41	0.32	94,94,94,94	0
55	MG	CA	3499	1/1	0.41	0.54	71,71,71,71	0
55	MG	DA	1845	1/1	0.42	1.20	117,117,117,117	0
55	MG	AA	4999	1/1	0.42	0.19	100,100,100,100	0
55	MG	DA	2153	1/1	0.42	0.72	87,87,87,87	0
55	MG	DA	1626	1/1	0.42	1.23	123,123,123,123	0
55	MG	CA	4369	1/1	0.42	0.50	111,111,111,111	0
55	MG	AB	224	1/1	0.43	0.17	94,94,94,94	0
55	MG	CA	3529	1/1	0.43	0.18	78,78,78,78	0
55	MG	BA	1975	1/1	0.43	0.44	75,75,75,75	0
55	MG	CA	4257	1/1	0.44	0.40	74,74,74,74	0
55	MG	BA	1904	1/1	0.45	0.72	79,79,79,79	0
55	MG	CA	2941	1/1	0.45	0.80	71,71,71,71	0
55	MG	AA	5296	1/1	0.45	0.27	74,74,74,74	0
55	MG	CA	3455	1/1	0.45	0.70	60,60,60,60	0
55	MG	AA	4718	1/1	0.45	0.20	89,89,89,89	0
55	MG	AB	243	1/1	0.45	0.73	164,164,164,164	0
55	MG	AA	4874	1/1	0.45	0.46	41,41,41,41	0
55	MG	DA	2180	1/1	0.46	0.47	123,123,123,123	0
55	MG	BA	2060	1/1	0.46	0.80	73,73,73,73	0
55	MG	BA	1840	1/1	0.46	0.43	96,96,96,96	0
55	MG	CA	2920	1/1	0.46	0.57	63,63,63,63	0
55	MG	AA	4697	1/1	0.46	0.79	82,82,82,82	0
55	MG	AA	4135	1/1	0.47	0.68	127,127,127,127	0
55	MG	AA	4536	1/1	0.47	0.32	126,126,126,126	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1801	1/1	0.47	0.68	88,88,88,88	0
55	MG	DA	1929	1/1	0.47	0.19	93,93,93,93	0
55	MG	DA	1831	1/1	0.47	0.29	99,99,99,99	0
55	MG	AA	5214	1/1	0.47	0.33	54,54,54,54	0
55	MG	BA	1661	1/1	0.47	0.20	90,90,90,90	0
55	MG	CA	4278	1/1	0.47	0.70	58,58,58,58	0
55	MG	CA	3885	1/1	0.47	0.45	77,77,77,77	0
55	MG	CA	3082	1/1	0.48	0.76	113,113,113,113	0
55	MG	BA	1964	1/1	0.48	0.16	70,70,70,70	0
55	MG	CA	3915	1/1	0.48	0.74	80,80,80,80	0
55	MG	CQ	205	1/1	0.48	0.56	81,81,81,81	0
55	MG	AA	4169	1/1	0.49	0.72	67,67,67,67	0
55	MG	DA	2146	1/1	0.49	0.36	69,69,69,69	0
55	MG	AB	223	1/1	0.49	0.25	95,95,95,95	0
55	MG	DA	1677	1/1	0.49	0.46	124,124,124,124	0
55	MG	AA	5039	1/1	0.49	0.63	51,51,51,51	0
55	MG	AA	4665	1/1	0.49	0.31	78,78,78,78	0
55	MG	DA	1908	1/1	0.49	0.27	88,88,88,88	0
55	MG	AA	4788	1/1	0.49	0.66	55,55,55,55	0
55	MG	DA	2068	1/1	0.50	0.20	105,105,105,105	0
55	MG	CA	3799	1/1	0.50	0.56	111,111,111,111	0
55	MG	DA	2191	1/1	0.50	0.67	92,92,92,92	0
55	MG	BV	122	1/1	0.50	0.39	97,97,97,97	0
55	MG	CA	3997	1/1	0.51	0.27	51,51,51,51	0
55	MG	CA	3795	1/1	0.51	0.54	51,51,51,51	0
55	MG	BA	2010	1/1	0.51	0.52	78,78,78,78	0
55	MG	CA	3935	1/1	0.51	0.72	61,61,61,61	0
55	MG	AA	5002	1/1	0.51	0.83	90,90,90,90	0
55	MG	DA	2067	1/1	0.51	0.54	55,55,55,55	0
55	MG	AA	5037	1/1	0.52	1.00	95,95,95,95	0
55	MG	AB	237	1/1	0.52	0.62	72,72,72,72	0
55	MG	AA	5205	1/1	0.52	0.22	83,83,83,83	0
55	MG	BA	2102	1/1	0.52	0.56	80,80,80,80	0
55	MG	CA	3054	1/1	0.52	1.35	68,68,68,68	0
55	MG	BA	1925	1/1	0.52	1.12	75,75,75,75	0
55	MG	CA	3684	1/1	0.52	0.32	90,90,90,90	0
55	MG	BA	1624	1/1	0.53	1.04	79,79,79,79	0
55	MG	AA	4295	1/1	0.53	0.27	61,61,61,61	0
55	MG	AA	4123	1/1	0.53	0.54	74,74,74,74	0
55	MG	CV	203	1/1	0.53	0.21	85,85,85,85	0
55	MG	AA	4397	1/1	0.53	3.28	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1852	1/1	0.53	0.76	121,121,121,121	0
55	MG	DA	2109	1/1	0.53	0.17	93,93,93,93	0
55	MG	CA	4326	1/1	0.53	0.56	57,57,57,57	0
55	MG	AA	4803	1/1	0.53	0.55	85,85,85,85	0
55	MG	AA	5146	1/1	0.53	0.36	110,110,110,110	0
55	MG	CA	3079	1/1	0.53	0.34	103,103,103,103	0
55	MG	DA	2125	1/1	0.54	0.66	63,63,63,63	0
55	MG	BA	2033	1/1	0.54	0.53	56,56,56,56	0
55	MG	BA	2057	1/1	0.54	0.54	46,46,46,46	0
55	MG	AA	4779	1/1	0.54	0.48	71,71,71,71	0
55	MG	DA	1999	1/1	0.54	0.53	108,108,108,108	0
55	MG	AA	4338	1/1	0.54	0.22	58,58,58,58	0
55	MG	AA	4741	1/1	0.54	0.45	71,71,71,71	0
55	MG	CA	2925	1/1	0.54	0.18	128,128,128,128	0
55	MG	DA	2202	1/1	0.54	0.25	80,80,80,80	0
55	MG	AA	4502	1/1	0.54	0.47	53,53,53,53	0
55	MG	DA	1952	1/1	0.54	0.50	66,66,66,66	0
55	MG	CA	4035	1/1	0.54	0.46	50,50,50,50	0
55	MG	AA	4770	1/1	0.55	0.47	83,83,83,83	0
55	MG	BA	1781	1/1	0.55	0.62	64,64,64,64	0
55	MG	BA	1647	1/1	0.55	0.60	93,93,93,93	0
55	MG	DA	1649	1/1	0.55	0.75	118,118,118,118	0
55	MG	AA	4723	1/1	0.55	0.45	83,83,83,83	0
55	MG	DA	1806	1/1	0.55	0.21	69,69,69,69	0
55	MG	CV	201	1/1	0.55	0.45	78,78,78,78	0
55	MG	CD	306	1/1	0.55	0.46	65,65,65,65	0
55	MG	AA	5228	1/1	0.55	0.84	73,73,73,73	0
55	MG	BA	2145	1/1	0.55	0.21	97,97,97,97	0
55	MG	BA	1634	1/1	0.55	0.90	104,104,104,104	0
55	MG	AA	4069	1/1	0.55	0.59	68,68,68,68	0
55	MG	DV	123	1/1	0.55	0.25	104,104,104,104	0
55	MG	AA	4828	1/1	0.55	0.28	53,53,53,53	0
55	MG	AA	4497	1/1	0.55	0.32	66,66,66,66	0
55	MG	AA	4436	1/1	0.56	0.28	76,76,76,76	0
55	MG	AA	4616	1/1	0.56	0.42	140,140,140,140	0
55	MG	A3	102	1/1	0.56	0.39	77,77,77,77	0
55	MG	BA	2019	1/1	0.56	0.28	83,83,83,83	0
55	MG	CA	4207	1/1	0.56	0.29	62,62,62,62	0
55	MG	BV	115	1/1	0.56	0.33	107,107,107,107	0
55	MG	AA	5045	1/1	0.56	0.27	80,80,80,80	0
55	MG	DA	1682	1/1	0.56	0.63	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1604	1/1	0.56	0.52	96,96,96,96	0
55	MG	AA	4593	1/1	0.56	0.44	82,82,82,82	0
55	MG	AB	210	1/1	0.56	0.38	68,68,68,68	0
55	MG	AA	4097	1/1	0.56	0.57	78,78,78,78	0
55	MG	CA	4181	1/1	0.56	0.25	57,57,57,57	0
55	MG	DA	1991	1/1	0.57	0.56	56,56,56,56	0
55	MG	BA	1682	1/1	0.57	0.10	105,105,105,105	0
55	MG	DA	1841	1/1	0.57	1.07	75,75,75,75	0
55	MG	BA	1943	1/1	0.57	0.82	79,79,79,79	0
55	MG	AA	4923	1/1	0.57	0.71	64,64,64,64	0
55	MG	DA	1912	1/1	0.57	0.18	88,88,88,88	0
55	MG	AA	4363	1/1	0.57	0.44	57,57,57,57	0
55	MG	CA	4136	1/1	0.57	0.71	67,67,67,67	0
55	MG	BA	1903	1/1	0.57	0.40	62,62,62,62	0
55	MG	CA	3941	1/1	0.57	0.53	58,58,58,58	0
55	MG	BA	1995	1/1	0.57	0.29	61,61,61,61	0
55	MG	BA	2141	1/1	0.57	0.36	85,85,85,85	0
55	MG	DA	2140	1/1	0.58	0.19	107,107,107,107	0
55	MG	CA	4195	1/1	0.58	0.86	64,64,64,64	0
55	MG	AA	4632	1/1	0.58	0.38	81,81,81,81	0
55	MG	CA	4335	1/1	0.58	0.14	110,110,110,110	0
55	MG	AA	4769	1/1	0.58	0.68	69,69,69,69	0
55	MG	CB	242	1/1	0.58	0.33	77,77,77,77	0
55	MG	BA	1818	1/1	0.58	0.94	75,75,75,75	0
55	MG	CA	3936	1/1	0.58	0.54	82,82,82,82	0
55	MG	BA	1913	1/1	0.58	0.72	84,84,84,84	0
55	MG	BA	2121	1/1	0.58	0.29	81,81,81,81	0
55	MG	AA	4767	1/1	0.58	0.50	89,89,89,89	0
55	MG	AA	5032	1/1	0.58	0.50	65,65,65,65	0
55	MG	CA	3764	1/1	0.58	0.59	75,75,75,75	0
55	MG	CA	2935	1/1	0.58	0.22	65,65,65,65	0
55	MG	CB	259	1/1	0.58	0.25	78,78,78,78	0
55	MG	DA	1690	1/1	0.58	0.72	79,79,79,79	0
55	MG	AA	4717	1/1	0.58	0.14	68,68,68,68	0
55	MG	AA	4047	1/1	0.59	0.46	65,65,65,65	0
55	MG	DA	1833	1/1	0.59	0.22	103,103,103,103	0
55	MG	AA	4970	1/1	0.59	0.23	60,60,60,60	0
55	MG	CA	4179	1/1	0.59	0.40	105,105,105,105	0
55	MG	DA	2121	1/1	0.59	1.00	96,96,96,96	0
55	MG	DA	2037	1/1	0.59	0.67	95,95,95,95	0
55	MG	AA	4453	1/1	0.59	0.51	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5164	1/1	0.59	0.08	125,125,125,125	0
55	MG	AA	5100	1/1	0.59	0.46	91,91,91,91	0
55	MG	BA	1999	1/1	0.59	0.21	85,85,85,85	0
55	MG	DA	2117	1/1	0.59	0.49	68,68,68,68	0
55	MG	CA	3090	1/1	0.59	0.41	82,82,82,82	0
55	MG	AA	4096	1/1	0.59	0.43	70,70,70,70	0
55	MG	AA	5086	1/1	0.59	0.40	65,65,65,65	0
55	MG	AA	5078	1/1	0.59	0.63	64,64,64,64	0
55	MG	CA	3888	1/1	0.59	0.43	73,73,73,73	0
55	MG	DA	1951	1/1	0.60	0.58	68,68,68,68	0
55	MG	BA	1626	1/1	0.60	0.50	81,81,81,81	0
55	MG	AA	4584	1/1	0.60	0.53	67,67,67,67	0
55	MG	CA	3072	1/1	0.60	0.62	87,87,87,87	0
55	MG	BA	1816	1/1	0.60	0.14	86,86,86,86	0
55	MG	AA	4703	1/1	0.60	0.30	92,92,92,92	0
55	MG	DA	1937	1/1	0.60	0.52	85,85,85,85	0
55	MG	CA	4339	1/1	0.60	0.62	67,67,67,67	0
55	MG	DA	1850	1/1	0.60	0.23	101,101,101,101	0
55	MG	CA	3692	1/1	0.60	0.80	65,65,65,65	0
55	MG	DA	1932	1/1	0.60	1.48	66,66,66,66	0
55	MG	CA	3805	1/1	0.60	0.23	72,72,72,72	0
55	MG	AA	5250	1/1	0.60	1.06	70,70,70,70	0
55	MG	DA	1799	1/1	0.60	0.17	80,80,80,80	0
55	MG	DA	1611	1/1	0.60	0.61	99,99,99,99	0
55	MG	BA	1823	1/1	0.60	0.39	103,103,103,103	0
55	MG	DA	1995	1/1	0.60	0.48	71,71,71,71	0
55	MG	AA	4751	1/1	0.60	0.30	96,96,96,96	0
55	MG	CB	231	1/1	0.60	0.26	76,76,76,76	0
55	MG	BA	2093	1/1	0.60	0.61	75,75,75,75	0
55	MG	DA	1681	1/1	0.60	0.42	83,83,83,83	0
55	MG	CA	4183	1/1	0.60	0.83	71,71,71,71	0
55	MG	BA	1737	1/1	0.60	0.23	46,46,46,46	0
55	MG	DA	2101	1/1	0.60	0.27	155,155,155,155	0
55	MG	DA	2032	1/1	0.60	0.22	60,60,60,60	0
55	MG	DW	113	1/1	0.61	0.24	68,68,68,68	0
55	MG	CA	3786	1/1	0.61	0.67	64,64,64,64	0
55	MG	CA	3424	1/1	0.61	0.30	48,48,48,48	0
55	MG	AA	5137	1/1	0.61	0.57	64,64,64,64	0
55	MG	CA	3059	1/1	0.61	0.83	92,92,92,92	0
55	MG	AA	4061	1/1	0.61	0.33	52,52,52,52	0
55	MG	CA	2972	1/1	0.61	0.93	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1914	1/1	0.61	0.27	82,82,82,82	0
55	MG	CA	3873	1/1	0.61	0.16	77,77,77,77	0
55	MG	AA	4144	1/1	0.61	0.34	63,63,63,63	0
55	MG	CA	3858	1/1	0.61	0.42	53,53,53,53	0
55	MG	AA	5201	1/1	0.61	0.44	49,49,49,49	0
55	MG	AA	5265	1/1	0.61	0.53	68,68,68,68	0
55	MG	CA	2994	1/1	0.61	0.54	49,49,49,49	0
55	MG	DA	2162	1/1	0.61	0.34	72,72,72,72	0
55	MG	CA	3388	1/1	0.61	0.50	61,61,61,61	0
55	MG	BA	2170	1/1	0.61	0.16	105,105,105,105	0
55	MG	DA	1673	1/1	0.61	0.58	90,90,90,90	0
55	MG	AA	5013	1/1	0.61	0.16	79,79,79,79	0
55	MG	CA	4332	1/1	0.61	0.38	74,74,74,74	0
55	MG	DA	2069	1/1	0.61	0.56	76,76,76,76	0
55	MG	AA	4032	1/1	0.61	0.80	82,82,82,82	0
55	MG	AA	4755	1/1	0.61	0.75	68,68,68,68	0
55	MG	CA	2952	1/1	0.61	0.19	130,130,130,130	0
55	MG	AA	4798	1/1	0.61	0.80	76,76,76,76	0
55	MG	AA	5121	1/1	0.61	0.14	78,78,78,78	0
55	MG	AB	204	1/1	0.61	0.46	56,56,56,56	0
55	MG	CJ	201	1/1	0.61	0.38	71,71,71,71	0
55	MG	CA	2903	1/1	0.61	0.44	80,80,80,80	0
55	MG	AA	5279	1/1	0.61	1.09	59,59,59,59	0
55	MG	BA	2129	1/1	0.61	0.77	36,36,36,36	0
55	MG	AA	5143	1/1	0.61	0.42	71,71,71,71	0
55	MG	CA	2902	1/1	0.62	0.46	65,65,65,65	0
55	MG	DW	120	1/1	0.62	0.17	73,73,73,73	0
55	MG	CA	3326	1/1	0.62	0.47	61,61,61,61	0
55	MG	DA	1866	1/1	0.62	0.37	74,74,74,74	0
55	MG	AA	4138	1/1	0.62	0.33	69,69,69,69	0
55	MG	BV	111	1/1	0.62	0.23	65,65,65,65	0
55	MG	AA	4546	1/1	0.62	0.56	76,76,76,76	0
55	MG	CA	3972	1/1	0.62	0.40	46,46,46,46	0
55	MG	BA	1878	1/1	0.62	0.26	77,77,77,77	0
55	MG	AA	5200	1/1	0.62	0.56	64,64,64,64	0
55	MG	BA	1974	1/1	0.62	0.33	66,66,66,66	0
55	MG	CA	3844	1/1	0.62	0.45	54,54,54,54	0
55	MG	AA	4057	1/1	0.62	0.78	71,71,71,71	0
55	MG	AA	4556	1/1	0.62	0.27	80,80,80,80	0
55	MG	AA	5147	1/1	0.62	0.42	61,61,61,61	0
55	MG	DA	2123	1/1	0.62	0.55	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1607	1/1	0.62	0.93	74,74,74,74	0
55	MG	CA	3824	1/1	0.62	0.96	78,78,78,78	0
55	MG	CA	3722	1/1	0.62	0.24	82,82,82,82	0
55	MG	AA	4837	1/1	0.62	0.30	107,107,107,107	0
55	MG	BV	102	1/1	0.62	0.44	56,56,56,56	0
55	MG	AA	4978	1/1	0.62	0.14	99,99,99,99	0
55	MG	CA	3517	1/1	0.62	0.59	71,71,71,71	0
55	MG	DW	103	1/1	0.62	0.10	93,93,93,93	0
55	MG	AA	4780	1/1	0.62	0.81	68,68,68,68	0
55	MG	BA	2028	1/1	0.62	0.28	64,64,64,64	0
55	MG	BA	2127	1/1	0.62	0.73	69,69,69,69	0
55	MG	CF	303	1/1	0.62	1.15	53,53,53,53	0
55	MG	AA	4025	1/1	0.62	0.54	59,59,59,59	0
55	MG	BA	2003	1/1	0.62	0.33	49,49,49,49	0
55	MG	CA	3892	1/1	0.63	0.70	63,63,63,63	0
55	MG	CA	2954	1/1	0.63	0.34	76,76,76,76	0
55	MG	BA	1902	1/1	0.63	0.47	63,63,63,63	0
55	MG	CA	4147	1/1	0.63	0.57	64,64,64,64	0
55	MG	CA	3944	1/1	0.63	0.30	39,39,39,39	0
55	MG	BW	105	1/1	0.63	0.12	69,69,69,69	0
55	MG	CA	4294	1/1	0.63	0.48	94,94,94,94	0
55	MG	CA	4151	1/1	0.63	0.47	57,57,57,57	0
55	MG	DA	1671	1/1	0.63	0.75	78,78,78,78	0
55	MG	AA	4473	1/1	0.63	0.50	91,91,91,91	0
55	MG	DA	2192	1/1	0.63	0.55	58,58,58,58	0
55	MG	AA	4110	1/1	0.63	0.59	89,89,89,89	0
55	MG	AS	206	1/1	0.63	0.23	77,77,77,77	0
55	MG	AA	4375	1/1	0.63	0.46	61,61,61,61	0
55	MG	BA	1659	1/1	0.63	0.47	85,85,85,85	0
55	MG	AA	4121	1/1	0.63	0.81	82,82,82,82	0
55	MG	AA	4024	1/1	0.63	0.29	82,82,82,82	0
55	MG	DA	2119	1/1	0.63	0.31	75,75,75,75	0
55	MG	AA	4592	1/1	0.63	0.40	61,61,61,61	0
55	MG	AA	4514	1/1	0.63	0.54	81,81,81,81	0
55	MG	AA	4716	1/1	0.63	0.47	76,76,76,76	0
55	MG	BA	1859	1/1	0.64	0.47	53,53,53,53	0
55	MG	AA	5110	1/1	0.64	0.44	60,60,60,60	0
55	MG	CA	4190	1/1	0.64	0.38	51,51,51,51	0
55	MG	CA	3493	1/1	0.64	0.58	57,57,57,57	0
55	MG	AA	4924	1/1	0.64	0.28	78,78,78,78	0
55	MG	AA	4396	1/1	0.64	0.30	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1628	1/1	0.64	0.94	99,99,99,99	0
55	MG	AA	5178	1/1	0.64	0.44	74,74,74,74	0
55	MG	AA	4112	1/1	0.64	0.27	92,92,92,92	0
55	MG	BA	2134	1/1	0.64	0.58	63,63,63,63	0
55	MG	CK	202	1/1	0.64	0.36	57,57,57,57	0
55	MG	AA	4162	1/1	0.64	0.48	67,67,67,67	0
55	MG	BA	1652	1/1	0.64	0.63	84,84,84,84	0
55	MG	AA	4829	1/1	0.64	0.29	82,82,82,82	0
55	MG	CA	3755	1/1	0.64	0.33	52,52,52,52	0
55	MG	CA	4174	1/1	0.64	0.38	53,53,53,53	0
55	MG	CA	3841	1/1	0.64	0.18	71,71,71,71	0
55	MG	AA	4825	1/1	0.64	0.26	84,84,84,84	0
55	MG	BA	1930	1/1	0.64	0.19	75,75,75,75	0
55	MG	AA	4430	1/1	0.64	0.32	59,59,59,59	0
55	MG	AB	216	1/1	0.64	0.59	63,63,63,63	0
55	MG	CA	3089	1/1	0.64	0.13	81,81,81,81	0
55	MG	CA	3881	1/1	0.64	0.59	84,84,84,84	0
55	MG	CA	4402	1/1	0.64	0.24	94,94,94,94	0
55	MG	DQ	201	1/1	0.64	0.34	57,57,57,57	0
55	MG	BA	2052	1/1	0.64	0.35	81,81,81,81	0
55	MG	AA	4750	1/1	0.65	0.94	62,62,62,62	0
55	MG	AA	4842	1/1	0.65	0.49	111,111,111,111	0
55	MG	AF	306	1/1	0.65	0.27	53,53,53,53	0
55	MG	CA	3856	1/1	0.65	0.30	67,67,67,67	0
55	MG	DA	2129	1/1	0.65	0.21	72,72,72,72	0
55	MG	CA	4228	1/1	0.65	1.43	74,74,74,74	0
55	MG	CA	4289	1/1	0.65	0.33	65,65,65,65	0
55	MG	CA	3797	1/1	0.65	0.51	83,83,83,83	0
55	MG	CA	3677	1/1	0.65	0.45	67,67,67,67	0
55	MG	BA	2112	1/1	0.65	0.29	84,84,84,84	0
55	MG	AA	4844	1/1	0.65	1.15	59,59,59,59	0
55	MG	CA	4304	1/1	0.65	0.23	81,81,81,81	0
55	MG	AA	4737	1/1	0.65	0.51	71,71,71,71	0
55	MG	DA	1924	1/1	0.65	0.51	90,90,90,90	0
55	MG	BA	1765	1/1	0.65	0.18	93,93,93,93	0
55	MG	AB	233	1/1	0.65	0.17	64,64,64,64	0
55	MG	DA	2041	1/1	0.65	0.37	112,112,112,112	0
55	MG	AA	4594	1/1	0.65	1.30	75,75,75,75	0
55	MG	CA	4141	1/1	0.65	0.49	54,54,54,54	0
55	MG	CA	2914	1/1	0.65	0.72	66,66,66,66	0
55	MG	BA	1673	1/1	0.65	0.41	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4026	1/1	0.65	0.35	66,66,66,66	0
55	MG	AA	4529	1/1	0.65	0.49	88,88,88,88	0
55	MG	DA	1922	1/1	0.65	0.32	94,94,94,94	0
55	MG	DA	1752	1/1	0.65	0.45	89,89,89,89	0
55	MG	BA	1819	1/1	0.65	0.23	67,67,67,67	0
55	MG	AA	4305	1/1	0.66	0.76	55,55,55,55	0
55	MG	CA	3945	1/1	0.66	0.82	65,65,65,65	0
55	MG	CA	3412	1/1	0.66	0.17	57,57,57,57	0
55	MG	CA	4061	1/1	0.66	0.29	73,73,73,73	0
55	MG	AA	4067	1/1	0.66	0.74	82,82,82,82	0
55	MG	DV	114	1/1	0.66	0.25	68,68,68,68	0
55	MG	AA	4142	1/1	0.66	0.35	65,65,65,65	0
55	MG	DA	1763	1/1	0.66	0.90	68,68,68,68	0
55	MG	CA	2950	1/1	0.66	0.66	84,84,84,84	0
55	MG	DA	1612	1/1	0.66	0.42	141,141,141,141	0
55	MG	AA	5239	1/1	0.66	0.76	69,69,69,69	0
55	MG	DA	1680	1/1	0.66	0.37	83,83,83,83	0
55	MG	CB	212	1/1	0.66	0.52	104,104,104,104	0
55	MG	DA	1992	1/1	0.66	0.39	53,53,53,53	0
55	MG	BA	2139	1/1	0.66	0.96	96,96,96,96	0
55	MG	CW	103	1/1	0.66	0.54	47,47,47,47	0
55	MG	CA	4105	1/1	0.66	0.17	60,60,60,60	0
55	MG	CA	3554	1/1	0.66	0.40	62,62,62,62	0
55	MG	BA	1911	1/1	0.66	0.43	73,73,73,73	0
55	MG	CA	3800	1/1	0.66	0.51	92,92,92,92	0
55	MG	BA	2098	1/1	0.66	0.62	82,82,82,82	0
55	MG	AA	5295	1/1	0.66	0.36	103,103,103,103	0
55	MG	DI	201	1/1	0.66	0.54	72,72,72,72	0
55	MG	DA	1927	1/1	0.66	0.40	92,92,92,92	0
55	MG	CA	3623	1/1	0.66	0.50	69,69,69,69	0
55	MG	DV	117	1/1	0.66	0.19	81,81,81,81	0
55	MG	CA	3641	1/1	0.66	0.34	57,57,57,57	0
55	MG	DA	2151	1/1	0.66	0.14	124,124,124,124	0
55	MG	AB	228	1/1	0.66	0.18	75,75,75,75	0
55	MG	CA	4144	1/1	0.66	0.47	55,55,55,55	0
55	MG	CA	3024	1/1	0.67	0.56	75,75,75,75	0
55	MG	CA	4389	1/1	0.67	0.19	93,93,93,93	0
55	MG	DA	2054	1/1	0.67	0.15	77,77,77,77	0
55	MG	BA	1803	1/1	0.67	0.41	61,61,61,61	0
55	MG	CA	3917	1/1	0.67	0.48	70,70,70,70	0
55	MG	AA	4918	1/1	0.67	0.58	54,54,54,54	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3039	1/1	0.67	0.24	81,81,81,81	0
55	MG	CA	3578	1/1	0.67	0.29	58,58,58,58	0
55	MG	AA	4760	1/1	0.67	0.37	89,89,89,89	0
55	MG	AA	4885	1/1	0.67	0.23	88,88,88,88	0
55	MG	CA	3721	1/1	0.67	0.37	56,56,56,56	0
55	MG	CA	4349	1/1	0.67	0.43	84,84,84,84	0
55	MG	CA	3085	1/1	0.67	0.48	81,81,81,81	0
55	MG	CA	4070	1/1	0.67	0.56	46,46,46,46	0
55	MG	DA	1622	1/1	0.67	0.55	77,77,77,77	0
55	MG	DA	1773	1/1	0.67	0.27	83,83,83,83	0
55	MG	AA	5033	1/1	0.67	0.30	88,88,88,88	0
55	MG	AA	5041	1/1	0.67	0.39	84,84,84,84	0
55	MG	CA	4050	1/1	0.67	0.51	54,54,54,54	0
55	MG	DV	116	1/1	0.67	0.13	77,77,77,77	0
55	MG	CA	4347	1/1	0.67	0.80	81,81,81,81	0
55	MG	AA	4350	1/1	0.67	0.27	43,43,43,43	0
55	MG	AA	5089	1/1	0.67	0.34	57,57,57,57	0
55	MG	CA	4233	1/1	0.67	1.35	76,76,76,76	0
55	MG	CA	4308	1/1	0.67	0.15	83,83,83,83	0
55	MG	CA	3165	1/1	0.67	0.59	26,26,26,26	0
55	MG	BA	1970	1/1	0.67	0.27	61,61,61,61	0
55	MG	CA	3252	1/1	0.67	0.19	61,61,61,61	0
55	MG	AA	5243	1/1	0.67	0.23	107,107,107,107	0
55	MG	AA	4113	1/1	0.67	0.52	84,84,84,84	0
55	MG	CA	4395	1/1	0.67	0.86	85,85,85,85	0
55	MG	BA	2099	1/1	0.67	0.60	54,54,54,54	0
55	MG	DA	2075	1/1	0.67	0.24	72,72,72,72	0
55	MG	AA	4078	1/1	0.67	0.35	60,60,60,60	0
55	MG	AA	4986	1/1	0.68	0.50	65,65,65,65	0
55	MG	AA	5092	1/1	0.68	0.19	55,55,55,55	0
55	MG	BA	2160	1/1	0.68	0.37	91,91,91,91	0
55	MG	AA	4990	1/1	0.68	0.39	60,60,60,60	0
55	MG	DA	2058	1/1	0.68	0.15	86,86,86,86	0
55	MG	AA	4313	1/1	0.68	0.37	39,39,39,39	0
55	MG	AA	4159	1/1	0.68	0.98	77,77,77,77	0
55	MG	BA	2076	1/1	0.68	0.37	66,66,66,66	0
55	MG	CB	262	1/1	0.68	0.41	67,67,67,67	0
55	MG	CA	3825	1/1	0.68	0.27	83,83,83,83	0
55	MG	DA	1766	1/1	0.68	0.15	91,91,91,91	0
55	MG	BA	2077	1/1	0.68	0.37	72,72,72,72	0
55	MG	BA	1645	1/1	0.68	0.42	86,86,86,86	0
55	MG	AA	5162	1/1	0.68	0.17	47,47,47,47	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3651	1/1	0.68	0.16	70,70,70,70	0
55	MG	CA	4352	1/1	0.68	0.67	80,80,80,80	0
55	MG	CA	3583	1/1	0.68	0.45	111,111,111,111	0
55	MG	CA	4199	1/1	0.68	0.17	70,70,70,70	0
55	MG	AA	4945	1/1	0.68	0.45	58,58,58,58	0
55	MG	AA	4447	1/1	0.68	0.49	63,63,63,63	0
55	MG	BA	2142	1/1	0.68	0.30	78,78,78,78	0
55	MG	CA	4218	1/1	0.68	0.23	75,75,75,75	0
55	MG	AA	4576	1/1	0.68	0.26	60,60,60,60	0
55	MG	BA	2046	1/1	0.68	0.79	82,82,82,82	0
55	MG	AA	4994	1/1	0.68	0.53	63,63,63,63	0
55	MG	CA	3466	1/1	0.68	0.27	56,56,56,56	0
55	MG	CA	4046	1/1	0.68	0.57	59,59,59,59	0
55	MG	AA	4763	1/1	0.68	0.60	137,137,137,137	0
55	MG	CB	228	1/1	0.68	0.23	67,67,67,67	0
55	MG	BA	2133	1/1	0.68	0.52	77,77,77,77	0
55	MG	DA	1859	1/1	0.68	0.22	91,91,91,91	0
55	MG	CA	3540	1/1	0.68	0.72	49,49,49,49	0
55	MG	AB	221	1/1	0.68	0.16	74,74,74,74	0
55	MG	CA	3541	1/1	0.68	0.37	63,63,63,63	0
55	MG	AA	5059	1/1	0.68	0.48	48,48,48,48	0
55	MG	CA	3522	1/1	0.68	0.43	56,56,56,56	0
55	MG	CA	4273	1/1	0.68	0.41	82,82,82,82	0
55	MG	AA	5177	1/1	0.68	0.45	63,63,63,63	0
55	MG	AA	4653	1/1	0.69	0.47	90,90,90,90	0
55	MG	BA	1979	1/1	0.69	0.11	64,64,64,64	0
55	MG	AA	4130	1/1	0.69	0.44	78,78,78,78	0
55	MG	BA	2109	1/1	0.69	0.76	63,63,63,63	0
55	MG	AA	4429	1/1	0.69	0.20	36,36,36,36	0
55	MG	AA	4696	1/1	0.69	0.56	50,50,50,50	0
55	MG	CA	3454	1/1	0.69	0.26	55,55,55,55	0
55	MG	AA	4759	1/1	0.69	0.53	55,55,55,55	0
55	MG	AA	4342	1/1	0.69	0.47	40,40,40,40	0
55	MG	AA	5131	1/1	0.69	0.17	86,86,86,86	0
55	MG	CA	4300	1/1	0.69	0.40	46,46,46,46	0
55	MG	DA	2099	1/1	0.69	0.42	55,55,55,55	0
55	MG	BA	1992	1/1	0.69	0.80	67,67,67,67	0
55	MG	BA	2068	1/1	0.69	0.32	69,69,69,69	0
55	MG	CA	3883	1/1	0.69	0.91	77,77,77,77	0
55	MG	AA	4992	1/1	0.69	0.36	48,48,48,48	0
55	MG	AA	4508	1/1	0.69	0.19	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4175	1/1	0.69	0.40	64,64,64,64	0
55	MG	CA	4109	1/1	0.69	0.51	45,45,45,45	0
55	MG	CA	4192	1/1	0.69	0.34	43,43,43,43	0
55	MG	AA	5028	1/1	0.69	0.26	68,68,68,68	0
55	MG	DV	111	1/1	0.69	0.28	75,75,75,75	0
55	MG	AA	5063	1/1	0.69	0.51	59,59,59,59	0
55	MG	AA	4106	1/1	0.69	0.25	54,54,54,54	0
55	MG	AA	4093	1/1	0.69	0.31	104,104,104,104	0
55	MG	AA	4958	1/1	0.69	0.41	78,78,78,78	0
55	MG	CA	4243	1/1	0.69	0.29	68,68,68,68	0
55	MG	CA	4362	1/1	0.69	0.42	58,58,58,58	0
55	MG	DA	1849	1/1	0.69	0.28	65,65,65,65	0
55	MG	CA	4058	1/1	0.69	0.45	48,48,48,48	0
55	MG	BA	2113	1/1	0.69	0.27	58,58,58,58	0
55	MG	AA	4855	1/1	0.69	0.25	36,36,36,36	0
55	MG	DA	1933	1/1	0.69	0.55	61,61,61,61	0
55	MG	DA	2126	1/1	0.69	0.40	59,59,59,59	0
55	MG	CA	3626	1/1	0.69	0.51	103,103,103,103	0
55	MG	DA	2038	1/1	0.69	0.19	114,114,114,114	0
55	MG	AA	4114	1/1	0.69	0.51	64,64,64,64	0
55	MG	CA	4106	1/1	0.69	0.16	49,49,49,49	0
55	MG	BA	1640	1/1	0.69	0.35	75,75,75,75	0
55	MG	BA	2044	1/1	0.69	0.30	56,56,56,56	0
55	MG	BA	2002	1/1	0.69	0.63	71,71,71,71	0
55	MG	BA	1967	1/1	0.69	0.86	56,56,56,56	0
55	MG	AA	5271	1/1	0.69	0.24	82,82,82,82	0
55	MG	BA	2138	1/1	0.69	0.27	51,51,51,51	0
55	MG	AA	4115	1/1	0.69	0.24	86,86,86,86	0
55	MG	CA	3339	1/1	0.69	0.14	50,50,50,50	0
55	MG	BA	1752	1/1	0.69	0.57	69,69,69,69	0
55	MG	BA	1836	1/1	0.69	0.32	79,79,79,79	0
55	MG	BA	1954	1/1	0.69	0.29	56,56,56,56	0
55	MG	AA	4023	1/1	0.70	0.45	71,71,71,71	0
55	MG	AA	4378	1/1	0.70	0.21	54,54,54,54	0
55	MG	AA	4906	1/1	0.70	0.74	63,63,63,63	0
55	MG	CA	4404	1/1	0.70	0.76	66,66,66,66	0
55	MG	AA	4471	1/1	0.70	0.38	53,53,53,53	0
55	MG	CA	3438	1/1	0.70	0.21	54,54,54,54	0
55	MG	DA	1893	1/1	0.70	0.37	65,65,65,65	0
55	MG	AA	5020	1/1	0.70	0.44	57,57,57,57	0
55	MG	DA	1684	1/1	0.70	0.42	72,72,72,72	0
55	MG	CA	2926	1/1	0.70	0.71	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3729	1/1	0.70	0.31	101,101,101,101	0
55	MG	AA	4314	1/1	0.70	0.37	36,36,36,36	0
55	MG	CA	4276	1/1	0.70	0.34	61,61,61,61	0
55	MG	BA	1931	1/1	0.70	0.76	61,61,61,61	0
55	MG	AA	4916	1/1	0.70	0.38	58,58,58,58	0
55	MG	BA	1833	1/1	0.70	0.57	55,55,55,55	0
55	MG	CB	255	1/1	0.70	0.23	62,62,62,62	0
55	MG	BA	2086	1/1	0.70	0.54	71,71,71,71	0
55	MG	DA	1619	1/1	0.70	0.54	77,77,77,77	0
55	MG	AA	4721	1/1	0.70	0.30	76,76,76,76	0
55	MG	AA	5248	1/1	0.70	0.45	59,59,59,59	0
55	MG	CA	3891	1/1	0.70	0.44	50,50,50,50	0
55	MG	AA	5190	1/1	0.70	0.73	73,73,73,73	0
55	MG	AA	4549	1/1	0.70	0.41	39,39,39,39	0
55	MG	BA	2049	1/1	0.70	0.26	59,59,59,59	0
55	MG	DA	1921	1/1	0.70	0.41	53,53,53,53	0
55	MG	AA	4748	1/1	0.70	0.39	104,104,104,104	0
55	MG	DA	2152	1/1	0.70	0.15	69,69,69,69	0
55	MG	BA	1841	1/1	0.70	0.33	60,60,60,60	0
55	MG	BA	1827	1/1	0.70	0.52	73,73,73,73	0
55	MG	DA	1646	1/1	0.70	0.36	72,72,72,72	0
55	MG	CA	3462	1/1	0.70	0.48	64,64,64,64	0
55	MG	BA	1808	1/1	0.70	0.46	67,67,67,67	0
55	MG	CA	3566	1/1	0.70	0.28	63,63,63,63	0
55	MG	AA	4573	1/1	0.70	0.24	59,59,59,59	0
55	MG	DA	1973	1/1	0.70	0.71	49,49,49,49	0
55	MG	AB	205	1/1	0.70	0.55	88,88,88,88	0
55	MG	CA	3050	1/1	0.70	0.39	80,80,80,80	0
55	MG	AA	4973	1/1	0.70	0.47	65,65,65,65	0
55	MG	AA	4809	1/1	0.71	0.52	65,65,65,65	0
55	MG	CA	3269	1/1	0.71	0.34	40,40,40,40	0
55	MG	CA	3417	1/1	0.71	0.14	45,45,45,45	0
55	MG	CA	2981	1/1	0.71	0.45	48,48,48,48	0
55	MG	CA	4112	1/1	0.71	0.16	49,49,49,49	0
55	MG	CB	244	1/1	0.71	0.30	76,76,76,76	0
55	MG	BA	1900	1/1	0.71	0.40	98,98,98,98	0
55	MG	CG	201	1/1	0.71	0.30	86,86,86,86	0
55	MG	CA	3956	1/1	0.71	0.39	64,64,64,64	0
55	MG	CA	3898	1/1	0.71	0.45	65,65,65,65	0
55	MG	CA	4008	1/1	0.71	0.32	61,61,61,61	0
55	MG	AA	4810	1/1	0.71	0.41	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1787	1/1	0.71	0.27	81,81,81,81	0
55	MG	BV	121	1/1	0.71	0.36	65,65,65,65	0
55	MG	DA	1935	1/1	0.71	0.48	69,69,69,69	0
55	MG	AA	4477	1/1	0.71	0.39	59,59,59,59	0
55	MG	BA	1745	1/1	0.71	0.30	70,70,70,70	0
55	MG	AA	4757	1/1	0.71	0.39	78,78,78,78	0
55	MG	CA	3716	1/1	0.71	0.52	105,105,105,105	0
55	MG	BA	1785	1/1	0.71	0.18	73,73,73,73	0
55	MG	CA	3849	1/1	0.71	0.47	119,119,119,119	0
55	MG	DA	2195	1/1	0.71	0.86	78,78,78,78	0
55	MG	CA	3938	1/1	0.71	0.42	64,64,64,64	0
55	MG	CA	3996	1/1	0.71	0.28	49,49,49,49	0
55	MG	CV	204	1/1	0.71	0.14	86,86,86,86	0
55	MG	DA	2179	1/1	0.71	0.35	73,73,73,73	0
55	MG	DA	1725	1/1	0.71	0.29	59,59,59,59	0
55	MG	AA	5154	1/1	0.71	0.64	45,45,45,45	0
55	MG	AA	4944	1/1	0.71	0.31	53,53,53,53	0
55	MG	AA	4524	1/1	0.71	0.47	87,87,87,87	0
55	MG	CA	3995	1/1	0.71	0.84	36,36,36,36	0
55	MG	AB	227	1/1	0.71	0.28	95,95,95,95	0
55	MG	AA	4746	1/1	0.71	0.25	71,71,71,71	0
55	MG	BW	106	1/1	0.71	0.18	91,91,91,91	0
55	MG	DA	1717	1/1	0.71	0.65	91,91,91,91	0
55	MG	DA	1761	1/1	0.71	0.73	76,76,76,76	0
55	MG	AA	4125	1/1	0.71	0.39	66,66,66,66	0
55	MG	BA	2101	1/1	0.71	0.33	59,59,59,59	0
55	MG	AA	4756	1/1	0.71	1.22	69,69,69,69	0
55	MG	DA	1731	1/1	0.71	0.30	47,47,47,47	0
55	MG	DA	1826	1/1	0.71	0.53	73,73,73,73	0
55	MG	CA	3352	1/1	0.71	0.21	61,61,61,61	0
55	MG	CA	4221	1/1	0.71	0.44	69,69,69,69	0
55	MG	CA	4334	1/1	0.71	0.35	102,102,102,102	0
55	MG	CA	3720	1/1	0.71	0.73	60,60,60,60	0
55	MG	CA	4116	1/1	0.71	0.34	56,56,56,56	0
55	MG	DA	1904	1/1	0.71	0.29	57,57,57,57	0
55	MG	DA	2199	1/1	0.71	0.30	59,59,59,59	0
55	MG	BA	2115	1/1	0.71	0.29	56,56,56,56	0
55	MG	CA	4263	1/1	0.71	0.42	61,61,61,61	0
55	MG	CA	3871	1/1	0.71	0.57	64,64,64,64	0
55	MG	CA	3532	1/1	0.71	0.56	64,64,64,64	0
55	MG	AA	5294	1/1	0.71	0.26	61,61,61,61	0
55	MG	AB	202	1/1	0.71	0.45	95,95,95,95	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4194	1/1	0.71	0.41	78,78,78,78	0
55	MG	DA	1818	1/1	0.71	0.42	68,68,68,68	0
55	MG	BV	129	1/1	0.71	0.16	92,92,92,92	0
55	MG	BA	1846	1/1	0.72	0.33	87,87,87,87	0
55	MG	BA	1724	1/1	0.72	0.45	55,55,55,55	0
55	MG	AA	4794	1/1	0.72	0.28	106,106,106,106	0
55	MG	BV	116	1/1	0.72	0.44	74,74,74,74	0
55	MG	AA	5268	1/1	0.72	0.55	62,62,62,62	0
55	MG	BA	1847	1/1	0.72	0.12	52,52,52,52	0
55	MG	BA	1720	1/1	0.72	0.32	54,54,54,54	0
55	MG	BA	1790	1/1	0.72	0.16	109,109,109,109	0
55	MG	AA	4982	1/1	0.72	0.57	60,60,60,60	0
55	MG	BA	1857	1/1	0.72	0.17	72,72,72,72	0
55	MG	CA	3835	1/1	0.72	0.27	69,69,69,69	0
55	MG	CA	3862	1/1	0.72	0.43	44,44,44,44	0
55	MG	BR	101	1/1	0.72	0.56	77,77,77,77	0
55	MG	CA	4348	1/1	0.72	0.76	89,89,89,89	0
55	MG	AA	4361	1/1	0.72	0.35	47,47,47,47	0
55	MG	DA	1721	1/1	0.72	0.23	79,79,79,79	0
55	MG	AA	5212	1/1	0.72	0.30	74,74,74,74	0
55	MG	CA	3070	1/1	0.72	0.39	39,39,39,39	0
55	MG	AA	5000	1/1	0.72	0.38	50,50,50,50	0
55	MG	AA	4680	1/1	0.72	0.43	68,68,68,68	0
55	MG	AA	4354	1/1	0.72	0.42	55,55,55,55	0
55	MG	AA	4954	1/1	0.72	0.21	42,42,42,42	0
55	MG	BA	1761	1/1	0.72	0.44	61,61,61,61	0
55	MG	BA	2132	1/1	0.72	0.46	82,82,82,82	0
55	MG	CA	4237	1/1	0.72	0.36	55,55,55,55	0
55	MG	CA	4182	1/1	0.72	0.25	47,47,47,47	0
55	MG	CA	4025	1/1	0.72	0.38	76,76,76,76	0
55	MG	CA	3782	1/1	0.72	0.69	76,76,76,76	0
55	MG	CA	3500	1/1	0.72	0.69	69,69,69,69	0
55	MG	BA	1824	1/1	0.72	0.39	76,76,76,76	0
55	MG	CA	3209	1/1	0.72	0.39	38,38,38,38	0
55	MG	DA	1648	1/1	0.72	0.47	68,68,68,68	0
55	MG	DA	2194	1/1	0.72	0.29	79,79,79,79	0
55	MG	AA	4567	1/1	0.72	0.69	83,83,83,83	0
55	MG	BA	1915	1/1	0.72	0.18	58,58,58,58	0
55	MG	AA	4702	1/1	0.72	0.48	89,89,89,89	0
55	MG	CA	3058	1/1	0.72	0.59	66,66,66,66	0
55	MG	AA	4089	1/1	0.72	0.43	96,96,96,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2003	1/1	0.72	0.22	53,53,53,53	0
55	MG	AA	5159	1/1	0.72	1.00	69,69,69,69	0
55	MG	DA	2083	1/1	0.72	0.68	53,53,53,53	0
55	MG	AA	4499	1/1	0.72	0.42	74,74,74,74	0
55	MG	CA	3713	1/1	0.72	0.41	54,54,54,54	0
55	MG	AA	4732	1/1	0.72	1.04	112,112,112,112	0
55	MG	AA	4152	1/1	0.72	0.34	68,68,68,68	0
55	MG	CA	3100	1/1	0.72	0.29	86,86,86,86	0
55	MG	AA	5140	1/1	0.72	0.37	84,84,84,84	0
55	MG	CA	3882	1/1	0.72	0.12	60,60,60,60	0
55	MG	AA	4833	1/1	0.72	0.47	69,69,69,69	0
55	MG	CA	4367	1/1	0.73	0.60	46,46,46,46	0
55	MG	CA	3322	1/1	0.73	1.37	66,66,66,66	0
55	MG	AA	4074	1/1	0.73	0.42	54,54,54,54	0
55	MG	CA	3324	1/1	0.73	0.35	53,53,53,53	0
55	MG	CA	4346	1/1	0.73	0.18	60,60,60,60	0
55	MG	DA	2157	1/1	0.73	0.33	31,31,31,31	0
55	MG	BA	1939	1/1	0.73	0.31	69,69,69,69	0
55	MG	CA	4261	1/1	0.73	0.37	48,48,48,48	0
55	MG	BC	301	1/1	0.73	0.72	64,64,64,64	0
55	MG	AA	5108	1/1	0.73	0.28	66,66,66,66	0
55	MG	DA	2010	1/1	0.73	0.09	61,61,61,61	0
55	MG	CA	4222	1/1	0.73	1.05	62,62,62,62	0
55	MG	CA	4242	1/1	0.73	0.39	47,47,47,47	0
55	MG	CA	3535	1/1	0.73	0.43	53,53,53,53	0
55	MG	CA	3356	1/1	0.73	0.60	34,34,34,34	0
55	MG	BA	1901	1/1	0.73	1.03	48,48,48,48	0
55	MG	DA	1896	1/1	0.73	0.45	74,74,74,74	0
55	MG	CA	4039	1/1	0.73	0.23	60,60,60,60	0
55	MG	DA	1651	1/1	0.73	0.49	69,69,69,69	0
55	MG	CA	4235	1/1	0.73	0.51	51,51,51,51	0
55	MG	AA	4310	1/1	0.73	0.46	37,37,37,37	0
55	MG	CA	3877	1/1	0.73	0.48	65,65,65,65	0
55	MG	AA	4448	1/1	0.73	0.14	59,59,59,59	0
55	MG	CA	4283	1/1	0.73	0.25	55,55,55,55	0
55	MG	AA	4749	1/1	0.73	0.52	51,51,51,51	0
55	MG	BA	1875	1/1	0.73	0.69	78,78,78,78	0
55	MG	CA	3727	1/1	0.73	0.41	89,89,89,89	0
55	MG	AA	5185	1/1	0.73	0.37	102,102,102,102	0
55	MG	BA	1947	1/1	0.73	0.62	69,69,69,69	0
55	MG	DA	1800	1/1	0.73	0.34	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1901	1/1	0.73	0.60	68,68,68,68	0
55	MG	CA	4117	1/1	0.73	1.26	76,76,76,76	0
55	MG	AA	5169	1/1	0.73	0.89	71,71,71,71	0
55	MG	BA	1923	1/1	0.73	0.45	54,54,54,54	0
55	MG	DA	1789	1/1	0.73	0.14	90,90,90,90	0
55	MG	DA	2198	1/1	0.73	0.49	87,87,87,87	0
55	MG	AA	5226	1/1	0.73	0.40	78,78,78,78	0
55	MG	BA	1739	1/1	0.73	0.52	73,73,73,73	0
55	MG	AA	4708	1/1	0.73	0.44	72,72,72,72	0
55	MG	CA	3789	1/1	0.73	0.47	94,94,94,94	0
55	MG	AA	4628	1/1	0.73	0.68	68,68,68,68	0
55	MG	AA	5229	1/1	0.73	0.44	54,54,54,54	0
55	MG	CA	4004	1/1	0.73	0.72	48,48,48,48	0
55	MG	DW	105	1/1	0.73	0.11	92,92,92,92	0
55	MG	CA	3023	1/1	0.73	0.29	64,64,64,64	0
55	MG	AA	4629	1/1	0.73	0.24	112,112,112,112	0
55	MG	AA	4606	1/1	0.73	0.56	109,109,109,109	0
55	MG	CA	3551	1/1	0.73	0.52	87,87,87,87	0
55	MG	CA	3439	1/1	0.73	0.37	36,36,36,36	0
55	MG	DA	2104	1/1	0.73	0.18	124,124,124,124	0
55	MG	BA	1608	1/1	0.73	0.48	69,69,69,69	0
55	MG	BA	1897	1/1	0.73	0.12	53,53,53,53	0
55	MG	AB	218	1/1	0.73	0.84	93,93,93,93	0
55	MG	CA	3561	1/1	0.73	0.51	68,68,68,68	0
55	MG	CA	2989	1/1	0.73	0.32	83,83,83,83	0
55	MG	DA	2183	1/1	0.73	0.35	96,96,96,96	0
55	MG	AA	4817	1/1	0.73	0.08	98,98,98,98	0
55	MG	AA	4009	1/1	0.73	0.15	56,56,56,56	0
55	MG	DA	2184	1/1	0.73	0.66	79,79,79,79	0
55	MG	CA	3932	1/1	0.73	0.42	54,54,54,54	0
55	MG	BA	1731	1/1	0.73	0.82	37,37,37,37	0
55	MG	AA	4084	1/1	0.73	0.46	61,61,61,61	0
55	MG	AA	4055	1/1	0.73	0.37	92,92,92,92	0
55	MG	AA	4965	1/1	0.73	0.50	51,51,51,51	0
55	MG	CA	3081	1/1	0.73	0.20	80,80,80,80	0
55	MG	CA	3730	1/1	0.73	0.20	74,74,74,74	0
55	MG	CA	3473	1/1	0.74	0.20	80,80,80,80	0
55	MG	CA	3593	1/1	0.74	0.50	62,62,62,62	0
55	MG	BA	1966	1/1	0.74	0.32	69,69,69,69	0
55	MG	CA	3433	1/1	0.74	0.35	67,67,67,67	0
55	MG	CA	3620	1/1	0.74	0.30	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1957	1/1	0.74	0.18	43,43,43,43	0
55	MG	CA	3041	1/1	0.74	0.37	72,72,72,72	0
55	MG	CA	4193	1/1	0.74	0.26	58,58,58,58	0
55	MG	AA	5072	1/1	0.74	0.27	78,78,78,78	0
55	MG	AA	4731	1/1	0.74	0.29	119,119,119,119	0
55	MG	DA	1662	1/1	0.74	0.21	64,64,64,64	0
55	MG	AF	303	1/1	0.74	0.38	62,62,62,62	0
55	MG	CA	3766	1/1	0.74	0.34	89,89,89,89	0
55	MG	CA	4280	1/1	0.74	0.49	84,84,84,84	0
55	MG	AA	4861	1/1	0.74	0.10	79,79,79,79	0
55	MG	CA	3321	1/1	0.74	0.53	45,45,45,45	0
55	MG	DA	2072	1/1	0.74	0.30	49,49,49,49	0
55	MG	CA	3837	1/1	0.74	0.38	71,71,71,71	0
55	MG	BA	1787	1/1	0.74	0.22	98,98,98,98	0
55	MG	BW	118	1/1	0.74	0.44	61,61,61,61	0
55	MG	AA	4521	1/1	0.74	0.15	64,64,64,64	0
55	MG	CA	3080	1/1	0.74	0.43	65,65,65,65	0
55	MG	AA	4664	1/1	0.74	0.43	74,74,74,74	0
55	MG	DA	1678	1/1	0.74	0.57	74,74,74,74	0
55	MG	BA	1810	1/1	0.74	0.48	75,75,75,75	0
55	MG	AA	5235	1/1	0.74	0.51	67,67,67,67	0
55	MG	DA	2177	1/1	0.74	0.27	105,105,105,105	0
55	MG	BA	2118	1/1	0.74	0.39	64,64,64,64	0
55	MG	DA	1872	1/1	0.74	0.87	96,96,96,96	0
55	MG	DA	2028	1/1	0.74	0.67	82,82,82,82	0
55	MG	DA	2150	1/1	0.74	0.47	57,57,57,57	0
55	MG	CB	227	1/1	0.74	0.25	76,76,76,76	0
55	MG	BA	2038	1/1	0.74	0.27	51,51,51,51	0
55	MG	BA	1991	1/1	0.74	0.28	62,62,62,62	0
55	MG	CA	3453	1/1	0.74	0.45	49,49,49,49	0
55	MG	CA	3803	1/1	0.74	0.89	121,121,121,121	0
55	MG	CA	2984	1/1	0.74	0.47	103,103,103,103	0
55	MG	AA	4948	1/1	0.74	0.33	56,56,56,56	0
55	MG	AA	5050	1/1	0.74	0.30	63,63,63,63	0
55	MG	BA	1972	1/1	0.74	0.75	55,55,55,55	0
55	MG	AA	5142	1/1	0.74	0.58	69,69,69,69	0
55	MG	AA	4150	1/1	0.74	0.40	86,86,86,86	0
55	MG	BA	1993	1/1	0.74	0.24	28,28,28,28	0
55	MG	AA	5173	1/1	0.74	0.27	68,68,68,68	0
55	MG	CA	3958	1/1	0.74	0.46	51,51,51,51	0
55	MG	AA	4462	1/1	0.74	0.39	48,48,48,48	0
55	MG	CA	3008	1/1	0.74	0.46	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2055	1/1	0.74	0.53	59,59,59,59	0
55	MG	CL	201	1/1	0.74	0.40	76,76,76,76	0
55	MG	DA	2169	1/1	0.74	0.44	54,54,54,54	0
55	MG	AA	4017	1/1	0.74	1.20	155,155,155,155	0
55	MG	AA	4951	1/1	0.74	0.34	64,64,64,64	0
55	MG	AA	5160	1/1	0.74	0.43	55,55,55,55	0
55	MG	CA	3399	1/1	0.74	0.43	37,37,37,37	0
55	MG	DA	1942	1/1	0.74	0.38	58,58,58,58	0
55	MG	DA	2144	1/1	0.74	0.96	63,63,63,63	0
55	MG	BA	2008	1/1	0.74	0.65	45,45,45,45	0
55	MG	DA	1834	1/1	0.74	0.33	123,123,123,123	0
55	MG	CA	3833	1/1	0.74	0.22	75,75,75,75	0
55	MG	AM	201	1/1	0.74	0.38	62,62,62,62	0
55	MG	DA	1753	1/1	0.74	0.33	52,52,52,52	0
55	MG	BA	1641	1/1	0.74	0.42	63,63,63,63	0
55	MG	DA	1928	1/1	0.74	0.73	68,68,68,68	0
55	MG	DA	2155	1/1	0.74	0.14	83,83,83,83	0
55	MG	AA	4987	1/1	0.74	0.15	78,78,78,78	0
55	MG	BA	2151	1/1	0.74	0.40	76,76,76,76	0
55	MG	DA	2051	1/1	0.74	0.54	65,65,65,65	0
55	MG	AA	4773	1/1	0.74	0.54	69,69,69,69	0
55	MG	AA	4515	1/1	0.74	0.28	62,62,62,62	0
55	MG	BH	201	1/1	0.74	0.27	64,64,64,64	0
55	MG	DA	1883	1/1	0.74	0.37	75,75,75,75	0
55	MG	DA	2087	1/1	0.74	0.59	64,64,64,64	0
55	MG	AA	5253	1/1	0.74	0.13	90,90,90,90	0
55	MG	DW	119	1/1	0.75	0.36	49,49,49,49	0
55	MG	DA	1654	1/1	0.75	0.35	131,131,131,131	0
55	MG	DA	2138	1/1	0.75	0.18	58,58,58,58	0
55	MG	DA	1660	1/1	0.75	0.29	126,126,126,126	0
55	MG	DA	1686	1/1	0.75	0.11	97,97,97,97	0
55	MG	CA	3382	1/1	0.75	0.65	38,38,38,38	0
55	MG	CA	3528	1/1	0.75	0.43	43,43,43,43	0
55	MG	DA	1871	1/1	0.75	0.10	69,69,69,69	0
55	MG	CA	4161	1/1	0.75	0.29	65,65,65,65	0
55	MG	CA	2938	1/1	0.75	0.75	107,107,107,107	0
55	MG	AA	4694	1/1	0.75	0.34	92,92,92,92	0
55	MG	CA	3948	1/1	0.75	0.62	66,66,66,66	0
55	MG	BA	1680	1/1	0.75	0.44	72,72,72,72	0
55	MG	BA	2082	1/1	0.75	0.47	54,54,54,54	0
55	MG	CA	4036	1/1	0.75	0.13	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AF	301	1/1	0.75	0.67	59,59,59,59	0
55	MG	CA	4239	1/1	0.75	0.55	56,56,56,56	0
55	MG	AA	5275	1/1	0.75	0.31	59,59,59,59	0
55	MG	AG	202	1/1	0.75	0.41	76,76,76,76	0
55	MG	CA	3003	1/1	0.75	0.10	69,69,69,69	0
55	MG	AA	5240	1/1	0.75	0.53	93,93,93,93	0
55	MG	AA	5184	1/1	0.75	0.39	73,73,73,73	0
55	MG	CB	257	1/1	0.75	0.73	81,81,81,81	0
55	MG	AA	5232	1/1	0.75	0.33	76,76,76,76	0
55	MG	BA	1896	1/1	0.75	0.16	66,66,66,66	0
55	MG	BA	2007	1/1	0.75	0.23	82,82,82,82	0
55	MG	CA	3986	1/1	0.75	0.65	38,38,38,38	0
55	MG	BA	1639	1/1	0.75	0.44	62,62,62,62	0
55	MG	AA	4989	1/1	0.75	0.12	72,72,72,72	0
55	MG	AA	4065	1/1	0.75	0.40	100,100,100,100	0
55	MG	DA	2089	1/1	0.75	0.35	58,58,58,58	0
55	MG	AA	4806	1/1	0.75	0.37	48,48,48,48	0
55	MG	CA	3649	1/1	0.75	0.40	54,54,54,54	0
55	MG	BA	1929	1/1	0.75	0.47	72,72,72,72	0
55	MG	AA	4838	1/1	0.75	0.21	73,73,73,73	0
55	MG	CA	4359	1/1	0.75	0.45	56,56,56,56	0
55	MG	CA	4284	1/1	0.75	0.37	63,63,63,63	0
55	MG	CA	3459	1/1	0.75	0.34	45,45,45,45	0
55	MG	BA	2047	1/1	0.75	0.27	58,58,58,58	0
55	MG	AA	4347	1/1	0.75	0.34	54,54,54,54	0
55	MG	CB	220	1/1	0.75	0.17	31,31,31,31	0
55	MG	BA	1898	1/1	0.75	0.44	54,54,54,54	0
55	MG	BA	1744	1/1	0.75	0.39	51,51,51,51	0
55	MG	AA	4678	1/1	0.75	0.40	62,62,62,62	0
55	MG	AA	4783	1/1	0.75	0.14	70,70,70,70	0
55	MG	AA	4797	1/1	0.75	0.55	50,50,50,50	0
55	MG	BA	1793	1/1	0.75	0.18	73,73,73,73	0
55	MG	BA	1863	1/1	0.75	0.44	56,56,56,56	0
55	MG	CA	3226	1/1	0.75	0.16	25,25,25,25	0
55	MG	CA	3864	1/1	0.75	0.48	55,55,55,55	0
55	MG	DA	2127	1/1	0.75	0.45	68,68,68,68	0
55	MG	CB	245	1/1	0.75	0.27	51,51,51,51	0
55	MG	CA	3062	1/1	0.75	0.65	68,68,68,68	0
55	MG	AA	5244	1/1	0.75	0.38	68,68,68,68	0
55	MG	CA	4220	1/1	0.75	0.14	95,95,95,95	0
55	MG	AA	4435	1/1	0.75	0.25	38,38,38,38	0
55	MG	BW	117	1/1	0.75	0.44	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4481	1/1	0.75	0.49	58,58,58,58	0
55	MG	DA	1838	1/1	0.75	0.24	73,73,73,73	0
55	MG	CA	3460	1/1	0.75	0.43	45,45,45,45	0
55	MG	BA	1775	1/1	0.75	0.52	64,64,64,64	0
55	MG	CA	4142	1/1	0.75	0.14	103,103,103,103	0
55	MG	CA	3653	1/1	0.75	0.91	82,82,82,82	0
55	MG	AA	4643	1/1	0.75	0.20	65,65,65,65	0
55	MG	AA	5223	1/1	0.75	0.43	70,70,70,70	0
55	MG	BA	2123	1/1	0.75	0.86	82,82,82,82	0
55	MG	BA	1675	1/1	0.76	0.37	60,60,60,60	0
55	MG	AA	4821	1/1	0.76	0.31	70,70,70,70	0
55	MG	AA	4942	1/1	0.76	0.18	56,56,56,56	0
55	MG	CA	3002	1/1	0.76	0.46	58,58,58,58	0
55	MG	BV	107	1/1	0.76	0.16	68,68,68,68	0
55	MG	CA	4122	1/1	0.76	0.74	49,49,49,49	0
55	MG	AA	4676	1/1	0.76	0.23	74,74,74,74	0
55	MG	CA	4180	1/1	0.76	0.18	63,63,63,63	0
55	MG	CA	4048	1/1	0.76	0.24	65,65,65,65	0
55	MG	AA	4656	1/1	0.76	0.92	69,69,69,69	0
55	MG	CA	3809	1/1	0.76	0.36	62,62,62,62	0
55	MG	BA	1909	1/1	0.76	0.26	67,67,67,67	0
55	MG	AA	5188	1/1	0.76	0.29	77,77,77,77	0
55	MG	AA	4913	1/1	0.76	0.26	36,36,36,36	0
55	MG	CA	3770	1/1	0.76	0.28	62,62,62,62	0
55	MG	AA	4912	1/1	0.76	0.37	49,49,49,49	0
55	MG	CA	3544	1/1	0.76	0.35	53,53,53,53	0
55	MG	AA	5249	1/1	0.76	0.45	69,69,69,69	0
55	MG	AA	4804	1/1	0.76	0.60	57,57,57,57	0
55	MG	AA	5109	1/1	0.76	0.35	88,88,88,88	0
55	MG	BA	1866	1/1	0.76	0.33	57,57,57,57	0
55	MG	BA	1660	1/1	0.76	0.25	73,73,73,73	0
55	MG	DA	1911	1/1	0.76	0.25	58,58,58,58	0
55	MG	CA	4272	1/1	0.76	0.40	65,65,65,65	0
55	MG	AA	4147	1/1	0.76	0.36	75,75,75,75	0
55	MG	AA	4947	1/1	0.76	0.46	61,61,61,61	0
55	MG	BA	1980	1/1	0.76	0.37	53,53,53,53	0
55	MG	CA	3857	1/1	0.76	0.45	44,44,44,44	0
55	MG	AA	5281	1/1	0.76	0.29	56,56,56,56	0
55	MG	DA	1878	1/1	0.76	0.38	111,111,111,111	0
55	MG	CA	3495	1/1	0.76	0.32	58,58,58,58	0
55	MG	CA	3291	1/1	0.76	0.21	31,31,31,31	0
55	MG	AA	4587	1/1	0.76	0.11	107,107,107,107	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3718	1/1	0.76	0.41	71,71,71,71	0
55	MG	AS	205	1/1	0.76	0.47	70,70,70,70	0
55	MG	CY	102	1/1	0.76	0.28	100,100,100,100	0
55	MG	CA	4223	1/1	0.76	0.37	30,30,30,30	0
55	MG	DA	1679	1/1	0.76	0.38	41,41,41,41	0
55	MG	CA	2996	1/1	0.76	0.71	55,55,55,55	0
55	MG	BA	2126	1/1	0.76	0.60	106,106,106,106	0
55	MG	AA	4374	1/1	0.76	0.27	46,46,46,46	0
55	MG	AA	4667	1/1	0.76	0.83	120,120,120,120	0
55	MG	CR	202	1/1	0.76	0.52	66,66,66,66	0
55	MG	AA	4835	1/1	0.76	0.41	131,131,131,131	0
55	MG	AA	5117	1/1	0.76	1.11	77,77,77,77	0
55	MG	CA	4270	1/1	0.76	0.33	52,52,52,52	0
55	MG	CA	3942	1/1	0.76	0.41	60,60,60,60	0
55	MG	BA	2055	1/1	0.76	0.31	95,95,95,95	0
55	MG	CA	4119	1/1	0.76	0.57	51,51,51,51	0
55	MG	BA	1862	1/1	0.76	0.39	65,65,65,65	0
55	MG	BA	2140	1/1	0.76	0.42	88,88,88,88	0
55	MG	AA	5080	1/1	0.76	0.29	56,56,56,56	0
55	MG	CA	3004	1/1	0.76	1.07	89,89,89,89	0
55	MG	AA	4904	1/1	0.76	0.36	49,49,49,49	0
55	MG	AA	5251	1/1	0.76	0.47	55,55,55,55	0
55	MG	AA	5051	1/1	0.76	0.31	69,69,69,69	0
55	MG	CA	3447	1/1	0.76	0.20	57,57,57,57	0
55	MG	CA	2919	1/1	0.76	0.81	62,62,62,62	0
55	MG	AA	4099	1/1	0.76	0.46	88,88,88,88	0
55	MG	AA	4267	1/1	0.76	0.40	50,50,50,50	0
55	MG	DW	107	1/1	0.76	0.21	155,155,155,155	0
55	MG	CA	3066	1/1	0.76	0.38	92,92,92,92	0
55	MG	CA	4177	1/1	0.76	0.36	54,54,54,54	0
55	MG	CA	3489	1/1	0.76	0.65	69,69,69,69	0
55	MG	DA	1683	1/1	0.76	0.35	98,98,98,98	0
55	MG	AA	5075	1/1	0.76	0.49	49,49,49,49	0
55	MG	AA	4054	1/1	0.76	0.47	79,79,79,79	0
55	MG	AA	4805	1/1	0.76	0.38	61,61,61,61	0
55	MG	BA	1780	1/1	0.76	0.28	72,72,72,72	0
55	MG	BO	101	1/1	0.76	0.42	91,91,91,91	0
55	MG	AA	4006	1/1	0.76	0.37	59,59,59,59	0
55	MG	CA	3040	1/1	0.76	0.27	60,60,60,60	0
55	MG	CA	3037	1/1	0.76	0.18	66,66,66,66	0
55	MG	AA	4870	1/1	0.76	0.85	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	2016	1/1	0.76	0.28	47,47,47,47	0
55	MG	AA	4377	1/1	0.76	0.63	52,52,52,52	0
55	MG	CA	3686	1/1	0.76	0.62	83,83,83,83	0
55	MG	BA	1649	1/1	0.76	0.67	96,96,96,96	0
55	MG	DA	2200	1/1	0.76	0.45	61,61,61,61	0
55	MG	CA	3950	1/1	0.76	0.31	75,75,75,75	0
55	MG	DA	1632	1/1	0.76	0.36	81,81,81,81	0
55	MG	BA	1843	1/1	0.77	0.71	87,87,87,87	0
55	MG	CB	250	1/1	0.77	0.31	74,74,74,74	0
55	MG	BA	2105	1/1	0.77	0.28	96,96,96,96	0
55	MG	CA	3905	1/1	0.77	0.11	64,64,64,64	0
55	MG	CA	4325	1/1	0.77	0.41	72,72,72,72	0
55	MG	CA	3075	1/1	0.77	1.23	68,68,68,68	0
55	MG	DA	1795	1/1	0.77	0.68	70,70,70,70	0
55	MG	DA	1900	1/1	0.77	0.11	87,87,87,87	0
55	MG	C3	102	1/1	0.77	0.13	46,46,46,46	0
55	MG	DD	302	1/1	0.77	0.25	48,48,48,48	0
55	MG	BA	2024	1/1	0.77	0.09	68,68,68,68	0
55	MG	AA	4933	1/1	0.77	0.22	62,62,62,62	0
55	MG	AA	4151	1/1	0.77	0.41	83,83,83,83	0
55	MG	CA	3310	1/1	0.77	0.50	48,48,48,48	0
55	MG	BA	1621	1/1	0.77	0.40	67,67,67,67	0
55	MG	CA	4323	1/1	0.77	0.40	49,49,49,49	0
55	MG	DA	1910	1/1	0.77	0.44	104,104,104,104	0
55	MG	CA	4252	1/1	0.77	0.18	66,66,66,66	0
55	MG	AA	4421	1/1	0.77	0.42	47,47,47,47	0
55	MG	DL	202	1/1	0.77	0.48	60,60,60,60	0
55	MG	CA	3060	1/1	0.77	0.32	100,100,100,100	0
55	MG	AA	4512	1/1	0.77	0.17	55,55,55,55	0
55	MG	DA	1672	1/1	0.77	0.42	62,62,62,62	0
55	MG	CF	305	1/1	0.77	0.31	89,89,89,89	0
55	MG	AA	5247	1/1	0.77	1.42	91,91,91,91	0
55	MG	CA	4224	1/1	0.77	0.20	58,58,58,58	0
55	MG	BA	2165	1/1	0.77	0.30	66,66,66,66	0
55	MG	DA	2118	1/1	0.77	0.26	54,54,54,54	0
55	MG	CA	4388	1/1	0.77	0.45	59,59,59,59	0
55	MG	DA	1918	1/1	0.77	0.12	88,88,88,88	0
55	MG	CA	4396	1/1	0.77	0.18	90,90,90,90	0
55	MG	BA	1722	1/1	0.77	0.28	43,43,43,43	0
55	MG	CA	3830	1/1	0.77	0.41	66,66,66,66	0
55	MG	BA	1835	1/1	0.77	0.32	106,106,106,106	0
55	MG	DA	1687	1/1	0.77	0.34	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3706	1/1	0.77	0.41	48,48,48,48	0
55	MG	CA	4216	1/1	0.77	0.36	60,60,60,60	0
55	MG	AA	5044	1/1	0.77	0.45	72,72,72,72	0
55	MG	CA	3815	1/1	0.77	0.30	66,66,66,66	0
55	MG	BA	1656	1/1	0.77	0.45	70,70,70,70	0
55	MG	CA	3760	1/1	0.77	0.94	74,74,74,74	0
55	MG	CA	3709	1/1	0.77	1.14	82,82,82,82	0
55	MG	AA	5219	1/1	0.77	0.43	79,79,79,79	0
55	MG	AA	4819	1/1	0.77	0.33	77,77,77,77	0
55	MG	DA	1613	1/1	0.77	0.34	60,60,60,60	0
55	MG	AA	5010	1/1	0.77	0.59	81,81,81,81	0
55	MG	CA	2918	1/1	0.77	0.34	89,89,89,89	0
55	MG	BA	1784	1/1	0.77	0.39	47,47,47,47	0
55	MG	AA	4865	1/1	0.77	0.77	52,52,52,52	0
55	MG	CA	3814	1/1	0.77	0.37	76,76,76,76	0
55	MG	CA	3732	1/1	0.77	0.39	74,74,74,74	0
55	MG	AA	5145	1/1	0.77	0.32	58,58,58,58	0
55	MG	AA	5206	1/1	0.77	0.38	78,78,78,78	0
55	MG	AA	5174	1/1	0.77	0.38	63,63,63,63	0
55	MG	CA	3851	1/1	0.77	0.40	74,74,74,74	0
55	MG	BA	1905	1/1	0.77	0.37	64,64,64,64	0
55	MG	CX	101	1/1	0.77	1.00	71,71,71,71	0
55	MG	CA	3895	1/1	0.77	0.35	58,58,58,58	0
55	MG	CA	4128	1/1	0.77	0.29	64,64,64,64	0
55	MG	CA	3343	1/1	0.77	0.15	54,54,54,54	0
55	MG	CA	3009	1/1	0.77	0.38	56,56,56,56	0
55	MG	AA	4469	1/1	0.77	0.16	66,66,66,66	0
55	MG	CA	3449	1/1	0.77	0.15	49,49,49,49	0
55	MG	BA	2114	1/1	0.77	0.44	60,60,60,60	0
55	MG	AA	4824	1/1	0.78	0.32	51,51,51,51	0
55	MG	AA	4570	1/1	0.78	0.30	76,76,76,76	0
55	MG	CA	3546	1/1	0.78	0.43	55,55,55,55	0
55	MG	AA	5245	1/1	0.78	0.48	76,76,76,76	0
55	MG	CA	3374	1/1	0.78	0.20	56,56,56,56	0
55	MG	CB	237	1/1	0.78	0.46	72,72,72,72	0
55	MG	DA	2088	1/1	0.78	0.28	94,94,94,94	0
55	MG	BA	1717	1/1	0.78	0.51	75,75,75,75	0
55	MG	CA	3954	1/1	0.78	0.18	92,92,92,92	0
55	MG	CA	3606	1/1	0.78	0.34	55,55,55,55	0
55	MG	CA	2915	1/1	0.78	0.27	64,64,64,64	0
55	MG	AA	4442	1/1	0.78	0.56	55,55,55,55	0
55	MG	DA	2203	1/1	0.78	0.33	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3984	1/1	0.78	0.21	65,65,65,65	0
55	MG	DA	2011	1/1	0.78	0.27	79,79,79,79	0
55	MG	DA	2137	1/1	0.78	0.23	98,98,98,98	0
55	MG	AA	4590	1/1	0.78	0.47	66,66,66,66	0
55	MG	CA	4266	1/1	0.78	0.60	63,63,63,63	0
55	MG	CA	4333	1/1	0.78	0.25	76,76,76,76	0
55	MG	CA	3754	1/1	0.78	0.30	67,67,67,67	0
55	MG	DA	2181	1/1	0.78	0.47	68,68,68,68	0
55	MG	CA	2998	1/1	0.78	0.38	62,62,62,62	0
55	MG	AA	5087	1/1	0.78	0.37	43,43,43,43	0
55	MG	AA	4525	1/1	0.78	0.33	43,43,43,43	0
55	MG	CA	4121	1/1	0.78	0.30	39,39,39,39	0
55	MG	BA	2051	1/1	0.78	0.20	71,71,71,71	0
55	MG	BA	1872	1/1	0.78	0.34	64,64,64,64	0
55	MG	AA	4575	1/1	0.78	0.11	87,87,87,87	0
55	MG	CA	4307	1/1	0.78	0.37	58,58,58,58	0
55	MG	AA	5141	1/1	0.78	0.21	58,58,58,58	0
55	MG	DA	1816	1/1	0.78	0.30	79,79,79,79	0
55	MG	AA	4841	1/1	0.78	0.45	67,67,67,67	0
55	MG	DA	1754	1/1	0.78	0.18	69,69,69,69	0
55	MG	AA	4081	1/1	0.78	0.26	78,78,78,78	0
55	MG	CA	3558	1/1	0.78	0.27	50,50,50,50	0
55	MG	CA	3401	1/1	0.78	0.41	55,55,55,55	0
55	MG	BA	1719	1/1	0.78	0.12	50,50,50,50	0
55	MG	DA	1685	1/1	0.78	0.24	59,59,59,59	0
55	MG	CA	4340	1/1	0.78	0.32	40,40,40,40	0
55	MG	CA	3704	1/1	0.78	0.28	61,61,61,61	0
55	MG	CA	3788	1/1	0.78	0.49	57,57,57,57	0
55	MG	AA	4650	1/1	0.78	0.62	70,70,70,70	0
55	MG	CA	3807	1/1	0.78	0.68	66,66,66,66	0
55	MG	BA	1861	1/1	0.78	0.38	67,67,67,67	0
55	MG	BA	1655	1/1	0.78	0.35	77,77,77,77	0
55	MG	AO	201	1/1	0.78	0.17	67,67,67,67	0
55	MG	CA	2960	1/1	0.78	0.41	77,77,77,77	0
55	MG	DA	2158	1/1	0.78	0.12	76,76,76,76	0
55	MG	AA	4328	1/1	0.78	1.05	40,40,40,40	0
55	MG	CA	3647	1/1	0.78	0.41	69,69,69,69	0
55	MG	AA	4635	1/1	0.78	0.60	79,79,79,79	0
55	MG	AA	4963	1/1	0.78	0.37	62,62,62,62	0
55	MG	AA	4426	1/1	0.78	0.22	64,64,64,64	0
55	MG	AA	5282	1/1	0.78	0.19	87,87,87,87	0
55	MG	CA	4062	1/1	0.78	0.27	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3423	1/1	0.78	0.14	56,56,56,56	0
55	MG	BA	1671	1/1	0.78	0.28	112,112,112,112	0
55	MG	BA	1648	1/1	0.78	0.41	61,61,61,61	0
55	MG	AA	4511	1/1	0.78	1.17	71,71,71,71	0
55	MG	CA	3145	1/1	0.78	0.16	22,22,22,22	0
55	MG	CA	2907	1/1	0.78	0.75	70,70,70,70	0
55	MG	CB	263	1/1	0.78	0.11	73,73,73,73	0
55	MG	CA	4191	1/1	0.78	0.11	55,55,55,55	0
55	MG	BA	1942	1/1	0.78	0.27	77,77,77,77	0
55	MG	AA	4818	1/1	0.78	0.41	79,79,79,79	0
55	MG	CA	3010	1/1	0.78	0.69	65,65,65,65	0
55	MG	CA	3450	1/1	0.78	0.50	49,49,49,49	0
55	MG	CA	4350	1/1	0.78	0.40	77,77,77,77	0
55	MG	AA	4531	1/1	0.78	0.23	57,57,57,57	0
55	MG	CA	4102	1/1	0.78	0.66	69,69,69,69	0
55	MG	AA	4355	1/1	0.78	1.33	69,69,69,69	0
55	MG	CA	3735	1/1	0.78	0.18	64,64,64,64	0
55	MG	CA	3813	1/1	0.78	0.27	58,58,58,58	0
55	MG	AA	4670	1/1	0.78	0.31	66,66,66,66	0
55	MG	AA	5094	1/1	0.78	0.17	55,55,55,55	0
55	MG	CA	3842	1/1	0.78	0.32	71,71,71,71	0
55	MG	AA	4129	1/1	0.78	0.40	66,66,66,66	0
55	MG	AA	4630	1/1	0.78	0.33	72,72,72,72	0
55	MG	CA	3756	1/1	0.79	0.26	90,90,90,90	0
55	MG	CA	4379	1/1	0.79	0.34	59,59,59,59	0
55	MG	CA	3084	1/1	0.79	0.19	95,95,95,95	0
55	MG	AA	5090	1/1	0.79	0.79	73,73,73,73	0
55	MG	CA	3515	1/1	0.79	0.30	42,42,42,42	0
55	MG	CA	4133	1/1	0.79	0.39	51,51,51,51	0
55	MG	AA	5236	1/1	0.79	0.53	66,66,66,66	0
55	MG	CA	3930	1/1	0.79	0.36	74,74,74,74	0
55	MG	AA	5115	1/1	0.79	0.26	65,65,65,65	0
55	MG	CA	4205	1/1	0.79	0.60	82,82,82,82	0
55	MG	BA	1625	1/1	0.79	0.46	91,91,91,91	0
55	MG	CA	4100	1/1	0.79	0.41	65,65,65,65	0
55	MG	CA	4337	1/1	0.79	0.52	69,69,69,69	0
55	MG	AA	4293	1/1	0.79	0.65	43,43,43,43	0
55	MG	CA	2986	1/1	0.79	0.29	51,51,51,51	0
55	MG	CA	3435	1/1	0.79	0.64	45,45,45,45	0
55	MG	AA	4843	1/1	0.79	0.40	51,51,51,51	0
55	MG	AA	5005	1/1	0.79	0.29	61,61,61,61	0
55	MG	CA	3347	1/1	0.79	0.35	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4905	1/1	0.79	0.07	71,71,71,71	0
55	MG	AA	4568	1/1	0.79	0.33	41,41,41,41	0
55	MG	CA	3570	1/1	0.79	0.29	57,57,57,57	0
55	MG	DA	1814	1/1	0.79	0.32	59,59,59,59	0
55	MG	CA	3625	1/1	0.79	0.30	59,59,59,59	0
55	MG	AB	231	1/1	0.79	0.20	78,78,78,78	0
55	MG	BA	1920	1/1	0.79	0.17	92,92,92,92	0
55	MG	CA	4030	1/1	0.79	0.27	37,37,37,37	0
55	MG	BW	116	1/1	0.79	0.15	82,82,82,82	0
55	MG	CA	4366	1/1	0.79	0.34	70,70,70,70	0
55	MG	DA	1783	1/1	0.79	0.15	72,72,72,72	0
55	MG	DH	202	1/1	0.79	1.14	87,87,87,87	0
55	MG	DA	1863	1/1	0.79	0.63	86,86,86,86	0
55	MG	BV	114	1/1	0.79	0.20	70,70,70,70	0
55	MG	AA	4677	1/1	0.79	0.36	95,95,95,95	0
55	MG	BB	301	1/1	0.79	0.24	54,54,54,54	0
55	MG	CA	3022	1/1	0.79	0.68	56,56,56,56	0
55	MG	CA	3436	1/1	0.79	0.42	46,46,46,46	0
55	MG	BA	1828	1/1	0.79	0.30	68,68,68,68	0
55	MG	CA	3472	1/1	0.79	0.34	50,50,50,50	0
55	MG	DA	1907	1/1	0.79	0.68	71,71,71,71	0
55	MG	DA	1786	1/1	0.79	0.14	93,93,93,93	0
55	MG	CA	4163	1/1	0.79	0.44	64,64,64,64	0
55	MG	DA	1895	1/1	0.79	0.26	80,80,80,80	0
55	MG	DA	1794	1/1	0.79	0.62	64,64,64,64	0
55	MG	AA	5284	1/1	0.79	0.28	52,52,52,52	0
55	MG	BA	1802	1/1	0.79	0.33	66,66,66,66	0
55	MG	CA	4131	1/1	0.79	0.27	70,70,70,70	0
55	MG	DA	2080	1/1	0.79	0.32	71,71,71,71	0
55	MG	AA	4952	1/1	0.79	0.19	89,89,89,89	0
55	MG	CA	2922	1/1	0.79	0.28	56,56,56,56	0
55	MG	BA	1788	1/1	0.79	0.68	58,58,58,58	0
55	MG	CA	3052	1/1	0.79	0.38	86,86,86,86	0
55	MG	BA	2062	1/1	0.79	0.38	79,79,79,79	0
55	MG	AA	4901	1/1	0.79	0.18	42,42,42,42	0
55	MG	CA	4209	1/1	0.79	0.53	55,55,55,55	0
55	MG	DV	119	1/1	0.79	0.19	72,72,72,72	0
55	MG	CA	3301	1/1	0.79	0.34	35,35,35,35	0
55	MG	CA	3866	1/1	0.79	0.29	65,65,65,65	0
55	MG	CA	4265	1/1	0.79	0.30	64,64,64,64	0
55	MG	AA	4282	1/1	0.79	0.26	23,23,23,23	0
55	MG	AA	4035	1/1	0.79	0.45	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1988	1/1	0.79	0.19	66,66,66,66	0
55	MG	DA	1735	1/1	0.79	0.21	57,57,57,57	0
55	MG	AX	104	1/1	0.79	0.38	65,65,65,65	0
55	MG	CA	4041	1/1	0.79	0.64	61,61,61,61	0
55	MG	AA	4997	1/1	0.79	0.56	68,68,68,68	0
55	MG	CB	253	1/1	0.79	0.10	76,76,76,76	0
55	MG	CA	3521	1/1	0.79	0.29	42,42,42,42	0
55	MG	CA	3351	1/1	0.79	0.27	39,39,39,39	0
55	MG	CA	4082	1/1	0.79	0.32	43,43,43,43	0
55	MG	CA	3539	1/1	0.79	0.12	78,78,78,78	0
55	MG	BA	1945	1/1	0.79	0.60	82,82,82,82	0
55	MG	BA	2001	1/1	0.79	0.36	68,68,68,68	0
55	MG	DA	2095	1/1	0.79	0.22	79,79,79,79	0
55	MG	AA	4445	1/1	0.79	0.15	61,61,61,61	0
55	MG	AR	204	1/1	0.79	0.28	40,40,40,40	0
55	MG	DA	1748	1/1	0.79	0.43	73,73,73,73	0
55	MG	CA	3283	1/1	0.79	0.28	47,47,47,47	0
55	MG	AA	4040	1/1	0.79	0.38	60,60,60,60	0
55	MG	AA	4011	1/1	0.79	0.63	59,59,59,59	0
55	MG	CA	3525	1/1	0.79	0.82	61,61,61,61	0
55	MG	BA	2089	1/1	0.79	0.38	66,66,66,66	0
55	MG	AA	5119	1/1	0.79	0.47	80,80,80,80	0
55	MG	CA	3355	1/1	0.79	0.27	54,54,54,54	0
55	MG	CA	3775	1/1	0.79	0.20	66,66,66,66	0
55	MG	AN	204	1/1	0.79	0.47	48,48,48,48	0
55	MG	BA	1854	1/1	0.79	0.23	71,71,71,71	0
55	MG	CA	3178	1/1	0.79	0.16	25,25,25,25	0
55	MG	BA	1973	1/1	0.79	0.16	58,58,58,58	0
55	MG	AA	4715	1/1	0.79	0.97	80,80,80,80	0
55	MG	CA	3501	1/1	0.79	0.33	65,65,65,65	0
55	MG	CA	3744	1/1	0.79	0.15	90,90,90,90	0
55	MG	AA	5216	1/1	0.79	0.30	58,58,58,58	0
55	MG	DA	2076	1/1	0.79	0.34	62,62,62,62	0
55	MG	BA	1921	1/1	0.79	0.23	42,42,42,42	0
55	MG	DA	1857	1/1	0.79	0.32	79,79,79,79	0
55	MG	CA	4063	1/1	0.79	0.82	58,58,58,58	0
55	MG	AA	4409	1/1	0.79	0.12	83,83,83,83	0
55	MG	DH	201	1/1	0.79	0.20	100,100,100,100	0
55	MG	BA	2137	1/1	0.79	0.59	75,75,75,75	0
55	MG	AA	4086	1/1	0.79	0.86	57,57,57,57	0
55	MG	BA	2009	1/1	0.79	0.45	94,94,94,94	0
55	MG	DA	2066	1/1	0.79	0.52	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1728	1/1	0.79	0.30	32,32,32,32	0
55	MG	CA	4238	1/1	0.79	0.14	91,91,91,91	0
55	MG	DA	2113	1/1	0.79	0.22	46,46,46,46	0
55	MG	BA	1607	1/1	0.80	0.29	90,90,90,90	0
55	MG	CA	3752	1/1	0.80	0.25	68,68,68,68	0
55	MG	CA	3834	1/1	0.80	0.23	69,69,69,69	0
55	MG	DA	2139	1/1	0.80	0.28	83,83,83,83	0
55	MG	C4	103	1/1	0.80	0.41	74,74,74,74	0
55	MG	DA	1812	1/1	0.80	0.64	116,116,116,116	0
55	MG	CA	2943	1/1	0.80	0.31	69,69,69,69	0
55	MG	CA	4291	1/1	0.80	0.20	46,46,46,46	0
55	MG	BA	2103	1/1	0.80	0.41	38,38,38,38	0
55	MG	AA	5149	1/1	0.80	0.25	36,36,36,36	0
55	MG	CA	4005	1/1	0.80	0.24	49,49,49,49	0
55	MG	BA	1637	1/1	0.80	0.38	70,70,70,70	0
55	MG	DA	1705	1/1	0.80	0.79	34,34,34,34	0
55	MG	CA	3913	1/1	0.80	0.26	77,77,77,77	0
55	MG	CA	4344	1/1	0.80	0.23	41,41,41,41	0
55	MG	CA	2964	1/1	0.80	0.30	56,56,56,56	0
55	MG	DA	1967	1/1	0.80	0.41	36,36,36,36	0
55	MG	CA	4137	1/1	0.80	0.62	64,64,64,64	0
55	MG	AA	4304	1/1	0.80	0.40	38,38,38,38	0
55	MG	BW	111	1/1	0.80	0.23	53,53,53,53	0
55	MG	AA	4882	1/1	0.80	0.31	42,42,42,42	0
55	MG	DA	2027	1/1	0.80	0.52	57,57,57,57	0
55	MG	BA	1917	1/1	0.80	0.40	73,73,73,73	0
55	MG	AA	5047	1/1	0.80	0.44	60,60,60,60	0
55	MG	CA	3497	1/1	0.80	0.67	107,107,107,107	0
55	MG	AA	5273	1/1	0.80	0.33	75,75,75,75	0
55	MG	CA	4049	1/1	0.80	0.26	62,62,62,62	0
55	MG	AA	4535	1/1	0.80	0.58	70,70,70,70	0
55	MG	DW	104	1/1	0.80	0.29	95,95,95,95	0
55	MG	CA	3440	1/1	0.80	0.27	52,52,52,52	0
55	MG	AA	4581	1/1	0.80	0.13	59,59,59,59	0
55	MG	BA	2013	1/1	0.80	1.20	88,88,88,88	0
55	MG	CB	207	1/1	0.80	0.38	75,75,75,75	0
55	MG	BA	1969	1/1	0.80	0.32	60,60,60,60	0
55	MG	AA	5287	1/1	0.80	0.38	58,58,58,58	0
55	MG	CA	3042	1/1	0.80	0.33	67,67,67,67	0
55	MG	CA	4380	1/1	0.80	0.38	63,63,63,63	0
55	MG	CA	3879	1/1	0.80	0.33	43,43,43,43	0
55	MG	CA	3166	1/1	0.80	0.73	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5179	1/1	0.80	0.62	61,61,61,61	0
55	MG	BA	1642	1/1	0.80	0.68	67,67,67,67	0
55	MG	CA	4211	1/1	0.80	0.29	67,67,67,67	0
55	MG	AA	4853	1/1	0.80	0.13	52,52,52,52	0
55	MG	BA	2130	1/1	0.80	0.65	33,33,33,33	0
55	MG	DA	1784	1/1	0.80	0.11	133,133,133,133	0
55	MG	CA	4146	1/1	0.80	0.41	47,47,47,47	0
55	MG	AA	4550	1/1	0.80	0.24	62,62,62,62	0
55	MG	BA	1766	1/1	0.80	0.41	50,50,50,50	0
55	MG	BA	2094	1/1	0.80	0.41	41,41,41,41	0
55	MG	AA	4454	1/1	0.80	0.29	49,49,49,49	0
55	MG	AA	4309	1/1	0.80	0.29	57,57,57,57	0
55	MG	CA	3661	1/1	0.80	0.15	63,63,63,63	0
55	MG	CA	3034	1/1	0.80	0.52	43,43,43,43	0
55	MG	AB	203	1/1	0.80	0.33	65,65,65,65	0
55	MG	DA	1955	1/1	0.80	0.20	24,24,24,24	0
55	MG	AA	4391	1/1	0.80	0.61	63,63,63,63	0
55	MG	AE	303	1/1	0.80	0.57	53,53,53,53	0
55	MG	CA	3434	1/1	0.80	0.51	56,56,56,56	0
55	MG	AB	219	1/1	0.80	0.14	107,107,107,107	0
55	MG	AA	4552	1/1	0.80	0.23	71,71,71,71	0
55	MG	BA	1742	1/1	0.80	0.23	60,60,60,60	0
55	MG	BA	1708	1/1	0.80	0.19	36,36,36,36	0
55	MG	CA	3965	1/1	0.80	0.20	42,42,42,42	0
55	MG	CA	2973	1/1	0.80	0.52	99,99,99,99	0
55	MG	CA	3376	1/1	0.80	0.23	44,44,44,44	0
55	MG	CA	4210	1/1	0.80	0.31	63,63,63,63	0
55	MG	AA	5130	1/1	0.80	0.22	83,83,83,83	0
55	MG	CA	3556	1/1	0.80	0.11	55,55,55,55	0
55	MG	AA	4292	1/1	0.80	0.17	65,65,65,65	0
55	MG	AA	4425	1/1	0.80	0.38	66,66,66,66	0
55	MG	BA	2071	1/1	0.80	0.16	71,71,71,71	0
55	MG	AA	4796	1/1	0.80	0.34	64,64,64,64	0
55	MG	DA	2023	1/1	0.80	0.19	65,65,65,65	0
55	MG	CA	3859	1/1	0.80	0.48	96,96,96,96	0
55	MG	CA	3656	1/1	0.80	0.55	44,44,44,44	0
55	MG	DA	2112	1/1	0.80	0.33	55,55,55,55	0
55	MG	BA	1733	1/1	0.80	0.68	54,54,54,54	0
55	MG	CA	4214	1/1	0.80	0.29	63,63,63,63	0
55	MG	CA	4068	1/1	0.80	0.49	66,66,66,66	0
55	MG	AA	5286	1/1	0.80	0.36	65,65,65,65	0
55	MG	CA	3061	1/1	0.80	0.28	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2156	1/1	0.80	1.24	97,97,97,97	0
55	MG	BA	1876	1/1	0.80	0.24	91,91,91,91	0
55	MG	DV	118	1/1	0.80	0.21	78,78,78,78	0
55	MG	DA	1979	1/1	0.80	0.17	48,48,48,48	0
55	MG	AA	4625	1/1	0.80	0.64	68,68,68,68	0
55	MG	BA	1779	1/1	0.80	0.40	54,54,54,54	0
55	MG	CA	3650	1/1	0.80	0.41	122,122,122,122	0
55	MG	CA	3884	1/1	0.80	0.81	86,86,86,86	0
55	MG	CA	2953	1/1	0.80	0.32	71,71,71,71	0
55	MG	DA	1865	1/1	0.80	1.16	75,75,75,75	0
55	MG	CA	3929	1/1	0.80	0.24	53,53,53,53	0
55	MG	CA	3964	1/1	0.80	0.57	48,48,48,48	0
55	MG	AA	5136	1/1	0.80	0.38	62,62,62,62	0
55	MG	CA	4355	1/1	0.80	0.23	47,47,47,47	0
55	MG	CA	4394	1/1	0.80	0.68	81,81,81,81	0
55	MG	DA	1724	1/1	0.80	0.36	41,41,41,41	0
55	MG	AA	5018	1/1	0.80	0.16	44,44,44,44	0
55	MG	AA	4476	1/1	0.80	0.30	61,61,61,61	0
55	MG	BA	2053	1/1	0.80	0.46	64,64,64,64	0
55	MG	CA	3921	1/1	0.80	0.30	59,59,59,59	0
55	MG	CA	3731	1/1	0.80	0.32	53,53,53,53	0
55	MG	DO	102	1/1	0.80	1.15	113,113,113,113	0
55	MG	AA	4858	1/1	0.80	0.36	50,50,50,50	0
55	MG	AA	4826	1/1	0.80	0.42	73,73,73,73	0
55	MG	AA	5118	1/1	0.80	0.65	54,54,54,54	0
55	MG	CA	3749	1/1	0.80	0.40	105,105,105,105	0
55	MG	BA	1874	1/1	0.80	0.32	82,82,82,82	0
55	MG	CA	3846	1/1	0.80	0.17	126,126,126,126	0
55	MG	AA	4290	1/1	0.80	0.80	38,38,38,38	0
55	MG	CA	4017	1/1	0.80	0.31	48,48,48,48	0
55	MG	CA	3309	1/1	0.80	0.63	61,61,61,61	0
55	MG	CA	3258	1/1	0.80	0.16	41,41,41,41	0
55	MG	CA	3608	1/1	0.80	0.48	82,82,82,82	0
55	MG	CA	2958	1/1	0.80	0.25	71,71,71,71	0
55	MG	AA	4108	1/1	0.80	0.30	61,61,61,61	0
55	MG	DA	1605	1/1	0.80	0.34	80,80,80,80	0
55	MG	DA	1909	1/1	0.80	0.33	73,73,73,73	0
55	MG	AA	5038	1/1	0.80	0.92	52,52,52,52	0
55	MG	CA	3422	1/1	0.81	0.74	44,44,44,44	0
55	MG	AA	5168	1/1	0.81	0.30	71,71,71,71	0
55	MG	AA	4618	1/1	0.81	0.25	64,64,64,64	0
55	MG	CA	3596	1/1	0.81	0.18	79,79,79,79	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3599	1/1	0.81	0.36	46,46,46,46	0
55	MG	DA	2077	1/1	0.81	0.31	109,109,109,109	0
55	MG	AM	202	1/1	0.81	0.37	52,52,52,52	0
55	MG	AB	246	1/1	0.81	0.22	94,94,94,94	0
55	MG	BA	1815	1/1	0.81	0.42	47,47,47,47	0
55	MG	DA	2056	1/1	0.81	0.69	105,105,105,105	0
55	MG	DA	2061	1/1	0.81	0.21	57,57,57,57	0
55	MG	AA	5161	1/1	0.81	0.25	48,48,48,48	0
55	MG	CA	4318	1/1	0.81	0.27	71,71,71,71	0
55	MG	DA	2120	1/1	0.81	0.43	95,95,95,95	0
55	MG	AA	4863	1/1	0.81	0.68	51,51,51,51	0
55	MG	AA	4037	1/1	0.81	0.35	62,62,62,62	0
55	MG	DV	113	1/1	0.81	0.19	72,72,72,72	0
55	MG	AA	4517	1/1	0.81	0.45	48,48,48,48	0
55	MG	DA	2166	1/1	0.81	0.39	69,69,69,69	0
55	MG	AA	4730	1/1	0.81	0.24	73,73,73,73	0
55	MG	CA	4052	1/1	0.81	0.67	60,60,60,60	0
55	MG	CA	3432	1/1	0.81	0.32	32,32,32,32	0
55	MG	AA	4003	1/1	0.81	0.31	57,57,57,57	0
55	MG	CA	3259	1/1	0.81	0.42	39,39,39,39	0
55	MG	CF	304	1/1	0.81	0.54	55,55,55,55	0
55	MG	AA	5256	1/1	0.81	0.37	55,55,55,55	0
55	MG	DA	1604	1/1	0.81	0.41	101,101,101,101	0
55	MG	CA	3714	1/1	0.81	0.51	80,80,80,80	0
55	MG	DA	2141	1/1	0.81	0.23	85,85,85,85	0
55	MG	DA	1746	1/1	0.81	0.24	67,67,67,67	0
55	MG	AA	4261	1/1	0.81	0.42	34,34,34,34	0
55	MG	CB	211	1/1	0.81	0.09	90,90,90,90	0
55	MG	BA	1881	1/1	0.81	0.29	68,68,68,68	0
55	MG	CA	2934	1/1	0.81	0.32	59,59,59,59	0
55	MG	AA	4686	1/1	0.81	0.42	81,81,81,81	0
55	MG	BA	1934	1/1	0.81	0.31	87,87,87,87	0
55	MG	AA	4895	1/1	0.81	0.21	70,70,70,70	0
55	MG	AA	5112	1/1	0.81	0.57	47,47,47,47	0
55	MG	CA	4356	1/1	0.81	0.67	60,60,60,60	0
55	MG	BA	2148	1/1	0.81	0.15	88,88,88,88	0
55	MG	AA	4766	1/1	0.81	0.32	63,63,63,63	0
55	MG	CA	3605	1/1	0.81	0.28	66,66,66,66	0
55	MG	AA	5289	1/1	0.81	0.13	73,73,73,73	0
55	MG	AA	4754	1/1	0.81	0.69	42,42,42,42	0
55	MG	DA	2063	1/1	0.81	0.14	77,77,77,77	0
55	MG	AA	4085	1/1	0.81	0.29	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4695	1/1	0.81	0.13	65,65,65,65	0
55	MG	DA	1854	1/1	0.81	0.45	47,47,47,47	0
55	MG	AA	5060	1/1	0.81	0.34	54,54,54,54	0
55	MG	CA	4400	1/1	0.81	0.27	45,45,45,45	0
55	MG	AA	5111	1/1	0.81	0.52	53,53,53,53	0
55	MG	DA	2014	1/1	0.81	0.14	78,78,78,78	0
55	MG	CB	203	1/1	0.81	0.33	100,100,100,100	0
55	MG	AA	4243	1/1	0.81	0.37	45,45,45,45	0
55	MG	AX	105	1/1	0.81	0.32	58,58,58,58	0
55	MG	BV	101	1/1	0.81	0.11	105,105,105,105	0
55	MG	DA	2134	1/1	0.81	0.23	74,74,74,74	0
55	MG	BA	1922	1/1	0.81	0.34	54,54,54,54	0
55	MG	AA	5071	1/1	0.81	0.58	49,49,49,49	0
55	MG	BA	2090	1/1	0.81	0.79	55,55,55,55	0
55	MG	CA	2955	1/1	0.81	0.53	52,52,52,52	0
55	MG	BA	1994	1/1	0.81	0.34	52,52,52,52	0
55	MG	CA	3053	1/1	0.81	0.94	81,81,81,81	0
55	MG	CA	3197	1/1	0.81	0.44	28,28,28,28	0
55	MG	CA	3479	1/1	0.81	0.13	45,45,45,45	0
55	MG	AA	4259	1/1	0.81	0.64	42,42,42,42	0
55	MG	CA	3425	1/1	0.81	0.10	57,57,57,57	0
55	MG	CA	3753	1/1	0.81	0.34	69,69,69,69	0
55	MG	AA	4109	1/1	0.81	0.77	59,59,59,59	0
55	MG	CA	4285	1/1	0.81	0.17	46,46,46,46	0
55	MG	CA	3635	1/1	0.81	0.48	63,63,63,63	0
55	MG	CA	3387	1/1	0.81	0.19	29,29,29,29	0
55	MG	DW	109	1/1	0.81	0.27	85,85,85,85	0
55	MG	AA	5233	1/1	0.81	0.17	74,74,74,74	0
55	MG	AA	4087	1/1	0.81	0.38	86,86,86,86	0
55	MG	CA	3981	1/1	0.81	0.24	35,35,35,35	0
55	MG	CA	4398	1/1	0.81	0.47	68,68,68,68	0
55	MG	BA	1743	1/1	0.81	0.13	76,76,76,76	0
55	MG	CA	3821	1/1	0.81	0.07	94,94,94,94	0
55	MG	CA	3740	1/1	0.81	0.69	77,77,77,77	0
55	MG	AA	5198	1/1	0.81	0.16	62,62,62,62	0
55	MG	AA	4561	1/1	0.81	0.72	67,67,67,67	0
55	MG	CV	202	1/1	0.81	0.11	78,78,78,78	0
55	MG	CA	4293	1/1	0.81	0.32	60,60,60,60	0
55	MG	AA	4160	1/1	0.81	0.26	94,94,94,94	0
55	MG	AA	4577	1/1	0.81	0.56	110,110,110,110	0
55	MG	CA	2974	1/1	0.81	0.13	59,59,59,59	0
55	MG	AA	4034	1/1	0.81	0.44	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	2150	1/1	0.81	0.28	82,82,82,82	0
55	MG	DA	2090	1/1	0.81	0.27	86,86,86,86	0
55	MG	DA	2020	1/1	0.81	0.21	66,66,66,66	0
55	MG	CA	4345	1/1	0.81	0.51	86,86,86,86	0
55	MG	AA	5046	1/1	0.81	0.37	37,37,37,37	0
55	MG	BA	2149	1/1	0.81	0.19	70,70,70,70	0
55	MG	DR	102	1/1	0.81	0.38	70,70,70,70	0
55	MG	CA	3350	1/1	0.81	0.39	47,47,47,47	0
55	MG	AA	4041	1/1	0.81	0.16	57,57,57,57	0
55	MG	AA	4329	1/1	0.81	0.45	76,76,76,76	0
55	MG	DA	2046	1/1	0.81	0.23	47,47,47,47	0
55	MG	DG	201	1/1	0.81	0.39	73,73,73,73	0
55	MG	CA	4079	1/1	0.81	0.36	51,51,51,51	0
55	MG	AA	4031	1/1	0.81	0.21	109,109,109,109	0
55	MG	CA	3248	1/1	0.81	0.66	40,40,40,40	0
55	MG	AA	5290	1/1	0.81	0.38	69,69,69,69	0
55	MG	BA	2128	1/1	0.81	0.42	83,83,83,83	0
55	MG	CA	4377	1/1	0.81	0.14	84,84,84,84	0
55	MG	AA	4662	1/1	0.81	0.38	77,77,77,77	0
55	MG	AA	4742	1/1	0.81	0.27	69,69,69,69	0
55	MG	CA	3177	1/1	0.81	0.92	42,42,42,42	0
55	MG	CA	3577	1/1	0.81	0.63	69,69,69,69	0
55	MG	CA	4158	1/1	0.81	0.32	83,83,83,83	0
55	MG	CA	3999	1/1	0.81	0.39	37,37,37,37	0
55	MG	DE	202	1/1	0.81	0.29	73,73,73,73	0
55	MG	CA	3827	1/1	0.81	0.33	70,70,70,70	0
55	MG	AA	4622	1/1	0.81	0.28	79,79,79,79	0
55	MG	AA	5148	1/1	0.81	0.14	59,59,59,59	0
55	MG	AA	4265	1/1	0.81	0.64	51,51,51,51	0
55	MG	DM	201	1/1	0.81	0.26	69,69,69,69	0
55	MG	AB	245	1/1	0.81	0.40	63,63,63,63	0
55	MG	DA	2161	1/1	0.81	0.35	61,61,61,61	0
55	MG	DA	1998	1/1	0.81	0.38	59,59,59,59	0
55	MG	BA	1611	1/1	0.81	0.30	67,67,67,67	0
55	MG	AA	4505	1/1	0.81	0.87	126,126,126,126	0
55	MG	BA	1941	1/1	0.81	0.15	81,81,81,81	0
55	MG	AA	4488	1/1	0.81	0.34	50,50,50,50	0
55	MG	BA	2030	1/1	0.81	0.65	55,55,55,55	0
55	MG	DA	1695	1/1	0.81	0.26	55,55,55,55	0
55	MG	AA	4758	1/1	0.81	0.31	71,71,71,71	0
55	MG	DA	1994	1/1	0.81	0.26	63,63,63,63	0
55	MG	CA	4299	1/1	0.81	0.58	73,73,73,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4074	1/1	0.81	0.37	59,59,59,59	0
55	MG	BU	101	1/1	0.81	0.34	109,109,109,109	0
55	MG	CA	3378	1/1	0.81	0.13	44,44,44,44	0
55	MG	CA	3951	1/1	0.82	0.34	94,94,94,94	0
55	MG	AA	5255	1/1	0.82	0.37	61,61,61,61	0
55	MG	DA	2042	1/1	0.82	0.38	87,87,87,87	0
55	MG	CA	4187	1/1	0.82	0.26	69,69,69,69	0
55	MG	AA	4604	1/1	0.82	0.31	54,54,54,54	0
55	MG	CW	104	1/1	0.82	1.42	64,64,64,64	0
55	MG	CA	3750	1/1	0.82	0.58	140,140,140,140	0
55	MG	CA	4269	1/1	0.82	0.58	49,49,49,49	0
55	MG	AA	4640	1/1	0.82	0.33	73,73,73,73	0
55	MG	AA	4166	1/1	0.82	0.23	75,75,75,75	0
55	MG	DA	2105	1/1	0.82	0.27	52,52,52,52	0
55	MG	AA	4700	1/1	0.82	0.58	107,107,107,107	0
55	MG	DA	2085	1/1	0.82	0.37	68,68,68,68	0
55	MG	AA	4896	1/1	0.82	0.28	42,42,42,42	0
55	MG	AA	4157	1/1	0.82	0.41	64,64,64,64	0
55	MG	AA	4229	1/1	0.82	0.44	34,34,34,34	0
55	MG	BA	1870	1/1	0.82	0.10	92,92,92,92	0
55	MG	CA	4226	1/1	0.82	0.22	50,50,50,50	0
55	MG	CB	241	1/1	0.82	0.19	82,82,82,82	0
55	MG	DA	2135	1/1	0.82	0.17	93,93,93,93	0
55	MG	DA	1943	1/1	0.82	0.37	64,64,64,64	0
55	MG	AA	4168	1/1	0.82	0.52	65,65,65,65	0
55	MG	AA	4470	1/1	0.82	0.31	62,62,62,62	0
55	MG	CA	4129	1/1	0.82	0.37	79,79,79,79	0
55	MG	DA	1629	1/1	0.82	0.45	89,89,89,89	0
55	MG	CA	3861	1/1	0.82	0.23	56,56,56,56	0
55	MG	CA	3886	1/1	0.82	0.09	58,58,58,58	0
55	MG	DA	1970	1/1	0.82	0.33	30,30,30,30	0
55	MG	CA	4225	1/1	0.82	0.46	48,48,48,48	0
55	MG	AA	5231	1/1	0.82	0.39	78,78,78,78	0
55	MG	CA	4148	1/1	0.82	0.55	43,43,43,43	0
55	MG	BA	1940	1/1	0.82	0.11	65,65,65,65	0
55	MG	CA	2982	1/1	0.82	0.48	69,69,69,69	0
55	MG	AA	4026	1/1	0.82	0.40	55,55,55,55	0
55	MG	AA	5101	1/1	0.82	0.55	77,77,77,77	0
55	MG	AS	201	1/1	0.82	0.40	62,62,62,62	0
55	MG	AA	4279	1/1	0.82	0.28	37,37,37,37	0
55	MG	CA	3923	1/1	0.82	0.34	63,63,63,63	0
55	MG	CA	4384	1/1	0.82	0.54	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	2025	1/1	0.82	0.30	62,62,62,62	0
55	MG	AA	4468	1/1	0.82	0.42	66,66,66,66	0
55	MG	CA	3071	1/1	0.82	0.64	66,66,66,66	0
55	MG	AA	5082	1/1	0.82	0.29	72,72,72,72	0
55	MG	CA	2908	1/1	0.82	0.62	74,74,74,74	0
55	MG	AA	5009	1/1	0.82	0.50	65,65,65,65	0
55	MG	BV	103	1/1	0.82	1.10	66,66,66,66	0
55	MG	BA	1977	1/1	0.82	0.23	65,65,65,65	0
55	MG	AA	4393	1/1	0.82	0.11	57,57,57,57	0
55	MG	CI	201	1/1	0.82	0.70	62,62,62,62	0
55	MG	AA	4002	1/1	0.82	0.68	130,130,130,130	0
55	MG	DA	1920	1/1	0.82	0.41	72,72,72,72	0
55	MG	AA	4412	1/1	0.82	0.77	60,60,60,60	0
55	MG	DA	1903	1/1	0.82	0.23	79,79,79,79	0
55	MG	CA	3168	1/1	0.82	0.41	27,27,27,27	0
55	MG	AA	4137	1/1	0.82	0.93	85,85,85,85	0
55	MG	AA	4890	1/1	0.82	0.42	37,37,37,37	0
55	MG	CA	3922	1/1	0.82	0.38	72,72,72,72	0
55	MG	CA	3904	1/1	0.82	0.24	98,98,98,98	0
55	MG	AA	4634	1/1	0.82	0.48	86,86,86,86	0
55	MG	DO	101	1/1	0.82	0.35	98,98,98,98	0
55	MG	DA	2096	1/1	0.82	0.18	38,38,38,38	0
55	MG	AA	4967	1/1	0.82	0.14	60,60,60,60	0
55	MG	AA	4713	1/1	0.82	0.22	87,87,87,87	0
55	MG	CA	4282	1/1	0.82	0.45	56,56,56,56	0
55	MG	AA	5048	1/1	0.82	0.38	69,69,69,69	0
55	MG	DA	2165	1/1	0.82	0.57	61,61,61,61	0
55	MG	AB	211	1/1	0.82	0.65	62,62,62,62	0
55	MG	AK	202	1/1	0.82	0.20	72,72,72,72	0
55	MG	AA	4595	1/1	0.82	0.44	62,62,62,62	0
55	MG	CA	3415	1/1	0.82	0.20	44,44,44,44	0
55	MG	DA	2029	1/1	0.82	0.21	53,53,53,53	0
55	MG	AA	4596	1/1	0.82	0.39	103,103,103,103	0
55	MG	DA	1919	1/1	0.82	0.27	66,66,66,66	0
55	MG	CA	3125	1/1	0.82	0.52	13,13,13,13	0
55	MG	CA	3667	1/1	0.82	0.34	64,64,64,64	0
55	MG	CA	4254	1/1	0.82	0.38	61,61,61,61	0
55	MG	AA	4461	1/1	0.82	0.41	53,53,53,53	0
55	MG	CA	4186	1/1	0.82	0.36	47,47,47,47	0
55	MG	CA	4290	1/1	0.82	0.24	68,68,68,68	0
55	MG	AA	4620	1/1	0.82	0.20	70,70,70,70	0
55	MG	CA	3655	1/1	0.82	0.60	63,63,63,63	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4939	1/1	0.82	0.55	56,56,56,56	0
55	MG	CA	3018	1/1	0.82	0.46	70,70,70,70	0
55	MG	AA	5083	1/1	0.82	0.23	56,56,56,56	0
55	MG	AA	4551	1/1	0.82	0.22	72,72,72,72	0
55	MG	CA	3076	1/1	0.82	0.36	101,101,101,101	0
55	MG	CA	3584	1/1	0.82	0.17	55,55,55,55	0
55	MG	AA	5254	1/1	0.82	0.43	54,54,54,54	0
55	MG	DA	2102	1/1	0.82	1.13	87,87,87,87	0
55	MG	BA	1916	1/1	0.82	0.73	65,65,65,65	0
55	MG	CA	3398	1/1	0.82	0.16	53,53,53,53	0
55	MG	AA	4868	1/1	0.82	0.79	62,62,62,62	0
55	MG	CA	3247	1/1	0.82	0.26	23,23,23,23	0
55	MG	CA	3705	1/1	0.82	0.41	84,84,84,84	0
55	MG	AA	4404	1/1	0.82	0.60	41,41,41,41	0
55	MG	AA	4039	1/1	0.82	0.18	85,85,85,85	0
55	MG	CA	2927	1/1	0.82	0.36	57,57,57,57	0
55	MG	CE	306	1/1	0.82	0.29	64,64,64,64	0
55	MG	A5	101	1/1	0.82	0.31	30,30,30,30	0
55	MG	CA	3389	1/1	0.82	0.14	46,46,46,46	0
55	MG	AB	238	1/1	0.82	0.11	55,55,55,55	0
55	MG	CA	3078	1/1	0.82	0.20	72,72,72,72	0
55	MG	AA	4626	1/1	0.82	0.28	55,55,55,55	0
55	MG	CA	4154	1/1	0.82	0.88	61,61,61,61	0
55	MG	AA	5106	1/1	0.82	0.31	56,56,56,56	0
55	MG	CA	3498	1/1	0.82	0.30	44,44,44,44	0
55	MG	BA	1723	1/1	0.82	0.27	38,38,38,38	0
55	MG	DA	2012	1/1	0.82	0.32	65,65,65,65	0
55	MG	BA	1657	1/1	0.82	0.16	52,52,52,52	0
55	MG	DA	1793	1/1	0.82	0.13	84,84,84,84	0
55	MG	AA	5192	1/1	0.82	0.35	46,46,46,46	0
55	MG	CA	3275	1/1	0.82	0.94	40,40,40,40	0
55	MG	CA	3512	1/1	0.82	0.11	60,60,60,60	0
55	MG	AA	4907	1/1	0.82	0.29	42,42,42,42	0
55	MG	DJ	201	1/1	0.82	0.30	83,83,83,83	0
55	MG	AA	5246	1/1	0.82	0.29	46,46,46,46	0
55	MG	DA	1714	1/1	0.82	0.19	46,46,46,46	0
55	MG	CA	4096	1/1	0.82	0.32	72,72,72,72	0
55	MG	CA	3240	1/1	0.82	0.59	33,33,33,33	0
55	MG	CA	3229	1/1	0.83	0.18	45,45,45,45	0
55	MG	DA	2145	1/1	0.83	0.20	84,84,84,84	0
55	MG	CA	2993	1/1	0.83	0.52	64,64,64,64	0
55	MG	DA	1779	1/1	0.83	0.08	87,87,87,87	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4298	1/1	0.83	0.35	62,62,62,62	0
55	MG	CA	3675	1/1	0.83	0.17	72,72,72,72	0
55	MG	BA	1962	1/1	0.83	0.54	49,49,49,49	0
55	MG	CL	204	1/1	0.83	0.44	41,41,41,41	0
55	MG	AA	4158	1/1	0.83	0.30	100,100,100,100	0
55	MG	AA	5040	1/1	0.83	0.48	64,64,64,64	0
55	MG	CB	235	1/1	0.83	0.15	58,58,58,58	0
55	MG	AA	5064	1/1	0.83	0.18	46,46,46,46	0
55	MG	CA	3043	1/1	0.83	0.11	95,95,95,95	0
55	MG	BA	1845	1/1	0.83	0.14	103,103,103,103	0
55	MG	CA	3494	1/1	0.83	0.28	40,40,40,40	0
55	MG	AA	5097	1/1	0.83	0.36	37,37,37,37	0
55	MG	AA	4315	1/1	0.83	0.93	55,55,55,55	0
55	MG	CA	3914	1/1	0.83	1.60	73,73,73,73	0
55	MG	CA	3306	1/1	0.83	0.32	25,25,25,25	0
55	MG	A4	105	1/1	0.83	0.74	94,94,94,94	0
55	MG	CA	2976	1/1	0.83	0.53	61,61,61,61	0
55	MG	BA	2119	1/1	0.83	0.28	88,88,88,88	0
55	MG	BA	1899	1/1	0.83	0.48	79,79,79,79	0
55	MG	CA	3359	1/1	0.83	0.38	43,43,43,43	0
55	MG	CE	304	1/1	0.83	0.67	59,59,59,59	0
55	MG	AA	5227	1/1	0.83	0.24	75,75,75,75	0
55	MG	CA	3015	1/1	0.83	0.20	71,71,71,71	0
55	MG	AA	5269	1/1	0.83	0.73	109,109,109,109	0
55	MG	AA	4633	1/1	0.83	0.54	59,59,59,59	0
55	MG	CA	3426	1/1	0.83	0.43	39,39,39,39	0
55	MG	DA	1986	1/1	0.83	0.65	60,60,60,60	0
55	MG	DA	2108	1/1	0.83	0.25	92,92,92,92	0
55	MG	BA	2116	1/1	0.83	0.42	93,93,93,93	0
55	MG	AA	4943	1/1	0.83	0.35	45,45,45,45	0
55	MG	AB	250	1/1	0.83	0.23	68,68,68,68	0
55	MG	BW	108	1/1	0.83	0.15	93,93,93,93	0
55	MG	CA	3739	1/1	0.83	0.43	45,45,45,45	0
55	MG	CA	3416	1/1	0.83	0.36	54,54,54,54	0
55	MG	CA	3697	1/1	0.83	0.51	71,71,71,71	0
55	MG	CA	3271	1/1	0.83	0.59	52,52,52,52	0
55	MG	CA	3628	1/1	0.83	0.84	69,69,69,69	0
55	MG	CA	3358	1/1	0.83	0.70	41,41,41,41	0
55	MG	BV	125	1/1	0.83	0.31	81,81,81,81	0
55	MG	BA	1885	1/1	0.83	0.15	60,60,60,60	0
55	MG	AA	4597	1/1	0.83	0.39	54,54,54,54	0
55	MG	CA	4060	1/1	0.83	0.24	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3161	1/1	0.83	0.61	30,30,30,30	0
55	MG	DA	2086	1/1	0.83	0.15	57,57,57,57	0
55	MG	AA	4887	1/1	0.83	0.27	40,40,40,40	0
55	MG	AA	4935	1/1	0.83	0.58	46,46,46,46	0
55	MG	CA	4343	1/1	0.83	0.41	73,73,73,73	0
55	MG	AA	4218	1/1	0.83	0.18	34,34,34,34	0
55	MG	BA	1795	1/1	0.83	0.33	75,75,75,75	0
55	MG	BA	1848	1/1	0.83	0.24	79,79,79,79	0
55	MG	CA	2937	1/1	0.83	0.29	86,86,86,86	0
55	MG	CA	3429	1/1	0.83	0.37	44,44,44,44	0
55	MG	BA	1782	1/1	0.83	0.43	69,69,69,69	0
55	MG	AA	4392	1/1	0.83	0.21	39,39,39,39	0
55	MG	AA	4832	1/1	0.83	0.30	75,75,75,75	0
55	MG	BV	123	1/1	0.83	0.47	56,56,56,56	0
55	MG	CA	4327	1/1	0.83	0.23	58,58,58,58	0
55	MG	DV	108	1/1	0.83	0.36	111,111,111,111	0
55	MG	DA	1781	1/1	0.83	0.09	107,107,107,107	0
55	MG	CA	3603	1/1	0.83	0.14	57,57,57,57	0
55	MG	CS	204	1/1	0.83	0.31	76,76,76,76	0
55	MG	CA	4371	1/1	0.83	0.31	76,76,76,76	0
55	MG	AA	4458	1/1	0.83	0.56	65,65,65,65	0
55	MG	BA	1669	1/1	0.83	0.22	60,60,60,60	0
55	MG	CA	3952	1/1	0.83	0.40	70,70,70,70	0
55	MG	AB	215	1/1	0.83	0.31	99,99,99,99	0
55	MG	DA	1755	1/1	0.83	0.60	93,93,93,93	0
55	MG	BC	302	1/1	0.83	0.32	60,60,60,60	0
55	MG	C5	101	1/1	0.83	0.45	63,63,63,63	0
55	MG	AA	4266	1/1	0.83	0.57	43,43,43,43	0
55	MG	DW	115	1/1	0.83	0.14	127,127,127,127	0
55	MG	AA	5053	1/1	0.83	0.30	75,75,75,75	0
55	MG	AA	4714	1/1	0.83	0.22	73,73,73,73	0
55	MG	CA	3798	1/1	0.83	0.37	98,98,98,98	0
55	MG	CB	226	1/1	0.83	0.19	40,40,40,40	0
55	MG	DW	117	1/1	0.83	0.19	74,74,74,74	0
55	MG	CA	4360	1/1	0.83	0.28	52,52,52,52	0
55	MG	CA	3569	1/1	0.83	0.37	74,74,74,74	0
55	MG	CA	3063	1/1	0.83	0.22	82,82,82,82	0
55	MG	CA	4173	1/1	0.83	0.41	49,49,49,49	0
55	MG	AA	4424	1/1	0.83	0.51	48,48,48,48	0
55	MG	DA	1899	1/1	0.83	0.17	71,71,71,71	0
55	MG	BA	1789	1/1	0.83	1.15	79,79,79,79	0
55	MG	CB	206	1/1	0.83	0.14	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5027	1/1	0.83	0.09	68,68,68,68	0
55	MG	CA	3607	1/1	0.83	0.35	47,47,47,47	0
55	MG	AA	4098	1/1	0.83	0.56	87,87,87,87	0
55	MG	CA	2990	1/1	0.83	0.09	68,68,68,68	0
55	MG	BA	1630	1/1	0.83	0.53	47,47,47,47	0
55	MG	AA	5008	1/1	0.83	0.41	71,71,71,71	0
55	MG	AA	5151	1/1	0.83	0.32	58,58,58,58	0
55	MG	AA	4957	1/1	0.83	0.25	47,47,47,47	0
55	MG	AA	4627	1/1	0.83	0.37	42,42,42,42	0
55	MG	AA	4774	1/1	0.83	0.37	63,63,63,63	0
55	MG	DA	1807	1/1	0.83	0.19	53,53,53,53	0
55	MG	CA	4015	1/1	0.83	0.17	53,53,53,53	0
55	MG	AA	5120	1/1	0.83	0.38	80,80,80,80	0
55	MG	BA	1799	1/1	0.83	0.36	64,64,64,64	0
55	MG	CA	3955	1/1	0.83	0.36	51,51,51,51	0
55	MG	CA	3346	1/1	0.83	0.36	39,39,39,39	0
55	MG	CA	4321	1/1	0.83	0.60	63,63,63,63	0
55	MG	CA	4381	1/1	0.83	0.57	74,74,74,74	0
55	MG	BQ	202	1/1	0.83	0.36	78,78,78,78	0
55	MG	DA	1822	1/1	0.83	0.49	111,111,111,111	0
55	MG	CA	4204	1/1	0.83	0.46	49,49,49,49	0
55	MG	BA	1946	1/1	0.83	0.19	69,69,69,69	0
55	MG	CA	4176	1/1	0.83	0.28	68,68,68,68	0
55	MG	DA	1616	1/1	0.83	0.19	113,113,113,113	0
55	MG	AA	4483	1/1	0.83	0.21	51,51,51,51	0
55	MG	AA	5096	1/1	0.83	1.09	63,63,63,63	0
55	MG	DA	1926	1/1	0.83	0.10	54,54,54,54	0
55	MG	DA	2189	1/1	0.83	0.29	58,58,58,58	0
55	MG	CA	3654	1/1	0.83	0.12	56,56,56,56	0
55	MG	AA	5230	1/1	0.83	0.16	102,102,102,102	0
55	MG	BA	1736	1/1	0.83	0.30	36,36,36,36	0
55	MG	CA	3906	1/1	0.83	0.29	47,47,47,47	0
55	MG	CA	3513	1/1	0.83	0.15	52,52,52,52	0
55	MG	CA	3926	1/1	0.83	0.58	45,45,45,45	0
55	MG	AA	4153	1/1	0.83	0.48	62,62,62,62	0
55	MG	DK	201	1/1	0.83	0.26	49,49,49,49	0
55	MG	BA	2135	1/1	0.83	0.27	76,76,76,76	0
55	MG	AA	4532	1/1	0.83	0.62	46,46,46,46	0
55	MG	CA	3021	1/1	0.83	0.41	68,68,68,68	0
55	MG	CA	3669	1/1	0.83	0.64	44,44,44,44	0
55	MG	AA	4013	1/1	0.83	0.27	55,55,55,55	0
55	MG	CA	3353	1/1	0.83	0.71	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3927	1/1	0.83	0.40	64,64,64,64	0
55	MG	CA	4075	1/1	0.83	0.38	69,69,69,69	0
55	MG	AA	4376	1/1	0.83	0.14	53,53,53,53	0
55	MG	CA	3218	1/1	0.83	0.46	23,23,23,23	0
55	MG	BA	1666	1/1	0.83	0.64	45,45,45,45	0
55	MG	AA	4959	1/1	0.83	0.30	37,37,37,37	0
55	MG	AA	4929	1/1	0.83	0.41	35,35,35,35	0
55	MG	BA	2043	1/1	0.83	0.37	62,62,62,62	0
55	MG	BA	1989	1/1	0.83	0.30	74,74,74,74	0
55	MG	DA	1813	1/1	0.84	0.38	79,79,79,79	0
55	MG	CA	4045	1/1	0.84	0.21	49,49,49,49	0
55	MG	DA	2204	1/1	0.84	0.20	66,66,66,66	0
55	MG	CA	2923	1/1	0.84	0.26	65,65,65,65	0
55	MG	AA	5081	1/1	0.84	0.12	92,92,92,92	0
55	MG	CB	240	1/1	0.84	0.49	54,54,54,54	0
55	MG	DA	2065	1/1	0.84	0.21	59,59,59,59	0
55	MG	A4	103	1/1	0.84	0.50	76,76,76,76	0
55	MG	DA	1823	1/1	0.84	0.14	88,88,88,88	0
55	MG	CA	3442	1/1	0.84	0.11	45,45,45,45	0
55	MG	DE	201	1/1	0.84	0.39	137,137,137,137	0
55	MG	BA	2169	1/1	0.84	0.33	72,72,72,72	0
55	MG	CA	4188	1/1	0.84	0.35	45,45,45,45	0
55	MG	AA	4850	1/1	0.84	0.30	50,50,50,50	0
55	MG	BA	1990	1/1	0.84	0.45	59,59,59,59	0
55	MG	CA	3287	1/1	0.84	0.34	36,36,36,36	0
55	MG	BA	1612	1/1	0.84	0.27	98,98,98,98	0
55	MG	CB	254	1/1	0.84	0.19	71,71,71,71	0
55	MG	DA	2168	1/1	0.84	0.27	54,54,54,54	0
55	MG	AA	4572	1/1	0.84	0.47	61,61,61,61	0
55	MG	AA	4014	1/1	0.84	0.25	80,80,80,80	0
55	MG	BA	2032	1/1	0.84	0.52	59,59,59,59	0
55	MG	CA	3235	1/1	0.84	0.42	35,35,35,35	0
55	MG	DA	1764	1/1	0.84	0.55	71,71,71,71	0
55	MG	DV	103	1/1	0.84	0.21	79,79,79,79	0
55	MG	CA	4316	1/1	0.84	0.30	60,60,60,60	0
55	MG	CA	3542	1/1	0.84	0.28	63,63,63,63	0
55	MG	AA	5220	1/1	0.84	0.30	51,51,51,51	0
55	MG	AA	5194	1/1	0.84	0.82	70,70,70,70	0
55	MG	CA	4150	1/1	0.84	0.55	75,75,75,75	0
55	MG	AA	4214	1/1	0.84	0.37	33,33,33,33	0
55	MG	DX	101	1/1	0.84	0.32	62,62,62,62	0
55	MG	BA	1968	1/1	0.84	0.20	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4927	1/1	0.84	0.27	50,50,50,50	0
55	MG	DA	1914	1/1	0.84	0.18	77,77,77,77	0
55	MG	AA	4985	1/1	0.84	0.36	61,61,61,61	0
55	MG	AA	5211	1/1	0.84	1.13	74,74,74,74	0
55	MG	CA	3580	1/1	0.84	0.34	59,59,59,59	0
55	MG	AA	4554	1/1	0.84	0.38	73,73,73,73	0
55	MG	AA	4133	1/1	0.84	0.76	82,82,82,82	0
55	MG	DA	1837	1/1	0.84	0.48	88,88,88,88	0
55	MG	AA	5029	1/1	0.84	0.09	111,111,111,111	0
55	MG	CA	3557	1/1	0.84	0.22	59,59,59,59	0
55	MG	BW	115	1/1	0.84	0.18	70,70,70,70	0
55	MG	AA	4358	1/1	0.84	0.29	46,46,46,46	0
55	MG	AA	4297	1/1	0.84	0.73	53,53,53,53	0
55	MG	AA	4588	1/1	0.84	0.49	80,80,80,80	0
55	MG	CA	4241	1/1	0.84	0.28	86,86,86,86	0
55	MG	CA	3652	1/1	0.84	0.29	51,51,51,51	0
55	MG	AB	249	1/1	0.84	0.15	73,73,73,73	0
55	MG	DW	106	1/1	0.84	0.30	113,113,113,113	0
55	MG	BA	1679	1/1	0.84	0.33	46,46,46,46	0
55	MG	AA	4646	1/1	0.84	0.20	91,91,91,91	0
55	MG	BA	2156	1/1	0.84	0.23	95,95,95,95	0
55	MG	DA	2159	1/1	0.84	0.28	63,63,63,63	0
55	MG	CA	4208	1/1	0.84	0.18	68,68,68,68	0
55	MG	AA	4278	1/1	0.84	0.49	44,44,44,44	0
55	MG	BA	2058	1/1	0.84	0.18	63,63,63,63	0
55	MG	AA	4389	1/1	0.84	0.21	61,61,61,61	0
55	MG	CA	3437	1/1	0.84	0.57	62,62,62,62	0
55	MG	AA	4998	1/1	0.84	0.13	86,86,86,86	0
55	MG	AA	4064	1/1	0.84	0.53	66,66,66,66	0
55	MG	CA	3027	1/1	0.84	0.30	48,48,48,48	0
55	MG	AA	4909	1/1	0.84	0.29	57,57,57,57	0
55	MG	AA	5207	1/1	0.84	0.28	65,65,65,65	0
55	MG	CA	3889	1/1	0.84	0.13	59,59,59,59	0
55	MG	AA	4523	1/1	0.84	0.42	66,66,66,66	0
55	MG	AA	4416	1/1	0.84	0.86	56,56,56,56	0
55	MG	CA	2959	1/1	0.84	0.25	60,60,60,60	0
55	MG	DA	2092	1/1	0.84	0.13	70,70,70,70	0
55	MG	AA	4165	1/1	0.84	0.61	104,104,104,104	0
55	MG	DA	2017	1/1	0.84	0.26	76,76,76,76	0
55	MG	AA	4083	1/1	0.84	0.24	78,78,78,78	0
55	MG	BA	2069	1/1	0.84	0.53	52,52,52,52	0
55	MG	DA	1734	1/1	0.84	0.80	61,61,61,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3748	1/1	0.84	0.09	56,56,56,56	0
55	MG	CA	3372	1/1	0.84	0.18	38,38,38,38	0
55	MG	DA	1639	1/1	0.84	0.32	138,138,138,138	0
55	MG	CA	4042	1/1	0.84	0.24	46,46,46,46	0
55	MG	DA	1843	1/1	0.84	0.57	60,60,60,60	0
55	MG	BA	1716	1/1	0.84	0.51	56,56,56,56	0
55	MG	BE	204	1/1	0.84	0.19	46,46,46,46	0
55	MG	A3	103	1/1	0.84	0.64	77,77,77,77	0
55	MG	BA	1676	1/1	0.84	0.60	90,90,90,90	0
55	MG	CA	4341	1/1	0.84	0.34	51,51,51,51	0
55	MG	CA	3594	1/1	0.84	0.26	55,55,55,55	0
55	MG	CA	4077	1/1	0.84	0.37	47,47,47,47	0
55	MG	DA	1693	1/1	0.84	0.56	18,18,18,18	0
55	MG	CA	3947	1/1	0.84	0.11	41,41,41,41	0
55	MG	CA	3368	1/1	0.84	0.31	41,41,41,41	0
55	MG	BA	1830	1/1	0.84	0.23	61,61,61,61	0
55	MG	DA	1804	1/1	0.84	0.45	69,69,69,69	0
55	MG	DV	101	1/1	0.84	0.21	103,103,103,103	0
55	MG	BA	1948	1/1	0.84	0.86	85,85,85,85	0
55	MG	BA	2063	1/1	0.84	0.46	37,37,37,37	0
55	MG	DA	1623	1/1	0.84	0.22	85,85,85,85	0
55	MG	CA	4055	1/1	0.84	0.24	49,49,49,49	0
55	MG	AA	4975	1/1	0.84	0.15	57,57,57,57	0
55	MG	CA	3946	1/1	0.84	0.32	51,51,51,51	0
55	MG	CN	202	1/1	0.84	0.38	57,57,57,57	0
55	MG	BA	1932	1/1	0.84	0.78	99,99,99,99	0
55	MG	BA	2048	1/1	0.84	0.32	47,47,47,47	0
55	MG	DA	1706	1/1	0.84	0.27	54,54,54,54	0
55	MG	DA	1747	1/1	0.84	0.59	56,56,56,56	0
55	MG	CA	4162	1/1	0.84	0.26	62,62,62,62	0
55	MG	CA	3293	1/1	0.84	0.36	45,45,45,45	0
55	MG	CA	3771	1/1	0.84	0.61	111,111,111,111	0
55	MG	BW	109	1/1	0.84	0.29	57,57,57,57	0
55	MG	AA	5238	1/1	0.84	0.42	59,59,59,59	0
55	MG	CA	4401	1/1	0.84	0.21	77,77,77,77	0
55	MG	AA	4903	1/1	0.84	0.26	48,48,48,48	0
55	MG	AA	4353	1/1	0.84	0.14	36,36,36,36	0
55	MG	AA	4528	1/1	0.84	0.34	63,63,63,63	0
55	MG	AA	4956	1/1	0.84	0.24	55,55,55,55	0
55	MG	DV	124	1/1	0.84	0.62	61,61,61,61	0
55	MG	CA	3064	1/1	0.84	1.08	75,75,75,75	0
55	MG	CB	209	1/1	0.84	0.84	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1924	1/1	0.84	0.33	53,53,53,53	0
55	MG	AA	4362	1/1	0.84	0.51	49,49,49,49	0
55	MG	AA	5204	1/1	0.84	0.41	71,71,71,71	0
55	MG	AA	4601	1/1	0.84	0.17	68,68,68,68	0
55	MG	BA	2075	1/1	0.84	0.20	60,60,60,60	0
55	MG	CA	4306	1/1	0.84	0.35	53,53,53,53	0
55	MG	AA	4745	1/1	0.84	0.47	64,64,64,64	0
55	MG	BA	2110	1/1	0.84	0.40	88,88,88,88	0
55	MG	CA	3627	1/1	0.84	0.12	88,88,88,88	0
55	MG	AA	5007	1/1	0.84	0.27	60,60,60,60	0
55	MG	CA	3901	1/1	0.84	0.38	58,58,58,58	0
55	MG	AA	5138	1/1	0.84	0.25	72,72,72,72	0
55	MG	AA	4197	1/1	0.84	0.65	33,33,33,33	0
55	MG	CA	4080	1/1	0.84	0.43	59,59,59,59	0
55	MG	AA	5025	1/1	0.84	0.39	92,92,92,92	0
55	MG	CA	3933	1/1	0.84	0.31	52,52,52,52	0
55	MG	CA	3678	1/1	0.84	0.29	77,77,77,77	0
55	MG	BA	1936	1/1	0.84	0.14	74,74,74,74	0
55	MG	AD	304	1/1	0.84	0.33	84,84,84,84	0
55	MG	AA	4012	1/1	0.84	0.44	65,65,65,65	0
55	MG	CA	2970	1/1	0.84	0.28	78,78,78,78	0
55	MG	DA	2009	1/1	0.84	0.26	55,55,55,55	0
55	MG	AA	5257	1/1	0.84	0.32	69,69,69,69	0
55	MG	BW	113	1/1	0.84	0.18	56,56,56,56	0
55	MG	DA	1688	1/1	0.84	0.33	58,58,58,58	0
55	MG	CA	3340	1/1	0.84	0.48	33,33,33,33	0
55	MG	CA	3793	1/1	0.84	0.16	77,77,77,77	0
55	MG	AA	5152	1/1	0.84	0.82	71,71,71,71	0
55	MG	CA	3482	1/1	0.85	0.23	47,47,47,47	0
55	MG	CA	4115	1/1	0.85	0.23	46,46,46,46	0
55	MG	BA	1807	1/1	0.85	0.90	77,77,77,77	0
55	MG	AA	4073	1/1	0.85	0.78	43,43,43,43	0
55	MG	CA	3504	1/1	0.85	0.29	43,43,43,43	0
55	MG	BA	1928	1/1	0.85	0.20	53,53,53,53	0
55	MG	CA	2916	1/1	0.85	0.37	66,66,66,66	0
55	MG	CA	3743	1/1	0.85	0.36	58,58,58,58	0
55	MG	CA	3242	1/1	0.85	0.25	33,33,33,33	0
55	MG	CA	4172	1/1	0.85	0.31	43,43,43,43	0
55	MG	BA	2155	1/1	0.85	0.19	40,40,40,40	0
55	MG	CA	3467	1/1	0.85	0.37	41,41,41,41	0
55	MG	DA	2045	1/1	0.85	0.17	98,98,98,98	0
55	MG	CA	3164	1/1	0.85	0.20	9,9,9,9	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2124	1/1	0.85	0.84	88,88,88,88	0
55	MG	CA	4234	1/1	0.85	0.27	46,46,46,46	0
55	MG	DA	1631	1/1	0.85	0.49	71,71,71,71	0
55	MG	CA	3555	1/1	0.85	0.61	73,73,73,73	0
55	MG	CA	4140	1/1	0.85	0.30	57,57,57,57	0
55	MG	DT	201	1/1	0.85	0.24	57,57,57,57	0
55	MG	AA	4607	1/1	0.85	0.63	91,91,91,91	0
55	MG	DA	1659	1/1	0.85	0.26	83,83,83,83	0
55	MG	DA	2187	1/1	0.85	0.39	55,55,55,55	0
55	MG	BA	2005	1/1	0.85	0.20	63,63,63,63	0
55	MG	AA	4541	1/1	0.85	0.35	78,78,78,78	0
55	MG	CA	3637	1/1	0.85	0.16	47,47,47,47	0
55	MG	CA	3288	1/1	0.85	0.94	53,53,53,53	0
55	MG	AA	4480	1/1	0.85	0.34	48,48,48,48	0
55	MG	CA	3375	1/1	0.85	0.08	59,59,59,59	0
55	MG	CA	3719	1/1	0.85	0.13	46,46,46,46	0
55	MG	DA	1989	1/1	0.85	0.11	85,85,85,85	0
55	MG	DA	1809	1/1	0.85	0.24	86,86,86,86	0
55	MG	AA	4876	1/1	0.85	0.40	57,57,57,57	0
55	MG	DA	1938	1/1	0.85	0.09	128,128,128,128	0
55	MG	DA	1948	1/1	0.85	0.28	58,58,58,58	0
55	MG	BA	1762	1/1	0.85	0.60	71,71,71,71	0
55	MG	CA	3445	1/1	0.85	0.48	44,44,44,44	0
55	MG	AA	4814	1/1	0.85	0.32	75,75,75,75	0
55	MG	DA	1947	1/1	0.85	0.25	84,84,84,84	0
55	MG	CA	3890	1/1	0.85	0.38	56,56,56,56	0
55	MG	AA	4500	1/1	0.85	0.55	63,63,63,63	0
55	MG	AA	4852	1/1	0.85	0.39	28,28,28,28	0
55	MG	BA	1681	1/1	0.85	0.62	162,162,162,162	0
55	MG	CA	3277	1/1	0.85	0.31	49,49,49,49	0
55	MG	BA	1644	1/1	0.85	0.29	91,91,91,91	0
55	MG	DA	2059	1/1	0.85	0.43	52,52,52,52	0
55	MG	AA	4609	1/1	0.85	0.37	76,76,76,76	0
55	MG	CA	3286	1/1	0.85	0.35	27,27,27,27	0
55	MG	AA	4615	1/1	0.85	0.36	79,79,79,79	0
55	MG	DA	1829	1/1	0.85	0.32	123,123,123,123	0
55	MG	AA	4335	1/1	0.85	0.46	52,52,52,52	0
55	MG	BA	1667	1/1	0.85	0.58	50,50,50,50	0
55	MG	AA	4795	1/1	0.85	0.36	105,105,105,105	0
55	MG	AA	4777	1/1	0.85	0.43	48,48,48,48	0
55	MG	CB	230	1/1	0.85	0.54	77,77,77,77	0
55	MG	AA	4516	1/1	0.85	0.40	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BV	112	1/1	0.85	0.14	89,89,89,89	0
55	MG	AA	4238	1/1	0.85	0.30	42,42,42,42	0
55	MG	CA	3030	1/1	0.85	0.26	61,61,61,61	0
55	MG	AS	202	1/1	0.85	0.28	56,56,56,56	0
55	MG	BA	1877	1/1	0.85	0.21	84,84,84,84	0
55	MG	AA	5061	1/1	0.85	0.49	49,49,49,49	0
55	MG	CA	3491	1/1	0.85	0.32	59,59,59,59	0
55	MG	BA	2070	1/1	0.85	0.63	66,66,66,66	0
55	MG	AA	4926	1/1	0.85	0.29	53,53,53,53	0
55	MG	BA	1687	1/1	0.85	0.37	25,25,25,25	0
55	MG	DA	1771	1/1	0.85	0.24	77,77,77,77	0
55	MG	CA	4361	1/1	0.85	0.50	65,65,65,65	0
55	MG	AA	4289	1/1	0.85	0.17	52,52,52,52	0
55	MG	CA	3334	1/1	0.85	0.50	32,32,32,32	0
55	MG	CA	4156	1/1	0.85	0.56	68,68,68,68	0
55	MG	CA	3939	1/1	0.85	0.51	65,65,65,65	0
55	MG	BA	1774	1/1	0.85	0.17	57,57,57,57	0
55	MG	AA	4127	1/1	0.85	0.56	72,72,72,72	0
55	MG	BA	1696	1/1	0.85	0.41	50,50,50,50	0
55	MG	CA	4168	1/1	0.85	0.24	64,64,64,64	0
55	MG	AA	5288	1/1	0.85	0.43	68,68,68,68	0
55	MG	DA	1858	1/1	0.85	0.61	68,68,68,68	0
55	MG	CA	4330	1/1	0.85	0.53	61,61,61,61	0
55	MG	CA	4375	1/1	0.85	0.87	85,85,85,85	0
55	MG	CA	3689	1/1	0.85	0.19	47,47,47,47	0
55	MG	AA	5165	1/1	0.85	0.56	62,62,62,62	0
55	MG	AA	5221	1/1	0.85	0.48	55,55,55,55	0
55	MG	AA	4681	1/1	0.85	0.60	69,69,69,69	0
55	MG	CA	3777	1/1	0.85	0.58	59,59,59,59	0
55	MG	CA	4073	1/1	0.85	0.43	45,45,45,45	0
55	MG	AA	4827	1/1	0.85	0.31	64,64,64,64	0
55	MG	AA	4119	1/1	0.85	0.78	67,67,67,67	0
55	MG	DA	1902	1/1	0.85	0.53	70,70,70,70	0
55	MG	DA	1993	1/1	0.85	0.59	55,55,55,55	0
55	MG	BV	118	1/1	0.85	0.26	94,94,94,94	0
55	MG	AA	5195	1/1	0.85	0.32	80,80,80,80	0
55	MG	CA	3878	1/1	0.85	0.40	67,67,67,67	0
55	MG	CA	3876	1/1	0.85	0.30	76,76,76,76	0
55	MG	AA	4080	1/1	0.85	0.67	71,71,71,71	0
55	MG	CB	236	1/1	0.85	0.35	93,93,93,93	0
55	MG	CA	3410	1/1	0.85	0.17	44,44,44,44	0
55	MG	CA	3017	1/1	0.85	0.39	68,68,68,68	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DW	114	1/1	0.85	0.27	97,97,97,97	0
55	MG	CA	4259	1/1	0.85	0.48	35,35,35,35	0
55	MG	CA	4312	1/1	0.85	0.26	57,57,57,57	0
55	MG	CA	4123	1/1	0.85	0.39	43,43,43,43	0
55	MG	BA	2157	1/1	0.85	0.38	49,49,49,49	0
55	MG	CA	2966	1/1	0.85	0.29	75,75,75,75	0
55	MG	CA	3159	1/1	0.85	0.32	24,24,24,24	0
55	MG	DA	1931	1/1	0.85	0.52	50,50,50,50	0
55	MG	CA	3622	1/1	0.85	0.47	53,53,53,53	0
55	MG	BA	2083	1/1	0.85	0.21	92,92,92,92	0
55	MG	AA	4878	1/1	0.85	0.45	29,29,29,29	0
55	MG	CL	207	1/1	0.85	0.52	41,41,41,41	0
55	MG	BA	2078	1/1	0.85	0.08	79,79,79,79	0
55	MG	AA	4884	1/1	0.85	0.19	47,47,47,47	0
55	MG	DA	1819	1/1	0.85	0.29	101,101,101,101	0
55	MG	CA	3699	1/1	0.85	0.24	75,75,75,75	0
55	MG	AA	4270	1/1	0.85	0.46	45,45,45,45	0
55	MG	BA	1728	1/1	0.85	0.28	69,69,69,69	0
55	MG	AA	4365	1/1	0.85	0.24	39,39,39,39	0
55	MG	AA	4018	1/1	0.85	0.31	125,125,125,125	0
55	MG	AA	5062	1/1	0.85	0.34	56,56,56,56	0
55	MG	AA	4239	1/1	0.85	1.29	47,47,47,47	0
55	MG	BA	1837	1/1	0.85	0.34	61,61,61,61	0
55	MG	DA	2060	1/1	0.85	0.57	72,72,72,72	0
55	MG	BA	1664	1/1	0.85	0.36	86,86,86,86	0
55	MG	CA	3391	1/1	0.85	0.40	72,72,72,72	0
55	MG	CA	4212	1/1	0.85	0.21	44,44,44,44	0
55	MG	AA	4565	1/1	0.85	0.27	61,61,61,61	0
55	MG	AA	5181	1/1	0.85	0.19	67,67,67,67	0
55	MG	AA	5011	1/1	0.85	0.24	87,87,87,87	0
55	MG	CA	2968	1/1	0.85	0.54	74,74,74,74	0
55	MG	BW	104	1/1	0.85	0.24	96,96,96,96	0
55	MG	CA	3550	1/1	0.85	0.45	41,41,41,41	0
55	MG	DA	1703	1/1	0.85	0.26	34,34,34,34	0
55	MG	BA	2029	1/1	0.85	0.15	64,64,64,64	0
55	MG	BA	1826	1/1	0.85	0.21	48,48,48,48	0
55	MG	BA	1883	1/1	0.85	0.23	77,77,77,77	0
55	MG	CA	2928	1/1	0.85	0.49	55,55,55,55	0
55	MG	CA	3048	1/1	0.85	0.33	88,88,88,88	0
55	MG	AA	5139	1/1	0.85	0.37	66,66,66,66	0
55	MG	DA	1745	1/1	0.85	0.29	54,54,54,54	0
55	MG	AB	220	1/1	0.85	0.31	84,84,84,84	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4326	1/1	0.85	0.59	29,29,29,29	0
55	MG	AA	5182	1/1	0.85	0.48	52,52,52,52	0
55	MG	CA	3056	1/1	0.85	0.48	47,47,47,47	0
55	MG	DA	1855	1/1	0.85	0.28	69,69,69,69	0
55	MG	DA	2019	1/1	0.85	0.56	62,62,62,62	0
55	MG	BA	2059	1/1	0.85	0.42	48,48,48,48	0
55	MG	DV	106	1/1	0.85	0.13	93,93,93,93	0
55	MG	CA	3394	1/1	0.85	0.28	54,54,54,54	0
55	MG	AA	4062	1/1	0.85	0.52	126,126,126,126	0
55	MG	AA	4928	1/1	0.85	0.55	54,54,54,54	0
55	MG	BA	2034	1/1	0.85	0.17	47,47,47,47	0
55	MG	AA	4689	1/1	0.85	0.27	64,64,64,64	0
55	MG	DA	2016	1/1	0.85	0.45	49,49,49,49	0
55	MG	CA	3560	1/1	0.85	0.11	69,69,69,69	0
55	MG	BA	2080	1/1	0.85	0.26	56,56,56,56	0
55	MG	AA	4451	1/1	0.85	0.42	60,60,60,60	0
55	MG	AA	4761	1/1	0.85	0.19	64,64,64,64	0
55	MG	BA	1956	1/1	0.85	0.25	50,50,50,50	0
55	MG	CA	3200	1/1	0.85	0.26	27,27,27,27	0
55	MG	DA	2073	1/1	0.86	0.18	60,60,60,60	0
55	MG	CA	4393	1/1	0.86	0.25	69,69,69,69	0
55	MG	DW	102	1/1	0.86	0.32	76,76,76,76	0
55	MG	AA	4540	1/1	0.86	0.28	87,87,87,87	0
55	MG	AA	5215	1/1	0.86	0.29	68,68,68,68	0
55	MG	CA	3634	1/1	0.86	0.61	118,118,118,118	0
55	MG	BA	1770	1/1	0.86	0.14	58,58,58,58	0
55	MG	DA	1620	1/1	0.86	0.20	101,101,101,101	0
55	MG	CA	2978	1/1	0.86	0.73	56,56,56,56	0
55	MG	DA	1875	1/1	0.86	0.20	77,77,77,77	0
55	MG	AA	4212	1/1	0.86	0.60	39,39,39,39	0
55	MG	DA	1749	1/1	0.86	0.24	39,39,39,39	0
55	MG	AA	4272	1/1	0.86	0.80	46,46,46,46	0
55	MG	CA	3970	1/1	0.86	0.45	29,29,29,29	0
55	MG	AA	4322	1/1	0.86	0.10	43,43,43,43	0
55	MG	CB	229	1/1	0.86	0.18	84,84,84,84	0
55	MG	AA	4537	1/1	0.86	0.36	58,58,58,58	0
55	MG	CA	3745	1/1	0.86	0.31	60,60,60,60	0
55	MG	BE	202	1/1	0.86	0.96	65,65,65,65	0
55	MG	DA	2074	1/1	0.86	0.64	72,72,72,72	0
55	MG	CA	4378	1/1	0.86	0.29	42,42,42,42	0
55	MG	AA	4743	1/1	0.86	0.33	59,59,59,59	0
55	MG	AA	5091	1/1	0.86	0.17	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3910	1/1	0.86	0.27	77,77,77,77	0
55	MG	CA	3802	1/1	0.86	0.55	70,70,70,70	0
55	MG	CA	4385	1/1	0.86	0.12	61,61,61,61	0
55	MG	CA	2983	1/1	0.86	0.22	64,64,64,64	0
55	MG	CA	4336	1/1	0.86	0.36	62,62,62,62	0
55	MG	AN	203	1/1	0.86	0.17	64,64,64,64	0
55	MG	AA	4443	1/1	0.86	0.29	43,43,43,43	0
55	MG	AA	4802	1/1	0.86	0.28	82,82,82,82	0
55	MG	BA	1886	1/1	0.86	0.16	63,63,63,63	0
55	MG	DA	2064	1/1	0.86	0.37	52,52,52,52	0
55	MG	DA	1977	1/1	0.86	0.16	61,61,61,61	0
55	MG	BA	1842	1/1	0.86	0.59	63,63,63,63	0
55	MG	BA	1730	1/1	0.86	0.21	48,48,48,48	0
55	MG	AA	4786	1/1	0.86	0.24	55,55,55,55	0
55	MG	DA	1873	1/1	0.86	0.30	90,90,90,90	0
55	MG	AA	4492	1/1	0.86	0.36	41,41,41,41	0
55	MG	CA	4153	1/1	0.86	0.23	57,57,57,57	0
55	MG	AA	4090	1/1	0.86	0.47	87,87,87,87	0
55	MG	CA	3067	1/1	0.86	0.25	73,73,73,73	0
55	MG	BA	1605	1/1	0.86	0.52	75,75,75,75	0
55	MG	CA	2905	1/1	0.86	0.72	89,89,89,89	0
55	MG	CA	3937	1/1	0.86	0.20	52,52,52,52	0
55	MG	A5	102	1/1	0.86	0.60	62,62,62,62	0
55	MG	DA	1744	1/1	0.86	0.42	69,69,69,69	0
55	MG	DA	1990	1/1	0.86	0.25	68,68,68,68	0
55	MG	CA	3614	1/1	0.86	0.53	84,84,84,84	0
55	MG	AB	207	1/1	0.86	0.19	59,59,59,59	0
55	MG	DA	1738	1/1	0.86	0.56	40,40,40,40	0
55	MG	CA	4353	1/1	0.86	0.68	53,53,53,53	0
55	MG	BA	1890	1/1	0.86	0.18	64,64,64,64	0
55	MG	BV	126	1/1	0.86	0.40	75,75,75,75	0
55	MG	CA	3552	1/1	0.86	0.92	56,56,56,56	0
55	MG	AA	5276	1/1	0.86	0.21	41,41,41,41	0
55	MG	CA	4003	1/1	0.86	0.34	56,56,56,56	0
55	MG	AA	5189	1/1	0.86	0.59	65,65,65,65	0
55	MG	AA	4659	1/1	0.86	0.43	69,69,69,69	0
55	MG	DA	2170	1/1	0.86	0.54	107,107,107,107	0
55	MG	CA	3211	1/1	0.86	0.28	28,28,28,28	0
55	MG	DA	2131	1/1	0.86	0.30	56,56,56,56	0
55	MG	CA	4155	1/1	0.86	0.41	54,54,54,54	0
55	MG	CA	3217	1/1	0.86	0.25	24,24,24,24	0
55	MG	DA	1750	1/1	0.86	0.16	27,27,27,27	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4088	1/1	0.86	0.26	66,66,66,66	0
55	MG	DA	1889	1/1	0.86	0.54	107,107,107,107	0
55	MG	CA	3968	1/1	0.86	0.30	33,33,33,33	0
55	MG	BA	1609	1/1	0.86	0.55	88,88,88,88	0
55	MG	CL	203	1/1	0.86	0.40	49,49,49,49	0
55	MG	AA	4974	1/1	0.86	0.51	73,73,73,73	0
55	MG	AA	4094	1/1	0.86	0.42	62,62,62,62	0
55	MG	DD	301	1/1	0.86	0.28	73,73,73,73	0
55	MG	CA	3591	1/1	0.86	0.51	58,58,58,58	0
55	MG	DA	1775	1/1	0.86	0.20	68,68,68,68	0
55	MG	BA	2056	1/1	0.86	0.17	72,72,72,72	0
55	MG	BA	1663	1/1	0.86	0.43	95,95,95,95	0
55	MG	AA	4384	1/1	0.86	0.34	35,35,35,35	0
55	MG	CA	3967	1/1	0.86	0.18	39,39,39,39	0
55	MG	AA	4100	1/1	0.86	0.50	58,58,58,58	0
55	MG	AA	4487	1/1	0.86	0.38	43,43,43,43	0
55	MG	CA	3990	1/1	0.86	0.49	39,39,39,39	0
55	MG	CA	3481	1/1	0.86	0.36	38,38,38,38	0
55	MG	AA	4648	1/1	0.86	0.26	70,70,70,70	0
55	MG	CA	3839	1/1	0.86	0.22	27,27,27,27	0
55	MG	DA	1827	1/1	0.86	0.28	98,98,98,98	0
55	MG	CA	3899	1/1	0.86	0.31	71,71,71,71	0
55	MG	AA	4614	1/1	0.86	0.11	79,79,79,79	0
55	MG	AA	4762	1/1	0.86	0.63	113,113,113,113	0
55	MG	BV	113	1/1	0.86	0.18	82,82,82,82	0
55	MG	DA	1888	1/1	0.86	0.15	98,98,98,98	0
55	MG	BA	1665	1/1	0.86	0.50	83,83,83,83	0
55	MG	DA	1712	1/1	0.86	0.33	48,48,48,48	0
55	MG	AA	4753	1/1	0.86	0.19	51,51,51,51	0
55	MG	CA	4043	1/1	0.86	0.24	47,47,47,47	0
55	MG	AV	201	1/1	0.86	0.17	62,62,62,62	0
55	MG	CA	3520	1/1	0.86	0.63	57,57,57,57	0
55	MG	CA	3865	1/1	0.86	0.32	55,55,55,55	0
55	MG	AA	5049	1/1	0.86	0.20	69,69,69,69	0
55	MG	CA	3855	1/1	0.86	0.34	42,42,42,42	0
55	MG	DA	1696	1/1	0.86	0.30	25,25,25,25	0
55	MG	CA	4262	1/1	0.86	0.55	55,55,55,55	0
55	MG	CA	3507	1/1	0.86	0.57	55,55,55,55	0
55	MG	CA	4139	1/1	0.86	0.15	51,51,51,51	0
55	MG	AA	4077	1/1	0.86	0.29	62,62,62,62	0
55	MG	CA	4245	1/1	0.86	0.31	43,43,43,43	0
55	MG	CA	3683	1/1	0.86	0.12	62,62,62,62	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4382	1/1	0.86	0.26	65,65,65,65	0
55	MG	CA	4255	1/1	0.86	0.13	89,89,89,89	0
55	MG	CA	4185	1/1	0.86	0.54	53,53,53,53	0
55	MG	BA	1805	1/1	0.86	0.14	64,64,64,64	0
55	MG	CA	3854	1/1	0.86	0.42	66,66,66,66	0
55	MG	CA	4253	1/1	0.86	0.22	53,53,53,53	0
55	MG	AA	4390	1/1	0.86	0.36	59,59,59,59	0
55	MG	CA	3869	1/1	0.86	0.22	43,43,43,43	0
55	MG	DA	1860	1/1	0.86	0.29	74,74,74,74	0
55	MG	AA	5095	1/1	0.86	0.68	57,57,57,57	0
55	MG	AA	4494	1/1	0.86	0.20	50,50,50,50	0
55	MG	AA	5133	1/1	0.86	0.42	74,74,74,74	0
55	MG	CA	4087	1/1	0.86	0.20	49,49,49,49	0
55	MG	AA	4044	1/1	0.86	0.42	66,66,66,66	0
55	MG	AA	4045	1/1	0.86	0.28	72,72,72,72	0
55	MG	CA	4229	1/1	0.86	0.61	42,42,42,42	0
55	MG	AA	4417	1/1	0.86	0.29	55,55,55,55	0
55	MG	BW	114	1/1	0.86	0.19	58,58,58,58	0
55	MG	CA	4028	1/1	0.86	0.24	47,47,47,47	0
55	MG	BV	124	1/1	0.86	0.21	62,62,62,62	0
55	MG	DW	122	1/1	0.86	0.18	72,72,72,72	0
55	MG	AA	5065	1/1	0.86	0.30	44,44,44,44	0
55	MG	DA	1830	1/1	0.86	0.20	56,56,56,56	0
55	MG	AA	4772	1/1	0.86	0.31	51,51,51,51	0
55	MG	CA	3796	1/1	0.86	0.43	54,54,54,54	0
55	MG	AA	4145	1/1	0.86	0.37	63,63,63,63	0
55	MG	AA	4432	1/1	0.86	0.25	56,56,56,56	0
55	MG	DA	2176	1/1	0.86	0.32	57,57,57,57	0
55	MG	AA	4095	1/1	0.86	0.26	57,57,57,57	0
55	MG	CA	3978	1/1	0.86	0.16	32,32,32,32	0
55	MG	DA	1774	1/1	0.86	0.23	71,71,71,71	0
55	MG	CA	2939	1/1	0.86	0.41	47,47,47,47	0
55	MG	AA	4765	1/1	0.86	0.98	59,59,59,59	0
55	MG	CA	3338	1/1	0.86	0.69	43,43,43,43	0
55	MG	BA	1773	1/1	0.86	0.14	74,74,74,74	0
55	MG	AA	4449	1/1	0.86	0.26	58,58,58,58	0
55	MG	DA	1768	1/1	0.86	0.56	138,138,138,138	0
55	MG	DA	1628	1/1	0.86	0.20	135,135,135,135	0
55	MG	CA	4331	1/1	0.86	0.22	51,51,51,51	0
55	MG	CA	3989	1/1	0.86	0.23	14,14,14,14	0
55	MG	CA	3943	1/1	0.86	0.29	114,114,114,114	0
55	MG	CA	3192	1/1	0.86	0.26	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1619	1/1	0.86	0.18	81,81,81,81	0
55	MG	AA	4854	1/1	0.86	0.45	43,43,43,43	0
55	MG	CA	4203	1/1	0.86	0.55	32,32,32,32	0
55	MG	DA	1862	1/1	0.86	0.51	75,75,75,75	0
55	MG	CA	3702	1/1	0.86	0.98	90,90,90,90	0
55	MG	CA	3405	1/1	0.86	0.38	32,32,32,32	0
55	MG	BA	2066	1/1	0.86	0.15	58,58,58,58	0
55	MG	AA	4993	1/1	0.86	1.03	59,59,59,59	0
55	MG	BA	1986	1/1	0.86	0.19	56,56,56,56	0
55	MG	CA	3911	1/1	0.86	0.22	63,63,63,63	0
55	MG	CA	3458	1/1	0.86	0.41	68,68,68,68	0
55	MG	CA	4114	1/1	0.86	0.34	50,50,50,50	0
55	MG	AA	4185	1/1	0.86	0.34	16,16,16,16	0
55	MG	BA	2124	1/1	0.86	0.64	64,64,64,64	0
55	MG	CA	4365	1/1	0.86	0.29	84,84,84,84	0
55	MG	BI	202	1/1	0.87	0.78	94,94,94,94	0
55	MG	AA	5054	1/1	0.87	0.18	48,48,48,48	0
55	MG	DA	2103	1/1	0.87	0.23	80,80,80,80	0
55	MG	AA	4506	1/1	0.87	0.22	65,65,65,65	0
55	MG	AA	5166	1/1	0.87	0.15	93,93,93,93	0
55	MG	CA	3979	1/1	0.87	0.17	29,29,29,29	0
55	MG	CA	3421	1/1	0.87	0.49	55,55,55,55	0
55	MG	BA	1721	1/1	0.87	0.09	46,46,46,46	0
55	MG	AA	4258	1/1	0.87	0.41	42,42,42,42	0
55	MG	CA	3033	1/1	0.87	0.27	61,61,61,61	0
55	MG	CA	2999	1/1	0.87	0.14	85,85,85,85	0
55	MG	CA	3563	1/1	0.87	0.28	62,62,62,62	0
55	MG	CB	247	1/1	0.87	0.14	55,55,55,55	0
55	MG	BA	2158	1/1	0.87	0.22	59,59,59,59	0
55	MG	AA	5132	1/1	0.87	0.67	62,62,62,62	0
55	MG	BA	2073	1/1	0.87	0.10	68,68,68,68	0
55	MG	CA	3187	1/1	0.87	0.25	36,36,36,36	0
55	MG	CA	3420	1/1	0.87	0.29	43,43,43,43	0
55	MG	BA	2042	1/1	0.87	0.41	73,73,73,73	0
55	MG	BV	105	1/1	0.87	0.14	56,56,56,56	0
55	MG	BA	2061	1/1	0.87	0.39	65,65,65,65	0
55	MG	CA	3672	1/1	0.87	0.45	72,72,72,72	0
55	MG	AE	304	1/1	0.87	0.26	29,29,29,29	0
55	MG	DV	120	1/1	0.87	0.13	54,54,54,54	0
55	MG	CA	3411	1/1	0.87	0.50	53,53,53,53	0
55	MG	CB	261	1/1	0.87	0.22	61,61,61,61	0
55	MG	AA	4337	1/1	0.87	0.37	24,24,24,24	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1751	1/1	0.87	0.69	58,58,58,58	0
55	MG	DA	2154	1/1	0.87	0.32	68,68,68,68	0
55	MG	CA	3441	1/1	0.87	0.28	63,63,63,63	0
55	MG	CA	3595	1/1	0.87	0.39	54,54,54,54	0
55	MG	AA	4816	1/1	0.87	0.27	82,82,82,82	0
55	MG	BB	302	1/1	0.87	0.16	61,61,61,61	0
55	MG	AA	5225	1/1	0.87	0.11	56,56,56,56	0
55	MG	CA	2987	1/1	0.87	0.41	67,67,67,67	0
55	MG	CA	3349	1/1	0.87	0.14	48,48,48,48	0
55	MG	AA	4513	1/1	0.87	0.25	42,42,42,42	0
55	MG	DA	2034	1/1	0.87	0.12	43,43,43,43	0
55	MG	DA	1964	1/1	0.87	0.42	38,38,38,38	0
55	MG	AA	4823	1/1	0.87	0.28	51,51,51,51	0
55	MG	BA	2088	1/1	0.87	0.36	55,55,55,55	0
55	MG	DA	1987	1/1	0.87	0.32	42,42,42,42	0
55	MG	CA	3496	1/1	0.87	0.13	45,45,45,45	0
55	MG	CA	3163	1/1	0.87	0.49	16,16,16,16	0
55	MG	AA	4332	1/1	0.87	0.32	53,53,53,53	0
55	MG	AA	5167	1/1	0.87	0.35	58,58,58,58	0
55	MG	AA	4189	1/1	0.87	0.38	27,27,27,27	0
55	MG	AA	4543	1/1	0.87	0.27	77,77,77,77	0
55	MG	AA	4311	1/1	0.87	0.53	60,60,60,60	0
55	MG	AA	4864	1/1	0.87	0.24	30,30,30,30	0
55	MG	CA	3860	1/1	0.87	0.33	46,46,46,46	0
55	MG	AA	4790	1/1	0.87	0.26	43,43,43,43	0
55	MG	CA	4027	1/1	0.87	0.23	67,67,67,67	0
55	MG	AA	4931	1/1	0.87	0.26	41,41,41,41	0
55	MG	CA	3734	1/1	0.87	0.59	43,43,43,43	0
55	MG	AA	4747	1/1	0.87	0.34	37,37,37,37	0
55	MG	AA	4071	1/1	0.87	0.25	54,54,54,54	0
55	MG	BA	1813	1/1	0.87	0.67	60,60,60,60	0
55	MG	BA	2131	1/1	0.87	0.41	70,70,70,70	0
55	MG	BA	2081	1/1	0.87	0.17	92,92,92,92	0
55	MG	AA	5016	1/1	0.87	0.51	68,68,68,68	0
55	MG	AA	4791	1/1	0.87	0.42	57,57,57,57	0
55	MG	DA	1668	1/1	0.87	0.88	93,93,93,93	0
55	MG	CA	3648	1/1	0.87	0.28	41,41,41,41	0
55	MG	CA	4037	1/1	0.87	0.15	45,45,45,45	0
55	MG	CA	3446	1/1	0.87	0.46	53,53,53,53	0
55	MG	DA	2004	1/1	0.87	0.41	40,40,40,40	0
55	MG	CB	265	1/1	0.87	0.30	55,55,55,55	0
55	MG	CA	4351	1/1	0.87	0.19	59,59,59,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4799	1/1	0.87	0.34	37,37,37,37	0
55	MG	AA	4063	1/1	0.87	0.67	80,80,80,80	0
55	MG	CA	4126	1/1	0.87	0.16	48,48,48,48	0
55	MG	CA	3998	1/1	0.87	0.23	35,35,35,35	0
55	MG	CB	204	1/1	0.87	0.21	92,92,92,92	0
55	MG	CA	4069	1/1	0.87	0.31	41,41,41,41	0
55	MG	CA	2921	1/1	0.87	0.15	63,63,63,63	0
55	MG	AA	5293	1/1	0.87	0.34	49,49,49,49	0
55	MG	CA	3817	1/1	0.87	0.95	59,59,59,59	0
55	MG	CA	3893	1/1	0.87	0.36	54,54,54,54	0
55	MG	AA	5266	1/1	0.87	0.32	64,64,64,64	0
55	MG	AA	4254	1/1	0.87	0.52	33,33,33,33	0
55	MG	DA	1603	1/1	0.87	0.66	60,60,60,60	0
55	MG	CT	101	1/1	0.87	0.31	51,51,51,51	0
55	MG	CA	4010	1/1	0.87	0.51	42,42,42,42	0
55	MG	CA	3783	1/1	0.87	1.20	96,96,96,96	0
55	MG	AA	4495	1/1	0.87	0.31	53,53,53,53	0
55	MG	CA	3516	1/1	0.87	0.16	46,46,46,46	0
55	MG	DA	2070	1/1	0.87	0.19	90,90,90,90	0
55	MG	C3	101	1/1	0.87	0.35	57,57,57,57	0
55	MG	AA	4603	1/1	0.87	0.20	68,68,68,68	0
55	MG	DA	1805	1/1	0.87	0.30	85,85,85,85	0
55	MG	AA	4503	1/1	0.87	0.20	48,48,48,48	0
55	MG	BA	2014	1/1	0.87	0.26	58,58,58,58	0
55	MG	AA	4316	1/1	0.87	0.31	31,31,31,31	0
55	MG	BA	2039	1/1	0.87	0.29	62,62,62,62	0
55	MG	DA	2050	1/1	0.87	0.39	77,77,77,77	0
55	MG	BA	1794	1/1	0.87	0.11	53,53,53,53	0
55	MG	CA	4189	1/1	0.87	0.48	49,49,49,49	0
55	MG	CA	4287	1/1	0.87	0.41	77,77,77,77	0
55	MG	CA	3853	1/1	0.87	0.24	21,21,21,21	0
55	MG	A4	102	1/1	0.87	0.63	101,101,101,101	0
55	MG	CA	3470	1/1	0.87	0.41	49,49,49,49	0
55	MG	CA	3480	1/1	0.87	0.67	49,49,49,49	0
55	MG	BA	1750	1/1	0.87	0.48	55,55,55,55	0
55	MG	DA	1723	1/1	0.87	0.38	65,65,65,65	0
55	MG	AA	4124	1/1	0.87	0.40	75,75,75,75	0
55	MG	AA	4660	1/1	0.87	1.25	140,140,140,140	0
55	MG	AA	4246	1/1	0.87	0.47	43,43,43,43	0
55	MG	CB	223	1/1	0.87	0.56	36,36,36,36	0
55	MG	AA	4219	1/1	0.87	0.17	16,16,16,16	0
55	MG	DA	1700	1/1	0.87	0.10	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	2188	1/1	0.87	0.51	91,91,91,91	0
55	MG	AB	214	1/1	0.87	0.24	84,84,84,84	0
55	MG	CB	217	1/1	0.87	0.28	35,35,35,35	0
55	MG	CA	3335	1/1	0.87	0.20	34,34,34,34	0
55	MG	CA	3327	1/1	0.87	0.28	36,36,36,36	0
55	MG	CA	3400	1/1	0.87	0.45	32,32,32,32	0
55	MG	BA	1767	1/1	0.87	0.32	39,39,39,39	0
55	MG	CA	3616	1/1	0.87	0.17	53,53,53,53	0
55	MG	AB	226	1/1	0.87	0.20	59,59,59,59	0
55	MG	BA	1834	1/1	0.87	1.08	67,67,67,67	0
55	MG	CA	3126	1/1	0.87	0.37	14,14,14,14	0
55	MG	AA	4411	1/1	0.87	0.17	63,63,63,63	0
55	MG	AA	4372	1/1	0.87	0.18	49,49,49,49	0
55	MG	DR	101	1/1	0.87	0.83	62,62,62,62	0
55	MG	AA	5258	1/1	0.87	0.07	76,76,76,76	0
55	MG	DA	1941	1/1	0.87	0.30	38,38,38,38	0
55	MG	DH	203	1/1	0.87	0.92	102,102,102,102	0
55	MG	AA	5203	1/1	0.87	0.25	80,80,80,80	0
55	MG	BA	2011	1/1	0.87	0.12	73,73,73,73	0
55	MG	AA	4644	1/1	0.87	0.53	75,75,75,75	0
55	MG	CA	4099	1/1	0.87	0.31	47,47,47,47	0
55	MG	CA	3912	1/1	0.87	0.30	56,56,56,56	0
55	MG	CA	3243	1/1	0.87	0.52	54,54,54,54	0
55	MG	CA	4364	1/1	0.87	0.13	74,74,74,74	0
55	MG	BA	1963	1/1	0.87	0.17	51,51,51,51	0
55	MG	CA	3099	1/1	0.87	0.27	41,41,41,41	0
55	MG	DA	2164	1/1	0.87	0.25	54,54,54,54	0
55	MG	AA	4866	1/1	0.87	0.43	24,24,24,24	0
55	MG	BA	1757	1/1	0.87	0.46	66,66,66,66	0
55	MG	BA	1971	1/1	0.87	0.27	34,34,34,34	0
55	MG	CA	2917	1/1	0.87	0.35	41,41,41,41	0
55	MG	AA	4257	1/1	0.87	0.79	41,41,41,41	0
55	MG	AA	5055	1/1	0.87	0.27	48,48,48,48	0
55	MG	AA	4068	1/1	0.87	0.22	66,66,66,66	0
55	MG	CA	3524	1/1	0.87	0.12	39,39,39,39	0
55	MG	CA	3562	1/1	0.87	0.32	48,48,48,48	0
55	MG	CA	3549	1/1	0.87	0.27	36,36,36,36	0
55	MG	DA	2160	1/1	0.87	0.78	63,63,63,63	0
55	MG	CA	4000	1/1	0.87	0.23	47,47,47,47	0
55	MG	AA	4107	1/1	0.87	0.32	61,61,61,61	0
55	MG	CA	3597	1/1	0.87	0.28	89,89,89,89	0
55	MG	AA	4318	1/1	0.87	1.05	56,56,56,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3005	1/1	0.87	0.53	91,91,91,91	0
55	MG	CA	3210	1/1	0.87	0.38	35,35,35,35	0
55	MG	BA	2117	1/1	0.87	0.19	56,56,56,56	0
55	MG	CA	3592	1/1	0.87	0.18	49,49,49,49	0
55	MG	DA	1657	1/1	0.87	0.73	68,68,68,68	0
55	MG	AA	5116	1/1	0.87	0.19	50,50,50,50	0
55	MG	AA	4848	1/1	0.87	0.16	30,30,30,30	0
55	MG	CA	4275	1/1	0.87	0.31	74,74,74,74	0
55	MG	BA	1658	1/1	0.87	0.20	73,73,73,73	0
55	MG	AA	5123	1/1	0.87	0.13	60,60,60,60	0
55	MG	BA	1933	1/1	0.87	0.15	64,64,64,64	0
55	MG	AA	5014	1/1	0.87	0.21	45,45,45,45	0
55	MG	CA	3468	1/1	0.87	0.57	59,59,59,59	0
55	MG	BA	1838	1/1	0.87	0.26	90,90,90,90	0
55	MG	AA	4720	1/1	0.87	0.32	92,92,92,92	0
55	MG	DA	2116	1/1	0.87	0.39	89,89,89,89	0
55	MG	CB	238	1/1	0.88	0.25	52,52,52,52	0
55	MG	AP	202	1/1	0.88	0.33	79,79,79,79	0
55	MG	BA	1627	1/1	0.88	0.29	61,61,61,61	0
55	MG	CA	3186	1/1	0.88	0.25	29,29,29,29	0
55	MG	AA	4325	1/1	0.88	0.26	44,44,44,44	0
55	MG	CA	4021	1/1	0.88	0.10	56,56,56,56	0
55	MG	CA	3519	1/1	0.88	0.26	68,68,68,68	0
55	MG	AA	4922	1/1	0.88	0.12	67,67,67,67	0
55	MG	AA	4446	1/1	0.88	0.32	51,51,51,51	0
55	MG	AA	4564	1/1	0.88	0.12	66,66,66,66	0
55	MG	CA	2991	1/1	0.88	0.33	51,51,51,51	0
55	MG	AA	4420	1/1	0.88	0.17	52,52,52,52	0
55	MG	CA	2979	1/1	0.88	0.60	74,74,74,74	0
55	MG	DA	2007	1/1	0.88	0.11	75,75,75,75	0
55	MG	AA	4941	1/1	0.88	0.21	48,48,48,48	0
55	MG	AA	4117	1/1	0.88	0.96	71,71,71,71	0
55	MG	CA	3181	1/1	0.88	0.34	39,39,39,39	0
55	MG	DA	1971	1/1	0.88	0.19	45,45,45,45	0
55	MG	AA	4645	1/1	0.88	0.18	57,57,57,57	0
55	MG	CA	3318	1/1	0.88	0.31	29,29,29,29	0
55	MG	BA	1703	1/1	0.88	0.14	32,32,32,32	0
55	MG	BA	1614	1/1	0.88	0.54	83,83,83,83	0
55	MG	DA	2167	1/1	0.88	0.28	41,41,41,41	0
55	MG	CA	4236	1/1	0.88	0.50	45,45,45,45	0
55	MG	AA	4051	1/1	0.88	0.16	54,54,54,54	0
55	MG	CA	4363	1/1	0.88	0.13	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CB	213	1/1	0.88	0.25	65,65,65,65	0
55	MG	CA	4165	1/1	0.88	0.13	37,37,37,37	0
55	MG	BA	1602	1/1	0.88	0.26	101,101,101,101	0
55	MG	AA	4155	1/1	0.88	0.54	75,75,75,75	0
55	MG	AA	4128	1/1	0.88	0.17	69,69,69,69	0
55	MG	CA	3276	1/1	0.88	0.55	58,58,58,58	0
55	MG	BA	1918	1/1	0.88	0.15	65,65,65,65	0
55	MG	DA	1963	1/1	0.88	0.14	46,46,46,46	0
55	MG	AA	4740	1/1	0.88	1.33	103,103,103,103	0
55	MG	AA	4136	1/1	0.88	0.19	91,91,91,91	0
55	MG	BA	1631	1/1	0.88	0.17	94,94,94,94	0
55	MG	AA	4919	1/1	0.88	0.66	64,64,64,64	0
55	MG	AA	5124	1/1	0.88	0.27	46,46,46,46	0
55	MG	BA	2104	1/1	0.88	0.25	62,62,62,62	0
55	MG	DA	2098	1/1	0.88	0.36	57,57,57,57	0
55	MG	CA	3902	1/1	0.88	0.19	68,68,68,68	0
55	MG	DA	2033	1/1	0.88	0.35	45,45,45,45	0
55	MG	CA	3205	1/1	0.88	0.32	34,34,34,34	0
55	MG	CA	3994	1/1	0.88	0.15	66,66,66,66	0
55	MG	AA	4657	1/1	0.88	0.77	69,69,69,69	0
55	MG	CA	3366	1/1	0.88	0.26	42,42,42,42	0
55	MG	AA	4995	1/1	0.88	0.12	71,71,71,71	0
55	MG	AA	4654	1/1	0.88	0.19	42,42,42,42	0
55	MG	DA	2081	1/1	0.88	0.48	68,68,68,68	0
55	MG	CA	2936	1/1	0.88	0.29	61,61,61,61	0
55	MG	BA	1983	1/1	0.88	0.28	58,58,58,58	0
55	MG	BA	1706	1/1	0.88	0.14	35,35,35,35	0
55	MG	DA	1726	1/1	0.88	0.14	28,28,28,28	0
55	MG	AA	5043	1/1	0.88	0.30	79,79,79,79	0
55	MG	CX	103	1/1	0.88	0.20	31,31,31,31	0
55	MG	BA	1817	1/1	0.88	0.06	77,77,77,77	0
55	MG	DA	2111	1/1	0.88	0.23	52,52,52,52	0
55	MG	BA	2012	1/1	0.88	0.75	64,64,64,64	0
55	MG	CA	4006	1/1	0.88	0.17	33,33,33,33	0
55	MG	BA	1906	1/1	0.88	1.40	90,90,90,90	0
55	MG	CA	3255	1/1	0.88	0.13	33,33,33,33	0
55	MG	CA	3477	1/1	0.88	0.16	45,45,45,45	0
55	MG	BW	103	1/1	0.88	0.34	60,60,60,60	0
55	MG	CA	3514	1/1	0.88	0.60	74,74,74,74	0
55	MG	AA	5012	1/1	0.88	0.51	59,59,59,59	0
55	MG	DA	1658	1/1	0.88	0.30	87,87,87,87	0
55	MG	CA	2924	1/1	0.88	0.63	91,91,91,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4932	1/1	0.88	0.25	45,45,45,45	0
55	MG	DA	1732	1/1	0.88	0.43	64,64,64,64	0
55	MG	AA	5172	1/1	0.88	0.17	65,65,65,65	0
55	MG	DA	1718	1/1	0.88	0.57	43,43,43,43	0
55	MG	BA	2015	1/1	0.88	0.40	53,53,53,53	0
55	MG	CA	3537	1/1	0.88	0.22	60,60,60,60	0
55	MG	CA	3503	1/1	0.88	0.32	53,53,53,53	0
55	MG	CA	3228	1/1	0.88	0.32	34,34,34,34	0
55	MG	BA	1798	1/1	0.88	0.23	60,60,60,60	0
55	MG	CA	3097	1/1	0.88	0.27	60,60,60,60	0
55	MG	CA	3264	1/1	0.88	0.25	34,34,34,34	0
55	MG	BI	201	1/1	0.88	0.34	96,96,96,96	0
55	MG	AA	4860	1/1	0.88	0.08	66,66,66,66	0
55	MG	CA	3957	1/1	0.88	0.71	55,55,55,55	0
55	MG	CQ	204	1/1	0.88	0.52	75,75,75,75	0
55	MG	CA	3418	1/1	0.88	0.39	49,49,49,49	0
55	MG	CA	3759	1/1	0.88	0.47	57,57,57,57	0
55	MG	DA	2100	1/1	0.88	0.16	48,48,48,48	0
55	MG	AB	232	1/1	0.88	0.13	93,93,93,93	0
55	MG	CA	4019	1/1	0.88	0.42	43,43,43,43	0
55	MG	DA	1982	1/1	0.88	0.22	61,61,61,61	0
55	MG	AA	4976	1/1	0.88	0.34	78,78,78,78	0
55	MG	AA	4889	1/1	0.88	0.26	41,41,41,41	0
55	MG	AA	4955	1/1	0.88	0.42	54,54,54,54	0
55	MG	AA	4431	1/1	0.88	0.32	59,59,59,59	0
55	MG	BA	2146	1/1	0.88	0.30	53,53,53,53	0
55	MG	DA	1870	1/1	0.88	0.11	76,76,76,76	0
55	MG	CA	2985	1/1	0.88	0.28	43,43,43,43	0
55	MG	CA	3452	1/1	0.88	0.20	50,50,50,50	0
55	MG	AA	4548	1/1	0.88	0.18	78,78,78,78	0
55	MG	BA	1820	1/1	0.88	0.38	66,66,66,66	0
55	MG	AA	5155	1/1	0.88	0.85	69,69,69,69	0
55	MG	BA	1646	1/1	0.88	0.20	59,59,59,59	0
55	MG	CA	3300	1/1	0.88	0.36	60,60,60,60	0
55	MG	CA	3518	1/1	0.88	0.11	75,75,75,75	0
55	MG	BA	1889	1/1	0.88	0.27	98,98,98,98	0
55	MG	CA	3688	1/1	0.88	0.39	70,70,70,70	0
55	MG	CA	3640	1/1	0.88	0.26	73,73,73,73	0
55	MG	DA	1944	1/1	0.88	0.27	64,64,64,64	0
55	MG	CA	4160	1/1	0.88	0.25	67,67,67,67	0
55	MG	CA	3658	1/1	0.88	0.21	51,51,51,51	0
55	MG	DA	2047	1/1	0.88	0.58	52,52,52,52	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4857	1/1	0.88	0.35	28,28,28,28	0
55	MG	AA	4666	1/1	0.88	0.72	48,48,48,48	0
55	MG	AA	4574	1/1	0.88	0.80	71,71,71,71	0
55	MG	DA	2186	1/1	0.88	0.19	71,71,71,71	0
55	MG	CA	4231	1/1	0.88	0.42	48,48,48,48	0
55	MG	AA	4004	1/1	0.88	0.37	52,52,52,52	0
55	MG	BA	1672	1/1	0.88	0.23	60,60,60,60	0
55	MG	DA	1689	1/1	0.88	0.66	118,118,118,118	0
55	MG	BA	1714	1/1	0.88	0.51	56,56,56,56	0
55	MG	AA	4856	1/1	0.88	0.20	42,42,42,42	0
55	MG	AA	4319	1/1	0.88	0.20	50,50,50,50	0
55	MG	CA	3698	1/1	0.88	0.19	65,65,65,65	0
55	MG	DA	1874	1/1	0.88	0.58	92,92,92,92	0
55	MG	DA	2000	1/1	0.88	0.47	87,87,87,87	0
55	MG	AA	4131	1/1	0.88	0.19	48,48,48,48	0
55	MG	AA	5088	1/1	0.88	0.50	78,78,78,78	0
55	MG	AA	5042	1/1	0.88	0.37	57,57,57,57	0
55	MG	AA	5098	1/1	0.88	0.37	80,80,80,80	0
55	MG	AA	4052	1/1	0.88	0.33	72,72,72,72	0
55	MG	CB	218	1/1	0.88	0.53	46,46,46,46	0
55	MG	CA	3244	1/1	0.88	1.14	47,47,47,47	0
55	MG	DA	2062	1/1	0.88	0.34	65,65,65,65	0
55	MG	AA	4244	1/1	0.88	0.19	31,31,31,31	0
55	MG	AB	201	1/1	0.88	1.19	87,87,87,87	0
55	MG	AA	4784	1/1	0.88	0.34	43,43,43,43	0
55	MG	AA	4441	1/1	0.88	0.30	43,43,43,43	0
55	MG	CA	3870	1/1	0.88	0.34	51,51,51,51	0
55	MG	DA	1742	1/1	0.88	0.28	53,53,53,53	0
55	MG	DA	1945	1/1	0.88	0.21	78,78,78,78	0
55	MG	BA	2000	1/1	0.88	0.21	76,76,76,76	0
55	MG	CA	3331	1/1	0.88	0.14	27,27,27,27	0
55	MG	AA	4038	1/1	0.88	0.26	117,117,117,117	0
55	MG	CA	3919	1/1	0.88	0.24	51,51,51,51	0
55	MG	CA	2948	1/1	0.88	0.43	85,85,85,85	0
55	MG	CA	3428	1/1	0.88	0.16	35,35,35,35	0
55	MG	AA	4479	1/1	0.88	0.33	80,80,80,80	0
55	MG	CA	3055	1/1	0.88	0.19	59,59,59,59	0
55	MG	BA	1952	1/1	0.88	0.31	22,22,22,22	0
55	MG	AA	4284	1/1	0.88	0.38	28,28,28,28	0
55	MG	DA	1815	1/1	0.88	0.31	75,75,75,75	0
55	MG	CA	4198	1/1	0.88	0.64	93,93,93,93	0
55	MG	CA	4271	1/1	0.88	0.32	29,29,29,29	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1790	1/1	0.88	0.37	91,91,91,91	0
55	MG	CA	3642	1/1	0.88	0.32	46,46,46,46	0
55	MG	AA	4873	1/1	0.88	0.40	34,34,34,34	0
55	MG	AB	206	1/1	0.88	0.25	112,112,112,112	0
55	MG	DA	1934	1/1	0.88	0.13	75,75,75,75	0
55	MG	CA	3488	1/1	0.88	0.25	55,55,55,55	0
55	MG	BA	1950	1/1	0.88	0.28	84,84,84,84	0
55	MG	CA	4322	1/1	0.88	0.29	66,66,66,66	0
55	MG	DA	1663	1/1	0.88	0.22	64,64,64,64	0
55	MG	CA	3256	1/1	0.88	0.15	31,31,31,31	0
55	MG	CA	4390	1/1	0.88	0.15	54,54,54,54	0
55	MG	AA	4283	1/1	0.88	0.18	39,39,39,39	0
55	MG	CA	3977	1/1	0.88	0.16	26,26,26,26	0
55	MG	AA	4562	1/1	0.88	0.13	73,73,73,73	0
55	MG	AA	4915	1/1	0.88	0.31	64,64,64,64	0
55	MG	CA	3396	1/1	0.88	0.33	39,39,39,39	0
55	MG	AA	4019	1/1	0.88	0.12	85,85,85,85	0
55	MG	AA	4519	1/1	0.88	0.32	50,50,50,50	0
55	MG	AA	4217	1/1	0.88	0.82	43,43,43,43	0
55	MG	CA	4328	1/1	0.88	0.68	76,76,76,76	0
55	MG	AA	4373	1/1	0.88	0.49	40,40,40,40	0
55	MG	CA	3816	1/1	0.88	0.10	68,68,68,68	0
55	MG	AA	4423	1/1	0.88	0.24	45,45,45,45	0
55	MG	AA	4553	1/1	0.88	0.31	39,39,39,39	0
55	MG	AA	4059	1/1	0.88	0.36	73,73,73,73	0
55	MG	AA	4072	1/1	0.88	0.33	57,57,57,57	0
55	MG	CA	3548	1/1	0.88	0.34	55,55,55,55	0
55	MG	AA	4752	1/1	0.88	0.34	78,78,78,78	0
55	MG	AA	4623	1/1	0.88	0.43	69,69,69,69	0
55	MG	CA	3474	1/1	0.88	0.39	55,55,55,55	0
55	MG	CA	4067	1/1	0.88	0.30	50,50,50,50	0
55	MG	BA	1821	1/1	0.88	0.64	81,81,81,81	0
55	MG	CP	201	1/1	0.88	0.20	57,57,57,57	0
55	MG	BA	1772	1/1	0.88	0.14	43,43,43,43	0
55	MG	AA	4734	1/1	0.88	0.30	21,21,21,21	0
55	MG	BA	1705	1/1	0.88	0.12	55,55,55,55	0
55	MG	AA	4518	1/1	0.88	0.55	98,98,98,98	0
55	MG	AA	4352	1/1	0.88	0.32	66,66,66,66	0
55	MG	BA	2168	1/1	0.88	0.34	59,59,59,59	0
55	MG	AA	4401	1/1	0.88	0.41	42,42,42,42	0
55	MG	BW	119	1/1	0.88	0.17	73,73,73,73	0
55	MG	CA	4258	1/1	0.88	0.47	48,48,48,48	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3887	1/1	0.88	0.41	48,48,48,48	0
55	MG	DA	2171	1/1	0.88	0.21	96,96,96,96	0
55	MG	BV	130	1/1	0.88	0.13	43,43,43,43	0
55	MG	CA	3670	1/1	0.88	0.90	78,78,78,78	0
55	MG	AB	247	1/1	0.88	0.12	49,49,49,49	0
55	MG	BA	1960	1/1	0.88	0.35	35,35,35,35	0
55	MG	AA	4381	1/1	0.88	0.34	79,79,79,79	0
55	MG	BA	1984	1/1	0.88	0.08	69,69,69,69	0
55	MG	CA	3456	1/1	0.88	0.25	51,51,51,51	0
55	MG	C4	104	1/1	0.88	0.28	56,56,56,56	0
55	MG	AA	5001	1/1	0.88	0.67	53,53,53,53	0
55	MG	CA	4372	1/1	0.88	0.35	55,55,55,55	0
55	MG	CA	4196	1/1	0.88	0.24	37,37,37,37	0
55	MG	AA	5058	1/1	0.88	0.26	49,49,49,49	0
55	MG	DA	2174	1/1	0.88	0.23	65,65,65,65	0
55	MG	AA	4983	1/1	0.88	0.21	51,51,51,51	0
55	MG	AA	4545	1/1	0.88	0.57	65,65,65,65	0
55	MG	AA	4691	1/1	0.88	0.15	76,76,76,76	0
55	MG	CA	4297	1/1	0.88	0.35	49,49,49,49	0
55	MG	CA	3000	1/1	0.88	0.57	37,37,37,37	0
55	MG	AA	4877	1/1	0.88	0.24	48,48,48,48	0
55	MG	CA	3035	1/1	0.88	0.20	70,70,70,70	0
55	MG	CA	2962	1/1	0.89	0.30	71,71,71,71	0
55	MG	DA	1950	1/1	0.89	0.21	155,155,155,155	0
55	MG	CA	4264	1/1	0.89	0.10	68,68,68,68	0
55	MG	CB	248	1/1	0.89	0.55	63,63,63,63	0
55	MG	CB	252	1/1	0.89	0.22	64,64,64,64	0
55	MG	AA	4555	1/1	0.89	0.47	66,66,66,66	0
55	MG	CB	260	1/1	0.89	0.20	54,54,54,54	0
55	MG	DA	1656	1/1	0.89	0.13	96,96,96,96	0
55	MG	BA	1638	1/1	0.89	0.22	65,65,65,65	0
55	MG	AA	4701	1/1	0.89	0.43	71,71,71,71	0
55	MG	BA	1616	1/1	0.89	0.38	65,65,65,65	0
55	MG	AA	4719	1/1	0.89	0.26	74,74,74,74	0
55	MG	AA	4403	1/1	0.89	0.18	55,55,55,55	0
55	MG	CA	4103	1/1	0.89	0.33	43,43,43,43	0
55	MG	CA	3273	1/1	0.89	0.35	43,43,43,43	0
55	MG	AA	4642	1/1	0.89	0.67	73,73,73,73	0
55	MG	AA	4262	1/1	0.89	0.19	34,34,34,34	0
55	MG	DA	1767	1/1	0.89	0.20	118,118,118,118	0
55	MG	BA	2096	1/1	0.89	0.39	76,76,76,76	0
55	MG	CA	4240	1/1	0.89	0.28	44,44,44,44	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3179	1/1	0.89	0.12	41,41,41,41	0
55	MG	AA	4438	1/1	0.89	0.20	76,76,76,76	0
55	MG	CA	3510	1/1	0.89	0.24	58,58,58,58	0
55	MG	AA	4980	1/1	0.89	0.16	55,55,55,55	0
55	MG	BA	2079	1/1	0.89	0.17	57,57,57,57	0
55	MG	CA	3138	1/1	0.89	0.55	19,19,19,19	0
55	MG	CA	3266	1/1	0.89	0.49	25,25,25,25	0
55	MG	DA	1915	1/1	0.89	0.11	113,113,113,113	0
55	MG	AA	4408	1/1	0.89	0.24	50,50,50,50	0
55	MG	BA	1937	1/1	0.89	0.26	48,48,48,48	0
55	MG	AA	4460	1/1	0.89	0.26	62,62,62,62	0
55	MG	CA	4120	1/1	0.89	0.32	42,42,42,42	0
55	MG	BA	1777	1/1	0.89	0.29	63,63,63,63	0
55	MG	CA	3791	1/1	0.89	0.37	61,61,61,61	0
55	MG	AA	4775	1/1	0.89	0.14	66,66,66,66	0
55	MG	AB	212	1/1	0.89	0.10	45,45,45,45	0
55	MG	AB	241	1/1	0.89	0.41	98,98,98,98	0
55	MG	BA	1753	1/1	0.89	0.42	39,39,39,39	0
55	MG	CA	3383	1/1	0.89	0.19	38,38,38,38	0
55	MG	CA	4064	1/1	0.89	0.24	49,49,49,49	0
55	MG	CA	4132	1/1	0.89	0.40	57,57,57,57	0
55	MG	AA	4268	1/1	0.89	0.28	25,25,25,25	0
55	MG	CA	3527	1/1	0.89	0.34	27,27,27,27	0
55	MG	CA	3169	1/1	0.89	0.53	21,21,21,21	0
55	MG	CA	3245	1/1	0.89	0.23	31,31,31,31	0
55	MG	AA	4126	1/1	0.89	0.47	95,95,95,95	0
55	MG	AA	5186	1/1	0.89	0.63	69,69,69,69	0
55	MG	CA	4397	1/1	0.89	0.21	69,69,69,69	0
55	MG	CA	3370	1/1	0.89	0.25	52,52,52,52	0
55	MG	AA	5024	1/1	0.89	0.14	52,52,52,52	0
55	MG	CA	4022	1/1	0.89	0.28	55,55,55,55	0
55	MG	DA	1835	1/1	0.89	0.20	85,85,85,85	0
55	MG	CA	2980	1/1	0.89	0.17	67,67,67,67	0
55	MG	DA	2044	1/1	0.89	0.25	65,65,65,65	0
55	MG	DA	2082	1/1	0.89	0.13	81,81,81,81	0
55	MG	AA	5134	1/1	0.89	0.73	77,77,77,77	0
55	MG	BA	2065	1/1	0.89	0.14	39,39,39,39	0
55	MG	CA	3918	1/1	0.89	0.20	58,58,58,58	0
55	MG	AA	4343	1/1	0.89	0.27	43,43,43,43	0
55	MG	AA	5180	1/1	0.89	0.45	82,82,82,82	0
55	MG	CA	4020	1/1	0.89	0.50	21,21,21,21	0
55	MG	CA	3601	1/1	0.89	0.29	58,58,58,58	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1848	1/1	0.89	0.26	67,67,67,67	0
55	MG	DA	2091	1/1	0.89	0.42	50,50,50,50	0
55	MG	CA	4044	1/1	0.89	0.34	25,25,25,25	0
55	MG	CA	3894	1/1	0.89	0.21	55,55,55,55	0
55	MG	CA	4202	1/1	0.89	0.24	61,61,61,61	0
55	MG	CA	3031	1/1	0.89	0.56	62,62,62,62	0
55	MG	BA	2161	1/1	0.89	0.27	69,69,69,69	0
55	MG	CA	3547	1/1	0.89	0.28	32,32,32,32	0
55	MG	DA	1828	1/1	0.89	0.41	100,100,100,100	0
55	MG	CA	3657	1/1	0.89	0.36	53,53,53,53	0
55	MG	CA	3046	1/1	0.89	0.88	80,80,80,80	0
55	MG	CA	3613	1/1	0.89	0.23	72,72,72,72	0
55	MG	CA	3348	1/1	0.89	0.47	43,43,43,43	0
55	MG	CA	4167	1/1	0.89	0.17	45,45,45,45	0
55	MG	CB	239	1/1	0.89	0.22	43,43,43,43	0
55	MG	CA	3207	1/1	0.89	0.20	14,14,14,14	0
55	MG	DA	1978	1/1	0.89	0.41	51,51,51,51	0
55	MG	AA	4563	1/1	0.89	0.26	54,54,54,54	0
55	MG	AA	4273	1/1	0.89	0.43	43,43,43,43	0
55	MG	CA	3925	1/1	0.89	0.28	69,69,69,69	0
55	MG	AA	4465	1/1	0.89	0.40	57,57,57,57	0
55	MG	AB	244	1/1	0.89	0.28	100,100,100,100	0
55	MG	AA	4395	1/1	0.89	0.10	53,53,53,53	0
55	MG	DA	2035	1/1	0.89	0.72	59,59,59,59	0
55	MG	AA	4398	1/1	0.89	0.48	52,52,52,52	0
55	MG	DA	1876	1/1	0.89	0.34	56,56,56,56	0
55	MG	DA	1891	1/1	0.89	0.62	116,116,116,116	0
55	MG	AA	4663	1/1	0.89	0.31	49,49,49,49	0
55	MG	AA	4968	1/1	0.89	0.22	65,65,65,65	0
55	MG	BA	1683	1/1	0.89	0.34	29,29,29,29	0
55	MG	DA	1625	1/1	0.89	0.41	81,81,81,81	0
55	MG	CA	4013	1/1	0.89	0.22	46,46,46,46	0
55	MG	DA	1864	1/1	0.89	0.90	97,97,97,97	0
55	MG	CA	3402	1/1	0.89	0.19	63,63,63,63	0
55	MG	CB	232	1/1	0.89	0.15	54,54,54,54	0
55	MG	DA	1946	1/1	0.89	0.20	86,86,86,86	0
55	MG	CA	4031	1/1	0.89	0.10	40,40,40,40	0
55	MG	DA	1877	1/1	0.89	0.39	88,88,88,88	0
55	MG	DA	1777	1/1	0.89	0.28	124,124,124,124	0
55	MG	CE	302	1/1	0.89	0.62	31,31,31,31	0
55	MG	DA	1697	1/1	0.89	0.45	57,57,57,57	0
55	MG	CA	3406	1/1	0.89	0.30	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4093	1/1	0.89	0.24	56,56,56,56	0
55	MG	CA	3298	1/1	0.89	0.45	56,56,56,56	0
55	MG	BA	1849	1/1	0.89	0.40	135,135,135,135	0
55	MG	AA	4917	1/1	0.89	0.19	41,41,41,41	0
55	MG	AA	4027	1/1	0.89	0.28	48,48,48,48	0
55	MG	CA	3223	1/1	0.89	0.42	51,51,51,51	0
55	MG	CA	3598	1/1	0.89	0.29	81,81,81,81	0
55	MG	CA	3492	1/1	0.89	0.57	124,124,124,124	0
55	MG	AA	4589	1/1	0.89	0.34	70,70,70,70	0
55	MG	CA	3633	1/1	0.89	0.54	63,63,63,63	0
55	MG	CA	4249	1/1	0.89	0.77	84,84,84,84	0
55	MG	AA	4076	1/1	0.89	0.56	90,90,90,90	0
55	MG	CA	3342	1/1	0.89	0.20	48,48,48,48	0
55	MG	DA	1798	1/1	0.89	0.20	117,117,117,117	0
55	MG	AA	4707	1/1	0.89	0.41	73,73,73,73	0
55	MG	CA	4085	1/1	0.89	0.25	54,54,54,54	0
55	MG	CA	3014	1/1	0.89	0.37	68,68,68,68	0
55	MG	AA	4111	1/1	0.89	0.90	81,81,81,81	0
55	MG	CA	3850	1/1	0.89	0.25	89,89,89,89	0
55	MG	CO	201	1/1	0.89	0.18	43,43,43,43	0
55	MG	CA	4310	1/1	0.89	0.33	44,44,44,44	0
55	MG	CA	3431	1/1	0.89	0.19	40,40,40,40	0
55	MG	AA	4675	1/1	0.89	0.28	52,52,52,52	0
55	MG	CA	3036	1/1	0.89	0.66	77,77,77,77	0
55	MG	AA	4482	1/1	0.89	0.28	67,67,67,67	0
55	MG	CA	4107	1/1	0.89	0.19	52,52,52,52	0
55	MG	CB	264	1/1	0.89	0.18	62,62,62,62	0
55	MG	AA	4102	1/1	0.89	0.73	58,58,58,58	0
55	MG	DA	1608	1/1	0.89	0.19	71,71,71,71	0
55	MG	AF	305	1/1	0.89	0.27	45,45,45,45	0
55	MG	BA	2163	1/1	0.89	0.25	38,38,38,38	0
55	MG	CA	4084	1/1	0.89	0.22	67,67,67,67	0
55	MG	CA	3016	1/1	0.89	0.72	48,48,48,48	0
55	MG	DA	2114	1/1	0.89	0.29	74,74,74,74	0
55	MG	AA	5019	1/1	0.89	0.33	67,67,67,67	0
55	MG	BA	1629	1/1	0.89	0.09	55,55,55,55	0
55	MG	AA	4808	1/1	0.89	1.03	73,73,73,73	0
55	MG	AB	225	1/1	0.89	0.19	89,89,89,89	0
55	MG	BA	2023	1/1	0.89	0.23	45,45,45,45	0
55	MG	AA	4134	1/1	0.89	0.31	52,52,52,52	0
55	MG	AA	4709	1/1	0.89	0.22	67,67,67,67	0
55	MG	AA	4739	1/1	0.89	0.34	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1855	1/1	0.89	0.21	75,75,75,75	0
55	MG	AA	4638	1/1	0.89	0.42	139,139,139,139	0
55	MG	AA	5187	1/1	0.89	0.17	69,69,69,69	0
55	MG	DA	1730	1/1	0.89	0.33	44,44,44,44	0
55	MG	CA	3057	1/1	0.89	0.23	51,51,51,51	0
55	MG	C5	102	1/1	0.89	0.35	55,55,55,55	0
55	MG	BA	2026	1/1	0.89	0.34	59,59,59,59	0
55	MG	CA	3095	1/1	0.89	0.12	82,82,82,82	0
55	MG	CA	3836	1/1	0.89	0.31	77,77,77,77	0
55	MG	AA	5085	1/1	0.89	0.30	77,77,77,77	0
55	MG	CA	4089	1/1	0.89	0.07	53,53,53,53	0
55	MG	DV	112	1/1	0.89	0.18	35,35,35,35	0
55	MG	DV	122	1/1	0.89	0.45	63,63,63,63	0
55	MG	AA	5157	1/1	0.89	0.30	58,58,58,58	0
55	MG	AA	4962	1/1	0.89	0.31	49,49,49,49	0
55	MG	CA	3638	1/1	0.89	0.49	44,44,44,44	0
55	MG	DA	1923	1/1	0.89	0.10	69,69,69,69	0
55	MG	DA	2078	1/1	0.89	0.29	63,63,63,63	0
55	MG	AA	5105	1/1	0.89	0.28	47,47,47,47	0
55	MG	CA	3409	1/1	0.89	0.15	38,38,38,38	0
55	MG	DA	1720	1/1	0.89	0.59	66,66,66,66	0
55	MG	BA	1712	1/1	0.89	0.16	41,41,41,41	0
55	MG	AA	4776	1/1	0.89	0.70	105,105,105,105	0
55	MG	BA	1701	1/1	0.89	0.28	36,36,36,36	0
55	MG	AA	4248	1/1	0.89	0.41	39,39,39,39	0
55	MG	AA	5158	1/1	0.89	0.30	50,50,50,50	0
55	MG	AA	5129	1/1	0.89	0.32	66,66,66,66	0
55	MG	BA	1654	1/1	0.89	0.09	89,89,89,89	0
55	MG	AA	5004	1/1	0.89	0.15	49,49,49,49	0
55	MG	CA	3567	1/1	0.89	0.45	71,71,71,71	0
55	MG	CA	4072	1/1	0.89	0.32	61,61,61,61	0
55	MG	CA	4098	1/1	0.89	0.43	76,76,76,76	0
55	MG	BG	202	1/1	0.89	0.19	61,61,61,61	0
55	MG	CA	3476	1/1	0.89	0.73	74,74,74,74	0
55	MG	AA	5127	1/1	0.89	0.08	83,83,83,83	0
55	MG	BA	1763	1/1	0.89	0.27	54,54,54,54	0
55	MG	CA	4302	1/1	0.89	0.40	26,26,26,26	0
55	MG	BA	1618	1/1	0.89	0.28	62,62,62,62	0
55	MG	CA	3553	1/1	0.89	0.62	48,48,48,48	0
55	MG	DA	1966	1/1	0.89	0.79	50,50,50,50	0
55	MG	DL	201	1/1	0.89	0.46	58,58,58,58	0
55	MG	BA	1783	1/1	0.89	0.52	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1890	1/1	0.89	0.14	97,97,97,97	0
55	MG	DA	1906	1/1	0.89	0.10	79,79,79,79	0
55	MG	BT	201	1/1	0.89	0.92	67,67,67,67	0
55	MG	CA	3285	1/1	0.89	0.34	45,45,45,45	0
55	MG	DA	2079	1/1	0.89	0.28	57,57,57,57	0
55	MG	CA	3609	1/1	0.90	0.30	77,77,77,77	0
55	MG	CA	3367	1/1	0.90	0.78	50,50,50,50	0
55	MG	AA	5069	1/1	0.90	0.76	80,80,80,80	0
55	MG	CA	3430	1/1	0.90	0.35	52,52,52,52	0
55	MG	BA	1985	1/1	0.90	0.33	44,44,44,44	0
55	MG	CB	251	1/1	0.90	0.24	61,61,61,61	0
55	MG	AA	4463	1/1	0.90	0.31	35,35,35,35	0
55	MG	DA	1760	1/1	0.90	0.34	62,62,62,62	0
55	MG	AA	4167	1/1	0.90	0.29	68,68,68,68	0
55	MG	CA	3464	1/1	0.90	0.20	64,64,64,64	0
55	MG	BA	1702	1/1	0.90	0.27	52,52,52,52	0
55	MG	CA	3696	1/1	0.90	0.19	47,47,47,47	0
55	MG	CA	3457	1/1	0.90	0.41	42,42,42,42	0
55	MG	DA	1655	1/1	0.90	0.77	85,85,85,85	0
55	MG	CA	3747	1/1	0.90	0.42	46,46,46,46	0
55	MG	CA	3153	1/1	0.90	0.55	27,27,27,27	0
55	MG	AM	203	1/1	0.90	0.19	55,55,55,55	0
55	MG	CA	3362	1/1	0.90	0.40	64,64,64,64	0
55	MG	CA	3296	1/1	0.90	0.20	41,41,41,41	0
55	MG	CA	3227	1/1	0.90	0.26	29,29,29,29	0
55	MG	AA	4433	1/1	0.90	0.09	63,63,63,63	0
55	MG	CA	3665	1/1	0.90	0.19	50,50,50,50	0
55	MG	BA	2092	1/1	0.90	0.54	52,52,52,52	0
55	MG	CA	4314	1/1	0.90	0.18	62,62,62,62	0
55	MG	DA	2128	1/1	0.90	0.19	40,40,40,40	0
55	MG	AA	4046	1/1	0.90	0.28	108,108,108,108	0
55	MG	AA	4571	1/1	0.90	0.35	48,48,48,48	0
55	MG	AA	4930	1/1	0.90	0.26	39,39,39,39	0
55	MG	CA	3781	1/1	0.90	0.53	53,53,53,53	0
55	MG	AA	4379	1/1	0.90	0.24	60,60,60,60	0
55	MG	BA	1907	1/1	0.90	0.41	58,58,58,58	0
55	MG	AA	5017	1/1	0.90	0.29	72,72,72,72	0
55	MG	DA	1727	1/1	0.90	0.26	33,33,33,33	0
55	MG	CA	4217	1/1	0.90	0.26	41,41,41,41	0
55	MG	AA	4830	1/1	0.90	0.23	65,65,65,65	0
55	MG	DA	2163	1/1	0.90	0.27	66,66,66,66	0
55	MG	DA	2008	1/1	0.90	0.36	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5259	1/1	0.90	0.41	55,55,55,55	0
55	MG	DA	2071	1/1	0.90	0.26	58,58,58,58	0
55	MG	AA	4897	1/1	0.90	0.10	51,51,51,51	0
55	MG	CA	3703	1/1	0.90	0.20	57,57,57,57	0
55	MG	AA	5006	1/1	0.90	0.46	47,47,47,47	0
55	MG	AA	4991	1/1	0.90	0.26	52,52,52,52	0
55	MG	DA	2021	1/1	0.90	0.42	49,49,49,49	0
55	MG	DA	1740	1/1	0.90	0.40	46,46,46,46	0
55	MG	CA	3012	1/1	0.90	0.26	75,75,75,75	0
55	MG	AA	4655	1/1	0.90	0.71	60,60,60,60	0
55	MG	CA	3769	1/1	0.90	0.34	50,50,50,50	0
55	MG	AA	4184	1/1	0.90	0.50	19,19,19,19	0
55	MG	AA	4275	1/1	0.90	0.22	41,41,41,41	0
55	MG	BA	1955	1/1	0.90	0.22	24,24,24,24	0
55	MG	AA	4668	1/1	0.90	0.31	74,74,74,74	0
55	MG	AA	4317	1/1	0.90	0.19	47,47,47,47	0
55	MG	AA	4364	1/1	0.90	0.65	77,77,77,77	0
55	MG	BA	1868	1/1	0.90	0.23	55,55,55,55	0
55	MG	AA	4728	1/1	0.90	0.33	60,60,60,60	0
55	MG	DA	1642	1/1	0.90	0.27	87,87,87,87	0
55	MG	AA	5093	1/1	0.90	0.23	48,48,48,48	0
55	MG	AA	4612	1/1	0.90	0.32	59,59,59,59	0
55	MG	DA	2093	1/1	0.90	0.19	89,89,89,89	0
55	MG	CF	306	1/1	0.90	0.29	26,26,26,26	0
55	MG	CA	3868	1/1	0.90	0.37	46,46,46,46	0
55	MG	AA	4198	1/1	0.90	0.28	46,46,46,46	0
55	MG	DA	1669	1/1	0.90	0.31	98,98,98,98	0
55	MG	CA	3832	1/1	0.90	0.88	52,52,52,52	0
55	MG	CA	3826	1/1	0.90	0.23	61,61,61,61	0
55	MG	CA	4051	1/1	0.90	0.19	54,54,54,54	0
55	MG	DA	2036	1/1	0.90	0.31	54,54,54,54	0
55	MG	CA	3736	1/1	0.90	1.00	99,99,99,99	0
55	MG	CA	3983	1/1	0.90	0.27	18,18,18,18	0
55	MG	DA	2002	1/1	0.90	0.13	59,59,59,59	0
55	MG	CA	4296	1/1	0.90	0.24	78,78,78,78	0
55	MG	AA	4914	1/1	0.90	0.32	43,43,43,43	0
55	MG	CA	3115	1/1	0.90	0.48	16,16,16,16	0
55	MG	AA	5144	1/1	0.90	0.40	59,59,59,59	0
55	MG	CA	3230	1/1	0.90	0.12	21,21,21,21	0
55	MG	BA	1764	1/1	0.90	0.25	51,51,51,51	0
55	MG	DA	1644	1/1	0.90	0.12	92,92,92,92	0
55	MG	AA	4834	1/1	0.90	0.22	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1987	1/1	0.90	0.26	47,47,47,47	0
55	MG	BA	2084	1/1	0.90	0.41	71,71,71,71	0
55	MG	AA	4181	1/1	0.90	0.55	25,25,25,25	0
55	MG	CA	2951	1/1	0.90	0.36	125,125,125,125	0
55	MG	CA	3664	1/1	0.90	0.14	48,48,48,48	0
55	MG	CA	3191	1/1	0.90	0.10	36,36,36,36	0
55	MG	DA	1965	1/1	0.90	0.26	39,39,39,39	0
55	MG	AR	202	1/1	0.90	0.70	78,78,78,78	0
55	MG	BA	2154	1/1	0.90	0.32	39,39,39,39	0
55	MG	AA	4566	1/1	0.90	0.35	72,72,72,72	0
55	MG	CA	4092	1/1	0.90	0.37	53,53,53,53	0
55	MG	CA	4376	1/1	0.90	0.73	33,33,33,33	0
55	MG	BA	1749	1/1	0.90	0.18	50,50,50,50	0
55	MG	CA	3646	1/1	0.90	0.24	73,73,73,73	0
55	MG	DA	1981	1/1	0.90	0.27	68,68,68,68	0
55	MG	AA	4428	1/1	0.90	0.16	36,36,36,36	0
55	MG	CA	3250	1/1	0.90	0.31	32,32,32,32	0
55	MG	CA	3254	1/1	0.90	0.39	46,46,46,46	0
55	MG	AA	4831	1/1	0.90	0.82	78,78,78,78	0
55	MG	CA	3812	1/1	0.90	0.27	78,78,78,78	0
55	MG	AA	4030	1/1	0.90	0.73	62,62,62,62	0
55	MG	A3	101	1/1	0.90	0.33	100,100,100,100	0
55	MG	AA	4839	1/1	0.90	0.21	98,98,98,98	0
55	MG	AA	5056	1/1	0.90	0.44	63,63,63,63	0
55	MG	AA	5066	1/1	0.90	0.21	37,37,37,37	0
55	MG	DA	1715	1/1	0.90	0.16	30,30,30,30	0
55	MG	BA	1809	1/1	0.90	0.24	62,62,62,62	0
55	MG	CE	305	1/1	0.90	1.18	44,44,44,44	0
55	MG	CA	4145	1/1	0.90	0.40	147,147,147,147	0
55	MG	DA	1698	1/1	0.90	0.46	35,35,35,35	0
55	MG	CA	4292	1/1	0.90	0.27	64,64,64,64	0
55	MG	DA	2001	1/1	0.90	0.17	70,70,70,70	0
55	MG	AA	4299	1/1	0.90	0.67	45,45,45,45	0
55	MG	CA	3582	1/1	0.90	0.29	49,49,49,49	0
55	MG	CB	249	1/1	0.90	0.26	50,50,50,50	0
55	MG	AA	5067	1/1	0.90	0.34	53,53,53,53	0
55	MG	BA	2036	1/1	0.90	0.19	74,74,74,74	0
55	MG	AA	4879	1/1	0.90	0.40	56,56,56,56	0
55	MG	BA	1865	1/1	0.90	0.21	86,86,86,86	0
55	MG	DA	1886	1/1	0.90	0.26	83,83,83,83	0
55	MG	BA	1697	1/1	0.90	0.29	40,40,40,40	0
55	MG	DA	1996	1/1	0.90	0.63	51,51,51,51	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5222	1/1	0.90	0.12	84,84,84,84	0
55	MG	AA	4208	1/1	0.90	0.50	34,34,34,34	0
55	MG	DA	2107	1/1	0.90	0.23	49,49,49,49	0
55	MG	BA	1919	1/1	0.90	0.31	59,59,59,59	0
55	MG	BA	2159	1/1	0.90	0.20	63,63,63,63	0
55	MG	CA	3644	1/1	0.90	0.16	83,83,83,83	0
55	MG	AA	4351	1/1	0.90	0.46	63,63,63,63	0
55	MG	AA	4706	1/1	0.90	0.46	58,58,58,58	0
55	MG	CA	3251	1/1	0.90	0.26	27,27,27,27	0
55	MG	AB	213	1/1	0.90	0.44	76,76,76,76	0
55	MG	AA	4459	1/1	0.90	0.23	58,58,58,58	0
55	MG	CA	3908	1/1	0.90	0.32	55,55,55,55	0
55	MG	CA	4130	1/1	0.90	0.29	49,49,49,49	0
55	MG	CA	3710	1/1	0.90	0.54	89,89,89,89	0
55	MG	CA	4184	1/1	0.90	0.24	56,56,56,56	0
55	MG	CA	3975	1/1	0.90	0.45	34,34,34,34	0
55	MG	AA	4291	1/1	0.90	0.55	46,46,46,46	0
55	MG	CJ	202	1/1	0.90	0.20	37,37,37,37	0
55	MG	CA	3694	1/1	0.90	0.18	76,76,76,76	0
55	MG	BA	1709	1/1	0.90	0.20	42,42,42,42	0
55	MG	AA	4557	1/1	0.90	0.37	70,70,70,70	0
55	MG	BA	1927	1/1	0.90	0.14	59,59,59,59	0
55	MG	CA	4066	1/1	0.90	0.60	54,54,54,54	0
55	MG	BE	203	1/1	0.90	0.59	91,91,91,91	0
55	MG	DA	1667	1/1	0.90	0.18	67,67,67,67	0
55	MG	AA	4242	1/1	0.90	0.44	32,32,32,32	0
55	MG	BW	101	1/1	0.90	0.23	106,106,106,106	0
55	MG	CA	3384	1/1	0.90	0.38	49,49,49,49	0
55	MG	BA	1959	1/1	0.90	0.26	49,49,49,49	0
55	MG	CA	3505	1/1	0.90	0.45	42,42,42,42	0
55	MG	AE	301	1/1	0.90	0.47	74,74,74,74	0
55	MG	AA	4787	1/1	0.90	0.26	77,77,77,77	0
55	MG	CA	3341	1/1	0.90	0.27	30,30,30,30	0
55	MG	CA	4251	1/1	0.90	0.31	56,56,56,56	0
55	MG	AA	5260	1/1	0.90	0.16	58,58,58,58	0
55	MG	DV	115	1/1	0.90	0.06	59,59,59,59	0
55	MG	AA	4008	1/1	0.90	0.30	79,79,79,79	0
55	MG	AA	4800	1/1	0.90	0.28	121,121,121,121	0
55	MG	AA	4256	1/1	0.90	0.17	59,59,59,59	0
55	MG	DA	2005	1/1	0.90	0.52	61,61,61,61	0
55	MG	CA	4125	1/1	0.90	0.36	76,76,76,76	0
55	MG	AA	4312	1/1	0.90	0.37	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	5104	1/1	0.90	0.29	54,54,54,54	0
55	MG	CA	3907	1/1	0.90	0.50	79,79,79,79	0
55	MG	AA	4920	1/1	0.90	0.15	75,75,75,75	0
55	MG	AB	230	1/1	0.90	0.16	74,74,74,74	0
55	MG	AA	4768	1/1	0.90	0.35	83,83,83,83	0
55	MG	AA	4938	1/1	0.90	0.31	45,45,45,45	0
55	MG	AA	4910	1/1	0.90	0.12	49,49,49,49	0
55	MG	AA	4233	1/1	0.90	0.39	29,29,29,29	0
55	MG	BA	1650	1/1	0.90	0.50	80,80,80,80	0
55	MG	CA	4033	1/1	0.90	0.41	45,45,45,45	0
55	MG	DA	1778	1/1	0.90	0.25	73,73,73,73	0
55	MG	CA	3154	1/1	0.90	0.31	29,29,29,29	0
55	MG	CA	3280	1/1	0.90	0.16	42,42,42,42	0
55	MG	AA	4020	1/1	0.90	0.66	50,50,50,50	0
55	MG	AA	4091	1/1	0.90	0.14	41,41,41,41	0
55	MG	CA	3757	1/1	0.90	0.27	92,92,92,92	0
55	MG	AA	4399	1/1	0.90	0.23	35,35,35,35	0
55	MG	DA	2147	1/1	0.90	0.53	40,40,40,40	0
55	MG	CA	3573	1/1	0.90	0.76	51,51,51,51	0
55	MG	CA	3295	1/1	0.90	0.27	29,29,29,29	0
55	MG	AA	4583	1/1	0.90	0.25	68,68,68,68	0
55	MG	CA	3875	1/1	0.90	0.41	56,56,56,56	0
55	MG	AA	5217	1/1	0.91	0.47	66,66,66,66	0
55	MG	CA	3589	1/1	0.91	0.37	58,58,58,58	0
55	MG	AA	4820	1/1	0.91	0.25	44,44,44,44	0
55	MG	BA	1741	1/1	0.91	0.23	56,56,56,56	0
55	MG	CA	4260	1/1	0.91	0.34	46,46,46,46	0
55	MG	AA	4988	1/1	0.91	0.25	52,52,52,52	0
55	MG	CA	3098	1/1	0.91	0.41	98,98,98,98	0
55	MG	AA	5163	1/1	0.91	0.43	63,63,63,63	0
55	MG	BA	1811	1/1	0.91	0.17	68,68,68,68	0
55	MG	CA	3069	1/1	0.91	1.02	98,98,98,98	0
55	MG	CA	3867	1/1	0.91	0.20	53,53,53,53	0
55	MG	DA	1785	1/1	0.91	0.11	76,76,76,76	0
55	MG	AA	5218	1/1	0.91	0.29	51,51,51,51	0
55	MG	BA	1850	1/1	0.91	0.10	48,48,48,48	0
55	MG	AA	4489	1/1	0.91	0.14	94,94,94,94	0
55	MG	AA	4154	1/1	0.91	0.44	55,55,55,55	0
55	MG	CA	2932	1/1	0.91	0.22	58,58,58,58	0
55	MG	DA	1701	1/1	0.91	0.36	43,43,43,43	0
55	MG	CB	205	1/1	0.91	0.22	75,75,75,75	0
55	MG	BA	1668	1/1	0.91	0.35	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4591	1/1	0.91	0.13	52,52,52,52	0
55	MG	AA	4671	1/1	0.91	0.19	122,122,122,122	0
55	MG	DA	2193	1/1	0.91	0.26	54,54,54,54	0
55	MG	BA	1778	1/1	0.91	0.27	64,64,64,64	0
55	MG	CA	3767	1/1	0.91	0.25	66,66,66,66	0
55	MG	CA	4056	1/1	0.91	0.18	61,61,61,61	0
55	MG	CA	3621	1/1	0.91	0.43	87,87,87,87	0
55	MG	CA	3354	1/1	0.91	1.08	52,52,52,52	0
55	MG	DA	1617	1/1	0.91	0.29	78,78,78,78	0
55	MG	CA	3778	1/1	0.91	0.30	106,106,106,106	0
55	MG	DA	2043	1/1	0.91	0.52	70,70,70,70	0
55	MG	CA	3345	1/1	0.91	0.49	48,48,48,48	0
55	MG	CA	4279	1/1	0.91	0.34	62,62,62,62	0
55	MG	DA	2115	1/1	0.91	1.32	92,92,92,92	0
55	MG	BA	1699	1/1	0.91	0.14	37,37,37,37	0
55	MG	BA	1729	1/1	0.91	0.33	53,53,53,53	0
55	MG	AA	4464	1/1	0.91	0.69	69,69,69,69	0
55	MG	DA	1634	1/1	0.91	0.75	79,79,79,79	0
55	MG	CA	3690	1/1	0.91	0.59	89,89,89,89	0
55	MG	AA	4599	1/1	0.91	0.28	61,61,61,61	0
55	MG	DA	1741	1/1	0.91	0.25	60,60,60,60	0
55	MG	CA	3600	1/1	0.91	0.85	54,54,54,54	0
55	MG	CA	4244	1/1	0.91	0.27	34,34,34,34	0
55	MG	AA	4231	1/1	0.91	0.38	48,48,48,48	0
55	MG	DA	1729	1/1	0.91	0.23	47,47,47,47	0
55	MG	AA	4334	1/1	0.91	0.33	53,53,53,53	0
55	MG	DA	2018	1/1	0.91	0.13	45,45,45,45	0
55	MG	CA	4288	1/1	0.91	0.59	53,53,53,53	0
55	MG	BA	1759	1/1	0.91	0.14	46,46,46,46	0
55	MG	AA	4598	1/1	0.91	0.28	104,104,104,104	0
55	MG	CB	210	1/1	0.91	0.24	81,81,81,81	0
55	MG	AA	4883	1/1	0.91	0.37	47,47,47,47	0
55	MG	DA	1782	1/1	0.91	0.25	54,54,54,54	0
55	MG	DA	1856	1/1	0.91	0.19	83,83,83,83	0
55	MG	CA	4040	1/1	0.91	0.34	36,36,36,36	0
55	MG	AA	4021	1/1	0.91	0.22	60,60,60,60	0
55	MG	DA	1881	1/1	0.91	0.40	92,92,92,92	0
55	MG	AA	4366	1/1	0.91	0.29	57,57,57,57	0
55	MG	CA	4159	1/1	0.91	0.19	36,36,36,36	0
55	MG	AA	4542	1/1	0.91	0.30	63,63,63,63	0
55	MG	CA	3784	1/1	0.91	0.21	82,82,82,82	0
55	MG	DA	1636	1/1	0.91	0.32	50,50,50,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3924	1/1	0.91	0.29	44,44,44,44	0
55	MG	DA	2006	1/1	0.91	0.20	54,54,54,54	0
55	MG	CA	4152	1/1	0.91	0.21	77,77,77,77	0
55	MG	AA	5150	1/1	0.91	0.20	82,82,82,82	0
55	MG	DA	1802	1/1	0.91	0.41	77,77,77,77	0
55	MG	CA	4295	1/1	0.91	0.46	42,42,42,42	0
55	MG	BA	2122	1/1	0.91	0.49	44,44,44,44	0
55	MG	AA	4509	1/1	0.91	0.38	55,55,55,55	0
55	MG	CN	201	1/1	0.91	0.54	57,57,57,57	0
55	MG	AL	201	1/1	0.91	0.45	61,61,61,61	0
55	MG	AA	5272	1/1	0.91	0.34	58,58,58,58	0
55	MG	AB	234	1/1	0.91	0.10	44,44,44,44	0
55	MG	AA	4015	1/1	0.91	0.39	71,71,71,71	0
55	MG	AA	4402	1/1	0.91	0.34	48,48,48,48	0
55	MG	CA	3509	1/1	0.91	0.35	49,49,49,49	0
55	MG	AA	5074	1/1	0.91	0.32	58,58,58,58	0
55	MG	BA	2037	1/1	0.91	0.32	55,55,55,55	0
55	MG	DA	1925	1/1	0.91	0.50	89,89,89,89	0
55	MG	AA	4898	1/1	0.91	0.24	67,67,67,67	0
55	MG	CA	3645	1/1	0.91	0.44	58,58,58,58	0
55	MG	AA	4704	1/1	0.91	0.55	78,78,78,78	0
55	MG	CA	4091	1/1	0.91	0.17	48,48,48,48	0
55	MG	BA	1747	1/1	0.91	0.12	56,56,56,56	0
55	MG	CA	3133	1/1	0.91	0.28	13,13,13,13	0
55	MG	AA	4520	1/1	0.91	0.19	67,67,67,67	0
55	MG	CA	3723	1/1	0.91	0.41	53,53,53,53	0
55	MG	AA	4778	1/1	0.91	0.25	69,69,69,69	0
55	MG	DA	2026	1/1	0.91	0.12	63,63,63,63	0
55	MG	AA	5022	1/1	0.91	0.47	55,55,55,55	0
55	MG	CA	4201	1/1	0.91	0.38	35,35,35,35	0
55	MG	CB	258	1/1	0.91	0.17	65,65,65,65	0
55	MG	CA	3660	1/1	0.91	0.15	60,60,60,60	0
55	MG	CA	3365	1/1	0.91	0.26	25,25,25,25	0
55	MG	CA	4014	1/1	0.91	0.16	37,37,37,37	0
55	MG	DA	1661	1/1	0.91	0.55	64,64,64,64	0
55	MG	AB	236	1/1	0.91	0.22	64,64,64,64	0
55	MG	BA	2067	1/1	0.91	0.13	66,66,66,66	0
55	MG	CA	3216	1/1	0.91	0.26	18,18,18,18	0
55	MG	BA	1754	1/1	0.91	0.22	68,68,68,68	0
55	MG	AA	4526	1/1	0.91	0.16	49,49,49,49	0
55	MG	CA	4108	1/1	0.91	1.00	57,57,57,57	0
55	MG	AA	5076	1/1	0.91	0.38	69,69,69,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3274	1/1	0.91	0.47	40,40,40,40	0
55	MG	DA	1652	1/1	0.91	0.34	107,107,107,107	0
55	MG	DA	1853	1/1	0.91	0.10	87,87,87,87	0
55	MG	CY	101	1/1	0.91	0.40	58,58,58,58	0
55	MG	CQ	202	1/1	0.91	0.58	58,58,58,58	0
55	MG	CA	3077	1/1	0.91	0.36	91,91,91,91	0
55	MG	DA	2015	1/1	0.91	0.15	50,50,50,50	0
55	MG	CA	3940	1/1	0.91	0.79	44,44,44,44	0
55	MG	CA	2992	1/1	0.91	0.30	60,60,60,60	0
55	MG	CA	3896	1/1	0.91	0.45	120,120,120,120	0
55	MG	AA	4223	1/1	0.91	0.62	39,39,39,39	0
55	MG	BA	2167	1/1	0.91	0.12	52,52,52,52	0
55	MG	CA	4059	1/1	0.91	0.12	42,42,42,42	0
55	MG	DA	1733	1/1	0.91	0.13	68,68,68,68	0
55	MG	AA	4722	1/1	0.91	0.26	56,56,56,56	0
55	MG	CA	4319	1/1	0.91	0.22	55,55,55,55	0
55	MG	CA	3681	1/1	0.91	0.19	58,58,58,58	0
55	MG	BE	201	1/1	0.91	0.41	86,86,86,86	0
55	MG	CB	234	1/1	0.91	0.34	74,74,74,74	0
55	MG	BA	1692	1/1	0.91	0.15	51,51,51,51	0
55	MG	BA	2020	1/1	0.91	0.21	61,61,61,61	0
55	MG	DW	118	1/1	0.91	0.40	157,157,157,157	0
55	MG	CA	2963	1/1	0.91	0.30	90,90,90,90	0
55	MG	CA	3101	1/1	0.91	0.60	21,21,21,21	0
55	MG	CA	3427	1/1	0.91	0.39	31,31,31,31	0
55	MG	AA	4801	1/1	0.91	0.12	61,61,61,61	0
55	MG	CA	3117	1/1	0.91	0.22	17,17,17,17	0
55	MG	CA	3006	1/1	0.91	0.64	50,50,50,50	0
55	MG	AA	4849	1/1	0.91	0.34	16,16,16,16	0
55	MG	AA	4049	1/1	0.91	0.13	60,60,60,60	0
55	MG	BA	1633	1/1	0.91	0.11	101,101,101,101	0
55	MG	CA	3268	1/1	0.91	0.52	35,35,35,35	0
55	MG	BA	1695	1/1	0.91	0.35	19,19,19,19	0
55	MG	AA	4079	1/1	0.91	0.35	76,76,76,76	0
55	MG	CA	2995	1/1	0.91	0.56	68,68,68,68	0
55	MG	BA	1693	1/1	0.91	0.18	43,43,43,43	0
55	MG	DA	1637	1/1	0.91	0.43	71,71,71,71	0
55	MG	CA	3966	1/1	0.91	0.54	49,49,49,49	0
55	MG	CA	3572	1/1	0.91	0.18	59,59,59,59	0
55	MG	AA	5156	1/1	0.91	0.08	52,52,52,52	0
55	MG	CE	301	1/1	0.91	0.38	47,47,47,47	0
55	MG	AA	4143	1/1	0.91	0.15	128,128,128,128	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4368	1/1	0.91	0.20	38,38,38,38	0
55	MG	CA	4392	1/1	0.91	0.28	67,67,67,67	0
55	MG	AA	4281	1/1	0.91	0.38	44,44,44,44	0
55	MG	CA	4324	1/1	0.91	0.30	79,79,79,79	0
55	MG	AA	4287	1/1	0.91	0.40	40,40,40,40	0
55	MG	CA	3602	1/1	0.91	0.38	35,35,35,35	0
55	MG	AA	4682	1/1	0.91	0.30	71,71,71,71	0
55	MG	CA	3214	1/1	0.91	0.43	32,32,32,32	0
55	MG	AL	202	1/1	0.91	0.72	42,42,42,42	0
55	MG	CA	3953	1/1	0.91	0.32	36,36,36,36	0
55	MG	BA	1726	1/1	0.91	0.32	57,57,57,57	0
55	MG	DA	1674	1/1	0.91	0.22	85,85,85,85	0
55	MG	AA	4222	1/1	0.91	0.32	23,23,23,23	0
55	MG	AA	5210	1/1	0.91	0.48	83,83,83,83	0
55	MG	CA	3746	1/1	0.91	0.61	62,62,62,62	0
55	MG	DA	2094	1/1	0.91	0.55	44,44,44,44	0
55	MG	BA	1601	1/1	0.91	0.22	78,78,78,78	0
55	MG	BA	1797	1/1	0.91	0.21	53,53,53,53	0
55	MG	AA	4693	1/1	0.91	0.41	80,80,80,80	0
55	MG	BA	2162	1/1	0.91	0.07	38,38,38,38	0
55	MG	AA	5285	1/1	0.91	0.24	55,55,55,55	0
55	MG	CA	3363	1/1	0.91	0.36	22,22,22,22	0
55	MG	DA	1635	1/1	0.91	0.48	93,93,93,93	0
55	MG	CA	3113	1/1	0.91	0.22	9,9,9,9	0
55	MG	AA	4859	1/1	0.91	0.34	48,48,48,48	0
55	MG	CL	202	1/1	0.91	0.15	93,93,93,93	0
55	MG	CA	3712	1/1	0.91	0.21	32,32,32,32	0
55	MG	BA	1982	1/1	0.91	0.28	49,49,49,49	0
55	MG	AA	5213	1/1	0.91	0.32	60,60,60,60	0
55	MG	CA	3262	1/1	0.91	0.10	44,44,44,44	0
55	MG	AA	5036	1/1	0.91	0.29	45,45,45,45	0
55	MG	BA	2021	1/1	0.91	0.16	75,75,75,75	0
55	MG	DA	2040	1/1	0.91	0.67	53,53,53,53	0
55	MG	DA	1699	1/1	0.91	0.33	27,27,27,27	0
55	MG	AA	4504	1/1	0.91	0.36	67,67,67,67	0
55	MG	AA	4437	1/1	0.91	0.20	33,33,33,33	0
55	MG	DA	1756	1/1	0.91	0.09	106,106,106,106	0
55	MG	AA	4386	1/1	0.91	0.48	36,36,36,36	0
55	MG	BA	1606	1/1	0.91	0.46	82,82,82,82	0
55	MG	CA	3774	1/1	0.91	0.17	55,55,55,55	0
55	MG	BA	1869	1/1	0.91	0.23	66,66,66,66	0
55	MG	DA	2182	1/1	0.91	0.26	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3390	1/1	0.91	0.26	37,37,37,37	0
55	MG	CA	4065	1/1	0.91	0.25	39,39,39,39	0
55	MG	AA	4940	1/1	0.91	0.94	48,48,48,48	0
55	MG	DA	1664	1/1	0.91	0.45	73,73,73,73	0
55	MG	AA	5030	1/1	0.91	0.18	45,45,45,45	0
55	MG	DA	1832	1/1	0.91	0.08	95,95,95,95	0
55	MG	DA	2190	1/1	0.91	0.24	59,59,59,59	0
55	MG	CA	4215	1/1	0.91	0.17	55,55,55,55	0
55	MG	AA	4586	1/1	0.91	0.12	84,84,84,84	0
55	MG	AA	4490	1/1	0.91	1.05	64,64,64,64	0
55	MG	CA	3238	1/1	0.91	0.40	29,29,29,29	0
55	MG	CA	3845	1/1	0.91	1.11	81,81,81,81	0
55	MG	BV	120	1/1	0.91	0.17	50,50,50,50	0
55	MG	CA	3792	1/1	0.91	0.62	122,122,122,122	0
55	MG	CA	4317	1/1	0.91	0.41	70,70,70,70	0
55	MG	AA	4744	1/1	0.91	0.50	61,61,61,61	0
55	MG	AA	4321	1/1	0.91	0.50	53,53,53,53	0
55	MG	AA	4092	1/1	0.91	0.18	50,50,50,50	0
55	MG	CA	4002	1/1	0.91	0.21	34,34,34,34	0
55	MG	AA	4369	1/1	0.91	0.20	25,25,25,25	0
55	MG	CA	4219	1/1	0.91	0.81	78,78,78,78	0
55	MG	AA	4301	1/1	0.91	0.40	44,44,44,44	0
55	MG	AA	5241	1/1	0.91	0.30	91,91,91,91	0
55	MG	AA	4407	1/1	0.91	0.28	58,58,58,58	0
55	MG	CA	3143	1/1	0.91	0.47	24,24,24,24	0
55	MG	DA	2031	1/1	0.91	0.17	58,58,58,58	0
55	MG	AA	5197	1/1	0.91	0.22	73,73,73,73	0
55	MG	CA	3172	1/1	0.91	0.38	30,30,30,30	0
55	MG	CA	2988	1/1	0.91	0.26	87,87,87,87	0
55	MG	DW	121	1/1	0.91	0.25	62,62,62,62	0
55	MG	BA	1978	1/1	0.91	0.31	48,48,48,48	0
55	MG	CA	3810	1/1	0.91	0.34	43,43,43,43	0
55	MG	BW	107	1/1	0.91	0.08	78,78,78,78	0
55	MG	AA	5171	1/1	0.91	0.27	53,53,53,53	0
55	MG	CA	3671	1/1	0.91	0.33	87,87,87,87	0
55	MG	DA	1980	1/1	0.91	0.44	49,49,49,49	0
55	MG	DV	105	1/1	0.91	0.10	55,55,55,55	0
55	MG	CA	4164	1/1	0.91	0.27	44,44,44,44	0
55	MG	DA	1758	1/1	0.91	0.13	106,106,106,106	0
55	MG	DA	2048	1/1	0.91	0.38	52,52,52,52	0
55	MG	CA	3160	1/1	0.91	0.64	44,44,44,44	0
55	MG	CA	3872	1/1	0.91	0.66	55,55,55,55	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3880	1/1	0.91	0.28	46,46,46,46	0
55	MG	CF	301	1/1	0.91	0.47	55,55,55,55	0
55	MG	CA	3140	1/1	0.91	0.25	8,8,8,8	0
55	MG	CA	3974	1/1	0.91	0.42	41,41,41,41	0
55	MG	CA	3575	1/1	0.91	0.22	36,36,36,36	0
55	MG	AA	4394	1/1	0.91	0.23	47,47,47,47	0
55	MG	AA	4984	1/1	0.91	0.28	39,39,39,39	0
55	MG	AA	5057	1/1	0.91	0.32	53,53,53,53	0
55	MG	AA	4385	1/1	0.91	0.23	54,54,54,54	0
55	MG	BA	1727	1/1	0.91	0.53	48,48,48,48	0
55	MG	DA	1707	1/1	0.91	0.26	41,41,41,41	0
55	MG	AA	4241	1/1	0.91	0.55	36,36,36,36	0
55	MG	AA	5175	1/1	0.91	0.54	62,62,62,62	0
55	MG	CA	3094	1/1	0.92	0.35	41,41,41,41	0
55	MG	CA	4200	1/1	0.92	0.24	55,55,55,55	0
55	MG	CA	3538	1/1	0.92	0.35	50,50,50,50	0
55	MG	DA	1797	1/1	0.92	0.10	82,82,82,82	0
55	MG	CA	3134	1/1	0.92	0.26	14,14,14,14	0
55	MG	DA	1984	1/1	0.92	0.53	50,50,50,50	0
55	MG	AA	4176	1/1	0.92	0.59	21,21,21,21	0
55	MG	CA	3380	1/1	0.92	0.28	56,56,56,56	0
55	MG	CA	3377	1/1	0.92	0.09	44,44,44,44	0
55	MG	AA	4534	1/1	0.92	0.30	63,63,63,63	0
55	MG	BA	1996	1/1	0.92	0.11	61,61,61,61	0
55	MG	CA	3313	1/1	0.92	0.25	49,49,49,49	0
55	MG	CA	3403	1/1	0.92	0.45	45,45,45,45	0
55	MG	AA	4711	1/1	0.92	0.12	75,75,75,75	0
55	MG	DA	2025	1/1	0.92	0.12	40,40,40,40	0
55	MG	AA	4140	1/1	0.92	0.29	73,73,73,73	0
55	MG	BA	2041	1/1	0.92	0.08	66,66,66,66	0
55	MG	CD	304	1/1	0.92	0.25	55,55,55,55	0
55	MG	DA	1739	1/1	0.92	0.14	35,35,35,35	0
55	MG	DA	1861	1/1	0.92	0.26	95,95,95,95	0
55	MG	CA	3131	1/1	0.92	0.21	31,31,31,31	0
55	MG	CA	3969	1/1	0.92	0.58	31,31,31,31	0
55	MG	CA	3083	1/1	0.92	0.35	57,57,57,57	0
55	MG	DA	2053	1/1	0.92	0.20	92,92,92,92	0
55	MG	AB	248	1/1	0.92	0.26	50,50,50,50	0
55	MG	DA	2133	1/1	0.92	0.08	66,66,66,66	0
55	MG	CA	3585	1/1	0.92	0.33	43,43,43,43	0
55	MG	AA	4569	1/1	0.92	0.33	64,64,64,64	0
55	MG	AA	4641	1/1	0.92	0.31	66,66,66,66	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1609	1/1	0.92	0.33	88,88,88,88	0
55	MG	AA	5283	1/1	0.92	0.92	87,87,87,87	0
55	MG	AA	4255	1/1	0.92	0.20	23,23,23,23	0
55	MG	BA	2050	1/1	0.92	0.22	62,62,62,62	0
55	MG	CA	3780	1/1	0.92	0.19	78,78,78,78	0
55	MG	AA	4339	1/1	0.92	0.21	33,33,33,33	0
55	MG	AA	4029	1/1	0.92	0.30	77,77,77,77	0
55	MG	AA	4148	1/1	0.92	0.30	71,71,71,71	0
55	MG	CA	3463	1/1	0.92	0.67	70,70,70,70	0
55	MG	CA	3991	1/1	0.92	0.14	21,21,21,21	0
55	MG	AA	4560	1/1	0.92	0.26	64,64,64,64	0
55	MG	AA	4712	1/1	0.92	1.18	69,69,69,69	0
55	MG	CA	3270	1/1	0.92	0.17	26,26,26,26	0
55	MG	CA	3408	1/1	0.92	0.32	41,41,41,41	0
55	MG	AA	4043	1/1	0.92	0.27	52,52,52,52	0
55	MG	AA	4173	1/1	0.92	0.30	34,34,34,34	0
55	MG	CA	3025	1/1	0.92	0.22	46,46,46,46	0
55	MG	AA	4192	1/1	0.92	0.22	23,23,23,23	0
55	MG	CA	2957	1/1	0.92	0.22	73,73,73,73	0
55	MG	DA	1852	1/1	0.92	0.21	73,73,73,73	0
55	MG	CA	4315	1/1	0.92	0.19	58,58,58,58	0
55	MG	CA	3092	1/1	0.92	0.47	62,62,62,62	0
55	MG	BA	2108	1/1	0.92	0.34	56,56,56,56	0
55	MG	CA	4320	1/1	0.92	0.08	59,59,59,59	0
55	MG	CA	3733	1/1	0.92	0.97	156,156,156,156	0
55	MG	AA	4240	1/1	0.92	0.31	32,32,32,32	0
55	MG	AA	4789	1/1	0.92	0.17	81,81,81,81	0
55	MG	CA	3758	1/1	0.92	0.10	71,71,71,71	0
55	MG	AA	4439	1/1	0.92	1.02	66,66,66,66	0
55	MG	CA	3763	1/1	0.92	0.78	62,62,62,62	0
55	MG	BA	1944	1/1	0.92	0.25	77,77,77,77	0
55	MG	BA	1632	1/1	0.92	0.49	79,79,79,79	0
55	MG	AA	4005	1/1	0.92	0.61	64,64,64,64	0
55	MG	BA	1853	1/1	0.92	0.22	102,102,102,102	0
55	MG	CA	3618	1/1	0.92	0.24	56,56,56,56	0
55	MG	AA	4815	1/1	0.92	0.13	102,102,102,102	0
55	MG	AA	5176	1/1	0.92	0.42	61,61,61,61	0
55	MG	CA	3051	1/1	0.92	0.06	95,95,95,95	0
55	MG	AA	4156	1/1	0.92	0.50	72,72,72,72	0
55	MG	CA	3011	1/1	0.92	0.27	59,59,59,59	0
55	MG	AA	4578	1/1	0.92	0.14	60,60,60,60	0
55	MG	CA	3987	1/1	0.92	0.34	36,36,36,36	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4169	1/1	0.92	0.36	46,46,46,46	0
55	MG	CA	2912	1/1	0.92	0.27	85,85,85,85	0
55	MG	BA	1636	1/1	0.92	0.20	56,56,56,56	0
55	MG	CA	4232	1/1	0.92	0.14	73,73,73,73	0
55	MG	DA	2022	1/1	0.92	0.23	39,39,39,39	0
55	MG	BW	112	1/1	0.92	0.24	97,97,97,97	0
55	MG	AA	5263	1/1	0.92	0.26	58,58,58,58	0
55	MG	BA	1751	1/1	0.92	0.48	91,91,91,91	0
55	MG	CA	3443	1/1	0.92	0.56	55,55,55,55	0
55	MG	CA	3236	1/1	0.92	0.43	31,31,31,31	0
55	MG	AJ	201	1/1	0.92	0.30	60,60,60,60	0
55	MG	CA	3711	1/1	0.92	0.31	67,67,67,67	0
55	MG	BA	2107	1/1	0.92	0.18	57,57,57,57	0
55	MG	AA	4478	1/1	0.92	0.26	44,44,44,44	0
55	MG	DA	1624	1/1	0.92	0.29	127,127,127,127	0
55	MG	DA	1762	1/1	0.92	0.16	79,79,79,79	0
55	MG	CA	3047	1/1	0.92	0.68	48,48,48,48	0
55	MG	DA	1708	1/1	0.92	0.28	46,46,46,46	0
55	MG	BA	1844	1/1	0.92	0.64	74,74,74,74	0
55	MG	AA	4333	1/1	0.92	0.33	53,53,53,53	0
55	MG	DA	1969	1/1	0.92	0.36	46,46,46,46	0
55	MG	DA	2084	1/1	0.92	0.47	67,67,67,67	0
55	MG	CB	214	1/1	0.92	0.12	74,74,74,74	0
55	MG	CA	4281	1/1	0.92	0.30	68,68,68,68	0
55	MG	BA	1734	1/1	0.92	0.20	56,56,56,56	0
55	MG	DA	1825	1/1	0.92	0.23	66,66,66,66	0
55	MG	CA	4305	1/1	0.92	0.53	46,46,46,46	0
55	MG	CA	3292	1/1	0.92	0.26	35,35,35,35	0
55	MG	CA	3323	1/1	0.92	0.52	43,43,43,43	0
55	MG	CA	3263	1/1	0.92	0.19	36,36,36,36	0
55	MG	AA	5034	1/1	0.92	0.72	48,48,48,48	0
55	MG	AA	4060	1/1	0.92	0.42	84,84,84,84	0
55	MG	AA	5252	1/1	0.92	0.30	70,70,70,70	0
55	MG	AA	4206	1/1	0.92	0.18	19,19,19,19	0
55	MG	AA	4253	1/1	0.92	0.99	28,28,28,28	0
55	MG	AA	4388	1/1	0.92	0.15	66,66,66,66	0
55	MG	AA	4210	1/1	0.92	0.23	37,37,37,37	0
55	MG	AA	4996	1/1	0.92	0.31	65,65,65,65	0
55	MG	CA	3344	1/1	0.92	0.51	46,46,46,46	0
55	MG	DA	2142	1/1	0.92	0.34	45,45,45,45	0
55	MG	AA	4186	1/1	0.92	0.24	10,10,10,10	0
55	MG	CB	202	1/1	0.92	0.30	78,78,78,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4066	1/1	0.92	0.47	65,65,65,65	0
55	MG	CA	3674	1/1	0.92	0.28	48,48,48,48	0
55	MG	DA	1836	1/1	0.92	0.47	80,80,80,80	0
55	MG	BA	1860	1/1	0.92	0.28	73,73,73,73	0
55	MG	CA	4342	1/1	0.92	0.54	60,60,60,60	0
55	MG	DA	1882	1/1	0.92	0.53	77,77,77,77	0
55	MG	BA	1740	1/1	0.92	0.20	51,51,51,51	0
55	MG	BA	1711	1/1	0.92	0.25	57,57,57,57	0
55	MG	CA	3762	1/1	0.92	0.27	78,78,78,78	0
55	MG	BA	1796	1/1	0.92	0.31	56,56,56,56	0
55	MG	AA	4207	1/1	0.92	0.16	25,25,25,25	0
55	MG	CA	3328	1/1	0.92	0.61	49,49,49,49	0
55	MG	AA	4327	1/1	0.92	0.10	53,53,53,53	0
55	MG	CA	4012	1/1	0.92	0.19	40,40,40,40	0
55	MG	BA	2085	1/1	0.92	0.17	55,55,55,55	0
55	MG	CA	3315	1/1	0.92	0.62	29,29,29,29	0
55	MG	AA	4725	1/1	0.92	0.42	78,78,78,78	0
55	MG	BA	1735	1/1	0.92	0.07	47,47,47,47	0
55	MG	CA	2945	1/1	0.92	1.06	99,99,99,99	0
55	MG	CA	3312	1/1	0.92	0.44	38,38,38,38	0
55	MG	AA	4735	1/1	0.92	0.17	43,43,43,43	0
55	MG	CA	3373	1/1	0.92	0.13	53,53,53,53	0
55	MG	AA	4729	1/1	0.92	0.18	85,85,85,85	0
55	MG	BA	1806	1/1	0.92	0.17	56,56,56,56	0
55	MG	CA	3728	1/1	0.92	0.32	77,77,77,77	0
55	MG	AA	5084	1/1	0.92	0.13	57,57,57,57	0
55	MG	AA	5208	1/1	0.92	0.36	45,45,45,45	0
55	MG	AY	101	1/1	0.92	0.51	72,72,72,72	0
55	MG	AA	5015	1/1	0.92	0.19	46,46,46,46	0
55	MG	DA	1839	1/1	0.92	0.19	88,88,88,88	0
55	MG	CA	4370	1/1	0.92	0.26	61,61,61,61	0
55	MG	CA	4134	1/1	0.92	0.13	49,49,49,49	0
55	MG	CA	4011	1/1	0.92	0.14	30,30,30,30	0
55	MG	BA	1958	1/1	0.92	0.25	45,45,45,45	0
55	MG	CA	4007	1/1	0.92	0.17	29,29,29,29	0
55	MG	CA	3364	1/1	0.92	0.18	20,20,20,20	0
55	MG	AA	4387	1/1	0.92	0.41	35,35,35,35	0
55	MG	DA	1867	1/1	0.92	0.17	63,63,63,63	0
55	MG	AA	4836	1/1	0.92	0.36	52,52,52,52	0
55	MG	CA	3717	1/1	0.92	0.47	71,71,71,71	0
55	MG	AA	4673	1/1	0.92	0.26	49,49,49,49	0
55	MG	CA	3931	1/1	0.92	0.37	75,75,75,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3196	1/1	0.92	0.21	23,23,23,23	0
55	MG	DA	1885	1/1	0.92	0.10	71,71,71,71	0
55	MG	AA	4427	1/1	0.92	0.11	68,68,68,68	0
55	MG	BE	205	1/1	0.92	0.48	56,56,56,56	0
55	MG	CF	302	1/1	0.92	0.20	43,43,43,43	0
55	MG	CA	3619	1/1	0.92	0.33	56,56,56,56	0
55	MG	CA	4118	1/1	0.92	0.58	58,58,58,58	0
55	MG	BA	1926	1/1	0.92	0.13	82,82,82,82	0
55	MG	BA	1670	1/1	0.92	0.10	78,78,78,78	0
55	MG	BA	1686	1/1	0.92	0.17	40,40,40,40	0
55	MG	CA	4009	1/1	0.92	0.25	34,34,34,34	0
55	MG	AA	5125	1/1	0.92	0.29	45,45,45,45	0
55	MG	CA	3811	1/1	0.92	0.28	72,72,72,72	0
55	MG	AB	240	1/1	0.92	0.11	65,65,65,65	0
55	MG	AA	4122	1/1	0.92	0.31	65,65,65,65	0
55	MG	CB	243	1/1	0.92	0.40	34,34,34,34	0
55	MG	BA	2091	1/1	0.92	0.18	70,70,70,70	0
55	MG	CA	4227	1/1	0.92	0.21	53,53,53,53	0
55	MG	CA	3199	1/1	0.92	0.31	41,41,41,41	0
55	MG	DA	1962	1/1	0.92	0.43	39,39,39,39	0
55	MG	AA	4070	1/1	0.92	0.37	60,60,60,60	0
55	MG	CA	3715	1/1	0.92	0.19	59,59,59,59	0
55	MG	CA	3571	1/1	0.92	0.90	88,88,88,88	0
55	MG	AA	4228	1/1	0.92	0.24	23,23,23,23	0
55	MG	BA	1825	1/1	0.92	0.15	62,62,62,62	0
55	MG	BA	1771	1/1	0.92	0.12	29,29,29,29	0
55	MG	BA	2027	1/1	0.92	0.32	63,63,63,63	0
55	MG	DA	1737	1/1	0.92	0.31	51,51,51,51	0
55	MG	CA	3971	1/1	0.92	0.36	36,36,36,36	0
55	MG	AA	4493	1/1	0.92	0.15	53,53,53,53	0
55	MG	CB	215	1/1	0.92	0.26	28,28,28,28	0
55	MG	DA	1614	1/1	0.92	0.31	91,91,91,91	0
55	MG	BG	201	1/1	0.92	0.30	46,46,46,46	0
55	MG	CA	2961	1/1	0.92	0.29	78,78,78,78	0
55	MG	BA	1981	1/1	0.92	0.11	74,74,74,74	0
55	MG	AA	4058	1/1	0.92	0.20	76,76,76,76	0
55	MG	DA	1810	1/1	0.92	0.09	67,67,67,67	0
55	MG	AA	4188	1/1	0.92	0.31	44,44,44,44	0
55	MG	AA	4163	1/1	0.92	0.43	72,72,72,72	0
55	MG	CA	3357	1/1	0.92	0.47	25,25,25,25	0
55	MG	CA	2931	1/1	0.92	0.26	105,105,105,105	0
55	MG	CA	3233	1/1	0.92	0.37	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4685	1/1	0.92	0.24	63,63,63,63	0
55	MG	CA	3823	1/1	0.92	0.25	81,81,81,81	0
55	MG	AA	4341	1/1	0.92	0.21	38,38,38,38	0
55	MG	CA	4047	1/1	0.92	0.31	38,38,38,38	0
55	MG	AA	4141	1/1	0.92	0.41	65,65,65,65	0
55	MG	AB	242	1/1	0.92	0.20	62,62,62,62	0
55	MG	DA	2110	1/1	0.92	0.19	84,84,84,84	0
55	MG	BA	1912	1/1	0.92	0.30	57,57,57,57	0
55	MG	DA	2197	1/1	0.92	0.47	50,50,50,50	0
55	MG	CS	202	1/1	0.92	0.23	28,28,28,28	0
55	MG	CA	3038	1/1	0.92	0.54	52,52,52,52	0
55	MG	AA	4501	1/1	0.92	0.27	73,73,73,73	0
55	MG	CA	3109	1/1	0.92	0.51	11,11,11,11	0
55	MG	CA	3193	1/1	0.92	0.60	38,38,38,38	0
55	MG	CA	3325	1/1	0.92	0.55	54,54,54,54	0
55	MG	CA	3150	1/1	0.92	0.46	23,23,23,23	0
55	MG	AA	5170	1/1	0.92	0.42	71,71,71,71	0
55	MG	CA	4018	1/1	0.92	0.69	56,56,56,56	0
55	MG	AA	4048	1/1	0.92	0.18	62,62,62,62	0
55	MG	CA	3829	1/1	0.92	0.42	68,68,68,68	0
55	MG	DA	1894	1/1	0.92	0.32	67,67,67,67	0
55	MG	CA	2906	1/1	0.92	0.43	66,66,66,66	0
55	MG	CA	2933	1/1	0.92	0.28	50,50,50,50	0
55	MG	BA	1635	1/1	0.92	0.41	63,63,63,63	0
55	MG	A4	104	1/1	0.92	0.28	99,99,99,99	0
55	MG	CA	3049	1/1	0.92	0.46	62,62,62,62	0
55	MG	CA	3290	1/1	0.92	0.42	28,28,28,28	0
55	MG	CA	3526	1/1	0.92	0.22	64,64,64,64	0
55	MG	BA	1891	1/1	0.92	0.36	56,56,56,56	0
55	MG	AF	302	1/1	0.92	0.22	49,49,49,49	0
55	MG	DA	2013	1/1	0.92	0.19	49,49,49,49	0
55	MG	CA	3260	1/1	0.92	0.23	25,25,25,25	0
55	MG	AA	4533	1/1	0.92	0.71	64,64,64,64	0
55	MG	CA	3284	1/1	0.92	0.22	42,42,42,42	0
55	MG	CA	3680	1/1	0.92	0.21	54,54,54,54	0
55	MG	AA	5234	1/1	0.92	0.31	61,61,61,61	0
55	MG	CA	3314	1/1	0.92	0.20	26,26,26,26	0
55	MG	DA	2149	1/1	0.92	0.37	74,74,74,74	0
55	MG	DV	104	1/1	0.92	0.33	92,92,92,92	0
55	MG	AA	4793	1/1	0.92	0.78	62,62,62,62	0
55	MG	DA	1975	1/1	0.92	0.15	43,43,43,43	0
55	MG	BA	1957	1/1	0.93	0.14	33,33,33,33	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3822	1/1	0.93	0.49	57,57,57,57	0
55	MG	CA	3483	1/1	0.93	0.24	52,52,52,52	0
55	MG	CA	2956	1/1	0.93	1.05	59,59,59,59	0
55	MG	CA	3993	1/1	0.93	0.36	37,37,37,37	0
55	MG	CA	3141	1/1	0.93	0.16	9,9,9,9	0
55	MG	AB	209	1/1	0.93	0.35	30,30,30,30	0
55	MG	BA	1738	1/1	0.93	0.15	25,25,25,25	0
55	MG	AA	4683	1/1	0.93	0.16	53,53,53,53	0
55	MG	AA	5193	1/1	0.93	0.71	66,66,66,66	0
55	MG	CA	3765	1/1	0.93	0.24	77,77,77,77	0
55	MG	AA	4191	1/1	0.93	0.53	14,14,14,14	0
55	MG	AA	4237	1/1	0.93	0.32	17,17,17,17	0
55	MG	CA	2949	1/1	0.93	0.15	81,81,81,81	0
55	MG	CA	3874	1/1	0.93	0.39	60,60,60,60	0
55	MG	DA	1974	1/1	0.93	0.20	62,62,62,62	0
55	MG	DA	1702	1/1	0.93	0.30	26,26,26,26	0
55	MG	DA	1808	1/1	0.93	0.29	61,61,61,61	0
55	MG	CA	4170	1/1	0.93	0.44	53,53,53,53	0
55	MG	AA	4950	1/1	0.93	0.17	51,51,51,51	0
55	MG	DA	1842	1/1	0.93	0.22	70,70,70,70	0
55	MG	DA	2175	1/1	0.93	0.23	35,35,35,35	0
55	MG	DA	1601	1/1	0.93	0.19	92,92,92,92	0
55	MG	CA	3847	1/1	0.93	0.36	71,71,71,71	0
55	MG	DA	1780	1/1	0.93	0.95	83,83,83,83	0
55	MG	AD	303	1/1	0.93	0.67	38,38,38,38	0
55	MG	AA	5107	1/1	0.93	0.25	38,38,38,38	0
55	MG	CA	4313	1/1	0.93	0.12	41,41,41,41	0
55	MG	BA	1725	1/1	0.93	0.12	27,27,27,27	0
55	MG	DA	2173	1/1	0.93	0.24	72,72,72,72	0
55	MG	AA	4010	1/1	0.93	0.57	64,64,64,64	0
55	MG	AP	201	1/1	0.93	0.22	55,55,55,55	0
55	MG	CA	3007	1/1	0.93	0.51	69,69,69,69	0
55	MG	AA	4296	1/1	0.93	0.16	25,25,25,25	0
55	MG	AA	4414	1/1	0.93	0.17	35,35,35,35	0
55	MG	BA	1622	1/1	0.93	0.45	122,122,122,122	0
55	MG	CA	3533	1/1	0.93	0.26	52,52,52,52	0
55	MG	BA	1804	1/1	0.93	0.57	39,39,39,39	0
55	MG	CA	3307	1/1	0.93	0.22	46,46,46,46	0
55	MG	AA	4356	1/1	0.93	0.38	33,33,33,33	0
55	MG	CA	3487	1/1	0.93	0.20	50,50,50,50	0
55	MG	CB	224	1/1	0.93	0.11	88,88,88,88	0
55	MG	CA	3484	1/1	0.93	0.36	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3319	1/1	0.93	0.26	25,25,25,25	0
55	MG	CR	201	1/1	0.93	0.14	17,17,17,17	0
55	MG	DA	1770	1/1	0.93	0.54	46,46,46,46	0
55	MG	AB	235	1/1	0.93	0.36	53,53,53,53	0
55	MG	CA	4104	1/1	0.93	0.15	42,42,42,42	0
55	MG	BL	202	1/1	0.93	0.44	47,47,47,47	0
55	MG	BA	1884	1/1	0.93	0.18	76,76,76,76	0
55	MG	AA	5126	1/1	0.93	0.47	58,58,58,58	0
55	MG	AA	5262	1/1	0.93	0.48	64,64,64,64	0
55	MG	CA	4124	1/1	0.93	0.21	48,48,48,48	0
55	MG	CA	3852	1/1	0.93	0.16	30,30,30,30	0
55	MG	CA	4038	1/1	0.93	0.54	45,45,45,45	0
55	MG	AA	4538	1/1	0.93	0.09	65,65,65,65	0
55	MG	AA	4733	1/1	0.93	0.12	20,20,20,20	0
55	MG	CA	3308	1/1	0.93	0.33	25,25,25,25	0
55	MG	DA	1930	1/1	0.93	0.11	95,95,95,95	0
55	MG	CA	3897	1/1	0.93	0.27	86,86,86,86	0
55	MG	CA	3206	1/1	0.93	0.34	24,24,24,24	0
55	MG	CA	3531	1/1	0.93	0.09	52,52,52,52	0
55	MG	DA	1820	1/1	0.93	0.59	102,102,102,102	0
55	MG	CA	3272	1/1	0.93	0.70	36,36,36,36	0
55	MG	BW	102	1/1	0.93	0.36	57,57,57,57	0
55	MG	BA	2031	1/1	0.93	0.18	55,55,55,55	0
55	MG	BA	2136	1/1	0.93	0.20	62,62,62,62	0
55	MG	DA	1722	1/1	0.93	0.10	73,73,73,73	0
55	MG	CA	3397	1/1	0.93	0.15	37,37,37,37	0
55	MG	CA	3643	1/1	0.93	0.27	48,48,48,48	0
55	MG	AA	4736	1/1	0.93	0.20	50,50,50,50	0
55	MG	AA	4580	1/1	0.93	0.45	90,90,90,90	0
55	MG	BA	2111	1/1	0.93	0.20	96,96,96,96	0
55	MG	DA	1817	1/1	0.93	0.13	34,34,34,34	0
55	MG	AA	4103	1/1	0.93	0.79	71,71,71,71	0
55	MG	AA	5280	1/1	0.93	0.17	85,85,85,85	0
55	MG	DA	1736	1/1	0.93	0.25	60,60,60,60	0
55	MG	BV	127	1/1	0.93	0.19	53,53,53,53	0
55	MG	CA	4399	1/1	0.93	0.30	70,70,70,70	0
55	MG	CA	3320	1/1	0.93	0.36	42,42,42,42	0
55	MG	DA	1640	1/1	0.93	0.34	91,91,91,91	0
55	MG	AA	4705	1/1	0.93	0.34	109,109,109,109	0
55	MG	CA	3282	1/1	0.93	0.19	25,25,25,25	0
55	MG	CA	3761	1/1	0.93	0.16	57,57,57,57	0
55	MG	CA	3112	1/1	0.93	0.45	14,14,14,14	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1812	1/1	0.93	1.03	78,78,78,78	0
55	MG	CA	3534	1/1	0.93	0.39	47,47,47,47	0
55	MG	AA	4345	1/1	0.93	0.16	59,59,59,59	0
55	MG	CA	3629	1/1	0.93	0.38	106,106,106,106	0
55	MG	AA	4300	1/1	0.93	0.32	25,25,25,25	0
55	MG	AA	4247	1/1	0.93	0.44	33,33,33,33	0
55	MG	AS	203	1/1	0.93	0.73	75,75,75,75	0
55	MG	AX	102	1/1	0.93	0.23	25,25,25,25	0
55	MG	CA	4178	1/1	0.93	0.22	50,50,50,50	0
55	MG	AA	4785	1/1	0.93	0.20	68,68,68,68	0
55	MG	BC	303	1/1	0.93	0.26	49,49,49,49	0
55	MG	DA	1791	1/1	0.93	0.16	65,65,65,65	0
55	MG	CA	3506	1/1	0.93	0.30	25,25,25,25	0
55	MG	CA	3249	1/1	0.93	0.21	40,40,40,40	0
55	MG	CA	4071	1/1	0.93	0.20	43,43,43,43	0
55	MG	AA	4306	1/1	0.93	0.30	42,42,42,42	0
55	MG	AB	222	1/1	0.93	0.22	62,62,62,62	0
55	MG	CA	3475	1/1	0.93	0.26	42,42,42,42	0
55	MG	CB	225	1/1	0.93	0.20	51,51,51,51	0
55	MG	BA	1758	1/1	0.93	0.17	49,49,49,49	0
55	MG	CA	3469	1/1	0.93	0.20	50,50,50,50	0
55	MG	AA	4252	1/1	0.93	0.16	37,37,37,37	0
55	MG	AA	4679	1/1	0.93	0.33	40,40,40,40	0
55	MG	DA	1653	1/1	0.93	0.13	47,47,47,47	0
55	MG	C4	101	1/1	0.93	1.17	63,63,63,63	0
55	MG	AA	4245	1/1	0.93	0.28	26,26,26,26	0
55	MG	AA	5079	1/1	0.93	0.36	53,53,53,53	0
55	MG	CA	3222	1/1	0.93	0.33	38,38,38,38	0
55	MG	AA	4946	1/1	0.93	0.26	49,49,49,49	0
55	MG	BA	1662	1/1	0.93	0.16	89,89,89,89	0
55	MG	AA	4440	1/1	0.93	0.07	60,60,60,60	0
55	MG	C5	103	1/1	0.93	0.15	44,44,44,44	0
55	MG	CA	3448	1/1	0.93	0.31	40,40,40,40	0
55	MG	CA	3329	1/1	0.93	0.20	21,21,21,21	0
55	MG	BA	1822	1/1	0.93	0.14	61,61,61,61	0
55	MG	AA	4936	1/1	0.93	0.12	46,46,46,46	0
55	MG	DA	1961	1/1	0.93	0.34	43,43,43,43	0
55	MG	AA	4346	1/1	0.93	0.52	49,49,49,49	0
55	MG	CA	3289	1/1	0.93	0.20	20,20,20,20	0
55	MG	AA	5278	1/1	0.93	0.33	56,56,56,56	0
55	MG	AA	5077	1/1	0.93	0.80	57,57,57,57	0
55	MG	CA	3104	1/1	0.93	0.60	19,19,19,19	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CD	301	1/1	0.93	0.22	61,61,61,61	0
55	MG	BP	101	1/1	0.93	0.23	88,88,88,88	0
55	MG	DA	1972	1/1	0.93	0.12	48,48,48,48	0
55	MG	CA	3973	1/1	0.93	0.18	23,23,23,23	0
55	MG	DA	1759	1/1	0.93	0.32	71,71,71,71	0
55	MG	CA	4277	1/1	0.93	0.23	72,72,72,72	0
55	MG	CA	3564	1/1	0.93	0.42	70,70,70,70	0
55	MG	CA	3303	1/1	0.93	0.46	28,28,28,28	0
55	MG	AA	4579	1/1	0.93	0.79	45,45,45,45	0
55	MG	CA	3224	1/1	0.93	0.14	36,36,36,36	0
55	MG	AA	4348	1/1	0.93	0.38	36,36,36,36	0
55	MG	CA	4311	1/1	0.93	0.27	65,65,65,65	0
55	MG	AA	4042	1/1	0.93	0.53	91,91,91,91	0
55	MG	AA	4811	1/1	0.93	0.23	60,60,60,60	0
55	MG	AA	4277	1/1	0.93	0.19	41,41,41,41	0
55	MG	DA	1670	1/1	0.93	0.16	136,136,136,136	0
55	MG	BA	1910	1/1	0.93	0.30	51,51,51,51	0
55	MG	DA	1665	1/1	0.93	0.42	61,61,61,61	0
55	MG	DA	1880	1/1	0.93	0.51	104,104,104,104	0
55	MG	CA	3203	1/1	0.93	0.37	35,35,35,35	0
55	MG	AA	4271	1/1	0.93	0.31	28,28,28,28	0
55	MG	CA	3330	1/1	0.93	0.69	69,69,69,69	0
55	MG	DA	1960	1/1	0.93	0.16	20,20,20,20	0
55	MG	BA	1755	1/1	0.93	0.23	40,40,40,40	0
55	MG	DA	2057	1/1	0.93	0.13	49,49,49,49	0
55	MG	BA	1880	1/1	0.93	0.41	135,135,135,135	0
55	MG	AA	4104	1/1	0.93	0.30	91,91,91,91	0
55	MG	AA	4418	1/1	0.93	0.27	53,53,53,53	0
55	MG	DW	101	1/1	0.93	0.13	70,70,70,70	0
55	MG	CA	3221	1/1	0.93	0.42	37,37,37,37	0
55	MG	BA	2072	1/1	0.93	0.72	64,64,64,64	0
55	MG	CA	3294	1/1	0.93	0.13	31,31,31,31	0
55	MG	CA	3511	1/1	0.93	0.40	46,46,46,46	0
55	MG	DA	1936	1/1	0.93	0.15	60,60,60,60	0
55	MG	AA	4698	1/1	0.93	0.23	68,68,68,68	0
55	MG	AA	4132	1/1	0.93	0.18	63,63,63,63	0
55	MG	DW	110	1/1	0.93	0.06	58,58,58,58	0
55	MG	AA	4472	1/1	0.93	0.20	57,57,57,57	0
55	MG	BV	117	1/1	0.93	0.23	43,43,43,43	0
55	MG	CA	3175	1/1	0.93	0.25	28,28,28,28	0
55	MG	DA	1897	1/1	0.93	0.21	79,79,79,79	0
55	MG	CA	3257	1/1	0.93	0.26	32,32,32,32	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3279	1/1	0.93	0.23	36,36,36,36	0
55	MG	AA	4792	1/1	0.93	0.18	74,74,74,74	0
55	MG	BA	1829	1/1	0.93	0.25	87,87,87,87	0
55	MG	AA	4349	1/1	0.93	0.47	56,56,56,56	0
55	MG	CA	3831	1/1	0.93	0.24	90,90,90,90	0
55	MG	DW	116	1/1	0.93	0.19	129,129,129,129	0
55	MG	CA	4267	1/1	0.93	0.42	56,56,56,56	0
55	MG	CA	3478	1/1	0.93	0.34	48,48,48,48	0
55	MG	CA	4143	1/1	0.93	0.20	57,57,57,57	0
55	MG	DA	2178	1/1	0.93	0.10	69,69,69,69	0
55	MG	CA	3909	1/1	0.93	0.46	62,62,62,62	0
55	MG	CA	4095	1/1	0.93	0.74	51,51,51,51	0
55	MG	CA	4268	1/1	0.93	0.72	53,53,53,53	0
55	MG	CA	4053	1/1	0.93	0.54	45,45,45,45	0
55	MG	AA	4639	1/1	0.93	0.39	56,56,56,56	0
54	BLS	AA	4001	30/30	0.93	0.42	56,56,56,56	0
55	MG	BV	110	1/1	0.93	0.12	71,71,71,71	0
55	MG	AA	4260	1/1	0.93	0.49	35,35,35,35	0
55	MG	BA	2147	1/1	0.93	0.20	121,121,121,121	0
55	MG	AA	4559	1/1	0.93	0.15	87,87,87,87	0
55	MG	BA	1715	1/1	0.93	0.20	63,63,63,63	0
55	MG	AA	4547	1/1	0.93	0.30	83,83,83,83	0
55	MG	BV	128	1/1	0.93	0.06	63,63,63,63	0
55	MG	AA	4101	1/1	0.93	0.33	49,49,49,49	0
55	MG	CS	203	1/1	0.93	0.39	53,53,53,53	0
55	MG	AA	5183	1/1	0.93	0.19	58,58,58,58	0
55	MG	CA	4034	1/1	0.93	0.30	38,38,38,38	0
55	MG	CA	3158	1/1	0.93	0.19	9,9,9,9	0
55	MG	CA	3073	1/1	0.93	0.35	94,94,94,94	0
55	MG	CA	3201	1/1	0.93	0.45	24,24,24,24	0
55	MG	DA	1666	1/1	0.93	0.56	46,46,46,46	0
55	MG	AA	4230	1/1	0.93	0.23	19,19,19,19	0
55	MG	CA	3074	1/1	0.93	0.28	39,39,39,39	0
55	MG	BA	1674	1/1	0.93	0.38	118,118,118,118	0
55	MG	BA	2040	1/1	0.93	0.21	68,68,68,68	0
55	MG	BA	1951	1/1	0.93	0.14	29,29,29,29	0
55	MG	CA	3639	1/1	0.93	0.15	78,78,78,78	0
55	MG	AA	4724	1/1	0.93	0.09	59,59,59,59	0
55	MG	CA	3610	1/1	0.93	0.31	67,67,67,67	0
55	MG	CA	4383	1/1	0.93	0.16	58,58,58,58	0
55	MG	CA	3838	1/1	0.93	1.18	131,131,131,131	0
55	MG	AA	4036	1/1	0.93	0.32	64,64,64,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3026	1/1	0.93	0.68	59,59,59,59	0
55	MG	CA	4094	1/1	0.93	0.36	39,39,39,39	0
55	MG	CA	3149	1/1	0.93	0.21	18,18,18,18	0
55	MG	BV	106	1/1	0.93	0.06	113,113,113,113	0
55	MG	BA	1698	1/1	0.93	0.13	51,51,51,51	0
55	MG	AA	5052	1/1	0.93	0.23	46,46,46,46	0
55	MG	AA	5237	1/1	0.93	0.45	37,37,37,37	0
55	MG	CA	3708	1/1	0.93	0.22	77,77,77,77	0
55	MG	BA	1691	1/1	0.94	0.26	20,20,20,20	0
55	MG	BA	1895	1/1	0.94	0.12	51,51,51,51	0
55	MG	CA	4127	1/1	0.94	0.34	49,49,49,49	0
55	MG	AA	5113	1/1	0.94	0.26	52,52,52,52	0
55	MG	AA	4050	1/1	0.94	0.19	84,84,84,84	0
55	MG	AA	4812	1/1	0.94	0.17	62,62,62,62	0
55	MG	AA	4419	1/1	0.94	0.32	64,64,64,64	0
55	MG	BA	2035	1/1	0.94	0.33	61,61,61,61	0
55	MG	AA	4075	1/1	0.94	0.25	88,88,88,88	0
55	MG	AA	5270	1/1	0.94	0.17	47,47,47,47	0
55	MG	CA	4110	1/1	0.94	0.16	45,45,45,45	0
55	MG	CA	3574	1/1	0.94	1.10	91,91,91,91	0
55	MG	DA	2196	1/1	0.94	0.56	90,90,90,90	0
55	MG	AA	4211	1/1	0.94	0.20	21,21,21,21	0
55	MG	CA	3044	1/1	0.94	0.49	43,43,43,43	0
55	MG	BA	1856	1/1	0.94	0.24	85,85,85,85	0
55	MG	DA	1711	1/1	0.94	0.13	50,50,50,50	0
55	MG	AA	5114	1/1	0.94	0.13	53,53,53,53	0
55	MG	AA	4139	1/1	0.94	0.35	61,61,61,61	0
55	MG	AA	5035	1/1	0.94	0.36	65,65,65,65	0
55	MG	CA	3961	1/1	0.94	0.18	28,28,28,28	0
55	MG	CA	3371	1/1	0.94	0.50	51,51,51,51	0
55	MG	DA	2201	1/1	0.94	0.26	75,75,75,75	0
55	MG	BA	2144	1/1	0.94	0.15	92,92,92,92	0
55	MG	AA	4203	1/1	0.94	0.21	25,25,25,25	0
55	MG	AA	4380	1/1	0.94	0.23	50,50,50,50	0
55	MG	BA	1689	1/1	0.94	0.35	19,19,19,19	0
55	MG	DA	1618	1/1	0.94	0.18	85,85,85,85	0
55	MG	AA	4226	1/1	0.94	0.12	25,25,25,25	0
55	MG	CA	4274	1/1	0.94	0.34	42,42,42,42	0
55	MG	AA	4294	1/1	0.94	0.23	50,50,50,50	0
55	MG	CA	3707	1/1	0.94	0.14	49,49,49,49	0
55	MG	CA	4057	1/1	0.94	0.42	42,42,42,42	0
55	MG	CA	3132	1/1	0.94	0.25	16,16,16,16	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4111	1/1	0.94	0.28	37,37,37,37	0
55	MG	CA	3208	1/1	0.94	0.08	46,46,46,46	0
55	MG	BA	1756	1/1	0.94	0.10	59,59,59,59	0
55	MG	BA	1892	1/1	0.94	0.53	83,83,83,83	0
55	MG	CL	206	1/1	0.94	0.43	55,55,55,55	0
55	MG	DA	2148	1/1	0.94	0.42	54,54,54,54	0
55	MG	CA	4166	1/1	0.94	0.49	59,59,59,59	0
55	MG	AA	4690	1/1	0.94	0.29	57,57,57,57	0
55	MG	AA	4687	1/1	0.94	0.11	58,58,58,58	0
55	MG	C2	102	1/1	0.94	0.54	49,49,49,49	0
55	MG	CA	3818	1/1	0.94	0.55	72,72,72,72	0
55	MG	CA	3180	1/1	0.94	0.18	18,18,18,18	0
55	MG	AA	4699	1/1	0.94	0.25	60,60,60,60	0
55	MG	CA	3545	1/1	0.94	0.24	75,75,75,75	0
55	MG	AA	4847	1/1	0.94	0.47	37,37,37,37	0
55	MG	CA	3130	1/1	0.94	0.21	11,11,11,11	0
55	MG	DA	1968	1/1	0.94	0.17	56,56,56,56	0
55	MG	DA	1713	1/1	0.94	0.10	30,30,30,30	0
55	MG	AA	5068	1/1	0.94	0.29	51,51,51,51	0
55	MG	CA	3185	1/1	0.94	0.21	16,16,16,16	0
55	MG	CA	3212	1/1	0.94	0.23	26,26,26,26	0
55	MG	CA	3241	1/1	0.94	0.17	26,26,26,26	0
55	MG	CA	2904	1/1	0.94	0.27	49,49,49,49	0
55	MG	CL	205	1/1	0.94	0.36	35,35,35,35	0
55	MG	CA	3174	1/1	0.94	0.23	23,23,23,23	0
55	MG	BA	2153	1/1	0.94	0.14	38,38,38,38	0
55	MG	CA	3666	1/1	0.94	0.66	54,54,54,54	0
55	MG	AA	4330	1/1	0.94	0.11	72,72,72,72	0
55	MG	BA	2004	1/1	0.94	0.10	74,74,74,74	0
55	MG	CA	2913	1/1	0.94	0.48	77,77,77,77	0
55	MG	AA	4340	1/1	0.94	0.29	37,37,37,37	0
55	MG	AA	4105	1/1	0.94	0.41	52,52,52,52	0
55	MG	BA	1832	1/1	0.94	0.45	83,83,83,83	0
55	MG	CA	3225	1/1	0.94	0.27	23,23,23,23	0
55	MG	DW	112	1/1	0.94	0.40	71,71,71,71	0
55	MG	DA	1743	1/1	0.94	0.11	50,50,50,50	0
55	MG	AA	4911	1/1	0.94	0.55	45,45,45,45	0
55	MG	AA	4964	1/1	0.94	0.22	40,40,40,40	0
55	MG	AA	4474	1/1	0.94	0.13	42,42,42,42	0
55	MG	BA	1732	1/1	0.94	0.12	42,42,42,42	0
55	MG	BA	1894	1/1	0.94	0.13	86,86,86,86	0
55	MG	CA	3395	1/1	0.94	0.10	39,39,39,39	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3148	1/1	0.94	0.33	17,17,17,17	0
55	MG	CA	3962	1/1	0.94	0.12	28,28,28,28	0
55	MG	AA	4022	1/1	0.94	0.24	66,66,66,66	0
55	MG	CA	3419	1/1	0.94	0.20	41,41,41,41	0
55	MG	CA	3305	1/1	0.94	0.67	50,50,50,50	0
55	MG	CA	3167	1/1	0.94	0.45	23,23,23,23	0
55	MG	CA	4001	1/1	0.94	0.42	11,11,11,11	0
55	MG	AK	201	1/1	0.94	0.34	56,56,56,56	0
55	MG	BA	1678	1/1	0.94	0.16	80,80,80,80	0
55	MG	BA	1603	1/1	0.94	0.21	65,65,65,65	0
55	MG	CA	3127	1/1	0.94	0.50	14,14,14,14	0
55	MG	AA	4232	1/1	0.94	0.04	40,40,40,40	0
55	MG	BQ	201	1/1	0.94	0.40	90,90,90,90	0
55	MG	CA	3219	1/1	0.94	0.49	35,35,35,35	0
55	MG	CA	2971	1/1	0.94	0.28	60,60,60,60	0
55	MG	AA	4881	1/1	0.94	0.13	45,45,45,45	0
55	MG	BA	1704	1/1	0.94	0.30	41,41,41,41	0
55	MG	CA	2940	1/1	0.94	0.55	78,78,78,78	0
55	MG	AA	4846	1/1	0.94	0.18	13,13,13,13	0
55	MG	AA	4971	1/1	0.94	0.68	68,68,68,68	0
55	MG	CA	3173	1/1	0.94	0.26	14,14,14,14	0
55	MG	CA	3122	1/1	0.94	0.41	11,11,11,11	0
55	MG	CA	3278	1/1	0.94	0.23	36,36,36,36	0
55	MG	AA	4177	1/1	0.94	0.53	9,9,9,9	0
55	MG	AA	4880	1/1	0.94	0.20	34,34,34,34	0
55	MG	CA	3636	1/1	0.94	0.28	53,53,53,53	0
55	MG	CD	305	1/1	0.94	0.32	57,57,57,57	0
55	MG	BA	1776	1/1	0.94	0.14	66,66,66,66	0
55	MG	AR	203	1/1	0.94	0.21	19,19,19,19	0
55	MG	AA	4937	1/1	0.94	0.12	38,38,38,38	0
55	MG	CA	3687	1/1	0.94	0.66	67,67,67,67	0
55	MG	CA	4286	1/1	0.94	0.27	58,58,58,58	0
55	MG	BA	2045	1/1	0.94	0.31	56,56,56,56	0
55	MG	AA	4840	1/1	0.94	0.20	52,52,52,52	0
55	MG	CA	2969	1/1	0.94	0.28	73,73,73,73	0
55	MG	BA	1814	1/1	0.94	0.45	53,53,53,53	0
55	MG	CA	4230	1/1	0.94	0.31	53,53,53,53	0
55	MG	AA	4146	1/1	0.94	0.24	73,73,73,73	0
55	MG	AA	5128	1/1	0.94	0.27	50,50,50,50	0
55	MG	CA	3801	1/1	0.94	0.17	45,45,45,45	0
55	MG	CA	3135	1/1	0.94	0.12	17,17,17,17	0
55	MG	CB	246	1/1	0.94	0.15	53,53,53,53	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4813	1/1	0.94	0.45	76,76,76,76	0
55	MG	AA	4382	1/1	0.94	0.20	48,48,48,48	0
55	MG	CA	3900	1/1	0.94	0.63	39,39,39,39	0
55	MG	DA	1615	1/1	0.94	0.21	104,104,104,104	0
54	BLS	CA	4405	30/30	0.94	0.43	53,53,54,54	0
55	MG	DA	1988	1/1	0.94	0.05	69,69,69,69	0
55	MG	AA	5026	1/1	0.94	0.30	40,40,40,40	0
55	MG	CA	4206	1/1	0.94	0.30	57,57,57,57	0
55	MG	AA	4862	1/1	0.94	0.19	30,30,30,30	0
55	MG	DA	1627	1/1	0.94	0.26	89,89,89,89	0
55	MG	CA	2947	1/1	0.94	0.27	38,38,38,38	0
55	MG	AA	4925	1/1	0.94	0.22	29,29,29,29	0
55	MG	CA	3129	1/1	0.94	0.48	14,14,14,14	0
55	MG	CA	4054	1/1	0.94	0.89	33,33,33,33	0
55	MG	CB	219	1/1	0.94	0.26	52,52,52,52	0
55	MG	CA	3820	1/1	0.94	0.32	100,100,100,100	0
55	MG	CB	208	1/1	0.94	0.13	59,59,59,59	0
55	MG	BA	2006	1/1	0.94	0.25	144,144,144,144	0
55	MG	CB	256	1/1	0.94	0.35	59,59,59,59	0
55	MG	CA	3673	1/1	0.94	0.52	81,81,81,81	0
55	MG	AA	5274	1/1	0.94	0.23	66,66,66,66	0
55	MG	BA	1873	1/1	0.94	0.64	80,80,80,80	0
55	MG	CA	3189	1/1	0.94	0.09	25,25,25,25	0
55	MG	BA	2166	1/1	0.94	0.28	59,59,59,59	0
55	MG	AA	4781	1/1	0.94	0.18	46,46,46,46	0
55	MG	AA	4405	1/1	0.94	0.53	24,24,24,24	0
55	MG	CA	3617	1/1	0.94	0.35	88,88,88,88	0
55	MG	CA	3632	1/1	0.94	0.19	61,61,61,61	0
55	MG	BA	1746	1/1	0.94	0.19	48,48,48,48	0
55	MG	CB	216	1/1	0.94	0.27	21,21,21,21	0
55	MG	DA	1704	1/1	0.94	0.34	42,42,42,42	0
55	MG	DA	1959	1/1	0.94	0.21	45,45,45,45	0
55	MG	AX	103	1/1	0.94	0.77	62,62,62,62	0
55	MG	DA	1772	1/1	0.94	0.22	74,74,74,74	0
55	MG	DA	1675	1/1	0.94	0.67	49,49,49,49	0
55	MG	DA	1803	1/1	0.94	0.11	56,56,56,56	0
55	MG	AA	5073	1/1	0.94	0.20	36,36,36,36	0
55	MG	AA	4213	1/1	0.94	0.20	18,18,18,18	0
55	MG	CF	307	1/1	0.94	0.37	71,71,71,71	0
55	MG	CA	3407	1/1	0.94	0.28	36,36,36,36	0
55	MG	CA	3559	1/1	0.94	0.20	57,57,57,57	0
55	MG	CA	3588	1/1	0.94	0.29	57,57,57,57	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3096	1/1	0.94	0.31	57,57,57,57	0
55	MG	CA	3663	1/1	0.94	0.12	44,44,44,44	0
55	MG	BA	2054	1/1	0.94	0.29	72,72,72,72	0
55	MG	CA	3151	1/1	0.94	0.63	42,42,42,42	0
55	MG	CA	4081	1/1	0.94	0.28	49,49,49,49	0
55	MG	AA	4674	1/1	0.94	0.32	50,50,50,50	0
55	MG	AA	4400	1/1	0.94	0.31	40,40,40,40	0
55	MG	CA	3985	1/1	0.94	0.31	22,22,22,22	0
55	MG	AB	239	1/1	0.94	0.13	49,49,49,49	0
55	MG	BA	1953	1/1	0.94	0.41	24,24,24,24	0
55	MG	DW	108	1/1	0.94	0.12	141,141,141,141	0
55	MG	AA	4900	1/1	0.94	0.33	47,47,47,47	0
55	MG	CA	4090	1/1	0.94	0.36	58,58,58,58	0
55	MG	CA	3502	1/1	0.94	0.27	75,75,75,75	0
55	MG	CA	3659	1/1	0.94	0.06	52,52,52,52	0
55	MG	CA	3281	1/1	0.94	0.23	35,35,35,35	0
55	MG	CA	3404	1/1	0.94	0.17	36,36,36,36	0
55	MG	CA	3317	1/1	0.94	0.09	60,60,60,60	0
55	MG	DA	1956	1/1	0.94	0.18	40,40,40,40	0
55	MG	AA	4466	1/1	0.94	0.21	57,57,57,57	0
55	MG	AA	4617	1/1	0.94	0.22	51,51,51,51	0
55	MG	DA	1869	1/1	0.94	0.16	59,59,59,59	0
55	MG	CA	3213	1/1	0.94	0.12	14,14,14,14	0
55	MG	CN	203	1/1	0.94	0.52	65,65,65,65	0
55	MG	DA	1792	1/1	0.94	0.10	66,66,66,66	0
55	MG	CA	3590	1/1	0.94	0.29	42,42,42,42	0
55	MG	AA	5103	1/1	0.94	0.17	47,47,47,47	0
55	MG	AA	4307	1/1	0.94	0.67	34,34,34,34	0
55	MG	CA	3928	1/1	0.94	0.15	71,71,71,71	0
55	MG	DV	102	1/1	0.94	0.11	54,54,54,54	0
55	MG	CA	3144	1/1	0.94	0.29	29,29,29,29	0
55	MG	CA	4246	1/1	0.94	0.17	51,51,51,51	0
55	MG	AA	5277	1/1	0.94	0.23	72,72,72,72	0
55	MG	CA	3234	1/1	0.94	0.22	18,18,18,18	0
55	MG	CA	3992	1/1	0.94	0.21	26,26,26,26	0
55	MG	AA	4949	1/1	0.94	0.17	38,38,38,38	0
55	MG	BA	1961	1/1	0.94	0.21	51,51,51,51	0
55	MG	AR	201	1/1	0.94	0.28	61,61,61,61	0
55	MG	AA	4227	1/1	0.94	0.14	36,36,36,36	0
55	MG	DA	2030	1/1	0.94	0.11	26,26,26,26	0
55	MG	AS	204	1/1	0.94	0.30	43,43,43,43	0
55	MG	CA	3176	1/1	0.94	0.24	15,15,15,15	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4236	1/1	0.94	0.39	23,23,23,23	0
55	MG	CA	3237	1/1	0.94	0.20	31,31,31,31	0
55	MG	CW	101	1/1	0.94	0.60	107,107,107,107	0
55	MG	DA	1846	1/1	0.94	0.34	133,133,133,133	0
55	MG	CA	3988	1/1	0.94	0.27	24,24,24,24	0
55	MG	CA	4101	1/1	0.94	0.21	46,46,46,46	0
55	MG	CA	4023	1/1	0.94	0.20	26,26,26,26	0
55	MG	CA	3110	1/1	0.94	0.40	15,15,15,15	0
55	MG	AA	4981	1/1	0.95	0.17	34,34,34,34	0
55	MG	AA	5153	1/1	0.95	0.31	44,44,44,44	0
55	MG	CA	2997	1/1	0.95	0.21	69,69,69,69	0
55	MG	AA	4894	1/1	0.95	0.17	93,93,93,93	0
55	MG	AA	4651	1/1	0.95	0.24	74,74,74,74	0
55	MG	CA	4303	1/1	0.95	0.19	50,50,50,50	0
55	MG	AA	4782	1/1	0.95	0.31	73,73,73,73	0
55	MG	DV	109	1/1	0.95	0.11	65,65,65,65	0
55	MG	CA	2942	1/1	0.95	0.28	56,56,56,56	0
55	MG	CA	4149	1/1	0.95	0.11	39,39,39,39	0
55	MG	DA	1844	1/1	0.95	0.28	164,164,164,164	0
55	MG	CA	2929	1/1	0.95	0.15	81,81,81,81	0
55	MG	BA	1998	1/1	0.95	0.32	52,52,52,52	0
55	MG	DA	1769	1/1	0.95	0.09	57,57,57,57	0
55	MG	DA	1997	1/1	0.95	0.29	50,50,50,50	0
55	MG	AG	201	1/1	0.95	0.80	78,78,78,78	0
55	MG	CA	3738	1/1	0.95	0.36	105,105,105,105	0
55	MG	CA	4250	1/1	0.95	0.64	48,48,48,48	0
55	MG	AA	4669	1/1	0.95	0.53	116,116,116,116	0
55	MG	DA	1868	1/1	0.95	0.51	58,58,58,58	0
55	MG	CA	2946	1/1	0.95	0.86	63,63,63,63	0
55	MG	CA	3980	1/1	0.95	0.27	39,39,39,39	0
55	MG	AA	4496	1/1	0.95	0.51	95,95,95,95	0
55	MG	BW	110	1/1	0.95	0.07	47,47,47,47	0
55	MG	AA	5242	1/1	0.95	0.19	70,70,70,70	0
55	MG	AA	4621	1/1	0.95	0.29	68,68,68,68	0
55	MG	AA	4205	1/1	0.95	0.46	18,18,18,18	0
55	MG	AA	4486	1/1	0.95	0.14	60,60,60,60	0
55	MG	CB	233	1/1	0.95	0.13	83,83,83,83	0
55	MG	BA	1677	1/1	0.95	0.28	71,71,71,71	0
55	MG	C2	101	1/1	0.95	0.25	15,15,15,15	0
55	MG	CA	4247	1/1	0.95	0.18	46,46,46,46	0
55	MG	CA	3360	1/1	0.95	0.41	53,53,53,53	0
55	MG	AA	4934	1/1	0.95	0.23	41,41,41,41	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	DA	1905	1/1	0.95	0.20	113,113,113,113	0
55	MG	CA	3032	1/1	0.95	0.30	46,46,46,46	0
55	MG	DA	1765	1/1	0.95	0.54	50,50,50,50	0
55	MG	CA	4309	1/1	0.95	0.19	36,36,36,36	0
55	MG	CA	3461	1/1	0.95	0.60	45,45,45,45	0
55	MG	DA	2143	1/1	0.95	0.30	48,48,48,48	0
55	MG	BA	1935	1/1	0.95	0.19	73,73,73,73	0
55	MG	DA	1691	1/1	0.95	0.15	16,16,16,16	0
55	MG	CA	3773	1/1	0.95	0.17	67,67,67,67	0
55	MG	AA	4893	1/1	0.95	0.17	54,54,54,54	0
55	MG	CA	3676	1/1	0.95	0.22	61,61,61,61	0
55	MG	DA	1621	1/1	0.95	0.23	97,97,97,97	0
55	MG	DA	1892	1/1	0.95	0.11	77,77,77,77	0
55	MG	BA	1864	1/1	0.95	0.11	92,92,92,92	0
55	MG	CA	3381	1/1	0.95	0.39	32,32,32,32	0
55	MG	CA	3808	1/1	0.95	0.40	88,88,88,88	0
55	MG	CA	4338	1/1	0.95	0.52	96,96,96,96	0
55	MG	AA	4608	1/1	0.95	0.09	81,81,81,81	0
55	MG	AA	4415	1/1	0.95	0.34	52,52,52,52	0
55	MG	BA	1617	1/1	0.95	0.20	99,99,99,99	0
55	MG	DA	2130	1/1	0.95	0.34	84,84,84,84	0
55	MG	CA	3311	1/1	0.95	0.14	20,20,20,20	0
55	MG	BA	1713	1/1	0.95	0.24	53,53,53,53	0
55	MG	CA	3701	1/1	0.95	0.09	66,66,66,66	0
55	MG	DA	1776	1/1	0.95	0.10	48,48,48,48	0
55	MG	AA	4726	1/1	0.95	0.55	59,59,59,59	0
55	MG	CA	3863	1/1	0.95	0.13	50,50,50,50	0
55	MG	AA	4637	1/1	0.95	0.15	79,79,79,79	0
55	MG	AA	4899	1/1	0.95	0.05	51,51,51,51	0
55	MG	AA	4961	1/1	0.95	0.26	44,44,44,44	0
55	MG	BA	1908	1/1	0.95	0.35	75,75,75,75	0
55	MG	CB	221	1/1	0.95	0.29	53,53,53,53	0
55	MG	AB	229	1/1	0.95	0.08	45,45,45,45	0
55	MG	CA	3194	1/1	0.95	0.20	9,9,9,9	0
55	MG	CA	3828	1/1	0.95	0.36	52,52,52,52	0
55	MG	CA	3332	1/1	0.95	0.29	45,45,45,45	0
55	MG	AA	4605	1/1	0.95	0.61	55,55,55,55	0
55	MG	CA	3934	1/1	0.95	0.14	55,55,55,55	0
55	MG	CA	3471	1/1	0.95	0.36	71,71,71,71	0
55	MG	AA	4357	1/1	0.95	0.23	56,56,56,56	0
55	MG	CA	3612	1/1	0.95	0.18	50,50,50,50	0
55	MG	CA	4256	1/1	0.95	0.12	70,70,70,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3959	1/1	0.95	0.68	37,37,37,37	0
55	MG	CA	3751	1/1	0.95	0.63	50,50,50,50	0
55	MG	BA	2017	1/1	0.95	0.12	48,48,48,48	0
55	MG	AA	4422	1/1	0.95	0.47	50,50,50,50	0
55	MG	CA	3146	1/1	0.95	0.57	24,24,24,24	0
55	MG	CA	3700	1/1	0.95	0.53	79,79,79,79	0
55	MG	AA	4871	1/1	0.95	0.47	34,34,34,34	0
55	MG	AA	4200	1/1	0.95	0.22	8,8,8,8	0
55	MG	BV	119	1/1	0.95	0.84	142,142,142,142	0
55	MG	AA	5224	1/1	0.95	0.26	47,47,47,47	0
55	MG	BV	109	1/1	0.95	0.23	88,88,88,88	0
55	MG	DA	1840	1/1	0.95	0.13	68,68,68,68	0
55	MG	CE	303	1/1	0.95	0.32	31,31,31,31	0
55	MG	CA	3615	1/1	0.95	0.11	50,50,50,50	0
55	MG	CA	4076	1/1	0.95	0.15	34,34,34,34	0
55	MG	BA	1748	1/1	0.95	0.55	57,57,57,57	0
55	MG	DA	1710	1/1	0.95	0.35	40,40,40,40	0
55	MG	DA	2024	1/1	0.95	0.45	63,63,63,63	0
55	MG	BA	1839	1/1	0.95	0.30	105,105,105,105	0
55	MG	BA	1800	1/1	0.95	0.16	73,73,73,73	0
55	MG	AA	4485	1/1	0.95	0.56	36,36,36,36	0
55	MG	AA	4264	1/1	0.95	0.43	32,32,32,32	0
55	MG	CA	2910	1/1	0.95	0.19	145,145,145,145	0
55	MG	CA	3819	1/1	0.95	0.24	68,68,68,68	0
55	MG	AA	4631	1/1	0.95	0.64	104,104,104,104	0
55	MG	CA	3624	1/1	0.95	0.37	33,33,33,33	0
55	MG	AA	4966	1/1	0.95	0.12	58,58,58,58	0
55	MG	AA	4323	1/1	0.95	0.30	31,31,31,31	0
55	MG	CA	3142	1/1	0.95	0.76	22,22,22,22	0
55	MG	AA	4303	1/1	0.95	0.23	41,41,41,41	0
55	MG	AA	5031	1/1	0.95	0.16	62,62,62,62	0
55	MG	DA	1716	1/1	0.95	0.16	51,51,51,51	0
55	MG	CA	3253	1/1	0.95	0.18	27,27,27,27	0
55	MG	AA	5070	1/1	0.95	0.16	79,79,79,79	0
55	MG	BA	1976	1/1	0.95	0.20	29,29,29,29	0
55	MG	AA	4902	1/1	0.95	0.21	35,35,35,35	0
55	MG	AA	4360	1/1	0.95	0.31	48,48,48,48	0
55	MG	AA	4888	1/1	0.95	0.35	36,36,36,36	0
55	MG	CA	3068	1/1	0.95	0.28	84,84,84,84	0
55	MG	AA	4875	1/1	0.95	0.22	57,57,57,57	0
55	MG	CA	3087	1/1	0.95	0.34	78,78,78,78	0
55	MG	AA	4302	1/1	0.95	0.06	28,28,28,28	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3379	1/1	0.95	0.32	37,37,37,37	0
55	MG	AA	4221	1/1	0.95	0.31	43,43,43,43	0
55	MG	DA	1847	1/1	0.95	0.05	119,119,119,119	0
55	MG	DA	1801	1/1	0.95	0.10	79,79,79,79	0
55	MG	AA	5261	1/1	0.95	0.17	73,73,73,73	0
55	MG	DV	110	1/1	0.95	0.14	55,55,55,55	0
55	MG	AA	4276	1/1	0.95	0.39	39,39,39,39	0
55	MG	AA	4116	1/1	0.95	0.41	53,53,53,53	0
55	MG	CA	3414	1/1	0.95	0.12	42,42,42,42	0
55	MG	BA	1613	1/1	0.95	0.38	69,69,69,69	0
55	MG	AA	4235	1/1	0.95	0.24	59,59,59,59	0
55	MG	CA	3768	1/1	0.95	0.33	84,84,84,84	0
55	MG	CA	4357	1/1	0.95	0.17	49,49,49,49	0
55	MG	AA	4298	1/1	0.95	0.56	47,47,47,47	0
55	MG	AA	4624	1/1	0.95	0.09	75,75,75,75	0
55	MG	AA	4172	1/1	0.95	0.46	14,14,14,14	0
55	MG	DA	2039	1/1	0.95	0.16	43,43,43,43	0
55	MG	CA	3114	1/1	0.95	0.39	17,17,17,17	0
55	MG	AA	4619	1/1	0.95	0.26	56,56,56,56	0
55	MG	CA	3848	1/1	0.95	0.30	70,70,70,70	0
55	MG	BA	2143	1/1	0.95	0.08	83,83,83,83	0
55	MG	AA	5102	1/1	0.95	0.42	50,50,50,50	0
55	MG	AN	202	1/1	0.95	0.62	48,48,48,48	0
55	MG	CA	3198	1/1	0.95	0.16	31,31,31,31	0
55	MG	AA	4216	1/1	0.95	0.13	18,18,18,18	0
55	MG	C4	102	1/1	0.95	0.77	70,70,70,70	0
55	MG	AA	4234	1/1	0.95	0.28	19,19,19,19	0
55	MG	AA	4195	1/1	0.95	0.16	21,21,21,21	0
55	MG	CA	4301	1/1	0.95	0.17	56,56,56,56	0
55	MG	CD	303	1/1	0.95	0.53	28,28,28,28	0
55	MG	DA	1645	1/1	0.95	0.21	131,131,131,131	0
55	MG	CA	4086	1/1	0.95	0.20	43,43,43,43	0
55	MG	BA	1791	1/1	0.95	0.10	60,60,60,60	0
55	MG	CA	4135	1/1	0.95	0.51	50,50,50,50	0
55	MG	BA	2074	1/1	0.95	0.28	46,46,46,46	0
55	MG	CA	4368	1/1	0.95	0.31	64,64,64,64	0
55	MG	BA	1707	1/1	0.95	0.59	38,38,38,38	0
55	MG	CA	4329	1/1	0.95	0.35	48,48,48,48	0
55	MG	DA	2136	1/1	0.95	0.15	52,52,52,52	0
55	MG	CA	3576	1/1	0.95	0.33	37,37,37,37	0
55	MG	BA	1620	1/1	0.95	0.43	62,62,62,62	0
55	MG	CA	3091	1/1	0.95	0.35	65,65,65,65	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4032	1/1	0.95	0.36	49,49,49,49	0
55	MG	AA	4308	1/1	0.95	0.37	44,44,44,44	0
55	MG	DA	1606	1/1	0.95	0.45	83,83,83,83	0
55	MG	CA	3215	1/1	0.95	0.18	26,26,26,26	0
55	MG	CA	3029	1/1	0.95	0.13	79,79,79,79	0
55	MG	BA	1893	1/1	0.95	0.36	102,102,102,102	0
55	MG	AA	4209	1/1	0.95	0.17	47,47,47,47	0
55	MG	CA	4391	1/1	0.95	0.26	57,57,57,57	0
55	MG	CA	3413	1/1	0.95	0.74	48,48,48,48	0
55	MG	AA	4692	1/1	0.95	0.27	57,57,57,57	0
55	MG	BA	1768	1/1	0.95	0.15	89,89,89,89	0
55	MG	CA	3779	1/1	0.96	0.18	53,53,53,53	0
55	MG	AA	4194	1/1	0.96	0.26	26,26,26,26	0
55	MG	CA	3190	1/1	0.96	0.23	11,11,11,11	0
55	MG	AA	4908	1/1	0.96	0.59	97,97,97,97	0
56	ZN	DN	101	1/1	0.96	0.13	94,94,94,94	0
55	MG	CA	3188	1/1	0.96	0.28	23,23,23,23	0
55	MG	AA	4544	1/1	0.96	0.38	69,69,69,69	0
55	MG	CA	3631	1/1	0.96	0.26	42,42,42,42	0
55	MG	CA	2967	1/1	0.96	0.32	73,73,73,73	0
55	MG	CA	3118	1/1	0.96	0.47	14,14,14,14	0
55	MG	BV	108	1/1	0.96	0.09	54,54,54,54	0
55	MG	CA	3261	1/1	0.96	0.45	48,48,48,48	0
55	MG	CA	3162	1/1	0.96	0.25	11,11,11,11	0
55	MG	AN	201	1/1	0.96	0.23	102,102,102,102	0
55	MG	AA	4170	1/1	0.96	0.41	22,22,22,22	0
55	MG	DA	1954	1/1	0.96	0.50	53,53,53,53	0
55	MG	CA	3725	1/1	0.96	0.20	67,67,67,67	0
55	MG	AA	4507	1/1	0.96	0.24	72,72,72,72	0
55	MG	CA	3147	1/1	0.96	0.46	12,12,12,12	0
55	MG	DA	1958	1/1	0.96	0.26	18,18,18,18	0
55	MG	AA	4764	1/1	0.96	0.21	112,112,112,112	0
55	MG	CS	201	1/1	0.96	0.46	44,44,44,44	0
55	MG	AA	4182	1/1	0.96	0.33	17,17,17,17	0
55	MG	AA	4175	1/1	0.96	0.40	14,14,14,14	0
55	MG	AA	4710	1/1	0.96	0.44	67,67,67,67	0
55	MG	AA	4649	1/1	0.96	0.55	58,58,58,58	0
55	MG	DA	1983	1/1	0.96	0.15	43,43,43,43	0
55	MG	CA	3297	1/1	0.96	0.58	37,37,37,37	0
55	MG	AA	4204	1/1	0.96	0.57	17,17,17,17	0
55	MG	AA	5291	1/1	0.96	0.26	78,78,78,78	0
55	MG	CA	3691	1/1	0.96	0.60	49,49,49,49	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4220	1/1	0.96	0.11	36,36,36,36	0
55	MG	CW	102	1/1	0.96	0.22	32,32,32,32	0
55	MG	CA	3204	1/1	0.96	0.11	38,38,38,38	0
55	MG	AA	4636	1/1	0.96	0.30	102,102,102,102	0
55	MG	DA	1757	1/1	0.96	0.55	73,73,73,73	0
55	MG	AA	4056	1/1	0.96	0.60	87,87,87,87	0
55	MG	BA	2022	1/1	0.96	0.20	73,73,73,73	0
55	MG	BA	1651	1/1	0.96	0.27	64,64,64,64	0
55	MG	AA	4201	1/1	0.96	0.12	15,15,15,15	0
55	MG	AA	4199	1/1	0.96	0.41	10,10,10,10	0
55	MG	AA	4484	1/1	0.96	0.57	75,75,75,75	0
55	MG	AA	4444	1/1	0.96	0.19	23,23,23,23	0
55	MG	AA	4600	1/1	0.96	0.50	64,64,64,64	0
55	MG	DA	1796	1/1	0.96	0.10	62,62,62,62	0
55	MG	AA	4161	1/1	0.96	0.19	46,46,46,46	0
55	MG	CD	302	1/1	0.96	0.40	15,15,15,15	0
55	MG	CA	3485	1/1	0.96	0.24	63,63,63,63	0
55	MG	DA	1851	1/1	0.96	0.28	102,102,102,102	0
55	MG	CA	3336	1/1	0.96	0.19	36,36,36,36	0
55	MG	AA	4960	1/1	0.96	0.07	55,55,55,55	0
55	MG	BA	1938	1/1	0.96	0.74	78,78,78,78	0
55	MG	AA	4892	1/1	0.96	0.07	45,45,45,45	0
55	MG	AA	5135	1/1	0.96	0.34	75,75,75,75	0
55	MG	CA	3679	1/1	0.96	0.39	90,90,90,90	0
55	MG	CA	3444	1/1	0.96	0.23	48,48,48,48	0
55	MG	AA	4969	1/1	0.96	0.17	68,68,68,68	0
55	MG	CA	3020	1/1	0.96	0.34	139,139,139,139	0
55	MG	CA	2930	1/1	0.96	0.33	92,92,92,92	0
55	MG	AA	4406	1/1	0.96	0.22	28,28,28,28	0
55	MG	AB	208	1/1	0.96	0.22	77,77,77,77	0
55	MG	CA	3490	1/1	0.96	0.44	146,146,146,146	0
55	MG	AA	4274	1/1	0.96	0.12	50,50,50,50	0
55	MG	AA	4467	1/1	0.96	0.10	36,36,36,36	0
55	MG	AA	5199	1/1	0.96	0.18	49,49,49,49	0
55	MG	DA	1692	1/1	0.96	0.32	11,11,11,11	0
55	MG	DA	1709	1/1	0.96	0.12	36,36,36,36	0
55	MG	DV	107	1/1	0.96	0.19	69,69,69,69	0
55	MG	DA	1976	1/1	0.96	0.15	47,47,47,47	0
55	MG	CA	3182	1/1	0.96	0.33	33,33,33,33	0
55	MG	CA	3202	1/1	0.96	0.31	28,28,28,28	0
55	MG	CA	3045	1/1	0.96	0.40	53,53,53,53	0
55	MG	AA	4286	1/1	0.96	0.11	35,35,35,35	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	4387	1/1	0.96	0.46	50,50,50,50	0
55	MG	BA	2164	1/1	0.96	0.15	40,40,40,40	0
55	MG	DA	1633	1/1	0.96	0.32	94,94,94,94	0
55	MG	AA	4053	1/1	0.96	0.22	107,107,107,107	0
55	MG	CA	3772	1/1	0.96	0.77	58,58,58,58	0
55	MG	CA	3794	1/1	0.96	0.53	106,106,106,106	0
55	MG	BA	1690	1/1	0.96	0.49	38,38,38,38	0
55	MG	CA	3611	1/1	0.96	0.42	49,49,49,49	0
55	MG	CA	3128	1/1	0.96	0.14	8,8,8,8	0
55	MG	BA	1887	1/1	0.96	0.11	51,51,51,51	0
55	MG	CA	4097	1/1	0.96	0.35	57,57,57,57	0
55	MG	AA	4610	1/1	0.96	0.14	74,74,74,74	0
55	MG	AA	4118	1/1	0.96	0.19	81,81,81,81	0
55	MG	AA	4410	1/1	0.96	0.45	65,65,65,65	0
55	MG	AA	4498	1/1	0.96	0.28	77,77,77,77	0
55	MG	DA	1694	1/1	0.96	0.21	22,22,22,22	0
55	MG	BA	1997	1/1	0.96	0.34	58,58,58,58	0
55	MG	CX	102	1/1	0.96	0.15	18,18,18,18	0
55	MG	CA	3579	1/1	0.96	0.06	53,53,53,53	0
55	MG	CA	3184	1/1	0.96	0.26	13,13,13,13	0
55	MG	DA	1788	1/1	0.96	0.12	70,70,70,70	0
55	MG	DA	1610	1/1	0.96	0.17	59,59,59,59	0
55	MG	BA	1871	1/1	0.96	0.12	71,71,71,71	0
55	MG	AA	4367	1/1	0.96	0.33	35,35,35,35	0
55	MG	AA	4672	1/1	0.96	0.24	57,57,57,57	0
55	MG	AA	4280	1/1	0.96	0.21	51,51,51,51	0
55	MG	CA	3001	1/1	0.96	0.17	40,40,40,40	0
55	MG	CA	4024	1/1	0.96	0.17	48,48,48,48	0
55	MG	AA	4202	1/1	0.96	0.27	20,20,20,20	0
55	MG	CA	4386	1/1	0.96	0.72	59,59,59,59	0
55	MG	CQ	203	1/1	0.96	0.44	80,80,80,80	0
55	MG	CA	3392	1/1	0.96	0.23	25,25,25,25	0
55	MG	DA	1821	1/1	0.96	0.32	82,82,82,82	0
55	MG	CA	3604	1/1	0.96	0.33	57,57,57,57	0
55	MG	DA	1824	1/1	0.96	0.51	63,63,63,63	0
55	MG	AA	5191	1/1	0.96	0.13	41,41,41,41	0
55	MG	CA	4078	1/1	0.96	0.44	44,44,44,44	0
55	MG	CA	3587	1/1	0.96	0.27	44,44,44,44	0
55	MG	CA	4016	1/1	0.96	0.23	42,42,42,42	0
55	MG	AA	5003	1/1	0.96	0.14	69,69,69,69	0
55	MG	CA	3724	1/1	0.96	0.26	60,60,60,60	0
55	MG	CA	3124	1/1	0.96	0.29	17,17,17,17	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1965	1/1	0.96	0.07	61,61,61,61	0
55	MG	CA	3299	1/1	0.96	0.22	21,21,21,21	0
55	MG	AA	4164	1/1	0.96	0.33	83,83,83,83	0
55	MG	CA	3685	1/1	0.96	0.33	86,86,86,86	0
55	MG	A4	101	1/1	0.96	0.27	117,117,117,117	0
55	MG	AA	4149	1/1	0.96	0.27	104,104,104,104	0
55	MG	BA	1685	1/1	0.96	0.60	34,34,34,34	0
55	MG	AA	4661	1/1	0.96	0.67	97,97,97,97	0
55	MG	DA	1719	1/1	0.96	0.25	42,42,42,42	0
55	MG	BA	2064	1/1	0.96	0.39	79,79,79,79	0
55	MG	AA	4288	1/1	0.96	0.41	35,35,35,35	0
55	MG	AA	4647	1/1	0.96	0.49	59,59,59,59	0
55	MG	CA	3695	1/1	0.96	0.14	21,21,21,21	0
55	MG	BA	1888	1/1	0.96	0.12	75,75,75,75	0
55	MG	AA	4891	1/1	0.96	0.20	25,25,25,25	0
55	MG	CA	3385	1/1	0.96	0.38	69,69,69,69	0
55	MG	AA	4977	1/1	0.96	0.21	33,33,33,33	0
55	MG	CA	3806	1/1	0.96	0.39	86,86,86,86	0
55	MG	CA	3239	1/1	0.96	0.20	29,29,29,29	0
55	MG	AA	4033	1/1	0.96	0.25	47,47,47,47	0
55	MG	AA	4179	1/1	0.96	0.28	14,14,14,14	0
55	MG	CA	3682	1/1	0.96	0.06	93,93,93,93	0
55	MG	BA	1760	1/1	0.96	0.17	53,53,53,53	0
55	MG	AA	5122	1/1	0.96	0.16	52,52,52,52	0
55	MG	AV	202	1/1	0.97	0.26	56,56,56,56	0
55	MG	AA	5209	1/1	0.97	0.31	51,51,51,51	0
55	MG	CA	3726	1/1	0.97	0.67	160,160,160,160	0
55	MG	CA	3195	1/1	0.97	0.14	20,20,20,20	0
55	MG	AA	4183	1/1	0.97	0.63	13,13,13,13	0
55	MG	DA	1884	1/1	0.97	0.15	71,71,71,71	0
55	MG	BA	2095	1/1	0.97	0.18	68,68,68,68	0
55	MG	AA	4190	1/1	0.97	0.47	23,23,23,23	0
55	MG	AA	4558	1/1	0.97	0.24	48,48,48,48	0
55	MG	DA	1940	1/1	0.97	0.06	94,94,94,94	0
55	MG	CA	3976	1/1	0.97	0.09	14,14,14,14	0
55	MG	AA	4171	1/1	0.97	0.37	21,21,21,21	0
55	MG	CA	3963	1/1	0.97	0.32	24,24,24,24	0
55	MG	CA	3137	1/1	0.97	0.26	16,16,16,16	0
55	MG	CA	2975	1/1	0.97	0.30	59,59,59,59	0
55	MG	CA	3086	1/1	0.97	0.36	57,57,57,57	0
55	MG	DV	121	1/1	0.97	0.14	62,62,62,62	0
55	MG	DA	2132	1/1	0.97	0.08	60,60,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3111	1/1	0.97	0.32	12,12,12,12	0
55	MG	BA	2018	1/1	0.97	0.12	46,46,46,46	0
55	MG	CQ	201	1/1	0.97	0.29	33,33,33,33	0
55	MG	AA	4738	1/1	0.97	0.23	19,19,19,19	0
55	MG	CA	3982	1/1	0.97	0.12	57,57,57,57	0
55	MG	AA	4450	1/1	0.97	0.18	62,62,62,62	0
55	MG	CA	3960	1/1	0.97	0.43	6,6,6,6	0
55	MG	AA	4611	1/1	0.97	0.23	98,98,98,98	0
55	MG	CA	3361	1/1	0.97	0.36	42,42,42,42	0
55	MG	CA	4138	1/1	0.97	0.24	49,49,49,49	0
55	MG	AA	4324	1/1	0.97	0.47	46,46,46,46	0
55	MG	CA	3171	1/1	0.97	0.29	30,30,30,30	0
55	MG	AA	4457	1/1	0.97	0.26	71,71,71,71	0
55	MG	CA	3787	1/1	0.97	0.15	52,52,52,52	0
55	MG	AA	4452	1/1	0.97	0.06	42,42,42,42	0
55	MG	CA	4354	1/1	0.97	0.23	60,60,60,60	0
55	MG	DA	1887	1/1	0.97	0.82	113,113,113,113	0
55	MG	CA	3668	1/1	0.97	0.30	84,84,84,84	0
55	MG	AA	4522	1/1	0.97	0.18	76,76,76,76	0
55	MG	CA	3486	1/1	0.97	0.07	61,61,61,61	0
55	MG	CA	3840	1/1	0.97	0.32	63,63,63,63	0
55	MG	CA	3139	1/1	0.97	0.25	19,19,19,19	0
55	MG	AX	106	1/1	0.97	0.16	50,50,50,50	0
55	MG	AA	4371	1/1	0.97	0.28	44,44,44,44	0
55	MG	AF	304	1/1	0.97	0.54	73,73,73,73	0
55	MG	AA	4359	1/1	0.97	0.10	50,50,50,50	0
55	MG	AA	4475	1/1	0.97	0.05	53,53,53,53	0
55	MG	AA	4771	1/1	0.97	0.21	25,25,25,25	0
55	MG	CA	4113	1/1	0.97	0.23	32,32,32,32	0
55	MG	CA	3741	1/1	0.97	0.20	59,59,59,59	0
55	MG	DA	2097	1/1	0.97	0.36	61,61,61,61	0
55	MG	AB	217	1/1	0.97	0.17	84,84,84,84	0
55	MG	BA	1718	1/1	0.97	0.23	30,30,30,30	0
55	MG	CA	3246	1/1	0.97	0.23	46,46,46,46	0
55	MG	AA	4331	1/1	0.97	0.30	34,34,34,34	0
55	MG	CA	4029	1/1	0.97	0.08	58,58,58,58	0
55	MG	AA	4582	1/1	0.97	0.12	62,62,62,62	0
55	MG	AA	4886	1/1	0.97	0.11	42,42,42,42	0
55	MG	DA	1641	1/1	0.97	0.51	86,86,86,86	0
55	MG	BA	1769	1/1	0.97	0.16	50,50,50,50	0
55	MG	AA	4225	1/1	0.97	0.15	44,44,44,44	0
55	MG	AE	302	1/1	0.97	0.25	77,77,77,77	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	BA	1858	1/1	0.97	0.13	88,88,88,88	0
55	MG	CA	3106	1/1	0.97	0.36	11,11,11,11	0
55	MG	CA	3337	1/1	0.97	0.13	58,58,58,58	0
55	MG	CA	3543	1/1	0.97	0.18	47,47,47,47	0
55	MG	CA	3581	1/1	0.97	0.09	49,49,49,49	0
55	MG	CA	3103	1/1	0.97	0.75	18,18,18,18	0
55	MG	BA	1694	1/1	0.97	0.59	44,44,44,44	0
55	MG	DA	2185	1/1	0.97	0.35	62,62,62,62	0
55	MG	AA	5021	1/1	0.97	0.29	61,61,61,61	0
55	MG	CA	3232	1/1	0.97	0.20	32,32,32,32	0
55	MG	CA	3170	1/1	0.97	0.23	24,24,24,24	0
55	MG	BA	1688	1/1	0.97	0.11	11,11,11,11	0
55	MG	CA	3183	1/1	0.97	0.27	19,19,19,19	0
55	MG	AA	4336	1/1	0.97	0.48	51,51,51,51	0
55	MG	CA	3536	1/1	0.97	0.12	72,72,72,72	0
55	MG	CA	3019	1/1	0.97	0.20	130,130,130,130	0
55	MG	AA	4370	1/1	0.97	0.11	51,51,51,51	0
55	MG	CA	3107	1/1	0.97	0.62	20,20,20,20	0
55	MG	AA	4178	1/1	0.97	0.37	9,9,9,9	0
55	MG	CA	3304	1/1	0.97	0.23	13,13,13,13	0
55	MG	CA	4197	1/1	0.97	0.42	64,64,64,64	0
55	MG	CK	201	1/1	0.97	0.58	105,105,105,105	0
55	MG	CA	4171	1/1	0.97	0.18	26,26,26,26	0
55	MG	CA	3565	1/1	0.97	0.14	65,65,65,65	0
55	MG	DA	1985	1/1	0.97	0.21	58,58,58,58	0
55	MG	CA	3105	1/1	0.97	0.41	18,18,18,18	0
55	MG	AA	4851	1/1	0.97	0.27	16,16,16,16	0
55	MG	AA	4250	1/1	0.97	0.11	24,24,24,24	0
55	MG	CA	2965	1/1	0.97	0.76	74,74,74,74	0
55	MG	AA	4658	1/1	0.97	0.28	56,56,56,56	0
55	MG	BA	1623	1/1	0.97	0.16	47,47,47,47	0
55	MG	AA	4869	1/1	0.97	0.10	61,61,61,61	0
55	MG	AA	4269	1/1	0.97	0.25	34,34,34,34	0
55	MG	CA	4374	1/1	0.97	0.73	41,41,41,41	0
55	MG	CA	3465	1/1	0.97	0.33	48,48,48,48	0
55	MG	DA	2049	1/1	0.97	0.16	56,56,56,56	0
55	MG	BA	1643	1/1	0.97	0.10	81,81,81,81	0
55	MG	BA	1786	1/1	0.97	0.35	60,60,60,60	0
55	MG	CA	3155	1/1	0.97	0.25	18,18,18,18	0
55	MG	DA	1879	1/1	0.97	0.21	80,80,80,80	0
55	MG	AA	4613	1/1	0.97	0.15	41,41,41,41	0
55	MG	AA	4263	1/1	0.97	0.15	38,38,38,38	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	AA	4344	1/1	0.97	0.24	33,33,33,33	0
55	MG	AA	4456	1/1	0.97	0.16	61,61,61,61	0
55	MG	BA	1710	1/1	0.97	0.18	43,43,43,43	0
55	MG	CA	3267	1/1	0.97	0.04	56,56,56,56	0
55	MG	CA	3333	1/1	0.97	0.17	49,49,49,49	0
55	MG	AA	4187	1/1	0.97	0.84	30,30,30,30	0
55	MG	CA	3530	1/1	0.97	0.05	57,57,57,57	0
55	MG	AA	4727	1/1	0.97	0.06	75,75,75,75	0
55	MG	CA	3369	1/1	0.97	0.24	67,67,67,67	0
55	MG	CA	3152	1/1	0.97	0.49	22,22,22,22	0
55	MG	BA	1684	1/1	0.97	0.52	29,29,29,29	0
55	MG	CB	201	1/1	0.97	0.12	61,61,61,61	0
55	MG	CA	3136	1/1	0.97	0.17	14,14,14,14	0
55	MG	AA	5196	1/1	0.97	0.32	48,48,48,48	0
55	MG	AD	302	1/1	0.97	0.39	79,79,79,79	0
55	MG	AA	4845	1/1	0.97	0.42	35,35,35,35	0
55	MG	CA	3231	1/1	0.97	0.23	19,19,19,19	0
55	MG	AA	4028	1/1	0.97	0.39	88,88,88,88	0
55	MG	AA	4455	1/1	0.97	0.28	72,72,72,72	0
55	MG	CA	3028	1/1	0.98	1.27	56,56,56,56	0
55	MG	AA	4530	1/1	0.98	0.52	64,64,64,64	0
55	MG	AA	4652	1/1	0.98	0.29	74,74,74,74	0
55	MG	BL	201	1/1	0.98	0.60	78,78,78,78	0
55	MG	AA	4174	1/1	0.98	0.24	14,14,14,14	0
55	MG	CA	3508	1/1	0.98	0.13	89,89,89,89	0
55	MG	CA	3790	1/1	0.98	0.48	111,111,111,111	0
55	MG	CA	3102	1/1	0.98	0.53	20,20,20,20	0
55	MG	CA	3120	1/1	0.98	0.36	11,11,11,11	0
55	MG	AA	4016	1/1	0.98	0.35	99,99,99,99	0
55	MG	AA	4413	1/1	0.98	0.22	40,40,40,40	0
55	MG	AA	4491	1/1	0.98	0.09	74,74,74,74	0
55	MG	CA	3121	1/1	0.98	0.28	11,11,11,11	0
55	MG	AA	4434	1/1	0.98	0.17	54,54,54,54	0
55	MG	CA	2911	1/1	0.98	0.44	64,64,64,64	0
55	MG	CA	4083	1/1	0.98	0.08	37,37,37,37	0
55	MG	CA	3693	1/1	0.98	0.33	59,59,59,59	0
55	MG	CA	2909	1/1	0.98	0.26	67,67,67,67	0
55	MG	AA	4180	1/1	0.98	0.25	22,22,22,22	0
55	MG	CA	3157	1/1	0.98	0.31	8,8,8,8	0
55	MG	CA	3265	1/1	0.98	0.06	35,35,35,35	0
55	MG	AA	4921	1/1	0.98	0.47	74,74,74,74	0
55	MG	BA	2087	1/1	0.98	0.24	94,94,94,94	0

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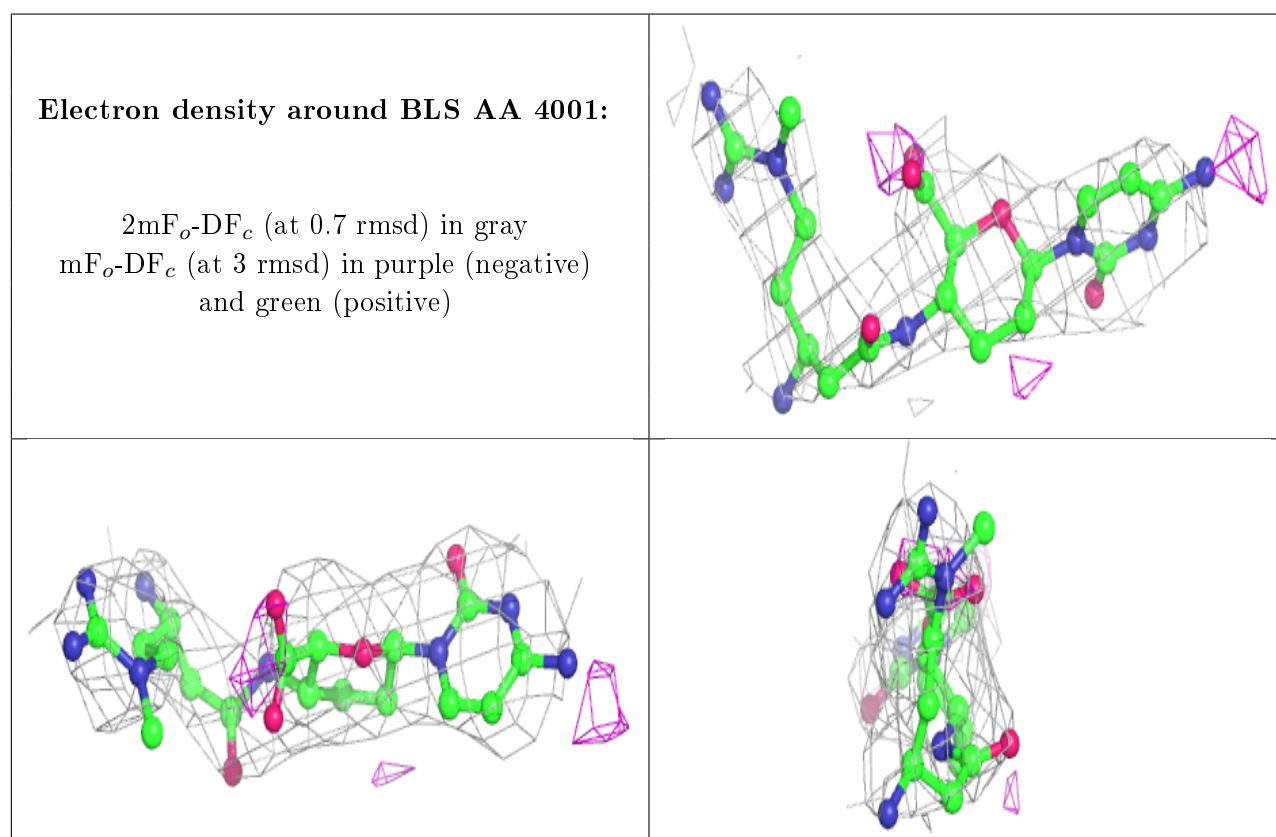
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3123	1/1	0.98	0.22	6,6,6,6	0
55	MG	CA	3116	1/1	0.98	0.27	14,14,14,14	0
55	MG	CA	3316	1/1	0.98	0.07	61,61,61,61	0
55	MG	BA	1831	1/1	0.98	0.20	124,124,124,124	0
55	MG	AA	4193	1/1	0.98	0.27	11,11,11,11	0
55	MG	BA	1851	1/1	0.98	0.43	66,66,66,66	0
55	MG	BA	1700	1/1	0.98	0.22	41,41,41,41	0
55	MG	AD	301	1/1	0.98	0.31	28,28,28,28	0
55	MG	CB	222	1/1	0.98	0.15	29,29,29,29	0
55	MG	CA	3737	1/1	0.98	0.44	91,91,91,91	0
55	MG	AA	4224	1/1	0.98	0.19	14,14,14,14	0
55	MG	AA	4320	1/1	0.98	0.53	46,46,46,46	0
55	MG	CA	3220	1/1	0.98	0.16	12,12,12,12	0
55	MG	CA	3630	1/1	0.98	0.12	47,47,47,47	0
56	ZN	DD	303	1/1	0.98	0.24	80,80,80,80	0
55	MG	AA	4872	1/1	0.98	0.14	32,32,32,32	0
55	MG	BA	2120	1/1	0.98	0.33	65,65,65,65	0
55	MG	AA	4285	1/1	0.98	0.12	23,23,23,23	0
55	MG	AA	4249	1/1	0.98	0.46	25,25,25,25	0
55	MG	AA	4082	1/1	0.98	0.52	77,77,77,77	0
55	MG	CA	3742	1/1	0.98	0.56	112,112,112,112	0
55	MG	CA	3386	1/1	0.98	0.19	43,43,43,43	0
55	MG	CA	3568	1/1	0.98	0.09	75,75,75,75	0
55	MG	AA	4867	1/1	0.98	0.30	44,44,44,44	0
55	MG	AA	4383	1/1	0.98	0.16	54,54,54,54	0
55	MG	CA	3093	1/1	0.98	0.41	69,69,69,69	0
55	MG	AA	4527	1/1	0.98	0.11	43,43,43,43	0
55	MG	CA	3451	1/1	0.99	0.08	35,35,35,35	0
56	ZN	BD	301	1/1	0.99	0.28	38,38,38,38	0
55	MG	CA	3302	1/1	0.99	0.42	50,50,50,50	0
55	MG	AA	4088	1/1	0.99	0.47	120,120,120,120	0
55	MG	CA	3156	1/1	0.99	0.20	17,17,17,17	0
55	MG	AA	4251	1/1	0.99	0.25	27,27,27,27	0
55	MG	AA	4215	1/1	0.99	0.29	19,19,19,19	0
55	MG	CA	3119	1/1	0.99	0.58	8,8,8,8	0
55	MG	CA	3108	1/1	0.99	0.29	8,8,8,8	0
56	ZN	BN	101	1/1	0.99	0.14	76,76,76,76	0
55	MG	CA	3785	1/1	0.99	0.31	69,69,69,69	0
55	MG	CA	2901	1/1	0.99	0.45	20,20,20,20	0
55	MG	CA	3843	1/1	0.99	0.36	68,68,68,68	0
55	MG	AA	4585	1/1	0.99	0.41	72,72,72,72	0
55	MG	CA	3523	1/1	0.99	0.39	59,59,59,59	0

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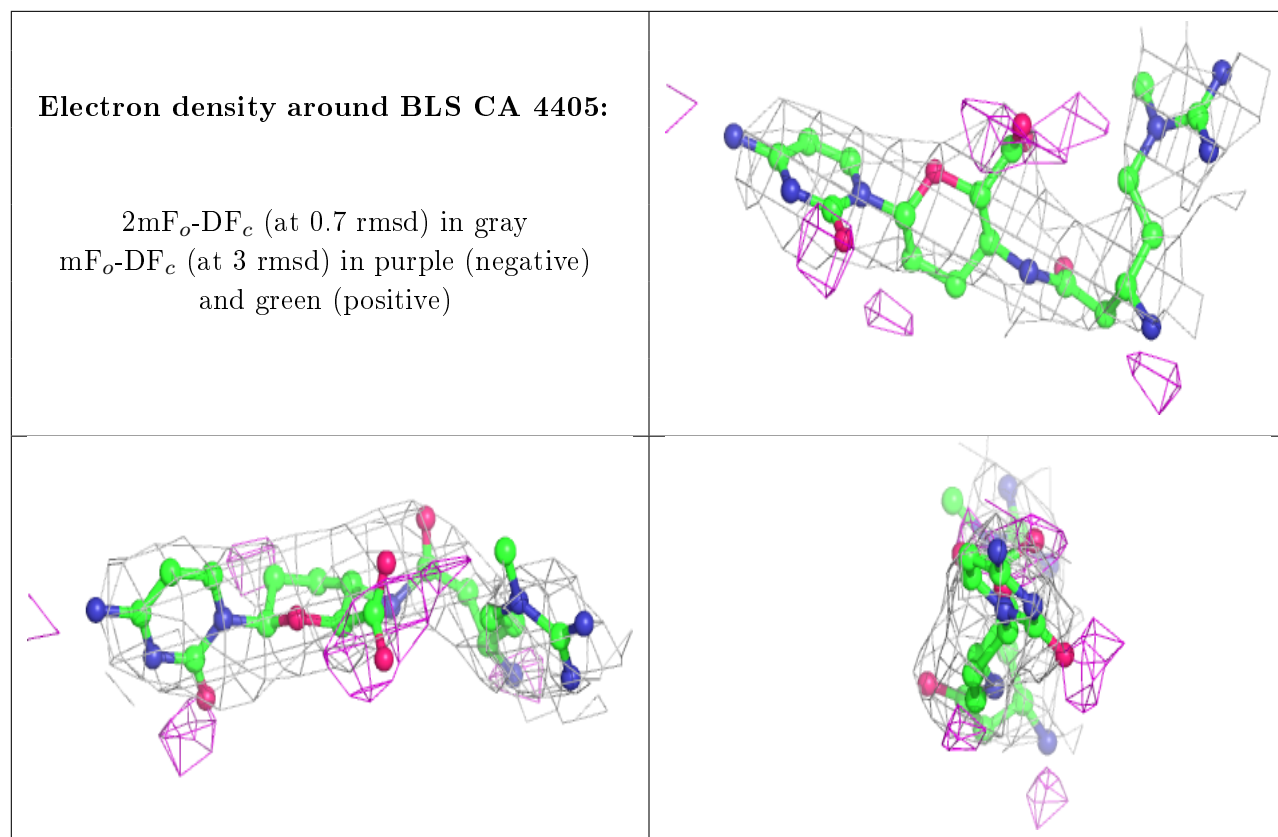
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
55	MG	CA	3393	1/1	0.99	0.24	36,36,36,36	0
55	MG	DA	1647	1/1	0.99	0.09	57,57,57,57	0
55	MG	AR	205	1/1	0.99	0.31	110,110,110,110	0
55	MG	CA	3662	1/1	0.99	0.67	76,76,76,76	0
55	MG	AA	4196	1/1	0.99	0.34	24,24,24,24	0

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







## 6.5 Other polymers [i](#)

There are no such residues in this entry.