



# Full wwPDB X-ray Structure Validation Report ⓘ

May 22, 2020 – 08:03 pm BST

PDB ID : 4V4T  
Title : Crystal structure of the whole ribosomal complex with a stop codon in the A-site.  
Authors : Petry, S.; Brodersen, D.E.; Murphy IV, F.V.; Dunham, C.M.; Selmer, M.; Tarry, M.J.; Kelley, A.C.; Ramakrishnan, V.  
Deposited on : 2005-10-12  
Resolution : 6.46 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  
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



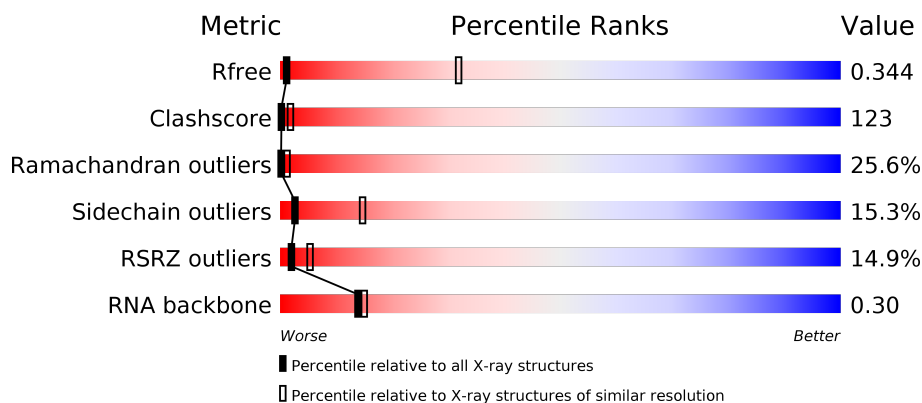
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

## *X-RAY DIFFRACTION*

The reported resolution of this entry is 6.46 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	1000 (9.00-3.90)
Clashscore	141614	1064 (9.00-3.90)
Ramachandran outliers	138981	1012 (9.00-3.88)
Sidechain outliers	138945	1010 (9.00-3.84)
RSRZ outliers	127900	1002 (9.00-3.80)
RNA backbone	3102	1077 (9.50-3.00)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments 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	1522	
2	AV	76	
3	AW	76	
4	AX	18	

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Mol	Chain	Length	Quality of chain
5	AB	256	
6	AC	239	
7	AD	209	
8	AE	162	
9	AF	101	
10	AG	156	
11	AH	138	
12	AI	128	
13	AJ	105	
14	AK	129	
15	AL	135	
16	AM	126	
17	AN	61	
18	AO	89	
19	AP	88	
20	AQ	105	
21	AR	88	
22	AS	93	
23	AT	106	
24	AU	27	
25	BB	123	
26	BA	2916	
27	BD	173	
28	BE	338	
29	BF	246	

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Mol	Chain	Length	Quality of chain
30	BG	176	
31	BH	177	
32	BI	149	
33	BN	145	
34	BO	122	
35	BP	164	
36	BQ	138	
37	BS	186	
38	BT	66	
39	BW	113	
40	BX	84	
41	BY	119	
42	BZ	253	
43	BR	118	
44	BU	118	
45	BV	100	
46	B2	70	
47	B3	60	
48	B0	91	
49	B4	73	
50	B5	60	
51	B6	82	
52	B7	47	
53	B8	64	
54	B9	36	

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Mol	Chain	Length	Quality of chain
55	BK	141	

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
3	YYG	AW	37	X	-	X	X
3	PSU	AW	39	-	-	-	X



## 2 Entry composition

There are 55 unique types of molecules in this entry. The entry contains 142447 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1515	Total	C	N	O	P	0	0	0
			32551	14490	6022	10525	1514			

There are 3 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AA	416	G	-	INSERTION	GB 155076
AA	905	U	-	INSERTION	GB 155076
AA	1395	C	-	INSERTION	GB 155076

- Molecule 2 is a RNA chain called P-site tRNA (Phe).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AV	76	Total	C	N	O	P	0	0	0
			1622	725	293	529	75			

- Molecule 3 is a RNA chain called E-site tRNA (Phe).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AW	76	Total	C	N	O	P	0	0	0
			1638	736	294	533	75			

- Molecule 4 is a RNA chain called 5'-D(\*AP\*UP\*GP\*UP\*UP\*CP\*UP\*AP\*GP\*UP\*AP\*C  
P\*AP\*AP\*UP\*AP\*AP\*U)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AX	17	Total	C	N	O	P	0	0	11
			136	56	19	44	17			

- Molecule 5 is a protein called 30S ribosomal protein S2.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AB	234	Total	C	N	O	S	0	0	0
			1900	1213	341	341	5			

- Molecule 6 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AC	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			

- Molecule 7 is a protein called 30S ribosomal protein S4.

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

- Molecule 8 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AE	150	Total	C	N	O	S	0	0	0
			1146	724	217	201	4			

- Molecule 9 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 10 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 11 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 12 is a protein called 30S ribosomal protein S9.



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
12	AI	127	Total	C	N	O			
			1011	639	198	174	0	0	0

- Molecule 13 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AJ	98	Total	C	N	O	S			
			794	499	156	138	1	0	0	0

- Molecule 14 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AK	119	Total	C	N	O	S			
			885	549	168	165	3	0	0	0

- Molecule 15 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AL	124	Total	C	N	O	S			
			970	611	195	163	1	0	0	0

- Molecule 16 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AM	125	Total	C	N	O	S			
			997	617	207	171	2	0	0	0

- Molecule 17 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AN	60	Total	C	N	O	S			
			492	312	104	72	4	0	0	0

- Molecule 18 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AO	88	Total	C	N	O	S			
			734	459	147	126	2	0	0	0

- Molecule 19 is a protein called 30S ribosomal protein S16.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AP	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			

- Molecule 20 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AQ	104	Total	C	N	O	S	0	0	0
			857	547	161	147	2			

- Molecule 21 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AR	73	Total	C	N	O		0	0	0
			597	380	118	99				

- Molecule 22 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AS	80	Total	C	N	O	S	0	0	0
			647	414	119	112	2			

- Molecule 23 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AT	99	Total	C	N	O	S	0	0	0
			762	469	162	129	2			

- Molecule 24 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AU	24	Total	C	N	O		0	0	0
			208	128	50	30				

- Molecule 25 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BB	123	Total	C	N	O	P	0	0	0
			2637	1175	488	852	122			

There is a discrepancy between the modelled and reference sequences:



Chain	Residue	Modelled	Actual	Comment	Reference
BB	-1	A	-	INSERTION	GB 48271

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BA	2814	Total	C	N	O	P	0	0	0
			60600	26974	11331	19482	2813			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BA	493	G	-	INSERTION	GB 48268

- Molecule 27 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BD	173	Total	C	N	O	S	0	0	0
			1308	820	246	236	6			

- Molecule 28 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BE	191	Total	C	N	O	S	0	0	0
			1507	940	290	273	4			

- Molecule 29 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BF	189	Total	C	N	O	S	0	0	0
			1430	872	255	302	1			

- Molecule 30 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BG	122	Total	C	N	O	S	0	0	0
			957	597	176	180	4			

- Molecule 31 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BH	164	Total	C	N	O	S	0	0	0
			1251	787	225	237	2			



- Molecule 32 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BI	148	Total	C	N	O	S	0	0	0
			1145	727	205	212	1			

- Molecule 33 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BN	117	Total	C	N	O	S	0	0	0
			917	570	164	180	3			

- Molecule 34 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BO	122	Total	C	N	O	S	0	0	0
			937	585	180	169	3			

- Molecule 35 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
35	BP	84	Total	C	N	O	0	0	0
			639	391	109	139			

- Molecule 36 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BQ	138	Total	C	N	O	S	0	0	0
			1081	678	208	192	3			

- Molecule 37 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BS	113	Total	C	N	O	S	0	0	0
			866	536	165	164	1			

- Molecule 38 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BT	52	Total	C	N	O	S	0	0	0
			406	242	74	85	5			

- Molecule 39 is a protein called 50S ribosomal protein L22.



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
39	BW	108	Total	C	N	O	0	0	0
			860	542	169	149			

- Molecule 40 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BX	76	Total	C	N	O	S	0	0	0
			602	366	102	131	3			

- Molecule 41 is a protein called 50S ribosomal protein 24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
41	BY	110	Total	C	N	O	0	0	0
			879	531	166	182			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BZ	177	Total	C	N	O	S	0	0	0
			1360	859	238	257	6			

- Molecule 43 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
43	BR	105	Total	C	N	O	0	0	0
			855	536	174	145			

- Molecule 44 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BU	117	Total	C	N	O	S	0	0	0
			978	608	210	159	1			

- Molecule 45 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BV	100	Total	C	N	O	S	0	0	0
			787	495	146	145	1			

- Molecule 46 is a protein called 50S ribosomal protein L29.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	B2	64	Total	C	N	O	S	0	0	0
			494	301	93	99	1			

- Molecule 47 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	B3	60	Total	C	N	O	S	0	0	0
			477	303	91	82	1			

- Molecule 48 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B0	86	Total	C	N	O	S	0	0	0
			641	402	124	114	1			

- Molecule 49 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	B4	73	Total	C	N	O	S	0	0	0
			604	382	110	108	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B5	58	Total	C	N	O	S	0	0	0
			457	281	94	77	5			

- Molecule 51 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B6	53	Total	C	N	O	S	0	0	0
			431	274	80	76	1			

- Molecule 52 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B7	46	Total	C	N	O	S	0	0	0
			383	230	91	60	2			

- Molecule 53 is a protein called 50S ribosomal protein L35.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	B8	63	Total	C	N	O	S	0	0	0
			496	312	101	78	5			

- Molecule 54 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	B9	35	Total	C	N	O	S	0	0	0
			285	172	64	45	4			

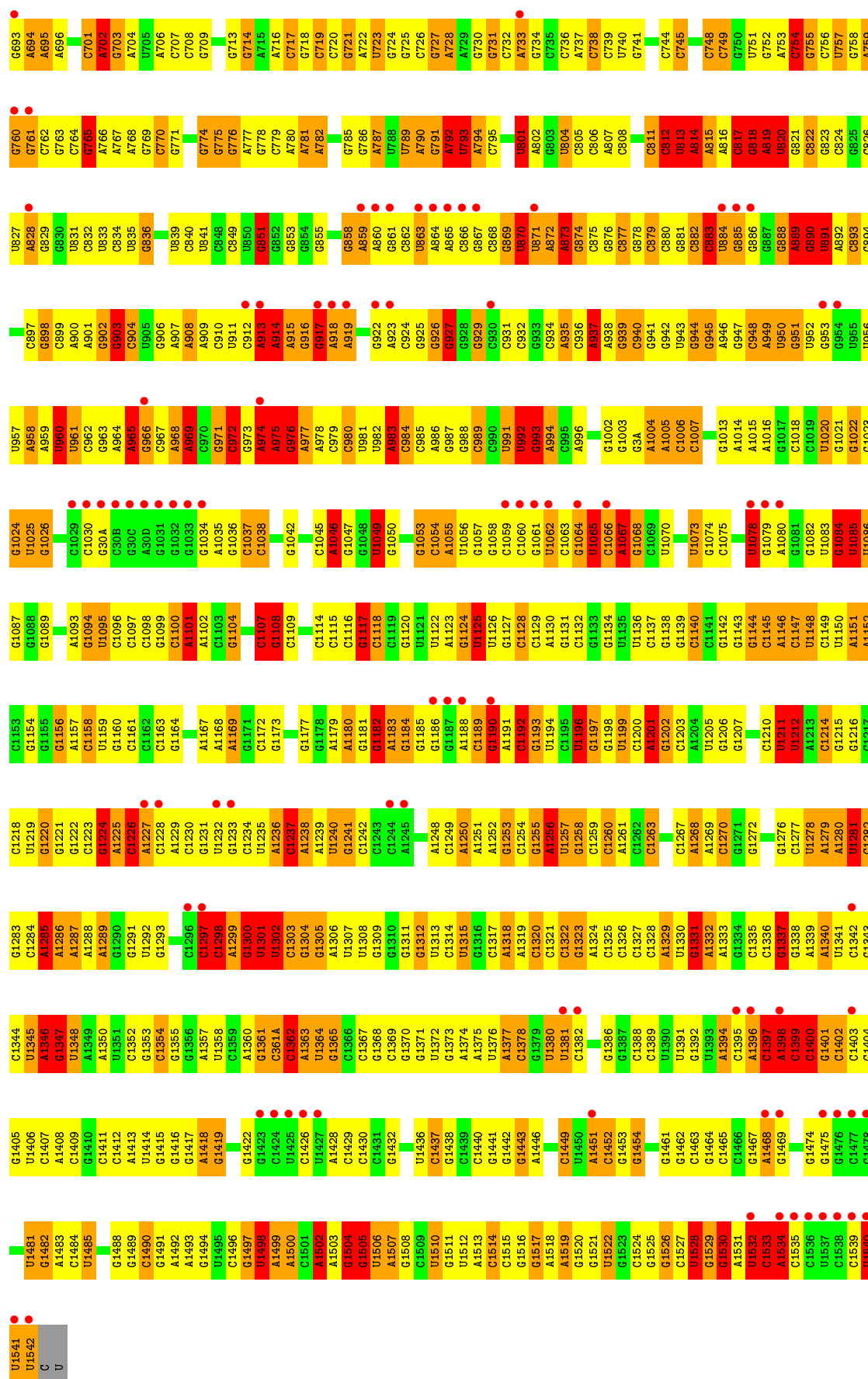
- Molecule 55 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	BK	133	Total	C	N	O	S	0	0	0
			999	642	169	182	6			



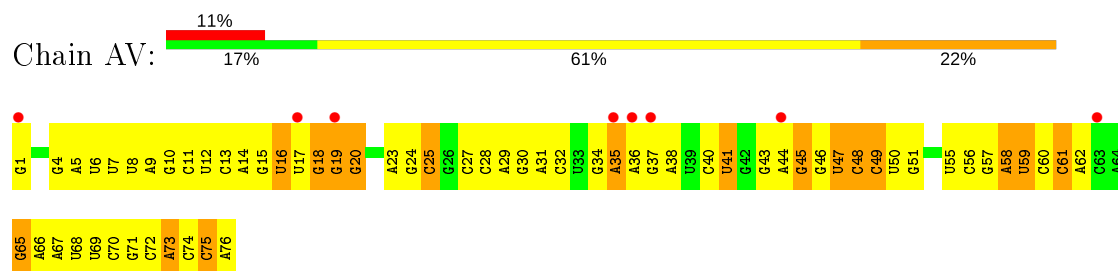




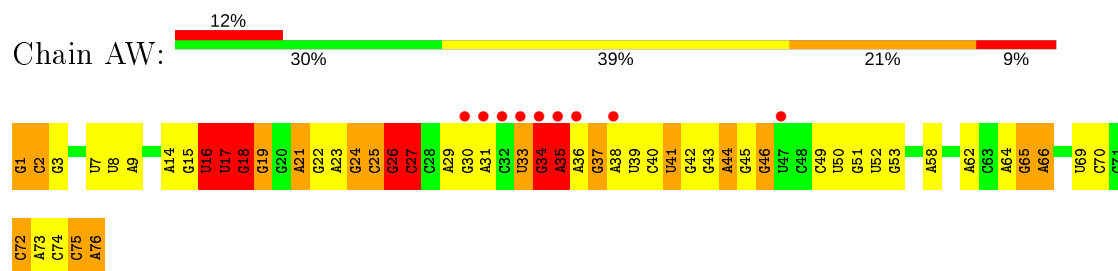




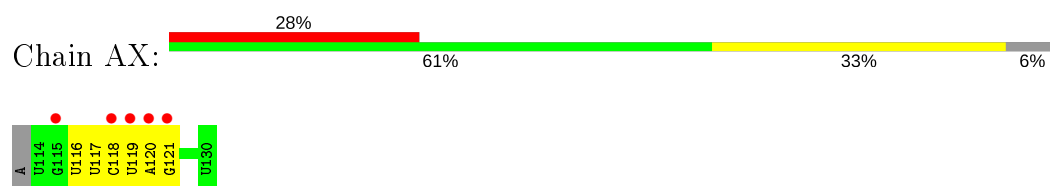
- Molecule 2: P-site tRNA (Phe)



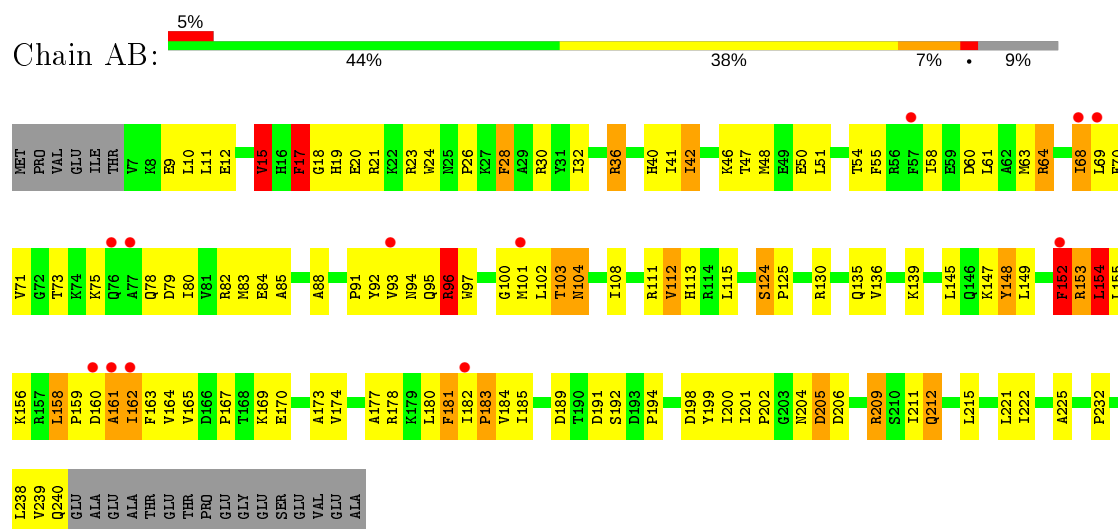
- Molecule 3: E-site tRNA (Phe)



- Molecule 4: 5'-D(\*AP\*UP\*GP\*UP\*UP\*CP\*UP\*AP\*GP\*UP\*AP\*CP\*AP\*AP\*UP\*AP\*AP\*U)-3'



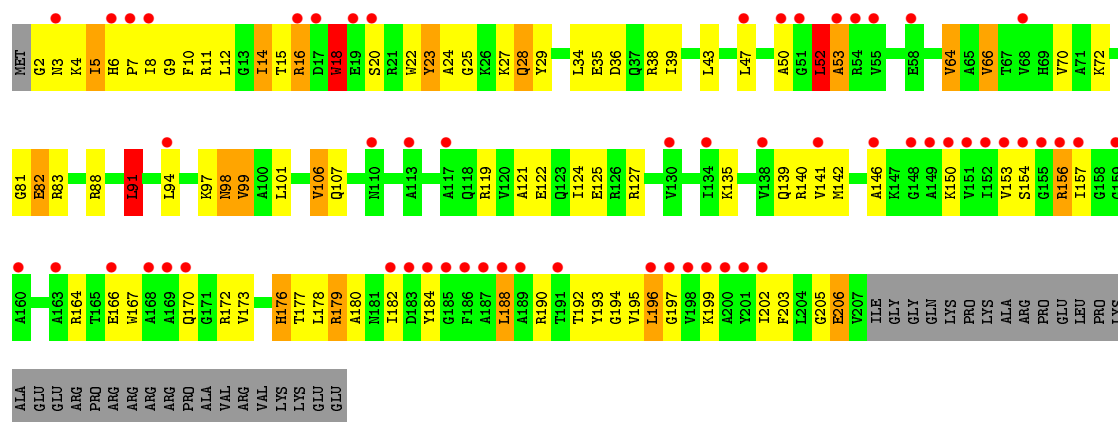
- Molecule 5: 30S ribosomal protein S2



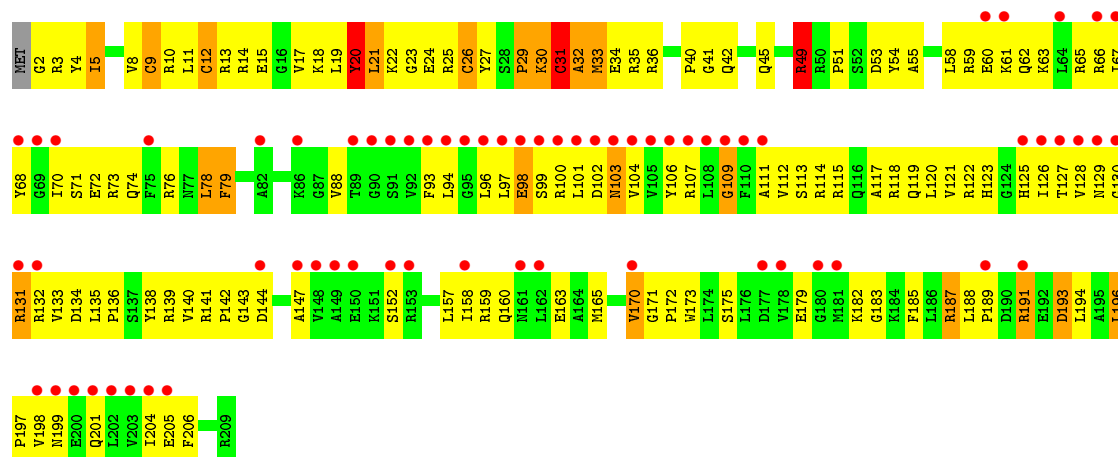
- Molecule 6: 30S ribosomal protein S3



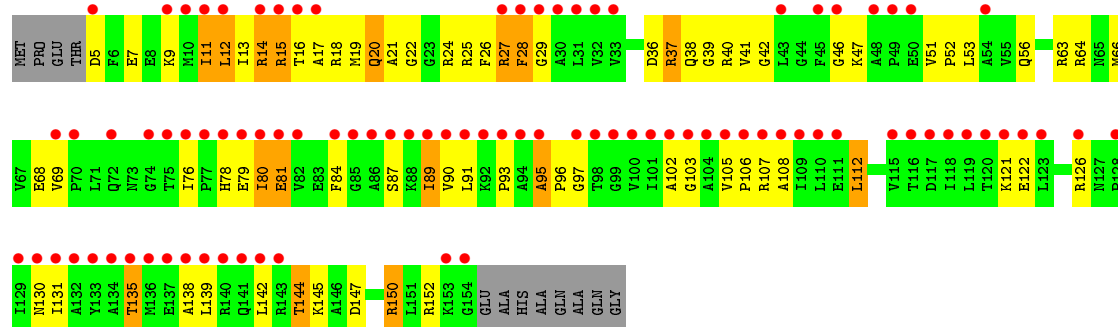




### • Molecule 7: 30S ribosomal protein S4



### • Molecule 8: 30S ribosomal protein S5



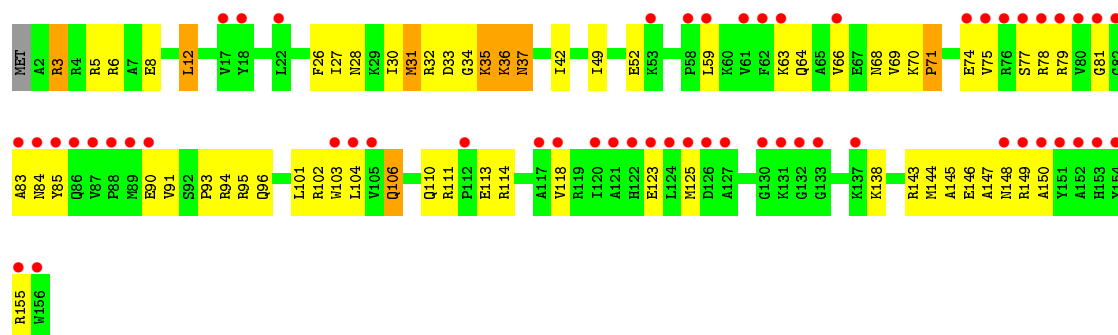
### • Molecule 9: 30S ribosomal protein S6



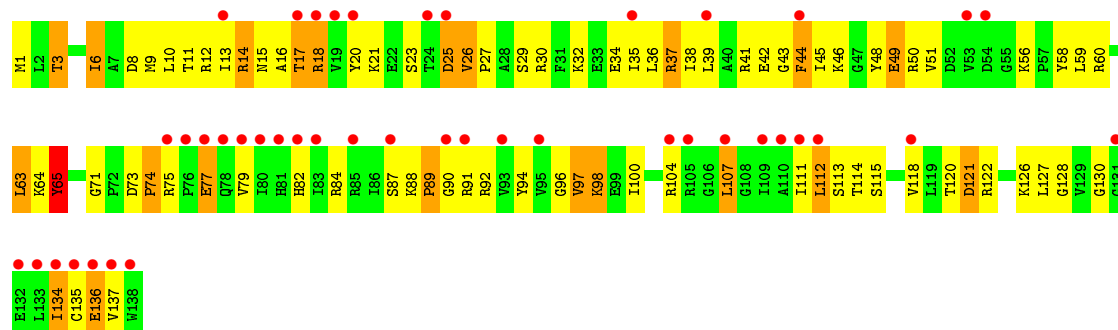




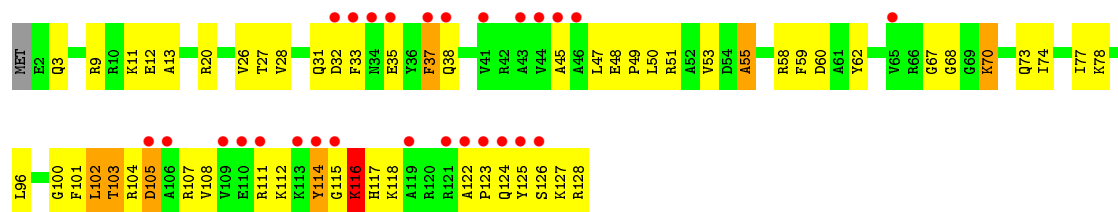
- Molecule 10: 30S ribosomal protein S7



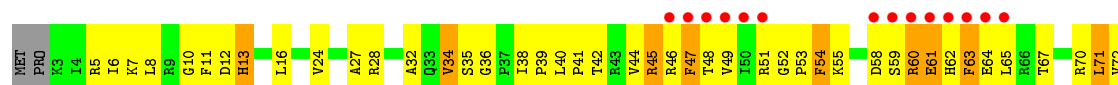
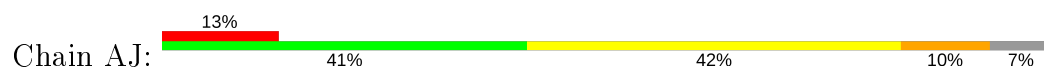
- Molecule 11: 30S ribosomal protein S8



- Molecule 12: 30S ribosomal protein S9



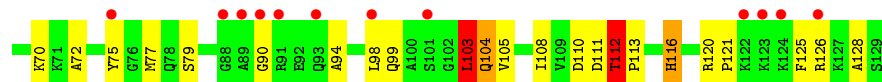
- Molecule 13: 30S ribosomal protein S10



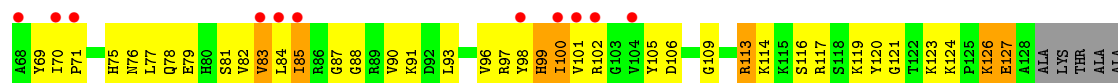
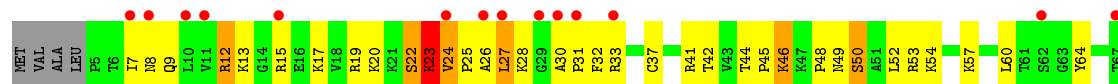




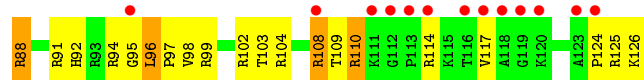
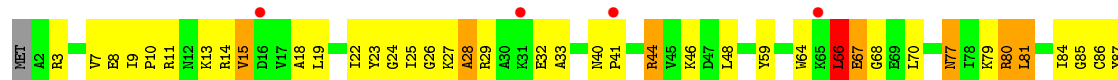
- Molecule 14: 30S ribosomal protein S11



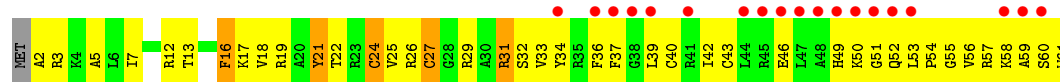
- Molecule 15: 30S ribosomal protein S12



- Molecule 16: 30S ribosomal protein S13



- Molecule 17: 30S ribosomal protein S14



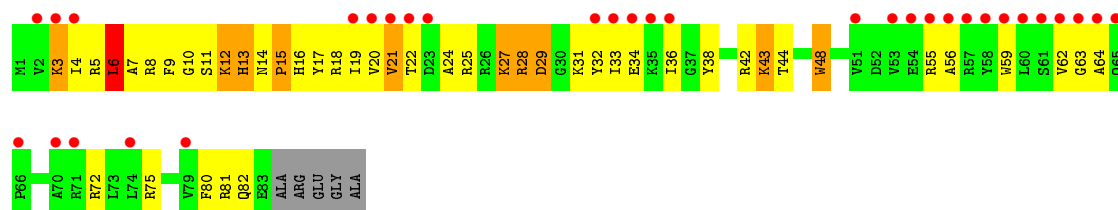
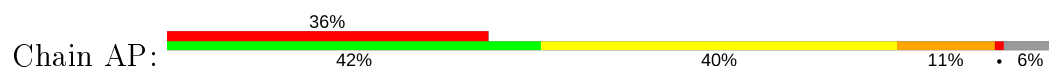
- Molecule 18: 30S ribosomal protein S15



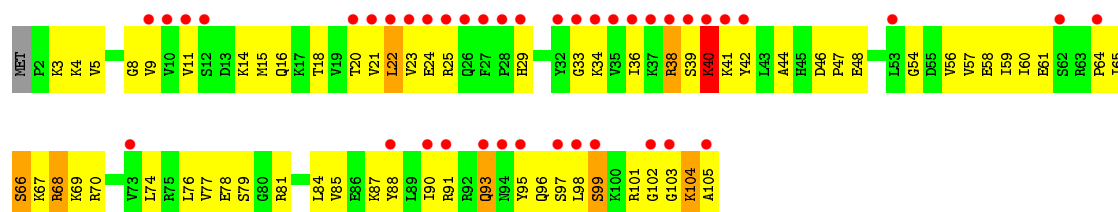




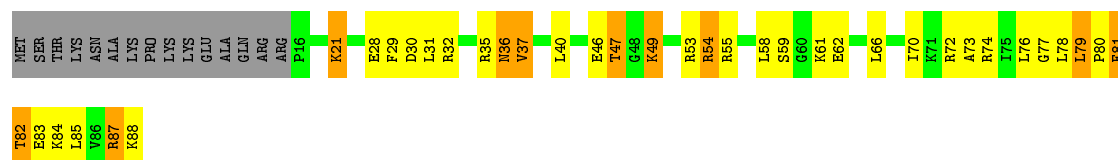
- Molecule 19: 30S ribosomal protein S16



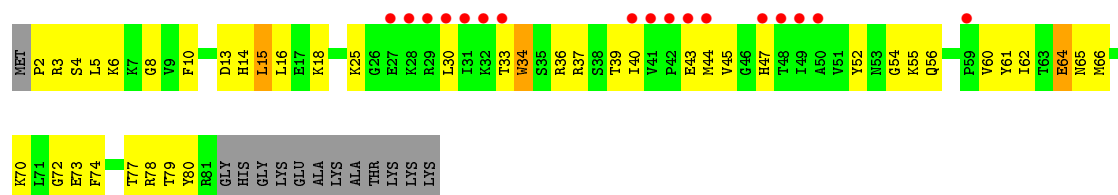
- Molecule 20: 30S ribosomal protein S17



- Molecule 21: 30S ribosomal protein S18



- Molecule 22: 30S ribosomal protein S19



- Molecule 23: 30S ribosomal protein S20









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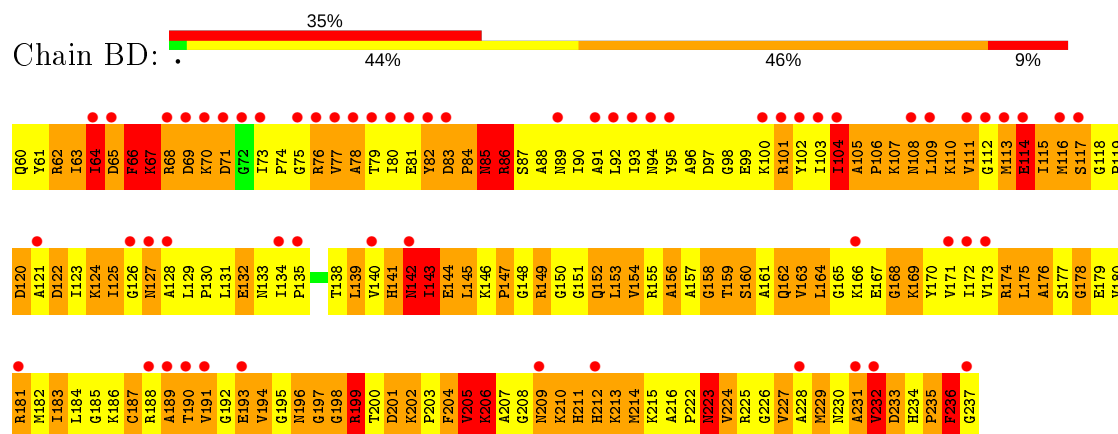
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U2016	G1953	A1890	G1817	G1756	G1674	A1614	A545A	U1482	C1417	G1356	U1288	G1224
U2017	G1954	G1891	U1818	U1757	C1675	C1615	A1546	U1483	G1418	G1357	C1289	G1225
G2018	U1955	A1892	A1819	A1758	A1676	A1616	C1547	G1484	A1419	U1358	U1294	G1226
A2019	U1956	C1895	U1820	A1759	A1677	C1617	C1548	G1485	U1420	G1359	U1294	G1227
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A2054	U1994	A1932	G1858	C1795	G1726	G1653	C1588	G1525	A1457	U1396	C1333	G1266
C2055	U1995	G1933	A1859	U1796	U1727	A1654	G1595	G1527	A1460	U1397	G1334	U1267
G2056	U1996	C1934	G1860	C1797	G1728	A1655	A1596	A1528	G1461	C1398	U1335	A1268
A2057	C1997	G1935	G1861	G1798	A1729	C1656	A1597	A1529	C1462	C1399	A1336	A1269
C2058	G1998	A1936	G1862	C1800	U1730	C1657	G1598	G1530	C1463	G1400	G1337	G1270
A2059	C1999	A1937	U1863	G1801	G1731	C1658	C1599	C1531	G1466	G1401	G1338	G1271
G2060	G2000	U1938	U1870	A1802	A1732	U1659	C1600	C1532	G1467	C1402	G1339	A1272
C2061	A2001	U1939	C1871	A1803	G1733	C1660	G1601	C1533	C1467	C1403	U1340	U1273
A2062	G2002	U1940	A1872	C1804	C1734	G1661	U1602	C1534	G1470	C1404	U1341	A1274
C2063	C2003	C1941	G1873	U1805	C1735	C1663	A1603	U1535	U1471	U1405	A1342	A1275
C2064	C2004	C1942	C1879	C1806	C1741	C1663	G1604	A1536	G1471	U1406	G1343	A1276
C2065	C2005	U1943	G1880	G1807	G1742	A1664	C1598	C1537	A1472	C1407	G1344	G1277
C2066	G2006	U1944	C1881	U1808	G1743	A1665	C1605	C1538	G1473	C1408	G1345	A1278
G2067	C2007	C1945	C1882	A1809	G1746	G1666	G1606	G1539	C1474	G1409	A1349	G1279
U2068	C2008	U1946	G1883	A1810	G1747	A1667	C1607	G1540	C1475	G1410	C1350	G1280
G2069	G2009	C1947	A1884	G1811	U1747	A1668	A1608	G1475	C1476	C1411		
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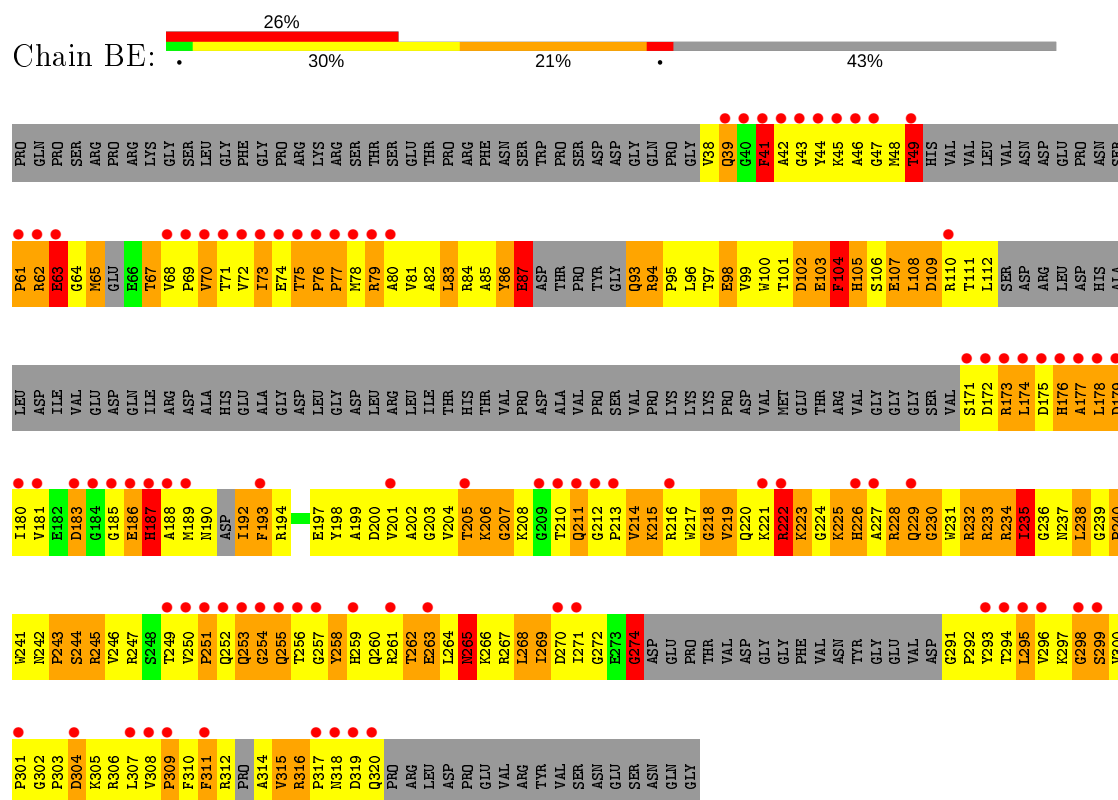
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U2866	G2805	C2743	A2564	U2504	G2444	G2384	C2264	G2194	C2074
G2867	G2807	G2744	A2565	G2505	G2445	C2385	U2265	C2195	U2075
A2868	U2808	C2745	U2566	U2506	G2446	C2386	C2266	C2196	A2076
G2869	A2809	C2746	G2567	G2507	G2447	U2387	A2267	U2197	C2077
A2810	C2810	G2747	C2568	G2508	A2448	A2388	A2268	A2198	C2078
C2811	G2811	A2748	U2569	G2509	A2449	G2389	A2269	A2199	U2079
G2812	C2812	A2749	G2570	U2510	A2450	C2390	G2270	C2205	G2080
A2813	G2813	G2750	C2571	U2511	C2451	G2391	C2271	C2206	C2081
G2814	C2814	G2751	A2572	C2512	A2452	C2392	U2272	C2207	A2082
C2815	A2815	C2752	C2573	G2513	G2453	A2393	A2273	C2208	G2083
G2816	C2816	A2753	G2574	U2514	A2454	C2394	A2274	C2209	C2084
U2817	G2817	U2754	C2575	C2515	G2455	C2395	C2275	C2210	C2085
G2818	C2818	C2755	U2576	G2516	A2456	G2396	G2276	G2211	U2086
U2819	G2819	U2756	A2577	C2517	U2457	G2397	G2277	A2212	G2087
C2820	A2820	A2757	U2578	A2518	G2458	U2398	A2278	U2213	G2088
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C2823	A2823	C2760	G2581	C2521	C2461	U2401	C2281	G2216	C2091
G2824	C2824	G2761	C2582	U2522	U2462	C2402	G2282	G2217	U2092
U2825	G2825	G2762	G2583	G2523	C2463	C2403	C2283	G2218	G2093
C2826	A2826	G2763	U2584	G2524	C2464	C2404	C2284	G2219	G2094
U2827	G2827	A2764	U2585	G2525	C2465	G2405	C2285	G2220	C2095
G2828	C2828	A2765	C2586	G2526	C2466	U2406	A2286	A2225	U2096
C2829	G2829	G2766	A2587	C2527	C2467	G2407	A2287	C2226	C2097
G2830	C2830	C2767	U2588	U2528	G2468	U2408	A2288	G2227	U2098
A2831	G2831	G2768	A2589	G2529	A2469	G2409	A2289	C2228	U2099
C2832	U2832	C2769	U2590	A2530	G2470	G2410	G2290	G2229	G2100
G2833	C2833	G2770	C2591	A2531	C2471	G2411	U2291	C2230	G2101
U2834	G2834	C2771	U2592	G2532	G2472	A2412	C2292	U2231	U2102
C2835	A2835	C2772	U2593	A2533	U2473	G2413	C2293	U2232	C2103
G2836	U2836	G2773	C2594	A2534	C2474	C2414	C2294	G2233	C2104
C2837	G2837	C2774	G2595	G2535	C2475	G2415	C2295	G2234	C2105
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G2839	U2839	A2776	G2597	U2537	C2477	C2417	C2297	C2236	C
C2840	C2840	G2777	A2598	C2538	A2478	A2418	A2298	G2237	C
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C2842	C2842	U2779	A2600	C2540	C2480	C2420	G2300	C2239	A
G2843	U2843	G2780	C2601	A2541	G2481	G2421	C2301	C2240	G
A2844	C2844	A2781	A2602	A2542	C2482	A2422	G2302	A2241	C
G2845	G2845	G2782	G2603	G2543	C2483	U2423	G2303	G2242	U
C2846	U2846	G2783	G2604	G2544	G2484	C2424	G2304	U2243	G
G2847	C2847	C2784	U2605	G2545	C2485	A2425	A2305	U2244	A
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A2849	U2849	U2786	G2607	U2547	A2487	C2427	G2307	A2246	G
C2850	C2850	C2787	U2608	G2548	A2488	G2428	G2308	A2247	A
G2851	A2851	C2788	U2609	G2549	G2489	C2429	A2309	U2248	U
C2852	U2852	G2789	C2610	U2550	G2490	A2430	A2310	G2249	G
G2853	C2853	A2790	U2611	C2551	U2491	U2431	A2311	G2250	A
C2854	U2854	C2791	C2612	U2552	U2492	A2432	U2312	G2251	G
G2855	C2855	G2792	U2613	G2553	U2493	A2433	G2313	G2252	U
C2856	U2856	A2793	A2614	U2554	C2494	A2434	C2314	G2253	G
G2857	C2857	G2794	C2615	G2555	G2495	A2435	G2315	C2254	G
U2858	G2858	G2795	C2616	U2556	A2496	G2436	G2316	G2255	G
C2859	U2859	U2796	C2617	G2557	A2497	U2437	C2317	G2256	A
A2860	G2860	C2797	G2618	C2558	C2498	U2438	G2318	U2257	G
C2861	U2861	A2798	G2619	C2559	C2499	A2439	G2319	C2258	C
G2862	C2862	U2739	C2620	U2560	U2500	C2440	A2320	G2259	U
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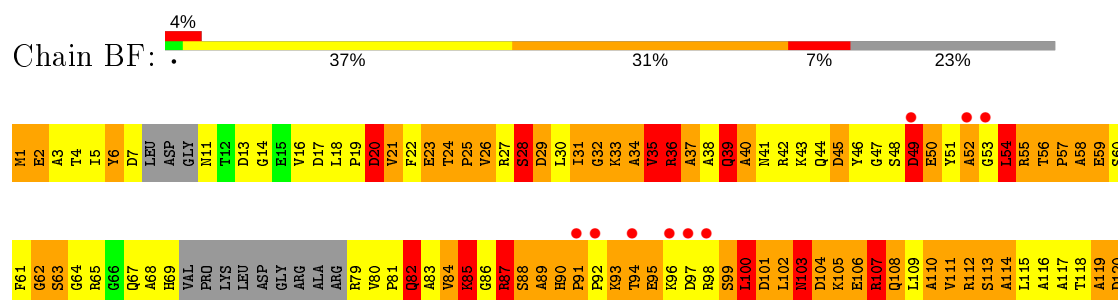
• Molecule 27: 50S ribosomal protein L2



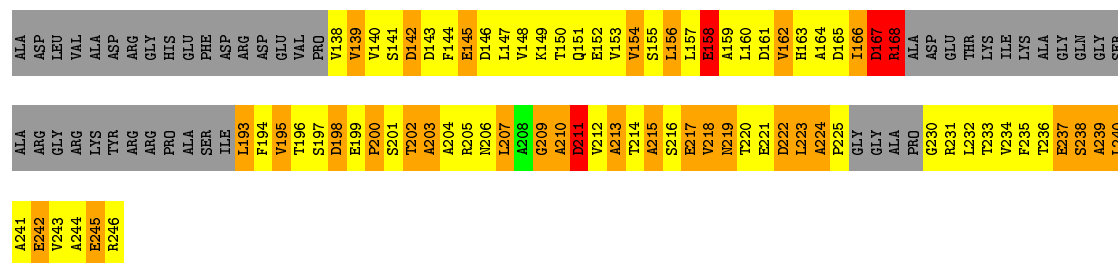
• Molecule 28: 50S ribosomal protein L3



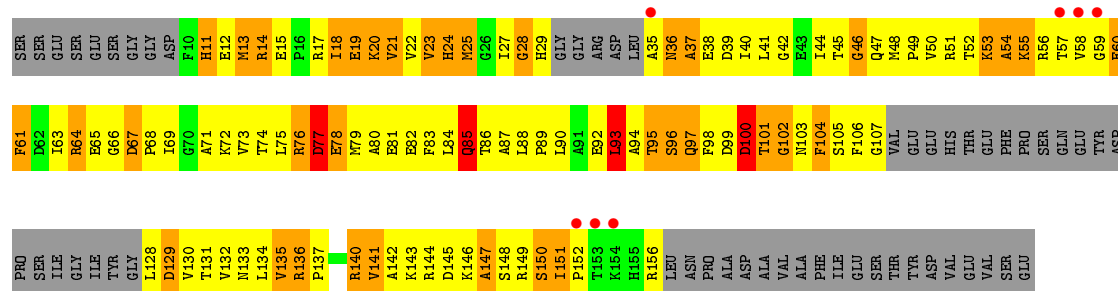
• Molecule 29: 50S ribosomal protein L4



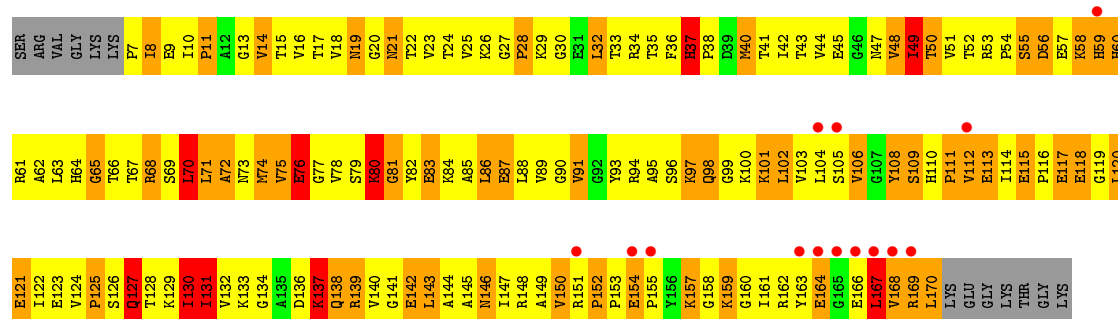




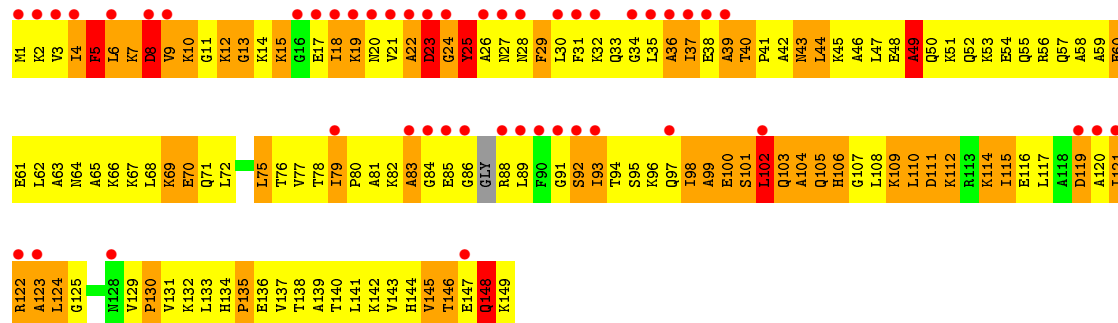
• Molecule 30: 50S ribosomal protein L5



• Molecule 31: 50S ribosomal protein L6

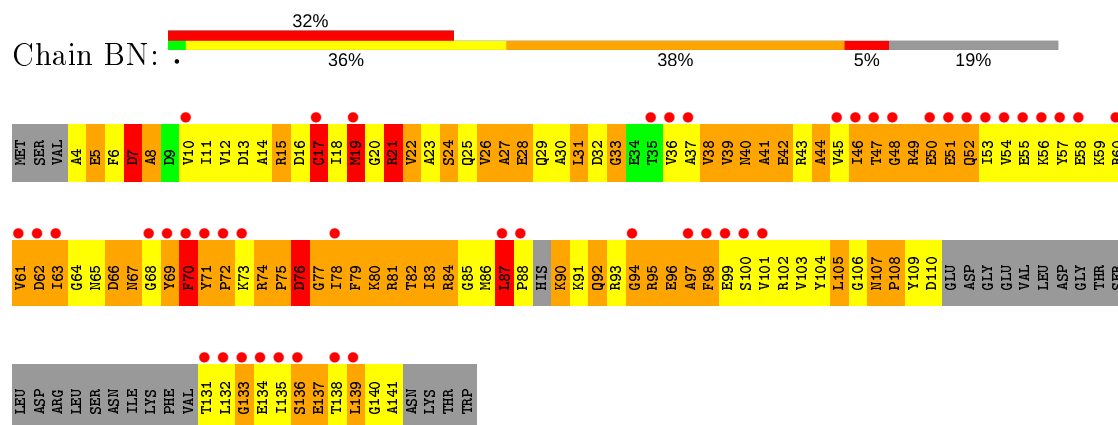


• Molecule 32: 50S ribosomal protein L9

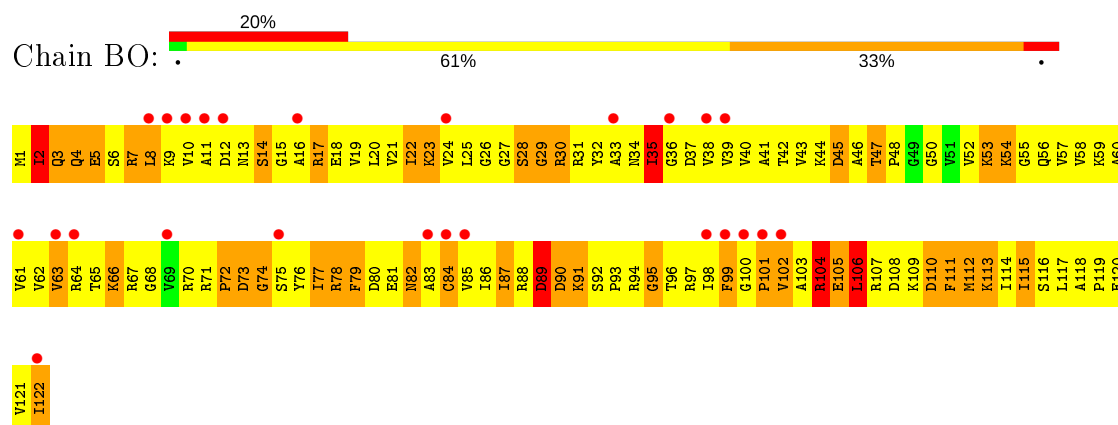




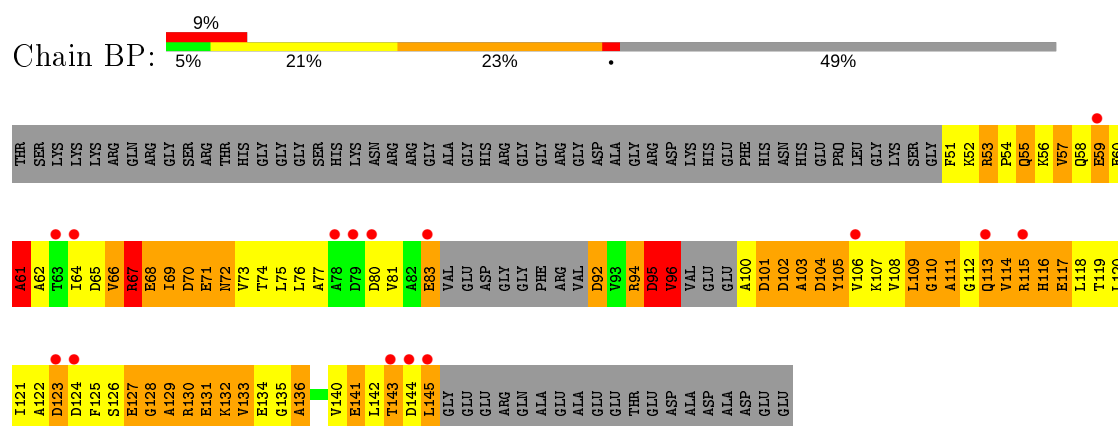
- Molecule 33: 50S ribosomal protein L13



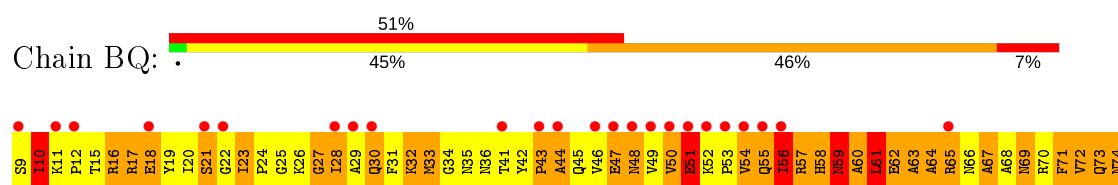
- Molecule 34: 50S ribosomal protein L14



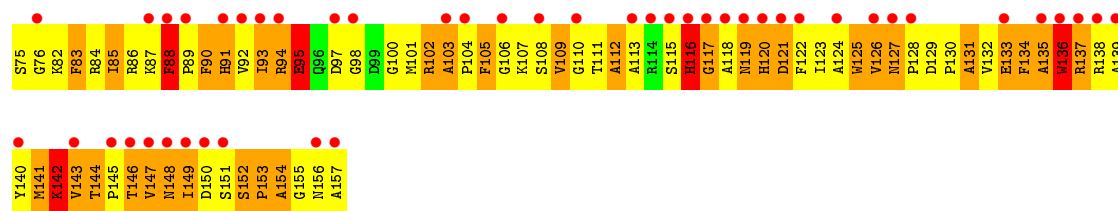
- Molecule 35: 50S ribosomal protein L15



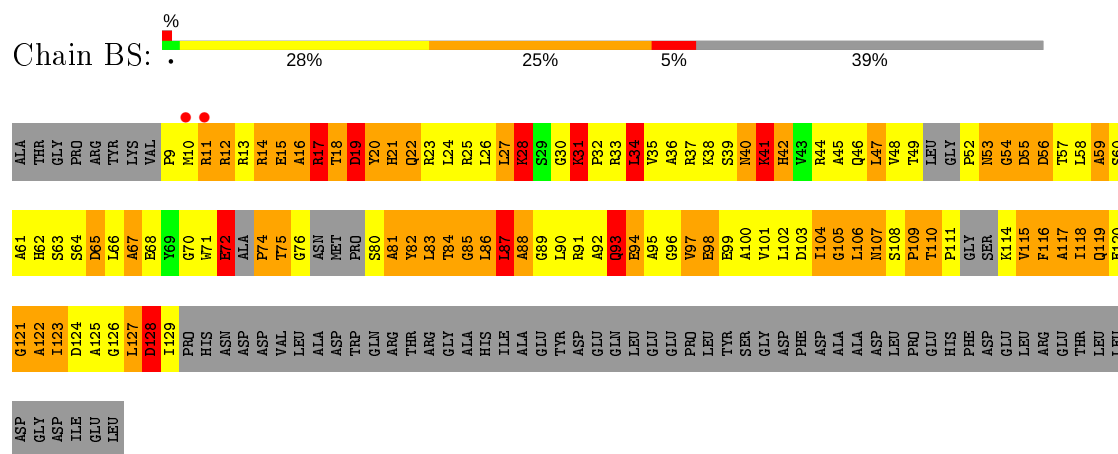
- Molecule 36: 50S ribosomal protein L16



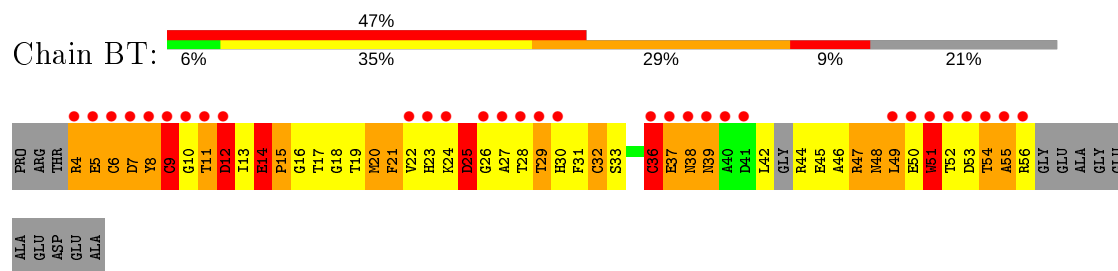




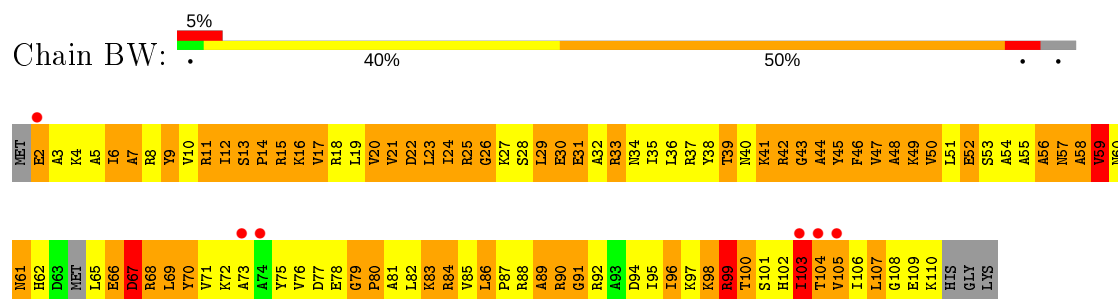
• Molecule 37: 50S ribosomal protein L18



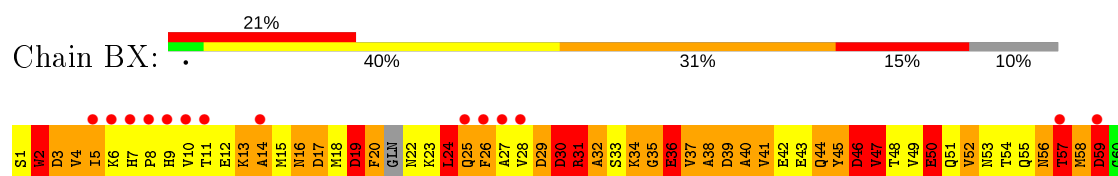
• Molecule 38: 50S ribosomal protein L19



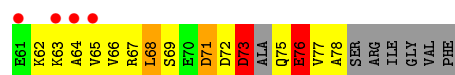
• Molecule 39: 50S ribosomal protein L22



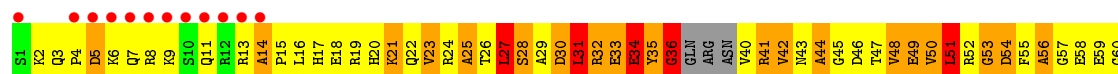
• Molecule 40: 50S ribosomal protein L23



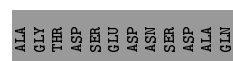
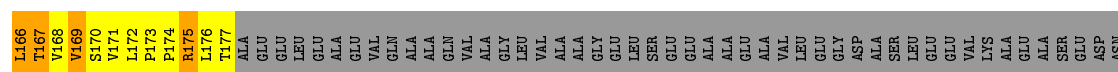
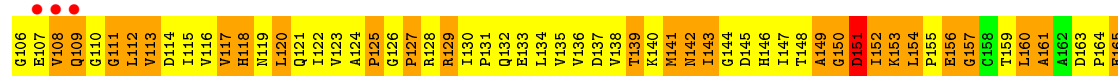
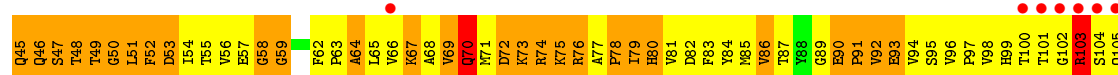




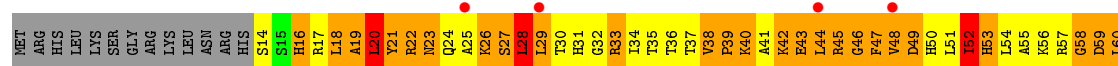
- Molecule 41: 50S ribosomal protein 24



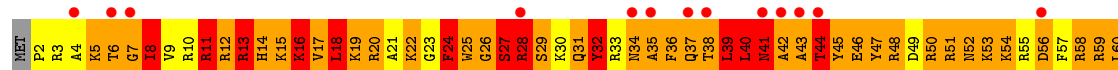
- Molecule 42: 50S ribosomal protein CTC



- Molecule 43: 50S ribosomal protein L17



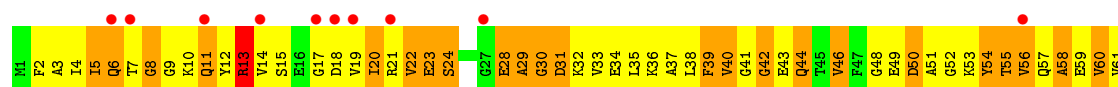
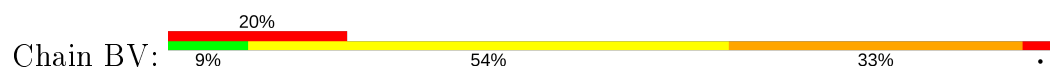
- Molecule 44: 50S ribosomal protein L20



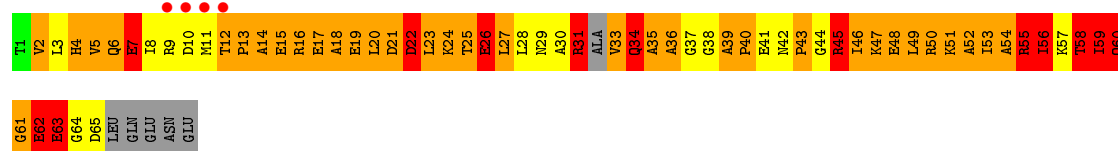




• Molecule 45: 50S ribosomal protein L21



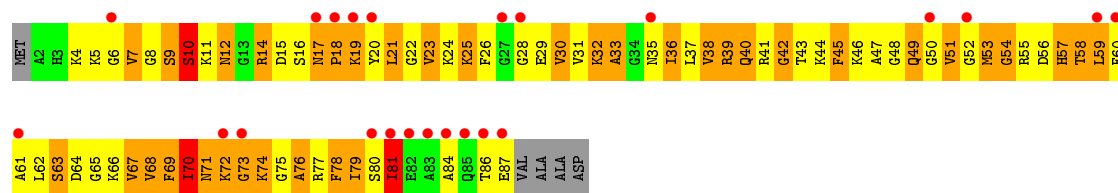
• Molecule 46: 50S ribosomal protein L29



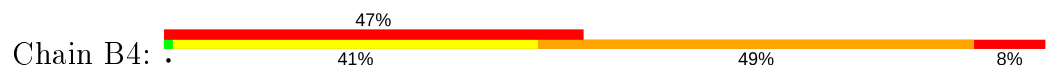
• Molecule 47: 50S ribosomal protein L30



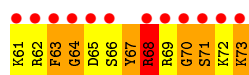
• Molecule 48: 50S ribosomal protein L27



• Molecule 49: 50S ribosomal protein L31



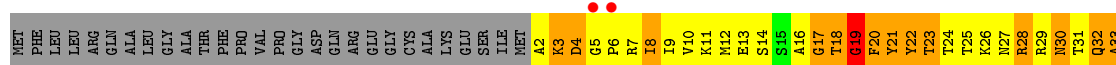




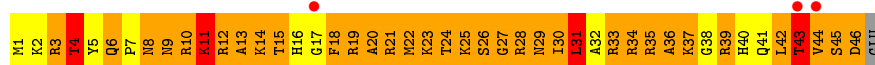
- Molecule 50: 50S ribosomal protein L32



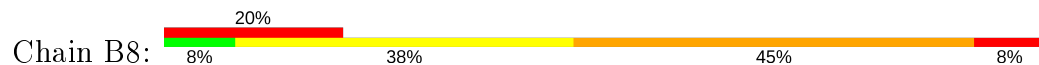
- Molecule 51: 50S ribosomal protein L33



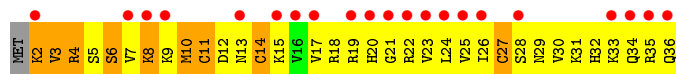
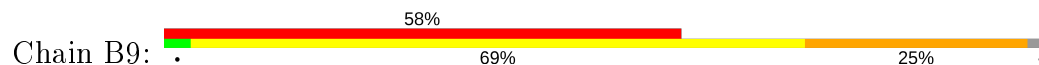
- Molecule 52: 50S ribosomal protein L34



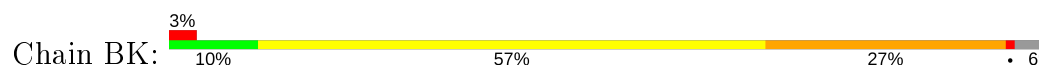
- Molecule 53: 50S ribosomal protein L35



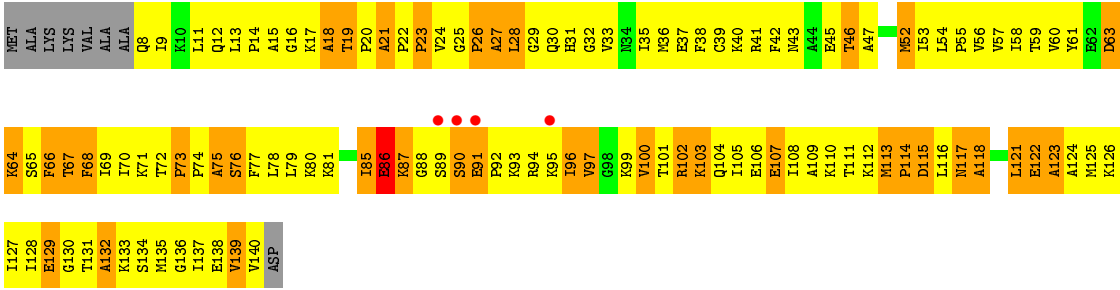
- Molecule 54: 50S ribosomal protein L36



- Molecule 55: 50S ribosomal protein L11









## 4 Data and refinement statistics

Property	Value	Source
Space group	P 43 21 2	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	517.41Å 517.41Å 365.38Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	40.00 – 6.46 99.57 – 6.00	Depositor EDS
% Data completeness (in resolution range)	99.9 (40.00-6.46) 99.7 (99.57-6.00)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.13	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.87 (at 6.19Å)	Xtriage
Refinement program	CNS	Depositor
R, $R_{free}$	0.354 , 0.361 0.329 , 0.344	Depositor DCC
$R_{free}$ test set	6075 reflections (4.93%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	240.8	Xtriage
Anisotropy	0.222	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.10 , 90.1	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.46$ , $\langle L^2 \rangle = 0.29$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.87	EDS
Total number of atoms	142447	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	314.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.58% 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: YYG, PSU

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	1.32	68/36413 (0.2%)	1.49	439/56777 (0.8%)
2	AV	0.74	3/1812 (0.2%)	1.20	8/2819 (0.3%)
3	AW	1.81	19/1739 (1.1%)	2.15	47/2698 (1.7%)
4	AX	0.18	0/139	0.67	0/213
5	AB	0.60	2/1935 (0.1%)	0.61	0/2609
6	AC	0.73	2/1636 (0.1%)	0.61	4/2205 (0.2%)
7	AD	0.70	4/1733 (0.2%)	1.03	11/2318 (0.5%)
8	AE	0.83	1/1162 (0.1%)	0.63	1/1564 (0.1%)
9	AF	0.35	0/856	0.54	0/1154
10	AG	0.34	0/1276	0.59	3/1709 (0.2%)
11	AH	0.41	0/1136	0.66	0/1527
12	AI	0.34	0/1029	0.54	0/1378
13	AJ	0.35	0/807	0.56	0/1085
14	AK	0.59	1/900 (0.1%)	0.54	0/1213
15	AL	1.33	1/986 (0.1%)	1.11	3/1320 (0.2%)
16	AM	0.92	1/1007 (0.1%)	0.59	1/1344 (0.1%)
17	AN	0.49	1/501 (0.2%)	0.65	1/664 (0.2%)
18	AO	0.32	0/745	0.54	0/992
19	AP	0.40	0/716	0.59	1/963 (0.1%)
20	AQ	1.23	2/870 (0.2%)	1.38	6/1159 (0.5%)
21	AR	0.40	0/603	0.70	0/799
22	AS	0.34	0/661	0.53	0/890
23	AT	0.32	0/764	0.57	1/1006 (0.1%)
24	AU	0.33	0/212	0.49	0/277
25	BB	1.25	6/2950 (0.2%)	1.44	25/4602 (0.5%)
26	BA	1.17	153/67839 (0.2%)	1.46	906/105818 (0.9%)
27	BD	0.38	0/1328	0.60	0/1783
28	BE	0.65	4/1540 (0.3%)	1.07	7/2078 (0.3%)
29	BF	0.76	3/1444 (0.2%)	0.83	1/1954 (0.1%)
30	BG	0.25	0/971	0.46	0/1304
31	BH	0.54	1/1272 (0.1%)	0.80	3/1721 (0.2%)
32	BI	0.32	0/1156	0.71	3/1544 (0.2%)



Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
33	BN	0.35	0/927	0.55	0/1245
34	BO	0.32	0/946	0.57	0/1269
35	BP	1.59	3/643 (0.5%)	1.31	5/870 (0.6%)
36	BQ	0.32	0/1106	0.53	0/1490
37	BS	1.13	3/877 (0.3%)	0.69	1/1179 (0.1%)
38	BT	0.39	0/412	0.70	0/554
39	BW	0.75	3/869 (0.3%)	0.75	4/1166 (0.3%)
40	BX	0.49	1/608 (0.2%)	1.04	3/820 (0.4%)
41	BY	0.26	0/887	0.83	3/1195 (0.3%)
42	BZ	0.32	1/1385 (0.1%)	0.62	3/1883 (0.2%)
43	BR	0.30	0/867	0.50	0/1162
44	BU	0.64	1/994 (0.1%)	0.74	3/1323 (0.2%)
45	BV	0.82	1/796 (0.1%)	0.91	3/1058 (0.3%)
46	B2	0.37	0/497	1.00	2/668 (0.3%)
47	B3	0.31	0/482	0.50	0/646
48	B0	0.38	1/649 (0.2%)	0.87	3/860 (0.3%)
49	B4	0.89	2/620 (0.3%)	0.54	0/831
50	B5	0.36	0/469	0.90	3/629 (0.5%)
51	B6	0.32	0/438	0.55	1/583 (0.2%)
52	B7	0.38	0/387	0.64	0/509
53	B8	0.91	2/503 (0.4%)	0.92	3/657 (0.5%)
54	B9	0.33	0/286	0.59	0/375
55	BK	0.27	1/1014 (0.1%)	0.44	0/1363
All	All	1.09	291/154800 (0.2%)	1.33	1508/231822 (0.7%)

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
3	AW	1	5
5	AB	0	1
6	AC	0	1
7	AD	0	1
14	AK	0	1
15	AL	0	1
20	AQ	0	1
27	BD	0	1
28	BE	0	3
29	BF	0	4
31	BH	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
32	BI	0	1
35	BP	0	1
37	BS	0	1
40	BX	0	1
41	BY	0	1
46	B2	0	1
50	B5	0	1
55	BK	0	1
All	All	1	28

All (291) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BA	2199	A	O3'-P	-71.04	0.75	1.61
1	AA	1278	U	O3'-P	-56.53	0.93	1.61
1	AA	1337	G	O3'-P	-53.91	0.96	1.61
26	BA	1546	C	O3'-P	-51.62	0.99	1.61
1	AA	1004	A	O3'-P	48.18	2.19	1.61
26	BA	2196	C	O3'-P	-48.04	1.03	1.61
1	AA	1224	G	O3'-P	47.01	2.17	1.61
1	AA	219	C	O3'-P	46.80	2.17	1.61
26	BA	1545	A	O3'-P	45.79	2.16	1.61
26	BA	2454	G	O3'-P	-44.69	1.07	1.61
26	BA	2889	C	O3'-P	-43.48	1.08	1.61
1	AA	1037	C	O3'-P	43.13	2.12	1.61
1	AA	1211	U	O3'-P	-42.94	1.09	1.61
15	AL	23	LYS	C-N	-39.21	0.43	1.34
26	BA	1142	U	O3'-P	38.88	2.07	1.61
1	AA	820	U	O3'-P	38.55	2.07	1.61
25	BB	59	A	O3'-P	-37.97	1.15	1.61
26	BA	324	A	O3'-P	37.59	2.06	1.61
1	AA	365	U	O3'-P	37.44	2.06	1.61
26	BA	1924	C	O3'-P	-37.38	1.16	1.61
26	BA	1029	A	O3'-P	-36.91	1.16	1.61
26	BA	2625	G	O3'-P	-35.56	1.18	1.61
1	AA	288	A	O3'-P	-35.06	1.19	1.61
26	BA	280	C	O3'-P	34.99	2.03	1.61
3	AW	21	A	O3'-P	-34.92	1.19	1.61
1	AA	944	G	O3'-P	-34.59	1.19	1.61
26	BA	1525	G	O3'-P	34.43	2.02	1.61
26	BA	1124	C	O3'-P	34.22	2.02	1.61
26	BA	1988	C	O3'-P	-34.18	1.20	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1107	C	O3'-P	33.37	2.01	1.61
26	BA	1163	G	O3'-P	-33.21	1.21	1.61
26	BA	223	A	O3'-P	32.91	2.00	1.61
20	AQ	22	LEU	C-N	-32.62	0.59	1.34
26	BA	1404	C	O3'-P	32.43	2.00	1.61
1	AA	405	U	O3'-P	32.18	1.99	1.61
1	AA	937	A	O3'-P	32.05	1.99	1.61
26	BA	460	A	O3'-P	-30.93	1.24	1.61
1	AA	566	G	O3'-P	30.77	1.98	1.61
26	BA	176	G	O3'-P	-29.60	1.25	1.61
1	AA	286	G	O3'-P	29.11	1.96	1.61
1	AA	1024	G	O3'-P	29.11	1.96	1.61
26	BA	1019	U	O3'-P	28.98	1.96	1.61
1	AA	1182	G	O3'-P	-28.91	1.26	1.61
1	AA	703	G	O3'-P	28.62	1.95	1.61
1	AA	337	C	O3'-P	28.61	1.95	1.61
26	BA	1055	G	O3'-P	28.58	1.95	1.61
1	AA	672	U	O3'-P	-28.56	1.26	1.61
1	AA	1255	G	O3'-P	-27.89	1.27	1.61
26	BA	232	G	O3'-P	27.65	1.94	1.61
35	BP	96	VAL	C-N	-27.56	0.70	1.34
26	BA	2769	C	O3'-P	-27.43	1.28	1.61
1	AA	196	A	O3'-P	27.40	1.94	1.61
1	AA	311	C	O3'-P	27.39	1.94	1.61
26	BA	2810	A	O3'-P	-27.34	1.28	1.61
25	BB	0	A	O3'-P	27.27	1.93	1.61
26	BA	1667	G	O3'-P	-27.01	1.28	1.61
2	AV	45	G	O3'-P	-27.01	1.28	1.61
26	BA	130	C	O3'-P	-26.92	1.28	1.61
1	AA	1046	A	O3'-P	26.89	1.93	1.61
16	AM	66	LEU	C-N	26.80	1.95	1.34
26	BA	1419	A	O3'-P	26.69	1.93	1.61
26	BA	110	G	O3'-P	-26.23	1.29	1.61
1	AA	546	G	O3'-P	25.76	1.92	1.61
26	BA	14	A	O3'-P	-25.56	1.30	1.61
26	BA	601	C	O3'-P	25.31	1.91	1.61
37	BS	128	ASP	C-N	24.38	1.90	1.34
1	AA	765	G	O3'-P	-23.81	1.32	1.61
26	BA	2344	U	O3'-P	-23.71	1.32	1.61
8	AE	144	THR	C-N	23.51	1.88	1.34
1	AA	717	C	O3'-P	-23.31	1.33	1.61
1	AA	239	U	O3'-P	-23.24	1.33	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	24	G	O3'-P	-22.46	1.34	1.61
1	AA	879	C	O3'-P	22.34	1.88	1.61
26	BA	793	A	O3'-P	-22.33	1.34	1.61
26	BA	1626	G	O3'-P	-22.30	1.34	1.61
35	BP	61	ALA	C-N	22.28	1.85	1.34
45	BV	91	THR	C-N	21.99	1.84	1.34
25	BB	-1	A	O3'-P	-21.91	1.34	1.61
26	BA	2062	A	O3'-P	-21.71	1.35	1.61
26	BA	316	C	O3'-P	20.97	1.86	1.61
26	BA	2243	U	O3'-P	20.94	1.86	1.61
1	AA	1073	U	O3'-P	-20.93	1.36	1.61
26	BA	2644	G	O3'-P	-20.89	1.36	1.61
1	AA	813	U	O3'-P	-20.68	1.36	1.61
26	BA	1991	U	O3'-P	19.97	1.85	1.61
26	BA	2322	A	O3'-P	-19.85	1.37	1.61
1	AA	960	U	O3'-P	-19.80	1.37	1.61
1	AA	587	G	O3'-P	19.74	1.84	1.61
5	AB	112	VAL	C-N	19.71	1.79	1.34
3	AW	46	G	C8-N7	19.55	1.42	1.30
29	BF	168	ARG	C-N	-19.27	0.89	1.34
26	BA	2040	C	O3'-P	-19.23	1.38	1.61
26	BA	1361	G	O3'-P	-19.19	1.38	1.61
26	BA	359	A	O3'-P	19.13	1.84	1.61
3	AW	16	U	C5-C6	18.64	1.50	1.34
1	AA	754	C	O3'-P	18.64	1.83	1.61
26	BA	405	U	O3'-P	-18.51	1.39	1.61
26	BA	468	G	O3'-P	-18.49	1.39	1.61
26	BA	2009	G	O3'-P	18.44	1.83	1.61
26	BA	1646	C	O3'-P	-18.36	1.39	1.61
6	AC	106	VAL	C-N	-18.35	0.91	1.34
26	BA	584	C	O3'-P	-18.32	1.39	1.61
26	BA	837	C	O3'-P	18.30	1.83	1.61
26	BA	271(B)	G	O3'-P	-18.28	1.39	1.61
26	BA	2566	A	O3'-P	18.25	1.83	1.61
1	AA	1067	A	O3'-P	18.23	1.83	1.61
1	AA	884	U	O3'-P	-18.12	1.39	1.61
35	BP	83	GLU	C-N	17.99	1.75	1.34
28	BE	87	GLU	C-N	17.94	1.75	1.34
7	AD	98	GLU	C-N	-17.93	0.92	1.34
3	AW	58	A	C6-N6	17.86	1.48	1.33
26	BA	2882	A	O3'-P	17.71	1.82	1.61
6	AC	18	TRP	C-N	-17.63	0.93	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	576	G	O3'-P	17.55	1.82	1.61
53	B8	46	LYS	C-N	17.52	1.64	1.33
26	BA	809	G	O3'-P	-17.25	1.40	1.61
1	AA	1101	A	O3'-P	17.21	1.81	1.61
3	AW	17	U	C5-C6	16.98	1.49	1.34
31	BH	80	LYS	C-N	-16.95	1.02	1.33
37	BS	72	GLU	C-N	16.89	1.66	1.34
3	AW	44	A	O3'-P	-16.82	1.41	1.61
3	AW	72	C	O3'-P	-16.75	1.41	1.61
3	AW	33	U	O3'-P	-16.61	1.41	1.61
44	BU	50	ARG	C-N	-16.51	0.96	1.34
26	BA	432	A	O3'-P	16.50	1.80	1.61
26	BA	1905	C	O3'-P	-16.46	1.41	1.61
26	BA	2225	A	O3'-P	16.37	1.80	1.61
49	B4	40	HIS	C-N	16.18	1.65	1.34
29	BF	103	ASN	C-N	-16.18	0.96	1.34
26	BA	474	G	O3'-P	16.17	1.80	1.61
26	BA	1706	U	O3'-P	15.92	1.80	1.61
26	BA	1143	A	O3'-P	15.87	1.80	1.61
26	BA	271	G	O3'-P	15.68	1.79	1.61
26	BA	117	G	O3'-P	15.49	1.79	1.61
1	AA	108	G	O3'-P	15.48	1.79	1.61
26	BA	427	U	O3'-P	-15.41	1.42	1.61
26	BA	1189	A	O3'-P	-15.35	1.42	1.61
26	BA	297	C	O3'-P	-15.34	1.42	1.61
1	AA	983	A	O3'-P	15.22	1.79	1.61
26	BA	509	C	O3'-P	-15.05	1.43	1.61
26	BA	264	C	O3'-P	-14.99	1.43	1.61
26	BA	1970	A	O3'-P	14.58	1.78	1.61
26	BA	2835	A	O3'-P	-14.42	1.43	1.61
1	AA	1085	U	O3'-P	14.18	1.78	1.61
14	AK	112	THR	C-N	-14.04	1.07	1.34
26	BA	2258	C	O3'-P	-14.00	1.44	1.61
26	BA	817	C	O3'-P	13.87	1.77	1.61
26	BA	1208	C	O3'-P	-13.84	1.44	1.61
26	BA	1630	G	O3'-P	-13.82	1.44	1.61
3	AW	58	A	C6-N1	13.77	1.45	1.35
37	BS	31	LYS	C-N	13.75	1.60	1.34
26	BA	2712	U	O3'-P	-13.70	1.44	1.61
1	AA	1396	A	O3'-P	13.61	1.77	1.61
26	BA	2421	G	O3'-P	-13.60	1.44	1.61
26	BA	2609	U	O3'-P	13.33	1.77	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	119	A	O3'-P	13.32	1.77	1.61
26	BA	56	A	O3'-P	-13.23	1.45	1.61
1	AA	351	G	O3'-P	-13.16	1.45	1.61
26	BA	1255	U	O3'-P	-12.82	1.45	1.61
49	B4	8	LYS	C-N	12.81	1.63	1.34
26	BA	1275	A	O3'-P	12.71	1.76	1.61
1	AA	913	A	O3'-P	-12.71	1.46	1.61
26	BA	1294	U	O3'-P	-12.38	1.46	1.61
1	AA	178	C	O3'-P	12.32	1.75	1.61
26	BA	2295	C	O3'-P	-12.29	1.46	1.61
1	AA	497	A	O3'-P	12.28	1.75	1.61
39	BW	2	GLU	C-N	-12.20	1.06	1.34
26	BA	270	A	O3'-P	-12.19	1.46	1.61
26	BA	670	A	O3'-P	-11.99	1.46	1.61
26	BA	1834	U	O3'-P	11.85	1.75	1.61
26	BA	1751	C	O3'-P	11.83	1.75	1.61
1	AA	361(A)	C	O3'-P	11.65	1.75	1.61
26	BA	44	A	O3'-P	11.58	1.75	1.61
26	BA	636	G	O3'-P	11.57	1.75	1.61
26	BA	1302	A	O3'-P	11.46	1.74	1.61
26	BA	1466	G	O3'-P	11.45	1.74	1.61
1	AA	1156	G	O3'-P	11.42	1.74	1.61
26	BA	1961	C	O3'-P	-11.39	1.47	1.61
26	BA	445	C	O3'-P	-11.28	1.47	1.61
2	AV	25	C	O3'-P	11.23	1.74	1.61
26	BA	148	C	O3'-P	11.21	1.74	1.61
26	BA	2381	C	O3'-P	-11.21	1.47	1.61
39	BW	79	GLY	C-N	-11.21	1.12	1.34
25	BB	69	G	O3'-P	11.16	1.74	1.61
3	AW	16	U	N1-C6	11.02	1.47	1.38
1	AA	1117	G	O3'-P	10.94	1.74	1.61
3	AW	17	U	N1-C6	10.88	1.47	1.38
1	AA	25	C	O3'-P	-10.85	1.48	1.61
39	BW	99	ARG	C-N	10.82	1.58	1.34
26	BA	864	G	O3'-P	10.78	1.74	1.61
26	BA	2090	G	O3'-P	-10.61	1.48	1.61
7	AD	187	ARG	C-N	10.60	1.58	1.34
3	AW	46	G	N9-C8	10.60	1.45	1.37
26	BA	1444	G	O3'-P	10.60	1.73	1.61
26	BA	1307	A	O3'-P	-10.52	1.48	1.61
26	BA	1978	A	O3'-P	-10.22	1.48	1.61
3	AW	17	U	C4-C5	10.11	1.52	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BA	1150	C	O3'-P	10.00	1.73	1.61
26	BA	2732	G	O3'-P	-9.96	1.49	1.61
20	AQ	40	LYS	C-N	-9.77	1.11	1.34
26	BA	578	A	O3'-P	-9.71	1.49	1.61
26	BA	712(A)	A	O3'-P	9.65	1.72	1.61
26	BA	2370	G	O3'-P	-9.43	1.49	1.61
26	BA	32	C	O3'-P	-9.39	1.49	1.61
26	BA	1449	A	O3'-P	-9.32	1.50	1.61
26	BA	2281	C	O3'-P	-9.25	1.50	1.61
28	BE	49	THR	C-N	-9.20	1.16	1.34
1	AA	1504	G	O3'-P	9.18	1.72	1.61
40	BX	73	ASP	C-N	8.98	1.54	1.34
26	BA	183	C	O3'-P	-8.93	1.50	1.61
26	BA	1681	G	O3'-P	-8.86	1.50	1.61
1	AA	1377	A	O3'-P	-8.82	1.50	1.61
26	BA	2447	G	O3'-P	8.67	1.71	1.61
1	AA	804	U	O3'-P	-8.67	1.50	1.61
1	AA	858	G	O3'-P	8.64	1.71	1.61
26	BA	2287	A	O3'-P	8.63	1.71	1.61
26	BA	1828	G	O3'-P	-8.60	1.50	1.61
26	BA	1004	C	O3'-P	8.58	1.71	1.61
26	BA	532	A	O3'-P	-8.54	1.50	1.61
1	AA	1534	A	O3'-P	8.51	1.71	1.61
1	AA	558	G	O3'-P	8.46	1.71	1.61
26	BA	525	U	O3'-P	-8.32	1.51	1.61
3	AW	16	U	C4-C5	8.31	1.51	1.43
26	BA	1237	A	O3'-P	-8.16	1.51	1.61
3	AW	35	A	O3'-P	8.15	1.71	1.61
1	AA	243	A	C3'-O3'	8.08	1.53	1.42
26	BA	2433	A	O3'-P	-7.99	1.51	1.61
2	AV	65	G	O3'-P	-7.89	1.51	1.61
26	BA	1564	C	O3'-P	-7.85	1.51	1.61
1	AA	776	G	O3'-P	-7.78	1.51	1.61
26	BA	101	G	N9-C4	7.77	1.44	1.38
3	AW	25	C	C4'-C3'	-7.73	1.44	1.53
26	BA	70	G	O3'-P	-7.73	1.51	1.61
26	BA	103	A	O3'-P	7.69	1.70	1.61
26	BA	2718	G	O3'-P	7.67	1.70	1.61
26	BA	2394	C	O3'-P	7.46	1.70	1.61
26	BA	8	A	O3'-P	-7.38	1.52	1.61
42	BZ	92	VAL	C-N	7.30	1.50	1.34
1	AA	1237	C	O3'-P	7.12	1.69	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BA	761	A	O3'-P	7.11	1.69	1.61
26	BA	2894	G	O3'-P	7.05	1.69	1.61
1	AA	143	A	O3'-P	-6.93	1.52	1.61
26	BA	340	A	O3'-P	-6.89	1.52	1.61
7	AD	31	CYS	CB-SG	6.87	1.94	1.82
26	BA	734	A	O3'-P	6.83	1.69	1.61
26	BA	776	G	C3'-O3'	6.82	1.51	1.42
26	BA	940	G	O3'-P	6.73	1.69	1.61
26	BA	1189	A	C3'-O3'	6.73	1.51	1.42
3	AW	25	C	C2'-C1'	6.72	1.60	1.53
3	AW	58	A	C5-C6	6.70	1.47	1.41
26	BA	2674	G	O3'-P	6.61	1.69	1.61
26	BA	1851	U	O3'-P	6.53	1.69	1.61
28	BE	274	GLY	C-N	6.49	1.44	1.33
26	BA	1791	A	O3'-P	-6.45	1.53	1.61
53	B8	24	ALA	C-N	6.36	1.48	1.34
5	AB	148	TYR	C-N	-6.34	1.19	1.34
26	BA	2545	G	O3'-P	6.29	1.68	1.61
26	BA	624	C	O3'-P	-6.13	1.53	1.61
29	BF	28	SER	C-N	6.13	1.48	1.34
48	B0	18	PRO	C-N	-6.12	1.20	1.34
26	BA	1339	G	O3'-P	-6.05	1.53	1.61
26	BA	101	G	C3'-O3'	6.04	1.50	1.42
26	BA	1428	C	O3'-P	5.98	1.68	1.61
26	BA	801	G	C3'-O3'	5.95	1.50	1.42
26	BA	2869	G	O3'-P	-5.94	1.54	1.61
26	BA	1917	U	C3'-O3'	5.82	1.50	1.42
26	BA	212	G	O3'-P	5.70	1.68	1.61
26	BA	1944	U	O3'-P	5.67	1.68	1.61
26	BA	1247	A	O3'-P	5.67	1.68	1.61
26	BA	686	G	O3'-P	5.64	1.68	1.61
26	BA	817	C	C1'-N1	5.50	1.57	1.48
26	BA	613	U	C1'-N1	5.43	1.56	1.48
1	AA	789	U	C1'-N1	5.43	1.56	1.48
26	BA	1620	G	O3'-P	5.42	1.67	1.61
1	AA	366	C	C3'-O3'	5.39	1.49	1.42
26	BA	944	G	C3'-O3'	5.37	1.49	1.42
1	AA	115	G	C3'-O3'	5.37	1.49	1.42
26	BA	739	G	N9-C4	5.31	1.42	1.38
7	AD	26	CYS	CB-SG	5.24	1.91	1.82
3	AW	24	G	O3'-P	-5.24	1.54	1.61
26	BA	990	A	O3'-P	5.24	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	BA	974(A)	C	C1'-N1	5.19	1.56	1.48
25	BB	106	G	O3'-P	-5.18	1.54	1.61
55	BK	86	GLU	C-N	-5.14	1.22	1.34
26	BA	1914	C	C1'-N1	5.11	1.56	1.48
26	BA	2582	G	O3'-P	-5.10	1.55	1.61
28	BE	258	TYR	C-N	5.09	1.45	1.34
1	AA	703	G	C3'-O3'	5.08	1.49	1.42
17	AN	27	CYS	CB-SG	5.05	1.90	1.82
1	AA	733	A	O3'-P	5.02	1.67	1.61
1	AA	1101	A	C3'-O3'	5.02	1.49	1.42

All (1508) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AW	65	G	P-O3'-C3'	-50.68	58.88	119.70
26	BA	712(A)	A	P-O3'-C3'	-43.62	67.36	119.70
26	BA	2199	A	O3'-P-O5'	-43.07	22.17	104.00
2	AV	65	G	P-O3'-C3'	39.88	167.56	119.70
1	AA	1255	G	P-O3'-C3'	-38.36	73.67	119.70
25	BB	24	G	P-O3'-C3'	32.35	158.52	119.70
1	AA	983	A	P-O3'-C3'	-29.74	84.01	119.70
26	BA	1545	A	P-O3'-C3'	-28.07	86.01	119.70
28	BE	49	THR	O-C-N	-27.52	68.81	121.10
3	AW	33	U	P-O3'-C3'	27.31	152.47	119.70
35	BP	83	GLU	O-C-N	-27.07	79.38	122.70
3	AW	35	A	P-O3'-C3'	27.06	152.18	119.70
26	BA	1525	G	P-O3'-C3'	-26.57	87.82	119.70
1	AA	1278	U	O3'-P-O5'	-26.53	53.59	104.00
15	AL	23	LYS	O-C-N	-25.97	81.14	122.70
3	AW	65	G	OP2-P-O3'	24.94	160.06	105.20
29	BF	168	ARG	O-C-N	-24.62	83.30	122.70
1	AA	1085	U	P-O3'-C3'	24.45	149.04	119.70
1	AA	436	C	P-O3'-C3'	-24.33	90.51	119.70
3	AW	65	G	OP1-P-O3'	-23.57	53.35	105.20
26	BA	1545	A	OP2-P-O3'	23.20	156.25	105.20
3	AW	17	U	C5-C6-N1	-23.03	111.19	122.70
26	BA	223	A	P-O3'-C3'	-22.35	92.88	119.70
1	AA	497	A	OP2-P-O3'	-22.32	56.09	105.20
1	AA	497	A	P-O3'-C3'	-22.13	93.15	119.70
1	AA	1255	G	O3'-P-O5'	-22.05	62.10	104.00
1	AA	558	G	OP1-P-O3'	-21.90	57.01	105.20
1	AA	288	A	O3'-P-O5'	-21.33	63.47	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	AQ	22	LEU	O-C-N	21.26	156.72	122.70
3	AW	16	U	C5-C6-N1	-20.94	112.23	122.70
26	BA	1924	C	P-O3'-C3'	-20.68	94.89	119.70
26	BA	232	G	P-O3'-C3'	-20.67	94.89	119.70
26	BA	1630	G	P-O3'-C3'	20.15	143.88	119.70
2	AV	65	G	OP1-P-O3'	20.00	149.21	105.20
1	AA	436	C	O3'-P-O5'	-20.00	66.00	104.00
1	AA	497	A	OP1-P-O3'	19.18	147.39	105.20
40	BX	73	ASP	O-C-N	-18.91	92.44	122.70
45	BV	91	THR	CA-C-N	-18.71	76.05	117.20
46	B2	31	ARG	O-C-N	-18.58	92.98	122.70
7	AD	98	GLU	O-C-N	18.55	152.38	122.70
3	AW	21	A	P-O3'-C3'	18.49	141.89	119.70
25	BB	24	G	O3'-P-O5'	18.43	139.03	104.00
31	BH	80	LYS	O-C-N	-18.40	91.93	123.20
26	BA	2889	C	OP2-P-O3'	-18.19	65.19	105.20
2	AV	65	G	OP2-P-O3'	-18.14	65.29	105.20
7	AD	187	ARG	O-C-N	18.07	151.60	122.70
26	BA	1055	G	O3'-P-O5'	17.91	138.04	104.00
1	AA	1224	G	P-O3'-C3'	17.77	141.02	119.70
20	AQ	22	LEU	CA-C-N	-17.57	78.54	117.20
20	AQ	40	LYS	CA-C-N	-17.39	78.94	117.20
26	BA	1546	C	O3'-P-O5'	-17.30	71.13	104.00
1	AA	1004	A	P-O3'-C3'	17.12	140.25	119.70
26	BA	2447	G	P-O3'-C3'	17.04	140.15	119.70
1	AA	1534	A	P-O3'-C3'	17.02	140.12	119.70
1	AA	1037	C	P-O3'-C3'	-17.00	99.30	119.70
37	BS	72	GLU	O-C-N	-16.97	88.86	121.10
28	BE	49	THR	CA-C-N	16.90	164.42	117.10
1	AA	196	A	P-O3'-C3'	16.89	139.97	119.70
35	BP	96	VAL	O-C-N	16.87	149.69	122.70
41	BY	36	GLY	O-C-N	-16.78	95.85	122.70
3	AW	72	C	OP2-P-O3'	16.77	142.10	105.20
1	AA	1255	G	OP2-P-O3'	16.54	141.59	105.20
26	BA	1546	C	OP2-P-O3'	16.50	141.50	105.20
20	AQ	40	LYS	O-C-N	16.49	149.08	122.70
26	BA	1905	C	P-O3'-C3'	16.46	139.45	119.70
26	BA	1108	U	OP1-P-O3'	-16.18	69.59	105.20
26	BA	1140	C	C1'-O4'-C4'	-16.15	96.98	109.90
1	AA	703	G	P-O3'-C3'	16.11	139.04	119.70
26	BA	70	G	P-O3'-C3'	16.02	138.93	119.70
26	BA	2506	U	P-O3'-C3'	15.99	138.88	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	59	A	O3'-P-O5'	-15.67	74.23	104.00
1	AA	38	G	OP1-P-O3'	15.58	139.48	105.20
28	BE	87	GLU	O-C-N	-15.57	97.78	122.70
45	BV	91	THR	C-N-CA	-15.56	82.79	121.70
15	AL	23	LYS	CA-C-N	15.55	151.40	117.20
26	BA	101	G	N3-C4-C5	-15.54	120.83	128.60
48	B0	18	PRO	O-C-N	-15.43	98.02	122.70
2	AV	25	C	P-O3'-C3'	-15.17	101.50	119.70
31	BH	80	LYS	CA-C-N	15.12	146.45	116.20
20	AQ	40	LYS	C-N-CA	-15.05	84.07	121.70
1	AA	143	A	O3'-P-O5'	-14.97	75.56	104.00
1	AA	983	A	OP1-P-O3'	-14.94	72.34	105.20
26	BA	2090	G	P-O3'-C3'	14.89	137.57	119.70
40	BX	73	ASP	C-N-CA	14.86	158.84	121.70
26	BA	712(A)	A	O3'-P-O5'	-14.80	75.88	104.00
20	AQ	22	LEU	C-N-CA	-14.76	84.81	121.70
1	AA	436	C	OP2-P-O3'	14.71	137.56	105.20
1	AA	687	A	P-O3'-C3'	14.67	137.30	119.70
26	BA	2889	C	O3'-P-O5'	14.65	131.84	104.00
41	BY	36	GLY	C-N-CA	14.58	158.16	121.70
1	AA	311	C	OP2-P-O3'	14.53	137.16	105.20
3	AW	35	A	OP1-P-O3'	14.53	137.16	105.20
26	BA	223	A	OP1-P-O3'	14.51	137.12	105.20
1	AA	1504	G	P-O3'-C3'	14.50	137.10	119.70
28	BE	49	THR	C-N-CD	-14.49	88.72	120.60
26	BA	101	G	C2-N3-C4	14.40	119.10	111.90
7	AD	98	GLU	CA-C-N	-14.22	85.91	117.20
26	BA	1189	A	P-O3'-C3'	14.20	136.74	119.70
1	AA	1337	G	P-O3'-C3'	14.17	136.71	119.70
26	BA	1546	C	P-O3'-C3'	14.16	136.69	119.70
1	AA	311	C	P-O3'-C3'	-13.97	102.93	119.70
1	AA	108	G	O3'-P-O5'	13.94	130.48	104.00
25	BB	106	G	P-O3'-C3'	-13.85	103.08	119.70
1	AA	365	U	OP1-P-O3'	13.80	135.56	105.20
1	AA	1237	C	P-O3'-C3'	-13.76	103.19	119.70
26	BA	232	G	OP2-P-O3'	13.67	135.27	105.20
1	AA	983	A	OP2-P-O3'	13.66	135.25	105.20
1	AA	361(A)	C	P-O3'-C3'	-13.63	103.34	119.70
50	B5	30	LEU	O-C-N	-13.58	100.98	122.70
26	BA	148	C	P-O3'-C3'	-13.41	103.61	119.70
1	AA	243	A	P-O3'-C3'	13.41	135.79	119.70
1	AA	813	U	P-O3'-C3'	13.30	135.66	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1073	U	O3'-P-O5'	-13.30	78.74	104.00
7	AD	187	ARG	CA-C-N	-13.28	87.98	117.20
1	AA	1073	U	OP2-P-O3'	13.23	134.30	105.20
3	AW	58	A	N1-C6-N6	13.20	126.52	118.60
1	AA	1345	U	P-O3'-C3'	13.19	135.52	119.70
1	AA	944	G	P-O3'-C3'	-12.98	104.12	119.70
26	BA	316	C	P-O3'-C3'	-12.90	104.22	119.70
35	BP	96	VAL	CA-C-N	-12.89	88.84	117.20
42	BZ	92	VAL	O-C-N	12.88	143.31	122.70
1	AA	361(A)	C	O3'-P-O5'	-12.82	79.63	104.00
26	BA	2381	C	P-O3'-C3'	12.82	135.09	119.70
31	BH	80	LYS	C-N-CA	12.79	149.16	122.30
1	AA	361(A)	C	OP1-P-O3'	12.79	133.33	105.20
1	AA	288	A	OP1-P-O3'	12.78	133.32	105.20
26	BA	1108	U	P-O3'-C3'	-12.76	104.39	119.70
3	AW	33	U	OP1-P-O3'	12.74	133.23	105.20
26	BA	2090	G	O3'-P-O5'	12.70	128.14	104.00
3	AW	24	G	P-O3'-C3'	12.62	134.84	119.70
1	AA	38	G	O3'-P-O5'	-12.59	80.09	104.00
26	BA	931	G	C1'-O4'-C4'	-12.53	99.88	109.90
1	AA	1073	U	P-O3'-C3'	-12.51	104.69	119.70
26	BA	776	G	P-O3'-C3'	12.50	134.70	119.70
26	BA	1545	A	OP1-P-O3'	-12.50	77.71	105.20
1	AA	1085	U	OP1-P-O3'	-12.46	77.80	105.20
26	BA	1545	A	O3'-P-O5'	-12.31	80.61	104.00
26	BA	670	A	P-O3'-C3'	12.28	134.44	119.70
26	BA	2810	A	P-O3'-C3'	-12.23	105.03	119.70
26	BA	627	A	C1'-O4'-C4'	-12.19	100.15	109.90
26	BA	2454	G	P-O3'-C3'	-12.14	105.13	119.70
1	AA	1067	A	P-O3'-C3'	12.14	134.26	119.70
1	AA	178	C	P-O3'-C3'	12.08	134.19	119.70
26	BA	801	G	P-O3'-C3'	12.07	134.19	119.70
32	BI	49	ALA	O-C-N	12.07	142.01	122.70
3	AW	58	A	C4-C5-C6	12.05	123.03	117.00
1	AA	1278	U	OP2-P-O3'	12.04	131.69	105.20
1	AA	178	C	OP2-P-O3'	-12.03	78.74	105.20
26	BA	1525	G	OP1-P-O3'	-12.01	78.77	105.20
26	BA	1266	G	C1'-O4'-C4'	-12.00	100.30	109.90
3	AW	17	U	C4-C5-C6	-11.95	112.53	119.70
26	BA	101	G	N9-C1'-C2'	11.86	129.41	114.00
32	BI	49	ALA	CA-C-N	-11.84	91.15	117.20
53	B8	24	ALA	O-C-N	-11.78	103.84	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	1586	A	P-O3'-C3'	11.72	133.76	119.70
26	BA	1055	G	P-O3'-C3'	-11.66	105.71	119.70
3	AW	46	G	N7-C8-N9	-11.62	107.29	113.10
26	BA	1630	G	OP1-P-O3'	11.61	130.73	105.20
3	AW	21	A	OP1-P-O3'	11.60	130.72	105.20
15	AL	23	LYS	C-N-CA	11.57	150.63	121.70
26	BA	1924	C	OP1-P-O3'	-11.56	79.78	105.20
1	AA	405	U	P-O3'-C3'	-11.54	105.85	119.70
26	BA	1108	U	O3'-P-O5'	11.51	125.86	104.00
1	AA	1037	C	OP2-P-O3'	11.50	130.50	105.20
26	BA	1673	U	C1'-O4'-C4'	-11.48	100.72	109.90
26	BA	101	G	C8-N9-C4	-11.45	101.82	106.40
26	BA	2199	A	OP2-P-O3'	11.43	130.35	105.20
7	AD	98	GLU	C-N-CA	-11.43	93.13	121.70
1	AA	178	C	O3'-P-O5'	11.41	125.68	104.00
3	AW	26	G	P-O3'-C3'	-11.32	106.12	119.70
26	BA	359	A	OP1-P-O3'	11.30	130.07	105.20
1	AA	1156	G	P-O3'-C3'	-11.30	106.14	119.70
48	B0	18	PRO	CA-C-N	11.26	141.97	117.20
26	BA	2042	A	C1'-O4'-C4'	-11.26	100.89	109.90
26	BA	421	U	P-O3'-C3'	11.25	133.19	119.70
3	AW	1	G	P-O3'-C3'	11.15	133.08	119.70
26	BA	30	G	P-O3'-C3'	11.14	133.07	119.70
26	BA	2496	C	P-O3'-C3'	-11.14	106.33	119.70
1	AA	1085	U	O3'-P-O5'	11.04	124.99	104.00
39	BW	79	GLY	O-C-N	11.04	142.08	121.10
1	AA	405	U	OP1-P-O3'	11.02	129.45	105.20
26	BA	301	G	C1'-O4'-C4'	-10.99	101.11	109.90
26	BA	1124	C	P-O3'-C3'	10.96	132.85	119.70
1	AA	944	G	OP2-P-O3'	10.94	129.26	105.20
1	AA	1237	C	OP1-P-O3'	10.93	129.25	105.20
32	BI	49	ALA	C-N-CA	-10.86	94.56	121.70
26	BA	2219	G	P-O3'-C3'	-10.82	106.71	119.70
26	BA	2832	U	C3'-C2'-C1'	-10.80	92.86	101.50
1	AA	813	U	O3'-P-O5'	10.77	124.47	104.00
26	BA	101	G	N3-C4-N9	10.77	132.46	126.00
1	AA	575	G	P-O3'-C3'	10.77	132.62	119.70
1	AA	558	G	OP2-P-O3'	10.74	128.84	105.20
1	AA	804	U	P-O3'-C3'	-10.72	106.83	119.70
26	BA	1324	G	P-O3'-C3'	10.72	132.57	119.70
3	AW	26	G	P-O5'-C5'	-10.70	103.78	120.90
7	AD	187	ARG	C-N-CA	-10.69	94.98	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	1992	G	P-O3'-C3'	10.69	132.52	119.70
26	BA	1751	C	P-O3'-C3'	-10.67	106.90	119.70
26	BA	148	C	O3'-P-O5'	-10.63	83.81	104.00
26	BA	101	G	C5-C6-N1	10.62	116.81	111.50
26	BA	1255	U	P-O3'-C3'	-10.59	106.99	119.70
3	AW	33	U	O3'-P-O5'	-10.58	83.89	104.00
26	BA	101	G	C4-N9-C1'	10.57	140.24	126.50
44	BU	50	ARG	O-C-N	10.56	139.60	122.70
1	AA	143	A	P-O3'-C3'	-10.48	107.12	119.70
26	BA	944	G	P-O3'-C3'	10.48	132.28	119.70
26	BA	1444	G	P-O3'-C3'	10.37	132.14	119.70
1	AA	121	C	P-O3'-C3'	10.36	132.13	119.70
3	AW	58	A	C5-C6-N1	-10.36	112.52	117.70
1	AA	1201	A	P-O3'-C3'	10.34	132.11	119.70
1	AA	818	G	O4'-C1'-N9	10.32	116.45	108.20
1	AA	1224	G	OP1-P-O3'	-10.31	82.51	105.20
26	BA	1941	C	C3'-C2'-C1'	-10.30	93.26	101.50
26	BA	1980	G	P-O3'-C3'	10.28	132.04	119.70
26	BA	1525	G	O3'-P-O5'	10.27	123.52	104.00
26	BA	117	G	P-O3'-C3'	-10.26	107.39	119.70
26	BA	280	C	P-O3'-C3'	10.16	131.89	119.70
26	BA	945	A	O4'-C1'-N9	10.16	116.33	108.20
48	B0	18	PRO	C-N-CA	10.10	146.94	121.70
1	AA	1046	A	O3'-P-O5'	10.05	123.11	104.00
1	AA	974	A	O3'-P-O5'	10.05	123.09	104.00
1	AA	25	C	P-O3'-C3'	10.05	131.76	119.70
1	AA	509	A	P-O3'-C3'	10.05	131.76	119.70
3	AW	25	C	P-O5'-C5'	-10.04	104.83	120.90
1	AA	1377	A	OP2-P-O3'	10.02	127.25	105.20
1	AA	1182	G	O3'-P-O5'	-10.02	84.96	104.00
26	BA	2287	A	P-O3'-C3'	-10.00	107.70	119.70
3	AW	16	U	C4-C5-C6	-9.97	113.72	119.70
26	BA	1265	A	P-O3'-C3'	9.95	131.64	119.70
7	AD	26	CYS	CA-CB-SG	9.92	131.86	114.00
26	BA	1248	G	P-O3'-C3'	9.92	131.61	119.70
1	AA	1064	G	C1'-O4'-C4'	-9.92	101.96	109.90
26	BA	2433	A	P-O3'-C3'	-9.91	107.81	119.70
26	BA	2042	A	O4'-C1'-N9	9.89	116.11	108.20
1	AA	793	U	C1'-O4'-C4'	-9.88	102.00	109.90
26	BA	1237	A	P-O3'-C3'	9.88	131.56	119.70
2	AV	45	G	O3'-P-O5'	9.87	122.76	104.00
26	BA	1206	G	C4'-C3'-C2'	-9.87	92.73	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	52	A	P-O3'-C3'	9.86	131.53	119.70
26	BA	1247	A	P-O3'-C3'	9.85	131.52	119.70
26	BA	242	G	C1'-O4'-C4'	-9.82	102.04	109.90
1	AA	328	C	P-O3'-C3'	9.81	131.47	119.70
26	BA	1559	G	C3'-C2'-C1'	-9.81	93.65	101.50
26	BA	223	A	OP2-P-O3'	-9.75	83.75	105.20
26	BA	386	G	C1'-O4'-C4'	-9.73	102.12	109.90
42	BZ	92	VAL	CA-C-N	-9.69	95.89	117.20
3	AW	35	A	OP2-P-O3'	-9.67	83.92	105.20
1	AA	566	G	O3'-P-O5'	9.67	122.37	104.00
3	AW	34	G	O3'-P-O5'	9.64	122.31	104.00
1	AA	311	C	O3'-P-O5'	-9.63	85.70	104.00
26	BA	1140	C	O4'-C1'-N1	9.62	115.90	108.20
3	AW	72	C	O3'-P-O5'	-9.53	85.90	104.00
26	BA	1275	A	P-O3'-C3'	9.51	131.12	119.70
1	AA	1107	C	P-O3'-C3'	-9.49	108.31	119.70
3	AW	44	A	OP2-P-O3'	9.49	126.08	105.20
26	BA	2506	U	OP1-P-O3'	9.48	126.06	105.20
28	BE	274	GLY	CA-C-N	-9.47	97.26	116.20
26	BA	2769	C	P-O3'-C3'	-9.46	108.35	119.70
1	AA	1224	G	OP2-P-O3'	9.44	125.97	105.20
1	AA	405	U	O3'-P-O5'	-9.43	86.08	104.00
1	AA	366	C	P-O3'-C3'	9.40	130.98	119.70
1	AA	143	A	OP2-P-O3'	9.38	125.83	105.20
1	AA	266	G	P-O3'-C3'	9.35	130.92	119.70
1	AA	765	G	O3'-P-O5'	-9.34	86.25	104.00
26	BA	294	A	C3'-C2'-C1'	-9.33	94.03	101.50
1	AA	1534	A	OP2-P-O3'	9.31	125.69	105.20
3	AW	34	G	OP2-P-O3'	-9.31	84.71	105.20
1	AA	558	G	O3'-P-O5'	9.29	121.66	104.00
1	AA	812	C	P-O3'-C3'	9.27	130.82	119.70
26	BA	139	G	P-O3'-C3'	9.26	130.81	119.70
1	AA	1505	G	P-O3'-C3'	9.26	130.81	119.70
26	BA	1819	A	P-O3'-C3'	9.26	130.81	119.70
1	AA	372	C	P-O3'-C3'	9.25	130.80	119.70
1	AA	365	U	OP2-P-O3'	-9.22	84.92	105.20
26	BA	282	A	C3'-C2'-C1'	-9.20	94.14	101.50
1	AA	108	G	P-O3'-C3'	-9.20	108.67	119.70
25	BB	11	C	P-O3'-C3'	-9.19	108.67	119.70
7	AD	49	ARG	CA-C-N	-9.16	97.04	117.20
1	AA	1065	U	P-O3'-C3'	9.15	130.68	119.70
1	AA	315	A	OP1-P-O3'	9.14	125.31	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	817	C	P-O3'-C3'	9.11	130.63	119.70
26	BA	973	A	C4'-C3'-C2'	-9.11	93.49	102.60
41	BY	36	GLY	CA-C-N	9.06	137.14	117.20
1	AA	960	U	OP2-P-O3'	9.04	125.08	105.20
1	AA	286	G	P-O3'-C3'	9.02	130.52	119.70
1	AA	239	U	P-O3'-C3'	-9.01	108.89	119.70
26	BA	2090	G	OP2-P-O3'	-9.01	85.39	105.20
1	AA	914	A	O4'-C1'-N9	8.98	115.38	108.20
1	AA	914	A	C1'-O4'-C4'	-8.97	102.72	109.90
26	BA	1542	G	C3'-C2'-C1'	-8.97	94.32	101.50
39	BW	79	GLY	C-N-CD	8.97	147.24	128.40
26	BA	148	C	OP2-P-O3'	8.96	124.92	105.20
25	BB	56	G	P-O3'-C3'	8.96	130.45	119.70
26	BA	1634	A	P-O3'-C3'	8.94	130.43	119.70
44	BU	50	ARG	CA-C-N	-8.93	97.56	117.20
26	BA	32	C	P-O3'-C3'	8.89	130.37	119.70
26	BA	911	A	P-O3'-C3'	8.88	130.35	119.70
26	BA	800	A	P-O3'-C3'	8.85	130.32	119.70
26	BA	2545	G	P-O3'-C3'	-8.85	109.08	119.70
1	AA	754	C	P-O3'-C3'	8.80	130.26	119.70
26	BA	30	G	O3'-P-O5'	-8.79	87.30	104.00
1	AA	1182	G	OP2-P-O3'	8.78	124.52	105.20
26	BA	2381	C	OP1-P-O3'	8.76	124.47	105.20
26	BA	1183	G	O4'-C1'-N9	8.75	115.20	108.20
1	AA	1377	A	OP1-P-O3'	-8.74	85.97	105.20
26	BA	1070	A	C1'-O4'-C4'	-8.73	102.92	109.90
26	BA	654	A	C3'-C2'-C1'	-8.73	94.52	101.50
26	BA	1255	U	O3'-P-O5'	8.72	120.58	104.00
1	AA	563	A	C1'-O4'-C4'	-8.71	102.94	109.90
1	AA	1502	A	C1'-O4'-C4'	-8.70	102.94	109.90
26	BA	296	C	O4'-C1'-N1	8.65	115.12	108.20
26	BA	691	C	C3'-C2'-C1'	-8.65	94.58	101.50
26	BA	846	C	P-O3'-C3'	8.65	130.08	119.70
26	BA	1943	U	P-O3'-C3'	8.64	130.07	119.70
25	BB	106	G	OP2-P-O3'	8.64	124.21	105.20
26	BA	1970	A	P-O3'-C3'	8.64	130.06	119.70
1	AA	197	A	P-O3'-C3'	8.63	130.06	119.70
26	BA	135	G	C3'-C2'-C1'	-8.63	94.60	101.50
35	BP	96	VAL	C-N-CA	-8.62	100.16	121.70
26	BA	1751	C	OP2-P-O3'	8.61	124.15	105.20
1	AA	518	C	P-O3'-C3'	8.61	130.04	119.70
26	BA	1742	C	C4'-C3'-C2'	-8.61	93.99	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	176	G	P-O3'-C3'	8.59	130.00	119.70
1	AA	1347	G	P-O3'-C3'	8.56	129.97	119.70
40	BX	73	ASP	CA-C-N	8.55	136.00	117.20
26	BA	972	G	C4'-C3'-C2'	-8.53	94.07	102.60
26	BA	752	A	P-O3'-C3'	8.53	129.94	119.70
1	AA	879	C	P-O3'-C3'	-8.49	109.51	119.70
26	BA	284	U	C1'-O4'-C4'	-8.47	103.12	109.90
26	BA	444	C	O4'-C1'-N1	8.47	114.98	108.20
26	BA	1955	U	O4'-C1'-N1	8.47	114.98	108.20
26	BA	2336	A	P-O3'-C3'	8.47	129.87	119.70
26	BA	359	A	OP2-P-O3'	-8.46	86.59	105.20
1	AA	25	C	OP1-P-O3'	8.44	123.76	105.20
26	BA	458	G	P-O3'-C3'	8.41	129.80	119.70
26	BA	1925	C	C3'-C2'-C1'	-8.41	94.77	101.50
26	BA	232	G	OP1-P-O3'	-8.41	86.70	105.20
26	BA	1022	G	P-O3'-C3'	8.41	129.79	119.70
3	AW	18	G	C5'-C4'-O4'	-8.40	99.03	109.10
26	BA	265	A	P-O3'-C3'	8.38	129.76	119.70
1	AA	889	A	P-O3'-C3'	8.35	129.71	119.70
1	AA	1226	C	P-O3'-C3'	8.34	129.71	119.70
1	AA	196	A	OP2-P-O3'	-8.32	86.89	105.20
1	AA	877	C	C3'-C2'-C1'	-8.32	94.84	101.50
26	BA	2398	U	C3'-C2'-C1'	-8.32	94.84	101.50
26	BA	74	A	P-O3'-C3'	8.29	129.65	119.70
42	BZ	92	VAL	C-N-CA	-8.29	100.98	121.70
1	AA	1037	C	OP1-P-O3'	-8.28	86.99	105.20
1	AA	47	C	P-O3'-C3'	8.25	129.60	119.70
26	BA	791	C	C1'-O4'-C4'	-8.25	103.30	109.90
26	BA	83	G	P-O3'-C3'	8.22	129.57	119.70
26	BA	960	A	P-O3'-C3'	8.22	129.57	119.70
1	AA	560	U	P-O3'-C3'	8.22	129.56	119.70
26	BA	1349	A	O3'-P-O5'	8.21	119.61	104.00
6	AC	106	VAL	O-C-N	8.21	135.84	122.70
26	BA	940	G	P-O3'-C3'	8.21	129.55	119.70
26	BA	1419	A	C1'-O4'-C4'	-8.20	103.34	109.90
26	BA	2810	A	O3'-P-O5'	8.20	119.57	104.00
26	BA	1545	A	C1'-O4'-C4'	-8.19	103.34	109.90
26	BA	714	U	C3'-C2'-C1'	-8.19	94.95	101.50
1	AA	1380	U	P-O3'-C3'	8.19	129.52	119.70
26	BA	973	A	O4'-C1'-N9	8.18	114.75	108.20
26	BA	1955	U	C1'-O4'-C4'	-8.17	103.37	109.90
1	AA	559	A	P-O3'-C3'	8.15	129.48	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	BU	50	ARG	C-N-CA	-8.15	101.33	121.70
3	AW	72	C	OP1-P-O3'	-8.13	87.32	105.20
26	BA	1520	U	C3'-C2'-C1'	-8.12	95.01	101.50
26	BA	1307	A	P-O3'-C3'	8.11	129.44	119.70
26	BA	1183	G	O4'-C4'-C3'	-8.11	95.89	104.00
26	BA	2219	G	N9-C1'-C2'	-8.11	103.08	112.00
1	AA	992	U	P-O3'-C3'	8.10	129.42	119.70
1	AA	1257	U	P-O3'-C3'	8.07	129.38	119.70
26	BA	1742	C	O4'-C1'-N1	8.07	114.66	108.20
26	BA	2506	U	OP2-P-O3'	-8.06	87.47	105.20
26	BA	1954	G	P-O3'-C3'	8.04	129.34	119.70
1	AA	1346	A	P-O3'-C3'	8.04	129.34	119.70
53	B8	24	ALA	CA-C-N	8.02	134.85	117.20
1	AA	246	A	P-O3'-C3'	8.02	129.32	119.70
26	BA	2690	C	P-O3'-C3'	-8.00	110.10	119.70
26	BA	2045	C	C1'-O4'-C4'	-8.00	103.50	109.90
26	BA	739	G	N3-C4-C5	-7.98	124.61	128.60
53	B8	24	ALA	C-N-CA	7.96	141.59	121.70
26	BA	1427	A	P-O3'-C3'	7.95	129.24	119.70
26	BA	1463	C	O4'-C1'-N1	7.94	114.55	108.20
26	BA	280	C	O3'-P-O5'	-7.92	88.95	104.00
26	BA	2825	C	C3'-C2'-C1'	-7.92	95.17	101.50
1	AA	484	G	P-O3'-C3'	7.91	129.19	119.70
26	BA	1961	C	OP2-P-O3'	7.91	122.59	105.20
26	BA	1552	G	P-O3'-C3'	7.90	129.18	119.70
26	BA	2857	G	C3'-C2'-C1'	-7.90	95.18	101.50
1	AA	499	A	P-O3'-C3'	7.90	129.18	119.70
1	AA	274	A	P-O3'-C3'	7.89	129.17	119.70
1	AA	1281	U	P-O3'-C3'	7.88	129.16	119.70
26	BA	1143	A	O4'-C1'-N9	7.87	114.50	108.20
26	BA	1669	A	C1'-O4'-C4'	-7.87	103.60	109.90
3	AW	44	A	O3'-P-O5'	-7.87	89.06	104.00
1	AA	535	A	P-O3'-C3'	7.86	129.14	119.70
26	BA	329	G	P-O3'-C3'	7.86	129.13	119.70
26	BA	119	A	P-O3'-C3'	7.86	129.13	119.70
3	AW	58	A	C6-C5-N7	-7.86	126.80	132.30
26	BA	793	A	P-O3'-C3'	7.86	129.13	119.70
26	BA	699	A	P-O3'-C3'	7.85	129.12	119.70
26	BA	1988	C	OP2-P-O3'	-7.85	87.94	105.20
26	BA	2021	C	N1-C2-O2	7.84	123.61	118.90
26	BA	2488	A	C3'-C2'-C1'	-7.84	95.23	101.50
26	BA	1646	C	OP1-P-O3'	7.82	122.41	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	331	A	P-O3'-C3'	7.82	129.08	119.70
26	BA	509	C	P-O3'-C3'	-7.80	110.34	119.70
2	AV	25	C	OP1-P-O3'	-7.79	88.07	105.20
26	BA	289	A	C1'-O4'-C4'	-7.78	103.67	109.90
26	BA	1466	G	P-O3'-C3'	-7.78	110.37	119.70
1	AA	429	U	C1'-O4'-C4'	-7.78	103.68	109.90
26	BA	2893	G	C3'-C2'-C1'	-7.77	95.29	101.50
26	BA	974(A)	C	C6-N1-C2	-7.75	117.20	120.30
26	BA	2584	U	C3'-C2'-C1'	-7.75	95.30	101.50
26	BA	613	U	O4'-C1'-N1	7.74	114.39	108.20
1	AA	965	A	P-O3'-C3'	7.73	128.98	119.70
1	AA	25	C	O3'-P-O5'	-7.73	89.32	104.00
3	AW	72	C	P-O3'-C3'	-7.72	110.43	119.70
26	BA	832	G	O4'-C1'-N9	7.72	114.38	108.20
26	BA	2712	U	P-O3'-C3'	7.72	128.97	119.70
1	AA	251	G	P-O3'-C3'	7.72	128.96	119.70
26	BA	931	G	O4'-C1'-N9	7.72	114.37	108.20
1	AA	129(A)	G	P-O3'-C3'	7.72	128.96	119.70
26	BA	1706	U	P-O3'-C3'	7.71	128.95	119.70
26	BA	2019	A	C3'-C2'-C1'	-7.71	95.33	101.50
26	BA	961	C	P-O3'-C3'	7.71	128.95	119.70
1	AA	190(F)	G	P-O3'-C3'	7.69	128.93	119.70
1	AA	701	C	P-O3'-C3'	7.69	128.93	119.70
26	BA	120	U	C1'-O4'-C4'	-7.67	103.76	109.90
26	BA	2626	C	C3'-C2'-C1'	-7.67	95.36	101.50
1	AA	1156	G	OP2-P-O3'	7.67	122.08	105.20
1	AA	569	C	OP2-P-O3'	7.65	122.04	105.20
26	BA	1100	C	P-O3'-C3'	7.65	128.88	119.70
35	BP	83	GLU	CA-C-N	7.65	134.03	117.20
26	BA	1820	U	P-O3'-C3'	7.63	128.85	119.70
28	BE	274	GLY	O-C-N	-7.63	110.24	123.20
26	BA	530	G	O4'-C1'-N9	7.62	114.30	108.20
26	BA	679	C	C3'-C2'-C1'	-7.62	95.40	101.50
26	BA	1255	U	O4'-C1'-N1	7.62	114.30	108.20
25	BB	59	A	OP2-P-O3'	7.62	121.96	105.20
26	BA	2228	G	P-O3'-C3'	-7.62	110.56	119.70
1	AA	727	G	C3'-C2'-C1'	-7.61	95.41	101.50
1	AA	884	U	P-O3'-C3'	7.61	128.82	119.70
26	BA	2057	A	P-O3'-C3'	-7.60	110.58	119.70
25	BB	80	U	O4'-C1'-N1	7.60	114.28	108.20
1	AA	286	G	O3'-P-O5'	-7.59	89.57	104.00
1	AA	927	G	C3'-C2'-C1'	-7.59	95.43	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	AG	12	LEU	O-C-N	-7.57	110.58	122.70
26	BA	1239	G	N9-C1'-C2'	7.55	123.82	114.00
26	BA	574	C	P-O3'-C3'	7.54	128.75	119.70
26	BA	2033	A	P-O3'-C3'	7.54	128.75	119.70
26	BA	1208	C	P-O3'-C3'	7.52	128.73	119.70
26	BA	2049	G	P-O3'-C3'	7.52	128.72	119.70
1	AA	281	G	P-O3'-C3'	7.51	128.71	119.70
26	BA	125	G	C1'-O4'-C4'	-7.50	103.90	109.90
26	BA	1964	G	P-O3'-C3'	7.50	128.69	119.70
1	AA	1049	U	P-O3'-C3'	7.49	128.69	119.70
26	BA	342	G	O4'-C1'-N9	7.49	114.19	108.20
26	BA	1664	A	C3'-C2'-C1'	-7.49	95.51	101.50
26	BA	738	G	C3'-C2'-C1'	7.46	107.47	101.50
26	BA	1404	C	P-O3'-C3'	7.46	128.66	119.70
1	AA	365	U	P-O3'-C3'	-7.45	110.76	119.70
1	AA	327	A	P-O3'-C3'	7.45	128.63	119.70
26	BA	1239	G	C8-N9-C4	-7.44	103.42	106.40
26	BA	1630	G	OP2-P-O3'	-7.42	88.87	105.20
26	BA	2228	G	OP2-P-O3'	7.42	121.52	105.20
1	AA	863	U	C1'-O4'-C4'	-7.41	103.97	109.90
26	BA	117	G	O3'-P-O5'	-7.41	89.93	104.00
26	BA	573	G	N9-C1'-C2'	7.40	123.62	114.00
26	BA	832	G	C1'-O4'-C4'	-7.40	103.98	109.90
26	BA	2503	A	C3'-C2'-C1'	-7.40	95.58	101.50
1	AA	501	C	O4'-C1'-N1	7.39	114.11	108.20
1	AA	819	A	O4'-C1'-N9	-7.39	102.29	108.20
26	BA	1772	G	C4'-C3'-C2'	-7.38	95.22	102.60
26	BA	196	A	P-O3'-C3'	7.37	128.54	119.70
26	BA	101	G	N1-C6-O6	-7.36	115.48	119.90
3	AW	25	C	O4'-C4'-C3'	7.36	111.98	106.10
26	BA	1130	U	P-O3'-C3'	7.35	128.52	119.70
1	AA	1190	G	P-O3'-C3'	7.35	128.52	119.70
26	BA	1363	C	C3'-C2'-C1'	-7.35	95.62	101.50
39	BW	79	GLY	CA-C-N	-7.35	96.52	117.10
1	AA	1298	C	OP1-P-O3'	7.34	121.34	105.20
1	AA	993	G	P-O3'-C3'	7.34	128.50	119.70
26	BA	2545	G	OP2-P-O3'	-7.33	89.07	105.20
26	BA	2059	A	C1'-O4'-C4'	-7.33	104.04	109.90
1	AA	196	A	O3'-P-O5'	7.32	117.91	104.00
26	BA	1800	C	O4'-C4'-C3'	-7.32	96.68	104.00
26	BA	2448	A	C1'-O4'-C4'	-7.32	104.04	109.90
26	BA	559	G	P-O3'-C3'	7.32	128.48	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1298	C	P-O3'-C3'	-7.31	110.93	119.70
26	BA	1890	A	OP1-P-O3'	7.31	121.28	105.20
26	BA	1944	U	O3'-P-O5'	7.31	117.89	104.00
26	BA	2589	A	C4'-C3'-C2'	-7.29	95.31	102.60
26	BA	2433	A	OP2-P-O3'	7.29	121.23	105.20
26	BA	1961	C	P-O3'-C3'	-7.28	110.96	119.70
26	BA	2035	G	N3-C4-N9	7.28	130.37	126.00
26	BA	527	C	P-O3'-C3'	7.27	128.43	119.70
1	AA	851	G	C4'-C3'-C2'	-7.24	95.36	102.60
26	BA	1826	G	O4'-C1'-N9	7.24	113.99	108.20
1	AA	108	G	OP1-P-O3'	-7.22	89.31	105.20
26	BA	1924	C	OP2-P-O3'	7.21	121.06	105.20
1	AA	51	A	P-O3'-C3'	7.20	128.34	119.70
26	BA	1924	C	O3'-P-O5'	7.20	117.68	104.00
1	AA	913	A	P-O3'-C3'	7.20	128.33	119.70
1	AA	1145	C	P-O3'-C3'	7.19	128.33	119.70
1	AA	1211	U	O3'-P-O5'	-7.19	90.33	104.00
26	BA	101	G	N7-C8-N9	7.19	116.69	113.10
1	AA	5	U	P-O3'-C3'	7.17	128.31	119.70
26	BA	2080	G	C1'-O4'-C4'	-7.17	104.16	109.90
26	BA	1183	G	C4'-C3'-C2'	-7.17	95.43	102.60
26	BA	1938	A	P-O3'-C3'	7.17	128.31	119.70
26	BA	1988	C	P-O3'-C3'	7.17	128.31	119.70
26	BA	1237	A	C1'-O4'-C4'	-7.17	104.17	109.90
26	BA	2055	C	P-O3'-C3'	7.17	128.30	119.70
26	BA	2286	A	C3'-C2'-C1'	-7.16	95.78	101.50
25	BB	69	G	P-O3'-C3'	-7.15	111.12	119.70
26	BA	128	C	P-O3'-C3'	7.15	128.28	119.70
26	BA	2848	G	C3'-C2'-C1'	-7.14	95.78	101.50
1	AA	429	U	P-O3'-C3'	7.14	128.27	119.70
1	AA	258	G	C1'-O4'-C4'	-7.14	104.19	109.90
26	BA	13	A	P-O3'-C3'	7.13	128.26	119.70
26	BA	1190	G	C5'-C4'-O4'	7.13	117.66	109.10
1	AA	960	U	O3'-P-O5'	-7.13	90.46	104.00
1	AA	1301	U	C1'-O4'-C4'	-7.12	104.20	109.90
28	BE	49	THR	C-N-CA	7.12	151.92	122.00
26	BA	363(F)	A	C3'-C2'-C1'	-7.12	95.80	101.50
26	BA	2734	A	C3'-C2'-C1'	-7.12	95.81	101.50
26	BA	1249	U	O4'-C1'-N1	7.11	113.89	108.20
26	BA	804	A	C1'-O4'-C4'	-7.10	104.22	109.90
26	BA	1085	A	P-O3'-C3'	7.09	128.21	119.70
7	AD	49	ARG	C-N-CA	-7.09	103.97	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	578	A	P-O3'-C3'	-7.08	111.20	119.70
26	BA	2589	A	C1'-O4'-C4'	-7.07	104.25	109.90
26	BA	71	A	P-O3'-C3'	7.05	128.16	119.70
1	AA	975	A	P-O3'-C3'	7.05	128.16	119.70
26	BA	2832	U	C1'-O4'-C4'	-7.04	104.27	109.90
1	AA	1522	U	O4'-C1'-N1	7.03	113.83	108.20
25	BB	119	A	C3'-C2'-C1'	-7.03	95.88	101.50
1	AA	1337	G	OP2-P-O3'	-7.03	89.74	105.20
26	BA	1181	C	P-O3'-C3'	7.02	128.13	119.70
26	BA	945	A	O4'-C4'-C3'	-7.02	96.98	104.00
26	BA	1890	A	P-O3'-C3'	7.01	128.12	119.70
1	AA	428	G	P-O3'-C3'	7.01	128.11	119.70
1	AA	1498	U	P-O3'-C3'	7.00	128.10	119.70
26	BA	1851	U	OP1-P-O3'	6.99	120.58	105.20
26	BA	14	A	P-O3'-C3'	6.99	128.09	119.70
26	BA	204	A	P-O3'-C3'	6.99	128.09	119.70
1	AA	202	U	P-O3'-C3'	6.98	128.08	119.70
26	BA	830	G	P-O3'-C3'	6.98	128.08	119.70
26	BA	1828	G	P-O3'-C3'	6.98	128.08	119.70
26	BA	264	C	P-O3'-C3'	-6.98	111.33	119.70
26	BA	101	G	C8-N9-C1'	-6.97	117.93	127.00
26	BA	52	A	OP1-P-O3'	6.97	120.54	105.20
26	BA	1968	G	C3'-C2'-C1'	-6.97	95.92	101.50
26	BA	289	A	O4'-C1'-N9	6.96	113.77	108.20
26	BA	1266	G	P-O3'-C3'	6.95	128.04	119.70
26	BA	2381	C	O3'-P-O5'	-6.95	90.79	104.00
26	BA	971	C	O4'-C1'-N1	6.95	113.76	108.20
1	AA	891	U	O4'-C1'-N1	6.94	113.75	108.20
26	BA	615	G	C3'-C2'-C1'	6.94	107.05	101.50
26	BA	1251	C	C1'-O4'-C4'	-6.94	104.35	109.90
26	BA	1988	C	OP1-P-O3'	6.94	120.46	105.20
26	BA	1673	U	O4'-C1'-N1	6.93	113.75	108.20
26	BA	2756	U	C1'-O4'-C4'	-6.93	104.35	109.90
26	BA	1265	A	C1'-O4'-C4'	-6.93	104.36	109.90
25	BB	66	A	P-O3'-C3'	6.92	128.01	119.70
26	BA	51	G	C3'-C2'-C1'	6.92	107.03	101.50
26	BA	2545	G	O3'-P-O5'	6.92	117.14	104.00
1	AA	1534	A	O3'-P-O5'	-6.90	90.89	104.00
26	BA	223	A	C1'-O4'-C4'	-6.90	104.38	109.90
1	AA	818	G	C1'-O4'-C4'	-6.89	104.38	109.90
1	AA	1532	U	O4'-C1'-N1	6.89	113.71	108.20
26	BA	215	G	P-O3'-C3'	6.88	127.96	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	1905	C	OP2-P-O3'	-6.88	90.06	105.20
26	BA	2451	A	P-O3'-C3'	6.88	127.96	119.70
1	AA	914	A	C4'-C3'-C2'	-6.88	95.72	102.60
3	AW	25	C	OP1-P-OP2	-6.88	109.29	119.60
26	BA	2042	A	C5'-C4'-O4'	6.87	117.34	109.10
26	BA	2834	G	C4'-C3'-C2'	-6.87	95.73	102.60
26	BA	2432	A	C1'-O4'-C4'	-6.86	104.41	109.90
1	AA	1189	C	O3'-P-O5'	-6.86	90.97	104.00
26	BA	1210	A	P-O3'-C3'	6.85	127.92	119.70
26	BA	2448	A	O4'-C1'-N9	6.84	113.68	108.20
26	BA	1180	C	P-O3'-C3'	6.84	127.91	119.70
26	BA	2258	C	O4'-C1'-N1	6.84	113.67	108.20
1	AA	701	C	C1'-O4'-C4'	-6.84	104.43	109.90
26	BA	971	C	OP2-P-O3'	6.84	120.25	105.20
26	BA	1980	G	O4'-C1'-N9	-6.84	102.73	108.20
1	AA	591	U	O4'-C1'-N1	6.82	113.65	108.20
1	AA	119	A	O3'-P-O5'	-6.81	91.06	104.00
3	AW	27	C	OP1-P-OP2	-6.81	109.38	119.60
26	BA	2258	C	C1'-O4'-C4'	-6.81	104.45	109.90
26	BA	2595	G	C3'-C2'-C1'	-6.81	96.05	101.50
26	BA	1179	C	P-O3'-C3'	6.81	127.87	119.70
3	AW	65	G	O3'-P-O5'	-6.81	91.07	104.00
1	AA	1528	U	P-O3'-C3'	6.80	127.87	119.70
1	AA	770	C	O4'-C1'-N1	6.79	113.63	108.20
26	BA	2240	C	C1'-O4'-C4'	-6.79	104.47	109.90
26	BA	90	U	P-O3'-C3'	6.79	127.85	119.70
1	AA	239	U	OP2-P-O3'	6.79	120.14	105.20
1	AA	318	G	O4'-C1'-N9	6.78	113.62	108.20
1	AA	877	C	C4'-C3'-C2'	-6.77	95.83	102.60
26	BA	686	G	OP2-P-O3'	6.77	120.10	105.20
1	AA	1337	G	O3'-P-O5'	6.77	116.86	104.00
25	BB	24	G	OP2-P-O3'	-6.77	90.31	105.20
26	BA	2508	G	N9-C1'-C2'	-6.77	104.56	112.00
26	BA	1475	G	C3'-C2'-C1'	-6.77	96.09	101.50
26	BA	1996	C	C5-C6-N1	6.77	124.38	121.00
1	AA	1224	G	C1'-O4'-C4'	-6.76	104.49	109.90
26	BA	1914	C	O4'-C1'-C2'	-6.76	99.04	105.80
1	AA	1502	A	O4'-C1'-N9	6.75	113.60	108.20
26	BA	1742	C	O4'-C4'-C3'	-6.75	97.25	104.00
6	AC	106	VAL	CA-C-N	-6.74	102.36	117.20
26	BA	787	U	O4'-C4'-C3'	-6.74	97.26	104.00
26	BA	1779	U	C3'-C2'-C1'	-6.74	96.11	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	788	A	P-O3'-C3'	6.73	127.78	119.70
26	BA	945	A	C1'-O4'-C4'	-6.73	104.51	109.90
26	BA	1586	A	OP1-P-O3'	6.73	120.01	105.20
26	BA	1800	C	C3'-C2'-C1'	-6.73	96.12	101.50
26	BA	1247	A	OP1-P-O3'	6.72	119.98	105.20
26	BA	886	C	P-O3'-C3'	6.71	127.75	119.70
26	BA	587	C	P-O3'-C3'	6.71	127.75	119.70
26	BA	2047	U	P-O3'-C3'	6.69	127.73	119.70
26	BA	1743	G	N9-C1'-C2'	6.69	122.70	114.00
26	BA	2394	C	O3'-P-O5'	6.68	116.70	104.00
26	BA	740	U	C3'-C2'-C1'	6.68	106.84	101.50
26	BA	2035	G	N3-C4-C5	-6.67	125.27	128.60
26	BA	973	A	C1'-O4'-C4'	-6.66	104.57	109.90
26	BA	2451	A	C4'-C3'-C2'	-6.66	95.94	102.60
26	BA	739	G	C3'-C2'-C1'	6.66	106.83	101.50
26	BA	1742	C	C3'-C2'-C1'	-6.65	96.18	101.50
1	AA	9	G	O4'-C1'-N9	6.64	113.52	108.20
3	AW	25	C	O3'-P-O5'	-6.64	91.38	104.00
26	BA	1616	A	O4'-C1'-N9	-6.64	102.89	108.20
1	AA	578	C	O4'-C1'-N1	6.64	113.51	108.20
26	BA	1984	G	O4'-C1'-N9	6.64	113.51	108.20
26	BA	1341	U	P-O3'-C3'	6.63	127.66	119.70
26	BA	984	A	C4'-C3'-C2'	-6.62	95.98	102.60
1	AA	181	G	P-O3'-C3'	6.61	127.64	119.70
26	BA	525	U	O3'-P-O5'	-6.61	91.44	104.00
26	BA	655	A	P-O3'-C3'	6.60	127.62	119.70
1	AA	506	G	O4'-C1'-N9	6.59	113.47	108.20
26	BA	1423	G	C3'-C2'-C1'	-6.59	96.23	101.50
26	BA	221	A	P-O3'-C3'	6.59	127.60	119.70
1	AA	239	U	O3'-P-O5'	-6.56	91.54	104.00
1	AA	1084	G	P-O3'-C3'	6.55	127.56	119.70
26	BA	152	G	C3'-C2'-C1'	-6.54	96.27	101.50
1	AA	356	A	C4'-C3'-C2'	-6.53	96.07	102.60
26	BA	2689	U	C1'-O4'-C4'	-6.53	104.67	109.90
26	BA	1914	C	C2-N1-C1'	6.53	125.98	118.80
1	AA	869	G	OP2-P-O3'	6.52	119.55	105.20
26	BA	714	U	O4'-C1'-N1	6.52	113.42	108.20
1	AA	820	U	P-O3'-C3'	6.52	127.52	119.70
26	BA	120	U	P-O3'-C3'	6.51	127.52	119.70
26	BA	1583	A	C1'-O4'-C4'	-6.51	104.69	109.90
26	BA	2561	A	C3'-C2'-C1'	-6.50	96.30	101.50
26	BA	1618	A	P-O3'-C3'	6.50	127.50	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	569	C	P-O3'-C3'	-6.49	111.91	119.70
26	BA	2021	C	N3-C2-O2	-6.49	117.36	121.90
26	BA	2896	C	C3'-C2'-C1'	-6.48	96.31	101.50
1	AA	884	U	O4'-C1'-N1	6.48	113.39	108.20
26	BA	791	C	P-O3'-C3'	6.48	127.48	119.70
26	BA	2644	G	C3'-C2'-C1'	-6.48	96.31	101.50
26	BA	2030	A	P-O3'-C3'	6.48	127.47	119.70
26	BA	2398	U	C4'-C3'-C2'	-6.47	96.12	102.60
26	BA	8	A	P-O3'-C3'	6.47	127.47	119.70
26	BA	1008	C	P-O3'-C3'	6.47	127.46	119.70
26	BA	713	G	C3'-C2'-C1'	-6.46	96.34	101.50
1	AA	873	A	P-O3'-C3'	6.45	127.44	119.70
26	BA	348	G	P-O3'-C3'	6.45	127.44	119.70
26	BA	2267	A	O4'-C1'-N9	6.45	113.36	108.20
26	BA	809	G	O3'-P-O5'	-6.45	91.75	104.00
1	AA	733	A	O3'-P-O5'	6.44	116.24	104.00
26	BA	1239	G	N3-C4-C5	-6.44	125.38	128.60
26	BA	817	C	C6-N1-C2	-6.44	117.72	120.30
26	BA	141(A)	C	O4'-C1'-N1	6.44	113.35	108.20
26	BA	1552	G	C3'-C2'-C1'	-6.43	96.35	101.50
26	BA	1522	G	C3'-C2'-C1'	-6.43	96.36	101.50
1	AA	501	C	C3'-C2'-C1'	-6.43	96.36	101.50
26	BA	1968	G	O4'-C4'-C3'	-6.43	97.57	104.00
1	AA	1453	G	C1'-O4'-C4'	-6.43	104.76	109.90
26	BA	324	A	OP2-P-O3'	6.43	119.34	105.20
1	AA	1046	A	OP2-P-O3'	-6.42	91.07	105.20
26	BA	1055	G	OP2-P-O3'	-6.42	91.07	105.20
1	AA	1398	A	C3'-C2'-C1'	-6.42	96.37	101.50
26	BA	147	U	O4'-C1'-N1	6.42	113.33	108.20
1	AA	28	G	C3'-C2'-C1'	-6.41	96.37	101.50
26	BA	271	G	P-O3'-C3'	6.41	127.40	119.70
26	BA	1187	G	P-O3'-C3'	6.41	127.40	119.70
26	BA	1544	C	O4'-C1'-N1	6.41	113.33	108.20
26	BA	1667	G	C3'-C2'-C1'	6.41	106.63	101.50
25	BB	11	C	OP2-P-O3'	6.40	119.29	105.20
26	BA	301	G	O4'-C1'-N9	6.40	113.32	108.20
1	AA	1532	U	C3'-C2'-C1'	-6.40	96.38	101.50
26	BA	1980	G	C2'-C3'-O3'	6.39	123.93	113.70
26	BA	1732	A	C1'-O4'-C4'	-6.39	104.79	109.90
1	AA	1377	A	P-O3'-C3'	6.39	127.37	119.70
26	BA	532	A	P-O3'-C3'	6.39	127.37	119.70
26	BA	71	A	C1'-O4'-C4'	-6.39	104.79	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1400	C	C3'-C2'-C1'	6.38	106.61	101.50
25	BB	90	C	O4'-C1'-N1	6.38	113.30	108.20
26	BA	699	A	OP1-P-O3'	6.38	119.23	105.20
26	BA	1239	G	C4-N9-C1'	6.37	134.78	126.50
1	AA	890	G	C1'-O4'-C4'	-6.37	104.81	109.90
1	AA	1452	C	C2-N1-C1'	6.36	125.79	118.80
26	BA	103	A	P-O3'-C3'	6.36	127.33	119.70
26	BA	1088	A	C1'-O4'-C4'	-6.36	104.81	109.90
26	BA	2238	G	C1'-O4'-C4'	-6.35	104.82	109.90
1	AA	917	G	C4'-C3'-C2'	-6.34	96.26	102.60
26	BA	1183	G	C3'-C2'-C1'	-6.34	96.42	101.50
26	BA	1702	G	C3'-C2'-C1'	-6.34	96.42	101.50
26	BA	2040	C	O3'-P-O5'	-6.34	91.95	104.00
26	BA	627	A	C4'-C3'-C2'	-6.34	96.26	102.60
26	BA	2542	A	P-O3'-C3'	6.33	127.30	119.70
1	AA	1481	U	O4'-C1'-N1	6.33	113.27	108.20
26	BA	456	C	O4'-C1'-N1	6.33	113.26	108.20
26	BA	2019	A	P-O3'-C3'	6.33	127.30	119.70
26	BA	2345	G	C1'-O4'-C4'	-6.33	104.83	109.90
1	AA	1117	G	O3'-P-O5'	-6.33	91.98	104.00
26	BA	1439	A	O4'-C1'-N9	6.33	113.26	108.20
26	BA	1621	U	O4'-C1'-N1	6.33	113.26	108.20
26	BA	1266	G	C4'-C3'-C2'	-6.32	96.28	102.60
26	BA	676	A	C1'-O4'-C4'	-6.31	104.85	109.90
26	BA	1926	U	C3'-C2'-C1'	-6.30	96.46	101.50
26	BA	2062	A	O4'-C1'-N9	6.30	113.24	108.20
1	AA	859	A	O4'-C1'-N9	6.29	113.23	108.20
26	BA	1559	G	C4'-C3'-C2'	-6.29	96.31	102.60
1	AA	944	G	OP1-P-O3'	-6.29	91.37	105.20
26	BA	2428	G	C4'-C3'-C2'	-6.29	96.31	102.60
26	BA	264	C	O3'-P-O5'	-6.29	92.06	104.00
26	BA	1571	A	O4'-C1'-C2'	-6.29	99.51	105.80
1	AA	30	U	P-O3'-C3'	6.28	127.23	119.70
1	AA	939	G	C1'-O4'-C4'	-6.28	104.88	109.90
1	AA	634	C	O4'-C1'-N1	6.27	113.22	108.20
1	AA	723	U	C2-N1-C1'	6.27	125.23	117.70
26	BA	1747	G	O4'-C1'-N9	6.27	113.22	108.20
26	BA	1825	A	C1'-O4'-C4'	-6.27	104.88	109.90
26	BA	2517	C	P-O3'-C3'	6.27	127.23	119.70
26	BA	712(A)	A	OP2-P-O3'	6.27	119.00	105.20
26	BA	1939	U	O4'-C1'-N1	6.27	113.21	108.20
26	BA	2718	G	P-O3'-C3'	6.27	127.22	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	32	A	C1'-O4'-C4'	-6.27	104.89	109.90
26	BA	322	A	C4'-C3'-C2'	-6.26	96.34	102.60
26	BA	1536	A	P-O3'-C3'	6.26	127.21	119.70
1	AA	27	G	P-O3'-C3'	6.26	127.21	119.70
26	BA	1941	C	C4'-C3'-C2'	-6.25	96.35	102.60
1	AA	652	U	O4'-C1'-N1	6.25	113.20	108.20
1	AA	776	G	OP1-P-O3'	6.25	118.94	105.20
26	BA	1055	G	OP1-P-O3'	-6.25	91.46	105.20
26	BA	626	U	O4'-C4'-C3'	-6.25	97.75	104.00
26	BA	102	G	O4'-C4'-C3'	-6.24	97.76	104.00
1	AA	1300	G	P-O3'-C3'	6.24	127.19	119.70
26	BA	1183	G	C5'-C4'-O4'	6.24	116.59	109.10
26	BA	1970	A	O4'-C1'-N9	6.24	113.19	108.20
26	BA	2267	A	P-O3'-C3'	-6.24	112.21	119.70
1	AA	915	A	C3'-C2'-C1'	-6.24	96.51	101.50
26	BA	2021	C	C2-N1-C1'	6.24	125.66	118.80
26	BA	2062	A	C1'-O4'-C4'	-6.23	104.91	109.90
1	AA	1108	G	C4'-C3'-C2'	-6.23	96.37	102.60
26	BA	328	U	C2-N1-C1'	6.23	125.18	117.70
26	BA	1239	G	N7-C8-N9	6.23	116.22	113.10
1	AA	1345	U	OP2-P-O3'	6.23	118.90	105.20
26	BA	899	A	C3'-C2'-C1'	-6.23	96.52	101.50
26	BA	527	C	C3'-C2'-C1'	6.23	106.48	101.50
26	BA	1230	C	O4'-C1'-N1	6.22	113.17	108.20
26	BA	1527	G	C8-N9-C4	-6.21	103.92	106.40
1	AA	543	C	O4'-C1'-N1	6.21	113.17	108.20
26	BA	321	G	C3'-C2'-C1'	6.21	106.47	101.50
26	BA	597	U	O4'-C1'-N1	6.20	113.16	108.20
26	BA	2788	C	C3'-C2'-C1'	-6.20	96.54	101.50
26	BA	1542	G	C4'-C3'-C2'	-6.20	96.40	102.60
1	AA	1024	G	O3'-P-O5'	-6.20	92.23	104.00
26	BA	1248	G	N9-C1'-C2'	6.20	122.05	114.00
26	BA	2856	C	C3'-C2'-C1'	-6.19	96.55	101.50
26	BA	574	C	C1'-O4'-C4'	-6.19	104.95	109.90
26	BA	1917	U	P-O3'-C3'	6.19	127.13	119.70
1	AA	396	G	C1'-O4'-C4'	-6.19	104.95	109.90
26	BA	532	A	C1'-O4'-C4'	-6.18	104.95	109.90
1	AA	806	C	O4'-C1'-N1	6.18	113.14	108.20
26	BA	1961	C	O3'-P-O5'	-6.18	92.26	104.00
1	AA	92	C	O4'-C1'-N1	6.17	113.14	108.20
1	AA	859	A	C1'-O4'-C4'	-6.17	104.96	109.90
1	AA	1285	A	P-O3'-C3'	6.17	127.11	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	24	G	OP1-P-O3'	-6.17	91.63	105.20
1	AA	250	A	P-O3'-C3'	6.17	127.10	119.70
1	AA	717	C	OP2-P-O3'	-6.16	91.64	105.20
2	AV	25	C	OP2-P-O3'	6.16	118.75	105.20
26	BA	571	A	C1'-O4'-C4'	-6.16	104.97	109.90
26	BA	2692	C	C4'-C3'-C2'	-6.16	96.44	102.60
26	BA	2252	G	C3'-C2'-C1'	-6.15	96.58	101.50
26	BA	1210	A	C1'-O4'-C4'	-6.14	104.99	109.90
1	AA	573	A	P-O3'-C3'	6.14	127.07	119.70
26	BA	687	C	C3'-C2'-C1'	6.14	106.41	101.50
1	AA	1004	A	C1'-O4'-C4'	-6.14	104.99	109.90
1	AA	290	C	C5-C6-N1	6.13	124.07	121.00
26	BA	535	C	C3'-C2'-C1'	-6.13	96.59	101.50
7	AD	49	ARG	O-C-N	6.13	132.51	122.70
26	BA	2091	U	C3'-C2'-C1'	-6.13	96.60	101.50
26	BA	1552	G	C4'-C3'-C2'	-6.13	96.47	102.60
26	BA	2287	A	OP2-P-O3'	6.12	118.67	105.20
26	BA	1758	G	O4'-C1'-N9	6.12	113.10	108.20
26	BA	1313	U	O4'-C1'-N1	6.12	113.09	108.20
26	BA	2683	C	C4'-C3'-C2'	-6.11	96.49	102.60
26	BA	363(D)	G	O4'-C1'-N9	6.11	113.09	108.20
26	BA	2886	G	C3'-C2'-C1'	-6.11	96.61	101.50
1	AA	908	A	C3'-C2'-C1'	-6.11	96.61	101.50
26	BA	2016	U	P-O3'-C3'	6.11	127.03	119.70
26	BA	1253	A	N9-C1'-C2'	6.10	121.94	114.00
26	BA	363(D)	G	C1'-O4'-C4'	-6.10	105.02	109.90
1	AA	344	A	P-O3'-C3'	6.10	127.02	119.70
26	BA	1796	U	C1'-O4'-C4'	-6.10	105.02	109.90
1	AA	372	C	C1'-O4'-C4'	-6.10	105.02	109.90
3	AW	21	A	O3'-P-O5'	-6.10	92.41	104.00
26	BA	2219	G	OP1-P-OP2	-6.10	110.46	119.60
1	AA	1004	A	O3'-P-O5'	-6.09	92.42	104.00
1	AA	1397	C	N1-C2-O2	6.09	122.56	118.90
1	AA	849	C	O4'-C1'-N1	6.09	113.07	108.20
26	BA	1202	C	C2-N1-C1'	6.09	125.50	118.80
1	AA	871	U	P-O3'-C3'	6.08	127.00	119.70
26	BA	2399	G	C3'-C2'-C1'	-6.08	96.63	101.50
26	BA	1585	C	C3'-C2'-C1'	6.08	106.36	101.50
26	BA	1604	C	O4'-C1'-N1	6.08	113.06	108.20
26	BA	710	G	C3'-C2'-C1'	-6.07	96.64	101.50
26	BA	777	A	O4'-C1'-N9	6.07	113.06	108.20
1	AA	353	A	O4'-C1'-N9	6.07	113.06	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	456	C	C4'-C3'-C2'	-6.07	96.53	102.60
1	AA	917	G	C3'-C2'-C1'	-6.07	96.64	101.50
26	BA	974(A)	C	C3'-C2'-C1'	6.07	106.35	101.50
1	AA	1413	A	C3'-C2'-C1'	-6.06	96.65	101.50
26	BA	525	U	O4'-C1'-N1	6.06	113.05	108.20
1	AA	302	G	C8-N9-C4	-6.06	103.97	106.40
26	BA	1625	C	P-O3'-C3'	6.06	126.97	119.70
1	AA	603	U	C3'-C2'-C1'	-6.05	96.66	101.50
1	AA	748	C	P-O3'-C3'	6.05	126.96	119.70
1	AA	904	C	O4'-C1'-N1	6.05	113.04	108.20
26	BA	669	G	C3'-C2'-C1'	6.05	106.34	101.50
26	BA	1647	G	P-O3'-C3'	6.04	126.95	119.70
1	AA	765	G	OP1-P-O3'	6.04	118.49	105.20
26	BA	734	A	O3'-P-O5'	-6.04	92.52	104.00
26	BA	2267	A	C4'-C3'-C2'	-6.04	96.56	102.60
26	BA	2224	G	OP1-P-OP2	-6.03	110.55	119.60
26	BA	1206	G	C1'-O4'-C4'	-6.02	105.08	109.90
26	BA	1108	U	OP2-P-O3'	6.02	118.44	105.20
26	BA	1991	U	C3'-C2'-C1'	-6.02	96.69	101.50
1	AA	727	G	O4'-C4'-C3'	-6.02	97.98	104.00
26	BA	460	A	P-O3'-C3'	-6.01	112.48	119.70
1	AA	1297	C	P-O3'-C3'	6.01	126.91	119.70
50	B5	30	LEU	CA-C-N	6.01	130.42	117.20
1	AA	339	C	O4'-C1'-N1	6.00	113.00	108.20
26	BA	296	C	C4'-C3'-C2'	-6.00	96.60	102.60
26	BA	503	A	C3'-C2'-C1'	6.00	106.30	101.50
26	BA	1824	G	C4'-C3'-C2'	-5.99	96.61	102.60
8	AE	12	LEU	CA-CB-CG	5.99	129.07	115.30
26	BA	154	G	N3-C4-C5	-5.99	125.61	128.60
26	BA	525	U	OP1-P-O3'	5.98	118.36	105.20
1	AA	510	A	O4'-C1'-N9	5.98	112.98	108.20
1	AA	1156	G	O3'-P-O5'	-5.98	92.64	104.00
26	BA	2832	U	O4'-C1'-C2'	-5.98	99.82	105.80
1	AA	65	U	C3'-C2'-C1'	5.98	106.28	101.50
26	BA	270(L)	U	P-O3'-C3'	5.97	126.86	119.70
26	BA	586	A	N9-C1'-C2'	-5.97	105.44	112.00
26	BA	775	G	C3'-C2'-C1'	5.96	106.27	101.50
26	BA	984	A	C1'-O4'-C4'	-5.96	105.13	109.90
1	AA	296	U	O4'-C1'-N1	5.96	112.97	108.20
26	BA	1131	G	P-O3'-C3'	5.96	126.85	119.70
26	BA	1912	A	C1'-O4'-C4'	-5.96	105.13	109.90
1	AA	728	A	O4'-C1'-N9	5.95	112.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	945	A	C4'-C3'-C2'	-5.95	96.65	102.60
26	BA	1239	G	O4'-C1'-N9	5.95	112.96	108.20
1	AA	870	U	C3'-C2'-C1'	5.95	106.26	101.50
1	AA	974	A	OP2-P-O3'	-5.95	92.11	105.20
26	BA	351	G	C4'-C3'-C2'	-5.93	96.67	102.60
26	BA	371	A	P-O3'-C3'	5.93	126.82	119.70
26	BA	2218	G	O3'-P-O5'	-5.93	92.72	104.00
3	AW	15	G	N9-C1'-C2'	-5.93	105.47	112.00
26	BA	787	U	C4'-C3'-C2'	-5.93	96.67	102.60
1	AA	219	C	P-O3'-C3'	-5.93	112.58	119.70
1	AA	1453	G	O4'-C1'-N9	5.93	112.94	108.20
26	BA	294	A	O4'-C4'-C3'	-5.92	98.08	104.00
26	BA	1437	C	P-O3'-C3'	5.92	126.81	119.70
1	AA	1125	U	P-O3'-C3'	5.92	126.81	119.70
26	BA	1183	G	C1'-O4'-C4'	-5.92	105.16	109.90
26	BA	2245	U	C1'-O4'-C4'	-5.92	105.16	109.90
26	BA	1498	C	C2-N1-C1'	5.92	125.31	118.80
26	BA	120	U	O4'-C1'-N1	5.92	112.93	108.20
26	BA	2584	U	N1-C1'-C2'	-5.92	105.49	112.00
1	AA	882	C	O4'-C1'-N1	5.91	112.93	108.20
26	BA	1207	C	C1'-O4'-C4'	-5.91	105.17	109.90
26	BA	1507	A	C1'-O4'-C4'	-5.91	105.17	109.90
26	BA	2196	C	P-O3'-C3'	-5.90	112.62	119.70
26	BA	1664	A	C8-N9-C4	-5.90	103.44	105.80
26	BA	779	U	O4'-C1'-N1	5.90	112.92	108.20
1	AA	127	G	C3'-C2'-C1'	-5.89	96.79	101.50
25	BB	11	C	OP1-P-O3'	-5.89	92.25	105.20
26	BA	962	G	P-O3'-C3'	5.89	126.76	119.70
26	BA	1206	G	O4'-C1'-N9	5.89	112.91	108.20
26	BA	148	C	O4'-C1'-N1	5.88	112.90	108.20
26	BA	508	G	P-O3'-C3'	5.88	126.76	119.70
26	BA	1241	A	N7-C8-N9	5.88	116.74	113.80
1	AA	869	G	P-O3'-C3'	-5.88	112.65	119.70
26	BA	102	G	O4'-C1'-N9	5.88	112.90	108.20
26	BA	1011	G	C1'-O4'-C4'	-5.88	105.20	109.90
26	BA	2035	G	C2-N3-C4	5.87	114.83	111.90
1	AA	1396	A	OP2-P-O3'	5.87	118.10	105.20
1	AA	1094	G	C1'-O4'-C4'	-5.86	105.21	109.90
26	BA	371	A	O4'-C1'-N9	5.86	112.89	108.20
26	BA	1836	C	C3'-C2'-C1'	-5.86	96.81	101.50
1	AA	553	A	O4'-C1'-N9	5.86	112.89	108.20
26	BA	685	A	P-O3'-C3'	5.86	126.73	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	787	U	C5'-C4'-O4'	5.86	116.13	109.10
26	BA	190	A	C1'-O4'-C4'	-5.85	105.22	109.90
1	AA	740	U	O4'-C1'-N1	5.85	112.88	108.20
26	BA	2035	G	C5-C6-N1	5.85	114.42	111.50
26	BA	1489	U	C1'-O4'-C4'	-5.85	105.22	109.90
26	BA	1102	C	C2-N1-C1'	5.84	125.23	118.80
26	BA	1241	A	C8-N9-C4	-5.84	103.46	105.80
26	BA	445	C	C1'-O4'-C4'	-5.83	105.23	109.90
26	BA	1944	U	P-O3'-C3'	5.83	126.70	119.70
26	BA	767	U	O4'-C1'-N1	5.83	112.86	108.20
26	BA	27	G	C8-N9-C4	-5.83	104.07	106.40
26	BA	1342	A	P-O3'-C3'	5.83	126.69	119.70
26	BA	316	C	OP1-P-O3'	-5.82	92.39	105.20
26	BA	1489	U	P-O3'-C3'	5.82	126.69	119.70
26	BA	1930	G	P-O3'-C3'	5.82	126.68	119.70
26	BA	791	C	C3'-C2'-C1'	5.82	106.16	101.50
26	BA	602	G	P-O3'-C3'	5.82	126.68	119.70
1	AA	367	U	P-O3'-C3'	5.81	126.68	119.70
26	BA	359	A	P-O3'-C3'	-5.81	112.72	119.70
1	AA	1452	C	N1-C2-O2	5.81	122.39	118.90
1	AA	804	U	OP2-P-O3'	5.80	117.97	105.20
1	AA	1418	A	P-O3'-C3'	5.80	126.67	119.70
1	AA	576	G	P-O3'-C3'	5.80	126.66	119.70
3	AW	27	C	C5'-C4'-C3'	5.80	125.29	116.00
1	AA	888	G	C5-C6-O6	-5.80	125.12	128.60
26	BA	1482	U	C3'-C2'-C1'	-5.80	96.86	101.50
1	AA	542	G	C4'-C3'-C2'	-5.79	96.81	102.60
26	BA	2895	U	C4'-C3'-C2'	-5.79	96.81	102.60
1	AA	1504	G	O3'-P-O5'	-5.79	93.01	104.00
26	BA	296	C	O4'-C4'-C3'	-5.78	98.22	104.00
26	BA	332	A	P-O3'-C3'	5.78	126.64	119.70
26	BA	1339	G	P-O3'-C3'	5.78	126.64	119.70
26	BA	1890	A	OP2-P-O3'	-5.78	92.48	105.20
26	BA	2076	U	C3'-C2'-C1'	-5.78	96.88	101.50
26	BA	1476	C	C1'-O4'-C4'	-5.78	105.28	109.90
26	BA	1809	A	O4'-C1'-N9	5.78	112.82	108.20
26	BA	1914	C	N1-C2-O2	5.77	122.36	118.90
1	AA	607	A	C4'-C3'-C2'	-5.77	96.83	102.60
25	BB	-1	A	O4'-C1'-N9	5.76	112.81	108.20
26	BA	512	G	C8-N9-C4	-5.76	104.09	106.40
26	BA	110	G	O3'-P-O5'	-5.76	93.06	104.00
26	BA	1181	C	O4'-C1'-N1	5.76	112.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	352	G	N7-C8-N9	5.76	115.98	113.10
1	AA	315	A	O3'-P-O5'	-5.76	93.06	104.00
26	BA	1808	U	C2-N1-C1'	5.76	124.61	117.70
26	BA	792	G	C1'-O4'-C4'	-5.75	105.30	109.90
26	BA	1757	U	C3'-C2'-C1'	-5.75	96.90	101.50
1	AA	18	C	O4'-C1'-N1	5.75	112.80	108.20
26	BA	498	G	C8-N9-C4	-5.74	104.10	106.40
1	AA	1193	G	C3'-C2'-C1'	-5.74	96.91	101.50
25	BB	106	G	OP1-P-O3'	-5.74	92.58	105.20
26	BA	459	U	O4'-C1'-N1	5.74	112.79	108.20
1	AA	976	G	C1'-O4'-C4'	-5.73	105.31	109.90
26	BA	1266	G	O4'-C1'-N9	5.73	112.79	108.20
26	BA	133	C	O4'-C1'-N1	5.73	112.78	108.20
26	BA	2554	U	C4'-C3'-C2'	-5.72	96.88	102.60
26	BA	2045	C	C5'-C4'-O4'	5.72	115.96	109.10
26	BA	2825	C	P-O3'-C3'	-5.72	112.84	119.70
26	BA	503	A	P-O3'-C3'	5.72	126.56	119.70
1	AA	902	G	P-O3'-C3'	5.71	126.55	119.70
26	BA	688	U	C1'-O4'-C4'	-5.71	105.33	109.90
1	AA	801	U	O4'-C1'-N1	5.70	112.76	108.20
26	BA	380	U	C3'-C2'-C1'	-5.70	96.94	101.50
1	AA	1301	U	O4'-C1'-N1	5.70	112.76	108.20
1	AA	1084	G	C3'-C2'-C1'	5.69	106.06	101.50
1	AA	820	U	OP2-P-O3'	5.69	117.72	105.20
1	AA	1237	C	OP2-P-O3'	-5.69	92.68	105.20
1	AA	1297	C	C3'-C2'-C1'	5.69	106.05	101.50
26	BA	280	C	OP1-P-O3'	5.69	117.72	105.20
1	AA	508	C	P-O3'-C3'	5.69	126.53	119.70
1	AA	732	C	O4'-C1'-N1	5.69	112.75	108.20
26	BA	793	A	O3'-P-O5'	5.69	114.81	104.00
1	AA	776	G	OP2-P-O3'	-5.68	92.70	105.20
1	AA	1211	U	OP2-P-O3'	5.68	117.70	105.20
26	BA	421	U	O3'-P-O5'	5.68	114.80	104.00
26	BA	2539	C	C4'-C3'-C2'	-5.68	96.92	102.60
26	BA	1730	U	O4'-C1'-N1	5.68	112.74	108.20
1	AA	738	C	C3'-C2'-C1'	-5.68	96.96	101.50
26	BA	646	A	C3'-C2'-C1'	5.68	106.04	101.50
26	BA	2553	G	C4'-C3'-C2'	-5.68	96.92	102.60
1	AA	524	G	P-O3'-C3'	5.67	126.51	119.70
26	BA	1667	G	N3-C4-C5	-5.67	125.76	128.60
26	BA	2579	C	C3'-C2'-C1'	-5.67	96.96	101.50
26	BA	1905	C	O3'-P-O5'	5.67	114.78	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	BV	91	THR	O-C-N	5.67	131.77	122.70
1	AA	311	C	OP1-P-O3'	-5.67	92.73	105.20
1	AA	342	C	O4'-C1'-N1	5.67	112.73	108.20
1	AA	1380	U	C1'-O4'-C4'	-5.67	105.36	109.90
26	BA	1378	A	P-O3'-C3'	5.67	126.50	119.70
1	AA	413	G	C1'-O4'-C4'	-5.66	105.37	109.90
26	BA	218	A	C1'-O4'-C4'	-5.65	105.38	109.90
26	BA	1669	A	P-O3'-C3'	5.65	126.48	119.70
1	AA	587	G	OP2-P-O3'	5.65	117.64	105.20
1	AA	616	G	C3'-C2'-C1'	-5.65	96.98	101.50
26	BA	1796	U	O4'-C1'-N1	5.65	112.72	108.20
39	BW	79	GLY	C-N-CA	-5.65	98.27	122.00
25	BB	69	G	OP1-P-O3'	-5.65	92.77	105.20
26	BA	1914	C	C6-N1-C2	-5.65	118.04	120.30
1	AA	893	C	O4'-C1'-N1	5.65	112.72	108.20
26	BA	70	G	OP2-P-O3'	5.65	117.62	105.20
1	AA	481	G	C3'-C2'-C1'	5.64	106.02	101.50
26	BA	1261	C	O3'-P-O5'	-5.64	93.27	104.00
26	BA	1509	C	N1-C2-O2	5.64	122.29	118.90
1	AA	1451	A	C3'-C2'-C1'	-5.64	96.99	101.50
2	AV	45	G	OP1-P-O3'	-5.64	92.80	105.20
17	AN	27	CYS	CA-CB-SG	5.64	124.15	114.00
1	AA	438	G	C3'-C2'-C1'	5.63	106.01	101.50
25	BB	0	A	O4'-C1'-N9	5.63	112.71	108.20
26	BA	271(C)	U	OP2-P-O3'	5.63	117.59	105.20
26	BA	1132	A	C1'-O4'-C4'	-5.63	105.40	109.90
26	BA	1914	C	N1-C1'-C2'	5.63	121.31	114.00
1	AA	359	U	O4'-C1'-N1	5.62	112.70	108.20
26	BA	352	G	C8-N9-C4	-5.62	104.15	106.40
1	AA	498	U	C3'-C2'-C1'	5.62	106.00	101.50
1	AA	1397	C	C2-N1-C1'	5.62	124.98	118.80
1	AA	586	C	O4'-C1'-N1	5.61	112.69	108.20
26	BA	1070	A	O4'-C1'-N9	5.61	112.69	108.20
26	BA	1984	G	C4'-C3'-C2'	-5.61	96.99	102.60
1	AA	522	C	C4'-C3'-C2'	-5.61	97.00	102.60
26	BA	2022	U	O3'-P-O5'	-5.60	93.35	104.00
1	AA	412	A	C1'-O4'-C4'	-5.60	105.42	109.90
26	BA	162	U	C3'-C2'-C1'	5.60	105.98	101.50
1	AA	1192	C	C3'-C2'-C1'	-5.60	97.02	101.50
26	BA	1668	A	P-O3'-C3'	5.60	126.42	119.70
26	BA	2524	G	C4'-C3'-C2'	-5.59	97.01	102.60
26	BA	2824	C	C3'-C2'-C1'	-5.59	97.03	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	1626	G	OP2-P-O3'	5.59	117.49	105.20
26	BA	1924	C	C6-N1-C2	-5.59	118.06	120.30
26	BA	1437	C	C4'-C3'-C2'	-5.58	97.02	102.60
1	AA	1399	C	C1'-O4'-C4'	-5.58	105.44	109.90
1	AA	1400	C	P-O3'-C3'	5.58	126.40	119.70
26	BA	101	G	C6-N1-C2	-5.58	121.75	125.10
26	BA	1914	C	N3-C2-O2	-5.58	118.00	121.90
26	BA	563	G	N3-C4-C5	-5.58	125.81	128.60
1	AA	403	C	O4'-C1'-N1	5.57	112.66	108.20
1	AA	485	G	C1'-O4'-C4'	-5.57	105.45	109.90
1	AA	1510	U	C3'-C2'-C1'	-5.56	97.05	101.50
26	BA	1991	U	O3'-P-O5'	5.56	114.57	104.00
26	BA	817	C	O4'-C1'-N1	5.56	112.65	108.20
26	BA	946	G	O4'-C1'-N9	5.56	112.65	108.20
26	BA	1251	C	N1-C2-O2	5.56	122.23	118.90
26	BA	1442	G	O4'-C1'-N9	5.55	112.64	108.20
1	AA	571	U	C2-N1-C1'	5.55	124.36	117.70
26	BA	134	C	O4'-C1'-N1	5.55	112.64	108.20
1	AA	587	G	O3'-P-O5'	-5.55	93.46	104.00
26	BA	286	C	O4'-C1'-N1	5.55	112.64	108.20
26	BA	973	A	C5'-C4'-C3'	5.55	124.87	116.00
1	AA	234	C	C3'-C2'-C1'	-5.54	97.06	101.50
1	AA	290	C	C3'-C2'-C1'	-5.54	97.06	101.50
23	AT	84	LEU	CA-CB-CG	5.54	128.05	115.30
1	AA	1064	G	O4'-C1'-N9	5.54	112.63	108.20
1	AA	233	C	O4'-C1'-N1	5.54	112.63	108.20
3	AW	26	G	OP1-P-OP2	-5.54	111.29	119.60
26	BA	479	A	O4'-C1'-N9	5.54	112.63	108.20
26	BA	2003	G	C1'-O4'-C4'	-5.54	105.47	109.90
26	BA	270(M)	U	C2-N1-C1'	5.54	124.34	117.70
26	BA	1970	A	C1'-O4'-C4'	-5.54	105.47	109.90
26	BA	2317	C	C4'-C3'-C2'	-5.53	97.07	102.60
1	AA	836	G	C4'-C3'-C2'	-5.53	97.07	102.60
26	BA	1669	A	C4'-C3'-C2'	-5.53	97.07	102.60
1	AA	709	G	O4'-C1'-N9	5.53	112.62	108.20
26	BA	848	G	C3'-C2'-C1'	-5.53	97.08	101.50
3	AW	25	C	P-O3'-C3'	5.53	126.33	119.70
26	BA	1498	C	N1-C1'-C2'	5.53	121.19	114.00
26	BA	342	G	O4'-C4'-C3'	-5.53	98.47	104.00
26	BA	1211	U	P-O3'-C3'	5.52	126.33	119.70
26	BA	2846	G	P-O3'-C3'	5.52	126.33	119.70
1	AA	242	C	O4'-C1'-N1	5.52	112.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	276	G	C3'-C2'-C1'	-5.52	97.08	101.50
1	AA	496	A	P-O3'-C3'	5.52	126.33	119.70
26	BA	16	G	C5'-C4'-O4'	5.52	115.72	109.10
25	BB	28	C	O4'-C1'-N1	5.52	112.61	108.20
26	BA	530	G	C1'-O4'-C4'	-5.52	105.49	109.90
26	BA	2855	C	C3'-C2'-C1'	-5.52	97.09	101.50
26	BA	462	C	O4'-C1'-N1	5.51	112.61	108.20
26	BA	815	C	O4'-C1'-N1	5.51	112.61	108.20
26	BA	1214	A	C1'-O4'-C4'	-5.51	105.49	109.90
26	BA	1056	G	C1'-O4'-C4'	-5.51	105.49	109.90
26	BA	1653	G	C3'-C2'-C1'	5.51	105.91	101.50
1	AA	542	G	O4'-C1'-N9	5.50	112.60	108.20
1	AA	499	A	C1'-O4'-C4'	-5.50	105.50	109.90
26	BA	232	G	O3'-P-O5'	-5.50	93.56	104.00
26	BA	1968	G	C4'-C3'-C2'	-5.50	97.10	102.60
3	AW	25	C	O4'-C1'-N1	-5.50	103.80	108.20
26	BA	2454	G	O3'-P-O5'	5.50	114.44	104.00
26	BA	1206	G	C3'-C2'-C1'	-5.49	97.11	101.50
26	BA	1088	A	O4'-C1'-N9	5.49	112.59	108.20
1	AA	1101	A	P-O3'-C3'	5.49	126.28	119.70
26	BA	434	U	C3'-C2'-C1'	5.48	105.89	101.50
26	BA	625	G	C3'-C2'-C1'	-5.48	97.11	101.50
26	BA	774	A	O4'-C1'-N9	5.48	112.58	108.20
26	BA	1763	G	P-O3'-C3'	5.48	126.28	119.70
1	AA	969	A	O4'-C1'-N9	5.48	112.58	108.20
1	AA	356	A	O4'-C1'-N9	5.48	112.58	108.20
26	BA	1025	G	C4'-C3'-C2'	-5.48	97.12	102.60
26	BA	2370	G	OP1-P-O3'	5.48	117.25	105.20
26	BA	516	C	C6-N1-C2	-5.48	118.11	120.30
1	AA	615	C	O4'-C1'-N1	5.47	112.58	108.20
1	AA	652	U	C1'-O4'-C4'	-5.47	105.52	109.90
26	BA	1664	A	N7-C8-N9	5.47	116.53	113.80
26	BA	458	G	C3'-C2'-C1'	5.47	105.87	101.50
1	AA	656	C	C3'-C2'-C1'	-5.47	97.13	101.50
26	BA	1924	C	C4'-C3'-C2'	-5.47	97.13	102.60
26	BA	81	G	P-O3'-C3'	5.46	126.26	119.70
1	AA	1256	A	C3'-C2'-C1'	5.46	105.87	101.50
26	BA	117	G	OP2-P-O3'	5.46	117.22	105.20
26	BA	1102	C	N1-C2-O2	5.46	122.18	118.90
26	BA	1976	U	C1'-O4'-C4'	-5.46	105.53	109.90
26	BA	27	G	N3-C4-C5	-5.46	125.87	128.60
26	BA	1286	A	C3'-C2'-C1'	5.46	105.87	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AW	46	G	C5-N7-C8	5.46	107.03	104.30
26	BA	1935	G	C3'-C2'-C1'	5.46	105.86	101.50
26	BA	1706	U	OP2-P-O3'	5.45	117.20	105.20
26	BA	627	A	O4'-C1'-N9	5.45	112.56	108.20
26	BA	1528	A	C5'-C4'-O4'	5.45	115.64	109.10
26	BA	1249	U	C3'-C2'-C1'	-5.44	97.14	101.50
26	BA	2726	U	C1'-O4'-C4'	-5.44	105.55	109.90
1	AA	125	U	O4'-C1'-N1	5.44	112.55	108.20
26	BA	1420	U	N1-C1'-C2'	5.44	121.07	114.00
1	AA	402	G	C3'-C2'-C1'	-5.44	97.15	101.50
26	BA	1520	U	C5-C6-N1	5.44	125.42	122.70
26	BA	2010	G	O4'-C1'-N9	5.44	112.55	108.20
46	B2	31	ARG	C-N-CA	-5.44	108.10	121.70
1	AA	231	G	C5'-C4'-O4'	5.43	115.62	109.10
26	BA	1140	C	C5'-C4'-O4'	5.43	115.62	109.10
26	BA	1885	A	O4'-C1'-N9	5.43	112.55	108.20
26	BA	564	C	C4'-C3'-C2'	-5.43	97.17	102.60
1	AA	119	A	OP2-P-O3'	5.43	117.14	105.20
26	BA	1423	G	O4'-C4'-C3'	-5.43	98.57	104.00
1	AA	960	U	P-O3'-C3'	-5.42	113.19	119.70
26	BA	2310	A	C4'-C3'-C2'	-5.42	97.17	102.60
26	BA	2395	C	C3'-C2'-C1'	-5.42	97.17	101.50
26	BA	1313	U	C4'-C3'-C2'	-5.41	97.19	102.60
1	AA	804	U	OP1-P-O3'	-5.41	93.29	105.20
26	BA	1888	G	O4'-C1'-N9	5.41	112.53	108.20
1	AA	48	C	P-O3'-C3'	5.41	126.19	119.70
26	BA	137	C	C3'-C2'-C1'	5.41	105.83	101.50
26	BA	2442	C	P-O3'-C3'	-5.41	113.21	119.70
50	B5	30	LEU	C-N-CA	5.41	135.22	121.70
1	AA	574	A	C8-N9-C4	-5.41	103.64	105.80
1	AA	28	G	C4'-C3'-C2'	-5.41	97.19	102.60
1	AA	1065	U	C2'-C3'-O3'	5.41	122.35	113.70
26	BA	1767	C	O4'-C1'-N1	5.40	112.52	108.20
1	AA	951	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	AA	1024	G	OP2-P-O3'	5.40	117.07	105.20
26	BA	2267	A	O4'-C4'-C3'	-5.39	98.61	104.00
1	AA	1298	C	OP2-P-O3'	-5.39	93.33	105.20
26	BA	498	G	C3'-C2'-C1'	-5.39	97.19	101.50
26	BA	943	U	C4'-C3'-C2'	-5.39	97.21	102.60
3	AW	25	C	C4'-C3'-O3'	-5.39	98.09	109.40
26	BA	932	G	C3'-C2'-C1'	5.39	105.81	101.50
26	BA	1283	G	C3'-C2'-C1'	-5.39	97.19	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	817	C	P-O3'-C3'	5.38	126.16	119.70
26	BA	1206	G	O4'-C4'-C3'	-5.38	98.61	104.00
1	AA	595	G	C3'-C2'-C1'	5.38	105.80	101.50
26	BA	30	G	C3'-C2'-C1'	5.38	105.80	101.50
26	BA	1181	C	C1'-O4'-C4'	-5.38	105.60	109.90
26	BA	1124	C	OP1-P-O3'	5.37	117.02	105.20
26	BA	987	G	O4'-C1'-N9	5.37	112.50	108.20
26	BA	52	A	O3'-P-O5'	-5.37	93.80	104.00
1	AA	403	C	C3'-C2'-C1'	-5.37	97.21	101.50
26	BA	530	G	P-O3'-C3'	5.37	126.14	119.70
26	BA	626	U	O4'-C1'-N1	5.36	112.49	108.20
26	BA	2441	C	P-O3'-C3'	-5.36	113.26	119.70
26	BA	2733	A	C4'-C3'-C2'	-5.36	97.24	102.60
16	AM	66	LEU	CA-C-N	-5.36	105.41	117.20
26	BA	47	C	O4'-C1'-N1	5.36	112.49	108.20
26	BA	488	G	C4'-C3'-C2'	-5.36	97.24	102.60
26	BA	1939	U	C3'-C2'-C1'	5.36	105.79	101.50
26	BA	1190	G	O4'-C4'-C3'	-5.35	98.65	104.00
26	BA	1600	C	O4'-C1'-N1	5.35	112.48	108.20
1	AA	332	G	C4'-C3'-C2'	-5.35	97.25	102.60
26	BA	1283	G	P-O3'-C3'	-5.35	113.28	119.70
1	AA	679	C	O4'-C1'-N1	5.35	112.48	108.20
1	AA	883	C	O4'-C1'-N1	5.34	112.48	108.20
26	BA	665	C	O4'-C1'-N1	5.34	112.47	108.20
26	BA	845	G	C3'-C2'-C1'	5.34	105.77	101.50
1	AA	1285	A	C1'-O4'-C4'	-5.34	105.63	109.90
26	BA	739	G	N3-C4-N9	5.34	129.20	126.00
26	BA	973	A	O4'-C4'-C3'	-5.34	98.66	104.00
26	BA	1534	G	C4'-C3'-C2'	-5.34	97.26	102.60
26	BA	2690	C	O3'-P-O5'	-5.34	93.86	104.00
26	BA	2036	C	O4'-C1'-N1	5.33	112.47	108.20
26	BA	2076	U	P-O3'-C3'	5.33	126.10	119.70
1	AA	387	U	C1'-O4'-C4'	-5.33	105.63	109.90
1	AA	1530	G	C1'-O4'-C4'	-5.33	105.64	109.90
26	BA	1386	C	O4'-C1'-N1	5.33	112.46	108.20
1	AA	792	A	C1'-O4'-C4'	-5.33	105.64	109.90
26	BA	1247	A	C3'-C2'-C1'	5.33	105.76	101.50
1	AA	1212	U	P-O3'-C3'	5.32	126.09	119.70
26	BA	1261	C	P-O3'-C3'	5.32	126.09	119.70
26	BA	288	C	C3'-C2'-C1'	-5.32	97.24	101.50
26	BA	997	G	C4'-C3'-C2'	-5.32	97.28	102.60
1	AA	591	U	C3'-C2'-C1'	-5.32	97.25	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	566	U	C3'-C2'-C1'	5.32	105.75	101.50
1	AA	1532	U	O4'-C4'-C3'	-5.32	98.69	104.00
26	BA	1791	A	P-O3'-C3'	-5.32	113.32	119.70
26	BA	1142	U	P-O3'-C3'	-5.31	113.32	119.70
1	AA	332	G	C3'-C2'-C1'	-5.31	97.25	101.50
26	BA	2865	U	C1'-O4'-C4'	-5.31	105.65	109.90
26	BA	1515	C	P-O3'-C3'	5.31	126.07	119.70
26	BA	1800	C	C4'-C3'-C2'	-5.31	97.29	102.60
26	BA	2052	G	O4'-C1'-N9	5.31	112.45	108.20
26	BA	1054	A	C1'-O4'-C4'	-5.30	105.66	109.90
26	BA	2668	G	C3'-C2'-C1'	-5.30	97.26	101.50
26	BA	105	C	O4'-C1'-N1	5.30	112.44	108.20
26	BA	578	A	OP2-P-O3'	5.30	116.86	105.20
26	BA	218	A	C4'-C3'-C2'	-5.30	97.30	102.60
26	BA	1329	U	P-O3'-C3'	5.30	126.06	119.70
1	AA	1302	U	P-O3'-C3'	5.30	126.06	119.70
26	BA	338	G	C3'-C2'-C1'	5.30	105.74	101.50
26	BA	1835	G	N3-C4-C5	-5.30	125.95	128.60
1	AA	792	A	O4'-C1'-N9	5.29	112.44	108.20
26	BA	594	U	O4'-C1'-N1	5.29	112.44	108.20
1	AA	258	G	O4'-C1'-N9	5.29	112.43	108.20
26	BA	271(C)	U	O3'-P-O5'	-5.29	93.94	104.00
26	BA	750	A	C3'-C2'-C1'	5.29	105.73	101.50
26	BA	242	G	P-O3'-C3'	5.29	126.05	119.70
1	AA	1331	G	P-O3'-C3'	5.29	126.05	119.70
26	BA	1772	G	O4'-C1'-N9	5.29	112.43	108.20
6	AC	18	TRP	O-C-N	-5.29	114.24	122.70
25	BB	119	A	C4'-C3'-C2'	-5.28	97.32	102.60
26	BA	2370	G	P-O3'-C3'	5.28	126.03	119.70
26	BA	321	G	P-O3'-C3'	5.28	126.03	119.70
26	BA	612	G	P-O3'-C3'	5.27	126.03	119.70
1	AA	1452	C	N1-C1'-C2'	5.27	120.85	114.00
26	BA	2751	G	C1'-O4'-C4'	-5.27	105.68	109.90
26	BA	1626	G	C3'-C2'-C1'	5.27	105.72	101.50
26	BA	469	G	N3-C4-C5	-5.27	125.97	128.60
26	BA	1772	G	C5'-C4'-O4'	5.27	115.42	109.10
26	BA	2320	A	C3'-C2'-C1'	5.27	105.71	101.50
26	BA	2334	G	C1'-O4'-C4'	-5.27	105.69	109.90
1	AA	680	C	O4'-C1'-N1	5.26	112.41	108.20
26	BA	130	C	P-O3'-C3'	-5.26	113.38	119.70
26	BA	2676	C	C3'-C2'-C1'	-5.26	97.29	101.50
26	BA	1567	A	C3'-C2'-C1'	5.26	105.71	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	340	A	O3'-P-O5'	5.25	113.98	104.00
26	BA	1402	C	O4'-C1'-N1	5.25	112.40	108.20
26	BA	889	C	O4'-C1'-N1	5.25	112.40	108.20
26	BA	270(Z)	U	P-O3'-C3'	5.25	126.00	119.70
26	BA	1586	A	C3'-C2'-C1'	5.25	105.70	101.50
26	BA	1153	C	C2-N1-C1'	5.24	124.57	118.80
26	BA	32	C	OP1-P-O3'	5.24	116.73	105.20
1	AA	204	U	C2-N1-C1'	5.24	123.99	117.70
26	BA	1800	C	C5'-C4'-O4'	5.24	115.39	109.10
26	BA	8	A	O3'-P-O5'	5.24	113.95	104.00
26	BA	468	G	O3'-P-O5'	-5.24	94.05	104.00
26	BA	1539	G	C1'-O4'-C4'	-5.24	105.71	109.90
26	BA	1727	U	C1'-O4'-C4'	-5.24	105.71	109.90
1	AA	1078	U	O4'-C1'-N1	5.23	112.39	108.20
26	BA	2336	A	OP1-P-O3'	5.23	116.71	105.20
1	AA	904	C	C3'-C2'-C1'	-5.23	97.32	101.50
26	BA	148	C	C1'-O4'-C4'	-5.23	105.72	109.90
51	B6	19	GLY	N-CA-C	-5.23	100.03	113.10
26	BA	242	G	O4'-C1'-N9	5.23	112.38	108.20
26	BA	791	C	O4'-C1'-N1	5.23	112.38	108.20
26	BA	935	C	C1'-O4'-C4'	-5.23	105.72	109.90
26	BA	370	G	P-O3'-C3'	5.22	125.97	119.70
26	BA	95	G	P-O3'-C3'	-5.22	113.43	119.70
26	BA	1270	C	P-O3'-C3'	5.22	125.97	119.70
1	AA	38	G	OP2-P-O3'	-5.22	93.72	105.20
26	BA	1312	U	C3'-C2'-C1'	5.22	105.68	101.50
26	BA	2726	U	O4'-C1'-N1	5.22	112.38	108.20
26	BA	2264	C	C4'-C3'-C2'	-5.22	97.38	102.60
1	AA	576	G	C1'-O4'-C4'	-5.22	105.73	109.90
25	BB	-1	A	OP1-P-O3'	5.22	116.68	105.20
26	BA	456	C	C6-N1-C2	-5.22	118.21	120.30
26	BA	2614	A	C3'-C2'-C1'	5.21	105.67	101.50
26	BA	244	A	C3'-C2'-C1'	-5.21	97.33	101.50
26	BA	801	G	C2'-C3'-O3'	5.21	122.04	113.70
26	BA	1409	C	O4'-C1'-N1	5.21	112.37	108.20
1	AA	574	A	N7-C8-N9	5.21	116.41	113.80
1	AA	918	A	O4'-C1'-N9	5.21	112.37	108.20
26	BA	548	A	C3'-C2'-C1'	5.21	105.67	101.50
26	BA	2777	G	C1'-O4'-C4'	-5.21	105.73	109.90
1	AA	1201	A	C1'-O4'-C4'	-5.21	105.74	109.90
26	BA	974(A)	C	N1-C1'-C2'	5.20	120.77	114.00
26	BA	479	A	C1'-O4'-C4'	-5.20	105.74	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	AG	12	LEU	CA-C-N	5.20	128.64	117.20
26	BA	135	G	C4'-C3'-C2'	-5.20	97.40	102.60
26	BA	616	A	C3'-C2'-C1'	5.20	105.66	101.50
26	BA	1941	C	N1-C2-O2	5.20	122.02	118.90
26	BA	2403	C	C4'-C3'-C2'	-5.20	97.40	102.60
26	BA	196	A	N9-C1'-C2'	5.20	120.76	114.00
26	BA	764	A	N9-C1'-C2'	5.20	120.76	114.00
26	BA	2209	C	C4'-C3'-C2'	-5.20	97.40	102.60
26	BA	141(A)	C	C6-N1-C2	-5.20	118.22	120.30
26	BA	177	G	P-O3'-C3'	5.20	125.93	119.70
26	BA	1212	G	P-O3'-C3'	5.20	125.94	119.70
1	AA	345	C	P-O3'-C3'	5.19	125.93	119.70
26	BA	1996	C	C6-N1-C2	-5.19	118.22	120.30
1	AA	44	G	C3'-C2'-C1'	-5.19	97.34	101.50
26	BA	271(C)	U	P-O3'-C3'	-5.19	113.47	119.70
26	BA	1554	A	P-O3'-C3'	5.19	125.93	119.70
26	BA	2267	A	C1'-O4'-C4'	-5.19	105.75	109.90
1	AA	21	G	C3'-C2'-C1'	-5.19	97.35	101.50
7	AD	31	CYS	CA-CB-SG	5.19	123.34	114.00
26	BA	335	C	O4'-C1'-N1	5.19	112.35	108.20
26	BA	661	C	C4'-C3'-C2'	-5.19	97.41	102.60
1	AA	569	C	O3'-P-O5'	-5.19	94.14	104.00
26	BA	1206	G	C5'-C4'-O4'	5.19	115.33	109.10
26	BA	164	U	C3'-C2'-C1'	5.19	105.65	101.50
26	BA	1255	U	C5'-C4'-O4'	5.19	115.33	109.10
1	AA	1365	G	N9-C1'-C2'	-5.19	106.30	112.00
26	BA	1640	C	P-O3'-C3'	5.19	125.92	119.70
1	AA	511	C	C3'-C2'-C1'	5.18	105.65	101.50
26	BA	935	C	O4'-C1'-N1	5.18	112.35	108.20
26	BA	2091	U	O4'-C1'-N1	5.18	112.35	108.20
26	BA	153	C	O4'-C1'-N1	5.18	112.34	108.20
26	BA	1566	A	C1'-O4'-C4'	-5.18	105.76	109.90
26	BA	80	G	C3'-C2'-C1'	-5.18	97.36	101.50
26	BA	1697	G	C3'-C2'-C1'	-5.18	97.36	101.50
26	BA	688	U	O4'-C1'-N1	5.17	112.34	108.20
26	BA	814	C	C1'-O4'-C4'	-5.17	105.76	109.90
26	BA	71	A	O4'-C1'-N9	5.17	112.34	108.20
26	BA	1979	C	C4'-C3'-C2'	-5.17	97.43	102.60
1	AA	137	C	O4'-C1'-N1	5.17	112.34	108.20
26	BA	2508	G	N3-C4-C5	5.17	131.19	128.60
26	BA	1829	A	O4'-C1'-N9	-5.17	104.06	108.20
26	BA	2471	C	C4'-C3'-C2'	-5.17	97.43	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	2086	U	O4'-C1'-N1	5.17	112.33	108.20
26	BA	1570	A	C3'-C2'-C1'	-5.17	97.37	101.50
1	AA	859	A	C4'-C3'-C2'	-5.16	97.44	102.60
26	BA	218	A	O4'-C1'-N9	5.16	112.33	108.20
26	BA	337	C	O4'-C1'-N1	5.16	112.33	108.20
26	BA	761	A	N7-C8-N9	5.16	116.38	113.80
26	BA	2234	G	C4'-C3'-C2'	-5.16	97.44	102.60
26	BA	95	G	O4'-C4'-C3'	-5.16	98.84	104.00
1	AA	819	A	P-O3'-C3'	5.15	125.88	119.70
1	AA	1362	C	O4'-C1'-N1	5.15	112.32	108.20
26	BA	1169	G	O4'-C1'-N9	5.15	112.32	108.20
26	BA	1404	C	O3'-P-O5'	-5.15	94.21	104.00
26	BA	1476	C	C5'-C4'-O4'	5.15	115.28	109.10
26	BA	264	C	OP2-P-O3'	5.15	116.53	105.20
1	AA	74	C	O4'-C1'-N1	5.15	112.32	108.20
26	BA	585	G	O5'-C5'-C4'	-5.15	101.92	111.70
26	BA	1653	G	P-O3'-C3'	5.15	125.88	119.70
26	BA	2848	G	C1'-O4'-C4'	-5.15	105.78	109.90
26	BA	1835	G	C8-N9-C4	-5.14	104.34	106.40
26	BA	2007	C	C3'-C2'-C1'	-5.14	97.39	101.50
26	BA	151	C	O4'-C1'-N1	5.14	112.31	108.20
26	BA	2084	C	P-O3'-C3'	-5.14	113.53	119.70
1	AA	366	C	C3'-C2'-C1'	5.14	105.61	101.50
26	BA	1349	A	P-O3'-C3'	-5.14	113.53	119.70
26	BA	1983	C	O4'-C1'-N1	5.14	112.31	108.20
1	AA	147	G	C3'-C2'-C1'	-5.14	97.39	101.50
1	AA	421	U	C3'-C2'-C1'	5.14	105.61	101.50
26	BA	2488	A	P-O3'-C3'	-5.14	113.54	119.70
25	BB	69	G	OP2-P-O3'	5.13	116.50	105.20
26	BA	79	G	C3'-C2'-C1'	-5.13	97.39	101.50
26	BA	2418	A	C3'-C2'-C1'	5.13	105.61	101.50
26	BA	2595	G	C4'-C3'-C2'	-5.13	97.47	102.60
1	AA	1396	A	O3'-P-O5'	-5.13	94.25	104.00
1	AA	1237	C	O3'-P-O5'	-5.13	94.26	104.00
1	AA	10	A	C4'-C3'-C2'	-5.13	97.47	102.60
1	AA	314	C	P-O3'-C3'	5.13	125.85	119.70
1	AA	908	A	O4'-C1'-N9	5.13	112.30	108.20
26	BA	101	G	P-O3'-C3'	5.13	125.85	119.70
1	AA	135	C	O4'-C1'-N1	5.12	112.30	108.20
1	AA	1315	U	O4'-C1'-N1	5.12	112.30	108.20
1	AA	827	U	O4'-C1'-N1	5.12	112.30	108.20
1	AA	849	C	C4'-C3'-C2'	-5.12	97.48	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	195	A	O4'-C1'-N9	5.12	112.30	108.20
1	AA	972	C	O4'-C1'-N1	5.12	112.29	108.20
1	AA	1514	C	C5-C6-N1	5.12	123.56	121.00
26	BA	1559	G	O4'-C1'-C2'	-5.12	100.68	105.80
26	BA	2022	U	N1-C2-O2	5.12	126.38	122.80
1	AA	65	U	P-O3'-C3'	5.12	125.84	119.70
1	AA	271	C	O4'-C1'-N1	5.11	112.29	108.20
26	BA	1132	A	O4'-C1'-N9	5.11	112.29	108.20
26	BA	449(A)	G	C3'-C2'-C1'	5.11	105.59	101.50
26	BA	1474	C	O4'-C1'-N1	5.11	112.29	108.20
26	BA	1939	U	C2-N1-C1'	5.11	123.83	117.70
26	BA	2062	A	OP2-P-O3'	5.11	116.44	105.20
26	BA	1568	G	C3'-C2'-C1'	5.11	105.59	101.50
26	BA	2855	C	C4'-C3'-C2'	-5.11	97.49	102.60
26	BA	912	C	O4'-C1'-N1	5.10	112.28	108.20
26	BA	2495	G	P-O3'-C3'	5.10	125.83	119.70
26	BA	865	C	N1-C2-O2	5.10	121.96	118.90
26	BA	1491	G	P-O3'-C3'	5.10	125.82	119.70
26	BA	1827	C	O4'-C1'-N1	5.10	112.28	108.20
26	BA	271(B)	G	O3'-P-O5'	5.10	113.69	104.00
26	BA	1915	U	P-O3'-C3'	5.10	125.82	119.70
1	AA	918	A	C3'-C2'-C1'	5.10	105.58	101.50
1	AA	1378	C	N1-C2-O2	5.10	121.96	118.90
26	BA	2040	C	OP2-P-O3'	5.10	116.41	105.20
1	AA	1346	A	C1'-O4'-C4'	-5.09	105.83	109.90
26	BA	740	U	O4'-C1'-N1	5.09	112.27	108.20
26	BA	1805	U	O4'-C1'-N1	5.09	112.27	108.20
1	AA	497	A	O4'-C1'-N9	5.08	112.27	108.20
26	BA	1653	G	N9-C1'-C2'	5.08	120.61	114.00
10	AG	12	LEU	C-N-CA	5.08	134.40	121.70
26	BA	1527	G	O4'-C1'-N9	5.08	112.27	108.20
26	BA	1727	U	O4'-C1'-N1	5.08	112.27	108.20
26	BA	2885	C	C3'-C2'-C1'	-5.08	97.43	101.50
26	BA	82	G	C3'-C2'-C1'	5.08	105.56	101.50
26	BA	670	A	O4'-C1'-N9	5.08	112.26	108.20
1	AA	702	A	C3'-C2'-C1'	5.08	105.56	101.50
1	AA	1304	G	C1'-O4'-C4'	-5.08	105.84	109.90
26	BA	602	G	C3'-C2'-C1'	5.08	105.56	101.50
26	BA	957	A	P-O3'-C3'	5.08	125.79	119.70
26	BA	1917	U	O4'-C1'-N1	5.08	112.26	108.20
26	BA	299	A	C8-N9-C4	-5.07	103.77	105.80
26	BA	529	A	P-O3'-C3'	5.07	125.79	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	814	A	P-O3'-C3'	5.07	125.79	119.70
1	AA	1158	C	C2-N1-C1'	5.07	124.38	118.80
1	AA	1020	U	O4'-C1'-N1	5.07	112.25	108.20
26	BA	563	G	C5'-C4'-O4'	5.07	115.18	109.10
26	BA	971	C	O3'-P-O5'	-5.07	94.37	104.00
26	BA	1297	C	O4'-C1'-N1	5.07	112.25	108.20
1	AA	656	C	O4'-C1'-N1	5.07	112.25	108.20
1	AA	851	G	O4'-C1'-N9	5.07	112.25	108.20
26	BA	270(Q)	C	O4'-C1'-N1	5.07	112.25	108.20
1	AA	1196	U	P-O3'-C3'	5.06	125.77	119.70
1	AA	1394	A	C3'-C2'-C1'	5.06	105.55	101.50
1	AA	1498	U	C3'-C2'-C1'	5.06	105.55	101.50
1	AA	1533	C	O4'-C1'-N1	5.06	112.25	108.20
26	BA	801	G	O4'-C1'-N9	-5.06	104.15	108.20
1	AA	903	G	O4'-C4'-C3'	-5.06	98.94	104.00
26	BA	32	C	O4'-C1'-N1	5.06	112.25	108.20
26	BA	738	G	N3-C4-C5	-5.06	126.07	128.60
26	BA	1265	A	N9-C1'-C2'	5.06	120.57	114.00
26	BA	1335	U	O4'-C1'-N1	5.06	112.25	108.20
1	AA	911	U	O4'-C1'-N1	5.06	112.25	108.20
26	BA	1025	G	O4'-C4'-C3'	-5.05	98.95	104.00
26	BA	1779	U	P-O3'-C3'	-5.05	113.64	119.70
26	BA	2765	A	C3'-C2'-C1'	5.05	105.54	101.50
26	BA	699	A	O3'-P-O5'	-5.05	94.40	104.00
26	BA	712	G	C3'-C2'-C1'	-5.05	97.46	101.50
26	BA	809	G	OP2-P-O3'	5.05	116.31	105.20
26	BA	1288	U	C3'-C2'-C1'	5.05	105.54	101.50
26	BA	1621	U	C3'-C2'-C1'	-5.05	97.46	101.50
1	AA	1158	C	N1-C2-O2	5.05	121.93	118.90
26	BA	1351	C	O4'-C1'-N1	5.05	112.24	108.20
26	BA	1657	C	C3'-C2'-C1'	-5.05	97.46	101.50
1	AA	412	A	O4'-C1'-N9	5.05	112.24	108.20
26	BA	1542	G	O4'-C4'-C3'	-5.05	98.95	104.00
26	BA	825	C	P-O3'-C3'	5.04	125.75	119.70
26	BA	2862	G	C3'-C2'-C1'	5.04	105.54	101.50
26	BA	81	G	OP1-P-O3'	5.04	116.29	105.20
26	BA	1657	C	C5-C6-N1	5.04	123.52	121.00
26	BA	984	A	C5'-C4'-C3'	5.04	124.07	116.00
26	BA	1966	A	C3'-C2'-C1'	5.04	105.53	101.50
1	AA	434	U	O4'-C1'-N1	5.04	112.23	108.20
26	BA	2045	C	O4'-C1'-N1	5.04	112.23	108.20
19	AP	6	LEU	CA-CB-CG	5.04	126.89	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	188	G	O4'-C1'-N9	5.04	112.23	108.20
26	BA	1266	G	C5'-C4'-C3'	5.04	124.06	116.00
26	BA	1527	G	N7-C8-N9	5.04	115.62	113.10
26	BA	1306	C	O4'-C1'-N1	5.03	112.23	108.20
26	BA	1667	G	C8-N9-C4	-5.03	104.39	106.40
1	AA	541	G	C8-N9-C4	-5.03	104.39	106.40
26	BA	2511	U	C4'-C3'-C2'	-5.03	97.57	102.60
26	BA	2227	A	P-O3'-C3'	-5.03	113.67	119.70
26	BA	472	A	P-O3'-C3'	-5.03	113.67	119.70
26	BA	1240	U	C5-C6-N1	5.03	125.21	122.70
26	BA	1520	U	O4'-C1'-N1	5.03	112.22	108.20
1	AA	164	U	O4'-C1'-N1	5.03	112.22	108.20
1	AA	508	C	C3'-C2'-C1'	5.03	105.52	101.50
1	AA	509	A	C3'-C2'-C1'	-5.03	97.48	101.50
26	BA	1930	G	O4'-C1'-N9	5.03	112.22	108.20
1	AA	308	C	C4'-C3'-C2'	-5.02	97.58	102.60
26	BA	1420	U	P-O3'-C3'	5.02	125.73	119.70
26	BA	1480	G	N7-C8-N9	5.02	115.61	113.10
1	AA	1540	U	O4'-C1'-N1	5.02	112.22	108.20
26	BA	1313	U	C1'-O4'-C4'	-5.02	105.88	109.90
26	BA	2791	C	C3'-C2'-C1'	5.02	105.52	101.50
26	BA	84	A	C3'-C2'-C1'	5.02	105.52	101.50
26	BA	249	C	N1-C1'-C2'	-5.02	106.48	112.00
1	AA	822	C	C3'-C2'-C1'	-5.02	97.49	101.50
26	BA	270(H)	C	O4'-C1'-N1	5.02	112.21	108.20
26	BA	624	C	P-O3'-C3'	5.02	125.72	119.70
26	BA	977	G	C4'-C3'-C2'	-5.02	97.58	102.60
26	BA	1278	A	C4'-C3'-C2'	-5.02	97.58	102.60
26	BA	1710	C	O4'-C1'-N1	5.02	112.22	108.20
26	BA	2460	U	N1-C1'-C2'	-5.02	106.48	112.00
26	BA	1914	C	P-O3'-C3'	5.02	125.72	119.70
1	AA	329	A	P-O3'-C3'	5.01	125.72	119.70
6	AC	91	LEU	CA-CB-CG	5.01	126.83	115.30
26	BA	1998	G	C3'-C2'-C1'	-5.01	97.49	101.50
26	BA	2218	G	OP1-P-O3'	5.01	116.23	105.20
26	BA	2318	G	C3'-C2'-C1'	5.01	105.51	101.50
26	BA	2561	A	C4'-C3'-C2'	-5.01	97.59	102.60
26	BA	2507	C	C4'-C3'-C2'	-5.01	97.59	102.60
26	BA	2654	A	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	960	U	C2-N1-C1'	5.01	123.71	117.70
26	BA	782	A	C1'-O4'-C4'	-5.01	105.89	109.90
1	AA	603	U	O4'-C1'-N1	5.01	112.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	BA	2784	C	C1'-O4'-C4'	-5.00	105.90	109.90
1	AA	1485	U	O4'-C4'-C3'	-5.00	99.00	104.00
26	BA	500	G	C3'-C2'-C1'	-5.00	97.50	101.50
26	BA	1247	A	O3'-P-O5'	-5.00	94.49	104.00
26	BA	1525	G	OP2-P-O3'	5.00	116.21	105.20
26	BA	740	U	P-O3'-C3'	5.00	125.70	119.70
26	BA	766	C	O4'-C1'-N1	5.00	112.20	108.20
26	BA	1005	C	C6-N1-C2	-5.00	118.30	120.30
26	BA	1999	C	O4'-C1'-N1	5.00	112.20	108.20
26	BA	2439	A	N9-C1'-C2'	-5.00	106.50	112.00

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
3	AW	37	YYG	C15

All (28) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	AB	148	TYR	Mainchain
6	AC	18	TRP	Mainchain
7	AD	49	ARG	Mainchain
14	AK	112	THR	Mainchain
15	AL	23	LYS	Mainchain
20	AQ	40	LYS	Mainchain
3	AW	16	U	Sidechain
3	AW	17	U	Sidechain
3	AW	18	G	Sidechain
3	AW	19	G	Sidechain
3	AW	62	A	Sidechain
46	B2	31	ARG	Mainchain
50	B5	30	LEU	Mainchain
27	BD	213	LYS	Peptide
28	BE	274	GLY	Mainchain,Peptide
28	BE	49	THR	Mainchain
29	BF	103	ASN	Mainchain
29	BF	168	ARG	Mainchain,Peptide
29	BF	28	SER	Mainchain
31	BH	80	LYS	Mainchain
32	BI	49	ALA	Mainchain
55	BK	86	GLU	Mainchain
35	BP	96	VAL	Peptide

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Mol	Chain	Res	Type	Group
37	BS	31	LYS	Mainchain
40	BX	73	ASP	Mainchain
41	BY	36	GLY	Mainchain

## 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	32551	0	16459	2042	3
2	AV	1622	0	821	231	0
3	AW	1638	0	836	243	0
4	AX	136	0	63	26	0
5	AB	1900	0	1950	97	0
6	AC	1612	0	1675	99	0
7	AD	1703	0	1761	289	0
8	AE	1146	0	1206	68	0
9	AF	843	0	857	30	0
10	AG	1257	0	1295	102	0
11	AH	1116	0	1177	100	0
12	AI	1011	0	1040	80	0
13	AJ	794	0	840	81	0
14	AK	885	0	904	53	0
15	AL	970	0	1056	72	0
16	AM	997	0	1070	149	0
17	AN	492	0	529	82	0
18	AO	734	0	771	28	0
19	AP	700	0	720	70	0
20	AQ	857	0	928	80	0
21	AR	597	0	668	40	0
22	AS	647	0	673	155	0
23	AT	762	0	859	37	0
24	AU	208	0	221	84	0
25	BB	2637	0	1339	219	1
26	BA	60600	0	30514	11060	138
27	BD	1308	0	1346	1086	0
28	BE	1507	0	1478	1144	3
29	BF	1430	0	1357	1085	0
30	BG	957	0	952	692	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
31	BH	1251	0	1291	754	0
32	BI	1145	0	1225	625	3
33	BN	917	0	896	771	2
34	BO	937	0	992	613	0
35	BP	639	0	605	482	0
36	BQ	1081	0	1047	932	0
37	BS	866	0	866	677	0
38	BT	406	0	359	167	0
39	BW	860	0	909	557	0
40	BX	602	0	558	460	0
41	BY	879	0	860	755	0
42	BZ	1360	0	1378	902	0
43	BR	855	0	904	579	0
44	BU	978	0	996	895	0
45	BV	787	0	782	635	0
46	B2	494	0	504	393	0
47	B3	477	0	527	460	0
48	B0	641	0	661	531	0
49	B4	604	0	587	489	0
50	B5	457	0	456	279	0
51	B6	431	0	454	289	0
52	B7	383	0	409	382	0
53	B8	496	0	539	349	0
54	B9	285	0	312	195	0
55	BK	999	0	1064	573	0
All	All	142447	0	94546	28969	145

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 123.

All (28969) 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)
50:B5:33:CYS:SG	50:B5:36:CYS:HB2	1.24	1.69
26:BA:2470:G:C2	26:BA:2471:C:C5	1.81	1.68
52:B7:30:ILE:HA	52:B7:33:ARG:CD	1.21	1.67
26:BA:2712:U:C6	26:BA:712(A):A:C8	1.77	1.67
26:BA:2580:U:C6	26:BA:2581:G:C8	1.82	1.66
27:BD:73:ILE:HG21	27:BD:95:TYR:CD2	1.30	1.65
26:BA:2352:A:C2	48:B0:30:VAL:CG1	1.78	1.64
26:BA:1799:G:C2	27:BD:153:LEU:HD21	1.26	1.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:43:THR:HG23	31:BH:52:THR:CG2	1.23	1.64
28:BE:71:THR:HG21	28:BE:299:SER:CB	1.26	1.64
26:BA:911:A:C5	36:BQ:16:ARG:HG2	1.25	1.64
43:BR:58:GLY:HA2	43:BR:80:PHE:CE2	1.26	1.63
48:B0:37:LEU:HB3	48:B0:69:PHE:CD2	1.26	1.63
51:B6:32:GLN:CB	51:B6:35:LEU:HD12	1.25	1.63
41:BY:103:LEU:HD21	41:BY:112:LEU:CD2	1.25	1.63
41:BY:73:HIS:CA	41:BY:91:LEU:HD11	1.26	1.63
1:AA:409:G:H5''	7:AD:25:ARG:CB	1.17	1.63
26:BA:2625:G:H3'	26:BA:2626:C:C5	1.30	1.63
26:BA:2712:U:C2'	26:BA:712(A):A:H5''	1.18	1.63
26:BA:2355:C:C4'	48:B0:21:LEU:HD13	1.25	1.62
31:BH:10:ILE:CG2	31:BH:14:VAL:HG11	1.26	1.62
45:BV:11:GLN:HE22	45:BV:22:VAL:CG2	1.06	1.62
27:BD:92:LEU:HD11	27:BD:102:TYR:CE1	1.29	1.62
26:BA:2316:C:H4'	30:BG:151:ILE:CD1	1.15	1.62
36:BQ:85:ILE:HG22	36:BQ:122:PHE:CG	1.17	1.62
32:BI:95:SER:HA	32:BI:98:ILE:CG1	1.25	1.61
26:BA:849:A:C2	47:B3:21:ALA:HB1	1.29	1.61
42:BZ:39:PHE:HA	42:BZ:43:PHE:CE2	1.24	1.61
26:BA:2226:C:C2	26:BA:2227:A:H1'	1.19	1.61
26:BA:25:U:H5''	39:BW:80:PRO:CD	1.30	1.61
26:BA:994:C:C2	44:BU:53:LYS:HD3	1.36	1.60
26:BA:2354:G:C2	48:B0:32:LYS:HE3	1.36	1.60
41:BY:45:GLY:HA2	41:BY:62:VAL:CG1	1.29	1.60
27:BD:128:ALA:CB	27:BD:190:THR:HG22	1.15	1.60
35:BP:77:ALA:HA	35:BP:81:VAL:CB	1.23	1.60
1:AA:1268:A:H4'	24:AU:20:LYS:CA	1.27	1.60
41:BY:101:LEU:HD22	41:BY:103:LEU:CG	1.31	1.60
26:BA:2313:C:C5'	30:BG:72:LYS:HG3	1.26	1.59
28:BE:71:THR:CG2	28:BE:299:SER:HB2	1.12	1.59
53:B8:50:LEU:CD2	53:B8:51:ALA:H	1.03	1.59
35:BP:65:ASP:CB	35:BP:109:LEU:HB3	1.25	1.59
2:AV:31:A:C5'	12:AI:127:LYS:HD2	1.21	1.59
26:BA:16:G:H4'	50:B5:18:MET:SD	1.42	1.59
26:BA:2470:G:N2	26:BA:2471:C:C2	1.67	1.59
41:BY:71:VAL:CG2	41:BY:93:THR:HG23	1.23	1.59
26:BA:535:C:C4'	44:BU:53:LYS:HE2	1.27	1.59
33:BN:13:ASP:HA	33:BN:38:VAL:CG1	1.23	1.59
54:B9:25:VAL:CB	54:B9:34:GLN:HB3	1.26	1.59
26:BA:2360:A:N7	26:BA:2361:A:C8	1.69	1.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:147:LEU:CD1	29:BF:156:LEU:HD11	1.17	1.59
43:BR:38:VAL:CG1	43:BR:39:PRO:HD3	1.30	1.59
43:BR:38:VAL:HG12	43:BR:39:PRO:CD	1.23	1.59
26:BA:1151:G:C4'	44:BU:81:ASN:HD21	1.16	1.59
41:BY:103:LEU:CD2	41:BY:112:LEU:HD21	1.19	1.59
29:BF:96:LYS:HB2	29:BF:98:ARG:CZ	1.11	1.58
31:BH:129:LYS:C	31:BH:130:ILE:HD12	1.21	1.58
47:B3:20:LYS:HA	47:B3:23:LEU:CD1	1.30	1.58
26:BA:2740:A:H2'	26:BA:2741:A:C8	1.13	1.58
54:B9:7:VAL:CG1	54:B9:34:GLN:HG2	1.21	1.58
26:BA:1665:A:C4'	34:BO:66:LYS:HZ3	1.07	1.58
27:BD:128:ALA:HB2	27:BD:190:THR:CB	1.10	1.58
44:BU:59:ARG:HA	44:BU:62:ILE:CG1	1.15	1.58
2:AV:31:A:P	12:AI:127:LYS:HE3	1.43	1.58
26:BA:2768:C:N3	26:BA:2769:C:C5	1.71	1.58
33:BN:10:VAL:CG1	33:BN:36:VAL:HG22	1.15	1.58
26:BA:2832:U:H5'	26:BA:2832:U:C6	1.34	1.58
26:BA:2785:C:C4'	28:BE:99:VAL:HA	1.22	1.58
47:B3:23:LEU:CA	47:B3:28:LEU:HD12	1.31	1.57
39:BW:19:LEU:CD2	50:B5:25:LEU:HG	1.25	1.57
26:BA:2331:G:H4'	48:B0:70:ILE:CG1	1.27	1.57
27:BD:175:LEU:CD2	27:BD:180:VAL:HA	1.32	1.57
33:BN:15:ARG:CB	33:BN:43:ARG:HG2	1.20	1.57
44:BU:59:ARG:CA	44:BU:62:ILE:HG12	1.22	1.57
26:BA:2432:A:H2	26:BA:2433:A:C6	1.18	1.57
27:BD:213:LYS:CG	27:BD:215:LYS:HB2	1.27	1.57
33:BN:13:ASP:CA	33:BN:38:VAL:CG1	1.78	1.57
3:AW:37:YYG:H243	10:AG:85:TYR:CD2	1.31	1.57
2:AV:35:A:C2	4:AX:118:C:N3	1.70	1.57
32:BI:68:LEU:CD2	32:BI:108:LEU:HD13	1.16	1.57
42:BZ:69:VAL:CG2	42:BZ:81:VAL:HG13	1.26	1.57
26:BA:2543:G:H2'	26:BA:2544:G:C8	1.40	1.57
26:BA:2227:A:N1	26:BA:2228:G:C6	1.70	1.57
33:BN:65:ASN:HB2	33:BN:69:TYR:CD1	1.31	1.57
33:BN:58:GLU:HA	33:BN:61:VAL:CG2	1.34	1.57
50:B5:45:ILE:HG23	50:B5:52:TYR:CD1	1.36	1.57
44:BU:92:ARG:CA	44:BU:95:LEU:HD11	1.26	1.57
1:AA:409:G:C5'	7:AD:25:ARG:HB2	1.22	1.57
47:B3:8:LEU:CD2	47:B3:31:LEU:HA	1.20	1.57
26:BA:2826:A:C6	26:BA:2827:C:C6	1.90	1.56
51:B6:19:GLY:HA3	51:B6:42:PRO:CG	1.32	1.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1826:G:P	27:BD:227:VAL:HG21	1.45	1.56
49:B4:7:PRO:CD	49:B4:56:VAL:HG21	1.33	1.56
32:BI:7:LYS:HG3	32:BI:12:LYS:CG	1.25	1.56
43:BR:20:LEU:CD1	43:BR:21:TYR:N	1.68	1.56
26:BA:2313:C:H5'	30:BG:72:LYS:CG	1.29	1.56
26:BA:2574:G:C4	26:BA:2575:C:C5	1.90	1.56
41:BY:78:THR:CG2	41:BY:88:PRO:HA	1.26	1.56
52:B7:17:GLY:HA2	52:B7:44:VAL:CG2	1.09	1.56
2:AV:35:A:C2	4:AX:118:C:C2	1.93	1.55
3:AW:25:C:C6	3:AW:26:G:C5	1.92	1.55
26:BA:2579:C:C6	26:BA:2579:C:H5''	1.41	1.55
26:BA:2581:G:N1	26:BA:2610:C:C6	1.70	1.55
26:BA:2209:C:C2'	26:BA:2210:G:H3'	1.36	1.55
34:BO:35:ILE:CG2	34:BO:63:VAL:HA	1.34	1.55
43:BR:77:ARG:HH11	43:BR:77:ARG:CB	1.04	1.55
29:BF:47:GLY:HA2	29:BF:92:PRO:CG	1.35	1.55
26:BA:2316:C:C4'	30:BG:151:ILE:HD12	1.33	1.55
26:BA:911:A:C5	36:BQ:16:ARG:CG	1.79	1.55
27:BD:128:ALA:CB	27:BD:190:THR:CG2	1.80	1.55
30:BG:19:GLU:HB3	30:BG:135:VAL:CG2	1.16	1.55
35:BP:77:ALA:CA	35:BP:81:VAL:HB	1.37	1.55
36:BQ:140:TYR:CD1	36:BQ:147:VAL:HG11	1.33	1.55
44:BU:14:HIS:CE1	44:BU:36:PHE:HZ	1.25	1.55
2:AV:35:A:H2	4:AX:118:C:C2	1.19	1.54
35:BP:94:ARG:HB2	35:BP:120:LEU:CD2	1.17	1.54
25:BB:59:A:O3'	25:BB:60:C:P	1.15	1.54
42:BZ:71:MET:CG	42:BZ:78:PRO:HD3	1.09	1.54
26:BA:2296:U:C4	37:BS:16:ALA:HB2	1.40	1.54
29:BF:81:PRO:HA	29:BF:87:ARG:CG	1.36	1.54
44:BU:92:ARG:HA	44:BU:95:LEU:CD1	1.07	1.54
41:BY:101:LEU:CG	41:BY:112:LEU:HD11	1.33	1.54
3:AW:37:YYG:H243	10:AG:85:TYR:CE2	1.40	1.54
26:BA:2287:A:C2	26:BA:2289:G:C1'	1.90	1.54
26:BA:2785:C:H4'	28:BE:99:VAL:CA	1.35	1.54
41:BY:45:GLY:CA	41:BY:62:VAL:HG11	1.36	1.54
43:BR:44:LEU:CD1	43:BR:48:VAL:HG21	1.37	1.54
45:BV:19:VAL:CG1	45:BV:21:ARG:NH1	1.69	1.54
41:BY:101:LEU:HD22	41:BY:103:LEU:CD1	1.33	1.54
54:B9:25:VAL:CB	54:B9:34:GLN:CB	1.82	1.53
27:BD:103:ILE:CG1	27:BD:104:ILE:CD1	1.80	1.53
26:BA:2556:C:H2'	26:BA:2557:G:C5'	1.34	1.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:55:PHE:CZ	41:BY:89:ARG:NH1	1.71	1.53
54:B9:7:VAL:CG1	54:B9:34:GLN:CG	1.83	1.53
32:BI:95:SER:CB	32:BI:98:ILE:HD12	1.09	1.53
26:BA:2322:A:C5	26:BA:2323:G:C8	1.94	1.53
26:BA:2813:A:H2'	26:BA:2814:C:C6	1.41	1.53
33:BN:27:ALA:CA	33:BN:30:ALA:CB	1.82	1.53
34:BO:99:PHE:CE2	38:BT:24:LYS:HE2	1.01	1.53
41:BY:55:PHE:CZ	41:BY:89:ARG:CZ	1.88	1.53
52:B7:30:ILE:CD1	52:B7:33:ARG:NH1	1.72	1.53
26:BA:1782:C:C2	26:BA:2609:U:C6	1.97	1.53
41:BY:73:HIS:C	41:BY:91:LEU:HD11	1.23	1.52
34:BO:35:ILE:HG23	34:BO:63:VAL:CA	1.37	1.52
45:BV:50:ASP:CB	45:BV:53:LYS:HG3	1.37	1.52
30:BG:145:ASP:HB3	37:BS:15:GLU:C	1.25	1.52
26:BA:2331:G:C4'	48:B0:70:ILE:HG13	1.36	1.52
26:BA:2254:C:C2'	26:BA:2255:G:H5'	1.38	1.52
33:BN:10:VAL:HG11	33:BN:36:VAL:CG2	1.05	1.52
44:BU:99:ALA:HB2	44:BU:106:PHE:CE2	1.43	1.52
47:B3:23:LEU:HA	47:B3:28:LEU:CD1	1.37	1.52
30:BG:19:GLU:CB	30:BG:135:VAL:CG2	1.81	1.52
33:BN:52:GLN:HA	33:BN:55:GLU:CD	1.23	1.52
26:BA:2066:C:C2	26:BA:2445:G:N2	1.77	1.52
27:BD:131:LEU:HD13	27:BD:171:VAL:CG2	1.40	1.52
26:BA:2580:U:C5	26:BA:2581:G:C8	1.98	1.51
31:BH:86:LEU:CA	31:BH:148:ARG:NH2	1.68	1.51
34:BO:99:PHE:CE2	38:BT:24:LYS:CE	1.92	1.51
29:BF:47:GLY:CA	29:BF:92:PRO:HB2	1.29	1.51
34:BO:25:LEU:CD2	34:BO:40:VAL:HG23	1.09	1.51
40:BX:24:LEU:O	40:BX:26:PHE:CE1	1.63	1.51
26:BA:2225:A:H4'	26:BA:2226:C:C5'	1.34	1.51
26:BA:2712:U:C5	26:BA:712(A):A:C8	1.95	1.51
41:BY:63:ILE:CD1	41:BY:75:GLU:N	1.69	1.51
30:BG:102:GLY:CA	30:BG:134:LEU:HD12	1.39	1.51
26:BA:2584:U:C6	26:BA:2585:U:C6	1.95	1.51
27:BD:213:LYS:HG3	27:BD:215:LYS:CB	1.41	1.51
28:BE:205:THR:HG21	28:BE:259:HIS:CA	1.40	1.51
32:BI:95:SER:CB	32:BI:98:ILE:CD1	1.85	1.51
44:BU:49:ASP:CA	44:BU:52:ASN:ND2	1.71	1.51
26:BA:2403:C:N4	26:BA:2415:G:C6	1.79	1.51
26:BA:10:G:N2	26:BA:2629:A:C2	1.77	1.51
26:BA:2850:A:C2	43:BR:61:HIS:CE1	1.95	1.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:81:PRO:CB	29:BF:87:ARG:HB3	1.37	1.51
53:B8:26:LYS:CG	53:B8:45:GLY:H	1.24	1.50
34:BO:35:ILE:HD11	34:BO:65:THR:CG2	1.41	1.50
26:BA:2865:U:C4	26:BA:2866:U:H5	1.29	1.50
34:BO:63:VAL:CG1	34:BO:102:VAL:HG13	1.33	1.50
26:BA:2584:U:C6	26:BA:2585:U:C5	1.97	1.50
34:BO:99:PHE:CD2	38:BT:24:LYS:HE2	1.47	1.50
16:AM:91:ARG:HH12	16:AM:103:THR:CG2	1.23	1.50
26:BA:535:C:H4'	44:BU:53:LYS:CE	1.03	1.50
27:BD:135:PRO:CG	27:BD:138:THR:HG21	1.38	1.50
47:B3:40:THR:CG2	47:B3:43:ILE:CD1	1.85	1.50
45:BV:94:LYS:C	45:BV:95:ILE:CD1	1.76	1.50
39:BW:20:VAL:CG1	39:BW:47:VAL:HG21	1.40	1.50
29:BF:22:PHE:CZ	29:BF:115:LEU:HB3	1.45	1.49
44:BU:13:ARG:HH11	44:BU:13:ARG:CB	0.86	1.49
27:BD:73:ILE:CG2	27:BD:95:TYR:CD2	1.89	1.49
27:BD:146:LYS:CD	27:BD:147:PRO:HD2	1.39	1.49
26:BA:2225:A:C4'	26:BA:2226:C:H5'	1.41	1.49
26:BA:2450:A:H5''	26:BA:2497:A:N6	1.19	1.49
28:BE:39:GLN:NE2	28:BE:174:LEU:HD11	1.22	1.49
29:BF:91:PRO:HB2	29:BF:92:PRO:CD	1.32	1.49
44:BU:99:ALA:HB2	44:BU:106:PHE:CZ	1.46	1.49
26:BA:104:U:H3	41:BY:17:HIS:CE1	1.29	1.49
26:BA:2657:A:N7	26:BA:2658:C:C5	1.78	1.49
28:BE:74:GLU:HA	28:BE:293:TYR:CD2	1.46	1.49
30:BG:28:GLY:CA	30:BG:69:ILE:HD13	1.38	1.49
39:BW:32:ALA:CB	39:BW:35:ILE:HD12	1.39	1.49
29:BF:36:ARG:CA	29:BF:39:GLN:HE22	1.24	1.49
26:BA:2406:U:C4	35:BP:55:GLN:HB3	1.48	1.49
26:BA:2353:G:H1	26:BA:2364:C:N4	1.03	1.49
33:BN:25:GLN:HA	33:BN:28:GLU:CG	1.41	1.49
26:BA:2826:A:C6	26:BA:2827:C:C5	2.01	1.48
28:BE:44:TYR:HA	28:BE:309:PRO:CD	1.39	1.48
29:BF:225:PRO:C	29:BF:231:ARG:HG3	1.12	1.48
36:BQ:85:ILE:HG22	36:BQ:122:PHE:CB	1.39	1.48
29:BF:47:GLY:CA	29:BF:92:PRO:CG	1.88	1.48
36:BQ:49:VAL:CG2	36:BQ:121:ASP:H	1.26	1.48
33:BN:15:ARG:HB3	33:BN:43:ARG:CG	1.03	1.48
26:BA:2785:C:C1'	28:BE:100:TRP:CD1	1.90	1.48
41:BY:73:HIS:CA	41:BY:91:LEU:CD1	1.91	1.48
26:BA:2355:C:H4'	48:B0:21:LEU:CD1	1.05	1.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2785:C:H1'	28:BE:100:TRP:CD1	0.98	1.48
26:BA:1669:A:C8	34:BO:4:GLN:OE1	1.66	1.48
33:BN:27:ALA:CA	33:BN:30:ALA:HB3	1.39	1.48
47:B3:31:LEU:CD2	47:B3:32:GLN:H	1.25	1.48
33:BN:12:VAL:C	33:BN:38:VAL:HG13	1.30	1.48
26:BA:2653:U:C2	26:BA:2654:A:N6	1.82	1.48
26:BA:2597:G:H2'	26:BA:2598:A:C8	1.47	1.48
41:BY:78:THR:HG22	41:BY:88:PRO:CA	1.44	1.47
42:BZ:91:PRO:CD	42:BZ:127:PRO:HB3	1.41	1.47
26:BA:1062:G:N2	55:BK:92:PRO:HG3	1.25	1.47
44:BU:74:MET:CE	44:BU:78:THR:HG21	1.00	1.47
39:BW:20:VAL:HG11	39:BW:47:VAL:CG2	1.41	1.47
50:B5:12:SER:HB3	50:B5:15:LYS:NZ	1.22	1.47
7:AD:15:GLU:HG2	7:AD:63:LYS:CB	1.44	1.47
47:B3:20:LYS:C	47:B3:23:LEU:HG	1.31	1.47
53:B8:16:ILE:HG13	53:B8:22:VAL:CG2	1.43	1.47
26:BA:2416:C:OP1	35:BP:51:PHE:CE2	1.66	1.47
28:BE:210:THR:HA	28:BE:216:ARG:NH2	1.30	1.47
26:BA:29:U:H4'	44:BU:11:ARG:NH1	1.28	1.47
44:BU:14:HIS:CE1	44:BU:36:PHE:CZ	2.00	1.47
26:BA:2286:A:H5'	26:BA:2287:A:C4'	1.38	1.47
26:BA:2432:A:C2	26:BA:2433:A:C6	2.03	1.47
28:BE:39:GLN:CD	28:BE:174:LEU:HD11	1.33	1.47
28:BE:79:ARG:O	28:BE:187:HIS:CE1	1.67	1.47
1:AA:1211:U:O3'	1:AA:1212:U:P	1.09	1.47
26:BA:2410:G:H2'	26:BA:2411:A:C8	1.47	1.47
28:BE:79:ARG:HH12	28:BE:104:PHE:C	1.02	1.47
39:BW:19:LEU:HD22	50:B5:25:LEU:CG	1.40	1.47
53:B8:26:LYS:CD	53:B8:44:LYS:CA	1.89	1.47
32:BI:103:GLN:HE21	32:BI:110:LEU:N	1.11	1.46
55:BK:15:ALA:CB	55:BK:46:THR:HB	1.46	1.46
35:BP:144:ASP:C	35:BP:145:LEU:HD12	1.27	1.46
36:BQ:89:PRO:O	36:BQ:90:PHE:CD1	1.66	1.46
54:B9:25:VAL:HB	54:B9:34:GLN:CB	1.03	1.46
26:BA:2446:G:C2	26:BA:2501:C:H5	1.31	1.46
26:BA:2579:C:H6	26:BA:2579:C:C5'	1.21	1.46
41:BY:71:VAL:HG22	41:BY:93:THR:CG2	1.41	1.46
52:B7:30:ILE:CA	52:B7:33:ARG:HD2	1.45	1.46
26:BA:1364:G:H3'	49:B4:3:LYS:CD	1.38	1.46
27:BD:175:LEU:CG	27:BD:179:GLU:C	1.81	1.46
33:BN:45:VAL:O	33:BN:46:ILE:CG1	1.63	1.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2259:G:N2	26:BA:2282:G:C5	1.82	1.46
26:BA:2287:A:C2	26:BA:2289:G:H1'	1.45	1.46
27:BD:74:PRO:CG	27:BD:96:ALA:HB2	1.42	1.46
43:BR:38:VAL:CG1	43:BR:39:PRO:CD	1.84	1.46
42:BZ:68:ALA:O	42:BZ:69:VAL:CG2	1.64	1.46
46:B2:55:ARG:CA	46:B2:58:THR:OG1	1.63	1.46
45:BV:50:ASP:HB2	45:BV:53:LYS:CG	1.43	1.46
3:AW:37:YYG:C19	10:AG:84:ASN:HA	1.41	1.46
26:BA:2740:A:C2'	26:BA:2741:A:H8	1.25	1.46
28:BE:205:THR:CG2	28:BE:259:HIS:CA	1.94	1.46
2:AV:35:A:N1	4:AX:118:C:N3	1.62	1.46
49:B4:46:GLU:O	49:B4:47:GLU:CG	1.64	1.46
26:BA:2470:G:C2	26:BA:2471:C:C4	2.01	1.46
28:BE:72:VAL:C	28:BE:73:ILE:HD13	1.19	1.45
49:B4:7:PRO:HD2	49:B4:56:VAL:CG2	1.44	1.45
26:BA:2561:A:O2'	34:BO:40:VAL:CG1	1.64	1.45
26:BA:1151:G:H4'	44:BU:81:ASN:ND2	1.25	1.45
26:BA:2258:C:C5	26:BA:2426:A:O4'	1.68	1.45
26:BA:2638:G:N2	26:BA:2778:A:H62	1.08	1.45
26:BA:994:C:C2	44:BU:53:LYS:CD	1.94	1.45
34:BO:1:MET:C	34:BO:2:ILE:HD12	1.15	1.45
1:AA:1268:A:C4'	24:AU:20:LYS:HA	1.44	1.45
39:BW:82:LEU:CD2	39:BW:98:LYS:O	1.64	1.45
26:BA:2531:A:H2'	26:BA:2532:G:C5'	1.46	1.45
26:BA:1568:G:C5'	27:BD:60:GLN:HE21	1.25	1.45
3:AW:65:G:H2'	3:AW:66:A:C5'	1.44	1.45
27:BD:158:GLY:HA2	27:BD:194:VAL:CG1	1.46	1.45
27:BD:80:ILE:O	27:BD:80:ILE:CD1	1.65	1.45
35:BP:65:ASP:HB3	35:BP:109:LEU:CB	1.46	1.45
7:AD:15:GLU:CG	7:AD:63:LYS:HB3	1.45	1.44
26:BA:2626:C:H2'	26:BA:2627:G:C5'	1.45	1.44
31:BH:73:ASN:HB3	31:BH:137:LYS:NZ	1.24	1.44
55:BK:37:GLU:CB	55:BK:41:ARG:NH1	1.77	1.44
53:B8:26:LYS:HG3	53:B8:45:GLY:N	1.28	1.44
26:BA:2652:C:C6	26:BA:2653:U:C5	2.05	1.44
26:BA:2698:U:O2	26:BA:2699:C:C6	1.69	1.44
16:AM:92:HIS:CD2	16:AM:98:VAL:HG21	1.50	1.44
30:BG:49:PRO:HB3	30:BG:72:LYS:C	1.36	1.44
33:BN:19:MET:CE	33:BN:19:MET:HA	1.44	1.44
26:BA:2698:U:O2	26:BA:2699:C:C5	1.70	1.44
32:BI:7:LYS:CD	32:BI:12:LYS:NZ	1.78	1.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:41:ARG:O	41:BY:112:LEU:CB	1.65	1.44
26:BA:2570:G:H2'	26:BA:2571:C:C6	1.52	1.44
29:BF:52:ALA:HA	29:BF:55:ARG:NE	1.27	1.44
26:BA:2447:G:C4	26:BA:2500:U:H5	1.35	1.44
25:BB:50:G:OP2	37:BS:74:PRO:CG	1.65	1.44
35:BP:94:ARG:HD3	35:BP:120:LEU:CD2	1.40	1.44
28:BE:71:THR:CG2	28:BE:299:SER:CB	1.84	1.44
30:BG:19:GLU:CB	30:BG:135:VAL:HG21	1.39	1.44
52:B7:21:ARG:CZ	52:B7:43:THR:HG23	1.47	1.44
26:BA:2810:A:C8	26:BA:2811:G:O4'	1.66	1.44
31:BH:166:GLU:C	31:BH:167:LEU:HD23	1.07	1.44
33:BN:15:ARG:CD	33:BN:43:ARG:HD2	1.42	1.44
26:BA:911:A:C4	36:BQ:16:ARG:HG2	1.50	1.44
33:BN:95:ARG:N	33:BN:98:PHE:HE1	1.15	1.44
45:BV:91:THR:C	45:BV:92:ALA:CB	1.83	1.44
42:BZ:172:LEU:HD23	42:BZ:173:PRO:N	1.33	1.44
42:BZ:2:GLU:C	42:BZ:54:ILE:HG21	1.32	1.44
51:B6:28:ARG:NH1	51:B6:28:ARG:HB3	1.31	1.44
29:BF:3:ALA:HB3	29:BF:16:VAL:C	1.37	1.44
32:BI:68:LEU:HD21	32:BI:108:LEU:CD1	0.98	1.44
42:BZ:172:LEU:HD23	42:BZ:173:PRO:CD	1.46	1.44
27:BD:73:ILE:CG2	27:BD:95:TYR:HD2	1.20	1.43
26:BA:535:C:C4'	44:BU:53:LYS:CE	1.87	1.43
26:BA:2638:G:H21	26:BA:2778:A:N6	0.95	1.43
43:BR:44:LEU:HD13	43:BR:48:VAL:CG2	1.47	1.43
48:B0:65:GLY:C	48:B0:66:LYS:CD	1.86	1.43
52:B7:17:GLY:CA	52:B7:44:VAL:CG2	1.95	1.43
35:BP:94:ARG:CB	35:BP:120:LEU:CD2	1.94	1.43
26:BA:2579:C:C2'	26:BA:2580:U:H5'	1.48	1.43
35:BP:92:ASP:CB	35:BP:118:LEU:HD13	1.49	1.43
36:BQ:16:ARG:HH11	36:BQ:16:ARG:CB	1.27	1.43
47:B3:40:THR:CG2	47:B3:43:ILE:HD13	0.95	1.43
26:BA:2315:G:OP1	30:BG:20:LYS:CD	1.64	1.43
26:BA:994:C:H5	45:BV:72:ARG:NH1	1.15	1.43
55:BK:38:PHE:CD2	55:BK:67:THR:HG22	1.51	1.43
26:BA:825:C:H4'	26:BA:2428:G:N7	1.26	1.43
26:BA:2447:G:C5	26:BA:2500:U:C5	2.07	1.43
26:BA:2090:G:C6	26:BA:2230:G:O6	1.70	1.43
26:BA:2306:C:N4	26:BA:2311:A:H2	1.12	1.43
26:BA:2556:C:C2'	26:BA:2557:G:H5'	0.98	1.43
26:BA:495:G:C4'	39:BW:57:ASN:ND2	1.82	1.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:28:GLY:HA2	30:BG:69:ILE:CD1	1.46	1.43
45:BV:61:VAL:CG1	45:BV:95:ILE:HG22	1.49	1.43
26:BA:2679:A:N3	28:BE:300:VAL:CG1	1.78	1.43
44:BU:76:TYR:O	44:BU:80:ILE:CD1	1.65	1.43
26:BA:2810:A:C2'	26:BA:2811:G:H5'	0.96	1.42
27:BD:208:GLY:HA2	27:BD:210:LYS:NZ	1.27	1.42
45:BV:11:GLN:NE2	45:BV:22:VAL:CG2	1.74	1.42
40:BX:5:ILE:CG2	40:BX:6:LYS:H	1.17	1.42
26:BA:2735:G:C6	26:BA:2770:G:N2	1.87	1.42
26:BA:598:G:H21	29:BF:33:LYS:NZ	1.01	1.42
35:BP:94:ARG:CD	35:BP:120:LEU:HD23	1.46	1.42
44:BU:8:ILE:CA	44:BU:11:ARG:HD3	1.44	1.42
45:BV:60:VAL:O	45:BV:98:ILE:CB	1.67	1.42
31:BH:104:LEU:HB2	31:BH:151:ARG:NH1	1.25	1.42
51:B6:12:MET:SD	51:B6:54:LYS:HB3	1.60	1.42
29:BF:196:THR:HA	29:BF:236:THR:CG2	1.50	1.42
35:BP:76:LEU:C	35:BP:81:VAL:HG21	1.32	1.42
26:BA:2352:A:C2	48:B0:30:VAL:HG11	1.44	1.42
32:BI:7:LYS:CG	32:BI:12:LYS:HG2	1.48	1.42
26:BA:104:U:N3	41:BY:17:HIS:HE1	1.15	1.42
26:BA:2813:A:C2'	26:BA:2814:C:H6	1.30	1.42
36:BQ:87:LYS:O	36:BQ:88:PHE:CD2	1.72	1.42
37:BS:31:LYS:HB3	37:BS:32:PRO:CD	1.46	1.42
27:BD:149:ARG:CB	27:BD:152:GLN:HE22	1.32	1.42
48:B0:45:PHE:CD1	48:B0:78:PHE:HA	1.52	1.42
51:B6:45:LYS:O	51:B6:46:LYS:CE	1.66	1.42
26:BA:125:G:H5''	52:B7:19:ARG:NH1	1.33	1.42
26:BA:1:G:H1	26:BA:2902:C:N4	0.92	1.42
26:BA:2484:G:N2	26:BA:2485:G:C1'	1.83	1.42
26:BA:2579:C:H2'	26:BA:2580:U:C5'	1.48	1.42
26:BA:2698:U:C2	26:BA:2699:C:C5	2.06	1.42
27:BD:77:VAL:CB	27:BD:113:MET:HA	1.31	1.42
28:BE:205:THR:CG2	28:BE:259:HIS:N	1.83	1.42
45:BV:39:PHE:O	45:BV:40:VAL:CG2	1.64	1.42
45:BV:74:TYR:CD1	45:BV:86:HIS:O	1.70	1.42
26:BA:2355:C:C4'	48:B0:21:LEU:CD1	1.79	1.41
30:BG:21:VAL:HG13	30:BG:132:VAL:CG2	1.48	1.41
34:BO:63:VAL:HG13	34:BO:102:VAL:CG1	0.96	1.41
51:B6:46:LYS:NZ	51:B6:46:LYS:HA	1.19	1.41
26:BA:2093:G:H1'	26:BA:2198:A:N1	1.29	1.41
26:BA:2228:G:C8	26:BA:2229:C:C6	2.08	1.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AW:65:G:C2'	3:AW:66:A:H5'	1.36	1.41
28:BE:211:GLN:C	28:BE:216:ARG:HD2	1.37	1.41
44:BU:74:MET:CE	44:BU:78:THR:CG2	1.97	1.41
42:BZ:6:LYS:O	42:BZ:31:SER:CB	1.66	1.41
26:BA:2330:G:N2	26:BA:2331:G:H1'	1.34	1.41
29:BF:223:LEU:HD12	29:BF:224:ALA:N	1.08	1.41
45:BV:50:ASP:H	45:BV:53:LYS:CE	1.30	1.41
48:B0:43:THR:HG21	48:B0:75:GLY:CA	1.48	1.41
28:BE:74:GLU:HA	28:BE:293:TYR:CE2	1.53	1.41
30:BG:98:PHE:HA	30:BG:104:PHE:CD2	1.53	1.41
31:BH:104:LEU:CB	31:BH:151:ARG:NH1	1.84	1.41
26:BA:1021:A:C8	33:BN:49:ARG:NH1	1.89	1.41
26:BA:2021:C:OP2	50:B5:15:LYS:CE	1.66	1.41
26:BA:2437:U:H5'	26:BA:2598:A:C2	1.53	1.41
33:BN:94:GLY:C	33:BN:98:PHE:HE1	1.19	1.41
26:BA:2515:C:N4	26:BA:2569:G:H1	1.10	1.41
30:BG:28:GLY:C	30:BG:69:ILE:CD1	1.88	1.41
53:B8:26:LYS:HD2	53:B8:44:LYS:CA	0.93	1.40
26:BA:2652:C:C5	26:BA:2653:U:C4	2.09	1.40
27:BD:77:VAL:HB	27:BD:113:MET:CA	1.47	1.40
41:BY:55:PHE:CE2	41:BY:89:ARG:NH1	1.89	1.40
42:BZ:116:VAL:HG23	42:BZ:169:VAL:CG2	1.50	1.40
42:BZ:67:LYS:HA	42:BZ:67:LYS:NZ	1.29	1.40
26:BA:2354:G:N2	48:B0:32:LYS:HE3	1.35	1.40
26:BA:2652:C:C5	26:BA:2653:U:C5	2.09	1.40
35:BP:83:GLU:C	35:BP:92:ASP:N	1.75	1.40
36:BQ:46:VAL:CB	36:BQ:124:ALA:O	1.65	1.40
36:BQ:142:LYS:CG	36:BQ:143:VAL:H	1.28	1.40
3:AW:25:C:C5	3:AW:26:G:C5	1.79	1.40
26:BA:963:U:H1'	26:BA:2250:G:N2	1.33	1.40
36:BQ:140:TYR:HD1	36:BQ:147:VAL:CG1	1.28	1.40
2:AV:75:C:N3	26:BA:2252:G:N2	1.61	1.40
26:BA:2573:C:C5'	26:BA:2573:C:H6	1.32	1.40
26:BA:2684:U:H1'	34:BO:70:ARG:NH2	1.11	1.40
3:AW:65:G:C6	3:AW:66:A:C5	2.10	1.40
27:BD:131:LEU:HD11	27:BD:183:ILE:CG2	1.49	1.40
48:B0:67:VAL:CG1	48:B0:74:LYS:HG2	1.52	1.40
48:B0:45:PHE:CE1	48:B0:78:PHE:CD2	2.08	1.40
35:BP:94:ARG:CG	35:BP:120:LEU:HD23	1.50	1.40
49:B4:6:HIS:ND1	49:B4:56:VAL:HG23	1.34	1.40
52:B7:21:ARG:NH1	52:B7:43:THR:HG23	1.08	1.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2832:U:C6	26:BA:2832:U:C5'	2.04	1.40
28:BE:45:LYS:HE3	28:BE:303:PRO:CG	1.52	1.39
33:BN:135:ILE:O	33:BN:139:LEU:CD1	1.69	1.39
26:BA:2364:C:N1	48:B0:32:LYS:NZ	1.66	1.39
26:BA:2285:C:C4'	26:BA:2288:A:N6	1.82	1.39
42:BZ:172:LEU:CG	42:BZ:173:PRO:HD2	1.49	1.39
52:B7:30:ILE:HA	52:B7:33:ARG:CG	1.48	1.39
55:BK:18:ALA:O	55:BK:19:THR:CG2	1.69	1.39
26:BA:2786:U:C5'	28:BE:100:TRP:O	1.67	1.39
27:BD:175:LEU:HG	27:BD:179:GLU:C	1.03	1.39
27:BD:92:LEU:HD11	27:BD:102:TYR:CD1	1.56	1.39
28:BE:87:GLU:C	28:BE:93:GLN:N	1.75	1.39
55:BK:42:PHE:CZ	55:BK:58:ILE:HD11	1.58	1.39
26:BA:6:A:H5'	33:BN:4:ALA:N	1.38	1.39
3:AW:65:G:C5	3:AW:66:A:C8	2.10	1.39
26:BA:2848:G:N2	26:BA:2849:U:H3	1.14	1.39
26:BA:1952:A:C2	34:BO:22:ILE:HG23	1.57	1.39
42:BZ:163:ASP:CG	42:BZ:164:PRO:HD2	1.40	1.39
47:B3:31:LEU:CD2	47:B3:32:GLN:N	1.81	1.39
26:BA:2748:A:N7	26:BA:2749:A:C2	1.89	1.39
53:B8:55:TRP:CZ3	53:B8:59:LYS:HE3	1.54	1.39
26:BA:1545:A:H5'	26:BA:545(A):A:P	1.62	1.39
36:BQ:45:GLN:NE2	36:BQ:153:PRO:HB2	1.38	1.39
44:BU:59:ARG:C	44:BU:62:ILE:HG12	1.42	1.39
41:BY:33:GLU:OE1	41:BY:34:GLU:CG	1.70	1.39
27:BD:103:ILE:HG12	27:BD:104:ILE:CD1	0.93	1.39
31:BH:10:ILE:CG2	31:BH:14:VAL:CG1	1.98	1.39
26:BA:2485:G:C2'	26:BA:2486:G:H5'	1.50	1.39
29:BF:47:GLY:HA2	29:BF:92:PRO:CB	0.91	1.39
33:BN:94:GLY:C	33:BN:98:PHE:CE1	1.96	1.39
28:BE:79:ARG:NH1	28:BE:104:PHE:C	1.75	1.39
55:BK:93:LYS:HD3	55:BK:96:ILE:CD1	1.53	1.39
44:BU:92:ARG:C	44:BU:95:LEU:HG	1.42	1.39
51:B6:46:LYS:CA	51:B6:46:LYS:HZ3	1.34	1.38
26:BA:2845:G:O2'	26:BA:2846:G:C5'	1.69	1.38
39:BW:30:GLU:CA	39:BW:33:ARG:HD3	1.51	1.38
26:BA:2799:A:H3'	26:BA:2801:A:P	1.63	1.38
31:BH:86:LEU:H	31:BH:131:ILE:CG2	1.35	1.38
37:BS:12:ARG:NH1	37:BS:20:TYR:CE2	1.73	1.38
37:BS:12:ARG:HD2	37:BS:20:TYR:CZ	1.58	1.38
41:BY:18:GLU:C	41:BY:21:LYS:HZ2	1.23	1.38

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2893:G:O2'	26:BA:2894:G:C1'	1.69	1.38
30:BG:28:GLY:CA	30:BG:69:ILE:CD1	1.96	1.38
36:BQ:54:VAL:O	36:BQ:56:ILE:CD1	1.71	1.38
29:BF:47:GLY:C	29:BF:92:PRO:CG	1.92	1.38
34:BO:63:VAL:CG1	34:BO:102:VAL:CG1	1.91	1.38
35:BP:112:GLY:C	35:BP:113:GLN:NE2	1.76	1.38
42:BZ:71:MET:HG2	42:BZ:78:PRO:CD	0.92	1.38
52:B7:21:ARG:O	52:B7:24:THR:CG2	1.72	1.38
26:BA:2228:G:N7	26:BA:2229:C:C6	1.90	1.38
26:BA:2776:A:H1'	26:BA:2778:A:C8	1.58	1.38
28:BE:76:PRO:HB2	28:BE:77:PRO:CD	1.49	1.38
39:BW:90:ARG:NH1	39:BW:90:ARG:HB2	1.14	1.38
29:BF:52:ALA:CB	29:BF:55:ARG:NH2	1.85	1.38
29:BF:81:PRO:CA	29:BF:87:ARG:HG2	1.49	1.38
1:AA:1319:A:H4'	22:AS:70:LYS:NZ	1.31	1.38
51:B6:48:VAL:O	51:B6:50:PHE:CE1	1.76	1.38
52:B7:30:ILE:O	52:B7:33:ARG:CB	1.71	1.38
32:BI:102:LEU:HD12	32:BI:103:GLN:N	1.07	1.38
55:BK:117:ASN:ND2	55:BK:127:ILE:HD11	1.34	1.38
53:B8:16:ILE:CG1	53:B8:22:VAL:HG22	1.51	1.38
27:BD:208:GLY:CA	27:BD:210:LYS:NZ	1.83	1.38
26:BA:29:U:C4'	44:BU:11:ARG:HH12	1.36	1.38
26:BA:125:G:C5'	52:B7:19:ARG:HH11	1.35	1.38
53:B8:26:LYS:HD2	53:B8:44:LYS:N	1.37	1.38
26:BA:1546:C:O3'	26:BA:1547:C:P	0.99	1.38
26:BA:2287:A:N6	26:BA:2344:U:C5	1.92	1.38
26:BA:2583:G:C2'	26:BA:2584:U:O2	1.69	1.38
31:BH:143:LEU:HD23	31:BH:144:ALA:N	1.32	1.38
35:BP:62:ALA:O	35:BP:107:LYS:CD	1.69	1.38
35:BP:62:ALA:N	35:BP:107:LYS:CE	1.84	1.38
41:BY:101:LEU:HD11	41:BY:112:LEU:CG	1.53	1.38
54:B9:14:CYS:HA	54:B9:27:CYS:CB	1.52	1.37
26:BA:2482:G:H2'	26:BA:2483:C:C5'	1.51	1.37
28:BE:205:THR:HG21	28:BE:259:HIS:N	1.09	1.37
53:B8:60:LEU:HD11	53:B8:64:ARG:CB	1.51	1.37
32:BI:103:GLN:NE2	32:BI:110:LEU:H	1.21	1.37
47:B3:8:LEU:CD2	47:B3:31:LEU:CA	2.01	1.37
27:BD:128:ALA:HB2	27:BD:190:THR:CA	1.54	1.37
55:BK:66:PHE:O	55:BK:67:THR:CG2	1.73	1.37
26:BA:2768:C:C2'	26:BA:2769:C:H5'	1.54	1.37
26:BA:1818:U:C5'	27:BD:155:ARG:HG3	1.53	1.37

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AM:91:ARG:NH1	16:AM:103:THR:HG21	1.37	1.37
26:BA:2406:U:O4	35:BP:55:GLN:CB	1.71	1.37
42:BZ:172:LEU:CD2	42:BZ:173:PRO:HD2	1.53	1.37
26:BA:2580:U:C5	26:BA:2581:G:N7	1.92	1.37
26:BA:2544:G:H5"	26:BA:2645:G:N7	1.37	1.37
3:AW:25:C:C3'	3:AW:26:G:H8	1.25	1.37
48:B0:46:LYS:HG3	48:B0:58:THR:CG2	1.51	1.37
26:BA:2251:G:OP1	36:BQ:102:ARG:NE	1.57	1.37
45:BV:42:GLY:N	45:BV:54:TYR:CZ	1.93	1.37
39:BW:19:LEU:HD13	50:B5:25:LEU:CD2	1.55	1.37
42:BZ:163:ASP:CG	42:BZ:164:PRO:CD	1.92	1.37
26:BA:2307:G:H1'	26:BA:2311:A:N6	1.40	1.36
26:BA:2616:C:C2'	26:BA:2617:C:H5'	1.56	1.36
37:BS:27:LEU:CB	37:BS:33:ARG:NH2	1.87	1.36
44:BU:49:ASP:HA	44:BU:52:ASN:ND2	1.06	1.36
26:BA:2567:G:N3	26:BA:2568:C:C5	1.92	1.36
26:BA:2023:G:C4'	26:BA:2618:G:OP1	1.71	1.36
44:BU:61:TRP:O	44:BU:65:ILE:CG1	1.74	1.36
45:BV:62:GLU:O	45:BV:95:ILE:CG2	1.71	1.36
49:B4:16:TYR:O	49:B4:17:GLN:CG	1.73	1.36
26:BA:2267:A:H5"	26:BA:2268:A:OP1	1.20	1.36
26:BA:2464:C:N4	26:BA:2487:G:C6	1.94	1.36
26:BA:1568:G:C4'	27:BD:60:GLN:HE21	1.36	1.36
37:BS:46:GLN:O	37:BS:47:LEU:CD2	1.73	1.36
44:BU:44:THR:CG2	45:BV:77:GLY:O	1.71	1.36
26:BA:2528:U:P	54:B9:30:VAL:HG11	1.64	1.36
35:BP:66:VAL:HB	35:BP:67:ARG:CZ	1.16	1.36
41:BY:28:SER:HB3	41:BY:99:THR:CB	1.52	1.36
48:B0:36:ILE:C	48:B0:68:VAL:HG13	1.45	1.36
28:BE:211:GLN:O	28:BE:216:ARG:CD	1.72	1.36
28:BE:45:LYS:HZ1	28:BE:303:PRO:N	0.90	1.36
29:BF:217:GLU:O	29:BF:218:VAL:CG2	1.73	1.36
44:BU:92:ARG:H	45:BV:10:LYS:NZ	1.16	1.36
51:B6:21:TYR:CZ	51:B6:43:VAL:HG23	1.60	1.36
26:BA:495:G:C4'	39:BW:57:ASN:HD21	1.36	1.36
31:BH:101:LYS:CE	31:BH:115:GLU:HB2	1.56	1.36
31:BH:120:LEU:C	31:BH:121:GLU:OE1	1.63	1.36
26:BA:2470:G:N2	26:BA:2471:C:N3	1.65	1.36
26:BA:2578:G:N7	28:BE:237:ASN:ND2	1.74	1.36
33:BN:27:ALA:HA	33:BN:30:ALA:CB	0.89	1.36
45:BV:42:GLY:HA3	45:BV:54:TYR:CE2	1.60	1.36

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2336:A:O2'	26:BA:2337:G:C5'	1.74	1.35
28:BE:233:ARG:O	28:BE:234:ARG:CG	1.71	1.35
55:BK:37:GLU:CA	55:BK:41:ARG:HH11	1.36	1.35
33:BN:106:GLY:O	33:BN:107:ASN:ND2	1.58	1.35
1:AA:1337:G:O3'	1:AA:1338:G:P	0.96	1.35
48:B0:65:GLY:O	48:B0:66:LYS:HD2	1.20	1.35
29:BF:243:VAL:HA	29:BF:246:ARG:CD	1.54	1.35
29:BF:34:ALA:HB2	29:BF:110:ALA:CB	1.55	1.35
34:BO:25:LEU:CD2	34:BO:40:VAL:CG2	2.04	1.35
45:BV:61:VAL:HG12	45:BV:95:ILE:CG2	1.52	1.35
3:AW:1:G:N2	3:AW:2:C:H41	1.22	1.35
48:B0:37:LEU:N	48:B0:68:VAL:HG13	1.39	1.35
52:B7:34:ARG:NH1	52:B7:42:LEU:HA	1.35	1.35
26:BA:2195:C:C5	26:BA:2195:C:OP2	1.77	1.35
26:BA:2446:G:C2	26:BA:2501:C:C5	2.12	1.35
26:BA:2574:G:C5	26:BA:2575:C:C5	1.91	1.35
26:BA:965:C:O2'	26:BA:2272:U:C6	1.77	1.35
30:BG:49:PRO:CB	30:BG:72:LYS:O	1.72	1.35
35:BP:117:GLU:OE2	35:BP:136:ALA:C	1.64	1.35
26:BA:2737:G:H1	26:BA:2767:C:N4	1.22	1.35
27:BD:143:ILE:O	27:BD:152:GLN:N	1.57	1.35
27:BD:156:ALA:O	27:BD:196:ASN:ND2	1.58	1.35
28:BE:70:VAL:HG11	28:BE:296:VAL:N	1.41	1.35
29:BF:59:GLU:O	29:BF:61:PHE:CD2	1.79	1.35
26:BA:2018:G:N2	44:BU:34:ASN:ND2	1.69	1.35
2:AV:31:A:OP1	12:AI:127:LYS:HE3	1.27	1.35
26:BA:2785:C:H2'	26:BA:2786:U:C6	1.60	1.35
26:BA:2820:A:H5''	26:BA:2820:A:N3	1.38	1.35
5:AB:112:VAL:C	5:AB:113:HIS:N	1.79	1.35
26:BA:1140:C:C5	33:BN:49:ARG:HG3	1.61	1.35
26:BA:2306:C:N4	26:BA:2311:A:C2	1.88	1.35
29:BF:215:ALA:HB1	29:BF:238:SER:O	1.27	1.35
26:BA:2745:C:H1'	31:BH:142:GLU:CG	1.55	1.35
31:BH:148:ARG:NH1	31:BH:163:TYR:HA	1.42	1.35
33:BN:13:ASP:N	33:BN:38:VAL:CG1	1.87	1.35
43:BR:20:LEU:CD1	43:BR:21:TYR:CD2	2.10	1.35
48:B0:46:LYS:CG	48:B0:58:THR:HG23	1.55	1.35
26:BA:1826:G:P	27:BD:227:VAL:CG2	2.14	1.35
38:BT:28:THR:O	38:BT:29:THR:HG23	1.17	1.35
45:BV:40:VAL:HG12	45:BV:51:ALA:O	1.24	1.35
26:BA:2564:A:H2'	26:BA:2565:A:C8	1.60	1.35

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:974:G:N7	45:BV:80:TYR:CE1	1.94	1.35
29:BF:238:SER:O	29:BF:241:ALA:CB	1.72	1.35
29:BF:245:GLU:N	29:BF:245:GLU:OE2	1.60	1.35
33:BN:65:ASN:CB	33:BN:69:TYR:HD1	1.40	1.35
46:B2:52:ALA:O	46:B2:56:ILE:CG1	1.71	1.35
26:BA:1996:C:OP2	34:BO:31:ARG:NH2	1.57	1.35
26:BA:2636:U:C4'	28:BE:84:ARG:HH22	1.40	1.35
31:BH:15:THR:CG2	31:BH:26:LYS:HB2	1.54	1.35
28:BE:94:ARG:HB3	28:BE:95:PRO:CD	1.54	1.35
44:BU:88:ILE:HG21	45:BV:55:THR:OG1	1.26	1.35
44:BU:98:ILE:O	44:BU:100:ALA:N	1.56	1.35
27:BD:183:ILE:CG2	27:BD:184:LEU:H	1.34	1.34
36:BQ:67:ALA:CB	36:BQ:70:ARG:NH1	1.88	1.34
41:BY:73:HIS:HA	41:BY:91:LEU:CD1	1.52	1.34
53:B8:16:ILE:CG2	53:B8:21:LYS:O	1.75	1.34
53:B8:8:LYS:O	53:B8:10:ALA:N	1.59	1.34
26:BA:2286:A:H5'	26:BA:2287:A:C5'	1.57	1.34
31:BH:97:LYS:O	31:BH:98:GLN:HG3	1.21	1.34
47:B3:20:LYS:O	47:B3:23:LEU:CG	1.75	1.34
26:BA:825:C:H4'	26:BA:2428:G:C5	1.63	1.34
26:BA:2717:G:N3	26:BA:2718:G:C8	1.95	1.34
29:BF:62:GLY:HA3	29:BF:65:ARG:NH2	1.38	1.34
41:BY:43:ASN:ND2	41:BY:101:LEU:CD2	1.90	1.34
51:B6:32:GLN:HB3	51:B6:35:LEU:CD1	1.55	1.34
54:B9:7:VAL:HG12	54:B9:34:GLN:CD	1.47	1.34
26:BA:1080:C:O2'	55:BK:126:LYS:HB2	1.18	1.34
26:BA:2826:A:N6	26:BA:2827:C:C5	1.91	1.34
27:BD:118:GLY:O	27:BD:129:LEU:HD11	1.20	1.34
36:BQ:67:ALA:O	36:BQ:71:PHE:CD1	1.78	1.34
39:BW:76:VAL:HG23	39:BW:102:HIS:O	1.19	1.34
1:AA:1320:C:C1'	22:AS:73:GLU:HG2	1.57	1.34
31:BH:104:LEU:HB2	31:BH:151:ARG:CZ	1.56	1.34
26:BA:2485:G:C5'	36:BQ:144:THR:HG22	1.58	1.34
37:BS:27:LEU:HB2	37:BS:33:ARG:NH2	1.05	1.34
2:AV:31:A:O5'	12:AI:127:LYS:CE	1.74	1.34
3:AW:65:G:C2'	3:AW:66:A:C5'	2.01	1.34
26:BA:1364:G:H2'	49:B4:3:LYS:NZ	1.42	1.34
26:BA:1:G:N1	26:BA:2902:C:N4	1.71	1.34
26:BA:2583:G:H2'	26:BA:2584:U:C2	1.61	1.34
27:BD:175:LEU:HD21	27:BD:180:VAL:CA	1.55	1.34
28:BE:44:TYR:CE1	28:BE:308:VAL:HA	1.62	1.34

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2718:G:OP1	38:BT:38:ASN:ND2	1.57	1.34
26:BA:2051:A:O2'	28:BE:238:LEU:CG	1.74	1.34
30:BG:21:VAL:CG1	30:BG:132:VAL:HG23	1.58	1.34
42:BZ:51:LEU:HD23	42:BZ:52:PHE:N	1.38	1.34
26:BA:2020:A:N7	50:B5:9:LYS:CE	1.87	1.34
33:BN:134:GLU:O	33:BN:138:THR:CG2	1.74	1.34
33:BN:83:ILE:CG1	33:BN:84:ARG:H	1.17	1.34
53:B8:58:MET:SD	53:B8:61:MET:HG3	1.67	1.34
26:BA:2785:C:C1'	28:BE:100:TRP:HD1	1.30	1.34
41:BY:30:ASP:OD2	41:BY:31:LEU:HD21	1.19	1.34
26:BA:2592:G:N7	26:BA:2593:U:C5	1.95	1.34
26:BA:2688:U:O2	26:BA:2719:G:C2	1.80	1.34
26:BA:1665:A:O3'	34:BO:66:LYS:CE	1.74	1.34
26:BA:2352:A:C2	48:B0:30:VAL:HG12	1.48	1.33
52:B7:30:ILE:HD13	52:B7:33:ARG:CD	1.58	1.33
26:BA:973:A:N1	45:BV:81:ARG:CD	1.76	1.33
29:BF:5:ILE:HB	29:BF:14:GLY:O	1.23	1.33
31:BH:166:GLU:C	31:BH:167:LEU:CD2	1.95	1.33
35:BP:52:LYS:HD3	35:BP:53:ARG:NH1	1.42	1.33
31:BH:166:GLU:O	31:BH:167:LEU:CD2	1.76	1.33
46:B2:7:GLU:CD	46:B2:8:ILE:HG13	1.47	1.33
26:BA:1059:G:O2'	55:BK:112:LYS:NZ	1.58	1.33
26:BA:2353:G:N2	26:BA:2364:C:N3	1.71	1.33
26:BA:2043:C:C5	26:BA:2777:G:H1'	1.61	1.33
27:BD:128:ALA:CB	27:BD:190:THR:CB	2.03	1.33
44:BU:92:ARG:O	44:BU:95:LEU:CG	1.76	1.33
41:BY:73:HIS:HA	41:BY:91:LEU:CG	1.57	1.33
17:AN:24:CYS:CB	17:AN:40:CYS:H	1.40	1.33
26:BA:2768:C:C4	26:BA:2769:C:H5	1.45	1.33
29:BF:36:ARG:HA	29:BF:39:GLN:NE2	1.40	1.33
32:BI:48:GLU:O	32:BI:52:GLN:HG3	1.25	1.33
1:AA:1221:G:H5'	22:AS:36:ARG:NH1	1.42	1.33
29:BF:81:PRO:HB3	29:BF:87:ARG:CB	1.56	1.33
34:BO:35:ILE:HG23	34:BO:63:VAL:N	1.37	1.33
34:BO:77:ILE:HD11	34:BO:79:PHE:CE2	1.62	1.33
35:BP:114:VAL:O	35:BP:115:ARG:CG	1.75	1.33
37:BS:35:VAL:HA	37:BS:103:ASP:CB	1.42	1.33
26:BA:2320:A:N6	37:BS:9:PRO:HG3	1.40	1.33
41:BY:45:GLY:CA	41:BY:62:VAL:CG1	1.98	1.33
42:BZ:91:PRO:CG	42:BZ:127:PRO:HB3	1.58	1.33
26:BA:1665:A:C4'	34:BO:66:LYS:NZ	1.87	1.33

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2689:U:H5'	26:BA:2690:C:C5'	1.57	1.33
26:BA:2785:C:H2'	26:BA:2786:U:C5	1.64	1.33
29:BF:48:SER:N	29:BF:92:PRO:CG	1.92	1.33
52:B7:34:ARG:CD	52:B7:42:LEU:CD2	2.06	1.33
26:BA:2556:C:C2'	26:BA:2557:G:C5'	1.94	1.33
49:B4:21:VAL:CG1	49:B4:22:MET:H	1.38	1.33
28:BE:107:GLU:HB3	28:BE:110:ARG:NE	1.35	1.33
3:AW:25:C:H3'	3:AW:26:G:C8	1.64	1.32
26:BA:1338:G:O2'	40:BX:13:LYS:NZ	1.61	1.32
26:BA:2552:U:H5''	26:BA:2553:G:OP2	1.29	1.32
27:BD:135:PRO:HG2	27:BD:138:THR:CG2	1.55	1.32
35:BP:114:VAL:HG23	35:BP:132:LYS:CB	1.57	1.32
42:BZ:126:GLY:O	42:BZ:129:ARG:HB2	1.18	1.32
29:BF:59:GLU:HB2	29:BF:61:PHE:CE2	1.65	1.32
45:BV:5:ILE:O	45:BV:6:GLN:HG2	1.19	1.32
3:AW:76:A:N7	26:BA:2421:G:C2'	1.91	1.32
52:B7:21:ARG:HB3	52:B7:31:LEU:CD1	1.59	1.32
26:BA:1614:A:N6	39:BW:88:ARG:CB	1.92	1.32
26:BA:2450:A:OP1	26:BA:2497:A:N7	1.62	1.32
41:BY:101:LEU:O	41:BY:103:LEU:HG	1.24	1.32
42:BZ:37:LYS:O	42:BZ:41:ARG:NH1	1.59	1.32
48:B0:61:ALA:O	48:B0:62:LEU:CD1	1.76	1.32
26:BA:2225:A:C5'	26:BA:2226:C:H5'	1.59	1.32
26:BA:2320:A:C2	26:BA:2333:A:C2	2.17	1.32
28:BE:180:ILE:CA	28:BE:183:ASP:OD2	1.74	1.32
29:BF:52:ALA:HB2	29:BF:55:ARG:NH2	1.00	1.32
30:BG:28:GLY:C	30:BG:69:ILE:HD13	1.42	1.32
33:BN:95:ARG:N	33:BN:98:PHE:CE1	1.96	1.32
35:BP:67:ARG:NH1	35:BP:111:ALA:O	1.62	1.32
44:BU:27:SER:O	44:BU:29:SER:N	1.57	1.32
1:AA:1341:U:C5'	2:AV:32:C:OP1	1.75	1.32
33:BN:106:GLY:C	33:BN:107:ASN:ND2	1.82	1.32
34:BO:7:ARG:CD	34:BO:44:LYS:HE3	1.58	1.32
26:BA:2018:G:H21	44:BU:34:ASN:ND2	0.83	1.32
26:BA:2258:C:N4	26:BA:2426:A:C1'	1.91	1.32
26:BA:2679:A:C2	28:BE:300:VAL:CG2	2.12	1.32
26:BA:2698:U:C2	26:BA:2699:C:H5	1.42	1.32
26:BA:2810:A:H2'	26:BA:2811:G:C5'	0.85	1.32
26:BA:531:C:O2	44:BU:28:ARG:NH2	1.58	1.32
26:BA:535:C:O2'	44:BU:53:LYS:CG	1.75	1.32
41:BY:43:ASN:HD21	41:BY:101:LEU:CD2	1.40	1.32

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1665:A:H4'	34:BO:66:LYS:NZ	1.39	1.32
26:BA:2355:C:O3'	48:B0:21:LEU:HD11	1.16	1.32
26:BA:684:G:OP1	52:B7:16:HIS:NE2	1.59	1.32
43:BR:78:LYS:O	43:BR:82:GLU:HB2	1.18	1.32
44:BU:7:GLY:C	44:BU:8:ILE:HD12	1.50	1.32
2:AV:31:A:C5'	12:AI:127:LYS:CD	2.06	1.32
26:BA:2364:C:C1'	48:B0:32:LYS:NZ	1.92	1.32
47:B3:16:PRO:HB2	47:B3:19:GLN:CD	1.45	1.32
26:BA:2617:C:H2'	26:BA:2618:G:C5'	1.58	1.32
36:BQ:69:ASN:HD22	36:BQ:70:ARG:N	1.24	1.32
26:BA:126:A:C6	52:B7:18:PHE:CE2	2.17	1.32
54:B9:7:VAL:O	54:B9:8:LYS:CE	1.76	1.32
26:BA:2315:G:H5'	30:BG:133:ASN:ND2	1.44	1.32
26:BA:911:A:C6	36:BQ:16:ARG:HG2	1.65	1.32
26:BA:997:G:OP1	44:BU:93:LYS:HE2	1.28	1.32
32:BI:77:VAL:CG2	32:BI:141:LEU:HD11	1.60	1.32
36:BQ:16:ARG:NH1	36:BQ:16:ARG:HB3	0.99	1.32
36:BQ:85:ILE:CG2	36:BQ:122:PHE:CG	2.10	1.32
26:BA:2850:A:H2	43:BR:61:HIS:CE1	1.33	1.32
41:BY:101:LEU:CD2	41:BY:103:LEU:CG	2.07	1.32
26:BA:2056:G:N2	50:B5:4:HIS:O	1.63	1.32
26:BA:2581:G:N1	26:BA:2610:C:H6	0.82	1.32
26:BA:2678:C:C2	26:BA:2679:A:C8	2.17	1.32
26:BA:2749:A:O4'	31:BH:62:ALA:CB	1.76	1.32
26:BA:2865:U:C4	26:BA:2866:U:C5	2.18	1.32
26:BA:2712:U:C2'	26:BA:712(A):A:C5'	2.08	1.32
36:BQ:140:TYR:CD1	36:BQ:147:VAL:CG1	2.02	1.32
36:BQ:91:HIS:O	36:BQ:111:THR:HG23	1.16	1.32
45:BV:30:GLY:O	45:BV:33:VAL:HG23	1.22	1.32
45:BV:62:GLU:C	45:BV:95:ILE:HG23	1.48	1.32
40:BX:4:VAL:HG22	46:B2:24:LYS:NZ	1.40	1.32
47:B3:19:GLN:O	47:B3:23:LEU:HD21	1.27	1.31
26:BA:2314:C:C5'	30:BG:22:VAL:HG11	1.60	1.31
26:BA:245:G:H5'	35:BP:55:GLN:O	1.29	1.31
29:BF:223:LEU:CD1	29:BF:224:ALA:N	1.93	1.31
32:BI:95:SER:CA	32:BI:98:ILE:HG13	1.59	1.31
34:BO:66:LYS:NZ	34:BO:67:ARG:HD3	1.42	1.31
44:BU:107:LYS:O	44:BU:110:VAL:HB	1.29	1.31
26:BA:2842:G:C2'	26:BA:2843:G:H5'	1.58	1.31
27:BD:65:ASP:OD1	27:BD:66:PHE:N	1.59	1.31
29:BF:168:ARG:NH1	29:BF:209:GLY:O	1.62	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1364:G:C2'	49:B4:3:LYS:HZ2	1.42	1.31
26:BA:2709:G:C2'	26:BA:2710:C:H5'	1.57	1.31
35:BP:76:LEU:C	35:BP:81:VAL:CG2	1.96	1.31
39:BW:85:VAL:O	39:BW:86:LEU:HD23	1.20	1.31
53:B8:5:LYS:O	53:B8:7:HIS:N	1.61	1.31
26:BA:2574:G:H5''	26:BA:2575:C:OP2	1.19	1.31
27:BD:118:GLY:O	27:BD:129:LEU:CD1	1.78	1.31
26:BA:1799:G:N2	27:BD:153:LEU:HD21	1.43	1.31
29:BF:47:GLY:CA	29:BF:92:PRO:HG2	1.54	1.31
29:BF:84:VAL:C	29:BF:85:LYS:HD2	1.51	1.31
2:AV:31:A:O5'	12:AI:127:LYS:CD	1.77	1.31
50:B5:44:HIS:CA	50:B5:52:TYR:OH	1.78	1.31
26:BA:2647:U:O2'	26:BA:2648:C:H5'	1.20	1.31
28:BE:180:ILE:HG22	28:BE:186:GLU:O	1.14	1.31
31:BH:137:LYS:HD2	31:BH:138:GLN:N	1.42	1.31
55:BK:79:LEU:CD2	55:BK:137:ILE:HD13	1.59	1.31
2:AV:31:A:P	12:AI:127:LYS:CE	2.17	1.31
26:BA:2397:G:C6	26:BA:2420:C:O2	1.81	1.31
26:BA:2679:A:H2	28:BE:300:VAL:CG2	1.39	1.31
26:BA:2717:G:C2	26:BA:2718:G:N7	1.98	1.31
31:BH:73:ASN:CB	31:BH:137:LYS:HZ1	1.41	1.31
26:BA:1952:A:H2	34:BO:22:ILE:CG2	1.43	1.31
26:BA:2470:G:N2	26:BA:2471:C:C4	1.90	1.31
29:BF:48:SER:N	29:BF:92:PRO:HG2	1.46	1.31
55:BK:37:GLU:CA	55:BK:41:ARG:NH1	1.90	1.31
53:B8:6:THR:O	53:B8:8:LYS:N	1.63	1.31
26:BA:1568:G:O5'	27:BD:60:GLN:CG	1.75	1.31
30:BG:81:GLU:O	30:BG:85:GLN:HG2	1.20	1.31
45:BV:65:ARG:O	45:BV:93:ILE:HG23	1.20	1.31
42:BZ:34:LEU:HD13	42:BZ:39:PHE:CZ	1.65	1.31
42:BZ:95:SER:OG	42:BZ:122:ILE:HG12	1.13	1.31
52:B7:30:ILE:HD11	52:B7:33:ARG:NH1	0.99	1.31
26:BA:2584:U:C5	26:BA:2585:U:C6	2.17	1.31
26:BA:856:C:H5'	48:B0:25:LYS:NZ	1.42	1.31
29:BF:163:HIS:O	29:BF:166:ILE:CB	1.78	1.31
29:BF:168:ARG:O	29:BF:168:ARG:HD2	1.20	1.31
26:BA:85:G:P	41:BY:65:VAL:HG11	1.71	1.31
26:BA:856:C:C5'	48:B0:25:LYS:HZ1	1.40	1.31
26:BA:2485:G:O2'	26:BA:2486:G:C5'	1.77	1.31
26:BA:2768:C:H2'	26:BA:2769:C:C5'	1.61	1.31
27:BD:71:ASP:OD1	27:BD:118:GLY:HA2	1.19	1.31

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:4:ILE:HD11	45:BV:13:ARG:CD	1.61	1.31
39:BW:36:LEU:HD11	39:BW:47:VAL:CG1	1.59	1.31
1:AA:37:U:N3	1:AA:397:A:N1	1.76	1.30
26:BA:856:C:O2'	48:B0:24:LYS:CB	1.79	1.30
26:BA:2488:A:H2'	26:BA:2489:G:C5'	1.59	1.30
26:BA:2555:U:C2'	26:BA:2556:C:H5'	1.60	1.30
34:BO:110:ASP:O	34:BO:111:PHE:CG	1.83	1.30
38:BT:4:ARG:O	38:BT:5:GLU:CG	1.78	1.30
26:BA:2212:A:C2'	26:BA:2213:U:C5	2.12	1.30
28:BE:45:LYS:NZ	28:BE:303:PRO:O	1.62	1.30
26:BA:1082:U:O4'	55:BK:118:ALA:HB2	1.15	1.30
44:BU:94:VAL:C	44:BU:98:ILE:CD1	1.99	1.30
45:BV:42:GLY:CA	45:BV:54:TYR:CZ	2.12	1.30
26:BA:2262:U:O2'	26:BA:2263:C:H5''	1.24	1.30
26:BA:2313:C:OP1	30:BG:51:ARG:CD	1.80	1.30
26:BA:2051:A:C8	26:BA:2614:A:N6	1.95	1.30
26:BA:2657:A:C8	26:BA:2658:C:C5	2.17	1.30
31:BH:42:ILE:O	31:BH:52:THR:HG21	1.21	1.30
35:BP:66:VAL:CB	35:BP:67:ARG:CZ	2.01	1.30
37:BS:34:LEU:CD2	37:BS:102:LEU:HA	1.59	1.30
26:BA:2468:G:O6	26:BA:2481:G:C6	1.84	1.30
1:AA:247:G:OP2	20:AQ:99:SER:HB2	1.23	1.30
27:BD:149:ARG:HB2	27:BD:152:GLN:NE2	0.99	1.30
44:BU:65:ILE:HG22	44:BU:76:TYR:CE2	1.65	1.30
26:BA:2249:U:H3	26:BA:2253:G:P	1.53	1.30
26:BA:2517:C:O2'	26:BA:2518:A:H5''	1.28	1.30
26:BA:593:G:C5'	53:B8:62:LEU:HD21	1.61	1.30
26:BA:1818:U:O5'	27:BD:155:ARG:CG	1.75	1.30
30:BG:59:GLY:O	30:BG:60:GLU:HG3	1.30	1.30
31:BH:121:GLU:OE2	31:BH:134:GLY:HA2	1.29	1.30
32:BI:89:LEU:CD1	32:BI:93:ILE:HG22	1.59	1.30
35:BP:70:ASP:O	35:BP:74:THR:HG23	1.24	1.30
43:BR:113:LEU:HD13	43:BR:114:VAL:N	1.45	1.30
26:BA:2826:A:C5	26:BA:2827:C:C5	2.20	1.30
28:BE:171:SER:O	28:BE:175:ASP:HB2	1.13	1.30
26:BA:2314:C:H5''	30:BG:22:VAL:CG1	1.60	1.30
34:BO:1:MET:N	34:BO:32:TYR:HD2	1.26	1.30
34:BO:77:ILE:CD1	34:BO:78:ARG:N	1.93	1.30
3:AW:25:C:C3'	3:AW:26:G:C8	2.10	1.30
26:BA:2316:C:C4'	30:BG:151:ILE:CD1	1.98	1.30
26:BA:2718:G:H2'	26:BA:2719:G:C8	1.66	1.30

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2741:A:O2'	26:BA:2742:C:C5'	1.78	1.30
33:BN:38:VAL:O	33:BN:39:VAL:HG13	1.21	1.30
34:BO:66:LYS:HZ2	34:BO:67:ARG:CD	1.44	1.30
36:BQ:49:VAL:HG22	36:BQ:121:ASP:N	1.44	1.30
40:BX:24:LEU:C	40:BX:25:GLN:OE1	1.70	1.30
26:BA:1995:U:OP1	28:BE:220:GLN:NE2	1.63	1.30
26:BA:2226:C:C2	26:BA:2227:A:C1'	2.13	1.30
26:BA:25:U:H4'	39:BW:79:GLY:CA	1.60	1.30
29:BF:164:ALA:CA	29:BF:232:LEU:HD12	1.62	1.30
34:BO:77:ILE:HD13	34:BO:78:ARG:N	0.98	1.30
26:BA:2195:C:H5	26:BA:2195:C:OP2	1.07	1.30
26:BA:1782:C:O2	26:BA:2609:U:C6	1.81	1.30
50:B5:33:CYS:SG	50:B5:36:CYS:CB	2.19	1.29
26:BA:2397:G:N1	26:BA:2420:C:O2	1.62	1.29
26:BA:2712:U:C5	26:BA:712(A):A:N7	2.00	1.29
26:BA:440:G:P	41:BY:6:LYS:NZ	2.03	1.29
26:BA:1526:G:N2	26:BA:545(A):A:N7	1.80	1.29
29:BF:225:PRO:C	29:BF:231:ARG:CG	1.99	1.29
55:BK:9:ILE:CD1	55:BK:31:HIS:HB3	1.62	1.29
45:BV:34:GLU:O	45:BV:35:LEU:HD23	1.23	1.29
26:BA:2333:A:N9	26:BA:2335:A:C2	2.01	1.29
26:BA:2:G:N2	26:BA:2902:C:O2	1.61	1.29
41:BY:28:SER:CB	41:BY:99:THR:OG1	1.80	1.29
42:BZ:69:VAL:CG1	42:BZ:81:VAL:HG22	1.62	1.29
26:BA:592:G:N3	53:B8:3:LYS:CE	1.94	1.29
26:BA:1568:G:H5''	27:BD:60:GLN:NE2	1.43	1.29
26:BA:2792:G:N2	26:BA:2804:C:C2	1.99	1.29
27:BD:139:LEU:HD12	27:BD:139:LEU:O	1.27	1.29
27:BD:175:LEU:CD1	27:BD:180:VAL:N	1.93	1.29
30:BG:145:ASP:HB3	37:BS:15:GLU:O	1.26	1.29
1:AA:1256:A:OP2	1:AA:1279:A:N6	1.66	1.29
26:BA:2210:G:O6	27:BD:148:GLY:HA2	1.15	1.29
26:BA:2258:C:C5	26:BA:2426:A:C4'	2.14	1.29
27:BD:143:ILE:O	27:BD:152:GLN:HB2	1.29	1.29
28:BE:180:ILE:HG21	28:BE:187:HIS:CA	1.62	1.29
28:BE:222:ARG:HD3	28:BE:232:ARG:C	1.53	1.29
28:BE:45:LYS:NZ	28:BE:303:PRO:N	1.79	1.29
29:BF:205:ARG:HG2	29:BF:212:VAL:CG2	1.62	1.29
35:BP:61:ALA:C	35:BP:62:ALA:N	1.85	1.29
36:BQ:58:HIS:HB3	36:BQ:111:THR:O	1.27	1.29
43:BR:20:LEU:HD13	43:BR:21:TYR:CA	1.60	1.29

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:172:LEU:CD2	42:BZ:173:PRO:CD	2.05	1.29
26:BA:2225:A:C4'	26:BA:2226:C:C5'	2.02	1.29
26:BA:2385:C:N3	26:BA:2386:C:C5	2.01	1.29
27:BD:75:GLY:CA	27:BD:115:ILE:O	1.79	1.29
28:BE:39:GLN:OE1	28:BE:174:LEU:HD21	1.19	1.29
26:BA:1205:U:O2	29:BF:232:LEU:HD11	1.26	1.29
3:AW:1:G:N2	3:AW:2:C:N4	1.77	1.29
26:BA:2799:A:O2'	26:BA:2802:G:C2	1.86	1.29
30:BG:27:ILE:O	30:BG:69:ILE:CG2	1.81	1.29
52:B7:34:ARG:CD	52:B7:42:LEU:HD23	1.61	1.29
26:BA:2206:C:O2'	26:BA:2207:C:H5'	1.11	1.29
28:BE:82:ALA:O	28:BE:83:LEU:HG	1.14	1.29
29:BF:91:PRO:CB	29:BF:92:PRO:HD3	1.62	1.29
55:BK:101:THR:O	55:BK:105:ILE:HG13	1.29	1.29
42:BZ:147:ILE:O	42:BZ:168:VAL:HB	1.30	1.29
53:B8:4:MET:HA	53:B8:5:LYS:NZ	1.17	1.29
26:BA:1791:A:OP1	27:BD:210:LYS:CD	1.79	1.29
26:BA:2285:C:O4'	26:BA:2288:A:N6	1.58	1.29
26:BA:2691:C:O2'	26:BA:2692:C:H5'	1.22	1.29
33:BN:12:VAL:O	33:BN:38:VAL:HG13	1.16	1.29
26:BA:558:G:OP1	33:BN:91:LYS:C	1.67	1.29
39:BW:85:VAL:CA	39:BW:95:ILE:HG12	1.62	1.29
48:B0:46:LYS:HE3	48:B0:58:THR:OG1	1.21	1.29
51:B6:48:VAL:O	51:B6:50:PHE:CD1	1.85	1.29
26:BA:1031:G:C4'	54:B9:8:LYS:HZ3	1.43	1.29
26:BA:2103:C:O2	26:BA:2187:G:N1	1.63	1.29
26:BA:2259:G:C2	26:BA:2282:G:C6	2.19	1.29
36:BQ:133:GLU:C	36:BQ:133:GLU:OE1	1.68	1.29
26:BA:1614:A:N6	39:BW:88:ARG:HB2	0.96	1.29
26:BA:144:C:H5'	40:BX:36:GLU:CD	1.52	1.29
41:BY:101:LEU:HD21	41:BY:112:LEU:CD2	1.62	1.29
26:BA:2470:G:N3	26:BA:2471:C:C6	2.01	1.28
29:BF:147:LEU:CD1	29:BF:156:LEU:CD1	2.12	1.28
43:BR:72:ASP:O	43:BR:76:VAL:CG2	1.81	1.28
7:AD:23:GLY:C	7:AD:112:VAL:HG12	1.52	1.28
53:B8:16:ILE:HG23	53:B8:21:LYS:O	1.14	1.28
26:BA:2043:C:N4	26:BA:2777:G:C4	2.00	1.28
26:BA:2498:C:O2'	26:BA:2499:C:H5''	1.34	1.28
26:BA:2571:C:O2'	28:BE:243:PRO:HD3	1.29	1.28
26:BA:2636:U:H4'	28:BE:84:ARG:NH2	1.47	1.28
29:BF:201:SER:O	29:BF:204:ALA:HB3	1.29	1.28

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:95:ARG:O	33:BN:98:PHE:CD1	1.86	1.28
43:BR:44:LEU:O	43:BR:48:VAL:HG23	1.31	1.28
37:BS:53:ASN:O	37:BS:55:ASP:N	1.66	1.28
47:B3:1:MET:CE	47:B3:3:ARG:HD2	1.61	1.28
26:BA:545(A):A:OP2	26:BA:1546:C:N4	1.66	1.28
26:BA:598:G:N2	29:BF:33:LYS:NZ	1.80	1.28
34:BO:99:PHE:O	34:BO:119:PRO:HG3	1.32	1.28
36:BQ:17:ARG:O	36:BQ:18:GLU:CG	1.79	1.28
26:BA:2378:A:N3	37:BS:26:LEU:HD23	1.46	1.28
3:AW:25:C:C6	3:AW:26:G:N7	2.02	1.28
47:B3:51:ALA:O	47:B3:53:LEU:N	1.66	1.28
26:BA:989:G:OP1	47:B3:31:LEU:HD12	1.16	1.28
26:BA:1818:U:C5'	27:BD:155:ARG:CG	2.11	1.28
29:BF:147:LEU:HD12	29:BF:156:LEU:CD1	1.62	1.28
33:BN:45:VAL:O	33:BN:46:ILE:HG12	1.16	1.28
45:BV:94:LYS:O	45:BV:95:ILE:HD12	1.21	1.28
48:B0:24:LYS:HG2	48:B0:56:ASP:OD2	1.21	1.28
26:BA:2644:G:O5'	26:BA:2644:G:H8	1.07	1.28
26:BA:2653:U:O2	26:BA:2654:A:N6	1.61	1.28
2:AV:56:C:O2'	30:BG:56:ARG:HD3	1.21	1.28
26:BA:850:C:H4'	47:B3:18:ASP:CG	1.51	1.28
27:BD:146:LYS:NZ	27:BD:184:LEU:HD11	1.46	1.28
29:BF:112:ARG:O	29:BF:114:ALA:N	1.66	1.28
29:BF:52:ALA:CB	29:BF:55:ARG:CZ	2.08	1.28
30:BG:105:SER:OG	30:BG:131:THR:HG22	1.33	1.28
36:BQ:58:HIS:O	36:BQ:61:LEU:HG	1.30	1.28
45:BV:42:GLY:HA3	45:BV:54:TYR:CZ	1.66	1.28
26:BA:2642:G:O2'	26:BA:2643:G:H5'	1.18	1.28
26:BA:2218:G:O2'	27:BD:146:LYS:HE3	1.32	1.28
31:BH:40:MET:HG2	31:BH:64:HIS:CE1	1.69	1.28
36:BQ:85:ILE:CG2	36:BQ:122:PHE:HB3	1.63	1.28
49:B4:30:GLU:C	49:B4:31:ILE:HD13	1.52	1.28
49:B4:68:ARG:CD	49:B4:72:LYS:HG2	1.63	1.28
26:BA:2261:C:OP2	48:B0:14:ARG:CG	1.82	1.28
3:AW:76:A:N7	26:BA:2421:G:H2'	0.98	1.28
26:BA:2494:G:C2	26:BA:2495:G:C8	2.22	1.28
32:BI:29:PHE:O	32:BI:33:GLN:NE2	1.67	1.28
36:BQ:34:GLY:HA2	36:BQ:74:ASN:O	1.28	1.28
42:BZ:130:ILE:O	42:BZ:130:ILE:HD12	1.29	1.28
1:AA:60:A:N6	1:AA:107:G:O2'	1.67	1.28
26:BA:2212:A:O2'	26:BA:2213:U:H5	1.06	1.28

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:111:VAL:O	29:BF:114:ALA:HB3	1.21	1.28
37:BS:99:GLU:OE1	37:BS:128:ASP:CB	1.80	1.28
46:B2:2:VAL:O	46:B2:4:HIS:ND1	1.63	1.28
26:BA:2491:U:O2'	26:BA:2492:U:C5'	1.81	1.28
26:BA:2580:U:C6	26:BA:2581:G:H8	1.27	1.28
27:BD:175:LEU:HD11	27:BD:180:VAL:N	1.49	1.28
29:BF:4:THR:O	29:BF:139:VAL:HG21	1.32	1.28
30:BG:145:ASP:CB	37:BS:15:GLU:C	2.00	1.28
40:BX:24:LEU:C	40:BX:26:PHE:CE1	2.05	1.28
47:B3:31:LEU:HD23	47:B3:32:GLN:N	0.96	1.27
26:BA:2457:U:C2'	26:BA:2458:G:H5'	1.62	1.27
29:BF:84:VAL:O	29:BF:86:GLY:N	1.63	1.27
41:BY:49:GLU:CD	41:BY:97:ARG:NH1	1.86	1.27
25:BB:75:G:O2'	42:BZ:32:PHE:HD2	1.05	1.27
1:AA:1400:C:C2	2:AV:34:G:N2	2.01	1.27
26:BA:2051:A:N7	26:BA:2614:A:N6	1.78	1.27
26:BA:85:G:O5'	41:BY:65:VAL:HG11	1.24	1.27
27:BD:103:ILE:CG1	27:BD:104:ILE:HD12	1.47	1.27
27:BD:175:LEU:CG	27:BD:179:GLU:O	1.76	1.27
30:BG:22:VAL:O	30:BG:23:VAL:HG13	1.25	1.27
26:BA:1665:A:C3'	34:BO:66:LYS:HZ3	1.45	1.27
36:BQ:125:TRP:O	36:BQ:126:VAL:HG23	1.22	1.27
8:AE:144:THR:C	8:AE:145:LYS:N	1.88	1.27
26:BA:126:A:N7	52:B7:18:PHE:CZ	2.03	1.27
53:B8:26:LYS:CD	53:B8:45:GLY:H	1.47	1.27
26:BA:2297:C:H2'	26:BA:2298:A:C8	1.69	1.27
26:BA:2312:U:H5'	30:BG:53:LYS:CA	1.62	1.27
28:BE:44:TYR:CD1	28:BE:308:VAL:HA	1.69	1.27
31:BH:111:PRO:O	31:BH:112:VAL:CG2	1.82	1.27
35:BP:94:ARG:CD	35:BP:120:LEU:CD2	2.04	1.27
26:BA:1248:G:OP1	44:BU:2:PRO:CB	1.82	1.27
26:BA:2470:G:C2	26:BA:2471:C:C6	2.22	1.27
26:BA:2821:A:C2	26:BA:2822:G:C5	2.21	1.27
45:BV:91:THR:O	45:BV:92:ALA:CB	1.79	1.27
1:AA:1337:G:C3'	1:AA:1338:G:P	2.22	1.27
1:AA:953:G:O2'	16:AM:125:ARG:HA	1.30	1.27
26:BA:1021:A:H8	33:BN:49:ARG:NH1	1.20	1.27
26:BA:2615:U:O2'	26:BA:2616:C:H5'	1.34	1.27
26:BA:2739:U:H2'	26:BA:2740:A:C5'	1.63	1.27
43:BR:72:ASP:O	43:BR:76:VAL:HG23	1.10	1.27
44:BU:111:ASP:O	44:BU:113:SER:N	1.65	1.27

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1826:G:OP1	27:BD:227:VAL:CG2	1.81	1.27
26:BA:2862:G:O2'	26:BA:2863:C:H6	1.08	1.27
36:BQ:143:VAL:O	36:BQ:144:THR:HG23	1.30	1.27
48:B0:65:GLY:C	48:B0:66:LYS:HD2	0.89	1.27
47:B3:32:GLN:NE2	47:B3:32:GLN:O	1.62	1.27
51:B6:38:LYS:O	51:B6:50:PHE:HB2	1.10	1.27
26:BA:2333:A:C8	26:BA:2335:A:C2	2.22	1.27
26:BA:1568:G:C5'	27:BD:60:GLN:NE2	1.93	1.27
29:BF:91:PRO:CB	29:BF:92:PRO:CD	2.02	1.27
2:AV:35:A:H2	4:AX:118:C:O2	1.17	1.27
26:BA:2286:A:C5'	26:BA:2287:A:H5'	1.64	1.27
26:BA:2740:A:C2'	26:BA:2741:A:C8	2.06	1.27
27:BD:110:LYS:NZ	27:BD:110:LYS:HA	1.48	1.27
26:BA:2771:C:C5'	28:BE:316:ARG:HD2	1.65	1.27
29:BF:91:PRO:CG	29:BF:92:PRO:HD2	1.65	1.27
45:BV:91:THR:C	45:BV:92:ALA:N	1.84	1.27
34:BO:1:MET:C	34:BO:2:ILE:CD1	2.02	1.27
38:BT:4:ARG:O	38:BT:5:GLU:HG3	1.17	1.27
26:BA:1799:G:N2	27:BD:153:LEU:CD2	1.97	1.27
26:BA:2453:A:O2'	26:BA:2454:G:H5'	1.29	1.27
26:BA:2587:A:O2'	26:BA:2588:G:H5'	1.30	1.27
27:BD:71:ASP:OD1	27:BD:118:GLY:CA	1.83	1.27
28:BE:229:GLN:O	28:BE:231:TRP:N	1.68	1.27
44:BU:4:ALA:O	44:BU:6:THR:N	1.65	1.27
26:BA:2574:G:O2'	28:BE:240:PRO:HB3	1.09	1.26
26:BA:2657:A:C8	26:BA:2658:C:H5	1.50	1.26
29:BF:151:GLN:OE1	29:BF:154:VAL:HG21	1.23	1.26
29:BF:32:GLY:O	29:BF:35:VAL:HG23	1.19	1.26
31:BH:123:GLU:O	31:BH:130:ILE:HG23	1.18	1.26
35:BP:114:VAL:HG21	35:BP:133:VAL:N	1.45	1.26
36:BQ:59:ASN:ND2	36:BQ:60:ALA:H	1.30	1.26
52:B7:43:THR:C	52:B7:46:ASP:OD2	1.72	1.26
26:BA:2210:G:O6	27:BD:148:GLY:CA	1.82	1.26
28:BE:211:GLN:H	28:BE:216:ARG:CZ	1.46	1.26
28:BE:44:TYR:CA	28:BE:309:PRO:HG3	1.65	1.26
29:BF:231:ARG:O	29:BF:232:LEU:HD23	1.09	1.26
30:BG:93:LEU:CD1	30:BG:94:ALA:H	1.45	1.26
39:BW:32:ALA:HA	39:BW:35:ILE:CD1	1.63	1.26
46:B2:30:ALA:C	46:B2:34:GLN:HG2	1.54	1.26
26:BA:2254:C:H2'	26:BA:2255:G:C5'	1.63	1.26
26:BA:2558:C:O2	26:BA:2559:C:C6	1.86	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:75:LEU:O	35:BP:75:LEU:HD23	1.30	1.26
41:BY:30:ASP:OD2	41:BY:31:LEU:CD2	1.83	1.26
42:BZ:2:GLU:O	42:BZ:54:ILE:HG21	1.09	1.26
30:BG:71:ALA:O	30:BG:72:LYS:HD3	1.33	1.26
34:BO:88:ARG:O	34:BO:90:ASP:N	1.68	1.26
26:BA:2056:G:C2	50:B5:4:HIS:O	1.89	1.26
26:BA:2309:A:H5''	26:BA:2310:A:C8	1.69	1.26
26:BA:2364:C:C2	48:B0:32:LYS:NZ	2.01	1.26
26:BA:801:G:OP1	29:BF:79:ARG:NE	1.65	1.26
35:BP:144:ASP:O	35:BP:145:LEU:HD12	1.17	1.26
41:BY:78:THR:CA	41:BY:89:ARG:HG3	1.65	1.26
51:B6:37:LEU:O	51:B6:38:LYS:HG3	1.35	1.26
26:BA:2322:A:C4	26:BA:2323:G:H8	1.53	1.26
26:BA:2422:A:N3	26:BA:2424:C:C5	2.02	1.26
26:BA:2544:G:C5'	26:BA:2645:G:N7	1.98	1.26
26:BA:2815:C:C2'	26:BA:2816:C:H5'	1.62	1.26
28:BE:74:GLU:CA	28:BE:293:TYR:CE2	2.18	1.26
31:BH:53:ARG:HB3	31:BH:56:ASP:OD1	1.25	1.26
45:BV:61:VAL:HA	45:BV:98:ILE:CG1	1.66	1.26
26:BA:1034:G:P	54:B9:18:ARG:HH21	1.58	1.26
30:BG:11:HIS:CD2	30:BG:15:GLU:OE2	1.88	1.26
31:BH:111:PRO:O	31:BH:112:VAL:HG23	1.26	1.26
52:B7:18:PHE:N	52:B7:44:VAL:HG21	1.48	1.26
26:BA:1287:A:O4'	43:BR:104:ARG:HD2	1.09	1.26
29:BF:163:HIS:O	29:BF:166:ILE:HB	1.15	1.26
26:BA:142(A):A:H4'	33:BN:21:ARG:NH2	1.51	1.26
49:B4:49:PHE:CZ	49:B4:70:GLY:O	1.87	1.26
26:BA:2197:U:C2'	26:BA:2224:G:H22	1.47	1.26
26:BA:2225:A:C5'	26:BA:2226:C:C5'	2.14	1.26
26:BA:2825:C:H6	26:BA:2825:C:O5'	1.14	1.26
28:BE:62:ARG:O	28:BE:63:GLU:CD	1.73	1.26
35:BP:77:ALA:N	35:BP:81:VAL:HG21	1.51	1.26
26:BA:2378:A:O2'	37:BS:30:GLY:HA3	1.28	1.26
40:BX:4:VAL:CG2	46:B2:24:LYS:NZ	1.98	1.26
51:B6:37:LEU:HD21	51:B6:51:ARG:CG	1.65	1.26
26:BA:2012:G:OP1	39:BW:98:LYS:HD3	1.30	1.26
26:BA:2712:U:H2'	26:BA:712(A):A:C5'	1.63	1.26
26:BA:30:G:OP1	44:BU:8:ILE:CD1	1.83	1.26
27:BD:146:LYS:HD3	27:BD:147:PRO:CD	1.65	1.26
30:BG:21:VAL:CG1	30:BG:132:VAL:CG2	2.12	1.26
32:BI:7:LYS:HD2	32:BI:12:LYS:NZ	0.93	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:32:GLY:O	55:BK:60:VAL:HG11	1.21	1.26
3:AW:65:G:C6	3:AW:66:A:N7	2.03	1.25
26:BA:2865:U:C5	26:BA:2866:U:H5	1.53	1.25
27:BD:158:GLY:CA	27:BD:194:VAL:HG11	1.63	1.25
27:BD:198:GLY:O	27:BD:200:THR:N	1.66	1.25
29:BF:32:GLY:HA2	29:BF:35:VAL:CG2	1.66	1.25
51:B6:37:LEU:CD2	51:B6:51:ARG:HG2	1.65	1.25
40:BX:38:ALA:O	40:BX:39:ASP:O	1.53	1.25
41:BY:86:GLU:O	41:BY:87:VAL:HG23	1.36	1.25
48:B0:46:LYS:NZ	48:B0:60:PHE:O	1.69	1.25
26:BA:1364:G:OP1	49:B4:3:LYS:CG	1.84	1.25
51:B6:21:TYR:OH	51:B6:43:VAL:HG23	1.35	1.25
26:BA:2766:G:H5''	26:BA:2767:C:OP2	1.18	1.25
26:BA:389:G:OP2	49:B4:24:THR:HG22	1.28	1.25
27:BD:74:PRO:HG3	27:BD:96:ALA:CB	1.64	1.25
29:BF:102:LEU:HB3	29:BF:107:ARG:NE	1.50	1.25
31:BH:93:TYR:CB	31:BH:106:VAL:HG22	1.66	1.25
43:BR:63:ARG:NH2	43:BR:77:ARG:HG2	1.47	1.25
37:BS:105:GLY:O	37:BS:106:LEU:HD23	1.37	1.25
39:BW:32:ALA:HA	39:BW:35:ILE:CG1	1.66	1.25
40:BX:51:GLN:O	40:BX:52:VAL:HG23	1.13	1.25
50:B5:19:ARG:O	50:B5:21:SER:N	1.68	1.25
53:B8:26:LYS:CD	53:B8:44:LYS:HA	1.56	1.25
26:BA:2776:A:H1'	26:BA:2778:A:N7	1.51	1.25
32:BI:43:ASN:O	32:BI:46:ALA:N	1.68	1.25
55:BK:79:LEU:HD22	55:BK:137:ILE:CD1	1.66	1.25
33:BN:95:ARG:O	33:BN:98:PHE:HD1	0.93	1.25
36:BQ:67:ALA:HB2	36:BQ:70:ARG:NH1	0.94	1.25
26:BA:144:C:H5'	40:BX:36:GLU:OE1	1.30	1.25
51:B6:22:TYR:O	51:B6:23:THR:HG23	1.21	1.25
26:BA:2645:G:H4'	26:BA:2732:G:O2'	1.28	1.25
26:BA:1826:G:OP2	27:BD:227:VAL:HG21	1.09	1.25
26:BA:2219:G:H2'	26:BA:2224:G:C5'	1.66	1.25
26:BA:2296:U:O4	37:BS:16:ALA:HB2	1.21	1.25
26:BA:2785:C:C5'	28:BE:99:VAL:HG22	1.67	1.25
28:BE:45:LYS:CE	28:BE:303:PRO:HG2	1.67	1.25
29:BF:96:LYS:H	29:BF:98:ARG:NH2	1.35	1.25
30:BG:105:SER:CB	30:BG:131:THR:HG22	1.65	1.25
30:BG:49:PRO:CB	30:BG:72:LYS:C	2.04	1.25
35:BP:66:VAL:HG23	35:BP:109:LEU:O	1.24	1.25
42:BZ:13:LYS:O	42:BZ:36:ARG:NH2	1.69	1.25

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1353:G:OP1	24:AU:10:ARG:NH2	1.67	1.25
26:BA:856:C:O2'	48:B0:24:LYS:HB2	1.18	1.25
26:BA:2543:G:C5	26:BA:2544:G:C6	2.24	1.25
26:BA:2674:G:H2'	26:BA:2675:A:C8	1.71	1.25
28:BE:44:TYR:HA	28:BE:309:PRO:CG	1.65	1.25
28:BE:72:VAL:O	28:BE:73:ILE:HD13	1.24	1.25
33:BN:65:ASN:CB	33:BN:69:TYR:CD1	2.16	1.25
39:BW:82:LEU:O	39:BW:84:ARG:HD2	1.34	1.25
26:BA:18:C:H4'	44:BU:23:GLY:O	1.34	1.25
26:BA:2320:A:N3	26:BA:2333:A:C6	2.05	1.25
27:BD:107:LYS:N	27:BD:194:VAL:O	1.70	1.25
27:BD:63:ILE:CG2	27:BD:64:ILE:H	1.33	1.25
31:BH:170:LEU:O	31:BH:170:LEU:CD1	1.85	1.25
34:BO:110:ASP:O	34:BO:111:PHE:CD1	1.88	1.25
36:BQ:72:VAL:O	36:BQ:73:GLN:HG3	1.10	1.25
37:BS:109:PRO:O	37:BS:116:PHE:CE1	1.89	1.25
1:AA:986:A:C1'	22:AS:55:LYS:HA	1.67	1.25
53:B8:26:LYS:CD	53:B8:45:GLY:N	1.99	1.25
26:BA:2484:G:N2	26:BA:2485:G:O4'	1.69	1.25
32:BI:77:VAL:CG2	32:BI:141:LEU:CD1	2.14	1.25
36:BQ:94:ARG:CD	36:BQ:106:GLY:HA2	1.65	1.25
48:B0:67:VAL:HG11	48:B0:74:LYS:CG	1.66	1.25
53:B8:41:ILE:O	53:B8:43:GLY:N	1.69	1.25
26:BA:2717:G:H5'	26:BA:2717:G:C8	1.70	1.25
26:BA:2826:A:C5	26:BA:2827:C:C6	2.23	1.25
27:BD:208:GLY:CA	27:BD:210:LYS:HZ3	1.40	1.25
28:BE:70:VAL:CG1	28:BE:71:THR:H	1.41	1.25
29:BF:205:ARG:CG	29:BF:212:VAL:HG21	1.64	1.25
30:BG:88:LEU:O	30:BG:88:LEU:HD23	1.30	1.25
55:BK:122:GLU:C	55:BK:126:LYS:HE3	1.55	1.25
36:BQ:17:ARG:O	36:BQ:18:GLU:HG3	1.32	1.25
37:BS:40:ASN:HA	37:BS:114:LYS:NZ	1.51	1.25
40:BX:75:GLN:HB2	40:BX:78:ALA:O	1.30	1.25
7:AD:23:GLY:HA2	7:AD:112:VAL:C	1.56	1.25
48:B0:37:LEU:CB	48:B0:69:PHE:CD2	2.18	1.25
54:B9:7:VAL:O	54:B9:8:LYS:HE3	1.09	1.25
26:BA:1456:G:N2	26:BA:2704:C:C2	2.05	1.25
42:BZ:62:PHE:CD2	42:BZ:87:THR:HG22	1.70	1.25
1:AA:1211:U:C3'	1:AA:1212:U:P	2.24	1.24
52:B7:21:ARG:CZ	52:B7:43:THR:CG2	2.14	1.24
26:BA:10:G:N2	26:BA:2629:A:N3	1.84	1.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:93:LYS:O	29:BF:96:LYS:CG	1.83	1.24
35:BP:62:ALA:HB3	35:BP:105:TYR:O	1.30	1.24
43:BR:87:TYR:CE1	43:BR:94:TYR:HB3	1.72	1.24
41:BY:48:VAL:CG1	41:BY:49:GLU:H	1.46	1.24
3:AW:37:YYG:H192	10:AG:84:ASN:CA	1.65	1.24
26:BA:849:A:C2	47:B3:21:ALA:CB	2.19	1.24
26:BA:2252:G:C2'	26:BA:2253:G:H5'	1.67	1.24
26:BA:2825:C:C6	26:BA:2825:C:O5'	1.91	1.24
27:BD:165:GLY:O	27:BD:172:ILE:CB	1.85	1.24
29:BF:25:PRO:O	29:BF:26:VAL:HG23	1.32	1.24
31:BH:146:ASN:O	31:BH:150:VAL:HG23	1.36	1.24
33:BN:15:ARG:HB3	33:BN:43:ARG:CD	1.65	1.24
26:BA:2352:A:N1	48:B0:30:VAL:CG1	2.00	1.24
46:B2:5:VAL:CG1	46:B2:6:GLN:H	1.41	1.24
47:B3:7:LYS:O	47:B3:54:VAL:HG21	1.26	1.24
39:BW:19:LEU:CD1	50:B5:25:LEU:HD21	1.66	1.24
26:BA:2447:G:C4	26:BA:2500:U:C5	2.22	1.24
29:BF:47:GLY:CA	29:BF:92:PRO:CB	1.82	1.24
32:BI:95:SER:CA	32:BI:98:ILE:CG1	2.09	1.24
43:BR:89:ASP:OD1	43:BR:90:ARG:N	1.69	1.24
44:BU:99:ALA:HB2	44:BU:106:PHE:CD2	1.72	1.24
40:BX:9:HIS:CE1	40:BX:27:ALA:HA	1.70	1.24
26:BA:2421:G:H5''	51:B6:4:ASP:OD1	1.19	1.24
26:BA:2893:G:O2'	26:BA:2894:G:H1'	1.21	1.24
26:BA:2051:A:O2'	28:BE:238:LEU:CD2	1.83	1.24
29:BF:24:THR:HB	29:BF:25:PRO:CD	1.61	1.24
26:BA:2315:G:OP1	30:BG:20:LYS:NZ	1.71	1.24
31:BH:168:VAL:O	31:BH:169:ARG:CG	1.85	1.24
43:BR:38:VAL:CB	43:BR:39:PRO:HD2	1.66	1.24
1:AA:39:G:N7	1:AA:547:A:H8	1.35	1.24
2:AV:31:A:C4'	12:AI:127:LYS:HD2	1.67	1.24
48:B0:61:ALA:HB2	48:B0:81:ILE:CD1	1.67	1.24
48:B0:39:ARG:HG2	48:B0:69:PHE:CE1	1.71	1.24
46:B2:52:ALA:O	46:B2:56:ILE:HG13	1.27	1.24
26:BA:2219:G:O2'	26:BA:2224:G:C5'	1.86	1.24
29:BF:96:LYS:CA	29:BF:98:ARG:CZ	2.15	1.24
31:BH:86:LEU:HD13	31:BH:87:GLU:N	1.51	1.24
36:BQ:54:VAL:O	36:BQ:56:ILE:HD13	1.11	1.24
43:BR:79:LEU:C	43:BR:79:LEU:CD2	2.01	1.24
44:BU:43:ALA:O	44:BU:45:TYR:N	1.68	1.24
26:BA:2528:U:P	54:B9:30:VAL:CG1	2.25	1.24

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:7:LYS:CG	32:BI:12:LYS:CG	2.10	1.24
33:BN:61:VAL:HG12	33:BN:62:ASP:OD1	1.32	1.24
41:BY:101:LEU:CG	41:BY:112:LEU:CD1	2.16	1.24
26:BA:2354:G:C2	48:B0:32:LYS:CE	2.20	1.24
26:BA:2439:A:H1'	26:BA:2587:A:OP1	1.13	1.24
26:BA:2509:G:O2'	26:BA:2510:C:H5'	1.28	1.24
26:BA:2517:C:O2'	26:BA:2518:A:C5'	1.83	1.24
26:BA:994:C:O2	44:BU:53:LYS:HD3	1.36	1.24
28:BE:301:PRO:O	28:BE:303:PRO:HD2	1.32	1.24
29:BF:52:ALA:HB2	29:BF:55:ARG:CZ	1.68	1.24
30:BG:27:ILE:O	30:BG:69:ILE:HG23	1.29	1.24
36:BQ:108:SER:O	36:BQ:109:VAL:HG13	1.36	1.24
37:BS:128:ASP:C	37:BS:129:ILE:N	1.90	1.24
44:BU:14:HIS:ND1	44:BU:36:PHE:HZ	1.34	1.24
45:BV:19:VAL:HG12	45:BV:21:ARG:CZ	1.68	1.24
42:BZ:39:PHE:HA	42:BZ:43:PHE:CD2	1.70	1.24
43:BR:101:ALA:O	50:B5:41:LEU:CD1	1.86	1.24
26:BA:1637:A:H4'	26:BA:2711:A:O2'	1.12	1.24
26:BA:1665:A:C3'	34:BO:66:LYS:NZ	1.99	1.24
26:BA:2710:C:O2'	26:BA:2711:A:H5'	1.37	1.24
29:BF:96:LYS:CA	29:BF:98:ARG:NH1	2.00	1.24
55:BK:90:SER:O	55:BK:91:GLU:HG3	1.11	1.24
33:BN:106:GLY:O	33:BN:107:ASN:CG	1.76	1.24
44:BU:13:ARG:O	44:BU:16:LYS:HB2	1.09	1.24
45:BV:33:VAL:HB	45:BV:63:HIS:CG	1.72	1.24
26:BA:2056:G:N1	50:B5:4:HIS:O	1.66	1.24
26:BA:2307:G:C1'	26:BA:2311:A:H61	1.49	1.24
32:BI:95:SER:CA	32:BI:98:ILE:CD1	2.13	1.24
26:BA:1060:U:OP1	55:BK:74:PRO:HA	1.35	1.24
41:BY:28:SER:HB3	41:BY:99:THR:OG1	1.07	1.24
26:BA:2246:G:O2'	26:BA:2247:A:H5'	1.32	1.24
26:BA:2622:C:O2	26:BA:2623:G:C8	1.91	1.24
26:BA:2717:G:C2	26:BA:2718:G:C5	2.26	1.24
30:BG:21:VAL:HG13	30:BG:132:VAL:CB	1.65	1.24
32:BI:7:LYS:HG3	32:BI:12:LYS:CD	1.67	1.24
34:BO:1:MET:O	34:BO:2:ILE:CD1	1.86	1.24
45:BV:59:GLU:O	45:BV:60:VAL:CG2	1.86	1.24
47:B3:19:GLN:O	47:B3:23:LEU:CD2	1.84	1.23
26:BA:2215:G:H2'	26:BA:2216:G:C8	1.71	1.23
28:BE:193:PHE:CE2	28:BE:199:ALA:HB2	1.72	1.23
29:BF:238:SER:O	29:BF:241:ALA:HB3	1.09	1.23

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2316:C:H5'	30:BG:142:ALA:CB	1.65	1.23
26:BA:2333:A:H1'	26:BA:2335:A:C4	1.71	1.23
26:BA:2384:G:H5''	26:BA:2386:C:OP1	1.09	1.23
26:BA:2384:G:C5'	26:BA:2386:C:OP1	1.85	1.23
26:BA:2847:U:OP2	26:BA:2847:U:C6	1.90	1.23
30:BG:24:HIS:O	30:BG:25:MET:HG2	1.11	1.23
31:BH:43:THR:CG2	31:BH:52:THR:CG2	2.14	1.23
40:BX:3:ASP:O	40:BX:4:VAL:HG13	1.32	1.23
26:BA:2352:A:N1	48:B0:30:VAL:HG12	1.53	1.23
46:B2:51:LYS:O	46:B2:54:ALA:N	1.71	1.23
26:BA:1546:C:C3'	26:BA:1547:C:P	2.24	1.23
44:BU:103:PRO:O	44:BU:107:LYS:HG2	1.30	1.23
45:BV:61:VAL:CG2	45:BV:97:GLY:HA2	1.69	1.23
48:B0:23:VAL:CG1	48:B0:24:LYS:H	1.49	1.23
26:BA:2470:G:N3	26:BA:2471:C:C5	2.04	1.23
26:BA:2555:U:H2'	26:BA:2556:C:C5'	1.68	1.23
26:BA:2044:C:N3	26:BA:2624:G:N2	1.86	1.23
27:BD:78:ALA:O	27:BD:79:THR:HG23	1.32	1.23
31:BH:129:LYS:O	31:BH:130:ILE:HD12	1.12	1.23
39:BW:85:VAL:HA	39:BW:95:ILE:CG1	1.68	1.23
42:BZ:5:ALA:O	42:BZ:33:ALA:HB2	1.38	1.23
26:BA:2508:G:O2'	26:BA:2509:G:H5'	1.36	1.23
26:BA:2023:G:H4'	26:BA:2618:G:OP1	1.06	1.23
26:BA:2681:C:O2'	26:BA:2682:U:O5'	1.56	1.23
29:BF:115:LEU:HG	29:BF:246:ARG:NH2	1.51	1.23
32:BI:4:ILE:HB	32:BI:37:ILE:O	1.33	1.23
55:BK:20:PRO:O	55:BK:23:PRO:HD2	1.34	1.23
37:BS:41:LYS:HD3	37:BS:41:LYS:C	1.57	1.23
45:BV:35:LEU:O	45:BV:60:VAL:HG13	1.29	1.23
26:BA:2400:G:O2'	51:B6:20:PHE:HE1	1.18	1.23
26:BA:2507:C:N3	26:BA:2583:G:C2	2.07	1.23
26:BA:2589:A:C2'	26:BA:2590:A:H5''	1.69	1.23
30:BG:142:ALA:CB	30:BG:151:ILE:HD11	1.67	1.23
33:BN:60:ARG:O	33:BN:71:TYR:HB3	1.33	1.23
3:AW:72:C:O2'	3:AW:73:A:C5'	1.85	1.23
49:B4:21:VAL:HG12	49:B4:22:MET:N	1.43	1.23
53:B8:23:MET:CE	53:B8:23:MET:HA	1.63	1.23
26:BA:1599:C:OP1	40:BX:33:SER:OG	1.55	1.23
26:BA:2309:A:OP2	26:BA:2309:A:C4'	1.81	1.23
26:BA:2573:C:C6	26:BA:2573:C:H5'	1.71	1.23
26:BA:2584:U:C6	26:BA:2584:U:H3'	1.65	1.23

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1260:G:H5''	39:BW:83:LYS:NZ	1.53	1.23
41:BY:101:LEU:HD13	41:BY:113:GLU:CB	1.68	1.23
1:AA:60:A:C2	1:AA:107:G:N3	2.07	1.23
26:BA:850:C:C4'	47:B3:18:ASP:OD1	1.85	1.23
26:BA:2021:C:P	50:B5:15:LYS:HE3	1.76	1.23
26:BA:2226:C:O2	26:BA:2227:A:H1'	1.33	1.23
26:BA:2509:G:C2'	26:BA:2510:C:H5'	1.67	1.23
30:BG:44:ILE:O	30:BG:83:PHE:CZ	1.92	1.23
26:BA:1059:G:N2	55:BK:127:ILE:HG23	1.53	1.23
36:BQ:88:PHE:HB2	36:BQ:90:PHE:CE1	1.72	1.23
37:BS:34:LEU:CG	37:BS:102:LEU:HA	1.69	1.23
44:BU:38:THR:CA	44:BU:41:ASN:OD1	1.84	1.23
48:B0:30:VAL:HG22	48:B0:63:SER:OG	1.36	1.23
51:B6:2:ALA:HB2	51:B6:11:LYS:NZ	1.53	1.23
26:BA:687:C:C4'	52:B7:4:THR:HG22	1.67	1.23
26:BA:2756:U:O2'	26:BA:2757:A:C5'	1.86	1.23
28:BE:269:ILE:HG23	28:BE:297:LYS:NZ	1.53	1.23
29:BF:243:VAL:CA	29:BF:246:ARG:HD2	1.67	1.23
26:BA:2316:C:C5'	30:BG:151:ILE:HD11	1.69	1.23
31:BH:143:LEU:CD2	31:BH:144:ALA:H	1.51	1.23
44:BU:88:ILE:CG2	45:BV:55:THR:OG1	1.87	1.23
40:BX:3:ASP:OD2	46:B2:24:LYS:CD	1.86	1.23
26:BA:94:G:N2	46:B2:42:ASN:HD22	1.35	1.23
26:BA:2246:G:C4	26:BA:2426:A:C2	2.26	1.23
26:BA:801:G:OP2	29:BF:79:ARG:HD3	1.37	1.23
26:BA:2312:U:C5'	30:BG:53:LYS:HA	1.68	1.23
43:BR:58:GLY:CA	43:BR:80:PHE:CE2	2.22	1.23
45:BV:14:VAL:HG21	45:BV:19:VAL:CG2	1.68	1.23
45:BV:5:ILE:HG23	45:BV:39:PHE:CA	1.67	1.23
42:BZ:96:VAL:CG1	42:BZ:97:PRO:HD2	1.69	1.23
1:AA:1340:A:O2'	2:AV:31:A:O2'	1.52	1.22
52:B7:41:GLN:O	52:B7:42:LEU:HG	1.34	1.22
26:BA:1665:A:C2'	34:BO:66:LYS:NZ	2.00	1.22
28:BE:44:TYR:CA	28:BE:309:PRO:CG	2.15	1.22
42:BZ:168:VAL:O	42:BZ:169:VAL:CG2	1.87	1.22
42:BZ:67:LYS:HD3	42:BZ:93:GLU:OE2	1.31	1.22
42:BZ:69:VAL:CG2	42:BZ:81:VAL:CG1	2.18	1.22
53:B8:26:LYS:CD	53:B8:44:LYS:N	2.00	1.22
53:B8:26:LYS:CG	53:B8:45:GLY:N	1.88	1.22
26:BA:1783:A:C2	26:BA:2587:A:H2	1.57	1.22
27:BD:226:GLY:O	27:BD:227:VAL:HG12	1.10	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:73:ASN:CB	31:BH:137:LYS:NZ	1.96	1.22
35:BP:92:ASP:HB3	35:BP:118:LEU:CD1	1.68	1.22
37:BS:81:ALA:O	37:BS:83:LEU:N	1.72	1.22
37:BS:94:GLU:OE1	37:BS:94:GLU:C	1.76	1.22
45:BV:71:ILE:O	45:BV:72:ARG:HG3	1.38	1.22
26:BA:2625:G:C3'	26:BA:2626:C:C5	2.22	1.22
29:BF:93:LYS:O	29:BF:96:LYS:HG3	1.08	1.22
36:BQ:65:ARG:CZ	36:BQ:122:PHE:CE2	2.22	1.22
26:BA:564:C:OP1	45:BV:79:GLN:HG2	1.07	1.22
40:BX:28:VAL:O	40:BX:62:LYS:HB3	1.37	1.22
52:B7:21:ARG:NH1	52:B7:43:THR:CG2	2.03	1.22
52:B7:17:GLY:CA	52:B7:44:VAL:HG21	1.63	1.22
26:BA:1056:G:N1	26:BA:1102:C:OP2	1.72	1.22
26:BA:1790:C:P	27:BD:224:VAL:HG13	1.79	1.22
26:BA:2209:C:H2'	26:BA:2210:G:C3'	1.68	1.22
26:BA:2320:A:H62	37:BS:9:PRO:CG	1.49	1.22
28:BE:205:THR:HG23	28:BE:259:HIS:C	1.60	1.22
31:BH:15:THR:HG21	31:BH:26:LYS:CB	1.68	1.22
36:BQ:25:GLY:O	36:BQ:26:LYS:HG2	1.34	1.22
25:BB:104:A:H1'	42:BZ:24:TYR:OH	1.05	1.22
49:B4:59:PHE:O	49:B4:61:LYS:N	1.72	1.22
26:BA:636:G:OP1	35:BP:127:GLU:HG2	1.39	1.22
25:BB:75:G:O2'	42:BZ:32:PHE:CD2	1.77	1.22
32:BI:133:LEU:CD1	32:BI:139:ALA:HB2	1.69	1.22
33:BN:18:ILE:O	33:BN:22:VAL:HG23	1.36	1.22
45:BV:30:GLY:C	45:BV:33:VAL:CG2	2.07	1.22
44:BU:43:ALA:CB	45:BV:75:LYS:HB3	1.67	1.22
42:BZ:2:GLU:O	42:BZ:54:ILE:CG2	1.86	1.22
52:B7:34:ARG:HD2	52:B7:42:LEU:CD2	1.65	1.22
26:BA:1669:A:C8	34:BO:4:GLN:CD	2.13	1.22
27:BD:183:ILE:O	27:BD:184:LEU:HD23	1.06	1.22
29:BF:52:ALA:CA	29:BF:55:ARG:NE	2.02	1.22
48:B0:43:THR:CG2	48:B0:75:GLY:HA3	1.68	1.22
47:B3:23:LEU:O	47:B3:28:LEU:HG	1.36	1.22
26:BA:1456:G:N2	26:BA:2704:C:N3	1.86	1.22
26:BA:2784:C:OP1	28:BE:95:PRO:HG2	1.39	1.22
26:BA:2406:U:N3	35:BP:55:GLN:HB3	1.50	1.22
44:BU:97:ASP:O	44:BU:101:ARG:HG2	1.07	1.22
44:BU:36:PHE:O	44:BU:39:LEU:HB2	1.38	1.22
45:BV:33:VAL:O	45:BV:62:GLU:HA	1.32	1.22
39:BW:8:ARG:HG3	39:BW:102:HIS:CE1	1.74	1.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:40:THR:HG21	47:B3:43:ILE:CD1	1.58	1.22
49:B4:68:ARG:CG	49:B4:72:LYS:HG2	1.69	1.22
28:BE:205:THR:HG23	28:BE:259:HIS:O	1.07	1.22
30:BG:145:ASP:CB	37:BS:15:GLU:O	1.85	1.22
39:BW:11:ARG:O	39:BW:12:ILE:HG13	1.39	1.22
42:BZ:64:ALA:CB	42:BZ:85:MET:HA	1.70	1.22
26:BA:2734:A:N6	26:BA:2735:G:N3	1.88	1.22
26:BA:2809:A:O4'	26:BA:2811:G:N7	1.72	1.22
26:BA:2730:C:H4'	28:BE:265:ASN:ND2	1.39	1.22
55:BK:122:GLU:O	55:BK:126:LYS:HG3	1.35	1.22
43:BR:44:LEU:O	43:BR:48:VAL:CG2	1.87	1.22
37:BS:76:GLY:O	37:BS:82:TYR:HB2	1.34	1.22
45:BV:71:ILE:O	45:BV:72:ARG:CG	1.87	1.22
45:BV:94:LYS:O	45:BV:95:ILE:CD1	1.82	1.22
41:BY:49:GLU:OE2	41:BY:97:ARG:CZ	1.87	1.22
53:B8:23:MET:HE3	53:B8:48:PHE:CD2	1.75	1.22
26:BA:2771:C:H5'	28:BE:316:ARG:CD	1.68	1.22
26:BA:2793:G:C6	26:BA:2794:C:N4	2.07	1.22
29:BF:153:VAL:CG1	29:BF:157:LEU:HD21	1.69	1.22
29:BF:3:ALA:CB	29:BF:16:VAL:O	1.87	1.22
45:BV:50:ASP:OD1	45:BV:53:LYS:HE3	1.39	1.22
40:BX:11:THR:O	40:BX:15:MET:HG3	1.08	1.22
41:BY:29:ALA:O	41:BY:33:GLU:OE2	1.55	1.22
1:AA:566:G:O3'	1:AA:567:G:P	1.98	1.21
26:BA:2768:C:C2	26:BA:2769:C:C6	2.28	1.21
34:BO:103:ALA:HA	34:BO:122:ILE:O	1.39	1.21
36:BQ:57:ARG:O	36:BQ:58:HIS:O	1.56	1.21
44:BU:92:ARG:CA	44:BU:95:LEU:CD1	1.91	1.21
51:B6:35:LEU:O	51:B6:36:GLU:CG	1.87	1.21
26:BA:2410:G:C4	26:BA:2411:A:N7	2.09	1.21
26:BA:2626:C:C2'	26:BA:2627:G:C5'	2.17	1.21
28:BE:205:THR:CG2	28:BE:259:HIS:O	1.88	1.21
37:BS:94:GLU:OE1	37:BS:94:GLU:O	1.55	1.21
44:BU:113:SER:O	44:BU:115:ASN:N	1.71	1.21
45:BV:11:GLN:NE2	45:BV:22:VAL:HG23	1.34	1.21
41:BY:41:ARG:O	41:BY:112:LEU:HB2	1.13	1.21
3:AW:65:G:N1	3:AW:66:A:C4	2.07	1.21
26:BA:2322:A:C6	26:BA:2323:G:C8	2.23	1.21
26:BA:2786:U:H5'	28:BE:100:TRP:O	1.05	1.21
26:BA:592:G:N3	53:B8:3:LYS:HE3	1.48	1.21
26:BA:598:G:N2	29:BF:33:LYS:HZ3	1.36	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:77:GLY:O	33:BN:79:PHE:N	1.74	1.21
40:BX:18:MET:HE3	40:BX:25:GLN:O	1.40	1.21
1:AA:977:A:N6	1:AA:1224:G:O5'	1.73	1.21
47:B3:48:GLU:N	47:B3:48:GLU:OE1	1.70	1.21
26:BA:911:A:N1	36:BQ:16:ARG:HA	1.55	1.21
29:BF:230:GLY:O	29:BF:231:ARG:CG	1.88	1.21
44:BU:6:THR:O	44:BU:9:VAL:HG23	1.40	1.21
45:BV:57:GLN:NE2	45:BV:100:GLY:O	1.72	1.21
41:BY:101:LEU:CD2	41:BY:103:LEU:HD21	1.68	1.21
41:BY:103:LEU:CD2	41:BY:112:LEU:CD2	1.96	1.21
42:BZ:151:ASP:HB3	42:BZ:153:LYS:NZ	1.55	1.21
26:BA:849:A:N3	47:B3:21:ALA:HB1	1.52	1.21
26:BA:2373:G:O2'	26:BA:2374:C:H5'	1.36	1.21
27:BD:167:GLU:N	27:BD:182:MET:HE1	1.56	1.21
29:BF:163:HIS:HB3	29:BF:166:ILE:HD12	1.21	1.21
30:BG:97:GLN:HB2	30:BG:106:PHE:CE2	1.76	1.21
32:BI:102:LEU:CD1	32:BI:103:GLN:N	2.02	1.21
32:BI:75:LEU:CD1	32:BI:76:THR:H	1.54	1.21
55:BK:8:GLN:N	55:BK:59:THR:HA	1.53	1.21
41:BY:43:ASN:ND2	41:BY:101:LEU:HD21	1.51	1.21
42:BZ:39:PHE:CA	42:BZ:43:PHE:CE2	2.21	1.21
26:BA:2353:G:N1	26:BA:2364:C:N4	1.69	1.21
26:BA:2581:G:C2	26:BA:2610:C:C6	2.29	1.21
26:BA:2620:C:O2'	26:BA:2621:A:C5'	1.87	1.21
26:BA:495:G:H4'	39:BW:57:ASN:ND2	0.90	1.21
26:BA:600:G:C5'	29:BF:30:LEU:HD11	1.68	1.21
31:BH:53:ARG:NH1	31:BH:56:ASP:HA	1.55	1.21
36:BQ:69:ASN:ND2	36:BQ:70:ARG:N	1.88	1.21
40:BX:6:LYS:NZ	40:BX:29:ASP:HA	1.53	1.21
42:BZ:100:THR:HG22	42:BZ:137:ASP:OD1	1.39	1.21
47:B3:1:MET:SD	47:B3:3:ARG:HG2	1.78	1.21
52:B7:21:ARG:NH2	52:B7:43:THR:OG1	1.72	1.21
53:B8:52:LYS:O	53:B8:54:GLU:N	1.71	1.21
26:BA:2226:C:H2'	26:BA:2227:A:O4'	1.05	1.21
26:BA:2275:C:O2	36:BQ:103:ALA:CB	1.89	1.21
26:BA:2519:U:OP1	26:BA:2519:U:H3'	1.35	1.21
25:BB:59:A:C3'	25:BB:60:C:P	2.29	1.21
26:BA:2051:A:O2'	28:BE:238:LEU:HG	1.24	1.21
55:BK:116:LEU:HD13	55:BK:117:ASN:N	1.56	1.21
34:BO:46:ALA:O	34:BO:47:THR:O	1.52	1.21
26:BA:1340:U:O4	40:BX:57:THR:HG22	1.41	1.21

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:149:ALA:O	42:BZ:152:ILE:HG13	1.36	1.21
26:BA:2447:G:C5	26:BA:2500:U:H5	1.52	1.21
33:BN:60:ARG:O	33:BN:71:TYR:CB	1.88	1.21
35:BP:128:GLY:CA	35:BP:132:LYS:NZ	2.03	1.21
26:BA:535:C:C3'	44:BU:53:LYS:HE2	1.70	1.21
26:BA:138:G:C5'	40:BX:43:GLU:HG3	1.69	1.21
48:B0:28:GLY:N	48:B0:60:PHE:CD2	1.98	1.21
49:B4:55:ARG:O	49:B4:56:VAL:O	1.57	1.21
53:B8:36:LYS:HD3	53:B8:40:GLU:OE1	1.40	1.21
26:BA:2348:U:C5'	53:B8:42:ARG:HH22	1.52	1.21
26:BA:1566:A:C2	27:BD:212:HIS:HA	1.74	1.21
26:BA:1799:G:C2	27:BD:153:LEU:CD2	2.21	1.21
42:BZ:100:THR:HA	42:BZ:137:ASP:OD2	1.03	1.21
50:B5:18:MET:O	50:B5:21:SER:CB	1.89	1.21
26:BA:2259:G:N2	26:BA:2282:G:C4	2.08	1.21
26:BA:2319:G:O5'	26:BA:2320:A:OP1	1.56	1.21
26:BA:2392:A:OP1	53:B8:32:GLN:OE1	1.58	1.21
26:BA:2663:G:H2'	26:BA:2664:G:C8	1.75	1.21
27:BD:143:ILE:O	27:BD:152:GLN:CB	1.88	1.21
25:BB:17:C:OP1	30:BG:147:ALA:HA	1.35	1.21
30:BG:65:GLU:OE1	30:BG:65:GLU:O	1.59	1.21
44:BU:117:ARG:HD3	44:BU:118:GLN:HG2	1.23	1.21
41:BY:31:LEU:HD13	41:BY:113:GLU:OE1	1.36	1.21
42:BZ:71:MET:HG2	42:BZ:78:PRO:CG	1.71	1.21
1:AA:405:U:O3'	1:AA:406:G:P	1.99	1.20
53:B8:50:LEU:CD2	53:B8:51:ALA:N	1.73	1.20
27:BD:103:ILE:CD1	27:BD:104:ILE:HD11	1.71	1.20
27:BD:210:LYS:CA	27:BD:213:LYS:HD3	1.69	1.20
30:BG:19:GLU:CB	30:BG:135:VAL:HG22	1.57	1.20
26:BA:2258:C:N4	26:BA:2426:A:H1'	1.50	1.20
26:BA:2653:U:H3'	26:BA:2654:A:C8	1.76	1.20
26:BA:2684:U:H1'	34:BO:70:ARG:CZ	1.68	1.20
29:BF:230:GLY:O	29:BF:231:ARG:HG2	1.07	1.20
3:AW:65:G:C6	3:AW:66:A:C8	2.29	1.20
48:B0:37:LEU:CD1	48:B0:69:PHE:HB2	1.70	1.20
47:B3:20:LYS:HA	47:B3:23:LEU:CG	1.69	1.20
26:BA:126:A:C5	52:B7:18:PHE:CE2	2.30	1.20
26:BA:2188:C:C4	26:BA:2189:U:O4	1.94	1.20
26:BA:2219:G:C2'	26:BA:2224:G:O5'	1.88	1.20
26:BA:2268:A:OP1	26:BA:2268:A:O4'	1.57	1.20
26:BA:2310:A:H2'	30:BG:55:LYS:CE	1.71	1.20

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2322:A:C4	26:BA:2323:G:C8	2.29	1.20
27:BD:183:ILE:HG22	27:BD:184:LEU:N	1.31	1.20
26:BA:1500:G:N2	27:BD:97:ASP:OD2	1.73	1.20
34:BO:68:GLY:HA3	34:BO:78:ARG:NE	1.55	1.20
44:BU:65:ILE:CG2	44:BU:76:TYR:HE2	1.54	1.20
26:BA:337:C:OP1	41:BY:24:ARG:CB	1.89	1.20
42:BZ:67:LYS:CD	42:BZ:93:GLU:OE2	1.89	1.20
46:B2:55:ARG:C	46:B2:58:THR:OG1	1.79	1.20
26:BA:1263:U:H4'	50:B5:16:ARG:CZ	1.69	1.20
26:BA:969:U:H4'	47:B3:14:GLY:O	1.05	1.20
27:BD:92:LEU:CD1	27:BD:102:TYR:CD1	2.24	1.20
32:BI:89:LEU:CD1	32:BI:93:ILE:CG2	2.17	1.20
34:BO:25:LEU:HG	34:BO:38:VAL:O	1.36	1.20
45:BV:30:GLY:CA	45:BV:33:VAL:HG21	1.69	1.20
1:AA:937:A:O3'	1:AA:938:A:P	1.99	1.20
16:AM:66:LEU:C	16:AM:67:GLU:N	1.95	1.20
53:B8:60:LEU:CD1	53:B8:64:ARG:HB2	1.71	1.20
26:BA:2287:A:N1	26:BA:2289:G:H1'	1.56	1.20
26:BA:931:G:OP1	47:B3:27:GLY:HA2	1.40	1.20
26:BA:451:C:O3'	29:BF:55:ARG:NH2	1.72	1.20
26:BA:2684:U:C1'	34:BO:70:ARG:NH2	2.04	1.20
49:B4:51:ASP:O	49:B4:52:THR:CG2	1.89	1.20
26:BA:2262:U:O2'	26:BA:2263:C:C5'	1.88	1.20
26:BA:2313:C:O2'	26:BA:2314:C:H5'	1.35	1.20
26:BA:2258:C:C4	26:BA:2426:A:C1'	2.24	1.20
26:BA:2848:G:N2	26:BA:2849:U:N3	1.79	1.20
31:BH:18:VAL:HG22	31:BH:23:VAL:CG2	1.69	1.20
38:BT:28:THR:O	38:BT:29:THR:CG2	1.89	1.20
26:BA:1612:C:C2'	52:B7:3:ARG:NE	2.00	1.20
26:BA:2819:G:H5''	26:BA:2821:A:N6	1.55	1.20
27:BD:167:GLU:HB3	27:BD:170:TYR:HE1	1.06	1.20
29:BF:168:ARG:NH2	29:BF:209:GLY:HA2	1.55	1.20
36:BQ:145:PRO:O	36:BQ:146:THR:OG1	1.59	1.20
45:BV:59:GLU:O	45:BV:60:VAL:HG23	1.37	1.20
1:AA:39:G:N7	1:AA:547:A:C8	2.08	1.20
26:BA:617:G:H4'	29:BF:219:ASN:OD1	1.41	1.20
29:BF:225:PRO:HG2	29:BF:231:ARG:NH2	1.54	1.20
32:BI:103:GLN:NE2	32:BI:110:LEU:N	1.81	1.20
35:BP:62:ALA:N	35:BP:107:LYS:HE3	0.89	1.20
44:BU:91:ASN:OD1	44:BU:95:LEU:HD21	1.37	1.20
26:BA:993:G:H4'	45:BV:90:PHE:CZ	1.76	1.20

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:85:VAL:C	39:BW:86:LEU:HD23	1.63	1.20
41:BY:74:VAL:CG1	41:BY:77:VAL:HG23	1.70	1.20
41:BY:55:PHE:CE1	41:BY:89:ARG:NH1	2.07	1.20
1:AA:247:G:OP2	20:AQ:99:SER:CB	1.89	1.20
51:B6:19:GLY:CA	51:B6:42:PRO:HG3	1.70	1.20
53:B8:55:TRP:CZ3	53:B8:59:LYS:CE	2.24	1.20
26:BA:144:C:C5'	40:BX:36:GLU:OE1	1.89	1.20
26:BA:1782:C:O2	26:BA:2609:U:O4'	1.56	1.20
26:BA:2631:G:H4'	26:BA:2892:A:OP1	1.42	1.20
27:BD:158:GLY:N	27:BD:194:VAL:HG11	1.53	1.20
31:BH:101:LYS:NZ	31:BH:115:GLU:HB2	1.53	1.20
26:BA:1059:G:C2	55:BK:127:ILE:HG23	1.74	1.20
43:BR:34:ILE:CG2	43:BR:35:THR:H	1.51	1.20
42:BZ:100:THR:HA	42:BZ:137:ASP:CG	1.62	1.20
1:AA:1341:U:H5'	2:AV:32:C:OP1	1.03	1.20
1:AA:1308:U:C5'	16:AM:110:ARG:HH22	1.53	1.20
51:B6:8:ILE:N	51:B6:29:ARG:NH2	1.87	1.20
26:BA:527:C:O2'	33:BN:95:ARG:NH1	1.71	1.20
26:BA:687:C:O4'	52:B7:4:THR:HG22	1.41	1.20
27:BD:63:ILE:O	27:BD:64:ILE:HG13	1.38	1.20
28:BE:77:PRO:CB	28:BE:187:HIS:H	1.55	1.20
31:BH:83:GLU:OE2	31:BH:84:LYS:N	1.72	1.20
55:BK:129:GLU:O	55:BK:133:LYS:HG3	1.38	1.20
33:BN:56:LYS:O	33:BN:59:LYS:HB2	1.37	1.20
43:BR:79:LEU:O	43:BR:79:LEU:HD23	1.38	1.20
34:BO:99:PHE:HE2	38:BT:24:LYS:CE	1.33	1.20
26:BA:1161:C:O2'	45:BV:22:VAL:HG11	1.05	1.20
1:AA:408:A:C5'	7:AD:22:LYS:O	1.90	1.19
26:BA:1364:G:P	49:B4:3:LYS:CG	2.30	1.19
26:BA:1404:C:O3'	26:BA:1405:U:P	2.00	1.19
26:BA:2357:U:O2'	26:BA:2358:G:O5'	1.56	1.19
28:BE:221:LYS:NZ	28:BE:233:ARG:HG2	1.55	1.19
32:BI:7:LYS:CD	32:BI:12:LYS:HZ2	1.43	1.19
46:B2:30:ALA:O	46:B2:34:GLN:HB2	1.39	1.19
46:B2:55:ARG:HA	46:B2:58:THR:OG1	1.22	1.19
49:B4:51:ASP:O	49:B4:52:THR:HG23	1.38	1.19
50:B5:57:VAL:CG1	50:B5:58:LEU:H	1.55	1.19
51:B6:21:TYR:OH	51:B6:43:VAL:CG2	1.90	1.19
53:B8:23:MET:CE	53:B8:48:PHE:HA	1.70	1.19
35:BP:113:GLN:O	35:BP:114:VAL:O	1.60	1.19
36:BQ:41:THR:HG22	36:BQ:125:TRP:CZ3	1.76	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:994:C:OP2	44:BU:54:LYS:HE3	1.37	1.19
45:BV:61:VAL:CA	45:BV:98:ILE:HD12	1.73	1.19
3:AW:25:C:C6	3:AW:26:G:C4	2.30	1.19
27:BD:63:ILE:HG22	27:BD:64:ILE:N	1.38	1.19
43:BR:20:LEU:HD11	43:BR:21:TYR:CD2	1.74	1.19
26:BA:2021:C:H5	44:BU:25:TRP:CZ2	1.59	1.19
40:BX:47:VAL:HG12	40:BX:69:SER:OG	1.36	1.19
3:AW:65:G:O2'	3:AW:66:A:H5'	1.37	1.19
47:B3:32:GLN:O	47:B3:32:GLN:CD	1.81	1.19
51:B6:19:GLY:CA	51:B6:42:PRO:CG	2.20	1.19
26:BA:2252:G:H2'	26:BA:2253:G:C5'	1.73	1.19
26:BA:2617:C:C2'	26:BA:2618:G:H5'	1.71	1.19
27:BD:111:VAL:O	27:BD:113:MET:N	1.74	1.19
31:BH:82:TYR:CE2	31:BH:137:LYS:HB3	1.75	1.19
33:BN:19:MET:CB	33:BN:46:ILE:HG12	1.69	1.19
44:BU:33:ARG:HB2	44:BU:33:ARG:NH1	1.57	1.19
26:BA:95:G:C5'	46:B2:41:GLU:OE1	1.90	1.19
26:BA:1710:C:O2'	26:BA:2858:C:N4	1.75	1.19
26:BA:2526:G:H2'	26:BA:2527:C:C5'	1.71	1.19
26:BA:600:G:H5'	29:BF:30:LEU:CD1	1.71	1.19
26:BA:2574:G:O2'	28:BE:240:PRO:CB	1.89	1.19
31:BH:10:ILE:HG22	31:BH:14:VAL:CB	1.70	1.19
33:BN:12:VAL:C	33:BN:38:VAL:CG1	2.07	1.19
33:BN:77:GLY:HA2	33:BN:80:LYS:CG	1.72	1.19
45:BV:42:GLY:N	45:BV:54:TYR:CE1	2.03	1.19
26:BA:2355:C:C3'	48:B0:21:LEU:HD11	1.72	1.19
26:BA:932:G:C5'	47:B3:29:ARG:NH2	2.04	1.19
51:B6:14:SER:HB2	51:B6:51:ARG:O	1.43	1.19
26:BA:2700:C:H2'	26:BA:2701:C:C4'	1.71	1.19
27:BD:167:GLU:HB2	27:BD:170:TYR:CD1	1.75	1.19
28:BE:211:GLN:N	28:BE:216:ARG:CZ	2.05	1.19
36:BQ:134:PHE:O	36:BQ:137:ARG:HB3	1.39	1.19
26:BA:2018:G:N2	44:BU:34:ASN:HD21	1.31	1.19
45:BV:19:VAL:CB	45:BV:21:ARG:NH1	2.03	1.19
42:BZ:20:ALA:C	42:BZ:34:LEU:HD21	1.52	1.19
1:AA:410:G:OP2	7:AD:25:ARG:CZ	1.90	1.19
53:B8:55:TRP:CE3	53:B8:59:LYS:HE3	1.76	1.19
26:BA:965:C:C4'	26:BA:2273:A:N3	2.05	1.19
26:BA:2717:G:C2	26:BA:2718:G:C8	2.30	1.19
26:BA:2808:U:C2	26:BA:2892:A:C6	2.30	1.19
26:BA:637:A:H8	35:BP:111:ALA:CB	1.53	1.19

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:163:HIS:HA	29:BF:166:ILE:HG13	1.24	1.19
30:BG:38:GLU:HG2	30:BG:41:LEU:CD1	1.71	1.19
55:BK:121:LEU:HA	55:BK:125:MET:CE	1.72	1.19
48:B0:43:THR:HG21	48:B0:75:GLY:N	1.55	1.19
26:BA:16:G:C4'	50:B5:18:MET:SD	2.30	1.19
27:BD:118:GLY:O	27:BD:129:LEU:CG	1.91	1.19
27:BD:70:LYS:HG3	27:BD:73:ILE:CD1	1.71	1.19
28:BE:200:ASP:HA	28:BE:266:LYS:HD2	1.22	1.19
26:BA:911:A:C6	36:BQ:16:ARG:CG	2.22	1.19
37:BS:108:SER:O	37:BS:110:THR:N	1.74	1.19
41:BY:33:GLU:OE1	41:BY:34:GLU:HG3	1.05	1.19
3:AW:25:C:C6	3:AW:26:G:C8	2.31	1.19
51:B6:8:ILE:CA	51:B6:29:ARG:HH21	1.54	1.19
26:BA:2870:C:O2	26:BA:2871:C:O4'	1.61	1.19
29:BF:167:ASP:OD2	29:BF:232:LEU:HG	1.03	1.19
29:BF:217:GLU:O	29:BF:218:VAL:HG23	1.05	1.19
25:BB:50:G:P	37:BS:74:PRO:HG2	1.82	1.19
44:BU:76:TYR:O	44:BU:80:ILE:HD12	1.04	1.19
40:BX:12:GLU:O	40:BX:16:ASN:OD1	1.61	1.19
40:BX:6:LYS:HB3	40:BX:27:ALA:O	1.42	1.19
2:AV:56:C:H1'	30:BG:56:ARG:CD	1.71	1.19
26:BA:1031:G:H4'	54:B9:8:LYS:NZ	1.55	1.19
26:BA:2045:C:N4	26:BA:2623:G:H1	1.40	1.19
26:BA:337:C:OP1	41:BY:24:ARG:HB2	1.03	1.19
26:BA:993:G:C4'	45:BV:90:PHE:CE2	2.26	1.19
32:BI:77:VAL:HG21	32:BI:141:LEU:CD1	1.72	1.19
36:BQ:49:VAL:CG2	36:BQ:121:ASP:N	2.01	1.19
44:BU:97:ASP:O	44:BU:101:ARG:CG	1.90	1.19
45:BV:14:VAL:CG2	45:BV:19:VAL:HG21	1.70	1.19
45:BV:61:VAL:HA	45:BV:98:ILE:CD1	1.72	1.19
40:BX:9:HIS:HD1	40:BX:26:PHE:C	1.47	1.19
16:AM:91:ARG:NH1	16:AM:103:THR:CG2	1.96	1.18
1:AA:1269:A:H5'	24:AU:19:GLY:HA2	1.25	1.18
26:BA:2320:A:H2	26:BA:2333:A:N3	1.40	1.18
26:BA:2403:C:N4	26:BA:2415:G:O6	1.63	1.18
26:BA:2659:G:H2'	26:BA:2661:G:OP2	1.43	1.18
29:BF:102:LEU:N	29:BF:107:ARG:HH21	1.38	1.18
29:BF:103:ASN:O	29:BF:104:ASP:O	1.60	1.18
37:BS:33:ARG:O	37:BS:35:VAL:HG23	1.42	1.18
26:BA:2225:A:H5''	26:BA:2226:C:C5'	1.70	1.18
26:BA:2258:C:C4	26:BA:2426:A:O4'	1.96	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2309:A:H5'	26:BA:2310:A:OP2	1.40	1.18
26:BA:2589:A:H2'	26:BA:2590:A:C5'	1.73	1.18
26:BA:2785:C:O2'	26:BA:2786:U:O5'	1.60	1.18
28:BE:268:LEU:HD23	28:BE:269:ILE:N	1.56	1.18
26:BA:2679:A:C2	28:BE:300:VAL:HG22	1.75	1.18
33:BN:19:MET:HB2	33:BN:46:ILE:CG1	1.74	1.18
33:BN:83:ILE:HG13	33:BN:84:ARG:N	1.15	1.18
1:AA:1107:C:O3'	1:AA:1108:G:P	2.01	1.18
3:AW:72:C:O2'	3:AW:73:A:H5'	1.38	1.18
47:B3:9:VAL:CG2	47:B3:54:VAL:HA	1.73	1.18
26:BA:2880:C:H42	26:BA:2881:C:N4	1.41	1.18
43:BR:61:HIS:HA	43:BR:64:ARG:CD	1.73	1.18
37:BS:46:GLN:O	37:BS:47:LEU:HD23	1.01	1.18
52:B7:21:ARG:O	52:B7:24:THR:HG23	1.43	1.18
53:B8:50:LEU:HD23	53:B8:51:ALA:N	0.86	1.18
26:BA:1568:G:H3'	27:BD:60:GLN:NE2	1.57	1.18
26:BA:1665:A:O2'	34:BO:66:LYS:NZ	1.74	1.18
26:BA:2488:A:C2'	26:BA:2489:G:H5'	1.74	1.18
26:BA:1129:A:C2	26:BA:2570:G:C1'	2.25	1.18
26:BA:2583:G:H2'	26:BA:2584:U:O2	1.04	1.18
26:BA:2711:A:OP2	26:BA:2714:G:OP1	1.57	1.18
29:BF:215:ALA:CB	29:BF:238:SER:O	1.91	1.18
26:BA:2746:U:H4'	31:BH:138:GLN:HA	1.24	1.18
44:BU:65:ILE:CD1	44:BU:96:ALA:HB2	1.71	1.18
41:BY:23:VAL:HG23	41:BY:67:LEU:HD21	1.25	1.18
46:B2:5:VAL:HG12	46:B2:6:GLN:N	1.38	1.18
26:BA:2528:U:C5	26:BA:2530:A:C4	2.30	1.18
26:BA:2712:U:C6	26:BA:712(A):A:N7	2.08	1.18
26:BA:2869:G:C5	26:BA:2870:C:C5	2.10	1.18
27:BD:61:TYR:OH	27:BD:214:MET:CE	1.91	1.18
35:BP:69:ILE:CG1	35:BP:70:ASP:H	1.57	1.18
36:BQ:127:ASN:HB3	36:BQ:128:PRO:CD	1.72	1.18
26:BA:25:U:C5'	39:BW:80:PRO:HD3	1.72	1.18
47:B3:7:LYS:O	47:B3:54:VAL:CG2	1.88	1.18
26:BA:2043:C:OP2	26:BA:2779:U:O4	1.60	1.18
26:BA:2746:U:O2	26:BA:2759:G:N2	1.74	1.18
29:BF:219:ASN:O	29:BF:222:ASP:CB	1.90	1.18
43:BR:33:ARG:HA	43:BR:114:VAL:O	1.42	1.18
38:BT:12:ASP:O	38:BT:13:ILE:HG13	1.42	1.18
39:BW:29:LEU:O	39:BW:31:GLU:N	1.76	1.18
42:BZ:159:THR:O	42:BZ:160:LEU:HD13	1.41	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:12:MET:C	51:B6:13:GLU:OE1	1.82	1.18
51:B6:5:GLY:O	51:B6:7:ARG:N	1.74	1.18
53:B8:7:HIS:O	53:B8:10:ALA:HB3	1.40	1.18
26:BA:2206:C:O2'	26:BA:2207:C:C5'	1.91	1.18
26:BA:223:A:O3'	26:BA:224:G:P	2.00	1.18
26:BA:2258:C:OP1	48:B0:4:LYS:NZ	1.76	1.18
26:BA:2616:C:O2'	26:BA:2617:C:C5'	1.91	1.18
26:BA:2776:A:H4'	26:BA:2778:A:OP1	1.44	1.18
27:BD:103:ILE:CG1	27:BD:104:ILE:HD11	1.52	1.18
31:BH:87:GLU:HG3	31:BH:162:ARG:O	1.43	1.18
31:BH:86:LEU:HD13	31:BH:86:LEU:C	1.63	1.18
41:BY:101:LEU:CD2	41:BY:103:LEU:CD2	2.20	1.18
41:BY:64:ASN:O	41:BY:72:ILE:HG23	1.41	1.18
42:BZ:69:VAL:HG21	42:BZ:81:VAL:CG1	1.73	1.18
1:AA:1340:A:O2'	2:AV:31:A:O3'	1.62	1.18
47:B3:53:LEU:CD2	47:B3:54:VAL:HG13	1.72	1.18
52:B7:7:PRO:C	52:B7:8:ASN:HD22	1.43	1.18
53:B8:36:LYS:CD	53:B8:40:GLU:OE1	1.90	1.18
32:BI:37:ILE:CG2	32:BI:38:GLU:H	1.55	1.18
45:BV:4:ILE:CD1	45:BV:13:ARG:HG2	1.74	1.18
45:BV:91:THR:C	45:BV:92:ALA:HB3	1.50	1.18
45:BV:94:LYS:C	45:BV:95:ILE:HD12	0.80	1.18
39:BW:30:GLU:HA	39:BW:33:ARG:CD	1.72	1.18
26:BA:2303:G:H4'	30:BG:99:ASP:CB	1.64	1.18
26:BA:2739:U:H2'	26:BA:2740:A:H5'	1.26	1.18
26:BA:557:U:C5'	33:BN:92:GLN:HE21	1.57	1.18
27:BD:92:LEU:CD1	27:BD:102:TYR:CE1	2.26	1.18
26:BA:1675:C:N3	28:BE:225:LYS:HG2	1.58	1.18
28:BE:256:THR:HA	28:BE:259:HIS:HE1	1.02	1.18
32:BI:13:GLY:HA2	32:BI:15:LYS:CE	1.72	1.18
34:BO:4:GLN:O	34:BO:21:VAL:O	1.58	1.18
26:BA:2009:G:H1'	43:BR:107:ASP:O	1.43	1.18
26:BA:2320:A:C6	37:BS:9:PRO:HB3	1.79	1.18
40:BX:18:MET:SD	40:BX:25:GLN:N	2.15	1.18
1:AA:986:A:N3	22:AS:52:TYR:OH	1.73	1.18
51:B6:19:GLY:HA2	51:B6:44:ALA:CB	1.74	1.18
54:B9:7:VAL:CG1	54:B9:34:GLN:CD	2.01	1.18
26:BA:2228:G:N7	26:BA:2229:C:C5	2.11	1.18
26:BA:2302:G:C6	26:BA:2315:G:O6	1.95	1.18
3:AW:76:A:C8	26:BA:2421:G:H2'	1.77	1.18
26:BA:85:G:O5'	41:BY:65:VAL:CG1	1.92	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:214:VAL:HG21	28:BE:221:LYS:NZ	1.56	1.18
39:BW:104:THR:O	39:BW:105:VAL:CG1	1.92	1.18
3:AW:37:YYG:C19	10:AG:84:ASN:CA	2.15	1.17
3:AW:65:G:C2	3:AW:66:A:C1'	2.26	1.17
47:B3:8:LEU:HD21	47:B3:31:LEU:HA	1.26	1.17
26:BA:2507:C:C2	26:BA:2583:G:N2	2.11	1.17
36:BQ:69:ASN:C	36:BQ:69:ASN:HD22	1.45	1.17
26:BA:856:C:C5'	48:B0:25:LYS:NZ	2.03	1.17
47:B3:20:LYS:O	47:B3:23:LEU:HG	1.01	1.17
26:BA:2573:C:C6	26:BA:2573:C:C5'	2.24	1.17
26:BA:2756:U:O2'	26:BA:2757:A:H5'	1.02	1.17
26:BA:388:G:P	49:B4:29:PRO:HG3	1.82	1.17
26:BA:75:G:O3'	46:B2:51:LYS:NZ	1.76	1.17
26:BA:1492:G:O4'	27:BD:97:ASP:OD1	1.61	1.17
41:BY:103:LEU:CD1	41:BY:113:GLU:HB3	1.74	1.17
42:BZ:46:GLN:O	42:BZ:47:SER:O	1.62	1.17
51:B6:41:ASP:HB2	51:B6:46:LYS:NZ	1.55	1.17
26:BA:2255:G:C2	26:BA:2256:G:H1'	1.76	1.17
26:BA:2733:A:H1'	28:BE:318:ASN:ND2	1.59	1.17
28:BE:72:VAL:O	28:BE:73:ILE:CD1	1.93	1.17
32:BI:92:SER:HB3	32:BI:122:ARG:NH1	1.58	1.17
32:BI:95:SER:HA	32:BI:98:ILE:CD1	1.72	1.17
34:BO:34:ASN:O	34:BO:35:ILE:O	1.62	1.17
35:BP:117:GLU:OE2	35:BP:136:ALA:O	1.61	1.17
35:BP:76:LEU:O	35:BP:81:VAL:HG23	1.41	1.17
37:BS:99:GLU:OE1	37:BS:128:ASP:HB2	1.02	1.17
45:BV:61:VAL:CA	45:BV:98:ILE:CD1	2.23	1.17
40:BX:11:THR:O	40:BX:15:MET:CG	1.91	1.17
40:BX:5:ILE:HG22	40:BX:6:LYS:N	1.25	1.17
41:BY:101:LEU:HD11	41:BY:112:LEU:CD1	1.74	1.17
1:AA:1260:C:H4'	1:AA:1284:C:H5'	1.18	1.17
26:BA:1525:G:O3'	26:BA:1526:G:P	2.02	1.17
26:BA:2546:U:H5'	26:BA:2565:A:C2	1.79	1.17
26:BA:2618:G:O2'	26:BA:2619:C:O5'	1.61	1.17
26:BA:2644:G:O5'	26:BA:2644:G:C8	1.98	1.17
35:BP:57:VAL:HG12	35:BP:58:GLN:N	1.51	1.17
44:BU:92:ARG:N	45:BV:10:LYS:NZ	1.91	1.17
47:B3:59:VAL:O	47:B3:60:GLU:CG	1.92	1.17
50:B5:12:SER:CB	50:B5:15:LYS:HZ1	1.57	1.17
26:BA:2219:G:C2'	26:BA:2224:G:C5'	2.21	1.17
26:BA:2359:C:O2'	26:BA:2360:A:O4'	1.61	1.17

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2653:U:N3	26:BA:2654:A:N6	1.93	1.17
26:BA:2865:U:C5	26:BA:2866:U:C5	2.33	1.17
26:BA:526:A:H2	26:BA:2626:C:C1'	1.58	1.17
31:BH:86:LEU:N	31:BH:131:ILE:CG2	2.05	1.17
31:BH:86:LEU:HA	31:BH:148:ARG:NH2	0.86	1.17
36:BQ:144:THR:OG1	36:BQ:145:PRO:HD3	1.43	1.17
3:AW:40:C:O2	10:AG:144:MET:SD	2.01	1.17
48:B0:65:GLY:O	48:B0:66:LYS:CD	1.86	1.17
52:B7:30:ILE:CD1	52:B7:33:ARG:HD3	1.75	1.17
26:BA:2603:G:N3	26:BA:2604:U:C6	2.13	1.17
28:BE:205:THR:CG2	28:BE:259:HIS:C	2.11	1.17
28:BE:303:PRO:CB	28:BE:307:LEU:HD13	1.46	1.17
28:BE:44:TYR:C	28:BE:309:PRO:HG3	1.63	1.17
31:BH:129:LYS:O	31:BH:130:ILE:CD1	1.93	1.17
31:BH:18:VAL:CG2	31:BH:23:VAL:HG22	1.73	1.17
33:BN:13:ASP:N	33:BN:38:VAL:HG11	1.51	1.17
34:BO:79:PHE:HA	38:BT:22:VAL:HG22	1.24	1.17
39:BW:8:ARG:O	39:BW:10:VAL:HG23	1.43	1.17
41:BY:41:ARG:HB2	41:BY:112:LEU:HA	1.24	1.17
42:BZ:19:ILE:HB	42:BZ:39:PHE:CE1	1.79	1.17
1:AA:1219:U:O2'	22:AS:34:TRP:HB3	1.41	1.17
48:B0:49:GLN:NE2	48:B0:73:GLY:HA3	1.39	1.17
26:BA:2093:G:C5	26:BA:2225:A:N7	2.12	1.17
26:BA:2386:C:H4'	48:B0:39:ARG:NE	1.60	1.17
26:BA:2482:G:C2'	26:BA:2483:C:H5'	1.74	1.17
26:BA:2439:A:C1'	26:BA:2587:A:OP1	1.92	1.17
26:BA:2700:C:H2'	26:BA:2701:C:H4'	1.24	1.17
26:BA:2754:U:H2'	26:BA:2756:U:OP1	0.99	1.17
26:BA:2776:A:C1'	26:BA:2778:A:N7	2.08	1.17
26:BA:974:G:N7	45:BV:80:TYR:CD1	2.12	1.17
27:BD:128:ALA:HB3	27:BD:190:THR:CG2	1.54	1.17
29:BF:62:GLY:CA	29:BF:65:ARG:NH2	2.06	1.17
32:BI:95:SER:CA	32:BI:98:ILE:HD12	1.75	1.17
26:BA:2378:A:N3	37:BS:26:LEU:CD2	2.05	1.17
41:BY:35:TYR:OH	41:BY:113:GLU:HG3	1.43	1.17
47:B3:40:THR:CB	47:B3:43:ILE:HD13	1.74	1.17
26:BA:1124:C:O3'	26:BA:1125:G:P	2.02	1.17
26:BA:1214:A:H2'	26:BA:1215:G:C8	1.80	1.17
26:BA:2423:U:C5	26:BA:2425:A:N6	2.12	1.17
26:BA:2657:A:N6	26:BA:2664:G:H21	1.39	1.17
26:BA:775:G:O2'	26:BA:791:C:N4	1.78	1.17

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:158:GLY:CA	27:BD:194:VAL:CG1	2.17	1.17
29:BF:36:ARG:CA	29:BF:39:GLN:NE2	2.01	1.17
26:BA:616:A:H5''	29:BF:42:ARG:HH12	1.09	1.17
32:BI:95:SER:OG	32:BI:98:ILE:CD1	1.79	1.17
37:BS:41:LYS:CD	37:BS:41:LYS:O	1.93	1.17
44:BU:115:ASN:O	44:BU:117:ARG:N	1.78	1.17
41:BY:101:LEU:CD2	41:BY:112:LEU:HD11	1.74	1.17
48:B0:69:PHE:O	48:B0:70:ILE:HG23	1.42	1.17
48:B0:45:PHE:CZ	48:B0:78:PHE:HD2	1.62	1.17
26:BA:2226:C:C2'	26:BA:2227:A:O4'	1.93	1.17
26:BA:2333:A:H1'	26:BA:2335:A:C5	1.80	1.17
26:BA:2543:G:C2'	26:BA:2544:G:C8	2.26	1.17
26:BA:2688:U:O2	26:BA:2719:G:N2	1.76	1.17
26:BA:2838:G:H2'	26:BA:2839:G:H5'	1.26	1.17
32:BI:3:VAL:HG21	32:BI:21:VAL:CG2	1.74	1.17
26:BA:2485:G:H5''	36:BQ:144:THR:CG2	1.73	1.17
26:BA:875:G:OP1	42:BZ:146:HIS:CD2	1.98	1.17
42:BZ:2:GLU:CA	42:BZ:54:ILE:CG2	2.23	1.17
42:BZ:2:GLU:N	42:BZ:54:ILE:CG2	2.06	1.17
26:BA:593:G:H5''	53:B8:62:LEU:HD21	1.19	1.17
26:BA:2021:C:P	50:B5:15:LYS:CE	2.32	1.17
26:BA:2263:C:C2'	26:BA:2264:C:H5'	1.74	1.17
26:BA:2507:C:N3	26:BA:2583:G:N3	1.91	1.17
26:BA:280:C:O3'	26:BA:281:G:P	2.03	1.17
36:BQ:20:ILE:HG13	36:BQ:21:SER:N	1.59	1.17
42:BZ:113:VAL:HG12	42:BZ:114:ASP:H	1.04	1.17
49:B4:14:ILE:HG23	49:B4:16:TYR:CE1	1.81	1.16
26:BA:2815:C:H5'	50:B5:29:ASN:ND2	1.58	1.16
26:BA:2209:C:O2'	26:BA:2210:G:H3'	1.43	1.16
26:BA:2292:C:C2	26:BA:2293:C:C6	2.32	1.16
26:BA:2603:G:C2	26:BA:2604:U:C6	2.33	1.16
26:BA:2617:C:N3	26:BA:2618:G:H8	1.40	1.16
26:BA:2754:U:C2'	26:BA:2756:U:OP1	1.93	1.16
26:BA:2310:A:C2'	30:BG:55:LYS:HE2	1.73	1.16
36:BQ:49:VAL:CG2	36:BQ:119:ASN:O	1.92	1.16
42:BZ:92:VAL:O	42:BZ:94:VAL:N	1.75	1.16
26:BA:2328:A:N6	26:BA:2329:G:O6	1.78	1.16
26:BA:2586:C:O2	26:BA:2587:A:N7	1.76	1.16
26:BA:2731:G:N2	26:BA:2732:G:N2	1.93	1.16
26:BA:95:G:H5'	46:B2:41:GLU:OE1	1.00	1.16
32:BI:95:SER:O	32:BI:98:ILE:HB	0.98	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:100:VAL:HG12	55:BK:101:THR:H	1.05	1.16
33:BN:58:GLU:CA	33:BN:61:VAL:HG23	1.74	1.16
39:BW:86:LEU:HB3	39:BW:87:PRO:CD	1.74	1.16
52:B7:30:ILE:CA	52:B7:33:ARG:CD	2.11	1.16
26:BA:199:A:N1	26:BA:2433:A:C8	2.14	1.16
26:BA:2416:C:OP1	35:BP:51:PHE:HE2	1.01	1.16
26:BA:2864:G:O2'	26:BA:2865:U:O4'	1.62	1.16
26:BA:904:C:O4'	42:BZ:166:LEU:HD21	1.44	1.16
27:BD:73:ILE:HG21	27:BD:95:TYR:CE2	1.78	1.16
28:BE:199:ALA:CB	28:BE:312:ARG:O	1.93	1.16
29:BF:211:ASP:OD2	29:BF:211:ASP:O	1.61	1.16
30:BG:97:GLN:CB	30:BG:106:PHE:CE2	2.27	1.16
26:BA:245:G:OP2	35:BP:53:ARG:NH1	1.76	1.16
36:BQ:89:PRO:C	36:BQ:90:PHE:CD1	2.17	1.16
45:BV:11:GLN:NE2	45:BV:22:VAL:HG21	1.54	1.16
3:AW:65:G:O6	3:AW:66:A:C5	1.95	1.16
54:B9:7:VAL:HG11	54:B9:34:GLN:CG	1.61	1.16
26:BA:2094:G:C6	26:BA:2196:C:N3	2.14	1.16
29:BF:219:ASN:N	29:BF:219:ASN:HD22	1.38	1.16
30:BG:93:LEU:HD22	30:BG:97:GLN:OE1	1.44	1.16
41:BY:101:LEU:CD2	41:BY:103:LEU:HD11	1.74	1.16
1:AA:1313:U:C5	22:AS:4:SER:CB	2.27	1.16
26:BA:856:C:O3'	48:B0:56:ASP:OD2	1.60	1.16
46:B2:13:PRO:HD3	46:B2:16:ARG:NH1	1.60	1.16
47:B3:20:LYS:CA	47:B3:23:LEU:HG	1.75	1.16
26:BA:2603:G:C2	26:BA:2604:U:C5	2.33	1.16
34:BO:56:GLN:O	34:BO:58:VAL:HG23	1.45	1.16
44:BU:13:ARG:O	44:BU:16:LYS:CB	1.93	1.16
44:BU:21:ALA:HA	44:BU:24:PHE:CZ	1.78	1.16
44:BU:92:ARG:HA	44:BU:95:LEU:HD12	1.20	1.16
39:BW:32:ALA:CB	39:BW:35:ILE:CD1	2.23	1.16
41:BY:48:VAL:HG12	41:BY:49:GLU:N	1.46	1.16
42:BZ:39:PHE:O	42:BZ:43:PHE:CD2	1.99	1.16
50:B5:45:ILE:HG13	50:B5:52:TYR:CE1	1.80	1.16
26:BA:2049:G:C2	26:BA:2620:C:N3	2.14	1.16
27:BD:223:ASN:O	27:BD:224:VAL:O	1.63	1.16
29:BF:219:ASN:O	29:BF:222:ASP:HB2	1.02	1.16
31:BH:10:ILE:HG23	31:BH:14:VAL:HG11	1.16	1.16
35:BP:128:GLY:CA	35:BP:132:LYS:HZ2	1.58	1.16
36:BQ:45:GLN:HE22	36:BQ:153:PRO:CB	1.57	1.16
1:AA:1313:U:C5	22:AS:4:SER:HB3	1.79	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B5:25:LEU:O	50:B5:26:THR:HG23	1.44	1.16
50:B5:44:HIS:HA	50:B5:52:TYR:CZ	1.81	1.16
50:B5:57:VAL:HG12	50:B5:58:LEU:N	1.55	1.16
26:BA:459:U:OP2	52:B7:40:HIS:CD2	1.99	1.16
26:BA:2358:G:N2	26:BA:2359:C:O4'	1.78	1.16
26:BA:2432:A:C2	26:BA:2433:A:N1	2.13	1.16
26:BA:2491:U:O2'	26:BA:2492:U:H5'	1.02	1.16
26:BA:2653:U:N3	26:BA:2654:A:C6	2.14	1.16
26:BA:2741:A:O2'	26:BA:2742:C:H5'	1.00	1.16
27:BD:139:LEU:CD1	27:BD:139:LEU:O	1.93	1.16
31:BH:93:TYR:O	31:BH:94:ARG:CG	1.92	1.16
26:BA:994:C:O2'	44:BU:54:LYS:HG2	1.43	1.16
40:BX:47:VAL:HG11	40:BX:69:SER:HB3	1.20	1.16
47:B3:59:VAL:HG12	47:B3:60:GLU:H	1.04	1.16
26:BA:2052:G:H21	28:BE:245:ARG:CG	1.57	1.16
26:BA:2212:A:H2'	26:BA:2213:U:C5	1.77	1.16
26:BA:2459:A:C8	26:BA:2460:U:C5	2.33	1.16
26:BA:526:A:C2	26:BA:2626:C:O4'	1.98	1.16
26:BA:2768:C:C2	26:BA:2769:C:C5	2.33	1.16
26:BA:2808:U:C2	26:BA:2892:A:N6	2.13	1.16
27:BD:168:GLY:O	27:BD:170:TYR:N	1.79	1.16
30:BG:29:HIS:N	30:BG:69:ILE:HD13	1.59	1.16
31:BH:75:VAL:O	31:BH:77:GLY:N	1.75	1.16
36:BQ:91:HIS:C	36:BQ:111:THR:HG23	1.66	1.16
26:BA:494:G:H4'	39:BW:6:ILE:CG2	1.75	1.16
40:BX:13:LYS:O	40:BX:16:ASN:OD1	1.64	1.16
41:BY:32:ARG:O	41:BY:34:GLU:N	1.77	1.16
41:BY:63:ILE:HD11	41:BY:75:GLU:CA	1.74	1.16
26:BA:1278:A:OP1	43:BR:36:THR:OG1	1.60	1.16
26:BA:1620:G:C1'	52:B7:1:MET:N	2.09	1.16
29:BF:96:LYS:CB	29:BF:98:ARG:CZ	1.80	1.16
32:BI:7:LYS:CD	32:BI:12:LYS:HG2	1.74	1.16
33:BN:135:ILE:O	33:BN:139:LEU:HD13	1.34	1.16
33:BN:10:VAL:CB	33:BN:36:VAL:HA	1.76	1.16
34:BO:98:ILE:HD11	34:BO:117:LEU:CB	1.71	1.16
44:BU:13:ARG:HB2	44:BU:13:ARG:NH1	0.83	1.16
41:BY:101:LEU:CD2	41:BY:103:LEU:CD1	2.24	1.16
47:B3:53:LEU:HD23	47:B3:54:VAL:HG13	1.28	1.16
26:BA:2020:A:N7	50:B5:9:LYS:HE2	1.22	1.16
53:B8:58:MET:O	53:B8:60:LEU:N	1.77	1.16
26:BA:1568:G:C3'	27:BD:60:GLN:NE2	2.08	1.16

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2592:G:C8	26:BA:2593:U:C5	2.34	1.16
26:BA:2869:G:C6	26:BA:2870:C:C5	2.34	1.16
26:BA:965:C:H5'	26:BA:2273:A:C1'	1.76	1.16
26:BA:1818:U:H3'	27:BD:155:ARG:HG2	1.16	1.16
27:BD:80:ILE:HB	27:BD:82:TYR:CE1	1.81	1.16
29:BF:34:ALA:CB	29:BF:110:ALA:HB1	1.75	1.16
33:BN:42:GLU:O	33:BN:132:LEU:O	1.60	1.16
44:BU:28:ARG:HA	44:BU:31:GLN:HB2	1.18	1.16
45:BV:30:GLY:O	45:BV:33:VAL:CG2	1.91	1.16
41:BY:101:LEU:CD2	41:BY:112:LEU:HD21	1.76	1.16
26:BA:1665:A:O3'	34:BO:66:LYS:HE2	0.98	1.15
26:BA:2801:A:C2	26:BA:2895:U:O2'	1.96	1.15
26:BA:72:U:H5'	40:BX:2:TRP:CH2	1.81	1.15
27:BD:66:PHE:O	27:BD:67:LYS:HD2	1.41	1.15
26:BA:2679:A:N3	28:BE:300:VAL:HG11	1.45	1.15
36:BQ:59:ASN:ND2	36:BQ:60:ALA:N	1.93	1.15
36:BQ:67:ALA:O	36:BQ:71:PHE:CE1	1.98	1.15
45:BV:91:THR:O	45:BV:92:ALA:HB2	1.32	1.15
41:BY:101:LEU:CD1	41:BY:112:LEU:CD1	2.24	1.15
1:AA:37:U:O2	1:AA:397:A:N6	1.78	1.15
3:AW:25:C:N1	3:AW:26:G:N9	1.80	1.15
53:B8:17:THR:OG1	53:B8:19:THR:OG1	1.63	1.15
2:AV:74:C:N4	26:BA:2253:G:H1	1.44	1.15
26:BA:2633:G:N3	26:BA:2634:G:C8	2.15	1.15
26:BA:1827:C:H41	27:BD:225:ARG:NH1	1.41	1.15
28:BE:218:GLY:O	28:BE:219:VAL:CG2	1.94	1.15
29:BF:144:PHE:CE2	29:BF:156:LEU:HD13	1.80	1.15
44:BU:99:ALA:CB	44:BU:106:PHE:CZ	2.28	1.15
1:AA:404:U:O4	7:AD:2:GLY:HA2	1.45	1.15
26:BA:2311:A:OP2	30:BG:55:LYS:HE3	1.45	1.15
27:BD:104:ILE:HD12	27:BD:104:ILE:N	1.57	1.15
27:BD:204:PHE:HD1	27:BD:204:PHE:N	1.43	1.15
34:BO:98:ILE:CD1	34:BO:117:LEU:CB	2.23	1.15
26:BA:1156:A:OP1	44:BU:55:ARG:CZ	1.94	1.15
26:BA:2009:G:H5''	39:BW:41:LYS:HD2	1.18	1.15
50:B5:45:ILE:CG2	50:B5:52:TYR:CD1	2.28	1.15
26:BA:2061:G:N7	26:BA:2501:C:H1'	1.61	1.15
26:BA:2776:A:N3	26:BA:2778:A:C5	2.15	1.15
26:BA:617:G:OP1	29:BF:221:GLU:CD	1.84	1.15
28:BE:205:THR:O	28:BE:206:LYS:HG3	1.47	1.15
28:BE:268:LEU:HD23	28:BE:269:ILE:H	0.99	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:51:TYR:O	29:BF:55:ARG:CA	1.94	1.15
55:BK:46:THR:HG22	55:BK:54:LEU:HD12	1.20	1.15
26:BA:637:A:C8	35:BP:111:ALA:CB	2.27	1.15
42:BZ:92:VAL:HG13	42:BZ:124:ALA:CB	1.76	1.15
26:BA:2215:G:O2'	26:BA:2216:G:H5'	1.41	1.15
34:BO:62:VAL:CA	34:BO:84:CYS:SG	2.34	1.15
34:BO:66:LYS:HG3	34:BO:82:ASN:HD21	1.01	1.15
43:BR:104:ARG:HA	43:BR:105:ARG:NH2	1.60	1.15
40:BX:6:LYS:HE3	40:BX:29:ASP:N	1.60	1.15
41:BY:46:ASP:HA	41:BY:102:ASP:OD2	0.99	1.15
48:B0:77:ARG:O	48:B0:78:PHE:O	1.63	1.15
46:B2:29:ASN:O	46:B2:34:GLN:CD	1.85	1.15
26:BA:2197:U:O2'	26:BA:2198:A:H5''	1.42	1.15
28:BE:174:LEU:O	28:BE:177:ALA:HB3	1.40	1.15
28:BE:205:THR:CG2	28:BE:259:HIS:CB	2.23	1.15
30:BG:19:GLU:OE1	30:BG:135:VAL:HG22	1.43	1.15
33:BN:138:THR:OG1	33:BN:139:LEU:HD13	1.43	1.15
47:B3:30:ARG:HH11	47:B3:30:ARG:HG3	1.04	1.15
26:BA:2373:G:C6	26:BA:2374:C:N4	2.15	1.15
26:BA:2745:C:C1'	31:BH:142:GLU:OE2	1.94	1.15
26:BA:2218:G:O2'	27:BD:146:LYS:CE	1.92	1.15
27:BD:85:ASN:OD1	27:BD:86:ARG:NH2	1.78	1.15
28:BE:74:GLU:CA	28:BE:293:TYR:HE2	1.57	1.15
29:BF:151:GLN:OE1	29:BF:154:VAL:CG2	1.95	1.15
29:BF:153:VAL:HG13	29:BF:157:LEU:CD2	1.74	1.15
36:BQ:57:ARG:O	36:BQ:61:LEU:HG	1.47	1.15
44:BU:44:THR:O	44:BU:47:TYR:HB2	1.45	1.15
44:BU:61:TRP:O	44:BU:65:ILE:HG12	1.00	1.15
26:BA:998:C:H5''	44:BU:84:LYS:NZ	1.61	1.15
26:BA:2386:C:C4'	48:B0:39:ARG:HH21	1.58	1.15
26:BA:2761:G:H2'	26:BA:2762:G:H5'	1.19	1.15
27:BD:141:HIS:CE1	27:BD:191:VAL:O	1.99	1.15
29:BF:3:ALA:HB3	29:BF:16:VAL:O	0.98	1.15
30:BG:93:LEU:HD22	30:BG:106:PHE:CD2	1.80	1.15
55:BK:106:GLU:O	55:BK:110:LYS:HE3	1.44	1.15
35:BP:114:VAL:HG23	35:BP:132:LYS:HB3	1.23	1.15
41:BY:101:LEU:HG	41:BY:112:LEU:CD1	1.76	1.15
3:AW:72:C:O2'	3:AW:73:A:C4'	1.95	1.15
26:BA:1364:G:O5'	49:B4:3:LYS:HD3	1.45	1.15
26:BA:2592:G:C5	26:BA:2593:U:C5	2.35	1.15
26:BA:2815:C:O2'	26:BA:2816:C:C5'	1.94	1.15

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2832:U:C5	26:BA:2832:U:H5'	1.82	1.15
26:BA:801:G:P	29:BF:79:ARG:NE	2.19	1.15
26:BA:2679:A:C2	28:BE:300:VAL:HG21	1.80	1.15
43:BR:52:ILE:HG22	43:BR:53:HIS:N	1.54	1.15
26:BA:994:C:C2	44:BU:53:LYS:HD2	1.78	1.15
45:BV:31:ASP:O	45:BV:63:HIS:HB2	1.47	1.15
25:BB:104:A:C1'	42:BZ:24:TYR:OH	1.95	1.15
49:B4:5:LEU:CB	49:B4:56:VAL:HG13	1.76	1.15
26:BA:1457:A:N1	26:BA:2703:C:N4	1.94	1.15
29:BF:47:GLY:C	29:BF:92:PRO:HG3	1.63	1.15
31:BH:159:LYS:H	31:BH:162:ARG:NH2	1.43	1.15
31:BH:63:LEU:O	31:BH:66:THR:HG22	1.45	1.15
31:BH:85:ALA:HA	31:BH:131:ILE:CG2	1.75	1.15
33:BN:45:VAL:N	33:BN:132:LEU:HB2	1.24	1.15
26:BA:1140:C:N4	33:BN:49:ARG:HD2	1.61	1.15
37:BS:47:LEU:HD12	37:BS:58:LEU:CD2	1.76	1.15
42:BZ:64:ALA:HB3	42:BZ:85:MET:CA	1.75	1.15
26:BA:2205:C:O2'	26:BA:2228:G:N2	1.81	1.14
26:BA:2410:G:N3	26:BA:2411:A:C8	2.15	1.14
26:BA:2580:U:H5	26:BA:2581:G:N7	1.33	1.14
26:BA:2768:C:N3	26:BA:2769:C:H5	1.16	1.14
28:BE:205:THR:HG22	28:BE:259:HIS:HB2	1.26	1.14
33:BN:20:GLY:O	33:BN:22:VAL:N	1.79	1.14
33:BN:15:ARG:NE	33:BN:40:ASN:ND2	1.95	1.14
35:BP:71:GLU:O	35:BP:74:THR:N	1.80	1.14
43:BR:77:ARG:NH1	43:BR:77:ARG:CB	1.72	1.14
44:BU:73:GLY:O	44:BU:74:MET:HG2	1.47	1.14
26:BA:25:U:C5'	39:BW:80:PRO:CD	2.24	1.14
40:BX:47:VAL:CG1	40:BX:69:SER:CB	2.24	1.14
42:BZ:112:LEU:HD23	42:BZ:113:VAL:N	1.61	1.14
1:AA:1500:A:H5''	1:AA:1508:G:H5''	1.18	1.14
16:AM:23:TYR:CE2	16:AM:70:LEU:HD22	1.81	1.14
48:B0:61:ALA:HB2	48:B0:81:ILE:HD13	1.28	1.14
47:B3:20:LYS:CA	47:B3:23:LEU:CD1	2.24	1.14
3:AW:75:C:O2	26:BA:2395:C:H1'	1.44	1.14
28:BE:211:GLN:NE2	28:BE:216:ARG:H	1.40	1.14
31:BH:129:LYS:C	31:BH:130:ILE:CD1	2.15	1.14
31:BH:44:VAL:HA	31:BH:49:ILE:CG2	1.78	1.14
33:BN:134:GLU:O	33:BN:138:THR:HG23	0.97	1.14
36:BQ:56:ILE:N	36:BQ:56:ILE:HD13	1.48	1.14
37:BS:23:ARG:NH2	37:BS:37:ARG:NH2	1.94	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2320:A:N6	37:BS:9:PRO:CG	2.06	1.14
42:BZ:103:ARG:HG2	42:BZ:139:THR:HG22	1.17	1.14
3:AW:76:A:N3	26:BA:2422:A:N6	1.94	1.14
48:B0:23:VAL:HG12	48:B0:24:LYS:H	1.07	1.14
48:B0:37:LEU:CD1	48:B0:70:ILE:CD1	2.24	1.14
53:B8:26:LYS:HD2	53:B8:44:LYS:C	1.67	1.14
26:BA:2265:U:C2	26:BA:2266:A:N7	2.15	1.14
26:BA:2364:C:H5''	48:B0:38:VAL:HG12	1.19	1.14
28:BE:205:THR:HA	28:BE:261:ARG:HD2	1.22	1.14
28:BE:48:MET:O	28:BE:49:THR:HG22	1.48	1.14
29:BF:147:LEU:HD11	29:BF:156:LEU:HD11	1.16	1.14
29:BF:52:ALA:CA	29:BF:55:ARG:HB3	1.77	1.14
26:BA:1082:U:O4'	55:BK:118:ALA:CB	1.95	1.14
55:BK:129:GLU:CG	55:BK:133:LYS:HE3	1.68	1.14
34:BO:64:ARG:NH2	34:BO:100:GLY:HA3	1.62	1.14
34:BO:77:ILE:HD13	34:BO:77:ILE:C	1.58	1.14
44:BU:8:ILE:HD12	44:BU:8:ILE:N	1.61	1.14
3:AW:25:C:N1	3:AW:26:G:C4	1.95	1.14
26:BA:1598:C:H5''	40:BX:34:LYS:CG	1.77	1.14
26:BA:2343:C:H5'	26:BA:2374:C:OP1	1.44	1.14
26:BA:2432:A:H2	26:BA:2433:A:C5	1.64	1.14
26:BA:2528:U:C5	26:BA:2530:A:N3	2.14	1.14
26:BA:2626:C:C2'	26:BA:2627:G:H5''	1.78	1.14
26:BA:2052:G:H4'	28:BE:239:GLY:O	1.47	1.14
30:BG:56:ARG:CG	30:BG:65:GLU:HB2	1.77	1.14
32:BI:95:SER:O	32:BI:98:ILE:CB	1.94	1.14
46:B2:55:ARG:O	46:B2:58:THR:OG1	1.65	1.14
54:B9:32:HIS:O	54:B9:34:GLN:N	1.79	1.14
26:BA:1917:U:H3'	26:BA:1918:A:H8	1.02	1.14
26:BA:2425:A:O2'	26:BA:2426:A:OP2	1.62	1.14
26:BA:2064:C:H1'	26:BA:2450:A:C6	1.83	1.14
26:BA:2717:G:H8	26:BA:2717:G:C5'	1.59	1.14
25:BB:47:C:O3'	37:BS:107:ASN:ND2	1.79	1.14
27:BD:175:LEU:HD12	27:BD:179:GLU:CB	1.78	1.14
26:BA:1827:C:N4	27:BD:225:ARG:HH12	1.43	1.14
29:BF:215:ALA:HB1	29:BF:241:ALA:HB3	1.20	1.14
29:BF:32:GLY:C	29:BF:35:VAL:HG23	1.66	1.14
36:BQ:51:GLU:HA	36:BQ:118:ALA:HB2	1.26	1.14
36:BQ:56:ILE:H	36:BQ:56:ILE:CD1	1.47	1.14
39:BW:85:VAL:HG12	39:BW:95:ILE:HD11	1.20	1.14
42:BZ:120:LEU:O	42:BZ:121:GLN:HG3	1.46	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:18:ASP:OD2	47:B3:49:LYS:NZ	1.80	1.14
3:AW:75:C:H41	49:B4:28:ARG:N	1.44	1.14
50:B5:18:MET:O	50:B5:21:SER:OG	1.62	1.14
54:B9:3:VAL:O	54:B9:5:SER:N	1.81	1.14
26:BA:2254:C:O2'	26:BA:2255:G:H5'	1.46	1.14
26:BA:2626:C:C2'	26:BA:2627:G:H5'	1.78	1.14
26:BA:2821:A:H2	26:BA:2822:G:C4	1.66	1.14
26:BA:2842:G:H2'	26:BA:2843:G:H5'	1.29	1.14
28:BE:44:TYR:C	28:BE:74:GLU:OE1	1.84	1.14
29:BF:102:LEU:H	29:BF:107:ARG:NH2	1.46	1.14
29:BF:94:THR:O	29:BF:96:LYS:N	1.81	1.14
32:BI:95:SER:OG	32:BI:98:ILE:HD12	0.97	1.14
36:BQ:67:ALA:HB2	36:BQ:70:ARG:CZ	1.76	1.14
43:BR:61:HIS:CA	43:BR:64:ARG:HD3	1.76	1.14
26:BA:2334:G:H21	37:BS:12:ARG:HG3	1.06	1.14
37:BS:35:VAL:CA	37:BS:103:ASP:CB	2.25	1.14
1:AA:365:U:O3'	1:AA:366:C:P	2.06	1.14
13:AJ:51:ARG:HB2	13:AJ:59:SER:HB3	1.16	1.14
48:B0:39:ARG:HG2	48:B0:69:PHE:CZ	1.81	1.14
26:BA:2287:A:H2	26:BA:2289:G:C1'	1.41	1.14
27:BD:167:GLU:CB	27:BD:170:TYR:CE1	2.31	1.14
30:BG:105:SER:OG	30:BG:131:THR:CG2	1.95	1.14
30:BG:151:ILE:HD13	30:BG:156:ARG:NH2	1.63	1.14
31:BH:137:LYS:CD	31:BH:138:GLN:H	1.60	1.14
39:BW:11:ARG:NH2	39:BW:98:LYS:HB3	1.61	1.14
39:BW:65:LEU:O	39:BW:69:LEU:HD21	1.45	1.14
2:AV:1:G:O2'	36:BQ:98:GLY:CA	1.96	1.14
40:BX:4:VAL:CG2	46:B2:24:LYS:HZ2	1.53	1.14
26:BA:2317:C:C5'	30:BG:150:SER:HA	1.77	1.14
26:BA:825:C:C4'	26:BA:2428:G:N7	2.10	1.14
29:BF:47:GLY:N	29:BF:92:PRO:HB2	1.60	1.14
30:BG:76:ARG:O	30:BG:77:ASP:O	1.64	1.14
26:BA:1059:G:N3	55:BK:127:ILE:HG23	1.63	1.14
33:BN:66:ASP:O	33:BN:68:GLY:N	1.79	1.14
37:BS:61:ALA:CB	37:BS:88:ALA:HB2	1.76	1.14
39:BW:90:ARG:CB	39:BW:90:ARG:NH1	2.10	1.14
3:AW:65:G:N2	3:AW:66:A:H1'	1.61	1.14
53:B8:4:MET:HB2	53:B8:7:HIS:CE1	1.83	1.14
26:BA:324:A:O3'	26:BA:325:G:P	2.06	1.14
28:BE:72:VAL:C	28:BE:73:ILE:CD1	2.16	1.14
28:BE:77:PRO:HB2	28:BE:187:HIS:N	1.62	1.14

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:53:ARG:HH11	31:BH:56:ASP:CA	1.60	1.14
32:BI:51:LYS:O	32:BI:55:GLN:HG3	1.47	1.14
55:BK:22:PRO:HG2	55:BK:23:PRO:HD3	1.25	1.14
35:BP:113:GLN:N	35:BP:113:GLN:NE2	1.95	1.14
36:BQ:58:HIS:HA	36:BQ:61:LEU:HD12	1.18	1.14
43:BR:36:THR:HG21	43:BR:40:LYS:HB3	1.18	1.14
26:BA:2296:U:C4	37:BS:16:ALA:CB	2.29	1.14
42:BZ:105:GLN:C	42:BZ:142:ASN:HD21	1.51	1.14
7:AD:3:ARG:HH22	7:AD:74:GLN:NE2	1.45	1.14
48:B0:37:LEU:CD1	48:B0:70:ILE:HD13	1.78	1.14
47:B3:8:LEU:HD23	47:B3:31:LEU:HA	1.18	1.14
52:B7:34:ARG:HD3	52:B7:42:LEU:CD2	1.73	1.14
26:BA:593:G:H5''	53:B8:62:LEU:CD2	1.77	1.14
26:BA:2292:C:N3	26:BA:2293:C:C5	2.15	1.14
26:BA:2386:C:C4'	48:B0:39:ARG:NH2	2.10	1.14
26:BA:2472:G:H2'	26:BA:2475:C:N4	1.60	1.14
26:BA:2447:G:C2	26:BA:2500:U:O4	2.00	1.14
27:BD:75:GLY:HA3	27:BD:115:ILE:O	1.37	1.14
28:BE:71:THR:HG21	28:BE:299:SER:OG	1.47	1.14
31:BH:96:SER:O	31:BH:97:LYS:O	1.64	1.14
33:BN:60:ARG:HA	33:BN:71:TYR:CD2	1.82	1.14
34:BO:92:SER:HB2	34:BO:113:LYS:HZ3	1.07	1.14
34:BO:62:VAL:HA	34:BO:84:CYS:SG	1.86	1.14
45:BV:43:GLU:C	45:BV:44:GLN:NE2	2.00	1.14
1:AA:404:U:C4	7:AD:2:GLY:HA2	1.81	1.13
3:AW:39:PSU:H4'	14:AK:54:ARG:NH2	1.60	1.13
52:B7:30:ILE:C	52:B7:33:ARG:HB2	1.66	1.13
53:B8:26:LYS:HE3	53:B8:45:GLY:N	1.61	1.13
26:BA:1151:G:O2'	44:BU:81:ASN:ND2	1.81	1.13
26:BA:2379:G:OP1	37:BS:30:GLY:HA2	1.47	1.13
27:BD:149:ARG:CB	27:BD:152:GLN:NE2	1.95	1.13
27:BD:80:ILE:HD13	27:BD:82:TYR:CE1	1.82	1.13
28:BE:44:TYR:CA	28:BE:309:PRO:CD	2.22	1.13
29:BF:51:TYR:O	29:BF:55:ARG:HB3	1.44	1.13
33:BN:105:LEU:HG	33:BN:106:GLY:H	1.12	1.13
35:BP:64:ILE:HD12	35:BP:106:VAL:CA	1.77	1.13
1:AA:409:G:OP2	7:AD:22:LYS:CE	1.95	1.13
46:B2:30:ALA:O	46:B2:34:GLN:CB	1.95	1.13
47:B3:20:LYS:HD3	47:B3:23:LEU:CD1	1.76	1.13
26:BA:1080:C:O2	55:BK:127:ILE:HG12	1.46	1.13
26:BA:2678:C:N3	26:BA:2679:A:C8	2.16	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:66:PHE:O	27:BD:66:PHE:CD2	2.00	1.13
26:BA:2303:G:C5'	30:BG:99:ASP:HB3	1.78	1.13
32:BI:7:LYS:CB	32:BI:12:LYS:HD3	1.77	1.13
33:BN:19:MET:HE2	33:BN:22:VAL:HG21	1.30	1.13
34:BO:13:ASN:O	34:BO:15:GLY:N	1.78	1.13
41:BY:51:LEU:HA	41:BY:97:ARG:NH2	1.63	1.13
42:BZ:3:LEU:HD21	42:BZ:38:ALA:HB3	1.14	1.13
26:BA:1612:C:C2	52:B7:3:ARG:NH1	2.16	1.13
26:BA:1287:A:O4'	43:BR:104:ARG:CD	1.95	1.13
26:BA:1364:G:H3'	49:B4:3:LYS:HD2	1.17	1.13
26:BA:2470:G:N2	26:BA:2471:C:N1	1.96	1.13
26:BA:526:A:C2	26:BA:2626:C:C1'	2.31	1.13
26:BA:2768:C:O2'	26:BA:2769:C:H5'	1.47	1.13
27:BD:210:LYS:HA	27:BD:213:LYS:CD	1.77	1.13
27:BD:81:GLU:O	27:BD:83:ASP:OD2	1.64	1.13
26:BA:2315:G:C5'	30:BG:133:ASN:HD22	1.61	1.13
30:BG:142:ALA:HB2	30:BG:151:ILE:CG1	1.77	1.13
33:BN:15:ARG:CB	33:BN:43:ARG:CG	1.94	1.13
33:BN:25:GLN:CA	33:BN:28:GLU:HG2	1.77	1.13
35:BP:64:ILE:CD1	35:BP:106:VAL:HA	1.77	1.13
36:BQ:72:VAL:O	36:BQ:73:GLN:CG	1.94	1.13
43:BR:77:ARG:HB2	43:BR:77:ARG:NH1	0.82	1.13
30:BG:145:ASP:HB3	37:BS:15:GLU:CA	1.75	1.13
37:BS:35:VAL:HA	37:BS:103:ASP:HB3	1.14	1.13
41:BY:103:LEU:HD22	41:BY:108:ARG:O	1.44	1.13
26:BA:856:C:O2'	48:B0:24:LYS:CG	1.95	1.13
49:B4:5:LEU:HB2	49:B4:56:VAL:HG13	1.16	1.13
54:B9:4:ARG:O	54:B9:36:GLN:CG	1.97	1.13
26:BA:2453:A:O2'	26:BA:2454:G:C5'	1.95	1.13
26:BA:749:C:H2'	26:BA:750:A:H8	1.11	1.13
41:BY:73:HIS:C	41:BY:91:LEU:CD1	2.06	1.13
42:BZ:100:THR:CA	42:BZ:137:ASP:OD2	1.97	1.13
48:B0:37:LEU:HD13	48:B0:69:PHE:HB2	1.20	1.13
26:BA:2386:C:H4'	48:B0:39:ARG:CZ	1.77	1.13
26:BA:1809:A:N6	49:B4:3:LYS:HG2	1.63	1.13
26:BA:1457:A:C2	26:BA:2703:C:N4	2.16	1.13
26:BA:2339:G:H2'	26:BA:2340:G:H8	1.12	1.13
26:BA:2570:G:C2'	26:BA:2571:C:H6	1.61	1.13
26:BA:2574:G:C8	26:BA:2575:C:H5	1.66	1.13
26:BA:850:C:H4'	47:B3:18:ASP:OD1	0.96	1.13
29:BF:6:TYR:CD2	29:BF:140:VAL:HA	1.83	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:168:ARG:O	29:BF:168:ARG:CD	1.96	1.13
31:BH:101:LYS:NZ	31:BH:115:GLU:CB	2.10	1.13
36:BQ:23:ILE:H	36:BQ:24:PRO:HD3	1.08	1.13
38:BT:12:ASP:O	38:BT:13:ILE:CG1	1.95	1.13
26:BA:994:C:O2	44:BU:53:LYS:CD	1.90	1.13
41:BY:46:ASP:CA	41:BY:102:ASP:OD2	1.95	1.13
50:B5:45:ILE:HG23	50:B5:52:TYR:CE1	1.83	1.13
26:BA:1819:A:H2'	27:BD:177:SER:CA	1.78	1.13
26:BA:572:A:H2'	26:BA:573:G:H1'	1.20	1.13
26:BA:963:U:C1'	26:BA:2250:G:N2	2.11	1.13
28:BE:201:VAL:H	28:BE:266:LYS:CD	1.60	1.13
31:BH:55:SER:CB	31:BH:60:HIS:HB2	1.78	1.13
43:BR:96:ARG:HD2	43:BR:115:GLU:OE1	1.47	1.13
41:BY:66:ASP:HB2	41:BY:71:VAL:O	1.47	1.13
26:BA:2759:G:O2'	26:BA:2760:C:H5'	1.48	1.13
26:BA:2832:U:H1'	26:BA:2834:G:H21	1.06	1.13
28:BE:205:THR:HG21	28:BE:259:HIS:CB	1.77	1.13
29:BF:1:MET:O	29:BF:3:ALA:N	1.79	1.13
33:BN:13:ASP:N	33:BN:38:VAL:HG13	1.55	1.13
34:BO:1:MET:N	34:BO:32:TYR:CD2	2.16	1.13
34:BO:35:ILE:HD12	34:BO:35:ILE:N	1.63	1.13
35:BP:114:VAL:CG2	35:BP:132:LYS:CB	2.27	1.13
36:BQ:91:HIS:O	36:BQ:111:THR:CG2	1.97	1.13
26:BA:1599:C:P	40:BX:33:SER:OG	2.07	1.13
40:BX:44:GLN:OE1	40:BX:45:TYR:N	1.80	1.13
40:BX:56:ASN:N	40:BX:56:ASN:HD22	1.34	1.13
41:BY:33:GLU:CD	41:BY:34:GLU:HG3	1.68	1.13
26:BA:2838:G:C2'	26:BA:2839:G:H5'	1.77	1.13
27:BD:143:ILE:O	27:BD:152:GLN:CA	1.97	1.13
27:BD:85:ASN:ND2	27:BD:86:ARG:NE	1.96	1.13
28:BE:44:TYR:CA	28:BE:309:PRO:HD3	1.79	1.13
29:BF:51:TYR:O	29:BF:55:ARG:CB	1.97	1.13
31:BH:168:VAL:O	31:BH:169:ARG:HG2	0.96	1.13
26:BA:2674:G:H4'	34:BO:30:ARG:CG	1.77	1.13
36:BQ:48:ASN:OD1	36:BQ:121:ASP:HB3	1.48	1.13
37:BS:104:ILE:O	37:BS:106:LEU:N	1.78	1.13
44:BU:56:ASP:O	44:BU:60:LEU:CD2	1.96	1.13
1:AA:820:U:O3'	1:AA:821:G:P	2.07	1.13
7:AD:24:GLU:HB2	7:AD:112:VAL:HG11	1.14	1.13
1:AA:1325:C:OP1	24:AU:15:ARG:NE	1.80	1.13
48:B0:38:VAL:O	48:B0:40:GLN:HG3	1.42	1.13

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:36:ILE:C	48:B0:68:VAL:CG1	2.15	1.13
52:B7:17:GLY:CA	52:B7:44:VAL:HG22	1.66	1.13
53:B8:55:TRP:HZ3	53:B8:59:LYS:CE	1.60	1.13
26:BA:1062:G:H22	55:BK:92:PRO:CG	1.62	1.13
26:BA:2090:G:C5	26:BA:2230:G:O6	2.00	1.13
26:BA:2305:A:C3'	26:BA:2306:C:H5''	1.77	1.13
26:BA:2526:G:C5	26:BA:2527:C:C5	2.36	1.13
26:BA:2709:G:O2'	26:BA:2710:C:H5'	1.46	1.13
31:BH:40:MET:HB2	31:BH:64:HIS:NE2	1.61	1.13
55:BK:37:GLU:HA	55:BK:41:ARG:NH1	1.58	1.13
33:BN:52:GLN:CA	33:BN:55:GLU:CD	2.17	1.13
40:BX:24:LEU:HD11	40:BX:68:LEU:HD22	1.24	1.13
49:B4:42:PHE:O	49:B4:61:LYS:HE3	1.42	1.12
26:BA:747:U:OP1	50:B5:2:ALA:HB3	1.48	1.12
26:BA:1665:A:H4'	34:BO:66:LYS:CE	1.78	1.12
29:BF:215:ALA:O	29:BF:242:GLU:HG3	1.49	1.12
33:BN:13:ASP:CA	33:BN:38:VAL:HG11	1.51	1.12
33:BN:63:ILE:HD12	33:BN:71:TYR:CE2	1.83	1.12
35:BP:65:ASP:CB	35:BP:109:LEU:CB	2.14	1.12
35:BP:124:ASP:O	35:BP:125:PHE:CD2	2.01	1.12
1:AA:976:G:C6	1:AA:361(A):C:C5	2.38	1.12
1:AA:986:A:C2	22:AS:52:TYR:CE2	2.37	1.12
51:B6:35:LEU:O	51:B6:36:GLU:HG3	0.96	1.12
26:BA:2332:U:C1'	26:BA:2336:A:N6	2.11	1.12
26:BA:2432:A:N3	26:BA:2432:A:H2'	1.54	1.12
26:BA:2495:G:H4'	36:BQ:101:MET:CG	1.78	1.12
26:BA:2554:U:H3'	26:BA:2554:U:C6	1.82	1.12
26:BA:2839:G:O2'	43:BR:92:GLY:HA3	1.47	1.12
29:BF:164:ALA:HA	29:BF:232:LEU:HD12	1.14	1.12
29:BF:167:ASP:CG	29:BF:232:LEU:HG	1.69	1.12
29:BF:62:GLY:CA	29:BF:65:ARG:HH21	1.58	1.12
31:BH:44:VAL:CA	31:BH:49:ILE:HG22	1.78	1.12
34:BO:21:VAL:HA	34:BO:41:ALA:HB2	1.29	1.12
26:BA:1162:G:H4'	45:BV:23:GLU:CB	1.76	1.12
39:BW:36:LEU:HD11	39:BW:47:VAL:HG11	1.27	1.12
42:BZ:91:PRO:HD2	42:BZ:127:PRO:HB3	1.23	1.12
1:AA:988:G:H4'	1:AA:1014:A:H61	1.08	1.12
47:B3:1:MET:HE1	47:B3:3:ARG:HD2	1.14	1.12
2:AV:25:C:H4'	26:BA:1923:U:OP2	1.48	1.12
26:BA:2492:U:O2'	26:BA:2493:U:O5'	1.65	1.12
26:BA:2565:A:H5''	26:BA:2566:A:OP2	1.48	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2570:G:N3	26:BA:2571:C:C5	2.16	1.12
26:BA:2617:C:N3	26:BA:2618:G:C8	2.16	1.12
26:BA:2893:G:HO2'	26:BA:2894:G:C1'	1.49	1.12
42:BZ:69:VAL:HG12	42:BZ:70:GLN:H	1.06	1.12
1:AA:1400:C:C6	2:AV:34:G:N1	2.16	1.12
48:B0:42:GLY:CA	48:B0:66:LYS:HA	1.78	1.12
26:BA:1031:G:H4'	54:B9:8:LYS:CE	1.79	1.12
26:BA:1479:G:H2'	26:BA:1480:G:H8	1.05	1.12
26:BA:2364:C:H1'	48:B0:32:LYS:NZ	1.60	1.12
26:BA:2526:G:C2'	26:BA:2527:C:H5'	1.78	1.12
26:BA:2507:C:C2	26:BA:2583:G:C2	2.37	1.12
29:BF:33:LYS:HA	29:BF:36:ARG:HG3	1.20	1.12
36:BQ:123:ILE:CG2	36:BQ:125:TRP:HB2	1.79	1.12
43:BR:100:LEU:HD23	43:BR:112:ALA:CA	1.80	1.12
37:BS:35:VAL:CA	37:BS:103:ASP:HB3	1.79	1.12
42:BZ:30:VAL:O	42:BZ:31:SER:O	1.68	1.12
48:B0:45:PHE:CZ	48:B0:78:PHE:CD2	2.36	1.12
48:B0:61:ALA:CB	48:B0:81:ILE:HD13	1.79	1.12
47:B3:16:PRO:CB	47:B3:19:GLN:CD	2.17	1.12
26:BA:1031:G:H4'	54:B9:8:LYS:CD	1.80	1.12
26:BA:1799:G:N2	27:BD:153:LEU:CG	2.13	1.12
26:BA:17:G:OP1	50:B5:13:LYS:NZ	1.82	1.12
26:BA:1809:A:H62	49:B4:3:LYS:HG2	1.07	1.12
26:BA:2259:G:N2	26:BA:2282:G:C6	2.12	1.12
26:BA:199:A:C2	26:BA:2433:A:C5	2.37	1.12
26:BA:2530:A:C2'	26:BA:2531:A:H5''	1.79	1.12
26:BA:2741:A:C2'	26:BA:2742:C:H5'	1.79	1.12
26:BA:2822:G:OP1	28:BE:207:GLY:CA	1.97	1.12
26:BA:1545:A:H5'	26:BA:545(A):A:OP2	1.47	1.12
28:BE:180:ILE:CG2	28:BE:186:GLU:O	1.95	1.12
31:BH:42:ILE:O	31:BH:52:THR:CG2	1.96	1.12
31:BH:43:THR:CG2	31:BH:52:THR:HG23	1.78	1.12
32:BI:95:SER:HB2	32:BI:98:ILE:CD1	1.79	1.12
33:BN:75:PRO:HD3	33:BN:136:SER:OG	1.46	1.12
36:BQ:62:GLU:O	36:BQ:63:ALA:O	1.65	1.12
45:BV:50:ASP:H	45:BV:53:LYS:CD	1.62	1.12
40:BX:14:ALA:CA	40:BX:17:ASP:CG	2.17	1.12
40:BX:17:ASP:HA	40:BX:20:PHE:CE1	1.84	1.12
41:BY:9:LYS:HE3	41:BY:13:ARG:NH1	1.64	1.12
48:B0:37:LEU:O	48:B0:40:GLN:HG3	1.49	1.12
47:B3:22:ALA:HA	47:B3:46:ASN:HD21	1.05	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2474:C:H2'	26:BA:2475:C:H5'	1.31	1.12
26:BA:2633:G:C2	26:BA:2634:G:N7	2.17	1.12
26:BA:558:G:OP2	33:BN:91:LYS:HB3	1.49	1.12
26:BA:974:G:O3'	45:BV:82:ARG:NH2	1.81	1.12
28:BE:256:THR:HA	28:BE:259:HIS:CE1	1.83	1.12
28:BE:74:GLU:CB	28:BE:293:TYR:HE2	1.60	1.12
28:BE:71:THR:HG22	28:BE:299:SER:HB2	1.18	1.12
29:BF:52:ALA:CA	29:BF:55:ARG:HE	1.60	1.12
31:BH:10:ILE:HG22	31:BH:14:VAL:HB	1.31	1.12
49:B4:5:LEU:H	49:B4:5:LEU:HD23	1.07	1.12
51:B6:32:GLN:CB	51:B6:35:LEU:CD1	2.19	1.12
53:B8:23:MET:HE3	53:B8:48:PHE:HD2	0.95	1.12
53:B8:60:LEU:CD2	53:B8:60:LEU:C	2.18	1.12
26:BA:2689:U:H5'	26:BA:2690:C:H5'	1.29	1.12
26:BA:1791:A:OP1	27:BD:210:LYS:HD3	1.36	1.12
29:BF:168:ARG:CZ	29:BF:209:GLY:HA2	1.79	1.12
32:BI:4:ILE:HG22	32:BI:4:ILE:O	1.49	1.12
55:BK:121:LEU:CA	55:BK:125:MET:HE2	1.79	1.12
33:BN:12:VAL:HG13	33:BN:13:ASP:H	1.15	1.12
40:BX:22:ASN:HA	40:BX:68:LEU:HD11	1.21	1.12
41:BY:43:ASN:ND2	41:BY:101:LEU:HD23	1.62	1.12
42:BZ:112:LEU:HD23	42:BZ:113:VAL:H	1.02	1.12
48:B0:39:ARG:O	48:B0:40:GLN:O	1.66	1.12
49:B4:50:LEU:O	49:B4:51:ASP:O	1.67	1.12
49:B4:6:HIS:CG	49:B4:56:VAL:HG23	1.85	1.12
26:BA:2082:A:N6	26:BA:2239:G:O6	1.83	1.12
26:BA:2267:A:C5'	26:BA:2268:A:OP1	1.97	1.12
26:BA:242:G:H3'	53:B8:5:LYS:HZ3	1.12	1.12
28:BE:205:THR:CG2	28:BE:259:HIS:HB2	1.80	1.12
29:BF:167:ASP:O	29:BF:168:ARG:HG3	1.49	1.12
35:BP:144:ASP:C	35:BP:145:LEU:CD1	2.18	1.12
36:BQ:48:ASN:O	36:BQ:121:ASP:HB2	1.47	1.12
41:BY:101:LEU:CD1	41:BY:113:GLU:HB2	1.79	1.12
41:BY:29:ALA:O	41:BY:33:GLU:CD	1.87	1.12
42:BZ:129:ARG:HE	42:BZ:129:ARG:HA	1.09	1.12
1:AA:116:A:H61	1:AA:313:A:H1'	1.08	1.12
48:B0:36:ILE:HB	48:B0:68:VAL:HG11	1.27	1.12
51:B6:40:TYR:O	51:B6:47:HIS:HA	1.47	1.12
26:BA:2332:U:H1'	26:BA:2336:A:N6	1.64	1.12
26:BA:2354:G:N3	48:B0:32:LYS:CE	2.12	1.12
26:BA:2355:C:O3'	48:B0:21:LEU:CD1	1.98	1.12

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2397:G:C6	26:BA:2420:C:C2	2.37	1.12
26:BA:2740:A:O2'	26:BA:2741:A:H5'	1.50	1.12
29:BF:167:ASP:OD2	29:BF:232:LEU:CG	1.96	1.12
30:BG:57:THR:HG22	30:BG:58:VAL:H	1.08	1.12
30:BG:81:GLU:O	30:BG:85:GLN:CG	1.97	1.12
31:BH:10:ILE:HD11	31:BH:49:ILE:CG1	1.78	1.12
32:BI:116:GLU:HG2	32:BI:132:LYS:HE3	1.29	1.12
32:BI:68:LEU:HB3	32:BI:72:LEU:HD11	1.15	1.12
35:BP:128:GLY:HA2	35:BP:132:LYS:HZ2	0.98	1.12
36:BQ:16:ARG:NH1	36:BQ:16:ARG:CB	1.96	1.12
39:BW:23:LEU:O	39:BW:25:ARG:N	1.83	1.12
42:BZ:172:LEU:HG	42:BZ:173:PRO:HD2	1.13	1.12
1:AA:1278:U:OP1	1:AA:1281:U:H5	1.32	1.12
1:AA:986:A:C2	22:AS:52:TYR:HE2	1.68	1.12
26:BA:2232:U:H2'	26:BA:2233:U:H5'	1.14	1.12
26:BA:2391:G:O2'	26:BA:2392:A:H5'	1.47	1.12
28:BE:107:GLU:HB3	28:BE:110:ARG:CZ	1.78	1.12
28:BE:193:PHE:CE2	28:BE:199:ALA:CB	2.31	1.12
26:BA:2052:G:H21	28:BE:245:ARG:HG2	1.08	1.12
26:BA:600:G:H5''	29:BF:27:ARG:NH1	1.64	1.12
32:BI:116:GLU:HG2	32:BI:132:LYS:CE	1.80	1.12
32:BI:141:LEU:CD1	32:BI:142:LYS:O	1.98	1.12
32:BI:29:PHE:O	32:BI:33:GLN:CD	1.86	1.12
42:BZ:105:GLN:HB2	42:BZ:141:MET:SD	1.88	1.12
47:B3:1:MET:SD	47:B3:3:ARG:CG	2.37	1.11
26:BA:2414:G:N3	26:BA:2415:G:C8	2.17	1.11
26:BA:2530:A:H2'	26:BA:2531:A:H5''	1.22	1.11
26:BA:2748:A:C8	26:BA:2749:A:C4	2.38	1.11
27:BD:167:GLU:O	27:BD:170:TYR:CD1	2.01	1.11
28:BE:214:VAL:CG2	28:BE:221:LYS:HZ1	1.63	1.11
29:BF:45:ASP:O	29:BF:46:TYR:CD1	2.03	1.11
29:BF:46:TYR:O	29:BF:92:PRO:O	1.65	1.11
35:BP:112:GLY:C	35:BP:113:GLN:CD	2.09	1.11
42:BZ:91:PRO:HG2	42:BZ:127:PRO:CB	1.80	1.11
3:AW:9:A:N3	3:AW:45:G:H2'	1.65	1.11
54:B9:19:ARG:O	54:B9:22:ARG:HB2	1.47	1.11
26:BA:2570:G:N3	26:BA:2571:C:C6	2.17	1.11
26:BA:2679:A:N3	28:BE:300:VAL:HG13	1.56	1.11
28:BE:70:VAL:HG12	28:BE:71:THR:N	1.38	1.11
29:BF:32:GLY:O	29:BF:35:VAL:CG2	1.96	1.11
55:BK:117:ASN:ND2	55:BK:127:ILE:CD1	2.12	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:10:VAL:HG11	33:BN:36:VAL:HG23	1.24	1.11
35:BP:77:ALA:HB2	35:BP:81:VAL:CG1	1.79	1.11
36:BQ:56:ILE:HG12	36:BQ:113:ALA:O	1.48	1.11
37:BS:106:LEU:O	37:BS:107:ASN:O	1.66	1.11
26:BA:1818:U:O5'	27:BD:155:ARG:HG3	0.94	1.11
26:BA:2315:G:OP1	30:BG:20:LYS:CE	1.96	1.11
26:BA:2431:U:C2	26:BA:2433:A:OP2	2.02	1.11
26:BA:2633:G:C2	26:BA:2634:G:C5	2.37	1.11
26:BA:2678:C:O2	26:BA:2679:A:C1'	1.98	1.11
26:BA:965:C:H4'	26:BA:2273:A:N3	1.63	1.11
27:BD:128:ALA:HB2	27:BD:190:THR:HB	1.22	1.11
28:BE:268:LEU:CD2	28:BE:269:ILE:N	2.13	1.11
55:BK:20:PRO:HG2	55:BK:23:PRO:HG2	1.28	1.11
33:BN:78:ILE:O	33:BN:82:THR:HG23	1.48	1.11
34:BO:99:PHE:CD2	38:BT:24:LYS:CE	2.23	1.11
38:BT:50:GLU:O	38:BT:52:THR:N	1.84	1.11
39:BW:32:ALA:CA	39:BW:35:ILE:CD1	2.27	1.11
1:AA:1224:G:N2	1:AA:1362:C:C2	1.91	1.11
50:B5:44:HIS:HA	50:B5:52:TYR:OH	0.94	1.11
26:BA:2813:A:C2'	26:BA:2814:C:C6	2.14	1.11
27:BD:118:GLY:O	27:BD:129:LEU:CD2	1.98	1.11
27:BD:66:PHE:C	27:BD:67:LYS:CD	2.18	1.11
28:BE:39:GLN:NE2	28:BE:174:LEU:CD1	2.12	1.11
29:BF:51:TYR:C	29:BF:55:ARG:HB3	1.70	1.11
55:BK:9:ILE:CD1	55:BK:31:HIS:CB	2.28	1.11
34:BO:98:ILE:HD11	34:BO:117:LEU:HB2	1.33	1.11
36:BQ:49:VAL:HG23	36:BQ:121:ASP:H	1.14	1.11
45:BV:5:ILE:HD12	45:BV:12:TYR:CZ	1.85	1.11
16:AM:91:ARG:CZ	16:AM:103:THR:HG21	1.80	1.11
52:B7:17:GLY:C	52:B7:44:VAL:HG21	1.70	1.11
26:BA:687:C:O4'	52:B7:4:THR:CG2	1.98	1.11
26:BA:1012:U:O2	33:BN:21:ARG:CZ	1.99	1.11
26:BA:2227:A:C2	26:BA:2228:G:C2	2.37	1.11
26:BA:2287:A:O2'	26:BA:2288:A:OP2	1.67	1.11
26:BA:2482:G:C5	26:BA:2483:C:C5	2.39	1.11
26:BA:2592:G:C8	26:BA:2593:U:H5	1.69	1.11
26:BA:2752:C:N4	26:BA:2753:A:C2	2.19	1.11
31:BH:101:LYS:CG	31:BH:115:GLU:HA	1.78	1.11
55:BK:105:ILE:CG2	55:BK:128:ILE:HG21	1.81	1.11
26:BA:1665:A:C2'	34:BO:66:LYS:HZ1	1.61	1.11
26:BA:2296:U:O4	37:BS:16:ALA:CB	1.98	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:440:G:OP2	41:BY:3:GLN:OE1	1.68	1.11
42:BZ:6:LYS:O	42:BZ:31:SER:HB3	1.26	1.11
49:B4:23:GLU:OE2	49:B4:29:PRO:CB	1.99	1.11
26:BA:1140:C:C4	33:BN:49:ARG:NE	2.18	1.11
26:BA:2330:G:C2'	26:BA:2331:G:H5'	1.81	1.11
26:BA:2356:C:P	48:B0:21:LEU:HD11	1.90	1.11
27:BD:181:ARG:HB3	27:BD:181:ARG:NH1	1.63	1.11
28:BE:303:PRO:HB2	28:BE:307:LEU:CD1	1.80	1.11
2:AV:56:C:O2	30:BG:56:ARG:NE	1.84	1.11
30:BG:29:HIS:CE1	30:BG:64:ARG:NH1	2.17	1.11
31:BH:166:GLU:O	31:BH:167:LEU:HD22	1.45	1.11
55:BK:105:ILE:HG23	55:BK:128:ILE:HG21	1.33	1.11
36:BQ:49:VAL:CG1	36:BQ:119:ASN:O	1.99	1.11
36:BQ:65:ARG:O	36:BQ:68:ALA:HB3	1.46	1.11
37:BS:41:LYS:HD3	37:BS:41:LYS:O	0.96	1.11
44:BU:86:ALA:HB3	44:BU:90:LEU:HD21	1.33	1.11
45:BV:30:GLY:HA3	45:BV:33:VAL:HG21	1.11	1.11
42:BZ:116:VAL:CA	42:BZ:169:VAL:HG22	1.79	1.11
42:BZ:159:THR:HG23	42:BZ:160:LEU:H	0.96	1.11
1:AA:876:G:H1'	11:AH:11:THR:HG21	1.29	1.11
26:BA:969:U:C4'	47:B3:14:GLY:O	1.97	1.11
26:BA:1137:G:OP1	33:BN:60:ARG:NH2	1.82	1.11
26:BA:2295:C:N4	26:BA:2337:G:H1	1.48	1.11
26:BA:2302:G:C6	26:BA:2315:G:C6	2.38	1.11
28:BE:180:ILE:HA	28:BE:183:ASP:CG	1.71	1.11
28:BE:269:ILE:HG23	28:BE:297:LYS:HZ3	0.96	1.11
29:BF:168:ARG:CZ	29:BF:209:GLY:CA	2.28	1.11
30:BG:102:GLY:CA	30:BG:134:LEU:CD1	2.27	1.11
33:BN:12:VAL:CG1	33:BN:13:ASP:H	1.61	1.11
33:BN:38:VAL:O	33:BN:39:VAL:CG1	1.98	1.11
33:BN:15:ARG:CA	33:BN:43:ARG:HG2	1.81	1.11
43:BR:104:ARG:HA	43:BR:105:ARG:HH21	1.04	1.11
40:BX:9:HIS:CE1	40:BX:27:ALA:CA	2.34	1.11
41:BY:14:ALA:HB1	41:BY:15:PRO:CD	1.79	1.11
7:AD:22:LYS:C	7:AD:113:SER:CB	2.19	1.11
1:AA:409:G:OP2	7:AD:22:LYS:HE2	1.48	1.11
26:BA:1953:A:N3	26:BA:2560:C:H1'	1.63	1.11
26:BA:2285:C:H4'	26:BA:2288:A:N6	1.62	1.11
26:BA:2360:A:C8	26:BA:2361:A:C8	2.39	1.11
26:BA:2463:C:C2	26:BA:2464:C:C5	2.39	1.11
26:BA:2526:G:H2'	26:BA:2527:C:H5'	1.11	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:23:VAL:HG12	31:BH:74:MET:HE3	1.15	1.11
36:BQ:42:TYR:O	36:BQ:125:TRP:HH2	1.34	1.11
44:BU:108:ALA:O	44:BU:110:VAL:N	1.82	1.11
45:BV:54:TYR:O	45:BV:56:VAL:N	1.81	1.11
39:BW:29:LEU:HG	39:BW:33:ARG:HD2	1.32	1.11
40:BX:47:VAL:CG1	40:BX:69:SER:HB3	1.79	1.11
41:BY:72:ILE:HG22	41:BY:73:HIS:H	1.12	1.11
42:BZ:3:LEU:HB3	42:BZ:34:LEU:HA	1.11	1.11
3:AW:65:G:C2	3:AW:66:A:H1'	1.86	1.11
49:B4:18:GLY:H	49:B4:33:VAL:HG21	1.10	1.11
50:B5:40:LYS:HE2	50:B5:46:CYS:HB2	1.31	1.11
26:BA:1142:U:O3'	26:BA:142(A):A:P	2.07	1.11
26:BA:2066:C:O2	26:BA:2445:G:N2	1.83	1.11
26:BA:2327:A:N1	26:BA:2328:A:C2	2.19	1.11
26:BA:2334:G:N2	37:BS:12:ARG:HG3	1.65	1.11
31:BH:36:PHE:CD2	31:BH:70:LEU:CD1	2.31	1.11
32:BI:75:LEU:HD13	32:BI:76:THR:H	1.00	1.11
55:BK:109:ALA:HB2	55:BK:128:ILE:CD1	1.80	1.11
35:BP:101:ASP:O	35:BP:102:ASP:OD1	1.67	1.11
26:BA:244:A:O2'	35:BP:56:LYS:HA	1.49	1.11
35:BP:66:VAL:HG12	35:BP:67:ARG:H	1.01	1.11
43:BR:85:PRO:O	43:BR:87:TYR:N	1.83	1.11
45:BV:19:VAL:HG12	45:BV:21:ARG:NH1	1.40	1.11
39:BW:30:GLU:CA	39:BW:33:ARG:CD	2.26	1.11
41:BY:45:GLY:C	41:BY:62:VAL:CG1	2.17	1.11
41:BY:71:VAL:CG2	41:BY:93:THR:H	1.62	1.11
26:BA:2235:G:H2'	26:BA:2236:C:H6	1.01	1.11
26:BA:2331:G:H4'	48:B0:70:ILE:HG12	1.32	1.11
26:BA:2476:A:N7	26:BA:2477:C:C5	2.19	1.11
26:BA:2623:G:N2	26:BA:2624:G:C4	2.19	1.11
30:BG:27:ILE:C	30:BG:69:ILE:HG21	1.71	1.11
35:BP:116:HIS:CD2	35:BP:118:LEU:HD11	1.85	1.11
36:BQ:142:LYS:O	36:BQ:143:VAL:HG22	1.46	1.11
26:BA:994:C:N3	44:BU:53:LYS:HD3	1.63	1.11
45:BV:30:GLY:O	45:BV:63:HIS:HB2	1.49	1.11
42:BZ:168:VAL:O	42:BZ:169:VAL:HG23	0.94	1.11
17:AN:24:CYS:HB2	17:AN:40:CYS:H	1.00	1.10
48:B0:49:GLN:NE2	48:B0:73:GLY:CA	2.10	1.10
28:BE:71:THR:HG23	28:BE:299:SER:HB2	1.31	1.10
28:BE:44:TYR:CE1	28:BE:308:VAL:CA	2.34	1.10
26:BA:2303:G:H5'	30:BG:99:ASP:HB3	1.17	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:77:ILE:CD1	34:BO:77:ILE:C	2.12	1.10
36:BQ:65:ARG:NH2	36:BQ:85:ILE:HB	1.63	1.10
43:BR:19:ALA:O	43:BR:22:ARG:HB3	1.50	1.10
37:BS:32:PRO:HG2	37:BS:100:ALA:CB	1.81	1.10
45:BV:61:VAL:N	45:BV:98:ILE:HD12	1.66	1.10
40:BX:22:ASN:HA	40:BX:68:LEU:CD1	1.80	1.10
41:BY:47:THR:O	41:BY:98:VAL:HG13	1.49	1.10
1:AA:1255:G:O2'	1:AA:1258:G:H1'	1.49	1.10
26:BA:2509:G:C2	26:BA:2580:U:O2	2.03	1.10
26:BA:1783:A:N1	26:BA:2587:A:H2	1.49	1.10
26:BA:2716:U:H2'	26:BA:2717:G:C5'	1.80	1.10
26:BA:2785:C:H1'	28:BE:100:TRP:NE1	1.65	1.10
26:BA:600:G:O2'	29:BF:109:LEU:HD11	1.51	1.10
28:BE:269:ILE:HD12	28:BE:269:ILE:H	0.95	1.10
29:BF:200:PRO:HB3	29:BF:212:VAL:CG1	1.81	1.10
29:BF:47:GLY:C	29:BF:92:PRO:HG2	1.60	1.10
32:BI:92:SER:HA	32:BI:122:ARG:HG3	1.14	1.10
26:BA:994:C:O3'	44:BU:54:LYS:HE2	1.49	1.10
41:BY:51:LEU:CA	41:BY:97:ARG:HH21	1.64	1.10
42:BZ:26:LYS:O	42:BZ:27:GLU:CG	1.98	1.10
3:AW:37:YYG:H101	10:AG:83:ALA:HB1	1.23	1.10
3:AW:65:G:C4	3:AW:66:A:C8	2.39	1.10
51:B6:42:PRO:HG2	51:B6:44:ALA:HB3	1.14	1.10
26:BA:148:C:H2'	26:BA:149:A:C8	1.86	1.10
26:BA:1917:U:H3'	26:BA:1918:A:C8	1.85	1.10
28:BE:214:VAL:CG2	28:BE:221:LYS:NZ	2.12	1.10
29:BF:1:MET:C	29:BF:18:LEU:HG	1.44	1.10
30:BG:102:GLY:HA3	30:BG:134:LEU:CD1	1.81	1.10
30:BG:19:GLU:HB2	30:BG:135:VAL:HG21	1.31	1.10
32:BI:115:ILE:CG1	32:BI:131:VAL:HG13	1.78	1.10
35:BP:128:GLY:HA3	35:BP:132:LYS:HZ3	1.17	1.10
35:BP:69:ILE:HA	35:BP:73:VAL:HG23	1.32	1.10
46:B2:7:GLU:OE2	46:B2:8:ILE:HG13	1.51	1.10
54:B9:14:CYS:HA	54:B9:27:CYS:HB2	1.28	1.10
26:BA:125:G:H3'	52:B7:19:ARG:NH1	1.65	1.10
26:BA:2059:A:C6	26:BA:2503:A:N7	2.03	1.10
26:BA:2287:A:C2	26:BA:2289:G:N9	2.18	1.10
26:BA:2469:A:H8	26:BA:2469:A:H5'	1.15	1.10
26:BA:2556:C:O2'	26:BA:2557:G:H5'	1.49	1.10
26:BA:2848:G:N2	26:BA:2867:G:H1'	1.66	1.10
28:BE:267:ARG:HD3	28:BE:297:LYS:HD3	1.29	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:7:LYS:NZ	32:BI:8:ASP:OD1	1.82	1.10
36:BQ:56:ILE:O	36:BQ:112:ALA:CB	1.99	1.10
44:BU:46:GLU:O	44:BU:49:ASP:HB2	1.50	1.10
44:BU:59:ARG:O	44:BU:62:ILE:N	1.84	1.10
40:BX:24:LEU:CB	40:BX:26:PHE:HZ	1.65	1.10
41:BY:50:VAL:HG12	41:BY:51:LEU:N	1.64	1.10
42:BZ:24:TYR:O	42:BZ:84:TYR:HA	1.47	1.10
26:BA:138:G:H5''	40:BX:43:GLU:HG3	1.17	1.10
26:BA:2552:U:O2	26:BA:2554:U:H5''	1.49	1.10
26:BA:2811:G:N2	26:BA:2891:G:N3	1.84	1.10
26:BA:932:G:C5'	47:B3:24:LYS:HZ3	1.62	1.10
28:BE:39:GLN:CD	28:BE:174:LEU:CD1	2.20	1.10
30:BG:28:GLY:C	30:BG:69:ILE:HD11	1.69	1.10
30:BG:20:LYS:HA	30:BG:76:ARG:HB3	1.20	1.10
55:BK:37:GLU:CG	55:BK:41:ARG:HH12	1.62	1.10
55:BK:37:GLU:HB3	55:BK:41:ARG:NH1	1.46	1.10
33:BN:58:GLU:CA	33:BN:61:VAL:CG2	2.28	1.10
37:BS:31:LYS:HB3	37:BS:32:PRO:HD2	1.14	1.10
41:BY:101:LEU:HD13	41:BY:113:GLU:HB2	1.16	1.10
2:AV:35:A:N1	4:AX:118:C:C4	2.18	1.10
53:B8:26:LYS:CE	53:B8:45:GLY:N	2.13	1.10
26:BA:2197:U:H2'	26:BA:2224:G:H22	1.03	1.10
26:BA:2628:C:H1'	26:BA:2781:A:H2'	1.31	1.10
26:BA:965:C:H5'	26:BA:2273:A:H1'	1.12	1.10
26:BA:1789:A:H4'	27:BD:224:VAL:HG11	1.12	1.10
28:BE:211:GLN:O	28:BE:216:ARG:HD2	0.93	1.10
28:BE:62:ARG:O	28:BE:63:GLU:OE2	1.66	1.10
28:BE:79:ARG:O	28:BE:187:HIS:NE2	1.83	1.10
29:BF:157:LEU:HB2	29:BF:158:GLU:OE2	1.43	1.10
26:BA:2315:G:OP1	30:BG:20:LYS:HD2	1.39	1.10
31:BH:10:ILE:HG21	31:BH:14:VAL:HG11	1.26	1.10
35:BP:77:ALA:HB2	35:BP:81:VAL:HG11	1.19	1.10
37:BS:109:PRO:HA	37:BS:115:VAL:HG11	1.23	1.10
2:AV:56:C:H1'	30:BG:56:ARG:NE	1.62	1.10
53:B8:4:MET:CA	53:B8:5:LYS:NZ	2.13	1.10
53:B8:60:LEU:HD23	53:B8:60:LEU:C	1.69	1.10
26:BA:2094:G:O6	26:BA:2196:C:N4	1.83	1.10
26:BA:2406:U:O4	35:BP:55:GLN:HB2	1.41	1.10
26:BA:2423:U:C6	26:BA:2423:U:H5'	1.87	1.10
26:BA:2438:U:OP1	26:BA:2599:G:O2'	1.68	1.10
26:BA:2677:G:O2'	26:BA:2678:C:H5'	1.51	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:166:LYS:O	27:BD:167:GLU:CD	1.89	1.10
28:BE:263:GLU:CG	28:BE:266:LYS:HE2	1.82	1.10
29:BF:102:LEU:CD2	29:BF:106:GLU:OE1	1.99	1.10
29:BF:37:ALA:HB1	29:BF:102:LEU:HB2	1.25	1.10
33:BN:45:VAL:O	33:BN:46:ILE:HG13	1.48	1.10
43:BR:75:LEU:O	43:BR:77:ARG:N	1.84	1.10
16:AM:94:ARG:C	16:AM:95:GLY:N	2.03	1.10
47:B3:8:LEU:HD23	47:B3:31:LEU:CA	1.68	1.10
52:B7:11:LYS:O	52:B7:13:ALA:N	1.85	1.10
26:BA:2216:G:C2'	26:BA:2217:G:H5'	1.81	1.10
26:BA:2498:C:O2'	26:BA:2499:C:C5'	2.00	1.10
26:BA:2623:G:H21	26:BA:2624:G:C1'	1.64	1.10
26:BA:2722:G:N1	26:BA:2723:C:C4	2.19	1.10
26:BA:617:G:P	29:BF:221:GLU:OE1	2.10	1.10
27:BD:128:ALA:HB2	27:BD:190:THR:CG2	1.56	1.10
32:BI:7:LYS:HB2	32:BI:14:LYS:HE2	1.22	1.10
36:BQ:58:HIS:HA	36:BQ:61:LEU:CD1	1.82	1.10
45:BV:34:GLU:O	45:BV:35:LEU:CD2	2.00	1.10
45:BV:33:VAL:HB	45:BV:63:HIS:CD2	1.87	1.10
40:BX:25:GLN:N	40:BX:25:GLN:OE1	1.83	1.10
46:B2:26:GLU:HG2	46:B2:27:LEU:H	0.94	1.10
26:BA:2052:G:N2	28:BE:245:ARG:HG2	1.65	1.10
26:BA:2227:A:N1	26:BA:2228:G:N1	1.99	1.10
26:BA:2393:A:O2'	26:BA:2394:C:O5'	1.69	1.10
26:BA:2827:C:O2	26:BA:2828:C:C6	2.04	1.10
26:BA:2893:G:O3'	26:BA:2894:G:H4'	1.49	1.10
26:BA:557:U:H4'	33:BN:92:GLN:NE2	1.65	1.10
26:BA:1799:G:O6	27:BD:177:SER:HB2	1.51	1.10
32:BI:43:ASN:O	32:BI:45:LYS:N	1.82	1.10
55:BK:109:ALA:HB2	55:BK:128:ILE:HD11	1.27	1.10
43:BR:100:LEU:HD23	43:BR:112:ALA:C	1.72	1.10
43:BR:36:THR:CG2	43:BR:40:LYS:CB	2.29	1.10
44:BU:44:THR:OG1	45:BV:77:GLY:O	1.70	1.10
41:BY:101:LEU:HD22	41:BY:103:LEU:HG	1.28	1.10
49:B4:15:ILE:N	49:B4:15:ILE:HD12	1.67	1.10
26:BA:2231:C:H5''	49:B4:39:VAL:HG22	1.28	1.10
51:B6:32:GLN:CA	51:B6:35:LEU:HD12	1.82	1.10
26:BA:1080:C:O2	55:BK:127:ILE:CG1	1.99	1.10
26:BA:1827:C:H5'	26:BA:1971:A:H4'	1.33	1.10
26:BA:2225:A:H5''	26:BA:2226:C:H5''	1.33	1.10
26:BA:2565:A:C5'	26:BA:2566:A:OP2	2.00	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2679:A:H2	28:BE:300:VAL:HG22	0.95	1.10
26:BA:2781:A:H5''	26:BA:2782:G:C5'	1.82	1.10
27:BD:140:VAL:HG22	27:BD:191:VAL:HG12	1.31	1.10
31:BH:90:GLY:HA2	31:BH:159:LYS:CG	1.81	1.10
26:BA:637:A:H8	35:BP:111:ALA:HB2	1.05	1.10
45:BV:31:ASP:O	45:BV:63:HIS:O	1.69	1.10
45:BV:50:ASP:H	45:BV:53:LYS:HE3	0.98	1.10
7:AD:23:GLY:HA2	7:AD:113:SER:N	1.66	1.09
26:BA:2386:C:C1'	48:B0:39:ARG:HH21	1.62	1.09
49:B4:46:GLU:C	49:B4:47:GLU:HG3	1.72	1.09
26:BA:1620:G:O4'	52:B7:1:MET:N	1.84	1.09
54:B9:25:VAL:CG2	54:B9:34:GLN:HB3	1.82	1.09
26:BA:1080:C:O3'	55:BK:126:LYS:HD3	1.50	1.09
26:BA:1161:C:O2'	45:BV:22:VAL:CG1	2.00	1.09
26:BA:2485:G:H5''	36:BQ:144:THR:HG22	1.12	1.09
27:BD:183:ILE:O	27:BD:184:LEU:CD2	1.98	1.09
33:BN:61:VAL:CG1	33:BN:62:ASP:OD1	1.98	1.09
26:BA:2674:G:H4'	34:BO:30:ARG:HG2	1.26	1.09
35:BP:64:ILE:HD12	35:BP:106:VAL:HA	1.16	1.09
43:BR:20:LEU:HD13	43:BR:21:TYR:N	0.78	1.09
44:BU:43:ALA:HB1	45:BV:75:LYS:HB3	1.11	1.09
26:BA:2261:C:OP2	48:B0:14:ARG:HG2	0.94	1.09
48:B0:49:GLN:HE22	48:B0:73:GLY:CA	1.56	1.09
54:B9:25:VAL:CG2	54:B9:34:GLN:CB	2.28	1.09
26:BA:1140:C:C5	33:BN:49:ARG:CG	2.35	1.09
26:BA:2227:A:C6	26:BA:2228:G:C6	2.38	1.09
26:BA:2258:C:H5	26:BA:2426:A:C4'	1.55	1.09
26:BA:2355:C:C5'	48:B0:21:LEU:HD13	1.82	1.09
26:BA:2654:A:H61	26:BA:2667:C:N4	1.48	1.09
26:BA:2722:G:C2	26:BA:2723:C:C4	2.36	1.09
26:BA:2819:G:H3'	26:BA:2821:A:N6	1.67	1.09
26:BA:2720:U:O4	26:BA:2873:A:N6	1.84	1.09
27:BD:66:PHE:CD2	27:BD:67:LYS:HD2	1.87	1.09
29:BF:153:VAL:HG13	29:BF:157:LEU:HD21	1.17	1.09
30:BG:93:LEU:HD13	30:BG:94:ALA:H	1.12	1.09
31:BH:25:VAL:CG1	31:BH:78:VAL:HG21	1.82	1.09
33:BN:15:ARG:HD3	33:BN:43:ARG:CD	1.81	1.09
34:BO:35:ILE:HD11	34:BO:65:THR:HG21	1.11	1.09
36:BQ:125:TRP:O	36:BQ:126:VAL:CG2	2.00	1.09
36:BQ:49:VAL:CG1	36:BQ:50:VAL:H	1.65	1.09
41:BY:43:ASN:HD21	41:BY:103:LEU:CD2	1.65	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:143:ILE:CG2	42:BZ:144:GLY:H	1.65	1.09
1:AA:986:A:H1'	22:AS:55:LYS:CA	1.83	1.09
7:AD:9:CYS:SG	7:AD:31:CYS:HA	1.91	1.09
3:AW:25:C:O2	3:AW:26:G:H1'	1.50	1.09
52:B7:21:ARG:O	52:B7:24:THR:HG22	1.40	1.09
26:BA:2044:C:N4	26:BA:2624:G:H1	1.50	1.09
26:BA:2683:C:H2'	26:BA:2684:U:H5'	1.33	1.09
28:BE:79:ARG:C	28:BE:187:HIS:NE2	2.04	1.09
29:BF:103:ASN:HB2	29:BF:106:GLU:OE2	1.50	1.09
55:BK:52:MET:HA	55:BK:52:MET:HE3	1.15	1.09
36:BQ:41:THR:O	36:BQ:125:TRP:HZ3	1.33	1.09
43:BR:78:LYS:O	43:BR:82:GLU:CB	1.99	1.09
45:BV:39:PHE:C	45:BV:40:VAL:HG22	1.72	1.09
26:BA:71:A:O2'	40:BX:2:TRP:CZ2	2.05	1.09
46:B2:6:GLN:O	46:B2:9:ARG:N	1.83	1.09
47:B3:48:GLU:O	47:B3:51:ALA:N	1.84	1.09
51:B6:13:GLU:OE1	51:B6:13:GLU:N	1.84	1.09
53:B8:23:MET:HE1	53:B8:48:PHE:HA	1.15	1.09
54:B9:24:LEU:HD13	54:B9:35:ARG:HG3	1.27	1.09
26:BA:2421:G:C5'	51:B6:4:ASP:OD1	2.00	1.09
26:BA:2880:C:H2'	26:BA:2881:C:C5'	1.81	1.09
27:BD:146:LYS:HD2	27:BD:147:PRO:HD2	1.32	1.09
31:BH:17:THR:HB	31:BH:24:THR:OG1	1.51	1.09
34:BO:19:VAL:HG13	34:BO:42:THR:O	1.51	1.09
35:BP:55:GLN:HG3	35:BP:56:LYS:HG2	1.35	1.09
44:BU:59:ARG:CA	44:BU:62:ILE:CG1	1.94	1.09
45:BV:50:ASP:N	45:BV:53:LYS:CE	2.16	1.09
39:BW:32:ALA:HA	39:BW:35:ILE:HG13	1.23	1.09
41:BY:55:PHE:CE2	41:BY:89:ARG:CZ	2.30	1.09
41:BY:74:VAL:N	41:BY:91:LEU:HD11	1.65	1.09
42:BZ:95:SER:OG	42:BZ:122:ILE:CG1	1.99	1.09
26:BA:1031:G:H4'	54:B9:8:LYS:HZ3	1.01	1.09
26:BA:2093:G:C1'	26:BA:2198:A:N1	2.16	1.09
26:BA:2332:U:C1'	26:BA:2336:A:H62	1.63	1.09
26:BA:2546:U:C4'	26:BA:2565:A:C2	2.35	1.09
26:BA:2748:A:N7	26:BA:2749:A:N3	1.99	1.09
26:BA:2815:C:O2	26:BA:2816:C:C6	2.06	1.09
34:BO:63:VAL:HG13	34:BO:102:VAL:HG11	1.14	1.09
34:BO:7:ARG:HD3	34:BO:44:LYS:HE3	1.18	1.09
36:BQ:94:ARG:CZ	36:BQ:105:PHE:O	2.00	1.09
38:BT:37:GLU:CG	38:BT:38:ASN:H	1.65	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:94:VAL:C	44:BU:98:ILE:HD13	1.63	1.09
39:BW:82:LEU:HD23	39:BW:98:LYS:O	0.92	1.09
41:BY:101:LEU:HD22	41:BY:103:LEU:HD11	1.16	1.09
41:BY:101:LEU:CD1	41:BY:112:LEU:HG	1.82	1.09
41:BY:66:ASP:O	41:BY:68:ASP:N	1.85	1.09
42:BZ:4:THR:O	42:BZ:33:ALA:HB1	1.51	1.09
52:B7:30:ILE:CD1	52:B7:33:ARG:CD	2.30	1.09
53:B8:60:LEU:HD23	53:B8:60:LEU:O	1.51	1.09
26:BA:1341:U:O2'	40:BX:53:ASN:HB3	1.52	1.09
26:BA:2195:C:H2'	26:BA:2196:C:O4'	1.51	1.09
26:BA:2251:G:N2	26:BA:2252:G:N3	2.01	1.09
26:BA:2334:G:H21	37:BS:12:ARG:CG	1.65	1.09
26:BA:2815:C:H2'	26:BA:2816:C:H5'	1.17	1.09
27:BD:143:ILE:H	27:BD:143:ILE:HD12	1.11	1.09
28:BE:74:GLU:CB	28:BE:293:TYR:CE2	2.34	1.09
26:BA:321:G:H4'	29:BF:206:ASN:HB3	1.33	1.09
30:BG:93:LEU:CD2	30:BG:106:PHE:CD2	2.35	1.09
34:BO:47:THR:HB	34:BO:48:PRO:HD2	1.18	1.09
34:BO:8:LEU:HB2	34:BO:83:ALA:HA	1.18	1.09
36:BQ:45:GLN:HB3	36:BQ:152:SER:HB3	1.12	1.09
37:BS:60:SER:O	37:BS:88:ALA:HA	1.51	1.09
42:BZ:3:LEU:HD21	42:BZ:38:ALA:CB	1.80	1.09
1:AA:1329:A:H5''	16:AM:26:GLY:N	1.66	1.09
40:BX:3:ASP:OD2	46:B2:24:LYS:HD2	0.92	1.09
26:BA:1364:G:P	49:B4:3:LYS:HG3	1.92	1.09
26:BA:2286:A:H5'	26:BA:2287:A:H4'	1.34	1.09
26:BA:1129:A:C2	26:BA:2570:G:H1'	1.87	1.09
26:BA:600:G:H5''	29:BF:27:ARG:HH11	1.17	1.09
27:BD:89:ASN:O	27:BD:105:ALA:CB	2.01	1.09
28:BE:76:PRO:CB	28:BE:77:PRO:HD3	1.83	1.09
30:BG:38:GLU:HG2	30:BG:41:LEU:HD12	1.19	1.09
26:BA:558:G:OP1	33:BN:91:LYS:O	1.69	1.09
34:BO:98:ILE:CD1	34:BO:117:LEU:HB3	1.81	1.09
37:BS:23:ARG:O	37:BS:33:ARG:NH1	1.86	1.09
44:BU:74:MET:HE1	44:BU:78:THR:HG21	1.28	1.09
45:BV:91:THR:C	45:BV:92:ALA:CA	2.20	1.09
40:BX:14:ALA:HA	40:BX:17:ASP:CG	1.72	1.09
41:BY:43:ASN:HD21	41:BY:103:LEU:HD21	1.01	1.09
41:BY:51:LEU:HD12	41:BY:97:ARG:HG2	1.26	1.09
46:B2:39:ALA:HB3	46:B2:40:PRO:HD3	1.34	1.09
51:B6:41:ASP:HB3	51:B6:47:HIS:H	1.06	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1612:C:H2'	52:B7:3:ARG:NE	1.11	1.09
26:BA:2309:A:OP2	26:BA:2309:A:O4'	1.66	1.09
26:BA:631:A:C2	26:BA:2416:C:O4'	2.06	1.09
26:BA:2543:G:C2'	26:BA:2544:G:H5'	1.81	1.09
26:BA:2821:A:C2	26:BA:2822:G:C4	2.38	1.09
27:BD:226:GLY:O	27:BD:227:VAL:CG1	2.01	1.09
28:BE:180:ILE:HG21	28:BE:187:HIS:CB	1.82	1.09
26:BA:2682:U:C5	28:BE:48:MET:CE	2.36	1.09
30:BG:98:PHE:CA	30:BG:104:PHE:HD2	1.65	1.09
31:BH:43:THR:HG23	31:BH:52:THR:HG22	1.22	1.09
32:BI:5:PHE:O	32:BI:36:ALA:CB	2.01	1.09
25:BB:89(A):A:N1	36:BQ:52:LYS:NZ	2.01	1.09
37:BS:32:PRO:CG	37:BS:100:ALA:HB1	1.81	1.09
42:BZ:156:GLU:HG2	42:BZ:157:GLY:H	1.00	1.09
1:AA:408:A:H5''	7:AD:22:LYS:O	0.93	1.09
1:AA:979:C:OP1	1:AA:1222:G:O6	1.71	1.09
2:AV:73:A:H3'	2:AV:74:C:P	1.92	1.09
48:B0:52:GLY:O	48:B0:53:MET:CG	2.00	1.09
49:B4:6:HIS:ND1	49:B4:56:VAL:CG2	2.14	1.09
52:B7:30:ILE:O	52:B7:33:ARG:HB2	0.93	1.09
26:BA:2187:G:C2'	26:BA:2188:C:H5'	1.82	1.09
26:BA:2333:A:C1'	26:BA:2335:A:C4	2.35	1.09
26:BA:2415:G:N2	26:BA:2416:C:C1'	2.07	1.09
26:BA:1130:U:H5''	26:BA:2515:C:O2'	1.50	1.09
26:BA:2623:G:N2	26:BA:2624:G:N9	2.01	1.09
26:BA:2771:C:O2	26:BA:2771:C:H2'	1.51	1.09
27:BD:213:LYS:HB3	27:BD:215:LYS:N	1.64	1.09
29:BF:22:PHE:CE2	29:BF:115:LEU:HB3	1.86	1.09
31:BH:113:GLU:OE1	31:BH:114:ILE:N	1.86	1.09
31:BH:101:LYS:HB3	31:BH:114:ILE:O	1.50	1.09
32:BI:7:LYS:HA	32:BI:12:LYS:O	1.47	1.09
33:BN:80:LYS:O	33:BN:83:ILE:HG12	1.53	1.09
34:BO:35:ILE:HD11	34:BO:65:THR:HG22	1.24	1.09
35:BP:57:VAL:CG1	35:BP:58:GLN:H	1.63	1.09
44:BU:99:ALA:CB	44:BU:106:PHE:CE2	2.34	1.09
41:BY:50:VAL:HG12	41:BY:51:LEU:H	0.96	1.09
1:AA:1268:A:C4'	24:AU:20:LYS:CA	2.15	1.09
46:B2:22:ASP:O	46:B2:26:GLU:OE2	1.71	1.09
49:B4:42:PHE:O	49:B4:57:ASP:HA	1.34	1.09
53:B8:16:ILE:HG23	53:B8:21:LYS:C	1.72	1.09
54:B9:25:VAL:HB	54:B9:34:GLN:HB2	1.15	1.09

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:B9:4:ARG:O	54:B9:36:GLN:HG2	1.50	1.09
26:BA:1287:A:H8	43:BR:104:ARG:HG2	1.14	1.09
26:BA:2234:G:H2'	26:BA:2235:G:H5'	1.29	1.09
26:BA:2328:A:H2'	26:BA:2329:G:H8	1.17	1.09
26:BA:2618:G:C6	26:BA:2619:C:C5	2.31	1.09
26:BA:1456:G:C2	26:BA:2704:C:N3	2.20	1.09
26:BA:911:A:H2'	36:BQ:16:ARG:HE	1.07	1.09
26:BA:1819:A:OP1	27:BD:154:VAL:HA	1.49	1.09
28:BE:180:ILE:HG21	28:BE:187:HIS:HA	1.14	1.09
26:BA:71:A:O2'	40:BX:2:TRP:HZ2	1.33	1.09
41:BY:57:GLY:CA	41:BY:97:ARG:HH22	1.65	1.09
42:BZ:69:VAL:HG22	42:BZ:81:VAL:HG13	1.15	1.09
2:AV:34:G:H2'	2:AV:35:A:H5''	1.31	1.08
48:B0:42:GLY:HA2	48:B0:66:LYS:HA	1.12	1.08
26:BA:2219:G:H2'	26:BA:2224:G:O5'	1.40	1.08
26:BA:2484:G:N2	26:BA:2485:G:H1'	1.66	1.08
26:BA:2450:A:C5'	26:BA:2497:A:N6	2.15	1.08
26:BA:2048:G:H1	26:BA:2620:C:N4	1.49	1.08
26:BA:2815:C:O2'	26:BA:2816:C:H5''	1.48	1.08
27:BD:128:ALA:CB	27:BD:190:THR:CA	2.25	1.08
28:BE:77:PRO:HB3	28:BE:187:HIS:C	1.73	1.08
29:BF:115:LEU:CG	29:BF:246:ARG:HH22	1.64	1.08
30:BG:22:VAL:O	30:BG:23:VAL:CG1	2.00	1.08
26:BA:2312:U:H5'	30:BG:53:LYS:CB	1.83	1.08
34:BO:22:ILE:HB	34:BO:40:VAL:O	1.52	1.08
35:BP:94:ARG:HD3	35:BP:120:LEU:CB	1.83	1.08
26:BA:911:A:C5	36:BQ:16:ARG:HG3	1.68	1.08
39:BW:30:GLU:N	39:BW:33:ARG:HD2	1.66	1.08
42:BZ:116:VAL:CG2	42:BZ:169:VAL:HG21	1.82	1.08
1:AA:1267:C:O2'	24:AU:20:LYS:HD3	1.50	1.08
40:BX:3:ASP:CA	46:B2:24:LYS:HD3	1.83	1.08
26:BA:126:A:N6	52:B7:18:PHE:CE2	2.21	1.08
26:BA:2093:G:C4	26:BA:2225:A:N6	2.20	1.08
26:BA:2262:U:C2'	26:BA:2263:C:H5'	1.82	1.08
26:BA:2498:C:C2'	26:BA:2499:C:H5''	1.83	1.08
26:BA:2567:G:C2	26:BA:2568:C:C5	2.41	1.08
26:BA:2572:A:H5''	26:BA:2574:G:H5'	1.31	1.08
26:BA:380:U:O2'	49:B4:15:ILE:HB	1.53	1.08
30:BG:49:PRO:HB2	30:BG:72:LYS:H	1.11	1.08
31:BH:15:THR:HG23	31:BH:26:LYS:H	1.18	1.08
26:BA:1012:U:O2	33:BN:21:ARG:NH1	1.85	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:9:LYS:O	34:BO:83:ALA:HB1	1.50	1.08
37:BS:47:LEU:HD12	37:BS:58:LEU:HD21	1.29	1.08
37:BS:63:SER:O	37:BS:67:ALA:O	1.71	1.08
39:BW:58:ALA:HA	39:BW:62:HIS:HB2	1.21	1.08
7:AD:3:ARG:HG3	7:AD:118:ARG:NH1	1.67	1.08
1:AA:1308:U:H5'	16:AM:110:ARG:HH22	1.04	1.08
52:B7:34:ARG:CD	52:B7:42:LEU:HD21	1.78	1.08
53:B8:62:LEU:HB2	53:B8:63:PRO:HD3	1.35	1.08
26:BA:2239:G:H2'	26:BA:2240:C:H6	1.15	1.08
26:BA:2360:A:C8	26:BA:2361:A:H8	1.70	1.08
26:BA:2819:G:H3'	26:BA:2821:A:H62	1.14	1.08
26:BA:911:A:C8	36:BQ:16:ARG:HD2	1.89	1.08
27:BD:131:LEU:HD13	27:BD:171:VAL:HG21	1.24	1.08
28:BE:268:LEU:HD23	28:BE:269:ILE:HD12	1.27	1.08
30:BG:98:PHE:CA	30:BG:104:PHE:CD2	2.35	1.08
31:BH:43:THR:CG2	31:BH:52:THR:HG22	1.77	1.08
34:BO:79:PHE:HA	38:BT:22:VAL:CG2	1.82	1.08
37:BS:102:LEU:HD12	37:BS:129:ILE:HD12	1.27	1.08
39:BW:30:GLU:N	39:BW:33:ARG:CD	2.15	1.08
41:BY:50:VAL:CG1	41:BY:51:LEU:H	1.64	1.08
16:AM:66:LEU:HA	16:AM:70:LEU:HD12	1.26	1.08
26:BA:2021:C:OP2	50:B5:15:LYS:HE2	1.47	1.08
50:B5:11:THR:HG21	50:B5:19:ARG:HH22	1.11	1.08
26:BA:1819:A:H2'	27:BD:177:SER:HA	1.25	1.08
26:BA:2254:C:C2'	26:BA:2255:G:C5'	2.23	1.08
29:BF:236:THR:O	29:BF:239:ALA:N	1.85	1.08
33:BN:95:ARG:CA	33:BN:98:PHE:CE1	2.35	1.08
35:BP:65:ASP:HA	35:BP:109:LEU:H	0.99	1.08
26:BA:2276:G:OP2	36:BQ:104:PRO:HD2	1.52	1.08
44:BU:94:VAL:O	44:BU:98:ILE:HD12	1.31	1.08
45:BV:35:LEU:C	45:BV:60:VAL:HG13	1.72	1.08
45:BV:5:ILE:CG2	45:BV:39:PHE:HA	1.83	1.08
41:BY:79:LEU:HD12	41:BY:80:GLU:H	0.99	1.08
41:BY:71:VAL:HG23	41:BY:93:THR:HG23	1.35	1.08
42:BZ:142:ASN:H	42:BZ:171:VAL:HG21	0.98	1.08
1:AA:541:G:H4'	7:AD:42:GLN:HB2	1.13	1.08
47:B3:8:LEU:HA	47:B3:54:VAL:HG11	1.24	1.08
49:B4:63:PHE:O	49:B4:65:ASP:OD2	1.69	1.08
54:B9:14:CYS:CA	54:B9:27:CYS:CB	2.31	1.08
26:BA:1826:G:OP2	27:BD:227:VAL:CG2	2.00	1.08
26:BA:2391:G:O2'	26:BA:2392:A:OP2	1.70	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2634:G:H2'	26:BA:2635:C:O5'	1.54	1.08
30:BG:28:GLY:HA2	30:BG:69:ILE:HD12	1.14	1.08
36:BQ:17:ARG:C	36:BQ:18:GLU:HG3	1.62	1.08
36:BQ:28:ILE:HG23	36:BQ:62:GLU:HG2	1.15	1.08
39:BW:79:GLY:O	39:BW:80:PRO:C	1.81	1.08
1:AA:31:G:O2'	1:AA:46:G:H5'	1.54	1.08
1:AA:1286:A:H1'	24:AU:22:ARG:HH21	1.16	1.08
3:AW:45:G:O3'	3:AW:46:G:H5'	1.50	1.08
48:B0:46:LYS:HG2	48:B0:58:THR:H	1.10	1.08
52:B7:30:ILE:CG1	52:B7:33:ARG:HD2	1.81	1.08
53:B8:4:MET:HB2	53:B8:7:HIS:HE1	0.93	1.08
26:BA:2271:G:O2'	26:BA:2272:U:O5'	1.71	1.08
33:BN:48:GLY:O	33:BN:53:ILE:HD13	1.54	1.08
34:BO:14:SER:CB	34:BO:86:ILE:HD12	1.84	1.08
43:BR:84:ALA:HB3	43:BR:85:PRO:CD	1.83	1.08
1:AA:1337:G:HO3'	1:AA:1338:G:P	1.01	1.08
48:B0:35:ASN:O	48:B0:36:ILE:HG12	1.53	1.08
26:BA:1248:G:OP1	44:BU:2:PRO:HB2	1.52	1.08
26:BA:2012:G:OP1	39:BW:98:LYS:CD	2.02	1.08
26:BA:2415:G:C6	26:BA:2416:C:C5	2.38	1.08
26:BA:2579:C:C6	26:BA:2579:C:C5'	2.12	1.08
26:BA:2731:G:H22	26:BA:2732:G:N2	1.47	1.08
26:BA:2805:G:H2'	26:BA:2807:G:O4'	1.54	1.08
26:BA:2745:C:C1'	31:BH:142:GLU:HG3	1.82	1.08
34:BO:98:ILE:HG22	34:BO:99:PHE:H	0.99	1.08
35:BP:132:LYS:H	35:BP:132:LYS:HD2	0.97	1.08
36:BQ:76:GLY:HA3	36:BQ:132:VAL:HG11	1.12	1.08
44:BU:7:GLY:C	44:BU:8:ILE:CD1	2.22	1.08
44:BU:92:ARG:N	44:BU:95:LEU:HD11	1.69	1.08
39:BW:32:ALA:HB1	39:BW:35:ILE:HD12	1.19	1.08
39:BW:66:GLU:CG	39:BW:67:ASP:H	1.66	1.08
5:AB:185:ILE:HG22	5:AB:199:TYR:HB2	1.34	1.08
49:B4:58:LYS:HG2	49:B4:62:ARG:HE	1.12	1.08
26:BA:2457:U:C4	26:BA:2458:G:N3	2.15	1.08
26:BA:2485:G:C2'	26:BA:2486:G:C5'	2.30	1.08
26:BA:2653:U:C2	26:BA:2654:A:C6	2.41	1.08
26:BA:2739:U:C2'	26:BA:2740:A:H5''	1.82	1.08
26:BA:2740:A:C2'	26:BA:2741:A:H5'	1.81	1.08
26:BA:2768:C:H2'	26:BA:2769:C:H5'	1.08	1.08
28:BE:109:ASP:HA	28:BE:112:LEU:HB2	1.36	1.08
28:BE:180:ILE:CG2	28:BE:187:HIS:HB3	1.82	1.08

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:7:LYS:CD	32:BI:12:LYS:HZ3	1.50	1.08
55:BK:89:SER:HB2	55:BK:95:LYS:HD3	1.29	1.08
55:BK:93:LYS:HA	55:BK:96:ILE:CD1	1.84	1.08
34:BO:10:VAL:HG21	34:BO:16:ALA:HB3	1.22	1.08
37:BS:116:PHE:O	37:BS:120:GLU:OE1	1.69	1.08
44:BU:21:ALA:CA	44:BU:24:PHE:HZ	1.64	1.08
45:BV:50:ASP:N	45:BV:53:LYS:HE3	1.69	1.08
48:B0:23:VAL:HG12	48:B0:24:LYS:N	1.63	1.08
52:B7:42:LEU:O	52:B7:46:ASP:OD1	1.72	1.08
26:BA:2397:G:C2	26:BA:2420:C:O2	2.04	1.08
26:BA:2544:G:O2'	26:BA:2545:G:H5'	1.50	1.08
26:BA:2570:G:C4	26:BA:2571:C:C5	2.42	1.08
26:BA:782:A:C2	27:BD:229:MET:SD	2.47	1.08
27:BD:73:ILE:HG22	27:BD:95:TYR:HD2	0.91	1.08
31:BH:170:LEU:HD13	31:BH:170:LEU:O	0.92	1.08
55:BK:72:THR:OG1	55:BK:115:ASP:HB3	1.51	1.08
26:BA:1140:C:H41	33:BN:49:ARG:HD2	0.96	1.08
37:BS:34:LEU:HG	37:BS:102:LEU:HA	1.33	1.08
37:BS:49:THR:C	37:BS:52:PRO:N	2.07	1.08
44:BU:28:ARG:HA	44:BU:31:GLN:CB	1.83	1.08
45:BV:61:VAL:HA	45:BV:98:ILE:HG13	1.22	1.08
26:BA:592:G:H2'	53:B8:3:LYS:HE3	1.30	1.08
26:BA:2094:G:C6	26:BA:2196:C:C4	2.40	1.08
26:BA:2616:C:H2'	26:BA:2617:C:H5'	1.15	1.08
26:BA:2674:G:H2'	26:BA:2675:A:H8	1.06	1.08
26:BA:2:G:N2	26:BA:2902:C:C2	2.22	1.08
27:BD:63:ILE:C	27:BD:64:ILE:HG13	1.71	1.08
28:BE:210:THR:HG22	28:BE:255:GLN:HG2	1.13	1.08
28:BE:70:VAL:CG1	28:BE:296:VAL:CA	2.32	1.08
32:BI:115:ILE:HG12	32:BI:131:VAL:CG1	1.82	1.08
32:BI:133:LEU:HD11	32:BI:139:ALA:CB	1.83	1.08
55:BK:90:SER:O	55:BK:91:GLU:CG	2.01	1.08
45:BV:51:ALA:HA	45:BV:54:TYR:HD1	1.16	1.08
39:BW:24:ILE:O	39:BW:25:ARG:O	1.72	1.08
1:AA:1340:A:O2'	2:AV:31:A:C3'	2.00	1.07
26:BA:2494:G:C2	26:BA:2495:G:N7	2.22	1.07
26:BA:2700:C:C3'	26:BA:2701:C:H5''	1.83	1.07
29:BF:22:PHE:CZ	29:BF:115:LEU:CB	2.37	1.07
29:BF:27:ARG:O	29:BF:31:ILE:HG13	1.32	1.07
26:BA:2745:C:C2'	31:BH:142:GLU:OE2	2.01	1.07
55:BK:67:THR:O	55:BK:68:PHE:HD1	1.34	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:10:VAL:HG12	33:BN:36:VAL:HG22	1.34	1.07
36:BQ:25:GLY:O	36:BQ:26:LYS:CG	2.02	1.07
36:BQ:57:ARG:N	36:BQ:61:LEU:HD21	1.69	1.07
40:BX:31:ARG:O	40:BX:32:ALA:O	1.69	1.07
42:BZ:78:PRO:O	42:BZ:79:ILE:HG13	1.54	1.07
1:AA:1313:U:H5	22:AS:4:SER:CB	1.66	1.07
51:B6:28:ARG:NH1	51:B6:28:ARG:CB	2.17	1.07
54:B9:4:ARG:O	54:B9:36:GLN:CB	2.02	1.07
26:BA:2317:C:H5'	30:BG:150:SER:CB	1.83	1.07
26:BA:2258:C:C4	26:BA:2426:A:H1'	1.86	1.07
26:BA:2657:A:H62	26:BA:2664:G:N2	1.50	1.07
26:BA:270(M):U:H4'	26:BA:270(N):G:H4'	1.35	1.07
26:BA:1819:A:H2'	27:BD:177:SER:CB	1.83	1.07
28:BE:210:THR:CA	28:BE:216:ARG:NH2	2.16	1.07
28:BE:200:ASP:CA	28:BE:266:LYS:HD2	1.84	1.07
34:BO:7:ARG:NE	34:BO:44:LYS:HE3	1.68	1.07
26:BA:2278:A:P	36:BQ:20:ILE:HG22	1.93	1.07
36:BQ:28:ILE:HG22	36:BQ:29:ALA:H	1.16	1.07
44:BU:21:ALA:HA	44:BU:24:PHE:HZ	0.94	1.07
45:BV:94:LYS:CA	45:BV:95:ILE:HD12	1.84	1.07
42:BZ:114:ASP:HB2	42:BZ:170:SER:O	1.53	1.07
1:AA:1268:A:C3'	24:AU:20:LYS:HA	1.84	1.07
48:B0:37:LEU:HG	48:B0:68:VAL:HG12	1.29	1.07
50:B5:45:ILE:HG13	50:B5:52:TYR:HE1	0.92	1.07
54:B9:14:CYS:HA	54:B9:27:CYS:HB3	1.17	1.07
26:BA:2315:G:P	30:BG:20:LYS:NZ	2.27	1.07
26:BA:2316:C:H5'	30:BG:142:ALA:HB1	1.36	1.07
26:BA:2531:A:C2'	26:BA:2532:G:C5'	2.31	1.07
26:BA:2701:C:H3'	26:BA:2702:U:C5'	1.84	1.07
26:BA:2869:G:H21	26:BA:2870:C:H1'	1.09	1.07
25:BB:75:G:H1'	42:BZ:22:VAL:HG22	1.28	1.07
27:BD:131:LEU:HD13	27:BD:171:VAL:HG22	1.16	1.07
27:BD:165:GLY:O	27:BD:172:ILE:HB	0.90	1.07
29:BF:194:PHE:HB2	29:BF:211:ASP:O	1.52	1.07
30:BG:36:ASN:O	30:BG:39:ASP:N	1.86	1.07
32:BI:77:VAL:HB	32:BI:142:LYS:O	1.52	1.07
34:BO:25:LEU:HD21	34:BO:40:VAL:CG2	1.73	1.07
34:BO:68:GLY:HA3	34:BO:78:ARG:HE	1.00	1.07
45:BV:61:VAL:HG21	45:BV:97:GLY:HA2	1.27	1.07
42:BZ:96:VAL:HG13	42:BZ:97:PRO:HD2	1.27	1.07
7:AD:22:LYS:C	7:AD:113:SER:HB3	1.73	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:5:LEU:HB2	49:B4:56:VAL:CG1	1.83	1.07
52:B7:36:ALA:O	52:B7:38:GLY:N	1.87	1.07
26:BA:1056:G:O6	26:BA:1101:U:H3'	1.53	1.07
26:BA:1364:G:OP1	49:B4:3:LYS:HG2	1.54	1.07
26:BA:2286:A:H5''	26:BA:2287:A:H5'	1.33	1.07
26:BA:2394:C:C5	26:BA:2395:C:N4	2.20	1.07
26:BA:2470:G:N2	26:BA:2471:C:C6	2.21	1.07
26:BA:2472:G:C2'	26:BA:2475:C:H42	1.66	1.07
26:BA:2554:U:H3'	26:BA:2554:U:H6	1.09	1.07
26:BA:2573:C:H5'	26:BA:2573:C:H6	1.05	1.07
26:BA:2682:U:C6	28:BE:48:MET:HE2	1.89	1.07
26:BA:2819:G:C2	26:BA:2821:A:C8	2.41	1.07
28:BE:240:PRO:HB2	28:BE:243:PRO:HG2	1.35	1.07
29:BF:168:ARG:NH1	29:BF:209:GLY:C	2.08	1.07
31:BH:15:THR:CG2	31:BH:26:LYS:CB	2.27	1.07
26:BA:1059:G:N3	55:BK:127:ILE:CG2	2.17	1.07
33:BN:80:LYS:O	33:BN:84:ARG:HG3	1.54	1.07
43:BR:34:ILE:HG22	43:BR:35:THR:N	1.63	1.07
25:BB:50:G:OP2	37:BS:74:PRO:HG2	0.92	1.07
45:BV:50:ASP:N	45:BV:53:LYS:CD	2.16	1.07
42:BZ:154:LEU:HD13	42:BZ:160:LEU:HD11	1.35	1.07
42:BZ:2:GLU:C	42:BZ:54:ILE:CG2	2.22	1.07
26:BA:931:G:OP1	47:B3:27:GLY:CA	2.03	1.07
26:BA:2358:G:C2	26:BA:2359:C:O4'	2.08	1.07
26:BA:2392:A:C2'	26:BA:2393:A:H5'	1.85	1.07
26:BA:2885:C:C4	26:BA:2886:G:C8	2.42	1.07
26:BA:564:C:OP1	45:BV:79:GLN:CG	2.01	1.07
26:BA:75:G:H4'	46:B2:51:LYS:HZ1	1.11	1.07
29:BF:231:ARG:O	29:BF:232:LEU:CD2	2.02	1.07
29:BF:237:GLU:O	29:BF:239:ALA:N	1.87	1.07
25:BB:42:C:O2'	30:BG:47:GLN:HA	1.52	1.07
30:BG:44:ILE:HG22	30:BG:83:PHE:HE2	1.19	1.07
32:BI:103:GLN:HE21	32:BI:109:LYS:C	1.56	1.07
33:BN:19:MET:HG2	33:BN:46:ILE:HD11	1.35	1.07
33:BN:65:ASN:ND2	33:BN:69:TYR:CE1	2.23	1.07
35:BP:92:ASP:OD1	35:BP:94:ARG:HG3	1.53	1.07
40:BX:51:GLN:O	40:BX:52:VAL:CG2	2.02	1.07
42:BZ:5:ALA:HB3	42:BZ:33:ALA:HA	1.34	1.07
50:B5:4:HIS:HB2	50:B5:5:PRO:HD3	1.37	1.07
52:B7:21:ARG:HB3	52:B7:31:LEU:HD11	1.07	1.07
26:BA:2348:U:H5''	53:B8:42:ARG:HH22	0.98	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1129:A:N1	26:BA:2570:G:O4'	1.88	1.07
26:BA:2053:G:OP1	28:BE:241:TRP:HA	1.51	1.07
26:BA:2216:G:H2'	26:BA:2217:G:H5'	1.07	1.07
26:BA:2227:A:H2	26:BA:2228:G:C2	1.69	1.07
26:BA:2344:U:O2'	26:BA:2345:G:O5'	1.72	1.07
26:BA:2385:C:N3	26:BA:2386:C:C6	2.23	1.07
26:BA:2584:U:N1	26:BA:2585:U:C5	2.23	1.07
26:BA:2680:C:H5'	28:BE:302:GLY:H	1.17	1.07
26:BA:2689:U:C5	26:BA:2713:A:N6	2.22	1.07
26:BA:2681:C:H5	26:BA:2727:G:N2	1.51	1.07
25:BB:59:A:O3'	25:BB:60:C:O5'	1.70	1.07
29:BF:59:GLU:CB	29:BF:61:PHE:HE2	1.68	1.07
30:BG:44:ILE:O	30:BG:83:PHE:CE2	2.07	1.07
32:BI:7:LYS:CG	32:BI:12:LYS:CD	2.31	1.07
32:BI:77:VAL:HG21	32:BI:141:LEU:HD12	1.14	1.07
33:BN:135:ILE:O	33:BN:139:LEU:HD11	1.53	1.07
35:BP:114:VAL:CG2	35:BP:132:LYS:HB2	1.82	1.07
43:BR:104:ARG:CA	43:BR:105:ARG:HH21	1.68	1.07
26:BA:2334:G:P	37:BS:12:ARG:O	2.12	1.07
26:BA:445:C:H3'	44:BU:3:ARG:NH2	1.68	1.07
44:BU:72:HIS:CE1	44:BU:110:VAL:HG11	1.89	1.07
26:BA:974:G:C8	45:BV:80:TYR:CD1	2.41	1.07
41:BY:31:LEU:O	41:BY:34:GLU:CG	1.98	1.07
1:AA:1268:A:H4'	24:AU:20:LYS:CB	1.82	1.07
2:AV:31:A:O5'	12:AI:127:LYS:HD2	1.34	1.07
16:AM:23:TYR:HE2	16:AM:70:LEU:HD22	0.95	1.07
47:B3:20:LYS:CA	47:B3:23:LEU:CG	2.31	1.07
47:B3:9:VAL:N	47:B3:54:VAL:HG12	1.69	1.07
49:B4:7:PRO:HG2	49:B4:56:VAL:HG11	1.35	1.07
51:B6:14:SER:HB3	51:B6:52:GLU:HA	1.27	1.07
26:BA:594:U:H5'	53:B8:58:MET:HE1	1.29	1.07
26:BA:2249:U:N3	26:BA:2253:G:OP2	1.88	1.07
26:BA:2328:A:C5	26:BA:2329:G:N7	2.23	1.07
26:BA:2574:G:N7	26:BA:2575:C:H5	1.53	1.07
26:BA:2577:A:C2	26:BA:2614:A:C2	2.42	1.07
26:BA:675:A:N3	26:BA:2443:C:O2'	1.87	1.07
25:BB:18:G:OP1	30:BG:149:ARG:HA	1.53	1.07
28:BE:214:VAL:HG21	28:BE:221:LYS:HZ1	0.94	1.07
33:BN:19:MET:HE2	33:BN:19:MET:HA	1.13	1.07
35:BP:110:GLY:O	35:BP:111:ALA:O	1.70	1.07
36:BQ:85:ILE:CG2	36:BQ:122:PHE:CB	2.16	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:41:LYS:NZ	37:BS:68:GLU:OE2	1.86	1.07
26:BA:1151:G:C4'	44:BU:81:ASN:ND2	1.93	1.07
44:BU:94:VAL:O	44:BU:98:ILE:CD1	0.77	1.07
42:BZ:37:LYS:C	42:BZ:40:ASP:OD1	1.91	1.07
42:BZ:69:VAL:HG11	42:BZ:81:VAL:HG22	1.37	1.07
1:AA:1463:C:OP1	38:BT:47:ARG:HG2	1.52	1.07
46:B2:62:GLU:O	46:B2:64:GLY:N	1.87	1.07
26:BA:1364:G:C3'	49:B4:3:LYS:CD	2.32	1.07
51:B6:12:MET:HB2	51:B6:27:ASN:ND2	1.70	1.07
51:B6:45:LYS:O	51:B6:46:LYS:HE2	0.90	1.07
26:BA:2215:G:C2'	26:BA:2216:G:H8	1.65	1.07
26:BA:2468:G:H22	26:BA:2481:G:H2'	1.10	1.07
26:BA:2731:G:C2	26:BA:2732:G:C2	2.42	1.07
26:BA:976:C:OP1	44:BU:48:ARG:NH1	1.88	1.07
29:BF:37:ALA:HB3	29:BF:102:LEU:HD12	1.35	1.07
29:BF:102:LEU:HB3	29:BF:107:ARG:HE	1.07	1.07
32:BI:103:GLN:NE2	32:BI:109:LYS:HA	1.70	1.07
32:BI:77:VAL:HG11	32:BI:143:VAL:HG22	1.08	1.07
33:BN:19:MET:CB	33:BN:46:ILE:CD1	2.32	1.07
33:BN:19:MET:CE	33:BN:19:MET:CA	2.29	1.07
26:BA:1137:G:O2'	33:BN:82:THR:HA	1.52	1.07
34:BO:31:ARG:HB2	34:BO:32:TYR:CE1	1.89	1.07
35:BP:114:VAL:HG21	35:BP:132:LYS:C	1.75	1.07
36:BQ:127:ASN:HB3	36:BQ:128:PRO:HD3	1.08	1.07
38:BT:37:GLU:HG2	38:BT:38:ASN:H	0.91	1.07
39:BW:85:VAL:O	39:BW:86:LEU:CD2	2.03	1.07
42:BZ:116:VAL:HA	42:BZ:169:VAL:HG22	1.11	1.07
42:BZ:40:ASP:HB2	42:BZ:41:ARG:NE	1.70	1.07
54:B9:4:ARG:HA	54:B9:36:GLN:HA	1.29	1.07
26:BA:1248:G:OP1	44:BU:2:PRO:HB3	1.54	1.07
26:BA:1364:G:OP1	49:B4:3:LYS:HG3	1.49	1.07
26:BA:1819:A:OP2	27:BD:153:LEU:HG	1.55	1.07
26:BA:2263:C:O2'	26:BA:2264:C:H5'	1.52	1.07
26:BA:2283:C:N3	26:BA:2284:C:H1'	1.69	1.07
26:BA:2521:C:C2	26:BA:2522:U:C6	2.42	1.07
26:BA:2543:G:C8	26:BA:2544:G:N7	2.21	1.07
26:BA:605:C:O3'	29:BF:103:ASN:ND2	1.88	1.07
26:BA:780:G:N1	27:BD:233:ASP:OD2	1.87	1.07
28:BE:222:ARG:HH11	28:BE:222:ARG:HG3	0.97	1.07
29:BF:223:LEU:O	29:BF:225:PRO:N	1.88	1.07
29:BF:235:PHE:HB3	29:BF:239:ALA:HB1	1.37	1.07

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:7:PRO:CD	31:BH:68:ARG:HD3	1.84	1.07
31:BH:36:PHE:CD2	31:BH:70:LEU:HD13	1.86	1.07
26:BA:557:U:H5'	33:BN:92:GLN:HE21	1.17	1.07
26:BA:2684:U:H5'	34:BO:76:TYR:OH	1.52	1.07
43:BR:37:THR:HA	43:BR:111:LEU:HA	1.37	1.07
44:BU:8:ILE:N	44:BU:11:ARG:HD3	1.69	1.07
44:BU:57:PHE:O	44:BU:59:ARG:N	1.88	1.07
45:BV:93:ILE:HG22	45:BV:95:ILE:HD11	1.37	1.07
41:BY:18:GLU:C	41:BY:21:LYS:NZ	2.07	1.07
41:BY:91:LEU:HD23	41:BY:91:LEU:N	1.68	1.07
41:BY:52:ARG:HD2	41:BY:95:ASN:CG	1.74	1.07
48:B0:38:VAL:O	48:B0:40:GLN:CG	1.97	1.07
26:BA:2482:G:C2'	26:BA:2483:C:C5'	2.29	1.07
26:BA:2574:G:C3'	26:BA:2575:C:H6	1.67	1.07
26:BA:2839:G:C4	26:BA:2840:C:C5	2.43	1.07
29:BF:32:GLY:CA	29:BF:35:VAL:CG2	2.33	1.07
36:BQ:67:ALA:H	36:BQ:70:ARG:CZ	1.52	1.07
39:BW:96:ILE:HD12	39:BW:96:ILE:H	0.96	1.07
42:BZ:163:ASP:OD2	42:BZ:164:PRO:CD	0.77	1.07
46:B2:27:LEU:HD11	46:B2:53:ILE:HD13	1.30	1.06
51:B6:8:ILE:N	51:B6:29:ARG:HH21	1.50	1.06
26:BA:2819:G:C3'	26:BA:2821:A:H62	1.68	1.06
26:BA:2785:C:C5'	28:BE:99:VAL:HA	1.84	1.06
31:BH:86:LEU:H	31:BH:131:ILE:HG23	0.94	1.06
33:BN:87:LEU:N	33:BN:87:LEU:HD12	1.70	1.06
35:BP:128:GLY:HA2	35:BP:132:LYS:NZ	1.65	1.06
26:BA:2495:G:H4'	36:BQ:101:MET:HG3	1.35	1.06
42:BZ:91:PRO:CG	42:BZ:127:PRO:CB	2.31	1.06
52:B7:18:PHE:O	52:B7:19:ARG:O	1.72	1.06
26:BA:2386:C:O4'	48:B0:39:ARG:NH2	1.88	1.06
26:BA:2465:C:O2	26:BA:2485:G:N1	1.87	1.06
29:BF:85:LYS:N	29:BF:85:LYS:HD2	1.67	1.06
55:BK:25:GLY:HA2	55:BK:35:ILE:HD13	1.29	1.06
33:BN:21:ARG:O	33:BN:24:SER:OG	1.70	1.06
36:BQ:136:TRP:O	36:BQ:139:ALA:N	1.87	1.06
43:BR:100:LEU:CD2	43:BR:113:LEU:N	2.18	1.06
26:BA:564:C:O4'	44:BU:37:GLN:OE1	1.72	1.06
44:BU:44:THR:HG21	45:BV:78:VAL:HG12	1.36	1.06
39:BW:81:ALA:C	39:BW:82:LEU:HD22	1.75	1.06
48:B0:37:LEU:O	48:B0:40:GLN:CG	2.03	1.06
48:B0:44:LYS:HA	48:B0:64:ASP:OD1	1.52	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2219:G:C2'	26:BA:2224:G:H5'	1.84	1.06
26:BA:2273:A:C8	26:BA:2274:A:C8	2.43	1.06
26:BA:222:A:N6	26:BA:232:G:N3	2.03	1.06
26:BA:2657:A:N7	26:BA:2664:G:N2	2.03	1.06
27:BD:118:GLY:O	27:BD:129:LEU:HD21	1.49	1.06
27:BD:174:ARG:HG2	27:BD:174:ARG:HH11	0.95	1.06
28:BE:216:ARG:NH1	28:BE:253:GLN:HB3	1.69	1.06
31:BH:101:LYS:HG3	31:BH:115:GLU:HA	1.12	1.06
34:BO:25:LEU:HD22	34:BO:40:VAL:CG2	1.73	1.06
34:BO:7:ARG:NE	34:BO:44:LYS:CD	2.17	1.06
41:BY:63:ILE:HD11	41:BY:75:GLU:N	0.74	1.06
26:BA:1128:A:C6	26:BA:2518:A:N6	2.22	1.06
26:BA:2086:U:N3	26:BA:2233:U:O4	1.88	1.06
26:BA:414:C:N4	26:BA:2409:G:H1	1.53	1.06
26:BA:2458:G:O6	26:BA:2490:G:H2'	1.56	1.06
26:BA:2556:C:O2'	26:BA:2557:G:C5'	2.00	1.06
26:BA:2774:C:OP1	26:BA:2774:C:H4'	1.47	1.06
27:BD:131:LEU:CD1	27:BD:183:ILE:CG2	2.32	1.06
27:BD:175:LEU:CG	27:BD:180:VAL:N	2.11	1.06
28:BE:39:GLN:OE1	28:BE:174:LEU:CD2	2.04	1.06
55:BK:38:PHE:CD2	55:BK:67:THR:CG2	2.38	1.06
37:BS:109:PRO:O	37:BS:116:PHE:CD1	2.08	1.06
44:BU:41:ASN:ND2	44:BU:42:ALA:H	1.53	1.06
26:BA:535:C:C5'	44:BU:53:LYS:CE	2.33	1.06
45:BV:95:ILE:N	45:BV:95:ILE:HD12	1.68	1.06
40:BX:47:VAL:CG1	40:BX:69:SER:OG	2.02	1.06
26:BA:1364:G:H3'	49:B4:3:LYS:HD3	1.25	1.06
26:BA:1943:U:H1'	26:BA:1945:G:H5'	1.32	1.06
26:BA:2093:G:C6	26:BA:2225:A:N7	2.23	1.06
26:BA:2359:C:C4	26:BA:2360:A:C2	2.43	1.06
26:BA:2392:A:H2'	26:BA:2393:A:H5'	1.07	1.06
26:BA:337:C:H3'	26:BA:338:G:H5''	1.09	1.06
27:BD:175:LEU:CD1	27:BD:179:GLU:C	2.23	1.06
31:BH:168:VAL:HG12	31:BH:169:ARG:H	1.20	1.06
32:BI:80:PRO:HB3	32:BI:146:THR:HG23	1.10	1.06
33:BN:31:LEU:O	33:BN:33:GLY:N	1.88	1.06
34:BO:25:LEU:HD12	34:BO:38:VAL:HG12	1.33	1.06
26:BA:974:G:N7	45:BV:80:TYR:CZ	2.23	1.06
40:BX:24:LEU:O	40:BX:26:PHE:HE1	0.72	1.06
42:BZ:67:LYS:NZ	42:BZ:67:LYS:CA	2.18	1.06
51:B6:41:ASP:HB2	51:B6:46:LYS:HZ2	0.90	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2278:A:H4'	36:BQ:19:TYR:HB3	1.33	1.06
26:BA:2423:U:C6	26:BA:2425:A:C5	2.44	1.06
26:BA:2463:C:O2	26:BA:2464:C:C5	2.09	1.06
26:BA:2645:G:O4'	26:BA:2645:G:OP2	1.74	1.06
26:BA:2808:U:O2	26:BA:2892:A:C6	2.07	1.06
26:BA:446:G:H3'	44:BU:5:LYS:NZ	1.68	1.06
26:BA:674:G:C5'	29:BF:69:HIS:HA	1.86	1.06
31:BH:113:GLU:C	31:BH:113:GLU:OE1	1.93	1.06
31:BH:85:ALA:O	31:BH:148:ARG:NH2	1.68	1.06
32:BI:8:ASP:HA	32:BI:11:GLY:C	1.69	1.06
26:BA:1287:A:H8	43:BR:104:ARG:CG	1.66	1.06
43:BR:20:LEU:HD12	43:BR:21:TYR:CD2	1.88	1.06
26:BA:2021:C:C5	44:BU:25:TRP:CZ2	2.42	1.06
45:BV:65:ARG:O	45:BV:93:ILE:CG2	2.04	1.06
42:BZ:2:GLU:N	42:BZ:54:ILE:HG23	1.67	1.06
46:B2:39:ALA:HB3	46:B2:40:PRO:CD	1.84	1.06
26:BA:126:A:N7	52:B7:18:PHE:CE1	2.23	1.06
26:BA:1818:U:O2	27:BD:153:LEU:HA	1.54	1.06
26:BA:2051:A:N6	26:BA:2614:A:N7	2.04	1.06
26:BA:2527:C:O3'	54:B9:30:VAL:CG1	2.01	1.06
29:BF:98:ARG:O	29:BF:99:SER:O	1.72	1.06
31:BH:93:TYR:CE1	31:BH:106:VAL:O	2.09	1.06
32:BI:133:LEU:HD11	32:BI:139:ALA:HB2	1.37	1.06
55:BK:106:GLU:O	55:BK:110:LYS:HG3	1.56	1.06
33:BN:27:ALA:CA	33:BN:30:ALA:HB2	1.62	1.06
26:BA:994:C:H4'	44:BU:54:LYS:CE	1.84	1.06
42:BZ:69:VAL:HG13	42:BZ:81:VAL:HG22	1.33	1.06
1:AA:1037:C:O3'	1:AA:1038:C:P	2.12	1.06
16:AM:94:ARG:N	16:AM:95:GLY:N	2.04	1.06
26:BA:2320:A:H2	26:BA:2333:A:C4	1.72	1.06
26:BA:2635:C:O2	26:BA:2783:G:N2	1.88	1.06
26:BA:801:G:OP2	29:BF:79:ARG:CD	2.03	1.06
25:BB:57:A:C2	30:BG:17:ARG:NH1	2.24	1.06
29:BF:196:THR:HA	29:BF:236:THR:HG23	1.11	1.06
29:BF:239:ALA:O	29:BF:241:ALA:N	1.89	1.06
31:BH:140:VAL:O	31:BH:143:LEU:CD2	2.03	1.06
33:BN:45:VAL:N	33:BN:132:LEU:CB	2.15	1.06
34:BO:25:LEU:CG	34:BO:38:VAL:O	2.04	1.06
34:BO:25:LEU:HD22	34:BO:40:VAL:HG23	1.08	1.06
36:BQ:142:LYS:HG3	36:BQ:143:VAL:N	1.39	1.06
26:BA:872:A:O2'	36:BQ:31:PHE:HB2	1.56	1.06

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:65:ARG:CZ	36:BQ:85:ILE:HB	1.86	1.06
25:BB:48:A:P	37:BS:107:ASN:ND2	2.29	1.06
41:BY:29:ALA:O	41:BY:30:ASP:O	1.74	1.06
41:BY:43:ASN:HD21	41:BY:101:LEU:HD21	0.90	1.06
1:AA:1260:C:H4'	1:AA:1284:C:C5'	1.85	1.06
26:BA:1525:G:H3'	26:BA:1526:G:P	1.95	1.06
26:BA:2199:A:H3'	26:BA:2205:C:C6	1.90	1.06
26:BA:2350:C:H2'	26:BA:2351:G:H8	1.15	1.06
26:BA:2352:A:H2	48:B0:30:VAL:CG1	1.30	1.06
26:BA:2700:C:H3'	26:BA:2701:C:H5''	1.10	1.06
26:BA:2766:G:C5'	26:BA:2767:C:OP2	2.03	1.06
28:BE:205:THR:O	28:BE:206:LYS:CG	2.01	1.06
30:BG:20:LYS:HA	30:BG:76:ARG:CB	1.86	1.06
35:BP:64:ILE:HB	35:BP:107:LYS:O	1.56	1.06
36:BQ:31:PHE:CE2	36:BQ:85:ILE:O	2.08	1.06
36:BQ:87:LYS:O	36:BQ:88:PHE:CG	2.09	1.06
44:BU:47:TYR:CE2	45:BV:74:TYR:O	2.07	1.06
39:BW:36:LEU:CD1	39:BW:47:VAL:CG1	2.33	1.06
42:BZ:26:LYS:HB2	42:BZ:84:TYR:OH	1.51	1.06
48:B0:61:ALA:O	48:B0:62:LEU:HD12	0.88	1.06
49:B4:46:GLU:OE1	49:B4:54:GLY:HA3	1.54	1.06
26:BA:1525:G:C3'	26:BA:1526:G:P	2.43	1.06
26:BA:2262:U:H2'	26:BA:2263:C:H5'	1.33	1.06
26:BA:2312:U:H5'	30:BG:53:LYS:HA	1.08	1.06
26:BA:2862:G:C2'	26:BA:2863:C:H6	1.66	1.06
26:BA:988:A:OP1	47:B3:11:SER:N	1.89	1.06
27:BD:222:PRO:O	27:BD:224:VAL:HG23	1.56	1.06
31:BH:82:TYR:CE1	31:BH:137:LYS:HG3	1.90	1.06
55:BK:92:PRO:HG3	55:BK:134:SER:O	1.54	1.06
33:BN:52:GLN:HA	33:BN:55:GLU:OE1	1.54	1.06
33:BN:53:ILE:HG23	33:BN:135:ILE:CD1	1.86	1.06
35:BP:67:ARG:O	35:BP:71:GLU:HG2	1.55	1.06
35:BP:69:ILE:HG13	35:BP:70:ASP:N	1.53	1.06
43:BR:77:ARG:HH11	43:BR:77:ARG:CG	1.66	1.06
37:BS:32:PRO:CG	37:BS:100:ALA:CB	2.34	1.06
44:BU:110:VAL:O	44:BU:114:ARG:HG3	1.56	1.06
39:BW:67:ASP:CG	39:BW:68:ARG:H	1.59	1.06
42:BZ:143:ILE:HG22	42:BZ:144:GLY:N	1.63	1.06
1:AA:764:C:H2'	1:AA:765:G:C8	1.91	1.05
3:AW:37:YYG:H241	10:AG:85:TYR:HE2	1.16	1.05
48:B0:58:THR:O	48:B0:60:PHE:N	1.88	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2396:G:P	49:B4:28:ARG:NH1	2.28	1.05
26:BA:1151:G:H4'	44:BU:81:ASN:CG	1.75	1.05
26:BA:2302:G:O6	26:BA:2315:G:O6	1.72	1.05
26:BA:2527:C:O3'	54:B9:30:VAL:HG12	1.55	1.05
26:BA:2749:A:O4'	31:BH:62:ALA:HB2	0.90	1.05
27:BD:208:GLY:CA	27:BD:211:HIS:NE2	2.19	1.05
28:BE:193:PHE:CE2	28:BE:311:PHE:HD1	1.72	1.05
28:BE:70:VAL:CG1	28:BE:296:VAL:H	1.68	1.05
31:BH:86:LEU:HA	31:BH:148:ARG:CZ	1.84	1.05
35:BP:114:VAL:HG23	35:BP:132:LYS:HB2	1.30	1.05
41:BY:103:LEU:HD23	41:BY:108:ARG:HB3	1.35	1.05
41:BY:28:SER:HB3	41:BY:99:THR:CG2	1.85	1.05
41:BY:84:GLY:O	41:BY:85:GLU:O	1.73	1.05
42:BZ:6:LYS:C	42:BZ:31:SER:CB	2.24	1.05
42:BZ:71:MET:CB	42:BZ:78:PRO:HD3	1.85	1.05
1:AA:1313:U:H5	22:AS:4:SER:HB3	0.96	1.05
1:AA:406:G:H4'	7:AD:5:ILE:HG21	1.29	1.05
16:AM:92:HIS:NE2	16:AM:98:VAL:HG21	1.69	1.05
47:B3:40:THR:HG21	47:B3:43:ILE:HD13	1.17	1.05
51:B6:28:ARG:CZ	51:B6:28:ARG:HB3	1.84	1.05
53:B8:52:LYS:C	53:B8:54:GLU:H	1.60	1.05
26:BA:1665:A:H4'	34:BO:66:LYS:CD	1.85	1.05
26:BA:2384:G:H2'	26:BA:2386:C:OP2	1.52	1.05
26:BA:2488:A:H2'	26:BA:2489:G:H5'	1.15	1.05
26:BA:2615:U:O2'	26:BA:2616:C:C5'	2.03	1.05
26:BA:2838:G:C6	26:BA:2839:G:N7	2.24	1.05
26:BA:2847:U:OP2	26:BA:2847:U:C5	2.08	1.05
26:BA:1820:U:O2	27:BD:200:THR:CG2	2.03	1.05
30:BG:71:ALA:O	30:BG:72:LYS:CD	2.03	1.05
32:BI:68:LEU:HD21	32:BI:108:LEU:HD12	1.29	1.05
35:BP:65:ASP:HB2	35:BP:109:LEU:HB3	1.14	1.05
36:BQ:50:VAL:HG12	36:BQ:51:GLU:H	0.91	1.05
37:BS:98:GLU:HG3	37:BS:99:GLU:H	1.12	1.05
45:BV:5:ILE:O	45:BV:6:GLN:CG	2.02	1.05
45:BV:72:ARG:CA	45:BV:88:GLN:HG2	1.81	1.05
26:BA:25:U:C5'	39:BW:79:GLY:HA3	1.85	1.05
40:BX:24:LEU:CB	40:BX:26:PHE:CZ	2.39	1.05
42:BZ:39:PHE:CA	42:BZ:43:PHE:CD2	2.38	1.05
47:B3:20:LYS:CA	47:B3:23:LEU:HD11	1.86	1.05
49:B4:35:VAL:HG12	49:B4:36:TRP:H	1.22	1.05
54:B9:7:VAL:HG13	54:B9:34:GLN:CG	1.63	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1697:G:H3'	26:BA:1698:A:C5'	1.85	1.05
26:BA:1966:A:N3	26:BA:2593:U:H5'	1.71	1.05
26:BA:2045:C:N3	26:BA:2624:G:C2	2.23	1.05
26:BA:614:U:H3'	26:BA:615:G:H4'	1.31	1.05
27:BD:131:LEU:CD1	27:BD:171:VAL:CG2	2.34	1.05
28:BE:254:GLY:O	28:BE:255:GLN:O	1.74	1.05
29:BF:102:LEU:HD22	29:BF:103:ASN:H	1.16	1.05
32:BI:59:ALA:HA	32:BI:62:LEU:HD12	1.37	1.05
36:BQ:17:ARG:N	36:BQ:17:ARG:HD3	1.71	1.05
44:BU:7:GLY:O	44:BU:9:VAL:N	1.88	1.05
3:AW:37:YYG:C10	10:AG:83:ALA:HB1	1.87	1.05
47:B3:1:MET:SD	47:B3:1:MET:O	2.14	1.05
49:B4:49:PHE:HZ	49:B4:70:GLY:O	1.28	1.05
26:BA:1031:G:H4'	54:B9:8:LYS:HD3	1.35	1.05
26:BA:1598:C:H5''	40:BX:34:LYS:HG2	1.37	1.05
26:BA:199:A:C6	26:BA:2433:A:N7	2.23	1.05
26:BA:2503:A:H4'	26:BA:2504:U:OP1	1.56	1.05
26:BA:1789:A:O3'	27:BD:224:VAL:HG13	1.55	1.05
29:BF:164:ALA:CB	29:BF:232:LEU:CD1	2.34	1.05
29:BF:164:ALA:HB1	29:BF:232:LEU:HD13	1.39	1.05
31:BH:52:THR:O	31:BH:54:PRO:HD3	1.56	1.05
32:BI:80:PRO:CB	32:BI:146:THR:HG23	1.85	1.05
33:BN:19:MET:HB2	33:BN:45:VAL:O	1.55	1.05
33:BN:77:GLY:O	33:BN:80:LYS:N	1.89	1.05
36:BQ:127:ASN:CB	36:BQ:128:PRO:CD	2.34	1.05
43:BR:33:ARG:HB3	43:BR:115:GLU:HB3	1.39	1.05
44:BU:27:SER:O	44:BU:29:SER:OG	1.72	1.05
26:BA:534:U:O2'	44:BU:49:ASP:OD1	1.74	1.05
44:BU:92:ARG:C	44:BU:95:LEU:CG	2.20	1.05
45:BV:19:VAL:HB	45:BV:21:ARG:NH1	1.68	1.05
41:BY:45:GLY:C	41:BY:62:VAL:HG11	1.75	1.05
41:BY:47:THR:O	41:BY:48:VAL:HG23	1.56	1.05
42:BZ:159:THR:O	42:BZ:160:LEU:CD1	2.04	1.05
42:BZ:2:GLU:CA	42:BZ:54:ILE:HG23	1.85	1.05
42:BZ:37:LYS:HG3	42:BZ:41:ARG:NH1	1.71	1.05
1:AA:671:G:H5'	9:AF:77:ARG:HH21	1.16	1.05
26:BA:2355:C:C3'	48:B0:21:LEU:CD1	2.30	1.05
52:B7:13:ALA:O	52:B7:14:LYS:O	1.74	1.05
53:B8:23:MET:HA	53:B8:23:MET:HE2	1.08	1.05
26:BA:2210:G:O2'	26:BA:2211:G:OP2	1.74	1.05
26:BA:2212:A:O2'	26:BA:2213:U:C5	1.89	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2380:C:H2'	26:BA:2381:C:C5'	1.86	1.05
26:BA:2470:G:N1	26:BA:2471:C:C4	2.24	1.05
26:BA:2507:C:C2	26:BA:2583:G:N3	2.23	1.05
26:BA:2745:C:H1'	31:BH:142:GLU:CD	1.75	1.05
27:BD:143:ILE:HB	27:BD:152:GLN:C	1.75	1.05
29:BF:24:THR:HB	29:BF:25:PRO:HD2	1.34	1.05
29:BF:91:PRO:HG2	29:BF:92:PRO:HD2	1.08	1.05
29:BF:92:PRO:O	29:BF:96:LYS:HD2	1.50	1.05
35:BP:62:ALA:HB2	35:BP:105:TYR:HB2	1.36	1.05
36:BQ:65:ARG:NH2	36:BQ:122:PHE:CE2	2.24	1.05
44:BU:74:MET:HE2	44:BU:78:THR:HG21	1.06	1.05
40:BX:6:LYS:NZ	40:BX:29:ASP:CA	2.19	1.05
8:AE:78:HIS:HB2	11:AH:104:ARG:HD2	1.36	1.05
51:B6:37:LEU:CD2	51:B6:51:ARG:HA	1.87	1.05
26:BA:1783:A:C2	26:BA:2587:A:C2	2.45	1.05
29:BF:201:SER:O	29:BF:204:ALA:CB	2.03	1.05
31:BH:85:ALA:CA	31:BH:131:ILE:HG21	1.84	1.05
32:BI:3:VAL:HG21	32:BI:21:VAL:HG23	1.11	1.05
55:BK:93:LYS:HD3	55:BK:96:ILE:HD11	1.08	1.05
55:BK:93:LYS:CD	55:BK:96:ILE:HD11	1.85	1.05
43:BR:79:LEU:HD22	43:BR:80:PHE:N	1.69	1.05
44:BU:99:ALA:CB	44:BU:106:PHE:CD2	2.40	1.05
44:BU:74:MET:HE3	44:BU:78:THR:HG21	1.08	1.05
39:BW:75:TYR:CE1	39:BW:104:THR:OG1	2.07	1.05
40:BX:44:GLN:OE1	40:BX:45:TYR:CA	2.03	1.05
41:BY:23:VAL:HG23	41:BY:67:LEU:CD2	1.83	1.05
1:AA:1278:U:H5'	1:AA:1279:A:C5'	1.87	1.05
1:AA:1329:A:O2'	16:AM:24:GLY:HA2	1.57	1.05
47:B3:4:LEU:O	47:B3:36:VAL:HA	1.57	1.05
49:B4:14:ILE:HG21	49:B4:37:SER:OG	1.56	1.05
49:B4:6:HIS:HB2	49:B4:7:PRO:CD	1.85	1.05
26:BA:2286:A:C5'	26:BA:2287:A:C4'	2.33	1.05
26:BA:2389:G:OP1	26:BA:2390:U:H5'	1.55	1.05
26:BA:535:C:O2'	44:BU:53:LYS:HG2	0.88	1.05
27:BD:131:LEU:CD1	27:BD:183:ILE:HG21	1.86	1.05
28:BE:79:ARG:HA	28:BE:186:GLU:HA	1.38	1.05
30:BG:22:VAL:HB	30:BG:24:HIS:NE2	1.69	1.05
32:BI:47:LEU:HD12	32:BI:48:GLU:N	1.70	1.05
26:BA:1140:C:N4	33:BN:49:ARG:CD	2.20	1.05
35:BP:144:ASP:O	35:BP:145:LEU:CD1	2.04	1.05
35:BP:62:ALA:O	35:BP:107:LYS:HD2	0.88	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:56:ASP:O	37:BS:57:THR:HG23	1.55	1.05
39:BW:104:THR:O	39:BW:105:VAL:HG13	1.57	1.05
26:BA:2331:G:C5	26:BA:2332:U:N3	2.24	1.05
26:BA:2406:U:H1'	35:BP:57:VAL:HG22	1.36	1.05
26:BA:2717:G:N2	26:BA:2718:G:C5	2.25	1.05
26:BA:2785:C:C5	26:BA:2786:U:O4	2.10	1.05
26:BA:2819:G:H2'	26:BA:2821:A:N7	1.71	1.05
26:BA:1819:A:OP1	27:BD:154:VAL:CA	2.04	1.05
28:BE:200:ASP:O	28:BE:311:PHE:HA	1.55	1.05
28:BE:201:VAL:HG22	28:BE:311:PHE:HB3	1.38	1.05
28:BE:221:LYS:HE3	28:BE:233:ARG:CA	1.86	1.05
29:BF:34:ALA:HB2	29:BF:110:ALA:HB1	1.11	1.05
32:BI:7:LYS:CA	32:BI:12:LYS:HD3	1.87	1.05
33:BN:18:ILE:O	33:BN:22:VAL:CG2	2.03	1.05
33:BN:19:MET:CB	33:BN:46:ILE:CG1	2.33	1.05
36:BQ:46:VAL:HG12	36:BQ:124:ALA:HB3	1.32	1.05
26:BA:1287:A:C1'	43:BR:104:ARG:HH11	1.70	1.05
37:BS:74:PRO:O	37:BS:75:THR:O	1.73	1.05
44:BU:34:ASN:O	44:BU:38:THR:OG1	1.73	1.05
53:B8:29:LYS:O	53:B8:30:ARG:O	1.75	1.05
26:BA:2286:A:C5'	26:BA:2287:A:C5'	2.30	1.05
26:BA:2355:C:H4'	48:B0:21:LEU:HD12	1.38	1.05
26:BA:2584:U:C2'	26:BA:2585:U:H5	1.69	1.05
26:BA:2647:U:C2'	26:BA:2648:C:H5'	1.87	1.05
26:BA:2781:A:C5'	26:BA:2782:G:O5'	2.04	1.05
26:BA:2785:C:H5''	28:BE:99:VAL:CG2	1.86	1.05
27:BD:131:LEU:N	27:BD:187:CYS:O	1.89	1.05
29:BF:163:HIS:CA	29:BF:166:ILE:HG13	1.87	1.05
29:BF:196:THR:HA	29:BF:236:THR:HG21	1.36	1.05
26:BA:452:G:P	29:BF:55:ARG:HH22	1.79	1.05
30:BG:24:HIS:O	30:BG:25:MET:CG	2.05	1.05
26:BA:2313:C:OP1	30:BG:51:ARG:HD3	1.52	1.05
26:BA:2275:C:O2	36:BQ:103:ALA:HB3	1.57	1.05
43:BR:79:LEU:HD23	43:BR:79:LEU:C	1.61	1.05
44:BU:89:ASP:O	44:BU:90:LEU:HD23	1.57	1.05
40:BX:3:ASP:HA	46:B2:24:LYS:CD	1.85	1.05
42:BZ:20:ALA:O	42:BZ:34:LEU:HD21	1.55	1.05
48:B0:43:THR:HG21	48:B0:75:GLY:HA3	1.07	1.05
52:B7:30:ILE:CA	52:B7:33:ARG:CG	2.31	1.05
26:BA:2198:A:N1	26:BA:2225:A:N6	2.04	1.05
26:BA:2364:C:H5''	48:B0:38:VAL:CG1	1.87	1.05

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2405:G:N2	26:BA:2413:G:C6	2.25	1.05
26:BA:2485:G:C2	26:BA:2486:G:H1'	1.91	1.05
26:BA:1566:A:C6	27:BD:212:HIS:ND1	2.23	1.05
28:BE:205:THR:OG1	28:BE:257:GLY:C	1.95	1.05
29:BF:4:THR:O	29:BF:139:VAL:CG2	2.04	1.05
29:BF:157:LEU:O	29:BF:159:ALA:N	1.89	1.05
29:BF:1:MET:C	29:BF:18:LEU:CG	2.23	1.05
29:BF:219:ASN:C	29:BF:222:ASP:HB2	1.75	1.05
35:BP:112:GLY:O	35:BP:113:GLN:CD	1.95	1.05
26:BA:1218:C:OP2	44:BU:15:LYS:NZ	1.88	1.05
39:BW:90:ARG:HB2	39:BW:90:ARG:CZ	1.82	1.05
40:BX:33:SER:CA	40:BX:37:VAL:HG23	1.87	1.05
42:BZ:114:ASP:CB	42:BZ:170:SER:O	2.05	1.05
3:AW:65:G:C2	3:AW:66:A:N9	2.25	1.04
2:AV:35:A:C2	4:AX:118:C:O2	1.93	1.04
3:AW:74:C:OP1	49:B4:22:MET:HE2	1.54	1.04
26:BA:1665:A:H5''	34:BO:66:LYS:HD3	1.34	1.04
26:BA:2094:G:N1	26:BA:2196:C:N3	2.03	1.04
26:BA:2228:G:C8	26:BA:2229:C:C5	2.45	1.04
26:BA:2309:A:H4'	26:BA:2309:A:OP2	1.50	1.04
26:BA:2385:C:O2	26:BA:2386:C:C6	2.09	1.04
26:BA:729:G:C6	27:BD:207:ALA:HA	1.93	1.04
27:BD:146:LYS:CD	27:BD:147:PRO:CD	2.25	1.04
27:BD:175:LEU:HG	27:BD:179:GLU:O	0.88	1.04
27:BD:175:LEU:HG	27:BD:180:VAL:N	1.71	1.04
29:BF:163:HIS:O	29:BF:166:ILE:CG1	2.05	1.04
30:BG:29:HIS:N	30:BG:69:ILE:CD1	2.15	1.04
32:BI:98:ILE:HG22	32:BI:99:ALA:N	1.69	1.04
33:BN:53:ILE:HG23	33:BN:135:ILE:HD11	1.38	1.04
34:BO:77:ILE:HD13	34:BO:78:ARG:CA	1.86	1.04
43:BR:34:ILE:HG23	43:BR:35:THR:H	1.23	1.04
46:B2:29:ASN:O	46:B2:34:GLN:CG	2.05	1.04
49:B4:23:GLU:OE2	49:B4:29:PRO:HB3	1.56	1.04
26:BA:2227:A:C2	26:BA:2228:G:C4	2.45	1.04
26:BA:2234:G:N1	26:BA:2235:G:C5	2.25	1.04
26:BA:2268:A:C4'	26:BA:2268:A:OP1	2.03	1.04
26:BA:2572:A:H5''	26:BA:2574:G:C5'	1.87	1.04
26:BA:2810:A:N7	26:BA:2811:G:N9	2.04	1.04
27:BD:118:GLY:C	27:BD:129:LEU:HD21	1.78	1.04
27:BD:85:ASN:CG	27:BD:86:ARG:CZ	2.26	1.04
29:BF:34:ALA:CB	29:BF:110:ALA:CB	2.34	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:200:PRO:CB	29:BF:212:VAL:HG11	1.86	1.04
32:BI:133:LEU:CD1	32:BI:139:ALA:CB	2.35	1.04
38:BT:37:GLU:HG2	38:BT:38:ASN:N	1.60	1.04
44:BU:65:ILE:HD13	44:BU:96:ALA:HB2	1.05	1.04
26:BA:30:G:OP1	44:BU:8:ILE:HD11	0.87	1.04
45:BV:60:VAL:O	45:BV:98:ILE:HB	0.88	1.04
41:BY:63:ILE:HG12	41:BY:75:GLU:CD	1.78	1.04
41:BY:78:THR:HA	41:BY:89:ARG:HG3	1.07	1.04
1:AA:410:G:OP2	7:AD:25:ARG:NE	1.89	1.04
51:B6:37:LEU:HD23	51:B6:51:ARG:HA	1.08	1.04
26:BA:1799:G:C6	27:BD:177:SER:HB2	1.91	1.04
26:BA:2385:C:C2	26:BA:2386:C:C6	2.45	1.04
26:BA:2785:C:O2	28:BE:100:TRP:CD1	2.09	1.04
27:BD:208:GLY:HA3	27:BD:210:LYS:NZ	1.69	1.04
28:BE:271:ILE:HD13	28:BE:294:THR:HG22	1.34	1.04
31:BH:102:LEU:HD23	31:BH:114:ILE:O	1.56	1.04
35:BP:117:GLU:HA	35:BP:136:ALA:O	1.57	1.04
35:BP:66:VAL:O	35:BP:68:GLU:N	1.91	1.04
35:BP:95:ASP:O	35:BP:96:VAL:O	1.75	1.04
36:BQ:41:THR:CG2	36:BQ:126:VAL:HA	1.85	1.04
26:BA:2376:A:H2	37:BS:102:LEU:HD22	1.15	1.04
44:BU:8:ILE:HA	44:BU:11:ARG:HD3	1.06	1.04
44:BU:92:ARG:O	44:BU:95:LEU:HG	0.89	1.04
1:AA:355:C:H1'	1:AA:388:G:H2'	1.38	1.04
1:AA:815:A:O2'	1:AA:1527:C:H1'	1.57	1.04
49:B4:6:HIS:HB2	49:B4:7:PRO:HD3	1.32	1.04
54:B9:7:VAL:HG13	54:B9:34:GLN:HG2	1.21	1.04
26:BA:2742:C:H5''	54:B9:35:ARG:HH12	1.17	1.04
26:BA:2852:G:C2	26:BA:2853:C:N3	2.26	1.04
27:BD:130:PRO:HB3	27:BD:186:LYS:O	1.55	1.04
28:BE:180:ILE:HA	28:BE:183:ASP:OD2	0.87	1.04
28:BE:221:LYS:HE3	28:BE:233:ARG:HA	1.09	1.04
28:BE:45:LYS:HZ1	28:BE:303:PRO:CD	1.70	1.04
30:BG:19:GLU:OE1	30:BG:135:VAL:HA	1.57	1.04
32:BI:145:VAL:HG12	32:BI:146:THR:H	0.90	1.04
55:BK:25:GLY:O	55:BK:35:ILE:HD11	1.57	1.04
33:BN:95:ARG:CA	33:BN:98:PHE:CD1	2.40	1.04
35:BP:94:ARG:HD3	35:BP:120:LEU:CG	1.85	1.04
36:BQ:142:LYS:HE2	36:BQ:143:VAL:N	1.70	1.04
37:BS:72:GLU:HB3	37:BS:74:PRO:HD2	1.35	1.04
44:BU:6:THR:O	44:BU:7:GLY:O	1.74	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:11:GLN:HE22	45:BV:22:VAL:HG21	1.12	1.04
42:BZ:120:LEU:CD2	42:BZ:120:LEU:H	1.70	1.04
9:AF:95:GLU:HB2	9:AF:96:PRO:CD	1.88	1.04
1:AA:551:U:H5'	15:AL:119:LYS:HE2	1.39	1.04
2:AV:40:C:H2'	2:AV:41:U:H5''	1.36	1.04
48:B0:43:THR:CG2	48:B0:75:GLY:CA	2.31	1.04
52:B7:27:GLY:O	52:B7:31:LEU:HG	1.57	1.04
26:BA:2459:A:C8	26:BA:2460:U:C6	2.44	1.04
31:BH:41:THR:CG2	31:BH:52:THR:HB	1.86	1.04
32:BI:37:ILE:HG23	32:BI:38:GLU:H	1.21	1.04
33:BN:51:GLU:O	33:BN:53:ILE:N	1.90	1.04
26:BA:998:C:H5''	44:BU:84:LYS:HZ1	1.14	1.04
40:BX:44:GLN:OE1	40:BX:45:TYR:CB	2.06	1.04
41:BY:101:LEU:HD21	41:BY:103:LEU:CD2	1.81	1.04
51:B6:38:LYS:O	51:B6:50:PHE:CB	2.04	1.04
26:BA:1076:C:O2'	55:BK:91:GLU:HB3	1.55	1.04
26:BA:2543:G:O2'	26:BA:2544:G:H5'	1.57	1.04
26:BA:2484:G:H1'	36:BQ:142:LYS:HZ2	1.18	1.04
43:BR:38:VAL:CB	43:BR:39:PRO:CD	2.22	1.04
45:BV:4:ILE:HG12	45:BV:13:ARG:HA	1.10	1.04
39:BW:32:ALA:CA	39:BW:35:ILE:HD12	1.85	1.04
3:AW:39:PSU:H4'	14:AK:54:ARG:HH22	1.15	1.04
47:B3:3:ARG:HD3	47:B3:60:GLU:HB3	1.35	1.04
52:B7:13:ALA:O	52:B7:16:HIS:O	1.73	1.04
26:BA:2009:G:H5''	39:BW:41:LYS:CD	1.72	1.04
26:BA:2287:A:O2'	26:BA:2288:A:P	2.14	1.04
26:BA:2739:U:C2'	26:BA:2740:A:C5'	2.35	1.04
28:BE:218:GLY:O	28:BE:219:VAL:HG22	1.56	1.04
55:BK:32:GLY:O	55:BK:60:VAL:CG1	2.05	1.04
26:BA:557:U:C4'	33:BN:92:GLN:HE21	1.71	1.04
43:BR:107:ASP:OD1	43:BR:109:ALA:N	1.90	1.04
38:BT:36:CYS:O	38:BT:37:GLU:O	1.74	1.04
44:BU:44:THR:HG23	45:BV:77:GLY:O	1.55	1.04
44:BU:44:THR:CB	45:BV:77:GLY:O	2.05	1.04
39:BW:36:LEU:CD1	39:BW:47:VAL:HG12	1.88	1.04
25:BB:103:U:O2'	42:BZ:67:LYS:HG2	1.54	1.04
26:BA:2264:C:H2'	26:BA:2265:U:O5'	1.56	1.04
26:BA:2327:A:C2	26:BA:2328:A:C2	2.46	1.04
26:BA:2520:C:O2	26:BA:2521:C:C6	2.11	1.04
26:BA:2573:C:O5'	26:BA:2574:G:OP1	1.75	1.04
26:BA:2762:G:C5	26:BA:2763:G:C5	2.45	1.04

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2808:U:O3'	26:BA:2810:A:OP1	1.73	1.04
26:BA:2881:C:O2'	26:BA:2882:A:O5'	1.76	1.04
26:BA:806:C:O2'	26:BA:2445:G:O4'	1.73	1.04
31:BH:23:VAL:HG12	31:BH:74:MET:CE	1.87	1.04
38:BT:50:GLU:CA	38:BT:55:ALA:HB3	1.88	1.04
26:BA:25:U:C4'	39:BW:79:GLY:HA2	1.88	1.04
49:B4:18:GLY:H	49:B4:33:VAL:CG2	1.70	1.04
26:BA:1620:G:H1'	52:B7:1:MET:N	1.70	1.04
26:BA:2570:G:C2'	26:BA:2571:C:C6	2.38	1.04
26:BA:2678:C:O2	26:BA:2679:A:C8	2.09	1.04
26:BA:1709:U:O2'	26:BA:2859:G:N3	1.89	1.04
28:BE:222:ARG:CD	28:BE:232:ARG:C	2.25	1.04
55:BK:67:THR:O	55:BK:68:PHE:CD1	2.09	1.04
35:BP:77:ALA:CA	35:BP:81:VAL:CB	2.07	1.04
36:BQ:56:ILE:O	36:BQ:112:ALA:HB1	1.54	1.04
36:BQ:45:GLN:OE1	36:BQ:153:PRO:CD	2.06	1.04
36:BQ:94:ARG:HD3	36:BQ:106:GLY:CA	1.88	1.04
39:BW:55:ALA:HA	39:BW:107:LEU:CD1	1.87	1.04
41:BY:31:LEU:CD2	41:BY:31:LEU:H	1.68	1.04
41:BY:87:VAL:CG1	41:BY:88:PRO:HD2	1.87	1.04
42:BZ:90:GLU:N	42:BZ:91:PRO:HD2	1.67	1.04
1:AA:1318:A:H5'	22:AS:10:PHE:CB	1.88	1.04
49:B4:68:ARG:HD3	49:B4:72:LYS:HG2	1.39	1.04
26:BA:1364:G:O5'	49:B4:3:LYS:CD	2.04	1.04
26:BA:2316:C:H5'	30:BG:151:ILE:HD11	1.10	1.04
28:BE:42:ALA:H	28:BE:189:MET:HE1	1.16	1.04
31:BH:90:GLY:HA2	31:BH:159:LYS:HG3	1.05	1.04
34:BO:101:PRO:HB2	34:BO:122:ILE:CD1	1.86	1.04
36:BQ:27:GLY:O	36:BQ:62:GLU:OE2	1.74	1.04
43:BR:36:THR:HG22	43:BR:40:LYS:HB2	1.36	1.04
39:BW:76:VAL:CG2	39:BW:102:HIS:O	2.06	1.04
39:BW:66:GLU:HG2	39:BW:67:ASP:H	1.18	1.04
40:BX:28:VAL:HG22	40:BX:62:LYS:O	1.58	1.04
40:BX:6:LYS:CB	40:BX:27:ALA:O	2.05	1.04
42:BZ:112:LEU:HD13	42:BZ:142:ASN:HA	1.06	1.04
42:BZ:91:PRO:CB	42:BZ:127:PRO:HA	1.88	1.04
42:BZ:91:PRO:HB2	42:BZ:127:PRO:HA	1.09	1.04
2:AV:31:A:H5'	12:AI:127:LYS:CG	1.88	1.03
3:AW:23:A:OP2	3:AW:45:G:O6	1.74	1.03
48:B0:70:ILE:O	48:B0:71:ASN:O	1.75	1.03
49:B4:10:VAL:H	49:B4:11:PRO:HD3	1.13	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2253:G:O2'	26:BA:2254:C:O5'	1.76	1.03
26:BA:2320:A:C2	26:BA:2333:A:C4	2.44	1.03
26:BA:2320:A:C2	26:BA:2333:A:N3	2.23	1.03
26:BA:2485:G:O2'	26:BA:2486:G:H5'	0.86	1.03
26:BA:2615:U:H3	50:B5:8:LYS:HG2	1.13	1.03
26:BA:325:G:H21	41:BY:7:GLN:NE2	1.55	1.03
26:BA:527:C:C2'	33:BN:95:ARG:NH1	2.20	1.03
26:BA:2731:G:OP1	28:BE:265:ASN:CB	2.03	1.03
28:BE:299:SER:OG	28:BE:301:PRO:HD3	1.58	1.03
32:BI:141:LEU:HD13	32:BI:142:LYS:N	1.71	1.03
55:BK:73:PRO:HG2	55:BK:78:LEU:CD1	1.87	1.03
43:BR:36:THR:HG23	43:BR:40:LYS:CD	1.87	1.03
45:BV:4:ILE:HD11	45:BV:13:ARG:CG	1.87	1.03
42:BZ:6:LYS:C	42:BZ:31:SER:HB3	1.76	1.03
1:AA:1320:C:H1'	22:AS:73:GLU:HG2	1.09	1.03
1:AA:1285:A:OP2	24:AU:24:ARG:HG2	1.57	1.03
48:B0:38:VAL:HA	48:B0:40:GLN:CD	1.79	1.03
26:BA:2804:C:C5	26:BA:2805:G:C6	2.46	1.03
27:BD:68:ARG:HH21	27:BD:128:ALA:HB3	1.22	1.03
27:BD:66:PHE:O	27:BD:66:PHE:CG	2.08	1.03
31:BH:87:GLU:OE2	31:BH:162:ARG:HB2	1.58	1.03
32:BI:121:ILE:HG22	32:BI:122:ARG:N	1.67	1.03
37:BS:23:ARG:NH2	37:BS:35:VAL:HG21	1.72	1.03
26:BA:446:G:H3'	44:BU:5:LYS:HZ1	0.91	1.03
45:BV:59:GLU:CD	45:BV:99:GLN:HA	1.77	1.03
45:BV:70:TYR:O	45:BV:71:ILE:O	1.75	1.03
1:AA:1278:U:H5'	1:AA:1279:A:C4'	1.89	1.03
48:B0:65:GLY:HA2	48:B0:66:LYS:HZ2	1.20	1.03
51:B6:29:ARG:O	51:B6:31:THR:N	1.91	1.03
26:BA:1131:G:N1	33:BN:69:TYR:CE1	2.25	1.03
26:BA:2620:C:O2'	26:BA:2621:A:O5'	1.70	1.03
26:BA:2741:A:H2'	26:BA:2742:C:H6	1.16	1.03
26:BA:2839:G:C5	26:BA:2840:C:C5	2.46	1.03
26:BA:1818:U:C3'	27:BD:155:ARG:HG2	1.89	1.03
27:BD:211:HIS:ND1	27:BD:212:HIS:HD2	1.56	1.03
30:BG:21:VAL:CG1	30:BG:132:VAL:CB	2.33	1.03
30:BG:29:HIS:HB3	30:BG:69:ILE:HG12	1.39	1.03
30:BG:53:LYS:CG	30:BG:54:ALA:H	1.71	1.03
34:BO:22:ILE:HG13	34:BO:41:ALA:HA	1.38	1.03
43:BR:100:LEU:HD23	43:BR:113:LEU:N	1.73	1.03
43:BR:58:GLY:CA	43:BR:80:PHE:HE2	1.63	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:31:LEU:N	41:BY:31:LEU:HD23	1.65	1.03
3:AW:72:C:O2'	3:AW:73:A:O4'	1.74	1.03
26:BA:2385:C:O2'	48:B0:39:ARG:CZ	2.05	1.03
48:B0:66:LYS:N	48:B0:66:LYS:HD2	1.67	1.03
26:BA:2314:C:O2'	26:BA:2315:G:O5'	1.75	1.03
26:BA:2320:A:N3	26:BA:2333:A:C5	2.25	1.03
26:BA:2468:G:O2'	26:BA:2469:A:H5'	1.56	1.03
26:BA:1952:A:H1'	26:BA:2560:C:O2'	1.56	1.03
26:BA:2783:G:C6	26:BA:2784:C:N4	2.25	1.03
26:BA:2880:C:C2'	26:BA:2881:C:H5'	1.87	1.03
27:BD:74:PRO:CG	27:BD:96:ALA:CB	2.26	1.03
30:BG:12:GLU:OE1	30:BG:12:GLU:O	1.76	1.03
55:BK:97:VAL:HA	55:BK:99:LYS:HZ1	1.22	1.03
34:BO:45:ASP:HA	34:BO:54:LYS:HG3	1.40	1.03
43:BR:100:LEU:HD23	43:BR:112:ALA:HA	1.35	1.03
43:BR:36:THR:CG2	43:BR:40:LYS:CD	2.37	1.03
37:BS:105:GLY:C	37:BS:106:LEU:HD23	1.76	1.03
44:BU:38:THR:HA	44:BU:41:ASN:OD1	1.23	1.03
45:BV:57:GLN:HG2	45:BV:58:ALA:H	1.22	1.03
41:BY:57:GLY:N	41:BY:97:ARG:HH22	1.57	1.03
41:BY:87:VAL:HG13	41:BY:88:PRO:HD2	1.06	1.03
3:AW:25:C:N1	3:AW:26:G:C8	2.27	1.03
49:B4:32:HIS:O	49:B4:33:VAL:O	1.75	1.03
53:B8:25:PHE:O	53:B8:26:LYS:O	1.76	1.03
26:BA:2292:C:C2	26:BA:2293:C:C5	2.45	1.03
26:BA:2313:C:C4	26:BA:2314:C:N4	2.26	1.03
26:BA:2520:C:H2'	26:BA:2521:C:H5'	1.37	1.03
26:BA:2546:U:C5'	26:BA:2565:A:C2	2.41	1.03
26:BA:2616:C:O2'	26:BA:2617:C:H5''	1.59	1.03
26:BA:2682:U:C5	28:BE:48:MET:HE1	1.93	1.03
26:BA:2712:U:C5	26:BA:712(A):A:H8	1.53	1.03
26:BA:2717:G:C4	26:BA:2718:G:C8	2.46	1.03
26:BA:2839:G:C6	26:BA:2840:C:C4	2.47	1.03
26:BA:1545:A:O3'	26:BA:545(A):A:P	2.16	1.03
26:BA:989:G:OP1	47:B3:31:LEU:CD1	2.07	1.03
29:BF:93:LYS:CA	29:BF:96:LYS:HE3	1.60	1.03
31:BH:168:VAL:HG12	31:BH:169:ARG:N	1.70	1.03
32:BI:115:ILE:HG12	32:BI:131:VAL:HG13	1.31	1.03
26:BA:142(A):A:H4'	33:BN:21:ARG:HH22	1.06	1.03
44:BU:89:ASP:HB3	45:BV:51:ALA:HB3	1.40	1.03
41:BY:14:ALA:HB1	41:BY:15:PRO:HD2	1.40	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:403:C:N4	1:AA:547:A:H5'	1.73	1.03
1:AA:764:C:H2'	1:AA:765:G:H8	1.19	1.03
1:AA:426:G:O2'	7:AD:42:GLN:HA	1.56	1.03
50:B5:29:ASN:O	50:B5:30:LEU:O	1.76	1.03
52:B7:34:ARG:HD2	52:B7:42:LEU:HD21	1.25	1.03
26:BA:2268:A:H4'	26:BA:2269:A:OP2	1.55	1.03
32:BI:97:GLN:HA	32:BI:100:GLU:OE2	1.57	1.03
32:BI:133:LEU:HD12	32:BI:139:ALA:HB2	1.39	1.03
35:BP:66:VAL:HG12	35:BP:67:ARG:N	1.69	1.03
36:BQ:48:ASN:OD1	36:BQ:121:ASP:CB	2.06	1.03
45:BV:19:VAL:HG12	45:BV:21:ARG:NH2	1.71	1.03
41:BY:71:VAL:HG12	41:BY:72:ILE:H	1.22	1.03
1:AA:1269:A:C5'	24:AU:19:GLY:HA2	1.88	1.03
3:AW:37:YYG:H191	10:AG:79:ARG:HA	1.35	1.03
46:B2:20:LEU:C	46:B2:20:LEU:HD13	1.74	1.03
39:BW:19:LEU:CD1	50:B5:25:LEU:CD2	2.29	1.03
26:BA:2236:C:H2'	26:BA:2237:G:H5'	1.35	1.03
26:BA:2256:G:C2	26:BA:2257:U:C2	2.46	1.03
26:BA:2457:U:H2'	26:BA:2458:G:O4'	1.58	1.03
26:BA:2805:G:H3'	26:BA:2807:G:P	1.98	1.03
26:BA:2822:G:OP1	28:BE:207:GLY:HA2	1.55	1.03
27:BD:158:GLY:HA2	27:BD:194:VAL:CG2	1.88	1.03
27:BD:232:VAL:O	27:BD:232:VAL:HG23	1.56	1.03
31:BH:93:TYR:HB3	31:BH:106:VAL:HG22	1.08	1.03
32:BI:6:LEU:HB2	32:BI:36:ALA:HB2	1.34	1.03
55:BK:89:SER:HB2	55:BK:95:LYS:CD	1.87	1.03
33:BN:12:VAL:CG1	33:BN:13:ASP:N	2.17	1.03
34:BO:35:ILE:CD1	34:BO:65:THR:CG2	2.37	1.03
35:BP:73:VAL:HG13	35:BP:76:LEU:HD23	1.36	1.03
43:BR:55:ALA:HA	43:BR:80:PHE:CD1	1.92	1.03
39:BW:83:LYS:HG2	39:BW:97:LYS:HD3	1.36	1.03
42:BZ:34:LEU:HD13	42:BZ:39:PHE:HZ	0.91	1.03
47:B3:37:LEU:CD1	47:B3:43:ILE:HG21	1.88	1.03
50:B5:34:PRO:CG	50:B5:36:CYS:SG	2.47	1.03
26:BA:2482:G:C6	26:BA:2483:C:C5	2.47	1.03
26:BA:2737:G:C4	26:BA:2738:A:N7	2.26	1.03
26:BA:2869:G:N2	26:BA:2870:C:H1'	1.74	1.03
26:BA:871:U:OP1	36:BQ:24:PRO:O	1.75	1.03
27:BD:66:PHE:O	27:BD:67:LYS:CD	2.07	1.03
27:BD:80:ILE:HD12	27:BD:80:ILE:O	0.86	1.03
31:BH:85:ALA:C	31:BH:148:ARG:NH2	2.11	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:121:ILE:CG2	32:BI:122:ARG:H	1.72	1.03
32:BI:21:VAL:HG11	32:BI:30:LEU:CD1	1.88	1.03
55:BK:101:THR:O	55:BK:105:ILE:CG1	2.07	1.03
33:BN:12:VAL:O	33:BN:38:VAL:CG1	2.05	1.03
26:BA:637:A:C8	35:BP:111:ALA:HB2	1.91	1.03
46:B2:30:ALA:O	46:B2:34:GLN:CG	2.07	1.03
50:B5:45:ILE:CG1	50:B5:52:TYR:HE1	1.70	1.03
26:BA:1751:C:O4'	26:BA:2860:A:C2	2.12	1.03
26:BA:2051:A:C4'	28:BE:238:LEU:HD21	1.89	1.03
26:BA:2235:G:H2'	26:BA:2236:C:C6	1.93	1.03
26:BA:2436:G:C2'	26:BA:2437:U:O5'	2.05	1.03
26:BA:2546:U:H5'	26:BA:2565:A:N1	1.73	1.03
26:BA:1638:C:O3'	26:BA:2709:G:N2	1.91	1.03
28:BE:308:VAL:HG12	28:BE:310:PHE:CE1	1.94	1.03
29:BF:32:GLY:CA	29:BF:35:VAL:HG21	1.89	1.03
31:BH:40:MET:HG2	31:BH:64:HIS:HE1	0.97	1.03
32:BI:141:LEU:HD13	32:BI:142:LYS:O	1.58	1.03
33:BN:95:ARG:C	33:BN:98:PHE:HD1	1.61	1.03
26:BA:2406:U:O4	35:BP:55:GLN:HB3	1.40	1.03
39:BW:103:ILE:HG22	39:BW:103:ILE:O	1.56	1.03
41:BY:78:THR:HA	41:BY:89:ARG:CG	1.88	1.03
7:AD:99:SER:HB3	7:AD:139:ARG:HG3	1.38	1.03
48:B0:37:LEU:HD11	48:B0:70:ILE:CD1	1.86	1.03
26:BA:398:G:OP2	49:B4:59:PHE:CZ	2.12	1.03
2:AV:13:C:H4'	26:BA:1924:C:O2'	1.58	1.03
26:BA:2542:A:O4'	26:BA:2542:A:OP2	1.75	1.03
26:BA:2649:U:H2'	26:BA:2650:U:H6	1.23	1.03
26:BA:2790:A:H5''	26:BA:2791:C:OP1	1.57	1.03
26:BA:1545:A:C5'	26:BA:545(A):A:P	2.47	1.03
27:BD:158:GLY:HA2	27:BD:194:VAL:HG13	1.40	1.03
27:BD:175:LEU:CG	27:BD:180:VAL:HA	1.89	1.03
28:BE:82:ALA:O	28:BE:83:LEU:CG	2.05	1.03
31:BH:102:LEU:H	31:BH:102:LEU:HD23	1.24	1.03
32:BI:98:ILE:HD13	32:BI:115:ILE:CD1	1.89	1.03
32:BI:115:ILE:HG23	32:BI:131:VAL:HG22	1.40	1.03
34:BO:1:MET:O	34:BO:2:ILE:HD13	1.58	1.03
25:BB:89(A):A:C2	36:BQ:52:LYS:NZ	2.25	1.03
43:BR:58:GLY:HA2	43:BR:80:PHE:CZ	1.93	1.03
43:BR:77:ARG:HB2	43:BR:77:ARG:CZ	1.87	1.03
41:BY:74:VAL:HG12	41:BY:77:VAL:HG23	1.33	1.03
42:BZ:142:ASN:N	42:BZ:171:VAL:HG21	1.74	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:71:MET:HA	42:BZ:78:PRO:CA	1.89	1.03
42:BZ:91:PRO:CD	42:BZ:127:PRO:CB	2.37	1.03
3:AW:24:G:O6	3:AW:45:G:N2	1.92	1.02
26:BA:2400:G:O3'	51:B6:20:PHE:CZ	2.10	1.02
26:BA:2718:G:H2'	26:BA:2719:G:H8	0.99	1.02
26:BA:775:G:H5'	26:BA:777:A:H1'	1.33	1.02
27:BD:75:GLY:O	27:BD:115:ILE:N	1.92	1.02
27:BD:167:GLU:C	27:BD:170:TYR:CD1	2.33	1.02
26:BA:2571:C:O2'	28:BE:243:PRO:CD	2.07	1.02
30:BG:38:GLU:CG	30:BG:41:LEU:HD12	1.89	1.02
30:BG:93:LEU:CD1	30:BG:94:ALA:N	2.22	1.02
33:BN:87:LEU:H	33:BN:87:LEU:HD12	1.23	1.02
35:BP:112:GLY:HA2	35:BP:113:GLN:HE22	1.21	1.02
26:BA:491:G:O6	39:BW:49:LYS:NZ	1.92	1.02
26:BA:440:G:OP1	41:BY:6:LYS:HD2	1.55	1.02
16:AM:91:ARG:HD3	16:AM:96:LEU:HD12	1.37	1.02
48:B0:37:LEU:HD11	48:B0:70:ILE:HD11	1.35	1.02
52:B7:1:MET:SD	52:B7:1:MET:O	2.17	1.02
26:BA:458:G:H5''	52:B7:39:ARG:HD2	1.40	1.02
26:BA:932:G:C4'	47:B3:24:LYS:HZ3	1.71	1.02
27:BD:167:GLU:O	27:BD:168:GLY:O	1.75	1.02
29:BF:163:HIS:HB3	29:BF:166:ILE:CD1	1.90	1.02
33:BN:25:GLN:CA	33:BN:28:GLU:CG	2.36	1.02
40:BX:24:LEU:HB2	40:BX:26:PHE:HZ	1.19	1.02
41:BY:42:VAL:HG12	41:BY:43:ASN:N	1.70	1.02
25:BB:75:G:H1'	42:BZ:22:VAL:CG2	1.89	1.02
48:B0:45:PHE:CE1	48:B0:78:PHE:CG	2.46	1.02
50:B5:19:ARG:C	50:B5:21:SER:H	1.62	1.02
50:B5:56:GLN:O	50:B5:57:VAL:HG23	1.57	1.02
54:B9:7:VAL:C	54:B9:8:LYS:HE3	1.77	1.02
26:BA:1479:G:H2'	26:BA:1480:G:C8	1.93	1.02
26:BA:2196:C:H5''	26:BA:2197:U:OP2	1.56	1.02
26:BA:2236:C:C2'	26:BA:2237:G:H5'	1.88	1.02
26:BA:2348:U:H5''	53:B8:42:ARG:NH2	1.73	1.02
26:BA:2520:C:C2'	26:BA:2521:C:H5'	1.88	1.02
26:BA:2689:U:C5'	26:BA:2690:C:H5'	1.88	1.02
31:BH:130:ILE:O	31:BH:131:ILE:HG23	1.56	1.02
31:BH:97:LYS:O	31:BH:98:GLN:CG	2.07	1.02
33:BN:19:MET:CG	33:BN:46:ILE:HD11	1.88	1.02
34:BO:25:LEU:CD1	34:BO:38:VAL:HG12	1.88	1.02
43:BR:60:LEU:HG	43:BR:61:HIS:H	1.24	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:23:ARG:CZ	37:BS:37:ARG:HH22	1.72	1.02
39:BW:80:PRO:HB2	39:BW:100:THR:HG21	1.40	1.02
39:BW:84:ARG:HB3	39:BW:96:ILE:HD11	1.37	1.02
42:BZ:120:LEU:HD23	42:BZ:120:LEU:N	1.70	1.02
42:BZ:156:GLU:HG2	42:BZ:157:GLY:N	1.71	1.02
42:BZ:159:THR:HG23	42:BZ:160:LEU:N	1.71	1.02
1:AA:219:C:O3'	1:AA:220:G:P	2.17	1.02
1:AA:1015:A:OP1	22:AS:14:HIS:CE1	2.12	1.02
2:AV:75:C:C4	26:BA:2252:G:N2	2.28	1.02
3:AW:37:YYG:H241	10:AG:85:TYR:CE2	1.86	1.02
48:B0:49:GLN:O	48:B0:49:GLN:NE2	1.93	1.02
26:BA:932:G:H5'	47:B3:24:LYS:NZ	1.74	1.02
53:B8:30:ARG:HD2	53:B8:44:LYS:HD2	1.41	1.02
26:BA:1080:C:H4'	55:BK:126:LYS:CB	1.89	1.02
26:BA:1278:A:O3'	43:BR:34:ILE:HD12	1.59	1.02
26:BA:2216:G:H2'	26:BA:2217:G:C5'	1.89	1.02
26:BA:2226:C:O2	26:BA:2227:A:C1'	2.01	1.02
26:BA:2543:G:C6	26:BA:2544:G:C6	2.47	1.02
26:BA:2584:U:C6	26:BA:2584:U:C3'	2.31	1.02
26:BA:2584:U:H2'	26:BA:2585:U:H5	1.19	1.02
26:BA:2689:U:H5'	26:BA:2690:C:H5''	1.33	1.02
27:BD:61:TYR:HH	27:BD:214:MET:CE	1.66	1.02
27:BD:63:ILE:O	27:BD:64:ILE:CG1	2.07	1.02
29:BF:239:ALA:C	29:BF:241:ALA:H	1.57	1.02
29:BF:96:LYS:CG	29:BF:98:ARG:NH1	2.22	1.02
26:BA:1080:C:C4'	55:BK:126:LYS:HB3	1.88	1.02
36:BQ:45:GLN:CB	36:BQ:152:SER:HB3	1.88	1.02
36:BQ:32:LYS:HZ1	42:BZ:172:LEU:HD11	1.20	1.02
37:BS:20:TYR:CE2	37:BS:21:HIS:CD2	2.46	1.02
37:BS:33:ARG:O	37:BS:35:VAL:CG2	2.06	1.02
3:AW:9:A:N1	3:AW:45:G:C5	2.26	1.02
47:B3:23:LEU:O	47:B3:28:LEU:CG	2.08	1.02
53:B8:61:MET:O	53:B8:63:PRO:HD2	1.57	1.02
26:BA:2227:A:N1	26:BA:2228:G:C5	2.27	1.02
26:BA:2328:A:C4	26:BA:2329:G:N7	2.27	1.02
26:BA:2574:G:C5'	26:BA:2575:C:OP2	2.07	1.02
26:BA:2693:A:C2	26:BA:2694:G:C5	2.48	1.02
26:BA:2788:C:H5''	26:BA:2789:C:OP2	1.59	1.02
26:BA:85:G:OP2	41:BY:65:VAL:HB	1.60	1.02
29:BF:214:THR:O	29:BF:216:SER:N	1.93	1.02
36:BQ:28:ILE:HG23	36:BQ:62:GLU:CG	1.87	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:59:ARG:O	44:BU:62:ILE:CB	2.08	1.02
1:AA:1269:A:N3	1:AA:1326:C:H1'	1.73	1.02
26:BA:2195:C:C5'	26:BA:2195:C:H6	1.72	1.02
26:BA:2470:G:N2	26:BA:2471:C:C5	2.20	1.02
26:BA:2495:G:C4'	36:BQ:101:MET:HG3	1.88	1.02
26:BA:2577:A:N1	26:BA:2614:A:H2	1.56	1.02
26:BA:2709:G:H2'	26:BA:2710:C:H5'	1.39	1.02
28:BE:180:ILE:CB	28:BE:187:HIS:HB3	1.88	1.02
28:BE:62:ARG:O	28:BE:63:GLU:CG	2.07	1.02
29:BF:4:THR:O	29:BF:139:VAL:HG11	1.59	1.02
31:BH:93:TYR:HE1	31:BH:106:VAL:O	1.36	1.02
32:BI:95:SER:C	32:BI:98:ILE:HB	1.80	1.02
34:BO:1:MET:O	34:BO:2:ILE:HD12	1.51	1.02
36:BQ:65:ARG:NE	36:BQ:122:PHE:CE2	2.27	1.02
36:BQ:41:THR:OG1	36:BQ:126:VAL:HA	1.58	1.02
43:BR:38:VAL:HB	43:BR:39:PRO:HD2	1.06	1.02
44:BU:34:ASN:HA	44:BU:37:GLN:HB3	1.39	1.02
41:BY:42:VAL:HG12	41:BY:43:ASN:H	0.88	1.02
41:BY:70:ALA:O	41:BY:93:THR:CG2	2.06	1.02
42:BZ:4:THR:C	42:BZ:33:ALA:HB1	1.78	1.02
26:BA:593:G:H5'	53:B8:62:LEU:HD21	1.40	1.02
26:BA:2616:C:O2'	26:BA:2617:C:H5'	1.52	1.02
26:BA:1637:A:C4'	26:BA:2711:A:O2'	2.07	1.02
26:BA:557:U:H5'	33:BN:92:GLN:NE2	1.73	1.02
27:BD:167:GLU:HB3	27:BD:170:TYR:CE1	1.91	1.02
28:BE:174:LEU:HD12	28:BE:174:LEU:H	1.23	1.02
28:BE:45:LYS:HZ1	28:BE:302:GLY:C	1.63	1.02
29:BF:164:ALA:HB1	29:BF:232:LEU:CD1	1.88	1.02
26:BA:2314:C:H5''	30:BG:22:VAL:HG11	1.06	1.02
31:BH:102:LEU:HD21	31:BH:114:ILE:HB	1.42	1.02
55:BK:129:GLU:HG2	55:BK:133:LYS:HE3	1.06	1.02
34:BO:7:ARG:NE	34:BO:44:LYS:CE	2.23	1.02
39:BW:82:LEU:HD21	39:BW:100:THR:H	1.17	1.02
41:BY:42:VAL:CG1	41:BY:43:ASN:H	1.72	1.02
1:AA:977:A:N6	1:AA:1224:G:P	2.33	1.02
48:B0:26:PHE:N	48:B0:60:PHE:CD1	2.20	1.02
47:B3:37:LEU:HD12	47:B3:43:ILE:HG21	1.41	1.02
49:B4:58:LYS:O	49:B4:61:LYS:HG3	1.58	1.02
26:BA:1140:C:H1'	26:BA:142(A):A:N1	1.75	1.02
26:BA:2446:G:H5'	26:BA:2446:G:H8	1.24	1.02
26:BA:2768:C:C2'	26:BA:2769:C:C5'	2.27	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:414:C:N3	26:BA:2409:G:N2	2.08	1.02
26:BA:1827:C:N4	27:BD:225:ARG:NH1	2.04	1.02
28:BE:190:ASN:O	28:BE:192:ILE:N	1.93	1.02
29:BF:215:ALA:O	29:BF:242:GLU:CG	2.08	1.02
30:BG:145:ASP:CG	37:BS:15:GLU:O	1.97	1.02
34:BO:11:ALA:O	34:BO:99:PHE:HB2	1.59	1.02
34:BO:35:ILE:C	34:BO:62:VAL:HB	1.55	1.02
26:BA:911:A:C4	36:BQ:16:ARG:CG	2.24	1.02
43:BR:107:ASP:CG	43:BR:108:GLY:H	1.62	1.02
43:BR:107:ASP:CG	43:BR:108:GLY:N	2.12	1.02
41:BY:30:ASP:CG	41:BY:31:LEU:CD2	2.28	1.02
2:AV:7:U:O4	2:AV:49:C:C4	2.13	1.02
46:B2:29:ASN:O	46:B2:34:GLN:HG2	1.60	1.02
47:B3:9:VAL:H	47:B3:54:VAL:HG12	1.22	1.02
52:B7:18:PHE:H	52:B7:44:VAL:CG2	1.72	1.02
53:B8:62:LEU:HB2	53:B8:63:PRO:CD	1.88	1.02
26:BA:1071:G:H1'	26:BA:1090:U:OP1	1.60	1.02
26:BA:126:A:N6	52:B7:18:PHE:HE2	1.57	1.02
26:BA:1270:C:H4'	26:BA:1271:G:H5''	1.39	1.02
26:BA:1710:C:O2'	26:BA:2858:C:C4	2.12	1.02
26:BA:2315:G:C5'	30:BG:133:ASN:ND2	2.22	1.02
26:BA:2423:U:C6	26:BA:2423:U:C5'	2.42	1.02
26:BA:2572:A:C5'	26:BA:2574:G:H5'	1.89	1.02
26:BA:459:U:OP1	52:B7:40:HIS:HA	1.59	1.02
27:BD:89:ASN:HD21	27:BD:199:ARG:NE	1.57	1.02
27:BD:70:LYS:HG3	27:BD:73:ILE:HD11	1.41	1.02
26:BA:1675:C:C2	28:BE:225:LYS:HG2	1.94	1.02
29:BF:148:VAL:HG12	29:BF:148:VAL:O	1.58	1.02
29:BF:241:ALA:O	29:BF:245:GLU:CD	1.98	1.02
29:BF:243:VAL:O	29:BF:246:ARG:N	1.91	1.02
29:BF:96:LYS:HB2	29:BF:98:ARG:NH2	1.73	1.02
32:BI:4:ILE:O	32:BI:4:ILE:CG2	2.07	1.02
40:BX:11:THR:C	40:BX:15:MET:HG3	1.79	1.02
41:BY:103:LEU:HA	41:BY:108:ARG:CB	1.89	1.02
36:BQ:42:TYR:CE2	42:BZ:116:VAL:HG21	1.95	1.02
52:B7:32:ALA:HA	52:B7:35:ARG:CG	1.90	1.02
26:BA:1062:G:N2	55:BK:92:PRO:CG	2.22	1.02
26:BA:1340:U:C5	40:BX:55:GLN:NE2	2.28	1.02
26:BA:2286:A:C8	26:BA:2286:A:H3'	1.95	1.02
26:BA:2461:C:N3	26:BA:2462:U:C5	2.28	1.02
26:BA:2531:A:H2'	26:BA:2532:G:H5''	1.38	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2616:C:C2	26:BA:2617:C:C5	2.48	1.02
26:BA:2653:U:H2'	26:BA:2654:A:N7	1.74	1.02
32:BI:103:GLN:NE2	32:BI:109:LYS:CA	2.22	1.02
35:BP:94:ARG:HB2	35:BP:120:LEU:HD22	1.36	1.02
36:BQ:44:ALA:CB	36:BQ:126:VAL:O	2.08	1.02
45:BV:61:VAL:CG2	45:BV:98:ILE:H	1.73	1.02
39:BW:82:LEU:HD23	39:BW:98:LYS:C	1.79	1.02
42:BZ:116:VAL:CG2	42:BZ:169:VAL:CG2	2.35	1.02
1:AA:1268:A:H2	1:AA:1327:C:H1'	1.22	1.01
17:AN:24:CYS:HB2	17:AN:40:CYS:N	1.75	1.01
1:AA:957:U:H4'	22:AS:79:THR:HB	1.39	1.01
48:B0:45:PHE:CD1	48:B0:78:PHE:CA	2.42	1.01
46:B2:30:ALA:CA	46:B2:34:GLN:HG2	1.89	1.01
47:B3:3:ARG:HB2	47:B3:60:GLU:HA	1.37	1.01
26:BA:1364:G:C2'	49:B4:3:LYS:NZ	2.10	1.01
26:BA:2305:A:H3'	26:BA:2306:C:H5''	1.02	1.01
26:BA:2626:C:C5'	26:BA:2626:C:H6	1.71	1.01
26:BA:2781:A:OP1	26:BA:2781:A:O4'	1.77	1.01
26:BA:527:C:C6	26:BA:2779:U:C6	2.48	1.01
27:BD:141:HIS:CE1	27:BD:192:GLY:O	2.12	1.01
27:BD:167:GLU:HG2	27:BD:182:MET:HE3	1.37	1.01
27:BD:204:PHE:CD1	27:BD:204:PHE:N	2.18	1.01
30:BG:103:ASN:OD1	30:BG:134:LEU:N	1.92	1.01
31:BH:10:ILE:HG21	31:BH:14:VAL:CG1	1.79	1.01
32:BI:68:LEU:CD2	32:BI:108:LEU:CD1	1.90	1.01
32:BI:6:LEU:HD22	32:BI:14:LYS:HD3	1.38	1.01
34:BO:78:ARG:C	34:BO:79:PHE:HD2	1.61	1.01
34:BO:92:SER:HB2	34:BO:113:LYS:NZ	1.75	1.01
35:BP:141:GLU:HB2	35:BP:145:LEU:HD22	1.02	1.01
36:BQ:133:GLU:OE1	36:BQ:133:GLU:O	1.78	1.01
43:BR:25:ALA:O	43:BR:29:LEU:HD23	1.60	1.01
44:BU:41:ASN:HD22	44:BU:42:ALA:N	1.58	1.01
44:BU:63:GLN:O	44:BU:65:ILE:N	1.92	1.01
47:B3:30:ARG:HH11	47:B3:30:ARG:CG	1.68	1.01
47:B3:33:GLN:NE2	47:B3:34:GLU:O	1.94	1.01
26:BA:1309:G:OP2	52:B7:9:ASN:ND2	1.92	1.01
26:BA:2570:G:N3	26:BA:2570:G:H2'	1.72	1.01
26:BA:2689:U:C5'	26:BA:2690:C:C5'	2.36	1.01
26:BA:2782:G:OP2	26:BA:2782:G:C8	2.13	1.01
26:BA:2896:C:O5'	26:BA:2896:C:C6	2.12	1.01
26:BA:557:U:C4'	33:BN:92:GLN:NE2	2.23	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:104:ILE:HB	27:BD:106:PRO:CD	1.89	1.01
32:BI:37:ILE:CG2	32:BI:38:GLU:N	2.17	1.01
33:BN:25:GLN:HA	33:BN:28:GLU:HG2	1.03	1.01
34:BO:35:ILE:CG2	34:BO:63:VAL:CA	2.09	1.01
36:BQ:58:HIS:CE1	36:BQ:59:ASN:HB3	1.95	1.01
38:BT:4:ARG:HE	38:BT:4:ARG:N	1.57	1.01
38:BT:50:GLU:HA	38:BT:55:ALA:CB	1.89	1.01
44:BU:49:ASP:N	44:BU:52:ASN:ND2	1.95	1.01
45:BV:50:ASP:OD1	45:BV:53:LYS:CE	2.07	1.01
40:BX:30:ASP:O	40:BX:62:LYS:HE2	1.56	1.01
3:AW:9:A:H1'	3:AW:45:G:O2'	1.60	1.01
40:BX:4:VAL:HG22	46:B2:24:LYS:HZ2	0.85	1.01
51:B6:28:ARG:HB3	51:B6:28:ARG:HH11	1.20	1.01
54:B9:25:VAL:CB	54:B9:34:GLN:HB2	1.69	1.01
26:BA:2330:G:N2	26:BA:2331:G:C1'	2.23	1.01
26:BA:995:C:P	44:BU:54:LYS:HE2	1.99	1.01
29:BF:56:THR:HB	29:BF:57:PRO:HD2	1.41	1.01
26:BA:2314:C:O2'	30:BG:133:ASN:ND2	1.93	1.01
32:BI:109:LYS:CE	32:BI:109:LYS:H	1.74	1.01
32:BI:112:LYS:HD3	32:BI:112:LYS:N	1.75	1.01
55:BK:129:GLU:HG2	55:BK:133:LYS:CE	1.90	1.01
34:BO:7:ARG:CD	34:BO:44:LYS:CE	2.38	1.01
26:BA:1287:A:C4'	43:BR:104:ARG:HD2	1.90	1.01
37:BS:33:ARG:HB3	37:BS:35:VAL:CG2	1.90	1.01
39:BW:17:VAL:O	39:BW:20:VAL:HG23	1.60	1.01
42:BZ:53:ASP:CG	42:BZ:62:PHE:O	1.98	1.01
47:B3:59:VAL:O	47:B3:60:GLU:HG3	1.55	1.01
51:B6:28:ARG:CB	51:B6:28:ARG:HH11	1.72	1.01
52:B7:26:SER:O	52:B7:29:ASN:HB2	1.59	1.01
52:B7:32:ALA:HA	52:B7:35:ARG:HG3	1.42	1.01
26:BA:2302:G:N1	26:BA:2315:G:C6	2.29	1.01
26:BA:2336:A:O2'	26:BA:2337:G:H5'	0.85	1.01
26:BA:2758:A:P	26:BA:2758:A:H3'	2.01	1.01
26:BA:2812:G:O2'	26:BA:2813:A:H5'	1.58	1.01
26:BA:2845:G:H2'	26:BA:2846:G:H8	1.25	1.01
26:BA:58:G:H1	26:BA:69:C:H42	1.09	1.01
28:BE:70:VAL:CG1	28:BE:296:VAL:N	2.22	1.01
29:BF:240:LEU:HD22	29:BF:243:VAL:HG21	1.38	1.01
31:BH:145:ALA:O	31:BH:147:ILE:N	1.92	1.01
32:BI:145:VAL:HG12	32:BI:146:THR:N	1.72	1.01
34:BO:61:VAL:HG12	34:BO:62:VAL:H	1.18	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1665:A:C5'	34:BO:66:LYS:HD3	1.89	1.01
43:BR:20:LEU:O	43:BR:22:ARG:N	1.94	1.01
42:BZ:138:VAL:O	42:BZ:139:THR:OG1	1.79	1.01
3:AW:75:C:C2	26:BA:2395:C:H1'	1.87	1.01
49:B4:20:VAL:O	49:B4:30:GLU:OE1	1.77	1.01
26:BA:2287:A:N6	26:BA:2344:U:C6	2.28	1.01
26:BA:2410:G:C2'	26:BA:2411:A:C8	2.43	1.01
26:BA:2580:U:C6	26:BA:2581:G:N7	2.18	1.01
26:BA:2761:G:C2'	26:BA:2762:G:H5'	1.89	1.01
28:BE:221:LYS:CE	28:BE:233:ARG:HA	1.90	1.01
28:BE:61:PRO:HA	28:BE:69:PRO:HA	1.38	1.01
26:BA:2317:C:H5'	30:BG:150:SER:CA	1.89	1.01
32:BI:22:ALA:O	32:BI:23:ASP:O	1.77	1.01
55:BK:33:VAL:HG22	55:BK:60:VAL:CG1	1.89	1.01
33:BN:50:GLU:HA	33:BN:53:ILE:HG21	1.35	1.01
35:BP:66:VAL:HG23	35:BP:67:ARG:NH2	1.73	1.01
37:BS:12:ARG:NH1	37:BS:20:TYR:CD2	2.21	1.01
44:BU:28:ARG:O	44:BU:31:GLN:N	1.92	1.01
44:BU:42:ALA:O	44:BU:45:TYR:HB2	1.60	1.01
26:BA:446:G:C3'	44:BU:5:LYS:HZ1	1.73	1.01
39:BW:96:ILE:N	39:BW:96:ILE:HD12	1.66	1.01
40:BX:44:GLN:OE1	40:BX:45:TYR:HB2	1.60	1.01
42:BZ:163:ASP:OD2	42:BZ:164:PRO:CG	2.08	1.01
1:AA:1004:A:O3'	1:AA:1005:A:P	2.19	1.01
1:AA:1288:A:N1	1:AA:1371:G:H1'	1.75	1.01
7:AD:23:GLY:HA2	7:AD:112:VAL:O	1.60	1.01
26:BA:2307:G:C1'	26:BA:2311:A:N6	2.15	1.01
26:BA:2339:G:H2'	26:BA:2340:G:C8	1.95	1.01
26:BA:2575:C:H2'	26:BA:2575:C:O2	1.61	1.01
26:BA:2577:A:N1	26:BA:2614:A:C2	2.29	1.01
26:BA:1968:G:OP1	26:BA:2592:G:OP1	1.79	1.01
26:BA:2437:U:C5'	26:BA:2598:A:C2	2.42	1.01
28:BE:45:LYS:HZ1	28:BE:303:PRO:CA	1.73	1.01
31:BH:146:ASN:O	31:BH:150:VAL:CG2	2.08	1.01
32:BI:6:LEU:CB	32:BI:36:ALA:HB2	1.91	1.01
35:BP:65:ASP:CA	35:BP:109:LEU:H	1.71	1.01
36:BQ:45:GLN:HB3	36:BQ:152:SER:CB	1.90	1.01
44:BU:27:SER:HB3	44:BU:31:GLN:NE2	1.76	1.01
44:BU:8:ILE:CA	44:BU:11:ARG:CD	2.38	1.01
39:BW:8:ARG:O	39:BW:10:VAL:N	1.93	1.01
42:BZ:24:TYR:CD2	42:BZ:84:TYR:HD1	1.79	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:13:PRO:HA	46:B2:16:ARG:HD2	1.40	1.01
53:B8:26:LYS:CD	53:B8:44:LYS:C	2.24	1.01
28:BE:229:GLN:C	28:BE:231:TRP:H	1.60	1.01
29:BF:102:LEU:CD2	29:BF:103:ASN:H	1.74	1.01
26:BA:2277:G:O3'	36:BQ:15:THR:CB	1.99	1.01
36:BQ:28:ILE:CG2	36:BQ:62:GLU:HG2	1.90	1.01
36:BQ:85:ILE:HG22	36:BQ:122:PHE:CD2	1.95	1.01
25:BB:7:G:O2'	37:BS:37:ARG:HG3	1.61	1.01
38:BT:11:THR:HG22	38:BT:12:ASP:H	1.20	1.01
26:BA:439:G:H5''	41:BY:6:LYS:HZ3	1.24	1.01
26:BA:2815:C:H5'	50:B5:29:ASN:HD22	0.85	1.01
51:B6:24:THR:O	51:B6:25:THR:HG23	1.60	1.01
52:B7:34:ARG:NH1	52:B7:42:LEU:HD23	1.75	1.01
26:BA:2403:C:O2	26:BA:2403:C:H2'	1.56	1.01
26:BA:2722:G:N3	26:BA:2723:C:C6	2.28	1.01
26:BA:458:G:C5'	52:B7:39:ARG:HD2	1.91	1.01
26:BA:529:A:H2	26:BA:2022:U:OP1	1.44	1.01
27:BD:175:LEU:N	27:BD:175:LEU:HD23	1.72	1.01
27:BD:183:ILE:CG2	27:BD:184:LEU:N	1.99	1.01
31:BH:166:GLU:CA	31:BH:167:LEU:HD23	1.88	1.01
31:BH:93:TYR:O	31:BH:94:ARG:HG2	1.57	1.01
33:BN:139:LEU:H	33:BN:139:LEU:HD13	1.21	1.01
37:BS:31:LYS:CB	37:BS:32:PRO:CD	2.38	1.01
26:BA:1156:A:OP1	44:BU:55:ARG:NH1	1.94	1.01
44:BU:55:ARG:O	44:BU:57:PHE:N	1.93	1.01
39:BW:42:ARG:O	39:BW:44:ALA:N	1.93	1.01
39:BW:85:VAL:HG12	39:BW:95:ILE:CD1	1.90	1.01
42:BZ:145:ASP:O	42:BZ:146:HIS:CD2	2.14	1.01
26:BA:2286:A:H4'	26:BA:2287:A:O4'	1.60	1.01
26:BA:2528:U:C4	26:BA:2530:A:N3	2.29	1.01
26:BA:2746:U:O2	26:BA:2759:G:C2	2.13	1.01
29:BF:193:LEU:HD13	29:BF:223:LEU:HB2	1.43	1.01
29:BF:59:GLU:O	29:BF:61:PHE:CE2	2.13	1.01
32:BI:121:ILE:HG22	32:BI:122:ARG:H	0.85	1.01
32:BI:37:ILE:HG22	32:BI:38:GLU:N	1.73	1.01
32:BI:77:VAL:HG23	32:BI:141:LEU:CD1	1.83	1.01
33:BN:27:ALA:CB	33:BN:30:ALA:HB3	1.91	1.01
34:BO:64:ARG:HD3	34:BO:81:GLU:HB3	1.42	1.01
36:BQ:32:LYS:NZ	42:BZ:172:LEU:HD11	1.74	1.01
37:BS:31:LYS:HB3	37:BS:32:PRO:HD3	1.37	1.01
45:BV:40:VAL:HB	45:BV:51:ALA:HB1	1.37	1.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:51:ALA:HA	45:BV:54:TYR:CD1	1.95	1.01
1:AA:1500:A:H5''	1:AA:1508:G:C5'	1.91	1.01
26:BA:76:C:O2'	46:B2:55:ARG:HG3	1.61	1.01
26:BA:1364:G:P	49:B4:3:LYS:HG2	1.97	1.01
26:BA:1033:U:C6	26:BA:2750:A:H2	1.78	1.01
26:BA:1078:U:O2	26:BA:1088:A:H1'	1.61	1.01
26:BA:1993:U:H4'	28:BE:228:ARG:HH21	1.26	1.01
26:BA:574:C:H41	26:BA:2054:A:C5'	1.73	1.01
26:BA:2217:G:O2'	26:BA:2218:G:H5'	1.57	1.01
26:BA:2597:G:C2'	26:BA:2598:A:C8	2.43	1.01
26:BA:2726:U:H3'	26:BA:2727:G:H8	1.24	1.01
26:BA:2839:G:N3	26:BA:2840:C:C6	2.29	1.01
30:BG:35:ALA:O	30:BG:36:ASN:CG	1.99	1.01
34:BO:35:ILE:HG21	34:BO:63:VAL:HA	1.38	1.01
26:BA:2296:U:N3	37:BS:16:ALA:HB2	1.74	1.01
44:BU:103:PRO:C	44:BU:107:LYS:HG2	1.82	1.01
45:BV:14:VAL:HG12	45:BV:15:SER:N	1.75	1.01
46:B2:30:ALA:O	46:B2:34:GLN:HG2	1.58	1.00
26:BA:1944:U:C1'	26:BA:1955:U:H1'	1.90	1.00
26:BA:2043:C:C4	26:BA:2777:G:N3	2.29	1.00
26:BA:2215:G:O2'	26:BA:2216:G:C5'	2.09	1.00
26:BA:2246:G:O2'	26:BA:2247:A:C5'	2.07	1.00
26:BA:2253:G:C2'	26:BA:2254:C:O5'	2.07	1.00
26:BA:2422:A:C4	26:BA:2424:C:C5	2.49	1.00
26:BA:2552:U:O2	26:BA:2554:U:C5'	2.09	1.00
26:BA:2570:G:H2'	26:BA:2571:C:C5	1.95	1.00
26:BA:2589:A:H2'	26:BA:2590:A:H5''	1.27	1.00
26:BA:2832:U:O2'	26:BA:2834:G:N3	1.90	1.00
26:BA:990:A:C6	26:BA:1186:G:H1'	1.96	1.00
27:BD:167:GLU:CB	27:BD:170:TYR:CD1	2.43	1.00
29:BF:225:PRO:CG	29:BF:231:ARG:NH2	2.20	1.00
31:BH:15:THR:HG22	31:BH:26:LYS:O	1.59	1.00
55:BK:73:PRO:HG2	55:BK:78:LEU:HD11	1.02	1.00
34:BO:2:ILE:HD13	34:BO:33:ALA:O	1.61	1.00
34:BO:37:ASP:O	34:BO:62:VAL:HG23	1.58	1.00
35:BP:114:VAL:O	35:BP:115:ARG:HG3	0.83	1.00
36:BQ:36:ASN:OD1	42:BZ:116:VAL:HG12	1.60	1.00
36:BQ:65:ARG:NE	36:BQ:85:ILE:HB	1.76	1.00
26:BA:1287:A:C8	43:BR:104:ARG:HG2	1.94	1.00
42:BZ:120:LEU:H	42:BZ:120:LEU:HD23	0.87	1.00
42:BZ:126:GLY:O	42:BZ:129:ARG:CB	2.08	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:39:PHE:HA	42:BZ:43:PHE:CZ	1.96	1.00
1:AA:1224:G:O3'	1:AA:1225:A:P	2.17	1.00
1:AA:944:G:O6	1:AA:1337:G:H8	1.44	1.00
54:B9:10:MET:CB	54:B9:32:HIS:HD2	1.75	1.00
26:BA:2297:C:C2'	26:BA:2298:A:H8	1.73	1.00
26:BA:2364:C:C1'	48:B0:32:LYS:HZ2	1.66	1.00
26:BA:2717:G:N2	26:BA:2718:G:C4	2.28	1.00
26:BA:2742:C:C5'	54:B9:35:ARG:HH12	1.74	1.00
26:BA:2633:G:H1	26:BA:2785:C:H42	1.09	1.00
26:BA:2896:C:O5'	26:BA:2896:C:H6	1.40	1.00
26:BA:2785:C:O2'	28:BE:100:TRP:HB2	1.61	1.00
28:BE:206:LYS:O	28:BE:257:GLY:HA2	1.61	1.00
28:BE:267:ARG:HB2	28:BE:297:LYS:HD2	1.42	1.00
29:BF:144:PHE:CD2	29:BF:156:LEU:HD13	1.94	1.00
55:BK:73:PRO:CG	55:BK:78:LEU:HD11	1.89	1.00
35:BP:53:ARG:HD2	35:BP:53:ARG:H	1.21	1.00
43:BR:22:ARG:HG3	43:BR:26:LYS:HE3	1.42	1.00
26:BA:2850:A:C2	43:BR:61:HIS:NE2	2.28	1.00
41:BY:52:ARG:HD2	41:BY:95:ASN:OD1	1.59	1.00
1:AA:1340:A:O2'	2:AV:31:A:C2'	2.08	1.00
2:AV:56:C:O2'	30:BG:56:ARG:CD	2.10	1.00
47:B3:8:LEU:HD22	47:B3:31:LEU:HA	1.36	1.00
26:BA:1364:G:C3'	49:B4:3:LYS:HD3	1.90	1.00
49:B4:11:PRO:HA	49:B4:40:HIS:CD2	1.96	1.00
26:BA:1819:A:C2'	27:BD:177:SER:HA	1.90	1.00
26:BA:2187:G:O2'	26:BA:2188:C:H5'	1.59	1.00
26:BA:2258:C:C5	26:BA:2426:A:H4'	1.90	1.00
26:BA:2343:C:O2'	26:BA:2344:U:H5'	1.58	1.00
26:BA:2520:C:N3	26:BA:2521:C:C5	2.30	1.00
26:BA:649:G:O3'	53:B8:17:THR:HG21	1.61	1.00
26:BA:687:C:C5'	52:B7:4:THR:HG22	1.90	1.00
28:BE:74:GLU:CA	28:BE:293:TYR:CD2	2.41	1.00
31:BH:41:THR:HB	31:BH:52:THR:HB	1.42	1.00
34:BO:98:ILE:HG13	34:BO:117:LEU:HB3	1.43	1.00
35:BP:83:GLU:O	35:BP:92:ASP:N	1.95	1.00
36:BQ:49:VAL:HG13	36:BQ:50:VAL:H	1.22	1.00
26:BA:1251:C:H5"	44:BU:10:ARG:HE	1.22	1.00
26:BA:1162:G:C4'	45:BV:23:GLU:HB2	1.89	1.00
39:BW:8:ARG:HG2	39:BW:9:TYR:N	1.75	1.00
41:BY:45:GLY:HA2	41:BY:62:VAL:HG12	1.42	1.00
1:AA:1319:A:C4'	22:AS:70:LYS:NZ	2.25	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2331:G:O3'	48:B0:70:ILE:HB	1.61	1.00
47:B3:59:VAL:O	47:B3:60:GLU:HG2	1.61	1.00
49:B4:42:PHE:O	49:B4:57:ASP:CA	1.99	1.00
52:B7:44:VAL:C	52:B7:46:ASP:H	1.53	1.00
53:B8:19:THR:HB	53:B8:21:LYS:NZ	1.77	1.00
26:BA:2051:A:H4'	28:BE:238:LEU:HD21	1.43	1.00
26:BA:2103:C:N3	26:BA:2187:G:O6	1.94	1.00
26:BA:2188:C:N4	26:BA:2189:U:O4	1.95	1.00
26:BA:2195:C:O5'	26:BA:2195:C:H6	1.44	1.00
26:BA:2423:U:C6	26:BA:2425:A:C6	2.50	1.00
26:BA:199:A:C2	26:BA:2433:A:C4	2.49	1.00
26:BA:2581:G:N2	26:BA:2610:C:C6	2.29	1.00
26:BA:2759:G:H2'	26:BA:2760:C:O5'	1.58	1.00
26:BA:526:A:H2	26:BA:2626:C:H1'	1.25	1.00
26:BA:1818:U:H5''	27:BD:155:ARG:HB2	1.41	1.00
28:BE:171:SER:O	28:BE:175:ASP:CB	2.08	1.00
28:BE:303:PRO:HB2	28:BE:307:LEU:HD13	1.02	1.00
29:BF:96:LYS:CB	29:BF:98:ARG:NH1	0.86	1.00
35:BP:112:GLY:CA	35:BP:113:GLN:HE22	1.74	1.00
36:BQ:16:ARG:HB3	36:BQ:16:ARG:CZ	1.90	1.00
36:BQ:94:ARG:NH1	36:BQ:105:PHE:O	1.93	1.00
41:BY:101:LEU:CD2	41:BY:103:LEU:HG	1.79	1.00
41:BY:43:ASN:HD21	41:BY:112:LEU:HD21	1.23	1.00
41:BY:46:ASP:OD2	41:BY:101:LEU:HA	1.59	1.00
42:BZ:51:LEU:HD11	42:BZ:63:PRO:HB2	1.42	1.00
1:AA:1189:C:O2'	6:AC:176:HIS:HD2	1.43	1.00
47:B3:40:THR:HG23	47:B3:43:ILE:CD1	1.66	1.00
51:B6:37:LEU:O	51:B6:38:LYS:CG	2.07	1.00
26:BA:2209:C:N4	26:BA:2215:G:H1	1.58	1.00
26:BA:2286:A:H3'	26:BA:2286:A:H8	1.26	1.00
26:BA:2558:C:C2	26:BA:2559:C:C5	2.50	1.00
26:BA:2640:G:H1	26:BA:2774:C:H42	1.02	1.00
26:BA:2792:G:N2	26:BA:2804:C:N3	2.08	1.00
26:BA:1826:G:OP1	27:BD:227:VAL:HG22	1.58	1.00
32:BI:7:LYS:HA	32:BI:12:LYS:HD3	1.43	1.00
35:BP:76:LEU:O	35:BP:81:VAL:CG2	2.01	1.00
44:BU:36:PHE:O	44:BU:39:LEU:CB	2.09	1.00
45:BV:42:GLY:CA	45:BV:54:TYR:OH	2.09	1.00
40:BX:33:SER:C	40:BX:37:VAL:HG23	1.82	1.00
26:BA:83:G:H5''	41:BY:20:HIS:ND1	1.77	1.00
42:BZ:47:SER:O	42:BZ:49:THR:N	1.94	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:95:SER:CB	42:BZ:122:ILE:HG12	1.92	1.00
1:AA:691:G:H1	14:AK:52:GLY:HA2	1.27	1.00
48:B0:61:ALA:C	48:B0:62:LEU:HD12	1.80	1.00
26:BA:2316:C:H5'	30:BG:142:ALA:HB3	1.42	1.00
26:BA:2423:U:O2'	26:BA:2425:A:H3'	1.62	1.00
26:BA:2567:G:O2'	26:BA:2568:C:H5'	1.62	1.00
26:BA:2857:G:O5'	26:BA:2857:G:H8	1.44	1.00
28:BE:44:TYR:CG	28:BE:307:LEU:O	2.14	1.00
31:BH:58:LYS:O	31:BH:61:ARG:HB3	1.62	1.00
37:BS:34:LEU:HD21	37:BS:102:LEU:HA	1.42	1.00
37:BS:110:THR:OG1	37:BS:111:PRO:HD2	1.61	1.00
41:BY:31:LEU:O	41:BY:34:GLU:CB	2.09	1.00
1:AA:428:G:O2'	7:AD:36:ARG:NH1	1.95	1.00
46:B2:57:LYS:O	46:B2:60:GLN:HB3	1.61	1.00
52:B7:8:ASN:HB2	52:B7:11:LYS:HB3	1.42	1.00
26:BA:2234:G:C6	26:BA:2235:G:N7	2.29	1.00
26:BA:2543:G:C5	26:BA:2544:G:C5	2.49	1.00
26:BA:2045:C:C4	26:BA:2624:G:C2	2.50	1.00
26:BA:2625:G:H3'	26:BA:2626:C:C6	1.95	1.00
26:BA:2709:G:O2'	26:BA:2710:C:C5'	2.09	1.00
26:BA:932:G:C5'	47:B3:24:LYS:NZ	2.24	1.00
26:BA:1568:G:C3'	27:BD:60:GLN:HE21	1.70	1.00
26:BA:2730:C:C4'	28:BE:265:ASN:HD21	1.74	1.00
29:BF:144:PHE:O	29:BF:146:ASP:N	1.93	1.00
36:BQ:34:GLY:CA	36:BQ:74:ASN:O	2.09	1.00
26:BA:85:G:P	41:BY:65:VAL:CG1	2.48	1.00
42:BZ:6:LYS:H	42:BZ:7:PRO:CD	1.74	1.00
1:AA:1222:G:OP2	1:AA:1322:C:C4	2.15	1.00
53:B8:16:ILE:CG1	53:B8:22:VAL:CG2	2.22	1.00
26:BA:1669:A:H5''	26:BA:2550:G:OP1	1.61	1.00
26:BA:2327:A:C2	26:BA:2328:A:N3	2.29	1.00
26:BA:2646:C:H2'	26:BA:2647:U:H5'	1.42	1.00
26:BA:2813:A:H2'	26:BA:2814:C:C5	1.96	1.00
28:BE:271:ILE:CD1	28:BE:294:THR:HG22	1.89	1.00
30:BG:21:VAL:CG1	30:BG:132:VAL:HB	1.92	1.00
31:BH:147:ILE:HD12	31:BH:150:VAL:HB	1.41	1.00
31:BH:41:THR:CB	31:BH:52:THR:HB	1.91	1.00
55:BK:15:ALA:CB	55:BK:46:THR:CB	2.40	1.00
34:BO:66:LYS:HG3	34:BO:82:ASN:ND2	1.75	1.00
43:BR:21:TYR:HB3	43:BR:47:PHE:CD2	1.96	1.00
44:BU:33:ARG:CB	44:BU:33:ARG:HH11	1.75	1.00

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:77:VAL:O	41:BY:78:THR:HG23	1.61	1.00
42:BZ:149:ALA:HA	42:BZ:152:ILE:HD11	1.43	1.00
42:BZ:159:THR:C	42:BZ:160:LEU:CD1	2.30	1.00
26:BA:2305:A:H3'	26:BA:2306:C:C5'	1.92	1.00
26:BA:2862:G:C2'	26:BA:2863:C:C6	2.43	1.00
26:BA:2870:C:H2'	26:BA:2870:C:O2	1.62	1.00
28:BE:94:ARG:HB3	28:BE:95:PRO:HD2	1.04	1.00
29:BF:102:LEU:HD21	29:BF:106:GLU:OE1	1.61	1.00
29:BF:164:ALA:CB	29:BF:232:LEU:HD12	1.92	1.00
36:BQ:46:VAL:HB	36:BQ:124:ALA:O	0.83	1.00
36:BQ:31:PHE:HA	36:BQ:85:ILE:HD11	1.43	1.00
43:BR:36:THR:CG2	43:BR:40:LYS:HB3	1.89	1.00
26:BA:1351:C:H2'	26:BA:1352:U:H6	1.26	1.00
26:BA:1364:G:C5'	49:B4:3:LYS:HD3	1.92	1.00
26:BA:1759:A:C8	26:BA:2696:U:O2	2.14	1.00
26:BA:2457:U:O2'	26:BA:2458:G:H5'	1.60	1.00
26:BA:14:A:C2	26:BA:2625:G:O2'	2.14	1.00
26:BA:2815:C:C2'	26:BA:2816:C:C5'	2.38	1.00
26:BA:2839:G:C4	26:BA:2840:C:C6	2.49	1.00
27:BD:66:PHE:C	27:BD:67:LYS:HD3	1.80	1.00
26:BA:2682:U:C6	28:BE:48:MET:CE	2.44	1.00
30:BG:24:HIS:HB3	30:BG:72:LYS:HA	1.42	1.00
55:BK:22:PRO:HG2	55:BK:23:PRO:CD	1.90	1.00
36:BQ:12:PRO:HB2	36:BQ:20:ILE:HD11	1.41	1.00
36:BQ:94:ARG:CD	36:BQ:106:GLY:CA	2.40	1.00
38:BT:4:ARG:C	38:BT:5:GLU:HG3	1.77	1.00
45:BV:62:GLU:HB2	45:BV:96:LEU:HD21	1.43	1.00
26:BA:440:G:OP1	41:BY:6:LYS:CD	2.10	1.00
42:BZ:62:PHE:CG	42:BZ:87:THR:HG22	1.95	1.00
1:AA:1014:A:N3	22:AS:34:TRP:CE3	2.29	0.99
51:B6:21:TYR:CE1	51:B6:43:VAL:HG23	1.97	0.99
54:B9:10:MET:CB	54:B9:32:HIS:CD2	2.45	0.99
26:BA:2587:A:O2'	26:BA:2588:G:C5'	2.08	0.99
26:BA:2654:A:N6	26:BA:2667:C:H42	1.59	0.99
26:BA:2769:C:O2	26:BA:2770:G:O4'	1.78	0.99
29:BF:36:ARG:HA	29:BF:39:GLN:HE22	0.89	0.99
33:BN:58:GLU:O	33:BN:61:VAL:HB	1.62	0.99
37:BS:61:ALA:HB2	37:BS:88:ALA:HB2	1.03	0.99
45:BV:4:ILE:HD13	45:BV:13:ARG:HG2	1.39	0.99
45:BV:62:GLU:N	45:BV:98:ILE:HD11	1.74	0.99
1:AA:509:A:C8	7:AD:54:TYR:HE2	1.80	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:30:VAL:CG2	48:B0:63:SER:OG	2.09	0.99
26:BA:2403:C:C4	26:BA:2415:G:C6	2.50	0.99
26:BA:2484:G:C2	26:BA:2485:G:O4'	2.15	0.99
26:BA:2495:G:H4'	36:BQ:101:MET:CB	1.92	0.99
26:BA:2599:G:H2'	26:BA:2600:A:O4'	1.60	0.99
26:BA:2741:A:H2'	26:BA:2742:C:O4'	1.62	0.99
26:BA:2838:G:C5	26:BA:2839:G:N7	2.30	0.99
26:BA:931:G:H2'	26:BA:932:G:C8	1.96	0.99
28:BE:222:ARG:HD3	28:BE:232:ARG:CA	1.92	0.99
30:BG:97:GLN:OE1	30:BG:106:PHE:CE2	2.14	0.99
31:BH:93:TYR:CG	31:BH:106:VAL:HG22	1.88	0.99
55:BK:9:ILE:HD11	55:BK:31:HIS:HB3	1.01	0.99
33:BN:42:GLU:O	33:BN:132:LEU:C	2.00	0.99
26:BA:142(A):A:C4'	33:BN:21:ARG:NH2	2.26	0.99
34:BO:68:GLY:CA	34:BO:78:ARG:HE	1.74	0.99
35:BP:66:VAL:C	35:BP:67:ARG:HE	1.65	0.99
26:BA:2376:A:C2	37:BS:102:LEU:HD22	1.96	0.99
45:BV:20:ILE:CG2	45:BV:67:LYS:HD2	1.92	0.99
41:BY:73:HIS:HA	41:BY:91:LEU:HD11	1.12	0.99
26:BA:2354:G:N3	48:B0:32:LYS:HE3	1.73	0.99
26:BA:2273:A:N7	26:BA:2274:A:C8	2.30	0.99
27:BD:146:LYS:HD3	27:BD:147:PRO:HD2	1.03	0.99
27:BD:161:ALA:C	27:BD:162:GLN:NE2	2.16	0.99
29:BF:196:THR:HG23	29:BF:236:THR:HG21	1.43	0.99
32:BI:94:THR:CG2	32:BI:96:LYS:HB3	1.90	0.99
55:BK:9:ILE:HD13	55:BK:31:HIS:CB	1.89	0.99
35:BP:141:GLU:CB	35:BP:145:LEU:HD22	1.93	0.99
26:BA:2275:C:O2	36:BQ:103:ALA:HB2	1.60	0.99
36:BQ:54:VAL:O	36:BQ:56:ILE:N	1.96	0.99
7:AD:21:LEU:HD22	7:AD:114:ARG:HG3	1.44	0.99
48:B0:36:ILE:CB	48:B0:68:VAL:HG11	1.92	0.99
46:B2:55:ARG:O	46:B2:58:THR:N	1.96	0.99
54:B9:10:MET:HB3	54:B9:32:HIS:CD2	1.97	0.99
26:BA:2090:G:N1	26:BA:2230:G:O6	1.94	0.99
26:BA:2555:U:OP2	26:BA:2555:U:H6	1.45	0.99
25:BB:76:G:OP1	42:BZ:10:PRO:HB3	1.61	0.99
27:BD:213:LYS:HB3	27:BD:215:LYS:H	1.17	0.99
26:BA:2051:A:O2'	28:BE:238:LEU:HD23	1.60	0.99
28:BE:74:GLU:N	28:BE:74:GLU:OE2	1.94	0.99
29:BF:3:ALA:CB	29:BF:16:VAL:C	2.28	0.99
29:BF:37:ALA:CB	29:BF:102:LEU:HB2	1.91	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:21:VAL:HG13	30:BG:132:VAL:HG23	1.03	0.99
31:BH:73:ASN:CG	31:BH:137:LYS:HZ1	1.64	0.99
33:BN:15:ARG:CD	33:BN:43:ARG:CD	2.38	0.99
36:BQ:41:THR:HG22	36:BQ:125:TRP:CE3	1.95	0.99
43:BR:43:GLU:O	43:BR:45:ARG:N	1.94	0.99
43:BR:93:GLY:O	43:BR:95:THR:N	1.95	0.99
41:BY:74:VAL:CG1	41:BY:77:VAL:CG2	2.40	0.99
1:AA:1015:A:OP1	22:AS:14:HIS:HE1	1.41	0.99
1:AA:889:A:N6	1:AA:908:A:N7	2.11	0.99
49:B4:5:LEU:HD12	49:B4:60:ASN:ND2	1.77	0.99
52:B7:38:GLY:O	52:B7:39:ARG:HB2	1.62	0.99
26:BA:687:C:C4'	52:B7:4:THR:CG2	2.40	0.99
53:B8:41:ILE:C	53:B8:43:GLY:H	1.65	0.99
26:BA:2082:A:C6	26:BA:2239:G:C6	2.50	0.99
26:BA:2464:C:N4	26:BA:2487:G:C5	2.31	0.99
26:BA:2576:G:OP1	26:BA:2576:G:H3'	1.61	0.99
26:BA:2603:G:N1	26:BA:2604:U:C5	2.29	0.99
26:BA:2821:A:H2	26:BA:2822:G:C5	1.67	0.99
30:BG:19:GLU:HB2	30:BG:135:VAL:CG2	1.79	0.99
26:BA:2303:G:C4'	30:BG:99:ASP:CB	2.40	0.99
32:BI:89:LEU:HD12	32:BI:93:ILE:CG2	1.93	0.99
37:BS:32:PRO:HG2	37:BS:100:ALA:HB1	1.00	0.99
40:BX:24:LEU:CD1	40:BX:68:LEU:HD22	1.90	0.99
26:BA:398:G:OP1	49:B4:58:LYS:NZ	1.95	0.99
26:BA:1566:A:H2	27:BD:212:HIS:HA	1.19	0.99
26:BA:2361:A:C2'	26:BA:2362:G:H5'	1.92	0.99
26:BA:2386:C:H4'	48:B0:39:ARG:NH2	1.72	0.99
26:BA:2710:C:O2'	26:BA:2711:A:C5'	2.10	0.99
26:BA:2755:C:O5'	26:BA:2755:C:C6	2.15	0.99
26:BA:974(A):C:H1'	26:BA:989:G:H22	1.24	0.99
27:BD:85:ASN:CG	27:BD:86:ARG:NE	2.16	0.99
28:BE:44:TYR:CD1	28:BE:309:PRO:HD3	1.97	0.99
29:BF:220:THR:HA	29:BF:224:ALA:HB2	1.43	0.99
29:BF:5:ILE:HA	29:BF:139:VAL:HG11	1.42	0.99
30:BG:56:ARG:HG2	30:BG:65:GLU:HB2	1.01	0.99
34:BO:63:VAL:N	34:BO:84:CYS:SG	2.34	0.99
34:BO:98:ILE:CG1	34:BO:117:LEU:HB3	1.92	0.99
37:BS:32:PRO:CD	37:BS:100:ALA:HA	1.92	0.99
37:BS:87:LEU:H	37:BS:87:LEU:HD22	1.26	0.99
39:BW:10:VAL:HG13	39:BW:46:PHE:HE2	1.23	0.99
39:BW:81:ALA:O	39:BW:82:LEU:HD13	1.62	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:24:LYS:HG2	48:B0:56:ASP:CG	1.82	0.99
49:B4:16:TYR:O	49:B4:17:GLN:HG3	0.82	0.99
49:B4:73:LYS:HG3	49:B4:73:LYS:OXT	1.61	0.99
51:B6:22:TYR:O	51:B6:23:THR:CG2	2.11	0.99
51:B6:39:LYS:HA	51:B6:50:PHE:HD1	1.23	0.99
26:BA:1789:A:H4'	27:BD:224:VAL:CG1	1.92	0.99
26:BA:2251:G:C5'	36:BQ:102:ARG:NH2	2.26	0.99
26:BA:2469:A:H5'	26:BA:2469:A:C8	1.95	0.99
26:BA:2666:C:C3'	26:BA:2667:C:H5'	1.93	0.99
26:BA:2745:C:H1'	31:BH:142:GLU:HG3	1.02	0.99
27:BD:89:ASN:O	27:BD:105:ALA:HB1	1.58	0.99
29:BF:63:SER:H	29:BF:65:ARG:HE	1.04	0.99
32:BI:3:VAL:CG2	32:BI:21:VAL:HG23	1.92	0.99
32:BI:65:ALA:HB1	32:BI:134:HIS:HB2	1.44	0.99
55:BK:121:LEU:CD2	55:BK:125:MET:CE	2.40	0.99
42:BZ:92:VAL:HG13	42:BZ:124:ALA:HB2	1.42	0.99
42:BZ:69:VAL:HG21	42:BZ:81:VAL:HG13	1.03	0.99
1:AA:463:A:OP2	19:AP:75:ARG:NH2	1.96	0.99
3:AW:25:C:C1'	3:AW:26:G:C8	2.33	0.99
48:B0:43:THR:OG1	48:B0:75:GLY:C	2.01	0.99
47:B3:20:LYS:HA	47:B3:23:LEU:HD11	0.99	0.99
52:B7:34:ARG:HH11	52:B7:42:LEU:HD23	1.09	0.99
26:BA:1545:A:C3'	26:BA:545(A):A:P	2.51	0.99
26:BA:1620:G:H1'	52:B7:1:MET:H3	1.22	0.99
26:BA:929:G:H21	47:B3:43:ILE:N	1.60	0.99
25:BB:43:C:H1'	30:BG:47:GLN:NE2	1.76	0.99
27:BD:100:LYS:O	27:BD:101:ARG:HG3	1.62	0.99
29:BF:163:HIS:HA	29:BF:166:ILE:CG1	1.92	0.99
29:BF:243:VAL:O	29:BF:246:ARG:CB	2.11	0.99
32:BI:48:GLU:HG3	32:BI:52:GLN:HE21	1.27	0.99
34:BO:2:ILE:HG22	34:BO:21:VAL:HG21	1.42	0.99
35:BP:117:GLU:OE2	35:BP:136:ALA:CA	2.10	0.99
44:BU:31:GLN:O	44:BU:33:ARG:N	1.95	0.99
44:BU:65:ILE:CG2	44:BU:76:TYR:CE2	2.37	0.99
39:BW:84:ARG:HB2	39:BW:96:ILE:HD13	1.44	0.99
26:BA:2331:G:C4'	48:B0:70:ILE:CG1	2.12	0.99
26:BA:2531:A:C2'	26:BA:2532:G:H5'	1.93	0.99
29:BF:214:THR:OG1	29:BF:216:SER:O	1.81	0.99
55:BK:37:GLU:O	55:BK:41:ARG:CD	2.10	0.99
55:BK:15:ALA:HB1	55:BK:46:THR:HB	1.03	0.99
35:BP:132:LYS:H	35:BP:132:LYS:CD	1.74	0.99

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:77:ALA:CB	35:BP:81:VAL:CG1	2.41	0.99
36:BQ:142:LYS:CE	36:BQ:143:VAL:N	2.26	0.99
36:BQ:58:HIS:CA	36:BQ:61:LEU:CD1	2.41	0.99
37:BS:32:PRO:HD2	37:BS:101:VAL:H	1.27	0.99
39:BW:36:LEU:HD11	39:BW:47:VAL:HG12	1.40	0.99
1:AA:1320:C:N3	22:AS:72:GLY:HA3	1.77	0.99
1:AA:406:G:H21	7:AD:119:GLN:HE22	1.10	0.99
53:B8:60:LEU:O	53:B8:61:MET:O	1.79	0.99
26:BA:2531:A:H2'	26:BA:2532:G:H5'	1.02	0.99
26:BA:1782:C:C2	26:BA:2609:U:C5	2.51	0.99
26:BA:2712:U:H3'	26:BA:2714:G:OP2	1.60	0.99
27:BD:110:LYS:HA	27:BD:110:LYS:HZ3	0.82	0.99
27:BD:143:ILE:HG12	27:BD:153:LEU:CB	1.92	0.99
26:BA:1791:A:OP1	27:BD:210:LYS:HD2	1.60	0.99
28:BE:212:GLY:O	28:BE:216:ARG:HG3	1.54	0.99
28:BE:263:GLU:HG3	28:BE:266:LYS:HE2	1.00	0.99
29:BF:159:ALA:O	29:BF:160:LEU:HD23	1.62	0.99
29:BF:225:PRO:O	29:BF:231:ARG:CG	2.09	0.99
55:BK:18:ALA:C	55:BK:19:THR:HG23	1.81	0.99
33:BN:10:VAL:HB	33:BN:36:VAL:CA	1.92	0.99
33:BN:79:PHE:O	33:BN:83:ILE:HG23	1.63	0.99
26:BA:2495:G:O2'	36:BQ:101:MET:CE	2.11	0.99
2:AV:1:G:O2'	36:BQ:98:GLY:HA2	1.60	0.99
44:BU:59:ARG:O	44:BU:62:ILE:HG12	1.62	0.99
40:BX:9:HIS:ND1	40:BX:26:PHE:C	2.15	0.99
42:BZ:39:PHE:O	42:BZ:43:PHE:CG	2.16	0.99
42:BZ:2:GLU:CA	42:BZ:54:ILE:HG21	1.87	0.99
16:AM:92:HIS:CD2	16:AM:98:VAL:CG2	2.45	0.98
47:B3:16:PRO:HB2	47:B3:19:GLN:CG	1.93	0.98
50:B5:11:THR:CG2	50:B5:19:ARG:HH22	1.76	0.98
52:B7:21:ARG:CB	52:B7:31:LEU:HD11	1.92	0.98
26:BA:1210:A:H5'	26:BA:1211:U:H3'	1.43	0.98
26:BA:2022:U:H4'	26:BA:2023:G:OP1	1.61	0.98
26:BA:2093:G:N7	26:BA:2225:A:C5	2.31	0.98
26:BA:2198:A:C6	26:BA:2225:A:N6	2.31	0.98
26:BA:2219:G:H2'	26:BA:2224:G:H5'	1.41	0.98
26:BA:2239:G:H2'	26:BA:2240:C:C6	1.98	0.98
26:BA:2277:G:O3'	36:BQ:15:THR:OG1	1.80	0.98
26:BA:2429:G:C5'	26:BA:2430:A:OP2	2.10	0.98
26:BA:2616:C:C2	26:BA:2617:C:H5	1.81	0.98
26:BA:2746:U:C4'	31:BH:138:GLN:HA	1.93	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:201:VAL:HA	28:BE:310:PHE:O	1.61	0.98
32:BI:31:PHE:CE1	32:BI:36:ALA:HB3	1.98	0.98
33:BN:45:VAL:H	33:BN:132:LEU:HD22	1.28	0.98
34:BO:101:PRO:CB	34:BO:122:ILE:HD11	1.93	0.98
26:BA:1666:G:O2'	34:BO:6:SER:HB3	1.60	0.98
43:BR:34:ILE:CG2	43:BR:35:THR:N	2.12	0.98
41:BY:81:LYS:HD2	41:BY:83:ASP:H	1.28	0.98
42:BZ:37:LYS:HA	42:BZ:40:ASP:OD2	1.61	0.98
1:AA:1222:G:OP2	1:AA:1322:C:C5	2.15	0.98
26:BA:138:G:H3'	26:BA:138:G:N3	1.78	0.98
26:BA:223:A:C3'	26:BA:224:G:P	2.51	0.98
26:BA:2356:C:H2'	26:BA:2357:U:O5'	1.63	0.98
26:BA:2378:A:C4	37:BS:26:LEU:CD2	2.45	0.98
26:BA:783:A:H4'	26:BA:2588:G:O3'	1.62	0.98
26:BA:2654:A:N6	26:BA:2667:C:N4	2.11	0.98
26:BA:2826:A:C5	26:BA:2827:C:H5	1.72	0.98
31:BH:130:ILE:HG22	31:BH:131:ILE:H	1.27	0.98
31:BH:120:LEU:HD13	31:BH:143:LEU:HD12	1.43	0.98
31:BH:93:TYR:CE1	31:BH:106:VAL:C	2.35	0.98
26:BA:1140:C:OP1	33:BN:18:ILE:HD11	1.61	0.98
33:BN:60:ARG:O	33:BN:71:TYR:CG	2.16	0.98
43:BR:52:ILE:HG22	43:BR:53:HIS:H	1.19	0.98
26:BA:563:G:N2	44:BU:37:GLN:HE22	1.61	0.98
41:BY:71:VAL:CG1	41:BY:72:ILE:H	1.76	0.98
46:B2:11:MET:O	46:B2:12:THR:O	1.81	0.98
46:B2:2:VAL:H	46:B2:4:HIS:CE1	1.80	0.98
51:B6:28:ARG:HG3	51:B6:30:ASN:HB3	1.44	0.98
26:BA:1312:U:HO2'	26:BA:1314:C:H5	1.11	0.98
26:BA:2392:A:C8	26:BA:2393:A:C8	2.51	0.98
26:BA:2552:U:C2	26:BA:2554:U:H5'	1.96	0.98
26:BA:2584:U:H3'	26:BA:2584:U:H6	1.21	0.98
26:BA:2601:C:O2	26:BA:2603:G:N7	1.96	0.98
26:BA:2647:U:O2'	26:BA:2648:C:C5'	2.10	0.98
28:BE:263:GLU:HG3	28:BE:266:LYS:CE	1.91	0.98
29:BF:245:GLU:H	29:BF:245:GLU:CD	1.64	0.98
31:BH:93:TYR:O	31:BH:94:ARG:HG3	1.60	0.98
34:BO:37:ASP:HB2	34:BO:62:VAL:HG21	1.44	0.98
36:BQ:137:ARG:HH11	36:BQ:138:ARG:HG2	1.28	0.98
36:BQ:47:GLU:OE2	36:BQ:151:SER:C	2.02	0.98
43:BR:87:TYR:OH	43:BR:116:LEU:HB2	1.64	0.98
37:BS:34:LEU:HG	37:BS:102:LEU:CA	1.93	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:50:ASP:N	45:BV:53:LYS:HD2	1.76	0.98
26:BA:973:A:N1	45:BV:81:ARG:HD2	0.85	0.98
26:BA:1260:G:C5'	39:BW:83:LYS:NZ	2.26	0.98
40:BX:6:LYS:HZ1	40:BX:29:ASP:HA	1.05	0.98
1:AA:1278:U:H5''	1:AA:1279:A:H5'	1.41	0.98
1:AA:1276:G:O2'	1:AA:1282:C:C4'	2.12	0.98
46:B2:3:LEU:O	46:B2:4:HIS:HB2	1.59	0.98
47:B3:7:LYS:O	47:B3:54:VAL:CB	2.10	0.98
53:B8:26:LYS:CE	53:B8:45:GLY:H	1.73	0.98
26:BA:1364:G:O5'	49:B4:3:LYS:CG	2.10	0.98
26:BA:2021:C:OP2	50:B5:15:LYS:NZ	1.95	0.98
26:BA:2246:G:C2'	26:BA:2247:A:H5'	1.92	0.98
26:BA:2463:C:C2	26:BA:2464:C:H5	1.78	0.98
26:BA:2472:G:H2'	26:BA:2475:C:H42	0.83	0.98
26:BA:2625:G:H2'	26:BA:2626:C:C6	1.98	0.98
26:BA:612:G:H4'	26:BA:616:A:N6	1.78	0.98
26:BA:617:G:OP2	29:BF:221:GLU:OE1	1.80	0.98
27:BD:74:PRO:CD	27:BD:96:ALA:HB2	1.93	0.98
29:BF:224:ALA:HB3	29:BF:225:PRO:HD3	1.43	0.98
26:BA:1204:A:HO2'	29:BF:230:GLY:N	1.61	0.98
31:BH:120:LEU:HD13	31:BH:143:LEU:CD1	1.93	0.98
32:BI:48:GLU:O	32:BI:52:GLN:CG	2.11	0.98
55:BK:37:GLU:HG2	55:BK:41:ARG:HH12	1.22	0.98
34:BO:11:ALA:HB1	34:BO:99:PHE:HB3	1.45	0.98
35:BP:62:ALA:CA	35:BP:107:LYS:HE3	1.94	0.98
44:BU:65:ILE:HG22	44:BU:76:TYR:HE2	1.00	0.98
26:BA:993:G:C4'	45:BV:90:PHE:HE2	1.65	0.98
26:BA:138:G:H5''	40:BX:43:GLU:CG	1.92	0.98
42:BZ:91:PRO:HG2	42:BZ:127:PRO:CA	1.92	0.98
48:B0:49:GLN:OE1	48:B0:74:LYS:O	1.80	0.98
47:B3:31:LEU:HD23	47:B3:32:GLN:CA	1.93	0.98
50:B5:12:SER:CB	50:B5:15:LYS:NZ	2.19	0.98
52:B7:30:ILE:CB	52:B7:33:ARG:HD2	1.91	0.98
54:B9:29:ASN:HB2	54:B9:32:HIS:ND1	1.78	0.98
26:BA:227:A:N1	26:BA:2407:G:H1'	1.77	0.98
26:BA:2466:C:OP1	54:B9:5:SER:O	1.82	0.98
26:BA:25:U:H4'	39:BW:79:GLY:HA2	0.99	0.98
29:BF:115:LEU:HG	29:BF:246:ARG:CZ	1.91	0.98
33:BN:60:ARG:CA	33:BN:71:TYR:CD2	2.46	0.98
34:BO:35:ILE:HG23	34:BO:62:VAL:C	1.82	0.98
35:BP:104:ASP:O	35:BP:105:TYR:CD1	2.16	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2320:A:N1	37:BS:13:ARG:HG2	1.78	0.98
37:BS:61:ALA:HB2	37:BS:88:ALA:CB	1.91	0.98
45:BV:20:ILE:HG23	45:BV:67:LYS:HD2	1.43	0.98
26:BA:973:A:C2	45:BV:81:ARG:HD2	1.99	0.98
45:BV:61:VAL:HG22	45:BV:98:ILE:H	1.23	0.98
39:BW:86:LEU:HB3	39:BW:87:PRO:HD2	1.43	0.98
3:AW:37:YYG:C24	10:AG:85:TYR:CD2	2.27	0.98
48:B0:45:PHE:HE1	48:B0:78:PHE:CD2	1.62	0.98
46:B2:63:GLU:OE2	46:B2:63:GLU:O	1.82	0.98
47:B3:20:LYS:O	47:B3:23:LEU:CB	2.11	0.98
49:B4:42:PHE:O	49:B4:61:LYS:CE	2.10	0.98
26:BA:2406:U:C4	35:BP:55:GLN:CB	2.30	0.98
26:BA:2492:U:C2'	26:BA:2493:U:O5'	2.11	0.98
26:BA:2520:C:N3	26:BA:2521:C:H5	1.59	0.98
26:BA:2687:U:H2'	26:BA:2687:U:O2	1.61	0.98
26:BA:2:G:C2	26:BA:2902:C:N3	2.31	0.98
29:BF:57:PRO:O	29:BF:79:ARG:HB2	1.62	0.98
29:BF:96:LYS:N	29:BF:98:ARG:NH2	2.09	0.98
55:BK:37:GLU:O	55:BK:41:ARG:HD3	1.63	0.98
36:BQ:49:VAL:HG22	36:BQ:119:ASN:O	1.63	0.98
39:BW:103:ILE:CG2	39:BW:103:ILE:O	2.08	0.98
26:BA:1614:A:H61	39:BW:88:ARG:HB2	1.22	0.98
1:AA:116:A:H61	1:AA:313:A:C1'	1.77	0.98
26:BA:75:G:H4'	46:B2:51:LYS:NZ	1.79	0.98
49:B4:5:LEU:CD2	49:B4:5:LEU:H	1.75	0.98
52:B7:43:THR:C	52:B7:46:ASP:CG	2.21	0.98
26:BA:1351:C:H2'	26:BA:1352:U:C6	1.98	0.98
26:BA:2567:G:HO2'	26:BA:2568:C:H6	1.07	0.98
26:BA:2574:G:C2'	26:BA:2575:C:H6	1.75	0.98
26:BA:2023:G:H5''	26:BA:2617:C:O2'	1.61	0.98
26:BA:2626:C:O2'	26:BA:2627:G:H5''	1.62	0.98
26:BA:2869:G:O2'	26:BA:2870:C:H5'	1.64	0.98
26:BA:68:G:H2'	26:BA:69:C:C6	1.99	0.98
27:BD:175:LEU:CD2	27:BD:180:VAL:CA	2.27	0.98
30:BG:18:ILE:HG22	30:BG:19:GLU:H	1.25	0.98
31:BH:101:LYS:CG	31:BH:115:GLU:CA	2.40	0.98
43:BR:25:ALA:O	43:BR:29:LEU:CD2	2.12	0.98
43:BR:36:THR:HG21	43:BR:40:LYS:CB	1.89	0.98
44:BU:30:LYS:O	44:BU:32:TYR:HD2	1.45	0.98
45:BV:61:VAL:CG2	45:BV:97:GLY:CA	2.40	0.98
39:BW:84:ARG:CB	39:BW:96:ILE:CD1	2.42	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:13:LYS:O	42:BZ:15:ASP:N	1.96	0.98
1:AA:1277:C:H1'	1:AA:1282:C:C2	1.98	0.98
51:B6:24:THR:O	51:B6:25:THR:CG2	2.11	0.98
26:BA:242:G:H3'	53:B8:5:LYS:NZ	1.78	0.98
26:BA:2219:G:O2'	26:BA:2224:G:P	2.22	0.98
26:BA:2564:A:H2'	26:BA:2565:A:H8	0.96	0.98
26:BA:2622:C:C2	26:BA:2623:G:C8	2.52	0.98
26:BA:2712:U:O2'	26:BA:712(A):A:C5'	2.11	0.98
26:BA:965:C:O2'	26:BA:2272:U:H6	1.19	0.98
28:BE:76:PRO:CB	28:BE:77:PRO:CD	2.35	0.98
29:BF:102:LEU:HB2	29:BF:107:ARG:NH2	1.77	0.98
30:BG:24:HIS:C	30:BG:129:ASP:OD2	2.01	0.98
32:BI:4:ILE:O	32:BI:5:PHE:O	1.81	0.98
26:BA:1139:G:OP1	33:BN:46:ILE:CG2	2.12	0.98
43:BR:110:PRO:O	43:BR:111:LEU:O	1.80	0.98
37:BS:116:PHE:O	37:BS:120:GLU:CD	2.01	0.98
44:BU:61:TRP:HZ3	44:BU:94:VAL:N	1.61	0.98
45:BV:33:VAL:HB	45:BV:63:HIS:ND1	1.78	0.98
39:BW:69:LEU:N	39:BW:69:LEU:HD23	1.77	0.98
42:BZ:18:MET:C	42:BZ:36:ARG:HG3	1.82	0.98
1:AA:1014:A:C2	22:AS:34:TRP:CD2	2.52	0.98
1:AA:361(A):C:C2'	1:AA:1362:C:H5''	1.93	0.98
48:B0:46:LYS:CE	48:B0:58:THR:OG1	2.11	0.98
53:B8:50:LEU:HD23	53:B8:51:ALA:CA	1.94	0.98
26:BA:1129:A:C2	26:BA:2570:G:O4'	2.17	0.98
26:BA:145:G:H4'	40:BX:1:SER:HB2	1.44	0.98
26:BA:1782:C:C2	26:BA:2609:U:H6	1.56	0.98
26:BA:1820:U:O2	27:BD:200:THR:HG23	1.60	0.98
26:BA:2094:G:C2	26:BA:2196:C:C2	2.50	0.98
26:BA:2314:C:OP1	30:BG:74:THR:HG22	1.64	0.98
26:BA:2428:G:H5''	26:BA:2429:G:OP1	1.64	0.98
26:BA:2460:U:O2	26:BA:2493:U:C5	2.17	0.98
26:BA:2848:G:H22	26:BA:2867:G:H1'	0.82	0.98
31:BH:10:ILE:HG22	31:BH:14:VAL:CG1	1.79	0.98
34:BO:37:ASP:O	34:BO:61:VAL:HG13	1.64	0.98
45:BV:49:GLU:HB3	45:BV:53:LYS:HD2	1.44	0.98
41:BY:86:GLU:O	41:BY:87:VAL:CG2	2.11	0.98
42:BZ:68:ALA:C	42:BZ:69:VAL:HG23	1.81	0.98
1:AA:1313:U:O4	22:AS:4:SER:OG	1.82	0.98
9:AF:95:GLU:HB2	9:AF:96:PRO:HD3	1.42	0.98
26:BA:396:G:OP1	49:B4:10:VAL:HA	1.63	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:44:VAL:O	52:B7:46:ASP:N	1.96	0.98
26:BA:2459:A:N7	26:BA:2460:U:C5	2.31	0.98
26:BA:2584:U:H2'	26:BA:2585:U:C5	1.98	0.98
26:BA:2785:C:C2'	26:BA:2786:U:C6	2.46	0.98
28:BE:208:LYS:H	28:BE:257:GLY:HA3	1.27	0.98
29:BF:25:PRO:O	29:BF:26:VAL:CG2	2.12	0.98
32:BI:7:LYS:CA	32:BI:14:LYS:HG2	1.94	0.98
32:BI:62:LEU:O	32:BI:66:LYS:HE2	1.64	0.98
35:BP:65:ASP:HA	35:BP:109:LEU:N	1.79	0.98
44:BU:117:ARG:CD	44:BU:118:GLN:HG2	1.93	0.98
44:BU:28:ARG:N	44:BU:31:GLN:HG3	1.77	0.98
44:BU:53:LYS:HA	44:BU:56:ASP:OD2	1.64	0.98
39:BW:97:LYS:HE3	39:BW:99:ARG:NH1	1.79	0.98
2:AV:34:G:C2'	2:AV:35:A:H5''	1.93	0.97
48:B0:28:GLY:N	48:B0:60:PHE:HD2	1.35	0.97
46:B2:27:LEU:HD11	46:B2:53:ILE:CD1	1.93	0.97
26:BA:2815:C:C5'	50:B5:29:ASN:HD22	1.76	0.97
26:BA:650:C:H5''	53:B8:19:THR:HG23	1.45	0.97
26:BA:2248:C:H2'	26:BA:2249:U:H5'	1.43	0.97
26:BA:2392:A:H2'	26:BA:2393:A:C5'	1.94	0.97
26:BA:2393:A:H4'	53:B8:13:ARG:NH2	1.79	0.97
26:BA:2404:C:N4	26:BA:2405:G:C6	2.31	0.97
26:BA:2595:G:H1'	26:BA:2599:G:H22	1.27	0.97
26:BA:25:U:H5''	39:BW:80:PRO:HD2	1.44	0.97
26:BA:2731:G:OP1	28:BE:265:ASN:HB3	1.62	0.97
28:BE:46:ALA:HB3	28:BE:72:VAL:O	1.63	0.97
29:BF:36:ARG:O	29:BF:39:GLN:OE1	1.81	0.97
31:BH:123:GLU:O	31:BH:130:ILE:CG2	2.11	0.97
31:BH:58:LYS:HG3	31:BH:59:HIS:H	1.29	0.97
32:BI:95:SER:HG	32:BI:98:ILE:HD12	1.28	0.97
33:BN:19:MET:HB2	33:BN:46:ILE:HG12	0.98	0.97
36:BQ:45:GLN:OE1	36:BQ:153:PRO:HD2	1.62	0.97
36:BQ:67:ALA:CB	36:BQ:70:ARG:HH11	1.65	0.97
41:BY:49:GLU:HG2	41:BY:59:GLU:HA	1.45	0.97
49:B4:14:ILE:HB	49:B4:37:SER:O	1.63	0.97
53:B8:57:ARG:O	53:B8:58:MET:O	1.81	0.97
26:BA:1809:A:H62	49:B4:3:LYS:CG	1.77	0.97
26:BA:2226:C:H2'	26:BA:2227:A:C4'	1.94	0.97
26:BA:2232:U:H2'	26:BA:2233:U:C5'	1.93	0.97
26:BA:2364:C:C5'	48:B0:38:VAL:CG1	2.42	0.97
26:BA:911:A:N7	36:BQ:16:ARG:HG3	1.78	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:140:VAL:HG12	27:BD:141:HIS:N	1.77	0.97
27:BD:167:GLU:HB2	27:BD:170:TYR:HD1	1.20	0.97
27:BD:85:ASN:ND2	27:BD:86:ARG:CD	2.27	0.97
28:BE:201:VAL:H	28:BE:266:LYS:HD2	1.29	0.97
26:BA:2785:C:H5''	28:BE:99:VAL:HG22	0.98	0.97
29:BF:243:VAL:O	29:BF:246:ARG:HB2	1.64	0.97
31:BH:86:LEU:N	31:BH:148:ARG:NH2	2.12	0.97
31:BH:86:LEU:HD22	31:BH:87:GLU:H	1.27	0.97
35:BP:52:LYS:CD	35:BP:53:ARG:NH1	2.26	0.97
36:BQ:142:LYS:O	36:BQ:143:VAL:CG2	2.11	0.97
36:BQ:33:MET:HB3	36:BQ:83:PHE:HB3	1.43	0.97
43:BR:46:GLY:O	43:BR:49:ASP:HB3	1.62	0.97
44:BU:7:GLY:O	44:BU:9:VAL:HG23	1.64	0.97
45:BV:30:GLY:CA	45:BV:33:VAL:CG2	2.40	0.97
40:BX:35:GLY:O	40:BX:37:VAL:N	1.97	0.97
41:BY:101:LEU:HG	41:BY:112:LEU:HD11	0.99	0.97
41:BY:31:LEU:H	41:BY:31:LEU:HD23	0.82	0.97
42:BZ:123:VAL:HB	42:BZ:159:THR:HG21	1.41	0.97
1:AA:1255:G:N2	1:AA:1258:G:N2	2.13	0.97
13:AJ:10:GLY:HA3	13:AJ:16:LEU:HD21	1.45	0.97
49:B4:23:GLU:CD	49:B4:29:PRO:HG3	1.84	0.97
52:B7:34:ARG:HD3	52:B7:42:LEU:HD23	1.29	0.97
26:BA:1031:G:C4'	54:B9:8:LYS:HD3	1.93	0.97
26:BA:2465:C:O2'	26:BA:2466:C:O5'	1.82	0.97
26:BA:2497:A:O2'	26:BA:2498:C:O5'	1.81	0.97
26:BA:2532:G:H8	26:BA:2532:G:C5'	1.75	0.97
27:BD:211:HIS:CE1	27:BD:212:HIS:HD2	1.82	0.97
26:BA:1568:G:O5'	27:BD:60:GLN:HG2	0.83	0.97
28:BE:101:THR:O	28:BE:103:GLU:HG3	1.64	0.97
33:BN:52:GLN:HA	33:BN:55:GLU:CG	1.93	0.97
34:BO:81:GLU:HG2	34:BO:82:ASN:H	1.26	0.97
45:BV:61:VAL:HG22	45:BV:98:ILE:N	1.78	0.97
1:AA:436:C:H2'	1:AA:437:U:C6	2.00	0.97
40:BX:4:VAL:CG1	46:B2:24:LYS:NZ	2.27	0.97
40:BX:4:VAL:HG13	46:B2:24:LYS:NZ	1.79	0.97
52:B7:31:LEU:HD23	52:B7:31:LEU:N	1.77	0.97
26:BA:919:G:H21	26:BA:2268:A:H5'	1.29	0.97
26:BA:2652:C:C4	26:BA:2653:U:C4	2.51	0.97
26:BA:2717:G:H8	26:BA:2717:G:H5'	0.82	0.97
29:BF:52:ALA:HB1	29:BF:55:ARG:CZ	1.94	0.97
31:BH:159:LYS:H	31:BH:162:ARG:HH22	0.98	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:34:ARG:HH12	31:BH:73:ASN:HB2	1.26	0.97
55:BK:97:VAL:HA	55:BK:99:LYS:NZ	1.80	0.97
35:BP:57:VAL:HG12	35:BP:58:GLN:H	0.80	0.97
26:BA:2276:G:OP2	36:BQ:103:ALA:HA	1.64	0.97
43:BR:73:VAL:HG12	43:BR:77:ARG:CZ	1.93	0.97
44:BU:95:LEU:O	44:BU:106:PHE:HE1	1.46	0.97
45:BV:62:GLU:O	45:BV:95:ILE:HG23	0.80	0.97
39:BW:11:ARG:HH11	39:BW:11:ARG:HG3	1.26	0.97
40:BX:17:ASP:HA	40:BX:20:PHE:HE1	1.18	0.97
40:BX:28:VAL:HG11	40:BX:64:ALA:CB	1.94	0.97
40:BX:6:LYS:CE	40:BX:29:ASP:HA	1.93	0.97
42:BZ:14:LEU:HD21	42:BZ:79:ILE:HG21	1.46	0.97
7:AD:23:GLY:CA	7:AD:113:SER:HB3	1.93	0.97
3:AW:65:G:C6	3:AW:66:A:C4	2.49	0.97
40:BX:4:VAL:CG2	46:B2:24:LYS:HZ1	1.78	0.97
46:B2:26:GLU:HG2	46:B2:27:LEU:N	1.77	0.97
52:B7:18:PHE:N	52:B7:44:VAL:CG2	2.27	0.97
26:BA:1080:C:O2'	55:BK:126:LYS:CB	2.13	0.97
26:BA:2436:G:H2'	26:BA:2437:U:O5'	1.61	0.97
26:BA:2445:G:C2'	26:BA:2446:G:H5'	1.94	0.97
26:BA:2464:C:C4	26:BA:2487:G:C6	2.53	0.97
26:BA:2520:C:O2	26:BA:2521:C:H6	1.44	0.97
26:BA:2678:C:O2	26:BA:2679:A:N9	1.97	0.97
26:BA:2690:C:H6	26:BA:2690:C:H3'	1.27	0.97
26:BA:282:A:N7	26:BA:360:G:N2	2.11	0.97
26:BA:2832:U:H1'	26:BA:2834:G:N2	1.78	0.97
27:BD:129:LEU:CD2	27:BD:130:PRO:HD3	1.93	0.97
26:BA:782:A:C2	27:BD:233:ASP:OD2	2.16	0.97
28:BE:76:PRO:HB3	28:BE:292:PRO:HG2	1.44	0.97
26:BA:2313:C:OP1	30:BG:51:ARG:CB	2.12	0.97
55:BK:100:VAL:HG12	55:BK:101:THR:N	1.78	0.97
33:BN:12:VAL:HG12	33:BN:13:ASP:N	1.80	0.97
34:BO:62:VAL:C	34:BO:84:CYS:SG	2.42	0.97
34:BO:8:LEU:HD23	34:BO:8:LEU:N	1.80	0.97
34:BO:95:GLY:O	34:BO:97:ARG:N	1.96	0.97
36:BQ:50:VAL:HG12	36:BQ:51:GLU:N	1.75	0.97
36:BQ:65:ARG:NH2	36:BQ:122:PHE:CD2	2.32	0.97
44:BU:13:ARG:CG	44:BU:13:ARG:HH11	1.77	0.97
44:BU:27:SER:O	44:BU:28:ARG:C	2.01	0.97
41:BY:9:LYS:NZ	41:BY:13:ARG:NH2	2.13	0.97
42:BZ:90:GLU:N	42:BZ:91:PRO:CD	2.27	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:410:G:P	7:AD:25:ARG:NE	2.37	0.97
3:AW:65:G:C5	3:AW:66:A:N7	2.25	0.97
49:B4:14:ILE:HG23	49:B4:16:TYR:CD1	1.99	0.97
53:B8:62:LEU:CB	53:B8:63:PRO:HD3	1.94	0.97
26:BA:2464:C:H42	26:BA:2486:G:H1	1.01	0.97
26:BA:2555:U:OP2	26:BA:2555:U:C6	2.17	0.97
26:BA:2567:G:N3	26:BA:2568:C:H5	1.49	0.97
26:BA:2695:C:HO2'	26:BA:2696:U:H6	1.08	0.97
26:BA:2734:A:H5''	26:BA:2734:A:H8	1.27	0.97
26:BA:2788:C:H5''	26:BA:2789:C:P	2.03	0.97
26:BA:2801:A:H2	26:BA:2895:U:HO2'	0.97	0.97
29:BF:115:LEU:O	29:BF:118:THR:N	1.97	0.97
29:BF:36:ARG:C	29:BF:39:GLN:HE22	1.66	0.97
55:BK:42:PHE:CE1	55:BK:58:ILE:HD11	2.00	0.97
34:BO:73:ASP:O	34:BO:75:SER:N	1.97	0.97
35:BP:77:ALA:CB	35:BP:81:VAL:HG11	1.94	0.97
44:BU:26:GLY:O	44:BU:27:SER:HB2	1.63	0.97
44:BU:95:LEU:O	44:BU:106:PHE:CE1	2.18	0.97
44:BU:95:LEU:O	44:BU:98:ILE:HB	1.62	0.97
41:BY:79:LEU:HD12	41:BY:80:GLU:N	1.78	0.97
1:AA:826:C:H5'	11:AH:12:ARG:HE	1.26	0.97
1:AA:1491:G:OP1	15:AL:46:LYS:NZ	1.97	0.97
48:B0:46:LYS:HG2	48:B0:58:THR:N	1.79	0.97
46:B2:13:PRO:CA	46:B2:16:ARG:HD2	1.93	0.97
47:B3:40:THR:OG1	47:B3:43:ILE:CD1	2.13	0.97
49:B4:5:LEU:C	49:B4:7:PRO:HD2	1.84	0.97
50:B5:33:CYS:HB3	50:B5:37:HIS:H	1.29	0.97
26:BA:1299:G:H4'	26:BA:1301:A:N3	1.79	0.97
26:BA:2520:C:C5	26:BA:2567:G:C4	2.52	0.97
26:BA:2758:A:OP2	26:BA:2758:A:C3'	2.12	0.97
28:BE:221:LYS:HZ1	28:BE:233:ARG:HG2	1.22	0.97
36:BQ:85:ILE:CB	36:BQ:122:PHE:CD2	2.48	0.97
44:BU:59:ARG:HA	44:BU:62:ILE:HG13	0.98	0.97
39:BW:36:LEU:HD22	39:BW:44:ALA:HA	1.44	0.97
40:BX:30:ASP:O	40:BX:62:LYS:CE	2.08	0.97
40:BX:33:SER:N	40:BX:37:VAL:HG23	1.80	0.97
52:B7:34:ARG:NH1	52:B7:42:LEU:CA	2.28	0.97
26:BA:2554:U:H6	26:BA:2554:U:C3'	1.77	0.97
26:BA:1939:U:H1'	26:BA:2592:G:H4'	1.44	0.97
26:BA:2613:U:H5'	26:BA:2613:U:H6	1.28	0.97
26:BA:529:A:C2	26:BA:2022:U:OP1	2.18	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1993:U:H4'	28:BE:228:ARG:NH2	1.80	0.97
33:BN:50:GLU:HA	33:BN:53:ILE:CG2	1.92	0.97
43:BR:33:ARG:CB	43:BR:115:GLU:HB3	1.95	0.97
43:BR:52:ILE:O	43:BR:54:LEU:N	1.98	0.97
38:BT:50:GLU:HA	38:BT:55:ALA:HB3	0.99	0.97
45:BV:19:VAL:HG11	45:BV:21:ARG:NH1	1.77	0.97
40:BX:24:LEU:C	40:BX:26:PHE:HE1	1.52	0.97
1:AA:1269:A:H5'	24:AU:19:GLY:CA	1.95	0.97
1:AA:953:G:O2'	16:AM:124:PRO:O	1.82	0.97
47:B3:26:LEU:HD21	47:B3:46:ASN:HB3	1.46	0.97
47:B3:8:LEU:HD22	47:B3:31:LEU:CA	1.86	0.97
26:BA:1264:G:OP1	50:B5:19:ARG:NH1	1.98	0.97
26:BA:1807:G:H21	26:BA:1809:A:H5'	1.30	0.97
26:BA:2259:G:C8	26:BA:2260:C:C5	2.52	0.97
26:BA:2454:G:C2	26:BA:2455:G:H1'	1.99	0.97
27:BD:140:VAL:HG12	27:BD:141:HIS:H	1.23	0.97
27:BD:208:GLY:CA	27:BD:210:LYS:HZ1	1.65	0.97
26:BA:2785:C:C2'	28:BE:100:TRP:HD1	1.77	0.97
30:BG:19:GLU:OE1	30:BG:135:VAL:CG2	2.13	0.97
30:BG:53:LYS:HG2	30:BG:54:ALA:N	1.75	0.97
32:BI:101:SER:O	32:BI:103:GLN:N	1.98	0.97
43:BR:67:LEU:HD13	43:BR:68:ARG:N	1.80	0.97
43:BR:84:ALA:HB3	43:BR:85:PRO:HD3	1.44	0.97
37:BS:89:GLY:HA3	37:BS:125:ALA:HB1	1.43	0.97
44:BU:28:ARG:N	44:BU:31:GLN:CD	2.17	0.97
45:BV:33:VAL:HB	45:BV:63:HIS:CE1	1.98	0.97
45:BV:69:ILE:H	45:BV:91:THR:HG22	1.27	0.97
42:BZ:159:THR:CG2	42:BZ:160:LEU:H	1.76	0.97
48:B0:24:LYS:CG	48:B0:56:ASP:OD2	2.13	0.97
52:B7:3:ARG:O	52:B7:4:THR:HG23	1.64	0.97
26:BA:1031:G:C4'	54:B9:8:LYS:NZ	2.20	0.97
26:BA:2701:C:H3'	26:BA:2702:U:H5''	1.46	0.97
26:BA:2776:A:C4	26:BA:2778:A:N7	2.33	0.97
26:BA:2836:U:O2	26:BA:2883:A:C5	2.18	0.97
28:BE:315:VAL:O	28:BE:317:PRO:N	1.98	0.97
28:BE:79:ARG:HH12	28:BE:105:HIS:N	1.61	0.97
28:BE:99:VAL:HG12	28:BE:100:TRP:H	1.26	0.97
31:BH:42:ILE:C	31:BH:52:THR:HG21	1.86	0.97
32:BI:120:ALA:O	32:BI:121:ILE:O	1.83	0.97
34:BO:1:MET:CA	34:BO:2:ILE:HD12	1.94	0.97
35:BP:130:ARG:HA	35:BP:133:VAL:HG21	1.46	0.97

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:67:ALA:N	36:BQ:70:ARG:CZ	2.03	0.97
43:BR:60:LEU:CG	43:BR:61:HIS:H	1.75	0.97
37:BS:34:LEU:HD11	37:BS:103:ASP:H	1.27	0.97
38:BT:53:ASP:O	38:BT:56:ARG:NE	1.98	0.97
44:BU:94:VAL:C	44:BU:98:ILE:HD11	1.70	0.97
39:BW:12:ILE:O	39:BW:14:PRO:HD3	1.65	0.97
41:BY:33:GLU:OE2	41:BY:33:GLU:N	1.98	0.97
41:BY:78:THR:C	41:BY:89:ARG:HG3	1.84	0.97
42:BZ:105:GLN:O	42:BZ:142:ASN:ND2	1.97	0.97
42:BZ:69:VAL:HG22	42:BZ:82:ASP:H	1.30	0.97
1:AA:406:G:N2	1:AA:437:U:O2	1.98	0.96
46:B2:31:ARG:O	46:B2:33:VAL:C	1.89	0.96
46:B2:7:GLU:CD	46:B2:8:ILE:CG1	2.33	0.96
52:B7:32:ALA:HA	52:B7:35:ARG:CD	1.95	0.96
26:BA:1287:A:C1'	43:BR:104:ARG:NH1	2.27	0.96
26:BA:1287:A:N9	43:BR:104:ARG:NH1	2.13	0.96
26:BA:1944:U:H1'	26:BA:1955:U:H1'	1.44	0.96
26:BA:2574:G:C4	26:BA:2575:C:C6	2.52	0.96
26:BA:605:C:H3'	29:BF:105:LYS:CE	1.71	0.96
27:BD:134:ILE:HG23	27:BD:135:PRO:HD2	1.45	0.96
27:BD:178:GLY:O	27:BD:179:GLU:HG2	1.65	0.96
28:BE:269:ILE:N	28:BE:269:ILE:HD12	1.79	0.96
28:BE:48:MET:O	28:BE:49:THR:CG2	2.14	0.96
26:BA:2316:C:C5'	30:BG:151:ILE:CD1	2.36	0.96
32:BI:5:PHE:O	32:BI:36:ALA:HB2	1.63	0.96
55:BK:15:ALA:HB1	55:BK:46:THR:CB	1.95	0.96
26:BA:1140:C:N4	33:BN:49:ARG:NE	2.13	0.96
37:BS:111:PRO:C	37:BS:114:LYS:N	2.19	0.96
44:BU:105:ALA:O	44:BU:108:ALA:HB3	1.64	0.96
44:BU:56:ASP:O	44:BU:60:LEU:HG	1.65	0.96
44:BU:8:ILE:HA	44:BU:11:ARG:CD	1.94	0.96
41:BY:101:LEU:HD21	41:BY:103:LEU:HD21	0.97	0.96
42:BZ:46:GLN:O	42:BZ:49:THR:OG1	1.83	0.96
42:BZ:71:MET:CG	42:BZ:78:PRO:CG	2.36	0.96
1:AA:463:A:P	19:AP:75:ARG:HH22	1.88	0.96
52:B7:29:ASN:O	52:B7:31:LEU:N	1.96	0.96
26:BA:1034:G:P	54:B9:18:ARG:NH2	2.37	0.96
26:BA:1:G:H1	26:BA:2902:C:H41	0.97	0.96
26:BA:2251:G:N2	26:BA:2252:G:C4	2.33	0.96
26:BA:2494:G:N2	26:BA:2495:G:N9	2.13	0.96
26:BA:2638:G:N2	26:BA:2778:A:N6	1.79	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2688:U:C2	26:BA:2719:G:C2	2.53	0.96
26:BA:2788:C:O3'	26:BA:2789:C:P	2.24	0.96
26:BA:2880:C:N4	26:BA:2881:C:N4	2.13	0.96
28:BE:193:PHE:HE2	28:BE:199:ALA:CB	1.75	0.96
28:BE:269:ILE:HG13	28:BE:297:LYS:HG3	1.47	0.96
29:BF:167:ASP:O	29:BF:168:ARG:CG	2.13	0.96
55:BK:66:PHE:O	55:BK:67:THR:HG23	0.80	0.96
33:BN:138:THR:OG1	33:BN:139:LEU:CD1	2.06	0.96
33:BN:23:ALA:HA	33:BN:26:VAL:HG21	1.46	0.96
41:BY:72:ILE:CG2	41:BY:73:HIS:H	1.78	0.96
42:BZ:176:LEU:HD23	42:BZ:177:THR:N	1.80	0.96
6:AC:91:LEU:HD11	6:AC:99:VAL:HG22	1.45	0.96
1:AA:939:G:P	10:AG:102:ARG:HH12	1.88	0.96
17:AN:24:CYS:CB	17:AN:40:CYS:N	2.26	0.96
50:B5:46:CYS:HB3	50:B5:47:PRO:HD2	1.47	0.96
26:BA:2227:A:C2	26:BA:2228:G:C5	2.52	0.96
26:BA:2262:U:C2'	26:BA:2263:C:C5'	2.42	0.96
26:BA:2324:C:H42	26:BA:2331:G:H1	1.01	0.96
26:BA:2472:G:C2'	26:BA:2473:U:OP1	2.13	0.96
26:BA:2720:U:OP1	26:BA:2720:U:H4'	1.62	0.96
26:BA:2741:A:H2'	26:BA:2742:C:C6	1.98	0.96
26:BA:2848:G:N2	26:BA:2849:U:C2	2.23	0.96
27:BD:146:LYS:HZ2	27:BD:184:LEU:HD11	1.25	0.96
27:BD:216:ALA:HB1	27:BD:223:ASN:HB2	1.46	0.96
28:BE:107:GLU:HG2	28:BE:110:ARG:NH2	1.79	0.96
28:BE:205:THR:C	28:BE:206:LYS:HG3	1.85	0.96
30:BG:94:ALA:O	30:BG:95:THR:OG1	1.80	0.96
36:BQ:17:ARG:O	36:BQ:18:GLU:HG2	1.61	0.96
41:BY:32:ARG:C	41:BY:33:GLU:OE2	2.03	0.96
41:BY:71:VAL:HG12	41:BY:72:ILE:N	1.76	0.96
41:BY:51:LEU:HA	41:BY:97:ARG:HH21	0.82	0.96
42:BZ:116:VAL:HG23	42:BZ:169:VAL:HG21	0.96	0.96
1:AA:1222:G:OP2	1:AA:1322:C:N4	1.98	0.96
1:AA:652:U:H1'	1:AA:653:A:H2	1.30	0.96
7:AD:21:LEU:O	7:AD:113:SER:HB2	1.63	0.96
49:B4:33:VAL:O	49:B4:34:ASP:OD1	1.82	0.96
26:BA:2051:A:N6	26:BA:2614:A:C8	2.33	0.96
26:BA:2386:C:H4'	48:B0:39:ARG:HE	1.27	0.96
26:BA:2447:G:C6	26:BA:2500:U:C5	2.53	0.96
26:BA:2567:G:H2'	26:BA:2568:C:C5	1.99	0.96
26:BA:321:G:H1'	29:BF:206:ASN:HD22	1.28	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:389:G:OP2	49:B4:24:THR:CG2	2.12	0.96
28:BE:206:LYS:O	28:BE:257:GLY:CA	2.12	0.96
29:BF:196:THR:CA	29:BF:236:THR:CG2	2.42	0.96
32:BI:75:LEU:HD13	32:BI:76:THR:N	1.80	0.96
32:BI:89:LEU:HD11	32:BI:93:ILE:CG2	1.92	0.96
37:BS:76:GLY:O	37:BS:82:TYR:CB	2.13	0.96
37:BS:87:LEU:O	37:BS:90:LEU:N	1.97	0.96
26:BA:29:U:C5'	44:BU:11:ARG:HH12	1.79	0.96
39:BW:96:ILE:H	39:BW:96:ILE:CD1	1.74	0.96
41:BY:101:LEU:HD11	41:BY:112:LEU:HG	0.98	0.96
49:B4:10:VAL:H	49:B4:11:PRO:CD	1.77	0.96
49:B4:6:HIS:HB2	49:B4:56:VAL:HG21	1.45	0.96
3:AW:76:A:H2	53:B8:32:GLN:HB3	1.31	0.96
26:BA:125:G:N2	52:B7:10:ARG:N	2.14	0.96
26:BA:2234:G:C2'	26:BA:2235:G:H5'	1.94	0.96
26:BA:2352:A:C8	26:BA:2366:A:N1	2.33	0.96
26:BA:2423:U:O2'	26:BA:2424:C:OP2	1.82	0.96
26:BA:2528:U:H5	26:BA:2530:A:C4	1.77	0.96
26:BA:2437:U:C5'	26:BA:2598:A:H2	1.77	0.96
26:BA:2862:G:O2'	26:BA:2863:C:O4'	1.82	0.96
26:BA:2870:C:O2	26:BA:2871:C:C1'	2.13	0.96
26:BA:995:C:H1'	44:BU:57:PHE:CE2	2.01	0.96
27:BD:175:LEU:HD12	27:BD:179:GLU:HB2	1.42	0.96
28:BE:201:VAL:N	28:BE:266:LYS:HD2	1.77	0.96
28:BE:217:TRP:O	28:BE:219:VAL:HG23	1.65	0.96
28:BE:46:ALA:HB3	28:BE:72:VAL:C	1.78	0.96
29:BF:81:PRO:CB	29:BF:87:ARG:CB	2.29	0.96
30:BG:58:VAL:O	30:BG:58:VAL:HG12	1.61	0.96
30:BG:64:ARG:HB2	30:BG:67:ASP:OD2	1.65	0.96
30:BG:20:LYS:CA	30:BG:76:ARG:HB3	1.95	0.96
31:BH:82:TYR:CD2	31:BH:137:LYS:HB3	2.01	0.96
35:BP:112:GLY:CA	35:BP:113:GLN:NE2	2.27	0.96
35:BP:81:VAL:HG12	35:BP:81:VAL:O	1.64	0.96
36:BQ:108:SER:O	36:BQ:109:VAL:CG1	2.12	0.96
36:BQ:49:VAL:CG1	36:BQ:50:VAL:N	2.22	0.96
26:BA:1287:A:C8	43:BR:104:ARG:NH1	2.33	0.96
37:BS:122:ALA:O	37:BS:125:ALA:HB3	1.66	0.96
26:BA:563:G:H21	44:BU:37:GLN:NE2	1.61	0.96
45:BV:4:ILE:HG12	45:BV:13:ARG:CA	1.96	0.96
42:BZ:103:ARG:CG	42:BZ:139:THR:HG22	1.95	0.96
42:BZ:6:LYS:O	42:BZ:31:SER:HB2	1.66	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:8:ILE:CA	51:B6:29:ARG:NH2	2.27	0.96
54:B9:25:VAL:CG1	54:B9:34:GLN:HB2	1.95	0.96
26:BA:104:U:C4	41:BY:17:HIS:CE1	2.52	0.96
26:BA:2100:G:C4	26:BA:2190:G:C2	2.54	0.96
26:BA:2094:G:O6	26:BA:2196:C:C4	2.18	0.96
26:BA:2333:A:C1'	26:BA:2335:A:N3	2.29	0.96
26:BA:2457:U:H2'	26:BA:2458:G:H5'	1.45	0.96
26:BA:2509:G:H2'	26:BA:2510:C:H5'	1.45	0.96
26:BA:2538:C:O2'	26:BA:2539:C:O5'	1.81	0.96
26:BA:2574:G:H3'	26:BA:2575:C:H6	1.30	0.96
26:BA:2730:C:H4'	28:BE:265:ASN:HD21	0.80	0.96
26:BA:2845:G:O2'	26:BA:2846:G:H5'	0.78	0.96
27:BD:85:ASN:OD1	27:BD:86:ARG:CZ	2.13	0.96
28:BE:176:HIS:O	28:BE:179:ASP:HB2	1.64	0.96
29:BF:197:SER:HB3	29:BF:239:ALA:N	1.74	0.96
29:BF:52:ALA:N	29:BF:55:ARG:HB3	1.81	0.96
55:BK:9:ILE:HD11	55:BK:31:HIS:CB	1.91	0.96
26:BA:1665:A:C2'	34:BO:66:LYS:HZ3	1.71	0.96
35:BP:128:GLY:O	35:BP:131:GLU:HB2	1.65	0.96
37:BS:94:GLU:C	37:BS:94:GLU:CD	2.22	0.96
44:BU:111:ASP:HA	44:BU:114:ARG:HD2	1.45	0.96
45:BV:62:GLU:C	45:BV:95:ILE:CG2	2.26	0.96
39:BW:104:THR:O	39:BW:105:VAL:HG12	1.62	0.96
40:BX:3:ASP:O	40:BX:4:VAL:CG1	2.13	0.96
42:BZ:159:THR:C	42:BZ:160:LEU:HD12	1.86	0.96
1:AA:958:A:C2	22:AS:55:LYS:HB2	1.99	0.96
26:BA:2227:A:C2	26:BA:2228:G:C6	2.52	0.96
26:BA:2298:A:C4	26:BA:2321:G:N2	2.34	0.96
26:BA:2758:A:OP2	26:BA:2758:A:O4'	1.83	0.96
26:BA:2864:G:H2'	26:BA:2865:U:C6	2.01	0.96
26:BA:533:G:H1	26:BA:560:C:H42	1.13	0.96
26:BA:803:U:H2'	26:BA:804:A:H5'	1.48	0.96
27:BD:61:TYR:OH	27:BD:214:MET:HE1	1.65	0.96
28:BE:44:TYR:HA	28:BE:309:PRO:HD3	0.96	0.96
29:BF:52:ALA:HA	29:BF:55:ARG:CD	1.95	0.96
2:AV:56:C:H1'	30:BG:56:ARG:HD2	1.48	0.96
30:BG:82:GLU:C	30:BG:85:GLN:HG3	1.85	0.96
31:BH:90:GLY:C	31:BH:159:LYS:HE3	1.86	0.96
32:BI:13:GLY:CA	32:BI:15:LYS:NZ	2.28	0.96
55:BK:117:ASN:CG	55:BK:127:ILE:CD1	2.33	0.96
55:BK:8:GLN:N	55:BK:59:THR:CA	2.28	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:58:VAL:HG12	34:BO:59:LYS:N	1.81	0.96
35:BP:66:VAL:HB	35:BP:67:ARG:NE	1.80	0.96
36:BQ:85:ILE:HG23	36:BQ:122:PHE:HB3	1.46	0.96
44:BU:39:LEU:O	44:BU:41:ASN:ND2	1.99	0.96
40:BX:52:VAL:HG22	40:BX:65:VAL:O	1.66	0.96
42:BZ:69:VAL:HG22	42:BZ:81:VAL:CG1	1.89	0.96
1:AA:944:G:C6	1:AA:1337:G:H2'	1.99	0.96
1:AA:1327:C:H5''	24:AU:20:LYS:CE	1.95	0.96
2:AV:31:A:H5'	12:AI:127:LYS:HB2	1.48	0.96
2:AV:7:U:H5'	2:AV:8:U:P	2.05	0.96
51:B6:12:MET:SD	51:B6:54:LYS:CB	2.53	0.96
26:BA:1598:C:C5'	40:BX:34:LYS:CG	2.44	0.96
26:BA:2048:G:C6	26:BA:2621:A:C2	2.54	0.96
26:BA:2430:A:H2'	26:BA:2431:U:H5''	1.48	0.96
26:BA:2850:A:N3	43:BR:61:HIS:HE1	1.62	0.96
26:BA:2887:U:H2'	26:BA:2888:C:H6	1.30	0.96
26:BA:849:A:N3	47:B3:21:ALA:CB	2.21	0.96
29:BF:22:PHE:HZ	29:BF:115:LEU:HD12	1.31	0.96
29:BF:223:LEU:O	29:BF:231:ARG:HD2	1.65	0.96
32:BI:13:GLY:HA2	32:BI:15:LYS:HE3	1.44	0.96
32:BI:58:ALA:O	32:BI:62:LEU:HG	1.64	0.96
33:BN:10:VAL:HB	33:BN:36:VAL:HA	0.98	0.96
34:BO:77:ILE:CD1	34:BO:79:PHE:HE2	1.77	0.96
36:BQ:88:PHE:HB2	36:BQ:90:PHE:CZ	1.99	0.96
43:BR:33:ARG:HB3	43:BR:115:GLU:CB	1.96	0.96
44:BU:49:ASP:N	44:BU:52:ASN:HD21	1.52	0.96
45:BV:5:ILE:HG23	45:BV:39:PHE:HA	0.96	0.96
1:AA:790:A:O5'	2:AV:38:A:O2'	1.84	0.96
1:AA:1328:C:H5''	16:AM:28:ALA:HB1	1.45	0.96
26:BA:126:A:C8	52:B7:18:PHE:CE1	2.53	0.96
26:BA:1669:A:H8	34:BO:4:GLN:OE1	1.37	0.96
26:BA:2215:G:H2'	26:BA:2216:G:H8	0.79	0.96
26:BA:2230:G:O2'	26:BA:2231:C:O4'	1.83	0.96
26:BA:2285:C:C4'	26:BA:2288:A:H61	1.60	0.96
26:BA:2309:A:H5''	26:BA:2310:A:H8	1.21	0.96
26:BA:2412:A:C2'	26:BA:2413:G:H5'	1.94	0.96
26:BA:2429:G:H5'	26:BA:2430:A:OP2	1.64	0.96
26:BA:2607:G:H2'	26:BA:2608:G:H5'	1.47	0.96
26:BA:2850:A:H2'	26:BA:2851:A:H8	1.29	0.96
26:BA:592:G:C2	53:B8:3:LYS:CE	2.49	0.96
26:BA:2712:U:C6	26:BA:712(A):A:H8	1.46	0.96

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:151:GLY:O	27:BD:152:GLN:OE1	1.81	0.96
28:BE:99:VAL:HG12	28:BE:100:TRP:N	1.79	0.96
26:BA:675:A:P	29:BF:69:HIS:O	2.24	0.96
30:BG:142:ALA:HB2	30:BG:151:ILE:CD1	1.96	0.96
30:BG:27:ILE:C	30:BG:69:ILE:CG2	2.29	0.96
55:BK:65:SER:O	55:BK:66:PHE:HB2	1.64	0.96
33:BN:103:VAL:O	33:BN:104:TYR:CD2	2.18	0.96
26:BA:2320:A:C5	37:BS:9:PRO:HB3	2.00	0.96
26:BA:564:C:P	45:BV:79:GLN:HG2	2.06	0.96
26:BA:1162:G:H4'	45:BV:23:GLU:HB2	0.97	0.96
26:BA:1943:U:C1'	26:BA:1945:G:H5'	1.96	0.96
26:BA:2249:U:C2	26:BA:2253:G:OP2	2.18	0.96
26:BA:2661:G:O2'	26:BA:2662:A:H5'	1.66	0.96
26:BA:2819:G:H5''	26:BA:2821:A:H61	1.16	0.96
26:BA:2791:C:N4	26:BA:2893:G:N7	2.14	0.96
26:BA:919:G:N2	26:BA:2268:A:C5'	2.29	0.96
28:BE:193:PHE:CE2	28:BE:311:PHE:CD1	2.53	0.96
29:BF:217:GLU:C	29:BF:218:VAL:HG23	1.82	0.96
29:BF:240:LEU:CD2	29:BF:243:VAL:HG21	1.95	0.96
29:BF:6:TYR:CE2	29:BF:140:VAL:HA	2.01	0.96
34:BO:7:ARG:CZ	34:BO:44:LYS:HD2	1.96	0.96
43:BR:87:TYR:HD1	43:BR:94:TYR:CD2	1.84	0.96
40:BX:22:ASN:CA	40:BX:68:LEU:HD11	1.95	0.96
7:AD:3:ARG:HG3	7:AD:118:ARG:HH11	1.24	0.95
48:B0:69:PHE:O	48:B0:70:ILE:CG2	2.14	0.95
46:B2:7:GLU:OE1	46:B2:8:ILE:CG1	2.14	0.95
50:B5:45:ILE:CG2	50:B5:52:TYR:HD1	1.74	0.95
26:BA:2324:C:N4	26:BA:2331:G:H1	1.63	0.95
26:BA:2385:C:O2	26:BA:2386:C:O4'	1.84	0.95
26:BA:2819:G:N3	26:BA:2821:A:N7	2.14	0.95
55:BK:42:PHE:CZ	55:BK:58:ILE:CD1	2.49	0.95
34:BO:7:ARG:HE	34:BO:44:LYS:CD	1.77	0.95
35:BP:70:ASP:O	35:BP:74:THR:CG2	2.13	0.95
43:BR:105:ARG:O	43:BR:107:ASP:N	1.97	0.95
44:BU:44:THR:HA	44:BU:47:TYR:CD1	2.00	0.95
41:BY:101:LEU:O	41:BY:103:LEU:CG	2.13	0.95
51:B6:40:TYR:N	51:B6:50:PHE:CE1	2.33	0.95
52:B7:43:THR:O	52:B7:45:SER:N	1.97	0.95
54:B9:14:CYS:CA	54:B9:27:CYS:HB2	1.95	0.95
26:BA:1033:U:C6	26:BA:2750:A:C2	2.54	0.95
26:BA:631:A:C2	26:BA:2415:G:N2	2.35	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2446:G:N1	26:BA:2501:C:C5	2.34	0.95
26:BA:2574:G:HO2'	28:BE:240:PRO:CB	1.72	0.95
26:BA:526:A:N1	26:BA:2626:C:O4'	1.99	0.95
26:BA:2838:G:C4	26:BA:2839:G:C8	2.54	0.95
26:BA:296:C:H6	26:BA:338:G:H21	1.03	0.95
26:BA:957:A:OP1	36:BQ:95:GLU:CB	2.13	0.95
27:BD:131:LEU:CD1	27:BD:171:VAL:HG22	1.93	0.95
27:BD:106:PRO:CA	27:BD:194:VAL:O	2.14	0.95
29:BF:32:GLY:HA2	29:BF:35:VAL:HG21	0.98	0.95
29:BF:39:GLN:O	29:BF:40:ALA:O	1.83	0.95
31:BH:41:THR:HB	31:BH:52:THR:CB	1.96	0.95
32:BI:7:LYS:HA	32:BI:14:LYS:CG	1.96	0.95
32:BI:77:VAL:HG23	32:BI:141:LEU:HD11	0.99	0.95
55:BK:122:GLU:HB3	55:BK:126:LYS:CE	1.96	0.95
34:BO:25:LEU:HD12	34:BO:38:VAL:CG1	1.96	0.95
34:BO:35:ILE:HA	34:BO:62:VAL:C	1.84	0.95
43:BR:87:TYR:CD1	43:BR:94:TYR:CD2	2.53	0.95
44:BU:47:TYR:HE2	45:BV:74:TYR:O	1.47	0.95
41:BY:28:SER:CB	41:BY:99:THR:HG23	1.95	0.95
41:BY:49:GLU:CG	41:BY:59:GLU:HA	1.94	0.95
41:BY:51:LEU:HD12	41:BY:97:ARG:CG	1.96	0.95
1:AA:426:G:O2'	7:AD:42:GLN:CA	2.13	0.95
1:AA:1221:G:O2'	22:AS:77:THR:HG23	1.64	0.95
52:B7:43:THR:OG1	52:B7:44:VAL:N	1.95	0.95
26:BA:2094:G:N1	26:BA:2196:C:C2	2.34	0.95
26:BA:2304:G:O4'	30:BG:105:SER:HB2	1.64	0.95
26:BA:2615:U:N3	50:B5:8:LYS:HG2	1.81	0.95
26:BA:2698:U:H2'	26:BA:2699:C:C6	2.01	0.95
26:BA:2753:A:C8	26:BA:2754:U:C5	2.53	0.95
26:BA:617:G:P	29:BF:221:GLU:CD	2.44	0.95
26:BA:68:G:H2'	26:BA:69:C:H6	1.30	0.95
27:BD:213:LYS:C	27:BD:215:LYS:H	1.60	0.95
28:BE:176:HIS:O	28:BE:179:ASP:CB	2.14	0.95
33:BN:139:LEU:N	33:BN:139:LEU:HD13	1.79	0.95
35:BP:132:LYS:N	35:BP:132:LYS:HD2	1.76	0.95
26:BA:2406:U:H3	35:BP:55:GLN:HB3	1.30	0.95
36:BQ:143:VAL:O	36:BQ:144:THR:CG2	2.14	0.95
37:BS:19:ASP:O	37:BS:21:HIS:N	1.98	0.95
39:BW:8:ARG:HD2	39:BW:9:TYR:CD1	2.01	0.95
2:AV:31:A:O5'	12:AI:127:LYS:NZ	1.98	0.95
2:AV:7:U:C4	2:AV:49:C:C4	2.53	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AW:75:C:C4	49:B4:28:ARG:HB2	2.01	0.95
48:B0:46:LYS:HZ3	48:B0:81:ILE:HD11	1.32	0.95
40:BX:3:ASP:CG	46:B2:24:LYS:HD2	1.86	0.95
53:B8:26:LYS:HD2	53:B8:44:LYS:HA	0.98	0.95
26:BA:1518:C:H3'	26:BA:1519:G:H4'	1.46	0.95
26:BA:2579:C:C6	26:BA:2579:C:C4'	2.50	0.95
26:BA:2612:C:O2'	26:BA:2613:U:H5''	1.65	0.95
26:BA:2649:U:H2'	26:BA:2650:U:C6	2.01	0.95
26:BA:997:G:P	44:BU:93:LYS:HE2	2.06	0.95
27:BD:167:GLU:O	27:BD:170:TYR:O	1.84	0.95
28:BE:229:GLN:C	28:BE:231:TRP:N	2.13	0.95
26:BA:2315:G:H5'	30:BG:133:ASN:HD22	1.00	0.95
30:BG:49:PRO:HB2	30:BG:72:LYS:N	1.79	0.95
30:BG:93:LEU:HD12	30:BG:94:ALA:N	1.80	0.95
31:BH:101:LYS:HG3	31:BH:115:GLU:CA	1.96	0.95
31:BH:84:LYS:HG3	31:BH:140:VAL:HG12	1.43	0.95
32:BI:95:SER:HB2	32:BI:98:ILE:HD11	1.44	0.95
55:BK:96:ILE:O	55:BK:97:VAL:HG13	1.67	0.95
35:BP:141:GLU:HB2	35:BP:145:LEU:CD2	1.96	0.95
44:BU:15:LYS:O	44:BU:16:LYS:O	1.82	0.95
45:BV:43:GLU:O	45:BV:44:GLN:NE2	1.99	0.95
1:AA:410:G:P	7:AD:25:ARG:HE	1.88	0.95
1:AA:986:A:N3	22:AS:52:TYR:CE2	2.35	0.95
46:B2:34:GLN:N	46:B2:34:GLN:OE1	2.00	0.95
47:B3:23:LEU:C	47:B3:28:LEU:HD12	1.85	0.95
49:B4:58:LYS:HG2	49:B4:62:ARG:NE	1.80	0.95
26:BA:1081:U:O2'	55:BK:117:ASN:HB3	1.67	0.95
26:BA:2232:U:C2'	26:BA:2233:U:H5'	1.97	0.95
26:BA:2268:A:C4'	26:BA:2269:A:OP2	2.14	0.95
26:BA:2061:G:N3	26:BA:2503:A:H2	1.65	0.95
26:BA:2617:C:O2	26:BA:2618:G:O4'	1.84	0.95
26:BA:2845:G:C2'	26:BA:2846:G:H5'	1.95	0.95
35:BP:94:ARG:CB	35:BP:120:LEU:HD23	1.79	0.95
36:BQ:58:HIS:N	36:BQ:61:LEU:HD11	1.81	0.95
26:BA:994:C:H4'	44:BU:54:LYS:HE3	1.45	0.95
42:BZ:172:LEU:CG	42:BZ:173:PRO:CD	2.39	0.95
1:AA:405:U:OP2	7:AD:5:ILE:HD12	1.66	0.95
1:AA:1319:A:C4'	22:AS:70:LYS:HZ3	1.78	0.95
26:BA:2331:G:O4'	48:B0:70:ILE:HG13	1.65	0.95
51:B6:2:ALA:HB2	51:B6:11:LYS:HZ2	1.14	0.95
52:B7:10:ARG:O	52:B7:14:LYS:HG3	1.64	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2236:C:C3'	26:BA:2237:G:H5'	1.97	0.95
26:BA:2320:A:C6	37:BS:9:PRO:CB	2.48	0.95
26:BA:558:G:P	33:BN:91:LYS:CB	2.55	0.95
27:BD:146:LYS:NZ	27:BD:184:LEU:CD1	2.29	0.95
30:BG:19:GLU:CG	30:BG:135:VAL:HG22	1.96	0.95
40:BX:25:GLN:CD	40:BX:65:VAL:HG22	1.87	0.95
42:BZ:92:VAL:CG1	42:BZ:124:ALA:HB2	1.97	0.95
42:BZ:112:LEU:HA	42:BZ:174:PRO:HD2	1.48	0.95
42:BZ:26:LYS:C	42:BZ:27:GLU:HG3	1.86	0.95
49:B4:14:ILE:O	49:B4:14:ILE:HG22	1.67	0.95
49:B4:48:ARG:HG2	49:B4:49:PHE:H	1.30	0.95
51:B6:8:ILE:HA	51:B6:29:ARG:HE	1.28	0.95
53:B8:4:MET:HA	53:B8:5:LYS:HZ1	1.27	0.95
26:BA:139:G:H3'	26:BA:141(A):C:O2	1.66	0.95
26:BA:2199:A:H3'	26:BA:2205:C:H6	1.27	0.95
26:BA:963:U:C1'	26:BA:2250:G:H21	1.75	0.95
26:BA:2300:G:O2'	26:BA:2301:C:H5'	1.65	0.95
26:BA:2544:G:C2'	26:BA:2545:G:H5'	1.95	0.95
26:BA:2574:G:C5	26:BA:2575:C:H5	1.46	0.95
26:BA:2712:U:H5''	26:BA:2714:G:O5'	1.64	0.95
26:BA:2782:G:OP2	26:BA:2782:G:N7	2.00	0.95
26:BA:2795:G:H2'	26:BA:2795:G:N3	1.80	0.95
29:BF:34:ALA:O	29:BF:35:VAL:O	1.84	0.95
30:BG:100:ASP:O	30:BG:102:GLY:N	1.99	0.95
30:BG:49:PRO:HB3	30:BG:72:LYS:O	0.78	0.95
32:BI:7:LYS:N	32:BI:14:LYS:HG2	1.38	0.95
35:BP:92:ASP:HB2	35:BP:118:LEU:HD13	1.46	0.95
26:BA:2251:G:H5''	36:BQ:102:ARG:NH2	1.81	0.95
36:BQ:33:MET:CE	36:BQ:34:GLY:O	2.14	0.95
41:BY:53:GLY:O	41:BY:56:ALA:N	2.00	0.95
41:BY:63:ILE:HG12	41:BY:75:GLU:OE2	1.64	0.95
42:BZ:13:LYS:C	42:BZ:15:ASP:H	1.65	0.95
46:B2:20:LEU:C	46:B2:20:LEU:CD1	2.35	0.95
49:B4:23:GLU:OE2	49:B4:29:PRO:HG3	1.66	0.95
49:B4:48:ARG:HG2	49:B4:49:PHE:N	1.79	0.95
52:B7:43:THR:O	52:B7:46:ASP:CG	2.05	0.95
53:B8:58:MET:SD	53:B8:61:MET:CG	2.55	0.95
26:BA:2742:C:OP1	54:B9:35:ARG:NH1	1.98	0.95
26:BA:1127:A:C2	26:BA:2518:A:N3	2.35	0.95
26:BA:1544:C:H2'	26:BA:1545:A:H4'	1.48	0.95
26:BA:2670:A:H5''	26:BA:2670:A:H8	1.31	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2691:C:O2'	26:BA:2692:C:C5'	2.15	0.95
27:BD:174:ARG:CG	27:BD:174:ARG:HH11	1.80	0.95
29:BF:94:THR:C	29:BF:96:LYS:H	1.70	0.95
31:BH:104:LEU:HB3	31:BH:151:ARG:NH1	1.80	0.95
31:BH:60:HIS:HA	31:BH:63:LEU:HB2	1.46	0.95
32:BI:89:LEU:HD13	32:BI:93:ILE:HG22	1.47	0.95
44:BU:99:ALA:CB	44:BU:106:PHE:CE1	2.28	0.95
41:BY:43:ASN:ND2	41:BY:103:LEU:HD21	1.81	0.95
41:BY:63:ILE:HD11	41:BY:74:VAL:C	1.85	0.95
41:BY:72:ILE:HG22	41:BY:73:HIS:N	1.72	0.95
41:BY:78:THR:HB	41:BY:87:VAL:O	1.66	0.95
1:AA:1276:G:O2'	1:AA:1282:C:H4'	1.64	0.95
7:AD:23:GLY:N	7:AD:113:SER:CB	2.30	0.95
16:AM:91:ARG:HH12	16:AM:103:THR:HG22	1.28	0.95
6:AC:12:LEU:HD21	17:AN:51:GLY:HA3	1.46	0.95
1:AA:1317:C:O2'	22:AS:10:PHE:CZ	2.20	0.95
47:B3:59:VAL:HG12	47:B3:60:GLU:N	1.77	0.95
26:BA:1140:C:H41	33:BN:49:ARG:CD	1.80	0.95
26:BA:1260:G:H5''	39:BW:83:LYS:HZ3	1.25	0.95
26:BA:2023:G:C5'	26:BA:2617:C:O2'	2.14	0.95
26:BA:2219:G:O2'	26:BA:2224:G:OP1	1.83	0.95
26:BA:2262:U:OP2	48:B0:14:ARG:NE	2.00	0.95
26:BA:227:A:H61	26:BA:2407:G:H8	1.12	0.95
26:BA:2320:A:N6	37:BS:9:PRO:CB	2.30	0.95
26:BA:2326:C:H2'	26:BA:2326:C:O2	1.61	0.95
26:BA:2333:A:H3'	37:BS:13:ARG:HD3	1.47	0.95
26:BA:2405:G:N2	26:BA:2413:G:O6	2.00	0.95
26:BA:2422:A:C4	26:BA:2424:C:H5	1.84	0.95
26:BA:2488:A:H2'	26:BA:2489:G:O5'	1.66	0.95
26:BA:2543:G:N7	26:BA:2544:G:O6	1.99	0.95
26:BA:2565:A:O3'	26:BA:2566:A:O4'	1.85	0.95
26:BA:993:G:H4'	45:BV:90:PHE:HZ	1.24	0.95
28:BE:107:GLU:CB	28:BE:110:ARG:NE	2.29	0.95
28:BE:70:VAL:HG11	28:BE:296:VAL:H	0.95	0.95
29:BF:24:THR:HB	29:BF:25:PRO:HD3	1.46	0.95
30:BG:103:ASN:C	30:BG:104:PHE:CD1	2.40	0.95
30:BG:142:ALA:CB	30:BG:151:ILE:CD1	2.44	0.95
31:BH:166:GLU:O	31:BH:167:LEU:HD23	1.46	0.95
31:BH:55:SER:HB3	31:BH:60:HIS:HB2	1.45	0.95
31:BH:93:TYR:C	31:BH:94:ARG:HG3	1.83	0.95
26:BA:1059:G:C4	55:BK:127:ILE:HD13	2.02	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:6:A:C5'	33:BN:4:ALA:N	2.29	0.95
35:BP:128:GLY:HA3	35:BP:132:LYS:NZ	1.72	0.95
35:BP:64:ILE:CD1	35:BP:106:VAL:HG12	1.97	0.95
35:BP:77:ALA:N	35:BP:81:VAL:CG2	2.24	0.95
36:BQ:94:ARG:HD3	36:BQ:106:GLY:HA2	0.96	0.95
44:BU:44:THR:HG21	45:BV:77:GLY:O	1.64	0.95
41:BY:33:GLU:CD	41:BY:34:GLU:H	1.69	0.95
42:BZ:92:VAL:HA	42:BZ:124:ALA:HB1	1.47	0.95
49:B4:40:HIS:HB3	49:B4:41:PRO:HD3	1.48	0.95
26:BA:1264:G:P	50:B5:19:ARG:HH12	1.89	0.95
26:BA:2393:A:OP2	53:B8:32:GLN:NE2	2.00	0.95
26:BA:2313:C:N4	26:BA:2314:C:N4	2.14	0.95
26:BA:2320:A:H61	37:BS:14:ARG:CA	1.80	0.95
26:BA:2678:C:O2	26:BA:2679:A:O4'	1.82	0.95
26:BA:2818:G:OP1	26:BA:2837:G:O2'	1.83	0.95
26:BA:825:C:O3'	26:BA:2428:G:C8	2.19	0.95
27:BD:103:ILE:HD11	27:BD:104:ILE:HD11	1.48	0.95
29:BF:113:SER:O	29:BF:116:ALA:HB3	1.66	0.95
33:BN:54:VAL:HG13	33:BN:135:ILE:HA	1.47	0.95
45:BV:14:VAL:HG12	45:BV:15:SER:H	1.32	0.95
45:BV:30:GLY:C	45:BV:33:VAL:HG23	1.75	0.95
26:BA:1614:A:C6	39:BW:88:ARG:HB2	1.99	0.95
40:BX:68:LEU:N	40:BX:68:LEU:HD23	1.79	0.95
40:BX:47:VAL:HB	40:BX:69:SER:CB	1.97	0.95
40:BX:47:VAL:HG11	40:BX:69:SER:CB	1.90	0.95
41:BY:45:GLY:CA	41:BY:62:VAL:HG12	1.90	0.95
42:BZ:113:VAL:HG12	42:BZ:114:ASP:N	1.82	0.95
42:BZ:71:MET:HA	42:BZ:78:PRO:HA	1.48	0.95
1:AA:986:A:N3	22:AS:52:TYR:CZ	2.34	0.94
3:AW:1:G:H22	3:AW:2:C:N4	1.65	0.94
26:BA:2066:C:N3	26:BA:2445:G:N2	2.14	0.94
26:BA:2209:C:C2'	26:BA:2210:G:C3'	2.32	0.94
26:BA:2236:C:H2'	26:BA:2237:G:C5'	1.96	0.94
26:BA:2648:C:C2'	26:BA:2649:U:H5'	1.96	0.94
26:BA:2888:C:O2	26:BA:2889:C:C6	2.20	0.94
26:BA:2896:C:C6	26:BA:2896:C:H3'	2.02	0.94
28:BE:189:MET:O	28:BE:190:ASN:CG	2.06	0.94
29:BF:243:VAL:O	29:BF:246:ARG:CA	2.15	0.94
26:BA:801:G:OP1	29:BF:79:ARG:CZ	2.15	0.94
32:BI:43:ASN:N	32:BI:43:ASN:HD22	1.50	0.94
32:BI:80:PRO:HB3	32:BI:146:THR:CG2	1.96	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1080:C:H4'	55:BK:126:LYS:HB3	0.97	0.94
55:BK:33:VAL:CG2	55:BK:60:VAL:HG11	1.96	0.94
33:BN:134:GLU:C	33:BN:138:THR:HG23	1.87	0.94
34:BO:66:LYS:HD2	34:BO:66:LYS:C	1.84	0.94
38:BT:49:LEU:HD23	38:BT:49:LEU:C	1.87	0.94
44:BU:56:ASP:O	44:BU:60:LEU:CG	2.15	0.94
39:BW:41:LYS:O	39:BW:42:ARG:O	1.84	0.94
41:BY:30:ASP:CG	41:BY:31:LEU:HD23	1.87	0.94
1:AA:1320:C:H1'	22:AS:73:GLU:CG	1.96	0.94
7:AD:15:GLU:HG2	7:AD:63:LYS:HB2	1.49	0.94
40:BX:4:VAL:HG13	46:B2:24:LYS:HZ3	1.32	0.94
46:B2:51:LYS:O	46:B2:52:ALA:C	2.04	0.94
51:B6:29:ARG:HG2	51:B6:30:ASN:N	1.80	0.94
26:BA:1140:C:OP1	33:BN:18:ILE:CD1	2.14	0.94
26:BA:1546:C:O3'	26:BA:1547:C:OP1	1.85	0.94
26:BA:2578:G:C2'	26:BA:2579:C:O5'	2.15	0.94
26:BA:2631:G:C5	26:BA:2632:A:C8	2.54	0.94
26:BA:2740:A:H8	26:BA:2740:A:H5'	1.31	0.94
26:BA:2804:C:C5	26:BA:2805:G:N1	2.34	0.94
26:BA:398:G:OP2	49:B4:59:PHE:CE2	2.20	0.94
26:BA:599:G:O2'	29:BF:30:LEU:HD21	1.67	0.94
31:BH:101:LYS:CE	31:BH:115:GLU:CB	2.45	0.94
31:BH:143:LEU:CD2	31:BH:144:ALA:N	2.19	0.94
33:BN:136:SER:O	33:BN:138:THR:N	2.00	0.94
26:BA:558:G:P	33:BN:91:LYS:HB3	2.06	0.94
37:BS:17:ARG:HH11	37:BS:18:THR:HA	1.31	0.94
38:BT:49:LEU:HD23	38:BT:49:LEU:O	1.65	0.94
44:BU:28:ARG:N	44:BU:31:GLN:CG	2.31	0.94
26:BA:535:C:C5'	44:BU:53:LYS:HE2	1.96	0.94
1:AA:977:A:H62	1:AA:1224:G:P	1.90	0.94
7:AD:23:GLY:O	7:AD:112:VAL:HG12	1.66	0.94
47:B3:8:LEU:CD2	47:B3:31:LEU:C	2.33	0.94
26:BA:193:U:H2'	26:BA:194:G:H8	1.32	0.94
26:BA:2249:U:N3	26:BA:2253:G:P	2.39	0.94
26:BA:2315:G:P	30:BG:20:LYS:HZ2	1.88	0.94
26:BA:2412:A:H2'	26:BA:2413:G:H5'	1.49	0.94
26:BA:2439:A:N3	26:BA:2439:A:H2'	1.81	0.94
26:BA:2521:C:N3	26:BA:2522:U:C6	2.35	0.94
26:BA:2574:G:N9	26:BA:2575:C:C5	2.33	0.94
26:BA:2652:C:O2'	26:BA:2653:U:H5'	1.66	0.94
26:BA:2826:A:N7	26:BA:2827:C:H5	1.65	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:650:C:OP1	53:B8:19:THR:OG1	1.85	0.94
26:BA:932:G:H5'	47:B3:29:ARG:NH2	1.78	0.94
27:BD:80:ILE:HD13	27:BD:82:TYR:HE1	1.24	0.94
26:BA:2749:A:C4'	31:BH:62:ALA:HB2	1.97	0.94
32:BI:68:LEU:HD11	32:BI:108:LEU:CD2	1.97	0.94
34:BO:47:THR:HB	34:BO:48:PRO:CD	1.97	0.94
36:BQ:88:PHE:HB2	36:BQ:90:PHE:HE1	1.18	0.94
37:BS:83:LEU:N	37:BS:83:LEU:HD12	1.78	0.94
44:BU:8:ILE:H	44:BU:11:ARG:HH11	1.05	0.94
44:BU:44:THR:OG1	45:BV:77:GLY:C	2.03	0.94
41:BY:28:SER:CB	41:BY:99:THR:CG2	2.44	0.94
42:BZ:123:VAL:HB	42:BZ:159:THR:CG2	1.96	0.94
36:BQ:32:LYS:NZ	42:BZ:172:LEU:CD1	2.29	0.94
1:AA:1221:G:H5'	22:AS:36:ARG:HH12	1.20	0.94
50:B5:18:MET:O	50:B5:21:SER:HB3	1.65	0.94
26:BA:2415:G:N2	26:BA:2416:C:H1'	1.81	0.94
26:BA:2487:G:O2'	26:BA:2488:A:H5'	1.67	0.94
26:BA:2446:G:N2	26:BA:2501:C:N4	2.14	0.94
26:BA:2526:G:C2'	26:BA:2527:C:C5'	2.42	0.94
26:BA:1966:A:N3	26:BA:2593:U:C5'	2.30	0.94
26:BA:2825:C:H6	26:BA:2825:C:C5'	1.80	0.94
26:BA:749:C:H2'	26:BA:750:A:C8	2.00	0.94
25:BB:42:C:H1'	30:BG:47:GLN:CA	1.98	0.94
27:BD:194:VAL:HG23	27:BD:195:GLY:H	1.29	0.94
29:BF:48:SER:H	29:BF:92:PRO:HG2	1.21	0.94
31:BH:10:ILE:HD11	31:BH:49:ILE:HG13	1.48	0.94
32:BI:63:ALA:O	32:BI:67:LYS:HG2	1.67	0.94
32:BI:7:LYS:CA	32:BI:12:LYS:O	2.11	0.94
43:BR:77:ARG:HB2	43:BR:77:ARG:HH12	1.33	0.94
26:BA:1453:A:C6	43:BR:77:ARG:HD3	2.01	0.94
44:BU:115:ASN:O	44:BU:116:ALA:C	2.03	0.94
41:BY:53:GLY:O	41:BY:55:PHE:N	2.00	0.94
42:BZ:35:ASP:N	42:BZ:39:PHE:CE2	2.34	0.94
3:AW:9:A:C2	3:AW:45:G:C5	2.56	0.94
51:B6:32:GLN:CG	51:B6:35:LEU:HD12	1.96	0.94
26:BA:2393:A:H4'	53:B8:13:ARG:HH21	1.30	0.94
26:BA:2432:A:C2	26:BA:2433:A:C5	2.48	0.94
26:BA:2488:A:C2'	26:BA:2489:G:C5'	2.39	0.94
27:BD:146:LYS:HZ1	27:BD:184:LEU:HD11	1.14	0.94
26:BA:2636:U:H4'	28:BE:84:ARG:HH22	0.80	0.94
26:BA:2317:C:C5'	30:BG:150:SER:CA	2.45	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:151:ILE:HD13	30:BG:156:ARG:HH22	1.32	0.94
31:BH:55:SER:O	31:BH:57:GLU:HG2	1.68	0.94
26:BA:6:A:O2'	33:BN:6:PHE:HD2	1.50	0.94
34:BO:98:ILE:HG22	34:BO:99:PHE:N	1.80	0.94
36:BQ:87:LYS:O	36:BQ:88:PHE:HD2	1.46	0.94
38:BT:42:LEU:C	38:BT:44:ARG:N	2.21	0.94
26:BA:1163:G:H5'	45:BV:23:GLU:OE1	1.67	0.94
45:BV:30:GLY:O	45:BV:31:ASP:O	1.85	0.94
41:BY:78:THR:CA	41:BY:89:ARG:CG	2.44	0.94
41:BY:73:HIS:HD2	41:BY:88:PRO:HB2	1.31	0.94
42:BZ:118:HIS:O	42:BZ:120:LEU:HD23	1.66	0.94
42:BZ:112:LEU:CD1	42:BZ:142:ASN:HA	1.97	0.94
51:B6:8:ILE:H	51:B6:8:ILE:HD13	1.32	0.94
26:BA:2254:C:O2'	26:BA:2255:G:C5'	2.14	0.94
26:BA:2450:A:C2	26:BA:2451:A:C4	2.55	0.94
26:BA:2509:G:O2'	26:BA:2510:C:C5'	2.15	0.94
26:BA:2537:U:H2'	26:BA:2538:C:H6	1.32	0.94
26:BA:2543:G:N7	26:BA:2544:G:C6	2.36	0.94
26:BA:2617:C:H2'	26:BA:2618:G:H5'	0.95	0.94
26:BA:2617:C:C2	26:BA:2618:G:H8	1.84	0.94
26:BA:2689:U:C4'	26:BA:2690:C:H5'	1.98	0.94
26:BA:2693:A:N1	26:BA:2694:G:C6	2.36	0.94
26:BA:495:G:H4'	39:BW:57:ASN:CG	1.86	0.94
28:BE:203:GLY:HA3	28:BE:303:PRO:CD	1.97	0.94
30:BG:102:GLY:HA2	30:BG:134:LEU:HD12	1.49	0.94
26:BA:2313:C:OP1	30:BG:51:ARG:HD2	1.64	0.94
31:BH:120:LEU:CD1	31:BH:143:LEU:HD12	1.97	0.94
32:BI:98:ILE:HD13	32:BI:115:ILE:HD12	1.48	0.94
33:BN:50:GLU:CA	33:BN:53:ILE:CG2	2.36	0.94
33:BN:77:GLY:HA2	33:BN:80:LYS:HG3	1.44	0.94
43:BR:20:LEU:HD11	43:BR:21:TYR:HD2	1.17	0.94
44:BU:61:TRP:HZ3	44:BU:94:VAL:H	0.99	0.94
45:BV:4:ILE:CD1	45:BV:13:ARG:CG	2.44	0.94
39:BW:67:ASP:OD1	39:BW:68:ARG:N	1.99	0.94
26:BA:25:U:C4'	39:BW:79:GLY:CA	2.43	0.94
41:BY:55:PHE:CE2	41:BY:89:ARG:NH2	2.35	0.94
3:AW:37:YYG:C10	10:AG:83:ALA:CB	2.45	0.94
11:AH:21:LYS:O	11:AH:63:LEU:HD11	1.67	0.94
1:AA:1198:G:HO2'	13:AJ:54:PHE:HE2	0.98	0.94
1:AA:953:G:H1'	16:AM:125:ARG:C	1.88	0.94
3:AW:65:G:O6	3:AW:66:A:C6	2.19	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:23:GLU:OE2	49:B4:29:PRO:CG	2.14	0.94
26:BA:2093:G:N7	26:BA:2225:A:N7	2.15	0.94
26:BA:965:C:C1'	26:BA:2273:A:C2	2.49	0.94
26:BA:2313:C:H5'	30:BG:72:LYS:CB	1.98	0.94
26:BA:2315:G:OP1	30:BG:20:LYS:HD3	1.68	0.94
26:BA:2317:C:C5'	30:BG:150:SER:CB	2.46	0.94
26:BA:2804:C:H5	26:BA:2805:G:C6	1.84	0.94
26:BA:2832:U:H6	26:BA:2832:U:C5'	1.58	0.94
27:BD:213:LYS:HG2	27:BD:215:LYS:O	1.68	0.94
28:BE:233:ARG:O	28:BE:234:ARG:HG3	0.77	0.94
29:BF:102:LEU:HD22	29:BF:106:GLU:HB2	1.50	0.94
29:BF:102:LEU:HD23	29:BF:106:GLU:OE1	1.65	0.94
29:BF:111:VAL:O	29:BF:114:ALA:CB	2.14	0.94
31:BH:101:LYS:CG	31:BH:115:GLU:HB2	1.97	0.94
31:BH:168:VAL:C	31:BH:169:ARG:HG2	1.88	0.94
35:BP:92:ASP:HB3	35:BP:118:LEU:HD13	0.95	0.94
43:BR:22:ARG:CG	43:BR:26:LYS:HE3	1.97	0.94
43:BR:38:VAL:HG11	43:BR:39:PRO:HD3	1.44	0.94
26:BA:2333:A:H2'	37:BS:13:ARG:HG3	1.49	0.94
44:BU:110:VAL:O	44:BU:113:SER:OG	1.84	0.94
40:BX:14:ALA:HA	40:BX:17:ASP:OD2	1.68	0.94
41:BY:28:SER:OG	41:BY:30:ASP:OD1	1.84	0.94
42:BZ:39:PHE:N	42:BZ:39:PHE:HD2	1.66	0.94
48:B0:41:ARG:H	48:B0:67:VAL:CG2	1.80	0.94
48:B0:41:ARG:H	48:B0:67:VAL:HG22	1.33	0.94
47:B3:26:LEU:HD12	47:B3:28:LEU:HD11	1.48	0.94
26:BA:932:G:C5'	47:B3:29:ARG:HH21	1.81	0.94
51:B6:21:TYR:CZ	51:B6:43:VAL:CG2	2.47	0.94
51:B6:37:LEU:HD23	51:B6:51:ARG:CA	1.95	0.94
26:BA:2331:G:N7	26:BA:2332:U:C4	2.36	0.94
26:BA:2416:C:C2'	26:BA:2417:C:H5''	1.98	0.94
26:BA:2574:G:H2'	26:BA:2575:C:C6	2.02	0.94
26:BA:2642:G:C2'	26:BA:2643:G:H5'	1.96	0.94
27:BD:198:GLY:O	27:BD:200:THR:HG23	1.65	0.94
26:BA:1789:A:C4'	27:BD:224:VAL:HG11	1.98	0.94
27:BD:66:PHE:C	27:BD:67:LYS:HD2	1.86	0.94
29:BF:220:THR:CA	29:BF:224:ALA:HB2	1.97	0.94
30:BG:27:ILE:O	30:BG:29:HIS:N	2.00	0.94
32:BI:7:LYS:HG3	32:BI:12:LYS:CB	1.97	0.94
55:BK:52:MET:HA	55:BK:52:MET:CE	1.97	0.94
36:BQ:41:THR:CG2	36:BQ:125:TRP:CE3	2.51	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:58:HIS:O	36:BQ:61:LEU:N	2.00	0.94
36:BQ:31:PHE:CA	36:BQ:85:ILE:HD11	1.97	0.94
43:BR:36:THR:HG23	43:BR:40:LYS:HD2	1.46	0.94
26:BA:495:G:H21	39:BW:61:ASN:HD21	1.05	0.94
1:AA:1278:U:OP1	1:AA:1281:U:C5	2.20	0.94
7:AD:23:GLY:N	7:AD:113:SER:HB3	1.83	0.94
1:AA:427:U:H5'	7:AD:41:GLY:HA2	1.45	0.94
49:B4:2:GLN:O	49:B4:3:LYS:HG3	1.65	0.94
51:B6:12:MET:O	51:B6:25:THR:OG1	1.86	0.94
52:B7:31:LEU:HD23	52:B7:31:LEU:H	1.32	0.94
53:B8:9:MET:O	53:B8:12:ARG:O	1.86	0.94
26:BA:1598:C:O3'	40:BX:33:SER:OG	1.86	0.94
26:BA:2049:G:N2	26:BA:2620:C:C2	2.36	0.94
26:BA:2332:U:H1'	26:BA:2336:A:H62	1.21	0.94
26:BA:2394:C:C4	26:BA:2395:C:N3	2.35	0.94
26:BA:746:A:O2'	26:BA:2611:U:O2'	1.82	0.94
26:BA:2048:G:N1	26:BA:2621:A:C2	2.36	0.94
26:BA:526:A:C2	26:BA:2626:C:H1'	1.98	0.94
26:BA:2755:C:H6	26:BA:2755:C:C5'	1.80	0.94
26:BA:2776:A:N3	26:BA:2778:A:N7	2.16	0.94
26:BA:2810:A:C1'	26:BA:2811:G:H5'	1.97	0.94
26:BA:2820:A:N3	26:BA:2820:A:C5'	2.29	0.94
26:BA:527:C:H2'	33:BN:95:ARG:HH11	1.32	0.94
27:BD:143:ILE:HD12	27:BD:143:ILE:N	1.82	0.94
28:BE:211:GLN:C	28:BE:216:ARG:CD	2.28	0.94
26:BA:2730:C:C4'	28:BE:265:ASN:ND2	2.28	0.94
55:BK:112:LYS:C	55:BK:114:PRO:HD2	1.87	0.94
33:BN:58:GLU:HG2	33:BN:61:VAL:HG21	1.50	0.94
33:BN:90:LYS:HD2	33:BN:90:LYS:O	1.68	0.94
36:BQ:89:PRO:O	36:BQ:90:PHE:CG	2.21	0.94
44:BU:59:ARG:O	44:BU:62:ILE:CG1	2.15	0.94
39:BW:8:ARG:HG2	39:BW:9:TYR:H	1.30	0.94
41:BY:101:LEU:HD21	41:BY:112:LEU:HD21	0.96	0.94
41:BY:73:HIS:HA	41:BY:91:LEU:CD2	1.98	0.94
46:B2:8:ILE:HA	46:B2:11:MET:CG	1.98	0.94
47:B3:11:SER:OG	47:B3:13:ILE:HG12	1.68	0.94
26:BA:1669:A:N9	34:BO:4:GLN:OE1	2.00	0.94
26:BA:2228:G:N7	26:BA:2229:C:N1	2.14	0.94
26:BA:2364:C:O2'	26:BA:2365:G:H5'	1.68	0.94
26:BA:2567:G:C2	26:BA:2568:C:C4	2.56	0.94
26:BA:2808:U:N3	26:BA:2892:A:C5	2.36	0.94

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:208:GLY:N	27:BD:211:HIS:NE2	2.16	0.94
28:BE:211:GLN:H	28:BE:216:ARG:NE	1.66	0.94
28:BE:269:ILE:HG13	28:BE:297:LYS:CG	1.98	0.94
31:BH:101:LYS:HG2	31:BH:115:GLU:CB	1.98	0.94
31:BH:120:LEU:CA	31:BH:121:GLU:OE1	2.16	0.94
34:BO:77:ILE:HD13	34:BO:78:ARG:H	1.28	0.94
43:BR:38:VAL:HG12	43:BR:39:PRO:N	1.72	0.94
43:BR:52:ILE:CG2	43:BR:53:HIS:N	2.26	0.94
26:BA:446:G:OP2	44:BU:3:ARG:CZ	2.15	0.94
42:BZ:143:ILE:HG22	42:BZ:144:GLY:H	0.79	0.94
48:B0:7:VAL:O	48:B0:7:VAL:HG12	1.67	0.94
46:B2:47:LYS:O	46:B2:48:GLU:O	1.84	0.94
26:BA:1032:A:OP1	54:B9:8:LYS:CG	2.15	0.94
26:BA:125:G:C3'	52:B7:19:ARG:NH1	2.30	0.94
27:BD:130:PRO:N	27:BD:188:ARG:HG2	1.83	0.94
28:BE:216:ARG:HH21	28:BE:255:GLN:HA	1.33	0.94
29:BF:59:GLU:HB2	29:BF:61:PHE:HE2	0.81	0.94
30:BG:74:THR:O	30:BG:75:LEU:HG	1.68	0.94
31:BH:40:MET:CG	31:BH:64:HIS:CE1	2.51	0.94
32:BI:68:LEU:HD22	32:BI:108:LEU:HD13	1.47	0.94
34:BO:35:ILE:CD1	34:BO:65:THR:HG21	1.95	0.94
35:BP:73:VAL:HG13	35:BP:76:LEU:CD2	1.97	0.94
36:BQ:58:HIS:C	36:BQ:61:LEU:HG	1.87	0.94
36:BQ:65:ARG:O	36:BQ:68:ALA:CB	2.15	0.94
40:BX:25:GLN:HE22	40:BX:65:VAL:HG13	1.32	0.94
41:BY:73:HIS:CA	41:BY:91:LEU:CG	2.33	0.94
42:BZ:130:ILE:CD1	42:BZ:130:ILE:O	2.15	0.94
42:BZ:37:LYS:O	42:BZ:41:ARG:CZ	2.14	0.94
1:AA:1340:A:C2'	2:AV:31:A:O2'	2.16	0.93
47:B3:20:LYS:HD3	47:B3:23:LEU:HD12	1.50	0.93
49:B4:7:PRO:O	49:B4:8:LYS:HB2	1.68	0.93
51:B6:14:SER:CB	51:B6:51:ARG:O	2.16	0.93
26:BA:684:G:OP1	52:B7:16:HIS:CE1	2.21	0.93
26:BA:2313:C:H5''	30:BG:51:ARG:HH11	1.31	0.93
26:BA:2415:G:H21	26:BA:2416:C:C1'	1.81	0.93
26:BA:2258:C:N4	26:BA:2426:A:O4'	1.93	0.93
26:BA:2468:G:C8	26:BA:2476:A:N1	2.35	0.93
26:BA:1783:A:N1	26:BA:2587:A:C2	2.35	0.93
26:BA:2605:U:O2	26:BA:2606:C:H5	1.51	0.93
26:BA:2717:G:N1	26:BA:2718:G:N7	2.15	0.93
26:BA:2745:C:H1'	31:BH:142:GLU:OE2	1.64	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2043:C:H5	26:BA:2777:G:H1'	0.95	0.93
26:BA:911:A:N9	36:BQ:16:ARG:HD2	1.82	0.93
25:BB:104:A:H1'	42:BZ:24:TYR:CZ	2.03	0.93
27:BD:138:THR:O	27:BD:162:GLN:HA	1.68	0.93
28:BE:80:ALA:HB2	28:BE:187:HIS:CD2	2.03	0.93
32:BI:5:PHE:O	32:BI:36:ALA:HB1	1.67	0.93
55:BK:106:GLU:O	55:BK:110:LYS:CE	2.16	0.93
26:BA:2684:U:C5'	34:BO:76:TYR:OH	2.07	0.93
35:BP:69:ILE:O	35:BP:71:GLU:N	2.01	0.93
40:BX:6:LYS:CE	40:BX:29:ASP:N	2.31	0.93
26:BA:138:G:H8	40:BX:42:GLU:OE1	1.50	0.93
41:BY:101:LEU:CD1	41:BY:112:LEU:CG	2.41	0.93
41:BY:17:HIS:O	41:BY:20:HIS:HB3	1.68	0.93
7:AD:22:LYS:C	7:AD:113:SER:HB2	1.86	0.93
26:BA:2023:G:H5''	26:BA:2617:C:HO2'	1.32	0.93
26:BA:2392:A:N7	26:BA:2393:A:C5	2.36	0.93
26:BA:2554:U:C6	26:BA:2554:U:C3'	2.44	0.93
26:BA:2762:G:C8	26:BA:2763:G:N7	2.36	0.93
26:BA:2880:C:H2'	26:BA:2881:C:H5'	0.96	0.93
26:BA:494:G:H4'	39:BW:6:ILE:HG22	1.46	0.93
28:BE:197:GLU:O	28:BE:268:LEU:N	2.01	0.93
29:BF:115:LEU:HG	29:BF:246:ARG:HH22	1.15	0.93
30:BG:82:GLU:O	30:BG:85:GLN:CD	2.07	0.93
31:BH:30:GLY:HA3	31:BH:78:VAL:O	1.68	0.93
33:BN:50:GLU:CA	33:BN:53:ILE:HG21	1.95	0.93
37:BS:41:LYS:C	37:BS:41:LYS:CD	2.32	0.93
39:BW:13:SER:O	39:BW:17:VAL:HG23	1.66	0.93
42:BZ:91:PRO:HB2	42:BZ:127:PRO:CA	1.98	0.93
1:AA:889:A:H4'	1:AA:890:G:H4'	1.44	0.93
1:AA:1014:A:C2	22:AS:34:TRP:CE3	2.56	0.93
3:AW:75:C:N4	49:B4:28:ARG:HB2	1.83	0.93
52:B7:20:ALA:O	52:B7:21:ARG:C	2.06	0.93
26:BA:1603:A:H2'	26:BA:1604:C:C6	2.02	0.93
26:BA:2048:G:N1	26:BA:2620:C:N4	2.16	0.93
26:BA:2195:C:O5'	26:BA:2195:C:C6	2.21	0.93
26:BA:2210:G:C6	27:BD:148:GLY:CA	2.51	0.93
26:BA:963:U:C2'	26:BA:2250:G:H21	1.82	0.93
26:BA:2320:A:H1'	26:BA:2333:A:N6	1.83	0.93
26:BA:2333:A:C1'	26:BA:2335:A:C2	2.50	0.93
26:BA:2592:G:C5	26:BA:2593:U:C6	2.56	0.93
26:BA:2781:A:H5''	26:BA:2782:G:H5'	1.47	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:831:G:H3'	26:BA:944:G:H22	1.31	0.93
27:BD:174:ARG:HG2	27:BD:174:ARG:NH1	1.77	0.93
30:BG:14:ARG:HA	30:BG:137:PRO:HD3	1.49	0.93
32:BI:103:GLN:HE21	32:BI:109:LYS:CA	1.81	0.93
33:BN:15:ARG:CB	33:BN:43:ARG:CD	2.36	0.93
35:BP:75:LEU:O	35:BP:75:LEU:CD2	2.16	0.93
36:BQ:56:ILE:CG1	36:BQ:113:ALA:O	2.16	0.93
36:BQ:127:ASN:CB	36:BQ:128:PRO:HD3	1.97	0.93
36:BQ:49:VAL:HG12	36:BQ:50:VAL:N	1.84	0.93
44:BU:107:LYS:O	44:BU:108:ALA:O	1.86	0.93
41:BY:23:VAL:CG2	41:BY:67:LEU:HD21	1.98	0.93
46:B2:59:ILE:HG23	46:B2:60:GLN:H	1.32	0.93
26:BA:1181:C:HO2'	26:BA:1182:A:H8	1.08	0.93
26:BA:1799:G:N2	27:BD:153:LEU:HG	1.80	0.93
26:BA:2098:U:H3	26:BA:2191:G:H1	1.06	0.93
26:BA:2328:A:C6	26:BA:2329:G:O6	2.21	0.93
26:BA:2348:U:H3'	53:B8:42:ARG:CZ	1.98	0.93
26:BA:2523:G:N2	26:BA:2541:A:N3	2.16	0.93
26:BA:2640:G:H1	26:BA:2774:C:N4	1.65	0.93
26:BA:2842:G:C2	26:BA:2876:G:C2	2.56	0.93
27:BD:110:LYS:CA	27:BD:110:LYS:HZ3	1.79	0.93
27:BD:196:ASN:HA	27:BD:199:ARG:HD3	1.48	0.93
28:BE:180:ILE:HG21	28:BE:187:HIS:HB3	1.46	0.93
28:BE:71:THR:HG21	28:BE:299:SER:CA	1.97	0.93
33:BN:87:LEU:HB3	33:BN:88:PRO:CD	1.97	0.93
33:BN:95:ARG:HA	33:BN:98:PHE:CD1	2.03	0.93
40:BX:28:VAL:O	40:BX:30:ASP:N	2.01	0.93
53:B8:36:LYS:CE	53:B8:40:GLU:OE1	2.16	0.93
54:B9:10:MET:HB2	54:B9:32:HIS:HD2	1.32	0.93
26:BA:2546:U:O4'	26:BA:2565:A:C2	2.22	0.93
26:BA:712(A):A:H5'	26:BA:2714:G:OP2	1.67	0.93
26:BA:1526:G:N2	26:BA:545(A):A:C8	2.31	0.93
26:BA:806:C:O2'	26:BA:2445:G:C4'	2.15	0.93
25:BB:12:C:N3	37:BS:10:MET:CE	2.31	0.93
28:BE:210:THR:HG22	28:BE:255:GLN:CG	1.97	0.93
28:BE:271:ILE:HG12	28:BE:294:THR:HA	1.46	0.93
32:BI:68:LEU:CB	32:BI:72:LEU:HD11	1.96	0.93
33:BN:21:ARG:HA	33:BN:24:SER:HB3	1.48	0.93
35:BP:68:GLU:O	35:BP:71:GLU:HG3	1.68	0.93
26:BA:911:A:H2'	36:BQ:16:ARG:NE	1.82	0.93
37:BS:16:ALA:O	37:BS:17:ARG:HB3	1.68	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:14:VAL:CG1	45:BV:15:SER:H	1.81	0.93
45:BV:20:ILE:O	45:BV:21:ARG:NH2	2.00	0.93
45:BV:42:GLY:CA	45:BV:54:TYR:CE2	2.42	0.93
41:BY:31:LEU:CD1	41:BY:101:LEU:HB2	1.99	0.93
2:AV:57:G:O4'	30:BG:56:ARG:NH1	2.02	0.93
48:B0:37:LEU:HD12	48:B0:70:ILE:HD13	1.48	0.93
48:B0:45:PHE:CG	48:B0:78:PHE:HA	2.02	0.93
26:BA:1078:U:C2	26:BA:1088:A:H1'	2.04	0.93
26:BA:1907:G:H1	26:BA:1923:U:H3	0.98	0.93
26:BA:2292:C:C4	26:BA:2293:C:C5	2.56	0.93
26:BA:2604:U:O2	26:BA:2605:U:C6	2.21	0.93
26:BA:2845:G:HO2'	26:BA:2846:G:H5'	1.31	0.93
26:BA:2836:U:O2	26:BA:2883:A:C6	2.20	0.93
26:BA:919:G:N2	26:BA:2268:A:H5''	1.82	0.93
28:BE:269:ILE:CD1	28:BE:269:ILE:H	1.77	0.93
26:BA:674:G:H5''	29:BF:69:HIS:HA	1.50	0.93
30:BG:142:ALA:HB2	30:BG:151:ILE:HG12	1.51	0.93
55:BK:18:ALA:O	55:BK:19:THR:HG23	0.77	0.93
33:BN:61:VAL:HG22	33:BN:139:LEU:HB2	1.47	0.93
35:BP:65:ASP:HB3	35:BP:109:LEU:HB2	1.49	0.93
36:BQ:87:LYS:C	36:BQ:88:PHE:CG	2.37	0.93
26:BA:2378:A:C4	37:BS:26:LEU:HD21	2.04	0.93
44:BU:117:ARG:HD3	44:BU:118:GLN:CG	1.97	0.93
39:BW:10:VAL:HB	39:BW:101:SER:O	1.68	0.93
39:BW:39:THR:HA	50:B5:28:PRO:HG3	1.50	0.93
40:BX:33:SER:C	40:BX:37:VAL:CG2	2.37	0.93
40:BX:55:GLN:C	40:BX:56:ASN:HD22	1.69	0.93
1:AA:1405:G:N2	1:AA:1518:A:N3	2.17	0.93
7:AD:78:LEU:HD21	7:AD:139:ARG:HH21	1.33	0.93
2:AV:31:A:H5'	12:AI:127:LYS:CB	1.99	0.93
46:B2:8:ILE:O	46:B2:11:MET:HG2	1.69	0.93
47:B3:1:MET:CE	47:B3:3:ARG:CD	2.46	0.93
3:AW:75:C:N4	49:B4:28:ARG:CB	2.31	0.93
26:BA:388:G:OP2	49:B4:29:PRO:HG3	1.66	0.93
52:B7:34:ARG:HH11	52:B7:42:LEU:CD2	1.79	0.93
53:B8:55:TRP:CE3	53:B8:59:LYS:CE	2.48	0.93
26:BA:2209:C:H2'	26:BA:2210:G:H3'	0.93	0.93
26:BA:2520:C:C2	26:BA:2521:C:C5	2.56	0.93
26:BA:2526:G:C5	26:BA:2527:C:H5	1.85	0.93
26:BA:1782:C:N3	26:BA:2609:U:C6	2.36	0.93
28:BE:271:ILE:HG23	28:BE:293:TYR:O	1.67	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:196:THR:C	29:BF:236:THR:OG1	2.07	0.93
32:BI:28:ASN:O	32:BI:32:LYS:HB2	1.65	0.93
32:BI:98:ILE:HG22	32:BI:99:ALA:H	1.24	0.93
55:BK:42:PHE:HZ	55:BK:58:ILE:CD1	1.81	0.93
34:BO:99:PHE:O	34:BO:119:PRO:CG	2.16	0.93
36:BQ:49:VAL:HG21	36:BQ:120:HIS:HA	1.50	0.93
38:BT:38:ASN:OD1	38:BT:39:ASN:N	2.02	0.93
45:BV:4:ILE:HD11	45:BV:13:ARG:HD3	1.51	0.93
40:BX:76:GLU:OE1	40:BX:77:VAL:N	2.01	0.93
41:BY:70:ALA:O	41:BY:93:THR:HG21	1.68	0.93
7:AD:23:GLY:O	7:AD:112:VAL:O	1.86	0.93
48:B0:43:THR:HG21	48:B0:75:GLY:H	1.30	0.93
49:B4:7:PRO:CG	49:B4:56:VAL:HG11	1.99	0.93
50:B5:12:SER:HB3	50:B5:15:LYS:HZ2	1.28	0.93
39:BW:19:LEU:CG	50:B5:25:LEU:HG	1.97	0.93
51:B6:12:MET:HE3	51:B6:54:LYS:H	1.33	0.93
26:BA:1139:G:OP1	33:BN:46:ILE:HG23	1.68	0.93
26:BA:1819:A:OP1	27:BD:155:ARG:N	2.00	0.93
26:BA:2330:G:H2'	26:BA:2331:G:H5'	1.48	0.93
26:BA:2357:U:O2'	26:BA:2358:G:C5'	2.16	0.93
26:BA:2542:A:O2'	26:BA:2543:G:C8	2.20	0.93
26:BA:2574:G:C2'	26:BA:2575:C:C6	2.52	0.93
26:BA:2652:C:H2'	26:BA:2653:U:H6	1.32	0.93
26:BA:2661:G:N3	26:BA:2662:A:N7	2.17	0.93
26:BA:2741:A:HO2'	26:BA:2742:C:H5'	1.30	0.93
26:BA:565:C:O2'	26:BA:1253:A:C2	2.22	0.93
27:BD:143:ILE:HG12	27:BD:153:LEU:HB3	1.51	0.93
28:BE:221:LYS:NZ	28:BE:233:ARG:CG	2.32	0.93
29:BF:111:VAL:O	29:BF:112:ARG:O	1.86	0.93
32:BI:68:LEU:HB3	32:BI:72:LEU:CD1	1.99	0.93
55:BK:71:LYS:C	55:BK:72:THR:N	2.22	0.93
33:BN:25:GLN:HA	33:BN:28:GLU:HG3	1.49	0.93
34:BO:68:GLY:HA2	34:BO:78:ARG:HG2	1.50	0.93
36:BQ:41:THR:O	36:BQ:125:TRP:CZ3	2.21	0.93
38:BT:21:PHE:O	38:BT:22:VAL:CG1	2.17	0.93
39:BW:11:ARG:O	39:BW:12:ILE:CG1	2.16	0.93
39:BW:84:ARG:HB3	39:BW:96:ILE:CD1	1.99	0.93
41:BY:31:LEU:O	41:BY:32:ARG:O	1.86	0.93
42:BZ:142:ASN:H	42:BZ:171:VAL:CG2	1.82	0.93
42:BZ:141:MET:CA	42:BZ:171:VAL:HG11	1.97	0.93
1:AA:1268:A:C4'	24:AU:20:LYS:CB	2.41	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AW:65:G:N1	3:AW:66:A:N9	2.17	0.93
46:B2:2:VAL:H	46:B2:4:HIS:HE1	0.96	0.93
26:BA:2246:G:N9	26:BA:2426:A:C2	2.35	0.93
26:BA:2455:G:H2'	26:BA:2456:C:H5'	1.51	0.93
26:BA:2881:C:H2'	26:BA:2882:A:H8	1.32	0.93
28:BE:269:ILE:HD11	28:BE:296:VAL:CA	1.99	0.93
28:BE:45:LYS:NZ	28:BE:302:GLY:C	2.20	0.93
29:BF:164:ALA:HA	29:BF:232:LEU:CD1	1.97	0.93
32:BI:5:PHE:HB3	32:BI:17:GLU:O	1.69	0.93
55:BK:121:LEU:HD22	55:BK:125:MET:CE	1.99	0.93
33:BN:88:PRO:HB2	33:BN:90:LYS:N	1.84	0.93
36:BQ:137:ARG:HD3	36:BQ:138:ARG:N	1.83	0.93
36:BQ:65:ARG:HH21	36:BQ:85:ILE:HB	1.24	0.93
42:BZ:103:ARG:HD3	42:BZ:103:ARG:H	1.34	0.93
42:BZ:35:ASP:N	42:BZ:39:PHE:CZ	2.36	0.93
42:BZ:34:LEU:CD1	42:BZ:39:PHE:HZ	1.81	0.93
42:BZ:71:MET:CG	42:BZ:78:PRO:CD	1.89	0.93
1:AA:1308:U:H5'	16:AM:110:ARG:NH2	1.82	0.93
1:AA:509:A:H8	7:AD:54:TYR:HE2	1.15	0.93
1:AA:978:A:O2'	22:AS:37:ARG:NH2	2.02	0.93
1:AA:1268:A:O2'	24:AU:20:LYS:N	2.02	0.93
3:AW:9:A:C2	3:AW:45:G:C4	2.56	0.93
51:B6:2:ALA:CB	51:B6:11:LYS:NZ	2.31	0.93
26:BA:126:A:C5	52:B7:18:PHE:CZ	2.54	0.93
26:BA:1818:U:H5''	27:BD:155:ARG:CB	1.97	0.93
26:BA:2584:U:H6	26:BA:2585:U:C6	1.84	0.93
26:BA:2597:G:C6	26:BA:2598:A:N6	2.36	0.93
26:BA:2689:U:H4'	26:BA:2690:C:H5'	1.48	0.93
26:BA:2893:G:O3'	26:BA:2894:G:C4'	2.16	0.93
26:BA:451:C:OP1	29:BF:49:ASP:N	2.01	0.93
26:BA:605:C:H3'	29:BF:105:LYS:HE2	1.51	0.93
26:BA:994:C:C5	45:BV:72:ARG:NH1	2.08	0.93
28:BE:177:ALA:O	28:BE:179:ASP:N	2.00	0.93
29:BF:34:ALA:HB2	29:BF:110:ALA:HB2	1.48	0.93
29:BF:225:PRO:O	29:BF:231:ARG:HG3	1.68	0.93
55:BK:66:PHE:C	55:BK:67:THR:HG23	1.88	0.93
33:BN:78:ILE:O	33:BN:82:THR:CG2	2.17	0.93
36:BQ:94:ARG:NE	36:BQ:106:GLY:HA3	1.84	0.93
36:BQ:145:PRO:C	36:BQ:146:THR:HG1	1.71	0.93
39:BW:23:LEU:HD22	39:BW:24:ILE:N	1.84	0.93
41:BY:78:THR:C	41:BY:89:ARG:CG	2.34	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:62:PHE:CD2	42:BZ:87:THR:CG2	2.51	0.93
1:AA:116:A:N6	1:AA:313:A:H1'	1.84	0.92
1:AA:1353:G:OP1	24:AU:10:ARG:CZ	2.16	0.92
13:AJ:46:ARG:NH1	17:AN:59:ALA:HB1	1.84	0.92
52:B7:18:PHE:H	52:B7:44:VAL:HG21	1.17	0.92
26:BA:1646:C:H5''	26:BA:1647:G:H5'	1.48	0.92
26:BA:2330:G:O2'	48:B0:71:ASN:OD1	1.86	0.92
26:BA:2431:U:H2'	26:BA:2432:A:H3'	1.50	0.92
26:BA:2448:A:OP2	26:BA:2498:C:OP1	1.86	0.92
26:BA:2623:G:N2	26:BA:2624:G:C1'	2.31	0.92
26:BA:2653:U:H3'	26:BA:2654:A:H8	1.16	0.92
26:BA:2748:A:H8	26:BA:2749:A:C4	1.84	0.92
26:BA:2804:C:C6	26:BA:2805:G:N1	2.37	0.92
26:BA:2819:G:N3	26:BA:2821:A:C8	2.36	0.92
26:BA:2842:G:O2'	26:BA:2843:G:H5'	1.66	0.92
26:BA:2852:G:H1	26:BA:2865:U:H3	0.97	0.92
26:BA:919:G:H21	26:BA:2268:A:C5'	1.81	0.92
28:BE:218:GLY:O	28:BE:219:VAL:HG23	1.68	0.92
28:BE:67:THR:O	28:BE:68:VAL:HG23	1.69	0.92
26:BA:673:C:C1'	29:BF:82:GLN:OE1	2.17	0.92
31:BH:14:VAL:O	31:BH:14:VAL:HG12	1.67	0.92
35:BP:130:ARG:O	35:BP:133:VAL:HB	1.69	0.92
37:BS:81:ALA:HB3	37:BS:117:ALA:HB1	1.49	0.92
45:BV:40:VAL:CG1	45:BV:51:ALA:O	2.16	0.92
39:BW:32:ALA:HB2	39:BW:35:ILE:HD12	1.49	0.92
40:BX:56:ASN:N	40:BX:56:ASN:ND2	2.11	0.92
41:BY:74:VAL:HG12	41:BY:74:VAL:O	1.65	0.92
1:AA:983:A:H5'	1:AA:984:C:OP2	1.68	0.92
1:AA:1327:C:H5''	24:AU:20:LYS:HE2	1.47	0.92
26:BA:380:U:HO2'	49:B4:15:ILE:HB	1.26	0.92
26:BA:1612:C:H2'	52:B7:3:ARG:HE	1.25	0.92
26:BA:2262:U:HO2'	26:BA:2263:C:H5''	1.19	0.92
26:BA:2322:A:OP1	26:BA:2322:A:O4'	1.87	0.92
26:BA:2555:U:H2'	26:BA:2556:C:H5'	0.94	0.92
26:BA:2628:C:O2	26:BA:2781:A:O2'	1.86	0.92
26:BA:2689:U:C6	26:BA:2713:A:N1	2.36	0.92
26:BA:2734:A:N6	26:BA:2735:G:C2	2.33	0.92
26:BA:34:C:H2'	26:BA:455:C:H41	1.31	0.92
26:BA:747:U:OP2	50:B5:2:ALA:N	2.02	0.92
27:BD:158:GLY:HA2	27:BD:194:VAL:CB	1.97	0.92
28:BE:222:ARG:HD2	28:BE:222:ARG:H	1.33	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:233:ARG:C	28:BE:234:ARG:HG3	1.87	0.92
28:BE:79:ARG:NH1	28:BE:104:PHE:CA	2.32	0.92
31:BH:85:ALA:HA	31:BH:131:ILE:HG21	0.94	0.92
31:BH:91:VAL:O	31:BH:91:VAL:HG12	1.67	0.92
32:BI:132:LYS:HA	32:BI:138:THR:CG2	1.99	0.92
32:BI:13:GLY:HA2	32:BI:15:LYS:NZ	1.84	0.92
35:BP:114:VAL:C	35:BP:115:ARG:HG3	1.89	0.92
26:BA:2406:U:H1'	35:BP:57:VAL:CG2	1.99	0.92
44:BU:69:ALA:HA	44:BU:79:PHE:CZ	2.04	0.92
40:BX:8:PRO:O	40:BX:10:VAL:HG23	1.69	0.92
40:BX:2:TRP:O	40:BX:3:ASP:O	1.87	0.92
1:AA:901:A:O2'	1:AA:1513:A:OP1	1.87	0.92
1:AA:1325:C:O5'	24:AU:15:ARG:NH2	2.00	0.92
2:AV:31:A:H5'	12:AI:127:LYS:CD	1.91	0.92
48:B0:37:LEU:HG	48:B0:68:VAL:CG1	1.98	0.92
48:B0:65:GLY:CA	48:B0:66:LYS:HD2	2.00	0.92
47:B3:43:ILE:N	47:B3:43:ILE:HD12	1.84	0.92
51:B6:16:ALA:O	51:B6:48:VAL:HG11	1.68	0.92
26:BA:2207:C:N3	26:BA:2218:G:N1	2.16	0.92
26:BA:223:A:H3'	26:BA:224:G:P	2.08	0.92
26:BA:2414:G:C2	26:BA:2415:G:N7	2.37	0.92
26:BA:2638:G:O2'	26:BA:2639:A:C8	2.21	0.92
26:BA:2852:G:N2	26:BA:2853:C:O2	2.03	0.92
27:BD:135:PRO:CG	27:BD:138:THR:CG2	2.28	0.92
27:BD:74:PRO:HA	27:BD:116:MET:CE	1.99	0.92
28:BE:76:PRO:HB2	28:BE:77:PRO:HD3	0.92	0.92
30:BG:18:ILE:HG22	30:BG:19:GLU:N	1.81	0.92
31:BH:96:SER:HA	31:BH:124:VAL:HG21	1.50	0.92
34:BO:10:VAL:HG13	34:BO:12:ASP:OD1	1.70	0.92
35:BP:109:LEU:HD13	35:BP:110:GLY:N	1.85	0.92
43:BR:38:VAL:HB	43:BR:39:PRO:CD	1.93	0.92
43:BR:63:ARG:HH21	43:BR:77:ARG:HG2	1.20	0.92
40:BX:25:GLN:C	40:BX:26:PHE:CD1	2.43	0.92
41:BY:35:TYR:HH	41:BY:113:GLU:HG3	1.15	0.92
42:BZ:91:PRO:HD2	42:BZ:127:PRO:CB	1.97	0.92
42:BZ:69:VAL:HG12	42:BZ:70:GLN:N	1.84	0.92
1:AA:876:G:C1'	11:AH:11:THR:HG21	1.98	0.92
2:AV:25:C:C4'	26:BA:1923:U:OP2	2.17	0.92
47:B3:40:THR:HG21	47:B3:43:ILE:CG1	1.98	0.92
49:B4:46:GLU:OE1	49:B4:54:GLY:CA	2.15	0.92
52:B7:8:ASN:HB2	52:B7:11:LYS:CB	1.98	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:34:ARG:O	52:B7:35:ARG:O	1.85	0.92
26:BA:592:G:H21	53:B8:3:LYS:HE2	1.31	0.92
26:BA:1301:A:HO2'	26:BA:1302:A:H8	0.95	0.92
26:BA:131:G:N2	26:BA:149:A:N1	2.17	0.92
26:BA:2228:G:H8	26:BA:2228:G:H5''	1.29	0.92
26:BA:965:C:O4'	26:BA:2273:A:N3	2.02	0.92
26:BA:2469:A:H61	26:BA:2481:G:H1'	1.34	0.92
26:BA:2552:U:C2	26:BA:2554:U:C5'	2.53	0.92
26:BA:2572:A:OP2	28:BE:242:ASN:N	2.01	0.92
26:BA:2717:G:C5'	26:BA:2717:G:C8	2.43	0.92
26:BA:2822:G:OP1	28:BE:207:GLY:C	2.08	0.92
28:BE:206:LYS:O	28:BE:208:LYS:N	2.02	0.92
29:BF:163:HIS:CB	29:BF:166:ILE:HD12	1.98	0.92
30:BG:14:ARG:HA	30:BG:137:PRO:CD	1.99	0.92
31:BH:108:TYR:O	31:BH:109:SER:HB3	1.68	0.92
31:BH:86:LEU:N	31:BH:131:ILE:HG22	1.82	0.92
33:BN:106:GLY:C	33:BN:107:ASN:HD22	1.67	0.92
33:BN:87:LEU:HB3	33:BN:88:PRO:HD2	1.51	0.92
26:BA:557:U:C5'	33:BN:92:GLN:NE2	2.31	0.92
36:BQ:41:THR:HG21	36:BQ:126:VAL:CA	1.98	0.92
44:BU:39:LEU:O	44:BU:41:ASN:N	2.03	0.92
40:BX:47:VAL:HB	40:BX:69:SER:HB2	1.50	0.92
42:BZ:26:LYS:O	42:BZ:27:GLU:HG3	1.66	0.92
42:BZ:67:LYS:HZ1	42:BZ:67:LYS:CA	1.79	0.92
42:BZ:79:ILE:O	42:BZ:80:HIS:ND1	2.02	0.92
1:AA:116:A:N1	1:AA:313:A:O2'	2.03	0.92
1:AA:407:G:H4'	7:AD:115:ARG:HB3	1.51	0.92
47:B3:50:VAL:HB	47:B3:53:LEU:HD12	1.49	0.92
50:B5:45:ILE:N	50:B5:52:TYR:CE1	2.37	0.92
52:B7:30:ILE:CG1	52:B7:33:ARG:CD	2.47	0.92
26:BA:1152:C:H5''	44:BU:80:ILE:CG2	1.99	0.92
26:BA:2333:A:C8	26:BA:2335:A:H2	1.81	0.92
26:BA:2373:G:C2	26:BA:2374:C:C4	2.58	0.92
26:BA:2445:G:H2'	26:BA:2446:G:H5'	1.51	0.92
26:BA:2603:G:C6	26:BA:2604:U:C5	2.58	0.92
26:BA:2737:G:H2'	26:BA:2738:A:H8	1.33	0.92
26:BA:2790:A:C5'	26:BA:2791:C:OP1	2.17	0.92
26:BA:2862:G:H2'	26:BA:2863:C:C6	2.03	0.92
29:BF:102:LEU:CB	29:BF:107:ARG:NE	2.33	0.92
29:BF:147:LEU:HD12	29:BF:156:LEU:HD11	0.93	0.92
31:BH:53:ARG:HH11	31:BH:56:ASP:HA	0.78	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:45:VAL:C	33:BN:46:ILE:CG1	2.36	0.92
35:BP:67:ARG:CZ	35:BP:111:ALA:O	2.16	0.92
45:BV:60:VAL:C	45:BV:98:ILE:HB	1.90	0.92
40:BX:18:MET:HE1	40:BX:25:GLN:HB2	1.49	0.92
2:AV:31:A:H5'	12:AI:127:LYS:HD2	1.41	0.92
26:BA:2385:C:O2'	48:B0:39:ARG:NH2	2.02	0.92
53:B8:16:ILE:CB	53:B8:22:VAL:HG22	1.99	0.92
54:B9:4:ARG:CA	54:B9:36:GLN:HA	2.00	0.92
26:BA:2287:A:H62	26:BA:2344:U:H5	1.12	0.92
26:BA:2354:G:N2	48:B0:32:LYS:CE	2.29	0.92
26:BA:2631:G:C6	26:BA:2632:A:C8	2.57	0.92
26:BA:2825:C:H2'	26:BA:2826:A:O4'	1.70	0.92
26:BA:963:U:H1'	26:BA:2250:G:H21	1.26	0.92
26:BA:2210:G:C5	27:BD:148:GLY:HA3	2.04	0.92
44:BU:28:ARG:H	44:BU:31:GLN:CD	1.70	0.92
44:BU:76:TYR:O	44:BU:80:ILE:CG1	2.18	0.92
41:BY:30:ASP:O	41:BY:34:GLU:HG3	1.58	0.92
41:BY:57:GLY:HA2	41:BY:97:ARG:HH22	1.31	0.92
26:BA:2216:G:C2'	26:BA:2217:G:C5'	2.45	0.92
26:BA:2488:A:O2'	26:BA:2489:G:H5'	1.70	0.92
26:BA:2552:U:N3	26:BA:2554:U:H5'	1.84	0.92
26:BA:598:G:H21	29:BF:33:LYS:HZ1	1.13	0.92
25:BB:28:C:OP1	37:BS:44:ARG:NH2	2.03	0.92
27:BD:106:PRO:HA	27:BD:194:VAL:O	1.67	0.92
28:BE:107:GLU:O	28:BE:110:ARG:HG3	1.70	0.92
28:BE:190:ASN:O	28:BE:192:ILE:CA	2.18	0.92
28:BE:200:ASP:HA	28:BE:266:LYS:CD	2.00	0.92
32:BI:13:GLY:C	32:BI:15:LYS:HD2	1.90	0.92
32:BI:68:LEU:HD21	32:BI:108:LEU:HD11	1.49	0.92
32:BI:7:LYS:HG3	32:BI:12:LYS:HG2	1.00	0.92
35:BP:68:GLU:O	35:BP:71:GLU:CG	2.17	0.92
44:BU:13:ARG:HB2	44:BU:13:ARG:HH12	1.27	0.92
44:BU:44:THR:HA	44:BU:47:TYR:HD1	1.34	0.92
26:BA:1151:G:C3'	44:BU:81:ASN:HD21	1.83	0.92
45:BV:74:TYR:CE1	45:BV:87:ARG:C	2.43	0.92
39:BW:8:ARG:O	39:BW:10:VAL:CG2	2.17	0.92
42:BZ:149:ALA:HB3	42:BZ:165:GLU:N	1.82	0.92
1:AA:542:G:OP1	7:AD:41:GLY:HA2	1.70	0.92
46:B2:59:ILE:HG12	46:B2:60:GLN:N	1.84	0.92
50:B5:51:TYR:O	50:B5:52:TYR:HB2	1.66	0.92
52:B7:22:MET:O	52:B7:24:THR:N	2.03	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:43:THR:CA	52:B7:46:ASP:OD1	2.17	0.92
26:BA:1140:C:C5	33:BN:49:ARG:CD	2.52	0.92
26:BA:1462:C:H4'	26:BA:2703:C:H5'	1.51	0.92
26:BA:1603:A:H2'	26:BA:1604:C:H6	1.30	0.92
26:BA:2410:G:H2'	26:BA:2411:A:N7	1.84	0.92
27:BD:129:LEU:HD23	27:BD:130:PRO:HD3	1.48	0.92
26:BA:1568:G:C4'	27:BD:60:GLN:NE2	2.16	0.92
27:BD:70:LYS:HG3	27:BD:73:ILE:HD13	1.48	0.92
28:BE:45:LYS:NZ	28:BE:303:PRO:C	2.23	0.92
29:BF:32:GLY:CA	29:BF:35:VAL:HG23	1.98	0.92
30:BG:49:PRO:HD3	30:BG:73:VAL:HG22	1.51	0.92
31:BH:74:MET:O	31:BH:78:VAL:HG23	1.68	0.92
55:BK:121:LEU:HB3	55:BK:125:MET:HE3	1.52	0.92
26:BA:1062:G:C2	55:BK:134:SER:OG	2.23	0.92
55:BK:11:LEU:CD1	55:BK:28:LEU:HD11	1.99	0.92
33:BN:13:ASP:HA	33:BN:38:VAL:HG12	0.92	0.92
36:BQ:67:ALA:CB	36:BQ:70:ARG:CZ	2.36	0.92
37:BS:27:LEU:CA	37:BS:33:ARG:NH2	2.33	0.92
37:BS:81:ALA:HB1	37:BS:118:ILE:N	1.85	0.92
42:BZ:96:VAL:HG12	42:BZ:97:PRO:HD2	1.52	0.92
1:AA:1222:G:OP1	1:AA:1321:C:H2'	1.69	0.92
49:B4:41:PRO:HB2	49:B4:57:ASP:HB3	1.48	0.92
26:BA:2051:A:N1	26:BA:2618:G:O6	2.02	0.92
26:BA:2350:C:H2'	26:BA:2351:G:C8	2.04	0.92
26:BA:248:G:N2	26:BA:2431:U:C4'	2.33	0.92
26:BA:2251:G:C8	26:BA:2450:A:H4'	2.05	0.92
26:BA:2515:C:N4	26:BA:2569:G:N1	1.82	0.92
26:BA:2617:C:C2'	26:BA:2618:G:C5'	2.37	0.92
26:BA:2619:C:O2'	26:BA:2620:C:H5'	1.70	0.92
26:BA:2698:U:H2'	26:BA:2699:C:H6	1.30	0.92
26:BA:2711:A:OP2	26:BA:2714:G:P	2.28	0.92
26:BA:2759:G:C2'	26:BA:2760:C:O5'	2.17	0.92
26:BA:337:C:H3'	26:BA:338:G:C5'	1.98	0.92
26:BA:650:C:C5'	53:B8:19:THR:HG23	2.00	0.92
26:BA:2712:U:O2'	26:BA:712(A):A:H5"	1.66	0.92
27:BD:175:LEU:CG	27:BD:180:VAL:CA	2.45	0.92
30:BG:19:GLU:CD	30:BG:135:VAL:HG22	1.89	0.92
30:BG:53:LYS:HG2	30:BG:54:ALA:H	1.27	0.92
31:BH:102:LEU:CD2	31:BH:114:ILE:O	2.18	0.92
36:BQ:76:GLY:CA	36:BQ:132:VAL:HG11	2.00	0.92
44:BU:72:HIS:CE1	44:BU:110:VAL:HG21	2.04	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:71:VAL:HG12	39:BW:106:ILE:O	1.68	0.92
40:BX:24:LEU:HB3	40:BX:26:PHE:CZ	2.01	0.92
41:BY:79:LEU:CD1	41:BY:80:GLU:H	1.82	0.92
1:AA:404:U:C4	7:AD:2:GLY:CA	2.53	0.92
26:BA:2212:A:C2'	26:BA:2213:U:H5	1.62	0.92
26:BA:2378:A:O2'	37:BS:30:GLY:CA	2.17	0.92
26:BA:2384:G:H5''	26:BA:2386:C:P	2.09	0.92
26:BA:2400:G:O3'	51:B6:20:PHE:HZ	1.47	0.92
26:BA:2436:G:C6	26:BA:2437:U:C4	2.56	0.92
26:BA:2468:G:O2'	26:BA:2469:A:H8	1.51	0.92
26:BA:2833:G:OP1	26:BA:2833:G:H8	1.51	0.92
28:BE:99:VAL:O	28:BE:100:TRP:CD2	2.22	0.92
29:BF:111:VAL:HA	29:BF:220:THR:HG22	1.51	0.92
29:BF:24:THR:CB	29:BF:25:PRO:CD	2.46	0.92
30:BG:29:HIS:CE1	30:BG:64:ARG:HH12	1.85	0.92
32:BI:145:VAL:O	32:BI:146:THR:HG22	1.69	0.92
33:BN:136:SER:O	33:BN:137:GLU:C	2.08	0.92
33:BN:19:MET:CG	33:BN:46:ILE:CD1	2.47	0.92
34:BO:35:ILE:CD1	34:BO:65:THR:HG22	1.99	0.92
34:BO:98:ILE:CG2	34:BO:99:PHE:H	1.83	0.92
35:BP:116:HIS:HD2	35:BP:118:LEU:HD11	1.29	0.92
36:BQ:91:HIS:N	36:BQ:111:THR:CG2	2.33	0.92
36:BQ:85:ILE:HB	36:BQ:122:PHE:CD2	2.05	0.92
36:BQ:57:ARG:O	36:BQ:61:LEU:CG	2.17	0.92
2:AV:1:G:H4'	36:BQ:97:ASP:OD2	1.69	0.92
41:BY:55:PHE:HZ	41:BY:89:ARG:CZ	1.80	0.92
1:AA:1014:A:C4	22:AS:34:TRP:CE3	2.58	0.91
1:AA:1211:U:HO3'	1:AA:1212:U:P	1.27	0.91
1:AA:409:G:O3'	7:AD:25:ARG:HG3	1.69	0.91
26:BA:592:G:N2	53:B8:3:LYS:HE2	1.86	0.91
26:BA:965:C:C5'	26:BA:2273:A:H1'	2.01	0.91
26:BA:2317:C:C5	26:BA:2318:G:O6	2.23	0.91
26:BA:2424:C:H2'	26:BA:2424:C:O2	1.68	0.91
26:BA:2463:C:N3	26:BA:2464:C:H5	1.68	0.91
26:BA:2468:G:N2	26:BA:2481:G:H2'	1.83	0.91
26:BA:2446:G:N2	26:BA:2501:C:H41	1.67	0.91
26:BA:2546:U:O4'	26:BA:2565:A:H2	1.52	0.91
26:BA:2810:A:H2'	26:BA:2811:G:H5''	1.50	0.91
26:BA:2854:G:C2	26:BA:2864:G:C5	2.58	0.91
28:BE:199:ALA:HB1	28:BE:312:ARG:O	1.68	0.91
29:BF:115:LEU:CG	29:BF:246:ARG:NH2	2.28	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:14:ARG:HA	30:BG:137:PRO:HG3	1.49	0.91
30:BG:59:GLY:O	30:BG:60:GLU:CG	2.18	0.91
30:BG:88:LEU:O	30:BG:88:LEU:CD2	2.16	0.91
31:BH:95:ALA:O	31:BH:127:GLN:HA	1.70	0.91
55:BK:123:ALA:N	55:BK:126:LYS:HE3	1.85	0.91
34:BO:112:MET:O	34:BO:115:ILE:N	2.03	0.91
34:BO:78:ARG:C	34:BO:79:PHE:CD2	2.43	0.91
37:BS:36:ALA:HA	37:BS:45:ALA:HB2	1.52	0.91
44:BU:40:LEU:CD2	44:BU:40:LEU:H	1.83	0.91
26:BA:535:C:C4'	44:BU:53:LYS:HE3	1.75	0.91
26:BA:104:U:N3	41:BY:17:HIS:CE1	2.03	0.91
1:AA:1070:U:H5'	8:AE:18:ARG:HH12	1.35	0.91
26:BA:2386:C:C1'	48:B0:39:ARG:NH2	2.33	0.91
47:B3:9:VAL:HG22	47:B3:54:VAL:HA	1.49	0.91
54:B9:11:CYS:SG	54:B9:14:CYS:N	2.39	0.91
26:BA:2210:G:N7	27:BD:148:GLY:HA3	1.83	0.91
26:BA:2431:U:O2	26:BA:2433:A:OP2	1.87	0.91
26:BA:2494:G:N1	26:BA:2495:G:C5	2.39	0.91
26:BA:2785:C:C4'	28:BE:99:VAL:CA	2.15	0.91
27:BD:135:PRO:HG3	27:BD:138:THR:HG21	1.48	0.91
28:BE:45:LYS:CE	28:BE:303:PRO:O	2.17	0.91
28:BE:70:VAL:HG11	28:BE:296:VAL:CA	1.90	0.91
32:BI:59:ALA:O	32:BI:62:LEU:HB2	1.69	0.91
33:BN:80:LYS:O	33:BN:81:ARG:O	1.88	0.91
35:BP:132:LYS:O	35:BP:135:GLY:N	2.03	0.91
36:BQ:129:ASP:OD1	36:BQ:132:VAL:HG23	1.70	0.91
36:BQ:33:MET:HB3	36:BQ:83:PHE:CB	1.99	0.91
44:BU:7:GLY:CA	44:BU:8:ILE:HD12	2.00	0.91
45:BV:11:GLN:CD	45:BV:22:VAL:HG23	1.89	0.91
39:BW:90:ARG:CB	39:BW:90:ARG:CZ	2.45	0.91
1:AA:1193:G:O2'	8:AE:25:ARG:NH2	2.03	0.91
46:B2:4:HIS:O	46:B2:8:ILE:HD12	1.69	0.91
26:BA:75:G:C3'	46:B2:51:LYS:HZ3	1.83	0.91
52:B7:43:THR:CA	52:B7:46:ASP:OD2	2.17	0.91
26:BA:1140:C:H5	33:BN:49:ARG:CG	1.77	0.91
26:BA:126:A:P	52:B7:44:VAL:HG11	2.10	0.91
26:BA:1698:A:O2'	26:BA:1699:G:H3'	1.70	0.91
26:BA:2255:G:N2	26:BA:2256:G:H1'	1.85	0.91
26:BA:2316:C:C5'	30:BG:142:ALA:HB1	2.00	0.91
26:BA:199:A:C6	26:BA:2433:A:C8	2.56	0.91
26:BA:2474:C:H41	26:BA:2529:G:N2	1.68	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2606:C:H5''	26:BA:2606:C:H6	1.34	0.91
26:BA:2754:U:H2'	26:BA:2756:U:P	2.09	0.91
26:BA:2740:A:N1	26:BA:2764:A:N3	2.18	0.91
26:BA:2623:G:O2'	26:BA:2825:C:O2'	1.88	0.91
26:BA:2785:C:C5'	28:BE:99:VAL:CG2	2.46	0.91
32:BI:145:VAL:CG1	32:BI:146:THR:H	1.76	0.91
55:BK:117:ASN:OD1	55:BK:127:ILE:HD12	1.67	0.91
33:BN:94:GLY:O	33:BN:97:ALA:HB3	1.70	0.91
36:BQ:143:VAL:HG23	36:BQ:144:THR:H	1.35	0.91
36:BQ:12:PRO:HB2	36:BQ:20:ILE:CD1	1.99	0.91
36:BQ:50:VAL:HG12	36:BQ:52:LYS:H	1.34	0.91
39:BW:21:VAL:HG23	39:BW:22:ASP:H	1.36	0.91
26:BA:594:U:H5'	53:B8:58:MET:CE	2.00	0.91
26:BA:2185:C:C2	26:BA:2186:G:C8	2.59	0.91
26:BA:2341:G:C5	26:BA:2342:C:C4	2.58	0.91
26:BA:2414:G:C2	26:BA:2415:G:C8	2.58	0.91
26:BA:2246:G:C4	26:BA:2426:A:N3	2.38	0.91
26:BA:2620:C:O2'	26:BA:2621:A:H5''	1.71	0.91
26:BA:2641:G:C6	26:BA:2774:C:C4	2.58	0.91
28:BE:79:ARG:O	28:BE:187:HIS:HE1	1.37	0.91
28:BE:45:LYS:CE	28:BE:303:PRO:CG	2.33	0.91
35:BP:52:LYS:HD3	35:BP:53:ARG:HH11	1.16	0.91
37:BS:27:LEU:CB	37:BS:33:ARG:HH22	1.66	0.91
38:BT:44:ARG:HG3	38:BT:45:GLU:H	1.34	0.91
44:BU:25:TRP:O	44:BU:28:ARG:NH1	2.03	0.91
44:BU:20:ARG:HH12	45:BV:75:LYS:CE	1.82	0.91
40:BX:14:ALA:N	40:BX:17:ASP:OD2	2.02	0.91
40:BX:24:LEU:HB2	40:BX:26:PHE:CZ	2.03	0.91
41:BY:103:LEU:HD22	41:BY:112:LEU:CD2	2.00	0.91
41:BY:87:VAL:HG13	41:BY:88:PRO:CD	1.97	0.91
42:BZ:78:PRO:O	42:BZ:79:ILE:CG1	2.19	0.91
1:AA:1003:G:O3'	1:AA:3(A):G:P	2.29	0.91
1:AA:952:U:O2	16:AM:126:LYS:O	1.89	0.91
3:AW:37:YYG:O22	10:AG:84:ASN:C	2.09	0.91
47:B3:39:ASP:HA	47:B3:44:ARG:HH21	1.34	0.91
50:B5:33:CYS:CB	50:B5:37:HIS:N	2.33	0.91
51:B6:29:ARG:HG2	51:B6:30:ASN:H	1.33	0.91
26:BA:2290:G:C6	26:BA:2291:U:N3	2.38	0.91
26:BA:2311:A:OP2	26:BA:2311:A:O4'	1.88	0.91
26:BA:2353:G:O2'	48:B0:30:VAL:O	1.88	0.91
26:BA:2468:G:O2'	26:BA:2469:A:C5'	2.18	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2579:C:H6	26:BA:2579:C:C4'	1.84	0.91
26:BA:2589:A:C5	26:BA:2590:A:N7	2.39	0.91
26:BA:2737:G:N3	26:BA:2738:A:C8	2.38	0.91
26:BA:2887:U:C2	26:BA:2888:C:C5	2.58	0.91
26:BA:338:G:H5'	41:BY:24:ARG:NH1	1.85	0.91
27:BD:131:LEU:HD12	27:BD:184:LEU:O	1.71	0.91
28:BE:180:ILE:HB	28:BE:187:HIS:HB3	1.50	0.91
29:BF:33:LYS:CA	29:BF:36:ARG:HG3	2.00	0.91
31:BH:127:GLN:O	31:BH:130:ILE:HD11	1.70	0.91
35:BP:65:ASP:HB3	35:BP:109:LEU:HB3	0.94	0.91
26:BA:636:G:OP1	35:BP:127:GLU:CG	2.19	0.91
36:BQ:42:TYR:O	36:BQ:125:TRP:CH2	2.23	0.91
36:BQ:42:TYR:C	36:BQ:125:TRP:HH2	1.74	0.91
43:BR:36:THR:HG22	43:BR:40:LYS:CB	1.96	0.91
43:BR:79:LEU:C	43:BR:79:LEU:HD22	1.82	0.91
45:BV:57:GLN:CG	45:BV:58:ALA:H	1.82	0.91
26:BA:2013:A:H4'	39:BW:96:ILE:HG22	1.52	0.91
26:BA:104:U:C4	41:BY:17:HIS:HE1	1.89	0.91
42:BZ:100:THR:CG2	42:BZ:137:ASP:OD1	2.17	0.91
42:BZ:46:GLN:HB2	42:BZ:49:THR:OG1	1.69	0.91
1:AA:115:G:O3'	1:AA:116:A:P	2.29	0.91
1:AA:1255:G:H21	1:AA:1258:G:N2	1.67	0.91
3:AW:65:G:H2'	3:AW:66:A:C4'	1.99	0.91
47:B3:8:LEU:HD22	47:B3:31:LEU:C	1.91	0.91
26:BA:1364:G:H2'	49:B4:3:LYS:HZ2	0.77	0.91
54:B9:15:LYS:N	54:B9:26:ILE:O	2.01	0.91
26:BA:1140:C:H5	33:BN:49:ARG:HG3	1.02	0.91
26:BA:49:A:N6	26:BA:176:G:N1	2.19	0.91
26:BA:2309:A:C3'	26:BA:2310:A:H5'	2.01	0.91
26:BA:827:U:OP1	26:BA:2430:A:OP2	1.88	0.91
26:BA:2575:C:H5'	28:BE:241:TRP:HE1	1.33	0.91
26:BA:2645:G:C4'	26:BA:2732:G:O2'	2.18	0.91
26:BA:2826:A:C6	26:BA:2827:C:H6	1.69	0.91
26:BA:2:G:N1	26:BA:2902:C:N3	2.19	0.91
26:BA:321:G:H1'	29:BF:206:ASN:ND2	1.86	0.91
26:BA:487:C:H1'	39:BW:53:SER:OG	1.71	0.91
26:BA:592:G:N3	53:B8:3:LYS:HE2	1.83	0.91
26:BA:932:G:H5''	47:B3:29:ARG:HH22	1.36	0.91
27:BD:133:ASN:O	27:BD:134:ILE:HG13	1.68	0.91
27:BD:89:ASN:HD21	27:BD:199:ARG:HE	1.04	0.91
29:BF:163:HIS:CB	29:BF:166:ILE:CD1	2.48	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:60:SER:HB3	29:BF:69:HIS:HB3	1.51	0.91
31:BH:121:GLU:OE1	31:BH:121:GLU:N	2.03	0.91
31:BH:7:PRO:HD3	31:BH:68:ARG:HD3	1.51	0.91
33:BN:27:ALA:O	33:BN:29:GLN:N	1.95	0.91
39:BW:75:TYR:CD1	39:BW:104:THR:OG1	2.22	0.91
42:BZ:103:ARG:HG2	42:BZ:139:THR:CG2	1.99	0.91
2:AV:7:U:O4	2:AV:49:C:N4	2.04	0.91
48:B0:38:VAL:C	48:B0:40:GLN:HG3	1.91	0.91
51:B6:5:GLY:C	51:B6:7:ARG:H	1.74	0.91
26:BA:1417:C:N3	26:BA:1581:G:N2	2.19	0.91
26:BA:965:C:O2'	26:BA:2272:U:C5	2.24	0.91
26:BA:2380:C:H2'	26:BA:2381:C:H5'	1.53	0.91
26:BA:197:A:C6	26:BA:2430:A:C8	2.58	0.91
26:BA:2434:A:O2'	26:BA:2435:A:O5'	1.87	0.91
26:BA:2528:U:O4	26:BA:2530:A:N3	2.03	0.91
26:BA:2657:A:C6	26:BA:2665:A:N7	2.38	0.91
28:BE:45:LYS:NZ	28:BE:303:PRO:CD	2.30	0.91
29:BF:52:ALA:HA	29:BF:55:ARG:CB	1.99	0.91
31:BH:82:TYR:CZ	31:BH:137:LYS:CG	2.54	0.91
31:BH:36:PHE:CD2	31:BH:70:LEU:HD11	2.04	0.91
32:BI:132:LYS:HA	32:BI:138:THR:HG21	1.50	0.91
32:BI:7:LYS:CG	32:BI:12:LYS:HD3	1.95	0.91
36:BQ:49:VAL:HA	36:BQ:121:ASP:HB2	1.53	0.91
43:BR:107:ASP:CG	43:BR:109:ALA:H	1.73	0.91
43:BR:19:ALA:O	43:BR:22:ARG:CB	2.17	0.91
44:BU:57:PHE:HA	44:BU:60:LEU:HG	1.51	0.91
6:AC:18:TRP:CD1	17:AN:54:PRO:HA	2.05	0.91
53:B8:23:MET:CE	53:B8:23:MET:CA	2.49	0.91
53:B8:26:LYS:HZ2	53:B8:44:LYS:H	1.11	0.91
26:BA:2197:U:H2'	26:BA:2224:G:N2	1.74	0.91
26:BA:2226:C:N3	26:BA:2227:A:H1'	1.84	0.91
26:BA:2343:C:H4'	26:BA:2373:G:O3'	1.70	0.91
26:BA:2391:G:C2'	26:BA:2392:A:OP2	2.17	0.91
26:BA:2432:A:N1	26:BA:2433:A:N1	2.19	0.91
26:BA:2570:G:C2	26:BA:2571:C:C5	2.59	0.91
26:BA:2603:G:C4	26:BA:2604:U:C6	2.59	0.91
26:BA:602:G:H21	26:BA:655:A:H2'	1.36	0.91
26:BA:1818:U:H5''	27:BD:155:ARG:CG	1.97	0.91
28:BE:222:ARG:NH1	28:BE:222:ARG:HG3	1.77	0.91
30:BG:105:SER:HB3	30:BG:131:THR:HG22	1.53	0.91
26:BA:1140:C:C4	33:BN:49:ARG:CD	2.54	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:85:PRO:C	43:BR:87:TYR:H	1.74	0.91
26:BA:535:C:HO2'	44:BU:53:LYS:HG2	1.12	0.91
1:AA:1320:C:N4	22:AS:36:ARG:HG3	1.84	0.91
7:AD:23:GLY:HA2	7:AD:113:SER:CA	2.00	0.91
3:AW:65:G:N3	3:AW:66:A:O4'	2.04	0.91
26:BA:2262:U:H6	48:B0:14:ARG:HH22	0.96	0.91
26:BA:2363:C:O2'	48:B0:38:VAL:HG11	1.71	0.91
48:B0:33:ALA:HB3	48:B0:66:LYS:H	1.35	0.91
40:BX:3:ASP:HA	46:B2:24:LYS:HD3	0.94	0.91
49:B4:15:ILE:N	49:B4:15:ILE:CD1	2.32	0.91
26:BA:2346:A:O2'	26:BA:2347:C:OP1	1.87	0.91
26:BA:2493:U:O2	26:BA:2493:U:H2'	1.71	0.91
26:BA:2625:G:C3'	26:BA:2626:C:C6	2.51	0.91
26:BA:2678:C:N3	26:BA:2679:A:N7	2.19	0.91
26:BA:2729:G:C2	26:BA:2730:C:C2	2.58	0.91
26:BA:2825:C:H5	26:BA:2825:C:OP2	1.53	0.91
26:BA:322:A:C2	26:BA:341:G:C5	2.59	0.91
27:BD:145:LEU:N	27:BD:152:GLN:CB	2.23	0.91
28:BE:267:ARG:HD3	28:BE:297:LYS:CD	2.01	0.91
28:BE:267:ARG:HG3	28:BE:297:LYS:HB2	1.51	0.91
25:BB:57:A:H2	30:BG:17:ARG:HH12	0.98	0.91
36:BQ:140:TYR:CD1	36:BQ:147:VAL:HG13	2.02	0.91
36:BQ:94:ARG:NE	36:BQ:106:GLY:CA	2.34	0.91
44:BU:65:ILE:HD13	44:BU:96:ALA:CB	1.98	0.91
26:BA:30:G:P	44:BU:8:ILE:HD11	2.10	0.91
39:BW:8:ARG:CG	39:BW:102:HIS:CE1	2.54	0.91
26:BA:1598:C:C5'	40:BX:34:LYS:HG3	1.99	0.91
26:BA:338:G:H5'	41:BY:24:ARG:HH11	1.32	0.91
1:AA:408:A:OP1	7:AD:22:LYS:HA	1.71	0.91
1:AA:1220:G:H21	22:AS:54:GLY:CA	1.84	0.91
26:BA:929:G:H1'	47:B3:43:ILE:HG13	1.53	0.91
49:B4:13:LYS:O	49:B4:14:ILE:HB	1.67	0.91
26:BA:1364:G:OP1	49:B4:2:GLN:O	1.87	0.91
52:B7:41:GLN:O	52:B7:42:LEU:CG	2.18	0.91
26:BA:135:G:H1	26:BA:144:C:H42	1.17	0.91
26:BA:1449:A:H5'	26:BA:1528:A:C2	2.06	0.91
26:BA:176:G:H3'	26:BA:177:G:H8	1.34	0.91
26:BA:2428:G:C5'	26:BA:2429:G:OP1	2.18	0.91
26:BA:2460:U:N3	26:BA:2492:U:O4	2.03	0.91
26:BA:2558:C:O2	26:BA:2559:C:C5	2.24	0.91
26:BA:2567:G:C4	26:BA:2568:C:H5	1.88	0.91

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2768:C:C4	26:BA:2769:C:C5	2.35	0.91
26:BA:2821:A:C2'	26:BA:2822:G:O4'	2.19	0.91
26:BA:342:G:H2'	26:BA:343:C:C6	2.05	0.91
26:BA:1566:A:N1	27:BD:212:HIS:ND1	2.19	0.91
29:BF:215:ALA:C	29:BF:242:GLU:HG3	1.92	0.91
31:BH:101:LYS:HE2	31:BH:115:GLU:HB2	1.53	0.91
31:BH:102:LEU:HD22	31:BH:122:ILE:HD12	1.53	0.91
33:BN:15:ARG:HD3	33:BN:43:ARG:HD2	0.93	0.91
33:BN:65:ASN:H	33:BN:69:TYR:HB2	1.35	0.91
33:BN:74:ARG:HB3	33:BN:76:ASP:OD2	1.70	0.91
26:BA:873:G:H4'	36:BQ:32:LYS:HB3	1.52	0.91
44:BU:88:ILE:HG22	45:BV:55:THR:CG2	2.00	0.91
45:BV:39:PHE:O	45:BV:40:VAL:HG22	0.73	0.91
26:BA:993:G:C4'	45:BV:90:PHE:CZ	2.51	0.91
4:AX:120:A:H2'	4:AX:121:G:C8	2.05	0.90
49:B4:20:VAL:HG12	49:B4:30:GLU:OE1	1.69	0.90
49:B4:58:LYS:HG2	49:B4:59:PHE:H	1.32	0.90
26:BA:2207:C:N3	26:BA:2218:G:C6	2.40	0.90
26:BA:2246:G:HO2'	26:BA:2247:A:H5'	1.22	0.90
26:BA:2303:G:H4'	30:BG:99:ASP:HB3	1.50	0.90
26:BA:2290:G:N2	26:BA:2343:C:H1'	1.86	0.90
26:BA:2380:C:H2'	26:BA:2381:C:H5''	1.49	0.90
26:BA:2473:U:O2	26:BA:2473:U:H2'	1.67	0.90
26:BA:2051:A:C2	26:BA:2618:G:C6	2.59	0.90
26:BA:2657:A:H62	26:BA:2664:G:H21	1.05	0.90
26:BA:2746:U:C2	26:BA:2759:G:N2	2.37	0.90
25:BB:48:A:OP2	37:BS:107:ASN:ND2	2.04	0.90
27:BD:130:PRO:HA	27:BD:188:ARG:HA	1.51	0.90
28:BE:214:VAL:HG22	28:BE:221:LYS:HD2	1.51	0.90
28:BE:87:GLU:O	28:BE:94:ARG:N	2.01	0.90
34:BO:61:VAL:HG12	34:BO:62:VAL:N	1.84	0.90
36:BQ:87:LYS:C	36:BQ:88:PHE:CD2	2.44	0.90
36:BQ:89:PRO:C	36:BQ:90:PHE:HD1	1.67	0.90
43:BR:41:ALA:HB1	43:BR:114:VAL:HG21	1.51	0.90
43:BR:44:LEU:O	43:BR:44:LEU:HD13	1.70	0.90
43:BR:87:TYR:HE1	43:BR:94:TYR:HB3	1.13	0.90
44:BU:27:SER:O	44:BU:29:SER:CA	2.19	0.90
39:BW:89:ALA:N	39:BW:92:ARG:O	2.04	0.90
42:BZ:6:LYS:H	42:BZ:7:PRO:HD3	1.33	0.90
47:B3:22:ALA:HA	47:B3:46:ASN:ND2	1.86	0.90
49:B4:30:GLU:O	49:B4:31:ILE:HD13	1.70	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:55:TRP:CZ3	53:B8:59:LYS:NZ	2.40	0.90
26:BA:1205:U:O2	29:BF:232:LEU:CD1	2.19	0.90
26:BA:2653:U:C2'	26:BA:2654:A:N7	2.33	0.90
26:BA:2785:C:O2	28:BE:100:TRP:NE1	2.04	0.90
26:BA:2826:A:N1	26:BA:2827:C:C6	2.39	0.90
26:BA:797:C:H5''	29:BF:57:PRO:HB3	1.50	0.90
27:BD:128:ALA:HB1	27:BD:190:THR:HG22	1.48	0.90
27:BD:80:ILE:CD1	27:BD:82:TYR:HE1	1.84	0.90
29:BF:148:VAL:CG1	29:BF:148:VAL:O	2.20	0.90
30:BG:14:ARG:HA	30:BG:137:PRO:CG	2.00	0.90
31:BH:140:VAL:O	31:BH:143:LEU:HD23	1.70	0.90
32:BI:109:LYS:H	32:BI:109:LYS:HE3	1.34	0.90
32:BI:134:HIS:ND1	32:BI:135:PRO:HD2	1.86	0.90
32:BI:7:LYS:HA	32:BI:14:LYS:HG3	1.53	0.90
26:BA:1077:A:O2'	55:BK:134:SER:HA	1.71	0.90
26:BA:1022:G:P	33:BN:52:GLN:NE2	2.44	0.90
33:BN:47:THR:OG1	33:BN:53:ILE:HD11	1.70	0.90
33:BN:95:ARG:C	33:BN:98:PHE:CD1	2.40	0.90
43:BR:37:THR:O	43:BR:38:VAL:O	1.90	0.90
44:BU:30:LYS:O	44:BU:32:TYR:CD2	2.24	0.90
26:BA:581:C:P	44:BU:33:ARG:HH12	1.94	0.90
44:BU:91:ASN:C	44:BU:95:LEU:HD11	1.92	0.90
45:BV:4:ILE:CG1	45:BV:13:ARG:HA	2.00	0.90
45:BV:61:VAL:C	45:BV:98:ILE:HD11	1.92	0.90
42:BZ:19:ILE:N	42:BZ:36:ARG:CG	2.34	0.90
46:B2:48:GLU:O	46:B2:49:LEU:C	2.08	0.90
46:B2:4:HIS:N	46:B2:8:ILE:HD11	1.86	0.90
53:B8:9:MET:O	53:B8:14:ILE:HD13	1.70	0.90
26:BA:1566:A:C2	27:BD:212:HIS:CA	2.54	0.90
26:BA:2043:C:N4	26:BA:2777:G:N3	2.18	0.90
26:BA:2051:A:H4'	28:BE:238:LEU:CD2	2.00	0.90
26:BA:2093:G:C5	26:BA:2225:A:C5	2.59	0.90
26:BA:2494:G:N3	26:BA:2495:G:C8	2.38	0.90
26:BA:2739:U:H6	26:BA:2739:U:H3'	1.35	0.90
26:BA:2740:A:O2'	26:BA:2741:A:C5'	2.19	0.90
26:BA:2804:C:H5	26:BA:2805:G:O6	1.54	0.90
25:BB:40:U:H3'	25:BB:41:U:H5'	1.52	0.90
27:BD:103:ILE:HG12	27:BD:104:ILE:HD13	1.50	0.90
27:BD:145:LEU:H	27:BD:152:GLN:HB2	1.34	0.90
27:BD:78:ALA:O	27:BD:79:THR:CG2	2.19	0.90
26:BA:2733:A:N3	28:BE:318:ASN:HB2	1.85	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:42:ALA:O	32:BI:45:LYS:HB2	1.70	0.90
34:BO:111:PHE:O	34:BO:112:MET:C	2.08	0.90
35:BP:55:GLN:OE1	35:BP:55:GLN:HA	1.69	0.90
45:BV:28:GLU:OE2	45:BV:93:ILE:HB	1.72	0.90
39:BW:68:ARG:O	39:BW:110:LYS:N	2.04	0.90
1:AA:405:U:OP2	7:AD:5:ILE:CD1	2.17	0.90
1:AA:542:G:OP1	7:AD:41:GLY:CA	2.19	0.90
3:AW:41:U:H6	3:AW:41:U:H5'	1.34	0.90
46:B2:17:GLU:O	46:B2:19:GLU:N	2.04	0.90
46:B2:39:ALA:CB	46:B2:40:PRO:HD3	2.01	0.90
49:B4:14:ILE:HG22	49:B4:37:SER:H	1.37	0.90
26:BA:2045:C:O2	50:B5:22:HIS:CE1	2.25	0.90
50:B5:33:CYS:HB3	50:B5:37:HIS:N	1.86	0.90
26:BA:1059:G:H21	55:BK:127:ILE:HG23	1.12	0.90
26:BA:2227:A:C2	26:BA:2228:G:N1	2.37	0.90
26:BA:2484:G:N1	26:BA:2485:G:C8	2.40	0.90
26:BA:2607:G:C2'	26:BA:2608:G:H5'	2.01	0.90
26:BA:2721:A:H2'	26:BA:2722:G:H8	1.36	0.90
26:BA:2712:U:H6	26:BA:712(A):A:C8	1.67	0.90
27:BD:208:GLY:O	27:BD:210:LYS:HG2	1.72	0.90
29:BF:37:ALA:O	29:BF:107:ARG:NH1	2.04	0.90
29:BF:164:ALA:CA	29:BF:232:LEU:CD1	2.50	0.90
30:BG:59:GLY:C	30:BG:60:GLU:HG3	1.92	0.90
31:BH:10:ILE:HD11	31:BH:49:ILE:HG12	1.50	0.90
26:BA:1082:U:C1'	55:BK:118:ALA:HB2	2.02	0.90
35:BP:94:ARG:CG	35:BP:120:LEU:CD2	2.27	0.90
36:BQ:49:VAL:HG13	36:BQ:119:ASN:O	1.71	0.90
41:BY:103:LEU:HA	41:BY:108:ARG:HB2	1.51	0.90
41:BY:90:PRO:C	41:BY:91:LEU:HD23	1.91	0.90
1:AA:926:G:H22	4:AX:116:U:P	1.95	0.90
7:AD:23:GLY:CA	7:AD:112:VAL:C	2.40	0.90
2:AV:56:C:C1'	30:BG:56:ARG:NE	2.34	0.90
48:B0:29:GLU:O	48:B0:31:VAL:N	2.05	0.90
51:B6:54:LYS:HZ3	51:B6:54:LYS:HB2	1.33	0.90
52:B7:34:ARG:HH11	52:B7:42:LEU:HA	1.18	0.90
26:BA:1482:U:H3'	26:BA:1482:U:H6	1.37	0.90
26:BA:2331:G:H21	26:BA:2385:C:H5	1.01	0.90
26:BA:2504:U:H3'	26:BA:2504:U:C6	2.07	0.90
26:BA:2605:U:O2'	26:BA:2606:C:O5'	1.86	0.90
26:BA:2735:G:C6	26:BA:2770:G:C2	2.60	0.90
26:BA:2850:A:C2	43:BR:61:HIS:HE1	1.61	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:439:G:O3'	41:BY:6:LYS:NZ	2.04	0.90
26:BA:532:A:H3'	26:BA:533:G:O4'	1.69	0.90
28:BE:94:ARG:CB	28:BE:95:PRO:CD	2.43	0.90
29:BF:62:GLY:N	29:BF:65:ARG:NH2	2.18	0.90
55:BK:80:LYS:HD2	55:BK:85:ILE:O	1.72	0.90
43:BR:97:VAL:HG13	43:BR:114:VAL:HG22	1.53	0.90
26:BA:1161:C:HO2'	45:BV:22:VAL:HG11	1.26	0.90
45:BV:49:GLU:O	45:BV:54:TYR:CZ	2.25	0.90
39:BW:82:LEU:CD2	39:BW:100:THR:H	1.83	0.90
1:AA:1014:A:N3	22:AS:34:TRP:CD2	2.38	0.90
1:AA:1277:C:H1'	1:AA:1282:C:O2	1.72	0.90
52:B7:44:VAL:C	52:B7:46:ASP:N	2.24	0.90
26:BA:2397:G:C5	26:BA:2420:C:O2	2.24	0.90
26:BA:2484:G:H2'	26:BA:2485:G:C5'	2.02	0.90
26:BA:2583:G:C1'	26:BA:2584:U:O2	2.19	0.90
26:BA:2675:A:H2'	26:BA:2676:C:H5'	1.54	0.90
26:BA:440:G:P	41:BY:3:GLN:CD	2.50	0.90
28:BE:210:THR:CA	28:BE:216:ARG:HH22	1.82	0.90
29:BF:223:LEU:HD12	29:BF:223:LEU:C	1.87	0.90
29:BF:236:THR:O	29:BF:239:ALA:CB	2.19	0.90
29:BF:81:PRO:CA	29:BF:87:ARG:HB3	2.01	0.90
30:BG:82:GLU:C	30:BG:85:GLN:CG	2.37	0.90
31:BH:15:THR:HG23	31:BH:26:LYS:N	1.87	0.90
31:BH:64:HIS:O	31:BH:66:THR:N	2.05	0.90
55:BK:52:MET:HE2	55:BK:53:ILE:H	1.35	0.90
26:BA:2561:A:O2'	34:BO:40:VAL:HG11	0.72	0.90
26:BA:2406:U:N3	35:BP:55:GLN:CB	2.34	0.90
36:BQ:50:VAL:CG1	36:BQ:51:GLU:H	1.74	0.90
44:BU:13:ARG:NH1	44:BU:13:ARG:CB	1.68	0.90
45:BV:59:GLU:O	45:BV:60:VAL:HG22	1.69	0.90
26:BA:495:G:C3'	39:BW:57:ASN:HD21	1.84	0.90
41:BY:73:HIS:N	41:BY:91:LEU:CD1	2.29	0.90
42:BZ:172:LEU:CD2	42:BZ:173:PRO:N	2.27	0.90
42:BZ:53:ASP:OD2	42:BZ:62:PHE:O	1.88	0.90
1:AA:1400:C:C5	2:AV:34:G:N1	2.40	0.90
48:B0:42:GLY:HA2	48:B0:66:LYS:CA	2.02	0.90
49:B4:35:VAL:HG12	49:B4:36:TRP:N	1.86	0.90
50:B5:45:ILE:HG23	50:B5:52:TYR:HD1	1.09	0.90
53:B8:23:MET:CE	53:B8:48:PHE:HD2	1.81	0.90
26:BA:2046:G:OP1	50:B5:19:ARG:HA	1.70	0.90
26:BA:2303:G:C5'	30:BG:99:ASP:CB	2.49	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2366:A:C8	26:BA:2367:G:N7	2.40	0.90
26:BA:2258:C:H41	26:BA:2426:A:C1'	1.84	0.90
26:BA:2635:C:C2	26:BA:2783:G:N2	2.37	0.90
26:BA:2722:G:C2	26:BA:2723:C:C5	2.59	0.90
27:BD:106:PRO:O	27:BD:107:LYS:O	1.88	0.90
27:BD:148:GLY:O	27:BD:150:GLY:N	2.05	0.90
26:BA:801:G:P	29:BF:79:ARG:CZ	2.58	0.90
31:BH:10:ILE:CD1	31:BH:49:ILE:HG13	2.02	0.90
32:BI:77:VAL:CG1	32:BI:143:VAL:HG22	2.00	0.90
55:BK:20:PRO:O	55:BK:23:PRO:CD	2.18	0.90
36:BQ:49:VAL:HG22	36:BQ:121:ASP:H	1.00	0.90
43:BR:18:LEU:CD1	43:BR:19:ALA:N	2.35	0.90
43:BR:87:TYR:CD1	43:BR:94:TYR:HB3	2.07	0.90
40:BX:47:VAL:CB	40:BX:69:SER:CB	2.49	0.90
3:AW:9:A:N1	3:AW:45:G:C6	2.40	0.90
46:B2:52:ALA:O	46:B2:56:ILE:CD1	2.14	0.90
26:BA:1665:A:C3'	34:BO:66:LYS:CE	2.45	0.90
26:BA:2094:G:C2	26:BA:2196:C:O2	2.25	0.90
26:BA:2265:U:O2	26:BA:2266:A:N7	2.05	0.90
26:BA:2331:G:C5	26:BA:2332:U:C4	2.58	0.90
26:BA:2436:G:N1	26:BA:2437:U:C2	2.40	0.90
26:BA:2526:G:C6	26:BA:2527:C:C5	2.58	0.90
26:BA:849:A:H2	47:B3:21:ALA:CB	1.66	0.90
27:BD:145:LEU:H	27:BD:152:GLN:CB	1.55	0.90
27:BD:128:ALA:CB	27:BD:190:THR:HA	2.00	0.90
29:BF:112:ARG:O	29:BF:113:SER:C	2.10	0.90
30:BG:35:ALA:O	30:BG:36:ASN:ND2	2.04	0.90
30:BG:84:LEU:O	30:BG:88:LEU:HB2	1.71	0.90
33:BN:23:ALA:HA	33:BN:26:VAL:CG2	2.00	0.90
26:BA:2041:U:H5'	33:BN:70:PHE:CE1	2.07	0.90
34:BO:77:ILE:HD11	34:BO:79:PHE:HE2	0.98	0.90
37:BS:59:ALA:O	37:BS:91:ARG:NH1	2.04	0.90
3:AW:25:C:H3'	3:AW:26:G:H8	0.74	0.90
46:B2:27:LEU:CD1	46:B2:53:ILE:HD13	2.00	0.90
47:B3:54:VAL:HG23	47:B3:55:ARG:H	1.33	0.90
26:BA:2209:C:O2'	26:BA:2210:G:C3'	2.19	0.90
26:BA:957:A:C2	26:BA:2459:A:H5'	2.05	0.90
26:BA:2712:U:O2'	26:BA:712(A):A:P	2.30	0.90
26:BA:2810:A:H2'	26:BA:2811:G:O5'	1.70	0.90
25:BB:12:C:O2	37:BS:10:MET:SD	2.29	0.90
25:BB:99:A:H2'	25:BB:100:G:C8	2.07	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:216:ARG:HH11	28:BE:253:GLN:HB3	1.37	0.90
28:BE:211:GLN:NE2	28:BE:216:ARG:N	2.17	0.90
29:BF:196:THR:CA	29:BF:236:THR:HG23	2.01	0.90
33:BN:15:ARG:NE	33:BN:40:ASN:HD21	1.65	0.90
34:BO:36:GLY:N	34:BO:62:VAL:HB	1.87	0.90
26:BA:2683:C:H2'	34:BO:76:TYR:OH	1.72	0.90
36:BQ:57:ARG:C	36:BQ:61:LEU:HG	1.93	0.90
37:BS:116:PHE:HA	37:BS:119:GLN:OE1	1.70	0.90
44:BU:28:ARG:CA	44:BU:31:GLN:CG	2.50	0.90
44:BU:41:ASN:ND2	44:BU:42:ALA:N	2.16	0.90
26:BA:2633:G:O2'	26:BA:2634:G:H5'	1.71	0.90
26:BA:2695:C:O2'	26:BA:2696:U:C6	2.24	0.90
26:BA:2848:G:H22	26:BA:2867:G:C1'	1.78	0.90
26:BA:2880:C:O2'	43:BR:90:ARG:HD3	1.72	0.90
27:BD:213:LYS:CB	27:BD:215:LYS:H	1.83	0.90
28:BE:43:GLY:HA3	28:BE:75:THR:OG1	1.72	0.90
28:BE:45:LYS:CD	28:BE:303:PRO:O	2.19	0.90
29:BF:195:VAL:HG13	29:BF:213:ALA:HB3	1.52	0.90
32:BI:95:SER:CB	32:BI:98:ILE:HD11	1.98	0.90
32:BI:94:THR:HG23	32:BI:96:LYS:HB3	1.53	0.90
35:BP:94:ARG:CD	35:BP:120:LEU:HD22	1.99	0.90
38:BT:11:THR:HG22	38:BT:12:ASP:N	1.87	0.90
41:BY:31:LEU:O	41:BY:34:GLU:HB2	1.71	0.90
41:BY:9:LYS:HZ2	41:BY:13:ARG:NH2	1.68	0.90
42:BZ:90:GLU:H	42:BZ:91:PRO:CD	1.85	0.90
1:AA:41:G:H2'	1:AA:42:G:C8	2.05	0.89
47:B3:43:ILE:H	47:B3:43:ILE:HD12	1.36	0.89
26:BA:1262:A:H2	50:B5:10:LYS:HE2	1.36	0.89
26:BA:2528:U:OP2	54:B9:30:VAL:HG11	1.69	0.89
26:BA:1697:G:H3'	26:BA:1698:A:H5'	1.52	0.89
26:BA:2821:A:H2'	26:BA:2822:G:C1'	2.01	0.89
28:BE:199:ALA:O	28:BE:266:LYS:HB2	1.72	0.89
28:BE:315:VAL:O	28:BE:317:PRO:CD	2.20	0.89
28:BE:44:TYR:O	28:BE:74:GLU:OE1	1.90	0.89
29:BF:219:ASN:H	29:BF:219:ASN:ND2	1.70	0.89
32:BI:102:LEU:C	32:BI:102:LEU:HD12	1.91	0.89
32:BI:60:GLU:O	32:BI:63:ALA:N	2.06	0.89
33:BN:77:GLY:HA2	33:BN:80:LYS:HG2	1.49	0.89
36:BQ:41:THR:C	36:BQ:125:TRP:HZ3	1.73	0.89
40:BX:25:GLN:OE1	40:BX:25:GLN:CA	2.20	0.89
41:BY:101:LEU:CD1	41:BY:103:LEU:HD11	2.02	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:695:A:H2	1:AA:787:A:H4'	1.36	0.89
3:AW:33:U:C2	3:AW:35:A:H5'	2.06	0.89
48:B0:23:VAL:CG1	48:B0:24:LYS:N	2.19	0.89
26:BA:2241:A:H8	26:BA:2241:A:H5'	1.34	0.89
26:BA:2248:C:H2'	26:BA:2248:C:O2	1.70	0.89
26:BA:2327:A:N7	26:BA:2388:A:N6	2.19	0.89
26:BA:2330:G:C2	26:BA:2331:G:H1'	2.06	0.89
26:BA:2700:C:H3'	26:BA:2701:C:C5'	2.00	0.89
26:BA:396:G:H4'	49:B4:39:VAL:HG12	1.52	0.89
29:BF:84:VAL:C	29:BF:85:LYS:CD	2.39	0.89
30:BG:18:ILE:CG2	30:BG:19:GLU:H	1.85	0.89
31:BH:147:ILE:HA	31:BH:150:VAL:CG2	2.01	0.89
55:BK:103:LYS:N	55:BK:106:GLU:OE1	2.04	0.89
36:BQ:59:ASN:HD22	36:BQ:60:ALA:N	1.61	0.89
26:BA:1277:G:N3	43:BR:23:ASN:ND2	2.19	0.89
38:BT:21:PHE:C	38:BT:22:VAL:HG13	1.93	0.89
39:BW:21:VAL:HG23	39:BW:22:ASP:N	1.86	0.89
1:AA:498:U:O2	1:AA:547:A:N6	2.06	0.89
1:AA:677:U:H3	1:AA:713:G:H1	1.19	0.89
2:AV:31:A:H4'	12:AI:127:LYS:HD2	1.52	0.89
2:AV:57:G:C1'	30:BG:56:ARG:HH12	1.85	0.89
48:B0:28:GLY:HA3	48:B0:60:PHE:HB3	1.51	0.89
46:B2:20:LEU:O	46:B2:23:LEU:N	2.05	0.89
46:B2:26:GLU:CG	46:B2:27:LEU:H	1.82	0.89
49:B4:7:PRO:HD3	49:B4:56:VAL:HG21	1.51	0.89
26:BA:2400:G:O2'	51:B6:20:PHE:CE1	2.01	0.89
52:B7:9:ASN:O	52:B7:10:ARG:C	2.07	0.89
26:BA:1032:A:OP1	54:B9:8:LYS:HG3	1.72	0.89
26:BA:1609:A:C6	26:BA:1616:A:H2	1.90	0.89
26:BA:2043:C:C5	26:BA:2777:G:C1'	2.53	0.89
26:BA:2330:G:H21	26:BA:2331:G:H1'	1.09	0.89
26:BA:2482:G:H2'	26:BA:2483:C:H5'	0.90	0.89
26:BA:2492:U:O2'	26:BA:2493:U:C5'	2.19	0.89
26:BA:1669:A:O3'	26:BA:2550:G:OP1	1.91	0.89
26:BA:2578:G:C5	28:BE:237:ASN:ND2	2.40	0.89
26:BA:2634:G:C2'	26:BA:2635:C:O5'	2.20	0.89
26:BA:2771:C:N3	26:BA:2772:C:C5	2.40	0.89
26:BA:527:C:C5	26:BA:2779:U:H3'	2.07	0.89
26:BA:572:A:H2'	26:BA:573:G:C1'	2.02	0.89
26:BA:932:G:H5'	47:B3:24:LYS:CE	2.02	0.89
27:BD:152:GLN:O	27:BD:153:LEU:HB2	1.72	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:85:ASN:ND2	27:BD:86:ARG:CZ	2.36	0.89
28:BE:81:VAL:HB	28:BE:100:TRP:CZ3	2.07	0.89
30:BG:76:ARG:HB2	30:BG:77:ASP:OD1	1.71	0.89
31:BH:102:LEU:HD12	31:BH:104:LEU:HD11	1.54	0.89
31:BH:111:PRO:C	31:BH:112:VAL:HG23	1.91	0.89
31:BH:64:HIS:C	31:BH:66:THR:H	1.75	0.89
55:BK:117:ASN:CG	55:BK:127:ILE:HD12	1.91	0.89
55:BK:45:GLU:O	55:BK:47:ALA:N	2.04	0.89
33:BN:12:VAL:HG12	33:BN:38:VAL:HG21	1.54	0.89
45:BV:35:LEU:O	45:BV:60:VAL:CG1	2.20	0.89
40:BX:33:SER:O	40:BX:37:VAL:HG23	1.71	0.89
41:BY:103:LEU:HD13	41:BY:113:GLU:HB3	1.51	0.89
1:AA:1222:G:OP1	1:AA:1321:C:C2'	2.21	0.89
7:AD:14:ARG:CG	7:AD:66:ARG:NH1	2.34	0.89
1:AA:986:A:H1'	22:AS:55:LYS:HA	0.91	0.89
26:BA:94:G:H21	46:B2:42:ASN:HD22	1.19	0.89
49:B4:5:LEU:HD23	49:B4:5:LEU:N	1.87	0.89
52:B7:12:ARG:O	52:B7:15:THR:OG1	1.90	0.89
53:B8:26:LYS:CG	53:B8:44:LYS:HA	2.03	0.89
26:BA:2356:C:H2'	26:BA:2357:U:C5'	2.02	0.89
26:BA:2553:G:C8	26:BA:2554:U:O4'	2.25	0.89
26:BA:2578:G:O2'	26:BA:2579:C:O5'	1.91	0.89
26:BA:2635:C:O2'	26:BA:2636:U:O5'	1.91	0.89
26:BA:2869:G:N2	26:BA:2870:C:C1'	2.35	0.89
27:BD:71:ASP:OD1	27:BD:118:GLY:N	2.06	0.89
27:BD:235:PRO:O	27:BD:236:PHE:C	2.07	0.89
28:BE:77:PRO:HB2	28:BE:187:HIS:H	0.76	0.89
28:BE:70:VAL:HG22	28:BE:297:LYS:HA	1.55	0.89
29:BF:193:LEU:HD13	29:BF:223:LEU:CB	2.01	0.89
31:BH:71:LEU:O	31:BH:73:ASN:N	2.05	0.89
26:BA:1059:G:H21	55:BK:127:ILE:CG2	1.84	0.89
33:BN:61:VAL:HG22	33:BN:139:LEU:CB	2.02	0.89
33:BN:65:ASN:HB2	33:BN:69:TYR:CE1	2.07	0.89
33:BN:82:THR:OG1	33:BN:83:ILE:N	2.03	0.89
26:BA:2250:G:H5'	36:BQ:102:ARG:HD3	1.53	0.89
45:BV:74:TYR:HD1	45:BV:86:HIS:O	1.55	0.89
1:AA:1318:A:H5'	22:AS:10:PHE:HB3	1.51	0.89
1:AA:1400:C:C5	2:AV:34:G:C6	2.59	0.89
46:B2:47:LYS:O	46:B2:48:GLU:C	2.11	0.89
26:BA:1263:U:C4'	50:B5:16:ARG:CZ	2.50	0.89
26:BA:686:G:O6	52:B7:12:ARG:NE	2.05	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1416:G:H21	26:BA:1582:C:H42	1.20	0.89
2:AV:25:C:O4'	26:BA:1923:U:OP1	1.90	0.89
26:BA:2287:A:HO2'	26:BA:2288:A:P	1.91	0.89
26:BA:2472:G:O2'	26:BA:2473:U:OP1	1.90	0.89
26:BA:248:G:N2	26:BA:2431:U:H4'	1.87	0.89
26:BA:2625:G:C2'	26:BA:2626:C:C6	2.55	0.89
26:BA:2657:A:N7	26:BA:2658:C:C6	2.40	0.89
26:BA:2734:A:C5'	26:BA:2734:A:H8	1.84	0.89
26:BA:2799:A:C5'	26:BA:2801:A:OP2	2.20	0.89
26:BA:2861:G:H5''	26:BA:2861:G:H8	1.36	0.89
28:BE:74:GLU:HA	28:BE:293:TYR:HD2	1.19	0.89
29:BF:37:ALA:CB	29:BF:102:LEU:HD12	2.02	0.89
29:BF:243:VAL:HA	29:BF:246:ARG:CG	2.03	0.89
29:BF:52:ALA:O	29:BF:54:LEU:N	2.06	0.89
30:BG:97:GLN:HB2	30:BG:106:PHE:HE2	1.31	0.89
31:BH:167:LEU:N	31:BH:167:LEU:HD23	1.86	0.89
26:BA:2748:A:H2'	31:BH:62:ALA:HB1	1.54	0.89
32:BI:79:ILE:O	32:BI:145:VAL:HG13	1.72	0.89
35:BP:52:LYS:HD3	35:BP:53:ARG:HH12	1.36	0.89
36:BQ:65:ARG:NH2	36:BQ:85:ILE:C	2.25	0.89
43:BR:102:GLU:HG3	43:BR:103:ARG:H	1.34	0.89
43:BR:97:VAL:HA	43:BR:114:VAL:HG13	1.53	0.89
37:BS:82:TYR:O	37:BS:86:LEU:HG	1.72	0.89
44:BU:39:LEU:O	44:BU:40:LEU:C	2.11	0.89
44:BU:88:ILE:HG22	45:BV:55:THR:HG21	1.55	0.89
45:BV:11:GLN:HE22	45:BV:22:VAL:CB	1.86	0.89
41:BY:78:THR:HG21	41:BY:88:PRO:HA	1.53	0.89
42:BZ:26:LYS:N	42:BZ:84:TYR:CE1	2.40	0.89
3:AW:37:YYG:C19	10:AG:83:ALA:O	2.21	0.89
47:B3:8:LEU:HB3	47:B3:32:GLN:N	1.87	0.89
51:B6:14:SER:CB	51:B6:52:GLU:HA	2.02	0.89
26:BA:687:C:H5''	52:B7:4:THR:HA	1.51	0.89
26:BA:2468:G:N1	26:BA:2481:G:C4	2.41	0.89
26:BA:2061:G:N7	26:BA:2501:C:C1'	2.35	0.89
26:BA:2550:G:C4	26:BA:2551:C:H5	1.91	0.89
26:BA:1457:A:C2	26:BA:2703:C:C4	2.61	0.89
26:BA:2799:A:H5''	26:BA:2801:A:OP2	1.70	0.89
26:BA:527:C:H5''	26:BA:2779:U:O2	1.72	0.89
26:BA:2210:G:C6	27:BD:148:GLY:HA2	2.08	0.89
27:BD:211:HIS:HD1	27:BD:212:HIS:CD2	1.91	0.89
27:BD:74:PRO:HG2	27:BD:96:ALA:N	1.87	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:115:LEU:CD2	29:BF:246:ARG:HH22	1.86	0.89
29:BF:91:PRO:HG2	29:BF:92:PRO:CD	2.01	0.89
31:BH:93:TYR:CG	31:BH:106:VAL:CG2	2.49	0.89
31:BH:86:LEU:CD1	31:BH:87:GLU:N	2.33	0.89
43:BR:107:ASP:OD1	43:BR:108:GLY:N	2.06	0.89
38:BT:45:GLU:O	38:BT:48:ASN:ND2	2.05	0.89
44:BU:86:ALA:HB3	44:BU:90:LEU:CD2	2.02	0.89
42:BZ:163:ASP:OD2	42:BZ:164:PRO:N	2.05	0.89
1:AA:1317:C:O2'	22:AS:10:PHE:CE2	2.25	0.89
1:AA:1319:A:H4'	22:AS:70:LYS:CE	2.02	0.89
3:AW:74:C:OP1	49:B4:22:MET:CE	2.20	0.89
26:BA:856:C:C4'	48:B0:25:LYS:NZ	2.35	0.89
46:B2:51:LYS:O	46:B2:56:ILE:HD11	1.71	0.89
26:BA:1340:U:O4	40:BX:57:THR:CG2	2.21	0.89
26:BA:1924:C:C4	26:BA:1925:C:C5	2.60	0.89
26:BA:2282:G:N2	26:BA:2427:C:O2	2.05	0.89
26:BA:2494:G:N2	26:BA:2495:G:C8	2.40	0.89
26:BA:2555:U:C2'	26:BA:2556:C:C5'	2.38	0.89
26:BA:2758:A:C1'	26:BA:2758:A:OP2	2.20	0.89
26:BA:2898:U:N3	26:BA:2899:G:N7	2.21	0.89
27:BD:213:LYS:CB	27:BD:215:LYS:HB2	2.02	0.89
27:BD:216:ALA:HA	27:BD:222:PRO:N	1.86	0.89
27:BD:73:ILE:CG2	27:BD:95:TYR:CE2	2.44	0.89
28:BE:304:ASP:O	28:BE:307:LEU:HB2	1.72	0.89
26:BA:2303:G:C4'	30:BG:99:ASP:HB3	2.01	0.89
31:BH:73:ASN:HB3	31:BH:137:LYS:HZ3	1.11	0.89
32:BI:93:ILE:O	32:BI:93:ILE:HG13	1.69	0.89
33:BN:105:LEU:HG	33:BN:106:GLY:N	1.86	0.89
33:BN:60:ARG:HA	33:BN:71:TYR:CE2	2.07	0.89
33:BN:94:GLY:O	33:BN:98:PHE:CE1	2.24	0.89
34:BO:12:ASP:HB2	34:BO:95:GLY:HA3	1.54	0.89
34:BO:86:ILE:HG22	34:BO:87:ILE:H	1.38	0.89
35:BP:53:ARG:CD	35:BP:53:ARG:H	1.85	0.89
36:BQ:88:PHE:CB	36:BQ:90:PHE:HE1	1.86	0.89
43:BR:67:LEU:CD2	43:BR:71:GLN:HA	2.03	0.89
40:BX:39:ASP:O	40:BX:41:VAL:N	2.05	0.89
41:BY:41:ARG:O	41:BY:112:LEU:HB3	1.71	0.89
42:BZ:16:GLU:OE1	42:BZ:16:GLU:HA	1.73	0.89
1:AA:1327:C:C5'	24:AU:20:LYS:HE2	2.02	0.89
47:B3:22:ALA:O	47:B3:26:LEU:HG	1.73	0.89
47:B3:8:LEU:HB3	47:B3:32:GLN:HA	1.55	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:929:G:H1'	47:B3:43:ILE:CG1	2.01	0.89
49:B4:41:PRO:CG	49:B4:57:ASP:OD2	2.21	0.89
53:B8:16:ILE:HG13	53:B8:22:VAL:HG21	1.50	0.89
26:BA:126:A:OP1	52:B7:44:VAL:CG1	2.20	0.89
26:BA:198:C:H4'	26:BA:2243:U:O2'	1.73	0.89
26:BA:954:G:O2'	26:BA:2274:A:N1	2.04	0.89
26:BA:2331:G:C6	26:BA:2332:U:N3	2.39	0.89
26:BA:2528:U:H5	26:BA:2530:A:C2	1.90	0.89
26:BA:2522:U:O2	26:BA:2543:G:N1	2.04	0.89
26:BA:2746:U:H4'	31:BH:138:GLN:CA	2.02	0.89
26:BA:527:C:H2'	33:BN:95:ARG:NH1	1.86	0.89
26:BA:598:G:N2	29:BF:33:LYS:HZ1	1.66	0.89
26:BA:71:A:H4'	26:BA:72:U:H3'	1.54	0.89
29:BF:162:VAL:HG12	29:BF:163:HIS:H	1.35	0.89
29:BF:150:THR:HB	29:BF:207:LEU:CD2	2.02	0.89
55:BK:33:VAL:CG2	55:BK:60:VAL:CG1	2.50	0.89
33:BN:87:LEU:H	33:BN:87:LEU:CD1	1.86	0.89
43:BR:97:VAL:HG13	43:BR:114:VAL:CG2	2.03	0.89
45:BV:49:GLU:HA	45:BV:53:LYS:NZ	1.88	0.89
44:BU:20:ARG:HH12	45:BV:75:LYS:NZ	1.71	0.89
41:BY:18:GLU:HB3	41:BY:21:LYS:NZ	1.88	0.89
42:BZ:2:GLU:H	42:BZ:54:ILE:HG23	1.23	0.89
42:BZ:34:LEU:CD1	42:BZ:35:ASP:H	1.85	0.89
1:AA:60:A:H61	1:AA:107:G:C2'	1.85	0.89
16:AM:97:PRO:HG2	16:AM:103:THR:HG22	1.52	0.89
1:AA:1320:C:O4'	22:AS:73:GLU:HG2	1.71	0.89
2:AV:73:A:C3'	2:AV:74:C:P	2.61	0.89
48:B0:48:GLY:HA3	48:B0:55:ARG:HB2	1.54	0.89
49:B4:57:ASP:O	49:B4:58:LYS:O	1.90	0.89
51:B6:21:TYR:CE1	51:B6:43:VAL:CG2	2.55	0.89
53:B8:38:GLY:O	53:B8:41:ILE:N	2.05	0.89
26:BA:1152:C:H5''	44:BU:80:ILE:HG21	1.52	0.89
26:BA:1668:A:O5'	34:BO:5:GLU:OE2	1.91	0.89
26:BA:2013:A:H2'	26:BA:2014:A:O4'	1.73	0.89
26:BA:2623:G:H21	26:BA:2624:G:H1'	1.34	0.89
26:BA:2684:U:C1'	34:BO:70:ARG:CZ	2.46	0.89
26:BA:2712:U:H3'	26:BA:2714:G:P	2.12	0.89
26:BA:2893:G:OP2	26:BA:2893:G:H8	1.56	0.89
27:BD:127:ASN:O	27:BD:190:THR:HB	1.70	0.89
27:BD:213:LYS:HB3	27:BD:215:LYS:CA	2.03	0.89
45:BV:57:GLN:HG2	45:BV:58:ALA:N	1.85	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:74:TYR:CE1	45:BV:86:HIS:O	2.26	0.89
42:BZ:95:SER:HG	42:BZ:122:ILE:HG12	1.37	0.89
42:BZ:92:VAL:O	42:BZ:123:VAL:O	1.91	0.89
42:BZ:39:PHE:C	42:BZ:43:PHE:CD2	2.46	0.89
42:BZ:79:ILE:HG22	42:BZ:80:HIS:CE1	2.08	0.89
50:B5:34:PRO:HD2	50:B5:36:CYS:SG	2.12	0.89
51:B6:8:ILE:HA	51:B6:29:ARG:NE	1.88	0.89
52:B7:8:ASN:O	52:B7:9:ASN:O	1.91	0.89
26:BA:2246:G:C2	26:BA:2247:A:C5	2.60	0.89
26:BA:2309:A:H3'	26:BA:2310:A:H5'	1.54	0.89
26:BA:2484:G:H22	26:BA:2485:G:C1'	1.80	0.89
26:BA:2574:G:H3'	26:BA:2575:C:C6	2.06	0.89
26:BA:1672:C:O2	26:BA:2582:G:O4'	1.90	0.89
26:BA:997:G:OP1	44:BU:93:LYS:CE	2.19	0.89
27:BD:131:LEU:CD1	27:BD:171:VAL:HG21	2.00	0.89
29:BF:55:ARG:HG3	29:BF:56:THR:N	1.87	0.89
31:BH:148:ARG:HH11	31:BH:163:TYR:HA	1.08	0.89
31:BH:15:THR:HG21	31:BH:26:LYS:HB2	0.91	0.89
55:BK:107:GLU:HA	55:BK:110:LYS:HD2	1.55	0.89
26:BA:1080:C:O3'	55:BK:126:LYS:CD	2.20	0.89
34:BO:81:GLU:HG2	34:BO:82:ASN:N	1.83	0.89
26:BA:911:A:C4	36:BQ:16:ARG:CD	2.57	0.89
36:BQ:88:PHE:C	36:BQ:90:PHE:HE1	1.76	0.89
43:BR:60:LEU:HG	43:BR:61:HIS:N	1.87	0.89
43:BR:55:ALA:HA	43:BR:80:PHE:CE1	2.06	0.89
37:BS:41:LYS:NZ	37:BS:68:GLU:CD	2.26	0.89
39:BW:3:ALA:O	39:BW:4:LYS:HG3	1.73	0.89
39:BW:5:ALA:HB2	39:BW:54:ALA:HB2	1.54	0.89
40:BX:11:THR:C	40:BX:15:MET:SD	2.52	0.89
41:BY:11:GLN:HG3	41:BY:21:LYS:HE2	1.53	0.89
1:AA:737:A:H4'	9:AF:72:VAL:HG11	1.55	0.88
1:AA:1400:C:C2	2:AV:34:G:C2	2.60	0.88
51:B6:32:GLN:HB3	51:B6:35:LEU:HD12	0.89	0.88
52:B7:24:THR:O	52:B7:28:ARG:HG3	1.72	0.88
52:B7:21:ARG:HH12	52:B7:43:THR:HG23	1.31	0.88
53:B8:26:LYS:O	53:B8:27:SER:HB2	1.70	0.88
26:BA:1027:A:H61	26:BA:1126:A:H1'	1.36	0.88
26:BA:1669:A:H1'	34:BO:4:GLN:OE1	1.72	0.88
26:BA:1993:U:C4'	28:BE:228:ARG:HH21	1.86	0.88
26:BA:2051:A:N7	26:BA:2614:A:C6	2.40	0.88
26:BA:2216:G:O2'	26:BA:2217:G:H5''	1.71	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2265:U:C2'	26:BA:2266:A:OP1	2.21	0.88
26:BA:2316:C:N4	26:BA:2317:C:N4	2.20	0.88
26:BA:2457:U:C2'	26:BA:2458:G:C5'	2.50	0.88
26:BA:2468:G:C6	26:BA:2481:G:C6	2.61	0.88
26:BA:2482:G:H2'	26:BA:2483:C:H5''	1.55	0.88
26:BA:2531:A:C2	26:BA:2658:C:H1'	2.08	0.88
26:BA:2535:G:N2	26:BA:2536:G:H1'	1.89	0.88
26:BA:2543:G:C2'	26:BA:2544:G:H8	1.71	0.88
26:BA:2606:C:C5'	26:BA:2606:C:C6	2.57	0.88
26:BA:869:G:H1	26:BA:908:C:H42	1.19	0.88
28:BE:231:TRP:CE3	28:BE:234:ARG:NH2	2.41	0.88
29:BF:200:PRO:HB3	29:BF:212:VAL:HG11	0.92	0.88
29:BF:52:ALA:CB	29:BF:55:ARG:NE	2.31	0.88
31:BH:53:ARG:NH1	31:BH:56:ASP:CA	2.29	0.88
55:BK:75:ALA:O	55:BK:77:PHE:N	2.05	0.88
35:BP:129:ALA:O	35:BP:133:VAL:HG23	1.73	0.88
45:BV:40:VAL:O	45:BV:51:ALA:CB	2.21	0.88
7:AD:24:GLU:CB	7:AD:112:VAL:HG11	2.01	0.88
51:B6:19:GLY:HA2	51:B6:44:ALA:HB3	1.53	0.88
51:B6:19:GLY:O	51:B6:42:PRO:HB2	1.73	0.88
26:BA:2018:G:H21	44:BU:34:ASN:HD22	1.05	0.88
26:BA:2225:A:H4'	26:BA:2226:C:O5'	1.65	0.88
26:BA:2240:C:O2	26:BA:2240:C:H2'	1.71	0.88
26:BA:2384:G:C2'	26:BA:2386:C:OP2	2.21	0.88
26:BA:2410:G:C2'	26:BA:2411:A:H8	1.82	0.88
26:BA:2446:G:N2	26:BA:2501:C:C5	2.40	0.88
26:BA:2573:C:P	26:BA:2574:G:OP1	2.32	0.88
26:BA:2703:C:O2'	26:BA:2704:C:O5'	1.91	0.88
26:BA:2832:U:C4'	26:BA:2832:U:C6	2.56	0.88
26:BA:2869:G:C5	26:BA:2870:C:H5	1.49	0.88
26:BA:748:G:H8	26:BA:750:A:OP2	1.55	0.88
26:BA:94:G:N2	46:B2:42:ASN:ND2	2.20	0.88
26:BA:1818:U:C5'	27:BD:155:ARG:CB	2.51	0.88
26:BA:1789:A:OP1	27:BD:226:GLY:HA2	1.73	0.88
27:BD:68:ARG:O	27:BD:69:ASP:OD2	1.91	0.88
28:BE:314:ALA:O	28:BE:317:PRO:HD3	1.71	0.88
29:BF:221:GLU:O	29:BF:222:ASP:O	1.91	0.88
29:BF:48:SER:N	29:BF:92:PRO:HG3	1.70	0.88
32:BI:43:ASN:C	32:BI:45:LYS:N	2.23	0.88
32:BI:77:VAL:HG11	32:BI:143:VAL:CG2	2.02	0.88
33:BN:66:ASP:C	33:BN:68:GLY:N	2.18	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:128:GLY:C	35:BP:132:LYS:HD3	1.92	0.88
36:BQ:144:THR:HG1	36:BQ:145:PRO:HD3	1.32	0.88
36:BQ:48:ASN:OD1	36:BQ:48:ASN:O	1.92	0.88
38:BT:4:ARG:O	38:BT:5:GLU:HG2	1.72	0.88
26:BA:495:G:N2	39:BW:61:ASN:HD21	1.70	0.88
40:BX:76:GLU:OE1	40:BX:77:VAL:CG2	2.22	0.88
1:AA:1182:G:O2'	1:AA:1183:A:OP2	1.90	0.88
49:B4:6:HIS:HB2	49:B4:56:VAL:CG2	2.02	0.88
52:B7:34:ARG:HH12	52:B7:42:LEU:HA	1.37	0.88
26:BA:2064:C:H1'	26:BA:2450:A:N6	1.89	0.88
26:BA:2254:C:H2'	26:BA:2255:G:H5'	0.91	0.88
26:BA:2303:G:H5'	30:BG:99:ASP:CB	2.03	0.88
26:BA:244:A:O2'	35:BP:56:LYS:CA	2.21	0.88
26:BA:2550:G:H2'	26:BA:2551:C:C6	2.08	0.88
26:BA:2684:U:H1'	34:BO:70:ARG:HH22	1.29	0.88
26:BA:825:C:H4'	26:BA:2428:G:C6	2.07	0.88
27:BD:105:ALA:N	27:BD:106:PRO:CD	2.35	0.88
29:BF:102:LEU:CD2	29:BF:106:GLU:CD	2.41	0.88
31:BH:91:VAL:N	31:BH:159:LYS:HE3	1.87	0.88
55:BK:117:ASN:OD1	55:BK:127:ILE:CD1	2.21	0.88
33:BN:19:MET:HE2	33:BN:19:MET:CA	1.98	0.88
34:BO:112:MET:O	34:BO:114:ILE:N	2.06	0.88
36:BQ:51:GLU:HA	36:BQ:118:ALA:CB	2.03	0.88
43:BR:101:ALA:O	50:B5:41:LEU:HD12	1.73	0.88
43:BR:75:LEU:HA	43:BR:78:LYS:HB3	1.52	0.88
41:BY:51:LEU:N	41:BY:51:LEU:HD13	1.88	0.88
26:BA:310:A:P	41:BY:53:GLY:H	1.97	0.88
41:BY:73:HIS:CE1	41:BY:90:PRO:HA	2.08	0.88
1:AA:1326:C:OP1	24:AU:12:LYS:NZ	2.07	0.88
6:AC:16:ARG:HH22	6:AC:184:TYR:H	1.17	0.88
46:B2:20:LEU:HD13	46:B2:23:LEU:HB2	1.52	0.88
46:B2:54:ALA:O	46:B2:55:ARG:C	2.09	0.88
51:B6:19:GLY:CA	51:B6:44:ALA:CB	2.51	0.88
26:BA:2314:C:H5'	30:BG:22:VAL:HG11	1.52	0.88
26:BA:2416:C:H2'	26:BA:2417:C:C5'	2.03	0.88
26:BA:2476:A:C8	26:BA:2477:C:C6	2.60	0.88
26:BA:2546:U:C5'	26:BA:2565:A:H2	1.84	0.88
26:BA:2597:G:C2'	26:BA:2598:A:H8	1.83	0.88
26:BA:2652:C:C6	26:BA:2653:U:C6	2.61	0.88
26:BA:2884:U:H2'	26:BA:2885:C:O4'	1.73	0.88
26:BA:563:G:H21	44:BU:37:GLN:HE22	1.15	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:771:G:OP2	52:B7:11:LYS:NZ	2.06	0.88
28:BE:205:THR:HG21	28:BE:259:HIS:H	1.11	0.88
28:BE:217:TRP:CZ2	28:BE:251:PRO:HB3	2.09	0.88
31:BH:101:LYS:HG2	31:BH:115:GLU:CA	2.01	0.88
55:BK:22:PRO:CG	55:BK:23:PRO:HD3	2.04	0.88
55:BK:37:GLU:C	55:BK:41:ARG:HH11	1.77	0.88
33:BN:95:ARG:O	33:BN:98:PHE:N	2.04	0.88
35:BP:69:ILE:HA	35:BP:73:VAL:CG2	2.01	0.88
45:BV:61:VAL:HG22	45:BV:97:GLY:CA	2.03	0.88
42:BZ:51:LEU:CD1	42:BZ:63:PRO:HB2	2.04	0.88
7:AD:21:LEU:CD2	7:AD:114:ARG:HG3	2.02	0.88
48:B0:48:GLY:HA3	48:B0:55:ARG:CB	2.03	0.88
49:B4:16:TYR:C	49:B4:17:GLN:HG3	1.92	0.88
26:BA:2839:G:C2	26:BA:2840:C:C2	2.62	0.88
26:BA:2881:C:C2'	26:BA:2882:A:O5'	2.21	0.88
26:BA:494:G:H4'	39:BW:6:ILE:HG23	1.56	0.88
27:BD:155:ARG:C	27:BD:157:ALA:H	1.75	0.88
27:BD:184:LEU:HB2	27:BD:187:CYS:SG	2.14	0.88
29:BF:102:LEU:CB	29:BF:107:ARG:CZ	2.52	0.88
31:BH:104:LEU:CB	31:BH:151:ARG:HH12	1.85	0.88
31:BH:83:GLU:CD	31:BH:84:LYS:N	2.26	0.88
32:BI:116:GLU:CG	32:BI:132:LYS:HE3	2.03	0.88
32:BI:2:LYS:CD	32:BI:39:ALA:HB2	2.03	0.88
26:BA:1140:C:N4	33:BN:49:ARG:CZ	2.36	0.88
34:BO:63:VAL:HG12	34:BO:102:VAL:HG13	1.54	0.88
36:BQ:131:ALA:HA	36:BQ:134:PHE:CE2	2.08	0.88
36:BQ:58:HIS:ND1	36:BQ:59:ASN:N	2.20	0.88
43:BR:113:LEU:HD13	43:BR:113:LEU:C	1.94	0.88
44:BU:115:ASN:HD22	44:BU:115:ASN:H	1.21	0.88
44:BU:74:MET:HE2	44:BU:78:THR:CG2	1.81	0.88
41:BY:101:LEU:CD2	41:BY:101:LEU:O	2.21	0.88
41:BY:11:GLN:HA	41:BY:21:LYS:HE3	1.53	0.88
41:BY:51:LEU:O	41:BY:52:ARG:HG3	1.72	0.88
41:BY:57:GLY:H	41:BY:97:ARG:NH2	1.70	0.88
26:BA:440:G:OP2	41:BY:6:LYS:NZ	2.05	0.88
42:BZ:40:ASP:CG	42:BZ:41:ARG:CZ	2.42	0.88
26:BA:2354:G:N3	48:B0:32:LYS:HE2	1.88	0.88
47:B3:30:ARG:HG3	47:B3:30:ARG:NH1	1.86	0.88
26:BA:126:A:C5	52:B7:18:PHE:CD2	2.60	0.88
52:B7:30:ILE:O	52:B7:33:ARG:CA	2.21	0.88
1:AA:1517:G:N3	26:BA:1919:A:H4'	1.89	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2236:C:C2'	26:BA:2237:G:C5'	2.50	0.88
26:BA:2255:G:C5	26:BA:2256:G:C8	2.62	0.88
26:BA:2287:A:H2	26:BA:2289:G:O4'	1.55	0.88
26:BA:2353:G:N2	26:BA:2364:C:C4	2.32	0.88
26:BA:2471:C:O2	26:BA:2479:G:N2	2.06	0.88
26:BA:2626:C:O5'	26:BA:2626:C:C6	2.27	0.88
26:BA:2680:C:H5'	28:BE:302:GLY:N	1.89	0.88
26:BA:2688:U:O2	26:BA:2719:G:N3	2.06	0.88
26:BA:2770:G:C1'	28:BE:316:ARG:HH12	1.70	0.88
26:BA:2785:C:HO2'	26:BA:2786:U:P	1.97	0.88
27:BD:161:ALA:CA	27:BD:162:GLN:NE2	2.37	0.88
27:BD:167:GLU:C	27:BD:170:TYR:CE1	2.46	0.88
27:BD:86:ARG:N	27:BD:86:ARG:HD2	1.87	0.88
28:BE:304:ASP:O	28:BE:307:LEU:CB	2.22	0.88
29:BF:111:VAL:C	29:BF:114:ALA:HB3	1.92	0.88
31:BH:7:PRO:HD3	31:BH:68:ARG:CD	2.03	0.88
55:BK:121:LEU:HD22	55:BK:125:MET:HE1	1.53	0.88
26:BA:1022:G:O6	33:BN:47:THR:CB	2.21	0.88
33:BN:54:VAL:HG22	33:BN:135:ILE:HD13	1.55	0.88
34:BO:90:ASP:O	34:BO:92:SER:N	2.07	0.88
36:BQ:41:THR:CB	36:BQ:126:VAL:HA	2.03	0.88
36:BQ:58:HIS:CG	36:BQ:59:ASN:H	1.90	0.88
36:BQ:57:ARG:C	36:BQ:61:LEU:HD21	1.93	0.88
37:BS:27:LEU:HB2	37:BS:33:ARG:HH21	1.10	0.88
45:BV:40:VAL:HG12	45:BV:55:THR:HG23	1.53	0.88
44:BU:43:ALA:CB	45:BV:75:LYS:CB	2.52	0.88
39:BW:79:GLY:O	39:BW:80:PRO:O	1.92	0.88
42:BZ:105:GLN:C	42:BZ:142:ASN:ND2	2.25	0.88
48:B0:64:ASP:O	48:B0:66:LYS:NZ	2.06	0.88
49:B4:40:HIS:HB3	49:B4:41:PRO:CD	2.02	0.88
49:B4:41:PRO:HG2	49:B4:57:ASP:CB	2.03	0.88
26:BA:1097:U:O4	55:BK:31:HIS:CE1	2.27	0.88
26:BA:818:G:N2	26:BA:1189:A:H62	1.70	0.88
26:BA:1952:A:N3	34:BO:22:ILE:HD13	1.88	0.88
26:BA:2432:A:C2	26:BA:2433:A:C2	2.60	0.88
26:BA:2712:U:C3'	26:BA:2714:G:OP2	2.20	0.88
26:BA:2777:G:O5'	26:BA:2777:G:C8	2.26	0.88
26:BA:2801:A:H2	26:BA:2895:U:H1'	1.37	0.88
26:BA:2810:A:N7	26:BA:2811:G:C1'	2.37	0.88
26:BA:752:A:C5	26:BA:1781:C:H1'	2.08	0.88
27:BD:143:ILE:C	27:BD:152:GLN:HB2	1.93	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2317:C:H5'	30:BG:150:SER:HB2	1.55	0.88
26:BA:2312:U:H5'	30:BG:53:LYS:HB2	1.54	0.88
32:BI:21:VAL:HG11	32:BI:30:LEU:HD12	1.56	0.88
33:BN:27:ALA:HA	33:BN:30:ALA:HB3	0.92	0.88
33:BN:58:GLU:HA	33:BN:61:VAL:CB	2.03	0.88
36:BQ:149:ILE:H	36:BQ:149:ILE:HD12	1.39	0.88
44:BU:49:ASP:HA	44:BU:52:ASN:CG	1.92	0.88
40:BX:17:ASP:CA	40:BX:20:PHE:CE1	2.56	0.88
41:BY:101:LEU:HB3	41:BY:113:GLU:OE1	1.73	0.88
41:BY:41:ARG:CB	41:BY:112:LEU:HA	1.98	0.88
41:BY:9:LYS:HE3	41:BY:13:ARG:CZ	2.04	0.88
42:BZ:176:LEU:C	42:BZ:176:LEU:HD23	1.93	0.88
7:AD:24:GLU:N	7:AD:112:VAL:HG12	1.89	0.88
26:BA:2295:C:N4	26:BA:2337:G:N1	2.21	0.88
26:BA:2348:U:H3'	53:B8:42:ARG:NH2	1.89	0.88
26:BA:2361:A:H2'	26:BA:2362:G:H5'	1.55	0.88
26:BA:2463:C:O2	26:BA:2464:C:C6	2.26	0.88
26:BA:2458:G:O6	26:BA:2490:G:C2'	2.20	0.88
26:BA:2663:G:H2'	26:BA:2664:G:H8	1.35	0.88
26:BA:2740:A:C8	26:BA:2741:A:N7	2.42	0.88
28:BE:222:ARG:HD3	28:BE:232:ARG:HA	1.56	0.88
28:BE:201:VAL:N	28:BE:266:LYS:CD	2.37	0.88
29:BF:157:LEU:HB2	29:BF:158:GLU:CD	1.93	0.88
34:BO:31:ARG:C	34:BO:32:TYR:CD1	2.47	0.88
35:BP:94:ARG:HB2	35:BP:120:LEU:HD21	0.89	0.88
43:BR:18:LEU:HD13	43:BR:18:LEU:C	1.94	0.88
38:BT:28:THR:C	38:BT:29:THR:HG23	1.93	0.88
26:BA:446:G:OP2	44:BU:3:ARG:NE	2.07	0.88
45:BV:4:ILE:HD11	45:BV:13:ARG:NE	1.87	0.88
41:BY:26:THR:O	41:BY:27:LEU:HG	1.73	0.88
1:AA:939:G:H5''	10:AG:102:ARG:NH2	1.88	0.88
16:AM:66:LEU:C	16:AM:70:LEU:HB2	1.92	0.88
1:AA:1314:C:N4	22:AS:4:SER:OG	2.06	0.88
3:AW:9:A:C6	3:AW:45:G:N1	2.42	0.88
48:B0:43:THR:OG1	48:B0:75:GLY:O	1.90	0.88
46:B2:23:LEU:CA	46:B2:26:GLU:OE1	2.18	0.88
49:B4:41:PRO:HB3	49:B4:59:PHE:HE1	1.38	0.88
50:B5:15:LYS:O	50:B5:18:MET:N	2.06	0.88
51:B6:19:GLY:HA2	51:B6:44:ALA:HB2	1.56	0.88
26:BA:1156:A:C8	44:BU:55:ARG:NH2	2.41	0.88
26:BA:2206:C:C2'	26:BA:2207:C:H5'	2.04	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2366:A:C8	26:BA:2367:G:C8	2.62	0.88
26:BA:2700:C:C2'	26:BA:2701:C:H4'	2.03	0.88
26:BA:1664:A:N3	26:BA:2726:U:O4	2.06	0.88
26:BA:2731:G:N2	26:BA:2732:G:C2	2.42	0.88
26:BA:2756:U:N3	26:BA:2759:G:O6	2.07	0.88
26:BA:2810:A:C8	26:BA:2811:G:C1'	2.56	0.88
26:BA:2813:A:O2'	26:BA:2814:C:H6	1.57	0.88
26:BA:1710:C:O2'	26:BA:2858:C:N3	2.05	0.88
29:BF:47:GLY:HA2	29:BF:92:PRO:CA	2.03	0.88
31:BH:90:GLY:CA	31:BH:159:LYS:HG3	2.00	0.88
31:BH:43:THR:HG23	31:BH:52:THR:HG23	0.88	0.88
33:BN:83:ILE:O	33:BN:86:MET:N	2.05	0.88
26:BA:911:A:C6	36:BQ:16:ARG:HA	2.09	0.88
36:BQ:57:ARG:C	36:BQ:61:LEU:CG	2.42	0.88
37:BS:23:ARG:CZ	37:BS:37:ARG:NH2	2.35	0.88
45:BV:59:GLU:C	45:BV:60:VAL:HG23	1.93	0.88
39:BW:8:ARG:CG	39:BW:9:TYR:H	1.85	0.88
40:BX:20:PHE:HD1	40:BX:22:ASN:N	1.70	0.88
41:BY:55:PHE:HB3	41:BY:58:GLU:OE2	1.73	0.88
1:AA:651:C:O3'	1:AA:652:U:P	2.32	0.88
3:AW:76:A:C4	26:BA:2421:G:C5	2.62	0.88
47:B3:54:VAL:HG23	47:B3:55:ARG:N	1.89	0.88
50:B5:15:LYS:HZ3	50:B5:15:LYS:HB2	1.39	0.88
26:BA:125:G:N2	52:B7:10:ARG:HA	1.88	0.88
26:BA:1251:C:H5''	44:BU:10:ARG:NE	1.88	0.88
26:BA:1801:G:H8	26:BA:1801:G:OP1	1.57	0.88
26:BA:2509:G:N3	26:BA:2580:U:O2	2.06	0.88
26:BA:2589:A:H2'	26:BA:2590:A:H5'	1.54	0.88
26:BA:2045:C:H42	26:BA:2623:G:H1	0.88	0.88
26:BA:2653:U:H3	26:BA:2654:A:N6	1.71	0.88
26:BA:2734:A:N7	26:BA:2735:G:C8	2.42	0.88
26:BA:2783:G:O5'	26:BA:2783:G:H8	1.57	0.88
26:BA:2869:G:C2'	26:BA:2870:C:H5'	2.03	0.88
26:BA:997:G:OP1	44:BU:92:ARG:HD2	1.72	0.88
28:BE:99:VAL:CG1	28:BE:100:TRP:H	1.87	0.88
29:BF:39:GLN:N	29:BF:39:GLN:OE1	2.07	0.88
29:BF:6:TYR:HE2	29:BF:140:VAL:HG22	1.37	0.88
31:BH:93:TYR:HB3	31:BH:106:VAL:CG2	1.99	0.88
33:BN:45:VAL:C	33:BN:46:ILE:HG13	1.86	0.88
26:BA:1137:G:H21	33:BN:86:MET:HE1	1.37	0.88
36:BQ:65:ARG:HE	36:BQ:85:ILE:HB	1.38	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:907:U:O2'	36:BQ:88:PHE:CZ	2.25	0.88
26:BA:994:C:H4'	44:BU:54:LYS:HE2	1.55	0.88
45:BV:40:VAL:CB	45:BV:51:ALA:HB1	2.03	0.88
40:BX:48:THR:O	40:BX:50:GLU:OE2	1.91	0.88
41:BY:28:SER:CB	41:BY:99:THR:CB	2.48	0.88
46:B2:8:ILE:C	46:B2:11:MET:HG2	1.94	0.87
49:B4:14:ILE:HG23	49:B4:16:TYR:HE1	1.32	0.87
49:B4:51:ASP:O	49:B4:52:THR:HG22	1.75	0.87
50:B5:34:PRO:CD	50:B5:36:CYS:SG	2.62	0.87
51:B6:39:LYS:HA	51:B6:50:PHE:CD1	2.09	0.87
53:B8:5:LYS:C	53:B8:7:HIS:N	2.26	0.87
26:BA:1151:G:C2'	44:BU:81:ASN:ND2	2.36	0.87
26:BA:2320:A:H8	26:BA:2320:A:O5'	1.56	0.87
26:BA:2333:A:C4	26:BA:2335:A:C2	2.61	0.87
26:BA:2425:A:O2'	26:BA:2426:A:P	2.32	0.87
26:BA:2067:G:H1	26:BA:2443:C:N4	1.72	0.87
26:BA:2060:A:O2'	26:BA:2502:G:O5'	1.91	0.87
26:BA:2546:U:C4'	26:BA:2565:A:H2	1.79	0.87
26:BA:2657:A:N6	26:BA:2664:G:N2	2.12	0.87
26:BA:2689:U:C5'	26:BA:2690:C:H5''	2.03	0.87
26:BA:2739:U:O2'	26:BA:2740:A:H5''	1.74	0.87
26:BA:2735:G:C5	26:BA:2770:G:N2	2.42	0.87
28:BE:315:VAL:O	28:BE:317:PRO:HD3	1.74	0.87
29:BF:230:GLY:C	29:BF:231:ARG:CG	2.40	0.87
29:BF:59:GLU:O	29:BF:61:PHE:HD2	1.55	0.87
30:BG:11:HIS:NE2	30:BG:15:GLU:OE2	2.05	0.87
31:BH:25:VAL:HG12	31:BH:78:VAL:HG21	1.56	0.87
35:BP:101:ASP:O	35:BP:102:ASP:CG	2.13	0.87
43:BR:90:ARG:HH22	43:BR:117:VAL:HG22	1.38	0.87
43:BR:21:TYR:HB3	43:BR:47:PHE:CE2	2.08	0.87
45:BV:83:ARG:O	45:BV:84:THR:OG1	1.89	0.87
26:BA:1614:A:N7	39:BW:88:ARG:HD2	1.88	0.87
40:BX:33:SER:CA	40:BX:37:VAL:CG2	2.51	0.87
42:BZ:14:LEU:CD2	42:BZ:79:ILE:HG21	2.04	0.87
26:BA:856:C:HO2'	48:B0:24:LYS:HB2	1.09	0.87
49:B4:32:HIS:O	49:B4:34:ASP:OD1	1.92	0.87
26:BA:1127:A:N1	26:BA:2518:A:N3	2.22	0.87
26:BA:1646:C:H3'	26:BA:1647:G:C5'	2.02	0.87
26:BA:2093:G:H1'	26:BA:2198:A:C6	2.09	0.87
26:BA:2482:G:C5	26:BA:2483:C:C6	2.62	0.87
26:BA:2734:A:C8	26:BA:2734:A:H5''	2.09	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:856:C:C4'	48:B0:25:LYS:HZ2	1.88	0.87
29:BF:6:TYR:CE1	29:BF:139:VAL:HB	2.08	0.87
29:BF:56:THR:HB	29:BF:57:PRO:CD	2.04	0.87
31:BH:93:TYR:HE1	31:BH:106:VAL:C	1.75	0.87
55:BK:93:LYS:HD3	55:BK:96:ILE:HD12	1.54	0.87
35:BP:77:ALA:CA	35:BP:81:VAL:CG1	2.51	0.87
36:BQ:46:VAL:O	36:BQ:124:ALA:C	2.11	0.87
42:BZ:6:LYS:C	42:BZ:31:SER:OG	2.11	0.87
3:AW:75:C:N4	49:B4:28:ARG:N	2.21	0.87
26:BA:2056:G:H1	50:B5:4:HIS:C	1.75	0.87
26:BA:2266:A:N6	26:BA:2273:A:OP2	2.07	0.87
26:BA:2581:G:N1	26:BA:2610:C:H2'	1.88	0.87
26:BA:2689:U:C1'	26:BA:2713:A:C2	2.57	0.87
26:BA:1759:A:H5'	26:BA:2715:C:H1'	1.55	0.87
26:BA:2838:G:C5	26:BA:2839:G:C8	2.62	0.87
26:BA:2862:G:H2'	26:BA:2863:C:C5	2.08	0.87
26:BA:2881:C:N4	26:BA:2882:A:H62	1.72	0.87
27:BD:75:GLY:C	27:BD:115:ILE:O	2.11	0.87
27:BD:73:ILE:HG22	27:BD:95:TYR:CD2	1.80	0.87
28:BE:221:LYS:HZ3	28:BE:233:ARG:HG2	1.37	0.87
29:BF:144:PHE:C	29:BF:146:ASP:H	1.77	0.87
29:BF:197:SER:HB3	29:BF:239:ALA:H	1.37	0.87
29:BF:164:ALA:CB	29:BF:232:LEU:HD13	2.02	0.87
33:BN:19:MET:CE	33:BN:22:VAL:HG21	2.05	0.87
33:BN:19:MET:HB3	33:BN:46:ILE:CD1	2.05	0.87
38:BT:14:GLU:OE1	38:BT:14:GLU:HA	1.74	0.87
39:BW:85:VAL:CG1	39:BW:95:ILE:HD11	2.03	0.87
39:BW:83:LYS:HA	39:BW:97:LYS:HG2	1.54	0.87
42:BZ:51:LEU:CD2	42:BZ:52:PHE:N	2.33	0.87
42:BZ:68:ALA:O	42:BZ:69:VAL:HG23	0.70	0.87
1:AA:243:A:H4'	1:AA:244:U:H5'	1.57	0.87
5:AB:32:ILE:HD11	5:AB:40:HIS:HB3	1.57	0.87
50:B5:15:LYS:O	50:B5:16:ARG:C	2.09	0.87
53:B8:12:ARG:HD2	53:B8:13:ARG:HD2	1.57	0.87
26:BA:2484:G:H1'	36:BQ:142:LYS:NZ	1.90	0.87
26:BA:2642:G:O2'	26:BA:2643:G:C5'	2.15	0.87
26:BA:2666:C:H3'	26:BA:2667:C:H5'	1.56	0.87
26:BA:2781:A:H5''	26:BA:2782:G:O5'	1.68	0.87
26:BA:2821:A:N3	26:BA:2822:G:C8	2.42	0.87
26:BA:535:C:H4'	44:BU:53:LYS:HE3	0.88	0.87
28:BE:79:ARG:NH1	28:BE:104:PHE:O	2.02	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:99:LYS:HG3	55:BK:140:VAL:HG21	1.56	0.87
33:BN:10:VAL:CG1	33:BN:36:VAL:CG2	1.97	0.87
33:BN:95:ARG:HA	33:BN:98:PHE:CE1	2.08	0.87
35:BP:106:VAL:CG2	35:BP:122:ALA:HB1	2.03	0.87
26:BA:2406:U:H3	35:BP:55:GLN:CB	1.86	0.87
35:BP:64:ILE:O	35:BP:108:VAL:HA	1.74	0.87
35:BP:71:GLU:O	35:BP:73:VAL:N	2.07	0.87
36:BQ:41:THR:HG21	36:BQ:126:VAL:HA	1.52	0.87
36:BQ:67:ALA:H	36:BQ:70:ARG:NH2	1.72	0.87
36:BQ:67:ALA:O	36:BQ:71:PHE:HD1	1.28	0.87
40:BX:6:LYS:CE	40:BX:29:ASP:CA	2.52	0.87
41:BY:101:LEU:HD13	41:BY:103:LEU:HD11	1.56	0.87
42:BZ:141:MET:SD	42:BZ:141:MET:N	2.46	0.87
42:BZ:10:PRO:O	42:BZ:14:LEU:N	2.08	0.87
1:AA:266:G:H22	1:AA:270:A:H62	1.20	0.87
47:B3:20:LYS:CD	47:B3:23:LEU:HD12	2.02	0.87
47:B3:38:GLU:O	47:B3:40:THR:HG22	1.74	0.87
50:B5:42:SER:O	50:B5:43:HIS:HB2	1.74	0.87
26:BA:125:G:N2	52:B7:10:ARG:CA	2.37	0.87
26:BA:2330:G:N1	26:BA:2385:C:N4	2.22	0.87
26:BA:2378:A:O4'	37:BS:101:VAL:HG23	1.74	0.87
26:BA:631:A:H2	26:BA:2415:G:N3	1.73	0.87
26:BA:2445:G:O2'	26:BA:2446:G:H5'	1.75	0.87
26:BA:2633:G:N2	26:BA:2634:G:C5	2.42	0.87
26:BA:2712:U:O2'	26:BA:712(A):A:O5'	1.92	0.87
26:BA:2759:G:O2'	26:BA:2760:C:C5'	2.23	0.87
26:BA:818:G:H21	26:BA:1189:A:N6	1.70	0.87
29:BF:212:VAL:HG12	29:BF:212:VAL:O	1.72	0.87
30:BG:135:VAL:HG12	30:BG:135:VAL:O	1.73	0.87
30:BG:57:THR:HG22	30:BG:58:VAL:N	1.90	0.87
31:BH:159:LYS:N	31:BH:162:ARG:HH22	1.72	0.87
32:BI:25:TYR:HD2	32:BI:25:TYR:N	1.70	0.87
33:BN:60:ARG:CA	33:BN:71:TYR:HD2	1.88	0.87
35:BP:64:ILE:HD12	35:BP:106:VAL:CB	2.05	0.87
36:BQ:140:TYR:CG	36:BQ:147:VAL:HG11	2.09	0.87
26:BA:911:A:N7	36:BQ:16:ARG:CG	2.34	0.87
37:BS:56:ASP:O	37:BS:57:THR:CG2	2.22	0.87
44:BU:5:LYS:O	44:BU:7:GLY:N	2.08	0.87
39:BW:23:LEU:C	39:BW:25:ARG:H	1.76	0.87
39:BW:86:LEU:HB3	39:BW:87:PRO:HD3	1.56	0.87
1:AA:1268:A:C4'	24:AU:20:LYS:HB2	2.02	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:19:LEU:HB3	50:B5:25:LEU:HD11	1.55	0.87
53:B8:4:MET:HA	53:B8:5:LYS:HZ2	1.11	0.87
54:B9:20:HIS:C	54:B9:22:ARG:H	1.78	0.87
54:B9:24:LEU:CD1	54:B9:35:ARG:HG3	2.05	0.87
26:BA:2044:C:C2	26:BA:2624:G:N2	2.38	0.87
26:BA:2210:G:C6	27:BD:148:GLY:HA3	2.09	0.87
26:BA:2084:C:O2	26:BA:2235:G:N2	2.06	0.87
26:BA:2364:C:H1'	48:B0:32:LYS:HZ3	1.27	0.87
26:BA:2373:G:N1	26:BA:2374:C:N4	2.22	0.87
26:BA:2625:G:C8	26:BA:2626:C:C4	2.63	0.87
26:BA:2626:C:H2'	26:BA:2627:G:H5'	0.89	0.87
26:BA:2661:G:C4	26:BA:2662:A:N7	2.42	0.87
26:BA:2679:A:H61	26:BA:2728:U:H3	1.23	0.87
26:BA:2706:G:H8	26:BA:2706:G:O5'	1.57	0.87
27:BD:149:ARG:HB2	27:BD:152:GLN:HE21	1.38	0.87
28:BE:180:ILE:CG2	28:BE:187:HIS:CB	2.48	0.87
28:BE:211:GLN:O	28:BE:216:ARG:NH1	2.07	0.87
29:BF:4:THR:O	29:BF:139:VAL:CG1	2.23	0.87
29:BF:39:GLN:OE1	29:BF:40:ALA:N	2.06	0.87
30:BG:53:LYS:CG	30:BG:54:ALA:N	2.33	0.87
31:BH:170:LEU:C	31:BH:170:LEU:HD13	1.94	0.87
32:BI:7:LYS:CG	32:BI:12:LYS:HA	2.03	0.87
36:BQ:44:ALA:HB1	36:BQ:126:VAL:O	1.73	0.87
36:BQ:140:TYR:O	36:BQ:143:VAL:HG22	1.75	0.87
37:BS:27:LEU:HD13	37:BS:27:LEU:C	1.93	0.87
37:BS:74:PRO:O	37:BS:80:SER:N	2.07	0.87
44:BU:98:ILE:O	44:BU:101:ARG:N	2.08	0.87
42:BZ:24:TYR:CD2	42:BZ:84:TYR:CD1	2.61	0.87
42:BZ:26:LYS:HB3	42:BZ:26:LYS:NZ	1.89	0.87
1:AA:32:A:H2'	1:AA:33:A:C8	2.10	0.87
14:AK:110:ASP:HB3	21:AR:85:LEU:HB3	1.56	0.87
48:B0:52:GLY:O	48:B0:53:MET:HG2	1.73	0.87
50:B5:25:LEU:O	50:B5:26:THR:CG2	2.23	0.87
51:B6:8:ILE:HA	51:B6:29:ARG:HH21	1.38	0.87
52:B7:38:GLY:O	52:B7:39:ARG:CB	2.22	0.87
53:B8:16:ILE:HG22	53:B8:21:LYS:O	1.74	0.87
26:BA:14:A:H2	26:BA:2625:G:O2'	1.54	0.87
26:BA:1786:A:H2	26:BA:2590:A:H1'	1.40	0.87
26:BA:2197:U:C2'	26:BA:2224:G:N2	2.30	0.87
26:BA:2227:A:N6	26:BA:2228:G:O6	2.06	0.87
26:BA:2259:G:N7	26:BA:2260:C:C4	2.43	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2317:C:C6	26:BA:2318:G:N7	2.43	0.87
26:BA:2439:A:H1'	26:BA:2587:A:P	2.15	0.87
26:BA:2616:C:C2'	26:BA:2617:C:C5'	2.44	0.87
26:BA:2044:C:H42	26:BA:2624:G:H1	0.89	0.87
26:BA:2825:C:C6	26:BA:2825:C:H3'	2.10	0.87
26:BA:593:G:O2'	53:B8:58:MET:HE1	1.75	0.87
25:BB:45:A:H1'	30:BG:76:ARG:NH1	1.90	0.87
27:BD:196:ASN:HA	27:BD:199:ARG:CD	2.04	0.87
29:BF:106:GLU:O	29:BF:109:LEU:HB2	1.74	0.87
30:BG:149:ARG:O	30:BG:151:ILE:N	2.06	0.87
33:BN:105:LEU:CG	33:BN:106:GLY:H	1.86	0.87
34:BO:29:GLY:O	34:BO:30:ARG:O	1.90	0.87
34:BO:40:VAL:HG12	34:BO:40:VAL:O	1.74	0.87
35:BP:67:ARG:HH11	35:BP:111:ALA:C	1.77	0.87
26:BA:445:C:H3'	44:BU:3:ARG:CZ	2.03	0.87
45:BV:74:TYR:CZ	45:BV:87:ARG:C	2.44	0.87
1:AA:891:U:H2'	1:AA:892:A:H8	1.37	0.87
26:BA:2400:G:H4'	51:B6:20:PHE:CE1	2.09	0.87
51:B6:45:LYS:C	51:B6:46:LYS:HE2	1.95	0.87
52:B7:30:ILE:HD11	52:B7:33:ARG:HH12	1.39	0.87
53:B8:30:ARG:NH2	53:B8:41:ILE:HG23	1.88	0.87
26:BA:1027:A:N6	26:BA:1126:A:H1'	1.89	0.87
26:BA:1924:C:N3	26:BA:1925:C:C5	2.43	0.87
26:BA:2247:A:H2'	26:BA:2248:C:H6	1.39	0.87
26:BA:199:A:N1	26:BA:2433:A:N7	2.20	0.87
26:BA:2479:G:OP1	26:BA:2537:U:O4'	1.93	0.87
26:BA:2695:C:H2'	26:BA:2696:U:C6	2.10	0.87
26:BA:2699:C:O2	26:BA:2699:C:H2'	1.73	0.87
26:BA:602:G:O3'	26:BA:603:A:H4'	1.70	0.87
26:BA:72:U:C5'	40:BX:2:TRP:CH2	2.56	0.87
26:BA:85:G:OP2	41:BY:65:VAL:CB	2.22	0.87
27:BD:131:LEU:HD11	27:BD:183:ILE:HG21	0.89	0.87
26:BA:2218:G:HO2'	27:BD:146:LYS:HE3	1.34	0.87
28:BE:210:THR:CG2	28:BE:255:GLN:HG2	2.03	0.87
31:BH:148:ARG:HH12	31:BH:164:GLU:H	1.22	0.87
31:BH:51:VAL:HG21	31:BH:68:ARG:HE	1.38	0.87
32:BI:91:GLY:O	32:BI:92:SER:O	1.92	0.87
36:BQ:42:TYR:O	42:BZ:119:ASN:ND2	2.06	0.87
37:BS:12:ARG:NH1	37:BS:20:TYR:HE2	1.37	0.87
37:BS:98:GLU:CG	37:BS:99:GLU:H	1.88	0.87
45:BV:42:GLY:O	45:BV:54:TYR:OH	1.93	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1339:G:H5'	40:BX:13:LYS:CE	2.05	0.87
7:AD:9:CYS:SG	7:AD:31:CYS:CA	2.63	0.87
49:B4:68:ARG:CG	49:B4:72:LYS:CG	2.52	0.87
53:B8:8:LYS:O	53:B8:11:LYS:N	2.07	0.87
26:BA:138:G:H2'	26:BA:139:G:H4'	1.57	0.87
26:BA:2188:C:C4	26:BA:2189:U:C4	2.63	0.87
26:BA:2313:C:HO2'	26:BA:2314:C:H5'	1.34	0.87
26:BA:2330:G:C2	26:BA:2331:G:C1'	2.57	0.87
26:BA:2457:U:C5	26:BA:2458:G:N3	2.42	0.87
26:BA:1782:C:N3	26:BA:2609:U:H6	1.71	0.87
26:BA:2657:A:C5	26:BA:2664:G:N2	2.41	0.87
26:BA:2721:A:N3	26:BA:2722:G:C8	2.43	0.87
26:BA:623:G:H2'	26:BA:624:C:H6	1.40	0.87
27:BD:89:ASN:C	27:BD:105:ALA:HB2	1.95	0.87
28:BE:61:PRO:HB3	28:BE:69:PRO:HB3	1.56	0.87
29:BF:102:LEU:HD21	29:BF:106:GLU:CB	2.04	0.87
29:BF:140:VAL:HG23	29:BF:234:VAL:HB	1.57	0.87
30:BG:142:ALA:HB2	30:BG:151:ILE:HD11	1.55	0.87
32:BI:75:LEU:CD1	32:BI:76:THR:N	2.36	0.87
32:BI:7:LYS:HG3	32:BI:12:LYS:HD3	1.55	0.87
55:BK:121:LEU:HA	55:BK:125:MET:HE2	0.88	0.87
33:BN:16:ASP:N	33:BN:45:VAL:HG23	1.83	0.87
33:BN:27:ALA:O	33:BN:28:GLU:C	2.12	0.87
35:BP:67:ARG:N	35:BP:67:ARG:NE	2.23	0.87
36:BQ:36:ASN:HB3	36:BQ:41:THR:N	1.90	0.87
44:BU:8:ILE:N	44:BU:11:ARG:CD	2.38	0.87
39:BW:66:GLU:HG2	39:BW:67:ASP:N	1.89	0.87
42:BZ:141:MET:HA	42:BZ:171:VAL:HG11	1.55	0.87
42:BZ:85:MET:O	42:BZ:86:VAL:HG23	1.75	0.87
1:AA:1319:A:H4'	22:AS:70:LYS:HZ1	1.40	0.86
1:AA:1229:A:O3'	2:AV:30:G:H5''	1.75	0.86
47:B3:3:ARG:HD3	47:B3:60:GLU:CB	2.03	0.86
50:B5:44:HIS:HA	50:B5:52:TYR:HH	1.06	0.86
51:B6:41:ASP:HB3	51:B6:47:HIS:N	1.90	0.86
52:B7:21:ARG:HD2	52:B7:31:LEU:HD13	1.57	0.86
26:BA:1022:G:OP2	33:BN:52:GLN:NE2	2.08	0.86
26:BA:1665:A:H4'	34:BO:66:LYS:HD3	1.54	0.86
26:BA:1818:U:H3'	27:BD:155:ARG:CG	2.05	0.86
26:BA:1952:A:H2	34:BO:22:ILE:HG23	0.72	0.86
26:BA:1999:C:O2'	26:BA:2687:U:O2'	1.78	0.86
26:BA:2049:G:C2	26:BA:2620:C:C2	2.61	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2439:A:N3	26:BA:2439:A:C2'	2.37	0.86
26:BA:2653:U:OP2	26:BA:2654:A:H3'	1.74	0.86
27:BD:213:LYS:C	27:BD:215:LYS:N	2.28	0.86
28:BE:222:ARG:CG	28:BE:232:ARG:HA	2.05	0.86
28:BE:45:LYS:HE2	28:BE:301:PRO:HB2	1.54	0.86
30:BG:99:ASP:N	30:BG:104:PHE:CD2	2.42	0.86
30:BG:97:GLN:OE1	30:BG:106:PHE:HE2	1.56	0.86
31:BH:7:PRO:HD2	31:BH:68:ARG:HD3	1.54	0.86
55:BK:121:LEU:CD2	55:BK:125:MET:HE1	2.05	0.86
55:BK:93:LYS:HA	55:BK:96:ILE:HD11	1.57	0.86
34:BO:92:SER:CB	34:BO:113:LYS:NZ	2.38	0.86
26:BA:2250:G:C5'	36:BQ:102:ARG:HD3	2.04	0.86
42:BZ:141:MET:CB	42:BZ:171:VAL:HG11	2.05	0.86
42:BZ:156:GLU:CG	42:BZ:157:GLY:H	1.81	0.86
1:AA:600:C:OP1	11:AH:97:VAL:HB	1.74	0.86
48:B0:36:ILE:O	48:B0:37:LEU:CD2	2.23	0.86
53:B8:16:ILE:N	53:B8:16:ILE:HD12	1.90	0.86
26:BA:138:G:C8	40:BX:42:GLU:OE1	2.28	0.86
26:BA:2087:G:O6	26:BA:2233:U:C5	2.28	0.86
26:BA:2234:G:C6	26:BA:2235:G:C5	2.62	0.86
26:BA:2414:G:C4	26:BA:2415:G:C8	2.63	0.86
26:BA:414:C:H42	26:BA:2409:G:H1	0.88	0.86
27:BD:86:ARG:O	27:BD:87:SER:OG	1.92	0.86
28:BE:225:LYS:O	28:BE:226:HIS:ND1	2.08	0.86
29:BF:102:LEU:CD2	29:BF:106:GLU:CB	2.53	0.86
26:BA:2306:C:O2	30:BG:27:ILE:HG12	1.74	0.86
31:BH:36:PHE:HD2	31:BH:70:LEU:HD13	1.39	0.86
55:BK:112:LYS:NZ	55:BK:116:LEU:HD23	1.90	0.86
33:BN:63:ILE:HG21	33:BN:71:TYR:OH	1.74	0.86
34:BO:25:LEU:HD21	34:BO:40:VAL:HG23	0.88	0.86
26:BA:910:A:H3'	36:BQ:17:ARG:HH21	1.38	0.86
36:BQ:58:HIS:N	36:BQ:61:LEU:CD1	2.38	0.86
36:BQ:89:PRO:HA	36:BQ:113:ALA:HB2	1.57	0.86
1:AA:979:C:OP1	1:AA:1222:G:C6	2.28	0.86
3:AW:9:A:C6	3:AW:45:G:C2	2.63	0.86
49:B4:49:PHE:CZ	49:B4:71:SER:OG	2.20	0.86
53:B8:6:THR:O	53:B8:7:HIS:C	2.13	0.86
26:BA:2313:C:O2'	26:BA:2314:C:C5'	2.23	0.86
26:BA:2517:C:C2	26:BA:2542:A:N6	2.43	0.86
26:BA:2870:C:O2	26:BA:2871:C:C6	2.28	0.86
27:BD:104:ILE:CD1	27:BD:104:ILE:N	2.32	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:126:GLY:O	27:BD:127:ASN:O	1.91	0.86
27:BD:216:ALA:HB1	27:BD:223:ASN:CB	2.04	0.86
29:BF:102:LEU:CB	29:BF:107:ARG:NH2	2.37	0.86
29:BF:102:LEU:HD21	29:BF:106:GLU:HB3	1.58	0.86
29:BF:102:LEU:HD23	29:BF:106:GLU:CD	1.95	0.86
30:BG:88:LEU:N	30:BG:89:PRO:CD	2.38	0.86
35:BP:114:VAL:HG11	35:BP:133:VAL:HA	1.57	0.86
36:BQ:31:PHE:CD2	36:BQ:85:ILE:O	2.28	0.86
44:BU:89:ASP:CB	45:BV:51:ALA:HB3	2.03	0.86
44:BU:92:ARG:CA	44:BU:95:LEU:CG	2.52	0.86
41:BY:49:GLU:OE2	41:BY:97:ARG:NH1	0.72	0.86
1:AA:1073:U:N3	1:AA:1074:G:N7	2.22	0.86
48:B0:36:ILE:O	48:B0:37:LEU:HD23	1.75	0.86
48:B0:38:VAL:HA	48:B0:40:GLN:NE2	1.89	0.86
46:B2:24:LYS:HA	46:B2:27:LEU:HD12	1.56	0.86
46:B2:7:GLU:OE1	46:B2:8:ILE:HG13	1.74	0.86
50:B5:34:PRO:HG2	50:B5:36:CYS:SG	2.14	0.86
26:BA:1620:G:C1'	52:B7:1:MET:H3	1.77	0.86
52:B7:30:ILE:HA	52:B7:33:ARG:HD2	0.94	0.86
26:BA:1240:U:H3'	26:BA:1241:A:H8	1.38	0.86
26:BA:2446:G:H21	26:BA:2501:C:H41	1.16	0.86
26:BA:2561:A:C5	26:BA:2562:U:C6	2.64	0.86
26:BA:2564:A:C2'	26:BA:2565:A:H8	1.84	0.86
26:BA:25:U:H5'	39:BW:79:GLY:HA3	1.55	0.86
26:BA:2652:C:C6	26:BA:2653:U:H5	1.83	0.86
27:BD:208:GLY:C	27:BD:210:LYS:HG2	1.96	0.86
30:BG:49:PRO:CB	30:BG:72:LYS:H	1.87	0.86
26:BA:2749:A:C1'	31:BH:62:ALA:HB2	2.05	0.86
32:BI:102:LEU:HD12	32:BI:103:GLN:CA	2.05	0.86
32:BI:13:GLY:CA	32:BI:15:LYS:CE	2.53	0.86
55:BK:121:LEU:CB	55:BK:125:MET:HE3	2.06	0.86
36:BQ:36:ASN:C	36:BQ:41:THR:HB	1.95	0.86
37:BS:110:THR:HG22	37:BS:115:VAL:HG23	1.56	0.86
44:BU:27:SER:O	44:BU:29:SER:CB	2.24	0.86
44:BU:6:THR:O	44:BU:9:VAL:CG2	2.23	0.86
39:BW:104:THR:C	39:BW:105:VAL:HG13	1.90	0.86
1:AA:585:G:O2'	1:AA:879:C:H5''	1.75	0.86
7:AD:127:THR:HB	7:AD:147:ALA:HB3	1.58	0.86
7:AD:14:ARG:HD2	7:AD:66:ARG:HH12	1.40	0.86
3:AW:9:A:C6	3:AW:45:G:C6	2.63	0.86
48:B0:49:GLN:O	48:B0:73:GLY:HA3	1.76	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1287:A:C5'	43:BR:104:ARG:CD	2.53	0.86
26:BA:1:G:H1	26:BA:2902:C:H42	1.10	0.86
26:BA:2484:G:H2'	26:BA:2485:G:O5'	1.75	0.86
26:BA:2517:C:O2'	26:BA:2518:A:O5'	1.87	0.86
26:BA:2536:G:C6	26:BA:2537:U:N3	2.43	0.86
26:BA:2589:A:C6	26:BA:2590:A:N7	2.42	0.86
26:BA:2648:C:H2'	26:BA:2649:U:H5'	1.56	0.86
25:BB:56:G:H4'	25:BB:57:A:H5''	1.58	0.86
27:BD:208:GLY:HA2	27:BD:210:LYS:HZ3	0.71	0.86
33:BN:15:ARG:CG	33:BN:43:ARG:HD2	2.05	0.86
37:BS:40:ASN:HA	37:BS:114:LYS:HZ2	1.35	0.86
45:BV:3:ALA:C	45:BV:12:TYR:OH	2.08	0.86
45:BV:35:LEU:H	45:BV:60:VAL:CG1	1.89	0.86
39:BW:19:LEU:HD13	50:B5:25:LEU:CG	2.06	0.86
40:BX:9:HIS:ND1	40:BX:27:ALA:N	2.24	0.86
42:BZ:67:LYS:HA	42:BZ:67:LYS:CE	2.05	0.86
49:B4:41:PRO:HG2	49:B4:57:ASP:HB2	1.58	0.86
49:B4:46:GLU:O	49:B4:47:GLU:HG3	0.69	0.86
26:BA:1669:A:C5'	26:BA:2550:G:OP1	2.24	0.86
26:BA:2187:G:H2'	26:BA:2188:C:O4'	1.75	0.86
26:BA:2395:C:H3'	26:BA:2395:C:C6	2.09	0.86
26:BA:2432:A:C2'	26:BA:2432:A:N3	2.37	0.86
26:BA:2471:C:H2'	26:BA:2472:G:O5'	1.75	0.86
26:BA:2558:C:N3	26:BA:2559:C:C4	2.43	0.86
26:BA:2718:G:C2'	26:BA:2719:G:H8	1.87	0.86
26:BA:2801:A:C2	26:BA:2895:U:H1'	2.10	0.86
27:BD:131:LEU:CD1	27:BD:183:ILE:HG22	2.06	0.86
28:BE:304:ASP:O	28:BE:307:LEU:CG	2.23	0.86
29:BF:38:ALA:O	29:BF:39:GLN:C	2.14	0.86
29:BF:81:PRO:CA	29:BF:87:ARG:CB	2.53	0.86
33:BN:47:THR:OG1	33:BN:53:ILE:CD1	2.23	0.86
34:BO:75:SER:C	34:BO:76:TYR:HD1	1.78	0.86
43:BR:93:GLY:C	43:BR:95:THR:H	1.79	0.86
37:BS:17:ARG:C	37:BS:17:ARG:CD	2.43	0.86
38:BT:6:CYS:HB3	38:BT:9:CYS:O	1.76	0.86
44:BU:44:THR:HG21	45:BV:78:VAL:CG1	2.04	0.86
45:BV:61:VAL:C	45:BV:98:ILE:CD1	2.43	0.86
41:BY:108:ARG:O	41:BY:112:LEU:HD23	1.73	0.86
41:BY:46:ASP:HA	41:BY:102:ASP:CG	1.94	0.86
42:BZ:129:ARG:NE	42:BZ:129:ARG:HA	1.90	0.86
1:AA:409:G:H5''	7:AD:25:ARG:CG	2.06	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AD:22:LYS:O	7:AD:113:SER:HB3	1.76	0.86
48:B0:37:LEU:CG	48:B0:68:VAL:HG12	2.06	0.86
49:B4:23:GLU:O	49:B4:25:MET:N	2.08	0.86
53:B8:26:LYS:HG3	53:B8:45:GLY:CA	2.03	0.86
53:B8:38:GLY:O	53:B8:40:GLU:N	2.09	0.86
26:BA:1031:G:C5'	54:B9:8:LYS:HD3	2.04	0.86
26:BA:1780:A:H3'	26:BA:1781:C:C5'	2.05	0.86
26:BA:2425:A:HO2'	26:BA:2426:A:P	1.98	0.86
26:BA:825:C:O3'	26:BA:2428:G:N7	2.09	0.86
26:BA:2457:U:H2'	26:BA:2458:G:C5'	2.05	0.86
26:BA:2722:G:C4	26:BA:2723:C:C5	2.63	0.86
26:BA:2739:U:H2'	26:BA:2740:A:H5''	1.46	0.86
26:BA:2752:C:O2	26:BA:2752:C:H2'	1.73	0.86
26:BA:2768:C:C2	26:BA:2769:C:H6	1.86	0.86
25:BB:50:G:OP1	37:BS:74:PRO:HB2	1.76	0.86
28:BE:268:LEU:CD2	28:BE:295:LEU:O	2.23	0.86
32:BI:114:LYS:HD2	32:BI:132:LYS:O	1.76	0.86
33:BN:94:GLY:O	33:BN:98:PHE:CD1	2.29	0.86
36:BQ:11:LYS:HD2	36:BQ:91:HIS:CD2	2.09	0.86
36:BQ:65:ARG:CZ	36:BQ:122:PHE:HE2	1.88	0.86
36:BQ:58:HIS:CG	36:BQ:59:ASN:N	2.42	0.86
36:BQ:59:ASN:CG	36:BQ:60:ALA:H	1.75	0.86
36:BQ:65:ARG:HH21	36:BQ:85:ILE:CB	1.89	0.86
40:BX:34:LYS:O	40:BX:35:GLY:O	1.91	0.86
42:BZ:57:GLU:C	42:BZ:59:GLY:H	1.76	0.86
1:AA:403:C:N4	1:AA:547:A:C5'	2.38	0.86
47:B3:16:PRO:HB2	47:B3:19:GLN:OE1	1.75	0.86
52:B7:21:ARG:NH2	52:B7:43:THR:CB	2.38	0.86
26:BA:1022:G:O6	33:BN:47:THR:HB	1.75	0.86
26:BA:1364:G:H8	26:BA:1364:G:H5'	1.40	0.86
26:BA:2276:G:C2	26:BA:2277:G:C8	2.64	0.86
26:BA:2573:C:C4'	26:BA:2573:C:H6	1.88	0.86
26:BA:2642:G:HO2'	26:BA:2643:G:H5'	1.35	0.86
26:BA:2677:G:O2'	26:BA:2678:C:C5'	2.22	0.86
26:BA:2768:C:O2	26:BA:2769:C:C6	2.28	0.86
26:BA:872:A:O2'	36:BQ:31:PHE:CB	2.23	0.86
28:BE:235:ILE:HG23	28:BE:236:GLY:N	1.89	0.86
28:BE:43:GLY:O	28:BE:309:PRO:O	1.94	0.86
29:BF:219:ASN:H	29:BF:219:ASN:HD22	0.95	0.86
29:BF:84:VAL:C	29:BF:86:GLY:H	1.78	0.86
30:BG:19:GLU:OE1	30:BG:135:VAL:CA	2.23	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:118:ALA:O	36:BQ:119:ASN:HB3	1.75	0.86
36:BQ:85:ILE:CG2	36:BQ:122:PHE:CD2	2.54	0.86
44:BU:14:HIS:ND1	44:BU:36:PHE:CZ	2.23	0.86
39:BW:10:VAL:HG13	39:BW:46:PHE:CE2	2.10	0.86
40:BX:38:ALA:O	40:BX:39:ASP:C	2.14	0.86
42:BZ:41:ARG:O	42:BZ:44:ARG:HB2	1.75	0.86
46:B2:55:ARG:O	46:B2:58:THR:CB	2.23	0.86
47:B3:8:LEU:HB3	47:B3:32:GLN:CA	2.06	0.86
50:B5:50:GLY:HA2	50:B5:57:VAL:HB	1.57	0.86
26:BA:458:G:H2'	52:B7:40:HIS:CE1	2.10	0.86
26:BA:1081:U:H4'	55:BK:123:ALA:CB	2.06	0.86
26:BA:126:A:C6	52:B7:18:PHE:CD2	2.63	0.86
26:BA:2235:G:C4	26:BA:2236:C:C5	2.63	0.86
26:BA:2328:A:H2'	26:BA:2329:G:C8	2.08	0.86
26:BA:2394:C:C4	26:BA:2395:C:C4	2.63	0.86
26:BA:2469:A:N6	26:BA:2481:G:H1'	1.89	0.86
26:BA:2484:G:H21	26:BA:2485:G:C1'	1.84	0.86
26:BA:248:G:N2	26:BA:2431:U:O4'	2.09	0.86
26:BA:2494:G:N2	26:BA:2495:G:C4	2.44	0.86
26:BA:2509:G:C2'	26:BA:2510:C:C5'	2.52	0.86
26:BA:1953:A:H62	26:BA:2550:G:H4'	1.39	0.86
26:BA:2832:U:C1'	26:BA:2834:G:H21	1.86	0.86
26:BA:775:G:H2'	26:BA:794:G:N7	1.91	0.86
27:BD:104:ILE:HD12	27:BD:104:ILE:H	1.34	0.86
32:BI:94:THR:HG22	32:BI:97:GLN:HG3	1.58	0.86
55:BK:129:GLU:O	55:BK:133:LYS:CG	2.22	0.86
43:BR:43:GLU:OE2	43:BR:43:GLU:N	2.08	0.86
37:BS:89:GLY:O	37:BS:93:GLN:HG3	1.76	0.86
45:BV:33:VAL:CB	45:BV:63:HIS:CG	2.58	0.86
36:BQ:36:ASN:HB2	42:BZ:114:ASP:O	1.75	0.86
42:BZ:39:PHE:HD2	42:BZ:39:PHE:H	0.87	0.86
1:AA:1189:C:O2'	6:AC:176:HIS:CD2	2.29	0.86
13:AJ:46:ARG:HH11	17:AN:59:ALA:HB1	1.41	0.86
1:AA:277:C:OP1	20:AQ:41:LYS:HD2	1.76	0.86
1:AA:1221:G:C5'	22:AS:36:ARG:NH1	2.36	0.86
49:B4:58:LYS:CD	49:B4:62:ARG:HH21	1.89	0.86
50:B5:11:THR:HB	50:B5:16:ARG:HE	1.40	0.86
26:BA:1081:U:H1'	55:BK:117:ASN:HD22	1.41	0.86
26:BA:1157:G:O2'	47:B3:31:LEU:HD13	1.76	0.86
26:BA:1274:A:C6	26:BA:1302:A:H2	1.93	0.86
26:BA:2416:C:O2	26:BA:2417:C:C6	2.29	0.86

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2416:C:O2'	26:BA:2417:C:H5''	1.76	0.86
26:BA:2061:G:C8	26:BA:2501:C:H1'	2.10	0.86
26:BA:2768:C:H2'	26:BA:2769:C:O5'	1.75	0.86
26:BA:2836:U:C2	26:BA:2883:A:C6	2.64	0.86
27:BD:140:VAL:CG1	27:BD:141:HIS:H	1.88	0.86
27:BD:160:SER:O	27:BD:176:ALA:HB2	1.74	0.86
29:BF:214:THR:H	29:BF:218:VAL:CG2	1.89	0.86
30:BG:22:VAL:HB	30:BG:24:HIS:CE1	2.10	0.86
31:BH:101:LYS:HZ1	31:BH:115:GLU:CB	1.85	0.86
32:BI:68:LEU:HD11	32:BI:108:LEU:HD21	1.58	0.86
55:BK:106:GLU:C	55:BK:110:LYS:HE3	1.95	0.86
55:BK:106:GLU:O	55:BK:110:LYS:CG	2.24	0.86
33:BN:42:GLU:C	33:BN:132:LEU:O	2.14	0.86
35:BP:124:ASP:O	35:BP:125:PHE:CG	2.28	0.86
36:BQ:57:ARG:C	36:BQ:61:LEU:CD2	2.44	0.86
44:BU:28:ARG:CA	44:BU:31:GLN:HG3	2.05	0.86
44:BU:33:ARG:HB2	44:BU:33:ARG:HH11	1.28	0.86
41:BY:32:ARG:O	41:BY:33:GLU:C	2.14	0.86
41:BY:66:ASP:O	41:BY:67:LEU:C	2.14	0.86
42:BZ:37:LYS:C	42:BZ:41:ARG:NH1	2.28	0.86
1:AA:495:U:H2'	1:AA:496:A:H5'	1.58	0.85
1:AA:986:A:H2	22:AS:52:TYR:CE2	1.90	0.85
20:AQ:8:GLY:HA3	20:AQ:22:LEU:O	1.75	0.85
48:B0:44:LYS:O	48:B0:45:PHE:CD1	2.28	0.85
46:B2:61:GLY:O	46:B2:64:GLY:N	2.08	0.85
46:B2:4:HIS:H	46:B2:8:ILE:HD11	1.40	0.85
52:B7:24:THR:HG21	52:B7:27:GLY:HA3	1.57	0.85
26:BA:1006:C:H4'	33:BN:28:GLU:OE2	1.75	0.85
26:BA:1613:G:H3'	26:BA:1614:A:H5'	1.56	0.85
26:BA:1666:G:N2	26:BA:1669:A:H62	1.74	0.85
26:BA:2324:C:O2'	26:BA:2325:G:OP1	1.94	0.85
26:BA:2416:C:H2'	26:BA:2417:C:H5'	1.58	0.85
26:BA:2584:U:C2'	26:BA:2585:U:C5	2.55	0.85
26:BA:2049:G:C6	26:BA:2620:C:N4	2.43	0.85
26:BA:2768:C:O2'	26:BA:2769:C:C5'	2.23	0.85
26:BA:2853:C:H3'	26:BA:2853:C:H6	1.40	0.85
26:BA:452:G:P	29:BF:55:ARG:NH2	2.41	0.85
27:BD:131:LEU:HD11	27:BD:183:ILE:HG22	1.57	0.85
28:BE:105:HIS:HB2	28:BE:108:LEU:HG	1.56	0.85
28:BE:265:ASN:HD22	28:BE:265:ASN:C	1.78	0.85
26:BA:2636:U:O2'	28:BE:84:ARG:NH1	2.09	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:52:ALA:HA	29:BF:55:ARG:CG	2.05	0.85
32:BI:24:GLY:HA2	32:BI:27:ASN:HB3	1.57	0.85
32:BI:43:ASN:N	32:BI:43:ASN:ND2	2.22	0.85
33:BN:25:GLN:O	33:BN:26:VAL:C	2.11	0.85
33:BN:46:ILE:HG13	33:BN:132:LEU:HD13	1.57	0.85
35:BP:67:ARG:HE	35:BP:67:ARG:N	1.73	0.85
36:BQ:15:THR:O	36:BQ:16:ARG:HG3	1.75	0.85
36:BQ:58:HIS:O	36:BQ:61:LEU:CG	2.20	0.85
39:BW:32:ALA:HB2	39:BW:35:ILE:CD1	2.05	0.85
40:BX:9:HIS:CE1	40:BX:27:ALA:CB	2.59	0.85
41:BY:103:LEU:HD11	41:BY:113:GLU:HB3	1.58	0.85
42:BZ:172:LEU:HG	42:BZ:173:PRO:CD	2.02	0.85
42:BZ:48:THR:HG22	42:BZ:48:THR:O	1.75	0.85
1:AA:60:A:O3'	1:AA:61:G:P	2.34	0.85
49:B4:6:HIS:CB	49:B4:56:VAL:CG2	2.51	0.85
51:B6:37:LEU:HD21	51:B6:51:ARG:HG2	0.86	0.85
26:BA:1665:A:C4'	34:BO:66:LYS:CE	2.44	0.85
26:BA:1819:A:H5''	27:BD:157:ALA:HB2	1.55	0.85
26:BA:2078:C:H4'	26:BA:2434:A:H5'	1.56	0.85
26:BA:2198:A:H5'	26:BA:2199:A:OP2	1.75	0.85
26:BA:2209:C:H42	26:BA:2215:G:H1	0.88	0.85
26:BA:2311:A:O2'	26:BA:2312:U:O5'	1.94	0.85
26:BA:2330:G:C2	26:BA:2331:G:C4	2.65	0.85
26:BA:2530:A:H2'	26:BA:2531:A:C5'	2.05	0.85
26:BA:2698:U:N3	26:BA:2699:C:C5	2.43	0.85
26:BA:2854:G:C6	26:BA:2864:G:O6	2.29	0.85
28:BE:44:TYR:CD1	28:BE:309:PRO:CD	2.58	0.85
29:BF:149:LYS:HB2	29:BF:152:GLU:HG3	1.58	0.85
29:BF:168:ARG:NH1	29:BF:209:GLY:CA	2.37	0.85
31:BH:110:HIS:O	31:BH:111:PRO:O	1.92	0.85
33:BN:103:VAL:HG12	33:BN:104:TYR:H	1.41	0.85
33:BN:49:ARG:O	33:BN:53:ILE:HB	1.76	0.85
43:BR:46:GLY:O	43:BR:49:ASP:CB	2.24	0.85
43:BR:77:ARG:O	43:BR:81:ASP:OD1	1.93	0.85
40:BX:57:THR:HB	40:BX:59:ASP:OD2	1.76	0.85
41:BY:101:LEU:HD21	41:BY:112:LEU:CG	2.06	0.85
42:BZ:39:PHE:O	42:BZ:43:PHE:HB2	1.75	0.85
1:AA:409:G:C5'	7:AD:25:ARG:CB	2.03	0.85
7:AD:15:GLU:CD	7:AD:63:LYS:HB3	1.96	0.85
46:B2:20:LEU:O	46:B2:21:ASP:O	1.95	0.85
26:BA:932:G:P	47:B3:29:ARG:HH21	1.98	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1791:A:O2'	27:BD:204:PHE:HB2	1.74	0.85
26:BA:1817:G:OP1	27:BD:63:ILE:HD11	1.75	0.85
26:BA:2096:U:H3	26:BA:2193:G:H1	1.24	0.85
26:BA:2227:A:H8	26:BA:2227:A:O5'	1.59	0.85
26:BA:2547:U:C6	26:BA:2566:A:C2	2.64	0.85
26:BA:2051:A:H2	26:BA:2618:G:C6	1.93	0.85
26:BA:2689:U:O2	26:BA:2713:A:OP2	1.95	0.85
26:BA:2785:C:C2'	26:BA:2786:U:C5	2.55	0.85
26:BA:2839:G:H2'	26:BA:2840:C:H6	1.41	0.85
26:BA:573:G:H3'	26:BA:574:C:H5"	1.59	0.85
26:BA:58:G:H2'	26:BA:73:A:N6	1.90	0.85
26:BA:856:C:O2'	48:B0:24:LYS:CD	2.24	0.85
27:BD:162:GLN:N	27:BD:162:GLN:CD	2.29	0.85
26:BA:1568:G:C5'	27:BD:60:GLN:HG2	2.06	0.85
28:BE:225:LYS:O	28:BE:229:GLN:NE2	2.09	0.85
29:BF:103:ASN:HB2	29:BF:106:GLU:CD	1.94	0.85
29:BF:6:TYR:CE2	29:BF:140:VAL:CG2	2.60	0.85
29:BF:196:THR:CG2	29:BF:236:THR:HG21	2.06	0.85
26:BA:2313:C:C4'	30:BG:72:LYS:HG3	2.05	0.85
32:BI:121:ILE:HD12	32:BI:121:ILE:H	1.40	0.85
32:BI:23:ASP:HB2	32:BI:25:TYR:CE2	2.11	0.85
33:BN:51:GLU:C	33:BN:53:ILE:H	1.77	0.85
34:BO:101:PRO:O	34:BO:102:VAL:HG22	1.75	0.85
34:BO:24:VAL:HG11	34:BO:32:TYR:O	1.76	0.85
34:BO:8:LEU:HB2	34:BO:83:ALA:CA	2.06	0.85
35:BP:120:LEU:HD11	35:BP:122:ALA:HB2	1.57	0.85
36:BQ:76:GLY:HA3	36:BQ:132:VAL:CG1	2.02	0.85
39:BW:66:GLU:CG	39:BW:67:ASP:N	2.39	0.85
1:AA:971:G:N2	1:AA:1363:A:OP2	2.09	0.85
1:AA:509:A:C8	7:AD:54:TYR:CE2	2.63	0.85
2:AV:73:A:H5"	2:AV:74:C:P	2.16	0.85
48:B0:37:LEU:CB	48:B0:69:PHE:HD2	1.70	0.85
46:B2:20:LEU:HD13	46:B2:20:LEU:O	1.76	0.85
53:B8:26:LYS:HZ2	53:B8:44:LYS:N	1.73	0.85
53:B8:7:HIS:O	53:B8:8:LYS:O	1.94	0.85
26:BA:2246:G:N2	26:BA:2247:A:C4	2.44	0.85
26:BA:2298:A:N9	26:BA:2321:G:N2	2.23	0.85
26:BA:2395:C:O3'	49:B4:28:ARG:HD2	1.76	0.85
26:BA:2573:C:C6	26:BA:2573:C:C4'	2.59	0.85
26:BA:2774:C:C2	26:BA:2775:A:C8	2.63	0.85
28:BE:210:THR:HA	28:BE:216:ARG:HH22	1.03	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2317:C:H5''	30:BG:150:SER:HA	1.55	0.85
30:BG:21:VAL:HG11	30:BG:132:VAL:CG2	2.04	0.85
30:BG:38:GLU:HA	30:BG:41:LEU:HG	1.55	0.85
30:BG:77:ASP:N	30:BG:77:ASP:OD1	2.06	0.85
33:BN:19:MET:HB3	33:BN:46:ILE:HD13	1.57	0.85
34:BO:65:THR:OG1	34:BO:67:ARG:HG2	1.76	0.85
37:BS:47:LEU:CD1	37:BS:58:LEU:HD21	2.06	0.85
37:BS:62:HIS:HB2	37:BS:65:ASP:CG	1.97	0.85
39:BW:32:ALA:O	39:BW:35:ILE:N	2.09	0.85
42:BZ:25:ASN:OD1	42:BZ:26:LYS:N	2.08	0.85
48:B0:61:ALA:CB	48:B0:80:SER:O	2.23	0.85
48:B0:80:SER:OG	48:B0:84:ALA:CB	2.25	0.85
46:B2:52:ALA:C	46:B2:56:ILE:CG1	2.35	0.85
49:B4:41:PRO:CB	49:B4:57:ASP:OD2	2.21	0.85
52:B7:30:ILE:HA	52:B7:33:ARG:HG3	1.57	0.85
26:BA:1669:A:O3'	26:BA:2550:G:P	2.33	0.85
26:BA:2077:A:N7	26:BA:2238:G:O6	2.10	0.85
26:BA:2255:G:C2	26:BA:2256:G:C1'	2.59	0.85
26:BA:965:C:H1'	26:BA:2273:A:C2	2.10	0.85
26:BA:2437:U:H5'	26:BA:2598:A:H2	1.14	0.85
26:BA:2523:G:N1	26:BA:2541:A:C2	2.45	0.85
26:BA:2532:G:C8	26:BA:2532:G:C5'	2.59	0.85
26:BA:2785:C:H2'	26:BA:2786:U:H6	1.41	0.85
26:BA:2826:A:C5	26:BA:2827:C:H6	1.76	0.85
28:BE:205:THR:HG22	28:BE:259:HIS:CB	1.95	0.85
29:BF:102:LEU:CD2	29:BF:103:ASN:N	2.40	0.85
29:BF:235:PHE:HB3	29:BF:239:ALA:CB	2.06	0.85
29:BF:6:TYR:CE1	29:BF:139:VAL:CB	2.57	0.85
33:BN:15:ARG:HG2	33:BN:43:ARG:HB3	1.56	0.85
33:BN:46:ILE:O	33:BN:47:THR:O	1.94	0.85
36:BQ:41:THR:CG2	36:BQ:126:VAL:CA	2.55	0.85
36:BQ:89:PRO:O	36:BQ:90:PHE:CE1	2.30	0.85
43:BR:100:LEU:CD2	43:BR:112:ALA:HA	2.05	0.85
43:BR:39:PRO:O	43:BR:41:ALA:N	2.08	0.85
43:BR:39:PRO:O	43:BR:42:LYS:N	2.10	0.85
39:BW:8:ARG:HD2	39:BW:9:TYR:HD1	1.38	0.85
42:BZ:92:VAL:HA	42:BZ:124:ALA:CB	2.06	0.85
42:BZ:24:TYR:N	42:BZ:83:PHE:O	2.09	0.85
1:AA:22:G:H1'	1:AA:914:A:N6	1.91	0.85
26:BA:849:A:H2	47:B3:21:ALA:HB1	1.02	0.85
52:B7:7:PRO:C	52:B7:8:ASN:ND2	2.29	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:B9:24:LEU:HD22	54:B9:35:ARG:CG	2.06	0.85
26:BA:1789:A:OP1	27:BD:226:GLY:CA	2.23	0.85
26:BA:2225:A:C5'	26:BA:2226:C:H5''	1.94	0.85
26:BA:2286:A:C4'	26:BA:2287:A:O4'	2.24	0.85
26:BA:2311:A:H2'	26:BA:2312:U:C6	2.10	0.85
26:BA:2304:G:H1	26:BA:2312:U:H3	1.19	0.85
26:BA:2445:G:O2'	26:BA:2446:G:C5'	2.24	0.85
26:BA:2450:A:H5''	26:BA:2497:A:H62	1.04	0.85
26:BA:2592:G:C2	26:BA:2603:G:C6	2.63	0.85
26:BA:2662:A:H2'	26:BA:2663:G:H5'	1.56	0.85
25:BB:12:C:N3	37:BS:10:MET:HE3	1.92	0.85
27:BD:154:VAL:HG21	27:BD:160:SER:HA	1.56	0.85
28:BE:45:LYS:CE	28:BE:303:PRO:CD	2.55	0.85
30:BG:97:GLN:HB3	30:BG:106:PHE:CE2	2.10	0.85
30:BG:49:PRO:HG3	30:BG:73:VAL:HG23	1.57	0.85
32:BI:115:ILE:HA	32:BI:131:VAL:HA	1.58	0.85
26:BA:2485:G:C5'	36:BQ:144:THR:CG2	2.41	0.85
25:BB:9:G:OP1	37:BS:37:ARG:NH2	2.10	0.85
42:BZ:85:MET:O	42:BZ:86:VAL:CG2	2.23	0.85
26:BA:2364:C:C5'	48:B0:38:VAL:HG12	2.02	0.85
51:B6:19:GLY:CA	51:B6:44:ALA:HB3	2.06	0.85
26:BA:1024:G:N7	26:BA:1025:G:C8	2.44	0.85
26:BA:1031:G:H5'	54:B9:8:LYS:HD3	1.56	0.85
26:BA:2252:G:O6	26:BA:2253:G:O6	1.93	0.85
26:BA:2276:G:OP2	36:BQ:104:PRO:CD	2.25	0.85
26:BA:2313:C:C5'	30:BG:51:ARG:HH11	1.90	0.85
26:BA:2334:G:N3	37:BS:20:TYR:OH	2.10	0.85
26:BA:2397:G:N1	26:BA:2420:C:C2	2.42	0.85
26:BA:2531:A:C2'	26:BA:2532:G:H5''	2.03	0.85
26:BA:2574:G:C8	26:BA:2575:C:C5	2.55	0.85
28:BE:240:PRO:CB	28:BE:243:PRO:HG2	2.05	0.85
29:BF:93:LYS:CB	29:BF:96:LYS:HE3	2.07	0.85
2:AV:56:C:C1'	30:BG:56:ARG:CD	2.55	0.85
30:BG:64:ARG:CB	30:BG:67:ASP:OD2	2.24	0.85
31:BH:101:LYS:HZ1	31:BH:115:GLU:HG3	1.40	0.85
31:BH:44:VAL:HA	31:BH:49:ILE:HG22	0.90	0.85
26:BA:7:G:H5'	33:BN:6:PHE:CD2	2.11	0.85
35:BP:69:ILE:HG13	35:BP:70:ASP:H	0.70	0.85
36:BQ:72:VAL:HG21	36:BQ:83:PHE:HZ	1.42	0.85
43:BR:74:LYS:CA	43:BR:77:ARG:HH22	1.89	0.85
40:BX:14:ALA:CA	40:BX:17:ASP:OD2	2.19	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:55:GLN:O	40:BX:63:LYS:N	2.09	0.85
42:BZ:37:LYS:CG	42:BZ:41:ARG:HH12	1.89	0.85
42:BZ:24:TYR:HD2	42:BZ:84:TYR:HD1	1.24	0.85
16:AM:91:ARG:NH2	16:AM:103:THR:HG21	1.91	0.85
46:B2:24:LYS:C	46:B2:26:GLU:OE2	2.15	0.85
46:B2:62:GLU:N	46:B2:62:GLU:OE1	2.09	0.85
26:BA:932:G:C5'	47:B3:29:ARG:HH22	1.86	0.85
52:B7:32:ALA:CA	52:B7:35:ARG:HG3	2.06	0.85
53:B8:23:MET:CE	53:B8:48:PHE:CD2	2.58	0.85
26:BA:2080:G:N1	26:BA:2241:A:C6	2.45	0.85
26:BA:2360:A:N7	26:BA:2361:A:N7	2.24	0.85
26:BA:2648:C:C4	26:BA:2649:U:C4	2.65	0.85
26:BA:2782:G:H2'	26:BA:2783:G:H5'	1.59	0.85
26:BA:2808:U:O2	26:BA:2892:A:N1	2.09	0.85
26:BA:321:G:H4'	29:BF:206:ASN:CB	2.06	0.85
26:BA:380:U:O2'	49:B4:15:ILE:CB	2.24	0.85
26:BA:774:A:H1'	26:BA:775:G:C8	2.12	0.85
27:BD:155:ARG:O	27:BD:157:ALA:N	2.09	0.85
28:BE:70:VAL:HG13	28:BE:296:VAL:CA	1.97	0.85
26:BA:2306:C:N4	30:BG:53:LYS:NZ	2.25	0.85
30:BG:56:ARG:HG2	30:BG:65:GLU:CB	1.97	0.85
31:BH:111:PRO:O	31:BH:112:VAL:HG22	1.77	0.85
32:BI:6:LEU:HB2	32:BI:36:ALA:CB	2.06	0.85
33:BN:12:VAL:CG1	33:BN:38:VAL:HG21	2.07	0.85
43:BR:36:THR:CG2	43:BR:40:LYS:HD3	2.04	0.85
37:BS:17:ARG:HD2	37:BS:18:THR:N	1.92	0.85
44:BU:42:ALA:O	44:BU:43:ALA:O	1.94	0.85
44:BU:74:MET:HE3	44:BU:78:THR:CG2	1.86	0.85
41:BY:71:VAL:HG22	41:BY:93:THR:CB	2.07	0.85
2:AV:73:A:O3'	2:AV:74:C:OP2	1.94	0.85
26:BA:2045:C:N3	26:BA:2624:G:N3	2.24	0.85
26:BA:2259:G:N7	26:BA:2260:C:C5	2.44	0.85
26:BA:2313:C:OP1	30:BG:51:ARG:HB2	1.74	0.85
26:BA:2411:A:O2'	26:BA:2412:A:H8	1.59	0.85
26:BA:2494:G:C2	26:BA:2495:G:C5	2.65	0.85
26:BA:2525:G:N1	26:BA:2539:C:N4	2.24	0.85
26:BA:2731:G:H22	26:BA:2732:G:H21	1.22	0.85
26:BA:2783:G:C4	26:BA:2784:C:C5	2.65	0.85
26:BA:2827:C:O2	26:BA:2828:C:H6	1.50	0.85
26:BA:637:A:OP2	35:BP:110:GLY:N	2.09	0.85
26:BA:988:A:OP2	47:B3:11:SER:HB3	1.77	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:145:LEU:N	27:BD:152:GLN:HB2	1.88	0.85
27:BD:66:PHE:HD2	27:BD:67:LYS:HD2	1.42	0.85
27:BD:80:ILE:CD1	27:BD:82:TYR:CE1	2.59	0.85
28:BE:269:ILE:CD1	28:BE:295:LEU:O	2.25	0.85
28:BE:308:VAL:HG12	28:BE:310:PHE:HE1	1.40	0.85
29:BF:109:LEU:O	29:BF:112:ARG:HB2	1.76	0.85
30:BG:25:MET:SD	30:BG:129:ASP:HB3	2.16	0.85
34:BO:64:ARG:NH2	34:BO:100:GLY:CA	2.40	0.85
44:BU:99:ALA:HB2	44:BU:106:PHE:CE1	1.78	0.85
26:BA:993:G:O4'	45:BV:90:PHE:HE2	1.34	0.85
39:BW:67:ASP:CG	39:BW:68:ARG:N	2.24	0.85
1:AA:1268:A:C2	1:AA:1327:C:H1'	2.12	0.85
1:AA:559:A:H4'	1:AA:560:U:O5'	1.75	0.85
7:AD:3:ARG:CG	7:AD:118:ARG:NH1	2.39	0.85
48:B0:46:LYS:CG	48:B0:58:THR:H	1.90	0.85
51:B6:19:GLY:HA3	51:B6:42:PRO:HG2	1.53	0.85
26:BA:106:C:H2'	26:BA:107:C:H5''	1.59	0.85
26:BA:2268:A:C5'	26:BA:2269:A:OP2	2.25	0.85
26:BA:2309:A:H3'	26:BA:2310:A:C5'	2.07	0.85
26:BA:2333:A:H1'	26:BA:2335:A:C6	2.12	0.85
26:BA:31:C:H5''	26:BA:1239:G:OP1	1.75	0.85
27:BD:208:GLY:C	27:BD:211:HIS:NE2	2.30	0.85
28:BE:74:GLU:H	28:BE:74:GLU:CD	1.80	0.85
29:BF:5:ILE:HB	29:BF:14:GLY:C	1.95	0.85
31:BH:86:LEU:CD1	31:BH:86:LEU:C	2.39	0.85
32:BI:4:ILE:CB	32:BI:37:ILE:O	2.23	0.85
55:BK:37:GLU:CB	55:BK:41:ARG:HH12	1.59	0.85
34:BO:7:ARG:NH2	34:BO:44:LYS:HD2	1.92	0.85
26:BA:1665:A:C1'	34:BO:66:LYS:HZ3	1.90	0.85
44:BU:43:ALA:HB1	45:BV:75:LYS:CB	2.02	0.85
40:BX:7:HIS:ND1	40:BX:8:PRO:HD2	1.92	0.85
41:BY:71:VAL:CG2	41:BY:93:THR:N	2.39	0.85
42:BZ:34:LEU:HD13	42:BZ:35:ASP:H	1.42	0.85
1:AA:1308:U:C5'	16:AM:110:ARG:NH2	2.38	0.84
48:B0:22:GLY:O	48:B0:23:VAL:O	1.94	0.84
48:B0:43:THR:O	48:B0:64:ASP:CG	2.15	0.84
48:B0:43:THR:CG2	48:B0:75:GLY:N	2.40	0.84
26:BA:76:C:O2'	46:B2:55:ARG:CA	2.25	0.84
47:B3:31:LEU:CD2	47:B3:32:GLN:HB3	2.07	0.84
26:BA:1479:G:C2'	26:BA:1480:G:H8	1.89	0.84
26:BA:2411:A:HO2'	26:BA:2412:A:H8	0.87	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2044:C:C6	26:BA:2625:G:N2	2.45	0.84
26:BA:296:C:H6	26:BA:338:G:N2	1.75	0.84
26:BA:404:C:H4'	26:BA:405:U:H5'	1.56	0.84
26:BA:993:G:N2	44:BU:54:LYS:NZ	2.25	0.84
27:BD:175:LEU:HD11	27:BD:180:VAL:H	1.40	0.84
27:BD:181:ARG:CZ	27:BD:181:ARG:HB3	2.02	0.84
34:BO:31:ARG:CB	34:BO:32:TYR:CE1	2.60	0.84
35:BP:117:GLU:OE2	35:BP:136:ALA:CB	2.25	0.84
35:BP:62:ALA:CB	35:BP:105:TYR:HB2	2.06	0.84
36:BQ:35:ASN:CB	36:BQ:75:SER:HB2	2.07	0.84
43:BR:44:LEU:HD11	43:BR:48:VAL:HG21	1.56	0.84
43:BR:52:ILE:HG21	43:BR:94:TYR:CD1	2.12	0.84
37:BS:109:PRO:HA	37:BS:115:VAL:CG1	2.05	0.84
39:BW:36:LEU:HA	39:BW:39:THR:HG22	1.58	0.84
41:BY:47:THR:CG2	41:BY:100:ASP:HB2	2.07	0.84
42:BZ:107:GLU:OE2	42:BZ:141:MET:HG3	1.77	0.84
42:BZ:96:VAL:CG1	42:BZ:97:PRO:CD	2.55	0.84
1:AA:976:G:C4	1:AA:361(A):C:C4	2.65	0.84
48:B0:43:THR:O	48:B0:64:ASP:OD1	1.94	0.84
47:B3:40:THR:HG23	47:B3:43:ILE:HD13	0.85	0.84
52:B7:7:PRO:O	52:B7:8:ASN:ND2	2.10	0.84
26:BA:2309:A:C5'	26:BA:2310:A:C8	2.60	0.84
26:BA:2315:G:P	30:BG:20:LYS:HZ3	1.98	0.84
26:BA:2369:A:H2'	26:BA:2370:G:H8	1.42	0.84
26:BA:243:U:OP2	53:B8:7:HIS:NE2	2.08	0.84
26:BA:2060:A:O2'	26:BA:2502:G:C5'	2.24	0.84
26:BA:338:G:OP1	41:BY:21:LYS:HD2	1.76	0.84
26:BA:446:G:H5'	44:BU:5:LYS:HE3	1.59	0.84
26:BA:452:G:H3'	26:BA:453:C:H5''	1.59	0.84
28:BE:61:PRO:CA	28:BE:69:PRO:HA	2.06	0.84
28:BE:80:ALA:HB2	28:BE:187:HIS:NE2	1.92	0.84
26:BA:2304:G:H4'	30:BG:105:SER:O	1.77	0.84
30:BG:107:GLY:O	30:BG:129:ASP:N	2.10	0.84
26:BA:2314:C:H5''	30:BG:22:VAL:HG13	1.57	0.84
31:BH:130:ILE:HG22	31:BH:131:ILE:N	1.87	0.84
31:BH:82:TYR:CZ	31:BH:137:LYS:HB3	2.11	0.84
31:BH:155:PRO:HB2	31:BH:169:ARG:HG3	1.60	0.84
31:BH:8:ILE:HG22	31:BH:9:GLU:H	1.41	0.84
55:BK:92:PRO:CG	55:BK:134:SER:O	2.24	0.84
35:BP:77:ALA:HA	35:BP:81:VAL:CG1	2.07	0.84
38:BT:48:ASN:OD1	38:BT:49:LEU:N	2.10	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:35:LEU:N	45:BV:60:VAL:CG1	2.40	0.84
40:BX:9:HIS:HE1	40:BX:27:ALA:HA	1.34	0.84
42:BZ:124:ALA:H	42:BZ:159:THR:HG21	1.42	0.84
42:BZ:39:PHE:O	42:BZ:43:PHE:CB	2.25	0.84
1:AA:60:A:N6	1:AA:107:G:HO2'	1.73	0.84
3:AW:74:C:P	49:B4:22:MET:HE3	2.16	0.84
51:B6:35:LEU:C	51:B6:36:GLU:HG3	1.98	0.84
26:BA:1840:G:H1	26:BA:1902:C:H42	1.24	0.84
26:BA:1937:A:H3'	26:BA:1938:A:H5''	1.59	0.84
26:BA:2236:C:C3'	26:BA:2237:G:C5'	2.54	0.84
26:BA:2264:C:C2'	26:BA:2265:U:O5'	2.23	0.84
26:BA:2331:G:H4'	48:B0:70:ILE:CB	2.06	0.84
28:BE:70:VAL:HG11	28:BE:295:LEU:CD2	2.07	0.84
28:BE:74:GLU:HB2	28:BE:293:TYR:HE2	1.40	0.84
29:BF:91:PRO:CB	29:BF:92:PRO:HD2	1.88	0.84
55:BK:79:LEU:HD22	55:BK:137:ILE:HD13	0.88	0.84
55:BK:25:GLY:CA	55:BK:35:ILE:HD13	2.07	0.84
55:BK:37:GLU:HA	55:BK:41:ARG:HH11	1.17	0.84
55:BK:42:PHE:HE2	55:BK:56:VAL:HG21	1.41	0.84
34:BO:71:ARG:O	34:BO:73:ASP:N	2.10	0.84
34:BO:77:ILE:HD11	34:BO:79:PHE:CD2	2.11	0.84
36:BQ:140:TYR:O	36:BQ:141:MET:C	2.16	0.84
36:BQ:57:ARG:CA	36:BQ:61:LEU:HD21	2.06	0.84
37:BS:9:PRO:HG2	37:BS:14:ARG:HB3	1.58	0.84
37:BS:91:ARG:O	37:BS:94:GLU:HG3	1.77	0.84
39:BW:70:TYR:CD2	39:BW:71:VAL:N	2.45	0.84
40:BX:30:ASP:O	40:BX:31:ARG:O	1.94	0.84
47:B3:36:VAL:O	47:B3:37:LEU:HD23	1.77	0.84
51:B6:16:ALA:C	51:B6:18:THR:H	1.78	0.84
51:B6:37:LEU:CD2	51:B6:51:ARG:CA	2.53	0.84
52:B7:43:THR:HA	52:B7:46:ASP:OD1	1.77	0.84
26:BA:2332:U:O4'	26:BA:2336:A:N6	2.09	0.84
26:BA:2416:C:N3	26:BA:2417:C:C5	2.45	0.84
26:BA:1129:A:N3	26:BA:2570:G:H1'	1.92	0.84
26:BA:2603:G:C6	26:BA:2604:U:H5	1.94	0.84
26:BA:2693:A:N1	26:BA:2694:G:C5	2.45	0.84
26:BA:2729:G:C2	26:BA:2730:C:O2	2.29	0.84
26:BA:2813:A:O2'	26:BA:2814:C:C6	2.30	0.84
26:BA:2896:C:C3'	26:BA:2896:C:C6	2.60	0.84
26:BA:292:C:H2'	26:BA:293:U:H3	1.41	0.84
26:BA:95:G:O2'	46:B2:42:ASN:HB3	1.78	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:222:ARG:HH11	28:BE:222:ARG:CG	1.88	0.84
28:BE:304:ASP:O	28:BE:307:LEU:HG	1.77	0.84
26:BA:2784:C:OP1	28:BE:95:PRO:CG	2.22	0.84
26:BA:38:A:C2	29:BF:46:TYR:OH	2.31	0.84
29:BF:52:ALA:CA	29:BF:55:ARG:CB	2.54	0.84
26:BA:2296:U:O4	30:BG:145:ASP:CG	2.15	0.84
30:BG:82:GLU:O	30:BG:85:GLN:HG3	1.77	0.84
31:BH:101:LYS:CG	31:BH:115:GLU:CB	2.54	0.84
31:BH:83:GLU:C	31:BH:83:GLU:CD	2.36	0.84
34:BO:113:LYS:O	34:BO:117:LEU:HD23	1.76	0.84
34:BO:17:ARG:NH2	34:BO:47:THR:C	2.30	0.84
35:BP:66:VAL:CG2	35:BP:109:LEU:O	2.15	0.84
36:BQ:48:ASN:O	36:BQ:121:ASP:CB	2.24	0.84
36:BQ:56:ILE:HG22	36:BQ:61:LEU:HD22	1.56	0.84
36:BQ:72:VAL:CG2	36:BQ:135:ALA:HB1	2.07	0.84
37:BS:34:LEU:CD1	37:BS:103:ASP:H	1.90	0.84
44:BU:28:ARG:HA	44:BU:31:GLN:CG	2.06	0.84
45:BV:49:GLU:HB3	45:BV:53:LYS:CD	2.07	0.84
45:BV:67:LYS:HE3	45:BV:94:LYS:HD2	1.58	0.84
40:BX:24:LEU:O	40:BX:25:GLN:OE1	1.94	0.84
40:BX:45:TYR:OH	40:BX:75:GLN:OE1	1.95	0.84
41:BY:45:GLY:HA2	41:BY:62:VAL:HG11	0.90	0.84
1:AA:365:U:HO3'	1:AA:366:C:P	1.96	0.84
1:AA:1286:A:H2	24:AU:18:TYR:HH	1.20	0.84
48:B0:37:LEU:HB3	48:B0:69:PHE:CG	2.08	0.84
48:B0:24:LYS:CG	48:B0:56:ASP:CG	2.45	0.84
47:B3:26:LEU:HD21	47:B3:46:ASN:HD22	1.39	0.84
3:AW:75:C:H5	49:B4:28:ARG:H	1.25	0.84
50:B5:13:LYS:HD3	50:B5:14:SER:N	1.92	0.84
51:B6:45:LYS:O	51:B6:46:LYS:NZ	2.10	0.84
52:B7:8:ASN:O	52:B7:9:ASN:C	2.16	0.84
26:BA:104:U:O4	41:BY:17:HIS:CE1	2.30	0.84
26:BA:1162:G:O2'	45:BV:23:GLU:CD	2.16	0.84
26:BA:1223:C:C5	45:BV:87:ARG:NH2	2.44	0.84
26:BA:2283:C:C2	26:BA:2284:C:H1'	2.12	0.84
26:BA:2358:G:N3	26:BA:2358:G:H2'	1.91	0.84
26:BA:2428:G:O2'	26:BA:2429:G:C8	2.29	0.84
26:BA:2468:G:H22	26:BA:2481:G:C2'	1.90	0.84
26:BA:2537:U:H2'	26:BA:2538:C:C6	2.12	0.84
26:BA:270(O):U:C5	32:BI:53:LYS:NZ	2.45	0.84
26:BA:85:G:C5'	41:BY:65:VAL:HG12	2.07	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:175:LEU:HD11	27:BD:180:VAL:CA	2.07	0.84
29:BF:153:VAL:CG1	29:BF:157:LEU:CD2	2.45	0.84
29:BF:223:LEU:O	29:BF:224:ALA:C	2.12	0.84
29:BF:240:LEU:HA	29:BF:243:VAL:HG23	1.60	0.84
31:BH:34:ARG:HD2	31:BH:36:PHE:CZ	2.12	0.84
32:BI:47:LEU:HD12	32:BI:48:GLU:H	1.38	0.84
32:BI:6:LEU:O	32:BI:6:LEU:HD13	1.76	0.84
55:BK:25:GLY:O	55:BK:35:ILE:CD1	2.26	0.84
55:BK:37:GLU:HB3	55:BK:41:ARG:CZ	2.06	0.84
55:BK:80:LYS:CG	55:BK:85:ILE:O	2.25	0.84
34:BO:17:ARG:HH21	34:BO:47:THR:HA	1.42	0.84
34:BO:7:ARG:NE	34:BO:44:LYS:HD2	1.91	0.84
34:BO:9:LYS:HD3	34:BO:81:GLU:OE2	1.78	0.84
35:BP:62:ALA:HB2	35:BP:104:ASP:O	1.78	0.84
35:BP:94:ARG:CB	35:BP:120:LEU:HD21	1.80	0.84
36:BQ:23:ILE:N	36:BQ:24:PRO:HD3	1.91	0.84
26:BA:18:C:C4'	44:BU:23:GLY:O	2.23	0.84
39:BW:32:ALA:CA	39:BW:35:ILE:HG13	2.08	0.84
39:BW:85:VAL:CG1	39:BW:95:ILE:CD1	2.56	0.84
41:BY:103:LEU:HA	41:BY:108:ARG:HB3	1.56	0.84
41:BY:74:VAL:CB	41:BY:77:VAL:HG23	2.07	0.84
42:BZ:113:VAL:HG23	42:BZ:174:PRO:HG3	1.58	0.84
42:BZ:19:ILE:N	42:BZ:36:ARG:HG3	1.91	0.84
1:AA:1315:U:OP2	22:AS:6:LYS:HD2	1.77	0.84
1:AA:1329:A:H4'	16:AM:24:GLY:O	1.78	0.84
3:AW:72:C:C2'	3:AW:73:A:C5'	2.55	0.84
50:B5:15:LYS:NZ	50:B5:15:LYS:HB2	1.93	0.84
52:B7:17:GLY:HA2	52:B7:44:VAL:HG21	1.15	0.84
53:B8:4:MET:CA	53:B8:5:LYS:HZ2	1.84	0.84
26:BA:1260:G:H5''	39:BW:83:LYS:HZ1	1.40	0.84
26:BA:2276:G:O2'	26:BA:2277:G:O5'	1.94	0.84
26:BA:2411:A:C2	26:BA:2412:A:C5	2.66	0.84
26:BA:2455:G:C2'	26:BA:2456:C:H5'	2.08	0.84
26:BA:2484:G:C2	26:BA:2485:G:C8	2.66	0.84
26:BA:2528:U:C5	26:BA:2530:A:C2	2.65	0.84
26:BA:2051:A:C5	26:BA:2614:A:N6	2.43	0.84
26:BA:2783:G:C5	26:BA:2784:C:C5	2.65	0.84
26:BA:2886:G:N2	26:BA:2887:U:N1	2.25	0.84
26:BA:2:G:C2	26:BA:2902:C:C2	2.64	0.84
26:BA:973:A:H2'	26:BA:974:G:H5''	1.56	0.84
27:BD:146:LYS:HB2	27:BD:149:ARG:HG3	1.59	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:226:HIS:HA	28:BE:229:GLN:HG3	1.57	0.84
28:BE:44:TYR:N	28:BE:309:PRO:CG	2.24	0.84
30:BG:12:GLU:O	30:BG:12:GLU:CD	2.14	0.84
30:BG:140:ARG:O	30:BG:142:ALA:N	2.10	0.84
31:BH:83:GLU:OE1	31:BH:84:LYS:C	2.16	0.84
34:BO:52:VAL:O	34:BO:53:LYS:HB2	1.76	0.84
35:BP:117:GLU:OE2	35:BP:136:ALA:HB1	1.77	0.84
36:BQ:20:ILE:HG13	36:BQ:21:SER:H	1.38	0.84
43:BR:20:LEU:O	43:BR:21:TYR:C	2.16	0.84
43:BR:63:ARG:NH2	43:BR:77:ARG:CG	2.37	0.84
37:BS:24:LEU:HA	37:BS:33:ARG:HH22	1.42	0.84
44:BU:14:HIS:O	44:BU:15:LYS:C	2.10	0.84
44:BU:95:LEU:C	44:BU:98:ILE:HD13	1.96	0.84
42:BZ:35:ASP:H	42:BZ:39:PHE:HZ	1.22	0.84
6:AC:9:GLY:N	17:AN:49:HIS:O	2.10	0.84
46:B2:39:ALA:CB	46:B2:40:PRO:CD	2.53	0.84
46:B2:46:ILE:O	46:B2:47:LYS:O	1.96	0.84
26:BA:2077:A:C4	26:BA:2435:A:C8	2.65	0.84
26:BA:2411:A:N3	26:BA:2412:A:N7	2.26	0.84
26:BA:2532:G:H8	26:BA:2532:G:O5'	1.60	0.84
26:BA:2615:U:HO2'	26:BA:2616:C:H5'	1.38	0.84
26:BA:2722:G:C2	26:BA:2723:C:C6	2.65	0.84
26:BA:2729:G:O2'	26:BA:2730:C:H5'	1.75	0.84
27:BD:213:LYS:CG	27:BD:215:LYS:CB	2.22	0.84
29:BF:106:GLU:O	29:BF:107:ARG:O	1.94	0.84
29:BF:33:LYS:HA	29:BF:36:ARG:CG	2.07	0.84
30:BG:73:VAL:O	30:BG:73:VAL:HG12	1.76	0.84
55:BK:26:PRO:O	55:BK:27:ALA:O	1.96	0.84
33:BN:46:ILE:HD11	33:BN:132:LEU:CD1	2.07	0.84
33:BN:46:ILE:HD11	33:BN:132:LEU:HD11	1.60	0.84
35:BP:113:GLN:HE21	35:BP:113:GLN:N	1.71	0.84
43:BR:113:LEU:CD1	43:BR:114:VAL:N	2.38	0.84
45:BV:4:ILE:CD1	45:BV:13:ARG:CD	2.52	0.84
39:BW:6:ILE:HA	39:BW:103:ILE:O	1.77	0.84
1:AA:1268:A:H4'	24:AU:20:LYS:HA	0.84	0.84
7:AD:31:CYS:O	7:AD:33:MET:N	2.09	0.84
1:AA:1123:A:O2'	13:AJ:38:ILE:HG22	1.78	0.84
16:AM:94:ARG:CA	16:AM:95:GLY:N	2.40	0.84
48:B0:24:LYS:HG3	48:B0:56:ASP:OD1	1.77	0.84
51:B6:46:LYS:CA	51:B6:46:LYS:NZ	2.12	0.84
26:BA:1546:C:C3'	26:BA:1547:C:OP1	2.23	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2847:U:OP2	26:BA:2847:U:H6	1.61	0.84
26:BA:617:G:OP1	29:BF:221:GLU:OE1	1.93	0.84
29:BF:223:LEU:C	29:BF:223:LEU:CD1	2.37	0.84
29:BF:241:ALA:O	29:BF:245:GLU:OE1	1.59	0.84
34:BO:2:ILE:HD12	34:BO:2:ILE:N	1.91	0.84
34:BO:35:ILE:CG2	34:BO:62:VAL:C	2.46	0.84
34:BO:68:GLY:CA	34:BO:78:ARG:NE	2.37	0.84
36:BQ:41:THR:HG21	36:BQ:126:VAL:N	1.93	0.84
36:BQ:85:ILE:HG22	36:BQ:122:PHE:CD1	2.10	0.84
37:BS:118:ILE:HG23	37:BS:119:GLN:H	1.43	0.84
37:BS:23:ARG:HH21	37:BS:35:VAL:HG21	1.39	0.84
26:BA:29:U:H4'	44:BU:11:ARG:HH12	0.67	0.84
44:BU:13:ARG:H	44:BU:13:ARG:CZ	1.90	0.84
41:BY:19:ARG:N	41:BY:21:LYS:HZ2	1.75	0.84
42:BZ:15:ASP:OD1	42:BZ:16:GLU:N	2.10	0.84
42:BZ:40:ASP:OD2	42:BZ:41:ARG:CZ	2.26	0.84
1:AA:1181:G:H4'	1:AA:1184:G:O4'	1.78	0.84
1:AA:406:G:C4'	7:AD:5:ILE:HG21	2.07	0.84
7:AD:3:ARG:NH2	7:AD:74:GLN:NE2	2.26	0.84
47:B3:3:ARG:CB	47:B3:60:GLU:HA	2.07	0.84
53:B8:8:LYS:O	53:B8:9:MET:C	2.14	0.84
26:BA:1140:C:OP1	33:BN:18:ILE:CG1	2.25	0.84
26:BA:2423:U:H1'	26:BA:2425:A:C4	2.12	0.84
26:BA:2504:U:C3'	26:BA:2504:U:C6	2.61	0.84
26:BA:2561:A:C6	26:BA:2562:U:C5	2.65	0.84
26:BA:2676:C:H3'	26:BA:2676:C:C6	2.13	0.84
26:BA:2839:G:C2	26:BA:2840:C:N1	2.45	0.84
27:BD:140:VAL:HG13	27:BD:190:THR:C	1.98	0.84
27:BD:75:GLY:O	27:BD:115:ILE:O	1.94	0.84
28:BE:225:LYS:C	28:BE:226:HIS:ND1	2.31	0.84
28:BE:256:THR:CA	28:BE:259:HIS:HE1	1.89	0.84
28:BE:71:THR:CG2	28:BE:299:SER:CA	2.55	0.84
29:BF:219:ASN:N	29:BF:219:ASN:ND2	2.14	0.84
31:BH:101:LYS:HZ1	31:BH:115:GLU:CG	1.90	0.84
2:AV:1:G:O5'	36:BQ:97:ASP:OD2	1.94	0.84
37:BS:114:LYS:O	37:BS:117:ALA:N	2.11	0.84
45:BV:40:VAL:CG1	45:BV:55:THR:CG2	2.56	0.84
39:BW:12:ILE:O	39:BW:14:PRO:CD	2.26	0.84
41:BY:101:LEU:CG	41:BY:103:LEU:HD11	2.07	0.84
41:BY:49:GLU:HG2	41:BY:59:GLU:CA	2.02	0.84
41:BY:49:GLU:CD	41:BY:97:ARG:HH12	1.60	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:147:ILE:O	42:BZ:168:VAL:CB	2.23	0.84
42:BZ:34:LEU:CD1	42:BZ:35:ASP:N	2.41	0.84
1:AA:1502:A:H2	1:AA:1505:G:H1	1.25	0.84
48:B0:38:VAL:CA	48:B0:40:GLN:HG3	2.08	0.84
48:B0:43:THR:CG2	48:B0:75:GLY:H	1.90	0.84
26:BA:1350:C:H42	26:BA:1381:G:H1	1.22	0.84
26:BA:2097:C:N3	26:BA:2192:G:N2	2.25	0.84
26:BA:2252:G:C8	26:BA:2252:G:H3'	2.13	0.84
2:AV:75:C:C2	26:BA:2252:G:N2	2.46	0.84
26:BA:2253:G:H2'	26:BA:2254:C:O5'	1.78	0.84
26:BA:2485:G:H2'	26:BA:2486:G:C5'	2.05	0.84
26:BA:2607:G:H2'	26:BA:2608:G:C5'	2.07	0.84
26:BA:2657:A:C8	26:BA:2658:C:C6	2.65	0.84
26:BA:2784:C:O2'	28:BE:98:GLU:O	1.95	0.84
26:BA:911:A:C6	36:BQ:16:ARG:CA	2.60	0.84
26:BA:957:A:OP1	36:BQ:95:GLU:HB2	1.77	0.84
27:BD:141:HIS:HE1	27:BD:192:GLY:O	1.58	0.84
27:BD:211:HIS:ND1	27:BD:212:HIS:CD2	2.46	0.84
28:BE:199:ALA:CA	28:BE:312:ARG:O	2.24	0.84
28:BE:203:GLY:HA3	28:BE:303:PRO:HD3	1.58	0.84
28:BE:94:ARG:CB	28:BE:95:PRO:HD2	2.00	0.84
30:BG:93:LEU:HD22	30:BG:106:PHE:HD2	1.39	0.84
30:BG:25:MET:N	30:BG:129:ASP:OD2	2.10	0.84
26:BA:2314:C:C5'	30:BG:22:VAL:CG1	2.36	0.84
25:BB:42:C:H5'	30:BG:48:MET:HB2	1.59	0.84
32:BI:21:VAL:HG11	32:BI:30:LEU:HD11	1.57	0.84
33:BN:25:GLN:HA	33:BN:28:GLU:CB	2.07	0.84
36:BQ:56:ILE:HD11	36:BQ:115:SER:N	1.93	0.84
36:BQ:66:ASN:HB2	36:BQ:70:ARG:HH21	1.43	0.84
43:BR:101:ALA:O	50:B5:41:LEU:HD13	1.78	0.84
43:BR:100:LEU:CD2	43:BR:113:LEU:H	1.87	0.84
37:BS:81:ALA:CB	37:BS:117:ALA:HB1	2.07	0.84
37:BS:116:PHE:O	37:BS:119:GLN:HB2	1.78	0.84
37:BS:87:LEU:H	37:BS:87:LEU:CD2	1.90	0.84
44:BU:88:ILE:HB	45:BV:52:GLY:CA	2.08	0.84
40:BX:31:ARG:HE	40:BX:31:ARG:N	1.75	0.84
42:BZ:18:MET:CA	42:BZ:36:ARG:HG3	2.08	0.84
1:AA:463:A:P	19:AP:75:ARG:NH2	2.50	0.83
1:AA:815:A:H2	1:AA:1528:U:H1'	1.43	0.83
7:AD:23:GLY:CA	7:AD:112:VAL:O	2.25	0.83
48:B0:61:ALA:CB	48:B0:80:SER:HA	2.07	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:50:ARG:HA	46:B2:53:ILE:HD12	1.60	0.83
47:B3:20:LYS:CD	47:B3:23:LEU:CD1	2.55	0.83
49:B4:6:HIS:HE1	49:B4:55:ARG:HB2	1.42	0.83
50:B5:57:VAL:HG12	50:B5:58:LEU:H	0.73	0.83
26:BA:2528:U:OP1	54:B9:30:VAL:CG1	2.26	0.83
26:BA:1350:C:N3	26:BA:1381:G:N2	2.24	0.83
26:BA:2309:A:C5'	26:BA:2310:A:OP2	2.24	0.83
26:BA:2314:C:O2'	26:BA:2315:G:C5'	2.26	0.83
26:BA:2539:C:H2'	26:BA:2540:C:O5'	1.78	0.83
26:BA:527:C:H6	26:BA:2779:U:C6	1.96	0.83
26:BA:910:A:N6	36:BQ:11:LYS:O	2.11	0.83
28:BE:295:LEU:HD23	28:BE:296:VAL:H	1.41	0.83
28:BE:267:ARG:CB	28:BE:297:LYS:HD2	2.08	0.83
29:BF:96:LYS:N	29:BF:98:ARG:CZ	2.41	0.83
31:BH:164:GLU:OE1	31:BH:164:GLU:CA	2.26	0.83
32:BI:121:ILE:O	32:BI:122:ARG:HB2	1.75	0.83
33:BN:136:SER:HA	33:BN:139:LEU:CD2	2.08	0.83
34:BO:26:GLY:HA3	34:BO:30:ARG:NH1	1.93	0.83
34:BO:35:ILE:CG2	34:BO:63:VAL:N	2.32	0.83
38:BT:53:ASP:C	38:BT:56:ARG:HE	1.81	0.83
39:BW:82:LEU:HD21	39:BW:98:LYS:O	1.76	0.83
41:BY:18:GLU:CB	41:BY:21:LYS:NZ	2.40	0.83
16:AM:92:HIS:CG	16:AM:98:VAL:HG21	2.12	0.83
1:AA:1014:A:C2	22:AS:34:TRP:CE2	2.66	0.83
52:B7:30:ILE:CA	52:B7:33:ARG:HG3	2.08	0.83
54:B9:7:VAL:HG11	54:B9:34:GLN:HG2	0.85	0.83
26:BA:1669:A:C1'	34:BO:4:GLN:OE1	2.24	0.83
26:BA:2185:C:H2'	26:BA:2186:G:H8	1.41	0.83
26:BA:2268:A:H5'	26:BA:2269:A:OP2	1.78	0.83
26:BA:2293:C:N3	26:BA:2339:G:O6	2.11	0.83
26:BA:2311:A:OP2	30:BG:55:LYS:CE	2.25	0.83
26:BA:2484:G:H2'	26:BA:2485:G:H5'	1.60	0.83
26:BA:2543:G:O2'	26:BA:2645:G:N7	2.11	0.83
26:BA:225:A:O2'	26:BA:257:A:H4'	1.76	0.83
26:BA:2648:C:H42	26:BA:2672:G:H1	1.25	0.83
26:BA:630(A):C:H3'	26:BA:1631:A:P	2.18	0.83
29:BF:210:ALA:O	29:BF:211:ASP:HB3	1.76	0.83
29:BF:215:ALA:HB2	29:BF:238:SER:C	1.98	0.83
30:BG:97:GLN:CD	30:BG:106:PHE:CD2	2.51	0.83
32:BI:9:VAL:O	32:BI:9:VAL:HG12	1.78	0.83
33:BN:21:ARG:HA	33:BN:24:SER:CB	2.08	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:20:ILE:CG1	36:BQ:21:SER:N	2.38	0.83
36:BQ:61:LEU:O	36:BQ:62:GLU:C	2.13	0.83
43:BR:61:HIS:HA	43:BR:64:ARG:HD3	0.89	0.83
37:BS:30:GLY:O	37:BS:31:LYS:CE	2.26	0.83
26:BA:1011:G:OP2	44:BU:75:ASN:HB3	1.79	0.83
45:BV:67:LYS:HD3	45:BV:70:TYR:CE1	2.13	0.83
41:BY:57:GLY:N	41:BY:97:ARG:NH2	2.26	0.83
1:AA:986:A:H4'	22:AS:55:LYS:HG3	1.58	0.83
1:AA:541:G:C4'	7:AD:42:GLN:HB2	2.04	0.83
47:B3:20:LYS:O	47:B3:23:LEU:N	2.11	0.83
49:B4:63:PHE:O	49:B4:65:ASP:N	2.11	0.83
26:BA:1782:C:O2	26:BA:2609:U:C1'	2.27	0.83
26:BA:2458:G:C8	26:BA:2490:G:N1	2.46	0.83
26:BA:2550:G:C4	26:BA:2551:C:C5	2.66	0.83
26:BA:2679:A:C5	26:BA:2680:C:C5	2.66	0.83
26:BA:2688:U:N3	26:BA:2719:G:C4	2.46	0.83
29:BF:52:ALA:HA	29:BF:55:ARG:HB3	1.57	0.83
30:BG:102:GLY:HA3	30:BG:134:LEU:HD12	0.85	0.83
30:BG:90:LEU:O	30:BG:92:GLU:OE2	1.95	0.83
31:BH:148:ARG:NH1	31:BH:163:TYR:CA	2.34	0.83
31:BH:86:LEU:HD13	31:BH:87:GLU:CA	2.08	0.83
33:BN:70:PHE:O	33:BN:71:TYR:HB2	1.76	0.83
34:BO:60:ALA:HA	34:BO:87:ILE:HD13	1.59	0.83
34:BO:66:LYS:NZ	34:BO:67:ARG:CD	2.19	0.83
43:BR:63:ARG:HH22	43:BR:77:ARG:HG2	1.39	0.83
37:BS:34:LEU:CD2	37:BS:102:LEU:CA	2.52	0.83
44:BU:13:ARG:CA	44:BU:13:ARG:NH1	2.41	0.83
44:BU:92:ARG:N	45:BV:10:LYS:HZ2	1.68	0.83
26:BA:564:C:OP2	45:BV:79:GLN:CD	2.16	0.83
26:BA:1614:A:H62	39:BW:88:ARG:HB2	1.01	0.83
41:BY:55:PHE:CZ	41:BY:89:ARG:NH2	2.46	0.83
42:BZ:112:LEU:HD13	42:BZ:142:ASN:CA	2.00	0.83
42:BZ:69:VAL:CG1	42:BZ:70:GLN:H	1.90	0.83
1:AA:1255:G:O2'	1:AA:1258:G:C1'	2.26	0.83
1:AA:429:U:OP1	7:AD:13:ARG:NE	2.11	0.83
48:B0:46:LYS:HE3	48:B0:58:THR:HG1	1.43	0.83
49:B4:14:ILE:HG13	49:B4:38:GLY:O	1.78	0.83
50:B5:4:HIS:CB	50:B5:5:PRO:HD3	2.07	0.83
51:B6:37:LEU:C	51:B6:38:LYS:HG3	1.97	0.83
51:B6:36:GLU:C	51:B6:52:GLU:CD	2.35	0.83
52:B7:14:LYS:O	52:B7:15:THR:C	2.16	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:693:C:O2'	26:BA:1353:A:C2	2.32	0.83
26:BA:2740:A:N9	26:BA:2741:A:N7	2.25	0.83
26:BA:2854:G:N1	26:BA:2864:G:C6	2.46	0.83
26:BA:514:A:O3'	44:BU:32:TYR:OH	1.95	0.83
26:BA:592:G:H2'	53:B8:3:LYS:CE	2.08	0.83
26:BA:610:C:H2'	26:BA:611:C:H6	1.42	0.83
26:BA:733:G:OP2	26:BA:761:A:N6	2.10	0.83
29:BF:27:ARG:O	29:BF:31:ILE:CG1	2.21	0.83
29:BF:3:ALA:O	29:BF:16:VAL:N	2.09	0.83
31:BH:80:LYS:O	31:BH:81:GLY:O	1.95	0.83
34:BO:101:PRO:O	34:BO:102:VAL:CG2	2.27	0.83
36:BQ:142:LYS:CD	36:BQ:143:VAL:H	1.91	0.83
26:BA:910:A:H2'	36:BQ:17:ARG:NH2	1.94	0.83
36:BQ:54:VAL:O	36:BQ:56:ILE:HD12	1.78	0.83
36:BQ:31:PHE:HZ	36:BQ:88:PHE:CD2	1.96	0.83
37:BS:127:LEU:CD2	37:BS:127:LEU:O	2.26	0.83
45:BV:3:ALA:CB	45:BV:12:TYR:OH	2.26	0.83
45:BV:78:VAL:HB	45:BV:80:TYR:CD1	2.14	0.83
1:AA:988:G:H21	1:AA:1016:A:H1'	1.43	0.83
1:AA:1278:U:C5'	1:AA:1279:A:O4'	2.25	0.83
1:AA:976:G:C5	1:AA:361(A):C:C5	2.66	0.83
4:AX:119:U:H2'	4:AX:120:A:C8	2.13	0.83
46:B2:2:VAL:C	46:B2:4:HIS:HD1	1.80	0.83
26:BA:76:C:O2'	46:B2:55:ARG:HA	1.78	0.83
53:B8:23:MET:SD	53:B8:24:ALA:N	2.52	0.83
54:B9:27:CYS:O	54:B9:29:ASN:N	2.11	0.83
26:BA:1566:A:C6	27:BD:212:HIS:CE1	2.66	0.83
26:BA:1809:A:N6	49:B4:3:LYS:CG	2.38	0.83
26:BA:2353:G:C2	26:BA:2364:C:N4	2.44	0.83
26:BA:2523:G:C2'	26:BA:2524:G:H5'	2.08	0.83
26:BA:2580:U:H6	26:BA:2581:G:C8	1.51	0.83
26:BA:2618:G:C5	26:BA:2619:C:H5	1.96	0.83
26:BA:2628:C:C1'	26:BA:2781:A:H2'	2.07	0.83
26:BA:2722:G:C6	26:BA:2723:C:N4	2.47	0.83
26:BA:2852:G:C2	26:BA:2853:C:C2	2.66	0.83
27:BD:141:HIS:HB3	27:BD:154:VAL:HG11	1.60	0.83
28:BE:174:LEU:O	28:BE:177:ALA:CB	2.25	0.83
28:BE:226:HIS:HA	28:BE:229:GLN:CG	2.01	0.83
29:BF:102:LEU:HB2	29:BF:107:ARG:CZ	2.08	0.83
55:BK:46:THR:HG22	55:BK:54:LEU:CD1	2.05	0.83
33:BN:19:MET:HE2	33:BN:22:VAL:CG2	2.08	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:135:ALA:O	36:BQ:138:ARG:N	2.11	0.83
25:BB:51:G:OP2	37:BS:72:GLU:HG2	1.78	0.83
45:BV:31:ASP:C	45:BV:63:HIS:O	2.17	0.83
39:BW:24:ILE:HG22	39:BW:35:ILE:HB	1.58	0.83
40:BX:13:LYS:O	40:BX:16:ASN:N	2.12	0.83
40:BX:26:PHE:N	40:BX:26:PHE:CD1	2.44	0.83
1:AA:1073:U:C4	1:AA:1074:G:N7	2.47	0.83
3:AW:40:C:O3'	10:AG:147:ALA:HB1	1.79	0.83
3:AW:39:PSU:C4'	14:AK:54:ARG:HH22	1.90	0.83
47:B3:22:ALA:O	47:B3:26:LEU:CD1	2.26	0.83
51:B6:42:PRO:CG	51:B6:44:ALA:HB3	2.04	0.83
51:B6:48:VAL:O	51:B6:50:PHE:HE1	1.56	0.83
53:B8:16:ILE:HG13	53:B8:22:VAL:HG22	0.85	0.83
26:BA:2090:G:C2	26:BA:2230:G:C6	2.66	0.83
26:BA:2219:G:O2'	26:BA:2224:G:H5''	1.78	0.83
26:BA:2430:A:H2'	26:BA:2431:U:C5'	2.08	0.83
26:BA:248:G:C2	26:BA:2431:U:H4'	2.13	0.83
26:BA:2552:U:C5'	26:BA:2553:G:OP2	2.23	0.83
26:BA:2561:A:H2'	26:BA:2562:U:O5'	1.79	0.83
26:BA:2716:U:H2'	26:BA:2717:G:H5'	1.59	0.83
27:BD:208:GLY:HA3	27:BD:210:LYS:CE	2.08	0.83
29:BF:7:ASP:C	29:BF:11:ASN:N	2.31	0.83
29:BF:163:HIS:CA	29:BF:166:ILE:CD1	2.56	0.83
33:BN:61:VAL:CG2	33:BN:139:LEU:HB3	2.08	0.83
33:BN:13:ASP:C	33:BN:38:VAL:HG11	1.99	0.83
34:BO:24:VAL:CG1	34:BO:32:TYR:O	2.27	0.83
34:BO:43:VAL:HB	34:BO:55:GLY:N	1.94	0.83
36:BQ:46:VAL:HG22	36:BQ:156:ASN:ND2	1.94	0.83
40:BX:23:LYS:HA	40:BX:66:VAL:O	1.79	0.83
42:BZ:105:GLN:CB	42:BZ:141:MET:SD	2.66	0.83
1:AA:1070:U:O4	1:AA:1085:U:C5	2.31	0.83
1:AA:1320:C:O2	22:AS:72:GLY:C	2.17	0.83
1:AA:47:C:H4'	1:AA:48:C:C5'	2.08	0.83
49:B4:41:PRO:HB2	49:B4:57:ASP:CB	2.09	0.83
51:B6:2:ALA:HB3	51:B6:11:LYS:HE3	1.59	0.83
26:BA:2253:G:O2'	26:BA:2254:C:C5'	2.26	0.83
26:BA:2476:A:C8	26:BA:2477:C:C5	2.66	0.83
26:BA:2618:G:HO2'	26:BA:2619:C:C5'	1.92	0.83
26:BA:2659:G:C2'	26:BA:2661:G:OP2	2.27	0.83
26:BA:26:G:N1	26:BA:27:G:N2	2.26	0.83
26:BA:2744:G:H2'	26:BA:2745:C:H5'	1.59	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:84:A:OP2	41:BY:111:ARG:NH1	2.11	0.83
26:BA:994:C:O2	44:BU:53:LYS:HB3	1.79	0.83
28:BE:199:ALA:HA	28:BE:312:ARG:O	1.77	0.83
29:BF:239:ALA:C	29:BF:241:ALA:N	2.26	0.83
29:BF:6:TYR:CE2	29:BF:140:VAL:HG22	2.14	0.83
26:BA:2315:G:C4'	30:BG:133:ASN:HD22	1.92	0.83
31:BH:101:LYS:CD	31:BH:115:GLU:HB2	2.07	0.83
31:BH:95:ALA:H	31:BH:127:GLN:NE2	1.75	0.83
43:BR:24:GLN:HB2	43:BR:44:LEU:HD23	1.60	0.83
43:BR:36:THR:HG23	43:BR:40:LYS:HD3	1.59	0.83
44:BU:98:ILE:C	44:BU:100:ALA:N	2.28	0.83
45:BV:71:ILE:O	45:BV:72:ARG:HG2	1.77	0.83
26:BA:2013:A:H4'	39:BW:96:ILE:CG2	2.08	0.83
42:BZ:51:LEU:C	42:BZ:51:LEU:HD23	1.98	0.83
1:AA:1223:C:OP2	22:AS:78:ARG:NH2	2.11	0.83
16:AM:91:ARG:NH1	16:AM:103:THR:HG22	1.88	0.83
3:AW:65:G:HO2'	3:AW:66:A:H5'	1.41	0.83
4:AX:120:A:H2'	4:AX:121:G:H8	1.40	0.83
48:B0:44:LYS:O	48:B0:45:PHE:HD1	1.61	0.83
48:B0:61:ALA:HB2	48:B0:80:SER:O	1.78	0.83
48:B0:67:VAL:O	48:B0:68:VAL:HG23	1.79	0.83
46:B2:7:GLU:OE1	46:B2:8:ILE:HG12	1.77	0.83
54:B9:7:VAL:O	54:B9:8:LYS:HE2	1.75	0.83
26:BA:1129:A:O2'	26:BA:2515:C:H2'	1.77	0.83
26:BA:2297:C:H2'	26:BA:2298:A:H8	0.77	0.83
26:BA:2457:U:H2'	26:BA:2458:G:C4'	2.08	0.83
26:BA:2731:G:N2	26:BA:2732:G:H21	1.75	0.83
26:BA:2780:G:H22	33:BN:80:LYS:NZ	1.76	0.83
26:BA:443:A:N7	29:BF:43:LYS:CD	2.42	0.83
27:BD:148:GLY:C	27:BD:150:GLY:H	1.82	0.83
27:BD:74:PRO:CA	27:BD:116:MET:HE2	1.99	0.83
32:BI:43:ASN:C	32:BI:45:LYS:H	1.80	0.83
55:BK:19:THR:H	55:BK:20:PRO:HD3	1.42	0.83
35:BP:128:GLY:O	35:BP:131:GLU:N	2.11	0.83
44:BU:27:SER:HB3	44:BU:31:GLN:CD	1.99	0.83
39:BW:24:ILE:HG22	39:BW:35:ILE:CD1	2.08	0.83
41:BY:101:LEU:HD13	41:BY:113:GLU:HB3	1.58	0.83
26:BA:85:G:C5'	41:BY:65:VAL:CG1	2.57	0.83
42:BZ:112:LEU:HD23	42:BZ:172:LEU:O	1.78	0.83
1:AA:48:C:OP1	1:AA:115:G:OP1	1.96	0.83
1:AA:674:G:H2'	1:AA:675:A:H8	1.44	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AM:91:ARG:HH12	16:AM:103:THR:HG21	0.93	0.83
48:B0:70:ILE:HG12	48:B0:71:ASN:H	1.44	0.83
26:BA:76:C:H5'	46:B2:51:LYS:HB3	1.60	0.83
52:B7:8:ASN:O	52:B7:11:LYS:N	2.12	0.83
53:B8:12:ARG:O	53:B8:13:ARG:O	1.96	0.83
53:B8:30:ARG:HG2	53:B8:31:HIS:N	1.93	0.83
26:BA:2317:C:H5'	30:BG:150:SER:HA	1.47	0.83
3:AW:76:A:C8	26:BA:2421:G:C2'	2.52	0.83
26:BA:2648:C:O2'	26:BA:2649:U:H5'	1.77	0.83
26:BA:2722:G:H2'	26:BA:2723:C:H6	1.44	0.83
26:BA:2735:G:N1	26:BA:2770:G:C2	2.47	0.83
26:BA:2898:U:N3	26:BA:2899:G:C5	2.46	0.83
25:BB:48:A:P	37:BS:107:ASN:HD21	1.97	0.83
27:BD:143:ILE:HB	27:BD:153:LEU:N	1.94	0.83
27:BD:211:HIS:CE1	27:BD:212:HIS:CD2	2.67	0.83
29:BF:52:ALA:O	29:BF:55:ARG:HG2	1.79	0.83
32:BI:7:LYS:HD3	32:BI:12:LYS:HZ2	1.44	0.83
32:BI:7:LYS:HD2	32:BI:12:LYS:CE	2.09	0.83
33:BN:50:GLU:O	33:BN:51:GLU:O	1.97	0.83
34:BO:112:MET:O	34:BO:115:ILE:HG13	1.78	0.83
26:BA:873:G:OP1	36:BQ:30:GLN:OE1	1.97	0.83
37:BS:41:LYS:HZ1	37:BS:68:GLU:CD	1.81	0.83
44:BU:91:ASN:OD1	44:BU:95:LEU:CD2	2.25	0.83
45:BV:5:ILE:HD12	45:BV:5:ILE:H	1.43	0.83
39:BW:58:ALA:O	39:BW:60:ASN:N	2.12	0.83
40:BX:28:VAL:CG1	40:BX:64:ALA:HB3	2.08	0.83
41:BY:43:ASN:HD22	41:BY:101:LEU:CD2	1.90	0.83
41:BY:4:PRO:O	41:BY:5:ASP:HB2	1.76	0.83
7:AD:24:GLU:HB2	7:AD:112:VAL:CG1	2.04	0.83
1:AA:1221:G:C5'	22:AS:36:ARG:HH12	1.92	0.83
47:B3:50:VAL:O	47:B3:53:LEU:HB2	1.79	0.83
26:BA:125:G:C4'	52:B7:19:ARG:HH11	1.91	0.83
26:BA:1818:U:O5'	27:BD:155:ARG:CB	2.26	0.83
26:BA:2066:C:C2	26:BA:2445:G:C2	2.67	0.83
26:BA:2263:C:O2'	26:BA:2264:C:C5'	2.24	0.83
26:BA:2068:U:O2	26:BA:2430:A:C2	2.32	0.83
26:BA:2521:C:H2'	26:BA:2522:U:O5'	1.79	0.83
26:BA:2542:A:O2'	26:BA:2543:G:H8	1.59	0.83
26:BA:2578:G:H2'	26:BA:2579:C:O5'	1.79	0.83
26:BA:2652:C:C5	26:BA:2653:U:O4	2.31	0.83
26:BA:29:U:H4'	44:BU:11:ARG:CZ	2.07	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:388:G:OP2	49:B4:29:PRO:CG	2.27	0.83
26:BA:466:A:OP1	52:B7:34:ARG:NH2	2.11	0.83
26:BA:1819:A:H2'	27:BD:177:SER:OG	1.77	0.83
28:BE:222:ARG:HG2	28:BE:232:ARG:CA	2.09	0.83
28:BE:250:VAL:O	28:BE:251:PRO:O	1.96	0.83
28:BE:46:ALA:CB	28:BE:72:VAL:C	2.42	0.83
29:BF:242:GLU:O	29:BF:245:GLU:HB2	1.78	0.83
31:BH:100:LYS:C	31:BH:101:LYS:HD2	2.00	0.83
32:BI:65:ALA:CB	32:BI:134:HIS:HB2	2.09	0.83
32:BI:31:PHE:HE1	32:BI:35:LEU:O	1.61	0.83
32:BI:94:THR:HG23	32:BI:97:GLN:H	1.42	0.83
36:BQ:65:ARG:HH22	36:BQ:87:LYS:H	1.24	0.83
36:BQ:82:LYS:C	36:BQ:84:ARG:H	1.79	0.83
43:BR:74:LYS:O	43:BR:75:LEU:O	1.97	0.83
37:BS:12:ARG:HD2	37:BS:20:TYR:CE2	2.13	0.83
45:BV:62:GLU:HB2	45:BV:96:LEU:CD2	2.08	0.83
39:BW:69:LEU:HD22	39:BW:109:GLU:CB	2.08	0.83
41:BY:28:SER:CA	41:BY:99:THR:OG1	2.27	0.83
42:BZ:10:PRO:O	42:BZ:14:LEU:HB2	1.79	0.83
42:BZ:112:LEU:CD2	42:BZ:113:VAL:N	2.41	0.83
42:BZ:112:LEU:HA	42:BZ:174:PRO:CD	2.09	0.83
42:BZ:15:ASP:O	42:BZ:16:GLU:HB2	1.76	0.83
1:AA:953:G:O2'	16:AM:125:ARG:CA	2.23	0.82
2:AV:56:C:C2	30:BG:56:ARG:NH2	2.47	0.82
3:AW:33:U:O2	3:AW:35:A:H3'	1.79	0.82
26:BA:1263:U:H4'	50:B5:16:ARG:NE	1.94	0.82
26:BA:1789:A:OP1	27:BD:226:GLY:N	2.12	0.82
26:BA:2061:G:N3	26:BA:2503:A:C2	2.47	0.82
26:BA:2380:C:C2'	26:BA:2381:C:H5''	2.08	0.82
26:BA:2067:G:N2	26:BA:2444:G:C4	2.47	0.82
26:BA:957:A:H61	26:BA:2458:G:H4'	1.41	0.82
26:BA:2504:U:H6	26:BA:2504:U:O5'	1.60	0.82
26:BA:2543:G:C4	26:BA:2544:G:C5	2.67	0.82
26:BA:2707:G:C2'	26:BA:2708:G:O5'	2.26	0.82
26:BA:2681:C:C5	26:BA:2727:G:N2	2.43	0.82
26:BA:2885:C:N4	26:BA:2886:G:C8	2.47	0.82
27:BD:110:LYS:NZ	27:BD:110:LYS:CA	2.38	0.82
27:BD:151:GLY:C	27:BD:152:GLN:OE1	2.17	0.82
27:BD:161:ALA:CA	27:BD:162:GLN:HE22	1.91	0.82
27:BD:74:PRO:CA	27:BD:116:MET:CE	2.54	0.82
27:BD:80:ILE:C	27:BD:80:ILE:HD12	1.98	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:180:ILE:CG2	28:BE:187:HIS:HA	2.04	0.82
29:BF:102:LEU:CD2	29:BF:106:GLU:HB2	2.08	0.82
29:BF:1:MET:O	29:BF:18:LEU:CD2	2.27	0.82
32:BI:2:LYS:HG2	32:BI:39:ALA:H	1.44	0.82
35:BP:109:LEU:HD13	35:BP:109:LEU:C	1.99	0.82
36:BQ:32:LYS:HD2	36:BQ:32:LYS:C	1.99	0.82
36:BQ:88:PHE:C	36:BQ:90:PHE:CE1	2.52	0.82
26:BA:2009:G:C1'	43:BR:107:ASP:O	2.26	0.82
44:BU:61:TRP:C	44:BU:65:ILE:HG12	1.98	0.82
45:BV:77:GLY:O	45:BV:78:VAL:HG13	1.79	0.82
45:BV:67:LYS:O	45:BV:91:THR:HB	1.78	0.82
40:BX:14:ALA:N	40:BX:17:ASP:CG	2.23	0.82
41:BY:103:LEU:CD2	41:BY:108:ARG:O	2.27	0.82
26:BA:85:G:P	41:BY:65:VAL:HG21	2.19	0.82
1:AA:1347:G:H22	1:AA:1373:G:H2'	1.42	0.82
4:AX:119:U:H2'	4:AX:120:A:H8	1.43	0.82
49:B4:14:ILE:CG2	49:B4:16:TYR:CE1	2.62	0.82
49:B4:59:PHE:N	49:B4:62:ARG:HE	1.76	0.82
26:BA:17:G:P	50:B5:13:LYS:HZ2	2.01	0.82
26:BA:771:G:OP1	52:B7:14:LYS:HD2	1.79	0.82
26:BA:1078:U:H2'	26:BA:1088:A:C4	2.14	0.82
26:BA:2556:C:O2'	26:BA:2557:G:H5''	1.77	0.82
26:BA:2589:A:C2'	26:BA:2590:A:C5'	2.43	0.82
26:BA:2589:A:C4	26:BA:2590:A:C8	2.67	0.82
26:BA:2633:G:C2	26:BA:2634:G:C8	2.61	0.82
26:BA:2799:A:H3'	26:BA:2801:A:OP2	1.77	0.82
26:BA:337:C:C3'	26:BA:338:G:H5''	2.02	0.82
26:BA:586:A:N1	26:BA:809:G:O2'	2.12	0.82
26:BA:932:G:H4'	47:B3:24:LYS:HZ3	1.42	0.82
26:BA:2733:A:C2	28:BE:318:ASN:HB2	2.13	0.82
29:BF:194:PHE:CE2	29:BF:204:ALA:O	2.33	0.82
35:BP:104:ASP:O	35:BP:105:TYR:CG	2.31	0.82
36:BQ:133:GLU:OE1	36:BQ:134:PHE:N	2.11	0.82
36:BQ:17:ARG:H	36:BQ:17:ARG:HD3	1.40	0.82
37:BS:86:LEU:HD23	37:BS:124:ASP:HB2	1.60	0.82
37:BS:20:TYR:HE2	37:BS:21:HIS:CD2	1.94	0.82
37:BS:46:GLN:HB3	37:BS:57:THR:HG21	1.60	0.82
45:BV:15:SER:O	45:BV:97:GLY:O	1.96	0.82
41:BY:78:THR:CG2	41:BY:88:PRO:CA	2.22	0.82
6:AC:91:LEU:HD21	6:AC:99:VAL:H	1.44	0.82
1:AA:1231:G:H5''	12:AI:126:SER:OG	1.79	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:56:C:C2	30:BG:56:ARG:NE	2.47	0.82
26:BA:2354:G:N3	48:B0:32:LYS:CG	2.41	0.82
51:B6:24:THR:C	51:B6:25:THR:HG23	1.99	0.82
26:BA:1646:C:C3'	26:BA:1647:G:H5'	2.08	0.82
26:BA:2195:C:C6	26:BA:2195:C:OP2	2.31	0.82
26:BA:2463:C:N3	26:BA:2464:C:C5	2.45	0.82
26:BA:1128:A:N6	26:BA:2518:A:H61	1.77	0.82
26:BA:2526:G:C4	26:BA:2527:C:C6	2.68	0.82
26:BA:2581:G:C6	26:BA:2610:C:H6	1.94	0.82
26:BA:2793:G:N1	26:BA:2794:C:N4	2.27	0.82
26:BA:2832:U:H6	26:BA:2832:U:H5''	1.44	0.82
26:BA:2864:G:H2'	26:BA:2865:U:H6	1.40	0.82
26:BA:495:G:C4'	39:BW:57:ASN:CG	2.47	0.82
26:BA:993:G:H4'	45:BV:90:PHE:CE2	2.02	0.82
27:BD:167:GLU:H	27:BD:182:MET:HE1	1.40	0.82
26:BA:2571:C:HO2'	28:BE:243:PRO:HD3	1.37	0.82
55:BK:15:ALA:HB2	55:BK:46:THR:HB	1.58	0.82
36:BQ:123:ILE:HG21	36:BQ:125:TRP:HB2	1.60	0.82
36:BQ:17:ARG:CD	36:BQ:17:ARG:N	2.36	0.82
44:BU:31:GLN:C	44:BU:33:ARG:H	1.79	0.82
39:BW:17:VAL:O	39:BW:20:VAL:CG2	2.27	0.82
41:BY:101:LEU:HD21	41:BY:112:LEU:CD1	2.09	0.82
41:BY:18:GLU:CA	41:BY:21:LYS:HZ2	1.92	0.82
1:AA:1391:U:H2'	1:AA:1392:G:H8	1.45	0.82
1:AA:1400:C:C4	2:AV:34:G:C2	2.68	0.82
46:B2:4:HIS:O	46:B2:7:GLU:OE2	1.95	0.82
26:BA:2267:A:O4'	26:BA:2267:A:OP1	1.97	0.82
26:BA:2306:C:H42	26:BA:2311:A:H2	1.26	0.82
26:BA:2364:C:O2'	26:BA:2365:G:C5'	2.28	0.82
26:BA:2528:U:HO2'	26:BA:2529:G:H8	1.25	0.82
26:BA:2509:G:OP1	26:BA:2555:U:H5'	1.79	0.82
27:BD:146:LYS:HZ2	27:BD:184:LEU:CD1	1.92	0.82
28:BE:79:ARG:NH2	28:BE:104:PHE:O	2.10	0.82
29:BF:11:ASN:OD1	29:BF:160:LEU:HD11	1.78	0.82
55:BK:11:LEU:HD11	55:BK:28:LEU:HD21	1.61	0.82
36:BQ:44:ALA:HB3	36:BQ:126:VAL:O	1.79	0.82
45:BV:21:ARG:HE	45:BV:21:ARG:HA	1.44	0.82
26:BA:2261:C:P	48:B0:14:ARG:HG2	2.19	0.82
46:B2:30:ALA:CA	46:B2:34:GLN:CG	2.57	0.82
26:BA:94:G:O3'	46:B2:41:GLU:OE2	1.98	0.82
50:B5:12:SER:O	50:B5:13:LYS:C	2.17	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2098:U:O2	26:BA:2191:G:N2	2.12	0.82
26:BA:2256:G:N2	26:BA:2257:U:O2	2.13	0.82
26:BA:2399:G:N2	26:BA:2400:G:H1'	1.94	0.82
26:BA:2586:C:C2	26:BA:2587:A:N7	2.47	0.82
26:BA:2781:A:C5'	26:BA:2782:G:C5'	2.57	0.82
26:BA:801:G:P	29:BF:79:ARG:CD	2.65	0.82
29:BF:193:LEU:CD1	29:BF:223:LEU:HB2	2.10	0.82
31:BH:35:THR:O	31:BH:36:PHE:CD1	2.32	0.82
31:BH:51:VAL:CG2	31:BH:68:ARG:HG2	2.10	0.82
32:BI:103:GLN:O	32:BI:104:ALA:C	2.16	0.82
55:BK:117:ASN:CG	55:BK:127:ILE:HD11	1.98	0.82
33:BN:54:VAL:HG22	33:BN:135:ILE:CD1	2.09	0.82
34:BO:66:LYS:HZ2	34:BO:67:ARG:HD3	0.66	0.82
36:BQ:136:TRP:O	36:BQ:139:ALA:HB3	1.78	0.82
45:BV:21:ARG:HA	45:BV:21:ARG:NE	1.95	0.82
44:BU:104:GLU:CD	45:BV:46:VAL:HG13	1.99	0.82
45:BV:66:GLY:C	45:BV:67:LYS:N	2.33	0.82
41:BY:71:VAL:CG2	41:BY:93:THR:CG2	2.18	0.82
41:BY:71:VAL:HG22	41:BY:93:THR:N	1.95	0.82
1:AA:1070:U:C4	1:AA:1085:U:C4	2.67	0.82
1:AA:1313:U:C5	22:AS:4:SER:HB2	2.12	0.82
1:AA:1375:A:OP1	10:AG:28:ASN:ND2	2.12	0.82
26:BA:2262:U:OP2	48:B0:14:ARG:CZ	2.28	0.82
47:B3:50:VAL:HB	47:B3:53:LEU:CD1	2.10	0.82
26:BA:2396:G:OP1	49:B4:28:ARG:CZ	2.28	0.82
49:B4:62:ARG:C	49:B4:65:ASP:OD2	2.17	0.82
26:BA:2022:U:C4	50:B5:9:LYS:NZ	2.47	0.82
52:B7:14:LYS:O	52:B7:16:HIS:N	2.12	0.82
26:BA:125:G:H5''	52:B7:19:ARG:HH11	0.67	0.82
52:B7:21:ARG:CB	52:B7:31:LEU:CD1	2.53	0.82
53:B8:26:LYS:HD3	53:B8:43:GLY:C	1.99	0.82
53:B8:55:TRP:O	53:B8:56:ALA:O	1.96	0.82
54:B9:7:VAL:HG11	54:B9:25:VAL:HG23	1.62	0.82
26:BA:1151:G:O3'	44:BU:81:ASN:OD1	1.98	0.82
26:BA:2292:C:O2	26:BA:2293:C:C6	2.32	0.82
26:BA:2423:U:O4'	26:BA:2425:A:C8	2.32	0.82
26:BA:2468:G:HO2'	26:BA:2469:A:H5'	1.43	0.82
26:BA:2681:C:O2'	26:BA:2682:U:C5'	2.27	0.82
26:BA:2695:C:C2'	26:BA:2696:U:C6	2.63	0.82
26:BA:2703:C:C2'	26:BA:2704:C:O5'	2.27	0.82
26:BA:2758:A:OP2	26:BA:2758:A:C4'	2.27	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:280:C:N3	26:BA:283:A:N6	2.26	0.82
26:BA:673:C:H4'	29:BF:82:GLN:CD	2.00	0.82
30:BG:136:ARG:HB3	30:BG:137:PRO:HD2	1.62	0.82
30:BG:44:ILE:O	30:BG:83:PHE:HZ	1.58	0.82
32:BI:68:LEU:CG	32:BI:108:LEU:HD13	2.10	0.82
32:BI:133:LEU:N	32:BI:138:THR:HG22	1.93	0.82
33:BN:60:ARG:O	33:BN:71:TYR:CD2	2.33	0.82
26:BA:527:C:C2'	33:BN:95:ARG:HH12	1.86	0.82
36:BQ:65:ARG:HH21	36:BQ:85:ILE:C	1.81	0.82
45:BV:19:VAL:HB	45:BV:21:ARG:HH11	1.44	0.82
40:BX:17:ASP:N	40:BX:17:ASP:OD1	2.13	0.82
40:BX:6:LYS:HE3	40:BX:29:ASP:H	1.43	0.82
41:BY:14:ALA:CB	41:BY:15:PRO:CD	2.54	0.82
1:AA:1392:G:H21	1:AA:1502:A:H8	1.28	0.82
3:AW:9:A:N6	3:AW:45:G:N1	2.26	0.82
47:B3:37:LEU:HD12	47:B3:43:ILE:CG2	2.09	0.82
51:B6:40:TYR:O	51:B6:47:HIS:CA	2.27	0.82
26:BA:592:G:O2'	53:B8:3:LYS:HG3	1.78	0.82
26:BA:2418:A:H2'	26:BA:2419:U:C6	2.15	0.82
26:BA:2574:G:C3'	26:BA:2575:C:C6	2.59	0.82
26:BA:322:A:OP2	26:BA:322:A:H8	1.63	0.82
26:BA:792:G:N7	26:BA:2440:C:H1'	1.93	0.82
27:BD:166:LYS:O	27:BD:167:GLU:OE2	1.96	0.82
29:BF:110:ALA:O	29:BF:111:VAL:C	2.17	0.82
29:BF:52:ALA:HA	29:BF:55:ARG:HE	0.99	0.82
26:BA:675:A:OP1	29:BF:69:HIS:O	1.96	0.82
30:BG:145:ASP:HB3	37:BS:15:GLU:HA	1.60	0.82
31:BH:36:PHE:O	31:BH:37:HIS:O	1.98	0.82
26:BA:1062:G:O3'	55:BK:76:SER:OG	1.97	0.82
26:BA:1064:C:OP1	55:BK:87:LYS:HB3	1.80	0.82
33:BN:134:GLU:O	33:BN:138:THR:CB	2.27	0.82
33:BN:58:GLU:HA	33:BN:61:VAL:HG23	0.84	0.82
34:BO:98:ILE:HG21	34:BO:118:ALA:HA	1.61	0.82
35:BP:61:ALA:HB1	35:BP:107:LYS:CE	2.10	0.82
43:BR:29:LEU:H	43:BR:29:LEU:HD22	1.44	0.82
37:BS:17:ARG:HD3	37:BS:17:ARG:C	1.99	0.82
39:BW:90:ARG:CB	39:BW:90:ARG:HH11	1.81	0.82
42:BZ:172:LEU:HD23	42:BZ:173:PRO:CG	2.09	0.82
42:BZ:19:ILE:N	42:BZ:36:ARG:HG2	1.95	0.82
1:AA:247:G:OP2	20:AQ:99:SER:CA	2.27	0.82
1:AA:988:G:H4'	1:AA:1014:A:N6	1.93	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AC:9:GLY:CA	17:AN:49:HIS:O	2.28	0.82
2:AV:30:G:O3'	12:AI:127:LYS:NZ	2.11	0.82
3:AW:45:G:O3'	3:AW:46:G:C5'	2.26	0.82
48:B0:46:LYS:HD2	48:B0:46:LYS:N	1.93	0.82
26:BA:1059:G:N3	55:BK:127:ILE:HD13	1.94	0.82
26:BA:1546:C:HO3'	26:BA:1547:C:P	1.26	0.82
26:BA:1673:U:H5	28:BE:225:LYS:HD3	1.45	0.82
26:BA:193:U:H2'	26:BA:194:G:C8	2.13	0.82
26:BA:2081:C:C5'	49:B4:35:VAL:HG21	2.09	0.82
26:BA:2207:C:O2	26:BA:2218:G:C2	2.33	0.82
26:BA:2267:A:H5''	26:BA:2268:A:O4'	1.80	0.82
26:BA:2508:G:N1	26:BA:2582:G:O6	2.13	0.82
26:BA:2508:G:N2	26:BA:2509:G:H1'	1.94	0.82
26:BA:2557:G:H2'	26:BA:2558:C:H6	1.44	0.82
26:BA:2520:C:C5	26:BA:2567:G:N9	2.47	0.82
26:BA:2595:G:O5'	26:BA:2595:G:H8	1.61	0.82
26:BA:2716:U:C2	26:BA:2717:G:N7	2.48	0.82
28:BE:70:VAL:HG13	28:BE:296:VAL:CB	2.09	0.82
30:BG:82:GLU:O	30:BG:85:GLN:CG	2.27	0.82
32:BI:108:LEU:HD23	32:BI:109:LYS:O	1.80	0.82
26:BA:1131:G:N1	33:BN:69:TYR:CZ	2.46	0.82
34:BO:61:VAL:CG1	34:BO:62:VAL:H	1.92	0.82
35:BP:103:ALA:O	35:BP:104:ASP:CG	2.18	0.82
37:BS:31:LYS:CB	37:BS:32:PRO:HD2	2.06	0.82
45:BV:72:ARG:O	45:BV:88:GLN:HG2	1.80	0.82
42:BZ:172:LEU:CD2	42:BZ:173:PRO:CG	2.58	0.82
42:BZ:91:PRO:CG	42:BZ:127:PRO:CA	2.57	0.82
1:AA:976:G:C4	1:AA:361(A):C:N4	2.47	0.82
7:AD:22:LYS:HG3	7:AD:115:ARG:HH22	1.44	0.82
17:AN:24:CYS:HB3	17:AN:40:CYS:H	1.43	0.82
48:B0:77:ARG:O	48:B0:79:ILE:HG13	1.80	0.82
46:B2:2:VAL:HG12	46:B2:3:LEU:H	1.44	0.82
46:B2:52:ALA:O	46:B2:53:ILE:C	2.17	0.82
47:B3:40:THR:CG2	47:B3:43:ILE:CG1	2.58	0.82
49:B4:58:LYS:CD	49:B4:62:ARG:NH2	2.43	0.82
50:B5:16:ARG:O	50:B5:19:ARG:HB3	1.78	0.82
26:BA:592:G:C2	53:B8:3:LYS:HE2	2.11	0.82
26:BA:1021:A:H8	33:BN:49:ARG:HH11	1.25	0.82
26:BA:2474:C:H41	26:BA:2529:G:H21	1.27	0.82
26:BA:2592:G:C4	26:BA:2593:U:C6	2.67	0.82
26:BA:2633:G:N2	26:BA:2634:G:C4	2.48	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:388:G:H2'	26:BA:390:A:N7	1.94	0.82
26:BA:440:G:P	41:BY:3:GLN:OE1	2.38	0.82
27:BD:161:ALA:N	27:BD:162:GLN:HE22	1.78	0.82
55:BK:38:PHE:CE2	55:BK:66:PHE:C	2.53	0.82
33:BN:61:VAL:CG2	33:BN:139:LEU:CB	2.58	0.82
26:BA:2566:A:H61	34:BO:28:SER:HA	1.43	0.82
35:BP:128:GLY:O	35:BP:131:GLU:CB	2.27	0.82
26:BA:2406:U:H3	35:BP:55:GLN:CG	1.92	0.82
36:BQ:57:ARG:O	36:BQ:61:LEU:CD2	2.27	0.82
44:BU:27:SER:C	44:BU:29:SER:N	2.32	0.82
45:BV:5:ILE:CD1	45:BV:12:TYR:CZ	2.63	0.82
39:BW:84:ARG:HB2	39:BW:96:ILE:CD1	2.05	0.82
41:BY:43:ASN:OD1	41:BY:112:LEU:HD22	1.80	0.82
42:BZ:141:MET:O	42:BZ:142:ASN:CG	2.18	0.82
1:AA:1211:U:H3'	1:AA:1212:U:OP1	1.80	0.82
46:B2:13:PRO:HA	46:B2:16:ARG:CD	2.10	0.82
50:B5:12:SER:HG	50:B5:14:SER:HG	1.22	0.82
52:B7:30:ILE:CD1	52:B7:33:ARG:CZ	2.56	0.82
53:B8:26:LYS:CD	53:B8:43:GLY:C	2.48	0.82
53:B8:30:ARG:HH21	53:B8:41:ILE:HG23	1.45	0.82
26:BA:1301:A:H62	26:BA:1303:G:H1'	1.44	0.82
26:BA:1780:A:H3'	26:BA:1781:C:H5''	1.60	0.82
26:BA:965:C:O4'	26:BA:2273:A:C2	2.32	0.82
26:BA:2347:C:C2	26:BA:2348:U:C5	2.68	0.82
26:BA:2612:C:O2'	26:BA:2613:U:C5'	2.28	0.82
26:BA:2678:C:H2'	26:BA:2679:A:O5'	1.80	0.82
26:BA:831:G:H3'	26:BA:944:G:N2	1.94	0.82
27:BD:211:HIS:HD1	27:BD:212:HIS:HD2	1.19	0.82
28:BE:174:LEU:H	28:BE:174:LEU:CD1	1.92	0.82
28:BE:214:VAL:HG22	28:BE:221:LYS:NZ	1.94	0.82
32:BI:43:ASN:HD22	32:BI:43:ASN:H	1.27	0.82
32:BI:86:GLY:C	32:BI:88:ARG:HA	2.00	0.82
33:BN:22:VAL:O	33:BN:26:VAL:HG23	1.80	0.82
34:BO:56:GLN:OE1	34:BO:56:GLN:HA	1.78	0.82
36:BQ:45:GLN:O	36:BQ:155:GLY:O	1.96	0.82
36:BQ:88:PHE:O	36:BQ:90:PHE:CE1	2.33	0.82
40:BX:37:VAL:O	40:BX:38:ALA:C	2.15	0.82
1:AA:988:G:N2	1:AA:1016:A:H1'	1.95	0.81
1:AA:958:A:N3	22:AS:55:LYS:HB2	1.94	0.81
5:AB:174:VAL:O	5:AB:178:ARG:HB2	1.79	0.81
11:AH:18:ARG:HG3	11:AH:18:ARG:HH11	1.44	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:31:A:P	12:AI:127:LYS:NZ	2.53	0.81
1:AA:668:G:N3	18:AO:46:HIS:NE2	2.28	0.81
1:AA:1286:A:C1'	24:AU:22:ARG:HH21	1.91	0.81
49:B4:17:GLN:O	49:B4:19:GLN:NE2	2.13	0.81
52:B7:30:ILE:HG12	52:B7:33:ARG:HD2	1.60	0.81
26:BA:2225:A:H4'	26:BA:2226:C:H5'	0.94	0.81
26:BA:2416:C:C2'	26:BA:2417:C:C5'	2.57	0.81
26:BA:2457:U:C5	26:BA:2458:G:C4	2.68	0.81
26:BA:2508:G:O2'	26:BA:2509:G:C5'	2.25	0.81
26:BA:2525:G:C2	26:BA:2539:C:C4	2.68	0.81
26:BA:2658:C:H2'	26:BA:2659:G:O5'	1.79	0.81
26:BA:2741:A:C2'	26:BA:2742:C:O4'	2.26	0.81
26:BA:2819:G:C5'	26:BA:2821:A:N6	2.41	0.81
26:BA:338:G:N7	41:BY:21:LYS:HB3	1.95	0.81
26:BA:388:G:P	49:B4:29:PRO:CG	2.68	0.81
27:BD:66:PHE:O	27:BD:67:LYS:HB3	1.77	0.81
29:BF:230:GLY:C	29:BF:231:ARG:HG2	1.99	0.81
29:BF:81:PRO:HA	29:BF:87:ARG:CB	2.09	0.81
31:BH:58:LYS:O	31:BH:59:HIS:O	1.96	0.81
31:BH:25:VAL:HG11	31:BH:78:VAL:HG21	1.62	0.81
32:BI:88:ARG:HD3	32:BI:122:ARG:HB3	1.59	0.81
55:BK:121:LEU:CA	55:BK:125:MET:CE	2.45	0.81
35:BP:61:ALA:HB1	35:BP:107:LYS:HE2	1.61	0.81
37:BS:23:ARG:NH2	37:BS:37:ARG:HH21	1.75	0.81
44:BU:17:VAL:O	44:BU:18:LEU:C	2.17	0.81
45:BV:3:ALA:HB2	45:BV:44:GLN:OE1	1.80	0.81
39:BW:19:LEU:HD13	50:B5:25:LEU:HD21	0.83	0.81
39:BW:70:TYR:HE2	39:BW:72:LYS:HA	1.45	0.81
42:BZ:2:GLU:HA	42:BZ:54:ILE:HG23	1.61	0.81
42:BZ:6:LYS:CA	42:BZ:31:SER:HB3	2.10	0.81
1:AA:1255:G:O2'	1:AA:1258:G:N3	2.11	0.81
1:AA:1347:G:H8	12:AI:107:ARG:HB3	1.43	0.81
7:AD:22:LYS:HG3	7:AD:115:ARG:NH2	1.95	0.81
18:AO:87:ILE:O	18:AO:88:ARG:HB2	1.78	0.81
1:AA:1320:C:H42	22:AS:36:ARG:HG3	1.42	0.81
1:AA:1286:A:C2	24:AU:18:TYR:OH	2.32	0.81
48:B0:23:VAL:HG13	48:B0:24:LYS:H	1.42	0.81
47:B3:19:GLN:C	47:B3:23:LEU:HD21	2.00	0.81
52:B7:43:THR:CA	52:B7:46:ASP:CG	2.48	0.81
26:BA:2278:A:C4'	36:BQ:19:TYR:HB3	2.10	0.81
26:BA:2416:C:OP1	35:BP:51:PHE:CD2	2.34	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:826:U:OP1	26:BA:2428:G:H3'	1.79	0.81
26:BA:2443:C:C5	26:BA:2444:G:N7	2.48	0.81
26:BA:807:U:H5'	26:BA:2445:G:H4'	1.60	0.81
26:BA:2565:A:O3'	26:BA:2566:A:C4'	2.27	0.81
2:AV:75:C:OP1	26:BA:2602:A:C5'	2.20	0.81
26:BA:2773:C:O2'	26:BA:2774:C:O4'	1.97	0.81
28:BE:73:ILE:HD13	28:BE:73:ILE:N	1.86	0.81
30:BG:38:GLU:HA	30:BG:41:LEU:CG	2.08	0.81
32:BI:21:VAL:CG1	32:BI:30:LEU:HD11	2.10	0.81
32:BI:77:VAL:CB	32:BI:142:LYS:O	2.27	0.81
55:BK:42:PHE:CE2	55:BK:56:VAL:HG21	2.15	0.81
34:BO:17:ARG:NE	34:BO:47:THR:N	2.28	0.81
34:BO:53:LYS:O	34:BO:56:GLN:HG2	1.81	0.81
26:BA:2378:A:C2	37:BS:26:LEU:HD23	2.14	0.81
37:BS:53:ASN:O	37:BS:54:GLY:C	2.17	0.81
45:BV:49:GLU:HA	45:BV:53:LYS:HZ1	1.42	0.81
40:BX:18:MET:CE	40:BX:25:GLN:HB2	2.10	0.81
42:BZ:37:LYS:O	42:BZ:40:ASP:CG	2.19	0.81
1:AA:1220:G:H21	22:AS:54:GLY:HA2	1.42	0.81
1:AA:1248:A:O2'	12:AI:70:LYS:NZ	2.14	0.81
16:AM:94:ARG:C	16:AM:95:GLY:CA	2.48	0.81
2:AV:31:A:OP1	12:AI:127:LYS:CE	2.20	0.81
3:AW:25:C:C2	3:AW:26:G:C1'	2.62	0.81
3:AW:9:A:C5	3:AW:45:G:C2	2.69	0.81
26:BA:1972:A:H2'	26:BA:1973:G:H8	1.46	0.81
26:BA:2041:U:H2'	26:BA:2042:A:H5'	1.63	0.81
26:BA:2349:G:OP2	53:B8:42:ARG:NE	2.13	0.81
26:BA:2482:G:N7	26:BA:2483:C:H5	1.78	0.81
26:BA:2520:C:O2'	26:BA:2521:C:H5'	1.80	0.81
26:BA:2549:G:O2'	26:BA:2550:G:H5'	1.81	0.81
26:BA:2570:G:H2'	26:BA:2571:C:H6	1.00	0.81
26:BA:2584:U:C5	26:BA:2585:U:N1	2.46	0.81
26:BA:2627:G:H8	26:BA:2627:G:H5'	1.43	0.81
26:BA:2698:U:O2	26:BA:2699:C:H6	1.57	0.81
26:BA:2729:G:N2	26:BA:2730:C:O2	2.14	0.81
26:BA:2854:G:C2	26:BA:2864:G:C6	2.68	0.81
26:BA:2808:U:N3	26:BA:2892:A:C6	2.49	0.81
27:BD:141:HIS:O	27:BD:143:ILE:N	2.14	0.81
27:BD:210:LYS:HA	27:BD:213:LYS:HD3	0.84	0.81
26:BA:1805:U:H5'	27:BD:235:PRO:CB	2.11	0.81
29:BF:197:SER:N	29:BF:236:THR:OG1	2.13	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:146:LYS:O	30:BG:148:SER:N	2.14	0.81
31:BH:119:GLY:O	31:BH:121:GLU:OE1	1.96	0.81
31:BH:10:ILE:CD1	31:BH:49:ILE:CG1	2.56	0.81
33:BN:14:ALA:HB3	33:BN:40:ASN:HB2	1.60	0.81
36:BQ:31:PHE:HE2	36:BQ:86:ARG:HA	1.45	0.81
43:BR:20:LEU:CG	43:BR:21:TYR:N	2.41	0.81
37:BS:10:MET:O	37:BS:12:ARG:N	2.13	0.81
41:BY:43:ASN:HD21	41:BY:112:LEU:CD2	1.93	0.81
42:BZ:69:VAL:HG11	42:BZ:81:VAL:CG2	2.10	0.81
48:B0:39:ARG:HG2	48:B0:69:PHE:HE1	1.41	0.81
48:B0:79:ILE:O	48:B0:81:ILE:HD12	1.80	0.81
46:B2:20:LEU:O	46:B2:21:ASP:C	2.17	0.81
49:B4:35:VAL:C	49:B4:36:TRP:CD1	2.54	0.81
51:B6:41:ASP:CB	51:B6:47:HIS:H	1.91	0.81
26:BA:1300:U:H1'	26:BA:1626:G:N2	1.93	0.81
26:BA:2090:G:C4	26:BA:2230:G:C6	2.68	0.81
26:BA:2242:G:C5	26:BA:2243:U:H5	1.98	0.81
26:BA:2329:G:H2'	26:BA:2330:G:H8	1.44	0.81
26:BA:2348:U:C3'	53:B8:42:ARG:NH2	2.43	0.81
26:BA:10:G:C2	26:BA:2629:A:C2	2.66	0.81
26:BA:322:A:H1'	26:BA:341:G:O4'	1.80	0.81
26:BA:34:C:H2'	26:BA:455:C:N4	1.94	0.81
26:BA:991:C:OP2	26:BA:1186:G:OP2	1.97	0.81
28:BE:304:ASP:OD1	28:BE:307:LEU:HD11	1.80	0.81
28:BE:45:LYS:HZ3	28:BE:301:PRO:C	1.82	0.81
29:BF:220:THR:O	29:BF:221:GLU:C	2.19	0.81
29:BF:223:LEU:O	29:BF:231:ARG:CD	2.28	0.81
30:BG:22:VAL:C	30:BG:23:VAL:HG13	2.01	0.81
30:BG:97:GLN:OE1	30:BG:106:PHE:CD2	2.33	0.81
32:BI:7:LYS:CB	32:BI:12:LYS:CD	2.55	0.81
55:BK:89:SER:CB	55:BK:95:LYS:HD3	2.10	0.81
26:BA:1665:A:C4'	34:BO:66:LYS:HD3	2.09	0.81
43:BR:97:VAL:HG22	43:BR:114:VAL:HG11	1.61	0.81
37:BS:94:GLU:CD	37:BS:95:ALA:N	2.33	0.81
44:BU:104:GLU:CD	45:BV:46:VAL:CG1	2.48	0.81
44:BU:28:ARG:O	44:BU:30:LYS:N	2.12	0.81
45:BV:11:GLN:HE22	45:BV:22:VAL:HG23	0.97	0.81
40:BX:14:ALA:CA	40:BX:17:ASP:OD1	2.28	0.81
1:AA:1194:U:H4'	8:AE:22:GLY:C	1.99	0.81
26:BA:111:A:H4'	46:B2:62:GLU:OE2	1.80	0.81
47:B3:12:PRO:HG2	47:B3:20:LYS:NZ	1.95	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:47:HIS:O	51:B6:48:VAL:HB	1.79	0.81
26:BA:1078:U:P	55:BK:93:LYS:HG3	2.20	0.81
26:BA:1614:A:C5	39:BW:88:ARG:HD2	2.16	0.81
26:BA:2234:G:C2	26:BA:2235:G:C8	2.68	0.81
26:BA:2330:G:H1	26:BA:2385:C:N4	1.77	0.81
26:BA:2523:G:O4'	26:BA:2765:A:N7	2.13	0.81
26:BA:2541:A:H2	26:BA:2765:A:H61	1.27	0.81
26:BA:2649:U:O2'	26:BA:2650:U:O5'	1.98	0.81
26:BA:2744:G:C2'	26:BA:2745:C:H5'	2.11	0.81
26:BA:706:A:H8	26:BA:706:A:O5'	1.63	0.81
25:BB:24:G:H2'	25:BB:56:G:O6	1.81	0.81
28:BE:205:THR:OG1	28:BE:258:TYR:N	2.13	0.81
28:BE:79:ARG:HA	28:BE:186:GLU:CA	2.11	0.81
32:BI:13:GLY:HA3	32:BI:15:LYS:NZ	1.95	0.81
32:BI:7:LYS:CA	32:BI:14:LYS:CG	2.57	0.81
33:BN:54:VAL:HA	33:BN:135:ILE:HD12	1.60	0.81
26:BA:1666:G:P	34:BO:66:LYS:HE2	2.21	0.81
35:BP:62:ALA:CB	35:BP:105:TYR:O	2.21	0.81
36:BQ:46:VAL:HG12	36:BQ:124:ALA:CB	2.10	0.81
26:BA:994:C:O2'	44:BU:54:LYS:CG	2.26	0.81
44:BU:92:ARG:H	45:BV:10:LYS:HZ2	0.83	0.81
40:BX:11:THR:C	40:BX:15:MET:CG	2.44	0.81
42:BZ:26:LYS:O	42:BZ:27:GLU:CB	2.28	0.81
42:BZ:40:ASP:CB	42:BZ:41:ARG:CZ	2.59	0.81
25:BB:76:G:H4'	42:BZ:80:HIS:HB3	1.60	0.81
1:AA:436:C:H2'	1:AA:437:U:N1	1.95	0.81
46:B2:15:GLU:O	46:B2:17:GLU:N	2.13	0.81
26:BA:2021:C:P	50:B5:15:LYS:HE2	2.09	0.81
50:B5:56:GLN:O	50:B5:57:VAL:CG2	2.29	0.81
51:B6:2:ALA:HB2	51:B6:11:LYS:HZ1	1.44	0.81
52:B7:30:ILE:O	52:B7:33:ARG:N	2.13	0.81
53:B8:36:LYS:HE2	53:B8:40:GLU:OE1	1.78	0.81
26:BA:1287:A:C5'	43:BR:104:ARG:HG3	2.10	0.81
26:BA:1364:G:O5'	49:B4:3:LYS:HG2	1.76	0.81
26:BA:2065:C:N4	26:BA:2445:G:H1	1.78	0.81
26:BA:2277:G:O3'	36:BQ:20:ILE:HG22	1.79	0.81
26:BA:2367:G:C2	26:BA:2368:C:C5	2.68	0.81
26:BA:2722:G:N3	26:BA:2723:C:C5	2.48	0.81
28:BE:269:ILE:HD11	28:BE:296:VAL:C	2.01	0.81
28:BE:267:ARG:CD	28:BE:297:LYS:HD3	2.08	0.81
29:BF:37:ALA:HB1	29:BF:107:ARG:CZ	2.10	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:238:SER:O	29:BF:241:ALA:HB2	1.81	0.81
29:BF:45:ASP:O	29:BF:46:TYR:CG	2.33	0.81
30:BG:140:ARG:HA	30:BG:143:LYS:NZ	1.96	0.81
30:BG:17:ARG:O	30:BG:18:ILE:O	1.98	0.81
31:BH:36:PHE:HD2	31:BH:70:LEU:CD1	1.90	0.81
31:BH:41:THR:CB	31:BH:52:THR:CB	2.57	0.81
26:BA:2674:G:H4'	34:BO:30:ARG:HG3	1.62	0.81
36:BQ:143:VAL:HG23	36:BQ:144:THR:N	1.94	0.81
44:BU:59:ARG:C	44:BU:62:ILE:CG1	2.33	0.81
41:BY:101:LEU:HD21	41:BY:112:LEU:HD11	1.62	0.81
26:BA:75:G:C4'	46:B2:51:LYS:HZ1	1.93	0.81
49:B4:68:ARG:HG2	49:B4:72:LYS:HG2	1.58	0.81
51:B6:19:GLY:O	51:B6:20:PHE:HB2	1.81	0.81
26:BA:2329:G:H2'	26:BA:2330:G:C8	2.16	0.81
26:BA:2336:A:HO2'	26:BA:2337:G:H5'	0.99	0.81
26:BA:2358:G:N2	26:BA:2359:C:C4'	2.43	0.81
26:BA:2361:A:C2	26:BA:2362:G:H1'	2.15	0.81
26:BA:2056:G:OP2	26:BA:2504:U:OP2	1.97	0.81
26:BA:2592:G:N7	26:BA:2593:U:C4	2.49	0.81
26:BA:2606:C:H5''	26:BA:2606:C:C6	2.15	0.81
26:BA:2668:G:N2	26:BA:2669:G:C4	2.49	0.81
26:BA:2707:G:H2'	26:BA:2708:G:O5'	1.80	0.81
26:BA:2733:A:H1'	28:BE:318:ASN:HD21	1.43	0.81
26:BA:2762:G:C6	26:BA:2763:G:C6	2.68	0.81
26:BA:2821:A:O2'	26:BA:2822:G:O4'	1.98	0.81
27:BD:80:ILE:CB	27:BD:82:TYR:CE1	2.63	0.81
28:BE:101:THR:OG1	28:BE:103:GLU:OE2	1.97	0.81
28:BE:185:GLY:O	28:BE:187:HIS:CD2	2.33	0.81
29:BF:223:LEU:HD12	29:BF:224:ALA:CA	2.11	0.81
29:BF:22:PHE:HE2	29:BF:118:THR:OG1	1.64	0.81
31:BH:85:ALA:C	31:BH:148:ARG:HH22	1.76	0.81
31:BH:151:ARG:O	31:BH:161:ILE:HG12	1.80	0.81
32:BI:81:ALA:O	32:BI:147:GLU:HA	1.80	0.81
33:BN:52:GLN:O	33:BN:56:LYS:HE2	1.79	0.81
35:BP:106:VAL:HG23	35:BP:122:ALA:HB1	1.61	0.81
26:BA:1287:A:C5'	43:BR:104:ARG:HD2	2.11	0.81
43:BR:78:LYS:HG3	43:BR:82:GLU:HG3	1.60	0.81
26:BA:447:A:OP2	44:BU:5:LYS:NZ	2.13	0.81
45:BV:12:TYR:O	45:BV:13:ARG:HB2	1.81	0.81
45:BV:40:VAL:HA	45:BV:51:ALA:HA	1.60	0.81
42:BZ:64:ALA:CB	42:BZ:85:MET:CA	2.44	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:36:C:H4'	15:AL:117:ARG:NH2	1.94	0.81
46:B2:54:ALA:O	46:B2:56:ILE:N	2.13	0.81
49:B4:51:ASP:C	49:B4:52:THR:HG23	1.99	0.81
51:B6:8:ILE:HA	51:B6:29:ARG:NH2	1.93	0.81
52:B7:21:ARG:HH12	52:B7:43:THR:H	1.28	0.81
26:BA:2188:C:C6	26:BA:2189:U:C5	2.68	0.81
26:BA:2249:U:O2	26:BA:2253:G:OP2	1.97	0.81
26:BA:2256:G:N1	26:BA:2257:U:C2	2.49	0.81
26:BA:227:A:N1	26:BA:2407:G:C1'	2.40	0.81
26:BA:2423:U:C5	26:BA:2425:A:C6	2.67	0.81
26:BA:825:C:C4'	26:BA:2428:G:C5	2.57	0.81
26:BA:2051:A:N7	26:BA:2614:A:N7	2.29	0.81
26:BA:2740:A:H5'	26:BA:2740:A:C8	2.14	0.81
26:BA:2742:C:P	54:B9:35:ARG:NH1	2.53	0.81
26:BA:2785:C:O2'	28:BE:100:TRP:CB	2.29	0.81
26:BA:534:U:O2'	44:BU:49:ASP:CG	2.18	0.81
26:BA:647:G:H1'	26:BA:2351:G:OP1	1.80	0.81
27:BD:146:LYS:HD3	27:BD:147:PRO:HD3	1.63	0.81
27:BD:167:GLU:CB	27:BD:170:TYR:HE1	1.74	0.81
28:BE:198:TYR:HE2	28:BE:265:ASN:O	1.63	0.81
29:BF:151:GLN:HA	29:BF:154:VAL:HG23	1.61	0.81
31:BH:58:LYS:HG3	31:BH:59:HIS:N	1.95	0.81
34:BO:24:VAL:HG21	34:BO:32:TYR:N	1.96	0.81
36:BQ:56:ILE:CD1	36:BQ:113:ALA:O	2.29	0.81
44:BU:43:ALA:O	44:BU:44:THR:C	2.16	0.81
44:BU:69:ALA:O	44:BU:79:PHE:CE1	2.33	0.81
39:BW:27:LYS:O	39:BW:70:TYR:HB2	1.81	0.81
42:BZ:99:HIS:O	42:BZ:135:VAL:HG13	1.80	0.81
42:BZ:81:VAL:HG12	42:BZ:82:ASP:N	1.95	0.81
1:AA:1392:G:N2	1:AA:1502:A:H8	1.78	0.81
1:AA:1500:A:C5'	1:AA:1508:G:H5''	2.07	0.81
48:B0:36:ILE:O	48:B0:37:LEU:HG	1.81	0.81
48:B0:52:GLY:O	48:B0:53:MET:HG3	1.81	0.81
46:B2:13:PRO:HD3	46:B2:16:ARG:HH11	1.43	0.81
50:B5:11:THR:HB	50:B5:16:ARG:NE	1.96	0.81
54:B9:29:ASN:CB	54:B9:32:HIS:ND1	2.44	0.81
26:BA:1943:U:H1'	26:BA:1945:G:C5'	2.11	0.81
26:BA:2060:A:HO2'	26:BA:2502:G:C5'	1.94	0.81
26:BA:2286:A:H5'	26:BA:2287:A:O4'	1.79	0.81
26:BA:2449:U:OP1	26:BA:2449:U:O4'	1.98	0.81
26:BA:247:G:O6	53:B8:11:LYS:NZ	2.12	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2634:G:C2	26:BA:2635:C:C6	2.69	0.81
26:BA:612:G:H4'	26:BA:616:A:H61	1.43	0.81
26:BA:637:A:OP2	35:BP:126:SER:OG	1.97	0.81
27:BD:158:GLY:CA	27:BD:194:VAL:CG2	2.57	0.81
27:BD:224:VAL:HG12	27:BD:225:ARG:N	1.96	0.81
27:BD:74:PRO:HG3	27:BD:96:ALA:HB2	0.81	0.81
28:BE:222:ARG:CD	28:BE:232:ARG:HA	2.11	0.81
26:BA:2578:G:N7	28:BE:237:ASN:CG	2.32	0.81
28:BE:46:ALA:CB	28:BE:72:VAL:O	2.28	0.81
55:BK:132:ALA:HB1	55:BK:137:ILE:HB	1.62	0.81
33:BN:136:SER:OG	33:BN:137:GLU:N	2.14	0.81
34:BO:1:MET:H1	34:BO:32:TYR:HD2	0.83	0.81
36:BQ:72:VAL:HG21	36:BQ:135:ALA:HB1	1.63	0.81
26:BA:1151:G:C2'	44:BU:81:ASN:HD21	1.93	0.81
40:BX:4:VAL:HG22	46:B2:24:LYS:CE	2.10	0.81
47:B3:31:LEU:CD2	47:B3:32:GLN:CB	2.59	0.81
49:B4:10:VAL:N	49:B4:11:PRO:CD	2.44	0.81
3:AW:76:A:H2'	26:BA:2422:A:C6	2.16	0.81
26:BA:2455:G:C2	26:BA:2498:C:N4	2.49	0.81
26:BA:2533:A:C8	26:BA:2534:A:N7	2.49	0.81
26:BA:2556:C:H2'	26:BA:2557:G:C4'	2.11	0.81
26:BA:2557:G:H2'	26:BA:2558:C:C6	2.15	0.81
26:BA:530:G:H5''	26:BA:561:G:O6	1.81	0.81
25:BB:8:U:OP1	37:BS:37:ARG:HD2	1.81	0.81
27:BD:106:PRO:HB3	27:BD:141:HIS:NE2	1.95	0.81
27:BD:208:GLY:O	27:BD:211:HIS:CD2	2.33	0.81
26:BA:1791:A:P	27:BD:210:LYS:CD	2.68	0.81
27:BD:235:PRO:O	27:BD:236:PHE:O	1.99	0.81
28:BE:105:HIS:ND1	28:BE:108:LEU:HD11	1.95	0.81
28:BE:216:ARG:NH2	28:BE:255:GLN:HA	1.96	0.81
28:BE:45:LYS:CE	28:BE:301:PRO:HB2	2.10	0.81
32:BI:68:LEU:CG	32:BI:108:LEU:CD1	2.59	0.81
34:BO:7:ARG:HE	34:BO:44:LYS:HD3	1.44	0.81
26:BA:873:G:H4'	36:BQ:32:LYS:CG	2.09	0.81
43:BR:47:PHE:O	43:BR:48:VAL:C	2.16	0.81
37:BS:86:LEU:CD2	37:BS:124:ASP:HB2	2.11	0.81
1:AA:403:C:H42	1:AA:547:A:C5'	1.94	0.81
49:B4:5:LEU:HA	49:B4:56:VAL:HA	1.59	0.81
52:B7:30:ILE:HD13	52:B7:33:ARG:HD3	0.85	0.81
26:BA:176:G:C3'	26:BA:177:G:H8	1.93	0.81
26:BA:1924:C:C2	26:BA:1925:C:C6	2.69	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2188:C:C5	26:BA:2189:U:C5	2.69	0.81
26:BA:2199:A:H2'	26:BA:2205:C:O4'	1.80	0.81
26:BA:2309:A:H5''	26:BA:2310:A:N7	1.95	0.81
26:BA:2315:G:O2'	26:BA:2316:C:O5'	1.98	0.81
26:BA:2447:G:C2	26:BA:2500:U:C4	2.69	0.81
26:BA:2593:U:H3	26:BA:2600:A:H61	1.29	0.81
26:BA:2731:G:C2	26:BA:2732:G:N2	2.46	0.81
26:BA:2627:G:C6	26:BA:2777:G:O6	2.34	0.81
26:BA:584:C:H42	26:BA:1256:G:H1	1.29	0.81
28:BE:229:GLN:O	28:BE:230:GLY:C	2.18	0.81
29:BF:217:GLU:O	29:BF:218:VAL:HG22	1.80	0.81
31:BH:164:GLU:OE1	31:BH:164:GLU:HA	1.80	0.81
31:BH:32:LEU:HD23	31:BH:32:LEU:C	2.02	0.81
32:BI:98:ILE:HD13	32:BI:115:ILE:HD13	1.62	0.81
32:BI:7:LYS:CE	32:BI:12:LYS:HG2	2.10	0.81
35:BP:67:ARG:NH1	35:BP:111:ALA:C	2.32	0.81
43:BR:73:VAL:O	43:BR:74:LYS:C	2.19	0.81
39:BW:86:LEU:HB2	39:BW:94:ASP:O	1.81	0.81
42:BZ:151:ASP:CB	42:BZ:153:LYS:NZ	2.41	0.81
42:BZ:71:MET:CG	42:BZ:78:PRO:HG3	2.11	0.81
1:AA:405:U:P	7:AD:5:ILE:CD1	2.69	0.80
26:BA:856:C:O2'	48:B0:24:LYS:HD3	1.80	0.80
47:B3:30:ARG:HE	47:B3:33:GLN:HG3	1.44	0.80
26:BA:1818:U:C5'	27:BD:155:ARG:HB2	2.10	0.80
26:BA:2314:C:C2'	26:BA:2315:G:O5'	2.29	0.80
26:BA:2320:A:C2	26:BA:2333:A:N1	2.49	0.80
26:BA:2498:C:H2'	26:BA:2499:C:H5''	1.62	0.80
26:BA:2446:G:N2	26:BA:2501:C:C4	2.50	0.80
26:BA:2658:C:H2'	26:BA:2659:G:C5'	2.10	0.80
26:BA:2663:G:O2'	26:BA:2664:G:O4'	1.98	0.80
26:BA:2683:C:C2'	26:BA:2684:U:H5'	2.10	0.80
26:BA:2742:C:H5''	54:B9:35:ARG:NH1	1.94	0.80
26:BA:2758:A:OP2	26:BA:2758:A:H3'	1.80	0.80
27:BD:68:ARG:NH2	27:BD:128:ALA:HB3	1.96	0.80
27:BD:130:PRO:CA	27:BD:188:ARG:HG2	2.10	0.80
28:BE:204:VAL:O	28:BE:205:THR:O	1.99	0.80
28:BE:62:ARG:O	28:BE:63:GLU:HG3	1.80	0.80
29:BF:223:LEU:C	29:BF:225:PRO:HD2	2.01	0.80
31:BH:104:LEU:C	31:BH:151:ARG:HH12	1.83	0.80
33:BN:58:GLU:HA	33:BN:61:VAL:HG21	1.59	0.80
43:BR:25:ALA:N	43:BR:44:LEU:HD21	1.96	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:78:THR:O	44:BU:79:PHE:C	2.17	0.80
44:BU:91:ASN:O	44:BU:95:LEU:HD11	1.79	0.80
45:BV:40:VAL:CG1	45:BV:55:THR:HG23	2.11	0.80
39:BW:19:LEU:CD2	50:B5:25:LEU:CG	2.21	0.80
40:BX:18:MET:HE3	40:BX:25:GLN:C	2.01	0.80
40:BX:4:VAL:HG23	40:BX:5:ILE:H	1.46	0.80
41:BY:101:LEU:O	41:BY:101:LEU:HD23	1.81	0.80
26:BA:85:G:OP1	41:BY:65:VAL:HG21	1.80	0.80
5:AB:54:THR:HG21	5:AB:201:ILE:HD11	1.62	0.80
21:AR:73:ALA:HB1	21:AR:79:LEU:HD11	1.63	0.80
26:BA:396:G:H5''	49:B4:10:VAL:O	1.80	0.80
49:B4:14:ILE:CG2	49:B4:37:SER:OG	2.28	0.80
49:B4:5:LEU:CD2	49:B4:5:LEU:N	2.42	0.80
50:B5:12:SER:OG	50:B5:14:SER:OG	1.98	0.80
50:B5:52:TYR:O	50:B5:53:ASP:OD1	1.99	0.80
26:BA:1612:C:C2'	52:B7:3:ARG:HE	1.82	0.80
26:BA:1807:G:N2	26:BA:1809:A:H5'	1.96	0.80
26:BA:2227:A:C2	26:BA:2228:G:N3	2.48	0.80
26:BA:2320:A:H61	37:BS:14:ARG:HA	1.46	0.80
26:BA:2498:C:H3'	26:BA:2498:C:P	2.21	0.80
26:BA:2508:G:C2'	26:BA:2509:G:H5'	2.10	0.80
26:BA:2726:U:H3'	26:BA:2727:G:C8	2.15	0.80
26:BA:2734:A:N6	26:BA:2735:G:C4	2.47	0.80
26:BA:2810:A:N7	26:BA:2811:G:C4	2.49	0.80
26:BA:2809:A:C4'	26:BA:2811:G:N7	2.45	0.80
26:BA:2885:C:N3	26:BA:2886:G:C8	2.49	0.80
27:BD:100:LYS:O	27:BD:101:ARG:CG	2.28	0.80
27:BD:168:GLY:C	27:BD:170:TYR:H	1.84	0.80
27:BD:66:PHE:O	27:BD:67:LYS:CB	2.29	0.80
26:BA:2049:G:O2'	28:BE:253:GLN:OE1	1.99	0.80
31:BH:86:LEU:N	31:BH:131:ILE:HG23	1.80	0.80
26:BA:142(A):A:O3'	33:BN:21:ARG:CZ	2.29	0.80
36:BQ:144:THR:OG1	36:BQ:145:PRO:CD	2.27	0.80
36:BQ:31:PHE:CE2	36:BQ:86:ARG:HA	2.16	0.80
44:BU:56:ASP:O	44:BU:60:LEU:HD21	1.78	0.80
44:BU:73:GLY:O	44:BU:74:MET:CG	2.28	0.80
41:BY:101:LEU:C	41:BY:101:LEU:HD23	2.01	0.80
42:BZ:147:ILE:C	42:BZ:168:VAL:HB	2.01	0.80
3:AW:75:C:C2	26:BA:2395:C:C1'	2.65	0.80
47:B3:1:MET:HE1	47:B3:3:ARG:CD	2.04	0.80
53:B8:30:ARG:HB3	53:B8:44:LYS:HE3	1.62	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2352:A:C8	26:BA:2366:A:C6	2.69	0.80
26:BA:2622:C:C2	26:BA:2623:G:N7	2.49	0.80
26:BA:2815:C:O2'	26:BA:2816:C:H5'	1.69	0.80
26:BA:2850:A:C5	26:BA:2851:A:N7	2.49	0.80
26:BA:904:C:O2'	42:BZ:166:LEU:HD11	1.82	0.80
28:BE:99:VAL:O	28:BE:100:TRP:CG	2.34	0.80
33:BN:51:GLU:C	33:BN:53:ILE:N	2.29	0.80
34:BO:58:VAL:CG1	34:BO:59:LYS:N	2.45	0.80
37:BS:122:ALA:O	37:BS:125:ALA:N	2.14	0.80
40:BX:44:GLN:C	40:BX:44:GLN:CD	2.40	0.80
26:BA:1340:U:C6	40:BX:55:GLN:NE2	2.47	0.80
40:BX:58:MET:C	40:BX:59:ASP:OD2	2.18	0.80
41:BY:66:ASP:OD2	41:BY:72:ILE:HA	1.82	0.80
42:BZ:26:LYS:HB3	42:BZ:26:LYS:HZ3	1.45	0.80
7:AD:49:ARG:O	7:AD:51:PRO:HD3	1.81	0.80
20:AQ:40:LYS:HD3	20:AQ:42:TYR:HE1	1.47	0.80
2:AV:1:G:C4'	36:BQ:97:ASP:OD2	2.28	0.80
3:AW:37:YYG:H102	10:AG:83:ALA:HB2	1.63	0.80
46:B2:8:ILE:HA	46:B2:11:MET:HG2	1.63	0.80
46:B2:45:ARG:HG3	46:B2:49:LEU:HG	1.64	0.80
47:B3:8:LEU:HA	47:B3:54:VAL:CG1	2.11	0.80
51:B6:16:ALA:HB2	51:B6:50:PHE:CE2	2.16	0.80
26:BA:458:G:H2'	52:B7:40:HIS:NE2	1.95	0.80
26:BA:1665:A:C1'	34:BO:66:LYS:NZ	2.43	0.80
26:BA:2052:G:C4'	28:BE:239:GLY:O	2.29	0.80
26:BA:2212:A:H2'	26:BA:2213:U:C6	2.16	0.80
26:BA:676:A:C8	26:BA:2443:C:H1'	2.16	0.80
26:BA:2558:C:N3	26:BA:2559:C:C5	2.50	0.80
26:BA:2659:G:O2'	26:BA:2663:G:N2	2.14	0.80
26:BA:2690:C:H6	26:BA:2690:C:C3'	1.95	0.80
26:BA:673:C:C4'	29:BF:82:GLN:OE1	2.29	0.80
25:BB:77:U:H5'	42:BZ:80:HIS:CE1	2.17	0.80
26:BA:782:A:H2	27:BD:233:ASP:OD2	1.65	0.80
26:BA:2785:C:O4'	28:BE:98:GLU:O	1.98	0.80
31:BH:127:GLN:HG3	31:BH:128:THR:H	1.46	0.80
31:BH:90:GLY:CA	31:BH:159:LYS:HE3	2.11	0.80
33:BN:82:THR:O	33:BN:85:GLY:N	2.13	0.80
34:BO:86:ILE:HG22	34:BO:87:ILE:N	1.95	0.80
44:BU:103:PRO:O	44:BU:107:LYS:CG	2.23	0.80
44:BU:33:ARG:NH1	44:BU:33:ARG:CB	2.35	0.80
51:B6:41:ASP:CB	51:B6:46:LYS:HZ2	1.84	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:26:LYS:CB	53:B8:44:LYS:HA	2.10	0.80
26:BA:593:G:O2'	53:B8:58:MET:CE	2.29	0.80
54:B9:25:VAL:HB	54:B9:34:GLN:CA	2.08	0.80
26:BA:1086:A:O3'	26:BA:1087:G:P	2.40	0.80
26:BA:1996:C:H2'	26:BA:1997:G:H4'	1.63	0.80
26:BA:2273:A:N7	26:BA:2274:A:N7	2.29	0.80
26:BA:2543:G:C6	26:BA:2544:G:N1	2.49	0.80
26:BA:2561:A:C6	26:BA:2562:U:C6	2.70	0.80
26:BA:2516:G:C4	26:BA:2569:G:N2	2.50	0.80
26:BA:2695:C:H2'	26:BA:2696:U:C5	2.17	0.80
26:BA:2703:C:O2'	26:BA:2704:C:C5'	2.29	0.80
26:BA:2689:U:C6	26:BA:2713:A:C6	2.69	0.80
26:BA:2776:A:C1'	26:BA:2778:A:C8	2.51	0.80
26:BA:2857:G:C8	26:BA:2857:G:O5'	2.32	0.80
26:BA:51:G:H1'	26:BA:118:A:N6	1.97	0.80
28:BE:180:ILE:CG2	28:BE:187:HIS:CA	2.54	0.80
29:BF:168:ARG:N	29:BF:232:LEU:O	2.14	0.80
30:BG:35:ALA:O	30:BG:36:ASN:CB	2.30	0.80
31:BH:102:LEU:HD21	31:BH:114:ILE:CB	2.11	0.80
31:BH:23:VAL:CG1	31:BH:74:MET:HE3	2.08	0.80
55:BK:63:ASP:C	55:BK:64:LYS:HG3	2.02	0.80
35:BP:69:ILE:CA	35:BP:73:VAL:HG23	2.11	0.80
36:BQ:32:LYS:HZ1	42:BZ:172:LEU:CD1	1.90	0.80
44:BU:14:HIS:CE1	44:BU:36:PHE:CE2	2.69	0.80
44:BU:21:ALA:CA	44:BU:24:PHE:CZ	2.50	0.80
44:BU:36:PHE:O	44:BU:37:GLN:O	2.00	0.80
41:BY:91:LEU:CD2	41:BY:91:LEU:N	2.44	0.80
25:BB:76:G:OP1	42:BZ:32:PHE:CZ	2.23	0.80
1:AA:979:C:H5''	1:AA:1222:G:O6	1.82	0.80
46:B2:21:ASP:O	46:B2:22:ASP:C	2.18	0.80
52:B7:22:MET:O	52:B7:28:ARG:HG3	1.82	0.80
54:B9:14:CYS:CA	54:B9:27:CYS:HB3	1.93	0.80
26:BA:1546:C:H3'	26:BA:1547:C:OP1	1.81	0.80
26:BA:2675:A:C2'	26:BA:2676:C:H5'	2.10	0.80
26:BA:2753:A:N7	26:BA:2754:U:C5	2.49	0.80
26:BA:2786:U:H5'	28:BE:100:TRP:C	2.02	0.80
26:BA:2887:U:C2	26:BA:2888:C:C6	2.70	0.80
27:BD:131:LEU:HG	27:BD:187:CYS:HB2	1.63	0.80
28:BE:221:LYS:HB3	28:BE:222:ARG:HD2	1.63	0.80
28:BE:42:ALA:CB	28:BE:310:PHE:HA	2.11	0.80
29:BF:102:LEU:HD13	29:BF:107:ARG:HG2	1.64	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:146:LYS:HG3	37:BS:15:GLU:HG3	1.64	0.80
30:BG:38:GLU:HA	30:BG:41:LEU:CD1	2.12	0.80
31:BH:40:MET:CB	31:BH:64:HIS:NE2	2.44	0.80
55:BK:38:PHE:CE2	55:BK:66:PHE:O	2.35	0.80
34:BO:27:GLY:O	34:BO:28:SER:O	2.00	0.80
36:BQ:136:TRP:HA	36:BQ:136:TRP:CE3	2.15	0.80
43:BR:20:LEU:CD1	43:BR:21:TYR:CG	2.64	0.80
25:BB:50:G:OP2	37:BS:74:PRO:CB	2.30	0.80
41:BY:15:PRO:O	41:BY:18:GLU:HB2	1.82	0.80
41:BY:69:LYS:O	41:BY:70:ALA:HB3	1.81	0.80
42:BZ:69:VAL:CG1	42:BZ:81:VAL:CG2	2.54	0.80
25:BB:77:U:H5'	42:BZ:80:HIS:ND1	1.96	0.80
1:AA:1259:C:O2	1:AA:1283:G:H1'	1.82	0.80
48:B0:46:LYS:HG3	48:B0:58:THR:CB	2.11	0.80
54:B9:24:LEU:HD13	54:B9:35:ARG:CG	2.12	0.80
26:BA:2248:C:C2'	26:BA:2249:U:H5'	2.11	0.80
26:BA:2333:A:C8	26:BA:2335:A:N3	2.49	0.80
26:BA:2741:A:O2'	26:BA:2742:C:C4'	2.28	0.80
26:BA:2801:A:H2	26:BA:2895:U:C1'	1.94	0.80
26:BA:1751:C:O4'	26:BA:2860:A:H2	1.61	0.80
26:BA:290:G:H2'	26:BA:291:C:O4'	1.82	0.80
26:BA:326:G:H2'	26:BA:327:G:H8	1.47	0.80
26:BA:873:G:H4'	36:BQ:32:LYS:CB	2.11	0.80
26:BA:932:G:H5'	47:B3:24:LYS:HE2	1.64	0.80
25:BB:24:G:C5	25:BB:56:G:C4	2.68	0.80
27:BD:143:ILE:HG12	27:BD:153:LEU:CA	2.06	0.80
25:BB:42:C:H1'	30:BG:47:GLN:C	2.02	0.80
55:BK:13:LEU:CD2	55:BK:24:VAL:CG2	2.58	0.80
55:BK:42:PHE:HZ	55:BK:58:ILE:HD11	0.98	0.80
33:BN:63:ILE:HB	33:BN:71:TYR:CE1	2.17	0.80
43:BR:65:LEU:O	43:BR:68:ARG:N	2.15	0.80
37:BS:49:THR:N	37:BS:55:ASP:CG	2.35	0.80
37:BS:98:GLU:HG3	37:BS:99:GLU:N	1.95	0.80
38:BT:12:ASP:O	38:BT:13:ILE:HG12	1.79	0.80
44:BU:46:GLU:O	44:BU:49:ASP:CB	2.30	0.80
45:BV:3:ALA:HB3	45:BV:12:TYR:OH	1.82	0.80
39:BW:11:ARG:HH11	39:BW:11:ARG:CG	1.94	0.80
39:BW:89:ALA:O	39:BW:90:ARG:NH1	2.14	0.80
40:BX:28:VAL:HG11	40:BX:64:ALA:HB3	1.64	0.80
40:BX:9:HIS:HB2	40:BX:26:PHE:HA	1.64	0.80
42:BZ:112:LEU:CD2	42:BZ:172:LEU:O	2.29	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:52:PHE:O	42:BZ:53:ASP:HB2	1.81	0.80
1:AA:1259:C:O2'	1:AA:1284:C:C1'	2.30	0.80
1:AA:1221:G:OP1	1:AA:1320:C:N4	2.15	0.80
3:AW:37:YYG:H192	10:AG:84:ASN:HA	0.80	0.80
13:AJ:51:ARG:HB2	13:AJ:59:SER:CB	2.07	0.80
16:AM:98:VAL:HG23	16:AM:110:ARG:HH21	1.46	0.80
1:AA:978:A:H1'	22:AS:37:ARG:HH12	1.47	0.80
2:AV:34:G:C3'	2:AV:35:A:H5''	2.11	0.80
46:B2:13:PRO:N	46:B2:16:ARG:HD2	1.96	0.80
53:B8:16:ILE:HD12	53:B8:16:ILE:H	1.44	0.80
26:BA:1022:G:OP2	33:BN:52:GLN:CD	2.19	0.80
26:BA:1341:U:H4'	40:BX:54:THR:O	1.82	0.80
26:BA:2298:A:H1'	26:BA:2321:G:N2	1.96	0.80
26:BA:2348:U:C5'	53:B8:42:ARG:NH2	2.37	0.80
26:BA:25:U:H5''	39:BW:80:PRO:HD3	0.80	0.80
26:BA:2653:U:C3'	26:BA:2654:A:C8	2.61	0.80
26:BA:2690:C:C6	26:BA:2690:C:H3'	2.16	0.80
26:BA:2768:C:N4	26:BA:2769:C:H41	1.79	0.80
27:BD:140:VAL:CG2	27:BD:191:VAL:HG12	2.10	0.80
28:BE:222:ARG:NE	28:BE:232:ARG:O	2.15	0.80
28:BE:42:ALA:HB1	28:BE:310:PHE:HA	1.64	0.80
26:BA:2310:A:C4	30:BG:55:LYS:NZ	2.49	0.80
31:BH:155:PRO:O	31:BH:169:ARG:HG3	1.82	0.80
35:BP:117:GLU:CD	35:BP:136:ALA:C	2.40	0.80
35:BP:66:VAL:CG1	35:BP:67:ARG:H	1.79	0.80
36:BQ:133:GLU:CD	36:BQ:134:PHE:N	2.35	0.80
43:BR:39:PRO:O	43:BR:40:LYS:C	2.20	0.80
43:BR:61:HIS:C	43:BR:64:ARG:HH11	1.85	0.80
44:BU:108:ALA:O	44:BU:109:LEU:C	2.19	0.80
44:BU:61:TRP:CZ3	44:BU:94:VAL:N	2.43	0.80
45:BV:30:GLY:HA3	45:BV:33:VAL:CG2	2.01	0.80
45:BV:30:GLY:C	45:BV:33:VAL:HG21	1.89	0.80
45:BV:72:ARG:C	45:BV:88:GLN:HG2	2.02	0.80
1:AA:436:C:C2'	1:AA:437:U:O4'	2.29	0.80
1:AA:1115:C:H1'	17:AN:61:TRP:O	1.82	0.80
26:BA:1364:G:C3'	49:B4:3:LYS:HZ2	1.95	0.80
51:B6:12:MET:HB2	51:B6:27:ASN:HD21	1.43	0.80
26:BA:126:A:H5''	52:B7:18:PHE:HD1	1.47	0.80
26:BA:1789:A:C4'	27:BD:224:VAL:CG1	2.59	0.80
26:BA:197:A:C5	26:BA:2430:A:C8	2.70	0.80
26:BA:2252:G:C6	26:BA:2253:G:C6	2.70	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2270:G:O6	26:BA:2271:G:C2	2.35	0.80
26:BA:2295:C:N3	26:BA:2337:G:N2	2.26	0.80
26:BA:2380:C:C2'	26:BA:2381:C:C5'	2.60	0.80
26:BA:2470:G:N1	26:BA:2471:C:N4	2.29	0.80
26:BA:2575:C:H5''	26:BA:2576:G:OP2	1.81	0.80
26:BA:2679:A:C4	28:BE:300:VAL:HG11	2.16	0.80
26:BA:2776:A:N9	26:BA:2778:A:N7	2.29	0.80
26:BA:2813:A:C8	26:BA:2814:C:C5	2.70	0.80
26:BA:2840:C:N3	26:BA:2841:C:C4	2.49	0.80
26:BA:953:A:O2'	26:BA:2266:A:OP2	1.99	0.80
28:BE:174:LEU:N	28:BE:174:LEU:HD12	1.95	0.80
28:BE:214:VAL:HG22	28:BE:221:LYS:CD	2.12	0.80
28:BE:268:LEU:HD22	28:BE:269:ILE:N	1.97	0.80
28:BE:65:MET:SD	28:BE:65:MET:O	2.39	0.80
55:BK:100:VAL:CG1	55:BK:101:THR:H	1.86	0.80
55:BK:13:LEU:HD21	55:BK:24:VAL:HG22	1.64	0.80
33:BN:21:ARG:C	33:BN:24:SER:HG	1.83	0.80
33:BN:41:ALA:HB1	33:BN:75:PRO:CB	2.12	0.80
36:BQ:151:SER:HB3	36:BQ:155:GLY:O	1.82	0.80
36:BQ:58:HIS:CA	36:BQ:61:LEU:HG	2.11	0.80
43:BR:75:LEU:O	43:BR:78:LYS:N	2.15	0.80
26:BA:2021:C:C5	44:BU:25:TRP:CH2	2.69	0.80
44:BU:80:ILE:HA	44:BU:83:LEU:HD12	1.64	0.80
40:BX:6:LYS:HZ1	40:BX:29:ASP:CA	1.86	0.80
41:BY:81:LYS:HG2	41:BY:82:THR:H	1.47	0.80
41:BY:89:ARG:HB3	41:BY:90:PRO:HD2	1.64	0.80
42:BZ:138:VAL:C	42:BZ:139:THR:HG1	1.85	0.80
26:BA:874:G:OP1	42:BZ:172:LEU:HD11	1.82	0.80
1:AA:250:A:H4'	1:AA:251:G:O5'	1.82	0.80
1:AA:671:G:H5'	9:AF:77:ARG:NH2	1.97	0.80
1:AA:767:A:N6	1:AA:813:U:H3	1.80	0.80
7:AD:15:GLU:HG2	7:AD:63:LYS:HB3	0.83	0.80
15:AL:117:ARG:CZ	15:AL:124:LYS:HD2	2.12	0.80
3:AW:37:YYG:H101	10:AG:83:ALA:CB	2.09	0.80
48:B0:65:GLY:CA	48:B0:66:LYS:HZ2	1.94	0.80
46:B2:52:ALA:O	46:B2:56:ILE:HG12	1.81	0.80
26:BA:1275:A:H61	43:BR:19:ALA:CB	1.94	0.80
26:BA:1792:G:OP1	27:BD:204:PHE:CZ	2.35	0.80
26:BA:2010:G:P	39:BW:41:LYS:HG3	2.22	0.80
26:BA:2082:A:N6	26:BA:2239:G:C6	2.50	0.80
26:BA:2240:C:C2'	26:BA:2240:C:O2	2.29	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2286:A:C8	26:BA:2286:A:C3'	2.64	0.80
26:BA:2067:G:C2	26:BA:2444:G:C2	2.70	0.80
26:BA:2446:G:N1	26:BA:2501:C:H5	1.75	0.80
26:BA:2509:G:H2'	26:BA:2510:C:C5'	2.11	0.80
26:BA:2540:C:O2'	26:BA:2541:A:O5'	1.99	0.80
26:BA:2564:A:C2'	26:BA:2565:A:C8	2.55	0.80
26:BA:2580:U:C5	26:BA:2581:G:H8	1.67	0.80
26:BA:2814:C:H2'	26:BA:2815:C:C6	2.16	0.80
26:BA:2825:C:C3'	26:BA:2825:C:C6	2.63	0.80
26:BA:854:G:H1	26:BA:923:C:H42	1.30	0.80
26:BA:99:U:N3	41:BY:107:LYS:HD2	1.97	0.80
29:BF:101:ASP:O	29:BF:102:LEU:O	2.00	0.80
29:BF:107:ARG:O	29:BF:108:GLN:C	2.19	0.80
29:BF:214:THR:H	29:BF:218:VAL:HG23	1.47	0.80
30:BG:54:ALA:O	30:BG:55:LYS:HB2	1.80	0.80
32:BI:52:GLN:HA	32:BI:55:GLN:CD	2.02	0.80
32:BI:62:LEU:C	32:BI:66:LYS:HE2	2.01	0.80
32:BI:7:LYS:N	32:BI:14:LYS:CG	2.34	0.80
34:BO:63:VAL:HG13	34:BO:102:VAL:CB	2.09	0.80
36:BQ:82:LYS:HB2	36:BQ:125:TRP:CB	2.11	0.80
36:BQ:142:LYS:HG3	36:BQ:143:VAL:H	0.63	0.80
37:BS:83:LEU:N	37:BS:83:LEU:CD1	2.43	0.80
44:BU:40:LEU:H	44:BU:40:LEU:HD23	1.46	0.80
45:BV:19:VAL:HG12	45:BV:21:ARG:HH22	1.44	0.80
39:BW:23:LEU:C	39:BW:25:ARG:N	2.34	0.80
39:BW:70:TYR:HD2	39:BW:71:VAL:N	1.80	0.80
42:BZ:40:ASP:HB2	42:BZ:41:ARG:CZ	2.10	0.80
1:AA:60:A:C6	1:AA:107:G:O2'	2.34	0.79
1:AA:1341:U:H5''	2:AV:32:C:OP1	1.81	0.79
47:B3:23:LEU:CA	47:B3:28:LEU:CD1	2.19	0.79
47:B3:42:ALA:HB3	47:B3:43:ILE:HD12	1.63	0.79
53:B8:62:LEU:CB	53:B8:63:PRO:CD	2.49	0.79
26:BA:1482:U:H3'	26:BA:1482:U:C6	2.17	0.79
26:BA:2396:G:OP1	49:B4:28:ARG:NH1	2.15	0.79
26:BA:2403:C:N4	26:BA:2415:G:C5	2.48	0.79
26:BA:2445:G:H2'	26:BA:2446:G:C8	2.16	0.79
26:BA:2464:C:N4	26:BA:2486:G:H1	1.80	0.79
26:BA:2517:C:C4	26:BA:2542:A:C6	2.70	0.79
26:BA:2547:U:C5	26:BA:2566:A:C4	2.70	0.79
26:BA:2666:C:C5	26:BA:2667:C:C5	2.70	0.79
26:BA:2748:A:N7	26:BA:2749:A:C4	2.48	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2839:G:C2	26:BA:2840:C:C6	2.70	0.79
26:BA:2865:U:N3	26:BA:2866:U:C5	2.50	0.79
31:BH:101:LYS:HZ3	31:BH:115:GLU:HB2	1.46	0.79
31:BH:120:LEU:HD23	31:BH:120:LEU:H	1.46	0.79
33:BN:75:PRO:CD	33:BN:136:SER:OG	2.27	0.79
35:BP:116:HIS:HD2	35:BP:118:LEU:CD1	1.95	0.79
35:BP:94:ARG:HD3	35:BP:120:LEU:HD23	1.10	0.79
36:BQ:65:ARG:HE	36:BQ:85:ILE:CB	1.94	0.79
26:BA:1287:A:H1'	43:BR:104:ARG:NH1	1.95	0.79
37:BS:109:PRO:O	37:BS:116:PHE:CZ	2.35	0.79
34:BO:78:ARG:O	38:BT:22:VAL:HG22	1.82	0.79
45:BV:72:ARG:N	45:BV:88:GLN:HG2	1.97	0.79
41:BY:41:ARG:O	41:BY:112:LEU:CA	2.30	0.79
1:AA:1255:G:C2	1:AA:1258:G:N2	2.50	0.79
1:AA:1376:U:H5'	10:AG:94:ARG:HH22	1.47	0.79
1:AA:1030:C:O3'	1:AA:30(A):G:P	2.41	0.79
1:AA:41:G:H2'	1:AA:42:G:H8	1.47	0.79
3:AW:37:YYG:C24	10:AG:85:TYR:HE2	1.62	0.79
26:BA:2364:C:C1'	48:B0:32:LYS:HZ3	1.78	0.79
26:BA:75:G:C4'	46:B2:51:LYS:NZ	2.46	0.79
47:B3:40:THR:OG1	47:B3:43:ILE:HD11	1.81	0.79
26:BA:10:G:N2	26:BA:2629:A:C4	2.50	0.79
26:BA:1482:U:H1'	26:BA:1512:G:H22	1.47	0.79
26:BA:2242:G:C2	26:BA:2243:U:C5	2.70	0.79
26:BA:2340:G:O2'	26:BA:2341:G:O5'	2.00	0.79
26:BA:2458:G:C5	26:BA:2490:G:C2	2.69	0.79
26:BA:2544:G:H2'	26:BA:2545:G:H8	1.47	0.79
26:BA:2584:U:C3'	26:BA:2584:U:H6	1.78	0.79
26:BA:2633:G:N3	26:BA:2634:G:N7	2.23	0.79
26:BA:2893:G:O2'	26:BA:2894:G:O4'	1.99	0.79
26:BA:412:A:H61	26:BA:2411:A:H1'	1.46	0.79
26:BA:963:U:O2'	26:BA:2250:G:N2	2.14	0.79
29:BF:157:LEU:C	29:BF:159:ALA:H	1.85	0.79
26:BA:617:G:C4'	29:BF:219:ASN:OD1	2.29	0.79
29:BF:225:PRO:CG	29:BF:231:ARG:HH21	1.95	0.79
29:BF:58:ALA:HB2	29:BF:79:ARG:N	1.95	0.79
55:BK:8:GLN:O	55:BK:9:ILE:CG1	2.30	0.79
34:BO:58:VAL:HG12	34:BO:59:LYS:H	1.47	0.79
37:BS:127:LEU:O	37:BS:127:LEU:HD22	1.81	0.79
37:BS:102:LEU:CD1	37:BS:129:ILE:HD12	2.08	0.79
38:BT:42:LEU:O	38:BT:44:ARG:HA	1.81	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:102:GLU:CB	45:BV:43:GLU:OE2	2.31	0.79
39:BW:30:GLU:H	39:BW:33:ARG:HD2	1.44	0.79
1:AA:1268:A:O4'	24:AU:20:LYS:HB2	1.81	0.79
48:B0:48:GLY:O	48:B0:54:GLY:O	1.99	0.79
48:B0:70:ILE:HG12	48:B0:71:ASN:N	1.98	0.79
46:B2:8:ILE:CA	46:B2:11:MET:HG2	2.12	0.79
49:B4:48:ARG:O	49:B4:49:PHE:C	2.21	0.79
52:B7:42:LEU:O	52:B7:43:THR:O	2.01	0.79
53:B8:19:THR:CB	53:B8:21:LYS:NZ	2.45	0.79
26:BA:1062:G:N3	55:BK:134:SER:OG	2.16	0.79
26:BA:2464:C:N4	26:BA:2487:G:O6	2.14	0.79
26:BA:2060:A:O2'	26:BA:2502:G:O4'	2.01	0.79
26:BA:2507:C:N3	26:BA:2582:G:N2	2.30	0.79
26:BA:2688:U:H2'	26:BA:2688:U:O2	1.82	0.79
26:BA:2785:C:H4'	28:BE:99:VAL:C	2.02	0.79
26:BA:2799:A:C3'	26:BA:2801:A:P	2.59	0.79
26:BA:919:G:N2	26:BA:2268:A:H5'	1.94	0.79
27:BD:105:ALA:N	27:BD:106:PRO:HD3	1.97	0.79
27:BD:76:ARG:HD3	27:BD:113:MET:CE	2.13	0.79
27:BD:131:LEU:HA	27:BD:134:ILE:HD12	1.64	0.79
28:BE:189:MET:O	28:BE:190:ASN:CB	2.29	0.79
2:AV:56:C:H2'	30:BG:56:ARG:NH1	1.97	0.79
30:BG:29:HIS:CE1	30:BG:64:ARG:CZ	2.65	0.79
31:BH:85:ALA:CA	31:BH:131:ILE:CG2	2.48	0.79
33:BN:61:VAL:HG21	33:BN:139:LEU:HB3	1.63	0.79
36:BQ:102:ARG:O	36:BQ:104:PRO:HD3	1.82	0.79
36:BQ:138:ARG:HA	36:BQ:141:MET:HG3	1.64	0.79
36:BQ:67:ALA:HB2	36:BQ:70:ARG:HH12	1.44	0.79
37:BS:32:PRO:O	37:BS:101:VAL:CG1	2.29	0.79
37:BS:28:LYS:HB3	37:BS:28:LYS:NZ	1.96	0.79
44:BU:107:LYS:O	44:BU:110:VAL:CB	2.23	0.79
45:BV:50:ASP:CA	45:BV:53:LYS:HG3	2.12	0.79
39:BW:13:SER:O	39:BW:14:PRO:C	2.21	0.79
39:BW:26:GLY:O	39:BW:27:LYS:HG3	1.82	0.79
39:BW:82:LEU:HD21	39:BW:100:THR:N	1.97	0.79
26:BA:99:U:H3	41:BY:107:LYS:CD	1.96	0.79
42:BZ:92:VAL:CG1	42:BZ:124:ALA:CB	2.56	0.79
1:AA:59:A:OP1	1:AA:61:G:OP1	1.99	0.79
1:AA:1308:U:H5''	16:AM:110:ARG:HH22	1.44	0.79
3:AW:37:YYG:H243	10:AG:85:TYR:HD2	1.34	0.79
50:B5:45:ILE:CG2	50:B5:52:TYR:CE1	2.61	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:32:GLN:HB3	51:B6:35:LEU:CG	2.11	0.79
53:B8:19:THR:HB	53:B8:21:LYS:HZ2	1.44	0.79
53:B8:60:LEU:HD11	53:B8:64:ARG:HB2	0.81	0.79
54:B9:4:ARG:O	54:B9:36:GLN:HB3	1.79	0.79
26:BA:2317:C:C5	26:BA:2318:G:C6	2.70	0.79
26:BA:2361:A:C2	26:BA:2362:G:C1'	2.65	0.79
26:BA:2366:A:N7	26:BA:2367:G:C5	2.50	0.79
26:BA:2445:G:H2'	26:BA:2446:G:H8	1.47	0.79
26:BA:2536:G:H2'	26:BA:2537:U:H5'	1.63	0.79
26:BA:2569:G:C2	26:BA:2570:G:N7	2.50	0.79
26:BA:2768:C:H42	26:BA:2769:C:H41	1.31	0.79
26:BA:2799:A:O2'	26:BA:2802:G:N3	2.14	0.79
26:BA:2842:G:H2'	26:BA:2843:G:C5'	2.10	0.79
26:BA:322:A:N3	26:BA:341:G:C8	2.51	0.79
26:BA:2574:G:C2'	28:BE:240:PRO:HB3	2.12	0.79
31:BH:73:ASN:CG	31:BH:137:LYS:NZ	2.27	0.79
31:BH:41:THR:HG22	31:BH:52:THR:HB	1.65	0.79
32:BI:102:LEU:CD1	32:BI:103:GLN:H	1.80	0.79
32:BI:92:SER:HB3	32:BI:122:ARG:HH11	1.43	0.79
32:BI:145:VAL:O	32:BI:146:THR:CG2	2.29	0.79
44:BU:106:PHE:O	44:BU:107:LYS:C	2.19	0.79
44:BU:113:SER:O	44:BU:114:ARG:C	2.19	0.79
41:BY:23:VAL:CG2	41:BY:67:LEU:CD2	2.59	0.79
26:BA:441:U:OP2	41:BY:3:GLN:HG2	1.83	0.79
42:BZ:20:ALA:O	42:BZ:34:LEU:CD2	2.30	0.79
1:AA:1256:A:H2'	6:AC:27:LYS:HZ3	1.47	0.79
1:AA:1353:G:P	24:AU:10:ARG:NH1	2.56	0.79
1:AA:794:A:H4'	1:AA:1521:G:O2'	1.83	0.79
1:AA:314:C:O2'	1:AA:353:A:N1	2.16	0.79
20:AQ:15:MET:HB3	20:AQ:18:THR:HB	1.64	0.79
3:AW:65:G:N3	3:AW:66:A:C1'	2.45	0.79
46:B2:27:LEU:CD1	46:B2:53:ILE:CD1	2.59	0.79
26:BA:929:G:N3	47:B3:43:ILE:HG13	1.97	0.79
47:B3:22:ALA:CA	47:B3:46:ASN:HD21	1.90	0.79
47:B3:9:VAL:HG22	47:B3:54:VAL:CA	2.12	0.79
51:B6:21:TYR:OH	51:B6:43:VAL:HG22	1.83	0.79
26:BA:1131:G:C2	33:BN:69:TYR:CE1	2.71	0.79
26:BA:1339:G:N2	26:BA:1603:A:H8	1.81	0.79
26:BA:2089:U:O2	26:BA:2231:C:N3	2.16	0.79
26:BA:2251:G:N2	26:BA:2252:G:C2	2.51	0.79
26:BA:2264:C:C4	26:BA:2265:U:C5	2.71	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:859:G:O2'	26:BA:2268:A:C2	2.36	0.79
26:BA:2376:A:N6	37:BS:109:PRO:HG3	1.96	0.79
26:BA:2422:A:H2'	26:BA:2424:C:C5	2.17	0.79
26:BA:2464:C:H2'	26:BA:2465:C:H6	1.46	0.79
26:BA:2479:G:C2'	26:BA:2480:C:O5'	2.30	0.79
26:BA:2450:A:C5'	26:BA:2497:A:H62	1.86	0.79
26:BA:2555:U:O2'	26:BA:2556:C:H5'	1.80	0.79
26:BA:2690:C:C6	26:BA:2690:C:C3'	2.66	0.79
26:BA:2869:G:H21	26:BA:2870:C:C1'	1.90	0.79
26:BA:484:C:H2'	26:BA:485:C:C6	2.18	0.79
26:BA:605:C:C3'	29:BF:105:LYS:CE	2.45	0.79
25:BB:49:C:OP1	37:BS:111:PRO:HD2	1.82	0.79
25:BB:24:G:C6	25:BB:56:G:N3	2.51	0.79
27:BD:183:ILE:C	27:BD:184:LEU:HD23	1.99	0.79
26:BA:1791:A:P	27:BD:210:LYS:HD2	2.22	0.79
28:BE:107:GLU:HB3	28:BE:110:ARG:CD	2.13	0.79
26:BA:1994:C:OP1	28:BE:227:ALA:HB1	1.81	0.79
26:BA:2304:G:C4'	30:BG:105:SER:HB2	2.13	0.79
55:BK:89:SER:O	55:BK:90:SER:OG	2.01	0.79
33:BN:15:ARG:HH12	33:BN:40:ASN:HA	1.47	0.79
33:BN:65:ASN:N	33:BN:68:GLY:O	2.14	0.79
33:BN:83:ILE:HD11	33:BN:84:ARG:HG2	1.64	0.79
33:BN:94:GLY:O	33:BN:97:ALA:N	2.16	0.79
36:BQ:49:VAL:HG21	36:BQ:120:HIS:CA	2.12	0.79
38:BT:21:PHE:O	38:BT:22:VAL:HG12	1.82	0.79
38:BT:54:THR:HG23	38:BT:55:ALA:H	1.48	0.79
42:BZ:108:VAL:HG12	42:BZ:108:VAL:O	1.82	0.79
1:AA:1268:A:H4'	24:AU:20:LYS:C	2.02	0.79
1:AA:1517:G:C8	26:BA:1920:C:OP1	2.35	0.79
1:AA:976:G:N1	1:AA:361(A):C:C5	2.50	0.79
1:AA:861:G:HO2'	1:AA:874:G:HO2'	1.26	0.79
46:B2:56:ILE:O	46:B2:59:ILE:HG23	1.82	0.79
46:B2:4:HIS:C	46:B2:8:ILE:HD12	2.02	0.79
47:B3:23:LEU:N	47:B3:23:LEU:HD23	1.97	0.79
26:BA:1081:U:H5'	55:BK:126:LYS:HD2	1.64	0.79
26:BA:1137:G:O2'	33:BN:82:THR:CA	2.30	0.79
26:BA:2251:G:OP1	36:BQ:102:ARG:CZ	2.31	0.79
26:BA:2484:G:N2	26:BA:2485:G:N9	2.31	0.79
26:BA:2603:G:C5	26:BA:2604:U:H5	2.00	0.79
26:BA:2652:C:H2'	26:BA:2653:U:C6	2.17	0.79
26:BA:2683:C:C5	26:BA:2684:U:C5	2.71	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2819:G:N2	26:BA:2821:A:C8	2.50	0.79
26:BA:2845:G:H2'	26:BA:2846:G:C8	2.16	0.79
26:BA:2856:C:C6	26:BA:2856:C:H3'	2.18	0.79
26:BA:440:G:O5'	41:BY:3:GLN:NE2	2.16	0.79
26:BA:775:G:HO2'	26:BA:791:C:N4	1.79	0.79
26:BA:933:A:OP1	47:B3:24:LYS:NZ	2.16	0.79
27:BD:211:HIS:HD1	27:BD:212:HIS:H	1.29	0.79
28:BE:109:ASP:HA	28:BE:112:LEU:CB	2.11	0.79
28:BE:222:ARG:N	28:BE:222:ARG:HD2	1.96	0.79
29:BF:112:ARG:O	29:BF:114:ALA:CA	2.30	0.79
29:BF:150:THR:HB	29:BF:207:LEU:HD21	1.62	0.79
31:BH:145:ALA:O	31:BH:148:ARG:N	2.15	0.79
55:BK:37:GLU:O	55:BK:41:ARG:HD2	1.80	0.79
33:BN:54:VAL:HA	33:BN:135:ILE:HG23	1.64	0.79
33:BN:54:VAL:O	33:BN:58:GLU:HG3	1.82	0.79
34:BO:22:ILE:CB	34:BO:40:VAL:O	2.30	0.79
34:BO:1:MET:CB	34:BO:2:ILE:HD12	2.12	0.79
43:BR:74:LYS:HA	43:BR:77:ARG:HH22	1.48	0.79
37:BS:127:LEU:C	37:BS:127:LEU:HD23	2.02	0.79
44:BU:117:ARG:CG	44:BU:118:GLN:H	1.92	0.79
39:BW:20:VAL:HG11	39:BW:47:VAL:HG22	1.61	0.79
41:BY:73:HIS:CE1	41:BY:89:ARG:O	2.35	0.79
42:BZ:14:LEU:HD23	42:BZ:14:LEU:O	1.81	0.79
1:AA:1224:G:HO3'	1:AA:1225:A:P	2.05	0.79
1:AA:162:A:N3	1:AA:348:G:H4'	1.98	0.79
3:AW:25:C:C2	3:AW:26:G:H1'	2.18	0.79
46:B2:2:VAL:O	46:B2:4:HIS:CE1	2.35	0.79
46:B2:58:THR:O	46:B2:59:ILE:C	2.21	0.79
51:B6:16:ALA:C	51:B6:48:VAL:HG11	2.02	0.79
26:BA:1032:A:OP1	54:B9:8:LYS:HG2	1.80	0.79
26:BA:2309:A:P	26:BA:2309:A:O4'	2.40	0.79
26:BA:2606:C:C2'	26:BA:2607:G:O5'	2.30	0.79
26:BA:2681:C:O2'	26:BA:2682:U:P	2.40	0.79
26:BA:2717:G:N1	26:BA:2718:G:C5	2.51	0.79
26:BA:2721:A:H2'	26:BA:2722:G:C8	2.17	0.79
26:BA:2722:G:C6	26:BA:2723:C:C4	2.71	0.79
26:BA:2862:G:O2'	26:BA:2863:C:C6	1.96	0.79
26:BA:2712:U:C3'	26:BA:712(A):A:H5''	2.10	0.79
26:BA:95:G:O2'	46:B2:42:ASN:O	2.01	0.79
27:BD:104:ILE:HB	27:BD:106:PRO:HD2	1.63	0.79
26:BA:1799:G:H21	27:BD:153:LEU:CG	1.92	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:213:LYS:CG	27:BD:215:LYS:O	2.31	0.79
32:BI:145:VAL:C	32:BI:146:THR:HG22	2.03	0.79
55:BK:122:GLU:CA	55:BK:126:LYS:HE3	2.13	0.79
55:BK:80:LYS:HD2	55:BK:86:GLU:O	1.83	0.79
33:BN:27:ALA:HA	33:BN:30:ALA:HB2	0.80	0.79
33:BN:15:ARG:HD2	33:BN:43:ARG:HD2	1.62	0.79
36:BQ:28:ILE:HG22	36:BQ:29:ALA:N	1.96	0.79
43:BR:113:LEU:HD13	43:BR:114:VAL:CA	2.12	0.79
1:AA:1463:C:OP1	38:BT:47:ARG:CG	2.31	0.79
45:BV:40:VAL:C	45:BV:51:ALA:CB	2.51	0.79
41:BY:20:HIS:HA	41:BY:67:LEU:HD21	1.63	0.79
42:BZ:67:LYS:HA	42:BZ:67:LYS:HZ2	1.44	0.79
42:BZ:62:PHE:HB2	42:BZ:85:MET:SD	2.22	0.79
1:AA:1367:C:OP1	12:AI:115:GLY:N	2.15	0.79
19:AP:6:LEU:HB2	19:AP:17:TYR:HB3	1.63	0.79
19:AP:20:VAL:HG11	19:AP:32:TYR:HB2	1.64	0.79
26:BA:856:C:C2'	48:B0:24:LYS:HB2	2.11	0.79
48:B0:28:GLY:CA	48:B0:60:PHE:HB3	2.12	0.79
48:B0:36:ILE:CA	48:B0:68:VAL:CG1	2.61	0.79
47:B3:9:VAL:HG23	47:B3:54:VAL:HA	1.62	0.79
51:B6:37:LEU:N	51:B6:52:GLU:OE2	2.15	0.79
53:B8:26:LYS:O	53:B8:27:SER:CB	2.30	0.79
26:BA:2528:U:P	54:B9:30:VAL:HG12	2.11	0.79
26:BA:1328:G:H2'	26:BA:1330:C:C5	2.18	0.79
26:BA:1558:A:C2	26:BA:1560:G:H1'	2.17	0.79
26:BA:2376:A:C2	37:BS:102:LEU:CD2	2.65	0.79
26:BA:2574:G:H5''	26:BA:2575:C:P	2.23	0.79
26:BA:2886:G:N2	26:BA:2887:U:C2	2.51	0.79
29:BF:32:GLY:O	29:BF:35:VAL:N	2.14	0.79
29:BF:51:TYR:O	29:BF:55:ARG:N	2.15	0.79
55:BK:33:VAL:HG23	55:BK:60:VAL:HG11	1.63	0.79
34:BO:34:ASN:O	34:BO:35:ILE:C	2.21	0.79
35:BP:94:ARG:HD3	35:BP:120:LEU:HB2	1.62	0.79
36:BQ:45:GLN:NE2	36:BQ:153:PRO:CB	2.20	0.79
36:BQ:18:GLU:HG2	36:BQ:23:ILE:HD11	1.65	0.79
36:BQ:91:HIS:O	36:BQ:92:VAL:HG13	1.83	0.79
45:BV:40:VAL:O	45:BV:51:ALA:HB2	1.83	0.79
45:BV:49:GLU:CB	45:BV:53:LYS:HD2	2.12	0.79
44:BU:47:TYR:CE1	45:BV:75:LYS:O	2.22	0.79
45:BV:69:ILE:CG2	45:BV:88:GLN:HB3	2.12	0.79
39:BW:10:VAL:CG1	39:BW:46:PHE:HE2	1.96	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:51:LEU:HD11	42:BZ:64:ALA:N	1.98	0.79
1:AA:1328:C:C5'	16:AM:28:ALA:HB1	2.12	0.79
1:AA:436:C:O2'	1:AA:437:U:O4'	2.00	0.79
1:AA:1190:G:H5'	6:AC:176:HIS:CE1	2.18	0.79
1:AA:375:U:H4'	19:AP:17:TYR:CE2	2.18	0.79
3:AW:75:C:N4	49:B4:28:ARG:CG	2.46	0.79
46:B2:27:LEU:O	46:B2:30:ALA:N	2.16	0.79
46:B2:6:GLN:O	46:B2:9:ARG:HB3	1.82	0.79
49:B4:11:PRO:HA	49:B4:40:HIS:HD2	1.43	0.79
49:B4:68:ARG:HG2	49:B4:72:LYS:CB	2.13	0.79
26:BA:1324:G:H1'	26:BA:1616:A:N6	1.98	0.79
26:BA:2776:A:H1'	26:BA:2778:A:H8	1.43	0.79
26:BA:2785:C:C5	26:BA:2786:U:C4	2.70	0.79
26:BA:2818:G:N2	26:BA:2829:C:N3	2.30	0.79
26:BA:2820:A:C2	26:BA:2820:A:H5''	2.18	0.79
26:BA:328:U:O2'	41:BY:94:SER:CB	2.31	0.79
26:BA:885:C:H41	26:BA:889:C:H1'	1.47	0.79
28:BE:102:ASP:CG	28:BE:104:PHE:CE1	2.56	0.79
28:BE:107:GLU:O	28:BE:110:ARG:N	2.14	0.79
28:BE:79:ARG:NH1	28:BE:104:PHE:HA	1.98	0.79
29:BF:102:LEU:HB3	29:BF:107:ARG:CZ	2.13	0.79
29:BF:115:LEU:O	29:BF:118:THR:OG1	2.01	0.79
29:BF:33:LYS:N	29:BF:36:ARG:HE	1.80	0.79
29:BF:51:TYR:O	29:BF:55:ARG:HA	1.81	0.79
55:BK:116:LEU:HD11	55:BK:124:ALA:HA	1.63	0.79
55:BK:93:LYS:HA	55:BK:96:ILE:CG1	2.12	0.79
35:BP:53:ARG:HD2	35:BP:53:ARG:N	1.96	0.79
35:BP:69:ILE:HB	35:BP:73:VAL:HG21	1.63	0.79
35:BP:94:ARG:O	35:BP:95:ASP:HB3	1.83	0.79
45:BV:30:GLY:O	45:BV:63:HIS:CB	2.28	0.79
39:BW:44:ALA:O	39:BW:45:TYR:C	2.21	0.79
42:BZ:48:THR:OG1	42:BZ:66:VAL:O	1.99	0.79
1:AA:1085:U:O4'	1:AA:1094:G:N1	2.16	0.79
3:AW:37:YYG:C19	10:AG:83:ALA:C	2.44	0.79
3:AW:72:C:C2'	3:AW:73:A:O4'	2.31	0.79
48:B0:37:LEU:O	48:B0:40:GLN:HG2	1.83	0.79
47:B3:40:THR:CB	47:B3:43:ILE:CD1	2.44	0.79
47:B3:51:ALA:C	47:B3:53:LEU:H	1.85	0.79
3:AW:75:C:N4	49:B4:28:ARG:HG3	1.98	0.79
49:B4:68:ARG:CZ	49:B4:72:LYS:HD3	2.13	0.79
51:B6:36:GLU:HB3	51:B6:52:GLU:HB2	1.63	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:60:LEU:HD11	53:B8:64:ARG:HB3	1.62	0.79
26:BA:1826:G:OP1	27:BD:227:VAL:HG23	1.81	0.79
26:BA:1952:A:C2	34:BO:22:ILE:CG2	2.35	0.79
26:BA:530:G:O6	26:BA:2021:C:H3'	1.83	0.79
26:BA:2287:A:C2	26:BA:2289:G:C8	2.71	0.79
26:BA:2309:A:C5'	26:BA:2310:A:H8	1.96	0.79
26:BA:2737:G:C4	26:BA:2738:A:C8	2.71	0.79
26:BA:2843:G:C4	26:BA:2844:G:C8	2.71	0.79
26:BA:2875:C:N4	26:BA:2876:G:C6	2.51	0.79
26:BA:396:G:C4'	49:B4:39:VAL:CG1	2.61	0.79
26:BA:905:U:O2'	42:BZ:117:VAL:HG13	1.83	0.79
26:BA:979:G:H3'	26:BA:980:A:C5'	2.11	0.79
28:BE:262:THR:HG1	28:BE:266:LYS:NZ	1.81	0.79
31:BH:105:SER:O	31:BH:106:VAL:HG23	1.82	0.79
32:BI:24:GLY:O	32:BI:25:TYR:O	2.00	0.79
55:BK:132:ALA:HB1	55:BK:137:ILE:O	1.83	0.79
33:BN:79:PHE:HD1	33:BN:79:PHE:N	1.80	0.79
34:BO:58:VAL:CG1	34:BO:59:LYS:H	1.95	0.79
26:BA:245:G:C5'	35:BP:55:GLN:O	2.24	0.79
36:BQ:42:TYR:C	36:BQ:125:TRP:CH2	2.56	0.79
36:BQ:142:LYS:HE2	36:BQ:143:VAL:O	1.83	0.79
36:BQ:32:LYS:HZ2	42:BZ:172:LEU:HD13	1.48	0.79
37:BS:49:THR:H	37:BS:55:ASP:CG	1.86	0.79
44:BU:13:ARG:NH1	44:BU:13:ARG:N	2.30	0.79
39:BW:55:ALA:CA	39:BW:107:LEU:CD1	2.60	0.79
41:BY:43:ASN:HD22	41:BY:101:LEU:HD23	1.41	0.79
41:BY:47:THR:HG21	41:BY:100:ASP:HB2	1.64	0.79
41:BY:55:PHE:CD1	41:BY:89:ARG:NH1	2.51	0.79
41:BY:74:VAL:N	41:BY:91:LEU:CD1	2.40	0.79
42:BZ:116:VAL:HA	42:BZ:169:VAL:CG2	2.04	0.79
42:BZ:151:ASP:HB3	42:BZ:153:LYS:HZ3	1.46	0.79
42:BZ:4:THR:O	42:BZ:33:ALA:CB	2.31	0.79
1:AA:976:G:C6	1:AA:361(A):C:H5	1.96	0.78
5:AB:145:LEU:O	5:AB:149:LEU:HB2	1.82	0.78
1:AA:1328:C:P	16:AM:28:ALA:HB2	2.23	0.78
6:AC:12:LEU:CD2	17:AN:51:GLY:HA3	2.13	0.78
19:AP:20:VAL:HG11	19:AP:32:TYR:CB	2.13	0.78
20:AQ:81:ARG:HG2	20:AQ:84:LEU:HG	1.64	0.78
26:BA:2354:G:H21	48:B0:32:LYS:HE3	1.45	0.78
47:B3:8:LEU:O	47:B3:9:VAL:HG13	1.83	0.78
54:B9:24:LEU:CD2	54:B9:36:GLN:H	1.96	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1665:A:N3	34:BO:67:ARG:NH1	2.31	0.78
26:BA:1857:G:H2'	26:BA:1858:G:C8	2.17	0.78
26:BA:2227:A:C6	26:BA:2228:G:C5	2.70	0.78
26:BA:2428:G:C8	26:BA:2428:G:H3'	2.18	0.78
26:BA:2592:G:N2	26:BA:2603:G:C6	2.51	0.78
26:BA:2737:G:H2'	26:BA:2738:A:C8	2.18	0.78
26:BA:2793:G:C6	26:BA:2794:C:C4	2.70	0.78
26:BA:2840:C:H2'	26:BA:2841:C:C6	2.17	0.78
26:BA:352:G:O5'	26:BA:352:G:H8	1.66	0.78
26:BA:562:U:O2'	26:BA:563:G:H5''	1.82	0.78
26:BA:59:U:O5'	26:BA:73:A:N6	2.15	0.78
26:BA:599:G:H1	26:BA:658:C:H42	1.30	0.78
27:BD:143:ILE:H	27:BD:143:ILE:CD1	1.81	0.78
27:BD:143:ILE:HD13	27:BD:153:LEU:N	1.95	0.78
26:BA:2512:C:OP1	28:BE:219:VAL:HG13	1.82	0.78
29:BF:104:ASP:O	29:BF:105:LYS:C	2.22	0.78
31:BH:130:ILE:CG2	31:BH:131:ILE:H	1.96	0.78
26:BA:1140:C:OP1	33:BN:18:ILE:HG13	1.82	0.78
33:BN:65:ASN:O	33:BN:66:ASP:C	2.21	0.78
35:BP:114:VAL:CG2	35:BP:132:LYS:HB3	2.03	0.78
35:BP:57:VAL:CG1	35:BP:58:GLN:N	2.27	0.78
36:BQ:49:VAL:HG21	36:BQ:119:ASN:O	1.83	0.78
44:BU:111:ASP:C	44:BU:113:SER:N	2.31	0.78
39:BW:32:ALA:CA	39:BW:35:ILE:CG1	2.56	0.78
1:AA:1315:U:OP2	22:AS:6:LYS:CD	2.31	0.78
1:AA:988:G:O2'	1:AA:1015:A:N6	2.16	0.78
7:AD:23:GLY:CA	7:AD:113:SER:CB	2.61	0.78
16:AM:92:HIS:CE1	16:AM:110:ARG:NH2	2.51	0.78
26:BA:2386:C:H1'	48:B0:39:ARG:HH21	1.48	0.78
47:B3:20:LYS:C	47:B3:23:LEU:CG	2.27	0.78
50:B5:11:THR:HG21	50:B5:19:ARG:NH2	1.94	0.78
26:BA:2252:G:H2'	26:BA:2253:G:H5'	0.85	0.78
26:BA:2458:G:C8	26:BA:2490:G:C6	2.70	0.78
26:BA:2507:C:C4	26:BA:2583:G:C2	2.71	0.78
26:BA:2603:G:N3	26:BA:2604:U:H6	1.80	0.78
26:BA:2043:C:C4	26:BA:2777:G:C4	2.69	0.78
26:BA:2776:A:C4	26:BA:2778:A:C5	2.69	0.78
26:BA:574:C:H41	26:BA:2054:A:H5'	1.44	0.78
26:BA:576:U:OP1	26:BA:2503:A:OP1	2.01	0.78
26:BA:599:G:H5'	29:BF:29:ASP:OD2	1.83	0.78
26:BA:604:G:H21	26:BA:657:U:H4'	1.47	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:90:ILE:HG21	27:BD:103:ILE:N	1.99	0.78
30:BG:38:GLU:O	30:BG:41:LEU:HB2	1.84	0.78
26:BA:1081:U:H4'	55:BK:123:ALA:HB1	1.65	0.78
55:BK:20:PRO:HG2	55:BK:23:PRO:CG	2.12	0.78
26:BA:1667:G:H5''	34:BO:5:GLU:OE1	1.84	0.78
40:BX:28:VAL:O	40:BX:62:LYS:CB	2.27	0.78
42:BZ:25:ASN:HA	42:BZ:84:TYR:CD1	2.18	0.78
1:AA:1286:A:N3	24:AU:22:ARG:NH2	2.31	0.78
1:AA:403:C:H42	1:AA:547:A:H5'	1.45	0.78
46:B2:6:GLN:HA	46:B2:9:ARG:HB3	1.66	0.78
51:B6:19:GLY:C	51:B6:42:PRO:HB2	2.02	0.78
51:B6:28:ARG:HG3	51:B6:30:ASN:CB	2.12	0.78
53:B8:19:THR:HB	53:B8:21:LYS:HZ1	1.46	0.78
53:B8:6:THR:C	53:B8:8:LYS:N	2.35	0.78
26:BA:2313:C:H5''	30:BG:51:ARG:NH1	1.98	0.78
26:BA:2352:A:H2	48:B0:30:VAL:CB	1.97	0.78
26:BA:2418:A:O2'	26:BA:2419:U:O4'	2.00	0.78
26:BA:2570:G:C2	26:BA:2571:C:C6	2.69	0.78
26:BA:2578:G:C8	28:BE:237:ASN:OD1	2.35	0.78
26:BA:2593:U:O2	26:BA:2600:A:N1	2.15	0.78
26:BA:457:A:H1'	26:BA:459:U:C2	2.18	0.78
26:BA:673:C:C4'	29:BF:82:GLN:CD	2.52	0.78
26:BA:85:G:P	41:BY:65:VAL:CB	2.71	0.78
27:BD:167:GLU:O	27:BD:170:TYR:CG	2.36	0.78
27:BD:142:ASN:HB2	27:BD:190:THR:H	1.48	0.78
27:BD:202:LYS:O	27:BD:204:PHE:HE1	1.66	0.78
28:BE:42:ALA:HA	28:BE:311:PHE:CE2	2.16	0.78
28:BE:45:LYS:NZ	28:BE:303:PRO:CA	2.37	0.78
29:BF:4:THR:O	29:BF:139:VAL:CB	2.31	0.78
29:BF:5:ILE:CB	29:BF:14:GLY:O	2.19	0.78
29:BF:163:HIS:C	29:BF:166:ILE:HG13	2.03	0.78
43:BR:61:HIS:O	43:BR:64:ARG:N	2.16	0.78
44:BU:13:ARG:C	44:BU:16:LYS:HB2	2.01	0.78
44:BU:25:TRP:HB3	44:BU:28:ARG:NH1	1.98	0.78
45:BV:33:VAL:HG12	45:BV:34:GLU:H	1.45	0.78
39:BW:97:LYS:CE	39:BW:99:ARG:NH1	2.46	0.78
40:BX:13:LYS:C	40:BX:16:ASN:OD1	2.21	0.78
40:BX:75:GLN:CB	40:BX:78:ALA:O	2.24	0.78
40:BX:9:HIS:CE1	40:BX:27:ALA:HB2	2.18	0.78
1:AA:60:A:N6	1:AA:107:G:C2'	2.46	0.78
1:AA:427:U:H5'	7:AD:41:GLY:CA	2.14	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AC:11:ARG:HG2	6:AC:15:THR:O	1.82	0.78
48:B0:36:ILE:HG22	48:B0:36:ILE:O	1.83	0.78
26:BA:850:C:C4'	47:B3:18:ASP:CG	2.42	0.78
26:BA:2815:C:C5'	50:B5:29:ASN:ND2	2.42	0.78
50:B5:6:VAL:HG13	50:B5:7:PRO:HD2	1.65	0.78
26:BA:2230:G:O2'	26:BA:2231:C:C5'	2.32	0.78
26:BA:2261:C:O4'	26:BA:2388:A:H1'	1.84	0.78
26:BA:2313:C:OP1	30:BG:51:ARG:CG	2.31	0.78
26:BA:2646:C:C2'	26:BA:2647:U:H5'	2.13	0.78
26:BA:2758:A:C2'	26:BA:2759:G:O5'	2.31	0.78
26:BA:2831:G:H5'	26:BA:2834:G:O2'	1.84	0.78
26:BA:2881:C:N4	26:BA:2882:A:N6	2.31	0.78
26:BA:616:A:H5''	29:BF:42:ARG:NH1	1.94	0.78
27:BD:61:TYR:OH	27:BD:214:MET:HE3	1.82	0.78
28:BE:222:ARG:HG2	28:BE:232:ARG:N	1.98	0.78
28:BE:222:ARG:NH2	28:BE:234:ARG:HB2	1.98	0.78
28:BE:299:SER:OG	28:BE:301:PRO:CD	2.29	0.78
29:BF:163:HIS:CA	29:BF:166:ILE:CG1	2.56	0.78
29:BF:168:ARG:C	29:BF:233:THR:HG22	2.00	0.78
30:BG:18:ILE:O	30:BG:135:VAL:HG11	1.83	0.78
31:BH:95:ALA:O	31:BH:127:GLN:HB2	1.83	0.78
34:BO:106:LEU:HD23	34:BO:106:LEU:H	1.46	0.78
26:BA:2485:G:H5'	36:BQ:144:THR:HG22	1.65	0.78
37:BS:32:PRO:HD2	37:BS:101:VAL:N	1.98	0.78
45:BV:94:LYS:O	45:BV:95:ILE:CG1	2.30	0.78
42:BZ:37:LYS:O	42:BZ:41:ARG:CD	2.32	0.78
1:AA:562:C:H1'	15:AL:15:ARG:HD2	1.66	0.78
26:BA:2421:G:OP1	51:B6:2:ALA:O	2.00	0.78
52:B7:17:GLY:O	52:B7:18:PHE:C	2.20	0.78
26:BA:1612:C:O2'	52:B7:5:TYR:HB2	1.83	0.78
52:B7:5:TYR:O	52:B7:6:GLN:C	2.22	0.78
26:BA:1819:A:H5''	27:BD:157:ALA:CB	2.13	0.78
26:BA:2434:A:HO2'	26:BA:2435:A:P	2.05	0.78
26:BA:2487:G:H2'	26:BA:2488:A:O5'	1.84	0.78
26:BA:2604:U:O2'	26:BA:2605:U:H5'	1.84	0.78
26:BA:2605:U:O2'	26:BA:2606:C:C5'	2.32	0.78
26:BA:481:G:OP2	41:BY:81:LYS:HG2	1.84	0.78
26:BA:599:G:O2'	29:BF:30:LEU:CD2	2.30	0.78
26:BA:752:A:C6	26:BA:1781:C:H1'	2.18	0.78
26:BA:1799:G:N1	27:BD:153:LEU:HD21	1.97	0.78
26:BA:1818:U:C4'	27:BD:155:ARG:HG3	2.13	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2310:A:C8	30:BG:55:LYS:NZ	2.51	0.78
55:BK:80:LYS:CD	55:BK:85:ILE:O	2.32	0.78
34:BO:35:ILE:CG1	34:BO:62:VAL:HG12	2.10	0.78
34:BO:64:ARG:O	34:BO:82:ASN:HA	1.83	0.78
34:BO:8:LEU:N	34:BO:8:LEU:CD2	2.45	0.78
36:BQ:108:SER:O	36:BQ:109:VAL:HG22	1.81	0.78
43:BR:60:LEU:CD2	43:BR:61:HIS:H	1.96	0.78
37:BS:127:LEU:O	37:BS:128:ASP:O	2.02	0.78
39:BW:55:ALA:HA	39:BW:107:LEU:HD11	1.65	0.78
39:BW:2:GLU:HA	39:BW:108:GLY:HA2	1.65	0.78
40:BX:13:LYS:H	40:BX:13:LYS:HD3	1.48	0.78
42:BZ:90:GLU:O	42:BZ:92:VAL:HG23	1.83	0.78
1:AA:1324:A:H4'	1:AA:361(A):C:O3'	1.83	0.78
26:BA:579:G:H1'	50:B5:10:LYS:HZ3	1.48	0.78
26:BA:1339:G:H5'	40:BX:13:LYS:HE3	1.64	0.78
26:BA:1364:G:H3'	49:B4:3:LYS:CE	2.14	0.78
26:BA:1530:G:H21	26:BA:1531:C:H5	1.32	0.78
26:BA:1567:A:N7	27:BD:84:PRO:HB3	1.99	0.78
26:BA:2195:C:C5'	26:BA:2195:C:C6	2.62	0.78
26:BA:2089:U:H3	26:BA:2231:C:H42	1.32	0.78
26:BA:2263:C:H2'	26:BA:2264:C:H5'	1.66	0.78
26:BA:2278:A:OP1	36:BQ:20:ILE:HG22	1.83	0.78
26:BA:2330:G:H1	26:BA:2385:C:H41	1.29	0.78
26:BA:2459:A:H8	26:BA:2460:U:C5	2.00	0.78
26:BA:2571:C:O2	26:BA:2571:C:H2'	1.84	0.78
26:BA:2597:G:H2'	26:BA:2598:A:H8	1.01	0.78
26:BA:2603:G:C4	26:BA:2604:U:C5	2.72	0.78
26:BA:858:U:H5'	48:B0:20:TYR:OH	1.83	0.78
26:BA:911:A:N1	36:BQ:16:ARG:CA	2.44	0.78
27:BD:131:LEU:HG	27:BD:187:CYS:O	1.82	0.78
26:BA:2574:G:HO2'	28:BE:240:PRO:HB3	0.79	0.78
30:BG:58:VAL:CG1	30:BG:58:VAL:O	2.32	0.78
55:BK:37:GLU:C	55:BK:41:ARG:HD3	2.04	0.78
33:BN:135:ILE:C	33:BN:139:LEU:HD11	2.03	0.78
33:BN:79:PHE:O	33:BN:83:ILE:CG2	2.31	0.78
34:BO:31:ARG:O	34:BO:32:TYR:CG	2.37	0.78
34:BO:14:SER:HB3	34:BO:86:ILE:HD12	1.64	0.78
37:BS:114:LYS:O	37:BS:115:VAL:C	2.22	0.78
44:BU:46:GLU:O	44:BU:47:TYR:O	2.02	0.78
45:BV:40:VAL:O	45:BV:51:ALA:HB1	1.84	0.78
40:BX:50:GLU:CB	40:BX:67:ARG:O	2.32	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:5:ILE:CG2	40:BX:6:LYS:N	1.93	0.78
42:BZ:149:ALA:HB3	42:BZ:164:PRO:C	2.03	0.78
42:BZ:26:LYS:O	42:BZ:27:GLU:CD	2.21	0.78
42:BZ:51:LEU:HD23	42:BZ:52:PHE:CA	2.12	0.78
42:BZ:71:MET:HG2	42:BZ:78:PRO:HD2	1.53	0.78
42:BZ:62:PHE:CE2	42:BZ:87:THR:HB	2.19	0.78
1:AA:947:G:H4'	1:AA:1332:A:H2	1.49	0.78
1:AA:571:U:H3'	1:AA:572:A:C5'	2.13	0.78
1:AA:1319:A:H4'	22:AS:70:LYS:HZ3	0.95	0.78
48:B0:14:ARG:C	48:B0:14:ARG:HD2	2.01	0.78
26:BA:849:A:H2	47:B3:21:ALA:CA	1.97	0.78
47:B3:23:LEU:HA	47:B3:28:LEU:HD11	1.59	0.78
26:BA:126:A:OP1	52:B7:44:VAL:HG13	1.84	0.78
53:B8:6:THR:O	53:B8:8:LYS:CA	2.32	0.78
26:BA:1103:A:O3'	26:BA:1104:C:P	2.42	0.78
26:BA:2250:G:H3'	26:BA:2250:G:C8	2.18	0.78
26:BA:2252:G:C2'	26:BA:2253:G:C5'	2.46	0.78
26:BA:2395:C:C3'	26:BA:2395:C:C6	2.67	0.78
26:BA:2466:C:O2'	26:BA:2467:C:H5'	1.83	0.78
26:BA:2468:G:HO2'	26:BA:2469:A:H8	0.79	0.78
26:BA:2604:U:C2	26:BA:2605:U:C5	2.71	0.78
26:BA:2652:C:H5	26:BA:2653:U:C4	2.01	0.78
26:BA:2657:A:H2'	26:BA:2658:C:H5'	1.65	0.78
26:BA:712(A):A:H5'	26:BA:2713:A:H5''	1.64	0.78
26:BA:2821:A:C2	26:BA:2822:G:N7	2.51	0.78
26:BA:341:G:H2'	26:BA:342:G:O4'	1.83	0.78
25:BB:103:U:O2'	42:BZ:67:LYS:CG	2.31	0.78
27:BD:196:ASN:CA	27:BD:199:ARG:HD3	2.14	0.78
27:BD:81:GLU:O	27:BD:82:TYR:C	2.21	0.78
28:BE:81:VAL:CG1	28:BE:100:TRP:HZ3	1.96	0.78
28:BE:189:MET:O	28:BE:190:ASN:OD1	2.00	0.78
28:BE:45:LYS:HZ2	28:BE:303:PRO:C	1.81	0.78
29:BF:195:VAL:CG1	29:BF:213:ALA:HB3	2.13	0.78
32:BI:89:LEU:HD11	32:BI:93:ILE:HG21	1.66	0.78
55:BK:107:GLU:OE1	55:BK:107:GLU:C	2.22	0.78
55:BK:93:LYS:CA	55:BK:96:ILE:HG13	2.14	0.78
33:BN:42:GLU:HA	33:BN:133:GLY:HA3	1.66	0.78
34:BO:103:ALA:CA	34:BO:122:ILE:O	2.28	0.78
36:BQ:49:VAL:HA	36:BQ:121:ASP:CB	2.14	0.78
43:BR:63:ARG:HH21	43:BR:77:ARG:CG	1.95	0.78
43:BR:67:LEU:HB2	43:BR:76:VAL:HG11	1.63	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:59:ARG:O	44:BU:62:ILE:CA	2.31	0.78
44:BU:83:LEU:O	44:BU:86:ALA:HB2	1.84	0.78
45:BV:39:PHE:CE2	45:BV:41:GLY:C	2.57	0.78
26:BA:564:C:OP2	45:BV:79:GLN:OE1	2.02	0.78
39:BW:16:LYS:O	39:BW:17:VAL:C	2.22	0.78
41:BY:31:LEU:HD13	41:BY:101:LEU:CB	2.13	0.78
5:AB:180:LEU:O	5:AB:181:PHE:HB2	1.81	0.78
7:AD:141:ARG:HB3	7:AD:142:PRO:HD2	1.66	0.78
1:AA:541:G:C4'	7:AD:42:GLN:HE21	1.97	0.78
19:AP:20:VAL:CG1	19:AP:32:TYR:HB2	2.13	0.78
3:AW:45:G:HO3'	3:AW:46:G:C5'	1.95	0.78
48:B0:24:LYS:CG	48:B0:56:ASP:OD1	2.32	0.78
47:B3:8:LEU:HD23	47:B3:31:LEU:C	1.98	0.78
26:BA:1059:G:H1'	55:BK:127:ILE:HD13	1.66	0.78
26:BA:2318:G:C8	26:BA:2318:G:O5'	2.37	0.78
26:BA:2454:G:N2	26:BA:2455:G:H1'	1.97	0.78
26:BA:2450:A:OP1	26:BA:2497:A:C8	2.37	0.78
26:BA:2520:C:C2	26:BA:2521:C:H5	1.95	0.78
26:BA:2584:U:C1'	26:BA:2585:U:H5	1.97	0.78
26:BA:2607:G:C6	26:BA:2608:G:C2	2.72	0.78
26:BA:2618:G:HO2'	26:BA:2619:C:P	2.06	0.78
26:BA:2722:G:H2'	26:BA:2723:C:C6	2.17	0.78
26:BA:2744:G:C4	26:BA:2761:G:N2	2.52	0.78
26:BA:54:G:H1'	52:B7:35:ARG:HH22	1.48	0.78
26:BA:974(A):C:H1'	26:BA:989:G:N2	1.97	0.78
27:BD:232:VAL:O	27:BD:232:VAL:CG2	2.27	0.78
26:BA:2679:A:N3	28:BE:300:VAL:CG2	2.47	0.78
29:BF:214:THR:N	29:BF:218:VAL:CG2	2.44	0.78
29:BF:196:THR:C	29:BF:236:THR:HG1	1.88	0.78
29:BF:215:ALA:CA	29:BF:242:GLU:HG3	2.14	0.78
29:BF:30:LEU:O	29:BF:31:ILE:O	2.01	0.78
30:BG:56:ARG:CG	30:BG:65:GLU:CB	2.60	0.78
31:BH:121:GLU:CD	31:BH:121:GLU:N	2.37	0.78
55:BK:9:ILE:HD13	55:BK:31:HIS:HB2	1.65	0.78
35:BP:66:VAL:HB	35:BP:67:ARG:NH1	1.97	0.78
36:BQ:56:ILE:O	36:BQ:61:LEU:HD11	1.83	0.78
43:BR:18:LEU:O	43:BR:19:ALA:C	2.22	0.78
43:BR:80:PHE:O	43:BR:84:ALA:CB	2.32	0.78
44:BU:99:ALA:HA	44:BU:106:PHE:CB	1.87	0.78
39:BW:20:VAL:HG13	39:BW:47:VAL:HG21	1.61	0.78
39:BW:68:ARG:C	39:BW:69:LEU:HD23	2.04	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:81:ALA:HB1	39:BW:97:LYS:HD2	1.63	0.78
26:BA:439:G:H5''	41:BY:6:LYS:NZ	1.96	0.78
42:BZ:151:ASP:HB3	42:BZ:153:LYS:HZ2	1.46	0.78
42:BZ:42:ALA:O	42:BZ:45:GLN:N	2.17	0.78
47:B3:19:GLN:O	47:B3:23:LEU:HD23	1.82	0.78
47:B3:8:LEU:CA	47:B3:54:VAL:HG11	2.11	0.78
49:B4:14:ILE:C	49:B4:15:ILE:HD12	2.05	0.78
50:B5:11:THR:CG2	50:B5:19:ARG:NH2	2.47	0.78
26:BA:2021:C:OP2	50:B5:15:LYS:HE3	1.62	0.78
26:BA:2400:G:C2'	51:B6:20:PHE:HE1	1.96	0.78
53:B8:56:ALA:O	53:B8:57:ARG:C	2.22	0.78
53:B8:5:LYS:O	53:B8:7:HIS:ND1	2.17	0.78
26:BA:1671:U:O2'	28:BE:225:LYS:NZ	2.15	0.78
26:BA:2227:A:C6	26:BA:2228:G:O6	2.37	0.78
26:BA:2264:C:C4	26:BA:2277:G:C6	2.71	0.78
26:BA:2349:G:C2	26:BA:2369:A:C2	2.72	0.78
26:BA:2479:G:H2'	26:BA:2480:C:O5'	1.84	0.78
26:BA:2523:G:H2'	26:BA:2524:G:H5'	1.63	0.78
26:BA:2652:C:H42	26:BA:2668:G:H1	1.29	0.78
26:BA:2716:U:C2'	26:BA:2717:G:C5'	2.60	0.78
26:BA:495:G:H4'	39:BW:57:ASN:HD22	1.41	0.78
27:BD:143:ILE:HD13	27:BD:153:LEU:H	1.49	0.78
28:BE:105:HIS:H	28:BE:108:LEU:HD12	1.48	0.78
28:BE:218:GLY:C	28:BE:219:VAL:HG23	2.04	0.78
28:BE:62:ARG:C	28:BE:63:GLU:HG3	2.04	0.78
28:BE:79:ARG:C	28:BE:187:HIS:CE1	2.50	0.78
30:BG:29:HIS:HE1	30:BG:64:ARG:CZ	1.97	0.78
55:BK:25:GLY:HA2	55:BK:35:ILE:CD1	2.12	0.78
26:BA:2563:U:H4'	34:BO:27:GLY:HA2	1.66	0.78
34:BO:17:ARG:NH2	34:BO:47:THR:HA	1.99	0.78
34:BO:66:LYS:C	34:BO:66:LYS:CD	2.52	0.78
26:BA:911:A:C8	36:BQ:16:ARG:CD	2.67	0.78
30:BG:146:LYS:HG3	37:BS:15:GLU:CG	2.13	0.78
37:BS:20:TYR:CE2	37:BS:21:HIS:HD2	1.95	0.78
37:BS:35:VAL:HG11	37:BS:37:ARG:CZ	2.13	0.78
44:BU:59:ARG:O	44:BU:62:ILE:HB	1.82	0.78
40:BX:18:MET:SD	40:BX:24:LEU:HA	2.24	0.78
25:BB:74:U:O2	42:BZ:29:ASN:ND2	2.15	0.78
42:BZ:71:MET:HG3	42:BZ:78:PRO:HG3	1.65	0.78
6:AC:18:TRP:CD1	17:AN:53:LEU:O	2.36	0.78
1:AA:254:G:O2'	20:AQ:16:GLN:O	2.01	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:36:ILE:H	48:B0:68:VAL:HG22	1.49	0.78
26:BA:989:G:N7	47:B3:13:ILE:HD12	1.98	0.78
26:BA:1518:C:H3'	26:BA:1519:G:C4'	2.14	0.78
26:BA:2093:G:H4'	32:BI:25:TYR:HA	1.66	0.78
26:BA:2094:G:C6	26:BA:2196:C:N4	2.46	0.78
26:BA:2410:G:N3	26:BA:2411:A:N7	2.25	0.78
26:BA:2446:G:H5'	26:BA:2446:G:C8	2.15	0.78
26:BA:2521:C:O4'	26:BA:2565:A:H1'	1.84	0.78
26:BA:2544:G:H5'	26:BA:2645:G:N7	1.94	0.78
26:BA:2729:G:H2'	26:BA:2730:C:O4'	1.83	0.78
26:BA:2762:G:N7	26:BA:2763:G:C5	2.51	0.78
26:BA:2827:C:O2	26:BA:2827:C:H2'	1.84	0.78
26:BA:801:G:OP2	29:BF:79:ARG:NE	2.15	0.78
26:BA:994:C:OP2	44:BU:54:LYS:CE	2.27	0.78
27:BD:146:LYS:HD2	27:BD:147:PRO:CD	2.07	0.78
27:BD:162:GLN:OE1	27:BD:174:ARG:HB3	1.84	0.78
27:BD:158:GLY:CA	27:BD:194:VAL:HG21	2.13	0.78
29:BF:32:GLY:O	29:BF:35:VAL:CB	2.32	0.78
30:BG:93:LEU:HD21	30:BG:106:PHE:CD2	2.16	0.78
55:BK:122:GLU:O	55:BK:126:LYS:CG	2.27	0.78
33:BN:20:GLY:O	33:BN:21:ARG:C	2.22	0.78
34:BO:103:ALA:HB3	34:BO:105:GLU:HG2	1.66	0.78
34:BO:10:VAL:CG2	34:BO:16:ALA:HB3	2.11	0.78
36:BQ:56:ILE:HD11	36:BQ:115:SER:H	1.47	0.78
37:BS:100:ALA:H	37:BS:127:LEU:HD21	1.49	0.78
37:BS:72:GLU:CB	37:BS:74:PRO:HD2	2.12	0.78
26:BA:144:C:C5'	40:BX:36:GLU:CD	2.39	0.78
41:BY:92:ASP:O	41:BY:94:SER:N	2.17	0.78
42:BZ:40:ASP:OD2	42:BZ:41:ARG:NH2	2.16	0.78
1:AA:977:A:N6	1:AA:1224:G:OP1	2.12	0.77
1:AA:112:G:H4'	1:AA:389:A:H4'	1.66	0.77
12:AI:11:LYS:HG3	12:AI:108:VAL:HG11	1.66	0.77
2:AV:70:C:H2'	2:AV:71:G:H8	1.47	0.77
2:AV:7:U:C4	2:AV:49:C:C5	2.71	0.77
3:AW:1:G:H21	3:AW:2:C:N4	1.80	0.77
47:B3:15:TYR:HB3	47:B3:16:PRO:HD2	1.65	0.77
47:B3:8:LEU:HD23	47:B3:32:GLN:N	1.96	0.77
26:BA:1140:C:H4'	26:BA:142(A):A:C5	2.19	0.77
26:BA:1240:U:H3'	26:BA:1241:A:C8	2.19	0.77
26:BA:1339:G:N2	26:BA:1603:A:C8	2.52	0.77
26:BA:1341:U:OP2	26:BA:1397:U:N3	2.16	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2375:G:N1	26:BA:2379:G:C6	2.52	0.77
26:BA:2556:C:C3'	26:BA:2557:G:H5'	2.09	0.77
26:BA:2654:A:H61	26:BA:2667:C:H42	1.16	0.77
26:BA:535:C:O3'	44:BU:53:LYS:HE2	1.83	0.77
26:BA:598:G:C2	29:BF:33:LYS:NZ	2.52	0.77
27:BD:129:LEU:HB3	27:BD:130:PRO:HD2	1.66	0.77
27:BD:106:PRO:C	27:BD:194:VAL:O	2.21	0.77
28:BE:240:PRO:HB2	28:BE:243:PRO:CG	2.13	0.77
28:BE:205:THR:CA	28:BE:261:ARG:HD2	2.08	0.77
29:BF:167:ASP:HB3	29:BF:232:LEU:H	1.48	0.77
29:BF:37:ALA:HB1	29:BF:107:ARG:NH2	1.98	0.77
55:BK:121:LEU:HD23	55:BK:125:MET:CE	2.13	0.77
34:BO:63:VAL:CG1	34:BO:102:VAL:HG11	1.88	0.77
36:BQ:156:ASN:O	36:BQ:156:ASN:OD1	2.01	0.77
43:BR:60:LEU:CG	43:BR:61:HIS:N	2.45	0.77
43:BR:91:GLN:O	43:BR:92:GLY:O	2.02	0.77
37:BS:32:PRO:HD2	37:BS:100:ALA:HA	1.64	0.77
25:BB:28:C:OP2	37:BS:41:LYS:HG3	1.83	0.77
44:BU:68:GLY:O	44:BU:70:ARG:N	2.17	0.77
45:BV:21:ARG:O	45:BV:92:ALA:HB1	1.83	0.77
41:BY:101:LEU:CD1	41:BY:112:LEU:HD12	2.14	0.77
41:BY:14:ALA:HB1	41:BY:15:PRO:HD3	1.66	0.77
42:BZ:107:GLU:H	42:BZ:107:GLU:CD	1.87	0.77
1:AA:403:C:OP2	7:AD:3:ARG:NH2	2.17	0.77
1:AA:39:G:C8	1:AA:498:U:C4	2.72	0.77
3:AW:76:A:C4	26:BA:2421:G:C4	2.58	0.77
26:BA:1364:G:C3'	49:B4:3:LYS:HD2	2.06	0.77
52:B7:43:THR:HA	52:B7:46:ASP:CG	2.04	0.77
53:B8:8:LYS:C	53:B8:10:ALA:N	2.37	0.77
53:B8:7:HIS:O	53:B8:10:ALA:CB	2.29	0.77
26:BA:1072:C:H42	26:BA:1100:C:N4	1.81	0.77
26:BA:2421:G:H5''	26:BA:2422:A:OP2	1.84	0.77
26:BA:2464:C:C4	26:BA:2487:G:N1	2.52	0.77
26:BA:2584:U:C6	26:BA:2585:U:H6	1.99	0.77
26:BA:2626:C:C5'	26:BA:2626:C:C6	2.62	0.77
26:BA:2810:A:H2'	26:BA:2811:G:C4'	2.09	0.77
26:BA:2827:C:O2'	26:BA:2828:C:H5'	1.83	0.77
26:BA:2850:A:C4	26:BA:2851:A:N7	2.52	0.77
26:BA:397:G:OP1	49:B4:40:HIS:C	2.22	0.77
28:BE:214:VAL:HG22	28:BE:221:LYS:CE	2.14	0.77
28:BE:222:ARG:HD3	28:BE:233:ARG:N	1.98	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:44:TYR:HE1	28:BE:308:VAL:HG13	1.48	0.77
29:BF:225:PRO:O	29:BF:231:ARG:HG2	1.73	0.77
29:BF:231:ARG:C	29:BF:232:LEU:HD23	2.02	0.77
29:BF:239:ALA:O	29:BF:242:GLU:N	2.13	0.77
30:BG:97:GLN:O	30:BG:104:PHE:HB3	1.85	0.77
30:BG:38:GLU:CB	30:BG:41:LEU:HD12	2.14	0.77
32:BI:13:GLY:CA	32:BI:15:LYS:HZ1	1.93	0.77
32:BI:43:ASN:ND2	32:BI:43:ASN:H	1.81	0.77
33:BN:87:LEU:CB	33:BN:88:PRO:CD	2.61	0.77
43:BR:28:LEU:CD1	43:BR:32:GLY:HA2	2.14	0.77
38:BT:24:LYS:O	38:BT:25:ASP:HB2	1.82	0.77
26:BA:1151:G:C3'	44:BU:81:ASN:ND2	2.44	0.77
40:BX:14:ALA:HB1	40:BX:18:MET:CE	2.13	0.77
41:BY:55:PHE:CD2	41:BY:89:ARG:NH1	2.35	0.77
41:BY:73:HIS:HE1	41:BY:90:PRO:HA	1.49	0.77
42:BZ:149:ALA:O	42:BZ:152:ILE:CG1	2.27	0.77
42:BZ:18:MET:C	42:BZ:36:ARG:CG	2.52	0.77
6:AC:18:TRP:NE1	17:AN:53:LEU:O	2.16	0.77
49:B4:35:VAL:CG1	49:B4:36:TRP:H	1.95	0.77
26:BA:1056:G:C6	26:BA:1102:C:OP2	2.37	0.77
26:BA:1309:G:H21	26:BA:1611:C:H5'	1.46	0.77
26:BA:1827:C:H41	27:BD:225:ARG:HH12	0.96	0.77
26:BA:2189:U:HO2'	26:BA:2190:G:H8	1.28	0.77
26:BA:2287:A:C2	26:BA:2289:G:O4'	2.32	0.77
26:BA:2331:G:N2	26:BA:2385:C:H5	1.80	0.77
26:BA:2392:A:C2'	26:BA:2393:A:C5'	2.59	0.77
26:BA:2436:G:O6	26:BA:2437:U:C4	2.38	0.77
26:BA:2461:C:N3	26:BA:2462:U:H5	1.79	0.77
26:BA:358:U:H3'	26:BA:359:A:H5'	1.65	0.77
26:BA:476:G:N2	26:BA:478:A:H2'	1.99	0.77
26:BA:603:A:H2'	26:BA:604:G:C8	2.19	0.77
27:BD:129:LEU:CD2	27:BD:130:PRO:CD	2.61	0.77
26:BA:2786:U:H5''	28:BE:100:TRP:O	1.82	0.77
28:BE:235:ILE:CG2	28:BE:236:GLY:N	2.47	0.77
31:BH:101:LYS:HZ3	31:BH:115:GLU:CB	1.94	0.77
31:BH:93:TYR:C	31:BH:94:ARG:CG	2.46	0.77
32:BI:134:HIS:CG	32:BI:135:PRO:HD2	2.19	0.77
55:BK:86:GLU:O	55:BK:87:LYS:O	2.02	0.77
34:BO:101:PRO:CB	34:BO:122:ILE:CD1	2.54	0.77
34:BO:77:ILE:CD1	34:BO:78:ARG:CA	2.53	0.77
36:BQ:32:LYS:HZ2	42:BZ:172:LEU:CD1	1.95	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:87:LEU:O	37:BS:88:ALA:C	2.23	0.77
44:BU:15:LYS:O	44:BU:16:LYS:C	2.21	0.77
45:BV:19:VAL:O	45:BV:21:ARG:HG2	1.83	0.77
39:BW:15:ARG:O	39:BW:18:ARG:HB2	1.84	0.77
39:BW:25:ARG:HG2	39:BW:26:GLY:H	1.50	0.77
40:BX:33:SER:O	40:BX:37:VAL:CG2	2.33	0.77
41:BY:14:ALA:CB	41:BY:15:PRO:HD2	2.12	0.77
41:BY:43:ASN:ND2	41:BY:112:LEU:CD2	2.46	0.77
41:BY:73:HIS:CD2	41:BY:88:PRO:HB2	2.18	0.77
42:BZ:172:LEU:HD23	42:BZ:173:PRO:CA	2.13	0.77
1:AA:1369:C:OP2	12:AI:112:LYS:N	2.14	0.77
2:AV:5:A:H2'	2:AV:6:U:H6	1.48	0.77
48:B0:36:ILE:O	48:B0:37:LEU:CG	2.32	0.77
48:B0:37:LEU:HD13	48:B0:69:PHE:CB	2.09	0.77
26:BA:396:G:C4'	49:B4:39:VAL:HG12	2.13	0.77
51:B6:40:TYR:N	51:B6:50:PHE:CD1	2.53	0.77
26:BA:1260:G:C5'	39:BW:83:LYS:HZ1	1.92	0.77
26:BA:574:C:N4	26:BA:2054:A:C5'	2.47	0.77
26:BA:2195:C:P	26:BA:2195:C:C6	2.77	0.77
26:BA:2264:C:C4	26:BA:2277:G:O6	2.38	0.77
26:BA:2398:U:C6	26:BA:2398:U:H3'	2.20	0.77
26:BA:2543:G:H2'	26:BA:2544:G:H5'	1.66	0.77
26:BA:2584:U:C1'	26:BA:2585:U:C5	2.67	0.77
26:BA:2074:U:HO2'	26:BA:2597:G:HO2'	0.90	0.77
26:BA:2051:A:N7	26:BA:2614:A:C5	2.52	0.77
26:BA:2618:G:C6	26:BA:2619:C:H5	1.96	0.77
26:BA:2700:C:C3'	26:BA:2701:C:C5'	2.58	0.77
26:BA:2762:G:C5	26:BA:2763:G:C6	2.73	0.77
28:BE:189:MET:C	28:BE:190:ASN:OD1	2.22	0.77
29:BF:150:THR:HG23	29:BF:203:ALA:HB1	1.66	0.77
29:BF:30:LEU:O	29:BF:33:LYS:HB2	1.85	0.77
30:BG:98:PHE:HA	30:BG:104:PHE:HD2	0.90	0.77
31:BH:84:LYS:O	31:BH:131:ILE:CG2	2.32	0.77
31:BH:84:LYS:CG	31:BH:140:VAL:HG12	2.14	0.77
32:BI:94:THR:HG21	32:BI:96:LYS:HB3	1.63	0.77
55:BK:15:ALA:CA	55:BK:46:THR:HB	2.12	0.77
35:BP:120:LEU:CD1	35:BP:122:ALA:HB2	2.15	0.77
36:BQ:133:GLU:C	36:BQ:133:GLU:CD	2.42	0.77
43:BR:41:ALA:HB1	43:BR:114:VAL:CG2	2.14	0.77
43:BR:18:LEU:HD13	43:BR:19:ALA:N	1.99	0.77
43:BR:83:ILE:O	43:BR:84:ALA:C	2.22	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:33:ARG:HG2	44:BU:34:ASN:H	1.48	0.77
41:BY:31:LEU:CD1	41:BY:113:GLU:OE1	2.27	0.77
42:BZ:154:LEU:HD13	42:BZ:160:LEU:CD1	2.12	0.77
1:AA:1224:G:N2	1:AA:1362:C:O2	1.99	0.77
1:AA:1517:G:H1'	26:BA:1919:A:H5''	1.65	0.77
48:B0:44:LYS:C	48:B0:45:PHE:CD1	2.57	0.77
46:B2:45:ARG:O	46:B2:46:ILE:C	2.22	0.77
53:B8:58:MET:O	53:B8:61:MET:N	2.18	0.77
26:BA:1456:G:H1	26:BA:2704:C:N4	1.83	0.77
26:BA:2320:A:N3	26:BA:2333:A:N1	2.32	0.77
26:BA:2454:G:C2	26:BA:2455:G:C1'	2.66	0.77
26:BA:2532:G:H8	26:BA:2532:G:H5'	1.46	0.77
26:BA:2570:G:N3	26:BA:2570:G:C2'	2.47	0.77
26:BA:477:A:H2'	26:BA:478:A:C8	2.19	0.77
27:BD:129:LEU:HD22	27:BD:130:PRO:CD	2.14	0.77
27:BD:71:ASP:C	27:BD:73:ILE:H	1.86	0.77
29:BF:196:THR:CA	29:BF:236:THR:HG21	2.11	0.77
31:BH:84:LYS:O	31:BH:131:ILE:HG22	1.84	0.77
32:BI:114:LYS:O	32:BI:115:ILE:O	2.03	0.77
55:BK:22:PRO:CG	55:BK:23:PRO:CD	2.59	0.77
33:BN:39:VAL:HA	33:BN:103:VAL:CG1	2.14	0.77
33:BN:58:GLU:CG	33:BN:61:VAL:HG21	2.14	0.77
34:BO:21:VAL:HA	34:BO:41:ALA:CB	2.12	0.77
36:BQ:94:ARG:NH2	36:BQ:105:PHE:O	2.18	0.77
43:BR:87:TYR:CD1	43:BR:94:TYR:HD2	2.00	0.77
44:BU:28:ARG:N	44:BU:31:GLN:OE1	2.18	0.77
25:BB:76:G:O3'	42:BZ:80:HIS:CG	2.37	0.77
48:B0:41:ARG:O	48:B0:74:LYS:HE2	1.84	0.77
47:B3:4:LEU:O	47:B3:36:VAL:CA	2.33	0.77
47:B3:9:VAL:H	47:B3:54:VAL:CG1	1.96	0.77
26:BA:1652:A:N6	26:BA:1653:G:H21	1.83	0.77
26:BA:2415:G:C6	26:BA:2416:C:H5	2.03	0.77
26:BA:2625:G:C3'	26:BA:2626:C:H5	1.77	0.77
26:BA:2637:U:O2	26:BA:2782:G:N2	2.18	0.77
26:BA:2646:C:H2'	26:BA:2647:U:C5'	2.14	0.77
26:BA:2812:G:O2'	26:BA:2813:A:C5'	2.32	0.77
26:BA:2887:U:O2	26:BA:2888:C:C6	2.37	0.77
26:BA:326:G:H22	26:BA:337:C:H1'	1.50	0.77
26:BA:579:G:H1'	50:B5:10:LYS:NZ	1.99	0.77
25:BB:100:G:N2	26:BA:863:A:H4'	1.99	0.77
27:BD:106:PRO:HG3	27:BD:141:HIS:CD2	2.20	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:80:ILE:HD13	27:BD:82:TYR:CD1	2.19	0.77
29:BF:51:TYR:C	29:BF:55:ARG:CB	2.45	0.77
31:BH:162:ARG:HB3	31:BH:166:GLU:HG3	1.64	0.77
32:BI:2:LYS:HD2	32:BI:39:ALA:HB2	1.67	0.77
33:BN:103:VAL:O	33:BN:104:TYR:CG	2.37	0.77
34:BO:75:SER:O	34:BO:76:TYR:CD1	2.38	0.77
36:BQ:58:HIS:CB	36:BQ:111:THR:O	2.21	0.77
36:BQ:46:VAL:O	36:BQ:124:ALA:N	2.18	0.77
36:BQ:136:TRP:O	36:BQ:139:ALA:CB	2.33	0.77
36:BQ:28:ILE:HG12	36:BQ:62:GLU:OE2	1.84	0.77
36:BQ:82:LYS:HG2	36:BQ:84:ARG:HG3	1.65	0.77
2:AV:1:G:O2'	36:BQ:98:GLY:N	2.18	0.77
37:BS:76:GLY:C	37:BS:82:TYR:HB2	2.04	0.77
26:BA:583:G:P	44:BU:10:ARG:NH1	2.57	0.77
44:BU:54:LYS:O	44:BU:58:ARG:HG3	1.85	0.77
45:BV:50:ASP:CG	45:BV:53:LYS:HE3	2.04	0.77
39:BW:21:VAL:CG2	39:BW:22:ASP:H	1.98	0.77
40:BX:13:LYS:CA	40:BX:16:ASN:OD1	2.32	0.77
40:BX:23:LYS:HE2	40:BX:67:ARG:NH1	1.99	0.77
26:BA:498:G:O2'	41:BY:82:THR:HG23	1.84	0.77
42:BZ:92:VAL:C	42:BZ:94:VAL:N	2.38	0.77
1:AA:1314:C:N4	22:AS:4:SER:O	2.18	0.77
1:AA:575:G:N2	1:AA:880:C:O2	2.16	0.77
2:AV:31:A:H4'	12:AI:127:LYS:CD	2.14	0.77
1:AA:1114:C:O2'	17:AN:60:SER:O	2.03	0.77
21:AR:53:ARG:HD2	21:AR:58:LEU:O	1.84	0.77
52:B7:35:ARG:O	52:B7:36:ALA:O	2.03	0.77
26:BA:2041:U:H5'	33:BN:70:PHE:HE1	1.49	0.77
26:BA:2065:C:H42	26:BA:2445:G:H1	1.32	0.77
26:BA:2264:C:N4	26:BA:2277:G:O6	2.17	0.77
26:BA:2350:C:O2'	26:BA:2351:G:O5'	2.01	0.77
26:BA:2352:A:N7	26:BA:2366:A:C6	2.52	0.77
26:BA:2419:U:P	53:B8:41:ILE:HD11	2.25	0.77
26:BA:2739:U:C6	26:BA:2739:U:H3'	2.18	0.77
26:BA:2747:G:H2'	26:BA:2748:A:H5''	1.66	0.77
26:BA:2771:C:C2'	26:BA:2771:C:O2	2.30	0.77
26:BA:2805:G:C3'	26:BA:2807:G:P	2.73	0.77
26:BA:772:C:H2'	26:BA:773:U:C6	2.19	0.77
26:BA:828:U:H2'	26:BA:829:A:C8	2.20	0.77
28:BE:201:VAL:O	28:BE:262:THR:OG1	2.03	0.77
28:BE:87:GLU:C	28:BE:94:ARG:H	1.87	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:141:SER:OG	29:BF:144:PHE:CD1	2.38	0.77
29:BF:62:GLY:HA3	29:BF:65:ARG:HH21	0.69	0.77
32:BI:82:LYS:HE3	32:BI:149:LYS:O	1.85	0.77
33:BN:15:ARG:NH1	33:BN:40:ASN:HA	2.00	0.77
33:BN:38:VAL:O	33:BN:39:VAL:HG22	1.85	0.77
34:BO:64:ARG:HH22	34:BO:100:GLY:HA3	1.43	0.77
36:BQ:46:VAL:CA	36:BQ:124:ALA:O	2.33	0.77
36:BQ:65:ARG:NH2	36:BQ:85:ILE:CB	2.47	0.77
37:BS:38:LYS:HG2	37:BS:106:LEU:HD12	1.65	0.77
44:BU:25:TRP:C	44:BU:28:ARG:NH1	2.38	0.77
41:BY:5:ASP:O	41:BY:9:LYS:HD3	1.83	0.77
42:BZ:53:ASP:CB	42:BZ:62:PHE:O	2.33	0.77
1:AA:886:G:N2	1:AA:912:C:H1'	1.99	0.77
1:AA:1221:G:O3'	22:AS:77:THR:HG21	1.85	0.77
26:BA:2385:C:H2'	26:BA:2386:C:H5''	1.65	0.77
26:BA:2470:G:O6	26:BA:2481:G:C2	2.38	0.77
26:BA:2717:G:O2'	26:BA:2718:G:O5'	2.02	0.77
26:BA:280:C:C2	26:BA:283:A:N6	2.53	0.77
26:BA:1673:U:H5	28:BE:225:LYS:CD	1.98	0.77
28:BE:312:ARG:C	28:BE:314:ALA:N	2.38	0.77
28:BE:48:MET:C	28:BE:49:THR:CG2	2.53	0.77
29:BF:6:TYR:HE2	29:BF:140:VAL:CG2	1.97	0.77
31:BH:98:GLN:HB2	31:BH:103:VAL:CG2	2.15	0.77
55:BK:13:LEU:HD21	55:BK:24:VAL:CG2	2.14	0.77
34:BO:63:VAL:HG11	34:BO:102:VAL:CG2	2.15	0.77
34:BO:88:ARG:O	34:BO:90:ASP:OD1	2.03	0.77
35:BP:102:ASP:O	35:BP:103:ALA:CB	2.33	0.77
36:BQ:48:ASN:C	36:BQ:48:ASN:OD1	2.23	0.77
26:BA:1287:A:C1'	43:BR:104:ARG:HD2	2.14	0.77
43:BR:33:ARG:CA	43:BR:114:VAL:O	2.29	0.77
44:BU:91:ASN:O	44:BU:95:LEU:CD1	2.33	0.77
45:BV:63:HIS:HA	45:BV:95:ILE:HG13	1.66	0.77
26:BA:974:G:C8	45:BV:80:TYR:CG	2.72	0.77
45:BV:60:VAL:C	45:BV:98:ILE:HD12	2.05	0.77
39:BW:86:LEU:CB	39:BW:87:PRO:CD	2.56	0.77
41:BY:31:LEU:HD13	41:BY:113:GLU:CD	2.04	0.77
1:AA:1256:A:H61	1:AA:1278:U:H1'	1.50	0.77
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.20	0.77
1:AA:545:C:H5''	7:AD:72:GLU:HG2	1.67	0.77
7:AD:8:VAL:HB	7:AD:115:ARG:CZ	2.15	0.77
1:AA:1198:G:O2'	13:AJ:54:PHE:HE2	1.68	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1329:A:C5'	16:AM:26:GLY:N	2.46	0.77
48:B0:41:ARG:N	48:B0:67:VAL:HG22	1.99	0.77
47:B3:6:VAL:HG23	47:B3:55:ARG:O	1.85	0.77
49:B4:14:ILE:HD12	49:B4:16:TYR:CE1	2.20	0.77
49:B4:14:ILE:CG2	49:B4:16:TYR:HE1	1.97	0.77
49:B4:17:GLN:HA	49:B4:33:VAL:CB	2.14	0.77
26:BA:2371:G:O2'	51:B6:47:HIS:NE2	2.18	0.77
26:BA:1417:C:H42	26:BA:1581:G:H1	1.33	0.77
26:BA:2192:G:OP2	26:BA:2192:G:H8	1.68	0.77
26:BA:2306:C:N4	30:BG:53:LYS:HZ3	1.80	0.77
26:BA:2446:G:C5'	26:BA:2446:G:H8	1.95	0.77
26:BA:2494:G:N1	26:BA:2495:G:N7	2.32	0.77
26:BA:2745:C:O2	31:BH:142:GLU:OE2	2.03	0.77
26:BA:2825:C:C5	26:BA:2825:C:OP2	2.38	0.77
26:BA:592:G:N2	53:B8:3:LYS:CE	2.46	0.77
27:BD:129:LEU:HB3	27:BD:130:PRO:CD	2.15	0.77
28:BE:308:VAL:CG1	28:BE:310:PHE:CE1	2.68	0.77
30:BG:142:ALA:HB1	30:BG:151:ILE:HD11	1.62	0.77
31:BH:147:ILE:O	31:BH:161:ILE:CD1	2.32	0.77
31:BH:89:VAL:HG12	31:BH:159:LYS:HA	1.67	0.77
32:BI:6:LEU:HD12	32:BI:35:LEU:HA	1.67	0.77
33:BN:39:VAL:HG12	33:BN:104:TYR:N	1.99	0.77
26:BA:2780:G:N2	33:BN:80:LYS:NZ	2.33	0.77
34:BO:75:SER:O	34:BO:76:TYR:HD1	1.67	0.77
36:BQ:65:ARG:HH21	36:BQ:122:PHE:HD2	1.26	0.77
38:BT:53:ASP:HA	38:BT:56:ARG:HG2	1.65	0.77
45:BV:2:PHE:HA	45:BV:15:SER:HB3	1.67	0.77
45:BV:49:GLU:O	45:BV:54:TYR:CE1	2.37	0.77
26:BA:564:C:P	45:BV:79:GLN:CG	2.71	0.77
39:BW:12:ILE:O	39:BW:101:SER:OG	2.01	0.77
39:BW:70:TYR:O	39:BW:107:LEU:HD23	1.85	0.77
42:BZ:168:VAL:C	42:BZ:169:VAL:HG23	2.01	0.77
42:BZ:69:VAL:O	42:BZ:70:GLN:NE2	2.18	0.77
1:AA:1221:G:H5'	22:AS:36:ARG:HH11	1.48	0.77
1:AA:1286:A:H1'	24:AU:22:ARG:NH2	1.97	0.77
1:AA:944:G:C8	1:AA:945:G:C8	2.73	0.77
3:AW:37:YYG:H102	10:AG:83:ALA:CB	2.11	0.77
48:B0:61:ALA:HB2	48:B0:80:SER:HA	1.66	0.77
47:B3:1:MET:HE3	47:B3:3:ARG:HD2	1.63	0.77
26:BA:2046:G:OP1	50:B5:19:ARG:CA	2.32	0.77
51:B6:16:ALA:HB2	51:B6:50:PHE:HE2	1.50	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:545(A):A:N7	26:BA:1546:C:C2	2.53	0.77
26:BA:2006:C:O2'	26:BA:2823:A:N3	2.18	0.77
26:BA:2303:G:H4'	30:BG:99:ASP:HB2	1.67	0.77
26:BA:2356:C:C2'	26:BA:2357:U:O5'	2.28	0.77
26:BA:2403:C:N3	26:BA:2414:G:N2	2.31	0.77
26:BA:2481:G:O2'	26:BA:2482:G:H5'	1.85	0.77
26:BA:2645:G:H3'	26:BA:2646:C:H5'	1.67	0.77
26:BA:2648:C:N4	26:BA:2672:G:H1	1.82	0.77
26:BA:2679:A:C6	26:BA:2680:C:C5	2.72	0.77
26:BA:2678:C:O2'	26:BA:2679:A:H5'	1.83	0.77
26:BA:2689:U:H1'	26:BA:2713:A:C2	2.18	0.77
26:BA:647:G:OP1	26:BA:2352:A:H4'	1.83	0.77
25:BB:24:G:O2'	25:BB:27:C:N4	2.18	0.77
26:BA:2680:C:H4'	28:BE:300:VAL:HA	1.67	0.77
28:BE:70:VAL:CG1	28:BE:71:THR:N	2.13	0.77
28:BE:74:GLU:O	28:BE:75:THR:OG1	2.01	0.77
29:BF:237:GLU:C	29:BF:239:ALA:N	2.37	0.77
29:BF:240:LEU:HD23	29:BF:243:VAL:CG2	2.14	0.77
33:BN:27:ALA:C	33:BN:30:ALA:HB3	2.05	0.77
26:BA:637:A:C8	35:BP:111:ALA:HB1	2.17	0.77
35:BP:83:GLU:O	35:BP:92:ASP:CA	2.33	0.77
36:BQ:41:THR:CG2	36:BQ:125:TRP:CZ3	2.65	0.77
43:BR:111:LEU:O	43:BR:112:ALA:HB2	1.85	0.77
1:AA:1073:U:C2	1:AA:1074:G:C8	2.73	0.76
1:AA:975:A:C8	1:AA:1357:A:H2	2.02	0.76
1:AA:509:A:H8	7:AD:54:TYR:CE2	1.99	0.76
3:AW:72:C:C2'	3:AW:73:A:H5'	2.13	0.76
49:B4:17:GLN:HA	49:B4:33:VAL:HB	1.67	0.76
26:BA:1024:G:H5''	26:BA:1025:G:H5''	1.64	0.76
26:BA:1365:A:OP2	49:B4:3:LYS:HD2	1.84	0.76
26:BA:199:A:N1	26:BA:2433:A:C5	2.50	0.76
26:BA:2363:C:O2'	26:BA:2364:C:H5'	1.84	0.76
26:BA:2385:C:C2'	26:BA:2386:C:H5''	2.15	0.76
26:BA:2423:U:C6	26:BA:2425:A:N7	2.54	0.76
26:BA:2258:C:C5	26:BA:2426:A:C1'	2.62	0.76
26:BA:2436:G:O2'	26:BA:2437:U:O5'	2.03	0.76
26:BA:2579:C:H6	26:BA:2579:C:H5''	0.61	0.76
26:BA:2635:C:HO2'	26:BA:2636:U:P	2.07	0.76
27:BD:70:LYS:CG	27:BD:73:ILE:HD11	2.16	0.76
28:BE:199:ALA:HB2	28:BE:312:ARG:O	1.85	0.76
29:BF:84:VAL:CA	29:BF:85:LYS:HD2	2.00	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:88:SER:O	29:BF:89:ALA:CB	2.32	0.76
31:BH:95:ALA:O	31:BH:127:GLN:CA	2.32	0.76
33:BN:39:VAL:O	33:BN:40:ASN:CB	2.33	0.76
35:BP:94:ARG:CD	35:BP:120:LEU:CB	2.64	0.76
35:BP:66:VAL:CG2	35:BP:67:ARG:NH2	2.07	0.76
43:BR:81:ASP:O	43:BR:85:PRO:HD2	1.85	0.76
26:BA:2880:C:H1'	43:BR:91:GLN:O	1.84	0.76
44:BU:47:TYR:O	44:BU:49:ASP:N	2.17	0.76
44:BU:80:ILE:N	44:BU:83:LEU:HD12	2.00	0.76
44:BU:99:ALA:CB	44:BU:106:PHE:CG	2.41	0.76
39:BW:104:THR:C	39:BW:105:VAL:CG1	2.51	0.76
26:BA:99:U:N3	41:BY:107:LYS:CD	2.48	0.76
41:BY:11:GLN:HG3	41:BY:21:LYS:CE	2.14	0.76
42:BZ:62:PHE:CG	42:BZ:87:THR:CG2	2.68	0.76
46:B2:50:ARG:CA	46:B2:53:ILE:HD12	2.15	0.76
26:BA:988:A:P	47:B3:11:SER:CB	2.73	0.76
26:BA:988:A:P	47:B3:11:SER:H	2.08	0.76
49:B4:68:ARG:HG2	49:B4:72:LYS:HA	1.68	0.76
26:BA:650:C:H5''	53:B8:19:THR:CG2	2.15	0.76
26:BA:650:C:P	53:B8:19:THR:HG21	2.26	0.76
26:BA:2049:G:N1	26:BA:2620:C:C4	2.54	0.76
26:BA:2236:C:H3'	26:BA:2237:G:H5'	1.67	0.76
26:BA:2403:C:C5	26:BA:2415:G:N1	2.52	0.76
26:BA:2397:G:C6	26:BA:2420:C:N3	2.52	0.76
26:BA:2463:C:N3	26:BA:2487:G:O6	2.18	0.76
26:BA:2626:C:OP2	26:BA:2626:C:H5	1.67	0.76
26:BA:2653:U:C2	26:BA:2654:A:C5	2.72	0.76
26:BA:2688:U:H2'	26:BA:2719:G:N2	2.00	0.76
26:BA:2772:C:C4	26:BA:2773:C:N4	2.53	0.76
26:BA:296:C:N3	26:BA:344:G:N2	2.34	0.76
26:BA:529:A:O2'	26:BA:530:G:C8	2.36	0.76
28:BE:201:VAL:H	28:BE:266:LYS:CE	1.98	0.76
28:BE:70:VAL:CG1	28:BE:295:LEU:CD2	2.63	0.76
29:BF:210:ALA:O	29:BF:211:ASP:CB	2.33	0.76
32:BI:108:LEU:HD23	32:BI:108:LEU:C	2.05	0.76
32:BI:7:LYS:HG2	32:BI:8:ASP:OD1	1.84	0.76
26:BA:558:G:P	33:BN:91:LYS:HB2	2.24	0.76
34:BO:111:PHE:O	34:BO:113:LYS:N	2.17	0.76
35:BP:94:ARG:CB	35:BP:120:LEU:HD22	1.99	0.76
36:BQ:142:LYS:C	36:BQ:143:VAL:HG22	2.06	0.76
43:BR:33:ARG:O	43:BR:33:ARG:HG3	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:29:A:OP1	37:BS:39:SER:O	2.01	0.76
41:BY:103:LEU:HD22	41:BY:108:ARG:C	2.04	0.76
1:AA:1125:U:O4	13:AJ:5:ARG:NH1	2.18	0.76
48:B0:37:LEU:HD12	48:B0:69:PHE:HB2	1.66	0.76
46:B2:8:ILE:HA	46:B2:11:MET:HG3	1.67	0.76
47:B3:25:ALA:O	47:B3:27:GLY:N	2.19	0.76
47:B3:42:ALA:O	47:B3:44:ARG:N	2.19	0.76
49:B4:21:VAL:CG1	49:B4:22:MET:N	2.12	0.76
49:B4:58:LYS:HG2	49:B4:59:PHE:N	1.99	0.76
49:B4:58:LYS:HD2	49:B4:62:ARG:HH21	1.48	0.76
26:BA:2021:C:OP1	50:B5:15:LYS:HE3	1.85	0.76
53:B8:4:MET:HG2	53:B8:5:LYS:H	1.50	0.76
26:BA:1416:G:H1'	26:BA:1583:A:N1	2.00	0.76
26:BA:2209:C:O2'	26:BA:2210:G:H8	1.69	0.76
26:BA:2228:G:N7	26:BA:2229:C:C4	2.53	0.76
26:BA:2285:C:H4'	26:BA:2288:A:C6	2.20	0.76
26:BA:2501:C:O2'	26:BA:2502:G:OP2	2.02	0.76
26:BA:2611:U:H3'	26:BA:2611:U:H6	1.50	0.76
26:BA:2718:G:C2'	26:BA:2719:G:C8	2.60	0.76
26:BA:322:A:C1'	26:BA:341:G:O4'	2.34	0.76
26:BA:38:A:H2'	26:BA:39:C:C6	2.20	0.76
26:BA:974:G:C3'	45:BV:82:ARG:NH2	2.48	0.76
29:BF:243:VAL:HA	29:BF:246:ARG:HD2	0.80	0.76
29:BF:93:LYS:C	29:BF:96:LYS:HE3	2.06	0.76
31:BH:84:LYS:HG3	31:BH:140:VAL:CG1	2.15	0.76
26:BA:2745:C:H2'	31:BH:142:GLU:OE2	1.85	0.76
55:BK:27:ALA:O	55:BK:29:GLY:N	2.18	0.76
34:BO:17:ARG:HE	34:BO:47:THR:HA	1.49	0.76
34:BO:88:ARG:HG2	34:BO:92:SER:O	1.84	0.76
36:BQ:57:ARG:O	36:BQ:58:HIS:C	2.23	0.76
37:BS:75:THR:O	37:BS:80:SER:N	2.18	0.76
26:BA:446:G:OP2	44:BU:3:ARG:CD	2.33	0.76
40:BX:47:VAL:CB	40:BX:69:SER:HB3	2.14	0.76
42:BZ:34:LEU:HD12	42:BZ:35:ASP:N	2.00	0.76
1:AA:1422:G:OP1	34:BO:48:PRO:HA	1.85	0.76
1:AA:781:A:O2'	1:AA:1522:U:O2	2.01	0.76
1:AA:408:A:OP2	7:AD:115:ARG:NH1	2.19	0.76
1:AA:1014:A:C2	22:AS:34:TRP:CZ3	2.73	0.76
26:BA:1364:G:C4'	49:B4:3:LYS:HD3	2.15	0.76
26:BA:1005:C:H5	26:BA:1143:A:H5''	1.50	0.76
26:BA:2045:C:N4	26:BA:2623:G:N1	2.22	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2182:G:H2'	26:BA:2183:C:C6	2.20	0.76
26:BA:2100:G:C5	26:BA:2190:G:N1	2.53	0.76
26:BA:2207:C:N4	26:BA:2218:G:O6	2.18	0.76
26:BA:2259:G:C5	26:BA:2260:C:C4	2.74	0.76
26:BA:2259:G:C2	26:BA:2282:G:C5	2.62	0.76
26:BA:2359:C:HO2'	26:BA:2360:A:C1'	1.97	0.76
26:BA:2521:C:C4	26:BA:2522:U:C5	2.73	0.76
26:BA:2591:C:N4	26:BA:2604:U:O4	2.18	0.76
26:BA:2049:G:C2	26:BA:2620:C:C4	2.73	0.76
26:BA:2712:U:C4	26:BA:712(A):A:N7	2.53	0.76
26:BA:2755:C:C6	26:BA:2755:C:C5'	2.67	0.76
26:BA:2744:G:N3	26:BA:2761:G:N2	2.34	0.76
26:BA:531:C:H5'	26:BA:532:A:N3	2.00	0.76
26:BA:627:A:N6	26:BA:636:G:O2'	2.19	0.76
25:BB:42:C:O2	30:BG:47:GLN:HB3	1.86	0.76
27:BD:141:HIS:O	27:BD:142:ASN:C	2.24	0.76
27:BD:161:ALA:C	27:BD:162:GLN:CD	2.43	0.76
29:BF:240:LEU:CD2	29:BF:243:VAL:CG2	2.62	0.76
30:BG:21:VAL:CG2	30:BG:132:VAL:HG23	2.15	0.76
25:BB:57:A:N3	30:BG:13:MET:CE	2.49	0.76
31:BH:159:LYS:H	31:BH:162:ARG:CZ	1.98	0.76
31:BH:82:TYR:CE1	31:BH:137:LYS:CG	2.67	0.76
32:BI:25:TYR:HD2	32:BI:25:TYR:H	0.85	0.76
32:BI:59:ALA:HA	32:BI:62:LEU:CD1	2.13	0.76
26:BA:1059:G:OP1	55:BK:115:ASP:OD1	2.03	0.76
33:BN:54:VAL:CA	33:BN:135:ILE:HD12	2.15	0.76
26:BA:2640:G:H4'	33:BN:70:PHE:CD2	2.21	0.76
34:BO:103:ALA:CB	34:BO:105:GLU:HG2	2.15	0.76
26:BA:1669:A:H8	34:BO:4:GLN:CD	1.74	0.76
36:BQ:50:VAL:CG1	36:BQ:51:GLU:OE1	2.34	0.76
36:BQ:76:GLY:C	36:BQ:82:LYS:N	2.39	0.76
36:BQ:87:LYS:O	36:BQ:88:PHE:CB	2.33	0.76
43:BR:23:ASN:HA	43:BR:26:LYS:HD2	1.67	0.76
37:BS:85:GLY:HA3	37:BS:121:GLY:HA3	1.66	0.76
44:BU:111:ASP:O	44:BU:112:ALA:C	2.23	0.76
41:BY:71:VAL:HG21	41:BY:93:THR:H	1.50	0.76
42:BZ:130:ILE:C	42:BZ:130:ILE:HD12	2.04	0.76
1:AA:450:G:H4'	19:AP:42:ARG:HG2	1.66	0.76
3:AW:75:C:O2	26:BA:2395:C:C1'	2.31	0.76
46:B2:55:ARG:O	46:B2:56:ILE:C	2.23	0.76
49:B4:68:ARG:HG2	49:B4:72:LYS:CG	2.15	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:138:G:N7	40:BX:39:ASP:OD1	2.18	0.76
26:BA:14:A:H2	26:BA:2625:G:HO2'	0.78	0.76
26:BA:1656:C:P	28:BE:233:ARG:HD3	2.26	0.76
26:BA:1675:C:C4	28:BE:225:LYS:HG2	2.20	0.76
26:BA:1952:A:H1'	26:BA:2560:C:HO2'	1.46	0.76
26:BA:2045:C:C2	26:BA:2624:G:N2	2.53	0.76
26:BA:2061:G:H1'	26:BA:2503:A:C2	2.20	0.76
26:BA:2332:U:C4'	26:BA:2336:A:N6	2.48	0.76
26:BA:2334:G:O5'	37:BS:12:ARG:O	2.03	0.76
26:BA:2465:C:N3	26:BA:2485:G:O6	2.19	0.76
26:BA:2519:U:C3'	26:BA:2519:U:OP1	2.28	0.76
26:BA:2762:G:N7	26:BA:2763:G:N7	2.33	0.76
26:BA:514:A:H2'	26:BA:515:A:C8	2.20	0.76
27:BD:167:GLU:HG2	27:BD:182:MET:CE	2.13	0.76
27:BD:228:ALA:O	27:BD:229:MET:O	2.04	0.76
26:BA:2785:C:O2'	28:BE:100:TRP:CD1	2.37	0.76
28:BE:246:VAL:CG1	28:BE:247:ARG:N	2.48	0.76
28:BE:217:TRP:CD2	28:BE:251:PRO:HG3	2.21	0.76
31:BH:124:VAL:O	31:BH:124:VAL:HG13	1.84	0.76
31:BH:51:VAL:CG2	31:BH:68:ARG:CG	2.63	0.76
31:BH:94:ARG:HB3	31:BH:127:GLN:HE22	1.51	0.76
32:BI:3:VAL:HG21	32:BI:21:VAL:CB	2.16	0.76
26:BA:1076:C:H4'	55:BK:94:ARG:CZ	2.16	0.76
33:BN:12:VAL:HG12	33:BN:38:VAL:HG11	1.66	0.76
33:BN:63:ILE:O	33:BN:69:TYR:HB3	1.85	0.76
34:BO:7:ARG:HD3	34:BO:44:LYS:CE	2.05	0.76
36:BQ:31:PHE:CZ	36:BQ:88:PHE:CD2	2.74	0.76
43:BR:79:LEU:O	43:BR:79:LEU:CD2	2.17	0.76
44:BU:28:ARG:HG2	44:BU:29:SER:H	1.48	0.76
39:BW:90:ARG:HH11	39:BW:90:ARG:HB2	0.94	0.76
41:BY:64:ASN:O	41:BY:66:ASP:OD1	2.04	0.76
42:BZ:57:GLU:O	42:BZ:59:GLY:N	2.18	0.76
1:AA:1286:A:N6	1:AA:1354:C:H5"	2.00	0.76
1:AA:315:A:H1'	1:AA:353:A:C2	2.19	0.76
48:B0:46:LYS:CG	48:B0:58:THR:N	2.47	0.76
47:B3:20:LYS:HD3	47:B3:23:LEU:HD11	1.66	0.76
52:B7:30:ILE:HA	52:B7:33:ARG:CB	2.15	0.76
26:BA:1063:G:C5'	55:BK:135:MET:HG2	2.16	0.76
26:BA:1140:C:H4'	26:BA:142(A):A:C4	2.21	0.76
26:BA:1287:A:C8	43:BR:104:ARG:CG	2.58	0.76
26:BA:1782:C:O2	26:BA:2609:U:N1	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1924:C:C2	26:BA:1925:C:C5	2.74	0.76
26:BA:2350:C:N4	26:BA:2382:G:N1	2.34	0.76
26:BA:2472:G:H2'	26:BA:2473:U:OP1	1.84	0.76
26:BA:2516:G:C5	26:BA:2569:G:N2	2.53	0.76
26:BA:2573:C:OP1	26:BA:2574:G:OP1	2.02	0.76
26:BA:2712:U:C3'	26:BA:712(A):A:C5'	2.64	0.76
26:BA:2713:A:H5''	26:BA:2714:G:OP2	1.84	0.76
26:BA:2720:U:OP1	26:BA:2720:U:C4'	2.34	0.76
26:BA:2:G:C2	26:BA:2902:C:O2	2.38	0.76
26:BA:380:U:HO2'	49:B4:15:ILE:CB	1.99	0.76
26:BA:247:G:H4'	26:BA:386:G:N3	2.01	0.76
26:BA:458:G:H5'	52:B7:39:ARG:CD	2.15	0.76
26:BA:687:C:O2	26:BA:787:U:H5''	1.85	0.76
26:BA:747:U:O2	26:BA:2015:A:H2	1.68	0.76
27:BD:234:HIS:O	27:BD:237:GLY:HA3	1.85	0.76
27:BD:92:LEU:HD12	27:BD:102:TYR:CD1	2.19	0.76
28:BE:269:ILE:HA	28:BE:297:LYS:HE2	1.66	0.76
29:BF:157:LEU:C	29:BF:159:ALA:N	2.37	0.76
29:BF:209:GLY:O	29:BF:210:ALA:O	2.02	0.76
29:BF:224:ALA:HB3	29:BF:225:PRO:CD	2.16	0.76
29:BF:87:ARG:O	29:BF:88:SER:OG	2.02	0.76
29:BF:47:GLY:HA3	29:BF:92:PRO:HG2	1.66	0.76
31:BH:166:GLU:OE2	31:BH:166:GLU:HA	1.85	0.76
32:BI:3:VAL:HG11	32:BI:21:VAL:CG2	2.15	0.76
32:BI:98:ILE:CG2	32:BI:99:ALA:N	2.43	0.76
55:BK:37:GLU:CG	55:BK:41:ARG:NH1	2.35	0.76
36:BQ:129:ASP:CG	36:BQ:132:VAL:HG23	2.06	0.76
25:BB:115:G:H5'	37:BS:59:ALA:HB2	1.67	0.76
45:BV:40:VAL:HA	45:BV:51:ALA:CA	2.16	0.76
45:BV:49:GLU:C	45:BV:53:LYS:HD2	2.06	0.76
26:BA:338:G:C8	41:BY:21:LYS:HB3	2.20	0.76
41:BY:32:ARG:O	41:BY:35:TYR:N	2.17	0.76
7:AD:21:LEU:HD11	7:AD:67:ILE:HA	1.64	0.76
17:AN:40:CYS:O	17:AN:43:CYS:SG	2.44	0.76
2:AV:48:C:H2'	2:AV:48:C:O2	1.84	0.76
46:B2:23:LEU:HA	46:B2:26:GLU:OE1	1.85	0.76
46:B2:3:LEU:HB3	46:B2:8:ILE:HD11	1.66	0.76
46:B2:4:HIS:O	46:B2:8:ILE:CD1	2.33	0.76
26:BA:2392:A:OP1	53:B8:32:GLN:CD	2.24	0.76
26:BA:1078:U:C6	26:BA:1088:A:C2	2.74	0.76
26:BA:972:G:N7	26:BA:1188:U:O4	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:176:G:H3'	26:BA:177:G:C8	2.18	0.76
26:BA:1994:C:OP1	28:BE:227:ALA:CB	2.34	0.76
26:BA:2051:A:C4'	28:BE:238:LEU:CD2	2.63	0.76
26:BA:2324:C:N3	26:BA:2331:G:N2	2.30	0.76
26:BA:2370:G:H2'	26:BA:2371:G:H8	1.49	0.76
26:BA:2393:A:C2'	26:BA:2394:C:O5'	2.33	0.76
26:BA:2475:C:O2	26:BA:2529:G:N2	2.18	0.76
26:BA:2539:C:C2'	26:BA:2540:C:O5'	2.32	0.76
26:BA:1638:C:C3'	26:BA:2709:G:H22	1.99	0.76
26:BA:2848:G:N2	26:BA:2849:U:O2	2.14	0.76
26:BA:592:G:C2	53:B8:3:LYS:NZ	2.54	0.76
26:BA:910:A:C8	36:BQ:17:ARG:NH2	2.53	0.76
26:BA:993:G:O4'	45:BV:90:PHE:CE2	2.25	0.76
27:BD:143:ILE:HG21	27:BD:153:LEU:HB2	1.67	0.76
27:BD:167:GLU:N	27:BD:170:TYR:O	2.18	0.76
28:BE:177:ALA:O	28:BE:180:ILE:N	2.19	0.76
28:BE:225:LYS:C	28:BE:229:GLN:HE21	1.74	0.76
29:BF:237:GLU:O	29:BF:238:SER:C	2.24	0.76
30:BG:156:ARG:HG2	30:BG:156:ARG:O	1.83	0.76
31:BH:35:THR:O	31:BH:36:PHE:CG	2.39	0.76
33:BN:46:ILE:CG1	33:BN:132:LEU:HD13	2.14	0.76
35:BP:110:GLY:HA2	35:BP:129:ALA:HB2	1.65	0.76
36:BQ:91:HIS:N	36:BQ:111:THR:HG23	2.00	0.76
37:BS:31:LYS:HD3	37:BS:99:GLU:HB2	1.66	0.76
44:BU:94:VAL:CG1	45:BV:4:ILE:HD13	2.15	0.76
41:BY:34:GLU:O	41:BY:35:TYR:CD2	2.38	0.76
41:BY:74:VAL:HB	41:BY:77:VAL:CG2	2.14	0.76
42:BZ:131:PRO:O	42:BZ:133:GLU:N	2.19	0.76
42:BZ:172:LEU:HD21	42:BZ:173:PRO:HG2	1.68	0.76
1:AA:1340:A:C4'	2:AV:31:A:O2'	2.33	0.76
3:AW:7:U:O2	3:AW:49:C:C5	2.39	0.76
48:B0:67:VAL:HG11	48:B0:74:LYS:HG2	0.79	0.76
46:B2:52:ALA:C	46:B2:56:ILE:HG12	2.06	0.76
49:B4:18:GLY:N	49:B4:33:VAL:CG2	2.49	0.76
49:B4:6:HIS:CE1	49:B4:56:VAL:H	2.03	0.76
53:B8:19:THR:CB	53:B8:21:LYS:HZ2	1.98	0.76
26:BA:1913:A:N1	26:BA:1916:A:H2'	2.00	0.76
26:BA:2199:A:C3'	26:BA:2205:C:H6	1.99	0.76
26:BA:2287:A:O2'	26:BA:2288:A:H5'	1.86	0.76
26:BA:2343:C:C5'	26:BA:2374:C:OP1	2.31	0.76
26:BA:2438:U:H4'	26:BA:2440:C:OP1	1.85	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2468:G:C6	26:BA:2481:G:N1	2.54	0.76
26:BA:2519:U:N3	26:BA:2542:A:C5	2.53	0.76
26:BA:2579:C:C5	26:BA:2579:C:H5''	2.15	0.76
26:BA:2581:G:H2'	26:BA:2581:G:N3	1.99	0.76
26:BA:2604:U:O2	26:BA:2604:U:H2'	1.85	0.76
26:BA:2626:C:H3'	26:BA:2626:C:C6	2.21	0.76
26:BA:631:A:H2	26:BA:2415:G:C2	2.03	0.76
26:BA:957:A:OP1	36:BQ:95:GLU:HB3	1.84	0.76
26:BA:994:C:O2	44:BU:53:LYS:CG	2.33	0.76
26:BA:998:C:H5''	44:BU:84:LYS:HZ3	1.51	0.76
28:BE:109:ASP:CA	28:BE:112:LEU:HB2	1.99	0.76
28:BE:217:TRP:CE3	28:BE:251:PRO:HG3	2.21	0.76
29:BF:89:ALA:HB1	29:BF:90:HIS:NE2	2.00	0.76
29:BF:46:TYR:C	29:BF:92:PRO:HB2	2.05	0.76
30:BG:94:ALA:C	30:BG:95:THR:HG1	1.89	0.76
31:BH:121:GLU:HG2	31:BH:133:LYS:O	1.86	0.76
32:BI:92:SER:CB	32:BI:122:ARG:NH1	2.45	0.76
33:BN:20:GLY:C	33:BN:22:VAL:N	2.32	0.76
34:BO:31:ARG:HB2	34:BO:32:TYR:HE1	1.50	0.76
34:BO:35:ILE:CD1	34:BO:35:ILE:N	2.37	0.76
43:BR:115:GLU:OE1	50:B5:56:GLN:NE2	2.17	0.76
43:BR:84:ALA:CB	43:BR:85:PRO:CD	2.58	0.76
25:BB:47:C:O3'	37:BS:107:ASN:CG	2.23	0.76
41:BY:15:PRO:HB2	41:BY:18:GLU:HG3	1.66	0.76
42:BZ:100:THR:HG22	42:BZ:137:ASP:CG	2.06	0.76
42:BZ:107:GLU:O	42:BZ:109:GLN:N	2.16	0.76
42:BZ:79:ILE:O	42:BZ:80:HIS:CG	2.39	0.76
1:AA:450:G:H21	19:AP:13:HIS:CE1	2.03	0.76
1:AA:768:A:OP1	1:AA:804:U:H5''	1.86	0.76
47:B3:4:LEU:N	47:B3:37:LEU:O	2.18	0.76
52:B7:15:THR:OG1	52:B7:16:HIS:N	2.17	0.76
52:B7:17:GLY:HA2	52:B7:44:VAL:HG22	0.77	0.76
26:BA:1214:A:H2'	26:BA:1215:G:H8	1.46	0.76
26:BA:1567:A:H4'	26:BA:1568:G:C2	2.21	0.76
26:BA:1638:C:H4'	26:BA:2710:C:O2	1.86	0.76
26:BA:2265:U:O2'	26:BA:2266:A:OP1	2.03	0.76
26:BA:2575:C:OP1	28:BE:241:TRP:CD1	2.39	0.76
26:BA:2638:G:O2'	26:BA:2639:A:H8	1.68	0.76
26:BA:2731:G:N1	26:BA:2732:G:C2	2.53	0.76
26:BA:359:A:O2'	26:BA:360:G:C5	2.39	0.76
25:BB:74:U:H2'	25:BB:75:G:H8	1.51	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:194:VAL:HG23	27:BD:195:GLY:N	2.01	0.76
26:BA:673:C:O4'	29:BF:82:GLN:OE1	2.04	0.76
55:BK:28:LEU:HD11	55:BK:58:ILE:HD12	1.67	0.76
34:BO:3:GLN:HG2	34:BO:4:GLN:N	2.01	0.76
34:BO:87:ILE:HG23	34:BO:92:SER:N	2.00	0.76
36:BQ:136:TRP:HE3	36:BQ:136:TRP:HA	1.51	0.76
26:BA:911:A:C2'	36:BQ:16:ARG:HE	1.95	0.76
36:BQ:33:MET:HE1	36:BQ:34:GLY:O	1.84	0.76
44:BU:106:PHE:O	44:BU:108:ALA:N	2.18	0.76
44:BU:41:ASN:O	44:BU:42:ALA:C	2.24	0.76
41:BY:74:VAL:HG11	41:BY:77:VAL:CG2	2.14	0.76
42:BZ:64:ALA:HB3	42:BZ:85:MET:HA	0.84	0.76
42:BZ:62:PHE:CE2	42:BZ:87:THR:CG2	2.68	0.76
1:AA:1037:C:C3'	1:AA:1038:C:P	2.74	0.76
1:AA:302:G:N3	1:AA:556:C:H4'	2.00	0.76
26:BA:2355:C:C5'	48:B0:21:LEU:CD1	2.51	0.76
46:B2:49:LEU:O	46:B2:50:ARG:C	2.24	0.76
49:B4:13:LYS:O	49:B4:14:ILE:CB	2.32	0.76
26:BA:242:G:C3'	53:B8:5:LYS:HZ3	1.95	0.76
53:B8:60:LEU:HD22	53:B8:61:MET:N	2.01	0.76
53:B8:60:LEU:CD1	53:B8:64:ARG:CB	2.47	0.76
26:BA:1820:U:O2	27:BD:200:THR:HG22	1.86	0.76
26:BA:2052:G:N2	28:BE:245:ARG:CG	2.35	0.76
26:BA:2064:C:C2	26:BA:2450:A:N6	2.54	0.76
26:BA:2321:G:H2'	26:BA:2321:G:N3	2.01	0.76
26:BA:2285:C:O2	26:BA:2384:G:N2	2.19	0.76
26:BA:2246:G:N3	26:BA:2426:A:N3	2.34	0.76
26:BA:2606:C:H2'	26:BA:2607:G:O5'	1.86	0.76
26:BA:2617:C:H2'	26:BA:2618:G:O5'	1.85	0.76
26:BA:2674:G:C2'	26:BA:2675:A:H8	1.93	0.76
26:BA:2755:C:H6	26:BA:2755:C:O5'	1.59	0.76
26:BA:2858:C:H2'	26:BA:2858:C:O2	1.85	0.76
26:BA:911:A:C2	36:BQ:16:ARG:HG2	2.19	0.76
27:BD:208:GLY:C	27:BD:211:HIS:CE1	2.59	0.76
28:BE:107:GLU:CB	28:BE:110:ARG:CZ	2.60	0.76
29:BF:236:THR:O	29:BF:237:GLU:C	2.24	0.76
30:BG:103:ASN:O	30:BG:104:PHE:CG	2.38	0.76
30:BG:19:GLU:HB3	30:BG:135:VAL:HG21	1.03	0.76
32:BI:4:ILE:C	32:BI:5:PHE:CD2	2.60	0.76
55:BK:11:LEU:HD11	55:BK:28:LEU:CG	2.16	0.76
33:BN:19:MET:HB3	33:BN:46:ILE:CG1	2.16	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:122:ILE:HD12	34:BO:122:ILE:H	1.51	0.76
36:BQ:31:PHE:CZ	36:BQ:88:PHE:HD2	2.04	0.76
37:BS:36:ALA:HA	37:BS:45:ALA:CB	2.15	0.76
44:BU:20:ARG:NH1	45:BV:75:LYS:CE	2.49	0.76
1:AA:1267:C:O2'	24:AU:20:LYS:CD	2.33	0.75
1:AA:1287:A:H61	1:AA:1371:G:C4'	1.98	0.75
8:AE:51:VAL:HB	8:AE:52:PRO:HD3	1.67	0.75
48:B0:18:PRO:HB2	48:B0:36:ILE:CD1	2.16	0.75
49:B4:58:LYS:O	49:B4:61:LYS:CG	2.33	0.75
26:BA:1312:U:O2'	26:BA:1314:C:H5	1.68	0.75
26:BA:1790:C:O2	26:BA:1790:C:H2'	1.86	0.75
26:BA:2307:G:C2'	26:BA:2311:A:N6	2.49	0.75
26:BA:2744:G:C6	26:BA:2745:C:C4	2.74	0.75
26:BA:865:C:O2'	26:BA:866:A:N7	2.18	0.75
28:BE:211:GLN:OE1	28:BE:212:GLY:N	2.16	0.75
55:BK:102:ARG:O	55:BK:105:ILE:N	2.19	0.75
55:BK:122:GLU:CB	55:BK:126:LYS:HE3	2.15	0.75
33:BN:65:ASN:CG	33:BN:69:TYR:CD1	2.60	0.75
33:BN:77:GLY:O	33:BN:78:ILE:C	2.22	0.75
37:BS:122:ALA:O	37:BS:125:ALA:CB	2.32	0.75
44:BU:12:ARG:O	44:BU:13:ARG:C	2.23	0.75
44:BU:17:VAL:HA	44:BU:20:ARG:HG3	1.67	0.75
39:BW:50:VAL:HG21	39:BW:103:ILE:HG21	1.68	0.75
41:BY:102:ASP:O	41:BY:103:LEU:HD23	1.86	0.75
42:BZ:25:ASN:HA	42:BZ:84:TYR:CE1	2.21	0.75
42:BZ:67:LYS:HD2	42:BZ:93:GLU:OE2	1.84	0.75
1:AA:1328:C:P	16:AM:28:ALA:CB	2.75	0.75
1:AA:540:G:O2'	7:AD:42:GLN:NE2	2.20	0.75
7:AD:14:ARG:CD	7:AD:66:ARG:HH12	1.98	0.75
46:B2:48:GLU:O	46:B2:50:ARG:N	2.19	0.75
46:B2:50:ARG:O	46:B2:53:ILE:HB	1.86	0.75
47:B3:39:ASP:HA	47:B3:44:ARG:NH2	2.02	0.75
26:BA:1773:A:OP1	26:BA:1828:G:H3'	1.84	0.75
2:AV:25:C:C4'	26:BA:1923:U:P	2.74	0.75
26:BA:2061:G:C1'	26:BA:2503:A:C2	2.69	0.75
26:BA:2185:C:H2'	26:BA:2186:G:C8	2.21	0.75
26:BA:2208:U:H3	26:BA:2216:G:H1	0.80	0.75
26:BA:2327:A:O2'	26:BA:2328:A:O4'	2.01	0.75
26:BA:2366:A:N7	26:BA:2367:G:N7	2.33	0.75
26:BA:2548:G:C8	26:BA:2548:G:H3'	2.20	0.75
26:BA:2507:C:O2	26:BA:2583:G:N3	2.19	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2586:C:H2'	26:BA:2587:A:H5'	1.68	0.75
26:BA:2631:G:H2'	26:BA:2632:A:O5'	1.85	0.75
26:BA:2691:C:C2'	26:BA:2692:C:H5'	2.16	0.75
30:BG:21:VAL:HG13	30:BG:132:VAL:CA	2.15	0.75
31:BH:116:PRO:HB2	31:BH:120:LEU:O	1.86	0.75
31:BH:121:GLU:OE2	31:BH:134:GLY:CA	2.24	0.75
31:BH:15:THR:CG2	31:BH:26:LYS:CA	2.63	0.75
26:BA:2748:A:C2'	31:BH:62:ALA:HB1	2.16	0.75
32:BI:108:LEU:CD2	32:BI:109:LYS:O	2.34	0.75
34:BO:21:VAL:CA	34:BO:41:ALA:HB2	2.15	0.75
35:BP:66:VAL:HB	35:BP:110:GLY:O	1.85	0.75
35:BP:96:VAL:HG23	35:BP:101:ASP:H	1.49	0.75
36:BQ:31:PHE:C	36:BQ:85:ILE:HD11	2.05	0.75
43:BR:46:GLY:O	43:BR:50:HIS:N	2.19	0.75
43:BR:79:LEU:HD22	43:BR:80:PHE:CA	2.17	0.75
44:BU:113:SER:C	44:BU:115:ASN:N	2.39	0.75
39:BW:50:VAL:HG12	39:BW:50:VAL:O	1.86	0.75
40:BX:33:SER:O	40:BX:34:LYS:C	2.23	0.75
40:BX:24:LEU:CD1	40:BX:68:LEU:CD2	2.64	0.75
41:BY:73:HIS:NE2	41:BY:89:ARG:O	2.19	0.75
1:AA:1259:C:O2'	1:AA:1284:C:H1'	1.84	0.75
1:AA:406:G:H21	7:AD:119:GLN:NE2	1.83	0.75
1:AA:673:G:H2'	1:AA:674:G:C8	2.21	0.75
1:AA:891:U:H2'	1:AA:892:A:C8	2.21	0.75
20:AQ:21:VAL:HG12	20:AQ:23:VAL:HG23	1.67	0.75
46:B2:17:GLU:O	46:B2:18:ALA:C	2.24	0.75
49:B4:17:GLN:CA	49:B4:33:VAL:HB	2.17	0.75
26:BA:397:G:H5'	49:B4:40:HIS:O	1.86	0.75
26:BA:1518:C:C3'	26:BA:1519:G:H4'	2.15	0.75
26:BA:1534:G:N2	26:BA:1538:G:N3	2.34	0.75
26:BA:2329:G:N2	26:BA:2386:C:N3	2.33	0.75
26:BA:2491:U:HO2'	26:BA:2492:U:H5'	0.93	0.75
26:BA:2735:G:N1	26:BA:2770:G:N2	2.34	0.75
26:BA:321:G:H2'	26:BA:341:G:H4'	1.69	0.75
26:BA:574:C:H41	26:BA:2054:A:H5''	1.50	0.75
26:BA:803:U:C2'	26:BA:804:A:H5'	2.16	0.75
27:BD:77:VAL:O	27:BD:77:VAL:HG12	1.85	0.75
26:BA:2575:C:H5'	28:BE:241:TRP:NE1	2.00	0.75
31:BH:159:LYS:N	31:BH:162:ARG:NH2	2.29	0.75
31:BH:75:VAL:O	31:BH:78:VAL:N	2.18	0.75
32:BI:28:ASN:HA	32:BI:32:LYS:HG2	1.68	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:73:VAL:CG1	35:BP:76:LEU:HD23	2.15	0.75
38:BT:21:PHE:O	38:BT:22:VAL:HG13	1.83	0.75
45:BV:91:THR:O	45:BV:92:ALA:HB3	1.63	0.75
39:BW:36:LEU:HA	39:BW:39:THR:CG2	2.16	0.75
41:BY:57:GLY:HA2	41:BY:97:ARG:NH2	2.00	0.75
41:BY:27:LEU:HD23	41:BY:98:VAL:HG12	1.69	0.75
1:AA:1286:A:N6	1:AA:1355:G:P	2.59	0.75
20:AQ:44:ALA:CB	20:AQ:59:ILE:HD11	2.16	0.75
1:AA:958:A:N9	22:AS:55:LYS:HD2	2.00	0.75
2:AV:40:C:C2'	2:AV:41:U:H5''	2.15	0.75
3:AW:7:U:C2	3:AW:49:C:C5	2.75	0.75
46:B2:13:PRO:CD	46:B2:16:ARG:NH1	2.45	0.75
53:B8:25:PHE:O	53:B8:26:LYS:C	2.23	0.75
26:BA:1287:A:H8	43:BR:104:ARG:CD	2.00	0.75
26:BA:1301:A:H62	26:BA:1303:G:C1'	1.98	0.75
26:BA:1917:U:C3'	26:BA:1918:A:H8	1.93	0.75
26:BA:1953:A:N6	26:BA:2550:G:C4'	2.49	0.75
26:BA:2188:C:C5	26:BA:2189:U:O4	2.39	0.75
26:BA:2325:G:C6	26:BA:2326:C:H5	2.04	0.75
26:BA:2419:U:OP1	53:B8:41:ILE:HD11	1.87	0.75
26:BA:2482:G:C6	26:BA:2483:C:C6	2.74	0.75
26:BA:2512:C:H4'	28:BE:235:ILE:HD12	1.69	0.75
26:BA:2516:G:C2	26:BA:2569:G:N3	2.55	0.75
26:BA:746:A:O5'	26:BA:2612:C:C5	2.40	0.75
26:BA:2821:A:C2	26:BA:2822:G:C8	2.74	0.75
27:BD:135:PRO:HG2	27:BD:138:THR:HG21	0.78	0.75
27:BD:107:LYS:HB2	27:BD:195:GLY:HA2	1.69	0.75
27:BD:67:LYS:N	27:BD:67:LYS:HD3	2.00	0.75
27:BD:80:ILE:CG1	27:BD:82:TYR:HE1	1.99	0.75
28:BE:44:TYR:CE1	28:BE:308:VAL:CB	2.60	0.75
28:BE:63:GLU:O	28:BE:67:THR:HA	1.84	0.75
29:BF:20:ASP:O	29:BF:23:GLU:HB2	1.86	0.75
29:BF:220:THR:CB	29:BF:224:ALA:HB2	2.16	0.75
29:BF:220:THR:HB	29:BF:224:ALA:CB	2.16	0.75
29:BF:220:THR:HB	29:BF:224:ALA:HB2	1.67	0.75
29:BF:167:ASP:HB3	29:BF:232:LEU:N	2.02	0.75
29:BF:87:ARG:O	29:BF:88:SER:CB	2.35	0.75
16:AM:3:ARG:HH12	30:BG:90:LEU:CD1	2.00	0.75
31:BH:120:LEU:HD23	31:BH:120:LEU:N	2.01	0.75
26:BA:2745:C:C2	31:BH:142:GLU:OE2	2.39	0.75
31:BH:23:VAL:CG1	31:BH:74:MET:CE	2.64	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:142:LEU:O	35:BP:145:LEU:HD13	1.87	0.75
36:BQ:136:TRP:O	36:BQ:139:ALA:CA	2.34	0.75
36:BQ:33:MET:CB	36:BQ:83:PHE:HB2	2.17	0.75
37:BS:27:LEU:HD13	37:BS:28:LYS:N	2.01	0.75
34:BO:79:PHE:CA	38:BT:22:VAL:CG2	2.64	0.75
45:BV:39:PHE:CD2	45:BV:40:VAL:N	2.54	0.75
40:BX:4:VAL:CB	46:B2:24:LYS:HZ2	2.00	0.75
42:BZ:10:PRO:O	42:BZ:14:LEU:CB	2.34	0.75
1:AA:1269:A:C2	1:AA:1326:C:O2	2.40	0.75
26:BA:2261:C:C3'	48:B0:14:ARG:HH21	2.00	0.75
26:BA:2261:C:H3'	48:B0:14:ARG:HH21	1.50	0.75
48:B0:50:GLY:C	48:B0:52:GLY:H	1.88	0.75
46:B2:62:GLU:O	46:B2:63:GLU:C	2.24	0.75
50:B5:46:CYS:C	50:B5:48:ASN:H	1.88	0.75
26:BA:2400:G:O3'	51:B6:20:PHE:CE1	2.39	0.75
26:BA:1287:A:H5'	43:BR:104:ARG:HG3	1.68	0.75
26:BA:1418:G:O6	26:BA:1577:C:H5''	1.86	0.75
26:BA:2211:G:H2'	26:BA:2211:G:N3	2.00	0.75
26:BA:2298:A:C4	26:BA:2321:G:C2	2.75	0.75
26:BA:2346:A:H1'	26:BA:2383:G:C8	2.21	0.75
26:BA:2488:A:H3'	26:BA:2488:A:C8	2.20	0.75
26:BA:2526:G:H2'	26:BA:2527:C:O5'	1.87	0.75
26:BA:2526:G:O2'	26:BA:2527:C:H5'	1.86	0.75
26:BA:2530:A:C3'	26:BA:2531:A:H5''	2.17	0.75
26:BA:2532:G:C8	26:BA:2532:G:O5'	2.39	0.75
26:BA:2658:C:C2'	26:BA:2659:G:O5'	2.34	0.75
26:BA:2722:G:N1	26:BA:2723:C:N3	2.31	0.75
26:BA:2825:C:C5	26:BA:2825:C:O5'	2.40	0.75
26:BA:527:C:H5	26:BA:2779:U:H3'	1.48	0.75
27:BD:155:ARG:C	27:BD:157:ALA:N	2.38	0.75
27:BD:230:ASN:O	27:BD:231:ALA:HB2	1.85	0.75
30:BG:151:ILE:CD1	30:BG:156:ARG:HH22	1.99	0.75
30:BG:44:ILE:HG22	30:BG:83:PHE:CE2	2.12	0.75
31:BH:102:LEU:CD2	31:BH:102:LEU:H	1.98	0.75
31:BH:128:THR:HG23	31:BH:129:LYS:H	1.52	0.75
55:BK:132:ALA:O	55:BK:137:ILE:O	2.04	0.75
33:BN:137:GLU:N	33:BN:141:ALA:H	1.83	0.75
34:BO:1:MET:CB	34:BO:2:ILE:CD1	2.64	0.75
35:BP:69:ILE:CA	35:BP:73:VAL:CG2	2.65	0.75
43:BR:32:GLY:O	43:BR:33:ARG:HB3	1.83	0.75
37:BS:32:PRO:HG3	37:BS:100:ALA:CB	2.16	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:18:C:O3'	44:BU:23:GLY:HA3	1.85	0.75
45:BV:46:VAL:HG12	45:BV:46:VAL:O	1.86	0.75
41:BY:43:ASN:ND2	41:BY:112:LEU:HD21	1.98	0.75
1:AA:361(A):C:H2'	1:AA:1362:C:H5''	1.68	0.75
8:AE:95:ALA:HB3	8:AE:96:PRO:HD3	1.68	0.75
48:B0:20:TYR:O	48:B0:21:LEU:O	2.04	0.75
47:B3:30:ARG:NH1	47:B3:30:ARG:CG	2.38	0.75
49:B4:41:PRO:CB	49:B4:57:ASP:HB3	2.17	0.75
26:BA:1416:G:N2	26:BA:1582:C:H42	1.83	0.75
26:BA:2206:C:HO2'	26:BA:2207:C:C4'	1.99	0.75
26:BA:2219:G:O2'	26:BA:2224:G:H5'	1.71	0.75
26:BA:2232:U:C2'	26:BA:2233:U:C5'	2.61	0.75
2:AV:74:C:N4	26:BA:2253:G:N1	2.15	0.75
26:BA:2495:G:H4'	36:BQ:101:MET:HB3	1.67	0.75
26:BA:2523:G:O4'	26:BA:2765:A:C8	2.40	0.75
26:BA:2603:G:C5	26:BA:2604:U:C5	2.75	0.75
26:BA:2626:C:C3'	26:BA:2626:C:C6	2.70	0.75
26:BA:2661:G:C6	26:BA:2662:A:N6	2.53	0.75
26:BA:2793:G:O6	26:BA:2794:C:N4	2.20	0.75
26:BA:770:G:H5'	52:B7:10:ARG:HH11	1.52	0.75
29:BF:103:ASN:O	29:BF:107:ARG:HG3	1.85	0.75
26:BA:2316:C:O3'	30:BG:151:ILE:HG13	1.86	0.75
30:BG:24:HIS:C	30:BG:25:MET:HG2	2.04	0.75
30:BG:56:ARG:HA	30:BG:63:ILE:O	1.86	0.75
55:BK:123:ALA:HA	55:BK:126:LYS:HD2	1.68	0.75
55:BK:132:ALA:CB	55:BK:137:ILE:HB	2.15	0.75
55:BK:38:PHE:CE2	55:BK:67:THR:HG22	2.20	0.75
33:BN:19:MET:CA	33:BN:19:MET:HE3	2.17	0.75
34:BO:17:ARG:NH2	34:BO:47:THR:CA	2.49	0.75
35:BP:64:ILE:CB	35:BP:107:LYS:O	2.23	0.75
37:BS:15:GLU:O	37:BS:16:ALA:CB	2.31	0.75
44:BU:94:VAL:O	44:BU:98:ILE:HD11	0.94	0.75
41:BY:78:THR:H	41:BY:89:ARG:CZ	2.00	0.75
41:BY:81:LYS:CG	41:BY:82:THR:H	1.96	0.75
42:BZ:3:LEU:CB	42:BZ:34:LEU:HA	2.05	0.75
20:AQ:87:LYS:O	20:AQ:91:ARG:HB3	1.87	0.75
1:AA:1325:C:P	24:AU:15:ARG:CZ	2.75	0.75
1:AA:1326:C:OP2	24:AU:6:ARG:HD2	1.86	0.75
2:AV:25:C:O4'	26:BA:1923:U:P	2.45	0.75
46:B2:59:ILE:O	46:B2:60:GLN:C	2.25	0.75
49:B4:68:ARG:CD	49:B4:72:LYS:CG	2.57	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2206:C:O2'	26:BA:2207:C:C4'	2.34	0.75
26:BA:2302:G:O2'	26:BA:2303:G:O5'	2.02	0.75
26:BA:2349:G:OP2	53:B8:42:ARG:NH2	2.20	0.75
26:BA:2666:C:C5	26:BA:2667:C:C6	2.74	0.75
26:BA:2665:A:O2'	26:BA:2666:C:O4'	2.03	0.75
26:BA:2716:U:N3	26:BA:2717:G:N7	2.33	0.75
26:BA:2734:A:C8	26:BA:2734:A:C5'	2.69	0.75
26:BA:2741:A:C2'	26:BA:2742:C:H6	1.95	0.75
26:BA:2635:C:N3	26:BA:2783:G:N1	2.34	0.75
26:BA:2852:G:N3	26:BA:2853:C:C2	2.55	0.75
26:BA:2865:U:C6	26:BA:2866:U:C5	2.75	0.75
26:BA:332:A:H2'	26:BA:334:C:OP2	1.86	0.75
26:BA:592:G:H21	53:B8:3:LYS:CE	2.00	0.75
26:BA:746:A:OP1	26:BA:2612:C:C2	2.40	0.75
26:BA:932:G:H5''	47:B3:29:ARG:NH2	1.91	0.75
26:BA:983:A:C8	26:BA:984:A:H1'	2.22	0.75
27:BD:222:PRO:O	27:BD:224:VAL:CG2	2.25	0.75
29:BF:167:ASP:C	29:BF:168:ARG:HG3	2.07	0.75
30:BG:103:ASN:C	30:BG:104:PHE:CG	2.59	0.75
30:BG:145:ASP:CB	37:BS:15:GLU:CA	2.56	0.75
30:BG:19:GLU:OE1	30:BG:135:VAL:CB	2.34	0.75
30:BG:76:ARG:CB	30:BG:77:ASP:OD1	2.35	0.75
32:BI:12:LYS:O	32:BI:14:LYS:HG3	1.86	0.75
26:BA:1081:U:P	55:BK:126:LYS:HD3	2.26	0.75
55:BK:109:ALA:CB	55:BK:128:ILE:HD11	2.13	0.75
55:BK:93:LYS:HA	55:BK:96:ILE:HG13	1.69	0.75
34:BO:10:VAL:HG21	34:BO:16:ALA:CB	2.12	0.75
36:BQ:132:VAL:O	36:BQ:135:ALA:HB3	1.86	0.75
36:BQ:42:TYR:HD2	42:BZ:119:ASN:HA	1.49	0.75
43:BR:37:THR:HA	43:BR:111:LEU:CA	2.15	0.75
43:BR:62:ALA:CB	43:BR:80:PHE:HZ	1.99	0.75
38:BT:45:GLU:O	38:BT:48:ASN:CG	2.25	0.75
39:BW:68:ARG:O	39:BW:110:LYS:HB2	1.86	0.75
1:AA:129(A):G:O2'	1:AA:190(E):U:H3'	1.86	0.75
1:AA:693:G:H2'	1:AA:694:A:C8	2.22	0.75
20:AQ:54:GLY:HA2	20:AQ:85:VAL:HG21	1.68	0.75
47:B3:23:LEU:O	47:B3:28:LEU:CD1	2.35	0.75
47:B3:48:GLU:HG2	47:B3:49:LYS:H	1.51	0.75
49:B4:6:HIS:CE1	49:B4:55:ARG:HB2	2.21	0.75
51:B6:8:ILE:HA	51:B6:29:ARG:CZ	2.17	0.75
53:B8:23:MET:CE	53:B8:48:PHE:CA	2.59	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:B9:29:ASN:HD22	54:B9:32:HIS:HE1	1.32	0.75
26:BA:1022:G:O6	33:BN:47:THR:HG21	1.87	0.75
26:BA:1057:A:N7	26:BA:1087:G:P	2.60	0.75
26:BA:974(A):C:O4'	26:BA:1186:G:N2	2.20	0.75
26:BA:1140:C:H4'	26:BA:142(A):A:C6	2.22	0.75
26:BA:1651:G:H1	26:BA:2006:C:H42	1.33	0.75
26:BA:688:U:H5'	26:BA:1780:A:N1	2.01	0.75
26:BA:2320:A:N1	37:BS:13:ARG:CG	2.49	0.75
26:BA:2403:C:C2'	26:BA:2403:C:O2	2.33	0.75
26:BA:2482:G:C2'	26:BA:2483:C:H5''	2.14	0.75
26:BA:2485:G:N2	26:BA:2486:G:H1'	2.01	0.75
26:BA:2754:U:C2'	26:BA:2756:U:P	2.72	0.75
26:BA:2828:C:N3	26:BA:2829:C:C4	2.55	0.75
26:BA:2881:C:H2'	26:BA:2882:A:C8	2.21	0.75
26:BA:300:A:O2'	26:BA:318:C:H1'	1.87	0.75
26:BA:806:C:O2'	26:BA:2445:G:H4'	1.87	0.75
28:BE:222:ARG:HG2	28:BE:232:ARG:HA	1.69	0.75
26:BA:606:U:H5'	29:BF:103:ASN:CG	2.07	0.75
30:BG:57:THR:H	30:BG:63:ILE:HA	1.50	0.75
31:BH:82:TYR:CZ	31:BH:137:LYS:HG3	2.20	0.75
31:BH:86:LEU:HD22	31:BH:87:GLU:N	2.01	0.75
55:BK:104:GLN:O	55:BK:108:ILE:HG13	1.87	0.75
34:BO:25:LEU:HD12	34:BO:38:VAL:CB	2.16	0.75
34:BO:66:LYS:HD2	34:BO:67:ARG:N	2.00	0.75
26:BA:245:G:P	35:BP:53:ARG:NH1	2.59	0.75
36:BQ:33:MET:HG3	36:BQ:83:PHE:CG	2.21	0.75
37:BS:30:GLY:O	37:BS:31:LYS:HE2	1.86	0.75
39:BW:15:ARG:O	39:BW:18:ARG:N	2.20	0.75
39:BW:24:ILE:HG22	39:BW:35:ILE:CB	2.16	0.75
41:BY:50:VAL:CG1	41:BY:51:LEU:N	2.33	0.75
42:BZ:115:ILE:O	42:BZ:169:VAL:HG13	1.87	0.75
42:BZ:19:ILE:CB	42:BZ:39:PHE:CE1	2.66	0.75
1:AA:60:A:H62	1:AA:110:C:N4	1.85	0.75
7:AD:3:ARG:CG	7:AD:118:ARG:HH11	1.99	0.75
2:AV:66:A:H2'	2:AV:67:A:C8	2.22	0.75
3:AW:9:A:H1'	3:AW:45:G:C2'	2.17	0.75
26:BA:1022:G:O6	33:BN:47:THR:CG2	2.34	0.75
26:BA:1495:A:H2'	26:BA:1496:A:N7	2.02	0.75
26:BA:2100:G:C6	26:BA:2190:G:C6	2.74	0.75
26:BA:2250:G:H5''	36:BQ:102:ARG:HB3	1.67	0.75
26:BA:2330:G:O2'	26:BA:2331:G:H5'	1.85	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:248:G:H21	26:BA:2431:U:C4'	1.98	0.75
26:BA:2543:G:N9	26:BA:2544:G:N7	2.35	0.75
26:BA:2581:G:C2	26:BA:2610:C:C5	2.74	0.75
26:BA:1966:A:C2	26:BA:2593:U:C4'	2.70	0.75
26:BA:2615:U:C2'	26:BA:2616:C:O5'	2.33	0.75
26:BA:2626:C:H6	26:BA:2626:C:O5'	1.63	0.75
26:BA:2633:G:H1	26:BA:2785:C:N4	1.82	0.75
26:BA:2671:A:H2'	26:BA:2672:G:H8	1.52	0.75
26:BA:387:U:H4'	26:BA:388:G:O4'	1.87	0.75
26:BA:510:C:P	26:BA:512:G:H1	2.09	0.75
26:BA:882:G:H1	26:BA:894:C:H42	1.34	0.75
26:BA:910:A:N7	36:BQ:12:PRO:O	2.20	0.75
28:BE:235:ILE:HG23	28:BE:236:GLY:H	1.51	0.75
28:BE:200:ASP:C	28:BE:266:LYS:HD2	2.07	0.75
28:BE:76:PRO:HB2	28:BE:77:PRO:HD2	1.63	0.75
29:BF:22:PHE:HZ	29:BF:115:LEU:CD1	1.99	0.75
31:BH:41:THR:HG22	31:BH:52:THR:CB	2.17	0.75
32:BI:31:PHE:CZ	32:BI:36:ALA:HB3	2.21	0.75
32:BI:92:SER:HA	32:BI:122:ARG:CG	2.08	0.75
55:BK:79:LEU:HD21	55:BK:137:ILE:HG21	1.69	0.75
33:BN:103:VAL:HG12	33:BN:104:TYR:N	2.01	0.75
33:BN:108:PRO:HG2	33:BN:109:TYR:CD1	2.21	0.75
33:BN:87:LEU:CB	33:BN:88:PRO:HD2	2.16	0.75
34:BO:64:ARG:CD	34:BO:81:GLU:HB3	2.17	0.75
44:BU:52:ASN:O	44:BU:53:LYS:C	2.24	0.75
44:BU:74:MET:HE1	44:BU:78:THR:CG2	1.97	0.75
26:BA:974:G:N7	45:BV:80:TYR:CG	2.54	0.75
42:BZ:116:VAL:CB	42:BZ:169:VAL:HG22	2.16	0.75
1:AA:944:G:O6	1:AA:1337:G:C8	2.35	0.74
5:AB:163:PHE:HA	5:AB:185:ILE:O	1.87	0.74
1:AA:1221:G:O2'	22:AS:77:THR:CG2	2.35	0.74
47:B3:37:LEU:HD13	47:B3:43:ILE:HG21	1.66	0.74
47:B3:44:ARG:O	47:B3:48:GLU:OE1	2.05	0.74
52:B7:10:ARG:O	52:B7:11:LYS:O	2.05	0.74
26:BA:1944:U:H1'	26:BA:1955:U:C1'	2.16	0.74
26:BA:2414:G:N3	26:BA:2415:G:H8	1.85	0.74
26:BA:2258:C:C6	26:BA:2426:A:H4'	2.22	0.74
26:BA:2430:A:C2'	26:BA:2431:U:H5''	2.16	0.74
26:BA:2512:C:H5''	28:BE:219:VAL:CG1	2.17	0.74
26:BA:2567:G:C4	26:BA:2568:C:C5	2.67	0.74
26:BA:2576:G:H3'	26:BA:2576:G:P	2.27	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2604:U:O2	26:BA:2605:U:C5	2.40	0.74
26:BA:2633:G:C4	26:BA:2634:G:C8	2.75	0.74
26:BA:2564:A:N1	26:BA:2647:U:H4'	2.02	0.74
26:BA:2680:C:C4'	28:BE:300:VAL:HA	2.17	0.74
26:BA:269:U:H5	26:BA:270(Z):U:P	2.10	0.74
26:BA:2641:G:O6	26:BA:2773:C:N3	2.20	0.74
26:BA:2783:G:H2'	26:BA:2784:C:H6	1.50	0.74
26:BA:2813:A:C8	26:BA:2814:C:H5	2.04	0.74
26:BA:2826:A:N7	26:BA:2827:C:C5	2.46	0.74
26:BA:2629:A:N6	26:BA:2895:U:O2	2.20	0.74
26:BA:475:U:H4'	26:BA:510:C:H5'	1.69	0.74
26:BA:715:G:H2'	26:BA:716:A:C8	2.22	0.74
27:BD:123:ILE:O	27:BD:125:ILE:N	2.20	0.74
28:BE:200:ASP:O	28:BE:311:PHE:CA	2.34	0.74
28:BE:222:ARG:CD	28:BE:222:ARG:H	1.96	0.74
29:BF:81:PRO:CA	29:BF:87:ARG:CG	2.26	0.74
31:BH:123:GLU:OE2	31:BH:123:GLU:N	2.20	0.74
31:BH:15:THR:HG23	31:BH:26:LYS:HB2	1.63	0.74
55:BK:38:PHE:HD2	55:BK:67:THR:HG22	1.47	0.74
33:BN:65:ASN:CB	33:BN:69:TYR:CE1	2.69	0.74
33:BN:83:ILE:O	33:BN:85:GLY:N	2.20	0.74
34:BO:105:GLU:O	34:BO:106:LEU:C	2.26	0.74
36:BQ:72:VAL:CG2	36:BQ:135:ALA:CB	2.65	0.74
36:BQ:27:GLY:O	36:BQ:28:ILE:HG12	1.87	0.74
36:BQ:67:ALA:HB2	36:BQ:70:ARG:HH11	0.94	0.74
37:BS:60:SER:HA	37:BS:91:ARG:HD3	1.68	0.74
45:BV:69:ILE:CG2	45:BV:88:GLN:CB	2.65	0.74
39:BW:32:ALA:O	39:BW:34:ASN:N	2.20	0.74
41:BY:50:VAL:C	41:BY:51:LEU:HD13	2.07	0.74
41:BY:70:ALA:O	41:BY:71:VAL:HG23	1.87	0.74
42:BZ:154:LEU:C	42:BZ:154:LEU:HD23	2.07	0.74
1:AA:1327:C:H5''	24:AU:20:LYS:HE3	1.69	0.74
1:AA:665:A:H2'	1:AA:725:G:N2	2.02	0.74
1:AA:769:G:H21	1:AA:900:A:H61	1.35	0.74
7:AD:78:LEU:HD21	7:AD:139:ARG:NH2	2.01	0.74
1:AA:410:G:OP2	7:AD:25:ARG:NH2	2.19	0.74
48:B0:50:GLY:O	48:B0:52:GLY:N	2.20	0.74
26:BA:2419:U:O4	53:B8:31:HIS:CE1	2.39	0.74
26:BA:1398:C:H2'	26:BA:1399:C:H6	1.52	0.74
26:BA:1789:A:H5''	27:BD:224:VAL:CG1	2.17	0.74
26:BA:2213:U:O2	26:BA:2213:U:H2'	1.86	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2468:G:C6	26:BA:2481:G:C2	2.74	0.74
26:BA:2473:U:O2	26:BA:2473:U:C2'	2.34	0.74
27:BD:208:GLY:O	27:BD:211:HIS:CE1	2.40	0.74
29:BF:140:VAL:CG2	29:BF:234:VAL:HB	2.17	0.74
29:BF:215:ALA:CB	29:BF:241:ALA:HB3	2.09	0.74
30:BG:13:MET:O	30:BG:15:GLU:N	2.21	0.74
31:BH:147:ILE:HD12	31:BH:150:VAL:CB	2.18	0.74
32:BI:102:LEU:HD12	32:BI:103:GLN:H	0.93	0.74
32:BI:76:THR:HB	32:BI:144:HIS:CE1	2.22	0.74
55:BK:106:GLU:O	55:BK:110:LYS:CD	2.35	0.74
35:BP:66:VAL:O	35:BP:67:ARG:C	2.24	0.74
35:BP:94:ARG:O	35:BP:95:ASP:CB	2.34	0.74
36:BQ:142:LYS:C	36:BQ:142:LYS:CE	2.55	0.74
36:BQ:35:ASN:HB2	36:BQ:75:SER:HB2	1.68	0.74
36:BQ:31:PHE:HA	36:BQ:85:ILE:CD1	2.18	0.74
37:BS:110:THR:OG1	37:BS:111:PRO:CD	2.34	0.74
37:BS:46:GLN:HB3	37:BS:57:THR:CG2	2.16	0.74
45:BV:61:VAL:CG2	45:BV:98:ILE:N	2.42	0.74
41:BY:92:ASP:OD1	41:BY:92:ASP:C	2.25	0.74
1:AA:1254:C:OP1	13:AJ:45:ARG:HD2	1.87	0.74
1:AA:427:U:H1'	1:AA:541:G:OP1	1.86	0.74
7:AD:70:ILE:CD1	7:AD:100:ARG:CZ	2.64	0.74
7:AD:109:GLY:HA3	7:AD:165:MET:HG3	1.68	0.74
48:B0:79:ILE:O	48:B0:81:ILE:CD1	2.34	0.74
46:B2:62:GLU:C	46:B2:64:GLY:N	2.36	0.74
26:BA:2294:C:C4	26:BA:2339:G:O6	2.40	0.74
26:BA:2356:C:OP1	48:B0:19:LYS:HD2	1.86	0.74
26:BA:2496:C:N4	26:BA:2497:A:C2	2.55	0.74
26:BA:2574:G:O2'	28:BE:240:PRO:CA	2.35	0.74
26:BA:2576:G:N3	26:BA:2576:G:H2'	2.02	0.74
26:BA:2735:G:O6	26:BA:2770:G:N2	2.18	0.74
26:BA:2638:G:C4	26:BA:2775:A:C2	2.76	0.74
26:BA:2850:A:H2'	26:BA:2851:A:C8	2.20	0.74
26:BA:2886:G:C2	26:BA:2887:U:C6	2.76	0.74
27:BD:167:GLU:HB2	27:BD:170:TYR:CE1	2.06	0.74
27:BD:63:ILE:HG22	27:BD:64:ILE:H	0.59	0.74
26:BA:2785:C:C2	28:BE:100:TRP:CD1	2.75	0.74
28:BE:205:THR:HG23	28:BE:259:HIS:N	1.97	0.74
28:BE:45:LYS:HE3	28:BE:303:PRO:HG2	0.79	0.74
28:BE:99:VAL:CG1	28:BE:100:TRP:N	2.46	0.74
29:BF:52:ALA:CB	29:BF:55:ARG:HH21	1.75	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:44:ILE:C	30:BG:83:PHE:HZ	1.91	0.74
32:BI:43:ASN:O	32:BI:45:LYS:C	2.24	0.74
33:BN:39:VAL:O	33:BN:40:ASN:HB2	1.85	0.74
33:BN:74:ARG:O	33:BN:75:PRO:C	2.23	0.74
35:BP:77:ALA:CA	35:BP:81:VAL:CG2	2.64	0.74
36:BQ:49:VAL:CG2	36:BQ:120:HIS:HA	2.17	0.74
43:BR:90:ARG:HH12	43:BR:117:VAL:CG2	2.00	0.74
45:BV:69:ILE:HG22	45:BV:88:GLN:CB	2.18	0.74
26:BA:138:G:H1'	40:BX:42:GLU:HG2	1.69	0.74
42:BZ:174:PRO:O	42:BZ:175:ARG:HG2	1.86	0.74
1:AA:1278:U:H4'	1:AA:1279:A:O4'	1.86	0.74
1:AA:815:A:N1	1:AA:1508:G:N2	2.35	0.74
11:AH:36:LEU:HA	11:AH:39:LEU:HB2	1.69	0.74
13:AJ:45:ARG:NH2	17:AN:36:PHE:HE2	1.85	0.74
46:B2:15:GLU:O	46:B2:16:ARG:C	2.22	0.74
46:B2:22:ASP:O	46:B2:23:LEU:C	2.25	0.74
26:BA:1472:A:C2'	26:BA:1473:G:H8	1.99	0.74
26:BA:2191:G:H2'	26:BA:2192:G:O4'	1.87	0.74
26:BA:2333:A:H1'	26:BA:2335:A:C2	2.19	0.74
26:BA:2391:G:O2'	26:BA:2392:A:P	2.46	0.74
26:BA:2441:C:O2'	26:BA:2442:C:O5'	2.05	0.74
26:BA:2461:C:C2	26:BA:2462:U:C6	2.75	0.74
26:BA:2555:U:C5	26:BA:2556:C:C6	2.75	0.74
26:BA:2567:G:H2'	26:BA:2568:C:H5	1.50	0.74
26:BA:2626:C:C4'	26:BA:2626:C:C6	2.70	0.74
26:BA:2737:G:N1	26:BA:2767:C:N4	1.97	0.74
26:BA:2804:C:C6	26:BA:2805:G:C6	2.75	0.74
26:BA:2818:G:C2	26:BA:2829:C:N3	2.54	0.74
26:BA:535:C:H4'	44:BU:53:LYS:CD	2.12	0.74
26:BA:627:A:H4'	26:BA:627:A:OP2	1.87	0.74
26:BA:2712:U:H5	26:BA:712(A):A:C8	1.99	0.74
26:BA:1818:U:O2	27:BD:153:LEU:CA	2.35	0.74
26:BA:1993:U:O2'	28:BE:224:GLY:HA3	1.87	0.74
28:BE:269:ILE:CA	28:BE:297:LYS:HE2	2.17	0.74
29:BF:102:LEU:HD22	29:BF:103:ASN:N	1.96	0.74
29:BF:215:ALA:HA	29:BF:239:ALA:HA	1.69	0.74
30:BG:102:GLY:HA2	30:BG:134:LEU:CD1	2.07	0.74
31:BH:41:THR:CG2	31:BH:52:THR:CB	2.66	0.74
31:BH:55:SER:O	31:BH:57:GLU:N	2.20	0.74
32:BI:80:PRO:HA	32:BI:146:THR:O	1.86	0.74
26:BA:270(P):C:OP2	32:BI:45:LYS:HD3	1.87	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:53:LYS:O	32:BI:57:GLN:OE1	2.04	0.74
32:BI:93:ILE:O	32:BI:93:ILE:CG1	2.35	0.74
55:BK:122:GLU:HB3	55:BK:126:LYS:HE3	1.67	0.74
55:BK:36:MET:SD	55:BK:40:LYS:HE3	2.27	0.74
55:BK:8:GLN:C	55:BK:9:ILE:HG13	2.07	0.74
34:BO:65:THR:OG1	34:BO:67:ARG:CG	2.34	0.74
34:BO:87:ILE:HG21	34:BO:91:LYS:HA	1.68	0.74
44:BU:91:ASN:OD1	44:BU:92:ARG:N	2.19	0.74
45:BV:57:GLN:O	45:BV:58:ALA:HB2	1.87	0.74
45:BV:69:ILE:HG22	45:BV:88:GLN:HB3	1.69	0.74
41:BY:50:VAL:HG12	41:BY:52:ARG:H	1.50	0.74
1:AA:1317:C:O2'	22:AS:10:PHE:CE1	2.40	0.74
48:B0:35:ASN:O	48:B0:36:ILE:CG1	2.33	0.74
46:B2:7:GLU:OE2	46:B2:8:ILE:CG1	2.32	0.74
47:B3:53:LEU:HD22	47:B3:54:VAL:HG13	1.67	0.74
26:BA:1027:A:C6	26:BA:1126:A:N3	2.56	0.74
26:BA:1638:C:C5'	26:BA:2710:C:H1'	2.17	0.74
26:BA:2256:G:N2	26:BA:2257:U:C2	2.56	0.74
26:BA:2422:A:O2'	26:BA:2424:C:C6	2.39	0.74
26:BA:2489:G:N7	26:BA:2490:G:N7	2.35	0.74
26:BA:2511:U:O2'	26:BA:2512:C:H5'	1.87	0.74
26:BA:2870:C:C2'	26:BA:2870:C:O2	2.35	0.74
26:BA:859:G:O2'	26:BA:2268:A:N3	2.19	0.74
26:BA:960:A:C2	26:BA:2495:G:N2	2.55	0.74
27:BD:140:VAL:HG13	27:BD:190:THR:O	1.88	0.74
27:BD:140:VAL:HG22	27:BD:191:VAL:CG1	2.13	0.74
27:BD:224:VAL:HG12	27:BD:225:ARG:H	1.51	0.74
29:BF:57:PRO:HG2	29:BF:58:ALA:H	1.52	0.74
26:BA:2317:C:OP1	30:BG:150:SER:HA	1.87	0.74
30:BG:65:GLU:OE1	30:BG:65:GLU:C	2.25	0.74
30:BG:87:ALA:C	30:BG:89:PRO:HD2	2.07	0.74
31:BH:83:GLU:C	31:BH:83:GLU:OE2	2.25	0.74
32:BI:31:PHE:CE1	32:BI:35:LEU:O	2.40	0.74
32:BI:5:PHE:C	32:BI:36:ALA:HB2	2.06	0.74
33:BN:53:ILE:CG2	33:BN:135:ILE:HD11	2.15	0.74
33:BN:136:SER:O	33:BN:139:LEU:N	2.20	0.74
44:BU:43:ALA:HB2	45:BV:75:LYS:HB3	1.65	0.74
39:BW:55:ALA:N	39:BW:107:LEU:HD12	2.02	0.74
39:BW:19:LEU:HD22	50:B5:25:LEU:CB	2.16	0.74
40:BX:9:HIS:ND1	40:BX:26:PHE:O	2.16	0.74
40:BX:50:GLU:HB2	40:BX:67:ARG:O	1.87	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:31:LEU:HD12	41:BY:101:LEU:HB2	1.67	0.74
42:BZ:12:GLN:O	42:BZ:15:ASP:HB3	1.87	0.74
42:BZ:19:ILE:HB	42:BZ:39:PHE:HE1	1.43	0.74
42:BZ:40:ASP:O	42:BZ:41:ARG:C	2.25	0.74
42:BZ:51:LEU:HD23	42:BZ:52:PHE:H	1.49	0.74
42:BZ:91:PRO:HG2	42:BZ:127:PRO:C	2.07	0.74
1:AA:1201:A:H4'	1:AA:1202:G:H5''	1.69	0.74
1:AA:303:A:O2'	1:AA:555:C:O2'	2.05	0.74
47:B3:53:LEU:HD23	47:B3:53:LEU:C	2.07	0.74
47:B3:6:VAL:CG2	47:B3:54:VAL:CG2	2.66	0.74
53:B8:60:LEU:HD22	53:B8:60:LEU:C	2.06	0.74
26:BA:1363:C:H1'	26:BA:1810:A:H1'	1.69	0.74
26:BA:1139:G:O2'	26:BA:142(A):A:N3	2.21	0.74
26:BA:1906:G:O4'	26:BA:1929:G:C8	2.40	0.74
26:BA:2462:U:C2	26:BA:2463:C:C6	2.75	0.74
26:BA:2652:C:C2'	26:BA:2653:U:H5'	2.16	0.74
26:BA:2678:C:C2	26:BA:2679:A:H8	2.04	0.74
26:BA:2748:A:C8	26:BA:2749:A:C5	2.75	0.74
27:BD:175:LEU:HD23	27:BD:175:LEU:H	1.47	0.74
29:BF:144:PHE:CD2	29:BF:156:LEU:CD1	2.71	0.74
31:BH:105:SER:O	31:BH:106:VAL:CG2	2.35	0.74
31:BH:7:PRO:N	31:BH:50:THR:HG1	1.85	0.74
32:BI:76:THR:HB	32:BI:144:HIS:HE1	1.52	0.74
55:BK:79:LEU:CD1	55:BK:132:ALA:HB2	2.16	0.74
55:BK:52:MET:CA	55:BK:52:MET:HE3	2.06	0.74
33:BN:68:GLY:O	33:BN:69:TYR:HB2	1.88	0.74
35:BP:62:ALA:O	35:BP:107:LYS:CE	2.36	0.74
36:BQ:49:VAL:CB	36:BQ:119:ASN:O	2.36	0.74
37:BS:31:LYS:CB	37:BS:32:PRO:HD3	2.14	0.74
44:BU:68:GLY:O	44:BU:71:LEU:N	2.21	0.74
45:BV:33:VAL:CB	45:BV:63:HIS:CD2	2.70	0.74
45:BV:35:LEU:HG	45:BV:63:HIS:HE2	1.52	0.74
45:BV:94:LYS:CA	45:BV:95:ILE:CD1	2.56	0.74
42:BZ:100:THR:CA	42:BZ:137:ASP:CG	2.50	0.74
3:AW:7:U:O3'	3:AW:8:U:O5'	2.06	0.74
26:BA:2386:C:C4'	48:B0:39:ARG:CZ	2.58	0.74
47:B3:9:VAL:N	47:B3:54:VAL:CG1	2.50	0.74
49:B4:17:GLN:HA	49:B4:33:VAL:CG1	2.18	0.74
50:B5:14:SER:O	50:B5:15:LYS:C	2.25	0.74
26:BA:125:G:C4'	52:B7:19:ARG:NH1	2.47	0.74
26:BA:2239:G:N3	26:BA:2240:C:C6	2.56	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2265:U:H2'	26:BA:2266:A:OP1	1.86	0.74
3:AW:76:A:O2'	26:BA:2395:C:N3	2.21	0.74
26:BA:227:A:N6	26:BA:2407:G:C8	2.52	0.74
26:BA:2488:A:C6	26:BA:2489:G:C5	2.76	0.74
26:BA:2636:U:H4'	28:BE:84:ARG:CZ	2.17	0.74
26:BA:2859:G:O2'	26:BA:2860:A:H5'	1.87	0.74
26:BA:2831:G:H1'	26:BA:2883:A:C2	2.22	0.74
26:BA:358:U:H3'	26:BA:359:A:C5'	2.17	0.74
26:BA:995:C:H1'	44:BU:57:PHE:CZ	2.23	0.74
27:BD:63:ILE:CG2	27:BD:64:ILE:N	2.09	0.74
29:BF:216:SER:O	29:BF:217:GLU:HB2	1.87	0.74
29:BF:223:LEU:HD12	29:BF:224:ALA:H	0.92	0.74
30:BG:93:LEU:HD22	30:BG:106:PHE:CE2	2.22	0.74
31:BH:104:LEU:CB	31:BH:151:ARG:CZ	2.48	0.74
31:BH:55:SER:C	31:BH:57:GLU:H	1.90	0.74
32:BI:116:GLU:HG2	32:BI:132:LYS:HE2	1.68	0.74
32:BI:115:ILE:HG13	32:BI:131:VAL:HG13	1.68	0.74
32:BI:13:GLY:CA	32:BI:15:LYS:HD2	2.16	0.74
26:BA:270(O):U:H5	32:BI:53:LYS:NZ	1.86	0.74
26:BA:1137:G:H21	33:BN:86:MET:CE	2.00	0.74
34:BO:104:ARG:HD2	34:BO:104:ARG:H	1.53	0.74
34:BO:17:ARG:HB2	34:BO:45:ASP:O	1.87	0.74
43:BR:101:ALA:O	50:B5:41:LEU:HD11	1.85	0.74
37:BS:33:ARG:HB3	37:BS:35:VAL:HG22	1.69	0.74
44:BU:117:ARG:NH1	44:BU:118:GLN:OE1	2.20	0.74
26:BA:444:C:OP2	44:BU:2:PRO:CG	2.35	0.74
44:BU:98:ILE:O	44:BU:99:ALA:C	2.26	0.74
45:BV:31:ASP:O	45:BV:33:VAL:HG23	1.87	0.74
45:BV:40:VAL:CA	45:BV:51:ALA:HB1	2.17	0.74
39:BW:8:ARG:NE	39:BW:102:HIS:HE1	1.85	0.74
40:BX:28:VAL:CG1	40:BX:64:ALA:CB	2.65	0.74
41:BY:78:THR:HA	41:BY:89:ARG:H	1.51	0.74
42:BZ:26:LYS:HD2	42:BZ:27:GLU:OE2	1.87	0.74
42:BZ:67:LYS:HA	42:BZ:67:LYS:HZ1	0.84	0.74
1:AA:1015:A:P	22:AS:14:HIS:CE1	2.81	0.74
1:AA:1073:U:H2'	1:AA:1074:G:O4'	1.87	0.74
1:AA:361(A):C:O2'	1:AA:1362:C:H5''	1.88	0.74
40:BX:4:VAL:CB	46:B2:24:LYS:NZ	2.51	0.74
49:B4:4:ASP:OD1	49:B4:11:PRO:HG3	1.86	0.74
50:B5:42:SER:O	50:B5:43:HIS:CB	2.35	0.74
52:B7:13:ALA:O	52:B7:14:LYS:C	2.25	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2393:A:C4'	53:B8:13:ARG:NH2	2.51	0.74
53:B8:31:HIS:O	53:B8:32:GLN:HG2	1.86	0.74
26:BA:2043:C:H5	26:BA:2777:G:C1'	1.89	0.74
26:BA:2264:C:H2'	26:BA:2265:U:C5'	2.16	0.74
26:BA:2285:C:C1'	26:BA:2288:A:N6	2.51	0.74
26:BA:2317:C:H5	26:BA:2318:G:O6	1.66	0.74
26:BA:2320:A:N7	37:BS:9:PRO:HD3	2.02	0.74
26:BA:2298:A:C5	26:BA:2321:G:N1	2.56	0.74
26:BA:2407:G:H5''	26:BA:2408:U:OP2	1.87	0.74
26:BA:2737:G:N3	26:BA:2738:A:N7	2.36	0.74
26:BA:328:U:HO2'	41:BY:94:SER:CB	2.01	0.74
26:BA:311:A:N6	26:BA:329:G:H5'	2.02	0.74
26:BA:617:G:OP1	29:BF:221:GLU:CG	2.35	0.74
26:BA:76:C:O2'	46:B2:55:ARG:CG	2.36	0.74
27:BD:142:ASN:N	27:BD:142:ASN:HD22	1.85	0.74
27:BD:74:PRO:CG	27:BD:96:ALA:CA	2.65	0.74
28:BE:198:TYR:HA	28:BE:266:LYS:O	1.88	0.74
29:BF:138:VAL:O	29:BF:139:VAL:HG23	1.88	0.74
29:BF:96:LYS:CB	29:BF:98:ARG:NH2	2.41	0.74
55:BK:121:LEU:CB	55:BK:125:MET:CE	2.65	0.74
55:BK:91:GLU:OE1	55:BK:94:ARG:HD2	1.88	0.74
35:BP:112:GLY:O	35:BP:113:GLN:OE1	2.06	0.74
36:BQ:68:ALA:CB	36:BQ:136:TRP:HZ3	2.01	0.74
36:BQ:42:TYR:CD2	42:BZ:119:ASN:HA	2.23	0.74
44:BU:47:TYR:CE2	45:BV:74:TYR:C	2.61	0.74
41:BY:103:LEU:CD2	41:BY:112:LEU:HD23	2.14	0.74
26:BA:337:C:P	41:BY:24:ARG:HB2	2.25	0.74
41:BY:48:VAL:CG1	41:BY:49:GLU:N	2.19	0.74
41:BY:28:SER:OG	41:BY:99:THR:HG23	1.87	0.74
42:BZ:141:MET:O	42:BZ:142:ASN:ND2	2.20	0.74
42:BZ:154:LEU:CD1	42:BZ:160:LEU:HD11	2.17	0.74
42:BZ:67:LYS:O	42:BZ:67:LYS:HG3	1.88	0.74
1:AA:194:C:O2'	23:AT:68:LYS:HD3	1.88	0.74
1:AA:112:G:C4'	1:AA:389:A:H4'	2.18	0.74
15:AL:54:LYS:CG	15:AL:75:HIS:HE1	2.01	0.74
20:AQ:22:LEU:HD12	20:AQ:23:VAL:O	1.87	0.74
1:AA:835:U:OP1	21:AR:61:LYS:HD2	1.87	0.74
48:B0:36:ILE:CA	48:B0:68:VAL:HG11	2.18	0.74
47:B3:16:PRO:CB	47:B3:19:GLN:OE1	2.35	0.74
51:B6:33:ALA:O	51:B6:35:LEU:N	2.21	0.74
51:B6:42:PRO:O	51:B6:44:ALA:O	2.05	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1697:G:H5''	26:BA:1698:A:H5'	1.68	0.74
26:BA:2373:G:O2'	26:BA:2374:C:C5'	2.29	0.74
26:BA:245:G:P	35:BP:53:ARG:CZ	2.76	0.74
26:BA:2613:U:H5'	26:BA:2613:U:C6	2.17	0.74
26:BA:2636:U:C4'	28:BE:84:ARG:NH2	2.24	0.74
26:BA:2773:C:H2'	26:BA:2774:C:H6	1.52	0.74
26:BA:2840:C:O3'	43:BR:53:HIS:CE1	2.41	0.74
26:BA:1:G:C2	26:BA:2902:C:N4	2.56	0.74
26:BA:535:C:H5''	44:BU:53:LYS:HZ1	1.53	0.74
27:BD:143:ILE:CG1	27:BD:153:LEU:CA	2.65	0.74
28:BE:247:ARG:HB2	28:BE:249:THR:OG1	1.88	0.74
29:BF:103:ASN:CB	29:BF:106:GLU:HG3	2.17	0.74
16:AM:3:ARG:HH12	30:BG:90:LEU:HD13	1.51	0.74
31:BH:104:LEU:HB2	31:BH:151:ARG:HH12	1.42	0.74
26:BA:1005:C:H1'	33:BN:21:ARG:HG3	1.68	0.74
33:BN:65:ASN:ND2	33:BN:69:TYR:CD1	2.54	0.74
35:BP:130:ARG:HA	35:BP:133:VAL:CG2	2.18	0.74
26:BA:874:G:OP1	36:BQ:32:LYS:NZ	2.21	0.74
43:BR:43:GLU:C	43:BR:45:ARG:N	2.36	0.74
43:BR:58:GLY:O	43:BR:59:ASP:HB3	1.88	0.74
45:BV:43:GLU:C	45:BV:44:GLN:HE21	1.90	0.74
44:BU:94:VAL:HG11	45:BV:4:ILE:HG21	1.70	0.74
44:BU:88:ILE:HG22	45:BV:55:THR:OG1	1.86	0.74
39:BW:45:TYR:HD2	39:BW:46:PHE:N	1.85	0.74
40:BX:14:ALA:O	40:BX:17:ASP:N	2.21	0.74
1:AA:1255:G:N2	1:AA:1258:G:H22	1.84	0.74
26:BA:95:G:O2'	46:B2:42:ASN:CB	2.36	0.74
46:B2:51:LYS:O	46:B2:54:ALA:CB	2.36	0.74
47:B3:23:LEU:HA	47:B3:28:LEU:HD12	0.74	0.74
26:BA:1078:U:OP1	55:BK:93:LYS:HE3	1.88	0.74
26:BA:1966:A:C2	26:BA:2593:U:H5'	2.23	0.74
26:BA:2188:C:C5	26:BA:2189:U:C4	2.76	0.74
26:BA:963:U:O2	26:BA:2250:G:N2	2.19	0.74
26:BA:2320:A:H62	37:BS:9:PRO:HG3	0.62	0.74
26:BA:1952:A:C1'	26:BA:2560:C:O2'	2.34	0.74
26:BA:2615:U:H2'	26:BA:2616:C:C6	2.23	0.74
26:BA:2866:U:O2	26:BA:2868:A:O2'	2.01	0.74
26:BA:2848:G:N1	26:BA:2867:G:N3	2.35	0.74
26:BA:2838:G:N2	26:BA:2881:C:C2	2.56	0.74
27:BD:104:ILE:HB	27:BD:106:PRO:HD3	1.68	0.74
27:BD:65:ASP:C	27:BD:65:ASP:OD1	2.23	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:192:ILE:O	28:BE:193:PHE:C	2.24	0.74
28:BE:214:VAL:CG2	28:BE:221:LYS:HZ2	2.01	0.74
26:BA:2051:A:C2'	28:BE:238:LEU:CD2	2.66	0.74
29:BF:103:ASN:O	29:BF:104:ASP:C	2.14	0.74
29:BF:215:ALA:CB	29:BF:238:SER:C	2.54	0.74
26:BA:673:C:H1'	29:BF:82:GLN:OE1	1.86	0.74
30:BG:46:GLY:O	30:BG:47:GLN:HG3	1.88	0.74
31:BH:89:VAL:O	31:BH:160:GLY:N	2.21	0.74
32:BI:133:LEU:HD11	32:BI:139:ALA:HB3	1.70	0.74
36:BQ:82:LYS:HB3	36:BQ:123:ILE:HG22	1.70	0.74
36:BQ:51:GLU:OE1	36:BQ:51:GLU:N	2.20	0.74
43:BR:18:LEU:HD12	43:BR:19:ALA:N	2.02	0.74
44:BU:63:GLN:C	44:BU:65:ILE:N	2.41	0.74
45:BV:78:VAL:HB	45:BV:80:TYR:CE1	2.22	0.74
40:BX:9:HIS:ND1	40:BX:27:ALA:CA	2.50	0.74
41:BY:48:VAL:HG12	41:BY:49:GLU:H	0.62	0.74
41:BY:63:ILE:CG1	41:BY:75:GLU:OE2	2.36	0.74
41:BY:81:LYS:HB3	41:BY:81:LYS:NZ	2.03	0.74
1:AA:634:C:H2'	1:AA:635:G:H8	1.52	0.73
47:B3:16:PRO:HB3	47:B3:19:GLN:NE2	2.03	0.73
49:B4:7:PRO:HD2	49:B4:56:VAL:CB	2.18	0.73
26:BA:1034:G:H5'	54:B9:18:ARG:NE	2.02	0.73
26:BA:1101:U:H2'	26:BA:1102:C:H6	1.51	0.73
26:BA:1427:A:OP1	26:BA:1427:A:H8	1.70	0.73
26:BA:2276:G:C2'	26:BA:2277:G:O5'	2.35	0.73
26:BA:2355:C:H5'	48:B0:21:LEU:HD13	1.70	0.73
26:BA:2395:C:H3'	26:BA:2395:C:H6	1.51	0.73
26:BA:2457:U:C5	26:BA:2458:G:C2	2.67	0.73
26:BA:2458:G:C4	26:BA:2490:G:C2	2.75	0.73
26:BA:2508:G:N2	26:BA:2509:G:C1'	2.50	0.73
26:BA:2520:C:C5	26:BA:2567:G:C8	2.75	0.73
26:BA:2853:C:H2'	26:BA:2854:G:O5'	1.88	0.73
26:BA:966:G:H1'	26:BA:2267:A:N6	2.02	0.73
25:BB:80:U:HO2'	26:BA:918:A:H8	1.36	0.73
27:BD:175:LEU:CD1	27:BD:180:VAL:CA	2.65	0.73
28:BE:265:ASN:O	28:BE:265:ASN:ND2	2.21	0.73
28:BE:268:LEU:HD21	28:BE:295:LEU:O	1.88	0.73
30:BG:60:GLU:O	30:BG:61:PHE:HB2	1.86	0.73
31:BH:127:GLN:HG3	31:BH:128:THR:N	2.03	0.73
31:BH:48:VAL:HG23	31:BH:49:ILE:H	1.53	0.73
26:BA:2780:G:H22	33:BN:80:LYS:HZ2	1.35	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:3:GLN:HA	34:BO:21:VAL:CG1	2.18	0.73
35:BP:66:VAL:C	35:BP:67:ARG:NE	2.40	0.73
36:BQ:10:ILE:O	36:BQ:10:ILE:HG13	1.88	0.73
36:BQ:45:GLN:CD	36:BQ:153:PRO:HB2	2.09	0.73
36:BQ:94:ARG:CG	36:BQ:107:LYS:N	2.51	0.73
37:BS:17:ARG:HH11	37:BS:18:THR:CA	2.01	0.73
44:BU:83:LEU:O	44:BU:86:ALA:CB	2.36	0.73
44:BU:7:GLY:C	44:BU:9:VAL:H	1.88	0.73
45:BV:95:ILE:N	45:BV:95:ILE:CD1	2.33	0.73
41:BY:102:ASP:C	41:BY:108:ARG:HD3	2.07	0.73
1:AA:1329:A:H4'	16:AM:24:GLY:C	2.08	0.73
1:AA:266:G:N2	1:AA:270:A:H62	1.85	0.73
1:AA:47:C:H4'	1:AA:48:C:H5''	1.69	0.73
1:AA:900:A:H2'	1:AA:901:A:C8	2.23	0.73
2:AV:35:A:N6	4:AX:117:U:O4	2.20	0.73
2:AV:4:G:H2'	2:AV:5:A:C8	2.23	0.73
40:BX:4:VAL:HG21	46:B2:24:LYS:HZ1	1.51	0.73
3:AW:74:C:P	49:B4:22:MET:CE	2.76	0.73
49:B4:21:VAL:HG12	49:B4:22:MET:H	0.58	0.73
50:B5:45:ILE:H	50:B5:52:TYR:HE1	1.35	0.73
39:BW:37:ARG:HH22	50:B5:48:ASN:HD21	1.36	0.73
51:B6:12:MET:HE3	51:B6:54:LYS:N	2.02	0.73
53:B8:9:MET:O	53:B8:14:ILE:CD1	2.35	0.73
26:BA:1489:U:H4'	26:BA:1490:A:OP2	1.87	0.73
26:BA:1620:G:C1'	52:B7:1:MET:H2	1.99	0.73
26:BA:1935:G:H2'	26:BA:1962:C:N3	2.02	0.73
26:BA:2306:C:H42	30:BG:53:LYS:HZ2	1.36	0.73
26:BA:2319:G:H4'	37:BS:9:PRO:CD	2.18	0.73
26:BA:2484:G:H22	26:BA:2485:G:H1'	1.36	0.73
26:BA:2816:C:H2'	26:BA:2817:G:O5'	1.88	0.73
26:BA:2838:G:C2	26:BA:2839:G:C8	2.76	0.73
26:BA:310:A:OP1	41:BY:53:GLY:N	2.21	0.73
32:BI:7:LYS:CB	32:BI:14:LYS:HE2	2.10	0.73
33:BN:54:VAL:HG11	33:BN:138:THR:HB	1.70	0.73
36:BQ:16:ARG:NH1	36:BQ:19:TYR:HD1	1.86	0.73
43:BR:90:ARG:HH12	43:BR:117:VAL:HG21	1.53	0.73
37:BS:34:LEU:HG	37:BS:102:LEU:C	2.08	0.73
37:BS:28:LYS:HB3	37:BS:28:LYS:HZ3	1.54	0.73
37:BS:46:GLN:C	37:BS:47:LEU:HD23	2.04	0.73
37:BS:97:VAL:O	37:BS:98:GLU:HB3	1.86	0.73
44:BU:104:GLU:OE2	45:BV:46:VAL:CG1	2.35	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:82:GLY:O	44:BU:85:ARG:HB2	1.87	0.73
40:BX:32:ALA:HA	40:BX:36:GLU:HG3	1.69	0.73
41:BY:92:ASP:O	41:BY:93:THR:C	2.24	0.73
42:BZ:18:MET:HG3	42:BZ:35:ASP:HA	1.70	0.73
1:AA:409:G:OP2	7:AD:22:LYS:CD	2.37	0.73
48:B0:65:GLY:O	48:B0:66:LYS:CE	2.35	0.73
51:B6:17:GLY:O	51:B6:18:THR:HB	1.88	0.73
26:BA:190:A:H2'	26:BA:191:A:C8	2.23	0.73
26:BA:2183:C:H2'	26:BA:2184:G:H8	1.53	0.73
26:BA:2187:G:H2'	26:BA:2188:C:H5'	1.70	0.73
26:BA:2255:G:C6	26:BA:2256:G:C8	2.76	0.73
26:BA:2349:G:O6	26:BA:2350:C:C5	2.42	0.73
26:BA:2404:C:N4	26:BA:2405:G:N1	2.36	0.73
26:BA:2838:G:C6	26:BA:2839:G:C5	2.75	0.73
26:BA:283:A:C2	26:BA:360:G:C2	2.76	0.73
26:BA:873:G:H4'	36:BQ:32:LYS:HG2	1.69	0.73
26:BA:974(A):C:C1'	26:BA:989:G:H22	2.01	0.73
25:BB:59:A:C3'	25:BB:60:C:O5'	2.34	0.73
27:BD:76:ARG:HD3	27:BD:113:MET:HE2	1.70	0.73
27:BD:175:LEU:O	27:BD:176:ALA:C	2.26	0.73
28:BE:44:TYR:HD1	28:BE:309:PRO:CD	1.98	0.73
28:BE:42:ALA:HA	28:BE:311:PHE:HE2	1.53	0.73
29:BF:167:ASP:O	29:BF:168:ARG:CD	2.36	0.73
30:BG:105:SER:CB	30:BG:131:THR:CG2	2.57	0.73
26:BA:2316:C:C5'	30:BG:142:ALA:CB	2.55	0.73
2:AV:56:C:C2	30:BG:56:ARG:CZ	2.71	0.73
31:BH:140:VAL:O	31:BH:143:LEU:HD22	1.86	0.73
32:BI:43:ASN:HA	32:BI:46:ALA:CB	2.18	0.73
32:BI:7:LYS:HG3	32:BI:12:LYS:CA	2.18	0.73
55:BK:20:PRO:CG	55:BK:23:PRO:HG2	2.15	0.73
33:BN:79:PHE:CD1	33:BN:79:PHE:N	2.52	0.73
34:BO:73:ASP:C	34:BO:75:SER:H	1.91	0.73
35:BP:124:ASP:HB3	35:BP:130:ARG:NH2	2.02	0.73
36:BQ:75:SER:O	36:BQ:132:VAL:HG21	1.88	0.73
36:BQ:146:THR:O	36:BQ:147:VAL:HB	1.87	0.73
26:BA:2378:A:C2	37:BS:26:LEU:CD2	2.71	0.73
37:BS:40:ASN:HA	37:BS:114:LYS:HZ1	1.54	0.73
38:BT:21:PHE:C	38:BT:22:VAL:CG1	2.54	0.73
44:BU:40:LEU:CD2	44:BU:40:LEU:N	2.46	0.73
44:BU:80:ILE:CA	44:BU:83:LEU:HD12	2.17	0.73
45:BV:33:VAL:HB	45:BV:63:HIS:NE2	2.02	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:14:ALA:C	40:BX:17:ASP:OD1	2.26	0.73
40:BX:31:ARG:CA	40:BX:31:ARG:NE	2.51	0.73
41:BY:101:LEU:HD23	41:BY:103:LEU:HG	1.67	0.73
41:BY:31:LEU:CD1	41:BY:101:LEU:CB	2.66	0.73
41:BY:73:HIS:HA	41:BY:91:LEU:HD21	1.69	0.73
7:AD:27:TYR:OH	7:AD:106:TYR:OH	2.00	0.73
1:AA:1325:C:P	24:AU:15:ARG:NE	2.62	0.73
3:AW:37:YYG:H31	3:AW:37:YYG:C1'	2.19	0.73
26:BA:2385:C:O2'	48:B0:39:ARG:NH1	2.20	0.73
26:BA:1078:U:C6	26:BA:1088:A:N3	2.56	0.73
26:BA:2048:G:C6	26:BA:2621:A:N1	2.57	0.73
26:BA:2266:A:H5''	26:BA:2267:A:C5	2.22	0.73
26:BA:2589:A:O2'	26:BA:2590:A:H5''	1.88	0.73
26:BA:2676:C:O2	26:BA:2732:G:N2	2.21	0.73
26:BA:2781:A:H5'	26:BA:2782:G:O5'	1.86	0.73
26:BA:2868:A:H8	26:BA:2868:A:O5'	1.71	0.73
26:BA:443:A:N7	29:BF:43:LYS:HD2	2.04	0.73
28:BE:222:ARG:CD	28:BE:232:ARG:CA	2.64	0.73
29:BF:33:LYS:CA	29:BF:36:ARG:CG	2.66	0.73
31:BH:63:LEU:O	31:BH:66:THR:CG2	2.31	0.73
32:BI:3:VAL:HG11	32:BI:21:VAL:HG21	1.70	0.73
33:BN:39:VAL:HA	33:BN:103:VAL:HG13	1.69	0.73
33:BN:18:ILE:O	33:BN:20:GLY:N	2.21	0.73
34:BO:31:ARG:O	34:BO:32:TYR:CD1	2.42	0.73
35:BP:65:ASP:O	35:BP:69:ILE:HG23	1.89	0.73
36:BQ:142:LYS:HE2	36:BQ:143:VAL:C	2.09	0.73
36:BQ:28:ILE:HG23	36:BQ:62:GLU:CB	2.18	0.73
36:BQ:69:ASN:C	36:BQ:69:ASN:ND2	2.21	0.73
43:BR:116:LEU:O	43:BR:116:LEU:HD12	1.88	0.73
43:BR:31:HIS:HD2	43:BR:34:ILE:HD11	1.53	0.73
38:BT:46:ALA:O	38:BT:49:LEU:HB3	1.88	0.73
44:BU:55:ARG:C	44:BU:57:PHE:N	2.41	0.73
40:BX:46:ASP:OD1	40:BX:46:ASP:N	2.21	0.73
41:BY:70:ALA:O	41:BY:93:THR:HG23	1.89	0.73
42:BZ:46:GLN:C	42:BZ:47:SER:O	2.27	0.73
42:BZ:4:THR:O	42:BZ:5:ALA:HB3	1.86	0.73
1:AA:1255:G:N2	1:AA:1277:C:O2	2.22	0.73
1:AA:1329:A:H5''	16:AM:26:GLY:H	1.53	0.73
1:AA:54:C:N4	1:AA:352:C:H2'	2.04	0.73
1:AA:462:G:H21	19:AP:82:GLN:HE21	1.34	0.73
3:AW:9:A:C2	3:AW:45:G:C8	2.76	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2262:U:P	48:B0:14:ARG:HH21	2.11	0.73
48:B0:71:ASN:O	48:B0:72:LYS:C	2.26	0.73
26:BA:76:C:C3'	46:B2:55:ARG:HG3	2.18	0.73
47:B3:3:ARG:HB2	47:B3:60:GLU:CA	2.18	0.73
49:B4:7:PRO:CD	49:B4:56:VAL:CG2	2.27	0.73
51:B6:19:GLY:HA3	51:B6:42:PRO:HG3	0.74	0.73
26:BA:120:U:C2	26:BA:150:C:C4	2.76	0.73
26:BA:1279:G:H5'	43:BR:34:ILE:CD1	2.18	0.73
26:BA:2228:G:H8	26:BA:2229:C:C6	2.01	0.73
26:BA:2285:C:C5'	26:BA:2288:A:H61	2.01	0.73
26:BA:2592:G:N2	26:BA:2603:G:C5	2.57	0.73
26:BA:269:U:H5''	26:BA:270(Y):G:H2'	1.70	0.73
26:BA:2785:C:H4'	28:BE:99:VAL:CB	2.17	0.73
26:BA:2892:A:H2'	26:BA:2893:G:C1'	2.18	0.73
26:BA:34:C:C2'	26:BA:455:C:H41	2.01	0.73
26:BA:573:G:H2'	26:BA:574:C:H3'	1.70	0.73
26:BA:850:C:H42	26:BA:928:G:H1	1.35	0.73
27:BD:128:ALA:HB2	27:BD:190:THR:HA	1.57	0.73
27:BD:141:HIS:HE1	27:BD:191:VAL:O	1.68	0.73
27:BD:215:LYS:O	27:BD:216:ALA:O	2.06	0.73
28:BE:267:ARG:HB2	28:BE:297:LYS:CD	2.17	0.73
29:BF:196:THR:OG1	29:BF:201:SER:N	2.22	0.73
29:BF:47:GLY:HA2	29:BF:92:PRO:HB2	0.80	0.73
26:BA:801:G:OP2	29:BF:79:ARG:CZ	2.36	0.73
32:BI:105:GLN:O	32:BI:107:GLY:N	2.22	0.73
32:BI:145:VAL:O	32:BI:146:THR:CB	2.34	0.73
32:BI:50:GLN:HA	32:BI:53:LYS:HG2	1.68	0.73
55:BK:38:PHE:CE2	55:BK:67:THR:CG2	2.71	0.73
55:BK:63:ASP:O	55:BK:64:LYS:HG3	1.89	0.73
26:BA:2640:G:H4'	33:BN:70:PHE:HD2	1.52	0.73
35:BP:64:ILE:O	35:BP:108:VAL:CA	2.35	0.73
36:BQ:91:HIS:CA	36:BQ:111:THR:HG23	2.17	0.73
36:BQ:51:GLU:OE2	36:BQ:148:ASN:HB2	1.88	0.73
38:BT:13:ILE:HG22	38:BT:14:GLU:OE2	1.89	0.73
44:BU:98:ILE:N	44:BU:98:ILE:HD12	2.04	0.73
40:BX:76:GLU:OE1	40:BX:77:VAL:HG22	1.88	0.73
26:BA:325:G:N2	41:BY:7:GLN:NE2	2.34	0.73
42:BZ:40:ASP:N	42:BZ:40:ASP:OD1	2.18	0.73
11:AH:44:PHE:O	11:AH:64:LYS:HB3	1.88	0.73
2:AV:37:G:N2	4:AX:116:U:C2	2.56	0.73
26:BA:1279:G:P	43:BR:34:ILE:HD12	2.28	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2025:C:H2'	26:BA:2026:C:C6	2.23	0.73
26:BA:2330:G:N1	26:BA:2331:G:C4	2.56	0.73
26:BA:2394:C:C5	26:BA:2395:C:C4	2.76	0.73
26:BA:2574:G:C4	26:BA:2575:C:C4	2.68	0.73
26:BA:10:G:C2	26:BA:2629:A:C4	2.76	0.73
26:BA:2816:C:C2'	26:BA:2817:G:O5'	2.35	0.73
26:BA:342:G:H1	26:BA:344:G:N2	1.86	0.73
26:BA:583:G:P	44:BU:10:ARG:HH11	2.10	0.73
26:BA:58:G:H1	26:BA:69:C:N4	1.83	0.73
28:BE:79:ARG:CZ	28:BE:104:PHE:O	2.36	0.73
28:BE:193:PHE:CZ	28:BE:312:ARG:O	2.42	0.73
28:BE:85:ALA:O	28:BE:96:LEU:O	2.07	0.73
29:BF:56:THR:CB	29:BF:57:PRO:CD	2.66	0.73
29:BF:63:SER:H	29:BF:65:ARG:NE	1.82	0.73
30:BG:14:ARG:CA	30:BG:137:PRO:HG3	2.18	0.73
32:BI:141:LEU:HD22	32:BI:142:LYS:H	1.53	0.73
32:BI:51:LYS:O	32:BI:55:GLN:CG	2.30	0.73
32:BI:89:LEU:HD12	32:BI:93:ILE:HG23	1.68	0.73
55:BK:33:VAL:HG22	55:BK:60:VAL:HG11	1.61	0.73
34:BO:17:ARG:HH21	34:BO:47:THR:CA	2.01	0.73
35:BP:76:LEU:CA	35:BP:81:VAL:HG21	2.17	0.73
36:BQ:94:ARG:HG2	36:BQ:107:LYS:H	1.54	0.73
36:BQ:125:TRP:C	36:BQ:126:VAL:HG23	2.05	0.73
36:BQ:47:GLU:OE1	36:BQ:47:GLU:N	2.22	0.73
37:BS:18:THR:C	37:BS:19:ASP:OD1	2.27	0.73
25:BB:116:G:H4'	37:BS:64:SER:OG	1.89	0.73
45:BV:5:ILE:HD12	45:BV:5:ILE:N	2.04	0.73
45:BV:77:GLY:O	45:BV:78:VAL:CG1	2.37	0.73
45:BV:64:GLY:H	45:BV:95:ILE:HG13	1.53	0.73
42:BZ:116:VAL:HG23	42:BZ:169:VAL:HG22	1.64	0.73
42:BZ:91:PRO:N	42:BZ:127:PRO:HB3	2.03	0.73
42:BZ:141:MET:O	42:BZ:142:ASN:CB	2.36	0.73
1:AA:1005:A:H4'	1:AA:1037:C:H1'	1.69	0.73
1:AA:113:G:H21	1:AA:353:A:H2'	1.52	0.73
46:B2:55:ARG:HA	46:B2:58:THR:CB	2.18	0.73
49:B4:31:ILE:HD13	49:B4:31:ILE:N	2.02	0.73
26:BA:1528:A:H61	26:BA:1543:A:H62	1.35	0.73
26:BA:2241:A:C8	26:BA:2241:A:H5'	2.22	0.73
26:BA:2341:G:C6	26:BA:2342:C:N4	2.57	0.73
26:BA:2445:G:C2'	26:BA:2446:G:C5'	2.67	0.73
26:BA:2468:G:N2	26:BA:2481:G:C2'	2.48	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2532:G:C8	26:BA:2532:G:H5'	2.22	0.73
26:BA:2579:C:C3'	26:BA:2579:C:C6	2.72	0.73
26:BA:2689:U:C4	26:BA:2713:A:N6	2.57	0.73
26:BA:712(A):A:C8	26:BA:2713:A:OP1	2.41	0.73
26:BA:482:A:N3	26:BA:482:A:H2'	2.02	0.73
26:BA:85:G:H5'	41:BY:65:VAL:HG12	1.69	0.73
27:BD:117:SER:HB3	27:BD:128:ALA:O	1.88	0.73
26:BA:1566:A:C2	27:BD:212:HIS:CG	2.77	0.73
29:BF:112:ARG:C	29:BF:114:ALA:N	2.41	0.73
29:BF:92:PRO:O	29:BF:93:LYS:C	2.24	0.73
30:BG:18:ILE:O	30:BG:19:GLU:HB2	1.89	0.73
26:BA:1059:G:N3	55:BK:127:ILE:HG21	2.01	0.73
33:BN:68:GLY:O	33:BN:69:TYR:CD1	2.42	0.73
36:BQ:123:ILE:HG22	36:BQ:125:TRP:HB2	1.69	0.73
36:BQ:67:ALA:O	36:BQ:71:PHE:HE1	1.70	0.73
44:BU:110:VAL:C	44:BU:113:SER:OG	2.26	0.73
44:BU:88:ILE:CG2	45:BV:55:THR:CB	2.66	0.73
45:BV:63:HIS:ND1	45:BV:63:HIS:N	2.35	0.73
45:BV:67:LYS:CG	45:BV:70:TYR:HE1	2.01	0.73
39:BW:23:LEU:HD13	39:BW:35:ILE:CG2	2.19	0.73
39:BW:82:LEU:N	39:BW:82:LEU:HD22	2.03	0.73
41:BY:45:GLY:C	41:BY:62:VAL:CB	2.55	0.73
42:BZ:45:GLN:HE21	42:BZ:45:GLN:N	1.87	0.73
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.23	0.73
16:AM:91:ARG:O	16:AM:96:LEU:N	2.21	0.73
1:AA:1325:C:OP1	24:AU:15:ARG:CD	2.36	0.73
47:B3:9:VAL:HG22	47:B3:54:VAL:CB	2.19	0.73
47:B3:7:LYS:O	47:B3:54:VAL:HB	1.89	0.73
51:B6:19:GLY:HA3	51:B6:42:PRO:CB	2.17	0.73
51:B6:46:LYS:HZ1	51:B6:46:LYS:HA	1.52	0.73
53:B8:26:LYS:NZ	53:B8:44:LYS:N	2.37	0.73
54:B9:23:VAL:O	54:B9:24:LEU:HD23	1.89	0.73
26:BA:2287:A:C2'	26:BA:2288:A:OP2	2.36	0.73
26:BA:2290:G:H21	26:BA:2343:C:H1'	1.52	0.73
26:BA:2410:G:H2'	26:BA:2411:A:H8	1.00	0.73
26:BA:2422:A:C2'	26:BA:2424:C:C5	2.71	0.73
26:BA:2077:A:C4	26:BA:2435:A:N7	2.57	0.73
26:BA:2459:A:N7	26:BA:2460:U:C6	2.55	0.73
26:BA:2528:U:O2'	26:BA:2529:G:H8	1.72	0.73
26:BA:2605:U:O2	26:BA:2606:C:C5	2.40	0.73
26:BA:2821:A:N3	26:BA:2822:G:N9	2.36	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:42:C:C2'	30:BG:47:GLN:HA	2.18	0.73
26:BA:2785:C:C2'	28:BE:100:TRP:CD1	2.61	0.73
28:BE:77:PRO:HB3	28:BE:188:ALA:N	2.02	0.73
30:BG:128:LEU:O	30:BG:129:ASP:CB	2.37	0.73
43:BR:14:SER:N	43:BR:17:ARG:HG2	2.03	0.73
43:BR:24:GLN:CB	43:BR:44:LEU:HD23	2.19	0.73
43:BR:38:VAL:HG22	43:BR:99:LYS:HE3	1.70	0.73
37:BS:117:ALA:HA	37:BS:120:GLU:CD	2.09	0.73
39:BW:70:TYR:O	39:BW:107:LEU:HA	1.88	0.73
40:BX:13:LYS:O	40:BX:14:ALA:C	2.26	0.73
41:BY:33:GLU:CG	41:BY:34:GLU:H	2.02	0.73
41:BY:47:THR:O	41:BY:48:VAL:CG2	2.35	0.73
41:BY:9:LYS:CE	41:BY:13:ARG:CZ	2.67	0.73
42:BZ:123:VAL:HA	42:BZ:161:ALA:HB3	1.69	0.73
42:BZ:26:LYS:CB	42:BZ:84:TYR:OH	2.32	0.73
1:AA:1224:G:C6	1:AA:1362:C:N4	2.52	0.73
1:AA:762:C:H2'	1:AA:763:G:C8	2.24	0.73
48:B0:30:VAL:O	48:B0:30:VAL:HG12	1.86	0.73
48:B0:49:GLN:HE21	48:B0:49:GLN:C	1.93	0.73
54:B9:10:MET:HB2	54:B9:32:HIS:CD2	2.15	0.73
54:B9:7:VAL:CG1	54:B9:25:VAL:CG2	2.66	0.73
26:BA:1609:A:C6	26:BA:1616:A:C2	2.76	0.73
26:BA:1818:U:C4'	27:BD:155:ARG:CG	2.66	0.73
26:BA:2281:C:O2'	26:BA:2282:G:O5'	2.05	0.73
26:BA:2332:U:C4'	26:BA:2336:A:H61	2.02	0.73
26:BA:2601:C:N3	26:BA:2603:G:O6	2.21	0.73
26:BA:2666:C:C2'	26:BA:2667:C:H5'	2.18	0.73
26:BA:2641:G:C6	26:BA:2774:C:N4	2.57	0.73
26:BA:2869:G:N2	26:BA:2870:C:N1	2.29	0.73
26:BA:2880:C:N3	26:BA:2881:C:C5	2.56	0.73
26:BA:2788:C:H2'	26:BA:2892:A:H2	1.54	0.73
26:BA:58:G:H2'	26:BA:73:A:C6	2.24	0.73
26:BA:764:A:OP1	27:BD:212:HIS:NE2	2.22	0.73
28:BE:39:GLN:HB2	28:BE:174:LEU:HG	1.70	0.73
28:BE:198:TYR:CE2	28:BE:265:ASN:O	2.40	0.73
28:BE:86:TYR:O	28:BE:87:GLU:O	2.07	0.73
25:BB:18:G:O5'	30:BG:149:ARG:HD3	1.89	0.73
31:BH:14:VAL:HG12	31:BH:16:VAL:HG23	1.70	0.73
55:BK:38:PHE:CZ	55:BK:66:PHE:N	2.57	0.73
33:BN:56:LYS:O	33:BN:59:LYS:CB	2.27	0.73
33:BN:83:ILE:CG1	33:BN:84:ARG:N	1.94	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:51:ARG:O	44:BU:52:ASN:O	2.07	0.73
45:BV:60:VAL:O	45:BV:98:ILE:CA	2.37	0.73
40:BX:47:VAL:HG12	40:BX:69:SER:HG	1.52	0.73
41:BY:63:ILE:CG1	41:BY:75:GLU:N	2.51	0.73
1:AA:946:A:N3	1:AA:1333:A:H2	1.85	0.73
1:AA:1400:C:N3	2:AV:34:G:C2	2.57	0.73
1:AA:405:U:C3'	1:AA:406:G:P	2.75	0.73
20:AQ:44:ALA:HB2	20:AQ:59:ILE:HD11	1.70	0.73
2:AV:37:G:N2	4:AX:116:U:N3	2.36	0.73
46:B2:63:GLU:OE2	46:B2:63:GLU:C	2.28	0.73
49:B4:41:PRO:HG2	49:B4:57:ASP:OD2	1.87	0.73
26:BA:1238:G:C2	26:BA:1239:G:H1'	2.24	0.73
26:BA:1300:U:H3'	26:BA:1635:G:OP1	1.88	0.73
26:BA:1906:G:C4	26:BA:1929:G:C6	2.77	0.73
26:BA:2330:G:N2	26:BA:2331:G:N3	2.37	0.73
26:BA:2444:G:C6	26:BA:2445:G:C6	2.77	0.73
26:BA:2516:G:O2'	26:BA:2517:C:O5'	2.06	0.73
26:BA:2520:C:C2	26:BA:2521:C:C6	2.77	0.73
26:BA:2743:C:C2	26:BA:2762:G:C2	2.77	0.73
26:BA:2767:C:H2'	26:BA:2768:C:O5'	1.89	0.73
26:BA:2807:G:O6	26:BA:2892:A:N7	2.22	0.73
25:BB:18:G:OP1	30:BG:149:ARG:CA	2.36	0.73
25:BB:59:A:O3'	25:BB:60:C:C5'	2.36	0.73
27:BD:116:MET:HG2	27:BD:117:SER:N	2.02	0.73
28:BE:224:GLY:O	28:BE:225:LYS:HB2	1.89	0.73
28:BE:200:ASP:H	28:BE:312:ARG:H	1.37	0.73
28:BE:70:VAL:HG13	28:BE:296:VAL:HB	1.70	0.73
29:BF:193:LEU:HD11	29:BF:231:ARG:HB3	1.71	0.73
29:BF:196:THR:HG22	29:BF:197:SER:H	1.52	0.73
29:BF:6:TYR:HE1	29:BF:139:VAL:HB	1.50	0.73
30:BG:93:LEU:HD13	30:BG:94:ALA:N	1.96	0.73
31:BH:20:GLY:O	31:BH:21:ASN:HB3	1.88	0.73
31:BH:64:HIS:C	31:BH:66:THR:N	2.33	0.73
33:BN:83:ILE:CD1	33:BN:84:ARG:HG2	2.19	0.73
34:BO:42:THR:HG22	34:BO:57:VAL:HA	1.71	0.73
34:BO:99:PHE:CE2	38:BT:24:LYS:NZ	2.56	0.73
36:BQ:149:ILE:HD12	36:BQ:149:ILE:N	2.03	0.73
26:BA:910:A:C2'	36:BQ:17:ARG:NH2	2.51	0.73
37:BS:48:VAL:HA	37:BS:55:ASP:OD1	1.89	0.73
26:BA:994:C:O2	44:BU:53:LYS:CB	2.37	0.73
44:BU:5:LYS:O	44:BU:6:THR:C	2.28	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:6:ILE:O	39:BW:7:ALA:HB2	1.88	0.73
40:BX:44:GLN:CD	40:BX:45:TYR:N	2.41	0.73
41:BY:87:VAL:CG1	41:BY:88:PRO:CD	2.60	0.73
42:BZ:69:VAL:C	42:BZ:70:GLN:NE2	2.42	0.73
42:BZ:75:LYS:O	42:BZ:76:ARG:HB2	1.89	0.73
1:AA:1259:C:O2'	1:AA:1284:C:O4'	2.05	0.72
6:AC:150:LYS:HB2	6:AC:173:VAL:HG21	1.70	0.72
16:AM:91:ARG:CD	16:AM:96:LEU:HD12	2.18	0.72
3:AW:37:YYG:H191	10:AG:79:ARG:CA	2.18	0.72
48:B0:49:GLN:HE22	48:B0:73:GLY:HA3	1.04	0.72
52:B7:8:ASN:HD22	52:B7:8:ASN:N	1.85	0.72
26:BA:1364:G:P	49:B4:2:GLN:O	2.47	0.72
26:BA:2056:G:H22	50:B5:4:HIS:C	1.92	0.72
26:BA:2207:C:C2	26:BA:2218:G:C2	2.77	0.72
26:BA:2287:A:O2'	26:BA:2288:A:C5'	2.36	0.72
26:BA:2330:G:H2'	26:BA:2331:G:C5'	2.18	0.72
26:BA:2320:A:C2	26:BA:2333:A:C6	2.77	0.72
26:BA:2359:C:C4	26:BA:2360:A:N1	2.57	0.72
26:BA:2066:C:O2	26:BA:2445:G:C2	2.42	0.72
26:BA:2447:G:C5	26:BA:2500:U:C6	2.74	0.72
26:BA:2251:G:OP2	26:BA:2496:C:OP2	2.07	0.72
26:BA:2497:A:H2'	26:BA:2498:C:OP2	1.88	0.72
26:BA:2564:A:C6	26:BA:2647:U:H4'	2.23	0.72
26:BA:2684:U:C2	26:BA:2725:A:N1	2.57	0.72
26:BA:2870:C:C2	26:BA:2871:C:C6	2.77	0.72
26:BA:931:G:P	47:B3:27:GLY:HA3	2.29	0.72
26:BA:996:A:H5'	44:BU:93:LYS:HG3	1.71	0.72
27:BD:139:LEU:C	27:BD:139:LEU:HD12	2.10	0.72
27:BD:200:THR:OG1	27:BD:201:ASP:OD2	2.07	0.72
28:BE:205:THR:O	28:BE:206:LYS:HG2	1.86	0.72
28:BE:212:GLY:C	28:BE:214:VAL:H	1.92	0.72
28:BE:204:VAL:H	28:BE:303:PRO:HG3	1.54	0.72
29:BF:215:ALA:HB2	29:BF:238:SER:O	1.87	0.72
31:BH:30:GLY:O	31:BH:78:VAL:HG13	1.89	0.72
32:BI:115:ILE:CG1	32:BI:131:VAL:CG1	2.55	0.72
32:BI:98:ILE:CG2	32:BI:99:ALA:H	1.98	0.72
33:BN:82:THR:OG1	33:BN:83:ILE:HG23	1.89	0.72
33:BN:94:GLY:O	33:BN:97:ALA:CB	2.35	0.72
36:BQ:23:ILE:H	36:BQ:24:PRO:CD	1.92	0.72
36:BQ:47:GLU:HA	36:BQ:124:ALA:H	1.53	0.72
43:BR:72:ASP:C	43:BR:72:ASP:OD2	2.28	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:48:A:OP1	37:BS:110:THR:HB	1.89	0.72
37:BS:82:TYR:O	37:BS:86:LEU:CD1	2.37	0.72
37:BS:92:ALA:O	37:BS:95:ALA:N	2.22	0.72
26:BA:581:C:H5''	44:BU:32:TYR:HB2	1.70	0.72
39:BW:29:LEU:HG	39:BW:30:GLU:H	1.54	0.72
40:BX:28:VAL:CG2	40:BX:62:LYS:O	2.37	0.72
42:BZ:113:VAL:CG1	42:BZ:114:ASP:H	1.88	0.72
42:BZ:125:PRO:O	42:BZ:127:PRO:HD3	1.88	0.72
42:BZ:3:LEU:HB3	42:BZ:34:LEU:CA	2.06	0.72
42:BZ:43:PHE:HD2	42:BZ:43:PHE:H	1.36	0.72
1:AA:1250:A:N3	1:AA:1370:G:O2'	2.21	0.72
1:AA:279:A:C2	20:AQ:98:LEU:HD13	2.23	0.72
1:AA:708:C:H4'	14:AK:37:GLY:HA3	1.70	0.72
1:AA:815:A:C2	1:AA:1528:U:H1'	2.24	0.72
2:AV:32:C:OP2	12:AI:128:ARG:O	2.07	0.72
26:BA:856:C:C5'	48:B0:25:LYS:HZ2	2.00	0.72
46:B2:3:LEU:O	46:B2:4:HIS:CB	2.36	0.72
49:B4:41:PRO:CG	49:B4:57:ASP:CB	2.67	0.72
49:B4:5:LEU:CA	49:B4:56:VAL:HG13	2.20	0.72
26:BA:2497:A:O2'	26:BA:2498:C:P	2.47	0.72
26:BA:2570:G:C4	26:BA:2571:C:H5	2.02	0.72
26:BA:1939:U:C1'	26:BA:2592:G:H4'	2.19	0.72
26:BA:2615:U:H2'	26:BA:2616:C:O5'	1.87	0.72
26:BA:2633:G:C4	26:BA:2634:G:N7	2.57	0.72
26:BA:2801:A:H2	26:BA:2895:U:C2'	2.02	0.72
26:BA:481:G:OP2	41:BY:81:LYS:CG	2.37	0.72
26:BA:76:C:H4'	46:B2:55:ARG:CD	2.18	0.72
27:BD:170:TYR:HB2	27:BD:182:MET:SD	2.29	0.72
26:BA:764:A:OP1	27:BD:212:HIS:CD2	2.41	0.72
28:BE:173:ARG:HB2	28:BE:174:LEU:HD12	1.71	0.72
28:BE:201:VAL:H	28:BE:266:LYS:NZ	1.86	0.72
32:BI:141:LEU:HD13	32:BI:142:LYS:C	2.09	0.72
34:BO:63:VAL:CG1	34:BO:102:VAL:CG2	2.67	0.72
36:BQ:47:GLU:OE2	36:BQ:151:SER:CA	2.37	0.72
37:BS:34:LEU:CD1	37:BS:103:ASP:N	2.51	0.72
37:BS:64:SER:O	37:BS:67:ALA:N	2.21	0.72
45:BV:36:LYS:HA	45:BV:60:VAL:HG22	1.71	0.72
42:BZ:125:PRO:HG3	42:BZ:130:ILE:HG22	1.71	0.72
1:AA:409:G:C5'	7:AD:25:ARG:HB3	2.15	0.72
7:AD:11:LEU:C	7:AD:13:ARG:H	1.93	0.72
9:AF:94:GLN:HB3	21:AR:32:ARG:HH11	1.54	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AG:74:GLU:HG2	10:AG:75:VAL:H	1.52	0.72
19:AP:13:HIS:O	19:AP:15:PRO:HD3	1.88	0.72
48:B0:49:GLN:NE2	48:B0:73:GLY:O	2.04	0.72
47:B3:22:ALA:O	47:B3:26:LEU:CG	2.36	0.72
47:B3:26:LEU:CD2	47:B3:46:ASN:HD22	2.02	0.72
49:B4:10:VAL:N	49:B4:11:PRO:HD3	1.96	0.72
26:BA:1082:U:C4'	55:BK:118:ALA:CB	2.66	0.72
26:BA:2250:G:H3'	26:BA:2250:G:H8	1.53	0.72
26:BA:2359:C:C5	26:BA:2360:A:C2	2.78	0.72
26:BA:2422:A:N3	26:BA:2424:C:C6	2.55	0.72
26:BA:2450:A:H5''	26:BA:2497:A:C6	2.18	0.72
26:BA:2575:C:C2'	26:BA:2575:C:O2	2.37	0.72
26:BA:2619:C:O2'	26:BA:2620:C:C5'	2.37	0.72
26:BA:2653:U:P	26:BA:2654:A:H3'	2.29	0.72
26:BA:2700:C:C2'	26:BA:2701:C:C4'	2.60	0.72
26:BA:2716:U:C2'	26:BA:2717:G:H5''	2.20	0.72
26:BA:2785:C:C6	26:BA:2786:U:C4	2.78	0.72
26:BA:2819:G:C4	26:BA:2821:A:N7	2.57	0.72
26:BA:929:G:O2'	47:B3:43:ILE:HG12	1.89	0.72
25:BB:24:G:O6	25:BB:56:G:H2'	1.89	0.72
28:BE:42:ALA:H	28:BE:189:MET:CE	2.00	0.72
29:BF:153:VAL:HG13	29:BF:157:LEU:HD22	1.71	0.72
29:BF:223:LEU:HA	29:BF:231:ARG:HD2	1.70	0.72
31:BH:82:TYR:CZ	31:BH:137:LYS:CB	2.72	0.72
32:BI:6:LEU:HB3	32:BI:35:LEU:O	1.90	0.72
35:BP:94:ARG:CZ	35:BP:120:LEU:HB2	1.93	0.72
36:BQ:46:VAL:O	36:BQ:124:ALA:O	2.08	0.72
36:BQ:91:HIS:O	36:BQ:92:VAL:CG1	2.37	0.72
39:BW:24:ILE:HB	39:BW:32:ALA:HB1	1.72	0.72
40:BX:9:HIS:H	40:BX:26:PHE:HA	1.53	0.72
42:BZ:150:GLY:H	42:BZ:165:GLU:H	1.36	0.72
1:AA:263:A:OP1	23:AT:75:ASN:HB2	1.89	0.72
1:AA:977:A:C2	1:AA:1223:C:H5	2.07	0.72
1:AA:426:G:H1'	7:AD:42:GLN:HG3	1.71	0.72
10:AG:77:SER:HB3	10:AG:84:ASN:HB3	1.71	0.72
3:AW:72:C:HO2'	3:AW:73:A:C4'	1.92	0.72
46:B2:26:GLU:O	46:B2:27:LEU:C	2.27	0.72
26:BA:2284:C:OP2	51:B6:9:ILE:HG13	1.90	0.72
52:B7:24:THR:CG2	52:B7:27:GLY:HA3	2.18	0.72
53:B8:14:ILE:CG2	53:B8:15:LYS:N	2.52	0.72
53:B8:5:LYS:HB3	53:B8:60:LEU:HA	1.70	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:B9:19:ARG:O	54:B9:22:ARG:CB	2.32	0.72
26:BA:1453:A:N6	43:BR:77:ARG:HD3	2.04	0.72
26:BA:1492:G:C1'	27:BD:97:ASP:OD1	2.37	0.72
26:BA:2068:U:O2	26:BA:2430:A:N1	2.22	0.72
26:BA:2298:A:C1'	26:BA:2321:G:N2	2.52	0.72
26:BA:2623:G:N2	26:BA:2624:G:H1'	2.00	0.72
26:BA:2762:G:N7	26:BA:2763:G:C6	2.58	0.72
26:BA:2815:C:O2	26:BA:2816:C:C5	2.42	0.72
28:BE:228:ARG:O	28:BE:231:TRP:N	2.22	0.72
28:BE:45:LYS:HD2	28:BE:303:PRO:O	1.90	0.72
29:BF:163:HIS:HA	29:BF:166:ILE:CD1	2.15	0.72
29:BF:168:ARG:CZ	29:BF:209:GLY:HA3	2.15	0.72
29:BF:36:ARG:O	29:BF:39:GLN:CD	2.26	0.72
36:BQ:140:TYR:O	36:BQ:142:LYS:N	2.22	0.72
43:BR:28:LEU:O	43:BR:30:THR:N	2.21	0.72
37:BS:121:GLY:O	37:BS:125:ALA:N	2.20	0.72
37:BS:27:LEU:HB2	37:BS:33:ARG:HH22	0.92	0.72
37:BS:85:GLY:O	37:BS:86:LEU:C	2.26	0.72
26:BA:994:C:N3	44:BU:53:LYS:CD	2.35	0.72
45:BV:62:GLU:CB	45:BV:96:LEU:HD21	2.19	0.72
39:BW:14:PRO:O	39:BW:17:VAL:HB	1.89	0.72
5:AB:170:GLU:HG3	5:AB:173:ALA:HB3	1.70	0.72
20:AQ:67:LYS:O	20:AQ:68:ARG:HB2	1.90	0.72
26:BA:2354:G:O5'	48:B0:31:VAL:HG21	1.89	0.72
48:B0:48:GLY:CA	48:B0:55:ARG:HA	2.18	0.72
48:B0:46:LYS:HG3	48:B0:58:THR:HG23	0.76	0.72
50:B5:45:ILE:N	50:B5:52:TYR:CZ	2.57	0.72
53:B8:37:SER:OG	53:B8:38:GLY:N	2.21	0.72
26:BA:592:G:N2	53:B8:3:LYS:NZ	2.38	0.72
26:BA:2320:A:C2	26:BA:2333:A:C5	2.75	0.72
26:BA:2428:G:H5''	26:BA:2429:G:P	2.29	0.72
26:BA:2066:C:N3	26:BA:2445:G:C2	2.58	0.72
26:BA:2551:C:H2'	26:BA:2552:U:H6	1.53	0.72
26:BA:2546:U:C5'	26:BA:2565:A:N1	2.49	0.72
26:BA:2508:G:C2	26:BA:2582:G:O6	2.41	0.72
26:BA:2656:U:C4	26:BA:2665:A:N6	2.57	0.72
26:BA:2668:G:H21	26:BA:2669:G:H1'	1.54	0.72
26:BA:2866:U:H5''	26:BA:2867:G:OP1	1.90	0.72
26:BA:2712:U:O2'	26:BA:712(A):A:OP1	2.06	0.72
26:BA:75:G:C3'	46:B2:51:LYS:NZ	2.48	0.72
28:BE:70:VAL:HG11	28:BE:295:LEU:HD22	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:243:VAL:C	29:BF:246:ARG:H	1.92	0.72
31:BH:102:LEU:CD2	31:BH:114:ILE:HB	2.18	0.72
32:BI:103:GLN:CD	32:BI:109:LYS:HA	2.08	0.72
55:BK:11:LEU:HD12	55:BK:58:ILE:HD12	1.71	0.72
55:BK:105:ILE:CG2	55:BK:128:ILE:CG2	2.63	0.72
26:BA:1138:G:OP1	33:BN:82:THR:HG22	1.90	0.72
35:BP:67:ARG:NH1	35:BP:109:LEU:HD12	2.05	0.72
36:BQ:135:ALA:O	36:BQ:136:TRP:C	2.28	0.72
43:BR:27:SER:O	43:BR:30:THR:HB	1.90	0.72
37:BS:46:GLN:O	37:BS:47:LEU:CG	2.37	0.72
45:BV:42:GLY:C	45:BV:54:TYR:OH	2.26	0.72
45:BV:74:TYR:HE1	45:BV:87:ARG:O	1.73	0.72
39:BW:24:ILE:HG22	39:BW:35:ILE:HD12	1.71	0.72
39:BW:27:LYS:HB3	39:BW:31:GLU:OE2	1.89	0.72
39:BW:82:LEU:O	39:BW:84:ARG:CD	2.27	0.72
40:BX:6:LYS:HD2	40:BX:27:ALA:HB1	1.70	0.72
1:AA:1261:A:H5'	1:AA:1284:C:OP1	1.89	0.72
1:AA:1222:G:P	1:AA:1321:C:O2	2.48	0.72
1:AA:1341:U:H5'	2:AV:32:C:P	2.29	0.72
9:AF:89:MET:HG2	21:AR:76:LEU:HD21	1.71	0.72
1:AA:926:G:N2	4:AX:116:U:P	2.62	0.72
48:B0:45:PHE:HZ	48:B0:78:PHE:HD2	1.33	0.72
49:B4:6:HIS:CB	49:B4:56:VAL:HG23	2.19	0.72
49:B4:68:ARG:HD3	49:B4:72:LYS:CG	2.17	0.72
52:B7:36:ALA:O	52:B7:37:LYS:C	2.28	0.72
26:BA:1031:G:O2'	54:B9:8:LYS:NZ	2.21	0.72
26:BA:146:G:C2	26:BA:147:U:H1'	2.24	0.72
26:BA:2021:C:C6	44:BU:25:TRP:CH2	2.78	0.72
26:BA:2197:U:H2'	26:BA:2224:G:H1	1.55	0.72
26:BA:2286:A:C5'	26:BA:2287:A:O4'	2.37	0.72
26:BA:2356:C:H2'	26:BA:2357:U:H5'	1.72	0.72
26:BA:2487:G:C2'	26:BA:2488:A:O5'	2.36	0.72
26:BA:2533:A:H2'	26:BA:2534:A:C8	2.24	0.72
26:BA:2585:U:O2'	26:BA:2586:C:OP2	2.06	0.72
26:BA:2701:C:H3'	26:BA:2702:U:H5'	1.72	0.72
26:BA:2886:G:H21	26:BA:2887:U:H1'	1.54	0.72
26:BA:84:A:C6	26:BA:99:U:H1'	2.23	0.72
27:BD:181:ARG:CB	27:BD:181:ARG:CZ	2.66	0.72
28:BE:206:LYS:O	28:BE:257:GLY:HA3	1.90	0.72
28:BE:269:ILE:CD1	28:BE:295:LEU:C	2.57	0.72
29:BF:5:ILE:CA	29:BF:139:VAL:HG11	2.20	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:106:VAL:O	31:BH:106:VAL:HG12	1.87	0.72
31:BH:53:ARG:HD2	31:BH:56:ASP:HA	1.70	0.72
31:BH:83:GLU:OE1	31:BH:85:ALA:N	2.23	0.72
33:BN:46:ILE:CD1	33:BN:132:LEU:CD1	2.68	0.72
34:BO:11:ALA:HB1	34:BO:99:PHE:CB	2.18	0.72
36:BQ:142:LYS:HE3	36:BQ:142:LYS:CA	2.19	0.72
43:BR:36:THR:CG2	43:BR:40:LYS:HD2	2.10	0.72
44:BU:85:ARG:CZ	44:BU:116:ALA:O	2.36	0.72
39:BW:12:ILE:CG2	39:BW:13:SER:N	2.52	0.72
39:BW:30:GLU:HA	39:BW:33:ARG:HD3	0.77	0.72
41:BY:35:TYR:OH	41:BY:113:GLU:CG	2.31	0.72
1:AA:1269:A:H2	1:AA:1326:C:O2	1.72	0.72
1:AA:976:G:N1	1:AA:361(A):C:C6	2.58	0.72
8:AE:152:ARG:HH11	11:AH:43:GLY:HA3	1.54	0.72
3:AW:65:G:H2'	3:AW:66:A:O4'	1.89	0.72
51:B6:29:ARG:O	51:B6:30:ASN:C	2.28	0.72
53:B8:30:ARG:CD	53:B8:44:LYS:HD2	2.19	0.72
26:BA:1030:G:O3'	26:BA:1031:G:P	2.47	0.72
26:BA:2256:G:C2'	26:BA:2257:U:H5'	2.20	0.72
26:BA:825:C:C4'	26:BA:2428:G:C6	2.72	0.72
26:BA:2468:G:O6	26:BA:2481:G:C5	2.42	0.72
26:BA:2548:G:H8	26:BA:2548:G:H3'	1.55	0.72
26:BA:2589:A:N1	26:BA:2606:C:N4	2.38	0.72
26:BA:2618:G:C5	26:BA:2619:C:C5	2.61	0.72
26:BA:2659:G:H1'	26:BA:2663:G:H1	1.53	0.72
26:BA:2678:C:C2'	26:BA:2679:A:O5'	2.35	0.72
26:BA:2717:G:C2	26:BA:2718:G:C4	2.76	0.72
28:BE:101:THR:O	28:BE:103:GLU:CG	2.37	0.72
28:BE:44:TYR:HD1	28:BE:309:PRO:HD2	1.55	0.72
26:BA:449:A:OP1	29:BF:85:LYS:N	2.22	0.72
30:BG:97:GLN:CD	30:BG:106:PHE:HD2	1.92	0.72
31:BH:41:THR:HG22	31:BH:52:THR:CG2	2.18	0.72
31:BH:75:VAL:HG12	31:BH:76:GLU:N	2.05	0.72
34:BO:31:ARG:HB2	34:BO:32:TYR:CD1	2.24	0.72
34:BO:79:PHE:CG	38:BT:22:VAL:HG21	2.25	0.72
35:BP:81:VAL:CG1	35:BP:81:VAL:O	2.36	0.72
26:BA:910:A:H62	36:BQ:12:PRO:CA	2.02	0.72
43:BR:105:ARG:NE	43:BR:105:ARG:N	2.38	0.72
43:BR:58:GLY:HA2	43:BR:80:PHE:HE2	0.93	0.72
44:BU:40:LEU:N	44:BU:40:LEU:HD23	2.04	0.72
42:BZ:105:GLN:HB2	42:BZ:141:MET:CG	2.18	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:18:MET:HA	42:BZ:36:ARG:H	1.55	0.72
42:BZ:5:ALA:HB3	42:BZ:33:ALA:CA	2.15	0.72
46:B2:51:LYS:HA	46:B2:54:ALA:HB2	1.72	0.72
49:B4:68:ARG:CB	49:B4:72:LYS:HG2	2.20	0.72
26:BA:1059:G:H5''	55:BK:115:ASP:O	1.88	0.72
26:BA:1608:A:H2'	26:BA:1611:C:N4	2.05	0.72
26:BA:1646:C:C3'	26:BA:1647:G:C5'	2.67	0.72
26:BA:2028:U:H2'	26:BA:2029:G:C8	2.25	0.72
26:BA:2468:G:C6	26:BA:2481:G:C5	2.78	0.72
26:BA:2536:G:C6	26:BA:2537:U:C4	2.78	0.72
26:BA:2734:A:N7	26:BA:2735:G:C5	2.58	0.72
26:BA:2766:G:N3	26:BA:2766:G:H2'	2.05	0.72
26:BA:2810:A:C8	26:BA:2811:G:C8	2.78	0.72
26:BA:910:A:N6	36:BQ:12:PRO:C	2.43	0.72
27:BD:89:ASN:C	27:BD:105:ALA:CB	2.54	0.72
27:BD:127:ASN:C	27:BD:190:THR:HB	2.09	0.72
28:BE:77:PRO:CB	28:BE:187:HIS:N	2.36	0.72
29:BF:96:LYS:H	29:BF:98:ARG:CZ	2.01	0.72
31:BH:145:ALA:C	31:BH:147:ILE:H	1.93	0.72
31:BH:58:LYS:HA	31:BH:61:ARG:HD2	1.70	0.72
35:BP:128:GLY:CA	35:BP:132:LYS:HZ3	1.81	0.72
35:BP:55:GLN:OE1	35:BP:55:GLN:CA	2.38	0.72
36:BQ:56:ILE:H	36:BQ:56:ILE:HD13	0.63	0.72
43:BR:99:LYS:HB3	50:B5:44:HIS:NE2	2.05	0.72
37:BS:40:ASN:HA	37:BS:114:LYS:HZ3	1.55	0.72
44:BU:115:ASN:C	44:BU:117:ARG:N	2.43	0.72
44:BU:95:LEU:HD23	44:BU:95:LEU:N	2.05	0.72
40:BX:16:ASN:HB2	40:BX:20:PHE:CE2	2.25	0.72
1:AA:652:U:H1'	1:AA:653:A:C2	2.20	0.72
1:AA:1400:C:C6	2:AV:34:G:C6	2.78	0.72
3:AW:37:YYG:H31	3:AW:37:YYG:C2'	2.20	0.72
48:B0:61:ALA:HB3	48:B0:81:ILE:HD13	1.71	0.72
46:B2:43:PRO:HB2	46:B2:46:ILE:H	1.53	0.72
47:B3:44:ARG:O	47:B3:45:GLY:O	2.07	0.72
49:B4:5:LEU:HD12	49:B4:60:ASN:HD22	1.55	0.72
51:B6:32:GLN:HB3	51:B6:35:LEU:CB	2.20	0.72
26:BA:1034:G:OP2	54:B9:18:ARG:NH2	2.21	0.72
26:BA:1996:C:H6	26:BA:1996:C:H5''	1.53	0.72
26:BA:2235:G:C4	26:BA:2236:C:C6	2.78	0.72
26:BA:2259:G:N1	26:BA:2282:G:C6	2.58	0.72
26:BA:2378:A:H2'	26:BA:2379:G:O5'	1.89	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2478:A:N7	26:BA:2479:G:C8	2.58	0.72
26:BA:2550:G:H2'	26:BA:2551:C:H6	1.51	0.72
26:BA:2623:G:H4'	26:BA:2826:A:H1'	1.72	0.72
26:BA:2649:U:C2'	26:BA:2650:U:O5'	2.38	0.72
26:BA:2655:G:N3	26:BA:2655:G:H3'	2.05	0.72
26:BA:2741:A:C2	26:BA:2742:C:H1'	2.25	0.72
26:BA:2810:A:N7	26:BA:2811:G:C8	2.57	0.72
26:BA:2840:C:H5''	43:BR:53:HIS:CD2	2.24	0.72
26:BA:2854:G:N2	26:BA:2864:G:C5	2.58	0.72
28:BE:79:ARG:CA	28:BE:186:GLU:HA	2.17	0.72
29:BF:155:SER:N	29:BF:157:LEU:HG	2.05	0.72
30:BG:19:GLU:HB3	30:BG:135:VAL:HG22	1.09	0.72
55:BK:101:THR:O	55:BK:105:ILE:CD1	2.38	0.72
55:BK:79:LEU:HD11	55:BK:132:ALA:HB2	1.71	0.72
35:BP:106:VAL:HG21	35:BP:122:ALA:CB	2.20	0.72
36:BQ:65:ARG:NH2	36:BQ:122:PHE:HE2	1.84	0.72
37:BS:100:ALA:HB3	37:BS:127:LEU:HD21	1.71	0.72
34:BO:101:PRO:HD3	38:BT:26:GLY:HA2	1.71	0.72
38:BT:5:GLU:OE1	38:BT:56:ARG:NH2	2.23	0.72
44:BU:57:PHE:C	44:BU:59:ARG:N	2.41	0.72
39:BW:5:ALA:CB	39:BW:54:ALA:HB2	2.19	0.72
41:BY:40:VAL:HG12	41:BY:41:ARG:HG2	1.71	0.72
41:BY:49:GLU:HG3	41:BY:59:GLU:HA	1.71	0.72
42:BZ:51:LEU:HD21	42:BZ:63:PRO:CB	2.20	0.72
7:AD:98:GLU:O	7:AD:99:SER:C	2.25	0.72
1:AA:587:G:OP1	11:AH:92:ARG:NH2	2.23	0.72
1:AA:1368:G:C8	12:AI:112:LYS:HD2	2.25	0.72
46:B2:30:ALA:HA	46:B2:34:GLN:CG	2.18	0.72
49:B4:20:VAL:O	49:B4:21:VAL:O	2.07	0.72
26:BA:1262:A:C2	50:B5:10:LYS:HE2	2.24	0.72
26:BA:1472:A:H2'	26:BA:1473:G:H8	1.54	0.72
26:BA:2283:C:C6	26:BA:2389:G:N3	2.57	0.72
26:BA:2397:G:O6	26:BA:2420:C:N3	2.23	0.72
26:BA:2606:C:O2	26:BA:2607:G:C8	2.43	0.72
26:BA:2522:U:O2'	26:BA:2647:U:OP1	2.08	0.72
26:BA:2652:C:H5	26:BA:2653:U:O4	1.73	0.72
26:BA:2788:C:H2'	26:BA:2892:A:C2	2.24	0.72
26:BA:489:G:H3'	26:BA:491:G:P	2.29	0.72
26:BA:687:C:O4'	52:B7:4:THR:HG21	1.90	0.72
26:BA:748:G:C8	26:BA:750:A:OP2	2.42	0.72
26:BA:95:G:H1'	46:B2:42:ASN:HB3	1.72	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:987:G:OP1	47:B3:10:LYS:CE	2.37	0.72
28:BE:177:ALA:O	28:BE:178:LEU:C	2.28	0.72
28:BE:295:LEU:CD2	28:BE:296:VAL:H	2.03	0.72
30:BG:44:ILE:C	30:BG:83:PHE:CZ	2.63	0.72
31:BH:66:THR:CG2	31:BH:67:THR:N	2.53	0.72
32:BI:21:VAL:O	32:BI:22:ALA:HB3	1.89	0.72
55:BK:95:LYS:O	55:BK:97:VAL:HG22	1.90	0.72
33:BN:48:GLY:O	33:BN:53:ILE:CD1	2.37	0.72
34:BO:66:LYS:HZ1	34:BO:67:ARG:CZ	2.02	0.72
34:BO:95:GLY:C	34:BO:97:ARG:H	1.92	0.72
35:BP:68:GLU:O	35:BP:71:GLU:HG2	1.89	0.72
36:BQ:151:SER:HB3	36:BQ:155:GLY:C	2.10	0.72
36:BQ:58:HIS:CA	36:BQ:61:LEU:CG	2.68	0.72
37:BS:34:LEU:HD21	37:BS:102:LEU:CA	2.15	0.72
44:BU:14:HIS:NE2	44:BU:36:PHE:CE2	2.58	0.72
44:BU:35:ALA:O	44:BU:38:THR:OG1	2.07	0.72
45:BV:83:ARG:O	45:BV:84:THR:HG23	1.90	0.72
41:BY:45:GLY:C	41:BY:62:VAL:HB	2.10	0.72
41:BY:73:HIS:N	41:BY:91:LEU:HD12	2.04	0.72
42:BZ:149:ALA:CA	42:BZ:152:ILE:HD11	2.20	0.72
42:BZ:13:LYS:C	42:BZ:36:ARG:HH21	1.89	0.72
42:BZ:63:PRO:O	42:BZ:64:ALA:CB	2.37	0.72
26:BA:923:C:C2	48:B0:26:PHE:CE2	2.75	0.71
48:B0:68:VAL:O	48:B0:68:VAL:HG12	1.90	0.71
49:B4:48:ARG:HG2	49:B4:49:PHE:CD1	2.24	0.71
51:B6:16:ALA:CB	51:B6:50:PHE:CE2	2.73	0.71
26:BA:142(A):A:P	26:BA:1143:A:H8	2.12	0.71
26:BA:1448:G:H5''	26:BA:1543:A:H61	1.54	0.71
26:BA:1646:C:H3'	26:BA:1647:G:H5'	1.68	0.71
26:BA:2404:C:N4	26:BA:2405:G:C5	2.57	0.71
26:BA:2511:U:C5	26:BA:2512:C:C5	2.77	0.71
26:BA:2540:C:C2'	26:BA:2541:A:O5'	2.37	0.71
26:BA:2676:C:C3'	26:BA:2676:C:C6	2.73	0.71
26:BA:2717:G:O2'	26:BA:2718:G:C5'	2.38	0.71
26:BA:2866:U:H4'	26:BA:2867:G:O5'	1.89	0.71
26:BA:350:U:O2	26:BA:350:U:H2'	1.90	0.71
26:BA:613:U:O5'	26:BA:615:G:H8	1.73	0.71
26:BA:72:U:H5'	40:BX:2:TRP:CZ3	2.25	0.71
27:BD:175:LEU:HD12	27:BD:179:GLU:HB3	1.70	0.71
26:BA:1791:A:P	27:BD:210:LYS:HD3	2.30	0.71
29:BF:102:LEU:H	29:BF:107:ARG:HH21	0.75	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:14:VAL:O	31:BH:16:VAL:HG23	1.90	0.71
31:BH:40:MET:HB2	31:BH:54:PRO:HG3	1.72	0.71
32:BI:49:ALA:O	32:BI:53:LYS:HG2	1.90	0.71
55:BK:92:PRO:CB	55:BK:134:SER:O	2.38	0.71
37:BS:58:LEU:HG	37:BS:58:LEU:O	1.90	0.71
34:BO:99:PHE:HD2	38:BT:24:LYS:CE	1.97	0.71
40:BX:17:ASP:O	40:BX:22:ASN:O	2.07	0.71
40:BX:39:ASP:O	40:BX:40:ALA:C	2.27	0.71
42:BZ:118:HIS:O	42:BZ:120:LEU:CD2	2.38	0.71
11:AH:27:PRO:HB2	11:AH:32:LYS:HZ3	1.55	0.71
46:B2:8:ILE:O	46:B2:11:MET:CG	2.37	0.71
46:B2:30:ALA:HA	46:B2:34:GLN:HG3	1.72	0.71
46:B2:5:VAL:CG1	46:B2:6:GLN:N	2.13	0.71
51:B6:2:ALA:CB	51:B6:11:LYS:HZ2	1.98	0.71
51:B6:19:GLY:CA	51:B6:42:PRO:HG2	2.13	0.71
52:B7:19:ARG:O	52:B7:20:ALA:C	2.26	0.71
26:BA:2320:A:N6	37:BS:14:ARG:CA	2.52	0.71
26:BA:2411:A:H2	26:BA:2412:A:C5	2.06	0.71
26:BA:2431:U:H2'	26:BA:2431:U:O2	1.90	0.71
26:BA:2454:G:O2'	26:BA:2455:G:H5'	1.90	0.71
26:BA:2461:C:O2	26:BA:2462:U:C6	2.42	0.71
26:BA:2716:U:H2'	26:BA:2717:G:H5''	1.68	0.71
26:BA:404:C:H4'	26:BA:405:U:C5'	2.21	0.71
26:BA:458:G:C5'	52:B7:39:ARG:CD	2.66	0.71
26:BA:752:A:N7	26:BA:1781:C:O2	2.23	0.71
25:BB:17:C:OP1	30:BG:147:ALA:CA	2.26	0.71
27:BD:115:ILE:HB	27:BD:127:ASN:OD1	1.90	0.71
28:BE:201:VAL:N	28:BE:266:LYS:NZ	2.38	0.71
29:BF:58:ALA:CB	29:BF:79:ARG:N	2.53	0.71
25:BB:18:G:P	30:BG:149:ARG:HD3	2.30	0.71
31:BH:55:SER:CB	31:BH:60:HIS:CB	2.63	0.71
32:BI:141:LEU:HD11	32:BI:142:LYS:O	1.90	0.71
34:BO:25:LEU:HD12	34:BO:38:VAL:C	2.09	0.71
34:BO:35:ILE:HG22	34:BO:62:VAL:O	1.89	0.71
35:BP:52:LYS:CD	35:BP:53:ARG:HH12	1.97	0.71
26:BA:2485:G:C4'	36:BQ:144:THR:HG22	2.19	0.71
36:BQ:23:ILE:O	36:BQ:23:ILE:HG22	1.90	0.71
37:BS:32:PRO:O	37:BS:101:VAL:HG12	1.89	0.71
37:BS:23:ARG:HH21	37:BS:35:VAL:HG11	1.54	0.71
44:BU:111:ASP:C	44:BU:113:SER:H	1.93	0.71
44:BU:27:SER:C	44:BU:31:GLN:HG3	2.10	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:39:PHE:O	45:BV:40:VAL:CB	2.37	0.71
39:BW:24:ILE:CG2	39:BW:35:ILE:HB	2.20	0.71
41:BY:18:GLU:HB3	41:BY:21:LYS:CE	2.19	0.71
42:BZ:114:ASP:CA	42:BZ:170:SER:O	2.37	0.71
1:AA:958:A:C4	22:AS:55:LYS:HD2	2.25	0.71
2:AV:14:A:H2'	2:AV:15:G:H8	1.55	0.71
26:BA:2364:C:H5'	48:B0:38:VAL:CG1	2.18	0.71
48:B0:38:VAL:HA	48:B0:40:GLN:CG	2.19	0.71
47:B3:6:VAL:HA	47:B3:55:ARG:O	1.90	0.71
52:B7:26:SER:O	52:B7:27:GLY:C	2.28	0.71
53:B8:13:ARG:HB3	53:B8:24:ALA:HB1	1.70	0.71
26:BA:138:G:C5'	40:BX:43:GLU:CG	2.59	0.71
26:BA:1398:C:H2'	26:BA:1399:C:C6	2.25	0.71
26:BA:1638:C:H5''	26:BA:2710:C:H1'	1.72	0.71
26:BA:2060:A:OP1	29:BF:64:GLY:HA2	1.89	0.71
26:BA:2241:A:H2'	26:BA:2242:G:C8	2.25	0.71
26:BA:2491:U:H5'	26:BA:2570:G:H5'	1.70	0.71
26:BA:2523:G:C2	26:BA:2541:A:N3	2.57	0.71
26:BA:2732:G:OP2	26:BA:2732:G:C8	2.43	0.71
26:BA:2748:A:C8	26:BA:2749:A:N3	2.54	0.71
26:BA:2783:G:H8	26:BA:2783:G:C5'	2.03	0.71
26:BA:2783:G:N1	26:BA:2784:C:N4	2.39	0.71
26:BA:614:U:C3'	26:BA:615:G:H4'	2.16	0.71
27:BD:85:ASN:N	27:BD:85:ASN:HD22	1.88	0.71
28:BE:47:GLY:CA	28:BE:305:LYS:HE2	2.21	0.71
29:BF:1:MET:C	29:BF:18:LEU:CD2	2.59	0.71
29:BF:215:ALA:C	29:BF:242:GLU:CG	2.54	0.71
29:BF:215:ALA:HA	29:BF:242:GLU:HG3	1.72	0.71
26:BA:673:C:O4'	29:BF:82:GLN:NE2	2.22	0.71
30:BG:21:VAL:CB	30:BG:132:VAL:HG23	2.19	0.71
30:BG:140:ARG:HD2	30:BG:144:ARG:HH22	1.53	0.71
30:BG:95:THR:O	30:BG:97:GLN:N	2.23	0.71
31:BH:104:LEU:HB3	31:BH:151:ARG:HH11	1.55	0.71
31:BH:69:SER:O	31:BH:70:LEU:C	2.28	0.71
32:BI:3:VAL:O	32:BI:18:ILE:HA	1.90	0.71
55:BK:105:ILE:HG23	55:BK:128:ILE:CG2	2.18	0.71
33:BN:137:GLU:N	33:BN:141:ALA:N	2.29	0.71
36:BQ:153:PRO:O	36:BQ:154:ALA:CB	2.37	0.71
43:BR:45:ARG:HD3	43:BR:97:VAL:HG23	1.72	0.71
43:BR:80:PHE:O	43:BR:84:ALA:HB3	1.90	0.71
26:BA:2880:C:O2'	43:BR:90:ARG:CD	2.37	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:17:ARG:CD	37:BS:18:THR:N	2.52	0.71
44:BU:111:ASP:O	44:BU:113:SER:CA	2.37	0.71
45:BV:5:ILE:CD1	45:BV:12:TYR:CE1	2.73	0.71
45:BV:60:VAL:O	45:BV:98:ILE:CG1	2.38	0.71
26:BA:566:U:OP2	45:BV:81:ARG:NE	2.24	0.71
42:BZ:95:SER:HA	42:BZ:122:ILE:HA	1.72	0.71
1:AA:1268:A:H5'	24:AU:20:LYS:O	1.90	0.71
1:AA:1313:U:C4	22:AS:4:SER:CB	2.74	0.71
1:AA:736:C:OP1	21:AR:72:ARG:NH2	2.23	0.71
1:AA:794:A:O2'	1:AA:1521:G:O3'	2.08	0.71
1:AA:408:A:OP1	7:AD:115:ARG:CZ	2.38	0.71
9:AF:50:TYR:HE1	21:AR:77:GLY:HA2	1.55	0.71
1:AA:175:C:H5''	23:AT:25:ARG:NH2	2.05	0.71
2:AV:25:C:H4'	26:BA:1923:U:P	2.30	0.71
46:B2:5:VAL:O	46:B2:6:GLN:C	2.28	0.71
47:B3:18:ASP:O	47:B3:20:LYS:N	2.24	0.71
49:B4:18:GLY:N	49:B4:33:VAL:HG21	1.96	0.71
51:B6:41:ASP:HA	51:B6:47:HIS:O	1.90	0.71
51:B6:54:LYS:HZ3	51:B6:54:LYS:CB	2.02	0.71
54:B9:24:LEU:HD22	54:B9:35:ARG:HG2	1.70	0.71
26:BA:49:A:N6	26:BA:176:G:H1	1.89	0.71
26:BA:574:C:N4	26:BA:2054:A:H5''	2.04	0.71
26:BA:2468:G:O6	26:BA:2481:G:N1	2.23	0.71
26:BA:2585:U:C2'	26:BA:2586:C:OP2	2.38	0.71
26:BA:2605:U:H6	26:BA:2605:U:C5'	2.02	0.71
26:BA:2049:G:N3	26:BA:2620:C:N3	2.39	0.71
26:BA:397:G:O2'	26:BA:2231:C:H1'	1.89	0.71
26:BA:531:C:O2	44:BU:28:ARG:CZ	2.38	0.71
27:BD:128:ALA:HB3	27:BD:190:THR:HG22	0.72	0.71
27:BD:198:GLY:O	27:BD:200:THR:CG2	2.38	0.71
27:BD:89:ASN:ND2	27:BD:199:ARG:NE	2.35	0.71
28:BE:204:VAL:H	28:BE:303:PRO:CG	2.03	0.71
28:BE:211:GLN:CD	28:BE:212:GLY:N	2.44	0.71
29:BF:20:ASP:O	29:BF:21:VAL:O	2.08	0.71
55:BK:11:LEU:HD11	55:BK:28:LEU:CD2	2.20	0.71
55:BK:8:GLN:O	55:BK:9:ILE:HG12	1.89	0.71
35:BP:120:LEU:C	35:BP:120:LEU:HD13	2.10	0.71
36:BQ:33:MET:CB	36:BQ:83:PHE:CB	2.66	0.71
36:BQ:93:ILE:O	36:BQ:94:ARG:HB2	1.89	0.71
43:BR:84:ALA:HB3	43:BR:85:PRO:HD2	1.68	0.71
37:BS:21:HIS:CD2	37:BS:24:LEU:HD12	2.24	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:31:ARG:NE	40:BX:31:ARG:N	2.39	0.71
41:BY:26:THR:C	41:BY:27:LEU:HG	2.10	0.71
42:BZ:113:VAL:O	42:BZ:171:VAL:HA	1.90	0.71
42:BZ:26:LYS:CB	42:BZ:26:LYS:NZ	2.52	0.71
1:AA:776:G:N2	1:AA:802:A:OP2	2.22	0.71
48:B0:9:SER:O	48:B0:10:SER:O	2.09	0.71
48:B0:61:ALA:C	48:B0:62:LEU:CD1	2.48	0.71
52:B7:27:GLY:O	52:B7:28:ARG:C	2.26	0.71
26:BA:1134:G:H3'	26:BA:1136:G:OP2	1.90	0.71
26:BA:125:G:C5'	52:B7:19:ARG:NH1	2.13	0.71
26:BA:2093:G:C8	26:BA:2225:A:C5	2.78	0.71
26:BA:2225:A:C4'	26:BA:2226:C:H5''	2.05	0.71
26:BA:2259:G:C2	26:BA:2282:G:N1	2.58	0.71
26:BA:2464:C:H2'	26:BA:2465:C:C6	2.24	0.71
26:BA:2496:C:C4	26:BA:2497:A:C2	2.77	0.71
26:BA:2504:U:O5'	26:BA:2504:U:C6	2.42	0.71
26:BA:2503:A:C4'	26:BA:2504:U:OP1	2.38	0.71
26:BA:2521:C:C2'	26:BA:2522:U:O5'	2.38	0.71
26:BA:2611:U:C5	50:B5:4:HIS:NE2	2.58	0.71
26:BA:2619:C:O2	26:BA:2619:C:H2'	1.90	0.71
26:BA:2762:G:C6	26:BA:2763:G:C5	2.79	0.71
26:BA:2802:G:H2'	26:BA:2803:C:H6	1.54	0.71
26:BA:2826:A:C4	26:BA:2827:C:H6	2.08	0.71
26:BA:2838:G:O2'	26:BA:2839:G:H5'	1.90	0.71
26:BA:2852:G:N3	26:BA:2853:C:N3	2.38	0.71
27:BD:131:LEU:HB3	27:BD:171:VAL:HG21	1.72	0.71
27:BD:208:GLY:O	27:BD:211:HIS:NE2	2.24	0.71
29:BF:214:THR:C	29:BF:216:SER:N	2.39	0.71
29:BF:30:LEU:O	29:BF:31:ILE:C	2.28	0.71
26:BA:674:G:H5''	29:BF:69:HIS:CA	2.19	0.71
30:BG:140:ARG:HA	30:BG:143:LYS:HZ3	1.53	0.71
30:BG:49:PRO:HD3	30:BG:73:VAL:CG2	2.19	0.71
31:BH:66:THR:O	31:BH:69:SER:OG	2.08	0.71
35:BP:73:VAL:O	35:BP:76:LEU:HB3	1.91	0.71
26:BA:2495:G:HO2'	36:BQ:101:MET:CE	2.01	0.71
44:BU:32:TYR:HD2	44:BU:32:TYR:H	1.38	0.71
44:BU:42:ALA:O	44:BU:45:TYR:CB	2.37	0.71
45:BV:75:LYS:HE2	45:BV:75:LYS:HA	1.70	0.71
26:BA:138:G:C4'	40:BX:43:GLU:HG3	2.20	0.71
41:BY:19:ARG:HG2	41:BY:22:GLN:NE2	2.05	0.71
42:BZ:78:PRO:C	42:BZ:79:ILE:HG13	2.11	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1073:U:C2	1:AA:1074:G:N7	2.58	0.71
1:AA:162:A:H1'	1:AA:348:G:O2'	1.90	0.71
1:AA:20:U:O4'	1:AA:572:A:N1	2.24	0.71
1:AA:406:G:H4'	7:AD:5:ILE:CG2	2.14	0.71
1:AA:573:A:N3	1:AA:883:C:O2'	2.23	0.71
1:AA:829:G:O2'	5:AB:26:PRO:HG2	1.89	0.71
1:AA:965:A:O2'	1:AA:966:G:H5''	1.91	0.71
5:AB:75:LYS:HA	5:AB:78:GLN:HB2	1.73	0.71
8:AE:9:LYS:HD2	8:AE:112:LEU:HD23	1.72	0.71
48:B0:35:ASN:HA	48:B0:68:VAL:HG22	1.70	0.71
47:B3:31:LEU:CD2	47:B3:32:GLN:CA	2.61	0.71
47:B3:42:ALA:O	47:B3:43:ILE:C	2.28	0.71
52:B7:11:LYS:CE	52:B7:11:LYS:HA	2.21	0.71
54:B9:7:VAL:HG12	54:B9:34:GLN:NE2	2.05	0.71
26:BA:1259:G:H2'	26:BA:1260:G:C8	2.26	0.71
26:BA:1666:G:C4'	34:BO:67:ARG:NH2	2.53	0.71
26:BA:2332:U:C2'	26:BA:2336:A:H62	2.03	0.71
26:BA:2607:G:O2'	26:BA:2608:G:H5'	1.91	0.71
26:BA:1709:U:H1'	26:BA:2860:A:H1'	1.72	0.71
27:BD:130:PRO:CB	27:BD:186:LYS:O	2.35	0.71
32:BI:75:LEU:HD12	32:BI:76:THR:H	1.53	0.71
33:BN:75:PRO:O	33:BN:77:GLY:N	2.23	0.71
34:BO:1:MET:HB2	34:BO:2:ILE:CD1	2.21	0.71
34:BO:3:GLN:O	34:BO:4:GLN:C	2.28	0.71
34:BO:35:ILE:CG2	34:BO:62:VAL:O	2.37	0.71
36:BQ:142:LYS:HE2	36:BQ:143:VAL:CA	2.19	0.71
37:BS:76:GLY:O	37:BS:83:LEU:CD1	2.39	0.71
38:BT:8:TYR:CE1	38:BT:54:THR:HB	2.26	0.71
44:BU:13:ARG:O	44:BU:16:LYS:N	2.24	0.71
26:BA:996:A:O3'	44:BU:93:LYS:HG2	1.90	0.71
41:BY:80:GLU:HG2	41:BY:86:GLU:HG2	1.72	0.71
42:BZ:108:VAL:O	42:BZ:109:GLN:HG3	1.91	0.71
42:BZ:37:LYS:C	42:BZ:40:ASP:CG	2.49	0.71
1:AA:1269:A:O4'	1:AA:1326:C:C4'	2.38	0.71
1:AA:36:C:H4'	15:AL:117:ARG:HH22	1.54	0.71
1:AA:757:U:H5'	1:AA:822:C:O2	1.91	0.71
20:AQ:40:LYS:HD3	20:AQ:42:TYR:CE1	2.26	0.71
52:B7:34:ARG:O	52:B7:35:ARG:C	2.28	0.71
26:BA:190:A:OP2	26:BA:205:G:N2	2.20	0.71
26:BA:216:A:H2'	26:BA:217:G:C8	2.25	0.71
26:BA:2306:C:H42	30:BG:53:LYS:NZ	1.88	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:825:C:C3'	26:BA:2428:G:N7	2.53	0.71
26:BA:2619:C:C2'	26:BA:2620:C:H5'	2.21	0.71
26:BA:2666:C:H5	26:BA:2667:C:C5	2.07	0.71
26:BA:2795:G:C2'	26:BA:2795:G:N3	2.53	0.71
26:BA:2825:C:C4'	26:BA:2825:C:C6	2.73	0.71
26:BA:2838:G:C4	26:BA:2839:G:H8	2.08	0.71
26:BA:974:G:O6	45:BV:80:TYR:OH	2.07	0.71
26:BA:2821:A:O3'	28:BE:258:TYR:HE2	1.74	0.71
29:BF:202:THR:HG22	29:BF:203:ALA:H	1.55	0.71
29:BF:22:PHE:O	29:BF:23:GLU:O	2.08	0.71
29:BF:51:TYR:O	29:BF:54:LEU:C	2.28	0.71
29:BF:92:PRO:O	29:BF:96:LYS:CD	2.07	0.71
30:BG:38:GLU:OE2	30:BG:71:ALA:CB	2.39	0.71
31:BH:101:LYS:CB	31:BH:114:ILE:O	2.33	0.71
31:BH:66:THR:HG23	31:BH:67:THR:N	2.05	0.71
33:BN:139:LEU:N	33:BN:139:LEU:CD1	2.53	0.71
34:BO:56:GLN:O	34:BO:58:VAL:CG2	2.33	0.71
34:BO:37:ASP:C	34:BO:62:VAL:HG23	2.11	0.71
26:BA:2250:G:N7	36:BQ:102:ARG:HA	2.05	0.71
37:BS:20:TYR:O	37:BS:23:ARG:HB3	1.91	0.71
45:BV:51:ALA:O	45:BV:55:THR:HG23	1.91	0.71
1:AA:1329:A:C5'	16:AM:26:GLY:H	2.03	0.71
14:AK:110:ASP:CB	21:AR:85:LEU:HB3	2.21	0.71
26:BA:686:G:O2'	52:B7:6:GLN:OE1	2.06	0.71
54:B9:10:MET:HB3	54:B9:32:HIS:NE2	2.05	0.71
26:BA:1364:G:O6	49:B4:2:GLN:OE1	2.08	0.71
26:BA:1364:G:H22	26:BA:1366:A:H3'	1.55	0.71
26:BA:2093:G:H4'	32:BI:29:PHE:CZ	2.26	0.71
26:BA:2100:G:H1'	26:BA:2190:G:N2	2.06	0.71
26:BA:2485:G:C2	26:BA:2486:G:C1'	2.73	0.71
26:BA:2631:G:C2'	26:BA:2632:A:O5'	2.39	0.71
26:BA:2793:G:N1	26:BA:2794:C:C4	2.59	0.71
26:BA:2892:A:H2'	26:BA:2893:G:H1'	1.71	0.71
26:BA:826:U:C2	26:BA:828:U:H1'	2.26	0.71
26:BA:974:G:H4'	26:BA:974(A):C:OP1	1.91	0.71
27:BD:196:ASN:O	27:BD:196:ASN:OD1	2.09	0.71
26:BA:673:C:C4'	29:BF:82:GLN:NE2	2.54	0.71
30:BG:55:LYS:O	30:BG:63:ILE:O	2.09	0.71
32:BI:1:MET:HG3	32:BI:3:VAL:CG2	2.21	0.71
55:BK:19:THR:H	55:BK:20:PRO:CD	2.03	0.71
33:BN:18:ILE:O	33:BN:18:ILE:CG2	2.38	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:73:ASP:C	34:BO:75:SER:N	2.44	0.71
35:BP:61:ALA:HB1	35:BP:107:LYS:NZ	2.06	0.71
37:BS:61:ALA:CB	37:BS:84:THR:O	2.39	0.71
38:BT:4:ARG:N	38:BT:4:ARG:NE	2.36	0.71
44:BU:88:ILE:HB	45:BV:52:GLY:HA3	1.71	0.71
45:BV:74:TYR:CE1	45:BV:87:ARG:O	2.42	0.71
1:AA:1190:G:H5'	6:AC:176:HIS:NE2	2.06	0.71
48:B0:7:VAL:O	48:B0:7:VAL:CG1	2.38	0.71
26:BA:989:G:P	47:B3:31:LEU:HD12	2.29	0.71
47:B3:1:MET:SD	47:B3:3:ARG:HG3	2.30	0.71
47:B3:59:VAL:C	47:B3:60:GLU:HG3	2.10	0.71
50:B5:6:VAL:H	50:B5:8:LYS:NZ	1.88	0.71
51:B6:16:ALA:O	51:B6:19:GLY:N	2.24	0.71
51:B6:12:MET:HB2	51:B6:27:ASN:HD22	1.51	0.71
54:B9:7:VAL:CG1	54:B9:25:VAL:HG23	2.21	0.71
26:BA:108:U:H2'	26:BA:109:G:H8	1.56	0.71
26:BA:2081:C:H2'	26:BA:2082:A:H8	1.53	0.71
26:BA:2367:G:O2'	26:BA:2368:C:H5'	1.90	0.71
26:BA:2468:G:C8	26:BA:2476:A:C2	2.78	0.71
26:BA:2520:C:C2'	26:BA:2521:C:C5'	2.67	0.71
26:BA:2783:G:H2'	26:BA:2784:C:C6	2.25	0.71
27:BD:186:LYS:O	27:BD:187:CYS:O	2.08	0.71
28:BE:268:LEU:CD2	28:BE:269:ILE:H	1.83	0.71
29:BF:163:HIS:O	29:BF:166:ILE:HG13	1.86	0.71
30:BG:129:ASP:O	30:BG:130:VAL:CG1	2.38	0.71
26:BA:5:A:HO2'	33:BN:4:ALA:N	1.88	0.71
35:BP:60:GLU:O	35:BP:61:ALA:CB	2.39	0.71
43:BR:105:ARG:NE	43:BR:105:ARG:CA	2.52	0.71
26:BA:2379:G:P	37:BS:30:GLY:HA2	2.31	0.71
26:BA:518:G:H1'	39:BW:77:ASP:OD1	1.90	0.71
40:BX:33:SER:O	40:BX:37:VAL:CB	2.38	0.71
40:BX:25:GLN:HE22	40:BX:65:VAL:CG1	2.02	0.71
42:BZ:66:VAL:CG2	42:BZ:68:ALA:O	2.38	0.71
7:AD:14:ARG:HG2	7:AD:66:ARG:NH1	2.04	0.71
20:AQ:15:MET:CB	20:AQ:18:THR:HB	2.21	0.71
3:AW:65:G:C6	3:AW:66:A:N9	2.58	0.71
46:B2:30:ALA:HB1	46:B2:46:ILE:CD1	2.20	0.71
51:B6:8:ILE:HG23	51:B6:30:ASN:H	1.55	0.71
52:B7:29:ASN:O	52:B7:30:ILE:C	2.29	0.71
26:BA:1287:A:H5''	43:BR:104:ARG:CD	2.20	0.71
26:BA:1364:G:C8	26:BA:1364:G:H5'	2.26	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1315:C:O2'	26:BA:1392:A:H1'	1.90	0.71
26:BA:1140:C:H4'	26:BA:142(A):A:C2	2.26	0.71
26:BA:2213:U:O3'	26:BA:2215:G:C8	2.38	0.71
26:BA:2305:A:N1	26:BA:2312:U:O2	2.24	0.71
26:BA:2320:A:C8	26:BA:2320:A:O5'	2.43	0.71
26:BA:2402:C:H5''	26:BA:2403:C:OP1	1.90	0.71
26:BA:2546:U:H4'	26:BA:2565:A:C2	2.24	0.71
26:BA:2693:A:C2	26:BA:2694:G:N7	2.58	0.71
26:BA:2762:G:O6	26:BA:2763:G:C6	2.44	0.71
26:BA:2802:G:H2'	26:BA:2803:C:C6	2.25	0.71
26:BA:2838:G:C6	26:BA:2839:G:C8	2.79	0.71
26:BA:623:G:H2'	26:BA:624:C:C6	2.26	0.71
26:BA:872:A:O2'	36:BQ:31:PHE:CG	2.44	0.71
26:BA:932:G:OP1	47:B3:29:ARG:NE	2.23	0.71
28:BE:61:PRO:HB3	28:BE:69:PRO:CB	2.20	0.71
29:BF:107:ARG:O	29:BF:109:LEU:N	2.24	0.71
29:BF:166:ILE:O	29:BF:168:ARG:HG3	1.91	0.71
29:BF:115:LEU:HG	29:BF:246:ARG:NH1	2.05	0.71
30:BG:23:VAL:HG23	30:BG:23:VAL:O	1.91	0.71
31:BH:130:ILE:HD12	31:BH:130:ILE:N	1.96	0.71
31:BH:158:GLY:O	31:BH:159:LYS:HB2	1.91	0.71
33:BN:12:VAL:CA	33:BN:38:VAL:HG22	2.21	0.71
33:BN:38:VAL:O	33:BN:39:VAL:CB	2.38	0.71
26:BA:1140:C:C4	33:BN:49:ARG:HD2	2.23	0.71
35:BP:66:VAL:CG2	35:BP:110:GLY:O	2.39	0.71
35:BP:131:GLU:O	35:BP:132:LYS:C	2.28	0.71
45:BV:6:GLN:HE22	45:BV:10:LYS:HB3	1.56	0.71
39:BW:30:GLU:O	39:BW:33:ARG:HB2	1.91	0.71
42:BZ:69:VAL:HG13	42:BZ:81:VAL:CG2	2.16	0.71
1:AA:1318:A:H5'	22:AS:10:PHE:HB2	1.69	0.70
1:AA:20:U:C2	1:AA:916:G:N2	2.58	0.70
7:AD:23:GLY:C	7:AD:112:VAL:O	2.29	0.70
3:AW:45:G:HO3'	3:AW:46:G:H5'	1.52	0.70
48:B0:51:VAL:O	48:B0:51:VAL:HG12	1.91	0.70
47:B3:12:PRO:HG2	47:B3:20:LYS:HZ1	1.53	0.70
52:B7:43:THR:O	52:B7:46:ASP:OD1	2.08	0.70
53:B8:3:LYS:C	53:B8:4:MET:HE3	2.11	0.70
26:BA:1470:G:N2	26:BA:1522:G:C2	2.59	0.70
26:BA:1937:A:N1	26:BA:1940:U:H5	1.89	0.70
26:BA:2189:U:O2'	26:BA:2190:G:H5'	1.90	0.70
26:BA:2476:A:C2	26:BA:2481:G:N2	2.59	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2482:G:C5	26:BA:2483:C:H5	1.97	0.70
26:BA:2631:G:C5	26:BA:2632:A:H8	2.07	0.70
26:BA:2758:A:H2'	26:BA:2759:G:O5'	1.91	0.70
26:BA:2815:C:C2	26:BA:2816:C:C5	2.79	0.70
26:BA:2845:G:HO2'	26:BA:2846:G:C4'	2.03	0.70
27:BD:166:LYS:HA	27:BD:172:ILE:H	1.54	0.70
27:BD:166:LYS:HB2	27:BD:171:VAL:HA	1.73	0.70
27:BD:141:HIS:CE1	27:BD:191:VAL:C	2.63	0.70
26:BA:2617:C:H1'	28:BE:245:ARG:NH2	2.06	0.70
29:BF:138:VAL:O	29:BF:139:VAL:CB	2.39	0.70
29:BF:197:SER:O	29:BF:198:ASP:CB	2.39	0.70
26:BA:600:G:C5'	29:BF:27:ARG:HH11	1.99	0.70
30:BG:129:ASP:O	30:BG:130:VAL:HG13	1.90	0.70
30:BG:19:GLU:HB3	30:BG:135:VAL:HG23	1.61	0.70
26:BA:2745:C:C1'	31:BH:142:GLU:CD	2.51	0.70
31:BH:120:LEU:HD13	31:BH:143:LEU:HD13	1.73	0.70
31:BH:147:ILE:O	31:BH:161:ILE:HD13	1.91	0.70
32:BI:80:PRO:O	32:BI:148:GLN:CG	2.39	0.70
55:BK:122:GLU:C	55:BK:126:LYS:CE	2.47	0.70
36:BQ:130:PRO:C	36:BQ:132:VAL:H	1.94	0.70
36:BQ:142:LYS:CD	36:BQ:143:VAL:N	2.52	0.70
36:BQ:58:HIS:O	36:BQ:59:ASN:C	2.29	0.70
43:BR:28:LEU:O	43:BR:31:HIS:N	2.23	0.70
39:BW:81:ALA:CB	39:BW:97:LYS:HD2	2.20	0.70
39:BW:8:ARG:HG3	39:BW:102:HIS:ND1	2.05	0.70
40:BX:25:GLN:NE2	40:BX:65:VAL:HG13	2.03	0.70
40:BX:7:HIS:HB2	40:BX:8:PRO:CD	2.20	0.70
41:BY:33:GLU:CG	41:BY:34:GLU:N	2.54	0.70
42:BZ:57:GLU:C	42:BZ:59:GLY:N	2.43	0.70
1:AA:376:G:H5''	19:AP:5:ARG:HD2	1.73	0.70
6:AC:16:ARG:NH2	6:AC:184:TYR:H	1.89	0.70
16:AM:92:HIS:NE2	16:AM:98:VAL:CG2	2.51	0.70
23:AT:67:ALA:HA	23:AT:72:LEU:O	1.91	0.70
26:BA:2355:C:C4'	48:B0:21:LEU:HD11	1.82	0.70
46:B2:59:ILE:HG23	46:B2:60:GLN:N	2.06	0.70
26:BA:989:G:C8	47:B3:13:ILE:CD1	2.73	0.70
47:B3:16:PRO:CB	47:B3:19:GLN:NE2	2.54	0.70
52:B7:27:GLY:C	52:B7:31:LEU:HG	2.10	0.70
53:B8:26:LYS:HG3	53:B8:45:GLY:C	2.10	0.70
26:BA:2742:C:C5'	54:B9:35:ARG:NH1	2.49	0.70
26:BA:563:G:C6	26:BA:2018:G:C5	2.79	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2228:G:N7	26:BA:2229:C:C2	2.58	0.70
26:BA:2242:G:C4	26:BA:2243:U:C5	2.78	0.70
26:BA:2252:G:C8	26:BA:2252:G:C3'	2.74	0.70
26:BA:2285:C:H1'	26:BA:2288:A:N7	2.06	0.70
26:BA:2298:A:C2	26:BA:2299:G:H1'	2.27	0.70
26:BA:2415:G:C5	26:BA:2416:C:H5	2.09	0.70
26:BA:2450:A:H2'	26:BA:2451:A:H8	1.56	0.70
26:BA:2607:G:O6	26:BA:2608:G:C2	2.44	0.70
26:BA:2051:A:N6	26:BA:2614:A:C5	2.58	0.70
26:BA:2681:C:N4	26:BA:2725:A:N7	2.39	0.70
26:BA:684:G:C2	26:BA:775:G:C6	2.79	0.70
26:BA:807:U:O4'	26:BA:2445:G:H5'	1.90	0.70
29:BF:19:PRO:O	29:BF:20:ASP:C	2.29	0.70
30:BG:14:ARG:H	30:BG:14:ARG:HD2	1.55	0.70
33:BN:45:VAL:H	33:BN:132:LEU:CD2	2.02	0.70
33:BN:52:GLN:CA	33:BN:55:GLU:OE1	2.29	0.70
33:BN:62:ASP:O	33:BN:64:GLY:N	2.24	0.70
34:BO:105:GLU:O	34:BO:107:ARG:N	2.24	0.70
34:BO:17:ARG:NE	34:BO:47:THR:HA	2.06	0.70
36:BQ:45:GLN:CB	36:BQ:152:SER:CB	2.62	0.70
37:BS:55:ASP:OD1	37:BS:56:ASP:N	2.23	0.70
37:BS:87:LEU:N	37:BS:87:LEU:HD22	2.03	0.70
41:BY:19:ARG:N	41:BY:21:LYS:NZ	2.36	0.70
1:AA:1326:C:H5''	24:AU:19:GLY:CA	2.21	0.70
1:AA:585:G:N3	1:AA:879:C:H4'	2.06	0.70
7:AD:31:CYS:C	7:AD:33:MET:H	1.95	0.70
13:AJ:34:VAL:HG12	13:AJ:36:GLY:H	1.56	0.70
46:B2:35:ALA:O	46:B2:36:ALA:C	2.28	0.70
46:B2:4:HIS:N	46:B2:8:ILE:CD1	2.53	0.70
49:B4:70:GLY:O	49:B4:71:SER:OG	2.09	0.70
39:BW:19:LEU:HB3	50:B5:25:LEU:CD1	2.21	0.70
26:BA:577:G:O2'	26:BA:1254:A:OP1	2.09	0.70
26:BA:1657:C:H5'	28:BE:234:ARG:NH1	2.07	0.70
2:AV:76:A:N1	26:BA:2251:G:O6	2.24	0.70
26:BA:2378:A:C2'	26:BA:2379:G:O5'	2.39	0.70
26:BA:2415:G:C5	26:BA:2416:C:C5	2.79	0.70
26:BA:2583:G:N9	26:BA:2584:U:O2	2.24	0.70
26:BA:2853:C:H3'	26:BA:2853:C:C6	2.25	0.70
26:BA:2835:A:N6	26:BA:2879:C:OP2	2.24	0.70
26:BA:495:G:H21	39:BW:61:ASN:ND2	1.87	0.70
26:BA:995:C:P	44:BU:54:LYS:CE	2.78	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:42:C:O2'	30:BG:47:GLN:HG2	1.92	0.70
25:BB:59:A:HO3'	25:BB:60:C:P	1.47	0.70
26:BA:1790:C:OP2	27:BD:224:VAL:HG13	1.91	0.70
27:BD:65:ASP:CG	27:BD:66:PHE:N	2.44	0.70
27:BD:68:ARG:O	27:BD:69:ASP:CG	2.29	0.70
28:BE:246:VAL:HG12	28:BE:247:ARG:N	2.05	0.70
30:BG:29:HIS:CB	30:BG:69:ILE:HG12	2.18	0.70
32:BI:109:LYS:H	32:BI:109:LYS:HE2	1.56	0.70
32:BI:13:GLY:HA3	32:BI:15:LYS:HZ2	1.55	0.70
32:BI:1:MET:HG3	32:BI:3:VAL:HG23	1.73	0.70
55:BK:38:PHE:CG	55:BK:67:THR:HG22	2.24	0.70
33:BN:19:MET:CE	33:BN:22:VAL:HG11	2.21	0.70
33:BN:24:SER:O	33:BN:28:GLU:HG2	1.91	0.70
33:BN:74:ARG:HD2	33:BN:141:ALA:O	1.91	0.70
26:BA:1665:A:C4'	34:BO:66:LYS:CD	2.64	0.70
36:BQ:67:ALA:C	36:BQ:71:PHE:CE1	2.64	0.70
43:BR:97:VAL:HG22	43:BR:114:VAL:CG1	2.22	0.70
37:BS:76:GLY:O	37:BS:82:TYR:N	2.23	0.70
39:BW:96:ILE:N	39:BW:96:ILE:CD1	2.40	0.70
26:BA:338:G:C8	41:BY:21:LYS:CB	2.74	0.70
42:BZ:24:TYR:HD2	42:BZ:84:TYR:CD1	2.06	0.70
42:BZ:2:GLU:O	42:BZ:3:LEU:O	2.09	0.70
42:BZ:67:LYS:CA	42:BZ:67:LYS:CE	2.68	0.70
1:AA:1288:A:H2	1:AA:1352:C:O2	1.75	0.70
1:AA:279:A:H5'	1:AA:280:C:H3'	1.73	0.70
16:AM:23:TYR:O	16:AM:67:GLU:N	2.25	0.70
48:B0:36:ILE:N	48:B0:68:VAL:CG2	2.55	0.70
46:B2:60:GLN:O	46:B2:63:GLU:CB	2.39	0.70
46:B2:6:GLN:O	46:B2:9:ARG:CA	2.39	0.70
49:B4:56:VAL:HG12	49:B4:57:ASP:N	2.06	0.70
49:B4:49:PHE:CE1	49:B4:71:SER:OG	2.44	0.70
52:B7:44:VAL:N	52:B7:46:ASP:OD2	2.24	0.70
26:BA:1031:G:C4'	54:B9:8:LYS:CE	2.63	0.70
26:BA:1173:G:H22	26:BA:1175:U:H3'	1.56	0.70
26:BA:1259:G:H2'	26:BA:1260:G:H8	1.56	0.70
26:BA:1779:U:H3'	26:BA:1779:U:H6	1.55	0.70
26:BA:1790:C:P	27:BD:224:VAL:CG1	2.72	0.70
26:BA:2086:U:C4	26:BA:2233:U:O4	2.44	0.70
26:BA:2093:G:C8	26:BA:2225:A:C6	2.80	0.70
26:BA:2385:C:O2	26:BA:2386:C:H6	1.72	0.70
26:BA:2616:C:N3	26:BA:2617:C:C5	2.58	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:650:C:OP1	53:B8:19:THR:CG2	2.39	0.70
26:BA:2712:U:H2'	26:BA:712(A):A:H5''	0.70	0.70
27:BD:74:PRO:HG2	27:BD:96:ALA:CA	2.20	0.70
28:BE:202:ALA:HA	28:BE:262:THR:HB	1.73	0.70
28:BE:228:ARG:O	28:BE:230:GLY:N	2.25	0.70
28:BE:252:GLN:O	28:BE:254:GLY:N	2.21	0.70
30:BG:146:LYS:HE3	37:BS:15:GLU:OE1	1.92	0.70
33:BN:12:VAL:HB	33:BN:38:VAL:CG2	2.21	0.70
33:BN:14:ALA:H	33:BN:40:ASN:ND2	1.88	0.70
34:BO:20:LEU:HG	34:BO:44:LYS:HG2	1.73	0.70
34:BO:64:ARG:HH22	34:BO:100:GLY:CA	2.04	0.70
43:BR:45:ARG:O	43:BR:46:GLY:C	2.30	0.70
43:BR:67:LEU:HD22	43:BR:71:GLN:HA	1.73	0.70
37:BS:127:LEU:C	37:BS:127:LEU:CD2	2.60	0.70
37:BS:93:GLN:C	37:BS:93:GLN:OE1	2.29	0.70
44:BU:25:TRP:C	44:BU:28:ARG:HH11	1.93	0.70
44:BU:93:LYS:O	44:BU:94:VAL:HG23	1.90	0.70
45:BV:39:PHE:HD2	45:BV:40:VAL:N	1.89	0.70
39:BW:29:LEU:CG	39:BW:33:ARG:HD2	2.16	0.70
40:BX:28:VAL:HG11	40:BX:64:ALA:HB2	1.73	0.70
41:BY:92:ASP:OD1	41:BY:94:SER:N	2.25	0.70
42:BZ:35:ASP:OD1	42:BZ:37:LYS:N	2.24	0.70
42:BZ:45:GLN:N	42:BZ:45:GLN:NE2	2.40	0.70
1:AA:1288:A:N6	1:AA:1371:G:O2'	2.24	0.70
1:AA:436:C:H2'	1:AA:437:U:O4'	1.91	0.70
7:AD:78:LEU:CD2	7:AD:139:ARG:HH21	2.05	0.70
7:AD:20:TYR:O	7:AD:22:LYS:N	2.23	0.70
48:B0:38:VAL:HG12	48:B0:39:ARG:N	2.06	0.70
51:B6:32:GLN:HA	51:B6:35:LEU:HD12	1.71	0.70
3:AW:76:A:C2	53:B8:32:GLN:HB3	2.21	0.70
26:BA:1675:C:N3	28:BE:225:LYS:CG	2.47	0.70
26:BA:2638:G:O6	26:BA:2776:A:OP2	2.09	0.70
26:BA:2783:G:C6	26:BA:2784:C:C4	2.79	0.70
26:BA:746:A:C2'	26:BA:2611:U:O2'	2.39	0.70
26:BA:827:U:OP2	26:BA:2429:G:OP2	2.08	0.70
27:BD:105:ALA:O	27:BD:194:VAL:O	2.08	0.70
29:BF:102:LEU:CA	29:BF:107:ARG:HH21	2.04	0.70
31:BH:137:LYS:CD	31:BH:138:GLN:N	2.34	0.70
26:BA:1058:G:N2	55:BK:127:ILE:HD11	2.05	0.70
33:BN:19:MET:HE1	33:BN:22:VAL:HG11	1.74	0.70
33:BN:51:GLU:O	33:BN:54:VAL:N	2.25	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:53:ILE:CG2	33:BN:54:VAL:N	2.54	0.70
34:BO:90:ASP:N	34:BO:90:ASP:OD1	2.24	0.70
34:BO:12:ASP:HA	34:BO:97:ARG:O	1.90	0.70
35:BP:114:VAL:CG2	35:BP:132:LYS:C	2.58	0.70
36:BQ:72:VAL:CG2	36:BQ:83:PHE:HZ	2.03	0.70
26:BA:1251:C:C5'	44:BU:10:ARG:CD	2.69	0.70
44:BU:10:ARG:O	44:BU:13:ARG:NH1	2.22	0.70
41:BY:11:GLN:O	41:BY:21:LYS:NZ	2.24	0.70
41:BY:78:THR:CA	41:BY:89:ARG:CD	2.67	0.70
1:AA:1107:C:C3'	1:AA:1108:G:P	2.79	0.70
1:AA:426:G:O2'	7:AD:42:GLN:CB	2.40	0.70
9:AF:50:TYR:CE1	21:AR:77:GLY:HA2	2.26	0.70
26:BA:2262:U:O5'	48:B0:14:ARG:NH2	2.25	0.70
46:B2:12:THR:HB	46:B2:13:PRO:HD2	1.71	0.70
46:B2:4:HIS:H	46:B2:8:ILE:CD1	2.05	0.70
47:B3:37:LEU:HB3	47:B3:38:GLU:OE1	1.91	0.70
50:B5:8:LYS:O	50:B5:9:LYS:HB2	1.90	0.70
52:B7:24:THR:O	52:B7:28:ARG:NE	2.23	0.70
54:B9:3:VAL:O	54:B9:3:VAL:HG12	1.89	0.70
26:BA:1567:A:C5	27:BD:84:PRO:HB3	2.27	0.70
26:BA:1667:G:OP2	26:BA:1667:G:H8	1.75	0.70
26:BA:2216:G:O2'	26:BA:2217:G:C5'	2.40	0.70
26:BA:2228:G:H5'	26:BA:2229:C:OP2	1.91	0.70
26:BA:2305:A:H5'	26:BA:2306:C:OP2	1.91	0.70
26:BA:2436:G:C2	26:BA:2437:U:C2	2.79	0.70
26:BA:2779:U:H5''	26:BA:2780:G:O5'	1.91	0.70
26:BA:2821:A:H2'	26:BA:2822:G:O4'	1.89	0.70
26:BA:2821:A:C2'	26:BA:2822:G:C1'	2.69	0.70
26:BA:740:U:O4	26:BA:758:C:H1'	1.91	0.70
27:BD:211:HIS:C	27:BD:213:LYS:N	2.42	0.70
26:BA:2679:A:O2'	28:BE:300:VAL:HG12	1.92	0.70
26:BA:2785:C:H4'	28:BE:99:VAL:HA	0.71	0.70
29:BF:93:LYS:HB2	29:BF:96:LYS:CE	2.22	0.70
55:BK:45:GLU:C	55:BK:47:ALA:H	1.93	0.70
34:BO:17:ARG:O	34:BO:18:GLU:HG3	1.92	0.70
37:BS:19:ASP:O	37:BS:22:GLN:N	2.21	0.70
38:BT:6:CYS:SG	38:BT:31:PHE:HA	2.32	0.70
44:BU:63:GLN:O	44:BU:64:ARG:C	2.28	0.70
42:BZ:35:ASP:N	42:BZ:39:PHE:HE2	1.86	0.70
1:AA:60:A:N1	1:AA:107:G:C2'	2.54	0.70
1:AA:1225:A:O2'	22:AS:80:TYR:HB2	1.91	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:56:C:C2'	30:BG:56:ARG:NH1	2.55	0.70
53:B8:30:ARG:HD2	53:B8:44:LYS:CD	2.20	0.70
26:BA:1127:A:C6	26:BA:2518:A:C2	2.79	0.70
26:BA:2090:G:C5	26:BA:2230:G:C6	2.79	0.70
26:BA:965:C:C4'	26:BA:2273:A:C2	2.74	0.70
26:BA:2330:G:C2	26:BA:2331:G:N9	2.60	0.70
26:BA:2450:A:H2'	26:BA:2451:A:C8	2.27	0.70
26:BA:2670:A:C8	26:BA:2670:A:H5''	2.22	0.70
26:BA:2783:G:C8	26:BA:2783:G:O5'	2.43	0.70
26:BA:2810:A:O2'	26:BA:2811:G:H5'	1.88	0.70
26:BA:2821:A:H2'	26:BA:2822:G:C8	2.26	0.70
26:BA:2880:C:C2'	26:BA:2881:C:C5'	2.58	0.70
26:BA:2888:C:C2	26:BA:2889:C:C6	2.79	0.70
26:BA:382:G:H1	26:BA:392:C:H42	1.38	0.70
26:BA:729:G:O2'	26:BA:763:G:H4'	1.91	0.70
29:BF:93:LYS:O	29:BF:96:LYS:CD	2.39	0.70
30:BG:140:ARG:HD2	30:BG:144:ARG:NH2	2.07	0.70
31:BH:146:ASN:O	31:BH:146:ASN:OD1	2.09	0.70
31:BH:153:PRO:HB3	31:BH:161:ILE:O	1.92	0.70
31:BH:70:LEU:O	31:BH:73:ASN:HB2	1.91	0.70
32:BI:77:VAL:HB	32:BI:143:VAL:HA	1.74	0.70
34:BO:101:PRO:HB3	34:BO:120:GLU:O	1.91	0.70
36:BQ:82:LYS:HB2	36:BQ:125:TRP:HB3	1.74	0.70
36:BQ:20:ILE:CG1	36:BQ:21:SER:H	2.01	0.70
43:BR:51:LEU:O	43:BR:54:LEU:HB2	1.91	0.70
37:BS:115:VAL:O	37:BS:118:ILE:HG22	1.91	0.70
37:BS:35:VAL:O	37:BS:45:ALA:HB1	1.91	0.70
45:BV:83:ARG:O	45:BV:84:THR:CB	2.40	0.70
39:BW:32:ALA:HA	39:BW:35:ILE:HD11	1.69	0.70
40:BX:20:PHE:CD1	40:BX:22:ASN:N	2.58	0.70
1:AA:1086:U:H2'	1:AA:1087:G:C8	2.26	0.70
1:AA:1276:G:O2'	1:AA:1282:C:O4'	2.05	0.70
1:AA:826:C:H4'	11:AH:12:ARG:HG2	1.71	0.70
19:AP:11:SER:H	19:AP:14:ASN:HB3	1.55	0.70
48:B0:36:ILE:CA	48:B0:68:VAL:HG13	2.22	0.70
47:B3:41:PRO:O	47:B3:42:ALA:O	2.10	0.70
52:B7:1:MET:SD	52:B7:1:MET:C	2.67	0.70
26:BA:593:G:H5''	53:B8:62:LEU:HD23	1.70	0.70
26:BA:1129:A:C4	26:BA:2570:G:H1'	2.25	0.70
26:BA:1924:C:N4	26:BA:1925:C:N4	2.40	0.70
26:BA:2358:G:N3	26:BA:2359:C:H5'	2.07	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2372:G:N1	26:BA:2373:G:C6	2.59	0.70
26:BA:2405:G:C2	26:BA:2413:G:O6	2.45	0.70
26:BA:2478:A:H2'	26:BA:2479:G:H5'	1.73	0.70
26:BA:2493:U:O2	26:BA:2494:G:O4'	2.08	0.70
26:BA:2520:C:C4	26:BA:2567:G:C8	2.80	0.70
26:BA:2575:C:OP1	28:BE:241:TRP:NE1	2.25	0.70
26:BA:2507:C:N1	26:BA:2583:G:N2	2.39	0.70
26:BA:2045:C:N3	26:BA:2624:G:N2	2.40	0.70
26:BA:2789:C:O2'	26:BA:2893:G:N2	2.25	0.70
26:BA:2839:G:O2'	26:BA:2840:C:H5'	1.92	0.70
26:BA:324:A:H62	26:BA:339:U:H1'	1.57	0.70
26:BA:874:G:OP1	42:BZ:172:LEU:CD1	2.39	0.70
27:BD:166:LYS:C	27:BD:182:MET:HE1	2.12	0.70
28:BE:211:GLN:HG2	28:BE:212:GLY:H	1.57	0.70
28:BE:268:LEU:C	28:BE:268:LEU:CD2	2.55	0.70
28:BE:268:LEU:CD2	28:BE:269:ILE:HD12	2.16	0.70
33:BN:136:SER:HA	33:BN:139:LEU:HD21	1.72	0.70
36:BQ:49:VAL:HG11	36:BQ:119:ASN:O	1.90	0.70
36:BQ:69:ASN:HD22	36:BQ:70:ARG:CA	2.03	0.70
43:BR:38:VAL:HG12	43:BR:39:PRO:HD3	0.74	0.70
43:BR:75:LEU:O	43:BR:76:VAL:C	2.29	0.70
37:BS:32:PRO:O	37:BS:101:VAL:HG13	1.92	0.70
37:BS:35:VAL:N	37:BS:103:ASP:HB3	2.05	0.70
38:BT:47:ARG:O	38:BT:48:ASN:CB	2.40	0.70
39:BW:43:GLY:O	39:BW:44:ALA:O	2.10	0.70
42:BZ:159:THR:O	42:BZ:160:LEU:HB2	1.90	0.70
2:AV:69:U:H2'	2:AV:70:C:C6	2.27	0.70
48:B0:49:GLN:HE21	48:B0:49:GLN:CA	2.04	0.70
50:B5:32:GLU:HG2	50:B5:39:LYS:HG2	1.74	0.70
51:B6:16:ALA:C	51:B6:18:THR:N	2.45	0.70
26:BA:2224:G:O2'	26:BA:2225:A:H5'	1.91	0.70
26:BA:2268:A:OP1	26:BA:2268:A:H4'	1.91	0.70
26:BA:2287:A:N3	26:BA:2289:G:C8	2.60	0.70
26:BA:2316:C:N4	26:BA:2317:C:C4	2.60	0.70
26:BA:2470:G:C4	26:BA:2471:C:C5	2.79	0.70
26:BA:2515:C:C4	26:BA:2570:G:C6	2.79	0.70
26:BA:2536:G:C2'	26:BA:2537:U:H5'	2.21	0.70
26:BA:2679:A:C2'	28:BE:300:VAL:CG1	2.70	0.70
26:BA:2688:U:C2	26:BA:2719:G:N3	2.58	0.70
26:BA:2692:C:O2	26:BA:2847:U:O2'	2.05	0.70
26:BA:2737:G:C5	26:BA:2738:A:N7	2.59	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2633:G:N2	26:BA:2785:C:N3	2.32	0.70
26:BA:2825:C:H6	26:BA:2825:C:C4'	2.05	0.70
26:BA:2840:C:C2	26:BA:2841:C:C5	2.80	0.70
29:BF:5:ILE:HA	29:BF:139:VAL:CG1	2.21	0.70
31:BH:98:GLN:HB2	31:BH:103:VAL:HG21	1.74	0.70
26:BA:1080:C:O2	55:BK:127:ILE:CD1	2.40	0.70
26:BA:1007:C:O4'	33:BN:86:MET:O	2.10	0.70
34:BO:19:VAL:CG1	34:BO:42:THR:O	2.36	0.70
36:BQ:116:HIS:O	36:BQ:116:HIS:CD2	2.45	0.70
37:BS:82:TYR:O	37:BS:86:LEU:CG	2.38	0.70
44:BU:43:ALA:O	44:BU:45:TYR:CA	2.40	0.70
44:BU:7:GLY:HA3	44:BU:8:ILE:HD12	1.74	0.70
44:BU:85:ARG:NH1	44:BU:116:ALA:O	2.24	0.70
39:BW:26:GLY:O	39:BW:27:LYS:CG	2.39	0.70
41:BY:43:ASN:O	41:BY:44:ALA:HB3	1.90	0.70
42:BZ:41:ARG:NE	42:BZ:41:ARG:H	1.90	0.70
1:AA:1014:A:O3'	22:AS:14:HIS:CE1	2.45	0.70
7:AD:70:ILE:HD12	7:AD:100:ARG:CZ	2.22	0.70
47:B3:26:LEU:HB2	47:B3:28:LEU:HD21	1.74	0.70
51:B6:2:ALA:HB3	51:B6:11:LYS:CE	2.21	0.70
26:BA:1287:A:C5'	43:BR:104:ARG:CG	2.69	0.70
26:BA:1327:C:H3'	26:BA:1328:G:H8	1.57	0.70
26:BA:1818:U:C5'	27:BD:155:ARG:HG2	2.21	0.70
26:BA:2103:C:O2	26:BA:2187:G:C2	2.43	0.70
26:BA:2328:A:C2'	26:BA:2329:G:H8	2.01	0.70
26:BA:2333:A:N9	26:BA:2335:A:N3	2.40	0.70
26:BA:1128:A:N6	26:BA:2489:G:O2'	2.25	0.70
26:BA:2620:C:H4'	28:BE:252:GLN:HB2	1.72	0.70
26:BA:2657:A:C2'	26:BA:2658:C:H5'	2.22	0.70
26:BA:2703:C:O2'	26:BA:2704:C:H5'	1.90	0.70
26:BA:280:C:O2	26:BA:283:A:C6	2.45	0.70
26:BA:2833:G:OP1	26:BA:2833:G:C8	2.39	0.70
26:BA:2870:C:H2'	26:BA:2871:C:O4'	1.92	0.70
26:BA:885:C:N4	26:BA:889:C:H1'	2.07	0.70
27:BD:139:LEU:CD1	27:BD:139:LEU:C	2.59	0.70
28:BE:205:THR:OG1	28:BE:257:GLY:O	2.09	0.70
28:BE:44:TYR:CB	28:BE:307:LEU:O	2.40	0.70
29:BF:6:TYR:CE2	29:BF:140:VAL:CA	2.74	0.70
32:BI:43:ASN:C	32:BI:46:ALA:H	1.95	0.70
32:BI:7:LYS:HB2	32:BI:14:LYS:CE	2.12	0.70
32:BI:95:SER:HA	32:BI:98:ILE:HG13	0.70	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:58:GLU:HG2	33:BN:139:LEU:HB3	1.74	0.70
33:BN:5:GLU:HA	33:BN:109:TYR:CE2	2.27	0.70
34:BO:47:THR:CB	34:BO:48:PRO:HD2	2.09	0.70
26:BA:1666:G:C4'	34:BO:67:ARG:HH22	2.05	0.70
36:BQ:140:TYR:HD1	36:BQ:147:VAL:HG11	0.67	0.70
43:BR:111:LEU:O	43:BR:112:ALA:CB	2.40	0.70
26:BA:2320:A:C2	37:BS:13:ARG:CG	2.74	0.70
45:BV:40:VAL:C	45:BV:51:ALA:HB1	2.12	0.70
39:BW:58:ALA:O	39:BW:59:VAL:C	2.29	0.70
40:BX:14:ALA:HB1	40:BX:18:MET:HE2	1.73	0.70
42:BZ:125:PRO:CG	42:BZ:130:ILE:HG22	2.22	0.70
42:BZ:3:LEU:HD22	42:BZ:34:LEU:C	2.12	0.70
36:BQ:120:HIS:CE1	42:BZ:76:ARG:HH12	2.09	0.70
1:AA:1060:C:H5''	13:AJ:51:ARG:HD3	1.74	0.69
1:AA:1230:C:O2'	16:AM:126:LYS:HE2	1.91	0.69
7:AD:23:GLY:HA3	7:AD:113:SER:HB3	1.74	0.69
10:AG:145:ALA:O	10:AG:146:GLU:HB3	1.90	0.69
1:AA:1286:A:C4	24:AU:22:ARG:NH2	2.59	0.69
48:B0:25:LYS:C	48:B0:60:PHE:HE1	1.91	0.69
47:B3:40:THR:HG21	47:B3:43:ILE:HG12	1.74	0.69
47:B3:50:VAL:O	47:B3:51:ALA:C	2.30	0.69
50:B5:58:LEU:O	50:B5:59:ALA:HB2	1.90	0.69
51:B6:33:ALA:C	51:B6:35:LEU:H	1.95	0.69
52:B7:34:ARG:CZ	52:B7:42:LEU:HD23	2.22	0.69
26:BA:1078:U:C5	26:BA:1088:A:C2	2.80	0.69
26:BA:1264:G:OP1	50:B5:16:ARG:HG2	1.92	0.69
26:BA:1827:C:H2'	26:BA:1828:G:O4'	1.91	0.69
26:BA:2325:G:C5	26:BA:2326:C:H5	2.09	0.69
26:BA:2385:C:HO2'	48:B0:39:ARG:CZ	2.04	0.69
26:BA:2423:U:O2	26:BA:2423:U:H2'	1.92	0.69
26:BA:2543:G:C8	26:BA:2544:G:C5	2.80	0.69
26:BA:2731:G:OP1	28:BE:265:ASN:HB2	1.89	0.69
26:BA:2838:G:C2	26:BA:2881:C:N3	2.59	0.69
26:BA:2842:G:C3'	26:BA:2843:G:H5'	2.22	0.69
26:BA:594:U:H4'	53:B8:58:MET:HE2	1.74	0.69
26:BA:830:G:C4	26:BA:2448:A:N7	2.60	0.69
25:BB:77:U:C5'	42:BZ:80:HIS:CE1	2.74	0.69
27:BD:87:SER:O	27:BD:156:ALA:HB2	1.92	0.69
28:BE:109:ASP:OD2	28:BE:112:LEU:HD23	1.91	0.69
29:BF:152:GLU:O	29:BF:155:SER:HB3	1.92	0.69
29:BF:22:PHE:O	29:BF:23:GLU:C	2.30	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:12:VAL:HG12	33:BN:38:VAL:CG2	2.22	0.69
33:BN:15:ARG:O	33:BN:16:ASP:HB2	1.91	0.69
33:BN:15:ARG:CG	33:BN:43:ARG:CG	2.68	0.69
33:BN:83:ILE:CG1	33:BN:84:ARG:HG2	2.22	0.69
33:BN:95:ARG:O	33:BN:96:GLU:C	2.28	0.69
26:BA:1251:C:H5'	44:BU:10:ARG:HD3	1.73	0.69
39:BW:40:ASN:O	39:BW:41:LYS:O	2.10	0.69
39:BW:56:ALA:O	39:BW:58:ALA:N	2.25	0.69
26:BA:2012:G:P	39:BW:98:LYS:HD3	2.31	0.69
41:BY:102:ASP:HB3	41:BY:108:ARG:NH1	2.06	0.69
42:BZ:71:MET:HA	42:BZ:78:PRO:CB	2.22	0.69
1:AA:1278:U:C5'	1:AA:1279:A:H5'	2.21	0.69
1:AA:403:C:H41	1:AA:547:A:H5'	1.55	0.69
1:AA:953:G:H1'	16:AM:125:ARG:O	1.91	0.69
15:AL:28:LYS:HB2	15:AL:30:ALA:HB2	1.72	0.69
15:AL:45:PRO:HD2	15:AL:50:SER:HA	1.74	0.69
1:AA:1219:U:O2	22:AS:34:TRP:CD1	2.44	0.69
2:AV:73:A:H3'	2:AV:74:C:OP1	1.92	0.69
46:B2:23:LEU:O	46:B2:27:LEU:HG	1.93	0.69
46:B2:27:LEU:CD2	46:B2:49:LEU:HB3	2.22	0.69
49:B4:14:ILE:O	49:B4:14:ILE:CG2	2.40	0.69
26:BA:1818:U:C3'	27:BD:155:ARG:CG	2.67	0.69
26:BA:218:A:H2'	26:BA:219:G:O4'	1.92	0.69
26:BA:2226:C:O2	26:BA:2227:A:O2'	2.08	0.69
26:BA:2265:U:N3	26:BA:2266:A:N7	2.39	0.69
26:BA:2051:A:H2	26:BA:2618:G:N1	1.90	0.69
26:BA:2620:C:O2'	26:BA:2621:A:C4'	2.40	0.69
26:BA:2682:U:C6	28:BE:48:MET:SD	2.85	0.69
26:BA:2740:A:H8	26:BA:2740:A:C5'	2.04	0.69
26:BA:58:G:N2	26:BA:70:G:C5	2.59	0.69
26:BA:994:C:O2'	44:BU:54:LYS:HA	1.92	0.69
27:BD:141:HIS:HE1	27:BD:192:GLY:C	1.95	0.69
32:BI:101:SER:O	32:BI:102:LEU:C	2.31	0.69
55:BK:132:ALA:CA	55:BK:137:ILE:HB	2.22	0.69
26:BA:1063:G:H4'	55:BK:88:GLY:HA3	1.73	0.69
36:BQ:152:SER:OG	36:BQ:153:PRO:HD2	1.92	0.69
43:BR:61:HIS:C	43:BR:64:ARG:NH1	2.44	0.69
37:BS:115:VAL:O	37:BS:117:ALA:N	2.25	0.69
37:BS:97:VAL:O	37:BS:98:GLU:CB	2.40	0.69
44:BU:47:TYR:CD1	45:BV:75:LYS:O	2.45	0.69
39:BW:14:PRO:HD3	39:BW:101:SER:OG	1.92	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:8:ARG:O	39:BW:9:TYR:C	2.30	0.69
1:AA:1211:U:C3'	1:AA:1212:U:OP1	2.38	0.69
1:AA:815:A:HO2'	1:AA:1527:C:H1'	1.51	0.69
1:AA:518:C:H2'	1:AA:530:G:C8	2.27	0.69
13:AJ:90:LEU:H	13:AJ:91:PRO:HD2	1.56	0.69
13:AJ:61:GLU:OE1	17:AN:49:HIS:HE1	1.75	0.69
21:AR:80:PRO:O	21:AR:82:THR:N	2.23	0.69
48:B0:33:ALA:CB	48:B0:66:LYS:H	2.03	0.69
47:B3:45:GLY:O	47:B3:46:ASN:C	2.31	0.69
49:B4:33:VAL:C	49:B4:34:ASP:OD1	2.30	0.69
26:BA:747:U:P	50:B5:2:ALA:HB3	2.32	0.69
26:BA:2194:G:C6	26:BA:2195:C:N4	2.60	0.69
26:BA:2236:C:H2'	26:BA:2236:C:O2	1.91	0.69
26:BA:2267:A:H5''	26:BA:2268:A:P	2.32	0.69
26:BA:2359:C:C5	26:BA:2360:A:N1	2.60	0.69
26:BA:2373:G:H1	26:BA:2380:C:H42	1.40	0.69
26:BA:2520:C:H2'	26:BA:2521:C:C5'	2.20	0.69
26:BA:2520:C:C6	26:BA:2567:G:C1'	2.75	0.69
26:BA:2657:A:C3'	26:BA:2658:C:H5'	2.23	0.69
26:BA:2657:A:C5	26:BA:2658:C:C6	2.80	0.69
26:BA:2768:C:HO2'	26:BA:2769:C:H5'	1.57	0.69
26:BA:280:C:O2	26:BA:283:A:N6	2.25	0.69
27:BD:110:LYS:O	27:BD:111:VAL:C	2.30	0.69
26:BA:1658:C:C5'	28:BE:230:GLY:HA3	2.21	0.69
29:BF:168:ARG:HH12	29:BF:209:GLY:C	1.91	0.69
29:BF:25:PRO:C	29:BF:26:VAL:HG23	2.12	0.69
31:BH:52:THR:O	31:BH:54:PRO:CD	2.37	0.69
32:BI:35:LEU:O	32:BI:36:ALA:CB	2.39	0.69
32:BI:8:ASP:O	32:BI:9:VAL:HB	1.92	0.69
55:BK:18:ALA:O	55:BK:19:THR:CB	2.40	0.69
55:BK:38:PHE:CZ	55:BK:66:PHE:C	2.65	0.69
55:BK:63:ASP:O	55:BK:64:LYS:CG	2.41	0.69
33:BN:5:GLU:OE2	33:BN:6:PHE:O	2.11	0.69
26:BA:2780:G:N2	33:BN:80:LYS:HZ2	1.88	0.69
36:BQ:94:ARG:NE	36:BQ:106:GLY:HA2	2.01	0.69
36:BQ:49:VAL:CG2	36:BQ:120:HIS:CA	2.70	0.69
43:BR:37:THR:O	43:BR:38:VAL:C	2.29	0.69
43:BR:62:ALA:HB1	43:BR:80:PHE:HZ	1.55	0.69
37:BS:100:ALA:CB	37:BS:127:LEU:HD21	2.23	0.69
44:BU:104:GLU:OE1	45:BV:46:VAL:CG1	2.39	0.69
41:BY:53:GLY:O	41:BY:54:ASP:C	2.30	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:71:VAL:HG22	41:BY:93:THR:HG23	0.71	0.69
1:AA:1268:A:C1'	24:AU:20:LYS:HB3	2.22	0.69
1:AA:597:G:N2	11:AH:94:TYR:HE2	1.90	0.69
48:B0:9:SER:O	48:B0:10:SER:C	2.30	0.69
26:BA:2262:U:C5	48:B0:14:ARG:NH1	2.59	0.69
48:B0:47:ALA:HB1	48:B0:73:GLY:O	1.93	0.69
47:B3:31:LEU:HD22	47:B3:32:GLN:CB	2.21	0.69
52:B7:12:ARG:O	52:B7:13:ALA:O	2.10	0.69
53:B8:60:LEU:CD2	53:B8:61:MET:O	2.40	0.69
26:BA:1405:U:H2'	26:BA:1406:U:C6	2.26	0.69
26:BA:196:A:C2	26:BA:2068:U:H5	2.11	0.69
26:BA:2013:A:C4'	39:BW:96:ILE:CG2	2.68	0.69
26:BA:2210:G:O2'	26:BA:2211:G:P	2.50	0.69
26:BA:2233:U:O2	26:BA:2234:G:N9	2.25	0.69
26:BA:2373:G:C4	26:BA:2374:C:C5	2.80	0.69
3:AW:76:A:C4	26:BA:2422:A:N6	2.61	0.69
26:BA:2457:U:O2'	26:BA:2458:G:C5'	2.40	0.69
26:BA:2474:C:C2'	26:BA:2475:C:H5'	2.15	0.69
26:BA:2517:C:C5	26:BA:2542:A:C5	2.80	0.69
26:BA:2517:C:N3	26:BA:2542:A:N6	2.40	0.69
26:BA:2561:A:C5	26:BA:2562:U:C5	2.80	0.69
26:BA:359:A:O2'	26:BA:360:G:C4	2.43	0.69
26:BA:671:C:N4	26:BA:809:G:H1	1.90	0.69
27:BD:85:ASN:CG	27:BD:86:ARG:NH2	2.44	0.69
30:BG:38:GLU:HG2	30:BG:41:LEU:HD11	1.70	0.69
31:BH:49:ILE:HD12	31:BH:49:ILE:N	2.01	0.69
55:BK:72:THR:HG21	55:BK:114:PRO:HB2	1.73	0.69
33:BN:10:VAL:HG11	33:BN:36:VAL:CB	2.16	0.69
33:BN:63:ILE:HB	33:BN:71:TYR:CZ	2.26	0.69
34:BO:64:ARG:HH21	34:BO:100:GLY:HA3	1.57	0.69
34:BO:43:VAL:HG23	34:BO:56:GLN:H	1.55	0.69
35:BP:114:VAL:HG21	35:BP:132:LYS:CB	2.22	0.69
43:BR:89:ASP:OD1	43:BR:90:ARG:CG	2.40	0.69
37:BS:76:GLY:C	37:BS:80:SER:N	2.46	0.69
44:BU:39:LEU:HB3	44:BU:40:LEU:HD23	1.74	0.69
44:BU:56:ASP:O	44:BU:60:LEU:HD23	1.89	0.69
44:BU:68:GLY:HA2	44:BU:71:LEU:HB2	1.74	0.69
45:BV:44:GLN:HE21	45:BV:44:GLN:N	1.91	0.69
42:BZ:51:LEU:HD11	42:BZ:64:ALA:H	1.56	0.69
1:AA:1014:A:C6	22:AS:34:TRP:CZ3	2.81	0.69
1:AA:566:G:H8	1:AA:566:G:O5'	1.76	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AW:14:A:C5	3:AW:22:G:C2	2.81	0.69
51:B6:42:PRO:C	51:B6:44:ALA:N	2.43	0.69
26:BA:1212:G:O2'	26:BA:1213:A:H8	1.74	0.69
26:BA:139:G:H2'	26:BA:141(A):C:O2'	1.93	0.69
26:BA:1:G:N2	26:BA:2902:C:C4	2.59	0.69
26:BA:2197:U:HO2'	26:BA:2198:A:H5''	1.58	0.69
26:BA:2341:G:C6	26:BA:2342:C:C4	2.80	0.69
26:BA:2484:G:C2	26:BA:2485:G:C1'	2.74	0.69
26:BA:265:A:N6	26:BA:428:A:C5	2.61	0.69
26:BA:2740:A:C4	26:BA:2741:A:N7	2.60	0.69
26:BA:2840:C:O2'	26:BA:2841:C:H5'	1.90	0.69
26:BA:2880:C:N4	26:BA:2881:C:H41	1.91	0.69
28:BE:205:THR:OG1	28:BE:206:LYS:N	2.24	0.69
26:BA:2572:A:N7	28:BE:241:TRP:CD1	2.60	0.69
26:BA:2052:G:H21	28:BE:245:ARG:CB	2.05	0.69
28:BE:269:ILE:HD12	28:BE:295:LEU:O	1.92	0.69
29:BF:214:THR:N	29:BF:218:VAL:HG21	1.96	0.69
29:BF:79:ARG:HG2	29:BF:79:ARG:O	1.92	0.69
30:BG:146:LYS:O	30:BG:147:ALA:C	2.30	0.69
55:BK:101:THR:OG1	55:BK:104:GLN:OE1	2.10	0.69
34:BO:10:VAL:CG1	34:BO:12:ASP:O	2.41	0.69
34:BO:78:ARG:O	34:BO:79:PHE:CD2	2.45	0.69
36:BQ:26:LYS:HE3	36:BQ:28:ILE:HD12	1.74	0.69
43:BR:56:LYS:NZ	43:BR:94:TYR:OH	2.21	0.69
44:BU:62:ILE:O	44:BU:65:ILE:HB	1.92	0.69
44:BU:75:ASN:O	44:BU:78:THR:OG1	2.10	0.69
39:BW:70:TYR:HD2	39:BW:71:VAL:H	1.40	0.69
1:AA:1320:C:C2	22:AS:72:GLY:C	2.65	0.69
1:AA:1353:G:P	24:AU:10:ARG:HH12	2.16	0.69
1:AA:1492:A:H2'	1:AA:1493:A:O4'	1.93	0.69
1:AA:46:G:O3'	1:AA:47:C:P	2.50	0.69
1:AA:946:A:N3	1:AA:1333:A:C2	2.60	0.69
7:AD:12:CYS:O	7:AD:33:MET:HB3	1.92	0.69
1:AA:403:C:OP2	7:AD:74:GLN:NE2	2.25	0.69
1:AA:1268:A:O3'	24:AU:20:LYS:HA	1.91	0.69
3:AW:34:G:OP1	3:AW:34:G:H8	1.75	0.69
47:B3:44:ARG:O	47:B3:45:GLY:C	2.30	0.69
49:B4:10:VAL:O	49:B4:10:VAL:HG12	1.92	0.69
39:BW:19:LEU:CD1	50:B5:25:LEU:CG	2.67	0.69
52:B7:19:ARG:O	52:B7:22:MET:N	2.25	0.69
26:BA:1134:G:O6	26:BA:1137:G:N7	2.25	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1254:A:N7	26:BA:1256:G:C4	2.60	0.69
26:BA:1668:A:H1'	26:BA:1669:A:C2	2.27	0.69
26:BA:2210:G:N7	27:BD:148:GLY:CA	2.56	0.69
26:BA:2228:G:H8	26:BA:2228:G:C5'	2.05	0.69
26:BA:2087:G:C6	26:BA:2233:U:C6	2.80	0.69
26:BA:2267:A:N1	26:BA:2272:U:O4	2.26	0.69
26:BA:2063:C:O2	26:BA:2450:A:N1	2.24	0.69
26:BA:2470:G:O6	26:BA:2481:G:N2	2.25	0.69
26:BA:2455:G:N2	26:BA:2498:C:N4	2.40	0.69
26:BA:1966:A:C2	26:BA:2593:U:H4'	2.28	0.69
26:BA:2818:G:N2	26:BA:2829:C:C2	2.61	0.69
26:BA:2898:U:O2	26:BA:2898:U:H2'	1.93	0.69
26:BA:310:A:H2'	26:BA:312:G:N7	2.08	0.69
26:BA:380:U:OP1	49:B4:16:TYR:HA	1.93	0.69
26:BA:397:G:OP2	49:B4:10:VAL:HG11	1.92	0.69
26:BA:772:C:H2'	26:BA:773:U:H6	1.57	0.69
26:BA:910:A:N6	36:BQ:12:PRO:CA	2.56	0.69
25:BB:75:G:O2'	42:BZ:32:PHE:CE2	2.40	0.69
28:BE:84:ARG:HB2	28:BE:174:LEU:HD23	1.74	0.69
28:BE:307:LEU:O	28:BE:309:PRO:HD3	1.92	0.69
28:BE:70:VAL:HG22	28:BE:297:LYS:CA	2.22	0.69
29:BF:153:VAL:C	29:BF:155:SER:N	2.45	0.69
29:BF:237:GLU:O	29:BF:240:LEU:N	2.26	0.69
26:BA:443:A:C8	29:BF:43:LYS:HD2	2.27	0.69
31:BH:164:GLU:OE1	31:BH:164:GLU:N	2.25	0.69
31:BH:82:TYR:CE2	31:BH:137:LYS:CB	2.67	0.69
35:BP:69:ILE:O	35:BP:70:ASP:C	2.31	0.69
26:BA:2251:G:H5''	36:BQ:102:ARG:CZ	2.22	0.69
43:BR:47:PHE:O	43:BR:50:HIS:N	2.25	0.69
43:BR:52:ILE:CD1	43:BR:94:TYR:HB2	2.23	0.69
37:BS:35:VAL:HG11	37:BS:37:ARG:NH2	2.08	0.69
44:BU:103:PRO:CA	44:BU:107:LYS:HE2	2.22	0.69
44:BU:63:GLN:O	44:BU:66:ASN:N	2.25	0.69
41:BY:101:LEU:HD22	41:BY:101:LEU:O	1.93	0.69
1:AA:1037:C:H3'	1:AA:1038:C:P	2.33	0.69
48:B0:41:ARG:O	48:B0:42:GLY:O	2.10	0.69
46:B2:35:ALA:O	46:B2:37:GLY:N	2.26	0.69
46:B2:51:LYS:O	46:B2:54:ALA:CA	2.40	0.69
49:B4:40:HIS:CB	49:B4:41:PRO:CD	2.70	0.69
50:B5:13:LYS:CD	50:B5:14:SER:N	2.56	0.69
52:B7:26:SER:HA	52:B7:29:ASN:HD22	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1367:A:O2'	52:B7:25:LYS:NZ	2.24	0.69
26:BA:1918:A:H2'	26:BA:1919:A:N7	2.07	0.69
26:BA:2018:G:H21	44:BU:34:ASN:HD21	0.74	0.69
26:BA:2262:U:C6	48:B0:14:ARG:NH2	2.58	0.69
26:BA:2333:A:O4'	26:BA:2335:A:C4	2.45	0.69
26:BA:2394:C:N4	26:BA:2395:C:N3	2.39	0.69
26:BA:245:G:H1	26:BA:253:C:H42	1.39	0.69
26:BA:2474:C:N4	26:BA:2529:G:N2	2.41	0.69
26:BA:2510:C:N4	26:BA:2511:U:C4	2.60	0.69
26:BA:2043:C:N4	26:BA:2777:G:C5	2.59	0.69
26:BA:387:U:H3'	49:B4:23:GLU:OE2	1.93	0.69
27:BD:73:ILE:HG22	27:BD:74:PRO:HD2	1.75	0.69
29:BF:147:LEU:HD12	29:BF:156:LEU:HD12	1.72	0.69
29:BF:42:ARG:NH1	29:BF:221:GLU:OE1	2.25	0.69
32:BI:7:LYS:HG2	32:BI:12:LYS:HA	1.74	0.69
33:BN:8:ALA:HB1	33:BN:11:ILE:HD11	1.75	0.69
33:BN:65:ASN:O	33:BN:68:GLY:O	2.11	0.69
34:BO:37:ASP:O	34:BO:61:VAL:CG1	2.39	0.69
35:BP:52:LYS:CE	35:BP:53:ARG:HH12	2.05	0.69
36:BQ:108:SER:C	36:BQ:109:VAL:HG22	2.13	0.69
36:BQ:67:ALA:HB1	36:BQ:71:PHE:CE1	2.28	0.69
36:BQ:65:ARG:HH21	36:BQ:85:ILE:CA	2.05	0.69
43:BR:90:ARG:NH1	43:BR:117:VAL:HG11	2.07	0.69
38:BT:6:CYS:O	38:BT:8:TYR:N	2.23	0.69
44:BU:66:ASN:O	44:BU:68:GLY:N	2.26	0.69
39:BW:32:ALA:C	39:BW:34:ASN:H	1.96	0.69
41:BY:47:THR:O	41:BY:98:VAL:CG1	2.35	0.69
41:BY:92:ASP:O	41:BY:92:ASP:OD1	2.09	0.69
42:BZ:81:VAL:CG1	42:BZ:82:ASP:N	2.56	0.69
42:BZ:91:PRO:HG2	42:BZ:128:ARG:N	2.07	0.69
7:AD:14:ARG:HG3	7:AD:66:ARG:NH1	2.07	0.69
1:AA:376:G:O2'	19:AP:28:ARG:HB3	1.93	0.69
2:AV:7:U:H5'	2:AV:8:U:OP2	1.92	0.69
48:B0:37:LEU:CD1	48:B0:70:ILE:HD11	2.04	0.69
54:B9:13:ASN:O	54:B9:14:CYS:C	2.31	0.69
54:B9:7:VAL:HG12	54:B9:34:GLN:OE1	1.91	0.69
26:BA:1131:G:N1	33:BN:69:TYR:HE1	1.85	0.69
26:BA:1274:A:C6	26:BA:1302:A:C2	2.79	0.69
26:BA:1637:A:O2'	26:BA:2711:A:H1'	1.93	0.69
26:BA:2247:A:H2'	26:BA:2248:C:C6	2.24	0.69
26:BA:222:A:N6	26:BA:232:G:C2	2.60	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2344:U:HO2'	26:BA:2345:G:P	2.14	0.69
26:BA:2423:U:C2'	26:BA:2424:C:OP2	2.39	0.69
26:BA:2471:C:C2'	26:BA:2472:G:O5'	2.41	0.69
26:BA:2511:U:C6	26:BA:2512:C:C5	2.81	0.69
26:BA:2535:G:N3	26:BA:2535:G:H2'	2.06	0.69
26:BA:2734:A:H5'	26:BA:2735:G:OP2	1.92	0.69
26:BA:2822:G:H8	26:BA:2822:G:OP2	1.74	0.69
26:BA:563:G:H21	44:BU:37:GLN:CD	1.95	0.69
26:BA:72:U:C5'	40:BX:2:TRP:CZ2	2.76	0.69
26:BA:907:U:O2'	36:BQ:88:PHE:HZ	1.76	0.69
27:BD:134:ILE:CG2	27:BD:135:PRO:HD2	2.20	0.69
27:BD:154:VAL:CG2	27:BD:160:SER:HA	2.23	0.69
26:BA:673:C:H4'	29:BF:82:GLN:OE1	1.92	0.69
30:BG:142:ALA:HB3	30:BG:151:ILE:HD11	1.71	0.69
32:BI:102:LEU:C	32:BI:102:LEU:CD1	2.56	0.69
35:BP:127:GLU:HA	35:BP:127:GLU:OE1	1.91	0.69
36:BQ:127:ASN:CB	36:BQ:128:PRO:HD2	2.23	0.69
43:BR:24:GLN:CB	43:BR:44:LEU:CD2	2.71	0.69
37:BS:110:THR:HG22	37:BS:115:VAL:CG2	2.21	0.69
37:BS:76:GLY:O	37:BS:80:SER:O	2.11	0.69
45:BV:41:GLY:N	45:BV:54:TYR:CD1	2.61	0.69
40:BX:13:LYS:HA	40:BX:16:ASN:ND2	2.07	0.69
41:BY:31:LEU:HD11	41:BY:99:THR:O	1.93	0.69
42:BZ:50:GLY:O	42:BZ:51:LEU:CB	2.40	0.69
1:AA:1278:U:C5'	1:AA:1279:A:C4'	2.70	0.69
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.75	0.69
1:AA:576:G:N7	1:AA:881:G:H1'	2.07	0.69
6:AC:8:ILE:HG21	17:AN:50:LYS:O	1.93	0.69
1:AA:1014:A:N1	22:AS:34:TRP:CH2	2.60	0.69
1:AA:1325:C:C5'	24:AU:15:ARG:HH21	2.06	0.69
2:AV:4:G:H2'	2:AV:5:A:H8	1.54	0.69
3:AW:37:YYG:H101	3:AW:37:YYG:N20	2.07	0.69
46:B2:26:GLU:O	46:B2:29:ASN:N	2.25	0.69
26:BA:95:G:C1'	46:B2:42:ASN:HB3	2.22	0.69
26:BA:76:C:C2'	46:B2:55:ARG:HG3	2.22	0.69
47:B3:33:GLN:CD	47:B3:34:GLU:N	2.47	0.69
47:B3:50:VAL:O	47:B3:51:ALA:O	2.10	0.69
52:B7:21:ARG:CZ	52:B7:43:THR:OG1	2.41	0.69
26:BA:1624:G:H2'	26:BA:1625:C:C5	2.27	0.69
26:BA:2048:G:C2	26:BA:2621:A:C2	2.79	0.69
26:BA:2061:G:C4	26:BA:2503:A:C2	2.80	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2209:C:O2'	26:BA:2210:G:C8	2.45	0.69
26:BA:2308:G:H5'	26:BA:2309:A:OP1	1.91	0.69
26:BA:2414:G:C4	26:BA:2415:G:N7	2.61	0.69
26:BA:2258:C:H5	26:BA:2426:A:O4'	1.31	0.69
26:BA:2483:C:H2'	26:BA:2484:G:O5'	1.93	0.69
26:BA:2573:C:C6	26:BA:2573:C:C3'	2.75	0.69
26:BA:2023:G:O4'	26:BA:2618:G:OP1	2.09	0.69
26:BA:2623:G:H4'	26:BA:2826:A:C1'	2.23	0.69
26:BA:2631:G:C6	26:BA:2632:A:N7	2.59	0.69
26:BA:2804:C:C6	26:BA:2805:G:C2	2.81	0.69
26:BA:2888:C:H2'	26:BA:2889:C:O4'	1.92	0.69
26:BA:373:U:C2	26:BA:400:G:N2	2.61	0.69
26:BA:590:A:O3'	29:BF:97:ASP:OD2	2.11	0.69
26:BA:761:A:H8	26:BA:761:A:O5'	1.75	0.69
27:BD:163:VAL:O	27:BD:165:GLY:N	2.26	0.69
26:BA:2512:C:H5''	28:BE:219:VAL:HG13	1.74	0.69
26:BA:2052:G:H1'	28:BE:245:ARG:O	1.91	0.69
29:BF:223:LEU:O	29:BF:225:PRO:CD	2.41	0.69
29:BF:215:ALA:O	29:BF:242:GLU:CB	2.40	0.69
29:BF:24:THR:CB	29:BF:25:PRO:HD3	2.15	0.69
29:BF:36:ARG:O	29:BF:39:GLN:NE2	2.26	0.69
25:BB:42:C:C1'	30:BG:47:GLN:HA	2.22	0.69
32:BI:116:GLU:HG3	32:BI:132:LYS:HG3	1.74	0.69
35:BP:67:ARG:HH11	35:BP:111:ALA:CA	2.06	0.69
35:BP:77:ALA:N	35:BP:81:VAL:CB	2.55	0.69
36:BQ:65:ARG:NE	36:BQ:85:ILE:CB	2.53	0.69
45:BV:20:ILE:O	45:BV:21:ARG:CZ	2.40	0.69
45:BV:33:VAL:HG12	45:BV:34:GLU:N	2.08	0.69
1:AA:1320:C:C2	22:AS:72:GLY:HA3	2.28	0.69
1:AA:51:A:N1	1:AA:314:C:O2'	2.26	0.69
6:AC:156:ARG:HB2	6:AC:196:LEU:HD22	1.75	0.69
7:AD:21:LEU:O	7:AD:113:SER:CB	2.40	0.69
7:AD:62:GLN:HE22	7:AD:65:ARG:HH11	1.40	0.69
1:AA:564:C:O2'	11:AH:91:ARG:NH1	2.26	0.69
48:B0:46:LYS:CB	48:B0:58:THR:HG23	2.21	0.69
51:B6:2:ALA:CB	51:B6:11:LYS:CE	2.70	0.69
52:B7:18:PHE:O	52:B7:19:ARG:C	2.30	0.69
52:B7:22:MET:O	52:B7:23:LYS:C	2.29	0.69
26:BA:1612:C:N1	52:B7:3:ARG:CZ	2.55	0.69
53:B8:50:LEU:HD22	53:B8:51:ALA:N	2.01	0.69
26:BA:138:G:H1'	40:BX:42:GLU:CG	2.23	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1545:A:H3'	26:BA:545(A):A:P	2.32	0.69
26:BA:1626:G:N7	26:BA:1634:A:H2	1.91	0.69
26:BA:1790:C:OP1	27:BD:224:VAL:HA	1.93	0.69
26:BA:2276:G:C4	26:BA:2277:G:H8	2.11	0.69
26:BA:2445:G:O2'	26:BA:2446:G:H5''	1.93	0.69
26:BA:2511:U:C2'	26:BA:2512:C:H5'	2.23	0.69
26:BA:2520:C:C4	26:BA:2567:G:N7	2.61	0.69
26:BA:2548:G:H2'	26:BA:2549:G:O5'	1.93	0.69
26:BA:729:G:C5	27:BD:207:ALA:HA	2.28	0.69
26:BA:775:G:C2'	26:BA:794:G:N7	2.56	0.69
26:BA:962:G:H2'	26:BA:963:U:C6	2.28	0.69
27:BD:123:ILE:H	27:BD:123:ILE:HD12	1.58	0.69
26:BA:780:G:N1	27:BD:233:ASP:CG	2.46	0.69
28:BE:211:GLN:CG	28:BE:212:GLY:N	2.56	0.69
28:BE:243:PRO:O	28:BE:244:SER:HB2	1.93	0.69
28:BE:44:TYR:CG	28:BE:309:PRO:HD3	2.28	0.69
28:BE:44:TYR:O	28:BE:74:GLU:CD	2.30	0.69
29:BF:144:PHE:HE2	29:BF:156:LEU:HD13	1.52	0.69
29:BF:163:HIS:C	29:BF:166:ILE:CG1	2.60	0.69
26:BA:1076:C:H5'	55:BK:94:ARG:NH2	2.07	0.69
33:BN:13:ASP:CA	33:BN:38:VAL:HG13	1.82	0.69
33:BN:94:GLY:C	33:BN:98:PHE:CD1	2.66	0.69
34:BO:71:ARG:C	34:BO:73:ASP:N	2.46	0.69
35:BP:124:ASP:C	35:BP:125:PHE:CG	2.63	0.69
37:BS:86:LEU:H	37:BS:121:GLY:HA2	1.58	0.69
44:BU:45:TYR:O	44:BU:46:GLU:C	2.31	0.69
39:BW:70:TYR:HE2	39:BW:72:LYS:CA	2.04	0.69
41:BY:18:GLU:CB	41:BY:21:LYS:HZ2	2.01	0.69
25:BB:75:G:C2'	42:BZ:32:PHE:CD2	2.74	0.69
42:BZ:64:ALA:CB	42:BZ:85:MET:C	2.61	0.69
42:BZ:24:TYR:CB	42:BZ:83:PHE:O	2.41	0.69
1:AA:105:G:OP2	23:AT:18:GLN:NE2	2.26	0.69
1:AA:1205:U:H4'	6:AC:195:VAL:CG2	2.22	0.69
1:AA:778:G:H2'	1:AA:779:C:C6	2.28	0.69
1:AA:1329:A:HO2'	16:AM:24:GLY:HA2	1.56	0.69
17:AN:27:CYS:SG	17:AN:43:CYS:N	2.60	0.69
18:AO:45:VAL:O	18:AO:46:HIS:HB2	1.93	0.69
21:AR:53:ARG:HH11	21:AR:59:SER:HA	1.58	0.69
48:B0:52:GLY:O	48:B0:53:MET:CB	2.40	0.69
46:B2:20:LEU:HD12	46:B2:21:ASP:N	2.07	0.69
47:B3:59:VAL:CG1	47:B3:60:GLU:H	1.82	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:9:ASN:O	52:B7:11:LYS:O	2.10	0.69
53:B8:8:LYS:O	53:B8:10:ALA:CA	2.41	0.69
26:BA:51:G:H1'	26:BA:118:A:H62	1.56	0.69
26:BA:1608:A:H2'	26:BA:1611:C:H41	1.57	0.69
26:BA:1879:C:H2'	26:BA:1880:C:H6	1.58	0.69
26:BA:2233:U:O2	26:BA:2234:G:C8	2.45	0.69
26:BA:2320:A:C6	37:BS:13:ARG:HG2	2.27	0.69
26:BA:2333:A:C4	26:BA:2335:A:N1	2.60	0.69
26:BA:2411:A:O2'	26:BA:2412:A:C5'	2.41	0.69
26:BA:2459:A:N1	26:BA:2494:G:C4	2.61	0.69
26:BA:2462:U:N3	26:BA:2463:C:C5	2.61	0.69
26:BA:2487:G:O2'	26:BA:2488:A:C5'	2.41	0.69
26:BA:2561:A:C5	26:BA:2562:U:H6	2.11	0.69
26:BA:2579:C:C2'	26:BA:2580:U:C5'	2.33	0.69
26:BA:2638:G:H2'	26:BA:2775:A:N1	2.08	0.69
26:BA:2776:A:C2	26:BA:2778:A:C5	2.81	0.69
26:BA:613:U:O5'	26:BA:615:G:C8	2.46	0.69
26:BA:729:G:H3'	26:BA:729:G:N3	2.08	0.69
26:BA:911:A:N9	36:BQ:16:ARG:CD	2.53	0.69
26:BA:931:G:OP1	47:B3:27:GLY:HA3	1.90	0.69
27:BD:121:ALA:O	27:BD:122:ASP:HB3	1.92	0.69
29:BF:96:LYS:C	29:BF:98:ARG:CZ	2.42	0.69
31:BH:137:LYS:HD2	31:BH:138:GLN:H	0.67	0.69
55:BK:116:LEU:HD13	55:BK:116:LEU:C	2.13	0.69
55:BK:24:VAL:O	55:BK:24:VAL:HG12	1.93	0.69
33:BN:46:ILE:CD1	33:BN:132:LEU:HD13	2.23	0.69
33:BN:48:GLY:O	33:BN:50:GLU:N	2.26	0.69
36:BQ:82:LYS:C	36:BQ:84:ARG:N	2.44	0.69
37:BS:100:ALA:N	37:BS:127:LEU:HD21	2.08	0.69
44:BU:55:ARG:C	44:BU:57:PHE:H	1.96	0.69
45:BV:74:TYR:CD1	45:BV:86:HIS:C	2.65	0.69
40:BX:13:LYS:HA	40:BX:16:ASN:HD21	1.59	0.69
1:AA:1268:A:H1'	24:AU:20:LYS:HB3	1.75	0.68
1:AA:667:G:O2'	18:AO:49:ASP:OD1	2.11	0.68
1:AA:1199:U:H4'	13:AJ:54:PHE:CE2	2.27	0.68
1:AA:110:C:O2'	19:AP:25:ARG:O	2.10	0.68
2:AV:60:C:H5'	2:AV:61:C:OP2	1.93	0.68
46:B2:24:LYS:O	46:B2:25:THR:C	2.31	0.68
49:B4:20:VAL:CG1	49:B4:30:GLU:OE1	2.41	0.68
50:B5:46:CYS:CB	50:B5:47:PRO:HD2	2.21	0.68
51:B6:29:ARG:O	51:B6:31:THR:O	2.12	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:30:ARG:HB3	53:B8:44:LYS:CE	2.22	0.68
26:BA:1062:G:O2'	55:BK:76:SER:OG	2.10	0.68
26:BA:585:G:C6	26:BA:1251:C:C5	2.80	0.68
1:AA:1418:A:N3	26:BA:1959:G:H1'	2.08	0.68
26:BA:2078:C:C4'	26:BA:2434:A:H5'	2.23	0.68
26:BA:2356:C:C2'	26:BA:2357:U:C5'	2.71	0.68
26:BA:2405:G:C2	26:BA:2413:G:C6	2.81	0.68
26:BA:2485:G:H2'	26:BA:2486:G:O4'	1.93	0.68
26:BA:2510:C:C4	26:BA:2511:U:C4	2.80	0.68
26:BA:2597:G:H8	26:BA:2597:G:OP2	1.75	0.68
26:BA:2668:G:N2	26:BA:2669:G:N9	2.41	0.68
26:BA:2678:C:H2'	26:BA:2679:A:O4'	1.93	0.68
26:BA:2709:G:C2'	26:BA:2710:C:C5'	2.53	0.68
26:BA:2762:G:C5	26:BA:2763:G:N7	2.60	0.68
26:BA:2795:G:OP2	26:BA:2795:G:C4	2.47	0.68
26:BA:2854:G:C6	26:BA:2864:G:C6	2.80	0.68
26:BA:30:G:H2'	26:BA:31:C:C6	2.28	0.68
26:BA:446:G:C5'	44:BU:5:LYS:HE3	2.23	0.68
26:BA:814:C:P	45:BV:84:THR:HG22	2.33	0.68
27:BD:73:ILE:HB	27:BD:95:TYR:HE2	1.57	0.68
29:BF:22:PHE:CE2	29:BF:115:LEU:C	2.66	0.68
29:BF:140:VAL:HG11	29:BF:236:THR:HG22	1.74	0.68
55:BK:56:VAL:HG12	55:BK:58:ILE:HG13	1.73	0.68
34:BO:104:ARG:O	34:BO:105:GLU:C	2.29	0.68
36:BQ:44:ALA:HB3	36:BQ:126:VAL:C	2.12	0.68
36:BQ:126:VAL:O	36:BQ:127:ASN:O	2.10	0.68
26:BA:1287:A:C4'	43:BR:104:ARG:CD	2.65	0.68
43:BR:116:LEU:O	43:BR:116:LEU:CD1	2.41	0.68
37:BS:12:ARG:CD	37:BS:20:TYR:CZ	2.55	0.68
37:BS:27:LEU:CA	37:BS:33:ARG:CZ	2.71	0.68
44:BU:13:ARG:CZ	44:BU:13:ARG:CB	2.62	0.68
39:BW:25:ARG:CG	39:BW:26:GLY:H	2.06	0.68
39:BW:28:SER:O	39:BW:29:LEU:O	2.10	0.68
39:BW:45:TYR:CD2	39:BW:46:PHE:N	2.61	0.68
40:BX:23:LYS:HA	40:BX:67:ARG:HA	1.75	0.68
40:BX:39:ASP:O	40:BX:42:GLU:N	2.27	0.68
40:BX:28:VAL:HG23	40:BX:62:LYS:HB3	1.75	0.68
40:BX:76:GLU:OE1	40:BX:77:VAL:HG23	1.92	0.68
41:BY:16:LEU:O	41:BY:19:ARG:HB2	1.93	0.68
41:BY:33:GLU:OE1	41:BY:34:GLU:HG2	1.85	0.68
41:BY:74:VAL:HB	41:BY:77:VAL:HG23	1.72	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:49:GLU:CD	41:BY:97:ARG:HH11	1.75	0.68
42:BZ:159:THR:O	42:BZ:160:LEU:CB	2.40	0.68
42:BZ:1:MET:CE	42:BZ:52:PHE:CD2	2.76	0.68
1:AA:20:U:N3	1:AA:916:G:C2	2.60	0.68
8:AE:16:THR:O	8:AE:26:PHE:HB2	1.92	0.68
2:AV:19:G:H5'	2:AV:20:G:OP2	1.93	0.68
26:BA:2386:C:H1'	48:B0:39:ARG:NH2	2.05	0.68
48:B0:44:LYS:HB3	48:B0:45:PHE:CE1	2.28	0.68
48:B0:61:ALA:HB3	48:B0:80:SER:O	1.92	0.68
47:B3:48:GLU:CG	47:B3:49:LYS:H	2.05	0.68
26:BA:1363:C:P	49:B4:55:ARG:HH22	2.16	0.68
49:B4:68:ARG:HG2	49:B4:72:LYS:CA	2.23	0.68
50:B5:33:CYS:SG	50:B5:36:CYS:C	2.71	0.68
26:BA:126:A:C8	52:B7:18:PHE:CD1	2.81	0.68
52:B7:42:LEU:C	52:B7:46:ASP:OD1	2.31	0.68
26:BA:1637:A:H4'	26:BA:2711:A:HO2'	1.53	0.68
26:BA:1954:G:N3	26:BA:2551:C:H5''	2.08	0.68
26:BA:2199:A:H3'	26:BA:2205:C:C5	2.28	0.68
26:BA:2250:G:C3'	26:BA:2250:G:C8	2.75	0.68
26:BA:2320:A:N6	37:BS:14:ARG:HA	2.06	0.68
26:BA:2495:G:O2'	36:BQ:101:MET:HE1	1.93	0.68
26:BA:2654:A:H61	26:BA:2667:C:H41	1.41	0.68
26:BA:2718:G:N2	26:BA:2719:G:H1'	2.08	0.68
26:BA:2842:G:O2'	26:BA:2843:G:C5'	2.41	0.68
26:BA:54:G:O2'	52:B7:35:ARG:NH2	2.26	0.68
26:BA:659:C:H2'	26:BA:660:G:H8	1.58	0.68
27:BD:93:ILE:HG22	27:BD:101:ARG:O	1.93	0.68
27:BD:141:HIS:CE1	27:BD:192:GLY:C	2.66	0.68
27:BD:175:LEU:CB	27:BD:179:GLU:O	2.40	0.68
28:BE:102:ASP:OD2	28:BE:104:PHE:HE1	1.74	0.68
30:BG:98:PHE:CA	30:BG:104:PHE:CE2	2.76	0.68
30:BG:88:LEU:N	30:BG:89:PRO:HD3	2.09	0.68
31:BH:108:TYR:N	31:BH:108:TYR:CD2	2.60	0.68
31:BH:91:VAL:O	31:BH:91:VAL:CG1	2.41	0.68
32:BI:68:LEU:CA	32:BI:72:LEU:HD21	2.23	0.68
55:BK:93:LYS:H	55:BK:96:ILE:CG1	2.06	0.68
33:BN:76:ASP:OD2	33:BN:76:ASP:N	2.25	0.68
34:BO:25:LEU:CD1	34:BO:38:VAL:C	2.61	0.68
26:BA:1665:A:H1'	34:BO:67:ARG:CD	2.24	0.68
36:BQ:56:ILE:O	36:BQ:112:ALA:HB2	1.88	0.68
43:BR:49:ASP:O	43:BR:52:ILE:HB	1.92	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:49:THR:O	37:BS:52:PRO:O	2.11	0.68
44:BU:17:VAL:O	44:BU:20:ARG:N	2.26	0.68
44:BU:72:HIS:CE1	44:BU:110:VAL:CG1	2.74	0.68
39:BW:21:VAL:CG2	39:BW:22:ASP:N	2.54	0.68
39:BW:23:LEU:CD2	39:BW:24:ILE:N	2.56	0.68
41:BY:27:LEU:HD12	41:BY:27:LEU:N	2.07	0.68
42:BZ:148:THR:O	42:BZ:149:ALA:O	2.11	0.68
1:AA:3(A):G:C6	1:AA:1004:A:O2'	2.44	0.68
1:AA:559:A:H4'	1:AA:560:U:C5'	2.23	0.68
3:AW:37:YYG:H31	3:AW:37:YYG:H1'	1.74	0.68
48:B0:67:VAL:O	48:B0:68:VAL:CG2	2.42	0.68
48:B0:45:PHE:CE1	48:B0:78:PHE:CB	2.76	0.68
26:BA:107:C:H6	26:BA:107:C:H5'	1.58	0.68
26:BA:1139:G:OP1	33:BN:19:MET:O	2.12	0.68
26:BA:1166:C:N3	26:BA:1183:G:N2	2.40	0.68
26:BA:1689:A:H2'	26:BA:1690:A:H8	1.58	0.68
26:BA:2023:G:C5'	26:BA:2617:C:HO2'	2.00	0.68
26:BA:2056:G:O6	26:BA:2577:A:H1'	1.91	0.68
26:BA:2242:G:C4	26:BA:2243:U:H5	2.11	0.68
26:BA:2305:A:N1	26:BA:2312:U:H1'	2.09	0.68
26:BA:2318:G:O5'	26:BA:2318:G:H8	1.74	0.68
26:BA:2363:C:C2'	26:BA:2364:C:H5'	2.24	0.68
26:BA:2423:U:C6	26:BA:2425:A:N6	2.53	0.68
26:BA:2692:C:N4	26:BA:2717:G:H1	1.91	0.68
26:BA:2864:G:C2'	26:BA:2865:U:C6	2.75	0.68
26:BA:2893:G:C8	26:BA:2893:G:OP2	2.44	0.68
26:BA:414:C:C2	26:BA:2409:G:N2	2.59	0.68
26:BA:514:A:H2'	26:BA:515:A:H8	1.56	0.68
26:BA:612:G:O2'	26:BA:615:G:H2'	1.93	0.68
27:BD:119:PRO:N	27:BD:129:LEU:HD21	2.07	0.68
27:BD:131:LEU:HB3	27:BD:171:VAL:HG11	1.75	0.68
27:BD:179:GLU:O	27:BD:180:VAL:CG2	2.41	0.68
30:BG:38:GLU:HA	30:BG:41:LEU:HD12	1.74	0.68
30:BG:49:PRO:CB	30:BG:72:LYS:CA	2.70	0.68
30:BG:53:LYS:HG3	30:BG:54:ALA:H	1.55	0.68
55:BK:52:MET:HE2	55:BK:53:ILE:N	2.08	0.68
33:BN:135:ILE:O	33:BN:139:LEU:CD2	2.41	0.68
36:BQ:59:ASN:O	36:BQ:60:ALA:C	2.31	0.68
36:BQ:56:ILE:C	36:BQ:61:LEU:HD21	2.14	0.68
43:BR:18:LEU:CD1	43:BR:18:LEU:C	2.61	0.68
38:BT:29:THR:HB	38:BT:31:PHE:CE1	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:95:LEU:HD23	44:BU:95:LEU:H	1.58	0.68
40:BX:18:MET:CE	40:BX:25:GLN:H	2.05	0.68
41:BY:11:GLN:CA	41:BY:21:LYS:HE3	2.23	0.68
41:BY:63:ILE:CD1	41:BY:75:GLU:CA	2.50	0.68
1:AA:586:C:H5'	1:AA:879:C:OP1	1.93	0.68
7:AD:23:GLY:CA	7:AD:113:SER:N	2.53	0.68
18:AO:28:GLN:O	18:AO:32:LEU:HG	1.94	0.68
48:B0:9:SER:OG	48:B0:10:SER:N	2.20	0.68
52:B7:21:ARG:CZ	52:B7:43:THR:CB	2.70	0.68
54:B9:7:VAL:HG11	54:B9:25:VAL:CG2	2.23	0.68
26:BA:1664:A:C8	26:BA:1664:A:H3'	2.29	0.68
26:BA:1943:U:N1	26:BA:1945:G:H5'	2.09	0.68
26:BA:2048:G:C2	26:BA:2621:A:N3	2.61	0.68
26:BA:2274:A:O3'	26:BA:2275:C:H3'	1.92	0.68
26:BA:2331:G:H2'	26:BA:2332:U:O4'	1.94	0.68
26:BA:2344:U:O2'	26:BA:2345:G:P	2.50	0.68
26:BA:2359:C:N3	26:BA:2360:A:C2	2.62	0.68
26:BA:2379:G:OP1	37:BS:30:GLY:CA	2.34	0.68
26:BA:2423:U:H6	26:BA:2425:A:N7	1.91	0.68
26:BA:2810:A:C2'	26:BA:2811:G:C5'	1.82	0.68
28:BE:190:ASN:O	28:BE:192:ILE:HA	1.94	0.68
29:BF:39:GLN:N	29:BF:39:GLN:CD	2.45	0.68
25:BB:42:C:H1'	30:BG:47:GLN:CB	2.23	0.68
55:BK:113:MET:O	55:BK:114:PRO:O	2.11	0.68
55:BK:55:PRO:HG2	55:BK:71:LYS:O	1.93	0.68
33:BN:81:ARG:O	33:BN:82:THR:C	2.30	0.68
34:BO:77:ILE:HD12	34:BO:77:ILE:C	2.12	0.68
35:BP:59:GLU:O	35:BP:60:GLU:CG	2.35	0.68
36:BQ:153:PRO:O	36:BQ:154:ALA:HB3	1.93	0.68
36:BQ:41:THR:C	36:BQ:125:TRP:CZ3	2.63	0.68
45:BV:68:LYS:O	45:BV:69:ILE:O	2.09	0.68
41:BY:11:GLN:HA	41:BY:21:LYS:CE	2.23	0.68
42:BZ:102:GLY:O	42:BZ:103:ARG:C	2.32	0.68
42:BZ:6:LYS:N	42:BZ:7:PRO:CD	2.51	0.68
42:BZ:64:ALA:CB	42:BZ:84:TYR:O	2.42	0.68
1:AA:13:U:H3	1:AA:21:G:H1	1.39	0.68
1:AA:427:U:O2'	1:AA:541:G:OP1	2.10	0.68
1:AA:571:U:O2	1:AA:917:G:H4'	1.94	0.68
7:AD:12:CYS:CB	7:AD:31:CYS:O	2.41	0.68
46:B2:26:GLU:HA	46:B2:29:ASN:HD22	1.57	0.68
46:B2:30:ALA:C	46:B2:34:GLN:CG	2.42	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:17:GLN:HA	49:B4:33:VAL:HG11	1.74	0.68
49:B4:62:ARG:O	49:B4:65:ASP:OD2	2.12	0.68
50:B5:40:LYS:CD	50:B5:49:CYS:SG	2.60	0.68
50:B5:58:LEU:O	50:B5:59:ALA:CB	2.41	0.68
51:B6:16:ALA:HB1	51:B6:42:PRO:HD3	1.75	0.68
53:B8:22:VAL:N	53:B8:48:PHE:CE2	2.56	0.68
53:B8:22:VAL:H	53:B8:48:PHE:HE2	1.36	0.68
26:BA:1455:G:O6	26:BA:2705:A:N3	2.26	0.68
26:BA:2096:U:O2	26:BA:2193:G:N2	2.26	0.68
26:BA:2209:C:H2'	26:BA:2210:G:O3'	1.94	0.68
26:BA:2239:G:C4	26:BA:2240:C:C6	2.82	0.68
26:BA:2246:G:C2	26:BA:2426:A:N3	2.62	0.68
26:BA:2286:A:H1'	26:BA:2346:A:H61	1.57	0.68
26:BA:2355:C:N4	26:BA:2356:C:N4	2.41	0.68
26:BA:2369:A:C2'	26:BA:2370:G:O5'	2.41	0.68
26:BA:2386:C:H2'	26:BA:2387:U:C5	2.29	0.68
26:BA:2077:A:N3	26:BA:2435:A:C8	2.62	0.68
26:BA:2486:G:N1	26:BA:2487:G:C8	2.62	0.68
26:BA:2512:C:H4'	28:BE:235:ILE:CD1	2.24	0.68
26:BA:2642:G:C2'	26:BA:2643:G:C5'	2.70	0.68
26:BA:1637:A:O3'	26:BA:2711:A:H4'	1.93	0.68
26:BA:2854:G:C6	26:BA:2855:C:N4	2.61	0.68
26:BA:2888:C:N3	26:BA:2889:C:C5	2.61	0.68
26:BA:780:G:H1	27:BD:233:ASP:CG	1.96	0.68
27:BD:188:ARG:O	27:BD:189:ALA:HB2	1.93	0.68
26:BA:2679:A:C4	28:BE:300:VAL:CG1	2.72	0.68
28:BE:94:ARG:HB3	28:BE:95:PRO:HD3	1.69	0.68
29:BF:110:ALA:O	29:BF:112:ARG:N	2.26	0.68
29:BF:162:VAL:HG12	29:BF:163:HIS:N	2.08	0.68
29:BF:242:GLU:O	29:BF:245:GLU:CB	2.41	0.68
2:AV:56:C:C2'	30:BG:56:ARG:HD3	2.22	0.68
31:BH:104:LEU:CA	31:BH:151:ARG:HH12	2.06	0.68
55:BK:15:ALA:HA	55:BK:46:THR:CB	2.23	0.68
34:BO:9:LYS:N	34:BO:83:ALA:HB2	2.09	0.68
36:BQ:137:ARG:NH1	36:BQ:138:ARG:HG2	2.07	0.68
43:BR:21:TYR:HB3	43:BR:47:PHE:HD2	1.58	0.68
43:BR:43:GLU:C	43:BR:45:ARG:H	1.95	0.68
43:BR:73:VAL:HG12	43:BR:77:ARG:NH2	2.09	0.68
43:BR:74:LYS:N	43:BR:77:ARG:HH22	1.91	0.68
37:BS:117:ALA:O	37:BS:118:ILE:C	2.31	0.68
37:BS:53:ASN:O	37:BS:55:ASP:CA	2.42	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:83:LEU:O	37:BS:85:GLY:N	2.26	0.68
42:BZ:37:LYS:O	42:BZ:40:ASP:OD1	2.10	0.68
1:AA:1182:G:H4'	1:AA:1183:A:H5''	1.76	0.68
1:AA:436:C:O2	1:AA:437:U:C2	2.47	0.68
1:AA:302:G:H2'	1:AA:556:C:H5''	1.74	0.68
1:AA:952:U:H5'	1:AA:972:C:H41	1.57	0.68
8:AE:80:ILE:HD13	8:AE:138:ALA:HB1	1.75	0.68
26:BA:72:U:C6	46:B2:57:LYS:HD2	2.28	0.68
46:B2:62:GLU:C	46:B2:64:GLY:H	1.97	0.68
47:B3:50:VAL:CB	47:B3:53:LEU:HD12	2.23	0.68
47:B3:6:VAL:HG22	47:B3:54:VAL:HG21	1.76	0.68
52:B7:21:ARG:C	52:B7:24:THR:HG22	2.14	0.68
26:BA:1612:C:C2	52:B7:3:ARG:CZ	2.77	0.68
26:BA:2209:C:N4	26:BA:2215:G:N1	2.29	0.68
26:BA:2247:A:O2'	26:BA:2248:C:H5'	1.94	0.68
26:BA:2317:C:H2'	26:BA:2318:G:C8	2.29	0.68
26:BA:2525:G:N2	26:BA:2539:C:C4	2.62	0.68
26:BA:2570:G:C2	26:BA:2571:C:C4	2.82	0.68
26:BA:2737:G:C2	26:BA:2738:A:N7	2.61	0.68
26:BA:2808:U:OP1	26:BA:2809:A:OP2	2.12	0.68
26:BA:2810:A:C8	26:BA:2811:G:N9	2.61	0.68
26:BA:2839:G:C5	26:BA:2840:C:C4	2.80	0.68
26:BA:746:A:C2'	26:BA:2611:U:HO2'	2.07	0.68
27:BD:208:GLY:HA3	27:BD:211:HIS:NE2	2.09	0.68
29:BF:157:LEU:CB	29:BF:158:GLU:OE2	2.18	0.68
29:BF:163:HIS:CB	29:BF:166:ILE:HD11	2.24	0.68
29:BF:38:ALA:C	29:BF:39:GLN:OE1	2.31	0.68
25:BB:42:C:C1'	30:BG:47:GLN:CA	2.71	0.68
31:BH:10:ILE:HG21	31:BH:14:VAL:HG12	1.70	0.68
32:BI:68:LEU:HD11	32:BI:108:LEU:CD1	2.24	0.68
33:BN:12:VAL:CB	33:BN:38:VAL:CG2	2.71	0.68
33:BN:38:VAL:O	33:BN:39:VAL:CG2	2.42	0.68
34:BO:101:PRO:CB	34:BO:120:GLU:O	2.42	0.68
35:BP:120:LEU:CD1	35:BP:122:ALA:CB	2.71	0.68
36:BQ:140:TYR:CE1	36:BQ:147:VAL:HG13	2.29	0.68
36:BQ:31:PHE:HZ	36:BQ:88:PHE:CE2	2.12	0.68
43:BR:100:LEU:HD21	43:BR:113:LEU:N	2.06	0.68
37:BS:115:VAL:O	37:BS:116:PHE:C	2.31	0.68
37:BS:24:LEU:O	37:BS:27:LEU:HB3	1.94	0.68
45:BV:54:TYR:O	45:BV:55:THR:C	2.32	0.68
40:BX:58:MET:N	40:BX:59:ASP:OD2	2.27	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:163:ASP:CG	42:BZ:164:PRO:HD3	1.79	0.68
42:BZ:47:SER:O	42:BZ:49:THR:OG1	2.12	0.68
1:AA:1318:A:C5'	22:AS:10:PHE:HB3	2.22	0.68
1:AA:815:A:O2'	1:AA:1527:C:C1'	2.41	0.68
5:AB:124:SER:HB2	5:AB:125:PRO:HD2	1.75	0.68
12:AI:53:VAL:HB	12:AI:58:ARG:HH22	1.59	0.68
1:AA:247:G:P	20:AQ:99:SER:HB2	2.32	0.68
48:B0:8:GLY:O	48:B0:9:SER:C	2.32	0.68
46:B2:27:LEU:HD21	46:B2:53:ILE:HD11	1.73	0.68
49:B4:58:LYS:O	49:B4:61:LYS:N	2.09	0.68
50:B5:46:CYS:N	50:B5:49:CYS:HB2	2.09	0.68
26:BA:1131:G:N2	33:BN:69:TYR:CZ	2.62	0.68
26:BA:1799:G:H21	27:BD:153:LEU:CD1	2.06	0.68
26:BA:2195:C:C5	26:BA:2195:C:P	2.86	0.68
26:BA:2195:C:H2'	26:BA:2196:C:C4'	2.23	0.68
26:BA:2228:G:C8	26:BA:2228:G:H5''	2.21	0.68
26:BA:2246:G:H2'	26:BA:2247:A:H8	1.57	0.68
26:BA:2246:G:N3	26:BA:2426:A:C2	2.61	0.68
26:BA:245:G:OP2	35:BP:53:ARG:CZ	2.40	0.68
26:BA:2552:U:H3	26:BA:2554:U:H5'	1.58	0.68
26:BA:2603:G:C4	26:BA:2604:U:H6	2.07	0.68
26:BA:2734:A:C8	26:BA:2735:G:C8	2.81	0.68
26:BA:2828:C:N3	26:BA:2829:C:C5	2.62	0.68
26:BA:304:G:H1	26:BA:313:C:H42	1.41	0.68
26:BA:1818:U:O2	27:BD:153:LEU:HD12	1.94	0.68
27:BD:186:LYS:O	27:BD:187:CYS:C	2.32	0.68
28:BE:243:PRO:O	28:BE:244:SER:CB	2.39	0.68
28:BE:76:PRO:CB	28:BE:292:PRO:HG2	2.21	0.68
29:BF:37:ALA:HB1	29:BF:102:LEU:CB	2.16	0.68
26:BA:674:G:O3'	29:BF:69:HIS:O	2.12	0.68
55:BK:11:LEU:HD11	55:BK:28:LEU:HD11	1.74	0.68
55:BK:13:LEU:HD22	55:BK:24:VAL:CG2	2.24	0.68
33:BN:18:ILE:O	33:BN:18:ILE:HG23	1.92	0.68
35:BP:106:VAL:CG2	35:BP:122:ALA:CB	2.71	0.68
26:BA:911:A:C2	36:BQ:16:ARG:HA	2.27	0.68
43:BR:87:TYR:CE1	43:BR:94:TYR:CB	2.66	0.68
37:BS:34:LEU:C	37:BS:103:ASP:HB3	2.14	0.68
44:BU:14:HIS:NE2	44:BU:36:PHE:CZ	2.59	0.68
44:BU:70:ARG:O	44:BU:71:LEU:C	2.30	0.68
45:BV:50:ASP:O	45:BV:54:TYR:CD1	2.46	0.68
26:BA:973:A:C6	45:BV:81:ARG:NE	2.53	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:4:LYS:HG2	39:BW:106:ILE:HA	1.75	0.68
40:BX:22:ASN:CA	40:BX:68:LEU:CD1	2.65	0.68
41:BY:31:LEU:HD13	41:BY:101:LEU:HB2	1.72	0.68
41:BY:43:ASN:ND2	41:BY:103:LEU:CD2	2.45	0.68
7:AD:152:SER:O	7:AD:158:ILE:HG13	1.93	0.68
46:B2:42:ASN:OD1	46:B2:42:ASN:C	2.32	0.68
49:B4:59:PHE:O	49:B4:60:ASN:C	2.32	0.68
52:B7:35:ARG:NH1	52:B7:35:ARG:HB3	2.09	0.68
26:BA:1287:A:H5'	43:BR:104:ARG:CG	2.24	0.68
26:BA:1341:U:O2'	40:BX:53:ASN:CB	2.36	0.68
26:BA:1520:U:H2'	26:BA:1521:G:H5''	1.75	0.68
26:BA:2199:A:C5	26:BA:2225:A:C2	2.81	0.68
26:BA:2261:C:H1'	26:BA:2388:A:N3	2.09	0.68
26:BA:2269:A:H2'	26:BA:2270:G:O5'	1.94	0.68
26:BA:2356:C:OP2	48:B0:21:LEU:HD21	1.94	0.68
26:BA:2246:G:H1'	26:BA:2426:A:H2	1.59	0.68
26:BA:2466:C:N4	26:BA:2467:C:N4	2.42	0.68
26:BA:2562:U:O2	26:BA:2563:U:O4'	2.12	0.68
26:BA:2771:C:C2	26:BA:2772:C:C5	2.81	0.68
26:BA:2856:C:C6	26:BA:2856:C:C3'	2.76	0.68
26:BA:2888:C:C2	26:BA:2889:C:C5	2.82	0.68
25:BB:28:C:OP2	37:BS:41:LYS:HE3	1.92	0.68
27:BD:81:GLU:O	27:BD:83:ASP:CG	2.32	0.68
28:BE:70:VAL:O	28:BE:71:THR:CG2	2.42	0.68
28:BE:87:GLU:O	28:BE:93:GLN:N	2.27	0.68
29:BF:241:ALA:O	29:BF:245:GLU:OE2	2.11	0.68
31:BH:150:VAL:HG12	31:BH:151:ARG:HG2	1.76	0.68
33:BN:63:ILE:HG21	33:BN:71:TYR:CZ	2.28	0.68
35:BP:129:ALA:C	35:BP:133:VAL:HG23	2.13	0.68
26:BA:1287:A:H5''	43:BR:104:ARG:HG3	1.75	0.68
43:BR:20:LEU:HD22	43:BR:24:GLN:HG3	1.76	0.68
37:BS:12:ARG:HD2	37:BS:20:TYR:CE1	2.23	0.68
44:BU:10:ARG:O	44:BU:11:ARG:C	2.32	0.68
44:BU:57:PHE:O	44:BU:58:ARG:C	2.30	0.68
39:BW:8:ARG:HD2	39:BW:9:TYR:CE1	2.28	0.68
39:BW:97:LYS:NZ	39:BW:99:ARG:HH12	1.89	0.68
40:BX:68:LEU:N	40:BX:68:LEU:CD2	2.53	0.68
42:BZ:74:ARG:O	42:BZ:76:ARG:N	2.27	0.68
1:AA:584:G:H1	1:AA:757:U:H3	1.40	0.68
1:AA:668:G:H5'	18:AO:48:LYS:O	1.93	0.68
1:AA:1205:U:H4'	6:AC:195:VAL:HG23	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AH:97:VAL:HG13	11:AH:98:LYS:H	1.57	0.68
1:AA:1248:A:C2'	12:AI:70:LYS:HZ1	2.07	0.68
13:AJ:53:PRO:O	13:AJ:54:PHE:HB3	1.93	0.68
2:AV:31:A:C4'	12:AI:127:LYS:CD	2.57	0.68
48:B0:37:LEU:C	48:B0:69:PHE:CE2	2.67	0.68
48:B0:37:LEU:HD11	48:B0:71:ASN:ND2	2.09	0.68
47:B3:18:ASP:O	47:B3:21:ALA:N	2.27	0.68
47:B3:32:GLN:C	47:B3:32:GLN:CD	2.52	0.68
50:B5:6:VAL:HG13	50:B5:7:PRO:CD	2.23	0.68
52:B7:20:ALA:O	52:B7:22:MET:N	2.26	0.68
52:B7:30:ILE:CA	52:B7:33:ARG:HB2	2.23	0.68
26:BA:686:G:C8	52:B7:7:PRO:HA	2.28	0.68
53:B8:26:LYS:CE	53:B8:44:LYS:N	2.57	0.68
54:B9:25:VAL:CA	54:B9:34:GLN:HB3	2.21	0.68
26:BA:125:G:H5''	52:B7:19:ARG:CZ	2.20	0.68
26:BA:1638:C:OP1	26:BA:2711:A:H5'	1.94	0.68
26:BA:1829:A:H3'	26:BA:1830:C:H6	1.59	0.68
26:BA:2189:U:O2'	26:BA:2190:G:H8	1.76	0.68
26:BA:2543:G:O3'	26:BA:2645:G:O6	2.12	0.68
26:BA:510:C:O5'	26:BA:512:G:N1	2.27	0.68
27:BD:146:LYS:CB	27:BD:149:ARG:HG3	2.24	0.68
28:BE:201:VAL:HG22	28:BE:311:PHE:CB	2.20	0.68
28:BE:70:VAL:HB	28:BE:295:LEU:HD21	1.75	0.68
26:BA:600:G:H4'	29:BF:109:LEU:HD13	1.74	0.68
29:BF:223:LEU:CD1	29:BF:224:ALA:CA	2.70	0.68
29:BF:35:VAL:O	29:BF:36:ARG:C	2.33	0.68
29:BF:57:PRO:O	29:BF:58:ALA:CB	2.42	0.68
31:BH:101:LYS:HE2	31:BH:115:GLU:CB	2.19	0.68
31:BH:32:LEU:HD11	31:BH:34:ARG:HH21	1.58	0.68
31:BH:73:ASN:O	31:BH:74:MET:C	2.30	0.68
31:BH:94:ARG:HB3	31:BH:127:GLN:NE2	2.09	0.68
33:BN:77:GLY:CA	33:BN:80:LYS:HG2	2.23	0.68
37:BS:13:ARG:O	37:BS:13:ARG:HG2	1.90	0.68
37:BS:35:VAL:N	37:BS:103:ASP:CB	2.56	0.68
44:BU:34:ASN:O	44:BU:35:ALA:O	2.11	0.68
44:BU:36:PHE:H	44:BU:36:PHE:HD1	1.41	0.68
39:BW:26:GLY:HA2	39:BW:71:VAL:O	1.94	0.68
42:BZ:149:ALA:HB1	42:BZ:164:PRO:HA	1.75	0.68
42:BZ:5:ALA:C	42:BZ:33:ALA:HB2	2.12	0.68
1:AA:977:A:N3	1:AA:1223:C:C5	2.62	0.68
1:AA:43:C:OP1	19:AP:12:LYS:HB3	1.94	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AE:103:GLY:O	8:AE:107:ARG:HB2	1.94	0.68
11:AH:23:SER:HB2	11:AH:60:ARG:HD2	1.76	0.68
26:BA:545(A):A:C8	26:BA:1546:C:C2	2.81	0.68
26:BA:729:G:N2	26:BA:1775:U:C6	2.62	0.68
26:BA:2099:U:H3	26:BA:2190:G:H1	1.42	0.68
26:BA:2191:G:N2	26:BA:2192:G:H1'	2.09	0.68
26:BA:2282:G:C5'	26:BA:2283:C:O5'	2.42	0.68
26:BA:2283:C:C4	26:BA:2284:C:H1'	2.29	0.68
26:BA:2298:A:C1'	26:BA:2321:G:H22	2.07	0.68
26:BA:2520:C:C5	26:BA:2567:G:C5	2.82	0.68
26:BA:2526:G:C2	26:BA:2527:C:C6	2.82	0.68
26:BA:2886:G:H21	26:BA:2887:U:C1'	2.06	0.68
27:BD:70:LYS:HG3	27:BD:70:LYS:O	1.92	0.68
29:BF:168:ARG:HH22	29:BF:209:GLY:HA2	1.55	0.68
29:BF:57:PRO:O	29:BF:58:ALA:HB3	1.94	0.68
26:BA:2303:G:C5'	30:BG:99:ASP:CG	2.56	0.68
31:BH:120:LEU:HB3	31:BH:143:LEU:CD1	2.23	0.68
32:BI:131:VAL:O	32:BI:138:THR:HB	1.94	0.68
32:BI:6:LEU:HB3	32:BI:35:LEU:C	2.13	0.68
33:BN:103:VAL:C	33:BN:104:TYR:CG	2.68	0.68
34:BO:103:ALA:O	34:BO:104:ARG:C	2.31	0.68
34:BO:20:LEU:HG	34:BO:44:LYS:CG	2.23	0.68
34:BO:8:LEU:HD23	34:BO:8:LEU:H	1.57	0.68
34:BO:99:PHE:CD2	38:BT:24:LYS:HE3	2.24	0.68
25:BB:37:C:O2	37:BS:111:PRO:HG2	1.93	0.68
37:BS:33:ARG:HB3	37:BS:35:VAL:HG23	1.74	0.68
37:BS:81:ALA:O	37:BS:82:TYR:C	2.33	0.68
39:BW:100:THR:O	39:BW:101:SER:OG	2.11	0.68
39:BW:43:GLY:O	39:BW:44:ALA:C	2.29	0.68
41:BY:101:LEU:HD11	41:BY:112:LEU:HD12	1.73	0.68
42:BZ:79:ILE:O	42:BZ:80:HIS:CB	2.42	0.68
1:AA:949:A:H4'	1:AA:1364:U:H3	1.58	0.67
1:AA:1289:A:H2	1:AA:1372:U:H4'	1.59	0.67
1:AA:1329:A:OP1	16:AM:26:GLY:C	2.32	0.67
2:AV:75:C:OP1	26:BA:2602:A:H5'	1.93	0.67
48:B0:46:LYS:NZ	48:B0:81:ILE:HD11	2.07	0.67
46:B2:54:ALA:HB3	46:B2:55:ARG:HD2	1.75	0.67
26:BA:2020:A:N7	50:B5:9:LYS:CD	2.57	0.67
26:BA:990:A:N6	26:BA:1186:G:N3	2.42	0.67
26:BA:1400:G:H2'	26:BA:1401:G:C8	2.29	0.67
26:BA:148:C:N3	26:BA:149:A:C6	2.63	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2227:A:N1	26:BA:2228:G:O6	2.21	0.67
26:BA:2235:G:N3	26:BA:2236:C:C6	2.63	0.67
26:BA:2322:A:C5	26:BA:2323:G:N7	2.59	0.67
26:BA:2526:G:C4	26:BA:2527:C:H6	2.12	0.67
26:BA:2555:U:O2'	26:BA:2556:C:C5'	2.41	0.67
26:BA:2648:C:H2'	26:BA:2649:U:C5'	2.24	0.67
26:BA:2730:C:H2'	26:BA:2731:G:C8	2.29	0.67
26:BA:2747:G:C2'	26:BA:2748:A:H5''	2.24	0.67
26:BA:988:A:OP1	47:B3:11:SER:HB2	1.94	0.67
28:BE:104:PHE:HB3	28:BE:108:LEU:HD12	1.76	0.67
26:BA:2822:G:P	28:BE:258:TYR:HE2	2.16	0.67
28:BE:198:TYR:CE2	28:BE:265:ASN:C	2.68	0.67
29:BF:114:ALA:O	29:BF:117:ALA:N	2.27	0.67
29:BF:34:ALA:O	29:BF:35:VAL:C	2.32	0.67
55:BK:79:LEU:HD21	55:BK:137:ILE:HD13	1.72	0.67
33:BN:45:VAL:N	33:BN:132:LEU:HD22	2.05	0.67
26:BA:6:A:O2'	33:BN:6:PHE:CD2	2.32	0.67
34:BO:110:ASP:O	34:BO:111:PHE:CD2	2.44	0.67
35:BP:94:ARG:CD	35:BP:120:LEU:HB2	2.23	0.67
35:BP:131:GLU:O	35:BP:134:GLU:N	2.27	0.67
36:BQ:72:VAL:HG21	36:BQ:135:ALA:CB	2.24	0.67
43:BR:20:LEU:HD12	43:BR:21:TYR:CG	2.27	0.67
38:BT:15:PRO:C	38:BT:17:THR:H	1.97	0.67
44:BU:92:ARG:HA	44:BU:95:LEU:HD11	0.69	0.67
45:BV:31:ASP:O	45:BV:63:HIS:CB	2.35	0.67
39:BW:6:ILE:O	39:BW:7:ALA:CB	2.42	0.67
40:BX:17:ASP:HA	40:BX:20:PHE:CZ	2.29	0.67
41:BY:3:GLN:HB2	41:BY:6:LYS:HD2	1.76	0.67
42:BZ:106:GLY:H	42:BZ:141:MET:HG2	1.59	0.67
42:BZ:154:LEU:CD1	42:BZ:160:LEU:CD1	2.72	0.67
42:BZ:19:ILE:CB	42:BZ:39:PHE:HE1	2.05	0.67
1:AA:20:U:C2	1:AA:916:G:C2	2.82	0.67
1:AA:946:A:H61	1:AA:1235:U:H3	1.41	0.67
1:AA:958:A:C1'	22:AS:55:LYS:HD2	2.24	0.67
46:B2:13:PRO:HD3	46:B2:16:ARG:HH12	1.59	0.67
26:BA:111:A:C4'	46:B2:62:GLU:OE2	2.41	0.67
46:B2:7:GLU:CD	46:B2:8:ILE:H	1.97	0.67
47:B3:3:ARG:HA	47:B3:37:LEU:O	1.94	0.67
53:B8:13:ARG:HB3	53:B8:24:ALA:CB	2.24	0.67
26:BA:1239:G:HO2'	26:BA:1240:U:H6	1.42	0.67
26:BA:1462:C:C4'	26:BA:2703:C:H5'	2.22	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2219:G:O2'	26:BA:2224:G:O5'	2.02	0.67
26:BA:2262:U:H6	48:B0:14:ARG:NH2	1.81	0.67
26:BA:2508:G:C2'	26:BA:2509:G:C5'	2.71	0.67
26:BA:2633:G:O2'	26:BA:2634:G:C5'	2.42	0.67
26:BA:2689:U:N1	26:BA:2713:A:N1	2.42	0.67
26:BA:2771:C:O2	26:BA:2772:C:C6	2.47	0.67
26:BA:2779:U:H4'	26:BA:2781:A:N7	2.08	0.67
26:BA:2842:G:N2	26:BA:2876:G:N3	2.40	0.67
26:BA:444:C:OP2	44:BU:2:PRO:HG3	1.94	0.67
26:BA:449:A:OP2	29:BF:85:LYS:HB3	1.93	0.67
26:BA:668:G:H2'	26:BA:670:A:H62	1.58	0.67
26:BA:911:A:C5	36:BQ:16:ARG:CD	2.73	0.67
26:BA:979:G:H3'	26:BA:980:A:H5'	1.75	0.67
29:BF:103:ASN:HB3	29:BF:106:GLU:HG3	1.76	0.67
31:BH:102:LEU:HD12	31:BH:104:LEU:CD1	2.23	0.67
31:BH:17:THR:HB	31:BH:24:THR:HG1	1.59	0.67
32:BI:115:ILE:CG2	32:BI:131:VAL:HG22	2.21	0.67
55:BK:32:GLY:O	55:BK:33:VAL:HG23	1.94	0.67
55:BK:79:LEU:HD23	55:BK:79:LEU:C	2.14	0.67
55:BK:80:LYS:HG3	55:BK:85:ILE:HG23	1.77	0.67
33:BN:79:PHE:HD1	33:BN:79:PHE:H	1.40	0.67
34:BO:11:ALA:CB	34:BO:99:PHE:HB3	2.23	0.67
34:BO:101:PRO:HB3	34:BO:122:ILE:HD11	1.75	0.67
34:BO:77:ILE:CD1	34:BO:79:PHE:CE2	2.56	0.67
35:BP:120:LEU:HD13	35:BP:121:ILE:N	2.09	0.67
36:BQ:48:ASN:OD1	36:BQ:121:ASP:HB2	1.91	0.67
36:BQ:34:GLY:N	36:BQ:83:PHE:HB2	2.09	0.67
43:BR:45:ARG:HG2	43:BR:46:GLY:N	2.08	0.67
37:BS:32:PRO:HG3	37:BS:100:ALA:HB2	1.76	0.67
37:BS:56:ASP:C	37:BS:57:THR:HG23	2.14	0.67
26:BA:2319:G:H4'	37:BS:9:PRO:N	2.09	0.67
44:BU:105:ALA:O	44:BU:108:ALA:CB	2.39	0.67
39:BW:66:GLU:CD	39:BW:67:ASP:H	1.97	0.67
26:BA:1261:C:OP1	39:BW:97:LYS:NZ	2.27	0.67
40:BX:5:ILE:HG13	40:BX:40:ALA:HB1	1.76	0.67
42:BZ:130:ILE:CD1	42:BZ:130:ILE:C	2.62	0.67
5:AB:239:VAL:HG12	5:AB:240:GLN:H	1.60	0.67
1:AA:1194:U:H4'	8:AE:22:GLY:O	1.94	0.67
1:AA:539:A:OP1	15:AL:114:LYS:HE2	1.94	0.67
46:B2:13:PRO:CD	46:B2:16:ARG:HH11	2.07	0.67
50:B5:28:PRO:HB2	50:B5:30:LEU:HG	1.75	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:39:LYS:O	51:B6:40:TYR:HD1	1.77	0.67
54:B9:10:MET:CA	54:B9:10:MET:CE	2.73	0.67
26:BA:2742:C:OP1	54:B9:35:ARG:HD3	1.94	0.67
26:BA:1034:G:C5'	54:B9:18:ARG:NH2	2.57	0.67
26:BA:126:A:P	52:B7:44:VAL:CG1	2.82	0.67
26:BA:1339:G:H5'	40:BX:13:LYS:NZ	2.08	0.67
26:BA:1498:C:H6	26:BA:1576:U:HO2'	1.42	0.67
26:BA:2206:C:O2'	26:BA:2207:C:O4'	2.11	0.67
26:BA:2235:G:C5	26:BA:2236:C:C5	2.82	0.67
26:BA:2395:C:H5''	49:B4:28:ARG:NH1	2.09	0.67
26:BA:2423:U:H1'	26:BA:2425:A:N9	2.10	0.67
26:BA:960:A:H2	26:BA:2495:G:H21	1.40	0.67
26:BA:2528:U:O2	26:BA:2536:G:C2	2.48	0.67
26:BA:2622:C:H5'	28:BE:255:GLN:OE1	1.93	0.67
26:BA:2739:U:C6	26:BA:2739:U:C3'	2.73	0.67
26:BA:2742:C:OP1	54:B9:35:ARG:CZ	2.42	0.67
26:BA:2757:A:H2'	26:BA:2758:A:H8	1.60	0.67
25:BB:56:G:H4'	25:BB:57:A:C5'	2.23	0.67
27:BD:213:LYS:CA	27:BD:215:LYS:H	2.06	0.67
27:BD:74:PRO:CD	27:BD:96:ALA:CB	2.64	0.67
28:BE:190:ASN:C	28:BE:192:ILE:C	2.52	0.67
28:BE:222:ARG:CG	28:BE:232:ARG:CA	2.69	0.67
26:BA:321:G:C1'	29:BF:206:ASN:HD22	2.03	0.67
30:BG:101:THR:O	30:BG:102:GLY:C	2.32	0.67
30:BG:71:ALA:O	30:BG:72:LYS:CE	2.42	0.67
30:BG:93:LEU:HD22	30:BG:97:GLN:CD	2.14	0.67
55:BK:112:LYS:O	55:BK:114:PRO:N	2.27	0.67
26:BA:142(A):A:C3'	33:BN:21:ARG:NH2	2.57	0.67
35:BP:113:GLN:C	35:BP:114:VAL:O	2.32	0.67
35:BP:75:LEU:C	35:BP:75:LEU:HD23	2.13	0.67
35:BP:92:ASP:HB3	35:BP:118:LEU:HB3	1.76	0.67
36:BQ:91:HIS:O	36:BQ:111:THR:HA	1.95	0.67
43:BR:44:LEU:CD1	43:BR:48:VAL:CG2	2.30	0.67
43:BR:55:ALA:HB1	43:BR:80:PHE:HA	1.76	0.67
37:BS:9:PRO:CG	37:BS:14:ARG:HB3	2.23	0.67
26:BA:446:G:H5'	44:BU:5:LYS:CE	2.24	0.67
45:BV:67:LYS:CD	45:BV:70:TYR:CE1	2.77	0.67
45:BV:72:ARG:N	45:BV:88:GLN:CG	2.56	0.67
39:BW:55:ALA:HA	39:BW:107:LEU:HD13	1.75	0.67
41:BY:103:LEU:HD22	41:BY:112:LEU:HD23	1.71	0.67
42:BZ:129:ARG:CA	42:BZ:129:ARG:HE	1.93	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:148:THR:HG22	42:BZ:168:VAL:H	1.58	0.67
5:AB:61:LEU:HA	5:AB:64:ARG:HD2	1.77	0.67
1:AA:426:G:C2'	7:AD:42:GLN:HA	2.24	0.67
1:AA:1269:A:H5'	24:AU:19:GLY:C	2.14	0.67
50:B5:51:TYR:O	50:B5:52:TYR:CB	2.40	0.67
26:BA:650:C:C5'	53:B8:19:THR:CG2	2.72	0.67
26:BA:1005:C:H2'	26:BA:1006:C:H6	1.60	0.67
26:BA:1056:G:O6	26:BA:1101:U:C3'	2.36	0.67
26:BA:1071:G:C1'	26:BA:1090:U:OP1	2.41	0.67
26:BA:1273:U:H4'	26:BA:1275:A:OP2	1.93	0.67
26:BA:2048:G:C6	26:BA:2620:C:N4	2.62	0.67
26:BA:2376:A:H62	37:BS:109:PRO:CG	2.07	0.67
26:BA:2283:C:H1'	26:BA:2389:G:H21	1.59	0.67
26:BA:2396:G:P	49:B4:28:ARG:HH11	2.18	0.67
26:BA:2422:A:H5''	26:BA:2423:U:OP1	1.94	0.67
26:BA:2426:A:OP1	26:BA:2426:A:H8	1.77	0.67
26:BA:1128:A:C5	26:BA:2518:A:N6	2.62	0.67
26:BA:2543:G:HO2'	26:BA:2544:G:H5'	1.54	0.67
26:BA:25:U:C5'	39:BW:80:PRO:HD2	2.10	0.67
26:BA:2647:U:H3	26:BA:2673:G:H1	1.41	0.67
26:BA:2865:U:C5	26:BA:2866:U:C6	2.82	0.67
26:BA:557:U:H4'	33:BN:92:GLN:HE21	1.28	0.67
25:BB:76:G:O3'	42:BZ:80:HIS:CD2	2.48	0.67
28:BE:102:ASP:C	28:BE:103:GLU:HG3	2.15	0.67
29:BF:138:VAL:O	29:BF:139:VAL:HB	1.94	0.67
31:BH:130:ILE:CG2	31:BH:131:ILE:N	2.57	0.67
31:BH:168:VAL:CG1	31:BH:169:ARG:H	1.91	0.67
32:BI:84:GLY:N	32:BI:147:GLU:OE2	2.28	0.67
32:BI:68:LEU:CD2	32:BI:108:LEU:HD11	2.15	0.67
55:BK:69:ILE:HG22	55:BK:70:ILE:N	2.09	0.67
55:BK:93:LYS:N	55:BK:96:ILE:HG13	2.09	0.67
36:BQ:130:PRO:C	36:BQ:132:VAL:N	2.47	0.67
36:BQ:69:ASN:ND2	36:BQ:70:ARG:CA	2.58	0.67
36:BQ:33:MET:HG3	36:BQ:83:PHE:CB	2.25	0.67
43:BR:87:TYR:HD1	43:BR:94:TYR:CG	2.13	0.67
43:BR:52:ILE:HD13	43:BR:94:TYR:CB	2.25	0.67
44:BU:33:ARG:HB2	44:BU:33:ARG:CZ	2.24	0.67
44:BU:43:ALA:HA	44:BU:46:GLU:OE2	1.95	0.67
45:BV:12:TYR:CG	45:BV:13:ARG:N	2.58	0.67
42:BZ:5:ALA:CB	42:BZ:33:ALA:HA	2.19	0.67
1:AA:60:A:N1	1:AA:107:G:N3	2.42	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:760:G:N1	20:AQ:104:LYS:O	2.27	0.67
20:AQ:22:LEU:HD13	20:AQ:39:SER:OG	1.94	0.67
47:B3:39:ASP:CG	47:B3:40:THR:H	1.96	0.67
49:B4:5:LEU:CD2	49:B4:9:ALA:HA	2.24	0.67
52:B7:30:ILE:CA	52:B7:33:ARG:CB	2.72	0.67
26:BA:687:C:H5''	52:B7:4:THR:HG22	1.76	0.67
26:BA:1212:G:O2'	26:BA:1213:A:C8	2.46	0.67
26:BA:2311:A:C2	30:BG:53:LYS:NZ	2.63	0.67
26:BA:2330:G:N1	26:BA:2331:G:N3	2.41	0.67
26:BA:2339:G:N3	26:BA:2340:G:C8	2.62	0.67
26:BA:256:A:H2'	26:BA:257:A:C8	2.29	0.67
26:BA:2711:A:OP2	26:BA:2712:U:O3'	2.03	0.67
26:BA:2837:G:N1	26:BA:2882:A:C6	2.62	0.67
26:BA:380:U:H4'	49:B4:15:ILE:O	1.94	0.67
26:BA:459:U:OP1	52:B7:40:HIS:CA	2.41	0.67
26:BA:54:G:C1'	52:B7:35:ARG:HH22	2.07	0.67
26:BA:995:C:C1'	44:BU:57:PHE:CE2	2.76	0.67
25:BB:42:C:O2'	30:BG:47:GLN:CA	2.37	0.67
27:BD:109:LEU:HD13	27:BD:115:ILE:HG12	1.75	0.67
27:BD:121:ALA:O	27:BD:122:ASP:CB	2.43	0.67
27:BD:130:PRO:HA	27:BD:188:ARG:HG2	1.76	0.67
29:BF:39:GLN:O	29:BF:40:ALA:C	2.33	0.67
29:BF:85:LYS:N	29:BF:85:LYS:CD	2.42	0.67
30:BG:19:GLU:HB2	30:BG:135:VAL:CG1	2.24	0.67
26:BA:2317:C:H5''	30:BG:150:SER:CA	2.20	0.67
34:BO:10:VAL:HG12	34:BO:12:ASP:O	1.94	0.67
36:BQ:86:ARG:HH21	36:BQ:123:ILE:HD12	1.59	0.67
43:BR:72:ASP:O	43:BR:76:VAL:HG21	1.91	0.67
37:BS:28:LYS:CB	37:BS:28:LYS:NZ	2.56	0.67
45:BV:5:ILE:HD12	45:BV:12:TYR:CE1	2.29	0.67
45:BV:35:LEU:HG	45:BV:63:HIS:NE2	2.10	0.67
39:BW:69:LEU:N	39:BW:69:LEU:CD2	2.50	0.67
40:BX:16:ASN:HB2	40:BX:20:PHE:HE2	1.59	0.67
42:BZ:37:LYS:CA	42:BZ:41:ARG:NH1	2.57	0.67
1:AA:1210:C:H4'	1:AA:1214:C:H42	1.60	0.67
1:AA:32:A:H2'	1:AA:33:A:H8	1.60	0.67
48:B0:19:LYS:O	48:B0:35:ASN:O	2.13	0.67
51:B6:32:GLN:HA	51:B6:35:LEU:CD1	2.23	0.67
26:BA:1955:U:H2'	26:BA:1955:U:O2	1.94	0.67
26:BA:2007:C:H4'	26:BA:2824:C:O2'	1.94	0.67
26:BA:2044:C:N3	26:BA:2624:G:C2	2.62	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2313:C:C5'	30:BG:72:LYS:CG	2.17	0.67
26:BA:2317:C:H2'	26:BA:2318:G:H8	1.59	0.67
26:BA:1782:C:N3	26:BA:2609:U:C5	2.62	0.67
26:BA:2660:A:H8	26:BA:2660:A:O5'	1.78	0.67
26:BA:2742:C:O2	26:BA:2742:C:H2'	1.95	0.67
26:BA:2785:C:C6	26:BA:2786:U:C5	2.83	0.67
27:BD:181:ARG:HH11	27:BD:181:ARG:HB3	1.55	0.67
27:BD:211:HIS:O	27:BD:213:LYS:N	2.27	0.67
27:BD:70:LYS:NZ	27:BD:70:LYS:HB3	2.09	0.67
29:BF:59:GLU:O	29:BF:60:SER:C	2.32	0.67
31:BH:101:LYS:HB2	31:BH:113:GLU:CD	2.14	0.67
31:BH:10:ILE:CD1	31:BH:48:VAL:O	2.41	0.67
31:BH:60:HIS:HA	31:BH:63:LEU:CB	2.23	0.67
37:BS:104:ILE:HG22	37:BS:104:ILE:O	1.94	0.67
38:BT:44:ARG:CG	38:BT:45:GLU:H	2.08	0.67
38:BT:8:TYR:O	38:BT:10:GLY:N	2.28	0.67
45:BV:39:PHE:CZ	45:BV:42:GLY:HA2	2.30	0.67
39:BW:20:VAL:HG11	39:BW:47:VAL:HG21	0.69	0.67
40:BX:7:HIS:CB	40:BX:8:PRO:CD	2.71	0.67
41:BY:58:GLU:H	41:BY:97:ARG:HH12	1.43	0.67
1:AA:1085:U:O4'	1:AA:1094:G:C6	2.47	0.67
1:AA:436:C:H2'	1:AA:437:U:C1'	2.24	0.67
1:AA:546:G:O2'	1:AA:548:G:O2'	2.10	0.67
3:AW:44:A:C2'	3:AW:45:G:H5'	2.25	0.67
48:B0:39:ARG:CG	48:B0:69:PHE:CE1	2.65	0.67
26:BA:1274:A:N3	26:BA:1297:C:H1'	2.08	0.67
26:BA:135:G:H1	26:BA:144:C:N4	1.91	0.67
26:BA:1800:C:C6	26:BA:1800:C:H3'	2.30	0.67
26:BA:1853:A:H2'	26:BA:1854:A:C8	2.30	0.67
26:BA:2043:C:P	26:BA:2779:U:O4	2.52	0.67
26:BA:2208:U:O2'	26:BA:2209:C:H5'	1.93	0.67
26:BA:2228:G:C8	26:BA:2229:C:H6	2.03	0.67
26:BA:2357:U:O2'	26:BA:2358:G:H5''	1.95	0.67
26:BA:2349:G:C6	26:BA:2369:A:N1	2.62	0.67
26:BA:2450:A:H5''	26:BA:2497:A:H61	1.48	0.67
26:BA:2470:G:N1	26:BA:2471:C:C5	2.51	0.67
26:BA:2520:C:C6	26:BA:2567:G:H1'	2.29	0.67
26:BA:2595:G:H1'	26:BA:2599:G:N2	2.05	0.67
26:BA:2712:U:H5''	26:BA:2714:G:C5'	2.24	0.67
26:BA:650:C:O2	26:BA:650:C:H2'	1.94	0.67
26:BA:674:G:H4'	29:BF:69:HIS:HA	1.76	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:103:ILE:CD1	27:BD:104:ILE:CD1	2.47	0.67
27:BD:75:GLY:N	27:BD:115:ILE:O	2.27	0.67
27:BD:188:ARG:O	27:BD:189:ALA:CB	2.42	0.67
28:BE:80:ALA:N	28:BE:187:HIS:NE2	2.42	0.67
29:BF:32:GLY:C	29:BF:35:VAL:CG2	2.44	0.67
31:BH:67:THR:HA	31:BH:70:LEU:HB2	1.75	0.67
31:BH:75:VAL:O	31:BH:76:GLU:C	2.31	0.67
32:BI:94:THR:CG2	32:BI:97:GLN:HG3	2.25	0.67
55:BK:90:SER:C	55:BK:91:GLU:HG3	2.11	0.67
35:BP:128:GLY:O	35:BP:129:ALA:C	2.33	0.67
36:BQ:91:HIS:C	36:BQ:92:VAL:HG13	2.15	0.67
36:BQ:11:LYS:HD2	36:BQ:91:HIS:HD2	1.57	0.67
43:BR:22:ARG:CG	43:BR:26:LYS:CE	2.72	0.67
44:BU:111:ASP:OD1	44:BU:111:ASP:N	2.26	0.67
26:BA:1162:G:O2'	45:BV:23:GLU:OE1	2.11	0.67
42:BZ:116:VAL:CG2	42:BZ:169:VAL:HG22	2.16	0.67
1:AA:116:A:C2	1:AA:314:C:O4'	2.48	0.67
1:AA:462:G:H21	19:AP:82:GLN:NE2	1.91	0.67
1:AA:759:A:H8	1:AA:759:A:H5'	1.60	0.67
48:B0:37:LEU:N	48:B0:68:VAL:CG1	2.36	0.67
48:B0:67:VAL:HG12	48:B0:74:LYS:HG2	1.69	0.67
46:B2:56:ILE:O	46:B2:59:ILE:CG2	2.41	0.67
26:BA:1085:A:H1'	26:BA:1086:A:H4'	1.77	0.67
26:BA:1252:G:C8	26:BA:1253:A:H1'	2.30	0.67
26:BA:2215:G:C4	26:BA:2216:G:N7	2.62	0.67
26:BA:2217:G:O2'	26:BA:2218:G:C5'	2.38	0.67
26:BA:2234:G:C2	26:BA:2235:G:N9	2.63	0.67
26:BA:2075:U:C4	26:BA:2238:G:C6	2.83	0.67
26:BA:2246:G:H2'	26:BA:2247:A:H5'	1.74	0.67
26:BA:2248:C:O2	26:BA:2248:C:C2'	2.43	0.67
26:BA:2266:A:C2	26:BA:2272:U:C2	2.83	0.67
26:BA:2410:G:C2	26:BA:2411:A:C8	2.83	0.67
26:BA:2523:G:C2	26:BA:2541:A:C2	2.82	0.67
26:BA:2520:C:N4	26:BA:2567:G:C5	2.63	0.67
26:BA:2648:C:N4	26:BA:2649:U:O4	2.27	0.67
26:BA:2652:C:H2'	26:BA:2653:U:O4'	1.95	0.67
26:BA:97:C:H2'	26:BA:98:G:O4'	1.94	0.67
27:BD:131:LEU:CG	27:BD:187:CYS:HB2	2.23	0.67
27:BD:208:GLY:O	27:BD:210:LYS:CG	2.42	0.67
27:BD:208:GLY:O	27:BD:209:ASN:C	2.33	0.67
28:BE:197:GLU:O	28:BE:267:ARG:HA	1.94	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:269:ILE:HG23	28:BE:297:LYS:HZ1	1.56	0.67
28:BE:44:TYR:CD1	28:BE:308:VAL:CA	2.64	0.67
28:BE:70:VAL:CG1	28:BE:296:VAL:HB	2.25	0.67
29:BF:48:SER:H	29:BF:92:PRO:CG	1.82	0.67
29:BF:58:ALA:HB2	29:BF:79:ARG:HB2	1.77	0.67
25:BB:42:C:O2	30:BG:74:THR:OG1	2.13	0.67
30:BG:95:THR:HG22	30:BG:96:SER:N	2.09	0.67
31:BH:148:ARG:HH12	31:BH:164:GLU:N	1.92	0.67
31:BH:23:VAL:CG1	31:BH:74:MET:SD	2.83	0.67
31:BH:67:THR:O	31:BH:70:LEU:HB3	1.95	0.67
32:BI:119:ASP:CG	32:BI:120:ALA:N	2.47	0.67
32:BI:77:VAL:HG12	32:BI:77:VAL:O	1.93	0.67
26:BA:1062:G:C4	55:BK:134:SER:OG	2.45	0.67
34:BO:25:LEU:CD1	34:BO:38:VAL:O	2.43	0.67
34:BO:66:LYS:NZ	34:BO:67:ARG:NE	2.43	0.67
44:BU:104:GLU:O	44:BU:105:ALA:C	2.33	0.67
45:BV:4:ILE:CD1	45:BV:13:ARG:HD3	2.23	0.67
41:BY:41:ARG:HB2	41:BY:112:LEU:CA	2.13	0.67
26:BA:85:G:OP1	41:BY:65:VAL:HG11	1.95	0.67
41:BY:74:VAL:O	41:BY:75:GLU:C	2.32	0.67
42:BZ:38:ALA:O	42:BZ:39:PHE:C	2.33	0.67
42:BZ:92:VAL:CA	42:BZ:124:ALA:CB	2.71	0.67
1:AA:1320:C:O2	22:AS:72:GLY:O	2.13	0.67
1:AA:1320:C:O4'	22:AS:73:GLU:CG	2.43	0.67
2:AV:69:U:H2'	2:AV:70:C:H6	1.59	0.67
48:B0:18:PRO:HB2	48:B0:36:ILE:HD13	1.77	0.67
48:B0:29:GLU:HA	48:B0:62:LEU:HD22	1.77	0.67
50:B5:23:HIS:O	50:B5:24:ALA:HB2	1.93	0.67
26:BA:1152:C:H5''	44:BU:80:ILE:HG22	1.74	0.67
26:BA:1184:G:OP1	47:B3:29:ARG:HB3	1.95	0.67
26:BA:1429:G:H2'	26:BA:1430:C:C6	2.30	0.67
26:BA:1441:G:H4'	26:BA:1628:G:OP1	1.93	0.67
26:BA:2230:G:O2'	26:BA:2231:C:H5'	1.94	0.67
26:BA:2410:G:C4	26:BA:2411:A:C5	2.82	0.67
26:BA:2430:A:C2'	26:BA:2431:U:C5'	2.72	0.67
26:BA:2528:U:H3'	26:BA:2528:U:H6	1.60	0.67
26:BA:2517:C:C4	26:BA:2542:A:N6	2.63	0.67
26:BA:2543:G:H2'	26:BA:2544:G:H8	0.82	0.67
26:BA:2561:A:N6	26:BA:2562:U:C5	2.63	0.67
26:BA:2765:A:H2'	26:BA:2765:A:N3	2.08	0.67
27:BD:210:LYS:O	27:BD:211:HIS:C	2.31	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:201:SER:HB2	29:BF:204:ALA:HB3	1.76	0.67
29:BF:32:GLY:O	29:BF:33:LYS:C	2.31	0.67
26:BA:1062:G:H4'	55:BK:76:SER:OG	1.94	0.67
36:BQ:133:GLU:CG	36:BQ:134:PHE:N	2.57	0.67
36:BQ:28:ILE:CG2	36:BQ:29:ALA:H	1.99	0.67
37:BS:47:LEU:H	37:BS:57:THR:HG22	1.60	0.67
37:BS:64:SER:O	37:BS:65:ASP:C	2.33	0.67
44:BU:27:SER:CB	44:BU:31:GLN:NE2	2.56	0.67
44:BU:31:GLN:O	44:BU:33:ARG:O	1.96	0.67
45:BV:38:LEU:N	45:BV:38:LEU:HD23	2.09	0.67
42:BZ:120:LEU:C	42:BZ:121:GLN:HG3	2.14	0.67
42:BZ:14:LEU:HD21	42:BZ:79:ILE:CG2	2.23	0.67
42:BZ:37:LYS:CA	42:BZ:40:ASP:OD1	2.42	0.67
1:AA:950:U:H3	1:AA:1231:G:H1	1.42	0.67
1:AA:1260:C:H1'	1:AA:1283:G:O2'	1.95	0.67
1:AA:1260:C:C4'	1:AA:1284:C:H5'	2.11	0.67
1:AA:1498:U:H1'	1:AA:1499:A:C8	2.30	0.67
1:AA:953:G:O3'	16:AM:124:PRO:O	2.13	0.67
7:AD:88:VAL:HG13	8:AE:97:GLY:HA3	1.77	0.67
1:AA:1328:C:OP1	16:AM:28:ALA:CB	2.43	0.67
25:BB:83:G:H4'	47:B3:52:HIS:CD2	2.30	0.67
49:B4:23:GLU:CD	49:B4:29:PRO:HB3	2.15	0.67
51:B6:24:THR:O	51:B6:25:THR:HG22	1.94	0.67
26:BA:1789:A:O3'	27:BD:224:VAL:CG1	2.39	0.67
26:BA:2234:G:C2	26:BA:2235:G:C4	2.83	0.67
26:BA:2289:G:N1	26:BA:2290:G:C5	2.63	0.67
26:BA:2317:C:C5'	30:BG:150:SER:HB3	2.25	0.67
26:BA:2354:G:N3	48:B0:32:LYS:HG3	2.09	0.67
26:BA:2485:G:H5''	36:BQ:144:THR:HG21	1.72	0.67
26:BA:2519:U:P	26:BA:2519:U:H3'	2.34	0.67
26:BA:2491:U:H4'	26:BA:2570:G:OP1	1.95	0.67
26:BA:2608:G:H8	26:BA:2608:G:H3'	1.60	0.67
26:BA:2689:U:C6	26:BA:2713:A:N6	2.63	0.67
26:BA:2771:C:H5'	28:BE:316:ARG:HD2	0.78	0.67
26:BA:2814:C:H2'	26:BA:2815:C:C5	2.30	0.67
26:BA:484:C:H2'	26:BA:485:C:H6	1.60	0.67
25:BB:45:A:H1'	30:BG:76:ARG:HH12	1.58	0.67
27:BD:175:LEU:HD21	27:BD:180:VAL:HA	0.67	0.67
26:BA:1791:A:O2'	27:BD:204:PHE:O	2.12	0.67
26:BA:1566:A:C2	27:BD:212:HIS:CB	2.78	0.67
27:BD:213:LYS:CB	27:BD:215:LYS:O	2.43	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:48:MET:C	28:BE:49:THR:HG23	2.15	0.67
30:BG:57:THR:O	30:BG:63:ILE:HB	1.94	0.67
31:BH:14:VAL:HG12	31:BH:16:VAL:CG2	2.25	0.67
32:BI:13:GLY:CA	32:BI:15:LYS:CD	2.72	0.67
32:BI:29:PHE:CD1	32:BI:29:PHE:N	2.62	0.67
32:BI:95:SER:HB2	32:BI:117:LEU:CD1	2.25	0.67
34:BO:122:ILE:HD12	34:BO:122:ILE:N	2.10	0.67
34:BO:20:LEU:HG	34:BO:44:LYS:HD3	1.77	0.67
35:BP:102:ASP:O	35:BP:103:ALA:HB2	1.95	0.67
36:BQ:82:LYS:O	36:BQ:84:ARG:N	2.28	0.67
37:BS:34:LEU:CG	37:BS:102:LEU:CA	2.56	0.67
38:BT:15:PRO:O	38:BT:17:THR:N	2.25	0.67
44:BU:25:TRP:H	44:BU:28:ARG:HD2	1.60	0.67
44:BU:47:TYR:CZ	45:BV:74:TYR:O	2.48	0.67
44:BU:65:ILE:CB	44:BU:76:TYR:HE2	2.08	0.67
45:BV:44:GLN:NE2	45:BV:44:GLN:N	2.42	0.67
40:BX:52:VAL:CG1	40:BX:53:ASN:N	2.57	0.67
40:BX:28:VAL:HG23	40:BX:62:LYS:CG	2.25	0.67
41:BY:43:ASN:CG	41:BY:112:LEU:HD22	2.16	0.67
41:BY:51:LEU:CD2	41:BY:95:ASN:CG	2.64	0.67
41:BY:69:LYS:O	41:BY:70:ALA:CB	2.40	0.67
1:AA:1277:C:O4'	1:AA:1282:C:H1'	1.94	0.66
1:AA:1426:C:H42	1:AA:1474:G:H1	1.43	0.66
1:AA:813:U:OP1	1:AA:904:C:H5'	1.94	0.66
1:AA:939:G:H5''	10:AG:102:ARG:CZ	2.23	0.66
1:AA:36:C:H5''	15:AL:123:LYS:HA	1.76	0.66
48:B0:38:VAL:CA	48:B0:40:GLN:CG	2.73	0.66
48:B0:48:GLY:HA2	48:B0:56:ASP:H	1.59	0.66
46:B2:20:LEU:CD1	46:B2:21:ASP:N	2.58	0.66
49:B4:43:TRP:HA	49:B4:61:LYS:HE3	1.77	0.66
26:BA:459:U:OP2	52:B7:40:HIS:CG	2.47	0.66
26:BA:126:A:OP1	52:B7:44:VAL:HG11	1.94	0.66
26:BA:1357:U:H2'	26:BA:1358:G:O4'	1.95	0.66
26:BA:1953:A:H62	26:BA:2550:G:C4'	2.05	0.66
26:BA:2090:G:C4	26:BA:2230:G:O6	2.48	0.66
26:BA:2320:A:C2	37:BS:13:ARG:HG2	2.30	0.66
26:BA:2322:A:N7	26:BA:2323:G:C8	2.63	0.66
26:BA:2487:G:HO2'	26:BA:2488:A:H5'	1.57	0.66
26:BA:2447:G:O6	26:BA:2501:C:O2	2.14	0.66
26:BA:2549:G:C2'	26:BA:2550:G:H5'	2.24	0.66
26:BA:987:G:OP1	47:B3:10:LYS:HE2	1.94	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:59:A:H3'	25:BB:60:C:P	2.35	0.66
27:BD:105:ALA:O	27:BD:107:LYS:N	2.28	0.66
27:BD:119:PRO:CA	27:BD:129:LEU:HD21	2.24	0.66
27:BD:142:ASN:H	27:BD:142:ASN:HD22	1.42	0.66
27:BD:224:VAL:CG1	27:BD:225:ARG:H	2.07	0.66
26:BA:1655:A:H4'	28:BE:211:GLN:HA	1.76	0.66
28:BE:67:THR:O	28:BE:68:VAL:CG2	2.43	0.66
26:BA:606:U:OP1	29:BF:104:ASP:HB2	1.95	0.66
29:BF:197:SER:CB	29:BF:236:THR:OG1	2.44	0.66
30:BG:49:PRO:HG3	30:BG:73:VAL:N	2.10	0.66
31:BH:8:ILE:HG22	31:BH:9:GLU:N	2.10	0.66
32:BI:112:LYS:CD	32:BI:112:LYS:N	2.55	0.66
55:BK:109:ALA:HB2	55:BK:128:ILE:HD12	1.75	0.66
55:BK:65:SER:O	55:BK:66:PHE:CB	2.40	0.66
33:BN:73:LYS:HB3	33:BN:140:GLY:HA3	1.77	0.66
26:BA:1022:G:P	33:BN:52:GLN:HE22	2.15	0.66
33:BN:78:ILE:HG22	33:BN:79:PHE:CD1	2.30	0.66
36:BQ:65:ARG:HH22	36:BQ:87:LYS:N	1.91	0.66
36:BQ:72:VAL:O	36:BQ:73:GLN:CB	2.43	0.66
36:BQ:65:ARG:HE	36:BQ:85:ILE:CG2	2.08	0.66
43:BR:113:LEU:CD1	43:BR:113:LEU:C	2.63	0.66
26:BA:2334:G:H21	37:BS:12:ARG:CD	2.08	0.66
26:BA:2320:A:N6	37:BS:14:ARG:CB	2.58	0.66
26:BA:445:C:C3'	44:BU:3:ARG:NH2	2.54	0.66
26:BA:995:C:OP2	44:BU:54:LYS:NZ	2.28	0.66
45:BV:42:GLY:HA3	45:BV:54:TYR:OH	1.83	0.66
40:BX:7:HIS:ND1	40:BX:8:PRO:CD	2.58	0.66
41:BY:71:VAL:HG22	41:BY:93:THR:H	1.36	0.66
42:BZ:106:GLY:N	42:BZ:142:ASN:HD21	1.87	0.66
42:BZ:37:LYS:CG	42:BZ:41:ARG:NH1	2.44	0.66
42:BZ:41:ARG:O	42:BZ:44:ARG:CB	2.43	0.66
42:BZ:25:ASN:C	42:BZ:84:TYR:CE1	2.68	0.66
1:AA:1491:G:P	15:AL:46:LYS:HZ2	2.18	0.66
1:AA:189:G:H1	1:AA:190(J):U:H3	1.40	0.66
1:AA:19:C:O2	1:AA:917:G:C2	2.49	0.66
1:AA:564:C:H4'	11:AH:91:ARG:NH2	2.09	0.66
1:AA:986:A:C4'	22:AS:55:LYS:HG3	2.25	0.66
2:AV:75:C:H42	26:BA:2252:G:H1	1.42	0.66
26:BA:2262:U:H5	48:B0:14:ARG:HH12	1.43	0.66
47:B3:16:PRO:HB3	47:B3:19:GLN:CD	2.13	0.66
47:B3:30:ARG:NE	47:B3:33:GLN:HB2	2.10	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:19:GLY:C	51:B6:42:PRO:CB	2.63	0.66
26:BA:1538:G:H2'	26:BA:1539:G:H1'	1.77	0.66
26:BA:2399:G:H2'	26:BA:2400:G:O5'	1.95	0.66
26:BA:2457:U:C3'	26:BA:2458:G:H5'	2.17	0.66
26:BA:2482:G:C3'	26:BA:2483:C:C5'	2.73	0.66
26:BA:2511:U:H2'	26:BA:2512:C:H5'	1.78	0.66
26:BA:2571:C:O2'	28:BE:243:PRO:CG	2.43	0.66
26:BA:2581:G:N1	26:BA:2610:C:C5	2.55	0.66
26:BA:2605:U:H2'	26:BA:2606:C:C5'	2.25	0.66
26:BA:2836:U:C2	26:BA:2883:A:N6	2.62	0.66
26:BA:324:A:N7	26:BA:340:A:H1'	2.10	0.66
26:BA:387:U:C3'	49:B4:23:GLU:OE2	2.43	0.66
26:BA:826:U:OP1	26:BA:2428:G:O5'	2.13	0.66
26:BA:904:C:C1'	42:BZ:166:LEU:HD21	2.24	0.66
26:BA:989:G:OP2	47:B3:11:SER:HB2	1.95	0.66
31:BH:84:LYS:O	31:BH:131:ILE:HB	1.94	0.66
31:BH:75:VAL:HG12	31:BH:76:GLU:H	1.60	0.66
32:BI:95:SER:HB2	32:BI:117:LEU:HD12	1.77	0.66
55:BK:121:LEU:O	55:BK:122:GLU:C	2.33	0.66
38:BT:12:ASP:C	38:BT:13:ILE:HG13	2.15	0.66
42:BZ:29:ASN:O	42:BZ:30:VAL:CG2	2.44	0.66
1:AA:292:G:C5	1:AA:293:G:H1'	2.30	0.66
7:AD:3:ARG:HH22	7:AD:74:GLN:CD	1.97	0.66
2:AV:70:C:H2'	2:AV:71:G:C8	2.29	0.66
3:AW:7:U:HO3'	3:AW:8:U:P	2.19	0.66
48:B0:11:LYS:O	48:B0:12:ASN:O	2.13	0.66
26:BA:856:C:H5'	48:B0:25:LYS:HZ1	0.56	0.66
26:BA:94:G:H22	46:B2:42:ASN:HD22	1.37	0.66
49:B4:41:PRO:HB2	49:B4:57:ASP:CG	2.15	0.66
54:B9:25:VAL:HB	54:B9:34:GLN:HB3	0.67	0.66
54:B9:25:VAL:HG11	54:B9:34:GLN:HB2	1.75	0.66
26:BA:1139:G:OP1	33:BN:46:ILE:HG21	1.94	0.66
26:BA:1996:C:C5'	26:BA:1996:C:H6	2.08	0.66
26:BA:2460:U:O2	26:BA:2493:U:H5	1.74	0.66
26:BA:2511:U:C6	26:BA:2512:C:H5	2.12	0.66
26:BA:2520:C:H5	26:BA:2567:G:C4	2.11	0.66
26:BA:1782:C:O2	26:BA:2609:U:H6	1.43	0.66
26:BA:2691:C:O4'	26:BA:2872:G:N7	2.28	0.66
26:BA:2740:A:C5	26:BA:2764:A:C5	2.82	0.66
26:BA:2744:G:N3	26:BA:2761:G:C2	2.63	0.66
26:BA:2862:G:N3	26:BA:2863:C:C6	2.63	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:322:A:H1'	26:BA:341:G:C8	2.30	0.66
25:BB:42:C:H1'	30:BG:47:GLN:HB3	1.77	0.66
27:BD:108:ASN:CG	27:BD:109:LEU:H	1.98	0.66
29:BF:22:PHE:HE2	29:BF:118:THR:HG1	1.42	0.66
29:BF:195:VAL:HG13	29:BF:213:ALA:CB	2.25	0.66
32:BI:23:ASP:HB2	32:BI:25:TYR:CD2	2.31	0.66
26:BA:1063:G:OP2	55:BK:77:PHE:HE1	1.79	0.66
26:BA:1131:G:C4	33:BN:65:ASN:CG	2.60	0.66
34:BO:93:PRO:HD2	34:BO:113:LYS:CD	2.25	0.66
36:BQ:35:ASN:CB	36:BQ:75:SER:CB	2.73	0.66
36:BQ:33:MET:HG3	36:BQ:83:PHE:HB2	1.77	0.66
36:BQ:84:ARG:O	36:BQ:122:PHE:HB3	1.96	0.66
37:BS:12:ARG:CZ	37:BS:20:TYR:CE2	2.74	0.66
26:BA:2320:A:C6	37:BS:9:PRO:HG3	2.26	0.66
44:BU:20:ARG:HH12	45:BV:75:LYS:HE3	1.57	0.66
44:BU:93:LYS:O	44:BU:94:VAL:CB	2.44	0.66
45:BV:3:ALA:O	45:BV:12:TYR:CZ	2.31	0.66
26:BA:25:U:C4'	39:BW:79:GLY:HA3	2.20	0.66
40:BX:75:GLN:O	40:BX:76:GLU:C	2.34	0.66
42:BZ:110:GLY:C	42:BZ:112:LEU:H	1.98	0.66
42:BZ:119:ASN:HB3	42:BZ:120:LEU:HD23	1.77	0.66
42:BZ:14:LEU:CD2	42:BZ:79:ILE:CG2	2.71	0.66
42:BZ:35:ASP:CA	42:BZ:39:PHE:CZ	2.63	0.66
1:AA:1123:A:O2'	13:AJ:38:ILE:CG2	2.42	0.66
1:AA:958:A:O4'	22:AS:55:LYS:NZ	2.22	0.66
13:AJ:24:VAL:HA	13:AJ:34:VAL:HG11	1.76	0.66
18:AO:24:SER:O	18:AO:28:GLN:HG2	1.95	0.66
48:B0:29:GLU:OE1	48:B0:29:GLU:HA	1.95	0.66
49:B4:59:PHE:HA	49:B4:62:ARG:NE	2.09	0.66
49:B4:7:PRO:O	49:B4:8:LYS:CB	2.43	0.66
54:B9:24:LEU:HD22	54:B9:35:ARG:HA	1.75	0.66
26:BA:1338:G:H4'	40:BX:12:GLU:OE1	1.95	0.66
26:BA:1766:U:H2'	26:BA:1767:C:C6	2.30	0.66
26:BA:2016:U:H2'	26:BA:2017:U:O4'	1.95	0.66
26:BA:2212:A:H2'	26:BA:2212:A:N3	2.10	0.66
26:BA:2278:A:C2'	26:BA:2279:G:O5'	2.43	0.66
26:BA:2373:G:C5	26:BA:2374:C:N4	2.63	0.66
26:BA:2376:A:H2'	26:BA:2377:A:C8	2.30	0.66
26:BA:2526:G:C4	26:BA:2527:C:C5	2.82	0.66
26:BA:2611:U:C3'	26:BA:2611:U:C6	2.78	0.66
26:BA:2616:C:N3	26:BA:2617:C:H5	1.90	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2648:C:C4	26:BA:2649:U:O4	2.48	0.66
26:BA:2677:G:C2'	26:BA:2678:C:O5'	2.43	0.66
26:BA:2730:C:H2'	26:BA:2731:G:H8	1.60	0.66
26:BA:974:G:N7	45:BV:80:TYR:CE2	2.62	0.66
27:BD:71:ASP:CA	27:BD:73:ILE:HG13	2.26	0.66
28:BE:201:VAL:CA	28:BE:310:PHE:O	2.42	0.66
29:BF:96:LYS:HB3	29:BF:98:ARG:NH1	1.01	0.66
30:BG:29:HIS:H	30:BG:69:ILE:HD13	1.60	0.66
31:BH:101:LYS:HG2	31:BH:115:GLU:HB2	1.62	0.66
31:BH:147:ILE:HA	31:BH:150:VAL:HB	1.76	0.66
32:BI:99:ALA:O	32:BI:100:GLU:C	2.33	0.66
33:BN:42:GLU:HA	33:BN:133:GLY:CA	2.26	0.66
33:BN:56:LYS:HD3	33:BN:56:LYS:N	2.10	0.66
35:BP:128:GLY:O	35:BP:131:GLU:CA	2.44	0.66
37:BS:66:LEU:N	37:BS:66:LEU:HD12	2.09	0.66
26:BA:994:C:HO2'	44:BU:54:LYS:HG2	1.55	0.66
26:BA:974:G:O6	45:BV:80:TYR:CZ	2.48	0.66
42:BZ:24:TYR:HB3	42:BZ:83:PHE:O	1.96	0.66
1:AA:1256:A:H2'	6:AC:27:LYS:NZ	2.09	0.66
1:AA:890:G:O2'	1:AA:891:U:C6	2.47	0.66
7:AD:22:LYS:CA	7:AD:113:SER:HB2	2.26	0.66
7:AD:14:ARG:CG	7:AD:66:ARG:HH12	2.06	0.66
19:AP:7:ALA:H	19:AP:18:ARG:H	1.42	0.66
3:AW:25:C:O2	3:AW:26:G:C1'	2.33	0.66
47:B3:26:LEU:CD2	47:B3:46:ASN:HB3	2.22	0.66
47:B3:37:LEU:CD1	47:B3:43:ILE:CG2	2.71	0.66
47:B3:7:LYS:HG2	47:B3:8:LEU:H	1.60	0.66
50:B5:3:LYS:HD3	50:B5:3:LYS:N	2.11	0.66
26:BA:1529:A:N7	26:BA:1543:A:C8	2.64	0.66
26:BA:1559:G:C4	26:BA:1559:G:H3'	2.30	0.66
26:BA:1568:G:C5'	27:BD:60:GLN:CD	2.63	0.66
26:BA:1906:G:C8	26:BA:1929:G:C4	2.83	0.66
26:BA:2488:A:C2'	26:BA:2489:G:O5'	2.35	0.66
26:BA:2489:G:C8	26:BA:2490:G:N7	2.63	0.66
26:BA:2525:G:N2	26:BA:2539:C:C5	2.64	0.66
26:BA:2562:U:N3	26:BA:2563:U:C4	2.63	0.66
26:BA:270(M):U:H4'	26:BA:270(N):G:C4'	2.21	0.66
26:BA:2754:U:O2'	26:BA:2756:U:P	2.53	0.66
26:BA:2785:C:H2'	26:BA:2786:U:H5	1.51	0.66
26:BA:2815:C:H2'	26:BA:2816:C:H6	1.61	0.66
26:BA:2853:C:C2'	26:BA:2854:G:O5'	2.44	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2842:G:N1	26:BA:2876:G:C2	2.64	0.66
26:BA:82:G:H5'	26:BA:296:C:OP1	1.95	0.66
26:BA:965:C:O2'	26:BA:2273:A:H2	1.77	0.66
26:BA:989:G:N7	47:B3:13:ILE:CD1	2.58	0.66
29:BF:104:ASP:O	29:BF:106:GLU:N	2.28	0.66
29:BF:144:PHE:CE2	29:BF:156:LEU:CD1	2.70	0.66
29:BF:153:VAL:HG11	29:BF:207:LEU:HD13	1.77	0.66
29:BF:215:ALA:HA	29:BF:242:GLU:CG	2.26	0.66
31:BH:130:ILE:C	31:BH:131:ILE:HG12	2.16	0.66
32:BI:3:VAL:CG2	32:BI:21:VAL:CG2	2.62	0.66
32:BI:8:ASP:HA	32:BI:12:LYS:N	2.09	0.66
33:BN:68:GLY:O	33:BN:69:TYR:CB	2.42	0.66
33:BN:90:LYS:NZ	33:BN:95:ARG:NH2	2.43	0.66
36:BQ:25:GLY:C	36:BQ:26:LYS:HG2	2.13	0.66
36:BQ:45:GLN:OE1	36:BQ:153:PRO:N	2.28	0.66
36:BQ:85:ILE:HA	36:BQ:122:PHE:HA	1.76	0.66
37:BS:72:GLU:HB3	37:BS:74:PRO:CD	2.20	0.66
44:BU:110:VAL:O	44:BU:114:ARG:CG	2.37	0.66
26:BA:99:U:H3	41:BY:107:LYS:HD2	1.56	0.66
41:BY:78:THR:HG22	41:BY:88:PRO:C	2.15	0.66
1:AA:597:G:H21	11:AH:94:TYR:HE2	1.41	0.66
7:AD:21:LEU:C	7:AD:113:SER:HB2	2.15	0.66
13:AJ:45:ARG:NH2	17:AN:36:PHE:CE2	2.63	0.66
3:AW:40:C:O2'	10:AG:147:ALA:HB3	1.95	0.66
26:BA:2261:C:H3'	48:B0:14:ARG:NH2	2.10	0.66
48:B0:46:LYS:NZ	48:B0:60:PHE:C	2.49	0.66
49:B4:23:GLU:CG	49:B4:29:PRO:HB3	2.26	0.66
26:BA:1655:A:H4'	28:BE:212:GLY:N	2.11	0.66
26:BA:1889:A:N1	26:BA:2234:G:O2'	2.28	0.66
2:AV:13:C:C4'	26:BA:1924:C:O2'	2.41	0.66
26:BA:2077:A:C2	26:BA:2244:U:N3	2.63	0.66
26:BA:2246:G:N2	26:BA:2247:A:C5	2.63	0.66
26:BA:2266:A:H5''	26:BA:2267:A:C4	2.31	0.66
26:BA:2269:A:C2'	26:BA:2270:G:O5'	2.44	0.66
26:BA:2312:U:C5'	30:BG:53:LYS:CA	2.44	0.66
26:BA:2328:A:C6	26:BA:2329:G:C6	2.83	0.66
26:BA:2424:C:O2	26:BA:2424:C:C2'	2.43	0.66
26:BA:2431:U:OP2	26:BA:2432:A:OP2	2.12	0.66
26:BA:2078:C:H4'	26:BA:2434:A:C5'	2.26	0.66
26:BA:2528:U:H5	26:BA:2530:A:N3	1.66	0.66
26:BA:2606:C:C5'	26:BA:2606:C:H6	1.99	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2678:C:O2'	26:BA:2679:A:C5'	2.44	0.66
26:BA:2758:A:P	26:BA:2758:A:C3'	2.70	0.66
26:BA:2762:G:O6	26:BA:2763:G:N1	2.28	0.66
26:BA:511:U:C5	26:BA:512:G:N3	2.64	0.66
26:BA:775:G:O2'	26:BA:794:G:C8	2.46	0.66
26:BA:969:U:H2'	26:BA:970:C:O4'	1.95	0.66
27:BD:172:ILE:HA	27:BD:182:MET:HG2	1.78	0.66
27:BD:196:ASN:CB	27:BD:199:ARG:HD3	2.26	0.66
26:BA:2785:C:C2	28:BE:100:TRP:NE1	2.63	0.66
28:BE:177:ALA:C	28:BE:179:ASP:N	2.45	0.66
28:BE:217:TRP:CE2	28:BE:251:PRO:CB	2.79	0.66
26:BA:2785:C:H5'	28:BE:99:VAL:HG22	1.71	0.66
29:BF:202:THR:HG22	29:BF:203:ALA:N	2.10	0.66
29:BF:37:ALA:CB	29:BF:102:LEU:CB	2.70	0.66
29:BF:56:THR:HG22	29:BF:57:PRO:HD3	1.76	0.66
30:BG:97:GLN:CD	30:BG:106:PHE:CE2	2.69	0.66
31:BH:100:LYS:O	31:BH:101:LYS:HD2	1.95	0.66
31:BH:95:ALA:O	31:BH:127:GLN:CB	2.44	0.66
31:BH:47:ASN:O	31:BH:48:VAL:HG13	1.96	0.66
32:BI:7:LYS:HE2	32:BI:12:LYS:HG2	1.77	0.66
55:BK:67:THR:O	55:BK:68:PHE:CB	2.43	0.66
34:BO:3:GLN:HA	34:BO:21:VAL:HG11	1.77	0.66
34:BO:68:GLY:HA2	34:BO:78:ARG:CG	2.24	0.66
36:BQ:142:LYS:CG	36:BQ:143:VAL:N	2.05	0.66
43:BR:46:GLY:O	43:BR:47:PHE:O	2.14	0.66
43:BR:84:ALA:CB	43:BR:85:PRO:HD3	2.21	0.66
43:BR:83:ILE:O	43:BR:85:PRO:N	2.28	0.66
37:BS:58:LEU:O	37:BS:60:SER:N	2.29	0.66
44:BU:34:ASN:OD1	44:BU:37:GLN:NE2	2.28	0.66
26:BA:994:C:C4'	44:BU:54:LYS:HE2	2.23	0.66
40:BX:3:ASP:C	40:BX:4:VAL:HG13	2.14	0.66
42:BZ:39:PHE:O	42:BZ:40:ASP:O	2.14	0.66
1:AA:1221:G:H5''	1:AA:1321:C:O2	1.96	0.66
6:AC:5:ILE:HG23	13:AJ:51:ARG:HH22	1.60	0.66
1:AA:1193:G:O2'	8:AE:25:ARG:CZ	2.44	0.66
1:AA:790:A:C5'	2:AV:38:A:O2'	2.44	0.66
2:AV:8:U:O2	2:AV:48:C:H1'	1.96	0.66
2:AV:66:A:H2'	2:AV:67:A:H8	1.59	0.66
47:B3:12:PRO:HB2	47:B3:20:LYS:HE2	1.78	0.66
26:BA:372:G:O2'	49:B4:63:PHE:CZ	2.48	0.66
26:BA:2400:G:C4'	51:B6:20:PHE:CE1	2.79	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2465:C:O3'	54:B9:5:SER:OG	2.12	0.66
26:BA:747:U:O2	26:BA:2015:A:C2	2.47	0.66
26:BA:2075:U:O2'	26:BA:2596:U:O2	2.13	0.66
26:BA:2080:G:C6	26:BA:2241:A:C6	2.84	0.66
26:BA:2307:G:H5''	26:BA:2307:G:H8	1.61	0.66
26:BA:2397:G:C4	26:BA:2420:C:O2	2.49	0.66
26:BA:2422:A:C2	26:BA:2424:C:C5	2.82	0.66
26:BA:2461:C:C2	26:BA:2462:U:C5	2.83	0.66
26:BA:2526:G:C5	26:BA:2527:C:C6	2.82	0.66
26:BA:2572:A:H5'	26:BA:2574:G:H5'	1.75	0.66
26:BA:2704:C:H2'	26:BA:2705:A:O4'	1.95	0.66
26:BA:2744:G:O6	26:BA:2745:C:N4	2.29	0.66
26:BA:2813:A:H2'	26:BA:2814:C:H6	0.75	0.66
26:BA:2826:A:N6	26:BA:2827:C:C4	2.61	0.66
26:BA:2859:G:H2'	26:BA:2860:A:O4'	1.96	0.66
26:BA:414:C:H2'	26:BA:415:A:H8	1.60	0.66
29:BF:168:ARG:HD2	29:BF:168:ARG:C	2.08	0.66
31:BH:87:GLU:HB3	31:BH:164:GLU:OE1	1.96	0.66
31:BH:51:VAL:HG21	31:BH:68:ARG:NE	2.10	0.66
32:BI:28:ASN:HA	32:BI:32:LYS:CG	2.26	0.66
36:BQ:48:ASN:C	36:BQ:121:ASP:HB2	2.16	0.66
36:BQ:156:ASN:O	36:BQ:157:ALA:HB3	1.95	0.66
36:BQ:35:ASN:HB3	36:BQ:75:SER:CB	2.26	0.66
43:BR:96:ARG:O	43:BR:96:ARG:HG3	1.96	0.66
37:BS:12:ARG:HD2	37:BS:20:TYR:OH	1.93	0.66
37:BS:32:PRO:CD	37:BS:100:ALA:CA	2.72	0.66
44:BU:103:PRO:HA	44:BU:107:LYS:HE2	1.78	0.66
44:BU:40:LEU:H	44:BU:40:LEU:HD22	1.60	0.66
26:BA:998:C:C5'	44:BU:84:LYS:NZ	2.51	0.66
41:BY:92:ASP:OD1	41:BY:94:SER:CB	2.44	0.66
42:BZ:4:THR:O	42:BZ:5:ALA:CB	2.43	0.66
42:BZ:85:MET:C	42:BZ:86:VAL:HG23	2.15	0.66
5:AB:101:MET:HA	5:AB:108:ILE:HG13	1.78	0.66
11:AH:27:PRO:O	11:AH:32:LYS:HD2	1.95	0.66
1:AA:1347:G:C8	12:AI:107:ARG:HB3	2.29	0.66
26:BA:2355:C:H5'	48:B0:21:LEU:HD22	1.78	0.66
26:BA:2385:C:HO2'	48:B0:39:ARG:NH1	1.92	0.66
46:B2:13:PRO:O	46:B2:14:ALA:C	2.33	0.66
46:B2:51:LYS:O	46:B2:54:ALA:HB3	1.96	0.66
47:B3:23:LEU:CB	47:B3:28:LEU:HD12	2.21	0.66
47:B3:51:ALA:C	47:B3:53:LEU:N	2.37	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:5:LEU:HD21	49:B4:9:ALA:HA	1.77	0.66
51:B6:46:LYS:CE	51:B6:46:LYS:HA	2.22	0.66
54:B9:7:VAL:HG23	54:B9:36:GLN:CG	2.26	0.66
26:BA:1527:G:O5'	26:BA:1527:G:H8	1.79	0.66
26:BA:2094:G:N2	26:BA:2196:C:O2	2.29	0.66
26:BA:2253:G:O2'	26:BA:2254:C:H5'	1.95	0.66
26:BA:2313:C:N4	26:BA:2314:C:H41	1.90	0.66
26:BA:2330:G:C2	26:BA:2331:G:N3	2.64	0.66
26:BA:2369:A:H2'	26:BA:2370:G:C8	2.29	0.66
26:BA:2370:G:H2'	26:BA:2371:G:C8	2.30	0.66
26:BA:2411:A:C2	26:BA:2412:A:C6	2.83	0.66
26:BA:2493:U:C2'	26:BA:2494:G:O5'	2.44	0.66
26:BA:2539:C:N3	26:BA:2540:C:C5	2.64	0.66
26:BA:2574:G:O3'	26:BA:2575:C:O4'	2.13	0.66
26:BA:2684:U:O2	26:BA:2725:A:N1	2.29	0.66
26:BA:2817:G:N1	26:BA:2818:G:C4	2.64	0.66
27:BD:106:PRO:HG3	27:BD:141:HIS:HD2	1.61	0.66
27:BD:146:LYS:CB	27:BD:149:ARG:CG	2.74	0.66
27:BD:71:ASP:C	27:BD:73:ILE:HG13	2.16	0.66
28:BE:224:GLY:O	28:BE:225:LYS:CB	2.44	0.66
26:BA:1658:C:H5"	28:BE:230:GLY:HA3	1.76	0.66
28:BE:238:LEU:N	28:BE:238:LEU:HD22	2.11	0.66
28:BE:295:LEU:CD2	28:BE:296:VAL:N	2.59	0.66
29:BF:244:ALA:HB3	29:BF:245:GLU:OE2	1.96	0.66
30:BG:29:HIS:CG	30:BG:29:HIS:O	2.47	0.66
31:BH:147:ILE:HD13	31:BH:150:VAL:HG11	1.78	0.66
31:BH:67:THR:HG23	31:BH:70:LEU:HD13	1.77	0.66
32:BI:13:GLY:HA2	32:BI:15:LYS:HZ1	1.57	0.66
26:BA:2040:C:H4'	33:BN:69:TYR:HE2	1.61	0.66
34:BO:43:VAL:HG12	34:BO:45:ASP:N	2.10	0.66
34:BO:52:VAL:O	34:BO:53:LYS:CB	2.44	0.66
34:BO:64:ARG:NH1	34:BO:81:GLU:OE1	2.27	0.66
34:BO:68:GLY:HA3	34:BO:78:ARG:CZ	2.25	0.66
35:BP:130:ARG:CA	35:BP:133:VAL:CG2	2.74	0.66
36:BQ:102:ARG:O	36:BQ:104:PRO:CD	2.43	0.66
36:BQ:108:SER:O	36:BQ:109:VAL:CG2	2.43	0.66
26:BA:910:A:C3'	36:BQ:17:ARG:HH21	2.07	0.66
36:BQ:88:PHE:O	36:BQ:90:PHE:HE1	1.75	0.66
43:BR:24:GLN:HB2	43:BR:44:LEU:CD2	2.24	0.66
43:BR:44:LEU:O	43:BR:48:VAL:HG21	1.93	0.66
37:BS:119:GLN:O	37:BS:120:GLU:C	2.33	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:49:ASP:CA	44:BU:52:ASN:CG	2.54	0.66
44:BU:20:ARG:NH1	45:BV:75:LYS:NZ	2.43	0.66
41:BY:74:VAL:CG1	41:BY:74:VAL:O	2.39	0.66
42:BZ:116:VAL:CB	42:BZ:169:VAL:CG2	2.73	0.66
42:BZ:1:MET:O	42:BZ:2:GLU:HB3	1.95	0.66
42:BZ:39:PHE:O	42:BZ:43:PHE:HD2	1.77	0.66
42:BZ:71:MET:HG3	42:BZ:78:PRO:CG	2.21	0.66
1:AA:1070:U:O4	1:AA:1085:U:C6	2.49	0.66
1:AA:1182:G:H4'	1:AA:1183:A:C5'	2.25	0.66
7:AD:23:GLY:CA	7:AD:113:SER:CA	2.73	0.66
7:AD:98:GLU:OE2	7:AD:103:ASN:ND2	2.27	0.66
8:AE:81:GLU:HA	8:AE:89:ILE:O	1.94	0.66
15:AL:102:ARG:HB3	15:AL:109:GLY:HA2	1.78	0.66
1:AA:136:C:O2'	19:AP:63:GLY:HA3	1.96	0.66
48:B0:37:LEU:HD13	48:B0:70:ILE:CD1	2.22	0.66
48:B0:39:ARG:CG	48:B0:69:PHE:CZ	2.71	0.66
49:B4:39:VAL:O	49:B4:39:VAL:HG12	1.95	0.66
51:B6:32:GLN:HB3	51:B6:35:LEU:HB2	1.77	0.66
26:BA:1081:U:H5'	55:BK:123:ALA:HA	1.78	0.66
26:BA:1833:U:H2'	26:BA:1834:U:H6	1.60	0.66
26:BA:2391:G:HO2'	26:BA:2392:A:P	2.16	0.66
26:BA:414:C:N4	26:BA:2409:G:N1	2.27	0.66
26:BA:2472:G:O2'	26:BA:2473:U:P	2.53	0.66
26:BA:2597:G:C4	26:BA:2598:A:N7	2.64	0.66
26:BA:2620:C:C4'	28:BE:252:GLN:CG	2.73	0.66
26:BA:2712:U:H3'	26:BA:2714:G:O5'	1.96	0.66
26:BA:2896:C:H6	26:BA:2896:C:C5'	2.08	0.66
26:BA:311:A:H1'	26:BA:332:A:C5	2.30	0.66
26:BA:600:G:O2'	29:BF:109:LEU:CD1	2.37	0.66
26:BA:973:A:C2'	26:BA:974:G:H5''	2.26	0.66
28:BE:199:ALA:O	28:BE:200:ASP:OD1	2.14	0.66
28:BE:295:LEU:HD23	28:BE:296:VAL:N	2.11	0.66
28:BE:315:VAL:CG1	28:BE:316:ARG:N	2.59	0.66
29:BF:214:THR:C	29:BF:216:SER:H	1.99	0.66
31:BH:28:PRO:HG2	31:BH:79:SER:HA	1.78	0.66
32:BI:121:ILE:CD1	32:BI:121:ILE:H	2.08	0.66
32:BI:22:ALA:O	32:BI:25:TYR:HB2	1.96	0.66
32:BI:7:LYS:CD	32:BI:12:LYS:CG	2.57	0.66
55:BK:96:ILE:O	55:BK:97:VAL:CG1	2.43	0.66
33:BN:65:ASN:CA	33:BN:68:GLY:O	2.44	0.66
34:BO:14:SER:CB	34:BO:86:ILE:CD1	2.70	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:101:ASP:O	35:BP:102:ASP:CB	2.44	0.66
26:BA:1649:G:O2'	43:BR:104:ARG:NH1	2.29	0.66
25:BB:47:C:C3'	37:BS:107:ASN:HD21	2.08	0.66
37:BS:80:SER:O	37:BS:81:ALA:C	2.34	0.66
44:BU:8:ILE:O	44:BU:11:ARG:CG	2.43	0.66
44:BU:40:LEU:HD21	45:BV:83:ARG:HH12	1.61	0.66
42:BZ:172:LEU:C	42:BZ:172:LEU:HD23	2.13	0.66
42:BZ:176:LEU:C	42:BZ:176:LEU:CD2	2.64	0.66
42:BZ:13:LYS:O	42:BZ:36:ARG:CZ	2.43	0.66
42:BZ:96:VAL:HG12	42:BZ:97:PRO:CD	2.21	0.66
1:AA:944:G:C2'	1:AA:945:G:H5'	2.27	0.66
6:AC:7:PRO:O	6:AC:11:ARG:HB2	1.95	0.66
1:AA:1318:A:O2'	22:AS:37:ARG:HB3	1.96	0.66
47:B3:18:ASP:O	47:B3:19:GLN:C	2.35	0.66
49:B4:41:PRO:CB	49:B4:57:ASP:CB	2.73	0.66
49:B4:59:PHE:H	49:B4:62:ARG:HE	1.41	0.66
26:BA:1470:G:H2'	26:BA:1519:G:O6	1.95	0.66
26:BA:2208:U:O2	26:BA:2216:G:N2	2.23	0.66
26:BA:2251:G:O5'	36:BQ:102:ARG:NH2	2.28	0.66
26:BA:2355:C:C4	26:BA:2356:C:N4	2.64	0.66
26:BA:2356:C:C2'	26:BA:2357:U:H5'	2.26	0.66
26:BA:2411:A:H2	26:BA:2412:A:C6	2.14	0.66
26:BA:2604:U:H2'	26:BA:2605:U:C6	2.31	0.66
26:BA:2581:G:N2	26:BA:2610:C:C5	2.63	0.66
26:BA:2624:G:H8	26:BA:2624:G:O5'	1.78	0.66
26:BA:2639:A:C4	26:BA:2778:A:C2	2.84	0.66
26:BA:2657:A:C5	26:BA:2658:C:C5	2.79	0.66
26:BA:2721:A:C4	26:BA:2722:G:N7	2.63	0.66
26:BA:527:C:C5	26:BA:2779:U:C6	2.84	0.66
26:BA:28:A:N3	44:BU:11:ARG:NH2	2.44	0.66
26:BA:299:A:N3	26:BA:319:C:O2'	2.27	0.66
26:BA:856:C:HO2'	48:B0:24:LYS:CB	1.84	0.66
27:BD:90:ILE:HG21	27:BD:102:TYR:C	2.17	0.66
27:BD:131:LEU:CD1	27:BD:187:CYS:HB2	2.26	0.66
28:BE:269:ILE:CG2	28:BE:297:LYS:NZ	2.47	0.66
29:BF:165:ASP:O	29:BF:166:ILE:C	2.34	0.66
29:BF:197:SER:O	29:BF:198:ASP:HB2	1.96	0.66
29:BF:242:GLU:O	29:BF:246:ARG:HG3	1.96	0.66
31:BH:85:ALA:C	31:BH:131:ILE:CG2	2.63	0.66
32:BI:63:ALA:O	32:BI:67:LYS:HE2	1.96	0.66
32:BI:68:LEU:CB	32:BI:72:LEU:HD21	2.26	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:89:LEU:HD11	32:BI:93:ILE:HG22	1.59	0.66
26:BA:1070:A:N1	55:BK:12:GLN:OE1	2.29	0.66
34:BO:25:LEU:HD21	34:BO:40:VAL:N	2.11	0.66
36:BQ:89:PRO:HA	36:BQ:113:ALA:CB	2.26	0.66
26:BA:910:A:H62	36:BQ:12:PRO:C	1.99	0.66
43:BR:85:PRO:O	43:BR:88:ARG:N	2.29	0.66
37:BS:87:LEU:HA	37:BS:90:LEU:HD12	1.78	0.66
34:BO:79:PHE:CA	38:BT:22:VAL:HG22	2.14	0.66
44:BU:34:ASN:HA	44:BU:37:GLN:CB	2.21	0.66
41:BY:55:PHE:CG	41:BY:89:ARG:NH1	2.64	0.66
1:AA:979:C:P	1:AA:1222:G:O6	2.54	0.65
1:AA:948:C:H4'	1:AA:1306:A:O3'	1.96	0.65
1:AA:404:U:O4	7:AD:2:GLY:CA	2.35	0.65
6:AC:38:ARG:HB3	6:AC:94:LEU:HD21	1.78	0.65
1:AA:541:G:O4'	7:AD:42:GLN:NE2	2.29	0.65
3:AW:65:G:C2	3:AW:66:A:C4	2.79	0.65
26:BA:2262:U:P	48:B0:14:ARG:NH2	2.69	0.65
48:B0:61:ALA:HB2	48:B0:81:ILE:HD11	1.69	0.65
46:B2:39:ALA:O	46:B2:40:PRO:O	2.13	0.65
26:BA:125:G:H21	52:B7:10:ARG:N	1.89	0.65
26:BA:1425:G:O2'	26:BA:1573:G:N2	2.29	0.65
26:BA:2093:G:O6	26:BA:2225:A:N7	2.29	0.65
26:BA:2278:A:H2'	26:BA:2279:G:O5'	1.96	0.65
26:BA:2349:G:C6	26:BA:2350:C:C6	2.84	0.65
26:BA:2372:G:H5''	26:BA:2372:G:H8	1.61	0.65
26:BA:2373:G:C2	26:BA:2374:C:N3	2.64	0.65
26:BA:2548:G:H2'	26:BA:2549:G:C5'	2.26	0.65
26:BA:2605:U:O5'	26:BA:2605:U:H6	1.79	0.65
26:BA:2615:U:C2'	26:BA:2616:C:H5'	2.27	0.65
26:BA:2620:C:O2'	26:BA:2621:A:O4'	2.14	0.65
26:BA:2698:U:O2	26:BA:2698:U:H2'	1.94	0.65
26:BA:2725:A:C4	26:BA:2727:G:C8	2.84	0.65
26:BA:2748:A:N7	26:BA:2749:A:N1	2.44	0.65
26:BA:2839:G:N2	26:BA:2840:C:C2	2.64	0.65
26:BA:2862:G:N2	26:BA:2863:C:C2	2.64	0.65
26:BA:322:A:C2	26:BA:341:G:C4	2.84	0.65
26:BA:1545:A:O3'	26:BA:545(A):A:H5'	1.96	0.65
26:BA:575:A:H2'	26:BA:576:U:C6	2.31	0.65
26:BA:76:C:HO2'	46:B2:55:ARG:HA	1.59	0.65
26:BA:959:A:H2'	26:BA:960:A:C8	2.31	0.65
26:BA:974:G:C5	45:BV:80:TYR:CZ	2.84	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:42:C:H1'	30:BG:47:GLN:HA	1.78	0.65
27:BD:175:LEU:CD1	27:BD:179:GLU:CB	2.67	0.65
27:BD:93:ILE:O	27:BD:93:ILE:HG23	1.95	0.65
28:BE:176:HIS:O	28:BE:179:ASP:N	2.29	0.65
26:BA:2572:A:N7	28:BE:241:TRP:CG	2.64	0.65
28:BE:45:LYS:HE3	28:BE:303:PRO:CB	2.22	0.65
28:BE:62:ARG:C	28:BE:63:GLU:CG	2.59	0.65
28:BE:70:VAL:HG11	28:BE:295:LEU:HD23	1.78	0.65
29:BF:223:LEU:CA	29:BF:231:ARG:HD2	2.25	0.65
26:BA:1255:U:O4	29:BF:67:GLN:O	2.13	0.65
30:BG:49:PRO:CG	30:BG:72:LYS:C	2.63	0.65
33:BN:10:VAL:CB	33:BN:36:VAL:CA	2.64	0.65
33:BN:23:ALA:CA	33:BN:26:VAL:CG2	2.74	0.65
34:BO:19:VAL:HG13	34:BO:42:THR:C	2.16	0.65
36:BQ:27:GLY:O	36:BQ:28:ILE:CG1	2.44	0.65
43:BR:97:VAL:CA	43:BR:114:VAL:HG13	2.26	0.65
37:BS:30:GLY:O	37:BS:31:LYS:HE3	1.94	0.65
26:BA:1754:C:H5'	38:BT:39:ASN:ND2	2.11	0.65
44:BU:95:LEU:O	44:BU:98:ILE:HD13	1.95	0.65
39:BW:106:ILE:CG2	39:BW:107:LEU:N	2.59	0.65
39:BW:24:ILE:CG2	39:BW:32:ALA:HB1	2.25	0.65
39:BW:47:VAL:O	39:BW:51:LEU:HD13	1.96	0.65
42:BZ:40:ASP:OD2	42:BZ:41:ARG:NH1	2.28	0.65
42:BZ:53:ASP:HB2	42:BZ:62:PHE:O	1.95	0.65
1:AA:989:C:O4'	1:AA:1016:A:H2	1.78	0.65
1:AA:1276:G:N3	1:AA:1282:C:O2'	2.28	0.65
1:AA:1340:A:C1'	2:AV:31:A:O2'	2.44	0.65
1:AA:975:A:C8	1:AA:1357:A:C2	2.85	0.65
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.10	0.65
1:AA:60:A:C2	1:AA:107:G:C2	2.84	0.65
1:AA:789:U:O2	1:AA:792:A:H8	1.77	0.65
1:AA:985:C:H2'	1:AA:986:A:H8	1.61	0.65
7:AD:185:PHE:HE2	7:AD:189:PRO:HD3	1.60	0.65
3:AW:25:C:C4'	3:AW:26:G:C8	2.78	0.65
49:B4:41:PRO:HB3	49:B4:59:PHE:CE1	2.27	0.65
50:B5:10:LYS:HG3	50:B5:11:THR:O	1.95	0.65
26:BA:2056:G:N2	50:B5:5:PRO:HA	2.11	0.65
51:B6:16:ALA:O	51:B6:18:THR:N	2.29	0.65
51:B6:44:ALA:O	51:B6:45:LYS:C	2.34	0.65
26:BA:2225:A:O2'	26:BA:2226:C:OP2	2.13	0.65
26:BA:2273:A:N7	26:BA:2274:A:C5	2.64	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2370:G:C2'	26:BA:2371:G:O5'	2.44	0.65
26:BA:2378:A:C1'	37:BS:101:VAL:HG23	2.26	0.65
26:BA:2411:A:C2	26:BA:2412:A:N7	2.64	0.65
26:BA:2452:C:N4	26:BA:2453:A:C6	2.64	0.65
26:BA:2458:G:N7	26:BA:2490:G:C6	2.64	0.65
26:BA:2497:A:C2'	26:BA:2498:C:OP2	2.44	0.65
26:BA:2574:G:N7	26:BA:2575:C:C5	2.40	0.65
26:BA:2666:C:OP2	26:BA:2667:C:H5	1.78	0.65
26:BA:2689:U:O4'	26:BA:2713:A:C2	2.49	0.65
26:BA:2741:A:OP2	26:BA:2742:C:H5	1.79	0.65
26:BA:2756:U:C2'	26:BA:2757:A:H5'	2.20	0.65
26:BA:76:C:H4'	46:B2:55:ARG:HG3	1.78	0.65
26:BA:783:A:H4'	26:BA:2589:A:P	2.37	0.65
26:BA:971:C:OP2	26:BA:974(A):C:O2	2.15	0.65
27:BD:179:GLU:O	27:BD:180:VAL:HG22	1.96	0.65
26:BA:1566:A:N6	27:BD:212:HIS:CE1	2.64	0.65
28:BE:198:TYR:CD2	28:BE:265:ASN:C	2.69	0.65
28:BE:206:LYS:C	28:BE:257:GLY:O	2.34	0.65
28:BE:70:VAL:CG1	28:BE:296:VAL:CB	2.72	0.65
28:BE:86:TYR:O	28:BE:94:ARG:O	2.14	0.65
29:BF:167:ASP:CB	29:BF:232:LEU:N	2.60	0.65
31:BH:116:PRO:HB2	31:BH:120:LEU:C	2.16	0.65
55:BK:102:ARG:O	55:BK:104:GLN:N	2.29	0.65
55:BK:42:PHE:CE1	55:BK:58:ILE:CD1	2.76	0.65
33:BN:138:THR:CB	33:BN:139:LEU:HD13	2.25	0.65
26:BA:910:A:H3'	36:BQ:17:ARG:NH2	2.10	0.65
43:BR:20:LEU:CD2	43:BR:24:GLN:HG3	2.27	0.65
43:BR:32:GLY:O	43:BR:33:ARG:CB	2.44	0.65
43:BR:45:ARG:HD3	43:BR:97:VAL:CG2	2.25	0.65
26:BA:2376:A:N6	37:BS:109:PRO:CG	2.59	0.65
37:BS:75:THR:O	37:BS:76:GLY:C	2.35	0.65
44:BU:98:ILE:HG22	44:BU:106:PHE:HD1	1.61	0.65
26:BA:1156:A:OP1	44:BU:55:ARG:NH2	2.29	0.65
39:BW:68:ARG:HH21	39:BW:110:LYS:HG3	1.61	0.65
40:BX:13:LYS:N	40:BX:13:LYS:HD3	2.10	0.65
40:BX:25:GLN:N	40:BX:25:GLN:CD	2.47	0.65
40:BX:9:HIS:HB2	40:BX:26:PHE:CA	2.25	0.65
41:BY:19:ARG:C	41:BY:67:LEU:HD22	2.16	0.65
41:BY:30:ASP:CB	41:BY:31:LEU:HD23	2.25	0.65
42:BZ:22:VAL:O	42:BZ:83:PHE:HB2	1.96	0.65
1:AA:1269:A:O4'	1:AA:1326:C:H4'	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:407:G:O5'	1:AA:407:G:H8	1.79	0.65
1:AA:720:C:C5	1:AA:721:G:H2'	2.30	0.65
1:AA:960:U:O2'	1:AA:961:U:P	2.54	0.65
2:AV:43:G:H2'	2:AV:44:A:H8	1.60	0.65
3:AW:9:A:N3	3:AW:45:G:C2'	2.52	0.65
46:B2:6:GLN:CA	46:B2:9:ARG:HB3	2.25	0.65
51:B6:14:SER:HB3	51:B6:52:GLU:CA	2.14	0.65
52:B7:34:ARG:HH11	52:B7:42:LEU:CA	1.97	0.65
26:BA:148:C:N3	26:BA:149:A:N6	2.44	0.65
26:BA:2246:G:N3	26:BA:2247:A:C8	2.64	0.65
26:BA:2498:C:OP1	26:BA:2498:C:H3'	1.97	0.65
26:BA:2677:G:H2'	26:BA:2678:C:O5'	1.96	0.65
26:BA:270(C):C:P	26:BA:365:C:O2'	2.54	0.65
26:BA:2779:U:C4'	26:BA:2781:A:N7	2.59	0.65
26:BA:38:A:H1'	29:BF:46:TYR:CD2	2.32	0.65
26:BA:971:C:N4	26:BA:972:G:H21	1.94	0.65
25:BB:15:A:H5'	25:BB:16:G:N7	2.12	0.65
27:BD:123:ILE:O	27:BD:124:LYS:C	2.34	0.65
27:BD:125:ILE:HG22	27:BD:126:GLY:N	2.11	0.65
27:BD:129:LEU:HD22	27:BD:130:PRO:HD2	1.78	0.65
27:BD:133:ASN:C	27:BD:134:ILE:HG13	2.16	0.65
27:BD:144:GLU:OE1	27:BD:144:GLU:O	2.13	0.65
27:BD:172:ILE:HG13	27:BD:182:MET:CE	2.26	0.65
31:BH:119:GLY:O	31:BH:121:GLU:CD	2.34	0.65
31:BH:84:LYS:O	31:BH:131:ILE:CB	2.45	0.65
32:BI:63:ALA:HA	32:BI:66:LYS:CE	2.26	0.65
32:BI:68:LEU:HD22	32:BI:72:LEU:HD21	1.79	0.65
35:BP:65:ASP:HB2	35:BP:109:LEU:CB	2.06	0.65
35:BP:67:ARG:NH1	35:BP:111:ALA:CA	2.59	0.65
36:BQ:45:GLN:OE1	36:BQ:153:PRO:CG	2.45	0.65
37:BS:34:LEU:HD21	37:BS:102:LEU:HG	1.77	0.65
44:BU:95:LEU:CA	44:BU:98:ILE:HD13	2.25	0.65
45:BV:11:GLN:HE21	45:BV:22:VAL:HG21	1.59	0.65
41:BY:27:LEU:HD23	41:BY:98:VAL:CG1	2.26	0.65
1:AA:1400:C:C5	2:AV:34:G:C2	2.84	0.65
1:AA:551:U:H5'	15:AL:119:LYS:CE	2.23	0.65
1:AA:944:G:C3'	1:AA:945:G:H5'	2.26	0.65
8:AE:29:GLY:HA2	8:AE:46:GLY:O	1.97	0.65
21:AR:70:ILE:O	21:AR:74:ARG:HD2	1.96	0.65
46:B2:4:HIS:O	46:B2:5:VAL:O	2.15	0.65
26:BA:931:G:P	47:B3:27:GLY:CA	2.85	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:35:ARG:HB3	52:B7:35:ARG:HH11	1.61	0.65
53:B8:41:ILE:C	53:B8:43:GLY:N	2.31	0.65
26:BA:1197:G:C2	26:BA:1250:G:C2	2.84	0.65
26:BA:1398:C:H4'	40:BX:23:LYS:NZ	2.12	0.65
26:BA:1559:G:C6	26:BA:1560:G:H4'	2.32	0.65
26:BA:1666:G:O4'	34:BO:67:ARG:NH2	2.29	0.65
26:BA:2015:A:H8	26:BA:2016:U:C6	2.15	0.65
26:BA:530:G:C6	26:BA:2021:C:C2	2.85	0.65
26:BA:2032:G:H21	26:BA:2055:C:H42	1.44	0.65
26:BA:2208:U:H2'	26:BA:2209:C:C6	2.31	0.65
26:BA:222:A:N6	26:BA:232:G:C4	2.64	0.65
26:BA:2242:G:C6	26:BA:2243:U:C5	2.84	0.65
26:BA:2360:A:N7	26:BA:2361:A:H8	1.51	0.65
26:BA:2416:C:C2	26:BA:2417:C:C6	2.84	0.65
26:BA:2731:G:N1	26:BA:2732:G:N1	2.45	0.65
26:BA:2774:C:H2'	26:BA:2775:A:H8	1.62	0.65
26:BA:2788:C:C5'	26:BA:2789:C:P	2.82	0.65
26:BA:85:G:OP2	41:BY:65:VAL:CG2	2.44	0.65
26:BA:987:G:OP2	47:B3:15:TYR:OH	2.14	0.65
27:BD:175:LEU:HB2	27:BD:179:GLU:H	1.60	0.65
27:BD:210:LYS:C	27:BD:213:LYS:HB2	1.83	0.65
27:BD:70:LYS:HZ3	27:BD:70:LYS:HB3	1.62	0.65
27:BD:77:VAL:HG21	27:BD:109:LEU:HB3	1.78	0.65
28:BE:193:PHE:CZ	28:BE:199:ALA:HB2	2.30	0.65
28:BE:73:ILE:O	28:BE:293:TYR:HD2	1.80	0.65
29:BF:140:VAL:HG12	29:BF:140:VAL:O	1.95	0.65
29:BF:223:LEU:C	29:BF:225:PRO:CD	2.65	0.65
29:BF:33:LYS:O	29:BF:34:ALA:C	2.31	0.65
30:BG:38:GLU:OE2	30:BG:71:ALA:HA	1.97	0.65
31:BH:130:ILE:O	31:BH:131:ILE:CG2	2.40	0.65
32:BI:19:LYS:O	32:BI:21:VAL:N	2.28	0.65
33:BN:38:VAL:HG12	33:BN:39:VAL:N	2.10	0.65
33:BN:53:ILE:HG23	33:BN:135:ILE:HD12	1.75	0.65
33:BN:94:GLY:O	33:BN:95:ARG:C	2.34	0.65
34:BO:71:ARG:C	34:BO:73:ASP:H	2.00	0.65
35:BP:62:ALA:HB3	35:BP:105:TYR:C	2.14	0.65
35:BP:94:ARG:HD2	35:BP:120:LEU:HA	1.77	0.65
36:BQ:85:ILE:CA	36:BQ:122:PHE:CD2	2.79	0.65
43:BR:61:HIS:O	43:BR:62:ALA:C	2.34	0.65
26:BA:1156:A:H8	44:BU:55:ARG:HH22	1.42	0.65
44:BU:98:ILE:O	44:BU:100:ALA:CA	2.43	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1057:G:H4'	6:AC:197:GLY:N	2.12	0.65
1:AA:1259:C:HO2'	1:AA:1284:C:C1'	2.09	0.65
1:AA:976:G:C5	1:AA:361(A):C:C4	2.85	0.65
1:AA:983:A:H2	1:AA:984:C:C6	2.15	0.65
1:AA:1375:A:OP1	10:AG:12:LEU:HD21	1.97	0.65
2:AV:47:U:H1'	2:AV:50:U:OP1	1.97	0.65
2:AV:73:A:HO3'	2:AV:74:C:P	2.17	0.65
46:B2:6:GLN:O	46:B2:7:GLU:C	2.34	0.65
26:BA:2433:A:H2	49:B4:32:HIS:CE1	2.14	0.65
49:B4:59:PHE:N	49:B4:62:ARG:NE	2.45	0.65
52:B7:27:GLY:O	52:B7:31:LEU:CG	2.41	0.65
53:B8:31:HIS:O	53:B8:32:GLN:CG	2.44	0.65
53:B8:58:MET:HA	53:B8:61:MET:HG2	1.79	0.65
26:BA:1070:A:C2	55:BK:12:GLN:OE1	2.49	0.65
26:BA:1130:U:H5''	26:BA:2515:C:HO2'	1.60	0.65
26:BA:1279:G:H5'	43:BR:34:ILE:HD11	1.77	0.65
26:BA:1612:C:N1	52:B7:3:ARG:NH2	2.43	0.65
26:BA:2484:G:C2'	26:BA:2485:G:O5'	2.41	0.65
26:BA:2446:G:H21	26:BA:2501:C:N4	1.82	0.65
26:BA:2060:A:H1'	26:BA:2502:G:C4	2.31	0.65
26:BA:2667:C:C2	26:BA:2668:G:C8	2.84	0.65
26:BA:2817:G:C2	26:BA:2818:G:H1'	2.32	0.65
26:BA:326:G:N2	26:BA:337:C:H1'	2.10	0.65
26:BA:472:A:H2'	26:BA:473:G:H5'	1.78	0.65
26:BA:558:G:OP1	33:BN:91:LYS:CB	2.44	0.65
26:BA:566:U:OP2	45:BV:81:ARG:CZ	2.44	0.65
26:BA:792:G:H2'	26:BA:2440:C:N3	2.11	0.65
27:BD:158:GLY:CA	27:BD:194:VAL:HG13	2.10	0.65
27:BD:209:ASN:O	27:BD:212:HIS:HB2	1.96	0.65
28:BE:315:VAL:O	28:BE:316:ARG:C	2.34	0.65
29:BF:107:ARG:O	29:BF:110:ALA:N	2.29	0.65
16:AM:3:ARG:NH1	30:BG:90:LEU:HD22	2.11	0.65
32:BI:124:LEU:HG	32:BI:125:GLY:N	2.10	0.65
55:BK:116:LEU:HD13	55:BK:117:ASN:H	1.57	0.65
55:BK:8:GLN:O	55:BK:9:ILE:HG13	1.97	0.65
33:BN:63:ILE:HD12	33:BN:71:TYR:HE2	1.54	0.65
34:BO:101:PRO:HB2	34:BO:122:ILE:HD12	1.77	0.65
34:BO:112:MET:O	34:BO:113:LYS:C	2.34	0.65
34:BO:17:ARG:NE	34:BO:47:THR:CA	2.60	0.65
35:BP:76:LEU:HG	35:BP:81:VAL:HG23	1.79	0.65
35:BP:92:ASP:CB	35:BP:118:LEU:CD1	2.42	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:122:ALA:O	37:BS:125:ALA:CA	2.45	0.65
44:BU:33:ARG:N	44:BU:35:ALA:HB3	2.11	0.65
44:BU:8:ILE:H	44:BU:11:ARG:NH1	1.88	0.65
40:BX:18:MET:CE	40:BX:25:GLN:CB	2.74	0.65
1:AA:1057:G:O3'	6:AC:197:GLY:HA3	1.96	0.65
1:AA:18:C:C2	1:AA:918:A:C2	2.85	0.65
1:AA:279:A:N7	20:AQ:95:TYR:CE2	2.65	0.65
1:AA:867:G:HO2'	1:AA:873:A:H61	1.44	0.65
6:AC:50:ALA:HB1	6:AC:70:VAL:HG11	1.79	0.65
1:AA:1400:C:N1	2:AV:34:G:N2	2.44	0.65
3:AW:9:A:C4	3:AW:45:G:H2'	2.32	0.65
48:B0:48:GLY:O	48:B0:55:ARG:HA	1.96	0.65
26:BA:988:A:P	47:B3:11:SER:HB2	2.35	0.65
50:B5:44:HIS:CB	50:B5:52:TYR:OH	2.43	0.65
54:B9:7:VAL:HG12	54:B9:25:VAL:CG2	2.25	0.65
26:BA:1062:G:C3'	55:BK:76:SER:OG	2.45	0.65
26:BA:1366:A:H8	26:BA:1366:A:OP2	1.79	0.65
26:BA:2191:G:C2	26:BA:2192:G:H1'	2.31	0.65
26:BA:2247:A:O2'	26:BA:2248:C:C5'	2.45	0.65
26:BA:2317:C:C5	26:BA:2318:G:N7	2.64	0.65
26:BA:2356:C:O2'	26:BA:2357:U:H5'	1.96	0.65
26:BA:2511:U:H2'	26:BA:2512:C:H6	1.62	0.65
26:BA:2573:C:O5'	26:BA:2573:C:H6	1.79	0.65
26:BA:2595:G:H3'	26:BA:2595:G:C8	2.32	0.65
26:BA:2622:C:H2'	26:BA:2623:G:H8	1.61	0.65
26:BA:2633:G:H2'	26:BA:2634:G:H8	1.60	0.65
26:BA:2671:A:C2'	26:BA:2672:G:O5'	2.44	0.65
26:BA:1462:C:C5'	26:BA:2703:C:H5'	2.27	0.65
26:BA:2712:U:C5'	26:BA:2714:G:O5'	2.42	0.65
26:BA:2817:G:C6	26:BA:2818:G:C5	2.85	0.65
26:BA:2870:C:O2	26:BA:2871:C:H6	1.79	0.65
26:BA:1545:A:C4'	26:BA:545(A):A:P	2.84	0.65
25:BB:50:G:P	37:BS:74:PRO:CB	2.85	0.65
27:BD:130:PRO:HA	27:BD:188:ARG:CA	2.25	0.65
28:BE:198:TYR:CE1	28:BE:267:ARG:HB3	2.32	0.65
28:BE:269:ILE:HD11	28:BE:296:VAL:N	2.11	0.65
29:BF:102:LEU:CB	29:BF:107:ARG:HH21	2.04	0.65
29:BF:138:VAL:O	29:BF:139:VAL:CG2	2.44	0.65
30:BG:74:THR:O	30:BG:75:LEU:CG	2.41	0.65
32:BI:133:LEU:H	32:BI:138:THR:CB	2.09	0.65
55:BK:72:THR:CG2	55:BK:114:PRO:HB2	2.27	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:9:ILE:CD1	55:BK:31:HIS:HB2	2.20	0.65
55:BK:93:LYS:CA	55:BK:96:ILE:HD11	2.26	0.65
33:BN:63:ILE:CG2	33:BN:71:TYR:CZ	2.79	0.65
36:BQ:131:ALA:HA	36:BQ:134:PHE:HE2	1.62	0.65
36:BQ:134:PHE:C	36:BQ:137:ARG:HB3	2.16	0.65
43:BR:105:ARG:CZ	43:BR:105:ARG:N	2.59	0.65
26:BA:1223:C:N4	45:BV:87:ARG:HH21	1.93	0.65
39:BW:29:LEU:O	39:BW:30:GLU:C	2.31	0.65
42:BZ:51:LEU:C	42:BZ:51:LEU:CD2	2.62	0.65
1:AA:1004:A:H5''	1:AA:1025:U:C5	2.32	0.65
1:AA:1053:G:H8	1:AA:1053:G:H5''	1.61	0.65
1:AA:15:G:O6	1:AA:1396:A:N6	2.30	0.65
1:AA:815:A:OP2	1:AA:816:A:H8	1.80	0.65
1:AA:586:C:H1'	1:AA:878:G:O2'	1.97	0.65
1:AA:932:C:H5''	10:AG:3:ARG:HD2	1.79	0.65
7:AD:173:TRP:CG	7:AD:189:PRO:HB3	2.32	0.65
1:AA:1325:C:OP1	24:AU:15:ARG:HG2	1.97	0.65
48:B0:23:VAL:HG12	48:B0:26:PHE:HE1	1.60	0.65
48:B0:28:GLY:H	48:B0:60:PHE:HD2	0.71	0.65
47:B3:31:LEU:HD22	47:B3:32:GLN:HG3	1.77	0.65
49:B4:23:GLU:O	49:B4:24:THR:C	2.34	0.65
26:BA:2422:A:OP2	51:B6:4:ASP:OD1	2.14	0.65
52:B7:24:THR:O	52:B7:28:ARG:CG	2.44	0.65
26:BA:1063:G:C5'	55:BK:135:MET:CG	2.75	0.65
26:BA:1843:C:H2'	26:BA:1844:C:C6	2.32	0.65
26:BA:1906:G:C5	26:BA:1929:G:C6	2.85	0.65
26:BA:2093:G:H1'	26:BA:2198:A:C2	2.26	0.65
26:BA:2520:C:C4	26:BA:2567:G:C5	2.85	0.65
26:BA:1129:A:C2	26:BA:2570:G:C8	2.84	0.65
26:BA:2597:G:C5	26:BA:2598:A:N6	2.64	0.65
26:BA:2748:A:H2	26:BA:2758:A:N7	1.95	0.65
26:BA:2783:G:N1	26:BA:2784:C:C4	2.65	0.65
26:BA:2635:C:N3	26:BA:2783:G:N2	2.43	0.65
26:BA:2816:C:H6	26:BA:2816:C:H5'	1.60	0.65
26:BA:2859:G:C2'	26:BA:2860:A:H5'	2.27	0.65
26:BA:987:G:OP1	47:B3:10:LYS:HE3	1.97	0.65
25:BB:59:A:H5''	25:BB:60:C:OP2	1.97	0.65
26:BA:2785:C:O4'	28:BE:99:VAL:HA	1.96	0.65
26:BA:1204:A:O2'	29:BF:230:GLY:N	2.30	0.65
30:BG:24:HIS:CB	30:BG:72:LYS:HD3	2.27	0.65
25:BB:43:C:H1'	30:BG:47:GLN:CD	2.16	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:147:ILE:HA	31:BH:150:VAL:CB	2.27	0.65
32:BI:12:LYS:O	32:BI:14:LYS:N	2.29	0.65
32:BI:28:ASN:O	32:BI:32:LYS:CB	2.44	0.65
32:BI:7:LYS:HG3	32:BI:12:LYS:HA	1.73	0.65
55:BK:15:ALA:CA	55:BK:46:THR:CB	2.73	0.65
34:BO:75:SER:C	34:BO:76:TYR:CD1	2.67	0.65
34:BO:90:ASP:O	34:BO:91:LYS:C	2.34	0.65
35:BP:94:ARG:CD	35:BP:120:LEU:HA	2.27	0.65
36:BQ:76:GLY:O	36:BQ:124:ALA:HA	1.97	0.65
36:BQ:67:ALA:C	36:BQ:71:PHE:HE1	1.97	0.65
36:BQ:85:ILE:HA	36:BQ:122:PHE:CB	2.26	0.65
2:AV:1:G:C5'	36:BQ:97:ASP:OD2	2.44	0.65
26:BA:1287:A:C8	43:BR:104:ARG:CD	2.78	0.65
43:BR:55:ALA:HB1	43:BR:79:LEU:CD2	2.26	0.65
44:BU:104:GLU:OE2	45:BV:46:VAL:HG11	1.96	0.65
44:BU:40:LEU:CD2	45:BV:83:ARG:NH1	2.60	0.65
26:BA:994:C:O2'	44:BU:54:LYS:CA	2.45	0.65
44:BU:68:GLY:O	44:BU:69:ALA:C	2.33	0.65
39:BW:23:LEU:HD13	39:BW:35:ILE:HG21	1.77	0.65
41:BY:31:LEU:HD13	41:BY:101:LEU:HB3	1.77	0.65
41:BY:86:GLU:C	41:BY:87:VAL:HG23	2.16	0.65
42:BZ:172:LEU:CD2	42:BZ:173:PRO:HG2	2.26	0.65
1:AA:1314:C:H41	22:AS:4:SER:C	2.00	0.65
1:AA:60:A:N1	1:AA:107:G:H1'	2.12	0.65
48:B0:33:ALA:HB2	48:B0:65:GLY:HA3	1.79	0.65
46:B2:6:GLN:O	46:B2:9:ARG:CB	2.44	0.65
47:B3:48:GLU:HG2	47:B3:49:LYS:N	2.11	0.65
51:B6:19:GLY:O	51:B6:20:PHE:CB	2.45	0.65
51:B6:32:GLN:CA	51:B6:35:LEU:CD1	2.62	0.65
51:B6:47:HIS:O	51:B6:48:VAL:CB	2.45	0.65
54:B9:14:CYS:N	54:B9:27:CYS:HB2	2.12	0.65
26:BA:1969:A:H4'	26:BA:1970:A:H5'	1.78	0.65
26:BA:2218:G:O2'	27:BD:146:LYS:HE2	1.92	0.65
26:BA:2090:G:C2	26:BA:2230:G:O6	2.48	0.65
26:BA:2297:C:O2'	26:BA:2298:A:H5'	1.95	0.65
26:BA:2637:U:C5	26:BA:2638:G:C5	2.84	0.65
26:BA:2684:U:N3	26:BA:2725:A:N6	2.44	0.65
26:BA:2758:A:OP2	26:BA:2758:A:C2'	2.45	0.65
26:BA:27:G:C2	26:BA:512:G:H2'	2.31	0.65
26:BA:2846:G:C2	26:BA:2847:U:O2	2.50	0.65
26:BA:712(A):A:H8	26:BA:2713:A:OP1	1.80	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:141:HIS:CD2	27:BD:142:ASN:ND2	2.65	0.65
27:BD:129:LEU:C	27:BD:188:ARG:HG2	2.17	0.65
27:BD:198:GLY:C	27:BD:200:THR:H	1.99	0.65
27:BD:76:ARG:HA	27:BD:114:GLU:H	1.61	0.65
27:BD:73:ILE:CB	27:BD:95:TYR:CE2	2.79	0.65
26:BA:1656:C:OP1	28:BE:233:ARG:HB3	1.97	0.65
29:BF:111:VAL:HA	29:BF:220:THR:CG2	2.24	0.65
30:BG:146:LYS:HG3	37:BS:15:GLU:CD	2.16	0.65
32:BI:92:SER:CA	32:BI:122:ARG:HG3	2.09	0.65
32:BI:121:ILE:CG2	32:BI:122:ARG:N	2.42	0.65
33:BN:38:VAL:C	33:BN:39:VAL:HG13	2.11	0.65
36:BQ:49:VAL:HA	36:BQ:121:ASP:CG	2.17	0.65
37:BS:83:LEU:O	37:BS:84:THR:C	2.35	0.65
39:BW:13:SER:HB3	39:BW:16:LYS:HD2	1.78	0.65
39:BW:17:VAL:O	39:BW:20:VAL:CB	2.45	0.65
39:BW:36:LEU:HD13	39:BW:47:VAL:HB	1.79	0.65
40:BX:28:VAL:HG23	40:BX:62:LYS:CB	2.27	0.65
41:BY:28:SER:CB	41:BY:99:THR:HG1	2.06	0.65
41:BY:50:VAL:HG13	41:BY:95:ASN:HB3	1.79	0.65
1:AA:436:C:N3	1:AA:437:U:C4	2.65	0.65
1:AA:811:C:OP1	1:AA:898:G:H5'	1.96	0.65
1:AA:406:G:N2	7:AD:119:GLN:HE22	1.90	0.65
26:BA:855:G:O2'	48:B0:25:LYS:HD3	1.96	0.65
54:B9:4:ARG:HA	54:B9:36:GLN:CA	2.16	0.65
26:BA:990:A:N6	26:BA:1186:G:H1'	2.11	0.65
26:BA:1455:G:O6	26:BA:2705:A:C2	2.50	0.65
26:BA:1472:A:H2'	26:BA:1473:G:C8	2.31	0.65
26:BA:1568:G:H5''	27:BD:60:GLN:CD	2.15	0.65
26:BA:2100:G:C5	26:BA:2190:G:C6	2.83	0.65
26:BA:2242:G:C5	26:BA:2243:U:C5	2.83	0.65
26:BA:2246:G:C2'	26:BA:2247:A:C5'	2.69	0.65
26:BA:2428:G:O2'	26:BA:2429:G:N7	2.27	0.65
26:BA:197:A:N6	26:BA:248:G:H22	1.95	0.65
26:BA:2492:U:O2'	26:BA:2493:U:H5'	1.95	0.65
26:BA:2666:C:H2'	26:BA:2667:C:H5'	1.76	0.65
26:BA:988:A:N6	47:B3:13:ILE:HG21	2.11	0.65
26:BA:1805:U:H5'	27:BD:235:PRO:CG	2.27	0.65
28:BE:45:LYS:HZ3	28:BE:302:GLY:N	1.94	0.65
28:BE:45:LYS:CE	28:BE:303:PRO:C	2.65	0.65
29:BF:56:THR:CB	29:BF:57:PRO:HD2	2.24	0.65
31:BH:113:GLU:OE1	31:BH:114:ILE:CA	2.45	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:89:VAL:O	31:BH:89:VAL:HG12	1.97	0.65
32:BI:65:ALA:HB1	32:BI:134:HIS:CB	2.25	0.65
55:BK:102:ARG:C	55:BK:106:GLU:OE1	2.35	0.65
55:BK:93:LYS:CD	55:BK:96:ILE:CD1	2.49	0.65
33:BN:136:SER:O	33:BN:139:LEU:HD22	1.97	0.65
33:BN:21:ARG:CA	33:BN:24:SER:HB3	2.25	0.65
33:BN:83:ILE:HG13	33:BN:84:ARG:CA	2.20	0.65
34:BO:66:LYS:CG	34:BO:82:ASN:HD21	1.95	0.65
36:BQ:46:VAL:CG1	36:BQ:124:ALA:O	2.42	0.65
36:BQ:75:SER:O	36:BQ:129:ASP:OD2	2.15	0.65
36:BQ:142:LYS:C	36:BQ:142:LYS:HE3	2.17	0.65
37:BS:58:LEU:O	37:BS:59:ALA:C	2.35	0.65
44:BU:40:LEU:HD21	45:BV:83:ARG:NH1	2.12	0.65
40:BX:24:LEU:HD13	40:BX:66:VAL:O	1.96	0.65
41:BY:58:GLU:N	41:BY:97:ARG:HH12	1.94	0.65
42:BZ:172:LEU:O	42:BZ:174:PRO:HD3	1.97	0.65
42:BZ:25:ASN:CA	42:BZ:84:TYR:CE1	2.80	0.65
42:BZ:19:ILE:CA	42:BZ:36:ARG:HG2	2.18	0.65
1:AA:1181:G:O3'	1:AA:1184:G:H5'	1.96	0.65
1:AA:315:A:H1'	1:AA:353:A:N1	2.12	0.65
1:AA:451:A:H61	1:AA:480:U:H2'	1.62	0.65
1:AA:738:C:H4'	9:AF:70:ASP:HA	1.79	0.65
1:AA:1326:C:H5''	24:AU:19:GLY:HA3	1.78	0.65
2:AV:14:A:H2'	2:AV:15:G:C8	2.31	0.65
46:B2:20:LEU:HD22	46:B2:53:ILE:HG23	1.79	0.65
26:BA:2400:G:C3'	51:B6:20:PHE:CE1	2.80	0.65
26:BA:1078:U:C5	26:BA:1088:A:H2	2.15	0.65
26:BA:1135:C:H2'	26:BA:1136:G:H8	1.62	0.65
26:BA:1394:U:H4'	26:BA:1603:A:H4'	1.78	0.65
26:BA:1482:U:H2'	26:BA:1483:G:H4'	1.79	0.65
26:BA:1753:G:OP1	38:BT:51:TRP:HZ3	1.80	0.65
26:BA:1800:C:C6	26:BA:1800:C:C3'	2.79	0.65
26:BA:1996:C:H2'	26:BA:1997:G:C4'	2.27	0.65
26:BA:2009:G:O2'	43:BR:106:GLY:O	2.12	0.65
26:BA:2041:U:C2'	26:BA:2042:A:H5'	2.27	0.65
26:BA:2206:C:H2'	26:BA:2207:C:O4'	1.97	0.65
26:BA:2305:A:C3'	26:BA:2306:C:C5'	2.64	0.65
26:BA:2327:A:C6	26:BA:2328:A:C2	2.85	0.65
26:BA:2358:G:C2'	26:BA:2358:G:N3	2.60	0.65
26:BA:244:A:O2'	35:BP:56:LYS:CB	2.44	0.65
26:BA:2536:G:C5	26:BA:2537:U:C4	2.85	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2657:A:N6	26:BA:2665:A:N7	2.45	0.65
26:BA:270(H):C:N3	26:BA:270(R):G:N2	2.45	0.65
26:BA:2799:A:O2'	26:BA:2802:G:N1	2.26	0.65
26:BA:2840:C:C4	26:BA:2841:C:N4	2.65	0.65
26:BA:2887:U:H2'	26:BA:2888:C:C6	2.22	0.65
26:BA:297:C:C5	26:BA:298:G:C4	2.85	0.65
26:BA:338:G:C5'	41:BY:24:ARG:NH1	2.59	0.65
26:BA:780:G:H2'	26:BA:782:A:C8	2.32	0.65
27:BD:141:HIS:HE1	27:BD:191:VAL:C	1.99	0.65
28:BE:221:LYS:HZ3	28:BE:233:ARG:CG	2.02	0.65
31:BH:104:LEU:CA	31:BH:151:ARG:NH1	2.61	0.65
36:BQ:122:PHE:HB2	36:BQ:136:TRP:CZ2	2.32	0.65
36:BQ:45:GLN:HE22	36:BQ:153:PRO:HB2	0.65	0.65
36:BQ:65:ARG:NE	36:BQ:122:PHE:CZ	2.64	0.65
43:BR:96:ARG:CG	43:BR:115:GLU:HG3	2.27	0.65
43:BR:90:ARG:NH1	43:BR:117:VAL:CG1	2.60	0.65
43:BR:67:LEU:O	43:BR:69:ASP:N	2.30	0.65
37:BS:16:ALA:O	37:BS:17:ARG:CB	2.45	0.65
34:BO:79:PHE:CG	38:BT:22:VAL:CG2	2.80	0.65
44:BU:102:GLU:HB3	45:BV:43:GLU:OE2	1.96	0.65
45:BV:33:VAL:HG23	45:BV:63:HIS:HB2	1.79	0.65
45:BV:35:LEU:CA	45:BV:60:VAL:HG13	2.27	0.65
40:BX:28:VAL:O	40:BX:29:ASP:C	2.35	0.65
42:BZ:159:THR:C	42:BZ:160:LEU:HD13	2.07	0.65
42:BZ:37:LYS:CD	42:BZ:41:ARG:HH12	2.10	0.65
1:AA:1124:G:OP1	13:AJ:35:SER:OG	2.13	0.64
1:AA:1239:A:N6	1:AA:1299:A:N6	2.44	0.64
1:AA:22:G:C1'	1:AA:914:A:N6	2.59	0.64
1:AA:37:U:C4	1:AA:397:A:N1	2.64	0.64
1:AA:948:C:H6	1:AA:948:C:O5'	1.80	0.64
6:AC:157:ILE:HD12	6:AC:164:ARG:HG3	1.79	0.64
13:AJ:38:ILE:HG13	13:AJ:38:ILE:O	1.98	0.64
16:AM:91:ARG:HH22	16:AM:103:THR:HG21	1.62	0.64
1:AA:953:G:C2'	16:AM:125:ARG:HA	2.27	0.64
21:AR:74:ARG:HG2	21:AR:81:PHE:HB3	1.78	0.64
3:AW:14:A:C6	3:AW:22:G:C2	2.85	0.64
48:B0:65:GLY:CA	48:B0:66:LYS:CD	2.70	0.64
46:B2:7:GLU:CG	46:B2:8:ILE:N	2.56	0.64
51:B6:19:GLY:CA	51:B6:42:PRO:CB	2.75	0.64
52:B7:11:LYS:O	52:B7:12:ARG:C	2.36	0.64
26:BA:1759:A:H4'	26:BA:2715:C:O4'	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1819:A:N9	27:BD:177:SER:OG	2.29	0.64
26:BA:1949:G:H2'	26:BA:1950:G:C8	2.32	0.64
26:BA:2195:C:C4	26:BA:2196:C:C5	2.85	0.64
26:BA:2334:G:O4'	37:BS:20:TYR:OH	2.11	0.64
26:BA:2341:G:C5	26:BA:2342:C:N4	2.64	0.64
26:BA:2431:U:O2	26:BA:2433:A:C8	2.50	0.64
26:BA:2064:C:C1'	26:BA:2450:A:N6	2.59	0.64
26:BA:2479:G:OP1	26:BA:2537:U:C1'	2.45	0.64
26:BA:1028:A:H1'	26:BA:2487:G:OP1	1.95	0.64
26:BA:2686:G:C5	26:BA:2687:U:C6	2.85	0.64
26:BA:270:A:H2'	26:BA:270(A):A:H4'	1.79	0.64
26:BA:2752:C:C2'	26:BA:2752:C:O2	2.44	0.64
26:BA:2840:C:C4	26:BA:2841:C:C4	2.85	0.64
26:BA:2842:G:N1	26:BA:2876:G:N1	2.44	0.64
26:BA:2869:G:C6	26:BA:2870:C:C4	2.85	0.64
26:BA:342:G:N1	26:BA:344:G:N2	2.45	0.64
27:BD:169:LYS:H	27:BD:169:LYS:HZ3	1.45	0.64
27:BD:224:VAL:CG1	27:BD:225:ARG:N	2.60	0.64
28:BE:206:LYS:N	28:BE:257:GLY:O	2.30	0.64
28:BE:70:VAL:HG12	28:BE:71:THR:H	0.54	0.64
29:BF:236:THR:O	29:BF:239:ALA:HB3	1.97	0.64
31:BH:32:LEU:HD23	31:BH:33:THR:N	2.12	0.64
32:BI:7:LYS:CG	32:BI:12:LYS:NZ	2.59	0.64
36:BQ:67:ALA:HB1	36:BQ:71:PHE:HE1	1.61	0.64
36:BQ:86:ARG:NH2	36:BQ:123:ILE:HD12	2.11	0.64
36:BQ:88:PHE:CB	36:BQ:90:PHE:CE1	2.60	0.64
36:BQ:94:ARG:HG2	36:BQ:107:LYS:N	2.11	0.64
37:BS:56:ASP:CG	37:BS:57:THR:H	2.01	0.64
37:BS:74:PRO:O	37:BS:75:THR:C	2.35	0.64
44:BU:72:HIS:ND1	44:BU:110:VAL:HG21	2.12	0.64
40:BX:18:MET:HE1	40:BX:25:GLN:CB	2.26	0.64
40:BX:3:ASP:CG	40:BX:4:VAL:H	1.99	0.64
41:BY:108:ARG:O	41:BY:112:LEU:CD2	2.42	0.64
42:BZ:107:GLU:CD	42:BZ:107:GLU:N	2.50	0.64
42:BZ:81:VAL:CG1	42:BZ:82:ASP:H	2.10	0.64
1:AA:929:G:H5'	1:AA:1533:C:H42	1.62	0.64
1:AA:20:U:C4	1:AA:916:G:N1	2.64	0.64
1:AA:409:G:OP2	7:AD:22:LYS:NZ	2.29	0.64
1:AA:991:U:O3'	1:AA:992:U:P	2.56	0.64
1:AA:406:G:C5'	7:AD:5:ILE:HG21	2.27	0.64
1:AA:1400:C:C6	2:AV:34:G:C2	2.84	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:12:MET:CA	51:B6:13:GLU:OE1	2.44	0.64
53:B8:58:MET:O	53:B8:59:LYS:C	2.33	0.64
54:B9:14:CYS:SG	54:B9:32:HIS:CD2	2.90	0.64
26:BA:1184:G:C2'	26:BA:1185:C:H5'	2.26	0.64
26:BA:1252:G:OP2	26:BA:1252:G:H4'	1.97	0.64
26:BA:1492:G:H21	26:BA:1493:C:H42	1.45	0.64
26:BA:1568:G:H3'	27:BD:60:GLN:CD	2.17	0.64
26:BA:1972:A:H2'	26:BA:1973:G:C8	2.31	0.64
26:BA:1996:C:H2'	26:BA:1997:G:C5'	2.28	0.64
26:BA:2082:A:C5	26:BA:2239:G:N1	2.64	0.64
26:BA:2311:A:O2'	30:BG:53:LYS:HG3	1.97	0.64
26:BA:2317:C:C5	26:BA:2318:G:C5	2.85	0.64
26:BA:2404:C:C4	26:BA:2405:G:C5	2.85	0.64
26:BA:2424:C:H5'	26:BA:2425:A:H5'	1.79	0.64
26:BA:2495:G:O2'	36:BQ:101:MET:HE2	1.74	0.64
26:BA:2543:G:C5	26:BA:2544:G:O6	2.43	0.64
26:BA:2563:U:H2'	26:BA:2565:A:OP2	1.97	0.64
26:BA:2572:A:C8	28:BE:241:TRP:CD1	2.85	0.64
26:BA:2574:G:N9	26:BA:2575:C:C6	2.62	0.64
26:BA:1786:A:C2	26:BA:2590:A:H1'	2.29	0.64
26:BA:2045:C:C4	26:BA:2624:G:N2	2.65	0.64
26:BA:2725:A:C2	26:BA:2727:G:C8	2.86	0.64
26:BA:530:G:H3'	26:BA:530:G:OP2	1.97	0.64
25:BB:11:C:N4	37:BS:11:ARG:HH12	1.95	0.64
27:BD:129:LEU:CB	27:BD:130:PRO:CD	2.74	0.64
29:BF:81:PRO:O	29:BF:82:GLN:CB	2.45	0.64
32:BI:77:VAL:CG2	32:BI:142:LYS:O	2.46	0.64
55:BK:100:VAL:CG1	55:BK:101:THR:N	2.52	0.64
55:BK:19:THR:HG22	55:BK:39:CYS:SG	2.38	0.64
55:BK:63:ASP:O	55:BK:64:LYS:CB	2.46	0.64
33:BN:135:ILE:O	33:BN:136:SER:O	2.14	0.64
26:BA:1140:C:C4	33:BN:49:ARG:CZ	2.78	0.64
34:BO:13:ASN:C	34:BO:15:GLY:N	2.51	0.64
34:BO:79:PHE:HD2	34:BO:79:PHE:N	1.95	0.64
35:BP:109:LEU:CD1	35:BP:109:LEU:C	2.65	0.64
36:BQ:47:GLU:OE1	36:BQ:150:ASP:O	2.13	0.64
43:BR:90:ARG:HH12	43:BR:117:VAL:CG1	2.10	0.64
43:BR:65:LEU:O	43:BR:66:VAL:C	2.35	0.64
38:BT:47:ARG:O	38:BT:48:ASN:HB3	1.97	0.64
44:BU:104:GLU:OE1	45:BV:46:VAL:HG12	1.98	0.64
39:BW:69:LEU:HA	39:BW:109:GLU:HA	1.78	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:25:U:C5'	39:BW:79:GLY:CA	2.62	0.64
26:BA:144:C:C4'	40:BX:36:GLU:OE1	2.45	0.64
26:BA:104:U:O4	41:BY:17:HIS:NE2	2.30	0.64
41:BY:24:ARG:O	41:BY:25:ALA:HB2	1.96	0.64
26:BA:440:G:O5'	41:BY:3:GLN:CD	2.36	0.64
42:BZ:140:LYS:N	42:BZ:141:MET:CE	2.60	0.64
42:BZ:46:GLN:O	42:BZ:47:SER:C	2.34	0.64
42:BZ:1:MET:HE2	42:BZ:52:PHE:CD2	2.32	0.64
1:AA:1325:C:P	24:AU:15:ARG:NH2	2.71	0.64
1:AA:529:G:C6	15:AL:49:ASN:ND2	2.65	0.64
1:AA:745:C:H1'	1:AA:836:G:O2'	1.98	0.64
7:AD:12:CYS:HB3	7:AD:31:CYS:O	1.96	0.64
16:AM:91:ARG:HD2	16:AM:97:PRO:O	1.98	0.64
13:AJ:11:PHE:CD2	17:AN:55:GLY:HA3	2.32	0.64
49:B4:16:TYR:O	49:B4:17:GLN:CB	2.43	0.64
51:B6:28:ARG:CG	51:B6:28:ARG:O	2.45	0.64
53:B8:26:LYS:HB2	53:B8:44:LYS:HA	1.78	0.64
54:B9:24:LEU:HD22	54:B9:36:GLN:H	1.61	0.64
26:BA:1520:U:C6	26:BA:1520:U:H3'	2.32	0.64
26:BA:1638:C:OP1	26:BA:2710:C:O2'	2.16	0.64
26:BA:2335:A:O2'	26:BA:2336:A:C8	2.51	0.64
26:BA:2369:A:H2'	26:BA:2370:G:O5'	1.97	0.64
26:BA:2432:A:N1	26:BA:2433:A:C6	2.59	0.64
26:BA:2492:U:H2'	26:BA:2493:U:O5'	1.95	0.64
26:BA:2521:C:O2	26:BA:2522:U:O4'	2.15	0.64
26:BA:2597:G:H2'	26:BA:2598:A:N7	2.05	0.64
26:BA:2625:G:C2'	26:BA:2626:C:H5'	2.27	0.64
26:BA:2633:G:H8	26:BA:2633:G:O5'	1.81	0.64
26:BA:2715:C:N3	26:BA:2716:U:C5	2.65	0.64
26:BA:2734:A:N7	26:BA:2735:G:C4	2.65	0.64
26:BA:2827:C:O2	26:BA:2828:C:C5	2.50	0.64
26:BA:2839:G:C6	26:BA:2840:C:N4	2.64	0.64
26:BA:2869:G:H2'	26:BA:2870:C:H5'	1.79	0.64
26:BA:604:G:N2	26:BA:657:U:H4'	2.11	0.64
26:BA:72:U:C4'	46:B2:57:LYS:NZ	2.60	0.64
26:BA:963:U:H2'	26:BA:964:C:C6	2.32	0.64
28:BE:175:ASP:O	28:BE:177:ALA:N	2.29	0.64
28:BE:256:THR:CA	28:BE:259:HIS:CE1	2.73	0.64
28:BE:269:ILE:HG13	28:BE:297:LYS:HG2	1.76	0.64
28:BE:74:GLU:HB3	28:BE:293:TYR:CE2	2.27	0.64
28:BE:81:VAL:HB	28:BE:100:TRP:HZ3	1.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:22:PHE:CZ	29:BF:115:LEU:HD12	2.23	0.64
26:BA:674:G:O3'	29:BF:69:HIS:C	2.36	0.64
55:BK:116:LEU:CD1	55:BK:117:ASN:N	2.48	0.64
33:BN:75:PRO:O	33:BN:76:ASP:C	2.35	0.64
35:BP:69:ILE:CB	35:BP:73:VAL:HG21	2.27	0.64
36:BQ:108:SER:O	36:BQ:109:VAL:CB	2.45	0.64
36:BQ:134:PHE:O	36:BQ:137:ARG:CB	2.31	0.64
43:BR:100:LEU:HD21	43:BR:113:LEU:CB	2.27	0.64
43:BR:28:LEU:O	43:BR:29:LEU:C	2.36	0.64
37:BS:15:GLU:O	37:BS:16:ALA:HB2	1.85	0.64
44:BU:78:THR:O	44:BU:79:PHE:O	2.14	0.64
39:BW:56:ALA:O	39:BW:57:ASN:C	2.36	0.64
41:BY:23:VAL:HG23	41:BY:67:LEU:HD23	1.75	0.64
42:BZ:112:LEU:CD2	42:BZ:113:VAL:O	2.45	0.64
1:AA:1060:C:H2'	1:AA:1061:G:H8	1.63	0.64
1:AA:1268:A:O2'	24:AU:20:LYS:CA	2.45	0.64
1:AA:175:C:H5''	23:AT:25:ARG:HH21	1.62	0.64
1:AA:369:C:H42	1:AA:392:G:H1	1.44	0.64
1:AA:713:G:H2'	1:AA:714:G:C8	2.33	0.64
1:AA:974:A:H5'	1:AA:975:A:OP1	1.96	0.64
1:AA:409:G:H5'	7:AD:25:ARG:HB2	1.65	0.64
26:BA:2256:G:P	48:B0:5:LYS:HD3	2.23	0.64
48:B0:70:ILE:N	48:B0:70:ILE:HD13	2.12	0.64
46:B2:17:GLU:O	46:B2:20:LEU:N	2.28	0.64
26:BA:2046:G:H1'	50:B5:22:HIS:ND1	2.13	0.64
39:BW:34:ASN:HD22	50:B5:39:LYS:HB2	1.61	0.64
50:B5:46:CYS:HB3	50:B5:47:PRO:CD	2.26	0.64
51:B6:13:GLU:O	51:B6:52:GLU:O	2.16	0.64
26:BA:1598:C:H5'	40:BX:34:LYS:HB2	1.79	0.64
26:BA:1669:A:C8	34:BO:4:GLN:NE2	2.65	0.64
26:BA:1809:A:N6	49:B4:3:LYS:HB3	2.12	0.64
26:BA:2032:G:N2	26:BA:2055:C:H42	1.94	0.64
26:BA:2058:A:H2'	26:BA:2059:A:H8	1.63	0.64
26:BA:2256:G:C2	26:BA:2257:U:O2	2.50	0.64
26:BA:245:G:H5'	35:BP:55:GLN:C	2.13	0.64
26:BA:2548:G:C3'	26:BA:2548:G:C8	2.79	0.64
26:BA:2619:C:C2'	26:BA:2620:C:C5'	2.75	0.64
26:BA:2732:G:OP2	26:BA:2732:G:H8	1.81	0.64
26:BA:2785:C:C4	26:BA:2786:U:C4	2.86	0.64
26:BA:452:G:N2	26:BA:457:A:C2	2.65	0.64
26:BA:687:C:N3	26:BA:787:U:O3'	2.31	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:72:VAL:O	28:BE:73:ILE:HD12	1.96	0.64
29:BF:91:PRO:HB2	29:BF:92:PRO:HD3	0.66	0.64
30:BG:28:GLY:N	30:BG:69:ILE:HD13	2.09	0.64
30:BG:25:MET:O	30:BG:71:ALA:HB3	1.97	0.64
32:BI:121:ILE:N	32:BI:121:ILE:HD12	2.12	0.64
32:BI:80:PRO:O	32:BI:148:GLN:HG3	1.96	0.64
55:BK:112:LYS:C	55:BK:114:PRO:CD	2.65	0.64
55:BK:72:THR:HG1	55:BK:115:ASP:HB3	1.62	0.64
26:BA:1059:G:H1'	55:BK:127:ILE:CD1	2.27	0.64
26:BA:636:G:OP2	35:BP:126:SER:HA	1.98	0.64
36:BQ:85:ILE:CA	36:BQ:122:PHE:HD2	2.10	0.64
36:BQ:127:ASN:HB2	36:BQ:128:PRO:HD2	1.80	0.64
36:BQ:88:PHE:O	36:BQ:90:PHE:CD1	2.51	0.64
2:AV:1:G:O2'	36:BQ:98:GLY:O	2.15	0.64
37:BS:103:ASP:OD2	37:BS:105:GLY:N	2.27	0.64
26:BA:2296:U:N3	37:BS:16:ALA:CB	2.49	0.64
37:BS:61:ALA:HB1	37:BS:84:THR:O	1.97	0.64
40:BX:28:VAL:HG13	40:BX:64:ALA:HB3	1.78	0.64
41:BY:43:ASN:ND2	41:BY:112:LEU:CD1	2.61	0.64
42:BZ:34:LEU:CD1	42:BZ:39:PHE:CZ	2.60	0.64
42:BZ:54:ILE:CG2	42:BZ:55:THR:N	2.59	0.64
1:AA:1030:C:HO3'	1:AA:30(A):G:P	2.20	0.64
11:AH:18:ARG:HG3	11:AH:18:ARG:NH1	2.13	0.64
3:AW:1:G:H22	3:AW:2:C:H41	1.24	0.64
48:B0:37:LEU:C	48:B0:40:GLN:HG3	2.18	0.64
48:B0:58:THR:O	48:B0:59:LEU:C	2.35	0.64
49:B4:46:GLU:OE2	49:B4:55:ARG:N	2.30	0.64
51:B6:8:ILE:O	51:B6:28:ARG:HA	1.97	0.64
51:B6:12:MET:CE	51:B6:54:LYS:O	2.46	0.64
52:B7:43:THR:HA	52:B7:46:ASP:OD2	1.95	0.64
26:BA:2067:G:H1	26:BA:2443:C:H42	1.43	0.64
26:BA:2411:A:O2'	26:BA:2412:A:H5'	1.98	0.64
26:BA:2504:U:H6	26:BA:2504:U:C5'	2.10	0.64
26:BA:2550:G:C6	26:BA:2559:C:N3	2.66	0.64
26:BA:2699:C:O2	26:BA:2699:C:C2'	2.42	0.64
26:BA:2740:A:N1	26:BA:2764:A:C4	2.42	0.64
26:BA:610:C:H2'	26:BA:611:C:C6	2.31	0.64
28:BE:222:ARG:O	28:BE:227:ALA:HA	1.97	0.64
28:BE:199:ALA:HA	28:BE:312:ARG:C	2.18	0.64
28:BE:314:ALA:O	28:BE:315:VAL:O	2.15	0.64
29:BF:147:LEU:HD11	29:BF:156:LEU:CD1	2.02	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:49:PRO:CB	30:BG:72:LYS:N	2.52	0.64
30:BG:75:LEU:O	30:BG:80:ALA:HB2	1.97	0.64
31:BH:95:ALA:H	31:BH:127:GLN:HE21	1.44	0.64
32:BI:88:ARG:CD	32:BI:122:ARG:HB3	2.27	0.64
33:BN:101:VAL:O	33:BN:102:ARG:CG	2.46	0.64
33:BN:82:THR:O	33:BN:83:ILE:C	2.36	0.64
35:BP:129:ALA:O	35:BP:131:GLU:N	2.30	0.64
36:BQ:35:ASN:HB3	36:BQ:75:SER:HB2	1.78	0.64
37:BS:109:PRO:HB2	37:BS:116:PHE:CZ	2.33	0.64
37:BS:128:ASP:O	37:BS:129:ILE:HG12	1.97	0.64
37:BS:56:ASP:OD1	37:BS:57:THR:N	2.30	0.64
44:BU:28:ARG:C	44:BU:31:GLN:H	1.97	0.64
44:BU:53:LYS:CA	44:BU:56:ASP:OD2	2.43	0.64
26:BA:994:C:N1	44:BU:53:LYS:HD2	2.13	0.64
44:BU:61:TRP:O	44:BU:65:ILE:HG13	1.90	0.64
41:BY:4:PRO:O	41:BY:5:ASP:CB	2.45	0.64
36:BQ:36:ASN:CB	42:BZ:114:ASP:O	2.45	0.64
42:BZ:3:LEU:CD2	42:BZ:38:ALA:CB	2.70	0.64
1:AA:745:C:H5'	1:AA:851:G:H1'	1.80	0.64
14:AK:18:ARG:HH21	14:AK:37:GLY:HA2	1.62	0.64
20:AQ:11:VAL:HB	20:AQ:88:TYR:CE2	2.33	0.64
2:AV:1:G:O2'	36:BQ:98:GLY:C	2.35	0.64
48:B0:48:GLY:HA2	48:B0:55:ARG:HA	1.78	0.64
48:B0:61:ALA:HB2	48:B0:80:SER:CA	2.28	0.64
48:B0:66:LYS:CD	48:B0:66:LYS:N	2.38	0.64
49:B4:14:ILE:CG2	49:B4:16:TYR:CD1	2.80	0.64
49:B4:41:PRO:HG2	49:B4:57:ASP:CG	2.17	0.64
52:B7:11:LYS:CA	52:B7:11:LYS:HE3	2.28	0.64
54:B9:11:CYS:H	54:B9:32:HIS:HE2	1.46	0.64
26:BA:1027:A:C6	26:BA:1126:A:C4	2.86	0.64
26:BA:1324:G:C1'	26:BA:1616:A:H62	2.09	0.64
26:BA:1914:C:P	26:BA:1916:A:H62	2.21	0.64
26:BA:2239:G:C4	26:BA:2240:C:C5	2.86	0.64
26:BA:2662:A:C2	26:BA:2663:G:O4'	2.50	0.64
26:BA:2725:A:N3	26:BA:2727:G:C8	2.65	0.64
26:BA:2834:G:H3'	26:BA:2834:G:H8	1.63	0.64
26:BA:2843:G:C5	26:BA:2844:G:N7	2.66	0.64
26:BA:322:A:N3	26:BA:341:G:C5	2.66	0.64
26:BA:581:C:OP1	44:BU:33:ARG:NH1	2.28	0.64
26:BA:60:G:N3	26:BA:74:A:C6	2.66	0.64
25:BB:50:G:P	37:BS:74:PRO:CG	2.62	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:7:G:O2'	37:BS:37:ARG:CG	2.44	0.64
27:BD:90:ILE:HG23	27:BD:91:ALA:N	2.12	0.64
28:BE:268:LEU:C	28:BE:297:LYS:HE2	2.18	0.64
28:BE:268:LEU:HD23	28:BE:295:LEU:O	1.97	0.64
30:BG:20:LYS:HG2	30:BG:76:ARG:HG2	1.80	0.64
2:AV:56:C:C2'	30:BG:56:ARG:CZ	2.75	0.64
31:BH:122:ILE:HG12	31:BH:132:VAL:HG22	1.78	0.64
31:BH:73:ASN:HB3	31:BH:137:LYS:HZ1	0.94	0.64
32:BI:133:LEU:HD12	32:BI:139:ALA:CB	2.12	0.64
55:BK:11:LEU:CD1	55:BK:28:LEU:CD1	2.75	0.64
33:BN:40:ASN:O	33:BN:41:ALA:C	2.35	0.64
33:BN:49:ARG:C	33:BN:53:ILE:HB	2.17	0.64
33:BN:56:LYS:H	33:BN:56:LYS:HD3	1.61	0.64
33:BN:60:ARG:HA	33:BN:63:ILE:HD12	1.79	0.64
33:BN:58:GLU:C	33:BN:61:VAL:HB	2.18	0.64
34:BO:63:VAL:HG13	34:BO:102:VAL:HG13	0.64	0.64
35:BP:113:GLN:HB2	35:BP:115:ARG:CZ	2.27	0.64
44:BU:40:LEU:O	44:BU:43:ALA:HB3	1.98	0.64
40:BX:33:SER:O	40:BX:37:VAL:N	2.26	0.64
42:BZ:156:GLU:CG	42:BZ:157:GLY:N	2.46	0.64
1:AA:110:C:O2'	19:AP:25:ARG:HA	1.98	0.64
1:AA:1210:C:H4'	1:AA:1214:C:N4	2.12	0.64
1:AA:126:G:OP1	1:AA:633:G:N2	2.30	0.64
1:AA:1278:U:H5''	1:AA:1279:A:O4'	1.94	0.64
1:AA:674:G:H2'	1:AA:675:A:C8	2.32	0.64
1:AA:801:U:H2'	1:AA:802:A:H8	1.62	0.64
12:AI:103:THR:HG22	12:AI:105:ASP:H	1.62	0.64
15:AL:70:ILE:HG12	15:AL:100:ILE:HD11	1.79	0.64
46:B2:49:LEU:O	46:B2:53:ILE:HG13	1.98	0.64
47:B3:48:GLU:O	47:B3:51:ALA:CA	2.46	0.64
49:B4:46:GLU:N	49:B4:53:GLU:O	2.31	0.64
53:B8:30:ARG:CG	53:B8:31:HIS:N	2.61	0.64
26:BA:2349:G:OP2	53:B8:42:ARG:CZ	2.45	0.64
26:BA:1059:G:C1'	55:BK:127:ILE:HD13	2.28	0.64
26:BA:1208:C:H2'	26:BA:1209:G:H8	1.63	0.64
26:BA:1598:C:H5''	40:BX:34:LYS:HG3	1.62	0.64
26:BA:176:G:H21	26:BA:177:G:H1'	1.63	0.64
26:BA:2097:C:H42	26:BA:2192:G:H1	1.46	0.64
26:BA:2212:A:C1'	26:BA:2213:U:C5	2.81	0.64
26:BA:2226:C:O2	26:BA:2227:A:C2'	2.46	0.64
26:BA:2227:A:C8	26:BA:2227:A:O5'	2.47	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2234:G:N1	26:BA:2235:G:N7	2.42	0.64
26:BA:2236:C:C2'	26:BA:2237:G:H5''	2.28	0.64
26:BA:2256:G:H2'	26:BA:2257:U:H5'	1.80	0.64
26:BA:2263:C:C3'	26:BA:2264:C:H5'	2.26	0.64
26:BA:2520:C:C6	26:BA:2567:G:N9	2.66	0.64
26:BA:2637:U:O2	26:BA:2782:G:C2	2.51	0.64
26:BA:2737:G:C6	26:BA:2767:C:N4	2.57	0.64
26:BA:2774:C:OP2	28:BE:260:GLN:NE2	2.30	0.64
26:BA:2853:C:C3'	26:BA:2853:C:C6	2.81	0.64
26:BA:326:G:H2'	26:BA:327:G:C8	2.32	0.64
26:BA:1545:A:H3'	26:BA:545(A):A:O4'	1.97	0.64
26:BA:854:G:H1	26:BA:923:C:N4	1.94	0.64
27:BD:60:GLN:N	27:BD:62:ARG:HH11	1.95	0.64
28:BE:204:VAL:O	28:BE:205:THR:C	2.34	0.64
29:BF:105:LYS:O	29:BF:106:GLU:C	2.36	0.64
29:BF:6:TYR:HE1	29:BF:139:VAL:CB	2.08	0.64
29:BF:155:SER:O	29:BF:158:GLU:OE2	2.16	0.64
29:BF:36:ARG:N	29:BF:39:GLN:NE2	2.46	0.64
30:BG:105:SER:OG	30:BG:131:THR:HG21	1.96	0.64
33:BN:12:VAL:HG13	33:BN:13:ASP:N	1.95	0.64
33:BN:54:VAL:HG11	33:BN:138:THR:CB	2.28	0.64
33:BN:27:ALA:HB1	33:BN:30:ALA:HB3	1.79	0.64
33:BN:38:VAL:C	33:BN:39:VAL:HG22	2.17	0.64
33:BN:93:ARG:O	33:BN:94:GLY:C	2.35	0.64
34:BO:105:GLU:O	34:BO:108:ASP:N	2.31	0.64
34:BO:23:LYS:HG3	34:BO:24:VAL:N	2.11	0.64
36:BQ:91:HIS:H	36:BQ:111:THR:CG2	2.09	0.64
36:BQ:143:VAL:CG2	36:BQ:144:THR:H	2.06	0.64
43:BR:43:GLU:O	43:BR:44:LEU:C	2.35	0.64
43:BR:45:ARG:O	43:BR:49:ASP:HB2	1.98	0.64
45:BV:83:ARG:O	45:BV:84:THR:CG2	2.46	0.64
45:BV:93:ILE:O	45:BV:95:ILE:CD1	2.45	0.64
39:BW:17:VAL:C	39:BW:20:VAL:HG23	2.18	0.64
40:BX:25:GLN:CA	40:BX:26:PHE:CD1	2.81	0.64
41:BY:9:LYS:HE3	41:BY:13:ARG:HH12	1.59	0.64
1:AA:1326:C:C5	24:AU:6:ARG:NH2	2.66	0.64
1:AA:22:G:H4'	1:AA:885:G:C8	2.32	0.64
1:AA:65:U:H4'	1:AA:66:G:H5'	1.78	0.64
1:AA:862:C:H1'	1:AA:874:G:H5''	1.78	0.64
21:AR:46:GLU:HB3	21:AR:85:LEU:HD13	1.78	0.64
47:B3:6:VAL:CG2	47:B3:54:VAL:HG23	2.26	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B5:16:ARG:O	50:B5:19:ARG:CB	2.45	0.64
50:B5:46:CYS:H	50:B5:49:CYS:HB2	1.63	0.64
26:BA:1742:C:H2'	26:BA:1743:G:O4'	1.98	0.64
26:BA:2320:A:H61	37:BS:13:ARG:C	1.83	0.64
26:BA:2452:C:N4	26:BA:2453:A:N6	2.46	0.64
26:BA:2623:G:H5'	26:BA:2826:A:O2'	1.97	0.64
26:BA:85:G:P	41:BY:65:VAL:CG2	2.84	0.64
27:BD:166:LYS:O	27:BD:167:GLU:OE1	2.15	0.64
26:BA:1789:A:H5''	27:BD:224:VAL:HG12	1.78	0.64
28:BE:44:TYR:CD2	28:BE:307:LEU:C	2.70	0.64
28:BE:70:VAL:C	28:BE:71:THR:HG23	2.18	0.64
29:BF:145:GLU:HG3	29:BF:196:THR:HG21	1.79	0.64
29:BF:223:LEU:C	29:BF:231:ARG:HD2	2.17	0.64
29:BF:236:THR:O	29:BF:239:ALA:CA	2.46	0.64
31:BH:67:THR:O	31:BH:70:LEU:CB	2.46	0.64
32:BI:145:VAL:O	32:BI:146:THR:HB	1.97	0.64
55:BK:113:MET:N	55:BK:114:PRO:HD2	2.13	0.64
55:BK:38:PHE:CZ	55:BK:66:PHE:O	2.51	0.64
34:BO:101:PRO:HA	34:BO:120:GLU:O	1.97	0.64
26:BA:2727:G:H4'	34:BO:70:ARG:CZ	2.28	0.64
36:BQ:35:ASN:N	36:BQ:75:SER:HA	2.13	0.64
36:BQ:51:GLU:N	36:BQ:51:GLU:CD	2.51	0.64
43:BR:20:LEU:CD2	43:BR:24:GLN:CD	2.66	0.64
43:BR:89:ASP:OD1	43:BR:90:ARG:HG3	1.95	0.64
39:BW:72:LYS:HB3	39:BW:106:ILE:HG21	1.80	0.64
39:BW:23:LEU:CD1	39:BW:35:ILE:CG2	2.76	0.64
39:BW:39:THR:CA	50:B5:28:PRO:HG3	2.27	0.64
40:BX:75:GLN:O	40:BX:77:VAL:N	2.31	0.64
1:AA:1014:A:N1	22:AS:34:TRP:CZ3	2.66	0.64
6:AC:91:LEU:HD11	6:AC:99:VAL:CG2	2.22	0.64
14:AK:99:GLN:HG2	14:AK:105:VAL:HG11	1.78	0.64
46:B2:27:LEU:O	46:B2:30:ALA:HB3	1.98	0.64
26:BA:17:G:P	50:B5:13:LYS:NZ	2.65	0.64
51:B6:21:TYR:CE1	51:B6:43:VAL:HG21	2.33	0.64
26:BA:1202:C:C2	26:BA:1243:G:N2	2.64	0.64
26:BA:1943:U:C1'	26:BA:1945:G:C5'	2.74	0.64
26:BA:2065:C:N4	26:BA:2445:G:N1	2.40	0.64
26:BA:2372:G:C2	26:BA:2373:G:C5	2.86	0.64
26:BA:2392:A:C8	26:BA:2393:A:N7	2.65	0.64
26:BA:2410:G:N9	26:BA:2411:A:N7	2.46	0.64
26:BA:2428:G:C3'	26:BA:2428:G:C8	2.80	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2454:G:O2'	26:BA:2455:G:C5'	2.46	0.64
26:BA:2511:U:H2'	26:BA:2512:C:C5'	2.27	0.64
26:BA:2561:A:C8	26:BA:2561:A:H3'	2.32	0.64
26:BA:2576:G:OP1	26:BA:2576:G:C3'	2.43	0.64
26:BA:2603:G:H2'	26:BA:2604:U:O5'	1.97	0.64
26:BA:2611:U:C3'	26:BA:2611:U:H6	2.11	0.64
26:BA:2717:G:C6	26:BA:2718:G:N7	2.66	0.64
26:BA:2741:A:C2'	26:BA:2742:C:C5'	2.57	0.64
26:BA:343:C:N3	26:BA:344:G:C2	2.66	0.64
26:BA:532:A:C3'	26:BA:533:G:O4'	2.44	0.64
26:BA:930:U:H2'	26:BA:931:G:H1'	1.79	0.64
28:BE:102:ASP:CG	28:BE:104:PHE:HE1	1.96	0.64
28:BE:212:GLY:O	28:BE:214:VAL:N	2.31	0.64
28:BE:228:ARG:O	28:BE:229:GLN:C	2.35	0.64
28:BE:93:GLN:O	28:BE:94:ARG:HG3	1.98	0.64
30:BG:21:VAL:HG22	30:BG:132:VAL:HG23	1.80	0.64
30:BG:11:HIS:O	30:BG:15:GLU:HG3	1.98	0.64
30:BG:95:THR:HG22	30:BG:96:SER:H	1.62	0.64
31:BH:10:ILE:CD1	31:BH:49:ILE:HG12	2.25	0.64
26:BA:1036:G:OP1	31:BH:58:LYS:HD2	1.98	0.64
31:BH:87:GLU:OE2	31:BH:162:ARG:CB	2.41	0.64
33:BN:15:ARG:CG	33:BN:43:ARG:CD	2.71	0.64
33:BN:41:ALA:HB1	33:BN:75:PRO:HB3	1.80	0.64
33:BN:94:GLY:O	33:BN:95:ARG:O	2.16	0.64
35:BP:94:ARG:HG2	35:BP:120:LEU:HD23	1.71	0.64
26:BA:2250:G:H5''	36:BQ:102:ARG:HD3	1.79	0.64
36:BQ:51:GLU:CA	36:BQ:118:ALA:HB2	2.17	0.64
37:BS:33:ARG:CB	37:BS:35:VAL:CG2	2.73	0.64
38:BT:6:CYS:SG	38:BT:31:PHE:CD2	2.91	0.64
45:BV:59:GLU:OE2	45:BV:99:GLN:HG2	1.98	0.64
39:BW:24:ILE:CB	39:BW:32:ALA:HB1	2.28	0.64
41:BY:103:LEU:CD2	41:BY:108:ARG:HB3	2.21	0.64
41:BY:29:ALA:O	41:BY:30:ASP:C	2.34	0.64
41:BY:31:LEU:O	41:BY:34:GLU:HG3	1.92	0.64
41:BY:46:ASP:N	41:BY:62:VAL:CB	2.61	0.64
1:AA:1539:C:OP1	21:AR:54:ARG:HD3	1.98	0.64
1:AA:193:C:O2'	23:AT:64:ASP:HB2	1.98	0.64
1:AA:940:C:H2'	1:AA:941:G:C8	2.33	0.64
13:AJ:64:GLU:HB3	17:AN:59:ALA:HB2	1.80	0.64
48:B0:36:ILE:H	48:B0:68:VAL:CG2	2.10	0.64
49:B4:11:PRO:O	49:B4:12:CYS:HB2	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1364:G:C3'	49:B4:3:LYS:NZ	2.58	0.64
49:B4:9:ALA:O	49:B4:10:VAL:HG23	1.98	0.64
26:BA:2421:G:P	51:B6:2:ALA:O	2.56	0.64
51:B6:2:ALA:O	51:B6:4:ASP:OD1	2.16	0.64
26:BA:1189:A:OP2	26:BA:1190:G:N7	2.31	0.64
26:BA:1274:A:C5	26:BA:1302:A:H2	2.16	0.64
26:BA:1456:G:H1	26:BA:2704:C:H42	1.46	0.64
26:BA:1559:G:N1	26:BA:1560:G:H4'	2.13	0.64
26:BA:1697:G:C3'	26:BA:1698:A:H5'	2.27	0.64
26:BA:2252:G:O5'	26:BA:2252:G:H8	1.80	0.64
26:BA:2313:C:C4	26:BA:2314:C:C4	2.85	0.64
26:BA:2436:G:N1	26:BA:2437:U:N3	2.45	0.64
26:BA:2515:C:H2'	26:BA:2515:C:O2	1.95	0.64
26:BA:2605:U:C2'	26:BA:2606:C:C5'	2.76	0.64
26:BA:2717:G:C4	26:BA:2718:G:N7	2.60	0.64
26:BA:2737:G:C2	26:BA:2738:A:C5	2.85	0.64
26:BA:2839:G:N1	26:BA:2840:C:C4	2.65	0.64
26:BA:2840:C:H2'	26:BA:2841:C:H6	1.59	0.64
26:BA:397:G:H5''	49:B4:59:PHE:HZ	1.61	0.64
25:BB:24:G:N7	25:BB:56:G:C4	2.66	0.64
26:BA:1566:A:C2	27:BD:212:HIS:ND1	2.66	0.64
27:BD:65:ASP:OD1	27:BD:66:PHE:CA	2.44	0.64
27:BD:81:GLU:O	27:BD:82:TYR:O	2.16	0.64
29:BF:1:MET:O	29:BF:18:LEU:HG	1.97	0.64
31:BH:102:LEU:HD13	31:BH:122:ILE:HD13	1.79	0.64
31:BH:87:GLU:CG	31:BH:162:ARG:O	2.34	0.64
31:BH:41:THR:HB	31:BH:52:THR:OG1	1.97	0.64
32:BI:95:SER:C	32:BI:98:ILE:CB	2.53	0.64
55:BK:67:THR:O	55:BK:68:PHE:HB2	1.98	0.64
35:BP:64:ILE:CD1	35:BP:106:VAL:CG1	2.73	0.64
43:BR:33:ARG:HB2	43:BR:115:GLU:HB3	1.77	0.64
44:BU:88:ILE:HB	45:BV:52:GLY:HA2	1.79	0.64
40:BX:26:PHE:HD1	40:BX:26:PHE:N	1.94	0.64
41:BY:101:LEU:O	41:BY:102:ASP:C	2.36	0.64
41:BY:46:ASP:N	41:BY:62:VAL:HG11	2.12	0.64
41:BY:74:VAL:CB	41:BY:77:VAL:CG2	2.70	0.64
41:BY:58:GLU:H	41:BY:97:ARG:NH1	1.96	0.64
1:AA:1095:U:OP1	1:AA:1108:G:N2	2.31	0.63
1:AA:522:C:H2'	1:AA:523:A:H8	1.62	0.63
16:AM:15:VAL:O	16:AM:19:LEU:HG	1.98	0.63
26:BA:2262:U:H5	48:B0:14:ARG:NH1	1.94	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:23:GLU:CD	49:B4:29:PRO:CG	2.57	0.63
26:BA:2624:G:H1'	50:B5:22:HIS:HE2	1.62	0.63
51:B6:19:GLY:CA	51:B6:44:ALA:HB2	2.24	0.63
51:B6:41:ASP:CB	51:B6:46:LYS:NZ	2.47	0.63
26:BA:1129:A:H2	26:BA:2570:G:C8	2.16	0.63
26:BA:2299:G:H2'	26:BA:2300:G:H8	1.63	0.63
26:BA:2353:G:H1	26:BA:2364:C:H41	1.31	0.63
26:BA:2374:C:H2'	26:BA:2375:G:C8	2.33	0.63
26:BA:2386:C:H2'	26:BA:2387:U:C6	2.34	0.63
26:BA:2507:C:C5	26:BA:2508:G:N7	2.66	0.63
26:BA:2531:A:H2	26:BA:2658:C:H1'	1.59	0.63
26:BA:2700:C:H2'	26:BA:2701:C:O4'	1.97	0.63
26:BA:2881:C:C5	26:BA:2882:A:N7	2.66	0.63
26:BA:389:G:O6	35:BP:54:PRO:HB3	1.98	0.63
26:BA:606:U:OP1	29:BF:104:ASP:N	2.31	0.63
25:BB:12:C:N3	37:BS:10:MET:HE1	2.11	0.63
26:BA:2218:G:C2'	27:BD:146:LYS:HE3	2.28	0.63
27:BD:175:LEU:HD12	27:BD:179:GLU:CA	2.27	0.63
26:BA:1568:G:C5'	27:BD:60:GLN:CG	2.71	0.63
27:BD:75:GLY:HA3	27:BD:115:ILE:C	2.17	0.63
28:BE:201:VAL:HG13	28:BE:310:PHE:C	2.18	0.63
28:BE:222:ARG:CD	28:BE:232:ARG:O	2.45	0.63
29:BF:150:THR:CB	29:BF:207:LEU:HD21	2.28	0.63
29:BF:211:ASP:O	29:BF:211:ASP:CG	2.36	0.63
30:BG:49:PRO:CG	30:BG:73:VAL:HG23	2.28	0.63
30:BG:93:LEU:CD2	30:BG:97:GLN:OE1	2.36	0.63
31:BH:53:ARG:CB	31:BH:56:ASP:OD1	2.21	0.63
55:BK:102:ARG:O	55:BK:103:LYS:C	2.36	0.63
34:BO:43:VAL:HG11	34:BO:54:LYS:HA	1.80	0.63
34:BO:85:VAL:O	34:BO:87:ILE:CD1	2.45	0.63
36:BQ:94:ARG:CG	36:BQ:107:LYS:H	2.10	0.63
36:BQ:12:PRO:CB	36:BQ:20:ILE:CD1	2.73	0.63
36:BQ:31:PHE:O	36:BQ:85:ILE:HD11	1.99	0.63
43:BR:19:ALA:O	43:BR:20:LEU:O	2.15	0.63
43:BR:44:LEU:HD13	43:BR:48:VAL:HG21	0.67	0.63
37:BS:27:LEU:O	37:BS:28:LYS:C	2.36	0.63
44:BU:65:ILE:HD11	44:BU:96:ALA:HB2	1.76	0.63
39:BW:39:THR:OG1	39:BW:40:ASN:N	2.31	0.63
39:BW:6:ILE:HG12	39:BW:7:ALA:H	1.63	0.63
40:BX:25:GLN:N	40:BX:26:PHE:CE1	2.66	0.63
40:BX:6:LYS:HZ2	40:BX:29:ASP:CA	2.08	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:71:VAL:HG22	41:BY:93:THR:CA	2.28	0.63
42:BZ:3:LEU:O	42:BZ:56:VAL:CG2	2.46	0.63
1:AA:1286:A:H62	1:AA:1354:C:H5''	1.62	0.63
1:AA:20:U:O4'	1:AA:572:A:C6	2.52	0.63
1:AA:21:G:C2	1:AA:915:A:N6	2.66	0.63
1:AA:1193:G:H1'	8:AE:25:ARG:NH2	2.13	0.63
2:AV:57:G:H2'	2:AV:58:A:H5''	1.80	0.63
47:B3:26:LEU:HD21	47:B3:46:ASN:ND2	2.11	0.63
49:B4:21:VAL:O	49:B4:22:MET:HB2	1.97	0.63
50:B5:56:GLN:C	50:B5:57:VAL:HG23	2.18	0.63
52:B7:30:ILE:N	52:B7:33:ARG:HD2	2.11	0.63
26:BA:1774:C:O3'	26:BA:1979:C:O2'	2.10	0.63
26:BA:790:C:OP1	26:BA:1781:C:N4	2.31	0.63
26:BA:2436:G:C2	26:BA:2437:U:N1	2.66	0.63
26:BA:2453:A:O3'	26:BA:2572:A:O2'	2.15	0.63
26:BA:2478:A:N7	26:BA:2479:G:N7	2.46	0.63
26:BA:2604:U:H2'	26:BA:2605:U:C5	2.33	0.63
26:BA:2616:C:H2'	26:BA:2617:C:C6	2.32	0.63
26:BA:2676:C:H3'	26:BA:2676:C:H6	1.61	0.63
26:BA:2801:A:C2	26:BA:2895:U:C1'	2.76	0.63
27:BD:103:ILE:HG12	27:BD:104:ILE:HD12	0.63	0.63
27:BD:105:ALA:H	27:BD:106:PRO:HD3	1.61	0.63
26:BA:1799:G:H21	27:BD:153:LEU:HD11	1.62	0.63
28:BE:206:LYS:C	28:BE:257:GLY:CA	2.67	0.63
28:BE:217:TRP:CE2	28:BE:251:PRO:HB3	2.33	0.63
31:BH:123:GLU:O	31:BH:125:PRO:HD2	1.99	0.63
31:BH:57:GLU:O	31:BH:58:LYS:C	2.37	0.63
32:BI:79:ILE:HD12	32:BI:79:ILE:N	2.14	0.63
34:BO:17:ARG:C	34:BO:18:GLU:HG3	2.18	0.63
35:BP:106:VAL:HG23	35:BP:123:ASP:H	1.62	0.63
36:BQ:33:MET:C	36:BQ:83:PHE:HB2	2.18	0.63
43:BR:42:LYS:C	43:BR:43:GLU:OE2	2.36	0.63
37:BS:27:LEU:HA	37:BS:33:ARG:CZ	2.27	0.63
37:BS:53:ASN:C	37:BS:55:ASP:N	2.48	0.63
26:BA:535:C:H5''	44:BU:53:LYS:CE	2.28	0.63
45:BV:39:PHE:CD2	45:BV:41:GLY:N	2.66	0.63
26:BA:1338:G:HO2'	40:BX:13:LYS:NZ	1.91	0.63
41:BY:30:ASP:O	41:BY:31:LEU:C	2.37	0.63
42:BZ:67:LYS:CA	42:BZ:67:LYS:HZ2	2.05	0.63
1:AA:1025:U:H2'	1:AA:1026:G:C8	2.33	0.63
1:AA:39:G:C8	1:AA:547:A:C8	2.85	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:949:A:C4'	1:AA:1364:U:H3	2.11	0.63
1:AA:985:C:H2'	1:AA:986:A:C8	2.32	0.63
49:B4:6:HIS:CG	49:B4:56:VAL:CG2	2.63	0.63
26:BA:1263:U:C4'	50:B5:16:ARG:NH2	2.61	0.63
50:B5:46:CYS:O	50:B5:49:CYS:N	2.28	0.63
52:B7:43:THR:O	52:B7:44:VAL:C	2.36	0.63
52:B7:8:ASN:HB2	52:B7:11:LYS:HB2	1.80	0.63
26:BA:144:C:OP1	40:BX:36:GLU:OE2	2.16	0.63
26:BA:1482:U:C3'	26:BA:1482:U:C6	2.80	0.63
26:BA:1790:C:OP2	27:BD:225:ARG:N	2.28	0.63
26:BA:2098:U:N3	26:BA:2191:G:N1	2.41	0.63
26:BA:2103:C:N3	26:BA:2187:G:C6	2.65	0.63
26:BA:2199:A:C3'	26:BA:2205:C:C6	2.76	0.63
26:BA:2234:G:N1	26:BA:2235:G:C4	2.66	0.63
26:BA:2319:G:P	26:BA:2320:A:OP1	2.56	0.63
26:BA:2345:G:H21	26:BA:2381:C:H3'	1.64	0.63
26:BA:2391:G:O2'	26:BA:2392:A:C5'	2.35	0.63
26:BA:2429:G:H5''	26:BA:2430:A:OP2	1.94	0.63
26:BA:2446:G:N3	26:BA:2501:C:H5	1.88	0.63
26:BA:2543:G:N7	26:BA:2544:G:C5	2.63	0.63
26:BA:2653:U:N1	26:BA:2654:A:N7	2.46	0.63
26:BA:2679:A:H2'	28:BE:300:VAL:HG13	1.80	0.63
26:BA:265:A:N6	26:BA:281:G:H5'	2.13	0.63
26:BA:2864:G:C2'	26:BA:2865:U:H6	2.09	0.63
26:BA:2631:G:C4'	26:BA:2892:A:OP1	2.34	0.63
26:BA:2898:U:C2	26:BA:2899:G:C8	2.86	0.63
26:BA:674:G:C4'	29:BF:69:HIS:HA	2.27	0.63
25:BB:50:G:P	37:BS:74:PRO:HB2	2.37	0.63
27:BD:103:ILE:C	27:BD:104:ILE:HD12	2.18	0.63
27:BD:175:LEU:HD21	27:BD:180:VAL:C	2.18	0.63
28:BE:175:ASP:O	28:BE:176:HIS:C	2.34	0.63
28:BE:198:TYR:CZ	28:BE:267:ARG:HB3	2.33	0.63
29:BF:31:ILE:O	29:BF:32:GLY:C	2.35	0.63
31:BH:126:SER:O	31:BH:128:THR:N	2.31	0.63
31:BH:91:VAL:N	31:BH:159:LYS:CE	2.61	0.63
32:BI:68:LEU:CG	32:BI:108:LEU:HD11	2.26	0.63
32:BI:9:VAL:O	32:BI:10:LYS:HB3	1.97	0.63
55:BK:100:VAL:HG21	55:BK:137:ILE:CG2	2.28	0.63
33:BN:47:THR:O	33:BN:53:ILE:HD11	1.98	0.63
34:BO:99:PHE:HD2	38:BT:24:LYS:HE3	1.62	0.63
36:BQ:118:ALA:O	36:BQ:119:ASN:CB	2.46	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:152:SER:O	36:BQ:155:GLY:N	2.30	0.63
43:BR:55:ALA:CB	43:BR:79:LEU:HD21	2.28	0.63
44:BU:28:ARG:O	44:BU:29:SER:C	2.36	0.63
44:BU:94:VAL:O	44:BU:98:ILE:HD13	0.82	0.63
45:BV:61:VAL:HG22	45:BV:97:GLY:C	2.19	0.63
39:BW:24:ILE:HA	39:BW:35:ILE:HD13	1.79	0.63
40:BX:14:ALA:HB1	40:BX:18:MET:HE1	1.80	0.63
40:BX:13:LYS:HA	40:BX:16:ASN:OD1	1.96	0.63
26:BA:145:G:C4'	40:BX:1:SER:HB2	2.25	0.63
41:BY:28:SER:HB3	41:BY:99:THR:HG1	1.53	0.63
41:BY:46:ASP:CG	41:BY:98:VAL:CG1	2.67	0.63
1:AA:1004:A:H5''	1:AA:1025:U:C4	2.33	0.63
1:AA:979:C:C5'	1:AA:1222:G:O6	2.46	0.63
1:AA:1329:A:O2'	16:AM:24:GLY:CA	2.40	0.63
1:AA:409:G:O5'	7:AD:25:ARG:HB3	1.98	0.63
1:AA:952:U:H4'	1:AA:964:A:N1	2.14	0.63
14:AK:61:ALA:HB1	14:AK:94:ALA:HB2	1.81	0.63
1:AA:1222:G:H5''	22:AS:78:ARG:NH2	2.13	0.63
49:B4:30:GLU:C	49:B4:31:ILE:CD1	2.47	0.63
26:BA:1006:C:O2'	33:BN:86:MET:HB3	1.98	0.63
26:BA:584:C:N4	26:BA:1256:G:H1	1.94	0.63
26:BA:1804:C:H42	26:BA:1813:G:H1	1.47	0.63
26:BA:2579:C:O2'	26:BA:2580:U:H5'	1.96	0.63
26:BA:2616:C:C2	26:BA:2617:C:C6	2.86	0.63
26:BA:2619:C:H2'	26:BA:2620:C:O5'	1.98	0.63
26:BA:2655:G:C2'	26:BA:2655:G:N3	2.61	0.63
26:BA:2651:C:C2	26:BA:2670:A:C2	2.85	0.63
26:BA:2733:A:N3	28:BE:318:ASN:CB	2.60	0.63
26:BA:2845:G:O2'	26:BA:2846:G:C4'	2.41	0.63
26:BA:2861:G:C8	26:BA:2861:G:H5''	2.26	0.63
26:BA:793:A:OP1	26:BA:2071:A:O2'	2.15	0.63
26:BA:848:G:H2'	26:BA:849:A:H8	1.62	0.63
27:BD:174:ARG:CG	27:BD:174:ARG:NH1	2.49	0.63
26:BA:2679:A:C2'	28:BE:300:VAL:HG12	2.29	0.63
28:BE:45:LYS:N	28:BE:74:GLU:OE1	2.31	0.63
29:BF:103:ASN:HB2	29:BF:106:GLU:CG	2.29	0.63
29:BF:20:ASP:O	29:BF:21:VAL:C	2.36	0.63
29:BF:39:GLN:O	29:BF:42:ARG:N	2.30	0.63
30:BG:53:LYS:O	30:BG:54:ALA:HB2	1.97	0.63
32:BI:108:LEU:HD23	32:BI:109:LYS:N	2.13	0.63
55:BK:132:ALA:O	55:BK:137:ILE:C	2.37	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:19:MET:HG2	33:BN:132:LEU:HD11	1.80	0.63
33:BN:60:ARG:CB	33:BN:71:TYR:HD2	2.10	0.63
34:BO:14:SER:OG	34:BO:86:ILE:HD12	1.98	0.63
34:BO:17:ARG:HH21	34:BO:47:THR:C	2.02	0.63
35:BP:114:VAL:CG2	35:BP:133:VAL:N	2.41	0.63
36:BQ:15:THR:O	36:BQ:16:ARG:CG	2.39	0.63
43:BR:100:LEU:C	50:B5:44:HIS:CD2	2.72	0.63
43:BR:22:ARG:HG3	43:BR:26:LYS:CE	2.23	0.63
37:BS:23:ARG:HH21	37:BS:35:VAL:CG2	2.10	0.63
37:BS:81:ALA:C	37:BS:83:LEU:N	2.51	0.63
44:BU:113:SER:O	44:BU:115:ASN:CA	2.46	0.63
41:BY:20:HIS:HA	41:BY:67:LEU:CD2	2.27	0.63
42:BZ:55:THR:HG23	42:BZ:58:GLY:HA2	1.80	0.63
1:AA:1237:C:O2'	1:AA:1300:G:N2	2.32	0.63
1:AA:568:G:N3	1:AA:574:A:H2	1.95	0.63
1:AA:977:A:C2	1:AA:1223:C:C5	2.87	0.63
1:AA:939:G:H5''	10:AG:102:ARG:HH22	1.62	0.63
1:AA:1225:A:C4'	22:AS:78:ARG:HD3	2.29	0.63
48:B0:36:ILE:N	48:B0:68:VAL:HG22	2.12	0.63
46:B2:43:PRO:O	46:B2:44:GLY:C	2.34	0.63
46:B2:48:GLU:O	46:B2:51:LYS:N	2.32	0.63
49:B4:17:GLN:CB	49:B4:33:VAL:HB	2.28	0.63
51:B6:2:ALA:CB	51:B6:11:LYS:HE3	2.28	0.63
26:BA:126:A:OP2	52:B7:44:VAL:HG11	1.97	0.63
26:BA:592:G:C2'	53:B8:3:LYS:HE3	2.18	0.63
53:B8:4:MET:SD	53:B8:4:MET:N	2.72	0.63
26:BA:1129:A:N1	26:BA:2570:G:C1'	2.55	0.63
26:BA:1163:G:C2	26:BA:1164:G:C8	2.86	0.63
26:BA:1664:A:H8	26:BA:1664:A:H3'	1.63	0.63
26:BA:1779:U:H3'	26:BA:1779:U:C6	2.34	0.63
26:BA:1817:G:OP1	27:BD:63:ILE:CD1	2.46	0.63
26:BA:199:A:N7	26:BA:2434:A:N6	2.46	0.63
26:BA:2197:U:H2'	26:BA:2224:G:N1	2.12	0.63
26:BA:2252:G:H3'	26:BA:2252:G:H8	1.63	0.63
26:BA:2317:C:C4	26:BA:2318:G:C6	2.87	0.63
26:BA:2446:G:C5'	26:BA:2446:G:C8	2.77	0.63
26:BA:2462:U:H1'	26:BA:2491:U:O4	1.99	0.63
26:BA:2485:G:N3	26:BA:2486:G:C1'	2.61	0.63
26:BA:2644:G:P	26:BA:2644:G:H8	2.21	0.63
26:BA:2644:G:N1	26:BA:2645:G:N2	2.46	0.63
26:BA:2786:U:H2'	26:BA:2787:C:H6	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2803:C:H2'	26:BA:2803:C:O2	1.99	0.63
26:BA:2810:A:H8	26:BA:2811:G:O4'	1.68	0.63
26:BA:291:C:C2'	26:BA:292:C:H5'	2.28	0.63
26:BA:443:A:N7	29:BF:43:LYS:HD3	2.13	0.63
26:BA:566:U:OP2	45:BV:81:ARG:NH2	2.32	0.63
26:BA:602:G:H2'	26:BA:655:A:C2	2.34	0.63
26:BA:614:U:H3'	26:BA:615:G:C4'	2.19	0.63
26:BA:825:C:C4'	26:BA:2428:G:O6	2.46	0.63
27:BD:131:LEU:O	27:BD:132:GLU:C	2.36	0.63
27:BD:152:GLN:O	27:BD:153:LEU:CB	2.44	0.63
28:BE:192:ILE:O	28:BE:194:ARG:HG2	1.99	0.63
28:BE:47:GLY:HA2	28:BE:305:LYS:HG2	1.79	0.63
29:BF:168:ARG:C	29:BF:193:LEU:HG	2.18	0.63
30:BG:20:LYS:HA	30:BG:76:ARG:CG	2.28	0.63
31:BH:40:MET:CB	31:BH:64:HIS:CE1	2.81	0.63
33:BN:5:GLU:N	33:BN:109:TYR:HE2	1.97	0.63
35:BP:114:VAL:HG21	35:BP:133:VAL:H	1.54	0.63
43:BR:44:LEU:HD13	43:BR:48:VAL:HG23	1.72	0.63
34:BO:80:ASP:N	38:BT:22:VAL:O	2.31	0.63
44:BU:17:VAL:O	44:BU:20:ARG:HB2	1.99	0.63
26:BA:994:C:C3'	44:BU:54:LYS:HE2	2.29	0.63
45:BV:49:GLU:CA	45:BV:53:LYS:HD2	2.28	0.63
41:BY:41:ARG:C	41:BY:112:LEU:CB	2.62	0.63
42:BZ:160:LEU:N	42:BZ:160:LEU:HD12	2.13	0.63
42:BZ:47:SER:O	42:BZ:48:THR:C	2.35	0.63
1:AA:1328:C:OP1	16:AM:28:ALA:HB1	1.99	0.63
1:AA:540:G:C2'	7:AD:42:GLN:HE22	2.11	0.63
1:AA:789:U:O2	1:AA:792:A:C8	2.51	0.63
1:AA:939:G:OP1	10:AG:102:ARG:NH1	2.32	0.63
2:AV:56:C:C1'	30:BG:56:ARG:CZ	2.77	0.63
3:AW:75:C:H41	49:B4:28:ARG:H	1.44	0.63
48:B0:46:LYS:CD	48:B0:46:LYS:N	2.60	0.63
48:B0:69:PHE:C	48:B0:70:ILE:HG23	2.17	0.63
46:B2:31:ARG:C	46:B2:34:GLN:N	2.51	0.63
47:B3:53:LEU:HD23	47:B3:53:LEU:O	1.99	0.63
49:B4:63:PHE:HD2	49:B4:69:ARG:NH2	1.96	0.63
50:B5:31:THR:OG1	50:B5:32:GLU:N	2.32	0.63
51:B6:11:LYS:HE2	51:B6:26:LYS:HE2	1.80	0.63
53:B8:52:LYS:C	53:B8:54:GLU:N	2.30	0.63
26:BA:1034:G:H5'	54:B9:18:ARG:CZ	2.28	0.63
26:BA:1418:G:N2	26:BA:1580:A:C2	2.66	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1555:G:C8	26:BA:1555:G:O5'	2.51	0.63
26:BA:2093:G:H4'	32:BI:29:PHE:CE1	2.34	0.63
26:BA:2189:U:C2'	26:BA:2190:G:H8	2.12	0.63
26:BA:2241:A:H2'	26:BA:2242:G:H8	1.64	0.63
26:BA:2369:A:O2'	26:BA:2370:G:H5'	1.98	0.63
26:BA:2396:G:H2'	26:BA:2396:G:N3	2.11	0.63
26:BA:227:A:N6	26:BA:2407:G:H8	1.92	0.63
26:BA:2454:G:C4	26:BA:2455:G:C8	2.87	0.63
26:BA:2509:G:C2	26:BA:2580:U:C2	2.87	0.63
26:BA:259:G:H2'	26:BA:260:G:H8	1.63	0.63
26:BA:2657:A:C6	26:BA:2665:A:C5	2.86	0.63
26:BA:2523:G:C1'	26:BA:2765:A:N7	2.61	0.63
26:BA:2881:C:HO2'	26:BA:2882:A:P	2.21	0.63
26:BA:2887:U:N3	26:BA:2888:C:C5	2.66	0.63
26:BA:67:U:H2'	26:BA:68:G:C8	2.34	0.63
28:BE:176:HIS:O	28:BE:179:ASP:CG	2.36	0.63
28:BE:201:VAL:HG13	28:BE:310:PHE:O	1.99	0.63
28:BE:211:GLN:H	28:BE:216:ARG:NH2	1.93	0.63
30:BG:47:GLN:HE21	30:BG:79:MET:HG3	1.63	0.63
31:BH:169:ARG:HE	31:BH:169:ARG:HA	1.63	0.63
31:BH:34:ARG:HH12	31:BH:73:ASN:CB	2.07	0.63
32:BI:133:LEU:H	32:BI:138:THR:HG22	1.61	0.63
32:BI:141:LEU:HD13	32:BI:142:LYS:CA	2.29	0.63
32:BI:39:ALA:O	32:BI:44:LEU:HG	1.99	0.63
33:BN:12:VAL:CB	33:BN:38:VAL:HG21	2.29	0.63
33:BN:58:GLU:CA	33:BN:61:VAL:HB	2.29	0.63
35:BP:94:ARG:H	35:BP:94:ARG:HD2	1.64	0.63
36:BQ:47:GLU:OE2	36:BQ:151:SER:HA	1.99	0.63
36:BQ:66:ASN:O	36:BQ:68:ALA:N	2.31	0.63
36:BQ:85:ILE:N	36:BQ:85:ILE:HD12	2.14	0.63
43:BR:72:ASP:C	43:BR:76:VAL:CG2	2.65	0.63
37:BS:87:LEU:O	37:BS:90:LEU:HB2	1.98	0.63
38:BT:45:GLU:O	38:BT:48:ASN:OD1	2.17	0.63
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.98	0.63
1:AA:1392:G:N2	1:AA:1502:A:C8	2.65	0.63
1:AA:562:C:O2'	15:AL:15:ARG:HB3	1.98	0.63
1:AA:940:C:H2'	1:AA:941:G:H8	1.63	0.63
1:AA:979:C:OP1	1:AA:1223:C:N4	2.31	0.63
5:AB:103:THR:O	5:AB:104:ASN:HB2	1.99	0.63
7:AD:10:ARG:O	7:AD:13:ARG:HB2	1.99	0.63
2:AV:61:C:H2'	2:AV:62:A:H8	1.64	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AW:76:A:C4	26:BA:2422:A:C6	2.83	0.63
2:AV:35:A:N1	4:AX:118:C:C2	2.40	0.63
26:BA:1034:G:O5'	54:B9:18:ARG:NH2	2.32	0.63
54:B9:7:VAL:CG2	54:B9:36:GLN:HG3	2.29	0.63
26:BA:1274:A:C5	26:BA:1302:A:C2	2.86	0.63
26:BA:162:U:H4'	26:BA:171:G:H21	1.64	0.63
26:BA:1801:G:C8	26:BA:1801:G:OP1	2.47	0.63
26:BA:1819:A:OP1	27:BD:154:VAL:C	2.37	0.63
26:BA:2314:C:O2'	26:BA:2315:G:H5'	1.96	0.63
26:BA:412:A:N6	26:BA:2411:A:H1'	2.14	0.63
3:AW:76:A:H2'	26:BA:2422:A:N1	2.13	0.63
26:BA:2453:A:H61	26:BA:2500:U:H3	1.46	0.63
26:BA:2690:C:H2'	26:BA:2691:C:OP2	1.99	0.63
26:BA:2774:C:C6	26:BA:2774:C:H5''	2.34	0.63
26:BA:2637:U:N3	26:BA:2782:G:N1	2.47	0.63
26:BA:2843:G:C5	26:BA:2844:G:C8	2.86	0.63
26:BA:511:U:H5	26:BA:512:G:N3	1.97	0.63
26:BA:827:U:C4	26:BA:2430:A:C6	2.86	0.63
26:BA:995:C:OP2	44:BU:54:LYS:CE	2.47	0.63
27:BD:179:GLU:C	27:BD:180:VAL:HG23	2.19	0.63
28:BE:80:ALA:CB	28:BE:187:HIS:NE2	2.61	0.63
30:BG:93:LEU:CD2	30:BG:106:PHE:HD2	1.94	0.63
30:BG:141:VAL:HA	30:BG:144:ARG:NH1	2.13	0.63
30:BG:141:VAL:HA	30:BG:144:ARG:HH11	1.62	0.63
31:BH:41:THR:HG22	31:BH:52:THR:HG21	1.80	0.63
31:BH:71:LEU:O	31:BH:72:ALA:C	2.37	0.63
55:BK:15:ALA:HA	55:BK:46:THR:OG1	1.99	0.63
55:BK:46:THR:CG2	55:BK:54:LEU:HD12	2.12	0.63
36:BQ:92:VAL:CG1	36:BQ:111:THR:N	2.49	0.63
36:BQ:130:PRO:HB2	36:BQ:134:PHE:CZ	2.34	0.63
36:BQ:142:LYS:HE3	36:BQ:142:LYS:HA	1.79	0.63
26:BA:1278:A:O2'	43:BR:27:SER:HB3	1.98	0.63
43:BR:36:THR:HG21	43:BR:40:LYS:HD3	1.78	0.63
45:BV:57:GLN:O	45:BV:58:ALA:CB	2.47	0.63
45:BV:93:ILE:C	45:BV:95:ILE:HD11	2.19	0.63
45:BV:61:VAL:HG12	45:BV:95:ILE:HG22	0.70	0.63
39:BW:14:PRO:HD3	39:BW:99:ARG:O	1.99	0.63
40:BX:6:LYS:HD2	40:BX:27:ALA:CB	2.28	0.63
41:BY:51:LEU:HD23	41:BY:52:ARG:HG3	1.81	0.63
41:BY:84:GLY:O	41:BY:85:GLU:C	2.37	0.63
41:BY:55:PHE:HE2	41:BY:89:ARG:HH22	1.46	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:64:ALA:HB1	42:BZ:84:TYR:O	1.99	0.63
1:AA:1073:U:H2'	1:AA:1074:G:H8	1.64	0.63
1:AA:1418:A:H8	1:AA:1419:G:O4'	1.79	0.63
1:AA:764:C:C2'	1:AA:765:G:H8	2.03	0.63
3:AW:1:G:N2	3:AW:2:C:C4	2.61	0.63
53:B8:16:ILE:CG2	53:B8:22:VAL:HG22	2.29	0.63
53:B8:50:LEU:CD2	53:B8:51:ALA:CA	2.67	0.63
26:BA:1028:A:C2	26:BA:2486:G:O2'	2.51	0.63
26:BA:1270:C:C4'	26:BA:1271:G:H5''	2.23	0.63
26:BA:1339:G:C5'	40:BX:13:LYS:HE3	2.28	0.63
26:BA:1944:U:O4'	26:BA:1955:U:H1'	1.99	0.63
26:BA:2234:G:C5	26:BA:2235:G:N7	2.67	0.63
26:BA:2286:A:C5'	26:BA:2287:A:H4'	2.17	0.63
26:BA:2322:A:N3	26:BA:2322:A:H2'	2.14	0.63
26:BA:2436:G:C6	26:BA:2437:U:C5	2.87	0.63
26:BA:2538:C:HO2'	26:BA:2539:C:P	2.19	0.63
26:BA:2679:A:N3	28:BE:300:VAL:CB	2.59	0.63
26:BA:2716:U:O2'	26:BA:2717:G:H5''	1.98	0.63
26:BA:2737:G:C6	26:BA:2738:A:N6	2.66	0.63
26:BA:2819:G:C3'	26:BA:2821:A:N6	2.42	0.63
26:BA:359:A:O2'	26:BA:360:G:C8	2.52	0.63
26:BA:617:G:O3'	29:BF:219:ASN:OD1	2.16	0.63
26:BA:627:A:H2'	26:BA:628:G:O4'	1.99	0.63
27:BD:139:LEU:HD13	27:BD:139:LEU:O	1.92	0.63
28:BE:211:GLN:N	28:BE:216:ARG:NH1	2.45	0.63
29:BF:6:TYR:CD1	29:BF:139:VAL:HG12	2.34	0.63
26:BA:2312:U:H5''	30:BG:53:LYS:HA	1.76	0.63
31:BH:127:GLN:CG	31:BH:128:THR:N	2.61	0.63
32:BI:112:LYS:HD3	32:BI:112:LYS:H	1.60	0.63
32:BI:141:LEU:CD1	32:BI:142:LYS:N	2.57	0.63
35:BP:125:PHE:H	35:BP:130:ARG:HH21	1.46	0.63
26:BA:2251:G:P	36:BQ:102:ARG:NE	2.69	0.63
37:BS:76:GLY:O	37:BS:82:TYR:CA	2.46	0.63
44:BU:43:ALA:C	44:BU:45:TYR:N	2.51	0.63
26:BA:535:C:C5'	44:BU:53:LYS:HZ1	2.12	0.63
26:BA:1156:A:N7	44:BU:55:ARG:NH2	2.46	0.63
44:BU:93:LYS:O	44:BU:94:VAL:HB	1.99	0.63
45:BV:42:GLY:HA3	45:BV:54:TYR:HE2	1.56	0.63
40:BX:23:LYS:O	40:BX:68:LEU:CD2	2.46	0.63
40:BX:76:GLU:CD	40:BX:77:VAL:HG23	2.19	0.63
42:BZ:112:LEU:HD21	42:BZ:172:LEU:N	2.14	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:26:LYS:HG2	42:BZ:27:GLU:HG3	1.81	0.63
42:BZ:46:GLN:C	42:BZ:49:THR:HG1	2.00	0.63
42:BZ:96:VAL:HG13	42:BZ:97:PRO:CD	2.16	0.63
1:AA:1374:A:H1'	10:AG:31:MET:SD	2.37	0.63
1:AA:757:U:O3'	1:AA:821:G:N2	2.31	0.63
1:AA:975:A:C5	1:AA:1357:A:H2	2.17	0.63
8:AE:17:ALA:HA	8:AE:26:PHE:HB3	1.78	0.63
2:AV:31:A:C5'	12:AI:127:LYS:HB2	2.26	0.63
47:B3:50:VAL:O	47:B3:53:LEU:N	2.26	0.63
51:B6:21:TYR:HE1	51:B6:43:VAL:HG21	1.64	0.63
54:B9:7:VAL:CG1	54:B9:34:GLN:NE2	2.60	0.63
26:BA:1899:G:N2	26:BA:1902:C:H41	1.96	0.63
26:BA:2398:U:O5'	26:BA:2398:U:H6	1.82	0.63
26:BA:2498:C:HO2'	26:BA:2499:C:C5'	2.11	0.63
26:BA:2051:A:C2	26:BA:2618:G:O6	2.51	0.63
26:BA:2745:C:C2'	26:BA:2746:U:O5'	2.46	0.63
25:BB:37:C:O2	37:BS:111:PRO:CG	2.47	0.63
25:BB:49:C:OP1	37:BS:110:THR:OG1	2.13	0.63
27:BD:110:LYS:HA	27:BD:110:LYS:CE	2.29	0.63
27:BD:116:MET:HG2	27:BD:117:SER:H	1.63	0.63
28:BE:206:LYS:H	28:BE:257:GLY:C	2.01	0.63
30:BG:135:VAL:CG1	30:BG:135:VAL:O	2.47	0.63
55:BK:38:PHE:HZ	55:BK:66:PHE:N	1.96	0.63
33:BN:83:ILE:HG12	33:BN:84:ARG:H	1.48	0.63
34:BO:3:GLN:HG2	34:BO:4:GLN:H	1.63	0.63
35:BP:71:GLU:C	35:BP:73:VAL:N	2.52	0.63
35:BP:77:ALA:HA	35:BP:81:VAL:CG2	2.16	0.63
37:BS:33:ARG:CB	37:BS:35:VAL:HG23	2.29	0.63
44:BU:13:ARG:H	44:BU:13:ARG:NH1	1.95	0.63
44:BU:59:ARG:O	44:BU:60:LEU:C	2.36	0.63
45:BV:71:ILE:C	45:BV:88:GLN:HG3	2.20	0.63
41:BY:55:PHE:O	41:BY:58:GLU:HB2	1.97	0.63
42:BZ:119:ASN:HB3	42:BZ:120:LEU:CD2	2.29	0.63
42:BZ:42:ALA:O	42:BZ:43:PHE:C	2.36	0.63
1:AA:1268:A:C1'	24:AU:20:LYS:CB	2.77	0.62
1:AA:299:G:H2'	1:AA:300:A:C8	2.33	0.62
1:AA:398:C:H2'	1:AA:399:G:C8	2.34	0.62
1:AA:397:A:C6	1:AA:548:G:C5	2.86	0.62
1:AA:706:A:H4'	14:AK:29:ILE:HD11	1.81	0.62
15:AL:54:LYS:HG2	15:AL:75:HIS:CE1	2.34	0.62
26:BA:2354:G:H1'	48:B0:32:LYS:HG2	1.80	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:49:GLN:HE21	48:B0:49:GLN:N	1.97	0.62
48:B0:68:VAL:O	48:B0:69:PHE:HB2	1.93	0.62
46:B2:24:LYS:O	46:B2:26:GLU:OE2	2.17	0.62
49:B4:58:LYS:HD2	49:B4:62:ARG:NH2	2.11	0.62
50:B5:18:MET:O	50:B5:19:ARG:O	2.17	0.62
52:B7:33:ARG:O	52:B7:34:ARG:C	2.36	0.62
26:BA:1575:C:H2'	26:BA:1576:U:O2	1.99	0.62
26:BA:1966:A:C2	26:BA:2593:U:C5'	2.80	0.62
26:BA:2081:C:H5'	49:B4:35:VAL:HG21	1.81	0.62
26:BA:2100:G:C1'	26:BA:2190:G:N2	2.61	0.62
26:BA:2320:A:H61	37:BS:14:ARG:N	1.96	0.62
26:BA:2395:C:C3'	26:BA:2395:C:H6	2.09	0.62
26:BA:2579:C:H3'	26:BA:2579:C:C6	2.34	0.62
26:BA:2586:C:O2	26:BA:2587:A:C8	2.52	0.62
26:BA:2619:C:H2'	26:BA:2620:C:C5'	2.28	0.62
26:BA:2894:G:H2'	26:BA:2894:G:N3	2.14	0.62
26:BA:354:G:N3	26:BA:355:G:N7	2.47	0.62
26:BA:991:C:C5	26:BA:1185:C:N4	2.67	0.62
27:BD:160:SER:O	27:BD:176:ALA:CB	2.47	0.62
26:BA:1789:A:C5'	27:BD:224:VAL:CG1	2.77	0.62
27:BD:85:ASN:ND2	27:BD:86:ARG:HD2	2.14	0.62
28:BE:251:PRO:O	28:BE:252:GLN:NE2	2.32	0.62
29:BF:104:ASP:HB2	29:BF:105:LYS:HD2	1.81	0.62
30:BG:23:VAL:HG12	30:BG:130:VAL:HB	1.81	0.62
30:BG:57:THR:N	30:BG:63:ILE:HA	2.13	0.62
31:BH:23:VAL:HG11	31:BH:74:MET:SD	2.39	0.62
32:BI:133:LEU:HB2	32:BI:138:THR:HA	1.80	0.62
32:BI:5:PHE:C	32:BI:36:ALA:CB	2.66	0.62
32:BI:66:LYS:O	32:BI:69:LYS:HE2	1.99	0.62
55:BK:56:VAL:HG22	55:BK:70:ILE:HG12	1.78	0.62
33:BN:95:ARG:O	33:BN:97:ALA:N	2.32	0.62
34:BO:79:PHE:N	34:BO:79:PHE:CD2	2.66	0.62
34:BO:11:ALA:C	34:BO:99:PHE:HB2	2.18	0.62
35:BP:145:LEU:HD12	35:BP:145:LEU:N	2.04	0.62
26:BA:911:A:N1	36:BQ:16:ARG:HG2	2.09	0.62
43:BR:22:ARG:HG2	43:BR:26:LYS:NZ	2.14	0.62
37:BS:122:ALA:HA	37:BS:125:ALA:HB3	1.80	0.62
37:BS:20:TYR:CD2	37:BS:21:HIS:HD2	2.17	0.62
37:BS:76:GLY:O	37:BS:83:LEU:HD13	1.98	0.62
44:BU:28:ARG:CA	44:BU:31:GLN:HB2	2.12	0.62
26:BA:1152:C:C5'	44:BU:80:ILE:HG21	2.27	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:59:GLU:HG2	45:BV:100:GLY:H	1.63	0.62
39:BW:58:ALA:HA	39:BW:62:HIS:CB	2.15	0.62
41:BY:109:GLU:HG2	41:BY:109:GLU:O	1.97	0.62
41:BY:41:ARG:HD2	41:BY:111:ARG:HA	1.81	0.62
26:BA:294:A:O2'	41:BY:15:PRO:CG	2.47	0.62
42:BZ:15:ASP:O	42:BZ:16:GLU:CB	2.46	0.62
42:BZ:40:ASP:HB2	42:BZ:41:ARG:HE	1.60	0.62
1:AA:1498:U:H1'	1:AA:1499:A:N7	2.14	0.62
1:AA:397:A:C5	1:AA:548:G:N7	2.66	0.62
46:B2:14:ALA:O	46:B2:17:GLU:HB2	1.98	0.62
49:B4:73:LYS:CG	49:B4:73:LYS:OXT	2.43	0.62
50:B5:15:LYS:O	50:B5:16:ARG:O	2.17	0.62
51:B6:42:PRO:O	51:B6:44:ALA:N	2.32	0.62
52:B7:34:ARG:HG2	52:B7:35:ARG:N	2.13	0.62
53:B8:16:ILE:HG22	53:B8:17:THR:N	2.14	0.62
26:BA:10:G:C2	26:BA:2629:A:C5	2.87	0.62
26:BA:1216:G:N2	26:BA:1234:U:H1'	2.14	0.62
26:BA:1306:C:H2'	26:BA:1307:A:O4'	1.99	0.62
26:BA:1496:A:C8	26:BA:1496:A:O5'	2.51	0.62
26:BA:1556:C:H2'	26:BA:1557:C:H6	1.64	0.62
26:BA:2253:G:O2'	26:BA:2254:C:P	2.58	0.62
26:BA:2281:C:HO2'	26:BA:2282:G:P	2.21	0.62
26:BA:2320:A:H1'	26:BA:2333:A:H62	1.63	0.62
26:BA:2334:G:N2	37:BS:12:ARG:NE	2.47	0.62
26:BA:2395:C:H6	26:BA:2395:C:O5'	1.81	0.62
26:BA:2398:U:C3'	26:BA:2398:U:C6	2.82	0.62
26:BA:2475:C:O2'	26:BA:2477:C:P	2.56	0.62
26:BA:2472:G:H21	26:BA:2529:G:H1	1.47	0.62
26:BA:2608:G:C8	26:BA:2608:G:H3'	2.34	0.62
26:BA:2615:U:C2'	26:BA:2616:C:C5'	2.75	0.62
26:BA:2671:A:H2'	26:BA:2672:G:C8	2.33	0.62
26:BA:2709:G:C3'	26:BA:2710:C:H5'	2.28	0.62
26:BA:2842:G:H1	26:BA:2875:C:H42	1.47	0.62
26:BA:2896:C:C3'	26:BA:2896:C:H6	2.12	0.62
26:BA:8:A:C2	26:BA:2896:C:O2	2.52	0.62
26:BA:460:A:C8	26:BA:461:C:C5	2.87	0.62
26:BA:496:G:H1'	39:BW:61:ASN:HD22	1.64	0.62
26:BA:531:C:H3'	26:BA:532:A:H4'	1.80	0.62
27:BD:161:ALA:N	27:BD:162:GLN:NE2	2.45	0.62
27:BD:95:TYR:HB2	27:BD:99:GLU:O	1.99	0.62
28:BE:79:ARG:NH1	28:BE:105:HIS:N	2.32	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1657:C:OP1	28:BE:232:ARG:C	2.37	0.62
26:BA:2053:G:H1'	28:BE:245:ARG:HG3	1.79	0.62
26:BA:2310:A:C5	30:BG:55:LYS:NZ	2.66	0.62
31:BH:128:THR:HG23	31:BH:129:LYS:N	2.15	0.62
31:BH:170:LEU:C	31:BH:170:LEU:CD1	2.62	0.62
55:BK:85:ILE:O	55:BK:86:GLU:O	2.16	0.62
34:BO:101:PRO:CA	34:BO:120:GLU:O	2.47	0.62
34:BO:31:ARG:C	34:BO:32:TYR:CG	2.72	0.62
35:BP:104:ASP:O	35:BP:105:TYR:CB	2.46	0.62
36:BQ:130:PRO:O	36:BQ:133:GLU:N	2.31	0.62
37:BS:115:VAL:O	37:BS:118:ILE:CG2	2.47	0.62
37:BS:86:LEU:CD2	37:BS:124:ASP:CB	2.76	0.62
38:BT:10:GLY:H	38:BT:52:THR:HB	1.64	0.62
26:BA:994:C:C2'	44:BU:54:LYS:HG2	2.28	0.62
40:BX:25:GLN:OE1	40:BX:25:GLN:HA	1.99	0.62
40:BX:33:SER:H	40:BX:36:GLU:HG3	1.63	0.62
41:BY:102:ASP:O	41:BY:103:LEU:CD2	2.47	0.62
42:BZ:123:VAL:HB	42:BZ:159:THR:HG23	1.81	0.62
42:BZ:92:VAL:CA	42:BZ:124:ALA:HB1	2.25	0.62
42:BZ:163:ASP:OD2	42:BZ:164:PRO:HD3	0.81	0.62
25:BB:75:G:C1'	42:BZ:22:VAL:CG2	2.74	0.62
1:AA:944:G:H2'	1:AA:945:G:H5'	1.79	0.62
3:AW:44:A:O2'	3:AW:45:G:H5'	2.00	0.62
46:B2:29:ASN:C	46:B2:34:GLN:HG2	2.19	0.62
46:B2:61:GLY:O	46:B2:62:GLU:C	2.38	0.62
47:B3:46:ASN:C	47:B3:48:GLU:OE1	2.37	0.62
47:B3:51:ALA:O	47:B3:52:HIS:C	2.33	0.62
26:BA:2081:C:H4'	49:B4:35:VAL:HG21	1.82	0.62
51:B6:40:TYR:H	51:B6:50:PHE:HE1	1.36	0.62
51:B6:54:LYS:HA	51:B6:54:LYS:HZ2	1.62	0.62
26:BA:1809:A:O2'	26:BA:1810:A:H5'	1.99	0.62
26:BA:2080:G:C6	26:BA:2241:A:N1	2.67	0.62
26:BA:2193:G:H2'	26:BA:2194:G:O4'	1.99	0.62
26:BA:2205:C:HO2'	26:BA:2228:G:N2	1.97	0.62
26:BA:2334:G:C5'	37:BS:12:ARG:O	2.47	0.62
26:BA:2418:A:C2'	26:BA:2419:U:O4'	2.47	0.62
26:BA:830:G:O6	26:BA:2446:G:C1'	2.47	0.62
26:BA:2615:U:H2'	26:BA:2616:C:H6	1.63	0.62
26:BA:2628:C:H1'	26:BA:2781:A:C2'	2.20	0.62
26:BA:10:G:C2	26:BA:2629:A:C6	2.88	0.62
26:BA:2663:G:C8	26:BA:2664:G:N7	2.67	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2682:U:O2'	28:BE:61:PRO:HD3	1.99	0.62
26:BA:2838:G:C2	26:BA:2881:C:C2	2.88	0.62
26:BA:307:G:H21	26:BA:330:A:H62	1.47	0.62
26:BA:602:G:N2	26:BA:655:A:H2'	2.10	0.62
27:BD:172:ILE:N	27:BD:182:MET:HE2	2.15	0.62
27:BD:197:GLY:O	27:BD:199:ARG:N	2.32	0.62
27:BD:90:ILE:CG2	27:BD:91:ALA:N	2.61	0.62
29:BF:216:SER:O	29:BF:217:GLU:CB	2.48	0.62
31:BH:30:GLY:CA	31:BH:78:VAL:O	2.46	0.62
32:BI:43:ASN:O	32:BI:44:LEU:C	2.35	0.62
33:BN:101:VAL:O	33:BN:102:ARG:HG3	1.99	0.62
34:BO:65:THR:HG1	34:BO:67:ARG:HG2	1.63	0.62
36:BQ:58:HIS:N	36:BQ:61:LEU:CG	2.62	0.62
36:BQ:82:LYS:CB	36:BQ:123:ILE:HG22	2.29	0.62
26:BA:1287:A:C8	43:BR:104:ARG:HD2	2.34	0.62
43:BR:96:ARG:HG2	43:BR:115:GLU:HG3	1.81	0.62
37:BS:100:ALA:H	37:BS:127:LEU:CD2	2.12	0.62
37:BS:97:VAL:HG12	37:BS:98:GLU:N	2.13	0.62
44:BU:69:ALA:O	44:BU:79:PHE:CZ	2.52	0.62
39:BW:17:VAL:HA	39:BW:20:VAL:HG21	1.80	0.62
40:BX:31:ARG:HA	40:BX:31:ARG:NE	2.14	0.62
40:BX:52:VAL:C	40:BX:53:ASN:HD22	2.02	0.62
41:BY:26:THR:O	41:BY:27:LEU:CG	2.46	0.62
26:BA:440:G:H5''	41:BY:2:LYS:HB3	1.81	0.62
41:BY:32:ARG:O	41:BY:34:GLU:CA	2.47	0.62
41:BY:81:LYS:HG2	41:BY:82:THR:N	2.12	0.62
1:AA:397:A:N6	1:AA:548:G:C5	2.67	0.62
1:AA:1267:C:HO2'	24:AU:20:LYS:HD3	1.63	0.62
46:B2:55:ARG:O	46:B2:58:THR:CA	2.48	0.62
46:B2:5:VAL:HG12	46:B2:6:GLN:H	0.54	0.62
49:B4:63:PHE:O	49:B4:66:SER:N	2.33	0.62
51:B6:48:VAL:HG12	51:B6:49:VAL:O	1.99	0.62
53:B8:9:MET:O	53:B8:14:ILE:CG1	2.48	0.62
26:BA:1324:G:H1'	26:BA:1616:A:H62	1.64	0.62
26:BA:1364:G:C4	49:B4:3:LYS:NZ	2.62	0.62
26:BA:1819:A:OP2	27:BD:153:LEU:CG	2.40	0.62
26:BA:2075:U:O2'	26:BA:2596:U:C2	2.50	0.62
26:BA:2258:C:OP2	26:BA:2258:C:O4'	2.18	0.62
26:BA:2268:A:H3'	26:BA:2268:A:C8	2.35	0.62
26:BA:2391:G:H2'	26:BA:2392:A:OP2	1.98	0.62
26:BA:2427:C:H5'	26:BA:2427:C:H6	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2454:G:C5	26:BA:2455:G:C8	2.87	0.62
26:BA:2468:G:C2'	26:BA:2469:A:H5'	2.29	0.62
26:BA:2507:C:N4	26:BA:2582:G:N1	2.47	0.62
26:BA:2692:C:H2'	26:BA:2693:A:O5'	2.00	0.62
26:BA:2740:A:C6	26:BA:2764:A:C5	2.68	0.62
26:BA:2638:G:C2	26:BA:2778:A:N6	2.62	0.62
26:BA:2779:U:H5'	26:BA:2781:A:C8	2.35	0.62
26:BA:2837:G:C6	26:BA:2882:A:C6	2.87	0.62
26:BA:396:G:OP1	49:B4:10:VAL:CA	2.43	0.62
26:BA:530:G:H1'	26:BA:532:A:OP2	1.99	0.62
26:BA:535:C:H5''	44:BU:53:LYS:NZ	2.15	0.62
27:BD:119:PRO:O	27:BD:133:ASN:ND2	2.31	0.62
28:BE:265:ASN:C	28:BE:265:ASN:ND2	2.52	0.62
30:BG:28:GLY:N	30:BG:69:ILE:HG21	2.15	0.62
30:BG:49:PRO:HB2	30:BG:72:LYS:CA	2.28	0.62
31:BH:88:LEU:O	31:BH:88:LEU:HD23	1.98	0.62
55:BK:11:LEU:HD11	55:BK:28:LEU:CD1	2.29	0.62
33:BN:20:GLY:C	33:BN:22:VAL:H	2.01	0.62
34:BO:71:ARG:NH2	34:BO:77:ILE:HG21	2.15	0.62
35:BP:67:ARG:O	35:BP:68:GLU:C	2.36	0.62
36:BQ:50:VAL:HG13	36:BQ:51:GLU:OE1	1.98	0.62
36:BQ:58:HIS:CE1	36:BQ:59:ASN:CB	2.77	0.62
43:BR:52:ILE:O	43:BR:55:ALA:N	2.32	0.62
30:BG:145:ASP:HB2	37:BS:15:GLU:CG	2.28	0.62
37:BS:70:GLY:O	37:BS:71:TRP:CE3	2.52	0.62
45:BV:39:PHE:CE2	45:BV:41:GLY:CA	2.82	0.62
41:BY:66:ASP:C	41:BY:68:ASP:N	2.53	0.62
42:BZ:62:PHE:CE2	42:BZ:87:THR:CB	2.82	0.62
42:BZ:51:LEU:HA	42:BZ:65:LEU:HD12	1.82	0.62
1:AA:1528:U:H2'	1:AA:1530:G:H5'	1.81	0.62
1:AA:976:G:C5	1:AA:361(A):C:N4	2.68	0.62
1:AA:409:G:OP1	7:AD:25:ARG:HB3	1.98	0.62
10:AG:71:PRO:HG2	10:AG:91:VAL:HG11	1.82	0.62
1:AA:1328:C:C5'	16:AM:28:ALA:CB	2.78	0.62
48:B0:31:VAL:O	48:B0:32:LYS:C	2.37	0.62
48:B0:43:THR:HG23	48:B0:75:GLY:HA3	1.73	0.62
46:B2:20:LEU:CD2	46:B2:53:ILE:HG23	2.29	0.62
26:BA:929:G:N2	47:B3:43:ILE:N	2.42	0.62
26:BA:108:U:H2'	26:BA:109:G:C8	2.34	0.62
26:BA:1151:G:H4'	44:BU:81:ASN:OD1	1.98	0.62
26:BA:1222:C:H42	26:BA:1227:A:H61	1.45	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1358:G:H3'	26:BA:1371:G:H1	1.64	0.62
26:BA:1916:A:H8	26:BA:1916:A:OP2	1.82	0.62
26:BA:2014:A:H2'	26:BA:2015:A:C2	2.34	0.62
26:BA:2046:G:OP1	50:B5:19:ARG:N	2.33	0.62
26:BA:2211:G:C2'	26:BA:2211:G:N3	2.62	0.62
26:BA:2246:G:N1	26:BA:2426:A:H1'	2.14	0.62
26:BA:2333:A:O4'	26:BA:2335:A:N3	2.32	0.62
26:BA:830:G:C8	26:BA:2448:A:C8	2.87	0.62
26:BA:249:C:O2	53:B8:11:LYS:NZ	2.32	0.62
26:BA:2533:A:H2'	26:BA:2534:A:H8	1.64	0.62
26:BA:2603:G:H8	26:BA:2603:G:H5''	1.64	0.62
26:BA:2684:U:C4	26:BA:2725:A:N6	2.67	0.62
26:BA:2822:G:C8	26:BA:2822:G:OP2	2.52	0.62
26:BA:2839:G:O2'	43:BR:92:GLY:CA	2.38	0.62
26:BA:2840:C:O3'	43:BR:53:HIS:NE2	2.32	0.62
26:BA:2863:C:N3	26:BA:2864:G:N7	2.47	0.62
30:BG:47:GLN:NE2	30:BG:79:MET:HG3	2.13	0.62
32:BI:68:LEU:HA	32:BI:72:LEU:HD21	1.81	0.62
55:BK:75:ALA:HB2	55:BK:112:LYS:HZ3	1.62	0.62
33:BN:12:VAL:C	33:BN:38:VAL:HG22	2.20	0.62
36:BQ:152:SER:CB	36:BQ:153:PRO:HD2	2.29	0.62
36:BQ:65:ARG:NE	36:BQ:122:PHE:CD2	2.67	0.62
44:BU:117:ARG:CD	44:BU:118:GLN:H	2.11	0.62
45:BV:33:VAL:O	45:BV:62:GLU:CA	2.28	0.62
40:BX:52:VAL:CG2	40:BX:66:VAL:HG22	2.29	0.62
40:BX:6:LYS:NZ	40:BX:29:ASP:N	2.46	0.62
42:BZ:139:THR:O	42:BZ:140:LYS:HB2	2.00	0.62
1:AA:1182:G:H4'	1:AA:1183:A:O5'	1.99	0.62
1:AA:563:A:H2	15:AL:15:ARG:HH12	1.47	0.62
1:AA:965:A:O2'	1:AA:966:G:C5'	2.47	0.62
1:AA:1014:A:C2	22:AS:34:TRP:CZ2	2.87	0.62
23:AT:23:ARG:HA	23:AT:26:ASN:HD21	1.64	0.62
2:AV:35:A:H2	4:AX:118:C:N3	1.39	0.62
46:B2:60:GLN:O	46:B2:63:GLU:HB3	1.99	0.62
26:BA:988:A:P	47:B3:11:SER:HB3	2.39	0.62
47:B3:8:LEU:CD2	47:B3:32:GLN:N	2.59	0.62
50:B5:11:THR:CB	50:B5:16:ARG:HE	2.09	0.62
26:BA:1059:G:C5'	55:BK:115:ASP:O	2.46	0.62
26:BA:1492:G:H4'	27:BD:99:GLU:OE2	1.99	0.62
26:BA:1764:G:C6	26:BA:1989:G:C2	2.88	0.62
26:BA:1906:G:C4	26:BA:1929:G:C5	2.87	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:747:U:C2	26:BA:2015:A:H2	2.17	0.62
26:BA:2058:A:H2'	26:BA:2059:A:C8	2.35	0.62
26:BA:2350:C:N4	26:BA:2382:G:C6	2.68	0.62
26:BA:2389:G:OP1	26:BA:2390:U:C5'	2.42	0.62
26:BA:827:U:C4	26:BA:2430:A:C5	2.88	0.62
26:BA:2517:C:HO2'	26:BA:2518:A:C5'	1.92	0.62
26:BA:2569:G:N1	26:BA:2570:G:N7	2.47	0.62
26:BA:2595:G:C2	26:BA:2597:G:O5'	2.53	0.62
26:BA:2605:U:HO2'	26:BA:2606:C:P	2.20	0.62
26:BA:2653:U:C3'	26:BA:2654:A:N7	2.62	0.62
26:BA:2739:U:H5	26:BA:2763:G:C2	2.17	0.62
26:BA:2745:C:O2	31:BH:142:GLU:CD	2.38	0.62
26:BA:2850:A:C4	26:BA:2851:A:C8	2.87	0.62
26:BA:2857:G:H3'	26:BA:2857:G:C8	2.34	0.62
26:BA:2721:A:O2'	26:BA:2874:C:H5'	1.98	0.62
26:BA:535:C:C5'	44:BU:53:LYS:NZ	2.62	0.62
26:BA:657:U:H2'	26:BA:658:C:C6	2.34	0.62
26:BA:917:A:H3'	26:BA:918:A:H5''	1.82	0.62
26:BA:989:G:C8	47:B3:13:ILE:HD11	2.35	0.62
29:BF:93:LYS:HB2	29:BF:96:LYS:HE3	1.80	0.62
30:BG:38:GLU:CA	30:BG:41:LEU:HD12	2.30	0.62
25:BB:42:C:C1'	30:BG:47:GLN:C	2.67	0.62
31:BH:48:VAL:HG23	31:BH:49:ILE:N	2.14	0.62
32:BI:144:HIS:O	32:BI:144:HIS:CD2	2.52	0.62
32:BI:83:ALA:HB2	32:BI:89:LEU:HA	1.80	0.62
33:BN:12:VAL:CB	33:BN:38:VAL:HG22	2.29	0.62
33:BN:21:ARG:H	33:BN:21:ARG:HD2	1.64	0.62
33:BN:61:VAL:HG12	33:BN:62:ASP:N	2.13	0.62
35:BP:65:ASP:CB	35:BP:109:LEU:H	2.13	0.62
35:BP:120:LEU:HD12	35:BP:122:ALA:HB3	1.81	0.62
36:BQ:116:HIS:O	36:BQ:117:GLY:C	2.38	0.62
36:BQ:130:PRO:O	36:BQ:132:VAL:N	2.32	0.62
36:BQ:94:ARG:CZ	36:BQ:106:GLY:HA3	2.30	0.62
37:BS:34:LEU:O	37:BS:103:ASP:HB3	2.00	0.62
44:BU:69:ALA:HB3	44:BU:76:TYR:CZ	2.35	0.62
44:BU:99:ALA:HA	44:BU:106:PHE:HB2	1.76	0.62
39:BW:19:LEU:O	39:BW:20:VAL:C	2.37	0.62
42:BZ:140:LYS:CA	42:BZ:141:MET:SD	2.81	0.62
42:BZ:151:ASP:HB3	42:BZ:153:LYS:HZ1	1.60	0.62
42:BZ:52:PHE:H	42:BZ:65:LEU:HD11	1.64	0.62
42:BZ:5:ALA:O	42:BZ:33:ALA:CB	2.31	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:67:LYS:CB	42:BZ:67:LYS:HZ2	2.13	0.62
1:AA:1340:A:H4'	2:AV:31:A:O2'	1.99	0.62
1:AA:568:G:N2	1:AA:574:A:C2	2.66	0.62
17:AN:24:CYS:HB2	17:AN:39:LEU:HA	1.81	0.62
18:AO:36:ILE:HD11	18:AO:60:VAL:HG22	1.81	0.62
48:B0:24:LYS:O	48:B0:25:LYS:HB2	1.98	0.62
48:B0:68:VAL:HG21	48:B0:72:LYS:HE3	1.82	0.62
48:B0:6:GLY:O	48:B0:8:GLY:N	2.32	0.62
47:B3:25:ALA:C	47:B3:27:GLY:N	2.51	0.62
26:BA:1158:C:H4'	47:B3:32:GLN:OE1	2.00	0.62
47:B3:6:VAL:HG22	47:B3:7:LYS:N	2.14	0.62
49:B4:47:GLU:OE2	49:B4:73:LYS:NZ	2.27	0.62
50:B5:40:LYS:HD2	50:B5:49:CYS:SG	2.38	0.62
26:BA:1799:G:H21	27:BD:153:LEU:HG	1.58	0.62
26:BA:1889:A:H2'	26:BA:1890:A:C8	2.35	0.62
26:BA:2261:C:H2'	26:BA:2261:C:O2	1.99	0.62
26:BA:2276:G:N3	26:BA:2277:G:C8	2.67	0.62
26:BA:2347:C:H2'	26:BA:2348:U:H6	1.65	0.62
26:BA:2455:G:N2	26:BA:2498:C:H41	1.96	0.62
26:BA:2504:U:C6	26:BA:2504:U:C4'	2.82	0.62
26:BA:2756:U:O2	26:BA:2756:U:C2'	2.47	0.62
26:BA:2748:A:C2	26:BA:2758:A:N7	2.66	0.62
26:BA:2772:C:N4	26:BA:2773:C:N4	2.47	0.62
26:BA:2792:G:H1'	26:BA:2805:G:N2	2.14	0.62
26:BA:2870:C:N3	26:BA:2871:C:C6	2.67	0.62
26:BA:307:G:H21	26:BA:330:A:N6	1.97	0.62
26:BA:397:G:OP1	49:B4:40:HIS:HA	2.00	0.62
26:BA:971:C:H42	26:BA:972:G:H21	1.47	0.62
27:BD:213:LYS:O	27:BD:215:LYS:HG2	1.99	0.62
28:BE:70:VAL:CG1	28:BE:295:LEU:HD23	2.29	0.62
29:BF:37:ALA:CB	29:BF:102:LEU:CD1	2.77	0.62
29:BF:93:LYS:CB	29:BF:96:LYS:CE	2.78	0.62
30:BG:29:HIS:ND1	30:BG:69:ILE:HD11	2.14	0.62
31:BH:14:VAL:O	31:BH:14:VAL:CG1	2.40	0.62
31:BH:42:ILE:C	31:BH:52:THR:CG2	2.56	0.62
31:BH:75:VAL:C	31:BH:77:GLY:N	2.47	0.62
31:BH:86:LEU:CD2	31:BH:87:GLU:H	2.09	0.62
32:BI:86:GLY:CA	32:BI:88:ARG:N	2.63	0.62
55:BK:112:LYS:CE	55:BK:116:LEU:HD23	2.30	0.62
55:BK:132:ALA:HB1	55:BK:137:ILE:CB	2.29	0.62
55:BK:28:LEU:HD22	55:BK:33:VAL:HG21	1.82	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:136:SER:CA	33:BN:139:LEU:CD2	2.78	0.62
35:BP:128:GLY:O	35:BP:132:LYS:HD3	1.99	0.62
26:BA:2495:G:O4'	36:BQ:101:MET:HG3	2.00	0.62
36:BQ:48:ASN:HD21	36:BQ:122:PHE:HD1	1.47	0.62
26:BA:2484:G:C1'	36:BQ:142:LYS:HZ2	2.03	0.62
26:BA:1287:A:N9	43:BR:104:ARG:HH11	1.37	0.62
43:BR:99:LYS:HA	43:BR:112:ALA:HB1	1.81	0.62
26:BA:1294:U:O2'	43:BR:26:LYS:CD	2.47	0.62
37:BS:111:PRO:O	37:BS:114:LYS:O	2.18	0.62
37:BS:23:ARG:HH21	37:BS:37:ARG:NH2	1.91	0.62
38:BT:8:TYR:O	38:BT:53:ASP:HB2	1.99	0.62
44:BU:109:LEU:O	44:BU:111:ASP:N	2.32	0.62
44:BU:93:LYS:N	44:BU:93:LYS:HD3	2.13	0.62
45:BV:14:VAL:HG21	45:BV:19:VAL:HG21	0.77	0.62
41:BY:105:ASP:O	41:BY:108:ARG:N	2.21	0.62
42:BZ:17:SER:O	42:BZ:36:ARG:N	2.33	0.62
42:BZ:70:GLN:O	42:BZ:72:ASP:OD2	2.17	0.62
1:AA:1014:A:C2	22:AS:34:TRP:CH2	2.87	0.62
1:AA:323:U:H3	1:AA:327:A:H62	1.46	0.62
3:AW:37:YYG:H101	3:AW:37:YYG:C21	2.30	0.62
3:AW:72:C:H2'	3:AW:73:A:H8	1.64	0.62
47:B3:26:LEU:HD21	47:B3:46:ASN:CB	2.26	0.62
26:BA:929:G:C1'	47:B3:43:ILE:HG13	2.29	0.62
47:B3:59:VAL:C	47:B3:60:GLU:CG	2.62	0.62
26:BA:974(A):C:C6	26:BA:1186:G:N1	2.68	0.62
26:BA:1284:A:H2'	26:BA:1285:G:C8	2.33	0.62
26:BA:1324:G:H4'	26:BA:1616:A:N7	2.14	0.62
26:BA:153:C:H42	26:BA:173:G:H1	1.47	0.62
26:BA:1666:G:N2	26:BA:1669:A:N6	2.46	0.62
26:BA:1912:A:N7	26:BA:1918:A:H2	1.97	0.62
26:BA:2100:G:N9	26:BA:2190:G:N2	2.48	0.62
26:BA:2218:G:H2'	26:BA:2219:G:O5'	2.00	0.62
26:BA:2218:G:C4	26:BA:2219:G:C8	2.88	0.62
26:BA:2356:C:P	48:B0:21:LEU:CD1	2.81	0.62
26:BA:2397:G:C2	26:BA:2398:U:C2	2.88	0.62
26:BA:2396:G:N2	26:BA:2397:G:C8	2.67	0.62
26:BA:2516:G:N2	26:BA:2569:G:H1'	2.14	0.62
26:BA:2652:C:C2'	26:BA:2653:U:H6	2.11	0.62
26:BA:2682:U:O4'	28:BE:48:MET:HG3	1.98	0.62
26:BA:2721:A:C2	26:BA:2722:G:C8	2.87	0.62
26:BA:302:C:H2'	26:BA:303:U:C6	2.35	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:226:GLY:C	27:BD:227:VAL:HG12	2.12	0.62
28:BE:104:PHE:CB	28:BE:108:LEU:HD12	2.29	0.62
28:BE:80:ALA:CA	28:BE:187:HIS:NE2	2.63	0.62
28:BE:242:ASN:N	28:BE:243:PRO:HD2	2.14	0.62
26:BA:2785:C:H5'	28:BE:99:VAL:CG2	2.27	0.62
29:BF:1:MET:O	29:BF:18:LEU:HD23	1.99	0.62
29:BF:196:THR:OG1	29:BF:201:SER:OG	1.84	0.62
29:BF:52:ALA:HB2	29:BF:55:ARG:HH21	0.80	0.62
30:BG:24:HIS:CB	30:BG:72:LYS:HA	2.26	0.62
32:BI:68:LEU:CD1	32:BI:108:LEU:CD1	2.78	0.62
33:BN:83:ILE:HG13	33:BN:84:ARG:HG2	1.81	0.62
33:BN:90:LYS:HZ3	33:BN:95:ARG:NH2	1.97	0.62
34:BO:14:SER:HB3	34:BO:86:ILE:CD1	2.30	0.62
35:BP:129:ALA:O	35:BP:130:ARG:C	2.38	0.62
26:BA:2416:C:P	35:BP:51:PHE:CE2	2.90	0.62
35:BP:66:VAL:CG1	35:BP:67:ARG:N	2.43	0.62
43:BR:89:ASP:OD1	43:BR:90:ARG:CA	2.48	0.62
37:BS:27:LEU:CD1	37:BS:28:LYS:N	2.63	0.62
37:BS:30:GLY:O	37:BS:31:LYS:CB	2.47	0.62
44:BU:20:ARG:HH11	45:BV:75:LYS:HD2	1.65	0.62
39:BW:32:ALA:C	39:BW:34:ASN:N	2.53	0.62
40:BX:9:HIS:NE2	40:BX:27:ALA:HB2	2.14	0.62
40:BX:38:ALA:HB1	40:BX:49:VAL:HG13	1.81	0.62
40:BX:3:ASP:CA	46:B2:24:LYS:CD	2.61	0.62
41:BY:102:ASP:HB3	41:BY:108:ARG:CZ	2.30	0.62
41:BY:43:ASN:ND2	41:BY:102:ASP:O	2.33	0.62
26:BA:99:U:H3	41:BY:107:LYS:HD3	1.65	0.62
42:BZ:18:MET:HA	42:BZ:35:ASP:HA	1.82	0.62
46:B2:20:LEU:CD2	46:B2:53:ILE:CG2	2.77	0.62
46:B2:26:GLU:O	46:B2:29:ASN:HB2	1.99	0.62
49:B4:7:PRO:HD2	49:B4:56:VAL:HG21	0.65	0.62
49:B4:64:GLY:O	49:B4:67:TYR:C	2.38	0.62
52:B7:43:THR:C	52:B7:46:ASP:OD1	2.35	0.62
26:BA:1980:G:C6	26:BA:1982:C:N4	2.68	0.62
26:BA:2093:G:C4	26:BA:2225:A:C6	2.86	0.62
26:BA:2208:U:H2'	26:BA:2209:C:H6	1.63	0.62
26:BA:2207:C:C2	26:BA:2218:G:N1	2.68	0.62
26:BA:2246:G:H2'	26:BA:2247:A:C8	2.34	0.62
26:BA:2266:A:H4'	26:BA:2267:A:C2	2.35	0.62
26:BA:2271:G:HO2'	26:BA:2272:U:C5'	2.08	0.62
26:BA:2292:C:H42	26:BA:2340:G:H1	1.44	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2403:C:H42	26:BA:2414:G:H1	1.46	0.62
26:BA:2406:U:H3	35:BP:55:GLN:HG3	1.63	0.62
26:BA:2468:G:N1	26:BA:2481:G:C5	2.67	0.62
26:BA:2472:G:C2'	26:BA:2475:C:N4	2.42	0.62
26:BA:2516:G:N7	26:BA:2517:C:N4	2.47	0.62
26:BA:2572:A:C5'	26:BA:2574:G:C5'	2.64	0.62
26:BA:2620:C:C4'	28:BE:252:GLN:HG2	2.29	0.62
26:BA:2773:C:OP1	28:BE:262:THR:HG22	2.00	0.62
26:BA:2786:U:C5'	28:BE:100:TRP:HB2	2.29	0.62
26:BA:2787:C:O2	26:BA:2787:C:H2'	1.98	0.62
26:BA:2836:U:H6	26:BA:2836:U:H3'	1.64	0.62
26:BA:2885:C:N3	26:BA:2886:G:C1'	2.63	0.62
26:BA:311:A:H62	26:BA:329:G:H5'	1.63	0.62
26:BA:558:G:OP1	33:BN:91:LYS:CA	2.47	0.62
26:BA:775:G:H22	26:BA:788:A:P	2.23	0.62
26:BA:1819:A:P	27:BD:154:VAL:N	2.72	0.62
29:BF:58:ALA:HB2	29:BF:79:ARG:CB	2.30	0.62
30:BG:142:ALA:CB	30:BG:151:ILE:CG1	2.66	0.62
31:BH:15:THR:HG23	31:BH:26:LYS:CA	2.29	0.62
31:BH:43:THR:HG22	31:BH:52:THR:HG22	1.75	0.62
32:BI:62:LEU:O	32:BI:66:LYS:HG3	2.00	0.62
55:BK:36:MET:HA	55:BK:39:CYS:SG	2.39	0.62
26:BA:6:A:H4'	33:BN:4:ALA:O	1.99	0.62
34:BO:17:ARG:CZ	34:BO:47:THR:HA	2.30	0.62
35:BP:114:VAL:HG12	35:BP:115:ARG:N	2.15	0.62
35:BP:62:ALA:HB2	35:BP:105:TYR:CB	2.22	0.62
38:BT:37:GLU:O	38:BT:39:ASN:N	2.33	0.62
44:BU:28:ARG:CA	44:BU:31:GLN:OE1	2.48	0.62
44:BU:57:PHE:C	44:BU:59:ARG:H	2.03	0.62
39:BW:32:ALA:CA	39:BW:35:ILE:HD11	2.26	0.62
42:BZ:26:LYS:N	42:BZ:84:TYR:HE1	1.95	0.62
1:AA:1014:A:H1'	22:AS:34:TRP:HB2	1.81	0.62
1:AA:120:A:H3'	1:AA:120:A:C8	2.35	0.62
1:AA:878:G:H5'	11:AH:89:PRO:HB2	1.82	0.62
7:AD:24:GLU:N	7:AD:112:VAL:CG1	2.63	0.62
10:AG:111:ARG:HD2	10:AG:123:GLU:HB2	1.81	0.62
1:AA:1060:C:H4'	13:AJ:51:ARG:HB3	1.82	0.62
14:AK:65:ALA:HB1	14:AK:98:LEU:HG	1.81	0.62
14:AK:99:GLN:HA	14:AK:105:VAL:HG21	1.82	0.62
1:AA:522:C:H5''	15:AL:120:TYR:OH	2.00	0.62
1:AA:563:A:H2	15:AL:15:ARG:NH1	1.97	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:236:G:H5''	20:AQ:42:TYR:OH	2.00	0.62
20:AQ:67:LYS:O	20:AQ:68:ARG:CB	2.47	0.62
25:BB:83:G:C5'	47:B3:52:HIS:CD2	2.83	0.62
49:B4:49:PHE:O	49:B4:50:LEU:O	2.17	0.62
26:BA:1072:C:H42	26:BA:1100:C:H42	1.48	0.62
26:BA:1492:G:C4'	27:BD:97:ASP:OD1	2.47	0.62
26:BA:1759:A:H5'	26:BA:2715:C:C1'	2.29	0.62
26:BA:18:C:O3'	44:BU:23:GLY:CA	2.47	0.62
26:BA:2353:G:C2	26:BA:2364:C:N3	2.62	0.62
26:BA:676:A:H1'	26:BA:2443:C:O4'	2.00	0.62
26:BA:2488:A:N1	26:BA:2489:G:C5	2.68	0.62
26:BA:2544:G:C4	26:BA:2545:G:C8	2.88	0.62
26:BA:2545:G:N2	26:BA:2546:U:C2	2.68	0.62
26:BA:2581:G:N1	26:BA:2610:C:C2'	2.62	0.62
26:BA:2641:G:C6	26:BA:2774:C:C5	2.88	0.62
26:BA:2681:C:H1'	26:BA:2682:U:C5	2.35	0.62
26:BA:2827:C:C2	26:BA:2828:C:C5	2.88	0.62
26:BA:2869:G:C2'	26:BA:2870:C:C5'	2.77	0.62
26:BA:729:G:H1'	26:BA:763:G:O3'	2.00	0.62
26:BA:2210:G:C5	27:BD:148:GLY:CA	2.78	0.62
27:BD:163:VAL:O	27:BD:163:VAL:HG12	2.00	0.62
27:BD:71:ASP:HA	27:BD:73:ILE:HG13	1.82	0.62
32:BI:2:LYS:HG2	32:BI:39:ALA:N	2.15	0.62
35:BP:77:ALA:CA	35:BP:81:VAL:HG11	2.25	0.62
36:BQ:131:ALA:HA	36:BQ:134:PHE:CD2	2.34	0.62
36:BQ:41:THR:OG1	36:BQ:126:VAL:CA	2.43	0.62
43:BR:52:ILE:C	43:BR:54:LEU:H	2.02	0.62
26:BA:446:G:OP2	44:BU:3:ARG:HD3	1.99	0.62
45:BV:35:LEU:N	45:BV:60:VAL:HG13	2.14	0.62
45:BV:72:ARG:O	45:BV:74:TYR:CE2	2.53	0.62
39:BW:70:TYR:CE2	39:BW:72:LYS:N	2.68	0.62
26:BA:1340:U:H5	40:BX:55:GLN:NE2	1.93	0.62
41:BY:32:ARG:C	41:BY:34:GLU:N	2.52	0.62
41:BY:64:ASN:O	41:BY:72:ILE:CG2	2.34	0.62
42:BZ:103:ARG:NH1	42:BZ:137:ASP:O	2.32	0.62
42:BZ:45:GLN:HE21	42:BZ:45:GLN:H	1.45	0.62
1:AA:3(A):G:C5	1:AA:1004:A:H1'	2.34	0.61
8:AE:79:GLU:HG3	8:AE:93:PRO:HD2	1.82	0.61
1:AA:192:U:H1'	23:AT:103:GLY:HA2	1.82	0.61
3:AW:9:A:N6	3:AW:45:G:C6	2.67	0.61
3:AW:76:A:C2	26:BA:2422:A:N6	2.55	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:17:LYS:O	47:B3:18:ASP:C	2.37	0.61
52:B7:11:LYS:HE3	52:B7:11:LYS:HA	1.80	0.61
54:B9:7:VAL:HG23	54:B9:36:GLN:OE1	2.00	0.61
26:BA:1027:A:C5	26:BA:1126:A:C2	2.87	0.61
26:BA:1268:A:H2'	26:BA:1269:A:C8	2.35	0.61
26:BA:2314:C:OP1	30:BG:74:THR:CG2	2.43	0.61
26:BA:2345:G:N2	26:BA:2381:C:H3'	2.15	0.61
26:BA:2759:G:C2'	26:BA:2760:C:C5'	2.78	0.61
26:BA:2628:C:O2	26:BA:2781:A:C2'	2.47	0.61
26:BA:2852:G:C2	26:BA:2853:C:O2	2.52	0.61
26:BA:322:A:OP2	26:BA:322:A:C8	2.50	0.61
26:BA:606:U:OP1	29:BF:105:LYS:HD2	2.00	0.61
26:BA:684:G:N2	26:BA:794:G:C2	2.69	0.61
26:BA:907:U:O2'	36:BQ:88:PHE:CE1	2.51	0.61
26:BA:910:A:N6	36:BQ:12:PRO:HA	2.14	0.61
27:BD:167:GLU:CA	27:BD:170:TYR:CD1	2.82	0.61
27:BD:71:ASP:C	27:BD:73:ILE:N	2.50	0.61
26:BA:2771:C:C4'	28:BE:316:ARG:HD2	2.29	0.61
29:BF:11:ASN:CG	29:BF:160:LEU:HD11	2.20	0.61
29:BF:16:VAL:HG12	29:BF:17:ASP:N	2.14	0.61
31:BH:153:PRO:O	31:BH:154:GLU:C	2.38	0.61
31:BH:169:ARG:HA	31:BH:169:ARG:NE	2.15	0.61
32:BI:63:ALA:HA	32:BI:66:LYS:HE2	1.81	0.61
55:BK:93:LYS:CG	55:BK:96:ILE:HD11	2.30	0.61
33:BN:15:ARG:HG2	33:BN:43:ARG:CB	2.30	0.61
33:BN:42:GLU:CA	33:BN:132:LEU:O	2.47	0.61
34:BO:78:ARG:O	38:BT:22:VAL:CG2	2.47	0.61
38:BT:6:CYS:SG	38:BT:31:PHE:HD2	2.23	0.61
44:BU:10:ARG:C	44:BU:13:ARG:HH12	2.03	0.61
40:BX:52:VAL:CG2	40:BX:65:VAL:O	2.47	0.61
42:BZ:46:GLN:C	42:BZ:49:THR:OG1	2.37	0.61
1:AA:1197:G:H2'	1:AA:1198:G:H5'	1.80	0.61
1:AA:1260:C:H1'	1:AA:1283:G:HO2'	1.65	0.61
1:AA:1312:G:O6	22:AS:2:PRO:O	2.18	0.61
1:AA:18:C:N3	1:AA:918:A:C2	2.68	0.61
1:AA:409:G:O5'	7:AD:25:ARG:CB	2.48	0.61
3:AW:40:C:H2'	3:AW:41:U:H5'	1.82	0.61
48:B0:25:LYS:HE2	48:B0:57:HIS:ND1	2.15	0.61
48:B0:40:GLN:N	48:B0:69:PHE:CZ	2.68	0.61
49:B4:47:GLU:HA	49:B4:53:GLU:H	1.66	0.61
52:B7:33:ARG:HB3	52:B7:37:LYS:HD2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:594:U:C5'	53:B8:58:MET:HE1	2.20	0.61
26:BA:1270:C:H4'	26:BA:1271:G:C5'	2.21	0.61
26:BA:1417:C:H3'	26:BA:1418:G:H8	1.65	0.61
26:BA:1426:G:H5''	26:BA:1427:A:H5''	1.81	0.61
26:BA:1652:A:H62	26:BA:1653:G:H21	1.48	0.61
26:BA:1819:A:H4'	26:BA:1820:U:C5'	2.30	0.61
26:BA:198:C:H2'	26:BA:199:A:H5''	1.81	0.61
26:BA:2018:G:N2	44:BU:34:ASN:HD22	1.72	0.61
26:BA:2206:C:C2'	26:BA:2207:C:O4'	2.47	0.61
26:BA:2337:G:C6	26:BA:2338:G:O6	2.52	0.61
26:BA:2361:A:C3'	26:BA:2362:G:H5'	2.31	0.61
26:BA:2384:G:O5'	26:BA:2386:C:OP1	2.18	0.61
26:BA:2476:A:N7	26:BA:2477:C:C6	2.66	0.61
26:BA:2488:A:C3'	26:BA:2488:A:C8	2.83	0.61
26:BA:2521:C:N3	26:BA:2522:U:C5	2.68	0.61
26:BA:2516:G:C6	26:BA:2569:G:C2	2.88	0.61
26:BA:2618:G:C2'	26:BA:2619:C:O5'	2.47	0.61
26:BA:2653:U:H3'	26:BA:2654:A:N7	2.15	0.61
26:BA:2665:A:C8	26:BA:2665:A:H5''	2.34	0.61
26:BA:2684:U:O4'	34:BO:76:TYR:OH	2.07	0.61
26:BA:2744:G:C2	26:BA:2761:G:C2	2.88	0.61
26:BA:2831:G:H1'	26:BA:2883:A:N3	2.15	0.61
26:BA:2886:G:N2	26:BA:2887:U:C1'	2.63	0.61
27:BD:160:SER:C	27:BD:162:GLN:HE22	2.03	0.61
26:BA:1799:G:N1	27:BD:177:SER:HB2	2.16	0.61
27:BD:202:LYS:O	27:BD:204:PHE:CE1	2.50	0.61
28:BE:81:VAL:CB	28:BE:100:TRP:CZ3	2.83	0.61
29:BF:141:SER:OG	29:BF:144:PHE:CE1	2.51	0.61
29:BF:59:GLU:CB	29:BF:61:PHE:CE2	2.57	0.61
32:BI:24:GLY:O	32:BI:25:TYR:C	2.38	0.61
55:BK:89:SER:HB2	55:BK:95:LYS:CE	2.30	0.61
34:BO:63:VAL:CG1	34:BO:102:VAL:HG22	2.30	0.61
34:BO:63:VAL:CG1	34:BO:102:VAL:CB	2.75	0.61
35:BP:113:GLN:O	35:BP:115:ARG:CD	2.48	0.61
35:BP:141:GLU:OE1	35:BP:141:GLU:O	2.18	0.61
36:BQ:43:PRO:O	36:BQ:125:TRP:CZ2	2.53	0.61
36:BQ:67:ALA:CA	36:BQ:71:PHE:HE1	2.14	0.61
43:BR:47:PHE:O	43:BR:49:ASP:N	2.32	0.61
43:BR:62:ALA:HB1	43:BR:80:PHE:CZ	2.35	0.61
45:BV:61:VAL:HG21	45:BV:97:GLY:CA	2.12	0.61
39:BW:82:LEU:O	39:BW:83:LYS:C	2.38	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:33:SER:O	40:BX:37:VAL:HB	1.99	0.61
42:BZ:120:LEU:CD2	42:BZ:120:LEU:N	2.43	0.61
42:BZ:125:PRO:CG	42:BZ:130:ILE:CG2	2.78	0.61
1:AA:280:C:O2	20:AQ:39:SER:N	2.32	0.61
1:AA:501:C:H1'	1:AA:549:C:H1'	1.80	0.61
1:AA:595:G:H2'	1:AA:641:U:O4	2.01	0.61
12:AI:32:ASP:HB3	12:AI:35:GLU:HB2	1.83	0.61
15:AL:54:LYS:HG3	15:AL:75:HIS:HE1	1.65	0.61
3:AW:72:C:H2'	3:AW:73:A:O4'	1.99	0.61
3:AW:9:A:C2	3:AW:45:G:N9	2.68	0.61
48:B0:48:GLY:CA	48:B0:55:ARG:CA	2.79	0.61
46:B2:39:ALA:HB3	46:B2:40:PRO:HD2	1.78	0.61
49:B4:14:ILE:HG22	49:B4:37:SER:N	2.10	0.61
54:B9:11:CYS:HB3	54:B9:32:HIS:CE1	2.36	0.61
26:BA:1029:A:H2'	26:BA:1030:G:O4'	2.00	0.61
26:BA:199:A:N1	26:BA:2433:A:N9	2.48	0.61
26:BA:2416:C:C2	26:BA:2417:C:C5	2.88	0.61
26:BA:2423:U:N1	26:BA:2425:A:C5	2.68	0.61
26:BA:2069:G:C2	26:BA:2443:C:C2	2.88	0.61
26:BA:2573:C:OP1	26:BA:2575:C:OP2	2.18	0.61
26:BA:2693:A:C2	26:BA:2694:G:C4	2.87	0.61
26:BA:2782:G:P	26:BA:2782:G:C8	2.93	0.61
26:BA:2814:C:C2	26:BA:2815:C:C5	2.87	0.61
26:BA:2817:G:C2	26:BA:2818:G:C4	2.88	0.61
26:BA:2896:C:C6	26:BA:2896:C:C4'	2.83	0.61
26:BA:660:G:H2'	26:BA:661:C:C6	2.34	0.61
26:BA:963:U:H1'	26:BA:2250:G:H22	1.54	0.61
25:BB:59:A:C2	25:BB:60:C:H1'	2.35	0.61
28:BE:39:GLN:CD	28:BE:174:LEU:CG	2.68	0.61
28:BE:77:PRO:HG2	28:BE:186:GLU:HB2	1.82	0.61
31:BH:149:ALA:C	31:BH:161:ILE:HD11	2.15	0.61
31:BH:67:THR:O	31:BH:68:ARG:C	2.37	0.61
32:BI:80:PRO:O	32:BI:148:GLN:HG2	1.99	0.61
32:BI:98:ILE:O	32:BI:99:ALA:C	2.39	0.61
55:BK:58:ILE:HG23	55:BK:67:THR:HA	1.82	0.61
33:BN:36:VAL:HG12	33:BN:36:VAL:O	2.00	0.61
33:BN:60:ARG:C	33:BN:71:TYR:CD2	2.73	0.61
33:BN:63:ILE:CD1	33:BN:71:TYR:CE2	2.73	0.61
34:BO:86:ILE:CG2	34:BO:87:ILE:H	2.11	0.61
36:BQ:117:GLY:O	36:BQ:118:ALA:HB3	2.01	0.61
36:BQ:47:GLU:OE2	36:BQ:152:SER:N	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:103:ASP:C	37:BS:105:GLY:H	2.04	0.61
25:BB:51:G:OP2	37:BS:72:GLU:CG	2.46	0.61
44:BU:109:LEU:O	44:BU:110:VAL:C	2.37	0.61
26:BA:1251:C:O5'	44:BU:10:ARG:HG3	2.00	0.61
44:BU:117:ARG:NE	44:BU:118:GLN:HG2	2.14	0.61
44:BU:15:LYS:HG2	44:BU:19:LYS:HE2	1.82	0.61
39:BW:69:LEU:HD22	39:BW:109:GLU:HB2	1.83	0.61
39:BW:26:GLY:HA2	39:BW:71:VAL:HG23	1.82	0.61
41:BY:9:LYS:HZ1	41:BY:13:ARG:HH22	1.48	0.61
42:BZ:26:LYS:HB2	42:BZ:84:TYR:HH	1.65	0.61
1:AA:127:G:P	1:AA:635:G:H1'	2.39	0.61
1:AA:1328:C:H5''	16:AM:28:ALA:CB	2.28	0.61
16:AM:88:ARG:HB2	16:AM:98:VAL:CG1	2.30	0.61
1:AA:624:C:H4'	19:AP:10:GLY:HA2	1.81	0.61
46:B2:23:LEU:N	46:B2:26:GLU:OE1	2.33	0.61
49:B4:17:GLN:HG2	49:B4:33:VAL:HG12	1.82	0.61
26:BA:1221:C:H2'	26:BA:1221:C:O2	2.01	0.61
26:BA:126:A:H5''	52:B7:18:PHE:CD1	2.34	0.61
26:BA:1429:G:O4'	26:BA:1568:G:H1'	1.98	0.61
26:BA:1610:A:OP2	26:BA:1610:A:H8	1.83	0.61
26:BA:2233:U:O2	26:BA:2234:G:C1'	2.48	0.61
26:BA:2400:G:C2	26:BA:2401:U:O2	2.54	0.61
26:BA:2504:U:H6	26:BA:2504:U:C4'	2.13	0.61
26:BA:2562:U:H2'	26:BA:2562:U:O2	1.99	0.61
26:BA:2567:G:H2'	26:BA:2568:C:C6	2.35	0.61
26:BA:2868:A:C2'	26:BA:2869:G:H5'	2.29	0.61
26:BA:865:C:N4	26:BA:908:C:N4	2.48	0.61
27:BD:130:PRO:CA	27:BD:188:ARG:HA	2.29	0.61
28:BE:61:PRO:HB3	28:BE:69:PRO:CA	2.30	0.61
29:BF:220:THR:OG1	29:BF:221:GLU:N	2.33	0.61
31:BH:60:HIS:O	31:BH:63:LEU:HB3	2.00	0.61
32:BI:21:VAL:CG1	32:BI:30:LEU:CD1	2.66	0.61
26:BA:1063:G:C4'	55:BK:135:MET:HG2	2.30	0.61
26:BA:1140:C:C6	33:BN:49:ARG:HG3	2.31	0.61
33:BN:7:ASP:O	33:BN:8:ALA:HB2	1.98	0.61
35:BP:77:ALA:HB2	35:BP:81:VAL:HG12	1.79	0.61
36:BQ:94:ARG:CZ	36:BQ:106:GLY:CA	2.78	0.61
36:BQ:131:ALA:CA	36:BQ:134:PHE:CE2	2.83	0.61
36:BQ:64:ALA:O	36:BQ:65:ARG:C	2.37	0.61
43:BR:97:VAL:HG13	43:BR:114:VAL:HG21	1.82	0.61
45:BV:65:ARG:O	45:BV:93:ILE:CB	2.48	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:94:LYS:C	45:BV:95:ILE:CG1	2.66	0.61
45:BV:61:VAL:HG23	45:BV:98:ILE:H	1.62	0.61
26:BA:520:G:P	39:BW:25:ARG:HH21	2.23	0.61
1:AA:1286:A:H61	1:AA:1355:G:P	2.23	0.61
46:B2:20:LEU:HD13	46:B2:23:LEU:CB	2.29	0.61
47:B3:22:ALA:CA	47:B3:46:ASN:ND2	2.58	0.61
49:B4:14:ILE:CB	49:B4:37:SER:O	2.42	0.61
50:B5:8:LYS:O	50:B5:9:LYS:CB	2.48	0.61
52:B7:26:SER:O	52:B7:29:ASN:CB	2.42	0.61
26:BA:1301:A:N7	26:BA:1303:G:O4'	2.33	0.61
26:BA:1327:C:H3'	26:BA:1328:G:C8	2.35	0.61
26:BA:2215:G:C2'	26:BA:2216:G:C8	2.55	0.61
26:BA:2219:G:C2	26:BA:2224:G:O4'	2.53	0.61
26:BA:2276:G:C4	26:BA:2277:G:C8	2.89	0.61
26:BA:2431:U:N3	26:BA:2434:A:OP2	2.32	0.61
26:BA:2504:U:C3'	26:BA:2504:U:H6	2.11	0.61
26:BA:2526:G:N7	26:BA:2527:C:H5	1.98	0.61
26:BA:2525:G:N1	26:BA:2539:C:C4	2.68	0.61
26:BA:2712:U:C3'	26:BA:2714:G:P	2.85	0.61
26:BA:2718:G:N3	26:BA:2719:G:C8	2.68	0.61
26:BA:2688:U:N3	26:BA:2719:G:N3	2.49	0.61
26:BA:2805:G:H2'	26:BA:2807:G:C4'	2.30	0.61
26:BA:2840:C:C2	26:BA:2841:C:C6	2.88	0.61
26:BA:294:A:O2'	41:BY:15:PRO:HG2	2.01	0.61
26:BA:321:G:C2'	26:BA:341:G:H4'	2.30	0.61
26:BA:527:C:C6	26:BA:2779:U:C5	2.89	0.61
26:BA:856:C:O2'	48:B0:24:LYS:HG2	1.92	0.61
26:BA:932:G:H4'	47:B3:24:LYS:NZ	2.14	0.61
27:BD:154:VAL:O	27:BD:154:VAL:HG12	1.98	0.61
28:BE:202:ALA:HA	28:BE:262:THR:CB	2.30	0.61
28:BE:271:ILE:CD1	28:BE:294:THR:CG2	2.73	0.61
30:BG:51:ARG:NH1	30:BG:72:LYS:HB2	2.15	0.61
32:BI:129:VAL:O	32:BI:131:VAL:HG23	2.00	0.61
32:BI:132:LYS:CA	32:BI:138:THR:CG2	2.77	0.61
26:BA:1059:G:N9	55:BK:127:ILE:HD13	2.15	0.61
36:BQ:85:ILE:HA	36:BQ:122:PHE:HB3	1.81	0.61
43:BR:25:ALA:O	43:BR:29:LEU:HD22	2.00	0.61
25:BB:9:G:OP1	37:BS:23:ARG:CZ	2.49	0.61
37:BS:76:GLY:C	37:BS:80:SER:C	2.58	0.61
45:BV:50:ASP:CB	45:BV:53:LYS:CG	2.28	0.61
45:BV:5:ILE:HD13	45:BV:12:TYR:CE1	2.36	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:41:ARG:CB	41:BY:112:LEU:CA	2.72	0.61
41:BY:43:ASN:ND2	41:BY:112:LEU:HD11	2.16	0.61
26:BA:310:A:OP1	41:BY:52:ARG:HB3	2.01	0.61
42:BZ:9:THR:O	42:BZ:13:LYS:HB2	2.01	0.61
16:AM:24:GLY:O	16:AM:29:ARG:HD2	2.01	0.61
48:B0:35:ASN:HA	48:B0:68:VAL:CG2	2.29	0.61
48:B0:65:GLY:HA2	48:B0:66:LYS:NZ	2.06	0.61
49:B4:58:LYS:HG2	49:B4:62:ARG:CZ	2.31	0.61
26:BA:125:G:H22	52:B7:10:ARG:N	1.91	0.61
52:B7:43:THR:O	52:B7:46:ASP:N	2.34	0.61
54:B9:20:HIS:O	54:B9:22:ARG:N	2.32	0.61
26:BA:2046:G:N2	26:BA:2623:G:C4	2.68	0.61
26:BA:2198:A:H2'	26:BA:2198:A:N3	2.16	0.61
26:BA:2252:G:C6	26:BA:2253:G:O6	2.54	0.61
26:BA:2409:G:H8	26:BA:2409:G:O5'	1.82	0.61
26:BA:2520:C:O2'	26:BA:2521:C:C5'	2.47	0.61
26:BA:2478:A:H1'	26:BA:2529:G:N7	2.16	0.61
26:BA:2549:G:C2	26:BA:2550:G:C8	2.88	0.61
26:BA:2611:U:H3'	26:BA:2611:U:C6	2.32	0.61
26:BA:2655:G:C3'	26:BA:2655:G:N3	2.63	0.61
26:BA:2695:C:O2	26:BA:2696:U:C5	2.54	0.61
26:BA:2734:A:N7	26:BA:2735:G:N7	2.48	0.61
26:BA:2755:C:C6	26:BA:2755:C:C4'	2.84	0.61
26:BA:647:G:H2'	26:BA:648:G:H8	1.65	0.61
26:BA:738:G:N2	26:BA:739:G:O2'	2.33	0.61
27:BD:146:LYS:CG	27:BD:147:PRO:HD2	2.25	0.61
28:BE:81:VAL:CB	28:BE:100:TRP:HZ3	2.13	0.61
28:BE:301:PRO:O	28:BE:303:PRO:CD	2.27	0.61
26:BA:1205:U:C2	29:BF:232:LEU:HD11	2.26	0.61
26:BA:451:C:P	29:BF:49:ASP:H	2.23	0.61
29:BF:63:SER:N	29:BF:65:ARG:HE	1.87	0.61
30:BG:98:PHE:C	30:BG:104:PHE:CD2	2.73	0.61
30:BG:141:VAL:N	30:BG:144:ARG:NH1	2.48	0.61
30:BG:27:ILE:O	30:BG:69:ILE:HD13	1.99	0.61
30:BG:75:LEU:HD22	30:BG:79:MET:HB3	1.82	0.61
32:BI:133:LEU:HD12	32:BI:138:THR:O	1.99	0.61
34:BO:14:SER:HB2	34:BO:86:ILE:HD12	1.81	0.61
36:BQ:137:ARG:CD	36:BQ:138:ARG:N	2.62	0.61
26:BA:2376:A:C6	37:BS:119:GLN:NE2	2.67	0.61
37:BS:17:ARG:NH1	37:BS:18:THR:HA	2.11	0.61
37:BS:30:GLY:O	37:BS:31:LYS:HB2	2.00	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:72:HIS:HE1	44:BU:107:LYS:HA	1.66	0.61
44:BU:26:GLY:O	44:BU:27:SER:CB	2.44	0.61
44:BU:88:ILE:CG2	45:BV:55:THR:HG21	2.28	0.61
45:BV:39:PHE:CE2	45:BV:41:GLY:N	2.68	0.61
45:BV:40:VAL:CA	45:BV:51:ALA:HA	2.31	0.61
45:BV:50:ASP:CA	45:BV:53:LYS:HE3	2.31	0.61
45:BV:59:GLU:CG	45:BV:99:GLN:HA	2.31	0.61
45:BV:33:VAL:CB	45:BV:63:HIS:CE1	2.79	0.61
41:BY:71:VAL:HG12	41:BY:91:LEU:HB2	1.82	0.61
41:BY:74:VAL:O	41:BY:76:ASP:N	2.33	0.61
42:BZ:13:LYS:O	42:BZ:18:MET:O	2.18	0.61
42:BZ:26:LYS:N	42:BZ:84:TYR:CZ	2.68	0.61
1:AA:1278:U:C4'	1:AA:1279:A:O4'	2.48	0.61
1:AA:1358:U:H5''	17:AN:33:VAL:O	2.00	0.61
5:AB:102:LEU:HD23	5:AB:177:ALA:HB2	1.83	0.61
1:AA:1058:G:OP1	6:AC:199:LYS:HE3	2.01	0.61
1:AA:409:G:P	7:AD:25:ARG:HB3	2.40	0.61
1:AA:1342:C:H4'	12:AI:125:TYR:HB2	1.83	0.61
18:AO:3:ILE:HG21	18:AO:34:LEU:HD21	1.83	0.61
1:AA:1364:U:C6	24:AU:14:TRP:CZ2	2.88	0.61
49:B4:15:ILE:H	49:B4:15:ILE:CD1	2.12	0.61
49:B4:5:LEU:C	49:B4:6:HIS:ND1	2.53	0.61
54:B9:10:MET:CA	54:B9:10:MET:HE3	2.31	0.61
54:B9:3:VAL:HG12	54:B9:5:SER:O	1.99	0.61
26:BA:1227:A:H8	26:BA:1227:A:H3'	1.65	0.61
26:BA:1527:G:O5'	26:BA:1527:G:C8	2.53	0.61
26:BA:2197:U:H2'	26:BA:2224:G:C2	2.29	0.61
26:BA:965:C:O4'	26:BA:2273:A:C4	2.53	0.61
26:BA:2344:U:O2	26:BA:2344:U:H2'	1.98	0.61
26:BA:2396:G:O5'	26:BA:2396:G:C8	2.53	0.61
26:BA:2447:G:N1	26:BA:2500:U:C4	2.69	0.61
26:BA:2514:U:H2'	26:BA:2515:C:O4'	1.99	0.61
26:BA:2542:A:O4'	26:BA:2542:A:P	2.57	0.61
26:BA:2557:G:C4	26:BA:2558:C:C5	2.89	0.61
26:BA:7:G:H5'	33:BN:6:PHE:HD2	1.65	0.61
26:BA:865:C:O2	26:BA:865:C:H2'	2.01	0.61
26:BA:969:U:H4'	47:B3:14:GLY:C	2.09	0.61
26:BA:995:C:OP2	44:BU:54:LYS:HE2	1.99	0.61
28:BE:229:GLN:O	28:BE:231:TRP:HD1	1.82	0.61
26:BA:2620:C:H4'	28:BE:252:GLN:HG2	1.81	0.61
28:BE:303:PRO:HB2	28:BE:307:LEU:HB3	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:74:GLU:HB2	28:BE:293:TYR:CE2	2.20	0.61
29:BF:193:LEU:HD11	29:BF:231:ARG:CB	2.31	0.61
29:BF:84:VAL:H	29:BF:87:ARG:HE	1.49	0.61
30:BG:156:ARG:CG	30:BG:156:ARG:O	2.49	0.61
32:BI:80:PRO:CA	32:BI:146:THR:HG23	2.31	0.61
33:BN:10:VAL:CG1	33:BN:36:VAL:HA	2.29	0.61
34:BO:16:ALA:O	34:BO:17:ARG:HG3	2.00	0.61
35:BP:94:ARG:CD	35:BP:120:LEU:CA	2.79	0.61
35:BP:120:LEU:HD12	35:BP:122:ALA:CB	2.30	0.61
36:BQ:136:TRP:CE3	36:BQ:139:ALA:CB	2.84	0.61
36:BQ:84:ARG:NH2	36:BQ:123:ILE:HD12	2.15	0.61
26:BA:1287:A:H5''	43:BR:104:ARG:CG	2.31	0.61
44:BU:92:ARG:O	44:BU:95:LEU:CB	2.47	0.61
45:BV:40:VAL:HG12	45:BV:55:THR:CG2	2.25	0.61
45:BV:67:LYS:HG2	45:BV:70:TYR:HE1	1.64	0.61
39:BW:88:ARG:O	39:BW:91:GLY:N	2.29	0.61
1:AA:1193:G:O2'	8:AE:25:ARG:NE	2.34	0.61
1:AA:776:G:H22	1:AA:802:A:P	2.23	0.61
15:AL:37:CYS:O	15:AL:79:GLU:HA	2.01	0.61
1:AA:1203:C:OP1	17:AN:2:ALA:N	2.34	0.61
48:B0:61:ALA:CB	48:B0:80:SER:CA	2.78	0.61
46:B2:35:ALA:O	46:B2:38:GLY:N	2.29	0.61
47:B3:39:ASP:OD1	47:B3:40:THR:N	2.30	0.61
26:BA:1809:A:N6	49:B4:3:LYS:CB	2.62	0.61
49:B4:68:ARG:CB	49:B4:72:LYS:CG	2.79	0.61
50:B5:41:LEU:O	50:B5:42:SER:C	2.38	0.61
26:BA:1024:G:N2	26:BA:1139:G:N2	2.48	0.61
26:BA:1462:C:H5'	26:BA:2703:C:H5'	1.82	0.61
26:BA:1670:C:P	26:BA:2550:G:OP2	2.58	0.61
26:BA:2246:G:C2	26:BA:2247:A:N7	2.69	0.61
26:BA:2321:G:N2	26:BA:2322:A:H1'	2.15	0.61
26:BA:631:A:C2	26:BA:2415:G:N3	2.64	0.61
26:BA:2459:A:N7	26:BA:2460:U:C4	2.69	0.61
26:BA:2508:G:H2'	26:BA:2509:G:C5'	2.30	0.61
26:BA:2519:U:C2	26:BA:2542:A:C6	2.88	0.61
26:BA:2695:C:O2'	26:BA:2696:U:O4'	2.19	0.61
26:BA:2706:G:O5'	26:BA:2706:G:C8	2.48	0.61
26:BA:2882:A:C2'	26:BA:2883:A:O5'	2.49	0.61
26:BA:873:G:H5'	36:BQ:32:LYS:H	1.66	0.61
26:BA:974(A):C:H2'	26:BA:974(A):C:O2	1.99	0.61
28:BE:247:ARG:HD2	28:BE:249:THR:OG1	2.01	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:16:VAL:CG1	29:BF:17:ASP:N	2.63	0.61
29:BF:52:ALA:C	29:BF:55:ARG:HB3	2.20	0.61
26:BA:2310:A:H2'	30:BG:55:LYS:HE2	0.79	0.61
55:BK:24:VAL:HG13	55:BK:28:LEU:HD12	1.82	0.61
55:BK:8:GLN:C	55:BK:9:ILE:CG1	2.69	0.61
26:BA:1021:A:N7	33:BN:49:ARG:NH1	2.44	0.61
34:BO:63:VAL:HG11	34:BO:102:VAL:HG22	1.81	0.61
34:BO:35:ILE:HG13	34:BO:62:VAL:HG12	1.82	0.61
35:BP:57:VAL:O	35:BP:58:GLN:HB3	2.01	0.61
36:BQ:46:VAL:C	36:BQ:124:ALA:O	2.38	0.61
36:BQ:49:VAL:HG22	36:BQ:120:HIS:C	2.20	0.61
43:BR:102:GLU:HG3	43:BR:103:ARG:N	2.12	0.61
43:BR:86:ARG:C	43:BR:87:TYR:HD2	2.03	0.61
37:BS:102:LEU:HD12	37:BS:129:ILE:CD1	2.13	0.61
37:BS:105:GLY:C	37:BS:106:LEU:CD2	2.61	0.61
37:BS:118:ILE:HG23	37:BS:119:GLN:N	2.13	0.61
37:BS:27:LEU:CD1	37:BS:27:LEU:C	2.66	0.61
44:BU:92:ARG:C	44:BU:95:LEU:CD1	2.53	0.61
26:BA:99:U:N3	41:BY:107:LYS:HD3	2.16	0.61
9:AF:69:GLU:O	9:AF:72:VAL:HG23	2.01	0.61
15:AL:54:LYS:HG2	15:AL:75:HIS:HE1	1.65	0.61
16:AM:94:ARG:HB2	16:AM:96:LEU:HD21	1.83	0.61
2:AV:1:G:HO2'	36:BQ:98:GLY:C	2.04	0.61
1:AA:1400:C:O2	2:AV:34:G:N2	2.30	0.61
43:BR:101:ALA:CA	50:B5:41:LEU:HD12	2.31	0.61
39:BW:38:TYR:CD1	50:B5:41:LEU:HD21	2.35	0.61
53:B8:16:ILE:HG23	53:B8:22:VAL:CG2	2.31	0.61
54:B9:4:ARG:O	54:B9:36:GLN:CA	2.48	0.61
26:BA:144:C:H2'	26:BA:145:G:H8	1.65	0.61
26:BA:1310:G:H1	26:BA:1604:C:H42	1.49	0.61
26:BA:2296:U:H3'	26:BA:2296:U:H6	1.65	0.61
26:BA:2423:U:C1'	26:BA:2425:A:C8	2.83	0.61
26:BA:2425:A:C2'	26:BA:2426:A:OP2	2.48	0.61
26:BA:2443:C:H2'	26:BA:2444:G:O4'	2.01	0.61
26:BA:2728:U:H2'	26:BA:2729:G:C8	2.36	0.61
26:BA:2767:C:H2'	26:BA:2768:C:C5'	2.31	0.61
26:BA:2854:G:N2	26:BA:2864:G:C4	2.69	0.61
26:BA:2811:G:N2	26:BA:2891:G:H1'	2.16	0.61
26:BA:551:G:H4'	26:BA:1220:A:H2	1.65	0.61
26:BA:783:A:N1	26:BA:785:G:H1'	2.16	0.61
26:BA:848:G:H21	26:BA:933:A:H1'	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:974(A):C:C6	26:BA:989:G:N1	2.69	0.61
27:BD:208:GLY:O	27:BD:211:HIS:CG	2.53	0.61
26:BA:2621:A:O2'	28:BE:255:GLN:NE2	2.34	0.61
26:BA:2821:A:O3'	28:BE:258:TYR:CE2	2.53	0.61
28:BE:39:GLN:CB	28:BE:174:LEU:HG	2.30	0.61
29:BF:220:THR:CA	29:BF:224:ALA:CB	2.76	0.61
29:BF:81:PRO:O	29:BF:82:GLN:HB3	2.01	0.61
30:BG:49:PRO:HG3	30:BG:73:VAL:CG2	2.28	0.61
32:BI:35:LEU:O	32:BI:36:ALA:HB3	2.01	0.61
35:BP:67:ARG:HH11	35:BP:111:ALA:HB3	1.66	0.61
35:BP:128:GLY:O	35:BP:129:ALA:O	2.19	0.61
37:BS:117:ALA:CA	37:BS:120:GLU:CD	2.65	0.61
38:BT:53:ASP:CA	38:BT:56:ARG:HE	2.14	0.61
45:BV:40:VAL:CG1	45:BV:55:THR:HG22	2.30	0.61
39:BW:5:ALA:HB3	39:BW:50:VAL:O	2.00	0.61
41:BY:51:LEU:HD22	41:BY:95:ASN:HB3	1.82	0.61
42:BZ:125:PRO:HG2	42:BZ:130:ILE:CG2	2.30	0.61
42:BZ:163:ASP:OD2	42:BZ:164:PRO:HD2	0.79	0.61
42:BZ:89:GLY:C	42:BZ:91:PRO:HD2	2.21	0.61
1:AA:768:A:OP1	1:AA:804:U:C5'	2.49	0.61
8:AE:11:ILE:HD11	8:AE:108:ALA:HB2	1.83	0.61
13:AJ:64:GLU:HG2	17:AN:59:ALA:HA	1.82	0.61
23:AT:87:LYS:O	23:AT:91:LEU:HG	2.01	0.61
46:B2:15:GLU:O	46:B2:17:GLU:C	2.39	0.61
47:B3:16:PRO:HB2	47:B3:19:GLN:HG2	1.83	0.61
47:B3:31:LEU:HD22	47:B3:32:GLN:N	2.08	0.61
49:B4:14:ILE:HD12	49:B4:16:TYR:HE1	1.63	0.61
39:BW:19:LEU:CD1	50:B5:25:LEU:HG	2.28	0.61
26:BA:1031:G:O3'	54:B9:8:LYS:HE2	2.01	0.61
26:BA:1140:C:H1'	26:BA:142(A):A:C6	2.36	0.61
26:BA:1287:A:C8	26:BA:1287:A:H5'	2.36	0.61
26:BA:1544:C:C2'	26:BA:1545:A:H4'	2.27	0.61
26:BA:1800:C:H3'	26:BA:1800:C:H6	1.65	0.61
26:BA:2429:G:H5'	26:BA:2430:A:P	2.41	0.61
26:BA:2483:C:C2'	26:BA:2484:G:O5'	2.46	0.61
26:BA:2503:A:C8	26:BA:2503:A:H3'	2.34	0.61
26:BA:2605:U:O2'	26:BA:2606:C:H5''	2.01	0.61
26:BA:2620:C:O2'	26:BA:2621:A:P	2.59	0.61
26:BA:2733:A:H3'	26:BA:2733:A:H8	1.66	0.61
26:BA:2740:A:C1'	26:BA:2741:A:C8	2.84	0.61
26:BA:527:C:C6	26:BA:2779:U:H2'	2.36	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:689:A:H2'	26:BA:690:G:O4'	2.00	0.61
26:BA:784:A:O2'	26:BA:785:G:H5''	2.00	0.61
26:BA:821:A:O2'	26:BA:945:A:H3'	2.00	0.61
25:BB:24:G:C8	25:BB:56:G:C5	2.89	0.61
27:BD:196:ASN:CA	27:BD:199:ARG:CD	2.77	0.61
28:BE:221:LYS:HE3	28:BE:233:ARG:CB	2.31	0.61
28:BE:240:PRO:CG	28:BE:243:PRO:HG2	2.30	0.61
28:BE:247:ARG:HB3	28:BE:249:THR:HG23	1.82	0.61
28:BE:254:GLY:O	28:BE:255:GLN:C	2.39	0.61
26:BA:321:G:C1'	29:BF:206:ASN:ND2	2.63	0.61
29:BF:6:TYR:CD1	29:BF:139:VAL:HB	2.35	0.61
29:BF:96:LYS:HB2	29:BF:98:ARG:NH1	0.68	0.61
32:BI:43:ASN:HA	32:BI:46:ALA:HB2	1.81	0.61
55:BK:20:PRO:C	55:BK:22:PRO:HD2	2.21	0.61
34:BO:13:ASN:O	34:BO:14:SER:C	2.37	0.61
34:BO:35:ILE:HD12	34:BO:62:VAL:CG1	2.30	0.61
35:BP:64:ILE:HD13	35:BP:106:VAL:HG12	1.81	0.61
37:BS:122:ALA:CA	37:BS:125:ALA:HB3	2.31	0.61
38:BT:10:GLY:O	38:BT:11:THR:O	2.19	0.61
45:BV:3:ALA:N	45:BV:14:VAL:O	2.30	0.61
39:BW:66:GLU:O	39:BW:69:LEU:CD2	2.48	0.61
41:BY:101:LEU:CD2	41:BY:101:LEU:C	2.66	0.61
41:BY:40:VAL:O	41:BY:41:ARG:HB2	2.00	0.61
42:BZ:149:ALA:O	42:BZ:150:GLY:C	2.38	0.61
42:BZ:81:VAL:HG12	42:BZ:82:ASP:H	1.64	0.61
1:AA:1229:A:O2'	16:AM:125:ARG:NH1	2.34	0.60
1:AA:1328:C:O5'	16:AM:28:ALA:CB	2.49	0.60
1:AA:1404:C:O2	1:AA:1519:A:O2'	2.19	0.60
7:AD:18:LYS:HA	7:AD:33:MET:CE	2.31	0.60
1:AA:877:C:O3'	11:AH:89:PRO:HD2	2.01	0.60
1:AA:1268:A:O3'	24:AU:19:GLY:O	2.19	0.60
3:AW:7:U:O3'	3:AW:8:U:C5'	2.49	0.60
48:B0:65:GLY:O	48:B0:66:LYS:CG	2.48	0.60
47:B3:16:PRO:C	47:B3:19:GLN:OE1	2.40	0.60
47:B3:5:LYS:CB	47:B3:36:VAL:HG12	2.31	0.60
49:B4:21:VAL:O	49:B4:22:MET:CB	2.49	0.60
49:B4:36:TRP:CD1	49:B4:36:TRP:N	2.69	0.60
49:B4:59:PHE:CA	49:B4:62:ARG:NE	2.63	0.60
50:B5:45:ILE:CB	50:B5:52:TYR:CE1	2.84	0.60
51:B6:32:GLN:CG	51:B6:35:LEU:CD1	2.67	0.60
26:BA:2051:A:C5	26:BA:2614:A:N7	2.69	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2252:G:C6	26:BA:2253:G:C5	2.89	0.60
26:BA:2458:G:O2'	26:BA:2459:A:C8	2.50	0.60
26:BA:2504:U:H3'	26:BA:2504:U:H6	1.66	0.60
26:BA:2553:G:C6	26:BA:2554:U:O2	2.54	0.60
26:BA:2603:G:H2'	26:BA:2604:U:O4'	2.01	0.60
26:BA:2701:C:C3'	26:BA:2702:U:C5'	2.73	0.60
26:BA:1664:A:N3	26:BA:2726:U:C4	2.68	0.60
26:BA:2752:C:N4	26:BA:2753:A:N1	2.49	0.60
26:BA:2821:A:H2'	26:BA:2821:A:N3	2.16	0.60
26:BA:294:A:H3'	26:BA:294:A:C8	2.36	0.60
25:BB:105:G:H2'	25:BB:106:G:H8	1.66	0.60
26:BA:450:G:OP2	29:BF:85:LYS:O	2.19	0.60
31:BH:59:HIS:O	31:BH:61:ARG:N	2.34	0.60
55:BK:114:PRO:C	55:BK:116:LEU:H	2.05	0.60
55:BK:32:GLY:O	55:BK:60:VAL:CB	2.48	0.60
55:BK:79:LEU:HD23	55:BK:79:LEU:O	2.00	0.60
33:BN:20:GLY:O	33:BN:22:VAL:CA	2.49	0.60
26:BA:142(A):A:O3'	33:BN:21:ARG:NH2	2.34	0.60
34:BO:17:ARG:CZ	34:BO:47:THR:CA	2.79	0.60
34:BO:17:ARG:HE	34:BO:47:THR:CA	2.13	0.60
36:BQ:9:SER:O	36:BQ:11:LYS:HE2	2.00	0.60
43:BR:20:LEU:CD2	43:BR:24:GLN:CG	2.79	0.60
25:BB:9:G:OP1	37:BS:23:ARG:NH1	2.34	0.60
44:BU:117:ARG:CG	44:BU:118:GLN:N	2.64	0.60
45:BV:20:ILE:HG21	45:BV:67:LYS:HD2	1.81	0.60
39:BW:8:ARG:CG	39:BW:102:HIS:HE1	2.09	0.60
39:BW:23:LEU:C	39:BW:23:LEU:CD2	2.69	0.60
26:BA:138:G:C8	40:BX:42:GLU:CD	2.74	0.60
42:BZ:165:GLU:O	42:BZ:166:LEU:HB2	2.01	0.60
25:BB:75:G:C4	42:BZ:22:VAL:HG21	2.36	0.60
42:BZ:34:LEU:O	42:BZ:35:ASP:CB	2.47	0.60
42:BZ:62:PHE:CE1	42:BZ:87:THR:HG21	2.36	0.60
1:AA:994:A:N1	1:AA:1047:G:H4'	2.16	0.60
1:AA:574:A:N3	1:AA:883:C:H1'	2.16	0.60
48:B0:75:GLY:O	48:B0:76:ALA:HB2	2.01	0.60
48:B0:61:ALA:HB1	48:B0:80:SER:HA	1.82	0.60
47:B3:31:LEU:HD22	47:B3:32:GLN:HB3	1.81	0.60
49:B4:60:ASN:O	49:B4:63:PHE:HB2	2.01	0.60
51:B6:8:ILE:N	51:B6:8:ILE:HD13	2.05	0.60
54:B9:7:VAL:HG21	54:B9:36:GLN:HG3	1.83	0.60
26:BA:1999:C:C2'	26:BA:2687:U:O2'	2.48	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2218:G:C2'	26:BA:2219:G:O5'	2.48	0.60
26:BA:2279:G:H2'	26:BA:2280:G:H8	1.66	0.60
26:BA:2246:G:H1'	26:BA:2426:A:C2	2.36	0.60
26:BA:2432:A:C2	26:BA:2433:A:C4	2.89	0.60
26:BA:807:U:C5'	26:BA:2445:G:H4'	2.30	0.60
26:BA:2555:U:C5	26:BA:2556:C:C5	2.89	0.60
26:BA:2682:U:H6	28:BE:48:MET:SD	2.23	0.60
26:BA:2684:U:N3	26:BA:2725:A:C6	2.69	0.60
26:BA:2776:A:C2	26:BA:2778:A:C6	2.88	0.60
26:BA:2786:U:H2'	26:BA:2787:C:C6	2.35	0.60
26:BA:246:C:O2'	26:BA:385:C:H4'	2.02	0.60
26:BA:405:U:H5''	26:BA:406:G:O5'	2.01	0.60
26:BA:874:G:H1	26:BA:903:C:H42	1.47	0.60
27:BD:167:GLU:O	27:BD:168:GLY:C	2.38	0.60
27:BD:175:LEU:HG	27:BD:180:VAL:CA	2.24	0.60
26:BA:1656:C:OP2	28:BE:233:ARG:HD3	2.00	0.60
29:BF:167:ASP:CG	29:BF:232:LEU:CG	2.59	0.60
32:BI:115:ILE:HG12	32:BI:131:VAL:CG2	2.31	0.60
32:BI:86:GLY:C	32:BI:88:ARG:CA	2.69	0.60
33:BN:27:ALA:N	33:BN:30:ALA:HB2	2.14	0.60
33:BN:53:ILE:HG22	33:BN:54:VAL:HG23	1.82	0.60
44:BU:93:LYS:O	44:BU:94:VAL:CG2	2.48	0.60
39:BW:84:ARG:CB	39:BW:96:ILE:HD11	2.12	0.60
26:BA:337:C:P	41:BY:24:ARG:CB	2.86	0.60
42:BZ:41:ARG:H	42:BZ:41:ARG:HE	1.49	0.60
1:AA:1403:C:H1'	1:AA:1500:A:N1	2.17	0.60
7:AD:24:GLU:O	7:AD:27:TYR:HB2	2.02	0.60
9:AF:23:LYS:HA	9:AF:26:ILE:HD12	1.83	0.60
48:B0:8:GLY:O	48:B0:10:SER:N	2.33	0.60
48:B0:48:GLY:CA	48:B0:55:ARG:CB	2.78	0.60
46:B2:46:ILE:O	46:B2:47:LYS:C	2.40	0.60
46:B2:27:LEU:CD2	46:B2:53:ILE:HD11	2.31	0.60
49:B4:58:LYS:C	49:B4:61:LYS:HG3	2.13	0.60
49:B4:6:HIS:CB	49:B4:7:PRO:CD	2.65	0.60
50:B5:50:GLY:HA2	50:B5:57:VAL:CB	2.31	0.60
53:B8:12:ARG:O	53:B8:14:ILE:HD13	1.99	0.60
53:B8:26:LYS:HE3	53:B8:45:GLY:CA	2.31	0.60
26:BA:1006:C:H1'	33:BN:86:MET:SD	2.42	0.60
26:BA:1059:G:N2	55:BK:127:ILE:CG2	2.43	0.60
26:BA:1127:A:H2	26:BA:2518:A:H1'	1.66	0.60
26:BA:1350:C:N4	26:BA:1381:G:H1	1.97	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:14:A:N3	26:BA:2625:G:O2'	2.34	0.60
26:BA:1556:C:H2'	26:BA:1557:C:C6	2.36	0.60
26:BA:1339:G:H22	26:BA:1603:A:H8	1.47	0.60
26:BA:1819:A:C2'	27:BD:177:SER:OG	2.48	0.60
26:BA:1667:G:H2'	26:BA:1991:U:O4	2.01	0.60
26:BA:2268:A:P	26:BA:2268:A:O4'	2.59	0.60
26:BA:2461:C:O2	26:BA:2462:U:H6	1.84	0.60
26:BA:2537:U:C6	26:BA:2538:C:H5	2.19	0.60
26:BA:2606:C:C6	26:BA:2606:C:H5'	2.34	0.60
26:BA:2619:C:H2'	26:BA:2620:C:H5'	1.83	0.60
26:BA:2741:A:O2'	26:BA:2742:C:O4'	2.18	0.60
26:BA:2869:G:H2'	26:BA:2870:C:C5'	2.31	0.60
26:BA:414:C:N3	26:BA:2409:G:C2	2.68	0.60
26:BA:511:U:OP2	26:BA:512:G:C5	2.53	0.60
25:BB:28:C:P	37:BS:41:LYS:HG3	2.40	0.60
25:BB:83:G:H4'	47:B3:52:HIS:HD2	1.66	0.60
28:BE:229:GLN:O	28:BE:231:TRP:CD1	2.54	0.60
26:BA:2620:C:C4'	28:BE:252:GLN:HB2	2.31	0.60
29:BF:195:VAL:O	29:BF:236:THR:HG23	2.01	0.60
30:BG:145:ASP:CB	37:BS:15:GLU:HA	2.26	0.60
30:BG:151:ILE:CD1	30:BG:156:ARG:NH2	2.51	0.60
2:AV:56:C:C2'	30:BG:56:ARG:CD	2.77	0.60
30:BG:60:GLU:O	30:BG:61:PHE:CB	2.50	0.60
55:BK:107:GLU:OE1	55:BK:107:GLU:O	2.18	0.60
55:BK:112:LYS:O	55:BK:114:PRO:CD	2.49	0.60
55:BK:116:LEU:HD13	55:BK:117:ASN:CA	2.31	0.60
55:BK:132:ALA:HA	55:BK:137:ILE:HB	1.84	0.60
36:BQ:16:ARG:H	36:BQ:20:ILE:HG12	1.64	0.60
36:BQ:65:ARG:CZ	36:BQ:122:PHE:CD2	2.78	0.60
43:BR:74:LYS:O	43:BR:77:ARG:NH1	2.33	0.60
43:BR:58:GLY:C	43:BR:80:PHE:HE2	2.03	0.60
37:BS:61:ALA:HB1	37:BS:84:THR:HG22	1.83	0.60
45:BV:69:ILE:HG21	45:BV:88:GLN:C	2.21	0.60
40:BX:4:VAL:HG23	40:BX:5:ILE:N	2.16	0.60
42:BZ:13:LYS:C	42:BZ:15:ASP:N	2.36	0.60
1:AA:1277:C:C1'	1:AA:1282:C:H1'	2.32	0.60
1:AA:1405:G:O4'	1:AA:1519:A:H4'	2.01	0.60
1:AA:627:G:H2'	1:AA:628:G:H8	1.65	0.60
1:AA:695:A:C2	1:AA:787:A:H4'	2.27	0.60
1:AA:404:U:C5	7:AD:2:GLY:HA2	2.35	0.60
7:AD:3:ARG:NH2	7:AD:74:GLN:CD	2.55	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AG:66:VAL:HG12	10:AG:70:LYS:HE2	1.84	0.60
14:AK:58:PRO:HA	14:AK:90:GLY:HA3	1.82	0.60
46:B2:60:GLN:O	46:B2:61:GLY:C	2.40	0.60
49:B4:56:VAL:HG12	49:B4:57:ASP:H	1.66	0.60
26:BA:1800:C:C3'	26:BA:1800:C:H6	2.14	0.60
26:BA:2292:C:H2'	26:BA:2293:C:H6	1.66	0.60
26:BA:2307:G:H1'	26:BA:2311:A:H61	0.59	0.60
26:BA:2332:U:H4'	26:BA:2336:A:N6	2.17	0.60
26:BA:2346:A:HO2'	26:BA:2347:C:P	2.22	0.60
26:BA:2393:A:O2'	26:BA:2394:C:O4'	2.19	0.60
26:BA:2415:G:H22	26:BA:2416:C:H1'	1.64	0.60
26:BA:2468:G:O2'	26:BA:2469:A:C8	2.35	0.60
26:BA:2597:G:C6	26:BA:2598:A:C6	2.88	0.60
26:BA:746:A:O5'	26:BA:2612:C:C6	2.54	0.60
26:BA:2681:C:C4'	28:BE:48:MET:SD	2.90	0.60
26:BA:2695:C:O2	26:BA:2696:U:C4	2.54	0.60
26:BA:1456:G:N1	26:BA:2704:C:N4	2.50	0.60
26:BA:2754:U:O2'	26:BA:2756:U:OP2	2.19	0.60
26:BA:2758:A:OP2	26:BA:2758:A:C8	2.54	0.60
26:BA:1752:C:H4'	26:BA:2862:G:OP1	2.01	0.60
26:BA:617:G:OP1	29:BF:221:GLU:CB	2.49	0.60
27:BD:175:LEU:CD2	27:BD:175:LEU:H	2.10	0.60
27:BD:203:PRO:C	27:BD:204:PHE:HD1	2.02	0.60
26:BA:1790:C:OP2	27:BD:224:VAL:CG1	2.48	0.60
28:BE:199:ALA:HA	28:BE:314:ALA:HA	1.83	0.60
29:BF:26:VAL:HG12	29:BF:27:ARG:N	2.16	0.60
25:BB:18:G:H3'	30:BG:149:ARG:HH11	1.66	0.60
30:BG:22:VAL:CB	30:BG:24:HIS:NE2	2.57	0.60
32:BI:52:GLN:HA	32:BI:55:GLN:CG	2.32	0.60
33:BN:22:VAL:HG12	33:BN:23:ALA:N	2.16	0.60
33:BN:62:ASP:N	33:BN:62:ASP:OD1	2.34	0.60
36:BQ:36:ASN:C	36:BQ:41:THR:CB	2.69	0.60
43:BR:90:ARG:HH12	43:BR:117:VAL:HG11	1.66	0.60
26:BA:447:A:P	44:BU:5:LYS:HZ3	2.23	0.60
45:BV:5:ILE:O	45:BV:6:GLN:CB	2.50	0.60
39:BW:11:ARG:NH1	39:BW:11:ARG:CG	2.61	0.60
42:BZ:69:VAL:CB	42:BZ:81:VAL:HG13	2.24	0.60
1:AA:1408:A:HO2'	26:BA:1913:A:HO2'	1.48	0.60
1:AA:801:U:H2'	1:AA:802:A:C8	2.37	0.60
7:AD:185:PHE:CE2	7:AD:189:PRO:HD3	2.35	0.60
2:AV:30:G:O3'	12:AI:127:LYS:CE	2.48	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AK:40:ILE:HG23	14:AK:75:TYR:HD2	1.66	0.60
1:AA:1268:A:O4'	24:AU:20:LYS:CB	2.44	0.60
47:B3:20:LYS:O	47:B3:23:LEU:CA	2.49	0.60
43:BR:101:ALA:C	50:B5:41:LEU:HD12	2.21	0.60
50:B5:57:VAL:CG1	50:B5:58:LEU:N	2.29	0.60
26:BA:2615:U:C2	50:B5:7:PRO:HA	2.36	0.60
51:B6:12:MET:HE1	51:B6:54:LYS:O	2.02	0.60
51:B6:36:GLU:C	51:B6:52:GLU:OE2	2.39	0.60
52:B7:3:ARG:O	52:B7:4:THR:CG2	2.45	0.60
26:BA:1129:A:N1	26:BA:2570:G:C4'	2.64	0.60
26:BA:1152:C:O3'	44:BU:80:ILE:HD13	2.02	0.60
26:BA:1183:G:H5''	47:B3:29:ARG:HG3	1.84	0.60
26:BA:1614:A:H62	39:BW:88:ARG:CB	1.85	0.60
26:BA:1952:A:C2	34:BO:22:ILE:HD13	2.35	0.60
26:BA:197:A:C5	26:BA:2430:A:N7	2.70	0.60
26:BA:2358:G:H5''	26:BA:2359:C:OP2	2.01	0.60
26:BA:2846:G:H1	26:BA:2869:G:H1	1.49	0.60
26:BA:533:G:H1	26:BA:560:C:N4	1.93	0.60
26:BA:598:G:H21	29:BF:33:LYS:HZ3	0.61	0.60
26:BA:617:G:OP1	29:BF:221:GLU:HB2	2.02	0.60
27:BD:168:GLY:C	27:BD:170:TYR:N	2.46	0.60
27:BD:208:GLY:H	27:BD:211:HIS:CE1	2.19	0.60
29:BF:88:SER:O	29:BF:89:ALA:HB2	2.01	0.60
31:BH:88:LEU:HD23	31:BH:88:LEU:C	2.21	0.60
32:BI:109:LYS:N	32:BI:109:LYS:CE	2.57	0.60
55:BK:75:ALA:O	55:BK:76:SER:C	2.40	0.60
33:BN:12:VAL:HG12	33:BN:38:VAL:CG1	2.31	0.60
33:BN:83:ILE:HG13	33:BN:84:ARG:H	0.45	0.60
34:BO:20:LEU:HG	34:BO:44:LYS:CD	2.31	0.60
43:BR:75:LEU:HD23	43:BR:78:LYS:HD3	1.82	0.60
43:BR:87:TYR:HE1	43:BR:94:TYR:CB	2.03	0.60
37:BS:118:ILE:O	37:BS:119:GLN:C	2.38	0.60
44:BU:115:ASN:H	44:BU:115:ASN:ND2	1.94	0.60
45:BV:59:GLU:HG2	45:BV:100:GLY:N	2.17	0.60
45:BV:50:ASP:CG	45:BV:53:LYS:CE	2.65	0.60
41:BY:66:ASP:H	41:BY:72:ILE:HG12	1.65	0.60
1:AA:47:C:H4'	1:AA:48:C:H5'	1.83	0.60
1:AA:92:C:H2'	1:AA:93:G:H8	1.66	0.60
8:AE:39:GLY:HA2	8:AE:69:VAL:HB	1.84	0.60
47:B3:11:SER:CB	47:B3:13:ILE:HG12	2.31	0.60
26:BA:388:G:OP2	49:B4:29:PRO:CD	2.50	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:56:VAL:CG1	49:B4:57:ASP:H	2.14	0.60
49:B4:6:HIS:NE2	49:B4:55:ARG:HG3	2.16	0.60
52:B7:21:ARG:HD2	52:B7:31:LEU:CD1	2.32	0.60
26:BA:1140:C:C5	33:BN:49:ARG:NE	2.65	0.60
26:BA:1818:U:O2	26:BA:1818:U:H2'	2.01	0.60
26:BA:2093:G:C5	26:BA:2225:A:C6	2.89	0.60
26:BA:2243:U:O2	26:BA:2244:U:C6	2.55	0.60
26:BA:2339:G:C4	26:BA:2340:G:C8	2.90	0.60
26:BA:2351:G:C2	26:BA:2365:G:C6	2.90	0.60
26:BA:2416:C:O2	26:BA:2417:C:H6	1.80	0.60
26:BA:2423:U:C1'	26:BA:2425:A:C4	2.83	0.60
26:BA:2447:G:N7	26:BA:2500:U:C5	2.68	0.60
26:BA:2531:A:C4	26:BA:2532:G:C8	2.89	0.60
26:BA:2662:A:H2'	26:BA:2663:G:C5'	2.31	0.60
26:BA:2697:G:C6	26:BA:2698:U:C5	2.90	0.60
26:BA:2741:A:N3	26:BA:2742:C:H1'	2.17	0.60
26:BA:2774:C:H2'	26:BA:2774:C:O2	1.99	0.60
26:BA:2881:C:H2'	26:BA:2882:A:O5'	1.99	0.60
26:BA:530:G:H3'	26:BA:530:G:P	2.41	0.60
26:BA:1545:A:O3'	26:BA:545(A):A:C5'	2.50	0.60
26:BA:574:C:N4	26:BA:2054:A:H5'	2.11	0.60
26:BA:783:A:C2	26:BA:785:G:H1'	2.37	0.60
27:BD:169:LYS:H	27:BD:169:LYS:NZ	1.99	0.60
28:BE:109:ASP:HA	28:BE:112:LEU:H	1.64	0.60
28:BE:61:PRO:HD2	28:BE:62:ARG:HG3	1.84	0.60
29:BF:84:VAL:C	29:BF:86:GLY:N	2.44	0.60
26:BA:2316:C:C3'	30:BG:151:ILE:HD12	2.23	0.60
30:BG:35:ALA:C	30:BG:36:ASN:CG	2.58	0.60
26:BA:2745:C:N1	31:BH:142:GLU:OE2	2.34	0.60
31:BH:89:VAL:O	31:BH:159:LYS:HA	2.00	0.60
31:BH:28:PRO:CG	31:BH:79:SER:HA	2.31	0.60
31:BH:88:LEU:HD11	31:BH:94:ARG:HA	1.83	0.60
32:BI:116:GLU:CG	32:BI:132:LYS:HG3	2.32	0.60
55:BK:52:MET:CE	55:BK:53:ILE:H	2.09	0.60
33:BN:15:ARG:CB	33:BN:43:ARG:CB	2.77	0.60
33:BN:83:ILE:O	33:BN:84:ARG:C	2.40	0.60
34:BO:100:GLY:O	34:BO:101:PRO:O	2.19	0.60
34:BO:103:ALA:HB3	34:BO:105:GLU:CG	2.31	0.60
34:BO:43:VAL:HG12	34:BO:45:ASP:H	1.66	0.60
26:BA:2684:U:O2	34:BO:70:ARG:NH2	2.34	0.60
43:BR:26:LYS:O	43:BR:27:SER:C	2.40	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:79:GLY:C	39:BW:80:PRO:O	2.32	0.60
41:BY:101:LEU:HD22	41:BY:103:LEU:CD2	1.99	0.60
26:BA:84:A:N7	41:BY:111:ARG:NH2	2.47	0.60
41:BY:33:GLU:HG2	41:BY:34:GLU:N	2.16	0.60
42:BZ:116:VAL:C	42:BZ:118:HIS:H	2.05	0.60
42:BZ:54:ILE:HG23	42:BZ:55:THR:N	2.17	0.60
1:AA:1289:A:C2	1:AA:1372:U:H4'	2.36	0.60
1:AA:1342:C:H2'	1:AA:1343:G:H8	1.66	0.60
1:AA:355:C:H1'	1:AA:388:G:C2'	2.22	0.60
1:AA:39:G:C5	1:AA:498:U:O4	2.53	0.60
1:AA:736:C:OP1	21:AR:72:ARG:CZ	2.50	0.60
2:AV:20:G:H2'	2:AV:20:G:N3	2.15	0.60
51:B6:28:ARG:HG2	51:B6:28:ARG:O	2.01	0.60
26:BA:988:A:H4'	26:BA:1155:A:H2	1.65	0.60
26:BA:1191:G:H2'	26:BA:1192:G:H8	1.66	0.60
26:BA:1630:G:H2'	26:BA:630(A):C:C6	2.37	0.60
26:BA:1646:C:C5'	26:BA:1647:G:H5'	2.26	0.60
26:BA:1766:U:H2'	26:BA:1767:C:H6	1.67	0.60
26:BA:1829:A:H5''	26:BA:1830:C:H5	1.65	0.60
26:BA:2264:C:C5	26:BA:2265:U:H5	2.20	0.60
26:BA:2300:G:H2'	26:BA:2301:C:H6	1.66	0.60
26:BA:2620:C:H4'	28:BE:252:GLN:CG	2.31	0.60
26:BA:2619:C:C2'	26:BA:2620:C:O5'	2.50	0.60
26:BA:2626:C:C5	26:BA:2626:C:P	2.95	0.60
26:BA:2634:G:C6	26:BA:2635:C:C5	2.89	0.60
26:BA:270(K):C:H3'	26:BA:270(L):U:O4'	2.01	0.60
26:BA:2740:A:H2'	26:BA:2741:A:H5'	1.77	0.60
26:BA:2825:C:C5	26:BA:2825:C:P	2.94	0.60
26:BA:2850:A:N6	26:BA:2851:A:N6	2.49	0.60
26:BA:495:G:N2	39:BW:61:ASN:ND2	2.48	0.60
26:BA:729:G:N1	26:BA:1775:U:C4	2.69	0.60
26:BA:76:C:O3'	46:B2:55:ARG:HG3	2.01	0.60
26:BA:684:G:C6	26:BA:775:G:N7	2.70	0.60
26:BA:964:C:O2'	26:BA:2273:A:C8	2.55	0.60
27:BD:204:PHE:CD2	27:BD:209:ASN:HB2	2.37	0.60
27:BD:77:VAL:CB	27:BD:113:MET:CA	2.23	0.60
27:BD:85:ASN:HD22	27:BD:86:ARG:HD2	1.66	0.60
30:BG:46:GLY:O	30:BG:47:GLN:CG	2.49	0.60
31:BH:53:ARG:NH1	31:BH:56:ASP:O	2.35	0.60
32:BI:92:SER:H	32:BI:122:ARG:CZ	2.13	0.60
33:BN:98:PHE:N	33:BN:98:PHE:CD1	2.70	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:67:ARG:HH11	35:BP:111:ALA:CB	2.15	0.60
36:BQ:9:SER:O	36:BQ:10:ILE:O	2.20	0.60
43:BR:21:TYR:O	43:BR:22:ARG:O	2.19	0.60
43:BR:38:VAL:O	43:BR:39:PRO:C	2.39	0.60
43:BR:98:LEU:O	43:BR:113:LEU:O	2.19	0.60
37:BS:122:ALA:C	37:BS:125:ALA:HB3	2.22	0.60
37:BS:18:THR:O	37:BS:19:ASP:OD1	2.18	0.60
26:BA:535:C:C5'	44:BU:53:LYS:HE3	2.21	0.60
44:BU:61:TRP:C	44:BU:65:ILE:CG1	2.62	0.60
39:BW:17:VAL:HA	39:BW:20:VAL:CG2	2.32	0.60
39:BW:59:VAL:HG12	39:BW:60:ASN:N	2.16	0.60
40:BX:5:ILE:HG22	40:BX:6:LYS:CA	2.27	0.60
1:AA:60:A:N1	1:AA:107:G:C1'	2.64	0.60
1:AA:1490:C:H6	1:AA:1490:C:H5''	1.67	0.60
1:AA:64:G:H4'	1:AA:65:U:H5''	1.82	0.60
7:AD:70:ILE:HD11	7:AD:100:ARG:CZ	2.31	0.60
3:AW:37:YYG:C19	10:AG:79:ARG:HA	2.22	0.60
46:B2:4:HIS:O	46:B2:8:ILE:CG1	2.49	0.60
47:B3:25:ALA:C	47:B3:27:GLY:H	2.05	0.60
51:B6:54:LYS:NZ	51:B6:54:LYS:HB2	2.12	0.60
26:BA:126:A:OP2	52:B7:17:GLY:CA	2.50	0.60
26:BA:1397:U:O2	26:BA:1397:U:H2'	2.01	0.60
26:BA:444(A):A:H3'	26:BA:1460:A:H1'	1.84	0.60
26:BA:1799:G:C6	27:BD:177:SER:CB	2.77	0.60
26:BA:2087:G:C6	26:BA:2233:U:C5	2.89	0.60
26:BA:2328:A:C4	26:BA:2329:G:C8	2.88	0.60
26:BA:2330:G:H2'	26:BA:2331:G:O4'	2.02	0.60
26:BA:2353:G:N2	26:BA:2364:C:C2	2.63	0.60
26:BA:2357:U:O2'	26:BA:2358:G:P	2.59	0.60
26:BA:2484:G:C1'	36:BQ:142:LYS:NZ	2.62	0.60
26:BA:2740:A:C2	26:BA:2764:A:C2	2.90	0.60
26:BA:2756:U:HO2'	26:BA:2757:A:H5'	1.54	0.60
26:BA:2635:C:N4	26:BA:2784:C:H42	2.00	0.60
26:BA:2792:G:C6	26:BA:2793:G:O6	2.55	0.60
26:BA:30:G:H2'	26:BA:31:C:H6	1.64	0.60
26:BA:558:G:OP1	33:BN:92:GLN:N	2.32	0.60
26:BA:701:G:H1	26:BA:731:C:H42	1.49	0.60
26:BA:960:A:O4'	26:BA:2457:U:H4'	2.02	0.60
25:BB:114:G:H1'	37:BS:46:GLN:NE2	2.16	0.60
27:BD:128:ALA:CB	27:BD:190:THR:HB	2.01	0.60
28:BE:77:PRO:CB	28:BE:187:HIS:C	2.60	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1655:A:H5''	28:BE:211:GLN:HG2	1.83	0.60
28:BE:63:GLU:OE1	28:BE:64:GLY:N	2.35	0.60
28:BE:87:GLU:O	28:BE:94:ARG:O	2.19	0.60
29:BF:93:LYS:HB2	29:BF:96:LYS:HE2	1.84	0.60
31:BH:64:HIS:O	31:BH:67:THR:N	2.35	0.60
32:BI:145:VAL:CG1	32:BI:146:THR:N	2.47	0.60
32:BI:21:VAL:O	32:BI:22:ALA:CB	2.49	0.60
55:BK:135:MET:CE	55:BK:137:ILE:HG13	2.32	0.60
55:BK:52:MET:CA	55:BK:52:MET:CE	2.74	0.60
55:BK:80:LYS:HG3	55:BK:85:ILE:O	2.02	0.60
33:BN:18:ILE:O	33:BN:22:VAL:HG21	2.00	0.60
33:BN:48:GLY:O	33:BN:49:ARG:C	2.40	0.60
34:BO:92:SER:HB3	34:BO:113:LYS:HZ2	1.67	0.60
36:BQ:42:TYR:HB2	36:BQ:43:PRO:HD3	1.83	0.60
38:BT:13:ILE:CG2	38:BT:14:GLU:OE2	2.49	0.60
44:BU:111:ASP:O	44:BU:113:SER:C	2.39	0.60
44:BU:16:LYS:O	44:BU:17:VAL:C	2.40	0.60
44:BU:86:ALA:CB	44:BU:90:LEU:CD2	2.79	0.60
39:BW:15:ARG:O	39:BW:16:LYS:C	2.40	0.60
42:BZ:171:VAL:HG23	42:BZ:171:VAL:O	2.02	0.60
42:BZ:39:PHE:N	42:BZ:39:PHE:CD2	2.40	0.60
42:BZ:35:ASP:N	42:BZ:39:PHE:HZ	1.88	0.60
1:AA:126:G:H4'	1:AA:634:C:O2'	2.02	0.60
1:AA:324:G:N2	1:AA:327:A:C8	2.69	0.60
1:AA:60:A:C6	1:AA:107:G:C2'	2.84	0.60
1:AA:689:C:O5'	1:AA:689:C:H6	1.84	0.60
1:AA:1376:U:C5'	10:AG:94:ARG:HH22	2.13	0.60
46:B2:2:VAL:HG12	46:B2:3:LEU:N	2.14	0.60
47:B3:41:PRO:O	47:B3:44:ARG:HB3	2.02	0.60
51:B6:29:ARG:CG	51:B6:30:ASN:N	2.58	0.60
51:B6:32:GLN:HG2	51:B6:35:LEU:CD1	2.31	0.60
51:B6:54:LYS:NZ	51:B6:54:LYS:CB	2.64	0.60
26:BA:1182:A:H2'	26:BA:1183:G:O4'	2.01	0.60
26:BA:1208:C:H2'	26:BA:1209:G:C8	2.37	0.60
26:BA:120:U:N3	26:BA:150:C:N4	2.50	0.60
26:BA:1791:A:OP1	27:BD:210:LYS:HB3	2.01	0.60
26:BA:792:G:H21	26:BA:2072:G:H1'	1.67	0.60
26:BA:2226:C:N3	26:BA:2227:A:N3	2.49	0.60
26:BA:2242:G:N1	26:BA:2243:U:C5	2.70	0.60
26:BA:2277:G:H2'	26:BA:2277:G:N3	2.16	0.60
26:BA:2259:G:N2	26:BA:2282:G:C2	2.70	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2331:G:C4	26:BA:2332:U:C2	2.90	0.60
26:BA:2351:G:N2	26:BA:2365:G:C5	2.70	0.60
26:BA:2411:A:O2'	26:BA:2412:A:O5'	2.19	0.60
26:BA:2428:G:H8	26:BA:2428:G:H3'	1.64	0.60
26:BA:2548:G:C2'	26:BA:2549:G:O5'	2.48	0.60
26:BA:2578:G:H2'	26:BA:2579:C:C5'	2.30	0.60
26:BA:2662:A:C2	26:BA:2663:G:C4'	2.85	0.60
26:BA:2679:A:C4	26:BA:2680:C:C6	2.90	0.60
26:BA:2785:C:C5'	28:BE:99:VAL:CA	2.63	0.60
26:BA:589:C:H42	26:BA:668:G:H1	1.47	0.60
26:BA:76:C:C4'	46:B2:55:ARG:HG3	2.31	0.60
26:BA:826:U:OP1	26:BA:2428:G:C3'	2.48	0.60
26:BA:957:A:P	36:BQ:95:GLU:HB3	2.41	0.60
27:BD:146:LYS:HZ1	27:BD:184:LEU:CD1	2.01	0.60
28:BE:112:LEU:C	28:BE:112:LEU:HD13	2.23	0.60
28:BE:303:PRO:HB2	28:BE:307:LEU:CG	2.30	0.60
33:BN:52:GLN:CB	33:BN:55:GLU:OE1	2.50	0.60
34:BO:110:ASP:O	34:BO:111:PHE:CE1	2.53	0.60
34:BO:93:PRO:HD2	34:BO:113:LYS:HD2	1.84	0.60
36:BQ:68:ALA:HB1	36:BQ:136:TRP:CZ3	2.37	0.60
36:BQ:72:VAL:HG22	36:BQ:135:ALA:CB	2.32	0.60
26:BA:2376:A:H61	37:BS:109:PRO:HG3	1.66	0.60
37:BS:48:VAL:CG1	37:BS:55:ASP:OD2	2.50	0.60
37:BS:86:LEU:H	37:BS:121:GLY:CA	2.15	0.60
38:BT:6:CYS:O	38:BT:7:ASP:CG	2.40	0.60
39:BW:14:PRO:CD	39:BW:99:ARG:O	2.50	0.60
26:BA:440:G:OP1	41:BY:6:LYS:NZ	2.35	0.60
41:BY:71:VAL:CG1	41:BY:93:THR:H	2.13	0.60
1:AA:60:A:N6	1:AA:108:G:H5'	2.17	0.60
1:AA:116:A:N6	1:AA:313:A:N3	2.50	0.60
1:AA:1286:A:C1'	24:AU:22:ARG:NH2	2.58	0.60
1:AA:280:C:H1'	20:AQ:38:ARG:NE	2.17	0.60
1:AA:290:C:H6	1:AA:290:C:O5'	1.84	0.60
1:AA:375:U:O5'	1:AA:375:U:H6	1.85	0.60
1:AA:454:C:H3'	1:AA:455:C:H6	1.66	0.60
6:AC:5:ILE:HG21	13:AJ:61:GLU:OE2	2.02	0.60
16:AM:19:LEU:HD13	16:AM:25:ILE:HG21	1.82	0.60
6:AC:34:LEU:HD12	17:AN:25:VAL:HG21	1.83	0.60
1:AA:450:G:N2	19:AP:13:HIS:CE1	2.69	0.60
48:B0:33:ALA:HB2	48:B0:65:GLY:CA	2.32	0.60
50:B5:15:LYS:HA	50:B5:18:MET:CG	2.32	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B5:46:CYS:O	50:B5:48:ASN:N	2.34	0.60
54:B9:29:ASN:HD22	54:B9:32:HIS:CE1	2.16	0.60
26:BA:1524:G:H2'	26:BA:1525:G:O4'	2.02	0.60
26:BA:1904:G:H21	26:BA:1928:A:H2	1.50	0.60
26:BA:196:A:C2	26:BA:805:G:N1	2.70	0.60
26:BA:530:G:N2	26:BA:2020:A:O2'	2.35	0.60
26:BA:528:A:N6	26:BA:2042:A:H2'	2.16	0.60
26:BA:2067:G:N1	26:BA:2444:G:C6	2.70	0.60
26:BA:2215:G:C4	26:BA:2216:G:C8	2.90	0.60
26:BA:2302:G:N1	26:BA:2315:G:C5	2.70	0.60
26:BA:2315:G:OP2	30:BG:20:LYS:NZ	2.34	0.60
26:BA:2390:U:H6	26:BA:2390:U:H3'	1.67	0.60
26:BA:631:A:H2	26:BA:2415:G:N2	1.85	0.60
26:BA:2417:C:C2	26:BA:2418:A:C8	2.90	0.60
26:BA:2431:U:O4	26:BA:2434:A:OP2	2.20	0.60
26:BA:1127:A:C6	26:BA:2518:A:H2	2.20	0.60
26:BA:2521:C:O2	26:BA:2522:U:C1'	2.50	0.60
26:BA:2528:U:C6	26:BA:2528:U:H3'	2.37	0.60
26:BA:2550:G:H2'	26:BA:2551:C:C5	2.37	0.60
26:BA:2686:G:C6	26:BA:2687:U:C5	2.90	0.60
26:BA:2728:U:H6	26:BA:2728:U:O5'	1.85	0.60
26:BA:2733:A:C8	26:BA:2733:A:H3'	2.37	0.60
26:BA:2857:G:H2'	26:BA:2858:C:C5'	2.31	0.60
26:BA:291:C:H2'	26:BA:292:C:H5'	1.84	0.60
26:BA:515:A:H2'	26:BA:516:C:C6	2.37	0.60
27:BD:175:LEU:N	27:BD:175:LEU:CD2	2.46	0.60
27:BD:86:ARG:HG2	27:BD:88:ALA:HB3	1.84	0.60
29:BF:84:VAL:H	29:BF:87:ARG:NE	1.99	0.60
31:BH:122:ILE:HG22	31:BH:123:GLU:N	2.17	0.60
31:BH:74:MET:O	31:BH:75:VAL:O	2.20	0.60
32:BI:133:LEU:H	32:BI:138:THR:CG2	2.15	0.60
32:BI:47:LEU:O	32:BI:51:LYS:HG3	2.02	0.60
32:BI:98:ILE:HG21	32:BI:115:ILE:CD1	2.32	0.60
55:BK:125:MET:N	55:BK:125:MET:SD	2.74	0.60
26:BA:1080:C:C2	55:BK:127:ILE:HG12	2.34	0.60
33:BN:135:ILE:O	33:BN:139:LEU:CG	2.49	0.60
34:BO:92:SER:CB	34:BO:113:LYS:HZ2	2.10	0.60
26:BA:2485:G:H4'	36:BQ:144:THR:HG22	1.84	0.60
26:BA:911:A:C8	36:BQ:16:ARG:CG	2.85	0.60
43:BR:22:ARG:HG2	43:BR:26:LYS:HZ1	1.66	0.60
37:BS:104:ILE:HG22	37:BS:106:LEU:O	2.02	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:118:ILE:O	37:BS:121:GLY:N	2.35	0.60
26:BA:1251:C:H5'	44:BU:10:ARG:CD	2.32	0.60
26:BA:974:G:H3'	45:BV:82:ARG:NH2	2.16	0.60
40:BX:30:ASP:C	40:BX:31:ARG:O	2.39	0.60
41:BY:77:VAL:O	41:BY:78:THR:CG2	2.44	0.60
42:BZ:108:VAL:O	42:BZ:109:GLN:CG	2.50	0.60
1:AA:944:G:O6	1:AA:1337:G:H2'	2.00	0.59
1:AA:943:U:OP1	1:AA:1236:A:N6	2.34	0.59
5:AB:91:PRO:HG3	5:AB:155:LEU:H	1.66	0.59
6:AC:23:TYR:CD1	13:AJ:10:GLY:HA2	2.36	0.59
8:AE:28:PHE:CD1	8:AE:28:PHE:N	2.69	0.59
12:AI:78:LYS:HD3	12:AI:101:PHE:HE2	1.66	0.59
1:AA:1317:C:O2'	22:AS:10:PHE:CD2	2.50	0.59
26:BA:2331:G:C3'	48:B0:70:ILE:HB	2.31	0.59
47:B3:8:LEU:O	47:B3:9:VAL:CG1	2.50	0.59
51:B6:54:LYS:NZ	51:B6:54:LYS:HA	2.17	0.59
54:B9:10:MET:HA	54:B9:10:MET:HE3	1.83	0.59
26:BA:1726:G:H2'	26:BA:1727:U:H5'	1.84	0.59
26:BA:223:A:H4'	26:BA:223:A:OP2	2.01	0.59
26:BA:2257:U:C2'	26:BA:2258:C:OP2	2.50	0.59
26:BA:2295:C:H2'	26:BA:2295:C:O2	2.02	0.59
26:BA:2297:C:O2	26:BA:2322:A:C8	2.55	0.59
26:BA:2553:G:N7	26:BA:2554:U:C2	2.70	0.59
26:BA:2553:G:O6	26:BA:2554:U:O2	2.19	0.59
26:BA:2558:C:H2'	26:BA:2558:C:O2	2.01	0.59
26:BA:2569:G:C2	26:BA:2570:G:C8	2.90	0.59
26:BA:2573:C:C6	26:BA:2573:C:O5'	2.54	0.59
26:BA:2625:G:N7	26:BA:2626:C:C4	2.70	0.59
26:BA:2686:G:C5	26:BA:2687:U:C5	2.89	0.59
26:BA:303:U:H2'	26:BA:304:G:H8	1.67	0.59
26:BA:364:C:H2'	26:BA:365:C:C6	2.37	0.59
26:BA:586:A:N6	26:BA:809:G:O2'	2.35	0.59
26:BA:911:A:C8	26:BA:2264:C:H1'	2.37	0.59
28:BE:211:GLN:N	28:BE:216:ARG:NH2	2.48	0.59
29:BF:102:LEU:HD23	29:BF:103:ASN:N	2.16	0.59
29:BF:7:ASP:OD2	29:BF:13:ASP:OD2	2.19	0.59
29:BF:81:PRO:HB3	29:BF:87:ARG:HB3	0.63	0.59
29:BF:94:THR:C	29:BF:96:LYS:N	2.34	0.59
31:BH:120:LEU:O	31:BH:121:GLU:OE1	2.16	0.59
31:BH:96:SER:O	31:BH:97:LYS:C	2.40	0.59
55:BK:18:ALA:HB1	55:BK:39:CYS:O	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:23:ALA:O	33:BN:24:SER:C	2.40	0.59
26:BA:2278:A:P	36:BQ:15:THR:OG1	2.60	0.59
36:BQ:18:GLU:CG	36:BQ:23:ILE:HD11	2.31	0.59
36:BQ:35:ASN:HB2	36:BQ:75:SER:HA	1.84	0.59
36:BQ:63:ALA:O	36:BQ:64:ALA:C	2.40	0.59
43:BR:37:THR:CA	43:BR:111:LEU:HA	2.22	0.59
43:BR:20:LEU:C	43:BR:22:ARG:N	2.52	0.59
43:BR:20:LEU:HD21	43:BR:24:GLN:OE1	2.02	0.59
43:BR:60:LEU:HD23	43:BR:61:HIS:H	1.65	0.59
25:BB:47:C:O3'	37:BS:107:ASN:OD1	2.18	0.59
37:BS:83:LEU:HA	37:BS:86:LEU:HD12	1.83	0.59
44:BU:8:ILE:O	44:BU:11:ARG:HG2	2.02	0.59
41:BY:31:LEU:CA	41:BY:113:GLU:OE2	2.39	0.59
25:BB:104:A:HO2'	42:BZ:24:TYR:HE2	1.50	0.59
6:AC:23:TYR:HD2	6:AC:24:ALA:N	2.01	0.59
7:AD:12:CYS:HB2	7:AD:31:CYS:O	2.02	0.59
7:AD:55:ALA:O	7:AD:59:ARG:HG2	2.02	0.59
1:AA:375:U:C4'	19:AP:17:TYR:CE2	2.84	0.59
26:BA:989:G:OP2	47:B3:11:SER:CB	2.49	0.59
47:B3:19:GLN:CD	47:B3:19:GLN:H	2.06	0.59
47:B3:50:VAL:O	47:B3:53:LEU:CB	2.49	0.59
26:BA:1364:G:C1'	49:B4:3:LYS:HZ3	2.14	0.59
49:B4:58:LYS:CG	49:B4:62:ARG:HH21	2.14	0.59
50:B5:30:LEU:CD2	50:B5:41:LEU:HD23	2.32	0.59
52:B7:34:ARG:NE	52:B7:42:LEU:HD23	2.13	0.59
26:BA:1071:G:O2'	26:BA:1090:U:OP1	2.14	0.59
26:BA:1024:G:C2	26:BA:1139:G:N2	2.71	0.59
26:BA:142:G:OP1	26:BA:1595:G:O2'	2.15	0.59
26:BA:1936:A:H2	26:BA:1943:U:H3	1.49	0.59
26:BA:215:G:H4'	26:BA:216:A:H4'	1.84	0.59
26:BA:2230:G:O2'	26:BA:2231:C:C4'	2.50	0.59
26:BA:2259:G:C2	26:BA:2282:G:O6	2.52	0.59
26:BA:2634:G:H2'	26:BA:2635:C:C5'	2.32	0.59
26:BA:273(A):G:H2'	26:BA:273(B):C:C6	2.37	0.59
26:BA:2776:A:N3	26:BA:2778:A:C8	2.70	0.59
26:BA:2810:A:C8	26:BA:2811:G:C4'	2.82	0.59
26:BA:324:A:C8	26:BA:340:A:H1'	2.37	0.59
26:BA:526:A:H2	26:BA:2626:C:O4'	1.57	0.59
26:BA:666:G:H2'	26:BA:667:U:C6	2.36	0.59
26:BA:802:A:H2'	26:BA:803:U:C6	2.38	0.59
27:BD:68:ARG:HH21	27:BD:190:THR:HG22	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:165:ASP:O	29:BF:168:ARG:HB3	2.02	0.59
30:BG:38:GLU:CG	30:BG:41:LEU:CD1	2.60	0.59
30:BG:57:THR:CG2	30:BG:58:VAL:H	1.92	0.59
31:BH:71:LEU:C	31:BH:73:ASN:N	2.55	0.59
32:BI:95:SER:C	32:BI:98:ILE:CG1	2.68	0.59
55:BK:56:VAL:CG1	55:BK:58:ILE:HG13	2.31	0.59
33:BN:54:VAL:HG12	33:BN:139:LEU:HD12	1.84	0.59
33:BN:57:TYR:O	33:BN:60:ARG:HB2	2.03	0.59
26:BA:1131:G:C2	33:BN:69:TYR:CZ	2.89	0.59
33:BN:83:ILE:HD11	33:BN:84:ARG:CG	2.31	0.59
35:BP:62:ALA:O	35:BP:107:LYS:CG	2.48	0.59
35:BP:73:VAL:O	35:BP:76:LEU:N	2.35	0.59
36:BQ:45:GLN:CD	36:BQ:153:PRO:CB	2.69	0.59
43:BR:41:ALA:O	43:BR:43:GLU:N	2.35	0.59
43:BR:52:ILE:HD12	43:BR:94:TYR:HB2	1.83	0.59
37:BS:114:LYS:O	37:BS:117:ALA:HB3	2.02	0.59
30:BG:145:ASP:O	37:BS:15:GLU:HA	2.02	0.59
25:BB:50:G:OP1	37:BS:75:THR:HG23	2.02	0.59
37:BS:85:GLY:O	37:BS:88:ALA:HB3	2.02	0.59
37:BS:92:ALA:O	37:BS:94:GLU:N	2.34	0.59
44:BU:4:ALA:C	44:BU:6:THR:N	2.52	0.59
45:BV:39:PHE:HE2	45:BV:41:GLY:CA	2.15	0.59
41:BY:51:LEU:C	41:BY:52:ARG:HG3	2.22	0.59
1:AA:17:U:O4'	1:AA:1080:A:H1'	2.02	0.59
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.01	0.59
1:AA:1192:C:C6	1:AA:1192:C:H3'	2.37	0.59
1:AA:1236:A:H4'	1:AA:1304:G:H5''	1.84	0.59
1:AA:1441:G:H1'	1:AA:1461:G:H22	1.67	0.59
1:AA:755:G:H2'	1:AA:756:C:C6	2.36	0.59
10:AG:102:ARG:HG2	10:AG:106:GLN:HE22	1.67	0.59
1:AA:228:A:O4'	19:AP:62:VAL:HG11	2.02	0.59
21:AR:36:ASN:HB3	21:AR:40:LEU:HG	1.83	0.59
16:AM:87:TYR:HB2	22:AS:73:GLU:O	2.03	0.59
3:AW:65:G:C4	3:AW:66:A:H8	2.17	0.59
2:AV:36:A:N6	4:AX:117:U:N3	2.50	0.59
49:B4:44:THR:O	49:B4:46:GLU:OE2	2.19	0.59
52:B7:24:THR:HG23	52:B7:28:ARG:H	1.67	0.59
26:BA:2031:A:N6	26:BA:2498:C:C6	2.70	0.59
26:BA:2279:G:C4	26:BA:2280:G:C8	2.90	0.59
26:BA:2287:A:N1	26:BA:2289:G:C1'	2.33	0.59
26:BA:1028:A:H2	26:BA:2486:G:HO2'	1.46	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2633:G:N1	26:BA:2634:G:C5	2.70	0.59
26:BA:2648:C:C2	26:BA:2673:G:N2	2.71	0.59
26:BA:2725:A:C4	26:BA:2727:G:N7	2.70	0.59
26:BA:2793:G:C2	26:BA:2794:C:C4	2.91	0.59
26:BA:2885:C:N4	26:BA:2886:G:N7	2.50	0.59
26:BA:34:C:O4'	41:BY:8:ARG:NH1	2.35	0.59
26:BA:517:C:C2'	39:BW:18:ARG:HH22	2.15	0.59
26:BA:545(A):A:O3'	26:BA:1546:C:P	2.60	0.59
26:BA:711:G:H1	26:BA:720:C:H42	1.50	0.59
26:BA:830:G:N7	26:BA:2448:A:H8	2.00	0.59
29:BF:115:LEU:O	29:BF:116:ALA:C	2.40	0.59
31:BH:55:SER:C	31:BH:57:GLU:N	2.56	0.59
32:BI:98:ILE:HG21	32:BI:115:ILE:HD12	1.83	0.59
55:BK:15:ALA:C	55:BK:17:LYS:H	2.05	0.59
36:BQ:68:ALA:HB1	36:BQ:136:TRP:HZ3	1.66	0.59
36:BQ:136:TRP:O	36:BQ:137:ARG:C	2.39	0.59
44:BU:13:ARG:O	44:BU:16:LYS:CA	2.50	0.59
39:BW:98:LYS:O	39:BW:100:THR:N	2.34	0.59
1:AA:18:C:H42	1:AA:917:G:H1	1.49	0.59
1:AA:380:G:N2	1:AA:382:A:H3'	2.18	0.59
1:AA:126:G:H4'	1:AA:634:C:H1'	1.84	0.59
1:AA:878:G:O4'	11:AH:3:THR:HG21	2.03	0.59
3:AW:72:C:C2'	3:AW:73:A:O5'	2.49	0.59
48:B0:73:GLY:O	48:B0:74:LYS:O	2.20	0.59
40:BX:8:PRO:HD3	46:B2:33:VAL:HG22	1.83	0.59
46:B2:60:GLN:NE2	46:B2:65:ASP:HA	2.17	0.59
47:B3:16:PRO:O	47:B3:17:LYS:O	2.20	0.59
53:B8:12:ARG:O	53:B8:13:ARG:C	2.40	0.59
54:B9:10:MET:HA	54:B9:10:MET:CE	2.31	0.59
54:B9:24:LEU:HD22	54:B9:35:ARG:CA	2.31	0.59
26:BA:1227:A:H3'	26:BA:1227:A:C8	2.37	0.59
26:BA:1430:C:H2'	26:BA:1431:U:C6	2.36	0.59
26:BA:1913:A:N1	26:BA:1917:U:C5	2.71	0.59
26:BA:2300:G:O2'	26:BA:2301:C:C5'	2.45	0.59
26:BA:2419:U:OP2	53:B8:41:ILE:CD1	2.50	0.59
26:BA:2474:C:H5	26:BA:2475:C:C4	2.21	0.59
26:BA:2593:U:C2	26:BA:2600:A:N1	2.70	0.59
26:BA:2620:C:H4'	28:BE:252:GLN:CB	2.32	0.59
26:BA:2834:G:H3'	26:BA:2834:G:C8	2.37	0.59
26:BA:2862:G:C4	26:BA:2863:C:C5	2.90	0.59
26:BA:593:G:C5'	53:B8:62:LEU:CD2	2.47	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:742:G:H4'	26:BA:1675:C:O2'	2.02	0.59
27:BD:103:ILE:CB	27:BD:104:ILE:HD12	2.29	0.59
26:BA:1500:G:H21	27:BD:97:ASP:CG	2.04	0.59
28:BE:237:ASN:C	28:BE:238:LEU:HD22	2.23	0.59
29:BF:6:TYR:CE2	29:BF:140:VAL:HG23	2.37	0.59
31:BH:103:VAL:HG12	31:BH:103:VAL:O	2.02	0.59
31:BH:104:LEU:C	31:BH:151:ARG:NH1	2.56	0.59
32:BI:82:LYS:O	32:BI:83:ALA:HB2	2.02	0.59
34:BO:79:PHE:HA	38:BT:22:VAL:HG23	1.80	0.59
35:BP:114:VAL:HG11	35:BP:133:VAL:CA	2.31	0.59
36:BQ:49:VAL:CA	36:BQ:121:ASP:HB2	2.29	0.59
36:BQ:72:VAL:HG22	36:BQ:135:ALA:HB2	1.82	0.59
37:BS:111:PRO:O	37:BS:116:PHE:HB2	2.03	0.59
44:BU:111:ASP:HA	44:BU:114:ARG:CD	2.28	0.59
45:BV:42:GLY:N	45:BV:54:TYR:OH	2.29	0.59
45:BV:67:LYS:CD	45:BV:70:TYR:HE1	2.15	0.59
42:BZ:29:ASN:C	42:BZ:30:VAL:HG23	2.23	0.59
1:AA:1078:U:H4'	8:AE:84:PHE:CZ	2.37	0.59
1:AA:1098:C:C4'	1:AA:1167:A:H2	2.15	0.59
1:AA:1224:G:C8	1:AA:1322:C:OP1	2.56	0.59
1:AA:365:U:C3'	1:AA:366:C:P	2.89	0.59
2:AV:43:G:H2'	2:AV:44:A:C8	2.37	0.59
46:B2:51:LYS:O	46:B2:52:ALA:O	2.20	0.59
47:B3:36:VAL:O	47:B3:37:LEU:CD2	2.50	0.59
52:B7:26:SER:O	52:B7:29:ASN:N	2.35	0.59
53:B8:30:ARG:NH2	53:B8:41:ILE:CG2	2.65	0.59
53:B8:9:MET:O	53:B8:13:ARG:O	2.19	0.59
54:B9:20:HIS:C	54:B9:22:ARG:N	2.48	0.59
26:BA:1078:U:O2	26:BA:1088:A:C1'	2.44	0.59
26:BA:1366:A:OP2	26:BA:1366:A:C8	2.55	0.59
26:BA:1454:U:H2'	26:BA:1454:U:O2	2.02	0.59
26:BA:1818:U:P	27:BD:155:ARG:CB	2.91	0.59
26:BA:1928:A:H8	26:BA:1928:A:H5''	1.67	0.59
26:BA:2343:C:H5'	26:BA:2374:C:P	2.42	0.59
26:BA:2246:G:C1'	26:BA:2426:A:C2	2.84	0.59
26:BA:827:U:C6	26:BA:2430:A:C2	2.91	0.59
26:BA:830:G:N1	26:BA:2446:G:O4'	2.36	0.59
26:BA:2471:C:N3	26:BA:2479:G:N1	2.50	0.59
26:BA:2531:A:C2	26:BA:2658:C:O2	2.56	0.59
26:BA:2567:G:HO2'	26:BA:2568:C:H5'	1.63	0.59
26:BA:2648:C:C2'	26:BA:2649:U:C5'	2.79	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2668:G:N2	26:BA:2669:G:H1'	2.18	0.59
26:BA:2785:C:C4	26:BA:2786:U:O4	2.56	0.59
26:BA:2817:G:H2'	26:BA:2818:G:O4'	2.02	0.59
26:BA:2841:C:OP1	43:BR:53:HIS:HE1	1.85	0.59
26:BA:2875:C:N4	26:BA:2876:G:O6	2.34	0.59
26:BA:2841:C:O2	26:BA:2877:G:C2	2.55	0.59
26:BA:2880:C:N4	26:BA:2881:C:C4	2.67	0.59
26:BA:2807:G:O6	26:BA:2892:A:C8	2.56	0.59
26:BA:450:G:N2	26:BA:454:A:H2	1.99	0.59
26:BA:529:A:O2'	26:BA:530:G:H8	1.83	0.59
26:BA:929:G:H21	47:B3:42:ALA:C	2.06	0.59
28:BE:315:VAL:C	28:BE:317:PRO:HD3	2.21	0.59
28:BE:70:VAL:O	28:BE:71:THR:HG23	2.02	0.59
26:BA:2313:C:H5'	30:BG:72:LYS:HG3	0.61	0.59
31:BH:13:GLY:O	31:BH:15:THR:N	2.35	0.59
31:BH:50:THR:OG1	31:BH:51:VAL:N	2.36	0.59
31:BH:58:LYS:C	31:BH:61:ARG:HB3	2.23	0.59
55:BK:121:LEU:HD23	55:BK:125:MET:HE2	1.85	0.59
55:BK:24:VAL:HG12	55:BK:35:ILE:HG23	1.85	0.59
34:BO:28:SER:O	34:BO:29:GLY:C	2.40	0.59
34:BO:88:ARG:NE	34:BO:94:ARG:HG2	2.17	0.59
34:BO:14:SER:N	34:BO:95:GLY:HA2	2.18	0.59
35:BP:76:LEU:HG	35:BP:81:VAL:CG2	2.31	0.59
26:BA:496:G:P	39:BW:62:HIS:HE2	2.25	0.59
40:BX:24:LEU:CD1	40:BX:66:VAL:O	2.51	0.59
40:BX:35:GLY:O	40:BX:36:GLU:C	2.40	0.59
42:BZ:147:ILE:HG13	42:BZ:168:VAL:CG1	2.33	0.59
1:AA:1095:U:H6	1:AA:1095:U:O5'	1.86	0.59
1:AA:1194:U:H4'	8:AE:22:GLY:CA	2.33	0.59
1:AA:1285:A:P	24:AU:24:ARG:HG2	2.43	0.59
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.38	0.59
1:AA:976:G:N9	1:AA:361(A):C:N4	2.50	0.59
5:AB:17:PHE:HD1	5:AB:18:GLY:N	2.00	0.59
1:AA:405:U:P	7:AD:5:ILE:HD13	2.41	0.59
1:AA:1061:G:H5'	13:AJ:59:SER:OG	2.03	0.59
1:AA:1360:A:C8	17:AN:18:VAL:HG12	2.38	0.59
1:AA:1286:A:H2	24:AU:18:TYR:CZ	2.20	0.59
3:AW:41:U:H2'	3:AW:42:G:O4'	2.02	0.59
48:B0:41:ARG:HB2	48:B0:74:LYS:NZ	2.17	0.59
49:B4:56:VAL:CG1	49:B4:57:ASP:N	2.66	0.59
50:B5:44:HIS:CA	50:B5:52:TYR:CZ	2.68	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:42:PRO:HD3	51:B6:50:PHE:HZ	1.68	0.59
26:BA:1033:U:C5	26:BA:2750:A:C2	2.90	0.59
26:BA:1482:U:C3'	26:BA:1482:U:H6	2.13	0.59
26:BA:2217:G:H2'	26:BA:2218:G:O5'	2.02	0.59
26:BA:2392:A:N7	26:BA:2393:A:C4	2.70	0.59
26:BA:2469:A:C8	26:BA:2469:A:C5'	2.80	0.59
26:BA:960:A:H2	26:BA:2496:C:H1'	1.67	0.59
26:BA:2584:U:H5	26:BA:2585:U:C2'	2.15	0.59
26:BA:2051:A:C6	26:BA:2614:A:N7	2.68	0.59
26:BA:2617:C:C2	26:BA:2618:G:C8	2.77	0.59
26:BA:269:U:H3	26:BA:270:A:H62	1.48	0.59
26:BA:2797:U:H1'	26:BA:2799:A:C8	2.38	0.59
26:BA:2846:G:H22	26:BA:2869:G:H1	1.49	0.59
26:BA:325:G:H2'	26:BA:326:G:C8	2.37	0.59
26:BA:54:G:H1'	52:B7:35:ARG:NH2	2.16	0.59
26:BA:1799:G:N1	27:BD:177:SER:OG	2.35	0.59
27:BD:86:ARG:N	27:BD:86:ARG:CD	2.61	0.59
26:BA:2571:C:O2'	28:BE:243:PRO:HG3	2.02	0.59
28:BE:193:PHE:HE2	28:BE:311:PHE:HD1	1.46	0.59
29:BF:193:LEU:N	29:BF:233:THR:HG22	1.91	0.59
29:BF:6:TYR:CD1	29:BF:139:VAL:CB	2.85	0.59
29:BF:58:ALA:CB	29:BF:79:ARG:HB2	2.33	0.59
31:BH:87:GLU:CD	31:BH:162:ARG:HB2	2.23	0.59
31:BH:25:VAL:HG12	31:BH:78:VAL:HG11	1.84	0.59
33:BN:24:SER:C	33:BN:28:GLU:HG2	2.23	0.59
33:BN:80:LYS:O	33:BN:83:ILE:CG1	2.42	0.59
43:BR:51:LEU:HD11	43:BR:70:LEU:HD21	1.85	0.59
44:BU:33:ARG:HB3	44:BU:33:ARG:HH11	1.62	0.59
45:BV:6:GLN:NE2	45:BV:10:LYS:HB3	2.17	0.59
42:BZ:107:GLU:C	42:BZ:109:GLN:H	2.05	0.59
42:BZ:173:PRO:C	42:BZ:175:ARG:H	2.04	0.59
1:AA:1060:C:H2'	1:AA:1061:G:C8	2.37	0.59
7:AD:30:LYS:C	7:AD:32:ALA:H	2.06	0.59
13:AJ:16:LEU:HB3	13:AJ:70:ARG:HE	1.66	0.59
20:AQ:5:VAL:HA	20:AQ:59:ILE:O	2.03	0.59
22:AS:55:LYS:HE2	22:AS:56:GLN:HE21	1.66	0.59
48:B0:30:VAL:HG22	48:B0:63:SER:CB	2.32	0.59
48:B0:61:ALA:HB2	48:B0:80:SER:C	2.23	0.59
46:B2:2:VAL:N	46:B2:4:HIS:CE1	2.62	0.59
26:BA:76:C:C5'	46:B2:55:ARG:HE	2.15	0.59
26:BA:746:A:O2'	50:B5:2:ALA:HB2	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:7:ARG:C	51:B6:29:ARG:NH2	2.54	0.59
26:BA:1254:A:C8	26:BA:1256:G:C8	2.90	0.59
26:BA:123:G:H1	26:BA:128:C:H42	1.51	0.59
26:BA:1665:A:O3'	34:BO:66:LYS:NZ	2.13	0.59
26:BA:1661:G:H1	26:BA:1999:C:H42	1.50	0.59
26:BA:2188:C:C6	26:BA:2189:U:H5	2.18	0.59
26:BA:2197:U:C5	26:BA:2224:G:C4	2.63	0.59
26:BA:2290:G:C5	26:BA:2291:U:N3	2.70	0.59
26:BA:2372:G:C6	26:BA:2373:G:O6	2.56	0.59
26:BA:2373:G:N1	26:BA:2374:C:C4	2.70	0.59
26:BA:2435:A:C2	26:BA:2436:G:N9	2.71	0.59
26:BA:2544:G:N3	26:BA:2545:G:C8	2.71	0.59
26:BA:2440:C:H5''	26:BA:2587:A:H4'	1.84	0.59
26:BA:2595:G:H2'	26:BA:2597:G:C8	2.37	0.59
26:BA:2653:U:OP2	26:BA:2654:A:C3'	2.48	0.59
26:BA:2751:G:N3	26:BA:2751:G:H2'	2.16	0.59
26:BA:2896:C:H6	26:BA:2896:C:C4'	2.16	0.59
26:BA:629:G:H5''	26:BA:649:G:O2'	2.03	0.59
26:BA:728:G:H8	26:BA:728:G:OP2	1.86	0.59
26:BA:801:G:OP1	29:BF:79:ARG:NH2	2.36	0.59
25:BB:24:G:C6	25:BB:56:G:C2	2.90	0.59
27:BD:213:LYS:HB3	27:BD:215:LYS:C	2.23	0.59
28:BE:267:ARG:CD	28:BE:297:LYS:CD	2.77	0.59
28:BE:269:ILE:HD13	28:BE:295:LEU:C	2.22	0.59
29:BF:22:PHE:CE2	29:BF:118:THR:OG1	2.50	0.59
29:BF:22:PHE:CE2	29:BF:115:LEU:CB	2.75	0.59
26:BA:38:A:N3	29:BF:46:TYR:CE2	2.70	0.59
26:BA:675:A:H5'	29:BF:69:HIS:C	2.22	0.59
31:BH:123:GLU:OE2	31:BH:131:ILE:O	2.20	0.59
32:BI:13:GLY:HA2	32:BI:15:LYS:CD	2.29	0.59
26:BA:1082:U:C4'	55:BK:118:ALA:HB1	2.33	0.59
33:BN:58:GLU:CA	33:BN:61:VAL:CB	2.73	0.59
35:BP:113:GLN:O	35:BP:115:ARG:HG3	2.01	0.59
37:BS:81:ALA:CB	37:BS:117:ALA:CB	2.80	0.59
44:BU:102:GLU:HB2	45:BV:43:GLU:OE2	2.02	0.59
45:BV:35:LEU:H	45:BV:60:VAL:HG12	1.66	0.59
45:BV:40:VAL:CA	45:BV:51:ALA:CB	2.80	0.59
45:BV:41:GLY:N	45:BV:54:TYR:CE1	2.71	0.59
39:BW:42:ARG:HG2	39:BW:43:GLY:H	1.67	0.59
39:BW:81:ALA:O	39:BW:82:LEU:CD1	2.46	0.59
42:BZ:146:HIS:HD2	42:BZ:170:SER:HB2	1.66	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:85:MET:O	42:BZ:86:VAL:HG22	2.03	0.59
1:AA:1117:G:N2	1:AA:1180:A:H1'	2.16	0.59
1:AA:37:U:O4	1:AA:397:A:C2	2.55	0.59
1:AA:522:C:H2'	1:AA:523:A:C8	2.38	0.59
1:AA:670:G:O2'	9:AF:77:ARG:NH2	2.36	0.59
1:AA:758:G:O5'	1:AA:758:G:H8	1.85	0.59
3:AW:7:U:HO3'	3:AW:8:U:C5'	2.16	0.59
50:B5:13:LYS:CD	50:B5:14:SER:H	2.15	0.59
26:BA:1063:G:OP2	55:BK:77:PHE:CE1	2.55	0.59
26:BA:1078:U:N1	26:BA:1088:A:N3	2.50	0.59
26:BA:1222:C:H42	26:BA:1227:A:N6	2.01	0.59
26:BA:1936:A:N6	26:BA:1945:G:C2	2.71	0.59
26:BA:1996:C:OP2	34:BO:31:ARG:CZ	2.46	0.59
26:BA:199:A:C2	26:BA:2433:A:C6	2.91	0.59
26:BA:2418:A:H2'	26:BA:2419:U:O4'	2.03	0.59
26:BA:245:G:N2	26:BA:254:G:H1'	2.18	0.59
26:BA:2507:C:C6	26:BA:2508:G:N7	2.70	0.59
26:BA:270(Z):U:H2'	26:BA:270(Z):U:O2	2.02	0.59
26:BA:2709:G:O2'	26:BA:2710:C:H5''	1.97	0.59
26:BA:2882:A:H2'	26:BA:2883:A:O5'	2.03	0.59
26:BA:481:G:O2'	26:BA:482:A:H8	1.86	0.59
26:BA:1818:U:P	27:BD:155:ARG:HB3	2.42	0.59
27:BD:209:ASN:O	27:BD:213:LYS:N	2.36	0.59
27:BD:74:PRO:CG	27:BD:96:ALA:N	2.63	0.59
28:BE:175:ASP:O	28:BE:178:LEU:N	2.36	0.59
29:BF:1:MET:SD	29:BF:18:LEU:HB2	2.43	0.59
29:BF:197:SER:CB	29:BF:239:ALA:N	2.60	0.59
26:BA:2313:C:P	30:BG:51:ARG:HD3	2.43	0.59
31:BH:120:LEU:HB3	31:BH:143:LEU:HD11	1.83	0.59
32:BI:110:LEU:HD11	32:BI:133:LEU:CD2	2.33	0.59
32:BI:5:PHE:N	32:BI:5:PHE:CD2	2.70	0.59
55:BK:11:LEU:CD1	55:BK:58:ILE:HD12	2.32	0.59
33:BN:65:ASN:N	33:BN:69:TYR:HB2	2.11	0.59
26:BA:2684:U:C1'	34:BO:70:ARG:HH22	1.91	0.59
36:BQ:36:ASN:O	36:BQ:41:THR:HB	2.02	0.59
36:BQ:33:MET:CG	36:BQ:83:PHE:HB2	2.33	0.59
43:BR:36:THR:HG22	43:BR:37:THR:N	2.17	0.59
37:BS:12:ARG:HB3	37:BS:20:TYR:CE1	2.38	0.59
37:BS:47:LEU:CD1	37:BS:58:LEU:CD2	2.67	0.59
26:BA:1754:C:H5'	38:BT:39:ASN:HD21	1.68	0.59
44:BU:70:ARG:O	44:BU:73:GLY:N	2.36	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:83:LYS:CA	39:BW:97:LYS:HG2	2.29	0.59
40:BX:33:SER:HA	40:BX:37:VAL:HG21	1.85	0.59
26:BA:144:C:H4'	40:BX:36:GLU:OE1	2.03	0.59
42:BZ:103:ARG:CB	42:BZ:139:THR:HG22	2.33	0.59
42:BZ:150:GLY:N	42:BZ:165:GLU:H	2.01	0.59
1:AA:1005:A:H5'	1:AA:1037:C:O2	2.03	0.59
5:AB:69:LEU:HB2	5:AB:159:PRO:HB2	1.84	0.59
7:AD:19:LEU:HD22	7:AD:67:ILE:HG12	1.84	0.59
15:AL:54:LYS:HB3	15:AL:70:ILE:HB	1.85	0.59
1:AA:43:C:OP1	19:AP:12:LYS:CB	2.51	0.59
48:B0:37:LEU:CD1	48:B0:71:ASN:ND2	2.66	0.59
47:B3:9:VAL:CG2	47:B3:54:VAL:CA	2.62	0.59
49:B4:17:GLN:HB3	49:B4:33:VAL:HB	1.85	0.59
49:B4:59:PHE:HA	49:B4:62:ARG:CD	2.32	0.59
51:B6:31:THR:O	51:B6:32:GLN:C	2.40	0.59
54:B9:19:ARG:O	54:B9:19:ARG:CG	2.51	0.59
26:BA:1050:A:O3'	26:BA:1051:G:P	2.60	0.59
26:BA:1332:G:C5	26:BA:1609:A:N6	2.70	0.59
26:BA:2022:U:N3	50:B5:9:LYS:NZ	2.51	0.59
26:BA:2070:G:H2'	26:BA:2071:A:C8	2.38	0.59
26:BA:2194:G:C5	26:BA:2195:C:N4	2.70	0.59
26:BA:2208:U:O2'	26:BA:2209:C:O4'	2.20	0.59
26:BA:2292:C:N3	26:BA:2293:C:C4	2.69	0.59
26:BA:2298:A:H1'	26:BA:2322:A:H1'	1.83	0.59
26:BA:2344:U:C2'	26:BA:2345:G:OP2	2.46	0.59
26:BA:2419:U:H5''	51:B6:24:THR:HG22	1.82	0.59
26:BA:2423:U:H5''	26:BA:2423:U:C6	2.35	0.59
26:BA:830:G:N7	26:BA:2448:A:C8	2.71	0.59
26:BA:957:A:C2	26:BA:2459:A:C5'	2.84	0.59
26:BA:2462:U:C2	26:BA:2463:C:C5	2.91	0.59
26:BA:2493:U:H2'	26:BA:2494:G:O5'	2.03	0.59
26:BA:1669:A:C4'	26:BA:2550:G:OP1	2.51	0.59
26:BA:255:A:H4'	26:BA:255:A:OP1	2.02	0.59
26:BA:2622:C:N3	26:BA:2623:G:N7	2.50	0.59
26:BA:2639:A:OP2	26:BA:2640:G:N7	2.35	0.59
26:BA:2675:A:C3'	26:BA:2676:C:H5'	2.31	0.59
26:BA:2681:C:O2	26:BA:2681:C:H2'	2.01	0.59
26:BA:2689:U:C5	26:BA:2713:A:C6	2.90	0.59
26:BA:2717:G:C4	26:BA:2718:G:H8	2.14	0.59
26:BA:2692:C:N3	26:BA:2718:G:C6	2.70	0.59
26:BA:26:G:H1	26:BA:27:G:H21	1.47	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2821:A:C2	26:BA:2822:G:N9	2.71	0.59
26:BA:2821:A:O2'	26:BA:2822:G:C1'	2.51	0.59
26:BA:2892:A:H3'	26:BA:2893:G:C8	2.38	0.59
26:BA:585:G:N2	26:BA:1256:G:C6	2.71	0.59
27:BD:128:ALA:HB1	27:BD:190:THR:N	2.18	0.59
27:BD:149:ARG:CA	27:BD:152:GLN:HE22	2.11	0.59
27:BD:68:ARG:HH21	27:BD:190:THR:CG2	2.15	0.59
28:BE:269:ILE:N	28:BE:297:LYS:HE2	2.17	0.59
30:BG:128:LEU:O	30:BG:129:ASP:HB3	2.00	0.59
30:BG:28:GLY:O	30:BG:29:HIS:C	2.39	0.59
31:BH:105:SER:C	31:BH:106:VAL:HG23	2.22	0.59
31:BH:138:GLN:O	31:BH:140:VAL:N	2.36	0.59
32:BI:23:ASP:OD1	32:BI:23:ASP:N	2.35	0.59
32:BI:29:PHE:O	32:BI:33:GLN:CG	2.50	0.59
55:BK:18:ALA:HB1	55:BK:39:CYS:C	2.24	0.59
33:BN:60:ARG:HD2	33:BN:71:TYR:CE2	2.38	0.59
33:BN:68:GLY:O	33:BN:69:TYR:HD1	1.86	0.59
35:BP:66:VAL:HB	35:BP:111:ALA:O	2.03	0.59
43:BR:71:GLN:O	43:BR:72:ASP:CB	2.49	0.59
44:BU:117:ARG:HG3	44:BU:118:GLN:H	1.65	0.59
26:BA:2021:C:C5	44:BU:25:TRP:HZ2	2.12	0.59
40:BX:23:LYS:CA	40:BX:66:VAL:O	2.50	0.59
41:BY:18:GLU:CB	41:BY:21:LYS:HZ1	2.15	0.59
42:BZ:95:SER:OG	42:BZ:122:ILE:CB	2.51	0.59
42:BZ:115:ILE:O	42:BZ:169:VAL:HA	2.03	0.59
42:BZ:69:VAL:HG22	42:BZ:82:ASP:N	2.11	0.59
1:AA:1259:C:O3'	1:AA:1284:C:H4'	2.03	0.59
1:AA:298:A:H3'	1:AA:299:G:H8	1.68	0.59
1:AA:566:G:C3'	1:AA:567:G:P	2.90	0.59
1:AA:761:G:H2'	1:AA:762:C:C6	2.38	0.59
1:AA:949:A:O2'	1:AA:971:G:N1	2.36	0.59
1:AA:952:U:H5'	1:AA:972:C:N4	2.18	0.59
7:AD:106:TYR:HA	7:AD:111:ALA:HB3	1.85	0.59
7:AD:201:GLN:O	7:AD:205:GLU:HG2	2.03	0.59
23:AT:72:LEU:HB3	23:AT:77:ALA:HB2	1.83	0.59
26:BA:2262:U:OP2	48:B0:14:ARG:NH2	2.36	0.59
47:B3:53:LEU:CD2	47:B3:54:VAL:CG1	2.65	0.59
52:B7:21:ARG:HH22	52:B7:43:THR:N	2.00	0.59
53:B8:14:ILE:O	53:B8:15:LYS:HB2	2.02	0.59
26:BA:1133:U:O2'	26:BA:1134:G:H5''	2.02	0.59
26:BA:1566:A:N1	27:BD:212:HIS:CE1	2.69	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1313:U:H2'	26:BA:1610:A:C2	2.38	0.59
26:BA:1769:G:H2'	26:BA:1770:G:H8	1.67	0.59
26:BA:1937:A:N1	26:BA:1940:U:C5	2.71	0.59
26:BA:1996:C:H5''	26:BA:1996:C:C6	2.36	0.59
26:BA:2056:G:H21	50:B5:8:LYS:HZ1	1.49	0.59
26:BA:2093:G:C5	26:BA:2225:A:N6	2.70	0.59
26:BA:2574:G:C2	26:BA:2575:C:C4	2.91	0.59
26:BA:2781:A:P	26:BA:2781:A:O4'	2.61	0.59
26:BA:2813:A:N9	26:BA:2814:C:C5	2.71	0.59
26:BA:2874:C:H6	26:BA:2874:C:O5'	1.86	0.59
26:BA:342:G:H2'	26:BA:343:C:C5	2.38	0.59
26:BA:830:G:C5	26:BA:2448:A:C8	2.91	0.59
26:BA:988:A:OP1	47:B3:11:SER:CB	2.51	0.59
31:BH:168:VAL:CG1	31:BH:169:ARG:N	2.44	0.59
32:BI:25:TYR:N	32:BI:25:TYR:CD2	2.44	0.59
32:BI:43:ASN:O	32:BI:45:LYS:CA	2.50	0.59
32:BI:65:ALA:CB	32:BI:134:HIS:CB	2.80	0.59
55:BK:8:GLN:N	55:BK:59:THR:CB	2.65	0.59
33:BN:23:ALA:O	33:BN:26:VAL:HB	2.02	0.59
33:BN:12:VAL:C	33:BN:38:VAL:CG2	2.71	0.59
34:BO:26:GLY:HA3	34:BO:30:ARG:CZ	2.33	0.59
34:BO:37:ASP:HB2	34:BO:62:VAL:CG2	2.28	0.59
36:BQ:85:ILE:HG23	36:BQ:136:TRP:HZ2	1.68	0.59
36:BQ:26:LYS:CE	36:BQ:28:ILE:HD12	2.32	0.59
26:BA:1275:A:H61	43:BR:19:ALA:HB1	1.68	0.59
37:BS:32:PRO:CG	37:BS:100:ALA:CA	2.80	0.59
45:BV:96:LEU:HD23	45:BV:96:LEU:H	1.67	0.59
40:BX:17:ASP:CA	40:BX:20:PHE:HE1	2.00	0.59
41:BY:81:LYS:HB3	41:BY:81:LYS:HZ3	1.65	0.59
42:BZ:110:GLY:O	42:BZ:112:LEU:N	2.34	0.59
42:BZ:150:GLY:H	42:BZ:165:GLU:N	2.00	0.59
1:AA:121:C:H4'	1:AA:122:G:N7	2.18	0.58
1:AA:900:A:H2'	1:AA:901:A:H8	1.68	0.58
6:AC:180:ALA:HB1	6:AC:203:PHE:HE1	1.66	0.58
6:AC:135:LYS:HZ1	8:AE:53:LEU:HD23	1.68	0.58
3:AW:39:PSU:C5'	14:AK:54:ARG:HH22	2.15	0.58
1:AA:978:A:C1'	22:AS:37:ARG:HH12	2.15	0.58
2:AV:34:G:C3'	2:AV:35:A:C5'	2.80	0.58
46:B2:49:LEU:O	46:B2:50:ARG:O	2.21	0.58
46:B2:51:LYS:C	46:B2:54:ALA:HB3	2.23	0.58
26:BA:969:U:C5'	47:B3:14:GLY:O	2.51	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:48:GLU:O	47:B3:49:LYS:C	2.41	0.58
50:B5:33:CYS:SG	50:B5:36:CYS:CA	2.90	0.58
26:BA:1059:G:C2	55:BK:127:ILE:CG2	2.64	0.58
26:BA:1265:A:OP2	26:BA:2615:U:OP1	2.21	0.58
26:BA:2189:U:H2'	26:BA:2190:G:H8	1.67	0.58
26:BA:2230:G:H2'	26:BA:2231:C:C6	2.38	0.58
26:BA:2259:G:N2	26:BA:2282:G:N1	2.49	0.58
26:BA:2377:A:H2'	26:BA:2378:A:C8	2.38	0.58
26:BA:2414:G:H2'	26:BA:2415:G:H8	1.68	0.58
26:BA:2462:U:C2'	26:BA:2463:C:O5'	2.51	0.58
26:BA:2485:G:N3	26:BA:2486:G:H1'	2.17	0.58
26:BA:2586:C:H2'	26:BA:2587:A:C5'	2.32	0.58
26:BA:2596:U:C5	26:BA:2597:G:C5	2.91	0.58
26:BA:2758:A:OP2	26:BA:2758:A:N9	2.36	0.58
26:BA:2782:G:C2'	26:BA:2783:G:H5'	2.30	0.58
26:BA:2807:G:C6	26:BA:2892:A:N7	2.71	0.58
26:BA:2892:A:OP1	26:BA:2892:A:H4'	2.03	0.58
26:BA:479:A:O2'	26:BA:480:A:H3'	2.02	0.58
26:BA:673:C:O4'	29:BF:82:GLN:CD	2.41	0.58
25:BB:18:G:P	30:BG:149:ARG:HA	2.43	0.58
27:BD:87:SER:O	27:BD:156:ALA:CB	2.51	0.58
30:BG:151:ILE:HG21	30:BG:156:ARG:CZ	2.33	0.58
26:BA:2745:C:C1'	31:BH:142:GLU:CG	2.51	0.58
31:BH:15:THR:HG23	31:BH:26:LYS:CB	2.28	0.58
33:BN:13:ASP:O	33:BN:38:VAL:HG11	2.02	0.58
33:BN:53:ILE:HG23	33:BN:54:VAL:N	2.17	0.58
34:BO:14:SER:OG	34:BO:94:ARG:HB2	2.03	0.58
35:BP:94:ARG:HD3	35:BP:120:LEU:CA	2.32	0.58
36:BQ:116:HIS:O	36:BQ:118:ALA:O	2.21	0.58
38:BT:5:GLU:O	38:BT:8:TYR:N	2.36	0.58
39:BW:17:VAL:O	39:BW:20:VAL:N	2.36	0.58
40:BX:28:VAL:HG23	40:BX:62:LYS:HG2	1.84	0.58
41:BY:32:ARG:CA	41:BY:33:GLU:OE2	2.51	0.58
41:BY:73:HIS:CD2	41:BY:89:ARG:O	2.56	0.58
1:AA:1319:A:C2	1:AA:1361:G:N2	2.65	0.58
1:AA:401:C:OP2	7:AD:73:ARG:NH2	2.37	0.58
1:AA:54:C:H41	1:AA:352:C:H2'	1.67	0.58
1:AA:574:A:HO2'	1:AA:882:C:C2'	2.12	0.58
49:B4:10:VAL:O	49:B4:10:VAL:CG1	2.51	0.58
49:B4:63:PHE:CD2	49:B4:69:ARG:NH2	2.71	0.58
26:BA:199:A:N3	26:BA:2433:A:C6	2.71	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1326:U:HO2'	26:BA:2010:G:HO2'	1.50	0.58
26:BA:2100:G:C6	26:BA:2190:G:C5	2.91	0.58
26:BA:2266:A:H4'	26:BA:2267:A:N3	2.17	0.58
26:BA:2276:G:N1	26:BA:2277:G:N7	2.51	0.58
26:BA:2298:A:H1'	26:BA:2321:G:H21	1.64	0.58
26:BA:2443:C:C5	26:BA:2444:G:C8	2.91	0.58
26:BA:2447:G:C6	26:BA:2501:C:O2	2.55	0.58
26:BA:2482:G:C4	26:BA:2483:C:C6	2.91	0.58
26:BA:2526:G:O2'	26:BA:2527:C:C5'	2.49	0.58
26:BA:2515:C:N4	26:BA:2570:G:O6	2.37	0.58
26:BA:2671:A:O2'	26:BA:2672:G:O5'	2.21	0.58
26:BA:2704:C:H2'	26:BA:2705:A:C8	2.38	0.58
26:BA:2844:G:N2	26:BA:2845:G:O4'	2.36	0.58
26:BA:2875:C:C4	26:BA:2876:G:C5	2.91	0.58
26:BA:328:U:O2'	41:BY:94:SER:HB2	2.02	0.58
26:BA:339:U:H2'	26:BA:340:A:C8	2.38	0.58
26:BA:835:A:O4'	26:BA:2358:G:H1'	2.04	0.58
26:BA:859:G:O2'	26:BA:2268:A:C4	2.54	0.58
26:BA:971:C:P	26:BA:974(A):C:O2	2.61	0.58
27:BD:200:THR:OG1	27:BD:201:ASP:CG	2.42	0.58
27:BD:213:LYS:CB	27:BD:215:LYS:CB	2.72	0.58
26:BA:2785:C:N1	28:BE:100:TRP:CD1	2.70	0.58
28:BE:102:ASP:HA	28:BE:104:PHE:CZ	2.37	0.58
28:BE:172:ASP:O	28:BE:175:ASP:N	2.36	0.58
29:BF:102:LEU:CB	29:BF:107:ARG:HE	1.97	0.58
29:BF:6:TYR:HE1	29:BF:138:VAL:C	2.07	0.58
32:BI:95:SER:CB	32:BI:117:LEU:HD12	2.33	0.58
55:BK:104:GLN:O	55:BK:107:GLU:OE2	2.21	0.58
55:BK:27:ALA:O	55:BK:28:LEU:C	2.40	0.58
55:BK:75:ALA:O	55:BK:78:LEU:N	2.36	0.58
35:BP:145:LEU:N	35:BP:145:LEU:CD1	2.64	0.58
37:BS:32:PRO:HD2	37:BS:100:ALA:CA	2.32	0.58
37:BS:53:ASN:OD1	37:BS:53:ASN:O	2.20	0.58
34:BO:79:PHE:CD2	38:BT:22:VAL:HG21	2.39	0.58
38:BT:5:GLU:HB3	38:BT:53:ASP:OD2	2.02	0.58
44:BU:21:ALA:C	44:BU:24:PHE:CZ	2.76	0.58
44:BU:57:PHE:CA	44:BU:60:LEU:HG	2.29	0.58
45:BV:40:VAL:HA	45:BV:54:TYR:HD1	1.67	0.58
39:BW:24:ILE:HG22	39:BW:32:ALA:HB1	1.85	0.58
40:BX:55:GLN:C	40:BX:56:ASN:ND2	2.51	0.58
40:BX:5:ILE:HG22	40:BX:6:LYS:H	0.43	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:151:ASP:CB	42:BZ:153:LYS:HZ3	2.12	0.58
42:BZ:46:GLN:CB	42:BZ:49:THR:OG1	2.46	0.58
1:AA:1084:G:H2'	1:AA:1085:U:C6	2.38	0.58
1:AA:1093:A:C2	1:AA:1109:C:O2	2.56	0.58
1:AA:1342:C:H2'	1:AA:1343:G:C8	2.37	0.58
1:AA:1407:C:O2'	26:BA:1912:A:N6	2.29	0.58
11:AH:29:SER:HB2	11:AH:32:LYS:HZ1	1.69	0.58
1:AA:1125:U:C5	13:AJ:5:ARG:NH2	2.71	0.58
16:AM:92:HIS:CE1	16:AM:110:ARG:CZ	2.86	0.58
20:AQ:57:VAL:HG12	20:AQ:76:LEU:HA	1.84	0.58
46:B2:13:PRO:O	46:B2:16:ARG:HB2	2.03	0.58
47:B3:39:ASP:CG	47:B3:40:THR:N	2.57	0.58
47:B3:48:GLU:CG	47:B3:49:LYS:N	2.66	0.58
26:BA:387:U:H3'	49:B4:29:PRO:HG3	1.85	0.58
49:B4:48:ARG:CG	49:B4:49:PHE:CD1	2.85	0.58
50:B5:40:LYS:HE2	50:B5:46:CYS:CB	2.21	0.58
53:B8:50:LEU:CD2	53:B8:50:LEU:C	2.62	0.58
26:BA:1364:G:N9	49:B4:3:LYS:NZ	2.41	0.58
26:BA:1492:G:H21	26:BA:1493:C:N4	2.01	0.58
26:BA:1936:A:C6	26:BA:1945:G:C4	2.91	0.58
26:BA:2090:G:N3	26:BA:2230:G:C6	2.71	0.58
26:BA:2234:G:C4	26:BA:2235:G:C8	2.91	0.58
26:BA:2354:G:C4'	48:B0:31:VAL:HG21	2.32	0.58
26:BA:2565:A:O5'	26:BA:2566:A:OP2	2.21	0.58
26:BA:2570:G:C5'	26:BA:2571:C:OP2	2.50	0.58
26:BA:2696:U:C4	26:BA:2714:G:N2	2.71	0.58
26:BA:295:G:H2'	26:BA:295:G:N3	2.18	0.58
26:BA:29:U:C5'	44:BU:11:ARG:NH1	2.56	0.58
26:BA:270(C):C:OP2	26:BA:365:C:O2'	2.21	0.58
26:BA:526:A:H4'	26:BA:527:C:OP1	2.03	0.58
26:BA:551:G:C4'	26:BA:1220:A:H2	2.15	0.58
26:BA:2786:U:O5'	28:BE:100:TRP:HB2	2.03	0.58
28:BE:315:VAL:HG12	28:BE:316:ARG:N	2.17	0.58
28:BE:39:GLN:OE1	28:BE:174:LEU:CG	2.51	0.58
30:BG:42:GLY:HA2	30:BG:48:MET:SD	2.43	0.58
32:BI:24:GLY:CA	32:BI:27:ASN:HB3	2.31	0.58
33:BN:51:GLU:O	33:BN:52:GLN:C	2.41	0.58
33:BN:58:GLU:HG2	33:BN:61:VAL:CG2	2.29	0.58
34:BO:43:VAL:HB	34:BO:55:GLY:H	1.69	0.58
36:BQ:50:VAL:HG12	36:BQ:51:GLU:OE1	2.02	0.58
37:BS:116:PHE:C	37:BS:120:GLU:OE2	2.42	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BT:6:CYS:C	38:BT:7:ASP:CG	2.62	0.58
41:BY:51:LEU:HD21	41:BY:95:ASN:CG	2.24	0.58
41:BY:81:LYS:NZ	41:BY:81:LYS:CB	2.66	0.58
1:AA:1418:A:C8	1:AA:1419:G:H1'	2.38	0.58
1:AA:1468:A:H2'	1:AA:1469:G:O4'	2.03	0.58
7:AD:157:LEU:HD23	7:AD:160:GLN:HG3	1.84	0.58
8:AE:144:THR:O	8:AE:147:ASP:HB2	2.03	0.58
14:AK:108:ILE:HB	21:AR:87:ARG:O	2.03	0.58
14:AK:12:ARG:NH1	14:AK:40:ILE:HA	2.18	0.58
1:AA:377:G:OP1	19:AP:3:LYS:HD2	2.03	0.58
1:AA:1319:A:C3'	22:AS:70:LYS:HZ1	2.15	0.58
46:B2:19:GLU:HG2	46:B2:23:LEU:HD21	1.84	0.58
50:B5:40:LYS:HE3	50:B5:48:ASN:HB2	1.85	0.58
50:B5:44:HIS:CA	50:B5:52:TYR:HH	1.88	0.58
52:B7:25:LYS:O	52:B7:28:ARG:HB2	2.04	0.58
53:B8:26:LYS:N	53:B8:46:LYS:HA	2.18	0.58
26:BA:1081:U:H5'	55:BK:126:LYS:CD	2.31	0.58
26:BA:1275:A:H2'	26:BA:1276:A:O4'	2.03	0.58
26:BA:1613:G:H2'	26:BA:1617:C:H42	1.68	0.58
26:BA:1743:G:H3'	26:BA:1746:G:H5'	1.85	0.58
26:BA:1840:G:H1	26:BA:1902:C:N4	1.99	0.58
26:BA:2250:G:H5''	36:BQ:102:ARG:CB	2.33	0.58
26:BA:2435:A:C2	26:BA:2436:G:C1'	2.86	0.58
26:BA:2067:G:N3	26:BA:2444:G:C2	2.71	0.58
26:BA:2668:G:C2	26:BA:2669:G:C8	2.92	0.58
26:BA:2679:A:H2'	28:BE:300:VAL:CG1	2.34	0.58
26:BA:2801:A:C2	26:BA:2895:U:C2'	2.79	0.58
26:BA:2840:C:H4'	43:BR:53:HIS:NE2	2.19	0.58
26:BA:319:C:N4	26:BA:320:A:N6	2.52	0.58
27:BD:167:GLU:C	27:BD:168:GLY:O	2.41	0.58
27:BD:208:GLY:HA3	27:BD:210:LYS:HE2	1.85	0.58
28:BE:99:VAL:C	28:BE:100:TRP:CG	2.75	0.58
28:BE:212:GLY:C	28:BE:214:VAL:N	2.54	0.58
29:BF:115:LEU:HD21	29:BF:246:ARG:HH22	1.67	0.58
31:BH:117:GLU:O	31:BH:118:GLU:C	2.42	0.58
32:BI:9:VAL:O	32:BI:10:LYS:CB	2.51	0.58
55:BK:123:ALA:N	55:BK:126:LYS:CE	2.63	0.58
33:BN:50:GLU:O	33:BN:51:GLU:C	2.36	0.58
33:BN:84:ARG:HA	33:BN:87:LEU:HD13	1.86	0.58
36:BQ:35:ASN:HB2	36:BQ:75:SER:CB	2.33	0.58
36:BQ:59:ASN:C	36:BQ:59:ASN:HD22	2.05	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:115:ASN:HD22	44:BU:115:ASN:N	1.96	0.58
39:BW:78:GLU:CD	39:BW:99:ARG:HB3	2.23	0.58
40:BX:2:TRP:O	40:BX:3:ASP:C	2.42	0.58
40:BX:7:HIS:O	40:BX:26:PHE:HB3	2.03	0.58
42:BZ:90:GLU:C	42:BZ:127:PRO:HG3	2.23	0.58
42:BZ:149:ALA:HA	42:BZ:152:ILE:CD1	2.26	0.58
42:BZ:30:VAL:O	42:BZ:31:SER:C	2.40	0.58
1:AA:1242:C:O2'	1:AA:1303:C:H5''	2.03	0.58
1:AA:57:G:N2	1:AA:388:G:C6	2.72	0.58
1:AA:565:U:H3'	1:AA:566:G:C8	2.38	0.58
1:AA:869:G:H5'	1:AA:872:A:O4'	2.03	0.58
1:AA:977:A:H2'	1:AA:977:A:N3	2.18	0.58
5:AB:28:PHE:CZ	5:AB:42:ILE:HD11	2.39	0.58
7:AD:102:ASP:HB3	7:AD:136:PRO:HB3	1.84	0.58
15:AL:82:VAL:O	15:AL:106:ASP:HB2	2.03	0.58
15:AL:82:VAL:O	15:AL:83:VAL:HB	2.02	0.58
16:AM:92:HIS:CE1	16:AM:98:VAL:HG21	2.34	0.58
17:AN:40:CYS:N	17:AN:43:CYS:SG	2.77	0.58
46:B2:51:LYS:HA	46:B2:54:ALA:CB	2.33	0.58
49:B4:5:LEU:HD12	49:B4:60:ASN:HD21	1.64	0.58
26:BA:125:G:OP2	52:B7:19:ARG:HD3	2.03	0.58
53:B8:57:ARG:O	53:B8:58:MET:C	2.40	0.58
54:B9:13:ASN:O	54:B9:14:CYS:O	2.22	0.58
54:B9:19:ARG:O	54:B9:20:HIS:HB2	2.04	0.58
26:BA:1062:G:H4'	55:BK:76:SER:CB	2.33	0.58
26:BA:1447:G:N3	26:BA:1545:A:H2	2.02	0.58
26:BA:1819:A:C8	27:BD:177:SER:OG	2.53	0.58
26:BA:2189:U:H2'	26:BA:2190:G:C8	2.39	0.58
26:BA:2197:U:O2'	26:BA:2198:A:C5'	2.35	0.58
26:BA:2262:U:C2'	26:BA:2263:C:H5''	2.21	0.58
26:BA:2310:A:N3	30:BG:55:LYS:HD3	2.19	0.58
26:BA:2398:U:H4'	26:BA:2399:G:OP1	2.03	0.58
26:BA:2417:C:O2'	26:BA:2418:A:H5'	2.03	0.58
26:BA:2691:C:C2'	26:BA:2692:C:C5'	2.79	0.58
26:BA:26:G:C6	26:BA:27:G:N2	2.71	0.58
26:BA:270(P):C:H2'	26:BA:270(Q):C:C6	2.39	0.58
26:BA:2826:A:N6	26:BA:2827:C:C6	2.38	0.58
26:BA:63:U:H6	26:BA:63:U:H3'	1.68	0.58
28:BE:199:ALA:HA	28:BE:314:ALA:CA	2.33	0.58
26:BA:606:U:H5'	29:BF:103:ASN:OD1	2.03	0.58
30:BG:54:ALA:O	30:BG:55:LYS:CB	2.50	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:102:LEU:N	31:BH:102:LEU:HD23	2.05	0.58
31:BH:101:LYS:HE2	31:BH:115:GLU:CG	2.33	0.58
31:BH:19:ASN:HD22	31:BH:19:ASN:C	2.06	0.58
55:BK:135:MET:HE1	55:BK:137:ILE:HG13	1.85	0.58
55:BK:99:LYS:HD2	55:BK:99:LYS:N	2.18	0.58
33:BN:71:TYR:O	33:BN:72:PRO:O	2.21	0.58
34:BO:13:ASN:C	34:BO:15:GLY:H	2.04	0.58
34:BO:85:VAL:O	34:BO:87:ILE:HD11	2.03	0.58
35:BP:67:ARG:NH1	35:BP:109:LEU:CD1	2.66	0.58
26:BA:873:G:H5'	36:BQ:32:LYS:HG3	1.84	0.58
43:BR:22:ARG:HG2	43:BR:26:LYS:HE3	1.81	0.58
37:BS:72:GLU:O	37:BS:74:PRO:C	2.37	0.58
37:BS:82:TYR:C	37:BS:83:LEU:HD12	2.24	0.58
44:BU:117:ARG:HD3	44:BU:118:GLN:H	1.67	0.58
44:BU:28:ARG:HG2	44:BU:29:SER:N	2.16	0.58
26:BA:1152:C:C5'	44:BU:80:ILE:CG2	2.78	0.58
45:BV:39:PHE:HB3	45:BV:54:TYR:HB3	1.86	0.58
45:BV:77:GLY:C	45:BV:78:VAL:HG13	2.24	0.58
39:BW:11:ARG:HH21	39:BW:98:LYS:HB3	1.61	0.58
40:BX:33:SER:HA	40:BX:37:VAL:CG2	2.30	0.58
40:BX:3:ASP:C	46:B2:24:LYS:NZ	2.57	0.58
41:BY:81:LYS:CG	41:BY:82:THR:N	2.66	0.58
1:AA:1014:A:H2	22:AS:34:TRP:CE2	2.22	0.58
1:AA:436:C:C2'	1:AA:437:U:C6	2.82	0.58
1:AA:886:G:H22	1:AA:912:C:H1'	1.67	0.58
1:AA:976:G:C8	1:AA:361(A):C:N4	2.71	0.58
7:AD:29:PRO:HB3	7:AD:34:GLU:HG2	1.85	0.58
8:AE:79:GLU:OE2	11:AH:104:ARG:HA	2.04	0.58
14:AK:79:SER:HA	14:AK:104:GLN:HB3	1.85	0.58
1:AA:1229:A:C2	16:AM:125:ARG:O	2.56	0.58
46:B2:11:MET:O	46:B2:16:ARG:HG3	2.02	0.58
49:B4:55:ARG:C	49:B4:56:VAL:O	2.41	0.58
26:BA:1309:G:OP1	52:B7:8:ASN:HA	2.04	0.58
26:BA:1809:A:H61	49:B4:3:LYS:HB3	1.67	0.58
26:BA:2186:G:C2	26:BA:2187:G:N7	2.72	0.58
26:BA:2188:C:C5	26:BA:2189:U:H5	2.21	0.58
26:BA:2217:G:C2'	26:BA:2218:G:O5'	2.52	0.58
26:BA:2071:A:C2	26:BA:2441:C:N3	2.71	0.58
26:BA:2458:G:C4	26:BA:2490:G:N2	2.71	0.58
26:BA:2485:G:N3	26:BA:2486:G:O4'	2.36	0.58
26:BA:2479:G:OP1	26:BA:2537:U:C4'	2.51	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2610:C:H4'	26:BA:2611:U:O5'	2.03	0.58
26:BA:2652:C:N1	26:BA:2653:U:C6	2.72	0.58
26:BA:2666:C:C3'	26:BA:2667:C:C5'	2.76	0.58
26:BA:2715:C:C2	26:BA:2716:U:C5	2.92	0.58
26:BA:271(B):G:H4'	26:BA:271(C):U:OP2	2.03	0.58
26:BA:2836:U:H2'	26:BA:2837:G:H8	1.68	0.58
26:BA:2888:C:O2	26:BA:2889:C:N1	2.36	0.58
26:BA:586:A:N1	26:BA:809:G:C2'	2.65	0.58
26:BA:763:G:O2'	26:BA:764:A:H5'	2.04	0.58
26:BA:919:G:H2'	26:BA:920:G:C8	2.38	0.58
26:BA:95:G:P	46:B2:41:GLU:OE1	2.61	0.58
27:BD:173:VAL:O	27:BD:180:VAL:HG13	2.03	0.58
27:BD:130:PRO:HA	27:BD:188:ARG:CG	2.33	0.58
27:BD:198:GLY:O	27:BD:200:THR:CA	2.52	0.58
27:BD:83:ASP:N	27:BD:83:ASP:OD2	2.35	0.58
28:BE:264:LEU:O	28:BE:265:ASN:ND2	2.36	0.58
32:BI:103:GLN:NE2	32:BI:109:LYS:C	2.32	0.58
26:BA:1063:G:H5'	55:BK:135:MET:CG	2.32	0.58
33:BN:63:ILE:CB	33:BN:71:TYR:CZ	2.87	0.58
35:BP:113:GLN:O	35:BP:115:ARG:HD2	2.03	0.58
35:BP:83:GLU:O	35:BP:92:ASP:HA	2.04	0.58
36:BQ:85:ILE:CD1	36:BQ:85:ILE:O	2.51	0.58
36:BQ:85:ILE:HD12	36:BQ:85:ILE:H	1.68	0.58
43:BR:24:GLN:HB3	43:BR:44:LEU:CD2	2.33	0.58
37:BS:32:PRO:HD3	37:BS:100:ALA:HA	1.81	0.58
37:BS:19:ASP:O	37:BS:20:TYR:C	2.41	0.58
44:BU:9:VAL:HG12	44:BU:13:ARG:HH21	1.68	0.58
44:BU:46:GLU:O	44:BU:47:TYR:C	2.40	0.58
44:BU:95:LEU:O	44:BU:98:ILE:CB	2.44	0.58
39:BW:19:LEU:HD22	50:B5:25:LEU:CD1	2.26	0.58
39:BW:12:ILE:HD11	39:BW:42:ARG:CD	2.33	0.58
40:BX:4:VAL:CG1	46:B2:24:LYS:HZ1	2.15	0.58
40:BX:57:THR:C	40:BX:59:ASP:OD2	2.41	0.58
42:BZ:91:PRO:CB	42:BZ:127:PRO:CA	2.62	0.58
42:BZ:9:THR:O	42:BZ:13:LYS:CB	2.52	0.58
1:AA:1134:G:H1	1:AA:1140:C:H42	1.52	0.58
1:AA:558:G:H2'	1:AA:559:A:H2	1.69	0.58
1:AA:983:A:H5'	1:AA:984:C:P	2.44	0.58
19:AP:22:THR:HA	19:AP:33:ILE:HG13	1.84	0.58
3:AW:41:U:H5'	3:AW:41:U:C6	2.26	0.58
3:AW:7:U:O2	3:AW:49:C:C6	2.56	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:50:GLY:C	48:B0:52:GLY:N	2.57	0.58
49:B4:33:VAL:HG12	49:B4:34:ASP:N	2.19	0.58
50:B5:15:LYS:HA	50:B5:18:MET:HG3	1.86	0.58
53:B8:38:GLY:O	53:B8:39:ASP:C	2.41	0.58
53:B8:36:LYS:CG	53:B8:40:GLU:OE1	2.50	0.58
26:BA:247:G:N1	53:B8:8:LYS:HE3	2.13	0.58
26:BA:1131:G:C6	33:BN:69:TYR:HE1	2.22	0.58
26:BA:138:G:O4'	40:BX:43:GLU:HG3	2.03	0.58
26:BA:1528:A:N3	26:BA:1529:A:H1'	2.19	0.58
26:BA:1538:G:H2'	26:BA:1539:G:C1'	2.33	0.58
26:BA:1655:A:C5'	28:BE:211:GLN:HA	2.34	0.58
26:BA:1813:G:H2'	26:BA:1814:G:O4'	2.03	0.58
26:BA:199:A:N1	26:BA:2433:A:C4	2.68	0.58
26:BA:2080:G:H5'	49:B4:32:HIS:HB3	1.85	0.58
26:BA:2276:G:C6	26:BA:2277:G:N7	2.72	0.58
26:BA:2279:G:C5	26:BA:2280:G:N7	2.72	0.58
26:BA:834:C:O2'	26:BA:2358:G:H2'	2.03	0.58
26:BA:2428:G:O5'	26:BA:2429:G:OP1	2.21	0.58
26:BA:2481:G:C2'	26:BA:2482:G:OP2	2.51	0.58
26:BA:2546:U:O2'	26:BA:2547:U:OP2	2.16	0.58
26:BA:2555:U:H5	26:BA:2556:C:C5	2.21	0.58
26:BA:2593:U:H3	26:BA:2600:A:N6	2.00	0.58
26:BA:2627:G:H1'	26:BA:2781:A:C2	2.38	0.58
26:BA:2631:G:C4	26:BA:2632:A:C8	2.91	0.58
26:BA:2666:C:C6	26:BA:2667:C:C6	2.92	0.58
26:BA:273(A):G:H2'	26:BA:273(B):C:H6	1.69	0.58
26:BA:2744:G:C6	26:BA:2745:C:N4	2.72	0.58
26:BA:2815:C:H2'	26:BA:2816:C:C6	2.38	0.58
26:BA:352:G:O5'	26:BA:352:G:C8	2.54	0.58
26:BA:1819:A:OP2	27:BD:154:VAL:N	2.30	0.58
27:BD:179:GLU:C	27:BD:180:VAL:CG2	2.72	0.58
27:BD:197:GLY:H	27:BD:199:ARG:NH1	2.01	0.58
29:BF:91:PRO:CG	29:BF:92:PRO:CD	2.41	0.58
31:BH:52:THR:C	31:BH:54:PRO:HD3	2.23	0.58
34:BO:101:PRO:C	34:BO:102:VAL:CG2	2.71	0.58
34:BO:106:LEU:N	34:BO:106:LEU:HD23	2.15	0.58
34:BO:3:GLN:HA	34:BO:21:VAL:HG12	1.84	0.58
35:BP:52:LYS:NZ	35:BP:53:ARG:HH12	2.01	0.58
35:BP:56:LYS:HG3	35:BP:57:VAL:H	1.68	0.58
36:BQ:50:VAL:HG12	36:BQ:52:LYS:N	2.12	0.58
43:BR:22:ARG:HG2	43:BR:26:LYS:CE	2.34	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2841:C:P	43:BR:53:HIS:CE1	2.96	0.58
37:BS:13:ARG:CG	37:BS:13:ARG:O	2.51	0.58
38:BT:50:GLU:HG3	38:BT:55:ALA:CB	2.34	0.58
44:BU:72:HIS:HE1	44:BU:110:VAL:HG21	1.67	0.58
44:BU:28:ARG:CG	44:BU:29:SER:N	2.66	0.58
44:BU:47:TYR:O	44:BU:48:ARG:C	2.41	0.58
45:BV:91:THR:C	45:BV:92:ALA:HB2	1.85	0.58
42:BZ:141:MET:CB	42:BZ:171:VAL:CG1	2.79	0.58
42:BZ:6:LYS:N	42:BZ:7:PRO:HD3	2.13	0.58
1:AA:1236:A:H4'	1:AA:1304:G:C5'	2.34	0.58
1:AA:947:G:C4'	1:AA:1332:A:H2	2.15	0.58
7:AD:10:ARG:HG2	7:AD:40:PRO:HG3	1.84	0.58
3:AW:65:G:C2	3:AW:66:A:C8	2.91	0.58
48:B0:67:VAL:CG1	48:B0:74:LYS:CG	2.47	0.58
47:B3:23:LEU:C	47:B3:28:LEU:CD1	2.57	0.58
49:B4:23:GLU:O	49:B4:26:SER:N	2.37	0.58
49:B4:6:HIS:CE1	49:B4:55:ARG:HG3	2.37	0.58
50:B5:12:SER:O	50:B5:14:SER:OG	2.22	0.58
51:B6:16:ALA:C	51:B6:48:VAL:CG1	2.71	0.58
51:B6:39:LYS:CA	51:B6:50:PHE:CD1	2.86	0.58
26:BA:1241:A:OP2	26:BA:1241:A:C8	2.57	0.58
26:BA:1252:G:H22	44:BU:37:GLN:HB2	1.69	0.58
26:BA:1255:U:C4	29:BF:67:GLN:O	2.57	0.58
26:BA:1351:C:O2'	26:BA:1571:A:H1'	2.03	0.58
26:BA:1352:U:H2'	26:BA:1352:U:O2	2.03	0.58
26:BA:2090:G:C2	26:BA:2230:G:C5	2.92	0.58
26:BA:2286:A:N6	51:B6:31:THR:O	2.36	0.58
26:BA:2292:C:N4	26:BA:2293:C:N4	2.51	0.58
26:BA:2297:C:C5	26:BA:2333:A:N1	2.71	0.58
26:BA:2290:G:N2	26:BA:2343:C:C1'	2.63	0.58
26:BA:2345:G:C8	26:BA:2371:G:N2	2.72	0.58
26:BA:2409:G:C8	26:BA:2409:G:O5'	2.55	0.58
26:BA:2431:U:C4	26:BA:2434:A:OP2	2.57	0.58
26:BA:2447:G:N2	26:BA:2500:U:O4	2.34	0.58
26:BA:2470:G:H1	26:BA:2471:C:N4	2.02	0.58
26:BA:2555:U:C6	26:BA:2556:C:C6	2.91	0.58
26:BA:747:U:C5	26:BA:2613:U:C5	2.91	0.58
26:BA:2679:A:C6	26:BA:2729:G:C6	2.92	0.58
26:BA:2718:G:H21	26:BA:2719:G:H1'	1.68	0.58
26:BA:2819:G:H8	26:BA:2819:G:O5'	1.87	0.58
26:BA:2838:G:N3	26:BA:2839:G:C8	2.71	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:60:G:H1'	26:BA:74:A:C2	2.38	0.58
26:BA:959:A:H2'	26:BA:960:A:H8	1.67	0.58
26:BA:976:C:OP1	44:BU:48:ARG:CZ	2.52	0.58
26:BA:995:C:H2'	26:BA:995:C:O2	2.03	0.58
26:BA:99:U:C2	41:BY:107:LYS:HD3	2.38	0.58
29:BF:6:TYR:CE1	29:BF:139:VAL:N	2.63	0.58
29:BF:236:THR:O	29:BF:239:ALA:HB2	2.02	0.58
29:BF:244:ALA:C	29:BF:246:ARG:N	2.54	0.58
31:BH:15:THR:HG22	31:BH:26:LYS:C	2.24	0.58
32:BI:133:LEU:HD12	32:BI:138:THR:C	2.23	0.58
32:BI:47:LEU:CD1	32:BI:48:GLU:N	2.59	0.58
55:BK:69:ILE:CG2	55:BK:70:ILE:N	2.67	0.58
33:BN:25:GLN:N	33:BN:28:GLU:HG2	2.18	0.58
35:BP:104:ASP:C	35:BP:105:TYR:CG	2.73	0.58
36:BQ:116:HIS:CG	36:BQ:116:HIS:O	2.56	0.58
26:BA:911:A:N3	36:BQ:16:ARG:HG2	2.08	0.58
36:BQ:72:VAL:HG21	36:BQ:83:PHE:CZ	2.32	0.58
38:BT:23:HIS:ND1	38:BT:24:LYS:O	2.36	0.58
26:BA:1251:C:C5'	44:BU:10:ARG:HG3	2.33	0.58
44:BU:76:TYR:O	44:BU:80:ILE:HG13	2.01	0.58
45:BV:34:GLU:C	45:BV:35:LEU:HD23	2.17	0.58
39:BW:80:PRO:CB	39:BW:100:THR:HG21	2.27	0.58
39:BW:25:ARG:HG2	39:BW:26:GLY:N	2.18	0.58
39:BW:8:ARG:CD	39:BW:9:TYR:CD1	2.82	0.58
42:BZ:72:ASP:OD2	42:BZ:72:ASP:N	2.37	0.58
1:AA:975:A:N7	1:AA:1357:A:H2	2.01	0.58
1:AA:37:U:O4	1:AA:397:A:H2	1.85	0.58
1:AA:25:C:H4'	1:AA:524:G:H21	1.68	0.58
7:AD:18:LYS:HA	7:AD:33:MET:HE1	1.86	0.58
47:B3:53:LEU:CD2	47:B3:53:LEU:C	2.72	0.58
51:B6:48:VAL:O	51:B6:50:PHE:HD1	1.73	0.58
52:B7:30:ILE:HD13	52:B7:33:ARG:NE	2.18	0.58
26:BA:1005:C:H2'	26:BA:1006:C:C6	2.38	0.58
26:BA:136:G:C3'	26:BA:137:C:H4'	2.33	0.58
26:BA:1372:U:H2'	26:BA:1373:A:C8	2.39	0.58
26:BA:1482:U:H1'	26:BA:1512:G:N2	2.18	0.58
26:BA:176:G:H2'	26:BA:177:G:C8	2.39	0.58
26:BA:2031:A:H2'	26:BA:2455:G:O2'	2.04	0.58
26:BA:2309:A:C3'	26:BA:2310:A:C5'	2.72	0.58
26:BA:825:C:H5'	26:BA:2428:G:O6	2.04	0.58
26:BA:2510:C:N3	26:BA:2578:G:O6	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2569:G:N3	26:BA:2570:G:C8	2.72	0.58
26:BA:2626:C:OP2	26:BA:2626:C:C5	2.51	0.58
26:BA:2647:U:O2	26:BA:2673:G:N2	2.36	0.58
26:BA:2679:A:H2'	26:BA:2680:C:O5'	2.04	0.58
26:BA:2001:A:H4'	26:BA:2689:U:H2'	1.86	0.58
26:BA:2731:G:N1	26:BA:2732:G:N2	2.52	0.58
26:BA:2881:C:C4	26:BA:2882:A:N7	2.71	0.58
26:BA:325:G:H2'	26:BA:326:G:H8	1.68	0.58
26:BA:447:A:N6	26:BA:454:A:N7	2.51	0.58
26:BA:911:A:C6	36:BQ:16:ARG:CB	2.86	0.58
26:BA:974:G:H3'	45:BV:82:ARG:CZ	2.34	0.58
27:BD:183:ILE:HG22	27:BD:184:LEU:H	0.48	0.58
28:BE:206:LYS:C	28:BE:257:GLY:HA2	2.24	0.58
28:BE:44:TYR:CA	28:BE:307:LEU:O	2.52	0.58
28:BE:308:VAL:CG1	28:BE:310:PHE:HE1	2.12	0.58
29:BF:103:ASN:O	29:BF:107:ARG:CG	2.50	0.58
29:BF:35:VAL:O	29:BF:38:ALA:N	2.36	0.58
29:BF:96:LYS:C	29:BF:98:ARG:NH1	2.53	0.58
31:BH:9:GLU:CD	31:BH:11:PRO:HD3	2.23	0.58
31:BH:41:THR:CB	31:BH:52:THR:OG1	2.52	0.58
32:BI:111:ASP:HB3	32:BI:114:LYS:HG2	1.85	0.58
55:BK:129:GLU:OE2	55:BK:130:GLY:N	2.37	0.58
33:BN:83:ILE:CG1	33:BN:84:ARG:CG	2.81	0.58
34:BO:63:VAL:HG12	34:BO:63:VAL:O	2.04	0.58
34:BO:93:PRO:HD2	34:BO:113:LYS:HD3	1.86	0.58
37:BS:31:LYS:NZ	37:BS:99:GLU:HB3	2.19	0.58
40:BX:46:ASP:O	40:BX:47:VAL:O	2.21	0.58
42:BZ:15:ASP:OD1	42:BZ:15:ASP:C	2.42	0.58
42:BZ:53:ASP:O	42:BZ:54:ILE:HD12	2.03	0.58
1:AA:194:C:O4'	23:AT:64:ASP:HB3	2.04	0.58
1:AA:560:U:H5'	1:AA:566:G:N2	2.18	0.58
1:AA:885:G:O2'	1:AA:915:A:C2	2.57	0.58
1:AA:976:G:H2'	1:AA:361(A):C:H42	1.68	0.58
5:AB:93:VAL:HG21	5:AB:97:TRP:HD1	1.69	0.58
7:AD:22:LYS:O	7:AD:113:SER:CB	2.44	0.58
1:AA:1377:A:OP1	10:AG:94:ARG:NE	2.37	0.58
1:AA:1248:A:C2'	12:AI:70:LYS:NZ	2.67	0.58
18:AO:45:VAL:O	18:AO:46:HIS:CB	2.52	0.58
49:B4:48:ARG:CG	49:B4:49:PHE:N	2.59	0.58
49:B4:4:ASP:HB3	49:B4:5:LEU:CD2	2.34	0.58
26:BA:2418:A:OP2	53:B8:30:ARG:NH1	2.37	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:594:U:C5'	53:B8:58:MET:CE	2.79	0.58
54:B9:29:ASN:HB2	54:B9:32:HIS:CE1	2.39	0.58
26:BA:1398:C:H4'	40:BX:23:LYS:HZ2	1.68	0.58
26:BA:1742:C:H2'	26:BA:1743:G:C1'	2.33	0.58
26:BA:1890:A:H2	26:BA:2235:G:C4'	2.17	0.58
26:BA:2263:C:H6	26:BA:2263:C:H5'	1.68	0.58
26:BA:2268:A:C3'	26:BA:2268:A:C8	2.87	0.58
26:BA:2304:G:O4'	30:BG:105:SER:CB	2.48	0.58
26:BA:2333:A:H5'	26:BA:2335:A:O4'	2.03	0.58
26:BA:2458:G:O6	26:BA:2490:G:O2'	2.21	0.58
26:BA:2561:A:C2'	26:BA:2562:U:O5'	2.44	0.58
26:BA:2052:G:N1	26:BA:2618:G:C8	2.72	0.58
26:BA:2640:G:N1	26:BA:2774:C:N4	2.33	0.58
26:BA:2710:C:HO2'	26:BA:2711:A:H5'	1.65	0.58
26:BA:2826:A:C2	26:BA:2827:C:H6	2.21	0.58
26:BA:809:G:C5	26:BA:810:U:C4	2.92	0.58
27:BD:76:ARG:O	27:BD:113:MET:HG2	2.02	0.58
28:BE:221:LYS:CE	28:BE:233:ARG:CG	2.81	0.58
29:BF:153:VAL:C	29:BF:155:SER:H	2.06	0.58
29:BF:21:VAL:O	29:BF:22:PHE:C	2.40	0.58
29:BF:223:LEU:HD23	29:BF:233:THR:OG1	2.04	0.58
29:BF:58:ALA:O	29:BF:59:GLU:OE2	2.22	0.58
31:BH:147:ILE:CD1	31:BH:150:VAL:CG1	2.82	0.58
55:BK:99:LYS:HG3	55:BK:140:VAL:CG2	2.30	0.58
33:BN:66:ASP:O	33:BN:67:ASN:C	2.39	0.58
34:BO:114:ILE:O	34:BO:116:SER:N	2.37	0.58
37:BS:114:LYS:O	37:BS:117:ALA:CB	2.52	0.58
37:BS:120:GLU:O	37:BS:121:GLY:C	2.42	0.58
37:BS:61:ALA:HB1	37:BS:84:THR:CG2	2.34	0.58
44:BU:115:ASN:O	44:BU:117:ARG:CA	2.51	0.58
44:BU:47:TYR:HD2	44:BU:50:ARG:HD2	1.69	0.58
45:BV:50:ASP:OD1	45:BV:53:LYS:HE2	2.01	0.58
1:AA:1156:G:H1'	1:AA:1179:A:H61	1.68	0.57
1:AA:1256:A:C8	6:AC:27:LYS:NZ	2.71	0.57
1:AA:877:C:O2'	11:AH:89:PRO:HG2	2.04	0.57
1:AA:575:G:N2	1:AA:880:C:C2	2.68	0.57
40:BX:3:ASP:C	46:B2:24:LYS:HZ2	2.07	0.57
49:B4:14:ILE:HG21	49:B4:37:SER:C	2.25	0.57
51:B6:12:MET:HE3	51:B6:54:LYS:C	2.23	0.57
26:BA:2466:C:H5"	54:B9:6:SER:HB3	1.86	0.57
26:BA:1162:G:O3'	45:BV:23:GLU:OE1	2.21	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1372:U:H2'	26:BA:1373:A:H8	1.68	0.57
26:BA:1525:G:HO3'	26:BA:1526:G:P	2.25	0.57
26:BA:2040:C:H4'	33:BN:69:TYR:CE2	2.38	0.57
26:BA:2344:U:O2	26:BA:2344:U:C2'	2.51	0.57
26:BA:2435:A:H2'	26:BA:2436:G:H5''	1.84	0.57
26:BA:245:G:H22	26:BA:254:G:H1'	1.69	0.57
26:BA:2464:C:C2	26:BA:2465:C:C6	2.91	0.57
26:BA:2573:C:C6	26:BA:2573:C:H3'	2.39	0.57
26:BA:2617:C:O2'	26:BA:2618:G:H5'	2.02	0.57
26:BA:270(O):U:H5''	26:BA:270(P):C:C5	2.39	0.57
26:BA:2792:G:N3	26:BA:2805:G:N2	2.38	0.57
26:BA:325:G:H21	41:BY:7:GLN:HE22	1.45	0.57
26:BA:668:G:H2'	26:BA:670:A:N7	2.19	0.57
27:BD:234:HIS:O	27:BD:235:PRO:O	2.22	0.57
27:BD:77:VAL:HB	27:BD:113:MET:N	2.16	0.57
28:BE:47:GLY:HA2	28:BE:305:LYS:HE2	1.86	0.57
29:BF:103:ASN:HB2	29:BF:106:GLU:HG3	1.86	0.57
29:BF:138:VAL:HG12	29:BF:138:VAL:O	2.04	0.57
31:BH:148:ARG:NH1	31:BH:164:GLU:H	1.98	0.57
32:BI:38:GLU:O	32:BI:39:ALA:C	2.42	0.57
32:BI:80:PRO:CA	32:BI:146:THR:O	2.51	0.57
33:BN:19:MET:CB	33:BN:46:ILE:HD13	2.15	0.57
33:BN:58:GLU:C	33:BN:61:VAL:H	2.07	0.57
26:BA:7:G:OP1	33:BN:6:PHE:CZ	2.51	0.57
35:BP:132:LYS:O	35:BP:133:VAL:C	2.42	0.57
36:BQ:71:PHE:HB3	36:BQ:138:ARG:HH11	1.69	0.57
43:BR:48:VAL:O	43:BR:51:LEU:HB2	2.03	0.57
43:BR:62:ALA:CB	43:BR:80:PHE:CZ	2.86	0.57
43:BR:52:ILE:CD1	43:BR:94:TYR:CB	2.81	0.57
44:BU:105:ALA:O	44:BU:106:PHE:C	2.42	0.57
45:BV:30:GLY:O	45:BV:33:VAL:HG21	1.94	0.57
45:BV:43:GLU:O	45:BV:44:GLN:CD	2.42	0.57
45:BV:4:ILE:O	45:BV:4:ILE:HG22	2.04	0.57
45:BV:66:GLY:HA2	45:BV:93:ILE:HA	1.86	0.57
39:BW:66:GLU:O	39:BW:69:LEU:HD21	2.03	0.57
40:BX:23:LYS:CA	40:BX:67:ARG:HA	2.34	0.57
26:BA:439:G:C5'	41:BY:6:LYS:HZ3	2.08	0.57
42:BZ:103:ARG:CD	42:BZ:103:ARG:H	2.14	0.57
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.38	0.57
1:AA:541:G:H4'	7:AD:42:GLN:CB	2.09	0.57
1:AA:575:G:OP1	1:AA:575:G:H4'	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:815:A:OP2	1:AA:816:A:C8	2.57	0.57
1:AA:22:G:H1'	1:AA:914:A:C6	2.38	0.57
47:B3:40:THR:O	47:B3:40:THR:HG23	2.04	0.57
49:B4:14:ILE:CG2	49:B4:37:SER:H	2.13	0.57
39:BW:19:LEU:HD22	50:B5:25:LEU:HG	0.59	0.57
51:B6:8:ILE:H	51:B6:29:ARG:NH2	1.93	0.57
51:B6:9:ILE:HG22	51:B6:9:ILE:O	2.02	0.57
52:B7:21:ARG:NH2	52:B7:43:THR:HG23	2.14	0.57
26:BA:1184:G:O2'	26:BA:1185:C:H5'	2.03	0.57
26:BA:2313:C:H4'	30:BG:72:LYS:HB3	1.86	0.57
26:BA:2347:C:H2'	26:BA:2348:U:C6	2.38	0.57
26:BA:2394:C:C6	26:BA:2395:C:N4	2.69	0.57
26:BA:2404:C:N4	26:BA:2405:G:C2	2.72	0.57
26:BA:2423:U:O2'	26:BA:2424:C:P	2.62	0.57
26:BA:2542:A:H5'	26:BA:2543:G:OP1	2.04	0.57
26:BA:2679:A:C2	26:BA:2680:C:C6	2.92	0.57
26:BA:270(W):G:H3'	26:BA:270(X):G:H8	1.68	0.57
26:BA:2716:U:O2	26:BA:2717:G:C8	2.57	0.57
26:BA:2783:G:C2	26:BA:2784:C:C4	2.93	0.57
26:BA:2827:C:O2'	26:BA:2828:C:C5'	2.52	0.57
26:BA:2828:C:C2	26:BA:2829:C:C5	2.92	0.57
26:BA:2856:C:H2'	26:BA:2857:G:H5'	1.86	0.57
26:BA:2862:G:N3	26:BA:2863:C:C5	2.71	0.57
26:BA:311:A:N3	26:BA:311:A:H2'	2.17	0.57
26:BA:498:G:H8	26:BA:498:G:O5'	1.87	0.57
26:BA:627:A:H61	26:BA:638:G:H1'	1.69	0.57
26:BA:648:G:H2'	26:BA:649:G:C8	2.39	0.57
26:BA:856:C:C1'	48:B0:24:LYS:HB2	2.34	0.57
27:BD:73:ILE:CG2	27:BD:74:PRO:HD2	2.33	0.57
28:BE:211:GLN:O	28:BE:216:ARG:CZ	2.52	0.57
28:BE:311:PHE:N	28:BE:311:PHE:CD2	2.72	0.57
28:BE:75:THR:HG21	28:BE:189:MET:SD	2.43	0.57
29:BF:166:ILE:O	29:BF:167:ASP:O	2.22	0.57
29:BF:243:VAL:CB	29:BF:246:ARG:HD2	2.33	0.57
29:BF:55:ARG:HG3	29:BF:56:THR:H	1.66	0.57
26:BA:801:G:P	29:BF:79:ARG:HD3	2.34	0.57
31:BH:66:THR:CG2	31:BH:67:THR:H	2.16	0.57
33:BN:16:ASP:H	33:BN:45:VAL:HG23	1.65	0.57
26:BA:2685:G:OP1	34:BO:78:ARG:NH1	2.36	0.57
36:BQ:136:TRP:C	36:BQ:139:ALA:H	2.05	0.57
36:BQ:88:PHE:CA	36:BQ:90:PHE:HE1	2.17	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:36:THR:CG2	43:BR:40:LYS:CG	2.82	0.57
26:BA:2880:C:H1'	43:BR:92:GLY:O	2.03	0.57
37:BS:109:PRO:HB2	37:BS:116:PHE:CE2	2.39	0.57
44:BU:36:PHE:N	44:BU:36:PHE:CD1	2.72	0.57
44:BU:8:ILE:H	44:BU:11:ARG:CD	2.15	0.57
41:BY:101:LEU:CD2	41:BY:112:LEU:CD1	2.53	0.57
41:BY:3:GLN:HB3	41:BY:4:PRO:HD2	1.86	0.57
42:BZ:58:GLY:O	42:BZ:59:GLY:C	2.42	0.57
1:AA:1098:C:H4'	1:AA:1167:A:C2	2.39	0.57
1:AA:275:G:H4'	20:AQ:14:LYS:HB3	1.85	0.57
1:AA:865:A:H2	1:AA:917:G:HO2'	1.52	0.57
16:AM:8:GLU:HG3	16:AM:22:ILE:HG12	1.85	0.57
4:AX:116:U:H2'	4:AX:117:U:C6	2.38	0.57
26:BA:101:G:OP2	41:BY:107:LYS:NZ	2.33	0.57
26:BA:1059:G:O2'	55:BK:112:LYS:CE	2.49	0.57
26:BA:489:G:H1'	26:BA:1284:A:C5	2.38	0.57
26:BA:1341:U:OP2	26:BA:1397:U:C2	2.58	0.57
26:BA:1268:A:OP2	26:BA:2006:C:OP2	2.21	0.57
26:BA:204:A:OP1	26:BA:206:U:H1'	2.04	0.57
26:BA:2268:A:H3'	26:BA:2268:A:H8	1.69	0.57
26:BA:2461:C:H1'	26:BA:2492:U:N3	2.18	0.57
26:BA:2468:G:O2'	26:BA:2469:A:H5''	2.01	0.57
26:BA:2468:G:C6	26:BA:2481:G:C4	2.91	0.57
26:BA:2547:U:C6	26:BA:2566:A:N1	2.73	0.57
26:BA:2605:U:O5'	26:BA:2605:U:C6	2.57	0.57
26:BA:2694:G:C6	26:BA:2695:C:C5	2.92	0.57
26:BA:374:A:H2'	26:BA:375:C:O4'	2.04	0.57
26:BA:481:G:H1	26:BA:509:C:H42	1.52	0.57
26:BA:570:G:H2'	26:BA:2030:A:N6	2.19	0.57
26:BA:830:G:C6	26:BA:2446:G:O4'	2.57	0.57
26:BA:1799:G:H22	27:BD:153:LEU:CD2	2.11	0.57
27:BD:175:LEU:HD21	27:BD:181:ARG:N	2.20	0.57
28:BE:222:ARG:NH1	28:BE:222:ARG:CG	2.58	0.57
31:BH:147:ILE:CD1	31:BH:150:VAL:HG11	2.34	0.57
31:BH:53:ARG:NH1	31:BH:56:ASP:C	2.57	0.57
31:BH:96:SER:HA	31:BH:124:VAL:CG2	2.30	0.57
55:BK:93:LYS:N	55:BK:96:ILE:CG1	2.67	0.57
34:BO:98:ILE:CG2	34:BO:118:ALA:HA	2.34	0.57
34:BO:46:ALA:C	34:BO:47:THR:O	2.39	0.57
26:BA:2406:U:C1'	35:BP:57:VAL:CG2	2.80	0.57
35:BP:73:VAL:HA	35:BP:76:LEU:HB2	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:9:SER:O	36:BQ:10:ILE:C	2.43	0.57
38:BT:8:TYR:HE1	38:BT:54:THR:HB	1.66	0.57
44:BU:8:ILE:C	44:BU:11:ARG:HD3	2.20	0.57
44:BU:88:ILE:HG22	44:BU:88:ILE:O	2.04	0.57
44:BU:95:LEU:N	44:BU:98:ILE:HD13	2.18	0.57
40:BX:45:TYR:O	40:BX:46:ASP:C	2.41	0.57
40:BX:57:THR:CB	40:BX:59:ASP:OD2	2.52	0.57
42:BZ:112:LEU:HD22	42:BZ:113:VAL:O	2.04	0.57
42:BZ:113:VAL:HG23	42:BZ:174:PRO:CG	2.32	0.57
42:BZ:40:ASP:O	42:BZ:44:ARG:HG2	2.04	0.57
1:AA:1222:G:H5'	22:AS:77:THR:HG21	1.86	0.57
1:AA:1222:G:OP1	1:AA:1321:C:O2'	2.20	0.57
1:AA:1481:U:H2'	1:AA:1482:G:C8	2.40	0.57
1:AA:717:C:H2'	1:AA:734:G:H5'	1.86	0.57
10:AG:26:PHE:HB2	10:AG:101:LEU:HD22	1.86	0.57
3:AW:7:U:O3'	3:AW:8:U:P	2.62	0.57
46:B2:20:LEU:HD22	46:B2:23:LEU:CB	2.34	0.57
46:B2:9:ARG:HA	46:B2:59:ILE:HD11	1.86	0.57
47:B3:31:LEU:HD22	47:B3:32:GLN:CG	2.33	0.57
26:BA:929:G:H21	47:B3:43:ILE:CA	2.18	0.57
49:B4:4:ASP:HB3	49:B4:5:LEU:HD23	1.86	0.57
26:BA:1255:U:OP1	26:BA:1256:G:H5''	2.04	0.57
26:BA:1317:A:H2'	26:BA:1318:C:C6	2.39	0.57
26:BA:1566:A:N3	27:BD:212:HIS:CA	2.67	0.57
26:BA:14:A:N7	26:BA:15:G:C4	2.73	0.57
26:BA:1664:A:H2'	26:BA:1665:A:H8	1.68	0.57
26:BA:1799:G:N1	27:BD:177:SER:CB	2.67	0.57
26:BA:1802:A:H3'	26:BA:1803:A:C8	2.40	0.57
26:BA:1991:U:C6	26:BA:1991:U:H3'	2.39	0.57
26:BA:2047:U:H2'	26:BA:2048:G:C8	2.39	0.57
26:BA:2069:G:N3	26:BA:2443:C:O2	2.36	0.57
26:BA:2078:C:H2'	26:BA:2079:U:O4'	2.04	0.57
26:BA:2360:A:C5	26:BA:2361:A:C8	2.80	0.57
26:BA:2461:C:O2'	26:BA:2462:U:H5'	2.03	0.57
26:BA:2476:A:N3	26:BA:2481:G:N2	2.51	0.57
26:BA:2525:G:O2'	26:BA:2742:C:O2'	1.95	0.57
26:BA:1999:C:C2'	26:BA:2687:U:HO2'	2.15	0.57
26:BA:270(S):G:H2'	26:BA:270(T):G:C8	2.40	0.57
26:BA:2766:G:C2	26:BA:2767:C:C6	2.91	0.57
26:BA:2844:G:H2'	26:BA:2844:G:N3	2.19	0.57
26:BA:635:C:H2'	26:BA:636:G:O4'	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:60:G:N7	26:BA:63:U:H5	2.02	0.57
25:BB:75:G:H1'	42:BZ:22:VAL:HG21	1.83	0.57
26:BA:1567:A:N1	27:BD:82:TYR:O	2.37	0.57
26:BA:2770:G:H1'	28:BE:316:ARG:HH12	1.66	0.57
29:BF:3:ALA:CA	29:BF:16:VAL:O	2.50	0.57
29:BF:193:LEU:O	29:BF:233:THR:HB	2.04	0.57
30:BG:129:ASP:C	30:BG:130:VAL:HG13	2.24	0.57
31:BH:15:THR:CG2	31:BH:26:LYS:O	2.45	0.57
32:BI:115:ILE:CG2	32:BI:129:VAL:CG1	2.83	0.57
32:BI:7:LYS:CG	32:BI:12:LYS:HZ2	2.11	0.57
33:BN:131:THR:O	33:BN:131:THR:OG1	2.22	0.57
33:BN:45:VAL:N	33:BN:132:LEU:CD2	2.66	0.57
34:BO:43:VAL:CG2	34:BO:56:GLN:H	2.16	0.57
26:BA:244:A:O2'	35:BP:56:LYS:HB3	2.04	0.57
35:BP:70:ASP:OD1	35:BP:115:ARG:HB2	2.04	0.57
35:BP:77:ALA:CB	35:BP:81:VAL:HG12	2.33	0.57
43:BR:55:ALA:CB	43:BR:79:LEU:CD2	2.82	0.57
37:BS:102:LEU:N	37:BS:102:LEU:HD12	2.19	0.57
37:BS:56:ASP:CG	37:BS:57:THR:N	2.58	0.57
38:BT:13:ILE:HD12	38:BT:33:SER:OG	2.03	0.57
44:BU:59:ARG:CA	44:BU:62:ILE:HG13	1.94	0.57
44:BU:69:ALA:CA	44:BU:79:PHE:CZ	2.84	0.57
45:BV:5:ILE:HD12	45:BV:12:TYR:OH	2.03	0.57
45:BV:83:ARG:C	45:BV:84:THR:OG1	2.41	0.57
45:BV:69:ILE:HG22	45:BV:88:GLN:HB2	1.87	0.57
39:BW:42:ARG:HG2	39:BW:43:GLY:N	2.19	0.57
40:BX:50:GLU:N	40:BX:50:GLU:CD	2.57	0.57
42:BZ:37:LYS:HD2	42:BZ:41:ARG:HH12	1.68	0.57
42:BZ:5:ALA:O	42:BZ:6:LYS:HB3	2.04	0.57
1:AA:120:A:H3'	1:AA:120:A:H8	1.68	0.57
1:AA:795:C:H5'	1:AA:1522:U:OP1	2.04	0.57
1:AA:570:G:H2'	1:AA:571:U:C5	2.40	0.57
1:AA:757:U:OP1	1:AA:822:C:O2'	2.07	0.57
1:AA:828:A:N6	1:AA:858:G:O2'	2.37	0.57
11:AH:96:GLY:HA2	11:AH:130:GLY:HA3	1.87	0.57
16:AM:91:ARG:HH12	16:AM:103:THR:CB	2.08	0.57
2:AV:74:C:H42	26:BA:2253:G:H1	0.63	0.57
48:B0:41:ARG:O	48:B0:67:VAL:HG13	2.03	0.57
26:BA:76:C:P	46:B2:51:LYS:HD3	2.45	0.57
47:B3:20:LYS:HA	47:B3:23:LEU:HD12	1.66	0.57
53:B8:55:TRP:HZ3	53:B8:59:LYS:NZ	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:138:G:O6	26:BA:142:G:O2'	2.23	0.57
26:BA:120:U:N3	26:BA:150:C:C4	2.73	0.57
26:BA:1418:G:H1	26:BA:1577:C:H3'	1.69	0.57
26:BA:1819:A:P	27:BD:154:VAL:H	2.26	0.57
26:BA:1913:A:H61	26:BA:1917:U:P	2.27	0.57
26:BA:1924:C:C4	26:BA:1925:C:C4	2.93	0.57
26:BA:198:C:C4'	26:BA:2243:U:O2'	2.50	0.57
26:BA:2299:G:H2'	26:BA:2300:G:C8	2.39	0.57
26:BA:2551:C:C2	26:BA:2552:U:C6	2.93	0.57
26:BA:2577:A:H2	26:BA:2614:A:C2	2.18	0.57
26:BA:2745:C:C2'	31:BH:142:GLU:CD	2.73	0.57
26:BA:659:C:H2'	26:BA:660:G:C8	2.37	0.57
27:BD:107:LYS:O	27:BD:108:ASN:HB3	2.05	0.57
27:BD:143:ILE:HB	27:BD:152:GLN:CA	2.34	0.57
27:BD:128:ALA:CB	27:BD:190:THR:N	2.68	0.57
27:BD:198:GLY:O	27:BD:200:THR:CB	2.52	0.57
27:BD:85:ASN:ND2	27:BD:85:ASN:N	2.49	0.57
28:BE:222:ARG:NE	28:BE:232:ARG:C	2.56	0.57
28:BE:70:VAL:HB	28:BE:295:LEU:CD2	2.34	0.57
29:BF:150:THR:HG22	29:BF:203:ALA:O	2.05	0.57
29:BF:214:THR:O	29:BF:216:SER:C	2.43	0.57
29:BF:237:GLU:O	29:BF:239:ALA:CA	2.52	0.57
29:BF:91:PRO:O	29:BF:96:LYS:NZ	2.36	0.57
31:BH:96:SER:O	31:BH:98:GLN:HG3	2.04	0.57
26:BA:1062:G:C4'	55:BK:76:SER:OG	2.52	0.57
33:BN:87:LEU:HB3	33:BN:88:PRO:HD3	1.85	0.57
36:BQ:55:GLN:O	36:BQ:56:ILE:C	2.42	0.57
36:BQ:58:HIS:N	36:BQ:61:LEU:HG	2.18	0.57
43:BR:44:LEU:O	43:BR:48:VAL:CB	2.51	0.57
26:BA:2840:C:C5'	43:BR:53:HIS:CD2	2.87	0.57
44:BU:20:ARG:NH1	45:BV:75:LYS:HD2	2.20	0.57
45:BV:57:GLN:HE22	45:BV:100:GLY:C	2.07	0.57
45:BV:65:ARG:O	45:BV:93:ILE:HG13	2.04	0.57
39:BW:23:LEU:HD21	50:B5:27:ALA:HB2	1.86	0.57
39:BW:8:ARG:CD	39:BW:9:TYR:HD1	2.13	0.57
41:BY:20:HIS:N	41:BY:67:LEU:HD22	2.19	0.57
41:BY:74:VAL:HB	41:BY:77:VAL:HG21	1.87	0.57
1:AA:1320:C:C2	22:AS:72:GLY:CA	2.87	0.57
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.05	0.57
1:AA:664:G:H22	1:AA:741:G:H1	1.53	0.57
5:AB:17:PHE:HD1	5:AB:18:GLY:H	1.50	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AD:23:GLY:N	7:AD:113:SER:HB2	2.12	0.57
1:AA:1297:C:O2'	10:AG:114:ARG:HD3	2.05	0.57
26:BA:76:C:O2'	46:B2:55:ARG:CB	2.53	0.57
51:B6:26:LYS:C	51:B6:27:ASN:OD1	2.43	0.57
52:B7:32:ALA:HA	52:B7:35:ARG:HD2	1.85	0.57
26:BA:1673:U:C5	28:BE:225:LYS:HD3	2.32	0.57
26:BA:2213:U:O3'	26:BA:2215:G:P	2.62	0.57
26:BA:2277:G:O3'	36:BQ:20:ILE:CG2	2.51	0.57
26:BA:2441:C:C2'	26:BA:2442:C:O5'	2.51	0.57
26:BA:2661:G:C2	26:BA:2662:A:N7	2.73	0.57
26:BA:2717:G:HO2'	26:BA:2718:G:C4'	2.18	0.57
26:BA:2717:G:O2'	26:BA:2718:G:O4'	2.17	0.57
26:BA:2735:G:N1	26:BA:2770:G:N3	2.53	0.57
26:BA:2852:G:O2'	26:BA:2853:C:H5'	2.05	0.57
26:BA:2866:U:O2	26:BA:2868:A:H4'	2.05	0.57
26:BA:297:C:H2'	26:BA:298:G:O4'	2.04	0.57
26:BA:988:A:C6	47:B3:13:ILE:HG21	2.40	0.57
27:BD:116:MET:O	27:BD:117:SER:OG	2.17	0.57
27:BD:167:GLU:O	27:BD:170:TYR:N	2.38	0.57
27:BD:128:ALA:HB1	27:BD:190:THR:CA	2.28	0.57
27:BD:80:ILE:CG1	27:BD:80:ILE:O	2.40	0.57
28:BE:107:GLU:O	28:BE:109:ASP:N	2.38	0.57
28:BE:222:ARG:O	28:BE:227:ALA:CB	2.53	0.57
28:BE:203:GLY:CA	28:BE:303:PRO:HD3	2.33	0.57
33:BN:54:VAL:CG1	33:BN:138:THR:CB	2.83	0.57
33:BN:90:LYS:CD	33:BN:90:LYS:O	2.47	0.57
34:BO:101:PRO:C	34:BO:102:VAL:HG23	2.25	0.57
34:BO:25:LEU:HD21	34:BO:40:VAL:CB	2.32	0.57
37:BS:117:ALA:O	37:BS:120:GLU:N	2.38	0.57
37:BS:41:LYS:HZ3	37:BS:68:GLU:CD	2.04	0.57
39:BW:10:VAL:CG1	39:BW:46:PHE:CE2	2.80	0.57
39:BW:8:ARG:HH11	39:BW:8:ARG:HB3	1.68	0.57
40:BX:22:ASN:HA	40:BX:68:LEU:CG	2.34	0.57
42:BZ:147:ILE:HG13	42:BZ:168:VAL:HG11	1.85	0.57
42:BZ:66:VAL:HG22	42:BZ:68:ALA:H	1.69	0.57
1:AA:793:U:O4	1:AA:1517:G:H5''	2.05	0.57
1:AA:673:G:N2	1:AA:734:G:H1'	2.20	0.57
1:AA:965:A:H1'	1:AA:969:A:C8	2.39	0.57
8:AE:152:ARG:NH1	11:AH:42:GLU:O	2.37	0.57
1:AA:1376:U:O3'	10:AG:94:ARG:NH2	2.38	0.57
1:AA:1226:C:C4	16:AM:104:ARG:HG3	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:59:LEU:O	48:B0:60:PHE:CD1	2.58	0.57
48:B0:77:ARG:C	48:B0:78:PHE:O	2.41	0.57
47:B3:3:ARG:HD3	47:B3:60:GLU:CA	2.35	0.57
47:B3:54:VAL:CG2	47:B3:55:ARG:N	2.59	0.57
26:BA:1011:G:OP2	44:BU:75:ASN:CB	2.52	0.57
26:BA:1215:G:O3'	44:BU:8:ILE:CG2	2.53	0.57
26:BA:1251:C:H5''	44:BU:10:ARG:CD	2.34	0.57
26:BA:121:G:N2	26:BA:131:G:C4	2.72	0.57
26:BA:1675:C:C4	28:BE:225:LYS:CG	2.86	0.57
26:BA:1841:U:H2'	26:BA:1842:G:H8	1.70	0.57
2:AV:25:C:Cl'	26:BA:1923:U:OP1	2.52	0.57
26:BA:2093:G:N9	26:BA:2225:A:N6	2.53	0.57
26:BA:2187:G:O2'	26:BA:2188:C:C5'	2.45	0.57
26:BA:2292:C:C4	26:BA:2293:C:C4	2.92	0.57
26:BA:2311:A:C2'	26:BA:2312:U:O5'	2.53	0.57
26:BA:2320:A:N7	37:BS:9:PRO:CD	2.67	0.57
26:BA:2295:C:H42	26:BA:2337:G:H1	1.37	0.57
26:BA:2378:A:N3	37:BS:26:LEU:HD21	2.02	0.57
26:BA:2431:U:O2	26:BA:2432:A:H3'	2.05	0.57
26:BA:2472:G:C2	26:BA:2475:C:C2	2.93	0.57
26:BA:2481:G:O2'	26:BA:2482:G:H8	1.88	0.57
26:BA:2533:A:C8	26:BA:2534:A:C8	2.93	0.57
26:BA:2572:A:C5'	26:BA:2574:G:H4'	2.34	0.57
26:BA:2678:C:H42	26:BA:2729:G:H1	1.52	0.57
26:BA:2681:C:H4'	26:BA:2682:U:H5'	1.87	0.57
26:BA:2693:A:N6	26:BA:2694:G:O6	2.37	0.57
26:BA:2684:U:H3	26:BA:2725:A:N6	2.02	0.57
26:BA:2744:G:N1	26:BA:2745:C:C4	2.72	0.57
26:BA:2808:U:C4	26:BA:2892:A:N7	2.73	0.57
26:BA:687:C:H4'	52:B7:4:THR:CG2	2.29	0.57
26:BA:783:A:H2'	26:BA:784:A:H4'	1.86	0.57
26:BA:993:G:N2	44:BU:54:LYS:HZ1	2.01	0.57
27:BD:144:GLU:CD	27:BD:188:ARG:H	2.08	0.57
27:BD:158:GLY:O	27:BD:194:VAL:HG13	2.04	0.57
27:BD:76:ARG:HG2	27:BD:76:ARG:HH11	1.69	0.57
28:BE:205:THR:HG23	28:BE:259:HIS:CA	1.99	0.57
29:BF:211:ASP:OD2	29:BF:211:ASP:C	2.37	0.57
29:BF:225:PRO:C	29:BF:230:GLY:N	2.43	0.57
30:BG:20:LYS:N	30:BG:76:ARG:HB3	2.19	0.57
32:BI:91:GLY:O	32:BI:92:SER:C	2.42	0.57
34:BO:24:VAL:HG13	34:BO:32:TYR:O	2.02	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:66:VAL:CB	35:BP:67:ARG:NE	2.52	0.57
43:BR:87:TYR:CD1	43:BR:94:TYR:CB	2.84	0.57
37:BS:76:GLY:C	37:BS:83:LEU:HD13	2.25	0.57
38:BT:42:LEU:C	38:BT:44:ARG:CA	2.73	0.57
26:BA:446:G:OP2	44:BU:3:ARG:NH1	2.38	0.57
44:BU:79:PHE:O	44:BU:80:ILE:C	2.43	0.57
39:BW:24:ILE:HB	39:BW:32:ALA:CB	2.34	0.57
39:BW:35:ILE:O	39:BW:39:THR:N	2.37	0.57
41:BY:34:GLU:C	41:BY:35:TYR:CG	2.77	0.57
42:BZ:24:TYR:CA	42:BZ:83:PHE:O	2.51	0.57
42:BZ:66:VAL:CG2	42:BZ:69:VAL:HG23	2.34	0.57
1:AA:39:G:C8	1:AA:498:U:N3	2.72	0.57
1:AA:59:A:H5''	1:AA:60:A:H5'	1.87	0.57
1:AA:673:G:C2	1:AA:734:G:C4	2.92	0.57
7:AD:101:LEU:HD13	7:AD:138:TYR:CD2	2.40	0.57
7:AD:170:VAL:HG12	7:AD:171:GLY:H	1.70	0.57
10:AG:69:VAL:HA	10:AG:138:LYS:HD2	1.86	0.57
19:AP:59:TRP:O	19:AP:64:ALA:HB3	2.05	0.57
1:AA:1325:C:OP1	24:AU:15:ARG:CG	2.51	0.57
3:AW:44:A:H2'	3:AW:45:G:O4'	2.04	0.57
26:BA:922:U:O2'	48:B0:26:PHE:CE2	2.51	0.57
48:B0:37:LEU:HB3	48:B0:69:PHE:HD2	0.78	0.57
26:BA:125:G:C3'	52:B7:19:ARG:HH11	2.06	0.57
26:BA:1521:G:H5'	26:BA:1522:G:C8	2.40	0.57
26:BA:1791:A:C8	26:BA:1792:G:C8	2.93	0.57
26:BA:1791:A:O3'	27:BD:204:PHE:CD2	2.58	0.57
26:BA:2051:A:C5	26:BA:2614:A:C6	2.90	0.57
26:BA:2255:G:N1	26:BA:2256:G:H1'	2.19	0.57
26:BA:2264:C:C5	26:BA:2265:U:C5	2.93	0.57
26:BA:2385:C:C2'	26:BA:2385:C:O2	2.52	0.57
26:BA:199:A:N6	26:BA:2433:A:C8	2.72	0.57
26:BA:807:U:H1'	26:BA:2445:G:OP1	2.04	0.57
26:BA:2556:C:H2'	26:BA:2557:G:H5'	0.57	0.57
26:BA:2583:G:C4	26:BA:2584:U:O2	2.58	0.57
26:BA:2589:A:C6	26:BA:2590:A:C5	2.92	0.57
26:BA:2627:G:C8	26:BA:2627:G:H5'	2.33	0.57
26:BA:2697:G:C5	26:BA:2698:U:C5	2.93	0.57
26:BA:2814:C:H2'	26:BA:2815:C:H6	1.64	0.57
26:BA:2836:U:C2	26:BA:2883:A:C5	2.90	0.57
26:BA:414:C:H2'	26:BA:415:A:C8	2.39	0.57
26:BA:452:G:N2	26:BA:458:G:N3	2.53	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:607:U:H3'	26:BA:608:A:H8	1.69	0.57
25:BB:43:C:H1'	30:BG:47:GLN:HE21	1.69	0.57
27:BD:68:ARG:N	27:BD:68:ARG:HD3	2.20	0.57
27:BD:73:ILE:CB	27:BD:95:TYR:HE2	2.15	0.57
29:BF:194:PHE:HZ	29:BF:207:LEU:HD12	1.68	0.57
29:BF:49:ASP:HB3	29:BF:52:ALA:HB3	1.87	0.57
26:BA:2310:A:C2	30:BG:55:LYS:HD3	2.39	0.57
32:BI:125:GLY:O	32:BI:144:HIS:HA	2.05	0.57
33:BN:27:ALA:C	33:BN:29:GLN:N	2.58	0.57
35:BP:65:ASP:OD1	35:BP:65:ASP:N	2.38	0.57
37:BS:47:LEU:HD12	37:BS:58:LEU:HD23	1.79	0.57
44:BU:9:VAL:O	44:BU:12:ARG:HB2	2.04	0.57
44:BU:55:ARG:O	44:BU:56:ASP:C	2.43	0.57
44:BU:72:HIS:ND1	44:BU:110:VAL:HG11	2.18	0.57
39:BW:50:VAL:HG21	39:BW:103:ILE:CG2	2.34	0.57
39:BW:13:SER:OG	39:BW:16:LYS:HG3	2.04	0.57
39:BW:36:LEU:CA	39:BW:39:THR:HG22	2.33	0.57
39:BW:11:ARG:CZ	39:BW:98:LYS:HB3	2.33	0.57
40:BX:19:ASP:O	40:BX:20:PHE:C	2.43	0.57
40:BX:18:MET:HE3	40:BX:25:GLN:CA	2.35	0.57
41:BY:30:ASP:OD1	41:BY:31:LEU:HG	2.05	0.57
42:BZ:29:ASN:O	42:BZ:30:VAL:HG23	2.05	0.57
42:BZ:37:LYS:CA	42:BZ:40:ASP:OD2	2.44	0.57
1:AA:1377:A:P	10:AG:94:ARG:NH2	2.77	0.57
1:AA:609:A:H2'	1:AA:610:G:O4'	2.05	0.57
1:AA:946:A:H2'	1:AA:947:G:H8	1.70	0.57
1:AA:966:G:H2'	1:AA:967:C:C6	2.40	0.57
8:AE:78:HIS:CG	11:AH:107:LEU:HD11	2.40	0.57
18:AO:63:ARG:HH12	18:AO:87:ILE:HG12	1.70	0.57
19:AP:7:ALA:O	19:AP:17:TYR:HA	2.05	0.57
2:AV:19:G:H5'	2:AV:20:G:P	2.44	0.57
2:AV:8:U:H1'	2:AV:48:C:H1'	1.87	0.57
3:AW:64:A:H2'	3:AW:65:G:O4'	2.04	0.57
48:B0:67:VAL:HG12	48:B0:74:LYS:HA	1.87	0.57
47:B3:27:GLY:O	47:B3:28:LEU:HD23	2.05	0.57
26:BA:1168:G:H2'	26:BA:1169:G:O4'	2.04	0.57
26:BA:1240:U:C3'	26:BA:1241:A:H8	2.14	0.57
26:BA:1545:A:C3'	26:BA:545(A):A:O4'	2.53	0.57
26:BA:1638:C:C4'	26:BA:2710:C:O2	2.52	0.57
26:BA:1743:G:H3'	26:BA:1746:G:P	2.45	0.57
26:BA:2019:A:H2'	26:BA:2020:A:O4'	2.05	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2195:C:C2	26:BA:2196:C:C6	2.93	0.57
26:BA:2252:G:C3'	26:BA:2253:G:H5'	2.34	0.57
26:BA:2285:C:H4'	26:BA:2288:A:H61	1.38	0.57
26:BA:2299:G:O6	26:BA:2300:G:O6	2.22	0.57
26:BA:2333:A:H3'	37:BS:13:ARG:CD	2.27	0.57
26:BA:2341:G:H2'	26:BA:2342:C:C6	2.40	0.57
26:BA:2350:C:C2'	26:BA:2351:G:O5'	2.52	0.57
26:BA:2385:C:C4	26:BA:2386:C:C5	2.90	0.57
26:BA:2396:G:O2'	49:B4:27:THR:N	2.37	0.57
26:BA:2523:G:O2'	26:BA:2524:G:H5'	2.05	0.57
26:BA:2546:U:H5'	26:BA:2565:A:H2	1.39	0.57
26:BA:2515:C:N3	26:BA:2569:G:N2	2.53	0.57
26:BA:2574:G:N3	26:BA:2575:C:C5	2.65	0.57
26:BA:2701:C:H5	26:BA:2703:C:OP2	1.87	0.57
26:BA:2745:C:O2'	31:BH:142:GLU:CD	2.43	0.57
26:BA:2821:A:N3	26:BA:2822:G:C4	2.71	0.57
26:BA:2868:A:H2'	26:BA:2869:G:H5'	1.87	0.57
26:BA:2896:C:H6	26:BA:2896:C:H3'	1.62	0.57
26:BA:380:U:O2'	49:B4:15:ILE:CA	2.53	0.57
26:BA:630(A):C:C3'	26:BA:1631:A:P	2.93	0.57
26:BA:780:G:C6	27:BD:233:ASP:OD2	2.55	0.57
28:BE:44:TYR:CG	28:BE:307:LEU:C	2.78	0.57
26:BA:674:G:H5'	29:BF:69:HIS:HA	1.83	0.57
30:BG:21:VAL:HG13	30:BG:132:VAL:HA	1.85	0.57
30:BG:149:ARG:C	30:BG:151:ILE:H	2.05	0.57
31:BH:27:GLY:HA3	31:BH:78:VAL:HG12	1.86	0.57
32:BI:132:LYS:HA	32:BI:138:THR:CB	2.35	0.57
32:BI:3:VAL:CB	32:BI:21:VAL:HG23	2.34	0.57
55:BK:57:VAL:HG12	55:BK:57:VAL:O	2.04	0.57
33:BN:4:ALA:O	33:BN:5:GLU:C	2.43	0.57
33:BN:77:GLY:O	33:BN:79:PHE:CA	2.50	0.57
34:BO:91:LYS:HB3	34:BO:111:PHE:CE2	2.40	0.57
35:BP:116:HIS:CG	35:BP:118:LEU:HD11	2.39	0.57
35:BP:124:ASP:HB3	35:BP:130:ARG:HH21	1.67	0.57
35:BP:142:LEU:O	35:BP:143:THR:C	2.42	0.57
36:BQ:51:GLU:HA	36:BQ:118:ALA:CA	2.34	0.57
43:BR:94:TYR:C	43:BR:117:VAL:HG12	2.25	0.57
34:BO:80:ASP:HB2	38:BT:23:HIS:HA	1.87	0.57
38:BT:9:CYS:O	38:BT:9:CYS:SG	2.63	0.57
26:BA:447:A:P	44:BU:5:LYS:NZ	2.77	0.57
44:BU:88:ILE:CG2	45:BV:52:GLY:HA2	2.35	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:12:ILE:HG23	39:BW:13:SER:H	1.69	0.57
41:BY:20:HIS:O	41:BY:22:GLN:N	2.38	0.57
42:BZ:116:VAL:O	42:BZ:116:VAL:HG13	2.04	0.57
42:BZ:105:GLN:HB2	42:BZ:141:MET:HG2	1.85	0.57
1:AA:1080:A:H5'	8:AE:14:ARG:HH22	1.70	0.57
1:AA:1192:C:H3'	1:AA:1192:C:H6	1.70	0.57
1:AA:677:U:H2'	1:AA:678:U:C6	2.40	0.57
3:AW:37:YYG:H193	10:AG:79:ARG:HG2	1.87	0.57
1:AA:986:A:N3	22:AS:52:TYR:HE2	1.85	0.57
26:BA:95:G:H1'	46:B2:42:ASN:CB	2.35	0.57
47:B3:5:LYS:HA	47:B3:36:VAL:HG12	1.87	0.57
47:B3:59:VAL:CG1	47:B3:60:GLU:N	2.49	0.57
53:B8:14:ILE:HG23	53:B8:15:LYS:N	2.19	0.57
26:BA:2192:G:OP2	26:BA:2192:G:C8	2.54	0.57
26:BA:198:C:O2'	26:BA:2243:U:O2'	2.16	0.57
26:BA:2320:A:C5	37:BS:9:PRO:CB	2.81	0.57
26:BA:2344:U:H2'	26:BA:2345:G:OP2	2.05	0.57
26:BA:835:A:H4'	26:BA:2358:G:O2'	2.04	0.57
26:BA:2453:A:H2	26:BA:2504:U:O2	1.88	0.57
26:BA:2509:G:HO2'	26:BA:2510:C:H5'	1.61	0.57
26:BA:2617:C:O2'	26:BA:2618:G:C5'	2.52	0.57
26:BA:2637:U:C2	26:BA:2782:G:C2	2.93	0.57
26:BA:2722:G:N1	26:BA:2723:C:N4	2.48	0.57
26:BA:2729:G:N1	26:BA:2730:C:N3	2.53	0.57
26:BA:2729:G:O2'	26:BA:2730:C:C5'	2.52	0.57
26:BA:2811:G:H22	26:BA:2891:G:H1'	1.68	0.57
26:BA:265:A:N7	26:BA:428:A:C6	2.73	0.57
26:BA:449:A:P	29:BF:85:LYS:HA	2.45	0.57
26:BA:706:A:C8	26:BA:706:A:O5'	2.53	0.57
26:BA:775:G:H2'	26:BA:794:G:C5	2.38	0.57
27:BD:142:ASN:N	27:BD:142:ASN:ND2	2.52	0.57
28:BE:271:ILE:HD11	28:BE:294:THR:HG22	1.85	0.57
28:BE:73:ILE:HB	28:BE:294:THR:OG1	2.04	0.57
29:BF:100:LEU:O	29:BF:101:ASP:C	2.43	0.57
32:BI:9:VAL:O	32:BI:9:VAL:CG1	2.50	0.57
26:BA:1063:G:P	55:BK:77:PHE:CE1	2.98	0.57
55:BK:85:ILE:HG23	55:BK:85:ILE:O	2.04	0.57
33:BN:136:SER:OG	33:BN:141:ALA:HA	2.05	0.57
33:BN:13:ASP:CA	33:BN:38:VAL:HG12	1.84	0.57
34:BO:8:LEU:CB	34:BO:83:ALA:HA	2.12	0.57
36:BQ:58:HIS:H	36:BQ:112:ALA:HB2	1.69	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:88:ARG:O	43:BR:89:ASP:HB3	2.03	0.57
30:BG:146:LYS:HE3	37:BS:15:GLU:CD	2.25	0.57
26:BA:2378:A:H1'	37:BS:26:LEU:HD22	1.87	0.57
38:BT:13:ILE:HG13	38:BT:33:SER:HB2	1.87	0.57
39:BW:11:ARG:NH2	39:BW:98:LYS:CB	2.54	0.57
40:BX:16:ASN:OD1	40:BX:16:ASN:N	2.33	0.57
41:BY:19:ARG:NH1	41:BY:67:LEU:C	2.58	0.57
41:BY:26:THR:C	41:BY:27:LEU:CG	2.68	0.57
41:BY:44:ALA:HB1	41:BY:65:VAL:HG22	1.87	0.57
42:BZ:107:GLU:OE2	42:BZ:141:MET:CG	2.51	0.57
26:BA:875:G:H5''	42:BZ:146:HIS:CG	2.40	0.57
1:AA:267:C:OP2	20:AQ:67:LYS:HD3	2.04	0.56
1:AA:436:C:C2	1:AA:437:U:N3	2.73	0.56
1:AA:826:C:H5'	11:AH:12:ARG:NE	2.09	0.56
5:AB:164:VAL:HG21	5:AB:170:GLU:CB	2.35	0.56
5:AB:46:LYS:HA	5:AB:46:LYS:HE2	1.86	0.56
3:AW:75:C:C5	49:B4:28:ARG:N	2.66	0.56
47:B3:6:VAL:HG22	47:B3:54:VAL:CG2	2.32	0.56
53:B8:4:MET:HG2	53:B8:5:LYS:N	2.19	0.56
26:BA:1080:C:O2	55:BK:127:ILE:HD11	2.04	0.56
26:BA:148:C:C4	26:BA:149:A:N6	2.73	0.56
26:BA:1857:G:H1	26:BA:1884:A:N6	2.03	0.56
26:BA:2284:C:O2	26:BA:2284:C:H2'	2.04	0.56
26:BA:2343:C:C2'	26:BA:2344:U:H5'	2.35	0.56
26:BA:2423:U:C1'	26:BA:2425:A:C5	2.88	0.56
26:BA:2644:G:P	26:BA:2644:G:C8	2.97	0.56
26:BA:712(A):A:C5'	26:BA:2714:G:OP2	2.49	0.56
26:BA:2808:U:N3	26:BA:2892:A:N7	2.52	0.56
26:BA:2691:C:O2'	26:BA:2871:C:O2'	2.23	0.56
26:BA:2884:U:C6	26:BA:2885:C:C6	2.93	0.56
26:BA:76:C:H4'	46:B2:55:ARG:CG	2.34	0.56
26:BA:989:G:OP2	47:B3:11:SER:OG	2.23	0.56
25:BB:59:A:C6	25:BB:60:C:C2	2.93	0.56
28:BE:269:ILE:HD11	28:BE:296:VAL:HA	1.85	0.56
30:BG:18:ILE:C	30:BG:135:VAL:HG21	2.25	0.56
35:BP:67:ARG:HG2	35:BP:68:GLU:H	1.69	0.56
36:BQ:49:VAL:CG2	36:BQ:120:HIS:C	2.71	0.56
36:BQ:59:ASN:O	36:BQ:61:LEU:N	2.38	0.56
37:BS:110:THR:HG1	37:BS:111:PRO:HD2	1.64	0.56
37:BS:46:GLN:CD	37:BS:57:THR:HG21	2.25	0.56
44:BU:108:ALA:O	44:BU:110:VAL:CA	2.52	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:3:ALA:HB3	45:BV:12:TYR:HH	1.68	0.56
45:BV:61:VAL:HG11	45:BV:95:ILE:C	2.24	0.56
45:BV:63:HIS:HA	45:BV:95:ILE:CG1	2.33	0.56
39:BW:83:LYS:HG2	39:BW:97:LYS:CD	2.24	0.56
40:BX:25:GLN:NE2	40:BX:65:VAL:HG22	2.19	0.56
26:BA:84:A:OP1	41:BY:20:HIS:NE2	2.37	0.56
1:AA:1225:A:H4'	22:AS:78:ARG:HD3	1.87	0.56
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.39	0.56
1:AA:228:A:O2'	19:AP:62:VAL:HG21	2.04	0.56
1:AA:867:G:HO2'	1:AA:873:A:N6	2.03	0.56
1:AA:1222:G:H5''	22:AS:78:ARG:HH21	1.70	0.56
53:B8:5:LYS:HB3	53:B8:59:LYS:O	2.05	0.56
54:B9:24:LEU:HD22	54:B9:35:ARG:HG3	1.87	0.56
26:BA:197:A:H61	26:BA:248:G:H22	1.53	0.56
26:BA:2299:G:C2'	26:BA:2300:G:H5'	2.34	0.56
26:BA:2064:C:N1	26:BA:2450:A:N6	2.54	0.56
26:BA:2655:G:H2'	26:BA:2655:G:N3	2.19	0.56
26:BA:2657:A:C6	26:BA:2664:G:N2	2.53	0.56
26:BA:2681:C:H4'	28:BE:48:MET:SD	2.44	0.56
26:BA:270(I):G:N2	26:BA:270(R):G:H1'	2.20	0.56
26:BA:2740:A:C2'	26:BA:2741:A:N7	2.64	0.56
26:BA:2880:C:N3	26:BA:2881:C:C4	2.73	0.56
26:BA:515:A:H2'	26:BA:516:C:H6	1.69	0.56
26:BA:605:C:H2'	26:BA:606:U:C6	2.40	0.56
26:BA:664:C:H2'	26:BA:665:C:C6	2.39	0.56
26:BA:685:A:O4'	26:BA:688:U:O4	2.22	0.56
26:BA:678:C:H42	26:BA:799:G:H1	1.53	0.56
26:BA:945:A:H2'	26:BA:945:A:N3	2.20	0.56
29:BF:196:THR:HG22	29:BF:197:SER:N	2.20	0.56
26:BA:2316:C:C4'	30:BG:151:ILE:HD11	1.93	0.56
30:BG:18:ILE:CG2	30:BG:19:GLU:N	2.47	0.56
31:BH:121:GLU:OE2	31:BH:133:LYS:O	2.23	0.56
55:BK:32:GLY:O	55:BK:60:VAL:HG21	2.05	0.56
33:BN:4:ALA:O	33:BN:5:GLU:O	2.23	0.56
33:BN:65:ASN:HB2	33:BN:68:GLY:O	2.05	0.56
34:BO:35:ILE:CG1	34:BO:65:THR:HG22	2.35	0.56
26:BA:1665:A:C3'	34:BO:66:LYS:HE2	2.11	0.56
34:BO:9:LYS:H	34:BO:83:ALA:HB2	1.70	0.56
35:BP:65:ASP:HB3	35:BP:109:LEU:CA	2.31	0.56
37:BS:17:ARG:HD3	37:BS:17:ARG:O	2.04	0.56
37:BS:32:PRO:HA	37:BS:49:THR:OG1	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BT:45:GLU:HG3	38:BT:47:ARG:O	2.06	0.56
44:BU:111:ASP:CA	44:BU:114:ARG:HD2	2.29	0.56
44:BU:63:GLN:C	44:BU:65:ILE:H	2.09	0.56
45:BV:69:ILE:HD12	45:BV:69:ILE:N	2.20	0.56
41:BY:23:VAL:HG12	41:BY:23:VAL:O	2.04	0.56
41:BY:43:ASN:O	41:BY:44:ALA:CB	2.52	0.56
1:AA:1070:U:C4	1:AA:1085:U:C5	2.93	0.56
1:AA:1269:A:O4'	1:AA:1326:C:O4'	2.24	0.56
1:AA:826:C:O5'	1:AA:826:C:H6	1.87	0.56
1:AA:867:G:N3	1:AA:873:A:C2	2.74	0.56
7:AD:15:GLU:CG	7:AD:63:LYS:CB	2.31	0.56
1:AA:1330:U:P	16:AM:25:ILE:O	2.62	0.56
1:AA:1222:G:H5''	22:AS:78:ARG:NE	2.20	0.56
1:AA:1340:A:O2'	2:AV:31:A:C4'	2.52	0.56
48:B0:36:ILE:O	48:B0:36:ILE:CG2	2.52	0.56
47:B3:30:ARG:HE	47:B3:33:GLN:CG	2.16	0.56
50:B5:33:CYS:HB2	50:B5:37:HIS:CA	2.36	0.56
26:BA:1249:U:C6	26:BA:1249:U:H3'	2.41	0.56
26:BA:136:G:O3'	26:BA:137:C:H4'	2.04	0.56
26:BA:124:G:OP1	26:BA:1376:C:H1'	2.05	0.56
26:BA:2261:C:N3	26:BA:2262:U:C5	2.73	0.56
26:BA:830:G:O6	26:BA:2446:G:H1'	2.05	0.56
26:BA:2472:G:N2	26:BA:2477:C:OP1	2.24	0.56
26:BA:24:G:O3'	39:BW:102:HIS:NE2	2.37	0.56
26:BA:2564:A:OP1	26:BA:2648:C:H4'	2.06	0.56
26:BA:2605:U:C2'	26:BA:2606:C:O5'	2.53	0.56
26:BA:2695:C:O2'	26:BA:2696:U:H6	1.76	0.56
26:BA:2734:A:C8	26:BA:2734:A:C4'	2.88	0.56
26:BA:2862:G:H2'	26:BA:2863:C:H5	1.70	0.56
26:BA:404:C:O5'	26:BA:404:C:H6	1.87	0.56
26:BA:664:C:H2'	26:BA:665:C:H6	1.69	0.56
26:BA:684:G:C4	26:BA:775:G:O6	2.58	0.56
26:BA:994:C:H4'	26:BA:994:C:OP2	2.05	0.56
27:BD:111:VAL:C	27:BD:113:MET:N	2.57	0.56
27:BD:163:VAL:HA	27:BD:172:ILE:O	2.06	0.56
28:BE:186:GLU:O	28:BE:187:HIS:CD2	2.58	0.56
28:BE:270:ASP:O	28:BE:271:ILE:HG13	2.05	0.56
28:BE:45:LYS:CE	28:BE:303:PRO:HD2	2.32	0.56
29:BF:193:LEU:HD13	29:BF:223:LEU:HB3	1.86	0.56
30:BG:103:ASN:CG	30:BG:133:ASN:HA	2.25	0.56
31:BH:104:LEU:HB2	31:BH:151:ARG:NH2	2.15	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:24:GLY:O	32:BI:29:PHE:CE1	2.58	0.56
32:BI:54:GLU:HA	32:BI:54:GLU:OE1	2.05	0.56
26:BA:1059:G:H1'	55:BK:117:ASN:OD1	2.05	0.56
55:BK:92:PRO:HB3	55:BK:134:SER:O	2.03	0.56
34:BO:10:VAL:HG12	34:BO:11:ALA:N	2.20	0.56
35:BP:110:GLY:H	35:BP:126:SER:HG	1.54	0.56
36:BQ:35:ASN:H	36:BQ:76:GLY:H	1.53	0.56
36:BQ:66:ASN:O	36:BQ:67:ALA:C	2.42	0.56
43:BR:65:LEU:O	43:BR:67:LEU:N	2.38	0.56
43:BR:78:LYS:O	43:BR:82:GLU:CG	2.53	0.56
38:BT:53:ASP:O	38:BT:56:ARG:CZ	2.53	0.56
38:BT:10:GLY:HA2	38:BT:53:ASP:OD2	2.06	0.56
39:BW:23:LEU:O	39:BW:24:ILE:C	2.44	0.56
39:BW:37:ARG:HH22	50:B5:48:ASN:ND2	2.02	0.56
39:BW:46:PHE:O	39:BW:47:VAL:C	2.43	0.56
39:BW:84:ARG:O	39:BW:96:ILE:HD12	2.05	0.56
40:BX:13:LYS:HA	40:BX:16:ASN:CG	2.25	0.56
40:BX:76:GLU:OE1	40:BX:77:VAL:CA	2.53	0.56
26:BA:338:G:H8	41:BY:21:LYS:HB2	1.70	0.56
36:BQ:42:TYR:CZ	42:BZ:116:VAL:HG21	2.41	0.56
42:BZ:79:ILE:HG22	42:BZ:80:HIS:ND1	2.20	0.56
1:AA:116:A:H2	1:AA:314:C:C4'	2.18	0.56
1:AA:1278:U:C5'	1:AA:1279:A:C5'	2.73	0.56
1:AA:908:A:H2'	1:AA:909:A:H8	1.69	0.56
1:AA:968:A:H5''	1:AA:969:A:OP2	2.05	0.56
3:AW:37:YYG:H191	10:AG:83:ALA:O	2.02	0.56
1:AA:1313:U:C4	22:AS:4:SER:OG	2.45	0.56
48:B0:33:ALA:HB3	48:B0:66:LYS:N	2.13	0.56
46:B2:12:THR:C	46:B2:16:ARG:HD2	2.25	0.56
46:B2:7:GLU:CG	46:B2:8:ILE:H	2.18	0.56
47:B3:6:VAL:HG23	47:B3:54:VAL:HG23	1.88	0.56
51:B6:8:ILE:HG22	51:B6:28:ARG:HB2	1.85	0.56
53:B8:60:LEU:HD23	53:B8:61:MET:O	2.04	0.56
54:B9:17:VAL:CG1	54:B9:18:ARG:N	2.67	0.56
26:BA:1254:A:H3'	26:BA:1256:G:H5''	1.86	0.56
26:BA:1263:U:C1'	50:B5:16:ARG:NH2	2.68	0.56
26:BA:1611:C:H2'	26:BA:1612:C:C6	2.40	0.56
26:BA:414:C:H5''	26:BA:1879:C:O2'	2.05	0.56
26:BA:2045:C:N4	26:BA:2624:G:N1	2.53	0.56
26:BA:2225:A:H5''	26:BA:2226:C:C4'	2.34	0.56
26:BA:2443:C:C6	26:BA:2444:G:C8	2.93	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2447:G:C6	26:BA:2500:U:C4	2.93	0.56
26:BA:2592:G:C5	26:BA:2593:U:C4	2.91	0.56
26:BA:2606:C:O2'	26:BA:2607:G:O5'	2.23	0.56
26:BA:2581:G:C6	26:BA:2610:C:H2'	2.40	0.56
26:BA:2707:G:O2'	26:BA:2708:G:O5'	2.22	0.56
26:BA:2712:U:O3'	26:BA:2714:G:OP2	2.22	0.56
26:BA:59:U:O4'	26:BA:73:A:C6	2.58	0.56
26:BA:961:C:C4	26:BA:2031:A:N3	2.74	0.56
27:BD:131:LEU:CA	27:BD:134:ILE:HD12	2.35	0.56
27:BD:138:THR:O	27:BD:162:GLN:CA	2.50	0.56
27:BD:146:LYS:CB	27:BD:147:PRO:HD2	2.33	0.56
28:BE:221:LYS:CE	28:BE:233:ARG:CA	2.64	0.56
28:BE:205:THR:HG22	28:BE:259:HIS:C	2.18	0.56
28:BE:45:LYS:NZ	28:BE:303:PRO:HD2	2.17	0.56
28:BE:71:THR:CG2	28:BE:299:SER:HA	2.36	0.56
31:BH:55:SER:OG	31:BH:60:HIS:HB2	2.05	0.56
32:BI:122:ARG:O	32:BI:124:LEU:N	2.38	0.56
32:BI:133:LEU:CD1	32:BI:139:ALA:HB3	2.25	0.56
32:BI:96:LYS:C	32:BI:98:ILE:N	2.58	0.56
55:BK:67:THR:O	55:BK:68:PHE:CG	2.58	0.56
35:BP:64:ILE:HD12	35:BP:106:VAL:CG1	2.34	0.56
36:BQ:47:GLU:HB3	36:BQ:123:ILE:HG12	1.87	0.56
36:BQ:70:ARG:HD2	36:BQ:71:PHE:HE1	1.69	0.56
43:BR:20:LEU:HD21	43:BR:24:GLN:CD	2.26	0.56
43:BR:59:ASP:O	43:BR:60:LEU:C	2.44	0.56
43:BR:71:GLN:O	43:BR:72:ASP:HB2	2.04	0.56
37:BS:12:ARG:HB2	37:BS:20:TYR:OH	2.05	0.56
37:BS:80:SER:O	37:BS:83:LEU:HD13	2.05	0.56
44:BU:13:ARG:NH1	44:BU:13:ARG:CG	2.46	0.56
44:BU:4:ALA:C	44:BU:6:THR:H	1.95	0.56
45:BV:50:ASP:HB2	45:BV:53:LYS:H	1.71	0.56
44:BU:88:ILE:CB	45:BV:52:GLY:HA2	2.34	0.56
40:BX:33:SER:CA	40:BX:37:VAL:HG21	2.36	0.56
40:BX:3:ASP:CG	40:BX:4:VAL:N	2.58	0.56
40:BX:23:LYS:HA	40:BX:67:ARG:CA	2.35	0.56
41:BY:67:LEU:O	41:BY:70:ALA:N	2.36	0.56
42:BZ:141:MET:HB2	42:BZ:171:VAL:HG11	1.84	0.56
42:BZ:51:LEU:CD1	42:BZ:64:ALA:H	2.17	0.56
1:AA:1181:G:H4'	1:AA:1184:G:C4'	2.36	0.56
1:AA:39:G:C8	1:AA:547:A:N7	2.74	0.56
7:AD:78:LEU:CD2	7:AD:139:ARG:NH2	2.66	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AQ:87:LYS:O	20:AQ:91:ARG:CB	2.52	0.56
3:AW:9:A:C2	3:AW:45:G:N7	2.74	0.56
48:B0:42:GLY:HA3	48:B0:66:LYS:HA	1.78	0.56
48:B0:80:SER:OG	48:B0:84:ALA:HB2	2.05	0.56
47:B3:5:LYS:HG3	47:B3:36:VAL:CG1	2.36	0.56
47:B3:7:LYS:HG2	47:B3:8:LEU:N	2.21	0.56
26:BA:145:G:H4'	40:BX:1:SER:CB	2.27	0.56
26:BA:1657:C:H3'	26:BA:1657:C:C6	2.41	0.56
26:BA:1783:A:C6	26:BA:2587:A:C2	2.93	0.56
26:BA:2022:U:C3'	26:BA:2617:C:H4'	2.35	0.56
26:BA:2080:G:C2	26:BA:2241:A:C2	2.93	0.56
26:BA:2278:A:H4'	36:BQ:19:TYR:CB	2.22	0.56
26:BA:2334:G:OP1	37:BS:12:ARG:O	2.22	0.56
26:BA:2364:C:H5'	48:B0:38:VAL:HG11	1.88	0.56
26:BA:2509:G:N2	26:BA:2510:C:H1'	2.20	0.56
26:BA:2562:U:N3	26:BA:2563:U:N3	2.44	0.56
26:BA:2603:G:C2'	26:BA:2604:U:O5'	2.53	0.56
26:BA:2607:G:O6	26:BA:2608:G:N2	2.38	0.56
26:BA:2636:U:C3'	28:BE:84:ARG:HH12	2.19	0.56
26:BA:373:U:H4'	26:BA:374:A:C8	2.40	0.56
26:BA:38:A:H1'	29:BF:46:TYR:CE2	2.40	0.56
26:BA:671:C:N4	26:BA:809:G:N1	2.53	0.56
26:BA:963:U:H2'	26:BA:964:C:H6	1.70	0.56
27:BD:125:ILE:CG2	27:BD:126:GLY:N	2.68	0.56
27:BD:73:ILE:HB	27:BD:95:TYR:CE2	2.37	0.56
28:BE:186:GLU:C	28:BE:187:HIS:CG	2.79	0.56
29:BF:98:ARG:N	29:BF:98:ARG:HD3	2.21	0.56
31:BH:83:GLU:CA	31:BH:83:GLU:OE2	2.52	0.56
26:BA:270(O):U:C4	32:BI:53:LYS:NZ	2.73	0.56
55:BK:112:LYS:O	55:BK:113:MET:C	2.44	0.56
55:BK:66:PHE:O	55:BK:67:THR:CB	2.52	0.56
33:BN:106:GLY:CA	33:BN:107:ASN:ND2	2.68	0.56
33:BN:60:ARG:HB3	33:BN:71:TYR:HD2	1.69	0.56
35:BP:101:ASP:C	35:BP:102:ASP:OD1	2.43	0.56
35:BP:73:VAL:HG13	35:BP:76:LEU:HB3	1.87	0.56
36:BQ:142:LYS:C	36:BQ:142:LYS:HE2	2.20	0.56
36:BQ:47:GLU:OE1	36:BQ:47:GLU:CA	2.54	0.56
36:BQ:71:PHE:CD1	36:BQ:71:PHE:N	2.73	0.56
43:BR:107:ASP:OD1	43:BR:108:GLY:C	2.44	0.56
43:BR:79:LEU:HD22	43:BR:80:PHE:HA	1.87	0.56
37:BS:34:LEU:HD21	37:BS:102:LEU:CB	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:13:ARG:CZ	44:BU:13:ARG:N	2.62	0.56
44:BU:7:GLY:C	44:BU:8:ILE:HD13	2.23	0.56
41:BY:101:LEU:CD2	41:BY:112:LEU:CG	2.78	0.56
42:BZ:67:LYS:CB	42:BZ:67:LYS:NZ	2.68	0.56
42:BZ:6:LYS:CA	42:BZ:31:SER:CB	2.78	0.56
1:AA:1115:C:O4'	17:AN:61:TRP:HA	2.06	0.56
1:AA:573:A:H2'	1:AA:574:A:C8	2.40	0.56
7:AD:173:TRP:CD2	7:AD:189:PRO:HB3	2.41	0.56
7:AD:24:GLU:CA	7:AD:112:VAL:CG1	2.83	0.56
1:AA:1317:C:OP1	17:AN:16:PHE:HB3	2.05	0.56
48:B0:64:ASP:C	48:B0:66:LYS:HZ1	2.08	0.56
46:B2:27:LEU:HD23	46:B2:49:LEU:HD13	1.88	0.56
26:BA:1186:G:H2'	26:BA:1187:G:H8	1.70	0.56
26:BA:1364:G:N2	26:BA:1366:A:H3'	2.18	0.56
26:BA:2021:C:OP2	50:B5:12:SER:HB3	2.06	0.56
26:BA:2255:G:C4	26:BA:2256:G:C8	2.93	0.56
26:BA:2410:G:C2'	26:BA:2411:A:N7	2.63	0.56
26:BA:2431:U:C2'	26:BA:2432:A:H3'	2.31	0.56
26:BA:2468:G:H8	26:BA:2476:A:N1	1.97	0.56
26:BA:2657:A:N7	26:BA:2658:C:C4	2.64	0.56
26:BA:2809:A:H5'	26:BA:2809:A:N3	2.21	0.56
26:BA:2839:G:N1	26:BA:2840:C:N3	2.52	0.56
26:BA:338:G:C4'	41:BY:24:ARG:NH1	2.68	0.56
28:BE:192:ILE:O	28:BE:194:ARG:CG	2.54	0.56
28:BE:211:GLN:O	28:BE:216:ARG:NE	2.36	0.56
29:BF:138:VAL:C	29:BF:139:VAL:HG23	2.25	0.56
30:BG:19:GLU:CA	30:BG:135:VAL:HG21	2.27	0.56
30:BG:24:HIS:HB2	30:BG:72:LYS:HD3	1.88	0.56
32:BI:8:ASP:O	32:BI:9:VAL:CB	2.53	0.56
36:BQ:67:ALA:CB	36:BQ:71:PHE:HE1	2.18	0.56
43:BR:51:LEU:CD1	43:BR:70:LEU:HD21	2.35	0.56
43:BR:67:LEU:CD1	43:BR:68:ARG:N	2.64	0.56
38:BT:21:PHE:HB2	38:BT:31:PHE:HD1	1.69	0.56
44:BU:105:ALA:O	44:BU:106:PHE:O	2.24	0.56
44:BU:108:ALA:O	44:BU:111:ASP:N	2.36	0.56
44:BU:13:ARG:O	44:BU:14:HIS:C	2.44	0.56
41:BY:41:ARG:C	41:BY:112:LEU:HB3	2.26	0.56
42:BZ:37:LYS:CA	42:BZ:40:ASP:CG	2.73	0.56
1:AA:1382:C:O5'	1:AA:1382:C:H6	1.88	0.56
1:AA:15:G:H4'	8:AE:24:ARG:HH22	1.70	0.56
1:AA:590:C:H5''	11:AH:30:ARG:CD	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AE:105:VAL:HB	8:AE:106:PRO:HD3	1.86	0.56
1:AA:563:A:C2	15:AL:15:ARG:NH1	2.73	0.56
21:AR:80:PRO:C	21:AR:82:THR:H	2.08	0.56
3:AW:14:A:C6	3:AW:22:G:N3	2.74	0.56
48:B0:68:VAL:HG12	48:B0:71:ASN:HD22	1.70	0.56
26:BA:851:U:O2'	47:B3:45:GLY:HA3	2.06	0.56
25:BB:83:G:C5'	47:B3:52:HIS:HD2	2.17	0.56
50:B5:46:CYS:C	50:B5:48:ASN:N	2.57	0.56
53:B8:26:LYS:CG	53:B8:44:LYS:C	2.62	0.56
53:B8:25:PHE:HA	53:B8:46:LYS:HG2	1.87	0.56
26:BA:2250:G:H5''	36:BQ:102:ARG:CG	2.35	0.56
26:BA:2287:A:N1	26:BA:2289:G:N9	2.48	0.56
26:BA:2464:C:N3	26:BA:2486:G:N2	2.53	0.56
26:BA:2493:U:O2	26:BA:2493:U:C2'	2.46	0.56
26:BA:2530:A:C3'	26:BA:2531:A:C5'	2.83	0.56
26:BA:2687:U:C2'	26:BA:2687:U:O2	2.40	0.56
26:BA:2721:A:C4	26:BA:2722:G:C8	2.93	0.56
26:BA:2783:G:C5	26:BA:2784:C:H5	2.23	0.56
26:BA:280:C:O2'	26:BA:281:G:H3'	2.05	0.56
26:BA:286:C:H2'	26:BA:287:C:H5'	1.88	0.56
25:BB:76:G:OP1	42:BZ:10:PRO:CB	2.45	0.56
27:BD:134:ILE:HG21	27:BD:163:VAL:HG21	1.88	0.56
27:BD:66:PHE:O	27:BD:67:LYS:CG	2.54	0.56
28:BE:200:ASP:HA	28:BE:266:LYS:CG	2.36	0.56
29:BF:33:LYS:O	29:BF:36:ARG:HG2	2.06	0.56
31:BH:148:ARG:HH11	31:BH:163:TYR:CA	2.00	0.56
32:BI:115:ILE:CG2	32:BI:129:VAL:HG11	2.35	0.56
34:BO:112:MET:O	34:BO:115:ILE:CG1	2.49	0.56
34:BO:88:ARG:C	34:BO:90:ASP:N	2.48	0.56
35:BP:73:VAL:C	35:BP:76:LEU:H	2.08	0.56
36:BQ:136:TRP:CE3	36:BQ:139:ALA:HB2	2.40	0.56
26:BA:910:A:C3'	36:BQ:17:ARG:NH2	2.68	0.56
36:BQ:45:GLN:OE1	36:BQ:152:SER:HB3	2.05	0.56
36:BQ:46:VAL:O	36:BQ:124:ALA:CA	2.53	0.56
36:BQ:93:ILE:O	36:BQ:94:ARG:CB	2.52	0.56
37:BS:31:LYS:C	37:BS:101:VAL:HG12	2.26	0.56
44:BU:85:ARG:O	44:BU:86:ALA:O	2.23	0.56
41:BY:102:ASP:C	41:BY:103:LEU:HG	2.26	0.56
42:BZ:163:ASP:CB	42:BZ:164:PRO:CD	2.79	0.56
1:AA:1259:C:H1'	1:AA:1283:G:H21	1.70	0.56
1:AA:1347:G:H22	1:AA:1373:G:C2'	2.16	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:261:U:H5	23:AT:79:ARG:NH2	2.03	0.56
1:AA:944:G:C8	1:AA:945:G:N7	2.73	0.56
3:AW:37:YYG:H192	10:AG:83:ALA:O	2.01	0.56
48:B0:38:VAL:C	48:B0:40:GLN:CG	2.64	0.56
49:B4:20:VAL:HG12	49:B4:20:VAL:O	2.05	0.56
50:B5:12:SER:HB3	50:B5:15:LYS:HZ1	0.75	0.56
51:B6:17:GLY:O	51:B6:18:THR:CB	2.54	0.56
52:B7:30:ILE:O	52:B7:31:LEU:C	2.44	0.56
53:B8:55:TRP:O	53:B8:56:ALA:C	2.44	0.56
26:BA:1021:A:O3'	33:BN:52:GLN:NE2	2.33	0.56
26:BA:818:G:C5	26:BA:1187:G:C2	2.93	0.56
26:BA:1340:U:H4'	26:BA:1394:U:H1'	1.88	0.56
26:BA:1662:C:O2'	26:BA:2687:U:OP1	2.23	0.56
26:BA:1684:C:H2'	26:BA:1685:C:C6	2.41	0.56
26:BA:1790:C:O3'	27:BD:210:LYS:HD2	2.05	0.56
26:BA:2019:A:N1	26:BA:2035:G:O6	2.39	0.56
26:BA:2092:U:OP1	26:BA:2199:A:H1'	2.06	0.56
26:BA:2311:A:HO2'	26:BA:2312:U:C5'	2.17	0.56
26:BA:2447:G:H3'	26:BA:2500:U:OP2	2.06	0.56
26:BA:2471:C:H2'	26:BA:2472:G:C5'	2.36	0.56
26:BA:2501:C:HO2'	26:BA:2502:G:P	2.27	0.56
26:BA:2060:A:H1'	26:BA:2502:G:N3	2.20	0.56
26:BA:2535:G:H21	26:BA:2536:G:H1'	1.66	0.56
26:BA:2595:G:C3'	26:BA:2595:G:C8	2.88	0.56
26:BA:2626:C:P	26:BA:2626:C:H5	2.28	0.56
26:BA:2637:U:C5	26:BA:2638:G:C6	2.94	0.56
26:BA:2677:G:C5	26:BA:2678:C:H5	2.23	0.56
26:BA:2695:C:C2'	26:BA:2696:U:H6	2.12	0.56
26:BA:2837:G:C6	26:BA:2882:A:N6	2.74	0.56
26:BA:2885:C:H2'	26:BA:2885:C:O2	2.03	0.56
26:BA:397:G:OP1	49:B4:40:HIS:CA	2.54	0.56
26:BA:440:G:OP2	41:BY:3:GLN:CD	2.41	0.56
26:BA:918:A:N3	26:BA:918:A:H5'	2.21	0.56
28:BE:186:GLU:C	28:BE:187:HIS:CD2	2.78	0.56
28:BE:205:THR:CG2	28:BE:258:TYR:C	2.73	0.56
28:BE:271:ILE:CG2	28:BE:272:GLY:N	2.69	0.56
26:BA:605:C:O5'	29:BF:105:LYS:HE2	2.05	0.56
29:BF:163:HIS:CA	29:BF:166:ILE:HD12	2.33	0.56
29:BF:165:ASP:O	29:BF:168:ARG:CG	2.54	0.56
33:BN:105:LEU:H	33:BN:105:LEU:HD23	1.71	0.56
35:BP:114:VAL:HG12	35:BP:115:ARG:H	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:31:PHE:CA	36:BQ:85:ILE:CD1	2.79	0.56
36:BQ:36:ASN:CB	36:BQ:41:THR:N	2.66	0.56
37:BS:70:GLY:O	37:BS:71:TRP:HE3	1.87	0.56
44:BU:44:THR:CG2	45:BV:78:VAL:CG1	2.81	0.56
26:BA:1151:G:C1'	44:BU:81:ASN:HD21	2.18	0.56
45:BV:96:LEU:CD2	45:BV:96:LEU:H	2.19	0.56
40:BX:6:LYS:HB2	40:BX:27:ALA:O	2.02	0.56
41:BY:93:THR:O	41:BY:94:SER:O	2.23	0.56
1:AA:1517:G:C4	26:BA:1919:A:O3'	2.59	0.56
1:AA:59:A:H3'	1:AA:60:A:C5'	2.36	0.56
1:AA:878:G:OP1	11:AH:88:LYS:HB3	2.06	0.56
13:AJ:10:GLY:CA	13:AJ:16:LEU:HD21	2.28	0.56
20:AQ:22:LEU:HD11	20:AQ:24:GLU:HG2	1.87	0.56
48:B0:46:LYS:HB2	48:B0:79:ILE:HD12	1.87	0.56
47:B3:33:GLN:NE2	47:B3:34:GLU:C	2.59	0.56
47:B3:1:MET:CE	47:B3:3:ARG:CG	2.83	0.56
49:B4:14:ILE:HD11	49:B4:39:VAL:HG21	1.88	0.56
49:B4:2:GLN:C	49:B4:3:LYS:HG3	2.25	0.56
51:B6:26:LYS:O	51:B6:27:ASN:OD1	2.23	0.56
52:B7:26:SER:CA	52:B7:29:ASN:HD22	2.18	0.56
26:BA:142(A):A:OP2	26:BA:1143:A:C8	2.59	0.56
26:BA:2313:C:C5	26:BA:2314:C:C5	2.94	0.56
26:BA:2380:C:C2'	26:BA:2381:C:H5'	2.27	0.56
26:BA:2625:G:C5	26:BA:2626:C:N3	2.74	0.56
26:BA:2653:U:C4	26:BA:2654:A:C6	2.91	0.56
26:BA:2668:G:N2	26:BA:2669:G:C1'	2.69	0.56
26:BA:2704:C:C2'	26:BA:2705:A:O4'	2.53	0.56
26:BA:2819:G:C4'	26:BA:2821:A:H62	2.17	0.56
26:BA:72:U:C4'	46:B2:57:LYS:HZ2	2.17	0.56
26:BA:776:G:N7	26:BA:793:A:H2'	2.20	0.56
26:BA:971:C:O2	26:BA:972:G:O2'	2.18	0.56
25:BB:28:C:OP2	37:BS:41:LYS:CG	2.54	0.56
28:BE:205:THR:HG22	28:BE:261:ARG:HG3	1.88	0.56
28:BE:199:ALA:HB1	28:BE:312:ARG:H	1.70	0.56
29:BF:168:ARG:NH2	29:BF:209:GLY:CA	2.44	0.56
29:BF:61:PHE:O	29:BF:62:GLY:C	2.43	0.56
30:BG:145:ASP:HB2	37:BS:15:GLU:HG2	1.88	0.56
31:BH:51:VAL:HG22	31:BH:68:ARG:CG	2.35	0.56
31:BH:51:VAL:HG22	31:BH:68:ARG:HG2	1.86	0.56
32:BI:7:LYS:HB2	32:BI:12:LYS:CE	2.35	0.56
32:BI:81:ALA:O	32:BI:147:GLU:CA	2.53	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1080:C:C2'	55:BK:126:LYS:HB2	2.26	0.56
26:BA:1062:G:H22	55:BK:92:PRO:HG3	0.76	0.56
33:BN:74:ARG:C	33:BN:76:ASP:OD2	2.44	0.56
38:BT:28:THR:O	38:BT:29:THR:HG22	1.99	0.56
45:BV:15:SER:O	45:BV:99:GLN:HG3	2.06	0.56
39:BW:103:ILE:HG23	39:BW:103:ILE:O	2.05	0.56
40:BX:7:HIS:CG	40:BX:8:PRO:HD2	2.41	0.56
42:BZ:113:VAL:CG1	42:BZ:114:ASP:N	2.56	0.56
11:AH:135:CYS:SG	11:AH:136:GLU:N	2.78	0.56
14:AK:44:SER:H	14:AK:47:VAL:HB	1.70	0.56
1:AA:1491:G:P	15:AL:46:LYS:NZ	2.76	0.56
20:AQ:65:ILE:HG13	20:AQ:69:LYS:O	2.04	0.56
26:BA:932:G:OP1	47:B3:29:ARG:NH2	2.39	0.56
49:B4:32:HIS:O	49:B4:33:VAL:C	2.40	0.56
52:B7:15:THR:HG1	52:B7:16:HIS:H	1.48	0.56
52:B7:25:LYS:O	52:B7:26:SER:C	2.45	0.56
26:BA:1177:A:H2'	26:BA:1178:C:C6	2.41	0.56
26:BA:1416:G:H2'	26:BA:1417:C:C6	2.41	0.56
26:BA:1142:U:C3'	26:BA:142(A):A:P	2.94	0.56
26:BA:1620:G:H1'	52:B7:1:MET:H2	1.59	0.56
26:BA:176:G:N3	26:BA:177:G:H1'	2.20	0.56
26:BA:1829:A:H5''	26:BA:1830:C:C5	2.41	0.56
26:BA:1937:A:H3'	26:BA:1938:A:C5'	2.33	0.56
26:BA:2060:A:O2'	26:BA:2502:G:C4'	2.54	0.56
26:BA:2196:C:C5'	26:BA:2197:U:OP2	2.42	0.56
26:BA:2197:U:C2'	26:BA:2198:A:H5''	2.34	0.56
26:BA:2215:G:O2'	26:BA:2216:G:O4'	2.21	0.56
26:BA:2231:C:H5''	49:B4:39:VAL:CG2	2.18	0.56
26:BA:2246:G:C8	26:BA:2426:A:N1	2.74	0.56
26:BA:2351:G:N2	26:BA:2365:G:C4	2.73	0.56
26:BA:2398:U:H2'	26:BA:2399:G:H8	1.71	0.56
26:BA:2450:A:OP1	26:BA:2497:A:C5	2.51	0.56
26:BA:957:A:H2	26:BA:2459:A:H5'	1.64	0.56
26:BA:2486:G:N1	26:BA:2487:G:N7	2.53	0.56
26:BA:2517:C:C5	26:BA:2542:A:C6	2.94	0.56
26:BA:2543:G:O2'	26:BA:2544:G:C5'	2.46	0.56
26:BA:2729:G:C6	26:BA:2730:C:N3	2.73	0.56
26:BA:2785:C:O3'	28:BE:99:VAL:HG13	2.05	0.56
26:BA:2792:G:H1	26:BA:2803:C:H42	1.53	0.56
26:BA:2852:G:N2	26:BA:2853:C:C2	2.72	0.56
26:BA:598:G:H2'	26:BA:599:G:O4'	2.04	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:989:G:C8	47:B3:13:ILE:HD12	2.40	0.56
27:BD:115:ILE:HD12	27:BD:115:ILE:C	2.26	0.56
27:BD:196:ASN:HB2	27:BD:199:ARG:HB2	1.88	0.56
28:BE:107:GLU:HB3	28:BE:110:ARG:HE	1.57	0.56
28:BE:189:MET:O	28:BE:190:ASN:HB3	2.05	0.56
26:BA:2770:G:H1'	28:BE:316:ARG:NH1	2.18	0.56
29:BF:168:ARG:C	29:BF:193:LEU:CG	2.67	0.56
29:BF:38:ALA:HB1	29:BF:221:GLU:HG2	1.88	0.56
30:BG:13:MET:O	30:BG:14:ARG:C	2.44	0.56
31:BH:94:ARG:CB	31:BH:127:GLN:HE22	2.18	0.56
32:BI:102:LEU:O	32:BI:103:GLN:O	2.24	0.56
32:BI:114:LYS:HB3	32:BI:132:LYS:O	2.06	0.56
32:BI:60:GLU:O	32:BI:62:LEU:N	2.39	0.56
55:BK:33:VAL:CG2	55:BK:60:VAL:HG13	2.35	0.56
33:BN:12:VAL:HB	33:BN:38:VAL:HG22	1.87	0.56
33:BN:27:ALA:CB	33:BN:30:ALA:CB	2.65	0.56
33:BN:52:GLN:CA	33:BN:55:GLU:CG	2.75	0.56
34:BO:31:ARG:CB	34:BO:32:TYR:CD1	2.87	0.56
35:BP:71:GLU:O	35:BP:72:ASN:C	2.44	0.56
37:BS:76:GLY:CA	37:BS:82:TYR:HB2	2.36	0.56
37:BS:81:ALA:HB1	37:BS:118:ILE:H	1.69	0.56
44:BU:14:HIS:CD2	44:BU:36:PHE:CE2	2.93	0.56
44:BU:69:ALA:O	44:BU:79:PHE:HE1	1.86	0.56
44:BU:79:PHE:O	44:BU:82:GLY:N	2.39	0.56
41:BY:11:GLN:C	41:BY:21:LYS:HZ1	2.10	0.56
41:BY:34:GLU:O	41:BY:35:TYR:CB	2.54	0.56
41:BY:51:LEU:O	41:BY:52:ARG:CG	2.50	0.56
42:BZ:156:GLU:O	42:BZ:157:GLY:C	2.43	0.56
42:BZ:176:LEU:HD23	42:BZ:177:THR:CA	2.36	0.56
42:BZ:64:ALA:HB2	42:BZ:85:MET:C	2.25	0.56
1:AA:1418:A:C8	1:AA:1419:G:C1'	2.89	0.56
1:AA:242:C:C2	1:AA:285:G:N2	2.74	0.56
1:AA:393:A:OP2	19:AP:12:LYS:HD3	2.06	0.56
1:AA:627:G:H2'	1:AA:628:G:C8	2.41	0.56
1:AA:818:G:O2'	1:AA:820:U:C5	2.59	0.56
7:AD:140:VAL:CG1	7:AD:144:ASP:HB2	2.35	0.56
1:AA:280:C:O2	20:AQ:38:ARG:HA	2.06	0.56
2:AV:23:A:H2'	2:AV:24:G:C8	2.40	0.56
48:B0:67:VAL:C	48:B0:68:VAL:HG23	2.25	0.56
46:B2:27:LEU:HD11	46:B2:53:ILE:HD11	1.87	0.56
46:B2:34:GLN:CA	46:B2:34:GLN:OE1	2.54	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:125:G:H5''	52:B7:19:ARG:CD	2.35	0.56
53:B8:23:MET:SD	53:B8:48:PHE:HA	2.46	0.56
53:B8:62:LEU:HB3	53:B8:63:PRO:HD3	1.83	0.56
54:B9:24:LEU:CD2	54:B9:35:ARG:CG	2.82	0.56
54:B9:7:VAL:CG2	54:B9:36:GLN:CG	2.85	0.56
26:BA:1031:G:O2'	54:B9:8:LYS:CE	2.54	0.56
26:BA:1077:A:N3	55:BK:134:SER:OG	2.39	0.56
26:BA:154:G:H5''	26:BA:155:C:H5	1.70	0.56
26:BA:1666:G:H22	26:BA:1669:A:N6	2.04	0.56
26:BA:1841:U:H2'	26:BA:1842:G:C8	2.40	0.56
26:BA:2053:G:H1'	28:BE:245:ARG:CG	2.35	0.56
26:BA:2079:U:O3'	49:B4:32:HIS:HD2	1.88	0.56
26:BA:2410:G:C4	26:BA:2411:A:C8	2.70	0.56
26:BA:2422:A:N9	26:BA:2424:C:H5	2.03	0.56
26:BA:2432:A:C2	26:BA:2433:A:N6	2.68	0.56
26:BA:2531:A:C6	26:BA:2532:G:C5	2.94	0.56
26:BA:2525:G:C6	26:BA:2539:C:N4	2.74	0.56
26:BA:2540:C:H2'	26:BA:2541:A:C8	2.41	0.56
26:BA:269:U:H5	26:BA:270(Y):G:O3'	1.88	0.56
26:BA:270(X):G:H2'	26:BA:270(Y):G:C5'	2.36	0.56
26:BA:2734:A:N7	26:BA:2735:G:N9	2.54	0.56
26:BA:2753:A:C8	26:BA:2754:U:H5	2.18	0.56
26:BA:2869:G:N1	26:BA:2870:C:C5	2.44	0.56
26:BA:2831:G:C1'	26:BA:2883:A:C2	2.88	0.56
26:BA:593:G:O2'	53:B8:58:MET:HE3	2.06	0.56
26:BA:83:G:H5''	41:BY:20:HIS:CE1	2.41	0.56
26:BA:840:C:H42	26:BA:938:G:H1	1.54	0.56
27:BD:116:MET:CG	27:BD:117:SER:H	2.16	0.56
27:BD:135:PRO:HG2	27:BD:138:THR:CB	2.34	0.56
27:BD:166:LYS:C	27:BD:167:GLU:CD	2.65	0.56
27:BD:167:GLU:CA	27:BD:170:TYR:CE1	2.88	0.56
27:BD:216:ALA:HB1	27:BD:223:ASN:H	1.70	0.56
26:BA:2620:C:O4'	28:BE:252:GLN:HG3	2.05	0.56
29:BF:163:HIS:CG	29:BF:166:ILE:HD11	2.41	0.56
29:BF:215:ALA:CA	29:BF:242:GLU:CG	2.83	0.56
31:BH:10:ILE:CG1	31:BH:49:ILE:CG1	2.84	0.56
55:BK:18:ALA:CB	55:BK:39:CYS:O	2.54	0.56
55:BK:36:MET:SD	55:BK:40:LYS:HG3	2.46	0.56
55:BK:37:GLU:HA	55:BK:41:ARG:HH12	1.63	0.56
33:BN:83:ILE:C	33:BN:85:GLY:N	2.59	0.56
34:BO:63:VAL:O	34:BO:102:VAL:HG13	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:87:ILE:HG22	34:BO:88:ARG:N	2.21	0.56
35:BP:96:VAL:CG2	35:BP:101:ASP:H	2.18	0.56
35:BP:58:GLN:HG3	35:BP:59:GLU:N	2.21	0.56
36:BQ:130:PRO:HA	36:BQ:133:GLU:HB3	1.88	0.56
43:BR:51:LEU:O	43:BR:52:ILE:C	2.44	0.56
43:BR:93:GLY:C	43:BR:95:THR:N	2.48	0.56
44:BU:35:ALA:O	44:BU:36:PHE:C	2.43	0.56
40:BX:24:LEU:C	40:BX:26:PHE:CZ	2.73	0.56
40:BX:35:GLY:C	40:BX:37:VAL:N	2.58	0.56
40:BX:52:VAL:HG12	40:BX:53:ASN:N	2.21	0.56
41:BY:22:GLN:C	41:BY:24:ARG:H	2.07	0.56
1:AA:1288:A:C6	1:AA:1371:G:H1'	2.40	0.55
14:AK:33:THR:HA	14:AK:39:PRO:HA	1.88	0.55
1:AA:1327:C:C5'	24:AU:20:LYS:CE	2.71	0.55
2:AV:34:G:H3'	2:AV:35:A:C5'	2.36	0.55
48:B0:43:THR:OG1	48:B0:44:LYS:N	2.32	0.55
46:B2:20:LEU:O	46:B2:23:LEU:CA	2.22	0.55
47:B3:8:LEU:HD23	47:B3:32:GLN:H	1.69	0.55
47:B3:9:VAL:HG22	47:B3:54:VAL:HG12	1.87	0.55
49:B4:17:GLN:CD	49:B4:34:ASP:HA	2.26	0.55
26:BA:2400:G:C3'	51:B6:20:PHE:HE1	2.19	0.55
26:BA:592:G:C4	53:B8:3:LYS:HE3	2.37	0.55
26:BA:1033:U:C5	26:BA:2750:A:N3	2.74	0.55
26:BA:107:C:H2'	26:BA:108:U:C6	2.41	0.55
26:BA:1690:A:H2'	26:BA:1690:A:N3	2.21	0.55
26:BA:2303:G:C2	26:BA:2314:C:N3	2.75	0.55
26:BA:2351:G:C2	26:BA:2365:G:C5	2.95	0.55
26:BA:2381:C:H6	26:BA:2381:C:H5'	1.70	0.55
26:BA:2395:C:O5'	26:BA:2395:C:C6	2.59	0.55
26:BA:2515:C:C4	26:BA:2570:G:O6	2.60	0.55
26:BA:2544:G:C5'	26:BA:2645:G:C8	2.82	0.55
26:BA:2633:G:C8	26:BA:2633:G:OP2	2.59	0.55
26:BA:2725:A:C5	26:BA:2727:G:C5	2.94	0.55
26:BA:2744:G:C4	26:BA:2761:G:C2	2.94	0.55
26:BA:27:G:C8	26:BA:27:G:H3'	2.42	0.55
26:BA:2865:U:C6	26:BA:2866:U:C6	2.94	0.55
26:BA:2887:U:C6	26:BA:2887:U:O5'	2.59	0.55
26:BA:2899:G:HO2'	26:BA:2900:A:H8	1.53	0.55
26:BA:446:G:H8	44:BU:3:ARG:HH12	1.53	0.55
27:BD:143:ILE:CB	27:BD:153:LEU:N	2.68	0.55
27:BD:158:GLY:HA2	27:BD:194:VAL:HG22	1.84	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:63:ILE:O	27:BD:64:ILE:CB	2.54	0.55
28:BE:271:ILE:HG22	28:BE:272:GLY:N	2.21	0.55
28:BE:199:ALA:HB1	28:BE:312:ARG:N	2.20	0.55
29:BF:149:LYS:HB2	29:BF:152:GLU:CG	2.35	0.55
29:BF:215:ALA:O	29:BF:242:GLU:CA	2.54	0.55
30:BG:104:PHE:N	30:BG:104:PHE:CD1	2.74	0.55
16:AM:3:ARG:NH1	30:BG:90:LEU:CD2	2.69	0.55
31:BH:32:LEU:CD2	31:BH:32:LEU:C	2.75	0.55
31:BH:86:LEU:CD2	31:BH:87:GLU:N	2.68	0.55
32:BI:121:ILE:O	32:BI:122:ARG:CB	2.49	0.55
32:BI:86:GLY:C	32:BI:88:ARG:N	2.59	0.55
34:BO:103:ALA:O	34:BO:106:LEU:HG	2.06	0.55
36:BQ:116:HIS:CD2	36:BQ:119:ASN:HB3	2.41	0.55
36:BQ:33:MET:CG	36:BQ:83:PHE:CB	2.84	0.55
37:BS:90:LEU:HA	37:BS:93:GLN:HE21	1.71	0.55
39:BW:97:LYS:CE	39:BW:99:ARG:HH12	2.15	0.55
40:BX:5:ILE:HG23	40:BX:6:LYS:N	2.12	0.55
41:BY:105:ASP:O	41:BY:107:LYS:N	2.39	0.55
42:BZ:123:VAL:HA	42:BZ:161:ALA:CB	2.36	0.55
42:BZ:18:MET:C	42:BZ:36:ARG:HE	2.07	0.55
42:BZ:40:ASP:C	42:BZ:44:ARG:HG2	2.26	0.55
1:AA:1400:C:N1	2:AV:34:G:C2	2.75	0.55
1:AA:175:C:C5'	23:AT:25:ARG:NH2	2.69	0.55
1:AA:316:G:O3'	1:AA:353:A:N6	2.39	0.55
12:AI:55:ALA:HB3	12:AI:58:ARG:NE	2.22	0.55
3:AW:75:C:H42	49:B4:28:ARG:HG3	1.68	0.55
46:B2:52:ALA:HA	46:B2:55:ARG:NH1	2.21	0.55
26:BA:1183:G:C5'	47:B3:29:ARG:HG3	2.36	0.55
47:B3:54:VAL:CG2	47:B3:55:ARG:H	2.01	0.55
53:B8:21:LYS:HB3	53:B8:48:PHE:CZ	2.41	0.55
26:BA:80:G:H1	26:BA:106:C:H42	1.55	0.55
26:BA:1152:C:H1'	44:BU:77:SER:HB3	1.88	0.55
26:BA:138:G:H8	40:BX:42:GLU:CD	2.09	0.55
26:BA:1418:G:N2	26:BA:1578:U:OP2	2.30	0.55
26:BA:1826:G:P	27:BD:227:VAL:HG22	2.26	0.55
26:BA:2185:C:C2	26:BA:2186:G:N7	2.73	0.55
26:BA:2093:G:N2	26:BA:2197:U:O2	2.40	0.55
26:BA:2213:U:H5''	26:BA:2213:U:C6	2.41	0.55
26:BA:2224:G:O2'	26:BA:2225:A:C5'	2.54	0.55
26:BA:2077:A:H2	26:BA:2244:U:C2	2.24	0.55
26:BA:2422:A:C2'	26:BA:2424:C:H5	2.15	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2476:A:H2'	26:BA:2477:C:O4'	2.06	0.55
26:BA:2508:G:C2	26:BA:2509:G:C8	2.94	0.55
26:BA:2513:G:C5	26:BA:2514:U:C4	2.94	0.55
26:BA:2570:G:C3'	26:BA:2571:C:C6	2.89	0.55
26:BA:2596:U:C5	26:BA:2597:G:N7	2.74	0.55
26:BA:2653:U:C2	26:BA:2654:A:N7	2.74	0.55
26:BA:2715:C:C4	26:BA:2716:U:C5	2.94	0.55
26:BA:2756:U:N3	26:BA:2759:G:C6	2.73	0.55
26:BA:2844:G:N2	26:BA:2845:G:C1'	2.69	0.55
26:BA:1751:C:C1'	26:BA:2860:A:C2	2.89	0.55
26:BA:551:G:H4'	26:BA:1220:A:C2	2.41	0.55
26:BA:559:G:H2'	26:BA:560:C:C6	2.42	0.55
26:BA:58:G:C2'	26:BA:73:A:N6	2.66	0.55
26:BA:775:G:H4'	26:BA:777:A:C4	2.42	0.55
26:BA:690:G:O2'	26:BA:780:G:OP1	2.22	0.55
28:BE:44:TYR:CD2	28:BE:307:LEU:O	2.59	0.55
29:BF:101:ASP:C	29:BF:102:LEU:O	2.45	0.55
29:BF:108:GLN:O	29:BF:109:LEU:C	2.44	0.55
30:BG:141:VAL:CA	30:BG:144:ARG:HH11	2.19	0.55
31:BH:101:LYS:NZ	31:BH:115:GLU:HB3	2.13	0.55
31:BH:88:LEU:HD13	31:BH:127:GLN:O	2.04	0.55
55:BK:122:GLU:HB3	55:BK:126:LYS:HE2	1.84	0.55
33:BN:136:SER:HA	33:BN:139:LEU:HD22	1.88	0.55
33:BN:26:VAL:O	33:BN:30:ALA:N	2.39	0.55
34:BO:99:PHE:HE2	38:BT:24:LYS:CD	2.11	0.55
36:BQ:84:ARG:HH21	36:BQ:123:ILE:HD12	1.71	0.55
36:BQ:47:GLU:CD	36:BQ:47:GLU:N	2.60	0.55
37:BS:110:THR:CG2	37:BS:115:VAL:HG23	2.32	0.55
26:BA:1251:C:C5'	44:BU:10:ARG:NE	2.67	0.55
26:BA:993:G:C2	44:BU:54:LYS:NZ	2.73	0.55
45:BV:5:ILE:H	45:BV:5:ILE:CD1	2.16	0.55
26:BA:973:A:N1	45:BV:81:ARG:HB2	2.20	0.55
39:BW:44:ALA:O	39:BW:47:VAL:N	2.39	0.55
40:BX:25:GLN:NE2	40:BX:65:VAL:CG1	2.65	0.55
40:BX:75:GLN:O	40:BX:77:VAL:C	2.45	0.55
42:BZ:34:LEU:O	42:BZ:35:ASP:HB3	2.05	0.55
1:AA:60:A:H62	1:AA:108:G:H5'	1.70	0.55
7:AD:31:CYS:HB3	7:AD:33:MET:SD	2.46	0.55
22:AS:40:ILE:HD13	22:AS:62:ILE:HD13	1.88	0.55
48:B0:28:GLY:N	48:B0:60:PHE:CG	2.69	0.55
50:B5:19:ARG:C	50:B5:21:SER:N	2.34	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:26:LYS:CE	53:B8:44:LYS:C	2.65	0.55
26:BA:2528:U:OP1	54:B9:30:VAL:HG12	2.02	0.55
26:BA:1634:A:O2'	26:BA:1635:G:OP1	2.23	0.55
26:BA:1907:G:C6	26:BA:1908:C:N4	2.74	0.55
26:BA:2218:G:C5	26:BA:2219:G:N7	2.74	0.55
26:BA:2291:U:H2'	26:BA:2292:C:H6	1.72	0.55
26:BA:2299:G:C6	26:BA:2300:G:C6	2.94	0.55
26:BA:2376:A:OP1	26:BA:2376:A:C8	2.60	0.55
26:BA:2395:C:O3'	49:B4:28:ARG:NH1	2.36	0.55
26:BA:2408:U:H2'	26:BA:2409:G:O5'	2.06	0.55
26:BA:2621:A:O2'	28:BE:255:GLN:CD	2.45	0.55
26:BA:2638:G:C8	26:BA:2775:A:N1	2.75	0.55
26:BA:2693:A:C6	26:BA:2694:G:C6	2.95	0.55
26:BA:2727:G:H2'	26:BA:2728:U:C5	2.40	0.55
26:BA:2759:G:C8	26:BA:2759:G:H3'	2.41	0.55
26:BA:322:A:C2	26:BA:341:G:C6	2.94	0.55
26:BA:628:G:H1	26:BA:635:C:H42	1.54	0.55
26:BA:76:C:O3'	46:B2:55:ARG:CG	2.53	0.55
26:BA:687:C:O2	26:BA:787:U:C5'	2.53	0.55
25:BB:110:G:H2'	25:BB:111:U:O4'	2.07	0.55
25:BB:59:A:H4'	30:BG:144:ARG:HG2	1.88	0.55
27:BD:197:GLY:C	27:BD:199:ARG:N	2.59	0.55
28:BE:175:ASP:C	28:BE:177:ALA:N	2.56	0.55
55:BK:9:ILE:HD13	55:BK:31:HIS:CG	2.40	0.55
55:BK:36:MET:CA	55:BK:39:CYS:SG	2.94	0.55
35:BP:131:GLU:O	35:BP:133:VAL:N	2.39	0.55
36:BQ:127:ASN:HB2	36:BQ:128:PRO:CD	2.29	0.55
36:BQ:46:VAL:HG22	36:BQ:156:ASN:HD22	1.72	0.55
36:BQ:50:VAL:C	36:BQ:51:GLU:CD	2.65	0.55
37:BS:122:ALA:O	37:BS:123:ILE:C	2.45	0.55
37:BS:27:LEU:N	37:BS:33:ARG:NH1	2.54	0.55
45:BV:6:GLN:CD	45:BV:10:LYS:HG2	2.27	0.55
45:BV:43:GLU:C	45:BV:44:GLN:HE22	2.04	0.55
40:BX:7:HIS:HB2	40:BX:8:PRO:HD2	1.89	0.55
41:BY:79:LEU:CD1	41:BY:80:GLU:N	2.52	0.55
1:AA:1097:C:O2'	1:AA:1168:A:N3	2.35	0.55
1:AA:62:U:H5''	1:AA:385:C:H1'	1.86	0.55
5:AB:84:GLU:HG3	5:AB:212:GLN:NE2	2.21	0.55
8:AE:80:ILE:HD12	8:AE:91:LEU:HB3	1.88	0.55
1:AA:254:G:H21	20:AQ:16:GLN:CD	2.09	0.55
1:AA:193:C:O2'	23:AT:64:ASP:CB	2.54	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:27:C:H2'	2:AV:28:C:C6	2.41	0.55
46:B2:22:ASP:O	46:B2:25:THR:N	2.40	0.55
47:B3:41:PRO:O	47:B3:45:GLY:N	2.33	0.55
52:B7:21:ARG:C	52:B7:24:THR:CG2	2.69	0.55
53:B8:61:MET:O	53:B8:62:LEU:HB2	2.07	0.55
26:BA:126:A:OP2	52:B7:17:GLY:C	2.45	0.55
26:BA:1783:A:C2	26:BA:2607:G:N2	2.74	0.55
26:BA:1826:G:H8	26:BA:1826:G:OP2	1.89	0.55
26:BA:2047:U:H2'	26:BA:2048:G:H8	1.72	0.55
26:BA:2086:U:N3	26:BA:2233:U:C4	2.57	0.55
26:BA:2354:G:N3	48:B0:32:LYS:HG2	2.20	0.55
26:BA:2355:C:H2'	26:BA:2355:C:O2	2.05	0.55
26:BA:2364:C:H1'	48:B0:32:LYS:HZ2	1.37	0.55
26:BA:2372:G:H5"	26:BA:2372:G:C8	2.40	0.55
26:BA:576:U:H5"	26:BA:2502:G:H2'	1.87	0.55
26:BA:2508:G:C2'	26:BA:2509:G:O5'	2.54	0.55
26:BA:2508:G:H2'	26:BA:2509:G:O5'	2.05	0.55
26:BA:2514:U:H3'	26:BA:2514:U:C6	2.41	0.55
26:BA:2556:C:HO2'	26:BA:2557:G:C5'	2.16	0.55
26:BA:2564:A:C6	26:BA:2565:A:N6	2.74	0.55
26:BA:2733:A:H61	28:BE:316:ARG:HD3	1.71	0.55
26:BA:447:A:C6	26:BA:454:A:N7	2.75	0.55
26:BA:849:A:N3	47:B3:21:ALA:HB2	2.18	0.55
28:BE:44:TYR:CZ	28:BE:308:VAL:CA	2.89	0.55
31:BH:101:LYS:HZ3	31:BH:115:GLU:HB3	1.71	0.55
31:BH:136:ASP:O	31:BH:137:LYS:C	2.43	0.55
32:BI:60:GLU:C	32:BI:62:LEU:N	2.59	0.55
32:BI:62:LEU:O	32:BI:66:LYS:CE	2.48	0.55
33:BN:103:VAL:CG1	33:BN:104:TYR:H	2.15	0.55
33:BN:102:ARG:HB3	33:BN:104:TYR:OH	2.06	0.55
33:BN:15:ARG:HB3	33:BN:43:ARG:HG2	0.56	0.55
33:BN:41:ALA:O	33:BN:42:GLU:C	2.44	0.55
26:BA:1138:G:OP1	33:BN:82:THR:CG2	2.54	0.55
34:BO:8:LEU:HD23	34:BO:19:VAL:O	2.06	0.55
35:BP:113:GLN:O	35:BP:114:VAL:C	2.35	0.55
43:BR:52:ILE:C	43:BR:54:LEU:N	2.51	0.55
43:BR:85:PRO:C	43:BR:87:TYR:N	2.40	0.55
37:BS:38:LYS:CG	37:BS:106:LEU:HD12	2.37	0.55
25:BB:12:C:C2	37:BS:10:MET:SD	2.98	0.55
37:BS:24:LEU:HA	37:BS:27:LEU:HB2	1.89	0.55
37:BS:64:SER:O	37:BS:66:LEU:N	2.39	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:72:GLU:CB	37:BS:74:PRO:CD	2.84	0.55
26:BA:29:U:C4'	44:BU:11:ARG:NH1	2.17	0.55
44:BU:33:ARG:HA	44:BU:36:PHE:CD1	2.41	0.55
45:BV:38:LEU:HD23	45:BV:38:LEU:H	1.70	0.55
45:BV:68:LYS:O	45:BV:69:ILE:C	2.44	0.55
40:BX:17:ASP:CA	40:BX:20:PHE:CZ	2.89	0.55
42:BZ:173:PRO:C	42:BZ:175:ARG:N	2.58	0.55
42:BZ:18:MET:N	42:BZ:36:ARG:HG3	2.21	0.55
42:BZ:37:LYS:HA	42:BZ:40:ASP:CG	2.26	0.55
1:AA:1073:U:H2'	1:AA:1074:G:C8	2.41	0.55
1:AA:143:A:H4'	1:AA:144:G:H8	1.70	0.55
1:AA:1451:A:H3'	1:AA:1451:A:C8	2.41	0.55
1:AA:976:G:C2	1:AA:361(A):C:C5	2.94	0.55
1:AA:421:U:N3	6:AC:127:ARG:CZ	2.69	0.55
1:AA:505:G:OP2	1:AA:534:U:O2'	2.13	0.55
1:AA:542:G:OP1	7:AD:41:GLY:HA3	2.04	0.55
1:AA:868:C:O2'	1:AA:873:A:OP1	2.17	0.55
7:AD:20:TYR:C	7:AD:22:LYS:H	2.09	0.55
7:AD:26:CYS:O	7:AD:31:CYS:HB2	2.06	0.55
8:AE:147:ASP:HA	8:AE:150:ARG:HB2	1.89	0.55
1:AA:1491:G:OP1	15:AL:46:LYS:CE	2.54	0.55
1:AA:1225:A:OP2	16:AM:104:ARG:HB2	2.06	0.55
2:AV:41:U:O2	2:AV:41:U:H2'	2.05	0.55
48:B0:38:VAL:CA	48:B0:40:GLN:CD	2.64	0.55
26:BA:72:U:O5'	46:B2:57:LYS:NZ	2.39	0.55
47:B3:50:VAL:HB	47:B3:53:LEU:HB2	1.89	0.55
49:B4:68:ARG:HB2	49:B4:72:LYS:CG	2.36	0.55
53:B8:36:LYS:HG2	53:B8:40:GLU:OE2	2.06	0.55
53:B8:56:ALA:O	53:B8:58:MET:N	2.40	0.55
26:BA:142(A):A:P	26:BA:1143:A:C8	2.96	0.55
26:BA:1918:A:C8	26:BA:1918:A:OP2	2.60	0.55
26:BA:2067:G:H8	26:BA:2067:G:O5'	1.90	0.55
26:BA:2093:G:N7	26:BA:2225:A:C8	2.75	0.55
26:BA:2100:G:C2	26:BA:2190:G:C4	2.95	0.55
26:BA:2380:C:H3'	26:BA:2380:C:C6	2.41	0.55
26:BA:2416:C:O2	26:BA:2416:C:H2'	2.06	0.55
26:BA:2466:C:C4	26:BA:2467:C:C4	2.94	0.55
26:BA:2615:U:H3	50:B5:8:LYS:CG	2.04	0.55
26:BA:2678:C:N3	26:BA:2679:A:C5	2.75	0.55
26:BA:2698:U:C2'	26:BA:2698:U:O2	2.54	0.55
26:BA:2720:U:C4	26:BA:2873:A:N6	2.53	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1033:U:H6	26:BA:2750:A:C2	2.21	0.55
26:BA:2783:G:C8	26:BA:2783:G:C5'	2.86	0.55
26:BA:2839:G:N2	26:BA:2840:C:H1'	2.21	0.55
26:BA:2856:C:O5'	26:BA:2856:C:H6	1.89	0.55
26:BA:284:U:H2'	26:BA:285:C:C6	2.40	0.55
26:BA:2881:C:C6	26:BA:2882:A:N7	2.75	0.55
27:BD:164:LEU:O	27:BD:172:ILE:HG21	2.07	0.55
27:BD:172:ILE:HG13	27:BD:182:MET:HE2	1.87	0.55
28:BE:193:PHE:HD1	28:BE:193:PHE:H	1.54	0.55
28:BE:319:ASP:O	28:BE:320:GLN:C	2.44	0.55
31:BH:20:GLY:O	31:BH:21:ASN:CB	2.51	0.55
32:BI:104:ALA:O	32:BI:105:GLN:O	2.25	0.55
32:BI:95:SER:CA	32:BI:98:ILE:CB	2.83	0.55
55:BK:22:PRO:HG2	55:BK:23:PRO:HD2	1.83	0.55
33:BN:23:ALA:O	33:BN:26:VAL:N	2.39	0.55
35:BP:110:GLY:CA	35:BP:129:ALA:HB2	2.35	0.55
35:BP:94:ARG:NE	35:BP:120:LEU:HB2	2.22	0.55
26:BA:637:A:OP2	35:BP:126:SER:CB	2.54	0.55
26:BA:2415:G:H4'	35:BP:51:PHE:HA	1.87	0.55
36:BQ:147:VAL:CG1	36:BQ:148:ASN:N	2.69	0.55
44:BU:55:ARG:O	44:BU:58:ARG:N	2.40	0.55
45:BV:74:TYR:HE2	45:BV:88:GLN:NE2	2.05	0.55
39:BW:89:ALA:HB3	39:BW:92:ARG:H	1.72	0.55
40:BX:7:HIS:HB2	40:BX:8:PRO:HD3	1.87	0.55
41:BY:102:ASP:O	41:BY:108:ARG:HD3	2.05	0.55
41:BY:55:PHE:CB	41:BY:58:GLU:OE2	2.50	0.55
41:BY:51:LEU:CD1	41:BY:97:ARG:CG	2.80	0.55
41:BY:9:LYS:NZ	41:BY:13:ARG:HH22	1.95	0.55
42:BZ:73:LYS:HG3	42:BZ:75:LYS:HE3	1.87	0.55
1:AA:1222:G:P	1:AA:1322:C:C5	3.00	0.55
1:AA:1226:C:N4	16:AM:104:ARG:HG3	2.22	0.55
7:AD:14:ARG:HG2	7:AD:66:ARG:CZ	2.36	0.55
16:AM:44:ARG:HB3	16:AM:46:LYS:HG2	1.88	0.55
2:AV:34:G:H3'	2:AV:35:A:H5''	1.88	0.55
3:AW:29:A:O2'	3:AW:30:G:H5'	2.06	0.55
48:B0:39:ARG:HG2	48:B0:69:PHE:HZ	1.61	0.55
46:B2:28:LEU:HG	46:B2:31:ARG:HH21	1.72	0.55
46:B2:34:GLN:O	46:B2:35:ALA:C	2.44	0.55
49:B4:58:LYS:HD3	49:B4:62:ARG:NH2	2.20	0.55
53:B8:62:LEU:HB2	53:B8:63:PRO:HD2	1.83	0.55
26:BA:2093:G:N3	26:BA:2225:A:N6	2.55	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2349:G:O6	26:BA:2350:C:C4	2.60	0.55
26:BA:2354:G:N3	26:BA:2355:C:C6	2.75	0.55
26:BA:2353:G:C2	26:BA:2364:C:C4	2.88	0.55
26:BA:2460:U:H2'	26:BA:2461:C:H6	1.71	0.55
26:BA:2521:C:C2	26:BA:2522:U:H6	2.14	0.55
26:BA:2533:A:C2'	26:BA:2534:A:H8	2.19	0.55
26:BA:2567:G:C2	26:BA:2568:C:N4	2.74	0.55
26:BA:2693:A:C6	26:BA:2694:G:O6	2.59	0.55
26:BA:282:A:C5	26:BA:360:G:N2	2.75	0.55
26:BA:452:G:OP1	29:BF:52:ALA:HB1	2.06	0.55
26:BA:666:G:H2'	26:BA:667:U:H6	1.72	0.55
27:BD:131:LEU:CG	27:BD:171:VAL:HG21	2.35	0.55
27:BD:172:ILE:HG12	27:BD:182:MET:HG3	1.88	0.55
27:BD:144:GLU:HG3	27:BD:188:ARG:HB2	1.88	0.55
27:BD:208:GLY:HA3	27:BD:211:HIS:CD2	2.42	0.55
28:BE:107:GLU:CG	28:BE:110:ARG:CZ	2.85	0.55
26:BA:2682:U:C1'	28:BE:49:THR:HA	2.37	0.55
29:BF:114:ALA:O	29:BF:115:LEU:C	2.43	0.55
29:BF:27:ARG:O	29:BF:28:SER:C	2.43	0.55
26:BA:451:C:OP1	29:BF:48:SER:HA	2.07	0.55
29:BF:60:SER:HB3	29:BF:69:HIS:CB	2.30	0.55
29:BF:79:ARG:CG	29:BF:79:ARG:O	2.54	0.55
30:BG:140:ARG:O	30:BG:141:VAL:C	2.45	0.55
30:BG:28:GLY:O	30:BG:69:ILE:HD11	2.05	0.55
32:BI:5:PHE:CB	32:BI:17:GLU:O	2.49	0.55
55:BK:114:PRO:O	55:BK:116:LEU:N	2.39	0.55
34:BO:102:VAL:HG12	34:BO:103:ALA:H	1.71	0.55
43:BR:87:TYR:CD1	43:BR:94:TYR:CG	2.93	0.55
44:BU:25:TRP:CB	44:BU:28:ARG:NH1	2.67	0.55
44:BU:61:TRP:O	44:BU:65:ILE:CB	2.53	0.55
45:BV:35:LEU:HG	45:BV:63:HIS:CE1	2.42	0.55
41:BY:15:PRO:HD2	41:BY:18:GLU:OE2	2.07	0.55
41:BY:78:THR:HG22	41:BY:89:ARG:N	2.21	0.55
42:BZ:172:LEU:O	42:BZ:174:PRO:CD	2.55	0.55
42:BZ:45:GLN:CA	42:BZ:45:GLN:NE2	2.69	0.55
1:AA:1276:G:HO2'	1:AA:1282:C:C1'	2.19	0.55
1:AA:1350:A:H62	12:AI:118:LYS:NZ	2.05	0.55
1:AA:175:C:OP1	23:AT:22:ARG:NH1	2.40	0.55
1:AA:436:C:N3	1:AA:437:U:N3	2.54	0.55
7:AD:98:GLU:CD	7:AD:103:ASN:HD21	2.10	0.55
13:AJ:7:LYS:HB3	13:AJ:97:GLU:HB2	1.89	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1220:G:N2	22:AS:54:GLY:HA2	2.16	0.55
2:AV:59:U:O2	2:AV:59:U:C2'	2.55	0.55
48:B0:31:VAL:HG12	48:B0:32:LYS:N	2.21	0.55
47:B3:7:LYS:O	47:B3:54:VAL:CG1	2.54	0.55
51:B6:46:LYS:CA	51:B6:46:LYS:CE	2.84	0.55
26:BA:147:U:H2'	26:BA:148:C:O4'	2.07	0.55
26:BA:153:C:H1'	26:BA:175:G:N2	2.21	0.55
26:BA:2256:G:N1	26:BA:2257:U:N3	2.55	0.55
26:BA:2356:C:O2'	48:B0:17:ASN:ND2	2.39	0.55
26:BA:2371:G:HO2'	51:B6:47:HIS:CE1	2.23	0.55
26:BA:2385:C:O2	26:BA:2385:C:H2'	2.05	0.55
26:BA:2412:A:C3'	26:BA:2413:G:H5'	2.36	0.55
26:BA:2462:U:C4	26:BA:2463:C:C4	2.95	0.55
26:BA:2469:A:H2'	26:BA:2470:G:H5'	1.89	0.55
26:BA:1129:A:N6	26:BA:2491:U:OP1	2.40	0.55
26:BA:2059:A:C5	26:BA:2503:A:N7	2.72	0.55
26:BA:2607:G:C2'	26:BA:2608:G:C5'	2.73	0.55
26:BA:2693:A:N3	26:BA:2694:G:C8	2.75	0.55
26:BA:2807:G:C8	26:BA:2808:U:H5	2.25	0.55
26:BA:2825:C:C6	26:BA:2825:C:C5'	2.73	0.55
26:BA:2880:C:O2	43:BR:93:GLY:HA3	2.07	0.55
26:BA:363(A):A:N3	26:BA:363(A):A:H2'	2.20	0.55
26:BA:645:C:OP2	26:BA:2369:A:O4'	2.25	0.55
27:BD:143:ILE:CD1	27:BD:153:LEU:N	2.68	0.55
29:BF:111:VAL:O	29:BF:115:LEU:N	2.33	0.55
26:BA:449:A:OP1	29:BF:85:LYS:CA	2.55	0.55
31:BH:67:THR:HA	31:BH:70:LEU:CB	2.36	0.55
32:BI:132:LYS:CA	32:BI:138:THR:HG21	2.29	0.55
32:BI:77:VAL:CG1	32:BI:143:VAL:HA	2.37	0.55
33:BN:39:VAL:HG12	33:BN:104:TYR:H	1.71	0.55
33:BN:57:TYR:HB2	33:BN:135:ILE:HG21	1.89	0.55
33:BN:136:SER:CA	33:BN:139:LEU:HD21	2.37	0.55
35:BP:62:ALA:CB	35:BP:104:ASP:O	2.53	0.55
38:BT:42:LEU:O	38:BT:44:ARG:CA	2.55	0.55
44:BU:98:ILE:HB	44:BU:106:PHE:CE1	2.42	0.55
39:BW:11:ARG:O	39:BW:12:ILE:CB	2.55	0.55
41:BY:46:ASP:N	41:BY:62:VAL:HB	2.13	0.55
41:BY:71:VAL:HA	41:BY:93:THR:HG22	1.88	0.55
42:BZ:111:GLY:O	42:BZ:174:PRO:HG3	2.06	0.55
42:BZ:4:THR:O	42:BZ:34:LEU:N	2.40	0.55
1:AA:1253:G:OP1	13:AJ:44:VAL:HB	2.06	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:922:G:H2'	1:AA:923:A:C8	2.41	0.55
1:AA:965:A:OP1	1:AA:1198:G:H5''	2.07	0.55
1:AA:991:U:O2'	1:AA:993:G:H1'	2.07	0.55
48:B0:22:GLY:O	48:B0:23:VAL:C	2.45	0.55
47:B3:19:GLN:OE1	47:B3:19:GLN:N	2.39	0.55
49:B4:63:PHE:O	49:B4:64:GLY:C	2.44	0.55
52:B7:17:GLY:O	52:B7:19:ARG:N	2.39	0.55
52:B7:43:THR:O	52:B7:46:ASP:OD2	2.16	0.55
26:BA:1248:G:H2'	44:BU:2:PRO:O	2.07	0.55
26:BA:1255:U:H5''	26:BA:1256:G:H5''	1.89	0.55
26:BA:1263:U:H4'	50:B5:16:ARG:NH2	2.17	0.55
26:BA:184:C:H2'	26:BA:185:U:C6	2.42	0.55
26:BA:2189:U:O2'	26:BA:2190:G:O4'	2.25	0.55
26:BA:2196:C:H2'	26:BA:2196:C:O2	2.05	0.55
26:BA:2306:C:C6	26:BA:2306:C:H3'	2.41	0.55
26:BA:2603:G:N1	26:BA:2604:U:C4	2.74	0.55
26:BA:265:A:C5	26:BA:428:A:C6	2.94	0.55
26:BA:2657:A:N1	26:BA:2665:A:C8	2.74	0.55
26:BA:2703:C:H2'	26:BA:2704:C:O5'	2.03	0.55
26:BA:2725:A:H2'	26:BA:2726:U:H5''	1.87	0.55
26:BA:2767:C:C4	26:BA:2768:C:C4	2.94	0.55
26:BA:2785:C:O2'	28:BE:100:TRP:CG	2.58	0.55
26:BA:2804:C:C5	26:BA:2805:G:O6	2.44	0.55
26:BA:5:A:C6	26:BA:2899:G:N1	2.75	0.55
26:BA:495:G:H4'	39:BW:57:ASN:HD21	0.74	0.55
26:BA:527:C:H6	26:BA:2779:U:H2'	1.71	0.55
26:BA:59:U:O4'	26:BA:73:A:C5	2.60	0.55
26:BA:931:G:H2'	26:BA:932:G:N9	2.20	0.55
25:BB:15:A:H5'	25:BB:16:G:C8	2.42	0.55
25:BB:95:U:H2'	25:BB:96:G:C8	2.42	0.55
27:BD:143:ILE:CG1	27:BD:153:LEU:CB	2.78	0.55
27:BD:63:ILE:O	27:BD:64:ILE:HG23	2.05	0.55
26:BA:2617:C:H1'	28:BE:245:ARG:CZ	2.37	0.55
29:BF:223:LEU:C	29:BF:225:PRO:N	2.59	0.55
30:BG:19:GLU:HB2	30:BG:135:VAL:HG11	1.88	0.55
31:BH:41:THR:H	31:BH:54:PRO:HG3	1.72	0.55
31:BH:40:MET:CB	31:BH:54:PRO:HG3	2.37	0.55
33:BN:38:VAL:HG12	33:BN:39:VAL:H	1.69	0.55
33:BN:58:GLU:CB	33:BN:61:VAL:HG21	2.37	0.55
34:BO:110:ASP:C	34:BO:111:PHE:CG	2.71	0.55
35:BP:92:ASP:HB3	35:BP:118:LEU:CB	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:49:VAL:HG21	36:BQ:119:ASN:C	2.27	0.55
36:BQ:85:ILE:HA	36:BQ:122:PHE:CA	2.37	0.55
36:BQ:84:ARG:O	36:BQ:85:ILE:HG23	2.07	0.55
43:BR:58:GLY:CA	43:BR:80:PHE:CZ	2.76	0.55
37:BS:83:LEU:CD1	37:BS:83:LEU:H	2.18	0.55
44:BU:24:PHE:CD1	44:BU:28:ARG:HG3	2.42	0.55
40:BX:30:ASP:HB3	40:BX:62:LYS:HB2	1.89	0.55
41:BY:67:LEU:O	41:BY:68:ASP:C	2.45	0.55
41:BY:78:THR:N	41:BY:89:ARG:NE	2.55	0.55
42:BZ:172:LEU:HD21	42:BZ:173:PRO:CG	2.29	0.55
42:BZ:37:LYS:O	42:BZ:41:ARG:HD2	2.06	0.55
1:AA:1074:G:H2'	1:AA:1075:C:O4'	2.07	0.55
1:AA:20:U:O4'	1:AA:572:A:C2	2.60	0.55
1:AA:949:A:H4'	1:AA:1364:U:N3	2.21	0.55
48:B0:68:VAL:O	48:B0:69:PHE:CB	2.54	0.55
46:B2:2:VAL:N	46:B2:4:HIS:HE1	1.82	0.55
52:B7:38:GLY:O	52:B7:39:ARG:CG	2.55	0.55
26:BA:250:G:OP2	53:B8:12:ARG:NH2	2.39	0.55
26:BA:1060:U:OP1	55:BK:74:PRO:CA	2.30	0.55
26:BA:815:C:H5'	26:BA:1224:G:N2	2.22	0.55
26:BA:1303:G:C5'	26:BA:1642:G:H21	2.20	0.55
26:BA:1303:G:H5'	26:BA:1642:G:H21	1.72	0.55
26:BA:120:U:C6	26:BA:150:C:C2	2.94	0.55
26:BA:16:G:O6	26:BA:525:U:C4	2.59	0.55
26:BA:1952:A:N3	34:BO:22:ILE:CD1	2.68	0.55
26:BA:2031:A:N6	26:BA:2498:C:C5	2.75	0.55
26:BA:2354:G:C1'	48:B0:32:LYS:HG2	2.37	0.55
26:BA:2355:C:C4	26:BA:2356:C:C4	2.95	0.55
26:BA:2392:A:N7	26:BA:2393:A:N7	2.54	0.55
26:BA:2472:G:H2'	26:BA:2475:C:C4	2.39	0.55
26:BA:2481:G:O2'	26:BA:2482:G:OP2	2.22	0.55
26:BA:2494:G:C2	26:BA:2495:G:C4	2.93	0.55
26:BA:221:A:N7	26:BA:266:G:N7	2.55	0.55
26:BA:2791:C:O2'	26:BA:2792:G:O4'	2.20	0.55
26:BA:2810:A:O2'	26:BA:2811:G:C5'	2.51	0.55
26:BA:2820:A:O2'	28:BE:207:GLY:O	2.25	0.55
26:BA:545(A):A:OP2	26:BA:1546:C:C4	2.55	0.55
26:BA:72:U:O4'	46:B2:57:LYS:NZ	2.37	0.55
26:BA:857:C:H42	26:BA:920:G:H1	1.55	0.55
25:BB:50:G:OP2	37:BS:74:PRO:HG3	1.95	0.55
28:BE:107:GLU:HG2	28:BE:110:ARG:CZ	2.37	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:190:ASN:C	28:BE:192:ILE:N	2.60	0.55
28:BE:210:THR:HA	28:BE:216:ARG:HH21	1.57	0.55
29:BF:57:PRO:O	29:BF:79:ARG:CB	2.48	0.55
30:BG:29:HIS:O	30:BG:29:HIS:CD2	2.60	0.55
31:BH:115:GLU:O	31:BH:115:GLU:OE1	2.24	0.55
32:BI:7:LYS:HB2	32:BI:12:LYS:HZ2	1.72	0.55
55:BK:93:LYS:CA	55:BK:96:ILE:CG1	2.78	0.55
33:BN:25:GLN:O	33:BN:27:ALA:C	2.45	0.55
34:BO:104:ARG:HH12	34:BO:122:ILE:HA	1.71	0.55
34:BO:66:LYS:H	34:BO:82:ASN:ND2	2.04	0.55
35:BP:120:LEU:CD1	35:BP:120:LEU:C	2.76	0.55
43:BR:18:LEU:O	43:BR:20:LEU:N	2.39	0.55
26:BA:2320:A:C6	37:BS:9:PRO:CG	2.79	0.55
39:BW:66:GLU:O	39:BW:68:ARG:N	2.39	0.55
42:BZ:38:ALA:O	42:BZ:40:ASP:N	2.39	0.55
42:BZ:75:LYS:O	42:BZ:76:ARG:CB	2.55	0.55
1:AA:989:C:C4'	1:AA:1016:A:H2	2.20	0.55
1:AA:1259:C:H42	1:AA:1276:G:H1	1.53	0.55
1:AA:294:U:H2'	1:AA:295:C:C6	2.42	0.55
1:AA:7:G:H1'	1:AA:298:A:C8	2.41	0.55
1:AA:355:C:C4'	1:AA:389:A:OP2	2.55	0.55
1:AA:361(A):C:O2'	1:AA:1362:C:O4'	2.24	0.55
1:AA:48:C:P	1:AA:115:G:OP1	2.65	0.55
1:AA:51:A:H61	1:AA:314:C:H1'	1.72	0.55
1:AA:127:G:H4'	1:AA:635:G:O2'	2.07	0.55
1:AA:749:C:O2	1:AA:749:C:H2'	2.07	0.55
1:AA:939:G:O2'	1:AA:940:C:O4'	2.24	0.55
12:AI:37:PHE:N	12:AI:37:PHE:CD2	2.74	0.55
20:AQ:67:LYS:HA	20:AQ:70:ARG:NH2	2.22	0.55
51:B6:13:GLU:O	51:B6:52:GLU:HA	2.06	0.55
26:BA:1179:C:H2'	26:BA:1180:C:C6	2.42	0.55
26:BA:1609:A:C5	26:BA:1616:A:C2	2.95	0.55
26:BA:1653:G:H5''	26:BA:1653:G:H8	1.72	0.55
26:BA:1899:G:H22	26:BA:1902:C:H41	1.55	0.55
26:BA:2080:G:C6	26:BA:2241:A:N6	2.75	0.55
26:BA:2331:G:H2'	26:BA:2332:U:C1'	2.37	0.55
26:BA:2392:A:N6	26:BA:2393:A:N6	2.54	0.55
26:BA:2414:G:H2'	26:BA:2415:G:C8	2.42	0.55
26:BA:2447:G:N9	26:BA:2500:U:H5	1.95	0.55
26:BA:2051:A:C5	26:BA:2614:A:C5	2.94	0.55
26:BA:2678:C:N4	26:BA:2729:G:H1	2.05	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2737:G:C2	26:BA:2738:A:C8	2.95	0.55
26:BA:1710:C:H4'	26:BA:2858:C:N3	2.21	0.55
26:BA:322:A:N3	26:BA:341:G:N7	2.55	0.55
26:BA:801:G:OP2	29:BF:79:ARG:NH1	2.40	0.55
27:BD:213:LYS:CB	27:BD:215:LYS:CA	2.80	0.55
26:BA:780:G:C6	27:BD:233:ASP:CG	2.80	0.55
28:BE:269:ILE:HA	28:BE:297:LYS:CE	2.37	0.55
29:BF:11:ASN:ND2	29:BF:160:LEU:HD11	2.21	0.55
30:BG:142:ALA:HB2	30:BG:151:ILE:HG13	1.83	0.55
31:BH:100:LYS:HG3	31:BH:100:LYS:O	2.07	0.55
31:BH:32:LEU:HD21	31:BH:34:ARG:HB2	1.89	0.55
26:BA:2748:A:H1'	31:BH:66:THR:HB	1.88	0.55
31:BH:82:TYR:CZ	31:BH:137:LYS:HG2	2.41	0.55
32:BI:122:ARG:C	32:BI:124:LEU:H	2.11	0.55
32:BI:76:THR:CB	32:BI:144:HIS:HE1	2.19	0.55
33:BN:24:SER:OG	33:BN:25:GLN:N	2.40	0.55
34:BO:60:ALA:HB1	34:BO:85:VAL:O	2.07	0.55
43:BR:72:ASP:C	43:BR:76:VAL:HG21	2.27	0.55
37:BS:116:PHE:O	37:BS:120:GLU:OE2	2.25	0.55
37:BS:116:PHE:C	37:BS:120:GLU:OE1	2.41	0.55
37:BS:39:SER:O	37:BS:41:LYS:N	2.40	0.55
38:BT:37:GLU:O	38:BT:38:ASN:C	2.44	0.55
45:BV:78:VAL:CB	45:BV:80:TYR:CD1	2.88	0.55
39:BW:88:ARG:C	39:BW:91:GLY:H	2.10	0.55
40:BX:50:GLU:OE1	40:BX:50:GLU:CA	2.55	0.55
26:BA:294:A:H4'	41:BY:15:PRO:CG	2.37	0.55
42:BZ:106:GLY:N	42:BZ:142:ASN:ND2	2.42	0.55
42:BZ:3:LEU:O	42:BZ:56:VAL:HG22	2.07	0.55
42:BZ:66:VAL:HG23	42:BZ:68:ALA:O	2.07	0.55
1:AA:971:G:P	1:AA:1231:G:H21	2.29	0.54
1:AA:279:A:H4'	1:AA:280:C:OP2	2.06	0.54
1:AA:501:C:H3'	1:AA:501:C:C6	2.42	0.54
15:AL:37:CYS:HA	15:AL:57:LYS:O	2.07	0.54
19:AP:8:ARG:NH1	19:AP:11:SER:O	2.33	0.54
1:AA:278:G:C6	20:AQ:95:TYR:HB3	2.42	0.54
48:B0:86:THR:O	48:B0:87:GLU:C	2.45	0.54
49:B4:41:PRO:CB	49:B4:57:ASP:CG	2.73	0.54
50:B5:42:SER:O	50:B5:43:HIS:ND1	2.40	0.54
51:B6:11:LYS:HZ3	53:B8:35:GLY:H	1.56	0.54
26:BA:1482:U:C1'	26:BA:1512:G:H22	2.20	0.54
26:BA:2075:U:O2'	26:BA:2596:U:N3	2.39	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:215:G:H4'	26:BA:216:A:O5'	2.07	0.54
26:BA:2209:C:N4	26:BA:2215:G:C6	2.73	0.54
26:BA:2281:C:O2'	26:BA:2282:G:P	2.64	0.54
26:BA:2289:G:N2	26:BA:2290:G:C4	2.76	0.54
26:BA:2384:G:C3'	26:BA:2386:C:OP 2	2.55	0.54
26:BA:2400:G:N2	26:BA:2401:U:O2	2.40	0.54
26:BA:2471:C:C2	26:BA:2479:G:N2	2.65	0.54
26:BA:2496:C:N4	26:BA:2497:A:N1	2.55	0.54
26:BA:2517:C:C5	26:BA:2542:A:N7	2.76	0.54
26:BA:2570:G:C3'	26:BA:2571:C:H6	2.17	0.54
26:BA:781:A:H5'	26:BA:782:A:H8	1.73	0.54
25:BB:8:U:H5'	37:BS:37:ARG:NE	2.22	0.54
27:BD:156:ALA:HB1	27:BD:196:ASN:HB3	1.88	0.54
29:BF:81:PRO:O	29:BF:82:GLN:CG	2.55	0.54
2:AV:57:G:H1'	30:BG:56:ARG:HH12	1.68	0.54
30:BG:29:HIS:HE1	30:BG:64:ARG:NH1	1.81	0.54
31:BH:122:ILE:C	31:BH:123:GLU:OE2	2.46	0.54
31:BH:130:ILE:N	31:BH:130:ILE:CD1	2.59	0.54
31:BH:34:ARG:HD2	31:BH:36:PHE:HZ	1.69	0.54
31:BH:85:ALA:CA	31:BH:131:ILE:HG22	2.34	0.54
32:BI:48:GLU:HG3	32:BI:52:GLN:NE2	2.10	0.54
55:BK:104:GLN:O	55:BK:107:GLU:CD	2.46	0.54
55:BK:132:ALA:CB	55:BK:137:ILE:O	2.53	0.54
37:BS:114:LYS:O	37:BS:115:VAL:O	2.24	0.54
44:BU:43:ALA:HA	44:BU:46:GLU:CD	2.28	0.54
44:BU:69:ALA:HA	44:BU:79:PHE:CE2	2.41	0.54
26:BA:974:G:C5	45:BV:80:TYR:CE2	2.95	0.54
39:BW:68:ARG:NE	39:BW:110:LYS:HB3	2.22	0.54
40:BX:40:ALA:N	40:BX:43:GLU:OE1	2.40	0.54
41:BY:103:LEU:HD11	41:BY:113:GLU:CB	2.36	0.54
36:BQ:36:ASN:CG	42:BZ:116:VAL:HG12	2.26	0.54
1:AA:1114:C:O2'	17:AN:60:SER:C	2.44	0.54
1:AA:1314:C:N4	22:AS:4:SER:CB	2.70	0.54
1:AA:160:A:H2'	1:AA:161:A:O4'	2.07	0.54
1:AA:173:U:H5'	1:AA:197:A:H5'	1.88	0.54
1:AA:356:A:C4'	1:AA:388:G:N2	2.70	0.54
1:AA:1324:A:O4'	1:AA:361(A):C:H4'	2.07	0.54
1:AA:529:G:C5	15:AL:49:ASN:ND2	2.75	0.54
8:AE:7:GLU:HB3	8:AE:112:LEU:HD11	1.88	0.54
1:AA:275:G:H5'	20:AQ:14:LYS:HD3	1.89	0.54
46:B2:52:ALA:O	46:B2:56:ILE:HD11	1.85	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:1:MET:O	47:B3:3:ARG:HG3	2.07	0.54
51:B6:42:PRO:HD3	51:B6:50:PHE:CZ	2.42	0.54
26:BA:1612:C:N1	52:B7:3:ARG:NH1	2.55	0.54
54:B9:10:MET:C	54:B9:10:MET:HE3	2.28	0.54
26:BA:1449:A:C5'	26:BA:1528:A:C2	2.86	0.54
26:BA:1792:G:OP1	27:BD:204:PHE:CE1	2.59	0.54
26:BA:1802:A:H61	26:BA:1822:G:H1'	1.72	0.54
26:BA:1805:U:C5'	27:BD:235:PRO:CB	2.85	0.54
26:BA:1912:A:C8	26:BA:1913:A:H1'	2.41	0.54
26:BA:2468:G:O6	26:BA:2481:G:O6	2.19	0.54
26:BA:2610:C:O4'	26:BA:2610:C:OP2	2.25	0.54
26:BA:264:C:C3'	26:BA:265:A:H5''	2.38	0.54
26:BA:2676:C:H2'	26:BA:2677:G:O5'	2.07	0.54
26:BA:2740:A:C2	26:BA:2764:A:N3	2.75	0.54
26:BA:2749:A:H5'	31:BH:62:ALA:HA	1.89	0.54
26:BA:2799:A:O5'	26:BA:2801:A:OP2	2.25	0.54
26:BA:2821:A:C2	26:BA:2822:G:C6	2.89	0.54
26:BA:2853:C:O2'	26:BA:2854:G:H5'	2.08	0.54
26:BA:2864:G:O2'	26:BA:2865:U:C1'	2.54	0.54
26:BA:322:A:N3	26:BA:341:G:C4	2.75	0.54
26:BA:715:G:H8	26:BA:715:G:H5'	1.72	0.54
26:BA:963:U:H1'	26:BA:2250:G:C2	2.29	0.54
26:BA:1818:U:C4'	27:BD:155:ARG:HG2	2.33	0.54
27:BD:209:ASN:O	27:BD:210:LYS:C	2.45	0.54
27:BD:208:GLY:HA3	27:BD:210:LYS:HZ1	1.48	0.54
28:BE:242:ASN:HD22	28:BE:242:ASN:N	2.03	0.54
28:BE:205:THR:N	28:BE:259:HIS:O	2.39	0.54
26:BA:2679:A:H5''	28:BE:261:ARG:HD3	1.88	0.54
28:BE:296:VAL:HG12	28:BE:297:LYS:N	2.22	0.54
28:BE:44:TYR:HA	28:BE:307:LEU:O	2.08	0.54
29:BF:140:VAL:HB	29:BF:235:PHE:C	2.27	0.54
29:BF:238:SER:HA	29:BF:241:ALA:HB2	1.89	0.54
30:BG:25:MET:SD	30:BG:129:ASP:CB	2.91	0.54
31:BH:15:THR:O	31:BH:25:VAL:HA	2.08	0.54
31:BH:80:LYS:O	31:BH:81:GLY:C	2.42	0.54
55:BK:129:GLU:CG	55:BK:133:LYS:CE	2.50	0.54
26:BA:1078:U:OP1	55:BK:93:LYS:HG3	2.07	0.54
33:BN:136:SER:CA	33:BN:139:LEU:HD22	2.38	0.54
36:BQ:32:LYS:NZ	42:BZ:172:LEU:HD13	2.07	0.54
43:BR:104:ARG:CA	43:BR:105:ARG:NH2	2.43	0.54
43:BR:81:ASP:O	43:BR:85:PRO:CD	2.54	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:19:VAL:CG1	45:BV:21:ARG:HH22	2.14	0.54
26:BA:974:G:C6	45:BV:80:TYR:CZ	2.94	0.54
26:BA:814:C:OP1	45:BV:84:THR:HG22	2.07	0.54
39:BW:25:ARG:CG	39:BW:26:GLY:N	2.71	0.54
41:BY:31:LEU:HB3	41:BY:113:GLU:CD	2.27	0.54
41:BY:51:LEU:N	41:BY:51:LEU:CD1	2.61	0.54
1:AA:3(A):G:N7	1:AA:1004:A:H1'	2.23	0.54
1:AA:1227:A:OP1	22:AS:80:TYR:OH	2.20	0.54
1:AA:922:G:N3	1:AA:1398:A:H2	2.05	0.54
1:AA:325:A:H2'	1:AA:326:G:O4'	2.07	0.54
5:AB:103:THR:O	5:AB:104:ASN:CB	2.54	0.54
1:AA:426:G:H4'	7:AD:42:GLN:HA	1.89	0.54
1:AA:15:G:H1'	8:AE:19:MET:SD	2.47	0.54
8:AE:79:GLU:OE2	11:AH:104:ARG:HD3	2.07	0.54
11:AH:111:ILE:HG22	11:AH:134:ILE:HD12	1.89	0.54
14:AK:72:ALA:O	14:AK:77:MET:HB2	2.07	0.54
1:AA:501:C:P	15:AL:124:LYS:HD3	2.47	0.54
1:AA:254:G:H4'	20:AQ:18:THR:OG1	2.07	0.54
48:B0:30:VAL:HG23	48:B0:62:LEU:HB3	1.90	0.54
50:B5:34:PRO:HG3	50:B5:36:CYS:SG	2.41	0.54
26:BA:1612:C:C6	52:B7:3:ARG:NH2	2.76	0.54
53:B8:54:GLU:O	53:B8:55:TRP:C	2.43	0.54
53:B8:54:GLU:O	53:B8:55:TRP:O	2.25	0.54
53:B8:9:MET:HA	53:B8:12:ARG:HG2	1.89	0.54
26:BA:1129:A:C2	26:BA:2570:G:N9	2.74	0.54
26:BA:582:G:H1	26:BA:1258:C:H42	1.55	0.54
26:BA:1264:G:P	50:B5:19:ARG:NH1	2.71	0.54
26:BA:1511:A:H2'	26:BA:1512:G:O4'	2.07	0.54
26:BA:1598:C:H5'	40:BX:34:LYS:CB	2.37	0.54
26:BA:2246:G:N3	26:BA:2247:A:N7	2.56	0.54
26:BA:2321:G:C2'	26:BA:2321:G:N3	2.70	0.54
26:BA:2292:C:N4	26:BA:2340:G:H1	2.04	0.54
26:BA:2510:C:N4	26:BA:2511:U:O4	2.41	0.54
26:BA:2544:G:H2'	26:BA:2545:G:H5'	1.85	0.54
26:BA:2558:C:C2'	26:BA:2559:C:H5'	2.38	0.54
26:BA:2575:C:C5'	26:BA:2576:G:OP2	2.52	0.54
26:BA:2693:A:C2	26:BA:2694:G:C8	2.95	0.54
26:BA:2716:U:C2	26:BA:2717:G:C8	2.96	0.54
26:BA:2759:G:H2'	26:BA:2760:C:C5'	2.38	0.54
26:BA:295:G:OP1	26:BA:338:G:C2	2.61	0.54
26:BA:683:C:N4	26:BA:684:G:O6	2.39	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:13:MET:CE	30:BG:13:MET:HA	2.38	0.54
31:BH:126:SER:O	31:BH:127:GLN:C	2.45	0.54
31:BH:90:GLY:CA	31:BH:159:LYS:CE	2.85	0.54
32:BI:40:THR:O	32:BI:41:PRO:C	2.45	0.54
32:BI:68:LEU:CD2	32:BI:72:LEU:HD21	2.37	0.54
33:BN:15:ARG:CG	33:BN:43:ARG:CB	2.85	0.54
34:BO:66:LYS:H	34:BO:82:ASN:HD22	1.54	0.54
35:BP:115:ARG:O	35:BP:117:GLU:N	2.40	0.54
35:BP:65:ASP:OD1	35:BP:68:GLU:OE1	2.26	0.54
35:BP:96:VAL:HG23	35:BP:101:ASP:N	2.21	0.54
26:BA:910:A:H62	36:BQ:11:LYS:C	2.11	0.54
36:BQ:66:ASN:O	36:BQ:69:ASN:N	2.40	0.54
26:BA:1287:A:N7	43:BR:105:ARG:O	2.40	0.54
43:BR:84:ALA:O	43:BR:87:TYR:HB2	2.07	0.54
37:BS:63:SER:O	37:BS:68:GLU:HA	2.08	0.54
37:BS:76:GLY:C	37:BS:80:SER:O	2.45	0.54
38:BT:6:CYS:O	38:BT:7:ASP:OD2	2.25	0.54
44:BU:28:ARG:CA	44:BU:31:GLN:CB	2.69	0.54
26:BA:1252:G:N2	44:BU:37:GLN:HB2	2.22	0.54
44:BU:78:THR:OG1	44:BU:79:PHE:N	2.39	0.54
39:BW:50:VAL:CG1	39:BW:50:VAL:O	2.54	0.54
26:BA:294:A:H4'	41:BY:15:PRO:HG2	1.88	0.54
41:BY:47:THR:O	41:BY:98:VAL:HA	2.06	0.54
41:BY:74:VAL:HG12	41:BY:77:VAL:CG2	2.19	0.54
41:BY:83:ASP:OD1	41:BY:83:ASP:N	2.40	0.54
41:BY:51:LEU:CD2	41:BY:95:ASN:CB	2.86	0.54
42:BZ:124:ALA:H	42:BZ:159:THR:CG2	2.18	0.54
1:AA:1004:A:H2'	1:AA:1036:G:O6	2.08	0.54
1:AA:1329:A:OP1	16:AM:26:GLY:O	2.25	0.54
1:AA:695:A:H2'	1:AA:696:A:C8	2.42	0.54
1:AA:953:G:H1'	16:AM:125:ARG:CA	2.37	0.54
5:AB:164:VAL:HG21	5:AB:170:GLU:HB3	1.89	0.54
5:AB:96:ARG:H	5:AB:96:ARG:HD2	1.72	0.54
6:AC:150:LYS:HE3	6:AC:167:TRP:HE1	1.71	0.54
6:AC:188:LEU:HD12	6:AC:190:ARG:HG3	1.89	0.54
8:AE:15:ARG:HG2	8:AE:28:PHE:CD2	2.43	0.54
13:AJ:6:ILE:HG22	13:AJ:98:ILE:HG12	1.88	0.54
14:AK:57:THR:HG23	14:AK:60:ALA:H	1.72	0.54
15:AL:100:ILE:HD13	15:AL:100:ILE:H	1.72	0.54
1:AA:1308:U:H5''	16:AM:110:ARG:NH2	2.15	0.54
20:AQ:11:VAL:HB	20:AQ:88:TYR:CD2	2.41	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:279:A:C8	20:AQ:95:TYR:CE2	2.96	0.54
23:AT:41:VAL:O	23:AT:45:GLN:HB2	2.07	0.54
3:AW:72:C:H2'	3:AW:73:A:C8	2.43	0.54
46:B2:27:LEU:O	46:B2:28:LEU:C	2.45	0.54
49:B4:23:GLU:O	49:B4:26:SER:O	2.25	0.54
26:BA:400:G:H1	49:B4:63:PHE:HE1	1.55	0.54
51:B6:28:ARG:HB2	51:B6:28:ARG:HH11	1.66	0.54
52:B7:30:ILE:N	52:B7:33:ARG:HG3	2.23	0.54
54:B9:18:ARG:HA	54:B9:22:ARG:O	2.07	0.54
26:BA:1264:G:O6	26:BA:1265:A:N6	2.41	0.54
26:BA:1472:A:C2'	26:BA:1473:G:C8	2.86	0.54
26:BA:1632:A:H8	26:BA:1632:A:O5'	1.90	0.54
26:BA:2067:G:C2	26:BA:2444:G:C4	2.96	0.54
26:BA:2281:C:OP2	26:BA:2281:C:H6	1.90	0.54
26:BA:2299:G:C6	26:BA:2300:G:O6	2.61	0.54
26:BA:2334:G:H5'	37:BS:12:ARG:O	2.07	0.54
26:BA:2414:G:C4	26:BA:2415:G:H8	2.18	0.54
26:BA:2436:G:C6	26:BA:2437:U:N3	2.76	0.54
26:BA:2479:G:C6	26:BA:2480:C:N3	2.75	0.54
26:BA:2623:G:C2	26:BA:2624:G:C4	2.94	0.54
26:BA:2644:G:N1	26:BA:2645:G:C2	2.76	0.54
26:BA:2690:C:C2'	26:BA:2691:C:OP2	2.56	0.54
26:BA:2698:U:N3	26:BA:2699:C:H5	1.88	0.54
26:BA:2725:A:N1	26:BA:2727:G:H1'	2.22	0.54
26:BA:2734:A:C5'	26:BA:2735:G:OP2	2.55	0.54
26:BA:2839:G:H21	26:BA:2840:C:H1'	1.73	0.54
26:BA:2862:G:HO2'	26:BA:2863:C:C1'	2.21	0.54
26:BA:286:C:H2'	26:BA:287:C:C5'	2.37	0.54
27:BD:140:VAL:HA	27:BD:191:VAL:HA	1.89	0.54
29:BF:144:PHE:C	29:BF:146:ASP:N	2.46	0.54
29:BF:163:HIS:CD2	29:BF:166:ILE:HD11	2.41	0.54
30:BG:56:ARG:C	30:BG:63:ILE:HG13	2.28	0.54
31:BH:143:LEU:CG	31:BH:144:ALA:N	2.70	0.54
32:BI:7:LYS:HB2	32:BI:12:LYS:HD3	1.77	0.54
55:BK:132:ALA:O	55:BK:137:ILE:N	2.40	0.54
33:BN:21:ARG:CA	33:BN:24:SER:CB	2.84	0.54
33:BN:15:ARG:CG	33:BN:43:ARG:HB3	2.30	0.54
35:BP:92:ASP:HB3	35:BP:118:LEU:CG	2.34	0.54
36:BQ:58:HIS:C	36:BQ:59:ASN:HD22	2.10	0.54
43:BR:64:ARG:HG2	43:BR:65:LEU:N	2.22	0.54
37:BS:106:LEU:O	37:BS:107:ASN:C	2.45	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:110:THR:O	37:BS:116:PHE:CD1	2.61	0.54
37:BS:40:ASN:CA	37:BS:114:LYS:NZ	2.46	0.54
38:BT:5:GLU:O	38:BT:8:TYR:C	2.45	0.54
44:BU:70:ARG:HA	44:BU:74:MET:O	2.08	0.54
44:BU:74:MET:HE2	44:BU:78:THR:CB	2.35	0.54
44:BU:7:GLY:CA	44:BU:8:ILE:CD1	2.80	0.54
45:BV:40:VAL:CA	45:BV:51:ALA:CA	2.84	0.54
44:BU:88:ILE:HG22	45:BV:52:GLY:HA2	1.90	0.54
45:BV:74:TYR:CE1	45:BV:86:HIS:C	2.80	0.54
39:BW:8:ARG:HG3	39:BW:102:HIS:HE1	1.56	0.54
40:BX:22:ASN:C	40:BX:68:LEU:HD11	2.27	0.54
40:BX:23:LYS:O	40:BX:68:LEU:HD22	2.05	0.54
41:BY:47:THR:HG22	41:BY:100:ASP:O	2.07	0.54
42:BZ:140:LYS:N	42:BZ:141:MET:SD	2.80	0.54
1:AA:1127:G:H2'	1:AA:1128:C:C6	2.42	0.54
1:AA:1054:C:H1'	1:AA:1196:U:C5	2.41	0.54
1:AA:1263:C:H42	1:AA:1272:G:H1	1.55	0.54
1:AA:1354:C:H2'	1:AA:1355:G:C8	2.43	0.54
1:AA:436:C:C4	1:AA:437:U:C4	2.94	0.54
1:AA:761:G:O2'	20:AQ:104:LYS:HA	2.07	0.54
1:AA:427:U:C5'	7:AD:41:GLY:HA2	2.28	0.54
12:AI:37:PHE:HD2	12:AI:37:PHE:N	2.05	0.54
16:AM:14:ARG:HA	16:AM:44:ARG:HA	1.89	0.54
19:AP:4:ILE:HG12	19:AP:21:VAL:HG13	1.88	0.54
1:AA:1353:G:P	24:AU:10:ARG:CZ	2.93	0.54
2:AV:56:C:C5	2:AV:57:G:C6	2.96	0.54
2:AV:7:U:O3'	2:AV:8:U:P	2.65	0.54
49:B4:39:VAL:O	49:B4:39:VAL:CG1	2.55	0.54
53:B8:16:ILE:N	53:B8:16:ILE:CD1	2.64	0.54
26:BA:650:C:P	53:B8:19:THR:CG2	2.95	0.54
54:B9:7:VAL:HG13	54:B9:34:GLN:HG3	1.76	0.54
26:BA:1022:G:N2	26:BA:1140:C:C2	2.76	0.54
26:BA:1497:U:H3	26:BA:1577:C:H4'	1.73	0.54
26:BA:1610:A:OP1	26:BA:1611:C:H5	1.90	0.54
26:BA:1819:A:C4	27:BD:177:SER:HB3	2.43	0.54
26:BA:2094:G:N1	26:BA:2196:C:C4	2.66	0.54
26:BA:2218:G:N3	26:BA:2219:G:C8	2.75	0.54
26:BA:2466:C:C4	26:BA:2467:C:N4	2.75	0.54
26:BA:2484:G:N3	26:BA:2485:G:O4'	2.41	0.54
26:BA:2529:G:H5''	26:BA:2530:A:H5''	1.88	0.54
26:BA:2589:A:C5	26:BA:2590:A:C8	2.93	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2641:G:N1	26:BA:2774:C:C4	2.76	0.54
26:BA:2544:G:C4'	26:BA:2645:G:C8	2.91	0.54
26:BA:2694:G:C6	26:BA:2695:C:C4	2.96	0.54
26:BA:2736:G:N1	26:BA:2769:C:C4	2.75	0.54
26:BA:2821:A:H2'	26:BA:2822:G:N9	2.22	0.54
26:BA:2854:G:N1	26:BA:2864:G:C5	2.72	0.54
26:BA:2871:C:H2'	26:BA:2871:C:O2	2.08	0.54
27:BD:174:ARG:HD3	27:BD:180:VAL:HG22	1.88	0.54
28:BE:71:THR:CG2	28:BE:299:SER:OG	2.31	0.54
28:BE:311:PHE:C	28:BE:312:ARG:HG3	2.27	0.54
28:BE:44:TYR:HE1	28:BE:308:VAL:CG1	2.18	0.54
29:BF:37:ALA:CB	29:BF:102:LEU:CG	2.86	0.54
29:BF:200:PRO:CB	29:BF:205:ARG:HD3	2.37	0.54
29:BF:150:THR:CG2	29:BF:207:LEU:HD21	2.38	0.54
31:BH:40:MET:HA	31:BH:54:PRO:CB	2.37	0.54
32:BI:2:LYS:CD	32:BI:39:ALA:CB	2.82	0.54
26:BA:1140:C:C5	33:BN:49:ARG:HD2	2.37	0.54
34:BO:66:LYS:HZ1	34:BO:67:ARG:NE	2.03	0.54
35:BP:132:LYS:O	35:BP:135:GLY:CA	2.55	0.54
43:BR:59:ASP:N	43:BR:80:PHE:HE2	2.04	0.54
37:BS:92:ALA:C	37:BS:94:GLU:H	2.10	0.54
38:BT:20:MET:CB	38:BT:30:HIS:HA	2.37	0.54
44:BU:14:HIS:CG	44:BU:36:PHE:CZ	2.94	0.54
44:BU:41:ASN:CG	44:BU:42:ALA:H	2.07	0.54
44:BU:92:ARG:O	44:BU:95:LEU:CD1	2.52	0.54
44:BU:94:VAL:HG13	45:BV:13:ARG:HG2	1.89	0.54
45:BV:50:ASP:CB	45:BV:53:LYS:H	2.21	0.54
39:BW:78:GLU:OE1	39:BW:99:ARG:NE	2.40	0.54
41:BY:70:ALA:O	41:BY:71:VAL:CG2	2.54	0.54
42:BZ:52:PHE:O	42:BZ:53:ASP:CB	2.53	0.54
1:AA:1239:A:H62	1:AA:1299:A:N6	2.05	0.54
1:AA:975:A:C4	1:AA:1357:A:C2	2.95	0.54
1:AA:1315:U:O2'	1:AA:1360:A:C2'	2.55	0.54
1:AA:1372:U:H2'	1:AA:1373:G:O4'	2.08	0.54
5:AB:18:GLY:HA3	5:AB:41:ILE:HA	1.90	0.54
6:AC:70:VAL:HG12	6:AC:72:LYS:H	1.73	0.54
9:AF:76:ALA:HB1	9:AF:80:ARG:HH21	1.71	0.54
1:AA:1307:U:H4'	16:AM:109:THR:CG2	2.38	0.54
16:AM:94:ARG:H	16:AM:95:GLY:N	2.02	0.54
13:AJ:64:GLU:CB	17:AN:59:ALA:HB2	2.37	0.54
1:AA:625:G:H4'	19:AP:16:HIS:CG	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:3:LEU:HD22	46:B2:8:ILE:CD1	2.38	0.54
47:B3:38:GLU:O	47:B3:39:ASP:C	2.45	0.54
53:B8:36:LYS:HE2	53:B8:40:GLU:CD	2.27	0.54
26:BA:1024:G:N7	26:BA:1025:G:N7	2.55	0.54
26:BA:1254:A:N7	26:BA:1256:G:N9	2.56	0.54
26:BA:1395:A:P	26:BA:1603:A:H5'	2.48	0.54
26:BA:1677:A:H2'	26:BA:1678:G:C8	2.43	0.54
26:BA:2100:G:C5	26:BA:2190:G:C2	2.95	0.54
26:BA:2299:G:C4	26:BA:2300:G:N7	2.76	0.54
26:BA:2330:G:C3'	26:BA:2331:G:H5'	2.38	0.54
26:BA:2386:C:O2'	26:BA:2387:U:O5'	2.26	0.54
26:BA:2415:G:C4	26:BA:2416:C:C5	2.92	0.54
26:BA:2533:A:C2'	26:BA:2534:A:C8	2.90	0.54
26:BA:265:A:C5	26:BA:428:A:N6	2.75	0.54
26:BA:86:C:OP1	41:BY:68:ASP:CG	2.45	0.54
28:BE:39:GLN:OE1	28:BE:174:LEU:HD11	1.96	0.54
28:BE:181:VAL:CG1	28:BE:181:VAL:O	2.55	0.54
28:BE:42:ALA:N	28:BE:189:MET:HE1	2.02	0.54
28:BE:211:GLN:N	28:BE:216:ARG:NE	2.40	0.54
29:BF:201:SER:CB	29:BF:204:ALA:HB3	2.38	0.54
29:BF:243:VAL:CA	29:BF:246:ARG:CG	2.83	0.54
30:BG:81:GLU:C	30:BG:85:GLN:HG2	2.15	0.54
30:BG:97:GLN:CB	30:BG:106:PHE:CZ	2.88	0.54
31:BH:108:TYR:O	31:BH:109:SER:CB	2.47	0.54
31:BH:85:ALA:C	31:BH:131:ILE:HG22	2.26	0.54
33:BN:12:VAL:HB	33:BN:38:VAL:HG21	1.87	0.54
26:BA:2041:U:C5'	33:BN:70:PHE:HE1	2.19	0.54
33:BN:93:ARG:O	33:BN:94:GLY:O	2.25	0.54
26:BA:1665:A:H1'	34:BO:67:ARG:HD2	1.89	0.54
25:BB:89(A):A:H2	36:BQ:52:LYS:NZ	2.00	0.54
43:BR:55:ALA:HB1	43:BR:79:LEU:HD21	1.86	0.54
43:BR:77:ARG:C	43:BR:81:ASP:OD1	2.45	0.54
37:BS:121:GLY:O	37:BS:122:ALA:C	2.43	0.54
45:BV:72:ARG:O	45:BV:88:GLN:N	2.40	0.54
40:BX:19:ASP:OD1	40:BX:20:PHE:CG	2.57	0.54
42:BZ:40:ASP:CB	42:BZ:41:ARG:NH2	2.70	0.54
1:AA:105:G:H2'	1:AA:106:C:C6	2.42	0.54
1:AA:1315:U:H3	1:AA:1319:A:H62	1.54	0.54
1:AA:436:C:C2	1:AA:437:U:C2	2.96	0.54
1:AA:640:A:H2'	11:AH:115:SER:OG	2.08	0.54
1:AA:691:G:O6	14:AK:55:LYS:HE3	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AC:18:TRP:CD1	17:AN:54:PRO:CA	2.86	0.54
7:AD:101:LEU:HD13	7:AD:138:TYR:HD2	1.72	0.54
10:AG:71:PRO:HA	10:AG:138:LYS:HE3	1.90	0.54
1:AA:562:C:H1'	15:AL:15:ARG:CD	2.36	0.54
18:AO:82:ILE:O	18:AO:86:GLY:N	2.34	0.54
3:AW:37:YYG:C19	10:AG:79:ARG:HG2	2.38	0.54
48:B0:30:VAL:O	48:B0:31:VAL:CG2	2.55	0.54
47:B3:8:LEU:HD23	47:B3:31:LEU:CG	2.38	0.54
49:B4:23:GLU:HA	49:B4:27:THR:O	2.07	0.54
26:BA:180:G:OP1	52:B7:32:ALA:HB1	2.07	0.54
26:BA:1031:G:O2'	54:B9:8:LYS:HE2	2.07	0.54
26:BA:630(A):C:H3'	26:BA:1631:A:OP2	2.08	0.54
26:BA:2054:A:C2	26:BA:2616:C:N3	2.76	0.54
26:BA:2208:U:C2	26:BA:2217:G:C2	2.95	0.54
26:BA:2285:C:H5'	26:BA:2288:A:H61	1.73	0.54
26:BA:2297:C:C4	26:BA:2333:A:N6	2.67	0.54
26:BA:2308:G:C5'	26:BA:2309:A:OP1	2.55	0.54
26:BA:792:G:C5	26:BA:2440:C:N1	2.76	0.54
26:BA:2458:G:C5	26:BA:2490:G:N3	2.74	0.54
26:BA:2654:A:O5'	26:BA:2654:A:H8	1.90	0.54
26:BA:2679:A:H5''	28:BE:261:ARG:CD	2.37	0.54
26:BA:2697:G:C4	26:BA:2698:U:C6	2.96	0.54
26:BA:2705:A:N6	26:BA:2706:G:N1	2.55	0.54
26:BA:2748:A:O2'	31:BH:62:ALA:O	2.25	0.54
26:BA:2793:G:C2	26:BA:2794:C:N3	2.75	0.54
26:BA:2889:C:H2'	26:BA:2891:G:O4'	2.06	0.54
26:BA:299:A:O2'	26:BA:319:C:H4'	2.08	0.54
26:BA:67:U:H2'	26:BA:68:G:H8	1.73	0.54
27:BD:154:VAL:HA	27:BD:157:ALA:HB3	1.89	0.54
28:BE:79:ARG:HA	28:BE:186:GLU:N	2.23	0.54
29:BF:157:LEU:HB2	29:BF:158:GLU:OE1	2.06	0.54
31:BH:101:LYS:NZ	31:BH:115:GLU:CG	2.60	0.54
31:BH:121:GLU:CG	31:BH:133:LYS:O	2.54	0.54
31:BH:168:VAL:O	31:BH:169:ARG:CD	2.54	0.54
32:BI:6:LEU:HB2	32:BI:36:ALA:CA	2.36	0.54
33:BN:65:ASN:HB2	33:BN:69:TYR:HD1	0.53	0.54
26:BA:2780:G:N2	33:BN:80:LYS:HZ1	2.04	0.54
34:BO:90:ASP:O	34:BO:92:SER:HB3	2.08	0.54
36:BQ:129:ASP:CG	36:BQ:132:VAL:CG2	2.76	0.54
43:BR:74:LYS:N	43:BR:77:ARG:NH2	2.55	0.54
44:BU:23:GLY:O	44:BU:24:PHE:O	2.25	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:41:ASN:O	44:BU:43:ALA:N	2.40	0.54
45:BV:5:ILE:CD1	45:BV:12:TYR:OH	2.56	0.54
39:BW:68:ARG:O	39:BW:110:LYS:CB	2.54	0.54
41:BY:46:ASP:OD1	41:BY:98:VAL:HG13	2.07	0.54
41:BY:55:PHE:CZ	41:BY:89:ARG:NE	2.63	0.54
1:AA:1182:G:O2'	1:AA:1183:A:P	2.65	0.54
1:AA:1306:A:H61	1:AA:1331:G:H1'	1.73	0.54
1:AA:766:A:H61	1:AA:1511:G:H1'	1.72	0.54
7:AD:98:GLU:O	7:AD:100:ARG:N	2.41	0.54
8:AE:152:ARG:HA	11:AH:64:LYS:HZ1	1.73	0.54
14:AK:121:PRO:HB2	14:AK:125:PHE:HB2	1.89	0.54
47:B3:21:ALA:C	47:B3:23:LEU:N	2.61	0.54
49:B4:6:HIS:CE1	49:B4:55:ARG:CB	2.91	0.54
49:B4:68:ARG:NH1	49:B4:72:LYS:HD3	2.22	0.54
26:BA:771:G:OP1	52:B7:14:LYS:CD	2.53	0.54
52:B7:21:ARG:CZ	52:B7:43:THR:HG21	2.30	0.54
26:BA:148:C:C2	26:BA:149:A:C5	2.96	0.54
26:BA:1799:G:N2	27:BD:153:LEU:CD1	2.67	0.54
26:BA:2252:G:C5	26:BA:2253:G:N7	2.76	0.54
26:BA:2322:A:N3	26:BA:2323:G:C5'	2.67	0.54
26:BA:2349:G:N3	26:BA:2369:A:C2	2.75	0.54
26:BA:2373:G:C4	26:BA:2374:C:C4	2.96	0.54
26:BA:2376:A:C2	26:BA:2377:A:C4	2.96	0.54
26:BA:2412:A:H2'	26:BA:2413:G:C5'	2.31	0.54
26:BA:2543:G:C1'	26:BA:2544:G:C8	2.91	0.54
26:BA:285:C:H42	26:BA:354:G:N2	2.05	0.54
26:BA:388:G:OP2	49:B4:29:PRO:HD3	2.08	0.54
26:BA:514:A:H4'	44:BU:32:TYR:OH	2.08	0.54
26:BA:617:G:H2'	26:BA:618:G:C8	2.43	0.54
28:BE:205:THR:OG1	28:BE:258:TYR:CA	2.56	0.54
26:BA:2679:A:H5''	28:BE:261:ARG:NE	2.22	0.54
28:BE:300:VAL:N	28:BE:301:PRO:CD	2.70	0.54
28:BE:44:TYR:CE1	28:BE:308:VAL:HG13	2.36	0.54
29:BF:106:GLU:O	29:BF:107:ARG:C	2.44	0.54
55:BK:97:VAL:CA	55:BK:99:LYS:NZ	2.64	0.54
33:BN:25:GLN:HG2	33:BN:28:GLU:HG3	1.90	0.54
33:BN:25:GLN:O	33:BN:27:ALA:N	2.40	0.54
33:BN:52:GLN:HA	33:BN:55:GLU:OE2	1.97	0.54
33:BN:69:TYR:O	33:BN:71:TYR:HD1	1.90	0.54
36:BQ:64:ALA:HB2	36:BQ:142:LYS:HD3	1.90	0.54
26:BA:2296:U:H3	37:BS:16:ALA:HB2	1.69	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:18:THR:OG1	37:BS:19:ASP:N	2.40	0.54
38:BT:10:GLY:HA3	38:BT:53:ASP:CG	2.28	0.54
36:BQ:36:ASN:HD21	42:BZ:116:VAL:HB	1.73	0.54
42:BZ:92:VAL:HG13	42:BZ:124:ALA:HB3	1.79	0.54
1:AA:1286:A:H2	24:AU:18:TYR:OH	1.82	0.54
1:AA:405:U:O4	7:AD:2:GLY:N	2.41	0.54
1:AA:621:A:H2'	1:AA:622:A:C8	2.43	0.54
1:AA:642:A:C2	11:AH:113:SER:O	2.61	0.54
6:AC:178:LEU:O	6:AC:179:ARG:CB	2.56	0.54
7:AD:21:LEU:CD1	7:AD:67:ILE:HA	2.35	0.54
9:AF:46:ARG:HH12	21:AR:37:VAL:HG11	1.73	0.54
12:AI:96:LEU:HG	12:AI:101:PHE:HB2	1.90	0.54
1:AA:247:G:OP2	20:AQ:99:SER:HA	2.05	0.54
2:AV:11:C:H4'	26:BA:1909:C:O2'	2.08	0.54
48:B0:39:ARG:O	48:B0:40:GLN:C	2.45	0.54
48:B0:64:ASP:C	48:B0:66:LYS:NZ	2.61	0.54
47:B3:8:LEU:HD23	47:B3:31:LEU:CB	2.34	0.54
49:B4:59:PHE:HA	49:B4:62:ARG:HD2	1.90	0.54
51:B6:45:LYS:C	51:B6:46:LYS:CE	2.65	0.54
26:BA:2421:G:OP1	51:B6:4:ASP:OD1	2.25	0.54
53:B8:7:HIS:C	53:B8:10:ALA:HB3	2.21	0.54
26:BA:1034:G:H5'	54:B9:18:ARG:HE	1.70	0.54
26:BA:1255:U:H5''	26:BA:1256:G:C5'	2.38	0.54
26:BA:747:U:C2	26:BA:2015:A:C2	2.96	0.54
26:BA:221:A:O2'	26:BA:271(A):C:O2	2.25	0.54
26:BA:2270:G:O6	26:BA:2271:G:N2	2.39	0.54
26:BA:2322:A:N6	26:BA:2323:G:C4	2.75	0.54
26:BA:2411:A:H2'	26:BA:2412:A:C8	2.43	0.54
26:BA:197:A:C6	26:BA:2430:A:N7	2.75	0.54
26:BA:2557:G:C4	26:BA:2558:C:H5	2.26	0.54
26:BA:2515:C:H41	26:BA:2569:G:H1	1.38	0.54
26:BA:2741:A:N3	26:BA:2742:C:C1'	2.71	0.54
26:BA:27:G:N2	26:BA:512:G:H2'	2.23	0.54
26:BA:2881:C:H6	26:BA:2881:C:H3'	1.72	0.54
26:BA:780:G:H2'	26:BA:782:A:N7	2.22	0.54
26:BA:801:G:O4'	29:BF:80:VAL:CG2	2.55	0.54
25:BB:40:U:C3'	25:BB:41:U:H5'	2.34	0.54
27:BD:77:VAL:CG2	27:BD:113:MET:HA	2.26	0.54
27:BD:148:GLY:C	27:BD:150:GLY:N	2.49	0.54
26:BA:1819:A:C2'	27:BD:177:SER:CB	2.73	0.54
27:BD:68:ARG:NH2	27:BD:190:THR:CG2	2.71	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:58:ALA:CB	29:BF:79:ARG:CB	2.86	0.54
31:BH:86:LEU:HD23	31:BH:148:ARG:NE	2.23	0.54
33:BN:45:VAL:CA	33:BN:132:LEU:HB2	2.28	0.54
33:BN:80:LYS:C	33:BN:84:ARG:HG3	2.25	0.54
33:BN:94:GLY:O	33:BN:97:ALA:CA	2.54	0.54
44:BU:14:HIS:CD2	44:BU:36:PHE:HE2	2.25	0.54
45:BV:75:LYS:CE	45:BV:75:LYS:HA	2.38	0.54
39:BW:36:LEU:CD1	39:BW:47:VAL:CB	2.85	0.54
40:BX:6:LYS:HZ2	40:BX:28:VAL:C	2.11	0.54
40:BX:28:VAL:C	40:BX:30:ASP:N	2.60	0.54
26:BA:294:A:H4'	41:BY:15:PRO:CD	2.37	0.54
41:BY:80:GLU:HG2	41:BY:86:GLU:HA	1.89	0.54
1:AA:1329:A:O3'	16:AM:25:ILE:N	2.41	0.54
1:AA:1358:U:OP1	17:AN:34:TYR:HA	2.07	0.54
1:AA:1418:A:N7	1:AA:1419:G:H1'	2.23	0.54
1:AA:397:A:N7	1:AA:548:G:C8	2.75	0.54
1:AA:903:G:OP1	1:AA:1512:U:OP1	2.27	0.54
7:AD:30:LYS:C	7:AD:32:ALA:N	2.61	0.54
13:AJ:84:GLN:HA	13:AJ:88:LEU:HD12	1.90	0.54
3:AW:65:G:N1	3:AW:66:A:C8	2.64	0.54
47:B3:8:LEU:CB	47:B3:32:GLN:HA	2.35	0.54
52:B7:21:ARG:NH1	52:B7:43:THR:H	1.98	0.54
26:BA:1024:G:C5'	26:BA:1025:G:H5''	2.36	0.54
26:BA:1906:G:C1'	26:BA:1929:G:N7	2.71	0.54
26:BA:2183:C:H2'	26:BA:2184:G:C8	2.40	0.54
26:BA:2185:C:N3	26:BA:2186:G:N7	2.56	0.54
26:BA:2225:A:H5'	26:BA:2226:C:H5'	1.79	0.54
26:BA:2320:A:C2	37:BS:13:ARG:HG3	2.43	0.54
26:BA:2344:U:O2'	26:BA:2345:G:C5'	2.56	0.54
26:BA:2452:C:C4	26:BA:2453:A:C6	2.96	0.54
26:BA:2454:G:N3	26:BA:2455:G:C1'	2.70	0.54
26:BA:2589:A:C3'	26:BA:2590:A:H5''	2.35	0.54
26:BA:2023:G:C5'	26:BA:2618:G:OP1	2.53	0.54
26:BA:2623:G:C2	26:BA:2624:G:N9	2.75	0.54
26:BA:2666:C:H2'	26:BA:2667:C:C5'	2.38	0.54
26:BA:2687:U:H5''	26:BA:2688:U:OP2	2.07	0.54
26:BA:2744:G:H1'	26:BA:2761:G:N2	2.23	0.54
26:BA:2758:A:O2'	26:BA:2759:G:O5'	2.26	0.54
26:BA:2899:G:O2'	26:BA:2900:A:H8	1.91	0.54
26:BA:464:U:O4'	52:B7:12:ARG:NH2	2.41	0.54
26:BA:624:C:H2'	26:BA:657:U:OP1	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:830:G:N9	26:BA:2448:A:N7	2.55	0.54
27:BD:141:HIS:ND1	27:BD:141:HIS:N	2.56	0.54
27:BD:131:LEU:CB	27:BD:171:VAL:HG21	2.37	0.54
27:BD:90:ILE:CG2	27:BD:103:ILE:N	2.68	0.54
28:BE:203:GLY:HA3	28:BE:303:PRO:HD2	1.86	0.54
28:BE:71:THR:HG23	28:BE:299:SER:CA	2.33	0.54
28:BE:47:GLY:HA3	28:BE:305:LYS:HE2	1.89	0.54
29:BF:33:LYS:O	29:BF:36:ARG:CG	2.56	0.54
32:BI:102:LEU:HD11	32:BI:103:GLN:HG3	1.88	0.54
32:BI:7:LYS:CB	32:BI:12:LYS:HZ2	2.21	0.54
26:BA:1140:C:N4	33:BN:49:ARG:NH1	2.56	0.54
34:BO:34:ASN:C	34:BO:35:ILE:O	2.41	0.54
43:BR:116:LEU:O	43:BR:117:VAL:C	2.45	0.54
37:BS:34:LEU:HD12	37:BS:103:ASP:HB3	1.88	0.54
38:BT:49:LEU:C	38:BT:49:LEU:CD2	2.63	0.54
38:BT:50:GLU:HG3	38:BT:55:ALA:HB1	1.89	0.54
44:BU:115:ASN:ND2	44:BU:115:ASN:N	2.52	0.54
45:BV:12:TYR:CD2	45:BV:13:ARG:N	2.70	0.54
45:BV:93:ILE:C	45:BV:95:ILE:CD1	2.77	0.54
39:BW:25:ARG:O	39:BW:26:GLY:C	2.46	0.54
39:BW:29:LEU:C	39:BW:31:GLU:N	2.57	0.54
26:BA:1340:U:H6	40:BX:55:GLN:HE22	1.42	0.54
41:BY:18:GLU:HB3	41:BY:21:LYS:HZ1	1.67	0.54
41:BY:11:GLN:CB	41:BY:21:LYS:HE3	2.38	0.54
42:BZ:112:LEU:CD1	42:BZ:177:THR:HG21	2.38	0.54
42:BZ:37:LYS:O	42:BZ:41:ARG:NE	2.40	0.54
42:BZ:48:THR:CG2	42:BZ:48:THR:O	2.49	0.54
1:AA:1504:G:H3'	1:AA:1504:G:P	2.48	0.53
1:AA:121:C:H41	1:AA:235:C:H3'	1.72	0.53
1:AA:263:A:H2'	1:AA:264:U:H5'	1.90	0.53
1:AA:345:C:H4'	1:AA:346:G:O5'	2.07	0.53
3:AW:25:C:H6	3:AW:26:G:N7	1.96	0.53
48:B0:20:TYR:O	48:B0:21:LEU:C	2.46	0.53
48:B0:45:PHE:HD1	48:B0:78:PHE:HA	1.53	0.53
26:BA:94:G:O3'	46:B2:41:GLU:CD	2.46	0.53
47:B3:29:ARG:O	47:B3:30:ARG:O	2.25	0.53
49:B4:28:ARG:HB3	49:B4:29:PRO:HD2	1.90	0.53
50:B5:13:LYS:O	50:B5:16:ARG:HB2	2.07	0.53
53:B8:50:LEU:CG	53:B8:51:ALA:H	2.06	0.53
26:BA:1034:G:C5'	54:B9:18:ARG:CZ	2.85	0.53
26:BA:1076:C:C5'	55:BK:94:ARG:NH2	2.71	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1743:G:C3'	26:BA:1746:G:H5'	2.37	0.53
26:BA:2043:C:N4	26:BA:2777:G:C2	2.76	0.53
26:BA:2205:C:H6	26:BA:2205:C:O5'	1.90	0.53
26:BA:2561:A:C4	26:BA:2562:U:H6	2.25	0.53
26:BA:2589:A:N6	26:BA:2590:A:N6	2.56	0.53
26:BA:2681:C:H5	26:BA:2727:G:C2	2.20	0.53
26:BA:1629:U:O2	26:BA:2698:U:H4'	2.08	0.53
26:BA:2781:A:H5'	26:BA:2782:G:O4'	2.08	0.53
26:BA:2842:G:H2'	26:BA:2843:G:O4'	2.07	0.53
26:BA:2898:U:N3	26:BA:2899:G:C8	2.76	0.53
26:BA:391:G:H2'	26:BA:392:C:C6	2.43	0.53
26:BA:85:G:H1	26:BA:97:C:H42	1.54	0.53
26:BA:868:U:H3	26:BA:909:A:H61	1.55	0.53
26:BA:947:G:H2'	26:BA:948:G:H8	1.73	0.53
27:BD:61:TYR:OH	27:BD:214:MET:SD	2.47	0.53
27:BD:60:GLN:N	27:BD:62:ARG:NH1	2.56	0.53
26:BA:321:G:OP2	29:BF:150:THR:OG1	2.26	0.53
30:BG:21:VAL:HG12	30:BG:132:VAL:HB	1.87	0.53
31:BH:147:ILE:HA	31:BH:150:VAL:HG21	1.86	0.53
26:BA:1140:C:P	33:BN:18:ILE:HD11	2.48	0.53
33:BN:47:THR:O	33:BN:53:ILE:CD1	2.56	0.53
34:BO:68:GLY:CA	34:BO:78:ARG:HG2	2.31	0.53
36:BQ:136:TRP:HE3	36:BQ:139:ALA:HB2	1.73	0.53
43:BR:67:LEU:O	43:BR:68:ARG:C	2.46	0.53
37:BS:20:TYR:O	37:BS:23:ARG:CB	2.55	0.53
37:BS:80:SER:O	37:BS:81:ALA:O	2.26	0.53
34:BO:101:PRO:HD3	38:BT:26:GLY:CA	2.38	0.53
45:BV:42:GLY:CA	45:BV:54:TYR:HH	2.18	0.53
39:BW:12:ILE:HG22	39:BW:13:SER:N	2.22	0.53
39:BW:35:ILE:O	39:BW:39:THR:HG22	2.09	0.53
39:BW:49:LYS:O	39:BW:51:LEU:N	2.40	0.53
41:BY:66:ASP:CG	41:BY:72:ILE:HA	2.28	0.53
25:BB:75:G:C2'	42:BZ:32:PHE:HD2	2.11	0.53
42:BZ:40:ASP:CG	42:BZ:41:ARG:NH1	2.61	0.53
42:BZ:63:PRO:O	42:BZ:64:ALA:HB2	2.08	0.53
1:AA:1095:U:P	1:AA:1108:G:H22	2.30	0.53
1:AA:143:A:H4'	1:AA:144:G:C8	2.43	0.53
1:AA:68:G:H2'	1:AA:69:G:O4'	2.07	0.53
1:AA:915:A:N7	1:AA:916:G:C8	2.76	0.53
1:AA:947:G:H4'	1:AA:1332:A:C2	2.36	0.53
5:AB:112:VAL:HA	5:AB:115:LEU:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AD:123:HIS:HB2	7:AD:125:HIS:NE2	2.23	0.53
1:AA:1298:C:P	10:AG:114:ARG:HH12	2.31	0.53
1:AA:1229:A:H4'	2:AV:29:A:O3'	2.08	0.53
48:B0:24:LYS:O	48:B0:25:LYS:CB	2.56	0.53
48:B0:30:VAL:O	48:B0:31:VAL:HG23	2.08	0.53
47:B3:11:SER:C	47:B3:13:ILE:H	2.09	0.53
52:B7:41:GLN:O	52:B7:42:LEU:CB	2.56	0.53
53:B8:36:LYS:HG2	53:B8:40:GLU:CD	2.27	0.53
54:B9:24:LEU:CD2	54:B9:35:ARG:HG2	2.38	0.53
26:BA:1173:G:N2	26:BA:1175:U:H3'	2.22	0.53
26:BA:1473:G:H2'	26:BA:1474:C:O4'	2.08	0.53
26:BA:1648:C:H2'	26:BA:1649:G:H8	1.72	0.53
26:BA:2248:C:C3'	26:BA:2249:U:H5'	2.38	0.53
26:BA:2252:G:C8	26:BA:2252:G:O5'	2.60	0.53
26:BA:2276:G:OP2	36:BQ:103:ALA:CA	2.50	0.53
26:BA:2350:C:C2	26:BA:2351:G:C8	2.97	0.53
26:BA:792:G:C5	26:BA:2440:C:H1'	2.42	0.53
26:BA:2608:G:C3'	26:BA:2608:G:C8	2.91	0.53
26:BA:2836:U:H2'	26:BA:2837:G:C8	2.42	0.53
26:BA:2868:A:C4	26:BA:2869:G:C8	2.96	0.53
26:BA:271(C):U:O4	26:BA:421:U:H2'	2.08	0.53
26:BA:590:A:H4'	29:BF:97:ASP:OD2	2.08	0.53
26:BA:669:G:N3	26:BA:801:G:N1	2.56	0.53
26:BA:746:A:H2'	26:BA:2611:U:O2'	2.09	0.53
26:BA:786:C:H2'	26:BA:787:U:O4'	2.08	0.53
25:BB:59:A:H3'	25:BB:60:C:O5'	2.08	0.53
27:BD:89:ASN:H	27:BD:105:ALA:CB	2.20	0.53
27:BD:82:TYR:C	27:BD:83:ASP:OD2	2.46	0.53
28:BE:180:ILE:CB	28:BE:183:ASP:OD2	2.54	0.53
28:BE:222:ARG:C	28:BE:227:ALA:HA	2.28	0.53
26:BA:2296:U:O4	30:BG:145:ASP:OD1	2.27	0.53
30:BG:93:LEU:O	30:BG:94:ALA:HB3	2.08	0.53
32:BI:68:LEU:HD11	32:BI:108:LEU:HD11	1.89	0.53
55:BK:73:PRO:HG2	55:BK:78:LEU:CG	2.38	0.53
34:BO:104:ARG:O	34:BO:105:GLU:O	2.26	0.53
36:BQ:156:ASN:O	36:BQ:156:ASN:CG	2.46	0.53
36:BQ:33:MET:HE2	36:BQ:74:ASN:O	2.07	0.53
37:BS:63:SER:O	37:BS:67:ALA:C	2.47	0.53
37:BS:61:ALA:HB2	37:BS:84:THR:O	2.09	0.53
44:BU:39:LEU:C	44:BU:41:ASN:ND2	2.61	0.53
44:BU:66:ASN:O	44:BU:67:ALA:C	2.47	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:71:LEU:CD2	44:BU:71:LEU:C	2.77	0.53
45:BV:72:ARG:HG3	45:BV:88:GLN:HG3	1.90	0.53
45:BV:88:GLN:OE1	45:BV:90:PHE:HE1	1.91	0.53
39:BW:12:ILE:HG23	39:BW:13:SER:N	2.23	0.53
39:BW:20:VAL:CG1	39:BW:47:VAL:CG2	2.29	0.53
1:AA:1066:C:H2'	1:AA:1067:A:C8	2.43	0.53
1:AA:667:G:H1	1:AA:739:C:H42	1.57	0.53
1:AA:673:G:C4	1:AA:734:G:C2	2.96	0.53
1:AA:775:G:O2'	1:AA:776:G:H5'	2.08	0.53
1:AA:967:C:H4'	12:AI:128:ARG:NH2	2.23	0.53
1:AA:986:A:H1'	22:AS:54:GLY:O	2.07	0.53
15:AL:42:THR:OG1	15:AL:52:LEU:HB3	2.08	0.53
3:AW:9:A:N1	3:AW:45:G:C4	2.70	0.53
48:B0:70:ILE:CG1	48:B0:71:ASN:H	2.17	0.53
46:B2:20:LEU:HD22	46:B2:23:LEU:HB3	1.90	0.53
50:B5:50:GLY:CA	50:B5:57:VAL:HB	2.35	0.53
52:B7:43:THR:OG1	52:B7:44:VAL:HG23	2.08	0.53
26:BA:148:C:C2'	26:BA:149:A:C8	2.78	0.53
26:BA:1614:A:C6	39:BW:88:ARG:CG	2.92	0.53
26:BA:1790:C:N4	26:BA:1828:G:H2'	2.23	0.53
26:BA:2052:G:C5'	28:BE:239:GLY:O	2.57	0.53
26:BA:2286:A:H8	26:BA:2286:A:C3'	2.09	0.53
26:BA:2414:G:N1	26:BA:2415:G:N7	2.56	0.53
26:BA:2527:C:O2'	26:BA:2528:U:H5'	2.08	0.53
26:BA:2661:G:H2'	26:BA:2662:A:C8	2.43	0.53
26:BA:2767:C:C4	26:BA:2768:C:C5	2.96	0.53
26:BA:2737:G:N2	26:BA:2767:C:N3	2.43	0.53
26:BA:2785:C:N1	26:BA:2786:U:C5	2.76	0.53
26:BA:2842:G:C6	26:BA:2876:G:N1	2.76	0.53
26:BA:684:G:N2	26:BA:794:G:N3	2.57	0.53
25:BB:83:G:H5''	47:B3:52:HIS:CD2	2.43	0.53
27:BD:77:VAL:HG12	27:BD:111:VAL:O	2.08	0.53
29:BF:237:GLU:C	29:BF:239:ALA:H	2.11	0.53
30:BG:141:VAL:HA	30:BG:144:ARG:HD3	1.90	0.53
31:BH:119:GLY:C	31:BH:121:GLU:OE1	2.46	0.53
55:BK:95:LYS:O	55:BK:95:LYS:HG2	2.08	0.53
26:BA:1020:A:H1'	33:BN:49:ARG:NH2	2.23	0.53
33:BN:82:THR:O	33:BN:85:GLY:CA	2.56	0.53
35:BP:126:SER:O	35:BP:130:ARG:HG3	2.08	0.53
36:BQ:92:VAL:HG12	36:BQ:110:GLY:C	2.27	0.53
36:BQ:35:ASN:HB2	36:BQ:75:SER:CA	2.38	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:67:LEU:HD22	43:BR:67:LEU:C	2.29	0.53
37:BS:116:PHE:CD2	37:BS:119:GLN:OE1	2.60	0.53
44:BU:12:ARG:O	44:BU:15:LYS:N	2.42	0.53
44:BU:104:GLU:OE2	45:BV:46:VAL:HG13	2.03	0.53
26:BA:564:C:P	45:BV:79:GLN:CD	2.87	0.53
45:BV:67:LYS:CE	45:BV:94:LYS:HD2	2.34	0.53
26:BA:487:C:C1'	39:BW:53:SER:OG	2.52	0.53
39:BW:8:ARG:C	39:BW:10:VAL:N	2.57	0.53
41:BY:101:LEU:CB	41:BY:113:GLU:OE1	2.51	0.53
41:BY:9:LYS:HZ1	41:BY:13:ARG:NH2	2.00	0.53
41:BY:78:THR:N	41:BY:89:ARG:CD	2.71	0.53
42:BZ:113:VAL:O	42:BZ:171:VAL:CA	2.57	0.53
42:BZ:90:GLU:HG3	42:BZ:90:GLU:O	2.09	0.53
1:AA:1107:C:H3'	1:AA:1108:G:P	2.47	0.53
1:AA:1117:G:OP1	12:AI:104:ARG:NH1	2.41	0.53
1:AA:1199:U:C4'	13:AJ:54:PHE:CE2	2.92	0.53
1:AA:1298:C:N4	10:AG:114:ARG:O	2.41	0.53
1:AA:361(A):C:C3'	1:AA:1362:C:H5''	2.37	0.53
1:AA:791:G:N2	1:AA:1497:G:O3'	2.39	0.53
1:AA:1502:A:H2	1:AA:1505:G:N1	1.99	0.53
1:AA:398:C:H2'	1:AA:399:G:H8	1.73	0.53
1:AA:831:U:H2'	1:AA:832:C:C6	2.43	0.53
1:AA:1205:U:C4'	6:AC:195:VAL:HG23	2.37	0.53
7:AD:159:ARG:O	7:AD:163:GLU:HB3	2.08	0.53
1:AA:1193:G:C2'	8:AE:25:ARG:NH2	2.71	0.53
10:AG:146:GLU:O	10:AG:149:ARG:HB2	2.08	0.53
1:AA:691:G:N1	14:AK:52:GLY:HA2	2.11	0.53
16:AM:10:PRO:HG2	16:AM:18:ALA:HB1	1.90	0.53
1:AA:1235:U:OP1	24:AU:3:LYS:HD3	2.08	0.53
2:AV:18:G:H2'	2:AV:19:G:O5'	2.08	0.53
2:AV:65:G:C2	2:AV:66:A:C5	2.96	0.53
3:AW:16:U:H1'	3:AW:17:U:OP2	2.08	0.53
48:B0:70:ILE:CG1	48:B0:71:ASN:N	2.71	0.53
46:B2:27:LEU:O	46:B2:30:ALA:CB	2.57	0.53
46:B2:34:GLN:CD	46:B2:34:GLN:H	2.11	0.53
47:B3:22:ALA:O	47:B3:26:LEU:HD12	2.08	0.53
47:B3:9:VAL:O	47:B3:53:LEU:O	2.27	0.53
26:BA:1151:G:C4'	44:BU:81:ASN:CG	2.57	0.53
26:BA:14:A:N1	26:BA:526:A:C6	2.77	0.53
26:BA:1534:G:N3	26:BA:1534:G:H2'	2.23	0.53
26:BA:1882:C:H2'	26:BA:1883:G:H5'	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2187:G:H2'	26:BA:2188:C:C5'	2.35	0.53
26:BA:2195:C:H6	26:BA:2195:C:P	2.25	0.53
26:BA:2421:G:OP1	51:B6:4:ASP:CG	2.46	0.53
26:BA:2488:A:C6	26:BA:2489:G:N7	2.76	0.53
26:BA:2495:G:H2'	26:BA:2496:C:O4'	2.08	0.53
26:BA:2539:C:N3	26:BA:2540:C:H5	2.06	0.53
26:BA:2044:C:C5	26:BA:2625:G:N2	2.76	0.53
26:BA:2641:G:N1	26:BA:2774:C:C5	2.76	0.53
26:BA:1638:C:H4'	26:BA:2709:G:N2	2.23	0.53
26:BA:2736:G:O2'	26:BA:2737:G:H5'	2.08	0.53
26:BA:612:G:H1'	26:BA:617:G:H22	1.74	0.53
26:BA:76:C:H5"	46:B2:55:ARG:HE	1.73	0.53
26:BA:830:G:O6	26:BA:2446:G:O4'	2.26	0.53
26:BA:1500:G:O2'	27:BD:98:GLY:O	2.27	0.53
28:BE:208:LYS:H	28:BE:257:GLY:CA	2.11	0.53
29:BF:197:SER:HA	29:BF:215:ALA:HB2	1.90	0.53
30:BG:105:SER:HB3	30:BG:131:THR:CG2	2.30	0.53
30:BG:24:HIS:CD2	30:BG:72:LYS:HB3	2.44	0.53
30:BG:27:ILE:C	30:BG:29:HIS:H	2.04	0.53
31:BH:55:SER:HB2	31:BH:60:HIS:HB2	1.82	0.53
32:BI:108:LEU:C	32:BI:108:LEU:CD2	2.77	0.53
32:BI:109:LYS:N	32:BI:109:LYS:HE2	2.20	0.53
32:BI:28:ASN:OD1	32:BI:28:ASN:C	2.46	0.53
32:BI:41:PRO:O	32:BI:42:ALA:C	2.47	0.53
55:BK:15:ALA:HB1	55:BK:46:THR:O	2.08	0.53
33:BN:23:ALA:O	33:BN:26:VAL:CB	2.57	0.53
33:BN:37:ALA:HA	33:BN:102:ARG:O	2.08	0.53
34:BO:10:VAL:CG1	34:BO:11:ALA:N	2.71	0.53
36:BQ:49:VAL:CG1	36:BQ:119:ASN:H	2.21	0.53
36:BQ:66:ASN:C	36:BQ:68:ALA:N	2.57	0.53
36:BQ:31:PHE:CE1	36:BQ:88:PHE:HD2	2.26	0.53
43:BR:100:LEU:HB2	43:BR:112:ALA:HA	1.91	0.53
37:BS:108:SER:C	37:BS:110:THR:N	2.59	0.53
26:BA:1251:C:C5'	44:BU:10:ARG:HD3	2.35	0.53
44:BU:34:ASN:O	44:BU:38:THR:CB	2.55	0.53
44:BU:72:HIS:CE1	44:BU:110:VAL:CG2	2.84	0.53
44:BU:83:LEU:O	44:BU:86:ALA:N	2.36	0.53
45:BV:10:LYS:O	45:BV:12:TYR:N	2.41	0.53
39:BW:69:LEU:HD22	39:BW:109:GLU:CA	2.38	0.53
42:BZ:126:GLY:O	42:BZ:127:PRO:O	2.26	0.53
1:AA:1058:G:H2'	1:AA:1059:C:O4'	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:51:A:N6	1:AA:116:A:C4	2.77	0.53
1:AA:404:U:C5	7:AD:2:GLY:CA	2.90	0.53
47:B3:2:PRO:HB2	47:B3:39:ASP:HB3	1.91	0.53
49:B4:1:MET:C	49:B4:2:GLN:HG3	2.29	0.53
26:BA:2081:C:C4'	49:B4:35:VAL:HG21	2.38	0.53
49:B4:58:LYS:CG	49:B4:59:PHE:H	2.04	0.53
26:BA:1078:U:C2	26:BA:1088:A:N3	2.77	0.53
26:BA:1273:U:C2	26:BA:2003:G:H5'	2.42	0.53
26:BA:1462:C:H4'	26:BA:2703:C:C5'	2.33	0.53
26:BA:2084:C:N3	26:BA:2235:G:N1	2.51	0.53
26:BA:2325:G:C2	26:BA:2326:C:C5	2.97	0.53
26:BA:2415:G:N3	26:BA:2415:G:H2'	2.22	0.53
26:BA:2435:A:C2	26:BA:2436:G:H1'	2.43	0.53
26:BA:2447:G:N7	26:BA:2500:U:C6	2.76	0.53
26:BA:2469:A:H8	26:BA:2469:A:C5'	2.04	0.53
26:BA:2526:G:N3	26:BA:2527:C:C6	2.76	0.53
26:BA:2553:G:N7	26:BA:2554:U:C1'	2.71	0.53
26:BA:2558:C:H2'	26:BA:2559:C:H5'	1.89	0.53
26:BA:2633:G:N1	26:BA:2634:G:N7	2.56	0.53
26:BA:295:G:O5'	26:BA:296:C:OP2	2.27	0.53
26:BA:389:G:H1'	26:BA:2413:G:O4'	2.08	0.53
26:BA:638:G:H2'	26:BA:639:U:O4'	2.09	0.53
25:BB:100:G:H21	26:BA:863:A:H4'	1.70	0.53
27:BD:79:THR:H	27:BD:91:ALA:HB1	1.73	0.53
26:BA:605:C:C3'	29:BF:105:LYS:HE2	2.28	0.53
29:BF:150:THR:HB	29:BF:207:LEU:HD22	1.89	0.53
29:BF:92:PRO:O	29:BF:94:THR:N	2.41	0.53
30:BG:36:ASN:O	30:BG:38:GLU:N	2.42	0.53
55:BK:121:LEU:CD2	55:BK:125:MET:HE3	2.35	0.53
34:BO:64:ARG:HD2	34:BO:81:GLU:OE1	2.09	0.53
44:BU:41:ASN:HD22	44:BU:41:ASN:C	2.09	0.53
26:BA:1151:G:C4'	44:BU:81:ASN:OD1	2.56	0.53
44:BU:94:VAL:HG12	44:BU:98:ILE:HD11	1.91	0.53
39:BW:43:GLY:O	39:BW:46:PHE:HB2	2.07	0.53
39:BW:48:ALA:O	39:BW:49:LYS:C	2.46	0.53
41:BY:19:ARG:O	41:BY:22:GLN:HB2	2.09	0.53
41:BY:66:ASP:O	41:BY:68:ASP:CA	2.55	0.53
42:BZ:149:ALA:CB	42:BZ:164:PRO:C	2.77	0.53
42:BZ:79:ILE:O	42:BZ:80:HIS:HB2	2.07	0.53
1:AA:1114:C:H1'	17:AN:60:SER:HB3	1.91	0.53
1:AA:1225:A:OP2	1:AA:1226:C:H5	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1224:G:C6	1:AA:1322:C:H4'	2.42	0.53
7:AD:173:TRP:CZ3	7:AD:193:ASP:O	2.62	0.53
20:AQ:9:VAL:HG12	20:AQ:56:VAL:HG22	1.91	0.53
3:AW:76:A:C4	26:BA:2421:G:C6	2.96	0.53
48:B0:23:VAL:HG12	48:B0:26:PHE:CE1	2.43	0.53
47:B3:30:ARG:CZ	47:B3:33:GLN:HB2	2.38	0.53
52:B7:8:ASN:O	52:B7:11:LYS:CA	2.56	0.53
53:B8:55:TRP:HE3	53:B8:59:LYS:CE	2.12	0.53
54:B9:20:HIS:HB2	54:B9:22:ARG:HG3	1.90	0.53
26:BA:1440:G:H2'	26:BA:1441:G:O4'	2.08	0.53
26:BA:1530:G:H22	26:BA:1532:C:N4	2.06	0.53
26:BA:1575:C:H6	26:BA:1575:C:H3'	1.74	0.53
26:BA:1364:G:C5'	26:BA:1809:A:N7	2.72	0.53
26:BA:1906:G:N9	26:BA:1929:G:C5	2.76	0.53
26:BA:2051:A:N1	26:BA:2618:G:C6	2.68	0.53
26:BA:2052:G:H2'	26:BA:2053:G:H8	1.74	0.53
26:BA:2331:G:C6	26:BA:2332:U:C4	2.94	0.53
26:BA:2484:G:C2	26:BA:2485:G:N9	2.74	0.53
26:BA:2486:G:C2	26:BA:2487:G:C8	2.97	0.53
26:BA:2497:A:O2'	26:BA:2498:C:C6	2.62	0.53
26:BA:2537:U:C6	26:BA:2538:C:C5	2.96	0.53
26:BA:2543:G:N9	26:BA:2544:G:C8	2.76	0.53
26:BA:2567:G:C2'	26:BA:2568:C:C5	2.85	0.53
26:BA:2516:G:N1	26:BA:2569:G:C2	2.77	0.53
26:BA:2658:C:H2'	26:BA:2659:G:H5'	1.88	0.53
26:BA:2691:C:C2	26:BA:2872:G:O6	2.61	0.53
26:BA:2710:C:O2'	26:BA:2711:A:C4'	2.56	0.53
26:BA:2838:G:H2'	26:BA:2839:G:C5'	2.19	0.53
26:BA:2857:G:C3'	26:BA:2857:G:C8	2.91	0.53
26:BA:60:G:N7	26:BA:63:U:C5	2.77	0.53
27:BD:141:HIS:CD2	27:BD:142:ASN:HD21	2.27	0.53
26:BA:780:G:C2	27:BD:233:ASP:OD2	2.59	0.53
31:BH:19:ASN:C	31:BH:21:ASN:H	2.11	0.53
32:BI:133:LEU:N	32:BI:138:THR:CG2	2.68	0.53
32:BI:2:LYS:CG	32:BI:39:ALA:HB2	2.38	0.53
32:BI:99:ALA:O	32:BI:101:SER:N	2.41	0.53
33:BN:54:VAL:CG1	33:BN:138:THR:HB	2.38	0.53
33:BN:136:SER:C	33:BN:141:ALA:H	2.11	0.53
33:BN:15:ARG:HE	33:BN:40:ASN:HD21	1.55	0.53
33:BN:47:THR:OG1	33:BN:53:ILE:HD12	2.09	0.53
34:BO:40:VAL:CG1	34:BO:40:VAL:O	2.47	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:86:ARG:NH2	36:BQ:123:ILE:CD1	2.71	0.53
36:BQ:35:ASN:O	36:BQ:36:ASN:C	2.46	0.53
43:BR:20:LEU:O	43:BR:22:ARG:CA	2.57	0.53
43:BR:36:THR:CG2	43:BR:37:THR:N	2.71	0.53
37:BS:116:PHE:HD2	37:BS:119:GLN:OE1	1.92	0.53
37:BS:41:LYS:CE	37:BS:68:GLU:OE2	2.57	0.53
37:BS:76:GLY:N	37:BS:82:TYR:HD1	2.06	0.53
39:BW:85:VAL:HA	39:BW:95:ILE:HG12	0.72	0.53
40:BX:32:ALA:C	40:BX:37:VAL:HG23	2.29	0.53
40:BX:34:LYS:O	40:BX:38:ALA:N	2.40	0.53
42:BZ:117:VAL:O	42:BZ:117:VAL:HG12	2.08	0.53
1:AA:60:A:N6	1:AA:107:G:H2'	2.22	0.53
1:AA:403:C:H42	1:AA:547:A:H5''	1.70	0.53
1:AA:720:C:H6	1:AA:720:C:O5'	1.92	0.53
1:AA:726:C:N4	1:AA:731:G:H1	2.07	0.53
6:AC:35:GLU:OE2	6:AC:97:LYS:HG3	2.09	0.53
13:AJ:45:ARG:HH21	17:AN:36:PHE:HE2	1.56	0.53
14:AK:110:ASP:HB3	21:AR:85:LEU:CB	2.33	0.53
20:AQ:3:LYS:HB3	20:AQ:61:GLU:O	2.07	0.53
23:AT:61:SER:O	23:AT:65:LYS:HG2	2.08	0.53
46:B2:29:ASN:C	46:B2:34:GLN:CG	2.74	0.53
26:BA:988:A:C5	47:B3:13:ILE:HG21	2.44	0.53
47:B3:25:ALA:O	47:B3:26:LEU:C	2.48	0.53
47:B3:39:ASP:CB	47:B3:44:ARG:NH2	2.72	0.53
49:B4:58:LYS:HG2	49:B4:62:ARG:NH2	2.24	0.53
54:B9:3:VAL:O	54:B9:3:VAL:CG1	2.55	0.53
26:BA:1328:G:H2'	26:BA:1330:C:H5	1.71	0.53
26:BA:1433:U:O5'	26:BA:1433:U:H6	1.92	0.53
26:BA:2207:C:O2	26:BA:2218:G:N2	2.42	0.53
26:BA:2217:G:N3	26:BA:2218:G:C8	2.77	0.53
26:BA:2259:G:H2'	26:BA:2260:C:C6	2.44	0.53
26:BA:2453:A:O2'	26:BA:2454:G:O5'	2.26	0.53
26:BA:2454:G:C2'	26:BA:2455:G:C5'	2.73	0.53
26:BA:2626:C:C3'	26:BA:2627:G:C5'	2.87	0.53
26:BA:2634:G:O2'	26:BA:2635:C:H5'	2.08	0.53
26:BA:2715:C:H2'	26:BA:2716:U:H6	1.73	0.53
26:BA:2791:C:C5	26:BA:2807:G:N1	2.77	0.53
26:BA:2868:A:C5	26:BA:2869:G:N7	2.77	0.53
26:BA:38:A:C4	29:BF:46:TYR:HE2	2.26	0.53
26:BA:570:G:H2'	26:BA:2030:A:C6	2.43	0.53
26:BA:575:A:C4'	26:BA:2500:U:H5'	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:873:G:C5'	36:BQ:32:LYS:HG3	2.39	0.53
26:BA:974:G:N7	45:BV:80:TYR:CD2	2.75	0.53
27:BD:141:HIS:C	27:BD:143:ILE:N	2.61	0.53
28:BE:267:ARG:CG	28:BE:297:LYS:HB2	2.34	0.53
26:BA:2679:A:C1'	28:BE:300:VAL:CG1	2.86	0.53
28:BE:41:PHE:O	28:BE:42:ALA:HB2	2.09	0.53
29:BF:6:TYR:HE1	29:BF:138:VAL:O	1.92	0.53
26:BA:2306:C:N4	30:BG:53:LYS:HZ2	1.96	0.53
31:BH:67:THR:HG23	31:BH:70:LEU:CD1	2.39	0.53
32:BI:123:ALA:O	32:BI:124:LEU:O	2.25	0.53
55:BK:19:THR:HG22	55:BK:39:CYS:CB	2.38	0.53
55:BK:75:ALA:HB3	55:BK:131:THR:HG21	1.89	0.53
33:BN:134:GLU:C	33:BN:138:THR:CG2	2.62	0.53
34:BO:44:LYS:O	34:BO:45:ASP:HB3	2.09	0.53
35:BP:67:ARG:NH1	35:BP:111:ALA:HB3	2.22	0.53
36:BQ:136:TRP:HA	36:BQ:139:ALA:CB	2.39	0.53
37:BS:59:ALA:O	37:BS:91:ARG:CZ	2.56	0.53
37:BS:87:LEU:HD13	37:BS:90:LEU:HD12	1.89	0.53
44:BU:5:LYS:C	44:BU:7:GLY:N	2.62	0.53
39:BW:11:ARG:HA	39:BW:11:ARG:NE	2.19	0.53
39:BW:29:LEU:HG	39:BW:33:ARG:CD	2.23	0.53
40:BX:23:LYS:HG2	40:BX:67:ARG:HA	1.90	0.53
41:BY:30:ASP:CG	41:BY:31:LEU:N	2.62	0.53
41:BY:71:VAL:HG21	41:BY:93:THR:N	2.15	0.53
41:BY:50:VAL:HA	41:BY:97:ARG:HG3	1.91	0.53
42:BZ:118:HIS:CE1	42:BZ:167:THR:OG1	2.62	0.53
42:BZ:105:GLN:CB	42:BZ:141:MET:HG2	2.39	0.53
42:BZ:35:ASP:OD1	42:BZ:35:ASP:C	2.47	0.53
1:AA:1004:A:HO3'	1:AA:1005:A:P	2.30	0.53
1:AA:1230:C:O2'	16:AM:126:LYS:CE	2.55	0.53
1:AA:54:C:C4	1:AA:352:C:H2'	2.44	0.53
1:AA:762:C:H2'	1:AA:763:G:H8	1.71	0.53
1:AA:975:A:C5	1:AA:1357:A:C2	2.96	0.53
7:AD:58:LEU:HD13	7:AD:59:ARG:HH11	1.73	0.53
1:AA:926:G:N1	4:AX:116:U:OP1	2.42	0.53
48:B0:68:VAL:HG21	48:B0:72:LYS:CE	2.38	0.53
49:B4:24:THR:C	49:B4:26:SER:H	2.12	0.53
51:B6:42:PRO:O	51:B6:43:VAL:C	2.45	0.53
53:B8:14:ILE:O	53:B8:15:LYS:CB	2.57	0.53
54:B9:4:ARG:O	54:B9:36:GLN:HA	2.09	0.53
26:BA:1582:C:H3'	26:BA:1583:A:H4'	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1826:G:C6	26:BA:1827:C:C5	2.96	0.53
26:BA:2011:U:H2'	26:BA:2012:G:O4'	2.08	0.53
26:BA:2037:G:H2'	26:BA:2038:G:C8	2.44	0.53
26:BA:2094:G:N2	26:BA:2196:C:C2	2.76	0.53
26:BA:2191:G:N3	26:BA:2192:G:H1'	2.24	0.53
26:BA:2272:U:H6	26:BA:2273:A:H2	1.56	0.53
26:BA:2369:A:O2'	26:BA:2370:G:C5'	2.57	0.53
26:BA:2415:G:N2	26:BA:2416:C:O4'	2.37	0.53
26:BA:2434:A:HO2'	26:BA:2435:A:C5'	2.16	0.53
26:BA:2067:G:C2	26:BA:2444:G:N3	2.77	0.53
26:BA:2472:G:O5'	26:BA:2472:G:H8	1.92	0.53
26:BA:2488:A:N6	26:BA:2489:G:C6	2.77	0.53
26:BA:2490:G:H4'	26:BA:2491:U:OP1	2.09	0.53
26:BA:2489:G:C5	26:BA:2490:G:N7	2.77	0.53
26:BA:2507:C:N3	26:BA:2583:G:C4	2.72	0.53
26:BA:2549:G:N3	26:BA:2550:G:C8	2.76	0.53
26:BA:2547:U:C5	26:BA:2566:A:C5	2.96	0.53
26:BA:2439:A:C8	26:BA:2586:C:O3'	2.62	0.53
26:BA:2592:G:H2'	26:BA:2593:U:C5'	2.38	0.53
26:BA:2616:C:O5'	26:BA:2616:C:H6	1.92	0.53
26:BA:2846:G:H22	26:BA:2869:G:H22	1.56	0.53
26:BA:355:G:H2'	26:BA:356:G:C8	2.44	0.53
26:BA:38:A:C4	29:BF:46:TYR:CE2	2.97	0.53
26:BA:591:C:C4	26:BA:592:G:N7	2.77	0.53
26:BA:774:A:C1'	26:BA:775:G:C8	2.87	0.53
27:BD:77:VAL:HB	27:BD:113:MET:HA	0.58	0.53
27:BD:127:ASN:O	27:BD:190:THR:CB	2.51	0.53
27:BD:68:ARG:NH2	27:BD:190:THR:HG21	2.23	0.53
28:BE:107:GLU:C	28:BE:110:ARG:HG3	2.29	0.53
28:BE:44:TYR:CE1	28:BE:308:VAL:CG1	2.92	0.53
29:BF:151:GLN:OE1	29:BF:151:GLN:HA	2.09	0.53
29:BF:223:LEU:HD13	29:BF:223:LEU:C	2.26	0.53
29:BF:57:PRO:HG2	29:BF:58:ALA:N	2.21	0.53
30:BG:38:GLU:OE2	30:BG:71:ALA:CA	2.56	0.53
31:BH:100:LYS:O	31:BH:100:LYS:CG	2.57	0.53
32:BI:38:GLU:O	32:BI:40:THR:N	2.41	0.53
36:BQ:10:ILE:O	36:BQ:10:ILE:CG1	2.55	0.53
26:BA:873:G:C4'	36:BQ:32:LYS:HB3	2.32	0.53
43:BR:38:VAL:CG1	43:BR:39:PRO:HD2	1.89	0.53
43:BR:49:ASP:O	43:BR:50:HIS:C	2.47	0.53
43:BR:59:ASP:CG	43:BR:60:LEU:HD23	2.29	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:55:ALA:HB1	43:BR:79:LEU:HD22	1.90	0.53
44:BU:76:TYR:N	44:BU:76:TYR:CD1	2.75	0.53
45:BV:39:PHE:CE2	45:BV:42:GLY:N	2.77	0.53
39:BW:19:LEU:CG	50:B5:25:LEU:CG	2.77	0.53
39:BW:84:ARG:HA	39:BW:84:ARG:HE	1.74	0.53
39:BW:84:ARG:CB	39:BW:96:ILE:HD13	2.15	0.53
40:BX:18:MET:CE	40:BX:25:GLN:CA	2.87	0.53
41:BY:14:ALA:HB3	41:BY:18:GLU:OE1	2.09	0.53
26:BA:85:G:OP2	41:BY:65:VAL:HG21	2.07	0.53
41:BY:73:HIS:CA	41:BY:91:LEU:HG	2.07	0.53
42:BZ:139:THR:C	42:BZ:141:MET:HE1	2.30	0.53
42:BZ:142:ASN:CA	42:BZ:171:VAL:HG21	2.36	0.53
42:BZ:68:ALA:O	42:BZ:69:VAL:CB	2.46	0.53
42:BZ:69:VAL:O	42:BZ:70:GLN:HB3	2.07	0.53
42:BZ:74:ARG:HD3	42:BZ:75:LYS:H	1.72	0.53
1:AA:112:G:C5'	1:AA:389:A:H4'	2.39	0.53
1:AA:1289:A:H1'	1:AA:1371:G:N2	2.24	0.53
1:AA:376:G:O3'	19:AP:5:ARG:NH1	2.42	0.53
1:AA:39:G:N7	1:AA:547:A:N7	2.56	0.53
1:AA:450:G:H1	1:AA:483:C:H42	1.56	0.53
1:AA:17:U:C2	1:AA:919:A:C2	2.97	0.53
1:AA:983:A:O2'	1:AA:1049:U:O2'	2.02	0.53
8:AE:36:ASP:O	8:AE:37:ARG:HB2	2.09	0.53
11:AH:82:HIS:O	11:AH:137:VAL:HA	2.09	0.53
22:AS:39:THR:HA	22:AS:70:LYS:HA	1.89	0.53
46:B2:31:ARG:O	46:B2:34:GLN:N	2.39	0.53
26:BA:929:G:C1'	47:B3:43:ILE:CG1	2.83	0.53
50:B5:4:HIS:CB	50:B5:5:PRO:CD	2.80	0.53
51:B6:49:VAL:HG12	51:B6:50:PHE:N	2.24	0.53
52:B7:30:ILE:HD13	52:B7:33:ARG:CZ	2.31	0.53
26:BA:121:G:N1	26:BA:131:G:C5	2.77	0.53
26:BA:131:G:N2	26:BA:149:A:C2	2.77	0.53
26:BA:138:G:C3'	26:BA:138:G:N3	2.63	0.53
26:BA:1529:A:N7	26:BA:1543:A:H8	2.06	0.53
26:BA:1648:C:H2'	26:BA:1649:G:C8	2.43	0.53
26:BA:1778:U:C6	26:BA:1784:A:H2	2.27	0.53
26:BA:2277:G:C2'	26:BA:2277:G:N3	2.72	0.53
26:BA:2282:G:H5''	26:BA:2283:C:O5'	2.09	0.53
26:BA:2333:A:N9	26:BA:2335:A:N1	2.54	0.53
26:BA:2489:G:C5	26:BA:2490:G:C5	2.97	0.53
26:BA:2570:G:N2	26:BA:2571:C:C2	2.77	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2799:A:C3'	26:BA:2801:A:OP2	2.54	0.53
26:BA:380:U:HO2'	49:B4:15:ILE:C	2.13	0.53
26:BA:38:A:H2'	26:BA:39:C:H6	1.71	0.53
26:BA:972:G:OP1	26:BA:975:G:OP1	2.26	0.53
27:BD:107:LYS:HG2	27:BD:193:GLU:OE1	2.08	0.53
27:BD:119:PRO:HA	27:BD:129:LEU:HD21	1.91	0.53
28:BE:201:VAL:CG1	28:BE:310:PHE:O	2.57	0.53
29:BF:238:SER:C	29:BF:241:ALA:CB	2.68	0.53
29:BF:39:GLN:O	29:BF:42:ARG:CB	2.57	0.53
32:BI:81:ALA:O	32:BI:148:GLN:HG3	2.08	0.53
32:BI:3:VAL:HB	32:BI:19:LYS:O	2.09	0.53
32:BI:21:VAL:HG21	32:BI:30:LEU:CD1	2.39	0.53
55:BK:19:THR:CG2	55:BK:39:CYS:HB3	2.39	0.53
33:BN:19:MET:CG	33:BN:46:ILE:HD13	2.35	0.53
34:BO:86:ILE:CG2	34:BO:87:ILE:N	2.66	0.53
34:BO:88:ARG:HG3	34:BO:92:SER:OG	2.09	0.53
35:BP:132:LYS:N	35:BP:132:LYS:CD	2.48	0.53
35:BP:66:VAL:CB	35:BP:110:GLY:O	2.48	0.53
36:BQ:134:PHE:O	36:BQ:135:ALA:O	2.27	0.53
37:BS:87:LEU:CD2	37:BS:87:LEU:N	2.66	0.53
44:BU:88:ILE:HG22	45:BV:55:THR:CB	2.31	0.53
45:BV:33:VAL:C	45:BV:63:HIS:CE1	2.82	0.53
45:BV:64:GLY:N	45:BV:95:ILE:HG13	2.21	0.53
40:BX:6:LYS:HD2	40:BX:27:ALA:C	2.29	0.53
41:BY:19:ARG:NH1	41:BY:67:LEU:HB3	2.24	0.53
41:BY:78:THR:H	41:BY:89:ARG:NE	2.07	0.53
41:BY:80:GLU:HA	41:BY:86:GLU:HA	1.90	0.53
42:BZ:146:HIS:CD2	42:BZ:170:SER:HB2	2.44	0.53
1:AA:645:C:H2'	1:AA:646:U:C6	2.44	0.53
7:AD:141:ARG:HB3	7:AD:142:PRO:CD	2.36	0.53
9:AF:37:VAL:HA	9:AF:65:VAL:HG12	1.91	0.53
11:AH:112:LEU:HD22	11:AH:114:THR:HG22	1.91	0.53
1:AA:1400:C:N1	2:AV:34:G:N1	2.56	0.53
26:BA:2355:C:H5'	48:B0:21:LEU:CD1	2.32	0.53
26:BA:2355:C:H5'	48:B0:21:LEU:CD2	2.38	0.53
48:B0:77:ARG:O	48:B0:79:ILE:CG1	2.54	0.53
49:B4:30:GLU:O	49:B4:31:ILE:CD1	2.52	0.53
53:B8:4:MET:CB	53:B8:5:LYS:HZ2	2.22	0.53
26:BA:1417:C:H3'	26:BA:1418:G:C8	2.43	0.53
26:BA:148:C:C2	26:BA:149:A:C6	2.97	0.53
26:BA:1697:G:O6	26:BA:1698:A:C6	2.62	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2041:U:H2'	26:BA:2042:A:C5'	2.34	0.53
26:BA:2059:A:C2	26:BA:2503:A:N7	2.51	0.53
26:BA:2182:G:H2'	26:BA:2183:C:C5	2.43	0.53
26:BA:2295:C:N4	26:BA:2337:G:C6	2.77	0.53
26:BA:2400:G:H4'	51:B6:20:PHE:CZ	2.44	0.53
26:BA:2418:A:O2'	26:BA:2419:U:H5'	2.09	0.53
26:BA:248:G:N3	26:BA:2431:U:H4'	2.23	0.53
26:BA:2605:U:C4'	26:BA:2605:U:C6	2.92	0.53
26:BA:2745:C:O2'	26:BA:2746:U:O5'	2.23	0.53
26:BA:2795:G:N9	26:BA:2795:G:OP2	2.42	0.53
26:BA:2858:C:C2'	26:BA:2858:C:O2	2.57	0.53
26:BA:2880:C:C4	26:BA:2881:C:C5	2.97	0.53
26:BA:304:G:H1	26:BA:313:C:N4	2.03	0.53
26:BA:325:G:H21	41:BY:7:GLN:HE21	1.52	0.53
26:BA:265:A:N7	26:BA:428:A:N1	2.56	0.53
26:BA:530:G:HO2'	26:BA:531:C:C5'	2.22	0.53
26:BA:604:G:H21	26:BA:657:U:C4'	2.20	0.53
26:BA:684:G:C2	26:BA:794:G:C2	2.97	0.53
26:BA:965:C:H1'	26:BA:2273:A:N1	2.24	0.53
25:BB:106:G:C6	25:BB:107:U:C4	2.97	0.53
27:BD:157:ALA:O	27:BD:158:GLY:C	2.46	0.53
28:BE:107:GLU:CG	28:BE:110:ARG:NH2	2.63	0.53
28:BE:304:ASP:N	28:BE:304:ASP:OD1	2.40	0.53
29:BF:105:LYS:HD2	29:BF:105:LYS:N	2.24	0.53
29:BF:142:ASP:O	29:BF:144:PHE:N	2.42	0.53
29:BF:52:ALA:O	29:BF:55:ARG:CG	2.54	0.53
30:BG:21:VAL:HG11	30:BG:132:VAL:HG21	1.87	0.53
32:BI:117:LEU:HD22	32:BI:121:ILE:CD1	2.39	0.53
33:BN:49:ARG:O	33:BN:50:GLU:C	2.47	0.53
35:BP:125:PHE:O	35:BP:130:ARG:NE	2.42	0.53
44:BU:14:HIS:O	44:BU:15:LYS:O	2.27	0.53
39:BW:12:ILE:HD11	39:BW:42:ARG:HD3	1.90	0.53
39:BW:36:LEU:HD13	39:BW:47:VAL:CB	2.39	0.53
40:BX:40:ALA:O	40:BX:41:VAL:C	2.47	0.53
41:BY:78:THR:HA	41:BY:89:ARG:N	2.22	0.53
42:BZ:149:ALA:C	42:BZ:152:ILE:HG13	2.22	0.53
42:BZ:5:ALA:O	42:BZ:6:LYS:CB	2.57	0.53
42:BZ:62:PHE:CD1	42:BZ:87:THR:HG21	2.44	0.53
1:AA:1117:G:N2	1:AA:1180:A:O2'	2.42	0.52
1:AA:1206:G:O4'	6:AC:194:GLY:HA2	2.08	0.52
1:AA:1269:A:H4'	1:AA:1326:C:H5'	1.90	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1368:G:N7	12:AI:112:LYS:NZ	2.50	0.52
1:AA:1400:C:N3	2:AV:34:G:N2	2.51	0.52
3:AW:7:U:O3'	3:AW:8:U:H5'	2.09	0.52
2:AV:37:G:C2	4:AX:116:U:N3	2.76	0.52
48:B0:44:LYS:C	48:B0:45:PHE:CG	2.82	0.52
26:BA:988:A:P	47:B3:11:SER:N	2.74	0.52
47:B3:11:SER:OG	47:B3:13:ILE:CG1	2.50	0.52
47:B3:39:ASP:CA	47:B3:44:ARG:NH2	2.72	0.52
26:BA:125:G:C2	52:B7:10:ARG:HA	2.44	0.52
53:B8:8:LYS:C	53:B8:10:ALA:H	2.06	0.52
54:B9:2:LYS:O	54:B9:4:ARG:N	2.42	0.52
26:BA:1056:G:N2	26:BA:1104:C:H42	2.08	0.52
26:BA:1274:A:N1	26:BA:1302:A:H2	2.07	0.52
26:BA:1364:G:H3'	49:B4:3:LYS:NZ	2.23	0.52
26:BA:135:G:C2	26:BA:145:G:C6	2.96	0.52
26:BA:1524:G:C4	26:BA:1525:G:C8	2.97	0.52
26:BA:1598:C:C5'	40:BX:34:LYS:HB2	2.40	0.52
26:BA:2052:G:H4'	28:BE:239:GLY:C	2.25	0.52
26:BA:2094:G:C2	26:BA:2196:C:N3	2.68	0.52
26:BA:2224:G:O2'	26:BA:2225:A:O4'	2.26	0.52
26:BA:2077:A:C2	26:BA:2244:U:C2	2.96	0.52
26:BA:2289:G:O3'	26:BA:2383:G:O2'	2.27	0.52
26:BA:2324:C:C2'	26:BA:2325:G:OP1	2.57	0.52
26:BA:2455:G:C6	26:BA:2456:C:C4	2.97	0.52
26:BA:2642:G:H2'	26:BA:2643:G:C5'	2.39	0.52
26:BA:2733:A:H2'	26:BA:2734:A:O4'	2.09	0.52
26:BA:2810:A:N9	26:BA:2811:G:O4'	2.33	0.52
26:BA:440:G:OP1	41:BY:6:LYS:HD3	2.07	0.52
26:BA:919:G:H2'	26:BA:920:G:H8	1.75	0.52
28:BE:268:LEU:HD11	28:BE:271:ILE:HD11	1.90	0.52
28:BE:61:PRO:CB	28:BE:69:PRO:HA	2.38	0.52
29:BF:168:ARG:CA	29:BF:232:LEU:O	2.57	0.52
29:BF:58:ALA:HB2	29:BF:79:ARG:CA	2.39	0.52
30:BG:145:ASP:C	37:BS:15:GLU:HA	2.29	0.52
30:BG:86:THR:O	30:BG:86:THR:HG22	2.09	0.52
31:BH:10:ILE:CG2	31:BH:14:VAL:CB	2.49	0.52
33:BN:25:GLN:O	33:BN:28:GLU:N	2.42	0.52
33:BN:88:PRO:C	33:BN:90:LYS:N	2.62	0.52
34:BO:63:VAL:CG1	34:BO:63:VAL:O	2.57	0.52
34:BO:88:ARG:CG	34:BO:92:SER:OG	2.57	0.52
35:BP:124:ASP:O	35:BP:125:PHE:CE2	2.56	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:66:VAL:C	35:BP:68:GLU:N	2.62	0.52
36:BQ:69:ASN:ND2	36:BQ:70:ARG:H	2.00	0.52
36:BQ:65:ARG:NH1	36:BQ:87:LYS:HB2	2.24	0.52
43:BR:107:ASP:CG	43:BR:109:ALA:N	2.41	0.52
43:BR:80:PHE:O	43:BR:84:ALA:HB2	2.07	0.52
44:BU:46:GLU:O	44:BU:49:ASP:N	2.42	0.52
26:BA:1156:A:P	44:BU:55:ARG:NH1	2.82	0.52
45:BV:50:ASP:CB	45:BV:53:LYS:HE3	2.39	0.52
44:BU:20:ARG:NH1	45:BV:75:LYS:CD	2.73	0.52
39:BW:95:ILE:HG22	39:BW:96:ILE:O	2.09	0.52
41:BY:26:THR:O	41:BY:27:LEU:CB	2.56	0.52
41:BY:47:THR:OG1	41:BY:60:GLY:O	2.27	0.52
42:BZ:113:VAL:H	42:BZ:174:PRO:HD3	1.74	0.52
42:BZ:25:ASN:C	42:BZ:84:TYR:HE1	2.12	0.52
1:AA:1269:A:C1'	1:AA:1326:C:O4'	2.57	0.52
1:AA:662:G:O2'	1:AA:836:G:OP1	2.27	0.52
1:AA:867:G:O2'	1:AA:873:A:N6	2.40	0.52
5:AB:36:ARG:HB2	5:AB:41:ILE:HD13	1.90	0.52
6:AC:142:MET:HA	6:AC:146:ALA:HB3	1.91	0.52
1:AA:1328:C:P	16:AM:28:ALA:HB1	2.50	0.52
48:B0:58:THR:O	48:B0:58:THR:OG1	2.24	0.52
46:B2:26:GLU:HG2	46:B2:27:LEU:HG	1.91	0.52
49:B4:28:ARG:HB3	49:B4:29:PRO:CD	2.39	0.52
49:B4:39:VAL:H	49:B4:40:HIS:CE1	2.26	0.52
53:B8:60:LEU:O	53:B8:60:LEU:CD2	2.35	0.52
26:BA:1174:A:N1	26:BA:1176:G:H8	2.07	0.52
26:BA:1598:C:C5'	40:BX:34:LYS:CB	2.88	0.52
26:BA:1609:A:C5	26:BA:1616:A:N3	2.77	0.52
26:BA:2009:G:C2'	43:BR:106:GLY:O	2.57	0.52
26:BA:792:G:H21	26:BA:2072:G:C1'	2.22	0.52
26:BA:2100:G:C4	26:BA:2190:G:N2	2.77	0.52
26:BA:2103:C:C2	26:BA:2187:G:N1	2.46	0.52
26:BA:2212:A:H1'	26:BA:2213:U:O4	2.08	0.52
26:BA:2299:G:C5	26:BA:2300:G:N7	2.77	0.52
26:BA:1028:A:H2	26:BA:2486:G:O2'	1.89	0.52
26:BA:2488:A:C2	26:BA:2489:G:C4	2.97	0.52
26:BA:2061:G:C4	26:BA:2503:A:H2	2.21	0.52
26:BA:2586:C:O5'	26:BA:2586:C:H6	1.91	0.52
26:BA:2589:A:N3	26:BA:2590:A:C8	2.77	0.52
26:BA:2600:A:H2'	26:BA:2601:C:C5	2.44	0.52
26:BA:2748:A:H2	26:BA:2758:A:H62	1.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2787:C:H5''	26:BA:2788:C:OP2	2.08	0.52
26:BA:280:C:HO3'	26:BA:281:G:P	2.28	0.52
26:BA:2828:C:H42	26:BA:2829:C:N4	2.07	0.52
26:BA:2893:G:O2'	26:BA:2894:G:N9	2.29	0.52
26:BA:563:G:C5	26:BA:2018:G:C6	2.97	0.52
26:BA:606:U:P	29:BF:104:ASP:HB2	2.49	0.52
26:BA:602:G:H2'	26:BA:655:A:N1	2.24	0.52
26:BA:687:C:H2'	26:BA:688:U:C6	2.44	0.52
26:BA:848:G:H3'	26:BA:848:G:C8	2.43	0.52
27:BD:183:ILE:HG23	27:BD:184:LEU:N	2.16	0.52
28:BE:296:VAL:CG1	28:BE:297:LYS:N	2.72	0.52
28:BE:303:PRO:HB2	28:BE:307:LEU:CB	2.38	0.52
29:BF:97:ASP:C	29:BF:98:ARG:HD3	2.29	0.52
26:BA:2315:G:P	30:BG:20:LYS:HD3	2.49	0.52
32:BI:130:PRO:HA	32:BI:140:THR:HA	1.90	0.52
34:BO:102:VAL:O	34:BO:122:ILE:O	2.26	0.52
34:BO:22:ILE:CG1	34:BO:40:VAL:O	2.58	0.52
35:BP:115:ARG:C	35:BP:117:GLU:N	2.60	0.52
36:BQ:126:VAL:HG12	36:BQ:127:ASN:N	2.24	0.52
43:BR:104:ARG:O	43:BR:107:ASP:OD2	2.27	0.52
43:BR:77:ARG:NH1	43:BR:77:ARG:CG	2.38	0.52
43:BR:96:ARG:O	43:BR:98:LEU:HG	2.10	0.52
37:BS:23:ARG:HH21	37:BS:35:VAL:CG1	2.21	0.52
38:BT:13:ILE:HD12	38:BT:33:SER:CB	2.38	0.52
44:BU:62:ILE:HD13	44:BU:62:ILE:N	2.24	0.52
40:BX:7:HIS:ND1	40:BX:8:PRO:N	2.56	0.52
41:BY:87:VAL:CG1	41:BY:88:PRO:N	2.73	0.52
42:BZ:50:GLY:O	42:BZ:51:LEU:HB2	2.08	0.52
42:BZ:71:MET:SD	42:BZ:78:PRO:HD3	2.39	0.52
1:AA:1222:G:H5''	22:AS:78:ARG:CZ	2.38	0.52
1:AA:1297:C:H1'	1:AA:1298:C:H5	1.74	0.52
1:AA:340:U:H2'	1:AA:341:C:H6	1.74	0.52
1:AA:818:G:C2'	1:AA:819:A:H5''	2.39	0.52
5:AB:91:PRO:HG2	5:AB:155:LEU:HB2	1.91	0.52
7:AD:11:LEU:C	7:AD:13:ARG:N	2.63	0.52
16:AM:11:ARG:HH12	16:AM:46:LYS:HB3	1.74	0.52
19:AP:4:ILE:HG12	19:AP:21:VAL:CG1	2.39	0.52
3:AW:75:C:H41	49:B4:28:ARG:CA	2.20	0.52
48:B0:45:PHE:HE1	48:B0:78:PHE:CE2	2.22	0.52
47:B3:7:LYS:CG	47:B3:8:LEU:H	2.22	0.52
49:B4:11:PRO:CA	49:B4:40:HIS:CD2	2.82	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B7:22:MET:HA	52:B7:28:ARG:HG2	1.91	0.52
53:B8:4:MET:HE3	53:B8:4:MET:N	2.24	0.52
54:B9:4:ARG:C	54:B9:36:GLN:HG2	2.26	0.52
54:B9:5:SER:O	54:B9:6:SER:CB	2.57	0.52
26:BA:1005:C:H1'	33:BN:21:ARG:CG	2.39	0.52
26:BA:1028:A:H2'	26:BA:1029:A:H8	1.74	0.52
26:BA:10:G:C2	26:BA:2629:A:N1	2.77	0.52
26:BA:110:G:H2'	26:BA:111:A:C8	2.44	0.52
26:BA:118:A:C8	26:BA:119:A:C8	2.97	0.52
26:BA:1545:A:H3'	26:BA:545(A):A:O5'	2.09	0.52
26:BA:1554:A:O5'	26:BA:1555:G:OP2	2.27	0.52
26:BA:1943:U:H4'	26:BA:1944:U:H5'	1.91	0.52
26:BA:2355:C:H5''	26:BA:2356:C:OP2	2.08	0.52
26:BA:2474:C:H5	26:BA:2475:C:N3	2.06	0.52
26:BA:2479:G:C2	26:BA:2480:C:O2	2.62	0.52
26:BA:247:G:H4'	26:BA:386:G:C4	2.44	0.52
26:BA:2544:G:H2'	26:BA:2545:G:C8	2.37	0.52
26:BA:2578:G:N7	28:BE:237:ASN:OD1	2.41	0.52
26:BA:2622:C:C5'	28:BE:255:GLN:OE1	2.58	0.52
26:BA:2657:A:C6	26:BA:2665:A:C8	2.97	0.52
26:BA:2662:A:C2	26:BA:2663:G:H4'	2.44	0.52
26:BA:2682:U:H2'	26:BA:2683:C:O5'	2.09	0.52
26:BA:270(X):G:H2'	26:BA:270(Y):G:H5'	1.89	0.52
26:BA:2728:U:O5'	26:BA:2728:U:C6	2.62	0.52
26:BA:2742:C:N3	26:BA:2743:C:C5	2.77	0.52
26:BA:2771:C:N3	26:BA:2772:C:C4	2.77	0.52
26:BA:2822:G:OP1	28:BE:258:TYR:HE2	1.93	0.52
26:BA:282:A:N6	26:BA:360:G:H21	2.07	0.52
26:BA:2887:U:O2'	26:BA:2888:C:H5'	2.08	0.52
26:BA:484:C:H6	26:BA:484:C:O5'	1.92	0.52
26:BA:549:G:H2'	26:BA:550:G:O4'	2.09	0.52
26:BA:911:A:H5''	26:BA:912:C:H5''	1.91	0.52
27:BD:107:LYS:HB3	27:BD:193:GLU:HB2	1.92	0.52
27:BD:144:GLU:HB3	27:BD:188:ARG:O	2.09	0.52
29:BF:167:ASP:CB	29:BF:232:LEU:H	2.20	0.52
29:BF:239:ALA:O	29:BF:242:GLU:CG	2.54	0.52
30:BG:103:ASN:CA	30:BG:104:PHE:CD1	2.93	0.52
31:BH:124:VAL:HG22	31:BH:124:VAL:O	2.09	0.52
31:BH:140:VAL:O	31:BH:141:GLY:C	2.47	0.52
32:BI:94:THR:HG23	32:BI:96:LYS:CB	2.34	0.52
33:BN:39:VAL:CA	33:BN:103:VAL:HG13	2.37	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:60:ARG:HD2	33:BN:71:TYR:HE2	1.74	0.52
34:BO:25:LEU:HD12	34:BO:38:VAL:HB	1.91	0.52
26:BA:1665:A:H1'	34:BO:67:ARG:HD3	1.90	0.52
35:BP:114:VAL:HG21	35:BP:132:LYS:HB2	1.81	0.52
36:BQ:18:GLU:CB	36:BQ:23:ILE:HD11	2.40	0.52
43:BR:67:LEU:HD13	43:BR:68:ARG:CA	2.39	0.52
37:BS:22:GLN:OE1	37:BS:23:ARG:N	2.42	0.52
38:BT:46:ALA:O	38:BT:48:ASN:OD1	2.27	0.52
44:BU:46:GLU:O	44:BU:49:ASP:CA	2.58	0.52
45:BV:69:ILE:CG2	45:BV:88:GLN:HB2	2.38	0.52
45:BV:7:THR:O	45:BV:9:GLY:O	2.27	0.52
39:BW:69:LEU:HD22	39:BW:109:GLU:HA	1.92	0.52
39:BW:5:ALA:CB	39:BW:50:VAL:O	2.57	0.52
26:BA:72:U:O5'	40:BX:2:TRP:CZ2	2.63	0.52
26:BA:1598:C:H5'	40:BX:34:LYS:CG	2.37	0.52
41:BY:11:GLN:CG	41:BY:21:LYS:CE	2.87	0.52
1:AA:1329:A:H5''	16:AM:25:ILE:C	2.28	0.52
1:AA:357:G:O2'	1:AA:368:U:O2	2.11	0.52
1:AA:1374:A:O3'	10:AG:28:ASN:CG	2.48	0.52
1:AA:600:C:H4'	11:AH:128:GLY:O	2.10	0.52
13:AJ:60:ARG:O	13:AJ:61:GLU:HB2	2.08	0.52
15:AL:53:ARG:NH1	15:AL:93:LEU:HD22	2.24	0.52
48:B0:48:GLY:HA2	48:B0:56:ASP:N	2.24	0.52
48:B0:37:LEU:O	48:B0:68:VAL:HA	2.09	0.52
46:B2:2:VAL:C	46:B2:4:HIS:ND1	2.50	0.52
26:BA:929:G:O2'	47:B3:37:LEU:HD13	2.09	0.52
51:B6:12:MET:CE	51:B6:54:LYS:C	2.78	0.52
53:B8:31:HIS:C	53:B8:32:GLN:CG	2.78	0.52
26:BA:1007:C:N3	26:BA:1008:C:N4	2.57	0.52
26:BA:1005:C:C5	26:BA:1143:A:H5''	2.38	0.52
26:BA:152:G:H2'	26:BA:153:C:H5'	1.91	0.52
26:BA:1697:G:O6	26:BA:1698:A:N6	2.41	0.52
26:BA:1827:C:H1'	26:BA:1970:A:H2	1.75	0.52
26:BA:199:A:C5	26:BA:2434:A:N1	2.77	0.52
26:BA:2185:C:C2'	26:BA:2186:G:H8	2.17	0.52
26:BA:2259:G:N7	26:BA:2260:C:N4	2.56	0.52
26:BA:2283:C:H1'	26:BA:2389:G:N2	2.25	0.52
26:BA:2296:U:OP2	26:BA:2296:U:O4'	2.27	0.52
26:BA:2297:C:N3	26:BA:2333:A:N6	2.54	0.52
26:BA:2429:G:C5'	26:BA:2430:A:P	2.97	0.52
26:BA:2565:A:C3'	26:BA:2566:A:O4'	2.57	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2578:G:C8	28:BE:237:ASN:CG	2.81	0.52
26:BA:2762:G:H2'	26:BA:2763:G:H8	1.74	0.52
26:BA:2842:G:H1	26:BA:2875:C:N4	2.07	0.52
26:BA:359:A:C2	26:BA:361:G:N2	2.77	0.52
26:BA:581:C:P	44:BU:33:ARG:NH1	2.75	0.52
26:BA:729:G:C6	27:BD:207:ALA:CA	2.82	0.52
27:BD:143:ILE:CG1	27:BD:153:LEU:N	2.73	0.52
27:BD:94:ASN:OD1	27:BD:100:LYS:HE2	2.09	0.52
28:BE:200:ASP:H	28:BE:312:ARG:N	2.06	0.52
26:BA:2682:U:C5	28:BE:48:MET:SD	3.02	0.52
28:BE:70:VAL:C	28:BE:71:THR:CG2	2.78	0.52
26:BA:2312:U:C5'	30:BG:53:LYS:HB2	2.31	0.52
30:BG:63:ILE:HG23	30:BG:64:ARG:N	2.24	0.52
26:BA:2313:C:O5'	30:BG:72:LYS:HG3	1.98	0.52
32:BI:94:THR:CG2	32:BI:97:GLN:H	2.16	0.52
55:BK:108:ILE:O	55:BK:111:THR:OG1	2.19	0.52
33:BN:21:ARG:CD	33:BN:21:ARG:H	2.22	0.52
33:BN:74:ARG:CB	33:BN:76:ASP:OD2	2.53	0.52
34:BO:35:ILE:HA	34:BO:62:VAL:CA	1.87	0.52
35:BP:73:VAL:CG1	35:BP:76:LEU:HB3	2.40	0.52
43:BR:38:VAL:CG1	43:BR:39:PRO:N	2.46	0.52
43:BR:50:HIS:O	43:BR:51:LEU:C	2.48	0.52
37:BS:27:LEU:CB	37:BS:33:ARG:HH21	1.89	0.52
37:BS:46:GLN:C	37:BS:47:LEU:CG	2.78	0.52
37:BS:70:GLY:C	37:BS:71:TRP:CE3	2.82	0.52
37:BS:90:LEU:HA	37:BS:93:GLN:NE2	2.24	0.52
38:BT:22:VAL:N	38:BT:29:THR:OG1	2.43	0.52
44:BU:39:LEU:O	44:BU:41:ASN:C	2.48	0.52
39:BW:48:ALA:O	39:BW:51:LEU:HB2	2.09	0.52
42:BZ:34:LEU:HD13	42:BZ:39:PHE:CE1	2.38	0.52
1:AA:1005:A:H5'	1:AA:1037:C:H1'	1.90	0.52
1:AA:1311:G:O6	22:AS:2:PRO:HA	2.09	0.52
1:AA:116:A:C2	1:AA:314:C:C4'	2.92	0.52
1:AA:791:G:OP2	1:AA:791:G:H8	1.92	0.52
1:AA:586:C:O2'	1:AA:878:G:H4'	2.08	0.52
1:AA:937:A:C3'	1:AA:938:A:P	2.95	0.52
7:AD:23:GLY:C	7:AD:112:VAL:CG1	2.48	0.52
8:AE:17:ALA:HA	8:AE:26:PHE:CB	2.39	0.52
10:AG:106:GLN:O	10:AG:110:GLN:HG2	2.09	0.52
15:AL:71:PRO:O	15:AL:102:ARG:HD2	2.09	0.52
1:AA:1330:U:H5''	16:AM:23:TYR:HA	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1340:A:C3'	2:AV:31:A:O2'	2.57	0.52
53:B8:10:ALA:HA	53:B8:14:ILE:HG21	1.92	0.52
26:BA:688:U:H5'	26:BA:1780:A:C2	2.45	0.52
26:BA:2279:G:C6	26:BA:2280:G:C5	2.97	0.52
26:BA:2297:C:N4	26:BA:2320:A:C8	2.77	0.52
26:BA:2404:C:C4	26:BA:2405:G:C4	2.98	0.52
26:BA:2423:U:HO2'	26:BA:2424:C:P	2.23	0.52
26:BA:2524:G:N1	26:BA:2540:C:C4	2.77	0.52
26:BA:2526:G:N3	26:BA:2527:C:H6	2.06	0.52
26:BA:2597:G:O6	26:BA:2598:A:N6	2.41	0.52
26:BA:2654:A:O3'	26:BA:2655:G:H4'	2.10	0.52
26:BA:2642:G:C2	26:BA:2773:C:C2	2.97	0.52
26:BA:2795:G:H3'	26:BA:2795:G:P	2.50	0.52
26:BA:2826:A:N1	26:BA:2827:C:H6	1.94	0.52
26:BA:389:G:C8	26:BA:2413:G:H4'	2.44	0.52
26:BA:381:G:H1	26:BA:393:C:H42	1.56	0.52
26:BA:479:A:O2'	26:BA:481:G:H5''	2.10	0.52
26:BA:869:G:H2'	26:BA:870:A:O4'	2.10	0.52
27:BD:145:LEU:HD13	27:BD:146:LYS:N	2.24	0.52
26:BA:1799:G:H22	27:BD:153:LEU:HG	1.71	0.52
27:BD:158:GLY:HA3	27:BD:194:VAL:HG21	1.89	0.52
27:BD:67:LYS:O	27:BD:67:LYS:HG2	2.10	0.52
28:BE:271:ILE:HD11	28:BE:294:THR:CG2	2.40	0.52
29:BF:22:PHE:CZ	29:BF:115:LEU:CG	2.93	0.52
29:BF:153:VAL:O	29:BF:155:SER:N	2.42	0.52
30:BG:56:ARG:HA	30:BG:63:ILE:HA	1.90	0.52
32:BI:117:LEU:HD22	32:BI:121:ILE:HD11	1.91	0.52
55:BK:121:LEU:HD22	55:BK:125:MET:HE3	1.85	0.52
33:BN:39:VAL:O	33:BN:40:ASN:CG	2.48	0.52
33:BN:76:ASP:O	33:BN:80:LYS:HG2	2.09	0.52
35:BP:66:VAL:CA	35:BP:67:ARG:NE	2.70	0.52
43:BR:92:GLY:HA2	43:BR:94:TYR:CE1	2.44	0.52
38:BT:47:ARG:O	38:BT:48:ASN:CG	2.47	0.52
44:BU:98:ILE:HB	44:BU:106:PHE:CD1	2.44	0.52
44:BU:17:VAL:HG11	44:BU:36:PHE:HA	1.90	0.52
45:BV:42:GLY:HA3	45:BV:54:TYR:HH	1.72	0.52
39:BW:4:LYS:CG	39:BW:106:ILE:HA	2.39	0.52
40:BX:45:TYR:CE2	40:BX:73:ASP:HA	2.44	0.52
1:AA:1222:G:H5''	22:AS:78:ARG:HE	1.75	0.52
1:AA:1317:C:O2'	22:AS:10:PHE:CD1	2.63	0.52
1:AA:1463:C:OP1	38:BT:47:ARG:CD	2.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:436:C:C2	1:AA:437:U:C4	2.98	0.52
1:AA:292:G:N2	1:AA:609:A:C2	2.78	0.52
1:AA:744:C:O2'	1:AA:851:G:N2	2.43	0.52
6:AC:205:GLY:O	6:AC:206:GLU:HB2	2.09	0.52
1:AA:540:G:H2'	7:AD:42:GLN:HE22	1.75	0.52
3:AW:9:A:H1'	3:AW:45:G:H2'	1.89	0.52
26:BA:95:G:C2'	46:B2:42:ASN:HB3	2.39	0.52
49:B4:48:ARG:O	49:B4:49:PHE:O	2.27	0.52
50:B5:45:ILE:CB	50:B5:52:TYR:HE1	2.19	0.52
50:B5:6:VAL:N	50:B5:8:LYS:CE	2.73	0.52
26:BA:131:G:C2	26:BA:149:A:N1	2.78	0.52
26:BA:1655:A:H4'	28:BE:211:GLN:CA	2.39	0.52
26:BA:1890:A:C2	26:BA:1891:G:H1'	2.44	0.52
26:BA:530:G:C6	26:BA:2021:C:O2	2.62	0.52
26:BA:2093:G:N9	26:BA:2198:A:N1	2.56	0.52
26:BA:2228:G:C8	26:BA:2228:G:C5'	2.89	0.52
26:BA:2285:C:C4'	26:BA:2288:A:C6	2.79	0.52
26:BA:2311:A:H2'	26:BA:2312:U:H6	1.73	0.52
26:BA:2306:C:C5	26:BA:2311:A:N1	2.77	0.52
26:BA:2330:G:N3	26:BA:2331:G:C1'	2.71	0.52
26:BA:2376:A:H2'	26:BA:2377:A:H8	1.74	0.52
26:BA:2380:C:C3'	26:BA:2381:C:C5'	2.87	0.52
26:BA:2553:G:H8	26:BA:2554:U:O4'	1.87	0.52
26:BA:2605:U:H2'	26:BA:2606:C:H5'	1.92	0.52
26:BA:2623:G:C2	26:BA:2624:G:C8	2.97	0.52
26:BA:2657:A:C3'	26:BA:2658:C:C5'	2.87	0.52
26:BA:637:A:C8	35:BP:111:ALA:HB3	2.39	0.52
26:BA:734:A:H2'	26:BA:735:A:C8	2.45	0.52
27:BD:64:ILE:HD13	27:BD:102:TYR:O	2.08	0.52
27:BD:166:LYS:HA	27:BD:182:MET:HE2	1.91	0.52
27:BD:75:GLY:N	27:BD:116:MET:HB2	2.25	0.52
28:BE:102:ASP:OD1	28:BE:104:PHE:CZ	2.62	0.52
28:BE:189:MET:C	28:BE:190:ASN:CG	2.68	0.52
28:BE:229:GLN:HB2	28:BE:231:TRP:HB2	1.91	0.52
28:BE:70:VAL:CB	28:BE:295:LEU:CD2	2.87	0.52
28:BE:65:MET:SD	28:BE:65:MET:C	2.85	0.52
28:BE:77:PRO:HB2	28:BE:186:GLU:HB2	1.90	0.52
29:BF:153:VAL:HG11	29:BF:207:LEU:CD1	2.39	0.52
29:BF:26:VAL:CG1	29:BF:27:ARG:N	2.72	0.52
30:BG:18:ILE:O	30:BG:135:VAL:HG21	2.10	0.52
30:BG:25:MET:O	30:BG:71:ALA:O	2.28	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:55:LYS:O	30:BG:65:GLU:CB	2.58	0.52
31:BH:23:VAL:HG12	31:BH:74:MET:SD	2.49	0.52
32:BI:39:ALA:O	32:BI:40:THR:C	2.48	0.52
55:BK:100:VAL:CG2	55:BK:137:ILE:HG23	2.40	0.52
33:BN:21:ARG:O	33:BN:24:SER:CB	2.57	0.52
34:BO:104:ARG:NH1	34:BO:122:ILE:HA	2.24	0.52
26:BA:2251:G:H3'	36:BQ:102:ARG:HH22	1.75	0.52
36:BQ:54:VAL:C	36:BQ:56:ILE:N	2.62	0.52
43:BR:22:ARG:NH2	43:BR:69:ASP:HB3	2.25	0.52
43:BR:81:ASP:CG	43:BR:82:GLU:H	2.13	0.52
37:BS:11:ARG:HA	37:BS:14:ARG:CZ	2.40	0.52
37:BS:27:LEU:HA	37:BS:33:ARG:NH2	2.20	0.52
44:BU:102:GLU:HB3	44:BU:105:ALA:HB3	1.91	0.52
45:BV:50:ASP:N	45:BV:53:LYS:CG	2.72	0.52
39:BW:84:ARG:HA	39:BW:84:ARG:NE	2.25	0.52
41:BY:41:ARG:O	41:BY:112:LEU:HA	2.10	0.52
41:BY:44:ALA:HB1	41:BY:65:VAL:CG2	2.40	0.52
42:BZ:134:LEU:HD23	42:BZ:135:VAL:N	2.25	0.52
1:AA:1260:C:H4'	1:AA:1284:C:H5''	1.87	0.52
1:AA:281:G:O2'	1:AA:282:A:H8	1.91	0.52
1:AA:578:C:H2'	1:AA:579:G:C8	2.45	0.52
1:AA:60:A:C6	1:AA:107:G:H2'	2.45	0.52
1:AA:660:G:H1	1:AA:745:C:H42	1.56	0.52
7:AD:49:ARG:O	7:AD:51:PRO:CD	2.56	0.52
11:AH:34:GLU:HA	11:AH:37:ARG:HB3	1.91	0.52
1:AA:279:A:N1	20:AQ:98:LEU:CD1	2.72	0.52
23:AT:60:GLU:HA	23:AT:63:ILE:HD12	1.91	0.52
3:AW:41:U:H6	3:AW:41:U:C5'	2.13	0.52
47:B3:7:LYS:HA	47:B3:33:GLN:O	2.10	0.52
49:B4:7:PRO:HD2	49:B4:56:VAL:CG1	2.39	0.52
26:BA:125:G:H21	52:B7:10:ARG:CA	2.19	0.52
53:B8:14:ILE:HG22	53:B8:15:LYS:N	2.23	0.52
26:BA:993:G:H1'	26:BA:1162:G:N2	2.24	0.52
26:BA:1530:G:N3	26:BA:1530:G:H2'	2.25	0.52
26:BA:1460:A:N1	26:BA:1732:A:C2	2.78	0.52
26:BA:1890:A:H2	26:BA:2235:G:O4'	1.92	0.52
26:BA:2300:G:H2'	26:BA:2301:C:C6	2.44	0.52
26:BA:389:G:O4'	26:BA:2413:G:H4'	2.09	0.52
26:BA:2048:G:N1	26:BA:2621:A:N3	2.58	0.52
26:BA:2633:G:H8	26:BA:2633:G:P	2.31	0.52
26:BA:264:C:C2'	26:BA:265:A:H5''	2.40	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2673:G:C2	26:BA:2674:G:C5	2.98	0.52
26:BA:2734:A:C6	26:BA:2735:G:C4	2.98	0.52
26:BA:2628:C:C2'	26:BA:2781:A:H2'	2.39	0.52
26:BA:2792:G:C6	26:BA:2793:G:C6	2.98	0.52
26:BA:2827:C:O2	26:BA:2827:C:C2'	2.52	0.52
26:BA:2832:U:H3'	26:BA:2832:U:C2	2.41	0.52
26:BA:301:G:H2'	26:BA:302:C:C6	2.44	0.52
26:BA:327:G:C2	26:BA:328:U:H6	2.27	0.52
26:BA:35:G:H1'	26:BA:454:A:N3	2.24	0.52
26:BA:452:G:H21	26:BA:457:A:H2	1.56	0.52
26:BA:758:C:H2'	26:BA:759:G:C8	2.45	0.52
26:BA:684:G:C6	26:BA:775:G:C5	2.98	0.52
27:BD:167:GLU:O	27:BD:170:TYR:C	2.47	0.52
26:BA:1805:U:C5'	27:BD:235:PRO:HB3	2.39	0.52
28:BE:101:THR:O	28:BE:102:ASP:C	2.47	0.52
29:BF:153:VAL:CB	29:BF:157:LEU:HD21	2.18	0.52
31:BH:58:LYS:HG3	31:BH:59:HIS:ND1	2.24	0.52
36:BQ:140:TYR:O	36:BQ:142:LYS:C	2.48	0.52
36:BQ:50:VAL:CG1	36:BQ:52:LYS:H	2.16	0.52
43:BR:75:LEU:O	43:BR:77:ARG:CA	2.58	0.52
38:BT:53:ASP:C	38:BT:56:ARG:NE	2.52	0.52
44:BU:113:SER:O	44:BU:115:ASN:C	2.48	0.52
44:BU:115:ASN:HA	44:BU:118:GLN:O	2.09	0.52
26:BA:995:C:O2'	44:BU:57:PHE:CG	2.58	0.52
44:BU:98:ILE:N	44:BU:98:ILE:CD1	2.72	0.52
40:BX:33:SER:N	40:BX:37:VAL:CG2	2.64	0.52
1:AA:1237:C:H5''	1:AA:1238:A:O4'	2.09	0.52
1:AA:686:U:H2'	1:AA:686:U:O2	2.09	0.52
1:AA:813:U:H2'	1:AA:814:A:H8	1.74	0.52
5:AB:47:THR:HG23	5:AB:202:PRO:HD2	1.91	0.52
1:AA:607:A:C6	19:AP:31:LYS:HG3	2.45	0.52
48:B0:36:ILE:C	48:B0:37:LEU:HG	2.30	0.52
47:B3:12:PRO:O	47:B3:20:LYS:HE2	2.10	0.52
49:B4:14:ILE:HG13	49:B4:38:GLY:C	2.29	0.52
50:B5:10:LYS:O	50:B5:11:THR:C	2.48	0.52
51:B6:41:ASP:HB2	51:B6:46:LYS:HZ3	1.65	0.52
26:BA:1530:G:H1'	26:BA:1542:G:C6	2.45	0.52
26:BA:185:U:H4'	26:BA:218:A:H4'	1.91	0.52
26:BA:2307:G:C5'	26:BA:2307:G:H8	2.22	0.52
26:BA:2330:G:N3	26:BA:2331:G:O4'	2.42	0.52
26:BA:2475:C:O2'	26:BA:2477:C:OP2	2.28	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2531:A:N3	26:BA:2532:G:H5'	2.25	0.52
26:BA:2704:C:O2'	26:BA:2705:A:O4'	2.27	0.52
26:BA:2710:C:O2'	26:BA:2711:A:O4'	2.28	0.52
26:BA:2817:G:N3	26:BA:2818:G:H1'	2.25	0.52
26:BA:2839:G:C6	26:BA:2840:C:C5	2.85	0.52
26:BA:2865:U:C2	26:BA:2866:U:C5	2.97	0.52
26:BA:2848:G:C6	26:BA:2867:G:N2	2.77	0.52
26:BA:294:A:O2'	41:BY:15:PRO:HG3	2.09	0.52
26:BA:848:G:H2'	26:BA:849:A:C8	2.42	0.52
26:BA:945:A:H2'	26:BA:946:G:O5'	2.10	0.52
25:BB:80:U:H2'	25:BB:81:G:C8	2.44	0.52
27:BD:154:VAL:HG21	27:BD:160:SER:CA	2.35	0.52
27:BD:216:ALA:CB	27:BD:223:ASN:HB2	2.30	0.52
28:BE:81:VAL:HG11	28:BE:100:TRP:HZ3	1.75	0.52
29:BF:105:LYS:O	29:BF:106:GLU:O	2.28	0.52
29:BF:165:ASP:O	29:BF:168:ARG:CB	2.58	0.52
29:BF:88:SER:O	29:BF:89:ALA:HB3	2.09	0.52
30:BG:55:LYS:O	30:BG:56:ARG:HG2	2.09	0.52
30:BG:21:VAL:O	30:BG:75:LEU:O	2.28	0.52
31:BH:121:GLU:O	31:BH:123:GLU:OE1	2.28	0.52
31:BH:166:GLU:OE2	31:BH:166:GLU:CA	2.57	0.52
31:BH:30:GLY:HA3	31:BH:78:VAL:C	2.28	0.52
31:BH:57:GLU:O	31:BH:59:HIS:N	2.42	0.52
31:BH:7:PRO:CD	31:BH:68:ARG:CD	2.64	0.52
32:BI:1:MET:CB	32:BI:22:ALA:H	2.22	0.52
32:BI:43:ASN:HA	32:BI:46:ALA:HB3	1.91	0.52
55:BK:130:GLY:O	55:BK:133:LYS:HB2	2.10	0.52
36:BQ:27:GLY:C	36:BQ:28:ILE:CG1	2.78	0.52
37:BS:34:LEU:HD21	37:BS:102:LEU:CG	2.39	0.52
38:BT:8:TYR:CD1	38:BT:54:THR:HB	2.44	0.52
45:BV:74:TYR:CE1	45:BV:87:ARG:CA	2.93	0.52
39:BW:17:VAL:CA	39:BW:20:VAL:HG23	2.40	0.52
39:BW:29:LEU:HG	39:BW:30:GLU:N	2.21	0.52
41:BY:103:LEU:CD2	41:BY:108:ARG:C	2.76	0.52
41:BY:34:GLU:C	41:BY:35:TYR:CD2	2.83	0.52
42:BZ:152:ILE:HG22	42:BZ:153:LYS:N	2.23	0.52
42:BZ:114:ASP:HA	42:BZ:170:SER:O	2.07	0.52
1:AA:405:U:OP1	7:AD:5:ILE:CD1	2.58	0.52
1:AA:765:G:H1	1:AA:812:C:C2'	2.21	0.52
1:AA:826:C:C4'	11:AH:12:ARG:HG2	2.39	0.52
6:AC:106:VAL:O	6:AC:107:GLN:C	2.41	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AC:52:LEU:O	6:AC:53:ALA:HB2	2.09	0.52
11:AH:38:ILE:HG13	11:AH:118:VAL:HB	1.92	0.52
1:AA:983:A:H4'	17:AN:3:ARG:HH22	1.74	0.52
2:AV:37:G:H2'	2:AV:38:A:H8	1.75	0.52
48:B0:65:GLY:CA	48:B0:66:LYS:NZ	2.68	0.52
48:B0:37:LEU:CG	48:B0:68:VAL:CG1	2.78	0.52
46:B2:33:VAL:O	46:B2:34:GLN:C	2.48	0.52
50:B5:45:ILE:CG1	50:B5:52:TYR:CE1	2.61	0.52
52:B7:43:THR:O	52:B7:45:SER:OG	2.26	0.52
53:B8:55:TRP:CE3	53:B8:59:LYS:NZ	2.75	0.52
53:B8:60:LEU:C	53:B8:61:MET:O	2.47	0.52
26:BA:1422:G:H2'	26:BA:1423:G:C8	2.43	0.52
26:BA:1790:C:O3'	27:BD:210:LYS:CD	2.57	0.52
26:BA:2046:G:H1'	50:B5:22:HIS:CE1	2.44	0.52
26:BA:2231:C:OP1	49:B4:39:VAL:HA	2.10	0.52
26:BA:2283:C:C2	26:BA:2284:C:C1'	2.90	0.52
26:BA:2284:C:C2'	26:BA:2284:C:O2	2.58	0.52
26:BA:2373:G:N3	26:BA:2374:C:C4	2.78	0.52
26:BA:2410:G:C5	26:BA:2411:A:C5	2.98	0.52
26:BA:2474:C:C5	26:BA:2475:C:C2	2.98	0.52
26:BA:2471:C:N3	26:BA:2479:G:N2	2.58	0.52
26:BA:2546:U:O2	26:BA:2567:G:H8	1.93	0.52
26:BA:2549:G:H8	26:BA:2549:G:H5''	1.74	0.52
26:BA:2584:U:C5	26:BA:2585:U:H2'	2.45	0.52
26:BA:2049:G:N1	26:BA:2620:C:N4	2.58	0.52
26:BA:2668:G:C2	26:BA:2669:G:N9	2.77	0.52
26:BA:2807:G:C8	26:BA:2808:U:C5	2.98	0.52
26:BA:360:G:H2'	26:BA:361:G:O4'	2.10	0.52
26:BA:983:A:H3'	26:BA:984:A:O4'	2.09	0.52
27:BD:76:ARG:HG2	27:BD:113:MET:HB2	1.92	0.52
28:BE:104:PHE:HB3	28:BE:108:LEU:CD1	2.40	0.52
28:BE:199:ALA:HB1	28:BE:312:ARG:C	2.29	0.52
26:BA:2680:C:C5'	28:BE:206:LYS:NZ	2.73	0.52
29:BF:237:GLU:O	29:BF:239:ALA:C	2.48	0.52
30:BG:97:GLN:CG	30:BG:106:PHE:CE2	2.93	0.52
30:BG:140:ARG:O	30:BG:143:LYS:N	2.43	0.52
31:BH:120:LEU:CD1	31:BH:143:LEU:CD1	2.69	0.52
31:BH:60:HIS:O	31:BH:63:LEU:CB	2.58	0.52
31:BH:7:PRO:HD3	31:BH:68:ARG:NE	2.24	0.52
32:BI:77:VAL:CB	32:BI:143:VAL:HA	2.38	0.52
34:BO:8:LEU:CB	34:BO:82:ASN:O	2.58	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:97:ARG:HG2	34:BO:98:ILE:N	2.25	0.52
35:BP:127:GLU:O	35:BP:128:GLY:C	2.47	0.52
35:BP:67:ARG:HG2	35:BP:68:GLU:N	2.25	0.52
36:BQ:85:ILE:CA	36:BQ:122:PHE:HB3	2.39	0.52
43:BR:52:ILE:O	43:BR:53:HIS:C	2.48	0.52
43:BR:82:GLU:HA	43:BR:82:GLU:OE1	2.09	0.52
37:BS:127:LEU:O	37:BS:128:ASP:C	2.47	0.52
44:BU:8:ILE:C	44:BU:11:ARG:CG	2.79	0.52
45:BV:4:ILE:CG1	45:BV:13:ARG:HD3	2.39	0.52
41:BY:11:GLN:CB	41:BY:21:LYS:CE	2.88	0.52
41:BY:46:ASP:CG	41:BY:98:VAL:HG13	2.30	0.52
42:BZ:125:PRO:HG3	42:BZ:130:ILE:CG2	2.38	0.52
42:BZ:145:ASP:O	42:BZ:146:HIS:CG	2.59	0.52
42:BZ:151:ASP:CB	42:BZ:153:LYS:HZ2	2.16	0.52
26:BA:876:C:H5'	42:BZ:165:GLU:OE2	2.10	0.52
1:AA:1193:G:C1'	8:AE:25:ARG:NH2	2.73	0.52
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.75	0.52
1:AA:1305:G:N2	1:AA:1331:G:H2'	2.24	0.52
13:AJ:11:PHE:CG	17:AN:55:GLY:HA3	2.45	0.52
2:AV:48:C:C2'	2:AV:48:C:O2	2.55	0.52
48:B0:80:SER:OG	48:B0:84:ALA:HB3	2.06	0.52
46:B2:47:LYS:O	46:B2:50:ARG:N	2.43	0.52
51:B6:16:ALA:CB	51:B6:42:PRO:HG3	2.40	0.52
26:BA:1141:U:H2'	26:BA:1141:U:O2	2.10	0.52
26:BA:1263:U:H3'	26:BA:1264:G:C8	2.45	0.52
26:BA:1358:G:C8	26:BA:1371:G:C6	2.97	0.52
26:BA:1689:A:H2'	26:BA:1690:A:C8	2.43	0.52
26:BA:2072:G:N1	26:BA:2438:U:N3	2.58	0.52
26:BA:2361:A:C4	26:BA:2362:G:C8	2.98	0.52
26:BA:2363:C:O2'	48:B0:38:VAL:CG1	2.53	0.52
26:BA:2422:A:H2'	26:BA:2424:C:H5	1.72	0.52
26:BA:2465:C:HO2'	26:BA:2466:C:P	2.27	0.52
26:BA:2485:G:O2'	26:BA:2486:G:C4'	2.54	0.52
26:BA:2584:U:C5	26:BA:2585:U:C2'	2.93	0.52
26:BA:2616:C:H2'	26:BA:2617:C:H6	1.74	0.52
26:BA:2632:A:H2'	26:BA:2632:A:N3	2.24	0.52
26:BA:2663:G:C2'	26:BA:2664:G:C8	2.70	0.52
26:BA:2762:G:H2'	26:BA:2763:G:C8	2.45	0.52
26:BA:573:G:C3'	26:BA:574:C:H5''	2.36	0.52
26:BA:632:A:H2'	26:BA:633:A:C8	2.45	0.52
26:BA:686:G:N3	26:BA:686:G:H5''	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:693:C:H1'	26:BA:1353:A:H2	1.74	0.52
28:BE:238:LEU:N	28:BE:238:LEU:CD2	2.74	0.52
29:BF:196:THR:CB	29:BF:236:THR:HG21	2.39	0.52
29:BF:197:SER:HB3	29:BF:236:THR:O	2.10	0.52
31:BH:163:TYR:O	31:BH:166:GLU:HG2	2.10	0.52
55:BK:32:GLY:O	55:BK:33:VAL:CG2	2.58	0.52
33:BN:107:ASN:N	33:BN:107:ASN:ND2	2.51	0.52
33:BN:14:ALA:HB3	33:BN:40:ASN:CB	2.36	0.52
34:BO:101:PRO:O	34:BO:102:VAL:HG23	2.10	0.52
36:BQ:133:GLU:HG3	36:BQ:134:PHE:H	1.74	0.52
36:BQ:46:VAL:CG2	36:BQ:156:ASN:ND2	2.70	0.52
43:BR:60:LEU:HD23	43:BR:61:HIS:N	2.24	0.52
43:BR:67:LEU:HD23	43:BR:72:ASP:H	1.75	0.52
37:BS:52:PRO:O	37:BS:53:ASN:C	2.48	0.52
45:BV:33:VAL:CB	45:BV:63:HIS:ND1	2.63	0.52
45:BV:67:LYS:HG3	45:BV:94:LYS:HG3	1.91	0.52
44:BU:20:ARG:NH1	45:BV:75:LYS:HE3	2.22	0.52
45:BV:93:ILE:O	45:BV:95:ILE:HD11	2.09	0.52
39:BW:105:VAL:O	39:BW:105:VAL:HG23	2.10	0.52
41:BY:31:LEU:O	41:BY:32:ARG:C	2.49	0.52
41:BY:46:ASP:N	41:BY:62:VAL:CG1	2.70	0.52
1:AA:1201:A:O2'	1:AA:1202:G:OP2	2.21	0.51
1:AA:977:A:N3	1:AA:1223:C:H5	2.05	0.51
1:AA:1339:A:C2	2:AV:31:A:H1'	2.45	0.51
1:AA:15:G:H2'	1:AA:16:A:C8	2.45	0.51
1:AA:228:A:C1'	19:AP:62:VAL:HG11	2.39	0.51
1:AA:37:U:C2	1:AA:397:A:N1	2.71	0.51
1:AA:983:A:C2	1:AA:984:C:C6	2.96	0.51
6:AC:52:LEU:O	6:AC:53:ALA:CB	2.58	0.51
19:AP:48:TRP:HD1	19:AP:48:TRP:H	1.58	0.51
46:B2:50:ARG:O	46:B2:53:ILE:CB	2.57	0.51
26:BA:387:U:H3'	49:B4:29:PRO:CG	2.40	0.51
49:B4:7:PRO:CD	49:B4:56:VAL:HG11	2.39	0.51
26:BA:1328:G:H4'	26:BA:1329:U:H5	1.74	0.51
26:BA:1567:A:H4'	26:BA:1568:G:N1	2.25	0.51
26:BA:2054:A:OP1	26:BA:2055:C:H1'	2.10	0.51
26:BA:2075:U:O4	26:BA:2238:G:O6	2.28	0.51
26:BA:2305:A:H8	26:BA:2306:C:H5''	1.75	0.51
26:BA:2399:G:N2	26:BA:2400:G:C1'	2.71	0.51
26:BA:2422:A:O2'	26:BA:2424:C:H6	1.84	0.51
26:BA:2246:G:C5	26:BA:2426:A:C2	2.93	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2244:U:O2	26:BA:2434:A:H1'	2.10	0.51
26:BA:2515:C:N4	26:BA:2569:G:C6	2.74	0.51
26:BA:2592:G:H2'	26:BA:2593:U:H5'	1.92	0.51
26:BA:2715:C:C2	26:BA:2716:U:C6	2.98	0.51
26:BA:2753:A:N7	26:BA:2754:U:C4	2.78	0.51
26:BA:2822:G:OP1	28:BE:258:TYR:CE2	2.63	0.51
26:BA:2689:U:OP2	26:BA:2872:G:N2	2.43	0.51
26:BA:592:G:O2'	53:B8:3:LYS:CG	2.54	0.51
26:BA:619:G:N7	26:BA:620:G:C2	2.78	0.51
26:BA:650:C:OP1	53:B8:19:THR:HG21	2.10	0.51
26:BA:987:G:P	47:B3:15:TYR:OH	2.69	0.51
25:BB:76:G:H4'	42:BZ:80:HIS:CB	2.37	0.51
27:BD:133:ASN:O	27:BD:134:ILE:CG1	2.51	0.51
27:BD:142:ASN:ND2	27:BD:142:ASN:H	2.09	0.51
28:BE:208:LYS:N	28:BE:257:GLY:HA3	2.11	0.51
28:BE:263:GLU:C	28:BE:266:LYS:HE3	2.30	0.51
28:BE:271:ILE:HG12	28:BE:294:THR:CA	2.31	0.51
30:BG:60:GLU:O	30:BG:61:PHE:HD1	1.93	0.51
55:BK:11:LEU:HD13	55:BK:28:LEU:HD11	1.85	0.51
33:BN:139:LEU:H	33:BN:139:LEU:CD1	1.95	0.51
33:BN:15:ARG:NH1	33:BN:40:ASN:CA	2.70	0.51
35:BP:52:LYS:CE	35:BP:53:ARG:NH1	2.70	0.51
36:BQ:41:THR:HG21	36:BQ:125:TRP:CE3	2.44	0.51
36:BQ:147:VAL:HG13	36:BQ:148:ASN:N	2.25	0.51
36:BQ:29:ALA:HB3	36:BQ:66:ASN:HD21	1.75	0.51
36:BQ:82:LYS:CG	36:BQ:84:ARG:HG3	2.37	0.51
43:BR:67:LEU:HB2	43:BR:76:VAL:CG1	2.35	0.51
25:BB:51:G:OP1	37:BS:72:GLU:OE1	2.28	0.51
44:BU:104:GLU:O	44:BU:105:ALA:O	2.28	0.51
45:BV:57:GLN:CG	45:BV:58:ALA:N	2.52	0.51
39:BW:9:TYR:H	39:BW:9:TYR:HD1	1.58	0.51
40:BX:51:GLN:O	40:BX:52:VAL:CB	2.57	0.51
41:BY:22:GLN:C	41:BY:24:ARG:N	2.64	0.51
26:BA:328:U:C2'	41:BY:94:SER:HG	2.11	0.51
42:BZ:91:PRO:CG	42:BZ:128:ARG:H	2.22	0.51
42:BZ:112:LEU:HD22	42:BZ:171:VAL:HB	1.92	0.51
42:BZ:25:ASN:CA	42:BZ:84:TYR:CD1	2.90	0.51
1:AA:1060:C:C5	6:AC:2:GLY:CA	2.94	0.51
1:AA:17:U:C2	1:AA:919:A:H2	2.27	0.51
1:AA:571:U:H3'	1:AA:572:A:H5'	1.90	0.51
1:AA:642:A:C8	11:AH:115:SER:HA	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:790:A:H2	1:AA:1497:G:OP1	1.92	0.51
1:AA:950:U:H5''	16:AM:102:ARG:HH22	1.75	0.51
7:AD:70:ILE:HD11	7:AD:100:ARG:NE	2.25	0.51
7:AD:172:PRO:HG2	7:AD:193:ASP:HB2	1.91	0.51
1:AA:590:C:H5''	11:AH:30:ARG:HD3	1.92	0.51
1:AA:675:A:H1'	14:AK:116:HIS:CE1	2.45	0.51
1:AA:1268:A:C2'	24:AU:20:LYS:HA	2.40	0.51
3:AW:9:A:C5	3:AW:45:G:N3	2.79	0.51
46:B2:6:GLN:C	46:B2:9:ARG:HB3	2.29	0.51
47:B3:2:PRO:O	47:B3:39:ASP:N	2.43	0.51
26:BA:388:G:H5'	49:B4:24:THR:CG2	2.41	0.51
49:B4:56:VAL:HG12	49:B4:61:LYS:NZ	2.23	0.51
49:B4:63:PHE:C	49:B4:65:ASP:OD2	2.47	0.51
26:BA:2286:A:N6	51:B6:32:GLN:O	2.43	0.51
26:BA:1364:G:H5''	26:BA:1809:A:N7	2.25	0.51
26:BA:2056:G:N1	50:B5:4:HIS:C	2.48	0.51
26:BA:2181:G:C3'	26:BA:2182:G:H5''	2.41	0.51
26:BA:2217:G:HO2'	26:BA:2218:G:H5'	1.71	0.51
26:BA:2082:A:C5	26:BA:2239:G:C6	2.97	0.51
26:BA:2269:A:H8	26:BA:2269:A:O5'	1.93	0.51
26:BA:2339:G:C4	26:BA:2340:G:N7	2.78	0.51
26:BA:2355:C:H4'	48:B0:21:LEU:HD13	0.52	0.51
26:BA:2407:G:H2'	26:BA:2407:G:N3	2.25	0.51
26:BA:2399:G:O6	26:BA:2418:A:C6	2.63	0.51
26:BA:2511:U:C2'	26:BA:2512:C:C5'	2.86	0.51
26:BA:2520:C:H2'	26:BA:2520:C:O2	2.11	0.51
26:BA:2551:C:O2	26:BA:2552:U:C6	2.63	0.51
26:BA:2555:U:C2'	26:BA:2556:C:O5'	2.57	0.51
26:BA:2589:A:C2	26:BA:2590:A:C8	2.99	0.51
26:BA:2797:U:H1'	26:BA:2799:A:H8	1.74	0.51
26:BA:2814:C:C2	26:BA:2815:C:H5	2.27	0.51
26:BA:2827:C:C2'	26:BA:2828:C:O5'	2.58	0.51
26:BA:2838:G:N1	26:BA:2839:G:C8	2.78	0.51
26:BA:1709:U:C1'	26:BA:2860:A:H1'	2.39	0.51
26:BA:338:G:P	41:BY:21:LYS:HD2	2.50	0.51
26:BA:450:G:N2	26:BA:454:A:C2	2.77	0.51
26:BA:586:A:H2	26:BA:809:G:N3	2.08	0.51
26:BA:60:G:H1'	26:BA:74:A:N1	2.25	0.51
26:BA:759:G:H2'	26:BA:760:G:H8	1.75	0.51
26:BA:910:A:C5	36:BQ:12:PRO:O	2.62	0.51
28:BE:172:ASP:O	28:BE:173:ARG:C	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2729:G:O4'	28:BE:298:GLY:HA3	2.09	0.51
29:BF:28:SER:O	29:BF:29:ASP:C	2.47	0.51
29:BF:61:PHE:HB2	29:BF:67:GLN:OE1	2.10	0.51
31:BH:37:HIS:CG	31:BH:40:MET:HG3	2.45	0.51
32:BI:103:GLN:HG2	32:BI:109:LYS:HA	1.92	0.51
55:BK:20:PRO:CG	55:BK:23:PRO:CG	2.84	0.51
55:BK:24:VAL:O	55:BK:24:VAL:CG1	2.58	0.51
26:BA:1077:A:O3'	55:BK:93:LYS:HG3	2.10	0.51
33:BN:25:GLN:HA	33:BN:28:GLU:HB2	1.90	0.51
34:BO:14:SER:H	34:BO:95:GLY:HA2	1.75	0.51
43:BR:105:ARG:C	43:BR:107:ASP:N	2.62	0.51
37:BS:33:ARG:HB2	37:BS:48:VAL:HB	1.92	0.51
44:BU:34:ASN:CA	44:BU:37:GLN:HB3	2.27	0.51
40:BX:52:VAL:O	40:BX:53:ASN:ND2	2.43	0.51
41:BY:33:GLU:O	41:BY:35:TYR:N	2.43	0.51
41:BY:87:VAL:HG12	41:BY:88:PRO:N	2.26	0.51
42:BZ:12:GLN:O	42:BZ:36:ARG:NH2	2.43	0.51
42:BZ:51:LEU:HD21	42:BZ:63:PRO:CA	2.40	0.51
1:AA:1269:A:C5'	24:AU:19:GLY:CA	2.68	0.51
1:AA:1328:C:OP1	16:AM:28:ALA:HB2	2.09	0.51
1:AA:927:G:N2	1:AA:1391:U:H1'	2.25	0.51
9:AF:60:PHE:CZ	21:AR:78:LEU:HD21	2.45	0.51
15:AL:85:ILE:HG12	15:AL:98:TYR:HB3	1.92	0.51
6:AC:9:GLY:HA2	17:AN:49:HIS:O	2.09	0.51
3:AW:40:C:O2'	10:AG:147:ALA:CB	2.57	0.51
3:AW:76:A:N7	26:BA:2421:G:C1'	2.70	0.51
26:BA:1215:G:O3'	44:BU:8:ILE:HG23	2.11	0.51
26:BA:1300:U:H1'	26:BA:1626:G:H22	1.73	0.51
26:BA:1362:C:H2'	26:BA:1363:C:H6	1.75	0.51
26:BA:1524:G:C5	26:BA:1525:G:C8	2.98	0.51
26:BA:176:G:N2	26:BA:177:G:H1'	2.25	0.51
26:BA:1917:U:H5''	26:BA:1918:A:N7	2.24	0.51
26:BA:1924:C:C4	26:BA:1925:C:H5	2.25	0.51
26:BA:1983:C:H4'	26:BA:2606:C:O2'	2.10	0.51
26:BA:1676:A:C2	26:BA:1993:U:H5'	2.45	0.51
26:BA:747:U:N3	26:BA:2015:A:C2	2.77	0.51
26:BA:2213:U:HO3'	26:BA:2215:G:H8	1.40	0.51
26:BA:2090:G:C4	26:BA:2230:G:N1	2.78	0.51
26:BA:2250:G:H5''	36:BQ:102:ARG:CD	2.40	0.51
26:BA:2252:G:N1	26:BA:2253:G:C6	2.79	0.51
26:BA:2268:A:C8	26:BA:2268:A:H5''	2.45	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2394:C:C4	26:BA:2395:C:N4	2.71	0.51
26:BA:2411:A:N3	26:BA:2412:A:C8	2.78	0.51
26:BA:2411:A:C2'	26:BA:2412:A:H8	2.23	0.51
26:BA:2403:C:C4	26:BA:2415:G:N1	2.73	0.51
26:BA:2078:C:H5'	26:BA:2434:A:H4'	1.90	0.51
26:BA:2461:C:C4	26:BA:2462:U:H5	2.28	0.51
26:BA:2476:A:N7	26:BA:2477:C:H5	2.00	0.51
26:BA:2484:G:C2'	26:BA:2485:G:H5'	2.36	0.51
26:BA:2495:G:N3	26:BA:2496:C:H1'	2.26	0.51
26:BA:2475:C:O2	26:BA:2529:G:C2	2.64	0.51
26:BA:2544:G:C4	26:BA:2545:G:N7	2.78	0.51
26:BA:746:A:C8	26:BA:2611:U:O3'	2.63	0.51
26:BA:2657:A:C5	26:BA:2665:A:C6	2.98	0.51
26:BA:2753:A:C8	26:BA:2754:U:C6	2.98	0.51
26:BA:2792:G:N2	26:BA:2804:C:O2	2.34	0.51
26:BA:270(C):C:P	26:BA:365:C:HO2'	2.33	0.51
26:BA:383:U:HO2'	26:BA:384:U:H5	1.58	0.51
26:BA:465:G:C6	26:BA:466:A:C6	2.98	0.51
26:BA:918:A:H5'	26:BA:919:G:C8	2.45	0.51
26:BA:946:G:H2'	26:BA:947:G:C8	2.45	0.51
26:BA:949:C:H2'	26:BA:950:G:C8	2.44	0.51
26:BA:965:C:H2'	26:BA:966:G:O4'	2.10	0.51
26:BA:1819:A:P	27:BD:154:VAL:HA	2.49	0.51
27:BD:60:GLN:O	27:BD:60:GLN:OE1	2.27	0.51
28:BE:180:ILE:C	28:BE:183:ASP:OD2	2.46	0.51
26:BA:1655:A:H4'	28:BE:211:GLN:C	2.29	0.51
29:BF:201:SER:HB2	29:BF:204:ALA:CB	2.40	0.51
29:BF:223:LEU:O	29:BF:225:PRO:CA	2.57	0.51
26:BA:600:G:H5'	29:BF:30:LEU:HD11	0.76	0.51
31:BH:34:ARG:HG2	31:BH:35:THR:H	1.75	0.51
31:BH:51:VAL:HG21	31:BH:68:ARG:CG	2.39	0.51
31:BH:75:VAL:C	31:BH:77:GLY:H	2.09	0.51
32:BI:68:LEU:CD1	32:BI:108:LEU:HD13	2.40	0.51
33:BN:54:VAL:N	33:BN:135:ILE:HD12	2.24	0.51
33:BN:82:THR:O	33:BN:83:ILE:O	2.29	0.51
35:BP:57:VAL:O	35:BP:58:GLN:CB	2.59	0.51
35:BP:67:ARG:HD3	35:BP:111:ALA:O	2.10	0.51
35:BP:69:ILE:C	35:BP:71:GLU:N	2.63	0.51
43:BR:28:LEU:HD13	43:BR:32:GLY:CA	2.40	0.51
37:BS:104:ILE:HG21	37:BS:109:PRO:HD3	1.92	0.51
37:BS:127:LEU:HD23	37:BS:127:LEU:O	2.03	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:24:LEU:HA	37:BS:27:LEU:CB	2.39	0.51
1:AA:1463:C:OP1	38:BT:47:ARG:HD3	2.10	0.51
26:BA:1223:C:N4	45:BV:87:ARG:HE	2.09	0.51
45:BV:59:GLU:OE1	45:BV:99:GLN:HA	2.07	0.51
39:BW:66:GLU:O	39:BW:67:ASP:C	2.49	0.51
39:BW:70:TYR:CE2	39:BW:72:LYS:CA	2.89	0.51
40:BX:14:ALA:C	40:BX:17:ASP:CG	2.68	0.51
41:BY:49:GLU:O	41:BY:49:GLU:OE2	2.28	0.51
41:BY:51:LEU:CD2	41:BY:95:ASN:HB3	2.41	0.51
41:BY:51:LEU:HD22	41:BY:51:LEU:C	2.31	0.51
1:AA:1098:C:H4'	1:AA:1167:A:H2	1.72	0.51
1:AA:1127:G:O5'	1:AA:1127:G:H8	1.93	0.51
1:AA:1484:C:H2'	1:AA:1485:U:O4'	2.11	0.51
1:AA:1514:C:H6	1:AA:1514:C:O5'	1.93	0.51
1:AA:888:G:H21	1:AA:909:A:H62	1.58	0.51
1:AA:889:A:C4'	1:AA:890:G:H4'	2.28	0.51
1:AA:1256:A:C2'	6:AC:27:LYS:NZ	2.73	0.51
10:AG:33:ASP:HB2	10:AG:35:LYS:HD3	1.91	0.51
17:AN:37:PHE:HE1	17:AN:53:LEU:HD13	1.75	0.51
48:B0:73:GLY:O	48:B0:74:LYS:C	2.48	0.51
46:B2:29:ASN:O	46:B2:34:GLN:OE1	2.26	0.51
46:B2:30:ALA:HB1	46:B2:46:ILE:HD12	1.93	0.51
46:B2:45:ARG:O	46:B2:46:ILE:O	2.28	0.51
49:B4:68:ARG:CG	49:B4:72:LYS:HA	2.36	0.51
49:B4:68:ARG:HB2	49:B4:72:LYS:HG2	1.93	0.51
51:B6:53:LYS:O	51:B6:54:LYS:NZ	2.44	0.51
26:BA:1575:C:H3'	26:BA:1575:C:C6	2.46	0.51
26:BA:1666:G:H4'	34:BO:67:ARG:NH2	2.24	0.51
26:BA:2023:G:H8	26:BA:2023:G:OP2	1.92	0.51
26:BA:2196:C:C2	26:BA:2197:U:O2	2.64	0.51
26:BA:2218:G:C2	26:BA:2219:G:C8	2.98	0.51
26:BA:2236:C:C2'	26:BA:2236:C:O2	2.55	0.51
26:BA:2246:G:C5	26:BA:2426:A:C4	2.98	0.51
26:BA:2356:C:P	48:B0:21:LEU:HD21	2.51	0.51
26:BA:2327:A:N7	26:BA:2388:A:C6	2.79	0.51
26:BA:2416:C:H2'	26:BA:2417:C:H5''	1.74	0.51
26:BA:2454:G:H2'	26:BA:2455:G:O4'	2.11	0.51
26:BA:2503:A:C8	26:BA:2503:A:C3'	2.94	0.51
26:BA:2519:U:C3'	26:BA:2519:U:P	2.98	0.51
26:BA:2550:G:N1	26:BA:2559:C:C2	2.79	0.51
26:BA:2552:U:O2	26:BA:2552:U:H2'	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2656:U:C6	26:BA:2656:U:H3'	2.45	0.51
26:BA:2700:C:C2'	26:BA:2701:C:H5''	2.40	0.51
26:BA:2716:U:H2'	26:BA:2717:G:O5'	2.10	0.51
26:BA:272:G:H1	26:BA:365:C:N4	2.08	0.51
26:BA:2761:G:C2'	26:BA:2762:G:C5'	2.78	0.51
26:BA:2762:G:N7	26:BA:2763:G:O6	2.43	0.51
26:BA:2840:C:N4	26:BA:2841:C:N4	2.59	0.51
26:BA:2857:G:N2	26:BA:2859:G:C8	2.78	0.51
26:BA:49:A:N6	26:BA:176:G:C2	2.79	0.51
26:BA:573:G:H3'	26:BA:574:C:C5'	2.36	0.51
26:BA:645:C:OP2	26:BA:2369:A:C4'	2.58	0.51
26:BA:644:A:O2'	26:BA:646:A:N7	2.42	0.51
26:BA:995:C:H1'	44:BU:57:PHE:CD2	2.46	0.51
27:BD:140:VAL:CG1	27:BD:141:HIS:N	2.47	0.51
26:BA:1792:G:P	27:BD:204:PHE:CE2	3.03	0.51
26:BA:1566:A:N3	27:BD:212:HIS:HA	2.18	0.51
27:BD:65:ASP:O	27:BD:66:PHE:CB	2.59	0.51
28:BE:39:GLN:HE22	28:BE:174:LEU:HD11	1.54	0.51
28:BE:204:VAL:N	28:BE:303:PRO:HG3	2.23	0.51
29:BF:243:VAL:CA	29:BF:246:ARG:CD	2.50	0.51
30:BG:141:VAL:C	30:BG:143:LYS:H	2.13	0.51
32:BI:136:GLU:OE1	32:BI:136:GLU:N	2.41	0.51
55:BK:103:LYS:O	55:BK:107:GLU:HG3	2.10	0.51
55:BK:22:PRO:CG	55:BK:23:PRO:HD2	2.38	0.51
55:BK:8:GLN:N	55:BK:60:VAL:H	2.09	0.51
35:BP:64:ILE:CD1	35:BP:106:VAL:CA	2.58	0.51
36:BQ:152:SER:CB	36:BQ:153:PRO:CD	2.88	0.51
43:BR:67:LEU:HD13	43:BR:67:LEU:C	2.30	0.51
44:BU:28:ARG:CA	44:BU:31:GLN:CD	2.77	0.51
44:BU:86:ALA:CB	44:BU:90:LEU:HD21	2.22	0.51
45:BV:23:GLU:O	45:BV:24:SER:CB	2.58	0.51
39:BW:4:LYS:HD2	39:BW:106:ILE:HG12	1.91	0.51
40:BX:30:ASP:O	40:BX:62:LYS:NZ	2.43	0.51
40:BX:41:VAL:HG11	40:BX:66:VAL:HG21	1.92	0.51
42:BZ:116:VAL:C	42:BZ:118:HIS:N	2.63	0.51
42:BZ:42:ALA:O	42:BZ:45:GLN:HB2	2.10	0.51
42:BZ:90:GLU:H	42:BZ:91:PRO:HD3	1.70	0.51
42:BZ:92:VAL:CA	42:BZ:124:ALA:HB2	2.40	0.51
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.25	0.51
1:AA:1324:A:OP1	1:AA:1362:C:H1'	2.09	0.51
1:AA:1267:C:O2	1:AA:1327:C:O3'	2.28	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:327:A:H4'	1:AA:328:C:OP1	2.11	0.51
1:AA:944:G:C8	1:AA:945:G:H8	2.25	0.51
3:AW:40:C:H2'	3:AW:41:U:C5'	2.40	0.51
3:AW:69:U:H2'	3:AW:70:C:C6	2.46	0.51
48:B0:43:THR:CB	48:B0:75:GLY:CA	2.88	0.51
47:B3:8:LEU:HD22	47:B3:30:ARG:O	2.10	0.51
50:B5:10:LYS:C	50:B5:11:THR:O	2.49	0.51
52:B7:11:LYS:CA	52:B7:11:LYS:CE	2.86	0.51
52:B7:11:LYS:CG	52:B7:12:ARG:H	2.23	0.51
52:B7:22:MET:C	52:B7:24:THR:N	2.61	0.51
52:B7:5:TYR:O	52:B7:7:PRO:N	2.43	0.51
53:B8:3:LYS:C	53:B8:4:MET:CE	2.77	0.51
54:B9:11:CYS:C	54:B9:13:ASN:H	2.13	0.51
26:BA:1265:A:OP2	26:BA:2615:U:P	2.68	0.51
26:BA:1350:C:C2	26:BA:1381:G:N2	2.76	0.51
26:BA:1528:A:N6	26:BA:1543:A:H62	2.06	0.51
26:BA:1567:A:C8	27:BD:84:PRO:HB3	2.45	0.51
26:BA:1773:A:H2'	26:BA:1774:C:O4'	2.10	0.51
26:BA:1790:C:O2'	27:BD:210:LYS:HE3	2.10	0.51
26:BA:2056:G:H21	50:B5:8:LYS:NZ	2.08	0.51
26:BA:2233:U:C2	26:BA:2234:G:C8	2.98	0.51
26:BA:2498:C:C2'	26:BA:2499:C:C5'	2.73	0.51
26:BA:2562:U:C4	26:BA:2563:U:C4	2.98	0.51
26:BA:2662:A:N3	26:BA:2662:A:H2'	2.25	0.51
26:BA:2684:U:O2	26:BA:2725:A:C2	2.63	0.51
26:BA:2758:A:OP1	26:BA:2758:A:H3'	2.10	0.51
26:BA:2815:C:C2	26:BA:2816:C:C6	2.95	0.51
26:BA:2864:G:HO2'	26:BA:2865:U:C1'	2.13	0.51
26:BA:532:A:H2'	26:BA:533:G:O4'	2.11	0.51
26:BA:760:G:C2	26:BA:761:A:H1'	2.46	0.51
26:BA:809:G:C5	26:BA:810:U:C5	2.98	0.51
26:BA:818:G:H21	26:BA:1189:A:H62	0.85	0.51
27:BD:118:GLY:O	27:BD:129:LEU:HG	2.00	0.51
28:BE:267:ARG:HD3	28:BE:297:LYS:CB	2.40	0.51
29:BF:94:THR:HG23	29:BF:95:GLU:H	1.75	0.51
30:BG:81:GLU:O	30:BG:85:GLN:HG3	2.03	0.51
30:BG:78:GLU:O	30:BG:82:GLU:OE2	2.28	0.51
31:BH:64:HIS:HA	31:BH:67:THR:OG1	2.10	0.51
31:BH:67:THR:O	31:BH:70:LEU:N	2.43	0.51
32:BI:21:VAL:C	32:BI:26:ALA:HB2	2.24	0.51
33:BN:45:VAL:HG12	33:BN:46:ILE:N	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1020:A:H4'	33:BN:49:ARG:HH22	1.75	0.51
36:BQ:139:ALA:O	36:BQ:143:VAL:HG13	2.11	0.51
36:BQ:35:ASN:CB	36:BQ:75:SER:HA	2.41	0.51
44:BU:22:LYS:N	44:BU:24:PHE:CZ	2.79	0.51
44:BU:30:LYS:O	44:BU:32:TYR:N	2.43	0.51
41:BY:30:ASP:CG	41:BY:31:LEU:H	2.12	0.51
41:BY:50:VAL:C	41:BY:51:LEU:CD1	2.77	0.51
42:BZ:62:PHE:CZ	42:BZ:87:THR:HG21	2.46	0.51
1:AA:1211:U:H3'	1:AA:1212:U:P	2.29	0.51
1:AA:1241:G:OP2	1:AA:1241:G:H8	1.93	0.51
1:AA:1381:U:H2'	1:AA:1381:U:O2	2.11	0.51
1:AA:897:C:O2	1:AA:903:G:C2	2.64	0.51
14:AK:66:LEU:HB3	14:AK:70:LYS:HE3	1.93	0.51
6:AC:22:TRP:H	17:AN:54:PRO:HB3	1.75	0.51
1:AA:279:A:N1	20:AQ:98:LEU:HB2	2.25	0.51
2:AV:56:C:H2'	30:BG:56:ARG:CZ	2.39	0.51
47:B3:12:PRO:HB2	47:B3:20:LYS:CE	2.41	0.51
49:B4:5:LEU:CB	49:B4:56:VAL:CG1	2.61	0.51
53:B8:6:THR:C	53:B8:8:LYS:H	2.13	0.51
26:BA:1210:A:N3	26:BA:1212:G:N2	2.57	0.51
26:BA:123:G:H1	26:BA:128:C:N4	2.09	0.51
26:BA:1363:C:H2'	26:BA:1364:G:H5''	1.91	0.51
26:BA:742:G:O2'	26:BA:1676:A:H4'	2.11	0.51
26:BA:1906:G:C8	26:BA:1929:G:C5	2.99	0.51
26:BA:2219:G:H2'	26:BA:2224:G:H8	1.76	0.51
26:BA:2077:A:H2	26:BA:2244:U:O2	1.94	0.51
26:BA:2274:A:H2'	26:BA:2276:G:H5''	1.93	0.51
26:BA:2304:G:H4'	30:BG:105:SER:C	2.30	0.51
26:BA:2392:A:C3'	26:BA:2393:A:H5'	2.40	0.51
26:BA:2461:C:H1'	26:BA:2492:U:C2	2.46	0.51
26:BA:2531:A:C2	26:BA:2532:G:O4'	2.64	0.51
26:BA:2576:G:OP1	26:BA:2577:A:OP1	2.29	0.51
26:BA:2625:G:H3'	26:BA:2626:C:H5	0.84	0.51
26:BA:2647:U:H2'	26:BA:2648:C:C6	2.46	0.51
26:BA:2681:C:O2	26:BA:2681:C:C2'	2.57	0.51
26:BA:2686:G:C4	26:BA:2687:U:C6	2.98	0.51
26:BA:2688:U:O2'	26:BA:2689:U:P	2.67	0.51
26:BA:2691:C:N4	26:BA:2719:G:N2	2.59	0.51
26:BA:2805:G:H3'	26:BA:2807:G:H5''	1.93	0.51
26:BA:300:A:HO2'	26:BA:318:C:H1'	1.75	0.51
26:BA:321:G:C8	26:BA:341:G:O2'	2.61	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:532:A:OP2	26:BA:2021:C:N4	2.43	0.51
26:BA:99:U:O2	41:BY:107:LYS:HD3	2.11	0.51
28:BE:75:THR:CG2	28:BE:189:MET:SD	2.99	0.51
28:BE:43:GLY:N	28:BE:309:PRO:O	2.42	0.51
28:BE:47:GLY:N	28:BE:72:VAL:HG22	2.25	0.51
29:BF:240:LEU:HD23	29:BF:243:VAL:HG23	1.91	0.51
30:BG:98:PHE:HB3	30:BG:104:PHE:CE2	2.45	0.51
31:BH:122:ILE:C	31:BH:123:GLU:CD	2.69	0.51
31:BH:86:LEU:HB3	31:BH:130:ILE:O	2.10	0.51
31:BH:120:LEU:CB	31:BH:143:LEU:CD1	2.89	0.51
32:BI:103:GLN:CG	32:BI:109:LYS:HA	2.40	0.51
32:BI:68:LEU:HD21	32:BI:108:LEU:HD13	0.57	0.51
55:BK:107:GLU:OE2	55:BK:108:ILE:HG13	2.11	0.51
55:BK:114:PRO:C	55:BK:116:LEU:N	2.64	0.51
55:BK:125:MET:O	55:BK:128:ILE:HB	2.11	0.51
33:BN:135:ILE:HG22	33:BN:139:LEU:HD11	1.92	0.51
33:BN:53:ILE:HG22	33:BN:54:VAL:H	1.76	0.51
34:BO:73:ASP:O	34:BO:75:SER:OG	2.21	0.51
35:BP:114:VAL:CG1	35:BP:133:VAL:HA	2.35	0.51
43:BR:28:LEU:HD11	43:BR:32:GLY:HA2	1.90	0.51
26:BA:1278:A:C5'	43:BR:34:ILE:HG21	2.40	0.51
38:BT:54:THR:HG23	38:BT:55:ALA:N	2.21	0.51
44:BU:88:ILE:CG2	45:BV:55:THR:HG1	2.17	0.51
45:BV:21:ARG:NE	45:BV:21:ARG:CA	2.72	0.51
39:BW:4:LYS:CG	39:BW:106:ILE:HG12	2.41	0.51
41:BY:63:ILE:CD1	41:BY:75:GLU:HA	2.37	0.51
41:BY:78:THR:HG22	41:BY:88:PRO:HA	0.55	0.51
42:BZ:51:LEU:CD2	42:BZ:63:PRO:CB	2.88	0.51
1:AA:988:G:O2'	1:AA:1015:A:C6	2.59	0.51
1:AA:1189:C:H5''	1:AA:1190:G:OP2	2.10	0.51
1:AA:1206:G:H2'	1:AA:1207:G:O4'	2.11	0.51
1:AA:1259:C:C2	1:AA:1283:G:H1'	2.45	0.51
1:AA:1510:U:H3	1:AA:1525:G:H1	1.56	0.51
1:AA:436:C:C4	1:AA:437:U:O4	2.63	0.51
1:AA:730:G:C5	1:AA:731:G:H1'	2.46	0.51
1:AA:868:C:O4'	1:AA:873:A:C6	2.64	0.51
1:AA:867:G:N3	1:AA:873:A:H2	2.08	0.51
1:AA:813:U:OP1	1:AA:904:C:C5'	2.58	0.51
1:AA:946:A:H2'	1:AA:947:G:C8	2.46	0.51
6:AC:20:SER:HB2	17:AN:52:GLN:O	2.10	0.51
10:AG:59:LEU:O	10:AG:63:LYS:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:953:G:C3'	16:AM:124:PRO:O	2.58	0.51
22:AS:44:MET:HA	22:AS:47:HIS:HD2	1.76	0.51
23:AT:63:ILE:HG21	23:AT:81:LYS:HG3	1.93	0.51
1:AA:1339:A:O2'	2:AV:40:C:O2	2.29	0.51
26:BA:2386:C:C4'	48:B0:39:ARG:HE	2.14	0.51
26:BA:2615:U:C4	50:B5:8:LYS:HG2	2.46	0.51
51:B6:35:LEU:C	51:B6:36:GLU:CG	2.70	0.51
51:B6:46:LYS:HZ3	51:B6:46:LYS:CB	2.17	0.51
52:B7:33:ARG:O	52:B7:37:LYS:HB2	2.11	0.51
53:B8:16:ILE:CG2	53:B8:22:VAL:CG2	2.88	0.51
54:B9:5:SER:O	54:B9:6:SER:OG	2.21	0.51
26:BA:1161:C:O4'	45:BV:8:GLY:O	2.28	0.51
26:BA:1261:C:OP1	39:BW:83:LYS:HE2	2.10	0.51
26:BA:1358:G:N1	26:BA:1371:G:H2'	2.26	0.51
26:BA:1525:G:O3'	26:BA:1526:G:OP1	2.26	0.51
26:BA:1418:G:OP1	26:BA:1588:C:H4'	2.11	0.51
26:BA:1657:C:H6	26:BA:1657:C:O5'	1.93	0.51
26:BA:1772:G:H2'	26:BA:1773:A:H4'	1.92	0.51
26:BA:1819:A:OP1	27:BD:154:VAL:N	2.43	0.51
26:BA:1827:C:OP1	26:BA:1971:A:O2'	2.17	0.51
26:BA:2029:G:H2'	26:BA:2030:A:H3'	1.93	0.51
26:BA:2182:G:N3	26:BA:2183:C:N3	2.58	0.51
26:BA:2189:U:O2'	26:BA:2190:G:C5'	2.57	0.51
26:BA:2264:C:C5	26:BA:2277:G:O6	2.63	0.51
26:BA:2313:C:C6	26:BA:2314:C:C5	2.99	0.51
26:BA:2322:A:N3	26:BA:2323:G:H5'	2.24	0.51
26:BA:2330:G:H21	26:BA:2331:G:C1'	2.01	0.51
26:BA:2625:G:C8	26:BA:2626:C:N4	2.77	0.51
26:BA:2640:G:C6	26:BA:2774:C:N4	2.68	0.51
26:BA:2657:A:C8	26:BA:2665:A:N6	2.79	0.51
26:BA:2678:C:C2'	26:BA:2679:A:C5'	2.88	0.51
26:BA:2725:A:C6	26:BA:2727:G:C4	2.98	0.51
26:BA:2734:A:C8	26:BA:2734:A:C3'	2.93	0.51
26:BA:2749:A:H62	26:BA:2753:A:N6	2.08	0.51
26:BA:2781:A:C4'	26:BA:2782:G:O5'	2.55	0.51
26:BA:2887:U:H6	26:BA:2887:U:O5'	1.93	0.51
26:BA:408:G:H2'	26:BA:409:C:O4'	2.11	0.51
26:BA:444:C:O3'	44:BU:2:PRO:HD2	2.11	0.51
26:BA:965:C:O2'	26:BA:2273:A:C2	2.61	0.51
25:BB:59:A:H2'	25:BB:60:C:O4'	2.11	0.51
27:BD:115:ILE:O	27:BD:116:MET:HB2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:74:PRO:C	27:BD:116:MET:HE2	2.31	0.51
30:BG:14:ARG:CA	30:BG:137:PRO:HD3	2.31	0.51
30:BG:140:ARG:HB3	30:BG:144:ARG:HH12	1.76	0.51
25:BB:19:G:OP1	30:BG:152:PRO:HB3	2.09	0.51
31:BH:49:ILE:O	31:BH:50:THR:HB	2.10	0.51
32:BI:115:ILE:HG23	32:BI:129:VAL:HG12	1.93	0.51
33:BN:109:TYR:O	33:BN:110:ASP:C	2.49	0.51
33:BN:15:ARG:NH1	33:BN:40:ASN:CG	2.42	0.51
35:BP:114:VAL:HG21	35:BP:132:LYS:CA	2.39	0.51
43:BR:56:LYS:HD3	43:BR:94:TYR:CZ	2.46	0.51
37:BS:92:ALA:C	37:BS:94:GLU:N	2.63	0.51
39:BW:34:ASN:HA	39:BW:37:ARG:HB3	1.91	0.51
40:BX:75:GLN:O	40:BX:78:ALA:N	2.44	0.51
42:BZ:145:ASP:C	42:BZ:146:HIS:CG	2.84	0.51
42:BZ:112:LEU:HA	42:BZ:174:PRO:CG	2.40	0.51
1:AA:944:G:C6	1:AA:1337:G:H8	2.26	0.51
1:AA:301:G:H5'	1:AA:564:C:H42	1.74	0.51
1:AA:25:C:H4'	1:AA:524:G:N2	2.25	0.51
1:AA:62:U:OP1	1:AA:385:C:O2'	2.26	0.51
1:AA:792:A:C4	1:AA:794:A:N6	2.79	0.51
1:AA:958:A:N6	22:AS:77:THR:O	2.44	0.51
5:AB:63:MET:HB3	5:AB:225:ALA:HB1	1.91	0.51
7:AD:170:VAL:HG12	7:AD:171:GLY:N	2.26	0.51
7:AD:22:LYS:HB2	7:AD:26:CYS:SG	2.51	0.51
8:AE:126:ARG:HA	8:AE:131:ILE:HG13	1.93	0.51
1:AA:953:G:C2'	16:AM:124:PRO:O	2.58	0.51
1:AA:112:G:OP1	19:AP:27:LYS:HG2	2.11	0.51
48:B0:60:PHE:N	48:B0:81:ILE:HG12	2.26	0.51
48:B0:68:VAL:O	48:B0:68:VAL:CG1	2.56	0.51
26:BA:929:G:H2'	47:B3:37:LEU:HD13	1.93	0.51
49:B4:41:PRO:CG	49:B4:57:ASP:HB2	2.34	0.51
49:B4:49:PHE:CE1	49:B4:70:GLY:O	2.54	0.51
26:BA:2021:C:OP2	50:B5:12:SER:CB	2.59	0.51
50:B5:17:ASP:O	50:B5:18:MET:C	2.48	0.51
53:B8:38:GLY:C	53:B8:40:GLU:N	2.64	0.51
53:B8:50:LEU:O	53:B8:51:ALA:HB3	2.10	0.51
54:B9:19:ARG:HD2	54:B9:24:LEU:HD12	1.92	0.51
26:BA:1406:U:H2'	26:BA:1407:C:C6	2.46	0.51
26:BA:1518:C:C2	26:BA:1519:G:H1'	2.46	0.51
26:BA:1520:U:H6	26:BA:1520:U:O5'	1.93	0.51
26:BA:2212:A:N3	26:BA:2213:U:H5''	2.26	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2411:A:C2'	26:BA:2412:A:C8	2.94	0.51
26:BA:2419:U:OP2	53:B8:41:ILE:HD11	2.10	0.51
26:BA:2437:U:H5'	26:BA:2598:A:N1	2.15	0.51
26:BA:2689:U:C1'	26:BA:2713:A:N1	2.72	0.51
26:BA:2741:A:C3'	26:BA:2742:C:H5'	2.31	0.51
26:BA:2783:G:O6	26:BA:2784:C:N4	2.40	0.51
26:BA:2825:C:H5	26:BA:2825:C:P	2.31	0.51
26:BA:293:U:H2'	26:BA:294:A:C8	2.46	0.51
26:BA:299:A:H1'	26:BA:319:C:O2'	2.10	0.51
26:BA:324:A:N6	26:BA:339:U:H1'	2.25	0.51
26:BA:468:G:H2'	26:BA:469:G:O4'	2.11	0.51
26:BA:558:G:OP2	33:BN:91:LYS:CB	2.36	0.51
26:BA:575:A:H4'	26:BA:2500:U:H5'	1.92	0.51
26:BA:609(A):G:H22	26:BA:618(A):C:H2'	1.76	0.51
26:BA:60:G:N2	26:BA:88:G:N7	2.58	0.51
26:BA:997:G:P	44:BU:93:LYS:CE	2.93	0.51
25:BB:49:C:OP1	37:BS:111:PRO:CD	2.58	0.51
27:BD:197:GLY:C	27:BD:199:ARG:H	2.14	0.51
30:BG:38:GLU:OE2	30:BG:71:ALA:HB1	2.10	0.51
55:BK:21:ALA:HB3	55:BK:22:PRO:CD	2.41	0.51
34:BO:1:MET:CB	34:BO:2:ILE:HD11	2.41	0.51
26:BA:2333:A:C3'	37:BS:13:ARG:HD3	2.32	0.51
37:BS:48:VAL:HG12	37:BS:55:ASP:OD2	2.10	0.51
39:BW:10:VAL:CB	39:BW:101:SER:O	2.50	0.51
40:BX:5:ILE:HG13	40:BX:40:ALA:CB	2.39	0.51
41:BY:79:LEU:CG	41:BY:80:GLU:N	2.73	0.51
1:AA:110:C:O2'	19:AP:25:ARG:CA	2.58	0.51
1:AA:1150:U:H2'	1:AA:1151:A:C8	2.46	0.51
1:AA:118:U:H3'	1:AA:288:A:H61	1.75	0.51
1:AA:1377:A:OP1	10:AG:94:ARG:CZ	2.59	0.51
1:AA:1397:C:O2	1:AA:1397:C:H2'	2.11	0.51
1:AA:1524:C:OP1	14:AK:120:ARG:NH2	2.44	0.51
1:AA:279:A:N1	20:AQ:98:LEU:HD12	2.25	0.51
9:AF:89:MET:HG2	21:AR:76:LEU:CD2	2.38	0.51
11:AH:113:SER:HB2	11:AH:134:ILE:HD11	1.92	0.51
11:AH:20:TYR:HA	11:AH:65:TYR:OH	2.10	0.51
12:AI:112:LYS:HG3	12:AI:117:HIS:O	2.10	0.51
13:AJ:48:THR:HG22	13:AJ:60:ARG:HG3	1.93	0.51
14:AK:42:TRP:HZ3	14:AK:47:VAL:HG21	1.76	0.51
48:B0:76:ALA:O	48:B0:78:PHE:CD1	2.64	0.51
46:B2:60:GLN:O	46:B2:63:GLU:HB2	2.11	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B5:33:CYS:SG	50:B5:37:HIS:N	2.84	0.51
26:BA:1034:G:O4'	54:B9:18:ARG:CZ	2.59	0.51
26:BA:1389:G:H2'	26:BA:1390:U:C6	2.46	0.51
26:BA:1495:A:H2'	26:BA:1496:A:C8	2.46	0.51
26:BA:177:G:N3	26:BA:177:G:H2'	2.26	0.51
26:BA:2015:A:C8	26:BA:2016:U:C5	2.99	0.51
26:BA:2212:A:H2	26:BA:2213:U:H3'	1.75	0.51
26:BA:2323:G:H2'	26:BA:2324:C:C6	2.46	0.51
26:BA:2363:C:H2'	26:BA:2364:C:H5'	1.92	0.51
26:BA:2352:A:N7	26:BA:2366:A:N1	2.53	0.51
26:BA:2458:G:N7	26:BA:2490:G:C5	2.78	0.51
26:BA:2528:U:C6	26:BA:2528:U:C3'	2.94	0.51
26:BA:2567:G:N3	26:BA:2568:C:C6	2.69	0.51
26:BA:2584:U:H5	26:BA:2585:U:C3'	2.24	0.51
26:BA:2589:A:C3'	26:BA:2590:A:C5'	2.89	0.51
26:BA:2592:G:C2	26:BA:2603:G:O6	2.64	0.51
26:BA:2733:A:H1'	28:BE:318:ASN:HD22	1.68	0.51
26:BA:2767:C:H2'	26:BA:2768:C:H5'	1.92	0.51
26:BA:2768:C:H42	26:BA:2769:C:N4	2.02	0.51
26:BA:498:G:H3'	26:BA:498:G:C8	2.45	0.51
26:BA:674:G:H4'	29:BF:69:HIS:CA	2.41	0.51
26:BA:76:C:H4'	46:B2:55:ARG:NE	2.25	0.51
26:BA:802:A:H2'	26:BA:803:U:H6	1.75	0.51
28:BE:210:THR:C	28:BE:216:ARG:CZ	2.77	0.51
28:BE:45:LYS:CD	28:BE:301:PRO:HB2	2.41	0.51
30:BG:99:ASP:N	30:BG:104:PHE:CE2	2.79	0.51
34:BO:38:VAL:HG22	34:BO:61:VAL:HG22	1.92	0.51
35:BP:61:ALA:CB	35:BP:107:LYS:NZ	2.74	0.51
35:BP:66:VAL:O	35:BP:68:GLU:CA	2.59	0.51
36:BQ:133:GLU:HG3	36:BQ:134:PHE:CD1	2.46	0.51
36:BQ:16:ARG:NH1	36:BQ:19:TYR:CD1	2.74	0.51
36:BQ:91:HIS:O	36:BQ:111:THR:CA	2.58	0.51
37:BS:34:LEU:HG	37:BS:101:VAL:O	2.11	0.51
26:BA:535:C:H5'	44:BU:53:LYS:CE	2.36	0.51
45:BV:39:PHE:C	45:BV:40:VAL:CG2	2.47	0.51
45:BV:94:LYS:O	45:BV:95:ILE:HG13	2.07	0.51
26:BA:1614:A:H61	39:BW:88:ARG:N	2.08	0.51
39:BW:88:ARG:HD3	39:BW:91:GLY:O	2.11	0.51
42:BZ:4:THR:C	42:BZ:33:ALA:CB	2.68	0.51
1:AA:1441:G:H1'	1:AA:1461:G:N2	2.25	0.51
1:AA:37:U:N3	1:AA:397:A:C2	2.71	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:583:A:H2'	1:AA:584:G:O4'	2.11	0.51
9:AF:49:ALA:HB2	21:AR:78:LEU:O	2.11	0.51
15:AL:88:GLY:O	15:AL:99:HIS:CE1	2.64	0.51
2:AV:55:U:C2	2:AV:57:G:OP2	2.64	0.51
3:AW:7:U:C2	3:AW:49:C:H5	2.26	0.51
46:B2:24:LYS:HE3	46:B2:28:LEU:HD12	1.93	0.51
47:B3:31:LEU:O	47:B3:33:GLN:N	2.43	0.51
47:B3:3:ARG:CD	47:B3:60:GLU:HA	2.40	0.51
47:B3:9:VAL:HG22	47:B3:54:VAL:CG1	2.40	0.51
26:BA:1365:A:H5''	49:B4:3:LYS:CE	2.41	0.51
50:B5:23:HIS:O	50:B5:24:ALA:CB	2.56	0.51
53:B8:16:ILE:CD1	53:B8:16:ILE:H	2.19	0.51
26:BA:196:A:C2	26:BA:805:G:C2	2.99	0.51
26:BA:2182:G:H2'	26:BA:2183:C:N1	2.25	0.51
26:BA:2265:U:O2'	26:BA:2266:A:P	2.69	0.51
26:BA:2276:G:N3	26:BA:2277:G:H8	2.06	0.51
26:BA:2357:U:C2'	26:BA:2358:G:C5'	2.89	0.51
26:BA:2357:U:C2'	26:BA:2358:G:O5'	2.55	0.51
26:BA:2400:G:N1	26:BA:2417:C:C4	2.79	0.51
26:BA:631:A:C2	26:BA:2415:G:C2	2.86	0.51
26:BA:2482:G:C4	26:BA:2483:C:H6	2.28	0.51
26:BA:2519:U:O2	26:BA:2542:A:C2	2.63	0.51
26:BA:2526:G:C6	26:BA:2527:C:C6	2.98	0.51
26:BA:2550:G:O2'	26:BA:2551:C:H5'	2.11	0.51
26:BA:2604:U:O2'	26:BA:2605:U:C5'	2.55	0.51
26:BA:2618:G:N1	26:BA:2619:C:C4	2.51	0.51
26:BA:1758:G:N7	26:BA:2695:C:H4'	2.26	0.51
26:BA:2734:A:C5	26:BA:2735:G:C4	2.98	0.51
26:BA:2740:A:C3'	26:BA:2741:A:H5'	2.32	0.51
26:BA:2768:C:O2	26:BA:2769:C:H6	1.81	0.51
26:BA:311:A:H1'	26:BA:332:A:C4	2.46	0.51
26:BA:389:G:O6	35:BP:54:PRO:CB	2.59	0.51
26:BA:787:U:C4	26:BA:791:C:C5	2.99	0.51
26:BA:875:G:H5''	42:BZ:146:HIS:ND1	2.26	0.51
27:BD:104:ILE:C	27:BD:106:PRO:HD2	2.31	0.51
27:BD:215:LYS:C	27:BD:216:ALA:O	2.48	0.51
27:BD:89:ASN:N	27:BD:105:ALA:CB	2.74	0.51
27:BD:73:ILE:HD13	27:BD:95:TYR:CE2	2.46	0.51
28:BE:214:VAL:CG2	28:BE:221:LYS:CE	2.79	0.51
28:BE:295:LEU:HD22	28:BE:296:VAL:N	2.26	0.51
28:BE:47:GLY:CA	28:BE:305:LYS:HG2	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:70:VAL:O	28:BE:71:THR:HG22	2.11	0.51
26:BA:606:U:P	29:BF:103:ASN:ND2	2.83	0.51
29:BF:2:GLU:C	29:BF:18:LEU:HD21	2.32	0.51
30:BG:55:LYS:O	30:BG:65:GLU:HB2	2.10	0.51
30:BG:84:LEU:O	30:BG:88:LEU:CB	2.54	0.51
31:BH:147:ILE:O	31:BH:147:ILE:HD12	2.11	0.51
31:BH:62:ALA:O	31:BH:65:GLY:N	2.44	0.51
55:BK:21:ALA:HB3	55:BK:22:PRO:HD3	1.92	0.51
55:BK:33:VAL:HG22	55:BK:60:VAL:HG13	1.88	0.51
55:BK:42:PHE:O	55:BK:45:GLU:N	2.38	0.51
33:BN:70:PHE:O	33:BN:71:TYR:CB	2.53	0.51
34:BO:35:ILE:CA	34:BO:62:VAL:C	2.70	0.51
26:BA:2415:G:O3'	35:BP:51:PHE:CD2	2.64	0.51
35:BP:59:GLU:O	35:BP:60:GLU:HG3	2.10	0.51
35:BP:65:ASP:OD1	35:BP:68:GLU:CD	2.49	0.51
43:BR:105:ARG:NH2	43:BR:105:ARG:N	2.59	0.51
43:BR:28:LEU:CD1	43:BR:32:GLY:CA	2.87	0.51
44:BU:66:ASN:HA	44:BU:76:TYR:CE1	1.97	0.51
45:BV:42:GLY:O	45:BV:48:GLY:HA2	2.10	0.51
39:BW:97:LYS:HE3	39:BW:99:ARG:HH11	1.68	0.51
40:BX:28:VAL:HG23	40:BX:28:VAL:O	2.11	0.51
41:BY:11:GLN:CG	41:BY:21:LYS:HE2	2.35	0.51
41:BY:46:ASP:OD2	41:BY:98:VAL:CG1	2.59	0.51
42:BZ:149:ALA:CB	42:BZ:164:PRO:HA	2.41	0.51
1:AA:1226:C:OP2	16:AM:103:THR:OG1	2.19	0.50
1:AA:942:G:H2'	1:AA:943:U:H6	1.76	0.50
12:AI:74:ILE:HA	12:AI:77:ILE:HD12	1.93	0.50
13:AJ:51:ARG:CB	13:AJ:59:SER:HB3	2.11	0.50
17:AN:24:CYS:HB2	17:AN:39:LEU:CA	2.42	0.50
48:B0:37:LEU:CB	48:B0:69:PHE:CG	2.83	0.50
26:BA:2256:G:OP1	48:B0:5:LYS:HD3	2.11	0.50
46:B2:45:ARG:HE	46:B2:49:LEU:HD21	1.76	0.50
26:BA:988:A:N6	47:B3:13:ILE:CG2	2.74	0.50
47:B3:37:LEU:CB	47:B3:38:GLU:OE1	2.55	0.50
47:B3:5:LYS:CA	47:B3:36:VAL:HG12	2.41	0.50
50:B5:45:ILE:N	50:B5:45:ILE:HD12	2.26	0.50
50:B5:6:VAL:H	50:B5:8:LYS:CE	2.21	0.50
26:BA:1416:G:N2	26:BA:1582:C:N4	2.58	0.50
26:BA:1456:G:N1	26:BA:2704:C:C4	2.79	0.50
26:BA:1626:G:H4'	26:BA:1627:G:OP1	2.11	0.50
26:BA:1763:G:H5'	26:BA:1763:G:C8	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2280:G:C2	26:BA:2281:C:C5	2.99	0.50
26:BA:2361:A:O2'	26:BA:2362:G:H5'	2.11	0.50
26:BA:2466:C:C2'	26:BA:2467:C:H5'	2.40	0.50
26:BA:2574:G:O2'	28:BE:240:PRO:HA	2.10	0.50
26:BA:2595:G:O5'	26:BA:2595:G:C8	2.52	0.50
26:BA:2620:C:O4'	28:BE:252:GLN:CG	2.59	0.50
26:BA:2635:C:N3	26:BA:2783:G:C2	2.79	0.50
26:BA:2644:G:H1	26:BA:2645:G:N2	2.07	0.50
26:BA:2745:C:H2'	26:BA:2746:U:O5'	2.11	0.50
26:BA:2772:C:C2'	26:BA:2773:C:O5'	2.59	0.50
26:BA:2785:C:C5'	28:BE:99:VAL:CB	2.89	0.50
26:BA:2839:G:H2'	26:BA:2840:C:C6	2.32	0.50
26:BA:270(B):A:O5'	26:BA:366:C:H4'	2.10	0.50
26:BA:29:U:O2	26:BA:511:U:O2	2.29	0.50
26:BA:527:C:OP1	26:BA:527:C:H4'	2.11	0.50
26:BA:563:G:N2	44:BU:37:GLN:NE2	2.31	0.50
26:BA:599:G:H1	26:BA:658:C:N4	2.05	0.50
26:BA:693:C:O2'	26:BA:1353:A:H2	1.91	0.50
26:BA:783:A:C4'	26:BA:2589:A:P	2.93	0.50
26:BA:826:U:N3	26:BA:828:U:H1'	2.26	0.50
26:BA:972:G:C8	26:BA:974:G:OP1	2.64	0.50
26:BA:993:G:H2'	26:BA:993:G:N3	2.26	0.50
27:BD:113:MET:N	27:BD:113:MET:SD	2.84	0.50
27:BD:74:PRO:HG3	27:BD:96:ALA:CA	2.32	0.50
28:BE:193:PHE:CZ	28:BE:199:ALA:CB	2.92	0.50
28:BE:228:ARG:HD2	28:BE:228:ARG:N	2.27	0.50
26:BA:2051:A:O4'	28:BE:238:LEU:HD21	2.10	0.50
28:BE:267:ARG:C	28:BE:297:LYS:HD2	2.32	0.50
29:BF:220:THR:C	29:BF:222:ASP:N	2.60	0.50
29:BF:52:ALA:N	29:BF:55:ARG:CB	2.67	0.50
26:BA:801:G:N7	29:BF:54:LEU:HD22	2.26	0.50
30:BG:140:ARG:HA	30:BG:143:LYS:HZ2	1.71	0.50
31:BH:51:VAL:HG13	31:BH:64:HIS:HB3	1.93	0.50
32:BI:105:GLN:O	32:BI:106:HIS:C	2.49	0.50
55:BK:33:VAL:HG23	55:BK:60:VAL:CG1	2.32	0.50
26:BA:636:G:H3'	35:BP:126:SER:CB	2.41	0.50
35:BP:65:ASP:CB	35:BP:109:LEU:CA	2.86	0.50
36:BQ:94:ARG:HG2	36:BQ:107:LYS:O	2.11	0.50
36:BQ:156:ASN:O	36:BQ:157:ALA:CB	2.59	0.50
43:BR:96:ARG:HE	43:BR:117:VAL:HA	1.75	0.50
43:BR:45:ARG:C	43:BR:49:ASP:HB2	2.31	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:116:PHE:C	37:BS:120:GLU:CD	2.68	0.50
44:BU:47:TYR:C	44:BU:49:ASP:N	2.62	0.50
44:BU:88:ILE:HG21	45:BV:55:THR:HG1	1.63	0.50
45:BV:3:ALA:CA	45:BV:12:TYR:OH	2.59	0.50
40:BX:13:LYS:CD	40:BX:13:LYS:H	2.22	0.50
41:BY:46:ASP:CG	41:BY:98:VAL:HG11	2.31	0.50
42:BZ:85:MET:C	42:BZ:86:VAL:CG2	2.77	0.50
1:AA:1327:C:OP1	24:AU:20:LYS:HG2	2.12	0.50
1:AA:944:G:N1	1:AA:1337:G:H2'	2.26	0.50
1:AA:1361:G:O3'	1:AA:361(A):C:P	2.69	0.50
1:AA:791:G:H22	1:AA:1498:U:P	2.33	0.50
1:AA:1500:A:OP1	1:AA:1505:G:P	2.69	0.50
1:AA:598:U:H4'	11:AH:94:TYR:HB3	1.92	0.50
5:AB:115:LEU:HB2	5:AB:145:LEU:HD12	1.93	0.50
5:AB:17:PHE:CD1	5:AB:18:GLY:N	2.78	0.50
1:AA:426:G:C4'	7:AD:42:GLN:HA	2.41	0.50
1:AA:426:G:OP1	7:AD:45:GLN:NE2	2.43	0.50
1:AA:406:G:C5'	7:AD:5:ILE:CG2	2.89	0.50
11:AH:88:LYS:O	11:AH:90:GLY:N	2.44	0.50
1:AA:1280:A:C8	13:AJ:41:PRO:CD	2.94	0.50
6:AC:6:HIS:HB3	17:AN:49:HIS:HB3	1.92	0.50
20:AQ:21:VAL:CG1	20:AQ:23:VAL:HG23	2.40	0.50
48:B0:14:ARG:HH11	48:B0:14:ARG:H	1.58	0.50
26:BA:2395:C:C4'	49:B4:28:ARG:HH11	2.23	0.50
52:B7:9:ASN:O	52:B7:11:LYS:N	2.44	0.50
52:B7:22:MET:O	52:B7:24:THR:O	2.30	0.50
52:B7:28:ARG:O	52:B7:31:LEU:HB2	2.11	0.50
52:B7:38:GLY:O	52:B7:39:ARG:HG3	2.12	0.50
26:BA:1555:G:O5'	26:BA:1555:G:H8	1.93	0.50
26:BA:1797:C:C2	26:BA:1823:G:N2	2.79	0.50
26:BA:1935:G:O2'	26:BA:1937:A:H2	1.94	0.50
26:BA:192:C:H3'	26:BA:193:U:C6	2.46	0.50
26:BA:2045:C:N4	26:BA:2624:G:C2	2.79	0.50
26:BA:2093:G:N9	26:BA:2225:A:C6	2.79	0.50
26:BA:2254:C:H2'	26:BA:2255:G:O5'	2.09	0.50
26:BA:2306:C:C3'	26:BA:2306:C:C6	2.95	0.50
26:BA:2302:G:C2	26:BA:2315:G:C6	2.99	0.50
26:BA:2325:G:C4	26:BA:2326:C:C5	3.00	0.50
26:BA:2431:U:C2'	26:BA:2431:U:O2	2.56	0.50
26:BA:2462:U:C4	26:BA:2463:C:C5	2.99	0.50
26:BA:2549:G:C4	26:BA:2550:G:C8	2.99	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2556:C:H2'	26:BA:2557:G:O4'	2.11	0.50
26:BA:2562:U:N3	26:BA:2563:U:C2	2.69	0.50
26:BA:2612:C:C2'	26:BA:2613:U:C5'	2.89	0.50
26:BA:2652:C:C4	26:BA:2653:U:N3	2.78	0.50
26:BA:2734:A:C8	26:BA:2734:A:H3'	2.47	0.50
26:BA:2740:A:C5'	26:BA:2740:A:C8	2.89	0.50
26:BA:2745:C:O2'	31:BH:142:GLU:N	2.43	0.50
26:BA:2746:U:H5'	31:BH:137:LYS:O	2.10	0.50
26:BA:535:C:O2'	44:BU:53:LYS:CD	2.54	0.50
26:BA:747:U:H5	26:BA:2613:U:C5	2.29	0.50
26:BA:809:G:C6	26:BA:810:U:C4	2.99	0.50
26:BA:863:A:H2'	26:BA:864:G:C8	2.45	0.50
26:BA:875:G:OP1	42:BZ:146:HIS:NE2	2.39	0.50
27:BD:208:GLY:CA	27:BD:210:LYS:CE	2.73	0.50
27:BD:74:PRO:HD3	27:BD:96:ALA:HB2	1.87	0.50
28:BE:190:ASN:C	28:BE:192:ILE:CA	2.79	0.50
28:BE:199:ALA:HA	28:BE:314:ALA:N	2.27	0.50
26:BA:2822:G:P	28:BE:258:TYR:CE2	3.01	0.50
29:BF:52:ALA:CA	29:BF:55:ARG:CG	2.86	0.50
30:BG:22:VAL:CB	30:BG:24:HIS:CE1	2.88	0.50
31:BH:18:VAL:HG22	31:BH:23:VAL:HG22	0.76	0.50
31:BH:86:LEU:CD1	31:BH:87:GLU:C	2.80	0.50
32:BI:124:LEU:CG	32:BI:125:GLY:N	2.74	0.50
55:BK:38:PHE:CE2	55:BK:67:THR:N	2.79	0.50
33:BN:137:GLU:O	33:BN:138:THR:C	2.50	0.50
34:BO:1:MET:SD	34:BO:67:ARG:HD2	2.51	0.50
35:BP:122:ALA:O	35:BP:141:GLU:HA	2.10	0.50
36:BQ:142:LYS:CE	36:BQ:143:VAL:O	2.58	0.50
36:BQ:85:ILE:CG2	36:BQ:136:TRP:HZ2	2.24	0.50
36:BQ:65:ARG:NH2	36:BQ:85:ILE:O	2.44	0.50
43:BR:28:LEU:HD13	43:BR:32:GLY:HA2	1.92	0.50
43:BR:22:ARG:NH2	43:BR:69:ASP:CB	2.75	0.50
44:BU:8:ILE:H	44:BU:11:ARG:HD3	1.65	0.50
39:BW:24:ILE:C	39:BW:25:ARG:O	2.46	0.50
40:BX:18:MET:CE	40:BX:25:GLN:N	2.70	0.50
40:BX:22:ASN:CA	40:BX:68:LEU:CG	2.88	0.50
41:BY:11:GLN:CA	41:BY:21:LYS:CE	2.88	0.50
41:BY:15:PRO:O	41:BY:18:GLU:CB	2.56	0.50
41:BY:81:LYS:HD2	41:BY:83:ASP:N	2.11	0.50
42:BZ:116:VAL:HG22	42:BZ:116:VAL:O	2.09	0.50
42:BZ:91:PRO:CG	42:BZ:128:ARG:N	2.73	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1288:A:C2	1:AA:1352:C:O2	2.61	0.50
1:AA:769:G:N2	1:AA:900:A:H61	2.05	0.50
5:AB:174:VAL:HG13	5:AB:184:VAL:HG11	1.94	0.50
5:AB:15:VAL:HG22	5:AB:209:ARG:HD2	1.93	0.50
7:AD:17:VAL:CG1	7:AD:197:PRO:HG2	2.41	0.50
7:AD:62:GLN:HE22	7:AD:65:ARG:HD3	1.75	0.50
10:AG:113:GLU:HG3	10:AG:118:VAL:HB	1.93	0.50
2:AV:73:A:O3'	2:AV:74:C:P	2.67	0.50
26:BA:2364:C:C6	48:B0:32:LYS:NZ	2.54	0.50
48:B0:67:VAL:HG23	48:B0:68:VAL:N	2.26	0.50
46:B2:59:ILE:CG1	46:B2:60:GLN:N	2.56	0.50
51:B6:16:ALA:HB1	51:B6:42:PRO:CD	2.40	0.50
26:BA:125:G:H22	52:B7:10:ARG:H	1.60	0.50
52:B7:11:LYS:HA	52:B7:11:LYS:HE2	1.94	0.50
26:BA:1127:A:C2	26:BA:2518:A:H1'	2.45	0.50
26:BA:1786:A:H2	26:BA:2590:A:C1'	2.17	0.50
26:BA:1899:G:N2	26:BA:1902:C:N4	2.58	0.50
26:BA:1935:G:HO2'	26:BA:1937:A:H2	1.58	0.50
26:BA:2186:G:N1	26:BA:2187:G:O6	2.37	0.50
26:BA:2195:C:N3	26:BA:2196:C:C6	2.80	0.50
26:BA:2218:G:C6	26:BA:2219:G:N7	2.79	0.50
26:BA:2246:G:H1	26:BA:2258:C:H42	1.59	0.50
26:BA:2325:G:C2	26:BA:2326:C:C6	2.99	0.50
26:BA:2349:G:H3'	26:BA:2350:C:H5''	1.92	0.50
26:BA:2352:A:O2'	26:BA:2353:G:H5'	2.11	0.50
26:BA:2381:C:H6	26:BA:2381:C:C5'	2.24	0.50
26:BA:2397:G:H2'	26:BA:2398:U:C6	2.47	0.50
26:BA:2398:U:O2'	26:BA:2399:G:OP1	2.29	0.50
26:BA:2022:U:C2'	26:BA:2617:C:H4'	2.41	0.50
26:BA:2636:U:C2'	26:BA:2637:U:O5'	2.60	0.50
26:BA:2698:U:C2'	26:BA:2699:C:H6	2.15	0.50
26:BA:270:A:H2'	26:BA:270(A):A:C4'	2.41	0.50
26:BA:2776:A:N3	26:BA:2778:A:C6	2.74	0.50
26:BA:2827:C:N3	26:BA:2828:C:C5	2.79	0.50
26:BA:298:G:H8	26:BA:298:G:O5'	1.94	0.50
26:BA:605:C:O2'	26:BA:658:C:H4'	2.12	0.50
26:BA:684:G:N1	26:BA:775:G:C5	2.79	0.50
29:BF:98:ARG:C	29:BF:99:SER:O	2.44	0.50
32:BI:19:LYS:O	32:BI:21:VAL:HG23	2.12	0.50
55:BK:100:VAL:CG2	55:BK:137:ILE:CG2	2.90	0.50
55:BK:21:ALA:N	55:BK:22:PRO:HD2	2.25	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:26:PRO:O	55:BK:27:ALA:C	2.50	0.50
55:BK:93:LYS:HA	55:BK:96:ILE:HD12	1.86	0.50
35:BP:73:VAL:HA	35:BP:76:LEU:CB	2.40	0.50
44:BU:115:ASN:O	44:BU:117:ARG:HG3	2.12	0.50
45:BV:96:LEU:N	45:BV:96:LEU:HD23	2.26	0.50
39:BW:17:VAL:O	39:BW:20:VAL:HB	2.10	0.50
26:BA:338:G:C8	41:BY:21:LYS:HB2	2.44	0.50
1:AA:116:A:H2	1:AA:314:C:H4'	1.76	0.50
1:AA:901:A:H8	1:AA:901:A:O5'	1.94	0.50
5:AB:112:VAL:CA	5:AB:113:HIS:N	2.71	0.50
5:AB:167:PRO:HG2	5:AB:192:SER:HB3	1.93	0.50
6:AC:139:GLN:HA	6:AC:170:GLN:HE22	1.77	0.50
14:AK:12:ARG:HH12	14:AK:40:ILE:HA	1.74	0.50
1:AA:1364:U:C6	24:AU:14:TRP:CH2	3.00	0.50
48:B0:62:LEU:O	48:B0:63:SER:C	2.48	0.50
48:B0:40:GLN:N	48:B0:69:PHE:CE1	2.79	0.50
47:B3:43:ILE:CD1	47:B3:43:ILE:N	2.57	0.50
52:B7:30:ILE:CD1	52:B7:33:ARG:NE	2.75	0.50
26:BA:1000:A:C8	26:BA:1154:G:N2	2.80	0.50
26:BA:1151:G:O3'	44:BU:81:ASN:CG	2.50	0.50
26:BA:996:A:H61	26:BA:1159:U:H3	1.59	0.50
26:BA:1203:G:H1'	26:BA:1241:A:N1	2.25	0.50
26:BA:134:C:H2'	26:BA:135:G:O4'	2.11	0.50
26:BA:1819:A:H4'	26:BA:1820:U:H5'	1.93	0.50
26:BA:1900:A:C2	26:BA:1970:A:C6	2.99	0.50
26:BA:1954:G:C2	26:BA:2551:C:H5''	2.46	0.50
26:BA:2210:G:H4'	26:BA:2211:G:O5'	2.11	0.50
26:BA:2377:A:O2'	26:BA:2378:A:O5'	2.20	0.50
26:BA:2450:A:C2	26:BA:2451:A:N9	2.80	0.50
26:BA:2544:G:C2	26:BA:2545:G:C5	3.00	0.50
26:BA:2549:G:C6	26:BA:2550:G:N7	2.79	0.50
26:BA:2588:G:O6	26:BA:2589:A:C6	2.64	0.50
26:BA:2690:C:C6	26:BA:2690:C:O5'	2.65	0.50
26:BA:2705:A:N6	26:BA:2706:G:C2	2.79	0.50
26:BA:2717:G:O2'	26:BA:2718:G:C4'	2.59	0.50
26:BA:2852:G:O6	26:BA:2866:U:O4	2.29	0.50
26:BA:2892:A:C4'	26:BA:2892:A:OP1	2.58	0.50
26:BA:590:A:H5''	29:BF:97:ASP:HB2	1.93	0.50
26:BA:738:G:N3	26:BA:739:G:H1'	2.26	0.50
26:BA:792:G:H21	26:BA:2072:G:C2'	2.24	0.50
26:BA:932:G:OP1	47:B3:29:ARG:CZ	2.58	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:104:ILE:CD1	27:BD:104:ILE:H	2.02	0.50
28:BE:198:TYR:HE2	28:BE:265:ASN:C	2.12	0.50
30:BG:103:ASN:O	30:BG:104:PHE:CD2	2.65	0.50
32:BI:6:LEU:HB3	32:BI:36:ALA:HB2	1.85	0.50
32:BI:93:ILE:HG12	32:BI:121:ILE:HB	1.94	0.50
32:BI:94:THR:HG23	32:BI:97:GLN:N	2.19	0.50
55:BK:22:PRO:CB	55:BK:23:PRO:CD	2.89	0.50
36:BQ:82:LYS:HB2	36:BQ:125:TRP:HB2	1.90	0.50
36:BQ:142:LYS:CE	36:BQ:142:LYS:CA	2.88	0.50
43:BR:45:ARG:HG2	43:BR:46:GLY:H	1.77	0.50
43:BR:91:GLN:C	43:BR:92:GLY:O	2.50	0.50
45:BV:14:VAL:CG2	45:BV:19:VAL:CG2	2.54	0.50
39:BW:58:ALA:O	39:BW:61:ASN:N	2.44	0.50
42:BZ:91:PRO:CB	42:BZ:127:PRO:CB	2.88	0.50
1:AA:1127:G:H2'	1:AA:1128:C:H6	1.75	0.50
1:AA:1516:G:H22	1:AA:1518:A:H3'	1.76	0.50
1:AA:946:A:O2'	1:AA:1333:A:H1'	2.12	0.50
1:AA:976:G:H8	1:AA:1358:U:H2'	1.77	0.50
6:AC:141:VAL:HG11	6:AC:202:ILE:HG12	1.92	0.50
6:AC:43:LEU:O	6:AC:47:LEU:HB2	2.11	0.50
11:AH:29:SER:CB	11:AH:32:LYS:HZ1	2.23	0.50
48:B0:37:LEU:CA	48:B0:69:PHE:CD2	2.92	0.50
47:B3:6:VAL:CG2	47:B3:7:LYS:N	2.75	0.50
52:B7:30:ILE:HG12	52:B7:33:ARG:CD	2.29	0.50
26:BA:1071:G:H2'	26:BA:1072:C:H5'	1.93	0.50
26:BA:1160:G:H2'	26:BA:1161:C:C6	2.46	0.50
26:BA:1140:C:H5'	26:BA:142(A):A:C4	2.46	0.50
26:BA:1470:G:N1	26:BA:1520:U:N3	2.54	0.50
26:BA:1518:C:H2'	26:BA:1519:G:O2'	2.11	0.50
26:BA:1655:A:O3'	28:BE:212:GLY:HA3	2.12	0.50
26:BA:1668:A:H61	26:BA:1676:A:H61	1.57	0.50
26:BA:204:A:H8	26:BA:204:A:OP1	1.94	0.50
26:BA:206:U:H2'	26:BA:207:A:H8	1.76	0.50
26:BA:2095:C:N3	26:BA:2194:G:O6	2.44	0.50
26:BA:2212:A:C2'	26:BA:2213:U:C6	2.80	0.50
26:BA:2325:G:C5	26:BA:2326:C:C5	2.96	0.50
26:BA:2354:G:C2	26:BA:2355:C:C6	3.00	0.50
26:BA:2370:G:H2'	26:BA:2371:G:O5'	2.09	0.50
26:BA:2384:G:H3'	26:BA:2386:C:P	2.52	0.50
26:BA:2385:C:O2	26:BA:2386:C:C1'	2.59	0.50
26:BA:2462:U:H2'	26:BA:2463:C:O5'	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2514:U:C3'	26:BA:2514:U:C6	2.94	0.50
26:BA:2572:A:OP2	28:BE:241:TRP:HB2	2.11	0.50
26:BA:2652:C:C2'	26:BA:2653:U:C5'	2.88	0.50
26:BA:458:G:O2'	26:BA:469:G:N1	2.43	0.50
26:BA:532:A:C8	26:BA:561:G:N2	2.80	0.50
25:BB:74:U:H2'	25:BB:75:G:C8	2.40	0.50
29:BF:165:ASP:O	29:BF:168:ARG:HG3	2.10	0.50
26:BA:2311:A:H2	30:BG:53:LYS:NZ	2.05	0.50
31:BH:25:VAL:HG21	31:BH:74:MET:HB3	1.92	0.50
32:BI:3:VAL:HG21	32:BI:21:VAL:H	1.76	0.50
32:BI:68:LEU:HD11	32:BI:108:LEU:HD22	1.87	0.50
32:BI:89:LEU:HD13	32:BI:92:SER:O	2.12	0.50
55:BK:19:THR:N	55:BK:20:PRO:CD	2.70	0.50
33:BN:83:ILE:HG13	33:BN:84:ARG:CG	2.41	0.50
34:BO:15:GLY:O	34:BO:46:ALA:HB1	2.12	0.50
34:BO:24:VAL:HG21	34:BO:32:TYR:CA	2.41	0.50
34:BO:3:GLN:CG	34:BO:4:GLN:H	2.23	0.50
34:BO:87:ILE:HG23	34:BO:92:SER:H	1.74	0.50
34:BO:87:ILE:CG2	34:BO:88:ARG:N	2.75	0.50
34:BO:88:ARG:CZ	34:BO:94:ARG:HG2	2.42	0.50
36:BQ:135:ALA:O	36:BQ:137:ARG:N	2.45	0.50
26:BA:911:A:C6	36:BQ:16:ARG:HG3	2.16	0.50
43:BR:33:ARG:HB2	43:BR:113:LEU:HD11	1.94	0.50
26:BA:2334:G:N2	37:BS:12:ARG:CG	2.44	0.50
37:BS:41:LYS:C	37:BS:42:HIS:CG	2.83	0.50
45:BV:35:LEU:C	45:BV:60:VAL:CG1	2.64	0.50
39:BW:23:LEU:CD1	39:BW:35:ILE:HG21	2.39	0.50
26:BA:519:U:H4'	39:BW:75:TYR:HB3	1.94	0.50
41:BY:33:GLU:CD	41:BY:34:GLU:N	2.51	0.50
42:BZ:116:VAL:O	42:BZ:118:HIS:N	2.43	0.50
1:AA:1020:U:H2'	1:AA:1021:G:C8	2.46	0.50
1:AA:1222:G:OP1	1:AA:1321:C:O2	2.29	0.50
1:AA:1280:A:C8	13:AJ:41:PRO:HD2	2.46	0.50
1:AA:626:U:H5''	19:AP:38:TYR:CD2	2.46	0.50
2:AV:24:G:H2'	2:AV:25:C:C6	2.47	0.50
46:B2:15:GLU:C	46:B2:17:GLU:N	2.64	0.50
50:B5:18:MET:C	50:B5:21:SER:HB3	2.32	0.50
51:B6:16:ALA:HB1	51:B6:42:PRO:HG3	1.94	0.50
53:B8:16:ILE:HG22	53:B8:17:THR:H	1.76	0.50
53:B8:23:MET:HE3	53:B8:48:PHE:CG	2.41	0.50
26:BA:1118:C:H2'	26:BA:1119:C:O4'	2.12	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:192:C:H3'	26:BA:193:U:H6	1.77	0.50
26:BA:1993:U:H4'	28:BE:228:ARG:CZ	2.41	0.50
26:BA:2195:C:H6	26:BA:2195:C:H5''	1.65	0.50
26:BA:2234:G:N3	26:BA:2235:G:C8	2.78	0.50
26:BA:2298:A:C1'	26:BA:2322:A:O2'	2.60	0.50
26:BA:2352:A:C8	26:BA:2366:A:N6	2.80	0.50
26:BA:2327:A:C5	26:BA:2388:A:C6	2.99	0.50
26:BA:2410:G:C2	26:BA:2411:A:C4	2.99	0.50
26:BA:2416:C:P	35:BP:51:PHE:CD2	3.05	0.50
26:BA:2431:U:O2	26:BA:2433:A:P	2.69	0.50
26:BA:2508:G:H2'	26:BA:2509:G:H5'	1.92	0.50
26:BA:2531:A:C2	26:BA:2658:C:C1'	2.90	0.50
26:BA:2569:G:C6	26:BA:2570:G:N7	2.80	0.50
26:BA:2516:G:N1	26:BA:2569:G:N3	2.59	0.50
26:BA:2569:G:C4	26:BA:2570:G:C8	2.99	0.50
26:BA:2771:C:C2	26:BA:2772:C:C6	2.99	0.50
26:BA:2850:A:C2	26:BA:2869:G:H4'	2.47	0.50
26:BA:2863:C:C2	26:BA:2864:G:C8	2.99	0.50
26:BA:2869:G:HO2'	26:BA:2870:C:H5'	1.71	0.50
26:BA:2886:G:N2	26:BA:2887:U:H1'	2.22	0.50
26:BA:489:G:N2	26:BA:1321:A:OP1	2.43	0.50
26:BA:764:A:C8	26:BA:764:A:H5''	2.46	0.50
26:BA:961:C:N4	26:BA:2031:A:N3	2.60	0.50
27:BD:166:LYS:HA	27:BD:182:MET:CE	2.42	0.50
27:BD:167:GLU:OE1	27:BD:167:GLU:HA	2.10	0.50
27:BD:170:TYR:O	27:BD:182:MET:HE1	2.11	0.50
27:BD:142:ASN:CB	27:BD:190:THR:HG23	2.41	0.50
27:BD:68:ARG:H	27:BD:68:ARG:HD3	1.76	0.50
27:BD:70:LYS:CG	27:BD:73:ILE:CD1	2.65	0.50
28:BE:78:MET:O	28:BE:79:ARG:O	2.29	0.50
29:BF:200:PRO:CB	29:BF:212:VAL:CG1	2.67	0.50
29:BF:19:PRO:O	29:BF:21:VAL:N	2.44	0.50
29:BF:39:GLN:CA	29:BF:39:GLN:OE1	2.60	0.50
30:BG:98:PHE:C	30:BG:104:PHE:HD2	2.10	0.50
30:BG:27:ILE:C	30:BG:69:ILE:HD13	2.31	0.50
30:BG:90:LEU:C	30:BG:92:GLU:OE2	2.49	0.50
33:BN:53:ILE:CG2	33:BN:54:VAL:HG23	2.41	0.50
33:BN:92:GLN:O	33:BN:95:ARG:HB2	2.11	0.50
34:BO:9:LYS:C	34:BO:83:ALA:HB1	2.26	0.50
35:BP:128:GLY:C	35:BP:132:LYS:CD	2.73	0.50
36:BQ:33:MET:HG3	36:BQ:83:PHE:CD1	2.47	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:77:ARG:O	43:BR:78:LYS:C	2.50	0.50
44:BU:39:LEU:C	44:BU:41:ASN:N	2.61	0.50
40:BX:45:TYR:HE2	40:BX:73:ASP:HA	1.77	0.50
36:BQ:36:ASN:OD1	42:BZ:116:VAL:N	2.45	0.50
42:BZ:67:LYS:O	42:BZ:67:LYS:CG	2.58	0.50
42:BZ:92:VAL:O	42:BZ:94:VAL:HG23	2.12	0.50
12:AI:111:ARG:HG2	12:AI:112:LYS:O	2.12	0.50
22:AS:60:VAL:HG11	22:AS:74:PHE:HB3	1.94	0.50
3:AW:16:U:O2'	3:AW:17:U:OP2	2.21	0.50
52:B7:11:LYS:HG3	52:B7:12:ARG:H	1.77	0.50
52:B7:12:ARG:O	52:B7:13:ALA:C	2.50	0.50
26:BA:1012:U:O2	33:BN:21:ARG:NE	2.40	0.50
26:BA:1027:A:C5	26:BA:1126:A:N3	2.79	0.50
26:BA:1034:G:H5'	54:B9:18:ARG:NH2	2.27	0.50
26:BA:1155:A:H2'	26:BA:1157:G:N7	2.25	0.50
26:BA:974(A):C:H6	26:BA:1186:G:N1	2.10	0.50
26:BA:2327:A:C6	26:BA:2328:A:N1	2.80	0.50
26:BA:2359:C:C4	26:BA:2360:A:H2	2.17	0.50
26:BA:2370:G:C4	26:BA:2371:G:C8	3.00	0.50
26:BA:2436:G:N2	26:BA:2437:U:C1'	2.75	0.50
26:BA:1127:A:C6	26:BA:2518:A:N3	2.80	0.50
26:BA:2531:A:C3'	26:BA:2532:G:C5'	2.88	0.50
26:BA:2592:G:C8	26:BA:2593:U:C6	2.97	0.50
26:BA:2712:U:H5''	26:BA:2714:G:H4'	1.94	0.50
26:BA:2767:C:C2'	26:BA:2768:C:O5'	2.52	0.50
26:BA:283:A:C2	26:BA:360:G:N2	2.80	0.50
26:BA:2868:A:C5	26:BA:2869:G:C8	2.99	0.50
26:BA:617:G:P	29:BF:221:GLU:OE2	2.69	0.50
26:BA:978:G:C6	26:BA:979:G:C6	3.00	0.50
28:BE:193:PHE:CE2	28:BE:199:ALA:HB1	2.38	0.50
28:BE:217:TRP:O	28:BE:218:GLY:C	2.47	0.50
28:BE:229:GLN:O	28:BE:231:TRP:CA	2.57	0.50
28:BE:216:ARG:HD3	28:BE:253:GLN:HA	1.92	0.50
29:BF:214:THR:O	29:BF:215:ALA:C	2.45	0.50
29:BF:57:PRO:CG	29:BF:58:ALA:N	2.74	0.50
30:BG:60:GLU:C	30:BG:61:PHE:HD1	2.15	0.50
30:BG:64:ARG:HB3	30:BG:67:ASP:OD2	2.08	0.50
31:BH:124:VAL:O	31:BH:125:PRO:C	2.49	0.50
31:BH:87:GLU:HG3	31:BH:162:ARG:C	2.27	0.50
32:BI:115:ILE:HG12	32:BI:131:VAL:HG11	1.86	0.50
33:BN:58:GLU:O	33:BN:61:VAL:CB	2.48	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:60:GLU:O	35:BP:61:ALA:HB2	2.10	0.50
35:BP:92:ASP:C	35:BP:92:ASP:OD1	2.50	0.50
36:BQ:85:ILE:HD13	36:BQ:85:ILE:O	2.11	0.50
43:BR:20:LEU:O	43:BR:22:ARG:C	2.50	0.50
26:BA:2334:G:H1'	37:BS:21:HIS:ND1	2.26	0.50
37:BS:27:LEU:N	37:BS:33:ARG:CZ	2.75	0.50
39:BW:12:ILE:CD1	39:BW:42:ARG:HD2	2.41	0.50
39:BW:45:TYR:O	39:BW:46:PHE:C	2.49	0.50
42:BZ:106:GLY:N	42:BZ:141:MET:HG2	2.25	0.50
42:BZ:51:LEU:HD21	42:BZ:52:PHE:O	2.10	0.50
25:BB:103:U:HO2'	42:BZ:67:LYS:HG2	1.69	0.50
36:BQ:120:HIS:CE1	42:BZ:76:ARG:NH1	2.78	0.50
1:AA:819:A:C6	1:AA:1529:G:C5	3.00	0.50
1:AA:778:G:H2'	1:AA:779:C:H6	1.77	0.50
1:AA:939:G:OP1	10:AG:102:ARG:NH2	2.45	0.50
1:AA:944:G:N7	1:AA:945:G:C8	2.80	0.50
14:AK:18:ARG:NH2	14:AK:37:GLY:HA2	2.27	0.50
1:AA:976:G:OP1	17:AN:31:ARG:O	2.30	0.50
6:AC:29:TYR:HD1	17:AN:36:PHE:HE1	1.58	0.50
1:AA:377:G:P	19:AP:5:ARG:HH11	2.34	0.50
1:AA:1221:G:HO2'	22:AS:77:THR:HG23	1.74	0.50
26:BA:858:U:C5'	48:B0:20:TYR:OH	2.56	0.50
51:B6:2:ALA:CB	51:B6:11:LYS:HZ1	2.15	0.50
26:BA:1287:A:H5''	43:BR:104:ARG:HD3	1.91	0.50
26:BA:1935:G:H2'	26:BA:1962:C:H42	1.77	0.50
26:BA:1936:A:C5	26:BA:1945:G:C6	3.00	0.50
26:BA:2314:C:HO2'	26:BA:2315:G:C5'	2.25	0.50
26:BA:2325:G:C6	26:BA:2326:C:C5	2.94	0.50
26:BA:2562:U:C2'	26:BA:2562:U:O2	2.59	0.50
26:BA:264:C:O2'	26:BA:265:A:H2'	2.12	0.50
26:BA:2725:A:H2'	26:BA:2727:G:N7	2.27	0.50
26:BA:2729:G:C4'	28:BE:298:GLY:HA3	2.42	0.50
26:BA:2862:G:C2	26:BA:2863:C:C4	2.99	0.50
26:BA:669:G:N3	26:BA:669:G:H2'	2.25	0.50
26:BA:851:U:H2'	26:BA:852:G:H8	1.77	0.50
27:BD:140:VAL:C	27:BD:141:HIS:HD1	2.14	0.50
27:BD:73:ILE:CD1	27:BD:95:TYR:CE2	2.95	0.50
28:BE:74:GLU:O	28:BE:75:THR:CB	2.60	0.50
29:BF:89:ALA:HB1	29:BF:90:HIS:CD2	2.47	0.50
31:BH:47:ASN:O	31:BH:48:VAL:CG1	2.60	0.50
32:BI:111:ASP:C	32:BI:112:LYS:HD3	2.31	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:270(O):U:H5	32:BI:53:LYS:HZ1	1.40	0.50
55:BK:20:PRO:O	55:BK:21:ALA:C	2.50	0.50
55:BK:8:GLN:N	55:BK:59:THR:HG22	2.27	0.50
55:BK:97:VAL:HA	55:BK:99:LYS:HZ2	1.74	0.50
33:BN:136:SER:C	33:BN:138:THR:N	2.63	0.50
34:BO:10:VAL:CG1	34:BO:12:ASP:OD1	2.52	0.50
34:BO:13:ASN:ND2	34:BO:97:ARG:HB3	2.27	0.50
35:BP:130:ARG:CA	35:BP:133:VAL:HG23	2.42	0.50
35:BP:66:VAL:HG21	35:BP:110:GLY:O	2.11	0.50
35:BP:75:LEU:C	35:BP:75:LEU:CD2	2.74	0.50
36:BQ:141:MET:O	36:BQ:142:LYS:O	2.30	0.50
2:AV:1:G:HO2'	36:BQ:98:GLY:CA	2.19	0.50
44:BU:98:ILE:O	44:BU:100:ALA:C	2.50	0.50
26:BA:974:G:H8	45:BV:80:TYR:CD1	2.17	0.50
39:BW:36:LEU:CD1	39:BW:47:VAL:HB	2.42	0.50
39:BW:7:ALA:O	39:BW:10:VAL:CG2	2.59	0.50
40:BX:17:ASP:O	40:BX:20:PHE:CE1	2.65	0.50
40:BX:76:GLU:OE1	40:BX:76:GLU:C	2.50	0.50
41:BY:30:ASP:CG	41:BY:31:LEU:CG	2.80	0.50
41:BY:40:VAL:O	41:BY:41:ARG:CB	2.59	0.50
41:BY:81:LYS:NZ	41:BY:83:ASP:HB2	2.26	0.50
26:BA:483:A:H1'	41:BY:83:ASP:HA	1.94	0.50
41:BY:89:ARG:O	41:BY:91:LEU:HD21	2.12	0.50
42:BZ:113:VAL:N	42:BZ:174:PRO:HD3	2.27	0.50
42:BZ:141:MET:HA	42:BZ:171:VAL:CG1	2.36	0.50
42:BZ:159:THR:CG2	42:BZ:160:LEU:N	2.45	0.50
42:BZ:1:MET:HE1	42:BZ:52:PHE:CD2	2.45	0.50
42:BZ:67:LYS:HB2	42:BZ:67:LYS:HZ2	1.77	0.50
42:BZ:6:LYS:O	42:BZ:31:SER:OG	2.18	0.50
1:AA:106:C:H2'	1:AA:107:G:H8	1.75	0.50
1:AA:1250:A:H4'	12:AI:67:GLY:C	2.33	0.50
1:AA:1221:G:H5''	1:AA:1321:C:C2	2.47	0.50
1:AA:1406:U:C2	1:AA:1517:G:N2	2.80	0.50
1:AA:686:U:H1'	14:AK:42:TRP:NE1	2.27	0.50
5:AB:162:ILE:H	5:AB:162:ILE:HD13	1.76	0.50
6:AC:119:ARG:HG2	6:AC:140:ARG:HH12	1.76	0.50
7:AD:24:GLU:CA	7:AD:112:VAL:HG12	2.40	0.50
11:AH:12:ARG:HH11	11:AH:27:PRO:HD3	1.76	0.50
13:AJ:11:PHE:HE2	13:AJ:65:LEU:HG	1.75	0.50
6:AC:8:ILE:CG2	17:AN:50:LYS:O	2.59	0.50
3:AW:75:C:H41	49:B4:27:THR:C	2.09	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:55:ARG:HB3	48:B0:55:ARG:CZ	2.42	0.50
48:B0:36:ILE:N	48:B0:68:VAL:CG1	2.75	0.50
47:B3:13:ILE:O	47:B3:15:TYR:CD1	2.65	0.50
47:B3:8:LEU:HB2	47:B3:33:GLN:H	1.77	0.50
49:B4:26:SER:O	49:B4:27:THR:O	2.30	0.50
49:B4:58:LYS:HG2	49:B4:62:ARG:HH21	1.75	0.50
52:B7:21:ARG:HH22	52:B7:43:THR:CA	2.24	0.50
26:BA:1097:U:O4	55:BK:31:HIS:HE1	1.91	0.50
26:BA:1450:C:H2'	26:BA:1451:C:H4'	1.94	0.50
26:BA:1657:C:C6	26:BA:1657:C:O5'	2.65	0.50
26:BA:1993:U:H2'	26:BA:1994:C:O4'	2.12	0.50
26:BA:2076:U:H3'	26:BA:2076:U:C6	2.47	0.50
26:BA:2182:G:C5	26:BA:2183:C:N4	2.80	0.50
26:BA:2277:G:H3'	26:BA:2278:A:H5''	1.94	0.50
26:BA:2325:G:H8	26:BA:2325:G:C5'	2.25	0.50
26:BA:2349:G:C4	26:BA:2369:A:C2	3.00	0.50
26:BA:2396:G:O2'	49:B4:27:THR:HA	2.12	0.50
26:BA:2511:U:C5	26:BA:2512:C:H5	2.26	0.50
26:BA:2571:C:C2'	26:BA:2571:C:O2	2.54	0.50
26:BA:2615:U:O2'	26:BA:2616:C:O5'	2.30	0.50
26:BA:2633:G:C2'	26:BA:2634:G:O5'	2.59	0.50
26:BA:2633:G:H5'	26:BA:2812:G:H5'	1.94	0.50
26:BA:2671:A:H2'	26:BA:2672:G:O5'	2.11	0.50
26:BA:2678:C:H2'	26:BA:2679:A:C5'	2.41	0.50
26:BA:270(G):C:H2'	26:BA:270(H):C:H6	1.76	0.50
26:BA:2696:U:O4	26:BA:2714:G:N2	2.44	0.50
26:BA:606:U:OP1	29:BF:104:ASP:CB	2.60	0.50
26:BA:673:C:N4	26:BA:808:G:C6	2.79	0.50
26:BA:721:C:H2'	26:BA:722:A:C8	2.47	0.50
26:BA:966:G:H1'	26:BA:2267:A:H62	1.76	0.50
27:BD:125:ILE:CG2	27:BD:126:GLY:H	2.24	0.50
27:BD:175:LEU:CD1	27:BD:179:GLU:CA	2.89	0.50
28:BE:83:LEU:HD12	28:BE:178:LEU:HD23	1.94	0.50
28:BE:185:GLY:O	28:BE:187:HIS:HD2	1.91	0.50
28:BE:233:ARG:O	28:BE:234:ARG:CB	2.48	0.50
28:BE:268:LEU:C	28:BE:268:LEU:HD22	2.27	0.50
29:BF:140:VAL:HB	29:BF:235:PHE:O	2.12	0.50
30:BG:141:VAL:CA	30:BG:144:ARG:NH1	2.75	0.50
31:BH:155:PRO:HB2	31:BH:169:ARG:CG	2.37	0.50
32:BI:119:ASP:OD1	32:BI:119:ASP:C	2.50	0.50
32:BI:86:GLY:O	32:BI:88:ARG:HA	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:80:LYS:O	33:BN:81:ARG:C	2.49	0.50
34:BO:17:ARG:HE	34:BO:47:THR:N	2.09	0.50
35:BP:59:GLU:OE1	35:BP:60:GLU:CB	2.58	0.50
43:BR:105:ARG:HA	43:BR:105:ARG:NE	2.25	0.50
37:BS:10:MET:H	37:BS:13:ARG:HE	1.60	0.50
44:BU:20:ARG:HH12	45:BV:75:LYS:HZ1	1.59	0.50
44:BU:84:LYS:C	44:BU:86:ALA:N	2.60	0.50
39:BW:106:ILE:HG23	39:BW:107:LEU:N	2.26	0.50
39:BW:49:LYS:C	39:BW:51:LEU:H	2.16	0.50
39:BW:86:LEU:CB	39:BW:87:PRO:HD2	2.28	0.50
26:BA:905:U:HO2'	42:BZ:117:VAL:HG13	1.76	0.50
1:AA:1084:G:H3'	1:AA:1085:U:H3'	1.94	0.49
1:AA:1418:A:H8	1:AA:1419:G:C1'	2.25	0.49
14:AK:40:ILE:HG23	14:AK:75:TYR:CD2	2.47	0.49
1:AA:279:A:C2	20:AQ:98:LEU:CD1	2.93	0.49
21:AR:21:LYS:H	21:AR:55:ARG:HH12	1.60	0.49
2:AV:58:A:C6	2:AV:61:C:C6	2.99	0.49
3:AW:30:G:O2'	3:AW:31:A:H5'	2.12	0.49
48:B0:14:ARG:C	48:B0:14:ARG:CD	2.75	0.49
46:B2:7:GLU:HG2	46:B2:8:ILE:N	2.26	0.49
49:B4:6:HIS:HE2	49:B4:55:ARG:HG3	1.77	0.49
53:B8:58:MET:O	53:B8:60:LEU:CA	2.57	0.49
26:BA:1668:A:C5	26:BA:1993:U:C4	3.00	0.49
26:BA:2230:G:H2'	26:BA:2231:C:H6	1.76	0.49
26:BA:2485:G:H2'	26:BA:2486:G:C4'	2.42	0.49
26:BA:2487:G:C2'	26:BA:2488:A:C5'	2.90	0.49
26:BA:2586:C:C2'	26:BA:2587:A:H5'	2.41	0.49
26:BA:512:G:H5'	26:BA:513:A:OP1	2.12	0.49
26:BA:648:G:H2'	26:BA:649:G:H8	1.77	0.49
27:BD:173:VAL:O	27:BD:175:LEU:HD23	2.12	0.49
29:BF:157:LEU:O	29:BF:158:GLU:C	2.47	0.49
29:BF:29:ASP:O	29:BF:30:LEU:C	2.50	0.49
30:BG:60:GLU:O	30:BG:61:PHE:CD1	2.65	0.49
30:BG:97:GLN:CB	30:BG:106:PHE:CD2	2.90	0.49
32:BI:119:ASP:OD1	32:BI:120:ALA:N	2.45	0.49
55:BK:37:GLU:HG2	55:BK:41:ARG:NH1	2.06	0.49
36:BQ:143:VAL:C	36:BQ:144:THR:HG23	2.21	0.49
36:BQ:27:GLY:C	36:BQ:28:ILE:HG13	2.32	0.49
36:BQ:45:GLN:OE1	36:BQ:153:PRO:CB	2.60	0.49
43:BR:23:ASN:OD1	43:BR:24:GLN:N	2.45	0.49
43:BR:59:ASP:N	43:BR:80:PHE:CE2	2.79	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:83:ILE:O	43:BR:86:ARG:N	2.45	0.49
44:BU:66:ASN:CG	44:BU:76:TYR:CZ	2.85	0.49
26:BA:1162:G:HO2'	45:BV:23:GLU:CD	2.13	0.49
45:BV:72:ARG:CG	45:BV:88:GLN:HG3	2.27	0.49
45:BV:78:VAL:CG2	45:BV:80:TYR:CD1	2.95	0.49
45:BV:67:LYS:HG3	45:BV:94:LYS:HD2	1.94	0.49
42:BZ:95:SER:OG	42:BZ:122:ILE:HG23	2.12	0.49
1:AA:1067:A:N1	1:AA:1108:G:O2'	2.45	0.49
1:AA:1179:A:H2'	1:AA:1180:A:C8	2.47	0.49
1:AA:281:G:HO2'	1:AA:282:A:H8	1.60	0.49
1:AA:585:G:O2'	1:AA:879:C:C5'	2.56	0.49
1:AA:971:G:H22	1:AA:1363:A:P	2.30	0.49
10:AG:74:GLU:HG2	10:AG:75:VAL:N	2.25	0.49
16:AM:66:LEU:CB	16:AM:67:GLU:N	2.75	0.49
2:AV:56:C:O2	30:BG:56:ARG:CZ	2.57	0.49
3:AW:37:YYG:O22	10:AG:85:TYR:N	2.45	0.49
48:B0:39:ARG:C	48:B0:40:GLN:O	2.47	0.49
26:BA:969:U:O3'	47:B3:14:GLY:HA2	2.12	0.49
52:B7:26:SER:O	52:B7:27:GLY:O	2.30	0.49
26:BA:594:U:C4'	53:B8:58:MET:HE2	2.42	0.49
26:BA:2528:U:OP1	54:B9:30:VAL:HG11	2.01	0.49
26:BA:993:G:C8	26:BA:1162:G:N1	2.80	0.49
26:BA:124:G:H5'	26:BA:1376:C:O2'	2.12	0.49
26:BA:1539:G:H2'	26:BA:1540:G:C8	2.48	0.49
26:BA:1924:C:N4	26:BA:1925:C:H41	2.08	0.49
26:BA:2218:G:N1	26:BA:2219:G:C5	2.80	0.49
26:BA:2087:G:N1	26:BA:2233:U:C6	2.80	0.49
26:BA:2345:G:H21	26:BA:2381:C:C3'	2.24	0.49
26:BA:2378:A:H1'	37:BS:101:VAL:CG2	2.42	0.49
26:BA:2459:A:H8	26:BA:2460:U:H5	1.58	0.49
26:BA:2458:G:C6	26:BA:2490:G:N3	2.80	0.49
26:BA:2605:U:H6	26:BA:2605:U:C4'	2.26	0.49
26:BA:2625:G:C5	26:BA:2626:C:C2	3.00	0.49
26:BA:2631:G:C4	26:BA:2632:A:H8	2.27	0.49
26:BA:2641:G:O6	26:BA:2774:C:C5	2.65	0.49
26:BA:2776:A:C4	26:BA:2778:A:C6	2.99	0.49
26:BA:2830:G:N3	26:BA:2883:A:H2	2.10	0.49
26:BA:2854:G:N2	26:BA:2864:G:C8	2.80	0.49
26:BA:292:C:H2'	26:BA:293:U:N3	2.20	0.49
26:BA:452:G:C3'	26:BA:453:C:H5''	2.36	0.49
26:BA:70:G:H5'	26:BA:75:G:N2	2.26	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:72:U:C4'	46:B2:57:LYS:HZ1	2.24	0.49
26:BA:778:G:C6	26:BA:779:U:N3	2.81	0.49
27:BD:105:ALA:N	27:BD:106:PRO:HD2	2.24	0.49
28:BE:193:PHE:HA	28:BE:197:GLU:OE1	2.12	0.49
29:BF:112:ARG:O	29:BF:115:LEU:N	2.45	0.49
29:BF:120:ASP:OD1	29:BF:120:ASP:N	2.45	0.49
29:BF:155:SER:OG	29:BF:156:LEU:N	2.45	0.49
29:BF:238:SER:O	29:BF:241:ALA:CA	2.54	0.49
26:BA:1255:U:C5	29:BF:67:GLN:O	2.65	0.49
29:BF:93:LYS:O	29:BF:96:LYS:CB	2.57	0.49
31:BH:87:GLU:CG	31:BH:162:ARG:HB2	2.42	0.49
32:BI:98:ILE:O	32:BI:99:ALA:O	2.30	0.49
55:BK:74:PRO:O	55:BK:75:ALA:C	2.51	0.49
26:BA:1012:U:O2	33:BN:21:ARG:HG2	2.12	0.49
33:BN:12:VAL:O	33:BN:38:VAL:HA	2.11	0.49
33:BN:52:GLN:HB3	33:BN:55:GLU:OE1	2.11	0.49
33:BN:77:GLY:HA2	33:BN:80:LYS:CB	2.39	0.49
35:BP:69:ILE:CA	35:BP:73:VAL:HG21	2.40	0.49
37:BS:9:PRO:CG	37:BS:14:ARG:CB	2.89	0.49
37:BS:31:LYS:HZ2	37:BS:99:GLU:HB3	1.77	0.49
25:BB:8:U:P	37:BS:37:ARG:HD2	2.52	0.49
44:BU:69:ALA:HB3	44:BU:76:TYR:CE1	2.47	0.49
44:BU:69:ALA:O	44:BU:74:MET:O	2.30	0.49
41:BY:20:HIS:C	41:BY:22:GLN:N	2.62	0.49
41:BY:24:ARG:O	41:BY:25:ALA:CB	2.61	0.49
42:BZ:94:VAL:HG11	42:BZ:130:ILE:HG21	1.94	0.49
42:BZ:141:MET:O	42:BZ:142:ASN:HB2	2.09	0.49
42:BZ:154:LEU:C	42:BZ:154:LEU:CD2	2.80	0.49
42:BZ:164:PRO:O	42:BZ:165:GLU:O	2.29	0.49
1:AA:1065:U:O2	1:AA:1066:C:H5	1.96	0.49
1:AA:1100:C:O2'	1:AA:1101:A:H4'	2.12	0.49
1:AA:120:A:O5'	1:AA:120:A:C8	2.65	0.49
1:AA:1229:A:H8	1:AA:1229:A:O5'	1.95	0.49
1:AA:1260:C:C1'	1:AA:1283:G:O2'	2.60	0.49
1:AA:1269:A:HO2'	1:AA:1325:C:HO2'	1.57	0.49
1:AA:1462:G:H2'	1:AA:1463:C:C6	2.46	0.49
1:AA:144:G:H1	1:AA:178:C:H42	1.60	0.49
1:AA:416:G:H2'	1:AA:417:C:C6	2.48	0.49
1:AA:891:U:C5	1:AA:906:G:C2	3.01	0.49
1:AA:92:C:H2'	1:AA:93:G:C8	2.48	0.49
1:AA:981:U:H6	1:AA:981:U:O5'	1.95	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AB:71:VAL:HG11	5:AB:170:GLU:HG2	1.94	0.49
8:AE:122:GLU:HB3	8:AE:126:ARG:HG2	1.93	0.49
9:AF:80:ARG:HG3	9:AF:88:VAL:HG21	1.95	0.49
18:AO:42:HIS:O	18:AO:45:VAL:O	2.30	0.49
22:AS:15:LEU:HD22	22:AS:33:THR:HG21	1.94	0.49
3:AW:14:A:C5	3:AW:22:G:N2	2.80	0.49
3:AW:23:A:O2'	3:AW:24:G:H5'	2.12	0.49
46:B2:8:ILE:CA	46:B2:11:MET:CG	2.75	0.49
47:B3:42:ALA:C	47:B3:44:ARG:N	2.65	0.49
47:B3:7:LYS:O	47:B3:54:VAL:HG11	2.12	0.49
54:B9:2:LYS:C	54:B9:4:ARG:H	2.14	0.49
26:BA:10:G:N2	26:BA:2629:A:N1	2.48	0.49
26:BA:1316:U:H2'	26:BA:1317:A:C8	2.48	0.49
26:BA:121:G:C2	26:BA:131:G:C5	3.00	0.49
26:BA:2185:C:C4	26:BA:2186:G:N7	2.80	0.49
26:BA:2327:A:H2'	26:BA:2328:A:C8	2.48	0.49
26:BA:2337:G:C2	26:BA:2338:G:N7	2.80	0.49
26:BA:2364:C:C2	48:B0:32:LYS:CE	2.93	0.49
26:BA:2395:C:OP2	26:BA:2396:G:OP2	2.31	0.49
26:BA:2399:G:C2'	26:BA:2400:G:O5'	2.60	0.49
26:BA:2523:G:C4	26:BA:2765:A:N6	2.80	0.49
26:BA:2616:C:C4	26:BA:2617:C:H5	2.30	0.49
26:BA:2044:C:C5	26:BA:2625:G:C2	3.00	0.49
26:BA:2625:G:C2'	26:BA:2626:C:C5	2.88	0.49
26:BA:2686:G:C4	26:BA:2687:U:H6	2.30	0.49
26:BA:2627:G:N3	26:BA:2781:A:H2	2.10	0.49
26:BA:2843:G:C6	26:BA:2844:G:N7	2.80	0.49
26:BA:449:A:OP2	29:BF:85:LYS:CB	2.59	0.49
26:BA:617:G:H4'	29:BF:219:ASN:CG	2.25	0.49
26:BA:636:G:OP1	35:BP:127:GLU:N	2.45	0.49
25:BB:60:C:H2'	25:BB:61:G:H8	1.77	0.49
27:BD:80:ILE:HB	27:BD:82:TYR:CZ	2.42	0.49
28:BE:301:PRO:C	28:BE:303:PRO:HD2	2.21	0.49
29:BF:102:LEU:CD2	29:BF:106:GLU:CG	2.90	0.49
29:BF:104:ASP:O	29:BF:107:ARG:N	2.45	0.49
29:BF:167:ASP:O	29:BF:168:ARG:HD2	2.12	0.49
31:BH:140:VAL:HA	31:BH:143:LEU:CD2	2.43	0.49
31:BH:147:ILE:HA	31:BH:150:VAL:HG23	1.85	0.49
55:BK:19:THR:HG23	55:BK:39:CYS:HB3	1.94	0.49
33:BN:52:GLN:CA	33:BN:55:GLU:HG3	2.41	0.49
34:BO:98:ILE:CG2	34:BO:99:PHE:N	2.53	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BP:58:GLN:HG3	35:BP:59:GLU:H	1.77	0.49
36:BQ:16:ARG:NH1	36:BQ:17:ARG:N	2.60	0.49
36:BQ:50:VAL:C	36:BQ:51:GLU:OE1	2.50	0.49
36:BQ:31:PHE:CZ	36:BQ:88:PHE:CE2	2.98	0.49
37:BS:102:LEU:CD1	37:BS:129:ILE:CD1	2.81	0.49
37:BS:35:VAL:CG1	37:BS:37:ARG:CZ	2.89	0.49
44:BU:72:HIS:NE2	44:BU:110:VAL:HG11	2.21	0.49
26:BA:998:C:C5'	44:BU:84:LYS:HZ3	2.20	0.49
45:BV:29:ALA:O	45:BV:31:ASP:N	2.45	0.49
39:BW:24:ILE:HA	39:BW:35:ILE:CD1	2.42	0.49
39:BW:52:GLU:HA	39:BW:52:GLU:OE2	2.13	0.49
26:BA:138:G:C8	40:BX:43:GLU:OE2	2.65	0.49
42:BZ:108:VAL:CG1	42:BZ:108:VAL:O	2.54	0.49
42:BZ:74:ARG:O	42:BZ:76:ARG:HG2	2.12	0.49
1:AA:1374:A:OP1	10:AG:36:LYS:NZ	2.46	0.49
1:AA:1464:G:H2'	1:AA:1465:C:C6	2.48	0.49
1:AA:406:G:C4'	7:AD:5:ILE:CG2	2.84	0.49
1:AA:474:G:P	19:AP:75:ARG:HG2	2.53	0.49
1:AA:676:A:H2'	1:AA:677:U:C6	2.47	0.49
5:AB:152:PHE:CD1	5:AB:152:PHE:C	2.86	0.49
9:AF:62:TRP:CD1	21:AR:35:ARG:NH2	2.81	0.49
1:AA:642:A:N7	11:AH:115:SER:HA	2.27	0.49
2:AV:24:G:H2'	2:AV:25:C:H6	1.77	0.49
2:AV:5:A:H2'	2:AV:6:U:C6	2.38	0.49
3:AW:76:A:C5	26:BA:2421:G:C4	2.92	0.49
48:B0:35:ASN:C	48:B0:36:ILE:HG12	2.30	0.49
48:B0:48:GLY:HA2	48:B0:55:ARG:CA	2.40	0.49
26:BA:72:U:C5'	46:B2:57:LYS:NZ	2.75	0.49
47:B3:31:LEU:CG	47:B3:32:GLN:H	2.14	0.49
26:BA:2081:C:H5'	49:B4:35:VAL:CG2	2.42	0.49
49:B4:43:TRP:HA	49:B4:56:VAL:O	2.13	0.49
26:BA:110:G:C2	26:BA:111:A:C4	2.99	0.49
26:BA:1394:U:H5''	26:BA:1603:A:O3'	2.11	0.49
26:BA:1602:U:OP2	26:BA:1602:U:C4	2.64	0.49
26:BA:1697:G:C5'	26:BA:1698:A:H5'	2.40	0.49
26:BA:1697:G:O2'	26:BA:1978:A:OP1	2.26	0.49
26:BA:2181:G:H2'	26:BA:2182:G:H5''	1.93	0.49
26:BA:2093:G:C1'	26:BA:2198:A:C6	2.82	0.49
26:BA:2242:G:N3	26:BA:2243:U:C6	2.81	0.49
26:BA:2341:G:O6	26:BA:2342:C:N4	2.44	0.49
26:BA:641:C:H1'	26:BA:2350:C:OP1	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2356:C:O2'	26:BA:2357:U:C5'	2.59	0.49
26:BA:2423:U:C6	26:BA:2423:U:C4'	2.95	0.49
26:BA:2459:A:H2'	26:BA:2460:U:H5'	1.94	0.49
26:BA:2533:A:C3'	26:BA:2534:A:H8	2.25	0.49
26:BA:1265:A:OP2	26:BA:2615:U:O5'	2.30	0.49
26:BA:2023:G:H5'	26:BA:2617:C:O2'	2.03	0.49
26:BA:2665:A:N3	26:BA:2665:A:H2'	2.27	0.49
26:BA:2677:G:C4	26:BA:2678:C:H5	2.29	0.49
26:BA:2714:G:H2'	26:BA:2715:C:H5'	1.94	0.49
26:BA:2732:G:H5''	26:BA:2733:A:O5'	2.12	0.49
26:BA:2747:G:C2	26:BA:2754:U:N3	2.80	0.49
26:BA:2865:U:C4	26:BA:2866:U:C4	2.95	0.49
26:BA:2894:G:C2'	26:BA:2894:G:N3	2.75	0.49
26:BA:303:U:H2'	26:BA:304:G:C8	2.45	0.49
26:BA:291:C:N4	26:BA:349:G:C6	2.81	0.49
26:BA:39:C:H2'	26:BA:40:C:C6	2.48	0.49
26:BA:444(A):A:P	26:BA:444(A):A:H8	2.35	0.49
26:BA:704:G:C4	26:BA:726:G:N2	2.80	0.49
26:BA:988:A:H62	47:B3:13:ILE:HG21	1.75	0.49
27:BD:107:LYS:O	27:BD:108:ASN:CB	2.59	0.49
28:BE:198:TYR:HD2	28:BE:265:ASN:C	2.13	0.49
28:BE:250:VAL:C	28:BE:251:PRO:O	2.49	0.49
28:BE:46:ALA:HB2	28:BE:72:VAL:C	2.29	0.49
26:BA:2682:U:H1'	28:BE:49:THR:HA	1.92	0.49
30:BG:20:LYS:HA	30:BG:76:ARG:HG2	1.93	0.49
31:BH:145:ALA:C	31:BH:147:ILE:N	2.51	0.49
31:BH:86:LEU:HB2	31:BH:148:ARG:HE	1.78	0.49
32:BI:115:ILE:HG12	32:BI:131:VAL:HG22	1.95	0.49
33:BN:134:GLU:O	33:BN:138:THR:OG1	2.31	0.49
33:BN:23:ALA:CA	33:BN:26:VAL:HG23	2.41	0.49
33:BN:58:GLU:CB	33:BN:61:VAL:CG2	2.89	0.49
33:BN:63:ILE:O	33:BN:71:TYR:CE1	2.66	0.49
34:BO:106:LEU:O	34:BO:107:ARG:C	2.50	0.49
36:BQ:68:ALA:CB	36:BQ:136:TRP:CZ3	2.89	0.49
36:BQ:82:LYS:HG2	36:BQ:84:ARG:CG	2.33	0.49
43:BR:65:LEU:O	43:BR:68:ARG:HB2	2.12	0.49
43:BR:72:ASP:OD2	43:BR:72:ASP:O	2.30	0.49
44:BU:115:ASN:O	44:BU:117:ARG:C	2.50	0.49
44:BU:21:ALA:O	44:BU:22:LYS:O	2.30	0.49
44:BU:73:GLY:O	44:BU:74:MET:CB	2.61	0.49
45:BV:22:VAL:O	45:BV:23:GLU:O	2.30	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:40:VAL:HG13	45:BV:55:THR:HG22	1.93	0.49
39:BW:86:LEU:HD23	39:BW:86:LEU:N	2.10	0.49
40:BX:32:ALA:C	40:BX:37:VAL:CG2	2.81	0.49
42:BZ:91:PRO:CB	42:BZ:127:PRO:HB3	2.36	0.49
42:BZ:98:VAL:HA	42:BZ:134:LEU:O	2.11	0.49
42:BZ:14:LEU:O	42:BZ:14:LEU:CD2	2.56	0.49
42:BZ:69:VAL:CG1	42:BZ:81:VAL:HG13	2.43	0.49
1:AA:109:A:N7	1:AA:326:G:C2	2.80	0.49
1:AA:37:U:C2	1:AA:397:A:N6	2.63	0.49
1:AA:579:G:H4'	1:AA:728:A:H1'	1.95	0.49
1:AA:767:A:N6	1:AA:813:U:N3	2.57	0.49
1:AA:986:A:H2'	1:AA:987:G:C8	2.47	0.49
16:AM:81:LEU:HA	16:AM:84:ILE:HG12	1.94	0.49
1:AA:1325:C:H5''	24:AU:15:ARG:HE	1.77	0.49
48:B0:45:PHE:CD1	48:B0:78:PHE:CB	2.96	0.49
46:B2:22:ASP:O	46:B2:26:GLU:CD	2.47	0.49
46:B2:25:THR:O	46:B2:26:GLU:C	2.48	0.49
47:B3:13:ILE:O	47:B3:15:TYR:CE1	2.65	0.49
47:B3:50:VAL:CG1	47:B3:53:LEU:HD12	2.42	0.49
49:B4:58:LYS:CG	49:B4:59:PHE:N	2.66	0.49
26:BA:10:G:N1	26:BA:2629:A:C4	2.80	0.49
26:BA:1213:A:N1	26:BA:1237:A:H1'	2.27	0.49
26:BA:1324:G:O3'	26:BA:1325:G:H4'	2.12	0.49
26:BA:1422:G:N2	26:BA:1576:U:C2	2.80	0.49
26:BA:1657:C:H3'	26:BA:1657:C:H6	1.77	0.49
26:BA:1952:A:C2	34:BO:22:ILE:CG1	2.95	0.49
26:BA:574:C:C2	26:BA:2055:C:C6	3.00	0.49
26:BA:2259:G:H2'	26:BA:2260:C:O4'	2.12	0.49
26:BA:2300:G:H1	26:BA:2316:C:H42	1.59	0.49
26:BA:2322:A:P	26:BA:2322:A:O4'	2.71	0.49
26:BA:2398:U:O2'	26:BA:2399:G:P	2.69	0.49
26:BA:2474:C:H2'	26:BA:2475:C:C5'	2.23	0.49
26:BA:2555:U:H2'	26:BA:2556:C:O5'	2.10	0.49
26:BA:2607:G:H2'	26:BA:2608:G:O5'	2.12	0.49
26:BA:2642:G:H2'	26:BA:2643:G:H5'	1.91	0.49
26:BA:2531:A:N3	26:BA:2658:C:H1'	2.26	0.49
26:BA:2834:G:C8	26:BA:2834:G:C3'	2.95	0.49
26:BA:290:G:C8	26:BA:290:G:OP2	2.66	0.49
26:BA:602:G:HO2'	26:BA:655:A:H2	1.59	0.49
26:BA:611:C:H2'	26:BA:611:C:O2	2.11	0.49
26:BA:617:G:C8	26:BA:618:G:N7	2.80	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:792:G:C6	26:BA:2440:C:C6	3.00	0.49
26:BA:994:C:O3'	44:BU:54:LYS:CE	2.41	0.49
26:BA:1817:G:OP2	27:BD:155:ARG:NH2	2.45	0.49
27:BD:213:LYS:HB3	27:BD:215:LYS:O	2.11	0.49
28:BE:305:LYS:O	28:BE:306:ARG:HB2	2.12	0.49
31:BH:10:ILE:HD11	31:BH:48:VAL:O	1.99	0.49
31:BH:140:VAL:HA	31:BH:143:LEU:HD22	1.95	0.49
31:BH:55:SER:HB2	31:BH:60:HIS:CB	2.39	0.49
32:BI:82:LYS:O	32:BI:89:LEU:HD23	2.12	0.49
32:BI:94:THR:HG22	32:BI:97:GLN:CG	2.37	0.49
33:BN:15:ARG:CB	33:BN:43:ARG:HD2	2.22	0.49
33:BN:46:ILE:O	33:BN:47:THR:C	2.49	0.49
35:BP:113:GLN:O	35:BP:115:ARG:CG	2.61	0.49
35:BP:130:ARG:O	35:BP:133:VAL:CB	2.53	0.49
35:BP:71:GLU:HG3	35:BP:72:ASN:H	1.78	0.49
43:BR:105:ARG:O	43:BR:107:ASP:HB3	2.12	0.49
43:BR:110:PRO:O	43:BR:111:LEU:C	2.50	0.49
37:BS:86:LEU:N	37:BS:121:GLY:CA	2.75	0.49
37:BS:81:ALA:C	37:BS:83:LEU:H	2.13	0.49
44:BU:87:ASN:HD22	44:BU:87:ASN:C	2.16	0.49
44:BU:91:ASN:O	44:BU:95:LEU:HD13	2.10	0.49
45:BV:10:LYS:O	45:BV:11:GLN:C	2.50	0.49
40:BX:25:GLN:C	40:BX:26:PHE:CG	2.84	0.49
40:BX:28:VAL:HG22	40:BX:62:LYS:C	2.32	0.49
41:BY:89:ARG:O	41:BY:91:LEU:CD2	2.61	0.49
42:BZ:19:ILE:CG2	42:BZ:39:PHE:HE1	2.25	0.49
42:BZ:26:LYS:O	42:BZ:27:GLU:HB2	2.10	0.49
42:BZ:21:ALA:H	42:BZ:32:PHE:HB2	1.76	0.49
42:BZ:51:LEU:CD2	42:BZ:52:PHE:O	2.60	0.49
1:AA:106:C:H2'	1:AA:107:G:C8	2.47	0.49
1:AA:1229:A:O3'	2:AV:30:G:C5'	2.52	0.49
1:AA:1237:C:O2	1:AA:1335:C:H5'	2.12	0.49
1:AA:280:C:C1'	20:AQ:38:ARG:NE	2.75	0.49
1:AA:25:C:C4	1:AA:558:G:N2	2.80	0.49
1:AA:781:A:H4'	1:AA:1522:U:O2'	2.13	0.49
7:AD:101:LEU:HD22	7:AD:138:TYR:HB3	1.94	0.49
7:AD:8:VAL:HB	7:AD:115:ARG:NH1	2.27	0.49
13:AJ:11:PHE:CE2	13:AJ:65:LEU:HG	2.47	0.49
17:AN:16:PHE:O	17:AN:18:VAL:N	2.45	0.49
3:AW:72:C:C3'	3:AW:73:A:H5'	2.38	0.49
3:AW:75:C:N4	49:B4:28:ARG:CA	2.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:969:U:O3'	47:B3:14:GLY:CA	2.61	0.49
26:BA:1129:A:C6	26:BA:2570:G:H4'	2.48	0.49
26:BA:1294:U:O2'	43:BR:26:LYS:HD3	2.12	0.49
26:BA:1398:C:OP1	40:BX:53:ASN:OD1	2.30	0.49
26:BA:1627:G:H1	26:BA:1639:U:H3	1.60	0.49
26:BA:1789:A:H5''	26:BA:1790:C:OP2	2.13	0.49
26:BA:2300:G:HO2'	26:BA:2301:C:H5'	1.73	0.49
26:BA:2294:C:N3	26:BA:2339:G:O6	2.45	0.49
26:BA:2340:G:HO2'	26:BA:2341:G:C5'	2.19	0.49
26:BA:2347:C:N3	26:BA:2348:U:C5	2.80	0.49
26:BA:2359:C:N3	26:BA:2360:A:H2	2.09	0.49
26:BA:2366:A:N7	26:BA:2367:G:C8	2.78	0.49
26:BA:243:U:H5''	26:BA:244:A:OP2	2.11	0.49
26:BA:2519:U:C6	26:BA:2541:A:N6	2.80	0.49
26:BA:2536:G:C3'	26:BA:2537:U:H5'	2.42	0.49
26:BA:2657:A:H8	26:BA:2658:C:H5	1.41	0.49
26:BA:2729:G:N3	26:BA:2730:C:C2	2.80	0.49
26:BA:2839:G:N1	26:BA:2840:C:C2	2.79	0.49
26:BA:2870:C:O2	26:BA:2871:C:N1	2.45	0.49
26:BA:527:C:H6	26:BA:2779:U:N1	2.11	0.49
26:BA:578:A:H2'	26:BA:579:G:H5''	1.94	0.49
26:BA:650:C:OP1	53:B8:19:THR:CB	2.59	0.49
26:BA:662:G:H2'	26:BA:663:G:C8	2.48	0.49
26:BA:807:U:C4'	26:BA:2445:G:H4'	2.43	0.49
25:BB:24:G:C5	25:BB:56:G:N3	2.79	0.49
25:BB:59:A:O3'	25:BB:60:C:H5'	2.13	0.49
27:BD:146:LYS:HB3	27:BD:149:ARG:CG	2.42	0.49
28:BE:177:ALA:C	28:BE:179:ASP:H	2.13	0.49
28:BE:215:LYS:HZ3	28:BE:215:LYS:HB3	1.77	0.49
26:BA:2051:A:C1'	28:BE:238:LEU:HD21	2.42	0.49
28:BE:193:PHE:CD2	28:BE:311:PHE:CD1	3.00	0.49
29:BF:36:ARG:C	29:BF:39:GLN:NE2	2.45	0.49
29:BF:99:SER:O	29:BF:100:LEU:HG	2.13	0.49
30:BG:98:PHE:CB	30:BG:104:PHE:CE2	2.96	0.49
31:BH:69:SER:O	31:BH:72:ALA:N	2.46	0.49
31:BH:8:ILE:CG2	31:BH:9:GLU:H	2.13	0.49
33:BN:52:GLN:HA	33:BN:55:GLU:HG3	1.88	0.49
33:BN:7:ASP:O	33:BN:8:ALA:CB	2.59	0.49
34:BO:104:ARG:HD2	34:BO:104:ARG:N	2.19	0.49
34:BO:43:VAL:CG1	34:BO:54:LYS:HA	2.42	0.49
26:BA:2485:G:H5'	36:BQ:144:THR:CG2	2.34	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:16:ARG:C	36:BQ:17:ARG:HD3	2.32	0.49
36:BQ:61:LEU:O	36:BQ:63:ALA:C	2.50	0.49
43:BR:34:ILE:HG23	43:BR:35:THR:N	2.03	0.49
26:BA:2021:C:H6	44:BU:25:TRP:CH2	2.29	0.49
26:BA:564:C:C1'	44:BU:37:GLN:OE1	2.59	0.49
45:BV:34:GLU:O	45:BV:35:LEU:CG	2.58	0.49
39:BW:60:ASN:C	39:BW:61:ASN:OD1	2.51	0.49
40:BX:6:LYS:HZ2	40:BX:29:ASP:N	2.09	0.49
41:BY:71:VAL:CG1	41:BY:93:THR:N	2.76	0.49
42:BZ:151:ASP:N	42:BZ:151:ASP:OD1	2.46	0.49
42:BZ:166:LEU:O	42:BZ:167:THR:C	2.50	0.49
42:BZ:2:GLU:O	42:BZ:54:ILE:HG22	1.99	0.49
42:BZ:50:GLY:O	42:BZ:51:LEU:HB3	2.11	0.49
42:BZ:69:VAL:HG13	42:BZ:81:VAL:HA	1.95	0.49
1:AA:1060:C:C5'	13:AJ:51:ARG:HB3	2.43	0.49
1:AA:1277:C:H1'	1:AA:1282:C:H1'	1.94	0.49
1:AA:291:C:H3'	1:AA:305:G:H22	1.78	0.49
1:AA:484:G:C8	1:AA:486:U:C2	3.00	0.49
1:AA:529:G:O6	15:AL:49:ASN:ND2	2.45	0.49
6:AC:122:GLU:HA	6:AC:125:GLU:CG	2.43	0.49
6:AC:135:LYS:NZ	8:AE:53:LEU:HD23	2.28	0.49
7:AD:62:GLN:NE2	7:AD:65:ARG:HD3	2.27	0.49
9:AF:95:GLU:CB	9:AF:96:PRO:HD3	2.29	0.49
17:AN:27:CYS:N	17:AN:43:CYS:HB3	2.27	0.49
1:AA:1220:G:H4'	22:AS:36:ARG:HG2	1.94	0.49
2:AV:59:U:H2'	2:AV:59:U:O2	2.10	0.49
4:AX:117:U:O2'	4:AX:118:C:H5'	2.12	0.49
48:B0:11:LYS:O	48:B0:12:ASN:C	2.51	0.49
26:BA:855:G:N2	48:B0:24:LYS:O	2.32	0.49
26:BA:2354:G:C4	48:B0:32:LYS:HE2	2.46	0.49
50:B5:16:ARG:O	50:B5:17:ASP:C	2.49	0.49
51:B6:8:ILE:HD13	51:B6:29:ARG:CZ	2.43	0.49
51:B6:31:THR:O	51:B6:32:GLN:O	2.31	0.49
51:B6:37:LEU:CD2	51:B6:51:ARG:CG	2.52	0.49
54:B9:4:ARG:C	54:B9:36:GLN:HA	2.33	0.49
26:BA:1332:G:C5	26:BA:1609:A:C6	3.00	0.49
26:BA:1497:U:H6	26:BA:1497:U:O5'	1.96	0.49
26:BA:1547:C:H2'	26:BA:1548:C:C6	2.47	0.49
26:BA:1644:C:H2'	26:BA:1645:G:H8	1.76	0.49
26:BA:1912:A:C5	26:BA:1918:A:H2	2.30	0.49
26:BA:218:A:N6	26:BA:235:U:O2'	2.45	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2215:G:O2'	26:BA:2216:G:C4'	2.58	0.49
26:BA:2322:A:N7	26:BA:2323:G:N7	2.60	0.49
26:BA:2365:G:OP1	48:B0:40:GLN:O	2.30	0.49
26:BA:2492:U:O2'	26:BA:2493:U:P	2.68	0.49
26:BA:2523:G:N2	26:BA:2541:A:H1'	2.28	0.49
26:BA:2540:C:H2'	26:BA:2541:A:O5'	2.12	0.49
26:BA:2604:U:C2'	26:BA:2604:U:O2	2.52	0.49
26:BA:2606:C:O2	26:BA:2607:G:N9	2.46	0.49
26:BA:2703:C:O4'	26:BA:2703:C:O2	2.29	0.49
26:BA:2819:G:C5'	26:BA:2821:A:H62	2.17	0.49
26:BA:452:G:C2	26:BA:458:G:C2	3.01	0.49
26:BA:527:C:O4'	26:BA:2779:U:C2	2.66	0.49
26:BA:80:G:O5'	26:BA:80:G:H8	1.95	0.49
26:BA:974(A):C:OP2	26:BA:1186:G:N2	2.45	0.49
27:BD:107:LYS:HG2	27:BD:108:ASN:N	2.27	0.49
28:BE:176:HIS:HA	28:BE:179:ASP:OD1	2.13	0.49
28:BE:222:ARG:HG2	28:BE:232:ARG:H	1.75	0.49
29:BF:145:GLU:HG3	29:BF:196:THR:CG2	2.43	0.49
31:BH:66:THR:HG22	31:BH:67:THR:H	1.77	0.49
32:BI:108:LEU:HD23	32:BI:109:LYS:C	2.33	0.49
33:BN:12:VAL:C	33:BN:38:VAL:CB	2.79	0.49
35:BP:116:HIS:CD2	35:BP:118:LEU:HD21	2.48	0.49
35:BP:129:ALA:C	35:BP:131:GLU:N	2.65	0.49
36:BQ:122:PHE:CB	36:BQ:136:TRP:HZ2	2.25	0.49
43:BR:22:ARG:HH21	43:BR:69:ASP:HB3	1.77	0.49
44:BU:36:PHE:O	44:BU:39:LEU:HB3	2.07	0.49
44:BU:68:GLY:C	44:BU:70:ARG:N	2.64	0.49
45:BV:40:VAL:HG13	45:BV:55:THR:CG2	2.41	0.49
45:BV:93:ILE:O	45:BV:95:ILE:HD13	2.12	0.49
45:BV:61:VAL:CG1	45:BV:96:LEU:N	2.75	0.49
39:BW:5:ALA:HB2	39:BW:54:ALA:CB	2.34	0.49
39:BW:85:VAL:HG12	39:BW:95:ILE:CG1	2.43	0.49
41:BY:16:LEU:O	41:BY:19:ARG:N	2.40	0.49
1:AA:1232:U:H5''	12:AI:124:GLN:O	2.13	0.49
1:AA:1268:A:H4'	24:AU:20:LYS:HB2	1.68	0.49
1:AA:1319:A:OP1	22:AS:70:LYS:HE2	2.13	0.49
1:AA:501:C:OP1	15:AL:124:LYS:HD3	2.12	0.49
1:AA:986:A:C4	22:AS:54:GLY:O	2.66	0.49
13:AJ:47:PHE:HE1	13:AJ:63:PHE:HB2	1.78	0.49
22:AS:44:MET:HA	22:AS:47:HIS:CD2	2.48	0.49
1:AA:986:A:C2	22:AS:52:TYR:CZ	2.86	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:50:ARG:O	46:B2:53:ILE:HD12	2.13	0.49
46:B2:51:LYS:O	46:B2:53:ILE:N	2.45	0.49
47:B3:12:PRO:HG2	47:B3:20:LYS:HZ3	1.74	0.49
52:B7:35:ARG:O	52:B7:36:ALA:C	2.50	0.49
26:BA:126:A:OP2	52:B7:44:VAL:HG21	2.13	0.49
26:BA:1085:A:H1'	26:BA:1086:A:C4'	2.43	0.49
26:BA:110:G:C6	26:BA:111:A:C6	3.00	0.49
26:BA:129:C:H5'	26:BA:1599:C:O2'	2.12	0.49
26:BA:1496:A:H8	26:BA:1496:A:O5'	1.93	0.49
26:BA:1796:U:H2'	26:BA:1797:C:C5	2.47	0.49
26:BA:1952:A:C2'	26:BA:2560:C:O2'	2.60	0.49
26:BA:1944:U:H4'	26:BA:1955:U:O2'	2.13	0.49
26:BA:2242:G:C2	26:BA:2243:U:C6	2.99	0.49
26:BA:2287:A:N1	26:BA:2289:G:C4	2.81	0.49
26:BA:2297:C:O2'	26:BA:2298:A:C5'	2.61	0.49
26:BA:2322:A:N3	26:BA:2322:A:C2'	2.76	0.49
26:BA:2349:G:N1	26:BA:2369:A:N1	2.60	0.49
26:BA:2358:G:C6	26:BA:2359:C:C2	3.00	0.49
26:BA:2373:G:H2'	26:BA:2374:C:C6	2.47	0.49
26:BA:2402:C:C6	26:BA:2402:C:O5'	2.65	0.49
26:BA:2410:G:C2	26:BA:2411:A:C5	3.01	0.49
26:BA:2416:C:C2'	26:BA:2417:C:H5'	2.31	0.49
26:BA:2431:U:N3	26:BA:2433:A:OP2	2.43	0.49
26:BA:2523:G:H2'	26:BA:2524:G:C5'	2.37	0.49
26:BA:2556:C:C3'	26:BA:2557:G:C5'	2.78	0.49
26:BA:2564:A:N6	26:BA:2565:A:N6	2.60	0.49
26:BA:2509:G:C4	26:BA:2580:U:O2	2.65	0.49
26:BA:2625:G:H2'	26:BA:2626:C:H6	1.71	0.49
26:BA:2543:G:O2'	26:BA:2645:G:C5	2.62	0.49
26:BA:2653:U:N3	26:BA:2654:A:C5	2.79	0.49
26:BA:270(A):A:H62	26:BA:270(Z):U:H5''	1.78	0.49
26:BA:2722:G:C5	26:BA:2723:C:C5	3.01	0.49
26:BA:2731:G:H4'	28:BE:264:LEU:HD12	1.94	0.49
26:BA:2854:G:C2	26:BA:2864:G:C4	3.00	0.49
26:BA:1:G:C6	26:BA:2902:C:N4	2.71	0.49
26:BA:678:C:N4	26:BA:799:G:H1	2.11	0.49
26:BA:1819:A:C5'	27:BD:157:ALA:HB2	2.34	0.49
28:BE:176:HIS:HA	28:BE:179:ASP:CG	2.33	0.49
29:BF:197:SER:O	29:BF:238:SER:HB3	2.13	0.49
30:BG:29:HIS:HE2	30:BG:64:ARG:HH22	1.61	0.49
30:BG:35:ALA:O	30:BG:36:ASN:HB2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:47:GLN:CD	30:BG:75:LEU:HD23	2.33	0.49
30:BG:98:PHE:HB3	30:BG:104:PHE:HE2	1.78	0.49
31:BH:36:PHE:C	31:BH:37:HIS:HD1	2.16	0.49
32:BI:43:ASN:CA	32:BI:46:ALA:H	2.26	0.49
35:BP:116:HIS:CD2	35:BP:118:LEU:CD1	2.71	0.49
35:BP:60:GLU:O	35:BP:61:ALA:HB3	2.12	0.49
36:BQ:85:ILE:HA	36:BQ:122:PHE:CD2	2.47	0.49
43:BR:105:ARG:CZ	43:BR:105:ARG:H	2.26	0.49
43:BR:28:LEU:C	43:BR:28:LEU:CD1	2.81	0.49
43:BR:28:LEU:C	43:BR:30:THR:N	2.66	0.49
43:BR:38:VAL:CG2	43:BR:99:LYS:HE3	2.40	0.49
43:BR:63:ARG:NH2	43:BR:77:ARG:HA	2.28	0.49
37:BS:115:VAL:HG12	37:BS:116:PHE:N	2.28	0.49
37:BS:76:GLY:HA2	37:BS:82:TYR:HB2	1.94	0.49
37:BS:86:LEU:O	37:BS:87:LEU:C	2.50	0.49
44:BU:44:THR:O	44:BU:47:TYR:CB	2.38	0.49
39:BW:45:TYR:O	39:BW:48:ALA:HB3	2.13	0.49
40:BX:14:ALA:O	40:BX:15:MET:C	2.51	0.49
41:BY:9:LYS:NZ	41:BY:13:ARG:CZ	2.76	0.49
42:BZ:110:GLY:C	42:BZ:112:LEU:N	2.65	0.49
42:BZ:6:LYS:CB	42:BZ:31:SER:HB3	2.43	0.49
1:AA:1061:G:OP1	13:AJ:59:SER:HA	2.13	0.49
1:AA:1233:G:H2'	1:AA:1234:C:C6	2.47	0.49
1:AA:1259:C:O2	1:AA:1283:G:N3	2.45	0.49
1:AA:1378:C:H2'	1:AA:1378:C:O2	2.13	0.49
1:AA:922:G:O2'	1:AA:1398:A:N1	2.42	0.49
7:AD:68:TYR:CZ	7:AD:97:LEU:HB3	2.48	0.49
16:AM:81:LEU:HD21	16:AM:88:ARG:HE	1.76	0.49
21:AR:58:LEU:HD22	21:AR:62:GLU:HG2	1.95	0.49
26:BA:464:U:O2'	52:B7:12:ARG:NH2	2.46	0.49
26:BA:650:C:H5'	53:B8:17:THR:HB	1.93	0.49
26:BA:1062:G:H2'	26:BA:1062:G:N3	2.28	0.49
26:BA:564:C:O2'	26:BA:1252:G:O6	2.29	0.49
26:BA:1264:G:H3'	26:BA:1265:A:C5'	2.43	0.49
26:BA:1359:A:N7	26:BA:1372:U:O4	2.46	0.49
26:BA:145:G:H2'	26:BA:146:G:H8	1.78	0.49
26:BA:1968:G:C8	26:BA:1968:G:H3'	2.47	0.49
26:BA:1764:G:N2	26:BA:1989:G:H1'	2.27	0.49
26:BA:2023:G:H2'	26:BA:2024:G:C8	2.48	0.49
26:BA:2205:C:N4	26:BA:2206:C:H41	2.11	0.49
26:BA:2239:G:C5	26:BA:2240:C:C5	3.00	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2254:C:C2'	26:BA:2255:G:O5'	2.61	0.49
26:BA:2329:G:N3	26:BA:2330:G:C8	2.80	0.49
26:BA:2340:G:C2'	26:BA:2341:G:O5'	2.61	0.49
26:BA:2392:A:C5	26:BA:2393:A:C5	3.01	0.49
26:BA:2571:C:H2'	26:BA:2572:A:OP1	2.12	0.49
26:BA:225:A:HO2'	26:BA:257:A:H4'	1.75	0.49
26:BA:2022:U:H2'	26:BA:2617:C:C4'	2.43	0.49
26:BA:2544:G:C4'	26:BA:2645:G:N7	2.74	0.49
26:BA:2821:A:H2'	26:BA:2822:G:H1'	1.92	0.49
26:BA:297:C:H3'	26:BA:298:G:C8	2.48	0.49
26:BA:38:A:N3	29:BF:46:TYR:CZ	2.81	0.49
26:BA:529:A:O2'	26:BA:530:G:P	2.71	0.49
26:BA:67:U:C2	26:BA:68:G:N7	2.81	0.49
26:BA:974:G:C6	45:BV:80:TYR:CE2	3.00	0.49
27:BD:124:LYS:O	27:BD:127:ASN:ND2	2.46	0.49
27:BD:134:ILE:CG2	27:BD:163:VAL:HG21	2.43	0.49
27:BD:76:ARG:HG2	27:BD:76:ARG:NH1	2.28	0.49
28:BE:207:GLY:N	28:BE:257:GLY:O	2.46	0.49
26:BA:1654:A:O2'	28:BE:210:THR:O	2.26	0.49
29:BF:113:SER:O	29:BF:114:ALA:C	2.51	0.49
29:BF:223:LEU:O	29:BF:231:ARG:CG	2.61	0.49
30:BG:99:ASP:N	30:BG:104:PHE:HD2	1.96	0.49
31:BH:10:ILE:CG1	31:BH:49:ILE:HG13	2.43	0.49
31:BH:62:ALA:O	31:BH:63:LEU:C	2.51	0.49
55:BK:131:THR:C	55:BK:133:LYS:H	2.15	0.49
26:BA:1139:G:P	33:BN:46:ILE:CG2	3.00	0.49
34:BO:77:ILE:O	34:BO:78:ARG:HG2	2.12	0.49
43:BR:20:LEU:HD12	43:BR:21:TYR:CE2	2.43	0.49
45:BV:39:PHE:HE2	45:BV:41:GLY:C	2.11	0.49
40:BX:9:HIS:ND1	40:BX:27:ALA:HA	2.10	0.49
40:BX:52:VAL:HA	40:BX:65:VAL:O	2.13	0.49
42:BZ:95:SER:CA	42:BZ:122:ILE:HA	2.40	0.49
42:BZ:95:SER:HB3	42:BZ:122:ILE:HG12	1.89	0.49
1:AA:130:A:H8	1:AA:130:A:OP1	1.95	0.49
1:AA:392:G:O5'	19:AP:12:LYS:HE2	2.13	0.49
1:AA:596:C:H2'	1:AA:597:G:H8	1.78	0.49
5:AB:73:THR:HG21	5:AB:97:TRP:H	1.77	0.49
7:AD:100:ARG:HB2	7:AD:103:ASN:HB3	1.95	0.49
7:AD:126:ILE:O	7:AD:132:ARG:HB3	2.13	0.49
7:AD:3:ARG:HH22	7:AD:74:GLN:HE22	1.47	0.49
12:AI:104:ARG:O	12:AI:105:ASP:HB2	2.13	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AI:115:GLY:O	12:AI:116:LYS:C	2.52	0.49
13:AJ:8:LEU:HB2	13:AJ:70:ARG:HB2	1.94	0.49
13:AJ:63:PHE:HE2	17:AN:49:HIS:CE1	2.30	0.49
47:B3:31:LEU:HD21	47:B3:32:GLN:HB3	1.90	0.49
50:B5:25:LEU:C	50:B5:26:THR:HG23	2.25	0.49
26:BA:2419:U:P	53:B8:41:ILE:CD1	2.98	0.49
53:B8:61:MET:O	53:B8:63:PRO:CD	2.46	0.49
26:BA:1031:G:C2'	54:B9:8:LYS:NZ	2.76	0.49
26:BA:1059:G:C4	55:BK:127:ILE:CD1	2.85	0.49
26:BA:489:G:C8	26:BA:1284:A:N3	2.81	0.49
26:BA:963:U:C2'	26:BA:2250:G:N2	2.55	0.49
26:BA:2315:G:O4'	30:BG:133:ASN:ND2	2.46	0.49
26:BA:2399:G:C2	26:BA:2400:G:N9	2.81	0.49
26:BA:2434:A:O2'	26:BA:2435:A:C5'	2.60	0.49
26:BA:2493:U:O2'	26:BA:2494:G:O5'	2.31	0.49
26:BA:2543:G:C3'	26:BA:2544:G:H5'	2.43	0.49
26:BA:2553:G:C8	26:BA:2554:U:C1'	2.95	0.49
26:BA:2565:A:O3'	26:BA:2566:A:H4'	2.09	0.49
26:BA:2645:G:C8	26:BA:2645:G:OP2	2.66	0.49
26:BA:2655:G:O2'	26:BA:2656:U:C5	2.66	0.49
26:BA:2712:U:H5''	26:BA:2714:G:C4'	2.43	0.49
26:BA:2769:C:O2	26:BA:2770:G:C1'	2.59	0.49
26:BA:280:C:O2	26:BA:283:A:N1	2.46	0.49
26:BA:2885:C:N3	26:BA:2886:G:N9	2.61	0.49
26:BA:29:U:O3'	44:BU:8:ILE:HG13	2.13	0.49
26:BA:446:G:OP1	44:BU:3:ARG:HB2	2.13	0.49
26:BA:530:G:N1	26:BA:2021:C:C2	2.81	0.49
26:BA:641:C:H2'	26:BA:642:G:O4'	2.13	0.49
26:BA:880:G:H1	26:BA:897:C:H42	1.61	0.49
27:BD:170:TYR:C	27:BD:182:MET:SD	2.92	0.49
27:BD:62:ARG:HH22	27:BD:83:ASP:HB3	1.78	0.49
28:BE:252:GLN:C	28:BE:254:GLY:N	2.67	0.49
29:BF:167:ASP:HB2	29:BF:232:LEU:HB2	1.95	0.49
29:BF:55:ARG:CG	29:BF:56:THR:N	2.68	0.49
31:BH:43:THR:HG21	31:BH:51:VAL:C	2.33	0.49
32:BI:6:LEU:HD22	32:BI:6:LEU:O	2.13	0.49
55:BK:19:THR:CG2	55:BK:39:CYS:CB	2.91	0.49
33:BN:74:ARG:HD2	33:BN:141:ALA:C	2.32	0.49
38:BT:37:GLU:CG	38:BT:38:ASN:N	2.38	0.49
38:BT:5:GLU:O	38:BT:6:CYS:C	2.49	0.49
41:BY:33:GLU:C	41:BY:35:TYR:N	2.66	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:51:LEU:CD2	41:BY:52:ARG:HG3	2.41	0.49
41:BY:51:LEU:HD22	41:BY:95:ASN:CB	2.43	0.49
1:AA:1172:C:H2'	1:AA:1173:G:H8	1.78	0.48
1:AA:1068:G:H5'	1:AA:1388:C:H5'	1.95	0.48
1:AA:668:G:N3	18:AO:46:HIS:CE1	2.81	0.48
7:AD:79:PHE:HB2	7:AD:93:PHE:CZ	2.48	0.48
16:AM:77:ASN:O	16:AM:81:LEU:HD13	2.13	0.48
20:AQ:29:HIS:N	20:AQ:33:GLY:O	2.46	0.48
1:AA:1269:A:H4'	24:AU:18:TYR:O	2.12	0.48
26:BA:929:G:HO2'	47:B3:43:ILE:HG12	1.78	0.48
50:B5:34:PRO:HG2	50:B5:35:GLN:H	1.77	0.48
53:B8:4:MET:CE	53:B8:4:MET:N	2.76	0.48
26:BA:1513:C:H6	26:BA:1513:C:H3'	1.77	0.48
26:BA:1804:C:N4	26:BA:1813:G:H1	2.11	0.48
26:BA:1851:U:H3	26:BA:1891:G:H1	1.60	0.48
26:BA:2093:G:O2'	32:BI:29:PHE:CD2	2.66	0.48
26:BA:2182:G:C2	26:BA:2183:C:N3	2.81	0.48
26:BA:2207:C:C4	26:BA:2218:G:C6	3.00	0.48
26:BA:2251:G:C5'	36:BQ:102:ARG:HH22	2.22	0.48
26:BA:2326:C:C2'	26:BA:2326:C:O2	2.41	0.48
26:BA:2331:G:C5	26:BA:2332:U:C2	2.99	0.48
26:BA:2439:A:N3	26:BA:2439:A:O2'	2.45	0.48
26:BA:2478:A:H2'	26:BA:2479:G:C5'	2.42	0.48
26:BA:2519:U:O2	26:BA:2542:A:N1	2.46	0.48
26:BA:2549:G:C2	26:BA:2550:G:N7	2.81	0.48
26:BA:2438:U:OP1	26:BA:2600:A:H5'	2.13	0.48
2:AV:74:C:H5'	26:BA:2602:A:H3'	1.95	0.48
26:BA:2622:C:O2	26:BA:2623:G:H8	1.79	0.48
26:BA:2647:U:O2	26:BA:2648:C:C5	2.66	0.48
26:BA:2739:U:HO2'	26:BA:2740:A:H5''	1.75	0.48
26:BA:2808:U:H5''	26:BA:2809:A:OP2	2.13	0.48
26:BA:366:C:H2'	26:BA:366:C:O2	2.12	0.48
26:BA:458:G:H5'	52:B7:39:ARG:HD3	1.94	0.48
26:BA:511:U:C5	26:BA:512:G:H1'	2.48	0.48
26:BA:584:C:OP2	44:BU:10:ARG:NH2	2.38	0.48
26:BA:729:G:H8	26:BA:764:A:OP1	1.95	0.48
26:BA:961:C:C4	26:BA:2031:A:C2	3.01	0.48
26:BA:974:G:C3'	45:BV:82:ARG:CZ	2.91	0.48
25:BB:60:C:H2'	25:BB:61:G:C8	2.48	0.48
27:BD:128:ALA:CA	27:BD:190:THR:HA	2.43	0.48
29:BF:200:PRO:HD3	29:BF:214:THR:HG22	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:147:ILE:CD1	31:BH:150:VAL:HB	2.28	0.48
31:BH:159:LYS:N	31:BH:162:ARG:NH1	2.61	0.48
55:BK:117:ASN:N	55:BK:117:ASN:OD1	2.45	0.48
55:BK:22:PRO:CB	55:BK:23:PRO:HD3	2.43	0.48
34:BO:114:ILE:O	34:BO:115:ILE:C	2.51	0.48
35:BP:71:GLU:C	35:BP:73:VAL:H	2.16	0.48
36:BQ:56:ILE:HD11	36:BQ:113:ALA:O	2.09	0.48
43:BR:100:LEU:HD21	43:BR:113:LEU:HB3	1.94	0.48
43:BR:58:GLY:O	43:BR:59:ASP:CB	2.59	0.48
44:BU:39:LEU:HB3	44:BU:40:LEU:CD2	2.41	0.48
45:BV:18:ASP:OD2	45:BV:94:LYS:HE2	2.13	0.48
40:BX:50:GLU:CD	40:BX:50:GLU:H	2.15	0.48
40:BX:77:VAL:O	40:BX:78:ALA:C	2.51	0.48
41:BY:34:GLU:O	41:BY:35:TYR:CG	2.65	0.48
26:BA:439:G:C3'	41:BY:6:LYS:NZ	2.75	0.48
42:BZ:142:ASN:O	42:BZ:171:VAL:HG21	2.13	0.48
42:BZ:20:ALA:O	42:BZ:21:ALA:HB2	2.13	0.48
1:AA:1233:G:OP1	12:AI:123:PRO:HA	2.14	0.48
1:AA:235:C:H2'	1:AA:236:G:H8	1.78	0.48
1:AA:31:G:O2'	1:AA:46:G:C5'	2.44	0.48
1:AA:323:U:H3	1:AA:327:A:N6	2.10	0.48
1:AA:765:G:N1	1:AA:812:C:H1'	2.28	0.48
1:AA:22:G:O2'	1:AA:913:A:N1	2.37	0.48
5:AB:70:PHE:O	5:AB:92:TYR:HA	2.13	0.48
15:AL:54:LYS:CG	15:AL:75:HIS:CE1	2.88	0.48
17:AN:26:ARG:HH12	17:AN:46:GLU:HB2	1.78	0.48
20:AQ:90:ILE:HA	20:AQ:93:GLN:HB2	1.95	0.48
49:B4:14:ILE:HD11	49:B4:39:VAL:CG2	2.43	0.48
26:BA:1065:U:H3'	26:BA:1066:U:H5''	1.95	0.48
26:BA:1239:G:C2'	26:BA:1240:U:H6	2.26	0.48
26:BA:1321:A:H2'	26:BA:1321:A:N3	2.28	0.48
26:BA:1626:G:N7	26:BA:1634:A:C2	2.78	0.48
26:BA:2089:U:H3	26:BA:2231:C:N4	2.05	0.48
26:BA:2206:C:H2'	26:BA:2207:C:C6	2.48	0.48
26:BA:222:A:O5'	26:BA:271(B):G:N2	2.46	0.48
26:BA:2239:G:C2	26:BA:2240:C:C6	3.01	0.48
26:BA:2237:G:O2'	26:BA:2239:G:N7	2.47	0.48
26:BA:2259:G:C8	26:BA:2260:C:C6	3.00	0.48
26:BA:2261:C:OP2	48:B0:14:ARG:CB	2.57	0.48
26:BA:911:A:H1'	26:BA:2264:C:O4'	2.13	0.48
26:BA:2271:G:O2'	26:BA:2272:U:C5'	2.57	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2298:A:C4	26:BA:2321:G:N1	2.79	0.48
26:BA:2354:G:C4	26:BA:2355:C:C6	3.01	0.48
26:BA:2423:U:O4'	26:BA:2425:A:N7	2.46	0.48
26:BA:199:A:N6	26:BA:2434:A:C6	2.81	0.48
26:BA:2513:G:C6	26:BA:2514:U:N3	2.81	0.48
26:BA:2045:C:C2	26:BA:2624:G:C2	2.95	0.48
26:BA:2628:C:H1'	26:BA:2781:A:N3	2.29	0.48
26:BA:2633:G:H2'	26:BA:2634:G:O5'	2.13	0.48
26:BA:2805:G:H3'	26:BA:2807:G:C5'	2.43	0.48
26:BA:2832:U:O2'	26:BA:2834:G:C4	2.61	0.48
26:BA:2857:G:N2	26:BA:2860:A:OP2	2.40	0.48
26:BA:2865:U:N3	26:BA:2866:U:C4	2.80	0.48
26:BA:391:G:H2'	26:BA:392:C:H6	1.76	0.48
26:BA:530:G:H1'	26:BA:532:A:P	2.54	0.48
26:BA:823:G:H2'	26:BA:824:A:C8	2.48	0.48
27:BD:65:ASP:OD2	27:BD:101:ARG:HD3	2.13	0.48
27:BD:103:ILE:HG13	27:BD:104:ILE:CD1	2.21	0.48
27:BD:167:GLU:CB	27:BD:170:TYR:HD1	1.99	0.48
27:BD:206:LYS:HD3	27:BD:206:LYS:H	1.77	0.48
29:BF:221:GLU:O	29:BF:222:ASP:C	2.50	0.48
29:BF:37:ALA:HB2	29:BF:102:LEU:CG	2.43	0.48
31:BH:104:LEU:N	31:BH:104:LEU:HD12	2.27	0.48
32:BI:114:LYS:O	32:BI:115:ILE:C	2.51	0.48
32:BI:1:MET:HB3	32:BI:22:ALA:H	1.77	0.48
33:BN:12:VAL:O	33:BN:38:VAL:CB	2.60	0.48
33:BN:41:ALA:O	33:BN:132:LEU:O	2.31	0.48
35:BP:115:ARG:C	35:BP:117:GLU:H	2.16	0.48
36:BQ:111:THR:HG22	36:BQ:112:ALA:N	2.27	0.48
44:BU:109:LEU:C	44:BU:111:ASP:N	2.64	0.48
44:BU:8:ILE:N	44:BU:11:ARG:HH11	1.90	0.48
44:BU:39:LEU:O	44:BU:41:ASN:CA	2.62	0.48
44:BU:66:ASN:OD1	44:BU:66:ASN:N	2.29	0.48
44:BU:72:HIS:ND1	44:BU:110:VAL:CG2	2.77	0.48
40:BX:46:ASP:O	40:BX:47:VAL:C	2.50	0.48
42:BZ:126:GLY:C	42:BZ:129:ARG:HB2	2.17	0.48
42:BZ:128:ARG:O	42:BZ:129:ARG:HG2	2.13	0.48
42:BZ:139:THR:O	42:BZ:140:LYS:CB	2.60	0.48
42:BZ:1:MET:O	42:BZ:2:GLU:CB	2.61	0.48
42:BZ:29:ASN:O	42:BZ:30:VAL:HG22	2.13	0.48
42:BZ:52:PHE:H	42:BZ:65:LEU:CD1	2.26	0.48
42:BZ:54:ILE:HG23	42:BZ:55:THR:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:994:A:N1	1:AA:1047:G:C4'	2.76	0.48
1:AA:977:A:C4	1:AA:1223:C:C5	3.01	0.48
1:AA:1225:A:OP2	1:AA:1226:C:C5	2.66	0.48
1:AA:1343:G:H4'	12:AI:122:ALA:HB3	1.94	0.48
1:AA:671:G:C2	1:AA:672:U:C2	3.00	0.48
1:AA:868:C:H1'	1:AA:873:A:C4	2.48	0.48
5:AB:181:PHE:CD1	11:AH:71:GLY:HA3	2.48	0.48
12:AI:26:VAL:HB	12:AI:33:PHE:HB2	1.95	0.48
46:B2:34:GLN:O	46:B2:35:ALA:O	2.31	0.48
47:B3:30:ARG:NE	47:B3:33:GLN:CB	2.77	0.48
51:B6:37:LEU:CD2	51:B6:51:ARG:N	2.75	0.48
52:B7:10:ARG:O	52:B7:13:ALA:HB3	2.13	0.48
52:B7:9:ASN:O	52:B7:10:ARG:O	2.28	0.48
54:B9:29:ASN:HB3	54:B9:32:HIS:ND1	2.28	0.48
26:BA:1022:G:C2	26:BA:1140:C:C4	3.01	0.48
26:BA:142(A):A:OP1	26:BA:1143:A:H8	1.95	0.48
26:BA:585:G:N1	26:BA:1251:C:C5	2.81	0.48
26:BA:1251:C:C5'	44:BU:10:ARG:CG	2.92	0.48
26:BA:489:G:C8	26:BA:1284:A:C2	3.01	0.48
26:BA:197:A:H61	26:BA:248:G:N2	2.11	0.48
26:BA:2092:U:H5	26:BA:2227:A:N6	2.12	0.48
26:BA:221:A:H4'	26:BA:222:A:O5'	2.12	0.48
26:BA:2354:G:C5	26:BA:2355:C:C5	3.01	0.48
26:BA:2463:C:C2	26:BA:2464:C:C6	2.93	0.48
26:BA:2517:C:O2'	26:BA:2518:A:P	2.71	0.48
26:BA:2586:C:H3'	26:BA:2586:C:C6	2.49	0.48
26:BA:2633:G:H8	26:BA:2633:G:OP2	1.95	0.48
26:BA:2644:G:H3'	26:BA:2644:G:C8	2.47	0.48
26:BA:2817:G:N2	26:BA:2818:G:H1'	2.28	0.48
26:BA:2842:G:N2	26:BA:2876:G:C4	2.81	0.48
26:BA:307:G:N2	26:BA:310:A:O4'	2.45	0.48
26:BA:585:G:H2'	26:BA:586:A:C8	2.47	0.48
26:BA:647:G:H2'	26:BA:648:G:C8	2.46	0.48
26:BA:687:C:H5''	52:B7:4:THR:CG2	2.42	0.48
26:BA:818:G:C4	26:BA:1187:G:N2	2.81	0.48
26:BA:997:G:OP1	44:BU:92:ARG:HB2	2.12	0.48
27:BD:108:ASN:CG	27:BD:109:LEU:N	2.64	0.48
27:BD:141:HIS:NE2	27:BD:191:VAL:O	2.44	0.48
26:BA:1655:A:C4'	28:BE:211:GLN:HA	2.40	0.48
28:BE:225:LYS:O	28:BE:226:HIS:CG	2.66	0.48
29:BF:197:SER:O	29:BF:238:SER:CB	2.61	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:32:GLY:O	29:BF:35:VAL:CA	2.61	0.48
29:BF:6:TYR:CD1	29:BF:139:VAL:CG1	2.96	0.48
31:BH:101:LYS:CE	31:BH:115:GLU:CG	2.90	0.48
31:BH:102:LEU:N	31:BH:102:LEU:CD2	2.70	0.48
31:BH:101:LYS:CB	31:BH:113:GLU:CD	2.81	0.48
31:BH:93:TYR:CD2	31:BH:159:LYS:HE2	2.48	0.48
32:BI:68:LEU:HB3	32:BI:72:LEU:HD21	1.94	0.48
55:BK:38:PHE:HZ	55:BK:65:SER:C	2.16	0.48
33:BN:21:ARG:CA	33:BN:24:SER:OG	2.61	0.48
34:BO:91:LYS:HB3	34:BO:111:PHE:HE2	1.77	0.48
35:BP:76:LEU:CB	35:BP:81:VAL:CG2	2.91	0.48
37:BS:106:LEU:C	37:BS:107:ASN:O	2.44	0.48
44:BU:8:ILE:C	44:BU:11:ARG:CD	2.81	0.48
45:BV:22:VAL:CG1	45:BV:23:GLU:N	2.76	0.48
41:BY:20:HIS:O	41:BY:23:VAL:N	2.46	0.48
41:BY:28:SER:HB3	41:BY:99:THR:CA	2.34	0.48
41:BY:49:GLU:OE2	41:BY:49:GLU:C	2.51	0.48
42:BZ:148:THR:HB	42:BZ:166:LEU:O	2.13	0.48
42:BZ:66:VAL:CG2	42:BZ:69:VAL:CG2	2.91	0.48
1:AA:1302:U:P	16:AM:13:LYS:NZ	2.87	0.48
1:AA:1305:G:O2'	1:AA:1331:G:N2	2.46	0.48
1:AA:1287:A:N6	1:AA:1371:G:C4'	2.73	0.48
1:AA:15:G:O6	1:AA:1396:A:C6	2.66	0.48
1:AA:246:A:HO2'	20:AQ:99:SER:HA	1.79	0.48
1:AA:834:C:H2'	1:AA:835:U:C6	2.48	0.48
1:AA:880:C:OP2	15:AL:8:ASN:HB2	2.13	0.48
1:AA:988:G:N3	1:AA:1015:A:C2	2.82	0.48
13:AJ:47:PHE:CE1	13:AJ:63:PHE:HB2	2.49	0.48
16:AM:92:HIS:CE1	16:AM:98:VAL:CG2	2.95	0.48
47:B3:3:ARG:HH11	47:B3:3:ARG:HG2	1.79	0.48
49:B4:46:GLU:CD	49:B4:54:GLY:HA3	2.29	0.48
51:B6:49:VAL:C	51:B6:50:PHE:CD1	2.87	0.48
26:BA:1140:C:H4'	26:BA:142(A):A:N1	2.27	0.48
26:BA:1197:G:N3	26:BA:1250:G:C2	2.81	0.48
26:BA:119:A:O2'	26:BA:120:U:P	2.72	0.48
26:BA:125:G:C5'	52:B7:19:ARG:HD2	2.44	0.48
26:BA:1278:A:H5''	43:BR:34:ILE:CG2	2.44	0.48
26:BA:1474:C:H2'	26:BA:1475:G:N7	2.29	0.48
26:BA:1651:G:H2'	26:BA:1652:A:H8	1.76	0.48
26:BA:1906:G:C1'	26:BA:1929:G:C8	2.96	0.48
26:BA:2234:G:C6	26:BA:2235:G:C6	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2256:G:N1	26:BA:2257:U:O2	2.47	0.48
26:BA:2261:C:OP2	48:B0:14:ARG:CD	2.58	0.48
26:BA:2264:C:H2'	26:BA:2265:U:H5'	1.94	0.48
26:BA:2393:A:O2'	26:BA:2394:C:P	2.71	0.48
26:BA:2488:A:O5'	26:BA:2488:A:H8	1.95	0.48
26:BA:2548:G:C5	26:BA:2549:G:N7	2.82	0.48
26:BA:2595:G:H2'	26:BA:2597:G:OP2	2.12	0.48
26:BA:2622:C:C2'	26:BA:2623:G:O5'	2.62	0.48
26:BA:2652:C:C2'	26:BA:2653:U:C6	2.92	0.48
26:BA:2658:C:C2'	26:BA:2659:G:C5'	2.86	0.48
26:BA:2700:C:C2'	26:BA:2701:C:C5'	2.90	0.48
26:BA:532:A:N7	44:BU:45:TYR:CE2	2.81	0.48
26:BA:561:G:H21	44:BU:45:TYR:HE2	1.60	0.48
26:BA:73:A:H5'	46:B2:50:ARG:NH2	2.28	0.48
27:BD:104:ILE:CB	27:BD:106:PRO:HD3	2.39	0.48
27:BD:106:PRO:O	27:BD:107:LYS:C	2.51	0.48
27:BD:175:LEU:N	27:BD:179:GLU:O	2.44	0.48
27:BD:216:ALA:CA	27:BD:222:PRO:N	2.69	0.48
29:BF:194:PHE:N	29:BF:211:ASP:OD2	2.46	0.48
29:BF:238:SER:C	29:BF:241:ALA:HB2	2.33	0.48
29:BF:89:ALA:CB	29:BF:90:HIS:NE2	2.73	0.48
31:BH:101:LYS:HB2	31:BH:113:GLU:OE2	2.13	0.48
31:BH:52:THR:O	31:BH:64:HIS:HD2	1.97	0.48
32:BI:116:GLU:CG	32:BI:130:PRO:O	2.61	0.48
32:BI:23:ASP:O	32:BI:24:GLY:C	2.51	0.48
55:BK:13:LEU:HD22	55:BK:24:VAL:HG23	1.95	0.48
55:BK:60:VAL:HG23	55:BK:60:VAL:O	2.13	0.48
33:BN:107:ASN:N	33:BN:107:ASN:HD22	2.09	0.48
33:BN:39:VAL:HA	33:BN:103:VAL:HG12	1.92	0.48
34:BO:24:VAL:HG11	34:BO:32:TYR:C	2.34	0.48
26:BA:2566:A:N6	34:BO:28:SER:HA	2.21	0.48
26:BA:2251:G:P	36:BQ:102:ARG:NH2	2.85	0.48
36:BQ:18:GLU:HB3	36:BQ:23:ILE:HD11	1.95	0.48
36:BQ:43:PRO:O	36:BQ:44:ALA:C	2.52	0.48
43:BR:20:LEU:CD1	43:BR:21:TYR:CE2	2.89	0.48
37:BS:15:GLU:HG2	37:BS:16:ALA:N	2.29	0.48
44:BU:47:TYR:HA	44:BU:50:ARG:CG	2.43	0.48
40:BX:18:MET:SD	40:BX:24:LEU:CA	2.99	0.48
41:BY:51:LEU:HD21	41:BY:95:ASN:CB	2.43	0.48
41:BY:80:GLU:HG2	41:BY:86:GLU:CG	2.43	0.48
41:BY:93:THR:O	41:BY:94:SER:C	2.51	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BZ:126:GLY:O	42:BZ:127:PRO:C	2.51	0.48
42:BZ:25:ASN:OD1	42:BZ:25:ASN:C	2.52	0.48
1:AA:116:A:H61	1:AA:313:A:C2'	2.25	0.48
1:AA:160:A:N1	1:AA:343:U:H1'	2.29	0.48
1:AA:17:U:H1'	1:AA:1080:A:N3	2.29	0.48
1:AA:25:C:C5	1:AA:558:G:N2	2.81	0.48
1:AA:280:C:O4'	20:AQ:38:ARG:CZ	2.61	0.48
1:AA:573:A:N3	1:AA:883:C:C2'	2.77	0.48
1:AA:953:G:P	1:AA:964:A:H61	2.36	0.48
6:AC:121:ALA:O	6:AC:125:GLU:HG2	2.13	0.48
7:AD:23:GLY:O	7:AD:112:VAL:CG1	2.51	0.48
11:AH:29:SER:CB	11:AH:32:LYS:NZ	2.77	0.48
1:AA:1369:C:H5	12:AI:112:LYS:HE3	1.79	0.48
12:AI:20:ARG:O	12:AI:60:ASP:N	2.47	0.48
20:AQ:64:PRO:HB3	20:AQ:70:ARG:HH11	1.77	0.48
2:AV:35:A:N6	4:AX:117:U:C4	2.82	0.48
48:B0:30:VAL:C	48:B0:31:VAL:HG23	2.33	0.48
48:B0:37:LEU:HD11	48:B0:71:ASN:HD21	1.76	0.48
46:B2:34:GLN:O	46:B2:37:GLY:N	2.46	0.48
47:B3:53:LEU:HD22	47:B3:54:VAL:HG22	1.95	0.48
50:B5:33:CYS:HB2	50:B5:37:HIS:N	2.28	0.48
51:B6:13:GLU:O	51:B6:52:GLU:CA	2.61	0.48
52:B7:22:MET:O	52:B7:28:ARG:CG	2.58	0.48
53:B8:3:LYS:HA	53:B8:4:MET:HE1	1.96	0.48
26:BA:249:C:O2'	53:B8:8:LYS:HG3	2.13	0.48
26:BA:1125:G:H5'	54:B9:4:ARG:HD3	1.95	0.48
26:BA:106:C:C2'	26:BA:107:C:H5''	2.35	0.48
26:BA:1171:G:H2'	26:BA:1173:G:H4'	1.94	0.48
26:BA:1326:U:O2'	26:BA:2010:G:O2'	2.24	0.48
26:BA:1655:A:H2'	26:BA:1656:C:O4'	2.14	0.48
26:BA:1967:C:N4	26:BA:1968:G:C2	2.81	0.48
26:BA:1998:G:O3'	26:BA:2724:C:H4'	2.14	0.48
26:BA:2052:G:N2	28:BE:245:ARG:CD	2.76	0.48
26:BA:2189:U:C2'	26:BA:2190:G:C8	2.94	0.48
26:BA:2212:A:H2'	26:BA:2213:U:H5''	1.94	0.48
26:BA:2308:G:H5'	26:BA:2309:A:P	2.52	0.48
26:BA:2315:G:C2'	26:BA:2316:C:O5'	2.61	0.48
26:BA:2372:G:N1	26:BA:2373:G:C5	2.82	0.48
26:BA:827:U:N3	26:BA:2430:A:C6	2.82	0.48
26:BA:2454:G:H2'	26:BA:2455:G:C5'	2.19	0.48
26:BA:2468:G:C2'	26:BA:2469:A:C8	2.97	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2567:G:N2	26:BA:2568:C:C5	2.81	0.48
26:BA:259:G:H2'	26:BA:260:G:C8	2.47	0.48
26:BA:2049:G:H1	26:BA:2619:C:N4	2.11	0.48
26:BA:2633:G:N1	26:BA:2634:G:C6	2.81	0.48
26:BA:270(Q):C:H2'	26:BA:270(R):G:H8	1.79	0.48
26:BA:2696:U:N3	26:BA:2714:G:N2	2.61	0.48
26:BA:2815:C:HO2'	26:BA:2816:C:H5''	1.70	0.48
26:BA:2840:C:O2'	26:BA:2841:C:C5'	2.61	0.48
26:BA:2830:G:N2	26:BA:2883:A:C2	2.80	0.48
26:BA:386:G:HO2'	26:BA:387:U:P	2.36	0.48
26:BA:519:U:C4'	39:BW:75:TYR:HB3	2.44	0.48
26:BA:75:G:O3'	46:B2:51:LYS:CE	2.59	0.48
26:BA:807:U:O4'	26:BA:2445:G:C5'	2.59	0.48
26:BA:904:C:O2'	42:BZ:166:LEU:CD1	2.58	0.48
26:BA:993:G:H21	44:BU:54:LYS:HZ1	1.60	0.48
25:BB:70:C:H42	25:BB:106:G:H1	1.61	0.48
27:BD:167:GLU:O	27:BD:170:TYR:CA	2.61	0.48
27:BD:175:LEU:CD1	27:BD:179:GLU:HB3	2.40	0.48
27:BD:62:ARG:HD3	27:BD:62:ARG:N	2.27	0.48
28:BE:214:VAL:HG21	28:BE:221:LYS:HZ2	1.61	0.48
28:BE:317:PRO:HG2	28:BE:320:GLN:HG2	1.94	0.48
29:BF:93:LYS:C	29:BF:96:LYS:HG3	2.13	0.48
31:BH:120:LEU:HD12	31:BH:143:LEU:HD12	1.91	0.48
32:BI:63:ALA:HA	32:BI:66:LYS:HE3	1.96	0.48
32:BI:7:LYS:HA	32:BI:12:LYS:CD	2.29	0.48
33:BN:5:GLU:CA	33:BN:109:TYR:HE2	2.27	0.48
36:BQ:85:ILE:CG2	36:BQ:136:TRP:CZ2	2.95	0.48
26:BA:873:G:C4'	36:BQ:32:LYS:CG	2.87	0.48
43:BR:62:ALA:HB3	43:BR:80:PHE:HZ	1.73	0.48
44:BU:43:ALA:HB2	45:BV:75:LYS:CB	2.32	0.48
45:BV:67:LYS:HG2	45:BV:70:TYR:CE1	2.47	0.48
45:BV:69:ILE:HG21	45:BV:88:GLN:CB	2.42	0.48
41:BY:58:GLU:HG2	41:BY:76:ASP:OD2	2.13	0.48
41:BY:9:LYS:CE	41:BY:13:ARG:NH2	2.75	0.48
1:AA:1279:A:N3	1:AA:1279:A:H2'	2.26	0.48
1:AA:794:A:O3'	1:AA:1522:U:H5'	2.14	0.48
1:AA:273:A:H2'	1:AA:274:A:O4'	2.13	0.48
1:AA:279:A:C6	20:AQ:98:LEU:HD12	2.49	0.48
1:AA:356:A:H4'	1:AA:388:G:N2	2.28	0.48
1:AA:526:C:O5'	1:AA:526:C:H6	1.96	0.48
1:AA:671:G:H2'	1:AA:672:U:C6	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:960:U:O2'	1:AA:961:U:OP2	2.25	0.48
7:AD:201:GLN:O	7:AD:205:GLU:CG	2.61	0.48
8:AE:87:SER:OG	8:AE:130:ASN:HB3	2.13	0.48
11:AH:36:LEU:HD13	11:AH:48:TYR:HB2	1.96	0.48
1:AA:1125:U:H5	13:AJ:5:ARG:HH22	1.60	0.48
18:AO:64:ARG:HA	18:AO:67:LEU:HD12	1.94	0.48
1:AA:279:A:N7	20:AQ:95:TYR:HE2	2.12	0.48
3:AW:65:G:C4	3:AW:66:A:O4'	2.65	0.48
48:B0:16:SER:O	48:B0:17:ASN:CB	2.62	0.48
46:B2:27:LEU:CD1	46:B2:53:ILE:HD11	2.41	0.48
54:B9:3:VAL:C	54:B9:5:SER:N	2.65	0.48
26:BA:1028:A:H2'	26:BA:1029:A:C8	2.48	0.48
26:BA:1523:U:C4	26:BA:1524:G:N7	2.82	0.48
26:BA:1528:A:H61	26:BA:1543:A:N6	2.09	0.48
26:BA:1544:C:H2'	26:BA:1545:A:C4'	2.33	0.48
26:BA:1889:A:H2'	26:BA:1890:A:H8	1.77	0.48
26:BA:1969:A:C4'	26:BA:1970:A:H5'	2.41	0.48
26:BA:2034:U:H2'	26:BA:2034:U:O2	2.14	0.48
26:BA:2226:C:C4	26:BA:2227:A:N3	2.82	0.48
26:BA:2242:G:N3	26:BA:2243:U:C5	2.80	0.48
26:BA:2302:G:C2'	26:BA:2303:G:O5'	2.60	0.48
26:BA:2310:A:N9	30:BG:55:LYS:NZ	2.40	0.48
26:BA:2297:C:C2	26:BA:2333:A:N6	2.81	0.48
26:BA:2401:U:H2'	26:BA:2402:C:O4'	2.12	0.48
26:BA:2417:C:H2'	26:BA:2418:A:H8	1.78	0.48
26:BA:2528:U:H5	26:BA:2530:A:C5	2.28	0.48
26:BA:1953:A:H1'	26:BA:2560:C:O4'	2.14	0.48
26:BA:2561:A:C8	26:BA:2561:A:C3'	2.96	0.48
26:BA:2785:C:H4'	28:BE:99:VAL:CG1	2.44	0.48
26:BA:2848:G:C2	26:BA:2867:G:N3	2.81	0.48
26:BA:472:A:H2'	26:BA:473:G:C5'	2.43	0.48
26:BA:533:G:OP1	44:BU:24:PHE:HB2	2.13	0.48
26:BA:687:C:C5'	52:B7:4:THR:CG2	2.78	0.48
26:BA:830:G:C8	26:BA:2448:A:N7	2.81	0.48
26:BA:873:G:H2'	26:BA:874:G:O4'	2.13	0.48
29:BF:22:PHE:CD2	29:BF:116:ALA:HA	2.49	0.48
29:BF:203:ALA:C	29:BF:205:ARG:N	2.64	0.48
29:BF:6:TYR:OH	29:BF:234:VAL:HG12	2.13	0.48
29:BF:236:THR:O	29:BF:237:GLU:O	2.31	0.48
29:BF:32:GLY:O	29:BF:36:ARG:HG2	2.14	0.48
30:BG:136:ARG:HB3	30:BG:137:PRO:CD	2.39	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:77:ASP:O	30:BG:79:MET:N	2.47	0.48
31:BH:10:ILE:HD11	31:BH:49:ILE:CG2	2.42	0.48
32:BI:68:LEU:CD1	32:BI:108:LEU:CD2	2.81	0.48
32:BI:83:ALA:CB	32:BI:89:LEU:HA	2.44	0.48
55:BK:28:LEU:O	55:BK:33:VAL:HB	2.14	0.48
33:BN:61:VAL:HG11	33:BN:62:ASP:OD1	2.03	0.48
26:BA:2495:G:C4'	36:BQ:101:MET:CB	2.79	0.48
36:BQ:152:SER:OG	36:BQ:153:PRO:CD	2.60	0.48
36:BQ:17:ARG:HA	36:BQ:22:GLY:HA3	1.95	0.48
36:BQ:62:GLU:O	36:BQ:63:ALA:C	2.42	0.48
43:BR:59:ASP:CG	43:BR:60:LEU:CD2	2.82	0.48
43:BR:67:LEU:O	43:BR:67:LEU:HD22	2.14	0.48
37:BS:31:LYS:HB3	37:BS:100:ALA:HA	1.95	0.48
37:BS:66:LEU:O	37:BS:67:ALA:O	2.31	0.48
26:BA:1248:G:P	44:BU:2:PRO:HB3	2.50	0.48
44:BU:42:ALA:O	44:BU:46:GLU:HG3	2.13	0.48
26:BA:994:C:HO2'	44:BU:54:LYS:HA	1.76	0.48
45:BV:88:GLN:O	45:BV:89:ASN:OD1	2.30	0.48
40:BX:76:GLU:CD	40:BX:77:VAL:CG2	2.81	0.48
42:BZ:26:LYS:HZ2	42:BZ:26:LYS:CB	2.27	0.48
42:BZ:29:ASN:C	42:BZ:30:VAL:CG2	2.82	0.48
42:BZ:6:LYS:HB2	42:BZ:31:SER:HB3	1.96	0.48
1:AA:116:A:H2'	1:AA:117:G:O4'	2.14	0.48
1:AA:1364:U:C5	24:AU:14:TRP:HH2	2.31	0.48
1:AA:244:U:C4	1:AA:894:G:C6	3.02	0.48
1:AA:427:U:HO2'	1:AA:541:G:P	2.35	0.48
1:AA:482:A:N3	1:AA:482:A:H2'	2.27	0.48
1:AA:594:G:H2'	1:AA:595:G:O4'	2.14	0.48
1:AA:878:G:H5''	11:AH:89:PRO:O	2.14	0.48
1:AA:943:U:OP1	1:AA:945:G:O6	2.31	0.48
1:AA:944:G:N7	1:AA:945:G:N7	2.62	0.48
5:AB:82:ARG:HB2	5:AB:94:ASN:HD21	1.79	0.48
6:AC:182:ILE:HG12	6:AC:203:PHE:HA	1.96	0.48
7:AD:140:VAL:HG13	7:AD:144:ASP:HB2	1.95	0.48
11:AH:64:LYS:HG2	11:AH:79:VAL:HG21	1.95	0.48
15:AL:41:ARG:HG2	15:AL:42:THR:H	1.78	0.48
16:AM:77:ASN:HA	16:AM:80:ARG:HB3	1.95	0.48
2:AV:71:G:H2'	2:AV:72:C:H6	1.77	0.48
3:AW:9:A:C1'	3:AW:45:G:H2'	2.43	0.48
48:B0:9:SER:O	48:B0:11:LYS:HG3	2.13	0.48
48:B0:65:GLY:O	48:B0:66:LYS:HE3	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:B4:68:ARG:HH11	49:B4:72:LYS:HE2	1.78	0.48
53:B8:31:HIS:C	53:B8:32:GLN:HG3	2.34	0.48
26:BA:1082:U:H4'	55:BK:118:ALA:HB1	1.96	0.48
26:BA:1300:U:O4	26:BA:1626:G:H3'	2.13	0.48
26:BA:1978:A:H2'	26:BA:1979:C:O4'	2.13	0.48
26:BA:2185:C:H2'	26:BA:2186:G:O4'	2.14	0.48
26:BA:2286:A:H1'	26:BA:2346:A:N6	2.27	0.48
26:BA:2304:G:H2'	26:BA:2305:A:O5'	2.14	0.48
26:BA:2423:U:H5'	26:BA:2423:U:C5	2.40	0.48
26:BA:2246:G:C5	26:BA:2426:A:N3	2.82	0.48
26:BA:2461:C:H2'	26:BA:2462:U:C5'	2.44	0.48
26:BA:2461:C:C2	26:BA:2462:U:H6	2.27	0.48
26:BA:2524:G:N2	26:BA:2540:C:C6	2.82	0.48
26:BA:2617:C:H2'	26:BA:2617:C:O2	2.13	0.48
26:BA:2634:G:N1	26:BA:2635:C:C5	2.82	0.48
26:BA:2644:G:C2	26:BA:2645:G:N2	2.82	0.48
26:BA:2685:G:N2	26:BA:2725:A:C5	2.82	0.48
26:BA:2729:G:C2'	26:BA:2730:C:O4'	2.58	0.48
26:BA:294:A:H2'	26:BA:295:G:H5''	1.96	0.48
26:BA:332:A:C2'	26:BA:334:C:OP2	2.58	0.48
26:BA:828:U:OP2	26:BA:2068:U:C6	2.67	0.48
26:BA:984:A:H3'	26:BA:985:C:C5	2.48	0.48
26:BA:1799:G:N3	27:BD:153:LEU:HD21	2.06	0.48
27:BD:210:LYS:HG3	27:BD:211:HIS:H	1.79	0.48
27:BD:216:ALA:HB1	27:BD:223:ASN:N	2.28	0.48
26:BA:2051:A:C2'	28:BE:238:LEU:HD21	2.41	0.48
26:BA:2575:C:C5'	28:BE:241:TRP:HE1	2.16	0.48
28:BE:205:THR:CB	28:BE:259:HIS:N	2.71	0.48
28:BE:42:ALA:HB2	28:BE:310:PHE:HA	1.91	0.48
28:BE:71:THR:HG21	28:BE:299:SER:HA	1.88	0.48
29:BF:1:MET:SD	29:BF:23:GLU:HG2	2.53	0.48
30:BG:36:ASN:O	30:BG:37:ALA:C	2.52	0.48
31:BH:123:GLU:C	31:BH:125:PRO:CD	2.81	0.48
31:BH:136:ASP:O	31:BH:138:GLN:N	2.47	0.48
31:BH:59:HIS:O	31:BH:60:HIS:C	2.50	0.48
31:BH:68:ARG:O	31:BH:71:LEU:HB2	2.13	0.48
31:BH:75:VAL:O	31:BH:77:GLY:CA	2.58	0.48
55:BK:88:GLY:O	55:BK:89:SER:C	2.52	0.48
33:BN:63:ILE:CB	33:BN:71:TYR:CE1	2.95	0.48
34:BO:1:MET:HB2	34:BO:2:ILE:HD11	1.93	0.48
36:BQ:87:LYS:HZ2	36:BQ:115:SER:HA	1.79	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:149:ILE:H	36:BQ:149:ILE:CD1	2.17	0.48
36:BQ:52:LYS:HD3	36:BQ:52:LYS:HA	1.57	0.48
43:BR:36:THR:HG21	43:BR:40:LYS:CD	2.29	0.48
43:BR:45:ARG:O	43:BR:49:ASP:N	2.41	0.48
37:BS:87:LEU:O	37:BS:90:LEU:CA	2.62	0.48
44:BU:8:ILE:N	44:BU:11:ARG:HD2	2.28	0.48
39:BW:83:LYS:HA	39:BW:97:LYS:CG	2.36	0.48
39:BW:96:ILE:C	39:BW:96:ILE:CD1	2.82	0.48
40:BX:14:ALA:CB	40:BX:18:MET:HE1	2.42	0.48
26:BA:338:G:H8	41:BY:21:LYS:CB	2.21	0.48
42:BZ:114:ASP:HA	42:BZ:171:VAL:HA	1.96	0.48
42:BZ:139:THR:C	42:BZ:141:MET:CE	2.82	0.48
42:BZ:24:TYR:HD2	42:BZ:25:ASN:N	2.11	0.48
42:BZ:3:LEU:CD2	42:BZ:35:ASP:HB3	2.44	0.48
1:AA:361(A):C:HO2'	1:AA:1362:C:H5''	1.75	0.48
1:AA:922:G:N3	1:AA:1398:A:C2	2.81	0.48
1:AA:976:G:C2	1:AA:361(A):C:C6	3.01	0.48
1:AA:403:C:OP1	7:AD:3:ARG:NH1	2.47	0.48
1:AA:858:G:N2	1:AA:870:U:OP2	2.45	0.48
6:AC:122:GLU:HA	6:AC:125:GLU:HG3	1.96	0.48
15:AL:117:ARG:HB2	15:AL:117:ARG:NH1	2.28	0.48
17:AN:24:CYS:HB3	17:AN:40:CYS:HB3	1.78	0.48
2:AV:49:C:O2	2:AV:49:C:H2'	2.12	0.48
46:B2:23:LEU:HD23	46:B2:23:LEU:H	1.79	0.48
46:B2:7:GLU:OE2	46:B2:8:ILE:CD1	2.62	0.48
54:B9:2:LYS:HZ3	54:B9:2:LYS:N	2.12	0.48
26:BA:1044:G:O3'	26:BA:1045:A:H4'	2.14	0.48
26:BA:1063:G:O5'	55:BK:135:MET:HG2	2.14	0.48
26:BA:1264:G:H3'	26:BA:1265:A:H5''	1.95	0.48
26:BA:1718:G:N1	26:BA:1741:C:N4	2.58	0.48
26:BA:1777:U:H2'	26:BA:1778:U:H6	1.78	0.48
26:BA:1800:C:C4	26:BA:1817:G:N1	2.81	0.48
26:BA:2043:C:N4	26:BA:2777:G:N9	2.52	0.48
26:BA:2206:C:H5'	26:BA:2228:G:H21	1.79	0.48
26:BA:2213:U:H4'	26:BA:2215:G:N7	2.29	0.48
26:BA:2217:G:C2	26:BA:2218:G:C8	3.02	0.48
26:BA:2317:C:P	30:BG:150:SER:HA	2.53	0.48
26:BA:2348:U:O2'	26:BA:2349:G:H5'	2.14	0.48
26:BA:2352:A:H2'	26:BA:2353:G:O4'	2.14	0.48
26:BA:2415:G:H22	26:BA:2416:C:C1'	2.16	0.48
26:BA:2450:A:C2	26:BA:2451:A:N3	2.82	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2454:G:C6	26:BA:2455:G:C4	3.01	0.48
26:BA:2487:G:H2'	26:BA:2488:A:C5'	2.43	0.48
26:BA:2549:G:N1	26:BA:2550:G:N7	2.62	0.48
26:BA:2051:A:H5'	26:BA:2578:G:O4'	2.14	0.48
26:BA:2645:G:P	26:BA:2645:G:O4'	2.70	0.48
26:BA:2674:G:C2'	26:BA:2675:A:C8	2.67	0.48
26:BA:2679:A:C2'	26:BA:2680:C:O5'	2.61	0.48
26:BA:270(H):C:C2	26:BA:270(R):G:N2	2.82	0.48
26:BA:2793:G:C5	26:BA:2794:C:C5	3.01	0.48
26:BA:2819:G:C4	26:BA:2821:A:C5	3.02	0.48
26:BA:286:C:H2'	26:BA:287:C:O5'	2.14	0.48
26:BA:380:U:HO2'	49:B4:15:ILE:CA	2.27	0.48
26:BA:775:G:C2'	26:BA:794:G:C8	2.95	0.48
26:BA:896:A:N3	26:BA:896:A:H3'	2.28	0.48
27:BD:168:GLY:N	27:BD:170:TYR:CE1	2.82	0.48
28:BE:102:ASP:O	28:BE:103:GLU:CG	2.62	0.48
28:BE:221:LYS:HZ1	28:BE:233:ARG:CG	2.06	0.48
31:BH:85:ALA:HB1	31:BH:164:GLU:HG2	1.94	0.48
31:BH:22:THR:HG23	31:BH:34:ARG:O	2.14	0.48
31:BH:34:ARG:NH1	31:BH:73:ASN:HB2	2.10	0.48
32:BI:68:LEU:CD1	32:BI:108:LEU:HD22	2.43	0.48
32:BI:60:GLU:C	32:BI:62:LEU:H	2.17	0.48
26:BA:1062:G:C2'	55:BK:76:SER:HG	2.23	0.48
55:BK:93:LYS:H	55:BK:96:ILE:HG12	1.77	0.48
34:BO:73:ASP:HB3	34:BO:75:SER:OG	2.14	0.48
36:BQ:16:ARG:HA	36:BQ:17:ARG:HD3	1.95	0.48
43:BR:65:LEU:HD23	43:BR:68:ARG:HD2	1.95	0.48
37:BS:12:ARG:CD	37:BS:20:TYR:CE2	2.91	0.48
37:BS:52:PRO:O	37:BS:53:ASN:O	2.31	0.48
44:BU:107:LYS:O	44:BU:111:ASP:OD1	2.32	0.48
44:BU:66:ASN:OD1	44:BU:76:TYR:CZ	2.66	0.48
39:BW:68:ARG:HE	39:BW:110:LYS:HB3	1.79	0.48
1:AA:124:G:H4'	1:AA:291:C:O2'	2.14	0.48
1:AA:1504:G:H3'	1:AA:1504:G:OP1	2.14	0.48
1:AA:1521:G:H2'	1:AA:1522:U:H6	1.77	0.48
1:AA:719:C:H3'	1:AA:720:C:C6	2.49	0.48
1:AA:975:A:O2'	17:AN:32:SER:HB2	2.14	0.48
7:AD:30:LYS:O	7:AD:32:ALA:N	2.39	0.48
1:AA:426:G:O2'	7:AD:42:GLN:HG3	2.14	0.48
14:AK:67:ASP:HA	14:AK:70:LYS:HD2	1.95	0.48
21:AR:29:PHE:HE1	21:AR:36:ASN:OD1	1.97	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:20:G:N3	2:AV:20:G:C2'	2.77	0.48
2:AV:56:C:N1	30:BG:56:ARG:CZ	2.77	0.48
46:B2:8:ILE:O	46:B2:11:MET:CB	2.61	0.48
49:B4:56:VAL:CG1	49:B4:61:LYS:NZ	2.77	0.48
26:BA:1076:C:O2	55:BK:92:PRO:CG	2.62	0.48
26:BA:110:G:N1	26:BA:111:A:C6	2.82	0.48
26:BA:1669:A:O2'	26:BA:2549:G:H4'	2.14	0.48
26:BA:1907:G:N2	26:BA:1924:C:C2	2.82	0.48
26:BA:2033:A:O2'	26:BA:2034:U:P	2.71	0.48
26:BA:2103:C:H42	26:BA:2186:G:H1	1.60	0.48
26:BA:2241:A:O2'	26:BA:2242:G:O5'	2.32	0.48
26:BA:2271:G:HO2'	26:BA:2272:U:P	2.28	0.48
26:BA:2281:C:OP2	26:BA:2281:C:C6	2.67	0.48
26:BA:2364:C:C2'	26:BA:2365:G:O5'	2.62	0.48
26:BA:2368:C:H42	26:BA:2369:A:N6	2.12	0.48
26:BA:2285:C:C2	26:BA:2384:G:N2	2.82	0.48
26:BA:2262:U:H5'	26:BA:2387:U:O2	2.13	0.48
26:BA:2475:C:H2'	26:BA:2477:C:P	2.54	0.48
26:BA:1953:A:C5	26:BA:2550:G:H1'	2.48	0.48
26:BA:2690:C:O2'	26:BA:2691:C:H5'	2.14	0.48
26:BA:2727:G:H4'	34:BO:70:ARG:NE	2.28	0.48
26:BA:1:G:N2	26:BA:2902:C:N3	2.61	0.48
26:BA:631:A:C2	26:BA:2416:C:C1'	2.96	0.48
26:BA:673:C:H5'	29:BF:80:VAL:CG1	2.43	0.48
26:BA:710:G:H1	26:BA:721:C:H42	1.62	0.48
26:BA:806:C:O2'	26:BA:2445:G:C1'	2.60	0.48
27:BD:130:PRO:O	27:BD:134:ILE:CD1	2.62	0.48
27:BD:145:LEU:CD1	27:BD:146:LYS:N	2.77	0.48
28:BE:215:LYS:O	28:BE:216:ARG:C	2.52	0.48
29:BF:164:ALA:O	29:BF:167:ASP:HB2	2.14	0.48
26:BA:2311:A:N3	30:BG:53:LYS:HE2	2.29	0.48
30:BG:29:HIS:CE1	30:BG:64:ARG:NH2	2.81	0.48
31:BH:34:ARG:HH11	31:BH:70:LEU:HD23	1.78	0.48
31:BH:40:MET:CA	31:BH:54:PRO:HG3	2.44	0.48
31:BH:75:VAL:CG1	31:BH:76:GLU:H	2.22	0.48
31:BH:86:LEU:CG	31:BH:87:GLU:N	2.77	0.48
32:BI:103:GLN:NE2	32:BI:109:LYS:CB	2.76	0.48
32:BI:30:LEU:HA	32:BI:33:GLN:NE2	2.29	0.48
33:BN:15:ARG:NH1	33:BN:40:ASN:CB	2.77	0.48
33:BN:92:GLN:O	33:BN:93:ARG:C	2.51	0.48
34:BO:71:ARG:O	34:BO:72:PRO:C	2.51	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:90:ASP:C	34:BO:92:SER:N	2.65	0.48
36:BQ:94:ARG:HG3	36:BQ:107:LYS:N	2.29	0.48
36:BQ:45:GLN:CD	36:BQ:153:PRO:N	2.67	0.48
36:BQ:28:ILE:CG1	36:BQ:62:GLU:HG2	2.44	0.48
26:BA:873:G:C4'	36:BQ:32:LYS:HG2	2.41	0.48
36:BQ:87:LYS:O	36:BQ:88:PHE:HB3	2.14	0.48
43:BR:81:ASP:O	43:BR:82:GLU:C	2.52	0.48
45:BV:33:VAL:C	45:BV:63:HIS:ND1	2.67	0.48
45:BV:72:ARG:O	45:BV:88:GLN:CG	2.59	0.48
45:BV:88:GLN:OE1	45:BV:90:PHE:CE1	2.67	0.48
40:BX:38:ALA:O	40:BX:41:VAL:HG23	2.13	0.48
42:BZ:127:PRO:O	42:BZ:128:ARG:C	2.53	0.48
42:BZ:37:LYS:CA	42:BZ:41:ARG:HH12	2.25	0.48
42:BZ:66:VAL:HG23	42:BZ:69:VAL:HG23	1.96	0.48
1:AA:413:G:N3	1:AA:413:G:H2'	2.29	0.48
1:AA:994:A:C2	1:AA:1047:G:H4'	2.49	0.48
11:AH:6:ILE:O	11:AH:10:LEU:HG	2.13	0.48
23:AT:81:LYS:HA	23:AT:84:LEU:HB3	1.95	0.48
2:AV:7:U:C5	2:AV:49:C:C5	3.02	0.48
3:AW:33:U:O2	3:AW:35:A:H5'	2.13	0.48
47:B3:5:LYS:HG3	47:B3:36:VAL:HG12	1.95	0.48
26:BA:2079:U:O3'	49:B4:32:HIS:CD2	2.66	0.48
49:B4:41:PRO:CG	49:B4:57:ASP:CG	2.80	0.48
26:BA:2021:C:O5'	50:B5:15:LYS:HE2	2.12	0.48
51:B6:54:LYS:CA	51:B6:54:LYS:NZ	2.76	0.48
53:B8:9:MET:O	53:B8:14:ILE:HG12	2.13	0.48
53:B8:14:ILE:HG23	53:B8:15:LYS:H	1.78	0.48
26:BA:120:U:H2'	26:BA:120:U:O2	2.14	0.48
26:BA:1362:C:HO2'	26:BA:1810:A:HO2'	1.61	0.48
26:BA:1369:G:H2'	26:BA:1370:C:O4'	2.14	0.48
26:BA:1520:U:H6	26:BA:1520:U:H3'	1.79	0.48
26:BA:1599:C:OP1	40:BX:33:SER:CB	2.56	0.48
26:BA:2208:U:O4	26:BA:2216:G:O6	2.31	0.48
26:BA:2257:U:H2'	26:BA:2258:C:OP2	2.13	0.48
26:BA:2276:G:H2'	26:BA:2277:G:O5'	2.13	0.48
26:BA:2259:G:O6	26:BA:2281:C:N3	2.47	0.48
26:BA:2354:G:N3	48:B0:32:LYS:CD	2.74	0.48
26:BA:2519:U:OP2	26:BA:2519:U:C6	2.67	0.48
26:BA:2560:C:H2'	26:BA:2560:C:O2	2.14	0.48
26:BA:2562:U:O2	26:BA:2563:U:N1	2.47	0.48
26:BA:2625:G:C8	26:BA:2626:C:C5	3.02	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2695:C:H2'	26:BA:2696:U:H6	1.67	0.48
26:BA:270(A):A:H3'	26:BA:270(A):A:N3	2.29	0.48
26:BA:2766:G:C2'	26:BA:2766:G:N3	2.75	0.48
26:BA:2639:A:H1'	26:BA:2778:A:H2	1.78	0.48
26:BA:2844:G:C6	26:BA:2845:G:C5	3.01	0.48
26:BA:293:U:O2'	26:BA:294:A:O4'	2.17	0.48
26:BA:388:G:O5'	49:B4:23:GLU:HB3	2.12	0.48
26:BA:447:A:N7	26:BA:473:G:C6	2.82	0.48
26:BA:603:A:H2'	26:BA:604:G:H8	1.77	0.48
26:BA:71:A:C2	26:BA:73:A:N7	2.82	0.48
26:BA:747:U:P	50:B5:2:ALA:CB	3.01	0.48
26:BA:60:G:N3	26:BA:74:A:N6	2.62	0.48
26:BA:85:G:O5'	41:BY:65:VAL:HG12	1.95	0.48
25:BB:75:G:N9	42:BZ:22:VAL:HG21	2.28	0.48
27:BD:70:LYS:CB	27:BD:70:LYS:NZ	2.76	0.48
27:BD:80:ILE:O	27:BD:82:TYR:CD1	2.67	0.48
27:BD:85:ASN:HD21	27:BD:86:ARG:CZ	2.24	0.48
28:BE:102:ASP:C	28:BE:103:GLU:CG	2.82	0.48
28:BE:111:THR:HG22	28:BE:111:THR:O	2.13	0.48
29:BF:197:SER:OG	29:BF:236:THR:OG1	2.25	0.48
32:BI:124:LEU:HD12	32:BI:125:GLY:H	1.79	0.48
32:BI:83:ALA:N	32:BI:147:GLU:HB3	2.29	0.48
32:BI:84:GLY:O	32:BI:85:GLU:HG3	2.14	0.48
32:BI:9:VAL:C	32:BI:10:LYS:HG2	2.35	0.48
55:BK:18:ALA:HB1	55:BK:39:CYS:CA	2.44	0.48
33:BN:8:ALA:O	33:BN:11:ILE:HG13	2.14	0.48
34:BO:5:GLU:HB2	34:BO:20:LEU:HD22	1.95	0.48
34:BO:37:ASP:CB	34:BO:62:VAL:HG21	2.30	0.48
34:BO:63:VAL:HG11	34:BO:102:VAL:HG21	1.93	0.48
34:BO:2:ILE:HG21	34:BO:8:LEU:HD13	1.96	0.48
34:BO:11:ALA:CA	34:BO:99:PHE:HB2	2.44	0.48
36:BQ:116:HIS:CD2	36:BQ:118:ALA:O	2.67	0.48
36:BQ:16:ARG:HH11	36:BQ:16:ARG:HB2	1.54	0.48
36:BQ:36:ASN:ND2	36:BQ:41:THR:N	2.62	0.48
36:BQ:34:GLY:C	36:BQ:74:ASN:O	2.53	0.48
36:BQ:84:ARG:HH21	36:BQ:123:ILE:CD1	2.27	0.48
43:BR:24:GLN:C	43:BR:44:LEU:HD21	2.35	0.48
37:BS:22:GLN:OE1	37:BS:22:GLN:C	2.53	0.48
44:BU:95:LEU:CD2	44:BU:95:LEU:H	2.19	0.48
39:BW:12:ILE:HD11	39:BW:42:ARG:HD2	1.96	0.48
26:BA:519:U:O3'	39:BW:25:ARG:NH2	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:12:GLU:OE1	40:BX:13:LYS:NZ	2.47	0.48
40:BX:31:ARG:O	40:BX:32:ALA:C	2.46	0.48
41:BY:19:ARG:O	41:BY:22:GLN:N	2.42	0.48
41:BY:75:GLU:O	41:BY:76:ASP:O	2.32	0.48
42:BZ:135:VAL:O	42:BZ:136:VAL:CG2	2.61	0.48
42:BZ:151:ASP:O	42:BZ:153:LYS:HD2	2.13	0.48
1:AA:1287:A:N6	1:AA:1371:G:O4'	2.43	0.47
1:AA:1517:G:H3'	1:AA:1518:A:C8	2.49	0.47
1:AA:429:U:H4'	1:AA:430:A:O5'	2.13	0.47
1:AA:739:C:H5''	18:AO:2:PRO:HD3	1.96	0.47
1:AA:978:A:N1	1:AA:1318:A:C5	2.82	0.47
12:AI:48:GLU:N	12:AI:49:PRO:HD2	2.29	0.47
13:AJ:60:ARG:O	13:AJ:61:GLU:CB	2.62	0.47
1:AA:1320:C:H5''	22:AS:3:ARG:CZ	2.43	0.47
2:AV:19:G:H1'	2:AV:57:G:N2	2.29	0.47
2:AV:60:C:OP2	2:AV:61:C:C5	2.67	0.47
48:B0:78:PHE:N	48:B0:78:PHE:CD1	2.81	0.47
46:B2:59:ILE:HG12	46:B2:60:GLN:H	1.76	0.47
49:B4:20:VAL:O	49:B4:30:GLU:CD	2.51	0.47
50:B5:11:THR:HG22	50:B5:19:ARG:NH2	2.28	0.47
39:BW:19:LEU:HD11	50:B5:25:LEU:CD2	2.32	0.47
26:BA:1367:A:H2'	52:B7:25:LYS:CD	2.44	0.47
53:B8:30:ARG:HG2	53:B8:31:HIS:H	1.78	0.47
26:BA:1470:G:N2	26:BA:1522:G:N1	2.61	0.47
26:BA:1855:G:H1	26:BA:1887:C:H42	1.62	0.47
26:BA:226:G:O6	26:BA:410:G:H1'	2.13	0.47
26:BA:2269:A:H2'	26:BA:2270:G:O4'	2.14	0.47
26:BA:2324:C:O2'	26:BA:2325:G:P	2.71	0.47
26:BA:2341:G:C8	26:BA:2342:C:C5	3.02	0.47
26:BA:2354:G:C4	26:BA:2355:C:C5	3.02	0.47
26:BA:2367:G:C2	26:BA:2368:C:C6	3.01	0.47
26:BA:2378:A:C1'	37:BS:101:VAL:CG2	2.91	0.47
26:BA:2390:U:C6	26:BA:2390:U:H3'	2.48	0.47
26:BA:2069:G:C2	26:BA:2443:C:O2	2.67	0.47
26:BA:2520:C:H6	26:BA:2567:G:H1'	1.75	0.47
26:BA:2538:C:C2'	26:BA:2539:C:O5'	2.61	0.47
26:BA:2049:G:H1	26:BA:2619:C:H42	1.62	0.47
26:BA:2673:G:N1	26:BA:2674:G:C5	2.81	0.47
26:BA:2711:A:P	26:BA:2714:G:OP1	2.67	0.47
26:BA:2717:G:C5	26:BA:2718:G:N7	2.82	0.47
26:BA:2773:C:C2'	26:BA:2774:C:H6	2.24	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:27:G:H2'	26:BA:28:A:H8	1.79	0.47
26:BA:2857:G:N2	26:BA:2859:G:H3'	2.29	0.47
26:BA:324:A:H62	26:BA:339:U:C1'	2.26	0.47
26:BA:382:G:H1	26:BA:392:C:N4	2.09	0.47
26:BA:474:G:C6	26:BA:510:C:N4	2.82	0.47
26:BA:687:C:O2'	26:BA:1780:A:N6	2.44	0.47
26:BA:685:A:C2	26:BA:689:A:C6	3.02	0.47
26:BA:729:G:C3'	26:BA:729:G:N3	2.75	0.47
26:BA:72:U:C1'	46:B2:57:LYS:HD2	2.43	0.47
26:BA:775:G:N2	26:BA:787:U:C3'	2.77	0.47
26:BA:954:G:H2'	26:BA:955:C:O4'	2.14	0.47
26:BA:978:G:N2	26:BA:986:C:N3	2.62	0.47
25:BB:77:U:H5'	42:BZ:80:HIS:HD1	1.76	0.47
27:BD:122:ASP:O	27:BD:122:ASP:CG	2.51	0.47
26:BA:1820:U:H3	27:BD:198:GLY:HA2	1.78	0.47
27:BD:89:ASN:O	27:BD:105:ALA:HB2	1.88	0.47
28:BE:203:GLY:CA	28:BE:303:PRO:CD	2.81	0.47
29:BF:230:GLY:C	29:BF:231:ARG:HG3	2.20	0.47
26:BA:451:C:O5'	29:BF:49:ASP:HB2	2.13	0.47
26:BA:2313:C:C5'	30:BG:72:LYS:CB	2.78	0.47
31:BH:161:ILE:HG13	31:BH:161:ILE:O	2.13	0.47
32:BI:102:LEU:HA	32:BI:106:HIS:HB2	1.96	0.47
26:BA:1063:G:O5'	55:BK:135:MET:CG	2.62	0.47
55:BK:138:GLU:CB	55:BK:140:VAL:HG23	2.44	0.47
33:BN:63:ILE:HB	33:BN:71:TYR:CD1	2.49	0.47
36:BQ:88:PHE:O	36:BQ:113:ALA:HB2	2.14	0.47
43:BR:61:HIS:O	43:BR:63:ARG:N	2.47	0.47
26:BA:2881:C:O2'	43:BR:96:ARG:HA	2.14	0.47
38:BT:38:ASN:O	38:BT:39:ASN:C	2.52	0.47
45:BV:61:VAL:CG1	45:BV:95:ILE:C	2.82	0.47
45:BV:61:VAL:HG13	45:BV:96:LEU:N	2.29	0.47
45:BV:69:ILE:N	45:BV:91:THR:HG22	2.11	0.47
39:BW:20:VAL:HG12	39:BW:47:VAL:HG11	1.96	0.47
41:BY:17:HIS:O	41:BY:20:HIS:N	2.47	0.47
41:BY:19:ARG:HA	41:BY:22:GLN:HG3	1.96	0.47
41:BY:76:ASP:O	41:BY:77:VAL:C	2.51	0.47
1:AA:1061:G:OP1	13:AJ:51:ARG:HD2	2.14	0.47
1:AA:1317:C:C4	17:AN:16:PHE:CE1	3.02	0.47
1:AA:1540:U:H2'	1:AA:1541:U:O4'	2.13	0.47
1:AA:37:U:C4	1:AA:397:A:C2	3.02	0.47
1:AA:1057:G:H1'	6:AC:195:VAL:HG12	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AD:76:ARG:O	7:AD:79:PHE:HB3	2.13	0.47
11:AH:17:THR:HB	11:AH:18:ARG:NH2	2.28	0.47
2:AV:1:G:O3'	36:BQ:97:ASP:OD2	2.32	0.47
2:AV:56:C:C5	2:AV:57:G:C5	3.02	0.47
3:AW:9:A:C6	3:AW:45:G:C5	2.93	0.47
46:B2:25:THR:O	46:B2:26:GLU:O	2.33	0.47
46:B2:43:PRO:O	46:B2:46:ILE:HB	2.14	0.47
26:BA:469:G:H1	52:B7:40:HIS:HE2	1.61	0.47
26:BA:1059:G:N3	55:BK:127:ILE:CD1	2.72	0.47
26:BA:1312:U:H1'	26:BA:1313:U:C5	2.49	0.47
26:BA:1466:G:H2'	26:BA:1547:C:C5	2.49	0.47
26:BA:1669:A:C6	26:BA:1994:C:O2	2.67	0.47
26:BA:1667:G:C2'	26:BA:1991:U:O4	2.63	0.47
26:BA:2033:A:O2'	26:BA:2034:U:O5'	2.29	0.47
26:BA:2234:G:N2	26:BA:2235:G:C4	2.82	0.47
26:BA:2251:G:P	36:BQ:102:ARG:CZ	3.02	0.47
26:BA:2256:G:N2	26:BA:2257:U:C1'	2.77	0.47
26:BA:2313:C:C5	26:BA:2314:C:N4	2.79	0.47
26:BA:2294:C:C2	26:BA:2339:G:C6	3.02	0.47
26:BA:2346:A:O2'	26:BA:2347:C:P	2.70	0.47
26:BA:2380:C:C3'	26:BA:2380:C:C6	2.97	0.47
26:BA:2392:A:N6	26:BA:2393:A:C6	2.82	0.47
26:BA:410:G:C2	26:BA:2407:G:N7	2.82	0.47
26:BA:2436:G:O6	26:BA:2437:U:O4	2.31	0.47
26:BA:2593:U:O2	26:BA:2600:A:C2	2.66	0.47
26:BA:2633:G:C2	26:BA:2634:G:C4	2.94	0.47
26:BA:2683:C:C5	26:BA:2684:U:H5	2.25	0.47
26:BA:2711:A:H3'	26:BA:2712:U:H5'	1.96	0.47
26:BA:2733:A:C3'	26:BA:2733:A:C8	2.96	0.47
26:BA:557:U:C5'	33:BN:92:GLN:HB2	2.44	0.47
26:BA:764:A:H8	26:BA:764:A:H5''	1.79	0.47
26:BA:949:C:H2'	26:BA:950:G:H8	1.79	0.47
27:BD:144:GLU:CG	27:BD:188:ARG:H	2.27	0.47
27:BD:89:ASN:ND2	27:BD:199:ARG:HE	1.88	0.47
26:BA:1789:A:P	27:BD:226:GLY:HA2	2.54	0.47
28:BE:109:ASP:OD2	28:BE:112:LEU:CD2	2.57	0.47
28:BE:270:ASP:OD2	28:BE:270:ASP:N	2.46	0.47
28:BE:44:TYR:N	28:BE:309:PRO:HG2	1.92	0.47
28:BE:45:LYS:HD2	28:BE:303:PRO:C	2.33	0.47
29:BF:6:TYR:CE1	29:BF:138:VAL:C	2.88	0.47
29:BF:151:GLN:HA	29:BF:154:VAL:CG2	2.39	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:93:LYS:O	29:BF:94:THR:C	2.53	0.47
25:BB:45:A:C1'	30:BG:76:ARG:HH12	2.26	0.47
31:BH:138:GLN:C	31:BH:140:VAL:H	2.17	0.47
31:BH:147:ILE:O	31:BH:150:VAL:HB	2.14	0.47
32:BI:119:ASP:CG	32:BI:120:ALA:H	2.15	0.47
33:BN:108:PRO:HD2	33:BN:109:TYR:H	1.78	0.47
34:BO:64:ARG:HG2	34:BO:81:GLU:O	2.14	0.47
37:BS:100:ALA:HB3	37:BS:127:LEU:CD2	2.40	0.47
37:BS:86:LEU:HD21	37:BS:124:ASP:HB2	1.95	0.47
38:BT:24:LYS:O	38:BT:25:ASP:CB	2.60	0.47
44:BU:103:PRO:CB	44:BU:107:LYS:HE2	2.44	0.47
44:BU:55:ARG:HA	44:BU:58:ARG:HD2	1.96	0.47
39:BW:82:LEU:CD2	39:BW:82:LEU:N	2.74	0.47
40:BX:6:LYS:CD	40:BX:27:ALA:HB1	2.43	0.47
41:BY:19:ARG:HA	41:BY:22:GLN:NE2	2.29	0.47
42:BZ:12:GLN:O	42:BZ:15:ASP:CB	2.58	0.47
42:BZ:40:ASP:O	42:BZ:41:ARG:O	2.32	0.47
42:BZ:71:MET:O	42:BZ:72:ASP:C	2.52	0.47
42:BZ:79:ILE:C	42:BZ:80:HIS:CG	2.85	0.47
1:AA:1309:G:H5''	16:AM:88:ARG:NH1	2.29	0.47
1:AA:1269:A:C4	1:AA:1326:C:H1'	2.47	0.47
1:AA:770:C:O2'	1:AA:899:C:O2	2.32	0.47
5:AB:180:LEU:O	5:AB:181:PHE:CB	2.58	0.47
11:AH:98:LYS:O	11:AH:98:LYS:HG2	2.15	0.47
13:AJ:24:VAL:O	13:AJ:28:ARG:HG3	2.14	0.47
1:AA:523:A:H2	15:AL:91:LYS:HB3	1.79	0.47
16:AM:22:ILE:HD12	16:AM:25:ILE:HD12	1.95	0.47
1:AA:1216:G:H5''	17:AN:5:ALA:HB2	1.96	0.47
1:AA:1114:C:H1'	17:AN:60:SER:CB	2.44	0.47
48:B0:37:LEU:CA	48:B0:68:VAL:HG13	2.36	0.47
26:BA:1368:G:H5'	52:B7:25:LYS:HD2	1.96	0.47
26:BA:1040:C:H2'	26:BA:1040:C:O2	2.15	0.47
26:BA:1076:C:O2	55:BK:92:PRO:HD2	2.15	0.47
26:BA:989:G:H5'	26:BA:1157:G:H4'	1.96	0.47
26:BA:47:C:C4	26:BA:179:G:C6	3.02	0.47
26:BA:1993:U:H5''	28:BE:228:ARG:HE	1.79	0.47
26:BA:2045:C:C4	26:BA:2624:G:N1	2.81	0.47
26:BA:2195:C:C6	26:BA:2195:C:C4'	2.97	0.47
26:BA:2247:A:C2'	26:BA:2248:C:O5'	2.62	0.47
26:BA:2263:C:H42	26:BA:2278:A:N6	2.12	0.47
26:BA:2278:A:OP1	36:BQ:20:ILE:CG2	2.57	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2296:U:H3'	26:BA:2296:U:C6	2.48	0.47
26:BA:2322:A:C2	26:BA:2323:G:C8	2.92	0.47
26:BA:2478:A:C2'	26:BA:2479:G:H5'	2.41	0.47
26:BA:2032:G:C6	26:BA:2572:A:C2	3.02	0.47
26:BA:2627:G:H1'	26:BA:2781:A:H2	1.78	0.47
26:BA:2817:G:C4	26:BA:2830:G:N2	2.81	0.47
26:BA:2885:C:N4	26:BA:2886:G:C5	2.83	0.47
26:BA:468:G:C2'	26:BA:469:G:H5'	2.44	0.47
26:BA:914:C:H2'	26:BA:915:C:H5'	1.97	0.47
27:BD:194:VAL:HG21	27:BD:196:ASN:OD1	2.14	0.47
27:BD:196:ASN:HB2	27:BD:199:ARG:HD3	1.96	0.47
27:BD:81:GLU:C	27:BD:82:TYR:O	2.51	0.47
28:BE:211:GLN:HB3	28:BE:216:ARG:HG2	1.94	0.47
28:BE:214:VAL:HG12	28:BE:215:LYS:N	2.28	0.47
29:BF:35:VAL:O	29:BF:38:ALA:CB	2.62	0.47
26:BA:443:A:H62	29:BF:39:GLN:HB2	1.79	0.47
29:BF:50:GLU:HG3	29:BF:51:TYR:H	1.79	0.47
32:BI:5:PHE:CD2	32:BI:17:GLU:C	2.87	0.47
55:BK:103:LYS:CA	55:BK:106:GLU:OE1	2.62	0.47
55:BK:93:LYS:H	55:BK:96:ILE:HG13	1.71	0.47
33:BN:45:VAL:N	33:BN:132:LEU:CG	2.76	0.47
26:BA:2251:G:C3'	36:BQ:102:ARG:HH22	2.27	0.47
43:BR:90:ARG:NH2	43:BR:117:VAL:HG22	2.18	0.47
43:BR:20:LEU:CD1	43:BR:21:TYR:CA	2.48	0.47
37:BS:104:ILE:C	37:BS:106:LEU:N	2.62	0.47
37:BS:85:GLY:O	37:BS:86:LEU:O	2.32	0.47
37:BS:98:GLU:CG	37:BS:99:GLU:N	2.60	0.47
44:BU:66:ASN:C	44:BU:68:GLY:N	2.67	0.47
44:BU:98:ILE:CG2	44:BU:106:PHE:HD1	2.25	0.47
41:BY:101:LEU:CD2	41:BY:112:LEU:CD2	2.54	0.47
41:BY:17:HIS:O	41:BY:20:HIS:CB	2.52	0.47
42:BZ:143:ILE:CG2	42:BZ:144:GLY:N	2.38	0.47
42:BZ:3:LEU:HD22	42:BZ:35:ASP:HB3	1.96	0.47
1:AA:1221:G:OP1	1:AA:1321:C:N4	2.48	0.47
1:AA:1242:C:O5'	1:AA:1242:C:H6	1.97	0.47
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.14	0.47
1:AA:190(L):U:O2	23:AT:105:SER:OG	2.29	0.47
1:AA:107:G:H1'	1:AA:378:G:O2'	2.15	0.47
7:AD:173:TRP:CD1	7:AD:189:PRO:HB3	2.49	0.47
11:AH:29:SER:HB2	11:AH:32:LYS:NZ	2.28	0.47
19:AP:6:LEU:HA	19:AP:18:ARG:O	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:27:LEU:HD22	46:B2:49:LEU:HB3	1.96	0.47
47:B3:40:THR:HG21	47:B3:43:ILE:HD11	1.80	0.47
47:B3:5:LYS:HA	47:B3:35:ARG:O	2.14	0.47
49:B4:5:LEU:HD22	49:B4:9:ALA:HA	1.95	0.47
26:BA:2045:C:C2	50:B5:22:HIS:CE1	3.01	0.47
50:B5:31:THR:HG23	50:B5:32:GLU:N	2.29	0.47
26:BA:1174:A:N6	26:BA:1177:A:C2	2.83	0.47
26:BA:1264:G:N7	26:BA:1265:A:C5	2.81	0.47
26:BA:131:G:N2	26:BA:132:G:C5	2.83	0.47
26:BA:1343:G:H5'	26:BA:1598:C:OP2	2.14	0.47
26:BA:1429:G:N3	26:BA:1568:G:C2	2.82	0.47
26:BA:152:G:H3'	26:BA:152:G:C8	2.49	0.47
26:BA:1771:C:H2'	26:BA:1772:G:C8	2.49	0.47
26:BA:1924:C:C5	26:BA:1925:C:H5	2.32	0.47
26:BA:2020:A:H5'	50:B5:12:SER:HB2	1.96	0.47
26:BA:2082:A:H61	26:BA:2237:G:H1'	1.79	0.47
26:BA:2251:G:OP1	36:BQ:102:ARG:NH2	2.47	0.47
26:BA:2252:G:C3'	26:BA:2253:G:C5'	2.93	0.47
26:BA:2305:A:N7	26:BA:2306:C:C6	2.82	0.47
26:BA:2313:C:C5'	30:BG:51:ARG:NH1	2.66	0.47
26:BA:2316:C:C4	26:BA:2317:C:C4	3.03	0.47
26:BA:2402:C:O5'	26:BA:2402:C:H6	1.97	0.47
26:BA:2462:U:N3	26:BA:2463:C:C4	2.83	0.47
26:BA:2479:G:H2'	26:BA:2480:C:O4'	2.14	0.47
26:BA:2468:G:C5	26:BA:2481:G:C2	3.02	0.47
26:BA:2251:G:P	26:BA:2496:C:OP2	2.71	0.47
26:BA:2447:G:C8	26:BA:2500:U:C5	3.02	0.47
26:BA:2537:U:C5	26:BA:2538:C:H5	2.32	0.47
26:BA:2550:G:C2'	26:BA:2551:C:H6	2.25	0.47
26:BA:2567:G:N2	26:BA:2568:C:C4	2.80	0.47
26:BA:2051:A:C2	26:BA:2618:G:N1	2.76	0.47
26:BA:2656:U:C6	26:BA:2656:U:C3'	2.98	0.47
26:BA:2679:A:C5	26:BA:2680:C:C6	3.02	0.47
26:BA:1630:G:O4'	26:BA:2698:U:OP1	2.33	0.47
26:BA:449:A:OP1	29:BF:85:LYS:HA	2.14	0.47
26:BA:1545:A:C5'	26:BA:545(A):A:OP2	2.40	0.47
26:BA:5:A:C4	26:BA:2899:G:N2	2.83	0.47
26:BA:619:G:H3'	26:BA:619:G:C8	2.50	0.47
26:BA:651:G:H3'	26:BA:652:C:C6	2.49	0.47
26:BA:826:U:C6	26:BA:828:U:H6	2.32	0.47
26:BA:989:G:HO2'	26:BA:990:A:P	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:107:LYS:CG	27:BD:193:GLU:OE1	2.62	0.47
26:BA:1805:U:C5'	27:BD:235:PRO:CG	2.93	0.47
28:BE:264:LEU:O	28:BE:265:ASN:C	2.52	0.47
29:BF:22:PHE:HE2	29:BF:115:LEU:C	2.18	0.47
29:BF:195:VAL:HG13	29:BF:213:ALA:C	2.35	0.47
29:BF:39:GLN:O	29:BF:42:ARG:CA	2.62	0.47
26:BA:673:C:C5'	29:BF:80:VAL:HG11	2.45	0.47
29:BF:93:LYS:C	29:BF:96:LYS:CE	2.80	0.47
30:BG:88:LEU:CD2	30:BG:88:LEU:C	2.79	0.47
31:BH:51:VAL:HG23	31:BH:68:ARG:HG2	1.95	0.47
32:BI:68:LEU:CD1	32:BI:108:LEU:HD11	2.45	0.47
55:BK:112:LYS:HE2	55:BK:116:LEU:HB2	1.94	0.47
34:BO:21:VAL:HG22	34:BO:39:VAL:HG11	1.95	0.47
34:BO:60:ALA:CB	34:BO:85:VAL:O	2.63	0.47
35:BP:92:ASP:N	35:BP:118:LEU:HD22	2.30	0.47
36:BQ:91:HIS:N	36:BQ:111:THR:HG21	2.26	0.47
43:BR:39:PRO:HA	43:BR:42:LYS:HB2	1.96	0.47
25:BB:7:G:HO2'	37:BS:37:ARG:HG3	1.74	0.47
37:BS:83:LEU:C	37:BS:87:LEU:HD23	2.35	0.47
38:BT:36:CYS:O	38:BT:37:GLU:C	2.46	0.47
26:BA:1754:C:O4'	38:BT:39:ASN:OD1	2.33	0.47
44:BU:10:ARG:CA	44:BU:13:ARG:HH12	2.26	0.47
39:BW:8:ARG:CD	39:BW:102:HIS:HE1	2.26	0.47
39:BW:2:GLU:CA	39:BW:108:GLY:HA2	2.38	0.47
39:BW:24:ILE:HD13	39:BW:36:LEU:CD1	2.45	0.47
39:BW:36:LEU:HD22	39:BW:44:ALA:CA	2.32	0.47
39:BW:40:ASN:O	39:BW:41:LYS:C	2.51	0.47
42:BZ:52:PHE:N	42:BZ:65:LEU:HD11	2.28	0.47
1:AA:1288:A:H2'	1:AA:1352:C:O2'	2.15	0.47
1:AA:1491:G:HO2'	1:AA:1492:A:H8	1.61	0.47
1:AA:312:C:H2'	1:AA:313:A:H8	1.80	0.47
1:AA:501:C:H2'	1:AA:502:G:H8	1.79	0.47
1:AA:861:G:O2'	1:AA:874:G:O2'	2.12	0.47
1:AA:950:U:H1'	1:AA:971:G:C4	2.50	0.47
9:AF:48:LEU:HD13	9:AF:52:ILE:HB	1.97	0.47
10:AG:49:ILE:HA	10:AG:52:GLU:HB2	1.96	0.47
24:AU:16:GLY:O	24:AU:17:THR:C	2.52	0.47
2:AV:12:U:H4'	26:BA:1908:C:O2	2.14	0.47
48:B0:48:GLY:C	48:B0:55:ARG:HA	2.35	0.47
26:BA:388:G:P	49:B4:29:PRO:HD3	2.54	0.47
51:B6:42:PRO:C	51:B6:44:ALA:H	2.17	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:16:ILE:HG23	53:B8:22:VAL:HG23	1.95	0.47
26:BA:125:G:C5'	52:B7:19:ARG:CD	2.92	0.47
26:BA:1304:C:H42	26:BA:1624:G:H1	1.60	0.47
26:BA:1647:G:OP2	26:BA:1647:G:H3'	2.14	0.47
26:BA:196:A:N3	26:BA:2068:U:H5	2.12	0.47
26:BA:2212:A:O2'	26:BA:2213:U:C6	2.51	0.47
26:BA:2282:G:C4'	26:BA:2283:C:O5'	2.62	0.47
26:BA:2284:C:OP2	51:B6:9:ILE:CG1	2.62	0.47
26:BA:2421:G:C5'	26:BA:2422:A:OP2	2.57	0.47
26:BA:199:A:N3	26:BA:2433:A:C5	2.81	0.47
26:BA:2478:A:C8	26:BA:2479:G:C8	3.02	0.47
26:BA:2488:A:N1	26:BA:2489:G:C4	2.83	0.47
26:BA:2478:A:C1'	26:BA:2529:G:N7	2.77	0.47
26:BA:2652:C:HO2'	26:BA:2653:U:H5'	1.76	0.47
26:BA:2657:A:C5	26:BA:2665:A:C5	3.02	0.47
26:BA:2755:C:O5'	26:BA:2755:C:C5	2.64	0.47
26:BA:496:G:H1'	39:BW:61:ASN:ND2	2.28	0.47
27:BD:146:LYS:C	27:BD:149:ARG:HG2	2.34	0.47
27:BD:152:GLN:CA	27:BD:152:GLN:OE1	2.62	0.47
27:BD:84:PRO:O	27:BD:85:ASN:HB3	2.13	0.47
26:BA:1993:U:C5'	28:BE:228:ARG:HE	2.28	0.47
28:BE:263:GLU:O	28:BE:266:LYS:HE3	2.15	0.47
30:BG:95:THR:CG2	30:BG:96:SER:H	2.25	0.47
31:BH:123:GLU:C	31:BH:125:PRO:HD2	2.35	0.47
31:BH:129:LYS:O	31:BH:130:ILE:CG1	2.61	0.47
32:BI:65:ALA:CB	32:BI:134:HIS:CG	2.97	0.47
33:BN:136:SER:C	33:BN:139:LEU:HD22	2.35	0.47
33:BN:74:ARG:HB3	33:BN:76:ASP:CG	2.34	0.47
35:BP:120:LEU:O	35:BP:140:VAL:O	2.31	0.47
36:BQ:93:ILE:HG22	36:BQ:94:ARG:H	1.79	0.47
37:BS:121:GLY:O	37:BS:125:ALA:HB2	2.15	0.47
37:BS:34:LEU:HD11	37:BS:103:ASP:N	2.08	0.47
37:BS:49:THR:N	37:BS:55:ASP:OD2	2.47	0.47
37:BS:62:HIS:HB2	37:BS:65:ASP:OD2	2.14	0.47
39:BW:89:ALA:O	39:BW:90:ARG:HB2	2.13	0.47
26:BA:144:C:H5''	40:BX:36:GLU:OE1	1.99	0.47
40:BX:67:ARG:C	40:BX:68:LEU:HD23	2.34	0.47
42:BZ:134:LEU:HD11	42:BZ:155:PRO:HG2	1.95	0.47
42:BZ:154:LEU:CD1	42:BZ:160:LEU:HD12	2.45	0.47
42:BZ:4:THR:O	42:BZ:33:ALA:CA	2.62	0.47
42:BZ:8:ARG:O	42:BZ:9:THR:HG23	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1095:U:OP2	1:AA:1108:G:N1	2.23	0.47
1:AA:1205:U:C4'	6:AC:195:VAL:CG2	2.91	0.47
1:AA:1220:G:O2'	22:AS:52:TYR:O	2.31	0.47
1:AA:197:A:H8	1:AA:197:A:O5'	1.98	0.47
1:AA:370:C:HO2'	1:AA:482:A:HO2'	1.50	0.47
1:AA:20:U:H1'	1:AA:572:A:C4	2.50	0.47
5:AB:19:HIS:CE1	5:AB:206:ASP:HB2	2.50	0.47
6:AC:36:ASP:HA	6:AC:39:ILE:HD12	1.97	0.47
7:AD:8:VAL:CB	7:AD:115:ARG:CZ	2.91	0.47
7:AD:96:LEU:O	7:AD:99:SER:HB2	2.14	0.47
15:AL:85:ILE:HA	15:AL:100:ILE:HA	1.95	0.47
2:AV:18:G:C2'	2:AV:19:G:O5'	2.63	0.47
3:AW:27:C:OP2	3:AW:27:C:H6	1.98	0.47
48:B0:28:GLY:N	48:B0:60:PHE:HB3	2.29	0.47
48:B0:77:ARG:O	48:B0:78:PHE:C	2.42	0.47
47:B3:33:GLN:CG	47:B3:34:GLU:N	2.77	0.47
49:B4:9:ALA:O	49:B4:10:VAL:CG2	2.62	0.47
43:BR:100:LEU:CA	50:B5:44:HIS:CD2	2.97	0.47
26:BA:464:U:C1'	52:B7:12:ARG:NH2	2.78	0.47
26:BA:135:G:H1'	26:BA:145:G:H22	1.79	0.47
26:BA:1665:A:C1'	34:BO:67:ARG:HD3	2.43	0.47
26:BA:2255:G:C6	26:BA:2256:G:C4	3.02	0.47
26:BA:2325:G:N3	26:BA:2326:C:H6	2.12	0.47
26:BA:2333:A:H4'	26:BA:2335:A:O4'	2.14	0.47
26:BA:2411:A:HO2'	26:BA:2412:A:C5'	2.24	0.47
26:BA:2428:G:C5'	26:BA:2429:G:P	2.97	0.47
26:BA:2475:C:HO2'	26:BA:2477:C:P	2.35	0.47
26:BA:2465:C:C2	26:BA:2485:G:N1	2.70	0.47
26:BA:2447:G:C8	26:BA:2500:U:H5	2.31	0.47
26:BA:1128:A:N6	26:BA:2518:A:N1	2.63	0.47
26:BA:2615:U:H2'	26:BA:2616:C:C5'	2.44	0.47
26:BA:2637:U:N3	26:BA:2782:G:C2	2.83	0.47
26:BA:2649:U:H2'	26:BA:2650:U:O5'	2.12	0.47
26:BA:2679:A:N6	26:BA:2729:G:O6	2.47	0.47
26:BA:2740:A:O2'	26:BA:2741:A:H5''	2.13	0.47
26:BA:2836:U:C6	26:BA:2836:U:C3'	2.98	0.47
26:BA:2875:C:C4	26:BA:2876:G:N7	2.83	0.47
26:BA:2841:C:C2	26:BA:2877:G:N1	2.83	0.47
26:BA:380:U:O2'	49:B4:15:ILE:N	2.48	0.47
26:BA:729:G:H1'	26:BA:763:G:H4'	1.96	0.47
27:BD:131:LEU:HG	27:BD:187:CYS:C	2.34	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:213:LYS:HG3	27:BD:215:LYS:CG	2.34	0.47
28:BE:109:ASP:CA	28:BE:112:LEU:CB	2.80	0.47
26:BA:2051:A:C2'	28:BE:238:LEU:HD23	2.37	0.47
28:BE:45:LYS:CE	28:BE:303:PRO:CA	2.93	0.47
31:BH:124:VAL:O	31:BH:126:SER:N	2.47	0.47
31:BH:48:VAL:CG2	31:BH:49:ILE:H	2.18	0.47
55:BK:129:GLU:O	55:BK:133:LYS:CD	2.62	0.47
55:BK:139:VAL:HG23	55:BK:139:VAL:O	2.14	0.47
33:BN:88:PRO:CB	33:BN:90:LYS:N	2.68	0.47
35:BP:62:ALA:C	35:BP:107:LYS:CD	2.69	0.47
35:BP:65:ASP:CA	35:BP:109:LEU:N	2.56	0.47
35:BP:94:ARG:HD3	35:BP:120:LEU:HD22	1.59	0.47
36:BQ:45:GLN:HA	36:BQ:125:TRP:CD1	2.49	0.47
43:BR:46:GLY:O	43:BR:47:PHE:C	2.53	0.47
37:BS:121:GLY:O	37:BS:125:ALA:CB	2.63	0.47
44:BU:93:LYS:C	44:BU:94:VAL:HG23	2.35	0.47
45:BV:12:TYR:O	45:BV:13:ARG:CB	2.58	0.47
45:BV:40:VAL:CA	45:BV:54:TYR:HD1	2.28	0.47
45:BV:78:VAL:HG21	45:BV:80:TYR:HD1	1.80	0.47
45:BV:61:VAL:C	45:BV:98:ILE:HD12	2.18	0.47
39:BW:6:ILE:HG23	39:BW:7:ALA:N	2.30	0.47
40:BX:13:LYS:O	40:BX:16:ASN:CG	2.48	0.47
40:BX:12:GLU:C	40:BX:16:ASN:OD1	2.45	0.47
41:BY:11:GLN:CA	41:BY:21:LYS:HZ1	2.28	0.47
41:BY:30:ASP:HB2	41:BY:31:LEU:HD23	1.97	0.47
42:BZ:118:HIS:O	42:BZ:119:ASN:HB3	2.13	0.47
1:AA:790:A:C2	1:AA:1497:G:OP1	2.68	0.47
1:AA:227:G:H21	19:AP:62:VAL:HG12	1.80	0.47
1:AA:33:A:H2'	1:AA:34:C:C6	2.49	0.47
1:AA:500:G:O2'	1:AA:548:G:N2	2.47	0.47
1:AA:893:C:H5''	1:AA:1416:G:H5'	1.96	0.47
5:AB:152:PHE:C	5:AB:152:PHE:HD1	2.17	0.47
5:AB:160:ASP:O	5:AB:161:ALA:CB	2.62	0.47
5:AB:170:GLU:O	5:AB:174:VAL:HG23	2.13	0.47
6:AC:8:ILE:O	6:AC:12:LEU:HG	2.14	0.47
1:AA:1231:G:OP1	12:AI:126:SER:HB2	2.15	0.47
20:AQ:22:LEU:HD11	20:AQ:24:GLU:CG	2.44	0.47
47:B3:50:VAL:HB	47:B3:53:LEU:CB	2.44	0.47
49:B4:39:VAL:C	49:B4:40:HIS:CG	2.88	0.47
26:BA:1612:C:N3	52:B7:3:ARG:NH1	2.61	0.47
53:B8:30:ARG:HD2	53:B8:44:LYS:HZ2	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1278:A:H5''	43:BR:34:ILE:HG21	1.96	0.47
26:BA:1401:G:C6	26:BA:1402:C:C4	3.02	0.47
26:BA:1617:C:H5''	26:BA:1618:A:OP2	2.15	0.47
26:BA:1790:C:H5'	26:BA:1791:A:OP2	2.14	0.47
26:BA:1809:A:H3'	26:BA:1810:A:N3	2.30	0.47
26:BA:2045:C:N4	26:BA:2624:G:C6	2.82	0.47
26:BA:2086:U:O4	26:BA:2233:U:O4	2.32	0.47
26:BA:2254:C:O2'	26:BA:2255:G:H5''	2.09	0.47
26:BA:2273:A:H8	26:BA:2274:A:C8	2.20	0.47
26:BA:2283:C:OP1	51:B6:3:LYS:NZ	2.47	0.47
26:BA:2305:A:N7	26:BA:2306:C:C5	2.83	0.47
26:BA:2313:C:H4'	30:BG:72:LYS:CG	2.43	0.47
26:BA:2447:G:N3	26:BA:2500:U:O4	2.42	0.47
26:BA:2508:G:C2	26:BA:2509:G:N9	2.83	0.47
26:BA:2044:C:C4	26:BA:2625:G:C2	3.02	0.47
26:BA:2657:A:C4	26:BA:2665:A:C6	3.01	0.47
26:BA:2692:C:C2'	26:BA:2693:A:O5'	2.62	0.47
26:BA:2785:C:C2'	26:BA:2786:U:H6	2.10	0.47
26:BA:2785:C:C2'	26:BA:2786:U:O5'	2.58	0.47
26:BA:2834:G:C6	26:BA:2879:C:C2	3.02	0.47
26:BA:479:A:H1'	26:BA:480:A:C8	2.50	0.47
26:BA:88:G:N3	26:BA:88:G:H2'	2.30	0.47
26:BA:929:G:C2'	47:B3:43:ILE:HG12	2.45	0.47
25:BB:24:G:C5	25:BB:56:G:C5	3.03	0.47
28:BE:193:PHE:CD2	28:BE:311:PHE:HD1	2.28	0.47
28:BE:44:TYR:HA	28:BE:309:PRO:HG3	1.43	0.47
29:BF:112:ARG:O	29:BF:114:ALA:C	2.53	0.47
29:BF:223:LEU:HD13	29:BF:224:ALA:N	2.14	0.47
29:BF:58:ALA:C	29:BF:59:GLU:OE2	2.53	0.47
31:BH:158:GLY:O	31:BH:159:LYS:CB	2.60	0.47
32:BI:30:LEU:O	32:BI:35:LEU:HG	2.15	0.47
55:BK:18:ALA:O	55:BK:39:CYS:HB3	2.15	0.47
55:BK:73:PRO:HB2	55:BK:78:LEU:HG	1.97	0.47
34:BO:33:ALA:HB1	34:BO:39:VAL:CG2	2.44	0.47
36:BQ:85:ILE:HG23	36:BQ:136:TRP:CZ2	2.48	0.47
43:BR:107:ASP:C	43:BR:107:ASP:OD1	2.53	0.47
37:BS:41:LYS:HZ2	37:BS:42:HIS:CG	2.24	0.47
38:BT:50:GLU:O	38:BT:51:TRP:C	2.46	0.47
44:BU:94:VAL:HG11	45:BV:4:ILE:CG2	2.40	0.47
45:BV:19:VAL:CG1	45:BV:21:ARG:CZ	2.47	0.47
45:BV:43:GLU:H	45:BV:44:GLN:HE22	1.62	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:68:LYS:C	45:BV:69:ILE:HD12	2.35	0.47
39:BW:19:LEU:O	39:BW:20:VAL:O	2.32	0.47
39:BW:23:LEU:HD13	39:BW:35:ILE:HG22	1.96	0.47
40:BX:43:GLU:H	40:BX:43:GLU:CD	2.16	0.47
40:BX:25:GLN:HA	40:BX:64:ALA:O	2.14	0.47
41:BY:32:ARG:C	41:BY:33:GLU:CD	2.72	0.47
41:BY:45:GLY:C	41:BY:62:VAL:HG12	2.16	0.47
41:BY:52:ARG:CD	41:BY:95:ASN:OD1	2.48	0.47
1:AA:1014:A:C5	22:AS:34:TRP:CZ3	3.02	0.47
1:AA:1104:G:O2'	5:AB:111:ARG:NH2	2.47	0.47
1:AA:1198:G:H2'	1:AA:1199:U:O4'	2.14	0.47
1:AA:192:U:H2'	1:AA:193:C:C6	2.49	0.47
1:AA:252:U:O2'	1:AA:275:G:N2	2.48	0.47
1:AA:32:A:C6	1:AA:33:A:C6	3.03	0.47
1:AA:737:A:H2'	1:AA:738:C:C6	2.50	0.47
1:AA:1107:C:OP1	6:AC:172:ARG:HA	2.14	0.47
7:AD:17:VAL:HG11	7:AD:197:PRO:HG2	1.95	0.47
8:AE:152:ARG:NH1	11:AH:44:PHE:H	2.13	0.47
46:B2:11:MET:O	46:B2:12:THR:C	2.52	0.47
47:B3:1:MET:SD	47:B3:3:ARG:CD	2.96	0.47
47:B3:51:ALA:O	47:B3:53:LEU:CA	2.58	0.47
49:B4:11:PRO:CA	49:B4:40:HIS:HD2	2.22	0.47
51:B6:16:ALA:HB1	51:B6:42:PRO:CG	2.45	0.47
52:B7:33:ARG:CA	52:B7:37:LYS:HD2	2.45	0.47
52:B7:33:ARG:CB	52:B7:37:LYS:HD2	2.45	0.47
52:B7:43:THR:O	52:B7:45:SER:CA	2.62	0.47
26:BA:1832:C:N4	26:BA:1833:U:C4	2.82	0.47
26:BA:2261:C:C2'	26:BA:2261:C:O2	2.63	0.47
26:BA:2266:A:N1	26:BA:2272:U:H3'	2.29	0.47
26:BA:2367:G:N3	26:BA:2368:C:C6	2.83	0.47
26:BA:2391:G:N2	26:BA:2429:G:H21	2.13	0.47
26:BA:2402:C:C6	26:BA:2402:C:C3'	2.97	0.47
26:BA:197:A:N6	26:BA:2430:A:C8	2.83	0.47
26:BA:2484:G:C2'	26:BA:2485:G:C5'	2.83	0.47
26:BA:2494:G:N1	26:BA:2495:G:C6	2.82	0.47
26:BA:2505:G:O2'	26:BA:2506:U:H5''	2.15	0.47
26:BA:2533:A:N7	26:BA:2534:A:N7	2.62	0.47
26:BA:2565:A:C4'	26:BA:2566:A:OP2	2.59	0.47
26:BA:2579:C:H2'	26:BA:2580:U:H5'	0.62	0.47
26:BA:2657:A:N7	26:BA:2665:A:N6	2.63	0.47
26:BA:2748:A:H8	26:BA:2749:A:C5	2.21	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2810:A:C3'	26:BA:2811:G:C5'	2.80	0.47
26:BA:359:A:C2'	26:BA:360:G:C8	2.98	0.47
26:BA:94:G:O2'	46:B2:41:GLU:CD	2.53	0.47
27:BD:208:GLY:CA	27:BD:211:HIS:CD2	2.94	0.47
28:BE:269:ILE:N	28:BE:269:ILE:CD1	2.51	0.47
30:BG:53:LYS:O	30:BG:54:ALA:CB	2.63	0.47
31:BH:94:ARG:CA	31:BH:127:GLN:HE22	2.27	0.47
32:BI:3:VAL:HG21	32:BI:21:VAL:HB	1.95	0.47
32:BI:6:LEU:CD1	32:BI:6:LEU:O	2.58	0.47
55:BK:22:PRO:CD	55:BK:23:PRO:HD2	2.45	0.47
26:BA:1137:G:N2	33:BN:86:MET:HE1	2.18	0.47
34:BO:99:PHE:HE2	38:BT:24:LYS:NZ	1.96	0.47
35:BP:102:ASP:O	35:BP:102:ASP:CG	2.53	0.47
36:BQ:122:PHE:HB2	36:BQ:136:TRP:HZ2	1.76	0.47
37:BS:46:GLN:C	37:BS:47:LEU:HG	2.35	0.47
37:BS:46:GLN:CB	37:BS:57:THR:HG21	2.38	0.47
37:BS:80:SER:OG	37:BS:81:ALA:N	2.48	0.47
38:BT:13:ILE:CG1	38:BT:33:SER:HB2	2.45	0.47
44:BU:9:VAL:HG12	44:BU:13:ARG:NH2	2.28	0.47
26:BA:446:G:OP2	44:BU:3:ARG:CB	2.63	0.47
44:BU:8:ILE:O	44:BU:11:ARG:HG3	2.14	0.47
26:BA:518:G:H4'	39:BW:18:ARG:NH2	2.30	0.47
39:BW:57:ASN:O	39:BW:58:ALA:O	2.32	0.47
40:BX:13:LYS:O	40:BX:15:MET:N	2.47	0.47
40:BX:48:THR:O	40:BX:50:GLU:CD	2.52	0.47
42:BZ:114:ASP:OD1	42:BZ:114:ASP:N	2.47	0.47
42:BZ:62:PHE:CD1	42:BZ:87:THR:CG2	2.97	0.47
1:AA:1305:G:H21	1:AA:1331:G:H2'	1.80	0.47
1:AA:976:G:N2	1:AA:361(A):C:H2'	2.30	0.47
1:AA:817:C:H4'	1:AA:818:G:OP1	2.14	0.47
1:AA:946:A:O2'	1:AA:1333:A:C2'	2.62	0.47
1:AA:95:U:H2'	1:AA:96:G:C8	2.50	0.47
7:AD:198:VAL:O	7:AD:199:ASN:HB3	2.14	0.47
11:AH:49:GLU:OE1	11:AH:60:ARG:HB3	2.15	0.47
15:AL:60:LEU:HD23	15:AL:64:TYR:CB	2.44	0.47
6:AC:29:TYR:CD1	17:AN:36:PHE:HE1	2.33	0.47
1:AA:279:A:C8	20:AQ:95:TYR:HE2	2.33	0.47
9:AF:46:ARG:NH1	21:AR:37:VAL:HG11	2.30	0.47
21:AR:80:PRO:HB2	21:AR:83:GLU:HB2	1.96	0.47
2:AV:11:C:H2'	2:AV:12:U:H6	1.80	0.47
48:B0:31:VAL:CG1	48:B0:32:LYS:N	2.77	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:36:ILE:N	48:B0:68:VAL:HG21	2.28	0.47
49:B4:20:VAL:O	49:B4:30:GLU:CG	2.63	0.47
51:B6:36:GLU:HA	51:B6:52:GLU:OE2	2.14	0.47
52:B7:21:ARG:NH2	52:B7:43:THR:CA	2.77	0.47
53:B8:26:LYS:H	53:B8:45:GLY:C	2.18	0.47
26:BA:1059:G:C1'	55:BK:117:ASN:OD1	2.63	0.47
26:BA:1076:C:H4'	55:BK:94:ARG:NE	2.29	0.47
26:BA:125:G:C3'	52:B7:19:ARG:HH12	2.24	0.47
26:BA:1823:G:C2	26:BA:1824:G:C8	3.03	0.47
26:BA:2013:A:H4'	39:BW:96:ILE:HG23	1.91	0.47
26:BA:2053:G:N1	26:BA:2617:C:C4	2.82	0.47
26:BA:2092:U:C2	26:BA:2226:C:OP2	2.68	0.47
26:BA:2243:U:O2	26:BA:2244:U:N1	2.48	0.47
26:BA:2255:G:C6	26:BA:2256:G:C5	3.02	0.47
26:BA:2299:G:O2'	26:BA:2300:G:H5'	2.15	0.47
26:BA:2336:A:HO2'	26:BA:2337:G:C5'	1.92	0.47
26:BA:2343:C:HO2'	26:BA:2344:U:H5'	1.70	0.47
26:BA:792:G:C5	26:BA:2440:C:C1'	2.98	0.47
26:BA:2493:U:N3	26:BA:2494:G:N7	2.45	0.47
26:BA:2509:G:H1	26:BA:2579:C:H42	1.62	0.47
26:BA:2515:C:N4	26:BA:2570:G:C6	2.83	0.47
26:BA:2531:A:C8	26:BA:2531:A:O5'	2.67	0.47
26:BA:2074:U:O2'	26:BA:2598:A:O4'	2.32	0.47
26:BA:2611:U:C5'	26:BA:2611:U:C6	2.98	0.47
26:BA:2673:G:N1	26:BA:2674:G:C6	2.82	0.47
26:BA:2742:C:C2'	26:BA:2742:C:O2	2.59	0.47
26:BA:2875:C:N3	26:BA:2876:G:C5	2.83	0.47
26:BA:2900:A:H2'	26:BA:2901:C:O4'	2.15	0.47
26:BA:359:A:H2'	26:BA:360:G:C8	2.50	0.47
26:BA:396:G:H4'	49:B4:39:VAL:CG1	2.27	0.47
26:BA:396:G:O4'	49:B4:39:VAL:CG1	2.59	0.47
26:BA:34:C:C2'	26:BA:455:C:N4	2.69	0.47
26:BA:605:C:H2'	26:BA:606:U:H6	1.79	0.47
26:BA:642:G:H21	26:BA:646:A:H61	1.63	0.47
26:BA:729:G:N1	27:BD:206:LYS:O	2.47	0.47
26:BA:792:G:O2'	26:BA:793:A:P	2.73	0.47
25:BB:41:U:C5	30:BG:50:VAL:HB	2.49	0.47
27:BD:110:LYS:O	27:BD:111:VAL:O	2.32	0.47
27:BD:119:PRO:HA	27:BD:129:LEU:CD2	2.44	0.47
27:BD:173:VAL:O	27:BD:175:LEU:CD2	2.63	0.47
27:BD:97:ASP:HB3	27:BD:99:GLU:OE2	2.15	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:199:ALA:CA	28:BE:312:ARG:C	2.82	0.47
28:BE:246:VAL:HG13	28:BE:247:ARG:H	1.79	0.47
28:BE:247:ARG:CB	28:BE:249:THR:OG1	2.62	0.47
28:BE:202:ALA:CA	28:BE:262:THR:HB	2.44	0.47
29:BF:244:ALA:C	29:BF:246:ARG:H	2.15	0.47
30:BG:97:GLN:HB2	30:BG:106:PHE:CZ	2.38	0.47
31:BH:148:ARG:HH12	31:BH:163:TYR:HA	1.63	0.47
31:BH:60:HIS:O	31:BH:61:ARG:C	2.53	0.47
32:BI:7:LYS:CD	32:BI:12:LYS:CE	2.84	0.47
55:BK:11:LEU:HD11	55:BK:28:LEU:HG	1.96	0.47
26:BA:1082:U:OP1	55:BK:123:ALA:HB2	2.14	0.47
33:BN:77:GLY:O	33:BN:79:PHE:C	2.52	0.47
34:BO:31:ARG:HB3	34:BO:32:TYR:CE1	2.49	0.47
35:BP:127:GLU:O	35:BP:131:GLU:HG3	2.15	0.47
35:BP:65:ASP:CB	35:BP:109:LEU:N	2.77	0.47
36:BQ:18:GLU:HG2	36:BQ:23:ILE:CD1	2.41	0.47
36:BQ:61:LEU:O	36:BQ:63:ALA:N	2.47	0.47
37:BS:24:LEU:HA	37:BS:33:ARG:NH2	2.21	0.47
26:BA:494:G:C4'	39:BW:6:ILE:HG22	2.32	0.47
42:BZ:118:HIS:CE1	42:BZ:166:LEU:O	2.67	0.47
42:BZ:149:ALA:HB1	42:BZ:163:ASP:O	2.15	0.47
42:BZ:63:PRO:O	42:BZ:64:ALA:HB3	2.12	0.47
42:BZ:73:LYS:HG3	42:BZ:75:LYS:CE	2.45	0.47
1:AA:1219:U:OP2	17:AN:19:ARG:NH1	2.47	0.47
1:AA:1236:A:H4'	1:AA:1304:G:C4'	2.43	0.47
1:AA:1254:C:H2'	1:AA:1255:G:H8	1.79	0.47
1:AA:1255:G:C5'	1:AA:1256:A:OP1	2.63	0.47
1:AA:834:C:H2'	1:AA:835:U:H6	1.80	0.47
2:AV:13:C:O2	2:AV:13:C:H2'	2.14	0.47
2:AV:7:U:C5'	2:AV:8:U:P	2.93	0.47
48:B0:41:ARG:O	48:B0:67:VAL:CG1	2.62	0.47
46:B2:19:GLU:CD	46:B2:20:LEU:N	2.68	0.47
47:B3:43:ILE:CD1	47:B3:43:ILE:H	2.08	0.47
26:BA:1365:A:P	49:B4:3:LYS:HD2	2.55	0.47
51:B6:12:MET:HA	51:B6:13:GLU:OE1	2.13	0.47
53:B8:58:MET:HB3	53:B8:59:LYS:H	1.53	0.47
54:B9:24:LEU:CD2	54:B9:35:ARG:HG3	2.45	0.47
26:BA:1184:G:H2'	26:BA:1185:C:H5'	1.97	0.47
26:BA:1257:C:O2'	29:BF:83:ALA:HB1	2.14	0.47
26:BA:143:C:O4'	26:BA:143:C:OP2	2.33	0.47
26:BA:1639:U:O2'	26:BA:2699:C:H4'	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1781:C:H6	26:BA:1781:C:H3'	1.80	0.47
26:BA:2071:A:C2	26:BA:2441:C:C4	3.03	0.47
26:BA:2544:G:H5''	26:BA:2645:G:C8	2.31	0.47
26:BA:242:G:O2'	26:BA:254:G:N1	2.46	0.47
26:BA:2596:U:C6	26:BA:2597:G:C8	3.03	0.47
26:BA:2718:G:C4	26:BA:2719:G:C8	3.03	0.47
26:BA:2772:C:N3	26:BA:2773:C:C4	2.83	0.47
26:BA:2816:C:C5'	26:BA:2816:C:H6	2.27	0.47
26:BA:2881:C:C3'	26:BA:2881:C:C6	2.98	0.47
26:BA:460:A:C4	26:BA:461:C:C6	3.02	0.47
26:BA:527:C:H6	26:BA:2779:U:C2'	2.27	0.47
26:BA:63:U:C6	26:BA:63:U:H3'	2.49	0.47
26:BA:72:U:C6	46:B2:57:LYS:CD	2.98	0.47
26:BA:929:G:H1'	47:B3:43:ILE:HG12	1.91	0.47
27:BD:75:GLY:H	27:BD:116:MET:HB2	1.79	0.47
27:BD:162:GLN:OE1	27:BD:162:GLN:N	2.48	0.47
27:BD:164:LEU:HD23	27:BD:164:LEU:HA	1.66	0.47
27:BD:131:LEU:HD11	27:BD:187:CYS:HB2	1.95	0.47
28:BE:225:LYS:O	28:BE:226:HIS:CE1	2.68	0.47
28:BE:315:VAL:C	28:BE:317:PRO:CD	2.80	0.47
29:BF:102:LEU:HD22	29:BF:106:GLU:CB	2.25	0.47
29:BF:113:SER:O	29:BF:114:ALA:O	2.32	0.47
29:BF:55:ARG:HG3	29:BF:56:THR:OG1	2.15	0.47
30:BG:23:VAL:O	30:BG:23:VAL:CG2	2.62	0.47
30:BG:49:PRO:HG3	30:BG:72:LYS:C	2.32	0.47
31:BH:36:PHE:C	31:BH:37:HIS:ND1	2.68	0.47
32:BI:116:GLU:HG3	32:BI:130:PRO:O	2.14	0.47
32:BI:40:THR:O	32:BI:43:ASN:N	2.48	0.47
55:BK:132:ALA:O	55:BK:137:ILE:CA	2.63	0.47
26:BA:1140:C:H42	33:BN:49:ARG:CZ	2.25	0.47
34:BO:107:ARG:HG3	34:BO:115:ILE:HG21	1.96	0.47
34:BO:9:LYS:N	34:BO:83:ALA:CB	2.78	0.47
35:BP:94:ARG:HH21	35:BP:118:LEU:HB2	1.80	0.47
36:BQ:65:ARG:HG2	36:BQ:85:ILE:HG21	1.96	0.47
38:BT:11:THR:CG2	38:BT:12:ASP:H	1.94	0.47
38:BT:6:CYS:C	38:BT:8:TYR:N	2.65	0.47
44:BU:99:ALA:HB3	44:BU:106:PHE:CE1	2.42	0.47
44:BU:47:TYR:HE2	45:BV:74:TYR:C	2.08	0.47
45:BV:61:VAL:HG13	45:BV:96:LEU:HD23	1.97	0.47
45:BV:87:ARG:O	45:BV:88:GLN:O	2.33	0.47
39:BW:36:LEU:HD13	39:BW:47:VAL:CG1	2.38	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BX:11:THR:O	40:BX:15:MET:SD	2.68	0.47
40:BX:32:ALA:CB	40:BX:36:GLU:HB2	2.44	0.47
41:BY:102:ASP:O	41:BY:103:LEU:HG	2.15	0.47
41:BY:33:GLU:C	41:BY:35:TYR:H	2.18	0.47
42:BZ:71:MET:CA	42:BZ:78:PRO:HA	2.32	0.47
1:AA:1082:G:H2'	1:AA:1083:U:O4'	2.15	0.47
1:AA:1364:U:C5	24:AU:14:TRP:CH2	3.03	0.47
1:AA:60:A:N1	1:AA:107:G:O2'	2.36	0.47
1:AA:659:U:H2'	1:AA:660:G:C8	2.50	0.47
1:AA:1080:A:H5'	8:AE:14:ARG:NH2	2.30	0.47
13:AJ:90:LEU:N	13:AJ:91:PRO:HD2	2.25	0.47
1:AA:278:G:O6	20:AQ:95:TYR:HB3	2.15	0.47
22:AS:13:ASP:HA	22:AS:16:LEU:HB3	1.96	0.47
47:B3:26:LEU:HD22	47:B3:47:VAL:HG23	1.95	0.47
49:B4:14:ILE:CG1	49:B4:39:VAL:HB	2.45	0.47
50:B5:18:MET:O	50:B5:21:SER:N	2.48	0.47
51:B6:12:MET:HE3	51:B6:54:LYS:CA	2.45	0.47
52:B7:31:LEU:C	52:B7:33:ARG:N	2.64	0.47
54:B9:25:VAL:HG23	54:B9:34:GLN:HB3	1.84	0.47
26:BA:1434:A:H61	26:BA:1558:A:N6	2.13	0.47
26:BA:1664:A:C8	26:BA:1664:A:C3'	2.96	0.47
26:BA:2051:A:C3'	28:BE:238:LEU:CD2	2.93	0.47
26:BA:2067:G:N2	26:BA:2444:G:N3	2.62	0.47
26:BA:2077:A:C5	26:BA:2435:A:N7	2.83	0.47
26:BA:2217:G:C2	26:BA:2218:G:C5	3.02	0.47
26:BA:2248:C:C3'	26:BA:2249:U:C5'	2.93	0.47
26:BA:2309:A:H5'	26:BA:2310:A:P	2.48	0.47
26:BA:2331:G:C4	26:BA:2332:U:N3	2.81	0.47
26:BA:2283:C:C6	26:BA:2389:G:C2	3.03	0.47
26:BA:2460:U:C2	26:BA:2493:U:C5	3.00	0.47
26:BA:2495:G:C2	26:BA:2496:C:H1'	2.50	0.47
26:BA:2503:A:O2'	26:BA:2504:U:OP1	2.20	0.47
26:BA:2511:U:C4	26:BA:2512:C:C5	3.03	0.47
26:BA:2554:U:C4'	26:BA:2554:U:C6	2.98	0.47
26:BA:2623:G:H4'	26:BA:2826:A:O4'	2.15	0.47
26:BA:2836:U:H3'	26:BA:2836:U:C6	2.48	0.47
26:BA:2881:C:H3'	26:BA:2881:C:C6	2.50	0.47
26:BA:721:C:H2'	26:BA:722:A:H8	1.80	0.47
26:BA:780:G:N3	26:BA:785:G:O6	2.48	0.47
26:BA:814:C:OP1	45:BV:84:THR:HA	2.14	0.47
26:BA:856:C:H1'	48:B0:24:LYS:HB2	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:262:THR:OG1	28:BE:266:LYS:NZ	2.47	0.47
28:BE:74:GLU:CA	28:BE:293:TYR:HD2	2.06	0.47
29:BF:202:THR:CG2	29:BF:203:ALA:H	2.27	0.47
30:BG:136:ARG:HD2	30:BG:136:ARG:H	1.80	0.47
31:BH:33:THR:OG1	31:BH:33:THR:O	2.32	0.47
32:BI:145:VAL:C	32:BI:146:THR:CG2	2.72	0.47
32:BI:59:ALA:HA	32:BI:62:LEU:CG	2.44	0.47
32:BI:95:SER:HB2	32:BI:117:LEU:HD11	1.97	0.47
33:BN:15:ARG:HA	33:BN:44:ALA:N	2.29	0.47
34:BO:102:VAL:HG12	34:BO:103:ALA:N	2.30	0.47
35:BP:114:VAL:O	35:BP:115:ARG:CB	2.53	0.47
35:BP:66:VAL:HG23	35:BP:109:LEU:C	2.21	0.47
36:BQ:101:MET:SD	36:BQ:101:MET:O	2.73	0.47
36:BQ:54:VAL:O	36:BQ:54:VAL:HG13	2.15	0.47
37:BS:34:LEU:HB3	37:BS:101:VAL:O	2.15	0.47
37:BS:66:LEU:CD1	37:BS:66:LEU:N	2.77	0.47
37:BS:76:GLY:C	37:BS:83:LEU:CD1	2.83	0.47
38:BT:44:ARG:HG3	38:BT:45:GLU:N	2.17	0.47
45:BV:43:GLU:N	45:BV:44:GLN:HE22	2.13	0.47
41:BY:6:LYS:HA	41:BY:9:LYS:HB2	1.96	0.47
42:BZ:117:VAL:HB	42:BZ:167:THR:HB	1.96	0.47
42:BZ:51:LEU:HD21	42:BZ:63:PRO:HB3	1.97	0.47
42:BZ:63:PRO:O	42:BZ:85:MET:HA	2.15	0.47
1:AA:1260:C:H5'	1:AA:1285:A:OP2	2.15	0.46
1:AA:1279:A:H5''	1:AA:1280:A:OP1	2.15	0.46
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.81	0.46
1:AA:582:U:H1'	20:AQ:105:ALA:C	2.36	0.46
11:AH:65:TYR:HA	11:AH:79:VAL:HG23	1.96	0.46
12:AI:37:PHE:CZ	12:AI:74:ILE:HG12	2.50	0.46
13:AJ:64:GLU:CG	17:AN:59:ALA:HB2	2.45	0.46
15:AL:45:PRO:CD	15:AL:50:SER:HA	2.44	0.46
47:B3:20:LYS:HD2	47:B3:23:LEU:HD12	1.90	0.46
52:B7:17:GLY:C	52:B7:44:VAL:CG2	2.49	0.46
54:B9:10:MET:HB3	54:B9:32:HIS:HE2	1.78	0.46
26:BA:1279:G:H4'	43:BR:31:HIS:NE2	2.30	0.46
26:BA:139:G:C8	26:BA:142:G:H1'	2.51	0.46
26:BA:1394:U:C5'	26:BA:1603:A:H4'	2.45	0.46
26:BA:176:G:C2'	26:BA:177:G:H8	2.27	0.46
26:BA:1872:A:C5	26:BA:1878:G:H1'	2.50	0.46
26:BA:1862:G:H1	26:BA:1880:C:N4	2.13	0.46
26:BA:1773:A:H2	26:BA:1977:A:N1	2.14	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2024:G:H2'	26:BA:2025:C:O4'	2.15	0.46
26:BA:2061:G:C4	26:BA:2503:A:N3	2.83	0.46
26:BA:2246:G:N9	26:BA:2426:A:N1	2.61	0.46
26:BA:2314:C:H2'	26:BA:2315:G:H8	1.80	0.46
26:BA:2341:G:C6	26:BA:2342:C:N3	2.84	0.46
26:BA:2385:C:C2	26:BA:2386:C:H6	2.18	0.46
26:BA:2442:C:O2'	26:BA:2443:C:H5'	2.15	0.46
26:BA:2489:G:O6	26:BA:2490:G:C6	2.68	0.46
26:BA:2527:C:C2'	26:BA:2528:U:O5'	2.62	0.46
26:BA:1669:A:C3'	26:BA:2550:G:OP1	2.62	0.46
26:BA:264:C:H2'	26:BA:265:A:H5''	1.97	0.46
26:BA:2682:U:C2'	26:BA:2683:C:O5'	2.62	0.46
26:BA:269:U:H5'	26:BA:270(Y):G:N3	2.30	0.46
26:BA:527:C:C6	26:BA:2779:U:H3'	2.49	0.46
26:BA:2817:G:C2	26:BA:2818:G:C1'	2.98	0.46
26:BA:321:G:O2'	26:BA:341:G:H4'	2.15	0.46
26:BA:414:C:OP1	26:BA:1879:C:O2'	2.30	0.46
26:BA:447:A:C5	26:BA:473:G:C5	3.02	0.46
26:BA:533:G:OP1	44:BU:25:TRP:HB2	2.15	0.46
26:BA:566:U:O5'	45:BV:81:ARG:NH2	2.48	0.46
25:BB:41:U:O4	30:BG:50:VAL:O	2.33	0.46
26:BA:1819:A:P	27:BD:154:VAL:CA	3.02	0.46
27:BD:188:ARG:HB3	27:BD:189:ALA:H	1.57	0.46
26:BA:1566:A:N3	27:BD:212:HIS:CB	2.79	0.46
27:BD:230:ASN:O	27:BD:231:ALA:CB	2.53	0.46
28:BE:109:ASP:HA	28:BE:112:LEU:N	2.29	0.46
28:BE:176:HIS:O	28:BE:179:ASP:CA	2.64	0.46
28:BE:268:LEU:CD2	28:BE:270:ASP:N	2.79	0.46
31:BH:115:GLU:O	31:BH:115:GLU:CD	2.54	0.46
31:BH:147:ILE:HD12	31:BH:150:VAL:CG1	2.44	0.46
31:BH:70:LEU:O	31:BH:73:ASN:CB	2.62	0.46
32:BI:8:ASP:N	32:BI:12:LYS:HA	2.18	0.46
36:BQ:45:GLN:HA	36:BQ:125:TRP:NE1	2.30	0.46
43:BR:20:LEU:HD22	43:BR:20:LEU:C	2.35	0.46
37:BS:102:LEU:HD21	37:BS:129:ILE:HG22	1.34	0.46
37:BS:18:THR:O	37:BS:19:ASP:CG	2.54	0.46
37:BS:97:VAL:HG12	37:BS:98:GLU:H	1.78	0.46
44:BU:110:VAL:C	44:BU:113:SER:HG	2.12	0.46
44:BU:46:GLU:C	44:BU:49:ASP:HB2	2.30	0.46
45:BV:18:ASP:HA	45:BV:96:LEU:HA	1.97	0.46
39:BW:45:TYR:O	39:BW:46:PHE:O	2.33	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:52:GLU:OE2	39:BW:52:GLU:CA	2.63	0.46
41:BY:102:ASP:O	41:BY:108:ARG:HB3	2.15	0.46
41:BY:103:LEU:HD23	41:BY:108:ARG:CB	2.26	0.46
42:BZ:71:MET:HA	42:BZ:78:PRO:HB3	1.95	0.46
1:AA:1260:C:O5'	1:AA:1284:C:H4'	2.15	0.46
1:AA:578:C:O2	1:AA:728:A:H2	1.98	0.46
5:AB:28:PHE:HZ	5:AB:42:ILE:HD11	1.80	0.46
6:AC:10:PHE:O	6:AC:10:PHE:CG	2.67	0.46
6:AC:82:GLU:HG3	6:AC:83:ARG:N	2.30	0.46
7:AD:59:ARG:CZ	7:AD:59:ARG:HA	2.46	0.46
1:AA:953:G:H1'	16:AM:125:ARG:HA	1.97	0.46
16:AM:84:ILE:HG13	16:AM:85:GLY:H	1.80	0.46
3:AW:72:C:H2'	3:AW:73:A:O5'	2.15	0.46
49:B4:33:VAL:O	49:B4:34:ASP:CG	2.51	0.46
49:B4:68:ARG:HB2	49:B4:72:LYS:HG3	1.97	0.46
53:B8:30:ARG:HH21	53:B8:41:ILE:CG2	2.22	0.46
26:BA:1007:C:C4'	33:BN:86:MET:O	2.63	0.46
26:BA:1057:A:H61	26:BA:1081:U:H3	1.64	0.46
26:BA:142:G:OP1	26:BA:1596:A:H5'	2.16	0.46
26:BA:1629:U:O2	26:BA:2698:U:C5'	2.63	0.46
26:BA:1775:U:H2'	26:BA:1776:G:O4'	2.15	0.46
26:BA:198:C:HO2'	26:BA:2243:U:HO2'	1.54	0.46
26:BA:2000:G:H2'	26:BA:2001:A:H8	1.81	0.46
26:BA:2218:G:H2'	26:BA:2219:G:H8	1.79	0.46
26:BA:2412:A:H2'	26:BA:2413:G:O4'	2.16	0.46
26:BA:631:A:N1	26:BA:2416:C:C1'	2.78	0.46
26:BA:2431:U:C2	26:BA:2433:A:C8	3.03	0.46
26:BA:2467:C:O3'	36:BQ:141:MET:HE3	2.16	0.46
26:BA:2485:G:C2'	26:BA:2486:G:O4'	2.63	0.46
26:BA:2511:U:H2'	26:BA:2512:C:O5'	2.15	0.46
26:BA:2576:G:C2'	26:BA:2576:G:N3	2.77	0.46
26:BA:2662:A:H2	26:BA:2663:G:H4'	1.80	0.46
26:BA:2681:C:O2'	26:BA:2682:U:H5'	2.12	0.46
26:BA:2705:A:C5	26:BA:2706:G:C5	3.03	0.46
26:BA:2720:U:C2	26:BA:2721:A:C8	3.03	0.46
26:BA:2748:A:O2'	31:BH:62:ALA:CA	2.64	0.46
26:BA:2817:G:C2	26:BA:2818:G:N9	2.84	0.46
26:BA:729:G:O5'	27:BD:207:ALA:HB2	2.15	0.46
26:BA:828:U:H4'	26:BA:831:G:C2	2.50	0.46
26:BA:872:A:H2'	26:BA:873:G:H8	1.80	0.46
27:BD:141:HIS:CE1	27:BD:193:GLU:O	2.69	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:74:PRO:HD2	27:BD:96:ALA:H	1.80	0.46
28:BE:212:GLY:O	28:BE:216:ARG:CG	2.45	0.46
26:BA:2051:A:C3'	28:BE:238:LEU:HD23	2.45	0.46
28:BE:200:ASP:O	28:BE:312:ARG:N	2.48	0.46
29:BF:148:VAL:O	29:BF:149:LYS:HG3	2.15	0.46
29:BF:167:ASP:OD1	29:BF:167:ASP:N	2.43	0.46
30:BG:71:ALA:C	30:BG:72:LYS:HD3	2.24	0.46
31:BH:83:GLU:CD	31:BH:84:LYS:C	2.74	0.46
32:BI:141:LEU:CD2	32:BI:142:LYS:H	2.25	0.46
32:BI:23:ASP:O	32:BI:25:TYR:N	2.48	0.46
33:BN:103:VAL:CG1	33:BN:104:TYR:N	2.71	0.46
26:BA:7:G:C5'	33:BN:6:PHE:CD2	2.93	0.46
36:BQ:52:LYS:HD2	36:BQ:53:PRO:HD2	1.96	0.46
36:BQ:93:ILE:HG22	36:BQ:94:ARG:N	2.30	0.46
44:BU:95:LEU:O	44:BU:98:ILE:CD1	2.62	0.46
45:BV:35:LEU:N	45:BV:60:VAL:HG11	2.28	0.46
40:BX:3:ASP:O	46:B2:24:LYS:NZ	2.48	0.46
40:BX:52:VAL:HG22	40:BX:66:VAL:HA	1.97	0.46
40:BX:25:GLN:NE2	40:BX:65:VAL:CG2	2.78	0.46
40:BX:71:ASP:HB3	40:BX:72:ASP:H	1.57	0.46
41:BY:49:GLU:CG	41:BY:59:GLU:CA	2.66	0.46
42:BZ:112:LEU:HD21	42:BZ:171:VAL:C	2.35	0.46
42:BZ:62:PHE:CZ	42:BZ:87:THR:CG2	2.99	0.46
1:AA:1053:G:H5''	1:AA:1053:G:C8	2.47	0.46
1:AA:1144:G:N2	1:AA:1146:A:H62	2.12	0.46
1:AA:1291:G:OP1	10:AG:37:ASN:ND2	2.47	0.46
1:AA:1443:G:C8	1:AA:1443:G:H5'	2.50	0.46
1:AA:20:U:N1	1:AA:916:G:N2	2.64	0.46
1:AA:62:U:O5'	1:AA:385:C:O2'	2.33	0.46
1:AA:564:C:O3'	11:AH:91:ARG:NH2	2.44	0.46
1:AA:757:U:H2'	1:AA:758:G:O4'	2.15	0.46
1:AA:958:A:C2	22:AS:55:LYS:CB	2.87	0.46
11:AH:9:MET:HG3	11:AH:26:VAL:HG21	1.96	0.46
11:AH:63:LEU:H	11:AH:63:LEU:HD22	1.81	0.46
14:AK:29:ILE:HG22	14:AK:44:SER:HB2	1.98	0.46
15:AL:12:ARG:HD2	15:AL:13:LYS:HZ2	1.79	0.46
19:AP:27:LYS:C	19:AP:29:ASP:H	2.18	0.46
22:AS:66:MET:HB2	22:AS:74:PHE:CE2	2.50	0.46
23:AT:50:GLU:H	23:AT:99:LEU:HD12	1.80	0.46
3:AW:37:YYG:O22	10:AG:84:ASN:O	2.33	0.46
48:B0:29:GLU:OE1	48:B0:29:GLU:CA	2.62	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:67:VAL:HG11	48:B0:74:LYS:CD	2.38	0.46
46:B2:4:HIS:O	46:B2:8:ILE:HG13	2.13	0.46
49:B4:38:GLY:O	49:B4:39:VAL:CB	2.63	0.46
49:B4:68:ARG:NE	49:B4:72:LYS:HG2	2.25	0.46
51:B6:39:LYS:O	51:B6:40:TYR:CD1	2.64	0.46
26:BA:1023:U:H2'	26:BA:1024:G:O4'	2.15	0.46
26:BA:51:G:O2'	26:BA:119:A:N1	2.37	0.46
26:BA:1358:G:N7	26:BA:1371:G:C6	2.84	0.46
26:BA:743:G:O2'	26:BA:1659:U:OP1	2.24	0.46
26:BA:1670:C:OP2	26:BA:1671:U:H5	1.97	0.46
26:BA:2195:C:H5''	26:BA:2195:C:C6	2.46	0.46
26:BA:2075:U:C4	26:BA:2238:G:O6	2.69	0.46
26:BA:2307:G:C8	26:BA:2307:G:H5''	2.47	0.46
26:BA:2367:G:N3	26:BA:2368:C:C5	2.83	0.46
26:BA:2380:C:H3'	26:BA:2380:C:H6	1.81	0.46
26:BA:827:U:C5	26:BA:2430:A:C2	3.03	0.46
26:BA:2478:A:N7	26:BA:2479:G:C5	2.83	0.46
26:BA:2491:U:O2'	26:BA:2492:U:O5'	2.31	0.46
26:BA:2491:U:C2'	26:BA:2492:U:H5'	2.26	0.46
26:BA:2516:G:H22	26:BA:2569:G:H1'	1.81	0.46
26:BA:2564:A:C4	26:BA:2565:A:N7	2.84	0.46
26:BA:2584:U:N1	26:BA:2585:U:C4	2.82	0.46
26:BA:2649:U:H2'	26:BA:2650:U:C5	2.49	0.46
26:BA:2652:C:H2'	26:BA:2653:U:C5'	2.45	0.46
26:BA:2679:A:N6	26:BA:2728:U:H3	2.00	0.46
26:BA:2795:G:OP2	26:BA:2795:G:H3'	2.15	0.46
26:BA:2808:U:P	26:BA:2809:A:OP2	2.73	0.46
26:BA:557:U:H5''	33:BN:92:GLN:HB2	1.97	0.46
26:BA:855:G:C2'	48:B0:25:LYS:HZ3	2.29	0.46
26:BA:89:G:H3'	26:BA:90:U:H5''	1.96	0.46
25:BB:75:G:C1'	42:BZ:22:VAL:HG21	2.44	0.46
27:BD:175:LEU:HB2	27:BD:179:GLU:N	2.28	0.46
28:BE:256:THR:HG22	28:BE:259:HIS:CE1	2.50	0.46
29:BF:157:LEU:O	29:BF:160:LEU:N	2.48	0.46
30:BG:19:GLU:HB2	30:BG:135:VAL:CB	2.42	0.46
31:BH:95:ALA:N	31:BH:127:GLN:NE2	2.54	0.46
31:BH:159:LYS:N	31:BH:162:ARG:HH12	2.14	0.46
31:BH:85:ALA:CB	31:BH:164:GLU:HG2	2.45	0.46
31:BH:40:MET:HA	31:BH:54:PRO:CG	2.46	0.46
32:BI:26:ALA:HB1	32:BI:30:LEU:HD12	1.96	0.46
32:BI:56:ARG:O	32:BI:60:GLU:CB	2.64	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:21:VAL:HG13	34:BO:39:VAL:CG1	2.45	0.46
35:BP:67:ARG:CZ	35:BP:109:LEU:HD12	2.45	0.46
36:BQ:126:VAL:CG1	36:BQ:127:ASN:N	2.77	0.46
36:BQ:136:TRP:HA	36:BQ:139:ALA:HB3	1.96	0.46
36:BQ:143:VAL:CG2	36:BQ:144:THR:N	2.64	0.46
43:BR:18:LEU:HD21	43:BR:22:ARG:NH2	2.30	0.46
37:BS:32:PRO:CG	37:BS:100:ALA:HA	2.38	0.46
37:BS:21:HIS:CD2	37:BS:24:LEU:CD1	2.96	0.46
44:BU:7:GLY:HA3	44:BU:8:ILE:CD1	2.44	0.46
45:BV:55:THR:O	45:BV:56:VAL:HG23	2.15	0.46
39:BW:25:ARG:O	39:BW:27:LYS:N	2.48	0.46
26:BA:2010:G:O2'	39:BW:42:ARG:NH2	2.48	0.46
41:BY:2:LYS:C	41:BY:3:GLN:HG3	2.35	0.46
41:BY:49:GLU:CB	41:BY:97:ARG:HH11	2.29	0.46
42:BZ:159:THR:O	42:BZ:160:LEU:CG	2.63	0.46
1:AA:112:G:OP1	19:AP:27:LYS:CG	2.64	0.46
1:AA:256:U:H2'	1:AA:257:G:O4'	2.15	0.46
1:AA:324:G:N2	1:AA:327:A:H8	2.13	0.46
1:AA:668:G:H1'	18:AO:46:HIS:CD2	2.50	0.46
1:AA:686:U:O2	14:AK:42:TRP:HZ2	1.98	0.46
1:AA:971:G:OP2	1:AA:1231:G:N2	2.48	0.46
5:AB:155:LEU:HB2	5:AB:159:PRO:HG3	1.97	0.46
5:AB:239:VAL:HG12	5:AB:240:GLN:N	2.28	0.46
7:AD:19:LEU:HD22	7:AD:67:ILE:CG1	2.46	0.46
1:AA:598:U:H4'	11:AH:94:TYR:CB	2.46	0.46
12:AI:45:ALA:O	12:AI:78:LYS:HG3	2.15	0.46
13:AJ:12:ASP:O	13:AJ:16:LEU:HD23	2.16	0.46
15:AL:25:PRO:C	15:AL:27:LEU:H	2.18	0.46
1:AA:979:C:O2	17:AN:19:ARG:NE	2.47	0.46
1:AA:110:C:H4'	19:AP:25:ARG:HB3	1.97	0.46
48:B0:22:GLY:C	48:B0:23:VAL:O	2.52	0.46
48:B0:45:PHE:C	48:B0:46:LYS:HD2	2.35	0.46
49:B4:14:ILE:HD11	49:B4:39:VAL:CB	2.45	0.46
26:BA:2395:C:H5''	49:B4:28:ARG:HH11	1.79	0.46
39:BW:38:TYR:HB3	50:B5:30:LEU:HD21	1.98	0.46
51:B6:16:ALA:CB	51:B6:42:PRO:CG	2.93	0.46
54:B9:10:MET:HB3	54:B9:11:CYS:H	1.48	0.46
54:B9:31:LYS:O	54:B9:32:HIS:CG	2.68	0.46
26:BA:1638:C:OP1	26:BA:2711:A:C5'	2.63	0.46
26:BA:1781:C:C6	26:BA:1781:C:H3'	2.51	0.46
26:BA:194:G:C6	26:BA:195:A:C5	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:75:C:N4	26:BA:2252:G:N2	2.62	0.46
26:BA:2256:G:C6	26:BA:2257:U:N3	2.83	0.46
26:BA:2246:G:C6	26:BA:2426:A:C4	3.03	0.46
26:BA:2078:C:H1'	26:BA:2434:A:C2	2.50	0.46
26:BA:2469:A:C5	26:BA:2470:G:C8	3.03	0.46
26:BA:2474:C:C5	26:BA:2475:C:C4	3.03	0.46
26:BA:2620:C:C5	26:BA:2621:A:C8	3.03	0.46
26:BA:2633:G:C8	26:BA:2633:G:O5'	2.64	0.46
26:BA:2742:C:OP1	54:B9:35:ARG:CD	2.63	0.46
26:BA:2773:C:H2'	26:BA:2774:C:O5'	2.16	0.46
26:BA:2793:G:C5	26:BA:2794:C:C4	3.03	0.46
26:BA:2839:G:N2	26:BA:2840:C:N1	2.64	0.46
26:BA:2842:G:C2	26:BA:2876:G:N2	2.83	0.46
26:BA:349:G:N3	26:BA:349:G:H2'	2.31	0.46
26:BA:455:C:OP1	26:BA:472:A:N1	2.48	0.46
26:BA:684:G:N3	26:BA:775:G:C6	2.84	0.46
26:BA:885:C:H41	26:BA:889:C:C1'	2.23	0.46
26:BA:2024:G:OP1	28:BE:245:ARG:NH1	2.48	0.46
29:BF:159:ALA:O	29:BF:160:LEU:CD2	2.49	0.46
30:BG:29:HIS:N	30:BG:69:ILE:CG1	2.76	0.46
30:BG:63:ILE:O	30:BG:64:ARG:C	2.53	0.46
31:BH:15:THR:CG2	31:BH:26:LYS:C	2.83	0.46
31:BH:52:THR:O	31:BH:64:HIS:CD2	2.68	0.46
31:BH:86:LEU:HD11	31:BH:87:GLU:C	2.35	0.46
55:BK:99:LYS:H	55:BK:99:LYS:HD2	1.80	0.46
33:BN:12:VAL:CG1	33:BN:38:VAL:CG2	2.82	0.46
33:BN:5:GLU:HA	33:BN:109:TYR:HE2	1.77	0.46
34:BO:19:VAL:HA	34:BO:42:THR:O	2.15	0.46
35:BP:53:ARG:CB	35:BP:54:PRO:CD	2.93	0.46
26:BA:2278:A:P	36:BQ:15:THR:HG1	2.39	0.46
26:BA:873:G:C5'	36:BQ:32:LYS:CG	2.93	0.46
37:BS:19:ASP:HB3	37:BS:22:GLN:HG3	1.51	0.46
44:BU:47:TYR:OH	45:BV:74:TYR:O	2.33	0.46
39:BW:8:ARG:HB3	39:BW:8:ARG:NH1	2.28	0.46
40:BX:52:VAL:HG13	40:BX:65:VAL:O	2.15	0.46
26:BA:1340:U:C4	40:BX:57:THR:CG2	2.98	0.46
41:BY:50:VAL:CA	41:BY:51:LEU:HD13	2.44	0.46
1:AA:1317:C:C2	17:AN:16:PHE:CE2	3.04	0.46
1:AA:1429:C:H2'	1:AA:1430:C:H6	1.80	0.46
1:AA:20:U:C1'	1:AA:572:A:C2	2.99	0.46
1:AA:397:A:C6	1:AA:548:G:C6	3.02	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:405:U:C2'	1:AA:406:G:P	3.03	0.46
1:AA:780:A:O5'	1:AA:780:A:H8	1.98	0.46
1:AA:949:A:H2'	1:AA:950:U:C6	2.51	0.46
5:AB:54:THR:HG22	5:AB:58:ILE:HD11	1.97	0.46
5:AB:60:ASP:O	5:AB:64:ARG:HB3	2.15	0.46
7:AD:98:GLU:C	7:AD:100:ARG:N	2.60	0.46
3:AW:41:U:H4'	10:AG:143:ARG:HB3	1.96	0.46
11:AH:35:ILE:O	11:AH:39:LEU:HD23	2.15	0.46
47:B3:41:PRO:HA	47:B3:44:ARG:HB3	1.97	0.46
52:B7:34:ARG:HH12	52:B7:42:LEU:CA	2.14	0.46
52:B7:38:GLY:C	52:B7:40:HIS:CE1	2.89	0.46
26:BA:687:C:H4'	52:B7:4:THR:HG23	1.95	0.46
53:B8:26:LYS:HD3	53:B8:43:GLY:O	2.16	0.46
53:B8:30:ARG:CG	53:B8:31:HIS:H	2.27	0.46
26:BA:585:G:C4	26:BA:1251:C:N4	2.83	0.46
26:BA:1300:U:C6	26:BA:1301:A:C2	3.03	0.46
26:BA:1332:G:C4	26:BA:1609:A:N1	2.83	0.46
26:BA:1956:U:H2'	26:BA:1956:U:O2	2.15	0.46
26:BA:2052:G:H21	28:BE:245:ARG:CD	2.22	0.46
26:BA:2198:A:N6	26:BA:2225:A:N6	2.61	0.46
26:BA:2297:C:N4	26:BA:2320:A:N9	2.64	0.46
26:BA:2358:G:C2	26:BA:2359:C:H5'	2.49	0.46
26:BA:2395:C:C4'	26:BA:2395:C:C6	2.98	0.46
26:BA:2402:C:C6	26:BA:2402:C:H3'	2.50	0.46
26:BA:2246:G:C8	26:BA:2426:A:C2	3.03	0.46
26:BA:792:G:C8	26:BA:2440:C:O2	2.69	0.46
26:BA:2461:C:C1'	26:BA:2492:U:N3	2.78	0.46
26:BA:2514:U:H2'	26:BA:2515:C:C6	2.50	0.46
26:BA:2515:C:C2'	26:BA:2515:C:O2	2.64	0.46
26:BA:2474:C:N4	26:BA:2529:G:H21	2.05	0.46
26:BA:2546:U:C2'	26:BA:2547:U:OP2	2.63	0.46
26:BA:2555:U:HO2'	26:BA:2556:C:P	2.39	0.46
26:BA:2616:C:C5'	26:BA:2616:C:H6	2.28	0.46
26:BA:2617:C:O2	26:BA:2618:G:H5'	2.14	0.46
26:BA:2631:G:C2	26:BA:2632:A:H1'	2.51	0.46
26:BA:2713:A:C3'	26:BA:2714:G:H5''	2.45	0.46
26:BA:2636:U:H3	26:BA:2782:G:H1	1.64	0.46
26:BA:2813:A:C4	26:BA:2814:C:C5	3.03	0.46
26:BA:2842:G:C2	26:BA:2876:G:N3	2.78	0.46
26:BA:321:G:H5'	29:BF:150:THR:HG21	1.97	0.46
26:BA:487:C:H42	26:BA:493:G:H1	1.62	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:531:C:H41	44:BU:38:THR:HA	0.78	0.46
26:BA:636:G:H3'	35:BP:126:SER:HB3	1.97	0.46
26:BA:586:A:N6	26:BA:809:G:HO2'	2.12	0.46
27:BD:167:GLU:C	27:BD:170:TYR:O	2.53	0.46
27:BD:131:LEU:CG	27:BD:187:CYS:O	2.59	0.46
26:BA:1789:A:C3'	27:BD:224:VAL:HG13	2.44	0.46
27:BD:76:ARG:HA	27:BD:114:GLU:N	2.30	0.46
28:BE:232:ARG:O	28:BE:233:ARG:C	2.53	0.46
26:BA:2512:C:C4'	28:BE:235:ILE:HD12	2.43	0.46
29:BF:199:GLU:O	29:BF:200:PRO:O	2.34	0.46
26:BA:2317:C:H4'	30:BG:150:SER:HB3	1.98	0.46
30:BG:27:ILE:O	30:BG:69:ILE:HG21	1.68	0.46
30:BG:97:GLN:HB3	30:BG:106:PHE:CZ	2.49	0.46
31:BH:58:LYS:O	31:BH:59:HIS:C	2.54	0.46
32:BI:21:VAL:HG21	32:BI:30:LEU:HD12	1.97	0.46
33:BN:56:LYS:H	33:BN:56:LYS:CD	2.23	0.46
33:BN:63:ILE:CG2	33:BN:71:TYR:OH	2.55	0.46
36:BQ:130:PRO:HB2	36:BQ:134:PHE:CE1	2.51	0.46
43:BR:41:ALA:O	43:BR:42:LYS:C	2.54	0.46
43:BR:56:LYS:O	43:BR:57:ARG:C	2.54	0.46
26:BA:2334:G:H5'	37:BS:20:TYR:CE1	2.50	0.46
26:BA:2334:G:H5'	37:BS:20:TYR:HE1	1.80	0.46
37:BS:34:LEU:HG	37:BS:103:ASP:N	2.31	0.46
44:BU:113:SER:C	44:BU:115:ASN:H	2.11	0.46
45:BV:14:VAL:HG13	45:BV:15:SER:H	1.74	0.46
45:BV:69:ILE:HG23	45:BV:89:ASN:O	2.15	0.46
42:BZ:174:PRO:C	42:BZ:175:ARG:HG2	2.36	0.46
42:BZ:8:ARG:C	42:BZ:9:THR:HG23	2.36	0.46
1:AA:1062:U:H2'	1:AA:1063:C:C5	2.51	0.46
1:AA:120:A:C8	1:AA:120:A:C3'	2.99	0.46
1:AA:1286:A:N6	1:AA:1355:G:OP1	2.48	0.46
1:AA:976:G:OP2	1:AA:1358:U:H4'	2.15	0.46
1:AA:949:A:H1'	1:AA:1364:U:O2	2.14	0.46
1:AA:597:G:C8	1:AA:597:G:O5'	2.68	0.46
1:AA:770:C:O2'	1:AA:899:C:N3	2.44	0.46
5:AB:160:ASP:O	5:AB:161:ALA:HB2	2.16	0.46
5:AB:9:GLU:OE2	5:AB:12:GLU:HG2	2.16	0.46
7:AD:128:VAL:O	7:AD:130:GLY:N	2.49	0.46
10:AG:31:MET:HG2	10:AG:32:ARG:N	2.30	0.46
1:AA:1319:A:OP2	22:AS:5:LEU:HD22	2.16	0.46
47:B3:1:MET:N	47:B3:2:PRO:CD	2.78	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:B3:4:LEU:HD11	47:B3:39:ASP:HA	1.98	0.46
26:BA:2348:U:C4'	53:B8:42:ARG:HH22	2.24	0.46
26:BA:1127:A:N1	26:BA:2518:A:C2	2.84	0.46
26:BA:1344:G:O2'	26:BA:1384:A:H2'	2.15	0.46
26:BA:13:A:N7	26:BA:525:U:C4	2.84	0.46
26:BA:1522:G:O5'	26:BA:1522:G:H8	1.99	0.46
26:BA:1664:A:N3	26:BA:2726:U:N3	2.63	0.46
26:BA:1676:A:H2'	26:BA:1677:A:O4'	2.16	0.46
26:BA:2032:G:C6	26:BA:2572:A:H2	2.33	0.46
26:BA:2187:G:C2'	26:BA:2188:C:C5'	2.72	0.46
26:BA:2194:G:H2'	26:BA:2194:G:N3	2.30	0.46
26:BA:2094:G:C5	26:BA:2196:C:N3	2.80	0.46
26:BA:2199:A:C4	26:BA:2225:A:C2	3.03	0.46
26:BA:2251:G:C4'	36:BQ:102:ARG:HH22	2.29	0.46
26:BA:2435:A:C2	26:BA:2436:G:C8	3.04	0.46
26:BA:2450:A:N3	26:BA:2451:A:N9	2.63	0.46
26:BA:2453:A:HO2'	26:BA:2454:G:C5'	2.19	0.46
26:BA:2625:G:H2'	26:BA:2626:C:H5'	1.97	0.46
26:BA:2790:A:H2	26:BA:2894:G:C8	2.33	0.46
26:BA:2832:U:C3'	26:BA:2832:U:C6	2.94	0.46
26:BA:440:G:H3'	41:BY:3:GLN:HE21	1.79	0.46
26:BA:476:G:H22	26:BA:478:A:H2'	1.79	0.46
26:BA:510:C:P	26:BA:512:G:H22	2.38	0.46
26:BA:783:A:C6	26:BA:785:G:H1'	2.49	0.46
26:BA:853:G:H2'	26:BA:854:G:C8	2.50	0.46
25:BB:24:G:C8	25:BB:56:G:N7	2.83	0.46
27:BD:109:LEU:HD11	27:BD:126:GLY:HA3	1.97	0.46
27:BD:172:ILE:HG13	27:BD:182:MET:HE3	1.97	0.46
27:BD:191:VAL:HG23	27:BD:192:GLY:N	2.29	0.46
28:BE:251:PRO:O	28:BE:252:GLN:HG2	2.15	0.46
28:BE:44:TYR:CD2	28:BE:306:ARG:O	2.69	0.46
29:BF:11:ASN:HD21	29:BF:160:LEU:CG	2.27	0.46
30:BG:134:LEU:C	30:BG:135:VAL:HG23	2.36	0.46
30:BG:67:ASP:N	30:BG:67:ASP:OD1	2.46	0.46
32:BI:42:ALA:HB3	32:BI:43:ASN:ND2	2.30	0.46
55:BK:112:LYS:HG2	55:BK:112:LYS:O	2.16	0.46
33:BN:68:GLY:O	33:BN:69:TYR:CG	2.69	0.46
33:BN:84:ARG:CA	33:BN:87:LEU:HD13	2.45	0.46
34:BO:77:ILE:CD1	34:BO:78:ARG:HA	2.42	0.46
35:BP:108:VAL:O	35:BP:125:PHE:HB3	2.15	0.46
35:BP:73:VAL:HG13	35:BP:76:LEU:CB	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:32:LYS:HD2	36:BQ:32:LYS:O	2.15	0.46
36:BQ:91:HIS:O	36:BQ:111:THR:CB	2.62	0.46
43:BR:63:ARG:HH22	43:BR:77:ARG:HA	1.81	0.46
43:BR:89:ASP:OD1	43:BR:89:ASP:C	2.49	0.46
38:BT:18:GLY:O	38:BT:19:THR:HB	2.15	0.46
38:BT:44:ARG:CG	38:BT:45:GLU:N	2.78	0.46
44:BU:108:ALA:O	44:BU:110:VAL:HB	2.15	0.46
44:BU:117:ARG:HG3	44:BU:118:GLN:N	2.28	0.46
44:BU:14:HIS:NE2	44:BU:36:PHE:HE2	2.10	0.46
45:BV:67:LYS:HG3	45:BV:94:LYS:CG	2.45	0.46
40:BX:7:HIS:CB	40:BX:8:PRO:HD2	2.41	0.46
41:BY:101:LEU:HD13	41:BY:103:LEU:CD1	2.39	0.46
42:BZ:112:LEU:HD12	42:BZ:177:THR:HG21	1.96	0.46
42:BZ:71:MET:HA	42:BZ:78:PRO:N	2.31	0.46
1:AA:118:U:H3'	1:AA:288:A:N6	2.31	0.46
1:AA:1205:U:O2'	6:AC:195:VAL:HG23	2.15	0.46
1:AA:961:U:H5	1:AA:1223:C:H1'	1.79	0.46
1:AA:1254:C:OP1	13:AJ:45:ARG:CD	2.61	0.46
1:AA:127:G:OP1	1:AA:635:G:H1'	2.16	0.46
1:AA:1150:U:H1'	1:AA:1280:A:N6	2.31	0.46
1:AA:1346:A:N6	1:AA:1374:A:H3'	2.31	0.46
1:AA:1414:U:H2'	1:AA:1415:G:C8	2.51	0.46
1:AA:741:G:O2'	18:AO:55:GLY:HA3	2.15	0.46
1:AA:890:G:N2	1:AA:907:A:O5'	2.49	0.46
7:AD:21:LEU:O	7:AD:114:ARG:N	2.48	0.46
1:AA:1377:A:P	10:AG:94:ARG:HH21	2.36	0.46
10:AG:150:ALA:HA	14:AK:59:TYR:CG	2.50	0.46
1:AA:1220:G:O2'	22:AS:36:ARG:HD3	2.16	0.46
1:AA:958:A:H1'	22:AS:55:LYS:HD2	1.98	0.46
47:B3:47:VAL:C	47:B3:48:GLU:OE1	2.49	0.46
26:BA:2080:G:C5'	49:B4:32:HIS:HB3	2.46	0.46
51:B6:37:LEU:CG	51:B6:51:ARG:HG2	2.40	0.46
52:B7:26:SER:OG	52:B7:27:GLY:N	2.47	0.46
52:B7:30:ILE:CB	52:B7:33:ARG:CD	2.71	0.46
26:BA:1152:C:H4'	44:BU:77:SER:HA	1.97	0.46
26:BA:1520:U:C6	26:BA:1520:U:C3'	2.98	0.46
26:BA:1614:A:N6	39:BW:88:ARG:CG	2.74	0.46
26:BA:2100:G:H1'	26:BA:2190:G:H21	1.78	0.46
26:BA:2097:C:N4	26:BA:2192:G:H1	2.14	0.46
26:BA:2273:A:C8	26:BA:2274:A:N9	2.84	0.46
26:BA:2343:C:H2'	26:BA:2343:C:O2	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2461:C:C2'	26:BA:2462:U:H5'	2.46	0.46
26:BA:2648:C:C5	26:BA:2649:U:C5	3.03	0.46
26:BA:2689:U:N1	26:BA:2713:A:C6	2.81	0.46
26:BA:2691:C:C4	26:BA:2719:G:N2	2.84	0.46
26:BA:2762:G:C4	26:BA:2763:G:C8	3.02	0.46
26:BA:2772:C:C2	26:BA:2773:C:C5	3.03	0.46
26:BA:2824:C:C4	26:BA:2825:C:C2	3.04	0.46
26:BA:2857:G:H22	26:BA:2859:G:H3'	1.81	0.46
26:BA:2885:C:N3	26:BA:2886:G:H1'	2.31	0.46
26:BA:2887:U:C2'	26:BA:2888:C:H5'	2.46	0.46
26:BA:323:G:OP2	26:BA:340:A:C2	2.68	0.46
26:BA:385:C:H42	26:BA:391:G:H1	1.64	0.46
26:BA:588:U:O4	26:BA:670:A:H2'	2.14	0.46
26:BA:791:C:O2'	26:BA:792:G:H5''	2.15	0.46
27:BD:159:THR:O	27:BD:176:ALA:HB1	2.16	0.46
27:BD:158:GLY:O	27:BD:160:SER:N	2.49	0.46
27:BD:63:ILE:O	27:BD:64:ILE:CG2	2.64	0.46
28:BE:246:VAL:HG12	28:BE:247:ARG:O	2.16	0.46
28:BE:262:THR:OG1	28:BE:263:GLU:N	2.46	0.46
28:BE:77:PRO:CG	28:BE:186:GLU:HB2	2.46	0.46
28:BE:77:PRO:HB3	28:BE:187:HIS:CA	2.43	0.46
29:BF:11:ASN:HD21	29:BF:160:LEU:HG	1.81	0.46
29:BF:16:VAL:CG1	29:BF:17:ASP:H	2.29	0.46
31:BH:86:LEU:CA	31:BH:148:ARG:HH22	2.05	0.46
55:BK:116:LEU:C	55:BK:116:LEU:CD1	2.82	0.46
33:BN:27:ALA:O	33:BN:31:LEU:N	2.48	0.46
33:BN:44:ALA:C	33:BN:45:VAL:HG23	2.36	0.46
33:BN:47:THR:O	33:BN:48:GLY:O	2.34	0.46
36:BQ:29:ALA:O	36:BQ:30:GLN:O	2.34	0.46
36:BQ:43:PRO:O	36:BQ:45:GLN:HG2	2.15	0.46
43:BR:97:VAL:CG1	43:BR:114:VAL:HG22	2.36	0.46
43:BR:18:LEU:HD12	43:BR:19:ALA:H	1.80	0.46
43:BR:65:LEU:HA	43:BR:68:ARG:HB2	1.98	0.46
43:BR:72:ASP:O	43:BR:73:VAL:O	2.34	0.46
43:BR:94:TYR:O	43:BR:116:LEU:HA	2.15	0.46
26:BA:2292:C:OP2	37:BS:25:ARG:NH1	2.49	0.46
37:BS:41:LYS:O	37:BS:42:HIS:CB	2.64	0.46
37:BS:84:THR:O	37:BS:88:ALA:HB2	2.15	0.46
37:BS:94:GLU:CG	37:BS:95:ALA:N	2.78	0.46
45:BV:37:ALA:O	45:BV:58:ALA:HB1	2.15	0.46
39:BW:69:LEU:HD22	39:BW:109:GLU:HB3	1.91	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:61:ASN:N	39:BW:61:ASN:OD1	2.49	0.46
39:BW:69:LEU:O	39:BW:70:TYR:HB3	2.15	0.46
40:BX:54:THR:O	40:BX:55:GLN:HB2	2.15	0.46
41:BY:92:ASP:OD1	41:BY:94:SER:HB3	2.13	0.46
41:BY:51:LEU:HD22	41:BY:95:ASN:ND2	2.31	0.46
1:AA:1007:C:C2	1:AA:1022:G:N2	2.83	0.46
1:AA:1269:A:H1'	1:AA:1326:C:O4'	2.16	0.46
1:AA:241:C:H42	1:AA:285:G:H1	1.64	0.46
1:AA:571:U:O4	1:AA:865:A:N1	2.49	0.46
1:AA:690:G:H2'	1:AA:691:G:C8	2.50	0.46
1:AA:823:G:H21	11:AH:1:MET:N	2.13	0.46
1:AA:690:G:N7	14:AK:55:LYS:NZ	2.64	0.46
20:AQ:15:MET:HB2	20:AQ:18:THR:HB	1.98	0.46
47:B3:31:LEU:O	47:B3:32:GLN:C	2.53	0.46
49:B4:48:ARG:CG	49:B4:49:PHE:CE1	2.99	0.46
49:B4:58:LYS:CG	49:B4:62:ARG:HE	2.04	0.46
51:B6:12:MET:CE	51:B6:54:LYS:H	2.18	0.46
53:B8:16:ILE:HD13	53:B8:64:ARG:OXT	2.16	0.46
26:BA:1152:C:C4'	44:BU:77:SER:HA	2.45	0.46
26:BA:49:A:C2	26:BA:118:A:N7	2.83	0.46
26:BA:1195:G:C2'	26:BA:1226:G:H22	2.29	0.46
26:BA:120:U:C2	26:BA:150:C:C5	3.04	0.46
26:BA:1364:G:N7	49:B4:2:GLN:OE1	2.48	0.46
26:BA:1582:C:C3'	26:BA:1583:A:H4'	2.46	0.46
26:BA:197:A:C4	26:BA:2430:A:C5	3.04	0.46
26:BA:2015:A:C8	26:BA:2016:U:C6	3.01	0.46
26:BA:2216:G:C2	26:BA:2217:G:C8	3.04	0.46
26:BA:2234:G:O6	26:BA:2235:G:C6	2.69	0.46
26:BA:919:G:C2	26:BA:2268:A:H5''	2.49	0.46
26:BA:2292:C:N3	26:BA:2293:C:C6	2.59	0.46
26:BA:2361:A:N3	26:BA:2362:G:O4'	2.48	0.46
26:BA:2390:U:C6	26:BA:2390:U:C3'	2.99	0.46
26:BA:2414:G:C5	26:BA:2415:G:N7	2.84	0.46
26:BA:631:A:N1	26:BA:2416:C:O4'	2.44	0.46
26:BA:1953:A:N6	26:BA:2550:G:O4'	2.48	0.46
26:BA:2584:U:H5	26:BA:2585:U:H3'	1.80	0.46
26:BA:2638:G:N2	26:BA:2776:A:C8	2.83	0.46
26:BA:2830:G:C2	26:BA:2883:A:H2	2.34	0.46
26:BA:2857:G:C5'	26:BA:2857:G:H8	2.26	0.46
26:BA:447:A:C8	26:BA:473:G:C6	3.04	0.46
26:BA:527:C:C6	26:BA:2779:U:C2'	2.99	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:640:C:O2	26:BA:648:G:C2	2.69	0.46
26:BA:74:A:H4'	26:BA:75:G:O4'	2.16	0.46
26:BA:989:G:O2'	26:BA:990:A:P	2.74	0.46
25:BB:8:U:O2	25:BB:112:G:O6	2.34	0.46
27:BD:80:ILE:CG1	27:BD:82:TYR:CE1	2.85	0.46
27:BD:86:ARG:HG2	27:BD:88:ALA:CB	2.45	0.46
28:BE:217:TRP:CD2	28:BE:251:PRO:CG	2.97	0.46
28:BE:72:VAL:CA	28:BE:73:ILE:HD13	2.30	0.46
28:BE:82:ALA:O	28:BE:83:LEU:CB	2.63	0.46
29:BF:215:ALA:CA	29:BF:239:ALA:HA	2.42	0.46
30:BG:98:PHE:C	30:BG:104:PHE:CE2	2.90	0.46
30:BG:11:HIS:CG	30:BG:15:GLU:OE2	2.58	0.46
30:BG:22:VAL:CG2	30:BG:24:HIS:CE1	2.98	0.46
25:BB:43:C:O4'	30:BG:47:GLN:HG2	2.15	0.46
30:BG:48:MET:HA	30:BG:49:PRO:HD3	1.75	0.46
31:BH:147:ILE:CD1	31:BH:150:VAL:CB	2.91	0.46
31:BH:166:GLU:HA	31:BH:167:LEU:HD23	1.88	0.46
32:BI:75:LEU:HD12	32:BI:76:THR:N	2.20	0.46
55:BK:63:ASP:O	55:BK:64:LYS:HB2	2.15	0.46
36:BQ:145:PRO:O	36:BQ:146:THR:CB	2.58	0.46
36:BQ:152:SER:O	36:BQ:153:PRO:C	2.54	0.46
36:BQ:56:ILE:N	36:BQ:56:ILE:CD1	2.24	0.46
43:BR:44:LEU:HD13	43:BR:44:LEU:C	2.34	0.46
43:BR:96:ARG:HH21	43:BR:117:VAL:HG23	1.80	0.46
26:BA:994:C:H1'	44:BU:53:LYS:HB2	1.98	0.46
44:BU:57:PHE:O	44:BU:60:LEU:N	2.48	0.46
39:BW:36:LEU:HD23	39:BW:39:THR:HG21	1.98	0.46
40:BX:1:SER:C	40:BX:2:TRP:HD1	2.19	0.46
41:BY:11:GLN:HA	41:BY:21:LYS:HZ1	1.80	0.46
41:BY:51:LEU:CA	41:BY:97:ARG:NH2	2.44	0.46
42:BZ:131:PRO:C	42:BZ:133:GLU:N	2.69	0.46
25:BB:74:U:C2	42:BZ:29:ASN:ND2	2.83	0.46
1:AA:1192:C:C6	1:AA:1192:C:C3'	2.99	0.46
1:AA:1307:U:C4'	16:AM:109:THR:HG21	2.46	0.46
1:AA:1304:G:H21	1:AA:1333:A:H62	1.62	0.46
1:AA:219:C:C3'	1:AA:220:G:P	3.03	0.46
1:AA:302:G:C8	1:AA:302:G:H5''	2.50	0.46
1:AA:768:A:H2	1:AA:1512:U:H4'	1.80	0.46
1:AA:813:U:H2'	1:AA:814:A:C8	2.50	0.46
5:AB:80:ILE:HG23	5:AB:212:GLN:HG2	1.98	0.46
10:AG:70:LYS:HB3	10:AG:96:GLN:HG2	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AM:27:LYS:O	16:AM:28:ALA:HB2	2.16	0.46
18:AO:32:LEU:HB2	18:AO:63:ARG:HG2	1.97	0.46
1:AA:607:A:N1	19:AP:31:LYS:HG3	2.30	0.46
22:AS:47:HIS:O	22:AS:62:ILE:HG22	2.16	0.46
1:AA:191:G:N2	23:AT:103:GLY:O	2.47	0.46
48:B0:30:VAL:HG13	48:B0:63:SER:OG	2.16	0.46
46:B2:45:ARG:HE	46:B2:49:LEU:CD2	2.29	0.46
49:B4:5:LEU:HD11	49:B4:8:LYS:CB	2.32	0.46
52:B7:31:LEU:H	52:B7:31:LEU:CD2	2.05	0.46
53:B8:57:ARG:O	53:B8:60:LEU:HB3	2.16	0.46
26:BA:1076:C:O2	55:BK:92:PRO:HG2	2.16	0.46
26:BA:1187:G:O4'	45:BV:82:ARG:NH2	2.49	0.46
26:BA:1223:C:C4	45:BV:87:ARG:NH2	2.63	0.46
26:BA:1358:G:H2'	26:BA:1371:G:N2	2.31	0.46
26:BA:1707:G:H1	26:BA:1751:C:H42	1.63	0.46
26:BA:1809:A:N1	49:B4:43:TRP:CH2	2.83	0.46
26:BA:1899:G:H22	26:BA:1902:C:N4	2.11	0.46
26:BA:2013:A:H8	26:BA:2013:A:H5''	1.81	0.46
26:BA:2064:C:H1'	26:BA:2450:A:C5	2.46	0.46
26:BA:2271:G:O2'	26:BA:2272:U:P	2.72	0.46
26:BA:2271:G:C2'	26:BA:2272:U:O5'	2.62	0.46
26:BA:2349:G:O6	26:BA:2350:C:C6	2.69	0.46
26:BA:2377:A:H2'	26:BA:2378:A:N7	2.30	0.46
26:BA:2384:G:H3'	26:BA:2386:C:OP2	2.16	0.46
26:BA:2454:G:N3	26:BA:2455:G:O4'	2.49	0.46
26:BA:2519:U:C2	26:BA:2542:A:C5	3.04	0.46
26:BA:1670:C:OP2	26:BA:2550:G:OP2	2.33	0.46
26:BA:2567:G:C2'	26:BA:2568:C:C6	2.99	0.46
26:BA:2580:U:H2'	26:BA:2581:G:O4'	2.15	0.46
26:BA:2649:U:HO2'	26:BA:2650:U:P	2.38	0.46
26:BA:2676:C:H6	26:BA:2676:C:C3'	2.23	0.46
26:BA:2729:G:C2	26:BA:2730:C:N3	2.84	0.46
26:BA:270(X):G:O2'	26:BA:272:G:H4'	2.16	0.46
26:BA:593:G:C2	26:BA:665:C:C2	3.04	0.46
26:BA:631:A:N1	26:BA:2416:C:H1'	2.31	0.46
26:BA:637:A:P	35:BP:126:SER:OG	2.73	0.46
25:BB:18:G:H3'	30:BG:149:ARG:NH1	2.31	0.46
29:BF:200:PRO:HB2	29:BF:205:ARG:HD3	1.97	0.46
29:BF:193:LEU:HA	29:BF:211:ASP:OD1	2.15	0.46
29:BF:239:ALA:O	29:BF:242:GLU:HG3	2.16	0.46
31:BH:101:LYS:NZ	31:BH:115:GLU:HG3	2.20	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:66:THR:O	31:BH:67:THR:C	2.54	0.46
32:BI:115:ILE:CG2	32:BI:129:VAL:HG12	2.45	0.46
32:BI:4:ILE:O	32:BI:4:ILE:HG23	2.11	0.46
32:BI:6:LEU:CB	32:BI:36:ALA:CB	2.75	0.46
26:BA:910:A:N6	36:BQ:12:PRO:O	2.47	0.46
36:BQ:16:ARG:HA	36:BQ:17:ARG:NH1	2.26	0.46
43:BR:99:LYS:HA	43:BR:112:ALA:CB	2.44	0.46
30:BG:145:ASP:CG	37:BS:15:GLU:C	2.56	0.46
37:BS:82:TYR:CB	37:BS:83:LEU:HD12	2.46	0.46
37:BS:87:LEU:HA	37:BS:90:LEU:HB2	1.98	0.46
38:BT:50:GLU:C	38:BT:52:THR:N	2.66	0.46
44:BU:10:ARG:HA	44:BU:13:ARG:NH1	2.31	0.46
44:BU:8:ILE:C	44:BU:11:ARG:HG2	2.37	0.46
45:BV:49:GLU:HB3	45:BV:53:LYS:HD3	1.94	0.46
41:BY:34:GLU:O	41:BY:35:TYR:HB3	2.16	0.46
41:BY:50:VAL:CA	41:BY:97:ARG:HG3	2.46	0.46
41:BY:92:ASP:CG	41:BY:94:SER:HB3	2.36	0.46
42:BZ:124:ALA:O	42:BZ:159:THR:HB	2.16	0.46
42:BZ:12:GLN:O	42:BZ:15:ASP:O	2.34	0.46
1:AA:1400:C:C4	2:AV:34:G:N3	2.84	0.46
1:AA:909:A:C2	1:AA:910:C:H1'	2.51	0.46
18:AO:33:THR:O	18:AO:36:ILE:HG22	2.16	0.46
23:AT:66:ALA:HB3	23:AT:72:LEU:HD12	1.98	0.46
1:AA:1269:A:C4'	24:AU:19:GLY:HA2	2.46	0.46
2:AV:28:C:H2'	2:AV:29:A:H8	1.81	0.46
3:AW:37:YYG:H31	3:AW:37:YYG:O2'	2.15	0.46
3:AW:9:A:N3	3:AW:45:G:C4	2.83	0.46
48:B0:44:LYS:O	48:B0:45:PHE:CB	2.63	0.46
48:B0:41:ARG:HB2	48:B0:74:LYS:CE	2.46	0.46
47:B3:22:ALA:CB	47:B3:46:ASN:ND2	2.79	0.46
26:BA:1365:A:H5''	49:B4:3:LYS:NZ	2.30	0.46
26:BA:1008:C:O2'	26:BA:1009:A:H8	1.99	0.46
26:BA:1056:G:N2	26:BA:1104:C:N4	2.64	0.46
26:BA:1315:C:H42	26:BA:1337:G:H1	1.63	0.46
26:BA:2096:U:H2'	26:BA:2097:C:H6	1.81	0.46
26:BA:221:A:O2'	26:BA:271(B):G:N1	2.49	0.46
26:BA:2224:G:O5'	26:BA:2224:G:H8	1.99	0.46
26:BA:2319:G:P	37:BS:9:PRO:HD3	2.55	0.46
26:BA:2446:G:N1	26:BA:2501:C:C6	2.82	0.46
26:BA:2479:G:C6	26:BA:2480:C:C2	3.03	0.46
26:BA:576:U:H4'	26:BA:2502:G:C8	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2534:A:C2	26:BA:2535:G:C8	3.04	0.46
26:BA:2543:G:H2'	26:BA:2544:G:C5'	2.41	0.46
26:BA:2548:G:C6	26:BA:2549:G:N7	2.84	0.46
26:BA:2516:G:C2	26:BA:2569:G:C2	3.04	0.46
26:BA:2653:U:OP2	26:BA:2654:A:H2'	2.15	0.46
26:BA:2657:A:N6	26:BA:2664:G:C2	2.66	0.46
26:BA:2658:C:C4	26:BA:2664:G:N2	2.84	0.46
26:BA:2809:A:H4'	26:BA:2811:G:N7	2.27	0.46
26:BA:2840:C:H4'	43:BR:53:HIS:CD2	2.50	0.46
26:BA:282:A:H62	26:BA:360:G:N2	2.14	0.46
26:BA:387:U:H2'	26:BA:387:U:O2	2.15	0.46
26:BA:570:G:O6	26:BA:2499:C:OP1	2.33	0.46
26:BA:780:G:O6	27:BD:233:ASP:OD1	2.34	0.46
26:BA:789:A:HO2'	26:BA:1781:C:H42	1.64	0.46
26:BA:794:G:C2	26:BA:795:C:C2	3.04	0.46
25:BB:115:G:H5'	37:BS:59:ALA:CB	2.41	0.46
25:BB:24:G:N7	25:BB:56:G:C5	2.84	0.46
25:BB:8:U:H2'	25:BB:9:G:H8	1.81	0.46
28:BE:221:LYS:CE	28:BE:233:ARG:CB	2.94	0.46
28:BE:226:HIS:CD2	28:BE:229:GLN:OE1	2.68	0.46
29:BF:31:ILE:HG22	29:BF:32:GLY:N	2.31	0.46
26:BA:2310:A:C2'	30:BG:55:LYS:CE	2.57	0.46
31:BH:41:THR:N	31:BH:54:PRO:HG3	2.31	0.46
32:BI:77:VAL:HG12	32:BI:79:ILE:HD11	1.98	0.46
33:BN:14:ALA:N	33:BN:40:ASN:ND2	2.56	0.46
36:BQ:134:PHE:O	36:BQ:138:ARG:HG3	2.16	0.46
36:BQ:35:ASN:O	36:BQ:126:VAL:HG22	2.15	0.46
36:BQ:92:VAL:HG12	36:BQ:111:THR:HA	0.92	0.46
43:BR:103:ARG:O	43:BR:105:ARG:NH2	2.49	0.46
43:BR:73:VAL:O	43:BR:75:LEU:C	2.54	0.46
44:BU:46:GLU:O	44:BU:50:ARG:N	2.48	0.46
45:BV:14:VAL:CG1	45:BV:15:SER:N	2.39	0.46
45:BV:33:VAL:CG1	45:BV:34:GLU:N	2.79	0.46
39:BW:68:ARG:HE	39:BW:110:LYS:CB	2.29	0.46
39:BW:73:ALA:O	39:BW:106:ILE:HB	2.16	0.46
41:BY:102:ASP:O	41:BY:103:LEU:CG	2.64	0.46
41:BY:78:THR:N	41:BY:89:ARG:HD2	2.31	0.46
42:BZ:154:LEU:HD23	42:BZ:154:LEU:O	2.15	0.46
42:BZ:154:LEU:HA	42:BZ:155:PRO:HD3	1.81	0.46
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.51	0.45
1:AA:19:C:C2	1:AA:917:G:C2	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:274:A:O2'	1:AA:275:G:O4'	2.33	0.45
1:AA:304:U:H2'	1:AA:305:G:H8	1.81	0.45
1:AA:126:G:H4'	1:AA:634:C:C1'	2.46	0.45
1:AA:721:G:H4'	1:AA:722:A:O4'	2.17	0.45
1:AA:863:U:H2'	1:AA:865:A:OP2	2.16	0.45
1:AA:909:A:H3'	1:AA:910:C:C6	2.50	0.45
6:AC:52:LEU:HA	6:AC:70:VAL:HG22	1.96	0.45
8:AE:79:GLU:HB2	11:AH:104:ARG:NH1	2.32	0.45
13:AJ:27:ALA:HB2	13:AJ:85:LEU:HD21	1.99	0.45
16:AM:11:ARG:HH12	16:AM:46:LYS:HD2	1.81	0.45
13:AJ:11:PHE:CE2	17:AN:55:GLY:HA3	2.51	0.45
46:B2:7:GLU:CD	46:B2:8:ILE:N	2.64	0.45
49:B4:41:PRO:CD	49:B4:57:ASP:OD2	2.63	0.45
43:BR:100:LEU:CA	50:B5:44:HIS:HD2	2.29	0.45
26:BA:249:C:O2'	53:B8:8:LYS:CG	2.64	0.45
26:BA:1239:G:O2'	26:BA:1240:U:H6	1.98	0.45
26:BA:49:A:H61	26:BA:176:G:H1	1.61	0.45
26:BA:1906:G:O5'	26:BA:1929:G:O2'	2.24	0.45
26:BA:1938:A:HO2'	26:BA:1939:U:C5'	2.30	0.45
26:BA:530:G:C2	26:BA:2021:C:C6	3.04	0.45
26:BA:2066:C:N3	26:BA:2445:G:N1	2.64	0.45
26:BA:2067:G:H3'	26:BA:2068:U:C5'	2.46	0.45
26:BA:2100:G:C4	26:BA:2190:G:N1	2.79	0.45
26:BA:2308:G:OP2	26:BA:2310:A:N6	2.49	0.45
26:BA:2331:G:C2'	26:BA:2332:U:O4'	2.63	0.45
26:BA:834:C:O2'	26:BA:2358:G:C2'	2.64	0.45
26:BA:2361:A:H2	26:BA:2362:G:H1'	1.75	0.45
26:BA:2380:C:C4	26:BA:2381:C:C5	3.03	0.45
26:BA:2547:U:C6	26:BA:2566:A:C6	3.05	0.45
26:BA:2586:C:C3'	26:BA:2586:C:C6	2.99	0.45
26:BA:2051:A:C6	26:BA:2614:A:C5	3.04	0.45
26:BA:2641:G:O6	26:BA:2774:C:N4	2.48	0.45
26:BA:2677:G:C2'	26:BA:2678:C:C5'	2.93	0.45
26:BA:2708:G:H5'	43:BR:68:ARG:O	2.15	0.45
26:BA:2722:G:N3	26:BA:2723:C:N1	2.60	0.45
26:BA:2728:U:O2'	26:BA:2729:G:H5'	2.17	0.45
26:BA:2759:G:C8	26:BA:2759:G:C3'	2.99	0.45
26:BA:2783:G:C6	26:BA:2784:C:C5	3.04	0.45
26:BA:27:G:H3'	26:BA:27:G:H8	1.80	0.45
26:BA:2803:C:O2	26:BA:2803:C:C2'	2.64	0.45
26:BA:2826:A:OP2	26:BA:2826:A:H8	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2898:U:O2	26:BA:2898:U:C2'	2.63	0.45
26:BA:308:G:O2'	41:BY:54:ASP:OD2	2.34	0.45
26:BA:636:G:P	35:BP:126:SER:HA	2.56	0.45
26:BA:673:C:OP1	29:BF:80:VAL:HG11	2.17	0.45
26:BA:747:U:C5	26:BA:2613:U:C4	3.04	0.45
26:BA:872:A:H2'	26:BA:873:G:C8	2.51	0.45
27:BD:144:GLU:OE2	27:BD:187:CYS:HA	2.16	0.45
28:BE:67:THR:C	28:BE:68:VAL:HG23	2.35	0.45
28:BE:61:PRO:CB	28:BE:69:PRO:CA	2.95	0.45
29:BF:102:LEU:HD21	29:BF:106:GLU:CD	2.26	0.45
29:BF:3:ALA:HB2	29:BF:17:ASP:C	2.36	0.45
26:BA:797:C:P	29:BF:59:GLU:OE1	2.74	0.45
30:BG:60:GLU:C	30:BG:61:PHE:CD1	2.89	0.45
31:BH:119:GLY:O	31:BH:121:GLU:OE2	2.34	0.45
31:BH:88:LEU:O	31:BH:88:LEU:CD2	2.62	0.45
32:BI:77:VAL:HG12	32:BI:143:VAL:HG13	1.97	0.45
32:BI:62:LEU:O	32:BI:66:LYS:CG	2.64	0.45
32:BI:63:ALA:CA	32:BI:66:LYS:HE2	2.45	0.45
26:BA:1081:U:H5'	55:BK:126:LYS:NZ	2.31	0.45
55:BK:42:PHE:CZ	55:BK:56:VAL:HG11	2.51	0.45
34:BO:5:GLU:CB	34:BO:20:LEU:HD22	2.46	0.45
35:BP:109:LEU:HD13	35:BP:110:GLY:C	2.37	0.45
35:BP:76:LEU:CB	35:BP:81:VAL:HG21	2.46	0.45
36:BQ:137:ARG:O	36:BQ:141:MET:HG2	2.16	0.45
36:BQ:70:ARG:H	36:BQ:70:ARG:HG3	1.58	0.45
43:BR:95:THR:HG23	43:BR:115:GLU:O	2.17	0.45
43:BR:29:LEU:CD2	43:BR:29:LEU:H	2.23	0.45
37:BS:49:THR:HG23	37:BS:52:PRO:HD2	1.98	0.45
44:BU:91:ASN:CG	44:BU:95:LEU:HD21	2.26	0.45
45:BV:59:GLU:HB3	45:BV:60:VAL:H	1.51	0.45
45:BV:67:LYS:HG3	45:BV:94:LYS:CD	2.46	0.45
41:BY:31:LEU:CD1	41:BY:99:THR:O	2.64	0.45
42:BZ:114:ASP:HB3	42:BZ:171:VAL:HG12	1.97	0.45
1:AA:1409:C:H42	1:AA:1491:G:H1	1.64	0.45
1:AA:126:G:H4'	1:AA:634:C:C2'	2.46	0.45
7:AD:25:ARG:C	7:AD:27:TYR:N	2.69	0.45
12:AI:67:GLY:O	12:AI:73:GLN:NE2	2.45	0.45
15:AL:69:TYR:HB2	15:AL:90:VAL:HG21	1.99	0.45
19:AP:20:VAL:HG11	19:AP:32:TYR:HB3	1.97	0.45
23:AT:45:GLN:HG2	23:AT:91:LEU:HD22	1.99	0.45
3:AW:34:G:OP1	3:AW:34:G:C8	2.64	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:37:LEU:CB	48:B0:68:VAL:CG1	2.93	0.45
46:B2:19:GLU:HG2	46:B2:23:LEU:CD2	2.45	0.45
47:B3:8:LEU:C	47:B3:9:VAL:HG13	2.36	0.45
49:B4:23:GLU:C	49:B4:25:MET:N	2.70	0.45
51:B6:33:ALA:C	51:B6:35:LEU:N	2.63	0.45
53:B8:60:LEU:CG	53:B8:64:ARG:HB2	2.42	0.45
26:BA:1106:G:H2'	26:BA:1107:G:C8	2.51	0.45
26:BA:1166:C:H2'	26:BA:1167:U:C6	2.51	0.45
26:BA:1174:A:N1	26:BA:1176:G:C8	2.83	0.45
26:BA:1341:U:O2'	26:BA:1342:A:P	2.74	0.45
26:BA:140:A:H8	40:BX:48:THR:HG21	1.81	0.45
26:BA:1618:A:OP1	26:BA:1618:A:H8	1.99	0.45
26:BA:1741:C:H2'	26:BA:1742:C:O4'	2.17	0.45
26:BA:1778:U:C6	26:BA:1784:A:C2	3.04	0.45
26:BA:227:A:N1	26:BA:2407:G:C8	2.84	0.45
26:BA:2430:A:H2'	26:BA:2431:U:H5'	1.96	0.45
26:BA:2447:G:C2	26:BA:2500:U:C5	3.03	0.45
26:BA:2454:G:C6	26:BA:2455:G:C5	3.03	0.45
26:BA:2536:G:N1	26:BA:2537:U:C2	2.85	0.45
26:BA:2570:G:H5'	26:BA:2571:C:OP2	2.16	0.45
26:BA:2570:G:C2'	26:BA:2571:C:C5	2.80	0.45
26:BA:2644:G:C8	26:BA:2644:G:C3'	2.99	0.45
26:BA:2666:C:O5'	26:BA:2666:C:H6	1.98	0.45
26:BA:2677:G:C4	26:BA:2678:C:C5	3.04	0.45
26:BA:2688:U:C2'	26:BA:2688:U:O2	2.55	0.45
26:BA:2782:G:C8	26:BA:2782:G:O5'	2.69	0.45
26:BA:2637:U:C2	26:BA:2782:G:N2	2.84	0.45
26:BA:2826:A:C2	26:BA:2827:C:C6	2.99	0.45
26:BA:2841:C:P	43:BR:53:HIS:HE1	2.39	0.45
26:BA:283:A:C2	26:BA:360:G:N1	2.85	0.45
26:BA:251:A:N6	26:BA:386:G:O6	2.41	0.45
26:BA:581:C:OP2	44:BU:33:ARG:NH1	2.50	0.45
26:BA:782:A:O2'	27:BD:229:MET:HA	2.17	0.45
26:BA:944:G:O2'	26:BA:945:A:OP2	2.22	0.45
26:BA:980:A:N3	26:BA:2037:G:O2'	2.45	0.45
27:BD:114:GLU:O	27:BD:115:ILE:HG23	2.17	0.45
27:BD:143:ILE:CG2	27:BD:153:LEU:HB2	2.43	0.45
27:BD:194:VAL:CG2	27:BD:195:GLY:N	2.69	0.45
28:BE:222:ARG:O	28:BE:227:ALA:CA	2.63	0.45
28:BE:68:VAL:HG13	28:BE:69:PRO:HD2	1.97	0.45
28:BE:81:VAL:O	28:BE:81:VAL:HG23	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:150:THR:CG2	29:BF:203:ALA:HB1	2.43	0.45
29:BF:220:THR:O	29:BF:222:ASP:N	2.50	0.45
30:BG:88:LEU:H	30:BG:89:PRO:HD3	1.80	0.45
31:BH:25:VAL:HG12	31:BH:78:VAL:CG2	2.38	0.45
32:BI:31:PHE:O	32:BI:34:GLY:N	2.50	0.45
33:BN:60:ARG:CD	33:BN:71:TYR:HE2	2.29	0.45
34:BO:105:GLU:CD	34:BO:105:GLU:H	2.20	0.45
35:BP:67:ARG:CD	35:BP:111:ALA:O	2.64	0.45
26:BA:2251:G:C4'	36:BQ:102:ARG:NH2	2.78	0.45
36:BQ:97:ASP:OD1	36:BQ:107:LYS:HD2	2.16	0.45
37:BS:86:LEU:HD21	37:BS:124:ASP:CB	2.46	0.45
37:BS:48:VAL:HG13	37:BS:55:ASP:OD2	2.16	0.45
44:BU:24:PHE:N	44:BU:24:PHE:CD1	2.81	0.45
45:BV:33:VAL:CG1	45:BV:34:GLU:H	2.21	0.45
45:BV:49:GLU:O	45:BV:54:TYR:OH	2.32	0.45
39:BW:85:VAL:HG13	39:BW:95:ILE:CD1	2.43	0.45
42:BZ:166:LEU:HD13	42:BZ:167:THR:N	2.31	0.45
1:AA:1034:G:H2'	1:AA:1035:A:C8	2.52	0.45
1:AA:1067:A:H3'	1:AA:1093:A:O3'	2.15	0.45
1:AA:1235:U:OP1	24:AU:3:LYS:CD	2.64	0.45
1:AA:1317:C:OP1	17:AN:16:PHE:HA	2.15	0.45
1:AA:1375:A:H5'	10:AG:28:ASN:HB3	1.99	0.45
1:AA:523:A:C2	15:AL:91:LYS:HB3	2.51	0.45
1:AA:531:U:H4'	1:AA:532:A:C5'	2.46	0.45
1:AA:126:G:O2'	1:AA:635:G:O4'	2.27	0.45
8:AE:102:ALA:O	8:AE:107:ARG:NH2	2.49	0.45
2:AV:27:C:H2'	2:AV:28:C:H6	1.81	0.45
3:AW:9:A:C6	3:AW:45:G:C4	3.04	0.45
46:B2:29:ASN:O	46:B2:30:ALA:C	2.53	0.45
49:B4:47:GLU:O	49:B4:72:LYS:O	2.34	0.45
54:B9:17:VAL:CG2	54:B9:26:ILE:HD12	2.46	0.45
26:BA:1530:G:O6	26:BA:1540:G:C6	2.70	0.45
26:BA:1598:C:OP1	40:BX:34:LYS:HG3	2.15	0.45
26:BA:1697:G:C3'	26:BA:1698:A:C5'	2.77	0.45
26:BA:1782:C:H5''	26:BA:1783:A:P	2.56	0.45
26:BA:184:C:C4	26:BA:213:A:N6	2.85	0.45
26:BA:2212:A:H1'	26:BA:2213:U:C4	2.52	0.45
26:BA:2219:G:HO2'	26:BA:2224:G:P	2.15	0.45
26:BA:2262:U:H3	26:BA:2278:A:H61	1.65	0.45
26:BA:2325:G:N3	26:BA:2326:C:C6	2.84	0.45
26:BA:2370:G:O2'	26:BA:2371:G:O5'	2.34	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2380:C:C5	26:BA:2381:C:C5	3.05	0.45
26:BA:825:C:C5'	26:BA:2428:G:O6	2.65	0.45
26:BA:2464:C:C2'	26:BA:2465:C:H6	2.21	0.45
26:BA:248:G:H21	26:BA:2431:U:C1'	2.29	0.45
26:BA:2589:A:N6	26:BA:2590:A:H62	2.14	0.45
26:BA:2643:G:C6	26:BA:2644:G:C2	3.04	0.45
26:BA:2684:U:C1'	34:BO:70:ARG:NH1	2.79	0.45
26:BA:2766:G:C5'	26:BA:2767:C:P	3.02	0.45
26:BA:2776:A:N3	26:BA:2778:A:C4	2.77	0.45
26:BA:2792:G:N2	26:BA:2804:C:C4	2.83	0.45
26:BA:2828:C:O2	26:BA:2829:C:C6	2.70	0.45
26:BA:2857:G:C2	26:BA:2859:G:OP2	2.69	0.45
26:BA:358:U:C3'	26:BA:359:A:H5'	2.40	0.45
26:BA:491:G:H2'	26:BA:492:A:C8	2.52	0.45
26:BA:698:C:O2'	26:BA:734:A:N6	2.49	0.45
26:BA:72:U:O5'	40:BX:2:TRP:CE2	2.70	0.45
26:BA:861:A:H62	26:BA:916:G:H21	1.64	0.45
26:BA:946:G:H2'	26:BA:947:G:O4'	2.15	0.45
27:BD:146:LYS:CB	27:BD:149:ARG:HG2	2.47	0.45
27:BD:141:HIS:CB	27:BD:154:VAL:HG11	2.41	0.45
27:BD:80:ILE:CB	27:BD:82:TYR:HE1	2.15	0.45
28:BE:102:ASP:OD1	28:BE:104:PHE:HZ	2.00	0.45
30:BG:74:THR:C	30:BG:75:LEU:HG	2.36	0.45
31:BH:41:THR:C	31:BH:52:THR:HG21	2.36	0.45
31:BH:55:SER:OG	31:BH:57:GLU:CG	2.64	0.45
32:BI:4:ILE:O	32:BI:5:PHE:C	2.51	0.45
55:BK:132:ALA:HB1	55:BK:137:ILE:CG2	2.46	0.45
55:BK:52:MET:SD	55:BK:81:LYS:HB2	2.55	0.45
33:BN:15:ARG:HA	33:BN:43:ARG:HG2	1.83	0.45
33:BN:65:ASN:CB	33:BN:68:GLY:O	2.64	0.45
34:BO:39:VAL:HG12	34:BO:40:VAL:N	2.30	0.45
34:BO:7:ARG:HH21	34:BO:44:LYS:HD2	1.75	0.45
36:BQ:64:ALA:HA	36:BQ:142:LYS:HG2	1.98	0.45
36:BQ:47:GLU:OE1	36:BQ:47:GLU:C	2.54	0.45
43:BR:38:VAL:O	43:BR:39:PRO:O	2.33	0.45
37:BS:86:LEU:HB2	37:BS:87:LEU:HD22	1.98	0.45
44:BU:32:TYR:N	44:BU:32:TYR:HD2	2.08	0.45
44:BU:17:VAL:HG13	44:BU:39:LEU:HD12	1.98	0.45
44:BU:55:ARG:HA	44:BU:58:ARG:CD	2.46	0.45
45:BV:74:TYR:CG	45:BV:86:HIS:O	2.56	0.45
39:BW:55:ALA:CA	39:BW:107:LEU:HD11	2.35	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BW:81:ALA:CA	39:BW:82:LEU:HD22	2.46	0.45
40:BX:32:ALA:HA	40:BX:36:GLU:CG	2.42	0.45
26:BA:140:A:C8	40:BX:48:THR:CG2	3.00	0.45
40:BX:28:VAL:CG2	40:BX:62:LYS:HG2	2.46	0.45
41:BY:55:PHE:HE2	41:BY:89:ARG:NH2	2.00	0.45
1:AA:1227:A:OP1	22:AS:80:TYR:CZ	2.70	0.45
1:AA:1240:U:H2'	10:AG:32:ARG:HH21	1.81	0.45
1:AA:1490:C:C6	1:AA:1490:C:H5''	2.48	0.45
1:AA:411:A:H2'	1:AA:413:G:H1'	1.98	0.45
1:AA:451:A:H1'	1:AA:452:A:C8	2.52	0.45
1:AA:935:A:H2'	1:AA:936:C:C6	2.51	0.45
5:AB:69:LEU:HD23	5:AB:91:PRO:HB2	1.98	0.45
13:AJ:40:LEU:HB3	13:AJ:41:PRO:HD2	1.97	0.45
1:AA:1329:A:H5'	16:AM:26:GLY:H	1.81	0.45
17:AN:39:LEU:HD22	17:AN:43:CYS:HB2	1.99	0.45
48:B0:37:LEU:HG	48:B0:71:ASN:ND2	2.32	0.45
46:B2:59:ILE:O	46:B2:60:GLN:O	2.34	0.45
49:B4:42:PHE:CG	49:B4:43:TRP:N	2.84	0.45
51:B6:8:ILE:HG21	51:B6:30:ASN:HB2	1.97	0.45
26:BA:1619:G:H21	52:B7:1:MET:HB3	1.81	0.45
54:B9:11:CYS:N	54:B9:14:CYS:SG	2.89	0.45
26:BA:1149:G:H2'	26:BA:1150:C:O4'	2.16	0.45
26:BA:1263:U:O2'	50:B5:16:ARG:NH2	2.50	0.45
26:BA:1267:U:C5	26:BA:2012:G:N2	2.85	0.45
26:BA:126:A:N7	26:BA:127:A:C6	2.84	0.45
26:BA:139:G:C3'	26:BA:141(A):C:H1'	2.47	0.45
26:BA:1525:G:H2'	26:BA:1526:G:H5'	1.98	0.45
26:BA:1628:G:H1	26:BA:1638:C:H42	1.63	0.45
26:BA:1779:U:H3	26:BA:1785:A:N6	2.14	0.45
26:BA:1853:A:H2'	26:BA:1854:A:H8	1.78	0.45
26:BA:2056:G:OP2	26:BA:2504:U:H5''	2.17	0.45
26:BA:2292:C:C2	26:BA:2293:C:H6	2.18	0.45
26:BA:2331:G:N7	26:BA:2332:U:O4	2.48	0.45
26:BA:245:G:H4'	35:BP:55:GLN:HA	1.98	0.45
26:BA:2512:C:O2	26:BA:2513:G:H1'	2.16	0.45
26:BA:2570:G:N2	26:BA:2571:C:N1	2.65	0.45
26:BA:2603:G:O2'	26:BA:2604:U:H5'	2.16	0.45
26:BA:2617:C:C2'	26:BA:2618:G:O5'	2.45	0.45
26:BA:2657:A:H2'	26:BA:2658:C:C5'	2.42	0.45
26:BA:2718:G:C2	26:BA:2719:G:C4	3.04	0.45
26:BA:446:G:P	44:BU:3:ARG:HB2	2.57	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:671:C:N3	26:BA:809:G:N2	2.65	0.45
26:BA:685:A:H5''	26:BA:686:G:H21	1.81	0.45
26:BA:725:G:N1	26:BA:726:G:N2	2.65	0.45
26:BA:70:G:H1'	26:BA:73:A:H1'	1.98	0.45
26:BA:733:G:O6	26:BA:761:A:H2'	2.16	0.45
26:BA:692:C:H42	26:BA:770:G:H1	1.64	0.45
26:BA:566:U:O2'	26:BA:808:G:H5''	2.16	0.45
28:BE:101:THR:O	28:BE:102:ASP:O	2.33	0.45
28:BE:224:GLY:O	28:BE:225:LYS:HG3	2.15	0.45
26:BA:2620:C:C5'	28:BE:252:GLN:HG2	2.45	0.45
29:BF:214:THR:O	29:BF:216:SER:CA	2.61	0.45
31:BH:113:GLU:OE1	31:BH:114:ILE:C	2.55	0.45
31:BH:40:MET:HE1	31:BH:42:ILE:N	2.31	0.45
32:BI:117:LEU:CD2	32:BI:121:ILE:HD11	2.47	0.45
32:BI:115:ILE:CA	32:BI:131:VAL:HG13	2.47	0.45
32:BI:37:ILE:HG23	32:BI:38:GLU:N	2.02	0.45
55:BK:93:LYS:CA	55:BK:96:ILE:CD1	2.73	0.45
33:BN:42:GLU:O	33:BN:43:ARG:C	2.53	0.45
33:BN:46:ILE:HD11	33:BN:132:LEU:HD13	1.86	0.45
26:BA:2640:G:HO2'	33:BN:70:PHE:HD2	1.63	0.45
33:BN:77:GLY:C	33:BN:79:PHE:N	2.55	0.45
36:BQ:124:ALA:HB2	36:BQ:136:TRP:CD1	2.51	0.45
36:BQ:140:TYR:CB	36:BQ:147:VAL:HG11	2.47	0.45
36:BQ:52:LYS:HA	36:BQ:53:PRO:HD3	1.82	0.45
26:BA:535:C:H5'	44:BU:53:LYS:HE3	1.96	0.45
45:BV:65:ARG:O	45:BV:93:ILE:CG1	2.65	0.45
39:BW:106:ILE:HG22	39:BW:107:LEU:N	2.32	0.45
39:BW:13:SER:O	39:BW:14:PRO:O	2.35	0.45
39:BW:15:ARG:O	39:BW:18:ARG:CB	2.62	0.45
26:BA:1614:A:C6	39:BW:88:ARG:HG3	2.51	0.45
40:BX:23:LYS:O	40:BX:68:LEU:HD21	2.07	0.45
40:BX:37:VAL:O	40:BX:38:ALA:O	2.33	0.45
41:BY:47:THR:HG23	41:BY:100:ASP:HB2	1.93	0.45
41:BY:30:ASP:CG	41:BY:31:LEU:HG	2.37	0.45
41:BY:71:VAL:CG1	41:BY:72:ILE:N	2.39	0.45
42:BZ:129:ARG:CA	42:BZ:129:ARG:NE	2.62	0.45
42:BZ:8:ARG:O	42:BZ:9:THR:CG2	2.64	0.45
1:AA:1261:A:H5'	1:AA:1284:C:P	2.57	0.45
1:AA:1236:A:H5'	1:AA:1304:G:H5''	1.98	0.45
1:AA:1314:C:H41	22:AS:4:SER:CB	2.30	0.45
1:AA:1443:G:H8	1:AA:1443:G:H5'	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:190(F):G:N2	1:AA:263:A:O2'	2.49	0.45
1:AA:731:G:OP1	1:AA:766:A:H1'	2.15	0.45
1:AA:1057:G:H5''	6:AC:154:SER:HB2	1.99	0.45
7:AD:20:TYR:HA	7:AD:31:CYS:SG	2.56	0.45
12:AI:9:ARG:HB3	12:AI:104:ARG:HE	1.81	0.45
21:AR:62:GLU:HB3	21:AR:66:LEU:HD23	1.98	0.45
23:AT:30:LYS:HA	23:AT:33:ILE:HD12	1.99	0.45
1:AA:1340:A:P	3:AW:34:G:HO2'	2.39	0.45
48:B0:46:LYS:HE2	48:B0:58:THR:C	2.37	0.45
48:B0:49:GLN:O	48:B0:72:LYS:O	2.34	0.45
47:B3:40:THR:HG23	47:B3:43:ILE:CG1	2.37	0.45
47:B3:46:ASN:O	47:B3:47:VAL:C	2.54	0.45
49:B4:31:ILE:HG22	49:B4:32:HIS:H	1.80	0.45
52:B7:20:ALA:O	52:B7:23:LYS:N	2.49	0.45
26:BA:124:G:OP1	26:BA:1376:C:C1'	2.63	0.45
26:BA:1275:A:H61	43:BR:19:ALA:HB2	1.77	0.45
26:BA:1406:U:H2'	26:BA:1407:C:H6	1.80	0.45
26:BA:139:G:H3'	26:BA:141(A):C:H1'	1.97	0.45
26:BA:1429:G:C2	26:BA:1568:G:N1	2.84	0.45
26:BA:1779:U:C3'	26:BA:1779:U:C6	2.99	0.45
26:BA:1790:C:C5'	26:BA:1828:G:H1	2.29	0.45
26:BA:1827:C:C5'	26:BA:1971:A:H4'	2.24	0.45
26:BA:197:A:C4	26:BA:2430:A:N7	2.84	0.45
26:BA:2215:G:C2'	26:BA:2216:G:C5'	2.94	0.45
26:BA:2218:G:C6	26:BA:2219:G:C5	3.04	0.45
26:BA:2292:C:C4	26:BA:2293:C:H5	2.23	0.45
26:BA:389:G:O4'	26:BA:2413:G:C4'	2.65	0.45
26:BA:2458:G:O2'	26:BA:2459:A:N7	2.45	0.45
26:BA:2463:C:C2'	26:BA:2464:C:O5'	2.65	0.45
26:BA:2627:G:H8	26:BA:2627:G:C5'	2.20	0.45
26:BA:2692:C:H1'	26:BA:2847:U:O2'	2.17	0.45
26:BA:2734:A:C5	26:BA:2735:G:N9	2.84	0.45
26:BA:2864:G:O2'	26:BA:2865:U:C6	2.70	0.45
26:BA:32:C:H2'	26:BA:33:U:C6	2.51	0.45
26:BA:775:G:H22	26:BA:787:U:C3'	2.30	0.45
26:BA:974:G:O6	45:BV:80:TYR:CE2	2.69	0.45
26:BA:995:C:N1	44:BU:57:PHE:CE2	2.85	0.45
27:BD:106:PRO:CB	27:BD:141:HIS:NE2	2.74	0.45
27:BD:146:LYS:HD2	27:BD:147:PRO:CG	2.45	0.45
26:BA:1799:G:N2	27:BD:153:LEU:HD11	2.29	0.45
29:BF:163:HIS:HA	29:BF:166:ILE:HD11	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:194:PHE:CZ	29:BF:204:ALA:O	2.70	0.45
30:BG:101:THR:O	30:BG:103:ASN:CG	2.54	0.45
30:BG:25:MET:CE	30:BG:128:LEU:HB3	2.47	0.45
26:BA:2745:C:O2'	31:BH:142:GLU:OE2	2.33	0.45
31:BH:35:THR:C	31:BH:36:PHE:CD1	2.89	0.45
32:BI:110:LEU:HD11	32:BI:133:LEU:HD22	1.99	0.45
32:BI:21:VAL:HG13	32:BI:30:LEU:HD11	1.93	0.45
32:BI:81:ALA:N	32:BI:146:THR:O	2.49	0.45
55:BK:104:GLN:O	55:BK:107:GLU:HG3	2.16	0.45
55:BK:89:SER:HB2	55:BK:95:LYS:CG	2.44	0.45
33:BN:79:PHE:O	33:BN:83:ILE:HG12	2.16	0.45
33:BN:90:LYS:HZ2	33:BN:95:ARG:NH2	2.15	0.45
37:BS:35:VAL:O	37:BS:45:ALA:CB	2.64	0.45
25:BB:51:G:OP2	37:BS:72:GLU:CD	2.54	0.45
44:BU:72:HIS:CE1	44:BU:107:LYS:HA	2.50	0.45
44:BU:96:ALA:O	44:BU:106:PHE:HE1	2.00	0.45
45:BV:61:VAL:CG1	45:BV:95:ILE:CG2	2.41	0.45
39:BW:75:TYR:CZ	39:BW:104:THR:HG21	2.52	0.45
41:BY:71:VAL:CG1	41:BY:91:LEU:HB2	2.44	0.45
41:BY:28:SER:N	41:BY:99:THR:OG1	2.49	0.45
42:BZ:19:ILE:HD12	42:BZ:19:ILE:N	2.27	0.45
42:BZ:69:VAL:CG2	42:BZ:82:ASP:H	2.15	0.45
1:AA:1298:C:H5''	1:AA:1299:A:OP1	2.16	0.45
1:AA:555:C:H5''	15:AL:20:LYS:NZ	2.31	0.45
5:AB:153:ARG:HH22	5:AB:156:LYS:HB2	1.82	0.45
6:AC:18:TRP:HB3	6:AC:20:SER:O	2.16	0.45
10:AG:64:GLN:HE21	10:AG:68:ASN:HD21	1.64	0.45
15:AL:32:PHE:HB3	15:AL:84:LEU:HD21	1.98	0.45
16:AM:92:HIS:CG	16:AM:98:VAL:CG2	2.87	0.45
1:AA:1317:C:O2'	22:AS:10:PHE:CG	2.69	0.45
48:B0:51:VAL:O	48:B0:51:VAL:CG1	2.63	0.45
46:B2:58:THR:O	46:B2:60:GLN:N	2.49	0.45
47:B3:21:ALA:O	47:B3:25:ALA:N	2.43	0.45
51:B6:49:VAL:CG1	51:B6:50:PHE:N	2.80	0.45
26:BA:54:G:C2'	52:B7:35:ARG:HH22	2.30	0.45
54:B9:24:LEU:CG	54:B9:35:ARG:HG3	2.47	0.45
26:BA:1081:U:OP1	55:BK:126:LYS:HD3	2.17	0.45
26:BA:1252:G:H8	26:BA:1253:A:C8	2.35	0.45
26:BA:136:G:H3'	26:BA:137:C:H4'	1.98	0.45
26:BA:146:G:H2'	26:BA:147:U:O4'	2.16	0.45
26:BA:1992:G:N2	26:BA:1995:U:H5	2.15	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:965:C:C2'	26:BA:2273:A:C2	3.00	0.45
26:BA:2317:C:N4	26:BA:2318:G:C6	2.85	0.45
26:BA:2333:A:H1'	26:BA:2335:A:N1	2.29	0.45
26:BA:2416:C:N3	26:BA:2417:C:H5	2.10	0.45
26:BA:2494:G:C6	26:BA:2495:G:N7	2.84	0.45
26:BA:2714:G:C2'	26:BA:2715:C:H5'	2.46	0.45
26:BA:2717:G:C2	26:BA:2718:G:N9	2.77	0.45
26:BA:2757:A:H2'	26:BA:2758:A:O4'	2.17	0.45
26:BA:2735:G:O6	26:BA:2770:G:C2	2.68	0.45
26:BA:27:G:C8	26:BA:27:G:C3'	3.00	0.45
26:BA:2793:G:N2	26:BA:2803:C:C2	2.83	0.45
26:BA:2821:A:H2	26:BA:2822:G:C6	2.28	0.45
26:BA:2828:C:N4	26:BA:2829:C:N4	2.65	0.45
26:BA:2898:U:C4	26:BA:2899:G:N7	2.85	0.45
26:BA:388:G:P	49:B4:29:PRO:CD	3.05	0.45
26:BA:511:U:OP2	26:BA:512:G:C6	2.70	0.45
26:BA:923:C:C6	48:B0:26:PHE:HE2	2.28	0.45
27:BD:126:GLY:C	27:BD:127:ASN:O	2.53	0.45
27:BD:152:GLN:O	27:BD:153:LEU:HD13	2.17	0.45
27:BD:161:ALA:O	27:BD:162:GLN:NE2	2.50	0.45
27:BD:131:LEU:CB	27:BD:171:VAL:HG11	2.46	0.45
27:BD:170:TYR:O	27:BD:182:MET:SD	2.75	0.45
28:BE:210:THR:C	28:BE:216:ARG:NH2	2.70	0.45
29:BF:115:LEU:HG	29:BF:246:ARG:HH12	1.80	0.45
26:BA:321:G:C4'	29:BF:206:ASN:CB	2.90	0.45
29:BF:238:SER:CA	29:BF:241:ALA:HB2	2.45	0.45
30:BG:102:GLY:C	30:BG:134:LEU:HG	2.37	0.45
30:BG:52:THR:HB	30:BG:67:ASP:O	2.16	0.45
30:BG:83:PHE:O	30:BG:87:ALA:HB3	2.16	0.45
30:BG:95:THR:CG2	30:BG:96:SER:N	2.76	0.45
55:BK:131:THR:C	55:BK:133:LYS:N	2.70	0.45
55:BK:138:GLU:HB3	55:BK:140:VAL:HG23	1.97	0.45
55:BK:32:GLY:O	55:BK:60:VAL:CG2	2.64	0.45
33:BN:5:GLU:CA	33:BN:109:TYR:CE2	2.97	0.45
34:BO:1:MET:HB3	34:BO:67:ARG:HG3	1.99	0.45
34:BO:86:ILE:HG21	34:BO:94:ARG:NE	2.32	0.45
36:BQ:50:VAL:HG23	36:BQ:121:ASP:OD1	2.17	0.45
43:BR:24:GLN:CB	43:BR:44:LEU:HD21	2.46	0.45
43:BR:39:PRO:O	43:BR:41:ALA:C	2.54	0.45
43:BR:73:VAL:HG12	43:BR:77:ARG:NE	2.27	0.45
43:BR:55:ALA:CA	43:BR:80:PHE:CE1	2.92	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:81:ALA:CB	37:BS:118:ILE:H	2.28	0.45
37:BS:30:GLY:O	37:BS:31:LYS:CG	2.65	0.45
37:BS:83:LEU:O	37:BS:87:LEU:HD23	2.16	0.45
44:BU:109:LEU:O	44:BU:113:SER:OG	2.33	0.45
44:BU:114:ARG:HA	44:BU:117:ARG:HD2	1.99	0.45
44:BU:25:TRP:HB3	44:BU:28:ARG:CZ	2.45	0.45
44:BU:60:LEU:H	44:BU:60:LEU:HD23	1.82	0.45
44:BU:63:GLN:O	44:BU:65:ILE:C	2.54	0.45
45:BV:46:VAL:CG1	45:BV:46:VAL:O	2.58	0.45
45:BV:71:ILE:O	45:BV:88:GLN:HG3	2.16	0.45
26:BA:494:G:C4'	39:BW:6:ILE:CG2	2.69	0.45
40:BX:52:VAL:C	40:BX:53:ASN:ND2	2.70	0.45
41:BY:2:LYS:O	41:BY:3:GLN:HG3	2.16	0.45
41:BY:42:VAL:O	41:BY:112:LEU:HB3	2.17	0.45
41:BY:75:GLU:O	41:BY:76:ASP:C	2.54	0.45
41:BY:74:VAL:O	41:BY:77:VAL:HG23	2.16	0.45
42:BZ:64:ALA:HB3	42:BZ:84:TYR:O	2.14	0.45
1:AA:1309:G:OP2	16:AM:99:ARG:NH1	2.49	0.45
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.15	0.45
1:AA:323:U:O4	1:AA:327:A:N7	2.50	0.45
1:AA:340:U:H2'	1:AA:341:C:C6	2.52	0.45
1:AA:501:C:H6	1:AA:501:C:H3'	1.82	0.45
1:AA:544:G:C6	1:AA:545:C:C4	3.05	0.45
1:AA:828:A:H2'	1:AA:829:G:O4'	2.15	0.45
7:AD:191:ARG:NH2	7:AD:196:LEU:O	2.47	0.45
3:AW:40:C:C4'	10:AG:148:ASN:OD1	2.65	0.45
11:AH:11:THR:HA	11:AH:14:ARG:HD2	1.99	0.45
1:AA:538:G:OP1	15:AL:113:ARG:HG2	2.17	0.45
17:AN:12:ARG:O	17:AN:13:THR:C	2.54	0.45
1:AA:377:G:OP1	19:AP:5:ARG:NH1	2.46	0.45
1:AA:1318:A:H4'	22:AS:10:PHE:HB3	1.98	0.45
23:AT:76:ALA:HA	23:AT:79:ARG:NH1	2.31	0.45
46:B2:55:ARG:HD2	46:B2:55:ARG:N	2.32	0.45
47:B3:6:VAL:CA	47:B3:55:ARG:O	2.64	0.45
53:B8:16:ILE:HG23	53:B8:22:VAL:HG22	1.93	0.45
26:BA:1163:G:C6	26:BA:1164:G:N7	2.85	0.45
26:BA:125:G:H3'	52:B7:19:ARG:HH12	1.68	0.45
26:BA:1609:A:N3	26:BA:1609:A:H2'	2.31	0.45
26:BA:2095:C:N3	26:BA:2194:G:C6	2.84	0.45
26:BA:2228:G:C5	26:BA:2229:C:C2	3.04	0.45
26:BA:2228:G:C5	26:BA:2229:C:N1	2.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2250:G:C8	26:BA:2496:C:OP1	2.69	0.45
26:BA:2280:G:N1	26:BA:2281:C:C4	2.85	0.45
26:BA:2283:C:C4	26:BA:2284:C:C1'	2.99	0.45
26:BA:2364:C:C5'	48:B0:38:VAL:HG11	2.38	0.45
26:BA:2494:G:N2	26:BA:2495:G:C1'	2.77	0.45
26:BA:2531:A:C6	26:BA:2532:G:C4	3.04	0.45
26:BA:2708:G:H2'	26:BA:2709:G:H8	1.82	0.45
26:BA:270(O):U:O4	32:BI:53:LYS:NZ	2.49	0.45
26:BA:2731:G:H1	26:BA:2732:G:N2	2.15	0.45
26:BA:2740:A:N9	26:BA:2741:A:C8	2.82	0.45
26:BA:2741:A:C2'	26:BA:2742:C:C4'	2.93	0.45
26:BA:2787:C:O2	26:BA:2787:C:C2'	2.62	0.45
26:BA:2844:G:N1	26:BA:2845:G:C4	2.85	0.45
26:BA:2852:G:C4	26:BA:2853:C:N3	2.84	0.45
26:BA:337:C:OP1	41:BY:21:LYS:O	2.34	0.45
26:BA:220:G:H22	26:BA:427:U:H2'	1.82	0.45
26:BA:839:U:H2'	26:BA:840:C:C6	2.52	0.45
25:BB:16:G:OP2	25:BB:16:G:H3'	2.17	0.45
27:BD:161:ALA:HA	27:BD:162:GLN:HE22	1.78	0.45
27:BD:202:LYS:HA	27:BD:203:PRO:HD3	1.87	0.45
27:BD:204:PHE:O	27:BD:205:VAL:O	2.35	0.45
27:BD:211:HIS:O	27:BD:214:MET:N	2.43	0.45
27:BD:70:LYS:CB	27:BD:73:ILE:HD11	2.38	0.45
26:BA:2679:A:H1'	28:BE:300:VAL:CG1	2.47	0.45
28:BE:201:VAL:HA	28:BE:311:PHE:HA	1.98	0.45
28:BE:311:PHE:O	28:BE:312:ARG:HG3	2.16	0.45
28:BE:42:ALA:HA	28:BE:311:PHE:CD2	2.51	0.45
28:BE:83:LEU:CD1	28:BE:178:LEU:HD23	2.47	0.45
29:BF:118:THR:O	29:BF:119:ALA:C	2.55	0.45
29:BF:213:ALA:HB2	29:BF:218:VAL:HG13	1.33	0.45
29:BF:200:PRO:HD3	29:BF:214:THR:CG2	2.47	0.45
30:BG:49:PRO:CD	30:BG:73:VAL:CG2	2.91	0.45
31:BH:36:PHE:O	31:BH:37:HIS:C	2.54	0.45
31:BH:84:LYS:CG	31:BH:140:VAL:CG1	2.86	0.45
31:BH:85:ALA:O	31:BH:148:ARG:CZ	2.56	0.45
31:BH:97:LYS:C	31:BH:98:GLN:HG3	2.20	0.45
32:BI:141:LEU:HD22	32:BI:142:LYS:HG2	1.98	0.45
55:BK:112:LYS:O	55:BK:114:PRO:HD2	2.09	0.45
33:BN:8:ALA:CB	33:BN:11:ILE:HD11	2.46	0.45
35:BP:92:ASP:O	35:BP:119:THR:O	2.34	0.45
36:BQ:45:GLN:CD	36:BQ:153:PRO:CA	2.85	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:118:ILE:CG2	37:BS:119:GLN:H	2.23	0.45
44:BU:95:LEU:CD2	44:BU:95:LEU:N	2.73	0.45
45:BV:39:PHE:CZ	45:BV:42:GLY:CA	2.97	0.45
39:BW:3:ALA:C	39:BW:4:LYS:HG3	2.36	0.45
39:BW:5:ALA:HB1	39:BW:50:VAL:HG13	1.99	0.45
39:BW:81:ALA:C	39:BW:82:LEU:CD2	2.66	0.45
40:BX:29:ASP:CG	40:BX:30:ASP:OD1	2.55	0.45
40:BX:33:SER:C	40:BX:37:VAL:HG21	2.35	0.45
40:BX:50:GLU:CG	40:BX:67:ARG:O	2.63	0.45
40:BX:58:MET:C	40:BX:59:ASP:CG	2.76	0.45
41:BY:19:ARG:O	41:BY:22:GLN:CB	2.64	0.45
41:BY:31:LEU:CD2	41:BY:31:LEU:N	2.40	0.45
41:BY:54:ASP:C	41:BY:56:ALA:N	2.69	0.45
42:BZ:168:VAL:O	42:BZ:169:VAL:CB	2.59	0.45
42:BZ:62:PHE:CB	42:BZ:85:MET:SD	3.01	0.45
1:AA:1216:G:H5''	17:AN:5:ALA:CB	2.46	0.45
1:AA:1525:G:H2'	1:AA:1526:G:O4'	2.16	0.45
1:AA:356:A:H4'	1:AA:388:G:H22	1.80	0.45
1:AA:409:G:OP1	7:AD:25:ARG:CB	2.63	0.45
1:AA:501:C:OP2	15:AL:124:LYS:HD3	2.17	0.45
1:AA:62:U:H5''	1:AA:385:C:O2'	2.17	0.45
1:AA:942:G:H2'	1:AA:943:U:C6	2.52	0.45
7:AD:12:CYS:HB3	7:AD:31:CYS:HB3	1.76	0.45
14:AK:24:SER:C	14:AK:26:ASN:H	2.19	0.45
48:B0:46:LYS:CE	48:B0:60:PHE:H	2.30	0.45
46:B2:52:ALA:HA	46:B2:55:ARG:HD3	1.98	0.45
26:BA:397:G:P	49:B4:10:VAL:HG11	2.57	0.45
50:B5:42:SER:O	50:B5:43:HIS:CG	2.69	0.45
52:B7:21:ARG:HB3	52:B7:31:LEU:HD12	1.78	0.45
54:B9:17:VAL:HG21	54:B9:26:ILE:HD12	1.98	0.45
54:B9:14:CYS:HA	54:B9:26:ILE:O	2.17	0.45
54:B9:29:ASN:CB	54:B9:32:HIS:CE1	3.00	0.45
26:BA:1227:A:C8	26:BA:1227:A:C3'	3.00	0.45
26:BA:1602:U:O5'	26:BA:1602:U:C2	2.70	0.45
26:BA:171:G:H2'	26:BA:172:C:C5	2.51	0.45
26:BA:1826:G:C5	26:BA:1827:C:C5	3.05	0.45
26:BA:182:A:H2'	26:BA:183:C:C6	2.52	0.45
2:AV:25:C:O2'	26:BA:1922:G:O3'	2.23	0.45
26:BA:2100:G:N3	26:BA:2190:G:C2	2.85	0.45
26:BA:2234:G:C3'	26:BA:2235:G:H5'	2.44	0.45
26:BA:2279:G:C4	26:BA:2280:G:N7	2.85	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2290:G:C2	26:BA:2291:U:O2	2.70	0.45
26:BA:2296:U:C3'	26:BA:2296:U:C6	2.99	0.45
26:BA:2310:A:C2	30:BG:57:THR:OG1	2.69	0.45
26:BA:641:C:O2	26:BA:2350:C:OP1	2.33	0.45
26:BA:2353:G:C6	26:BA:2364:C:N4	2.71	0.45
26:BA:2392:A:C3'	26:BA:2393:A:C5'	2.94	0.45
26:BA:2489:G:C6	26:BA:2490:G:C6	3.04	0.45
26:BA:2514:U:O4'	28:BE:247:ARG:NH1	2.49	0.45
26:BA:2618:G:O2'	26:BA:2619:C:P	2.66	0.45
26:BA:2645:G:C1'	26:BA:2645:G:OP2	2.63	0.45
26:BA:270(L):U:H4'	26:BA:270(M):U:OP1	2.16	0.45
26:BA:2723:C:O2'	26:BA:2724:C:H5'	2.16	0.45
26:BA:2737:G:C2'	26:BA:2738:A:H8	2.18	0.45
26:BA:2762:G:C4	26:BA:2763:G:N7	2.85	0.45
26:BA:2771:C:H42	26:BA:2772:C:N4	2.15	0.45
26:BA:2630:G:O6	26:BA:2788:C:N3	2.50	0.45
26:BA:2844:G:C2	26:BA:2845:G:N9	2.85	0.45
26:BA:270:A:C6	26:BA:370:G:H1'	2.51	0.45
26:BA:528:A:C8	26:BA:528:A:H3'	2.51	0.45
26:BA:551:G:C4'	26:BA:1220:A:C2	2.97	0.45
26:BA:611:C:O2	26:BA:617:G:C2	2.70	0.45
26:BA:797:C:H5''	29:BF:57:PRO:CB	2.34	0.45
26:BA:827:U:H4'	26:BA:828:U:O2	2.17	0.45
26:BA:992:C:H2'	26:BA:993:G:H5''	1.99	0.45
25:BB:105:G:H2'	25:BB:106:G:C8	2.47	0.45
25:BB:29:A:OP2	37:BS:41:LYS:HB2	2.17	0.45
27:BD:158:GLY:C	27:BD:194:VAL:HG13	2.36	0.45
27:BD:211:HIS:O	27:BD:212:HIS:C	2.53	0.45
27:BD:213:LYS:CG	27:BD:215:LYS:CA	2.94	0.45
27:BD:77:VAL:O	27:BD:111:VAL:O	2.35	0.45
28:BE:206:LYS:CA	28:BE:257:GLY:O	2.64	0.45
29:BF:144:PHE:HD2	29:BF:156:LEU:CD1	2.25	0.45
26:BA:2316:C:C3'	30:BG:151:ILE:CD1	2.84	0.45
30:BG:44:ILE:O	30:BG:83:PHE:HE2	1.86	0.45
31:BH:10:ILE:HG22	31:BH:14:VAL:CG2	2.42	0.45
31:BH:120:LEU:HA	31:BH:121:GLU:OE1	2.12	0.45
31:BH:34:ARG:HG2	31:BH:35:THR:N	2.32	0.45
32:BI:133:LEU:H	32:BI:138:THR:HB	1.80	0.45
32:BI:1:MET:HE3	32:BI:23:ASP:CA	2.47	0.45
33:BN:21:ARG:O	33:BN:22:VAL:C	2.55	0.45
37:BS:76:GLY:O	37:BS:83:LEU:HD12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:15:LYS:HG2	44:BU:19:LYS:CE	2.47	0.45
44:BU:33:ARG:HG2	44:BU:34:ASN:N	2.24	0.45
44:BU:76:TYR:O	44:BU:80:ILE:HD11	1.95	0.45
45:BV:11:GLN:OE1	45:BV:22:VAL:HG23	2.15	0.45
45:BV:54:TYR:O	45:BV:56:VAL:HB	2.17	0.45
45:BV:34:GLU:N	45:BV:63:HIS:CE1	2.85	0.45
41:BY:109:GLU:O	41:BY:109:GLU:CG	2.65	0.45
41:BY:51:LEU:C	41:BY:51:LEU:CD2	2.85	0.45
42:BZ:152:ILE:HG22	42:BZ:153:LYS:H	1.82	0.45
1:AA:1270:C:HO2'	1:AA:1313:U:HO2'	1.65	0.45
1:AA:1260:C:C1'	1:AA:1283:G:HO2'	2.27	0.45
1:AA:1224:G:C6	1:AA:1322:C:C4'	2.99	0.45
1:AA:160:A:H1'	1:AA:344:A:H62	1.82	0.45
1:AA:450:G:N7	1:AA:481:G:C6	2.85	0.45
1:AA:557:G:H5''	1:AA:558:G:OP2	2.17	0.45
1:AA:766:A:C8	1:AA:814:A:N6	2.85	0.45
1:AA:786:G:C2	1:AA:787:A:H1'	2.51	0.45
6:AC:156:ARG:HD3	6:AC:193:TYR:O	2.16	0.45
8:AE:20:GLN:OE1	8:AE:21:ALA:N	2.49	0.45
14:AK:103:LEU:O	14:AK:104:GLN:C	2.55	0.45
16:AM:84:ILE:HG13	16:AM:85:GLY:N	2.31	0.45
19:AP:7:ALA:N	19:AP:18:ARG:H	2.14	0.45
24:AU:20:LYS:HG3	24:AU:21:TYR:N	2.32	0.45
3:AW:37:YYG:H192	10:AG:78:ARG:O	2.16	0.45
3:AW:9:A:C4	3:AW:45:G:N3	2.85	0.45
46:B2:29:ASN:C	46:B2:34:GLN:CD	2.71	0.45
49:B4:14:ILE:HD11	49:B4:39:VAL:HB	1.97	0.45
51:B6:22:TYR:O	51:B6:23:THR:CB	2.65	0.45
26:BA:1155:A:O2'	26:BA:1156:A:H2'	2.17	0.45
26:BA:51:G:O2'	26:BA:119:A:C6	2.66	0.45
26:BA:1668:A:HO2'	26:BA:1669:A:P	2.40	0.45
26:BA:1680:U:O2	26:BA:1764:G:O5'	2.35	0.45
26:BA:1362:C:O2'	26:BA:1810:A:O2'	2.30	0.45
26:BA:1991:U:C3'	26:BA:1991:U:C6	2.99	0.45
26:BA:2022:U:O4	50:B5:9:LYS:HD3	2.17	0.45
26:BA:2264:C:N4	26:BA:2277:G:C6	2.83	0.45
26:BA:2314:C:H2'	26:BA:2315:G:O5'	2.14	0.45
26:BA:2065:C:O2	26:BA:2449:U:N3	2.50	0.45
26:BA:2468:G:N7	26:BA:2476:A:N1	2.63	0.45
26:BA:2482:G:N7	26:BA:2483:C:C5	2.61	0.45
26:BA:2840:C:C2	26:BA:2841:C:C4	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2866:U:O2	26:BA:2868:A:C4'	2.64	0.45
26:BA:2691:C:O4'	26:BA:2872:G:C5	2.70	0.45
26:BA:2808:U:O2	26:BA:2892:A:N6	2.25	0.45
26:BA:422:A:H2'	26:BA:422:A:N3	2.31	0.45
26:BA:450:G:C2	26:BA:454:A:H2	2.34	0.45
26:BA:592:G:H2'	53:B8:3:LYS:CD	2.46	0.45
26:BA:617:G:OP2	29:BF:42:ARG:CZ	2.65	0.45
26:BA:929:G:C2'	47:B3:37:LEU:HD13	2.46	0.45
27:BD:106:PRO:CG	27:BD:141:HIS:CD2	2.98	0.45
27:BD:175:LEU:HD21	27:BD:181:ARG:H	1.80	0.45
27:BD:209:ASN:O	27:BD:210:LYS:O	2.34	0.45
28:BE:270:ASP:OD2	28:BE:295:LEU:HB3	2.16	0.45
30:BG:83:PHE:O	30:BG:84:LEU:C	2.56	0.45
16:AM:3:ARG:HH12	30:BG:90:LEU:CD2	2.29	0.45
31:BH:14:VAL:CG1	31:BH:16:VAL:CG2	2.95	0.45
32:BI:49:ALA:C	32:BI:53:LYS:HG2	2.36	0.45
55:BK:35:ILE:HG22	55:BK:39:CYS:SG	2.57	0.45
55:BK:79:LEU:CD2	55:BK:79:LEU:C	2.84	0.45
34:BO:33:ALA:CB	34:BO:39:VAL:HG22	2.47	0.45
44:BU:114:ARG:CA	44:BU:117:ARG:HD2	2.46	0.45
45:BV:31:ASP:O	45:BV:63:HIS:C	2.50	0.45
26:BA:487:C:C2	39:BW:53:SER:OG	2.70	0.45
39:BW:85:VAL:HG13	39:BW:95:ILE:HD13	1.99	0.45
26:BA:138:G:O4'	40:BX:43:GLU:OE2	2.34	0.45
40:BX:23:LYS:HD3	40:BX:65:VAL:HG11	1.98	0.45
41:BY:103:LEU:CG	41:BY:112:LEU:HD21	2.24	0.45
42:BZ:148:THR:O	42:BZ:149:ALA:C	2.55	0.45
1:AA:1197:G:C8	1:AA:1197:G:P	3.10	0.45
1:AA:190(I):G:H2'	1:AA:190(J):U:C6	2.51	0.45
1:AA:279:A:OP1	1:AA:281:G:H5'	2.17	0.45
1:AA:407:G:N2	1:AA:436:C:H1'	2.32	0.45
1:AA:475:G:H2'	1:AA:476:G:C8	2.51	0.45
1:AA:574:A:H8	1:AA:574:A:O5'	2.00	0.45
1:AA:62:U:C5'	1:AA:385:C:O2'	2.64	0.45
1:AA:1060:C:C5	6:AC:2:GLY:HA2	2.52	0.45
7:AD:58:LEU:HD13	7:AD:59:ARG:NH1	2.32	0.45
9:AF:57:GLN:HB2	9:AF:57:GLN:HE21	1.65	0.45
11:AH:87:SER:HB3	11:AH:92:ARG:HA	1.99	0.45
46:B2:26:GLU:CG	46:B2:27:LEU:N	2.54	0.45
47:B3:20:LYS:O	47:B3:23:LEU:HB2	2.09	0.45
50:B5:18:MET:O	50:B5:19:ARG:C	2.55	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2393:A:C4'	53:B8:13:ARG:HH21	2.13	0.45
26:BA:1263:U:O4'	50:B5:16:ARG:NH2	2.49	0.45
26:BA:126:A:OP2	52:B7:17:GLY:HA3	2.17	0.45
26:BA:1651:G:H2'	26:BA:1652:A:C8	2.52	0.45
26:BA:1772:G:N2	26:BA:1774:C:H5'	2.32	0.45
26:BA:1908:C:H42	26:BA:1922:G:H1	1.65	0.45
26:BA:2219:G:N3	26:BA:2224:G:O4'	2.49	0.45
26:BA:2292:C:N3	26:BA:2340:G:N2	2.61	0.45
26:BA:2305:A:H8	26:BA:2306:C:C5'	2.29	0.45
26:BA:2371:G:O3'	51:B6:47:HIS:CE1	2.70	0.45
26:BA:2419:U:OP1	51:B6:24:THR:HG21	2.18	0.45
26:BA:2073:C:H42	26:BA:2437:U:H3	1.64	0.45
26:BA:2474:C:C5	26:BA:2475:C:N3	2.85	0.45
26:BA:2476:A:C8	26:BA:2477:C:H6	2.28	0.45
26:BA:2562:U:C2'	26:BA:2563:U:H5'	2.47	0.45
26:BA:2620:C:C4'	28:BE:252:GLN:CB	2.94	0.45
26:BA:2643:G:O5'	26:BA:2643:G:H8	1.99	0.45
26:BA:2766:G:N2	26:BA:2767:C:C6	2.85	0.45
26:BA:1545:A:OP1	26:BA:545(A):A:P	2.75	0.45
26:BA:54:G:H1	26:BA:116:C:H42	1.64	0.45
26:BA:566:U:H3'	26:BA:567:A:H8	1.81	0.45
26:BA:631:A:C2	26:BA:2416:C:C4'	2.99	0.45
26:BA:675:A:N3	26:BA:2443:C:C2'	2.77	0.45
26:BA:781:A:H5'	26:BA:782:A:C8	2.51	0.45
25:BB:40:U:H3'	25:BB:41:U:C5'	2.35	0.45
27:BD:165:GLY:O	27:BD:172:ILE:CA	2.61	0.45
27:BD:75:GLY:O	27:BD:115:ILE:C	2.55	0.45
28:BE:268:LEU:HD11	28:BE:271:ILE:CD1	2.46	0.45
28:BE:44:TYR:CB	28:BE:309:PRO:HD3	2.43	0.45
29:BF:1:MET:O	29:BF:18:LEU:CG	2.53	0.45
29:BF:56:THR:O	29:BF:79:ARG:HD2	2.17	0.45
30:BG:146:LYS:C	30:BG:148:SER:N	2.70	0.45
30:BG:19:GLU:OE1	30:BG:134:LEU:O	2.35	0.45
31:BH:124:VAL:O	31:BH:124:VAL:CG1	2.54	0.45
32:BI:75:LEU:O	32:BI:141:LEU:HD21	2.17	0.45
55:BK:113:MET:N	55:BK:114:PRO:CD	2.80	0.45
55:BK:135:MET:HE1	55:BK:137:ILE:CG1	2.47	0.45
55:BK:36:MET:SD	55:BK:40:LYS:CE	3.01	0.45
33:BN:39:VAL:HG12	33:BN:104:TYR:CA	2.46	0.45
33:BN:78:ILE:CG2	33:BN:79:PHE:CD1	2.99	0.45
33:BN:96:GLU:C	33:BN:98:PHE:H	2.21	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:97:ARG:HG2	34:BO:98:ILE:H	1.82	0.45
35:BP:94:ARG:HD2	35:BP:119:THR:O	2.17	0.45
36:BQ:26:LYS:NZ	36:BQ:88:PHE:HB3	2.32	0.45
43:BR:77:ARG:CZ	43:BR:77:ARG:CB	2.58	0.45
44:BU:91:ASN:C	44:BU:95:LEU:CD1	2.75	0.45
45:BV:50:ASP:HB2	45:BV:53:LYS:HG3	0.54	0.45
39:BW:29:LEU:C	39:BW:33:ARG:HG3	2.37	0.45
39:BW:30:GLU:CA	39:BW:33:ARG:CG	2.93	0.45
39:BW:26:GLY:CA	39:BW:71:VAL:HG23	2.47	0.45
1:AA:111:G:H3'	1:AA:112:G:H8	1.82	0.44
1:AA:1259:C:H1'	1:AA:1283:G:N3	2.32	0.44
1:AA:1277:C:O2'	1:AA:1282:C:N3	2.47	0.44
1:AA:1411:C:H2'	1:AA:1412:C:H6	1.81	0.44
1:AA:1517:G:H3'	1:AA:1518:A:H8	1.80	0.44
1:AA:33:A:OP2	1:AA:398:C:H5'	2.17	0.44
1:AA:403:C:N4	1:AA:547:A:H5''	2.26	0.44
1:AA:52:G:H5''	1:AA:52:G:H8	1.81	0.44
1:AA:932:C:C5'	10:AG:3:ARG:HB3	2.46	0.44
5:AB:69:LEU:HB3	5:AB:162:ILE:HG22	1.99	0.44
8:AE:76:ILE:CG2	8:AE:142:LEU:HD22	2.47	0.44
14:AK:45:GLY:O	14:AK:50:TYR:HB2	2.17	0.44
20:AQ:46:ASP:HA	20:AQ:47:PRO:HD3	1.80	0.44
1:AA:674:G:O2'	21:AR:81:PHE:CE1	2.63	0.44
1:AA:1319:A:C4'	22:AS:70:LYS:HZ1	2.09	0.44
26:BA:2080:G:H5'	49:B4:33:VAL:N	2.32	0.44
50:B5:50:GLY:HA2	50:B5:57:VAL:CG2	2.47	0.44
53:B8:16:ILE:HA	53:B8:22:VAL:HA	1.99	0.44
26:BA:1283:G:H2'	26:BA:1285:G:N7	2.32	0.44
26:BA:1344:G:N2	26:BA:1404:C:H1'	2.32	0.44
26:BA:142(A):A:H5''	26:BA:1143:A:P	2.57	0.44
26:BA:1528:A:C2	26:BA:1529:A:H1'	2.52	0.44
26:BA:1653:G:OP1	26:BA:2822:G:N1	2.48	0.44
26:BA:1698:A:H1'	26:BA:1700:A:O5'	2.17	0.44
26:BA:1791:A:OP1	27:BD:210:LYS:CB	2.65	0.44
26:BA:1910:G:N2	26:BA:1921:G:H1'	2.32	0.44
26:BA:530:G:C6	26:BA:2021:C:H3'	2.52	0.44
26:BA:2080:G:P	49:B4:32:HIS:HD2	2.40	0.44
26:BA:2263:C:N4	26:BA:2278:A:N6	2.65	0.44
26:BA:2298:A:C6	26:BA:2321:G:N1	2.85	0.44
26:BA:2341:G:N7	26:BA:2342:C:C4	2.85	0.44
26:BA:2350:C:N4	26:BA:2382:G:H1	2.15	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2397:G:C5	26:BA:2398:U:C4	3.04	0.44
26:BA:2455:G:C3'	26:BA:2456:C:H5'	2.47	0.44
26:BA:2464:C:C5	26:BA:2487:G:N1	2.85	0.44
26:BA:2611:U:H5'	26:BA:2611:U:C6	2.51	0.44
26:BA:2692:C:N3	26:BA:2717:G:N2	2.53	0.44
26:BA:2774:C:C2'	26:BA:2774:C:O2	2.63	0.44
26:BA:2857:G:H2'	26:BA:2858:C:H5''	1.97	0.44
26:BA:322:A:H1'	26:BA:341:G:H8	1.81	0.44
26:BA:330:A:H4'	26:BA:1210:A:N6	2.32	0.44
26:BA:492:A:H2'	26:BA:493:G:O4'	2.16	0.44
26:BA:532:A:C2'	26:BA:533:G:O4'	2.65	0.44
26:BA:59:U:C2	26:BA:73:A:C2	3.05	0.44
27:BD:124:LYS:HB2	27:BD:127:ASN:ND2	2.31	0.44
27:BD:143:ILE:CB	27:BD:152:GLN:C	2.66	0.44
28:BE:269:ILE:CD1	28:BE:296:VAL:N	2.75	0.44
29:BF:93:LYS:C	29:BF:96:LYS:CD	2.85	0.44
25:BB:42:C:H4'	30:BG:48:MET:H	1.82	0.44
30:BG:55:LYS:O	30:BG:56:ARG:CG	2.64	0.44
31:BH:122:ILE:HG22	31:BH:123:GLU:H	1.82	0.44
32:BI:7:LYS:CG	32:BI:12:LYS:CE	2.93	0.44
32:BI:86:GLY:HA3	32:BI:88:ARG:N	2.30	0.44
55:BK:13:LEU:HB3	55:BK:14:PRO:HD2	1.99	0.44
34:BO:112:MET:O	34:BO:114:ILE:C	2.55	0.44
34:BO:3:GLN:CA	34:BO:21:VAL:CG1	2.93	0.44
36:BQ:66:ASN:O	36:BQ:70:ARG:HG3	2.16	0.44
37:BS:117:ALA:HA	37:BS:120:GLU:OE2	2.16	0.44
37:BS:23:ARG:NH2	37:BS:35:VAL:HG11	2.28	0.44
37:BS:33:ARG:CG	37:BS:48:VAL:O	2.65	0.44
44:BU:103:PRO:O	44:BU:107:LYS:N	2.50	0.44
26:BA:1163:G:C5'	45:BV:23:GLU:OE1	2.53	0.44
45:BV:54:TYR:O	45:BV:56:VAL:CB	2.65	0.44
45:BV:33:VAL:CG2	45:BV:63:HIS:CG	3.00	0.44
41:BY:40:VAL:CG1	41:BY:41:ARG:HG2	2.46	0.44
1:AA:1070:U:O4	1:AA:1085:U:C4	2.63	0.44
1:AA:1169:A:O5'	1:AA:1169:A:H8	2.01	0.44
1:AA:1347:G:O2'	1:AA:1348:U:OP2	2.32	0.44
1:AA:1429:C:H2'	1:AA:1430:C:C6	2.51	0.44
1:AA:475:G:H2'	1:AA:476:G:H8	1.81	0.44
1:AA:962:C:C2	1:AA:963:G:C8	3.05	0.44
1:AA:983:A:H3'	1:AA:983:A:N3	2.32	0.44
5:AB:100:GLY:O	5:AB:104:ASN:HB3	2.16	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:408:A:P	7:AD:115:ARG:NH1	2.91	0.44
14:AK:111:ASP:O	14:AK:112:THR:C	2.55	0.44
17:AN:27:CYS:H	17:AN:43:CYS:HB3	1.81	0.44
3:AW:23:A:H2'	3:AW:24:G:C8	2.52	0.44
48:B0:62:LEU:O	48:B0:63:SER:O	2.35	0.44
46:B2:59:ILE:CG1	46:B2:60:GLN:H	2.29	0.44
49:B4:20:VAL:HB	49:B4:30:GLU:CD	2.38	0.44
43:BR:100:LEU:HA	50:B5:44:HIS:HD2	1.82	0.44
52:B7:11:LYS:O	52:B7:13:ALA:CA	2.62	0.44
52:B7:32:ALA:HA	52:B7:35:ARG:HD3	1.93	0.44
26:BA:242:G:C3'	53:B8:5:LYS:NZ	2.66	0.44
26:BA:1102:C:H2'	26:BA:1103:A:H8	1.82	0.44
26:BA:52:A:C5	26:BA:118:A:C2	3.06	0.44
26:BA:142(A):A:O3'	33:BN:21:ARG:NE	2.50	0.44
26:BA:1559:G:C4	26:BA:1559:G:C3'	2.92	0.44
26:BA:1914:C:OP2	26:BA:1916:A:N6	2.50	0.44
26:BA:1916:A:C8	26:BA:1916:A:OP2	2.68	0.44
26:BA:2043:C:C4	26:BA:2777:G:C2	3.02	0.44
26:BA:2092:U:H5	26:BA:2227:A:H62	1.64	0.44
26:BA:2385:C:C2'	26:BA:2386:C:C5'	2.93	0.44
26:BA:2392:A:C2	26:BA:2429:G:C4	3.06	0.44
26:BA:2438:U:C4'	26:BA:2440:C:OP1	2.63	0.44
26:BA:2508:G:C2	26:BA:2509:G:C1'	3.00	0.44
26:BA:1130:U:C5'	26:BA:2515:C:O2'	2.41	0.44
26:BA:2533:A:H2'	26:BA:2534:A:O4'	2.17	0.44
26:BA:2553:G:N7	26:BA:2554:U:N1	2.64	0.44
26:BA:2596:U:H5	26:BA:2597:G:N7	2.15	0.44
26:BA:2634:G:N1	26:BA:2635:C:C6	2.86	0.44
26:BA:2720:U:O4	26:BA:2873:A:C6	2.65	0.44
26:BA:2755:C:C6	26:BA:2755:C:C3'	3.00	0.44
26:BA:2777:G:C5'	26:BA:2777:G:N9	2.80	0.44
26:BA:2822:G:O2'	26:BA:2825:C:N4	2.47	0.44
26:BA:2816:C:C2	26:BA:2831:G:C2	3.05	0.44
26:BA:476:G:H2'	26:BA:478:A:OP2	2.17	0.44
26:BA:504:U:H5''	26:BA:506:G:OP2	2.16	0.44
28:BE:204:VAL:N	28:BE:303:PRO:HD3	2.32	0.44
29:BF:6:TYR:OH	29:BF:139:VAL:N	2.51	0.44
29:BF:142:ASP:O	29:BF:145:GLU:N	2.47	0.44
30:BG:24:HIS:HB3	30:BG:72:LYS:HD3	1.99	0.44
31:BH:151:ARG:HA	31:BH:152:PRO:HD2	1.76	0.44
31:BH:51:VAL:CG2	31:BH:68:ARG:HG3	2.43	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:96:LYS:C	32:BI:98:ILE:H	2.18	0.44
55:BK:22:PRO:N	55:BK:23:PRO:HD2	2.32	0.44
34:BO:35:ILE:HG22	34:BO:63:VAL:HA	1.68	0.44
36:BQ:88:PHE:HD1	36:BQ:88:PHE:O	2.00	0.44
43:BR:36:THR:O	43:BR:112:ALA:O	2.34	0.44
43:BR:73:VAL:O	43:BR:74:LYS:O	2.35	0.44
38:BT:13:ILE:CD1	38:BT:33:SER:HB2	2.47	0.44
44:BU:89:ASP:O	44:BU:90:LEU:CD2	2.48	0.44
45:BV:60:VAL:C	45:BV:98:ILE:CD1	2.83	0.44
39:BW:45:TYR:CD2	39:BW:45:TYR:C	2.91	0.44
40:BX:38:ALA:O	40:BX:41:VAL:HB	2.18	0.44
41:BY:71:VAL:HG13	41:BY:72:ILE:H	1.73	0.44
41:BY:93:THR:O	41:BY:96:VAL:HG23	2.17	0.44
1:AA:1073:U:N1	1:AA:1074:G:C8	2.85	0.44
1:AA:1496:C:H2'	1:AA:1497:G:C1'	2.47	0.44
1:AA:571:U:H3'	1:AA:572:A:H5''	1.94	0.44
1:AA:889:A:H62	1:AA:908:A:H62	1.65	0.44
5:AB:88:ALA:HA	5:AB:222:ILE:HD11	2.00	0.44
7:AD:31:CYS:C	7:AD:33:MET:N	2.60	0.44
1:AA:541:G:C5'	7:AD:42:GLN:HE21	2.30	0.44
9:AF:95:GLU:HB2	9:AF:96:PRO:HD2	1.91	0.44
11:AH:25:ASP:OD1	11:AH:60:ARG:HD3	2.17	0.44
1:AA:1307:U:H4'	16:AM:109:THR:HG21	2.00	0.44
16:AM:40:ASN:HA	16:AM:41:PRO:HD3	1.88	0.44
2:AV:56:C:O2'	30:BG:56:ARG:NH1	2.47	0.44
48:B0:61:ALA:CB	48:B0:80:SER:C	2.84	0.44
49:B4:35:VAL:C	49:B4:36:TRP:HD1	2.17	0.44
50:B5:12:SER:O	50:B5:14:SER:N	2.50	0.44
52:B7:44:VAL:O	52:B7:45:SER:C	2.55	0.44
52:B7:43:THR:N	52:B7:46:ASP:OD1	2.49	0.44
26:BA:1300:U:C6	26:BA:1301:A:H2	2.35	0.44
26:BA:1352:U:O2	26:BA:1353:A:N7	2.51	0.44
26:BA:1437:C:HO2'	26:BA:1516:U:HO2'	1.66	0.44
26:BA:1529:A:H2'	26:BA:1530:G:H5'	1.99	0.44
26:BA:1763:G:H5'	26:BA:1763:G:H8	1.82	0.44
26:BA:1265:A:N6	26:BA:2013:A:H5'	2.33	0.44
26:BA:2040:C:H2'	26:BA:2041:U:C6	2.51	0.44
26:BA:2185:C:N3	26:BA:2186:G:C5	2.85	0.44
26:BA:2191:G:H21	26:BA:2192:G:H1'	1.78	0.44
26:BA:2226:C:N4	26:BA:2227:A:C2	2.86	0.44
26:BA:2234:G:O6	26:BA:2235:G:O6	2.35	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2251:G:C2	26:BA:2252:G:C4	3.03	0.44
26:BA:2333:A:H4'	26:BA:2334:G:H2'	1.99	0.44
26:BA:2295:C:C6	26:BA:2338:G:N1	2.85	0.44
26:BA:2394:C:O2	26:BA:2394:C:H2'	2.17	0.44
26:BA:2514:U:H2'	26:BA:2515:C:H6	1.81	0.44
26:BA:1129:A:N6	26:BA:2570:G:H4'	2.32	0.44
26:BA:2670:A:H8	26:BA:2670:A:C5'	2.16	0.44
26:BA:2705:A:H8	26:BA:2705:A:O5'	2.00	0.44
26:BA:2734:A:H62	26:BA:2735:G:N3	1.47	0.44
26:BA:2756:U:O2'	26:BA:2757:A:O5'	2.33	0.44
26:BA:2852:G:C6	26:BA:2866:U:O4	2.71	0.44
26:BA:35:G:H5'	26:BA:455:C:H42	1.83	0.44
26:BA:1444:G:O3'	26:BA:444(A):A:H8	2.00	0.44
26:BA:5:A:H2'	26:BA:6:A:O4'	2.16	0.44
27:BD:175:LEU:O	27:BD:178:GLY:N	2.50	0.44
27:BD:194:VAL:CG2	27:BD:195:GLY:H	2.04	0.44
27:BD:213:LYS:HG3	27:BD:215:LYS:HB2	0.49	0.44
27:BD:61:TYR:HH	27:BD:214:MET:HE1	1.54	0.44
28:BE:180:ILE:CG2	28:BE:186:GLU:C	2.80	0.44
28:BE:45:LYS:NZ	28:BE:301:PRO:C	2.62	0.44
28:BE:80:ALA:HB3	28:BE:181:VAL:HA	1.50	0.44
29:BF:243:VAL:O	29:BF:246:ARG:C	2.54	0.44
29:BF:62:GLY:N	29:BF:65:ARG:CZ	2.78	0.44
30:BG:102:GLY:HA2	30:BG:134:LEU:HD11	1.95	0.44
30:BG:56:ARG:HG3	30:BG:65:GLU:CG	2.47	0.44
31:BH:9:GLU:C	31:BH:10:ILE:HG13	2.37	0.44
33:BN:42:GLU:HG2	33:BN:43:ARG:H	1.82	0.44
34:BO:25:LEU:CB	34:BO:38:VAL:O	2.64	0.44
34:BO:62:VAL:O	34:BO:63:VAL:HG23	2.17	0.44
26:BA:637:A:P	35:BP:126:SER:HG	2.31	0.44
35:BP:56:LYS:O	35:BP:57:VAL:HB	2.18	0.44
36:BQ:16:ARG:O	36:BQ:20:ILE:HG12	2.17	0.44
44:BU:63:GLN:O	44:BU:65:ILE:CA	2.65	0.44
44:BU:66:ASN:CB	44:BU:76:TYR:CZ	2.75	0.44
44:BU:63:GLN:HA	44:BU:66:ASN:CG	2.38	0.44
45:BV:19:VAL:O	45:BV:20:ILE:C	2.55	0.44
39:BW:14:PRO:O	39:BW:17:VAL:CB	2.61	0.44
39:BW:97:LYS:HZ1	39:BW:99:ARG:HH12	1.61	0.44
40:BX:31:ARG:HA	40:BX:31:ARG:CZ	2.47	0.44
41:BY:43:ASN:CG	41:BY:112:LEU:CD2	2.81	0.44
41:BY:63:ILE:HG13	41:BY:74:VAL:HA	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:79:LEU:O	41:BY:87:VAL:N	2.50	0.44
42:BZ:146:HIS:HB3	42:BZ:170:SER:HB3	1.98	0.44
42:BZ:69:VAL:HG21	42:BZ:81:VAL:HG11	1.87	0.44
42:BZ:6:LYS:H	42:BZ:7:PRO:HD2	1.73	0.44
1:AA:1269:A:N3	1:AA:1326:C:C1'	2.62	0.44
1:AA:126:G:C4'	1:AA:634:C:O2'	2.64	0.44
1:AA:1376:U:C3'	10:AG:94:ARG:NH2	2.81	0.44
1:AA:193:C:H2'	1:AA:194:C:C6	2.53	0.44
1:AA:451:A:N6	1:AA:480:U:H2'	2.28	0.44
1:AA:667:G:H2'	1:AA:668:G:C8	2.53	0.44
1:AA:774:G:C4	1:AA:775:G:C8	3.05	0.44
16:AM:92:HIS:HE1	16:AM:110:ARG:NH2	2.12	0.44
18:AO:3:ILE:H	18:AO:3:ILE:HG13	1.58	0.44
1:AA:1268:A:C2'	24:AU:20:LYS:CA	2.95	0.44
2:AV:68:U:H2'	2:AV:69:U:C6	2.52	0.44
2:AV:5:A:O2'	2:AV:6:U:H5'	2.17	0.44
47:B3:42:ALA:CB	47:B3:43:ILE:HD12	2.42	0.44
49:B4:58:LYS:CG	49:B4:62:ARG:NH2	2.76	0.44
26:BA:650:C:P	53:B8:17:THR:HG21	2.56	0.44
26:BA:769:G:H4'	26:BA:1379:A:N6	2.33	0.44
26:BA:1491:G:O2'	26:BA:1492:G:O4'	2.35	0.44
26:BA:154:G:H3'	26:BA:155:C:H6	1.82	0.44
26:BA:1602:U:C6	26:BA:1602:U:C3'	3.01	0.44
26:BA:1619:G:N3	52:B7:1:MET:HB3	2.31	0.44
26:BA:1651:G:H1	26:BA:2006:C:N4	2.10	0.44
26:BA:1672:C:H4'	26:BA:2553:G:O3'	2.16	0.44
26:BA:1790:C:O3'	27:BD:210:LYS:HE3	2.18	0.44
26:BA:2023:G:C8	26:BA:2023:G:OP2	2.70	0.44
26:BA:2234:G:N1	26:BA:2235:G:C6	2.84	0.44
26:BA:2258:C:N4	26:BA:2426:A:N9	2.58	0.44
26:BA:2266:A:H2	26:BA:2272:U:C2	2.35	0.44
26:BA:2309:A:N3	26:BA:2309:A:H2'	2.32	0.44
26:BA:2331:G:C3'	48:B0:70:ILE:CB	2.95	0.44
26:BA:2337:G:N1	26:BA:2338:G:O6	2.49	0.44
26:BA:2061:G:O6	26:BA:2501:C:O2	2.36	0.44
26:BA:2531:A:C5	26:BA:2532:G:N7	2.85	0.44
26:BA:2592:G:H2'	26:BA:2593:U:O5'	2.18	0.44
26:BA:1638:C:C4'	26:BA:2709:G:H22	2.30	0.44
26:BA:2804:C:H2'	26:BA:2804:C:H6	1.67	0.44
26:BA:2814:C:N1	26:BA:2815:C:H5	2.16	0.44
26:BA:265:A:H62	26:BA:281:G:H5'	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2842:G:N1	26:BA:2876:G:C6	2.85	0.44
26:BA:2876:G:H2'	26:BA:2877:G:H8	1.82	0.44
26:BA:322:A:N3	26:BA:341:G:N9	2.65	0.44
26:BA:342:G:H1	26:BA:344:G:H22	1.62	0.44
26:BA:37:C:H42	26:BA:442:G:H1	1.63	0.44
26:BA:452:G:N2	26:BA:457:A:H2	2.13	0.44
26:BA:575:A:H4'	26:BA:2500:U:C5'	2.48	0.44
26:BA:611:C:O2'	26:BA:616:A:C2	2.68	0.44
26:BA:772:C:H6	26:BA:772:C:O5'	2.01	0.44
25:BB:17:C:H2'	25:BB:18:G:O4'	2.17	0.44
25:BB:48:A:P	37:BS:107:ASN:CG	2.95	0.44
27:BD:66:PHE:HD2	27:BD:67:LYS:CD	2.22	0.44
28:BE:105:HIS:ND1	28:BE:108:LEU:CD1	2.74	0.44
28:BE:68:VAL:HA	28:BE:69:PRO:HD3	1.72	0.44
29:BF:168:ARG:HA	29:BF:232:LEU:O	2.18	0.44
26:BA:673:C:H5'	29:BF:80:VAL:HG11	1.99	0.44
30:BG:103:ASN:N	30:BG:104:PHE:CE1	2.86	0.44
31:BH:55:SER:O	31:BH:57:GLU:CG	2.54	0.44
32:BI:132:LYS:HA	32:BI:138:THR:HB	1.98	0.44
55:BK:52:MET:SD	55:BK:81:LYS:CG	3.06	0.44
33:BN:41:ALA:HB1	33:BN:75:PRO:HB2	1.95	0.44
33:BN:52:GLN:CA	33:BN:55:GLU:OE2	2.61	0.44
34:BO:107:ARG:HG3	34:BO:115:ILE:CG2	2.48	0.44
34:BO:1:MET:HB3	34:BO:67:ARG:NE	2.32	0.44
36:BQ:85:ILE:O	36:BQ:85:ILE:HD12	2.16	0.44
36:BQ:95:GLU:CD	36:BQ:95:GLU:N	2.70	0.44
37:BS:52:PRO:O	37:BS:55:ASP:HB3	2.14	0.44
38:BT:15:PRO:C	38:BT:17:THR:N	2.63	0.44
38:BT:5:GLU:O	38:BT:8:TYR:CA	2.66	0.44
26:BA:583:G:O5'	44:BU:10:ARG:NH1	2.50	0.44
44:BU:34:ASN:O	44:BU:35:ALA:C	2.55	0.44
45:BV:18:ASP:CB	45:BV:96:LEU:HA	2.47	0.44
41:BY:105:ASP:O	41:BY:106:GLU:C	2.55	0.44
41:BY:46:ASP:OD1	41:BY:47:THR:O	2.36	0.44
42:BZ:125:PRO:O	42:BZ:127:PRO:CD	2.61	0.44
1:AA:106:C:O2	1:AA:379:C:H4'	2.18	0.44
1:AA:1095:U:H5'	1:AA:1109:C:N3	2.33	0.44
1:AA:1330:U:OP1	16:AM:25:ILE:O	2.35	0.44
1:AA:408:A:P	7:AD:115:ARG:CZ	3.05	0.44
1:AA:501:C:H2'	1:AA:502:G:C8	2.52	0.44
6:AC:91:LEU:HD21	6:AC:99:VAL:N	2.23	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AD:70:ILE:HG13	7:AD:100:ARG:HD2	1.98	0.44
1:AA:878:G:C1'	11:AH:3:THR:HG21	2.47	0.44
1:AA:741:G:C5'	18:AO:39:LEU:HD11	2.47	0.44
9:AF:97:PHE:O	21:AR:30:ASP:HA	2.17	0.44
1:AA:986:A:C1'	22:AS:54:GLY:O	2.66	0.44
46:B2:18:ALA:O	46:B2:21:ASP:HB2	2.18	0.44
26:BA:850:C:C5'	47:B3:18:ASP:CG	2.86	0.44
50:B5:10:LYS:NZ	50:B5:10:LYS:HB2	2.33	0.44
52:B7:28:ARG:O	52:B7:31:LEU:HG	2.18	0.44
53:B8:8:LYS:HA	53:B8:11:LYS:HG3	1.99	0.44
26:BA:1010:A:O2'	26:BA:1152:C:O2	2.36	0.44
26:BA:1294:U:O2'	43:BR:26:LYS:NZ	2.44	0.44
26:BA:1520:U:C2'	26:BA:1521:G:H5''	2.44	0.44
1:AA:702:A:C2	26:BA:1848:A:N7	2.85	0.44
26:BA:1933:G:O6	26:BA:1968:G:N2	2.50	0.44
26:BA:2232:U:C2'	26:BA:2233:U:H5''	2.45	0.44
26:BA:2240:C:H2'	26:BA:2241:A:C8	2.53	0.44
26:BA:2256:G:C2	26:BA:2257:U:N1	2.85	0.44
26:BA:2259:G:C6	26:BA:2281:C:N3	2.85	0.44
26:BA:2310:A:H2	30:BG:57:THR:OG1	2.00	0.44
26:BA:2417:C:C4	26:BA:2418:A:N7	2.85	0.44
26:BA:2464:C:C4	26:BA:2487:G:C2	3.06	0.44
26:BA:2531:A:O2'	26:BA:2532:G:H5''	2.18	0.44
26:BA:2550:G:N3	26:BA:2551:C:C5	2.85	0.44
26:BA:2748:A:O2'	31:BH:62:ALA:HA	2.17	0.44
26:BA:297:C:C2	26:BA:342:G:N2	2.84	0.44
26:BA:651:G:H3'	26:BA:652:C:H6	1.82	0.44
26:BA:672:C:O2'	29:BF:82:GLN:NE2	2.50	0.44
26:BA:674:G:C2	26:BA:804:A:C2	3.05	0.44
26:BA:829:A:C6	26:BA:2247:A:O2'	2.70	0.44
26:BA:920:G:O5'	26:BA:920:G:C8	2.71	0.44
25:BB:99:A:H2'	25:BB:100:G:H8	1.73	0.44
28:BE:96:LEU:C	28:BE:97:THR:HG23	2.38	0.44
29:BF:140:VAL:HG12	29:BF:236:THR:HA	2.00	0.44
29:BF:153:VAL:HG12	29:BF:157:LEU:HD11	2.00	0.44
29:BF:160:LEU:O	29:BF:165:ASP:OD2	2.36	0.44
29:BF:220:THR:CB	29:BF:224:ALA:CB	2.84	0.44
29:BF:164:ALA:C	29:BF:232:LEU:HD12	2.31	0.44
29:BF:36:ARG:HA	29:BF:39:GLN:HE21	1.64	0.44
30:BG:129:ASP:O	30:BG:130:VAL:HG12	2.17	0.44
30:BG:13:MET:C	30:BG:15:GLU:N	2.71	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2315:G:P	30:BG:20:LYS:CD	2.91	0.44
31:BH:101:LYS:HG2	31:BH:115:GLU:N	2.32	0.44
32:BI:140:THR:HG22	32:BI:140:THR:O	2.17	0.44
32:BI:141:LEU:HD13	32:BI:142:LYS:H	1.73	0.44
32:BI:22:ALA:O	32:BI:23:ASP:C	2.47	0.44
32:BI:50:GLN:CG	32:BI:50:GLN:O	2.66	0.44
32:BI:5:PHE:CD2	32:BI:17:GLU:O	2.70	0.44
55:BK:52:MET:SD	55:BK:81:LYS:HG2	2.57	0.44
33:BN:21:ARG:HA	33:BN:24:SER:OG	2.17	0.44
33:BN:54:VAL:CG1	33:BN:139:LEU:CD1	2.96	0.44
33:BN:74:ARG:O	33:BN:75:PRO:O	2.35	0.44
36:BQ:42:TYR:N	36:BQ:43:PRO:CD	2.81	0.44
37:BS:87:LEU:O	37:BS:88:ALA:O	2.36	0.44
38:BT:27:ALA:C	38:BT:28:THR:HG23	2.38	0.44
44:BU:7:GLY:C	44:BU:9:VAL:N	2.51	0.44
45:BV:5:ILE:N	45:BV:12:TYR:CZ	2.65	0.44
40:BX:6:LYS:HE2	40:BX:29:ASP:HA	1.91	0.44
1:AA:121:C:H1'	1:AA:123:C:H41	1.83	0.44
1:AA:1259:C:H2'	1:AA:1283:G:O2'	2.18	0.44
1:AA:1328:C:O3'	16:AM:28:ALA:HB3	2.17	0.44
1:AA:1411:C:H42	1:AA:1489:G:H1	1.65	0.44
1:AA:1534:A:H3'	1:AA:1534:A:N3	2.32	0.44
1:AA:246:A:HO2'	1:AA:247:G:P	2.41	0.44
1:AA:29:G:O2'	1:AA:295:C:H4'	2.17	0.44
5:AB:164:VAL:HG22	5:AB:165:VAL:N	2.32	0.44
7:AD:101:LEU:HB2	7:AD:138:TYR:HB3	2.00	0.44
7:AD:133:VAL:C	7:AD:135:LEU:H	2.21	0.44
11:AH:46:LYS:HE3	11:AH:64:LYS:HG3	2.00	0.44
17:AN:37:PHE:HB3	17:AN:39:LEU:HD12	2.00	0.44
1:AA:626:U:H5''	19:AP:38:TYR:CE2	2.52	0.44
48:B0:37:LEU:HG	48:B0:71:ASN:HD22	1.82	0.44
26:BA:2386:C:O4'	48:B0:39:ARG:HH21	1.39	0.44
48:B0:49:GLN:N	48:B0:49:GLN:NE2	2.65	0.44
47:B3:24:LYS:HG3	47:B3:24:LYS:O	2.17	0.44
52:B7:20:ALA:O	52:B7:22:MET:C	2.56	0.44
52:B7:31:LEU:O	52:B7:35:ARG:HG3	2.17	0.44
54:B9:24:LEU:HD22	54:B9:36:GLN:N	2.28	0.44
26:BA:1266:G:O6	39:BW:13:SER:CB	2.66	0.44
26:BA:1472:A:C1'	26:BA:1473:G:C8	3.00	0.44
26:BA:2044:C:N4	26:BA:2624:G:N1	2.32	0.44
26:BA:2056:G:N2	50:B5:5:PRO:CA	2.80	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2272:U:C6	26:BA:2273:A:H2	2.36	0.44
26:BA:2302:G:C6	26:BA:2315:G:N1	2.81	0.44
26:BA:2349:G:C5	26:BA:2350:C:C6	3.06	0.44
26:BA:2418:A:HO2'	26:BA:2419:U:C4'	2.30	0.44
26:BA:825:C:O4'	26:BA:2428:G:O6	2.35	0.44
26:BA:2514:U:O5'	26:BA:2514:U:H6	2.01	0.44
26:BA:2516:G:N7	26:BA:2517:C:C4	2.86	0.44
26:BA:2548:G:C5	26:BA:2549:G:C8	3.06	0.44
26:BA:2022:U:H2'	26:BA:2617:C:H4'	2.00	0.44
26:BA:2625:G:N7	26:BA:2626:C:N3	2.65	0.44
26:BA:2644:G:H8	26:BA:2644:G:C5'	2.16	0.44
26:BA:2676:C:C2'	26:BA:2677:G:O5'	2.66	0.44
26:BA:2701:C:H42	26:BA:2705:A:H62	1.64	0.44
26:BA:2679:A:C6	26:BA:2729:G:N1	2.86	0.44
25:BB:24:G:H2'	25:BB:56:G:C6	2.51	0.44
27:BD:197:GLY:N	27:BD:199:ARG:HD2	2.33	0.44
29:BF:168:ARG:O	29:BF:168:ARG:HD3	2.06	0.44
29:BF:22:PHE:HZ	29:BF:115:LEU:CG	2.30	0.44
29:BF:99:SER:O	29:BF:100:LEU:CG	2.65	0.44
30:BG:24:HIS:O	30:BG:129:ASP:HB3	2.17	0.44
31:BH:87:GLU:HB3	31:BH:164:GLU:CD	2.38	0.44
32:BI:92:SER:O	32:BI:93:ILE:HG22	2.18	0.44
55:BK:36:MET:SD	55:BK:36:MET:C	2.96	0.44
33:BN:21:ARG:C	33:BN:24:SER:OG	2.42	0.44
34:BO:53:LYS:O	34:BO:54:LYS:O	2.35	0.44
34:BO:73:ASP:O	34:BO:74:GLY:C	2.49	0.44
35:BP:144:ASP:CA	35:BP:145:LEU:HD12	2.32	0.44
37:BS:21:HIS:HA	37:BS:24:LEU:HG	1.99	0.44
26:BA:19:C:OP1	44:BU:23:GLY:HA2	2.18	0.44
26:BA:517:C:H2'	39:BW:18:ARG:HH22	1.80	0.44
41:BY:55:PHE:O	41:BY:56:ALA:C	2.55	0.44
41:BY:51:LEU:HD22	41:BY:95:ASN:CG	2.37	0.44
42:BZ:164:PRO:O	42:BZ:165:GLU:C	2.55	0.44
42:BZ:40:ASP:C	42:BZ:44:ARG:CG	2.86	0.44
42:BZ:69:VAL:CG1	42:BZ:70:GLN:N	2.58	0.44
42:BZ:74:ARG:O	42:BZ:75:LYS:C	2.56	0.44
1:AA:1128:C:H42	1:AA:1143:G:H1	1.63	0.44
1:AA:1239:A:H1'	1:AA:1241:G:C4	2.53	0.44
1:AA:1308:U:H3'	16:AM:99:ARG:HH12	1.82	0.44
1:AA:1541:U:H2'	1:AA:1542:U:O3'	2.16	0.44
1:AA:665:A:H2'	1:AA:725:G:H21	1.79	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:804:U:H2'	1:AA:805:C:H5'	2.00	0.44
5:AB:54:THR:O	5:AB:58:ILE:HG13	2.17	0.44
8:AE:76:ILE:O	8:AE:93:PRO:HB3	2.17	0.44
11:AH:13:ILE:O	11:AH:17:THR:OG1	2.30	0.44
16:AM:24:GLY:CA	16:AM:70:LEU:CD1	2.96	0.44
16:AM:91:ARG:HD3	16:AM:96:LEU:CD1	2.27	0.44
20:AQ:58:GLU:HB2	20:AQ:74:LEU:HB3	1.99	0.44
23:AT:82:SER:O	23:AT:86:ARG:HB3	2.17	0.44
48:B0:39:ARG:CG	48:B0:69:PHE:HE1	2.17	0.44
46:B2:52:ALA:HA	46:B2:55:ARG:HH11	1.82	0.44
46:B2:55:ARG:HB2	46:B2:56:ILE:H	1.68	0.44
26:BA:387:U:C3'	49:B4:29:PRO:HG3	2.48	0.44
39:BW:37:ARG:NH2	50:B5:48:ASN:HD21	2.11	0.44
53:B8:22:VAL:N	53:B8:48:PHE:HE2	1.90	0.44
26:BA:1080:C:H2'	26:BA:1081:U:O4'	2.17	0.44
26:BA:1151:G:C3'	44:BU:81:ASN:CG	2.86	0.44
26:BA:1330:C:O2	26:BA:1330:C:H2'	2.17	0.44
26:BA:1476:C:N4	26:BA:1517:G:H1'	2.33	0.44
26:BA:1418:G:C2'	26:BA:1579:A:H61	2.31	0.44
26:BA:1657:C:C5	26:BA:1658:C:H5	2.36	0.44
26:BA:1778:U:H3	26:BA:1785:A:H62	1.65	0.44
26:BA:176:G:C2'	26:BA:177:G:C8	3.00	0.44
26:BA:1935:G:H2'	26:BA:1962:C:C4	2.53	0.44
26:BA:1936:A:C5	26:BA:1945:G:C5	3.06	0.44
26:BA:1942:C:H2'	26:BA:1943:U:C5	2.53	0.44
26:BA:204:A:O2'	26:BA:205:G:P	2.75	0.44
26:BA:2400:G:N1	26:BA:2401:U:C2	2.85	0.44
26:BA:2461:C:H2'	26:BA:2462:U:O5'	2.18	0.44
26:BA:2511:U:C4	26:BA:2512:C:C4	3.06	0.44
26:BA:2611:U:C4'	26:BA:2611:U:C6	3.01	0.44
26:BA:2657:A:C5	26:BA:2665:A:N6	2.86	0.44
26:BA:2742:C:O5'	54:B9:35:ARG:NH1	2.50	0.44
26:BA:2746:U:C2	26:BA:2759:G:C2	2.98	0.44
26:BA:533:G:OP1	44:BU:24:PHE:CB	2.66	0.44
26:BA:746:A:H8	26:BA:2611:U:O3'	2.00	0.44
26:BA:775:G:H2'	26:BA:794:G:C8	2.51	0.44
26:BA:817:C:H2'	26:BA:818:G:O4'	2.18	0.44
25:BB:18:G:H2'	25:BB:19:G:H8	1.82	0.44
26:BA:1566:A:N3	27:BD:212:HIS:HB3	2.32	0.44
27:BD:229:MET:SD	27:BD:233:ASP:HB2	2.58	0.44
26:BA:2785:C:O2'	28:BE:100:TRP:HD1	1.81	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:176:HIS:O	28:BE:177:ALA:C	2.55	0.44
26:BA:1657:C:OP1	28:BE:233:ARG:N	2.50	0.44
29:BF:113:SER:O	29:BF:116:ALA:CB	2.51	0.44
29:BF:11:ASN:HD21	29:BF:160:LEU:HD11	1.82	0.44
29:BF:33:LYS:O	29:BF:34:ALA:O	2.34	0.44
30:BG:98:PHE:N	30:BG:98:PHE:HD2	2.16	0.44
31:BH:19:ASN:O	31:BH:21:ASN:N	2.46	0.44
55:BK:80:LYS:CD	55:BK:86:GLU:O	2.59	0.44
33:BN:11:ILE:O	33:BN:11:ILE:HG22	2.18	0.44
33:BN:22:VAL:O	33:BN:23:ALA:C	2.55	0.44
33:BN:78:ILE:O	33:BN:82:THR:HG21	2.12	0.44
34:BO:17:ARG:CZ	34:BO:47:THR:N	2.79	0.44
34:BO:24:VAL:CG1	34:BO:32:TYR:C	2.86	0.44
34:BO:8:LEU:CD2	34:BO:19:VAL:O	2.65	0.44
34:BO:13:ASN:HD21	34:BO:97:ARG:HB3	1.83	0.44
26:BA:2378:A:H1'	37:BS:101:VAL:HG21	1.98	0.44
37:BS:37:ARG:HB2	37:BS:44:ARG:O	2.18	0.44
38:BT:52:THR:HB	38:BT:53:ASP:H	1.61	0.44
44:BU:85:ARG:C	44:BU:86:ALA:O	2.56	0.44
39:BW:53:SER:O	39:BW:57:ASN:HB2	2.18	0.44
26:BA:496:G:C1'	39:BW:61:ASN:HD22	2.30	0.44
26:BA:1260:G:H5'	39:BW:83:LYS:NZ	2.21	0.44
42:BZ:148:THR:HB	42:BZ:166:LEU:H	1.81	0.44
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.53	0.44
1:AA:143:A:C3'	1:AA:144:G:H5'	2.42	0.44
1:AA:453:A:H4'	19:AP:72:ARG:HD2	2.00	0.44
1:AA:458:C:H42	1:AA:474:G:H1	1.66	0.44
1:AA:918:A:H2'	1:AA:919:A:O4'	2.18	0.44
1:AA:924:C:H2'	1:AA:925:G:C8	2.53	0.44
1:AA:962:C:H2'	1:AA:963:G:O4'	2.18	0.44
5:AB:79:ASP:O	5:AB:83:MET:HG2	2.18	0.44
7:AD:21:LEU:HD23	7:AD:114:ARG:HG3	1.93	0.44
7:AD:120:LEU:HG	7:AD:125:HIS:HB2	1.99	0.44
7:AD:79:PHE:HE1	7:AD:204:ILE:HG13	1.82	0.44
1:AA:1374:A:H1'	10:AG:31:MET:HE1	2.00	0.44
11:AH:120:THR:O	11:AH:121:ASP:C	2.56	0.44
1:AA:1369:C:C5	12:AI:112:LYS:HE3	2.53	0.44
6:AC:23:TYR:HD1	13:AJ:10:GLY:HA2	1.79	0.44
13:AJ:16:LEU:HD12	13:AJ:70:ARG:HG2	1.99	0.44
13:AJ:90:LEU:H	13:AJ:91:PRO:CD	2.27	0.44
1:AA:684:A:H1'	14:AK:39:PRO:HD2	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AL:78:GLN:H	15:AL:81:SER:HB2	1.83	0.44
16:AM:9:ILE:N	16:AM:10:PRO:CD	2.80	0.44
16:AM:79:LYS:HE2	26:BA:889:C:OP2	2.17	0.44
21:AR:46:GLU:CB	21:AR:85:LEU:HD13	2.47	0.44
2:AV:11:C:H2'	2:AV:12:U:C6	2.53	0.44
48:B0:49:GLN:CA	48:B0:49:GLN:NE2	2.76	0.44
47:B3:3:ARG:HD3	47:B3:60:GLU:HA	2.00	0.44
26:BA:1005:C:H6	26:BA:1143:A:OP1	2.01	0.44
26:BA:1364:G:O6	49:B4:2:GLN:CD	2.55	0.44
26:BA:1379:A:H3'	26:BA:1379:A:N3	2.32	0.44
26:BA:176:G:C3'	26:BA:177:G:C8	2.84	0.44
26:BA:530:G:N2	26:BA:2021:C:C6	2.85	0.44
26:BA:2029:G:C5	26:BA:2031:A:OP1	2.70	0.44
26:BA:2228:G:C4'	26:BA:2228:G:C8	3.01	0.44
26:BA:2246:G:O2'	26:BA:2247:A:H5''	2.11	0.44
26:BA:2261:C:O4'	26:BA:2388:A:C1'	2.59	0.44
26:BA:2271:G:O2'	26:BA:2272:U:O2	2.35	0.44
26:BA:2279:G:C6	26:BA:2280:G:C6	3.05	0.44
26:BA:2330:G:N2	26:BA:2331:G:C4	2.79	0.44
26:BA:2334:G:P	37:BS:12:ARG:C	2.90	0.44
26:BA:2333:A:C5	26:BA:2335:A:C2	3.05	0.44
26:BA:2376:A:N3	26:BA:2377:A:C8	2.86	0.44
26:BA:2378:A:C2	37:BS:26:LEU:HD21	2.46	0.44
26:BA:2397:G:C6	26:BA:2398:U:C4	3.06	0.44
26:BA:2400:G:N1	26:BA:2401:U:O2	2.50	0.44
26:BA:2251:G:H8	26:BA:2450:A:H4'	1.72	0.44
26:BA:2497:A:O2'	26:BA:2498:C:C5	2.67	0.44
26:BA:2520:C:C6	26:BA:2567:G:C8	3.06	0.44
26:BA:2620:C:C6	26:BA:2621:A:C8	3.06	0.44
26:BA:2048:G:C5	26:BA:2621:A:C2	3.03	0.44
26:BA:2645:G:H4'	26:BA:2732:G:C2'	2.36	0.44
26:BA:2689:U:C4'	26:BA:2690:C:C5'	2.78	0.44
26:BA:270(S):G:H2'	26:BA:270(T):G:H8	1.81	0.44
26:BA:2751:G:N3	26:BA:2751:G:C2'	2.81	0.44
26:BA:2785:C:H5''	28:BE:99:VAL:CB	2.45	0.44
26:BA:2793:G:N2	26:BA:2803:C:O2	2.50	0.44
26:BA:2839:G:C2	26:BA:2840:C:C5	3.06	0.44
26:BA:2845:G:HO2'	26:BA:2846:G:C5'	1.91	0.44
26:BA:482:A:N6	26:BA:506:G:C4	2.86	0.44
26:BA:569:U:C4	26:BA:570:G:C6	3.06	0.44
26:BA:601:C:O2	26:BA:604:G:H4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:853:G:H2'	26:BA:854:G:H8	1.82	0.44
26:BA:918:A:OP1	26:BA:918:A:H4'	2.18	0.44
26:BA:995:C:C2	44:BU:57:PHE:CE2	3.05	0.44
27:BD:107:LYS:H	27:BD:194:VAL:C	2.06	0.44
27:BD:142:ASN:CG	27:BD:190:THR:HG23	2.39	0.44
27:BD:197:GLY:N	27:BD:199:ARG:HH11	2.15	0.44
28:BE:267:ARG:HD3	28:BE:297:LYS:HB3	1.99	0.44
29:BF:195:VAL:HG13	29:BF:213:ALA:CA	2.47	0.44
30:BG:128:LEU:O	30:BG:129:ASP:HB2	2.15	0.44
30:BG:55:LYS:C	30:BG:56:ARG:CG	2.86	0.44
31:BH:159:LYS:N	31:BH:162:ARG:CZ	2.74	0.44
31:BH:34:ARG:HD2	31:BH:36:PHE:CE1	2.52	0.44
31:BH:37:HIS:HA	31:BH:38:PRO:HD3	1.90	0.44
31:BH:55:SER:OG	31:BH:57:GLU:HG2	2.18	0.44
32:BI:116:GLU:OE1	32:BI:130:PRO:HB2	2.17	0.44
55:BK:92:PRO:HB3	55:BK:134:SER:C	2.38	0.44
33:BN:21:ARG:O	33:BN:22:VAL:O	2.35	0.44
26:BA:2484:G:C2'	36:BQ:142:LYS:NZ	2.81	0.44
37:BS:123:ILE:O	37:BS:124:ASP:C	2.55	0.44
37:BS:37:ARG:N	37:BS:44:ARG:O	2.51	0.44
45:BV:64:GLY:N	45:BV:94:LYS:O	2.50	0.44
26:BA:1266:G:O6	39:BW:13:SER:HB2	2.18	0.44
39:BW:24:ILE:HD13	39:BW:36:LEU:HG	2.00	0.44
39:BW:3:ALA:HB2	39:BW:62:HIS:CB	2.48	0.44
40:BX:14:ALA:O	40:BX:17:ASP:OD1	2.35	0.44
42:BZ:150:GLY:H	42:BZ:164:PRO:HA	1.83	0.44
42:BZ:21:ALA:HA	42:BZ:81:VAL:O	2.18	0.44
1:AA:1085:U:H5'	1:AA:1094:G:C2	2.53	0.44
1:AA:1298:C:P	10:AG:114:ARG:NH1	2.91	0.44
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.53	0.44
1:AA:1399:C:C2	1:AA:1502:A:N6	2.85	0.44
1:AA:370:C:H42	1:AA:391:G:H1	1.66	0.44
1:AA:355:C:H4'	1:AA:389:A:OP2	2.18	0.44
1:AA:392:G:P	19:AP:12:LYS:HE2	2.58	0.44
1:AA:517:G:N2	1:AA:533:A:OP2	2.51	0.44
1:AA:696:A:N3	1:AA:786:G:O2'	2.49	0.44
1:AA:996:A:N1	1:AA:1046:A:H4'	2.32	0.44
5:AB:205:ASP:O	5:AB:211:ILE:HD11	2.18	0.44
5:AB:93:VAL:HG11	5:AB:97:TRP:HA	2.00	0.44
6:AC:121:ALA:HA	6:AC:124:ILE:HD12	1.99	0.44
6:AC:64:VAL:HG12	6:AC:66:VAL:HG23	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AB:178:ARG:NH2	11:AH:74:PRO:HG3	2.31	0.44
13:AJ:49:VAL:O	13:AJ:60:ARG:HA	2.17	0.44
1:AA:881:G:OP2	15:AL:9:GLN:CD	2.56	0.44
1:AA:1225:A:O4'	22:AS:78:ARG:HD3	2.18	0.44
2:AV:58:A:C5	2:AV:61:C:C4	3.06	0.44
3:AW:34:G:H3'	3:AW:35:A:H5''	2.00	0.44
26:BA:856:C:C3'	48:B0:56:ASP:OD2	2.60	0.44
26:BA:2331:G:C1'	48:B0:70:ILE:HG13	2.47	0.44
46:B2:24:LYS:O	46:B2:27:LEU:N	2.51	0.44
49:B4:5:LEU:HD21	49:B4:9:ALA:CA	2.40	0.44
49:B4:58:LYS:O	49:B4:61:LYS:CB	2.65	0.44
49:B4:62:ARG:HG3	49:B4:62:ARG:H	1.42	0.44
49:B4:68:ARG:NH1	49:B4:72:LYS:HE2	2.33	0.44
50:B5:30:LEU:HD21	50:B5:41:LEU:HD23	1.99	0.44
26:BA:2528:U:OP1	54:B9:30:VAL:HB	2.18	0.44
26:BA:1004:C:H1'	26:BA:1010:A:C4	2.53	0.44
26:BA:1022:G:O2'	26:BA:1023:U:OP2	2.35	0.44
26:BA:1081:U:P	55:BK:126:LYS:CD	3.02	0.44
26:BA:578:A:OP1	26:BA:1255:U:H4'	2.18	0.44
26:BA:126:A:C4	52:B7:18:PHE:CD2	3.04	0.44
26:BA:1287:A:H62	43:BR:106:GLY:HA3	1.83	0.44
26:BA:1355:G:H1	26:BA:1376:C:H42	1.66	0.44
26:BA:1805:U:H2'	26:BA:1806:C:H6	1.83	0.44
26:BA:2052:G:H21	28:BE:245:ARG:HB3	1.81	0.44
26:BA:954:G:H1'	26:BA:2274:A:N1	2.32	0.44
26:BA:2422:A:C2	26:BA:2424:C:C4	3.06	0.44
26:BA:2519:U:O2	26:BA:2542:A:C6	2.70	0.44
26:BA:2535:G:N2	26:BA:2536:G:C1'	2.72	0.44
26:BA:2548:G:C6	26:BA:2549:G:C5	3.05	0.44
26:BA:2657:A:H3'	26:BA:2658:C:H5'	1.97	0.44
26:BA:1759:A:C5'	26:BA:2715:C:C1'	2.96	0.44
26:BA:2732:G:C5'	26:BA:2733:A:O5'	2.65	0.44
26:BA:2805:G:H8	26:BA:2807:G:O4'	2.01	0.44
26:BA:2888:C:N3	26:BA:2889:C:C4	2.85	0.44
26:BA:324:A:HO3'	26:BA:325:G:P	2.31	0.44
26:BA:273(A):G:C6	26:BA:363(D):G:O6	2.71	0.44
26:BA:680:G:C6	26:BA:681:G:C6	3.06	0.44
26:BA:687:C:N3	26:BA:788:A:O5'	2.51	0.44
27:BD:215:LYS:O	27:BD:216:ALA:C	2.56	0.44
28:BE:180:ILE:CG2	28:BE:183:ASP:OD2	2.66	0.44
28:BE:274:GLY:H	28:BE:291:GLY:C	2.21	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:164:ALA:O	29:BF:232:LEU:HB2	2.18	0.44
29:BF:37:ALA:HB2	29:BF:102:LEU:HG	2.00	0.44
30:BG:134:LEU:O	30:BG:135:VAL:CG2	2.65	0.44
30:BG:14:ARG:HG3	30:BG:137:PRO:HG3	2.00	0.44
31:BH:44:VAL:CB	31:BH:49:ILE:HG22	2.46	0.44
31:BH:8:ILE:HD13	31:BH:72:ALA:HB2	1.99	0.44
32:BI:2:LYS:HD3	32:BI:39:ALA:CB	2.47	0.44
32:BI:59:ALA:C	32:BI:62:LEU:HB2	2.34	0.44
55:BK:103:LYS:O	55:BK:104:GLN:C	2.56	0.44
55:BK:15:ALA:C	55:BK:17:LYS:N	2.71	0.44
55:BK:95:LYS:O	55:BK:96:ILE:C	2.55	0.44
33:BN:54:VAL:HG13	33:BN:138:THR:OG1	2.18	0.44
35:BP:55:GLN:CG	35:BP:56:LYS:N	2.80	0.44
35:BP:71:GLU:O	35:BP:74:THR:OG1	2.33	0.44
36:BQ:102:ARG:O	36:BQ:104:PRO:N	2.51	0.44
36:BQ:42:TYR:CE2	42:BZ:116:VAL:CG2	2.84	0.44
36:BQ:59:ASN:CG	36:BQ:60:ALA:N	2.47	0.44
43:BR:51:LEU:HA	43:BR:51:LEU:HD23	1.83	0.44
37:BS:103:ASP:C	37:BS:105:GLY:N	2.68	0.44
37:BS:81:ALA:CB	37:BS:118:ILE:N	2.69	0.44
37:BS:120:GLU:OE1	37:BS:120:GLU:N	2.51	0.44
37:BS:31:LYS:HD3	37:BS:99:GLU:CB	2.43	0.44
44:BU:61:TRP:CE3	44:BU:93:LYS:HA	2.53	0.44
40:BX:46:ASP:HB2	40:BX:47:VAL:H	1.64	0.44
1:AA:1055:A:H2	6:AC:194:GLY:HA3	1.83	0.43
1:AA:1280:A:C1'	13:AJ:41:PRO:HG3	2.48	0.43
1:AA:21:G:H2'	1:AA:22:G:C8	2.53	0.43
1:AA:376:G:O4'	19:AP:28:ARG:HB2	2.17	0.43
1:AA:531:U:H4'	1:AA:532:A:O5'	2.17	0.43
1:AA:62:U:H5''	1:AA:385:C:C2'	2.47	0.43
1:AA:7:G:H21	8:AE:121:LYS:HG2	1.83	0.43
1:AA:908:A:H2'	1:AA:909:A:C8	2.52	0.43
5:AB:95:GLN:O	5:AB:96:ARG:C	2.56	0.43
7:AD:20:TYR:HB2	7:AD:21:LEU:H	1.69	0.43
8:AE:95:ALA:CB	8:AE:96:PRO:HD3	2.45	0.43
1:AA:194:C:H4'	23:AT:64:ASP:O	2.18	0.43
1:AA:261:U:C5	23:AT:79:ARG:NH2	2.85	0.43
2:AV:73:A:C5'	2:AV:74:C:P	2.97	0.43
46:B2:9:ARG:HB2	46:B2:59:ILE:CD1	2.48	0.43
47:B3:8:LEU:HD23	47:B3:31:LEU:HD23	1.98	0.43
49:B4:35:VAL:CG1	49:B4:36:TRP:N	2.58	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:B6:28:ARG:O	51:B6:29:ARG:C	2.57	0.43
51:B6:8:ILE:HD12	51:B6:29:ARG:NE	2.33	0.43
51:B6:14:SER:CA	51:B6:51:ARG:O	2.65	0.43
52:B7:43:THR:C	52:B7:45:SER:N	2.68	0.43
26:BA:2359:C:H4'	53:B8:52:LYS:HZ1	1.83	0.43
26:BA:1173:G:N2	26:BA:1174:A:C2	2.84	0.43
26:BA:161:U:H5'	26:BA:162:U:C6	2.53	0.43
26:BA:1657:C:C3'	26:BA:1657:C:C6	3.01	0.43
26:BA:1906:G:H2'	26:BA:1907:G:C8	2.52	0.43
1:AA:1494:G:O2'	26:BA:1912:A:O2'	2.30	0.43
26:BA:2259:G:H2'	26:BA:2260:C:H6	1.81	0.43
26:BA:2264:C:N3	26:BA:2265:U:C6	2.86	0.43
26:BA:2352:A:C2'	26:BA:2353:G:O5'	2.66	0.43
26:BA:2394:C:N3	26:BA:2395:C:N3	2.64	0.43
26:BA:2416:C:HO2'	26:BA:2417:C:H5''	1.79	0.43
26:BA:2517:C:C6	26:BA:2542:A:N7	2.86	0.43
26:BA:2520:C:N4	26:BA:2567:G:N7	2.65	0.43
26:BA:2638:G:C6	26:BA:2776:A:OP2	2.70	0.43
26:BA:269:U:C5	26:BA:270(Y):G:O3'	2.70	0.43
26:BA:2828:C:C2	26:BA:2829:C:C6	3.05	0.43
26:BA:2875:C:N4	26:BA:2876:G:C5	2.86	0.43
26:BA:292:C:H5''	26:BA:293:U:OP1	2.17	0.43
26:BA:347:A:H3'	26:BA:347:A:C8	2.53	0.43
26:BA:444:C:OP2	44:BU:2:PRO:CD	2.65	0.43
26:BA:489:G:C5	26:BA:1284:A:C2	3.06	0.43
26:BA:685:A:H4'	26:BA:686:G:O5'	2.18	0.43
26:BA:729:G:H8	26:BA:764:A:P	2.41	0.43
25:BB:6:C:H2'	25:BB:7:G:C8	2.53	0.43
27:BD:141:HIS:HE1	27:BD:192:GLY:CA	2.30	0.43
28:BE:44:TYR:HD2	28:BE:306:ARG:O	2.00	0.43
29:BF:111:VAL:CA	29:BF:114:ALA:HB3	2.49	0.43
29:BF:38:ALA:O	29:BF:39:GLN:O	2.35	0.43
30:BG:56:ARG:CG	30:BG:65:GLU:CG	2.96	0.43
31:BH:34:ARG:HB3	31:BH:36:PHE:HE1	1.83	0.43
31:BH:53:ARG:HD2	31:BH:56:ASP:CA	2.45	0.43
31:BH:85:ALA:C	31:BH:164:GLU:HG2	2.38	0.43
31:BH:90:GLY:HA2	31:BH:159:LYS:CE	2.48	0.43
32:BI:5:PHE:CG	32:BI:17:GLU:O	2.71	0.43
32:BI:95:SER:HG	32:BI:98:ILE:CD1	2.03	0.43
55:BK:107:GLU:HA	55:BK:110:LYS:CD	2.39	0.43
55:BK:129:GLU:C	55:BK:129:GLU:OE2	2.56	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BK:131:THR:O	55:BK:133:LYS:N	2.51	0.43
55:BK:27:ALA:C	55:BK:29:GLY:N	2.70	0.43
33:BN:44:ALA:O	33:BN:45:VAL:CG2	2.65	0.43
33:BN:65:ASN:C	33:BN:68:GLY:O	2.56	0.43
33:BN:96:GLU:O	33:BN:98:PHE:N	2.51	0.43
34:BO:11:ALA:CA	34:BO:99:PHE:CB	2.97	0.43
36:BQ:35:ASN:HB2	42:BZ:113:VAL:HG21	1.77	0.43
37:BS:104:ILE:CG2	37:BS:104:ILE:O	2.65	0.43
37:BS:109:PRO:O	37:BS:116:PHE:CG	2.66	0.43
44:BU:55:ARG:O	44:BU:57:PHE:C	2.57	0.43
44:BU:64:ARG:O	44:BU:67:ALA:HB3	2.18	0.43
44:BU:65:ILE:O	44:BU:66:ASN:C	2.56	0.43
44:BU:68:GLY:HA2	44:BU:71:LEU:CB	2.47	0.43
44:BU:7:GLY:O	44:BU:8:ILE:CD1	2.63	0.43
45:BV:89:ASN:O	45:BV:90:PHE:C	2.56	0.43
40:BX:11:THR:O	40:BX:12:GLU:C	2.56	0.43
40:BX:55:GLN:N	40:BX:63:LYS:O	2.51	0.43
41:BY:22:GLN:O	41:BY:24:ARG:N	2.51	0.43
41:BY:73:HIS:CE1	41:BY:90:PRO:CA	2.91	0.43
42:BZ:141:MET:HB2	42:BZ:171:VAL:CG1	2.47	0.43
25:BB:104:A:OP1	42:BZ:93:GLU:OE1	2.36	0.43
1:AA:1289:A:C2	1:AA:1372:U:C4'	3.01	0.43
1:AA:1320:C:H2'	1:AA:1321:C:C6	2.53	0.43
1:AA:946:A:O2'	1:AA:1333:A:C1'	2.66	0.43
1:AA:1511:G:C6	1:AA:1512:U:N3	2.85	0.43
1:AA:253:U:H4'	1:AA:276:G:O2'	2.18	0.43
1:AA:413:G:H1	7:AD:36:ARG:NH1	2.16	0.43
1:AA:500:G:N2	1:AA:546:G:H1'	2.32	0.43
1:AA:659:U:H2'	1:AA:660:G:H8	1.83	0.43
1:AA:695:A:H2'	1:AA:696:A:O4'	2.17	0.43
7:AD:11:LEU:HD22	7:AD:66:ARG:CD	2.48	0.43
1:AA:823:G:H21	11:AH:1:MET:H3	1.66	0.43
16:AM:33:ALA:HA	16:AM:59:TYR:HE2	1.83	0.43
17:AN:26:ARG:HB3	17:AN:43:CYS:HB2	2.01	0.43
1:AA:236:G:C5'	20:AQ:42:TYR:OH	2.64	0.43
21:AR:31:LEU:HD11	21:AR:62:GLU:HG3	2.00	0.43
3:AW:14:A:C6	3:AW:22:G:C4	3.06	0.43
3:AW:50:U:O2'	3:AW:51:G:H5'	2.17	0.43
48:B0:35:ASN:CA	48:B0:68:VAL:CG2	2.95	0.43
26:BA:2331:G:C4'	48:B0:70:ILE:CB	2.81	0.43
48:B0:45:PHE:CE1	48:B0:78:PHE:CA	2.95	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:3:LEU:HB3	46:B2:4:HIS:H	1.42	0.43
47:B3:7:LYS:CG	47:B3:8:LEU:N	2.81	0.43
49:B4:7:PRO:CD	49:B4:56:VAL:CB	2.89	0.43
50:B5:33:CYS:HB2	50:B5:38:GLY:N	2.33	0.43
51:B6:49:VAL:O	51:B6:50:PHE:CD1	2.71	0.43
52:B7:11:LYS:HG3	52:B7:12:ARG:N	2.33	0.43
26:BA:1081:U:OP1	55:BK:126:LYS:NZ	2.44	0.43
26:BA:1166:C:H42	26:BA:1183:G:H1	1.66	0.43
26:BA:1375:C:H2'	26:BA:1376:C:H6	1.83	0.43
26:BA:162:U:H4'	26:BA:171:G:N3	2.33	0.43
26:BA:1707:G:H2'	26:BA:1708:C:C6	2.53	0.43
26:BA:1857:G:C2	26:BA:1858:G:O6	2.71	0.43
26:BA:2264:C:C2'	26:BA:2265:U:C5'	2.91	0.43
26:BA:2295:C:C5	26:BA:2338:G:N1	2.86	0.43
26:BA:2302:G:C2	26:BA:2315:G:C5	3.06	0.43
26:BA:2322:A:C4'	26:BA:2322:A:OP1	2.67	0.43
26:BA:2325:G:C4	26:BA:2326:C:H5	2.36	0.43
26:BA:2328:A:C6	26:BA:2329:G:N7	2.83	0.43
26:BA:2532:G:O2'	26:BA:2533:A:H5'	2.18	0.43
26:BA:2561:A:H8	26:BA:2561:A:H3'	1.79	0.43
26:BA:1783:A:C6	26:BA:2587:A:H2	2.25	0.43
26:BA:2605:U:C6	26:BA:2605:U:C3'	3.01	0.43
26:BA:2611:U:H5'	26:BA:2611:U:H6	1.83	0.43
26:BA:2620:C:HO2'	26:BA:2621:A:P	2.35	0.43
26:BA:2680:C:H5'	28:BE:302:GLY:CA	2.48	0.43
26:BA:2747:G:O2'	26:BA:2748:A:H5''	2.18	0.43
26:BA:2792:G:C2	26:BA:2804:C:C4	3.06	0.43
26:BA:2885:C:O2	26:BA:2885:C:C2'	2.64	0.43
26:BA:521:G:H2'	26:BA:522:G:H8	1.81	0.43
26:BA:563:G:H2'	26:BA:563:G:N3	2.33	0.43
26:BA:658:C:O2'	29:BF:103:ASN:ND2	2.51	0.43
26:BA:668:G:C2'	26:BA:670:A:H62	2.29	0.43
26:BA:707:G:H1	26:BA:724:U:H3	1.66	0.43
26:BA:948:G:H1	26:BA:969:U:H3	1.65	0.43
26:BA:996:A:O3'	44:BU:93:LYS:CG	2.64	0.43
25:BB:55:U:H2'	25:BB:56:G:C8	2.53	0.43
27:BD:104:ILE:C	27:BD:106:PRO:CD	2.87	0.43
27:BD:142:ASN:O	27:BD:189:ALA:HA	2.18	0.43
27:BD:73:ILE:HG13	27:BD:73:ILE:H	1.59	0.43
28:BE:41:PHE:HE1	28:BE:173:ARG:HH11	1.64	0.43
30:BG:14:ARG:H	30:BG:14:ARG:CD	2.29	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BG:98:PHE:HA	30:BG:104:PHE:CE2	2.27	0.43
30:BG:98:PHE:N	30:BG:98:PHE:CD2	2.85	0.43
32:BI:93:ILE:HG23	32:BI:122:ARG:HA	1.99	0.43
32:BI:12:LYS:O	32:BI:13:GLY:C	2.57	0.43
32:BI:39:ALA:O	32:BI:40:THR:O	2.36	0.43
33:BN:25:GLN:CA	33:BN:28:GLU:HG3	2.29	0.43
33:BN:31:LEU:C	33:BN:33:GLY:N	2.67	0.43
34:BO:107:ARG:CG	34:BO:115:ILE:HG21	2.48	0.43
34:BO:53:LYS:O	34:BO:54:LYS:C	2.56	0.43
35:BP:69:ILE:CG1	35:BP:70:ASP:N	2.30	0.43
36:BQ:59:ASN:C	36:BQ:61:LEU:N	2.68	0.43
37:BS:53:ASN:O	37:BS:53:ASN:CG	2.55	0.43
44:BU:99:ALA:HB3	44:BU:106:PHE:CZ	2.41	0.43
26:BA:1249:U:H5''	44:BU:4:ALA:HB2	2.00	0.43
45:BV:5:ILE:C	45:BV:6:GLN:HG2	2.19	0.43
39:BW:13:SER:HB3	39:BW:16:LYS:HB2	2.01	0.43
39:BW:17:VAL:CA	39:BW:20:VAL:CG2	2.95	0.43
39:BW:26:GLY:C	39:BW:27:LYS:HG3	2.38	0.43
39:BW:58:ALA:C	39:BW:60:ASN:N	2.71	0.43
40:BX:45:TYR:O	40:BX:47:VAL:O	2.35	0.43
40:BX:28:VAL:HG21	40:BX:64:ALA:HB2	2.01	0.43
40:BX:22:ASN:CA	40:BX:68:LEU:HG	2.48	0.43
41:BY:19:ARG:NH1	41:BY:68:ASP:N	2.66	0.43
41:BY:20:HIS:C	41:BY:22:GLN:H	2.20	0.43
42:BZ:166:LEU:HD13	42:BZ:167:THR:OG1	2.17	0.43
42:BZ:26:LYS:CA	42:BZ:84:TYR:OH	2.66	0.43
1:AA:1006:C:O2	1:AA:1006:C:H2'	2.18	0.43
1:AA:112:G:H5'	1:AA:389:A:H4'	2.00	0.43
1:AA:1449:C:H42	1:AA:1454:G:H1	1.67	0.43
1:AA:404:U:C4	7:AD:2:GLY:HA3	2.47	0.43
1:AA:405:U:OP1	7:AD:5:ILE:HD13	2.17	0.43
1:AA:741:G:H5'	18:AO:39:LEU:HD11	1.99	0.43
1:AA:752:G:H1'	1:AA:754:C:N4	2.33	0.43
1:AA:782:A:OP1	1:AA:1521:G:N2	2.42	0.43
1:AA:980:C:H2'	1:AA:981:U:O4'	2.18	0.43
8:AE:76:ILE:HG21	8:AE:142:LEU:HD22	2.01	0.43
12:AI:27:THR:HB	12:AI:62:TYR:HD1	1.83	0.43
3:AW:43:G:H2'	3:AW:44:A:C8	2.52	0.43
46:B2:19:GLU:OE1	46:B2:20:LEU:N	2.50	0.43
46:B2:56:ILE:O	46:B2:57:LYS:C	2.55	0.43
46:B2:56:ILE:HB	46:B2:57:LYS:H	1.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:72:U:H4'	46:B2:57:LYS:HZ1	1.84	0.43
49:B4:68:ARG:HB3	49:B4:72:LYS:HA	2.00	0.43
50:B5:34:PRO:HD2	50:B5:36:CYS:CB	2.48	0.43
51:B6:16:ALA:HA	51:B6:50:PHE:CE2	2.54	0.43
26:BA:1057:A:N7	26:BA:1087:G:OP2	2.52	0.43
26:BA:1545:A:H2'	26:BA:545(A):A:O4'	2.19	0.43
26:BA:1547:C:H2'	26:BA:1548:C:H6	1.83	0.43
26:BA:1780:A:H3'	26:BA:1781:C:H5'	1.95	0.43
26:BA:1788:C:C2	26:BA:1789:A:C8	3.07	0.43
26:BA:1812:A:H2'	26:BA:1813:G:O4'	2.19	0.43
26:BA:2210:G:N7	27:BD:148:GLY:C	2.72	0.43
26:BA:2297:C:O2'	26:BA:2298:A:O4'	2.28	0.43
26:BA:2304:G:C2'	26:BA:2305:A:O5'	2.66	0.43
26:BA:2352:A:N3	26:BA:2353:G:O4'	2.51	0.43
26:BA:2404:C:N4	26:BA:2405:G:C4	2.86	0.43
26:BA:2458:G:C6	26:BA:2490:G:O2'	2.63	0.43
26:BA:2475:C:C2'	26:BA:2477:C:P	3.07	0.43
26:BA:2482:G:C3'	26:BA:2483:C:H5'	2.41	0.43
26:BA:2561:A:C4	26:BA:2562:U:C6	3.04	0.43
26:BA:2578:G:H2'	26:BA:2579:C:H5''	1.98	0.43
26:BA:2588:G:H5''	26:BA:2589:A:OP2	2.19	0.43
26:BA:2634:G:C2'	26:BA:2635:C:C5'	2.93	0.43
26:BA:2666:C:OP2	26:BA:2667:C:C5	2.66	0.43
26:BA:2726:U:H6	26:BA:2726:U:H2'	1.62	0.43
26:BA:2736:G:C2'	26:BA:2737:G:H5'	2.48	0.43
26:BA:2743:C:C2	26:BA:2762:G:N2	2.86	0.43
26:BA:2869:G:N1	26:BA:2870:C:C4	2.86	0.43
26:BA:282:A:H62	26:BA:360:G:H21	1.65	0.43
26:BA:705:A:C8	26:BA:705:A:OP2	2.71	0.43
26:BA:72:U:OP2	40:BX:2:TRP:NE1	2.51	0.43
27:BD:166:LYS:CB	27:BD:171:VAL:HA	2.45	0.43
27:BD:216:ALA:CB	27:BD:223:ASN:H	2.31	0.43
28:BE:180:ILE:CD1	28:BE:187:HIS:CB	2.97	0.43
28:BE:267:ARG:CG	28:BE:297:LYS:HD2	2.48	0.43
29:BF:25:PRO:HG2	29:BF:26:VAL:H	1.83	0.43
32:BI:134:HIS:N	32:BI:137:VAL:O	2.48	0.43
32:BI:6:LEU:CD2	32:BI:14:LYS:HD3	2.28	0.43
33:BN:103:VAL:O	33:BN:104:TYR:CE2	2.68	0.43
33:BN:10:VAL:CG1	33:BN:36:VAL:CA	2.94	0.43
33:BN:55:GLU:O	33:BN:56:LYS:C	2.56	0.43
26:BA:1006:C:HO2'	33:BN:86:MET:HB3	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:32:LYS:HD2	36:BQ:33:MET:N	2.32	0.43
26:BA:1287:A:N6	43:BR:106:GLY:HA3	2.33	0.43
43:BR:90:ARG:HB3	43:BR:91:GLN:H	1.57	0.43
37:BS:103:ASP:OD2	37:BS:105:GLY:CA	2.66	0.43
37:BS:54:GLY:O	37:BS:55:ASP:O	2.36	0.43
44:BU:21:ALA:CB	44:BU:24:PHE:HZ	2.27	0.43
39:BW:6:ILE:HG13	39:BW:104:THR:HG22	1.99	0.43
39:BW:14:PRO:O	39:BW:15:ARG:C	2.57	0.43
39:BW:66:GLU:CD	39:BW:67:ASP:N	2.68	0.43
42:BZ:38:ALA:C	42:BZ:40:ASP:N	2.71	0.43
42:BZ:51:LEU:HD21	42:BZ:63:PRO:HA	2.00	0.43
1:AA:1278:U:H5'	1:AA:1279:A:O4'	2.13	0.43
1:AA:19:C:C2	1:AA:917:G:N2	2.86	0.43
1:AA:406:G:C2	1:AA:437:U:O2	2.68	0.43
1:AA:54:C:H41	1:AA:352:C:C2'	2.32	0.43
1:AA:599:C:H4'	11:AH:96:GLY:HA3	1.99	0.43
1:AA:769:G:H22	1:AA:811:C:H1'	1.84	0.43
1:AA:770:C:C4	1:AA:771:G:N7	2.86	0.43
5:AB:178:ARG:HH21	11:AH:74:PRO:HG3	1.84	0.43
7:AD:22:LYS:CG	7:AD:115:ARG:NH2	2.75	0.43
11:AH:38:ILE:HG22	11:AH:38:ILE:O	2.18	0.43
23:AT:73:HIS:C	23:AT:74:LYS:HG2	2.38	0.43
3:AW:76:A:O2'	26:BA:2395:C:C2	2.70	0.43
48:B0:24:LYS:HG3	48:B0:56:ASP:CG	2.25	0.43
47:B3:4:LEU:N	47:B3:4:LEU:HD23	2.32	0.43
49:B4:63:PHE:C	49:B4:65:ASP:N	2.71	0.43
50:B5:44:HIS:CG	50:B5:52:TYR:OH	2.71	0.43
50:B5:45:ILE:N	50:B5:52:TYR:OH	2.51	0.43
26:BA:1081:U:H4'	55:BK:123:ALA:CA	2.47	0.43
26:BA:1056:G:O6	26:BA:1101:U:C5'	2.67	0.43
26:BA:1287:A:OP1	43:BR:105:ARG:NH2	2.51	0.43
26:BA:133:C:H2'	26:BA:134:C:H6	1.84	0.43
26:BA:1638:C:O2	26:BA:2698:U:O2'	2.26	0.43
26:BA:1834:U:O3'	26:BA:1835:G:H8	2.01	0.43
26:BA:1934:C:H4'	26:BA:1974:C:H4'	2.00	0.43
26:BA:2000:G:H2'	26:BA:2001:A:C8	2.53	0.43
26:BA:2217:G:C2	26:BA:2218:G:N7	2.86	0.43
26:BA:2226:C:C3'	26:BA:2227:A:O4'	2.64	0.43
26:BA:2249:U:N3	26:BA:2253:G:OP1	2.43	0.43
26:BA:2255:G:C6	26:BA:2256:G:N9	2.86	0.43
26:BA:2267:A:C6	26:BA:2272:U:O4	2.72	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2328:A:C6	26:BA:2329:G:C5	3.07	0.43
26:BA:218:A:N6	26:BA:235:U:HO2'	2.15	0.43
26:BA:2392:A:C8	26:BA:2393:A:N9	2.86	0.43
26:BA:807:U:C4'	26:BA:2445:G:H5'	2.48	0.43
26:BA:2458:G:C5	26:BA:2490:G:C4	3.07	0.43
26:BA:2596:U:H3'	26:BA:2597:G:C8	2.53	0.43
26:BA:2048:G:N2	26:BA:2620:C:N3	2.64	0.43
26:BA:2626:C:H5'	26:BA:2626:C:H6	1.72	0.43
26:BA:2638:G:H2'	26:BA:2775:A:C2	2.53	0.43
26:BA:2648:C:C2	26:BA:2673:G:C2	3.05	0.43
26:BA:2748:A:H2'	31:BH:62:ALA:CB	2.37	0.43
26:BA:2756:U:O2	26:BA:2756:U:O2'	2.31	0.43
26:BA:2772:C:C4	26:BA:2773:C:C4	3.05	0.43
26:BA:2641:G:O6	26:BA:2774:C:C4	2.71	0.43
26:BA:2834:G:O6	26:BA:2835:A:C2	2.71	0.43
26:BA:2892:A:C2'	26:BA:2893:G:C1'	2.94	0.43
26:BA:307:G:N2	26:BA:309:G:H3'	2.33	0.43
26:BA:446:G:C5'	44:BU:5:LYS:CE	2.91	0.43
26:BA:558:G:H2'	26:BA:559:G:H8	1.82	0.43
26:BA:592:G:H1'	53:B8:2:PRO:N	2.33	0.43
26:BA:881:G:H3'	26:BA:882:G:H8	1.82	0.43
26:BA:911:A:H2'	36:BQ:16:ARG:CD	2.47	0.43
26:BA:968:G:H2'	26:BA:969:U:O4'	2.18	0.43
26:BA:997:G:H5''	44:BU:92:ARG:HD2	2.00	0.43
25:BB:28:C:H2'	25:BB:29:A:O4'	2.18	0.43
27:BD:77:VAL:O	27:BD:78:ALA:C	2.57	0.43
28:BE:42:ALA:CB	28:BE:310:PHE:CD2	3.01	0.43
29:BF:34:ALA:HB1	29:BF:110:ALA:CB	2.39	0.43
29:BF:167:ASP:OD2	29:BF:231:ARG:C	2.56	0.43
29:BF:87:ARG:O	29:BF:88:SER:HB2	2.17	0.43
30:BG:140:ARG:O	30:BG:143:LYS:HG3	2.17	0.43
30:BG:27:ILE:C	30:BG:29:HIS:N	2.64	0.43
31:BH:10:ILE:CG1	31:BH:49:ILE:HG12	2.48	0.43
33:BN:5:GLU:HA	33:BN:109:TYR:CD2	2.52	0.43
33:BN:83:ILE:HD11	33:BN:84:ARG:HE	1.84	0.43
34:BO:60:ALA:HA	34:BO:85:VAL:O	2.18	0.43
34:BO:84:CYS:HB3	34:BO:85:VAL:H	1.57	0.43
36:BQ:26:LYS:NZ	36:BQ:88:PHE:CB	2.82	0.43
43:BR:28:LEU:C	43:BR:28:LEU:HD13	2.37	0.43
26:BA:446:G:C5'	44:BU:5:LYS:HZ1	2.31	0.43
26:BA:1152:C:H4'	44:BU:80:ILE:HD12	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:22:VAL:HG12	45:BV:23:GLU:N	2.33	0.43
39:BW:23:LEU:HD23	39:BW:23:LEU:C	2.37	0.43
40:BX:1:SER:C	40:BX:2:TRP:CD1	2.92	0.43
40:BX:22:ASN:CB	40:BX:68:LEU:HG	2.48	0.43
41:BY:11:GLN:HG3	41:BY:21:LYS:NZ	2.34	0.43
42:BZ:37:LYS:HA	42:BZ:41:ARG:NH1	2.30	0.43
1:AA:1163:C:H42	1:AA:1173:G:H1	1.67	0.43
1:AA:1255:G:H5''	1:AA:1256:A:OP1	2.19	0.43
1:AA:1260:C:O2'	1:AA:1283:G:H4'	2.18	0.43
1:AA:1506:U:O2'	1:AA:1507:A:H5'	2.19	0.43
1:AA:531:U:H4'	1:AA:532:A:H5''	2.01	0.43
1:AA:564:C:H2'	1:AA:565:U:O4'	2.17	0.43
1:AA:974:A:H5'	1:AA:975:A:P	2.58	0.43
1:AA:99:C:H2'	1:AA:101:A:C8	2.53	0.43
6:AC:18:TRP:CD1	17:AN:53:LEU:C	2.92	0.43
10:AG:93:PRO:HA	10:AG:96:GLN:HB2	1.98	0.43
3:AW:16:U:C2'	3:AW:17:U:OP2	2.65	0.43
48:B0:67:VAL:HG11	48:B0:74:LYS:CE	2.49	0.43
46:B2:17:GLU:O	46:B2:19:GLU:OE1	2.37	0.43
47:B3:4:LEU:O	47:B3:37:LEU:N	2.50	0.43
49:B4:14:ILE:HG21	49:B4:37:SER:CB	2.44	0.43
49:B4:14:ILE:O	49:B4:36:TRP:HA	2.18	0.43
50:B5:44:HIS:C	50:B5:52:TYR:CZ	2.92	0.43
51:B6:16:ALA:HB3	51:B6:42:PRO:HB3	2.00	0.43
51:B6:48:VAL:C	51:B6:50:PHE:CE1	2.78	0.43
26:BA:489:G:N7	26:BA:1284:A:C2	2.87	0.43
26:BA:1361:G:H2'	26:BA:1362:C:C6	2.53	0.43
26:BA:1367:A:H2'	52:B7:25:LYS:HD2	2.01	0.43
26:BA:1559:G:N3	26:BA:1559:G:C2'	2.81	0.43
26:BA:1859:A:N6	26:BA:1883:G:O2'	2.51	0.43
26:BA:1930:G:O2'	26:BA:1931:U:P	2.77	0.43
26:BA:1935:G:N2	26:BA:1962:C:H2'	2.34	0.43
26:BA:1996:C:C5'	26:BA:1996:C:C6	2.95	0.43
26:BA:2199:A:C2'	26:BA:2205:C:C5'	2.95	0.43
26:BA:2286:A:OP2	51:B6:28:ARG:HD2	2.18	0.43
26:BA:2302:G:C5	26:BA:2315:G:N1	2.86	0.43
26:BA:2298:A:H1'	26:BA:2322:A:O2'	2.18	0.43
26:BA:2365:G:OP1	48:B0:39:ARG:O	2.35	0.43
26:BA:2478:A:H3'	26:BA:2478:A:C8	2.53	0.43
26:BA:2509:G:HO2'	26:BA:2510:C:C5'	2.23	0.43
26:BA:2540:C:P	26:BA:2540:C:H3'	2.58	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2639:A:N3	26:BA:2778:A:C2	2.86	0.43
26:BA:2647:U:O2	26:BA:2648:C:C6	2.71	0.43
26:BA:2648:C:N3	26:BA:2672:G:N2	2.59	0.43
26:BA:2757:A:H2'	26:BA:2758:A:C8	2.46	0.43
26:BA:27:G:O2'	26:BA:513:A:N6	2.52	0.43
26:BA:265:A:N1	26:BA:281:G:OP1	2.51	0.43
26:BA:309:G:O5'	41:BY:54:ASP:OD1	2.36	0.43
26:BA:295:G:C8	26:BA:345:A:H2	2.36	0.43
26:BA:35:G:N3	26:BA:454:A:C2	2.86	0.43
26:BA:404:C:O4'	26:BA:406:G:C8	2.72	0.43
26:BA:764:A:H2'	26:BA:781:A:N6	2.32	0.43
25:BB:42:C:C4'	30:BG:48:MET:N	2.81	0.43
25:BB:24:G:N1	25:BB:56:G:C2	2.87	0.43
26:BA:729:G:C2	27:BD:206:LYS:O	2.72	0.43
27:BD:90:ILE:HG23	27:BD:91:ALA:H	1.82	0.43
26:BA:2785:C:H5'	28:BE:98:GLU:O	2.19	0.43
29:BF:1:MET:O	29:BF:18:LEU:HD21	2.15	0.43
29:BF:213:ALA:HB3	29:BF:218:VAL:HG11	1.50	0.43
29:BF:220:THR:O	29:BF:225:PRO:HD2	2.19	0.43
31:BH:105:SER:C	31:BH:106:VAL:CG2	2.86	0.43
32:BI:102:LEU:O	32:BI:107:GLY:N	2.48	0.43
55:BK:80:LYS:HE2	55:BK:80:LYS:HB3	1.88	0.43
33:BN:12:VAL:N	33:BN:38:VAL:HG22	2.33	0.43
36:BQ:23:ILE:O	36:BQ:23:ILE:CG2	2.62	0.43
36:BQ:49:VAL:HG23	36:BQ:121:ASP:N	1.96	0.43
43:BR:43:GLU:OE2	43:BR:43:GLU:CA	2.63	0.43
43:BR:79:LEU:O	43:BR:80:PHE:C	2.57	0.43
37:BS:34:LEU:C	37:BS:103:ASP:CB	2.83	0.43
37:BS:115:VAL:C	37:BS:117:ALA:N	2.72	0.43
44:BU:108:ALA:C	44:BU:110:VAL:N	2.59	0.43
44:BU:10:ARG:HA	44:BU:13:ARG:HH12	1.83	0.43
44:BU:18:LEU:HD22	44:BU:18:LEU:HA	1.79	0.43
44:BU:94:VAL:CG1	44:BU:98:ILE:HD11	2.49	0.43
45:BV:54:TYR:O	45:BV:56:VAL:CA	2.63	0.43
39:BW:8:ARG:C	39:BW:10:VAL:HG23	2.28	0.43
39:BW:55:ALA:N	39:BW:107:LEU:CD1	2.72	0.43
41:BY:27:LEU:O	41:BY:28:SER:O	2.37	0.43
42:BZ:39:PHE:HB3	42:BZ:43:PHE:CE1	2.54	0.43
1:AA:1367:C:OP1	12:AI:114:TYR:HA	2.19	0.43
1:AA:1517:G:C2	26:BA:1919:A:O2'	2.67	0.43
1:AA:184:G:H4'	1:AA:224:C:H4'	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:265:G:H4'	20:AQ:66:SER:H	1.83	0.43
1:AA:409:G:OP2	7:AD:22:LYS:HD3	2.19	0.43
1:AA:39:G:N9	1:AA:498:U:C4	2.87	0.43
1:AA:989:C:H4'	1:AA:1016:A:C2	2.53	0.43
5:AB:112:VAL:C	5:AB:113:HIS:CA	2.77	0.43
6:AC:178:LEU:O	6:AC:179:ARG:HB2	2.18	0.43
14:AK:120:ARG:HA	14:AK:121:PRO:HD3	1.87	0.43
1:AA:978:A:C2'	22:AS:37:ARG:HH22	2.23	0.43
47:B3:5:LYS:CG	47:B3:36:VAL:HG12	2.48	0.43
51:B6:19:GLY:O	51:B6:44:ALA:HB2	2.19	0.43
26:BA:1034:G:C4'	54:B9:18:ARG:CZ	2.97	0.43
26:BA:120:U:C2'	26:BA:120:U:O2	2.67	0.43
26:BA:1510:A:H3'	26:BA:1511:A:C8	2.52	0.43
26:BA:1515:C:H1'	26:BA:1557:C:H4'	2.01	0.43
26:BA:545(A):A:N7	26:BA:1546:C:N3	2.65	0.43
26:BA:1917:U:H6	26:BA:1918:A:C8	2.37	0.43
26:BA:2033:A:N6	26:BA:2036:C:C2	2.87	0.43
26:BA:2058:A:H8	26:BA:2058:A:O5'	2.01	0.43
26:BA:2103:C:C2	26:BA:2187:G:C6	3.07	0.43
26:BA:2212:A:C2'	26:BA:2212:A:N3	2.78	0.43
26:BA:2264:C:C2	26:BA:2265:U:C6	3.07	0.43
26:BA:2290:G:C6	26:BA:2291:U:C2	3.06	0.43
26:BA:2337:G:O6	26:BA:2338:G:O6	2.36	0.43
26:BA:2416:C:C3'	26:BA:2417:C:C5'	2.96	0.43
26:BA:2535:G:N3	26:BA:2535:G:C2'	2.79	0.43
26:BA:2525:G:H1	26:BA:2539:C:N4	2.13	0.43
26:BA:2545:G:C2	26:BA:2546:U:C2	3.06	0.43
26:BA:2549:G:HO2'	26:BA:2550:G:H5'	1.78	0.43
26:BA:2562:U:O2	26:BA:2563:U:C1'	2.66	0.43
26:BA:2520:C:N4	26:BA:2567:G:C6	2.87	0.43
26:BA:2664:G:N2	26:BA:2665:A:H62	2.16	0.43
26:BA:2666:C:C2'	26:BA:2667:C:C5'	2.93	0.43
26:BA:2803:C:N3	26:BA:2804:C:N3	2.66	0.43
26:BA:2819:G:C2'	26:BA:2821:A:H62	2.30	0.43
26:BA:2849:U:O4'	26:BA:2868:A:N3	2.50	0.43
26:BA:2854:G:C6	26:BA:2855:C:C4	3.06	0.43
26:BA:2808:U:N1	26:BA:2892:A:N6	2.63	0.43
26:BA:63:U:H2'	26:BA:64:A:N7	2.34	0.43
26:BA:775:G:N2	26:BA:787:U:H2'	2.33	0.43
26:BA:688:U:N3	26:BA:787:U:O2'	2.52	0.43
26:BA:860:U:H2'	26:BA:861:A:H5'	1.99	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:964:C:O2'	26:BA:2273:A:N9	2.51	0.43
26:BA:995:C:O2	44:BU:61:TRP:CZ2	2.72	0.43
27:BD:234:HIS:HB3	27:BD:235:PRO:HD2	2.00	0.43
27:BD:85:ASN:CG	27:BD:86:ARG:HE	2.10	0.43
28:BE:242:ASN:ND2	28:BE:242:ASN:N	2.67	0.43
28:BE:263:GLU:O	28:BE:264:LEU:HD23	2.18	0.43
28:BE:63:GLU:HB2	28:BE:64:GLY:H	1.59	0.43
28:BE:96:LEU:O	28:BE:97:THR:HG23	2.19	0.43
31:BH:117:GLU:HG2	31:BH:118:GLU:N	2.34	0.43
26:BA:2749:A:C1'	31:BH:62:ALA:CB	2.81	0.43
31:BH:60:HIS:O	31:BH:63:LEU:N	2.52	0.43
55:BK:112:LYS:HG2	55:BK:116:LEU:HB2	1.99	0.43
33:BN:38:VAL:CG1	33:BN:39:VAL:H	2.29	0.43
26:BA:1131:G:N1	33:BN:69:TYR:OH	2.28	0.43
34:BO:20:LEU:CD2	34:BO:44:LYS:HD3	2.49	0.43
34:BO:25:LEU:HD12	34:BO:38:VAL:O	2.13	0.43
34:BO:27:GLY:O	34:BO:28:SER:C	2.54	0.43
36:BQ:151:SER:HB3	36:BQ:155:GLY:CA	2.48	0.43
37:BS:19:ASP:C	37:BS:21:HIS:N	2.63	0.43
37:BS:66:LEU:C	37:BS:67:ALA:O	2.57	0.43
37:BS:74:PRO:C	37:BS:75:THR:O	2.52	0.43
44:BU:34:ASN:O	44:BU:38:THR:CG2	2.66	0.43
44:BU:60:LEU:O	44:BU:61:TRP:C	2.57	0.43
45:BV:78:VAL:CG2	45:BV:82:ARG:HB2	2.49	0.43
45:BV:93:ILE:N	45:BV:93:ILE:HD12	2.32	0.43
39:BW:7:ALA:O	39:BW:10:VAL:HG21	2.18	0.43
41:BY:45:GLY:HA2	41:BY:62:VAL:HG13	1.68	0.43
1:AA:104:G:C6	1:AA:105:G:N7	2.87	0.43
1:AA:1268:A:C2	1:AA:1327:C:C1'	2.92	0.43
1:AA:228:A:H1'	19:AP:62:VAL:HG11	2.00	0.43
1:AA:297:G:N2	1:AA:300:A:OP2	2.48	0.43
1:AA:116:A:N1	1:AA:314:C:O4'	2.52	0.43
1:AA:782:A:O3'	1:AA:1515:C:H4'	2.18	0.43
1:AA:770:C:O2'	1:AA:899:C:C2	2.71	0.43
7:AD:8:VAL:HG21	7:AD:115:ARG:HD3	2.01	0.43
15:AL:87:GLY:O	15:AL:99:HIS:CE1	2.71	0.43
1:AA:953:G:C1'	16:AM:125:ARG:HA	2.49	0.43
1:AA:1267:C:C2'	24:AU:20:LYS:HD3	2.45	0.43
1:AA:966:G:H1'	2:AV:34:G:H4'	1.99	0.43
3:AW:14:A:N6	3:AW:22:G:C4	2.87	0.43
48:B0:45:PHE:HE1	48:B0:78:PHE:CG	2.10	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:70:ILE:N	48:B0:70:ILE:CD1	2.81	0.43
46:B2:54:ALA:O	46:B2:56:ILE:CA	2.57	0.43
52:B7:30:ILE:C	52:B7:33:ARG:CB	2.48	0.43
53:B8:29:LYS:C	53:B8:30:ARG:O	2.54	0.43
53:B8:8:LYS:HB3	53:B8:9:MET:H	1.57	0.43
26:BA:1249:U:C3'	26:BA:1249:U:C6	3.02	0.43
26:BA:1286:A:N3	26:BA:1329:U:C4	2.87	0.43
26:BA:1317:A:H2'	26:BA:1318:C:H6	1.80	0.43
26:BA:1411:C:H2'	26:BA:1412:A:H8	1.83	0.43
26:BA:1952:A:C2	34:BO:22:ILE:CD1	3.02	0.43
26:BA:2208:U:H2'	26:BA:2209:C:O4'	2.18	0.43
26:BA:2243:U:O2	26:BA:2243:U:H2'	2.18	0.43
26:BA:2246:G:C2	26:BA:2247:A:C8	3.06	0.43
26:BA:2359:C:C2	26:BA:2360:A:C2	3.06	0.43
26:BA:2586:C:H42	26:BA:2608:G:H1'	1.84	0.43
26:BA:2648:C:N3	26:BA:2673:G:C2	2.87	0.43
26:BA:1759:A:N7	26:BA:2696:U:O2	2.47	0.43
26:BA:2737:G:N1	26:BA:2738:A:C5	2.87	0.43
26:BA:2773:C:C2'	26:BA:2774:C:O5'	2.66	0.43
26:BA:2861:G:H2'	26:BA:2862:G:H8	1.84	0.43
26:BA:2850:A:N3	26:BA:2869:G:H4'	2.32	0.43
26:BA:2880:C:C4	26:BA:2881:C:C4	3.06	0.43
26:BA:292:C:C2'	26:BA:293:U:H3	2.22	0.43
26:BA:295:G:OP1	26:BA:338:G:N1	2.52	0.43
26:BA:441:U:OP2	41:BY:3:GLN:CG	2.62	0.43
26:BA:449:A:OP2	29:BF:85:LYS:HA	2.18	0.43
26:BA:611:C:O2	26:BA:617:G:N2	2.52	0.43
26:BA:629:G:H21	26:BA:640:C:P	2.41	0.43
26:BA:687:C:C2	26:BA:788:A:O4'	2.71	0.43
26:BA:684:G:N1	26:BA:794:G:C2	2.87	0.43
26:BA:799:G:OP1	26:BA:800:A:H3'	2.18	0.43
25:BB:100:G:H2'	25:BB:101:A:O4'	2.18	0.43
25:BB:100:G:H4'	26:BA:915:C:O2'	2.19	0.43
25:BB:28:C:OP2	37:BS:41:LYS:CE	2.64	0.43
25:BB:59:A:C4'	30:BG:144:ARG:NE	2.81	0.43
25:BB:59:A:H4'	30:BG:144:ARG:NE	2.34	0.43
27:BD:143:ILE:N	27:BD:143:ILE:CD1	2.54	0.43
27:BD:65:ASP:O	27:BD:66:PHE:HB3	2.19	0.43
27:BD:86:ARG:H	27:BD:86:ARG:HD2	1.76	0.43
28:BE:39:GLN:OE1	28:BE:174:LEU:CD1	2.57	0.43
28:BE:180:ILE:CD1	28:BE:187:HIS:HB3	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:247:ARG:C	28:BE:249:THR:H	2.21	0.43
29:BF:103:ASN:CB	29:BF:106:GLU:CG	2.88	0.43
29:BF:238:SER:O	29:BF:241:ALA:N	2.51	0.43
29:BF:35:VAL:HB	29:BF:36:ARG:H	1.39	0.43
29:BF:59:GLU:CA	29:BF:59:GLU:OE2	2.67	0.43
29:BF:6:TYR:C	29:BF:11:ASN:N	2.72	0.43
30:BG:56:ARG:HA	30:BG:63:ILE:CA	2.47	0.43
25:BB:42:C:C2	30:BG:74:THR:OG1	2.72	0.43
30:BG:97:GLN:CG	30:BG:106:PHE:CD2	3.01	0.43
31:BH:108:TYR:N	31:BH:108:TYR:HD2	2.10	0.43
31:BH:143:LEU:O	31:BH:144:ALA:C	2.57	0.43
32:BI:43:ASN:HA	32:BI:46:ALA:H	1.84	0.43
32:BI:52:GLN:HA	32:BI:55:GLN:HG3	2.00	0.43
32:BI:7:LYS:HB2	32:BI:12:LYS:CD	2.38	0.43
55:BK:18:ALA:HB2	55:BK:43:ASN:OD1	2.18	0.43
55:BK:38:PHE:CE2	55:BK:67:THR:CA	3.02	0.43
33:BN:135:ILE:CG2	33:BN:139:LEU:HD11	2.48	0.43
34:BO:102:VAL:CG1	34:BO:106:LEU:HD11	2.49	0.43
34:BO:103:ALA:CB	34:BO:105:GLU:CG	2.91	0.43
34:BO:25:LEU:HD11	34:BO:39:VAL:C	2.39	0.43
34:BO:2:ILE:HB	34:BO:33:ALA:HB3	2.01	0.43
34:BO:42:THR:CG2	34:BO:57:VAL:HA	2.45	0.43
36:BQ:133:GLU:HG3	36:BQ:134:PHE:N	2.29	0.43
36:BQ:140:TYR:O	36:BQ:142:LYS:O	2.35	0.43
38:BT:23:HIS:CE1	38:BT:24:LYS:O	2.71	0.43
45:BV:39:PHE:CZ	45:BV:42:GLY:N	2.87	0.43
45:BV:40:VAL:C	45:BV:51:ALA:HB2	2.32	0.43
45:BV:68:LYS:CG	45:BV:69:ILE:HD12	2.49	0.43
40:BX:11:THR:O	40:BX:15:MET:N	2.50	0.43
41:BY:51:LEU:CD2	41:BY:95:ASN:ND2	2.82	0.43
41:BY:27:LEU:HB3	41:BY:98:VAL:H	1.83	0.43
42:BZ:95:SER:OG	42:BZ:122:ILE:CG2	2.66	0.43
1:AA:1238:A:H62	1:AA:1301:U:H3	1.67	0.43
1:AA:1346:A:H61	1:AA:1374:A:H3'	1.84	0.43
1:AA:1417:G:N2	1:AA:1484:C:C4	2.87	0.43
1:AA:436:C:H5''	1:AA:437:U:P	2.59	0.43
1:AA:641:U:C4'	11:AH:115:SER:OG	2.66	0.43
1:AA:833:U:H3	1:AA:853:G:H1	1.65	0.43
1:AA:834:C:C2	1:AA:853:G:C2	3.06	0.43
1:AA:987:G:H21	1:AA:1014:A:H2	1.66	0.43
8:AE:81:GLU:HB3	8:AE:90:VAL:HG22	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AH:44:PHE:O	11:AH:64:LYS:HD3	2.19	0.43
1:AA:1248:A:O2'	12:AI:70:LYS:CE	2.67	0.43
6:AC:23:TYR:OH	13:AJ:67:THR:HG23	2.18	0.43
15:AL:102:ARG:HE	15:AL:109:GLY:C	2.21	0.43
16:AM:94:ARG:C	16:AM:95:GLY:HA3	2.38	0.43
21:AR:21:LYS:H	21:AR:55:ARG:NH1	2.16	0.43
1:AA:1268:A:O2'	24:AU:20:LYS:HB3	2.18	0.43
2:AV:40:C:H2'	2:AV:41:U:C5'	2.26	0.43
47:B3:42:ALA:O	47:B3:45:GLY:N	2.52	0.43
49:B4:7:PRO:HD2	49:B4:56:VAL:HG11	2.01	0.43
26:BA:818:G:C8	26:BA:1187:G:N1	2.87	0.43
26:BA:133:C:H2'	26:BA:134:C:C6	2.54	0.43
26:BA:134:C:C2	26:BA:135:G:C8	3.06	0.43
26:BA:1341:U:OP2	26:BA:1397:U:O2	2.36	0.43
26:BA:1332:G:N7	26:BA:1609:A:N6	2.66	0.43
26:BA:1651:G:H5''	43:BR:39:PRO:HG2	2.01	0.43
26:BA:1904:G:O2'	26:BA:1927:A:N6	2.45	0.43
26:BA:212:G:H2'	26:BA:213:A:H8	1.83	0.43
26:BA:2251:G:P	36:BQ:102:ARG:HH21	2.41	0.43
26:BA:2373:G:N3	26:BA:2374:C:C5	2.87	0.43
26:BA:2396:G:C2	26:BA:2397:G:C8	3.07	0.43
26:BA:2398:U:H2'	26:BA:2399:G:C8	2.52	0.43
26:BA:2414:G:C6	26:BA:2415:G:N7	2.86	0.43
26:BA:2476:A:H3'	26:BA:2476:A:H8	1.83	0.43
26:BA:2489:G:C8	26:BA:2490:G:C8	3.06	0.43
26:BA:1129:A:C6	26:BA:2570:G:C4'	3.01	0.43
26:BA:2589:A:C6	26:BA:2606:C:N4	2.86	0.43
26:BA:2698:U:H2'	26:BA:2699:C:C5	2.47	0.43
26:BA:2768:C:C6	26:BA:2768:C:H3'	2.53	0.43
26:BA:28:A:N6	26:BA:512:G:O2'	2.52	0.43
26:BA:346:A:H2'	26:BA:347:A:N7	2.34	0.43
26:BA:388:G:H5'	49:B4:24:THR:HG23	2.01	0.43
26:BA:521:G:H2'	26:BA:522:G:C8	2.54	0.43
26:BA:80:G:O5'	26:BA:80:G:C8	2.72	0.43
26:BA:812:C:H42	26:BA:1195:G:H1	1.66	0.43
26:BA:875:G:OP1	42:BZ:146:HIS:CG	2.61	0.43
26:BA:920:G:O5'	26:BA:920:G:H8	2.01	0.43
25:BB:24:G:N7	25:BB:56:G:C8	2.86	0.43
25:BB:87:G:H3'	25:BB:88:C:C5'	2.49	0.43
27:BD:140:VAL:HG13	27:BD:191:VAL:N	2.31	0.43
27:BD:89:ASN:N	27:BD:105:ALA:HB2	2.34	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BE:102:ASP:CG	28:BE:104:PHE:CZ	2.90	0.43
29:BF:215:ALA:C	29:BF:242:GLU:HG2	2.37	0.43
30:BG:51:ARG:NH1	30:BG:72:LYS:CB	2.82	0.43
31:BH:153:PRO:O	31:BH:154:GLU:O	2.37	0.43
31:BH:83:GLU:OE2	31:BH:132:VAL:O	2.36	0.43
32:BI:3:VAL:CG1	32:BI:21:VAL:CG2	2.91	0.43
55:BK:13:LEU:CD1	55:BK:24:VAL:HG21	2.49	0.43
26:BA:2674:G:O3'	34:BO:30:ARG:HA	2.19	0.43
36:BQ:92:VAL:HG11	36:BQ:111:THR:N	2.31	0.43
36:BQ:137:ARG:C	36:BQ:137:ARG:HD3	2.36	0.43
43:BR:105:ARG:N	43:BR:105:ARG:HE	2.13	0.43
43:BR:63:ARG:HH22	43:BR:77:ARG:CG	2.21	0.43
43:BR:61:HIS:HB3	43:BR:64:ARG:CZ	2.49	0.43
26:BA:2320:A:H62	37:BS:14:ARG:CB	2.30	0.43
38:BT:23:HIS:CD2	38:BT:28:THR:N	2.87	0.43
39:BW:48:ALA:O	39:BW:51:LEU:N	2.41	0.43
39:BW:51:LEU:O	39:BW:54:ALA:HB3	2.19	0.43
41:BY:51:LEU:CB	41:BY:97:ARG:HE	2.29	0.43
42:BZ:18:MET:HG3	42:BZ:35:ASP:CA	2.46	0.43
1:AA:1085:U:C5'	1:AA:1094:G:C2	3.01	0.43
1:AA:1197:G:C2'	1:AA:1198:G:H5'	2.47	0.43
1:AA:1203:C:H5''	17:AN:2:ALA:HB3	2.00	0.43
1:AA:18:C:N3	1:AA:918:A:N1	2.66	0.43
1:AA:551:U:O5'	1:AA:551:U:H6	2.02	0.43
1:AA:707:C:H4'	14:AK:20:TYR:CG	2.54	0.43
1:AA:875:C:H1'	11:AH:15:ASN:HD21	1.84	0.43
1:AA:880:C:OP1	15:AL:12:ARG:NH2	2.51	0.43
1:AA:938:A:H5''	10:AG:95:ARG:HH22	1.84	0.43
7:AD:187:ARG:O	7:AD:188:LEU:C	2.51	0.43
1:AA:1438:G:OP1	23:AT:34:LYS:HE3	2.18	0.43
3:AW:14:A:N6	3:AW:22:G:C5	2.86	0.43
3:AW:50:U:C2'	3:AW:51:G:H5'	2.48	0.43
48:B0:75:GLY:O	48:B0:76:ALA:CB	2.66	0.43
46:B2:55:ARG:C	46:B2:58:THR:CB	2.77	0.43
46:B2:7:GLU:O	46:B2:10:ASP:N	2.43	0.43
47:B3:22:ALA:O	47:B3:26:LEU:HD11	2.14	0.43
47:B3:33:GLN:CG	47:B3:34:GLU:H	2.32	0.43
47:B3:3:ARG:C	47:B3:4:LEU:HD23	2.39	0.43
51:B6:5:GLY:C	51:B6:7:ARG:N	2.42	0.43
54:B9:10:MET:HE2	54:B9:11:CYS:N	2.33	0.43
26:BA:1202:C:O2	26:BA:1202:C:H2'	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1363:C:H2'	26:BA:1363:C:O2	2.18	0.43
26:BA:729:G:C2	26:BA:1775:U:C6	3.07	0.43
26:BA:1802:A:H2'	26:BA:1802:A:N3	2.33	0.43
26:BA:1805:U:H5'	27:BD:235:PRO:HG2	2.01	0.43
26:BA:1829:A:N3	26:BA:1829:A:H2'	2.33	0.43
26:BA:197:A:N6	26:BA:248:G:N2	2.63	0.43
26:BA:1650:G:H1	26:BA:2007:C:H42	1.67	0.43
26:BA:2086:U:H2'	26:BA:2087:G:C8	2.54	0.43
26:BA:2210:G:H4'	26:BA:2211:G:C5'	2.49	0.43
26:BA:2233:U:H2'	26:BA:2234:G:O4'	2.18	0.43
26:BA:2275:C:O2'	26:BA:2276:G:OP2	2.37	0.43
26:BA:2309:A:H3'	26:BA:2310:A:O4'	2.19	0.43
26:BA:227:A:C2	26:BA:2407:G:H1'	2.48	0.43
26:BA:2410:G:C6	26:BA:2411:A:C6	3.07	0.43
26:BA:389:G:O4'	26:BA:2413:G:C5'	2.67	0.43
26:BA:2450:A:N3	26:BA:2451:A:C8	2.87	0.43
26:BA:2481:G:O2'	26:BA:2482:G:C8	2.71	0.43
26:BA:2522:U:C2	26:BA:2543:G:N1	2.79	0.43
26:BA:2587:A:O2'	26:BA:2588:G:O5'	2.37	0.43
26:BA:2678:C:O2	26:BA:2679:A:H1'	2.07	0.43
26:BA:2690:C:C4'	26:BA:2690:C:C6	3.02	0.43
26:BA:2731:G:C6	26:BA:2732:G:N1	2.86	0.43
26:BA:2739:U:H5	26:BA:2763:G:N1	2.17	0.43
26:BA:2739:U:C3'	26:BA:2740:A:C5'	2.97	0.43
26:BA:2752:C:H42	26:BA:2753:A:H2	1.43	0.43
26:BA:2886:G:N2	26:BA:2887:U:C6	2.82	0.43
26:BA:2:G:H2'	26:BA:3:U:C6	2.53	0.43
26:BA:311:A:H1'	26:BA:332:A:C6	2.53	0.43
26:BA:409:C:H2'	26:BA:410:G:C8	2.54	0.43
26:BA:37:C:H5'	26:BA:451:C:O4'	2.18	0.43
26:BA:628:G:H8	26:BA:628:G:O5'	2.02	0.43
26:BA:66:C:H2'	26:BA:67:U:O4'	2.19	0.43
27:BD:149:ARG:CG	27:BD:152:GLN:NE2	2.77	0.43
26:BA:1566:A:N3	27:BD:212:HIS:O	2.52	0.43
28:BE:87:GLU:OE1	28:BE:96:LEU:HD12	2.18	0.43
29:BF:6:TYR:CZ	29:BF:139:VAL:N	2.86	0.43
29:BF:81:PRO:HA	29:BF:87:ARG:HG2	0.53	0.43
30:BG:135:VAL:C	30:BG:136:ARG:O	2.57	0.43
26:BA:2303:G:H5''	30:BG:99:ASP:CG	2.37	0.43
31:BH:120:LEU:CD2	31:BH:120:LEU:H	2.15	0.43
31:BH:45:GLU:OE1	31:BH:49:ILE:HA	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:82:TYR:OH	31:BH:137:LYS:HG2	2.19	0.43
55:BK:20:PRO:HB2	55:BK:23:PRO:CG	2.48	0.43
33:BN:49:ARG:O	33:BN:53:ILE:N	2.51	0.43
34:BO:63:VAL:HG22	34:BO:106:LEU:CD2	2.49	0.43
35:BP:117:GLU:CA	35:BP:136:ALA:O	2.45	0.43
35:BP:68:GLU:HA	35:BP:71:GLU:OE2	2.18	0.43
36:BQ:16:ARG:CA	36:BQ:17:ARG:HD3	2.48	0.43
37:BS:102:LEU:N	37:BS:102:LEU:CD1	2.81	0.43
26:BA:2292:C:OP2	37:BS:25:ARG:CZ	2.67	0.43
44:BU:15:LYS:O	44:BU:18:LEU:HB2	2.19	0.43
44:BU:7:GLY:O	44:BU:8:ILE:HD13	2.18	0.43
44:BU:88:ILE:CG2	45:BV:55:THR:CG2	2.78	0.43
41:BY:11:GLN:HG3	41:BY:22:GLN:HE21	1.83	0.43
41:BY:19:ARG:HH12	41:BY:68:ASP:N	2.17	0.43
42:BZ:20:ALA:HB3	42:BZ:80:HIS:HA	2.00	0.43
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.53	0.43
1:AA:1320:C:H1'	22:AS:73:GLU:CB	2.49	0.43
1:AA:1515:C:H2'	1:AA:1516:G:H8	1.84	0.43
1:AA:69:G:H1	1:AA:99:C:H42	1.65	0.43
5:AB:136:VAL:HA	5:AB:139:LYS:HE3	2.01	0.43
7:AD:23:GLY:HA2	7:AD:113:SER:HA	1.95	0.43
13:AJ:51:ARG:HG3	13:AJ:60:ARG:O	2.19	0.43
20:AQ:97:SER:HB2	20:AQ:102:GLY:C	2.38	0.43
2:AV:13:C:H4'	26:BA:1924:C:HO2'	1.73	0.43
3:AW:44:A:C2'	3:AW:45:G:C5'	2.96	0.43
3:AW:9:A:C4	3:AW:45:G:C4	3.07	0.43
46:B2:26:GLU:OE2	46:B2:26:GLU:N	2.52	0.43
46:B2:36:ALA:O	46:B2:37:GLY:C	2.57	0.43
25:BB:83:G:C4'	47:B3:52:HIS:HD2	2.31	0.43
26:BA:396:G:P	49:B4:10:VAL:HG13	2.59	0.43
26:BA:388:G:OP1	49:B4:29:PRO:HG3	2.14	0.43
26:BA:372:G:O2'	49:B4:63:PHE:CE2	2.61	0.43
50:B5:12:SER:O	50:B5:14:SER:C	2.57	0.43
51:B6:37:LEU:O	51:B6:38:LYS:HG2	2.12	0.43
53:B8:58:MET:HE1	53:B8:61:MET:HE3	1.76	0.43
54:B9:2:LYS:NZ	54:B9:2:LYS:HA	2.34	0.43
26:BA:1158:C:H5'	47:B3:31:LEU:HB3	2.00	0.43
26:BA:1196:C:H2'	26:BA:1197:G:C8	2.54	0.43
26:BA:1359:A:N6	26:BA:1372:U:H3	2.17	0.43
26:BA:1359:A:OP2	26:BA:1371:G:N2	2.52	0.43
26:BA:1367:A:C2'	52:B7:25:LYS:CD	2.97	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1448:G:H5''	26:BA:1543:A:N6	2.29	0.43
26:BA:1545:A:O3'	26:BA:545(A):A:OP1	2.34	0.43
26:BA:1805:U:H5'	27:BD:235:PRO:HB3	1.92	0.43
26:BA:1952:A:C2	34:BO:22:ILE:HG12	2.54	0.43
26:BA:2251:G:H2'	26:BA:2251:G:N3	2.34	0.43
26:BA:2408:U:C2	26:BA:2409:G:N7	2.87	0.43
26:BA:2438:U:O3'	26:BA:2439:A:H3'	2.19	0.43
26:BA:2472:G:N2	26:BA:2475:C:C2	2.87	0.43
26:BA:2498:C:O2'	26:BA:2499:C:C4'	2.64	0.43
26:BA:2595:G:O2'	26:BA:2597:G:N7	2.52	0.43
26:BA:2623:G:N3	26:BA:2623:G:H2'	2.34	0.43
26:BA:1456:G:H22	26:BA:2703:C:H5	1.67	0.43
26:BA:2725:A:C5	26:BA:2727:G:C4	3.07	0.43
26:BA:273:G:H1	26:BA:364:C:H42	1.66	0.43
26:BA:371:A:O2'	26:BA:372:G:P	2.77	0.43
26:BA:389:G:C1'	26:BA:2413:G:C4'	2.97	0.43
26:BA:216:A:N6	26:BA:432:A:C8	2.87	0.43
26:BA:602:G:C2'	26:BA:655:A:C2	3.01	0.43
26:BA:727:A:C2'	26:BA:728:G:O5'	2.67	0.43
26:BA:669:G:O2'	26:BA:801:G:N2	2.52	0.43
26:BA:918:A:N3	26:BA:918:A:C5'	2.82	0.43
26:BA:978:G:C2	26:BA:986:C:N3	2.86	0.43
27:BD:176:ALA:O	27:BD:177:SER:C	2.57	0.43
28:BE:203:GLY:CA	28:BE:303:PRO:HG3	2.48	0.43
26:BA:2572:A:OP1	28:BE:240:PRO:HB3	2.19	0.43
26:BA:2680:C:H4'	28:BE:301:PRO:HD2	2.01	0.43
29:BF:33:LYS:CA	29:BF:36:ARG:HG2	2.48	0.43
30:BG:102:GLY:O	30:BG:134:LEU:HB2	2.19	0.43
30:BG:36:ASN:C	30:BG:38:GLU:N	2.72	0.43
2:AV:56:C:C2'	30:BG:56:ARG:NE	2.82	0.43
30:BG:93:LEU:HD21	30:BG:106:PHE:CG	2.53	0.43
32:BI:122:ARG:C	32:BI:124:LEU:N	2.71	0.43
32:BI:148:GLN:O	32:BI:149:LYS:HB3	2.18	0.43
32:BI:5:PHE:O	32:BI:6:LEU:HB2	2.19	0.43
55:BK:32:GLY:C	55:BK:33:VAL:HG23	2.40	0.43
33:BN:19:MET:HE2	33:BN:22:VAL:CB	2.48	0.43
34:BO:65:THR:HG23	34:BO:65:THR:O	2.18	0.43
35:BP:125:PHE:O	35:BP:130:ARG:CZ	2.67	0.43
43:BR:106:GLY:O	43:BR:107:ASP:O	2.36	0.43
43:BR:54:LEU:N	43:BR:54:LEU:CD1	2.82	0.43
37:BS:34:LEU:HD23	37:BS:102:LEU:HA	1.79	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:103:ASP:C	37:BS:103:ASP:OD2	2.57	0.43
37:BS:109:PRO:CB	37:BS:116:PHE:CE2	3.02	0.43
37:BS:28:LYS:HZ2	37:BS:28:LYS:CB	2.31	0.43
37:BS:33:ARG:HG2	37:BS:48:VAL:O	2.19	0.43
40:BX:11:THR:O	40:BX:15:MET:HE2	2.16	0.43
26:BA:138:G:N9	40:BX:43:GLU:OE2	2.52	0.43
40:BX:52:VAL:HG13	40:BX:53:ASN:N	2.34	0.43
41:BY:27:LEU:HD23	41:BY:98:VAL:CB	2.49	0.43
42:BZ:16:GLU:OE1	42:BZ:16:GLU:CA	2.49	0.43
42:BZ:18:MET:HA	42:BZ:36:ARG:N	2.28	0.43
42:BZ:26:LYS:N	42:BZ:84:TYR:OH	2.52	0.43
1:AA:989:C:C4'	1:AA:1016:A:C2	3.00	0.42
1:AA:123:C:H2'	1:AA:124:G:H8	1.84	0.42
1:AA:975:A:C4	1:AA:1357:A:N3	2.87	0.42
1:AA:1376:U:C5'	10:AG:94:ARG:NH2	2.81	0.42
1:AA:14:U:O5'	1:AA:14:U:H6	2.02	0.42
1:AA:113:G:N2	1:AA:353:A:H2'	2.28	0.42
1:AA:48:C:OP1	1:AA:115:G:P	2.76	0.42
1:AA:568:G:C2	1:AA:574:A:H2	2.36	0.42
1:AA:570:G:H2'	1:AA:571:U:C6	2.54	0.42
1:AA:824:C:H1'	11:AH:1:MET:N	2.33	0.42
1:AA:909:A:H3'	1:AA:910:C:H6	1.84	0.42
20:AQ:76:LEU:HD11	20:AQ:79:SER:HB3	2.01	0.42
2:AV:9:A:C2	2:AV:45:G:C4	3.07	0.42
48:B0:17:ASN:H	48:B0:18:PRO:HD3	1.82	0.42
26:BA:1183:G:H5'	47:B3:29:ARG:NE	2.34	0.42
47:B3:52:HIS:O	47:B3:53:LEU:C	2.57	0.42
52:B7:21:ARG:HH12	52:B7:43:THR:N	2.07	0.42
26:BA:1031:G:O3'	54:B9:8:LYS:CE	2.67	0.42
26:BA:1080:C:O2	55:BK:127:ILE:HG13	2.07	0.42
26:BA:1071:G:C2	26:BA:1091:G:N7	2.87	0.42
26:BA:974:G:OP2	26:BA:1188:U:C6	2.72	0.42
26:BA:1420:U:O2	26:BA:1421:G:N7	2.52	0.42
26:BA:1476:C:C5	26:BA:1477:A:N3	2.87	0.42
26:BA:1513:C:H2'	26:BA:1514:U:C5	2.54	0.42
26:BA:1525:G:N2	26:BA:545(A):A:H61	2.16	0.42
26:BA:1924:C:C5	26:BA:1925:C:C5	3.07	0.42
26:BA:2093:G:C4	26:BA:2198:A:N1	2.87	0.42
26:BA:2299:G:N1	26:BA:2300:G:C6	2.87	0.42
26:BA:2313:C:N4	26:BA:2314:C:H42	2.09	0.42
26:BA:2283:C:C1'	26:BA:2389:G:H21	2.27	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2422:A:C1'	26:BA:2424:C:H5	2.31	0.42
26:BA:2528:U:OP1	54:B9:30:VAL:CB	2.67	0.42
26:BA:2550:G:C5	26:BA:2551:C:C5	3.06	0.42
26:BA:2550:G:C5	26:BA:2551:C:H5	2.34	0.42
26:BA:2626:C:C5	26:BA:2626:C:O5'	2.69	0.42
26:BA:2638:G:N9	26:BA:2775:A:N1	2.67	0.42
26:BA:1033:U:H2'	26:BA:2750:A:C2	2.53	0.42
26:BA:2769:C:N3	26:BA:2770:G:C4	2.87	0.42
26:BA:2774:C:O2	26:BA:2775:A:C8	2.71	0.42
26:BA:2827:C:H2'	26:BA:2828:C:O5'	2.17	0.42
26:BA:586:A:N1	26:BA:809:G:H2'	2.33	0.42
27:BD:115:ILE:C	27:BD:115:ILE:CD1	2.87	0.42
27:BD:213:LYS:O	27:BD:214:MET:HB2	2.19	0.42
27:BD:71:ASP:O	27:BD:73:ILE:HG13	2.19	0.42
27:BD:74:PRO:HA	27:BD:116:MET:HE3	1.95	0.42
27:BD:75:GLY:O	27:BD:115:ILE:CA	2.64	0.42
27:BD:78:ALA:HA	27:BD:94:ASN:ND2	2.33	0.42
26:BA:2786:U:O5'	28:BE:100:TRP:O	2.29	0.42
29:BF:11:ASN:HD21	29:BF:160:LEU:CD1	2.33	0.42
30:BG:103:ASN:CB	30:BG:133:ASN:HA	2.49	0.42
30:BG:23:VAL:HB	30:BG:130:VAL:HG12	2.00	0.42
31:BH:122:ILE:CG2	31:BH:123:GLU:N	2.81	0.42
32:BI:89:LEU:HD12	32:BI:122:ARG:HA	2.01	0.42
55:BK:25:GLY:CA	55:BK:35:ILE:CD1	2.86	0.42
33:BN:39:VAL:N	33:BN:103:VAL:HG13	2.34	0.42
34:BO:106:LEU:O	34:BO:109:LYS:N	2.49	0.42
43:BR:101:ALA:HB1	50:B5:41:LEU:HD12	2.00	0.42
43:BR:48:VAL:O	43:BR:49:ASP:C	2.57	0.42
43:BR:65:LEU:O	43:BR:68:ARG:CB	2.67	0.42
37:BS:17:ARG:HH11	37:BS:18:THR:CB	2.32	0.42
37:BS:76:GLY:O	37:BS:81:ALA:C	2.57	0.42
38:BT:54:THR:C	38:BT:56:ARG:H	2.22	0.42
45:BV:35:LEU:H	45:BV:60:VAL:HG13	1.72	0.42
44:BU:94:VAL:HG11	45:BV:4:ILE:HD13	1.98	0.42
45:BV:61:VAL:HG22	45:BV:96:LEU:C	2.15	0.42
39:BW:79:GLY:O	39:BW:81:ALA:N	2.45	0.42
39:BW:8:ARG:HB2	39:BW:102:HIS:ND1	2.33	0.42
41:BY:48:VAL:HG21	41:BY:98:VAL:HG23	1.32	0.42
41:BY:73:HIS:CG	41:BY:91:LEU:HD21	2.54	0.42
42:BZ:135:VAL:C	42:BZ:136:VAL:HG23	2.39	0.42
1:AA:988:G:N3	1:AA:1015:A:H2	2.16	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1277:C:O2'	1:AA:1282:C:C2	2.59	0.42
1:AA:1329:A:H5''	16:AM:26:GLY:CA	2.44	0.42
1:AA:1347:G:H3'	12:AI:108:VAL:HA	2.01	0.42
1:AA:976:G:OP2	1:AA:1358:U:C4'	2.67	0.42
1:AA:1483:A:OP2	1:AA:1484:C:C5	2.72	0.42
1:AA:146:G:H1	1:AA:176:C:H42	1.66	0.42
1:AA:367:U:H4'	1:AA:368:U:OP1	2.18	0.42
1:AA:390:C:H2'	1:AA:391:G:C8	2.55	0.42
1:AA:685:G:H2'	1:AA:686:U:H6	1.84	0.42
1:AA:914:A:H2'	1:AA:915:A:C8	2.53	0.42
1:AA:976:G:O5'	1:AA:1358:U:O2'	2.31	0.42
6:AC:38:ARG:CB	6:AC:94:LEU:HD21	2.46	0.42
1:AA:7:G:N2	8:AE:121:LYS:HB3	2.35	0.42
8:AE:135:THR:O	8:AE:139:LEU:HG	2.19	0.42
11:AH:16:ALA:HB1	11:AH:21:LYS:HB2	2.01	0.42
1:AA:1491:G:OP1	15:AL:46:LYS:HE3	2.19	0.42
16:AM:108:ARG:HD2	16:AM:108:ARG:HA	1.86	0.42
16:AM:23:TYR:HD2	16:AM:70:LEU:HD13	1.83	0.42
47:B3:49:LYS:C	47:B3:51:ALA:N	2.72	0.42
26:BA:1364:G:C6	49:B4:2:GLN:OE1	2.72	0.42
49:B4:17:GLN:NE2	49:B4:34:ASP:HA	2.34	0.42
53:B8:36:LYS:HG2	53:B8:40:GLU:OE1	2.19	0.42
26:BA:1137:G:C5	26:BA:1138:G:H1'	2.54	0.42
26:BA:991:C:N3	26:BA:1164:G:C6	2.87	0.42
26:BA:123:G:H2'	26:BA:124:G:O4'	2.19	0.42
26:BA:1718:G:N2	26:BA:1742:C:C2	2.87	0.42
26:BA:1777:U:H2'	26:BA:1778:U:C6	2.53	0.42
26:BA:2267:A:C5'	26:BA:2268:A:P	3.02	0.42
26:BA:2328:A:C8	26:BA:2329:G:N7	2.88	0.42
26:BA:2392:A:C6	26:BA:2393:A:N6	2.87	0.42
26:BA:2403:C:C2'	26:BA:2404:C:H5'	2.48	0.42
26:BA:2410:G:C2	26:BA:2411:A:N9	2.88	0.42
26:BA:2461:C:O5'	26:BA:2461:C:C6	2.72	0.42
26:BA:2447:G:N3	26:BA:2500:U:C5	2.80	0.42
26:BA:2528:U:O2'	26:BA:2529:G:C8	2.61	0.42
26:BA:2571:C:C2'	26:BA:2572:A:OP1	2.66	0.42
26:BA:2615:U:H2'	26:BA:2616:C:C5	2.53	0.42
26:BA:2634:G:O6	26:BA:2785:C:N4	2.53	0.42
26:BA:2710:C:C2'	26:BA:2711:A:C5'	2.94	0.42
26:BA:2717:G:N1	26:BA:2718:G:C6	2.86	0.42
26:BA:2725:A:C2'	26:BA:2726:U:H5''	2.48	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2729:G:H4'	28:BE:298:GLY:HA3	2.00	0.42
26:BA:2819:G:C8	26:BA:2819:G:O5'	2.69	0.42
26:BA:2839:G:N2	26:BA:2840:C:C1'	2.82	0.42
26:BA:2840:C:O2	26:BA:2841:C:C6	2.72	0.42
26:BA:285:C:C4	26:BA:286:C:N4	2.87	0.42
26:BA:359:A:O2'	26:BA:360:G:N9	2.51	0.42
26:BA:536:A:H8	26:BA:536:A:O5'	2.02	0.42
26:BA:581:C:H5''	44:BU:32:TYR:CB	2.43	0.42
26:BA:60:G:C2	26:BA:74:A:N6	2.87	0.42
26:BA:63:U:H2'	26:BA:64:A:C8	2.54	0.42
26:BA:831:G:C6	26:BA:832:G:C5	3.07	0.42
26:BA:856:C:O4'	48:B0:25:LYS:NZ	2.31	0.42
25:BB:29:A:OP1	37:BS:39:SER:C	2.58	0.42
27:BD:169:LYS:HB2	27:BD:169:LYS:HE2	1.88	0.42
27:BD:93:ILE:O	27:BD:93:ILE:CG2	2.64	0.42
26:BA:2785:C:H5'	28:BE:99:VAL:HA	1.87	0.42
29:BF:147:LEU:CD1	29:BF:156:LEU:CG	2.93	0.42
29:BF:163:HIS:O	29:BF:166:ILE:CD1	2.66	0.42
26:BA:449:A:P	29:BF:85:LYS:CA	3.07	0.42
30:BG:140:ARG:C	30:BG:142:ALA:N	2.68	0.42
30:BG:13:MET:HB3	30:BG:14:ARG:HD2	2.01	0.42
31:BH:148:ARG:NH1	31:BH:164:GLU:N	2.63	0.42
31:BH:30:GLY:HA3	31:BH:78:VAL:HA	2.01	0.42
31:BH:86:LEU:HD13	31:BH:87:GLU:C	2.39	0.42
31:BH:96:SER:C	31:BH:97:LYS:O	2.45	0.42
32:BI:120:ALA:C	32:BI:121:ILE:O	2.54	0.42
32:BI:3:VAL:HG11	32:BI:21:VAL:HG23	1.98	0.42
26:BA:1080:C:H1'	55:BK:127:ILE:HA	2.01	0.42
55:BK:73:PRO:HG2	55:BK:78:LEU:HD21	2.01	0.42
26:BA:1137:G:H5''	33:BN:60:ARG:NH2	2.33	0.42
34:BO:10:VAL:HG11	34:BO:12:ASP:O	2.17	0.42
43:BR:19:ALA:O	43:BR:20:LEU:C	2.57	0.42
37:BS:46:GLN:OE1	37:BS:57:THR:HG21	2.19	0.42
34:BO:79:PHE:CB	38:BT:22:VAL:CG2	2.97	0.42
39:BW:50:VAL:HG11	39:BW:103:ILE:CG2	2.49	0.42
40:BX:2:TRP:CD1	40:BX:2:TRP:N	2.86	0.42
26:BA:1340:U:C4	40:BX:57:THR:HG22	2.40	0.42
41:BY:31:LEU:HA	41:BY:113:GLU:OE2	2.19	0.42
41:BY:44:ALA:O	41:BY:62:VAL:HG11	2.19	0.42
41:BY:78:THR:HG22	41:BY:89:ARG:H	1.84	0.42
42:BZ:112:LEU:HD21	42:BZ:172:LEU:O	2.15	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1067:A:H2'	1:AA:1093:A:O2'	2.20	0.42
1:AA:1392:G:O2'	1:AA:1502:A:OP1	2.37	0.42
1:AA:1532:U:H3'	1:AA:1532:U:C6	2.55	0.42
1:AA:262:A:H5'	23:AT:74:LYS:HG3	2.01	0.42
1:AA:355:C:C1'	1:AA:388:G:H2'	2.28	0.42
1:AA:405:U:P	7:AD:5:ILE:HD11	2.56	0.42
1:AA:760:G:C2	20:AQ:103:GLY:O	2.72	0.42
1:AA:862:C:H1'	1:AA:874:G:C5'	2.47	0.42
1:AA:409:G:C3'	7:AD:25:ARG:HG3	2.47	0.42
11:AH:39:LEU:HB3	11:AH:45:ILE:HG12	2.02	0.42
5:AB:181:PHE:HA	11:AH:71:GLY:HA2	2.02	0.42
1:AA:1232:U:OP1	12:AI:125:TYR:C	2.57	0.42
13:AJ:64:GLU:HG2	17:AN:59:ALA:CA	2.49	0.42
15:AL:26:ALA:O	15:AL:33:ARG:HD2	2.19	0.42
17:AN:29:ARG:HG3	17:AN:31:ARG:H	1.83	0.42
2:AV:19:G:H1'	2:AV:57:G:H21	1.84	0.42
2:AV:58:A:C5	2:AV:61:C:C5	3.08	0.42
46:B2:30:ALA:N	46:B2:34:GLN:HG2	2.32	0.42
46:B2:49:LEU:HA	46:B2:49:LEU:HD23	1.87	0.42
46:B2:51:LYS:O	46:B2:53:ILE:C	2.43	0.42
46:B2:57:LYS:O	46:B2:60:GLN:CB	2.50	0.42
49:B4:38:GLY:O	49:B4:39:VAL:HB	2.19	0.42
49:B4:38:GLY:O	49:B4:39:VAL:HG23	2.18	0.42
49:B4:46:GLU:HB2	49:B4:47:GLU:H	1.44	0.42
49:B4:6:HIS:HB2	49:B4:56:VAL:HG23	1.88	0.42
50:B5:12:SER:CB	50:B5:15:LYS:HZ2	2.13	0.42
50:B5:33:CYS:SG	50:B5:34:PRO:HD2	2.60	0.42
50:B5:43:HIS:O	50:B5:52:TYR:HE2	2.02	0.42
51:B6:53:LYS:HE3	51:B6:53:LYS:HB3	1.90	0.42
53:B8:58:MET:O	53:B8:60:LEU:C	2.57	0.42
54:B9:19:ARG:O	54:B9:19:ARG:HG3	2.19	0.42
26:BA:1032:A:P	54:B9:8:LYS:HG3	2.59	0.42
26:BA:585:G:C2	26:BA:1256:G:C6	3.08	0.42
26:BA:1328:G:H4'	26:BA:1329:U:C5	2.53	0.42
26:BA:1315:C:O2'	26:BA:1392:A:O2'	2.26	0.42
26:BA:1509:C:O2	26:BA:1509:C:H2'	2.19	0.42
26:BA:1647:G:H4'	26:BA:1648:C:C5'	2.49	0.42
26:BA:1857:G:H21	26:BA:1886:C:H42	1.67	0.42
26:BA:1942:C:H3'	26:BA:1942:C:P	2.59	0.42
26:BA:2078:C:C4'	26:BA:2434:A:C5'	2.93	0.42
26:BA:2196:C:O2	26:BA:2196:C:C2'	2.67	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2249:U:C4	26:BA:2253:G:OP1	2.72	0.42
26:BA:2255:G:N1	26:BA:2256:G:N9	2.67	0.42
26:BA:2358:G:H22	53:B8:52:LYS:HZ3	1.66	0.42
26:BA:2389:G:OP2	26:BA:2389:G:H3'	2.20	0.42
26:BA:2065:C:O2	26:BA:2449:U:O4	2.37	0.42
26:BA:2461:C:H2'	26:BA:2462:U:H5'	2.01	0.42
26:BA:2512:C:O2	26:BA:2513:G:C1'	2.67	0.42
26:BA:2576:G:H4'	26:BA:2577:A:C5'	2.49	0.42
26:BA:2652:C:N4	26:BA:2653:U:C4	2.86	0.42
26:BA:2697:G:H2'	26:BA:2698:U:O4'	2.18	0.42
26:BA:2707:G:O2'	26:BA:2708:G:P	2.76	0.42
26:BA:2727:G:N3	26:BA:2727:G:H2'	2.34	0.42
26:BA:2741:A:H5'	26:BA:2741:A:H8	1.82	0.42
26:BA:2844:G:C2	26:BA:2845:G:C8	3.07	0.42
26:BA:396:G:H5''	49:B4:10:VAL:HG13	2.02	0.42
26:BA:587:C:H4'	26:BA:588:U:OP2	2.19	0.42
26:BA:604:G:C2	26:BA:657:U:H4'	2.55	0.42
26:BA:680:G:H2'	26:BA:681:G:C8	2.54	0.42
26:BA:465:G:H21	26:BA:683:C:H2'	1.84	0.42
26:BA:769:G:H4'	26:BA:1379:A:H61	1.84	0.42
26:BA:792:G:C8	26:BA:2440:C:C2	3.07	0.42
26:BA:827:U:OP1	26:BA:2430:A:P	2.77	0.42
25:BB:42:C:O2'	30:BG:47:GLN:CG	2.63	0.42
27:BD:140:VAL:HG22	27:BD:191:VAL:HA	2.01	0.42
28:BE:214:VAL:HG21	28:BE:233:ARG:HG2	1.97	0.42
28:BE:222:ARG:HB3	28:BE:226:HIS:O	2.20	0.42
28:BE:311:PHE:N	28:BE:311:PHE:HD2	2.15	0.42
29:BF:222:ASP:O	29:BF:231:ARG:NH1	2.53	0.42
26:BA:2313:C:H4'	30:BG:72:LYS:CB	2.49	0.42
31:BH:88:LEU:HD13	31:BH:128:THR:HA	2.00	0.42
32:BI:7:LYS:HB2	32:BI:12:LYS:NZ	2.34	0.42
32:BI:94:THR:C	32:BI:96:LYS:N	2.73	0.42
26:BA:1081:U:C5'	55:BK:126:LYS:NZ	2.82	0.42
33:BN:106:GLY:O	33:BN:107:ASN:OD1	2.28	0.42
33:BN:78:ILE:HG22	33:BN:79:PHE:HD1	1.81	0.42
33:BN:95:ARG:C	33:BN:97:ALA:N	2.71	0.42
34:BO:109:LYS:O	34:BO:110:ASP:HB2	2.20	0.42
34:BO:17:ARG:HG3	34:BO:47:THR:H	1.85	0.42
34:BO:89:ASP:OD1	34:BO:89:ASP:N	2.52	0.42
35:BP:102:ASP:O	35:BP:103:ALA:HB3	2.17	0.42
26:BA:245:G:H4'	35:BP:55:GLN:OE1	2.18	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:122:PHE:CB	36:BQ:136:TRP:CZ2	3.00	0.42
36:BQ:31:PHE:CG	36:BQ:85:ILE:CD1	3.03	0.42
43:BR:104:ARG:HB3	43:BR:107:ASP:OD2	2.19	0.42
43:BR:36:THR:CG2	43:BR:37:THR:H	2.31	0.42
37:BS:110:THR:C	37:BS:116:PHE:CD1	2.93	0.42
37:BS:90:LEU:HD23	37:BS:93:GLN:HE21	1.84	0.42
37:BS:93:GLN:OE1	37:BS:94:GLU:N	2.51	0.42
44:BU:32:TYR:N	44:BU:32:TYR:CD2	2.79	0.42
44:BU:33:ARG:CA	44:BU:36:PHE:CD1	3.02	0.42
44:BU:47:TYR:HA	44:BU:50:ARG:HG3	2.00	0.42
39:BW:110:LYS:HD2	39:BW:110:LYS:HA	1.80	0.42
42:BZ:100:THR:CG2	42:BZ:137:ASP:CG	2.79	0.42
42:BZ:41:ARG:N	42:BZ:41:ARG:CD	2.83	0.42
42:BZ:90:GLU:O	42:BZ:91:PRO:C	2.56	0.42
1:AA:512:U:H2'	1:AA:513:C:C6	2.54	0.42
1:AA:505:G:H4'	1:AA:534:U:C4	2.55	0.42
1:AA:576:G:C8	1:AA:881:G:H1'	2.52	0.42
1:AA:616:G:H1	1:AA:624:C:H42	1.67	0.42
1:AA:658:G:O2'	18:AO:22:THR:HB	2.20	0.42
1:AA:948:C:C6	1:AA:948:C:O5'	2.67	0.42
5:AB:15:VAL:HG21	5:AB:209:ARG:HB3	2.02	0.42
1:AA:407:G:O3'	7:AD:115:ARG:CB	2.68	0.42
7:AD:102:ASP:O	7:AD:117:ALA:HB1	2.19	0.42
7:AD:175:SER:O	7:AD:183:GLY:HA2	2.20	0.42
1:AA:1240:U:O4'	10:AG:42:ILE:HD11	2.18	0.42
13:AJ:64:GLU:OE1	17:AN:57:ARG:HB3	2.19	0.42
19:AP:36:ILE:HD12	19:AP:56:ALA:HB2	2.02	0.42
1:AA:1319:A:P	22:AS:5:LEU:HD22	2.59	0.42
2:AV:31:A:H5'	12:AI:127:LYS:HG3	1.89	0.42
46:B2:55:ARG:O	46:B2:57:LYS:N	2.53	0.42
46:B2:60:GLN:HE22	46:B2:65:ASP:HA	1.83	0.42
47:B3:53:LEU:O	47:B3:54:VAL:CG1	2.67	0.42
51:B6:37:LEU:HD23	51:B6:37:LEU:HA	1.79	0.42
26:BA:1162:G:H2'	26:BA:1163:G:C8	2.55	0.42
26:BA:1196:C:H4'	26:BA:1226:G:C6	2.54	0.42
26:BA:162:U:H4'	26:BA:171:G:N2	2.31	0.42
26:BA:1974:C:H6	26:BA:1974:C:O5'	2.02	0.42
26:BA:961:C:C5	26:BA:2031:A:C2	3.07	0.42
26:BA:2256:G:N2	26:BA:2257:U:H1'	2.33	0.42
26:BA:2267:A:O5'	26:BA:2268:A:OP1	2.35	0.42
26:BA:2533:A:N7	26:BA:2534:A:C5	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2547:U:C4	26:BA:2566:A:C5	3.08	0.42
26:BA:2554:U:C4	26:BA:2555:U:O4	2.73	0.42
26:BA:2554:U:O4	26:BA:2555:U:O4	2.37	0.42
26:BA:1672:C:C2	26:BA:2582:G:O4'	2.68	0.42
26:BA:2692:C:O2	26:BA:2847:U:H4'	2.20	0.42
26:BA:281:G:C8	26:BA:281:G:O5'	2.72	0.42
26:BA:285:C:H2'	26:BA:286:C:N1	2.35	0.42
26:BA:322:A:C4	26:BA:341:G:N9	2.88	0.42
26:BA:412:A:H2'	26:BA:413:C:O4'	2.19	0.42
26:BA:465:G:C6	26:BA:466:A:N6	2.87	0.42
26:BA:480:A:H3'	26:BA:481:G:H5''	2.00	0.42
26:BA:492:A:H61	39:BW:49:LYS:CE	2.32	0.42
26:BA:751:A:C2	26:BA:789:A:C5	3.07	0.42
26:BA:826:U:C6	26:BA:828:U:C6	3.07	0.42
27:BD:183:ILE:C	27:BD:184:LEU:CD2	2.75	0.42
28:BE:42:ALA:HB1	28:BE:310:PHE:CA	2.43	0.42
28:BE:77:PRO:CB	28:BE:187:HIS:CA	2.98	0.42
28:BE:87:GLU:CD	28:BE:87:GLU:H	2.22	0.42
28:BE:96:LEU:O	28:BE:97:THR:CG2	2.67	0.42
29:BF:37:ALA:HB2	29:BF:102:LEU:HB2	1.93	0.42
25:BB:41:U:C4	30:BG:50:VAL:HB	2.54	0.42
30:BG:78:GLU:O	30:BG:81:GLU:HB2	2.19	0.42
31:BH:88:LEU:HD22	31:BH:128:THR:HA	2.00	0.42
31:BH:162:ARG:HB3	31:BH:166:GLU:CG	2.43	0.42
31:BH:73:ASN:CG	31:BH:137:LYS:HZ2	2.20	0.42
31:BH:7:PRO:C	31:BH:8:ILE:HG13	2.38	0.42
32:BI:31:PHE:O	32:BI:32:LYS:C	2.56	0.42
55:BK:89:SER:O	55:BK:95:LYS:NZ	2.48	0.42
33:BN:108:PRO:CD	33:BN:109:TYR:H	2.32	0.42
33:BN:90:LYS:HD3	33:BN:95:ARG:NE	2.34	0.42
34:BO:3:GLN:O	34:BO:21:VAL:HB	2.19	0.42
34:BO:64:ARG:CD	34:BO:81:GLU:OE1	2.67	0.42
36:BQ:54:VAL:CG1	36:BQ:54:VAL:O	2.67	0.42
36:BQ:65:ARG:HE	36:BQ:85:ILE:HG21	1.83	0.42
38:BT:31:PHE:HD2	38:BT:32:CYS:SG	2.42	0.42
44:BU:106:PHE:C	44:BU:108:ALA:N	2.73	0.42
44:BU:29:SER:HG	44:BU:30:LYS:H	1.66	0.42
44:BU:87:ASN:O	44:BU:88:ILE:HD13	2.20	0.42
45:BV:30:GLY:O	45:BV:31:ASP:C	2.53	0.42
45:BV:59:GLU:HG2	45:BV:99:GLN:HA	2.00	0.42
45:BV:66:GLY:HA2	45:BV:93:ILE:HG13	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BV:93:ILE:CD1	45:BV:93:ILE:N	2.82	0.42
39:BW:30:GLU:O	39:BW:33:ARG:CB	2.65	0.42
39:BW:90:ARG:HB3	39:BW:90:ARG:CZ	2.41	0.42
40:BX:50:GLU:OE1	40:BX:50:GLU:N	2.52	0.42
41:BY:46:ASP:N	41:BY:62:VAL:HG21	2.34	0.42
1:AA:1115:C:H2'	1:AA:1116:C:O4'	2.20	0.42
1:AA:1164:G:H1	1:AA:1172:C:H42	1.67	0.42
1:AA:280:C:O4'	20:AQ:38:ARG:NH2	2.53	0.42
1:AA:520:A:N6	1:AA:529:G:C2	2.87	0.42
1:AA:578:C:H2'	1:AA:579:G:H8	1.82	0.42
1:AA:973:G:H3'	1:AA:974:A:H5''	2.00	0.42
1:AA:410:G:P	7:AD:25:ARG:CZ	2.92	0.42
7:AD:34:GLU:O	7:AD:35:ARG:HB2	2.20	0.42
1:AA:940:C:OP2	10:AG:102:ARG:HD3	2.20	0.42
1:AA:1198:G:O2'	13:AJ:55:LYS:HE3	2.20	0.42
2:AV:76:A:N1	26:BA:2251:G:C6	2.86	0.42
3:AW:65:G:O6	3:AW:66:A:N7	2.22	0.42
48:B0:30:VAL:CG1	48:B0:63:SER:OG	2.67	0.42
47:B3:48:GLU:O	47:B3:51:ALA:HB2	2.19	0.42
47:B3:8:LEU:CA	47:B3:54:VAL:CG1	2.85	0.42
49:B4:14:ILE:HG21	49:B4:37:SER:CA	2.49	0.42
26:BA:125:G:H5'	52:B7:19:ARG:HD2	2.01	0.42
52:B7:24:THR:OG1	52:B7:26:SER:OG	2.33	0.42
53:B8:16:ILE:CG2	53:B8:17:THR:N	2.82	0.42
26:BA:1129:A:H4'	26:BA:2516:G:H5'	2.02	0.42
26:BA:1358:G:C5	26:BA:1371:G:C5	3.08	0.42
26:BA:1637:A:O3'	26:BA:2711:A:C4'	2.65	0.42
26:BA:1755:A:H8	26:BA:1755:A:OP2	2.02	0.42
26:BA:1968:G:H3'	26:BA:1968:G:H8	1.85	0.42
26:BA:1971:A:H8	26:BA:1971:A:H3'	1.84	0.42
26:BA:2217:G:C2'	26:BA:2218:G:C5'	2.97	0.42
26:BA:2251:G:C2	26:BA:2252:G:C2	3.07	0.42
26:BA:2314:C:H5'	30:BG:22:VAL:HG21	2.02	0.42
26:BA:2348:U:C2'	26:BA:2349:G:H5'	2.49	0.42
26:BA:2403:C:C5	26:BA:2415:G:C2	3.07	0.42
26:BA:2444:G:C6	26:BA:2445:G:N1	2.87	0.42
26:BA:2509:G:N2	26:BA:2510:C:C1'	2.82	0.42
26:BA:2606:C:C6	26:BA:2606:C:C4'	3.02	0.42
26:BA:2848:G:C2	26:BA:2849:U:N3	2.67	0.42
26:BA:2886:G:C2	26:BA:2887:U:C5	3.07	0.42
26:BA:359:A:C2	26:BA:361:G:C2	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:371:A:H5''	26:BA:423:A:C8	2.54	0.42
26:BA:451:C:H2'	26:BA:452:G:N7	2.34	0.42
26:BA:500:G:H3'	26:BA:500:G:C8	2.55	0.42
26:BA:729:G:C5	27:BD:207:ALA:CA	3.00	0.42
26:BA:803:U:H2'	26:BA:804:A:C5'	2.33	0.42
28:BE:202:ALA:CB	28:BE:262:THR:HB	2.49	0.42
26:BA:2511:U:H5'	28:BE:223:LYS:HE2	2.00	0.42
28:BE:222:ARG:NH2	28:BE:234:ARG:CB	2.71	0.42
28:BE:242:ASN:N	28:BE:243:PRO:CD	2.81	0.42
28:BE:270:ASP:O	28:BE:271:ILE:CG1	2.66	0.42
30:BG:57:THR:CG2	30:BG:58:VAL:N	2.62	0.42
30:BG:55:LYS:O	30:BG:65:GLU:CA	2.67	0.42
30:BG:55:LYS:H	30:BG:65:GLU:HG2	1.85	0.42
31:BH:104:LEU:HD23	31:BH:151:ARG:HD2	2.02	0.42
31:BH:10:ILE:HD11	31:BH:49:ILE:HG21	2.01	0.42
32:BI:3:VAL:CG2	32:BI:19:LYS:O	2.68	0.42
32:BI:70:GLU:CG	32:BI:71:GLN:N	2.78	0.42
32:BI:82:LYS:O	32:BI:83:ALA:CB	2.68	0.42
55:BK:87:LYS:HB3	55:BK:88:GLY:H	1.68	0.42
26:BA:2484:G:O2'	36:BQ:60:ALA:HB1	2.19	0.42
43:BR:74:LYS:O	43:BR:75:LEU:C	2.58	0.42
37:BS:27:LEU:HD13	37:BS:28:LYS:CA	2.49	0.42
37:BS:83:LEU:C	37:BS:85:GLY:N	2.71	0.42
44:BU:7:GLY:O	44:BU:9:VAL:CG2	2.52	0.42
45:BV:35:LEU:O	45:BV:60:VAL:HA	2.19	0.42
45:BV:94:LYS:N	45:BV:95:ILE:CD1	2.81	0.42
39:BW:105:VAL:CG2	39:BW:105:VAL:O	2.68	0.42
39:BW:23:LEU:HD11	39:BW:35:ILE:CG2	2.49	0.42
39:BW:41:LYS:O	39:BW:42:ARG:C	2.55	0.42
40:BX:7:HIS:CG	40:BX:8:PRO:CD	3.01	0.42
41:BY:34:GLU:O	41:BY:35:TYR:HD2	1.94	0.42
42:BZ:101:THR:HB	42:BZ:103:ARG:HD3	2.01	0.42
42:BZ:118:HIS:CD2	42:BZ:168:VAL:HA	2.54	0.42
42:BZ:151:ASP:CA	42:BZ:153:LYS:HZ2	2.32	0.42
42:BZ:71:MET:HG2	42:BZ:78:PRO:HD3	0.44	0.42
1:AA:1277:C:C1'	1:AA:1282:C:C2	2.86	0.42
1:AA:1506:U:O4	1:AA:1521:G:H5''	2.20	0.42
1:AA:162:A:C1'	1:AA:348:G:O2'	2.65	0.42
1:AA:590:C:H5''	11:AH:30:ARG:HD2	2.02	0.42
1:AA:686:U:O2	14:AK:42:TRP:CZ2	2.72	0.42
7:AD:187:ARG:O	7:AD:189:PRO:N	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:276:G:H5'	20:AQ:15:MET:SD	2.60	0.42
20:AQ:25:ARG:HB3	20:AQ:38:ARG:HB3	2.01	0.42
1:AA:1320:C:C4	22:AS:72:GLY:HA3	2.50	0.42
49:B4:14:ILE:CG2	49:B4:37:SER:C	2.87	0.42
49:B4:5:LEU:HG	49:B4:8:LYS:N	2.35	0.42
51:B6:46:LYS:C	51:B6:47:HIS:HD1	2.23	0.42
26:BA:1071:G:C2'	26:BA:1090:U:OP1	2.66	0.42
26:BA:1131:G:H4'	26:BA:1132:A:OP1	2.19	0.42
26:BA:1259:G:C4	26:BA:1260:G:C8	3.08	0.42
26:BA:1315:C:H2'	26:BA:1316:U:C6	2.54	0.42
26:BA:1367:A:O2'	52:B7:25:LYS:HD3	2.19	0.42
26:BA:138:G:C2'	26:BA:139:G:H4'	2.37	0.42
26:BA:1300:U:H2'	26:BA:1634:A:O2'	2.19	0.42
26:BA:1858:G:C2	26:BA:1885:A:C5	3.07	0.42
26:BA:2075:U:O4	26:BA:2238:G:C6	2.72	0.42
26:BA:2321:G:H21	26:BA:2322:A:H1'	1.83	0.42
26:BA:2353:G:H8	26:BA:2353:G:O5'	2.03	0.42
26:BA:2361:A:C2	26:BA:2362:G:N9	2.87	0.42
26:BA:2370:G:C6	26:BA:2371:G:C5	3.08	0.42
26:BA:2400:G:C2	26:BA:2401:U:C2	3.07	0.42
26:BA:2408:U:C2'	26:BA:2409:G:O5'	2.68	0.42
26:BA:2064:C:C1'	26:BA:2450:A:C6	2.77	0.42
26:BA:2494:G:H21	26:BA:2495:G:C1'	2.32	0.42
26:BA:2512:C:OP1	28:BE:219:VAL:CG1	2.61	0.42
26:BA:2634:G:O2'	26:BA:2635:C:C5'	2.68	0.42
26:BA:1638:C:C3'	26:BA:2709:G:N2	2.68	0.42
26:BA:1033:U:H6	26:BA:2750:A:H2	1.49	0.42
26:BA:2816:C:C2	26:BA:2831:G:N2	2.87	0.42
26:BA:2892:A:H3'	26:BA:2893:G:H8	1.84	0.42
26:BA:5:A:C2	26:BA:2899:G:C2	3.08	0.42
26:BA:515:A:H3'	26:BA:516:C:C6	2.54	0.42
26:BA:533:G:P	44:BU:25:TRP:HB2	2.59	0.42
26:BA:681:G:H1	26:BA:796:C:H42	1.65	0.42
26:BA:76:C:O2'	46:B2:55:ARG:N	2.53	0.42
27:BD:131:LEU:HG	27:BD:187:CYS:CB	2.43	0.42
27:BD:144:GLU:OE1	27:BD:144:GLU:C	2.57	0.42
27:BD:171:VAL:C	27:BD:182:MET:HG2	2.40	0.42
26:BA:1566:A:N1	27:BD:212:HIS:CG	2.82	0.42
27:BD:80:ILE:CD1	27:BD:82:TYR:CD1	2.95	0.42
28:BE:211:GLN:HG2	28:BE:212:GLY:N	2.21	0.42
26:BA:2578:G:C6	28:BE:237:ASN:ND2	2.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2784:C:H5'	28:BE:95:PRO:O	2.20	0.42
29:BF:34:ALA:HB1	29:BF:110:ALA:HB1	1.84	0.42
29:BF:33:LYS:C	29:BF:36:ARG:HG2	2.40	0.42
29:BF:63:SER:O	29:BF:64:GLY:C	2.57	0.42
30:BG:19:GLU:N	30:BG:135:VAL:HG21	2.34	0.42
30:BG:149:ARG:C	30:BG:151:ILE:N	2.66	0.42
30:BG:51:ARG:HH11	30:BG:72:LYS:HB2	1.82	0.42
30:BG:49:PRO:CG	30:BG:72:LYS:H	2.31	0.42
31:BH:101:LYS:HG3	31:BH:116:PRO:CD	2.49	0.42
32:BI:1:MET:HG3	32:BI:3:VAL:HG22	1.96	0.42
32:BI:92:SER:H	32:BI:122:ARG:NH2	2.18	0.42
36:BQ:72:VAL:HB	36:BQ:83:PHE:CZ	2.55	0.42
43:BR:20:LEU:HD22	43:BR:24:GLN:CG	2.41	0.42
37:BS:58:LEU:HD11	37:BS:92:ALA:HA	2.00	0.42
37:BS:97:VAL:O	37:BS:98:GLU:CG	2.68	0.42
38:BT:21:PHE:HB2	38:BT:31:PHE:CD1	2.52	0.42
26:BA:514:A:C3'	44:BU:32:TYR:OH	2.67	0.42
45:BV:58:ALA:O	45:BV:100:GLY:O	2.38	0.42
41:BY:32:ARG:HG2	41:BY:33:GLU:H	1.84	0.42
42:BZ:94:VAL:O	42:BZ:123:VAL:N	2.37	0.42
1:AA:1164:G:H1	1:AA:1172:C:N4	2.17	0.42
1:AA:236:G:H2'	1:AA:237:C:C6	2.55	0.42
5:AB:80:ILE:CG2	5:AB:212:GLN:HG2	2.49	0.42
5:AB:51:LEU:O	5:AB:55:PHE:HD1	2.02	0.42
5:AB:82:ARG:HD2	5:AB:92:TYR:HE1	1.84	0.42
1:AA:542:G:P	7:AD:41:GLY:HA2	2.57	0.42
1:AA:1240:U:N3	10:AG:30:ILE:O	2.45	0.42
12:AI:114:TYR:CD1	13:AJ:60:ARG:HB3	2.55	0.42
1:AA:668:G:C5'	18:AO:48:LYS:O	2.66	0.42
19:AP:55:ARG:O	19:AP:59:TRP:HD1	2.03	0.42
48:B0:18:PRO:O	48:B0:19:LYS:CB	2.68	0.42
46:B2:43:PRO:C	46:B2:45:ARG:N	2.71	0.42
47:B3:39:ASP:O	47:B3:40:THR:O	2.38	0.42
47:B3:6:VAL:CG2	47:B3:55:ARG:O	2.63	0.42
50:B5:3:LYS:O	50:B5:4:HIS:C	2.58	0.42
51:B6:44:ALA:O	51:B6:45:LYS:O	2.38	0.42
51:B6:39:LYS:C	51:B6:50:PHE:CD1	2.93	0.42
53:B8:15:LYS:HE3	53:B8:15:LYS:HB2	1.73	0.42
26:BA:1024:G:H3'	26:BA:1025:G:C5'	2.50	0.42
26:BA:1500:G:N2	27:BD:97:ASP:CG	2.60	0.42
26:BA:1559:G:N3	26:BA:1559:G:H2'	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1612:C:H2'	52:B7:3:ARG:CD	2.26	0.42
26:BA:1771:C:H2'	26:BA:1772:G:H8	1.85	0.42
26:BA:563:G:O6	26:BA:2018:G:N7	2.52	0.42
26:BA:2249:U:O4	26:BA:2253:G:OP1	2.38	0.42
26:BA:2257:U:HO2'	26:BA:2258:C:C4'	2.32	0.42
26:BA:2277:G:OP1	36:BQ:94:ARG:NH2	2.53	0.42
26:BA:2436:G:N2	26:BA:2437:U:C2	2.87	0.42
26:BA:2465:C:O2'	26:BA:2466:C:P	2.76	0.42
26:BA:2488:A:C6	26:BA:2489:G:C6	3.08	0.42
26:BA:2447:G:O2'	26:BA:2499:C:OP2	2.23	0.42
26:BA:2510:C:O2'	28:BE:223:LYS:HE3	2.19	0.42
26:BA:2525:G:O2'	26:BA:2742:C:C1'	2.67	0.42
26:BA:2581:G:N3	26:BA:2581:G:C2'	2.76	0.42
26:BA:2617:C:O2'	28:BE:245:ARG:NH1	2.52	0.42
26:BA:2622:C:H2'	26:BA:2623:G:O5'	2.20	0.42
26:BA:2680:C:C5'	28:BE:302:GLY:CA	2.98	0.42
26:BA:2729:G:H8	26:BA:2729:G:O5'	2.02	0.42
26:BA:337:C:P	41:BY:24:ARG:HB3	2.60	0.42
26:BA:492:A:N1	39:BW:49:LYS:NZ	2.62	0.42
26:BA:774:A:O2'	26:BA:775:G:H8	2.02	0.42
27:BD:82:TYR:HA	27:BD:89:ASN:HB3	2.01	0.42
27:BD:89:ASN:ND2	27:BD:199:ARG:CZ	2.83	0.42
28:BE:211:GLN:CG	28:BE:212:GLY:H	2.18	0.42
29:BF:215:ALA:HB2	29:BF:239:ALA:N	2.32	0.42
29:BF:39:GLN:O	29:BF:42:ARG:HB3	2.19	0.42
29:BF:52:ALA:O	29:BF:55:ARG:CB	2.68	0.42
29:BF:52:ALA:C	29:BF:54:LEU:N	2.73	0.42
29:BF:6:TYR:O	29:BF:11:ASN:N	2.52	0.42
26:BA:673:C:C2'	29:BF:82:GLN:OE1	2.68	0.42
30:BG:40:ILE:O	30:BG:44:ILE:HG13	2.19	0.42
30:BG:71:ALA:O	30:BG:72:LYS:HE3	2.17	0.42
32:BI:103:GLN:O	32:BI:104:ALA:O	2.38	0.42
26:BA:1059:G:N2	55:BK:127:ILE:O	2.52	0.42
55:BK:89:SER:C	55:BK:95:LYS:HD3	2.40	0.42
33:BN:10:VAL:CG1	33:BN:36:VAL:CB	2.88	0.42
26:BA:142(A):A:H1'	33:BN:18:ILE:HD11	2.02	0.42
33:BN:80:LYS:O	33:BN:84:ARG:CG	2.44	0.42
26:BA:558:G:O5'	33:BN:91:LYS:HB2	2.20	0.42
34:BO:105:GLU:HB2	34:BO:106:LEU:H	1.57	0.42
34:BO:45:ASP:OD1	34:BO:45:ASP:O	2.37	0.42
36:BQ:117:GLY:O	36:BQ:118:ALA:CB	2.66	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BR:41:ALA:C	43:BR:43:GLU:N	2.73	0.42
38:BT:11:THR:CG2	38:BT:12:ASP:N	2.58	0.42
44:BU:47:TYR:HE2	44:BU:50:ARG:NH1	2.16	0.42
26:BA:995:C:P	44:BU:54:LYS:NZ	2.93	0.42
45:BV:43:GLU:N	45:BV:44:GLN:NE2	2.68	0.42
39:BW:46:PHE:O	39:BW:48:ALA:N	2.53	0.42
39:BW:68:ARG:HH21	39:BW:110:LYS:CG	2.29	0.42
40:BX:14:ALA:HA	40:BX:17:ASP:CB	2.48	0.42
41:BY:105:ASP:OD1	41:BY:105:ASP:N	2.53	0.42
1:AA:1085:U:H5'	1:AA:1094:G:N3	2.34	0.42
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.84	0.42
1:AA:1223:C:H5''	1:AA:1224:G:H5''	2.00	0.42
1:AA:1308:U:H5'	16:AM:110:ARG:CZ	2.47	0.42
1:AA:1337:G:H3'	1:AA:1338:G:P	2.43	0.42
1:AA:975:A:N9	1:AA:1357:A:C2	2.88	0.42
1:AA:450:G:O6	1:AA:481:G:H2'	2.20	0.42
1:AA:832:C:H1'	1:AA:855:G:N2	2.35	0.42
1:AA:991:U:OP1	1:AA:1018:C:OP1	2.38	0.42
5:AB:162:ILE:HD13	5:AB:162:ILE:N	2.35	0.42
7:AD:70:ILE:CD1	7:AD:100:ARG:NH2	2.82	0.42
1:AA:1070:U:C5'	8:AE:18:ARG:HH12	2.20	0.42
1:AA:932:C:N4	10:AG:3:ARG:NH2	2.68	0.42
15:AL:97:ARG:O	15:AL:97:ARG:HG2	2.20	0.42
1:AA:1221:G:C4'	22:AS:36:ARG:HH12	2.33	0.42
22:AS:64:GLU:HG3	22:AS:65:ASN:N	2.35	0.42
24:AU:5:ASP:O	24:AU:11:GLY:HA3	2.19	0.42
24:AU:6:ARG:HH11	24:AU:15:ARG:HH22	1.66	0.42
48:B0:33:ALA:CB	48:B0:66:LYS:N	2.77	0.42
46:B2:59:ILE:CG2	46:B2:60:GLN:N	2.71	0.42
47:B3:47:VAL:N	47:B3:48:GLU:OE1	2.52	0.42
49:B4:5:LEU:CD1	49:B4:60:ASN:ND2	2.67	0.42
51:B6:40:TYR:CA	51:B6:50:PHE:CE1	3.03	0.42
26:BA:1022:G:N1	26:BA:1140:C:C6	2.88	0.42
26:BA:1278:A:OP1	43:BR:36:THR:CB	2.61	0.42
26:BA:489:G:H1'	26:BA:1284:A:N7	2.35	0.42
26:BA:1586:A:O2'	26:BA:1587:A:C8	2.72	0.42
26:BA:1924:C:C4	26:BA:1925:C:N4	2.88	0.42
26:BA:205:G:O2'	26:BA:206:U:P	2.78	0.42
26:BA:2181:G:C2'	26:BA:2182:G:H5''	2.49	0.42
26:BA:221:A:H8	26:BA:221:A:H3'	1.85	0.42
26:BA:2385:C:O2	26:BA:2386:C:N1	2.49	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2531:A:C2	26:BA:2532:G:C1'	3.02	0.42
26:BA:2522:U:C2	26:BA:2543:G:O6	2.73	0.42
26:BA:2571:C:O2	26:BA:2574:G:H1'	2.20	0.42
26:BA:2649:U:C2	26:BA:2650:U:C5	3.07	0.42
26:BA:2652:C:C4	26:BA:2653:U:C5	2.90	0.42
26:BA:1629:U:O2	26:BA:2698:U:C4'	2.68	0.42
26:BA:270(C):C:H2'	26:BA:270(D):C:C6	2.54	0.42
26:BA:2737:G:O6	26:BA:2738:A:N6	2.52	0.42
26:BA:2744:G:O2'	26:BA:2745:C:H5'	2.20	0.42
26:BA:2774:C:C2'	26:BA:2775:A:H8	2.30	0.42
26:BA:2817:G:C4	26:BA:2818:G:C8	3.08	0.42
26:BA:295:G:C8	26:BA:345:A:C2	3.08	0.42
26:BA:530:G:C5'	26:BA:561:G:O6	2.59	0.42
26:BA:618(A):C:N4	26:BA:619:G:H21	2.18	0.42
26:BA:686:G:C8	52:B7:6:GLN:O	2.73	0.42
26:BA:734:A:H2'	26:BA:735:A:H8	1.83	0.42
26:BA:752:A:C8	26:BA:752:A:O5'	2.72	0.42
26:BA:777:A:N7	26:BA:793:A:H2	2.17	0.42
27:BD:134:ILE:CG2	27:BD:135:PRO:CD	2.93	0.42
27:BD:156:ALA:C	27:BD:158:GLY:H	2.23	0.42
29:BF:100:LEU:HA	29:BF:100:LEU:HD23	1.66	0.42
29:BF:111:VAL:O	29:BF:115:LEU:HD23	2.19	0.42
29:BF:22:PHE:O	29:BF:24:THR:OG1	2.38	0.42
29:BF:45:ASP:HB3	29:BF:98:ARG:HG3	2.01	0.42
30:BG:150:SER:O	30:BG:151:ILE:O	2.37	0.42
31:BH:43:THR:HG21	31:BH:51:VAL:O	2.20	0.42
31:BH:90:GLY:HA2	31:BH:159:LYS:CD	2.47	0.42
32:BI:110:LEU:HD23	32:BI:111:ASP:N	2.35	0.42
55:BK:36:MET:SD	55:BK:40:LYS:CD	3.08	0.42
55:BK:13:LEU:O	55:BK:54:LEU:O	2.38	0.42
55:BK:97:VAL:CA	55:BK:99:LYS:HZ2	2.32	0.42
33:BN:137:GLU:O	33:BN:140:GLY:N	2.42	0.42
26:BA:1137:G:P	33:BN:60:ARG:NH2	2.90	0.42
33:BN:82:THR:O	33:BN:85:GLY:HA3	2.20	0.42
35:BP:128:GLY:O	35:BP:132:LYS:CD	2.65	0.42
35:BP:65:ASP:HB3	35:BP:109:LEU:N	2.35	0.42
36:BQ:57:ARG:O	36:BQ:60:ALA:HB3	2.20	0.42
37:BS:10:MET:O	37:BS:11:ARG:C	2.55	0.42
37:BS:22:GLN:CA	37:BS:22:GLN:OE1	2.67	0.42
38:BT:29:THR:HB	38:BT:31:PHE:HE1	1.83	0.42
44:BU:16:LYS:HB3	44:BU:17:VAL:H	1.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BU:72:HIS:ND1	44:BU:110:VAL:CG1	2.81	0.42
44:BU:94:VAL:CA	44:BU:98:ILE:HD11	2.45	0.42
45:BV:41:GLY:CA	45:BV:54:TYR:CE1	3.03	0.42
41:BY:92:ASP:C	41:BY:94:SER:N	2.73	0.42
42:BZ:171:VAL:O	42:BZ:171:VAL:CG2	2.68	0.42
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.20	0.42
1:AA:983:A:H1'	1:AA:1049:U:O2	2.19	0.42
1:AA:426:G:O2'	7:AD:42:GLN:CG	2.68	0.42
1:AA:509:A:O2'	1:AA:510:A:H5'	2.20	0.42
1:AA:819:A:N1	1:AA:1529:G:N7	2.68	0.42
1:AA:244:U:C6	1:AA:894:G:C2	3.07	0.42
6:AC:106:VAL:CG1	6:AC:107:GLN:N	2.82	0.42
6:AC:153:VAL:HB	6:AC:166:GLU:HB3	2.01	0.42
7:AD:68:TYR:CE2	7:AD:97:LEU:HB3	2.54	0.42
8:AE:26:PHE:HB2	8:AE:27:ARG:H	1.73	0.42
15:AL:75:HIS:HB3	15:AL:102:ARG:HH12	1.83	0.42
2:AV:75:C:P	26:BA:2602:A:H5'	2.60	0.42
3:AW:37:YYG:H32	3:AW:38:A:O4'	2.20	0.42
26:BA:76:C:HO2'	46:B2:55:ARG:CA	2.23	0.42
47:B3:44:ARG:O	47:B3:48:GLU:CD	2.55	0.42
52:B7:28:ARG:O	52:B7:31:LEU:CB	2.68	0.42
53:B8:26:LYS:NZ	53:B8:44:LYS:H	1.93	0.42
54:B9:3:VAL:O	54:B9:4:ARG:C	2.48	0.42
26:BA:1056:G:O6	26:BA:1102:C:OP2	2.37	0.42
26:BA:1129:A:H2	26:BA:2570:G:H8	1.62	0.42
26:BA:1203:G:N3	26:BA:1203:G:H3'	2.34	0.42
26:BA:1212:G:N7	26:BA:1235:G:O6	2.53	0.42
26:BA:1636:C:O2'	26:BA:1760:A:O2'	2.34	0.42
26:BA:1906:G:C2	26:BA:1929:G:O6	2.73	0.42
26:BA:197:A:H2'	26:BA:198:C:O4'	2.20	0.42
26:BA:2009:G:C6	26:BA:2010:G:N7	2.88	0.42
26:BA:2182:G:H2'	26:BA:2183:C:C2	2.55	0.42
26:BA:2263:C:C6	26:BA:2263:C:H5'	2.53	0.42
26:BA:227:A:H8	26:BA:227:A:O5'	2.02	0.42
26:BA:2395:C:H4'	49:B4:28:ARG:HD2	2.01	0.42
26:BA:2417:C:N4	26:BA:2418:A:N6	2.68	0.42
26:BA:2418:A:C2	26:BA:2419:U:O2	2.73	0.42
26:BA:2428:G:H1'	26:BA:2429:G:C6	2.55	0.42
26:BA:2458:G:H2'	26:BA:2490:G:H1	1.85	0.42
26:BA:2513:G:H2'	26:BA:2514:U:C6	2.55	0.42
26:BA:2537:U:C5	26:BA:2538:C:C5	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2635:C:N4	26:BA:2784:C:N4	2.65	0.42
26:BA:2648:C:C5	26:BA:2649:U:C4	3.08	0.42
26:BA:2684:U:C2'	26:BA:2685:G:O5'	2.67	0.42
26:BA:2703:C:H2'	26:BA:2704:C:C6	2.54	0.42
26:BA:2744:G:N1	26:BA:2745:C:N3	2.68	0.42
26:BA:1050:A:N1	26:BA:2751:G:C8	2.88	0.42
26:BA:2788:C:C3'	26:BA:2789:C:P	3.08	0.42
26:BA:279:C:H2'	26:BA:360:G:O6	2.19	0.42
26:BA:2691:C:O4'	26:BA:2872:G:C8	2.73	0.42
26:BA:342:G:C2	26:BA:343:C:C2	3.08	0.42
26:BA:624:C:O2	26:BA:657:U:H5''	2.20	0.42
26:BA:684:G:C4	26:BA:775:G:C6	3.08	0.42
26:BA:70:G:H5'	26:BA:75:G:H22	1.85	0.42
26:BA:85:G:OP1	41:BY:65:VAL:CG2	2.60	0.42
26:BA:863:A:H61	26:BA:913:U:H3	1.67	0.42
26:BA:965:C:C4'	26:BA:2273:A:C4	2.95	0.42
28:BE:112:LEU:C	28:BE:112:LEU:CD1	2.88	0.42
28:BE:242:ASN:O	28:BE:243:PRO:C	2.58	0.42
28:BE:193:PHE:HZ	28:BE:312:ARG:O	2.00	0.42
29:BF:52:ALA:O	29:BF:55:ARG:N	2.53	0.42
29:BF:84:VAL:N	29:BF:87:ARG:HE	2.17	0.42
29:BF:46:TYR:O	29:BF:92:PRO:HB2	2.19	0.42
30:BG:141:VAL:N	30:BG:144:ARG:HH11	2.15	0.42
31:BH:138:GLN:C	31:BH:140:VAL:N	2.72	0.42
31:BH:71:LEU:O	31:BH:74:MET:N	2.52	0.42
32:BI:80:PRO:C	32:BI:146:THR:O	2.58	0.42
33:BN:63:ILE:CG2	33:BN:71:TYR:CE1	3.03	0.42
33:BN:82:THR:HG1	33:BN:83:ILE:HG23	1.84	0.42
34:BO:63:VAL:HG22	34:BO:106:LEU:HD22	2.02	0.42
34:BO:21:VAL:HG13	34:BO:39:VAL:HG13	2.02	0.42
35:BP:73:VAL:O	35:BP:76:LEU:CB	2.65	0.42
35:BP:80:ASP:O	35:BP:92:ASP:HA	2.20	0.42
36:BQ:70:ARG:HD2	36:BQ:71:PHE:CE1	2.52	0.42
43:BR:70:LEU:HD23	43:BR:70:LEU:N	2.34	0.42
43:BR:99:LYS:HB3	50:B5:44:HIS:CE1	2.55	0.42
44:BU:28:ARG:C	44:BU:30:LYS:N	2.73	0.42
44:BU:9:VAL:O	44:BU:10:ARG:C	2.56	0.42
45:BV:18:ASP:HB3	45:BV:96:LEU:HA	2.00	0.42
39:BW:32:ALA:HB2	39:BW:35:ILE:HD11	1.94	0.42
39:BW:60:ASN:HB3	39:BW:61:ASN:OD1	2.19	0.42
41:BY:92:ASP:OD1	41:BY:94:SER:HB2	2.16	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:328:U:O3'	41:BY:92:ASP:OD2	2.38	0.42
42:BZ:40:ASP:HB2	42:BZ:41:ARG:H	1.39	0.42
1:AA:127:G:C5'	1:AA:635:G:HO2'	2.32	0.42
1:AA:1340:A:OP1	3:AW:34:G:O2'	2.30	0.42
1:AA:15:G:C6	1:AA:1396:A:C6	3.07	0.42
1:AA:1398:A:H3'	1:AA:1398:A:C8	2.55	0.42
1:AA:1539:C:OP2	21:AR:54:ARG:NH1	2.53	0.42
1:AA:18:C:O2'	1:AA:1078:U:N3	2.52	0.42
1:AA:317:G:P	1:AA:353:A:N6	2.93	0.42
1:AA:328:C:H4'	1:AA:329:A:H5'	2.01	0.42
1:AA:489:C:H2'	1:AA:490:G:H8	1.85	0.42
1:AA:695:A:H2'	1:AA:696:A:H8	1.84	0.42
1:AA:870:U:H6	1:AA:870:U:O5'	2.02	0.42
1:AA:891:U:H5	1:AA:906:G:C2	2.38	0.42
1:AA:925:G:H1	1:AA:1391:U:H3	1.68	0.42
5:AB:28:PHE:CD2	5:AB:194:PRO:HG3	2.55	0.42
19:AP:9:PHE:HB2	19:AP:16:HIS:O	2.20	0.42
19:AP:7:ALA:HB3	19:AP:18:ARG:HB2	2.01	0.42
48:B0:29:GLU:OE1	48:B0:62:LEU:CD2	2.68	0.42
26:BA:2352:A:N1	48:B0:30:VAL:HG11	1.96	0.42
48:B0:30:VAL:HG13	48:B0:63:SER:HG	1.84	0.42
47:B3:20:LYS:CA	47:B3:23:LEU:HD12	2.36	0.42
49:B4:59:PHE:H	49:B4:62:ARG:NE	2.12	0.42
49:B4:5:LEU:HB2	49:B4:56:VAL:HG11	1.85	0.42
51:B6:8:ILE:C	51:B6:29:ARG:HH21	2.18	0.42
26:BA:110:G:C2	26:BA:111:A:C5	3.07	0.42
26:BA:120:U:C5	26:BA:150:C:N3	2.88	0.42
26:BA:1602:U:C6	26:BA:1602:U:H3'	2.55	0.42
26:BA:1603:A:C2'	26:BA:1604:C:H6	2.17	0.42
26:BA:1661:G:H1	26:BA:1999:C:N4	2.15	0.42
26:BA:1799:G:H1	27:BD:177:SER:CB	2.32	0.42
26:BA:1857:G:H2'	26:BA:1858:G:N7	2.31	0.42
26:BA:2092:U:C5	26:BA:2227:A:N6	2.88	0.42
26:BA:2218:G:C4	26:BA:2219:G:N7	2.88	0.42
26:BA:2431:U:P	26:BA:2432:A:OP2	2.78	0.42
26:BA:2479:G:O2'	26:BA:2480:C:O5'	2.38	0.42
26:BA:2487:G:H2'	26:BA:2488:A:C8	2.54	0.42
26:BA:2546:U:N3	26:BA:2567:G:N7	2.44	0.42
26:BA:2572:A:OP1	26:BA:2574:G:H4'	2.20	0.42
26:BA:2693:A:C4	26:BA:2694:G:N7	2.88	0.42
26:BA:2749:A:N7	26:BA:2750:A:C8	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2785:C:C1'	28:BE:100:TRP:NE1	2.48	0.42
26:BA:2812:G:C2'	26:BA:2813:A:O5'	2.68	0.42
26:BA:571:A:O4'	26:BA:2030:A:N6	2.52	0.42
26:BA:738:G:H2'	26:BA:739:G:O4'	2.20	0.42
26:BA:961:C:N4	26:BA:2031:A:H1'	2.35	0.42
28:BE:200:ASP:O	28:BE:311:PHE:C	2.58	0.42
28:BE:94:ARG:CB	28:BE:95:PRO:HD3	2.40	0.42
29:BF:115:LEU:O	29:BF:117:ALA:N	2.53	0.42
31:BH:142:GLU:O	31:BH:143:LEU:C	2.58	0.42
55:BK:122:GLU:HB3	55:BK:126:LYS:NZ	2.31	0.42
55:BK:52:MET:CE	55:BK:53:ILE:N	2.78	0.42
33:BN:17:CYS:O	33:BN:45:VAL:CG1	2.58	0.42
33:BN:38:VAL:C	33:BN:39:VAL:CG2	2.84	0.42
33:BN:50:GLU:HB2	33:BN:51:GLU:H	1.64	0.42
34:BO:7:ARG:C	34:BO:8:LEU:CD2	2.87	0.42
36:BQ:93:ILE:CG2	36:BQ:94:ARG:H	2.30	0.42
26:BA:957:A:OP2	36:BQ:94:ARG:O	2.38	0.42
43:BR:22:ARG:NH2	43:BR:69:ASP:HA	2.35	0.42
43:BR:75:LEU:O	43:BR:77:ARG:C	2.58	0.42
26:BA:2292:C:OP2	37:BS:25:ARG:NH2	2.53	0.42
38:BT:46:ALA:O	38:BT:49:LEU:N	2.38	0.42
39:BW:8:ARG:CB	39:BW:102:HIS:ND1	2.83	0.42
39:BW:46:PHE:O	39:BW:49:LYS:N	2.52	0.42
39:BW:68:ARG:O	39:BW:110:LYS:CA	2.66	0.42
40:BX:9:HIS:CB	40:BX:26:PHE:HA	2.42	0.42
41:BY:57:GLY:CA	41:BY:97:ARG:NH2	2.50	0.42
42:BZ:6:LYS:HA	42:BZ:31:SER:CB	2.48	0.42
1:AA:1406:U:H1'	1:AA:1518:A:O4'	2.20	0.41
1:AA:1451:A:C8	1:AA:1451:A:C3'	3.03	0.41
1:AA:294:U:OP1	1:AA:610:G:O2'	2.33	0.41
1:AA:302:G:H21	1:AA:556:C:C4'	2.33	0.41
1:AA:439:A:OP2	1:AA:494:G:N1	2.43	0.41
1:AA:563:A:C5	1:AA:567:G:H1'	2.55	0.41
1:AA:579:G:O5'	1:AA:728:A:O2'	2.36	0.41
1:AA:62:U:P	1:AA:385:C:O2'	2.77	0.41
1:AA:126:G:C4'	1:AA:634:C:H1'	2.50	0.41
1:AA:707:C:O3'	14:AK:20:TYR:CZ	2.72	0.41
5:AB:182:ILE:HA	5:AB:183:PRO:HD3	1.91	0.41
7:AD:104:VAL:HG12	7:AD:104:VAL:O	2.20	0.41
12:AI:55:ALA:HB3	12:AI:58:ARG:HE	1.85	0.41
16:AM:22:ILE:HG23	16:AM:67:GLU:HB2	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:B2:23:LEU:O	46:B2:24:LYS:C	2.56	0.41
26:BA:931:G:OP2	47:B3:27:GLY:HA3	2.19	0.41
50:B5:41:LEU:O	50:B5:42:SER:O	2.38	0.41
26:BA:2611:U:H5	50:B5:4:HIS:HE2	1.60	0.41
51:B6:8:ILE:CD1	51:B6:8:ILE:H	2.14	0.41
26:BA:594:U:C4'	53:B8:58:MET:CE	2.98	0.41
53:B8:6:THR:O	53:B8:8:LYS:C	2.59	0.41
26:BA:1299:G:H5'	26:BA:1301:A:H1'	2.00	0.41
26:BA:1365:A:H5''	49:B4:3:LYS:HE3	2.01	0.41
26:BA:1521:G:H3'	26:BA:1522:G:O4'	2.19	0.41
26:BA:1906:G:H1'	26:BA:1929:G:N7	2.34	0.41
26:BA:2077:A:N3	26:BA:2435:A:H8	2.16	0.41
26:BA:2317:C:C2'	26:BA:2318:G:C8	3.03	0.41
26:BA:2333:A:C4'	26:BA:2335:A:O4'	2.68	0.41
26:BA:2539:C:O2	26:BA:2539:C:H2'	2.20	0.41
26:BA:2567:G:N1	26:BA:2568:C:N4	2.68	0.41
26:BA:2576:G:H4'	26:BA:2577:A:H5'	2.01	0.41
26:BA:746:A:H2'	26:BA:2611:U:HO2'	1.83	0.41
26:BA:2616:C:O2	26:BA:2617:C:C6	2.73	0.41
26:BA:2694:G:H8	26:BA:2694:G:O5'	2.02	0.41
26:BA:2783:G:C4	26:BA:2784:C:C6	3.08	0.41
26:BA:2832:U:C1'	26:BA:2834:G:N2	2.62	0.41
26:BA:2837:G:C6	26:BA:2882:A:N1	2.88	0.41
26:BA:481:G:O2'	26:BA:482:A:C8	2.71	0.41
26:BA:566:U:P	45:BV:81:ARG:NH2	2.93	0.41
26:BA:618(A):C:C5	26:BA:619:G:N2	2.88	0.41
26:BA:586:A:C6	26:BA:809:G:O2'	2.60	0.41
26:BA:815:C:H5'	26:BA:1224:G:H22	1.83	0.41
27:BD:125:ILE:HG22	27:BD:126:GLY:H	1.80	0.41
26:BA:2786:U:H5'	28:BE:100:TRP:HB2	2.01	0.41
28:BE:87:GLU:CA	28:BE:93:GLN:N	2.75	0.41
29:BF:200:PRO:HB3	29:BF:205:ARG:HD3	2.02	0.41
29:BF:168:ARG:CA	29:BF:233:THR:HG22	2.48	0.41
29:BF:44:GLN:HB3	29:BF:45:ASP:H	1.76	0.41
30:BG:25:MET:SD	30:BG:128:LEU:CB	3.08	0.41
30:BG:140:ARG:CB	30:BG:144:ARG:HH12	2.33	0.41
31:BH:91:VAL:C	31:BH:159:LYS:HZ2	2.23	0.41
55:BK:135:MET:HE3	55:BK:137:ILE:HG13	2.02	0.41
55:BK:96:ILE:HG23	55:BK:138:GLU:HG3	1.71	0.41
55:BK:18:ALA:HB3	55:BK:43:ASN:ND2	2.35	0.41
33:BN:23:ALA:O	33:BN:26:VAL:HG23	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:41:ALA:O	33:BN:44:ALA:N	2.53	0.41
34:BO:116:SER:O	34:BO:117:LEU:C	2.58	0.41
34:BO:17:ARG:CZ	34:BO:46:ALA:C	2.89	0.41
35:BP:55:GLN:HG3	35:BP:56:LYS:N	2.35	0.41
36:BQ:72:VAL:CB	36:BQ:83:PHE:HZ	2.33	0.41
43:BR:86:ARG:O	43:BR:87:TYR:HD2	2.03	0.41
41:BY:47:THR:C	41:BY:48:VAL:HG23	2.33	0.41
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.55	0.41
1:AA:36:C:O2'	1:AA:501:C:H5''	2.19	0.41
1:AA:392:G:H5'	19:AP:12:LYS:NZ	2.34	0.41
1:AA:79:G:H2'	1:AA:80:G:H8	1.85	0.41
1:AA:892:A:C2	1:AA:893:C:C2	3.09	0.41
1:AA:932:C:H5'	10:AG:3:ARG:HB3	2.01	0.41
7:AD:3:ARG:CB	7:AD:118:ARG:HH11	2.33	0.41
7:AD:3:ARG:CB	7:AD:118:ARG:NH1	2.83	0.41
7:AD:63:LYS:O	7:AD:67:ILE:HG13	2.20	0.41
11:AH:29:SER:HB3	11:AH:32:LYS:HG2	2.03	0.41
1:AA:564:C:C4'	11:AH:91:ARG:NH2	2.81	0.41
1:AA:1202:G:H21	17:AN:27:CYS:HB2	1.85	0.41
1:AA:1320:C:H1'	22:AS:73:GLU:CA	2.50	0.41
48:B0:67:VAL:HG11	48:B0:74:LYS:HE2	2.02	0.41
46:B2:28:LEU:O	46:B2:29:ASN:C	2.59	0.41
46:B2:34:GLN:HB2	46:B2:35:ALA:H	1.73	0.41
26:BA:988:A:H62	47:B3:13:ILE:CG2	2.33	0.41
49:B4:16:TYR:CE1	49:B4:37:SER:OG	2.73	0.41
26:BA:1202:C:N3	26:BA:1243:G:N2	2.56	0.41
26:BA:126:A:N7	26:BA:127:A:C5	2.88	0.41
26:BA:1377:G:H8	26:BA:1377:G:O5'	2.02	0.41
26:BA:1443:G:C2	26:BA:1444:G:H1'	2.54	0.41
26:BA:1638:C:H4'	26:BA:2709:G:H22	1.83	0.41
26:BA:1936:A:C6	26:BA:1945:G:N3	2.88	0.41
26:BA:2012:G:OP1	39:BW:98:LYS:CG	2.65	0.41
26:BA:2187:G:H2'	26:BA:2188:C:C4'	2.50	0.41
26:BA:2208:U:C2'	26:BA:2209:C:O4'	2.68	0.41
26:BA:2090:G:N1	26:BA:2230:G:C6	2.71	0.41
26:BA:2082:A:N6	26:BA:2237:G:H1'	2.35	0.41
26:BA:2352:A:H2'	26:BA:2353:G:C5'	2.50	0.41
26:BA:2537:U:O2'	26:BA:2538:C:H5'	2.20	0.41
26:BA:1952:A:C1'	26:BA:2560:C:HO2'	2.22	0.41
26:BA:2568:C:O2	26:BA:2568:C:H2'	2.19	0.41
26:BA:25:U:H5''	39:BW:80:PRO:N	2.19	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2682:U:H1'	28:BE:49:THR:CA	2.50	0.41
26:BA:1456:G:C2	26:BA:2704:C:C2	2.87	0.41
26:BA:1638:C:H5'	26:BA:2710:C:H1'	1.98	0.41
26:BA:272:G:H1	26:BA:365:C:H42	1.68	0.41
26:BA:2785:C:H4'	28:BE:100:TRP:N	2.35	0.41
26:BA:2801:A:OP1	26:BA:2802:G:O4'	2.38	0.41
26:BA:327:G:C2	26:BA:328:U:C6	3.08	0.41
26:BA:329:G:OP2	26:BA:329:G:H8	2.03	0.41
26:BA:654:A:C2	26:BA:655:A:C8	3.09	0.41
26:BA:706:A:H2'	26:BA:707:G:O4'	2.21	0.41
26:BA:796:C:H2'	26:BA:797:C:C6	2.56	0.41
26:BA:981:A:C8	26:BA:982:C:C5	3.08	0.41
26:BA:2682:U:C5	28:BE:48:MET:HE2	2.21	0.41
29:BF:166:ILE:O	29:BF:167:ASP:C	2.59	0.41
29:BF:203:ALA:C	29:BF:205:ARG:H	2.22	0.41
29:BF:140:VAL:CG1	29:BF:236:THR:HA	2.50	0.41
26:BA:675:A:C5'	29:BF:69:HIS:C	2.87	0.41
29:BF:7:ASP:HB3	29:BF:13:ASP:HB2	2.01	0.41
30:BG:102:GLY:C	30:BG:134:LEU:HD12	2.27	0.41
31:BH:139:ARG:H	31:BH:139:ARG:HG3	1.62	0.41
32:BI:102:LEU:O	32:BI:106:HIS:HB2	2.19	0.41
32:BI:52:GLN:HA	32:BI:55:GLN:NE2	2.34	0.41
55:BK:122:GLU:CB	55:BK:126:LYS:CE	2.74	0.41
36:BQ:49:VAL:HG13	36:BQ:50:VAL:N	2.02	0.41
36:BQ:64:ALA:O	36:BQ:66:ASN:N	2.53	0.41
26:BA:564:C:C4'	44:BU:37:GLN:OE1	2.63	0.41
44:BU:39:LEU:O	44:BU:42:ALA:N	2.52	0.41
40:BX:17:ASP:C	40:BX:20:PHE:CE1	2.93	0.41
41:BY:54:ASP:C	41:BY:56:ALA:H	2.24	0.41
42:BZ:125:PRO:HB2	42:BZ:126:GLY:H	1.71	0.41
42:BZ:148:THR:CB	42:BZ:166:LEU:H	2.33	0.41
1:AA:120:A:H2'	1:AA:122:G:N7	2.35	0.41
1:AA:1318:A:H5'	22:AS:10:PHE:CG	2.51	0.41
1:AA:246:A:H62	1:AA:281:G:H21	1.69	0.41
1:AA:719:C:O2'	21:AR:49:LYS:HB3	2.20	0.41
1:AA:890:G:O2'	1:AA:891:U:H6	1.98	0.41
5:AB:145:LEU:HD13	5:AB:149:LEU:HD12	2.02	0.41
5:AB:28:PHE:HE2	5:AB:189:ASP:O	2.03	0.41
5:AB:68:ILE:O	5:AB:91:PRO:HD2	2.20	0.41
5:AB:82:ARG:HB2	5:AB:94:ASN:ND2	2.35	0.41
6:AC:139:GLN:HE21	6:AC:170:GLN:HE22	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AH:49:GLU:OE1	11:AH:51:VAL:HG23	2.20	0.41
5:AB:181:PHE:HA	11:AH:71:GLY:CA	2.50	0.41
15:AL:44:THR:HA	15:AL:45:PRO:HD3	1.83	0.41
19:AP:27:LYS:C	19:AP:29:ASP:N	2.73	0.41
46:B2:2:VAL:CG1	46:B2:3:LEU:H	2.25	0.41
46:B2:46:ILE:HG22	46:B2:47:LYS:N	2.35	0.41
49:B4:63:PHE:HB3	49:B4:64:GLY:H	1.47	0.41
26:BA:16:G:C5'	50:B5:18:MET:SD	3.04	0.41
53:B8:58:MET:HA	53:B8:61:MET:CG	2.49	0.41
26:BA:1274:A:C4	26:BA:1302:A:C2	3.09	0.41
26:BA:1328:G:N2	26:BA:1330:C:C2	2.88	0.41
26:BA:1339:G:O5'	26:BA:1339:G:C8	2.73	0.41
26:BA:142(A):A:OP2	26:BA:1143:A:N7	2.53	0.41
26:BA:1530:G:P	26:BA:1539:G:H1	2.43	0.41
26:BA:1788:C:O2'	26:BA:1789:A:H5'	2.20	0.41
26:BA:1996:C:O2	26:BA:1997:G:H4'	2.21	0.41
26:BA:2246:G:H1	26:BA:2258:C:N4	2.18	0.41
26:BA:2250:G:C3'	26:BA:2250:G:H8	2.22	0.41
26:BA:2331:G:H4'	48:B0:70:ILE:HB	1.96	0.41
26:BA:2341:G:N7	26:BA:2342:C:N4	2.68	0.41
26:BA:2436:G:C2	26:BA:2437:U:C1'	3.02	0.41
26:BA:2462:U:O2	26:BA:2463:C:C6	2.73	0.41
26:BA:2476:A:C8	26:BA:2476:A:H3'	2.55	0.41
26:BA:2486:G:C6	26:BA:2487:G:N7	2.89	0.41
26:BA:2519:U:H2'	26:BA:2519:U:H6	1.59	0.41
26:BA:1783:A:C2	26:BA:2588:G:H1'	2.56	0.41
26:BA:2661:G:N3	26:BA:2662:A:C8	2.86	0.41
26:BA:1457:A:H2	26:BA:2703:C:C4	2.32	0.41
26:BA:2721:A:C2'	26:BA:2722:G:H8	2.20	0.41
26:BA:2830:G:C6	26:BA:2831:G:N7	2.89	0.41
26:BA:2886:G:N3	26:BA:2887:U:C6	2.89	0.41
26:BA:322:A:H2	26:BA:341:G:C6	2.37	0.41
26:BA:556:G:H2'	26:BA:557:U:O4'	2.20	0.41
26:BA:605:C:P	29:BF:105:LYS:HG2	2.60	0.41
26:BA:626:U:H3'	26:BA:627:A:C5'	2.49	0.41
26:BA:775:G:H5'	26:BA:777:A:C1'	2.25	0.41
26:BA:944:G:N3	26:BA:944:G:H2'	2.35	0.41
27:BD:77:VAL:CG1	27:BD:111:VAL:O	2.67	0.41
27:BD:205:VAL:HB	27:BD:206:LYS:HD3	2.01	0.41
28:BE:251:PRO:O	28:BE:252:GLN:CG	2.68	0.41
28:BE:268:LEU:HD11	28:BE:271:ILE:HG13	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:242:GLU:O	29:BF:245:GLU:CD	2.56	0.41
30:BG:136:ARG:HD2	30:BG:136:ARG:N	2.36	0.41
30:BG:56:ARG:CA	30:BG:63:ILE:HG13	2.51	0.41
30:BG:20:LYS:H	30:BG:76:ARG:HB3	1.85	0.41
32:BI:134:HIS:O	32:BI:136:GLU:N	2.54	0.41
32:BI:124:LEU:HA	32:BI:145:VAL:HB	2.02	0.41
26:BA:270(P):C:H4'	32:BI:42:ALA:HB1	2.02	0.41
34:BO:14:SER:H	34:BO:95:GLY:CA	2.34	0.41
34:BO:88:ARG:HB2	34:BO:92:SER:OG	2.19	0.41
36:BQ:151:SER:HB3	36:BQ:155:GLY:HA2	2.03	0.41
36:BQ:70:ARG:HB2	36:BQ:71:PHE:CD1	2.55	0.41
44:BU:60:LEU:N	44:BU:60:LEU:HD23	2.34	0.41
45:BV:49:GLU:HA	45:BV:53:LYS:HZ2	1.75	0.41
39:BW:18:ARG:O	39:BW:19:LEU:C	2.59	0.41
41:BY:20:HIS:O	41:BY:21:LYS:C	2.58	0.41
42:BZ:104:SER:O	42:BZ:105:GLN:CD	2.59	0.41
42:BZ:136:VAL:O	42:BZ:137:ASP:OD1	2.38	0.41
42:BZ:149:ALA:HB1	42:BZ:164:PRO:CA	2.47	0.41
1:AA:1127:G:H21	1:AA:1147:C:H42	1.68	0.41
1:AA:1222:G:O5'	1:AA:1222:G:H8	2.04	0.41
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.55	0.41
1:AA:1511:G:C6	1:AA:1512:U:C2	3.08	0.41
1:AA:330:C:C2	1:AA:331:G:C8	3.09	0.41
1:AA:976:G:N3	1:AA:361(A):C:C4	2.86	0.41
1:AA:413:G:N1	7:AD:36:ARG:NH1	2.68	0.41
1:AA:565:U:H3'	1:AA:566:G:H8	1.83	0.41
5:AB:152:PHE:O	5:AB:154:LEU:N	2.53	0.41
8:AE:42:GLY:HA3	8:AE:66:MET:SD	2.60	0.41
9:AF:79:LEU:O	9:AF:85:VAL:HG21	2.21	0.41
10:AG:27:ILE:HA	10:AG:30:ILE:HD12	2.02	0.41
1:AA:823:G:N2	11:AH:1:MET:N	2.68	0.41
12:AI:102:LEU:O	12:AI:103:THR:CB	2.68	0.41
12:AI:35:GLU:O	12:AI:38:GLN:HG2	2.21	0.41
16:AM:66:LEU:CA	16:AM:67:GLU:N	2.78	0.41
1:AA:1360:A:N7	17:AN:18:VAL:HG12	2.35	0.41
1:AA:1115:C:C1'	17:AN:61:TRP:O	2.60	0.41
19:AP:3:LYS:HE2	19:AP:24:ALA:HB2	2.03	0.41
48:B0:16:SER:O	48:B0:17:ASN:HB2	2.20	0.41
46:B2:51:LYS:C	46:B2:54:ALA:CB	2.88	0.41
47:B3:26:LEU:HG	47:B3:26:LEU:H	1.46	0.41
50:B5:42:SER:C	50:B5:43:HIS:HD1	2.22	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:B8:26:LYS:CG	53:B8:44:LYS:CA	2.69	0.41
26:BA:1070:A:H8	26:BA:1097:U:O5'	2.03	0.41
26:BA:1324:G:N2	26:BA:1331:A:C4	2.89	0.41
26:BA:143:C:O2'	26:BA:144:C:O4'	2.34	0.41
26:BA:211:A:H2'	26:BA:212:G:O4'	2.20	0.41
26:BA:2276:G:HO2'	26:BA:2277:G:C5'	2.24	0.41
26:BA:227:A:N1	26:BA:2407:G:N9	2.68	0.41
26:BA:2303:G:C2	26:BA:2314:C:C2	3.08	0.41
26:BA:2304:G:H5'	30:BG:105:SER:O	2.20	0.41
26:BA:2343:C:C4'	26:BA:2373:G:O3'	2.57	0.41
26:BA:389:G:C1'	26:BA:2413:G:H4'	2.50	0.41
26:BA:2418:A:O2'	26:BA:2419:U:C5'	2.68	0.41
26:BA:2423:U:N1	26:BA:2423:U:H5'	2.26	0.41
26:BA:2436:G:N2	26:BA:2437:U:H1'	2.34	0.41
26:BA:2441:C:HO2'	26:BA:2442:C:C5'	2.27	0.41
26:BA:2453:A:HO2'	26:BA:2454:G:H5'	1.65	0.41
26:BA:2491:U:H5'	26:BA:2570:G:C5'	2.44	0.41
26:BA:2547:U:C5	26:BA:2566:A:N3	2.88	0.41
26:BA:2694:G:C5	26:BA:2695:C:C5	3.07	0.41
26:BA:2747:G:N2	26:BA:2754:U:H3	2.16	0.41
26:BA:2771:C:N4	26:BA:2772:C:N4	2.69	0.41
26:BA:2820:A:O2'	28:BE:207:GLY:C	2.59	0.41
26:BA:2818:G:H1	26:BA:2828:C:H42	1.67	0.41
26:BA:2836:U:N3	26:BA:2883:A:N6	2.68	0.41
26:BA:364:C:H2'	26:BA:365:C:C5	2.55	0.41
26:BA:468:G:H2'	26:BA:469:G:H5'	2.02	0.41
26:BA:606:U:OP1	29:BF:105:LYS:CD	2.61	0.41
26:BA:988:A:OP1	47:B3:11:SER:CA	2.64	0.41
25:BB:5:C:H2'	25:BB:6:C:H6	1.85	0.41
27:BD:144:GLU:HA	27:BD:150:GLY:O	2.20	0.41
27:BD:152:GLN:OE1	27:BD:152:GLN:N	2.51	0.41
26:BA:1818:U:O2	27:BD:153:LEU:N	2.52	0.41
27:BD:81:GLU:C	27:BD:83:ASP:OD2	2.48	0.41
28:BE:44:TYR:CD1	28:BE:307:LEU:O	2.71	0.41
29:BF:149:LYS:CB	29:BF:152:GLU:HG3	2.39	0.41
29:BF:1:MET:HB2	29:BF:2:GLU:H	1.59	0.41
31:BH:140:VAL:CA	31:BH:143:LEU:HD22	2.50	0.41
31:BH:37:HIS:CE1	31:BH:67:THR:HG21	2.55	0.41
31:BH:51:VAL:HG22	31:BH:68:ARG:HG3	2.02	0.41
31:BH:82:TYR:CD1	31:BH:137:LYS:N	2.78	0.41
32:BI:134:HIS:CE1	32:BI:135:PRO:HD2	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BI:63:ALA:O	32:BI:67:LYS:CG	2.54	0.41
55:BK:135:MET:CE	55:BK:137:ILE:CG1	2.98	0.41
55:BK:100:VAL:HG21	55:BK:137:ILE:HG23	1.99	0.41
55:BK:66:PHE:HB3	55:BK:67:THR:H	1.55	0.41
34:BO:63:VAL:HG22	34:BO:102:VAL:HG11	2.02	0.41
26:BA:2674:G:C4'	34:BO:30:ARG:HG3	2.40	0.41
34:BO:65:THR:HG1	34:BO:67:ARG:CG	2.26	0.41
36:BQ:25:GLY:O	36:BQ:26:LYS:HG3	2.06	0.41
43:BR:28:LEU:HD13	43:BR:32:GLY:H	1.85	0.41
25:BB:49:C:P	37:BS:110:THR:HG1	2.38	0.41
37:BS:123:ILE:O	37:BS:126:GLY:N	2.40	0.41
37:BS:82:TYR:O	37:BS:86:LEU:HD12	2.19	0.41
45:BV:14:VAL:HG11	45:BV:19:VAL:HG23	2.02	0.41
45:BV:71:ILE:HG22	45:BV:72:ARG:N	2.35	0.41
41:BY:11:GLN:HA	41:BY:21:LYS:NZ	2.35	0.41
41:BY:30:ASP:OD2	41:BY:31:LEU:CG	2.61	0.41
41:BY:32:ARG:HB3	41:BY:33:GLU:OE2	2.21	0.41
42:BZ:118:HIS:O	42:BZ:119:ASN:CB	2.67	0.41
42:BZ:131:PRO:C	42:BZ:133:GLU:H	2.23	0.41
42:BZ:18:MET:O	42:BZ:36:ARG:NE	2.29	0.41
1:AA:1021:G:C2	1:AA:1022:G:H1'	2.56	0.41
1:AA:1151:A:OP1	13:AJ:42:THR:N	2.45	0.41
1:AA:1230:C:H5''	2:AV:31:A:OP1	2.20	0.41
1:AA:1401:G:H2'	1:AA:1402:C:O4'	2.20	0.41
1:AA:130:A:H5''	1:AA:190(F):G:H2'	2.00	0.41
1:AA:250:A:H5'	1:AA:252:U:O4'	2.20	0.41
1:AA:454:C:H3'	1:AA:455:C:C6	2.49	0.41
1:AA:807:A:C6	1:AA:808:C:N3	2.88	0.41
1:AA:878:G:H8	1:AA:878:G:O5'	2.02	0.41
6:AC:14:ILE:HG22	6:AC:15:THR:HG23	2.02	0.41
9:AF:10:LEU:HD11	9:AF:26:ILE:HD11	2.02	0.41
14:AK:58:PRO:CA	14:AK:90:GLY:HA3	2.48	0.41
17:AN:21:TYR:N	17:AN:21:TYR:CD1	2.89	0.41
1:AA:1221:G:H1'	22:AS:54:GLY:HA3	2.02	0.41
49:B4:6:HIS:CE1	49:B4:55:ARG:CG	3.02	0.41
26:BA:2419:U:OP1	51:B6:24:THR:CG2	2.69	0.41
51:B6:8:ILE:CA	51:B6:29:ARG:CZ	2.88	0.41
53:B8:16:ILE:CG1	53:B8:22:VAL:HG21	2.23	0.41
26:BA:1130:U:O2'	26:BA:1131:G:H8	2.03	0.41
26:BA:1239:G:H2'	26:BA:1240:U:H6	1.85	0.41
26:BA:1239:G:N3	26:BA:1240:U:C5	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:124:G:H2'	52:B7:19:ARG:NH2	2.35	0.41
26:BA:1273:U:H5''	26:BA:1646:C:N4	2.36	0.41
26:BA:1811:G:H2'	26:BA:1812:A:C8	2.55	0.41
26:BA:1906:G:C6	26:BA:1929:G:N1	2.89	0.41
26:BA:1936:A:C6	26:BA:1945:G:C2	3.09	0.41
26:BA:2023:G:H4'	26:BA:2618:G:H5''	2.02	0.41
26:BA:191:A:H62	26:BA:204:A:H62	1.66	0.41
26:BA:2074:U:H1'	26:BA:2598:A:H1'	2.02	0.41
26:BA:2096:U:H2'	26:BA:2097:C:C6	2.55	0.41
26:BA:2182:G:C4	26:BA:2183:C:C4	3.07	0.41
26:BA:2289:G:C2	26:BA:2290:G:C4	3.09	0.41
26:BA:2395:C:C5'	49:B4:28:ARG:HH11	2.34	0.41
26:BA:2431:U:H2'	26:BA:2433:A:OP2	2.20	0.41
26:BA:2485:G:C2'	26:BA:2486:G:C4'	2.97	0.41
26:BA:2459:A:N1	26:BA:2494:G:C5	2.89	0.41
26:BA:2522:U:O2	26:BA:2543:G:C6	2.74	0.41
26:BA:2524:G:C6	26:BA:2525:G:C5	3.09	0.41
26:BA:2546:U:C3'	26:BA:2546:U:C6	3.03	0.41
26:BA:2574:G:C5'	26:BA:2575:C:P	2.99	0.41
26:BA:2531:A:N1	26:BA:2658:C:O2	2.53	0.41
26:BA:2683:C:C4	26:BA:2684:U:C5	3.09	0.41
26:BA:26:G:H1	26:BA:27:G:N2	2.05	0.41
26:BA:2729:G:C6	26:BA:2730:C:C4	3.07	0.41
26:BA:2756:U:O2	26:BA:2756:U:H2'	2.18	0.41
26:BA:2842:G:H8	26:BA:2842:G:O5'	2.04	0.41
25:BB:5:C:H2'	25:BB:6:C:C6	2.55	0.41
27:BD:108:ASN:O	27:BD:109:LEU:C	2.59	0.41
27:BD:175:LEU:HD12	27:BD:179:GLU:C	2.17	0.41
27:BD:93:ILE:HD11	27:BD:115:ILE:HD11	2.02	0.41
28:BE:180:ILE:HG23	28:BE:183:ASP:OD2	2.20	0.41
28:BE:80:ALA:N	28:BE:185:GLY:O	2.53	0.41
28:BE:71:THR:HG22	28:BE:299:SER:CB	2.03	0.41
29:BF:40:ALA:HB1	29:BF:100:LEU:HB2	2.02	0.41
29:BF:163:HIS:O	29:BF:166:ILE:CA	2.62	0.41
29:BF:1:MET:C	29:BF:18:LEU:HD21	2.38	0.41
29:BF:38:ALA:O	29:BF:40:ALA:N	2.53	0.41
29:BF:56:THR:O	29:BF:79:ARG:CD	2.68	0.41
30:BG:106:PHE:O	30:BG:107:GLY:C	2.58	0.41
31:BH:10:ILE:O	31:BH:11:PRO:O	2.39	0.41
31:BH:102:LEU:O	31:BH:113:GLU:HA	2.21	0.41
31:BH:123:GLU:CD	31:BH:123:GLU:N	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:124:VAL:HA	31:BH:130:ILE:HG13	2.03	0.41
31:BH:91:VAL:H	31:BH:159:LYS:HD2	1.86	0.41
32:BI:144:HIS:O	32:BI:144:HIS:CG	2.73	0.41
55:BK:43:ASN:O	55:BK:47:ALA:HB2	2.20	0.41
33:BN:44:ALA:O	33:BN:45:VAL:HG23	2.21	0.41
33:BN:55:GLU:O	33:BN:58:GLU:N	2.53	0.41
26:BA:2640:G:C4'	33:BN:70:PHE:HD2	2.29	0.41
33:BN:96:GLU:C	33:BN:98:PHE:N	2.73	0.41
35:BP:110:GLY:C	35:BP:111:ALA:O	2.51	0.41
36:BQ:46:VAL:CG1	36:BQ:124:ALA:CB	2.90	0.41
36:BQ:140:TYR:C	36:BQ:142:LYS:N	2.72	0.41
36:BQ:91:HIS:C	36:BQ:92:VAL:CG1	2.81	0.41
43:BR:21:TYR:O	43:BR:25:ALA:CB	2.69	0.41
43:BR:67:LEU:C	43:BR:69:ASP:N	2.72	0.41
37:BS:9:PRO:HG3	37:BS:14:ARG:CB	2.51	0.41
37:BS:22:GLN:CD	37:BS:22:GLN:H	2.20	0.41
37:BS:23:ARG:HH21	37:BS:35:VAL:CB	2.34	0.41
38:BT:54:THR:O	38:BT:56:ARG:N	2.47	0.41
44:BU:117:ARG:NH1	44:BU:118:GLN:CD	2.74	0.41
44:BU:17:VAL:O	44:BU:20:ARG:CB	2.66	0.41
44:BU:25:TRP:O	44:BU:26:GLY:C	2.58	0.41
45:BV:19:VAL:CG1	45:BV:21:ARG:NH2	2.58	0.41
45:BV:50:ASP:O	45:BV:54:TYR:CE1	2.73	0.41
26:BA:565:C:OP1	45:BV:79:GLN:O	2.38	0.41
40:BX:35:GLY:C	40:BX:37:VAL:H	2.24	0.41
40:BX:44:GLN:CD	40:BX:45:TYR:CA	2.86	0.41
42:BZ:107:GLU:C	42:BZ:109:GLN:N	2.70	0.41
42:BZ:70:GLN:HG3	42:BZ:72:ASP:HB3	2.02	0.41
42:BZ:78:PRO:O	42:BZ:79:ILE:HG12	2.12	0.41
1:AA:1132:C:H42	1:AA:1142:G:H1	1.67	0.41
1:AA:1152:A:H5'	13:AJ:13:HIS:CD2	2.56	0.41
1:AA:977:A:C6	1:AA:1224:G:OP1	2.74	0.41
1:AA:162:A:N3	1:AA:348:G:C4'	2.78	0.41
1:AA:19:C:H2'	1:AA:20:U:C6	2.56	0.41
1:AA:573:A:N3	1:AA:883:C:H2'	2.35	0.41
1:AA:62:U:H5''	1:AA:385:C:C1'	2.51	0.41
1:AA:815:A:C6	1:AA:1508:G:N2	2.87	0.41
1:AA:573:A:H2	1:AA:883:C:O2	2.03	0.41
5:AB:85:ALA:HA	5:AB:88:ALA:HB3	2.02	0.41
7:AD:11:LEU:HD22	7:AD:66:ARG:HD3	2.02	0.41
13:AJ:38:ILE:HG13	13:AJ:71:LEU:HB3	2.01	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AJ:39:PRO:O	13:AJ:40:LEU:HB2	2.20	0.41
16:AM:81:LEU:HD21	16:AM:88:ARG:NE	2.34	0.41
1:AA:376:G:C1'	19:AP:28:ARG:HB3	2.51	0.41
48:B0:28:GLY:O	48:B0:62:LEU:HD22	2.20	0.41
46:B2:35:ALA:C	46:B2:37:GLY:N	2.73	0.41
47:B3:1:MET:O	47:B3:1:MET:CG	2.65	0.41
47:B3:27:GLY:C	47:B3:28:LEU:HD23	2.41	0.41
54:B9:2:LYS:C	54:B9:4:ARG:N	2.74	0.41
26:BA:1021:A:C2	26:BA:1023:U:H1'	2.55	0.41
26:BA:974(A):C:H6	26:BA:1186:G:C2	2.39	0.41
26:BA:1216:G:N2	26:BA:1234:U:C1'	2.82	0.41
26:BA:1396:U:H6	26:BA:1396:U:H3'	1.86	0.41
26:BA:1424:G:N1	26:BA:1574:C:O2	2.53	0.41
26:BA:1451:C:H6	26:BA:1453:A:H4'	1.85	0.41
26:BA:1539:G:H2'	26:BA:1540:G:C5	2.55	0.41
26:BA:1647:G:H4'	26:BA:1648:C:O5'	2.20	0.41
26:BA:1764:G:C2	26:BA:1989:G:N3	2.88	0.41
26:BA:176:G:C2	26:BA:177:G:H1'	2.55	0.41
26:BA:1832:C:C4	26:BA:1833:U:C4	3.08	0.41
26:BA:1935:G:H2'	26:BA:1962:C:N4	2.35	0.41
26:BA:563:G:C6	26:BA:2018:G:C6	3.08	0.41
26:BA:2351:G:H5'	26:BA:2352:A:OP1	2.19	0.41
26:BA:2491:U:C2'	26:BA:2492:U:C5'	2.88	0.41
26:BA:2530:A:C2'	26:BA:2531:A:C5'	2.71	0.41
26:BA:2533:A:H3'	26:BA:2534:A:H8	1.85	0.41
26:BA:2540:C:O2	26:BA:2541:A:C1'	2.69	0.41
26:BA:2656:U:H2'	26:BA:2657:A:H5'	2.01	0.41
26:BA:2648:C:N4	26:BA:2672:G:N1	2.52	0.41
26:BA:2692:C:C4	26:BA:2718:G:N1	2.87	0.41
26:BA:2831:G:O2'	26:BA:2883:A:H2'	2.20	0.41
26:BA:2857:G:C4	26:BA:2859:G:OP2	2.73	0.41
26:BA:2884:U:O4	50:B5:43:HIS:HA	2.20	0.41
26:BA:29:U:O5'	26:BA:29:U:H6	2.03	0.41
26:BA:319:C:H2'	26:BA:320:A:C8	2.54	0.41
26:BA:612:G:C4'	26:BA:616:A:N6	2.67	0.41
26:BA:669:G:N3	26:BA:669:G:C2'	2.83	0.41
26:BA:673:C:N4	26:BA:808:G:N1	2.68	0.41
26:BA:676:A:H8	26:BA:2069:G:H21	1.69	0.41
27:BD:104:ILE:HB	27:BD:106:PRO:CG	2.49	0.41
28:BE:77:PRO:O	28:BE:79:ARG:N	2.49	0.41
29:BF:167:ASP:OD2	29:BF:232:LEU:CD2	2.63	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BF:167:ASP:HB2	29:BF:232:LEU:CB	2.51	0.41
29:BF:89:ALA:CB	29:BF:90:HIS:CD2	3.04	0.41
30:BG:24:HIS:HB2	30:BG:72:LYS:CD	2.51	0.41
31:BH:98:GLN:HB2	31:BH:103:VAL:HG23	1.97	0.41
32:BI:78:THR:O	32:BI:79:ILE:HG13	2.21	0.41
33:BN:70:PHE:HB2	33:BN:71:TYR:H	1.65	0.41
35:BP:109:LEU:HD13	35:BP:110:GLY:CA	2.49	0.41
35:BP:133:VAL:C	35:BP:135:GLY:N	2.72	0.41
36:BQ:136:TRP:C	36:BQ:139:ALA:HB3	2.37	0.41
36:BQ:20:ILE:HG13	36:BQ:21:SER:OG	2.20	0.41
26:BA:1287:A:H5'	43:BR:104:ARG:HD2	1.97	0.41
43:BR:37:THR:HA	43:BR:111:LEU:C	2.40	0.41
37:BS:60:SER:O	37:BS:88:ALA:CA	2.43	0.41
44:BU:98:ILE:CB	44:BU:106:PHE:CD1	3.04	0.41
44:BU:20:ARG:NH1	45:BV:75:LYS:HZ2	2.17	0.41
44:BU:24:PHE:HB2	44:BU:28:ARG:HD2	2.02	0.41
44:BU:18:LEU:HD11	44:BU:30:LYS:HA	2.03	0.41
44:BU:44:THR:OG1	45:BV:77:GLY:CA	2.66	0.41
44:BU:93:LYS:N	45:BV:10:LYS:NZ	2.68	0.41
45:BV:31:ASP:O	45:BV:33:VAL:N	2.53	0.41
42:BZ:92:VAL:C	42:BZ:124:ALA:HB2	2.41	0.41
1:AA:1127:G:H21	1:AA:1147:C:N4	2.19	0.41
1:AA:1388:C:H2'	1:AA:1389:C:C6	2.56	0.41
1:AA:190(J):U:H2'	1:AA:190(K):G:H8	1.86	0.41
1:AA:314:C:O2'	1:AA:353:A:C2	2.59	0.41
1:AA:549:C:C4	1:AA:550:G:N7	2.89	0.41
1:AA:859:A:H2'	1:AA:860:A:C8	2.56	0.41
7:AD:13:ARG:HB3	7:AD:40:PRO:HD3	2.03	0.41
8:AE:102:ALA:HB1	8:AE:106:PRO:HB2	2.02	0.41
8:AE:36:ASP:OD1	8:AE:40:ARG:HB2	2.20	0.41
1:AA:1375:A:P	10:AG:28:ASN:ND2	2.94	0.41
10:AG:34:GLY:O	10:AG:36:LYS:N	2.53	0.41
1:AA:1329:A:P	16:AM:28:ALA:HB3	2.61	0.41
1:AA:1320:C:H4'	22:AS:3:ARG:NH2	2.36	0.41
47:B3:42:ALA:HB3	47:B3:43:ILE:CD1	2.41	0.41
49:B4:20:VAL:O	49:B4:30:GLU:HG2	2.20	0.41
26:BA:2081:C:H5''	49:B4:35:VAL:HG21	1.99	0.41
49:B4:51:ASP:N	49:B4:51:ASP:OD1	2.54	0.41
53:B8:51:ALA:O	53:B8:54:GLU:HG3	2.20	0.41
26:BA:1061:U:OP1	26:BA:1062:G:H8	2.03	0.41
26:BA:1238:G:C5	26:BA:1239:G:C8	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1470:G:N2	26:BA:1522:G:N2	2.67	0.41
26:BA:1544:C:C2	26:BA:1545:A:H1'	2.55	0.41
26:BA:1667:G:C8	26:BA:1667:G:OP2	2.64	0.41
26:BA:2235:G:C6	26:BA:2236:C:C4	3.08	0.41
26:BA:2263:C:H2'	26:BA:2264:C:H6	1.85	0.41
26:BA:2307:G:O2'	26:BA:2311:A:C6	2.62	0.41
26:BA:2313:C:OP1	30:BG:51:ARG:HB3	2.14	0.41
26:BA:2339:G:C2	26:BA:2340:G:C4	3.08	0.41
26:BA:2353:G:H2'	26:BA:2354:G:O5'	2.20	0.41
26:BA:247:G:O3'	26:BA:386:G:N2	2.54	0.41
26:BA:2555:U:O2'	26:BA:2556:C:P	2.78	0.41
26:BA:2606:C:C2	26:BA:2607:G:C8	3.08	0.41
26:BA:261:G:H2'	26:BA:262:A:H8	1.86	0.41
26:BA:2711:A:C3'	26:BA:2712:U:H5'	2.50	0.41
26:BA:2809:A:N3	26:BA:2811:G:O6	2.54	0.41
26:BA:359:A:C2	26:BA:361:G:N1	2.89	0.41
26:BA:1526:G:C2	26:BA:545(A):A:N7	2.77	0.41
26:BA:65:C:H2'	26:BA:66:C:H6	1.85	0.41
26:BA:673:C:C5'	29:BF:82:GLN:NE2	2.83	0.41
26:BA:754:C:O2'	26:BA:1618:A:H2	2.03	0.41
26:BA:792:G:C4	26:BA:2440:C:C2	3.09	0.41
26:BA:784:A:N7	26:BA:792:G:C4	2.89	0.41
26:BA:997:G:H5''	44:BU:92:ARG:CD	2.44	0.41
28:BE:105:HIS:HB3	28:BE:106:SER:H	1.56	0.41
28:BE:267:ARG:CD	28:BE:297:LYS:CB	2.98	0.41
29:BF:196:THR:CG2	29:BF:197:SER:H	2.24	0.41
29:BF:164:ALA:HB1	29:BF:232:LEU:HD12	1.71	0.41
29:BF:61:PHE:HB3	29:BF:65:ARG:NH1	2.35	0.41
30:BG:24:HIS:CB	30:BG:72:LYS:CD	2.98	0.41
30:BG:83:PHE:C	30:BG:85:GLN:N	2.72	0.41
30:BG:97:GLN:HB3	30:BG:106:PHE:CD2	2.52	0.41
31:BH:82:TYR:CE1	31:BH:137:LYS:CB	3.02	0.41
31:BH:145:ALA:HA	31:BH:148:ARG:HG3	2.01	0.41
31:BH:25:VAL:CB	31:BH:78:VAL:HG21	2.44	0.41
32:BI:28:ASN:O	32:BI:32:LYS:CG	2.69	0.41
32:BI:68:LEU:HD22	32:BI:72:LEU:CD2	2.49	0.41
55:BK:117:ASN:O	55:BK:118:ALA:O	2.39	0.41
55:BK:42:PHE:CE2	55:BK:56:VAL:HG11	2.55	0.41
33:BN:132:LEU:HA	33:BN:132:LEU:HD12	1.92	0.41
36:BQ:134:PHE:O	36:BQ:137:ARG:HD2	2.20	0.41
36:BQ:140:TYR:CE1	36:BQ:147:VAL:CG1	2.80	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:50:VAL:CA	36:BQ:51:GLU:OE1	2.69	0.41
43:BR:91:GLN:O	43:BR:92:GLY:C	2.54	0.41
45:BV:65:ARG:O	45:BV:93:ILE:CA	2.69	0.41
45:BV:78:VAL:HG22	45:BV:82:ARG:HB2	2.03	0.41
39:BW:69:LEU:CD2	39:BW:109:GLU:HB2	2.50	0.41
40:BX:28:VAL:C	40:BX:30:ASP:H	2.23	0.41
40:BX:33:SER:C	40:BX:37:VAL:CB	2.87	0.41
41:BY:55:PHE:O	41:BY:56:ALA:O	2.39	0.41
42:BZ:172:LEU:C	42:BZ:172:LEU:CD2	2.81	0.41
42:BZ:2:GLU:HA	42:BZ:54:ILE:CG2	2.24	0.41
42:BZ:77:ALA:HA	42:BZ:78:PRO:HD2	1.77	0.41
1:AA:1319:A:H61	1:AA:1361:G:H1'	1.86	0.41
1:AA:1330:U:H4'	16:AM:23:TYR:CD1	2.55	0.41
1:AA:20:U:N3	1:AA:916:G:N1	2.67	0.41
1:AA:37:U:C2	1:AA:397:A:C6	3.09	0.41
1:AA:407:G:O5'	1:AA:407:G:C8	2.65	0.41
5:AB:50:GLU:HB3	5:AB:200:ILE:O	2.20	0.41
7:AD:15:GLU:OE1	7:AD:59:ARG:O	2.39	0.41
16:AM:91:ARG:O	16:AM:96:LEU:HG	2.21	0.41
2:AV:50:U:C2	2:AV:51:G:C8	3.08	0.41
48:B0:14:ARG:CD	48:B0:15:ASP:N	2.83	0.41
46:B2:50:ARG:O	46:B2:51:LYS:C	2.57	0.41
49:B4:14:ILE:HG23	49:B4:16:TYR:HD1	1.71	0.41
51:B6:29:ARG:C	51:B6:31:THR:N	2.71	0.41
51:B6:46:LYS:C	51:B6:47:HIS:ND1	2.74	0.41
26:BA:1102:C:H2'	26:BA:1103:A:C8	2.56	0.41
26:BA:1027:A:N6	26:BA:1126:A:N3	2.68	0.41
26:BA:817:C:H42	26:BA:1190:G:H1	1.67	0.41
26:BA:15:G:C2	26:BA:16:G:H1'	2.55	0.41
26:BA:1953:A:N7	26:BA:2550:G:H1'	2.35	0.41
26:BA:2022:U:H1'	26:BA:2034:U:C2	2.56	0.41
26:BA:2049:G:N1	26:BA:2619:C:N4	2.66	0.41
26:BA:2181:G:H3'	26:BA:2182:G:H5''	2.02	0.41
26:BA:2207:C:N4	26:BA:2218:G:C6	2.89	0.41
26:BA:2228:G:C8	26:BA:2228:G:C3'	3.03	0.41
26:BA:2316:C:O3'	30:BG:151:ILE:CG1	2.62	0.41
26:BA:2454:G:C2	26:BA:2455:G:N9	2.89	0.41
26:BA:2488:A:C5	26:BA:2489:G:N7	2.89	0.41
26:BA:2458:G:N7	26:BA:2490:G:N1	2.68	0.41
26:BA:2604:U:C2'	26:BA:2605:U:H5'	2.49	0.41
26:BA:2625:G:O2'	26:BA:2626:C:H5'	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2634:G:C6	26:BA:2785:C:N4	2.88	0.41
26:BA:619:G:C3'	26:BA:619:G:C8	3.03	0.41
26:BA:628:G:H2'	26:BA:629:G:H8	1.86	0.41
26:BA:711:G:H1	26:BA:720:C:N4	2.17	0.41
26:BA:769:G:H2'	26:BA:770:G:H8	1.85	0.41
26:BA:775:G:C2	26:BA:787:U:H2'	2.56	0.41
26:BA:815:C:H2'	26:BA:816:C:H6	1.85	0.41
26:BA:904:C:C1'	42:BZ:166:LEU:CD2	2.98	0.41
25:BB:8:U:H2'	25:BB:9:G:C8	2.55	0.41
27:BD:166:LYS:HA	27:BD:172:ILE:N	2.30	0.41
27:BD:167:GLU:N	27:BD:182:MET:CE	2.51	0.41
27:BD:77:VAL:HG11	27:BD:109:LEU:O	2.20	0.41
27:BD:89:ASN:O	27:BD:105:ALA:CA	2.66	0.41
28:BE:41:PHE:CD1	28:BE:193:PHE:CE1	3.09	0.41
28:BE:216:ARG:NH2	28:BE:255:GLN:CA	2.77	0.41
26:BA:2679:A:O3'	28:BE:302:GLY:HA2	2.06	0.41
29:BF:144:PHE:HE2	29:BF:156:LEU:HD22	1.86	0.41
29:BF:3:ALA:HB2	29:BF:18:LEU:HD23	2.03	0.41
29:BF:210:ALA:O	29:BF:211:ASP:CG	2.59	0.41
26:BA:2304:G:C1'	30:BG:105:SER:CB	2.98	0.41
26:BA:2304:G:H4'	30:BG:105:SER:HB2	1.97	0.41
30:BG:63:ILE:CG2	30:BG:64:ARG:N	2.83	0.41
31:BH:129:LYS:CA	31:BH:130:ILE:HD12	2.31	0.41
31:BH:140:VAL:C	31:BH:143:LEU:CD2	2.84	0.41
31:BH:59:HIS:C	31:BH:61:ARG:N	2.72	0.41
31:BH:99:GLY:C	31:BH:101:LYS:H	2.22	0.41
32:BI:63:ALA:N	32:BI:66:LYS:HE2	2.35	0.41
55:BK:99:LYS:CD	55:BK:99:LYS:N	2.84	0.41
33:BN:136:SER:O	33:BN:138:THR:CA	2.66	0.41
34:BO:27:GLY:C	34:BO:28:SER:O	2.56	0.41
34:BO:60:ALA:CA	34:BO:85:VAL:O	2.69	0.41
35:BP:64:ILE:HD11	35:BP:106:VAL:HA	1.86	0.41
35:BP:132:LYS:O	35:BP:135:GLY:HA3	2.19	0.41
35:BP:51:PHE:N	35:BP:51:PHE:CD1	2.88	0.41
36:BQ:31:PHE:CZ	36:BQ:87:LYS:O	2.73	0.41
36:BQ:61:LEU:O	36:BQ:62:GLU:O	2.38	0.41
43:BR:47:PHE:C	43:BR:49:ASP:N	2.74	0.41
44:BU:11:ARG:O	44:BU:12:ARG:C	2.59	0.41
45:BV:61:VAL:HG22	45:BV:97:GLY:N	2.35	0.41
39:BW:96:ILE:C	39:BW:96:ILE:HD13	2.41	0.41
40:BX:37:VAL:HG12	40:BX:38:ALA:N	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BY:20:HIS:CA	41:BY:67:LEU:CD2	2.98	0.41
42:BZ:18:MET:C	42:BZ:19:ILE:HD12	2.38	0.41
42:BZ:40:ASP:CB	42:BZ:41:ARG:NE	2.56	0.41
1:AA:106:C:H6	1:AA:106:C:OP2	2.04	0.41
1:AA:1078:U:H4'	8:AE:84:PHE:HZ	1.83	0.41
1:AA:123:C:H2'	1:AA:124:G:C8	2.56	0.41
1:AA:1326:C:H5''	24:AU:19:GLY:HA2	2.01	0.41
1:AA:40:C:H2'	1:AA:41:G:O4'	2.20	0.41
1:AA:512:U:H2'	1:AA:513:C:H6	1.86	0.41
1:AA:511:C:H42	1:AA:541:G:N2	2.19	0.41
1:AA:397:A:C6	1:AA:548:G:N7	2.89	0.41
1:AA:892:A:O2'	1:AA:1415:G:H4'	2.21	0.41
5:AB:69:LEU:CD2	5:AB:91:PRO:HB2	2.51	0.41
12:AI:13:ALA:HA	12:AI:67:GLY:HA3	2.02	0.41
1:AA:1248:A:H2'	12:AI:70:LYS:NZ	2.36	0.41
1:AA:1060:C:C4'	13:AJ:51:ARG:HB3	2.48	0.41
14:AK:23:ALA:HB2	14:AK:28:THR:HG23	2.03	0.41
20:AQ:97:SER:CB	20:AQ:103:GLY:CA	2.99	0.41
24:AU:22:ARG:HA	24:AU:23:PRO:HD3	1.92	0.41
26:BA:94:G:O3'	46:B2:41:GLU:OE1	2.39	0.41
46:B2:48:GLU:HB3	46:B2:49:LEU:H	1.54	0.41
47:B3:40:THR:O	47:B3:41:PRO:C	2.59	0.41
47:B3:47:VAL:HA	47:B3:50:VAL:HG21	1.81	0.41
3:AW:75:C:C4	49:B4:28:ARG:N	2.80	0.41
50:B5:31:THR:HG22	50:B5:42:SER:HA	2.02	0.41
50:B5:6:VAL:H	50:B5:8:LYS:HZ3	1.67	0.41
52:B7:30:ILE:O	52:B7:31:LEU:O	2.38	0.41
54:B9:17:VAL:HG13	54:B9:18:ARG:N	2.36	0.41
26:BA:1034:G:O4'	54:B9:18:ARG:NH2	2.54	0.41
26:BA:1166:C:O2	26:BA:1184:G:N2	2.54	0.41
26:BA:1174:A:N6	26:BA:1177:A:N3	2.69	0.41
26:BA:120:U:C6	26:BA:150:C:N3	2.89	0.41
26:BA:1303:G:H1	26:BA:1625:C:N4	2.19	0.41
26:BA:1341:U:N3	26:BA:1398:C:H5'	2.35	0.41
26:BA:1382:G:H2'	26:BA:1383:C:C6	2.56	0.41
26:BA:1498:C:H6	26:BA:1576:U:O2'	2.00	0.41
26:BA:1513:C:H2'	26:BA:1514:U:C6	2.56	0.41
26:BA:1529:A:H3'	26:BA:1530:G:O4'	2.21	0.41
26:BA:1614:A:H61	39:BW:88:ARG:CA	2.33	0.41
26:BA:1647:G:H4'	26:BA:1648:C:H5'	2.03	0.41
26:BA:1655:A:O3'	28:BE:212:GLY:CA	2.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1517:G:N9	26:BA:1919:A:O3'	2.54	0.41
26:BA:2056:G:N7	26:BA:2577:A:C5	2.88	0.41
26:BA:2206:C:C2	26:BA:2207:C:C6	3.09	0.41
26:BA:2272:U:O4'	26:BA:2272:U:O2	2.38	0.41
26:BA:2306:C:C4	26:BA:2311:A:N1	2.88	0.41
26:BA:2334:G:O4'	26:BA:2334:G:OP1	2.39	0.41
26:BA:2447:G:H4'	26:BA:2448:A:O5'	2.20	0.41
26:BA:247:G:C6	53:B8:11:LYS:NZ	2.80	0.41
26:BA:2516:G:C2'	26:BA:2517:C:O5'	2.68	0.41
26:BA:1128:A:N6	26:BA:2518:A:N6	2.51	0.41
26:BA:2548:G:O5'	26:BA:2548:G:H8	2.04	0.41
26:BA:2053:G:N2	26:BA:2617:C:C6	2.89	0.41
26:BA:2679:A:C5	26:BA:2680:C:H5	2.32	0.41
26:BA:2693:A:N3	26:BA:2694:G:N7	2.68	0.41
26:BA:26:G:O5'	26:BA:26:G:H8	2.03	0.41
26:BA:2710:C:H2'	26:BA:2711:A:H8	1.86	0.41
26:BA:2748:A:C5	26:BA:2749:A:C2	2.95	0.41
26:BA:2763:G:O5'	26:BA:2763:G:H8	2.04	0.41
26:BA:2774:C:H2'	26:BA:2775:A:C8	2.47	0.41
26:BA:606:U:H5'	29:BF:103:ASN:ND2	2.35	0.41
26:BA:628:G:H2'	26:BA:629:G:C8	2.55	0.41
26:BA:705:A:H8	26:BA:705:A:OP2	2.04	0.41
26:BA:798:G:N1	26:BA:799:G:C6	2.88	0.41
25:BB:66:A:C2	25:BB:108:C:C4	3.09	0.41
25:BB:24:G:N7	25:BB:56:G:N9	2.68	0.41
27:BD:157:ALA:C	27:BD:194:VAL:HG11	2.29	0.41
26:BA:1567:A:C4	27:BD:84:PRO:HG3	2.55	0.41
28:BE:86:TYR:N	28:BE:86:TYR:CD1	2.88	0.41
29:BF:25:PRO:CG	29:BF:26:VAL:H	2.34	0.41
30:BG:29:HIS:ND1	30:BG:69:ILE:CG1	2.84	0.41
31:BH:75:VAL:CG1	31:BH:76:GLU:N	2.71	0.41
55:BK:129:GLU:O	55:BK:133:LYS:HE3	2.20	0.41
33:BN:101:VAL:O	33:BN:102:ARG:HG2	2.21	0.41
33:BN:135:ILE:CA	33:BN:139:LEU:HD11	2.51	0.41
33:BN:75:PRO:HD3	33:BN:136:SER:CB	2.44	0.41
34:BO:77:ILE:C	34:BO:78:ARG:CG	2.89	0.41
26:BA:2275:C:C2	36:BQ:103:ALA:HB2	2.46	0.41
36:BQ:133:GLU:OE1	36:BQ:134:PHE:CA	2.69	0.41
36:BQ:42:TYR:H	36:BQ:43:PRO:CD	2.34	0.41
36:BQ:66:ASN:CB	36:BQ:70:ARG:HH21	2.24	0.41
36:BQ:72:VAL:CG2	36:BQ:135:ALA:HB2	2.42	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BS:86:LEU:HA	37:BS:125:ALA:HB2	2.03	0.41
38:BT:14:GLU:O	38:BT:15:PRO:O	2.38	0.41
41:BY:71:VAL:CB	41:BY:93:THR:H	2.26	0.41
42:BZ:41:ARG:CD	42:BZ:41:ARG:H	2.33	0.41
42:BZ:70:GLN:C	42:BZ:72:ASP:H	2.24	0.41
1:AA:1347:G:N2	1:AA:1373:G:C4	2.89	0.41
1:AA:768:A:C2	1:AA:1512:U:H4'	2.55	0.41
1:AA:278:G:OP2	20:AQ:41:LYS:NZ	2.49	0.41
1:AA:54:C:C5	1:AA:352:C:H2'	2.56	0.41
1:AA:508:C:H4'	1:AA:509:A:O5'	2.21	0.41
1:AA:672:U:O2	1:AA:672:U:H2'	2.21	0.41
1:AA:947:G:C4'	1:AA:1332:A:C2	3.00	0.41
1:AA:95:U:H2'	1:AA:96:G:H8	1.85	0.41
7:AD:119:GLN:HG2	7:AD:123:HIS:CD2	2.56	0.41
11:AH:27:PRO:HB2	11:AH:32:LYS:NZ	2.30	0.41
12:AI:58:ARG:HB3	12:AI:59:PHE:HD1	1.86	0.41
15:AL:60:LEU:HD23	15:AL:64:TYR:HB3	2.02	0.41
1:AA:280:C:O2	20:AQ:38:ARG:HG3	2.21	0.41
2:AV:16:U:H4'	2:AV:18:G:C5'	2.51	0.41
2:AV:50:U:H2'	2:AV:51:G:C8	2.56	0.41
2:AV:72:C:H2'	2:AV:73:A:O4'	2.20	0.41
48:B0:41:ARG:C	48:B0:67:VAL:HG22	2.41	0.41
48:B0:6:GLY:O	48:B0:7:VAL:C	2.58	0.41
46:B2:9:ARG:HB2	46:B2:59:ILE:HD11	2.03	0.41
46:B2:61:GLY:O	46:B2:65:ASP:N	2.47	0.41
47:B3:12:PRO:C	47:B3:15:TYR:HD1	2.25	0.41
52:B7:13:ALA:O	52:B7:16:HIS:C	2.54	0.41
52:B7:21:ARG:HH21	52:B7:44:VAL:HG23	1.85	0.41
53:B8:23:MET:SD	53:B8:48:PHE:CA	3.08	0.41
26:BA:1012:U:H3'	26:BA:1012:U:C6	2.56	0.41
26:BA:1163:G:N1	26:BA:1164:G:C8	2.89	0.41
26:BA:1252:G:C8	26:BA:1253:A:C1'	3.03	0.41
26:BA:126:A:C5	52:B7:18:PHE:CG	3.09	0.41
26:BA:1315:C:N4	26:BA:1337:G:H1	2.19	0.41
26:BA:131:G:H1	26:BA:148:C:H42	1.69	0.41
26:BA:1545:A:OP1	26:BA:545(A):A:OP1	2.39	0.41
26:BA:1394:U:H5''	26:BA:1604:C:P	2.61	0.41
26:BA:1781:C:C6	26:BA:1781:C:C3'	3.04	0.41
26:BA:1842:G:H2'	26:BA:1843:C:O4'	2.21	0.41
26:BA:1998:G:O2'	26:BA:2724:C:H1'	2.21	0.41
26:BA:2077:A:OP2	26:BA:2238:G:N1	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2239:G:H5''	26:BA:2240:C:OP2	2.21	0.41
26:BA:2572:A:C3'	26:BA:2572:A:C8	3.04	0.41
26:BA:2588:G:H2'	26:BA:2589:A:O4'	2.21	0.41
26:BA:2648:C:C6	26:BA:2649:U:C5	3.09	0.41
26:BA:2686:G:C6	26:BA:2687:U:C6	3.09	0.41
26:BA:2691:C:C2'	26:BA:2692:C:O5'	2.69	0.41
26:BA:2743:C:N1	26:BA:2762:G:N2	2.69	0.41
26:BA:1709:U:C2'	26:BA:2859:G:N3	2.81	0.41
26:BA:2830:G:H2'	26:BA:2883:A:N1	2.36	0.41
26:BA:517:C:O2'	39:BW:18:ARG:NH2	2.49	0.41
26:BA:530:G:O2'	26:BA:531:C:O5'	2.36	0.41
26:BA:556:G:H2'	26:BA:557:U:C6	2.56	0.41
26:BA:697:C:H2'	26:BA:698:C:H6	1.85	0.41
26:BA:780:G:O6	27:BD:233:ASP:CG	2.59	0.41
26:BA:816:C:N4	26:BA:1192:G:O6	2.54	0.41
25:BB:49:C:P	37:BS:110:THR:OG1	2.79	0.41
27:BD:78:ALA:HA	27:BD:94:ASN:HD22	1.86	0.41
29:BF:151:GLN:OE1	29:BF:154:VAL:HG23	2.07	0.41
29:BF:220:THR:O	29:BF:225:PRO:CD	2.68	0.41
31:BH:124:VAL:N	31:BH:125:PRO:CD	2.83	0.41
31:BH:7:PRO:HA	31:BH:50:THR:OG1	2.21	0.41
31:BH:71:LEU:C	31:BH:73:ASN:H	2.22	0.41
32:BI:129:VAL:HA	32:BI:130:PRO:HD2	1.96	0.41
55:BK:37:GLU:CA	55:BK:41:ARG:HH12	1.95	0.41
33:BN:48:GLY:C	33:BN:50:GLU:N	2.74	0.41
34:BO:81:GLU:CG	34:BO:82:ASN:N	2.66	0.41
36:BQ:16:ARG:N	36:BQ:20:ILE:HG12	2.34	0.41
43:BR:118:GLU:OE2	43:BR:118:GLU:HA	2.19	0.41
43:BR:51:LEU:O	43:BR:54:LEU:N	2.44	0.41
44:BU:11:ARG:CG	44:BU:12:ARG:H	2.34	0.41
44:BU:49:ASP:HA	44:BU:52:ASN:CB	2.50	0.41
44:BU:68:GLY:O	44:BU:70:ARG:C	2.58	0.41
45:BV:73:LYS:C	45:BV:74:TYR:CD2	2.94	0.41
39:BW:4:LYS:HG2	39:BW:106:ILE:HG12	2.03	0.41
39:BW:19:LEU:HD21	50:B5:25:LEU:N	2.36	0.41
41:BY:41:ARG:HD3	41:BY:111:ARG:HG2	2.02	0.41
41:BY:51:LEU:N	41:BY:97:ARG:HH21	2.16	0.41
42:BZ:112:LEU:HD12	42:BZ:177:THR:CG2	2.51	0.41
42:BZ:34:LEU:HD13	42:BZ:35:ASP:N	2.16	0.41
1:AA:1004:A:H3'	1:AA:1025:U:N3	2.36	0.41
1:AA:157:G:C2	1:AA:165:C:N3	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:17:U:O2	1:AA:919:A:C2	2.74	0.41
1:AA:224:C:H2'	1:AA:225:C:C6	2.55	0.41
1:AA:160:A:C2	1:AA:343:U:H4'	2.56	0.41
1:AA:39:G:H1'	1:AA:498:U:C5	2.56	0.41
1:AA:781:A:O3'	1:AA:1522:U:H1'	2.20	0.41
1:AA:950:U:C2	1:AA:951:G:C8	3.08	0.41
5:AB:15:VAL:CG2	5:AB:209:ARG:HD2	2.50	0.41
7:AD:19:LEU:CD2	7:AD:67:ILE:HG12	2.48	0.41
3:AW:37:YYG:H141	10:AG:84:ASN:ND2	2.36	0.41
14:AK:42:TRP:CZ3	14:AK:47:VAL:HG21	2.55	0.41
14:AK:48:ILE:HD13	14:AK:63:LEU:HB3	2.03	0.41
1:AA:948:C:OP1	16:AM:108:ARG:N	2.53	0.41
18:AO:35:ARG:HH12	18:AO:59:MET:HG3	1.86	0.41
21:AR:47:THR:O	21:AR:82:THR:HA	2.21	0.41
1:AA:191:G:O2'	23:AT:102:GLY:O	2.34	0.41
2:AV:67:A:O2'	2:AV:68:U:H5'	2.21	0.41
4:AX:116:U:H2'	4:AX:117:U:H6	1.86	0.41
48:B0:26:PHE:N	48:B0:26:PHE:CD1	2.89	0.41
48:B0:35:ASN:C	48:B0:68:VAL:HG21	2.41	0.41
47:B3:39:ASP:O	47:B3:44:ARG:HB2	2.21	0.41
26:BA:2396:G:O2'	49:B4:27:THR:CA	2.69	0.41
51:B6:19:GLY:C	51:B6:44:ALA:HB2	2.42	0.41
52:B7:31:LEU:O	52:B7:33:ARG:N	2.54	0.41
53:B8:26:LYS:HE3	53:B8:44:LYS:C	2.30	0.41
53:B8:29:LYS:HB2	53:B8:30:ARG:H	1.71	0.41
26:BA:1023:U:H2'	26:BA:1024:G:C4'	2.51	0.41
26:BA:974(A):C:P	26:BA:1186:G:H21	2.44	0.41
26:BA:1265:A:HO2'	26:BA:1266:G:P	2.44	0.41
26:BA:1298:C:H4'	26:BA:1302:A:N6	2.36	0.41
26:BA:1364:G:C8	26:BA:1364:G:C5'	3.00	0.41
26:BA:1789:A:H2'	26:BA:1790:C:H1'	2.03	0.41
26:BA:1906:G:H1	26:BA:1924:C:H42	1.69	0.41
26:BA:2058:A:C8	26:BA:2058:A:O5'	2.74	0.41
26:BA:2279:G:N1	26:BA:2280:G:C5	2.89	0.41
26:BA:2305:A:C8	26:BA:2306:C:C6	3.09	0.41
26:BA:2327:A:N1	26:BA:2328:A:H2	2.03	0.41
26:BA:2330:G:H2'	26:BA:2331:G:C4'	2.51	0.41
26:BA:2355:C:C5'	26:BA:2356:C:OP2	2.69	0.41
26:BA:826:U:P	26:BA:2428:G:H3'	2.61	0.41
26:BA:2468:G:H2'	26:BA:2469:A:C8	2.56	0.41
26:BA:2468:G:C2'	26:BA:2469:A:C5'	2.96	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2531:A:O5'	26:BA:2531:A:H8	2.03	0.41
26:BA:2543:G:C6	26:BA:2544:G:O6	2.71	0.41
26:BA:256:A:H2'	26:BA:257:A:H8	1.78	0.41
26:BA:2533:A:C4'	26:BA:2664:G:O2'	2.68	0.41
26:BA:2689:U:O4'	26:BA:2713:A:H2	2.00	0.41
26:BA:2783:G:H2'	26:BA:2784:C:O4'	2.21	0.41
26:BA:414:C:C4	26:BA:2409:G:N1	2.81	0.41
26:BA:477:A:C6	26:BA:478:A:N6	2.88	0.41
26:BA:532:A:OP1	44:BU:25:TRP:CD1	2.74	0.41
26:BA:2712:U:H6	26:BA:712(A):A:H8	1.23	0.41
26:BA:775:G:N2	26:BA:788:A:OP2	2.52	0.41
25:BB:59:A:O4'	30:BG:144:ARG:NH2	2.53	0.41
27:BD:143:ILE:HG21	27:BD:153:LEU:CB	2.46	0.41
28:BE:199:ALA:CA	28:BE:314:ALA:HA	2.50	0.41
26:BA:2733:A:N1	28:BE:316:ARG:O	2.54	0.41
28:BE:45:LYS:HD3	28:BE:301:PRO:CG	2.51	0.41
29:BF:56:THR:CG2	29:BF:57:PRO:HD3	2.46	0.41
30:BG:100:ASP:HB2	30:BG:101:THR:H	1.66	0.41
30:BG:141:VAL:C	30:BG:143:LYS:N	2.74	0.41
30:BG:144:ARG:HD2	30:BG:144:ARG:N	2.36	0.41
30:BG:145:ASP:HB2	37:BS:15:GLU:HG3	2.01	0.41
31:BH:10:ILE:HG13	31:BH:49:ILE:CG1	2.51	0.41
32:BI:92:SER:C	32:BI:93:ILE:CG2	2.90	0.41
55:BK:68:PHE:HB3	55:BK:69:ILE:H	1.73	0.41
26:BA:1012:U:C2	33:BN:21:ARG:NH1	2.80	0.41
36:BQ:47:GLU:CB	36:BQ:123:ILE:HG12	2.48	0.41
36:BQ:137:ARG:C	36:BQ:139:ALA:N	2.74	0.41
36:BQ:25:GLY:C	36:BQ:27:GLY:H	2.24	0.41
36:BQ:85:ILE:HB	36:BQ:122:PHE:CE2	2.53	0.41
43:BR:37:THR:HG22	43:BR:111:LEU:HD23	2.02	0.41
43:BR:20:LEU:HD13	43:BR:21:TYR:CB	2.40	0.41
25:BB:12:C:C2	37:BS:10:MET:CE	3.03	0.41
37:BS:36:ALA:CB	37:BS:118:ILE:HD13	2.51	0.41
37:BS:65:ASP:C	37:BS:66:LEU:HD12	2.41	0.41
44:BU:80:ILE:O	44:BU:83:LEU:HB2	2.21	0.41
44:BU:84:LYS:C	44:BU:86:ALA:H	2.23	0.41
41:BY:101:LEU:O	41:BY:103:LEU:CD1	2.68	0.41
41:BY:47:THR:HA	41:BY:61:GLU:HA	2.03	0.41
41:BY:73:HIS:C	41:BY:91:LEU:HD12	2.26	0.41
42:BZ:102:GLY:O	42:BZ:103:ARG:O	2.39	0.41
42:BZ:66:VAL:HG23	42:BZ:69:VAL:CG2	2.51	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:113:G:H1'	1:AA:354:G:H5''	2.02	0.40
1:AA:1242:C:O2'	1:AA:1303:C:C5'	2.69	0.40
1:AA:150:C:H2'	1:AA:151:A:O4'	2.20	0.40
6:AC:88:ARG:CZ	6:AC:101:LEU:H	2.34	0.40
7:AD:121:VAL:HG22	7:AD:126:ILE:HG13	2.03	0.40
16:AM:77:ASN:HA	16:AM:80:ARG:HD3	2.04	0.40
1:AA:728:A:N7	18:AO:54:ARG:HD2	2.36	0.40
2:AV:58:A:N7	2:AV:61:C:C4	2.89	0.40
3:AW:52:U:O2'	3:AW:53:G:H5'	2.21	0.40
26:BA:922:U:O2	48:B0:26:PHE:HZ	2.04	0.40
48:B0:39:ARG:CB	48:B0:69:PHE:HZ	2.35	0.40
48:B0:37:LEU:CG	48:B0:71:ASN:ND2	2.84	0.40
46:B2:21:ASP:O	46:B2:22:ASP:O	2.37	0.40
46:B2:33:VAL:O	46:B2:34:GLN:O	2.39	0.40
47:B3:26:LEU:HD22	47:B3:47:VAL:CG2	2.52	0.40
49:B4:23:GLU:CG	49:B4:29:PRO:CB	2.96	0.40
53:B8:16:ILE:CA	53:B8:22:VAL:HG22	2.50	0.40
53:B8:23:MET:HE3	53:B8:48:PHE:CB	2.51	0.40
26:BA:1153:C:C4	26:BA:1154:G:C6	3.09	0.40
26:BA:1422:G:H2'	26:BA:1423:G:H8	1.86	0.40
26:BA:1802:A:OP2	26:BA:1815:A:N6	2.51	0.40
26:BA:1913:A:N6	26:BA:1917:U:O5'	2.54	0.40
26:BA:2246:G:HO2'	26:BA:2247:A:C5'	2.07	0.40
26:BA:2257:U:O2'	26:BA:2258:C:P	2.79	0.40
26:BA:2347:C:C2	26:BA:2348:U:H5	2.32	0.40
26:BA:2381:C:C3'	26:BA:2381:C:C6	3.04	0.40
26:BA:2061:G:N9	26:BA:2503:A:C2	2.89	0.40
26:BA:2574:G:N3	26:BA:2575:C:C6	2.88	0.40
26:BA:2589:A:N1	26:BA:2606:C:C4	2.89	0.40
26:BA:2048:G:O6	26:BA:2621:A:N1	2.54	0.40
26:BA:264:C:O2'	26:BA:265:A:H3'	2.22	0.40
26:BA:2695:C:C2'	26:BA:2696:U:C5	2.93	0.40
26:BA:2717:G:C2'	26:BA:2718:G:H5''	2.51	0.40
26:BA:2768:C:C6	26:BA:2768:C:C3'	3.04	0.40
26:BA:2816:C:O2'	26:BA:2817:G:O5'	2.39	0.40
26:BA:2861:G:C4	26:BA:2862:G:N7	2.89	0.40
26:BA:297:C:C4	26:BA:298:G:N3	2.90	0.40
26:BA:388:G:H5'	26:BA:389:G:OP2	2.20	0.40
26:BA:52:A:N1	26:BA:178:G:O2'	2.46	0.40
26:BA:545(A):A:N7	26:BA:1546:C:O2	2.53	0.40
26:BA:669:G:C4	26:BA:801:G:C6	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BD:145:LEU:C	27:BD:145:LEU:HD13	2.41	0.40
26:BA:1819:A:C2'	27:BD:177:SER:CA	2.64	0.40
29:BF:6:TYR:H	29:BF:139:VAL:HG12	1.86	0.40
30:BG:71:ALA:C	30:BG:72:LYS:CD	2.84	0.40
31:BH:128:THR:CG2	31:BH:129:LYS:H	2.27	0.40
31:BH:57:GLU:HG2	31:BH:57:GLU:H	1.68	0.40
32:BI:3:VAL:CG1	32:BI:21:VAL:HG21	2.47	0.40
32:BI:56:ARG:O	32:BI:60:GLU:HB2	2.21	0.40
32:BI:84:GLY:O	32:BI:85:GLU:CG	2.70	0.40
32:BI:84:GLY:C	32:BI:85:GLU:HG3	2.42	0.40
34:BO:115:ILE:O	34:BO:121:VAL:HG21	2.21	0.40
34:BO:34:ASN:C	34:BO:62:VAL:HG21	2.40	0.40
26:BA:1665:A:C4	34:BO:67:ARG:NH1	2.89	0.40
36:BQ:137:ARG:HD3	36:BQ:138:ARG:CA	2.47	0.40
36:BQ:74:ASN:N	36:BQ:74:ASN:OD1	2.54	0.40
43:BR:17:ARG:O	43:BR:20:LEU:HB3	2.21	0.40
26:BA:2839:G:H5''	43:BR:46:GLY:HA2	2.02	0.40
38:BT:10:GLY:N	38:BT:52:THR:HB	2.33	0.40
38:BT:10:GLY:CA	38:BT:53:ASP:CG	2.89	0.40
44:BU:34:ASN:O	44:BU:38:THR:HG23	2.20	0.40
45:BV:49:GLU:O	45:BV:50:ASP:C	2.60	0.40
41:BY:81:LYS:CB	41:BY:81:LYS:HZ2	2.34	0.40
42:BZ:35:ASP:OD1	42:BZ:38:ALA:N	2.48	0.40
42:BZ:92:VAL:HB	42:BZ:93:GLU:H	1.72	0.40
1:AA:1197:G:OP1	1:AA:1197:G:H3'	2.20	0.40
1:AA:1526:G:OP2	1:AA:1526:G:H8	2.05	0.40
1:AA:198:G:H2'	1:AA:199:G:H8	1.87	0.40
1:AA:300:A:H1'	1:AA:565:U:O2	2.20	0.40
1:AA:819:A:N6	1:AA:1529:G:C8	2.90	0.40
1:AA:908:A:O5'	1:AA:908:A:H8	2.04	0.40
1:AA:926:G:H1	4:AX:116:U:P	2.44	0.40
6:AC:91:LEU:CD1	6:AC:99:VAL:HG22	2.32	0.40
7:AD:58:LEU:HD23	7:AD:206:PHE:CE1	2.56	0.40
15:AL:33:ARG:HG2	15:AL:60:LEU:HG	2.03	0.40
20:AQ:54:GLY:HA2	20:AQ:85:VAL:CG2	2.44	0.40
1:AA:986:A:N9	22:AS:54:GLY:O	2.53	0.40
3:AW:72:C:C2	3:AW:73:A:C8	3.09	0.40
26:BA:2261:C:H3'	48:B0:14:ARG:HE	1.85	0.40
48:B0:71:ASN:O	48:B0:73:GLY:N	2.54	0.40
46:B2:22:ASP:HB2	46:B2:23:LEU:H	1.78	0.40
47:B3:37:LEU:HA	47:B3:37:LEU:HD23	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:15:G:H21	50:B5:18:MET:CE	2.34	0.40
52:B7:21:ARG:O	52:B7:22:MET:O	2.40	0.40
26:BA:1612:C:O2	52:B7:3:ARG:NH1	2.47	0.40
26:BA:1008:C:HO2'	26:BA:1009:A:H8	1.66	0.40
26:BA:1163:G:O2'	26:BA:1164:G:H5'	2.21	0.40
26:BA:1363:C:O2	26:BA:1364:G:H5'	2.21	0.40
26:BA:1397:U:O2	26:BA:1397:U:C2'	2.69	0.40
26:BA:1518:C:N1	26:BA:1519:G:H1'	2.37	0.40
26:BA:1624:G:H2'	26:BA:1625:C:C6	2.56	0.40
26:BA:1638:C:C4'	26:BA:2709:G:N2	2.84	0.40
26:BA:194:G:C6	26:BA:195:A:C6	3.09	0.40
26:BA:2215:G:C2'	26:BA:2216:G:O5'	2.70	0.40
26:BA:223:A:N1	26:BA:407:G:O2'	2.46	0.40
26:BA:2243:U:O2	26:BA:2244:U:O4'	2.38	0.40
26:BA:2251:G:OP2	26:BA:2496:C:P	2.79	0.40
26:BA:2320:A:C4	26:BA:2333:A:C6	2.99	0.40
26:BA:2376:A:H2'	26:BA:2376:A:N3	2.35	0.40
26:BA:2465:C:HO2'	26:BA:2466:C:C5'	2.19	0.40
26:BA:2491:U:O2	26:BA:2491:U:C2'	2.69	0.40
26:BA:2525:G:N2	26:BA:2539:C:C6	2.90	0.40
26:BA:2557:G:N9	26:BA:2558:C:H5	2.19	0.40
26:BA:2549:G:N2	26:BA:2559:C:O2	2.44	0.40
26:BA:2588:G:C6	26:BA:2589:A:C5	3.09	0.40
26:BA:273:G:H2'	26:BA:273(A):G:C8	2.56	0.40
26:BA:2540:C:H5'	26:BA:2741:A:H4'	2.02	0.40
26:BA:2779:U:C5'	26:BA:2781:A:C8	3.04	0.40
26:BA:2870:C:H2'	26:BA:2871:C:O5'	2.21	0.40
26:BA:388:G:C2'	26:BA:390:A:N7	2.77	0.40
26:BA:495:G:O3'	39:BW:62:HIS:NE2	2.52	0.40
26:BA:611:C:O2'	26:BA:616:A:H2	2.02	0.40
26:BA:994:C:N3	44:BU:53:LYS:CE	2.84	0.40
27:BD:144:GLU:HB3	27:BD:188:ARG:C	2.42	0.40
27:BD:86:ARG:C	27:BD:87:SER:HG	2.07	0.40
28:BE:211:GLN:C	28:BE:211:GLN:CD	2.79	0.40
29:BF:196:THR:OG1	29:BF:201:SER:CA	2.69	0.40
29:BF:52:ALA:N	29:BF:55:ARG:HE	2.13	0.40
30:BG:140:ARG:HD2	30:BG:144:ARG:CZ	2.51	0.40
55:BK:129:GLU:HB2	55:BK:139:VAL:HG11	2.02	0.40
55:BK:15:ALA:O	55:BK:17:LYS:N	2.53	0.40
33:BN:135:ILE:O	33:BN:139:LEU:HD22	2.20	0.40
33:BN:57:TYR:HB2	33:BN:135:ILE:CG2	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BN:96:GLU:O	33:BN:99:GLU:N	2.54	0.40
34:BO:102:VAL:HG11	34:BO:106:LEU:HD11	2.03	0.40
35:BP:106:VAL:HG21	35:BP:122:ALA:CA	2.51	0.40
35:BP:110:GLY:O	35:BP:111:ALA:C	2.48	0.40
35:BP:66:VAL:O	35:BP:69:ILE:N	2.53	0.40
36:BQ:28:ILE:CB	36:BQ:62:GLU:HG2	2.48	0.40
37:BS:81:ALA:O	37:BS:83:LEU:CA	2.59	0.40
38:BT:13:ILE:HD12	38:BT:33:SER:HB2	2.03	0.40
44:BU:52:ASN:HB2	44:BU:53:LYS:H	1.65	0.40
44:BU:8:ILE:CD1	44:BU:8:ILE:N	2.36	0.40
45:BV:3:ALA:O	45:BV:14:VAL:N	2.52	0.40
41:BY:89:ARG:CB	41:BY:90:PRO:HD2	2.42	0.40
42:BZ:111:GLY:O	42:BZ:112:LEU:O	2.40	0.40
42:BZ:172:LEU:HD21	42:BZ:173:PRO:CD	2.29	0.40
42:BZ:19:ILE:H	42:BZ:36:ARG:N	2.18	0.40
1:AA:1128:C:H1'	1:AA:1146:A:H61	1.85	0.40
1:AA:1237:C:H5'	1:AA:1303:C:O2'	2.22	0.40
1:AA:1405:G:H1'	1:AA:1519:A:O4'	2.21	0.40
1:AA:570:G:H2'	1:AA:571:U:H5	1.82	0.40
1:AA:717:C:N3	1:AA:734:G:C8	2.89	0.40
1:AA:17:U:N3	1:AA:919:A:C2	2.89	0.40
7:AD:79:PHE:CE1	7:AD:204:ILE:HG13	2.57	0.40
7:AD:94:LEU:HA	7:AD:97:LEU:HD12	2.02	0.40
9:AF:41:GLU:O	9:AF:42:GLU:HB3	2.21	0.40
1:AA:1374:A:O2'	10:AG:31:MET:SD	2.67	0.40
10:AG:5:ARG:HB3	10:AG:6:ARG:H	1.60	0.40
16:AM:108:ARG:NH2	16:AM:114:ARG:HA	2.36	0.40
1:AA:1308:U:H4'	16:AM:92:HIS:HE1	1.86	0.40
17:AN:24:CYS:HB3	17:AN:40:CYS:N	2.14	0.40
18:AO:39:LEU:HB3	18:AO:56:LEU:HD13	2.03	0.40
1:AA:1225:A:H5'	22:AS:78:ARG:NH1	2.37	0.40
48:B0:38:VAL:C	48:B0:69:PHE:CZ	2.95	0.40
48:B0:65:GLY:C	48:B0:66:LYS:CE	2.77	0.40
49:B4:24:THR:C	49:B4:26:SER:N	2.75	0.40
50:B5:6:VAL:CG1	50:B5:7:PRO:N	2.83	0.40
51:B6:45:LYS:C	51:B6:46:LYS:NZ	2.73	0.40
52:B7:21:ARG:O	52:B7:22:MET:C	2.58	0.40
52:B7:27:GLY:O	52:B7:28:ARG:O	2.39	0.40
26:BA:1027:A:N1	26:BA:1126:A:C4	2.90	0.40
26:BA:1206:G:H1'	26:BA:1242:A:N6	2.36	0.40
26:BA:1249:U:H5''	44:BU:4:ALA:CB	2.52	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:1342:A:H8	26:BA:1342:A:O5'	2.05	0.40
26:BA:1484:G:C2	26:BA:1506:C:C4	3.09	0.40
26:BA:1575:C:C3'	26:BA:1575:C:C6	3.05	0.40
26:BA:1668:A:C6	26:BA:1674:G:C4	3.09	0.40
26:BA:1795:C:O5'	26:BA:1795:C:H6	2.04	0.40
26:BA:1857:G:H1	26:BA:1884:A:H61	1.68	0.40
26:BA:1895:C:H2'	26:BA:1896:G:O4'	2.20	0.40
26:BA:1953:A:N6	26:BA:2550:G:C5'	2.85	0.40
26:BA:1996:C:H2'	26:BA:1997:G:O5'	2.22	0.40
26:BA:1999:C:H1'	26:BA:2687:U:O2'	2.21	0.40
26:BA:2049:G:C6	26:BA:2619:C:N4	2.81	0.40
26:BA:2190:G:H2'	26:BA:2191:G:H8	1.87	0.40
26:BA:2358:G:H22	53:B8:52:LYS:NZ	2.18	0.40
26:BA:2372:G:O6	26:BA:2373:G:O6	2.39	0.40
26:BA:2562:U:H2'	26:BA:2563:U:H5'	2.02	0.40
26:BA:2637:U:H5	26:BA:2638:G:C6	2.37	0.40
26:BA:2644:G:C8	26:BA:2644:G:C5'	3.00	0.40
26:BA:2646:C:C2'	26:BA:2647:U:C5'	2.89	0.40
26:BA:2710:C:H2'	26:BA:2711:A:O4'	2.20	0.40
26:BA:271:G:H2'	26:BA:272:G:H8	1.85	0.40
26:BA:2779:U:O4'	26:BA:2781:A:N7	2.55	0.40
26:BA:308:G:HO2'	41:BY:54:ASP:CG	2.24	0.40
26:BA:296:C:C2	26:BA:344:G:N2	2.89	0.40
26:BA:388:G:OP1	49:B4:29:PRO:CG	2.68	0.40
26:BA:72:U:HO2'	26:BA:73:A:P	2.44	0.40
26:BA:774:A:O2'	26:BA:775:G:C8	2.73	0.40
26:BA:977:G:H2'	26:BA:978:G:O4'	2.21	0.40
27:BD:128:ALA:HB1	27:BD:189:ALA:C	2.41	0.40
27:BD:146:LYS:O	27:BD:149:ARG:HG2	2.21	0.40
27:BD:69:ASP:HA	27:BD:188:ARG:HH12	1.87	0.40
29:BF:240:LEU:HA	29:BF:243:VAL:CG2	2.41	0.40
29:BF:32:GLY:C	29:BF:36:ARG:HG2	2.41	0.40
29:BF:36:ARG:HB2	29:BF:37:ALA:H	1.53	0.40
29:BF:84:VAL:HG23	29:BF:85:LYS:HD3	1.30	0.40
29:BF:93:LYS:CA	29:BF:96:LYS:CE	2.57	0.40
26:BA:2305:A:N6	30:BG:53:LYS:NZ	2.69	0.40
31:BH:28:PRO:HB2	31:BH:29:LYS:H	1.58	0.40
31:BH:9:GLU:CA	31:BH:49:ILE:HD11	2.52	0.40
32:BI:134:HIS:CD2	32:BI:136:GLU:OE1	2.74	0.40
32:BI:30:LEU:HA	32:BI:33:GLN:HE21	1.87	0.40
55:BK:38:PHE:CG	55:BK:67:THR:CG2	2.97	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BO:63:VAL:CG2	34:BO:102:VAL:HG11	2.51	0.40
36:BQ:35:ASN:CB	36:BQ:75:SER:CA	2.98	0.40
36:BQ:65:ARG:NH2	36:BQ:86:ARG:N	2.69	0.40
43:BR:16:HIS:O	43:BR:17:ARG:C	2.59	0.40
37:BS:61:ALA:CB	37:BS:88:ALA:CB	2.69	0.40
38:BT:9:CYS:HB2	38:BT:36:CYS:HB3	1.68	0.40
45:BV:41:GLY:C	45:BV:54:TYR:CE1	2.87	0.40
45:BV:71:ILE:O	45:BV:72:ARG:CB	2.60	0.40
39:BW:100:THR:C	39:BW:101:SER:OG	2.60	0.40
39:BW:28:SER:O	39:BW:31:GLU:HB3	2.22	0.40
39:BW:27:LYS:H	39:BW:71:VAL:HG23	1.87	0.40
26:BA:25:U:H5'	39:BW:80:PRO:HD2	2.01	0.40
41:BY:49:GLU:HB3	41:BY:97:ARG:HH11	1.85	0.40
42:BZ:107:GLU:OE1	42:BZ:107:GLU:N	2.35	0.40
42:BZ:39:PHE:CA	42:BZ:43:PHE:CZ	2.80	0.40
1:AA:1277:C:O4'	1:AA:1282:C:C1'	2.65	0.40
1:AA:819:A:C6	1:AA:1529:G:N7	2.89	0.40
1:AA:204:U:H2'	1:AA:204:U:O2	2.21	0.40
1:AA:628:G:H2'	1:AA:629:G:C8	2.56	0.40
1:AA:634:C:H2'	1:AA:635:G:C8	2.42	0.40
1:AA:642:A:C4	11:AH:114:THR:O	2.74	0.40
5:AB:19:HIS:CD2	5:AB:20:GLU:HG2	2.57	0.40
5:AB:55:PHE:HD2	5:AB:221:LEU:HG	1.86	0.40
1:AA:413:G:N1	7:AD:36:ARG:CZ	2.84	0.40
10:AG:26:PHE:CE2	10:AG:30:ILE:HD11	2.56	0.40
12:AI:28:VAL:N	12:AI:31:GLN:O	2.51	0.40
1:AA:1319:A:C5'	22:AS:70:LYS:HE2	2.51	0.40
23:AT:88:VAL:O	23:AT:92:LEU:HG	2.22	0.40
48:B0:61:ALA:CB	48:B0:81:ILE:CD1	2.50	0.40
26:BA:930:U:OP1	47:B3:37:LEU:HD21	2.22	0.40
47:B3:48:GLU:O	47:B3:51:ALA:CB	2.69	0.40
49:B4:5:LEU:CD1	49:B4:8:LYS:CB	2.99	0.40
50:B5:58:LEU:HB3	50:B5:59:ALA:H	1.48	0.40
26:BA:1080:C:C4'	55:BK:126:LYS:CB	2.70	0.40
26:BA:1153:C:H3'	26:BA:1154:G:C8	2.56	0.40
26:BA:1274:A:C2	26:BA:1302:A:H2	2.40	0.40
26:BA:1378:A:HO2'	26:BA:1379:A:P	2.44	0.40
26:BA:1729:A:OP2	26:BA:1730:U:C4	2.75	0.40
26:BA:1882:C:C2'	26:BA:1883:G:H5'	2.52	0.40
26:BA:2014:A:C4	26:BA:2015:A:N1	2.89	0.40
26:BA:2045:C:H2'	26:BA:2046:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2070:G:H2'	26:BA:2071:A:H8	1.81	0.40
26:BA:2197:U:O2'	26:BA:2224:G:N2	2.46	0.40
26:BA:2270:G:C6	26:BA:2271:G:C2	3.07	0.40
26:BA:965:C:HO2'	26:BA:2272:U:H6	1.03	0.40
26:BA:2411:A:O2'	26:BA:2412:A:C8	2.48	0.40
26:BA:2416:C:C2'	26:BA:2416:C:O2	2.69	0.40
26:BA:2417:C:H2'	26:BA:2418:A:C8	2.55	0.40
26:BA:957:A:N1	26:BA:2458:G:O3'	2.55	0.40
26:BA:2475:C:OP1	26:BA:2476:A:OP2	2.39	0.40
26:BA:2533:A:C5'	26:BA:2664:G:O2'	2.69	0.40
26:BA:2805:G:O3'	26:BA:2807:G:P	2.79	0.40
26:BA:2813:A:C2	26:BA:2888:C:C2	3.10	0.40
26:BA:294:A:C3'	26:BA:294:A:C8	3.05	0.40
26:BA:296:C:N3	26:BA:297:C:C4	2.90	0.40
26:BA:30:G:H2'	26:BA:31:C:O4'	2.21	0.40
26:BA:357:A:H2'	26:BA:358:U:O4'	2.22	0.40
26:BA:636:G:O5'	35:BP:126:SER:HB2	2.21	0.40
26:BA:812:C:H2'	26:BA:813:U:H6	1.86	0.40
26:BA:81:G:H2'	26:BA:82:G:O4'	2.21	0.40
25:BB:42:C:H2'	25:BB:43:C:C6	2.56	0.40
27:BD:103:ILE:CG1	27:BD:104:ILE:N	2.78	0.40
28:BE:107:GLU:H	28:BE:107:GLU:HG3	1.73	0.40
28:BE:179:ASP:OD1	28:BE:179:ASP:N	2.55	0.40
29:BF:154:VAL:O	29:BF:157:LEU:HB2	2.20	0.40
29:BF:158:GLU:HA	29:BF:161:ASP:OD2	2.22	0.40
29:BF:94:THR:HG23	29:BF:95:GLU:N	2.37	0.40
25:BB:57:A:O2'	30:BG:13:MET:CG	2.62	0.40
31:BH:73:ASN:ND2	31:BH:137:LYS:HZ1	2.13	0.40
31:BH:137:LYS:O	31:BH:138:GLN:O	2.38	0.40
55:BK:104:GLN:CA	55:BK:107:GLU:HG3	2.52	0.40
55:BK:21:ALA:O	55:BK:26:PRO:HD3	2.20	0.40
55:BK:27:ALA:O	55:BK:30:GLN:N	2.40	0.40
55:BK:73:PRO:CG	55:BK:78:LEU:HD21	2.52	0.40
33:BN:16:ASP:HA	33:BN:45:VAL:HG22	1.47	0.40
33:BN:54:VAL:HG11	33:BN:138:THR:CG2	2.52	0.40
34:BO:39:VAL:CG1	34:BO:40:VAL:N	2.84	0.40
35:BP:110:GLY:N	35:BP:126:SER:HG	2.17	0.40
36:BQ:131:ALA:N	36:BQ:134:PHE:CE2	2.89	0.40
36:BQ:61:LEU:HB2	36:BQ:62:GLU:H	1.60	0.40
36:BQ:62:GLU:C	36:BQ:63:ALA:O	2.44	0.40
38:BT:13:ILE:HG22	38:BT:14:GLU:CD	2.42	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BT:53:ASP:CA	38:BT:56:ARG:HG2	2.42	0.40
26:BA:581:C:C5'	44:BU:32:TYR:HB2	2.46	0.40
45:BV:61:VAL:HG23	45:BV:98:ILE:N	2.28	0.40
26:BA:496:G:OP1	39:BW:62:HIS:CE1	2.74	0.40
39:BW:27:LYS:H	39:BW:71:VAL:CG2	2.33	0.40
40:BX:58:MET:O	40:BX:59:ASP:OD2	2.39	0.40
41:BY:3:GLN:HB2	41:BY:6:LYS:CD	2.49	0.40
41:BY:80:GLU:CG	41:BY:86:GLU:HG2	2.46	0.40
1:AA:1287:A:N6	1:AA:1371:G:H4'	2.36	0.40
1:AA:946:A:C2	1:AA:1333:A:H2	2.39	0.40
1:AA:975:A:C4	1:AA:1357:A:H2	2.35	0.40
1:AA:1360:A:C8	1:AA:1360:A:O5'	2.74	0.40
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.87	0.40
1:AA:1405:G:H1'	1:AA:1519:A:C4'	2.52	0.40
1:AA:463:A:H5''	19:AP:80:PHE:HB3	2.04	0.40
1:AA:660:G:H1	1:AA:745:C:N4	2.18	0.40
1:AA:765:G:N2	1:AA:813:U:H5	2.20	0.40
1:AA:575:G:N2	1:AA:880:C:N3	2.54	0.40
7:AD:24:GLU:CB	7:AD:112:VAL:CG1	2.78	0.40
10:AG:75:VAL:HG23	10:AG:145:ALA:HA	2.04	0.40
15:AL:23:LYS:O	15:AL:24:VAL:CG2	2.69	0.40
15:AL:60:LEU:HD23	15:AL:64:TYR:HB2	2.02	0.40
1:AA:375:U:O3'	19:AP:6:LEU:HD22	2.20	0.40
20:AQ:56:VAL:O	20:AQ:77:VAL:HB	2.21	0.40
23:AT:73:HIS:HB3	23:AT:74:LYS:HE2	2.04	0.40
26:BA:72:U:H1'	46:B2:57:LYS:HD2	2.03	0.40
47:B3:8:LEU:CB	47:B3:32:GLN:N	2.73	0.40
49:B4:14:ILE:CG2	49:B4:37:SER:N	2.79	0.40
51:B6:8:ILE:CG2	51:B6:30:ASN:HB2	2.51	0.40
51:B6:36:GLU:HB3	51:B6:52:GLU:CB	2.29	0.40
52:B7:30:ILE:HD13	52:B7:33:ARG:NH1	1.84	0.40
52:B7:34:ARG:HH11	52:B7:42:LEU:CB	2.35	0.40
52:B7:41:GLN:HB2	52:B7:42:LEU:H	1.60	0.40
53:B8:52:LYS:HE3	53:B8:52:LYS:HB2	1.75	0.40
54:B9:10:MET:C	54:B9:10:MET:CE	2.89	0.40
26:BA:996:A:N6	26:BA:1159:U:H3	2.19	0.40
26:BA:1208:C:C4	26:BA:1240:U:O4	2.74	0.40
26:BA:1355:G:H2'	26:BA:1356:G:H8	1.87	0.40
26:BA:145:G:H2'	26:BA:146:G:C8	2.56	0.40
26:BA:1328:G:H1	26:BA:1647:G:H22	1.70	0.40
26:BA:1906:G:C5	26:BA:1929:G:N1	2.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2069:G:C2	26:BA:2443:C:N3	2.89	0.40
26:BA:954:G:O2'	26:BA:2274:A:C2	2.65	0.40
26:BA:2319:G:OP2	37:BS:9:PRO:HD3	2.21	0.40
26:BA:2320:A:P	26:BA:2320:A:H8	2.42	0.40
26:BA:2322:A:N3	26:BA:2323:G:C8	2.84	0.40
26:BA:227:A:C6	26:BA:2407:G:C8	3.10	0.40
26:BA:2421:G:C5'	51:B6:4:ASP:CG	2.84	0.40
26:BA:2553:G:H3'	26:BA:2553:G:H8	1.86	0.40
26:BA:2563:U:H3	26:BA:2566:A:H8	1.69	0.40
26:BA:2516:G:C6	26:BA:2569:G:N2	2.88	0.40
26:BA:2704:C:H2'	26:BA:2705:A:C1'	2.51	0.40
26:BA:2768:C:N4	26:BA:2769:C:N4	2.57	0.40
26:BA:27:G:H2'	26:BA:28:A:C8	2.56	0.40
26:BA:2808:U:C5'	26:BA:2809:A:OP2	2.69	0.40
26:BA:2850:A:C6	26:BA:2851:A:C5	3.10	0.40
26:BA:30:G:N2	26:BA:511:U:H1'	2.37	0.40
26:BA:619:G:H8	26:BA:619:G:H3'	1.86	0.40
26:BA:2712:U:H5	26:BA:712(A):A:H8	1.40	0.40
26:BA:990:A:OP2	26:BA:1185:C:OP1	2.39	0.40
25:BB:15:A:H1'	25:BB:109:G:C8	2.57	0.40
25:BB:10:C:H2'	25:BB:11:C:H6	1.86	0.40
25:BB:80:U:H2'	25:BB:81:G:H8	1.85	0.40
27:BD:140:VAL:CG1	27:BD:190:THR:O	2.65	0.40
27:BD:105:ALA:C	27:BD:194:VAL:O	2.60	0.40
27:BD:74:PRO:HG2	27:BD:96:ALA:H	1.78	0.40
28:BE:215:LYS:HG3	28:BE:216:ARG:N	2.37	0.40
26:BA:2052:G:C4'	28:BE:239:GLY:H	2.35	0.40
26:BA:2574:G:H1'	28:BE:240:PRO:HG3	2.02	0.40
29:BF:51:TYR:O	29:BF:54:LEU:O	2.39	0.40
29:BF:67:GLN:HB3	29:BF:68:ALA:H	1.67	0.40
31:BH:141:GLY:O	31:BH:144:ALA:HB3	2.22	0.40
31:BH:8:ILE:CD1	31:BH:72:ALA:HB2	2.52	0.40
55:BK:113:MET:O	55:BK:114:PRO:C	2.59	0.40
33:BN:24:SER:HG	33:BN:25:GLN:H	1.70	0.40
34:BO:111:PHE:O	34:BO:113:LYS:HB2	2.21	0.40
34:BO:22:ILE:H	34:BO:41:ALA:HB2	1.87	0.40
34:BO:33:ALA:HB2	34:BO:39:VAL:HG22	2.04	0.40
34:BO:43:VAL:HG21	34:BO:53:LYS:O	2.21	0.40
34:BO:20:LEU:CG	34:BO:44:LYS:HD3	2.47	0.40
34:BO:9:LYS:HG3	34:BO:18:GLU:HG2	2.03	0.40
35:BP:129:ALA:N	35:BP:132:LYS:HD3	2.35	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BQ:17:ARG:O	36:BQ:22:GLY:O	2.38	0.40
36:BQ:58:HIS:O	36:BQ:61:LEU:CB	2.68	0.40
43:BR:100:LEU:HA	43:BR:100:LEU:HD13	1.91	0.40
43:BR:62:ALA:HB3	43:BR:80:PHE:CZ	2.52	0.40
37:BS:34:LEU:CG	37:BS:103:ASP:N	2.84	0.40
38:BT:20:MET:HB3	38:BT:30:HIS:HA	2.03	0.40
26:BA:19:C:P	44:BU:23:GLY:HA3	2.61	0.40
44:BU:22:LYS:HB2	44:BU:23:GLY:H	1.55	0.40
44:BU:24:PHE:HB2	44:BU:25:TRP:H	1.47	0.40
44:BU:60:LEU:C	44:BU:62:ILE:N	2.73	0.40
45:BV:67:LYS:HE3	45:BV:94:LYS:CD	2.39	0.40
39:BW:24:ILE:HG22	39:BW:35:ILE:CG1	2.52	0.40
40:BX:39:ASP:O	40:BX:41:VAL:CA	2.70	0.40
42:BZ:18:MET:C	42:BZ:36:ARG:NE	2.75	0.40
42:BZ:79:ILE:CG2	42:BZ:80:HIS:CE1	2.92	0.40

All (145) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:6:A:O4'	26:BA:2902:C:C2'[8_554]	0.72	1.48
26:BA:2899:G:N1	26:BA:2901:C:C4[8_554]	0.79	1.41
26:BA:6:A:C4'	26:BA:2902:C:C2'[8_554]	0.97	1.23
26:BA:2900:A:N7	26:BA:2900:A:N6[8_554]	1.03	1.17
26:BA:3:U:O4	26:BA:2899:G:O2'[8_554]	1.09	1.11
26:BA:2900:A:C6	26:BA:2900:A:C6[8_554]	1.12	1.08
26:BA:6:A:O4'	26:BA:2902:C:C1'[8_554]	1.13	1.07
26:BA:2900:A:C5	26:BA:2900:A:C6[8_554]	1.14	1.06
26:BA:2899:G:C2	26:BA:2901:C:N3[8_554]	1.15	1.05
26:BA:6:A:C4'	26:BA:2902:C:O2'[8_554]	1.17	1.03
26:BA:2899:G:C5	26:BA:2901:C:N4[8_554]	1.20	1.00
1:AA:359:U:OP1	32:BI:82:LYS:NZ[3_454]	1.20	1.00
26:BA:5:A:C8	26:BA:2901:C:C2'[8_554]	1.21	0.99
26:BA:5:A:N7	26:BA:2901:C:C1'[8_554]	1.23	0.97
26:BA:5:A:N7	26:BA:2901:C:N1[8_554]	1.26	0.94
26:BA:2900:A:C5	26:BA:2900:A:N6[8_554]	1.28	0.92
26:BA:1:G:O6	26:BA:2898:U:O2[8_554]	1.29	0.91
26:BA:2899:G:N1	26:BA:2901:C:N3[8_554]	1.32	0.88
26:BA:2899:G:C6	26:BA:2901:C:N4[8_554]	1.32	0.88
26:BA:6:A:O4'	26:BA:2902:C:C3'[8_554]	1.33	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:4:C:C5	26:BA:2900:A:C2'[8_554]	1.35	0.85
26:BA:3:U:C5	26:BA:2900:A:O4'[8_554]	1.36	0.84
26:BA:2899:G:N2	26:BA:2901:C:N3[8_554]	1.38	0.82
26:BA:1:G:O6	26:BA:2898:U:C2'[8_554]	1.42	0.78
26:BA:2899:G:C6	26:BA:2901:C:C4[8_554]	1.42	0.78
26:BA:5:A:N7	26:BA:2901:C:C2'[8_554]	1.43	0.77
26:BA:6:A:O5'	26:BA:2902:C:C4'[8_554]	1.43	0.77
26:BA:6:A:C4'	26:BA:2902:C:C3'[8_554]	1.43	0.77
26:BA:4:C:C5	26:BA:2900:A:O2'[8_554]	1.46	0.74
26:BA:1:G:C5	26:BA:2898:U:O2'[8_554]	1.54	0.66
26:BA:5:A:C5	26:BA:2901:C:N1[8_554]	1.55	0.65
26:BA:5:A:C8	26:BA:2901:C:C1'[8_554]	1.55	0.65
26:BA:99:U:OP2	26:BA:101:G:O6[7_555]	1.55	0.65
26:BA:2900:A:N1	26:BA:2900:A:C4[8_554]	1.56	0.64
26:BA:2899:G:C4	26:BA:2901:C:N4[8_554]	1.57	0.63
28:BE:93:GLN:NE2	28:BE:96:LEU:CD1[8_554]	1.57	0.63
26:BA:4:C:C6	26:BA:2900:A:O2'[8_554]	1.59	0.61
26:BA:3:U:C6	26:BA:2900:A:O4'[8_554]	1.59	0.61
26:BA:3:U:O4	26:BA:2900:A:C8[8_554]	1.59	0.61
26:BA:3:U:C4	26:BA:2900:A:O4'[8_554]	1.60	0.60
26:BA:6:A:C3'	26:BA:2902:C:O3'[8_554]	1.60	0.60
26:BA:2899:G:O6	26:BA:2901:C:C5[8_554]	1.62	0.58
26:BA:5:A:N6	26:BA:2901:C:C5[8_554]	1.62	0.58
26:BA:6:A:C1'	26:BA:2902:C:C2'[8_554]	1.63	0.57
26:BA:2900:A:C5	26:BA:2900:A:N1[8_554]	1.63	0.57
26:BA:2:G:O6	26:BA:2899:G:C1'[8_554]	1.64	0.56
26:BA:2899:G:N1	26:BA:2901:C:N4[8_554]	1.65	0.55
26:BA:4:C:O2	26:BA:2900:A:N3[8_554]	1.65	0.55
26:BA:6:A:N9	26:BA:2902:C:C6[8_554]	1.65	0.55
26:BA:5:A:N9	26:BA:2901:C:O2[8_554]	1.66	0.54
1:AA:359:U:OP1	32:BI:82:LYS:CE[3_454]	1.66	0.54
26:BA:4:C:C5	26:BA:2901:C:O4'[8_554]	1.68	0.52
26:BA:2899:G:C2	26:BA:2901:C:C4[8_554]	1.69	0.51
26:BA:3:U:C4	26:BA:2899:G:O2'[8_554]	1.69	0.51
26:BA:6:A:O4'	26:BA:2902:C:O4'[8_554]	1.69	0.51
26:BA:4:C:C4	26:BA:2900:A:C2'[8_554]	1.70	0.50
26:BA:6:A:C3'	26:BA:2902:C:C3'[8_554]	1.71	0.49
26:BA:1:G:C6	26:BA:2898:U:C2'[8_554]	1.71	0.49
26:BA:6:A:C5'	26:BA:2902:C:O3'[8_554]	1.73	0.47
26:BA:2:G:O6	26:BA:2899:G:N9[8_554]	1.73	0.47
26:BA:5:A:C6	26:BA:2901:C:C5[8_554]	1.73	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:4:C:C2	26:BA:2900:A:N3[8_554]	1.74	0.46
26:BA:2899:G:N1	26:BA:2901:C:C5[8_554]	1.75	0.45
26:BA:2899:G:C6	26:BA:2901:C:C5[8_554]	1.75	0.45
26:BA:4:C:O2	26:BA:2900:A:C2[8_554]	1.75	0.45
26:BA:6:A:C4'	26:BA:2902:C:O3'[8_554]	1.79	0.41
26:BA:6:A:C1'	26:BA:2902:C:C6[8_554]	1.81	0.39
26:BA:5:A:C4	26:BA:2901:C:C2[8_554]	1.82	0.38
26:BA:2:G:O6	26:BA:2899:G:N3[8_554]	1.82	0.38
26:BA:2899:G:N2	26:BA:2901:C:C2[8_554]	1.82	0.38
26:BA:3:U:C5	26:BA:2900:A:C4'[8_554]	1.82	0.38
26:BA:2:G:O6	26:BA:2899:G:C4[8_554]	1.83	0.37
26:BA:5:A:N6	26:BA:2901:C:C6[8_554]	1.83	0.37
26:BA:5:A:C5	26:BA:2901:C:C2[8_554]	1.83	0.37
26:BA:6:A:O4'	26:BA:2902:C:C4'[8_554]	1.83	0.37
26:BA:1:G:C6	26:BA:2898:U:O2'[8_554]	1.85	0.35
26:BA:6:A:C5'	26:BA:2902:C:O2'[8_554]	1.86	0.34
26:BA:3:U:C5	26:BA:2900:A:C5'[8_554]	1.86	0.34
26:BA:2900:A:C2	26:BA:2900:A:C2[8_554]	1.87	0.33
26:BA:6:A:O5'	26:BA:2902:C:O3'[8_554]	1.87	0.33
26:BA:6:A:OP2	26:BA:2902:C:C5'[8_554]	1.89	0.31
26:BA:1:G:N7	26:BA:2898:U:O3'[8_554]	1.89	0.31
26:BA:5:A:C2'	26:BA:2902:C:O4'[8_554]	1.91	0.29
26:BA:2900:A:C6	26:BA:2900:A:N6[8_554]	1.91	0.29
26:BA:1:G:O6	26:BA:2898:U:C2[8_554]	1.91	0.29
26:BA:5:A:C6	26:BA:2901:C:C6[8_554]	1.93	0.27
26:BA:5:A:C2	26:BA:2902:C:C4[8_554]	1.93	0.27
26:BA:3:U:N3	26:BA:2900:A:O4'[8_554]	1.94	0.26
26:BA:2899:G:N2	26:BA:2901:C:O2[8_554]	1.95	0.25
26:BA:4:C:N3	26:BA:2900:A:N3[8_554]	1.95	0.25
26:BA:3:U:O4	26:BA:2899:G:C2'[8_554]	1.95	0.25
26:BA:5:A:C2	26:BA:2902:C:C5[8_554]	1.95	0.25
26:BA:6:A:C1'	26:BA:2902:C:C1'[8_554]	1.95	0.25
26:BA:5:A:C5	26:BA:2901:C:C6[8_554]	1.96	0.24
26:BA:6:A:O5'	26:BA:2902:C:C3'[8_554]	1.96	0.24
26:BA:6:A:C8	26:BA:2902:C:O4'[8_554]	1.97	0.23
1:AA:359:U:OP1	32:BI:82:LYS:CD[3_454]	1.97	0.23
26:BA:5:A:C8	26:BA:2901:C:O2'[8_554]	1.97	0.23
26:BA:4:C:C4	26:BA:2901:C:O4'[8_554]	1.98	0.22
26:BA:3:U:N3	26:BA:2900:A:N9[8_554]	1.98	0.22
26:BA:6:A:C3'	26:BA:2902:C:C2'[8_554]	1.98	0.22
28:BE:93:GLN:NE2	28:BE:96:LEU:CD2[8_554]	1.98	0.22

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:2899:G:C2	26:BA:2901:C:N4[8_554]	1.99	0.21
26:BA:6:A:O4'	26:BA:2902:C:O2'[8_554]	1.99	0.21
26:BA:6:A:C1'	26:BA:2902:C:C3'[8_554]	2.00	0.20
26:BA:1:G:C6	26:BA:2898:U:O2[8_554]	2.01	0.19
26:BA:6:A:C1'	26:BA:2902:C:N1[8_554]	2.01	0.19
26:BA:1:G:N7	26:BA:2898:U:O2'[8_554]	2.01	0.19
26:BA:3:U:C4	26:BA:2900:A:C8[8_554]	2.02	0.18
26:BA:6:A:C5'	26:BA:2902:C:C3'[8_554]	2.02	0.18
26:BA:5:A:C8	26:BA:2901:C:N1[8_554]	2.02	0.18
26:BA:2900:A:N1	26:BA:2900:A:N3[8_554]	2.02	0.18
26:BA:2902:C:O2'	33:BN:4:ALA:O[8_554]	2.03	0.17
26:BA:3:U:N1	26:BA:2900:A:O4'[8_554]	2.04	0.16
26:BA:4:C:C6	26:BA:2901:C:O4'[8_554]	2.04	0.16
26:BA:4:C:N4	26:BA:2901:C:C6[8_554]	2.04	0.16
26:BA:2900:A:C2	26:BA:2900:A:N3[8_554]	2.04	0.16
26:BA:6:A:O5'	26:BA:2902:C:C5'[8_554]	2.04	0.16
26:BA:2900:A:N7	26:BA:2900:A:C6[8_554]	2.05	0.15
26:BA:2899:G:N3	26:BA:2901:C:N4[8_554]	2.06	0.14
26:BA:5:A:N7	26:BA:2901:C:C6[8_554]	2.06	0.14
26:BA:2902:C:O2'	33:BN:4:ALA:N[8_554]	2.06	0.14
26:BA:3:U:C6	26:BA:2900:A:C4'[8_554]	2.07	0.13
26:BA:6:A:C4	26:BA:2902:C:C6[8_554]	2.08	0.12
26:BA:2900:A:C6	26:BA:2900:A:N1[8_554]	2.08	0.12
28:BE:93:GLN:NE2	28:BE:96:LEU:CG[8_554]	2.09	0.11
26:BA:4:C:N3	26:BA:2901:C:N1[8_554]	2.09	0.11
26:BA:5:A:C4	26:BA:2901:C:O2[8_554]	2.09	0.11
26:BA:5:A:C6	26:BA:2901:C:C4[8_554]	2.10	0.10
26:BA:5:A:C8	26:BA:2901:C:O2[8_554]	2.10	0.10
26:BA:3:U:N3	26:BA:2900:A:C1'[8_554]	2.10	0.10
25:BB:0:A:O5'	25:BB:120:U:O5'[7_554]	2.11	0.09
26:BA:1:G:O6	26:BA:2898:U:C1'[8_554]	2.12	0.08
26:BA:5:A:N1	26:BA:2901:C:C4[8_554]	2.13	0.07
26:BA:5:A:N9	26:BA:2901:C:C2[8_554]	2.13	0.07
26:BA:1:G:C5	26:BA:2898:U:C2'[8_554]	2.13	0.07
26:BA:2900:A:C6	26:BA:2900:A:C4[8_554]	2.14	0.06
26:BA:5:A:N7	26:BA:2901:C:C3'[8_554]	2.14	0.06
26:BA:2898:U:O2	26:BA:2902:C:N4[8_554]	2.16	0.04
26:BA:4:C:N3	26:BA:2900:A:C4[8_554]	2.18	0.02
26:BA:6:A:C2'	26:BA:2902:C:C2'[8_554]	2.18	0.02
26:BA:5:A:N7	26:BA:2901:C:O4'[8_554]	2.18	0.02
26:BA:2:G:N1	26:BA:2899:G:N3[8_554]	2.19	0.01

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BA:5:A:N7	26:BA:2901:C:C2[8_554]	2.19	0.01
26:BA:2:G:C6	26:BA:2899:G:N3[8_554]	2.19	0.01

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	AB	232/256 (91%)	183 (79%)	33 (14%)	16 (7%)	1	15
6	AC	204/239 (85%)	166 (81%)	24 (12%)	14 (7%)	1	15
7	AD	206/209 (99%)	157 (76%)	33 (16%)	16 (8%)	1	13
8	AE	148/162 (91%)	116 (78%)	29 (20%)	3 (2%)	7	38
9	AF	99/101 (98%)	85 (86%)	10 (10%)	4 (4%)	3	23
10	AG	153/156 (98%)	131 (86%)	18 (12%)	4 (3%)	5	31
11	AH	136/138 (99%)	101 (74%)	25 (18%)	10 (7%)	1	13
12	AI	125/128 (98%)	86 (69%)	31 (25%)	8 (6%)	1	16
13	AJ	96/105 (91%)	73 (76%)	14 (15%)	9 (9%)	0	10
14	AK	117/129 (91%)	88 (75%)	22 (19%)	7 (6%)	1	17
15	AL	122/135 (90%)	90 (74%)	13 (11%)	19 (16%)	0	3
16	AM	121/126 (96%)	95 (78%)	20 (16%)	6 (5%)	2	20
17	AN	58/61 (95%)	42 (72%)	12 (21%)	4 (7%)	1	15
18	AO	86/89 (97%)	76 (88%)	9 (10%)	1 (1%)	13	50
19	AP	81/88 (92%)	64 (79%)	11 (14%)	6 (7%)	1	13
20	AQ	102/105 (97%)	78 (76%)	18 (18%)	6 (6%)	1	17
21	AR	71/88 (81%)	54 (76%)	11 (16%)	6 (8%)	1	11
22	AS	78/93 (84%)	60 (77%)	15 (19%)	3 (4%)	3	24
23	AT	97/106 (92%)	79 (81%)	12 (12%)	6 (6%)	1	17

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
24	AU	22/27 (82%)	17 (77%)	3 (14%)	2 (9%)	1	11
27	BD	169/173 (98%)	60 (36%)	34 (20%)	75 (44%)	0	0
28	BE	183/338 (54%)	89 (49%)	34 (19%)	60 (33%)	0	0
29	BF	179/246 (73%)	51 (28%)	47 (26%)	81 (45%)	0	0
30	BG	116/176 (66%)	46 (40%)	31 (27%)	39 (34%)	0	0
31	BH	162/177 (92%)	74 (46%)	39 (24%)	49 (30%)	0	0
32	BI	144/149 (97%)	71 (49%)	29 (20%)	44 (31%)	0	0
33	BN	111/145 (77%)	34 (31%)	21 (19%)	56 (50%)	0	0
34	BO	120/122 (98%)	61 (51%)	27 (22%)	32 (27%)	0	0
35	BP	82/164 (50%)	28 (34%)	21 (26%)	33 (40%)	0	0
36	BQ	130/138 (94%)	38 (29%)	35 (27%)	57 (44%)	0	0
37	BS	105/186 (56%)	36 (34%)	20 (19%)	49 (47%)	0	0
38	BT	48/66 (73%)	17 (35%)	13 (27%)	18 (38%)	0	0
39	BW	104/113 (92%)	41 (39%)	16 (15%)	47 (45%)	0	0
40	BX	72/84 (86%)	26 (36%)	18 (25%)	28 (39%)	0	0
41	BY	108/119 (91%)	49 (45%)	20 (18%)	39 (36%)	0	0
42	BZ	175/253 (69%)	52 (30%)	53 (30%)	70 (40%)	0	0
43	BR	103/118 (87%)	35 (34%)	20 (19%)	48 (47%)	0	0
44	BU	115/118 (98%)	22 (19%)	23 (20%)	70 (61%)	0	0
45	BV	96/100 (96%)	39 (41%)	25 (26%)	32 (33%)	0	0
46	B2	62/70 (89%)	8 (13%)	9 (14%)	45 (73%)	0	0
47	B3	58/60 (97%)	24 (41%)	13 (22%)	21 (36%)	0	0
48	B0	84/91 (92%)	32 (38%)	17 (20%)	35 (42%)	0	0
49	B4	71/73 (97%)	21 (30%)	16 (22%)	34 (48%)	0	0
50	B5	56/60 (93%)	16 (29%)	18 (32%)	22 (39%)	0	0
51	B6	51/82 (62%)	21 (41%)	9 (18%)	21 (41%)	0	0
52	B7	44/47 (94%)	4 (9%)	7 (16%)	33 (75%)	0	0
53	B8	61/64 (95%)	22 (36%)	10 (16%)	29 (48%)	0	0
54	B9	33/36 (92%)	14 (42%)	9 (27%)	10 (30%)	0	0
55	BK	129/141 (92%)	73 (57%)	18 (14%)	38 (30%)	0	0
All	All	5325/6250 (85%)	2945 (55%)	1015 (19%)	1365 (26%)	0	1



All (1365) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
5	AB	24	TRP
5	AB	104	ASN
5	AB	153	ARG
5	AB	154	LEU
5	AB	161	ALA
6	AC	52	LEU
6	AC	53	ALA
7	AD	5	ILE
7	AD	20	TYR
7	AD	21	LEU
7	AD	29	PRO
7	AD	32	ALA
7	AD	129	ASN
7	AD	170	VAL
9	AF	95	GLU
10	AG	35	LYS
11	AH	44	PHE
11	AH	74	PRO
11	AH	97	VAL
11	AH	121	ASP
11	AH	134	ILE
12	AI	12	GLU
12	AI	70	LYS
13	AJ	61	GLU
14	AK	104	GLN
15	AL	12	ARG
15	AL	27	LEU
15	AL	46	LYS
15	AL	48	PRO
15	AL	127	GLU
16	AM	28	ALA
16	AM	67	GLU
18	AO	88	ARG
20	AQ	34	LYS
20	AQ	99	SER
20	AQ	104	LYS
21	AR	81	PHE
21	AR	82	THR
21	AR	84	LYS
23	AT	71	THR
27	BD	64	ILE
27	BD	66	PHE

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Mol	Chain	Res	Type
27	BD	67	LYS
27	BD	82	TYR
27	BD	85	ASN
27	BD	104	ILE
27	BD	106	PRO
27	BD	107	LYS
27	BD	108	ASN
27	BD	111	VAL
27	BD	112	GLY
27	BD	113	MET
27	BD	114	GLU
27	BD	116	MET
27	BD	120	ASP
27	BD	122	ASP
27	BD	124	LYS
27	BD	125	ILE
27	BD	127	ASN
27	BD	142	ASN
27	BD	143	ILE
27	BD	145	LEU
27	BD	149	ARG
27	BD	153	LEU
27	BD	156	ALA
27	BD	158	GLY
27	BD	163	VAL
27	BD	164	LEU
27	BD	168	GLY
27	BD	169	LYS
27	BD	187	CYS
27	BD	189	ALA
27	BD	191	VAL
27	BD	199	ARG
27	BD	205	VAL
27	BD	210	LYS
27	BD	223	ASN
27	BD	224	VAL
27	BD	227	VAL
27	BD	229	MET
27	BD	231	ALA
27	BD	232	VAL
28	BE	41	PHE
28	BE	61	PRO

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Mol	Chain	Res	Type
28	BE	79	ARG
28	BE	93	GLN
28	BE	94	ARG
28	BE	105	HIS
28	BE	108	LEU
28	BE	178	LEU
28	BE	205	THR
28	BE	207	GLY
28	BE	214	VAL
28	BE	229	GLN
28	BE	230	GLY
28	BE	232	ARG
28	BE	233	ARG
28	BE	234	ARG
28	BE	244	SER
28	BE	251	PRO
28	BE	253	GLN
28	BE	255	GLN
28	BE	315	VAL
28	BE	316	ARG
29	BF	2	GLU
29	BF	6	TYR
29	BF	21	VAL
29	BF	23	GLU
29	BF	24	THR
29	BF	25	PRO
29	BF	31	ILE
29	BF	35	VAL
29	BF	36	ARG
29	BF	37	ALA
29	BF	40	ALA
29	BF	41	ASN
29	BF	53	GLY
29	BF	54	LEU
29	BF	57	PRO
29	BF	58	ALA
29	BF	62	GLY
29	BF	63	SER
29	BF	82	GLN
29	BF	84	VAL
29	BF	85	LYS
29	BF	87	ARG

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Mol	Chain	Res	Type
29	BF	88	SER
29	BF	89	ALA
29	BF	90	HIS
29	BF	91	PRO
29	BF	93	LYS
29	BF	95	GLU
29	BF	99	SER
29	BF	100	LEU
29	BF	102	LEU
29	BF	104	ASP
29	BF	105	LYS
29	BF	106	GLU
29	BF	107	ARG
29	BF	108	GLN
29	BF	110	ALA
29	BF	111	VAL
29	BF	112	ARG
29	BF	113	SER
29	BF	114	ALA
29	BF	139	VAL
29	BF	145	GLU
29	BF	156	LEU
29	BF	158	GLU
29	BF	162	VAL
29	BF	166	ILE
29	BF	167	ASP
29	BF	193	LEU
29	BF	195	VAL
29	BF	198	ASP
29	BF	200	PRO
29	BF	202	THR
29	BF	203	ALA
29	BF	207	LEU
29	BF	210	ALA
29	BF	211	ASP
29	BF	215	ALA
29	BF	218	VAL
29	BF	222	ASP
29	BF	224	ALA
29	BF	237	GLU
29	BF	238	SER
29	BF	240	LEU

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Mol	Chain	Res	Type
30	BG	11	HIS
30	BG	14	ARG
30	BG	18	ILE
30	BG	19	GLU
30	BG	21	VAL
30	BG	23	VAL
30	BG	36	ASN
30	BG	54	ALA
30	BG	55	LYS
30	BG	60	GLU
30	BG	77	ASP
30	BG	78	GLU
30	BG	96	SER
30	BG	97	GLN
30	BG	100	ASP
30	BG	101	THR
30	BG	129	ASP
30	BG	141	VAL
30	BG	147	ALA
30	BG	150	SER
31	BH	11	PRO
31	BH	14	VAL
31	BH	21	ASN
31	BH	28	PRO
31	BH	37	HIS
31	BH	48	VAL
31	BH	49	ILE
31	BH	56	ASP
31	BH	58	LYS
31	BH	59	HIS
31	BH	72	ALA
31	BH	75	VAL
31	BH	76	GLU
31	BH	81	GLY
31	BH	97	LYS
31	BH	106	VAL
31	BH	111	PRO
31	BH	127	GLN
31	BH	138	GLN
31	BH	142	GLU
31	BH	146	ASN
31	BH	150	VAL

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Mol	Chain	Res	Type
31	BH	167	LEU
31	BH	169	ARG
32	BI	5	PHE
32	BI	6	LEU
32	BI	7	LYS
32	BI	9	VAL
32	BI	13	GLY
32	BI	20	ASN
32	BI	23	ASP
32	BI	25	TYR
32	BI	36	ALA
32	BI	39	ALA
32	BI	44	LEU
32	BI	92	SER
32	BI	98	ILE
32	BI	99	ALA
32	BI	100	GLU
32	BI	101	SER
32	BI	102	LEU
32	BI	103	GLN
32	BI	104	ALA
32	BI	105	GLN
32	BI	111	ASP
32	BI	114	LYS
32	BI	115	ILE
32	BI	121	ILE
32	BI	146	THR
32	BI	148	GLN
33	BN	5	GLU
33	BN	8	ALA
33	BN	15	ARG
33	BN	17	CYS
33	BN	21	ARG
33	BN	22	VAL
33	BN	24	SER
33	BN	26	VAL
33	BN	28	GLU
33	BN	32	ASP
33	BN	39	VAL
33	BN	44	ALA
33	BN	47	THR
33	BN	49	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
33	BN	50	GLU
33	BN	51	GLU
33	BN	52	GLN
33	BN	61	VAL
33	BN	63	ILE
33	BN	67	ASN
33	BN	69	TYR
33	BN	70	PHE
33	BN	72	PRO
33	BN	76	ASP
33	BN	78	ILE
33	BN	80	LYS
33	BN	81	ARG
33	BN	83	ILE
33	BN	84	ARG
33	BN	95	ARG
33	BN	105	LEU
33	BN	136	SER
33	BN	137	GLU
34	BO	4	GLN
34	BO	14	SER
34	BO	28	SER
34	BO	30	ARG
34	BO	35	ILE
34	BO	47	THR
34	BO	74	GLY
34	BO	89	ASP
34	BO	91	LYS
34	BO	96	THR
34	BO	101	PRO
34	BO	102	VAL
34	BO	105	GLU
34	BO	106	LEU
34	BO	111	PHE
34	BO	112	MET
34	BO	113	LYS
34	BO	115	ILE
35	BP	55	GLN
35	BP	61	ALA
35	BP	66	VAL
35	BP	67	ARG
35	BP	69	ILE

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
35	BP	70	ASP
35	BP	72	ASN
35	BP	95	ASP
35	BP	96	VAL
35	BP	100	ALA
35	BP	102	ASP
35	BP	103	ALA
35	BP	105	TYR
35	BP	111	ALA
35	BP	114	VAL
35	BP	115	ARG
35	BP	117	GLU
35	BP	127	GLU
35	BP	129	ALA
35	BP	131	GLU
35	BP	133	VAL
35	BP	143	THR
36	BQ	10	ILE
36	BQ	18	GLU
36	BQ	23	ILE
36	BQ	28	ILE
36	BQ	30	GLN
36	BQ	43	PRO
36	BQ	55	GLN
36	BQ	56	ILE
36	BQ	58	HIS
36	BQ	59	ASN
36	BQ	61	LEU
36	BQ	62	GLU
36	BQ	63	ALA
36	BQ	73	GLN
36	BQ	83	PHE
36	BQ	88	PHE
36	BQ	93	ILE
36	BQ	94	ARG
36	BQ	102	ARG
36	BQ	105	PHE
36	BQ	109	VAL
36	BQ	119	ASN
36	BQ	127	ASN
36	BQ	135	ALA
36	BQ	141	MET

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	BQ	142	LYS
36	BQ	144	THR
36	BQ	147	VAL
36	BQ	154	ALA
37	BS	11	ARG
37	BS	16	ALA
37	BS	17	ARG
37	BS	20	TYR
37	BS	31	LYS
37	BS	34	LEU
37	BS	41	LYS
37	BS	53	ASN
37	BS	54	GLY
37	BS	55	ASP
37	BS	59	ALA
37	BS	72	GLU
37	BS	74	PRO
37	BS	75	THR
37	BS	81	ALA
37	BS	82	TYR
37	BS	84	THR
37	BS	86	LEU
37	BS	97	VAL
37	BS	98	GLU
37	BS	105	GLY
37	BS	107	ASN
37	BS	109	PRO
37	BS	115	VAL
37	BS	116	PHE
37	BS	117	ALA
37	BS	118	ILE
37	BS	123	ILE
37	BS	128	ASP
38	BT	5	GLU
38	BT	9	CYS
38	BT	11	THR
38	BT	12	ASP
38	BT	15	PRO
38	BT	29	THR
38	BT	37	GLU
38	BT	38	ASN
38	BT	51	TRP

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Mol	Chain	Res	Type
39	BW	6	ILE
39	BW	7	ALA
39	BW	9	TYR
39	BW	17	VAL
39	BW	20	VAL
39	BW	22	ASP
39	BW	24	ILE
39	BW	25	ARG
39	BW	29	LEU
39	BW	30	GLU
39	BW	33	ARG
39	BW	39	THR
39	BW	41	LYS
39	BW	42	ARG
39	BW	43	GLY
39	BW	44	ALA
39	BW	45	TYR
39	BW	46	PHE
39	BW	56	ALA
39	BW	57	ASN
39	BW	58	ALA
39	BW	59	VAL
39	BW	66	GLU
39	BW	67	ASP
39	BW	68	ARG
39	BW	89	ALA
39	BW	100	THR
40	BX	2	TRP
40	BX	3	ASP
40	BX	4	VAL
40	BX	5	ILE
40	BX	13	LYS
40	BX	19	ASP
40	BX	29	ASP
40	BX	30	ASP
40	BX	31	ARG
40	BX	32	ALA
40	BX	35	GLY
40	BX	36	GLU
40	BX	37	VAL
40	BX	38	ALA
40	BX	39	ASP

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Mol	Chain	Res	Type
40	BX	40	ALA
40	BX	46	ASP
40	BX	47	VAL
40	BX	52	VAL
40	BX	57	THR
40	BX	76	GLU
41	BY	14	ALA
41	BY	25	ALA
41	BY	27	LEU
41	BY	28	SER
41	BY	30	ASP
41	BY	31	LEU
41	BY	32	ARG
41	BY	33	GLU
41	BY	35	TYR
41	BY	44	ALA
41	BY	48	VAL
41	BY	50	VAL
41	BY	54	ASP
41	BY	67	LEU
41	BY	75	GLU
41	BY	76	ASP
41	BY	85	GLU
41	BY	93	THR
41	BY	94	SER
42	BZ	3	LEU
42	BZ	6	LYS
42	BZ	14	LEU
42	BZ	16	GLU
42	BZ	31	SER
42	BZ	34	LEU
42	BZ	35	ASP
42	BZ	40	ASP
42	BZ	41	ARG
42	BZ	46	GLN
42	BZ	47	SER
42	BZ	48	THR
42	BZ	51	LEU
42	BZ	69	VAL
42	BZ	72	ASP
42	BZ	73	LYS
42	BZ	75	LYS

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Mol	Chain	Res	Type
42	BZ	79	ILE
42	BZ	80	HIS
42	BZ	86	VAL
42	BZ	93	GLU
42	BZ	108	VAL
42	BZ	132	GLN
42	BZ	142	ASN
42	BZ	149	ALA
42	BZ	153	LYS
42	BZ	160	LEU
42	BZ	161	ALA
42	BZ	165	GLU
42	BZ	169	VAL
43	BR	18	LEU
43	BR	19	ALA
43	BR	20	LEU
43	BR	21	TYR
43	BR	22	ARG
43	BR	26	LYS
43	BR	28	LEU
43	BR	29	LEU
43	BR	33	ARG
43	BR	38	VAL
43	BR	39	PRO
43	BR	40	LYS
43	BR	44	LEU
43	BR	45	ARG
43	BR	47	PHE
43	BR	48	VAL
43	BR	52	ILE
43	BR	53	HIS
43	BR	60	LEU
43	BR	61	HIS
43	BR	62	ALA
43	BR	66	VAL
43	BR	68	ARG
43	BR	72	ASP
43	BR	73	VAL
43	BR	74	LYS
43	BR	75	LEU
43	BR	76	VAL
43	BR	82	GLU

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Mol	Chain	Res	Type
43	BR	84	ALA
43	BR	86	ARG
43	BR	89	ASP
43	BR	94	TYR
43	BR	106	GLY
43	BR	107	ASP
43	BR	111	LEU
43	BR	112	ALA
44	BU	5	LYS
44	BU	6	THR
44	BU	7	GLY
44	BU	8	ILE
44	BU	13	ARG
44	BU	16	LYS
44	BU	17	VAL
44	BU	20	ARG
44	BU	22	LYS
44	BU	24	PHE
44	BU	27	SER
44	BU	28	ARG
44	BU	29	SER
44	BU	32	TYR
44	BU	34	ASN
44	BU	35	ALA
44	BU	37	GLN
44	BU	38	THR
44	BU	39	LEU
44	BU	40	LEU
44	BU	41	ASN
44	BU	43	ALA
44	BU	44	THR
44	BU	47	TYR
44	BU	48	ARG
44	BU	52	ASN
44	BU	53	LYS
44	BU	54	LYS
44	BU	56	ASP
44	BU	58	ARG
44	BU	64	ARG
44	BU	67	ALA
44	BU	69	ALA
44	BU	71	LEU

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Mol	Chain	Res	Type
44	BU	79	PHE
44	BU	80	ILE
44	BU	86	ALA
44	BU	94	VAL
44	BU	96	ALA
44	BU	97	ASP
44	BU	99	ALA
44	BU	105	ALA
44	BU	106	PHE
44	BU	107	LYS
44	BU	108	ALA
44	BU	109	LEU
44	BU	112	ALA
44	BU	114	ARG
44	BU	116	ALA
45	BV	5	ILE
45	BV	6	GLN
45	BV	8	GLY
45	BV	11	GLN
45	BV	13	ARG
45	BV	23	GLU
45	BV	24	SER
45	BV	28	GLU
45	BV	29	ALA
45	BV	31	ASP
45	BV	40	VAL
45	BV	55	THR
45	BV	58	ALA
45	BV	69	ILE
45	BV	71	ILE
45	BV	72	ARG
45	BV	84	THR
45	BV	88	GLN
45	BV	92	ALA
46	B2	2	VAL
46	B2	4	HIS
46	B2	5	VAL
46	B2	6	GLN
46	B2	7	GLU
46	B2	12	THR
46	B2	16	ARG
46	B2	17	GLU

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Mol	Chain	Res	Type
46	B2	18	ALA
46	B2	21	ASP
46	B2	23	LEU
46	B2	25	THR
46	B2	26	GLU
46	B2	31	ARG
46	B2	33	VAL
46	B2	34	GLN
46	B2	35	ALA
46	B2	36	ALA
46	B2	40	PRO
46	B2	46	ILE
46	B2	47	LYS
46	B2	48	GLU
46	B2	49	LEU
46	B2	50	ARG
46	B2	51	LYS
46	B2	52	ALA
46	B2	53	ILE
46	B2	54	ALA
46	B2	55	ARG
46	B2	56	ILE
46	B2	58	THR
46	B2	59	ILE
46	B2	60	GLN
46	B2	63	GLU
47	B3	17	LYS
47	B3	18	ASP
47	B3	19	GLN
47	B3	26	LEU
47	B3	30	ARG
47	B3	32	GLN
47	B3	42	ALA
47	B3	43	ILE
47	B3	46	ASN
47	B3	51	ALA
47	B3	52	HIS
47	B3	54	VAL
48	B0	9	SER
48	B0	10	SER
48	B0	12	ASN
48	B0	17	ASN

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Mol	Chain	Res	Type
48	B0	21	LEU
48	B0	23	VAL
48	B0	25	LYS
48	B0	30	VAL
48	B0	33	ALA
48	B0	36	ILE
48	B0	38	VAL
48	B0	39	ARG
48	B0	40	GLN
48	B0	51	VAL
48	B0	53	MET
48	B0	59	LEU
48	B0	63	SER
48	B0	68	VAL
48	B0	70	ILE
48	B0	71	ASN
48	B0	72	LYS
48	B0	74	LYS
48	B0	76	ALA
48	B0	78	PHE
48	B0	79	ILE
48	B0	81	ILE
49	B4	6	HIS
49	B4	10	VAL
49	B4	14	ILE
49	B4	17	GLN
49	B4	21	VAL
49	B4	24	THR
49	B4	27	THR
49	B4	32	HIS
49	B4	33	VAL
49	B4	39	VAL
49	B4	41	PRO
49	B4	49	PHE
49	B4	50	LEU
49	B4	51	ASP
49	B4	52	THR
49	B4	55	ARG
49	B4	56	VAL
49	B4	58	LYS
49	B4	59	PHE
49	B4	60	ASN

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Mol	Chain	Res	Type
49	B4	64	GLY
49	B4	68	ARG
50	B5	7	PRO
50	B5	9	LYS
50	B5	13	LYS
50	B5	14	SER
50	B5	16	ARG
50	B5	19	ARG
50	B5	20	ARG
50	B5	30	LEU
50	B5	43	HIS
50	B5	52	TYR
50	B5	57	VAL
51	B6	6	PRO
51	B6	8	ILE
51	B6	19	GLY
51	B6	20	PHE
51	B6	30	ASN
51	B6	32	GLN
51	B6	33	ALA
51	B6	34	LYS
51	B6	36	GLU
51	B6	45	LYS
52	B7	4	THR
52	B7	9	ASN
52	B7	10	ARG
52	B7	11	LYS
52	B7	12	ARG
52	B7	13	ALA
52	B7	14	LYS
52	B7	15	THR
52	B7	18	PHE
52	B7	19	ARG
52	B7	20	ALA
52	B7	22	MET
52	B7	23	LYS
52	B7	26	SER
52	B7	29	ASN
52	B7	30	ILE
52	B7	31	LEU
52	B7	33	ARG
52	B7	34	ARG

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Mol	Chain	Res	Type
52	B7	35	ARG
52	B7	36	ALA
52	B7	37	LYS
52	B7	39	ARG
52	B7	43	THR
52	B7	44	VAL
52	B7	45	SER
53	B8	5	LYS
53	B8	6	THR
53	B8	7	HIS
53	B8	8	LYS
53	B8	9	MET
53	B8	11	LYS
53	B8	13	ARG
53	B8	14	ILE
53	B8	15	LYS
53	B8	26	LYS
53	B8	27	SER
53	B8	30	ARG
53	B8	32	GLN
53	B8	34	THR
53	B8	39	ASP
53	B8	42	ARG
53	B8	53	ALA
53	B8	56	ALA
53	B8	57	ARG
53	B8	58	MET
53	B8	59	LYS
53	B8	61	MET
53	B8	62	LEU
54	B9	4	ARG
54	B9	6	SER
54	B9	11	CYS
54	B9	14	CYS
54	B9	28	SER
54	B9	33	LYS
55	BK	19	THR
55	BK	27	ALA
55	BK	28	LEU
55	BK	46	THR
55	BK	63	ASP
55	BK	64	LYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
55	BK	66	PHE
55	BK	67	THR
55	BK	68	PHE
55	BK	75	ALA
55	BK	76	SER
55	BK	86	GLU
55	BK	87	LYS
55	BK	90	SER
55	BK	97	VAL
55	BK	102	ARG
55	BK	103	LYS
55	BK	114	PRO
55	BK	118	ALA
55	BK	121	LEU
55	BK	122	GLU
5	AB	15	VAL
5	AB	17	PHE
5	AB	181	PHE
5	AB	232	PRO
6	AC	4	LYS
6	AC	25	GLY
6	AC	98	ASN
6	AC	179	ARG
6	AC	206	GLU
7	AD	12	CYS
7	AD	30	LYS
8	AE	11	ILE
8	AE	37	ARG
8	AE	95	ALA
9	AF	69	GLU
11	AH	89	PRO
12	AI	68	GLY
12	AI	103	THR
12	AI	116	LYS
13	AJ	34	VAL
13	AJ	52	GLY
13	AJ	72	VAL
14	AK	126	ARG
15	AL	77	LEU
15	AL	105	TYR
15	AL	116	SER
15	AL	121	GLY

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Mol	Chain	Res	Type
16	AM	7	VAL
17	AN	17	LYS
20	AQ	68	ARG
21	AR	37	VAL
22	AS	64	GLU
23	AT	68	LYS
24	AU	17	THR
24	AU	21	TYR
27	BD	77	VAL
27	BD	86	ARG
27	BD	117	SER
27	BD	147	PRO
27	BD	154	VAL
27	BD	159	THR
27	BD	160	SER
27	BD	176	ALA
27	BD	178	GLY
27	BD	183	ILE
27	BD	198	GLY
27	BD	209	ASN
27	BD	211	HIS
27	BD	212	HIS
27	BD	235	PRO
28	BE	67	THR
28	BE	76	PRO
28	BE	87	GLU
28	BE	102	ASP
28	BE	104	PHE
28	BE	176	HIS
28	BE	186	GLU
28	BE	206	LYS
28	BE	225	LYS
28	BE	245	ARG
29	BF	20	ASP
29	BF	26	VAL
29	BF	33	LYS
29	BF	49	ASP
29	BF	101	ASP
29	BF	143	ASP
29	BF	213	ALA
29	BF	217	GLU
29	BF	239	ALA

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
30	BG	28	GLY
30	BG	37	ALA
30	BG	61	PHE
30	BG	102	GLY
31	BH	8	ILE
31	BH	50	THR
31	BH	60	HIS
31	BH	65	GLY
31	BH	70	LEU
31	BH	71	LEU
31	BH	98	GLN
31	BH	109	SER
31	BH	131	ILE
31	BH	139	ARG
31	BH	159	LYS
32	BI	8	ASP
32	BI	10	LYS
32	BI	22	ALA
32	BI	61	GLU
32	BI	83	ALA
32	BI	106	HIS
32	BI	122	ARG
32	BI	123	ALA
32	BI	124	LEU
32	BI	145	VAL
33	BN	19	MET
33	BN	31	LEU
33	BN	40	ASN
33	BN	42	GLU
33	BN	46	ILE
33	BN	48	GLY
33	BN	66	ASP
33	BN	77	GLY
33	BN	82	THR
33	BN	92	GLN
33	BN	94	GLY
33	BN	96	GLU
34	BO	22	ILE
34	BO	29	GLY
34	BO	45	ASP
34	BO	53	LYS
34	BO	54	LYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BO	72	PRO
35	BP	71	GLU
35	BP	110	GLY
35	BP	116	HIS
35	BP	130	ARG
36	BQ	27	GLY
36	BQ	57	ARG
36	BQ	64	ALA
36	BQ	65	ARG
36	BQ	67	ALA
36	BQ	90	PHE
36	BQ	95	GLU
36	BQ	116	HIS
36	BQ	117	GLY
36	BQ	121	ASP
36	BQ	131	ALA
36	BQ	136	TRP
37	BS	18	THR
37	BS	40	ASN
37	BS	42	HIS
37	BS	65	ASP
37	BS	67	ALA
37	BS	88	ALA
37	BS	93	GLN
37	BS	121	GLY
37	BS	122	ALA
38	BT	16	GLY
38	BT	25	ASP
38	BT	48	ASN
39	BW	12	ILE
39	BW	13	SER
39	BW	15	ARG
39	BW	16	LYS
39	BW	26	GLY
39	BW	31	GLU
39	BW	47	VAL
39	BW	49	LYS
39	BW	50	VAL
39	BW	70	TYR
39	BW	80	PRO
39	BW	91	GLY
39	BW	99	ARG

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Mol	Chain	Res	Type
39	BW	105	VAL
40	BX	14	ALA
40	BX	41	VAL
40	BX	50	GLU
40	BX	59	ASP
40	BX	73	ASP
41	BY	5	ASP
41	BY	21	LYS
41	BY	34	GLU
41	BY	56	ALA
41	BY	68	ASP
41	BY	81	LYS
41	BY	92	ASP
41	BY	106	GLU
42	BZ	2	GLU
42	BZ	5	ALA
42	BZ	7	PRO
42	BZ	21	ALA
42	BZ	27	GLU
42	BZ	37	LYS
42	BZ	39	PHE
42	BZ	42	ALA
42	BZ	53	ASP
42	BZ	58	GLY
42	BZ	59	GLY
42	BZ	64	ALA
42	BZ	76	ARG
42	BZ	112	LEU
42	BZ	127	PRO
42	BZ	139	THR
42	BZ	143	ILE
42	BZ	150	GLY
42	BZ	157	GLY
42	BZ	167	THR
43	BR	42	LYS
43	BR	46	GLY
43	BR	49	ASP
43	BR	58	GLY
43	BR	88	ARG
43	BR	90	ARG
43	BR	92	GLY
43	BR	117	VAL

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Mol	Chain	Res	Type
44	BU	12	ARG
44	BU	18	LEU
44	BU	31	GLN
44	BU	42	ALA
44	BU	45	TYR
44	BU	73	GLY
44	BU	110	VAL
44	BU	113	SER
44	BU	115	ASN
44	BU	117	ARG
45	BV	17	GLY
45	BV	30	GLY
45	BV	42	GLY
45	BV	56	VAL
45	BV	75	LYS
46	B2	22	ASP
46	B2	27	LEU
46	B2	39	ALA
46	B2	61	GLY
47	B3	16	PRO
47	B3	44	ARG
47	B3	45	GLY
48	B0	19	LYS
48	B0	42	GLY
48	B0	54	GLY
48	B0	67	VAL
49	B4	8	LYS
49	B4	12	CYS
49	B4	22	MET
49	B4	26	SER
49	B4	40	HIS
49	B4	47	GLU
49	B4	63	PHE
50	B5	15	LYS
50	B5	24	ALA
50	B5	37	HIS
50	B5	42	SER
50	B5	45	ILE
50	B5	47	PRO
51	B6	3	LYS
51	B6	17	GLY
51	B6	18	THR

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Mol	Chain	Res	Type
51	B6	23	THR
51	B6	43	VAL
51	B6	48	VAL
52	B7	21	ARG
52	B7	25	LYS
52	B7	27	GLY
52	B7	28	ARG
52	B7	42	LEU
53	B8	28	GLY
53	B8	36	LYS
54	B9	3	VAL
54	B9	9	LYS
55	BK	26	PRO
55	BK	115	ASP
5	AB	96	ARG
5	AB	152	PHE
6	AC	64	VAL
7	AD	4	TYR
7	AD	179	GLU
11	AH	75	ARG
12	AI	55	ALA
13	AJ	54	PHE
14	AK	103	LEU
15	AL	17	LYS
15	AL	24	VAL
15	AL	83	VAL
17	AN	31	ARG
19	AP	43	LYS
19	AP	81	ARG
27	BD	69	ASP
27	BD	78	ALA
27	BD	84	PRO
27	BD	101	ARG
27	BD	109	LEU
27	BD	115	ILE
27	BD	132	GLU
27	BD	193	GLU
28	BE	39	GLN
28	BE	63	GLU
28	BE	75	THR
28	BE	77	PRO
28	BE	83	LEU

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Mol	Chain	Res	Type
28	BE	103	GLU
28	BE	177	ALA
28	BE	187	HIS
28	BE	193	PHE
28	BE	213	PRO
28	BE	222	ARG
28	BE	223	LYS
28	BE	299	SER
29	BF	29	ASP
29	BF	34	ALA
29	BF	52	ALA
30	BG	20	LYS
30	BG	53	LYS
30	BG	64	ARG
30	BG	66	GLY
30	BG	93	LEU
31	BH	55	SER
31	BH	68	ARG
31	BH	91	VAL
31	BH	112	VAL
31	BH	137	LYS
31	BH	154	GLU
31	BH	168	VAL
32	BI	24	GLY
33	BN	38	VAL
33	BN	41	ALA
33	BN	108	PRO
34	BO	50	GLY
34	BO	99	PHE
35	BP	57	VAL
35	BP	68	GLU
35	BP	104	ASP
35	BP	132	LYS
35	BP	136	ALA
36	BQ	21	SER
36	BQ	44	ALA
36	BQ	51	GLU
36	BQ	60	ALA
36	BQ	112	ALA
36	BQ	126	VAL
36	BQ	146	THR
37	BS	15	GLU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
37	BS	56	ASP
37	BS	87	LEU
38	BT	36	CYS
39	BW	83	LYS
39	BW	98	LYS
40	BX	24	LEU
40	BX	34	LYS
41	BY	49	GLU
41	BY	70	ALA
41	BY	71	VAL
41	BY	102	ASP
42	BZ	10	PRO
42	BZ	11	LYS
42	BZ	26	LYS
42	BZ	103	ARG
42	BZ	125	PRO
44	BU	11	ARG
44	BU	19	LYS
44	BU	26	GLY
44	BU	60	LEU
45	BV	32	LYS
45	BV	50	ASP
45	BV	60	VAL
45	BV	90	PHE
46	B2	24	LYS
46	B2	45	ARG
47	B3	2	PRO
48	B0	32	LYS
48	B0	45	PHE
48	B0	69	PHE
49	B4	67	TYR
50	B5	51	TYR
52	B7	2	LYS
53	B8	12	ARG
53	B8	55	TRP
55	BK	21	ALA
55	BK	113	MET
5	AB	158	LEU
6	AC	16	ARG
6	AC	28	GLN
6	AC	66	VAL
7	AD	196	LEU

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Mol	Chain	Res	Type
10	AG	90	GLU
11	AH	65	TYR
11	AH	73	ASP
11	AH	77	GLU
14	AK	13	GLN
14	AK	112	THR
14	AK	128	ALA
15	AL	76	ASN
15	AL	96	VAL
15	AL	126	LYS
16	AM	15	VAL
16	AM	117	VAL
19	AP	13	HIS
19	AP	44	THR
21	AR	21	LYS
21	AR	87	ARG
23	AT	69	GLY
23	AT	97	ALA
23	AT	98	PRO
27	BD	197	GLY
27	BD	206	LYS
27	BD	214	MET
27	BD	236	PHE
28	BE	173	ARG
28	BE	243	PRO
28	BE	254	GLY
28	BE	262	THR
28	BE	263	GLU
29	BF	32	GLY
29	BF	39	GLN
29	BF	119	ALA
29	BF	154	VAL
30	BG	25	MET
30	BG	45	THR
30	BG	46	GLY
30	BG	85	GLN
30	BG	135	VAL
31	BH	74	MET
31	BH	152	PRO
32	BI	37	ILE
32	BI	60	GLU
32	BI	69	LYS

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Mol	Chain	Res	Type
32	BI	135	PRO
33	BN	33	GLY
33	BN	71	TYR
33	BN	75	PRO
34	BO	17	ARG
34	BO	104	ARG
36	BQ	120	HIS
36	BQ	137	ARG
36	BQ	143	VAL
37	BS	19	ASP
37	BS	28	LYS
37	BS	119	GLN
38	BT	14	GLU
38	BT	39	ASN
39	BW	103	ILE
41	BY	41	ARG
42	BZ	70	GLN
42	BZ	91	PRO
42	BZ	109	GLN
42	BZ	117	VAL
42	BZ	151	ASP
42	BZ	152	ILE
42	BZ	156	GLU
42	BZ	166	LEU
43	BR	27	SER
43	BR	59	ASP
44	BU	14	HIS
44	BU	46	GLU
44	BU	87	ASN
44	BU	104	GLU
45	BV	20	ILE
45	BV	54	TYR
46	B2	14	ALA
46	B2	15	GLU
47	B3	25	ALA
47	B3	40	THR
48	B0	7	VAL
50	B5	11	THR
51	B6	21	TYR
53	B8	19	THR
54	B9	12	ASP
54	B9	21	GLY

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
55	BK	73	PRO
55	BK	85	ILE
55	BK	123	ALA
5	AB	191	ASP
7	AD	131	ARG
7	AD	134	ASP
7	AD	143	GLY
9	AF	15	ASP
12	AI	105	ASP
13	AJ	32	ALA
13	AJ	58	ASP
13	AJ	90	LEU
14	AK	113	PRO
15	AL	22	SER
15	AL	23	LYS
19	AP	15	PRO
27	BD	63	ILE
27	BD	202	LYS
28	BE	62	ARG
28	BE	70	VAL
28	BE	265	ASN
30	BG	95	THR
30	BG	151	ILE
31	BH	117	GLU
31	BH	118	GLU
33	BN	7	ASP
33	BN	27	ALA
33	BN	87	LEU
33	BN	97	ALA
34	BO	2	ILE
34	BO	63	VAL
34	BO	110	ASP
35	BP	101	ASP
36	BQ	54	VAL
36	BQ	100	GLY
36	BQ	103	ALA
38	BT	6	CYS
38	BT	32	CYS
38	BT	55	ALA
39	BW	48	ALA
41	BY	51	LEU
41	BY	101	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
42	BZ	50	GLY
42	BZ	52	PHE
42	BZ	111	GLY
43	BR	85	PRO
44	BU	74	MET
44	BU	111	ASP
46	B2	13	PRO
46	B2	62	GLU
47	B3	59	VAL
49	B4	3	LYS
49	B4	70	GLY
49	B4	71	SER
50	B5	5	PRO
50	B5	26	THR
51	B6	40	TYR
51	B6	47	HIS
53	B8	52	LYS
55	BK	61	TYR
55	BK	91	GLU
55	BK	100	VAL
55	BK	136	GLY
5	AB	130	ARG
10	AG	81	GLY
15	AL	19	ARG
20	AQ	4	LYS
20	AQ	66	SER
27	BD	185	GLY
27	BD	196	ASN
28	BE	226	HIS
28	BE	309	PRO
30	BG	68	PRO
30	BG	140	ARG
31	BH	157	LYS
32	BI	40	THR
34	BO	95	GLY
36	BQ	72	VAL
36	BQ	153	PRO
37	BS	47	LEU
37	BS	96	GLY
37	BS	104	ILE
39	BW	14	PRO
41	BY	77	VAL

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Mol	Chain	Res	Type
42	BZ	78	PRO
42	BZ	175	ARG
44	BU	15	LYS
47	B3	47	VAL
49	B4	25	MET
50	B5	46	CYS
51	B6	49	VAL
55	BK	18	ALA
55	BK	132	ALA
6	AC	5	ILE
16	AM	68	GLY
17	AN	7	ILE
28	BE	218	GLY
28	BE	240	PRO
28	BE	298	GLY
29	BF	209	GLY
31	BH	125	PRO
39	BW	21	VAL
41	BY	23	VAL
41	BY	42	VAL
46	B2	43	PRO
51	B6	41	ASP
52	B7	6	GLN
55	BK	16	GLY
55	BK	23	PRO
6	AC	81	GLY
7	AD	109	GLY
12	AI	100	GLY
17	AN	56	VAL
19	AP	19	ILE
22	AS	8	GLY
22	AS	45	VAL
27	BD	105	ALA
27	BD	194	VAL
28	BE	219	VAL
33	BN	133	GLY
35	BP	128	GLY
37	BS	85	GLY
41	BY	53	GLY
48	B0	73	GLY
55	BK	139	VAL
5	AB	124	SER

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Mol	Chain	Res	Type
10	AG	71	PRO
15	AL	31	PRO
23	AT	96	GLY
28	BE	235	ILE
30	BG	136	ARG
32	BI	130	PRO
41	BY	36	GLY
42	BZ	90	GLU
45	BV	46	VAL
6	AC	14	ILE
9	AF	68	PRO
31	BH	130	ILE
32	BI	4	ILE
37	BS	110	THR
42	BZ	113	VAL
47	B3	13	ILE
55	BK	96	ILE
5	AB	183	PRO
13	AJ	82	ILE
36	BQ	50	VAL
45	BV	22	VAL

### 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	
5	AB	202/220 (92%)	173 (86%)	29 (14%)	3	16
6	AC	160/188 (85%)	146 (91%)	14 (9%)	10	31
7	AD	180/181 (99%)	162 (90%)	18 (10%)	7	26
8	AE	115/123 (94%)	94 (82%)	21 (18%)	1	10
9	AF	90/90 (100%)	83 (92%)	7 (8%)	12	36
10	AG	126/127 (99%)	116 (92%)	10 (8%)	12	36
11	AH	119/119 (100%)	92 (77%)	27 (23%)	1	5
12	AI	98/99 (99%)	90 (92%)	8 (8%)	11	34

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	AJ	88/92 (96%)	77 (88%)	11 (12%)	4	19
14	AK	90/99 (91%)	85 (94%)	5 (6%)	21	46
15	AL	104/111 (94%)	93 (89%)	11 (11%)	6	24
16	AM	100/101 (99%)	87 (87%)	13 (13%)	4	18
17	AN	49/50 (98%)	43 (88%)	6 (12%)	5	20
18	AO	79/80 (99%)	70 (89%)	9 (11%)	5	21
19	AP	72/74 (97%)	62 (86%)	10 (14%)	3	17
20	AQ	96/97 (99%)	87 (91%)	9 (9%)	8	28
21	AR	64/77 (83%)	57 (89%)	7 (11%)	6	23
22	AS	71/80 (89%)	64 (90%)	7 (10%)	8	26
23	AT	76/82 (93%)	68 (90%)	8 (10%)	7	24
24	AU	19/22 (86%)	19 (100%)	0	100	100
27	BD	135/135 (100%)	99 (73%)	36 (27%)	0	3
28	BE	156/284 (55%)	128 (82%)	28 (18%)	2	10
29	BF	152/193 (79%)	124 (82%)	28 (18%)	1	10
30	BG	102/147 (69%)	93 (91%)	9 (9%)	10	31
31	BH	137/147 (93%)	111 (81%)	26 (19%)	1	9
32	BI	119/119 (100%)	98 (82%)	21 (18%)	2	11
33	BN	95/121 (78%)	80 (84%)	15 (16%)	2	14
34	BO	101/101 (100%)	81 (80%)	20 (20%)	1	8
35	BP	67/126 (53%)	56 (84%)	11 (16%)	2	13
36	BQ	110/110 (100%)	83 (76%)	27 (24%)	0	4
37	BS	89/149 (60%)	73 (82%)	16 (18%)	1	10
38	BT	44/52 (85%)	30 (68%)	14 (32%)	0	2
39	BW	88/92 (96%)	74 (84%)	14 (16%)	2	14
40	BX	67/73 (92%)	44 (66%)	23 (34%)	0	1
41	BY	97/105 (92%)	80 (82%)	17 (18%)	2	11
42	BZ	151/203 (74%)	130 (86%)	21 (14%)	3	17
43	BR	89/101 (88%)	71 (80%)	18 (20%)	1	7
44	BU	96/97 (99%)	68 (71%)	28 (29%)	0	2
45	BV	79/79 (100%)	69 (87%)	10 (13%)	4	19

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	B2	51/56 (91%)	37 (72%)	14 (28%)	0	3
47	B3	52/52 (100%)	47 (90%)	5 (10%)	8	27
48	B0	64/67 (96%)	57 (89%)	7 (11%)	6	23
49	B4	66/66 (100%)	54 (82%)	12 (18%)	1	10
50	B5	51/53 (96%)	43 (84%)	8 (16%)	2	14
51	B6	46/69 (67%)	39 (85%)	7 (15%)	3	15
52	B7	39/40 (98%)	31 (80%)	8 (20%)	1	7
53	B8	50/51 (98%)	39 (78%)	11 (22%)	1	6
54	B9	34/35 (97%)	30 (88%)	4 (12%)	5	20
55	BK	108/113 (96%)	104 (96%)	4 (4%)	34	58
All	All	4533/5148 (88%)	3841 (85%)	692 (15%)	2	15

All (692) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	AB	10	LEU
5	AB	11	LEU
5	AB	15	VAL
5	AB	17	PHE
5	AB	21	ARG
5	AB	23	ARG
5	AB	28	PHE
5	AB	30	ARG
5	AB	36	ARG
5	AB	42	ILE
5	AB	48	MET
5	AB	64	ARG
5	AB	68	ILE
5	AB	96	ARG
5	AB	103	THR
5	AB	135	GLN
5	AB	147	LYS
5	AB	152	PHE
5	AB	154	LEU
5	AB	158	LEU
5	AB	162	ILE
5	AB	169	LYS
5	AB	198	ASP

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Mol	Chain	Res	Type
5	AB	204	ASN
5	AB	205	ASP
5	AB	209	ARG
5	AB	212	GLN
5	AB	215	LEU
5	AB	238	LEU
6	AC	3	ASN
6	AC	23	TYR
6	AC	28	GLN
6	AC	52	LEU
6	AC	82	GLU
6	AC	91	LEU
6	AC	98	ASN
6	AC	99	VAL
6	AC	156	ARG
6	AC	176	HIS
6	AC	177	THR
6	AC	188	LEU
6	AC	192	THR
6	AC	196	LEU
7	AD	9	CYS
7	AD	20	TYR
7	AD	31	CYS
7	AD	33	MET
7	AD	53	ASP
7	AD	60	GLU
7	AD	61	LYS
7	AD	71	SER
7	AD	78	LEU
7	AD	79	PHE
7	AD	103	ASN
7	AD	107	ARG
7	AD	122	ARG
7	AD	131	ARG
7	AD	182	LYS
7	AD	191	ARG
7	AD	193	ASP
7	AD	194	LEU
8	AE	5	ASP
8	AE	12	LEU
8	AE	13	ILE
8	AE	14	ARG

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Mol	Chain	Res	Type
8	AE	15	ARG
8	AE	20	GLN
8	AE	27	ARG
8	AE	28	PHE
8	AE	38	GLN
8	AE	41	VAL
8	AE	47	LYS
8	AE	56	GLN
8	AE	63	ARG
8	AE	64	ARG
8	AE	68	GLU
8	AE	80	ILE
8	AE	81	GLU
8	AE	89	ILE
8	AE	112	LEU
8	AE	135	THR
8	AE	150	ARG
9	AF	15	ASP
9	AF	48	LEU
9	AF	57	GLN
9	AF	86	ARG
9	AF	94	GLN
9	AF	95	GLU
9	AF	98	LEU
10	AG	3	ARG
10	AG	8	GLU
10	AG	31	MET
10	AG	36	LYS
10	AG	37	ASN
10	AG	103	TRP
10	AG	104	LEU
10	AG	106	GLN
10	AG	125	MET
10	AG	155	ARG
11	AH	3	THR
11	AH	6	ILE
11	AH	8	ASP
11	AH	14	ARG
11	AH	17	THR
11	AH	18	ARG
11	AH	25	ASP
11	AH	26	VAL

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Mol	Chain	Res	Type
11	AH	37	ARG
11	AH	41	ARG
11	AH	49	GLU
11	AH	50	ARG
11	AH	56	LYS
11	AH	58	TYR
11	AH	59	LEU
11	AH	63	LEU
11	AH	65	TYR
11	AH	77	GLU
11	AH	84	ARG
11	AH	98	LYS
11	AH	100	ILE
11	AH	107	LEU
11	AH	112	LEU
11	AH	122	ARG
11	AH	126	LYS
11	AH	127	LEU
11	AH	136	GLU
12	AI	3	GLN
12	AI	37	PHE
12	AI	47	LEU
12	AI	50	LEU
12	AI	51	ARG
12	AI	102	LEU
12	AI	114	TYR
12	AI	116	LYS
13	AJ	13	HIS
13	AJ	45	ARG
13	AJ	47	PHE
13	AJ	60	ARG
13	AJ	62	HIS
13	AJ	63	PHE
13	AJ	71	LEU
13	AJ	73	ASP
13	AJ	82	ILE
13	AJ	87	THR
13	AJ	94	VAL
14	AK	18	ARG
14	AK	41	THR
14	AK	62	GLN
14	AK	103	LEU

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Mol	Chain	Res	Type
14	AK	116	HIS
15	AL	7	ILE
15	AL	22	SER
15	AL	23	LYS
15	AL	50	SER
15	AL	85	ILE
15	AL	99	HIS
15	AL	100	ILE
15	AL	101	VAL
15	AL	113	ARG
15	AL	126	LYS
15	AL	127	GLU
16	AM	32	GLU
16	AM	44	ARG
16	AM	48	LEU
16	AM	64	TRP
16	AM	66	LEU
16	AM	77	ASN
16	AM	80	ARG
16	AM	81	LEU
16	AM	86	CYS
16	AM	88	ARG
16	AM	96	LEU
16	AM	108	ARG
16	AM	110	ARG
17	AN	16	PHE
17	AN	21	TYR
17	AN	22	THR
17	AN	24	CYS
17	AN	42	ILE
17	AN	58	LYS
18	AO	3	ILE
18	AO	4	THR
18	AO	10	LYS
18	AO	34	LEU
18	AO	36	ILE
18	AO	38	ARG
18	AO	44	LYS
18	AO	46	HIS
18	AO	54	ARG
19	AP	3	LYS
19	AP	6	LEU

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Mol	Chain	Res	Type
19	AP	12	LYS
19	AP	21	VAL
19	AP	27	LYS
19	AP	28	ARG
19	AP	29	ASP
19	AP	34	GLU
19	AP	43	LYS
19	AP	48	TRP
20	AQ	20	THR
20	AQ	36	ILE
20	AQ	38	ARG
20	AQ	48	GLU
20	AQ	60	ILE
20	AQ	78	GLU
20	AQ	93	GLN
20	AQ	96	GLN
20	AQ	101	ARG
21	AR	28	GLU
21	AR	36	ASN
21	AR	47	THR
21	AR	49	LYS
21	AR	54	ARG
21	AR	79	LEU
21	AR	88	LYS
22	AS	15	LEU
22	AS	18	LYS
22	AS	25	LYS
22	AS	30	LEU
22	AS	34	TRP
22	AS	43	GLU
22	AS	61	TYR
23	AT	26	ASN
23	AT	30	LYS
23	AT	48	LYS
23	AT	71	THR
23	AT	73	HIS
23	AT	75	ASN
23	AT	90	GLN
23	AT	100	ILE
27	BD	62	ARG
27	BD	64	ILE
27	BD	65	ASP

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Mol	Chain	Res	Type
27	BD	66	PHE
27	BD	67	LYS
27	BD	68	ARG
27	BD	70	LYS
27	BD	71	ASP
27	BD	76	ARG
27	BD	83	ASP
27	BD	85	ASN
27	BD	86	ARG
27	BD	104	ILE
27	BD	110	LYS
27	BD	114	GLU
27	BD	120	ASP
27	BD	139	LEU
27	BD	141	HIS
27	BD	142	ASN
27	BD	143	ILE
27	BD	144	GLU
27	BD	152	GLN
27	BD	162	GLN
27	BD	174	ARG
27	BD	175	LEU
27	BD	181	ARG
27	BD	190	THR
27	BD	199	ARG
27	BD	201	ASP
27	BD	204	PHE
27	BD	205	VAL
27	BD	206	LYS
27	BD	223	ASN
27	BD	232	VAL
27	BD	233	ASP
27	BD	236	PHE
28	BE	38	VAL
28	BE	41	PHE
28	BE	49	THR
28	BE	63	GLU
28	BE	65	MET
28	BE	73	ILE
28	BE	86	TYR
28	BE	98	GLU
28	BE	104	PHE

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Mol	Chain	Res	Type
28	BE	107	GLU
28	BE	109	ASP
28	BE	174	LEU
28	BE	179	ASP
28	BE	183	ASP
28	BE	187	HIS
28	BE	192	ILE
28	BE	211	GLN
28	BE	215	LYS
28	BE	222	ARG
28	BE	228	ARG
28	BE	235	ILE
28	BE	238	LEU
28	BE	265	ASN
28	BE	268	LEU
28	BE	269	ILE
28	BE	295	LEU
28	BE	304	ASP
28	BE	311	PHE
29	BF	1	MET
29	BF	20	ASP
29	BF	35	VAL
29	BF	36	ARG
29	BF	39	GLN
29	BF	45	ASP
29	BF	49	ASP
29	BF	50	GLU
29	BF	54	LEU
29	BF	55	ARG
29	BF	56	THR
29	BF	59	GLU
29	BF	82	GLN
29	BF	85	LYS
29	BF	87	ARG
29	BF	94	THR
29	BF	100	LEU
29	BF	103	ASN
29	BF	107	ARG
29	BF	120	ASP
29	BF	142	ASP
29	BF	158	GLU
29	BF	167	ASP

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Mol	Chain	Res	Type
29	BF	211	ASP
29	BF	219	ASN
29	BF	223	LEU
29	BF	242	GLU
29	BF	245	GLU
30	BG	13	MET
30	BG	24	HIS
30	BG	67	ASP
30	BG	76	ARG
30	BG	77	ASP
30	BG	85	GLN
30	BG	93	LEU
30	BG	100	ASP
30	BG	104	PHE
31	BH	19	ASN
31	BH	32	LEU
31	BH	37	HIS
31	BH	40	MET
31	BH	49	ILE
31	BH	70	LEU
31	BH	76	GLU
31	BH	83	GLU
31	BH	86	LEU
31	BH	87	GLU
31	BH	101	LYS
31	BH	102	LEU
31	BH	108	TYR
31	BH	113	GLU
31	BH	115	GLU
31	BH	120	LEU
31	BH	121	GLU
31	BH	127	GLN
31	BH	130	ILE
31	BH	131	ILE
31	BH	137	LYS
31	BH	143	LEU
31	BH	157	LYS
31	BH	164	GLU
31	BH	167	LEU
31	BH	170	LEU
32	BI	5	PHE
32	BI	8	ASP

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Mol	Chain	Res	Type
32	BI	12	LYS
32	BI	15	LYS
32	BI	18	ILE
32	BI	19	LYS
32	BI	23	ASP
32	BI	25	TYR
32	BI	29	PHE
32	BI	43	ASN
32	BI	64	ASN
32	BI	70	GLU
32	BI	75	LEU
32	BI	79	ILE
32	BI	93	ILE
32	BI	102	LEU
32	BI	109	LYS
32	BI	110	LEU
32	BI	112	LYS
32	BI	119	ASP
32	BI	148	GLN
33	BN	7	ASP
33	BN	17	CYS
33	BN	19	MET
33	BN	21	ARG
33	BN	62	ASP
33	BN	70	PHE
33	BN	74	ARG
33	BN	76	ASP
33	BN	79	PHE
33	BN	87	LEU
33	BN	90	LYS
33	BN	98	PHE
33	BN	100	SER
33	BN	107	ASN
33	BN	139	LEU
34	BO	2	ILE
34	BO	3	GLN
34	BO	5	GLU
34	BO	7	ARG
34	BO	8	LEU
34	BO	23	LYS
34	BO	35	ILE
34	BO	66	LYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BO	73	ASP
34	BO	77	ILE
34	BO	78	ARG
34	BO	79	PHE
34	BO	82	ASN
34	BO	84	CYS
34	BO	87	ILE
34	BO	89	ASP
34	BO	90	ASP
34	BO	104	ARG
34	BO	106	LEU
34	BO	122	ILE
35	BP	53	ARG
35	BP	59	GLU
35	BP	67	ARG
35	BP	92	ASP
35	BP	94	ARG
35	BP	95	ASP
35	BP	109	LEU
35	BP	113	GLN
35	BP	123	ASP
35	BP	141	GLU
35	BP	145	LEU
36	BQ	10	ILE
36	BQ	16	ARG
36	BQ	17	ARG
36	BQ	32	LYS
36	BQ	33	MET
36	BQ	47	GLU
36	BQ	48	ASN
36	BQ	51	GLU
36	BQ	56	ILE
36	BQ	59	ASN
36	BQ	61	LEU
36	BQ	69	ASN
36	BQ	71	PHE
36	BQ	74	ASN
36	BQ	85	ILE
36	BQ	88	PHE
36	BQ	91	HIS
36	BQ	95	GLU
36	BQ	116	HIS

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Mol	Chain	Res	Type
36	BQ	125	TRP
36	BQ	133	GLU
36	BQ	134	PHE
36	BQ	136	TRP
36	BQ	142	LYS
36	BQ	148	ASN
36	BQ	149	ILE
36	BQ	152	SER
37	BS	12	ARG
37	BS	14	ARG
37	BS	17	ARG
37	BS	19	ASP
37	BS	21	HIS
37	BS	22	GLN
37	BS	27	LEU
37	BS	28	LYS
37	BS	34	LEU
37	BS	41	LYS
37	BS	83	LEU
37	BS	87	LEU
37	BS	93	GLN
37	BS	94	GLU
37	BS	106	LEU
37	BS	127	LEU
38	BT	4	ARG
38	BT	7	ASP
38	BT	8	TYR
38	BT	9	CYS
38	BT	12	ASP
38	BT	14	GLU
38	BT	20	MET
38	BT	21	PHE
38	BT	25	ASP
38	BT	36	CYS
38	BT	47	ARG
38	BT	49	LEU
38	BT	51	TRP
38	BT	54	THR
39	BW	11	ARG
39	BW	23	LEU
39	BW	52	GLU
39	BW	59	VAL

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Mol	Chain	Res	Type
39	BW	61	ASN
39	BW	67	ASP
39	BW	69	LEU
39	BW	84	ARG
39	BW	86	LEU
39	BW	90	ARG
39	BW	96	ILE
39	BW	103	ILE
39	BW	104	THR
39	BW	107	LEU
40	BX	2	TRP
40	BX	16	ASN
40	BX	17	ASP
40	BX	19	ASP
40	BX	20	PHE
40	BX	24	LEU
40	BX	25	GLN
40	BX	26	PHE
40	BX	30	ASP
40	BX	31	ARG
40	BX	36	GLU
40	BX	44	GLN
40	BX	45	TYR
40	BX	46	ASP
40	BX	47	VAL
40	BX	50	GLU
40	BX	56	ASN
40	BX	57	THR
40	BX	58	MET
40	BX	59	ASP
40	BX	68	LEU
40	BX	71	ASP
40	BX	76	GLU
41	BY	27	LEU
41	BY	31	LEU
41	BY	34	GLU
41	BY	51	LEU
41	BY	61	GLU
41	BY	66	ASP
41	BY	68	ASP
41	BY	73	HIS
41	BY	76	ASP

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Mol	Chain	Res	Type
41	BY	77	VAL
41	BY	81	LYS
41	BY	83	ASP
41	BY	91	LEU
41	BY	92	ASP
41	BY	97	ARG
41	BY	105	ASP
41	BY	112	LEU
42	BZ	2	GLU
42	BZ	24	TYR
42	BZ	26	LYS
42	BZ	32	PHE
42	BZ	35	ASP
42	BZ	39	PHE
42	BZ	40	ASP
42	BZ	41	ARG
42	BZ	43	PHE
42	BZ	45	GLN
42	BZ	49	THR
42	BZ	67	LYS
42	BZ	70	GLN
42	BZ	74	ARG
42	BZ	103	ARG
42	BZ	118	HIS
42	BZ	120	LEU
42	BZ	129	ARG
42	BZ	141	MET
42	BZ	151	ASP
42	BZ	154	LEU
43	BR	16	HIS
43	BR	20	LEU
43	BR	23	ASN
43	BR	28	LEU
43	BR	43	GLU
43	BR	52	ILE
43	BR	64	ARG
43	BR	67	LEU
43	BR	72	ASP
43	BR	77	ARG
43	BR	79	LEU
43	BR	80	PHE
43	BR	88	ARG

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Mol	Chain	Res	Type
43	BR	91	GLN
43	BR	98	LEU
43	BR	105	ARG
43	BR	107	ASP
43	BR	116	LEU
44	BU	8	ILE
44	BU	11	ARG
44	BU	13	ARG
44	BU	16	LYS
44	BU	18	LEU
44	BU	24	PHE
44	BU	25	TRP
44	BU	27	SER
44	BU	28	ARG
44	BU	32	TYR
44	BU	36	PHE
44	BU	39	LEU
44	BU	40	LEU
44	BU	41	ASN
44	BU	44	THR
44	BU	51	ARG
44	BU	59	ARG
44	BU	66	ASN
44	BU	71	LEU
44	BU	76	TYR
44	BU	85	ARG
44	BU	87	ASN
44	BU	95	LEU
44	BU	106	PHE
44	BU	111	ASP
44	BU	114	ARG
44	BU	115	ASN
44	BU	117	ARG
45	BV	13	ARG
45	BV	39	PHE
45	BV	44	GLN
45	BV	63	HIS
45	BV	69	ILE
45	BV	74	TYR
45	BV	80	TYR
45	BV	84	THR
45	BV	90	PHE

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Mol	Chain	Res	Type
45	BV	95	ILE
46	B2	7	GLU
46	B2	19	GLU
46	B2	20	LEU
46	B2	22	ASP
46	B2	26	GLU
46	B2	34	GLN
46	B2	45	ARG
46	B2	55	ARG
46	B2	56	ILE
46	B2	58	THR
46	B2	59	ILE
46	B2	60	GLN
46	B2	62	GLU
46	B2	63	GLU
47	B3	23	LEU
47	B3	30	ARG
47	B3	32	GLN
47	B3	38	GLU
47	B3	43	ILE
48	B0	10	SER
48	B0	14	ARG
48	B0	49	GLN
48	B0	57	HIS
48	B0	58	THR
48	B0	70	ILE
48	B0	81	ILE
49	B4	5	LEU
49	B4	15	ILE
49	B4	27	THR
49	B4	30	GLU
49	B4	31	ILE
49	B4	43	TRP
49	B4	46	GLU
49	B4	49	PHE
49	B4	57	ASP
49	B4	59	PHE
49	B4	68	ARG
49	B4	73	LYS
50	B5	3	LYS
50	B5	8	LYS
50	B5	10	LYS

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Mol	Chain	Res	Type
50	B5	11	THR
50	B5	17	ASP
50	B5	22	HIS
50	B5	33	CYS
50	B5	45	ILE
51	B6	4	ASP
51	B6	10	VAL
51	B6	22	TYR
51	B6	28	ARG
51	B6	40	TYR
51	B6	46	LYS
51	B6	54	LYS
52	B7	3	ARG
52	B7	4	THR
52	B7	8	ASN
52	B7	11	LYS
52	B7	24	THR
52	B7	31	LEU
52	B7	43	THR
52	B7	46	ASP
53	B8	4	MET
53	B8	5	LYS
53	B8	12	ARG
53	B8	16	ILE
53	B8	23	MET
53	B8	25	PHE
53	B8	31	HIS
53	B8	42	ARG
53	B8	58	MET
53	B8	60	LEU
53	B8	61	MET
54	B9	2	LYS
54	B9	8	LYS
54	B9	10	MET
54	B9	27	CYS
55	BK	52	MET
55	BK	107	GLU
55	BK	117	ASN
55	BK	129	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (129) such sidechains are listed below:



Mol	Chain	Res	Type
5	AB	94	ASN
5	AB	204	ASN
5	AB	212	GLN
5	AB	240	GLN
6	AC	136	GLN
6	AC	139	GLN
6	AC	162	GLN
6	AC	170	GLN
6	AC	176	HIS
7	AD	42	GLN
7	AD	45	GLN
7	AD	62	GLN
7	AD	103	ASN
7	AD	119	GLN
7	AD	123	HIS
7	AD	154	ASN
8	AE	56	GLN
9	AF	13	ASN
9	AF	18	GLN
9	AF	32	ASN
9	AF	57	GLN
9	AF	94	GLN
10	AG	64	GLN
10	AG	68	ASN
10	AG	106	GLN
11	AH	70	GLN
11	AH	82	HIS
12	AI	3	GLN
12	AI	87	GLN
13	AJ	56	HIS
14	AK	38	ASN
14	AK	116	HIS
15	AL	49	ASN
15	AL	75	HIS
15	AL	99	HIS
16	AM	92	HIS
17	AN	49	HIS
18	AO	28	GLN
18	AO	37	ASN
18	AO	42	HIS
19	AP	13	HIS
19	AP	16	HIS
19	AP	82	GLN

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Mol	Chain	Res	Type
20	AQ	16	GLN
22	AS	14	HIS
22	AS	47	HIS
22	AS	56	GLN
23	AT	26	ASN
23	AT	73	HIS
27	BD	60	GLN
27	BD	85	ASN
27	BD	89	ASN
27	BD	133	ASN
27	BD	141	HIS
27	BD	142	ASN
27	BD	162	GLN
27	BD	212	HIS
27	BD	223	ASN
28	BE	242	ASN
28	BE	259	HIS
28	BE	260	GLN
29	BF	90	HIS
29	BF	103	ASN
29	BF	163	HIS
29	BF	206	ASN
29	BF	219	ASN
30	BG	47	GLN
30	BG	133	ASN
31	BH	127	GLN
32	BI	33	GLN
32	BI	43	ASN
32	BI	52	GLN
32	BI	64	ASN
32	BI	103	GLN
33	BN	52	GLN
33	BN	92	GLN
33	BN	107	ASN
34	BO	82	ASN
35	BP	113	GLN
36	BQ	55	GLN
36	BQ	59	ASN
36	BQ	66	ASN
36	BQ	69	ASN
36	BQ	116	HIS
36	BQ	120	HIS

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Mol	Chain	Res	Type
36	BQ	148	ASN
37	BS	21	HIS
37	BS	46	GLN
38	BT	39	ASN
39	BW	61	ASN
40	BX	53	ASN
40	BX	56	ASN
41	BY	3	GLN
41	BY	7	GLN
41	BY	11	GLN
41	BY	17	HIS
41	BY	22	GLN
41	BY	43	ASN
41	BY	73	HIS
42	BZ	45	GLN
42	BZ	46	GLN
42	BZ	70	GLN
42	BZ	146	HIS
43	BR	31	HIS
43	BR	53	HIS
43	BR	61	HIS
44	BU	37	GLN
44	BU	72	HIS
44	BU	81	ASN
44	BU	87	ASN
44	BU	115	ASN
45	BV	44	GLN
45	BV	57	GLN
45	BV	86	HIS
46	B2	29	ASN
46	B2	42	ASN
47	B3	46	ASN
47	B3	52	HIS
48	B0	17	ASN
48	B0	71	ASN
49	B4	2	GLN
50	B5	29	ASN
50	B5	48	ASN
51	B6	27	ASN
52	B7	8	ASN
52	B7	29	ASN
53	B8	31	HIS

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Mol	Chain	Res	Type
54	B9	29	ASN
55	BK	31	HIS

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1497/1522 (98%)	520 (34%)	164 (10%)
2	AV	73/76 (96%)	16 (21%)	1 (1%)
25	BB	122/123 (99%)	45 (36%)	3 (2%)
26	BA	2780/2916 (95%)	1487 (53%)	360 (12%)
3	AW	70/76 (92%)	16 (22%)	3 (4%)
4	AX	5/18 (27%)	0	0
All	All	4547/4731 (96%)	2084 (45%)	531 (11%)

All (2084) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	6	G
1	AA	7	G
1	AA	8	A
1	AA	9	G
1	AA	12	U
1	AA	13	U
1	AA	14	U
1	AA	17	U
1	AA	25	C
1	AA	31	G
1	AA	32	A
1	AA	33	A
1	AA	38	G
1	AA	39	G
1	AA	41	G
1	AA	48	C
1	AA	49	U
1	AA	50	A
1	AA	51	A
1	AA	52	G
1	AA	54	C
1	AA	60	A
1	AA	62	U
1	AA	65	U

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Mol	Chain	Res	Type
1	AA	66	G
1	AA	68	G
1	AA	69	G
1	AA	70	G
1	AA	81	U
1	AA	83	U
1	AA	89	C
1	AA	97	G
1	AA	106	C
1	AA	108	G
1	AA	113	G
1	AA	114	U
1	AA	120	A
1	AA	121	C
1	AA	122	G
1	AA	123	C
1	AA	129(A)	G
1	AA	130	A
1	AA	131	C
1	AA	137	C
1	AA	144	G
1	AA	151	A
1	AA	152	A
1	AA	153	C
1	AA	161	A
1	AA	163	C
1	AA	181	G
1	AA	182	U
1	AA	190(E)	U
1	AA	190(F)	G
1	AA	190(G)	G
1	AA	193	C
1	AA	195	A
1	AA	196	A
1	AA	197	A
1	AA	198	G
1	AA	203	U
1	AA	204	U
1	AA	218	C
1	AA	219	C
1	AA	220	G
1	AA	231	G

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Mol	Chain	Res	Type
1	AA	236	G
1	AA	244	U
1	AA	245	C
1	AA	247	G
1	AA	251	G
1	AA	252	U
1	AA	253	U
1	AA	259	G
1	AA	263	A
1	AA	264	U
1	AA	266	G
1	AA	267	C
1	AA	275	G
1	AA	279	A
1	AA	280	C
1	AA	281	G
1	AA	287	U
1	AA	289	G
1	AA	291	C
1	AA	299	G
1	AA	301	G
1	AA	306	G
1	AA	308	C
1	AA	316	G
1	AA	317	G
1	AA	319	G
1	AA	321	A
1	AA	323	U
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	332	G
1	AA	345	C
1	AA	346	G
1	AA	352	C
1	AA	353	A
1	AA	355	C
1	AA	363	A
1	AA	366	C
1	AA	367	U
1	AA	368	U
1	AA	373	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	374	A
1	AA	388	G
1	AA	389	A
1	AA	390	C
1	AA	392	G
1	AA	397	A
1	AA	398	C
1	AA	406	G
1	AA	410	G
1	AA	412	A
1	AA	413	G
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	424	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	432	A
1	AA	433	C
1	AA	438	G
1	AA	439	A
1	AA	445	G
1	AA	450	G
1	AA	460	A
1	AA	461	C
1	AA	462	G
1	AA	480	U
1	AA	481	G
1	AA	482	A
1	AA	483	C
1	AA	484	G
1	AA	485	G
1	AA	486	U
1	AA	488	C
1	AA	496	A
1	AA	497	A
1	AA	498	U
1	AA	500	G
1	AA	505	G
1	AA	508	C
1	AA	509	A

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Mol	Chain	Res	Type
1	AA	510	A
1	AA	511	C
1	AA	512	U
1	AA	517	G
1	AA	518	C
1	AA	519	C
1	AA	520	A
1	AA	521	G
1	AA	523	A
1	AA	524	G
1	AA	527	G
1	AA	530	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	536	C
1	AA	538	G
1	AA	546	G
1	AA	547	A
1	AA	551	U
1	AA	552	U
1	AA	553	A
1	AA	555	C
1	AA	557	G
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	563	A
1	AA	566	G
1	AA	567	G
1	AA	568	G
1	AA	569	C
1	AA	570	G
1	AA	571	U
1	AA	572	A
1	AA	573	A
1	AA	574	A
1	AA	575	G
1	AA	576	G
1	AA	577	G
1	AA	579	G

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Mol	Chain	Res	Type
1	AA	582	U
1	AA	589	C
1	AA	591	U
1	AA	594	G
1	AA	595	G
1	AA	596	C
1	AA	607	A
1	AA	609	A
1	AA	618	C
1	AA	619	U
1	AA	623	C
1	AA	627	G
1	AA	632	A
1	AA	637	G
1	AA	642	A
1	AA	643	C
1	AA	650	G
1	AA	653	A
1	AA	654	G
1	AA	661	G
1	AA	665	A
1	AA	666	G
1	AA	667	G
1	AA	671	G
1	AA	672	U
1	AA	673	G
1	AA	674	G
1	AA	687	A
1	AA	688	G
1	AA	694	A
1	AA	695	A
1	AA	702	A
1	AA	703	G
1	AA	704	A
1	AA	714	G
1	AA	716	A
1	AA	718	G
1	AA	719	C
1	AA	721	G
1	AA	723	U
1	AA	724	G
1	AA	731	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	733	A
1	AA	745	C
1	AA	749	C
1	AA	751	U
1	AA	753	A
1	AA	754	C
1	AA	755	G
1	AA	757	U
1	AA	759	A
1	AA	760	G
1	AA	761	G
1	AA	765	G
1	AA	774	G
1	AA	775	G
1	AA	777	A
1	AA	781	A
1	AA	782	A
1	AA	785	G
1	AA	787	A
1	AA	790	A
1	AA	791	G
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	801	U
1	AA	811	C
1	AA	812	C
1	AA	813	U
1	AA	814	A
1	AA	815	A
1	AA	817	C
1	AA	818	G
1	AA	820	U
1	AA	828	A
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	864	A
1	AA	866	C
1	AA	870	U
1	AA	872	A
1	AA	873	A

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Mol	Chain	Res	Type
1	AA	874	G
1	AA	883	C
1	AA	884	U
1	AA	885	G
1	AA	889	A
1	AA	890	G
1	AA	891	U
1	AA	898	G
1	AA	902	G
1	AA	913	A
1	AA	914	A
1	AA	916	G
1	AA	917	G
1	AA	919	A
1	AA	926	G
1	AA	927	G
1	AA	929	G
1	AA	931	C
1	AA	934	C
1	AA	935	A
1	AA	940	C
1	AA	945	G
1	AA	948	C
1	AA	949	A
1	AA	950	U
1	AA	956	U
1	AA	958	A
1	AA	959	A
1	AA	960	U
1	AA	961	U
1	AA	965	A
1	AA	966	G
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	980	C
1	AA	982	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	983	A
1	AA	984	C
1	AA	989	C
1	AA	991	U
1	AA	993	G
1	AA	994	A
1	AA	1005	A
1	AA	1006	C
1	AA	1007	C
1	AA	1013	G
1	AA	1022	G
1	AA	1023	G
1	AA	1025	U
1	AA	1026	G
1	AA	1038	C
1	AA	1042	G
1	AA	1045	C
1	AA	1046	A
1	AA	1050	G
1	AA	1053	G
1	AA	1054	C
1	AA	1055	A
1	AA	1056	U
1	AA	1062	U
1	AA	1064	G
1	AA	1065	U
1	AA	1066	C
1	AA	1067	A
1	AA	1068	G
1	AA	1078	U
1	AA	1079	G
1	AA	1084	G
1	AA	1085	U
1	AA	1086	U
1	AA	1089	G
1	AA	1095	U
1	AA	1096	C
1	AA	1099	G
1	AA	1101	A
1	AA	1102	A
1	AA	1104	G
1	AA	1107	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	1117	G
1	AA	1118	C
1	AA	1120	G
1	AA	1122	U
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1128	C
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1144	G
1	AA	1145	C
1	AA	1146	A
1	AA	1147	C
1	AA	1148	U
1	AA	1151	A
1	AA	1152	A
1	AA	1154	G
1	AA	1157	A
1	AA	1158	C
1	AA	1159	U
1	AA	1160	G
1	AA	1161	C
1	AA	1169	A
1	AA	1177	G
1	AA	1180	A
1	AA	1183	A
1	AA	1184	G
1	AA	1185	G
1	AA	1186	G
1	AA	1188	A
1	AA	1191	A
1	AA	1192	C
1	AA	1196	U
1	AA	1197	G
1	AA	1199	U

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Mol	Chain	Res	Type
1	AA	1200	C
1	AA	1201	A
1	AA	1202	G
1	AA	1211	U
1	AA	1212	U
1	AA	1214	C
1	AA	1215	G
1	AA	1220	G
1	AA	1224	G
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1228	C
1	AA	1236	A
1	AA	1237	C
1	AA	1238	A
1	AA	1240	U
1	AA	1241	G
1	AA	1249	C
1	AA	1250	A
1	AA	1251	A
1	AA	1252	A
1	AA	1253	G
1	AA	1256	A
1	AA	1257	U
1	AA	1258	G
1	AA	1260	C
1	AA	1263	C
1	AA	1268	A
1	AA	1270	C
1	AA	1279	A
1	AA	1280	A
1	AA	1281	U
1	AA	1282	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1289	A
1	AA	1292	U
1	AA	1293	G
1	AA	1297	C
1	AA	1298	C

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Mol	Chain	Res	Type
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1303	C
1	AA	1305	G
1	AA	1312	G
1	AA	1318	A
1	AA	1320	C
1	AA	1322	C
1	AA	1323	G
1	AA	1329	A
1	AA	1331	G
1	AA	1332	A
1	AA	1336	C
1	AA	1340	A
1	AA	1345	U
1	AA	1346	A
1	AA	1347	G
1	AA	1348	U
1	AA	1354	C
1	AA	1361	G
1	AA	1362	C
1	AA	1363	A
1	AA	1364	U
1	AA	1365	G
1	AA	1381	U
1	AA	1386	G
1	AA	1394	A
1	AA	1395	C
1	AA	1397	C
1	AA	1398	A
1	AA	1399	C
1	AA	1400	C
1	AA	1401	G
1	AA	1402	C
1	AA	1419	G
1	AA	1432	G
1	AA	1436	U
1	AA	1437	C
1	AA	1440	C
1	AA	1442	G

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Mol	Chain	Res	Type
1	AA	1443	G
1	AA	1449	C
1	AA	1452	C
1	AA	1454	G
1	AA	1468	A
1	AA	1475	G
1	AA	1482	G
1	AA	1488	G
1	AA	1490	C
1	AA	1497	G
1	AA	1498	U
1	AA	1499	A
1	AA	1500	A
1	AA	1502	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1519	A
1	AA	1520	G
1	AA	1526	G
1	AA	1528	U
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
1	AA	1533	C
1	AA	1534	A
1	AA	1535	C
1	AA	1540	U
1	AA	1541	U
1	AA	1542	U
2	AV	10	G
2	AV	16	U
2	AV	17	U
2	AV	18	G
2	AV	20	G
2	AV	35	A
2	AV	41	U
2	AV	46	G

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Mol	Chain	Res	Type
2	AV	47	U
2	AV	48	C
2	AV	49	C
2	AV	58	A
2	AV	59	U
2	AV	61	C
2	AV	73	A
2	AV	75	C
3	AW	2	C
3	AW	3	G
3	AW	17	U
3	AW	18	G
3	AW	19	G
3	AW	21	A
3	AW	26	G
3	AW	27	C
3	AW	34	G
3	AW	35	A
3	AW	36	A
3	AW	37	YYG
3	AW	41	U
3	AW	66	A
3	AW	75	C
3	AW	76	A
25	BB	0	A
25	BB	1	U
25	BB	2	C
25	BB	3	C
25	BB	6	C
25	BB	8	U
25	BB	9	G
25	BB	10	C
25	BB	12	C
25	BB	13	A
25	BB	14	U
25	BB	15	A
25	BB	16	G
25	BB	21	G
25	BB	25	A
25	BB	35	U
25	BB	40	U
25	BB	41	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
25	BB	42	C
25	BB	43	C
25	BB	45	A
25	BB	46	A
25	BB	48	A
25	BB	57	A
25	BB	59	A
25	BB	60	C
25	BB	62	C
25	BB	67	G
25	BB	69	G
25	BB	73	A
25	BB	76	G
25	BB	84	C
25	BB	87	G
25	BB	88	C
25	BB	89	G
25	BB	90	C
25	BB	96	G
25	BB	99	A
25	BB	103	U
25	BB	108	C
25	BB	109	G
25	BB	111	U
25	BB	117	G
25	BB	119	A
25	BB	120	U
26	BA	14	A
26	BA	16	G
26	BA	26	G
26	BA	27	G
26	BA	34	C
26	BA	40	C
26	BA	46	C
26	BA	49	A
26	BA	50	U
26	BA	51	G
26	BA	52	A
26	BA	54	G
26	BA	55	G
26	BA	60	G
26	BA	61	G

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Mol	Chain	Res	Type
26	BA	63	U
26	BA	71	A
26	BA	72	U
26	BA	73	A
26	BA	74	A
26	BA	75	G
26	BA	76	C
26	BA	82	G
26	BA	83	G
26	BA	84	A
26	BA	87	C
26	BA	88	G
26	BA	89	G
26	BA	90	U
26	BA	91	A
26	BA	92	G
26	BA	94	G
26	BA	95	G
26	BA	97	C
26	BA	98	G
26	BA	102	G
26	BA	103	A
26	BA	104	U
26	BA	107	C
26	BA	108	U
26	BA	109	G
26	BA	110	G
26	BA	112	U
26	BA	113	G
26	BA	117	G
26	BA	119	A
26	BA	120	U
26	BA	121	G
26	BA	125	G
26	BA	126	A
26	BA	129	C
26	BA	131	G
26	BA	132	G
26	BA	133	C
26	BA	136	G
26	BA	137	C
26	BA	137(A)	G

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Mol	Chain	Res	Type
26	BA	138	G
26	BA	139	G
26	BA	140	A
26	BA	141	A
26	BA	141(A)	C
26	BA	142	G
26	BA	143	C
26	BA	144	C
26	BA	152	G
26	BA	154	G
26	BA	163	U
26	BA	164	U
26	BA	172	C
26	BA	173	G
26	BA	175	G
26	BA	178	G
26	BA	179	G
26	BA	181	A
26	BA	182	A
26	BA	186	G
26	BA	191	A
26	BA	192	C
26	BA	193	U
26	BA	195	A
26	BA	196	A
26	BA	197	A
26	BA	198	C
26	BA	199	A
26	BA	204	A
26	BA	205	G
26	BA	215	G
26	BA	216	A
26	BA	218	A
26	BA	221	A
26	BA	222	A
26	BA	223	A
26	BA	224	G
26	BA	225	A
26	BA	226	G
26	BA	227	A
26	BA	228	A
26	BA	229	A

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Mol	Chain	Res	Type
26	BA	232	G
26	BA	233	A
26	BA	241	A
26	BA	242	G
26	BA	243	U
26	BA	245	G
26	BA	247	G
26	BA	248	G
26	BA	249	C
26	BA	250	G
26	BA	252	G
26	BA	255	A
26	BA	259	G
26	BA	265	A
26	BA	266	G
26	BA	268	C
26	BA	269	U
26	BA	270	A
26	BA	270(A)	A
26	BA	270(B)	A
26	BA	270(C)	C
26	BA	270(D)	C
26	BA	270(G)	C
26	BA	270(L)	U
26	BA	270(M)	U
26	BA	270(N)	G
26	BA	270(O)	U
26	BA	270(T)	G
26	BA	270(U)	C
26	BA	270(V)	G
26	BA	270(X)	G
26	BA	270(Y)	G
26	BA	270(Z)	U
26	BA	271(A)	C
26	BA	271(B)	G
26	BA	271(C)	U
26	BA	271	G
26	BA	273(F)	C
26	BA	274	G
26	BA	275	G
26	BA	276	A
26	BA	277	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	279	C
26	BA	280	C
26	BA	281	G
26	BA	282	A
26	BA	283	A
26	BA	286	C
26	BA	288	C
26	BA	289	A
26	BA	290	G
26	BA	291	C
26	BA	293	U
26	BA	295	G
26	BA	297	C
26	BA	302	C
26	BA	310	A
26	BA	311	A
26	BA	312	G
26	BA	313	C
26	BA	316	C
26	BA	317	G
26	BA	320	A
26	BA	321	G
26	BA	322	A
26	BA	323	G
26	BA	324	A
26	BA	325	G
26	BA	328	U
26	BA	329	G
26	BA	330	A
26	BA	331	A
26	BA	332	A
26	BA	333	G
26	BA	334	C
26	BA	337	C
26	BA	338	G
26	BA	339	U
26	BA	340	A
26	BA	341	G
26	BA	342	G
26	BA	347	A
26	BA	348	G
26	BA	349	G

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Mol	Chain	Res	Type
26	BA	350	U
26	BA	351	G
26	BA	354	G
26	BA	358	U
26	BA	359	A
26	BA	360	G
26	BA	362	U
26	BA	363(A)	A
26	BA	363(C)	G
26	BA	363(F)	A
26	BA	364	C
26	BA	365	C
26	BA	371	A
26	BA	372	G
26	BA	373	U
26	BA	374	A
26	BA	380	U
26	BA	386	G
26	BA	387	U
26	BA	388	G
26	BA	390	A
26	BA	391	G
26	BA	397	G
26	BA	401	A
26	BA	404	C
26	BA	405	U
26	BA	406	G
26	BA	408	G
26	BA	411	G
26	BA	422	A
26	BA	423	A
26	BA	428	A
26	BA	431	U
26	BA	434	U
26	BA	435	C
26	BA	436	C
26	BA	442	G
26	BA	444	C
26	BA	445	C
26	BA	446	G
26	BA	447	A
26	BA	448	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	449	A
26	BA	451	C
26	BA	452	G
26	BA	453	C
26	BA	455	C
26	BA	456	C
26	BA	457	A
26	BA	470	A
26	BA	471	A
26	BA	473	G
26	BA	474	G
26	BA	475	U
26	BA	477	A
26	BA	478	A
26	BA	479	A
26	BA	480	A
26	BA	481	G
26	BA	482	A
26	BA	483	A
26	BA	489	G
26	BA	492	A
26	BA	493	G
26	BA	497	A
26	BA	501	A
26	BA	503	A
26	BA	504	U
26	BA	505	A
26	BA	506	G
26	BA	507	A
26	BA	508	G
26	BA	509	C
26	BA	512	G
26	BA	518	G
26	BA	525	U
26	BA	526	A
26	BA	527	C
26	BA	528	A
26	BA	529	A
26	BA	530	G
26	BA	531	C
26	BA	532	A
26	BA	533	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	535	C
26	BA	541	C
26	BA	544	C
26	BA	545	G
26	BA	546	C
26	BA	548	A
26	BA	549	G
26	BA	551	G
26	BA	554	U
26	BA	559	G
26	BA	560	C
26	BA	561	G
26	BA	562	U
26	BA	563	G
26	BA	565	C
26	BA	566	U
26	BA	567	A
26	BA	568	U
26	BA	570	G
26	BA	571	A
26	BA	572	A
26	BA	573	G
26	BA	574	C
26	BA	575	A
26	BA	579	G
26	BA	586	A
26	BA	587	C
26	BA	588	U
26	BA	593	G
26	BA	595	C
26	BA	598	G
26	BA	599	G
26	BA	600	G
26	BA	601	C
26	BA	602	G
26	BA	603	A
26	BA	608	A
26	BA	609	A
26	BA	612	G
26	BA	613	U
26	BA	614	U
26	BA	615	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	616	A
26	BA	617	G
26	BA	620	G
26	BA	621	A
26	BA	622	G
26	BA	624	C
26	BA	625	G
26	BA	627	A
26	BA	628	G
26	BA	634	C
26	BA	637	A
26	BA	639	U
26	BA	640	C
26	BA	641	C
26	BA	643	A
26	BA	646	A
26	BA	647	G
26	BA	650	C
26	BA	653	A
26	BA	654	A
26	BA	655	A
26	BA	656	G
26	BA	662	G
26	BA	668	G
26	BA	669	G
26	BA	670	A
26	BA	671	C
26	BA	673	C
26	BA	675	A
26	BA	677	A
26	BA	684	G
26	BA	686	G
26	BA	687	C
26	BA	688	U
26	BA	690	G
26	BA	698	C
26	BA	699	A
26	BA	704	G
26	BA	705	A
26	BA	713	G
26	BA	715	G
26	BA	717	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	718	A
26	BA	721	C
26	BA	726	G
26	BA	727	A
26	BA	728	G
26	BA	729	G
26	BA	730	C
26	BA	736	C
26	BA	739	G
26	BA	740	U
26	BA	741	G
26	BA	746	A
26	BA	747	U
26	BA	748	G
26	BA	750	A
26	BA	751	A
26	BA	752	A
26	BA	753	C
26	BA	762	U
26	BA	764	A
26	BA	765	G
26	BA	771	G
26	BA	775	G
26	BA	776	G
26	BA	777	A
26	BA	779	U
26	BA	781	A
26	BA	782	A
26	BA	783	A
26	BA	784	A
26	BA	785	G
26	BA	786	C
26	BA	787	U
26	BA	788	A
26	BA	789	A
26	BA	790	C
26	BA	791	C
26	BA	793	A
26	BA	794	G
26	BA	799	G
26	BA	800	A
26	BA	801	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	802	A
26	BA	805	G
26	BA	806	C
26	BA	811	U
26	BA	812	C
26	BA	813	U
26	BA	816	C
26	BA	819	A
26	BA	820	A
26	BA	822	U
26	BA	826	U
26	BA	827	U
26	BA	828	U
26	BA	829	A
26	BA	830	G
26	BA	831	G
26	BA	833	U
26	BA	847	U
26	BA	848	G
26	BA	859	G
26	BA	860	U
26	BA	861	A
26	BA	863	A
26	BA	865	C
26	BA	866	A
26	BA	867	C
26	BA	870	A
26	BA	873	G
26	BA	875	G
26	BA	877	U
26	BA	878	A
26	BA	881	G
26	BA	886	C
26	BA	887	A
26	BA	888	C
26	BA	889	C
26	BA	890	A
26	BA	896	A
26	BA	897	C
26	BA	899	A
26	BA	902	C
26	BA	906	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	907	U
26	BA	910	A
26	BA	914	C
26	BA	915	C
26	BA	918	A
26	BA	919	G
26	BA	930	U
26	BA	931	G
26	BA	932	G
26	BA	933	A
26	BA	935	C
26	BA	941	A
26	BA	942	G
26	BA	943	U
26	BA	944	G
26	BA	945	A
26	BA	946	G
26	BA	949	C
26	BA	957	A
26	BA	958	U
26	BA	959	A
26	BA	961	C
26	BA	962	G
26	BA	964	C
26	BA	966	G
26	BA	968	G
26	BA	972	G
26	BA	973	A
26	BA	974	G
26	BA	974(A)	C
26	BA	975	G
26	BA	976	C
26	BA	980	A
26	BA	982	C
26	BA	983	A
26	BA	984	A
26	BA	985	C
26	BA	986	C
26	BA	989	G
26	BA	990	A
26	BA	991	C
26	BA	993	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	994	C
26	BA	995	C
26	BA	996	A
26	BA	997	G
26	BA	999	U
26	BA	1003	G
26	BA	1008	C
26	BA	1009	A
26	BA	1012	U
26	BA	1013	C
26	BA	1017	G
26	BA	1019	U
26	BA	1021	A
26	BA	1022	G
26	BA	1023	U
26	BA	1024	G
26	BA	1025	G
26	BA	1026	U
26	BA	1033	U
26	BA	1041	C
26	BA	1044	G
26	BA	1045	A
26	BA	1046	A
26	BA	1049	C
26	BA	1056	G
26	BA	1058	G
26	BA	1060	U
26	BA	1061	U
26	BA	1062	G
26	BA	1063	G
26	BA	1066	U
26	BA	1067	A
26	BA	1068	G
26	BA	1069	A
26	BA	1070	A
26	BA	1071	G
26	BA	1072	C
26	BA	1073	A
26	BA	1081	U
26	BA	1084	A
26	BA	1085	A
26	BA	1086	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1088	A
26	BA	1089	G
26	BA	1090	U
26	BA	1093	G
26	BA	1096	A
26	BA	1097	U
26	BA	1098	A
26	BA	1099	G
26	BA	1101	U
26	BA	1102	C
26	BA	1103	A
26	BA	1105	U
26	BA	1106	G
26	BA	1109	C
26	BA	1110	G
26	BA	1111	A
26	BA	1112	G
26	BA	1114	G
26	BA	1116	C
26	BA	1120	G
26	BA	1123	C
26	BA	1124	C
26	BA	1126	A
26	BA	1127	A
26	BA	1128	A
26	BA	1129	A
26	BA	1130	U
26	BA	1131	G
26	BA	1132	A
26	BA	1133	U
26	BA	1134	G
26	BA	1135	C
26	BA	1138	G
26	BA	1140	C
26	BA	1141	U
26	BA	1142	U
26	BA	142(A)	A
26	BA	1149	G
26	BA	1153	C
26	BA	1154	G
26	BA	1155	A
26	BA	1156	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1157	G
26	BA	1159	U
26	BA	1162	G
26	BA	1166	C
26	BA	1171	G
26	BA	1174	A
26	BA	1175	U
26	BA	1176	G
26	BA	1177	A
26	BA	1179	C
26	BA	1180	C
26	BA	1181	C
26	BA	1182	A
26	BA	1183	G
26	BA	1184	G
26	BA	1185	C
26	BA	1186	G
26	BA	1190	G
26	BA	1197	G
26	BA	1199	U
26	BA	1202	C
26	BA	1203	G
26	BA	1204	A
26	BA	1205	U
26	BA	1206	G
26	BA	1207	C
26	BA	1208	C
26	BA	1209	G
26	BA	1210	A
26	BA	1211	U
26	BA	1212	G
26	BA	1214	A
26	BA	1220	A
26	BA	1221	C
26	BA	1222	C
26	BA	1227	A
26	BA	1228	G
26	BA	1229	G
26	BA	1234	U
26	BA	1236	G
26	BA	1237	A
26	BA	1239	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1240	U
26	BA	1241	A
26	BA	1244	G
26	BA	1246	A
26	BA	1247	A
26	BA	1248	G
26	BA	1249	U
26	BA	1251	C
26	BA	1252	G
26	BA	1253	A
26	BA	1254	A
26	BA	1255	U
26	BA	1256	G
26	BA	1260	G
26	BA	1261	C
26	BA	1265	A
26	BA	1266	G
26	BA	1267	U
26	BA	1268	A
26	BA	1269	A
26	BA	1270	C
26	BA	1271	G
26	BA	1272	A
26	BA	1273	U
26	BA	1275	A
26	BA	1284	A
26	BA	1286	A
26	BA	1287	A
26	BA	1288	U
26	BA	1289	C
26	BA	1298	C
26	BA	1300	U
26	BA	1301	A
26	BA	1302	A
26	BA	1304	C
26	BA	1307	A
26	BA	1309	G
26	BA	1311	G
26	BA	1312	U
26	BA	1313	U
26	BA	1314	C
26	BA	1320	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1321	A
26	BA	1325	G
26	BA	1326	U
26	BA	1329	U
26	BA	1330	C
26	BA	1332	G
26	BA	1333	C
26	BA	1340	U
26	BA	1341	U
26	BA	1342	A
26	BA	1343	G
26	BA	1344	G
26	BA	1345	C
26	BA	1350	C
26	BA	1352	U
26	BA	1361	G
26	BA	1363	C
26	BA	1364	G
26	BA	1365	A
26	BA	1366	A
26	BA	1368	G
26	BA	1378	A
26	BA	1379	A
26	BA	1384	A
26	BA	1385	G
26	BA	1391	U
26	BA	1392	A
26	BA	1394	U
26	BA	1395	A
26	BA	1397	U
26	BA	1398	C
26	BA	1402	C
26	BA	1404	C
26	BA	1407	C
26	BA	1415	U
26	BA	1416	G
26	BA	1417	C
26	BA	1418	G
26	BA	1419	A
26	BA	1420	U
26	BA	1421	G
26	BA	1422	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1425	G
26	BA	1426	G
26	BA	1427	A
26	BA	1428	C
26	BA	1429	G
26	BA	1438	U
26	BA	1439	A
26	BA	444(A)	A
26	BA	449(A)	G
26	BA	1451	C
26	BA	1454	U
26	BA	1455	G
26	BA	1460	A
26	BA	1461	G
26	BA	1462	C
26	BA	1467	C
26	BA	1475	G
26	BA	1478	G
26	BA	1480	G
26	BA	1483	G
26	BA	1484	G
26	BA	1485	G
26	BA	1489	U
26	BA	1490	A
26	BA	1491	G
26	BA	1494	A
26	BA	1495	A
26	BA	1496	A
26	BA	1497	U
26	BA	1498	C
26	BA	1499	C
26	BA	1502	C
26	BA	1506	C
26	BA	1507	A
26	BA	1508	A
26	BA	1509	C
26	BA	1510	A
26	BA	1512	G
26	BA	1513	C
26	BA	1514	U
26	BA	1515	C
26	BA	1516	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1517	G
26	BA	1519	G
26	BA	1521	G
26	BA	1522	G
26	BA	1525	G
26	BA	1527	G
26	BA	1528	A
26	BA	1530	G
26	BA	1531	C
26	BA	1533	C
26	BA	1534	G
26	BA	1536	A
26	BA	1537	C
26	BA	1538	G
26	BA	1539	G
26	BA	1540	G
26	BA	1543	A
26	BA	1544	C
26	BA	1545	A
26	BA	1547	C
26	BA	1553	A
26	BA	1554	A
26	BA	1555	G
26	BA	1558	A
26	BA	1559	G
26	BA	1560	G
26	BA	1561	G
26	BA	1566	A
26	BA	1567	A
26	BA	1568	G
26	BA	1569	A
26	BA	1571	A
26	BA	1572	A
26	BA	1573	G
26	BA	1574	C
26	BA	1575	C
26	BA	1577	C
26	BA	1578	U
26	BA	1579	A
26	BA	1583	A
26	BA	1586	A
26	BA	1587	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1588	C
26	BA	1602	U
26	BA	1603	A
26	BA	1606	G
26	BA	1607	C
26	BA	1608	A
26	BA	1609	A
26	BA	1610	A
26	BA	1611	C
26	BA	1612	C
26	BA	1613	G
26	BA	1614	A
26	BA	1615	C
26	BA	1616	A
26	BA	1617	C
26	BA	1618	A
26	BA	1619	G
26	BA	1625	C
26	BA	1626	G
26	BA	1627	G
26	BA	1634	A
26	BA	1635	G
26	BA	1639	U
26	BA	1640	C
26	BA	1645	G
26	BA	1646	C
26	BA	1647	G
26	BA	1648	C
26	BA	1649	G
26	BA	1652	A
26	BA	1653	G
26	BA	1654	A
26	BA	1655	A
26	BA	1658	C
26	BA	1664	A
26	BA	1665	A
26	BA	1667	G
26	BA	1668	A
26	BA	1669	A
26	BA	1670	C
26	BA	1674	G
26	BA	1675	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1679	U
26	BA	1681	G
26	BA	1682	G
26	BA	1686	C
26	BA	1688	U
26	BA	1689	A
26	BA	1695	G
26	BA	1696	G
26	BA	1698	A
26	BA	1699	G
26	BA	1700	A
26	BA	1701	A
26	BA	1703	G
26	BA	1705	G
26	BA	1706	U
26	BA	1707	G
26	BA	1718	G
26	BA	1726	G
26	BA	1728	G
26	BA	1729	A
26	BA	1730	U
26	BA	1731	G
26	BA	1732	A
26	BA	1733	G
26	BA	1735	C
26	BA	1743	G
26	BA	1747	G
26	BA	1755	A
26	BA	1756	G
26	BA	1757	U
26	BA	1758	G
26	BA	1759	A
26	BA	1760	A
26	BA	1762	A
26	BA	1763	G
26	BA	1764	G
26	BA	1767	C
26	BA	1772	G
26	BA	1773	A
26	BA	1774	C
26	BA	1775	U
26	BA	1776	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1780	A
26	BA	1781	C
26	BA	1782	C
26	BA	1783	A
26	BA	1784	A
26	BA	1786	A
26	BA	1787	A
26	BA	1788	C
26	BA	1790	C
26	BA	1791	A
26	BA	1800	C
26	BA	1801	G
26	BA	1802	A
26	BA	1805	U
26	BA	1808	U
26	BA	1809	A
26	BA	1810	A
26	BA	1811	G
26	BA	1815	A
26	BA	1816	G
26	BA	1817	G
26	BA	1818	U
26	BA	1820	U
26	BA	1821	A
26	BA	1823	G
26	BA	1824	G
26	BA	1825	A
26	BA	1826	G
26	BA	1828	G
26	BA	1829	A
26	BA	1834	U
26	BA	1837	C
26	BA	1838	C
26	BA	1839	G
26	BA	1840	G
26	BA	1843	C
26	BA	1847	A
26	BA	1852	C
26	BA	1858	G
26	BA	1860	G
26	BA	1870	C
26	BA	1880	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1881	C
26	BA	1883	G
26	BA	1884	A
26	BA	1891	G
26	BA	1895	C
26	BA	1899	G
26	BA	1901	A
26	BA	1903	G
26	BA	1906	G
26	BA	1913	A
26	BA	1914	C
26	BA	1915	U
26	BA	1916	A
26	BA	1917	U
26	BA	1918	A
26	BA	1919	A
26	BA	1923	U
26	BA	1925	C
26	BA	1928	A
26	BA	1929	G
26	BA	1930	G
26	BA	1931	U
26	BA	1934	C
26	BA	1936	A
26	BA	1937	A
26	BA	1938	A
26	BA	1939	U
26	BA	1940	U
26	BA	1941	C
26	BA	1942	C
26	BA	1943	U
26	BA	1944	U
26	BA	1945	G
26	BA	1947	C
26	BA	1953	A
26	BA	1954	G
26	BA	1955	U
26	BA	1956	U
26	BA	1957	C
26	BA	1958	C
26	BA	1960	A
26	BA	1962	C

*Continued on next page...*



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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1963	U
26	BA	1964	G
26	BA	1965	C
26	BA	1966	A
26	BA	1967	C
26	BA	1968	G
26	BA	1969	A
26	BA	1970	A
26	BA	1971	A
26	BA	1972	A
26	BA	1981	A
26	BA	1982	C
26	BA	1991	U
26	BA	1993	U
26	BA	1995	U
26	BA	1996	C
26	BA	1997	G
26	BA	2003	G
26	BA	2015	A
26	BA	2016	U
26	BA	2018	G
26	BA	2020	A
26	BA	2021	C
26	BA	2022	U
26	BA	2023	G
26	BA	2027	G
26	BA	2030	A
26	BA	2031	A
26	BA	2032	G
26	BA	2033	A
26	BA	2034	U
26	BA	2036	C
26	BA	2039	C
26	BA	2041	U
26	BA	2043	C
26	BA	2044	C
26	BA	2045	C
26	BA	2047	U
26	BA	2048	G
26	BA	2050	C
26	BA	2051	A
26	BA	2052	G

*Continued on next page...*



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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2055	C
26	BA	2056	G
26	BA	2059	A
26	BA	2060	A
26	BA	2061	G
26	BA	2062	A
26	BA	2063	C
26	BA	2064	C
26	BA	2065	C
26	BA	2066	C
26	BA	2068	U
26	BA	2069	G
26	BA	2076	U
26	BA	2077	A
26	BA	2080	G
26	BA	2083	G
26	BA	2087	G
26	BA	2091	U
26	BA	2092	U
26	BA	2093	G
26	BA	2094	G
26	BA	2098	U
26	BA	2099	U
26	BA	2182	G
26	BA	2188	C
26	BA	2190	G
26	BA	2191	G
26	BA	2192	G
26	BA	2193	G
26	BA	2194	G
26	BA	2195	C
26	BA	2196	C
26	BA	2198	A
26	BA	2205	C
26	BA	2206	C
26	BA	2207	C
26	BA	2208	U
26	BA	2209	C
26	BA	2210	G
26	BA	2211	G
26	BA	2212	A
26	BA	2213	U

*Continued on next page...*



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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2217	G
26	BA	2224	G
26	BA	2225	A
26	BA	2226	C
26	BA	2227	A
26	BA	2228	G
26	BA	2232	U
26	BA	2233	U
26	BA	2234	G
26	BA	2235	G
26	BA	2236	C
26	BA	2237	G
26	BA	2238	G
26	BA	2239	G
26	BA	2240	C
26	BA	2241	A
26	BA	2242	G
26	BA	2243	U
26	BA	2245	U
26	BA	2247	A
26	BA	2250	G
26	BA	2251	G
26	BA	2253	G
26	BA	2254	C
26	BA	2255	G
26	BA	2257	U
26	BA	2258	C
26	BA	2259	G
26	BA	2262	U
26	BA	2263	C
26	BA	2264	C
26	BA	2265	U
26	BA	2266	A
26	BA	2267	A
26	BA	2268	A
26	BA	2269	A
26	BA	2270	G
26	BA	2272	U
26	BA	2275	C
26	BA	2276	G
26	BA	2277	G
26	BA	2278	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2279	G
26	BA	2281	C
26	BA	2282	G
26	BA	2283	C
26	BA	2284	C
26	BA	2286	A
26	BA	2287	A
26	BA	2288	A
26	BA	2289	G
26	BA	2291	U
26	BA	2294	C
26	BA	2296	U
26	BA	2297	C
26	BA	2300	G
26	BA	2303	G
26	BA	2304	G
26	BA	2306	C
26	BA	2307	G
26	BA	2308	G
26	BA	2309	A
26	BA	2310	A
26	BA	2311	A
26	BA	2312	U
26	BA	2313	C
26	BA	2314	C
26	BA	2315	G
26	BA	2317	C
26	BA	2318	G
26	BA	2319	G
26	BA	2320	A
26	BA	2321	G
26	BA	2322	A
26	BA	2323	G
26	BA	2325	G
26	BA	2327	A
26	BA	2334	G
26	BA	2335	A
26	BA	2336	A
26	BA	2337	G
26	BA	2339	G
26	BA	2341	G
26	BA	2342	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2343	C
26	BA	2345	G
26	BA	2346	A
26	BA	2347	C
26	BA	2348	U
26	BA	2350	C
26	BA	2351	G
26	BA	2352	A
26	BA	2353	G
26	BA	2355	C
26	BA	2357	U
26	BA	2358	G
26	BA	2359	C
26	BA	2360	A
26	BA	2361	A
26	BA	2362	G
26	BA	2366	A
26	BA	2371	G
26	BA	2372	G
26	BA	2373	G
26	BA	2374	C
26	BA	2378	A
26	BA	2379	G
26	BA	2381	C
26	BA	2382	G
26	BA	2383	G
26	BA	2384	G
26	BA	2385	C
26	BA	2386	C
26	BA	2387	U
26	BA	2389	G
26	BA	2390	U
26	BA	2392	A
26	BA	2393	A
26	BA	2394	C
26	BA	2395	C
26	BA	2396	G
26	BA	2397	G
26	BA	2399	G
26	BA	2400	G
26	BA	2401	U
26	BA	2402	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2403	C
26	BA	2405	G
26	BA	2406	U
26	BA	2407	G
26	BA	2408	U
26	BA	2409	G
26	BA	2411	A
26	BA	2412	A
26	BA	2413	G
26	BA	2417	C
26	BA	2422	A
26	BA	2423	U
26	BA	2424	C
26	BA	2425	A
26	BA	2426	A
26	BA	2427	C
26	BA	2428	G
26	BA	2430	A
26	BA	2431	U
26	BA	2432	A
26	BA	2434	A
26	BA	2435	A
26	BA	2436	G
26	BA	2437	U
26	BA	2438	U
26	BA	2439	A
26	BA	2441	C
26	BA	2442	C
26	BA	2444	G
26	BA	2446	G
26	BA	2448	A
26	BA	2449	U
26	BA	2451	A
26	BA	2453	A
26	BA	2455	G
26	BA	2456	C
26	BA	2458	G
26	BA	2463	C
26	BA	2464	C
26	BA	2465	C
26	BA	2466	C
26	BA	2468	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2469	A
26	BA	2470	G
26	BA	2472	G
26	BA	2473	U
26	BA	2475	C
26	BA	2476	A
26	BA	2478	A
26	BA	2479	G
26	BA	2480	C
26	BA	2482	G
26	BA	2483	C
26	BA	2484	G
26	BA	2485	G
26	BA	2488	A
26	BA	2490	G
26	BA	2491	U
26	BA	2493	U
26	BA	2494	G
26	BA	2495	G
26	BA	2496	C
26	BA	2497	A
26	BA	2498	C
26	BA	2499	C
26	BA	2500	U
26	BA	2502	G
26	BA	2503	A
26	BA	2504	U
26	BA	2505	G
26	BA	2506	U
26	BA	2507	C
26	BA	2512	C
26	BA	2513	G
26	BA	2517	C
26	BA	2518	A
26	BA	2519	U
26	BA	2520	C
26	BA	2521	C
26	BA	2522	U
26	BA	2526	G
26	BA	2529	G
26	BA	2532	G
26	BA	2533	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2535	G
26	BA	2536	G
26	BA	2537	U
26	BA	2539	C
26	BA	2540	C
26	BA	2541	A
26	BA	2542	A
26	BA	2543	G
26	BA	2544	G
26	BA	2545	G
26	BA	2546	U
26	BA	2547	U
26	BA	2549	G
26	BA	2551	C
26	BA	2552	U
26	BA	2553	G
26	BA	2554	U
26	BA	2555	U
26	BA	2556	C
26	BA	2557	G
26	BA	2558	C
26	BA	2561	A
26	BA	2562	U
26	BA	2565	A
26	BA	2566	A
26	BA	2567	G
26	BA	2568	C
26	BA	2569	G
26	BA	2570	G
26	BA	2572	A
26	BA	2573	C
26	BA	2574	G
26	BA	2575	C
26	BA	2576	G
26	BA	2577	A
26	BA	2578	G
26	BA	2579	C
26	BA	2580	U
26	BA	2581	G
26	BA	2582	G
26	BA	2583	G
26	BA	2584	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2585	U
26	BA	2586	C
26	BA	2587	A
26	BA	2588	G
26	BA	2590	A
26	BA	2591	C
26	BA	2596	U
26	BA	2597	G
26	BA	2598	A
26	BA	2599	G
26	BA	2600	A
26	BA	2601	C
26	BA	2602	A
26	BA	2603	G
26	BA	2604	U
26	BA	2605	U
26	BA	2606	C
26	BA	2607	G
26	BA	2609	U
26	BA	2610	C
26	BA	2611	U
26	BA	2612	C
26	BA	2613	U
26	BA	2614	A
26	BA	2615	U
26	BA	2616	C
26	BA	2617	C
26	BA	2618	G
26	BA	2619	C
26	BA	2620	C
26	BA	2621	A
26	BA	2625	G
26	BA	2626	C
26	BA	2627	G
26	BA	2629	A
26	BA	2630	G
26	BA	2631	G
26	BA	2633	G
26	BA	2635	C
26	BA	2637	U
26	BA	2638	G
26	BA	2640	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2641	G
26	BA	2645	G
26	BA	2646	C
26	BA	2648	C
26	BA	2650	U
26	BA	2654	A
26	BA	2655	G
26	BA	2658	C
26	BA	2659	G
26	BA	2661	G
26	BA	2662	A
26	BA	2663	G
26	BA	2665	A
26	BA	2666	C
26	BA	2667	C
26	BA	2672	G
26	BA	2676	C
26	BA	2677	G
26	BA	2678	C
26	BA	2679	A
26	BA	2680	C
26	BA	2681	C
26	BA	2682	U
26	BA	2683	C
26	BA	2685	G
26	BA	2686	G
26	BA	2687	U
26	BA	2689	U
26	BA	2690	C
26	BA	2691	C
26	BA	2693	A
26	BA	2698	U
26	BA	2699	C
26	BA	2701	C
26	BA	2702	U
26	BA	2703	C
26	BA	2704	C
26	BA	2705	A
26	BA	2707	G
26	BA	2708	G
26	BA	2709	G
26	BA	2710	C

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Mol	Chain	Res	Type
26	BA	2712	U
26	BA	712(A)	A
26	BA	2713	A
26	BA	2714	G
26	BA	2717	G
26	BA	2718	G
26	BA	2719	G
26	BA	2720	U
26	BA	2721	A
26	BA	2723	C
26	BA	2725	A
26	BA	2726	U
26	BA	2727	G
26	BA	2729	G
26	BA	2732	G
26	BA	2733	A
26	BA	2738	A
26	BA	2740	A
26	BA	2741	A
26	BA	2742	C
26	BA	2743	C
26	BA	2744	G
26	BA	2746	U
26	BA	2747	G
26	BA	2748	A
26	BA	2750	A
26	BA	2751	G
26	BA	2752	C
26	BA	2755	C
26	BA	2756	U
26	BA	2757	A
26	BA	2758	A
26	BA	2759	G
26	BA	2760	C
26	BA	2762	G
26	BA	2763	G
26	BA	2764	A
26	BA	2765	A
26	BA	2766	G
26	BA	2768	C
26	BA	2769	C
26	BA	2770	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2771	C
26	BA	2772	C
26	BA	2773	C
26	BA	2774	C
26	BA	2775	A
26	BA	2776	A
26	BA	2777	G
26	BA	2778	A
26	BA	2779	U
26	BA	2780	G
26	BA	2781	A
26	BA	2782	G
26	BA	2783	G
26	BA	2784	C
26	BA	2786	U
26	BA	2787	C
26	BA	2788	C
26	BA	2790	A
26	BA	2791	C
26	BA	2793	G
26	BA	2794	C
26	BA	2795	G
26	BA	2798	C
26	BA	2799	A
26	BA	2802	G
26	BA	2803	C
26	BA	2804	C
26	BA	2805	G
26	BA	2809	A
26	BA	2810	A
26	BA	2811	G
26	BA	2812	G
26	BA	2815	C
26	BA	2816	C
26	BA	2817	G
26	BA	2818	G
26	BA	2819	G
26	BA	2820	A
26	BA	2821	A
26	BA	2822	G
26	BA	2826	A
26	BA	2827	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2829	C
26	BA	2832	U
26	BA	2833	G
26	BA	2834	G
26	BA	2835	A
26	BA	2836	U
26	BA	2839	G
26	BA	2843	G
26	BA	2844	G
26	BA	2845	G
26	BA	2846	G
26	BA	2847	U
26	BA	2848	G
26	BA	2849	U
26	BA	2850	A
26	BA	2853	C
26	BA	2854	G
26	BA	2858	C
26	BA	2860	A
26	BA	2861	G
26	BA	2862	G
26	BA	2863	C
26	BA	2866	U
26	BA	2867	G
26	BA	2868	A
26	BA	2869	G
26	BA	2871	C
26	BA	2872	G
26	BA	2874	C
26	BA	2877	G
26	BA	2879	C
26	BA	2880	C
26	BA	2881	C
26	BA	2882	A
26	BA	2883	A
26	BA	2884	U
26	BA	2889	C
26	BA	2891	G
26	BA	2892	A
26	BA	2893	G
26	BA	2894	G
26	BA	2895	U

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Mol	Chain	Res	Type
26	BA	2899	G
26	BA	2902	C

All (531) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	5	U
1	AA	7	G
1	AA	8	A
1	AA	9	G
1	AA	13	U
1	AA	30	U
1	AA	38	G
1	AA	47	C
1	AA	48	C
1	AA	49	U
1	AA	50	A
1	AA	51	A
1	AA	119	A
1	AA	121	C
1	AA	129(A)	G
1	AA	181	G
1	AA	190(F)	G
1	AA	195	A
1	AA	196	A
1	AA	197	A
1	AA	202	U
1	AA	203	U
1	AA	231	G
1	AA	243	A
1	AA	244	U
1	AA	246	A
1	AA	250	A
1	AA	251	G
1	AA	262	A
1	AA	266	G
1	AA	274	A
1	AA	279	A
1	AA	280	C
1	AA	286	G
1	AA	305	G
1	AA	327	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	328	C
1	AA	329	A
1	AA	337	C
1	AA	344	A
1	AA	345	C
1	AA	366	C
1	AA	367	U
1	AA	372	C
1	AA	388	G
1	AA	421	U
1	AA	422	C
1	AA	428	G
1	AA	429	U
1	AA	481	G
1	AA	484	G
1	AA	496	A
1	AA	497	A
1	AA	499	A
1	AA	508	C
1	AA	509	A
1	AA	511	C
1	AA	517	G
1	AA	518	C
1	AA	531	U
1	AA	533	A
1	AA	535	A
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	563	A
1	AA	566	G
1	AA	575	G
1	AA	576	G
1	AA	595	G
1	AA	641	U
1	AA	652	U
1	AA	687	A
1	AA	701	C
1	AA	702	A
1	AA	703	G
1	AA	718	G

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Mol	Chain	Res	Type
1	AA	721	G
1	AA	727	G
1	AA	748	C
1	AA	753	A
1	AA	759	A
1	AA	774	G
1	AA	792	A
1	AA	793	U
1	AA	812	C
1	AA	815	A
1	AA	817	C
1	AA	818	G
1	AA	819	A
1	AA	851	G
1	AA	871	U
1	AA	872	A
1	AA	873	A
1	AA	883	C
1	AA	889	A
1	AA	903	G
1	AA	913	A
1	AA	914	A
1	AA	937	A
1	AA	960	U
1	AA	965	A
1	AA	968	A
1	AA	975	A
1	AA	982	U
1	AA	983	A
1	AA	992	U
1	AA	993	G
1	AA	1024	G
1	AA	1049	U
1	AA	1053	G
1	AA	1065	U
1	AA	1067	A
1	AA	1085	U
1	AA	1100	C
1	AA	1101	A
1	AA	1108	G
1	AA	1124	G
1	AA	1125	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	1145	C
1	AA	1151	A
1	AA	1157	A
1	AA	1159	U
1	AA	1182	G
1	AA	1190	G
1	AA	1196	U
1	AA	1201	A
1	AA	1214	C
1	AA	1225	A
1	AA	1226	C
1	AA	1240	U
1	AA	1256	A
1	AA	1257	U
1	AA	1279	A
1	AA	1280	A
1	AA	1281	U
1	AA	1285	A
1	AA	1297	C
1	AA	1298	C
1	AA	1302	U
1	AA	1305	G
1	AA	1322	C
1	AA	1336	C
1	AA	1337	G
1	AA	1345	U
1	AA	1346	A
1	AA	1347	G
1	AA	1363	A
1	AA	1380	U
1	AA	1394	A
1	AA	1399	C
1	AA	1400	C
1	AA	1446	A
1	AA	1467	G
1	AA	1490	C
1	AA	1498	U
1	AA	1502	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U

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Mol	Chain	Res	Type
1	AA	1529	G
1	AA	1532	U
2	AV	19	G
3	AW	16	U
3	AW	18	G
3	AW	35	A
25	BB	14	U
25	BB	56	G
25	BB	119	A
26	BA	13	A
26	BA	16	G
26	BA	36	G
26	BA	51	G
26	BA	60	G
26	BA	71	A
26	BA	74	A
26	BA	83	G
26	BA	90	U
26	BA	102	G
26	BA	107	C
26	BA	119	A
26	BA	128	C
26	BA	137	C
26	BA	139	G
26	BA	162	U
26	BA	181	A
26	BA	197	A
26	BA	204	A
26	BA	215	G
26	BA	221	A
26	BA	232	G
26	BA	241	A
26	BA	247	G
26	BA	249	C
26	BA	265	A
26	BA	270(B)	A
26	BA	270(L)	U
26	BA	270(M)	U
26	BA	270(Y)	G
26	BA	271(B)	G
26	BA	289	A
26	BA	296	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	312	G
26	BA	320	A
26	BA	323	G
26	BA	331	A
26	BA	332	A
26	BA	333	G
26	BA	338	G
26	BA	370	G
26	BA	371	A
26	BA	386	G
26	BA	387	U
26	BA	390	A
26	BA	404	C
26	BA	434	U
26	BA	446	G
26	BA	448	U
26	BA	455	C
26	BA	463	G
26	BA	474	G
26	BA	478	A
26	BA	479	A
26	BA	482	A
26	BA	508	G
26	BA	526	A
26	BA	529	A
26	BA	530	G
26	BA	532	A
26	BA	548	A
26	BA	559	G
26	BA	566	U
26	BA	574	C
26	BA	579	G
26	BA	587	C
26	BA	615	G
26	BA	616	A
26	BA	620	G
26	BA	646	A
26	BA	654	A
26	BA	669	G
26	BA	670	A
26	BA	685	A
26	BA	686	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	687	C
26	BA	704	G
26	BA	728	G
26	BA	729	G
26	BA	746	A
26	BA	750	A
26	BA	751	A
26	BA	752	A
26	BA	762	U
26	BA	764	A
26	BA	776	G
26	BA	782	A
26	BA	787	U
26	BA	788	A
26	BA	789	A
26	BA	790	C
26	BA	792	G
26	BA	793	A
26	BA	800	A
26	BA	801	G
26	BA	805	G
26	BA	811	U
26	BA	817	C
26	BA	827	U
26	BA	829	A
26	BA	830	G
26	BA	845	G
26	BA	846	C
26	BA	886	C
26	BA	930	U
26	BA	940	G
26	BA	944	G
26	BA	945	A
26	BA	957	A
26	BA	973	A
26	BA	974	G
26	BA	974(A)	C
26	BA	982	C
26	BA	989	G
26	BA	994	C
26	BA	1011	G
26	BA	1022	G

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1025	G
26	BA	1033	U
26	BA	1045	A
26	BA	1061	U
26	BA	1069	A
26	BA	1085	A
26	BA	1100	C
26	BA	1102	C
26	BA	1110	G
26	BA	1126	A
26	BA	1128	A
26	BA	1130	U
26	BA	1131	G
26	BA	1140	C
26	BA	1141	U
26	BA	1154	G
26	BA	1163	G
26	BA	1169	G
26	BA	1173	G
26	BA	1179	C
26	BA	1180	C
26	BA	1181	C
26	BA	1183	G
26	BA	1190	G
26	BA	1202	C
26	BA	1206	G
26	BA	1210	A
26	BA	1220	A
26	BA	1248	G
26	BA	1250	G
26	BA	1252	G
26	BA	1253	A
26	BA	1254	A
26	BA	1255	U
26	BA	1265	A
26	BA	1287	A
26	BA	1288	U
26	BA	1300	U
26	BA	1302	A
26	BA	1311	G
26	BA	1312	U
26	BA	1320	C

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1324	G
26	BA	1325	G
26	BA	1329	U
26	BA	1341	U
26	BA	1342	A
26	BA	1364	G
26	BA	1378	A
26	BA	1420	U
26	BA	1427	A
26	BA	1428	C
26	BA	1437	C
26	BA	1444	G
26	BA	1454	U
26	BA	1460	A
26	BA	1476	C
26	BA	1489	U
26	BA	1490	A
26	BA	1496	A
26	BA	1498	C
26	BA	1507	A
26	BA	1521	G
26	BA	1535	U
26	BA	1544	C
26	BA	1552	G
26	BA	1554	A
26	BA	1557	C
26	BA	1567	A
26	BA	1568	G
26	BA	1571	A
26	BA	1585	C
26	BA	1602	U
26	BA	1608	A
26	BA	1609	A
26	BA	1610	A
26	BA	1614	A
26	BA	1616	A
26	BA	1618	A
26	BA	1634	A
26	BA	1647	G
26	BA	1653	G
26	BA	1667	G
26	BA	1668	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	1681	G
26	BA	1693	U
26	BA	1699	G
26	BA	1702	G
26	BA	1742	C
26	BA	1758	G
26	BA	1763	G
26	BA	1772	G
26	BA	1784	A
26	BA	1800	C
26	BA	1809	A
26	BA	1815	A
26	BA	1816	G
26	BA	1819	A
26	BA	1820	U
26	BA	1828	G
26	BA	1838	C
26	BA	1848	A
26	BA	1914	C
26	BA	1915	U
26	BA	1924	C
26	BA	1929	G
26	BA	1930	G
26	BA	1936	A
26	BA	1938	A
26	BA	1939	U
26	BA	1943	U
26	BA	1954	G
26	BA	1964	G
26	BA	1966	A
26	BA	1968	G
26	BA	1970	A
26	BA	1980	G
26	BA	1988	C
26	BA	1992	G
26	BA	2019	A
26	BA	2022	U
26	BA	2030	A
26	BA	2032	G
26	BA	2033	A
26	BA	2042	A
26	BA	2047	U

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2049	G
26	BA	2059	A
26	BA	2062	A
26	BA	2064	C
26	BA	2067	G
26	BA	2076	U
26	BA	2195	C
26	BA	2199	A
26	BA	2210	G
26	BA	2219	G
26	BA	2225	A
26	BA	2237	G
26	BA	2238	G
26	BA	2241	A
26	BA	2244	U
26	BA	2249	U
26	BA	2253	G
26	BA	2265	U
26	BA	2266	A
26	BA	2267	A
26	BA	2268	A
26	BA	2274	A
26	BA	2282	G
26	BA	2287	A
26	BA	2288	A
26	BA	2311	A
26	BA	2318	G
26	BA	2320	A
26	BA	2334	G
26	BA	2344	U
26	BA	2345	G
26	BA	2359	C
26	BA	2386	C
26	BA	2391	G
26	BA	2393	A
26	BA	2398	U
26	BA	2401	U
26	BA	2411	A
26	BA	2423	U
26	BA	2425	A
26	BA	2426	A
26	BA	2432	A

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	BA	2434	A
26	BA	2436	G
26	BA	2437	U
26	BA	2439	A
26	BA	2447	G
26	BA	2449	U
26	BA	2451	A
26	BA	2454	G
26	BA	2469	A
26	BA	2472	G
26	BA	2481	G
26	BA	2484	G
26	BA	2492	U
26	BA	2493	U
26	BA	2497	A
26	BA	2498	C
26	BA	2502	G
26	BA	2503	A
26	BA	2517	C
26	BA	2519	U
26	BA	2532	G
26	BA	2545	G
26	BA	2555	U
26	BA	2565	A
26	BA	2576	G
26	BA	2578	G
26	BA	2581	G
26	BA	2582	G
26	BA	2587	A
26	BA	2589	A
26	BA	2598	A
26	BA	2606	C
26	BA	2609	U
26	BA	2610	C
26	BA	2612	C
26	BA	2613	U
26	BA	2620	C
26	BA	2627	G
26	BA	2654	A
26	BA	2665	A
26	BA	2681	C
26	BA	2688	U

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Mol	Chain	Res	Type
26	BA	2689	U
26	BA	2690	C
26	BA	2703	C
26	BA	2707	G
26	BA	2712	U
26	BA	2717	G
26	BA	2720	U
26	BA	2722	G
26	BA	2726	U
26	BA	2740	A
26	BA	2741	A
26	BA	2756	U
26	BA	2757	A
26	BA	2763	G
26	BA	2769	C
26	BA	2774	C
26	BA	2777	G
26	BA	2781	A
26	BA	2783	G
26	BA	2790	A
26	BA	2809	A
26	BA	2819	G
26	BA	2820	A
26	BA	2835	A
26	BA	2849	U
26	BA	2858	C
26	BA	2862	G
26	BA	2866	U
26	BA	2867	G
26	BA	2879	C
26	BA	2881	C
26	BA	2882	A
26	BA	2891	G

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

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

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



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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
3	PSU	AW	39	3	17,21,22	1.27	2 (11%)	20,30,33	5.38	5 (25%)
3	YYG	AW	37	10,3	29,42,43	1.05	3 (10%)	29,62,65	2.17	7 (24%)
3	PSU	AW	55	3	17,21,22	1.42	3 (17%)	20,30,33	5.26	6 (30%)

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
3	PSU	AW	39	3	-	0/7/25/26	0/2/2/2
3	YYG	AW	37	10,3	1/1/8/9	7/20/42/43	0/4/4/4
3	PSU	AW	55	3	-	0/7/25/26	0/2/2/2

All (8) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	AW	55	PSU	C4-N3	4.34	1.40	1.33
3	AW	39	PSU	C6-C5	-3.31	1.33	1.38
3	AW	39	PSU	C4-N3	3.19	1.38	1.33
3	AW	37	YYG	C6-N1	2.91	1.42	1.37
3	AW	55	PSU	C6-C5	-2.88	1.34	1.38
3	AW	37	YYG	C6-C5	2.15	1.44	1.41
3	AW	55	PSU	O4'-C1'	-2.11	1.41	1.44
3	AW	37	YYG	C2-N2	2.05	1.38	1.35

All (18) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AW	39	PSU	N1-C2-N3	-17.74	114.33	128.43
3	AW	55	PSU	N1-C2-N3	-17.51	114.51	128.43
3	AW	39	PSU	C4-N3-C2	12.63	125.80	115.14
3	AW	55	PSU	C4-N3-C2	11.74	125.06	115.14
3	AW	39	PSU	C5-C4-N3	-8.08	114.95	125.36
3	AW	55	PSU	C5-C4-N3	-7.79	115.32	125.36
3	AW	37	YYG	C24-O23-C21	6.32	123.13	115.66
3	AW	37	YYG	C3-N3-C4	5.15	125.55	118.25
3	AW	39	PSU	C6-N1-C2	5.10	123.77	115.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AW	55	PSU	C6-N1-C2	4.99	123.59	115.36
3	AW	37	YYG	O23-C21-N20	4.37	118.48	110.80
3	AW	37	YYG	O23-C21-O22	-3.30	119.73	124.58
3	AW	37	YYG	C3-N3-C2	3.11	122.65	118.25
3	AW	37	YYG	C19-O18-C16	2.91	122.51	115.94
3	AW	37	YYG	O18-C16-C15	2.38	117.60	111.52
3	AW	55	PSU	C4-C5-C1'	-2.28	116.81	121.12
3	AW	39	PSU	C5-C6-N1	-2.01	121.97	124.44
3	AW	55	PSU	C5-C6-N1	-2.00	121.98	124.44

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
3	AW	37	YYG	C15

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	AW	37	YYG	C12-C13-C14-C15
3	AW	37	YYG	C15-C16-O18-C19
3	AW	37	YYG	O17-C16-O18-C19
3	AW	37	YYG	C13-C14-C15-C16
3	AW	37	YYG	C14-C15-C16-O18
3	AW	37	YYG	C13-C14-C15-N20
3	AW	37	YYG	C14-C15-C16-O17

There are no ring outliers.

2 monomers are involved in 42 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	AW	39	PSU	4	0
3	AW	37	YYG	38	0

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

The following chains have linkage breaks:

Mol	Chain	Number of breaks
26	BA	98
1	AA	68
3	AW	7
25	BB	4
2	AV	3
36	BQ	3
49	B4	2
5	AB	2
16	AM	2
45	BV	2
20	AQ	2
6	AC	2
39	BW	2
14	AK	1
53	B8	1
35	BP	1
8	AE	1
29	BF	1
44	BU	1
7	AD	1
55	BK	1
15	AL	1
37	BS	1
27	BD	1
48	B0	1
31	BH	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	30(D):A	O3'	1031:G	P	5.01
1	BA	142(A):A	O3'	1143:A	P	4.98
1	AW	73:A	O3'	74:C	P	4.88
1	BA	1171:G	O3'	1173:G	P	4.41
1	AA	440:A	O3'	442:C	P	4.34

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	BA	366:C	O3'	370:G	P	4.27
1	AA	1169:A	O3'	1171:G	P	4.14
1	AA	70:G	O3'	73:C	P	3.98
1	AA	204:U	O3'	216:G	P	3.83
1	AA	93:G	O3'	95:U	P	3.70
1	BA	449(A):G	O3'	1450:C	P	3.62
1	BA	890:A	O3'	892:G	P	3.61
1	BA	537:C	O3'	539:G	P	3.59
1	AW	63:C	O3'	64:A	P	3.53
1	BA	489:G	O3'	491:G	P	3.49
1	BA	1743:G	O3'	1746:G	P	3.48
1	BA	1712:C	O3'	1716:U	P	3.46
1	BA	926:A	O3'	928:G	P	3.40
1	BA	444(A):A	O3'	1445:C	P	3.40
1	BA	99:U	O3'	101:G	P	3.39
1	BA	164:U	O3'	171:G	P	3.39
1	AA	84:U	O3'	88:A	P	3.38
1	BA	1718:G	O3'	1725:G	P	3.36
1	BA	1451:C	O3'	1453:A	P	3.31
1	AW	45:G	O3'	46:G	P	3.30
1	BA	436:C	O3'	438:G	P	3.29
1	BQ	36:ASN	C	41:THR	N	3.29
1	AA	841:U	O3'	848:C	P	3.27
1	BA	41:C	O3'	43:G	P	3.26
1	BA	2795:G	O3'	2797:U	P	3.26
1	AA	3(A):G	O3'	1004:A	P	3.25
1	AA	1443:G	O3'	1446:A	P	3.25
1	AA	492:G	O3'	494:G	P	3.24
1	AW	5:A	O3'	6:U	P	3.24
1	BA	1735:C	O3'	1741:C	P	3.22
1	BA	2799:A	O3'	2801:A	P	3.18
1	BA	630(A):C	O3'	1631:A	P	3.15
1	BA	1872:A	O3'	1878:G	P	3.15
1	AA	99:C	O3'	101:A	P	3.11
1	BQ	12:PRO	C	15:THR	N	3.09
1	BA	155:C	O3'	161:U	P	3.05
1	BA	554:U	O3'	556:G	P	3.05
1	AA	463:A	O3'	474:G	P	3.01
1	BA	1480:G	O3'	1482:U	P	3.00
1	BA	1583:A	O3'	1585:C	P	2.99
1	BD	216:ALA	C	222:PRO	N	2.97
1	BA	1864:U	O3'	1869:G	P	2.92

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	1455:G	O3'	1459:C	P	2.83
1	BA	2805:G	O3'	2807:G	P	2.79
1	AA	1361:G	O3'	361(A):C	P	2.69
1	AV	73:A	O3'	74:C	P	2.67
1	AV	7:U	O3'	8:U	P	2.65
1	AW	7:U	O3'	8:U	P	2.62
1	BA	2213:U	O3'	2215:G	P	2.62
1	BA	1050:A	O3'	1051:G	P	2.60
1	BA	545(A):A	O3'	1546:C	P	2.60
1	AA	991:U	O3'	992:U	P	2.56
1	AA	46:G	O3'	47:C	P	2.50
1	BA	1030:G	O3'	1031:G	P	2.47
1	BA	1103:A	O3'	1104:C	P	2.42
1	AA	1030:C	O3'	30(A):G	P	2.41
1	BA	1086:A	O3'	1087:G	P	2.40
1	BQ	76:GLY	C	82:LYS	N	2.39
1	AA	60:A	O3'	61:G	P	2.34
1	BV	66:GLY	C	67:LYS	N	2.33
1	AA	651:C	O3'	652:U	P	2.32
1	AA	115:G	O3'	116:A	P	2.29
1	AA	1003:G	O3'	3(A):G	P	2.29
1	BA	2788:C	O3'	2789:C	P	2.24
1	BK	71:LYS	C	72:THR	N	2.22
1	AA	1004:A	O3'	1005:A	P	2.19
1	AA	219:C	O3'	220:G	P	2.17
1	AA	1224:G	O3'	1225:A	P	2.17
1	BA	1545:A	O3'	545(A):A	P	2.16
1	AA	1037:C	O3'	1038:C	P	2.12
1	AA	820:U	O3'	821:G	P	2.07
1	BA	1142:U	O3'	142(A):A	P	2.07
1	AA	365:U	O3'	366:C	P	2.06
1	BA	324:A	O3'	325:G	P	2.06
1	AM	94:ARG	C	95:GLY	N	2.03
1	BA	280:C	O3'	281:G	P	2.03
1	BA	1124:C	O3'	1125:G	P	2.02
1	BA	1525:G	O3'	1526:G	P	2.02
1	AA	1107:C	O3'	1108:G	P	2.01
1	BA	223:A	O3'	224:G	P	2.00
1	BA	1404:C	O3'	1405:U	P	2.00
1	AA	405:U	O3'	406:G	P	1.99
1	AA	937:A	O3'	938:A	P	1.99
1	AA	566:G	O3'	567:G	P	1.98

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	286:G	O3'	287:U	P	1.96
1	AA	1024:G	O3'	1025:U	P	1.96
1	AA	337:C	O3'	338:A	P	1.95
1	AA	703:G	O3'	704:A	P	1.95
1	AM	66:LEU	C	67:GLU	N	1.95
1	BA	1019:U	O3'	1020:A	P	1.95
1	BA	1055:G	O3'	1056:G	P	1.95
1	AA	196:A	O3'	197:A	P	1.94
1	AA	311:C	O3'	312:C	P	1.94
1	BA	232:G	O3'	233:A	P	1.94
1	AA	1046:A	O3'	1047:G	P	1.93
1	BB	0:A	O3'	1:U	P	1.93
1	BA	1419:A	O3'	1420:U	P	1.93
1	AA	546:G	O3'	547:A	P	1.92
1	BA	601:C	O3'	602:G	P	1.91
1	BS	128:ASP	C	129:ILE	N	1.90
1	AA	879:C	O3'	880:C	P	1.88
1	AE	144:THR	C	145:LYS	N	1.88
1	BA	316:C	O3'	317:G	P	1.86
1	BA	2243:U	O3'	2244:U	P	1.86
1	BA	1991:U	O3'	1992:G	P	1.85
1	BP	61:ALA	C	62:ALA	N	1.85
1	AA	587:G	O3'	588:G	P	1.84
1	BA	359:A	O3'	360:G	P	1.84
1	BV	91:THR	C	92:ALA	N	1.84
1	AA	754:C	O3'	755:G	P	1.83
1	AA	1067:A	O3'	1068:G	P	1.83
1	BA	837:C	O3'	838:C	P	1.83
1	BA	2009:G	O3'	2010:G	P	1.83
1	BA	2566:A	O3'	2567:G	P	1.83
1	AA	576:G	O3'	577:G	P	1.82
1	BA	2882:A	O3'	2883:A	P	1.82
1	AA	1101:A	O3'	1102:A	P	1.81
1	BA	271:G	O3'	272:G	P	1.80
1	BA	432:A	O3'	433:C	P	1.80
1	BA	474:G	O3'	475:U	P	1.80
1	BA	1143:A	O3'	1144:G	P	1.80
1	BA	1706:U	O3'	1707:G	P	1.80
1	BA	2225:A	O3'	2226:C	P	1.80
1	AA	108:G	O3'	109:A	P	1.79
1	AA	983:A	O3'	984:C	P	1.79
1	AB	112:VAL	C	113:HIS	N	1.79

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	BA	117:G	O3'	118:A	P	1.79
1	AA	1085:U	O3'	1086:U	P	1.78
1	BA	1970:A	O3'	1971:A	P	1.78
1	AA	119:A	O3'	120:A	P	1.77
1	AA	1396:A	O3'	1397:C	P	1.77
1	BA	817:C	O3'	818:G	P	1.77
1	BA	2609:U	O3'	2610:C	P	1.77
1	BA	1275:A	O3'	1276:A	P	1.76
1	AA	178:C	O3'	179:A	P	1.75
1	AA	497:A	O3'	498:U	P	1.75
1	B4	40:HIS	C	41:PRO	N	1.65
1	B8	46:LYS	C	47:GLY	N	1.64
1	B4	8:LYS	C	9:ALA	N	1.63
1	AA	884:U	O3'	885:G	P	1.39
1	BA	271(B):G	O3'	271(C):U	P	1.39
1	BA	468:G	O3'	469:G	P	1.39
1	BA	584:C	O3'	585:G	P	1.39
1	BA	1646:C	O3'	1647:G	P	1.39
1	BA	405:U	O3'	406:G	P	1.38
1	BA	1361:G	O3'	1362:C	P	1.38
1	BA	2040:C	O3'	2041:U	P	1.38
1	AA	960:U	O3'	961:U	P	1.37
1	BA	2322:A	O3'	2323:G	P	1.37
1	AA	813:U	O3'	814:A	P	1.36
1	AA	1073:U	O3'	1074:G	P	1.36
1	BA	2644:G	O3'	2645:G	P	1.36
1	BA	2062:A	O3'	2063:C	P	1.35
1	BB	-1:A	O3'	0:A	P	1.34
1	BB	24:G	O3'	25:A	P	1.34
1	BA	793:A	O3'	794:G	P	1.34
1	BA	1626:G	O3'	1627:G	P	1.34
1	AA	239:U	O3'	240:C	P	1.33
1	AA	717:C	O3'	718:G	P	1.33
1	AA	765:G	O3'	766:A	P	1.32
1	BA	2344:U	O3'	2345:G	P	1.32
1	BA	14:A	O3'	15:G	P	1.30
1	BA	110:G	O3'	111:A	P	1.29
1	AV	45:G	O3'	46:G	P	1.28
1	BA	130:C	O3'	131:G	P	1.28
1	BA	1667:G	O3'	1668:A	P	1.28
1	BA	2769:C	O3'	2770:G	P	1.28
1	BA	2810:A	O3'	2811:G	P	1.28

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Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	1255:G	O3'	1256:A	P	1.27
1	AA	672:U	O3'	673:G	P	1.26
1	AA	1182:G	O3'	1183:A	P	1.26
1	BA	176:G	O3'	177:G	P	1.25
1	BA	460:A	O3'	461:C	P	1.24
1	BA	1163:G	O3'	1164:G	P	1.21
1	BA	1988:C	O3'	1989:G	P	1.20
1	B0	18:PRO	C	19:LYS	N	1.20
1	AA	288:A	O3'	289:G	P	1.19
1	AA	944:G	O3'	945:G	P	1.19
1	AW	21:A	O3'	22:G	P	1.19
1	AB	148:TYR	C	149:LEU	N	1.19
1	AW	36:A	O3'	37:YYG	P	1.18
1	BA	2625:G	O3'	2626:C	P	1.18
1	BA	1029:A	O3'	1030:G	P	1.16
1	BA	1924:C	O3'	1925:C	P	1.16
1	BB	59:A	O3'	60:C	P	1.15
1	BW	79:GLY	C	80:PRO	N	1.13
1	AQ	40:LYS	C	41:LYS	N	1.11
1	AA	1211:U	O3'	1212:U	P	1.09
1	BA	2889:C	O3'	2891:G	P	1.09
1	AK	112:THR	C	113:PRO	N	1.07
1	BA	2454:G	O3'	2455:G	P	1.07
1	BW	2:GLU	C	3:ALA	N	1.06
1	BA	2196:C	O3'	2197:U	P	1.03
1	BH	80:LYS	C	81:GLY	N	1.02
1	BA	1546:C	O3'	1547:C	P	0.99
1	AA	1337:G	O3'	1338:G	P	0.96
1	BF	103:ASN	C	104:ASP	N	0.96
1	BU	50:ARG	C	51:ARG	N	0.96
1	AA	1278:U	O3'	1279:A	P	0.93
1	AC	18:TRP	C	19:GLU	N	0.93
1	AD	98:GLU	C	99:SER	N	0.92
1	AC	106:VAL	C	107:GLN	N	0.91
1	BA	2199:A	O3'	2205:C	P	0.75
1	AQ	22:LEU	C	23:VAL	N	0.59
1	AL	23:LYS	C	24:VAL	N	0.43



## 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	1515/1522 (99%)	0.48	151 (9%) 7 10	188, 339, 400, 400	0
2	AV	76/76 (100%)	0.90	8 (10%) 6 9	242, 299, 394, 394	0
3	AW	73/76 (96%)	0.44	9 (12%) 4 8	253, 400, 400, 400	0
4	AX	17/18 (94%)	1.31	5 (29%) 0 2	400, 400, 400, 400	0
5	AB	234/256 (91%)	0.10	12 (5%) 28 27	395, 395, 400, 400	0
6	AC	206/239 (86%)	1.60	58 (28%) 0 2	393, 398, 398, 398	0
7	AD	208/209 (99%)	1.61	67 (32%) 0 2	257, 391, 400, 400	0
8	AE	150/162 (92%)	3.17	90 (60%) 0 0	371, 400, 400, 400	0
9	AF	101/101 (100%)	-0.42	1 (0%) 82 75	400, 400, 400, 400	0
10	AG	155/156 (99%)	1.88	55 (35%) 0 1	358, 400, 400, 400	0
11	AH	138/138 (100%)	1.39	43 (31%) 0 2	396, 396, 396, 396	0
12	AI	127/128 (99%)	0.70	27 (21%) 0 3	395, 395, 395, 395	0
13	AJ	98/105 (93%)	1.25	14 (14%) 2 6	400, 400, 400, 400	0
14	AK	119/129 (92%)	0.82	18 (15%) 2 5	202, 202, 400, 400	0
15	AL	124/135 (91%)	0.96	25 (20%) 1 3	399, 399, 400, 400	0
16	AM	125/126 (99%)	0.47	17 (13%) 3 6	348, 400, 400, 400	0
17	AN	60/61 (98%)	1.49	19 (31%) 0 2	400, 400, 400, 400	0
18	AO	88/89 (98%)	-0.12	2 (2%) 60 54	400, 400, 400, 400	0
19	AP	83/88 (94%)	1.76	32 (38%) 0 1	400, 400, 400, 400	0
20	AQ	104/105 (99%)	1.84	41 (39%) 0 1	400, 400, 400, 400	0
21	AR	73/88 (82%)	-0.38	0 100 100	400, 400, 400, 400	0
22	AS	80/93 (86%)	0.67	17 (21%) 0 3	400, 400, 400, 400	0
23	AT	99/106 (93%)	-0.06	7 (7%) 16 16	400, 400, 400, 400	0
24	AU	24/27 (88%)	1.91	10 (41%) 0 1	400, 400, 400, 400	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
25	BB	123/123 (100%)	-0.16	6 (4%) 29 28	267, 323, 388, 388	0
26	BA	2814/2916 (96%)	0.34	156 (5%) 25 25	65, 238, 393, 400	0
27	BD	173/173 (100%)	1.56	60 (34%) 0 2	392, 392, 400, 400	0
28	BE	191/338 (56%)	2.04	89 (46%) 0 1	400, 400, 400, 400	0
29	BF	189/246 (76%)	-0.33	9 (4%) 30 29	393, 396, 396, 396	0
30	BG	122/176 (69%)	0.06	7 (5%) 23 23	400, 400, 400, 400	0
31	BH	164/177 (92%)	0.26	14 (8%) 10 13	400, 400, 400, 400	0
32	BI	148/149 (99%)	1.42	48 (32%) 0 2	400, 400, 400, 400	0
33	BN	117/145 (80%)	1.71	46 (39%) 0 1	400, 400, 400, 400	0
34	BO	122/122 (100%)	1.10	25 (20%) 1 3	400, 400, 400, 400	0
35	BP	84/164 (51%)	1.02	15 (17%) 1 4	395, 395, 400, 400	0
36	BQ	138/138 (100%)	2.38	70 (50%) 0 1	393, 393, 393, 393	0
37	BS	113/186 (60%)	-0.12	2 (1%) 68 60	278, 400, 400, 400	0
38	BT	52/66 (78%)	3.00	31 (59%) 0 0	400, 400, 400, 400	0
39	BW	108/113 (95%)	0.18	6 (5%) 24 24	278, 395, 400, 400	0
40	BX	76/84 (90%)	0.80	18 (23%) 0 2	400, 400, 400, 400	0
41	BY	110/119 (92%)	0.70	15 (13%) 3 6	400, 400, 400, 400	0
42	BZ	177/253 (69%)	0.28	10 (5%) 24 24	396, 398, 398, 398	0
43	BR	105/118 (88%)	0.35	8 (7%) 13 15	400, 400, 400, 400	0
44	BU	117/118 (99%)	0.44	14 (11%) 4 8	391, 391, 400, 400	0
45	BV	100/100 (100%)	1.10	20 (20%) 1 3	400, 400, 400, 400	0
46	B2	64/70 (91%)	0.03	4 (6%) 20 19	400, 400, 400, 400	0
47	B3	60/60 (100%)	0.28	4 (6%) 17 18	398, 398, 398, 398	0
48	B0	86/91 (94%)	1.44	23 (26%) 0 2	396, 400, 400, 400	0
49	B4	73/73 (100%)	1.92	34 (46%) 0 1	396, 397, 397, 397	0
50	B5	58/60 (96%)	-0.14	0 100 100	400, 400, 400, 400	0
51	B6	53/82 (64%)	-0.08	2 (3%) 40 36	400, 400, 400, 400	0
52	B7	46/47 (97%)	0.80	3 (6%) 18 18	396, 396, 396, 396	0
53	B8	63/64 (98%)	1.02	13 (20%) 1 3	400, 400, 400, 400	0
54	B9	35/36 (97%)	3.63	21 (60%) 0 0	400, 400, 400, 400	0
55	BK	133/141 (94%)	0.06	4 (3%) 50 43	392, 400, 400, 400	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
All	All	10091/10981 (91%)	0.70	1505 (14%) <b>2</b> <b>5</b>	65, 395, 400, 400	0

All (1505) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	AJ	61	GLU	17.3
13	AJ	62	HIS	16.0
13	AJ	48	THR	14.7
8	AE	134	ALA	13.7
54	B9	24	LEU	13.3
13	AJ	49	VAL	13.0
8	AE	100	VAL	12.8
7	AD	200	GLU	12.2
6	AC	149	ALA	11.4
8	AE	89	ILE	11.4
7	AD	109	GLY	11.3
36	BQ	115	SER	11.2
8	AE	99	GLY	11.2
54	B9	25	VAL	11.1
8	AE	135	THR	10.7
54	B9	34	GLN	10.3
8	AE	77	PRO	10.3
8	AE	29	GLY	10.1
7	AD	68	TYR	10.0
48	B0	85	GLN	10.0
54	B9	23	VAL	9.9
13	AJ	60	ARG	9.8
6	AC	189	ALA	9.8
26	BA	1532	C	9.8
20	AQ	97	SER	9.8
10	AG	77	SER	9.8
19	AP	21	VAL	9.6
54	B9	17	VAL	9.6
13	AJ	63	PHE	9.5
6	AC	185	GLY	9.5
19	AP	59	TRP	9.4
6	AC	156	ARG	9.3
10	AG	85	TYR	9.2
8	AE	30	ALA	9.0
19	AP	34	GLU	8.9
8	AE	80	ILE	8.8
48	B0	84	ALA	8.8

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Mol	Chain	Res	Type	RSRZ
10	AG	76	ARG	8.8
10	AG	86	GLN	8.5
8	AE	142	LEU	8.5
38	BT	52	THR	8.4
8	AE	76	ILE	8.4
1	AA	564	C	8.4
8	AE	122	GLU	8.3
17	AN	37	PHE	8.1
24	AU	23	PRO	8.0
38	BT	53	ASP	7.9
6	AC	200	ALA	7.9
7	AD	69	GLY	7.8
7	AD	199	ASN	7.8
10	AG	82	GLY	7.7
33	BN	133	GLY	7.6
8	AE	106	PRO	7.6
8	AE	16	THR	7.6
13	AJ	50	ILE	7.6
41	BY	5	ASP	7.6
10	AG	83	ALA	7.5
1	AA	1033	G	7.5
49	B4	72	LYS	7.5
26	BA	141	A	7.5
8	AE	138	ALA	7.5
6	AC	151	VAL	7.4
8	AE	75	THR	7.4
28	BE	254	GLY	7.4
33	BN	71	TYR	7.4
38	BT	10	GLY	7.4
8	AE	118	ILE	7.4
6	AC	166	GLU	7.3
6	AC	148	GLY	7.3
8	AE	32	VAL	7.3
17	AN	36	PHE	7.3
36	BQ	136	TRP	7.3
8	AE	78	HIS	7.3
7	AD	107	ARG	7.3
49	B4	47	GLU	7.2
13	AJ	47	PHE	7.1
32	BI	84	GLY	7.1
8	AE	143	ARG	7.1
19	AP	79	VAL	7.1

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Mol	Chain	Res	Type	RSRZ
15	AL	30	ALA	7.1
26	BA	546	C	7.1
28	BE	41	PHE	7.0
15	AL	26	ALA	7.0
36	BQ	147	VAL	7.0
7	AD	90	GLY	7.0
10	AG	87	VAL	7.0
8	AE	132	ALA	7.0
7	AD	198	VAL	6.9
7	AD	70	ILE	6.9
28	BE	319	ASP	6.9
10	AG	84	ASN	6.9
1	AA	562	C	6.9
8	AE	46	GLY	6.8
28	BE	42	ALA	6.8
7	AD	203	VAL	6.8
17	AN	45	ARG	6.7
26	BA	2104	G	6.7
7	AD	98	GLU	6.7
28	BE	294	THR	6.7
8	AE	136	MET	6.6
36	BQ	48	ASN	6.6
8	AE	93	PRO	6.6
36	BQ	127	ASN	6.6
1	AA	865	A	6.6
48	B0	83	ALA	6.6
41	BY	10	SER	6.5
6	AC	168	ALA	6.5
17	AN	38	GLY	6.5
26	BA	2105	C	6.5
36	BQ	150	ASP	6.5
38	BT	11	THR	6.4
36	BQ	140	TYR	6.4
19	AP	66	PRO	6.4
4	AX	120	A	6.4
8	AE	131	ILE	6.4
7	AD	103	ASN	6.4
10	AG	78	ARG	6.4
6	AC	187	ALA	6.4
34	BO	84	CYS	6.4
42	BZ	102	GLY	6.4
12	AI	110	GLU	6.3

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Mol	Chain	Res	Type	RSRZ
48	B0	86	THR	6.3
54	B9	26	ILE	6.3
32	BI	85	GLU	6.3
27	BD	78	ALA	6.3
1	AA	1537	U	6.3
34	BO	10	VAL	6.3
28	BE	175	ASP	6.3
49	B4	54	GLY	6.3
38	BT	5	GLU	6.3
54	B9	16	VAL	6.2
31	BH	167	LEU	6.2
36	BQ	113	ALA	6.2
10	AG	156	TRP	6.2
8	AE	82	VAL	6.2
20	AQ	33	GLY	6.2
7	AD	104	VAL	6.2
27	BD	68	ARG	6.2
1	AA	1535	C	6.2
36	BQ	139	ALA	6.1
20	AQ	39	SER	6.1
20	AQ	102	GLY	6.1
1	AA	1536	C	6.1
27	BD	93	ILE	6.1
33	BN	61	VAL	6.1
28	BE	253	GLN	6.1
26	BA	545	G	6.1
8	AE	115	VAL	6.1
32	BI	92	SER	6.0
34	BO	100	GLY	6.0
28	BE	40	GLY	6.0
6	AC	198	VAL	6.0
13	AJ	51	ARG	6.0
19	AP	33	ILE	6.0
27	BD	79	THR	6.0
36	BQ	148	ASN	5.9
17	AN	49	HIS	5.9
1	AA	1032	G	5.9
33	BN	72	PRO	5.9
4	AX	115	G	5.9
36	BQ	47	GLU	5.9
37	BS	11	ARG	5.9
42	BZ	104	SER	5.8

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Mol	Chain	Res	Type	RSRZ
38	BT	9	CYS	5.8
8	AE	91	LEU	5.8
28	BE	73	ILE	5.8
13	AJ	59	SER	5.8
38	BT	7	ASP	5.7
36	BQ	156	ASN	5.7
32	BI	27	ASN	5.7
28	BE	75	THR	5.7
32	BI	1	MET	5.7
36	BQ	50	VAL	5.7
32	BI	23	ASP	5.7
32	BI	2	LYS	5.7
1	AA	9	G	5.7
3	AW	34	G	5.7
34	BO	11	ALA	5.7
8	AE	79	GLU	5.7
8	AE	87	SER	5.7
17	AN	48	ALA	5.6
35	BP	79	ASP	5.6
20	AQ	11	VAL	5.6
1	AA	1034	G	5.6
33	BN	63	ILE	5.6
1	AA	555	C	5.6
16	AM	112	GLY	5.6
41	BY	9	LYS	5.6
26	BA	2103	C	5.6
54	B9	19	ARG	5.6
26	BA	1533	C	5.6
38	BT	54	THR	5.5
20	AQ	94	ASN	5.5
1	AA	866	C	5.5
7	AD	67	ILE	5.5
44	BU	38	THR	5.5
41	BY	6	LYS	5.5
36	BQ	53	PRO	5.4
22	AS	28	LYS	5.4
28	BE	74	GLU	5.4
36	BQ	51	GLU	5.4
12	AI	124	GLN	5.4
6	AC	202	ILE	5.4
32	BI	21	VAL	5.4
1	AA	301	G	5.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
8	AE	116	THR	5.4
32	BI	91	GLY	5.4
7	AD	152	SER	5.4
8	AE	119	LEU	5.4
48	B0	28	GLY	5.4
7	AD	149	ALA	5.4
41	BY	11	GLN	5.3
6	AC	153	VAL	5.3
15	AL	101	VAL	5.3
49	B4	46	GLU	5.3
10	AG	124	LEU	5.3
32	BI	26	ALA	5.3
28	BE	171	SER	5.3
27	BD	94	ASN	5.3
53	B8	22	VAL	5.3
45	BV	77	GLY	5.2
26	BA	1555	G	5.2
43	BR	70	LEU	5.2
26	BA	1531	C	5.2
7	AD	148	VAL	5.2
17	AN	52	GLN	5.2
49	B4	71	SER	5.2
8	AE	117	ASP	5.2
16	AM	123	ALA	5.2
19	AP	64	ALA	5.2
8	AE	107	ARG	5.2
10	AG	79	ARG	5.2
6	AC	155	GLY	5.2
16	AM	111	LYS	5.2
10	AG	154	TYR	5.2
22	AS	31	ILE	5.2
32	BI	38	GLU	5.2
8	AE	130	ASN	5.1
32	BI	20	ASN	5.1
7	AD	93	PHE	5.1
10	AG	151	TYR	5.1
1	AA	860	A	5.1
51	B6	5	GLY	5.1
33	BN	37	ALA	5.1
10	AG	120	ILE	5.1
10	AG	153	HIS	5.1
48	B0	81	ILE	5.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	AQ	12	SER	5.0
7	AD	97	LEU	5.0
26	BA	1378	A	5.0
41	BY	7	GLN	5.0
10	AG	152	ALA	5.0
19	AP	70	ALA	5.0
7	AD	95	GLY	5.0
49	B4	65	ASP	5.0
48	B0	87	GLU	5.0
28	BE	71	THR	5.0
54	B9	36	GLN	5.0
19	AP	36	ILE	5.0
40	BX	64	ALA	5.0
33	BN	100	SER	5.0
28	BE	63	GLU	5.0
10	AG	89	MET	5.0
10	AG	62	PHE	5.0
31	BH	168	VAL	4.9
8	AE	141	GLN	4.9
52	B7	43	THR	4.9
27	BD	100	LYS	4.9
28	BE	62	ARG	4.9
27	BD	231	ALA	4.9
20	AQ	23	VAL	4.9
36	BQ	22	GLY	4.9
38	BT	24	LYS	4.9
36	BQ	97	ASP	4.9
12	AI	122	ALA	4.9
8	AE	31	LEU	4.9
12	AI	123	PRO	4.9
49	B4	44	THR	4.9
49	B4	60	ASN	4.9
1	AA	280	C	4.9
24	AU	22	ARG	4.9
33	BN	36	VAL	4.9
14	AK	11	LYS	4.9
8	AE	139	LEU	4.9
28	BE	61	PRO	4.8
32	BI	86	GLY	4.8
36	BQ	54	VAL	4.8
32	BI	31	PHE	4.8
8	AE	27	ARG	4.8

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Mol	Chain	Res	Type	RSRZ
11	AH	80	ILE	4.8
1	AA	563	A	4.8
14	AK	89	ALA	4.8
28	BE	43	GLY	4.8
38	BT	50	GLU	4.8
20	AQ	32	TYR	4.8
7	AD	89	THR	4.8
38	BT	8	TYR	4.8
1	AA	1187	G	4.8
36	BQ	56	ILE	4.8
48	B0	82	GLU	4.8
28	BE	185	GLY	4.8
1	AA	318	G	4.7
19	AP	71	ARG	4.7
11	AH	111	ILE	4.7
54	B9	15	LYS	4.7
26	BA	531	C	4.7
31	BH	166	GLU	4.7
40	BX	8	PRO	4.7
32	BI	36	ALA	4.7
19	AP	4	ILE	4.7
15	AL	71	PRO	4.7
1	AA	1540	U	4.7
40	BX	7	HIS	4.7
8	AE	108	ALA	4.7
10	AG	74	GLU	4.6
1	AA	1539	C	4.6
7	AD	61	LYS	4.6
25	BB	88	C	4.6
28	BE	299	SER	4.6
48	B0	50	GLY	4.6
28	BE	176	HIS	4.6
31	BH	169	ARG	4.6
11	AH	78	GLN	4.6
38	BT	6	CYS	4.6
17	AN	47	LEU	4.6
7	AD	91	SER	4.6
7	AD	129	ASN	4.6
20	AQ	38	ARG	4.6
28	BE	311	PHE	4.6
20	AQ	20	THR	4.6
1	AA	1541	U	4.6

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
22	AS	29	ARG	4.6
28	BE	216	ARG	4.6
28	BE	301	PRO	4.6
41	BY	8	ARG	4.6
7	AD	60	GLU	4.6
27	BD	89	ASN	4.6
1	AA	864	A	4.5
28	BE	304	ASP	4.5
53	B8	60	LEU	4.5
10	AG	155	ARG	4.5
7	AD	96	LEU	4.5
1	AA	859	A	4.5
8	AE	48	ALA	4.5
17	AN	59	ALA	4.5
20	AQ	34	LYS	4.5
38	BT	4	ARG	4.5
8	AE	120	THR	4.4
33	BN	132	LEU	4.4
12	AI	34	ASN	4.4
15	AL	33	ARG	4.4
28	BE	179	ASP	4.4
36	BQ	52	LYS	4.4
7	AD	204	ILE	4.4
19	AP	57	ARG	4.4
45	BV	78	VAL	4.4
6	AC	188	LEU	4.4
8	AE	28	PHE	4.4
38	BT	56	ARG	4.4
34	BO	102	VAL	4.4
3	AW	35	A	4.4
1	AA	1078	U	4.4
15	AL	24	VAL	4.4
6	AC	17	ASP	4.4
8	AE	105	VAL	4.4
36	BQ	143	VAL	4.4
1	AA	1538	C	4.4
7	AD	105	VAL	4.4
25	BB	89	G	4.4
28	BE	172	ASP	4.3
34	BO	83	ALA	4.3
27	BD	101	ARG	4.3
33	BN	46	ILE	4.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	AQ	37	LYS	4.3
36	BQ	118	ALA	4.3
36	BQ	87	LYS	4.3
32	BI	3	VAL	4.3
26	BA	1989	G	4.3
32	BI	35	LEU	4.3
1	AA	1030	C	4.3
27	BD	70	LYS	4.3
32	BI	88	ARG	4.3
34	BO	101	PRO	4.3
28	BE	210	THR	4.3
48	B0	80	SER	4.3
11	AH	77	GLU	4.3
19	AP	22	THR	4.3
29	BF	53	GLY	4.3
1	AA	1061	G	4.3
10	AG	75	VAL	4.3
13	AJ	58	ASP	4.3
26	BA	1554	A	4.3
32	BI	24	GLY	4.3
7	AD	94	LEU	4.2
26	BA	1631	A	4.2
6	AC	50	ALA	4.2
36	BQ	124	ALA	4.2
28	BE	211	GLN	4.2
8	AE	90	VAL	4.2
6	AC	201	TYR	4.2
32	BI	83	ALA	4.2
34	BO	64	ARG	4.2
8	AE	70	PRO	4.2
17	AN	50	LYS	4.2
54	B9	35	ARG	4.2
8	AE	110	LEU	4.2
12	AI	121	ARG	4.2
36	BQ	49	VAL	4.2
11	AH	109	ILE	4.2
27	BD	228	ALA	4.2
7	AD	201	GLN	4.2
11	AH	83	ILE	4.2
1	AA	302	G	4.2
27	BD	232	VAL	4.2
44	BU	41	ASN	4.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
33	BN	97	ALA	4.1
7	AD	150	GLU	4.1
8	AE	133	TYR	4.1
11	AH	81	HIS	4.1
14	AK	126	ARG	4.1
45	BV	88	GLN	4.1
17	AN	41	ARG	4.1
10	AG	80	VAL	4.1
7	AD	189	PRO	4.1
7	AD	110	PHE	4.1
34	BO	85	VAL	4.1
27	BD	181	ARG	4.1
28	BE	309	PRO	4.1
32	BI	30	LEU	4.1
28	BE	187	HIS	4.1
6	AC	53	ALA	4.1
10	AG	53	LYS	4.1
28	BE	184	GLY	4.1
10	AG	117	ALA	4.0
8	AE	33	VAL	4.0
24	AU	3	LYS	4.0
13	AJ	65	LEU	4.0
6	AC	138	VAL	4.0
7	AD	102	ASP	4.0
36	BQ	116	HIS	4.0
24	AU	4	GLY	4.0
53	B8	23	MET	4.0
36	BQ	55	GLN	4.0
38	BT	55	ALA	4.0
49	B4	66	SER	4.0
2	AV	1	G	4.0
7	AD	170	VAL	4.0
1	AA	8	A	4.0
17	AN	58	LYS	4.0
34	BO	63	VAL	4.0
32	BI	37	ILE	4.0
26	BA	653	A	4.0
53	B8	24	ALA	4.0
40	BX	25	GLN	4.0
32	BI	22	ALA	4.0
7	AD	64	LEU	4.0
10	AG	81	GLY	4.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
6	AC	150	LYS	4.0
33	BN	134	GLU	4.0
54	B9	21	GLY	3.9
12	AI	35	GLU	3.9
8	AE	85	GLY	3.9
28	BE	256	THR	3.9
27	BD	92	LEU	3.9
6	AC	184	TYR	3.9
27	BD	173	VAL	3.9
28	BE	255	GLN	3.9
1	AA	1188	A	3.9
1	AA	1542	U	3.9
22	AS	44	MET	3.9
10	AG	88	PRO	3.9
7	AD	111	ALA	3.9
1	AA	30(B)	C	3.9
11	AH	135	CYS	3.9
19	AP	56	ALA	3.9
8	AE	121	LYS	3.9
33	BN	94	GLY	3.9
40	BX	9	HIS	3.9
29	BF	96	LYS	3.9
49	B4	52	THR	3.9
32	BI	90	PHE	3.8
38	BT	27	ALA	3.8
30	BG	59	GLY	3.8
32	BI	93	ILE	3.8
10	AG	125	MET	3.8
1	AA	1468	A	3.8
7	AD	161	ASN	3.8
28	BE	317	PRO	3.8
38	BT	12	ASP	3.8
27	BD	237	GLY	3.8
8	AE	109	ILE	3.8
38	BT	41	ASP	3.8
8	AE	101	ILE	3.8
22	AS	30	LEU	3.8
25	BB	89(A)	A	3.8
36	BQ	146	THR	3.8
1	AA	1476	G	3.8
26	BA	958	U	3.8
8	AE	154	GLY	3.8

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Mol	Chain	Res	Type	RSRZ
33	BN	62	ASP	3.8
11	AH	25	ASP	3.8
6	AC	159	GLY	3.8
1	AA	565	U	3.8
6	AC	170	GLN	3.8
49	B4	64	GLY	3.8
26	BA	2795	G	3.8
33	BN	58	GLU	3.8
12	AI	111	ARG	3.8
20	AQ	29	HIS	3.8
31	BH	165	GLY	3.8
26	BA	2833	G	3.8
36	BQ	133	GLU	3.8
1	AA	1477	C	3.8
28	BE	189	MET	3.7
26	BA	1377	G	3.7
11	AH	134	ILE	3.7
32	BI	128	ASN	3.7
44	BU	34	ASN	3.7
45	BV	7	THR	3.7
32	BI	39	ALA	3.7
1	AA	1403	C	3.7
22	AS	43	GLU	3.7
36	BQ	145	PRO	3.7
28	BE	68	VAL	3.7
33	BN	54	VAL	3.7
33	BN	101	VAL	3.7
53	B8	14	ILE	3.7
33	BN	35	THR	3.7
36	BQ	29	ALA	3.7
7	AD	205	GLU	3.7
54	B9	7	VAL	3.7
27	BD	108	ASN	3.7
28	BE	193	PHE	3.7
20	AQ	98	LEU	3.7
27	BD	128	ALA	3.7
15	AL	68	ALA	3.7
8	AE	74	GLY	3.7
42	BZ	109	GLN	3.7
6	AC	163	ALA	3.7
36	BQ	44	ALA	3.6
28	BE	47	GLY	3.6

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Mol	Chain	Res	Type	RSRZ
36	BQ	46	VAL	3.6
6	AC	199	LYS	3.6
7	AD	130	GLY	3.6
28	BE	177	ALA	3.6
26	BA	2452	C	3.6
48	B0	61	ALA	3.6
1	AA	82	U	3.6
11	AH	132	GLU	3.6
39	BW	74	ALA	3.6
19	AP	58	TYR	3.6
38	BT	28	THR	3.6
1	AA	885	G	3.6
31	BH	104	LEU	3.6
30	BG	152	PRO	3.6
6	AC	196	LEU	3.6
33	BN	70	PHE	3.6
36	BQ	76	GLY	3.6
49	B4	30	GLU	3.6
20	AQ	103	GLY	3.6
27	BD	91	ALA	3.6
26	BA	994	C	3.6
28	BE	320	GLN	3.6
48	B0	27	GLY	3.6
1	AA	88	A	3.6
26	BA	1103	A	3.6
35	BP	144	ASP	3.6
33	BN	135	ILE	3.5
49	B4	33	VAL	3.5
15	AL	100	ILE	3.5
7	AD	153	ARG	3.5
11	AH	110	ALA	3.5
10	AG	121	ALA	3.5
45	BV	70	TYR	3.5
36	BQ	128	PRO	3.5
8	AE	5	ASP	3.5
27	BD	76	ARG	3.5
28	BE	79	ARG	3.5
1	AA	319	G	3.5
27	BD	95	TYR	3.5
38	BT	36	CYS	3.5
1	AA	5	U	3.5
1	AA	279	A	3.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	AQ	62	SER	3.5
48	B0	52	GLY	3.5
49	B4	7	PRO	3.5
15	AL	102	ARG	3.5
30	BG	153	THR	3.5
36	BQ	121	ASP	3.5
8	AE	137	GLU	3.5
4	AX	121	G	3.5
26	BA	1764	G	3.5
49	B4	73	LYS	3.4
26	BA	2254	C	3.4
17	AN	46	GLU	3.4
1	AA	867	G	3.4
38	BT	40	ALA	3.4
20	AQ	91	ARG	3.4
22	AS	49	ILE	3.4
14	AK	13	GLN	3.4
7	AD	128	VAL	3.4
33	BN	68	GLY	3.4
19	AP	19	ILE	3.4
11	AH	35	ILE	3.4
26	BA	654	A	3.4
28	BE	295	LEU	3.4
1	AA	30(A)	G	3.4
25	BB	87	G	3.4
26	BA	2319	G	3.4
29	BF	52	ALA	3.4
2	AV	17	U	3.4
46	B2	10	ASP	3.4
12	AI	38	GLN	3.4
19	AP	2	VAL	3.4
1	AA	554	C	3.4
11	AH	17	THR	3.4
45	BV	80	TYR	3.4
11	AH	85	ARG	3.4
15	AL	27	LEU	3.4
26	BA	2615	U	3.4
27	BD	77	VAL	3.4
6	AC	6	HIS	3.4
26	BA	140	A	3.4
10	AG	133	GLY	3.4
16	AM	116	THR	3.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	BA	586	A	3.4
36	BQ	117	GLY	3.4
6	AC	8	ILE	3.4
33	BN	53	ILE	3.4
1	AA	913	A	3.4
29	BF	94	THR	3.4
26	BA	686	G	3.4
27	BD	109	LEU	3.4
33	BN	131	THR	3.4
14	AK	90	GLY	3.4
11	AH	137	VAL	3.3
28	BE	209	GLY	3.3
28	BE	212	GLY	3.3
26	BA	1971	A	3.3
27	BD	112	GLY	3.3
28	BE	69	PRO	3.3
49	B4	61	LYS	3.3
11	AH	91	ARG	3.3
6	AC	7	PRO	3.3
17	AN	44	LEU	3.3
27	BD	189	ALA	3.3
41	BY	14	ALA	3.3
11	AH	18	ARG	3.3
20	AQ	36	ILE	3.3
22	AS	59	PRO	3.3
6	AC	157	ILE	3.3
28	BE	318	ASN	3.3
38	BT	26	GLY	3.3
34	BO	12	ASP	3.3
6	AC	3	ASN	3.3
26	BA	2608	G	3.3
12	AI	126	SER	3.3
8	AE	86	ALA	3.3
8	AE	153	LYS	3.3
26	BA	2020	A	3.3
1	AA	1233	G	3.3
20	AQ	22	LEU	3.3
26	BA	2091	U	3.3
15	AL	31	PRO	3.3
25	BB	90	C	3.3
16	AM	113	PRO	3.3
36	BQ	98	GLY	3.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
5	AB	101	MET	3.3
33	BN	55	GLU	3.3
36	BQ	137	ARG	3.3
38	BT	49	LEU	3.3
49	B4	45	GLY	3.3
45	BV	72	ARG	3.3
49	B4	42	PHE	3.3
36	BQ	114	ARG	3.3
54	B9	22	ARG	3.3
1	AA	7	G	3.3
19	AP	20	VAL	3.3
27	BD	71	ASP	3.3
3	AW	31	A	3.3
3	AW	36	A	3.3
19	AP	53	VAL	3.3
19	AP	35	LYS	3.3
8	AE	45	PHE	3.2
42	BZ	108	VAL	3.2
1	AA	1381	U	3.2
12	AI	45	ALA	3.2
36	BQ	119	ASN	3.2
15	AL	104	VAL	3.2
8	AE	102	ALA	3.2
20	AQ	28	PRO	3.2
12	AI	46	ALA	3.2
8	AE	103	GLY	3.2
26	BA	2270	G	3.2
28	BE	178	LEU	3.2
1	AA	561	U	3.2
26	BA	890	A	3.2
28	BE	80	ALA	3.2
35	BP	143	THR	3.2
40	BX	57	THR	3.2
33	BN	139	LEU	3.2
6	AC	197	GLY	3.2
34	BO	99	PHE	3.2
10	AG	22	LEU	3.2
44	BU	37	GLN	3.2
29	BF	98	ARG	3.2
1	AA	861	G	3.2
35	BP	80	ASP	3.2
19	AP	74	LEU	3.2

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
36	BQ	110	GLY	3.2
28	BE	77	PRO	3.2
41	BY	12	ARG	3.2
16	AM	124	PRO	3.2
1	AA	1426	C	3.2
27	BD	117	SER	3.2
27	BD	142	ASN	3.2
35	BP	83	GLU	3.2
23	AT	80	ARG	3.2
36	BQ	65	ARG	3.2
7	AD	108	LEU	3.2
49	B4	69	ARG	3.2
1	AA	571	U	3.2
45	BV	19	VAL	3.2
26	BA	2210	G	3.2
43	BR	25	ALA	3.2
8	AE	126	ARG	3.2
28	BE	227	ALA	3.2
23	AT	18	GLN	3.2
37	BS	10	MET	3.2
1	AA	559	A	3.2
14	AK	124	LYS	3.2
7	AD	99	SER	3.1
8	AE	9	LYS	3.1
33	BN	45	VAL	3.1
49	B4	43	TRP	3.1
33	BN	98	PHE	3.1
29	BF	92	PRO	3.1
8	AE	50	GLU	3.1
38	BT	51	TRP	3.1
20	AQ	25	ARG	3.1
8	AE	72	GLN	3.1
11	AH	87	SER	3.1
33	BN	87	LEU	3.1
26	BA	2102	U	3.1
40	BX	6	LYS	3.1
53	B8	61	MET	3.1
1	AA	30(C)	G	3.1
15	AL	84	LEU	3.1
36	BQ	21	SER	3.1
49	B4	57	ASP	3.1
27	BD	111	VAL	3.1

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
41	BY	104	GLU	3.1
11	AH	112	LEU	3.1
28	BE	296	VAL	3.1
48	B0	60	PHE	3.1
1	AA	1469	G	3.1
10	AG	150	ALA	3.1
26	BA	2446	G	3.1
32	BI	19	LYS	3.1
44	BU	7	GLY	3.1
40	BX	61	GLU	3.1
26	BA	2064	C	3.1
26	BA	1654	A	3.1
40	BX	11	THR	3.1
36	BQ	157	ALA	3.1
54	B9	33	LYS	3.1
14	AK	101	SER	3.1
11	AH	90	GLY	3.1
28	BE	251	PRO	3.1
49	B4	18	GLY	3.1
1	AA	918	A	3.1
1	AA	1079	G	3.1
10	AG	122	HIS	3.1
22	AS	41	VAL	3.1
4	AX	118	C	3.1
33	BN	48	GLY	3.1
33	BN	10	VAL	3.1
7	AD	202	LEU	3.1
3	AW	33	U	3.1
40	BX	59	ASP	3.1
12	AI	65	VAL	3.1
30	BG	58	VAL	3.1
1	AA	228	A	3.1
1	AA	1398	A	3.1
28	BE	46	ALA	3.1
27	BD	65	ASP	3.0
45	BV	18	ASP	3.0
1	AA	570	G	3.0
12	AI	41	VAL	3.0
1	AA	303	A	3.0
28	BE	180	ILE	3.0
20	AQ	27	PHE	3.0
28	BE	252	GLN	3.0

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
48	B0	18	PRO	3.0
36	BQ	151	SER	3.0
1	AA	286	G	3.0
1	AA	568	G	3.0
31	BH	151	ARG	3.0
40	BX	26	PHE	3.0
41	BY	1	SER	3.0
1	AA	317	G	3.0
26	BA	271(B)	G	3.0
39	BW	104	THR	3.0
1	AA	863	U	3.0
32	BI	89	LEU	3.0
6	AC	16	ARG	3.0
8	AE	140	ARG	3.0
8	AE	17	ALA	3.0
41	BY	100	ASP	3.0
10	AG	58	PRO	3.0
28	BE	263	GLU	3.0
15	AL	10	LEU	3.0
26	BA	125	G	3.0
36	BQ	106	GLY	3.0
15	AL	7	ILE	3.0
7	AD	86	LYS	3.0
16	AM	65	LYS	3.0
53	B8	5	LYS	3.0
26	BA	2600	A	3.0
6	AC	169	ALA	3.0
44	BU	42	ALA	3.0
6	AC	186	PHE	3.0
32	BI	122	ARG	3.0
44	BU	6	THR	3.0
54	B9	20	HIS	3.0
26	BA	2211	G	3.0
26	BA	2681	C	3.0
42	BZ	101	THR	3.0
1	AA	229	U	3.0
1	AA	954	G	2.9
26	BA	2271	G	2.9
36	BQ	91	HIS	2.9
1	AA	1244	C	2.9
26	BA	2599	G	2.9
45	BV	76	SER	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
40	BX	63	LYS	2.9
1	AA	1186	G	2.9
1	AA	1232	U	2.9
12	AI	115	GLY	2.9
7	AD	181	MET	2.9
40	BX	27	ALA	2.9
1	AA	1451	A	2.9
17	AN	53	LEU	2.9
10	AG	132	GLY	2.9
28	BE	183	ASP	2.9
7	AD	180	GLY	2.9
10	AG	131	LYS	2.9
42	BZ	107	GLU	2.9
1	AA	294	U	2.9
6	AC	19	GLU	2.9
36	BQ	135	ALA	2.9
1	AA	922	G	2.9
40	BX	10	VAL	2.9
28	BE	226	HIS	2.9
38	BT	23	HIS	2.9
27	BD	102	TYR	2.9
17	AN	51	GLY	2.9
54	B9	9	LYS	2.9
7	AD	162	LEU	2.9
19	AP	65	GLN	2.9
20	AQ	24	GLU	2.9
33	BN	88	PRO	2.9
8	AE	81	GLU	2.9
38	BT	37	GLU	2.9
15	AL	11	VAL	2.9
35	BP	123	ASP	2.9
26	BA	2450	A	2.9
26	BA	2451	A	2.9
1	AA	886	G	2.9
26	BA	2798	C	2.9
19	AP	60	LEU	2.9
6	AC	152	ILE	2.9
34	BO	8	LEU	2.9
1	AA	1031	G	2.9
27	BD	190	THR	2.9
28	BE	270	ASP	2.9
55	BK	89	SER	2.9

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
2	AV	36	A	2.9
6	AC	134	ILE	2.9
26	BA	565	C	2.8
20	AQ	42	TYR	2.8
29	BF	97	ASP	2.8
52	B7	44	VAL	2.8
14	AK	57	THR	2.8
26	BA	898	C	2.8
26	BA	2680	C	2.8
19	AP	3	LYS	2.8
20	AQ	26	GLN	2.8
26	BA	675	A	2.8
10	AG	105	VAL	2.8
27	BD	113	MET	2.8
1	AA	1029	C	2.8
32	BI	4	ILE	2.8
7	AD	101	LEU	2.8
32	BI	9	VAL	2.8
14	AK	58	PRO	2.8
35	BP	115	ARG	2.8
27	BD	171	VAL	2.8
26	BA	1380	G	2.8
1	AA	1060	C	2.8
7	AD	147	ALA	2.8
26	BA	1075	C	2.8
15	AL	98	TYR	2.8
16	AM	108	ARG	2.8
34	BO	33	ALA	2.8
10	AG	126	ASP	2.8
26	BA	973	A	2.8
15	AL	29	GLY	2.8
27	BD	135	PRO	2.8
33	BN	19	MET	2.8
36	BQ	138	ARG	2.8
1	AA	30(D)	A	2.8
26	BA	1353	A	2.8
49	B4	68	ARG	2.8
28	BE	229	GLN	2.8
10	AG	18	TYR	2.8
11	AH	76	PRO	2.8
7	AD	82	ALA	2.8
14	AK	93	GLN	2.8

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	AQ	99	SER	2.8
26	BA	1379	A	2.8
28	BE	205	THR	2.8
8	AE	84	PHE	2.8
55	BK	95	LYS	2.8
49	B4	62	ARG	2.8
28	BE	49	THR	2.8
26	BA	1199	U	2.8
32	BI	97	GLN	2.8
26	BA	2042	A	2.8
33	BN	60	ARG	2.8
8	AE	111	GLU	2.8
22	AS	48	THR	2.8
36	BQ	122	PHE	2.8
43	BR	69	ASP	2.8
26	BA	1244	G	2.8
44	BU	43	ALA	2.8
49	B4	55	ARG	2.8
15	AL	83	VAL	2.8
36	BQ	92	VAL	2.8
49	B4	17	GLN	2.8
14	AK	123	LYS	2.8
32	BI	102	LEU	2.8
45	BV	74	TYR	2.8
1	AA	293	G	2.8
11	AH	75	ARG	2.8
54	B9	2	LYS	2.8
34	BO	24	VAL	2.8
26	BA	1674	G	2.7
45	BV	6	GLN	2.7
16	AM	119	GLY	2.7
8	AE	92	LYS	2.7
28	BE	76	PRO	2.7
48	B0	35	ASN	2.7
26	BA	2272	U	2.7
16	AM	16	ASP	2.7
26	BA	1090	U	2.7
15	AL	70	ILE	2.7
36	BQ	104	PRO	2.7
26	BA	966	G	2.7
42	BZ	100	THR	2.7
11	AH	54	ASP	2.7

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Mol	Chain	Res	Type	RSRZ
26	BA	1990	C	2.7
1	AA	300	A	2.7
43	BR	29	LEU	2.7
20	AQ	35	VAL	2.7
39	BW	105	VAL	2.7
26	BA	2023	G	2.7
26	BA	2447	G	2.7
26	BA	271(A)	C	2.7
47	B3	26	LEU	2.7
8	AE	104	ALA	2.7
28	BE	70	VAL	2.7
1	AA	1425	U	2.7
41	BY	13	ARG	2.7
26	BA	1243	G	2.7
1	AA	1427	U	2.7
11	AH	136	GLU	2.7
24	AU	9	ARG	2.7
26	BA	2789	C	2.7
8	AE	43	LEU	2.7
8	AE	123	LEU	2.7
13	AJ	46	ARG	2.7
23	AT	15	ARG	2.7
11	AH	19	VAL	2.7
16	AM	120	LYS	2.7
1	AA	761	G	2.7
26	BA	1626	G	2.7
26	BA	1632	A	2.7
6	AC	110	ASN	2.7
6	AC	160	ALA	2.7
38	BT	29	THR	2.7
38	BT	39	ASN	2.7
12	AI	33	PHE	2.7
7	AD	92	VAL	2.7
1	AA	1227	A	2.7
20	AQ	93	GLN	2.7
6	AC	117	ALA	2.7
6	AC	130	VAL	2.7
48	B0	73	GLY	2.7
6	AC	183	ASP	2.7
32	BI	8	ASP	2.7
27	BD	80	ILE	2.7
13	AJ	64	GLU	2.7

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
20	AQ	105	ALA	2.7
28	BE	213	PRO	2.7
1	AA	923	A	2.7
27	BD	188	ARG	2.7
11	AH	138	TRP	2.7
31	BH	164	GLU	2.7
44	BU	28	ARG	2.7
27	BD	209	ASN	2.6
26	BA	2587	A	2.6
1	AA	556	C	2.6
34	BO	69	VAL	2.6
1	AA	966	G	2.6
1	AA	1066	C	2.6
26	BA	668	G	2.6
33	BN	50	GLU	2.6
33	BN	136	SER	2.6
12	AI	125	TYR	2.6
30	BG	35	ALA	2.6
52	B7	17	GLY	2.6
26	BA	2267	A	2.6
55	BK	90	SER	2.6
23	AT	21	LYS	2.6
28	BE	44	TYR	2.6
36	BQ	149	ILE	2.6
1	AA	28	G	2.6
26	BA	2805	G	2.6
20	AQ	41	LYS	2.6
20	AQ	64	PRO	2.6
49	B4	31	ILE	2.6
38	BT	30	HIS	2.6
27	BD	172	ILE	2.6
48	B0	72	LYS	2.6
1	AA	10	A	2.6
10	AG	63	LYS	2.6
3	AW	30	G	2.6
27	BD	81	GLU	2.6
1	AA	18	C	2.6
1	AA	1382	C	2.6
28	BE	201	VAL	2.6
28	BE	181	VAL	2.6
36	BQ	41	THR	2.6
1	AA	11	G	2.6

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Mol	Chain	Res	Type	RSRZ
11	AH	20	TYR	2.6
14	AK	75	TYR	2.6
12	AI	105	ASP	2.6
26	BA	2212	A	2.6
14	AK	88	GLY	2.6
6	AC	94	LEU	2.6
24	AU	14	TRP	2.6
15	AL	8	ASN	2.6
26	BA	113	G	2.6
26	BA	974	G	2.6
28	BE	72	VAL	2.6
17	AN	34	TYR	2.6
46	B2	9	ARG	2.6
19	AP	23	ASP	2.6
30	BG	154	LYS	2.6
26	BA	532	A	2.6
26	BA	1020	A	2.6
26	BA	2621	A	2.6
26	BA	1198	U	2.6
27	BD	75	GLY	2.6
28	BE	271	ILE	2.6
8	AE	129	ILE	2.5
26	BA	564	C	2.5
32	BI	28	ASN	2.5
15	AL	67	THR	2.5
34	BO	61	VAL	2.5
32	BI	120	ALA	2.5
20	AQ	88	TYR	2.5
2	AV	63	C	2.5
11	AH	133	LEU	2.5
33	BN	69	TYR	2.5
26	BA	2238	G	2.5
35	BP	63	THR	2.5
46	B2	11	MET	2.5
49	B4	63	PHE	2.5
26	BA	466	A	2.5
26	BA	1086	A	2.5
12	AI	32	ASP	2.5
48	B0	19	LYS	2.5
35	BP	145	LEU	2.5
34	BO	98	ILE	2.5
27	BD	127	ASN	2.5

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
7	AD	125	HIS	2.5
19	AP	51	VAL	2.5
42	BZ	103	ARG	2.5
28	BE	293	TYR	2.5
1	AA	89	C	2.5
7	AD	127	THR	2.5
12	AI	113	LYS	2.5
32	BI	123	ALA	2.5
35	BP	106	VAL	2.5
16	AM	41	PRO	2.5
41	BY	4	PRO	2.5
12	AI	44	VAL	2.5
19	AP	54	GLU	2.5
49	B4	32	HIS	2.5
27	BD	64	ILE	2.5
10	AG	137	LYS	2.5
27	BD	126	GLY	2.5
53	B8	49	VAL	2.5
1	AA	974	A	2.5
3	AW	38	A	2.5
8	AE	94	ALA	2.5
26	BA	2820	A	2.5
40	BX	5	ILE	2.5
34	BO	75	SER	2.5
11	AH	95	VAL	2.5
10	AG	90	GLU	2.5
26	BA	1033	U	2.5
28	BE	186	GLU	2.5
33	BN	51	GLU	2.5
20	AQ	95	TYR	2.5
26	BA	1765	C	2.5
26	BA	715	G	2.5
1	AA	733	A	2.5
1	AA	1080	A	2.5
27	BD	104	ILE	2.5
38	BT	22	VAL	2.5
49	B4	14	ILE	2.5
1	AA	1395	C	2.4
26	BA	837	C	2.4
1	AA	610	G	2.4
34	BO	122	ILE	2.4
49	B4	53	GLU	2.4

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Mol	Chain	Res	Type	RSRZ
26	BA	836	G	2.4
10	AG	112	PRO	2.4
11	AH	104	ARG	2.4
22	AS	27	GLU	2.4
53	B8	47	GLY	2.4
15	AL	62	SER	2.4
15	AL	85	ILE	2.4
32	BI	18	ILE	2.4
33	BN	138	THR	2.4
28	BE	221	LYS	2.4
26	BA	2453	A	2.4
26	BA	2590	A	2.4
48	B0	17	ASN	2.4
6	AC	191	THR	2.4
7	AD	100	ARG	2.4
33	BN	17	CYS	2.4
1	AA	1245	A	2.4
34	BO	9	LYS	2.4
49	B4	70	GLY	2.4
12	AI	109	VAL	2.4
1	AA	828	A	2.4
1	AA	1534	A	2.4
1	AA	1424	C	2.4
26	BA	1203	G	2.4
26	BA	1763	G	2.4
28	BE	249	THR	2.4
17	AN	60	SER	2.4
2	AV	35	A	2.4
53	B8	63	PRO	2.4
1	AA	22	G	2.4
10	AG	130	GLY	2.4
12	AI	106	ALA	2.4
6	AC	141	VAL	2.4
7	AD	106	TYR	2.4
8	AE	98	THR	2.4
29	BF	91	PRO	2.4
19	AP	32	TYR	2.4
1	AA	1059	C	2.4
10	AG	123	GLU	2.4
26	BA	2063	C	2.4
2	AV	19	G	2.4
24	AU	5	ASP	2.4

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	BA	1679	U	2.4
6	AC	113	ALA	2.4
6	AC	154	SER	2.4
34	BO	36	GLY	2.4
27	BD	83	ASP	2.4
23	AT	71	THR	2.4
1	AA	917	G	2.4
22	AS	40	ILE	2.4
31	BH	154	GLU	2.4
5	AB	182	ILE	2.4
10	AG	59	LEU	2.4
10	AG	118	VAL	2.4
22	AS	32	LYS	2.4
26	BA	2043	C	2.4
36	BQ	9	SER	2.4
1	AA	81	U	2.4
22	AS	47	HIS	2.4
1	AA	27	G	2.4
36	BQ	88	PHE	2.4
36	BQ	43	PRO	2.4
26	BA	1083	U	2.4
33	BN	47	THR	2.4
36	BQ	89	PRO	2.4
1	AA	1297	C	2.3
5	AB	161	ALA	2.3
11	AH	82	HIS	2.3
26	BA	64	A	2.3
26	BA	2050	C	2.3
8	AE	88	LYS	2.3
28	BE	110	ARG	2.3
31	BH	59	HIS	2.3
49	B4	34	ASP	2.3
9	AF	8	ILE	2.3
11	AH	53	VAL	2.3
20	AQ	73	VAL	2.3
26	BA	965	C	2.3
26	BA	190	A	2.3
35	BP	78	ALA	2.3
45	BV	56	VAL	2.3
39	BW	73	ALA	2.3
28	BE	222	ARG	2.3
32	BI	34	GLY	2.3

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
5	AB	160	ASP	2.3
26	BA	897	C	2.3
20	AQ	10	VAL	2.3
26	BA	673	C	2.3
31	BH	155	PRO	2.3
26	BA	2807	G	2.3
1	AA	246	A	2.3
43	BR	48	VAL	2.3
28	BE	261	ARG	2.3
4	AX	119	U	2.3
28	BE	188	ALA	2.3
36	BQ	18	GLU	2.3
1	AA	567	G	2.3
1	AA	1475	G	2.3
47	B3	56	VAL	2.3
48	B0	59	LEU	2.3
32	BI	147	GLU	2.3
53	B8	53	ALA	2.3
18	AO	34	LEU	2.3
43	BR	44	LEU	2.3
1	AA	1064	G	2.3
7	AD	177	ASP	2.3
16	AM	114	ARG	2.3
49	B4	56	VAL	2.3
1	AA	240	C	2.3
32	BI	79	ILE	2.3
6	AC	47	LEU	2.3
5	AB	57	PHE	2.3
7	AD	126	ILE	2.3
14	AK	12	ARG	2.3
19	AP	62	VAL	2.3
44	BU	44	THR	2.3
23	AT	25	ARG	2.3
26	BA	589	C	2.3
27	BD	73	ILE	2.3
36	BQ	103	ALA	2.3
45	BV	21	ARG	2.3
10	AG	66	VAL	2.3
11	AH	131	GLY	2.3
6	AC	54	ARG	2.3
11	AH	79	VAL	2.3
5	AB	77	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
26	BA	508	G	2.3
54	B9	28	SER	2.3
1	AA	560	U	2.3
28	BE	259	HIS	2.3
10	AG	103	TRP	2.3
35	BP	124	ASP	2.3
45	BV	11	GLN	2.3
34	BO	16	ALA	2.3
26	BA	2061	G	2.3
36	BQ	126	VAL	2.3
10	AG	104	LEU	2.3
40	BX	65	VAL	2.3
26	BA	1566	A	2.2
27	BD	69	ASP	2.2
28	BE	39	GLN	2.2
1	AA	506	G	2.2
14	AK	14	VAL	2.2
27	BD	134	ILE	2.2
36	BQ	94	ARG	2.2
7	AD	75	PHE	2.2
27	BD	114	GLU	2.2
28	BE	250	VAL	2.2
43	BR	118	GLU	2.2
10	AG	148	ASN	2.2
19	AP	55	ARG	2.2
3	AW	32	C	2.2
26	BA	2601	C	2.2
30	BG	57	THR	2.2
7	AD	158	ILE	2.2
26	BA	2266	A	2.2
6	AC	51	GLY	2.2
26	BA	1076	C	2.2
27	BD	212	HIS	2.2
36	BQ	108	SER	2.2
32	BI	121	ILE	2.2
34	BO	38	VAL	2.2
45	BV	14	VAL	2.2
7	AD	144	ASP	2.2
16	AM	95	GLY	2.2
31	BH	105	SER	2.2
1	AA	919	A	2.2
46	B2	12	THR	2.2

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Mol	Chain	Res	Type	RSRZ
5	AB	152	PHE	2.2
1	AA	884	U	2.2
10	AG	17	VAL	2.2
28	BE	257	GLY	2.2
39	BW	103	ILE	2.2
2	AV	44	A	2.2
26	BA	960	A	2.2
7	AD	131	ARG	2.2
14	AK	122	LYS	2.2
26	BA	2742	C	2.2
22	AS	50	ALA	2.2
5	AB	76	GLN	2.2
8	AE	14	ARG	2.2
17	AN	39	LEU	2.2
36	BQ	11	LYS	2.2
27	BD	103	ILE	2.2
38	BT	38	ASN	2.2
6	AC	182	ILE	2.2
11	AH	13	ILE	2.2
11	AH	24	THR	2.2
33	BN	52	GLN	2.2
39	BW	2	GLU	2.2
44	BU	4	ALA	2.2
26	BA	2797	U	2.2
48	B0	6	GLY	2.2
26	BA	1440	G	2.2
26	BA	2228	G	2.2
28	BE	173	ARG	2.2
35	BP	59	GLU	2.2
1	AA	1396	A	2.2
44	BU	35	ALA	2.2
20	AQ	40	LYS	2.2
26	BA	1078	U	2.2
26	BA	2016	U	2.2
45	BV	67	LYS	2.2
33	BN	57	TYR	2.2
42	BZ	105	GLN	2.2
1	AA	631	G	2.2
1	AA	1423	G	2.2
34	BO	39	VAL	2.2
7	AD	66	ARG	2.2
8	AE	54	ALA	2.2

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Mol	Chain	Res	Type	RSRZ
29	BF	49	ASP	2.2
44	BU	56	ASP	2.2
45	BV	17	GLY	2.2
51	B6	6	PRO	2.2
8	AE	10	MET	2.2
1	AA	295	C	2.2
1	AA	523	A	2.2
1	AA	930	C	2.2
2	AV	37	G	2.2
27	BD	116	MET	2.2
26	BA	2790	A	2.2
32	BI	32	LYS	2.2
26	BA	2068	U	2.2
47	B3	53	LEU	2.2
48	B0	20	TYR	2.2
22	AS	42	PRO	2.2
42	BZ	66	VAL	2.2
1	AA	1190	G	2.2
1	AA	1342	C	2.2
11	AH	39	LEU	2.2
23	AT	19	SER	2.2
32	BI	6	LEU	2.2
20	AQ	53	LEU	2.2
33	BN	56	LYS	2.2
7	AD	132	ARG	2.2
32	BI	17	GLU	2.2
8	AE	97	GLY	2.1
20	AQ	21	VAL	2.1
22	AS	33	THR	2.1
35	BP	113	GLN	2.1
8	AE	69	VAL	2.1
26	BA	1625	C	2.1
26	BA	2679	A	2.1
26	BA	2588	G	2.1
15	AL	15	ARG	2.1
1	AA	871	U	2.1
26	BA	202	U	2.1
16	AM	31	LYS	2.1
1	AA	23	C	2.1
5	AB	69	LEU	2.1
5	AB	93	VAL	2.1
25	BB	91	C	2.1

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Mol	Chain	Res	Type	RSRZ
26	BA	65	C	2.1
26	BA	2683	C	2.1
8	AE	15	ARG	2.1
6	AC	68	VAL	2.1
12	AI	37	PHE	2.1
24	AU	10	ARG	2.1
36	BQ	120	HIS	2.1
1	AA	1228	C	2.1
12	AI	119	ALA	2.1
26	BA	995	C	2.1
26	BA	1354	A	2.1
10	AG	127	ALA	2.1
20	AQ	90	ILE	2.1
3	AW	47	U	2.1
31	BH	112	VAL	2.1
7	AD	191	ARG	2.1
36	BQ	12	PRO	2.1
54	B9	13	ASN	2.1
1	AA	1062	U	2.1
10	AG	149	ARG	2.1
26	BA	2387	U	2.1
27	BD	140	VAL	2.1
27	BD	191	VAL	2.1
1	AA	108	G	2.1
1	AA	693	G	2.1
26	BA	2894	G	2.1
33	BN	73	LYS	2.1
1	AA	912	C	2.1
1	AA	1296	C	2.1
6	AC	20	SER	2.1
8	AE	12	LEU	2.1
31	BH	163	TYR	2.1
36	BQ	28	ILE	2.1
40	BX	28	VAL	2.1
1	AA	532	A	2.1
26	BA	676	A	2.1
54	B9	8	LYS	2.1
8	AE	11	ILE	2.1
45	BV	27	GLY	2.1
8	AE	49	PRO	2.1
26	BA	952	G	2.1
26	BA	2501	C	2.1

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Mol	Chain	Res	Type	RSRZ
41	BY	84	GLY	2.1
6	AC	55	VAL	2.1
40	BX	14	ALA	2.1
1	AA	84	U	2.1
1	AA	315	A	2.1
27	BD	82	TYR	2.1
28	BE	174	LEU	2.1
14	AK	91	ARG	2.1
12	AI	114	TYR	2.1
26	BA	929	G	2.1
28	BE	45	LYS	2.1
32	BI	16	GLY	2.1
20	AQ	9	VAL	2.1
33	BN	99	GLU	2.1
11	AH	118	VAL	2.1
36	BQ	30	GLN	2.1
53	B8	13	ARG	2.1
26	BA	2021	C	2.1
1	AA	953	G	2.1
27	BD	166	LYS	2.1
8	AE	95	ALA	2.1
11	AH	105	ARG	2.1
18	AO	87	ILE	2.1
26	BA	590	A	2.1
28	BE	78	MET	2.1
35	BP	64	ILE	2.1
10	AG	61	VAL	2.1
27	BD	121	ALA	2.1
24	AU	13	ILE	2.1
26	BA	2586	C	2.1
53	B8	16	ILE	2.1
6	AC	146	ALA	2.1
27	BD	72	GLY	2.1
43	BR	114	VAL	2.1
55	BK	91	GLU	2.1
24	AU	8	THR	2.1
11	AH	107	LEU	2.1
19	AP	61	SER	2.1
28	BE	308	VAL	2.1
1	AA	243	A	2.1
6	AC	58	GLU	2.1
33	BN	78	ILE	2.1

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Mol	Chain	Res	Type	RSRZ
11	AH	93	VAL	2.1
5	AB	68	ILE	2.1
27	BD	193	GLU	2.1
16	AM	117	VAL	2.0
11	AH	44	PHE	2.0
26	BA	1301	A	2.0
26	BA	2035	G	2.0
36	BQ	93	ILE	2.0
12	AI	43	ALA	2.0
16	AM	118	ALA	2.0
32	BI	119	ASP	2.0
44	BU	97	ASP	2.0
1	AA	292	G	2.0
28	BE	307	LEU	2.0
26	BA	964	C	2.0
28	BE	298	GLY	2.0
45	BV	79	GLN	2.0
26	BA	448	U	2.0
26	BA	930	U	2.0
1	AA	609	A	2.0
1	AA	41	G	2.0
1	AA	760	G	2.0
8	AE	128	PRO	2.0
26	BA	1252	G	2.0
1	AA	241	C	2.0
1	AA	322	C	2.0
14	AK	98	LEU	2.0
19	AP	63	GLY	2.0
47	B3	27	GLY	2.0
7	AD	178	VAL	2.0
26	BA	2682	U	2.0
5	AB	162	ILE	2.0
1	AA	29	G	2.0
1	AA	526	C	2.0
26	BA	956	G	2.0
26	BA	1251	C	2.0
1	AA	1532	U	2.0
26	BA	2269	A	2.0
1	AA	1478	C	2.0
26	BA	1770	G	2.0



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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95<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
3	YYG	AW	37	39/40	0.17	0.79	399,399,399,399	0
3	PSU	AW	39	20/21	0.58	0.44	399,399,399,399	0
3	PSU	AW	55	20/21	0.94	0.09	400,400,400,400	0

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

There are no ligands in this entry.

## 6.5 Other polymers [i](#)

There are no such residues in this entry.