Full wwPDB X-ray Structure Validation Report ⓘ

Mar 8, 2026 – 03:21 PM UTC

PDB ID	:	4KZZ / pdb_00004kzz
Title	:	Rabbit 40S ribosomal subunit in complex with mRNA, initiator tRNA and eIF1A
Authors	:	Lomakin, I.B.; Steitz, T.A.
Deposited on	:	2013-05-30
Resolution	:	7.03 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/XrayValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

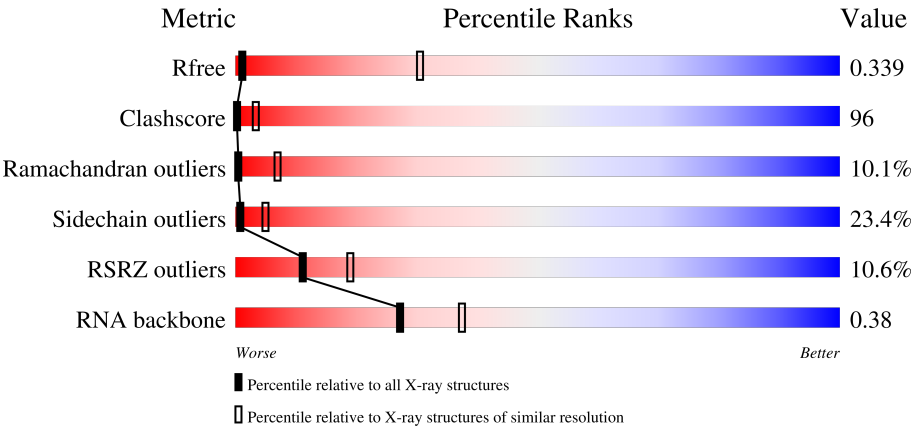
MolProbity	:	4-5-2 with Phenix2.0
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.010 (Gargrove)
Density-Fitness	:	1.0.12
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)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

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 7.03 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	1167 (10.00-4.00)
Clashscore	190562	1000 (10.00-4.06)
Ramachandran outliers	187476	1054 (10.00-4.00)
Sidechain outliers	187428	1017 (10.00-4.00)
RSRZ outliers	180081	1161 (10.00-4.00)
RNA backbone	3983	1056 (10.00-3.10)

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

Mol	Chain	Length	Quality of chain
1	A	295	6% 8% 38% 19% 6% 29%
2	B	264	3% 14% 42% 20% 5% 19%
3	C	278	28% 14% 39% 22% 6% 19%
4	D	243	20% 19% 43% 26% 6% 7%

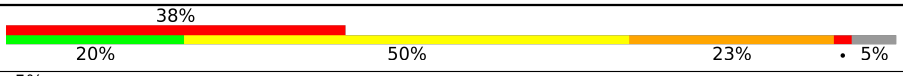
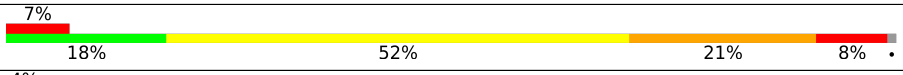
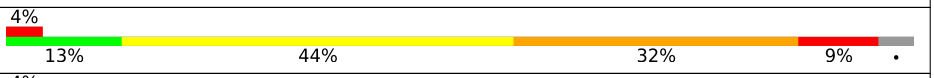
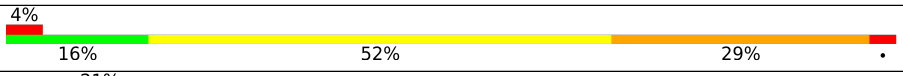
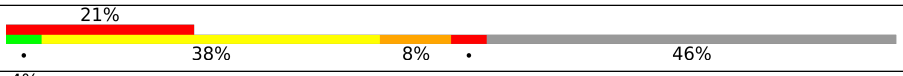
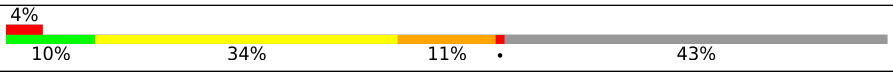
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
5	E	263	14% 21% 46% 29%
6	F	204	15% 20% 43% 24% 7% 6%
7	G	249	7% 21% 45% 24% 5% 5%
8	H	194	8% 13% 49% 21% 15%
9	I	208	17% 26% 42% 20% 11%
10	J	194	11% 13% 48% 23% 10% 6%
11	K	165	11% 6% 24% 15% 15% 41%
12	L	158	24% 23% 40% 25% 13%
13	M	132	4% 17% 41% 28% 8% 6%
14	N	151	10% 25% 48% 22%
15	O	151	5% 11% 52% 23% 10%
16	P	145	3% 10% 42% 25% 10% 12%
17	Q	146	12% 16% 46% 27% 7%
18	R	135	5% 14% 54% 16% 9% 7%
19	S	152	11% 15% 47% 15% 13% 10%
20	T	145	14% 18% 51% 19% 9%
21	U	119	16% 15% 36% 23% 13% 13%
22	V	83	5% 13% 39% 30% 17%
23	W	130	27% 25% 58% 12%
24	X	143	22% 22% 49% 19% 10%
25	Y	133	2% 11% 46% 27% 11% 5%
26	Z	125	3% 12% 27% 11% 10% 40%
27	a	115	24% 23% 45% 18% 7% 7%
28	b	84	2% 23% 40% 26% 11%
29	c	69	7% 23% 39% 17% 13% 7%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
30	d	56	
31	e	133	
32	f	156	
33	g	317	
34	i	1863	
35	j	75	
36	k	24	
37	n	144	

2 Entry composition

There are 37 unique types of molecules in this entry. The entry contains 79048 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 protein called 40S Ribosomal Protein SA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	208	1642	1045	289	300	8	0	0	0

- Molecule 2 is a protein called 40S Ribosomal Protein S3A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	215	1741	1107	309	310	15	0	0	0

- Molecule 3 is a protein called 40S Ribosomal Protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	226	1742	1127	300	306	9	0	0	0

- Molecule 4 is a protein called 40S Ribosomal Protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	227	1764	1124	317	315	8	0	0	0

- Molecule 5 is a protein called 40S Ribosomal Protein S4X.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	E	263	2083	1329	385	359	10	0	0	0

- Molecule 6 is a protein called 40S Ribosomal Protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	F	191	1509	943	286	273	7	0	0	0

- Molecule 7 is a protein called 40S Ribosomal Protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	G	237	Total	C	N	O	S	0	0	0
			1923	1200	387	329	7			

- Molecule 8 is a protein called 40S Ribosomal Protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	H	190	Total	C	N	O	S	0	0	0
			1530	975	281	273	1			

- Molecule 9 is a protein called 40S Ribosomal Protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	206	Total	C	N	O	S	0	0	0
			1679	1054	329	291	5			

- Molecule 10 is a protein called 40S Ribosomal Protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	182	Total	C	N	O	S	0	0	0
			1498	952	300	244	2			

- Molecule 11 is a protein called 40S Ribosomal Protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	98	Total	C	N	O	S	0	0	0
			827	539	148	134	6			

- Molecule 12 is a protein called 40S Ribosomal Protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	158	Total	C	N	O	S	0	0	0
			1296	827	241	221	7			

- Molecule 13 is a protein called 40S Ribosomal Protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	M	124	Total	C	N	O	S	0	0	0
			950	594	169	179	8			

- Molecule 14 is a protein called 40S Ribosomal Protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	N	150	Total	C	N	O	S	0	0	0
			1208	773	229	205	1			

- Molecule 15 is a protein called 40S Ribosomal Protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	O	136	Total	C	N	O	S	0	0	0
			1016	621	199	190	6			

- Molecule 16 is a protein called 40S Ribosomal Protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	P	127	Total	C	N	O	S	0	0	0
			1060	673	201	179	7			

- Molecule 17 is a protein called 40S Ribosomal Protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Q	141	Total	C	N	O	S	0	0	0
			1124	715	212	194	3			

- Molecule 18 is a protein called 40S Ribosomal Protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	R	126	Total	C	N	O	S	0	0	0
			1019	639	188	187	5			

- Molecule 19 is a protein called 40S Ribosomal Protein S18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	S	137	Total	C	N	O	S	0	0	0
			1139	714	231	193	1			

- Molecule 20 is a protein called 40S Ribosomal Protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	T	141	Total	C	N	O	S	0	0	0
			1112	701	213	195	3			

- Molecule 21 is a protein called 40S Ribosomal Protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	U	104	Total	C	N	O	S	0	0	0
			822	514	156	148	4			

- Molecule 22 is a protein called 40S Ribosomal Protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	V	82	Total	C	N	O	S	0	0	0
			619	378	117	119	5			

- Molecule 23 is a protein called 40S Ribosomal Protein S15A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	W	129	Total	C	N	O	S	0	0	0
			1034	659	193	176	6			

- Molecule 24 is a protein called 40S Ribosomal Protein S23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	X	142	Total	C	N	O	S	0	0	0
			1106	698	220	184	4			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
X	1	MET	ALA	SEE REMARK 999	UNP G1SZ47

- Molecule 25 is a protein called 40S Ribosomal Protein S24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	Y	126	Total	C	N	O	S	0	0	0
			1021	645	198	173	5			

- Molecule 26 is a protein called 40S Ribosomal Protein S25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	Z	75	Total	C	N	O	S	0	0	0
			598	382	111	104	1			

- Molecule 27 is a protein called 40S Ribosomal Protein S26.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	a	107	Total	C	N	O	S	0	0	0
			844	527	173	138	6			

- Molecule 28 is a protein called 40S Ribosomal Protein S27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	b	84	Total	C	N	O	S	0	0	0
			659	413	122	116	8			

- Molecule 29 is a protein called 40S Ribosomal Protein S28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	c	64	Total	C	N	O	S	0	0	0
			506	308	102	94	2			

- Molecule 30 is a protein called 40S Ribosomal Protein S29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	d	53	Total	C	N	O	S	0	0	0
			445	278	90	72	5			

- Molecule 31 is a protein called 40S Ribosomal Protein S30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	e	59	Total	C	N	O	S	0	0	0
			473	293	104	75	1			

- Molecule 32 is a protein called 40S Ribosomal Protein S27A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	f	71	Total	C	N	O	S	0	0	0
			581	367	109	98	7			

- Molecule 33 is a protein called 40S Ribosomal Protein RACK1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	g	313	Total	C	N	O	S	0	0	0
			2436	1535	424	465	12			

- Molecule 34 is a RNA chain called 18S Ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	i	1797	Total	C	N	O	P	0	0	0
			37514	16712	6634	12372	1796			

- Molecule 35 is a RNA chain called initiator Met-RNA-i.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	j	75	Total	C	N	O	P	0	0	0
			1607	717	298	517	75			

- Molecule 36 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	k	13	Total	C	N	O	P	0	0	0
			273	123	47	90	13			

- Molecule 37 is a protein called human initiation factor eIF1A.

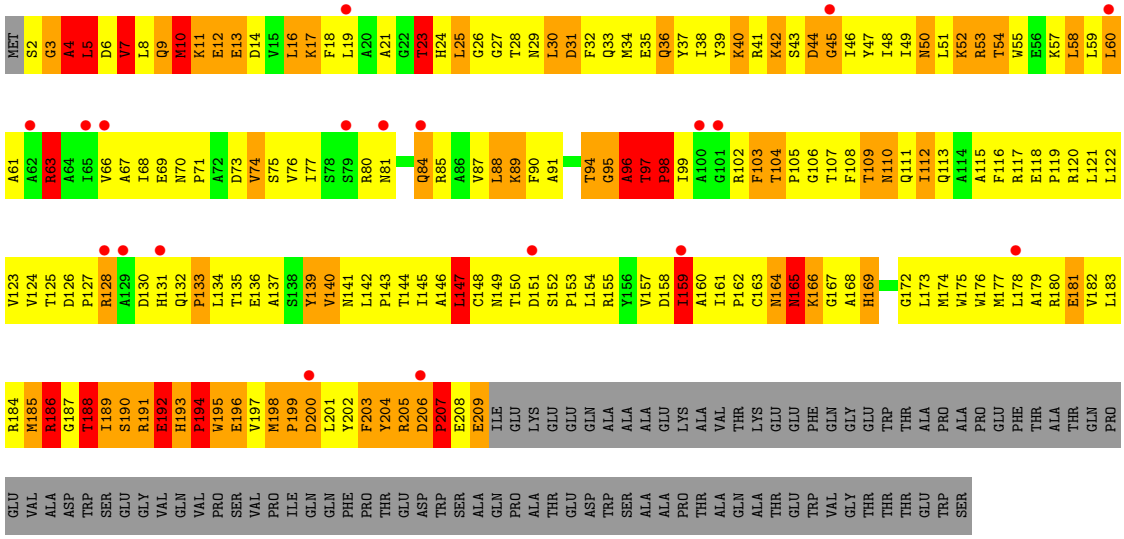
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	n	82	Total	C	N	O	S	0	0	0
			648	407	119	118	4			

3 Residue-property plots (i)

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

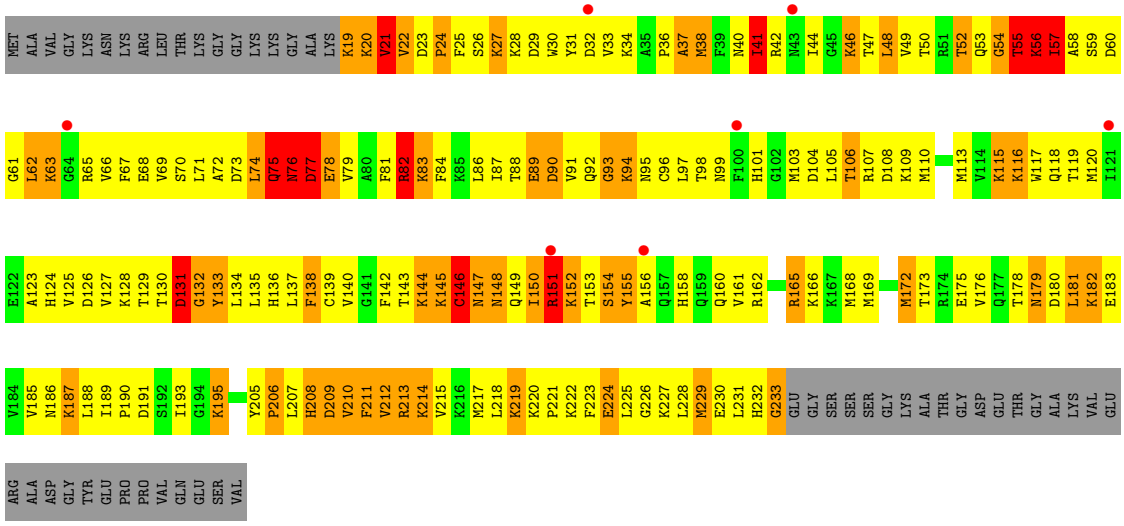
• Molecule 1: 40S Ribosomal Protein SA

Chain A:



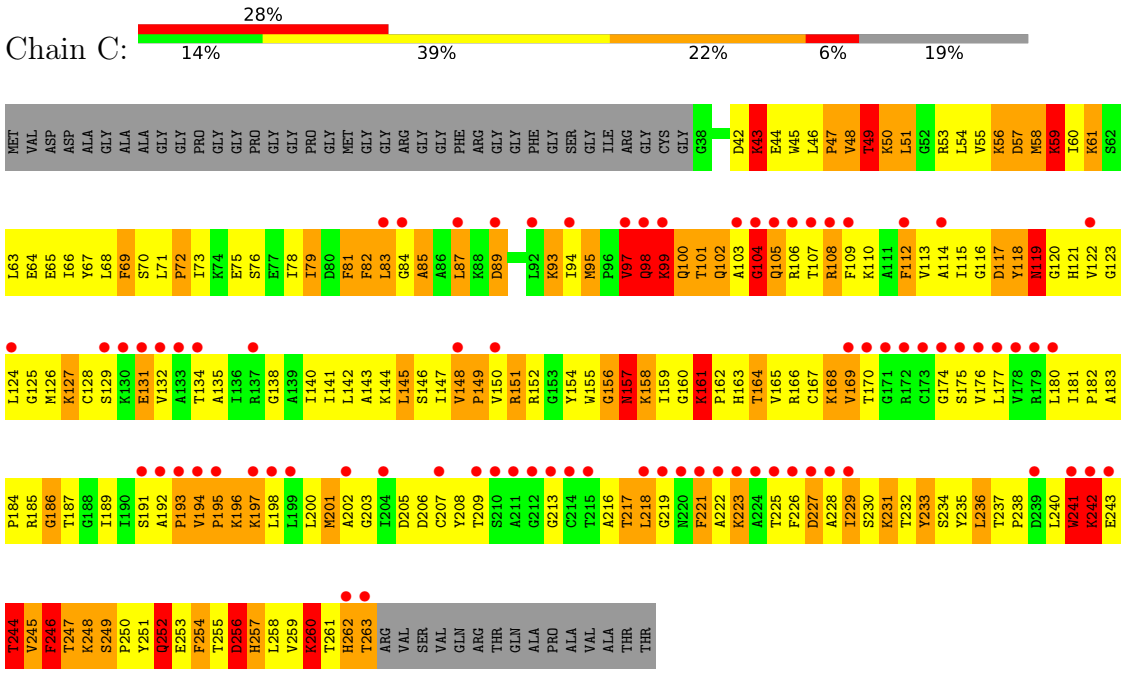
• Molecule 2: 40S Ribosomal Protein S3A

Chain B:



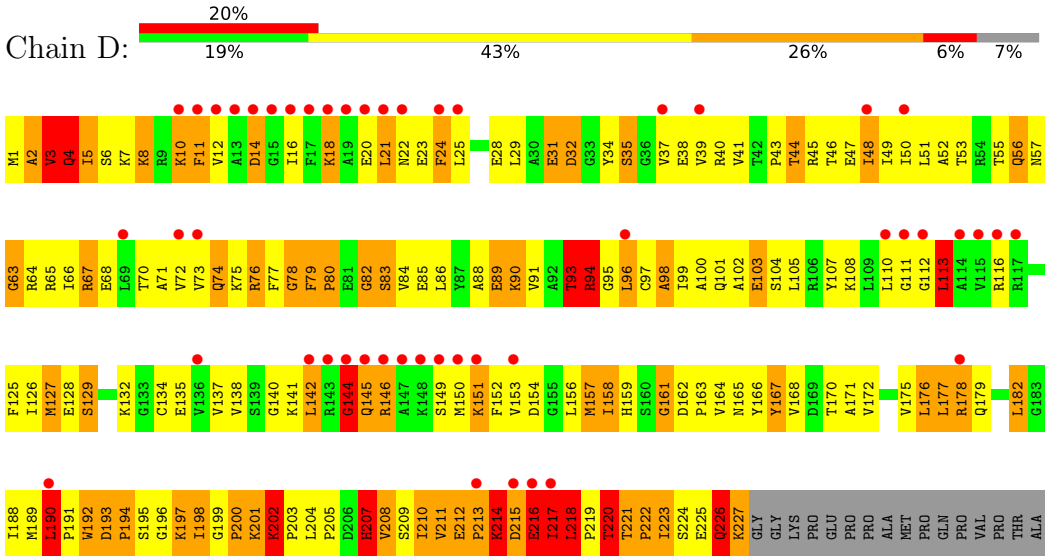
• Molecule 3: 40S Ribosomal Protein S2

Chain C:



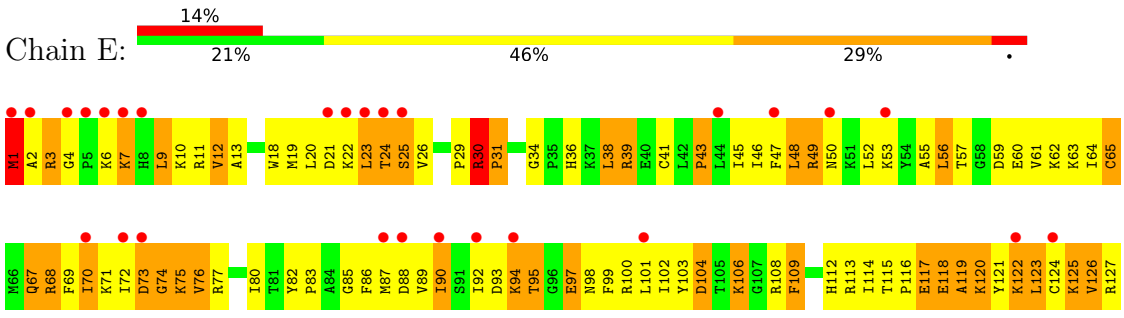
• Molecule 4: 40S Ribosomal Protein S3

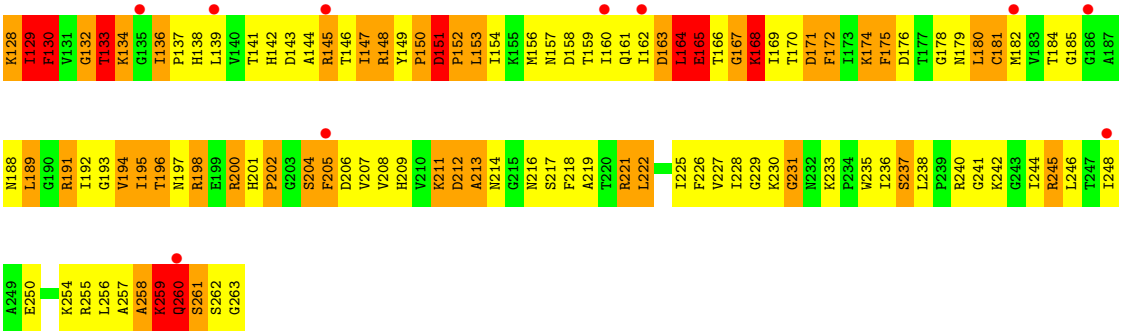
Chain D:



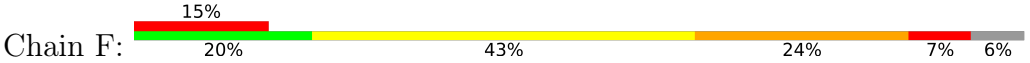
• Molecule 5: 40S Ribosomal Protein S4X

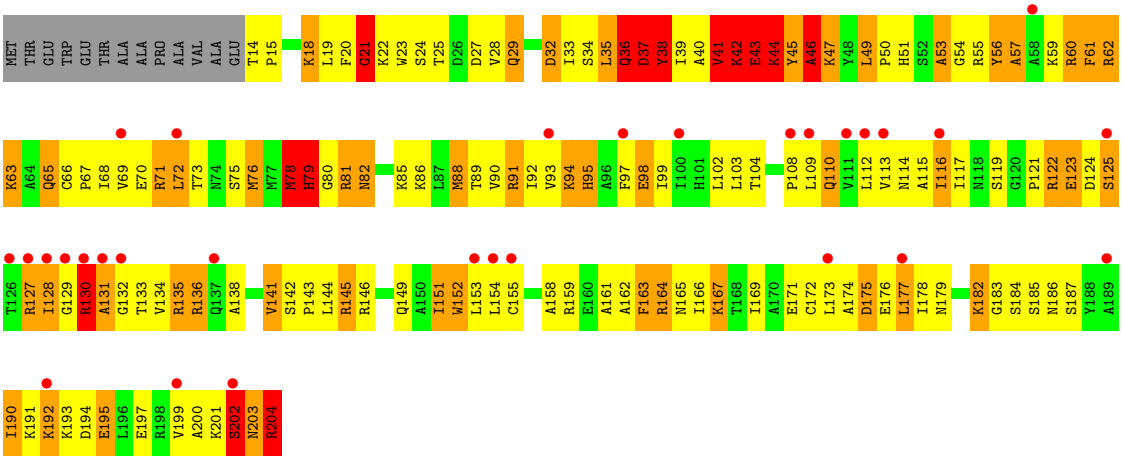
Chain E:



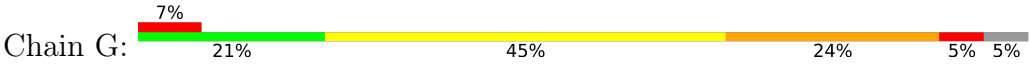


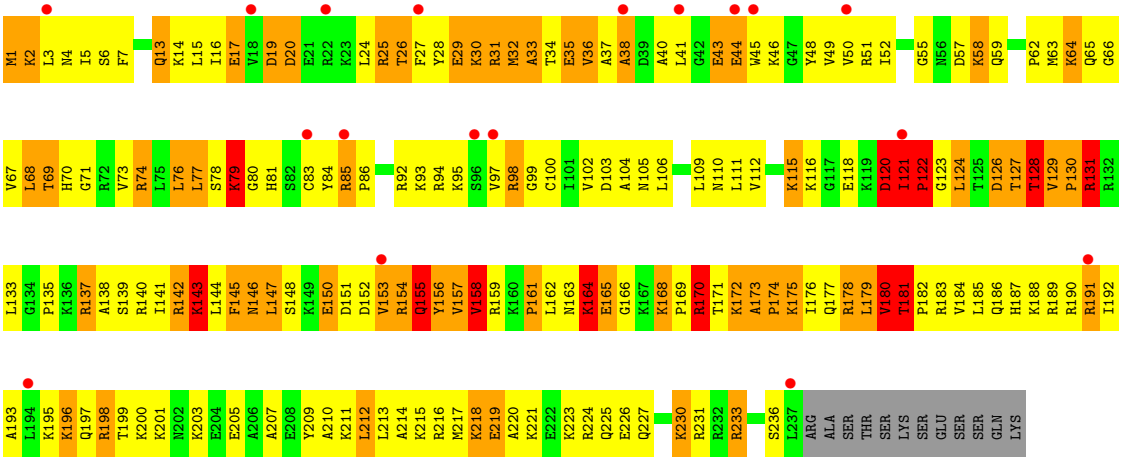
• Molecule 6: 40S Ribosomal Protein S5



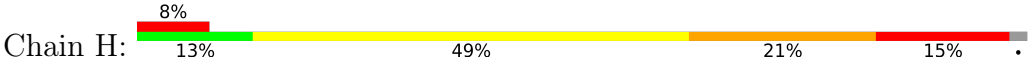


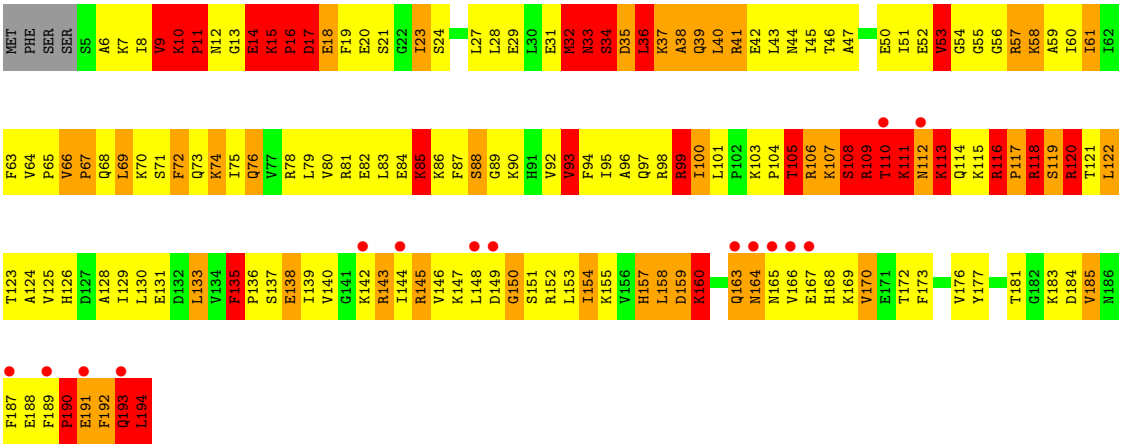
• Molecule 7: 40S Ribosomal Protein S6





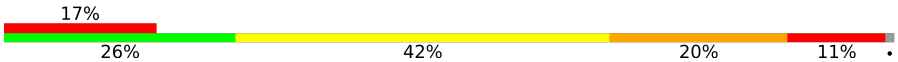
• Molecule 8: 40S Ribosomal Protein S7

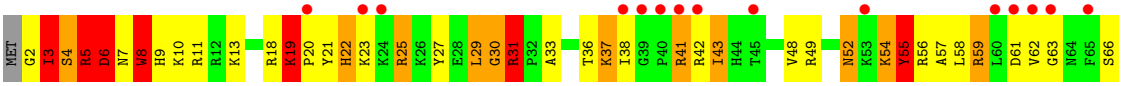


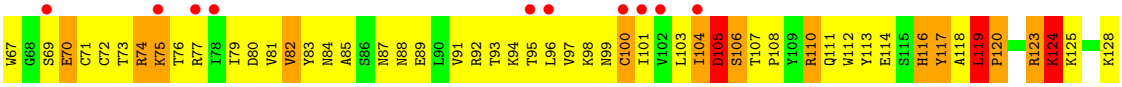


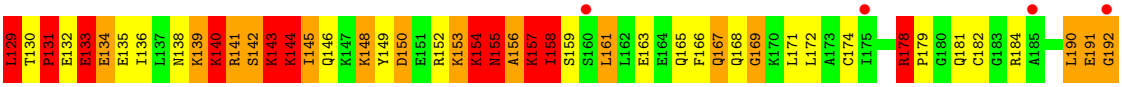
• Molecule 9: 40S Ribosomal Protein S8

Chain I:



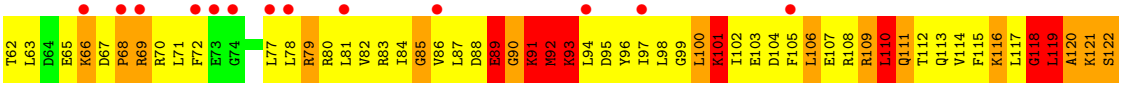


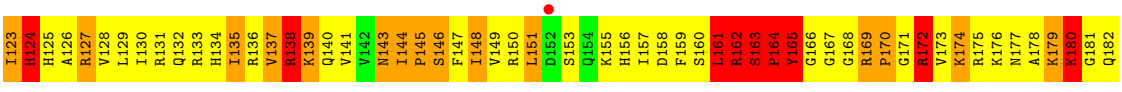




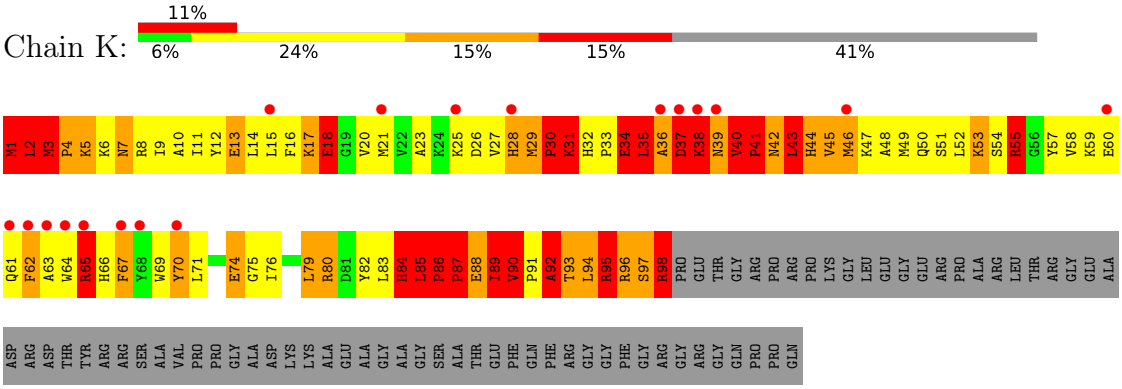
• Molecule 10: 40S Ribosomal Protein S9

Chain J:

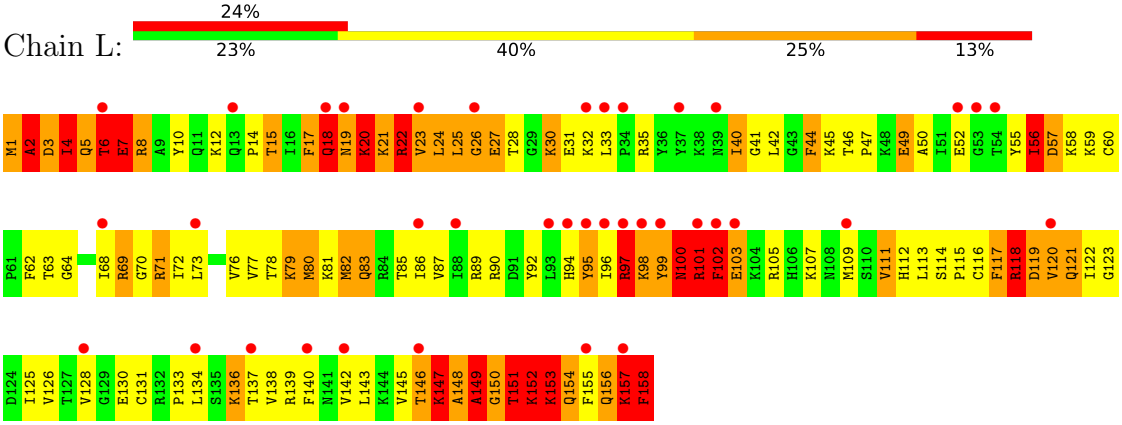




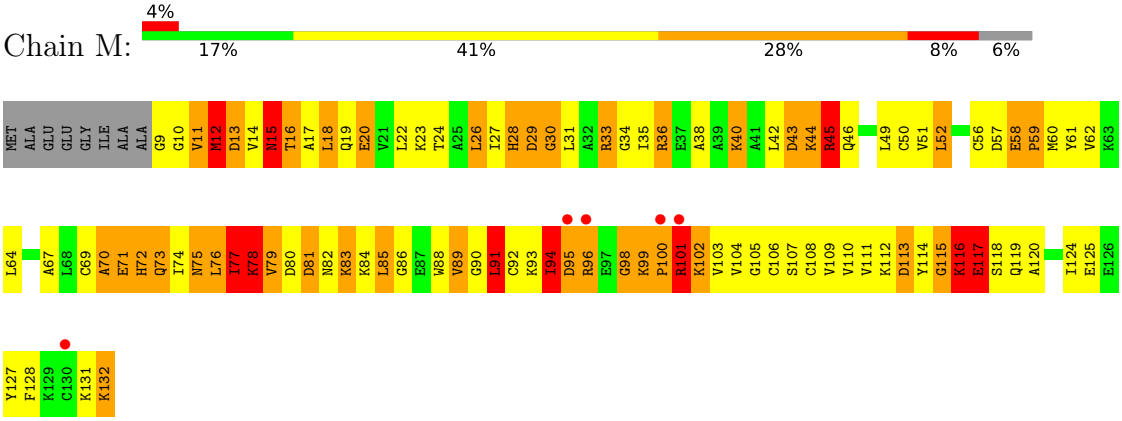
• Molecule 11: 40S Ribosomal Protein S10



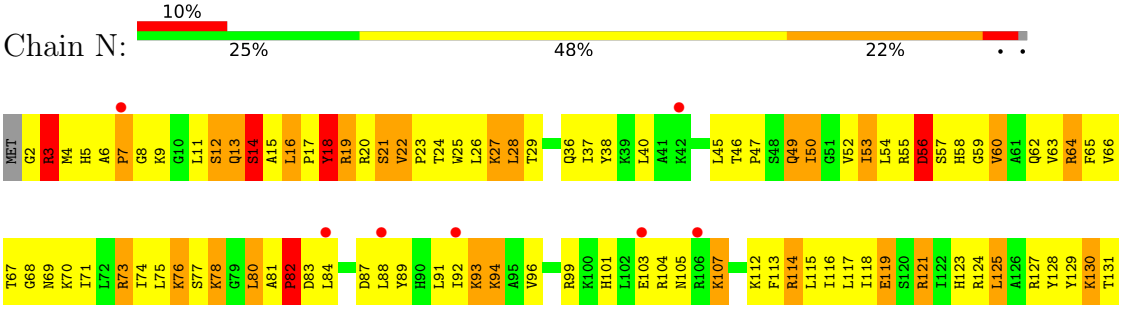
• Molecule 12: 40S Ribosomal Protein S11

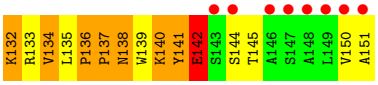


• Molecule 13: 40S Ribosomal Protein S12

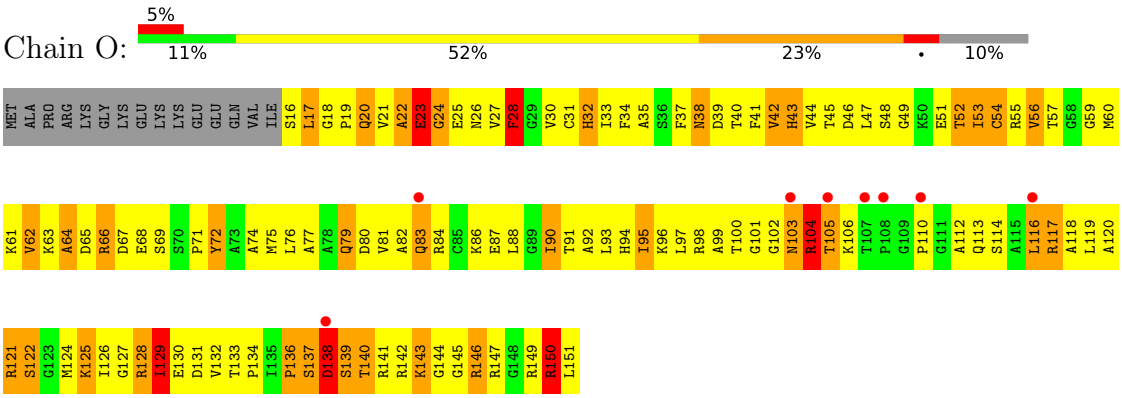


• Molecule 14: 40S Ribosomal Protein S13

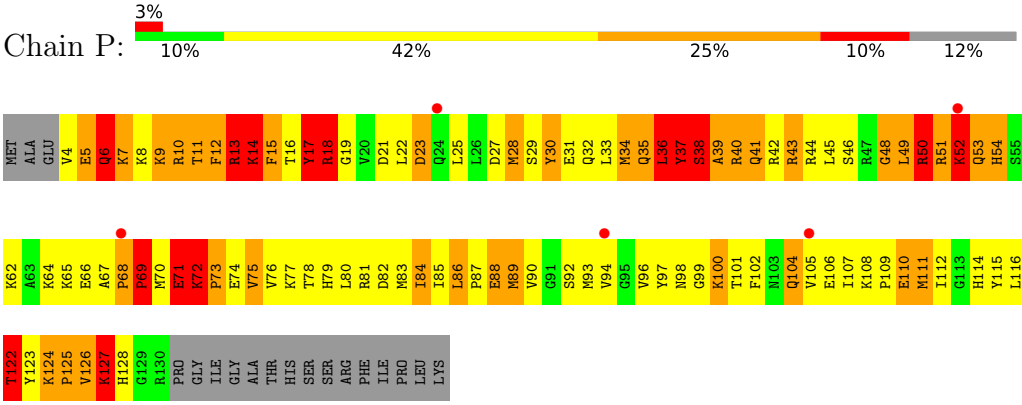




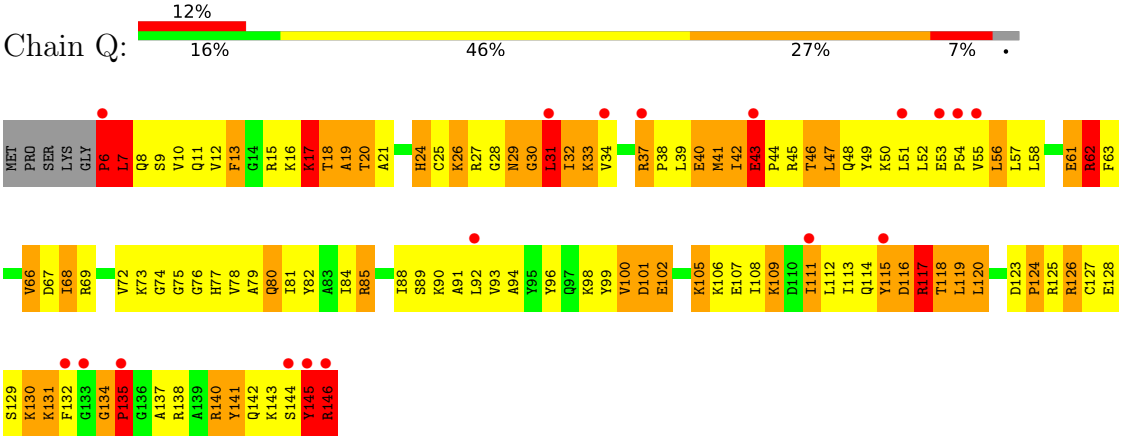
• Molecule 15: 40S Ribosomal Protein S14



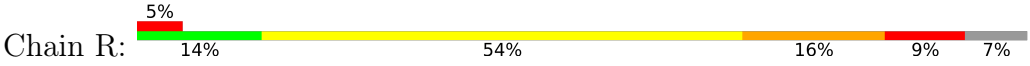
• Molecule 16: 40S Ribosomal Protein S15

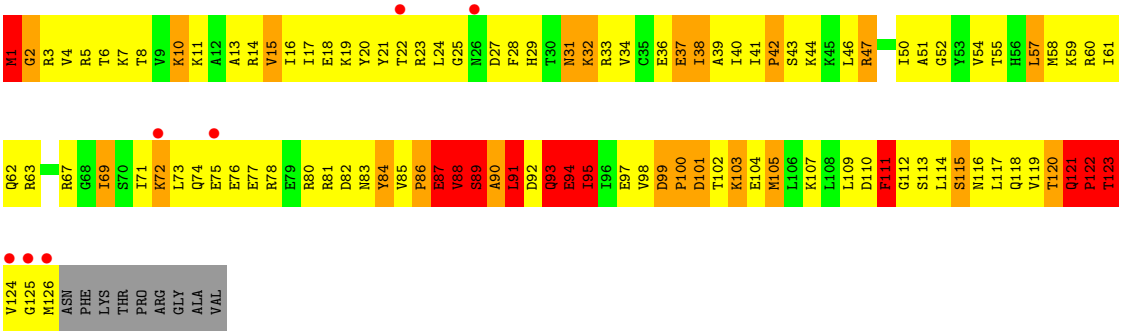


• Molecule 17: 40S Ribosomal Protein S16



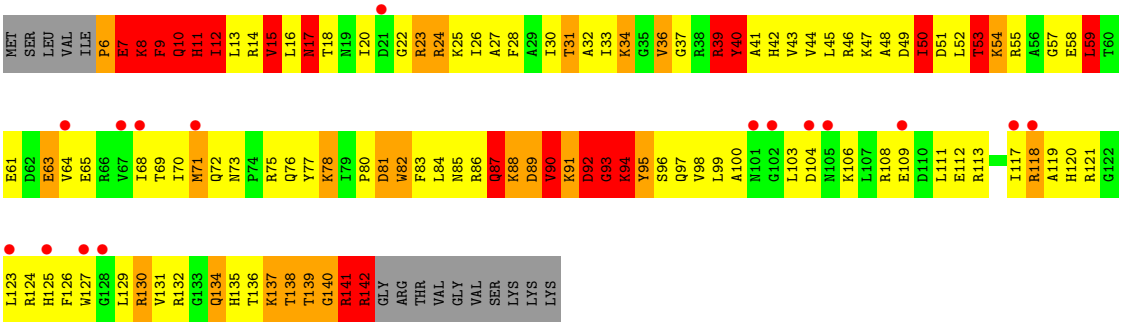
• Molecule 18: 40S Ribosomal Protein S17





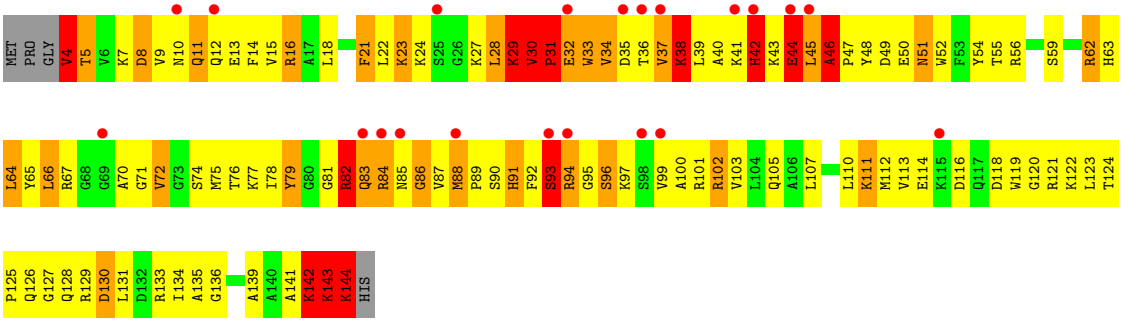
• Molecule 19: 40S Ribosomal Protein S18

Chain S:



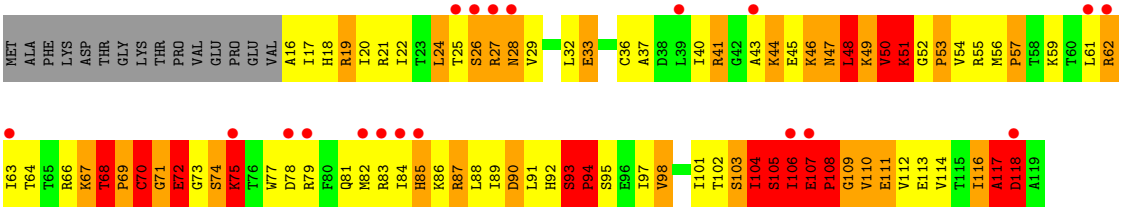
• Molecule 20: 40S Ribosomal Protein S19

Chain T:

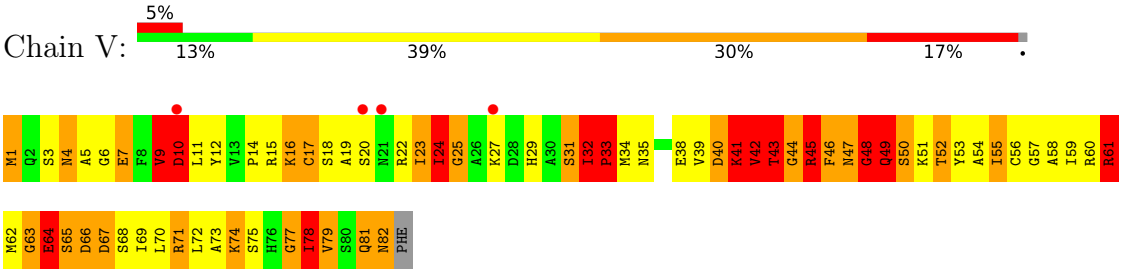


• Molecule 21: 40S Ribosomal Protein S20

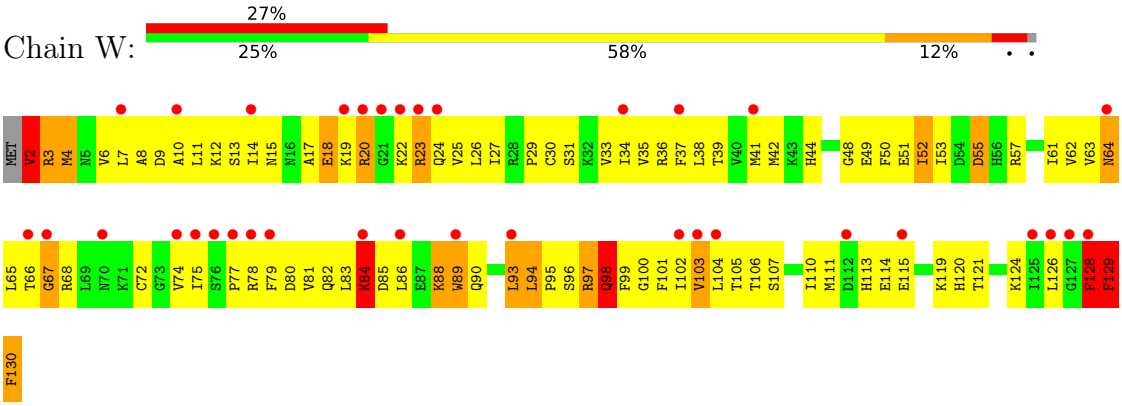
Chain U:



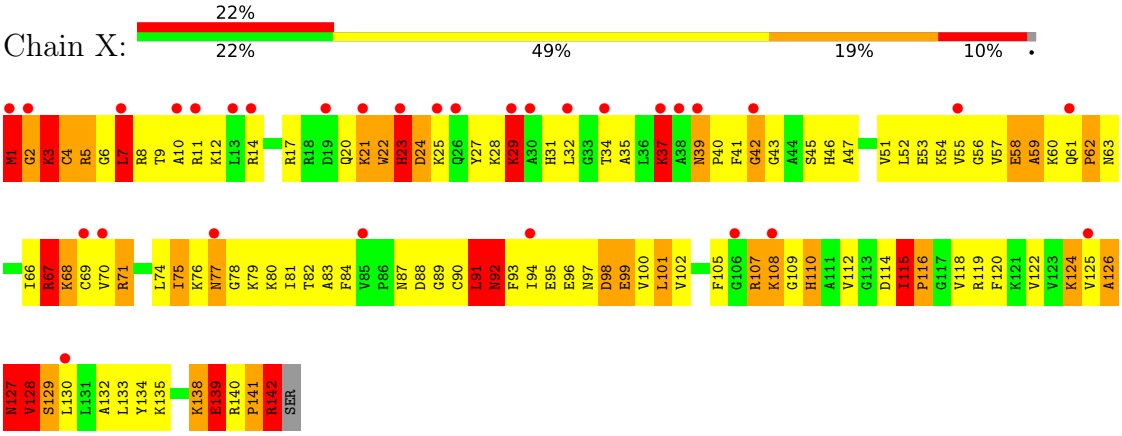
• Molecule 22: 40S Ribosomal Protein S21



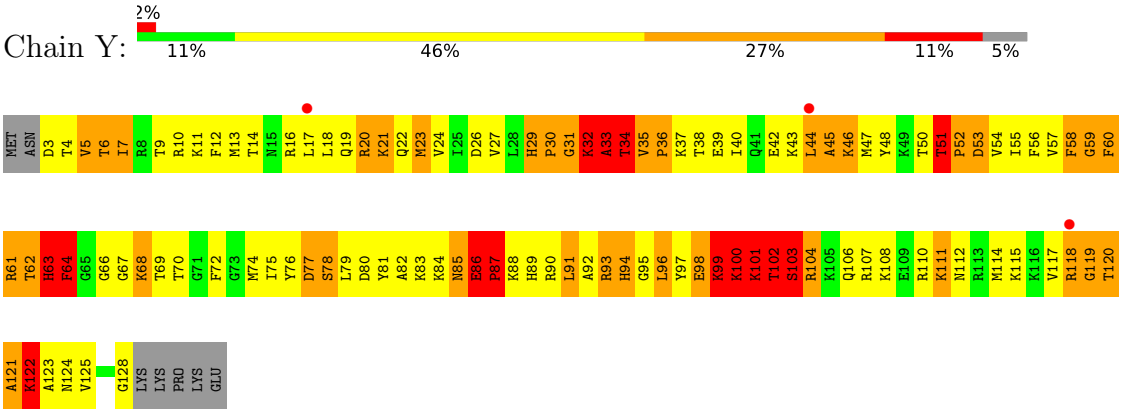
• Molecule 23: 40S Ribosomal Protein S15A



• Molecule 24: 40S Ribosomal Protein S23

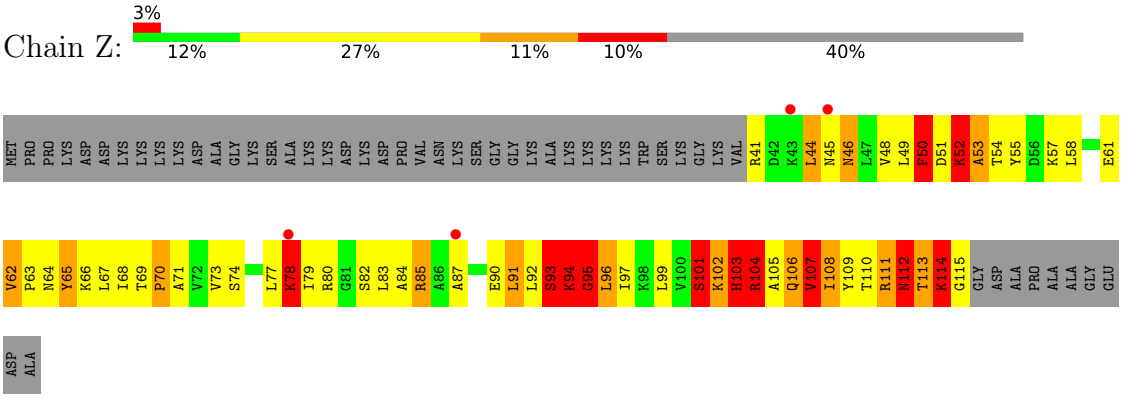


• Molecule 25: 40S Ribosomal Protein S24



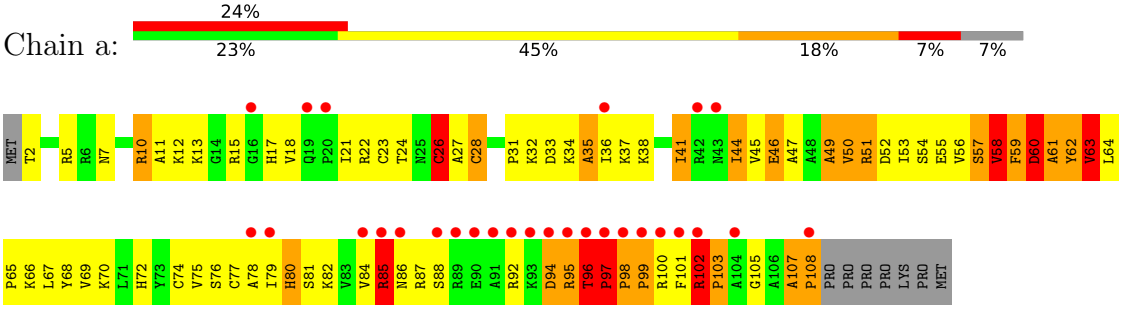
• Molecule 26: 40S Ribosomal Protein S25

Chain Z:



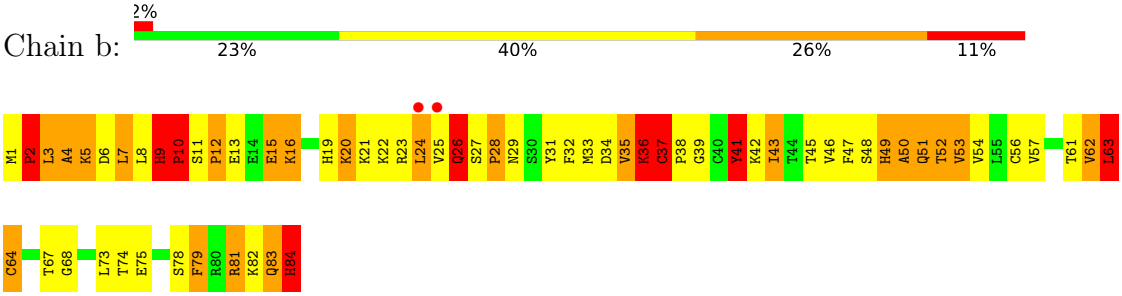
• Molecule 27: 40S Ribosomal Protein S26

Chain a:



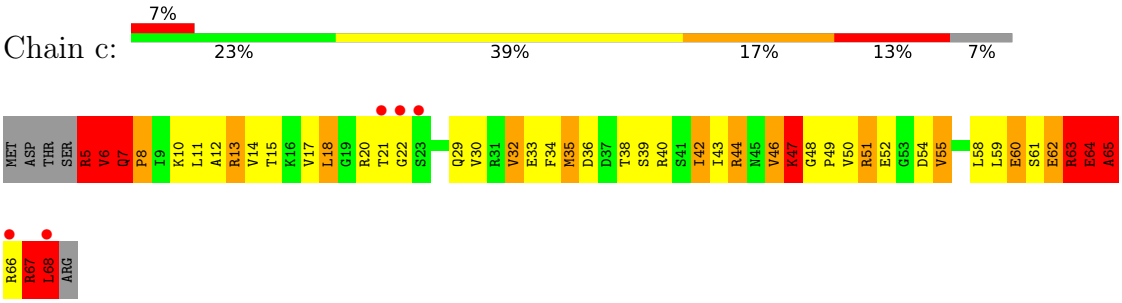
• Molecule 28: 40S Ribosomal Protein S27

Chain b:



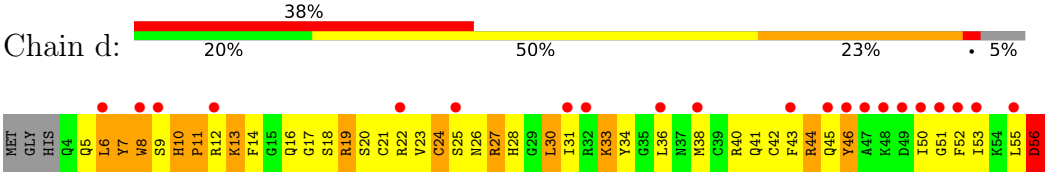
• Molecule 29: 40S Ribosomal Protein S28

Chain c:



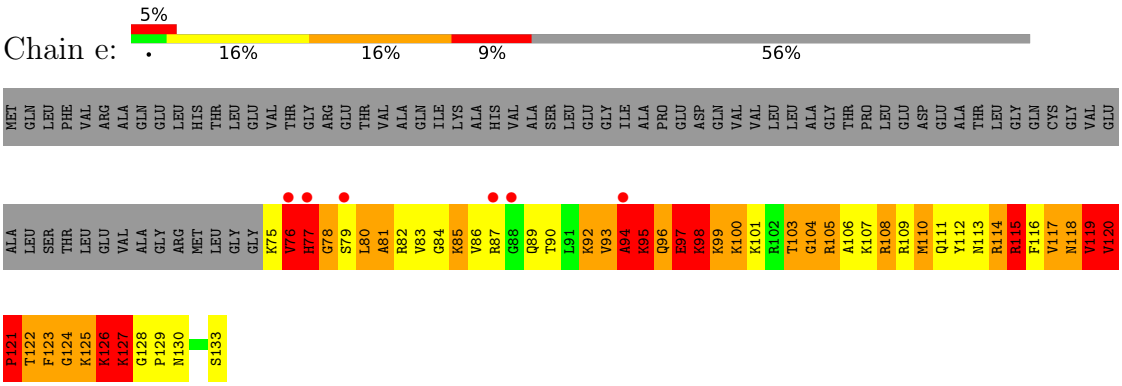
• Molecule 30: 40S Ribosomal Protein S29

Chain d:



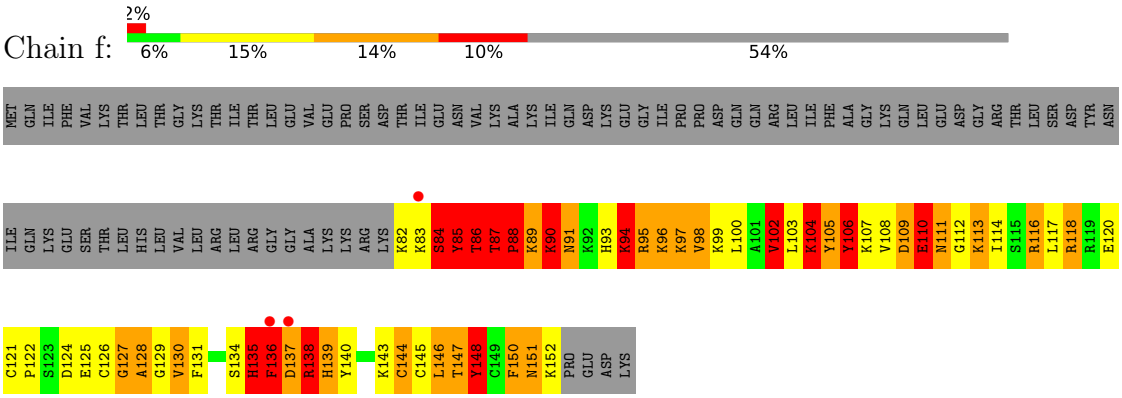
• Molecule 31: 40S Ribosomal Protein S30

Chain e:



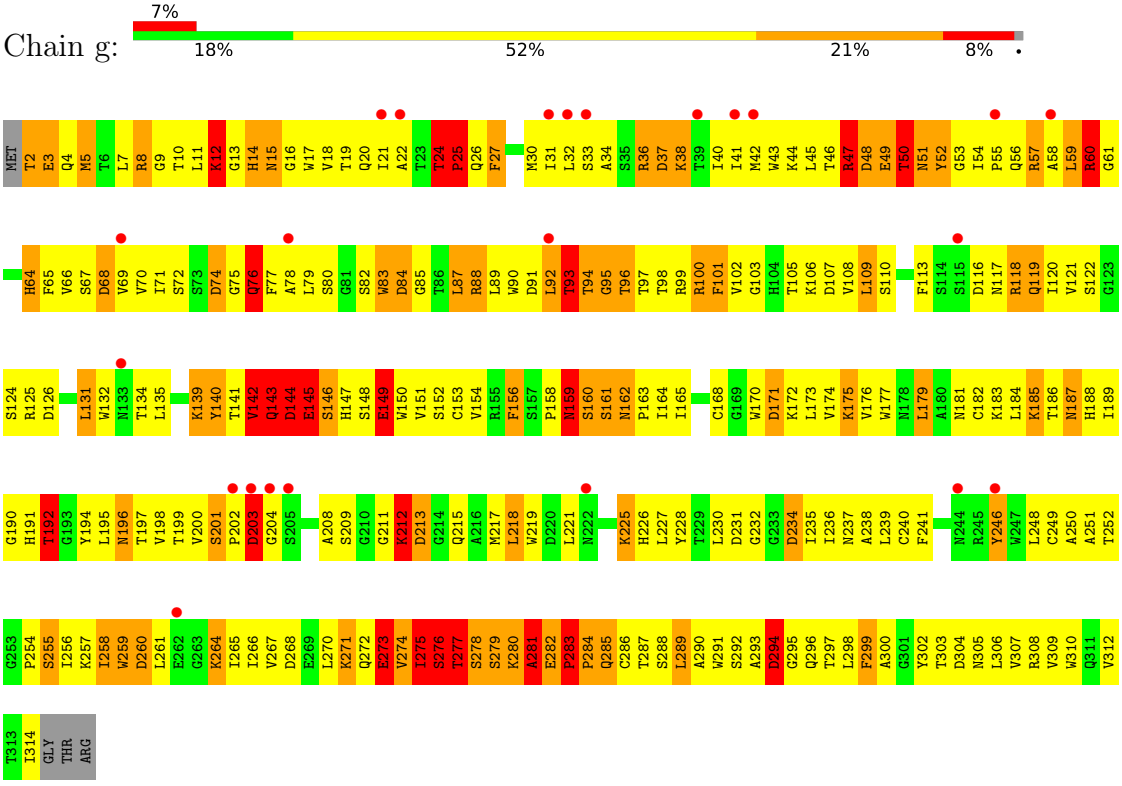
• Molecule 32: 40S Ribosomal Protein S27A

Chain f:



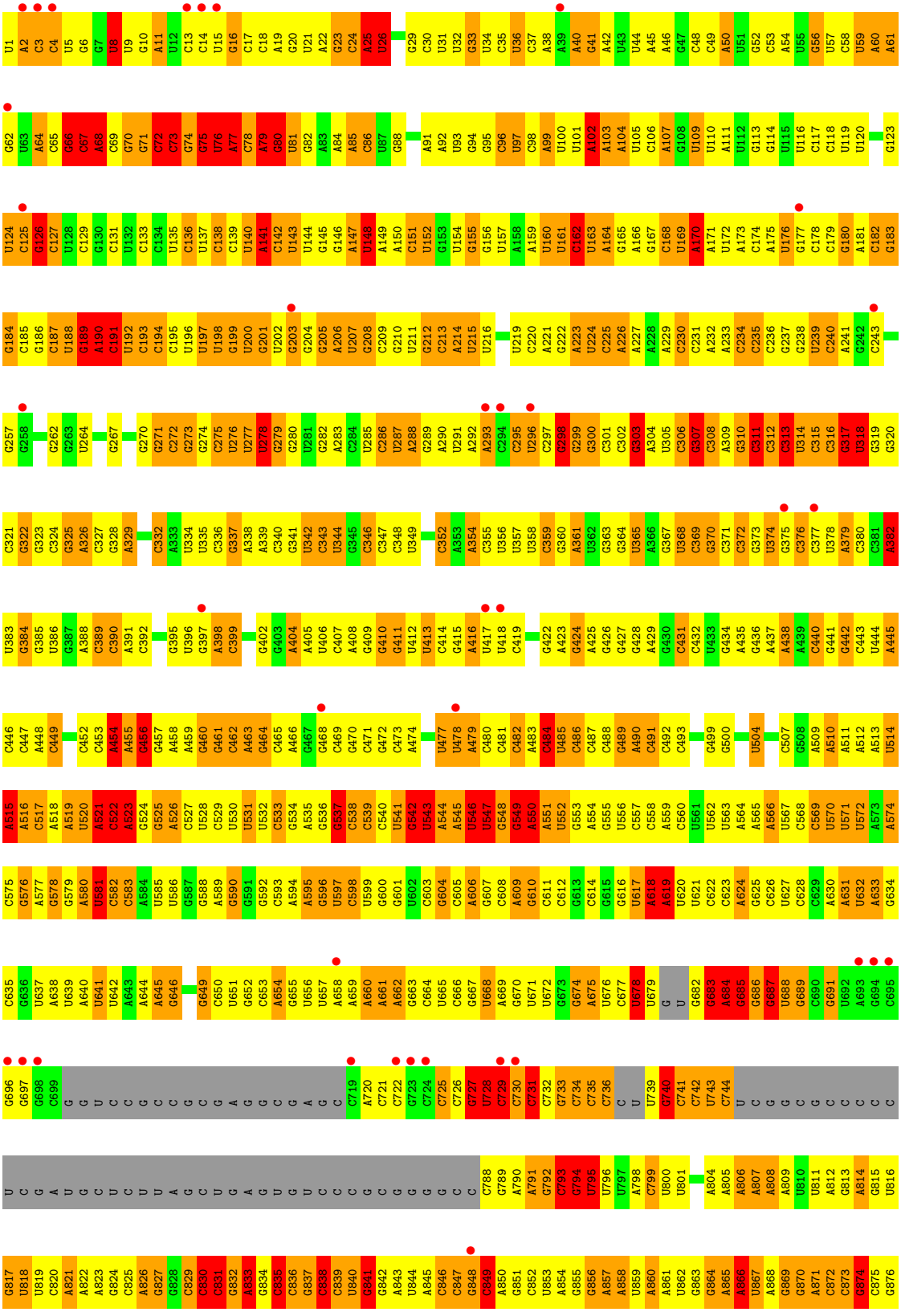
• Molecule 33: 40S Ribosomal Protein RACK1

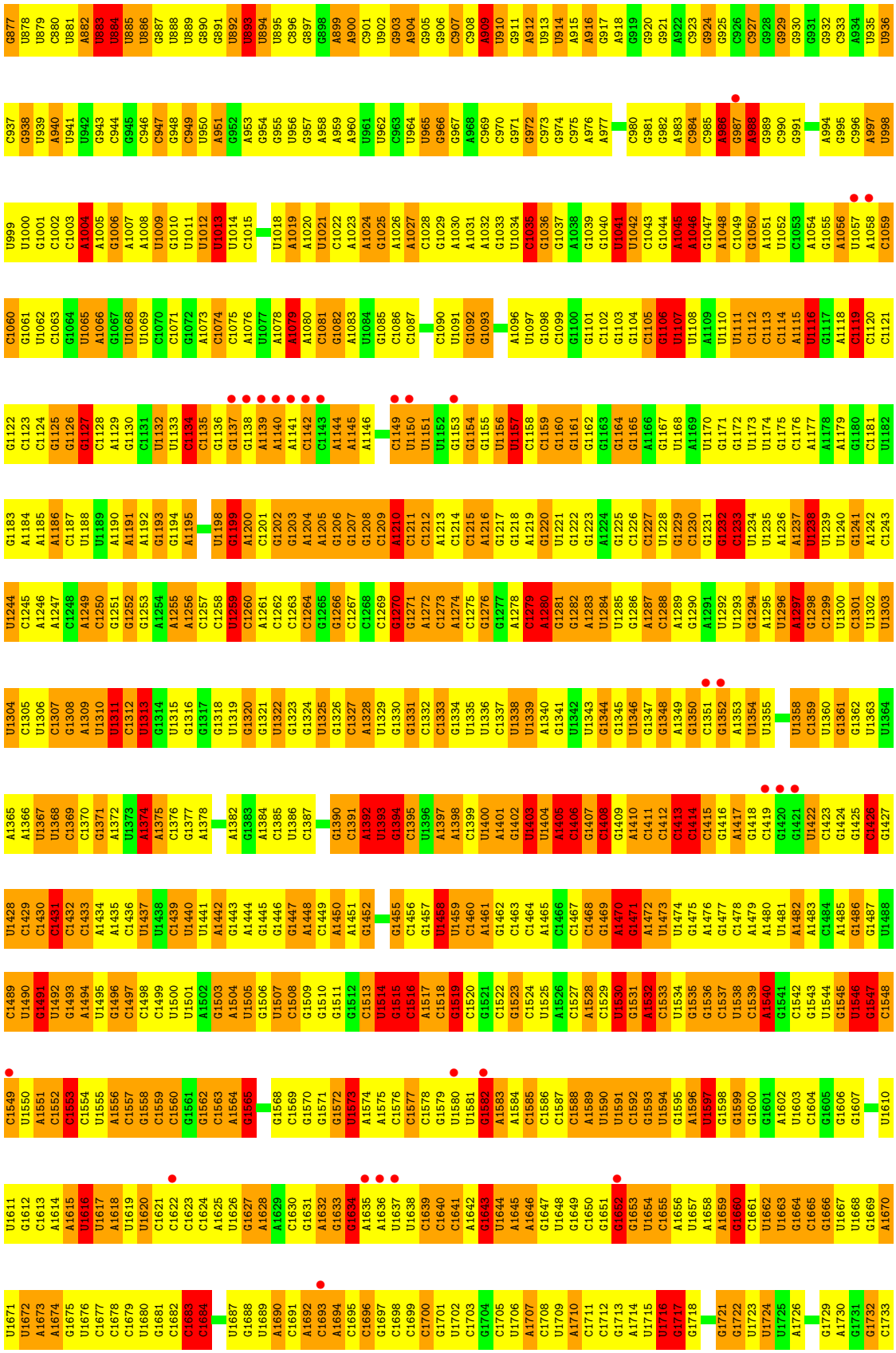
Chain g:

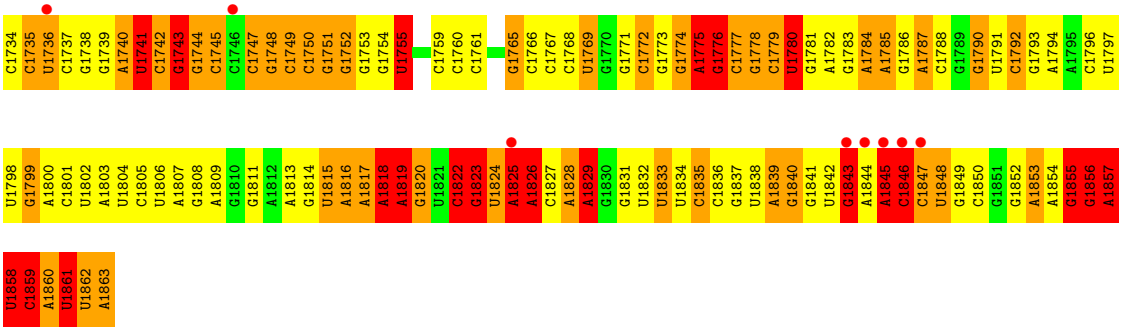


• Molecule 34: 18S Ribosomal RNA

Chain i:





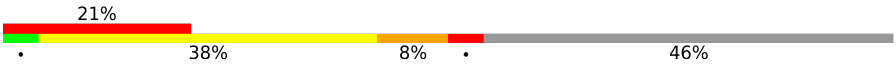


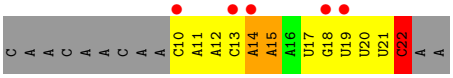
• Molecule 35: initiator Met-RNA-i

Chain j:

• Molecule 36: mRNA

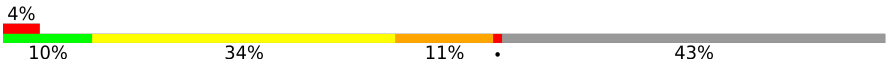
Chain k:

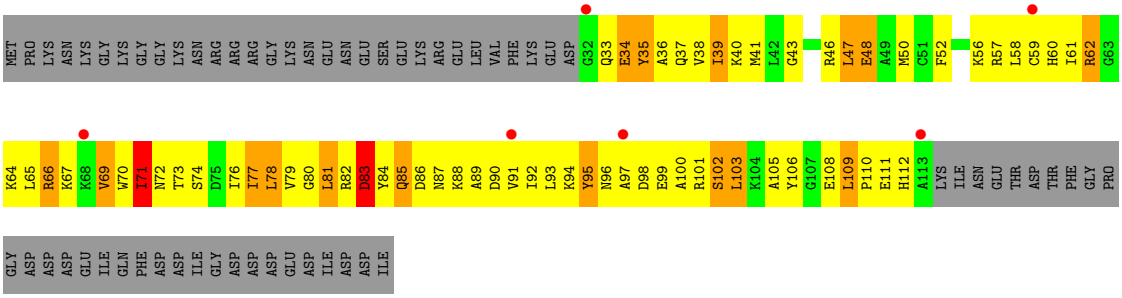




• Molecule 37: human initiation factor eIF1A

Chain n:





4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 31 2 1	Depositor
Cell constants a, b, c, α, β, γ	297.75Å 297.75Å 485.16Å 90.00° 90.00° 120.00°	Depositor
Resolution (Å)	77.53 – 7.03 77.53 – 7.03	Depositor EDS
% Data completeness (in resolution range)	98.3 (77.53-7.03) 98.6 (77.53-7.03)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	0.98 (at 6.72Å)	Xtriage
Refinement program	PHENIX 1.7.3_928	Depositor
R, R_{free}	0.345 , 0.359 0.335 , 0.339	Depositor DCC
R_{free} test set	1946 reflections (4.94%)	wwPDB-VP
Wilson B-factor (Å^2)	566.4	Xtriage
Anisotropy	0.159	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.24 , 84.7	EDS
L-test for twinning[2]	$< \|L\| > = 0.39$, $< L^2 > = 0.22$	Xtriage
Estimated twinning fraction	0.055 for -h,-k,l	Xtriage
F_o,F_c correlation	0.86	EDS
Total number of atoms	79048	wwPDB-VP
Average B, all atoms (Å^2)	179.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.50% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality (i)

5.1 Standard geometry (i)

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	A	1.05	14/1679 (0.8%)	1.61	47/2283 (2.1%)
2	B	0.94	9/1769 (0.5%)	1.64	47/2367 (2.0%)
3	C	1.38	22/1778 (1.2%)	1.88	55/2399 (2.3%)
4	D	1.57	9/1792 (0.5%)	1.97	55/2412 (2.3%)
5	E	0.90	8/2125 (0.4%)	1.48	48/2856 (1.7%)
6	F	1.29	10/1531 (0.7%)	1.77	40/2059 (1.9%)
7	G	1.30	27/1946 (1.4%)	1.76	48/2590 (1.9%)
8	H	1.47	20/1553 (1.3%)	2.04	62/2079 (3.0%)
9	I	1.58	21/1708 (1.2%)	1.98	51/2278 (2.2%)
10	J	1.87	27/1522 (1.8%)	2.13	75/2031 (3.7%)
11	K	1.72	18/851 (2.1%)	2.31	62/1147 (5.4%)
12	L	1.45	13/1319 (1.0%)	1.99	56/1761 (3.2%)
13	M	1.38	6/960 (0.6%)	1.79	27/1287 (2.1%)
14	N	1.01	8/1232 (0.6%)	1.27	14/1656 (0.8%)
15	O	0.89	7/1029 (0.7%)	1.55	26/1380 (1.9%)
16	P	1.03	8/1079 (0.7%)	1.84	52/1437 (3.6%)
17	Q	0.84	1/1142 (0.1%)	1.67	40/1528 (2.6%)
18	R	1.61	17/1031 (1.6%)	1.99	47/1383 (3.4%)
19	S	1.76	25/1157 (2.2%)	2.17	62/1548 (4.0%)
20	T	1.30	10/1132 (0.9%)	1.70	28/1517 (1.8%)
21	U	1.22	7/832 (0.8%)	2.34	53/1117 (4.7%)
22	V	1.13	5/626 (0.8%)	1.82	29/839 (3.5%)
23	W	1.10	4/1051 (0.4%)	1.38	15/1406 (1.1%)
24	X	1.49	17/1124 (1.5%)	1.97	37/1500 (2.5%)
25	Y	1.15	6/1038 (0.6%)	1.82	37/1380 (2.7%)
26	Z	1.17	6/604 (1.0%)	1.89	30/810 (3.7%)
27	a	1.32	11/860 (1.3%)	2.24	31/1156 (2.7%)
28	b	1.26	7/673 (1.0%)	2.20	33/902 (3.7%)
29	c	1.06	4/508 (0.8%)	1.76	20/680 (2.9%)
30	d	0.98	2/455 (0.4%)	1.24	3/603 (0.5%)
31	e	2.07	10/478 (2.1%)	2.14	20/628 (3.2%)
32	f	1.21	3/593 (0.5%)	2.01	34/786 (4.3%)
33	g	1.29	12/2493 (0.5%)	1.86	81/3394 (2.4%)
34	i	1.91	1346/41879 (3.2%)	1.93	2099/65157 (3.2%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
35	j	0.60	8/1798 (0.4%)	0.64	1/2802 (0.0%)
36	k	1.67	1/304 (0.3%)	0.89	3/470 (0.6%)
37	n	0.52	0/657	0.64	0/881
All	All	1.63	1729/84308 (2.1%)	1.87	3468/122509 (2.8%)

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
1	A	0	11
2	B	0	4
3	C	1	5
4	D	0	5
5	E	1	2
6	F	0	3
7	G	0	1
8	H	0	10
9	I	0	8
10	J	1	11
11	K	0	11
12	L	0	7
13	M	0	1
14	N	0	4
15	O	0	1
16	P	0	10
17	Q	0	4
18	R	1	5
19	S	1	10
20	T	1	6
21	U	0	8
22	V	0	9
23	W	0	2
24	X	0	4
25	Y	1	6
26	Z	0	6
27	a	0	2
28	b	0	3
31	e	0	5
32	f	0	6
33	g	0	13

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
34	i	6	0
All	All	13	183

All (1729) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	5	ILE	C-N	37.67	1.82	1.33
31	e	95	LYS	C-N	30.65	1.76	1.33
10	J	85	GLY	C-N	-30.43	0.95	1.33
10	J	118	GLY	C-N	28.43	1.73	1.33
36	k	22	C	C1'-N1	28.28	1.90	1.48
9	I	43	ILE	CA-C	-22.40	1.25	1.52
10	J	146	SER	C-N	22.33	1.61	1.33
9	I	43	ILE	C-N	22.30	1.67	1.33
19	S	141	ARG	C-N	19.52	1.60	1.33
23	W	2	VAL	C-N	19.41	1.59	1.33
19	S	40	TYR	CA-C	-18.83	1.28	1.52
34	i	1322	U	C2'-C1'	-18.55	1.25	1.53
34	i	66	G	C2'-C1'	-18.07	1.26	1.53
7	G	131	ARG	C-N	17.55	1.59	1.33
34	i	1503	G	O4'-C1'	-17.52	1.15	1.42
34	i	858	A	C2'-C1'	-17.43	1.27	1.53
18	R	1	MET	CA-C	-17.37	1.16	1.52
34	i	652	G	C2'-C1'	-17.26	1.27	1.53
18	R	1	MET	N-CA	17.26	1.79	1.46
18	R	1	MET	C-N	-17.17	1.13	1.33
18	R	1	MET	CA-CB	17.07	1.87	1.53
19	S	54	LYS	CA-C	17.01	1.75	1.52
24	X	115	ILE	CA-C	-16.65	1.39	1.53
19	S	54	LYS	N-CA	16.58	1.67	1.46
19	S	40	TYR	C-N	-16.40	1.09	1.33
34	i	1307	C	C2'-C1'	-16.28	1.28	1.53
34	i	521	A	C2'-C1'	-16.24	1.28	1.53
34	i	1037	G	C2'-C1'	-16.03	1.29	1.53
34	i	145	G	C2'-C1'	-15.86	1.29	1.53
34	i	1233	C	C2'-C1'	-15.74	1.29	1.53
18	R	89	SER	CA-C	15.64	1.73	1.52
34	i	287	U	C2'-C1'	-15.60	1.29	1.53
3	C	93	LYS	C-N	-15.33	1.18	1.33
4	D	96	LEU	C-N	15.32	1.55	1.33
34	i	1279	C	O4'-C1'	15.10	1.64	1.41
34	i	1327	C	C2'-C1'	-14.96	1.30	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	a	97	PRO	C-N	14.92	1.50	1.33
34	i	1472	A	O4'-C1'	-14.91	1.19	1.41
34	i	984	C	O4'-C1'	14.90	1.64	1.41
34	i	1393	U	C2'-C1'	-14.89	1.30	1.53
34	i	215	U	C2'-C1'	-14.88	1.31	1.53
34	i	299	G	C2'-C1'	-14.86	1.30	1.53
34	i	389	C	O4'-C1'	14.86	1.64	1.42
34	i	1233	C	O4'-C1'	14.53	1.63	1.41
34	i	630	A	C2'-C1'	-14.46	1.31	1.53
34	i	343	C	C2'-C1'	-14.46	1.31	1.53
34	i	626	C	O4'-C1'	14.44	1.63	1.41
34	i	1467	C	O4'-C1'	14.36	1.63	1.41
34	i	1407	G	C2'-C1'	-14.35	1.31	1.53
10	J	164	PRO	C-N	14.34	1.53	1.33
34	i	1733	C	O4'-C1'	14.24	1.63	1.41
34	i	612	C	C2'-C1'	-14.24	1.31	1.53
34	i	1738	G	C2'-C1'	-14.19	1.32	1.53
34	i	1043	C	O4'-C1'	14.16	1.62	1.41
34	i	956	U	C2'-C1'	-14.14	1.32	1.53
34	i	689	G	O4'-C1'	14.10	1.62	1.41
34	i	611	C	O4'-C1'	14.09	1.62	1.41
34	i	1308	G	O4'-C1'	14.04	1.63	1.42
34	i	1855	G	C2'-C1'	-14.03	1.31	1.53
4	D	4	GLN	C-N	-13.93	1.20	1.33
34	i	1308	G	C2'-C1'	-13.93	1.32	1.53
34	i	277	U	O4'-C1'	13.93	1.62	1.41
34	i	684	A	C2'-C1'	-13.89	1.32	1.53
34	i	1496	G	C2'-C1'	-13.86	1.32	1.53
34	i	604	G	O4'-C1'	13.85	1.62	1.42
34	i	390	C	O4'-C1'	13.80	1.62	1.42
34	i	446	C	O4'-C1'	13.80	1.62	1.41
34	i	1159	C	C2'-C1'	-13.74	1.32	1.53
34	i	1227	C	C2'-C1'	-13.73	1.32	1.53
34	i	1305	C	O4'-C1'	13.72	1.62	1.41
9	I	3	ILE	CA-CB	-13.65	1.38	1.54
34	i	1432	C	O4'-C1'	13.64	1.62	1.41
34	i	1227	C	O4'-C1'	13.60	1.62	1.41
34	i	594	A	O4'-C1'	13.60	1.62	1.41
34	i	1012	U	O4'-C1'	13.54	1.62	1.42
34	i	1194	G	C2'-C1'	-13.54	1.33	1.53
34	i	225	C	O4'-C1'	13.50	1.62	1.42
34	i	518	A	C2'-C1'	-13.50	1.33	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	T	4	VAL	C-N	13.46	1.52	1.33
34	i	1766	C	O4'-C1'	13.45	1.61	1.41
34	i	286	C	O4'-C1'	13.41	1.61	1.41
34	i	741	C	O4'-C1'	13.41	1.61	1.41
34	i	794	G	O4'-C1'	13.37	1.62	1.42
34	i	179	C	O4'-C1'	13.33	1.61	1.41
34	i	1288	C	O4'-C1'	13.29	1.61	1.41
24	X	128	VAL	CA-CB	-13.25	1.40	1.54
34	i	909	A	O4'-C1'	13.25	1.61	1.42
34	i	730	C	O4'-C1'	13.24	1.61	1.41
34	i	1237	A	O4'-C1'	13.18	1.61	1.41
34	i	214	A	O4'-C1'	13.18	1.61	1.41
7	G	170	ARG	CA-C	-13.16	1.36	1.52
34	i	1524	C	O4'-C1'	13.15	1.61	1.41
34	i	1222	G	C2'-C1'	-13.13	1.33	1.53
34	i	443	C	C2'-C1'	-13.10	1.33	1.53
34	i	1393	U	O4'-C1'	13.09	1.61	1.42
7	G	130	PRO	C-N	-13.09	1.16	1.33
34	i	859	U	C2'-C1'	-13.06	1.33	1.53
34	i	1774	G	C2'-C1'	-13.01	1.33	1.53
34	i	1226	C	C2'-C1'	-12.99	1.33	1.53
4	D	4	GLN	N-CA	-12.98	1.29	1.46
34	i	1307	C	O4'-C1'	12.90	1.60	1.41
34	i	1406	C	O4'-C1'	12.89	1.60	1.41
10	J	187	ALA	CA-C	12.88	1.68	1.53
24	X	24	ASP	CA-C	-12.86	1.34	1.52
34	i	538	C	O4'-C1'	12.85	1.60	1.41
34	i	838	C	O4'-C1'	12.84	1.60	1.41
34	i	606	A	C2'-C1'	-12.84	1.34	1.53
25	Y	91	LEU	C-N	12.82	1.50	1.33
34	i	970	C	O4'-C1'	12.81	1.60	1.41
34	i	1703	C	O4'-C1'	12.79	1.60	1.41
34	i	1199	G	C2'-C1'	-12.79	1.34	1.53
34	i	1010	G	C2'-C1'	-12.78	1.34	1.53
34	i	1413	C	O4'-C1'	12.77	1.60	1.41
34	i	1090	C	O4'-C1'	12.74	1.60	1.41
34	i	1289	A	O4'-C1'	12.72	1.60	1.41
34	i	873	C	O4'-C1'	12.65	1.60	1.41
34	i	1587	C	O4'-C1'	12.64	1.60	1.41
34	i	41	G	C2'-C1'	-12.59	1.34	1.53
34	i	1144	A	O4'-C1'	-12.59	1.23	1.42
34	i	1230	C	O4'-C1'	12.59	1.60	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1699	C	O4'-C1'	12.59	1.60	1.41
34	i	438	A	O4'-C1'	-12.57	1.23	1.42
34	i	431	C	O4'-C1'	12.52	1.60	1.41
34	i	1214	C	C2'-C1'	-12.52	1.34	1.53
34	i	1376	C	O4'-C1'	12.51	1.60	1.41
34	i	215	U	O4'-C1'	12.48	1.60	1.41
34	i	1738	G	O4'-C1'	12.44	1.60	1.41
34	i	1348	G	C2'-C1'	-12.38	1.34	1.53
34	i	1258	C	C2'-C1'	-12.37	1.34	1.53
34	i	1044	G	C2'-C1'	-12.35	1.34	1.53
34	i	35	C	O4'-C1'	12.34	1.60	1.41
34	i	144	U	O4'-C1'	12.32	1.60	1.41
7	G	131	ARG	N-CA	-12.30	1.30	1.46
34	i	1732	G	C2'-C1'	-12.28	1.34	1.53
34	i	838	C	C2'-C1'	-12.25	1.34	1.53
34	i	94	G	C2'-C1'	-12.23	1.35	1.53
34	i	929	G	C2'-C1'	-12.23	1.35	1.53
34	i	1691	C	O4'-C1'	12.23	1.59	1.41
8	H	111	LYS	CA-C	-12.22	1.34	1.53
34	i	1214	C	O4'-C1'	12.20	1.59	1.41
7	G	36	VAL	CA-CB	-12.19	1.37	1.55
34	i	844	U	C2'-C1'	-12.16	1.35	1.53
34	i	830	C	O4'-C1'	12.14	1.59	1.41
34	i	852	C	O4'-C1'	12.08	1.59	1.41
34	i	1736	U	O4'-C1'	12.07	1.59	1.41
34	i	1184	A	O4'-C1'	12.07	1.59	1.41
34	i	616	G	O4'-C1'	12.04	1.59	1.41
34	i	947	C	O4'-C1'	12.04	1.59	1.41
34	i	1520	C	O4'-C1'	12.04	1.59	1.41
34	i	435	A	C2'-C1'	-12.03	1.35	1.53
34	i	1433	C	O4'-C1'	12.03	1.59	1.41
27	a	97	PRO	CA-C	12.02	1.63	1.52
16	P	122	THR	CA-CB	12.01	1.72	1.53
34	i	604	G	C2'-C1'	-12.01	1.35	1.53
34	i	187	C	O4'-C1'	12.00	1.59	1.41
34	i	168	C	O4'-C1'	11.98	1.59	1.41
34	i	605	C	O4'-C1'	11.98	1.59	1.41
34	i	735	C	O4'-C1'	11.97	1.59	1.41
34	i	1003	C	O4'-C1'	11.95	1.59	1.41
34	i	1325	U	C2'-C1'	-11.94	1.35	1.53
34	i	312	C	O4'-C1'	11.92	1.59	1.41
34	i	1571	G	C2'-C1'	-11.92	1.35	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	801	U	O4'-C1'	11.91	1.59	1.41
34	i	734	C	O4'-C1'	11.89	1.59	1.41
7	G	157	VAL	CA-CB	-11.88	1.40	1.54
34	i	446	C	C2'-C1'	-11.86	1.35	1.53
21	U	93	SER	C-N	11.85	1.61	1.33
34	i	377	C	O4'-C1'	11.85	1.59	1.41
34	i	1419	C	O4'-C1'	11.84	1.59	1.41
34	i	1693	C	O4'-C1'	11.83	1.59	1.42
34	i	564	A	O4'-C1'	11.83	1.59	1.41
34	i	340	C	O4'-C1'	11.83	1.59	1.41
34	i	1263	C	O4'-C1'	11.82	1.59	1.41
34	i	1002	C	O4'-C1'	11.81	1.59	1.41
34	i	1436	C	O4'-C1'	11.81	1.59	1.41
34	i	92	A	C2'-C1'	-11.78	1.35	1.53
34	i	1022	C	O4'-C1'	11.78	1.59	1.41
34	i	1411	C	O4'-C1'	11.77	1.59	1.41
34	i	13	C	O4'-C1'	11.76	1.59	1.41
34	i	1847	C	C2'-C1'	-11.76	1.35	1.53
34	i	1563	C	C2'-C1'	-11.75	1.35	1.53
34	i	1400	U	O4'-C1'	11.70	1.59	1.42
34	i	1404	U	O4'-C1'	11.70	1.59	1.41
34	i	1805	C	O4'-C1'	11.68	1.59	1.41
34	i	788	C	C2'-C1'	-11.68	1.35	1.53
34	i	1666	G	C2'-C1'	-11.68	1.35	1.53
32	f	152	LYS	C-O	-11.67	1.00	1.23
34	i	568	C	O4'-C1'	11.67	1.59	1.41
34	i	1666	G	O4'-C1'	11.65	1.59	1.41
13	M	132	LYS	C-OXT	-11.64	1.00	1.23
14	N	151	ALA	C-OXT	-11.64	1.00	1.23
34	i	1617	U	O4'-C1'	11.64	1.59	1.42
10	J	188	GLY	C-O	-11.63	1.00	1.23
20	T	144	LYS	C-O	-11.63	1.00	1.23
13	M	132	LYS	C-O	-11.62	1.00	1.23
3	C	263	THR	C-O	-11.62	1.00	1.23
23	W	130	PHE	C-OXT	-11.62	1.00	1.23
9	I	207	GLY	C-O	-11.60	1.00	1.23
34	i	858	A	O4'-C1'	11.60	1.59	1.41
28	b	84	HIS	C-OXT	-11.60	1.00	1.23
34	i	402	G	O4'-C1'	11.60	1.59	1.41
34	i	728	U	O4'-C1'	11.60	1.59	1.41
24	X	142	ARG	C-O	-11.60	1.00	1.23
34	i	792	G	C2'-C1'	-11.59	1.35	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	Z	115	GLY	C-O	-11.58	1.00	1.23
14	N	151	ALA	C-O	-11.58	1.00	1.23
34	i	174	C	O4'-C1'	11.58	1.59	1.41
8	H	194	LEU	C-O	-11.57	1.00	1.23
31	e	133	SER	C-O	-11.57	1.00	1.23
5	E	263	GLY	C-OXT	-11.55	1.00	1.23
6	F	204	ARG	C-OXT	-11.55	1.00	1.23
34	i	830	C	C2'-C1'	-11.54	1.36	1.53
31	e	133	SER	C-OXT	-11.54	1.00	1.23
30	d	56	ASP	C-O	-11.53	1.00	1.23
2	B	233	GLY	C-O	-11.53	1.00	1.23
34	i	143	U	C2'-C1'	-11.53	1.35	1.53
25	Y	128	GLY	C-O	-11.53	1.00	1.23
34	i	54	A	O4'-C1'	11.52	1.58	1.41
34	i	179	C	C2'-C1'	-11.52	1.36	1.53
34	i	1267	C	O4'-C1'	11.52	1.58	1.41
34	i	1847	C	O4'-C1'	11.52	1.58	1.41
6	F	204	ARG	C-O	-11.51	1.00	1.23
34	i	1683	C	C2'-C1'	-11.51	1.36	1.53
5	E	263	GLY	C-O	-11.50	1.00	1.23
11	K	98	ARG	C-O	-11.50	1.00	1.23
23	W	130	PHE	C-O	-11.50	1.00	1.23
29	c	68	LEU	C-O	-11.50	1.00	1.23
30	d	56	ASP	C-OXT	-11.50	1.00	1.23
1	A	209	GLU	C-O	-11.49	1.00	1.23
12	L	158	PHE	C-OXT	-11.49	1.00	1.23
34	i	1063	C	O4'-C1'	11.49	1.58	1.41
4	D	227	LYS	C-O	-11.48	1.00	1.23
12	L	158	PHE	C-O	-11.48	1.00	1.23
33	g	314	ILE	C-O	-11.45	1.00	1.23
34	i	541	U	C2'-C1'	-11.45	1.36	1.53
8	H	194	LEU	C-OXT	-11.45	1.00	1.23
34	i	1232	G	O4'-C1'	-11.44	1.24	1.41
34	i	1688	G	C2'-C1'	-11.43	1.36	1.53
34	i	1257	C	O4'-C1'	11.41	1.58	1.41
8	H	109	ARG	CA-CB	-11.41	1.34	1.53
34	i	1452	G	C2'-C1'	-11.41	1.36	1.53
34	i	1777	C	O4'-C1'	11.41	1.59	1.42
34	i	826	A	O4'-C1'	-11.40	1.24	1.41
28	b	84	HIS	C-O	-11.39	1.00	1.23
34	i	1736	U	C2'-C1'	-11.39	1.36	1.53
10	J	91	LYS	C-O	-11.38	1.09	1.24

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	287	U	O4'-C1'	11.37	1.58	1.41
34	i	581	U	C2'-C1'	-11.37	1.35	1.53
34	i	1447	G	O4'-C1'	11.35	1.58	1.41
34	i	986	A	O4'-C1'	11.34	1.58	1.42
34	i	1660	G	C2'-C1'	-11.32	1.36	1.53
34	i	565	A	O4'-C1'	11.30	1.58	1.41
34	i	877	G	C2'-C1'	-11.27	1.36	1.53
34	i	1015	C	O4'-C1'	11.27	1.58	1.41
34	i	1683	C	O4'-C1'	11.27	1.58	1.41
34	i	1075	C	O4'-C1'	11.26	1.58	1.41
34	i	222	G	C2'-C1'	-11.24	1.36	1.53
34	i	62	G	C2'-C1'	-11.21	1.36	1.53
34	i	186	G	C2'-C1'	-11.21	1.36	1.53
34	i	657	U	C2'-C1'	-11.20	1.36	1.53
34	i	1542	C	O4'-C1'	11.19	1.58	1.41
34	i	1690	A	O4'-C1'	11.15	1.58	1.42
34	i	1018	U	C2'-C1'	-11.11	1.36	1.53
34	i	1539	C	O4'-C1'	11.11	1.58	1.41
34	i	687	G	O4'-C1'	11.09	1.58	1.41
27	a	10	ARG	CD-NE	11.07	1.61	1.46
34	i	1087	C	O4'-C1'	11.07	1.58	1.41
34	i	973	C	O4'-C1'	11.07	1.58	1.41
34	i	1659	A	C2'-C1'	-11.05	1.36	1.53
34	i	408	A	C2'-C1'	-11.04	1.36	1.53
34	i	1171	G	C2'-C1'	-11.04	1.36	1.53
34	i	1563	C	O4'-C1'	11.04	1.58	1.41
19	S	139	THR	CA-C	-11.02	1.47	1.53
34	i	731	C	O4'-C1'	10.97	1.58	1.41
34	i	484	C	O4'-C1'	10.97	1.58	1.41
7	G	170	ARG	CA-CB	10.97	1.70	1.53
34	i	1113	C	O4'-C1'	-10.96	1.25	1.41
34	i	985	C	O4'-C1'	10.96	1.58	1.42
34	i	734	C	C2'-C1'	-10.95	1.36	1.53
34	i	1259	U	O4'-C1'	10.94	1.58	1.41
34	i	324	C	O4'-C1'	10.94	1.58	1.41
34	i	986	A	C2'-C1'	-10.94	1.36	1.53
34	i	80	G	O4'-C1'	10.94	1.58	1.41
34	i	164	A	C2'-C1'	-10.93	1.36	1.53
34	i	539	C	O4'-C1'	10.92	1.58	1.41
34	i	1615	A	C2'-C1'	-10.92	1.36	1.53
34	i	193	C	O4'-C1'	10.91	1.58	1.41
34	i	788	C	O4'-C1'	10.91	1.58	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1012	U	C2'-C1'	-10.91	1.36	1.53
34	i	1451	A	O4'-C1'	10.91	1.58	1.41
34	i	4	C	C2'-C1'	-10.90	1.36	1.53
18	R	89	SER	C-N	10.86	1.48	1.33
34	i	64	A	O4'-C1'	-10.86	1.25	1.42
34	i	1711	C	O4'-C1'	10.84	1.57	1.41
34	i	188	U	C2'-C1'	-10.83	1.37	1.53
34	i	1856	G	O4'-C1'	10.82	1.58	1.42
34	i	225	C	C2'-C1'	-10.80	1.36	1.53
34	i	1610	U	C2'-C1'	-10.78	1.37	1.53
34	i	1656	A	C2'-C1'	-10.78	1.37	1.53
19	S	88	LYS	CA-C	10.77	1.65	1.53
34	i	744	C	O4'-C1'	10.74	1.57	1.41
34	i	1494	A	C2'-C1'	-10.74	1.37	1.53
34	i	48	C	O4'-C1'	10.73	1.57	1.41
34	i	205	G	C2'-C1'	-10.72	1.37	1.53
34	i	728	U	C2'-C1'	-10.72	1.37	1.53
34	i	650	C	O4'-C1'	10.72	1.57	1.41
34	i	1142	C	C2'-C1'	-10.71	1.37	1.53
34	i	1677	C	O4'-C1'	10.70	1.58	1.42
34	i	81	U	C2'-C1'	-10.70	1.37	1.53
34	i	482	C	O4'-C1'	10.68	1.57	1.42
11	K	93	THR	CA-C	10.67	1.66	1.52
34	i	804	A	C2'-C1'	-10.65	1.37	1.53
34	i	914	U	C2'-C1'	-10.65	1.37	1.53
34	i	1216	A	C2'-C1'	-10.60	1.37	1.53
10	J	144	ILE	CA-CB	-10.60	1.40	1.54
34	i	522	C	O4'-C1'	10.60	1.57	1.41
34	i	1734	C	O4'-C1'	10.60	1.57	1.41
34	i	1014	U	C2'-C1'	-10.58	1.37	1.53
10	J	101	LYS	N-CA	10.57	1.58	1.46
34	i	1262	C	O4'-C1'	10.57	1.57	1.41
34	i	1611	U	C2'-C1'	-10.57	1.37	1.53
34	i	1229	G	C2'-C1'	-10.55	1.37	1.53
34	i	1263	C	C2'-C1'	-10.55	1.37	1.53
34	i	623	C	O4'-C1'	10.53	1.57	1.41
34	i	62	G	O4'-C1'	10.52	1.57	1.41
34	i	1755	U	C2'-C1'	-10.51	1.37	1.53
34	i	1828	A	C2'-C1'	-10.51	1.37	1.53
34	i	1322	U	O4'-C1'	10.49	1.57	1.42
34	i	845	A	C2'-C1'	-10.47	1.37	1.53
34	i	1801	C	O4'-C1'	10.46	1.57	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1532	A	O4'-C1'	10.46	1.57	1.41
34	i	598	C	O4'-C1'	10.45	1.57	1.41
34	i	583	C	O4'-C1'	10.45	1.57	1.41
34	i	1416	G	C2'-C1'	-10.44	1.37	1.53
34	i	431	C	C2'-C1'	-10.43	1.37	1.53
34	i	1222	G	O4'-C1'	10.42	1.57	1.41
22	V	64	GLU	CA-C	10.41	1.62	1.52
34	i	1338	U	O4'-C1'	10.39	1.57	1.42
34	i	612	C	O4'-C1'	10.39	1.57	1.41
34	i	1548	C	O4'-C1'	-10.38	1.26	1.41
34	i	465	C	O4'-C1'	10.37	1.57	1.41
34	i	623	C	C2'-C1'	-10.32	1.37	1.53
34	i	1788	C	O4'-C1'	10.32	1.57	1.41
34	i	276	U	O4'-C1'	10.32	1.57	1.41
34	i	302	C	O4'-C1'	10.30	1.57	1.41
34	i	1587	C	C2'-C1'	-10.28	1.38	1.53
34	i	1793	G	C2'-C1'	-10.28	1.38	1.53
34	i	1801	C	C2'-C1'	-10.26	1.38	1.53
34	i	18	C	O4'-C1'	10.26	1.57	1.41
34	i	1140	A	C2'-C1'	-10.25	1.38	1.53
34	i	1557	C	C2'-C1'	-10.23	1.38	1.53
34	i	1060	C	O4'-C1'	10.23	1.56	1.41
34	i	1650	C	O4'-C1'	10.22	1.56	1.41
34	i	907	C	O4'-C1'	10.22	1.56	1.41
34	i	1602	A	C2'-C1'	-10.21	1.38	1.53
34	i	1628	A	O4'-C1'	10.20	1.56	1.41
34	i	299	G	O4'-C1'	10.19	1.57	1.42
34	i	1428	U	O4'-C1'	10.18	1.56	1.41
34	i	569	C	O4'-C1'	10.17	1.56	1.41
34	i	1251	G	C2'-C1'	-10.16	1.38	1.53
34	i	887	G	C2'-C1'	-10.13	1.38	1.53
34	i	553	G	O4'-C1'	10.12	1.57	1.42
34	i	1387	C	O4'-C1'	10.11	1.56	1.41
34	i	852	C	C2'-C1'	-10.11	1.38	1.53
34	i	325	G	O4'-C1'	-10.11	1.26	1.41
34	i	1765	G	C2'-C1'	-10.09	1.38	1.53
9	I	134	GLU	CA-C	-10.07	1.40	1.52
34	i	1698	C	O4'-C1'	10.07	1.56	1.41
34	i	606	A	O4'-C1'	10.05	1.56	1.41
34	i	1537	C	O4'-C1'	10.04	1.56	1.41
34	i	915	A	C2'-C1'	-10.04	1.38	1.53
34	i	1427	G	C2'-C1'	-10.03	1.38	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	545	A	O4'-C1'	10.03	1.56	1.41
34	i	1181	C	O4'-C1'	10.02	1.56	1.41
34	i	1074	C	O4'-C1'	10.00	1.56	1.41
34	i	407	C	O4'-C1'	9.99	1.56	1.41
24	X	126	ALA	CA-CB	-9.98	1.38	1.53
34	i	884	U	C2'-C1'	-9.97	1.38	1.53
34	i	1114	C	O4'-C1'	-9.96	1.26	1.41
34	i	436	G	O4'-C1'	9.95	1.56	1.41
11	K	46	MET	CA-C	-9.95	1.40	1.52
34	i	1241	G	C2'-C1'	-9.94	1.38	1.53
34	i	1732	G	O4'-C1'	9.94	1.56	1.41
34	i	903	G	C2'-C1'	-9.93	1.38	1.53
7	G	36	VAL	CA-C	-9.92	1.42	1.52
34	i	622	C	O4'-C1'	9.91	1.56	1.41
34	i	864	G	O4'-C1'	9.91	1.56	1.42
10	J	164	PRO	N-CA	-9.90	1.34	1.47
34	i	887	G	O4'-C1'	9.89	1.56	1.41
34	i	1455	G	C2'-C1'	-9.89	1.38	1.53
34	i	521	A	O4'-C1'	9.88	1.56	1.41
34	i	1577	C	C2'-C1'	-9.86	1.38	1.53
34	i	980	C	C2'-C1'	-9.82	1.38	1.53
34	i	1124	C	O4'-C1'	9.82	1.56	1.41
34	i	548	G	C2'-C1'	-9.79	1.38	1.53
34	i	510	A	C2'-C1'	-9.79	1.38	1.53
34	i	1623	C	C2'-C1'	-9.78	1.38	1.53
34	i	1091	U	C2'-C1'	-9.78	1.38	1.53
34	i	900	A	O4'-C1'	9.74	1.56	1.41
34	i	736	C	O4'-C1'	9.74	1.56	1.41
34	i	1433	C	C2'-C1'	-9.73	1.38	1.53
34	i	538	C	C2'-C1'	-9.73	1.38	1.53
34	i	1074	C	C2'-C1'	-9.73	1.38	1.53
34	i	1128	C	C2'-C1'	-9.73	1.38	1.53
34	i	1669	G	O4'-C1'	9.73	1.56	1.41
34	i	414	C	O4'-C1'	9.72	1.56	1.41
34	i	635	C	O4'-C1'	9.71	1.56	1.41
34	i	1406	C	C2'-C1'	-9.71	1.38	1.53
34	i	1639	C	C2'-C1'	-9.69	1.38	1.53
34	i	1792	C	O4'-C1'	9.69	1.56	1.41
34	i	144	U	C2'-C1'	-9.69	1.38	1.53
34	i	1471	G	C2'-C1'	-9.68	1.38	1.53
34	i	582	C	O4'-C1'	-9.66	1.27	1.42
34	i	1044	G	O4'-C1'	9.66	1.56	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	e	120	VAL	CA-CB	-9.66	1.47	1.53
34	i	964	U	O4'-C1'	9.64	1.56	1.41
34	i	84	A	O4'-C1'	9.64	1.56	1.41
34	i	839	C	O4'-C1'	9.63	1.56	1.41
34	i	1583	A	C2'-C1'	-9.63	1.39	1.53
10	J	163	SER	C-N	-9.62	1.21	1.33
34	i	1585	C	O4'-C1'	9.60	1.56	1.41
34	i	479	A	O4'-C1'	9.58	1.56	1.41
34	i	871	A	O4'-C1'	9.57	1.56	1.41
34	i	1715	U	C2'-C1'	9.57	1.67	1.53
34	i	1122	G	C2'-C1'	-9.56	1.39	1.53
34	i	1600	G	C2'-C1'	-9.55	1.39	1.53
34	i	1270	G	C2'-C1'	-9.53	1.38	1.53
34	i	901	C	O4'-C1'	9.52	1.55	1.41
34	i	1226	C	O4'-C1'	9.52	1.55	1.41
34	i	1603	U	O4'-C1'	9.52	1.55	1.41
34	i	4	C	O4'-C1'	9.51	1.55	1.41
34	i	542	G	C2'-C1'	-9.50	1.39	1.53
34	i	1515	G	C2'-C1'	-9.50	1.39	1.53
34	i	664	C	O4'-C1'	9.49	1.55	1.41
7	G	131	ARG	C-O	-9.48	1.12	1.23
34	i	1448	A	O4'-C1'	9.48	1.56	1.42
34	i	1771	G	C2'-C1'	-9.47	1.39	1.53
8	H	110	THR	CA-C	-9.46	1.40	1.52
34	i	1176	C	O4'-C1'	9.45	1.55	1.41
34	i	1546	U	C2'-C1'	-9.44	1.39	1.53
34	i	274	G	C2'-C1'	-9.44	1.39	1.53
34	i	462	C	O4'-C1'	9.43	1.55	1.41
34	i	1369	C	O4'-C1'	9.41	1.55	1.41
25	Y	86	GLU	C-N	9.39	1.55	1.33
34	i	812	A	O4'-C1'	9.39	1.55	1.41
34	i	432	C	O4'-C1'	9.39	1.55	1.41
34	i	1837	G	C2'-C1'	-9.39	1.39	1.53
34	i	1390	G	C2'-C1'	-9.38	1.39	1.53
34	i	868	A	O4'-C1'	-9.38	1.27	1.42
12	L	151	THR	CA-C	9.38	1.64	1.52
34	i	726	C	C2'-C1'	-9.37	1.39	1.53
9	I	125	LYS	CA-C	9.35	1.64	1.52
24	X	23	HIS	N-CA	-9.34	1.34	1.46
34	i	1632	A	C2'-C1'	9.34	1.67	1.53
34	i	975	C	O4'-C1'	9.34	1.55	1.41
34	i	1792	C	C2'-C1'	-9.33	1.39	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1159	C	O4'-C1'	9.33	1.55	1.41
34	i	1209	C	O4'-C1'	9.31	1.55	1.41
34	i	640	A	O4'-C1'	9.31	1.55	1.41
34	i	488	C	O4'-C1'	9.30	1.55	1.41
34	i	1160	G	C2'-C1'	-9.30	1.39	1.53
34	i	308	C	O4'-C1'	9.30	1.55	1.41
24	X	115	ILE	N-CA	-9.29	1.38	1.46
34	i	1786	G	C2'-C1'	-9.29	1.39	1.53
34	i	282	G	C2'-C1'	-9.29	1.39	1.53
1	A	200	ASP	CA-C	-9.28	1.39	1.52
34	i	487	C	O4'-C1'	9.28	1.55	1.41
3	C	119	ASN	CA-C	-9.26	1.42	1.53
34	i	1200	A	O4'-C1'	9.25	1.55	1.41
34	i	798	A	C2'-C1'	-9.25	1.39	1.53
34	i	1048	A	O4'-C1'	9.24	1.55	1.41
34	i	1578	C	O4'-C1'	9.24	1.55	1.41
34	i	853	U	C2'-C1'	-9.23	1.39	1.53
34	i	1496	G	O4'-C1'	9.23	1.55	1.41
34	i	352	C	O4'-C1'	9.22	1.55	1.41
34	i	546	U	C2'-C1'	-9.22	1.39	1.53
34	i	1481	U	O4'-C1'	9.21	1.55	1.41
34	i	1376	C	C2'-C1'	-9.21	1.39	1.53
34	i	907	C	C2'-C1'	-9.21	1.39	1.53
34	i	1708	C	O4'-C1'	9.20	1.55	1.41
34	i	1079	A	C2'-C1'	-9.19	1.39	1.53
34	i	416	A	O4'-C1'	9.17	1.55	1.41
3	C	47	PRO	N-CD	9.17	1.60	1.47
7	G	131	ARG	CG-CD	9.16	1.79	1.52
34	i	646	G	C2'-C1'	-9.16	1.39	1.53
34	i	741	C	C2'-C1'	-9.16	1.39	1.53
34	i	1258	C	O4'-C1'	9.16	1.55	1.41
34	i	1165	G	C2'-C1'	-9.14	1.39	1.53
34	i	547	U	O4'-C1'	9.14	1.55	1.41
34	i	633	A	O4'-C1'	9.13	1.55	1.42
34	i	449	C	O4'-C1'	9.13	1.55	1.41
34	i	1300	U	C2'-C1'	-9.13	1.39	1.53
34	i	155	G	C2'-C1'	-9.12	1.39	1.53
34	i	1436	C	C2'-C1'	-9.12	1.39	1.53
34	i	981	G	C2'-C1'	-9.10	1.39	1.53
34	i	1063	C	C2'-C1'	-9.09	1.39	1.53
33	g	143	GLN	CA-C	-9.08	1.40	1.52
34	i	622	C	C2'-C1'	-9.08	1.39	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	933	C	O4'-C1'	9.07	1.55	1.41
34	i	355	C	O4'-C1'	9.07	1.55	1.41
34	i	1002	C	C2'-C1'	-9.07	1.39	1.53
34	i	529	C	O4'-C1'	9.06	1.55	1.41
34	i	480	C	O4'-C1'	9.06	1.55	1.41
34	i	1755	U	O4'-C1'	9.06	1.55	1.41
34	i	1128	C	O4'-C1'	9.05	1.55	1.41
34	i	1262	C	C2'-C1'	-9.06	1.39	1.53
33	g	12	LYS	CA-C	-9.05	1.43	1.53
34	i	1312	C	C2'-C1'	-9.04	1.39	1.53
19	S	82	TRP	CA-CB	-9.04	1.37	1.53
10	J	17	ARG	CA-C	-9.03	1.40	1.52
34	i	1398	A	O4'-C1'	9.02	1.55	1.41
34	i	1003	C	C2'-C1'	-9.02	1.39	1.53
34	i	1778	G	O4'-C1'	9.02	1.55	1.41
34	i	1700	C	O4'-C1'	9.02	1.55	1.41
34	i	170	A	O4'-C1'	-9.02	1.28	1.41
34	i	1105	C	O4'-C1'	-9.01	1.28	1.41
34	i	143	U	O4'-C1'	9.01	1.55	1.42
34	i	560	C	O4'-C1'	9.01	1.55	1.41
34	i	1573	U	O4'-C1'	-9.01	1.28	1.42
11	K	35	LEU	CA-C	-9.00	1.40	1.52
34	i	34	U	C2'-C1'	-8.99	1.39	1.53
24	X	116	PRO	CA-C	8.99	1.65	1.52
34	i	611	C	C2'-C1'	-8.99	1.39	1.53
19	S	6	PRO	CA-C	8.98	1.71	1.52
34	i	558	C	O4'-C1'	8.98	1.55	1.41
34	i	230	C	O4'-C1'	8.98	1.55	1.41
19	S	10	GLN	CA-C	8.98	1.64	1.52
34	i	1326	G	C2'-C1'	-8.97	1.39	1.53
34	i	369	C	C2'-C1'	-8.97	1.39	1.53
34	i	1682	C	O4'-C1'	8.94	1.55	1.41
34	i	1076	A	O4'-C1'	-8.93	1.28	1.42
34	i	1573	U	C2'-C1'	8.91	1.66	1.53
34	i	1737	C	C2'-C1'	-8.91	1.40	1.53
14	N	14	SER	CA-C	-8.90	1.41	1.53
34	i	1272	A	O4'-C1'	8.90	1.55	1.41
34	i	1542	C	C2'-C1'	-8.90	1.40	1.53
34	i	316	C	O4'-C1'	8.90	1.55	1.42
34	i	869	G	C2'-C1'	-8.90	1.40	1.53
34	i	638	A	C2'-C1'	-8.90	1.40	1.53
34	i	729	C	O4'-C1'	8.90	1.54	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1280	A	O4'-C1'	8.90	1.55	1.42
31	e	100	LYS	CA-C	-8.88	1.42	1.52
34	i	382	A	O4'-C1'	8.88	1.54	1.41
34	i	241	A	O4'-C1'	8.87	1.55	1.42
34	i	1783	G	O4'-C1'	8.87	1.54	1.41
34	i	1835	C	O4'-C1'	8.87	1.54	1.41
34	i	1579	G	C2'-C1'	-8.87	1.39	1.53
34	i	1165	G	O4'-C1'	8.86	1.54	1.41
34	i	1116	U	C2'-C1'	-8.86	1.40	1.53
34	i	1404	U	C2'-C1'	-8.85	1.40	1.53
34	i	825	C	O4'-C1'	8.85	1.55	1.42
34	i	142	C	O4'-C1'	-8.83	1.28	1.42
34	i	970	C	C2'-C1'	-8.82	1.40	1.53
34	i	977	A	O4'-C1'	8.82	1.54	1.41
34	i	1066	A	C2'-C1'	-8.81	1.40	1.53
34	i	1261	A	C2'-C1'	-8.78	1.39	1.53
34	i	209	C	O4'-C1'	8.77	1.54	1.41
34	i	1827	C	O4'-C1'	8.77	1.54	1.41
34	i	971	G	C2'-C1'	-8.74	1.40	1.53
11	K	89	ILE	N-CA	-8.73	1.35	1.46
34	i	56	G	C2'-C1'	-8.73	1.40	1.53
34	i	1009	U	C2'-C1'	-8.73	1.40	1.53
34	i	1576	C	O4'-C1'	8.73	1.55	1.42
34	i	76	U	O4'-C1'	8.72	1.54	1.41
34	i	1133	U	O4'-C1'	8.71	1.54	1.41
34	i	1114	C	C2'-C1'	8.71	1.66	1.53
34	i	1312	C	O4'-C1'	8.70	1.54	1.41
34	i	1524	C	C2'-C1'	-8.70	1.40	1.53
27	a	63	VAL	CA-C	8.70	1.63	1.52
34	i	486	C	O4'-C1'	8.69	1.54	1.41
34	i	1096	A	O4'-C1'	8.69	1.54	1.41
34	i	809	A	O4'-C1'	8.68	1.54	1.41
9	I	6	ASP	N-CA	-8.67	1.35	1.46
34	i	664	C	C2'-C1'	-8.67	1.40	1.53
34	i	1377	G	O4'-C1'	-8.66	1.28	1.41
34	i	67	C	C2'-C1'	8.66	1.66	1.53
34	i	906	G	C2'-C1'	-8.65	1.40	1.53
34	i	727	G	C2'-C1'	-8.65	1.40	1.53
34	i	1316	G	O4'-C1'	-8.64	1.28	1.41
34	i	667	G	C2'-C1'	-8.63	1.40	1.53
34	i	1600	G	O4'-C1'	8.63	1.54	1.41
34	i	66	G	O4'-C1'	8.63	1.54	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	313	C	O4'-C1'	8.62	1.54	1.42
34	i	318	U	C2'-C1'	-8.61	1.40	1.53
34	i	111	A	O4'-C1'	-8.60	1.28	1.41
34	i	670	G	C2'-C1'	-8.60	1.40	1.53
34	i	1678	C	O4'-C1'	8.60	1.54	1.41
34	i	1787	A	O4'-C1'	8.60	1.54	1.41
34	i	533	C	O4'-C1'	8.59	1.54	1.41
34	i	1006	G	O4'-C1'	-8.58	1.28	1.41
34	i	1822	C	O4'-C1'	8.57	1.54	1.41
32	f	136	PHE	CA-C	-8.57	1.42	1.52
34	i	539	C	C2'-C1'	-8.57	1.40	1.53
20	T	93	SER	CA-C	-8.57	1.44	1.53
34	i	396	U	C2'-C1'	-8.56	1.40	1.53
34	i	639	U	C2'-C1'	-8.56	1.40	1.53
6	F	43	GLU	CA-C	-8.56	1.41	1.52
34	i	589	A	C2'-C1'	-8.56	1.40	1.53
34	i	149	A	O4'-C1'	8.56	1.54	1.41
34	i	833	A	C2'-C1'	-8.56	1.40	1.53
34	i	392	C	O4'-C1'	8.55	1.54	1.41
34	i	946	C	O4'-C1'	8.55	1.54	1.41
34	i	1559	C	O4'-C1'	8.54	1.54	1.41
34	i	956	U	O4'-C1'	8.54	1.54	1.41
34	i	1296	U	O4'-C1'	-8.52	1.29	1.42
12	L	152	LYS	C-N	8.50	1.45	1.33
34	i	96	C	O4'-C1'	8.50	1.54	1.41
8	H	111	LYS	N-CA	8.50	1.58	1.46
34	i	549	G	C2'-C1'	-8.49	1.40	1.53
34	i	298	G	O4'-C1'	-8.48	1.28	1.41
34	i	947	C	C2'-C1'	-8.47	1.40	1.53
34	i	1195	A	C2'-C1'	-8.47	1.40	1.53
34	i	1359	C	O4'-C1'	8.46	1.54	1.42
34	i	668	U	C2'-C1'	-8.45	1.40	1.53
34	i	976	A	C2'-C1'	-8.43	1.40	1.53
34	i	805	A	C2'-C1'	-8.43	1.40	1.53
3	C	262	HIS	CA-C	-8.43	1.41	1.52
34	i	471	C	C2'-C1'	-8.43	1.40	1.53
10	J	144	ILE	C-N	8.40	1.44	1.34
34	i	559	A	C2'-C1'	-8.39	1.40	1.53
34	i	851	G	C2'-C1'	-8.39	1.40	1.53
21	U	107	GLU	CA-C	8.38	1.63	1.52
34	i	67	C	O4'-C1'	-8.38	1.29	1.41
3	C	161	LYS	CA-C	-8.37	1.42	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	419	C	O4'-C1'	8.37	1.54	1.41
34	i	1260	C	C2'-C1'	-8.37	1.40	1.53
34	i	436	G	C2'-C1'	-8.36	1.40	1.53
34	i	1025	G	C2'-C1'	-8.36	1.40	1.53
34	i	500	G	C2'-C1'	-8.36	1.40	1.53
13	M	116	LYS	N-CA	8.36	1.56	1.46
34	i	1120	C	O4'-C1'	8.35	1.54	1.41
34	i	1112	C	O4'-C1'	-8.35	1.29	1.42
34	i	288	A	C2'-C1'	-8.35	1.40	1.53
34	i	1323	G	C2'-C1'	-8.34	1.40	1.53
34	i	48	C	C2'-C1'	-8.32	1.40	1.53
34	i	507	C	O4'-C1'	8.32	1.54	1.41
34	i	682	G	C2'-C1'	-8.32	1.40	1.53
34	i	452	C	C2'-C1'	-8.31	1.40	1.53
34	i	1101	G	C2'-C1'	-8.31	1.40	1.53
8	H	14	GLU	CA-C	-8.30	1.42	1.52
34	i	1464	C	O4'-C1'	8.30	1.54	1.41
34	i	150	A	O4'-C1'	8.30	1.54	1.41
34	i	323	G	C2'-C1'	-8.29	1.41	1.53
34	i	657	U	O4'-C1'	8.28	1.54	1.41
34	i	448	A	O4'-C1'	8.27	1.54	1.41
34	i	395	G	C2'-C1'	-8.27	1.41	1.53
34	i	1653	G	C2'-C1'	-8.27	1.41	1.53
34	i	445	A	O4'-C1'	8.27	1.54	1.41
34	i	1572	G	O4'-C1'	8.27	1.54	1.41
34	i	1775	A	C2'-C1'	-8.27	1.41	1.53
26	Z	104	ARG	N-CA	-8.26	1.35	1.46
34	i	1339	U	O4'-C1'	8.25	1.54	1.41
3	C	193	PRO	N-CD	8.24	1.59	1.47
31	e	120	VAL	CA-C	-8.24	1.45	1.52
34	i	173	A	O4'-C1'	8.24	1.54	1.41
25	Y	91	LEU	N-CA	-8.23	1.36	1.46
34	i	212	G	O4'-C1'	8.23	1.53	1.41
34	i	936	U	C2'-C1'	-8.23	1.41	1.53
34	i	678	U	O4'-C1'	-8.22	1.29	1.42
8	H	36	LEU	CA-C	-8.22	1.41	1.52
34	i	980	C	O4'-C1'	8.20	1.53	1.41
18	R	89	SER	N-CA	8.19	1.56	1.46
9	I	132	GLU	C-N	8.19	1.45	1.33
34	i	311	C	O4'-C1'	8.19	1.53	1.41
34	i	743	U	O4'-C1'	8.19	1.53	1.41
8	H	118	ARG	CA-C	-8.18	1.40	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	335	U	C2'-C1'	-8.17	1.41	1.53
34	i	938	G	C2'-C1'	-8.17	1.41	1.53
34	i	1202	G	C2'-C1'	-8.17	1.41	1.53
34	i	1101	G	O4'-C1'	8.15	1.53	1.41
34	i	1025	G	O4'-C1'	8.15	1.53	1.41
9	I	133	GLU	C-N	8.14	1.44	1.33
34	i	884	U	O4'-C1'	8.14	1.53	1.41
34	i	1337	C	O4'-C1'	8.14	1.54	1.42
34	i	1220	G	C2'-C1'	-8.13	1.41	1.53
34	i	726	C	O4'-C1'	8.13	1.53	1.41
34	i	1568	G	C2'-C1'	-8.13	1.41	1.53
34	i	77	A	C2'-C1'	8.13	1.65	1.53
34	i	1015	C	C2'-C1'	-8.13	1.41	1.53
34	i	1328	A	O4'-C1'	8.12	1.53	1.41
34	i	1735	C	O4'-C1'	8.12	1.53	1.41
12	L	20	LYS	N-CA	-8.11	1.35	1.46
34	i	347	C	C2'-C1'	-8.11	1.41	1.53
34	i	1251	G	O4'-C1'	8.11	1.53	1.41
34	i	1301	C	O4'-C1'	8.11	1.53	1.41
34	i	402	G	C2'-C1'	-8.09	1.41	1.53
34	i	614	C	O4'-C1'	8.09	1.53	1.41
34	i	360	G	C2'-C1'	-8.09	1.41	1.53
3	C	98	GLN	CA-C	8.08	1.62	1.52
34	i	457	G	O4'-C1'	8.08	1.53	1.41
34	i	1029	G	O4'-C1'	8.08	1.53	1.41
34	i	53	C	O4'-C1'	8.07	1.53	1.41
34	i	691	G	C2'-C1'	-8.07	1.41	1.53
34	i	1813	A	C2'-C1'	-8.07	1.41	1.53
34	i	927	C	O4'-C1'	8.06	1.53	1.41
34	i	332	C	O4'-C1'	8.06	1.53	1.41
34	i	171	A	O4'-C1'	-8.05	1.29	1.42
34	i	790	A	O4'-C1'	8.05	1.53	1.41
34	i	1289	A	C2'-C1'	-8.05	1.41	1.53
25	Y	33	ALA	CA-C	-8.03	1.42	1.52
34	i	1622	C	O4'-C1'	8.03	1.53	1.41
34	i	1120	C	C2'-C1'	-8.02	1.41	1.53
34	i	1557	C	O4'-C1'	8.01	1.53	1.41
34	i	1460	C	O4'-C1'	8.00	1.53	1.41
34	i	547	U	C2'-C1'	-7.99	1.41	1.53
34	i	1729	G	O4'-C1'	7.99	1.53	1.41
34	i	944	C	O4'-C1'	7.98	1.53	1.41
34	i	870	G	C2'-C1'	-7.97	1.41	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1716	U	C2'-C1'	7.97	1.65	1.53
7	G	180	VAL	CA-CB	-7.97	1.43	1.54
34	i	618	A	O4'-C1'	-7.97	1.29	1.41
10	J	186	GLY	C-N	7.95	1.40	1.33
34	i	685	G	C1'-N9	-7.95	1.36	1.48
34	i	285	U	O4'-C1'	7.95	1.53	1.42
34	i	414	C	C2'-C1'	-7.94	1.41	1.53
34	i	1834	U	C2'-C1'	-7.94	1.41	1.53
28	b	36	LYS	CA-C	7.94	1.62	1.52
34	i	839	C	C2'-C1'	-7.93	1.41	1.53
34	i	1238	U	C2'-C1'	-7.93	1.41	1.53
1	A	159	ILE	CA-CB	-7.92	1.43	1.54
34	i	1403	U	C2'-C1'	-7.92	1.41	1.53
11	K	35	LEU	N-CA	-7.91	1.35	1.46
34	i	666	C	O4'-C1'	7.91	1.53	1.41
34	i	1049	C	O4'-C1'	7.91	1.53	1.41
34	i	939	U	O4'-C1'	7.91	1.53	1.41
27	a	98	PRO	CA-C	7.90	1.59	1.52
26	Z	103	HIS	C-N	-7.89	1.22	1.33
34	i	1257	C	C2'-C1'	-7.89	1.41	1.53
3	C	98	GLN	N-CA	7.89	1.55	1.46
12	L	102	PHE	C-O	7.89	1.33	1.23
34	i	483	A	C2'-C1'	-7.88	1.41	1.53
34	i	1208	G	C2'-C1'	-7.88	1.41	1.53
34	i	1527	C	C2'-C1'	-7.88	1.41	1.53
34	i	481	C	O4'-C1'	7.88	1.53	1.41
34	i	1301	C	C2'-C1'	-7.87	1.41	1.53
10	J	18	ARG	CA-C	-7.87	1.43	1.52
34	i	895	U	O4'-C1'	7.87	1.53	1.41
34	i	804	A	O4'-C1'	7.87	1.53	1.41
34	i	1547	G	C2'-C1'	7.87	1.65	1.53
34	i	1850	C	O4'-C1'	7.86	1.53	1.41
34	i	1807	A	C2'-C1'	-7.86	1.41	1.53
34	i	327	C	C2'-C1'	-7.85	1.41	1.53
34	i	1050	G	C2'-C1'	-7.83	1.41	1.53
24	X	115	ILE	C-O	-7.83	1.15	1.24
34	i	1207	G	C2'-C1'	-7.82	1.41	1.53
34	i	1341	G	O4'-C1'	7.82	1.53	1.41
34	i	1565	G	O4'-C1'	-7.82	1.29	1.41
34	i	1481	U	C2'-C1'	-7.81	1.41	1.53
34	i	1684	C	C2'-C1'	-7.80	1.41	1.53
34	i	689	G	C1'-N9	-7.79	1.36	1.48

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	286	C	C2'-C1'	-7.78	1.41	1.53
34	i	1729	G	C2'-C1'	-7.78	1.41	1.53
34	i	373	G	O4'-C1'	7.78	1.53	1.41
7	G	131	ARG	CA-C	7.77	1.62	1.52
34	i	211	U	O4'-C1'	7.77	1.53	1.41
34	i	875	C	C2'-C1'	-7.77	1.41	1.53
34	i	1018	U	O4'-C1'	7.76	1.53	1.41
34	i	1533	C	O4'-C1'	7.75	1.53	1.41
34	i	1780	U	O4'-C1'	7.75	1.53	1.41
34	i	1752	G	C2'-C1'	-7.74	1.41	1.53
34	i	883	U	O4'-C1'	-7.74	1.30	1.42
34	i	1259	U	C2'-C1'	-7.74	1.41	1.53
34	i	683	G	O4'-C1'	7.73	1.53	1.41
34	i	69	C	O4'-C1'	7.72	1.53	1.41
34	i	1054	A	O4'-C1'	7.72	1.53	1.41
34	i	50	A	C2'-C1'	-7.72	1.41	1.53
34	i	1400	U	C2'-C1'	-7.71	1.41	1.53
34	i	97	U	O4'-C1'	7.71	1.53	1.41
34	i	605	C	C2'-C1'	-7.71	1.41	1.53
34	i	79	A	C2'-C1'	7.70	1.64	1.53
34	i	1370	C	O4'-C1'	7.70	1.53	1.41
34	i	507	C	C2'-C1'	-7.70	1.41	1.53
34	i	984	C	C2'-C1'	-7.70	1.41	1.53
34	i	16	G	C2'-C1'	-7.69	1.41	1.53
34	i	653	C	O4'-C1'	7.69	1.53	1.41
34	i	916	A	C2'-C1'	-7.69	1.41	1.53
34	i	1478	C	O4'-C1'	7.69	1.53	1.41
34	i	315	C	C2'-C1'	7.68	1.64	1.53
34	i	178	C	O4'-C1'	7.68	1.53	1.41
34	i	1813	A	O4'-C1'	7.67	1.53	1.41
34	i	220	C	O4'-C1'	7.67	1.53	1.41
34	i	1791	U	O4'-C1'	7.67	1.53	1.41
34	i	936	U	O4'-C1'	7.67	1.53	1.41
34	i	1104	G	O4'-C1'	-7.67	1.30	1.41
34	i	1385	C	O4'-C1'	7.66	1.53	1.41
34	i	1571	G	O4'-C1'	7.66	1.53	1.41
18	R	121	GLN	CA-C	7.66	1.62	1.52
12	L	152	LYS	CA-C	-7.66	1.42	1.52
34	i	54	A	C2'-C1'	-7.66	1.41	1.53
34	i	385	G	C2'-C1'	-7.66	1.41	1.53
34	i	1578	C	C2'-C1'	-7.66	1.41	1.53
34	i	1624	C	C2'-C1'	-7.66	1.41	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	106	C	O4'-C1'	7.65	1.53	1.41
34	i	178	C	C2'-C1'	-7.64	1.41	1.53
34	i	1407	G	O4'-C1'	7.64	1.53	1.41
34	i	26	U	O4'-C1'	7.64	1.53	1.41
2	B	155	TYR	CA-C	-7.63	1.42	1.53
34	i	194	C	O4'-C1'	7.63	1.53	1.41
34	i	189	G	O4'-C1'	7.63	1.53	1.41
34	i	1375	A	C2'-C1'	-7.62	1.42	1.53
27	a	96	THR	C-N	7.62	1.42	1.33
34	i	510	A	O4'-C1'	7.62	1.53	1.41
34	i	1742	C	O3'-P	-7.61	1.49	1.61
34	i	380	C	O4'-C1'	7.59	1.53	1.41
22	V	67	ASP	N-CA	-7.58	1.37	1.46
34	i	540	C	O4'-C1'	7.58	1.53	1.41
34	i	1456	C	O4'-C1'	7.57	1.53	1.41
11	K	89	ILE	CA-C	-7.57	1.43	1.52
34	i	1324	G	C2'-C1'	-7.57	1.42	1.53
34	i	575	C	O4'-C1'	7.56	1.52	1.41
34	i	1440	U	O4'-C1'	7.56	1.52	1.41
10	J	165	TYR	N-CA	-7.56	1.36	1.46
34	i	1230	C	C2'-C1'	-7.56	1.42	1.53
34	i	1682	C	C2'-C1'	-7.56	1.42	1.53
19	S	87	GLN	C-N	-7.55	1.24	1.33
34	i	1158	C	O4'-C1'	7.55	1.52	1.41
34	i	853	U	O4'-C1'	7.54	1.52	1.41
2	B	41	ILE	N-CA	-7.54	1.35	1.46
34	i	75	G	C2'-C1'	-7.53	1.42	1.53
34	i	410	G	C2'-C1'	-7.52	1.42	1.53
34	i	824	G	O4'-C1'	-7.52	1.30	1.41
34	i	1560	C	O4'-C1'	7.52	1.52	1.41
34	i	17	C	O4'-C1'	7.52	1.52	1.41
34	i	1410	A	C2'-C1'	-7.52	1.42	1.53
34	i	41	G	O4'-C1'	7.51	1.53	1.42
34	i	1486	G	C2'-C1'	-7.51	1.42	1.53
34	i	1434	A	O4'-C1'	7.51	1.52	1.41
34	i	1465	A	O4'-C1'	7.51	1.52	1.41
34	i	1504	A	C2'-C1'	7.51	1.64	1.53
11	K	31	LYS	N-CA	-7.50	1.36	1.46
34	i	1829	A	O4'-C1'	7.50	1.53	1.42
34	i	52	G	C2'-C1'	-7.50	1.42	1.53
34	i	844	U	O4'-C1'	7.50	1.52	1.41
7	G	36	VAL	N-CA	-7.50	1.37	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	84	A	C2'-C1'	-7.49	1.42	1.53
34	i	1411	C	C2'-C1'	-7.49	1.42	1.53
34	i	235	C	O4'-C1'	7.48	1.52	1.41
11	K	40	VAL	CA-CB	-7.48	1.44	1.54
34	i	653	C	C2'-C1'	-7.48	1.42	1.53
34	i	352	C	C2'-C1'	-7.47	1.42	1.53
21	U	68	THR	CA-C	7.47	1.62	1.53
34	i	437	A	C2'-C1'	7.47	1.64	1.53
34	i	1221	U	O4'-C1'	7.47	1.52	1.41
26	Z	104	ARG	CD-NE	-7.47	1.35	1.46
34	i	1651	G	C2'-C1'	-7.46	1.42	1.53
34	i	1779	C	C2'-C1'	7.46	1.64	1.53
34	i	1142	C	O4'-C1'	7.46	1.52	1.41
34	i	683	G	C2'-C1'	-7.45	1.42	1.53
34	i	543	U	O4'-C1'	7.45	1.52	1.41
34	i	1185	A	O4'-C1'	7.45	1.52	1.41
34	i	1304	U	O4'-C1'	-7.45	1.30	1.42
34	i	30	C	O4'-C1'	7.44	1.52	1.41
34	i	1775	A	O4'-C1'	7.44	1.52	1.41
34	i	1766	C	C2'-C1'	-7.44	1.42	1.53
34	i	1271	G	C2'-C1'	-7.43	1.42	1.53
34	i	1617	U	C2'-C1'	-7.43	1.42	1.53
34	i	596	G	O4'-C1'	-7.42	1.30	1.42
34	i	1825	A	O4'-C1'	7.41	1.52	1.41
10	J	101	LYS	CA-C	7.40	1.62	1.52
34	i	563	U	C2'-C1'	-7.40	1.42	1.53
34	i	649	G	O4'-C1'	-7.40	1.30	1.41
34	i	1071	C	C2'-C1'	-7.40	1.42	1.53
34	i	823	A	C2'-C1'	-7.39	1.42	1.53
34	i	1861	U	O4'-C1'	-7.39	1.30	1.42
34	i	1139	A	C2'-C1'	-7.38	1.42	1.53
34	i	1181	C	C2'-C1'	-7.38	1.42	1.53
34	i	1309	A	C2'-C1'	-7.38	1.42	1.53
34	i	50	A	O4'-C1'	7.38	1.52	1.41
34	i	443	C	O4'-C1'	7.38	1.52	1.41
34	i	428	G	C2'-C1'	7.37	1.64	1.53
34	i	588	G	C2'-C1'	-7.37	1.42	1.53
34	i	82	G	C2'-C1'	7.37	1.64	1.53
34	i	1345	G	O4'-C1'	7.36	1.52	1.41
34	i	1624	C	O4'-C1'	7.36	1.52	1.41
34	i	1807	A	O4'-C1'	7.35	1.52	1.41
34	i	120	U	C2'-C1'	-7.35	1.42	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	670	G	O4'-C1'	7.35	1.52	1.41
34	i	453	C	O4'-C1'	7.34	1.52	1.41
34	i	1098	G	C2'-C1'	-7.33	1.42	1.53
34	i	85	A	C2'-C1'	-7.33	1.42	1.53
7	G	121	ILE	CA-C	-7.33	1.45	1.52
14	N	137	PRO	N-CD	7.33	1.58	1.47
34	i	1223	G	O4'-C1'	7.33	1.52	1.41
4	D	193	ASP	N-CA	-7.33	1.39	1.46
11	K	40	VAL	CA-C	-7.32	1.45	1.52
13	M	116	LYS	CA-C	7.32	1.62	1.52
34	i	1212	C	O4'-C1'	7.32	1.52	1.41
34	i	409	G	O4'-C1'	7.31	1.52	1.41
34	i	1467	C	C2'-C1'	-7.31	1.42	1.53
34	i	1527	C	O4'-C1'	7.31	1.52	1.41
6	F	108	PRO	N-CD	7.31	1.57	1.47
34	i	1476	A	O4'-C1'	7.31	1.52	1.41
34	i	923	C	O4'-C1'	7.30	1.52	1.41
34	i	1264	C	O4'-C1'	7.30	1.52	1.41
34	i	1611	U	O4'-C1'	7.30	1.52	1.41
34	i	1585	C	C2'-C1'	-7.29	1.42	1.53
16	P	18	ARG	CA-CB	7.29	1.62	1.52
34	i	193	C	C2'-C1'	-7.28	1.42	1.53
34	i	1819	A	C2'-C1'	7.28	1.64	1.53
34	i	236	C	O4'-C1'	7.28	1.52	1.41
34	i	1079	A	O4'-C1'	7.27	1.52	1.41
10	J	144	ILE	CA-C	-7.26	1.45	1.52
34	i	1055	G	C2'-C1'	-7.26	1.42	1.53
19	S	88	LYS	N-CA	-7.26	1.36	1.46
34	i	1209	C	C2'-C1'	-7.26	1.42	1.53
34	i	159	A	O4'-C1'	7.25	1.52	1.41
34	i	604	G	C1'-N9	-7.25	1.36	1.47
27	a	10	ARG	NE-CZ	7.24	1.41	1.33
34	i	1630	C	O4'-C1'	7.24	1.52	1.41
34	i	1329	U	C2'-C1'	7.23	1.64	1.53
34	i	1740	A	C2'-C1'	7.23	1.64	1.53
34	i	348	C	O4'-C1'	7.22	1.52	1.41
34	i	564	A	C2'-C1'	-7.22	1.42	1.53
34	i	311	C	C2'-C1'	-7.21	1.42	1.53
34	i	1325	U	O4'-C1'	7.21	1.52	1.41
34	i	937	C	O4'-C1'	7.21	1.52	1.41
34	i	1785	A	O4'-C1'	7.21	1.52	1.41
34	i	1594	U	C2'-C1'	7.20	1.64	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1432	C	C2'-C1'	-7.20	1.42	1.53
34	i	557	C	O4'-C1'	7.20	1.52	1.41
34	i	593	C	O4'-C1'	7.20	1.52	1.42
34	i	625	G	O4'-C1'	7.20	1.52	1.41
34	i	487	C	C2'-C1'	-7.19	1.42	1.53
34	i	1252	G	O4'-C1'	7.19	1.52	1.41
34	i	902	U	O4'-C1'	7.19	1.52	1.41
34	i	176	U	O4'-C1'	7.19	1.52	1.41
34	i	1437	U	C2'-C1'	7.18	1.63	1.53
34	i	1661	C	O4'-C1'	7.18	1.52	1.41
34	i	528	U	O4'-C1'	7.18	1.52	1.41
34	i	855	G	C2'-C1'	-7.18	1.42	1.53
34	i	875	C	O4'-C1'	7.18	1.52	1.41
34	i	932	G	C2'-C1'	-7.18	1.42	1.53
34	i	1029	G	C2'-C1'	-7.17	1.42	1.53
34	i	1428	U	C2'-C1'	-7.16	1.42	1.53
34	i	317	G	O4'-C1'	-7.15	1.31	1.42
34	i	1201	C	C2'-C1'	-7.15	1.42	1.53
25	Y	103	SER	C-N	7.15	1.43	1.33
34	i	654	A	C2'-C1'	-7.15	1.42	1.53
10	J	89	GLU	N-CA	7.15	1.55	1.46
34	i	560	C	C2'-C1'	-7.14	1.42	1.53
34	i	1462	G	C2'-C1'	-7.13	1.42	1.53
35	j	23	G	C1'-N9	-7.13	1.37	1.48
34	i	1211	C	C2'-C1'	7.13	1.63	1.53
33	g	143	GLN	N-CA	-7.13	1.36	1.46
3	C	105	GLN	N-CA	7.13	1.55	1.45
34	i	1204	A	C2'-C1'	7.13	1.64	1.53
10	J	164	PRO	CA-CB	-7.12	1.43	1.53
34	i	544	A	C2'-C1'	-7.12	1.42	1.53
34	i	1577	C	O4'-C1'	7.12	1.52	1.41
34	i	1679	C	O4'-C1'	7.12	1.52	1.41
34	i	164	A	O4'-C1'	7.12	1.52	1.41
34	i	1320	G	C2'-C1'	-7.12	1.42	1.53
34	i	1784	A	C2'-C1'	-7.11	1.42	1.53
15	O	103	ASN	CA-C	-7.11	1.42	1.52
34	i	481	C	C2'-C1'	-7.10	1.42	1.53
34	i	1183	G	O4'-C1'	7.10	1.52	1.41
34	i	888	U	C2'-C1'	-7.09	1.42	1.53
34	i	31	U	C2'-C1'	7.08	1.64	1.53
8	H	109	ARG	N-CA	-7.08	1.37	1.46
34	i	1150	U	O4'-C1'	-7.08	1.31	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1140	A	O4'-C1'	7.07	1.52	1.41
34	i	1707	A	C2'-C1'	-7.06	1.42	1.53
34	i	1808	G	C2'-C1'	-7.06	1.42	1.53
34	i	1031	A	C2'-C1'	-7.06	1.42	1.53
34	i	1099	C	C2'-C1'	-7.06	1.42	1.53
34	i	1367	U	O4'-C1'	7.05	1.52	1.42
26	Z	112	ASN	CA-C	7.05	1.61	1.52
34	i	1086	C	O4'-C1'	7.05	1.52	1.41
34	i	88	G	C2'-C1'	-7.04	1.42	1.53
34	i	965	U	O4'-C1'	7.04	1.52	1.42
34	i	829	C	C2'-C1'	-7.04	1.42	1.53
34	i	1503	G	C2'-C1'	-7.03	1.42	1.53
34	i	1861	U	C2'-C1'	7.03	1.63	1.53
34	i	1669	G	C2'-C1'	-7.03	1.42	1.53
34	i	1390	G	O4'-C1'	7.02	1.52	1.41
34	i	1107	U	O4'-C1'	7.02	1.52	1.41
34	i	1480	A	O4'-C1'	7.02	1.52	1.41
34	i	234	C	C2'-C1'	7.02	1.63	1.53
34	i	166	A	C2'-C1'	-7.01	1.42	1.53
34	i	1794	A	O4'-C1'	7.01	1.52	1.41
34	i	675	A	C2'-C1'	-7.01	1.42	1.53
34	i	959	A	O4'-C1'	-7.01	1.31	1.41
34	i	219	U	O4'-C1'	7.00	1.52	1.41
34	i	645	A	C2'-C1'	-7.00	1.42	1.53
34	i	908	C	O4'-C1'	7.00	1.52	1.42
34	i	630	A	O4'-C1'	7.00	1.52	1.41
34	i	1338	U	C2'-C1'	-6.99	1.42	1.53
10	J	187	ALA	N-CA	6.99	1.57	1.46
34	i	13	C	C2'-C1'	-6.99	1.42	1.53
34	i	727	G	O4'-C1'	6.99	1.52	1.41
34	i	359	C	C2'-C1'	-6.99	1.42	1.53
34	i	511	A	C2'-C1'	-6.99	1.42	1.53
34	i	336	C	O4'-C1'	6.98	1.52	1.41
34	i	1028	C	O4'-C1'	6.98	1.52	1.41
34	i	799	C	C2'-C1'	-6.98	1.42	1.53
34	i	1201	C	O4'-C1'	6.97	1.52	1.41
19	S	6	PRO	C-N	6.97	1.43	1.33
34	i	1623	C	O4'-C1'	6.97	1.52	1.41
34	i	1536	G	C2'-C1'	-6.96	1.43	1.53
18	R	87	GLU	CA-C	-6.96	1.43	1.52
34	i	537	G	O4'-C1'	6.96	1.52	1.41
34	i	369	C	O4'-C1'	6.96	1.52	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1309	A	O4'-C1'	6.95	1.52	1.42
34	i	298	G	C2'-C1'	6.95	1.63	1.53
34	i	536	G	O4'-C1'	6.94	1.52	1.41
11	K	80	ARG	CA-C	-6.94	1.43	1.52
34	i	1604	C	O4'-C1'	6.93	1.52	1.41
11	K	93	THR	CA-CB	6.93	1.63	1.53
34	i	1450	A	O4'-C1'	6.92	1.52	1.41
34	i	1790	G	C2'-C1'	-6.92	1.43	1.53
34	i	1705	C	O4'-C1'	6.91	1.52	1.41
34	i	624	A	O4'-C1'	6.91	1.52	1.41
34	i	1440	U	C2'-C1'	-6.91	1.43	1.53
34	i	1365	A	C2'-C1'	-6.90	1.43	1.53
34	i	988	A	O4'-C1'	6.90	1.51	1.41
34	i	1713	G	C2'-C1'	-6.89	1.43	1.53
34	i	1261	A	O4'-C1'	6.89	1.52	1.42
34	i	599	U	O4'-C1'	6.88	1.51	1.41
34	i	863	G	O4'-C1'	6.88	1.51	1.41
34	i	1781	G	C2'-C1'	-6.87	1.43	1.53
34	i	1522	C	O4'-C1'	6.86	1.51	1.41
34	i	1534	U	C2'-C1'	6.86	1.63	1.53
34	i	1118	A	C2'-C1'	6.85	1.63	1.53
34	i	1321	G	O4'-C1'	6.85	1.51	1.41
34	i	969	C	O4'-C1'	6.85	1.51	1.41
34	i	1126	G	O4'-C1'	-6.85	1.31	1.41
12	L	151	THR	CA-CB	6.84	1.62	1.53
34	i	275	C	O4'-C1'	6.83	1.51	1.41
34	i	440	C	C2'-C1'	6.83	1.63	1.53
34	i	1548	C	C2'-C1'	6.83	1.63	1.53
34	i	1618	A	C2'-C1'	6.83	1.63	1.53
34	i	463	A	O4'-C1'	6.83	1.51	1.41
34	i	739	U	O4'-C1'	6.83	1.52	1.42
34	i	1818	A	O4'-C1'	-6.83	1.31	1.41
24	X	77	ASN	CA-C	-6.82	1.42	1.52
34	i	1849	G	C2'-C1'	-6.82	1.43	1.53
34	i	1744	G	C2'-C1'	-6.81	1.43	1.53
34	i	1796	C	O4'-C1'	6.80	1.51	1.41
34	i	337	G	O4'-C1'	6.80	1.51	1.41
7	G	157	VAL	CA-C	-6.80	1.45	1.52
34	i	1402	G	C2'-C1'	-6.80	1.43	1.53
28	b	53	VAL	CA-CB	-6.79	1.46	1.54
10	J	100	LEU	N-CA	6.79	1.54	1.45
34	i	1824	U	O4'-C1'	6.79	1.52	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	367	G	C2'-C1'	-6.78	1.43	1.53
6	F	130	ARG	N-CA	6.78	1.56	1.46
13	M	52	LEU	CA-C	-6.78	1.49	1.53
31	e	77	HIS	C-N	6.78	1.43	1.33
16	P	37	TYR	C-N	6.77	1.43	1.33
3	C	105	GLN	CA-C	6.75	1.62	1.53
34	i	399	C	O4'-C1'	6.74	1.51	1.41
34	i	190	A	O4'-C1'	6.73	1.51	1.41
34	i	1579	G	O4'-C1'	6.73	1.52	1.42
34	i	880	C	O4'-C1'	6.73	1.51	1.41
34	i	1403	U	O4'-C1'	6.73	1.51	1.41
34	i	447	C	O4'-C1'	6.72	1.51	1.41
34	i	1071	C	O4'-C1'	6.72	1.51	1.41
34	i	37	C	O4'-C1'	6.72	1.51	1.41
34	i	1177	A	C2'-C1'	-6.72	1.43	1.53
2	B	21	VAL	CA-CB	-6.72	1.45	1.54
34	i	49	C	C2'-C1'	-6.71	1.43	1.53
15	O	129	ILE	CA-CB	-6.71	1.45	1.54
34	i	342	U	O4'-C1'	6.71	1.51	1.41
34	i	405	A	C2'-C1'	6.71	1.63	1.53
34	i	544	A	O4'-C1'	-6.71	1.31	1.41
34	i	829	C	O4'-C1'	6.71	1.51	1.41
34	i	1477	G	C2'-C1'	-6.71	1.43	1.53
34	i	650	C	C2'-C1'	-6.70	1.43	1.53
34	i	1327	C	O4'-C1'	6.70	1.52	1.42
34	i	1027	A	O4'-C1'	6.70	1.51	1.41
34	i	60	A	O4'-C1'	-6.70	1.31	1.41
34	i	1275	C	C2'-C1'	6.69	1.63	1.53
34	i	42	A	C2'-C1'	-6.69	1.43	1.53
34	i	827	G	C2'-C1'	-6.69	1.43	1.53
4	D	193	ASP	CA-C	-6.68	1.44	1.52
34	i	1332	C	O4'-C1'	6.68	1.51	1.41
34	i	938	G	O4'-C1'	6.68	1.51	1.41
34	i	563	U	O4'-C1'	6.67	1.51	1.41
1	A	159	ILE	CA-C	-6.67	1.44	1.52
34	i	1607	G	C2'-C1'	6.66	1.63	1.53
34	i	820	C	O4'-C1'	6.66	1.51	1.41
34	i	492	C	O4'-C1'	6.65	1.51	1.42
34	i	452	C	O4'-C1'	6.65	1.51	1.41
34	i	1123	C	O4'-C1'	6.65	1.51	1.41
34	i	846	C	O4'-C1'	6.64	1.51	1.41
34	i	1385	C	C2'-C1'	-6.64	1.43	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	D	4	GLN	CA-C	-6.63	1.43	1.52
4	D	94	ARG	CA-C	-6.63	1.43	1.52
34	i	1028	C	C2'-C1'	-6.63	1.43	1.53
34	i	1384	A	O4'-C1'	6.63	1.51	1.41
34	i	49	C	O4'-C1'	6.62	1.51	1.41
34	i	1313	U	O4'-C1'	6.62	1.51	1.41
34	i	1045	A	O4'-C1'	-6.62	1.31	1.41
34	i	1647	G	C2'-C1'	-6.62	1.43	1.53
34	i	1343	U	O4'-C1'	6.62	1.51	1.41
34	i	666	C	C2'-C1'	-6.61	1.43	1.53
28	b	26	GLN	CA-C	-6.60	1.44	1.53
34	i	1288	C	C2'-C1'	-6.60	1.43	1.53
34	i	1382	A	O4'-C1'	6.59	1.51	1.41
34	i	1245	C	O4'-C1'	6.59	1.51	1.41
34	i	725	C	O4'-C1'	6.59	1.51	1.41
34	i	1823	G	O4'-C1'	6.59	1.51	1.41
3	C	72	PRO	N-CD	6.58	1.56	1.47
34	i	1646	A	C2'-C1'	6.58	1.63	1.53
34	i	1799	G	O4'-C1'	6.58	1.51	1.41
34	i	1040	G	C2'-C1'	-6.58	1.43	1.53
34	i	972	G	C2'-C1'	-6.57	1.43	1.53
34	i	1633	G	O4'-C1'	6.57	1.51	1.41
34	i	1559	C	C2'-C1'	-6.56	1.43	1.53
34	i	1041	U	O4'-C1'	6.56	1.51	1.41
1	A	53	ARG	CA-CB	-6.56	1.43	1.53
34	i	1292	U	O4'-C1'	6.56	1.51	1.41
34	i	1692	A	C2'-C1'	6.55	1.62	1.53
1	A	194	PRO	CA-C	6.54	1.61	1.52
34	i	518	A	O4'-C1'	6.54	1.51	1.41
34	i	386	U	O4'-C1'	6.54	1.51	1.41
34	i	741	C	O3'-P	-6.54	1.51	1.61
34	i	204	G	C2'-C1'	6.54	1.63	1.53
34	i	343	C	O4'-C1'	6.53	1.51	1.41
34	i	1568	G	O4'-C1'	6.52	1.51	1.41
10	J	100	LEU	CA-C	6.51	1.62	1.53
12	L	20	LYS	CA-C	6.51	1.61	1.52
34	i	1187	C	O4'-C1'	6.51	1.51	1.41
34	i	432	C	C2'-C1'	-6.51	1.43	1.53
35	j	49	A	C1'-N9	-6.51	1.38	1.48
9	I	54	LYS	C-N	-6.50	1.24	1.33
34	i	813	G	C2'-C1'	-6.50	1.43	1.53
34	i	442	G	O4'-C1'	6.50	1.51	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1336	U	C2'-C1'	6.50	1.63	1.53
21	U	69	PRO	N-CA	-6.49	1.39	1.47
34	i	840	U	O4'-C1'	6.48	1.51	1.41
34	i	872	C	O4'-C1'	6.47	1.51	1.41
34	i	656	U	O4'-C1'	6.47	1.51	1.41
34	i	1138	G	O4'-C1'	-6.47	1.31	1.41
34	i	69	C	C2'-C1'	-6.47	1.43	1.53
34	i	818	U	O4'-C1'	6.47	1.51	1.41
34	i	859	U	O4'-C1'	6.47	1.51	1.41
34	i	1039	G	C2'-C1'	-6.47	1.43	1.53
34	i	1225	G	C2'-C1'	-6.46	1.43	1.53
34	i	1423	C	O4'-C1'	6.46	1.51	1.41
24	X	58	GLU	CA-C	6.46	1.60	1.53
34	i	1299	C	O4'-C1'	-6.46	1.31	1.41
34	i	1137	G	O4'-C1'	-6.46	1.31	1.41
34	i	1638	U	O4'-C1'	6.45	1.51	1.41
34	i	900	A	C2'-C1'	-6.45	1.43	1.53
7	G	131	ARG	CB-CG	6.45	1.71	1.52
12	L	2	ALA	CA-C	-6.44	1.44	1.52
34	i	1490	U	C2'-C1'	6.44	1.62	1.53
34	i	223	A	O4'-C1'	6.44	1.51	1.41
34	i	939	U	C2'-C1'	-6.44	1.43	1.53
34	i	347	C	O4'-C1'	6.43	1.51	1.41
34	i	428	G	O4'-C1'	-6.43	1.32	1.41
27	a	85	ARG	CA-C	6.42	1.60	1.52
34	i	1706	U	C2'-C1'	-6.42	1.43	1.53
34	i	1678	C	C2'-C1'	-6.42	1.43	1.53
34	i	1425	G	O3'-P	-6.41	1.51	1.61
34	i	1808	G	O4'-C1'	6.41	1.51	1.41
34	i	86	C	O4'-C1'	6.41	1.51	1.41
34	i	1822	C	C2'-C1'	-6.41	1.43	1.53
34	i	989	G	C2'-C1'	-6.40	1.43	1.53
34	i	845	A	O4'-C1'	6.40	1.51	1.41
34	i	1186	A	O4'-C1'	6.40	1.51	1.41
15	O	43	HIS	CA-C	6.39	1.61	1.52
33	g	277	THR	CA-C	-6.39	1.44	1.53
34	i	170	A	C2'-C1'	-6.39	1.43	1.53
24	X	24	ASP	N-CA	-6.38	1.38	1.46
34	i	1218	G	C2'-C1'	-6.38	1.43	1.53
9	I	134	GLU	N-CA	6.38	1.53	1.46
34	i	120	U	O4'-C1'	6.38	1.51	1.41
34	i	147	A	C2'-C1'	6.38	1.62	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1091	U	O4'-C1'	6.37	1.51	1.41
34	i	1176	C	C2'-C1'	-6.37	1.43	1.53
34	i	1085	G	C2'-C1'	-6.37	1.43	1.53
11	K	84	HIS	CA-C	-6.37	1.45	1.52
1	A	193	HIS	N-CA	6.36	1.54	1.45
21	U	108	PRO	CA-C	-6.36	1.44	1.52
34	i	1363	U	O4'-C1'	6.36	1.51	1.41
34	i	514	U	O4'-C1'	6.35	1.51	1.41
34	i	292	A	C2'-C1'	6.35	1.62	1.53
5	E	150	PRO	N-CD	6.35	1.56	1.47
34	i	807	A	C2'-C1'	-6.34	1.43	1.53
11	K	41	PRO	C-N	6.34	1.41	1.33
34	i	324	C	C2'-C1'	-6.34	1.43	1.53
34	i	1059	C	O4'-C1'	6.34	1.51	1.41
34	i	1798	U	O4'-C1'	6.33	1.51	1.41
34	i	360	G	O4'-C1'	6.33	1.51	1.42
34	i	213	C	O4'-C1'	6.33	1.51	1.41
33	g	203	ASP	CA-C	6.33	1.61	1.52
34	i	574	A	C2'-C1'	-6.33	1.43	1.53
19	S	39	ARG	C-N	6.32	1.42	1.33
34	i	1493	G	O4'-C1'	6.32	1.51	1.42
14	N	142	GLU	C-O	-6.32	1.16	1.24
34	i	107	A	C2'-C1'	6.31	1.62	1.53
34	i	537	G	C2'-C1'	-6.31	1.43	1.53
3	C	46	LEU	CA-C	-6.30	1.47	1.52
9	I	134	GLU	CA-CB	6.30	1.63	1.53
34	i	85	A	O4'-C1'	6.30	1.51	1.41
34	i	798	A	O4'-C1'	6.30	1.51	1.41
34	i	216	U	O4'-C1'	6.29	1.51	1.41
6	F	81	ARG	C-N	-6.29	1.24	1.33
17	Q	18	THR	CA-CB	6.29	1.64	1.53
34	i	1260	C	O4'-C1'	6.28	1.51	1.42
34	i	1221	U	C2'-C1'	-6.27	1.44	1.53
34	i	72	C	C2'-C1'	6.26	1.62	1.53
34	i	278	U	O4'-C1'	6.26	1.51	1.42
34	i	361	A	O4'-C1'	6.26	1.51	1.41
34	i	1267	C	C2'-C1'	-6.26	1.44	1.53
20	T	82	ARG	CD-NE	6.25	1.55	1.46
34	i	1331	G	C2'-C1'	-6.25	1.44	1.53
34	i	1200	A	C2'-C1'	-6.25	1.44	1.53
34	i	1138	G	C2'-C1'	6.25	1.62	1.53
34	i	1068	U	C2'-C1'	6.25	1.62	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	42	A	O4'-C1'	6.24	1.51	1.41
34	i	327	C	O4'-C1'	6.24	1.51	1.41
34	i	856	G	O4'-C1'	6.24	1.51	1.41
34	i	1304	U	C2'-C1'	6.24	1.62	1.53
34	i	376	C	C2'-C1'	-6.24	1.44	1.53
34	i	576	G	O4'-C1'	6.24	1.51	1.41
20	T	42	HIS	CB-CG	-6.24	1.41	1.50
34	i	1532	A	C2'-C1'	6.23	1.62	1.53
3	C	195	PRO	N-CD	6.23	1.56	1.47
34	i	33	G	C2'-C1'	-6.23	1.44	1.53
34	i	53	C	C2'-C1'	6.23	1.62	1.53
34	i	168	C	C2'-C1'	-6.22	1.44	1.53
34	i	361	A	C2'-C1'	-6.22	1.44	1.53
34	i	660	A	O4'-C1'	-6.22	1.32	1.41
34	i	521	A	O3'-P	-6.22	1.51	1.61
34	i	1151	U	O4'-C1'	6.21	1.51	1.42
34	i	485	U	O4'-C1'	6.21	1.50	1.41
34	i	493	C	O4'-C1'	6.21	1.51	1.42
34	i	1340	A	O4'-C1'	6.21	1.51	1.42
21	U	104	ILE	CA-CB	6.20	1.62	1.54
34	i	1495	U	C2'-C1'	-6.20	1.44	1.53
34	i	1168	U	C2'-C1'	6.20	1.62	1.53
2	B	155	TYR	CB-CG	-6.20	1.38	1.51
5	E	202	PRO	CA-C	-6.20	1.46	1.52
19	S	91	LYS	C-N	6.19	1.42	1.33
34	i	1672	U	C2'-C1'	6.19	1.62	1.53
34	i	441	G	C2'-C1'	-6.19	1.44	1.53
34	i	688	U	C2'-C1'	-6.18	1.43	1.53
34	i	1335	U	P-O5'	-6.18	1.50	1.59
34	i	148	U	C2'-C1'	6.17	1.62	1.53
34	i	990	C	C2'-C1'	-6.17	1.44	1.53
34	i	677	C	C2'-C1'	-6.16	1.43	1.53
34	i	74	G	O4'-C1'	6.16	1.50	1.41
34	i	1405	A	O4'-C1'	6.16	1.50	1.41
34	i	18	C	C2'-C1'	-6.16	1.44	1.53
34	i	303	G	C2'-C1'	6.16	1.62	1.53
8	H	106	ARG	CA-C	-6.15	1.44	1.52
7	G	128	THR	CA-C	6.15	1.61	1.52
34	i	462	C	C2'-C1'	-6.15	1.44	1.53
34	i	165	G	C2'-C1'	6.15	1.62	1.53
34	i	1019	A	C2'-C1'	6.13	1.62	1.53
34	i	354	A	C2'-C1'	-6.13	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1292	U	C2'-C1'	-6.13	1.44	1.53
34	i	736	C	C2'-C1'	-6.11	1.44	1.53
34	i	81	U	O4'-C1'	6.11	1.50	1.41
34	i	632	U	O4'-C1'	6.11	1.50	1.41
34	i	1255	A	O4'-C1'	-6.11	1.32	1.41
34	i	465	C	C2'-C1'	-6.10	1.44	1.53
33	g	284	PRO	CA-C	-6.10	1.46	1.53
34	i	104	A	O4'-C1'	6.10	1.50	1.41
18	R	86	PRO	N-CD	6.10	1.56	1.47
22	V	42	VAL	CA-CB	-6.09	1.46	1.54
34	i	1569	C	C2'-C1'	-6.09	1.44	1.53
12	L	18	GLN	N-CA	-6.09	1.38	1.46
16	P	37	TYR	N-CA	-6.09	1.38	1.46
34	i	1149	C	O4'-C1'	-6.09	1.32	1.42
34	i	1840	G	C2'-C1'	-6.09	1.44	1.53
9	I	184	ARG	CD-NE	6.08	1.54	1.46
34	i	625	G	C2'-C1'	-6.08	1.44	1.53
34	i	941	U	C2'-C1'	-6.08	1.44	1.53
34	i	1401	A	C2'-C1'	-6.08	1.44	1.53
1	A	193	HIS	CA-C	6.08	1.60	1.53
8	H	16	PRO	CA-C	-6.07	1.43	1.52
34	i	147	A	O4'-C1'	-6.07	1.32	1.42
34	i	652	G	O4'-C1'	6.07	1.51	1.42
34	i	1717	G	O4'-C1'	6.07	1.50	1.41
34	i	1046	A	C2'-C1'	-6.07	1.44	1.53
34	i	1583	A	O4'-C1'	6.06	1.50	1.41
34	i	271	G	O3'-P	-6.06	1.52	1.61
34	i	832	G	C2'-C1'	6.06	1.62	1.53
34	i	187	C	C2'-C1'	-6.05	1.44	1.53
34	i	1487	G	C2'-C1'	-6.05	1.44	1.53
34	i	1295	A	C2'-C1'	6.05	1.62	1.53
34	i	1414	C	C2'-C1'	-6.05	1.44	1.53
34	i	601	G	O4'-C1'	6.04	1.50	1.41
34	i	211	U	O3'-P	-6.04	1.52	1.61
34	i	118	C	O4'-C1'	6.04	1.50	1.41
34	i	955	G	C2'-C1'	-6.04	1.44	1.53
34	i	876	G	O4'-C1'	-6.04	1.32	1.41
34	i	903	G	O4'-C1'	6.04	1.50	1.41
34	i	607	G	C2'-C1'	-6.03	1.44	1.53
34	i	811	U	O4'-C1'	6.03	1.50	1.41
34	i	918	A	C2'-C1'	6.02	1.62	1.53
34	i	1039	G	O4'-C1'	6.02	1.50	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	824	G	C2'-C1'	-6.02	1.44	1.53
34	i	1395	C	O4'-C1'	6.02	1.50	1.41
34	i	1519	G	O4'-C1'	-6.01	1.32	1.41
34	i	899	A	O4'-C1'	-6.01	1.32	1.41
34	i	1250	C	O4'-C1'	6.01	1.50	1.41
34	i	1857	A	C2'-C1'	6.01	1.62	1.53
34	i	823	A	O4'-C1'	6.00	1.50	1.41
34	i	1558	G	C2'-C1'	-6.00	1.44	1.53
18	R	111	PHE	CA-C	6.00	1.59	1.52
13	M	99	LYS	CA-C	6.00	1.57	1.53
34	i	1075	C	C2'-C1'	-6.00	1.44	1.53
34	i	40	A	C2'-C1'	5.99	1.62	1.53
9	I	8	TRP	CD2-CE3	-5.99	1.30	1.40
34	i	676	U	C2'-C1'	5.99	1.62	1.53
3	C	217	THR	CA-C	5.98	1.62	1.52
15	O	129	ILE	CA-C	-5.98	1.45	1.52
34	i	1059	C	C2'-C1'	-5.98	1.44	1.53
34	i	618	A	C2'-C1'	5.98	1.62	1.53
34	i	661	A	C2'-C1'	-5.98	1.44	1.53
34	i	1784	A	O4'-C1'	5.98	1.50	1.41
34	i	1782	A	O4'-C1'	5.97	1.50	1.41
34	i	1621	C	O4'-C1'	5.97	1.50	1.41
34	i	916	A	O4'-C1'	5.96	1.50	1.42
34	i	668	U	O4'-C1'	5.96	1.50	1.41
19	S	50	ILE	N-CA	5.96	1.53	1.46
18	R	3	ARG	CA-C	-5.95	1.44	1.53
34	i	983	A	O4'-C1'	5.95	1.50	1.41
34	i	1699	C	C2'-C1'	-5.95	1.44	1.53
34	i	302	C	C2'-C1'	-5.95	1.44	1.53
34	i	1452	G	O4'-C1'	5.94	1.50	1.41
34	i	943	G	C2'-C1'	-5.93	1.44	1.53
34	i	103	A	O4'-C1'	-5.93	1.33	1.42
34	i	171	A	C2'-C1'	5.92	1.61	1.53
34	i	1723	U	O4'-C1'	5.92	1.50	1.41
34	i	1414	C	O4'-C1'	-5.92	1.33	1.42
19	S	91	LYS	N-CA	-5.92	1.39	1.46
34	i	1001	G	C2'-C1'	-5.92	1.44	1.53
34	i	896	C	O4'-C1'	5.92	1.50	1.41
18	R	122	PRO	CA-C	5.91	1.60	1.52
34	i	1670	A	O4'-C1'	-5.91	1.32	1.41
34	i	1733	C	C2'-C1'	-5.91	1.44	1.53
18	R	91	LEU	N-CA	-5.91	1.38	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	435	A	O4'-C1'	5.91	1.50	1.41
34	i	152	U	C2'-C1'	-5.89	1.44	1.53
34	i	26	U	C2'-C1'	-5.89	1.44	1.53
34	i	1394	G	C2'-C1'	-5.89	1.44	1.53
33	g	213	ASP	CA-C	-5.89	1.45	1.52
34	i	1211	C	O4'-C1'	5.89	1.50	1.42
34	i	1525	U	O4'-C1'	5.89	1.50	1.41
34	i	1031	A	O4'-C1'	5.88	1.50	1.41
34	i	1102	C	C2'-C1'	5.88	1.62	1.53
34	i	225	C	O3'-P	-5.88	1.52	1.61
34	i	314	U	O4'-C1'	-5.88	1.32	1.41
34	i	1800	A	C2'-C1'	-5.88	1.44	1.53
3	C	257	HIS	N-CA	-5.87	1.39	1.46
34	i	57	U	C2'-C1'	5.87	1.62	1.53
34	i	743	U	O3'-P	-5.87	1.52	1.61
27	a	60	ASP	CA-C	5.87	1.60	1.53
34	i	470	G	O4'-C1'	5.86	1.50	1.41
34	i	1378	A	O4'-C1'	5.86	1.50	1.41
34	i	513	A	O4'-C1'	5.86	1.50	1.41
34	i	1446	G	C2'-C1'	-5.85	1.44	1.53
34	i	941	U	O4'-C1'	5.85	1.50	1.41
34	i	628	C	O4'-C1'	5.84	1.50	1.41
2	B	77	ASP	N-CA	5.84	1.53	1.46
34	i	86	C	C2'-C1'	-5.84	1.44	1.53
34	i	1652	G	C2'-C1'	-5.83	1.44	1.53
1	A	188	THR	CA-C	-5.83	1.45	1.52
34	i	313	C	C2'-C1'	-5.83	1.44	1.53
34	i	37	C	C2'-C1'	-5.83	1.44	1.53
7	G	169	PRO	C-N	5.83	1.41	1.33
16	P	17	TYR	C-N	5.83	1.41	1.33
34	i	434	G	O4'-C1'	-5.83	1.32	1.41
34	i	1447	G	C2'-C1'	-5.83	1.44	1.53
34	i	1386	U	C2'-C1'	-5.82	1.44	1.53
34	i	38	A	C2'-C1'	5.82	1.61	1.53
34	i	1535	G	C2'-C1'	-5.82	1.44	1.53
34	i	1842	U	O4'-C1'	5.82	1.50	1.41
34	i	172	U	O4'-C1'	5.82	1.50	1.42
34	i	1279	C	C2'-C1'	-5.81	1.44	1.53
34	i	1259	U	C5'-C4'	5.81	1.59	1.51
34	i	1707	A	O4'-C1'	5.81	1.50	1.41
31	e	94	ALA	CA-C	-5.81	1.45	1.52
34	i	1061	G	C2'-C1'	-5.80	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1537	C	C2'-C1'	-5.80	1.44	1.53
34	i	486	C	C2'-C1'	-5.79	1.44	1.53
9	I	184	ARG	CA-C	-5.79	1.45	1.52
19	S	6	PRO	N-CA	5.79	1.55	1.47
34	i	1741	U	O3'-P	5.79	1.69	1.61
9	I	8	TRP	CA-CB	5.79	1.63	1.53
34	i	1203	G	O4'-C1'	5.79	1.50	1.41
34	i	1836	C	O4'-C1'	5.79	1.50	1.41
34	i	930	G	C2'-C1'	-5.78	1.44	1.53
34	i	996	C	O4'-C1'	5.78	1.50	1.41
7	G	131	ARG	NE-CZ	5.78	1.39	1.33
33	g	50	THR	N-CA	-5.78	1.38	1.46
34	i	1035	C	O4'-C1'	5.78	1.50	1.41
34	i	14	C	O4'-C1'	5.77	1.50	1.41
34	i	338	A	C2'-C1'	-5.77	1.44	1.53
34	i	948	G	C2'-C1'	-5.76	1.44	1.53
34	i	1480	A	C2'-C1'	-5.76	1.44	1.53
34	i	165	G	O4'-C1'	-5.76	1.33	1.41
34	i	1051	A	O4'-C1'	5.76	1.50	1.41
34	i	1634	G	O4'-C1'	5.76	1.50	1.41
21	U	69	PRO	CA-C	-5.75	1.47	1.52
8	H	67	PRO	N-CD	5.75	1.55	1.47
14	N	132	LYS	CA-C	-5.75	1.45	1.53
34	i	338	A	O4'-C1'	5.74	1.50	1.41
34	i	876	G	C2'-C1'	5.74	1.61	1.53
34	i	953	A	C2'-C1'	-5.74	1.44	1.53
34	i	119	U	C2'-C1'	-5.74	1.44	1.53
26	Z	107	VAL	N-CA	-5.74	1.39	1.46
34	i	1696	C	O4'-C1'	5.74	1.50	1.42
34	i	273	G	O4'-C1'	5.73	1.50	1.41
34	i	456	G	C4'-C3'	5.73	1.61	1.52
34	i	1391	C	O4'-C1'	5.73	1.50	1.41
24	X	92	ASN	CA-C	-5.73	1.45	1.52
34	i	226	A	C2'-C1'	-5.73	1.44	1.53
34	i	557	C	C2'-C1'	-5.73	1.44	1.53
24	X	58	GLU	N-CA	5.72	1.53	1.46
34	i	1712	C	O4'-C1'	5.71	1.50	1.41
7	G	158	VAL	CA-CB	-5.70	1.46	1.54
34	i	1615	A	O4'-C1'	-5.70	1.33	1.42
34	i	566	A	C2'-C1'	-5.70	1.44	1.53
34	i	1797	U	O4'-C1'	5.70	1.50	1.41
34	i	1687	U	C2'-C1'	-5.70	1.44	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	P	36	LEU	N-CA	-5.69	1.39	1.46
8	H	118	ARG	CA-CB	-5.69	1.43	1.53
34	i	924	G	C2'-C1'	-5.69	1.44	1.53
34	i	1499	C	O4'-C1'	5.69	1.50	1.41
34	i	1592	C	C2'-C1'	-5.69	1.44	1.53
24	X	24	ASP	C-N	-5.68	1.26	1.33
34	i	9	U	O4'-C1'	5.68	1.50	1.41
34	i	227	A	O4'-C1'	5.68	1.50	1.41
34	i	835	C	C2'-C1'	-5.68	1.44	1.53
34	i	1737	C	O4'-C1'	5.68	1.50	1.41
34	i	1626	U	O4'-C1'	5.67	1.50	1.41
34	i	200	U	C2'-C1'	-5.66	1.44	1.53
34	i	368	U	C2'-C1'	-5.66	1.44	1.53
34	i	100	U	O4'-C1'	5.66	1.50	1.41
34	i	29	G	C2'-C1'	-5.66	1.44	1.53
34	i	189	G	C2'-C1'	-5.66	1.44	1.53
34	i	1121	C	O4'-C1'	5.66	1.50	1.41
34	i	1044	G	C5'-C4'	5.65	1.59	1.51
10	J	188	GLY	N-CA	5.65	1.54	1.45
34	i	205	G	O4'-C1'	5.65	1.50	1.41
34	i	461	G	O4'-C1'	-5.65	1.33	1.42
20	T	42	HIS	CA-C	-5.64	1.44	1.52
34	i	806	A	O4'-C1'	5.64	1.50	1.41
34	i	449	C	C2'-C1'	-5.64	1.44	1.53
18	R	42	PRO	N-CD	5.64	1.55	1.47
29	c	6	VAL	N-CA	5.63	1.52	1.46
35	j	59	A	C1'-N9	-5.63	1.38	1.47
34	i	3	C	C2'-C1'	5.63	1.61	1.53
34	i	1061	G	O4'-C1'	5.62	1.50	1.41
8	H	110	THR	N-CA	-5.62	1.39	1.46
34	i	637	U	O4'-C1'	5.62	1.50	1.41
29	c	7	GLN	CA-C	5.62	1.59	1.52
34	i	874	G	C2'-C1'	-5.62	1.45	1.53
6	F	79	HIS	N-CA	-5.61	1.39	1.46
34	i	471	C	O4'-C1'	5.61	1.50	1.41
34	i	846	C	C2'-C1'	-5.61	1.45	1.53
34	i	1664	G	C2'-C1'	-5.61	1.45	1.53
34	i	892	U	O4'-C1'	5.61	1.50	1.41
35	j	53	A	C1'-N9	-5.60	1.39	1.48
34	i	1392	A	O4'-C1'	-5.59	1.33	1.41
35	j	19	A	C1'-N9	-5.59	1.39	1.48
34	i	399	C	C2'-C1'	-5.59	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1463	C	O4'-C1'	5.59	1.50	1.41
34	i	1444	A	C2'-C1'	-5.58	1.45	1.53
14	N	20	ARG	NE-CZ	5.58	1.39	1.33
19	S	95	TYR	N-CA	-5.58	1.39	1.46
34	i	799	C	O4'-C1'	5.58	1.50	1.41
34	i	1006	G	C2'-C1'	5.57	1.61	1.53
19	S	9	PHE	CA-C	5.57	1.59	1.52
34	i	1569	C	O4'-C1'	5.55	1.50	1.41
34	i	388	A	O4'-C1'	5.55	1.50	1.42
34	i	1423	C	C2'-C1'	5.54	1.61	1.53
34	i	194	C	C2'-C1'	-5.54	1.45	1.53
34	i	264	U	O3'-P	-5.54	1.52	1.61
34	i	1610	U	O4'-C1'	5.54	1.50	1.41
34	i	1278	A	O4'-C1'	5.54	1.50	1.41
18	R	3	ARG	C-N	-5.54	1.25	1.33
22	V	24	ILE	CA-CB	-5.53	1.47	1.54
34	i	1398	A	C2'-C1'	-5.53	1.45	1.53
34	i	485	U	C2'-C1'	-5.53	1.45	1.53
34	i	1392	A	C2'-C1'	5.53	1.61	1.53
34	i	1173	U	O4'-C1'	5.53	1.50	1.41
34	i	1489	C	C2'-C1'	5.53	1.61	1.53
7	G	36	VAL	CB-CG1	-5.52	1.34	1.52
34	i	969	C	C5'-C4'	5.52	1.59	1.51
34	i	1840	G	O4'-C1'	5.52	1.50	1.41
34	i	460	G	C2'-C1'	-5.52	1.45	1.53
34	i	355	C	C2'-C1'	-5.51	1.45	1.53
34	i	1465	A	C2'-C1'	-5.51	1.45	1.53
34	i	1654	U	O3'-P	-5.51	1.52	1.61
34	i	95	G	C2'-C1'	-5.51	1.45	1.53
33	g	281	ALA	CA-CB	-5.51	1.44	1.53
34	i	202	U	C2'-C1'	-5.51	1.45	1.53
34	i	370	G	O4'-C1'	-5.51	1.33	1.41
34	i	639	U	O4'-C1'	5.51	1.50	1.41
34	i	94	G	O4'-C1'	5.50	1.50	1.41
3	C	46	LEU	N-CA	-5.50	1.37	1.45
6	F	82	ASN	CA-CB	-5.50	1.43	1.53
18	R	88	VAL	C-N	-5.50	1.25	1.33
34	i	1334	G	O4'-C1'	5.49	1.49	1.41
6	F	82	ASN	N-CA	-5.49	1.39	1.46
34	i	1102	C	O4'-C1'	5.49	1.49	1.41
1	A	159	ILE	N-CA	-5.49	1.39	1.46
34	i	1123	C	C2'-C1'	-5.49	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1814	G	C2'-C1'	-5.48	1.45	1.53
8	H	119	SER	CA-C	-5.48	1.47	1.53
19	S	50	ILE	CA-C	5.48	1.59	1.52
34	i	867	U	O4'-C1'	-5.48	1.33	1.42
34	i	408	A	O4'-C1'	5.48	1.49	1.41
34	i	1215	C	O4'-C1'	5.48	1.49	1.41
34	i	1663	U	P-O5'	-5.47	1.51	1.59
34	i	1850	C	C2'-C1'	-5.47	1.45	1.53
24	X	115	ILE	CA-CB	-5.47	1.47	1.54
9	I	131	PRO	C-N	5.46	1.42	1.33
34	i	1839	A	C2'-C1'	-5.46	1.45	1.53
34	i	1444	A	O4'-C1'	5.46	1.49	1.41
34	i	1626	U	C2'-C1'	-5.46	1.45	1.53
34	i	567	U	O4'-C1'	5.46	1.49	1.41
34	i	1042	U	O4'-C1'	5.46	1.49	1.41
31	e	130	ASN	C-N	5.45	1.41	1.33
34	i	1778	G	C2'-C1'	-5.45	1.45	1.53
34	i	488	C	C2'-C1'	-5.44	1.45	1.53
34	i	74	G	O5'-C5'	5.44	1.50	1.42
34	i	933	C	C2'-C1'	-5.44	1.45	1.53
34	i	1018	U	O3'-P	-5.44	1.52	1.61
19	S	89	ASP	CA-C	-5.44	1.45	1.52
34	i	686	G	C2'-C1'	-5.44	1.45	1.53
34	i	1641	C	C4'-O4'	-5.43	1.37	1.45
34	i	404	A	O4'-C1'	5.43	1.49	1.41
34	i	1051	A	C5'-C4'	5.43	1.59	1.51
34	i	377	C	C2'-C1'	-5.42	1.45	1.53
34	i	665	U	O4'-C1'	5.42	1.49	1.41
34	i	954	G	O4'-C1'	-5.42	1.33	1.41
34	i	619	A	C2'-C1'	5.42	1.61	1.53
34	i	1676	U	C2'-C1'	-5.42	1.45	1.53
34	i	1345	G	C2'-C1'	-5.42	1.45	1.53
34	i	1434	A	C2'-C1'	5.42	1.61	1.53
34	i	820	C	C2'-C1'	-5.42	1.45	1.53
34	i	864	G	C2'-C1'	-5.42	1.45	1.53
16	P	18	ARG	NE-CZ	5.42	1.39	1.33
34	i	1684	C	O4'-C1'	5.42	1.49	1.41
6	F	82	ASN	CA-C	-5.41	1.45	1.52
16	P	49	LEU	N-CA	5.41	1.53	1.46
34	i	1835	C	C2'-C1'	-5.41	1.45	1.53
34	i	515	A	C2'-C1'	-5.41	1.45	1.53
34	i	1243	C	O4'-C1'	5.41	1.50	1.42

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	1045	A	C2'-C1'	5.41	1.61	1.53
23	W	129	PHE	CA-C	-5.41	1.46	1.52
20	T	4	VAL	CA-C	5.40	1.64	1.52
11	K	79	LEU	C-N	5.39	1.41	1.33
19	S	53	THR	C-N	5.39	1.41	1.33
8	H	109	ARG	CA-C	-5.39	1.45	1.52
34	i	1008	A	C2'-C1'	-5.38	1.45	1.53
34	i	33	G	O4'-C1'	5.38	1.49	1.41
34	i	1402	G	O4'-C1'	5.38	1.49	1.41
3	C	182	PRO	N-CD	5.38	1.55	1.47
2	B	133	TYR	N-CA	-5.38	1.39	1.46
34	i	982	G	C2'-C1'	-5.38	1.45	1.53
34	i	469	C	O4'-C1'	5.37	1.49	1.41
34	i	1085	G	O4'-C1'	5.37	1.49	1.41
19	S	91	LYS	CA-C	-5.36	1.46	1.52
34	i	1668	U	C2'-C1'	-5.36	1.45	1.53
7	G	169	PRO	N-CD	5.35	1.55	1.47
7	G	43	GLU	CA-C	-5.35	1.45	1.52
34	i	160	U	O4'-C1'	5.35	1.50	1.42
34	i	1657	U	O4'-C1'	5.34	1.49	1.41
34	i	1415	C	O4'-C1'	5.34	1.49	1.41
34	i	404	A	C2'-C1'	5.34	1.61	1.53
34	i	1093	G	O4'-C1'	-5.33	1.33	1.41
3	C	119	ASN	N-CA	-5.33	1.40	1.46
34	i	1472	A	C2'-C1'	5.33	1.61	1.53
1	A	188	THR	CA-CB	-5.33	1.44	1.53
34	i	356	U	O4'-C1'	5.33	1.49	1.41
34	i	335	U	O4'-C1'	5.32	1.49	1.41
34	i	1582	G	O4'-C1'	-5.32	1.33	1.42
34	i	516	A	C2'-C1'	-5.31	1.45	1.53
34	i	1078	A	O4'-C1'	5.31	1.49	1.41
34	i	1096	A	C2'-C1'	-5.31	1.45	1.53
28	b	53	VAL	N-CA	-5.31	1.39	1.46
34	i	418	U	C2'-C1'	5.30	1.61	1.53
7	G	121	ILE	CA-CB	-5.30	1.47	1.54
34	i	1482	A	P-O5'	-5.30	1.51	1.59
34	i	1145	A	C2'-C1'	-5.30	1.45	1.53
1	A	53	ARG	N-CA	-5.29	1.40	1.46
28	b	36	LYS	N-CA	5.29	1.52	1.46
34	i	35	C	C2'-C1'	-5.29	1.45	1.53
34	i	411	G	O3'-P	-5.29	1.53	1.61
34	i	1460	C	C2'-C1'	-5.29	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	930	G	O4'-C1'	5.29	1.49	1.41
34	i	1424	G	C2'-C1'	5.29	1.61	1.53
8	H	9	VAL	CA-C	5.29	1.60	1.52
5	E	165	GLU	N-CA	-5.28	1.40	1.46
29	c	7	GLN	N-CA	5.28	1.51	1.46
34	i	1740	A	O4'-C1'	-5.28	1.33	1.41
34	i	1800	A	O4'-C1'	5.27	1.49	1.41
34	i	6	G	C2'-C1'	-5.27	1.45	1.53
34	i	1804	U	O4'-C1'	5.27	1.49	1.41
12	L	103	GLU	N-CA	-5.26	1.39	1.46
34	i	632	U	C2'-C1'	-5.26	1.45	1.53
3	C	161	LYS	C-N	-5.26	1.27	1.33
7	G	170	ARG	NE-CZ	5.26	1.38	1.33
34	i	1132	U	O4'-C1'	5.26	1.49	1.41
34	i	470	G	C2'-C1'	-5.25	1.45	1.53
34	i	897	G	C2'-C1'	-5.25	1.45	1.53
34	i	937	C	C2'-C1'	-5.25	1.45	1.53
14	N	136	PRO	N-CD	5.25	1.55	1.47
34	i	396	U	O4'-C1'	5.25	1.49	1.41
34	i	1032	A	O4'-C1'	5.25	1.49	1.41
34	i	1223	G	C2'-C1'	-5.25	1.45	1.53
34	i	1387	C	C2'-C1'	-5.25	1.45	1.53
34	i	155	G	O4'-C1'	5.24	1.49	1.41
34	i	871	A	C2'-C1'	-5.24	1.45	1.53
2	B	57	ILE	CA-C	5.24	1.59	1.52
34	i	1066	A	O4'-C1'	5.24	1.49	1.41
8	H	110	THR	C-N	5.23	1.40	1.33
34	i	1256	A	C2'-C1'	-5.23	1.45	1.53
15	O	143	LYS	CA-C	-5.23	1.46	1.52
33	g	145	GLU	CA-C	-5.23	1.46	1.52
34	i	1293	U	C2'-C1'	5.22	1.61	1.53
34	i	1427	G	O4'-C1'	5.21	1.49	1.41
34	i	1033	G	C2'-C1'	-5.21	1.45	1.53
34	i	1385	C	P-O5'	-5.21	1.51	1.59
34	i	1774	G	O4'-C1'	5.21	1.49	1.41
32	f	86	THR	N-CA	5.21	1.52	1.46
10	J	89	GLU	CA-C	5.21	1.60	1.52
34	i	960	A	C2'-C1'	5.21	1.61	1.53
34	i	1528	A	C2'-C1'	-5.20	1.45	1.53
34	i	1419	C	C2'-C1'	-5.20	1.45	1.53
19	S	94	LYS	C-N	-5.20	1.26	1.33
34	i	988	A	C2'-C1'	-5.20	1.45	1.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	96	ALA	C-N	-5.19	1.23	1.33
3	C	119	ASN	C-O	-5.19	1.18	1.23
11	K	36	ALA	CA-C	5.19	1.59	1.53
34	i	1144	A	C2'-C1'	5.19	1.60	1.53
34	i	959	A	C2'-C1'	-5.19	1.45	1.53
11	K	55	ARG	NE-CZ	5.19	1.38	1.33
34	i	489	G	C2'-C1'	-5.18	1.45	1.53
15	O	150	ARG	NE-CZ	5.18	1.38	1.33
35	j	71	U	C1'-N1	5.18	1.56	1.48
34	i	1037	G	O4'-C1'	5.18	1.49	1.41
5	E	31	PRO	N-CD	5.18	1.54	1.47
35	j	11	C	C1'-N1	5.17	1.56	1.48
34	i	621	U	C2'-C1'	-5.17	1.45	1.53
34	i	1710	A	O4'-C1'	5.17	1.49	1.41
22	V	33	PRO	N-CD	5.17	1.54	1.47
9	I	55	TYR	CA-C	-5.16	1.46	1.52
34	i	175	A	O4'-C1'	5.16	1.49	1.41
34	i	1172	G	O4'-C1'	5.16	1.49	1.41
11	K	30	PRO	C-N	-5.16	1.27	1.33
34	i	1311	U	C5'-C4'	5.16	1.58	1.51
27	a	58	VAL	CA-C	-5.15	1.46	1.52
34	i	59	U	C2'-C1'	5.15	1.61	1.53
34	i	1174	U	C2'-C1'	-5.15	1.45	1.53
10	J	188	GLY	CA-C	5.15	1.61	1.52
34	i	318	U	O4'-C1'	5.15	1.49	1.41
34	i	438	A	C2'-C1'	5.15	1.60	1.53
34	i	1817	A	O5'-C5'	-5.15	1.35	1.42
34	i	1355	U	C2'-C1'	5.15	1.61	1.53
34	i	880	C	C2'-C1'	-5.14	1.45	1.53
5	E	133	THR	N-CA	5.14	1.52	1.46
35	j	1	A	C1'-N9	-5.14	1.40	1.48
34	i	674	G	C2'-C1'	-5.14	1.45	1.53
34	i	818	U	C2'-C1'	-5.13	1.45	1.53
34	i	1311	U	O4'-C1'	-5.13	1.33	1.41
34	i	1032	A	C5'-C4'	5.13	1.58	1.51
34	i	1843	G	C2'-C1'	-5.13	1.45	1.53
8	H	119	SER	C-N	-5.12	1.26	1.33
34	i	1125	G	C2'-C1'	-5.12	1.45	1.53
34	i	655	G	C2'-C1'	-5.12	1.45	1.53
34	i	596	G	C2'-C1'	-5.12	1.45	1.53
3	C	99	LYS	CA-C	5.11	1.58	1.52
34	i	68	A	O4'-C1'	5.11	1.49	1.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	742	C	C2'-C1'	-5.11	1.45	1.53
31	e	99	LYS	N-CA	5.11	1.52	1.46
34	i	805	A	O4'-C1'	5.10	1.49	1.41
34	i	1730	A	O4'-C1'	5.10	1.49	1.41
34	i	282	G	O4'-C1'	5.09	1.49	1.41
34	i	1514	U	C2'-C1'	5.09	1.60	1.53
34	i	1054	A	C2'-C1'	-5.09	1.45	1.53
34	i	464	G	C2'-C1'	-5.09	1.45	1.53
34	i	860	A	C2'-C1'	-5.09	1.45	1.53
5	E	171	ASP	CA-CB	-5.08	1.44	1.53
34	i	879	U	C5'-C4'	5.08	1.58	1.51
10	J	124	HIS	CA-C	-5.08	1.46	1.52
34	i	231	C	O4'-C1'	5.08	1.49	1.41
20	T	82	ARG	NE-CZ	5.08	1.38	1.33
34	i	1591	U	O4'-C1'	5.08	1.49	1.41
2	B	221	PRO	N-CD	5.08	1.54	1.47
34	i	231	C	C2'-C1'	-5.08	1.45	1.53
34	i	609	A	C2'-C1'	5.08	1.60	1.53
34	i	735	C	C2'-C1'	-5.08	1.45	1.53
9	I	19	LYS	CA-C	-5.08	1.46	1.52
34	i	1021	U	C2'-C1'	5.08	1.60	1.53
34	i	382	A	C2'-C1'	-5.07	1.45	1.53
34	i	990	C	O4'-C1'	5.07	1.49	1.41
34	i	688	U	C1'-N1	5.07	1.55	1.47
34	i	1283	A	C2'-C1'	5.07	1.60	1.53
20	T	46	ALA	C-N	-5.07	1.28	1.33
34	i	1043	C	C2'-C1'	-5.06	1.45	1.53
1	A	63	ARG	N-CA	-5.06	1.40	1.46
7	G	158	VAL	N-CA	-5.06	1.40	1.46
9	I	30	GLY	CA-C	5.06	1.57	1.51
34	i	819	U	O4'-C1'	-5.06	1.34	1.41
34	i	1256	A	O3'-P	-5.06	1.53	1.61
34	i	1639	C	O4'-C1'	5.06	1.49	1.41
15	O	129	ILE	C-O	-5.05	1.18	1.24
34	i	1324	G	O4'-C1'	5.05	1.49	1.41
34	i	1805	C	C2'-C1'	-5.05	1.45	1.53
34	i	65	C	C2'-C1'	5.05	1.60	1.53
34	i	1032	A	C2'-C1'	-5.04	1.45	1.53
34	i	566	A	O4'-C1'	5.04	1.49	1.41
33	g	94	THR	N-CA	-5.04	1.39	1.46
34	i	325	G	C2'-C1'	5.03	1.60	1.53
20	T	46	ALA	CA-C	-5.03	1.46	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	i	597	U	C2'-C1'	-5.03	1.45	1.53
7	G	131	ARG	CD-NE	5.02	1.53	1.46
9	I	6	ASP	CA-C	-5.02	1.46	1.52
12	L	19	ASN	C-N	-5.02	1.26	1.33
34	i	1244	U	C2'-C1'	-5.02	1.45	1.53
34	i	1681	G	C2'-C1'	-5.02	1.45	1.53
34	i	1523	G	O4'-C1'	-5.01	1.34	1.41
34	i	1175	G	C2'-C1'	-5.01	1.45	1.53
24	X	127	ASN	N-CA	-5.01	1.39	1.46
34	i	1303	U	C2'-C1'	5.01	1.60	1.53
34	i	793	C	O3'-P	-5.01	1.53	1.61
34	i	1836	C	C2'-C1'	-5.00	1.45	1.53
27	a	108	PRO	N-CD	5.00	1.54	1.47

All (3468) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	a	97	PRO	N-CA-C	32.75	150.66	110.70
34	i	1774	G	P-O3'-C3'	30.32	165.68	120.20
4	D	5	ILE	O-C-N	-29.05	97.70	122.97
8	H	109	ARG	NE-CZ-NH2	-28.47	93.58	119.20
27	a	97	PRO	CB-CA-C	-26.13	79.04	110.92
34	i	24	C	C1'-C2'-O2'	-25.84	73.04	111.80
10	J	146	SER	O-C-N	-24.52	86.41	121.72
28	b	36	LYS	N-CA-C	24.20	137.28	111.14
19	S	40	TYR	N-CA-C	23.28	135.98	111.07
21	U	93	SER	CA-C-N	-22.77	91.38	119.84
21	U	93	SER	C-N-CA	-22.77	91.38	119.84
34	i	1664	G	P-O5'-C5'	22.76	155.05	120.90
34	i	883	U	P-O3'-C3'	22.25	153.58	120.20
9	I	43	ILE	O-C-N	-22.20	98.59	123.00
34	i	1817	A	P-O3'-C3'	21.47	152.41	120.20
34	i	1080	A	P-O3'-C3'	21.39	152.28	120.20
3	C	93	LYS	CA-C-N	21.32	145.81	122.14
3	C	93	LYS	C-N-CA	21.32	145.81	122.14
2	B	41	ILE	CB-CA-C	21.29	135.01	111.59
34	i	521	A	P-O3'-C3'	21.08	151.82	120.20
34	i	1503	G	O4'-C1'-C2'	20.66	126.46	105.80
7	G	157	VAL	N-CA-C	20.34	135.82	109.58
4	D	193	ASP	N-CA-C	-20.16	85.33	112.75
8	H	109	ARG	NE-CZ-NH1	20.09	141.59	121.50
9	I	134	GLU	N-CA-CB	20.06	139.09	110.01

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	131	ARG	CB-CA-C	19.88	145.21	109.62
15	O	145	GLY	N-CA-C	19.84	130.80	111.95
10	J	146	SER	CA-C-N	19.69	150.43	120.89
10	J	146	SER	C-N-CA	19.69	150.43	120.89
26	Z	107	VAL	N-CA-CB	-19.56	87.67	110.55
34	i	295	C	C4'-C3'-O3'	-19.48	80.17	109.40
34	i	329	A	C4'-C3'-O3'	-19.40	83.90	113.00
9	I	43	ILE	CA-C-O	19.24	141.00	121.19
34	i	1627	G	P-O3'-C3'	19.11	148.86	120.20
7	G	131	ARG	CB-CG-CD	18.91	154.79	111.30
34	i	730	C	P-O3'-C3'	18.72	148.28	120.20
34	i	317	G	P-O3'-C3'	18.70	148.24	120.20
34	i	1114	C	O4'-C1'-N1	18.62	136.42	108.50
25	Y	86	GLU	CA-C-O	-18.53	94.78	120.16
34	i	1470	A	P-O3'-C3'	18.53	147.99	120.20
18	R	1	MET	N-CA-CB	18.30	141.61	110.50
34	i	1459	U	C4'-C3'-O3'	-18.25	82.02	109.40
34	i	66	G	P-O3'-C3'	18.10	147.35	120.20
34	i	211	U	P-O3'-C3'	18.02	147.23	120.20
19	S	9	PHE	N-CA-C	17.98	130.99	111.03
34	i	520	U	C4'-C3'-O3'	-17.97	86.04	113.00
27	a	97	PRO	CA-C-N	-17.92	101.92	120.38
27	a	97	PRO	C-N-CA	-17.92	101.92	120.38
34	i	126	G	C4'-C3'-O3'	-17.91	82.54	109.40
34	i	793	C	P-O3'-C3'	17.78	146.87	120.20
25	Y	86	GLU	N-CA-C	17.75	149.03	109.81
17	Q	31	LEU	N-CA-C	17.68	132.71	110.61
34	i	140	U	P-O3'-C3'	17.62	146.63	120.20
34	i	1643	G	C4'-C3'-O3'	17.47	135.61	109.40
34	i	836	C	P-O3'-C3'	17.45	146.38	120.20
16	P	37	TYR	N-CA-CB	-17.44	81.01	110.49
34	i	582	C	O4'-C1'-N1	17.35	134.22	108.20
34	i	685	G	P-O3'-C3'	17.05	145.77	120.20
24	X	128	VAL	N-CA-C	16.99	129.58	113.10
34	i	1226	C	N1-C1'-C2'	16.96	137.44	112.00
34	i	1516	C	P-O3'-C3'	16.89	145.54	120.20
34	i	743	U	P-O3'-C3'	16.77	145.35	120.20
24	X	23	HIS	O-C-N	-16.71	102.67	122.22
34	i	722	C	P-O3'-C3'	16.64	145.16	120.20
34	i	67	C	O4'-C1'-N1	16.48	133.22	108.50
1	A	193	HIS	CA-C-N	16.44	140.39	119.84
1	A	193	HIS	C-N-CA	16.44	140.39	119.84

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1473	U	P-O3'-C3'	16.43	144.84	120.20
24	X	91	LEU	N-CA-C	-16.40	93.52	111.07
34	i	1151	U	N1-C1'-C2'	16.35	138.53	114.00
34	i	264	U	P-O3'-C3'	16.26	144.59	120.20
7	G	181	THR	CA-C-N	16.23	136.53	118.85
7	G	181	THR	C-N-CA	16.23	136.53	118.85
34	i	1429	C	O3'-P-O5'	-16.22	79.68	104.00
34	i	72	C	O4'-C1'-N1	16.19	132.49	108.20
34	i	1391	C	P-O3'-C3'	16.18	144.47	120.20
4	D	4	GLN	CG-CD-NE2	16.18	140.67	116.40
4	D	193	ASP	CA-C-N	-16.14	99.67	119.84
4	D	193	ASP	C-N-CA	-16.14	99.67	119.84
18	R	88	VAL	O-C-N	-16.03	102.53	122.57
18	R	89	SER	N-CA-C	16.01	144.91	110.80
34	i	837	G	C1'-C2'-O2'	-16.00	84.39	108.40
34	i	1414	C	C3'-C2'-C1'	-15.96	85.53	101.50
34	i	1563	C	N1-C1'-C2'	15.85	135.77	112.00
34	i	1281	G	C4'-C3'-O3'	15.77	133.06	109.40
34	i	1393	U	N1-C1'-C2'	15.74	137.62	114.00
33	g	275	ILE	N-CA-C	15.68	130.53	107.80
34	i	1392	A	P-O3'-C3'	15.67	143.70	120.20
33	g	274	VAL	CA-C-N	-15.66	102.76	123.12
33	g	274	VAL	C-N-CA	-15.66	102.76	123.12
9	I	3	ILE	N-CA-C	15.65	130.74	108.36
4	D	5	ILE	CA-C-N	15.64	144.36	120.75
4	D	5	ILE	C-N-CA	15.64	144.36	120.75
10	J	89	GLU	N-CA-C	15.63	137.16	111.37
34	i	1413	C	O4'-C1'-C2'	-15.62	91.98	107.60
2	B	40	ASN	CA-C-N	-15.53	98.74	120.95
2	B	40	ASN	C-N-CA	-15.53	98.74	120.95
34	i	678	U	O4'-C1'-N1	15.50	131.46	108.20
34	i	424	G	C4'-C3'-O3'	-15.44	89.84	113.00
34	i	319	G	P-O3'-C3'	15.40	143.29	120.20
4	D	82	GLY	CA-C-N	-15.37	98.46	120.29
4	D	82	GLY	C-N-CA	-15.37	98.46	120.29
34	i	79	A	O4'-C1'-C2'	-15.29	90.51	105.80
34	i	1819	A	P-O3'-C3'	15.29	143.13	120.20
34	i	551	A	C4'-C3'-O3'	-15.28	90.08	113.00
34	i	1469	G	O3'-P-O5'	15.27	126.91	104.00
34	i	1012	U	N1-C1'-C2'	15.23	136.85	114.00
7	G	170	ARG	CA-CB-CG	15.22	144.53	114.10
34	i	180	G	P-O3'-C3'	-15.18	97.43	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1233	C	N1-C1'-C2'	15.16	134.75	112.00
9	I	134	GLU	CB-CA-C	-15.13	87.13	110.88
26	Z	112	ASN	N-CA-C	15.09	127.22	111.07
34	i	1548	C	O4'-C1'-N1	15.06	131.09	108.50
34	i	793	C	O4'-C1'-N1	15.03	130.74	108.20
34	i	1549	C	O3'-P-O5'	-15.02	81.47	104.00
34	i	225	C	P-O3'-C3'	15.01	142.72	120.20
34	i	1471	G	P-O3'-C3'	14.98	142.67	120.20
7	G	170	ARG	N-CA-CB	14.92	132.94	110.70
8	H	110	THR	CA-C-O	-14.90	99.20	120.51
24	X	115	ILE	N-CA-C	-14.85	91.14	107.77
34	i	1322	U	N1-C1'-C2'	14.82	136.23	114.00
3	C	105	GLN	N-CA-C	14.68	129.47	110.53
23	W	100	GLY	N-CA-C	-14.68	94.71	112.48
34	i	697	G	P-O3'-C3'	14.67	142.21	120.20
17	Q	18	THR	N-CA-CB	14.64	134.26	110.69
33	g	274	VAL	O-C-N	-14.64	107.95	123.03
34	i	688	U	P-O3'-C3'	14.64	142.16	120.20
34	i	78	C	P-O3'-C3'	14.61	142.12	120.20
34	i	126	G	P-O3'-C3'	14.60	142.11	120.20
19	S	141	ARG	O-C-N	-14.59	100.78	122.96
34	i	418	U	O4'-C1'-N1	14.58	130.06	108.20
34	i	1299	C	O4'-C1'-N1	14.57	130.36	108.50
31	e	95	LYS	O-C-N	-14.53	103.50	122.39
1	A	10	MET	N-CA-C	14.48	126.78	111.14
25	Y	103	SER	O-C-N	-14.46	99.87	123.00
34	i	1113	C	O4'-C1'-N1	14.44	130.16	108.50
18	R	2	GLY	O-C-N	-14.43	106.37	122.68
8	H	109	ARG	CD-NE-CZ	14.33	144.46	124.40
11	K	42	ASN	CA-C-O	-14.33	106.36	121.55
9	I	5	ARG	CA-C-N	14.32	141.10	120.90
9	I	5	ARG	C-N-CA	14.32	141.10	120.90
7	G	131	ARG	CA-CB-CG	14.30	142.69	114.10
5	E	259	LYS	N-CA-C	14.22	131.59	108.55
34	i	72	C	P-O3'-C3'	14.17	141.45	120.20
34	i	1544	U	P-O3'-C3'	14.11	141.37	120.20
34	i	215	U	N1-C1'-C2'	14.09	133.13	112.00
34	i	1133	U	P-O3'-C3'	14.05	141.28	120.20
34	i	299	G	N9-C1'-C2'	14.04	135.05	114.00
31	e	120	VAL	CB-CA-C	-13.99	99.52	114.35
28	b	36	LYS	CA-C-N	13.98	155.92	121.80
28	b	36	LYS	C-N-CA	13.98	155.92	121.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Y	64	PHE	CA-C-N	-13.93	106.86	123.44
25	Y	64	PHE	C-N-CA	-13.93	106.86	123.44
3	C	93	LYS	O-C-N	-13.88	109.71	123.46
34	i	1227	C	N1-C1'-C2'	13.87	132.80	112.00
34	i	180	G	C4'-C3'-O3'	13.86	130.18	109.40
34	i	727	G	P-O3'-C3'	13.85	140.97	120.20
24	X	98	ASP	N-CA-C	13.84	126.44	111.36
24	X	37	LYS	N-CA-C	13.79	126.04	111.14
29	c	6	VAL	N-CA-C	13.79	127.33	107.75
19	S	87	GLN	O-C-N	-13.74	105.75	122.65
12	L	153	LYS	O-C-N	-13.73	104.33	122.59
34	i	257	G	P-O3'-C3'	13.68	140.72	120.20
5	E	75	LYS	N-CA-C	13.64	131.00	108.49
34	i	189	G	P-O3'-C3'	13.64	140.65	120.20
34	i	1458	U	C4'-C3'-O3'	13.59	129.78	109.40
21	U	67	LYS	CA-C-N	-13.56	100.08	120.68
21	U	67	LYS	C-N-CA	-13.56	100.08	120.68
8	H	118	ARG	NE-CZ-NH1	13.54	135.04	121.50
34	i	524	G	P-O3'-C3'	13.48	140.42	120.20
33	g	50	THR	CA-C-N	-13.45	103.23	123.14
33	g	50	THR	C-N-CA	-13.45	103.23	123.14
2	B	63	LYS	N-CA-C	13.43	125.64	111.14
10	J	145	PRO	N-CA-C	-13.41	96.00	113.57
34	i	135	U	P-O3'-C3'	13.41	140.31	120.20
34	i	1105	C	O4'-C1'-N1	13.41	128.61	108.50
34	i	1327	C	N1-C1'-C2'	13.39	134.09	114.00
17	Q	134	GLY	CA-C-N	-13.37	105.60	120.04
17	Q	134	GLY	C-N-CA	-13.37	105.60	120.04
34	i	1503	G	C1'-C2'-O2'	13.35	131.82	111.80
34	i	1311	U	O4'-C1'-N1	13.31	128.47	108.50
34	i	1018	U	N1-C1'-C2'	13.29	131.94	112.00
14	N	19	ARG	N-CA-C	-13.25	91.56	110.24
34	i	136	C	P-O3'-C3'	13.22	140.04	120.20
12	L	28	THR	CA-C-N	13.22	131.79	121.61
12	L	28	THR	C-N-CA	13.22	131.79	121.61
28	b	79	PHE	N-CA-C	13.19	129.62	107.20
34	i	831	C	P-O5'-C5'	13.19	140.69	120.90
34	i	222	G	P-O3'-C3'	13.17	139.95	120.20
21	U	93	SER	O-C-N	13.16	136.46	121.32
34	i	490	A	O3'-P-O5'	-13.16	84.25	104.00
10	J	138	ARG	N-CA-C	13.13	138.77	110.80
34	i	239	U	P-O3'-C3'	13.10	139.84	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	R	1	MET	CA-C-N	-13.09	97.48	120.79
18	R	1	MET	C-N-CA	-13.09	97.48	120.79
34	i	287	U	N1-C1'-C2'	13.04	131.56	112.00
34	i	1392	A	O4'-C1'-N9	13.02	128.02	108.50
34	i	1081	C	P-O5'-C5'	-13.01	101.39	120.90
28	b	53	VAL	CA-C-N	-13.00	107.07	123.19
28	b	53	VAL	C-N-CA	-13.00	107.07	123.19
20	T	4	VAL	N-CA-C	12.99	147.39	111.00
6	F	36	GLN	N-CA-C	-12.99	90.60	109.96
5	E	171	ASP	N-CA-C	12.99	138.46	110.80
34	i	1010	G	O4'-C1'-C2'	12.97	120.57	107.60
34	i	848	G	C4'-C3'-O3'	-12.97	93.55	113.00
19	S	91	LYS	CG-CD-CE	12.96	141.11	111.30
28	b	37	CYS	CA-C-N	12.95	136.03	119.84
28	b	37	CYS	C-N-CA	12.95	136.03	119.84
8	H	192	PHE	N-CA-C	12.92	126.75	110.61
16	P	51	ARG	N-CA-C	12.91	124.88	111.07
24	X	126	ALA	N-CA-C	-12.89	97.13	112.86
33	g	159	ASN	CA-C-N	-12.89	104.80	123.11
33	g	159	ASN	C-N-CA	-12.89	104.80	123.11
34	i	867	U	O4'-C1'-N1	12.89	127.54	108.20
34	i	830	C	N1-C1'-C2'	12.88	131.32	112.00
34	i	1414	C	O4'-C1'-C2'	12.84	118.64	105.80
6	F	130	ARG	N-CA-C	12.83	128.99	111.54
33	g	145	GLU	N-CA-C	-12.82	87.16	113.31
34	i	358	U	P-O3'-C3'	12.78	139.37	120.20
34	i	340	C	O4'-C1'-C2'	-12.77	94.83	107.60
34	i	1257	C	N1-C1'-C2'	12.76	131.13	112.00
34	i	835	C	N1-C1'-C2'	12.75	133.13	114.00
34	i	1408	C	O3'-P-O5'	-12.74	84.88	104.00
11	K	1	MET	N-CA-CB	-12.60	89.08	110.50
31	e	118	ASN	N-CA-C	12.60	124.75	111.14
7	G	173	ALA	CA-C-N	12.59	135.58	119.84
7	G	173	ALA	C-N-CA	12.59	135.58	119.84
13	M	10	GLY	N-CA-C	12.59	131.85	114.85
34	i	1859	C	C4'-C3'-O3'	12.58	128.26	109.40
34	i	1406	C	N1-C1'-C2'	12.55	130.83	112.00
4	D	4	GLN	N-CA-CB	-12.55	89.28	110.49
10	J	101	LYS	N-CA-C	12.54	128.58	108.76
32	f	104	LYS	N-CA-C	-12.55	97.81	112.87
10	J	187	ALA	N-CA-C	12.54	124.37	108.19
18	R	111	PHE	N-CA-C	12.54	130.33	108.02

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	L	98	LYS	N-CA-C	-12.52	95.73	111.75
34	i	207	U	C4'-C3'-O3'	12.51	131.77	113.00
15	O	129	ILE	CB-CA-C	-12.48	90.83	111.29
34	i	1307	C	N1-C1'-C2'	12.47	130.70	112.00
16	P	52	LYS	CA-C-N	-12.45	102.69	122.73
16	P	52	LYS	C-N-CA	-12.45	102.69	122.73
34	i	522	C	O4'-C1'-C2'	-12.40	95.19	107.60
11	K	55	ARG	CG-CD-NE	12.40	139.28	112.00
34	i	622	C	N1-C1'-C2'	12.40	130.60	112.00
34	i	1150	U	O4'-C1'-N1	12.39	126.78	108.20
23	W	2	VAL	CA-C-N	-12.38	104.98	122.93
23	W	2	VAL	C-N-CA	-12.38	104.98	122.93
19	S	10	GLN	N-CA-C	12.36	126.16	111.82
30	d	6	LEU	N-CA-C	-12.36	97.49	111.71
34	i	141	A	P-O3'-C3'	12.36	138.74	120.20
31	e	119	VAL	CA-C-N	12.34	128.01	120.24
31	e	119	VAL	C-N-CA	12.34	128.01	120.24
19	S	54	LYS	N-CA-C	12.33	137.06	110.80
33	g	159	ASN	N-CA-C	12.32	137.05	110.80
34	i	1564	A	O4'-C1'-N9	12.32	126.98	108.50
6	F	38	TYR	CA-C-N	-12.30	106.82	122.93
6	F	38	TYR	C-N-CA	-12.30	106.82	122.93
34	i	837	G	C2'-C3'-O3'	-12.29	95.27	113.70
34	i	165	G	O4'-C1'-N9	12.27	126.90	108.50
3	C	242	LYS	N-CA-C	12.26	129.44	109.95
34	i	138	C	P-O3'-C3'	12.22	138.53	120.20
34	i	1304	U	O4'-C1'-N1	12.17	126.45	108.20
7	G	173	ALA	O-C-N	-12.15	109.71	121.38
10	J	180	LYS	N-CA-C	12.14	127.58	113.01
34	i	728	U	P-O5'-C5'	12.12	139.09	120.90
34	i	1425	G	P-O3'-C3'	12.10	138.36	120.20
34	i	1472	A	O4'-C1'-N9	12.06	126.58	108.50
22	V	64	GLU	N-CA-C	12.04	128.94	112.93
34	i	1044	G	N9-C1'-C2'	12.01	130.01	112.00
34	i	295	C	P-O3'-C3'	12.00	138.19	120.20
20	T	42	HIS	CB-CG-CD2	-11.99	115.61	131.20
34	i	544	A	O4'-C1'-N9	11.94	126.41	108.50
12	L	20	LYS	N-CA-CB	-11.86	90.44	110.49
7	G	170	ARG	CB-CG-CD	11.85	138.56	111.30
34	i	1279	C	P-O3'-C3'	11.83	137.95	120.20
34	i	396	U	P-O3'-C3'	11.82	137.93	120.20
21	U	104	ILE	N-CA-C	-11.81	84.77	109.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	4	C	N1-C1'-C2'	11.81	129.71	112.00
2	B	76	ASN	N-CA-C	11.81	128.05	111.52
34	i	905	G	O3'-P-O5'	11.80	121.70	104.00
34	i	524	G	O3'-P-O5'	-11.78	86.33	104.00
34	i	1532	A	O4'-C1'-C2'	-11.78	95.82	107.60
28	b	53	VAL	N-CA-C	-11.77	93.88	109.30
24	X	127	ASN	N-CA-C	-11.76	98.52	112.86
34	i	1573	U	O4'-C1'-N1	11.75	125.83	108.20
4	D	4	GLN	CG-CD-OE1	-11.74	97.31	120.80
33	g	160	SER	N-CA-C	11.74	128.76	107.99
34	i	736	C	N1-C1'-C2'	11.72	129.58	112.00
1	A	84	GLN	N-CA-C	11.70	123.78	111.14
24	X	23	HIS	CA-C-N	11.71	139.87	121.26
24	X	23	HIS	C-N-CA	11.71	139.87	121.26
34	i	1360	U	O3'-P-O5'	11.71	121.56	104.00
34	i	314	U	O4'-C1'-N1	11.70	126.06	108.50
19	S	139	THR	N-CA-C	11.70	118.38	108.78
34	i	1235	U	P-O3'-C3'	-11.67	102.69	120.20
34	i	179	C	N1-C1'-C2'	11.65	129.47	112.00
34	i	835	C	C3'-C2'-C1'	-11.65	89.85	101.50
34	i	616	G	O4'-C1'-C2'	-11.63	95.97	107.60
34	i	1549	C	C2'-C3'-O3'	-11.63	96.26	113.70
34	i	1552	C	O4'-C1'-N1	11.62	125.62	108.20
34	i	1816	A	C4'-C3'-O3'	-11.62	95.58	113.00
34	i	734	C	P-O3'-C3'	11.61	137.61	120.20
19	S	93	GLY	O-C-N	11.60	133.77	122.41
34	i	876	G	O4'-C1'-N9	11.57	125.86	108.50
34	i	1492	U	P-O3'-C3'	11.55	137.52	120.20
34	i	1776	G	O4'-C1'-N9	11.51	125.76	108.50
6	F	131	ALA	N-CA-C	11.50	126.61	112.58
18	R	1	MET	CA-C-O	11.50	140.35	120.80
34	i	1261	A	N9-C1'-C2'	11.50	131.25	114.00
34	i	1328	A	O4'-C1'-C2'	-11.50	96.10	107.60
19	S	88	LYS	CA-C-N	-11.49	99.59	121.54
19	S	88	LYS	C-N-CA	-11.49	99.59	121.54
34	i	1296	U	O4'-C1'-N1	11.48	125.43	108.20
34	i	907	C	P-O5'-C5'	11.47	138.10	120.90
34	i	478	U	P-O3'-C3'	11.46	137.39	120.20
34	i	1515	G	N9-C1'-C2'	11.46	129.18	112.00
21	U	103	SER	CA-C-N	-11.44	101.37	121.97
21	U	103	SER	C-N-CA	-11.44	101.37	121.97
7	G	180	VAL	CB-CA-C	-11.43	92.54	111.29

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
20	T	93	SER	N-CA-CB	11.43	132.17	111.36
17	Q	18	THR	CA-CB-OG1	11.41	126.72	109.60
34	i	734	C	N1-C1'-C2'	11.41	129.11	112.00
24	X	22	TRP	CA-C-N	-11.40	103.86	120.28
24	X	22	TRP	C-N-CA	-11.40	103.86	120.28
34	i	1530	U	C4'-C3'-O3'	11.39	126.49	109.40
34	i	24	C	O3'-P-O5'	-11.39	86.92	104.00
34	i	1361	G	C4'-C3'-O3'	-11.36	95.95	113.00
34	i	170	A	O4'-C1'-C2'	11.34	118.94	107.60
34	i	454	A	P-O3'-C3'	-11.34	103.19	120.20
34	i	538	C	P-O3'-C3'	11.34	137.20	120.20
34	i	720	A	P-O3'-C3'	11.30	137.15	120.20
34	i	298	G	O4'-C1'-N9	11.28	125.41	108.50
34	i	1845	A	O4'-C1'-C2'	-11.26	96.34	107.60
34	i	847	C	O3'-P-O5'	-11.25	87.12	104.00
34	i	1390	G	P-O3'-C3'	11.25	137.08	120.20
12	L	17	PHE	O-C-N	11.22	137.30	123.16
11	K	87	PRO	CA-C-N	11.21	142.96	121.54
11	K	87	PRO	C-N-CA	11.21	142.96	121.54
34	i	133	C	P-O3'-C3'	11.18	136.97	120.20
18	R	86	PRO	CA-N-CD	-11.15	96.39	112.00
34	i	109	U	C4'-C3'-O3'	-11.15	96.28	113.00
18	R	1	MET	N-CA-C	-11.14	79.80	111.00
34	i	1562	G	O4'-C1'-N9	11.14	125.20	108.50
34	i	1468	C	C4'-C3'-O3'	11.13	129.70	113.00
3	C	157	ASN	N-CA-C	11.13	128.45	107.75
9	I	5	ARG	O-C-N	-11.12	109.52	122.20
10	J	165	TYR	CB-CA-C	11.12	128.09	109.75
34	i	1412	C	P-O3'-C3'	11.11	136.87	120.20
3	C	69	PHE	CA-CB-CG	-11.10	102.70	113.80
7	G	131	ARG	CA-C-N	-11.10	101.81	120.68
7	G	131	ARG	C-N-CA	-11.10	101.81	120.68
34	i	519	A	P-O3'-C3'	-11.04	103.63	120.20
34	i	682	G	P-O3'-C3'	11.03	136.74	120.20
9	I	31	ARG	N-CA-C	11.02	118.14	108.22
34	i	1238	U	N1-C1'-C2'	11.01	130.51	114.00
34	i	1496	G	N9-C1'-C2'	11.00	128.49	112.00
34	i	1824	U	P-O3'-C3'	10.99	136.68	120.20
34	i	1738	G	N9-C1'-C2'	10.97	128.45	112.00
34	i	53	C	O4'-C1'-C2'	-10.97	96.63	107.60
8	H	118	ARG	NE-CZ-NH2	-10.92	109.37	119.20
34	i	546	U	P-O5'-C5'	10.92	137.28	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	37	ALA	CA-C-N	-10.90	102.51	120.72
2	B	37	ALA	C-N-CA	-10.90	102.51	120.72
34	i	849	C	O3'-P-O5'	10.88	120.32	104.00
3	C	98	GLN	N-CA-C	10.88	124.48	108.60
27	a	97	PRO	N-CA-CB	-10.84	92.57	103.08
21	U	68	THR	CB-CA-C	10.83	126.71	109.27
27	a	10	ARG	NE-CZ-NH2	10.82	128.94	119.20
19	S	53	THR	O-C-N	-10.81	108.21	122.59
22	V	67	ASP	CB-CA-C	10.81	127.98	110.90
34	i	1441	U	C4'-C3'-O3'	-10.81	96.78	113.00
34	i	794	G	P-O3'-C3'	10.81	136.41	120.20
11	K	42	ASN	N-CA-C	-10.78	95.69	110.35
34	i	240	C	P-O3'-C3'	10.77	136.36	120.20
34	i	1819	A	O4'-C1'-N9	10.77	124.65	108.50
27	a	10	ARG	CB-CG-CD	10.74	136.01	111.30
34	i	730	C	O4'-C1'-C2'	-10.74	96.86	107.60
34	i	727	G	O3'-P-O5'	10.74	120.11	104.00
34	i	1414	C	P-O5'-C5'	10.73	137.00	120.90
34	i	1184	A	O4'-C1'-C2'	-10.72	96.88	107.60
34	i	1716	U	O4'-C1'-C2'	-10.72	96.88	107.60
10	J	118	GLY	O-C-N	-10.70	108.79	122.70
34	i	436	G	N9-C1'-C2'	10.69	128.04	112.00
34	i	570	U	C4'-C3'-O3'	10.68	129.02	113.00
34	i	543	U	O4'-C1'-C2'	-10.66	96.94	107.60
34	i	1112	C	O4'-C1'-N1	10.65	124.17	108.20
34	i	1134	C	C4'-C3'-O3'	-10.64	97.04	113.00
6	F	38	TYR	N-CA-C	-10.63	99.77	113.17
21	U	71	GLY	N-CA-C	10.62	138.35	113.18
34	i	1082	G	O3'-P-O5'	-10.62	88.08	104.00
24	X	23	HIS	CB-CA-C	10.61	130.26	110.63
34	i	313	C	P-O3'-C3'	10.60	136.09	120.20
34	i	986	A	N9-C1'-C2'	10.59	129.88	114.00
34	i	1773	G	P-O3'-C3'	10.59	136.08	120.20
34	i	1856	G	O4'-C1'-C2'	-10.57	95.23	105.80
12	L	147	LYS	N-CA-C	10.57	133.31	110.80
34	i	1741	U	C4'-C3'-O3'	10.56	128.85	113.00
34	i	276	U	P-O3'-C3'	10.56	136.04	120.20
34	i	858	A	N9-C1'-C2'	10.56	127.84	112.00
8	H	111	LYS	N-CA-C	-10.55	87.67	107.71
34	i	905	G	C4'-C3'-O3'	10.54	128.81	113.00
34	i	1297	A	C4'-C3'-O3'	10.54	128.81	113.00
34	i	325	G	O4'-C1'-N9	10.51	124.26	108.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1505	U	C4'-C3'-O3'	-10.48	93.67	109.40
34	i	618	A	O4'-C1'-N9	10.47	124.21	108.50
34	i	1135	C	C4'-C3'-O3'	-10.45	97.33	113.00
21	U	106	ILE	N-CA-C	10.44	124.02	108.46
34	i	1862	U	P-O3'-C3'	10.43	135.85	120.20
34	i	1272	A	O4'-C1'-C2'	-10.42	97.18	107.60
34	i	1716	U	O4'-C1'-N1	10.41	124.11	108.50
19	S	88	LYS	CB-CA-C	10.41	131.45	112.30
34	i	578	G	O3'-P-O5'	-10.40	88.40	104.00
34	i	1074	C	N1-C1'-C2'	10.40	127.59	112.00
34	i	1741	U	P-O3'-C3'	10.40	135.80	120.20
34	i	524	G	C4'-C3'-O3'	10.38	128.58	113.00
34	i	829	C	P-O3'-C3'	10.38	135.77	120.20
34	i	1548	C	C3'-C2'-C1'	-10.38	90.92	101.30
27	a	96	THR	O-C-N	10.38	133.26	121.32
18	R	94	GLU	N-CA-C	-10.38	96.75	110.24
34	i	794	G	O4'-C1'-C2'	-10.37	95.43	105.80
34	i	1426	C	O4'-C1'-N1	10.35	124.02	108.50
34	i	191	C	C4'-C3'-O3'	10.34	128.50	113.00
34	i	1404	U	N1-C1'-C2'	10.32	127.48	112.00
34	i	317	G	O4'-C1'-N9	10.29	123.64	108.20
34	i	1857	A	O4'-C1'-C2'	-10.27	95.53	105.80
34	i	1358	U	O4'-C1'-N1	10.27	123.60	108.20
3	C	149	PRO	CA-C-O	-10.23	109.67	121.34
34	i	24	C	P-O3'-C3'	10.22	135.53	120.20
5	E	151	ASP	CB-CA-C	10.21	121.87	109.31
19	S	138	THR	CA-C-N	-10.21	112.02	123.04
19	S	138	THR	C-N-CA	-10.21	112.02	123.04
21	U	104	ILE	N-CA-CB	10.21	128.07	111.23
34	i	964	U	O4'-C1'-C2'	-10.19	97.41	107.60
18	R	42	PRO	CA-N-CD	-10.19	97.74	112.00
10	J	161	LEU	O-C-N	-10.18	109.05	122.59
34	i	168	C	N1-C1'-C2'	10.17	127.25	112.00
34	i	742	C	P-O3'-C3'	10.16	135.45	120.20
34	i	1434	A	O4'-C1'-C2'	-10.16	97.44	107.60
34	i	526	A	C4'-C3'-O3'	10.16	128.24	113.00
27	a	80	HIS	N-CA-CB	-10.15	95.29	110.01
9	I	132	GLU	CA-C-O	-10.15	108.76	121.55
34	i	1118	A	O4'-C1'-C2'	-10.15	97.45	107.60
34	i	141	A	O4'-C1'-C2'	-10.14	95.66	105.80
26	Z	107	VAL	N-CA-C	10.14	120.16	110.42
34	i	1715	U	P-O3'-C3'	10.14	135.42	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1828	A	N9-C1'-C2'	10.13	129.19	114.00
29	c	60	GLU	N-CA-C	-10.11	95.98	110.24
34	i	142	C	O4'-C1'-N1	10.11	123.37	108.20
17	Q	18	THR	N-CA-C	-10.11	93.32	109.59
34	i	82	G	O4'-C1'-C2'	-10.09	97.51	107.60
34	i	876	G	P-O3'-C3'	10.09	135.34	120.20
34	i	883	U	P-O5'-C5'	10.08	136.02	120.90
34	i	73	C	O4'-C1'-C2'	-10.06	95.74	105.80
34	i	616	G	C3'-C2'-C1'	10.05	111.35	101.30
10	J	93	LYS	CA-C-N	10.05	140.73	121.54
10	J	93	LYS	C-N-CA	10.05	140.73	121.54
8	H	105	THR	CB-CA-C	10.04	126.75	110.29
34	i	1305	C	O4'-C1'-C2'	-10.04	97.56	107.60
22	V	66	ASP	CA-C-N	-10.03	106.80	120.44
22	V	66	ASP	C-N-CA	-10.03	106.80	120.44
27	a	10	ARG	CD-NE-CZ	10.03	138.44	124.40
34	i	869	G	P-O3'-C3'	10.03	135.24	120.20
34	i	207	U	O3'-P-O5'	-10.02	88.97	104.00
34	i	1211	C	O4'-C1'-C2'	-10.02	95.78	105.80
34	i	1258	C	N1-C1'-C2'	9.99	126.99	112.00
15	O	102	GLY	CA-C-N	-9.99	106.05	122.54
15	O	102	GLY	C-N-CA	-9.99	106.05	122.54
24	X	58	GLU	N-CA-C	9.99	126.18	110.70
34	i	547	U	N1-C1'-C2'	9.98	126.98	112.00
34	i	1515	G	O3'-P-O5'	9.98	118.97	104.00
34	i	1715	U	O4'-C1'-C2'	-9.97	97.63	107.60
10	J	166	GLY	CA-C-N	-9.96	106.10	121.45
10	J	166	GLY	C-N-CA	-9.96	106.10	121.45
34	i	546	U	C4'-C3'-C2'	-9.96	92.64	102.60
34	i	594	A	P-O3'-C3'	9.95	135.13	120.20
34	i	1533	C	P-O3'-C3'	9.94	135.11	120.20
34	i	1194	G	O4'-C1'-C2'	9.94	117.53	107.60
34	i	721	C	P-O3'-C3'	9.91	135.07	120.20
34	i	1859	C	C2'-C3'-O3'	-9.91	94.64	109.50
34	i	66	G	C1'-O4'-C4'	-9.91	99.99	109.90
34	i	854	A	O4'-C1'-C2'	-9.89	97.71	107.60
1	A	193	HIS	N-CA-C	9.88	124.66	110.24
34	i	1255	A	O4'-C1'-C2'	9.88	117.47	107.60
34	i	1402	G	P-O3'-C3'	9.87	135.00	120.20
34	i	139	C	P-O3'-C3'	9.87	135.00	120.20
11	K	1	MET	CB-CG-SD	9.86	142.28	112.70
10	J	100	LEU	N-CA-C	9.86	125.64	110.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1024	A	C4'-C3'-O3'	-9.86	98.22	113.00
4	D	52	ALA	CA-C-N	-9.85	103.73	122.06
4	D	52	ALA	C-N-CA	-9.85	103.73	122.06
34	i	1742	C	C2'-C3'-O3'	-9.85	98.92	113.70
16	P	36	LEU	N-CA-C	-9.85	93.22	109.07
34	i	684	A	O4'-C1'-C2'	9.85	117.45	107.60
34	i	914	U	N1-C1'-C2'	9.84	126.76	112.00
34	i	1060	C	O4'-C1'-C2'	-9.84	97.76	107.60
34	i	904	A	O3'-P-O5'	-9.84	89.25	104.00
34	i	125	C	C4'-C3'-O3'	9.83	124.15	109.40
34	i	1490	U	C2'-C3'-O3'	9.82	124.23	109.50
12	L	102	PHE	N-CA-C	-9.81	94.34	109.85
26	Z	104	ARG	CD-NE-CZ	-9.81	110.67	124.40
9	I	156	ALA	N-CA-C	-9.79	101.53	113.19
7	G	155	GLN	CA-C-N	-9.78	107.33	123.37
7	G	155	GLN	C-N-CA	-9.78	107.33	123.37
34	i	1068	U	O4'-C1'-C2'	-9.78	97.82	107.60
34	i	1855	G	O4'-C1'-C2'	9.77	115.57	105.80
34	i	883	U	O4'-C1'-N1	9.77	122.85	108.20
34	i	1534	U	O4'-C1'-C2'	-9.77	97.83	107.60
34	i	1673	A	O4'-C1'-N9	9.77	123.15	108.50
8	H	113	LYS	CA-C-O	-9.75	110.30	121.81
33	g	277	THR	N-CA-C	-9.75	97.75	110.33
34	i	735	C	O4'-C1'-C2'	-9.75	97.85	107.60
3	C	241	TRP	CA-C-N	-9.75	107.17	122.87
3	C	241	TRP	C-N-CA	-9.75	107.17	122.87
34	i	1743	G	P-O5'-C5'	9.73	135.50	120.90
34	i	954	G	O4'-C1'-N9	9.73	123.09	108.50
34	i	80	G	O4'-C1'-C2'	-9.72	97.88	107.60
34	i	1134	C	O3'-P-O5'	9.72	118.58	104.00
34	i	872	C	O4'-C1'-C2'	-9.72	97.88	107.60
10	J	161	LEU	CA-C-N	-9.71	103.00	121.54
10	J	161	LEU	C-N-CA	-9.71	103.00	121.54
34	i	1588	C	P-O3'-C3'	9.70	134.76	120.20
34	i	520	U	O4'-C4'-C3'	-9.70	94.30	104.00
34	i	66	G	N9-C1'-C2'	9.70	126.54	112.00
34	i	71	G	C4'-C3'-O3'	9.68	123.91	109.40
34	i	1597	U	O3'-P-O5'	-9.67	89.50	104.00
34	i	342	U	O4'-C1'-C2'	-9.66	97.94	107.60
34	i	570	U	P-O3'-C3'	-9.66	105.72	120.20
7	G	122	PRO	CA-N-CD	-9.64	98.50	112.00
34	i	526	A	P-O3'-C3'	-9.64	105.74	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	a	63	VAL	CA-C-N	9.64	145.31	121.80
27	a	63	VAL	C-N-CA	9.64	145.31	121.80
34	i	162	C	C4'-C3'-O3'	9.62	127.44	113.00
34	i	77	A	P-O3'-C3'	9.62	134.63	120.20
34	i	911	G	O4'-C1'-N9	9.62	122.93	108.50
10	J	164	PRO	CA-C-N	-9.61	109.45	122.72
10	J	164	PRO	C-N-CA	-9.61	109.45	122.72
3	C	156	GLY	CA-C-N	-9.61	109.49	122.85
3	C	156	GLY	C-N-CA	-9.61	109.49	122.85
34	i	594	A	O4'-C1'-C2'	-9.61	98.00	107.60
21	U	94	PRO	CA-N-CD	-9.60	98.56	112.00
9	I	191	GLU	N-CA-C	9.58	121.32	108.38
34	i	696	G	P-O3'-C3'	9.58	134.57	120.20
34	i	1585	C	N1-C1'-C2'	9.57	126.35	112.00
34	i	1546	U	O4'-C1'-C2'	9.54	117.14	107.60
34	i	542	G	P-O5'-C5'	9.54	135.21	120.90
20	T	51	ASN	CA-C-N	9.54	135.98	120.63
20	T	51	ASN	C-N-CA	9.54	135.98	120.63
27	a	58	VAL	CB-CA-C	-9.53	95.66	111.29
34	i	1483	A	C4'-C3'-O3'	-9.53	98.70	113.00
34	i	947	C	P-O5'-C5'	9.52	135.18	120.90
34	i	1405	A	P-O5'-C5'	9.52	135.18	120.90
34	i	1742	C	C4'-C3'-O3'	-9.51	98.73	113.00
34	i	899	A	O4'-C1'-N9	9.51	122.76	108.50
32	f	87	THR	N-CA-C	-9.51	88.80	109.81
34	i	1473	U	P-O5'-C5'	9.51	135.16	120.90
21	U	53	PRO	CA-N-CD	-9.50	98.70	112.00
33	g	185	LYS	N-CA-C	9.50	121.40	111.14
34	i	542	G	P-O3'-C3'	9.49	134.44	120.20
34	i	484	C	O4'-C1'-C2'	-9.49	98.11	107.60
34	i	1140	A	N9-C1'-C2'	9.49	126.23	112.00
21	U	70	CYS	CA-C-N	9.48	140.00	121.41
21	U	70	CYS	C-N-CA	9.48	140.00	121.41
34	i	277	U	C3'-C2'-C1'	9.45	110.75	101.30
34	i	689	G	O4'-C1'-C2'	-9.45	98.15	107.60
10	J	180	LYS	CA-C-N	9.45	139.93	121.41
10	J	180	LYS	C-N-CA	9.45	139.93	121.41
34	i	1530	U	O3'-P-O5'	-9.44	89.83	104.00
34	i	728	U	N1-C1'-C2'	9.43	126.15	112.00
34	i	1430	C	P-O3'-C3'	9.43	134.35	120.20
12	L	152	LYS	CA-C-O	-9.42	107.04	120.51
34	i	431	C	N1-C1'-C2'	9.42	126.12	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1562	G	C3'-C2'-C1'	-9.41	91.89	101.30
1	A	200	ASP	CB-CA-C	-9.40	90.99	110.17
34	i	408	A	N9-C1'-C2'	9.39	126.09	112.00
25	Y	86	GLU	C-N-CD	-9.39	86.49	125.00
34	i	237	G	P-O3'-C3'	9.38	134.27	120.20
34	i	1233	C	C1'-O4'-C4'	-9.37	100.53	109.90
7	G	170	ARG	CB-CA-C	-9.37	93.69	110.36
34	i	225	C	C3'-C2'-C1'	9.36	110.86	101.50
34	i	1494	A	C1'-O4'-C4'	-9.36	100.54	109.90
12	L	153	LYS	CA-C-N	9.35	141.95	122.41
12	L	153	LYS	C-N-CA	9.35	141.95	122.41
34	i	1740	A	O4'-C1'-N9	9.35	122.52	108.50
34	i	1288	C	N1-C1'-C2'	9.33	125.99	112.00
6	F	45	TYR	CA-CB-CG	-9.32	97.11	113.90
4	D	82	GLY	O-C-N	-9.32	111.00	122.46
34	i	1377	G	O4'-C1'-N9	9.32	122.48	108.50
33	g	12	LYS	CA-C-N	9.31	134.51	123.44
33	g	12	LYS	C-N-CA	9.31	134.51	123.44
34	i	446	C	N1-C1'-C2'	9.30	125.95	112.00
34	i	1403	U	N1-C1'-C2'	9.30	125.95	112.00
34	i	1199	G	N9-C1'-C2'	9.30	125.95	112.00
34	i	893	U	O3'-P-O5'	-9.29	90.06	104.00
34	i	1736	U	N1-C1'-C2'	9.28	125.92	112.00
34	i	1043	C	O4'-C1'-C2'	-9.28	98.32	107.60
16	P	121	ILE	O-C-N	-9.27	113.22	122.67
34	i	915	A	P-O3'-C3'	9.26	134.09	120.20
34	i	1397	A	P-O3'-C3'	9.26	134.09	120.20
8	H	99	ARG	N-CA-C	9.26	121.45	111.36
34	i	35	C	O4'-C1'-C2'	-9.26	98.34	107.60
27	a	102	ARG	C-N-CD	-9.25	87.07	125.00
2	B	147	ASN	CA-C-N	-9.25	103.87	121.54
2	B	147	ASN	C-N-CA	-9.25	103.87	121.54
34	i	428	G	O4'-C1'-N9	9.25	122.37	108.50
6	F	163	PHE	N-CA-C	9.24	120.96	111.07
34	i	1659	A	P-O3'-C3'	9.24	134.06	120.20
28	b	12	PRO	CA-N-CD	-9.24	99.07	112.00
16	P	18	ARG	N-CA-CB	9.23	122.08	110.45
10	J	18	ARG	CA-C-N	-9.23	108.30	119.84
10	J	18	ARG	C-N-CA	-9.23	108.30	119.84
34	i	1716	U	N1-C1'-C2'	-9.23	98.15	112.00
34	i	927	C	O4'-C1'-C2'	-9.22	98.38	107.60
34	i	454	A	O3'-P-O5'	9.22	117.83	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	735	C	N1-C1'-C2'	9.22	125.83	112.00
34	i	807	A	P-O3'-C3'	9.22	134.03	120.20
34	i	1237	A	C3'-C2'-C1'	9.22	110.52	101.30
19	S	139	THR	CB-CA-C	-9.21	103.80	117.07
34	i	143	U	N1-C1'-C2'	9.21	127.82	114.00
34	i	1235	U	C4'-C3'-O3'	-9.21	99.19	113.00
20	T	4	VAL	N-CA-CB	-9.20	95.86	111.50
34	i	1517	A	C2'-C3'-O3'	-9.20	99.90	113.70
3	C	104	GLY	N-CA-C	9.20	134.97	113.18
34	i	868	A	P-O3'-C3'	9.20	133.99	120.20
34	i	929	G	C1'-O4'-C4'	-9.20	100.70	109.90
34	i	1316	G	O4'-C1'-N9	9.20	122.29	108.50
19	S	9	PHE	CA-C-N	-9.19	106.35	120.31
19	S	9	PHE	C-N-CA	-9.19	106.35	120.31
29	c	7	GLN	N-CA-C	9.19	119.96	108.11
34	i	1186	A	O4'-C1'-C2'	-9.19	98.41	107.60
34	i	1024	A	P-O3'-C3'	-9.18	106.43	120.20
34	i	1615	A	N9-C1'-C2'	9.18	127.77	114.00
24	X	67	ARG	N-CA-C	9.17	121.04	111.14
34	i	414	C	N1-C1'-C2'	9.16	125.73	112.00
34	i	1232	G	O4'-C1'-C2'	9.16	116.76	107.60
34	i	1660	G	O4'-C1'-C2'	9.15	114.95	105.80
19	S	142	ARG	CB-CA-C	-9.15	92.72	110.10
34	i	547	U	O4'-C1'-C2'	-9.15	98.45	107.60
34	i	1538	U	P-O3'-C3'	9.14	133.92	120.20
34	i	278	U	P-O3'-C3'	9.14	133.91	120.20
2	B	41	ILE	N-CA-C	-9.13	100.09	110.05
34	i	857	A	N9-C1'-C2'	-9.13	98.30	112.00
34	i	1149	C	O4'-C1'-N1	9.13	121.89	108.20
34	i	1451	A	O4'-C1'-C2'	-9.13	98.47	107.60
34	i	972	G	P-O5'-C5'	9.12	134.58	120.90
25	Y	52	PRO	CA-N-CD	-9.11	99.24	112.00
18	R	89	SER	O-C-N	-9.11	110.47	122.59
34	i	653	C	N1-C1'-C2'	9.10	125.66	112.00
33	g	149	GLU	N-CA-C	9.10	120.63	108.07
34	i	545	A	O4'-C1'-C2'	-9.10	98.50	107.60
34	i	947	C	C3'-C2'-C1'	9.09	110.39	101.30
34	i	656	U	O4'-C1'-C2'	-9.09	98.51	107.60
9	I	184	ARG	N-CA-CB	9.09	125.94	110.68
3	C	254	PHE	CA-CB-CG	-9.08	104.72	113.80
34	i	1237	A	O4'-C1'-C2'	-9.08	98.52	107.60
34	i	239	U	C4'-C3'-O3'	-9.08	99.39	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	187	C	O4'-C1'-C2'	-9.07	98.53	107.60
19	S	95	TYR	N-CA-CB	-9.07	95.41	109.92
34	i	743	U	O4'-C1'-C2'	-9.06	98.54	107.60
34	i	1442	A	C4'-C3'-O3'	9.06	122.99	109.40
34	i	873	C	O4'-C1'-C2'	-9.05	98.55	107.60
34	i	1399	C	O4'-C1'-N1	9.05	121.78	108.20
34	i	189	G	N9-C1'-C2'	9.05	125.58	112.00
34	i	1275	C	O4'-C1'-C2'	-9.05	98.55	107.60
34	i	1847	C	N1-C1'-C2'	9.05	125.57	112.00
2	B	151	ARG	CA-C-N	-9.05	106.56	120.31
2	B	151	ARG	C-N-CA	-9.05	106.56	120.31
34	i	1552	C	C2'-C3'-O3'	9.04	123.06	109.50
36	k	22	C	O4'-C1'-N1	-9.04	94.94	108.50
34	i	145	G	C1'-O4'-C4'	-9.04	100.86	109.90
34	i	277	U	O4'-C1'-C2'	-9.04	98.56	107.60
34	i	343	C	C5'-C4'-C3'	9.03	129.55	116.00
34	i	1133	U	C2'-C3'-O3'	9.03	127.24	113.70
24	X	39	ASN	N-CA-C	9.02	119.98	109.60
34	i	915	A	N9-C1'-C2'	9.02	127.53	114.00
34	i	611	C	N1-C1'-C2'	9.02	125.53	112.00
34	i	346	C	O4'-C1'-N1	9.01	122.02	108.50
34	i	1159	C	N1-C1'-C2'	9.01	125.51	112.00
34	i	956	U	N1-C1'-C2'	9.01	125.51	112.00
34	i	1560	C	O4'-C1'-C2'	-9.00	98.60	107.60
34	i	791	A	O4'-C1'-C2'	-8.99	98.61	107.60
33	g	50	THR	CB-CA-C	8.99	128.30	110.42
34	i	1214	C	N1-C1'-C2'	8.99	125.48	112.00
11	K	35	LEU	N-CA-C	-8.97	91.69	110.80
14	N	56	ASP	N-CA-C	8.97	121.13	111.36
34	i	1045	A	O4'-C1'-N9	8.96	121.95	108.50
34	i	868	A	O4'-C1'-N9	8.96	121.64	108.20
34	i	1432	C	C3'-C2'-C1'	8.96	110.26	101.30
32	f	148	TYR	CA-C-N	8.96	135.59	122.16
32	f	148	TYR	C-N-CA	8.96	135.59	122.16
34	i	841	G	C4'-C3'-O3'	-8.96	99.57	113.00
34	i	437	A	O4'-C1'-C2'	-8.95	96.85	105.80
34	i	1788	C	O4'-C1'-C2'	-8.95	98.65	107.60
1	A	166	LYS	N-CA-C	-8.94	101.54	111.28
34	i	482	C	O4'-C1'-C2'	-8.94	96.86	105.80
24	X	62	PRO	CA-N-CD	-8.93	98.99	111.50
32	f	122	PRO	CA-N-CD	-8.93	99.49	112.00
34	i	1607	G	N9-C1'-C2'	-8.93	98.61	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	g	15	ASN	CA-C-N	-8.92	109.66	121.96
33	g	15	ASN	C-N-CA	-8.92	109.66	121.96
28	b	10	PRO	CA-N-CD	-8.91	99.52	112.00
34	i	903	G	N9-C1'-C2'	8.91	125.37	112.00
34	i	1348	G	C1'-O4'-C4'	-8.90	101.00	109.90
34	i	275	C	O4'-C1'-C2'	-8.89	98.71	107.60
16	P	36	LEU	CA-C-O	8.89	130.07	120.38
32	f	148	TYR	N-CA-C	8.88	129.72	110.80
1	A	200	ASP	CA-CB-CG	-8.88	103.72	112.60
34	i	141	A	C2'-C3'-O3'	8.87	122.81	109.50
16	P	69	PRO	CA-N-CD	-8.87	99.58	112.00
34	i	1783	G	O4'-C1'-C2'	-8.86	98.74	107.60
19	S	94	LYS	CA-C-N	8.86	133.84	120.82
19	S	94	LYS	C-N-CA	8.86	133.84	120.82
34	i	1620	U	C4'-C3'-O3'	-8.86	99.72	113.00
22	V	47	ASN	N-CA-C	-8.85	93.82	108.34
34	i	728	U	P-O3'-C3'	8.85	133.47	120.20
34	i	819	U	O4'-C1'-N1	8.85	121.77	108.50
14	N	14	SER	N-CA-C	-8.84	98.85	110.43
21	U	69	PRO	N-CA-C	-8.84	96.62	110.50
1	A	128	ARG	N-CA-C	8.83	120.68	111.14
34	i	1222	G	N9-C1'-C2'	8.83	125.24	112.00
34	i	170	A	C1'-O4'-C4'	-8.82	101.08	109.90
34	i	885	U	O4'-C1'-N1	8.82	121.74	108.50
34	i	1618	A	O4'-C1'-N9	8.81	121.72	108.50
34	i	225	C	C2'-C3'-O3'	8.81	122.71	109.50
34	i	93	U	O4'-C1'-C2'	-8.80	98.80	107.60
34	i	1208	G	N9-C1'-C2'	8.81	125.21	112.00
34	i	1405	A	O4'-C1'-C2'	-8.80	98.80	107.60
34	i	1670	A	N9-C1'-C2'	-8.80	98.80	112.00
9	I	133	GLU	O-C-N	-8.80	110.88	122.59
34	i	795	U	N1-C1'-C2'	8.80	125.20	112.00
34	i	1297	A	C2'-C3'-O3'	-8.79	100.51	113.70
34	i	409	G	O4'-C1'-C2'	-8.79	98.81	107.60
27	a	98	PRO	N-CA-C	8.79	121.42	110.70
34	i	74	G	O4'-C1'-N9	8.79	121.68	108.50
10	J	89	GLU	CA-C-N	8.78	129.73	119.98
10	J	89	GLU	C-N-CA	8.78	129.73	119.98
34	i	826	A	O4'-C1'-N9	8.78	121.67	108.50
34	i	523	A	C4'-C3'-O3'	-8.78	99.83	113.00
34	i	817	G	C2'-C3'-O3'	8.78	122.66	109.50
34	i	24	C	C4'-C3'-O3'	8.77	122.56	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1552	C	P-O3'-C3'	8.76	133.35	120.20
5	E	130	PHE	N-CA-C	8.76	123.18	108.90
10	J	179	LYS	CA-C-N	8.75	138.51	121.18
10	J	179	LYS	C-N-CA	8.75	138.51	121.18
12	L	17	PHE	CA-C-N	8.75	133.13	120.71
12	L	17	PHE	C-N-CA	8.75	133.13	120.71
34	i	80	G	P-O5'-C5'	8.74	134.01	120.90
4	D	4	GLN	CA-C-O	8.74	133.01	120.51
34	i	474	A	P-O3'-C3'	8.73	133.30	120.20
34	i	144	U	N1-C1'-C2'	8.73	125.10	112.00
33	g	142	VAL	O-C-N	8.73	133.48	122.57
34	i	1497	C	O3'-P-O5'	-8.73	90.91	104.00
34	i	171	A	O4'-C1'-N9	8.73	121.29	108.20
34	i	161	U	O4'-C1'-C2'	-8.72	97.08	105.80
34	i	1408	C	C2'-C3'-O3'	-8.72	100.62	113.70
5	E	43	PRO	CA-N-CD	-8.72	99.79	112.00
34	i	1470	A	O4'-C1'-N9	8.71	121.57	108.50
1	A	147	LEU	CA-C-N	-8.71	109.32	122.74
1	A	147	LEU	C-N-CA	-8.71	109.32	122.74
34	i	509	A	O4'-C1'-C2'	-8.71	98.89	107.60
34	i	1002	C	N1-C1'-C2'	8.71	125.07	112.00
34	i	1426	C	O4'-C1'-C2'	-8.71	98.89	107.60
25	Y	86	GLU	CB-CA-C	-8.71	93.02	110.17
34	i	234	C	O4'-C1'-C2'	-8.70	97.10	105.80
14	N	81	ALA	C-N-CD	-8.70	89.32	125.00
34	i	329	A	C2'-C3'-O3'	8.70	126.75	113.70
6	F	37	ASP	N-CA-C	8.70	129.33	110.80
34	i	729	C	O4'-C1'-C2'	-8.69	98.91	107.60
34	i	904	A	C4'-C3'-O3'	-8.70	99.96	113.00
34	i	79	A	C4'-C3'-C2'	-8.69	93.91	102.60
34	i	536	G	P-O3'-C3'	8.69	133.24	120.20
5	E	164	LEU	CA-C-N	-8.69	108.81	120.63
5	E	164	LEU	C-N-CA	-8.69	108.81	120.63
12	L	62	PHE	CA-CB-CG	-8.69	105.11	113.80
8	H	109	ARG	O-C-N	8.69	134.14	122.59
31	e	122	THR	O-C-N	-8.69	111.90	123.10
34	i	1550	U	C2'-C3'-O3'	-8.69	100.67	113.70
3	C	217	THR	CA-C-N	8.68	138.12	121.54
3	C	217	THR	C-N-CA	8.68	138.12	121.54
31	e	77	HIS	CA-C-N	8.67	138.41	121.41
31	e	77	HIS	C-N-CA	8.67	138.41	121.41
34	i	1414	C	C1'-O4'-C4'	-8.67	101.03	109.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	K	89	ILE	CA-C-O	-8.66	109.95	120.78
34	i	927	C	C5'-C4'-C3'	-8.66	103.02	116.00
16	P	17	TYR	CB-CA-C	8.65	127.64	110.42
30	d	9	SER	N-CA-C	8.65	123.54	108.75
34	i	1576	C	O4'-C1'-C2'	-8.65	97.15	105.80
34	i	1411	C	N1-C1'-C2'	8.64	124.97	112.00
34	i	310	G	C4'-C3'-O3'	8.64	125.96	113.00
34	i	227	A	O4'-C1'-C2'	-8.64	98.96	107.60
34	i	824	G	O4'-C1'-C2'	8.64	116.24	107.60
34	i	1014	U	N1-C1'-C2'	8.63	124.94	112.00
34	i	1533	C	O4'-C1'-C2'	-8.63	98.97	107.60
34	i	1294	G	O4'-C1'-N9	8.62	121.43	108.50
34	i	1414	C	P-O3'-C3'	8.62	133.12	120.20
34	i	25	A	O4'-C1'-C2'	-8.61	97.19	105.80
1	A	5	LEU	N-CA-C	8.60	120.27	111.07
34	i	1742	C	P-O3'-C3'	8.59	133.09	120.20
34	i	725	C	O4'-C1'-C2'	-8.59	99.01	107.60
10	J	91	LYS	O-C-N	-8.59	111.17	122.59
34	i	1037	G	C1'-O4'-C4'	-8.59	101.31	109.90
19	S	6	PRO	N-CA-C	8.58	133.56	112.10
34	i	1691	C	N1-C1'-C2'	8.58	124.87	112.00
34	i	92	A	N9-C1'-C2'	8.58	126.87	114.00
5	E	258	ALA	CA-C-N	-8.58	105.82	121.69
5	E	258	ALA	C-N-CA	-8.58	105.82	121.69
2	B	54	GLY	N-CA-C	-8.58	103.01	113.99
2	B	55	THR	N-CA-C	-8.58	103.88	112.97
25	Y	87	PRO	CA-N-CD	-8.57	100.00	112.00
34	i	125	C	O3'-P-O5'	8.57	116.86	104.00
14	N	7	PRO	CA-N-CD	-8.57	100.00	112.00
34	i	540	C	O3'-P-O5'	-8.57	91.15	104.00
34	i	97	U	N1-C1'-C2'	8.57	124.85	112.00
34	i	1423	C	O4'-C1'-C2'	-8.57	99.03	107.60
32	f	88	PRO	O-C-N	-8.56	111.08	122.64
34	i	1405	A	P-O3'-C3'	8.56	133.05	120.20
10	J	17	ARG	N-CA-C	-8.56	101.87	111.71
8	H	191	GLU	O-C-N	-8.56	111.21	122.59
1	A	133	PRO	CA-N-CD	-8.55	100.02	112.00
34	i	521	A	C1'-O4'-C4'	-8.54	101.36	109.90
8	H	109	ARG	CA-CB-CG	-8.53	97.04	114.10
34	i	1144	A	O4'-C1'-N9	8.53	121.00	108.20
12	L	150	GLY	N-CA-C	-8.53	97.98	112.30
34	i	1288	C	C3'-C2'-C1'	8.52	109.82	101.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	R	3	ARG	N-CA-CB	8.52	127.85	110.64
21	U	57	PRO	CA-N-CD	-8.51	100.08	112.00
5	E	30	ARG	CA-C-N	8.51	129.01	119.83
5	E	30	ARG	C-N-CA	8.51	129.01	119.83
34	i	376	C	N1-C1'-C2'	8.50	124.74	112.00
21	U	104	ILE	CA-C-N	-8.49	110.31	122.36
21	U	104	ILE	C-N-CA	-8.49	110.31	122.36
34	i	1774	G	O3'-P-O5'	8.48	116.73	104.00
34	i	313	C	C2'-C3'-O3'	8.48	122.22	109.50
34	i	546	U	N1-C1'-C2'	8.47	124.70	112.00
34	i	520	U	P-O5'-C5'	-8.46	108.20	120.90
34	i	1659	A	N9-C1'-C2'	8.46	126.69	114.00
34	i	391	A	O4'-C1'-C2'	-8.46	99.14	107.60
34	i	1012	U	C3'-C2'-C1'	8.46	109.96	101.50
34	i	1366	A	O4'-C1'-C2'	-8.45	99.15	107.60
15	O	43	HIS	N-CA-C	8.45	128.79	110.80
34	i	1079	A	C1'-O4'-C4'	-8.44	101.46	109.90
34	i	190	A	O4'-C1'-C2'	-8.44	99.16	107.60
11	K	46	MET	N-CA-CB	8.44	122.24	110.01
34	i	739	U	O4'-C1'-C2'	-8.43	97.37	105.80
5	E	133	THR	N-CA-C	8.43	121.98	109.59
34	i	207	U	P-O3'-C3'	8.43	132.84	120.20
34	i	73	C	O4'-C1'-N1	8.43	120.84	108.20
34	i	1037	G	O4'-C1'-C2'	8.43	116.03	107.60
34	i	626	C	P-O5'-C5'	8.42	133.53	120.90
12	L	148	ALA	N-CA-C	8.42	122.64	110.10
34	i	1408	C	P-O3'-C3'	8.42	132.83	120.20
11	K	90	VAL	N-CA-C	8.41	127.05	108.88
16	P	53	GLN	N-CA-C	-8.41	103.14	112.72
34	i	605	C	N1-C1'-C2'	8.40	124.60	112.00
34	i	1471	G	P-O5'-C5'	8.39	133.49	120.90
11	K	86	PRO	CA-C-N	8.39	130.32	119.84
11	K	86	PRO	C-N-CA	8.39	130.32	119.84
34	i	286	C	O4'-C1'-C2'	-8.39	99.21	107.60
34	i	949	C	C4'-C3'-O3'	-8.39	100.42	113.00
19	S	49	ASP	O-C-N	-8.38	112.53	122.58
33	g	234	ASP	CA-CB-CG	-8.38	104.22	112.60
34	i	145	G	N9-C1'-C2'	8.38	124.56	112.00
3	C	245	VAL	N-CA-C	-8.37	101.08	110.62
12	L	18	GLN	CA-C-N	-8.37	108.67	121.40
12	L	18	GLN	C-N-CA	-8.37	108.67	121.40
34	i	1786	G	O4'-C1'-C2'	8.37	115.97	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	U	68	THR	CA-C-N	-8.36	109.95	120.23
21	U	68	THR	C-N-CA	-8.36	109.95	120.23
34	i	385	G	C1'-O4'-C4'	-8.35	101.55	109.90
18	R	89	SER	CA-C-N	-8.35	103.58	121.45
18	R	89	SER	C-N-CA	-8.35	103.58	121.45
34	i	835	C	C1'-O4'-C4'	-8.35	101.35	109.70
34	i	486	C	O4'-C1'-C2'	-8.34	99.26	107.60
18	R	89	SER	CA-C-O	-8.34	108.59	120.51
34	i	543	U	C4'-C3'-C2'	-8.33	94.27	102.60
34	i	70	G	O3'-P-O5'	-8.33	91.51	104.00
34	i	272	C	O3'-P-O5'	8.32	116.48	104.00
34	i	459	A	O4'-C1'-C2'	-8.32	99.28	107.60
34	i	1537	C	O5'-C5'-C4'	8.32	123.98	111.50
18	R	87	GLU	CB-CA-C	-8.32	96.71	110.85
34	i	685	G	O4'-C1'-C2'	-8.32	99.28	107.60
34	i	1467	C	N1-C1'-C2'	8.32	124.48	112.00
34	i	1204	A	O4'-C1'-C2'	-8.32	99.28	107.60
34	i	1407	G	C1'-O4'-C4'	-8.32	101.58	109.90
10	J	91	LYS	N-CA-C	-8.31	93.09	110.80
34	i	208	G	C4'-C3'-O3'	-8.31	100.54	113.00
20	T	30	VAL	N-CA-C	8.30	126.80	108.88
26	Z	70	PRO	CA-N-CD	-8.29	100.39	112.00
31	e	100	LYS	N-CA-C	-8.29	95.72	109.07
9	I	184	ARG	NE-CZ-NH1	-8.29	113.21	121.50
34	i	464	G	N9-C1'-C2'	8.29	124.44	112.00
34	i	1075	C	C3'-C2'-C1'	8.29	109.59	101.30
34	i	1369	C	O4'-C1'-C2'	-8.29	99.31	107.60
34	i	1816	A	O3'-P-O5'	-8.29	91.57	104.00
34	i	1655	C	C5'-C4'-C3'	-8.29	103.57	116.00
9	I	55	TYR	CA-CB-CG	-8.28	99.00	113.90
9	I	184	ARG	CB-CA-C	-8.28	94.56	109.71
34	i	844	U	N1-C1'-C2'	8.28	124.42	112.00
26	Z	104	ARG	N-CA-CB	-8.27	96.51	110.49
19	S	50	ILE	N-CA-C	8.27	120.53	108.53
34	i	1632	A	P-O3'-C3'	8.27	132.60	120.20
34	i	1056	A	O4'-C1'-N9	8.27	120.60	108.20
2	B	77	ASP	N-CA-C	8.26	128.40	110.80
34	i	435	A	N9-C1'-C2'	8.26	124.39	112.00
34	i	1529	C	O4'-C1'-C2'	-8.26	97.54	105.80
34	i	205	G	N9-C1'-C2'	8.26	124.39	112.00
34	i	1289	A	N9-C1'-C2'	8.26	124.39	112.00
34	i	685	G	O3'-P-O5'	8.26	116.38	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	190	A	O3'-P-O5'	8.25	116.38	104.00
34	i	74	G	C3'-C2'-C1'	8.25	109.55	101.30
5	E	165	GLU	N-CA-C	-8.24	101.88	111.03
33	g	161	SER	N-CA-C	8.23	123.63	112.68
19	S	94	LYS	CA-C-O	8.23	130.20	121.15
34	i	1405	A	C5'-C4'-C3'	8.23	128.34	116.00
34	i	1650	C	N1-C1'-C2'	8.23	124.34	112.00
10	J	17	ARG	CB-CA-C	-8.22	95.42	110.63
34	i	1299	C	C3'-C2'-C1'	-8.22	93.08	101.30
34	i	1785	A	O4'-C1'-C2'	-8.22	99.38	107.60
34	i	650	C	N1-C1'-C2'	8.21	124.31	112.00
34	i	79	A	O5'-C5'-C4'	8.21	124.01	111.70
22	V	10	ASP	CA-C-N	-8.20	109.53	122.08
22	V	10	ASP	C-N-CA	-8.20	109.53	122.08
7	G	161	PRO	CA-N-CD	-8.19	100.53	112.00
16	P	50	ARG	CA-C-N	8.19	131.09	120.44
16	P	50	ARG	C-N-CA	8.19	131.09	120.44
33	g	14	HIS	CA-C-N	-8.19	108.28	122.36
33	g	14	HIS	C-N-CA	-8.19	108.28	122.36
34	i	1312	C	N1-C1'-C2'	8.19	124.28	112.00
34	i	620	U	O4'-C1'-N1	8.19	120.78	108.50
34	i	840	U	O4'-C1'-C2'	-8.18	99.42	107.60
34	i	1774	G	C1'-O4'-C4'	-8.17	101.73	109.90
20	T	45	LEU	O-C-N	-8.17	113.70	123.10
34	i	150	A	O4'-C1'-C2'	-8.17	99.43	107.60
9	I	129	LEU	CA-C-O	-8.17	112.25	120.82
34	i	477	U	P-O3'-C3'	8.16	132.44	120.20
34	i	1006	G	O4'-C1'-N9	8.15	120.73	108.50
34	i	1255	A	C3'-C2'-C1'	-8.15	93.15	101.30
4	D	94	ARG	CB-CA-C	-8.15	95.34	110.01
34	i	1282	G	C4'-C3'-O3'	-8.15	97.18	109.40
34	i	1678	C	N1-C1'-C2'	8.14	124.22	112.00
34	i	1524	C	N1-C1'-C2'	8.14	124.21	112.00
29	c	8	PRO	CA-C-N	-8.13	111.64	122.94
29	c	8	PRO	C-N-CA	-8.13	111.64	122.94
34	i	174	C	O4'-C1'-C2'	-8.13	99.47	107.60
34	i	635	C	O4'-C1'-C2'	-8.13	99.47	107.60
34	i	909	A	O4'-C1'-C2'	-8.13	97.67	105.80
34	i	907	C	N1-C1'-C2'	8.12	124.19	112.00
34	i	837	G	O4'-C4'-C3'	-8.12	95.88	104.00
10	J	162	ARG	N-CA-C	8.12	128.09	110.80
34	i	1777	C	O4'-C1'-C2'	-8.12	97.68	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	147	A	N9-C1'-C2'	-8.11	101.83	114.00
34	i	1666	G	N9-C1'-C2'	8.11	124.16	112.00
34	i	96	C	N1-C1'-C2'	8.11	124.16	112.00
34	i	894	U	P-O3'-C3'	8.11	132.36	120.20
5	E	151	ASP	CA-C-N	8.10	129.97	119.84
5	E	151	ASP	C-N-CA	8.10	129.97	119.84
34	i	541	U	N1-C1'-C2'	8.10	124.15	112.00
34	i	626	C	O4'-C1'-C2'	-8.10	99.50	107.60
34	i	1674	A	P-O3'-C3'	8.09	132.34	120.20
22	V	61	ARG	NE-CZ-NH2	-8.09	111.92	119.20
34	i	1415	C	O4'-C1'-C2'	-8.09	99.51	107.60
34	i	612	C	N1-C1'-C2'	8.08	124.12	112.00
10	J	40	LYS	N-CA-C	-8.08	102.47	111.28
4	D	190	LEU	O-C-N	-8.08	113.60	121.19
34	i	1091	U	N1-C1'-C2'	8.08	124.12	112.00
34	i	1416	G	C1'-O4'-C4'	-8.08	101.82	109.90
7	G	38	ALA	N-CA-C	8.07	119.86	111.14
10	J	166	GLY	N-CA-C	-8.07	104.19	115.32
11	K	90	VAL	CA-C-N	8.07	129.93	119.84
11	K	90	VAL	C-N-CA	8.07	129.93	119.84
32	f	148	TYR	CA-CB-CG	-8.07	99.37	113.90
34	i	733	G	O4'-C1'-C2'	-8.07	99.53	107.60
19	S	92	ASP	N-CA-C	8.07	127.98	110.80
34	i	64	A	O4'-C1'-N9	8.07	120.30	108.20
19	S	10	GLN	CA-C-N	8.06	136.94	121.54
19	S	10	GLN	C-N-CA	8.06	136.94	121.54
34	i	287	U	C1'-O4'-C4'	-8.06	101.84	109.90
34	i	619	A	O4'-C1'-C2'	-8.06	97.74	105.80
34	i	1191	A	O4'-C4'-C3'	-8.06	95.94	104.00
34	i	170	A	C3'-C2'-C1'	-8.05	93.25	101.30
34	i	296	U	P-O5'-C5'	8.05	132.98	120.90
8	H	39	GLN	CA-C-N	-8.05	109.49	120.44
8	H	39	GLN	C-N-CA	-8.05	109.49	120.44
34	i	1210	A	P-O3'-C3'	8.05	132.27	120.20
34	i	80	G	C3'-C2'-C1'	8.04	109.34	101.30
12	L	151	THR	CA-C-N	8.04	136.89	121.54
12	L	151	THR	C-N-CA	8.04	136.89	121.54
29	c	32	VAL	N-CA-C	8.03	119.47	107.75
34	i	794	G	P-O5'-C5'	8.03	132.94	120.90
34	i	1449	C	N1-C1'-C2'	8.03	124.04	112.00
11	K	55	ARG	CB-CG-CD	8.02	129.74	111.30
34	i	1003	C	N1-C1'-C2'	8.02	124.03	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	V	24	ILE	CB-CA-C	-8.01	100.97	110.91
6	F	46	ALA	CA-C-N	-8.01	106.24	121.54
6	F	46	ALA	C-N-CA	-8.01	106.24	121.54
34	i	1425	G	O3'-P-O5'	-8.01	91.99	104.00
1	A	109	THR	N-CA-C	-7.99	99.76	110.55
34	i	299	G	O4'-C1'-C2'	7.99	113.79	105.80
34	i	950	U	C4'-C3'-O3'	7.99	121.39	109.40
18	R	1	MET	CB-CA-C	7.99	125.29	110.10
34	i	837	G	P-O5'-C5'	7.99	132.88	120.90
34	i	1715	U	C1'-O4'-C4'	7.98	117.88	109.90
34	i	1413	C	C3'-C2'-C1'	7.96	109.26	101.30
16	P	71	GLU	CA-C-N	7.96	134.65	121.92
16	P	71	GLU	C-N-CA	7.96	134.65	121.92
4	D	144	GLY	CA-C-N	7.95	130.94	120.28
4	D	144	GLY	C-N-CA	7.95	130.94	120.28
10	J	93	LYS	O-C-N	-7.95	112.85	123.19
34	i	526	A	C2'-C3'-O3'	-7.95	101.77	113.70
3	C	217	THR	CB-CA-C	7.95	121.00	111.22
34	i	1677	C	O4'-C1'-C2'	-7.95	97.85	105.80
34	i	630	A	N9-C1'-C2'	7.95	123.92	112.00
17	Q	7	LEU	N-CA-C	7.94	119.10	108.38
18	R	1	MET	O-C-N	7.94	135.71	123.00
19	S	93	GLY	CA-C-N	7.94	132.10	120.90
19	S	93	GLY	C-N-CA	7.94	132.10	120.90
34	i	1459	U	P-O5'-C5'	7.94	132.82	120.90
5	E	103	TYR	N-CA-C	7.94	122.03	110.28
34	i	189	G	C1'-O4'-C4'	-7.93	101.97	109.90
29	c	18	LEU	N-CA-C	7.93	120.00	111.36
3	C	112	PHE	CA-CB-CG	-7.93	105.87	113.80
7	G	155	GLN	O-C-N	-7.92	110.31	121.72
10	J	164	PRO	N-CA-CB	-7.92	94.84	103.39
34	i	1531	G	C4'-C3'-O3'	-7.91	101.13	113.00
34	i	973	C	O4'-C1'-C2'	-7.91	99.69	107.60
17	Q	46	THR	N-CA-C	-7.91	101.62	111.11
34	i	201	G	O4'-C1'-C2'	-7.91	99.69	107.60
34	i	1776	G	C5'-C4'-C3'	7.91	127.86	116.00
34	i	606	A	N9-C1'-C2'	7.90	123.86	112.00
34	i	1010	G	C1'-O4'-C4'	-7.90	102.00	109.90
34	i	1663	U	O4'-C1'-N1	7.90	120.35	108.50
13	M	116	LYS	N-CA-C	7.89	127.62	110.80
32	f	134	SER	O-C-N	7.89	132.40	122.93
4	D	159	HIS	N-CA-C	7.89	119.96	111.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1408	C	C4'-C3'-O3'	7.89	124.83	113.00
17	Q	146	ARG	NE-CZ-NH2	7.89	126.30	119.20
34	i	295	C	O3'-P-O5'	7.89	115.83	104.00
34	i	741	C	O4'-C1'-C2'	-7.88	99.72	107.60
34	i	1779	C	O4'-C1'-C2'	-7.88	97.92	105.80
34	i	1080	A	C2'-C3'-O3'	-7.88	101.89	113.70
34	i	1263	C	N1-C1'-C2'	7.88	123.81	112.00
10	J	144	ILE	CA-CB-CG1	-7.88	97.01	110.40
34	i	1607	G	O4'-C1'-N9	7.87	120.31	108.50
34	i	1414	C	C1'-C2'-O2'	7.87	123.60	111.80
34	i	1654	U	O3'-P-O5'	7.87	115.80	104.00
12	L	157	LYS	N-CA-C	7.86	122.05	108.76
34	i	1698	C	O4'-C1'-C2'	-7.86	99.74	107.60
32	f	124	ASP	CA-C-N	-7.86	110.18	122.67
32	f	124	ASP	C-N-CA	-7.86	110.18	122.67
34	i	1102	C	O4'-C1'-C2'	-7.86	99.74	107.60
15	O	143	LYS	N-CA-C	7.85	121.90	110.28
34	i	1194	G	C1'-O4'-C4'	-7.85	102.05	109.90
2	B	146	CYS	CA-C-N	-7.85	109.94	120.54
2	B	146	CYS	C-N-CA	-7.85	109.94	120.54
16	P	49	LEU	CA-C-N	-7.85	106.55	121.54
16	P	49	LEU	C-N-CA	-7.85	106.55	121.54
34	i	60	A	O4'-C1'-N9	7.84	120.26	108.50
34	i	424	G	O3'-P-O5'	-7.84	92.24	104.00
34	i	76	U	P-O5'-C5'	7.84	132.66	120.90
34	i	1551	A	P-O3'-C3'	7.84	131.96	120.20
34	i	1717	G	P-O5'-C5'	7.83	132.65	120.90
32	f	88	PRO	CA-C-N	-7.83	109.86	121.05
32	f	88	PRO	C-N-CA	-7.83	109.86	121.05
34	i	316	C	O4'-C1'-C2'	-7.83	97.97	105.80
34	i	65	C	P-O3'-C3'	7.82	131.93	120.20
21	U	70	CYS	O-C-N	-7.82	112.19	122.59
34	i	1355	U	O4'-C1'-C2'	-7.82	99.78	107.60
33	g	47	ARG	N-CA-C	-7.81	94.16	110.80
34	i	626	C	C3'-C2'-C1'	7.81	109.11	101.30
18	R	88	VAL	CA-C-N	-7.81	106.62	121.54
18	R	88	VAL	C-N-CA	-7.81	106.62	121.54
34	i	639	U	N1-C1'-C2'	7.81	123.71	112.00
34	i	25	A	N9-C1'-C2'	-7.80	102.29	114.00
34	i	224	U	N1-C1'-C2'	-7.80	102.30	114.00
34	i	1559	C	N1-C1'-C2'	7.80	123.70	112.00
34	i	574	A	P-O5'-C5'	7.79	132.59	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	204	G	O4'-C1'-C2'	-7.79	99.81	107.60
34	i	1028	C	N1-C1'-C2'	7.79	123.68	112.00
34	i	1219	A	O4'-C1'-C2'	-7.79	99.81	107.60
3	C	157	ASN	CA-C-O	7.79	129.25	120.84
34	i	838	C	C3'-C2'-C1'	7.78	109.08	101.30
34	i	126	G	O3'-P-O5'	7.78	115.67	104.00
26	Z	107	VAL	CA-C-N	7.78	135.97	121.97
26	Z	107	VAL	C-N-CA	7.78	135.97	121.97
32	f	88	PRO	N-CA-C	-7.77	96.46	112.47
34	i	102	A	P-O3'-C3'	7.77	131.86	120.20
34	i	1670	A	O4'-C1'-N9	7.77	120.15	108.50
34	i	3	C	O4'-C1'-C2'	-7.77	98.03	105.80
34	i	1543	G	O4'-C1'-N9	7.76	120.14	108.50
34	i	1343	U	O4'-C1'-C2'	-7.76	99.84	107.60
34	i	980	C	N1-C1'-C2'	7.76	123.64	112.00
27	a	63	VAL	CB-CA-C	7.75	124.00	111.29
34	i	865	A	P-O3'-C3'	7.75	131.83	120.20
34	i	1547	G	O4'-C1'-C2'	-7.75	99.85	107.60
34	i	1743	G	O5'-C5'-C4'	7.75	123.13	111.50
34	i	223	A	O4'-C1'-C2'	-7.75	99.85	107.60
34	i	31	U	P-O3'-C3'	7.75	131.82	120.20
34	i	652	G	N9-C1'-C2'	7.75	125.62	114.00
22	V	81	GLN	O-C-N	-7.75	112.29	122.59
34	i	1144	A	O4'-C1'-C2'	7.74	113.54	105.80
34	i	541	U	P-O5'-C5'	7.74	132.51	120.90
34	i	1019	A	O4'-C1'-C2'	-7.74	99.86	107.60
34	i	1298	G	C2'-C3'-O3'	-7.74	97.90	109.50
13	M	70	ALA	N-CA-C	7.73	119.34	111.07
34	i	1771	G	C3'-C2'-C1'	-7.73	93.57	101.30
34	i	1087	C	O4'-C1'-C2'	-7.73	99.87	107.60
3	C	217	THR	N-CA-C	7.72	123.22	112.72
34	i	1022	C	O4'-C1'-C2'	-7.72	99.88	107.60
34	i	383	U	O4'-C1'-N1	7.72	119.78	108.20
34	i	70	G	C4'-C3'-O3'	-7.71	101.43	113.00
34	i	1696	C	O4'-C1'-C2'	-7.71	98.09	105.80
34	i	170	A	C5'-C4'-C3'	-7.70	104.45	116.00
34	i	111	A	O4'-C1'-N9	7.69	120.04	108.50
33	g	192	THR	N-CA-C	7.69	120.72	110.88
11	K	41	PRO	N-CA-C	-7.69	96.63	112.47
34	i	1741	U	C2'-C3'-O3'	-7.69	102.17	113.70
17	Q	145	TYR	CA-C-N	7.69	135.54	121.70
17	Q	145	TYR	C-N-CA	7.69	135.54	121.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	81	U	N1-C1'-C2'	7.69	123.53	112.00
17	Q	43	GLU	CA-C-N	7.68	127.58	119.05
17	Q	43	GLU	C-N-CA	7.68	127.58	119.05
34	i	21	U	O4'-C1'-C2'	-7.68	99.92	107.60
34	i	521	A	O4'-C4'-C3'	-7.68	96.32	104.00
34	i	581	U	O4'-C1'-N1	7.68	119.72	108.20
34	i	371	C	C4'-C3'-O3'	-7.67	101.50	113.00
3	C	186	GLY	N-CA-C	-7.66	105.96	115.08
34	i	1303	U	P-O3'-C3'	7.66	131.69	120.20
34	i	214	A	C3'-C2'-C1'	7.66	108.96	101.30
34	i	830	C	C1'-O4'-C4'	-7.66	102.24	109.90
3	C	83	LEU	CA-C-N	-7.66	108.88	122.97
3	C	83	LEU	C-N-CA	-7.66	108.88	122.97
34	i	929	G	O4'-C1'-C2'	7.66	115.25	107.60
31	e	122	THR	CA-C-N	-7.65	110.19	122.66
31	e	122	THR	C-N-CA	-7.65	110.19	122.66
15	O	95	ILE	N-CA-C	7.65	120.10	108.71
3	C	149	PRO	CB-CA-C	-7.65	101.60	111.46
5	E	170	THR	CA-C-N	7.64	136.14	121.54
5	E	170	THR	C-N-CA	7.64	136.14	121.54
34	i	1325	U	N1-C1'-C2'	7.64	123.46	112.00
6	F	131	ALA	CA-C-N	-7.64	106.44	121.41
6	F	131	ALA	C-N-CA	-7.64	106.44	121.41
34	i	392	C	O4'-C1'-C2'	-7.64	99.96	107.60
26	Z	112	ASN	N-CA-CB	-7.63	98.95	110.01
34	i	1288	C	P-O5'-C5'	-7.63	109.46	120.90
34	i	1557	C	N1-C1'-C2'	7.62	123.44	112.00
34	i	548	G	C1'-C2'-O2'	7.62	119.83	108.40
34	i	857	A	O4'-C1'-N9	7.62	119.93	108.50
24	X	43	GLY	N-CA-C	-7.62	104.22	115.72
34	i	909	A	C3'-C2'-C1'	7.62	109.12	101.50
34	i	1643	G	P-O3'-C3'	7.62	131.62	120.20
34	i	1690	A	O4'-C1'-C2'	-7.62	98.19	105.80
21	U	68	THR	N-CA-CB	-7.61	99.00	110.11
30	d	24	CYS	N-CA-C	7.60	122.64	112.30
34	i	1450	A	O4'-C1'-C2'	-7.60	100.00	107.60
34	i	1251	G	C1'-O4'-C4'	-7.60	102.30	109.90
34	i	1424	G	O4'-C1'-N9	7.60	119.90	108.50
34	i	71	G	C2'-C3'-O3'	-7.59	98.11	109.50
33	g	294	ASP	N-CA-CB	-7.59	100.54	111.54
34	i	1858	U	P-O5'-C5'	7.59	132.28	120.90
34	i	894	U	P-O5'-C5'	7.57	132.25	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1773	G	O4'-C1'-N9	7.56	119.84	108.50
33	g	24	THR	C-N-CD	-7.56	94.00	125.00
34	i	871	A	O4'-C1'-C2'	-7.55	100.05	107.60
34	i	958	A	O4'-C1'-C2'	-7.55	100.05	107.60
34	i	1116	U	N1-C1'-C2'	7.55	123.33	112.00
27	a	60	ASP	N-CA-C	7.55	121.70	108.56
34	i	1191	A	C2'-C3'-O3'	-7.54	102.39	113.70
34	i	1475	G	O4'-C1'-N9	7.54	119.81	108.50
7	G	85	ARG	CA-C-N	7.54	127.52	119.76
7	G	85	ARG	C-N-CA	7.54	127.52	119.76
34	i	1414	C	O4'-C1'-N1	7.54	119.50	108.20
3	C	85	ALA	N-CA-C	-7.53	98.87	110.10
6	F	42	LYS	N-CA-C	7.53	119.86	109.54
34	i	743	U	O3'-P-O5'	-7.53	92.70	104.00
33	g	25	PRO	CA-C-N	-7.53	110.65	120.44
33	g	25	PRO	C-N-CA	-7.53	110.65	120.44
33	g	273	GLU	CA-C-N	7.53	134.22	122.70
33	g	273	GLU	C-N-CA	7.53	134.22	122.70
34	i	1755	U	P-O5'-C5'	7.53	132.19	120.90
34	i	1501	U	O4'-C1'-C2'	-7.53	100.07	107.60
34	i	1594	U	O4'-C1'-N1	7.53	119.79	108.50
11	K	38	LYS	N-CA-C	-7.52	94.78	110.80
34	i	79	A	C5'-C4'-O4'	7.52	120.39	109.10
34	i	1004	A	P-O3'-C3'	7.52	131.48	120.20
27	a	10	ARG	NH1-CZ-NH2	-7.52	109.53	119.30
8	H	108	SER	N-CA-CB	7.51	123.18	110.49
11	K	84	HIS	CB-CA-C	-7.50	94.40	110.76
34	i	825	C	O4'-C1'-C2'	-7.50	98.30	105.80
34	i	793	C	C3'-C2'-C1'	7.50	109.00	101.50
34	i	912	A	O4'-C1'-N9	7.50	119.45	108.20
34	i	1015	C	N1-C1'-C2'	7.50	123.26	112.00
34	i	1504	A	N9-C1'-C2'	-7.50	102.75	114.00
12	L	151	THR	CB-CA-C	7.50	127.11	110.76
5	E	129	ILE	CA-C-N	7.50	133.56	122.99
5	E	129	ILE	C-N-CA	7.50	133.56	122.99
34	i	484	C	C3'-C2'-C1'	7.50	108.80	101.30
34	i	1344	G	O4'-C1'-N9	7.49	119.74	108.50
19	S	95	TYR	N-CA-C	7.49	119.98	110.24
34	i	895	U	O4'-C1'-C2'	-7.49	100.11	107.60
34	i	1491	G	C2'-C3'-O3'	-7.49	102.47	113.70
34	i	677	C	O4'-C1'-N1	7.48	119.42	108.20
34	i	543	U	O4'-C1'-N1	7.48	119.72	108.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	569	C	O4'-C1'-C2'	-7.48	100.12	107.60
34	i	1425	G	P-O5'-C5'	7.48	132.12	120.90
34	i	1412	C	O4'-C1'-N1	7.48	119.72	108.50
34	i	1503	G	C1'-O4'-C4'	-7.48	102.22	109.70
3	C	118	TYR	CA-C-N	-7.47	112.19	122.95
3	C	118	TYR	C-N-CA	-7.47	112.19	122.95
9	I	178	ARG	CG-CD-NE	-7.47	95.56	112.00
34	i	1022	C	C3'-C2'-C1'	7.47	108.77	101.30
34	i	210	G	O4'-C1'-N9	7.47	119.70	108.50
34	i	1432	C	P-O3'-C3'	7.47	131.40	120.20
34	i	49	C	N1-C1'-C2'	7.47	123.20	112.00
34	i	1349	A	O3'-P-O5'	-7.46	92.80	104.00
10	J	144	ILE	CB-CA-C	7.46	124.94	111.36
34	i	1646	A	O4'-C1'-C2'	-7.46	100.14	107.60
13	M	10	GLY	CA-C-N	7.45	131.50	122.26
13	M	10	GLY	C-N-CA	7.45	131.50	122.26
34	i	970	C	N1-C1'-C2'	7.45	123.18	112.00
34	i	1861	U	O4'-C1'-N1	7.45	119.38	108.20
34	i	1467	C	O4'-C1'-C2'	-7.45	100.15	107.60
34	i	1111	U	O4'-C1'-C2'	7.45	113.25	105.80
8	H	93	VAL	CA-C-N	-7.44	112.28	122.77
8	H	93	VAL	C-N-CA	-7.44	112.28	122.77
8	H	191	GLU	CA-C-N	-7.44	109.00	122.54
8	H	191	GLU	C-N-CA	-7.44	109.00	122.54
34	i	1705	C	O4'-C1'-C2'	-7.43	100.17	107.60
34	i	518	A	N9-C1'-C2'	7.42	123.14	112.00
9	I	43	ILE	N-CA-C	-7.42	97.81	108.42
34	i	1716	U	P-O3'-C3'	7.42	131.33	120.20
34	i	640	A	C3'-C2'-C1'	7.42	108.72	101.30
19	S	142	ARG	N-CA-CB	-7.41	97.90	110.50
5	E	130	PHE	CA-C-N	-7.41	113.22	122.48
5	E	130	PHE	C-N-CA	-7.41	113.22	122.48
34	i	1411	C	O4'-C1'-C2'	-7.41	100.19	107.60
34	i	235	C	O4'-C1'-C2'	-7.41	100.19	107.60
34	i	286	C	N1-C1'-C2'	7.40	123.10	112.00
4	D	190	LEU	CA-C-N	-7.40	110.53	120.96
4	D	190	LEU	C-N-CA	-7.40	110.53	120.96
11	K	89	ILE	CA-CB-CG2	7.40	123.08	110.50
28	b	43	ILE	N-CA-C	7.39	118.71	107.77
34	i	1468	C	C2'-C3'-O3'	-7.39	102.62	113.70
34	i	1042	U	O4'-C1'-C2'	-7.38	100.22	107.60
2	B	41	ILE	CA-C-N	7.38	133.50	121.99

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	B	41	ILE	C-N-CA	7.38	133.50	121.99
26	Z	104	ARG	N-CA-C	7.38	126.52	110.80
13	M	16	THR	N-CA-C	-7.38	103.54	112.54
34	i	985	C	O4'-C1'-C2'	-7.38	98.42	105.80
34	i	67	C	C3'-C2'-C1'	-7.38	93.92	101.30
34	i	730	C	O3'-P-O5'	7.38	115.07	104.00
21	U	117	ALA	O-C-N	7.37	132.40	122.59
34	i	230	C	O4'-C1'-C2'	-7.37	100.23	107.60
34	i	1533	C	C4'-C3'-C2'	-7.37	95.23	102.60
22	V	67	ASP	N-CA-C	-7.36	103.19	111.14
34	i	826	A	C3'-C2'-C1'	-7.36	93.94	101.30
34	i	38	A	N9-C1'-C2'	-7.35	102.97	114.00
9	I	29	LEU	CA-C-N	7.35	134.88	120.84
9	I	29	LEU	C-N-CA	7.35	134.88	120.84
26	Z	106	GLN	CA-C-N	7.35	129.82	120.56
26	Z	106	GLN	C-N-CA	7.35	129.82	120.56
34	i	994	A	O4'-C1'-C2'	-7.34	100.26	107.60
34	i	1249	A	P-O3'-C3'	7.34	131.21	120.20
34	i	1432	C	O4'-C1'-C2'	-7.34	100.26	107.60
13	M	99	LYS	C-N-CD	-7.34	94.92	125.00
18	R	25	GLY	O-C-N	7.34	131.07	123.29
4	D	83	SER	N-CA-CB	7.33	121.01	110.16
34	i	398	A	O4'-C1'-C2'	-7.33	100.27	107.60
34	i	1455	G	C1'-O4'-C4'	-7.33	102.57	109.90
34	i	1530	U	P-O3'-C3'	7.33	131.20	120.20
27	a	97	PRO	CA-CB-CG	7.33	118.43	104.50
34	i	191	C	C2'-C3'-O3'	-7.33	102.71	113.70
34	i	597	U	N1-C1'-C2'	7.33	122.99	112.00
34	i	317	G	C2'-C3'-O3'	7.32	120.48	109.50
18	R	123	THR	CB-CA-C	-7.32	93.01	109.10
34	i	374	U	N1-C1'-C2'	7.31	122.97	112.00
34	i	1515	G	C1'-C2'-O2'	7.31	119.36	108.40
34	i	536	G	O4'-C1'-C2'	-7.31	100.29	107.60
34	i	206	A	O3'-P-O5'	7.30	114.95	104.00
34	i	1472	A	N9-C1'-C2'	-7.30	101.05	112.00
16	P	36	LEU	CA-C-N	7.30	135.48	121.54
16	P	36	LEU	C-N-CA	7.30	135.48	121.54
34	i	507	C	N1-C1'-C2'	7.30	122.95	112.00
34	i	1490	U	P-O3'-C3'	7.30	131.14	120.20
24	X	138	LYS	O-C-N	-7.29	114.34	123.17
20	T	42	HIS	CB-CA-C	-7.29	94.93	110.32
34	i	1106	G	O4'-C1'-C2'	-7.29	100.31	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1402	G	N9-C1'-C2'	7.29	122.94	112.00
10	J	92	MET	O-C-N	7.29	129.53	121.87
34	i	649	G	O4'-C1'-N9	7.29	119.44	108.50
4	D	3	VAL	CA-C-N	7.29	135.46	121.54
4	D	3	VAL	C-N-CA	7.29	135.46	121.54
25	Y	31	GLY	N-CA-C	7.29	130.45	113.18
34	i	821	A	C4'-C3'-O3'	-7.29	102.07	113.00
34	i	1382	A	O4'-C1'-C2'	-7.29	100.31	107.60
34	i	192	U	O5'-C5'-C4'	-7.29	100.57	111.50
34	i	1637	U	O4'-C1'-N1	7.29	119.43	108.50
34	i	365	U	P-O5'-C5'	7.28	131.83	120.90
34	i	545	A	P-O3'-C3'	7.28	131.13	120.20
34	i	1013	U	O4'-C1'-C2'	-7.28	100.32	107.60
34	i	343	C	N1-C1'-C2'	7.28	122.92	112.00
34	i	204	G	N9-C1'-C2'	-7.28	101.08	112.00
34	i	1350	G	C2'-C3'-O3'	7.28	124.62	113.70
12	L	56	ILE	N-CA-C	7.27	118.58	111.67
34	i	1261	A	C3'-C2'-C1'	7.27	108.77	101.50
34	i	1556	A	O4'-C1'-C2'	-7.27	100.33	107.60
34	i	15	U	O4'-C1'-C2'	-7.26	100.33	107.60
17	Q	135	PRO	CB-CA-C	7.26	122.00	111.04
34	i	292	A	O4'-C1'-C2'	-7.25	100.35	107.60
7	G	121	ILE	N-CA-CB	7.25	121.36	111.21
34	i	790	A	O4'-C1'-C2'	-7.25	100.35	107.60
15	O	43	HIS	CA-C-N	-7.25	110.03	121.62
15	O	43	HIS	C-N-CA	-7.25	110.03	121.62
34	i	1823	G	O4'-C1'-C2'	-7.25	100.35	107.60
16	P	18	ARG	CB-CG-CD	7.25	127.96	111.30
34	i	1112	C	O4'-C1'-C2'	7.25	113.05	105.80
34	i	640	A	O4'-C1'-C2'	-7.24	100.36	107.60
34	i	1293	U	O4'-C1'-N1	7.24	119.36	108.50
34	i	79	A	O3'-P-O5'	-7.24	93.14	104.00
34	i	1436	C	C3'-C2'-C1'	7.24	108.54	101.30
34	i	101	U	O4'-C1'-C2'	-7.24	100.36	107.60
34	i	1393	U	O4'-C1'-N1	-7.23	97.35	108.20
4	D	207	HIS	N-CA-C	7.23	120.44	109.23
34	i	571	U	C4'-C3'-O3'	-7.23	102.16	113.00
34	i	277	U	O4'-C1'-N1	-7.23	97.66	108.50
34	i	997	A	O4'-C1'-C2'	-7.23	98.57	105.80
34	i	850	A	P-O5'-C5'	7.23	131.74	120.90
33	g	237	ASN	CA-CB-CG	-7.23	105.37	112.60
11	K	4	PRO	CA-C-O	-7.22	111.91	122.31

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	f	146	LEU	N-CA-C	-7.22	106.38	114.62
34	i	583	C	C3'-C2'-C1'	7.22	108.52	101.30
34	i	1818	A	O4'-C1'-N9	7.22	119.33	108.50
34	i	1161	G	N9-C1'-C2'	-7.22	103.17	114.00
3	C	241	TRP	O-C-N	-7.22	113.97	122.20
4	D	52	ALA	O-C-N	-7.22	114.60	123.33
34	i	1024	A	C5'-C4'-C3'	-7.22	105.18	116.00
34	i	160	U	P-O3'-C3'	7.21	131.02	120.20
34	i	404	A	O4'-C1'-C2'	-7.21	100.39	107.60
8	H	118	ARG	CA-C-O	7.21	128.12	119.61
17	Q	18	THR	CA-C-N	7.21	135.30	121.54
17	Q	18	THR	C-N-CA	7.21	135.30	121.54
34	i	564	A	C3'-C2'-C1'	7.21	108.51	101.30
34	i	296	U	P-O3'-C3'	-7.20	109.39	120.20
34	i	1127	G	O4'-C1'-C2'	-7.20	100.40	107.60
33	g	196	ASN	N-CA-C	7.20	119.20	111.36
7	G	128	THR	N-CA-CB	-7.20	98.33	110.49
24	X	42	GLY	CA-C-N	-7.20	112.29	122.00
24	X	42	GLY	C-N-CA	-7.20	112.29	122.00
34	i	234	C	C1'-O4'-C4'	7.20	116.89	109.70
4	D	144	GLY	N-CA-C	7.19	124.09	111.14
34	i	193	C	N1-C1'-C2'	7.19	122.79	112.00
34	i	966	G	C2'-C3'-O3'	7.19	120.29	109.50
6	F	41	VAL	N-CA-C	-7.19	94.39	109.34
17	Q	116	ASP	N-CA-C	7.19	118.64	108.00
34	i	377	C	N1-C1'-C2'	7.19	122.78	112.00
34	i	1003	C	O4'-C1'-C2'	-7.18	100.42	107.60
33	g	92	LEU	CA-C-N	7.18	130.62	120.28
33	g	92	LEU	C-N-CA	7.18	130.62	120.28
34	i	1341	G	O4'-C1'-C2'	-7.18	100.42	107.60
4	D	167	TYR	N-CA-C	7.18	120.52	111.69
34	i	1721	G	O4'-C1'-N9	7.18	119.26	108.50
17	Q	124	PRO	CB-CA-C	-7.17	101.79	112.55
10	J	34	GLU	O-C-N	7.17	130.61	122.22
34	i	733	G	C1'-O4'-C4'	7.17	117.07	109.90
34	i	1348	G	O4'-C1'-C2'	7.16	114.75	107.60
34	i	1778	G	N9-C1'-C2'	7.16	122.73	112.00
1	A	186	ARG	CA-C-N	7.15	135.42	121.41
1	A	186	ARG	C-N-CA	7.15	135.42	121.41
34	i	823	A	N9-C1'-C2'	7.15	122.72	112.00
34	i	1444	A	P-O3'-C3'	7.15	130.92	120.20
5	E	22	LYS	N-CA-C	7.15	119.15	111.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	60	A	C3'-C2'-C1'	-7.14	94.16	101.30
4	D	96	LEU	O-C-N	-7.14	113.56	122.35
34	i	1455	G	N9-C1'-C2'	7.14	122.71	112.00
34	i	1515	G	C1'-O4'-C4'	-7.14	102.76	109.90
34	i	270	G	C4'-C3'-O3'	-7.14	102.29	113.00
34	i	368	U	C4'-C3'-C2'	-7.14	95.46	102.60
34	i	1428	U	C3'-C2'-C1'	7.14	108.44	101.30
34	i	1126	G	N9-C1'-C2'	-7.13	101.30	112.00
34	i	1158	C	O4'-C1'-C2'	-7.13	100.47	107.60
7	G	79	LYS	N-CA-C	-7.13	100.66	110.35
25	Y	96	LEU	N-CA-CB	7.13	122.54	110.49
34	i	1045	A	C4'-C3'-C2'	-7.13	95.47	102.60
12	L	149	ALA	N-CA-C	-7.13	103.69	112.38
34	i	1472	A	C1'-O4'-C4'	7.13	117.03	109.90
20	T	70	ALA	CA-C-N	7.12	127.80	121.82
20	T	70	ALA	C-N-CA	7.12	127.80	121.82
2	B	75	GLN	CA-C-N	7.12	132.23	122.34
2	B	75	GLN	C-N-CA	7.12	132.23	122.34
34	i	332	C	O4'-C1'-C2'	-7.12	100.48	107.60
34	i	512	A	P-O5'-C5'	7.12	131.57	120.90
7	G	180	VAL	N-CA-C	7.11	124.13	109.34
34	i	1775	A	P-O5'-C5'	7.11	131.57	120.90
11	K	45	VAL	O-C-N	-7.11	114.94	121.91
34	i	123	G	C4'-C3'-O3'	-7.11	102.34	113.00
11	K	3	MET	CA-C-N	7.11	128.07	120.11
11	K	3	MET	C-N-CA	7.11	128.07	120.11
34	i	471	C	N1-C1'-C2'	7.11	122.66	112.00
34	i	540	C	O4'-C1'-C2'	-7.10	100.50	107.60
33	g	276	SER	N-CA-CB	-7.10	107.00	114.10
34	i	1824	U	C3'-C2'-C1'	7.10	108.60	101.50
34	i	307	G	P-O5'-C5'	7.10	131.55	120.90
27	a	98	PRO	CA-C-N	7.10	128.71	119.84
27	a	98	PRO	C-N-CA	7.10	128.71	119.84
34	i	65	C	O4'-C1'-C2'	-7.10	100.50	107.60
34	i	960	A	O4'-C1'-C2'	-7.10	100.50	107.60
34	i	849	C	P-O3'-C3'	-7.09	109.56	120.20
11	K	89	ILE	CA-CB-CG1	-7.09	98.34	110.40
34	i	241	A	O4'-C1'-C2'	-7.09	98.71	105.80
31	e	95	LYS	CA-C-N	7.09	135.08	121.54
31	e	95	LYS	C-N-CA	7.09	135.08	121.54
34	i	298	G	C3'-C2'-C1'	-7.09	94.21	101.30
34	i	1229	G	O4'-C1'-C2'	7.09	114.69	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1539	C	O4'-C1'-C2'	-7.08	100.52	107.60
34	i	1632	A	N9-C1'-C2'	-7.07	103.39	114.00
8	H	16	PRO	CA-C-N	7.07	135.04	121.54
8	H	16	PRO	C-N-CA	7.07	135.04	121.54
19	S	8	LYS	CA-C-N	7.07	130.25	120.63
19	S	8	LYS	C-N-CA	7.07	130.25	120.63
34	i	534	G	O4'-C1'-C2'	-7.07	100.53	107.60
10	J	180	LYS	CB-CA-C	-7.07	95.75	110.17
34	i	103	A	O4'-C1'-C2'	7.07	112.87	105.80
16	P	13	ARG	N-CA-C	-7.07	105.59	114.56
34	i	1251	G	N9-C1'-C2'	7.07	122.60	112.00
13	M	75	ASN	CA-CB-CG	-7.06	105.54	112.60
34	i	1003	C	C3'-C2'-C1'	7.06	108.36	101.30
34	i	1754	G	O4'-C1'-N9	7.06	119.09	108.50
34	i	1385	C	P-O5'-C5'	7.06	131.49	120.90
7	G	156	TYR	N-CA-C	7.06	121.12	107.71
34	i	1065	U	P-O3'-C3'	7.06	130.79	120.20
5	E	151	ASP	CA-C-O	7.06	127.51	119.61
27	a	98	PRO	C-N-CD	-7.05	96.08	125.00
34	i	1653	G	O4'-C1'-C2'	7.05	114.65	107.60
11	K	98	ARG	CA-C-O	-7.05	108.81	120.80
1	A	68	ILE	CA-C-N	-7.05	110.85	120.44
1	A	68	ILE	C-N-CA	-7.05	110.85	120.44
27	a	26	CYS	N-CA-C	-7.05	104.49	113.23
34	i	438	A	O4'-C1'-N9	7.05	118.78	108.20
34	i	688	U	C2'-C3'-O3'	7.05	120.07	109.50
34	i	824	G	C3'-C2'-C1'	-7.05	94.25	101.30
34	i	1853	A	C4'-C3'-O3'	-7.05	102.42	113.00
2	B	133	TYR	N-CA-CB	-7.05	98.48	109.69
34	i	1068	U	C1'-O4'-C4'	7.05	116.95	109.90
34	i	1861	U	C3'-C2'-C1'	-7.05	94.45	101.50
34	i	1449	C	O4'-C1'-N1	7.04	119.06	108.50
8	H	111	LYS	N-CA-CB	7.04	127.50	110.32
34	i	432	C	N1-C1'-C2'	7.04	122.55	112.00
34	i	983	A	P-O5'-C5'	-7.04	110.35	120.90
15	O	20	GLN	N-CA-C	7.03	119.25	108.42
34	i	1645	A	O4'-C1'-C2'	-7.03	100.57	107.60
34	i	478	U	O4'-C1'-N1	7.03	119.04	108.50
34	i	548	G	O4'-C1'-N9	7.03	119.04	108.50
9	I	125	LYS	N-CA-C	7.03	119.85	109.24
34	i	208	G	P-O5'-C5'	7.02	131.43	120.90
34	i	1071	C	N1-C1'-C2'	7.02	122.53	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	987	G	O4'-C1'-C2'	7.02	114.62	107.60
34	i	164	A	N9-C1'-C2'	7.02	122.53	112.00
24	X	142	ARG	CA-C-O	-7.01	108.88	120.80
28	b	52	THR	O-C-N	7.01	131.13	122.86
34	i	1616	U	O4'-C1'-N1	7.00	118.70	108.20
34	i	1514	U	O4'-C1'-N1	7.00	118.70	108.20
34	i	1078	A	O4'-C1'-C2'	-7.00	100.60	107.60
6	F	82	ASN	CA-CB-CG	-7.00	105.60	112.60
10	J	137	VAL	CA-C-N	7.00	134.91	121.54
10	J	137	VAL	C-N-CA	7.00	134.91	121.54
34	i	222	G	O4'-C1'-C2'	7.00	114.60	107.60
34	i	853	U	N1-C1'-C2'	7.00	122.50	112.00
34	i	1860	A	C4'-C3'-O3'	-7.00	102.50	113.00
33	g	24	THR	CA-C-N	-6.99	111.10	119.84
33	g	24	THR	C-N-CA	-6.99	111.10	119.84
34	i	599	U	O4'-C1'-C2'	-6.99	100.61	107.60
34	i	1658	A	O4'-C1'-C2'	-6.99	100.61	107.60
34	i	162	C	C2'-C3'-O3'	-6.99	103.22	113.70
8	H	16	PRO	O-C-N	-6.99	113.20	122.64
34	i	342	U	C5'-C4'-C3'	-6.99	105.52	116.00
34	i	1546	U	C1'-O4'-C4'	-6.99	102.91	109.90
34	i	1510	G	O4'-C1'-N9	6.99	118.98	108.50
4	D	227	LYS	CA-C-O	-6.98	108.93	120.80
34	i	147	A	O4'-C1'-N9	6.98	118.67	108.20
34	i	171	A	N9-C1'-C2'	-6.98	103.53	114.00
34	i	315	C	O4'-C1'-C2'	-6.98	98.82	105.80
34	i	480	C	O4'-C1'-C2'	-6.98	100.62	107.60
1	A	209	GLU	CA-C-O	-6.98	108.93	120.80
34	i	1769	U	O4'-C1'-N1	6.98	118.97	108.50
27	a	100	ARG	N-CA-C	6.98	122.21	112.93
34	i	538	C	N1-C1'-C2'	6.97	122.46	112.00
12	L	120	VAL	N-CA-C	-6.97	98.78	108.12
3	C	263	THR	CA-C-O	-6.97	108.95	120.80
33	g	159	ASN	O-C-N	-6.97	113.32	122.59
21	U	108	PRO	CB-CA-C	-6.97	101.85	110.98
33	g	143	GLN	N-CA-C	-6.97	95.96	110.80
34	i	1656	A	N9-C1'-C2'	6.97	122.45	112.00
20	T	44	GLU	N-CA-C	6.96	118.95	111.36
25	Y	62	THR	CA-C-N	-6.96	108.24	121.54
25	Y	62	THR	C-N-CA	-6.96	108.24	121.54
34	i	192	U	P-O5'-C5'	6.96	131.34	120.90
34	i	1523	G	C3'-C2'-C1'	-6.96	94.34	101.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	282	G	N9-C1'-C2'	6.96	122.44	112.00
34	i	550	A	O5'-C5'-C4'	6.96	121.93	111.50
1	A	50	ASN	CA-C-N	-6.95	110.27	120.28
1	A	50	ASN	C-N-CA	-6.95	110.27	120.28
34	i	1376	C	N1-C1'-C2'	6.95	122.43	112.00
34	i	960	A	O4'-C1'-N9	6.95	118.93	108.50
34	i	889	U	O4'-C1'-N1	6.95	118.92	108.50
17	Q	17	LYS	O-C-N	-6.95	113.35	122.59
9	I	4	SER	CB-CA-C	-6.94	101.64	111.85
34	i	604	G	C3'-C2'-C1'	6.94	108.44	101.50
26	Z	96	LEU	N-CA-C	-6.94	103.64	111.14
34	i	222	G	C1'-O4'-C4'	-6.94	102.96	109.90
34	i	308	C	O4'-C1'-C2'	-6.94	100.66	107.60
34	i	905	G	P-O3'-C3'	-6.94	109.79	120.20
33	g	314	ILE	CA-C-O	-6.94	109.01	120.80
34	i	947	C	N1-C1'-C2'	6.94	122.41	112.00
34	i	1267	C	O4'-C1'-C2'	-6.94	100.66	107.60
10	J	145	PRO	CA-C-N	-6.93	109.76	122.31
10	J	145	PRO	C-N-CA	-6.93	109.76	122.31
29	c	68	LEU	CA-C-O	-6.93	109.01	120.80
6	F	135	ARG	CB-CA-C	6.93	122.44	110.45
1	A	16	LEU	N-CA-C	6.93	118.62	111.14
34	i	1011	U	O4'-C1'-N1	6.93	118.89	108.50
34	i	1272	A	C3'-C2'-C1'	6.92	108.22	101.30
34	i	1716	U	O3'-P-O5'	6.92	114.38	104.00
11	K	3	MET	O-C-N	6.91	129.27	121.32
34	i	1202	G	N9-C1'-C2'	6.91	122.37	112.00
34	i	442	G	C3'-C2'-C1'	6.91	108.21	101.30
34	i	276	U	C3'-C2'-C1'	6.91	108.21	101.30
34	i	556	U	O4'-C1'-N1	6.91	118.86	108.50
34	i	837	G	O4'-C1'-N9	6.91	118.86	108.50
34	i	1503	G	O4'-C1'-N9	6.91	118.56	108.20
34	i	959	A	O4'-C1'-C2'	6.90	114.50	107.60
34	i	1702	U	N1-C1'-C2'	6.90	122.35	112.00
34	i	1199	G	C1'-O4'-C4'	-6.90	103.00	109.90
34	i	1436	C	N1-C1'-C2'	6.90	122.35	112.00
4	D	93	THR	CA-C-N	6.90	134.87	122.38
4	D	93	THR	C-N-CA	6.90	134.87	122.38
13	M	99	LYS	N-CA-C	6.90	126.67	112.40
7	G	157	VAL	CA-C-O	6.89	128.61	121.23
4	D	11	PHE	CA-CB-CG	-6.89	106.91	113.80
34	i	1313	U	O4'-C1'-C2'	-6.89	100.71	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	Q	17	LYS	CA-C-N	6.89	132.92	122.93
17	Q	17	LYS	C-N-CA	6.89	132.92	122.93
34	i	610	G	O4'-C1'-C2'	-6.89	100.71	107.60
34	i	22	A	O4'-C1'-C2'	-6.89	100.71	107.60
34	i	882	A	O3'-P-O5'	6.89	114.33	104.00
9	I	4	SER	N-CA-C	6.89	119.85	108.49
8	H	19	PHE	CA-CB-CG	-6.88	106.92	113.80
34	i	518	A	C1'-O4'-C4'	-6.88	103.02	109.90
34	i	883	U	C2'-C3'-O3'	6.88	119.82	109.50
34	i	1284	U	N1-C1'-C2'	6.88	122.32	112.00
34	i	156	G	P-O3'-C3'	-6.88	109.89	120.20
34	i	1801	C	N1-C1'-C2'	6.88	122.31	112.00
34	i	1469	G	P-O3'-C3'	6.88	130.51	120.20
29	c	60	GLU	CA-C-N	-6.87	111.70	122.49
29	c	60	GLU	C-N-CA	-6.87	111.70	122.49
34	i	530	U	O4'-C1'-N1	6.87	118.81	108.50
34	i	1449	C	C1'-C2'-O2'	6.87	118.71	108.40
24	X	91	LEU	CA-CB-CG	6.87	140.34	116.30
34	i	385	G	O4'-C1'-C2'	6.87	114.47	107.60
34	i	389	C	O4'-C1'-C2'	-6.87	98.93	105.80
34	i	1693	C	O4'-C1'-C2'	-6.87	98.93	105.80
34	i	155	G	C5'-C4'-C3'	6.87	126.30	116.00
4	D	83	SER	CA-C-N	-6.86	110.64	121.62
4	D	83	SER	C-N-CA	-6.86	110.64	121.62
34	i	299	G	C1'-O4'-C4'	-6.86	102.84	109.70
5	E	129	ILE	O-C-N	6.86	130.09	123.03
12	L	24	LEU	CA-C-N	6.86	134.64	121.54
12	L	24	LEU	C-N-CA	6.86	134.64	121.54
34	i	548	G	C3'-C2'-C1'	-6.86	94.44	101.30
34	i	1482	A	O4'-C1'-N9	6.85	118.77	108.50
12	L	147	LYS	CA-C-N	6.85	130.47	120.82
12	L	147	LYS	C-N-CA	6.85	130.47	120.82
34	i	176	U	N1-C1'-C2'	6.84	122.27	112.00
17	Q	31	LEU	CA-C-N	6.84	134.28	121.97
17	Q	31	LEU	C-N-CA	6.84	134.28	121.97
3	C	244	THR	N-CA-C	6.84	125.37	110.80
8	H	104	PRO	CA-C-N	6.84	131.64	121.72
8	H	104	PRO	C-N-CA	6.84	131.64	121.72
8	H	119	SER	N-CA-C	-6.84	101.17	110.68
34	i	78	C	N1-C1'-C2'	-6.84	103.74	114.00
34	i	546	U	C1'-C2'-O2'	6.83	118.65	108.40
34	i	1376	C	C3'-C2'-C1'	6.83	108.13	101.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
19	S	40	TYR	CA-C-O	6.83	127.99	120.82
24	X	24	ASP	CB-CA-C	-6.83	100.57	110.06
34	i	1207	G	N9-C1'-C2'	6.83	122.24	112.00
34	i	425	A	C4'-C3'-O3'	6.83	119.64	109.40
34	i	1325	U	C1'-O4'-C4'	-6.83	103.08	109.90
34	i	1151	U	P-O5'-C5'	6.82	131.13	120.90
17	Q	77	HIS	N-CA-C	6.82	118.71	111.28
34	i	627	U	O4'-C1'-N1	6.82	118.73	108.50
32	f	152	LYS	CA-C-O	-6.82	109.21	120.80
10	J	85	GLY	CA-C-N	-6.82	110.74	120.42
10	J	85	GLY	C-N-CA	-6.82	110.74	120.42
12	L	30	LYS	N-CA-C	6.82	118.79	111.36
34	i	189	G	O5'-C5'-C4'	6.82	121.73	111.50
34	i	1229	G	C1'-O4'-C4'	-6.82	103.08	109.90
3	C	256	ASP	O-C-N	6.82	129.34	122.12
19	S	100	ALA	CB-CA-C	-6.81	108.73	116.63
34	i	1	U	O4'-C1'-N1	6.81	118.42	108.20
34	i	415	G	O4'-C1'-N9	6.81	118.72	108.50
34	i	455	A	C4'-C3'-O3'	6.81	119.62	109.40
8	H	110	THR	CA-CB-CG2	6.81	122.08	110.50
34	i	523	A	C2'-C3'-O3'	6.81	123.92	113.70
34	i	1841	G	O4'-C1'-N9	6.81	118.71	108.50
34	i	1775	A	P-O3'-C3'	6.81	130.41	120.20
34	i	683	G	O4'-C4'-C3'	-6.81	97.19	104.00
24	X	61	GLN	C-N-CD	6.80	135.57	120.60
34	i	1634	G	O4'-C1'-C2'	-6.80	100.80	107.60
11	K	1	MET	N-CA-C	6.80	130.04	111.00
34	i	1346	U	O4'-C1'-C2'	-6.80	100.80	107.60
34	i	406	U	O4'-C1'-N1	6.79	118.69	108.50
34	i	859	U	C1'-O4'-C4'	-6.79	103.11	109.90
34	i	1256	A	N9-C1'-C2'	6.79	122.18	112.00
34	i	1776	G	C3'-C2'-C1'	-6.79	94.51	101.30
34	i	1771	G	O4'-C1'-C2'	6.79	114.39	107.60
13	M	73	GLN	N-CA-C	-6.79	102.97	110.91
34	i	744	C	C3'-C2'-C1'	6.78	108.08	101.30
34	i	1774	G	N9-C1'-C2'	6.78	122.16	112.00
16	P	49	LEU	O-C-N	-6.77	113.58	122.59
21	U	41	ARG	N-CA-C	6.77	118.45	111.14
34	i	887	G	N9-C1'-C2'	6.77	122.16	112.00
34	i	190	A	C5'-C4'-C3'	-6.77	105.84	116.00
15	O	103	ASN	N-CA-CB	6.77	120.51	110.49
34	i	1081	C	C4'-C3'-O3'	6.77	119.55	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	U	118	ASP	N-CA-C	-6.77	96.39	110.80
34	i	951	A	P-O3'-C3'	6.76	130.35	120.20
34	i	62	G	N9-C1'-C2'	6.76	122.14	112.00
4	D	217	ILE	N-CA-C	6.76	115.95	107.70
34	i	1523	G	O4'-C1'-N9	6.76	118.64	108.50
34	i	835	C	O3'-P-O5'	-6.75	93.88	104.00
20	T	144	LYS	CA-C-O	-6.75	109.33	120.80
24	X	24	ASP	CA-C-N	-6.75	111.24	120.28
24	X	24	ASP	C-N-CA	-6.75	111.24	120.28
34	i	1232	G	C3'-C2'-C1'	-6.75	94.55	101.30
34	i	1655	C	P-O3'-C3'	-6.75	110.08	120.20
34	i	1596	A	P-O3'-C3'	6.74	130.30	120.20
26	Z	101	SER	CA-C-O	-6.73	112.48	120.43
34	i	419	C	O4'-C1'-C2'	-6.73	100.87	107.60
34	i	830	C	C1'-C2'-O2'	6.73	118.50	108.40
34	i	1384	A	O4'-C1'-C2'	-6.73	100.87	107.60
34	i	38	A	O4'-C1'-N9	6.73	118.29	108.20
15	O	143	LYS	CB-CA-C	-6.73	98.15	109.65
34	i	946	C	O4'-C1'-C2'	-6.73	100.87	107.60
34	i	796	U	C5'-C4'-C3'	-6.72	105.92	116.00
34	i	1048	A	O4'-C1'-C2'	-6.71	100.89	107.60
34	i	1249	A	O4'-C1'-N9	6.71	118.27	108.20
34	i	1132	U	O4'-C1'-C2'	-6.71	100.89	107.60
34	i	1322	U	C3'-C2'-C1'	6.71	108.21	101.50
34	i	1191	A	C4'-C3'-O3'	-6.71	102.94	113.00
34	i	1784	A	N9-C1'-C2'	6.71	122.06	112.00
8	H	164	ASN	CA-CB-CG	-6.70	105.90	112.60
34	i	689	G	P-O3'-C3'	6.70	130.26	120.20
19	S	39	ARG	O-C-N	6.70	130.06	122.22
34	i	103	A	C3'-C2'-C1'	-6.70	94.80	101.50
34	i	1044	G	C1'-O4'-C4'	-6.70	103.20	109.90
34	i	72	C	C1'-C2'-O2'	6.70	121.84	111.80
34	i	424	G	C2'-C3'-O3'	6.69	123.74	113.70
20	T	86	GLY	N-CA-C	-6.69	105.52	111.67
34	i	311	C	C3'-C2'-C1'	6.69	107.99	101.30
34	i	1550	U	C4'-C3'-O3'	-6.69	102.97	113.00
34	i	1594	U	P-O5'-C5'	6.69	130.94	120.90
34	i	321	C	O4'-C1'-C2'	-6.69	99.11	105.80
6	F	130	ARG	N-CA-CB	6.69	121.81	111.84
33	g	15	ASN	N-CA-CB	6.69	119.48	110.59
34	i	456	G	O4'-C1'-N9	6.69	118.53	108.50
34	i	1167	G	O4'-C1'-C2'	-6.69	99.11	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
12	L	4	ILE	N-CA-C	-6.68	95.44	109.34
3	C	83	LEU	O-C-N	-6.68	115.04	122.72
22	V	24	ILE	CA-C-N	-6.68	117.57	122.18
22	V	24	ILE	C-N-CA	-6.68	117.57	122.18
34	i	1233	C	C3'-C2'-C1'	6.68	107.98	101.30
34	i	1014	U	C1'-O4'-C4'	-6.67	103.23	109.90
6	F	152	TRP	N-CA-C	-6.67	103.70	110.97
34	i	868	A	O4'-C1'-C2'	6.67	112.47	105.80
34	i	389	C	C3'-C2'-C1'	6.67	108.17	101.50
25	Y	103	SER	CA-C-N	6.67	134.28	121.54
25	Y	103	SER	C-N-CA	6.67	134.28	121.54
34	i	1809	A	O4'-C1'-C2'	-6.66	100.94	107.60
34	i	549	G	N9-C1'-C2'	6.66	121.99	112.00
34	i	290	A	O4'-C1'-C2'	-6.66	100.94	107.60
34	i	64	A	N9-C1'-C2'	-6.66	104.02	114.00
34	i	1703	C	O4'-C1'-C2'	-6.66	100.94	107.60
12	L	81	LYS	N-CA-C	6.66	118.61	111.36
7	G	180	VAL	N-CA-CB	-6.65	100.25	111.23
34	i	1243	C	O4'-C1'-C2'	-6.65	99.15	105.80
34	i	123	G	O4'-C1'-N9	6.65	118.47	108.50
21	U	109	GLY	CA-C-N	-6.64	110.01	121.97
21	U	109	GLY	C-N-CA	-6.64	110.01	121.97
34	i	598	C	C3'-C2'-C1'	6.64	107.94	101.30
34	i	139	C	O4'-C1'-C2'	-6.64	100.96	107.60
34	i	279	G	P-O5'-C5'	6.64	130.86	120.90
34	i	1548	C	P-O3'-C3'	6.64	130.16	120.20
5	E	132	GLY	CA-C-N	6.64	130.79	121.24
5	E	132	GLY	C-N-CA	6.64	130.79	121.24
11	K	2	LEU	N-CA-C	6.64	129.59	111.00
34	i	1145	A	O4'-C1'-N9	6.64	118.15	108.20
27	a	57	SER	O-C-N	-6.63	115.23	122.79
34	i	296	U	C4'-C3'-O3'	6.63	119.35	109.40
34	i	639	U	C1'-O4'-C4'	-6.63	103.27	109.90
34	i	176	U	O4'-C1'-C2'	-6.63	100.97	107.60
34	i	312	C	O4'-C1'-C2'	-6.63	100.97	107.60
34	i	1129	A	O5'-C5'-C4'	-6.63	101.56	111.50
34	i	1226	C	C1'-O4'-C4'	-6.63	103.27	109.90
34	i	792	G	P-O3'-C3'	6.62	130.13	120.20
34	i	1030	A	O4'-C1'-C2'	-6.62	100.98	107.60
34	i	68	A	O4'-C1'-C2'	-6.62	100.98	107.60
34	i	455	A	P-O3'-C3'	6.62	130.12	120.20
34	i	279	G	O4'-C1'-C2'	-6.61	100.99	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	405	A	N9-C1'-C2'	-6.61	102.08	112.00
34	i	1688	G	C1'-O4'-C4'	-6.61	103.29	109.90
34	i	1181	C	N1-C1'-C2'	6.61	121.92	112.00
34	i	1104	G	P-O3'-C3'	6.61	130.12	120.20
34	i	1056	A	N9-C1'-C2'	6.61	123.91	114.00
34	i	74	G	O4'-C1'-C2'	-6.61	100.99	107.60
34	i	313	C	C3'-C2'-C1'	6.61	108.11	101.50
34	i	1066	A	N9-C1'-C2'	6.61	121.91	112.00
34	i	59	U	O4'-C1'-N1	6.60	118.41	108.50
33	g	76	GLN	N-CA-C	6.60	118.56	111.36
33	g	258	ILE	CA-C-N	-6.60	111.80	122.36
33	g	258	ILE	C-N-CA	-6.60	111.80	122.36
34	i	553	G	O4'-C1'-C2'	-6.60	99.20	105.80
6	F	43	GLU	N-CA-C	-6.60	96.74	110.80
34	i	1151	U	C5'-C4'-O4'	6.60	119.00	109.10
34	i	352	C	N1-C1'-C2'	6.60	121.90	112.00
34	i	1433	C	N1-C1'-C2'	6.60	121.89	112.00
34	i	1776	G	O5'-C5'-C4'	6.60	121.40	111.50
23	W	97	ARG	N-CA-C	-6.59	104.09	111.28
34	i	1168	U	O4'-C1'-N1	6.59	118.39	108.50
34	i	1135	C	P-O5'-C5'	-6.59	111.02	120.90
34	i	342	U	C3'-C2'-C1'	6.59	107.89	101.30
22	V	42	VAL	CB-CA-C	-6.58	100.51	111.29
34	i	1208	G	C1'-O4'-C4'	-6.58	103.33	109.90
34	i	1280	A	O4'-C1'-C2'	-6.58	99.22	105.80
34	i	1565	G	O4'-C1'-N9	6.58	118.36	108.50
21	U	48	LEU	N-CA-C	-6.57	104.20	111.82
34	i	1695	C	O4'-C1'-C2'	-6.57	99.23	105.80
34	i	104	A	O4'-C1'-C2'	-6.57	101.03	107.60
34	i	1478	C	O4'-C1'-C2'	-6.57	101.03	107.60
10	J	124	HIS	N-CA-C	-6.57	96.81	110.80
34	i	848	G	P-O3'-C3'	6.57	130.05	120.20
34	i	1288	C	O4'-C1'-C2'	-6.57	101.03	107.60
34	i	881	U	O4'-C1'-C2'	-6.56	101.04	107.60
12	L	101	ARG	N-CA-C	-6.56	98.69	108.99
32	f	125	GLU	CB-CA-C	6.56	121.58	111.02
34	i	1395	C	C5'-C4'-C3'	-6.56	106.16	116.00
12	L	3	ASP	N-CA-C	-6.56	100.72	110.23
34	i	630	A	C1'-O4'-C4'	-6.56	103.34	109.90
34	i	887	G	C1'-O4'-C4'	-6.56	103.34	109.90
5	E	202	PRO	N-CA-C	-6.55	101.36	111.13
34	i	835	C	P-O3'-C3'	6.55	130.03	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1861	U	O4'-C1'-C2'	-6.55	99.25	105.80
34	i	821	A	P-O3'-C3'	-6.55	110.38	120.20
34	i	623	C	N1-C1'-C2'	6.55	121.82	112.00
33	g	212	LYS	CA-C-N	-6.54	111.51	120.28
33	g	212	LYS	C-N-CA	-6.54	111.51	120.28
8	H	54	GLY	N-CA-C	6.54	120.58	112.73
34	i	678	U	C1'-C2'-O2'	6.54	121.61	111.80
34	i	75	G	O4'-C1'-N9	6.53	118.30	108.50
34	i	604	G	N9-C1'-C2'	6.53	123.80	114.00
34	i	1550	U	O4'-C4'-C3'	-6.53	97.47	104.00
34	i	359	C	O4'-C1'-N1	6.53	117.99	108.20
34	i	1361	G	P-O5'-C5'	6.53	130.69	120.90
34	i	1461	A	O4'-C1'-C2'	-6.53	101.07	107.60
34	i	1240	U	O4'-C1'-N1	6.53	118.29	108.50
34	i	866	A	O4'-C1'-N9	6.52	117.99	108.20
34	i	186	G	C1'-O4'-C4'	-6.52	103.38	109.90
34	i	1369	C	C3'-C2'-C1'	6.52	107.82	101.30
34	i	455	A	O3'-P-O5'	-6.52	94.22	104.00
34	i	1272	A	N9-C1'-C2'	-6.52	102.22	112.00
34	i	685	G	C5'-C4'-C3'	6.51	125.77	116.00
34	i	1307	C	C1'-O4'-C4'	-6.51	103.39	109.90
34	i	435	A	C1'-O4'-C4'	-6.51	103.39	109.90
21	U	69	PRO	CB-CA-C	-6.51	104.46	111.56
34	i	60	A	O4'-C1'-C2'	6.51	114.11	107.60
34	i	740	G	O3'-P-O5'	-6.51	94.23	104.00
34	i	1627	G	C2'-C3'-O3'	6.51	119.27	109.50
16	P	17	TYR	N-CA-CB	6.51	121.49	110.49
34	i	58	C	N1-C1'-C2'	-6.51	104.23	114.00
34	i	1735	C	O4'-C1'-C2'	-6.51	101.09	107.60
10	J	186	GLY	CA-C-N	6.51	134.06	122.08
10	J	186	GLY	C-N-CA	6.51	134.06	122.08
34	i	908	C	C3'-C2'-C1'	6.51	108.01	101.50
34	i	1006	G	C3'-C2'-C1'	-6.51	94.79	101.30
33	g	162	ASN	N-CA-C	6.50	113.86	108.07
34	i	385	G	C3'-C2'-C1'	-6.50	94.80	101.30
34	i	1533	C	P-O5'-C5'	-6.50	111.15	120.90
11	K	18	GLU	N-CA-C	6.50	118.45	111.36
26	Z	52	LYS	N-CA-C	-6.50	96.95	110.80
34	i	563	U	N1-C1'-C2'	6.50	121.75	112.00
15	O	149	ARG	N-CA-C	-6.50	100.21	109.96
26	Z	94	LYS	N-CA-C	-6.50	98.14	108.73
34	i	209	C	P-O5'-C5'	6.50	130.65	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	816	U	O4'-C1'-N1	6.50	118.25	108.50
34	i	1711	C	O4'-C1'-C2'	-6.50	101.11	107.60
34	i	1794	A	O4'-C1'-C2'	-6.50	101.11	107.60
34	i	1235	U	O3'-P-O5'	6.49	113.74	104.00
34	i	390	C	O4'-C1'-C2'	-6.49	99.31	105.80
25	Y	122	LYS	N-CA-C	-6.49	104.21	111.28
34	i	325	G	N9-C1'-C2'	-6.49	102.27	112.00
9	I	6	ASP	N-CA-CB	-6.49	99.38	109.69
34	i	192	U	C2'-C3'-O3'	-6.49	103.97	113.70
12	L	151	THR	N-CA-C	-6.48	100.10	113.31
25	Y	64	PHE	N-CA-CB	-6.48	99.70	110.39
34	i	1714	A	C1'-O4'-C4'	6.47	116.37	109.90
34	i	325	G	C1'-C2'-O2'	6.47	118.11	108.40
34	i	1539	C	C3'-C2'-C1'	6.47	107.77	101.30
22	V	67	ASP	N-CA-CB	-6.47	100.69	110.07
28	b	15	GLU	N-CA-C	-6.46	103.74	111.69
34	i	1655	C	C4'-C3'-O3'	-6.46	103.31	113.00
34	i	142	C	O4'-C1'-C2'	6.46	112.26	105.80
13	M	58	GLU	CA-C-N	6.46	127.91	119.84
13	M	58	GLU	C-N-CA	6.46	127.91	119.84
31	e	121	PRO	CA-N-CD	-6.46	102.96	112.00
23	W	94	LEU	CA-C-N	6.45	125.68	118.97
23	W	94	LEU	C-N-CA	6.45	125.68	118.97
25	Y	34	THR	N-CA-C	6.45	124.55	110.80
34	i	1167	G	O4'-C1'-N9	6.45	117.88	108.20
34	i	1482	A	O5'-C5'-C4'	-6.45	101.82	111.50
16	P	53	GLN	CB-CA-C	6.45	121.58	110.94
34	i	147	A	C1'-O4'-C4'	6.45	116.15	109.70
34	i	145	G	O4'-C1'-C2'	6.45	114.05	107.60
34	i	1371	G	O4'-C1'-C2'	-6.45	101.15	107.60
34	i	1470	A	O3'-P-O5'	6.44	113.66	104.00
34	i	147	A	O4'-C1'-C2'	-6.44	99.36	105.80
34	i	788	C	N1-C1'-C2'	6.44	121.66	112.00
34	i	1104	G	O4'-C1'-N9	6.44	118.16	108.50
34	i	1316	G	C3'-C2'-C1'	-6.44	94.86	101.30
34	i	1846	C	N1-C1'-C2'	6.44	121.66	112.00
34	i	1527	C	N1-C1'-C2'	6.44	121.66	112.00
34	i	1817	A	C2'-C3'-O3'	-6.44	99.84	109.50
34	i	1563	C	C1'-C2'-O2'	6.44	118.05	108.40
27	a	99	PRO	CA-C-N	-6.43	111.85	122.79
27	a	99	PRO	C-N-CA	-6.43	111.85	122.79
34	i	57	U	O4'-C1'-C2'	-6.43	101.17	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	131	C	P-O3'-C3'	6.43	129.85	120.20
34	i	520	U	O5'-C5'-C4'	6.43	121.15	111.50
34	i	544	A	C3'-C2'-C1'	-6.43	94.87	101.30
34	i	1571	G	N9-C1'-C2'	6.43	121.65	112.00
34	i	446	C	C3'-C2'-C1'	6.43	107.73	101.30
34	i	983	A	O4'-C1'-C2'	-6.43	101.17	107.60
34	i	1431	C	C5'-C4'-C3'	6.43	125.64	116.00
34	i	1577	C	N1-C1'-C2'	6.43	121.64	112.00
34	i	446	C	O4'-C1'-C2'	-6.42	101.17	107.60
34	i	1442	A	P-O3'-C3'	6.42	129.84	120.20
34	i	1800	A	N9-C1'-C2'	6.42	121.63	112.00
34	i	224	U	O4'-C1'-N1	6.42	117.83	108.20
34	i	1753	G	O4'-C1'-N9	6.42	118.12	108.50
34	i	1416	G	N9-C1'-C2'	6.41	121.62	112.00
2	B	76	ASN	CA-C-O	-6.41	114.15	121.65
15	O	105	THR	N-CA-C	6.41	118.27	111.28
34	i	1359	C	C3'-C2'-C1'	6.41	107.91	101.50
34	i	520	U	C2'-C3'-O3'	-6.41	104.09	113.70
4	D	48	ILE	CA-C-N	-6.41	114.70	122.90
4	D	48	ILE	C-N-CA	-6.41	114.70	122.90
11	K	43	LEU	N-CA-C	-6.41	97.16	110.80
34	i	1023	A	O3'-P-O5'	6.41	113.61	104.00
34	i	1547	G	P-O5'-C5'	6.40	130.50	120.90
6	F	27	ASP	CA-C-N	-6.40	115.25	123.19
6	F	27	ASP	C-N-CA	-6.40	115.25	123.19
34	i	977	A	C3'-C2'-C1'	6.40	107.70	101.30
34	i	368	U	N1-C1'-C2'	6.40	121.60	112.00
12	L	118	ARG	N-CA-C	6.40	119.03	108.99
34	i	295	C	C2'-C3'-O3'	6.39	119.08	109.50
34	i	581	U	O4'-C1'-C2'	6.39	112.19	105.80
34	i	1630	C	O4'-C1'-C2'	-6.39	101.21	107.60
5	E	13	ALA	N-CA-C	-6.39	104.03	113.61
34	i	146	G	O4'-C1'-N9	6.39	117.78	108.20
34	i	730	C	N1-C1'-C2'	6.39	121.58	112.00
34	i	881	U	O4'-C1'-N1	6.39	118.08	108.50
34	i	1326	G	O4'-C1'-C2'	6.39	112.19	105.80
34	i	1250	C	O4'-C1'-C2'	-6.38	101.22	107.60
34	i	1518	C	C4'-C3'-O3'	-6.38	103.42	113.00
34	i	835	C	O4'-C1'-N1	6.38	117.78	108.20
34	i	691	G	P-O3'-C3'	6.38	129.77	120.20
21	U	109	GLY	N-CA-C	-6.38	98.07	113.18
34	i	1805	C	O4'-C1'-C2'	-6.37	101.23	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	N	14	SER	CB-CA-C	-6.37	96.46	109.65
18	R	121	GLN	N-CA-C	6.37	123.89	109.81
5	E	258	ALA	O-C-N	-6.37	114.44	122.27
34	i	1542	C	O4'-C1'-C2'	-6.37	101.23	107.60
34	i	986	A	C3'-C2'-C1'	6.37	107.87	101.50
34	i	1615	A	C1'-O4'-C4'	-6.37	103.33	109.70
3	C	216	ALA	O-C-N	-6.37	114.11	122.39
8	H	135	PHE	CA-CB-CG	-6.37	107.44	113.80
9	I	104	ILE	N-CA-C	6.37	122.58	109.34
34	i	959	A	P-O5'-C5'	-6.37	111.35	120.90
34	i	1428	U	N1-C1'-C2'	6.37	121.55	112.00
11	K	43	LEU	CA-CB-CG	6.36	138.57	116.30
14	N	137	PRO	CA-C-O	-6.36	114.09	121.34
34	i	54	A	N9-C1'-C2'	6.36	121.53	112.00
34	i	1269	C	P-O3'-C3'	-6.36	110.66	120.20
34	i	1661	C	O4'-C1'-C2'	-6.36	101.24	107.60
34	i	1215	C	C3'-C2'-C1'	6.36	107.66	101.30
16	P	37	TYR	CB-CA-C	6.35	123.06	110.42
32	f	106	TYR	N-CA-C	-6.35	97.27	110.80
34	i	960	A	C1'-O4'-C4'	6.35	116.25	109.90
34	i	1618	A	C3'-C2'-C1'	-6.35	94.95	101.30
10	J	179	LYS	O-C-N	6.35	130.28	122.34
34	i	407	C	O4'-C1'-C2'	-6.35	101.25	107.60
34	i	853	U	P-O5'-C5'	-6.34	111.39	120.90
34	i	277	U	N1-C1'-C2'	6.34	121.51	112.00
34	i	1010	G	C3'-C2'-C1'	-6.34	94.96	101.30
11	K	42	ASN	CA-CB-CG	6.34	118.94	112.60
34	i	596	G	O4'-C1'-N9	6.34	117.70	108.20
34	i	274	G	O4'-C1'-C2'	6.33	113.94	107.60
34	i	1126	G	O4'-C1'-N9	6.33	118.00	108.50
25	Y	94	HIS	CE1-NE2-CD2	-6.33	102.67	109.00
28	b	41	TYR	N-CA-CB	-6.33	102.48	110.90
34	i	180	G	O3'-P-O5'	6.33	113.50	104.00
34	i	793	C	P-O5'-C5'	6.33	130.39	120.90
34	i	1429	C	C2'-C3'-O3'	-6.33	104.21	113.70
8	H	34	SER	N-CA-C	-6.32	99.69	109.24
11	K	43	LEU	CA-C-N	-6.32	109.46	121.54
11	K	43	LEU	C-N-CA	-6.32	109.46	121.54
34	i	1786	G	C1'-O4'-C4'	-6.32	103.58	109.90
25	Y	78	SER	CA-C-N	-6.32	110.45	120.63
25	Y	78	SER	C-N-CA	-6.32	110.45	120.63
34	i	180	G	C2'-C3'-O3'	-6.32	100.02	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	225	C	N1-C1'-C2'	6.32	123.48	114.00
34	i	124	U	O3'-P-O5'	-6.32	94.52	104.00
6	F	46	ALA	O-C-N	-6.32	114.19	122.59
34	i	1706	U	N1-C1'-C2'	6.32	121.48	112.00
1	A	97	THR	CA-C-N	6.32	127.73	119.84
1	A	97	THR	C-N-CA	6.32	127.73	119.84
34	i	280	G	O4'-C1'-N9	6.32	117.97	108.50
34	i	1293	U	O4'-C1'-C2'	-6.32	101.28	107.60
34	i	1127	G	C5'-C4'-C3'	-6.31	106.53	116.00
34	i	1537	C	C1'-O4'-C4'	-6.31	103.59	109.90
34	i	966	G	P-O3'-C3'	6.31	129.66	120.20
34	i	1345	G	N9-C1'-C2'	6.30	121.46	112.00
28	b	35	VAL	CA-C-N	6.30	129.01	120.44
28	b	35	VAL	C-N-CA	6.30	129.01	120.44
34	i	278	U	P-O5'-C5'	6.30	130.35	120.90
34	i	1322	U	C1'-O4'-C4'	-6.30	103.40	109.70
34	i	1372	A	O4'-C1'-N9	6.30	117.95	108.50
1	A	4	ALA	CA-C-N	6.30	128.63	120.44
1	A	4	ALA	C-N-CA	6.30	128.63	120.44
34	i	981	G	O4'-C1'-C2'	6.30	112.10	105.80
34	i	520	U	P-O3'-C3'	6.29	129.64	120.20
33	g	213	ASP	N-CA-C	-6.29	104.42	111.28
34	i	20	G	O4'-C1'-N9	6.29	117.94	108.50
34	i	1262	C	N1-C1'-C2'	6.29	121.44	112.00
34	i	1407	G	C1'-C2'-O2'	6.29	117.84	108.40
6	F	57	ALA	N-CA-C	6.29	118.13	111.28
29	c	46	VAL	N-CA-C	6.29	117.53	108.48
34	i	684	A	P-O5'-C5'	6.29	130.33	120.90
34	i	1318	G	O4'-C1'-C2'	-6.29	101.31	107.60
17	Q	6	PRO	CB-CA-C	-6.29	98.16	110.10
34	i	35	C	C3'-C2'-C1'	6.29	107.59	101.30
34	i	531	U	O4'-C1'-N1	6.29	117.93	108.50
34	i	1097	U	O4'-C1'-N1	6.29	117.93	108.50
34	i	1407	G	N9-C1'-C2'	6.29	121.43	112.00
34	i	504	U	N1-C1'-C2'	6.28	121.43	112.00
14	N	82	PRO	CA-C-O	6.28	132.03	120.60
7	G	121	ILE	O-C-N	6.28	128.26	121.10
34	i	240	C	C4'-C3'-O3'	6.28	118.82	109.40
34	i	493	C	O4'-C1'-C2'	-6.28	99.52	105.80
18	R	84	TYR	N-CA-C	6.28	118.88	110.35
34	i	359	C	N1-C1'-C2'	6.27	123.41	114.00
34	i	1043	C	C3'-C2'-C1'	6.27	107.57	101.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	Q	29	ASN	O-C-N	6.27	128.77	122.12
34	i	1183	G	O4'-C1'-C2'	-6.27	101.33	107.60
34	i	1337	C	O4'-C1'-C2'	-6.27	99.53	105.80
33	g	27	PHE	CA-CB-CG	-6.27	107.53	113.80
34	i	1144	A	C1'-C2'-O2'	6.27	121.20	111.80
34	i	596	G	O4'-C1'-C2'	6.26	112.06	105.80
34	i	274	G	N9-C1'-C2'	6.26	121.39	112.00
34	i	545	A	O3'-P-O5'	6.26	113.39	104.00
34	i	1414	C	O4'-C4'-C3'	-6.26	99.84	106.10
32	f	86	THR	N-CA-C	-6.26	97.47	110.80
34	i	1646	A	N9-C1'-C2'	-6.26	102.61	112.00
29	c	55	VAL	N-CA-C	6.26	117.49	108.48
34	i	856	G	N9-C1'-C2'	6.26	121.39	112.00
34	i	1188	U	O4'-C1'-N1	6.26	117.89	108.50
11	K	95	ARG	N-CA-C	6.25	124.12	110.80
34	i	548	G	O3'-P-O5'	-6.25	94.62	104.00
25	Y	7	ILE	CA-C-N	6.25	131.82	123.00
25	Y	7	ILE	C-N-CA	6.25	131.82	123.00
34	i	1838	U	O4'-C1'-N1	6.25	117.88	108.50
10	J	40	LYS	CA-C-N	-6.25	111.90	120.28
10	J	40	LYS	C-N-CA	-6.25	111.90	120.28
2	B	56	LYS	CA-C-N	6.25	133.22	121.97
2	B	56	LYS	C-N-CA	6.25	133.22	121.97
3	C	81	PHE	CA-CB-CG	-6.25	107.55	113.80
23	W	98	GLN	N-CA-C	6.25	118.09	111.28
34	i	136	C	C5'-C4'-C3'	6.25	124.27	114.90
8	H	85	LYS	N-CA-C	6.25	117.89	111.14
34	i	390	C	C1'-C2'-O2'	-6.25	102.43	111.80
34	i	1028	C	O4'-C1'-C2'	-6.25	101.36	107.60
34	i	436	G	C3'-C2'-C1'	6.24	107.54	101.30
34	i	677	C	O4'-C1'-C2'	6.24	112.04	105.80
34	i	74	G	C4'-C3'-C2'	-6.24	96.36	102.60
34	i	1274	A	P-O5'-C5'	6.24	130.26	120.90
21	U	27	ARG	O-C-N	-6.24	114.30	122.59
34	i	1447	G	C3'-C2'-C1'	6.24	107.53	101.30
10	J	164	PRO	N-CD-CG	-6.23	93.85	103.20
28	b	36	LYS	O-C-N	-6.23	115.36	122.09
34	i	1425	G	N9-C1'-C2'	-6.23	102.65	112.00
10	J	35	TYR	CA-C-N	6.23	133.62	121.41
10	J	35	TYR	C-N-CA	6.23	133.62	121.41
33	g	212	LYS	N-CA-C	6.23	118.15	111.36
8	H	109	ARG	N-CA-C	6.23	124.07	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	c	47	LYS	N-CA-C	6.23	117.87	111.14
34	i	1065	U	P-O5'-C5'	-6.23	111.56	120.90
34	i	1156	U	O3'-P-O5'	6.23	113.34	104.00
34	i	1550	U	O4'-C1'-N1	6.23	117.84	108.50
34	i	1310	U	O4'-C1'-N1	6.22	117.84	108.50
34	i	850	A	O5'-C5'-C4'	-6.22	102.17	111.50
21	U	27	ARG	CA-C-N	-6.22	111.86	121.56
21	U	27	ARG	C-N-CA	-6.22	111.86	121.56
34	i	1035	C	O4'-C1'-C2'	-6.22	101.38	107.60
19	S	15	VAL	O-C-N	-6.21	116.16	123.00
34	i	368	U	C1'-O4'-C4'	-6.21	103.69	109.90
34	i	546	U	C5'-C4'-C3'	6.21	125.32	116.00
34	i	1198	U	N1-C1'-C2'	-6.21	102.68	112.00
34	i	1255	A	O4'-C1'-N9	6.21	117.82	108.50
34	i	1289	A	C3'-C2'-C1'	6.21	107.51	101.30
7	G	48	TYR	O-C-N	-6.21	115.40	122.97
34	i	841	G	P-O3'-C3'	-6.21	110.89	120.20
11	K	37	ASP	CA-C-N	6.21	133.40	121.54
11	K	37	ASP	C-N-CA	6.21	133.40	121.54
34	i	1149	C	O4'-C1'-C2'	6.21	112.01	105.80
34	i	594	A	C3'-C2'-C1'	6.20	107.50	101.30
34	i	1297	A	O3'-P-O5'	-6.20	94.69	104.00
34	i	1390	G	N9-C1'-C2'	6.20	121.30	112.00
34	i	1271	G	O3'-P-O5'	-6.20	94.70	104.00
34	i	1504	A	C1'-O4'-C4'	6.20	115.90	109.70
34	i	1542	C	N1-C1'-C2'	6.20	121.30	112.00
34	i	520	U	O4'-C1'-N1	6.19	117.79	108.50
13	M	101	ARG	CA-C-N	6.19	128.58	120.28
13	M	101	ARG	C-N-CA	6.19	128.58	120.28
14	N	142	GLU	CA-C-O	-6.19	113.67	120.36
34	i	1160	G	N9-C1'-C2'	6.19	121.28	112.00
34	i	1519	G	O4'-C4'-C3'	-6.19	97.81	104.00
34	i	1786	G	C3'-C2'-C1'	-6.19	95.11	101.30
4	D	142	LEU	O-C-N	-6.18	115.34	123.13
4	D	145	GLN	N-CA-C	-6.18	104.54	111.28
34	i	461	G	O4'-C1'-N9	6.18	117.48	108.20
11	K	46	MET	CB-CA-C	-6.18	101.17	110.88
34	i	1220	G	N9-C1'-C2'	6.18	121.28	112.00
34	i	817	G	O4'-C1'-N9	6.18	117.47	108.20
14	N	12	SER	N-CA-C	-6.18	99.13	108.46
34	i	1145	A	O4'-C1'-C2'	6.18	111.98	105.80
34	i	1437	U	O4'-C1'-N1	6.18	117.47	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	f	144	CYS	N-CA-C	-6.17	97.65	110.80
33	g	95	GLY	N-CA-C	-6.17	102.05	110.20
34	i	412	U	O4'-C1'-N1	6.17	117.76	108.50
34	i	984	C	O4'-C1'-C2'	-6.17	101.43	107.60
34	i	884	U	P-O5'-C5'	6.17	130.16	120.90
34	i	306	C	O4'-C1'-C2'	-6.17	101.43	107.60
5	E	109	PHE	N-CA-C	-6.17	101.17	110.24
34	i	804	A	N9-C1'-C2'	6.17	121.25	112.00
24	X	24	ASP	N-CA-CB	6.17	119.39	109.28
27	a	63	VAL	N-CA-C	6.16	122.16	109.34
34	i	733	G	N9-C1'-C2'	-6.16	102.75	112.00
34	i	1049	C	O4'-C1'-C2'	-6.16	101.44	107.60
34	i	1587	C	N1-C1'-C2'	6.16	121.25	112.00
34	i	236	C	O4'-C1'-C2'	-6.16	101.44	107.60
34	i	315	C	P-O3'-C3'	6.16	129.44	120.20
34	i	1549	C	C4'-C3'-O3'	6.16	122.24	113.00
6	F	81	ARG	O-C-N	-6.16	115.60	122.12
34	i	164	A	C1'-O4'-C4'	-6.16	103.75	109.90
16	P	122	THR	N-CA-C	-6.15	103.30	111.24
34	i	426	G	O4'-C1'-N9	6.15	117.73	108.50
24	X	23	HIS	N-CA-C	-6.15	104.64	111.71
34	i	1051	A	O4'-C1'-C2'	-6.15	101.45	107.60
16	P	35	GLN	CA-C-N	-6.15	114.51	123.00
16	P	35	GLN	C-N-CA	-6.15	114.51	123.00
21	U	108	PRO	CA-N-CD	-6.15	103.39	112.00
34	i	1858	U	O4'-C1'-C2'	-6.15	101.45	107.60
34	i	343	C	C4'-C3'-C2'	6.15	108.75	102.60
34	i	151	C	O5'-C5'-C4'	-6.15	102.28	111.50
34	i	168	C	O4'-C1'-C2'	-6.15	101.45	107.60
34	i	1514	U	O4'-C1'-C2'	-6.15	99.65	105.80
34	i	227	A	C1'-O4'-C4'	6.15	116.05	109.90
34	i	1355	U	O4'-C1'-N1	6.15	117.72	108.50
1	A	53	ARG	N-CA-CB	-6.14	101.09	110.12
34	i	1570	G	C4'-C3'-C2'	-6.14	96.46	102.60
4	D	210	ILE	O-C-N	6.14	129.85	123.03
34	i	162	C	P-O3'-C3'	6.14	129.41	120.20
34	i	689	G	C3'-C2'-C1'	6.14	107.44	101.30
34	i	1026	A	O4'-C1'-C2'	-6.14	101.46	107.60
34	i	1199	G	O4'-C1'-C2'	6.14	113.74	107.60
34	i	1406	C	C3'-C2'-C1'	6.14	107.44	101.30
34	i	1708	C	N1-C1'-C2'	6.14	121.21	112.00
34	i	1632	A	C1'-O4'-C4'	6.14	115.84	109.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	535	A	O4'-C1'-C2'	-6.13	101.47	107.60
11	K	41	PRO	CA-N-CD	-6.13	103.41	112.00
12	L	150	GLY	O-C-N	6.13	128.91	122.59
27	a	49	ALA	N-CA-C	6.13	118.75	111.33
34	i	1448	A	C3'-C2'-C1'	6.13	107.63	101.50
34	i	337	G	O4'-C1'-C2'	-6.13	101.47	107.60
34	i	1766	C	O4'-C1'-C2'	-6.13	101.47	107.60
34	i	608	C	O4'-C1'-C2'	-6.13	101.47	107.60
34	i	1546	U	C1'-C2'-O2'	6.13	117.59	108.40
34	i	276	U	O4'-C1'-C2'	-6.12	101.48	107.60
34	i	798	A	C1'-C2'-O2'	6.12	117.58	108.40
34	i	1660	G	C1'-O4'-C4'	-6.12	103.58	109.70
12	L	100	ASN	N-CA-C	6.12	120.71	107.49
33	g	2	THR	CA-C-N	-6.12	109.85	121.54
33	g	2	THR	C-N-CA	-6.12	109.85	121.54
34	i	1671	U	O4'-C1'-N1	6.12	117.68	108.50
9	I	116	HIS	N-CA-C	6.12	118.03	111.36
34	i	1418	G	O4'-C1'-N9	6.12	117.67	108.50
2	B	155	TYR	CB-CA-C	-6.11	97.15	109.68
34	i	1776	G	O4'-C4'-C3'	-6.11	97.89	104.00
34	i	1086	C	O4'-C1'-C2'	-6.11	101.49	107.60
34	i	735	C	O3'-P-O5'	-6.11	94.83	104.00
34	i	432	C	C3'-C2'-C1'	6.11	107.41	101.30
34	i	1532	A	C5'-C4'-C3'	-6.11	106.84	116.00
34	i	1766	C	C3'-C2'-C1'	6.11	107.41	101.30
34	i	1447	G	O3'-P-O5'	-6.10	94.84	104.00
34	i	1370	C	N1-C1'-C2'	6.10	121.15	112.00
3	C	57	ASP	CA-CB-CG	-6.10	106.50	112.60
34	i	1103	G	O4'-C1'-N9	6.10	117.65	108.50
34	i	1023	A	C2'-C3'-O3'	-6.10	104.55	113.70
34	i	491	C	P-O3'-C3'	6.10	129.34	120.20
34	i	1315	U	O4'-C1'-N1	6.09	117.64	108.50
34	i	1410	A	C4'-C3'-O3'	-6.09	103.86	113.00
34	i	1390	G	C2'-C3'-O3'	6.09	122.84	113.70
2	B	212	VAL	N-CA-C	-6.09	99.52	108.54
34	i	514	U	O4'-C1'-C2'	-6.09	101.51	107.60
33	g	12	LYS	CB-CA-C	-6.09	100.10	114.16
34	i	1271	G	C5'-C4'-C3'	6.08	125.12	116.00
34	i	148	U	O4'-C1'-C2'	-6.08	101.52	107.60
12	L	95	TYR	CA-C-N	-6.08	114.98	123.13
12	L	95	TYR	C-N-CA	-6.08	114.98	123.13
14	N	82	PRO	N-CA-C	6.08	124.99	112.47

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	W	55	ASP	N-CA-C	-6.08	102.35	110.55
34	i	441	G	P-O5'-C5'	6.07	130.01	120.90
34	i	1191	A	O3'-P-O5'	-6.07	94.89	104.00
3	C	262	HIS	CB-CA-C	-6.07	98.34	110.42
34	i	564	A	N9-C1'-C2'	6.07	121.11	112.00
34	i	1118	A	C4'-C3'-C2'	-6.07	96.53	102.60
34	i	1517	A	P-O3'-C3'	-6.07	111.10	120.20
34	i	1637	U	O4'-C1'-C2'	-6.07	101.53	107.60
34	i	625	G	C5'-C4'-C3'	6.06	125.09	116.00
34	i	1782	A	O4'-C1'-C2'	-6.06	101.54	107.60
7	G	129	VAL	CA-C-N	6.06	126.38	119.83
7	G	129	VAL	C-N-CA	6.06	126.38	119.83
34	i	490	A	P-O3'-C3'	6.06	129.29	120.20
4	D	167	TYR	CA-CB-CG	-6.06	103.00	113.90
34	i	216	U	O4'-C1'-C2'	-6.06	101.54	107.60
34	i	149	A	O4'-C1'-C2'	-6.05	101.55	107.60
34	i	651	U	O4'-C1'-C2'	-6.05	101.55	107.60
34	i	1258	C	C1'-O4'-C4'	-6.05	103.84	109.90
33	g	93	THR	CB-CA-C	-6.05	99.43	110.63
34	i	1617	U	C1'-C2'-O2'	-6.05	102.72	111.80
20	T	42	HIS	ND1-CE1-NE2	6.05	114.45	108.40
33	g	278	SER	N-CA-C	6.05	117.67	111.14
34	i	998	U	O4'-C1'-C2'	-6.05	101.55	107.60
34	i	1200	A	O4'-C1'-C2'	-6.05	101.55	107.60
25	Y	99	LYS	N-CA-C	6.04	123.67	110.80
34	i	396	U	N1-C1'-C2'	6.04	121.07	112.00
34	i	1771	G	C1'-O4'-C4'	-6.04	103.86	109.90
11	K	40	VAL	CB-CA-C	-6.04	100.36	111.36
34	i	168	C	C3'-C2'-C1'	6.04	107.34	101.30
34	i	1282	G	O3'-P-O5'	-6.04	94.94	104.00
34	i	796	U	O4'-C1'-N1	6.04	117.56	108.50
34	i	1826	A	P-O5'-C5'	6.04	129.96	120.90
4	D	113	LEU	N-CA-C	-6.04	97.94	110.80
25	Y	36	PRO	CA-C-O	-6.04	114.56	121.56
34	i	332	C	C3'-C2'-C1'	6.04	107.34	101.30
18	R	90	ALA	N-CA-C	6.03	118.31	110.53
22	V	9	VAL	CA-C-N	6.03	133.06	121.54
22	V	9	VAL	C-N-CA	6.03	133.06	121.54
34	i	560	C	N1-C1'-C2'	6.03	121.05	112.00
34	i	1600	G	C1'-O4'-C4'	-6.03	103.87	109.90
34	i	1157	U	O4'-C1'-N1	6.03	117.55	108.50
12	L	152	LYS	N-CA-C	-6.03	97.95	110.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1520	C	O4'-C1'-C2'	-6.03	101.57	107.60
17	Q	145	TYR	CB-CA-C	-6.03	107.90	116.34
4	D	129	SER	N-CA-C	-6.02	104.79	111.71
34	i	741	C	C5'-C4'-C3'	6.02	125.03	116.00
34	i	1515	G	C5'-C4'-C3'	6.02	125.03	116.00
34	i	525	G	P-O3'-C3'	6.02	129.23	120.20
34	i	1344	G	N9-C1'-C2'	-6.02	102.97	112.00
33	g	109	LEU	N-CA-C	6.02	117.92	111.36
34	i	1656	A	O5'-C5'-C4'	-6.02	102.47	111.50
34	i	1518	C	P-O5'-C5'	-6.01	111.88	120.90
34	i	1833	U	O4'-C1'-N1	6.01	117.52	108.50
12	L	117	PHE	CA-CB-CG	-6.01	107.79	113.80
34	i	1231	G	O4'-C1'-N9	6.01	117.52	108.50
34	i	1289	A	O4'-C1'-C2'	-6.01	101.59	107.60
34	i	541	U	O4'-C1'-C2'	6.01	113.61	107.60
34	i	1527	C	C3'-C2'-C1'	6.01	107.31	101.30
34	i	1589	A	C5'-C4'-C3'	6.01	125.01	116.00
34	i	1111	U	P-O3'-C3'	6.01	129.21	120.20
25	Y	45	ALA	N-CA-C	-6.00	104.06	111.33
26	Z	107	VAL	CA-CB-CG2	6.00	120.61	110.40
28	b	50	ALA	N-CA-C	6.00	121.47	114.62
10	J	164	PRO	CB-CA-C	6.00	121.58	112.21
34	i	343	C	C4'-C3'-O3'	-6.00	103.99	113.00
34	i	358	U	O4'-C1'-N1	6.00	117.20	108.20
34	i	570	U	C2'-C3'-O3'	-6.00	104.69	113.70
34	i	1059	C	C3'-C2'-C1'	6.00	107.30	101.30
34	i	1781	G	C1'-C2'-O2'	6.00	117.41	108.40
8	H	193	GLN	CA-C-N	6.00	132.50	121.70
8	H	193	GLN	C-N-CA	6.00	132.50	121.70
34	i	14	C	O4'-C1'-C2'	-6.00	101.60	107.60
34	i	835	C	C1'-C2'-O2'	6.00	120.80	111.80
34	i	1060	C	C3'-C2'-C1'	6.00	107.30	101.30
34	i	1425	G	C3'-C2'-O2'	6.00	119.70	110.70
16	P	121	ILE	CA-C-N	-6.00	111.17	120.88
16	P	121	ILE	C-N-CA	-6.00	111.17	120.88
34	i	1090	C	O4'-C1'-C2'	-6.00	101.60	107.60
34	i	1319	U	O4'-C1'-N1	6.00	117.50	108.50
34	i	427	G	N9-C1'-C2'	6.00	120.99	112.00
34	i	1044	G	P-O5'-C5'	5.99	129.89	120.90
34	i	1361	G	O5'-C5'-C4'	-5.99	102.51	111.50
34	i	1413	C	C5'-C4'-C3'	5.99	124.99	116.00
34	i	1596	A	C2'-C3'-O3'	-5.99	104.72	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	462	C	N1-C1'-C2'	5.99	120.98	112.00
34	i	1305	C	C3'-C2'-C1'	5.99	107.29	101.30
6	F	44	LYS	N-CA-C	5.99	123.55	110.80
17	Q	146	ARG	CA-CB-CG	5.99	126.07	114.10
10	J	89	GLU	CB-CA-C	-5.98	100.81	110.74
21	U	105	SER	CA-C-O	-5.98	114.90	121.84
34	i	94	G	N9-C1'-C2'	5.98	120.97	112.00
34	i	1184	A	C3'-C2'-C1'	5.98	107.28	101.30
1	A	53	ARG	N-CA-C	5.98	117.80	111.28
34	i	1105	C	O4'-C1'-C2'	5.98	113.58	107.60
34	i	1740	A	C4'-C3'-C2'	-5.98	96.62	102.60
34	i	1413	C	C1'-O4'-C4'	5.98	115.88	109.90
7	G	35	GLU	CA-C-N	-5.98	114.98	123.17
7	G	35	GLU	C-N-CA	-5.98	114.98	123.17
34	i	1446	G	O4'-C1'-N9	5.98	117.47	108.50
34	i	1819	A	C2'-C3'-O3'	5.98	122.67	113.70
34	i	365	U	O4'-C1'-N1	5.98	117.47	108.50
34	i	1806	U	O4'-C1'-N1	5.97	117.46	108.50
34	i	76	U	N1-C1'-C2'	5.97	120.96	112.00
34	i	817	G	P-O3'-C3'	5.97	129.16	120.20
34	i	1037	G	N9-C1'-C2'	5.97	120.96	112.00
34	i	727	G	N9-C1'-C2'	5.97	120.96	112.00
16	P	23	ASP	N-CA-C	-5.97	103.74	111.02
33	g	144	ASP	N-CA-C	5.97	123.52	110.80
34	i	639	U	C1'-C2'-O2'	5.97	117.36	108.40
34	i	740	G	C3'-C2'-C1'	5.97	107.27	101.30
34	i	1773	G	O3'-P-O5'	5.97	112.95	104.00
34	i	235	C	N1-C1'-C2'	5.97	120.95	112.00
34	i	1671	U	P-O3'-C3'	-5.96	111.25	120.20
34	i	582	C	N1-C1'-C2'	-5.96	105.06	114.00
34	i	853	U	C1'-O4'-C4'	-5.96	103.94	109.90
21	U	75	LYS	N-CA-C	-5.96	99.43	108.67
34	i	417	U	O4'-C1'-N1	5.96	117.44	108.50
34	i	443	C	N1-C1'-C2'	5.96	120.94	112.00
34	i	1300	U	N1-C1'-C2'	5.96	120.94	112.00
34	i	107	A	O4'-C1'-C2'	-5.96	101.64	107.60
34	i	820	C	N1-C1'-C2'	5.96	120.94	112.00
34	i	1007	A	O4'-C1'-N9	5.96	117.44	108.50
34	i	1270	G	C3'-C2'-C1'	5.96	107.46	101.50
34	i	635	C	C3'-C2'-C1'	5.96	107.25	101.30
34	i	1301	C	N1-C1'-C2'	5.95	120.93	112.00
4	D	102	ALA	O-C-N	-5.95	115.84	122.03

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	f	102	VAL	N-CA-C	5.95	121.72	109.34
34	i	224	U	P-O5'-C5'	5.95	129.83	120.90
34	i	976	A	C1'-O4'-C4'	-5.95	103.95	109.90
22	V	24	ILE	N-CA-C	-5.95	100.02	108.58
34	i	31	U	O4'-C1'-N1	5.95	117.42	108.50
34	i	1447	G	O4'-C1'-C2'	-5.95	101.66	107.60
34	i	149	A	C3'-C2'-C1'	5.94	107.24	101.30
34	i	637	U	O4'-C1'-C2'	-5.94	101.66	107.60
33	g	201	SER	CA-C-N	5.94	125.64	119.05
33	g	201	SER	C-N-CA	5.94	125.64	119.05
34	i	800	U	O4'-C1'-N1	5.94	117.41	108.50
34	i	1516	C	O3'-P-O5'	5.94	112.91	104.00
2	B	146	CYS	O-C-N	-5.94	116.23	123.30
34	i	1267	C	N1-C1'-C2'	5.94	120.91	112.00
19	S	139	THR	CA-C-O	5.93	121.38	117.94
33	g	139	LYS	N-CA-C	5.93	117.83	111.36
34	i	110	U	C4'-C3'-O3'	-5.93	104.10	113.00
34	i	169	U	P-O3'-C3'	5.93	129.10	120.20
34	i	319	G	O3'-P-O5'	5.93	112.90	104.00
34	i	839	C	O4'-C1'-C2'	-5.93	101.67	107.60
34	i	1737	C	N1-C1'-C2'	5.93	120.90	112.00
34	i	160	U	C2'-C3'-O3'	5.93	118.40	109.50
34	i	413	U	O4'-C1'-N1	5.93	117.40	108.50
16	P	17	TYR	CA-C-O	-5.93	112.03	120.51
34	i	34	U	C1'-O4'-C4'	-5.93	103.97	109.90
33	g	276	SER	CA-C-O	5.93	124.04	119.18
34	i	1578	C	C3'-C2'-C1'	5.92	107.22	101.30
34	i	1593	G	C2'-C3'-O3'	5.92	118.38	109.50
34	i	1860	A	P-O3'-C3'	5.92	129.08	120.20
8	H	36	LEU	CA-CB-CG	-5.92	95.58	116.30
34	i	440	C	O4'-C1'-C2'	-5.92	101.68	107.60
34	i	520	U	N1-C1'-C2'	-5.92	103.12	112.00
20	T	4	VAL	O-C-N	-5.92	113.53	123.00
32	f	85	TYR	CA-C-N	5.92	132.84	121.54
32	f	85	TYR	C-N-CA	5.92	132.84	121.54
34	i	1742	C	O3'-P-O5'	-5.92	95.12	104.00
2	B	57	ILE	CA-C-N	-5.91	111.75	120.38
2	B	57	ILE	C-N-CA	-5.91	111.75	120.38
3	C	108	ARG	N-CA-C	5.91	117.77	108.96
9	I	8	TRP	CG-CD2-CE3	-5.91	127.99	133.90
23	W	84	LYS	CA-C-N	5.91	132.23	121.41
23	W	84	LYS	C-N-CA	5.91	132.23	121.41

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1723	U	O4'-C1'-C2'	-5.91	101.69	107.60
1	A	53	ARG	CD-NE-CZ	-5.91	116.12	124.40
34	i	1455	G	O4'-C1'-C2'	5.91	113.51	107.60
34	i	1376	C	O4'-C1'-C2'	-5.91	101.69	107.60
3	C	233	TYR	CA-CB-CG	-5.90	103.28	113.90
33	g	284	PRO	N-CA-C	-5.90	95.44	113.27
24	X	25	LYS	N-CA-C	5.90	117.71	111.28
34	i	1433	C	C1'-O4'-C4'	-5.90	104.00	109.90
34	i	1479	A	O4'-C1'-C2'	-5.90	101.70	107.60
34	i	672	U	O4'-C1'-N1	5.90	117.35	108.50
34	i	1404	U	C1'-O4'-C4'	-5.90	104.00	109.90
2	B	187	LYS	N-CA-C	5.90	117.79	111.36
33	g	92	LEU	O-C-N	5.90	128.37	122.12
34	i	1000	U	O4'-C1'-N1	5.90	117.35	108.50
11	K	62	PHE	CA-CB-CG	-5.90	107.90	113.80
16	P	72	LYS	CA-C-N	-5.90	112.47	119.84
16	P	72	LYS	C-N-CA	-5.90	112.47	119.84
18	R	25	GLY	CA-C-N	5.90	130.57	120.72
18	R	25	GLY	C-N-CA	5.90	130.57	120.72
34	i	378	U	N1-C1'-C2'	5.90	120.84	112.00
8	H	111	LYS	CA-CB-CG	5.89	125.89	114.10
34	i	1206	G	O4'-C1'-N9	5.89	117.34	108.50
34	i	1209	C	N1-C1'-C2'	5.89	120.84	112.00
21	U	27	ARG	N-CA-C	5.89	123.35	110.80
34	i	836	C	O3'-P-O5'	-5.89	95.16	104.00
34	i	1019	A	C1'-O4'-C4'	5.89	115.79	109.90
34	i	1020	A	O4'-C1'-C2'	-5.89	101.71	107.60
34	i	655	G	N9-C1'-C2'	5.89	120.83	112.00
34	i	1164	G	O4'-C1'-C2'	-5.89	101.71	107.60
34	i	1514	U	N1-C1'-C2'	-5.89	105.17	114.00
34	i	227	A	C3'-C2'-C1'	5.88	107.18	101.30
34	i	376	C	P-O5'-C5'	-5.88	112.08	120.90
34	i	163	U	O4'-C4'-C3'	-5.88	98.12	104.00
34	i	410	G	C1'-O4'-C4'	-5.88	104.02	109.90
22	V	71	ARG	N-CA-C	-5.88	104.22	111.33
34	i	489	G	P-O5'-C5'	-5.88	112.08	120.90
34	i	1331	G	N9-C1'-C2'	5.88	120.82	112.00
34	i	1052	U	P-O3'-C3'	-5.88	111.39	120.20
13	M	119	GLN	CB-CA-C	-5.87	108.12	116.34
24	X	7	LEU	N-CA-C	-5.87	104.88	111.28
34	i	1634	G	C3'-C2'-C1'	5.87	107.17	101.30
11	K	86	PRO	CA-C-O	-5.87	112.05	120.56

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	617	U	O4'-C1'-C2'	-5.87	99.93	105.80
34	i	1355	U	C1'-O4'-C4'	5.87	115.77	109.90
4	D	24	PHE	CA-CB-CG	-5.87	107.93	113.80
34	i	172	U	O4'-C1'-C2'	-5.87	99.93	105.80
19	S	82	TRP	CB-CA-C	-5.87	97.94	110.32
18	R	60	ARG	N-CA-C	5.87	117.75	111.36
21	U	103	SER	O-C-N	-5.87	114.77	122.39
34	i	275	C	C3'-C2'-C1'	5.87	107.17	101.30
34	i	1691	C	O4'-C1'-C2'	-5.87	101.73	107.60
34	i	207	U	N1-C1'-C2'	5.86	120.79	112.00
34	i	368	U	O4'-C1'-N1	5.86	117.29	108.50
34	i	516	A	C5'-C4'-C3'	5.86	124.79	116.00
34	i	798	A	C1'-O4'-C4'	-5.86	104.04	109.90
34	i	1269	C	O3'-P-O5'	-5.86	95.21	104.00
1	A	159	ILE	CA-CB-CG1	-5.86	100.44	110.40
34	i	57	U	C1'-O4'-C4'	5.86	115.76	109.90
34	i	53	C	C3'-C2'-C1'	5.85	107.15	101.30
34	i	178	C	N1-C1'-C2'	5.85	120.78	112.00
15	O	42	VAL	O-C-N	5.85	129.17	123.03
34	i	301	C	O4'-C1'-C2'	-5.85	101.75	107.60
34	i	529	C	O4'-C1'-C2'	-5.85	101.75	107.60
34	i	1348	G	N9-C1'-C2'	5.85	120.77	112.00
34	i	1718	G	O4'-C1'-N9	5.85	117.27	108.50
21	U	68	THR	O-C-N	5.84	127.96	121.53
28	b	4	ALA	N-CA-C	5.84	117.13	107.20
34	i	614	C	C5'-C4'-C3'	-5.84	107.23	116.00
20	T	82	ARG	NH1-CZ-NH2	-5.84	111.71	119.30
34	i	1113	C	C3'-C2'-C1'	-5.84	95.46	101.30
34	i	633	A	O4'-C1'-C2'	-5.84	99.96	105.80
34	i	997	A	C1'-O4'-C4'	5.84	115.54	109.70
34	i	1417	A	O4'-C1'-C2'	-5.83	101.77	107.60
34	i	558	C	O4'-C1'-C2'	-5.83	101.77	107.60
6	F	61	PHE	N-CA-C	5.83	117.72	111.36
10	J	110	LEU	CA-C-N	5.83	132.68	121.54
10	J	110	LEU	C-N-CA	5.83	132.68	121.54
10	J	123	ILE	CA-C-N	5.83	132.68	121.54
10	J	123	ILE	C-N-CA	5.83	132.68	121.54
34	i	429	A	N9-C1'-C2'	-5.83	103.25	112.00
9	I	191	GLU	CB-CA-C	-5.83	99.90	111.91
34	i	2	A	P-O3'-C3'	5.83	128.94	120.20
34	i	1489	C	N1-C1'-C2'	-5.83	105.26	114.00
1	A	168	ALA	CB-CA-C	-5.83	109.84	116.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	Y	11	LYS	N-CA-C	5.83	119.43	111.39
34	i	910	U	O4'-C1'-C2'	-5.83	101.77	107.60
19	S	49	ASP	CA-C-N	-5.82	115.59	123.10
19	S	49	ASP	C-N-CA	-5.82	115.59	123.10
34	i	525	G	O3'-P-O5'	-5.82	95.27	104.00
34	i	1603	U	N1-C1'-C2'	5.82	120.73	112.00
16	P	14	LYS	CB-CA-C	-5.82	109.89	116.63
34	i	1827	C	C3'-C2'-C1'	5.82	107.11	101.30
34	i	1837	G	O4'-C1'-C2'	5.82	113.42	107.60
16	P	35	GLN	O-C-N	5.81	129.02	122.22
34	i	571	U	P-O3'-C3'	-5.81	111.48	120.20
34	i	1604	C	O4'-C1'-C2'	-5.81	101.79	107.60
34	i	949	C	O3'-P-O5'	-5.81	95.28	104.00
34	i	1323	G	N9-C1'-C2'	5.81	120.72	112.00
34	i	1500	U	O4'-C1'-N1	5.81	117.22	108.50
34	i	1544	U	N1-C1'-C2'	5.81	120.72	112.00
34	i	1090	C	N1-C1'-C2'	5.81	120.71	112.00
15	O	138	ASP	N-CA-C	5.81	123.17	110.80
26	Z	95	GLY	N-CA-C	5.81	119.44	111.54
34	i	893	U	C4'-C3'-O3'	5.81	121.71	113.00
19	S	40	TYR	CB-CG-CD1	5.80	129.51	120.80
24	X	139	GLU	N-CA-C	5.80	119.67	109.80
34	i	1693	C	C3'-C2'-C1'	5.80	107.31	101.50
5	E	74	GLY	CA-C-N	-5.80	115.26	123.03
5	E	74	GLY	C-N-CA	-5.80	115.26	123.03
7	G	120	ASP	CA-C-N	-5.79	111.41	122.13
7	G	120	ASP	C-N-CA	-5.79	111.41	122.13
34	i	1679	C	O4'-C1'-C2'	-5.79	101.81	107.60
16	P	37	TYR	CA-C-N	5.79	132.60	121.54
16	P	37	TYR	C-N-CA	5.79	132.60	121.54
34	i	103	A	O4'-C1'-N9	5.79	116.89	108.20
26	Z	50	PHE	CB-CA-C	-5.79	100.11	109.72
34	i	861	A	O4'-C1'-N9	5.79	117.18	108.50
32	f	134	SER	CA-C-N	5.79	130.96	121.58
32	f	134	SER	C-N-CA	5.79	130.96	121.58
34	i	1542	C	C3'-C2'-C1'	5.79	107.09	101.30
34	i	1815	U	O4'-C1'-N1	5.79	117.18	108.50
34	i	1393	U	C5'-C4'-C3'	5.79	123.88	115.20
8	H	33	ASN	O-C-N	5.78	130.28	122.59
18	R	1	MET	CA-CB-CG	5.78	125.67	114.10
34	i	1014	U	C1'-C2'-O2'	5.78	117.08	108.40
34	i	1287	A	O4'-C1'-C2'	-5.78	101.82	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	G	147	LEU	N-CA-C	5.78	123.12	110.80
34	i	1637	U	C1'-O4'-C4'	5.78	115.68	109.90
15	O	122	SER	N-CA-C	-5.78	104.89	111.07
11	K	65	ARG	CA-C-N	-5.78	112.51	122.79
11	K	65	ARG	C-N-CA	-5.78	112.51	122.79
28	b	68	GLY	N-CA-C	-5.78	105.67	113.24
2	B	21	VAL	N-CA-C	5.77	121.34	109.34
7	G	128	THR	CA-C-N	-5.77	111.45	122.13
7	G	128	THR	C-N-CA	-5.77	111.45	122.13
34	i	431	C	C1'-O4'-C4'	-5.77	104.13	109.90
34	i	568	C	O4'-C1'-C2'	-5.77	101.83	107.60
9	I	134	GLU	CA-C-N	-5.77	112.75	120.54
9	I	134	GLU	C-N-CA	-5.77	112.75	120.54
26	Z	107	VAL	CB-CA-C	-5.77	104.58	111.97
34	i	1023	A	C4'-C3'-O3'	5.77	121.65	113.00
34	i	1452	G	N9-C1'-C2'	5.77	120.65	112.00
34	i	465	C	C3'-C2'-C1'	5.77	107.07	101.30
34	i	1000	U	O4'-C1'-C2'	-5.77	101.83	107.60
17	Q	134	GLY	O-C-N	-5.77	116.00	121.77
18	R	115	SER	N-CA-C	5.77	117.55	108.96
22	V	41	LYS	CB-CA-C	-5.77	109.39	117.23
34	i	1726	A	O4'-C1'-C2'	-5.77	101.83	107.60
8	H	16	PRO	CA-N-CD	-5.76	103.93	112.00
9	I	88	ASN	CA-CB-CG	-5.76	106.84	112.60
34	i	371	C	O3'-P-O5'	-5.76	95.36	104.00
19	S	6	PRO	CA-C-N	-5.76	110.54	121.54
19	S	6	PRO	C-N-CA	-5.76	110.54	121.54
20	T	41	LYS	N-CA-C	-5.76	105.09	111.71
34	i	913	U	O4'-C1'-C2'	-5.76	101.84	107.60
34	i	689	G	N9-C1'-C2'	5.75	120.63	112.00
34	i	903	G	C1'-C2'-O2'	5.75	117.03	108.40
8	H	106	ARG	CD-NE-CZ	5.75	132.45	124.40
26	Z	106	GLN	N-CA-C	5.75	117.41	107.93
34	i	684	A	C3'-C2'-C1'	-5.75	95.55	101.30
34	i	1328	A	C3'-C2'-C1'	5.74	107.04	101.30
34	i	77	A	N9-C1'-C2'	-5.74	103.39	112.00
34	i	1813	A	N9-C1'-C2'	5.74	120.61	112.00
19	S	82	TRP	N-CA-C	5.74	119.38	112.38
2	B	90	ASP	N-CA-C	5.73	116.97	108.60
10	J	165	TYR	O-C-N	-5.73	116.79	123.27
34	i	276	U	P-O5'-C5'	-5.73	112.30	120.90
16	P	122	THR	CB-CA-C	5.73	120.32	110.86

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
17	Q	134	GLY	C-N-CD	-5.73	101.50	125.00
34	i	369	C	C3'-C2'-C1'	5.73	107.03	101.30
34	i	1452	G	C1'-O4'-C4'	-5.73	104.17	109.90
9	I	184	ARG	CB-CG-CD	5.73	124.47	111.30
16	P	16	THR	N-CA-C	-5.73	99.91	109.24
16	P	38	SER	CA-C-N	5.73	132.48	121.54
16	P	38	SER	C-N-CA	5.73	132.48	121.54
34	i	293	A	O3'-P-O5'	-5.73	95.41	104.00
34	i	1427	G	N9-C1'-C2'	5.73	120.59	112.00
34	i	1309	A	O4'-C1'-C2'	-5.73	100.07	105.80
34	i	419	C	N1-C1'-C2'	5.72	120.59	112.00
10	J	123	ILE	N-CA-C	-5.72	105.56	113.00
34	i	1179	A	O4'-C1'-C2'	-5.72	101.88	107.60
25	Y	59	GLY	N-CA-C	-5.72	102.72	111.24
2	B	74	LEU	N-CA-C	5.72	117.59	111.36
3	C	148	VAL	CA-C-N	5.72	125.65	119.76
3	C	148	VAL	C-N-CA	5.72	125.65	119.76
34	i	385	G	O4'-C1'-N9	5.72	117.07	108.50
34	i	544	A	C1'-C2'-O2'	5.72	116.98	108.40
9	I	207	GLY	CA-C-O	-5.71	108.80	120.80
34	i	209	C	O5'-C5'-C4'	-5.71	102.93	111.50
22	V	46	PHE	N-CA-C	-5.71	102.08	110.42
6	F	21	GLY	N-CA-C	-5.71	99.65	113.18
19	S	141	ARG	CA-C-N	-5.71	111.42	121.70
19	S	141	ARG	C-N-CA	-5.71	111.42	121.70
34	i	1111	U	O4'-C1'-N1	5.71	116.76	108.20
34	i	1730	A	N9-C1'-C2'	5.71	120.56	112.00
26	Z	101	SER	CA-C-N	5.71	132.44	121.54
26	Z	101	SER	C-N-CA	5.71	132.44	121.54
20	T	8	ASP	CA-CB-CG	-5.70	106.90	112.60
34	i	977	A	O4'-C1'-C2'	-5.70	101.90	107.60
34	i	1437	U	O4'-C1'-C2'	-5.70	100.10	105.80
34	i	918	A	O4'-C1'-N9	5.70	117.05	108.50
15	O	151	LEU	N-CA-CB	5.70	120.19	110.50
34	i	109	U	C2'-C3'-O3'	5.70	122.25	113.70
34	i	1700	C	O4'-C1'-C2'	-5.70	101.90	107.60
34	i	1775	A	C3'-C2'-C1'	5.70	107.00	101.30
34	i	356	U	O4'-C1'-C2'	-5.70	101.90	107.60
34	i	1666	G	C1'-O4'-C4'	-5.70	104.20	109.90
34	i	1711	C	N1-C1'-C2'	5.70	120.54	112.00
34	i	1717	G	C5'-C4'-C3'	-5.70	107.46	116.00
34	i	531	U	O4'-C1'-C2'	-5.69	101.91	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1573	U	C1'-O4'-C4'	5.69	115.39	109.70
34	i	1715	U	O4'-C1'-N1	5.69	117.04	108.50
34	i	1822	C	O4'-C1'-C2'	-5.69	101.91	107.60
34	i	1442	A	C2'-C3'-O3'	-5.69	100.96	109.50
34	i	1535	G	P-O5'-C5'	-5.69	112.36	120.90
6	F	78	MET	O-C-N	5.69	130.24	123.24
9	I	8	TRP	CB-CG-CD1	5.69	135.43	126.90
34	i	684	A	C1'-O4'-C4'	-5.69	104.21	109.90
34	i	1656	A	C1'-O4'-C4'	-5.69	104.21	109.90
34	i	1738	G	C1'-O4'-C4'	-5.69	104.21	109.90
34	i	1112	C	C1'-C2'-O2'	5.68	120.33	111.80
34	i	1124	C	O4'-C1'-C2'	-5.68	101.92	107.60
34	i	1482	A	O4'-C1'-C2'	-5.68	101.92	107.60
34	i	1651	G	C1'-O4'-C4'	-5.68	104.22	109.90
11	K	93	THR	CB-CA-C	5.68	118.91	109.53
34	i	407	C	C3'-C2'-C1'	5.68	106.98	101.30
34	i	1080	A	C4'-C3'-O3'	5.68	121.52	113.00
34	i	1553	C	O3'-P-O5'	-5.68	95.48	104.00
21	U	107	GLU	N-CA-C	5.68	122.36	109.81
28	b	29	ASN	CB-CA-C	-5.68	101.58	111.35
34	i	1063	C	N1-C1'-C2'	5.68	120.52	112.00
34	i	859	U	N1-C1'-C2'	5.68	120.52	112.00
34	i	1154	G	O4'-C1'-N9	5.68	117.02	108.50
34	i	1251	G	P-O3'-C3'	-5.68	111.68	120.20
34	i	1386	U	N1-C1'-C2'	5.68	120.52	112.00
34	i	1622	C	C4'-C3'-O3'	-5.68	104.49	113.00
34	i	1841	G	N9-C1'-C2'	-5.68	103.48	112.00
9	I	3	ILE	CA-C-N	5.67	130.63	123.03
9	I	3	ILE	C-N-CA	5.67	130.63	123.03
25	Y	128	GLY	CA-C-O	-5.67	108.88	120.80
29	c	5	ARG	N-CA-C	5.67	126.89	111.00
34	i	312	C	C3'-C2'-C1'	5.67	106.97	101.30
34	i	913	U	O4'-C1'-N1	5.67	117.01	108.50
34	i	1772	C	O4'-C1'-N1	5.67	117.01	108.50
1	A	194	PRO	CA-C-O	-5.67	110.27	120.60
4	D	152	PHE	CA-CB-CG	-5.67	108.13	113.80
34	i	1572	G	O4'-C1'-C2'	-5.67	101.93	107.60
1	A	53	ARG	CB-CG-CD	-5.67	98.26	111.30
34	i	795	U	P-O3'-C3'	5.67	128.71	120.20
34	i	411	G	O4'-C1'-N9	5.67	117.00	108.50
34	i	790	A	C3'-C2'-C1'	5.67	106.97	101.30
34	i	1055	G	P-O3'-C3'	5.67	128.70	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1648	U	O4'-C1'-N1	5.67	117.00	108.50
9	I	129	LEU	N-CA-C	-5.67	105.01	111.07
34	i	948	G	O4'-C1'-N9	5.67	117.00	108.50
26	Z	115	GLY	CA-C-O	-5.67	108.90	120.80
34	i	1194	G	C3'-C2'-C1'	-5.66	95.64	101.30
34	i	1638	U	C3'-C2'-C1'	5.66	106.96	101.30
3	C	229	ILE	CB-CA-C	-5.66	104.50	112.14
34	i	1773	G	C3'-C2'-C1'	-5.66	95.64	101.30
25	Y	26	ASP	N-CA-C	-5.65	99.19	108.41
34	i	1537	C	N1-C1'-C2'	5.65	120.48	112.00
9	I	129	LEU	CA-C-N	5.65	127.83	120.26
9	I	129	LEU	C-N-CA	5.65	127.83	120.26
34	i	192	U	O3'-P-O5'	-5.65	95.52	104.00
8	H	106	ARG	CA-CB-CG	-5.65	102.81	114.10
9	I	157	LYS	N-CA-C	-5.65	105.03	111.07
34	i	539	C	O4'-C1'-C2'	-5.64	101.95	107.60
17	Q	145	TYR	N-CA-C	-5.64	99.65	108.00
34	i	1139	A	N9-C1'-C2'	5.64	120.46	112.00
34	i	1308	G	O4'-C1'-N9	-5.64	99.73	108.20
3	C	59	LYS	CA-C-N	-5.64	116.19	123.19
3	C	59	LYS	C-N-CA	-5.64	116.19	123.19
3	C	149	PRO	N-CA-CB	-5.64	98.29	103.31
34	i	77	A	C5'-C4'-C3'	5.64	124.46	116.00
9	I	155	ASN	CB-CA-C	-5.64	101.43	110.79
13	M	30	GLY	CA-C-N	-5.64	115.51	122.84
13	M	30	GLY	C-N-CA	-5.64	115.51	122.84
15	O	79	GLN	N-CA-C	5.64	117.23	111.14
34	i	373	G	C3'-C2'-C1'	5.64	106.94	101.30
34	i	1368	U	O4'-C1'-C2'	-5.64	101.96	107.60
34	i	1848	U	O4'-C1'-N1	5.64	116.96	108.50
34	i	377	C	O4'-C1'-C2'	-5.63	101.97	107.60
9	I	178	ARG	CD-NE-CZ	5.63	132.28	124.40
34	i	1062	U	O4'-C1'-N1	5.63	116.94	108.50
34	i	578	G	C4'-C3'-O3'	-5.63	100.96	109.40
34	i	789	G	C4'-C3'-C2'	-5.63	96.97	102.60
33	g	101	PHE	CA-CB-CG	-5.62	108.18	113.80
34	i	1610	U	N1-C1'-C2'	5.62	120.43	112.00
34	i	1837	G	C1'-O4'-C4'	-5.62	104.28	109.90
34	i	551	A	C2'-C3'-O3'	5.62	122.13	113.70
34	i	98	C	N1-C1'-C2'	-5.62	105.57	114.00
34	i	1114	C	C1'-C2'-O2'	5.62	116.83	108.40
34	i	1233	C	C1'-C2'-O2'	5.62	116.83	108.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1234	U	C4'-C3'-O3'	-5.62	104.57	113.00
34	i	1633	G	C3'-C2'-C1'	5.62	106.92	101.30
34	i	341	G	C4'-C3'-C2'	-5.62	96.98	102.60
34	i	631	A	O4'-C1'-N9	5.62	116.93	108.50
34	i	741	C	C3'-C2'-C1'	5.62	106.92	101.30
34	i	895	U	P-O5'-C5'	5.62	129.33	120.90
34	i	1648	U	O4'-C1'-C2'	-5.62	101.98	107.60
34	i	84	A	P-O5'-C5'	-5.62	112.48	120.90
34	i	827	G	C3'-C2'-C1'	-5.62	95.69	101.30
34	i	1442	A	O3'-P-O5'	-5.62	95.58	104.00
34	i	1128	C	N1-C1'-C2'	5.61	120.42	112.00
28	b	67	THR	N-CA-C	5.61	115.43	108.19
5	E	70	ILE	N-CA-C	5.61	115.94	107.75
34	i	827	G	O4'-C1'-N9	5.61	116.92	108.50
34	i	1857	A	C1'-O4'-C4'	5.61	115.31	109.70
34	i	862	U	O4'-C1'-N1	5.61	116.91	108.50
34	i	867	U	C1'-C2'-O2'	5.61	120.21	111.80
34	i	1237	A	P-O3'-C3'	5.61	128.61	120.20
34	i	1517	A	C5'-C4'-O4'	5.60	118.21	109.80
34	i	956	U	C1'-O4'-C4'	-5.60	104.30	109.90
34	i	1448	A	O4'-C1'-C2'	-5.60	100.20	105.80
34	i	684	A	O4'-C1'-N9	5.60	116.90	108.50
34	i	1068	U	P-O3'-C3'	5.60	128.60	120.20
2	B	132	GLY	N-CA-C	5.60	121.16	113.99
4	D	14	ASP	CA-CB-CG	-5.60	107.00	112.60
10	J	188	GLY	CA-C-O	-5.60	109.05	120.80
34	i	742	C	C4'-C3'-C2'	-5.60	97.00	102.60
34	i	1847	C	C1'-O4'-C4'	-5.60	104.30	109.90
34	i	61	A	O4'-C1'-N9	5.59	116.89	108.50
34	i	306	C	P-O5'-C5'	-5.59	112.51	120.90
34	i	458	A	P-O5'-C5'	-5.59	112.51	120.90
29	c	63	ARG	CA-C-N	-5.59	110.86	121.54
29	c	63	ARG	C-N-CA	-5.59	110.86	121.54
34	i	739	U	O4'-C1'-N1	5.59	116.59	108.20
2	B	146	CYS	N-CA-C	5.59	118.01	108.90
2	B	233	GLY	CA-C-O	-5.59	109.06	120.80
18	R	122	PRO	N-CA-C	5.59	123.99	112.47
20	T	143	LYS	CA-CB-CG	-5.59	102.92	114.10
31	e	115	ARG	N-CA-C	5.59	117.18	111.14
34	i	1193	G	O4'-C1'-N9	5.59	116.88	108.50
34	i	1329	U	O4'-C1'-C2'	-5.59	102.01	107.60
34	i	537	G	O3'-P-O5'	-5.59	95.62	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	53	C	C1'-O4'-C4'	5.59	115.49	109.90
34	i	1315	U	O4'-C1'-C2'	-5.58	102.02	107.60
9	I	105	ASP	CB-CA-C	5.58	121.53	110.42
12	L	6	THR	CA-C-N	-5.58	110.88	121.54
12	L	6	THR	C-N-CA	-5.58	110.88	121.54
34	i	906	G	C1'-O4'-C4'	-5.58	104.32	109.90
34	i	1471	G	C4'-C3'-C2'	-5.58	97.02	102.60
34	i	1672	U	O4'-C1'-N1	5.58	116.87	108.50
33	g	294	ASP	CB-CA-C	5.58	119.88	111.18
29	c	64	GLU	N-CA-C	5.57	122.67	110.80
34	i	832	G	O4'-C1'-N9	5.57	116.86	108.50
34	i	79	A	O4'-C1'-N9	5.57	116.56	108.20
34	i	1645	A	P-O5'-C5'	-5.57	112.55	120.90
12	L	157	LYS	CA-C-N	5.57	131.72	121.70
12	L	157	LYS	C-N-CA	5.57	131.72	121.70
34	i	1739	G	C1'-O4'-C4'	5.57	115.27	109.70
34	i	542	G	C3'-C2'-C1'	-5.57	95.73	101.30
34	i	909	A	C1'-C2'-O2'	-5.56	103.45	111.80
34	i	1787	A	O4'-C1'-C2'	-5.56	102.04	107.60
26	Z	78	LYS	N-CA-C	-5.56	98.95	110.80
34	i	114	G	O4'-C4'-C3'	-5.56	100.54	106.10
34	i	200	U	O4'-C1'-N1	5.56	116.84	108.50
34	i	856	G	O4'-C1'-C2'	-5.56	102.04	107.60
34	i	1611	U	N1-C1'-C2'	5.56	120.34	112.00
34	i	1622	C	N1-C1'-C2'	5.56	120.34	112.00
2	B	21	VAL	CB-CA-C	-5.56	102.17	111.29
34	i	25	A	O4'-C4'-C3'	-5.56	100.54	106.10
34	i	1107	U	O4'-C1'-C2'	-5.56	102.04	107.60
34	i	1714	A	O4'-C1'-C2'	-5.56	102.04	107.60
13	M	81	ASP	CA-C-N	5.56	127.73	120.28
13	M	81	ASP	C-N-CA	5.56	127.73	120.28
20	T	38	LYS	N-CA-C	5.56	117.42	111.36
34	i	510	A	C1'-O4'-C4'	-5.56	104.34	109.90
34	i	1137	G	P-O5'-C5'	5.56	129.24	120.90
34	i	1667	U	C1'-C2'-O2'	5.56	116.73	108.40
17	Q	118	THR	N-CA-CB	-5.56	108.54	114.10
21	U	108	PRO	N-CA-C	-5.55	102.55	111.38
29	c	5	ARG	CA-C-N	-5.55	115.89	122.11
29	c	5	ARG	C-N-CA	-5.55	115.89	122.11
34	i	159	A	O4'-C1'-C2'	-5.55	102.05	107.60
34	i	314	U	C1'-C2'-O2'	5.55	116.73	108.40
11	K	40	VAL	O-C-N	5.55	127.43	121.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1138	G	O4'-C1'-N9	5.55	116.83	108.50
34	i	1503	G	C3'-C2'-C1'	-5.55	95.95	101.50
34	i	1546	U	C3'-C2'-C1'	-5.55	95.75	101.30
3	C	97	VAL	O-C-N	-5.55	115.63	122.57
34	i	1859	C	P-O3'-C3'	-5.55	111.88	120.20
34	i	1290	G	O4'-C1'-N9	5.54	116.82	108.50
34	i	456	G	O4'-C1'-C2'	5.54	113.14	107.60
18	R	87	GLU	N-CA-C	-5.54	105.32	111.36
19	S	94	LYS	O-C-N	5.54	129.73	122.97
34	i	438	A	C3'-C2'-C1'	-5.54	95.96	101.50
34	i	1818	A	P-O3'-C3'	5.54	128.51	120.20
34	i	1114	C	C1'-O4'-C4'	5.54	115.44	109.90
12	L	146	THR	O-C-N	-5.54	115.84	122.15
11	K	85	LEU	N-CA-C	5.53	117.88	109.41
34	i	846	C	N1-C1'-C2'	5.53	120.30	112.00
3	C	46	LEU	N-CA-C	-5.53	99.80	109.48
17	Q	30	GLY	CA-C-N	-5.53	112.47	122.54
17	Q	30	GLY	C-N-CA	-5.53	112.47	122.54
34	i	1742	C	C5'-C4'-C3'	5.53	124.29	116.00
8	H	93	VAL	N-CA-C	5.53	120.84	109.34
34	i	991	G	O4'-C1'-N9	5.53	116.79	108.50
34	i	1779	C	C1'-O4'-C4'	5.53	115.23	109.70
4	D	125	PHE	CA-CB-CG	-5.53	108.27	113.80
34	i	671	U	O4'-C1'-N1	5.53	116.79	108.50
34	i	1190	A	O3'-P-O5'	-5.53	95.71	104.00
34	i	1845	A	P-O3'-C3'	5.53	128.49	120.20
16	P	28	MET	CA-C-O	5.52	128.41	120.51
34	i	984	C	N1-C1'-C2'	5.52	120.28	112.00
34	i	1665	C	O4'-C1'-C2'	-5.52	102.08	107.60
34	i	514	U	N1-C1'-C2'	5.52	120.28	112.00
34	i	1118	A	C1'-O4'-C4'	5.52	115.42	109.90
8	H	56	GLY	N-CA-C	5.52	126.26	113.18
34	i	1513	C	P-O3'-C3'	-5.52	111.93	120.20
22	V	82	ASN	CB-CA-C	-5.51	99.63	110.10
31	e	95	LYS	N-CA-C	5.51	119.10	112.38
34	i	72	C	P-O5'-C5'	5.51	129.16	120.90
34	i	840	U	P-O3'-C3'	-5.51	111.94	120.20
34	i	10	G	P-O3'-C3'	-5.51	111.94	120.20
34	i	1458	U	O3'-P-O5'	-5.51	95.74	104.00
34	i	522	C	C4'-C3'-C2'	-5.50	97.09	102.60
34	i	899	A	C3'-C2'-C1'	-5.50	95.80	101.30
34	i	188	U	N1-C1'-C2'	5.50	120.25	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	622	C	C3'-C2'-C1'	5.50	106.80	101.30
34	i	796	U	N1-C1'-C2'	5.50	120.25	112.00
34	i	1779	C	N1-C1'-C2'	-5.50	105.74	114.00
34	i	1021	U	O4'-C1'-C2'	-5.50	102.10	107.60
34	i	57	U	O4'-C1'-N1	5.50	116.75	108.50
34	i	311	C	N1-C1'-C2'	5.50	120.25	112.00
34	i	589	A	N9-C1'-C2'	5.50	120.25	112.00
34	i	1648	U	P-O3'-C3'	5.50	128.45	120.20
1	A	165	ASN	N-CA-C	5.50	122.51	110.80
34	i	676	U	O4'-C1'-N1	5.50	116.74	108.50
34	i	1642	A	C3'-C2'-C1'	-5.50	96.00	101.50
34	i	1849	G	O4'-C1'-C2'	5.50	113.09	107.60
34	i	305	U	P-O3'-C3'	-5.49	111.96	120.20
34	i	1546	U	N1-C1'-C2'	5.49	120.24	112.00
6	F	53	ALA	N-CA-C	-5.49	105.30	111.28
19	S	89	ASP	CB-CA-C	-5.49	99.49	110.42
34	i	657	U	N1-C1'-C2'	5.49	120.23	112.00
34	i	975	C	O4'-C1'-C2'	-5.49	102.11	107.60
23	W	128	PHE	N-CA-C	5.49	116.61	108.60
34	i	283	A	C4'-C3'-O3'	-5.49	104.77	113.00
34	i	577	A	P-O3'-C3'	-5.49	111.97	120.20
34	i	906	G	O4'-C1'-C2'	5.49	113.09	107.60
20	T	51	ASN	CA-CB-CG	-5.48	107.12	112.60
34	i	340	C	C3'-C2'-C1'	5.48	106.78	101.30
2	B	37	ALA	O-C-N	-5.48	115.53	122.27
33	g	213	ASP	CA-C-N	-5.48	113.58	122.30
33	g	213	ASP	C-N-CA	-5.48	113.58	122.30
34	i	1724	U	O4'-C1'-N1	5.48	116.72	108.50
34	i	65	C	C1'-O4'-C4'	5.48	115.38	109.90
34	i	808	A	O4'-C1'-C2'	-5.48	102.12	107.60
34	i	1299	C	C1'-C2'-O2'	5.48	116.62	108.40
34	i	1354	U	O4'-C1'-N1	5.48	116.72	108.50
34	i	564	A	O4'-C1'-C2'	-5.48	102.12	107.60
34	i	966	G	O3'-P-O5'	-5.48	95.78	104.00
34	i	984	C	C3'-C2'-C1'	5.48	106.78	101.30
34	i	432	C	O4'-C1'-C2'	-5.47	102.12	107.60
34	i	1171	G	C1'-O4'-C4'	-5.47	104.42	109.90
3	C	252	GLN	N-CA-C	5.47	117.33	111.36
12	L	22	ARG	CA-C-N	5.47	131.82	121.97
12	L	22	ARG	C-N-CA	5.47	131.82	121.97
34	i	1361	G	O3'-P-O5'	-5.47	95.79	104.00
34	i	1424	G	N9-C1'-C2'	-5.47	103.79	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1536	G	O4'-C1'-N9	5.47	116.71	108.50
34	i	877	G	C1'-O4'-C4'	-5.47	104.43	109.90
34	i	1643	G	O3'-P-O5'	-5.47	95.80	104.00
1	A	193	HIS	CA-C-O	-5.47	115.01	120.64
5	E	167	GLY	N-CA-C	-5.47	101.66	110.95
34	i	682	G	O4'-C1'-N9	5.47	116.70	108.50
6	F	151	ILE	CA-C-N	-5.47	113.44	120.65
6	F	151	ILE	C-N-CA	-5.47	113.44	120.65
34	i	372	C	P-O3'-C3'	-5.47	112.00	120.20
34	i	878	U	O4'-C1'-N1	5.47	116.70	108.50
34	i	1375	A	C5'-C4'-C3'	-5.47	107.80	116.00
34	i	31	U	C1'-O4'-C4'	5.46	115.36	109.90
34	i	155	G	O5'-C5'-C4'	-5.46	103.31	111.50
34	i	405	A	O4'-C1'-N9	5.46	116.69	108.50
34	i	1305	C	N1-C1'-C2'	5.46	120.19	112.00
34	i	900	A	C1'-O4'-C4'	-5.46	104.44	109.90
34	i	1669	G	N9-C1'-C2'	5.46	120.19	112.00
34	i	1682	C	C3'-C2'-C1'	5.46	106.76	101.30
34	i	186	G	N9-C1'-C2'	5.46	120.19	112.00
34	i	1223	G	N9-C1'-C2'	5.46	120.19	112.00
34	i	1329	U	O4'-C1'-N1	5.46	116.69	108.50
6	F	35	LEU	O-C-N	5.46	129.48	122.39
8	H	7	LYS	CA-C-N	-5.46	112.15	121.97
8	H	7	LYS	C-N-CA	-5.46	112.15	121.97
34	i	792	G	C3'-C2'-C1'	-5.46	95.84	101.30
34	i	1311	U	C3'-C2'-C1'	-5.46	95.84	101.30
34	i	1486	G	O4'-C1'-C2'	5.46	113.06	107.60
13	M	12	MET	CA-C-N	5.46	131.05	122.21
13	M	12	MET	C-N-CA	5.46	131.05	122.21
31	e	100	LYS	CA-C-N	-5.45	111.11	122.07
31	e	100	LYS	C-N-CA	-5.45	111.11	122.07
32	f	138	ARG	CA-C-N	5.45	130.00	121.76
32	f	138	ARG	C-N-CA	5.45	130.00	121.76
34	i	299	G	P-O3'-C3'	5.45	128.38	120.20
34	i	1590	U	N1-C1'-C2'	-5.45	103.82	112.00
34	i	1699	C	O4'-C1'-C2'	-5.45	102.15	107.60
34	i	410	G	O4'-C1'-C2'	5.45	113.05	107.60
34	i	1667	U	N1-C1'-C2'	5.45	120.18	112.00
34	i	794	G	N9-C1'-C2'	5.45	122.17	114.00
34	i	1636	A	O4'-C1'-C2'	-5.45	102.15	107.60
34	i	19	A	O4'-C1'-N9	5.44	116.67	108.50
33	g	83	TRP	N-CA-C	-5.44	105.35	111.28

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	549	G	O3'-P-O5'	-5.44	95.84	104.00
34	i	1671	U	C1'-C2'-O2'	5.44	116.56	108.40
34	i	1733	C	O4'-C1'-C2'	-5.44	102.16	107.60
3	C	257	HIS	N-CA-C	-5.44	105.35	111.28
34	i	729	C	C3'-C2'-C1'	5.44	106.74	101.30
34	i	1092	G	C2'-C3'-O3'	5.44	117.66	109.50
5	E	170	THR	O-C-N	5.44	131.13	122.81
34	i	896	C	P-O5'-C5'	5.44	129.06	120.90
34	i	1360	U	P-O3'-C3'	-5.44	112.04	120.20
34	i	1777	C	C3'-C2'-C1'	5.44	106.94	101.50
34	i	1105	C	C3'-C2'-C1'	-5.44	95.86	101.30
34	i	1743	G	O4'-C1'-N9	5.44	116.65	108.50
6	F	60	ARG	N-CA-C	5.43	117.01	111.14
34	i	612	C	C1'-O4'-C4'	-5.43	104.47	109.90
2	B	75	GLN	O-C-N	5.43	129.29	122.23
19	S	81	ASP	CA-C-N	-5.43	111.91	120.60
19	S	81	ASP	C-N-CA	-5.43	111.91	120.60
24	X	124	LYS	CA-C-N	5.43	130.40	122.69
24	X	124	LYS	C-N-CA	5.43	130.40	122.69
28	b	63	LEU	CA-C-N	5.43	131.91	121.54
28	b	63	LEU	C-N-CA	5.43	131.91	121.54
34	i	734	C	O4'-C1'-C2'	-5.43	102.17	107.60
34	i	318	U	C5'-C4'-C3'	5.43	124.14	116.00
34	i	592	G	O4'-C1'-N9	5.43	116.64	108.50
34	i	1222	G	C1'-O4'-C4'	-5.43	104.47	109.90
34	i	163	U	O3'-P-O5'	-5.42	95.86	104.00
20	T	37	VAL	N-CA-C	5.42	116.58	109.21
21	U	93	SER	C-N-CD	5.42	147.24	125.00
34	i	1471	G	O4'-C1'-C2'	5.42	111.22	105.80
34	i	1603	U	O4'-C1'-C2'	-5.42	102.18	107.60
19	S	139	THR	O-C-N	5.42	125.54	121.47
34	i	611	C	C3'-C2'-C1'	5.42	106.72	101.30
11	K	80	ARG	N-CA-C	-5.42	105.37	111.28
34	i	209	C	O4'-C1'-C2'	-5.42	102.18	107.60
34	i	1326	G	C1'-O4'-C4'	-5.42	104.28	109.70
35	j	75	A	C2'-C3'-O3'	-5.42	101.37	109.50
1	A	195	TRP	N-CA-C	5.42	118.23	109.40
34	i	1346	U	O4'-C1'-N1	5.42	116.62	108.50
6	F	56	TYR	CA-CB-CG	-5.42	104.15	113.90
34	i	41	G	C1'-O4'-C4'	-5.41	104.29	109.70
34	i	625	G	N9-C1'-C2'	5.41	120.12	112.00
34	i	662	A	O4'-C1'-N9	5.41	116.32	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1413	C	O3'-P-O5'	5.41	112.12	104.00
10	J	144	ILE	O-C-N	5.41	127.27	121.10
11	K	35	LEU	CA-CB-CG	-5.41	97.37	116.30
22	V	45	ARG	N-CA-C	5.41	118.86	111.39
34	i	154	U	O4'-C1'-C2'	-5.41	102.19	107.60
23	W	88	LYS	N-CA-C	5.41	116.98	111.14
34	i	1004	A	O3'-P-O5'	-5.41	95.89	104.00
34	i	1374	A	O4'-C1'-C2'	-5.41	100.39	105.80
34	i	1692	A	N9-C1'-C2'	-5.41	105.89	114.00
34	i	1794	A	C3'-C2'-C1'	5.41	106.71	101.30
7	G	131	ARG	CG-CD-NE	5.41	123.89	112.00
34	i	1039	G	C3'-C2'-C1'	5.41	106.71	101.30
11	K	87	PRO	CA-C-O	-5.40	110.77	120.60
34	i	443	C	C3'-C2'-C1'	5.40	106.70	101.30
34	i	457	G	O4'-C1'-C2'	-5.40	102.20	107.60
34	i	1555	U	O4'-C1'-N1	5.40	116.60	108.50
1	A	189	ILE	N-CA-C	-5.40	106.54	111.67
15	O	145	GLY	CA-C-O	5.40	125.73	122.22
34	i	538	C	O4'-C1'-C2'	-5.40	102.20	107.60
34	i	1733	C	N1-C1'-C2'	5.40	120.10	112.00
34	i	338	A	N9-C1'-C2'	5.40	120.09	112.00
34	i	1570	G	O4'-C1'-N9	5.39	116.59	108.50
20	T	42	HIS	CA-CB-CG	-5.39	108.41	113.80
34	i	882	A	C3'-C2'-C1'	5.39	106.69	101.30
34	i	1287	A	P-O3'-C3'	5.39	128.29	120.20
34	i	1765	G	N9-C1'-C2'	5.39	120.09	112.00
34	i	1021	U	O4'-C1'-N1	5.39	116.58	108.50
34	i	1391	C	O4'-C1'-C2'	-5.39	102.21	107.60
34	i	376	C	C5'-C4'-C3'	-5.39	107.92	116.00
10	J	41	ARG	N-CA-C	-5.39	105.41	111.28
34	i	154	U	O4'-C1'-N1	5.39	116.58	108.50
34	i	213	C	O4'-C1'-C2'	-5.39	102.21	107.60
18	R	91	LEU	N-CA-CB	-5.38	101.39	110.49
34	i	672	U	O5'-C5'-C4'	-5.38	103.43	111.50
34	i	1584	A	O4'-C1'-N9	5.38	116.57	108.50
34	i	1650	C	O4'-C1'-C2'	-5.38	102.22	107.60
34	i	589	A	C1'-C2'-O2'	5.38	116.47	108.40
34	i	1853	A	O3'-P-O5'	-5.38	95.93	104.00
9	I	134	GLU	CA-C-O	-5.38	115.17	120.82
34	i	1052	U	C4'-C3'-O3'	-5.38	104.93	113.00
34	i	1773	G	N9-C1'-C2'	-5.38	103.93	112.00
16	P	122	THR	N-CA-CB	5.38	117.97	110.07

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	576	G	O4'-C1'-C2'	-5.38	102.22	107.60
34	i	1457	G	O4'-C1'-C2'	-5.38	102.22	107.60
34	i	1399	C	O4'-C1'-C2'	5.38	111.17	105.80
34	i	1732	G	N9-C1'-C2'	5.38	120.06	112.00
34	i	445	A	O4'-C1'-C2'	-5.37	102.23	107.60
34	i	1863	A	O4'-C1'-C2'	-5.37	102.23	107.60
34	i	210	G	N9-C1'-C2'	-5.37	103.94	112.00
34	i	1339	U	C3'-C2'-C1'	5.37	106.67	101.30
34	i	1295	A	O4'-C1'-N9	5.37	116.56	108.50
34	i	1687	U	C1'-C2'-O2'	5.37	116.45	108.40
2	B	38	MET	N-CA-CB	5.37	119.30	110.39
34	i	1216	A	C1'-O4'-C4'	-5.37	104.53	109.90
34	i	1652	G	C1'-O4'-C4'	-5.37	104.53	109.90
34	i	23	G	C4'-C3'-O3'	-5.37	104.95	113.00
34	i	322	G	O4'-C1'-N9	5.37	116.55	108.50
34	i	448	A	O4'-C1'-C2'	-5.37	102.23	107.60
34	i	1281	G	C2'-C3'-O3'	-5.37	101.45	109.50
34	i	1333	C	C2'-C3'-O3'	5.37	121.75	113.70
17	Q	66	VAL	N-CA-C	5.36	116.39	108.45
34	i	140	U	O4'-C1'-C2'	-5.36	102.24	107.60
34	i	163	U	C4'-C3'-O3'	-5.36	104.96	113.00
34	i	999	U	O4'-C1'-C2'	-5.36	102.24	107.60
17	Q	6	PRO	CA-C-N	-5.36	113.20	122.10
17	Q	6	PRO	C-N-CA	-5.36	113.20	122.10
34	i	812	A	O4'-C1'-C2'	-5.36	102.24	107.60
34	i	849	C	C4'-C3'-O3'	5.36	121.04	113.00
1	A	63	ARG	N-CA-CB	5.36	118.00	110.12
12	L	6	THR	O-C-N	-5.36	115.47	122.59
21	U	72	GLU	N-CA-C	-5.36	102.36	110.24
25	Y	101	LYS	CA-C-N	-5.36	111.31	121.54
25	Y	101	LYS	C-N-CA	-5.36	111.31	121.54
34	i	110	U	P-O3'-C3'	-5.36	112.17	120.20
5	E	133	THR	CB-CA-C	-5.36	102.23	110.26
34	i	146	G	O4'-C1'-C2'	-5.36	100.44	105.80
34	i	31	U	O4'-C1'-C2'	-5.35	102.25	107.60
34	i	437	A	C1'-O4'-C4'	5.35	115.05	109.70
34	i	641	U	O4'-C1'-C2'	-5.35	102.25	107.60
34	i	1375	A	N9-C1'-C2'	5.35	120.03	112.00
34	i	1615	A	O4'-C1'-N9	5.35	116.23	108.20
34	i	1672	U	N1-C1'-C2'	-5.35	103.97	112.00
25	Y	77	ASP	CA-C-N	-5.35	115.44	122.99
25	Y	77	ASP	C-N-CA	-5.35	115.44	122.99

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	b	28	PRO	CA-C-N	5.35	132.28	122.54
28	b	28	PRO	C-N-CA	5.35	132.28	122.54
34	i	1079	A	N9-C1'-C2'	5.35	120.03	112.00
34	i	1119	C	O4'-C1'-C2'	-5.35	102.25	107.60
34	i	491	C	N1-C1'-C2'	5.35	120.03	112.00
5	E	75	LYS	N-CA-CB	-5.35	103.05	111.23
34	i	38	A	C5'-C4'-C3'	-5.35	107.18	115.20
34	i	93	U	O4'-C1'-N1	5.35	116.53	108.50
34	i	815	G	O4'-C1'-N9	5.35	116.52	108.50
34	i	830	C	P-O3'-C3'	5.35	128.22	120.20
1	A	94	THR	N-CA-C	-5.35	103.63	110.53
14	N	18	TYR	O-C-N	5.35	127.59	122.03
11	K	7	ASN	CA-CB-CG	-5.35	107.25	112.60
34	i	542	G	O4'-C1'-N9	5.35	116.52	108.50
34	i	1467	C	C3'-C2'-C1'	5.35	106.65	101.30
19	S	88	LYS	N-CA-C	-5.34	104.34	111.02
6	F	130	ARG	CB-CG-CD	5.34	123.59	111.30
23	W	93	LEU	N-CA-C	5.34	120.47	112.94
34	i	548	G	C1'-O4'-C4'	-5.34	104.56	109.90
34	i	1699	C	N1-C1'-C2'	5.34	120.01	112.00
26	Z	104	ARG	NE-CZ-NH1	-5.34	116.16	121.50
34	i	94	G	C1'-O4'-C4'	-5.34	104.56	109.90
34	i	657	U	C1'-O4'-C4'	-5.34	104.56	109.90
34	i	789	G	O4'-C1'-N9	5.34	116.51	108.50
10	J	35	TYR	CA-CB-CG	-5.34	104.29	113.90
34	i	1359	C	C4'-C3'-O3'	5.34	117.41	109.40
34	i	468	G	P-O5'-C5'	5.33	128.90	120.90
34	i	1150	U	C4'-C3'-C2'	-5.33	97.27	102.60
13	M	15	ASN	CA-CB-CG	-5.33	107.27	112.60
33	g	273	GLU	O-C-N	5.33	129.81	122.72
34	i	82	G	C1'-O4'-C4'	5.33	115.23	109.90
34	i	1204	A	N9-C1'-C2'	-5.33	104.00	112.00
34	i	1334	G	O4'-C1'-C2'	-5.33	102.27	107.60
6	F	56	TYR	CA-C-N	5.33	127.42	120.28
6	F	56	TYR	C-N-CA	5.33	127.42	120.28
34	i	220	C	N1-C1'-C2'	5.33	119.99	112.00
34	i	678	U	C4'-C3'-O3'	5.33	117.39	109.40
34	i	795	U	C4'-C3'-C2'	-5.33	97.27	102.60
34	i	1479	A	O4'-C1'-N9	5.33	116.49	108.50
34	i	1439	C	O4'-C1'-C2'	-5.33	102.27	107.60
34	i	1288	C	O4'-C1'-N1	-5.32	100.52	108.50
6	F	130	ARG	CA-CB-CG	-5.32	103.46	114.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	204	G	O4'-C1'-N9	5.32	116.48	108.50
34	i	728	U	C1'-O4'-C4'	-5.32	104.58	109.90
32	f	135	HIS	N-CA-C	5.32	116.70	107.93
34	i	167	G	O4'-C1'-N9	5.32	116.47	108.50
34	i	729	C	C4'-C3'-C2'	-5.32	97.28	102.60
34	i	1110	U	O4'-C1'-C2'	-5.32	100.48	105.80
34	i	1479	A	C4'-C3'-C2'	-5.32	97.28	102.60
8	H	55	GLY	N-CA-C	-5.32	107.19	113.99
34	i	147	A	C2'-C3'-O3'	5.32	117.47	109.50
34	i	214	A	O3'-P-O5'	5.32	111.97	104.00
14	N	132	LYS	CA-CB-CG	-5.31	103.47	114.10
34	i	38	A	C1'-O4'-C4'	5.31	115.01	109.70
34	i	272	C	P-O5'-C5'	-5.31	112.93	120.90
34	i	463	A	O4'-C1'-C2'	-5.31	102.29	107.60
34	i	1288	C	C4'-C3'-O3'	-5.31	105.03	113.00
34	i	190	A	P-O5'-C5'	-5.31	112.93	120.90
34	i	950	U	C2'-C3'-O3'	-5.31	101.53	109.50
36	k	22	C	C6-N1-C1'	5.31	136.73	120.80
8	H	13	GLY	O-C-N	-5.31	115.65	122.39
8	H	32	MET	N-CA-C	-5.31	102.19	110.10
34	i	64	A	O4'-C1'-C2'	5.31	111.11	105.80
34	i	144	U	C1'-O4'-C4'	-5.31	104.59	109.90
23	W	2	VAL	O-C-N	-5.31	114.51	123.00
34	i	479	A	P-O5'-C5'	5.31	128.86	120.90
34	i	129	C	O3'-P-O5'	-5.30	96.04	104.00
34	i	1249	A	C2'-C3'-O3'	5.30	117.46	109.50
28	b	28	PRO	O-C-N	5.30	129.40	123.04
34	i	410	G	N9-C1'-C2'	5.30	119.95	112.00
8	H	36	LEU	N-CA-C	-5.30	106.58	112.57
18	R	3	ARG	NE-CZ-NH2	5.30	123.97	119.20
34	i	1624	C	O4'-C4'-C3'	-5.30	98.70	104.00
8	H	113	LYS	N-CA-C	-5.30	103.40	110.55
3	C	49	THR	N-CA-C	5.30	118.12	109.59
12	L	44	PHE	CA-CB-CG	-5.30	108.50	113.80
27	a	80	HIS	N-CA-C	-5.30	105.40	111.07
34	i	1170	U	O4'-C1'-N1	5.30	116.44	108.50
34	i	1336	U	O4'-C1'-C2'	-5.30	102.30	107.60
1	A	193	HIS	CB-CA-C	-5.29	101.17	109.11
8	H	13	GLY	CA-C-N	-5.29	112.62	121.94
8	H	13	GLY	C-N-CA	-5.29	112.62	121.94
12	L	138	VAL	N-CA-C	5.29	115.97	107.98
34	i	537	G	N9-C1'-C2'	5.29	119.94	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
4	D	161	GLY	CA-C-N	5.29	126.36	120.06
4	D	161	GLY	C-N-CA	5.29	126.36	120.06
34	i	792	G	O4'-C1'-N9	5.29	116.44	108.50
34	i	1227	C	C3'-C2'-C1'	5.29	106.59	101.30
21	U	90	ASP	N-CA-C	5.29	117.35	107.99
34	i	105	U	O4'-C1'-C2'	-5.29	102.31	107.60
34	i	274	G	C1'-O4'-C4'	-5.29	104.61	109.90
34	i	1226	C	C1'-C2'-O2'	5.29	116.33	108.40
34	i	1646	A	C1'-O4'-C4'	5.29	115.19	109.90
34	i	40	A	C1'-O4'-C4'	5.29	115.19	109.90
8	H	15	LYS	C-N-CD	-5.29	103.33	125.00
33	g	260	ASP	CA-CB-CG	-5.29	107.31	112.60
34	i	541	U	C1'-O4'-C4'	-5.29	104.61	109.90
34	i	585	U	O4'-C1'-N1	5.29	116.43	108.50
34	i	1615	A	C1'-C2'-O2'	5.29	119.73	111.80
2	B	22	VAL	N-CA-C	5.28	120.33	109.34
34	i	826	A	O4'-C1'-C2'	5.28	112.88	107.60
34	i	1104	G	C2'-C3'-O3'	5.28	121.63	113.70
8	H	36	LEU	N-CA-CB	5.28	119.25	110.91
34	i	267	G	P-O3'-C3'	5.28	128.12	120.20
34	i	1400	U	N1-C1'-C2'	5.28	121.92	114.00
34	i	1562	G	P-O3'-C3'	-5.28	112.28	120.20
34	i	67	C	C1'-C2'-O2'	5.27	116.31	108.40
34	i	349	U	O4'-C1'-N1	5.27	116.41	108.50
36	k	22	C	C2-N1-C1'	-5.27	102.98	118.80
34	i	285	U	C3'-C2'-C1'	5.27	106.77	101.50
33	g	142	VAL	CA-C-N	5.27	131.61	121.54
33	g	142	VAL	C-N-CA	5.27	131.61	121.54
34	i	568	C	C3'-C2'-C1'	5.27	106.57	101.30
34	i	1071	C	C1'-O4'-C4'	-5.27	104.63	109.90
34	i	1640	C	P-O3'-C3'	5.27	128.10	120.20
4	D	145	GLN	CA-C-O	5.27	126.13	120.55
11	K	1	MET	CA-C-N	5.27	131.18	121.70
11	K	1	MET	C-N-CA	5.27	131.18	121.70
34	i	461	G	N9-C1'-C2'	-5.27	106.10	114.00
28	b	53	VAL	CB-CA-C	-5.26	103.39	111.71
34	i	276	U	N1-C1'-C2'	5.26	119.89	112.00
34	i	1270	G	C2'-C3'-O3'	5.26	117.40	109.50
34	i	1370	C	O4'-C1'-C2'	-5.26	102.33	107.60
34	i	1426	C	P-O5'-C5'	-5.26	113.00	120.90
34	i	62	G	C1'-O4'-C4'	-5.26	104.64	109.90
34	i	359	C	O4'-C4'-C3'	-5.26	100.84	106.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1461	A	C1'-O4'-C4'	5.26	115.16	109.90
34	i	279	G	N9-C1'-C2'	-5.26	104.11	112.00
34	i	871	A	N9-C1'-C2'	5.26	119.89	112.00
18	R	37	GLU	N-CA-C	5.26	117.09	111.36
18	R	57	LEU	N-CA-C	5.26	116.70	111.07
34	i	1273	C	N1-C1'-C2'	5.26	119.89	112.00
9	I	82	VAL	N-CA-C	5.26	117.15	111.58
32	f	151	ASN	N-CA-C	5.26	116.76	107.61
34	i	210	G	P-O3'-C3'	-5.26	112.31	120.20
34	i	796	U	C4'-C3'-O3'	-5.26	105.11	113.00
34	i	1414	C	C2'-C3'-O3'	5.26	117.39	109.50
34	i	1283	A	O4'-C1'-C2'	-5.25	102.34	107.60
34	i	1456	C	O4'-C1'-C2'	-5.25	102.35	107.60
34	i	1525	U	O4'-C1'-C2'	-5.25	102.35	107.60
21	U	51	LYS	N-CA-C	-5.25	99.61	110.80
21	U	69	PRO	CA-C-O	-5.25	114.78	120.92
22	V	32	ILE	CA-C-N	-5.25	113.28	119.84
22	V	32	ILE	C-N-CA	-5.25	113.28	119.84
34	i	1010	G	O4'-C1'-N9	5.25	116.38	108.50
13	M	11	VAL	CB-CA-C	-5.25	106.15	112.19
19	S	75	ARG	N-CA-C	-5.25	105.56	111.28
34	i	582	C	C1'-C2'-O2'	5.25	119.67	111.80
34	i	971	G	O4'-C1'-N9	5.25	116.37	108.50
34	i	1015	C	C3'-C2'-C1'	5.25	106.55	101.30
34	i	1459	U	O5'-C5'-C4'	-5.25	103.83	111.70
34	i	1627	G	C5'-C4'-C3'	5.25	123.07	115.20
34	i	214	A	O4'-C1'-C2'	-5.25	102.36	107.60
34	i	300	G	O4'-C1'-N9	5.25	116.37	108.50
1	A	63	ARG	CA-C-O	-5.24	114.99	120.55
34	i	1151	U	O4'-C1'-N1	5.24	116.07	108.20
34	i	1232	G	C3'-C2'-O2'	5.24	118.56	110.70
34	i	1741	U	C1'-C2'-O2'	5.24	116.27	108.40
34	i	11	A	O3'-P-O5'	5.24	111.86	104.00
34	i	406	U	O4'-C1'-C2'	-5.24	102.36	107.60
34	i	806	A	C3'-C2'-C1'	5.24	106.54	101.30
5	E	172	PHE	N-CA-C	5.24	116.81	108.79
24	X	2	GLY	N-CA-C	-5.24	100.77	113.18
34	i	730	C	C3'-C2'-C1'	5.24	106.54	101.30
34	i	904	A	C3'-C2'-O2'	5.24	118.56	110.70
34	i	1663	U	O5'-C5'-C4'	-5.24	103.64	111.50
14	N	132	LYS	CA-C-O	5.24	126.89	120.55
25	Y	51	THR	C-N-CD	-5.24	103.54	125.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	642	U	O4'-C1'-C2'	-5.24	102.36	107.60
34	i	744	C	O4'-C1'-C2'	-5.24	102.36	107.60
34	i	862	U	C3'-C2'-C1'	-5.24	96.06	101.30
34	i	920	G	O4'-C1'-C2'	-5.24	102.36	107.60
34	i	544	A	O4'-C1'-C2'	5.23	112.83	107.60
34	i	1644	U	P-O3'-C3'	-5.23	112.35	120.20
34	i	1118	A	N9-C1'-C2'	-5.23	104.16	112.00
34	i	1602	A	O4'-C1'-C2'	5.23	112.83	107.60
9	I	134	GLU	N-CA-C	-5.23	105.47	111.07
34	i	726	C	P-O3'-C3'	5.23	128.04	120.20
22	V	41	LYS	N-CA-C	5.23	117.40	108.67
23	W	89	TRP	N-CA-C	5.23	117.40	111.02
34	i	809	A	O4'-C1'-C2'	-5.23	102.37	107.60
34	i	1530	U	C2'-C3'-O3'	-5.23	101.66	109.50
28	b	26	GLN	N-CA-C	-5.23	103.58	110.43
28	b	75	GLU	CB-CA-C	-5.22	110.13	117.23
34	i	59	U	O4'-C1'-C2'	-5.22	102.38	107.60
34	i	547	U	C1'-C2'-O2'	5.22	116.23	108.40
34	i	727	G	C5'-C4'-O4'	-5.22	101.97	109.80
34	i	74	G	P-O3'-C3'	5.22	128.03	120.20
34	i	167	G	N9-C1'-C2'	-5.22	104.17	112.00
34	i	1415	C	C3'-C2'-C1'	5.22	106.52	101.30
34	i	1778	G	O4'-C1'-C2'	-5.22	102.38	107.60
34	i	541	U	C1'-C2'-O2'	5.22	116.23	108.40
34	i	1019	A	N9-C1'-C2'	-5.22	104.17	112.00
34	i	1024	A	O5'-C5'-C4'	-5.22	103.68	111.50
34	i	1405	A	O5'-C5'-C4'	5.22	119.33	111.50
34	i	534	G	C1'-O4'-C4'	5.21	115.11	109.90
34	i	876	G	C3'-C2'-C1'	-5.21	96.09	101.30
34	i	1693	C	P-O3'-C3'	5.21	128.02	120.20
3	C	148	VAL	C-N-CD	-5.21	103.64	125.00
15	O	43	HIS	N-CA-CB	-5.21	101.68	110.49
34	i	262	G	P-O3'-C3'	5.21	128.02	120.20
34	i	36	U	O4'-C1'-C2'	-5.21	102.39	107.60
11	K	62	PHE	N-CA-C	5.21	117.75	111.40
34	i	1207	G	C1'-C2'-O2'	5.21	116.21	108.40
34	i	1513	C	O4'-C4'-C3'	-5.21	98.79	104.00
32	f	86	THR	N-CA-CB	5.21	119.29	110.49
34	i	1	U	O4'-C4'-C3'	-5.21	100.89	106.10
34	i	1695	C	N1-C1'-C2'	-5.21	106.19	114.00
26	Z	104	ARG	CB-CA-C	-5.21	100.06	110.42
5	E	4	GLY	CA-C-N	5.20	125.45	119.83

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	4	GLY	C-N-CA	5.20	125.45	119.83
16	P	105	VAL	N-CA-C	5.20	115.53	107.78
34	i	1151	U	C3'-C2'-C1'	5.20	106.70	101.50
34	i	384	G	C5'-C4'-C3'	-5.20	108.20	116.00
34	i	1833	U	O4'-C1'-C2'	-5.20	102.40	107.60
20	T	4	VAL	CA-C-O	-5.20	111.96	120.80
34	i	161	U	C2'-C3'-O3'	5.20	117.30	109.50
34	i	206	A	C2'-C3'-O3'	-5.20	105.90	113.70
34	i	1496	G	C1'-O4'-C4'	-5.20	104.70	109.90
34	i	1552	C	O3'-P-O5'	5.20	111.80	104.00
34	i	829	C	O4'-C1'-C2'	-5.20	102.40	107.60
34	i	1414	C	C5'-C4'-C3'	5.20	122.99	115.20
34	i	1540	A	P-O5'-C5'	-5.20	113.11	120.90
34	i	127	C	P-O3'-C3'	5.19	127.99	120.20
34	i	1472	A	C1'-C2'-O2'	5.19	116.19	108.40
34	i	1615	A	C2'-C3'-O3'	5.19	117.29	109.50
13	M	52	LEU	CB-CA-C	-5.19	108.90	116.53
34	i	517	C	O4'-C1'-N1	5.19	116.29	108.50
22	V	23	ILE	CA-C-N	-5.19	115.68	122.37
22	V	23	ILE	C-N-CA	-5.19	115.68	122.37
34	i	117	C	O4'-C1'-C2'	-5.19	102.41	107.60
34	i	358	U	C2'-C3'-O3'	5.19	117.28	109.50
34	i	549	G	O4'-C4'-C3'	-5.19	98.81	104.00
34	i	590	G	O4'-C1'-N9	5.19	116.28	108.50
34	i	1266	G	O4'-C1'-C2'	-5.19	102.41	107.60
34	i	1365	A	N9-C1'-C2'	5.19	119.78	112.00
7	G	143	LYS	N-CA-C	5.19	117.01	111.36
34	i	572	U	C4'-C3'-O3'	-5.19	105.22	113.00
34	i	144	U	C1'-C2'-O2'	5.18	116.18	108.40
34	i	1202	G	C1'-O4'-C4'	-5.18	104.72	109.90
34	i	1658	A	C3'-C2'-C1'	5.18	106.48	101.30
34	i	1662	U	O4'-C1'-N1	5.18	116.28	108.50
16	P	36	LEU	CB-CA-C	5.18	118.69	109.72
34	i	206	A	C4'-C3'-O3'	5.18	120.77	113.00
34	i	552	U	O4'-C4'-C3'	5.18	109.18	104.00
34	i	903	G	C1'-O4'-C4'	-5.18	104.72	109.90
34	i	1214	C	C3'-C2'-C1'	5.18	106.48	101.30
34	i	1328	A	C4'-C3'-C2'	-5.18	97.42	102.60
21	U	104	ILE	CA-CB-CG1	5.18	119.20	110.40
34	i	443	C	C5'-C4'-C3'	-5.18	108.23	116.00
34	i	924	G	N9-C1'-C2'	5.18	119.77	112.00
34	i	1780	U	O4'-C1'-C2'	-5.18	102.42	107.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
11	K	17	LYS	N-CA-C	5.18	116.73	111.14
20	T	79	TYR	O-C-N	5.18	128.64	122.27
34	i	230	C	N1-C1'-C2'	5.18	119.76	112.00
34	i	1636	A	C3'-C2'-C1'	5.18	106.48	101.30
34	i	935	U	O4'-C1'-N1	5.17	116.26	108.50
34	i	1606	G	O3'-P-O5'	-5.17	96.24	104.00
16	P	71	GLU	O-C-N	5.17	129.47	122.59
5	E	204	SER	N-CA-C	5.17	116.27	108.46
7	G	170	ARG	O-C-N	5.17	130.16	122.97
12	L	26	GLY	CA-C-N	5.17	131.01	121.70
12	L	26	GLY	C-N-CA	5.17	131.01	121.70
34	i	321	C	O4'-C1'-N1	5.17	115.96	108.20
34	i	1276	G	O4'-C1'-N9	5.17	116.26	108.50
34	i	1583	A	N9-C1'-C2'	5.17	119.76	112.00
15	O	28	PHE	N-CA-C	5.17	117.33	108.90
18	R	2	GLY	CA-C-N	5.17	131.81	123.33
18	R	2	GLY	C-N-CA	5.17	131.81	123.33
34	i	959	A	C3'-C2'-C1'	-5.17	96.13	101.30
34	i	1811	G	O4'-C1'-N9	5.17	116.25	108.50
20	T	71	GLY	N-CA-C	5.17	118.68	111.14
34	i	1273	C	C5'-C4'-C3'	5.17	123.75	116.00
34	i	1394	G	P-O3'-C3'	-5.17	112.45	120.20
16	P	37	TYR	CA-CB-CG	5.16	123.19	113.90
34	i	445	A	C3'-C2'-C1'	5.16	106.46	101.30
34	i	1093	G	C5'-C4'-O4'	5.16	117.55	109.80
34	i	1494	A	O4'-C1'-C2'	5.16	112.76	107.60
34	i	1555	U	C4'-C3'-C2'	-5.16	97.44	102.60
34	i	1722	G	O4'-C1'-N9	5.16	116.24	108.50
2	B	152	LYS	CB-CA-C	5.16	120.58	110.67
34	i	388	A	O4'-C4'-C3'	-5.16	100.94	106.10
34	i	794	G	O5'-C5'-C4'	5.16	119.44	111.70
34	i	1205	A	N9-C1'-C2'	-5.16	104.26	112.00
34	i	1233	C	C4'-C3'-C2'	-5.16	97.44	102.60
34	i	1285	U	O3'-P-O5'	-5.16	96.26	104.00
34	i	76	U	O4'-C1'-C2'	-5.16	102.44	107.60
34	i	985	C	C1'-C2'-O2'	-5.16	104.06	111.80
34	i	971	G	O4'-C4'-C3'	-5.16	98.84	104.00
34	i	1520	C	N1-C1'-C2'	5.16	119.73	112.00
32	f	84	SER	CA-C-N	5.15	131.38	121.54
32	f	84	SER	C-N-CA	5.15	131.38	121.54
7	G	157	VAL	O-C-N	5.15	128.23	122.61
31	e	77	HIS	ND1-CE1-NE2	5.15	113.55	108.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
33	g	274	VAL	N-CA-CB	-5.15	104.36	111.99
34	i	1332	C	O4'-C1'-C2'	-5.15	102.45	107.60
34	i	1551	A	O4'-C1'-N9	5.15	115.93	108.20
34	i	26	U	P-O5'-C5'	5.15	128.63	120.90
34	i	1559	C	P-O5'-C5'	5.15	128.63	120.90
11	K	95	ARG	CA-C-N	5.15	131.38	121.54
11	K	95	ARG	C-N-CA	5.15	131.38	121.54
12	L	123	GLY	N-CA-C	-5.15	107.77	113.79
34	i	79	A	C3'-C2'-O2'	-5.15	106.88	114.60
34	i	1490	U	O4'-C1'-N1	5.15	115.92	108.20
17	Q	68	ILE	N-CA-C	5.15	115.26	107.75
26	Z	46	ASN	N-CA-C	5.15	117.29	108.90
10	J	89	GLU	N-CA-CB	-5.14	101.39	109.78
34	i	1168	U	O4'-C1'-C2'	-5.14	102.45	107.60
22	V	17	CYS	O-C-N	5.14	129.43	122.59
34	i	1405	A	C1'-O4'-C4'	5.14	115.04	109.90
34	i	1473	U	C2'-C3'-O3'	5.14	121.41	113.70
34	i	1108	U	P-O5'-C5'	-5.14	113.19	120.90
34	i	1120	C	N1-C1'-C2'	5.14	119.71	112.00
4	D	193	ASP	C-N-CD	5.14	146.08	125.00
34	i	61	A	O4'-C1'-C2'	-5.14	102.46	107.60
34	i	207	U	C2'-C3'-O3'	-5.14	105.99	113.70
32	f	88	PRO	CA-N-CD	-5.14	104.81	112.00
34	i	1545	G	P-O3'-C3'	5.14	127.91	120.20
26	Z	50	PHE	N-CA-C	5.14	117.68	110.23
34	i	1729	G	C3'-C2'-C1'	5.14	106.44	101.30
1	A	3	GLY	O-C-N	5.13	129.38	122.70
34	i	210	G	O4'-C1'-C2'	-5.13	102.47	107.60
34	i	520	U	C4'-C3'-C2'	-5.13	97.47	102.60
34	i	570	U	O3'-P-O5'	5.13	111.70	104.00
34	i	796	U	O5'-C5'-C4'	-5.13	103.80	111.50
34	i	1404	U	O3'-P-O5'	5.13	111.70	104.00
3	C	227	ASP	CA-CB-CG	-5.13	107.47	112.60
34	i	595	A	O5'-C5'-C4'	5.13	119.20	111.50
34	i	1241	G	P-O5'-C5'	5.13	128.60	120.90
34	i	1568	G	C4'-C3'-C2'	-5.13	97.47	102.60
34	i	1359	C	P-O5'-C5'	5.13	128.59	120.90
1	A	167	GLY	N-CA-C	5.13	125.34	113.18
11	K	37	ASP	N-CA-C	-5.13	99.88	110.80
34	i	291	U	O4'-C1'-C2'	-5.13	102.47	107.60
34	i	736	C	O4'-C1'-C2'	-5.13	102.47	107.60
1	A	98	PRO	CB-CA-C	-5.13	103.10	111.56

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
5	E	260	GLN	N-CA-C	-5.13	99.88	110.80
19	S	82	TRP	O-C-N	5.13	129.05	122.39
33	g	299	PHE	CA-CB-CG	-5.13	108.67	113.80
34	i	1255	A	C1'-C2'-O2'	5.13	116.09	108.40
34	i	827	G	O4'-C1'-C2'	5.12	112.72	107.60
8	H	67	PRO	N-CA-C	-5.12	107.46	113.86
16	P	30	TYR	N-CA-C	-5.12	105.82	111.71
18	R	95	ILE	N-CA-C	5.12	119.99	109.34
34	i	344	U	O4'-C1'-N1	5.12	116.18	108.50
34	i	549	G	C4'-C3'-O3'	-5.12	105.32	113.00
34	i	1251	G	C1'-C2'-O2'	5.12	116.08	108.40
34	i	1479	A	N9-C1'-C2'	-5.12	104.32	112.00
34	i	1523	G	O5'-C5'-C4'	-5.12	103.82	111.50
13	M	9	GLY	CA-C-N	-5.12	115.41	122.63
13	M	9	GLY	C-N-CA	-5.12	115.41	122.63
34	i	78	C	O4'-C1'-C2'	-5.12	100.68	105.80
34	i	312	C	P-O3'-C3'	5.12	127.88	120.20
34	i	1269	C	C2'-C3'-O3'	-5.12	101.82	109.50
34	i	1682	C	O4'-C1'-C2'	-5.12	102.48	107.60
34	i	1562	G	O4'-C4'-C3'	-5.12	98.88	104.00
11	K	86	PRO	N-CA-CB	5.11	108.04	103.08
34	i	533	C	N1-C1'-C2'	5.11	119.67	112.00
34	i	794	G	C3'-C2'-C1'	5.11	106.61	101.50
34	i	1779	C	P-O3'-C3'	5.11	127.87	120.20
34	i	488	C	O4'-C1'-C2'	-5.11	102.49	107.60
3	C	194	VAL	CB-CA-C	-5.11	108.93	114.35
20	T	82	ARG	NE-CZ-NH2	5.11	123.80	119.20
34	i	542	G	O3'-P-O5'	-5.11	96.33	104.00
34	i	581	U	N1-C1'-C2'	5.11	121.67	114.00
34	i	728	U	O4'-C1'-C2'	-5.11	102.49	107.60
34	i	994	A	C1'-O4'-C4'	5.11	115.01	109.90
34	i	1122	G	C1'-O4'-C4'	-5.11	104.79	109.90
34	i	1441	U	P-O3'-C3'	-5.11	112.53	120.20
12	L	154	GLN	O-C-N	-5.11	118.46	123.26
34	i	793	C	C4'-C3'-O3'	5.11	117.06	109.40
1	A	159	ILE	O-C-N	5.11	128.95	122.57
34	i	1407	G	P-O5'-C5'	5.11	128.56	120.90
25	Y	94	HIS	ND1-CE1-NE2	5.10	113.50	108.40
34	i	1422	U	O4'-C1'-C2'	-5.10	102.50	107.60
16	P	28	MET	N-CA-CB	5.10	119.11	110.49
18	R	23	ARG	N-CA-C	5.10	116.92	111.36
33	g	187	ASN	CA-CB-CG	-5.10	107.50	112.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	625	G	P-O5'-C5'	-5.10	113.25	120.90
34	i	1036	G	O4'-C1'-N9	5.10	116.15	108.50
34	i	1461	A	P-O5'-C5'	5.10	128.55	120.90
34	i	1531	G	P-O5'-C5'	5.10	128.55	120.90
34	i	1656	A	C3'-C2'-C1'	-5.10	96.20	101.30
8	H	53	VAL	O-C-N	-5.10	117.67	123.18
34	i	1584	A	N9-C1'-C2'	-5.10	104.35	112.00
34	i	795	U	O4'-C1'-N1	5.10	116.14	108.50
34	i	550	A	C3'-C2'-C1'	-5.09	96.20	101.30
34	i	837	G	C3'-C2'-O2'	5.09	118.34	110.70
34	i	1435	A	O4'-C1'-N9	5.09	116.14	108.50
34	i	1594	U	C4'-C3'-O3'	-5.09	105.36	113.00
34	i	533	C	O4'-C1'-C2'	-5.09	102.51	107.60
34	i	835	C	C2'-C3'-O3'	5.09	117.14	109.50
33	g	143	GLN	CB-CA-C	-5.09	100.29	110.42
34	i	1185	A	O4'-C1'-C2'	-5.09	102.51	107.60
34	i	1186	A	C3'-C2'-C1'	5.09	106.39	101.30
34	i	1367	U	O4'-C1'-C2'	-5.09	100.71	105.80
6	F	152	TRP	CB-CA-C	-5.09	103.12	110.96
34	i	341	G	O4'-C4'-C3'	-5.09	98.91	104.00
34	i	361	A	P-O5'-C5'	-5.09	113.27	120.90
1	A	68	ILE	O-C-N	-5.09	117.13	122.83
1	A	69	GLU	N-CA-C	5.09	116.63	111.14
5	E	23	LEU	CA-C-O	-5.09	115.66	121.82
34	i	193	C	C3'-C2'-C1'	5.08	106.38	101.30
10	J	99	GLY	N-CA-C	-5.08	106.96	115.80
34	i	14	C	P-O5'-C5'	-5.08	113.28	120.90
34	i	1397	A	O4'-C1'-N9	5.08	116.12	108.50
34	i	1534	U	C1'-O4'-C4'	5.08	114.98	109.90
34	i	1648	U	N1-C1'-C2'	-5.08	104.38	112.00
34	i	1568	G	N9-C1'-C2'	5.08	119.62	112.00
31	e	94	ALA	N-CA-C	-5.08	103.64	110.24
34	i	1352	G	C4'-C3'-O3'	-5.08	105.38	113.00
16	P	49	LEU	CA-C-O	-5.08	113.25	120.51
34	i	1246	A	O4'-C1'-C2'	-5.08	100.72	105.80
34	i	1459	U	P-O3'-C3'	-5.08	112.58	120.20
21	U	104	ILE	CB-CA-C	-5.08	102.97	111.29
34	i	1286	G	C4'-C3'-O3'	-5.08	105.39	113.00
34	i	1734	C	N1-C1'-C2'	5.08	119.61	112.00
34	i	17	C	N1-C1'-C2'	5.07	119.61	112.00
34	i	1115	A	O4'-C1'-N9	5.07	116.11	108.50
19	S	9	PHE	CA-C-O	-5.07	115.68	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	110	U	P-O5'-C5'	-5.07	113.29	120.90
2	B	131	ASP	O-C-N	-5.07	116.88	122.86
9	I	61	ASP	CA-C-N	-5.07	114.63	122.69
9	I	61	ASP	C-N-CA	-5.07	114.63	122.69
17	Q	116	ASP	CB-CA-C	-5.07	109.24	116.34
34	i	1602	A	N9-C1'-C2'	5.07	119.61	112.00
34	i	1678	C	C3'-C2'-C1'	5.07	106.37	101.30
34	i	1167	G	C3'-C2'-C1'	-5.07	96.43	101.50
34	i	243	C	P-O3'-C3'	5.07	127.80	120.20
34	i	940	A	C3'-C2'-C1'	5.07	106.37	101.30
34	i	1663	U	C3'-C2'-O2'	5.07	118.30	110.70
34	i	1027	A	C4'-C3'-O3'	-5.07	105.40	113.00
34	i	1322	U	O4'-C1'-C2'	5.07	110.86	105.80
34	i	528	U	N1-C1'-C2'	5.06	119.60	112.00
34	i	854	A	C3'-C2'-C1'	5.06	106.36	101.30
17	Q	146	ARG	NE-CZ-NH1	-5.06	116.44	121.50
18	R	113	SER	CA-C-N	5.06	130.19	120.97
18	R	113	SER	C-N-CA	5.06	130.19	120.97
34	i	663	G	O4'-C1'-N9	5.06	116.09	108.50
34	i	872	C	C3'-C2'-C1'	5.06	106.36	101.30
34	i	1563	C	O3'-P-O5'	5.06	111.59	104.00
34	i	1582	G	O4'-C1'-N9	5.06	115.79	108.20
34	i	1694	A	P-O3'-C3'	-5.06	112.61	120.20
34	i	369	C	P-O3'-C3'	5.06	127.79	120.20
7	G	181	THR	CA-C-O	5.06	127.09	120.16
34	i	91	A	O4'-C1'-C2'	-5.06	102.54	107.60
34	i	895	U	O5'-C5'-C4'	-5.06	103.91	111.50
5	E	202	PRO	O-C-N	5.06	129.11	123.04
16	P	38	SER	N-CA-C	5.06	121.57	110.80
34	i	656	U	C4'-C3'-O3'	-5.06	105.41	113.00
34	i	1234	U	O4'-C1'-N1	5.06	116.08	108.50
34	i	1663	U	C4'-C3'-C2'	-5.06	97.54	102.60
34	i	1329	U	N1-C1'-C2'	-5.06	104.42	112.00
34	i	1413	C	O4'-C4'-C3'	-5.06	98.94	104.00
10	J	34	GLU	CA-C-N	5.05	131.02	123.24
10	J	34	GLU	C-N-CA	5.05	131.02	123.24
34	i	838	C	N1-C1'-C2'	5.05	119.58	112.00
34	i	1431	C	C3'-C2'-C1'	5.05	106.36	101.30
15	O	150	ARG	CB-CA-C	5.05	118.09	109.75
27	a	85	ARG	N-CA-C	5.05	117.30	108.76
18	R	52	GLY	N-CA-C	5.05	118.36	112.50
34	i	465	C	N1-C1'-C2'	5.05	119.57	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	i	1705	C	C3'-C2'-C1'	5.05	106.35	101.30
34	i	819	U	O4'-C1'-C2'	5.05	112.65	107.60
11	K	92	ALA	CA-C-N	5.05	129.56	122.09
11	K	92	ALA	C-N-CA	5.05	129.56	122.09
25	Y	63	HIS	N-CA-C	5.05	121.55	110.80
34	i	346	C	O4'-C1'-C2'	5.05	112.65	107.60
34	i	789	G	O3'-P-O5'	5.05	111.57	104.00
34	i	1779	C	C2'-C3'-O3'	5.05	117.07	109.50
32	f	138	ARG	N-CA-C	5.04	121.54	110.80
34	i	1246	A	N9-C1'-C2'	-5.04	106.43	114.00
34	i	1390	G	C1'-O4'-C4'	-5.04	104.86	109.90
34	i	1819	A	C3'-C2'-C1'	-5.04	96.26	101.30
34	i	1407	G	O4'-C1'-C2'	5.04	112.64	107.60
34	i	410	G	C4'-C3'-C2'	-5.04	97.56	102.60
34	i	879	U	O4'-C1'-C2'	-5.04	102.56	107.60
5	E	117	GLU	N-CA-C	-5.04	102.05	109.86
34	i	1428	U	O4'-C1'-C2'	-5.04	102.56	107.60
34	i	1803	A	O4'-C1'-N9	5.04	116.06	108.50
34	i	1473	U	C4'-C3'-O3'	-5.04	105.44	113.00
2	B	62	LEU	N-CA-C	-5.04	106.48	113.18
18	R	31	ASN	N-CA-C	-5.04	105.92	111.71
34	i	5	U	O4'-C1'-N1	5.04	116.05	108.50
4	D	32	ASP	CA-CB-CG	-5.03	107.57	112.60
19	S	100	ALA	N-CA-C	5.03	116.59	108.08
10	J	123	ILE	CB-CA-C	5.03	125.69	111.05
19	S	50	ILE	CA-C-N	-5.03	111.93	121.54
19	S	50	ILE	C-N-CA	-5.03	111.93	121.54
13	M	115	GLY	O-C-N	-5.03	116.16	122.70
8	H	109	ARG	CB-CA-C	-5.03	100.42	110.42
15	O	129	ILE	CA-C-N	-5.03	114.70	122.59
15	O	129	ILE	C-N-CA	-5.03	114.70	122.59
28	b	29	ASN	N-CA-C	-5.03	104.33	110.61
33	g	192	THR	N-CA-CB	5.03	118.95	111.51
33	g	213	ASP	N-CA-CB	5.03	117.51	110.12
34	i	1009	U	N1-C1'-C2'	5.03	119.54	112.00
21	U	28	ASN	CA-C-N	5.03	131.01	121.97
21	U	28	ASN	C-N-CA	5.03	131.01	121.97
29	c	65	ALA	O-C-N	5.03	129.28	122.59
34	i	609	A	N9-C1'-C2'	-5.03	104.46	112.00
34	i	1279	C	O4'-C1'-C2'	-5.03	102.57	107.60
34	i	189	G	O4'-C1'-C2'	-5.02	102.58	107.60
19	S	23	ARG	O-C-N	5.02	128.10	122.22

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	X	128	VAL	CB-CA-C	-5.02	105.41	110.93
34	i	73	C	O5'-C5'-C4'	5.02	119.23	111.70
34	i	116	U	N1-C1'-C2'	5.02	119.53	112.00
34	i	883	U	O3'-P-O5'	5.02	111.53	104.00
34	i	1377	G	C3'-C2'-C1'	-5.02	96.28	101.30
34	i	1796	C	N1-C1'-C2'	5.02	119.53	112.00
34	i	1818	A	C1'-C2'-O2'	5.02	115.93	108.40
34	i	105	U	O4'-C1'-N1	5.02	116.03	108.50
3	C	82	PHE	N-CA-C	5.02	117.64	111.82
34	i	644	A	O4'-C1'-C2'	-5.02	102.58	107.60
28	b	9	HIS	C-N-CD	-5.02	104.43	125.00
34	i	8	U	O4'-C1'-C2'	-5.02	100.78	105.80
34	i	1333	C	O4'-C1'-N1	5.02	116.03	108.50
34	i	1414	C	N1-C1'-C2'	5.02	121.53	114.00
34	i	1663	U	P-O5'-C5'	5.02	128.43	120.90
9	I	169	GLY	N-CA-C	-5.02	107.90	115.32
34	i	742	C	C2'-C3'-O3'	5.02	121.22	113.70
34	i	31	U	N1-C1'-C2'	-5.01	104.48	112.00
34	i	569	C	O3'-P-O5'	-5.01	96.48	104.00
34	i	665	U	O4'-C1'-N1	5.01	116.02	108.50
34	i	868	A	C2'-C3'-O3'	5.01	117.02	109.50
34	i	1240	U	C4'-C3'-C2'	-5.01	97.58	102.60
18	R	4	VAL	N-CA-C	5.01	114.79	107.37
34	i	1337	C	C3'-C2'-C1'	5.01	106.51	101.50
34	i	1698	C	C3'-C2'-C1'	5.01	106.31	101.30
26	Z	104	ARG	CB-CG-CD	-5.01	99.77	111.30
34	i	1798	U	O4'-C1'-N1	5.01	116.02	108.50
34	i	314	U	O4'-C1'-C2'	5.01	112.61	107.60
7	G	158	VAL	N-CA-CB	-5.01	102.97	111.23
24	X	29	LYS	N-CA-C	-5.00	105.83	111.28
2	B	221	PRO	CA-C-N	-5.00	115.76	122.42
2	B	221	PRO	C-N-CA	-5.00	115.76	122.42
5	E	151	ASP	N-CA-C	5.00	116.88	109.62
8	H	106	ARG	NE-CZ-NH1	-5.00	116.50	121.50
34	i	1150	U	C1'-C2'-O2'	5.00	119.31	111.80
34	i	1771	G	O4'-C1'-N9	5.00	116.00	108.50
34	i	1827	C	N1-C1'-C2'	5.00	119.51	112.00
15	O	102	GLY	O-C-N	-5.00	115.65	122.55
34	i	687	G	O4'-C1'-C2'	-5.00	102.60	107.60
34	i	689	G	O3'-P-O5'	5.00	111.50	104.00
34	i	1418	G	N9-C1'-C2'	-5.00	104.50	112.00

All (13) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
3	C	157	ASN	CA
5	E	171	ASP	CA
10	J	138	ARG	CA
18	R	3	ARG	CA
19	S	92	ASP	CA
20	T	93	SER	CA
25	Y	86	GLU	CA
34	i	544	A	C1'
34	i	794	G	C4'
34	i	835	C	C1'
34	i	1151	U	C1'
34	i	1414	C	C1'
34	i	1503	G	C1'

All (183) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	146	ALA	Mainchain
1	A	185	MET	Mainchain
1	A	192	GLU	Peptide,Mainchain
1	A	199	PRO	Mainchain
1	A	206	ASP	Peptide,Mainchain
1	A	23	THR	Mainchain
1	A	4	ALA	Peptide
1	A	63	ARG	Sidechain
1	A	97	THR	Mainchain
2	B	146	CYS	Peptide
2	B	56	LYS	Mainchain
2	B	75	GLN	Peptide
2	B	76	ASN	Peptide
3	C	157	ASN	Peptide
3	C	160	GLY	Mainchain
3	C	241	TRP	Mainchain
3	C	97	VAL	Peptide,Mainchain
4	D	144	GLY	Peptide
4	D	190	LEU	Mainchain
4	D	3	VAL	Peptide,Mainchain
4	D	96	LEU	Mainchain
5	E	1	MET	Peptide
5	E	129	ILE	Peptide
6	F	43	GLU	Peptide
6	F	44	LYS	Peptide
6	F	79	HIS	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
7	G	155	GLN	Mainchain
8	H	105	THR	Peptide
8	H	108	SER	Peptide
8	H	109	ARG	Sidechain
8	H	113	LYS	Mainchain
8	H	118	ARG	Sidechain
8	H	16	PRO	Peptide
8	H	17	ASP	Peptide
8	H	190	PRO	Peptide
8	H	193	GLN	Peptide
8	H	53	VAL	Peptide
9	I	123	ARG	Mainchain
9	I	129	LEU	Mainchain
9	I	131	PRO	Mainchain
9	I	155	ASN	Peptide
9	I	190	LEU	Mainchain
9	I	2	GLY	Mainchain
9	I	3	ILE	Peptide
9	I	55	TYR	Sidechain
10	J	146	SER	Mainchain
10	J	16	PRO	Peptide
10	J	161	LEU	Peptide,Mainchain
10	J	162	ARG	Peptide
10	J	164	PRO	Mainchain
10	J	165	TYR	Peptide
10	J	85	GLY	Mainchain
10	J	90	GLY	Peptide
10	J	91	LYS	Mainchain
10	J	92	MET	Peptide
11	K	29	MET	Peptide
11	K	30	PRO	Peptide
11	K	37	ASP	Peptide
11	K	43	LEU	Peptide
11	K	55	ARG	Sidechain
11	K	70	TYR	Sidechain
11	K	86	PRO	Peptide
11	K	89	ILE	Mainchain
11	K	90	VAL	Mainchain
11	K	92	ALA	Peptide
11	K	97	SER	Peptide
12	L	147	LYS	Peptide
12	L	149	ALA	Mainchain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
12	L	152	LYS	Mainchain
12	L	18	GLN	Peptide
12	L	26	GLY	Peptide
12	L	27	GLU	Peptide
12	L	97	ARG	Peptide
13	M	98	GLY	Peptide
14	N	13	GLN	Peptide
14	N	14	SER	Peptide
14	N	18	TYR	Peptide
14	N	82	PRO	Peptide
15	O	138	ASP	Peptide
16	P	17	TYR	Peptide,Sidechain
16	P	18	ARG	Sidechain
16	P	27	ASP	Peptide
16	P	36	LEU	Peptide
16	P	37	TYR	Peptide
16	P	38	SER	Peptide
16	P	48	GLY	Peptide,Mainchain
16	P	50	ARG	Peptide
17	Q	146	ARG	Sidechain
17	Q	31	LEU	Peptide
17	Q	43	GLU	Peptide
17	Q	47	LEU	Peptide
18	R	1	MET	Mainchain
18	R	122	PRO	Peptide
18	R	88	VAL	Peptide,Mainchain
18	R	89	SER	Peptide
19	S	10	GLN	Peptide
19	S	141	ARG	Mainchain
19	S	15	VAL	Peptide
19	S	40	TYR	Mainchain,Sidechain
19	S	8	LYS	Peptide
19	S	87	GLN	Mainchain
19	S	9	PHE	Peptide
19	S	93	GLY	Peptide
19	S	94	LYS	Peptide
20	T	142	LYS	Peptide,Mainchain
20	T	4	VAL	Peptide,Mainchain
20	T	42	HIS	Sidechain
20	T	82	ARG	Sidechain
21	U	104	ILE	Mainchain
21	U	105	SER	Mainchain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
21	U	108	PRO	Peptide
21	U	46	LYS	Peptide
21	U	50	VAL	Peptide
21	U	68	THR	Peptide
21	U	70	CYS	Mainchain
21	U	93	SER	Mainchain
22	V	25	GLY	Peptide
22	V	48	GLY	Peptide,Mainchain
22	V	49	GLN	Peptide
22	V	61	ARG	Sidechain
22	V	63	GLY	Mainchain
22	V	81	GLN	Peptide,Mainchain
22	V	9	VAL	Peptide
23	W	2	VAL	Mainchain
23	W	84	LYS	Peptide
24	X	1	MET	Peptide
24	X	127	ASN	Peptide
24	X	23	HIS	Mainchain
24	X	42	GLY	Peptide
25	Y	103	SER	Peptide
25	Y	32	LYS	Peptide
25	Y	33	ALA	Peptide
25	Y	34	THR	Peptide
25	Y	85	ASN	Peptide
25	Y	86	GLU	Mainchain
26	Z	101	SER	Mainchain
26	Z	104	ARG	Mainchain,Sidechain
26	Z	41	ARG	Peptide
26	Z	93	SER	Peptide
26	Z	95	GLY	Peptide
27	a	96	THR	Peptide,Mainchain
28	b	2	PRO	Mainchain
28	b	36	LYS	Peptide
28	b	37	CYS	Mainchain
31	e	93	VAL	Mainchain
31	e	94	ALA	Peptide,Mainchain
31	e	96	GLN	Mainchain
31	e	97	GLU	Peptide
32	f	102	VAL	Peptide
32	f	105	TYR	Peptide
32	f	135	HIS	Mainchain
32	f	148	TYR	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
32	f	84	SER	Peptide
32	f	90	LYS	Peptide
33	g	12	LYS	Peptide
33	g	142	VAL	Mainchain
33	g	148	SER	Mainchain
33	g	158	PRO	Peptide
33	g	159	ASN	Peptide,Mainchain
33	g	160	SER	Peptide
33	g	192	THR	Peptide
33	g	273	GLU	Peptide
33	g	283	PRO	Peptide
33	g	47	ARG	Peptide
33	g	59	LEU	Mainchain
33	g	60	ARG	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1642	0	1638	654	0
2	B	1741	0	1808	517	0
3	C	1742	0	1830	598	0
4	D	1764	0	1856	624	0
5	E	2083	0	2189	539	0
6	F	1509	0	1557	554	0
7	G	1923	0	2087	546	3
8	H	1530	0	1624	504	0
9	I	1679	0	1762	464	3
10	J	1498	0	1599	626	0
11	K	827	0	853	363	18
12	L	1296	0	1370	421	0
13	M	950	0	969	282	0
14	N	1208	0	1294	325	0
15	O	1016	0	1037	421	0
16	P	1060	0	1120	514	0
17	Q	1124	0	1189	507	0
18	R	1019	0	1067	390	0
19	S	1139	0	1188	460	1

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
20	T	1112	0	1149	432	0
21	U	822	0	887	232	0
22	V	619	0	620	282	0
23	W	1034	0	1079	301	0
24	X	1106	0	1177	345	0
25	Y	1021	0	1083	515	0
26	Z	598	0	652	217	0
27	a	844	0	895	201	0
28	b	659	0	681	265	0
29	c	506	0	534	212	0
30	d	445	0	441	139	0
31	e	473	0	519	287	31
32	f	581	0	598	191	0
33	g	2436	0	2388	708	0
34	i	37514	0	18808	1212	78
35	j	1607	0	811	157	0
36	k	273	0	139	104	0
37	n	648	0	642	307	0
All	All	79048	0	61140	13410	81

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 96.

All (13410) 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)
33:g:5:MET:SD	33:g:312:VAL:HG22	1.20	1.74
32:f:135:HIS:HB3	32:f:138:ARG:CG	1.22	1.69
28:b:64:CYS:SG	28:b:73:LEU:HD23	1.11	1.69
3:C:197:LYS:HA	3:C:200:LEU:CD2	1.22	1.68
9:I:141:ARG:CB	9:I:144:LYS:HB2	1.24	1.68
17:Q:135:PRO:HD3	17:Q:141:TYR:CE1	1.15	1.66
28:b:33:MET:HE3	28:b:79:PHE:CB	1.25	1.66
14:N:24:THR:CB	28:b:84:HIS:HE1	1.07	1.66
11:K:16:PHE:CE2	11:K:79:LEU:HB2	1.24	1.65
10:J:124:HIS:CD2	34:i:516:A:H5"	1.31	1.65
16:P:41:GLN:CG	16:P:84:ILE:HG21	1.18	1.64
25:Y:78:SER:HB3	25:Y:81:TYR:CD2	1.32	1.64
14:N:24:THR:HB	28:b:84:HIS:CE1	1.27	1.64
3:C:93:LYS:HD2	3:C:218:LEU:CD2	1.27	1.64
34:i:1820:G:C5'	37:n:43:GLY:HA3	1.16	1.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:41:LEU:CD2	7:G:45:TRP:CZ3	1.80	1.63
5:E:129:ILE:HG12	5:E:139:LEU:CD2	1.24	1.63
1:A:58:LEU:CD2	1:A:178:LEU:HD23	1.28	1.62
3:C:50:LYS:HD2	3:C:251:TYR:CE1	1.21	1.62
4:D:132:LYS:CB	4:D:191:PRO:HG3	1.23	1.62
33:g:118:ARG:HH21	33:g:134:THR:CG2	1.12	1.62
33:g:194:TYR:CE2	33:g:212:LYS:HD3	1.11	1.62
22:V:11:LEU:CD1	22:V:12:TYR:HD2	1.12	1.62
19:S:42:HIS:CD2	20:T:45:LEU:HD11	1.21	1.61
16:P:33:LEU:CD2	16:P:87:PRO:HD3	1.20	1.61
16:P:41:GLN:HG2	16:P:84:ILE:CG1	1.29	1.61
16:P:123:TYR:CE2	19:S:120:HIS:CE1	1.85	1.61
34:i:1820:G:H5'	37:n:43:GLY:CA	1.18	1.61
21:U:40:ILE:CD1	21:U:53:PRO:HG3	1.20	1.60
11:K:21:MET:HE1	11:K:49:MET:SD	1.37	1.60
16:P:53:GLN:HG2	16:P:80:LEU:CD1	1.24	1.60
20:T:77:LYS:HG3	20:T:92:PHE:CE2	1.13	1.60
3:C:55:VAL:HG13	3:C:82:PHE:CE2	1.35	1.60
4:D:12:VAL:CG1	30:d:36:LEU:HD11	1.24	1.60
8:H:40:LEU:CD2	8:H:43:LEU:HD12	1.14	1.60
16:P:41:GLN:CG	16:P:84:ILE:CG2	1.79	1.60
2:B:66:VAL:CG2	2:B:87:ILE:HG22	1.23	1.59
6:F:14:THR:HG21	17:Q:56:LEU:CG	1.32	1.59
5:E:129:ILE:CG1	5:E:139:LEU:CD2	1.80	1.59
11:K:27:VAL:CG1	11:K:43:LEU:HD22	1.28	1.59
7:G:41:LEU:HD22	7:G:45:TRP:CZ3	1.34	1.59
8:H:83:LEU:HD13	8:H:92:VAL:CG2	1.25	1.59
25:Y:78:SER:CB	25:Y:81:TYR:HD2	1.16	1.59
1:A:42:LYS:HD3	18:R:105:MET:CG	1.33	1.59
6:F:25:THR:HG21	6:F:42:LYS:CG	1.22	1.59
19:S:54:LYS:CA	19:S:54:LYS:C	1.75	1.59
5:E:70:ILE:HG12	5:E:92:ILE:CD1	1.12	1.58
37:n:62:ARG:CG	37:n:92:ILE:HA	1.21	1.58
30:d:23:VAL:CG2	30:d:38:MET:CE	1.81	1.58
7:G:131:ARG:CG	7:G:131:ARG:CD	1.79	1.57
36:k:19:U:C2'	37:n:70:TRP:CH2	1.82	1.57
2:B:71:LEU:HD13	2:B:84:PHE:CE2	1.39	1.57
22:V:17:CYS:SG	22:V:56:CYS:HB3	1.44	1.57
19:S:34:LYS:CB	19:S:103:LEU:HD21	1.17	1.57
25:Y:55:ILE:HG12	25:Y:75:ILE:CG1	1.22	1.56
11:K:14:LEU:HD22	11:K:35:LEU:CD2	1.22	1.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:9:SER:HB3	17:Q:26:LYS:CG	1.36	1.56
24:X:27:TYR:CE1	24:X:31:HIS:NE2	1.70	1.56
33:g:12:LYS:HD2	33:g:13:GLY:CA	1.32	1.56
4:D:158:ILE:CD1	4:D:189:MET:CE	1.81	1.55
8:H:146:VAL:HG21	23:W:50:PHE:CZ	1.37	1.55
17:Q:93:VAL:CG1	17:Q:105:LYS:HE2	1.10	1.55
21:U:61:LEU:CD2	30:d:34:TYR:CZ	1.77	1.55
3:C:50:LYS:CD	3:C:251:TYR:CE1	1.89	1.55
16:P:4:VAL:CA	16:P:10:ARG:HD3	1.18	1.54
1:A:21:ALA:CB	1:A:173:LEU:CD1	1.77	1.54
1:A:21:ALA:HB2	1:A:173:LEU:CD1	1.34	1.54
6:F:14:THR:CG2	17:Q:56:LEU:HD22	1.07	1.54
17:Q:9:SER:CB	17:Q:26:LYS:HG3	1.34	1.54
3:C:93:LYS:CD	3:C:218:LEU:HD21	1.12	1.54
5:E:248:ILE:CD1	10:J:72:PHE:CG	1.89	1.54
1:A:42:LYS:CD	18:R:105:MET:HG2	1.36	1.53
5:E:248:ILE:HD12	10:J:72:PHE:CD2	1.02	1.53
7:G:41:LEU:HD22	7:G:45:TRP:CE3	1.37	1.53
16:P:4:VAL:HA	16:P:10:ARG:CD	1.07	1.53
17:Q:42:ILE:HD13	17:Q:51:LEU:CD2	1.16	1.53
19:S:54:LYS:CA	19:S:54:LYS:N	1.67	1.53
19:S:42:HIS:CD2	20:T:45:LEU:CD1	1.92	1.53
25:Y:29:HIS:CE1	25:Y:68:LYS:N	1.74	1.53
1:A:141:ASN:C	22:V:32:ILE:HG12	1.27	1.53
19:S:34:LYS:HB3	19:S:103:LEU:CD2	1.08	1.53
2:B:113:MET:HE1	2:B:211:PHE:CE2	1.38	1.53
4:D:158:ILE:CD1	4:D:189:MET:HE1	1.31	1.53
9:I:142:SER:CB	9:I:143:LYS:HB2	1.35	1.53
10:J:17:ARG:HG2	10:J:18:ARG:CD	1.33	1.53
7:G:121:ILE:HG23	7:G:122:PRO:CD	1.38	1.52
21:U:61:LEU:HD22	30:d:34:TYR:CE2	1.41	1.52
1:A:30:LEU:HD13	1:A:38:ILE:CD1	1.32	1.52
3:C:50:LYS:HD2	3:C:251:TYR:CD1	1.42	1.52
17:Q:135:PRO:CD	17:Q:141:TYR:HE1	1.19	1.52
1:A:30:LEU:CD1	1:A:38:ILE:HD11	1.06	1.52
1:A:48:ILE:CD1	18:R:105:MET:HE1	1.10	1.52
4:D:12:VAL:HG11	30:d:36:LEU:CD1	1.08	1.52
9:I:69:SER:CB	12:L:19:ASN:HD21	1.17	1.52
5:E:99:PHE:CE1	5:E:113:ARG:HG3	1.45	1.51
25:Y:55:ILE:CG1	25:Y:75:ILE:HG12	1.35	1.51
4:D:197:LYS:HB2	4:D:198:ILE:CG1	1.35	1.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:14:THR:HG21	17:Q:56:LEU:CD2	1.05	1.51
16:P:33:LEU:CD2	16:P:87:PRO:CD	1.82	1.51
4:D:76:ARG:NE	11:K:66:HIS:CE1	1.76	1.51
19:S:39:ARG:CZ	20:T:38:LYS:CE	1.83	1.51
14:N:24:THR:CB	28:b:84:HIS:CE1	1.80	1.50
2:B:25:PHE:CE2	15:O:88:LEU:CD1	1.91	1.50
3:C:55:VAL:CG1	3:C:82:PHE:CE2	1.93	1.50
6:F:103:LEU:CD2	6:F:178:ILE:HD13	1.37	1.50
36:k:19:U:C2'	37:n:70:TRP:CZ2	1.88	1.50
26:Z:99:LEU:HD13	26:Z:102:LYS:CE	1.35	1.50
31:e:81:ALA:HB3	37:n:82:ARG:CD	1.34	1.50
9:I:25:ARG:HD2	9:I:27:TYR:CE2	1.42	1.50
28:b:33:MET:CE	28:b:79:PHE:CG	1.95	1.50
6:F:61:PHE:CZ	29:c:51:ARG:CB	1.91	1.50
9:I:157:LYS:CB	12:L:22:ARG:NH1	1.71	1.49
31:e:80:LEU:CD1	37:n:83:ASP:CB	1.88	1.49
1:A:48:ILE:HD11	18:R:105:MET:CE	1.39	1.49
8:H:144:ILE:HB	23:W:52:ILE:CG2	1.38	1.49
11:K:27:VAL:HG13	11:K:43:LEU:CD2	1.02	1.49
25:Y:18:LEU:CB	25:Y:20:ARG:HH11	1.22	1.49
8:H:122:LEU:HD13	8:H:123:THR:N	1.21	1.49
16:P:79:HIS:CE1	16:P:102:PHE:HZ	1.31	1.48
22:V:11:LEU:CD1	22:V:12:TYR:CD2	1.94	1.48
31:e:119:VAL:C	31:e:121:PRO:HD2	1.35	1.48
18:R:1:MET:CA	18:R:1:MET:CB	1.87	1.48
21:U:61:LEU:HD22	30:d:34:TYR:CZ	0.99	1.48
15:O:19:PRO:CG	15:O:27:VAL:CG2	1.86	1.48
23:W:14:ILE:CD1	23:W:72:CYS:SG	2.01	1.48
5:E:248:ILE:HG13	10:J:72:PHE:CD1	1.48	1.48
12:L:149:ALA:CB	12:L:156:GLN:CG	1.89	1.48
15:O:79:GLN:CB	29:c:5:ARG:CB	1.88	1.47
18:R:99:ASP:CA	18:R:119:VAL:CG1	1.92	1.47
18:R:99:ASP:CA	18:R:119:VAL:HG11	1.40	1.47
20:T:23:LYS:HD3	20:T:54:TYR:CD2	1.47	1.47
11:K:3:MET:CE	11:K:8:ARG:NH2	1.74	1.47
18:R:99:ASP:C	18:R:119:VAL:HG11	1.08	1.47
9:I:161:LEU:HD11	9:I:199:LEU:CD1	1.43	1.47
3:C:93:LYS:CD	3:C:218:LEU:CD2	1.78	1.47
17:Q:135:PRO:CD	17:Q:141:TYR:CE1	1.92	1.47
1:A:106:GLY:CA	34:i:1348:G:H5'	1.40	1.46
5:E:248:ILE:HD12	10:J:72:PHE:CG	1.49	1.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:81:ALA:CB	37:n:82:ARG:CD	1.87	1.46
6:F:63:LYS:HD3	6:F:71:ARG:CZ	1.42	1.46
19:S:8:LYS:HB2	19:S:9:PHE:CD1	1.46	1.46
12:L:149:ALA:HB2	12:L:156:GLN:CD	1.37	1.46
17:Q:93:VAL:CG1	17:Q:105:LYS:CE	1.94	1.46
35:j:53:A:H2	35:j:57:A:N6	1.04	1.46
3:C:50:LYS:CD	3:C:251:TYR:HE1	1.19	1.45
5:E:248:ILE:CD1	10:J:72:PHE:CD2	1.89	1.45
3:C:55:VAL:HG13	3:C:82:PHE:CZ	1.49	1.45
4:D:195:SER:C	4:D:197:LYS:HA	1.41	1.45
7:G:157:VAL:CG1	7:G:159:ARG:H	1.28	1.45
16:P:41:GLN:CD	16:P:84:ILE:HG21	1.38	1.45
10:J:118:GLY:C	10:J:119:LEU:N	1.73	1.45
31:e:80:LEU:N	37:n:82:ARG:CB	1.80	1.45
7:G:76:LEU:CD2	7:G:92:ARG:HG2	1.44	1.45
8:H:146:VAL:HG21	23:W:50:PHE:CE1	1.50	1.45
12:L:149:ALA:HB2	12:L:156:GLN:NE2	1.17	1.45
16:P:44:ARG:HE	16:P:84:ILE:CD1	1.28	1.45
16:P:49:LEU:CD1	16:P:51:ARG:HE	1.25	1.45
32:f:108:VAL:CG2	32:f:114:ILE:HG22	1.46	1.45
19:S:58:GLU:C	19:S:59:LEU:HD13	1.35	1.44
5:E:208:VAL:HB	5:E:225:ILE:CD1	1.46	1.44
6:F:42:LYS:HB2	6:F:45:TYR:N	1.21	1.44
18:R:1:MET:CA	18:R:1:MET:N	1.79	1.44
21:U:40:ILE:HD11	21:U:53:PRO:CG	1.47	1.44
26:Z:99:LEU:CD1	26:Z:102:LYS:HE2	1.43	1.44
1:A:48:ILE:CG1	18:R:105:MET:HE1	1.45	1.44
2:B:137:LEU:CD2	2:B:215:VAL:HG13	1.45	1.44
10:J:38:ARG:NH2	31:e:104:GLY:CA	1.77	1.44
15:O:79:GLN:CB	29:c:5:ARG:HB3	1.39	1.44
9:I:142:SER:HB3	9:I:143:LYS:CB	1.44	1.44
12:L:80:MET:CE	12:L:120:VAL:O	1.65	1.44
12:L:149:ALA:HB1	12:L:156:GLN:CB	1.46	1.44
5:E:159:THR:HG23	5:E:227:VAL:CG2	1.43	1.44
16:P:33:LEU:HD22	16:P:87:PRO:CD	1.41	1.44
19:S:39:ARG:NH2	20:T:38:LYS:CE	1.76	1.44
6:F:25:THR:CG2	6:F:42:LYS:HG3	1.46	1.43
7:G:16:ILE:HD13	7:G:45:TRP:CZ2	1.51	1.43
7:G:176:ILE:CB	7:G:179:LEU:HD23	1.47	1.43
11:K:11:ILE:CG2	11:K:49:MET:CE	1.94	1.43
17:Q:50:LYS:HZ2	17:Q:85:ARG:NH2	1.13	1.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:U:50:VAL:HG22	21:U:51:LYS:C	1.43	1.43
1:A:58:LEU:CD2	1:A:178:LEU:CD2	1.95	1.43
6:F:167:LYS:HD3	6:F:171:GLU:CG	1.47	1.43
15:O:19:PRO:CG	15:O:27:VAL:HG21	0.97	1.43
18:R:20:TYR:CE1	18:R:38:ILE:HG21	1.52	1.43
25:Y:29:HIS:HE1	25:Y:68:LYS:N	1.03	1.43
10:J:89:GLU:HA	10:J:92:MET:CG	1.45	1.43
10:J:110:LEU:HD13	10:J:130:ILE:CD1	1.48	1.43
14:N:55:ARG:NH1	28:b:47:PHE:CD2	1.83	1.43
1:A:57:LYS:NZ	22:V:70:LEU:HD11	1.34	1.43
17:Q:8:GLN:CG	17:Q:99:TYR:CE1	2.01	1.43
19:S:120:HIS:NE2	19:S:124:ARG:NE	1.62	1.43
25:Y:18:LEU:CD1	25:Y:20:ARG:HH12	1.31	1.43
10:J:170:PRO:HG2	10:J:175:ARG:CG	1.46	1.43
30:d:13:LYS:CG	30:d:14:PHE:HD2	1.32	1.43
10:J:38:ARG:NH2	31:e:104:GLY:HA3	1.19	1.42
11:K:2:LEU:HD13	11:K:3:MET:N	1.32	1.42
33:g:172:LYS:CE	33:g:191:HIS:O	1.64	1.42
5:E:153:LEU:HD13	5:E:172:PHE:CZ	1.51	1.42
10:J:90:GLY:O	10:J:96:TYR:CD2	1.73	1.42
25:Y:102:THR:HG21	25:Y:107:ARG:NE	1.16	1.42
29:c:15:THR:CG2	29:c:33:GLU:HG2	1.45	1.42
3:C:155:TRP:CH2	23:W:97:ARG:NH1	1.73	1.42
16:P:41:GLN:CG	16:P:84:ILE:HG12	1.47	1.42
19:S:39:ARG:NE	20:T:38:LYS:HE3	1.27	1.42
31:e:81:ALA:CA	37:n:82:ARG:HD3	1.33	1.42
32:f:140:TYR:OH	32:f:146:LEU:CA	1.63	1.42
34:i:1701:G:N2	34:i:1844:A:H1'	1.17	1.42
10:J:134:HIS:ND1	10:J:163:SER:HB2	1.30	1.42
12:L:80:MET:CE	12:L:120:VAL:C	1.93	1.42
1:A:176:TRP:CZ3	1:A:177:MET:SD	2.13	1.41
2:B:113:MET:CE	2:B:211:PHE:CE2	2.03	1.41
10:J:89:GLU:HA	10:J:92:MET:CB	1.48	1.41
9:I:69:SER:HB2	12:L:19:ASN:ND2	1.33	1.41
11:K:60:GLU:CD	11:K:67:PHE:HD1	1.26	1.41
28:b:64:CYS:SG	28:b:73:LEU:CD2	2.08	1.41
1:A:58:LEU:HD21	1:A:178:LEU:CD2	1.47	1.41
4:D:211:VAL:HG23	18:R:38:ILE:C	1.38	1.41
5:E:98:ASN:ND2	5:E:119:ALA:HB2	1.28	1.41
10:J:177:ASN:O	10:J:180:LYS:CG	1.69	1.41
31:e:80:LEU:CD1	37:n:83:ASP:HB2	0.93	1.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:110:LEU:CD1	10:J:130:ILE:CD1	1.96	1.41
15:O:19:PRO:HG3	15:O:27:VAL:CG2	1.40	1.41
18:R:99:ASP:C	18:R:119:VAL:CG1	1.94	1.40
18:R:20:TYR:OH	18:R:38:ILE:CG2	1.67	1.40
7:G:157:VAL:HG11	7:G:159:ARG:CG	1.51	1.40
10:J:38:ARG:HH21	31:e:104:GLY:CA	1.28	1.40
4:D:112:GLY:C	4:D:113:LEU:HD12	1.47	1.40
6:F:91:ARG:NH1	6:F:94:LYS:CB	1.85	1.40
7:G:85:ARG:HD2	25:Y:118:ARG:NH2	1.25	1.40
16:P:123:TYR:CE2	19:S:120:HIS:HE1	1.24	1.40
25:Y:29:HIS:CE1	25:Y:67:GLY:C	1.99	1.40
30:d:23:VAL:HG21	30:d:38:MET:CE	1.45	1.40
5:E:208:VAL:CB	5:E:225:ILE:CD1	1.99	1.40
31:e:118:ASN:N	31:e:119:VAL:HB	1.34	1.40
2:B:113:MET:HE3	2:B:209:ASP:CG	1.45	1.39
6:F:103:LEU:HD23	6:F:178:ILE:CD1	1.49	1.39
7:G:32:MET:SD	7:G:100:CYS:HB3	1.62	1.39
19:S:39:ARG:HH21	20:T:38:LYS:NZ	1.17	1.39
19:S:138:THR:CA	19:S:141:ARG:NH2	1.86	1.39
2:B:113:MET:CE	2:B:211:PHE:HE2	1.35	1.39
3:C:101:THR:CG2	3:C:103:ALA:O	1.69	1.39
16:P:79:HIS:HE1	16:P:102:PHE:CZ	1.40	1.39
18:R:20:TYR:CZ	18:R:38:ILE:CG2	2.03	1.39
19:S:46:ARG:NH2	20:T:50:GLU:HB3	1.16	1.39
25:Y:36:PRO:HG2	25:Y:39:GLU:CG	1.51	1.39
1:A:97:THR:CG2	1:A:98:PRO:HD2	1.52	1.39
10:J:79:ARG:NH1	10:J:83:ARG:NH1	1.62	1.39
12:L:99:TYR:OH	24:X:14:ARG:CA	1.70	1.39
16:P:44:ARG:NE	16:P:84:ILE:HD12	1.34	1.39
28:b:33:MET:CE	28:b:79:PHE:CB	1.94	1.39
5:E:248:ILE:HD12	10:J:72:PHE:CE2	1.55	1.39
27:a:23:CYS:HB2	27:a:28:CYS:SG	1.63	1.39
31:e:81:ALA:CB	37:n:82:ARG:HD3	0.92	1.39
19:S:39:ARG:CZ	20:T:38:LYS:HE3	0.92	1.38
4:D:132:LYS:HB2	4:D:191:PRO:CG	1.52	1.38
9:I:155:ASN:O	12:L:22:ARG:CD	1.72	1.38
10:J:48:PHE:CE1	10:J:52:LYS:HE3	1.57	1.38
8:H:143:ARG:CD	23:W:53:ILE:HG12	1.53	1.38
14:N:55:ARG:NH1	28:b:47:PHE:HD2	1.16	1.38
17:Q:146:ARG:HE	35:j:33:C:C5'	1.18	1.38
30:d:23:VAL:CG2	30:d:38:MET:HE1	0.91	1.38

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:30:LYS:HA	31:e:112:TYR:CE1	1.59	1.38
10:J:38:ARG:CG	31:e:105:ARG:HB2	1.51	1.38
10:J:38:ARG:CZ	31:e:104:GLY:HA3	1.51	1.38
18:R:21:TYR:CB	18:R:71:ILE:HD13	1.53	1.38
18:R:122:PRO:CA	18:R:123:THR:HG23	1.51	1.38
10:J:37:LEU:CD1	10:J:42:GLU:HB3	1.51	1.37
10:J:39:ASN:CG	10:J:42:GLU:OE2	1.67	1.37
15:O:79:GLN:HB2	29:c:5:ARG:CB	1.48	1.37
7:G:25:ARG:HG2	7:G:28:TYR:CD2	1.59	1.37
31:e:95:LYS:C	31:e:96:GLN:N	1.76	1.37
1:A:57:LYS:CE	22:V:70:LEU:HD11	1.55	1.37
18:R:44:LYS:CE	18:R:47:ARG:HH22	1.34	1.37
26:Z:112:ASN:O	26:Z:113:THR:HG23	1.23	1.37
34:i:60:A:C2	34:i:326:A:C3'	1.86	1.37
1:A:106:GLY:HA2	34:i:1348:G:C5'	1.54	1.37
6:F:45:TYR:O	6:F:47:LYS:CD	1.71	1.37
6:F:61:PHE:CZ	29:c:51:ARG:HB3	1.50	1.37
6:F:63:LYS:HD3	6:F:71:ARG:NH2	1.39	1.37
7:G:14:LYS:NZ	7:G:123:GLY:HA3	1.36	1.37
34:i:1683:C:H2'	34:i:1684:C:P	1.64	1.37
6:F:25:THR:CG2	6:F:42:LYS:HD2	1.55	1.37
9:I:69:SER:CB	12:L:19:ASN:ND2	1.83	1.37
18:R:17:ILE:CG2	18:R:69:ILE:HD11	1.54	1.37
19:S:42:HIS:NE2	20:T:45:LEU:CD2	1.84	1.37
1:A:76:VAL:HG21	1:A:90:PHE:CD2	1.60	1.36
1:A:176:TRP:HZ3	1:A:177:MET:SD	1.46	1.36
7:G:183:ARG:NH1	34:i:307:G:N7	1.70	1.36
6:F:45:TYR:O	6:F:47:LYS:CE	1.71	1.36
10:J:61:LEU:HD22	10:J:98:LEU:CD1	1.56	1.36
11:K:2:LEU:CD1	11:K:3:MET:H	1.37	1.36
16:P:41:GLN:HG2	16:P:84:ILE:CB	1.54	1.36
1:A:113:GLN:NE2	34:i:1347:G:H1'	1.39	1.36
6:F:204:ARG:NH1	29:c:60:GLU:OE2	1.57	1.36
33:g:191:HIS:CD2	33:g:195:LEU:HD21	1.59	1.36
8:H:83:LEU:CD1	8:H:92:VAL:HG21	1.52	1.36
25:Y:20:ARG:HG3	25:Y:74:MET:CE	1.53	1.36
34:i:1244:U:C1'	35:j:33:C:H5'	1.56	1.36
6:F:59:LYS:CD	6:F:62:ARG:HH21	1.37	1.36
11:K:65:ARG:NH2	30:d:25:SER:OG	1.57	1.36
18:R:20:TYR:OH	18:R:38:ILE:HG22	1.20	1.36
28:b:33:MET:HE1	28:b:79:PHE:CG	1.52	1.36

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:k:20:U:C1'	37:n:67:LYS:HA	1.53	1.36
2:B:66:VAL:HG22	2:B:87:ILE:CG2	1.55	1.35
4:D:59:LEU:HD12	4:D:60:GLY:N	1.37	1.35
7:G:32:MET:CE	7:G:100:CYS:HA	1.57	1.35
8:H:31:GLU:OE2	8:H:41:ARG:CD	1.71	1.35
11:K:16:PHE:CE2	11:K:79:LEU:CB	2.07	1.35
31:e:114:ARG:O	31:e:119:VAL:CG2	1.73	1.35
3:C:142:LEU:HA	3:C:145:LEU:CD2	1.56	1.35
6:F:59:LYS:HD2	6:F:62:ARG:NH2	1.03	1.35
15:O:121:ARG:CZ	29:c:62:GLU:OE2	1.72	1.35
19:S:14:ARG:NH1	19:S:17:ASN:HA	1.37	1.35
5:E:128:LYS:HD3	5:E:130:PHE:CE1	1.60	1.35
6:F:204:ARG:HD2	29:c:60:GLU:OE2	1.19	1.35
4:D:5:ILE:C	4:D:6:SER:N	1.82	1.35
11:K:83:LEU:HB3	11:K:85:LEU:CD2	1.56	1.35
16:P:4:VAL:N	16:P:10:ARG:HG2	1.40	1.35
23:W:14:ILE:HD11	23:W:72:CYS:SG	1.64	1.35
33:g:194:TYR:CE2	33:g:212:LYS:CD	2.07	1.35
13:M:13:ASP:O	13:M:16:THR:CG2	1.72	1.35
18:R:5:ARG:HB2	18:R:10:LYS:NZ	1.39	1.35
20:T:77:LYS:HB2	20:T:94:ARG:CD	1.57	1.35
10:J:90:GLY:O	10:J:96:TYR:CE2	1.77	1.34
19:S:42:HIS:CG	20:T:45:LEU:HD11	1.62	1.34
20:T:77:LYS:CG	20:T:92:PHE:CE2	2.07	1.34
5:E:248:ILE:HB	10:J:72:PHE:CZ	1.59	1.34
18:R:99:ASP:HA	18:R:119:VAL:CG1	1.53	1.34
19:S:42:HIS:CE1	20:T:45:LEU:HD21	1.62	1.34
22:V:11:LEU:HD11	22:V:12:TYR:CD2	1.58	1.34
24:X:114:ASP:O	24:X:116:PRO:HD3	1.16	1.34
30:d:13:LYS:HE3	30:d:14:PHE:CE2	1.60	1.34
31:e:80:LEU:HD12	37:n:83:ASP:CB	1.51	1.34
33:g:118:ARG:NH2	33:g:134:THR:HG21	1.02	1.34
6:F:204:ARG:CD	29:c:60:GLU:OE2	1.75	1.34
31:e:81:ALA:CB	37:n:82:ARG:HH11	1.36	1.34
31:e:81:ALA:CA	37:n:82:ARG:CD	1.91	1.34
4:D:7:LYS:NZ	21:U:113:GLU:OE2	1.60	1.34
7:G:63:MET:CE	7:G:106:LEU:HD11	1.56	1.34
33:g:5:MET:SD	33:g:312:VAL:CG2	2.15	1.34
2:B:147:ASN:O	18:R:124:VAL:CG2	1.73	1.34
7:G:157:VAL:HG13	7:G:159:ARG:N	1.39	1.33
16:P:49:LEU:HD12	16:P:51:ARG:NE	1.40	1.33

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:44:LEU:HD11	25:Y:48:TYR:CE2	1.63	1.33
5:E:19:MET:CE	34:i:842:G:H2'	1.57	1.33
9:I:141:ARG:CG	9:I:144:LYS:HB2	1.58	1.33
17:Q:42:ILE:CD1	17:Q:51:LEU:HD21	1.58	1.33
5:E:153:LEU:CD1	5:E:172:PHE:CZ	2.11	1.33
11:K:21:MET:CE	11:K:49:MET:SD	2.17	1.33
12:L:147:LYS:CD	12:L:148:ALA:HA	1.55	1.33
25:Y:18:LEU:HD13	25:Y:20:ARG:NH1	1.41	1.33
24:X:105:PHE:CE2	24:X:119:ARG:HA	1.60	1.33
33:g:12:LYS:CD	33:g:13:GLY:HA2	1.58	1.33
1:A:21:ALA:CB	1:A:173:LEU:HD12	1.42	1.32
1:A:177:MET:HE1	1:A:180:ARG:NH2	1.00	1.32
10:J:15:THR:HG22	10:J:44:TRP:CE3	1.64	1.32
21:U:62:ARG:NH1	21:U:64:THR:HG21	1.42	1.32
4:D:197:LYS:HB3	4:D:198:ILE:CG2	1.57	1.32
5:E:159:THR:CG2	5:E:227:VAL:HG23	1.59	1.32
6:F:122:ARG:O	6:F:141:VAL:HG13	1.26	1.32
17:Q:38:PRO:HG2	17:Q:41:MET:SD	1.69	1.32
2:B:205:TYR:CD2	2:B:206:PRO:HD2	1.62	1.32
7:G:1:MET:CE	7:G:106:LEU:O	1.77	1.32
10:J:39:ASN:ND2	10:J:42:GLU:OE2	1.58	1.32
13:M:28:HIS:CD2	13:M:115:GLY:HA3	1.62	1.32
17:Q:34:VAL:HG23	17:Q:39:LEU:CD2	1.56	1.32
28:b:33:MET:HE1	28:b:79:PHE:CD2	1.62	1.32
2:B:25:PHE:CE2	15:O:88:LEU:HD11	1.52	1.32
4:D:157:MET:CE	4:D:187:LYS:HD3	1.59	1.32
18:R:21:TYR:HB2	18:R:71:ILE:CD1	1.59	1.32
23:W:62:VAL:HG21	28:b:8:LEU:CD2	1.59	1.32
33:g:20:GLN:NE2	33:g:68:ASP:OD2	1.62	1.32
36:k:22:C:C1'	36:k:22:C:N1	1.90	1.32
9:I:136:ILE:CG2	9:I:139:LYS:HE3	1.60	1.32
14:N:38:TYR:HE2	14:N:74:ILE:CG2	1.43	1.32
18:R:20:TYR:CZ	18:R:38:ILE:HG21	1.63	1.32
1:A:57:LYS:HZ1	22:V:70:LEU:CD1	1.41	1.31
8:H:6:ALA:CA	8:H:10:LYS:HD3	1.58	1.31
12:L:71:ARG:CD	12:L:73:LEU:HD21	1.57	1.31
12:L:80:MET:HE1	12:L:121:GLN:CA	1.60	1.31
13:M:13:ASP:HB2	13:M:16:THR:CB	1.57	1.31
14:N:24:THR:CG2	28:b:84:HIS:CE1	2.12	1.31
33:g:87:LEU:HD12	33:g:101:PHE:CB	1.60	1.31
5:E:70:ILE:CG1	5:E:92:ILE:CD1	2.07	1.31

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:141:VAL:HB	29:c:47:LYS:CE	1.60	1.31
7:G:176:ILE:HG21	7:G:179:LEU:CD2	1.60	1.31
20:T:77:LYS:HG3	20:T:92:PHE:CZ	1.64	1.31
24:X:2:GLY:O	24:X:3:LYS:HG3	1.23	1.31
33:g:194:TYR:HE2	33:g:212:LYS:CD	1.42	1.31
34:i:1279:C:C1'	34:i:1279:C:O4'	1.64	1.31
1:A:154:LEU:HD12	22:V:63:GLY:C	1.54	1.31
11:K:83:LEU:CD1	11:K:85:LEU:HD21	1.60	1.31
20:T:11:GLN:NE2	20:T:62:ARG:CZ	1.92	1.31
32:f:144:CYS:CB	32:f:147:THR:HG22	1.60	1.31
34:i:1207:G:C2	34:i:1684:C:C2	2.09	1.31
12:L:147:LYS:CG	12:L:148:ALA:HA	1.61	1.31
25:Y:18:LEU:CD1	25:Y:20:ARG:NH1	1.90	1.31
33:g:172:LYS:CE	33:g:192:THR:HG22	1.59	1.31
8:H:40:LEU:CD2	8:H:43:LEU:CD1	2.09	1.31
25:Y:13:MET:HE3	25:Y:14:THR:N	1.45	1.30
31:e:105:ARG:NH2	31:e:105:ARG:HB3	1.39	1.30
34:i:1635:A:C2	35:j:30:G:H1'	1.66	1.30
34:i:1635:A:C5'	35:j:40:C:H5'	1.58	1.30
3:C:101:THR:HG22	3:C:104:GLY:O	1.13	1.30
16:P:53:GLN:CG	16:P:80:LEU:CD1	2.08	1.30
34:i:1206:G:C8	34:i:1207:G:P	2.23	1.30
3:C:167:CYS:SG	23:W:95:PRO:HB3	1.72	1.30
8:H:122:LEU:CD1	8:H:123:THR:N	1.94	1.30
17:Q:93:VAL:HG11	17:Q:105:LYS:CE	1.52	1.30
22:V:55:ILE:HD11	22:V:68:SER:OG	1.26	1.30
25:Y:99:LYS:N	25:Y:99:LYS:HE3	1.45	1.30
1:A:21:ALA:CB	1:A:173:LEU:HD11	1.49	1.30
1:A:76:VAL:HG13	1:A:175:TRP:CH2	1.65	1.30
11:K:3:MET:HE1	11:K:8:ARG:NH2	0.97	1.30
20:T:23:LYS:HD3	20:T:54:TYR:CG	1.65	1.30
22:V:24:ILE:HD13	22:V:25:GLY:N	1.45	1.30
24:X:29:LYS:HD2	24:X:34:THR:OG1	1.31	1.30
36:k:20:U:H1'	37:n:67:LYS:CA	1.59	1.30
1:A:48:ILE:CD1	18:R:105:MET:CE	1.98	1.30
4:D:210:ILE:HD12	18:R:15:VAL:CG1	1.62	1.30
7:G:32:MET:SD	7:G:100:CYS:CB	2.17	1.30
11:K:60:GLU:OE1	11:K:67:PHE:CD1	1.84	1.30
18:R:5:ARG:O	18:R:10:LYS:HE2	1.27	1.30
31:e:82:ARG:N	37:n:82:ARG:HD2	1.42	1.30
12:L:149:ALA:CB	12:L:156:GLN:HG2	1.54	1.29

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:117:ILE:O	19:S:118:ARG:HG2	1.12	1.29
25:Y:18:LEU:CB	25:Y:20:ARG:NH1	1.94	1.29
3:C:79:ILE:HD13	3:C:147:ILE:CD1	1.59	1.29
3:C:110:LYS:HE2	3:C:112:PHE:CZ	1.66	1.29
4:D:210:ILE:CD1	18:R:15:VAL:CG1	2.09	1.29
4:D:218:LEU:CG	4:D:220:THR:CG2	2.10	1.29
6:F:91:ARG:NH1	6:F:94:LYS:HB2	1.45	1.29
9:I:25:ARG:CD	9:I:27:TYR:HE2	1.43	1.29
10:J:38:ARG:HG2	31:e:105:ARG:CB	1.62	1.29
6:F:141:VAL:CB	29:c:47:LYS:HZ1	1.44	1.29
19:S:120:HIS:NE2	19:S:124:ARG:CZ	1.93	1.29
24:X:142:ARG:HH11	24:X:142:ARG:CB	1.44	1.29
33:g:261:LEU:O	33:g:264:LYS:HE3	1.14	1.29
2:B:87:ILE:HD13	2:B:101:HIS:CD2	1.66	1.29
4:D:105:LEU:CD2	4:D:184:ILE:HD12	1.63	1.29
7:G:176:ILE:CG2	7:G:179:LEU:CD2	2.10	1.29
8:H:122:LEU:HD13	8:H:122:LEU:C	1.57	1.29
10:J:88:ASP:C	10:J:92:MET:HG3	1.58	1.29
24:X:51:VAL:HG13	24:X:70:VAL:CG1	1.60	1.28
1:A:176:TRP:CZ2	1:A:195:TRP:HE3	1.06	1.28
5:E:49:ARG:C	5:E:49:ARG:HD3	1.41	1.28
19:S:42:HIS:CD2	20:T:45:LEU:HD21	1.68	1.28
23:W:62:VAL:CB	28:b:8:LEU:HD21	1.60	1.28
3:C:154:TYR:OH	3:C:161:LYS:CA	1.81	1.28
3:C:241:TRP:HB3	23:W:68:ARG:NH1	1.48	1.28
4:D:123:LEU:HD21	4:D:154:ASP:CB	1.63	1.28
8:H:6:ALA:HA	8:H:10:LYS:CD	1.62	1.28
10:J:37:LEU:O	31:e:105:ARG:HG2	1.29	1.28
10:J:134:HIS:ND1	10:J:163:SER:CB	1.96	1.28
16:P:9:LYS:O	16:P:10:ARG:HG3	1.19	1.28
19:S:11:HIS:HD2	19:S:23:ARG:NH2	1.31	1.28
19:S:132:ARG:HB2	19:S:134:GLN:OE1	1.18	1.28
20:T:31:PRO:O	20:T:33:TRP:N	1.63	1.28
1:A:176:TRP:CZ2	1:A:195:TRP:CE3	1.94	1.28
10:J:38:ARG:HH21	31:e:104:GLY:N	1.28	1.28
25:Y:102:THR:CG2	25:Y:107:ARG:HE	1.46	1.28
17:Q:42:ILE:CD1	17:Q:51:LEU:CD2	2.10	1.28
23:W:14:ILE:HD12	23:W:72:CYS:SG	1.67	1.28
6:F:25:THR:CG2	6:F:42:LYS:CD	2.12	1.27
32:f:106:TYR:OH	32:f:131:PHE:CZ	1.81	1.27
33:g:7:LEU:CD1	33:g:310:TRP:HE1	1.47	1.27

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:60:A:C2	34:i:326:A:O3'	1.77	1.27
1:A:177:MET:CE	1:A:180:ARG:NH2	1.95	1.27
9:I:144:LYS:O	9:I:145:ILE:HG12	1.30	1.27
16:P:49:LEU:O	16:P:51:ARG:HA	1.31	1.27
16:P:62:LYS:O	16:P:65:LYS:HG2	1.21	1.27
17:Q:25:CYS:SG	17:Q:91:ALA:HB1	1.74	1.27
34:i:389:C:C1'	34:i:389:C:O4'	1.64	1.27
34:i:1683:C:C2'	34:i:1684:C:P	2.18	1.27
8:H:138:GLU:OE2	14:N:19:ARG:HB3	1.29	1.27
10:J:15:THR:HG22	10:J:44:TRP:CZ3	1.66	1.27
10:J:17:ARG:CG	10:J:18:ARG:HD3	1.64	1.27
4:D:46:THR:OG1	4:D:79:PHE:CZ	1.82	1.27
4:D:197:LYS:CB	4:D:198:ILE:HG23	1.63	1.27
6:F:14:THR:CG2	17:Q:56:LEU:HB3	1.64	1.27
8:H:83:LEU:CD1	8:H:92:VAL:CG2	2.06	1.27
11:K:43:LEU:O	11:K:45:VAL:N	1.65	1.27
12:L:80:MET:HE1	12:L:121:GLN:N	1.46	1.27
17:Q:38:PRO:CG	17:Q:41:MET:SD	2.23	1.27
19:S:8:LYS:HD3	19:S:9:PHE:CE1	1.69	1.27
25:Y:13:MET:HE2	25:Y:14:THR:O	1.28	1.27
28:b:33:MET:HA	28:b:81:ARG:O	1.21	1.27
1:A:145:ILE:CD1	1:A:159:ILE:HG21	1.64	1.27
4:D:2:ALA:HB3	4:D:3:VAL:CA	1.65	1.27
30:d:13:LYS:CG	30:d:14:PHE:CD2	2.17	1.27
33:g:282:GLU:HG3	33:g:283:PRO:CD	1.64	1.27
37:n:62:ARG:NH1	37:n:92:ILE:HD12	1.45	1.27
3:C:151:ARG:NH1	3:C:240:LEU:HD11	1.50	1.26
9:I:37:LYS:O	9:I:59:ARG:HA	1.27	1.26
21:U:62:ARG:NH1	21:U:64:THR:CG2	1.96	1.26
34:i:1822:C:O2	34:i:1843:G:N2	1.66	1.26
1:A:112:ILE:CB	34:i:1346:U:O2'	1.81	1.26
18:R:44:LYS:HE3	18:R:47:ARG:NH2	1.48	1.26
1:A:106:GLY:CA	34:i:1347:G:O2'	1.84	1.26
5:E:248:ILE:CG1	10:J:72:PHE:CD1	2.17	1.26
6:F:42:LYS:CB	6:F:45:TYR:H	1.48	1.26
7:G:176:ILE:CG2	7:G:179:LEU:HD23	1.65	1.26
9:I:157:LYS:HB2	12:L:22:ARG:CD	1.64	1.26
12:L:101:ARG:O	24:X:10:ALA:HB2	1.29	1.26
15:O:113:GLN:CG	27:a:46:GLU:OE2	1.81	1.26
25:Y:10:ARG:NE	25:Y:24:VAL:HG11	1.50	1.26
26:Z:99:LEU:HD23	26:Z:109:TYR:CE1	1.69	1.26

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1244:U:O4'	35:j:33:C:C5'	1.84	1.26
3:C:244:THR:HG23	3:C:246:PHE:N	1.51	1.26
9:I:116:HIS:O	9:I:152:ARG:NH1	1.67	1.26
10:J:89:GLU:C	10:J:92:MET:HB2	1.57	1.26
12:L:71:ARG:HD3	12:L:73:LEU:CD2	1.66	1.26
17:Q:57:LEU:HD11	17:Q:115:TYR:CZ	1.71	1.26
18:R:44:LYS:CE	18:R:47:ARG:NH2	1.98	1.26
3:C:138:GLY:O	3:C:141:ILE:HG22	1.32	1.26
5:E:208:VAL:CG2	5:E:225:ILE:HD12	1.66	1.26
11:K:65:ARG:HB3	11:K:65:ARG:NH1	1.51	1.26
17:Q:38:PRO:HD2	17:Q:41:MET:SD	1.76	1.26
18:R:91:LEU:CD1	18:R:92:ASP:HA	1.64	1.26
2:B:137:LEU:HD21	2:B:215:VAL:CG1	1.65	1.25
3:C:79:ILE:CD1	3:C:147:ILE:HD12	1.66	1.25
4:D:16:ILE:HD13	30:d:22:ARG:NH2	1.47	1.25
31:e:82:ARG:HG3	37:n:82:ARG:NE	1.48	1.25
3:C:69:PHE:HZ	3:C:247:THR:OG1	1.03	1.25
6:F:91:ARG:HH11	6:F:94:LYS:CB	1.41	1.25
15:O:142:ARG:NH1	27:a:27:ALA:HB2	1.47	1.25
19:S:42:HIS:NE2	20:T:45:LEU:HD21	0.94	1.25
19:S:46:ARG:HG2	20:T:50:GLU:OE2	1.19	1.25
6:F:36:GLN:HG3	6:F:37:ASP:OD1	1.36	1.25
7:G:25:ARG:HG2	7:G:28:TYR:CE2	1.71	1.25
9:I:161:LEU:CD1	9:I:199:LEU:CD1	2.12	1.25
10:J:28:GLU:OE1	10:J:40:LYS:HD2	1.33	1.25
12:L:147:LYS:HG3	12:L:148:ALA:CA	1.65	1.25
14:N:46:THR:OG1	14:N:49:GLN:HG2	1.35	1.25
19:S:46:ARG:CZ	20:T:50:GLU:HB3	1.66	1.25
11:K:83:LEU:CB	11:K:85:LEU:CD2	2.15	1.25
35:j:16:C:O2	35:j:59:A:H4'	1.33	1.25
2:B:25:PHE:CE2	15:O:88:LEU:HD13	1.62	1.25
11:K:60:GLU:CD	11:K:67:PHE:CD1	2.15	1.25
15:O:52:THR:O	15:O:53:ILE:HG23	1.28	1.25
18:R:44:LYS:HG3	18:R:47:ARG:CZ	1.63	1.25
18:R:99:ASP:O	18:R:119:VAL:HG11	1.30	1.25
36:k:20:U:C2	37:n:67:LYS:O	1.90	1.25
1:A:112:ILE:HB	34:i:1346:U:O2'	1.31	1.25
1:A:113:GLN:NE2	34:i:1347:G:C1'	1.99	1.25
4:D:35:SER:CA	4:D:99:ILE:HD11	1.63	1.25
6:F:145:ARG:HG2	29:c:48:GLY:CA	1.67	1.25
11:K:27:VAL:CG1	11:K:43:LEU:CD2	1.94	1.25

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:30:PRO:O	11:K:31:LYS:HG3	1.14	1.25
16:P:79:HIS:CE1	16:P:102:PHE:CZ	2.17	1.25
19:S:42:HIS:CD2	20:T:45:LEU:CG	2.19	1.25
25:Y:34:THR:O	25:Y:35:VAL:HG22	1.09	1.25
32:f:135:HIS:CB	32:f:138:ARG:CG	2.14	1.25
4:D:201:LYS:O	4:D:203:PRO:HD2	1.08	1.24
6:F:14:THR:OG1	17:Q:56:LEU:CB	1.83	1.24
6:F:63:LYS:CD	6:F:71:ARG:NH1	1.98	1.24
16:P:46:SER:O	16:P:49:LEU:HB2	1.11	1.24
34:i:1244:U:O4'	35:j:33:C:H5'	1.36	1.24
2:B:105:LEU:HD12	2:B:110:MET:CE	1.66	1.24
4:D:47:GLU:CG	4:D:85:GLU:OE2	1.85	1.24
14:N:53:ILE:CD1	28:b:52:THR:HG21	1.68	1.24
22:V:1:MET:CE	22:V:10:ASP:HB2	1.68	1.24
30:d:5:GLN:HB3	30:d:7:TYR:CD2	1.71	1.24
34:i:127:C:C4	34:i:180:G:O2'	1.85	1.24
6:F:14:THR:CG2	17:Q:56:LEU:CD2	1.76	1.24
6:F:28:VAL:HG13	6:F:110:GLN:CD	1.60	1.24
9:I:141:ARG:CD	9:I:144:LYS:CB	2.15	1.24
12:L:80:MET:HE1	12:L:120:VAL:C	1.58	1.24
16:P:126:VAL:CG1	16:P:127:LYS:H	1.46	1.24
17:Q:34:VAL:CG2	17:Q:39:LEU:HD23	1.65	1.24
25:Y:55:ILE:HG12	25:Y:75:ILE:CD1	1.66	1.24
25:Y:78:SER:CB	25:Y:81:TYR:CD2	1.98	1.24
31:e:125:LYS:C	31:e:126:LYS:HD2	1.60	1.24
5:E:62:LYS:CD	5:E:80:ILE:HD11	1.68	1.24
16:P:128:HIS:CE1	34:i:1516:C:H1'	1.72	1.24
17:Q:92:LEU:CD1	17:Q:96:TYR:HE2	1.50	1.24
37:n:62:ARG:HG3	37:n:92:ILE:CA	1.67	1.24
3:C:195:PRO:HB3	3:C:221:PHE:CZ	1.73	1.24
6:F:25:THR:CG2	6:F:42:LYS:CG	2.07	1.24
6:F:42:LYS:C	6:F:44:LYS:H	1.32	1.24
7:G:1:MET:HE2	7:G:106:LEU:O	1.30	1.24
9:I:194:GLU:HG2	12:L:12:LYS:NZ	1.53	1.24
10:J:37:LEU:O	31:e:105:ARG:CG	1.83	1.24
12:L:118:ARG:HD2	12:L:118:ARG:O	1.38	1.24
19:S:61:GLU:O	19:S:64:VAL:HG22	1.33	1.24
28:b:81:ARG:HB2	28:b:82:LYS:CB	1.67	1.24
30:d:13:LYS:HG2	30:d:14:PHE:CD2	1.72	1.24
1:A:154:LEU:HD12	22:V:63:GLY:O	1.09	1.23
5:E:129:ILE:CG1	5:E:139:LEU:HD22	1.45	1.23

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:141:VAL:HB	29:c:47:LYS:NZ	1.53	1.23
9:I:141:ARG:CD	9:I:144:LYS:HB3	1.67	1.23
11:K:3:MET:HE1	11:K:8:ARG:CZ	1.66	1.23
13:M:78:LYS:O	13:M:79:VAL:HG23	1.06	1.23
20:T:141:ALA:O	20:T:142:LYS:HG3	1.13	1.23
21:U:59:LYS:HB2	21:U:84:ILE:CG2	1.67	1.23
24:X:60:LYS:HG3	24:X:116:PRO:CG	1.68	1.23
4:D:157:MET:HE1	4:D:187:LYS:CD	1.68	1.23
4:D:211:VAL:HG23	18:R:38:ILE:O	1.36	1.23
8:H:40:LEU:HD21	8:H:43:LEU:CD1	1.64	1.23
10:J:17:ARG:CG	10:J:18:ARG:HG2	1.66	1.23
17:Q:109:LYS:HG3	17:Q:113:ILE:CD1	1.65	1.23
23:W:62:VAL:CG2	28:b:8:LEU:CD2	2.16	1.23
25:Y:120:THR:HB	25:Y:122:LYS:CE	1.67	1.23
8:H:53:VAL:CG2	8:H:57:ARG:O	1.86	1.23
11:K:71:LEU:CD2	11:K:76:ILE:CD1	2.17	1.23
12:L:118:ARG:HD2	12:L:118:ARG:C	1.57	1.23
14:N:25:TRP:HB3	28:b:83:GLN:CG	1.69	1.23
17:Q:98:LYS:O	33:g:57:ARG:NH2	1.72	1.23
18:R:29:HIS:NE2	33:g:65:PHE:CZ	2.07	1.23
25:Y:114:MET:HA	25:Y:124:ASN:ND2	1.54	1.23
4:D:97:CYS:O	4:D:99:ILE:N	1.67	1.23
5:E:38:LEU:C	5:E:38:LEU:HD12	1.56	1.23
11:K:83:LEU:CB	11:K:85:LEU:HD21	1.66	1.23
25:Y:18:LEU:HB3	25:Y:20:ARG:NH1	1.51	1.23
25:Y:22:GLN:HB3	25:Y:74:MET:SD	1.78	1.23
25:Y:99:LYS:HE3	25:Y:99:LYS:CA	1.48	1.23
34:i:984:C:C1'	34:i:984:C:O4'	1.64	1.23
11:K:71:LEU:CD2	11:K:76:ILE:HD13	1.67	1.23
15:O:95:ILE:CD1	15:O:116:LEU:HD21	1.67	1.23
17:Q:34:VAL:CG2	17:Q:39:LEU:CD2	2.15	1.23
18:R:33:ARG:HB3	33:g:150:TRP:CZ2	1.74	1.23
19:S:94:LYS:HD3	19:S:96:SER:OG	1.38	1.23
34:i:61:A:N3	34:i:326:A:C4	2.07	1.23
9:I:157:LYS:HB3	12:L:22:ARG:CZ	1.68	1.22
14:N:46:THR:OG1	14:N:49:GLN:CG	1.86	1.22
19:S:138:THR:HA	19:S:141:ARG:NH2	0.92	1.22
5:E:62:LYS:HD3	5:E:80:ILE:CD1	1.68	1.22
37:n:62:ARG:CG	37:n:92:ILE:CA	2.18	1.22
18:R:1:MET:N	18:R:1:MET:C	1.95	1.22
34:i:1701:G:H21	34:i:1844:A:C1'	1.53	1.22

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:197:LYS:CA	3:C:200:LEU:CD2	2.15	1.22
5:E:47:PHE:CE2	5:E:52:LEU:HD11	1.74	1.22
5:E:126:VAL:HG13	5:E:158:ASP:O	1.35	1.22
7:G:85:ARG:CD	25:Y:118:ARG:NH2	2.03	1.22
11:K:14:LEU:CD2	11:K:35:LEU:CD2	2.18	1.22
16:P:10:ARG:HH21	16:P:11:THR:CB	1.50	1.22
17:Q:93:VAL:HG13	17:Q:105:LYS:CD	1.69	1.22
18:R:29:HIS:CE1	33:g:65:PHE:CZ	2.27	1.22
31:e:124:GLY:O	31:e:125:LYS:HG3	1.39	1.22
2:B:57:ILE:HD13	2:B:60:ASP:CG	1.65	1.22
2:B:57:ILE:CD1	2:B:60:ASP:OD1	1.88	1.22
4:D:35:SER:HA	4:D:99:ILE:CD1	1.69	1.22
9:I:136:ILE:O	9:I:139:LYS:HG3	1.04	1.22
10:J:17:ARG:CB	10:J:18:ARG:HG2	1.70	1.22
10:J:66:LYS:NZ	34:i:687:G:O3'	1.72	1.22
10:J:124:HIS:CD2	34:i:516:A:C5'	2.23	1.22
19:S:8:LYS:CB	19:S:9:PHE:HD1	1.53	1.22
8:H:93:VAL:CG2	8:H:94:PHE:H	1.43	1.21
9:I:161:LEU:CD1	9:I:199:LEU:HD11	1.67	1.21
10:J:15:THR:CG2	10:J:44:TRP:CZ3	2.23	1.21
17:Q:8:GLN:HG2	17:Q:99:TYR:CD1	1.74	1.21
19:S:39:ARG:NH2	20:T:38:LYS:HE3	1.44	1.21
33:g:7:LEU:CD1	33:g:310:TRP:NE1	2.02	1.21
34:i:1206:G:C2	34:i:1207:G:H1'	1.40	1.21
36:k:19:U:O2'	37:n:70:TRP:CZ3	1.93	1.21
2:B:113:MET:CE	2:B:209:ASP:OD1	1.86	1.21
2:B:150:ILE:HG12	18:R:124:VAL:CG1	1.68	1.21
3:C:156:GLY:C	3:C:157:ASN:HD22	1.45	1.21
12:L:156:GLN:OE1	12:L:158:PHE:CE2	1.92	1.21
10:J:17:ARG:HG3	10:J:17:ARG:O	1.41	1.21
10:J:89:GLU:CA	10:J:92:MET:SD	2.28	1.21
11:K:16:PHE:CD2	11:K:79:LEU:CB	2.23	1.21
11:K:40:VAL:HG22	11:K:41:PRO:CD	1.69	1.21
1:A:11:LYS:CG	1:A:13:GLU:HG2	1.69	1.21
6:F:76:MET:CE	6:F:169:ILE:HG21	1.68	1.21
7:G:32:MET:HE1	7:G:100:CYS:CA	1.69	1.21
8:H:83:LEU:CD2	8:H:92:VAL:HG11	1.71	1.21
12:L:80:MET:HE3	12:L:120:VAL:C	1.59	1.21
25:Y:12:PHE:CZ	25:Y:21:LYS:HB3	1.75	1.21
1:A:30:LEU:CD1	1:A:38:ILE:CD1	1.96	1.21
4:D:55:THR:O	4:D:58:VAL:HG22	1.41	1.21

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:18:LYS:NZ	6:F:46:ALA:O	1.73	1.21
6:F:59:LYS:CD	6:F:62:ARG:NH2	1.98	1.21
10:J:61:LEU:CD2	10:J:98:LEU:HD11	1.69	1.21
10:J:177:ASN:O	10:J:180:LYS:HG2	1.22	1.21
15:O:56:VAL:CG1	15:O:81:VAL:CG2	2.18	1.21
25:Y:19:GLN:HG2	25:Y:81:TYR:CD1	1.76	1.21
25:Y:36:PRO:CG	25:Y:39:GLU:CD	2.14	1.21
31:e:114:ARG:O	31:e:119:VAL:HG23	1.33	1.21
6:F:61:PHE:CE1	29:c:51:ARG:HB3	1.76	1.20
7:G:63:MET:CE	7:G:106:LEU:CD1	2.17	1.20
6:F:63:LYS:CD	6:F:71:ARG:CZ	2.19	1.20
8:H:146:VAL:CG2	23:W:50:PHE:CE1	2.22	1.20
14:N:24:THR:CG2	28:b:84:HIS:HE1	1.50	1.20
25:Y:22:GLN:CB	25:Y:74:MET:SD	2.29	1.20
25:Y:54:VAL:HG11	25:Y:76:TYR:O	1.35	1.20
12:L:103:GLU:OE1	24:X:11:ARG:HB2	1.07	1.20
17:Q:50:LYS:NZ	17:Q:85:ARG:NH2	1.88	1.20
25:Y:32:LYS:CG	25:Y:33:ALA:H	1.55	1.20
4:D:56:GLN:O	4:D:59:LEU:HG	1.41	1.20
12:L:149:ALA:HB2	12:L:156:GLN:CG	1.60	1.20
15:O:121:ARG:NH2	29:c:62:GLU:OE2	1.70	1.20
16:P:41:GLN:HE21	16:P:84:ILE:CB	1.54	1.20
17:Q:85:ARG:HH12	17:Q:117:ARG:CG	1.53	1.20
25:Y:120:THR:HB	25:Y:122:LYS:HE2	1.20	1.20
33:g:194:TYR:CZ	33:g:212:LYS:HD3	1.75	1.20
6:F:44:LYS:HB3	6:F:45:TYR:CE1	1.76	1.20
7:G:183:ARG:HH21	34:i:308:C:N4	1.39	1.20
7:G:195:LYS:HE2	34:i:125:C:O2'	1.38	1.20
9:I:157:LYS:HB3	12:L:22:ARG:NH1	0.87	1.20
9:I:194:GLU:CD	12:L:12:LYS:HZ3	1.50	1.20
13:M:98:GLY:O	13:M:100:PRO:HD3	1.36	1.20
14:N:25:TRP:CB	28:b:83:GLN:HG2	1.72	1.20
3:C:195:PRO:CB	3:C:221:PHE:HZ	1.54	1.19
9:I:141:ARG:CB	9:I:144:LYS:CB	2.18	1.19
12:L:149:ALA:CB	12:L:156:GLN:NE2	2.05	1.19
14:N:99:ARG:NH2	14:N:115:LEU:HD21	1.56	1.19
16:P:41:GLN:NE2	16:P:84:ILE:HB	1.56	1.19
29:c:10:LYS:HD2	29:c:61:SER:CB	1.70	1.19
31:e:80:LEU:CG	37:n:83:ASP:HB2	1.72	1.19
1:A:13:GLU:O	1:A:17:LYS:HE3	1.42	1.19
1:A:48:ILE:HD11	18:R:105:MET:SD	1.81	1.19

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:218:LEU:CG	4:D:220:THR:HG23	1.69	1.19
4:D:218:LEU:CD1	4:D:220:THR:HG21	1.71	1.19
12:L:17:PHE:CZ	12:L:18:GLN:O	1.94	1.19
16:P:46:SER:O	16:P:49:LEU:CB	1.91	1.19
16:P:126:VAL:HG12	16:P:127:LYS:N	1.34	1.19
24:X:27:TYR:CZ	24:X:31:HIS:NE2	2.09	1.19
26:Z:48:VAL:O	26:Z:83:LEU:HD11	1.36	1.19
32:f:140:TYR:OH	32:f:146:LEU:HA	1.01	1.19
4:D:218:LEU:HG	4:D:220:THR:CG2	1.69	1.19
8:H:85:LYS:HD2	8:H:85:LYS:C	1.61	1.19
10:J:66:LYS:NZ	34:i:687:G:O2'	1.75	1.19
16:P:123:TYR:OH	19:S:124:ARG:NH1	1.75	1.19
17:Q:47:LEU:CD2	17:Q:81:ILE:HD12	1.72	1.19
25:Y:84:LYS:HD2	25:Y:84:LYS:O	1.43	1.19
29:c:67:ARG:C	29:c:68:LEU:HD23	1.66	1.19
33:g:8:ARG:HE	33:g:8:ARG:CA	1.55	1.19
33:g:57:ARG:NE	33:g:94:THR:O	1.76	1.19
33:g:261:LEU:O	33:g:264:LYS:CE	1.89	1.19
36:k:19:U:O2'	37:n:70:TRP:CE2	1.93	1.19
3:C:79:ILE:CD1	3:C:147:ILE:CD1	2.19	1.19
4:D:158:ILE:HD11	4:D:189:MET:CE	1.54	1.19
4:D:177:LEU:CD2	4:D:182:LEU:HD23	1.72	1.19
5:E:21:ASP:OD2	5:E:24:THR:CG2	1.90	1.19
9:I:136:ILE:HG23	9:I:139:LYS:CE	1.70	1.19
10:J:17:ARG:HG2	10:J:18:ARG:CG	1.73	1.19
10:J:134:HIS:CE1	10:J:163:SER:HB2	1.77	1.19
23:W:11:LEU:O	23:W:14:ILE:HG12	1.37	1.19
33:g:100:ARG:HG3	33:g:100:ARG:HH11	1.07	1.19
33:g:162:ASN:ND2	33:g:163:PRO:HD2	1.57	1.19
34:i:1206:G:H8	34:i:1207:G:P	1.61	1.19
34:i:1831:G:H8	36:k:15:A:OP1	1.23	1.19
6:F:14:THR:CG2	17:Q:56:LEU:CB	2.21	1.19
17:Q:92:LEU:CD1	17:Q:96:TYR:CE2	2.25	1.19
23:W:62:VAL:CG2	28:b:8:LEU:HD23	1.73	1.19
26:Z:99:LEU:CD2	26:Z:109:TYR:CE1	2.26	1.19
33:g:57:ARG:CD	33:g:94:THR:O	1.90	1.19
34:i:431:C:H4'	34:i:1732:G:O2'	1.39	1.19
34:i:1206:G:C2	34:i:1207:G:C1'	2.23	1.19
37:n:65:LEU:HD23	37:n:92:ILE:O	1.35	1.19
1:A:104:THR:O	1:A:107:THR:HG23	1.38	1.18
2:B:71:LEU:CD1	2:B:84:PHE:HE2	1.55	1.18

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:223:LYS:HE2	34:i:1351:C:O2	1.40	1.18
5:E:25:SER:HB3	34:i:485:U:O2'	1.41	1.18
5:E:212:ASP:OD1	5:E:216:ASN:HB2	1.41	1.18
7:G:183:ARG:NH2	34:i:308:C:C5	2.09	1.18
10:J:10:ARG:NH1	10:J:10:ARG:HB3	1.58	1.18
1:A:118:GLU:HB3	3:C:50:LYS:NZ	1.57	1.18
1:A:125:THR:O	1:A:147:LEU:HB3	1.41	1.18
1:A:141:ASN:C	22:V:32:ILE:CG1	2.16	1.18
3:C:158:LYS:HE2	3:C:158:LYS:O	1.42	1.18
6:F:61:PHE:CZ	29:c:51:ARG:HB2	1.59	1.18
7:G:32:MET:SD	7:G:100:CYS:CA	2.31	1.18
17:Q:47:LEU:CD2	17:Q:81:ILE:CD1	2.22	1.18
17:Q:47:LEU:HD22	17:Q:81:ILE:CD1	1.72	1.18
23:W:18:GLU:OE2	23:W:67:GLY:HA2	1.36	1.18
26:Z:99:LEU:CD2	26:Z:102:LYS:HD3	1.73	1.18
34:i:1592:C:H4'	34:i:1598:G:O6	1.40	1.18
34:i:1825:A:N3	34:i:1846:C:H5'	1.58	1.18
13:M:13:ASP:CB	13:M:16:THR:HB	1.62	1.18
17:Q:9:SER:CB	17:Q:26:LYS:HE3	1.72	1.18
25:Y:120:THR:CB	25:Y:122:LYS:HE2	1.72	1.18
31:e:80:LEU:HG	37:n:83:ASP:CA	1.66	1.18
33:g:282:GLU:CB	33:g:283:PRO:HD2	1.72	1.18
3:C:101:THR:HG21	3:C:103:ALA:O	1.42	1.18
12:L:149:ALA:CB	12:L:156:GLN:CB	2.17	1.18
16:P:41:GLN:HE22	16:P:45:LEU:CG	1.56	1.18
26:Z:44:LEU:C	26:Z:44:LEU:HD13	1.65	1.18
32:f:105:TYR:O	32:f:106:TYR:CD2	1.96	1.18
33:g:8:ARG:NE	33:g:8:ARG:HA	1.43	1.18
3:C:154:TYR:OH	3:C:161:LYS:HA	1.01	1.18
8:H:163:GLN:OE1	8:H:189:PHE:CE2	1.97	1.18
11:K:18:GLU:O	11:K:92:ALA:CB	1.92	1.18
13:M:93:LYS:O	13:M:94:ILE:HG22	1.42	1.18
17:Q:38:PRO:CD	17:Q:41:MET:SD	2.32	1.18
18:R:29:HIS:NE2	33:g:65:PHE:HZ	1.40	1.18
18:R:105:MET:O	18:R:109:LEU:HG	1.40	1.18
20:T:23:LYS:CD	20:T:54:TYR:CD2	2.26	1.18
20:T:40:ALA:HB3	20:T:43:LYS:CG	1.73	1.18
24:X:126:ALA:CB	24:X:128:VAL:HB	1.71	1.18
32:f:144:CYS:HB3	32:f:147:THR:CG2	1.73	1.18
4:D:210:ILE:CD1	18:R:15:VAL:HG11	1.73	1.17
14:N:62:GLN:HB2	14:N:65:PHE:CD2	1.78	1.17

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:113:GLN:HG3	27:a:46:GLU:OE2	1.01	1.17
19:S:42:HIS:CD2	20:T:45:LEU:CD2	2.25	1.17
21:U:67:LYS:HG2	21:U:78:ASP:OD2	1.45	1.17
34:i:1635:A:H5'	35:j:40:C:C5'	1.72	1.17
1:A:30:LEU:HD21	1:A:35:GLU:CG	1.73	1.17
3:C:82:PHE:O	3:C:83:LEU:HD12	1.43	1.17
3:C:151:ARG:HH12	3:C:240:LEU:CD1	1.56	1.17
7:G:180:VAL:O	7:G:181:THR:HG22	1.41	1.17
11:K:11:ILE:CG2	11:K:49:MET:HE1	1.60	1.17
12:L:147:LYS:HD2	12:L:148:ALA:CA	1.71	1.17
13:M:85:LEU:HA	13:M:88:TRP:CE3	1.77	1.17
16:P:84:ILE:O	16:P:86:LEU:CD2	1.92	1.17
21:U:50:VAL:O	21:U:51:LYS:HD2	1.39	1.17
28:b:81:ARG:CB	28:b:82:LYS:HB2	1.74	1.17
32:f:120:GLU:OE1	32:f:128:ALA:O	1.62	1.17
33:g:144:ASP:C	33:g:145:GLU:HG2	1.64	1.17
1:A:113:GLN:NE2	34:i:1347:G:O2'	1.76	1.17
7:G:27:PHE:CE2	7:G:41:LEU:HD12	1.79	1.17
10:J:92:MET:O	10:J:93:LYS:HE3	1.40	1.17
13:M:78:LYS:O	13:M:79:VAL:CG2	1.91	1.17
17:Q:58:LEU:CD2	17:Q:111:ILE:CD1	2.22	1.17
25:Y:102:THR:CG2	25:Y:107:ARG:NE	2.03	1.17
1:A:141:ASN:CA	22:V:32:ILE:HG12	1.75	1.17
6:F:42:LYS:HD3	6:F:42:LYS:N	1.39	1.17
8:H:53:VAL:HG22	8:H:57:ARG:O	0.99	1.17
25:Y:63:HIS:CG	25:Y:64:PHE:CE1	2.31	1.17
34:i:1824:U:O4'	34:i:1845:A:N1	1.78	1.17
1:A:154:LEU:CD1	22:V:63:GLY:O	1.91	1.17
2:B:66:VAL:CG2	2:B:87:ILE:CG2	2.15	1.17
13:M:94:ILE:HG23	13:M:95:ASP:N	1.45	1.17
13:M:94:ILE:CG2	13:M:95:ASP:H	1.56	1.17
17:Q:42:ILE:HG21	17:Q:51:LEU:CD2	1.75	1.17
19:S:8:LYS:O	26:Z:49:LEU:CD2	1.93	1.17
22:V:11:LEU:HD12	22:V:12:TYR:CD2	1.65	1.17
28:b:2:PRO:CA	28:b:3:LEU:HD23	1.73	1.17
34:i:181:A:C4'	34:i:182:C:H5'	1.74	1.17
1:A:113:GLN:HE21	34:i:1347:G:C1'	1.53	1.16
2:B:137:LEU:CD2	2:B:215:VAL:CG1	2.20	1.16
6:F:42:LYS:O	6:F:44:LYS:N	1.77	1.16
7:G:63:MET:HE1	7:G:106:LEU:CD1	1.73	1.16
8:H:65:PRO:HD2	8:H:68:GLN:OE1	1.42	1.16

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:141:ARG:HB2	9:I:144:LYS:CB	1.75	1.16
10:J:110:LEU:CD1	10:J:130:ILE:CG1	2.22	1.16
15:O:79:GLN:HB3	29:c:5:ARG:CB	1.59	1.16
18:R:122:PRO:HB3	18:R:123:THR:CG2	1.75	1.16
19:S:138:THR:HA	19:S:141:ARG:CZ	1.75	1.16
20:T:77:LYS:CG	20:T:92:PHE:HE2	1.47	1.16
1:A:5:LEU:HB3	22:V:41:LYS:HE2	1.19	1.16
1:A:5:LEU:HD13	1:A:6:ASP:N	1.59	1.16
7:G:145:PHE:HB3	7:G:147:LEU:CD1	1.73	1.16
12:L:149:ALA:CB	12:L:156:GLN:HE21	1.55	1.16
12:L:153:LYS:HG3	14:N:131:THR:O	1.40	1.16
14:N:62:GLN:HB2	14:N:65:PHE:HD2	1.07	1.16
15:O:61:LYS:HE3	15:O:80:ASP:OD2	1.03	1.16
19:S:47:LYS:NZ	19:S:78:LYS:HB2	1.59	1.16
19:S:47:LYS:HE3	19:S:77:TYR:O	0.99	1.16
28:b:73:LEU:CD1	28:b:79:PHE:CE2	2.29	1.16
36:k:10:C:H2'	36:k:11:A:H8	1.11	1.16
37:n:62:ARG:NH1	37:n:92:ILE:CD1	2.07	1.16
3:C:244:THR:HG22	3:C:246:PHE:CD2	1.80	1.16
4:D:76:ARG:CD	11:K:66:HIS:CE1	2.27	1.16
5:E:100:ARG:HD3	5:E:102:ILE:HD11	1.19	1.16
10:J:138:ARG:NH1	10:J:156:HIS:CE1	2.13	1.16
12:L:101:ARG:O	24:X:10:ALA:CB	1.92	1.16
15:O:128:ARG:HA	27:a:62:TYR:CZ	1.80	1.16
25:Y:63:HIS:CG	25:Y:64:PHE:HE1	1.62	1.16
25:Y:92:ALA:N	25:Y:97:TYR:HB3	1.59	1.16
32:f:135:HIS:CB	32:f:138:ARG:HG3	1.70	1.16
33:g:20:GLN:CG	33:g:68:ASP:HA	1.74	1.16
33:g:219:TRP:CZ3	33:g:226:HIS:HD2	1.63	1.16
5:E:248:ILE:HB	10:J:72:PHE:CE1	1.81	1.16
8:H:31:GLU:OE2	8:H:41:ARG:HD2	1.01	1.16
9:I:136:ILE:O	9:I:139:LYS:CG	1.92	1.16
14:N:87:ASP:OD2	14:N:129:TYR:OH	1.64	1.16
19:S:139:THR:O	19:S:141:ARG:HG3	1.46	1.16
24:X:51:VAL:HG13	24:X:70:VAL:HG11	1.23	1.16
24:X:52:LEU:HD21	24:X:71:ARG:HB3	1.26	1.16
25:Y:20:ARG:CG	25:Y:74:MET:HE3	1.74	1.16
1:A:103:PHE:CE2	1:A:136:GLU:OE1	1.99	1.16
4:D:21:LEU:CD1	4:D:48:ILE:HD12	1.74	1.16
6:F:201:LYS:CE	6:F:204:ARG:HH21	1.58	1.16
8:H:143:ARG:HD3	23:W:53:ILE:CG1	1.74	1.16

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:144:ILE:CB	23:W:52:ILE:CG2	2.22	1.16
10:J:143:ASN:O	10:J:145:PRO:HD3	1.41	1.16
11:K:30:PRO:O	11:K:31:LYS:CG	1.94	1.16
11:K:60:GLU:OE1	11:K:67:PHE:CE1	1.99	1.16
11:K:83:LEU:HB3	11:K:85:LEU:HD23	1.20	1.16
15:O:61:LYS:O	15:O:62:VAL:HG23	1.42	1.16
16:P:123:TYR:CD2	19:S:120:HIS:HE1	1.64	1.16
18:R:17:ILE:HG21	18:R:69:ILE:CD1	1.74	1.16
20:T:75:MET:HE3	20:T:79:TYR:CE2	1.79	1.16
22:V:1:MET:HE2	22:V:10:ASP:CB	1.76	1.16
25:Y:20:ARG:CG	25:Y:74:MET:CE	2.23	1.16
28:b:16:LYS:HA	28:b:23:ARG:NH2	1.59	1.16
30:d:5:GLN:HB3	30:d:7:TYR:CE2	1.78	1.16
37:n:62:ARG:CZ	37:n:92:ILE:HD12	1.74	1.16
1:A:120:ARG:HD2	3:C:251:TYR:HE2	1.03	1.15
4:D:47:GLU:HG2	4:D:85:GLU:CD	1.71	1.15
4:D:226:GLN:NE2	4:D:226:GLN:HA	1.58	1.15
5:E:129:ILE:HG13	5:E:139:LEU:CD2	1.70	1.15
5:E:208:VAL:HG21	5:E:225:ILE:HD12	1.24	1.15
6:F:14:THR:CG2	17:Q:56:LEU:CG	2.10	1.15
9:I:25:ARG:CD	9:I:27:TYR:CE2	2.23	1.15
17:Q:109:LYS:CG	17:Q:113:ILE:HD12	1.76	1.15
22:V:11:LEU:HD11	22:V:12:TYR:CE2	1.80	1.15
25:Y:7:ILE:HD12	25:Y:43:LYS:CG	1.76	1.15
26:Z:85:ARG:NH1	26:Z:85:ARG:HB3	1.60	1.15
33:g:191:HIS:CG	33:g:195:LEU:HD21	1.81	1.15
1:A:48:ILE:CG1	18:R:105:MET:CE	2.20	1.15
3:C:195:PRO:CG	3:C:221:PHE:HZ	1.57	1.15
5:E:159:THR:CG2	5:E:227:VAL:CG2	2.16	1.15
7:G:16:ILE:CD1	7:G:45:TRP:HZ2	1.60	1.15
12:L:113:LEU:HD11	12:L:120:VAL:HG21	1.25	1.15
14:N:80:LEU:O	14:N:82:PRO:HD3	1.43	1.15
16:P:44:ARG:NH2	16:P:84:ILE:H	1.45	1.15
17:Q:128:GLU:CB	34:i:1644:U:OP1	1.93	1.15
19:S:139:THR:O	19:S:141:ARG:CG	1.95	1.15
31:e:80:LEU:HD11	37:n:83:ASP:HB2	1.24	1.15
33:g:48:ASP:OD2	33:g:49:GLU:HB2	1.46	1.15
2:B:26:SER:O	2:B:27:LYS:HG3	1.44	1.15
3:C:70:SER:O	22:V:29:HIS:ND1	1.78	1.15
4:D:210:ILE:CD1	18:R:15:VAL:HG12	1.75	1.15
6:F:176:GLU:OE1	6:F:187:SER:OG	1.63	1.15

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:23:ALA:O	11:K:66:HIS:O	1.64	1.15
11:K:62:PHE:HD1	11:K:67:PHE:CZ	1.65	1.15
14:N:13:GLN:OE1	28:b:21:LYS:HE2	1.46	1.15
15:O:19:PRO:HG2	15:O:27:VAL:CG2	1.62	1.15
16:P:49:LEU:CD1	16:P:51:ARG:NE	2.03	1.15
20:T:84:ARG:HB2	20:T:84:ARG:NH2	1.59	1.15
4:D:197:LYS:H	4:D:198:ILE:C	1.53	1.15
7:G:98:ARG:HD3	7:G:99:GLY:N	1.61	1.15
8:H:85:LYS:HD2	8:H:85:LYS:O	1.43	1.15
10:J:61:LEU:HD13	10:J:94:LEU:CD1	1.76	1.15
10:J:125:HIS:CD2	10:J:129:LEU:HD11	1.81	1.15
15:O:113:GLN:HG3	27:a:46:GLU:CD	1.71	1.15
25:Y:93:ARG:HG2	25:Y:93:ARG:HH11	1.02	1.15
26:Z:69:THR:HB	26:Z:70:PRO:HD3	1.24	1.15
34:i:1831:G:C8	36:k:15:A:OP1	1.99	1.15
2:B:137:LEU:HD22	2:B:215:VAL:CG2	1.77	1.15
4:D:132:LYS:CA	4:D:191:PRO:CG	2.25	1.15
6:F:14:THR:HG22	17:Q:56:LEU:HD22	1.15	1.15
11:K:16:PHE:CD2	11:K:79:LEU:HB2	1.80	1.15
15:O:95:ILE:HD13	15:O:116:LEU:HD21	1.18	1.15
17:Q:50:LYS:NZ	17:Q:117:ARG:HD2	1.59	1.15
19:S:39:ARG:NH2	20:T:38:LYS:HZ1	1.38	1.15
20:T:77:LYS:CB	20:T:94:ARG:HD3	1.75	1.15
25:Y:92:ALA:HA	25:Y:97:TYR:O	1.45	1.15
2:B:57:ILE:HD13	2:B:60:ASP:OD1	0.97	1.14
4:D:218:LEU:HD12	4:D:220:THR:HG21	1.19	1.14
7:G:50:VAL:HG11	7:G:111:LEU:HD13	1.19	1.14
9:I:116:HIS:O	9:I:152:ARG:CZ	1.93	1.14
12:L:10:TYR:CD2	12:L:12:LYS:NZ	2.14	1.14
12:L:157:LYS:C	12:L:158:PHE:CD2	2.25	1.14
14:N:125:LEU:HD13	14:N:129:TYR:CE2	1.82	1.14
16:P:53:GLN:NE2	16:P:80:LEU:HD13	1.60	1.14
17:Q:58:LEU:HD23	17:Q:111:ILE:HD13	1.25	1.14
20:T:46:ALA:HB1	20:T:47:PRO:CD	1.77	1.14
26:Z:48:VAL:HG22	26:Z:80:ARG:HD3	1.28	1.14
30:d:5:GLN:CB	30:d:7:TYR:CE2	2.29	1.14
33:g:298:LEU:HD12	33:g:298:LEU:O	1.47	1.14
34:i:181:A:H4'	34:i:182:C:C5'	1.76	1.14
34:i:1207:G:C4	34:i:1684:C:N3	2.14	1.14
2:B:20:LYS:O	2:B:21:VAL:HG12	1.43	1.14
6:F:141:VAL:HB	29:c:47:LYS:HE3	1.27	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:12:ASN:ND2	8:H:46:THR:OG1	1.81	1.14
10:J:169:ARG:HB3	10:J:170:PRO:CD	1.77	1.14
12:L:101:ARG:C	24:X:10:ALA:HB2	1.70	1.14
13:M:64:LEU:HD12	32:f:104:LYS:HZ3	0.98	1.14
17:Q:57:LEU:CD1	17:Q:115:TYR:CE2	2.31	1.14
17:Q:85:ARG:HD3	17:Q:119:LEU:HD23	1.24	1.14
31:e:80:LEU:HG	37:n:83:ASP:N	1.62	1.14
33:g:275:ILE:HD12	33:g:276:SER:H	1.06	1.14
1:A:186:ARG:HG2	1:A:186:ARG:HH11	1.01	1.14
2:B:25:PHE:CZ	15:O:88:LEU:HD13	1.83	1.14
3:C:54:LEU:CD1	3:C:258:LEU:HD11	1.69	1.14
4:D:214:LYS:HG3	4:D:215:ASP:OD2	1.48	1.14
5:E:129:ILE:HG12	5:E:139:LEU:HD21	1.19	1.14
9:I:154:LYS:HE2	9:I:154:LYS:CA	1.66	1.14
10:J:48:PHE:CE1	10:J:52:LYS:CE	2.29	1.14
10:J:110:LEU:CD1	10:J:130:ILE:HG12	1.74	1.14
11:K:62:PHE:CD1	11:K:67:PHE:CE2	2.36	1.14
16:P:33:LEU:HD22	16:P:87:PRO:CG	1.78	1.14
17:Q:57:LEU:HD11	17:Q:115:TYR:CE2	1.82	1.14
19:S:8:LYS:CD	19:S:9:PHE:HE1	1.60	1.14
19:S:47:LYS:CE	19:S:77:TYR:O	1.95	1.14
21:U:50:VAL:HG13	21:U:51:LYS:H	0.98	1.14
25:Y:92:ALA:HA	25:Y:97:TYR:C	1.71	1.14
28:b:12:PRO:HD2	28:b:13:GLU:H	1.08	1.14
1:A:32:PHE:CE1	1:A:33:GLN:HG2	1.83	1.14
3:C:260:LYS:HG3	3:C:261:THR:H	1.09	1.14
7:G:85:ARG:CD	25:Y:118:ARG:CZ	2.25	1.14
7:G:181:THR:OG1	7:G:182:PRO:HD2	1.48	1.14
10:J:48:PHE:CZ	10:J:52:LYS:NZ	2.16	1.14
10:J:89:GLU:CA	10:J:92:MET:HB2	1.77	1.14
10:J:114:VAL:HG12	10:J:120:ALA:HB2	1.23	1.14
17:Q:85:ARG:NH2	17:Q:117:ARG:HG2	1.63	1.14
21:U:109:GLY:O	21:U:110:VAL:HG23	1.45	1.14
33:g:5:MET:HE1	33:g:312:VAL:HG13	1.25	1.14
4:D:126:ILE:HD11	4:D:134:CYS:SG	1.86	1.14
4:D:212:GLU:CG	18:R:19:LYS:CD	2.25	1.14
5:E:19:MET:HE2	34:i:842:G:H2'	1.26	1.14
6:F:36:GLN:HG3	6:F:37:ASP:CG	1.70	1.14
6:F:41:VAL:HG22	6:F:42:LYS:N	1.53	1.14
6:F:91:ARG:NE	6:F:91:ARG:HA	1.42	1.14
24:X:56:GLY:HA3	37:n:84:TYR:CE1	1.82	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:71:ARG:HG2	24:X:82:THR:HG22	1.29	1.14
33:g:5:MET:HE1	33:g:312:VAL:CG1	1.78	1.14
34:i:181:A:C8	34:i:182:C:C4	2.36	1.14
36:k:19:U:O2'	37:n:70:TRP:CZ2	0.79	1.14
1:A:97:THR:HG23	1:A:98:PRO:HD2	1.21	1.13
2:B:25:PHE:CD2	15:O:88:LEU:HD22	1.82	1.13
2:B:147:ASN:O	18:R:124:VAL:HG21	1.41	1.13
3:C:234:SER:HA	22:V:23:ILE:CD1	1.78	1.13
4:D:132:LYS:H	4:D:191:PRO:HD3	1.06	1.13
6:F:14:THR:OG1	17:Q:56:LEU:HB2	1.35	1.13
6:F:63:LYS:HD2	6:F:71:ARG:NH1	1.59	1.13
7:G:63:MET:HE1	7:G:106:LEU:HD11	1.16	1.13
7:G:157:VAL:HG11	7:G:159:ARG:HG2	1.16	1.13
10:J:70:ARG:HH21	10:J:94:LEU:HD21	1.02	1.13
15:O:105:THR:O	15:O:106:LYS:HG2	1.45	1.13
15:O:124:MET:O	27:a:56:VAL:HG13	1.46	1.13
21:U:109:GLY:O	21:U:110:VAL:CG2	1.95	1.13
24:X:99:GLU:O	24:X:100:VAL:HG13	1.44	1.13
31:e:81:ALA:HB3	37:n:82:ARG:NH1	1.63	1.13
33:g:87:LEU:HD12	33:g:101:PHE:HB2	1.14	1.13
33:g:152:SER:OG	33:g:168:CYS:SG	2.05	1.13
5:E:98:ASN:ND2	5:E:119:ALA:CB	2.10	1.13
5:E:100:ARG:HD3	5:E:102:ILE:CD1	1.78	1.13
5:E:129:ILE:CG1	5:E:139:LEU:HD23	1.73	1.13
6:F:93:VAL:O	6:F:97:PHE:CD1	2.01	1.13
13:M:12:MET:HE1	13:M:120:ALA:CB	1.78	1.13
14:N:28:LEU:O	14:N:29:THR:HG23	1.45	1.13
22:V:55:ILE:HD13	22:V:65:SER:HA	1.25	1.13
25:Y:54:VAL:CG1	25:Y:76:TYR:O	1.95	1.13
26:Z:99:LEU:HD22	26:Z:102:LYS:HD3	1.19	1.13
28:b:12:PRO:O	28:b:16:LYS:CD	1.96	1.13
1:A:103:PHE:CZ	1:A:136:GLU:OE1	2.00	1.13
2:B:152:LYS:HD2	18:R:126:MET:HE3	1.29	1.13
4:D:47:GLU:HG2	4:D:85:GLU:OE2	1.41	1.13
4:D:76:ARG:CZ	11:K:66:HIS:CE1	2.30	1.13
7:G:14:LYS:NZ	7:G:123:GLY:CA	2.11	1.13
7:G:14:LYS:HZ2	7:G:123:GLY:CA	1.61	1.13
15:O:76:LEU:HA	29:c:5:ARG:HG2	1.28	1.13
20:T:31:PRO:HB3	20:T:33:TRP:CZ2	1.83	1.13
30:d:23:VAL:HG23	30:d:38:MET:CE	1.54	1.13
33:g:12:LYS:HG2	33:g:13:GLY:N	1.63	1.13

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:119:GLN:NE2	33:g:121:VAL:CG2	2.10	1.13
35:j:53:A:C2	35:j:57:A:N6	1.86	1.13
6:F:34:SER:CB	29:c:55:VAL:HB	1.76	1.13
6:F:61:PHE:HZ	29:c:51:ARG:CB	1.37	1.13
9:I:141:ARG:HD2	9:I:144:LYS:HB3	1.19	1.13
10:J:170:PRO:CG	10:J:175:ARG:CG	2.26	1.13
15:O:99:ALA:H	15:O:133:THR:CG2	1.60	1.13
18:R:1:MET:CB	18:R:1:MET:HA	1.67	1.13
18:R:17:ILE:CG2	18:R:69:ILE:CD1	2.25	1.13
21:U:36:CYS:SG	21:U:53:PRO:HB3	1.89	1.13
21:U:40:ILE:CD1	21:U:53:PRO:CG	2.13	1.13
31:e:79:SER:C	37:n:84:TYR:CD2	2.26	1.13
33:g:20:GLN:HG3	33:g:68:ASP:CA	1.76	1.13
33:g:294:ASP:O	33:g:296:GLN:N	1.80	1.13
1:A:66:VAL:HG22	1:A:186:ARG:HD3	1.14	1.12
1:A:118:GLU:CB	3:C:50:LYS:NZ	2.11	1.12
3:C:197:LYS:CA	3:C:200:LEU:HD21	1.78	1.12
4:D:132:LYS:CB	4:D:191:PRO:CG	2.16	1.13
3:C:260:LYS:CG	3:C:261:THR:H	1.56	1.12
4:D:212:GLU:HG2	18:R:19:LYS:HD3	1.30	1.12
5:E:208:VAL:HG11	5:E:225:ILE:HD13	1.27	1.12
7:G:32:MET:CE	7:G:100:CYS:CA	2.27	1.13
12:L:4:ILE:HD12	12:L:4:ILE:N	1.60	1.13
14:N:22:VAL:HB	14:N:23:PRO:HA	1.21	1.13
16:P:53:GLN:CG	16:P:80:LEU:HD13	1.74	1.13
17:Q:102:GLU:OE1	33:g:55:PRO:CB	1.94	1.13
26:Z:48:VAL:CG2	26:Z:80:ARG:HD3	1.77	1.13
31:e:80:LEU:N	37:n:82:ARG:HB2	0.87	1.13
9:I:153:LYS:O	9:I:154:LYS:HB3	1.40	1.12
10:J:91:LYS:HA	10:J:96:TYR:CB	1.78	1.12
17:Q:44:PRO:HG2	17:Q:81:ILE:HD11	1.27	1.12
25:Y:122:LYS:HD3	25:Y:123:ALA:H	1.05	1.12
32:f:108:VAL:HG22	32:f:114:ILE:CG2	1.77	1.12
1:A:102:ARG:NH2	34:i:1375:A:O2'	1.82	1.12
3:C:154:TYR:OH	3:C:162:PRO:HD3	1.49	1.12
4:D:158:ILE:HD13	4:D:189:MET:CE	1.73	1.12
6:F:47:LYS:HG3	17:Q:117:ARG:NH2	1.63	1.12
15:O:136:PRO:O	15:O:138:ASP:N	1.81	1.12
16:P:10:ARG:HH21	16:P:11:THR:HB	1.05	1.12
16:P:52:LYS:O	16:P:52:LYS:HD3	1.44	1.12
17:Q:105:LYS:O	17:Q:105:LYS:HD2	1.50	1.12

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:105:PHE:HE2	24:X:119:ARG:CA	1.61	1.12
24:X:126:ALA:HB3	24:X:128:VAL:HB	1.15	1.12
33:g:172:LYS:HE2	33:g:191:HIS:O	0.96	1.12
33:g:282:GLU:HG3	33:g:283:PRO:HD3	1.23	1.12
34:i:1820:G:C5'	37:n:43:GLY:CA	1.92	1.12
2:B:105:LEU:HD11	2:B:213:ARG:HB2	1.17	1.12
3:C:197:LYS:O	3:C:200:LEU:HG	1.48	1.12
4:D:16:ILE:HG21	30:d:22:ARG:HH22	1.14	1.12
4:D:218:LEU:CB	4:D:220:THR:CG2	2.25	1.12
15:O:125:LYS:HZ1	27:a:57:SER:C	1.57	1.12
17:Q:85:ARG:NH1	17:Q:117:ARG:HG2	1.62	1.12
26:Z:62:VAL:HG13	26:Z:68:ILE:CD1	1.78	1.12
1:A:106:GLY:O	1:A:113:GLN:OE1	1.67	1.12
1:A:120:ARG:HD2	3:C:251:TYR:CE2	1.84	1.12
2:B:160:GLN:NE2	2:B:205:TYR:CD1	2.18	1.12
3:C:87:LEU:HD21	3:C:115:ILE:HG23	1.16	1.12
4:D:166:TYR:CD1	4:D:200:PRO:HB2	1.84	1.12
4:D:195:SER:O	4:D:197:LYS:HG2	1.48	1.12
4:D:212:GLU:HG2	18:R:19:LYS:CD	1.80	1.12
6:F:42:LYS:O	6:F:44:LYS:CA	1.98	1.12
8:H:144:ILE:CD1	23:W:52:ILE:HG21	1.79	1.12
10:J:37:LEU:HD11	10:J:42:GLU:CB	1.77	1.12
12:L:76:VAL:HG12	12:L:125:ILE:CD1	1.78	1.12
16:P:41:GLN:CB	16:P:84:ILE:HG12	1.80	1.12
18:R:100:PRO:HG2	18:R:119:VAL:HG22	1.29	1.12
18:R:100:PRO:HA	18:R:103:LYS:HB2	1.13	1.12
19:S:46:ARG:NH2	20:T:50:GLU:CB	2.12	1.12
23:W:93:LEU:HD21	23:W:128:PHE:CD2	1.83	1.12
32:f:106:TYR:OH	32:f:131:PHE:CE2	2.03	1.12
1:A:5:LEU:CB	22:V:41:LYS:HE2	1.79	1.12
3:C:60:ILE:O	3:C:82:PHE:CE1	2.03	1.12
4:D:123:LEU:HD21	4:D:154:ASP:HB3	1.29	1.12
5:E:248:ILE:CB	10:J:72:PHE:CE1	2.33	1.12
6:F:185:SER:HA	6:F:190:ILE:HG21	1.12	1.12
8:H:8:ILE:CG2	8:H:9:VAL:HG22	1.79	1.12
9:I:194:GLU:CG	12:L:12:LYS:NZ	2.13	1.12
10:J:170:PRO:CG	10:J:175:ARG:HG3	1.80	1.12
11:K:14:LEU:HD22	11:K:35:LEU:HD21	1.17	1.12
11:K:28:HIS:CE1	30:d:8:TRP:NE1	2.18	1.12
17:Q:50:LYS:HZ1	17:Q:117:ARG:CD	1.61	1.12
17:Q:102:GLU:OE1	33:g:55:PRO:CG	1.98	1.12

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:128:GLU:HB2	34:i:1644:U:OP1	0.96	1.12
19:S:58:GLU:C	19:S:59:LEU:CD1	2.22	1.12
33:g:172:LYS:CD	33:g:191:HIS:O	1.98	1.12
2:B:105:LEU:CD1	2:B:110:MET:HE2	1.80	1.11
4:D:195:SER:HA	4:D:197:LYS:O	1.49	1.11
6:F:14:THR:HG23	17:Q:56:LEU:HB3	1.28	1.11
9:I:69:SER:HB3	12:L:19:ASN:HD21	1.11	1.11
9:I:114:GLU:OE1	9:I:133:GLU:HG3	1.50	1.11
11:K:11:ILE:HG21	11:K:49:MET:CE	1.71	1.11
16:P:121:ILE:CG2	19:S:123:LEU:HD12	1.80	1.11
22:V:17:CYS:SG	22:V:56:CYS:CB	2.38	1.11
25:Y:34:THR:O	25:Y:35:VAL:CG2	1.97	1.11
28:b:12:PRO:O	28:b:16:LYS:HG2	1.48	1.11
33:g:298:LEU:HD11	33:g:310:TRP:CE3	1.85	1.11
37:n:65:LEU:CG	37:n:93:LEU:HA	1.80	1.11
4:D:12:VAL:CG1	30:d:36:LEU:CD1	1.97	1.11
4:D:211:VAL:CG2	18:R:38:ILE:C	2.23	1.11
7:G:176:ILE:HG21	7:G:179:LEU:HD22	1.12	1.11
18:R:91:LEU:H	18:R:91:LEU:HD12	1.10	1.11
20:T:143:LYS:HD2	20:T:144:LYS:N	1.65	1.11
37:n:78:LEU:HD23	37:n:93:LEU:CD2	1.80	1.11
6:F:41:VAL:HG22	6:F:42:LYS:HD3	1.25	1.11
6:F:45:TYR:O	6:F:47:LYS:HD3	1.44	1.11
7:G:50:VAL:HG12	7:G:111:LEU:HD22	1.31	1.11
8:H:8:ILE:HG23	8:H:9:VAL:CG2	1.80	1.11
12:L:147:LYS:HD2	12:L:148:ALA:HA	1.13	1.11
18:R:1:MET:CB	18:R:2:GLY:N	2.13	1.11
29:c:21:THR:HG22	29:c:22:GLY:H	0.96	1.11
1:A:45:GLY:O	1:A:46:ILE:HG12	1.50	1.11
6:F:20:PHE:O	6:F:22:LYS:N	1.83	1.11
9:I:85:ALA:HB1	12:L:8:ARG:HH11	1.11	1.11
10:J:110:LEU:HD12	10:J:130:ILE:CD1	1.74	1.11
18:R:20:TYR:CZ	18:R:38:ILE:CB	2.33	1.11
31:e:120:VAL:N	31:e:121:PRO:HD2	1.61	1.11
33:g:32:LEU:HB2	33:g:71:ILE:HD11	1.26	1.11
4:D:176:LEU:H	4:D:176:LEU:HD12	1.13	1.11
5:E:89:VAL:O	5:E:99:PHE:O	1.68	1.11
5:E:208:VAL:CB	5:E:225:ILE:HD11	1.68	1.11
8:H:37:LYS:HE2	8:H:41:ARG:HH11	1.16	1.11
14:N:28:LEU:O	14:N:29:THR:CG2	1.99	1.11
16:P:108:LYS:O	16:P:111:MET:HG3	1.51	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:W:36:ARG:HD3	23:W:110:ILE:HD12	1.28	1.11
24:X:139:GLU:C	24:X:141:PRO:HD3	1.75	1.11
25:Y:62:THR:HG22	25:Y:69:THR:CG2	1.80	1.11
33:g:5:MET:CE	33:g:312:VAL:HG13	1.78	1.11
2:B:71:LEU:CD1	2:B:84:PHE:CE2	2.32	1.10
4:D:132:LYS:CA	4:D:191:PRO:HG3	1.80	1.10
7:G:16:ILE:CD1	7:G:45:TRP:CZ2	2.33	1.10
8:H:83:LEU:CD1	8:H:92:VAL:CB	2.27	1.10
9:I:157:LYS:CB	12:L:22:ARG:HD3	1.78	1.10
11:K:11:ILE:HG21	11:K:49:MET:HE2	1.24	1.10
11:K:34:GLU:O	11:K:35:LEU:HB2	1.31	1.10
11:K:40:VAL:CG2	11:K:41:PRO:CD	2.30	1.10
11:K:71:LEU:HD21	11:K:76:ILE:HD13	1.19	1.10
12:L:149:ALA:CB	12:L:156:GLN:HB3	1.79	1.10
15:O:35:ALA:HB2	15:O:112:ALA:HB2	1.33	1.10
16:P:49:LEU:HA	16:P:51:ARG:HG3	1.30	1.10
16:P:126:VAL:CG1	16:P:127:LYS:N	2.06	1.10
17:Q:8:GLN:HG3	17:Q:99:TYR:HE1	0.98	1.10
22:V:32:ILE:HD12	22:V:60:ARG:NH1	1.65	1.10
24:X:67:ARG:O	24:X:68:LYS:HG3	1.50	1.10
31:e:81:ALA:CB	37:n:82:ARG:NH1	2.12	1.10
33:g:282:GLU:CG	33:g:283:PRO:CD	2.29	1.10
33:g:286:CYS:HB2	33:g:302:TYR:CZ	1.85	1.10
34:i:60:A:N1	34:i:326:A:H3'	1.45	1.10
34:i:61:A:N3	34:i:326:A:N9	1.96	1.10
2:B:83:LYS:NZ	15:O:130:GLU:OE1	1.82	1.10
4:D:213:PRO:O	4:D:214:LYS:HB3	1.50	1.10
5:E:99:PHE:CE1	5:E:113:ARG:CG	2.34	1.10
6:F:41:VAL:HG22	6:F:42:LYS:CD	1.80	1.10
6:F:78:MET:O	6:F:79:HIS:HB2	1.44	1.10
7:G:176:ILE:CB	7:G:179:LEU:CD2	2.29	1.10
13:M:116:LYS:O	13:M:117:GLU:HB2	1.43	1.10
17:Q:19:ALA:HB2	17:Q:74:GLY:O	1.50	1.10
19:S:39:ARG:NH2	20:T:38:LYS:NZ	1.80	1.10
19:S:58:GLU:O	19:S:59:LEU:HD22	1.51	1.10
20:T:18:LEU:HD13	20:T:134:ILE:HD13	1.23	1.10
34:i:1635:A:C4'	35:j:40:C:H5'	1.79	1.10
3:C:55:VAL:CG2	3:C:82:PHE:HE2	1.63	1.10
7:G:76:LEU:HD21	7:G:92:ARG:HG2	1.32	1.10
8:H:93:VAL:HG23	8:H:94:PHE:H	1.11	1.10
8:H:144:ILE:HD12	23:W:52:ILE:CG2	1.82	1.10

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:38:ARG:NH2	31:e:104:GLY:N	1.90	1.10
10:J:115:PHE:HD1	10:J:122:SER:N	1.48	1.10
12:L:157:LYS:C	12:L:158:PHE:HD2	1.56	1.10
16:P:41:GLN:NE2	16:P:45:LEU:HG	1.65	1.10
16:P:107:ILE:HA	16:P:111:MET:CE	1.80	1.10
25:Y:51:THR:HB	25:Y:52:PRO:HD3	1.34	1.10
27:a:58:VAL:HG12	27:a:59:PHE:N	1.61	1.10
32:f:135:HIS:HB3	32:f:138:ARG:HG2	1.30	1.10
33:g:7:LEU:HD11	33:g:310:TRP:HE1	1.02	1.10
2:B:25:PHE:CD2	15:O:88:LEU:CD2	2.34	1.10
2:B:113:MET:HE3	2:B:209:ASP:OD1	0.92	1.10
2:B:135:LEU:HD21	2:B:217:MET:SD	1.91	1.10
3:C:102:GLN:HG3	3:C:103:ALA:H	1.04	1.10
4:D:70:THR:HG22	4:D:86:LEU:HD13	1.31	1.10
5:E:47:PHE:CZ	5:E:52:LEU:HD11	1.86	1.10
9:I:140:LYS:CG	9:I:141:ARG:H	1.64	1.10
10:J:169:ARG:HB3	10:J:170:PRO:HD2	1.17	1.10
11:K:5:LYS:HG3	11:K:5:LYS:O	1.44	1.10
17:Q:85:ARG:CZ	17:Q:117:ARG:HG2	1.82	1.10
17:Q:109:LYS:HG3	17:Q:113:ILE:HD12	1.22	1.10
18:R:105:MET:O	18:R:109:LEU:CG	2.00	1.10
18:R:122:PRO:CB	18:R:123:THR:CG2	2.29	1.10
24:X:60:LYS:HG3	24:X:116:PRO:HG2	1.26	1.10
26:Z:103:HIS:CD2	26:Z:105:ALA:HB3	1.86	1.10
31:e:119:VAL:C	31:e:121:PRO:CD	2.24	1.10
33:g:20:GLN:HE21	33:g:68:ASP:CG	1.57	1.10
33:g:49:GLU:O	33:g:50:THR:HG23	1.51	1.10
1:A:133:PRO:HD2	1:A:134:LEU:H	1.03	1.10
8:H:146:VAL:CG2	23:W:50:PHE:CZ	2.32	1.10
14:N:125:LEU:HD13	14:N:129:TYR:HE2	1.11	1.10
15:O:79:GLN:OE1	29:c:5:ARG:HB2	1.51	1.10
16:P:10:ARG:NH2	16:P:11:THR:HB	1.66	1.10
16:P:44:ARG:HH21	16:P:84:ILE:HB	1.10	1.10
17:Q:92:LEU:HD11	17:Q:96:TYR:CE2	1.85	1.10
18:R:100:PRO:HB2	18:R:119:VAL:HG21	1.24	1.10
31:e:124:GLY:C	31:e:125:LYS:HG3	1.71	1.10
1:A:185:MET:CE	22:V:39:VAL:HG12	1.82	1.09
3:C:142:LEU:HA	3:C:145:LEU:HD21	1.27	1.09
5:E:153:LEU:HD23	7:G:216:ARG:HH22	1.14	1.09
9:I:139:LYS:HB3	9:I:145:ILE:CD1	1.82	1.09
10:J:179:LYS:HG2	10:J:182:GLN:OE1	1.50	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:11:ILE:HG22	11:K:49:MET:HE1	1.27	1.09
17:Q:8:GLN:CB	17:Q:99:TYR:CE1	2.35	1.09
18:R:122:PRO:CA	18:R:123:THR:CG2	2.30	1.09
31:e:80:LEU:H	37:n:82:ARG:CB	1.50	1.09
1:A:30:LEU:CD2	1:A:35:GLU:HG3	1.80	1.09
4:D:47:GLU:HG2	4:D:85:GLU:CG	1.82	1.09
8:H:36:LEU:HD12	8:H:36:LEU:O	1.51	1.09
10:J:89:GLU:CA	10:J:92:MET:CG	2.29	1.09
14:N:24:THR:HG21	28:b:84:HIS:CE1	1.84	1.09
14:N:132:LYS:CA	14:N:132:LYS:HE3	1.70	1.09
15:O:79:GLN:CB	29:c:5:ARG:HB2	1.68	1.09
15:O:99:ALA:N	15:O:133:THR:HG22	1.68	1.09
17:Q:85:ARG:HD3	17:Q:119:LEU:CD2	1.81	1.09
18:R:29:HIS:CE1	33:g:65:PHE:HZ	1.64	1.09
29:c:67:ARG:HG2	29:c:68:LEU:N	1.43	1.09
33:g:286:CYS:HB2	33:g:302:TYR:CE2	1.86	1.09
34:i:61:A:C2	34:i:326:A:C8	2.41	1.09
1:A:205:ARG:CG	1:A:206:ASP:H	1.65	1.09
5:E:49:ARG:HD3	5:E:49:ARG:O	1.52	1.09
6:F:42:LYS:C	6:F:42:LYS:HE3	1.78	1.09
9:I:141:ARG:O	9:I:143:LYS:HE2	1.50	1.09
9:I:155:ASN:O	12:L:22:ARG:HD2	1.30	1.09
14:N:38:TYR:CE2	14:N:74:ILE:CG2	2.34	1.09
16:P:53:GLN:HG2	16:P:80:LEU:HD13	1.23	1.09
19:S:137:LYS:HG2	19:S:138:THR:HG23	1.34	1.09
21:U:64:THR:HG22	21:U:79:ARG:HG2	1.10	1.09
21:U:103:SER:O	21:U:106:ILE:CG2	1.99	1.09
26:Z:62:VAL:HG13	26:Z:68:ILE:HD13	1.17	1.09
27:a:28:CYS:SG	27:a:74:CYS:HB3	1.92	1.09
30:d:5:GLN:HG2	30:d:7:TYR:CE2	1.88	1.09
32:f:89:LYS:HG3	32:f:89:LYS:O	1.43	1.09
34:i:1206:G:C8	34:i:1207:G:O5'	2.02	1.09
36:k:11:A:H2'	36:k:12:A:H8	1.08	1.09
5:E:21:ASP:OD2	5:E:24:THR:HG21	1.52	1.09
5:E:70:ILE:HG12	5:E:92:ILE:HD12	1.24	1.09
6:F:204:ARG:NH1	29:c:60:GLU:CD	2.08	1.09
14:N:38:TYR:CD1	14:N:78:LYS:HD2	1.86	1.09
16:P:49:LEU:O	16:P:51:ARG:CA	1.99	1.09
23:W:26:LEU:HD12	23:W:26:LEU:O	1.53	1.09
24:X:2:GLY:O	24:X:3:LYS:CG	2.01	1.09
25:Y:7:ILE:HD12	25:Y:43:LYS:HG2	1.19	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:63:HIS:HB3	25:Y:64:PHE:CD1	1.86	1.09
28:b:2:PRO:C	28:b:3:LEU:HD23	1.76	1.09
28:b:2:PRO:HA	28:b:3:LEU:HD23	1.23	1.09
34:i:1701:G:N2	34:i:1844:A:C1'	2.13	1.09
3:C:51:LEU:HD13	3:C:78:ILE:HD13	1.30	1.09
6:F:47:LYS:HG3	17:Q:117:ARG:HH22	1.12	1.09
6:F:49:LEU:HD12	6:F:50:PRO:HD2	1.29	1.09
7:G:184:VAL:HG12	7:G:188:LYS:HE2	1.33	1.09
10:J:127:ARG:HH11	10:J:127:ARG:CG	1.66	1.09
17:Q:146:ARG:NE	35:j:33:C:H5"	1.38	1.09
20:T:111:LYS:HB3	20:T:126:GLN:NE2	1.67	1.09
24:X:52:LEU:HD12	24:X:53:GLU:N	1.68	1.09
30:d:27:ARG:HH11	30:d:27:ARG:CB	1.66	1.09
37:n:62:ARG:HG2	37:n:92:ILE:HA	1.29	1.09
1:A:141:ASN:HA	22:V:32:ILE:CG1	1.82	1.08
1:A:141:ASN:O	22:V:32:ILE:HG12	1.50	1.08
2:B:124:HIS:HD2	2:B:136:HIS:NE2	1.50	1.08
2:B:137:LEU:CD2	2:B:215:VAL:HG22	1.83	1.08
2:B:137:LEU:CB	2:B:172:MET:HE1	1.83	1.08
3:C:260:LYS:HD2	3:C:261:THR:HG22	1.18	1.08
6:F:39:ILE:HG23	6:F:68:ILE:HG21	1.20	1.08
7:G:76:LEU:HD22	7:G:92:ARG:CG	1.84	1.08
9:I:114:GLU:OE1	9:I:133:GLU:CG	2.00	1.08
9:I:154:LYS:HG3	9:I:155:ASN:H	1.16	1.08
10:J:100:LEU:CD1	10:J:104:ASP:OD2	2.01	1.08
13:M:124:ILE:HA	13:M:127:TYR:CD2	1.88	1.08
17:Q:42:ILE:HD13	17:Q:51:LEU:HD22	1.33	1.08
18:R:33:ARG:HB2	33:g:150:TRP:CH2	1.88	1.08
23:W:11:LEU:O	23:W:14:ILE:CG1	1.99	1.08
24:X:40:PRO:HB3	24:X:81:ILE:HD11	1.31	1.08
25:Y:7:ILE:CD1	25:Y:43:LYS:CG	2.30	1.08
25:Y:10:ARG:HG2	25:Y:24:VAL:HB	1.31	1.08
26:Z:73:VAL:HG12	26:Z:79:ILE:HG21	1.35	1.08
30:d:5:GLN:CG	30:d:7:TYR:CE2	2.36	1.08
32:f:98:VAL:HG12	32:f:99:LYS:N	1.62	1.08
1:A:21:ALA:HB3	1:A:173:LEU:HD12	1.21	1.08
1:A:66:VAL:HG11	1:A:186:ARG:HB3	1.35	1.08
4:D:210:ILE:HD13	18:R:15:VAL:HG12	1.33	1.08
4:D:218:LEU:HB2	4:D:220:THR:CG2	1.82	1.08
6:F:14:THR:CB	17:Q:56:LEU:HD13	1.82	1.08
7:G:142:ARG:HD3	7:G:147:LEU:CB	1.84	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:40:LEU:HD23	8:H:43:LEU:HD12	1.16	1.08
8:H:143:ARG:HE	23:W:53:ILE:HG23	1.09	1.08
10:J:91:LYS:HA	10:J:96:TYR:HB2	1.29	1.08
12:L:147:LYS:CD	12:L:148:ALA:CA	2.30	1.08
15:O:22:ALA:O	15:O:24:GLY:N	1.85	1.08
16:P:33:LEU:CD2	16:P:87:PRO:HD2	1.83	1.08
19:S:46:ARG:CZ	20:T:50:GLU:CB	2.30	1.08
21:U:40:ILE:HD13	21:U:53:PRO:HG3	1.27	1.08
23:W:104:LEU:CD1	23:W:106:THR:HG23	1.84	1.08
30:d:5:GLN:CG	30:d:7:TYR:HE2	1.66	1.08
31:e:79:SER:O	37:n:84:TYR:CE2	2.06	1.08
33:g:118:ARG:NH2	33:g:134:THR:CG2	1.83	1.08
36:k:11:A:H2'	36:k:12:A:C8	1.89	1.08
3:C:51:LEU:O	3:C:51:LEU:HD22	1.54	1.08
3:C:197:LYS:HA	3:C:200:LEU:HD23	1.10	1.08
4:D:212:GLU:HB2	4:D:213:PRO:HD2	1.28	1.08
5:E:38:LEU:HD12	5:E:38:LEU:O	1.53	1.08
7:G:176:ILE:HG22	7:G:179:LEU:HB3	1.25	1.08
11:K:28:HIS:HE1	30:d:8:TRP:NE1	1.51	1.08
15:O:56:VAL:HG12	15:O:81:VAL:HG22	1.30	1.08
16:P:53:GLN:HG2	16:P:80:LEU:HD11	1.26	1.08
17:Q:74:GLY:O	17:Q:80:GLN:NE2	1.86	1.08
19:S:124:ARG:HD3	19:S:130:ARG:O	1.52	1.08
26:Z:70:PRO:HD2	26:Z:71:ALA:H	1.14	1.08
33:g:284:PRO:O	33:g:302:TYR:HD1	1.35	1.08
1:A:58:LEU:HD23	1:A:178:LEU:CD2	1.74	1.08
2:B:36:PRO:CB	2:B:231:LEU:HD21	1.82	1.08
4:D:2:ALA:CB	4:D:3:VAL:CA	2.29	1.08
4:D:201:LYS:HE2	4:D:201:LYS:HA	1.36	1.08
7:G:50:VAL:CG1	7:G:111:LEU:HD22	1.84	1.08
8:H:83:LEU:HD11	8:H:92:VAL:HB	1.16	1.08
10:J:89:GLU:HA	10:J:92:MET:HB2	1.21	1.08
12:L:147:LYS:C	12:L:147:LYS:HD3	1.73	1.08
15:O:61:LYS:CE	15:O:80:ASP:OD2	2.00	1.08
16:P:11:THR:O	16:P:12:PHE:HB2	1.47	1.08
16:P:62:LYS:O	16:P:65:LYS:CG	2.01	1.08
18:R:17:ILE:HG22	18:R:69:ILE:HD11	1.14	1.08
18:R:91:LEU:HB2	18:R:92:ASP:C	1.77	1.08
20:T:46:ALA:HB1	20:T:47:PRO:HD2	1.08	1.08
25:Y:63:HIS:HB3	25:Y:64:PHE:CE1	1.88	1.08
26:Z:103:HIS:CD2	26:Z:105:ALA:H	1.72	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:33:MET:HE2	28:b:35:VAL:HG22	1.11	1.08
29:c:15:THR:HG22	29:c:33:GLU:HG2	1.12	1.08
31:e:114:ARG:C	31:e:119:VAL:CG2	2.26	1.08
32:f:108:VAL:HG13	32:f:113:LYS:O	1.54	1.08
34:i:1635:A:H5'	35:j:40:C:H5'	1.14	1.08
34:i:1831:G:H2'	36:k:15:A:P	1.94	1.08
3:C:154:TYR:CE1	3:C:162:PRO:HG3	1.89	1.08
5:E:248:ILE:HD11	10:J:72:PHE:CG	1.79	1.08
6:F:42:LYS:C	6:F:44:LYS:N	1.88	1.08
7:G:67:VAL:HG23	7:G:68:LEU:O	1.54	1.08
10:J:17:ARG:CG	10:J:18:ARG:CG	2.30	1.08
10:J:134:HIS:O	10:J:135:ILE:HG23	1.54	1.08
12:L:94:HIS:HB2	12:L:105:ARG:HD2	1.33	1.08
14:N:28:LEU:HD11	14:N:58:HIS:NE2	1.69	1.08
15:O:20:GLN:HG2	15:O:21:VAL:N	1.61	1.08
16:P:127:LYS:HB2	16:P:127:LYS:NZ	1.64	1.08
18:R:22:THR:HG22	18:R:73:LEU:HD11	1.30	1.08
18:R:122:PRO:CB	18:R:123:THR:HG23	1.83	1.08
20:T:31:PRO:CB	20:T:33:TRP:CE2	2.37	1.08
24:X:105:PHE:CE2	24:X:119:ARG:CA	2.36	1.08
25:Y:34:THR:HG22	25:Y:35:VAL:N	1.61	1.08
28:b:12:PRO:O	28:b:16:LYS:CG	2.00	1.08
33:g:275:ILE:HD12	33:g:276:SER:N	1.66	1.08
1:A:141:ASN:CA	22:V:32:ILE:CG1	2.31	1.07
1:A:154:LEU:O	1:A:154:LEU:HD13	1.54	1.07
4:D:12:VAL:HG11	30:d:36:LEU:HD12	1.36	1.07
6:F:167:LYS:HD3	6:F:171:GLU:CB	1.83	1.07
9:I:141:ARG:HB2	9:I:144:LYS:HB2	1.09	1.07
11:K:71:LEU:HD23	11:K:76:ILE:CD1	1.81	1.07
12:L:151:THR:O	12:L:153:LYS:HD3	1.53	1.07
15:O:142:ARG:NH1	27:a:27:ALA:CB	2.17	1.07
19:S:138:THR:CA	19:S:141:ARG:HH21	1.53	1.07
21:U:61:LEU:CD2	30:d:34:TYR:OH	1.96	1.07
24:X:128:VAL:HG13	24:X:128:VAL:O	1.51	1.07
33:g:282:GLU:CB	33:g:283:PRO:CD	2.30	1.07
2:B:124:HIS:CD2	2:B:136:HIS:NE2	2.22	1.07
3:C:234:SER:O	22:V:23:ILE:HD11	1.54	1.07
4:D:2:ALA:HB3	4:D:3:VAL:HA	1.09	1.07
4:D:197:LYS:CB	4:D:198:ILE:CG1	2.30	1.07
10:J:130:ILE:HG23	10:J:135:ILE:HD11	1.35	1.07
10:J:170:PRO:HA	10:J:174:LYS:NZ	1.70	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:80:MET:HE3	12:L:120:VAL:O	1.27	1.07
12:L:95:TYR:HA	12:L:102:PHE:HB3	1.15	1.07
13:M:91:LEU:HD22	13:M:104:VAL:HG13	1.33	1.07
14:N:53:ILE:CD1	28:b:52:THR:CG2	2.32	1.07
17:Q:54:PRO:HG3	17:Q:88:ILE:CD1	1.82	1.07
18:R:33:ARG:HB2	33:g:150:TRP:HH2	1.16	1.07
18:R:122:PRO:HA	18:R:123:THR:HG23	1.13	1.07
26:Z:48:VAL:HG22	26:Z:80:ARG:CD	1.83	1.07
31:e:81:ALA:C	37:n:82:ARG:HD2	1.80	1.07
1:A:39:TYR:HB2	1:A:50:ASN:ND2	1.70	1.07
1:A:176:TRP:CE3	1:A:177:MET:SD	2.46	1.07
2:B:63:LYS:O	2:B:88:THR:O	1.71	1.07
2:B:147:ASN:O	18:R:124:VAL:HG23	1.49	1.07
4:D:197:LYS:HB2	4:D:198:ILE:HG12	1.30	1.07
8:H:145:ARG:HD2	23:W:51:GLU:HG2	1.30	1.07
9:I:85:ALA:CB	12:L:8:ARG:HH11	1.66	1.07
11:K:14:LEU:CD2	11:K:35:LEU:HD22	1.80	1.07
12:L:103:GLU:OE1	24:X:11:ARG:CB	2.02	1.07
16:P:53:GLN:CD	16:P:80:LEU:HD13	1.79	1.07
17:Q:30:GLY:O	17:Q:31:LEU:HD12	1.52	1.07
20:T:40:ALA:CB	20:T:43:LYS:HG2	1.84	1.07
21:U:61:LEU:CD2	30:d:34:TYR:CE1	2.38	1.07
31:e:119:VAL:CA	31:e:121:PRO:HD2	1.82	1.07
34:i:181:A:H4'	34:i:182:C:H5'	1.29	1.07
34:i:1207:G:N2	34:i:1684:C:C2	2.22	1.07
1:A:118:GLU:CB	3:C:50:LYS:HZ1	1.64	1.07
1:A:180:ARG:HD3	1:A:184:ARG:NH2	1.70	1.07
3:C:54:LEU:HD11	3:C:258:LEU:HD11	1.19	1.07
3:C:84:GLY:HA2	3:C:87:LEU:HB3	1.30	1.07
3:C:98:GLN:HB2	3:C:106:ARG:O	1.55	1.07
6:F:116:ILE:HD13	6:F:116:ILE:N	1.64	1.07
7:G:145:PHE:HB3	7:G:147:LEU:HD11	1.30	1.07
10:J:89:GLU:O	10:J:92:MET:HB2	1.51	1.07
10:J:138:ARG:HH11	10:J:156:HIS:CG	1.72	1.07
11:K:14:LEU:HD22	11:K:35:LEU:HD22	1.10	1.07
12:L:4:ILE:CD1	12:L:4:ILE:H	1.68	1.07
20:T:141:ALA:O	20:T:142:LYS:CG	2.01	1.07
24:X:60:LYS:HE2	24:X:116:PRO:HG3	1.29	1.07
25:Y:29:HIS:ND1	25:Y:67:GLY:C	2.13	1.07
1:A:11:LYS:HG2	1:A:13:GLU:CG	1.84	1.07
2:B:66:VAL:HG21	2:B:87:ILE:HG22	1.34	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:25:THR:HG22	6:F:42:LYS:CD	1.78	1.07
7:G:41:LEU:HD21	7:G:45:TRP:CZ3	1.61	1.07
8:H:9:VAL:HG12	8:H:44:ASN:OD1	1.53	1.07
8:H:10:LYS:HE3	8:H:17:ASP:H	1.00	1.07
10:J:119:LEU:N	10:J:119:LEU:HD23	1.63	1.07
11:K:15:LEU:HD13	11:K:21:MET:HE2	1.07	1.07
12:L:99:TYR:OH	24:X:14:ARG:HA	0.90	1.07
12:L:101:ARG:HB3	24:X:7:LEU:O	1.55	1.07
14:N:12:SER:O	14:N:13:GLN:CG	2.02	1.07
18:R:20:TYR:CZ	18:R:38:ILE:HB	1.89	1.07
21:U:59:LYS:HB2	21:U:84:ILE:HG22	1.21	1.07
24:X:126:ALA:HB3	24:X:128:VAL:CB	1.84	1.07
27:a:58:VAL:HG12	27:a:59:PHE:H	1.08	1.07
34:i:1816:A:H2'	34:i:1817:A:C8	1.90	1.07
1:A:125:THR:O	1:A:147:LEU:CB	2.02	1.06
2:B:31:TYR:CD1	2:B:94:LYS:HA	1.90	1.06
2:B:137:LEU:HB2	2:B:172:MET:HE1	1.08	1.06
3:C:93:LYS:CE	3:C:218:LEU:HD21	1.84	1.06
4:D:112:GLY:N	4:D:113:LEU:HD12	1.69	1.06
7:G:50:VAL:HG11	7:G:111:LEU:CD1	1.84	1.06
7:G:74:ARG:HD3	7:G:94:ARG:HD2	1.36	1.06
12:L:40:ILE:HD11	12:L:68:ILE:HB	1.30	1.06
12:L:99:TYR:CZ	24:X:14:ARG:HA	1.89	1.06
16:P:83:MET:HE3	16:P:116:LEU:HD11	1.07	1.06
17:Q:58:LEU:CD1	17:Q:108:ILE:HG23	1.85	1.06
25:Y:19:GLN:OE1	25:Y:85:ASN:ND2	1.88	1.06
25:Y:54:VAL:O	25:Y:75:ILE:HA	1.55	1.06
31:e:113:ASN:ND2	34:i:542:G:OP1	1.89	1.06
32:f:135:HIS:CG	32:f:138:ARG:HG2	1.89	1.06
2:B:107:ARG:NH2	15:O:133:THR:O	1.86	1.06
4:D:132:LYS:N	4:D:191:PRO:HD3	1.69	1.06
5:E:23:LEU:O	5:E:24:THR:HG23	1.52	1.06
5:E:92:ILE:HB	5:E:97:GLU:OE1	1.53	1.06
8:H:10:LYS:CE	8:H:17:ASP:H	1.68	1.06
8:H:144:ILE:HB	23:W:52:ILE:HG23	1.34	1.06
12:L:146:THR:O	12:L:147:LYS:HB3	1.28	1.06
14:N:16:LEU:HD11	14:N:62:GLN:HE22	1.12	1.06
15:O:35:ALA:CB	15:O:112:ALA:HB2	1.84	1.06
28:b:16:LYS:HA	28:b:23:ARG:HH21	0.96	1.06
28:b:46:VAL:HG21	28:b:63:LEU:HD21	1.37	1.06
31:e:114:ARG:C	31:e:119:VAL:HG21	1.81	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:112:ILE:CG2	34:i:1346:U:O2'	2.03	1.06
2:B:25:PHE:CD2	15:O:88:LEU:HD13	1.91	1.06
2:B:67:PHE:CE1	15:O:48:SER:N	2.22	1.06
2:B:153:THR:HG23	2:B:154:SER:H	1.17	1.06
4:D:76:ARG:CD	11:K:66:HIS:HE1	1.63	1.06
4:D:112:GLY:C	4:D:113:LEU:CD1	2.28	1.06
4:D:201:LYS:O	4:D:203:PRO:CD	2.04	1.06
6:F:46:ALA:O	6:F:47:LYS:HD2	1.53	1.06
6:F:76:MET:HE1	6:F:169:ILE:HG21	1.32	1.06
10:J:50:LEU:HD12	10:J:102:ILE:CD1	1.85	1.06
17:Q:54:PRO:HG3	17:Q:88:ILE:HD11	1.37	1.06
18:R:20:TYR:OH	18:R:38:ILE:CB	2.02	1.06
28:b:33:MET:CE	28:b:79:PHE:HB3	1.84	1.06
30:d:27:ARG:HH11	30:d:27:ARG:HB2	0.97	1.06
33:g:172:LYS:HE2	33:g:192:THR:HG22	1.14	1.06
1:A:30:LEU:HD11	1:A:38:ILE:HD11	1.35	1.06
1:A:145:ILE:HA	1:A:159:ILE:CG2	1.84	1.06
2:B:25:PHE:CZ	15:O:88:LEU:CD1	2.36	1.06
5:E:248:ILE:CG1	10:J:72:PHE:CE1	2.39	1.06
6:F:42:LYS:C	6:F:42:LYS:CE	2.29	1.06
6:F:201:LYS:HE3	6:F:204:ARG:HH21	1.16	1.06
8:H:164:ASN:OD1	8:H:167:GLU:OE2	1.73	1.06
9:I:136:ILE:HG23	9:I:139:LYS:HE3	1.14	1.06
10:J:178:ALA:O	10:J:182:GLN:HG3	1.52	1.06
11:K:16:PHE:CD2	11:K:79:LEU:HB3	1.88	1.06
14:N:38:TYR:HE2	14:N:74:ILE:HG22	1.21	1.06
16:P:121:ILE:HG21	19:S:123:LEU:CD1	1.86	1.06
18:R:122:PRO:HA	18:R:123:THR:CG2	1.86	1.06
23:W:90:GLN:HA	23:W:102:ILE:HD11	1.37	1.06
25:Y:13:MET:CE	25:Y:14:THR:O	2.02	1.06
29:c:59:LEU:HB2	29:c:60:GLU:OE1	1.56	1.06
32:f:102:VAL:HG12	32:f:103:LEU:N	1.52	1.06
33:g:42:MET:CG	33:g:92:LEU:HD11	1.85	1.06
33:g:282:GLU:HB3	33:g:283:PRO:HD2	1.09	1.06
34:i:1701:G:C2	34:i:1844:A:H1'	1.84	1.06
37:n:78:LEU:HD23	37:n:93:LEU:HD21	1.34	1.06
1:A:97:THR:HG22	1:A:98:PRO:HD2	1.31	1.06
4:D:177:LEU:HD23	4:D:182:LEU:CD2	1.85	1.06
6:F:167:LYS:HD3	6:F:171:GLU:HG3	1.29	1.06
7:G:121:ILE:HG23	7:G:122:PRO:HD3	1.09	1.06
7:G:142:ARG:HD3	7:G:147:LEU:HB2	1.15	1.06

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:191:GLU:O	8:H:192:PHE:CG	2.08	1.06
10:J:61:LEU:CD2	10:J:98:LEU:CD1	2.28	1.06
10:J:66:LYS:HA	10:J:71:LEU:HD11	1.37	1.06
12:L:17:PHE:CE1	12:L:18:GLN:O	2.08	1.06
12:L:94:HIS:CB	12:L:105:ARG:HD2	1.86	1.06
13:M:12:MET:HG3	13:M:16:THR:HG23	1.10	1.06
15:O:76:LEU:HD22	29:c:5:ARG:HD3	1.37	1.06
15:O:131:ASP:HB2	27:a:67:LEU:HD21	1.12	1.06
16:P:8:LYS:O	16:P:11:THR:HG22	1.54	1.06
16:P:121:ILE:HG21	19:S:123:LEU:HD12	1.11	1.06
17:Q:85:ARG:HH12	17:Q:117:ARG:HG2	1.18	1.06
19:S:6:PRO:HA	26:Z:50:PHE:HB2	1.11	1.06
19:S:11:HIS:CD2	19:S:23:ARG:NH2	2.23	1.06
21:U:48:LEU:N	21:U:48:LEU:HD23	1.65	1.06
24:X:56:GLY:CA	37:n:84:TYR:CE1	2.37	1.06
25:Y:10:ARG:HE	25:Y:24:VAL:CG1	1.68	1.06
25:Y:61:ARG:HH21	25:Y:61:ARG:CG	1.66	1.06
33:g:42:MET:HG3	33:g:92:LEU:HD11	1.08	1.06
33:g:261:LEU:C	33:g:264:LYS:HE3	1.79	1.06
34:i:1700:C:O2'	34:i:1845:A:H4'	1.56	1.06
1:A:190:SER:O	1:A:191:ARG:HG2	1.56	1.05
4:D:218:LEU:CG	4:D:220:THR:HG21	1.79	1.05
6:F:42:LYS:CB	6:F:45:TYR:N	2.14	1.05
6:F:154:LEU:HD12	6:F:155:CYS:N	1.71	1.05
9:I:154:LYS:C	9:I:154:LYS:CE	2.30	1.05
14:N:132:LYS:HA	14:N:132:LYS:CE	1.69	1.05
20:T:29:LYS:HA	20:T:29:LYS:HE3	1.37	1.05
20:T:46:ALA:CB	20:T:47:PRO:HD2	1.86	1.05
28:b:73:LEU:HD12	28:b:79:PHE:CE2	1.87	1.05
33:g:12:LYS:CD	33:g:13:GLY:CA	2.22	1.05
3:C:76:SER:O	3:C:79:ILE:HG23	1.55	1.05
4:D:18:LYS:NZ	4:D:37:VAL:HG23	1.71	1.05
4:D:176:LEU:HD12	4:D:176:LEU:N	1.68	1.05
8:H:191:GLU:O	8:H:192:PHE:CD1	2.08	1.05
9:I:110:ARG:HH21	9:I:124:LYS:HD3	1.20	1.05
10:J:110:LEU:HD12	10:J:130:ILE:HD13	1.36	1.05
15:O:129:ILE:HB	27:a:65:PRO:HG3	1.39	1.05
16:P:41:GLN:HG3	16:P:84:ILE:CG2	1.65	1.05
17:Q:19:ALA:HB2	17:Q:74:GLY:C	1.78	1.05
19:S:14:ARG:HH12	19:S:17:ASN:CA	1.68	1.05
20:T:30:VAL:HG23	20:T:30:VAL:O	1.53	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:11:LYS:CG	1:A:13:GLU:CG	2.35	1.05
4:D:157:MET:CE	4:D:187:LYS:CD	2.31	1.05
4:D:196:GLY:N	4:D:197:LYS:HA	1.58	1.05
4:D:197:LYS:HB2	4:D:198:ILE:HG13	1.16	1.05
5:E:159:THR:HG23	5:E:227:VAL:HG22	1.30	1.05
6:F:14:THR:CB	17:Q:56:LEU:HB3	1.83	1.05
6:F:145:ARG:HD3	29:c:49:PRO:CD	1.86	1.05
7:G:70:HIS:HB2	7:G:103:ASP:OD2	1.56	1.05
7:G:121:ILE:CG2	7:G:122:PRO:CD	2.33	1.05
8:H:40:LEU:HD23	8:H:43:LEU:CD1	1.81	1.05
9:I:139:LYS:CB	9:I:145:ILE:CD1	2.35	1.05
9:I:140:LYS:HG3	9:I:141:ARG:H	1.16	1.05
10:J:21:GLU:O	10:J:23:SER:N	1.88	1.05
18:R:91:LEU:HD12	18:R:91:LEU:N	1.66	1.05
24:X:109:GLY:O	24:X:119:ARG:HD3	1.56	1.05
25:Y:20:ARG:HD2	25:Y:74:MET:HE2	1.38	1.05
25:Y:21:LYS:HE2	25:Y:77:ASP:OD1	1.57	1.05
25:Y:78:SER:HB2	25:Y:81:TYR:CD2	1.90	1.05
29:c:11:LEU:HD13	29:c:35:MET:HE2	1.39	1.05
32:f:140:TYR:OH	32:f:146:LEU:CB	2.05	1.05
2:B:19:LYS:HB2	2:B:19:LYS:NZ	1.69	1.05
2:B:131:ASP:OD2	2:B:180:ASP:HB2	1.57	1.05
3:C:59:LYS:HG3	3:C:254:PHE:CD1	1.92	1.05
6:F:141:VAL:CG1	29:c:47:LYS:HZ1	1.70	1.05
7:G:64:LYS:CG	7:G:67:VAL:HG13	1.87	1.05
7:G:176:ILE:HB	7:G:179:LEU:CD2	1.87	1.05
9:I:142:SER:HB2	9:I:143:LYS:NZ	1.72	1.05
10:J:39:ASN:OD1	10:J:42:GLU:OE2	1.73	1.05
11:K:16:PHE:HE2	11:K:79:LEU:CB	1.51	1.05
12:L:10:TYR:CE2	12:L:12:LYS:HE3	1.92	1.05
13:M:64:LEU:CD1	32:f:104:LYS:HZ3	1.69	1.05
15:O:125:LYS:NZ	27:a:57:SER:C	2.14	1.05
16:P:49:LEU:O	16:P:51:ARG:N	1.89	1.05
17:Q:93:VAL:HG13	17:Q:105:LYS:CE	1.71	1.05
18:R:5:ARG:O	18:R:10:LYS:CE	2.05	1.05
18:R:42:PRO:HD2	18:R:43:SER:H	1.22	1.05
19:S:39:ARG:NE	20:T:38:LYS:CE	2.06	1.05
19:S:120:HIS:CE1	19:S:124:ARG:NH2	2.25	1.05
19:S:120:HIS:CD2	19:S:124:ARG:NE	2.23	1.05
20:T:77:LYS:CG	20:T:92:PHE:CZ	2.34	1.05
20:T:84:ARG:HH21	20:T:84:ARG:CG	1.66	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:61:ARG:N	25:Y:61:ARG:HD2	1.71	1.05
25:Y:101:LYS:O	25:Y:102:THR:HG23	1.57	1.05
26:Z:64:ASN:O	26:Z:111:ARG:NH2	1.89	1.05
27:a:80:HIS:HE1	36:k:13:C:P	1.79	1.05
31:e:105:ARG:HB3	31:e:105:ARG:CZ	1.75	1.05
34:i:1207:G:N3	34:i:1684:C:N3	1.82	1.05
34:i:1823:G:H22	34:i:1845:A:H1'	0.92	1.05
1:A:10:MET:SD	1:A:10:MET:N	2.30	1.05
1:A:112:ILE:HB	34:i:1346:U:C2'	1.58	1.05
1:A:120:ARG:CD	3:C:251:TYR:HE2	1.68	1.05
2:B:209:ASP:OD1	2:B:211:PHE:HZ	1.37	1.05
3:C:142:LEU:CA	3:C:145:LEU:CD2	2.33	1.05
6:F:123:GLU:CG	29:c:59:LEU:HD11	1.87	1.05
8:H:83:LEU:CD1	8:H:92:VAL:HB	1.86	1.05
8:H:83:LEU:HD22	8:H:92:VAL:HG11	1.09	1.05
10:J:88:ASP:O	10:J:91:LYS:HB2	1.55	1.05
10:J:89:GLU:N	10:J:92:MET:SD	2.29	1.05
12:L:149:ALA:HB3	12:L:156:GLN:HG2	1.33	1.05
15:O:23:GLU:O	15:O:23:GLU:HG2	1.52	1.05
17:Q:9:SER:CB	17:Q:26:LYS:CG	2.09	1.05
17:Q:9:SER:HB2	17:Q:26:LYS:CE	1.86	1.05
17:Q:112:LEU:HD22	17:Q:119:LEU:CD1	1.86	1.05
19:S:39:ARG:CD	20:T:38:LYS:CE	2.33	1.05
19:S:94:LYS:HB3	19:S:95:TYR:O	1.54	1.05
21:U:18:HIS:HE1	21:U:98:VAL:CG2	1.69	1.05
25:Y:60:PHE:C	25:Y:61:ARG:HD2	1.82	1.05
29:c:10:LYS:HD2	29:c:61:SER:HB2	1.39	1.05
34:i:1823:G:N2	34:i:1845:A:H1'	1.70	1.05
1:A:34:MET:HE3	1:A:37:TYR:HD2	1.18	1.04
1:A:85:ARG:HH21	1:A:201:LEU:HD12	1.22	1.04
2:B:113:MET:CE	2:B:209:ASP:CG	2.29	1.04
2:B:113:MET:CE	2:B:211:PHE:CZ	2.40	1.04
6:F:41:VAL:CG2	6:F:42:LYS:H	1.62	1.04
6:F:145:ARG:HG2	29:c:48:GLY:HA3	1.37	1.04
8:H:15:LYS:HB3	8:H:16:PRO:CD	1.84	1.04
9:I:48:VAL:HG22	9:I:52:ASN:O	1.57	1.04
16:P:39:ALA:HA	16:P:42:ARG:NE	1.71	1.04
16:P:68:PRO:CB	16:P:69:PRO:HD3	1.84	1.04
17:Q:30:GLY:HA2	17:Q:66:VAL:O	1.55	1.04
19:S:61:GLU:O	19:S:64:VAL:CG2	2.05	1.04
20:T:111:LYS:CB	20:T:126:GLN:NE2	2.20	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:V:78:ILE:HD13	22:V:79:VAL:H	1.14	1.04
25:Y:36:PRO:CD	25:Y:39:GLU:OE1	2.04	1.04
30:d:26:ASN:ND2	34:i:1491:G:O2'	1.90	1.04
33:g:201:SER:HB2	33:g:202:PRO:CD	1.87	1.04
2:B:105:LEU:CD1	2:B:110:MET:CE	2.36	1.04
5:E:208:VAL:CG1	5:E:225:ILE:HD13	1.86	1.04
7:G:226:GLU:O	7:G:230:LYS:NZ	1.91	1.04
10:J:37:LEU:HD21	10:J:42:GLU:CB	1.87	1.04
10:J:122:SER:OG	10:J:124:HIS:HB2	1.57	1.04
10:J:131:ARG:HD2	10:J:143:ASN:OD1	1.56	1.04
11:K:60:GLU:OE2	11:K:67:PHE:HD1	1.38	1.04
12:L:4:ILE:HD12	12:L:4:ILE:H	1.12	1.04
15:O:131:ASP:HB2	27:a:67:LEU:CD2	1.87	1.04
16:P:4:VAL:N	16:P:10:ARG:CG	2.19	1.04
19:S:16:LEU:O	19:S:17:ASN:CG	2.00	1.04
19:S:120:HIS:CD2	19:S:124:ARG:HE	1.73	1.04
21:U:50:VAL:HG21	21:U:52:GLY:CA	1.87	1.04
21:U:61:LEU:HD22	30:d:34:TYR:CE1	1.91	1.04
23:W:129:PHE:O	23:W:129:PHE:HD1	1.40	1.04
24:X:94:ILE:HG12	24:X:125:VAL:HG21	1.32	1.04
24:X:100:VAL:HG12	24:X:125:VAL:HG22	1.36	1.04
25:Y:7:ILE:CD1	25:Y:43:LYS:HB3	1.86	1.04
25:Y:29:HIS:CE1	25:Y:67:GLY:CA	2.39	1.04
25:Y:32:LYS:HG3	25:Y:33:ALA:H	1.11	1.04
29:c:5:ARG:O	29:c:6:VAL:HG23	1.57	1.04
31:e:82:ARG:HG3	37:n:82:ARG:HE	0.93	1.04
32:f:98:VAL:CG1	32:f:99:LYS:H	1.69	1.04
2:B:179:ASN:CG	2:B:183:GLU:OE1	1.99	1.04
4:D:2:ALA:CB	4:D:3:VAL:C	2.30	1.04
4:D:2:ALA:HB1	4:D:3:VAL:C	1.82	1.04
6:F:185:SER:HA	6:F:190:ILE:CG2	1.88	1.04
8:H:144:ILE:HB	23:W:52:ILE:HG22	1.09	1.04
9:I:69:SER:HB3	12:L:19:ASN:ND2	1.67	1.04
10:J:130:ILE:HG12	10:J:135:ILE:HD13	1.36	1.04
12:L:147:LYS:CD	12:L:147:LYS:C	2.30	1.04
12:L:158:PHE:HD2	12:L:158:PHE:N	1.56	1.04
16:P:41:GLN:HG3	16:P:84:ILE:HG21	1.13	1.04
16:P:123:TYR:CE2	19:S:120:HIS:NE2	2.25	1.04
21:U:49:LYS:O	21:U:50:VAL:HG12	1.57	1.04
21:U:50:VAL:HG21	21:U:52:GLY:HA2	1.05	1.04
21:U:61:LEU:HD23	30:d:34:TYR:OH	1.53	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:V:17:CYS:HG	22:V:56:CYS:CB	1.70	1.04
22:V:24:ILE:CD1	22:V:25:GLY:N	2.18	1.04
28:b:34:ASP:HB3	28:b:43:ILE:HG21	1.37	1.04
33:g:7:LEU:HD12	33:g:310:TRP:NE1	1.68	1.04
33:g:294:ASP:C	33:g:296:GLN:H	1.63	1.04
34:i:1206:G:H3'	34:i:1207:G:O5'	1.55	1.04
1:A:32:PHE:HE1	1:A:33:GLN:NE2	1.56	1.04
1:A:177:MET:HE1	1:A:180:ARG:CZ	1.85	1.04
1:A:205:ARG:HG2	1:A:206:ASP:H	0.93	1.04
2:B:19:LYS:O	2:B:21:VAL:CG1	2.05	1.04
2:B:105:LEU:O	2:B:106:THR:HG23	1.57	1.04
4:D:105:LEU:HD23	4:D:184:ILE:HD12	1.04	1.04
5:E:208:VAL:CG2	5:E:225:ILE:CD1	2.28	1.04
7:G:212:LEU:HA	7:G:215:LYS:HE2	1.35	1.04
8:H:9:VAL:CG1	8:H:44:ASN:OD1	2.05	1.04
8:H:50:GLU:OE2	8:H:58:LYS:HD3	1.58	1.04
8:H:146:VAL:CG1	23:W:42:MET:SD	2.46	1.04
10:J:18:ARG:HB2	10:J:21:GLU:OE2	1.57	1.04
11:K:40:VAL:HG22	11:K:41:PRO:N	1.59	1.04
15:O:56:VAL:CG1	15:O:81:VAL:HG22	1.82	1.04
16:P:10:ARG:HH21	16:P:11:THR:CG2	1.69	1.04
17:Q:58:LEU:CD2	17:Q:111:ILE:HD12	1.85	1.04
20:T:89:PRO:O	20:T:91:HIS:NE2	1.90	1.04
22:V:40:ASP:CB	22:V:47:ASN:ND2	2.20	1.04
22:V:42:VAL:O	22:V:43:THR:HG23	1.54	1.04
24:X:95:GLU:CG	24:X:140:ARG:HH22	1.69	1.04
24:X:142:ARG:HH11	24:X:142:ARG:CG	1.65	1.04
31:e:81:ALA:HB3	37:n:82:ARG:NE	1.71	1.04
33:g:172:LYS:CE	33:g:192:THR:CG2	2.35	1.04
34:i:1207:G:N3	34:i:1684:C:C2	2.22	1.04
2:B:20:LYS:C	2:B:21:VAL:CG1	2.29	1.04
2:B:113:MET:SD	2:B:211:PHE:CE2	2.50	1.04
2:B:225:LEU:HB3	2:B:229:MET:HE2	1.37	1.04
9:I:154:LYS:HD3	9:I:155:ASN:N	1.72	1.04
9:I:194:GLU:CG	12:L:12:LYS:HZ1	1.68	1.04
10:J:127:ARG:HG3	10:J:127:ARG:NH1	1.55	1.04
17:Q:76:GLY:O	17:Q:80:GLN:HG3	1.56	1.04
19:S:39:ARG:HD3	20:T:38:LYS:CE	1.88	1.04
20:T:76:THR:O	20:T:95:GLY:N	1.90	1.04
25:Y:36:PRO:HG2	25:Y:39:GLU:HG3	1.36	1.04
25:Y:61:ARG:HH21	25:Y:61:ARG:HG3	0.91	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:127:LYS:C	31:e:127:LYS:CD	2.30	1.04
33:g:46:THR:O	33:g:47:ARG:CB	2.05	1.04
1:A:43:SER:C	1:A:44:ASP:OD1	1.99	1.03
1:A:188:THR:O	1:A:188:THR:HG23	1.57	1.03
2:B:25:PHE:CD2	15:O:88:LEU:CD1	2.40	1.03
3:C:149:PRO:HB2	3:C:233:TYR:CD2	1.93	1.03
8:H:23:ILE:HD13	8:H:27:LEU:HD23	1.34	1.03
8:H:145:ARG:HD2	23:W:51:GLU:CG	1.88	1.03
8:H:146:VAL:HG12	23:W:42:MET:SD	1.98	1.03
18:R:105:MET:O	18:R:109:LEU:CD1	2.05	1.03
20:T:28:LEU:O	20:T:28:LEU:HD22	1.58	1.03
25:Y:61:ARG:HG3	25:Y:61:ARG:NH2	1.63	1.03
28:b:82:LYS:O	28:b:83:GLN:NE2	1.91	1.03
1:A:106:GLY:HA3	34:i:1347:G:O2'	0.87	1.03
6:F:34:SER:HB2	29:c:55:VAL:HB	1.36	1.03
6:F:44:LYS:HB3	6:F:45:TYR:HE1	1.09	1.03
9:I:21:TYR:CE2	9:I:22:HIS:CD2	2.47	1.03
14:N:55:ARG:NH2	28:b:51:GLN:NE2	2.06	1.03
18:R:90:ALA:HB1	18:R:92:ASP:OD2	1.58	1.03
20:T:31:PRO:HB3	20:T:33:TRP:CE2	1.92	1.03
27:a:62:TYR:O	27:a:63:VAL:CB	2.06	1.03
28:b:81:ARG:HB2	28:b:82:LYS:HB2	1.04	1.03
30:d:23:VAL:CB	30:d:38:MET:HE1	1.87	1.03
36:k:20:U:N1	37:n:67:LYS:O	1.90	1.03
2:B:67:PHE:CE1	15:O:47:LEU:C	2.37	1.03
3:C:234:SER:O	22:V:23:ILE:CD1	2.06	1.03
4:D:212:GLU:CG	18:R:19:LYS:HD2	1.88	1.03
6:F:25:THR:HG21	6:F:42:LYS:CD	1.78	1.03
6:F:63:LYS:HD3	6:F:71:ARG:NH1	1.67	1.03
6:F:145:ARG:HD3	29:c:49:PRO:HD2	1.39	1.03
6:F:201:LYS:CD	6:F:204:ARG:HH21	1.71	1.03
11:K:40:VAL:HG22	11:K:41:PRO:O	1.56	1.03
16:P:127:LYS:HZ1	16:P:128:HIS:N	1.54	1.03
18:R:91:LEU:HD13	18:R:92:ASP:HA	1.38	1.03
22:V:24:ILE:O	22:V:24:ILE:HG23	1.58	1.03
31:e:81:ALA:HB3	37:n:82:ARG:CZ	1.87	1.03
31:e:113:ASN:HA	31:e:117:VAL:HG23	1.40	1.03
34:i:60:A:N1	34:i:326:A:C3'	1.98	1.03
35:j:16:C:O2	35:j:59:A:C4'	2.05	1.03
37:n:65:LEU:CD2	37:n:92:ILE:O	2.06	1.03
1:A:185:MET:O	1:A:186:ARG:C	2.01	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:197:LYS:CA	3:C:200:LEU:HD23	1.81	1.03
6:F:93:VAL:O	6:F:97:PHE:HD1	1.41	1.03
10:J:110:LEU:CD1	10:J:130:ILE:HD13	1.84	1.03
11:K:11:ILE:HG23	11:K:49:MET:CE	1.84	1.03
14:N:127:ARG:O	14:N:131:THR:HG23	1.58	1.03
16:P:5:GLU:N	16:P:10:ARG:HH11	1.56	1.03
31:e:127:LYS:C	31:e:127:LYS:HD2	1.82	1.03
1:A:30:LEU:HD21	1:A:35:GLU:HG3	1.07	1.03
5:E:248:ILE:O	10:J:72:PHE:HE1	1.42	1.03
5:E:248:ILE:C	10:J:72:PHE:HE1	1.67	1.03
7:G:27:PHE:CZ	7:G:41:LEU:HD12	1.94	1.03
8:H:16:PRO:HA	8:H:17:ASP:HB2	1.39	1.03
8:H:93:VAL:CG2	8:H:94:PHE:N	2.13	1.03
10:J:67:ASP:OD1	10:J:68:PRO:HD2	1.56	1.03
16:P:41:GLN:HG2	16:P:84:ILE:CG2	1.57	1.03
17:Q:112:LEU:HD22	17:Q:119:LEU:HD13	1.04	1.03
23:W:128:PHE:CE1	23:W:130:PHE:CE2	2.45	1.03
30:d:23:VAL:HG23	30:d:38:MET:SD	1.98	1.03
36:k:10:C:H2'	36:k:11:A:C8	1.94	1.03
1:A:34:MET:HE1	1:A:37:TYR:CE2	1.93	1.02
3:C:101:THR:CG2	3:C:104:GLY:O	2.06	1.02
4:D:218:LEU:O	4:D:218:LEU:HD23	1.59	1.02
5:E:70:ILE:HG12	5:E:92:ILE:HD13	1.37	1.02
6:F:201:LYS:HD2	6:F:204:ARG:NH2	1.74	1.02
15:O:79:GLN:HB3	29:c:5:ARG:HB3	1.13	1.02
16:P:128:HIS:HE1	34:i:1516:C:O2	1.42	1.02
17:Q:100:VAL:HG12	17:Q:101:ASP:H	0.87	1.02
17:Q:114:GLN:HG3	17:Q:115:TYR:H	1.20	1.02
21:U:18:HIS:HE1	21:U:98:VAL:HG21	1.23	1.02
24:X:107:ARG:O	24:X:110:HIS:CE1	2.12	1.02
25:Y:21:LYS:HD3	25:Y:21:LYS:N	1.74	1.02
33:g:143:GLN:CD	33:g:144:ASP:CA	2.32	1.02
33:g:162:ASN:ND2	33:g:163:PRO:CD	2.22	1.02
1:A:118:GLU:OE1	3:C:50:LYS:NZ	1.91	1.02
2:B:105:LEU:HD11	2:B:213:ARG:CB	1.89	1.02
2:B:150:ILE:HG12	18:R:124:VAL:HG13	1.36	1.02
4:D:112:GLY:CA	4:D:113:LEU:HD12	1.89	1.02
6:F:25:THR:HG23	6:F:41:VAL:CG2	1.89	1.02
6:F:91:ARG:HH12	6:F:94:LYS:CG	1.72	1.02
6:F:167:LYS:CD	6:F:171:GLU:CG	2.37	1.02
8:H:23:ILE:HD13	8:H:27:LEU:CD2	1.89	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:144:ILE:HD12	23:W:52:ILE:HG21	1.05	1.02
9:I:7:ASN:O	9:I:9:HIS:O	1.78	1.02
15:O:55:ARG:O	15:O:56:VAL:HG12	1.57	1.02
16:P:53:GLN:HG2	16:P:80:LEU:HD12	1.39	1.02
26:Z:80:ARG:HG2	26:Z:82:SER:OG	1.56	1.02
2:B:47:THR:HG21	2:B:67:PHE:CZ	1.93	1.02
2:B:120:MET:HE3	2:B:142:PHE:HZ	1.24	1.02
4:D:108:LYS:HB3	4:D:113:LEU:HD22	1.41	1.02
4:D:212:GLU:CB	18:R:19:LYS:CD	2.37	1.02
4:D:218:LEU:HG	4:D:220:THR:HG23	1.05	1.02
6:F:47:LYS:CG	17:Q:117:ARG:HH22	1.72	1.02
6:F:59:LYS:HD3	6:F:62:ARG:HD3	1.36	1.02
7:G:65:GLN:HA	7:G:100:CYS:SG	1.98	1.02
8:H:144:ILE:CB	23:W:52:ILE:HG23	1.87	1.02
11:K:83:LEU:CD1	11:K:85:LEU:CD2	2.38	1.02
11:K:96:ARG:HG3	11:K:97:SER:H	1.22	1.02
13:M:12:MET:HG3	13:M:16:THR:CG2	1.90	1.02
16:P:82:ASP:OD2	34:i:1614:A:O2'	1.75	1.02
17:Q:100:VAL:CG1	17:Q:101:ASP:H	1.72	1.02
18:R:5:ARG:CB	18:R:10:LYS:NZ	2.22	1.02
18:R:91:LEU:HB2	18:R:93:GLN:N	1.74	1.02
20:T:31:PRO:CB	20:T:33:TRP:CZ2	2.42	1.02
25:Y:63:HIS:ND1	25:Y:64:PHE:HE1	1.58	1.02
1:A:48:ILE:HG12	18:R:105:MET:CE	1.88	1.02
1:A:145:ILE:HA	1:A:159:ILE:HG22	1.41	1.02
3:C:59:LYS:HG3	3:C:254:PHE:CE1	1.94	1.02
6:F:14:THR:HG21	17:Q:56:LEU:CD1	1.88	1.02
16:P:9:LYS:C	16:P:10:ARG:HG3	1.82	1.02
22:V:40:ASP:HB3	22:V:47:ASN:ND2	1.74	1.02
23:W:62:VAL:HB	28:b:8:LEU:HD21	1.06	1.02
33:g:191:HIS:CD2	33:g:195:LEU:CD2	2.42	1.02
1:A:66:VAL:CG2	1:A:186:ARG:HD3	1.90	1.02
1:A:66:VAL:HG13	1:A:186:ARG:CD	1.90	1.02
3:C:151:ARG:HH12	3:C:240:LEU:HD11	0.88	1.02
4:D:43:PRO:O	4:D:44:THR:HG23	1.58	1.02
5:E:49:ARG:C	5:E:49:ARG:CD	2.30	1.02
6:F:91:ARG:HH11	6:F:94:LYS:HB3	1.23	1.02
7:G:121:ILE:HG23	7:G:122:PRO:HD2	1.39	1.02
10:J:161:LEU:O	10:J:162:ARG:CB	1.96	1.02
17:Q:47:LEU:HD22	17:Q:81:ILE:HD12	1.26	1.02
19:S:117:ILE:O	19:S:118:ARG:CG	2.07	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:75:MET:HE3	20:T:79:TYR:HE2	0.89	1.02
31:e:82:ARG:N	37:n:82:ARG:CD	2.21	1.02
32:f:97:LYS:HB2	32:f:97:LYS:NZ	1.73	1.02
33:g:259:TRP:HE3	33:g:259:TRP:N	1.58	1.02
1:A:113:GLN:NE2	34:i:1347:G:C2'	2.23	1.01
4:D:21:LEU:HD11	4:D:48:ILE:CD1	1.90	1.01
4:D:158:ILE:HD12	4:D:189:MET:HE1	1.41	1.01
5:E:70:ILE:HG12	5:E:92:ILE:HD11	1.04	1.01
5:E:153:LEU:HD13	5:E:172:PHE:CE1	1.94	1.01
7:G:183:ARG:NH2	34:i:308:C:H41	1.57	1.01
10:J:61:LEU:HD22	10:J:98:LEU:HD11	1.02	1.01
10:J:161:LEU:O	10:J:162:ARG:HB2	1.52	1.01
15:O:79:GLN:CD	29:c:5:ARG:HB2	1.84	1.01
15:O:99:ALA:H	15:O:133:THR:HG22	0.85	1.01
16:P:108:LYS:H	16:P:111:MET:HE3	1.18	1.01
19:S:12:ILE:O	19:S:12:ILE:HG22	1.60	1.01
25:Y:92:ALA:CA	25:Y:97:TYR:HB3	1.89	1.01
33:g:202:PRO:HB2	33:g:203:ASP:OD1	1.58	1.01
2:B:48:LEU:H	2:B:48:LEU:HD12	1.22	1.01
2:B:87:ILE:HG21	2:B:101:HIS:CD2	1.96	1.01
3:C:101:THR:HG23	3:C:103:ALA:O	1.59	1.01
4:D:59:LEU:CD1	4:D:60:GLY:N	2.23	1.01
5:E:120:LYS:O	5:E:164:LEU:HB2	1.59	1.01
8:H:10:LYS:HE3	8:H:17:ASP:N	1.72	1.01
11:K:4:PRO:HG2	11:K:7:ASN:HB2	1.37	1.01
12:L:7:GLU:CG	12:L:8:ARG:H	1.70	1.01
15:O:131:ASP:CB	27:a:67:LEU:HD21	1.89	1.01
16:P:123:TYR:CZ	19:S:124:ARG:NH1	2.11	1.01
25:Y:20:ARG:HD3	25:Y:76:TYR:CZ	1.95	1.01
26:Z:44:LEU:C	26:Z:44:LEU:CD1	2.30	1.01
26:Z:52:LYS:O	26:Z:55:TYR:N	1.93	1.01
29:c:15:THR:HG21	29:c:33:GLU:HG2	1.38	1.01
33:g:31:ILE:HG22	33:g:43:TRP:HB2	1.40	1.01
34:i:1244:U:C1'	35:j:33:C:C5'	2.35	1.01
1:A:24:HIS:HD2	1:A:48:ILE:HG23	1.25	1.01
1:A:97:THR:CG2	1:A:98:PRO:CD	2.37	1.01
1:A:127:PRO:HB2	1:A:153:PRO:HG2	1.37	1.01
1:A:145:ILE:HD12	1:A:159:ILE:HG21	1.36	1.01
1:A:205:ARG:HG2	1:A:206:ASP:N	1.71	1.01
3:C:155:TRP:CZ2	23:W:97:ARG:HD2	1.95	1.01
6:F:42:LYS:CD	6:F:42:LYS:H	1.73	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:82:VAL:HG11	9:I:202:ILE:CD1	1.91	1.01
10:J:89:GLU:HA	10:J:92:MET:SD	1.95	1.01
11:K:83:LEU:O	11:K:84:HIS:CG	2.13	1.01
12:L:95:TYR:HA	12:L:102:PHE:CB	1.89	1.01
16:P:127:LYS:HZ2	16:P:127:LYS:CB	1.71	1.01
25:Y:99:LYS:CA	25:Y:99:LYS:CE	2.39	1.01
28:b:64:CYS:SG	28:b:73:LEU:HA	1.98	1.01
31:e:115:ARG:C	31:e:119:VAL:CG2	2.34	1.01
34:i:1820:G:C4'	37:n:43:GLY:HA3	1.86	1.01
1:A:9:GLN:HB3	1:A:10:MET:SD	2.00	1.01
1:A:11:LYS:HD3	1:A:13:GLU:HG3	1.42	1.01
1:A:103:PHE:HE2	1:A:136:GLU:CD	1.68	1.01
2:B:105:LEU:HD12	2:B:110:MET:HE2	1.04	1.01
5:E:139:LEU:CD1	5:E:154:ILE:HG21	1.90	1.01
6:F:14:THR:HB	17:Q:56:LEU:HD13	1.43	1.01
10:J:17:ARG:CG	10:J:18:ARG:CD	2.29	1.01
10:J:38:ARG:HE	31:e:105:ARG:N	1.58	1.01
10:J:170:PRO:HB2	10:J:174:LYS:HE2	1.42	1.01
11:K:83:LEU:CG	11:K:85:LEU:HD21	1.90	1.01
14:N:27:LYS:CE	14:N:27:LYS:H	1.73	1.01
15:O:54:CYS:SG	15:O:84:ARG:HB3	2.01	1.01
15:O:56:VAL:CG1	15:O:81:VAL:HG23	1.88	1.01
16:P:46:SER:O	16:P:49:LEU:HD22	1.61	1.01
16:P:108:LYS:HB3	16:P:110:GLU:OE1	1.60	1.01
27:a:23:CYS:CB	27:a:28:CYS:SG	2.49	1.01
28:b:82:LYS:O	28:b:83:GLN:CD	2.02	1.01
33:g:87:LEU:CD1	33:g:101:PHE:HB2	1.90	1.01
33:g:98:THR:O	33:g:99:ARG:HD2	1.61	1.01
33:g:176:VAL:HB	33:g:186:THR:HG22	1.35	1.01
33:g:194:TYR:CE2	33:g:212:LYS:HB2	1.96	1.01
34:i:1635:A:H4'	35:j:39:C:O3'	1.36	1.01
1:A:127:PRO:HG2	1:A:153:PRO:HD2	1.42	1.01
2:B:19:LYS:O	2:B:21:VAL:HG13	1.61	1.01
4:D:177:LEU:HD22	4:D:182:LEU:HD23	1.42	1.01
6:F:18:LYS:HE3	17:Q:115:TYR:CD1	1.96	1.01
6:F:42:LYS:CD	6:F:42:LYS:C	2.29	1.01
8:H:138:GLU:OE2	14:N:19:ARG:CB	2.09	1.01
8:H:169:LYS:HB2	8:H:173:PHE:CE2	1.95	1.01
14:N:132:LYS:HE3	14:N:132:LYS:HA	1.01	1.01
17:Q:9:SER:HB3	17:Q:26:LYS:HG2	1.41	1.01
18:R:5:ARG:CB	18:R:10:LYS:HZ3	1.72	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:40:ALA:HB3	20:T:43:LYS:HG2	1.01	1.01
25:Y:35:VAL:HG12	25:Y:36:PRO:HD2	1.42	1.01
3:C:101:THR:HG22	3:C:104:GLY:C	1.84	1.00
6:F:45:TYR:O	6:F:47:LYS:HE2	1.56	1.00
9:I:19:LYS:HE2	9:I:20:PRO:HD2	1.39	1.00
9:I:144:LYS:O	9:I:145:ILE:CG1	2.10	1.00
10:J:79:ARG:NH1	10:J:83:ARG:CZ	2.23	1.00
12:L:146:THR:O	12:L:147:LYS:CB	2.04	1.00
12:L:156:GLN:OE1	12:L:158:PHE:HE2	1.35	1.00
14:N:21:SER:O	14:N:22:VAL:HG22	1.61	1.00
16:P:107:ILE:HA	16:P:111:MET:SD	2.01	1.00
17:Q:50:LYS:HA	17:Q:53:GLU:CD	1.85	1.00
17:Q:93:VAL:HG13	17:Q:105:LYS:HE2	1.31	1.00
18:R:122:PRO:HB3	18:R:123:THR:HG21	1.40	1.00
20:T:76:THR:HB	20:T:95:GLY:O	1.61	1.00
20:T:144:LYS:HB2	20:T:144:LYS:NZ	1.71	1.00
21:U:64:THR:HG22	21:U:79:ARG:CG	1.91	1.00
25:Y:64:PHE:CD1	25:Y:64:PHE:N	2.29	1.00
33:g:172:LYS:HE2	33:g:191:HIS:C	1.86	1.00
1:A:34:MET:HE3	1:A:37:TYR:CD2	1.95	1.00
3:C:234:SER:HA	22:V:23:ILE:HD12	1.38	1.00
4:D:176:LEU:H	4:D:176:LEU:CD1	1.72	1.00
6:F:91:ARG:HA	6:F:91:ARG:HE	1.03	1.00
6:F:145:ARG:HG2	29:c:48:GLY:HA2	1.39	1.00
12:L:95:TYR:CA	12:L:102:PHE:HB3	1.89	1.00
14:N:53:ILE:HD12	28:b:52:THR:HG21	1.37	1.00
16:P:118:GLU:O	19:S:119:ALA:HB1	1.58	1.00
17:Q:58:LEU:CD2	17:Q:111:ILE:HD13	1.84	1.00
18:R:33:ARG:NH2	33:g:83:TRP:CE3	2.29	1.00
19:S:137:LYS:C	19:S:141:ARG:HH21	1.69	1.00
20:T:84:ARG:HH21	20:T:84:ARG:HG3	1.22	1.00
22:V:41:LYS:O	22:V:43:THR:N	1.94	1.00
29:c:67:ARG:CG	29:c:68:LEU:H	1.73	1.00
32:f:108:VAL:HG21	32:f:114:ILE:HG22	1.43	1.00
33:g:12:LYS:CG	33:g:13:GLY:N	2.17	1.00
37:n:61:ILE:HA	37:n:91:VAL:HB	1.43	1.00
37:n:71:ILE:HG22	37:n:77:ILE:HD13	1.43	1.00
2:B:137:LEU:HD22	2:B:215:VAL:HG22	1.04	1.00
4:D:132:LYS:N	4:D:191:PRO:CD	2.25	1.00
6:F:25:THR:HG23	6:F:41:VAL:HG23	1.41	1.00
8:H:36:LEU:CD1	8:H:36:LEU:C	2.29	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:25:ARG:NH1	34:i:423:A:OP1	1.93	1.00
11:K:27:VAL:HG13	11:K:43:LEU:HD21	1.43	1.00
14:N:21:SER:O	14:N:22:VAL:HG13	1.61	1.00
15:O:124:MET:O	27:a:56:VAL:CG1	2.09	1.00
16:P:10:ARG:NE	16:P:11:THR:H	1.57	1.00
22:V:24:ILE:CD1	22:V:24:ILE:C	2.29	1.00
24:X:27:TYR:CD1	24:X:31:HIS:NE2	2.30	1.00
24:X:142:ARG:HH11	24:X:142:ARG:HB2	1.19	1.00
25:Y:36:PRO:HG3	25:Y:39:GLU:CD	1.86	1.00
28:b:33:MET:HE3	28:b:79:PHE:CG	1.72	1.00
2:B:55:THR:O	2:B:56:LYS:HD2	1.62	1.00
2:B:150:ILE:HG12	18:R:124:VAL:HG12	1.42	1.00
4:D:21:LEU:HD11	4:D:48:ILE:HD12	1.01	1.00
4:D:158:ILE:CD1	4:D:189:MET:HE2	1.87	1.00
4:D:193:ASP:HA	4:D:202:LYS:O	1.61	1.00
5:E:38:LEU:C	5:E:38:LEU:CD1	2.33	1.00
7:G:121:ILE:CG2	7:G:122:PRO:HD3	1.91	1.00
7:G:142:ARG:HH11	7:G:142:ARG:HG3	1.26	1.00
9:I:155:ASN:C	12:L:22:ARG:HD2	1.87	1.00
11:K:62:PHE:CE1	11:K:67:PHE:CE2	2.50	1.00
13:M:77:ILE:HG23	13:M:78:LYS:H	1.27	1.00
26:Z:94:LYS:C	26:Z:94:LYS:HD3	1.84	1.00
28:b:33:MET:HE2	28:b:35:VAL:CG2	1.90	1.00
1:A:118:GLU:OE1	3:C:50:LYS:CE	2.08	1.00
5:E:128:LYS:CD	5:E:130:PHE:CE1	2.45	1.00
7:G:176:ILE:HG22	7:G:179:LEU:CB	1.91	1.00
16:P:127:LYS:HB2	16:P:127:LYS:HZ2	0.85	1.00
17:Q:85:ARG:HH22	17:Q:117:ARG:HG2	1.19	1.00
18:R:33:ARG:CB	33:g:150:TRP:CZ2	2.44	1.00
21:U:50:VAL:CG2	21:U:52:GLY:HA2	1.92	1.00
24:X:139:GLU:O	24:X:141:PRO:HD3	1.60	1.00
33:g:232:GLY:HA2	33:g:257:LYS:HZ2	1.23	1.00
34:i:60:A:N6	34:i:326:A:H8	1.59	1.00
34:i:1826:A:H5'	34:i:1847:C:P	2.02	1.00
1:A:185:MET:HE1	22:V:39:VAL:HG12	1.00	1.00
7:G:183:ARG:NH2	34:i:308:C:N4	2.07	1.00
10:J:100:LEU:HG	10:J:101:LYS:N	1.73	1.00
13:M:70:ALA:HB3	13:M:71:GLU:OE2	1.61	1.00
25:Y:18:LEU:CG	25:Y:20:ARG:NH1	2.25	1.00
28:b:10:PRO:HG2	28:b:15:GLU:OE2	1.60	1.00
33:g:259:TRP:N	33:g:259:TRP:CE3	2.29	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:195:PRO:CG	3:C:221:PHE:CZ	2.44	1.00
9:I:114:GLU:OE1	9:I:133:GLU:CD	1.93	1.00
17:Q:8:GLN:HG3	17:Q:99:TYR:CE1	1.76	1.00
18:R:20:TYR:CE2	18:R:38:ILE:HB	1.96	1.00
20:T:31:PRO:HB3	20:T:33:TRP:CH2	1.97	1.00
1:A:5:LEU:C	1:A:5:LEU:HD22	1.87	0.99
2:B:20:LYS:C	2:B:21:VAL:HG13	1.87	0.99
9:I:118:ALA:O	9:I:119:LEU:HD23	1.61	0.99
10:J:127:ARG:HH12	10:J:145:PRO:HB2	1.23	0.99
13:M:100:PRO:O	13:M:101:ARG:HD2	1.61	0.99
16:P:127:LYS:O	16:P:127:LYS:HE3	1.61	0.99
25:Y:36:PRO:CG	25:Y:39:GLU:CG	2.36	0.99
31:e:115:ARG:O	31:e:119:VAL:HG13	1.56	0.99
33:g:2:THR:O	33:g:3:GLU:CB	2.08	0.99
35:j:53:A:H61	35:j:57:A:H8	1.04	0.99
35:j:53:A:N6	35:j:57:A:C8	2.04	0.99
3:C:155:TRP:CZ2	23:W:97:ARG:CD	2.45	0.99
4:D:195:SER:C	4:D:197:LYS:CA	2.34	0.99
6:F:20:PHE:O	6:F:22:LYS:CA	2.10	0.99
6:F:73:THR:CG2	6:F:93:VAL:HG21	1.92	0.99
9:I:79:ILE:HG22	9:I:103:LEU:O	1.62	0.99
9:I:206:LYS:HD2	9:I:207:GLY:H	1.24	0.99
11:K:18:GLU:O	11:K:92:ALA:HB3	1.60	0.99
19:S:46:ARG:CG	20:T:50:GLU:OE2	2.09	0.99
21:U:50:VAL:HG22	21:U:51:LYS:O	1.60	0.99
2:B:31:TYR:HD1	2:B:94:LYS:HA	1.27	0.99
6:F:91:ARG:HH11	6:F:94:LYS:HB2	1.07	0.99
8:H:83:LEU:HD13	8:H:92:VAL:CB	1.86	0.99
9:I:141:ARG:HD3	9:I:144:LYS:CB	1.92	0.99
10:J:92:MET:O	10:J:93:LYS:CE	2.10	0.99
12:L:10:TYR:HD2	12:L:12:LYS:NZ	1.54	0.99
15:O:54:CYS:SG	15:O:84:ARG:CB	2.51	0.99
19:S:14:ARG:NH1	19:S:17:ASN:CA	2.25	0.99
33:g:119:GLN:NE2	33:g:121:VAL:HG23	1.77	0.99
34:i:1519:G:H5"	35:j:29:G:H5'	1.43	0.99
2:B:87:ILE:CD1	2:B:101:HIS:HD2	1.74	0.99
2:B:136:HIS:CE1	2:B:138:PHE:CZ	2.50	0.99
5:E:248:ILE:C	10:J:72:PHE:CE1	2.39	0.99
6:F:136:ARG:O	6:F:203:ASN:HB3	1.62	0.99
14:N:54:LEU:HB3	14:N:60:VAL:HG21	1.39	0.99
16:P:128:HIS:CE1	34:i:1516:C:O2	2.14	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:U:19:ARG:HG3	21:U:92:HIS:CE1	1.95	0.99
25:Y:63:HIS:ND1	25:Y:64:PHE:CE1	2.29	0.99
1:A:24:HIS:CD2	1:A:48:ILE:HG23	1.95	0.99
1:A:32:PHE:CE1	1:A:33:GLN:NE2	2.28	0.99
2:B:125:VAL:HG11	2:B:173:THR:HG22	1.43	0.99
4:D:16:ILE:HD13	30:d:22:ARG:HH21	1.23	0.99
4:D:16:ILE:HG21	30:d:22:ARG:NH2	1.76	0.99
5:E:99:PHE:HE1	5:E:113:ARG:HG3	1.20	0.99
7:G:76:LEU:HD22	7:G:92:ARG:HG2	1.05	0.99
10:J:100:LEU:HD12	10:J:104:ASP:OD2	1.62	0.99
10:J:138:ARG:HH11	10:J:156:HIS:CE1	1.79	0.99
33:g:87:LEU:CD1	33:g:101:PHE:CB	2.40	0.99
9:I:154:LYS:HE2	9:I:154:LYS:C	1.86	0.99
13:M:12:MET:HE1	13:M:120:ALA:HB1	1.40	0.99
19:S:6:PRO:HA	26:Z:50:PHE:CB	1.93	0.99
21:U:50:VAL:CG2	21:U:51:LYS:C	2.34	0.99
33:g:2:THR:O	33:g:3:GLU:HB3	1.61	0.99
2:B:179:ASN:OD1	2:B:183:GLU:OE1	1.80	0.99
5:E:47:PHE:CE2	5:E:52:LEU:CD1	2.46	0.99
5:E:129:ILE:HG13	5:E:139:LEU:HD22	1.34	0.99
6:F:20:PHE:O	6:F:21:GLY:C	2.06	0.99
7:G:25:ARG:CG	7:G:28:TYR:CE2	2.45	0.99
11:K:28:HIS:HE1	30:d:8:TRP:CD1	1.81	0.99
16:P:51:ARG:N	16:P:51:ARG:HD2	1.77	0.99
30:d:13:LYS:HG3	30:d:14:PHE:HD2	1.27	0.99
1:A:57:LYS:CE	22:V:70:LEU:CD1	2.41	0.99
1:A:119:PRO:HG2	1:A:142:LEU:HD13	1.44	0.99
1:A:177:MET:HE1	1:A:180:ARG:HH22	1.21	0.99
2:B:19:LYS:HB2	2:B:19:LYS:HZ3	1.22	0.99
2:B:205:TYR:CG	2:B:206:PRO:HD2	1.98	0.99
4:D:18:LYS:HZ2	4:D:37:VAL:HG23	1.20	0.99
9:I:154:LYS:C	9:I:154:LYS:CD	2.30	0.99
12:L:10:TYR:HE2	12:L:12:LYS:HE3	1.27	0.99
16:P:52:LYS:H	16:P:54:HIS:CD2	1.81	0.99
17:Q:58:LEU:HD13	17:Q:108:ILE:HG23	1.44	0.99
24:X:29:LYS:CD	24:X:34:THR:OG1	2.11	0.99
24:X:60:LYS:CE	24:X:116:PRO:HG3	1.92	0.99
24:X:114:ASP:O	24:X:116:PRO:CD	2.10	0.99
26:Z:99:LEU:CD1	26:Z:102:LYS:CE	2.14	0.99
28:b:36:LYS:HG3	28:b:78:SER:OG	1.62	0.99
3:C:234:SER:CA	22:V:23:ILE:CD1	2.41	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:9:LYS:O	16:P:10:ARG:CG	2.10	0.99
16:P:62:LYS:HG3	16:P:65:LYS:HE2	1.40	0.99
18:R:100:PRO:HB2	18:R:119:VAL:CG2	1.91	0.99
20:T:103:VAL:O	20:T:107:LEU:HG	1.62	0.99
20:T:119:TRP:CD1	34:i:1556:A:C2	2.51	0.99
21:U:50:VAL:HG13	21:U:51:LYS:N	1.74	0.99
1:A:66:VAL:CG1	1:A:186:ARG:HB3	1.92	0.99
1:A:118:GLU:OE1	3:C:50:LYS:HE2	1.62	0.99
5:E:248:ILE:CD1	10:J:72:PHE:CD1	2.44	0.99
7:G:188:LYS:HA	7:G:191:ARG:HD3	1.44	0.99
16:P:118:GLU:O	19:S:119:ALA:CB	2.11	0.99
17:Q:146:ARG:HE	35:j:33:C:H5”	0.82	0.99
18:R:13:ALA:CB	18:R:54:VAL:HG22	1.92	0.99
19:S:8:LYS:HD3	19:S:9:PHE:HE1	0.84	0.99
19:S:31:THR:HA	19:S:36:VAL:HG22	1.44	0.99
25:Y:36:PRO:HG2	25:Y:39:GLU:CB	1.91	0.99
25:Y:98:GLU:C	25:Y:98:GLU:CD	2.31	0.99
33:g:87:LEU:HD12	33:g:101:PHE:HB3	1.43	0.99
37:n:62:ARG:CB	37:n:92:ILE:HA	1.92	0.99
1:A:154:LEU:CD1	22:V:63:GLY:C	2.35	0.98
17:Q:42:ILE:HD13	17:Q:51:LEU:CG	1.93	0.98
33:g:201:SER:HB2	33:g:202:PRO:HD3	1.41	0.98
2:B:160:GLN:NE2	2:B:205:TYR:HD1	1.58	0.98
6:F:91:ARG:NH1	6:F:94:LYS:HB3	1.76	0.98
6:F:122:ARG:NE	6:F:193:LYS:NZ	2.10	0.98
15:O:128:ARG:HG3	27:a:62:TYR:OH	1.63	0.98
16:P:41:GLN:NE2	16:P:84:ILE:CB	2.19	0.98
16:P:44:ARG:NH2	16:P:84:ILE:N	2.09	0.98
23:W:129:PHE:HD1	23:W:129:PHE:C	1.71	0.98
28:b:3:LEU:HD23	28:b:3:LEU:N	1.78	0.98
29:c:21:THR:HG22	29:c:22:GLY:N	1.78	0.98
1:A:185:MET:HE1	22:V:39:VAL:CG1	1.92	0.98
2:B:68:GLU:OE2	2:B:83:LYS:HE2	1.64	0.98
4:D:126:ILE:CD1	4:D:134:CYS:SG	2.52	0.98
10:J:39:ASN:H	10:J:42:GLU:HG2	1.26	0.98
15:O:19:PRO:HG2	15:O:27:VAL:HG21	1.01	0.98
16:P:83:MET:HE3	16:P:116:LEU:CD1	1.92	0.98
16:P:84:ILE:O	16:P:86:LEU:HD23	1.59	0.98
23:W:11:LEU:HD12	23:W:74:VAL:HB	1.45	0.98
33:g:118:ARG:HA	33:g:118:ARG:HE	1.28	0.98
33:g:212:LYS:HA	33:g:235:ILE:HG13	1.45	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1519:G:H5”	35:j:28:G:O2’	1.63	0.98
1:A:145:ILE:HD13	1:A:159:ILE:HG21	1.40	0.98
17:Q:9:SER:HB2	17:Q:26:LYS:HE3	1.02	0.98
19:S:136:THR:OG1	34:i:1516:C:OP2	1.79	0.98
28:b:12:PRO:O	28:b:16:LYS:HD3	1.63	0.98
33:g:275:ILE:O	33:g:276:SER:HB3	1.61	0.98
4:D:67:ARG:HH11	4:D:67:ARG:HG3	1.28	0.98
11:K:98:ARG:HG2	11:K:98:ARG:HH11	1.26	0.98
12:L:7:GLU:HG3	12:L:8:ARG:HG3	1.45	0.98
17:Q:93:VAL:HG13	17:Q:105:LYS:HD3	1.41	0.98
17:Q:100:VAL:HG12	17:Q:101:ASP:N	1.68	0.98
25:Y:114:MET:CA	25:Y:124:ASN:ND2	2.25	0.98
4:D:105:LEU:HD23	4:D:184:ILE:CD1	1.93	0.98
11:K:62:PHE:HD1	11:K:67:PHE:CE2	1.76	0.98
17:Q:7:LEU:CD2	17:Q:8:GLN:OE1	2.12	0.98
33:g:144:ASP:C	33:g:145:GLU:CG	2.30	0.98
5:E:25:SER:CB	34:i:485:U:O2’	2.11	0.98
5:E:61:VAL:O	5:E:65:CYS:SG	2.22	0.98
17:Q:8:GLN:HG2	17:Q:99:TYR:CE1	1.84	0.98
18:R:33:ARG:CB	33:g:150:TRP:CH2	2.45	0.98
23:W:85:ASP:O	23:W:89:TRP:HD1	1.47	0.98
24:X:71:ARG:HE	24:X:82:THR:CG2	1.75	0.98
25:Y:48:TYR:O	25:Y:50:THR:HG23	1.61	0.98
27:a:84:VAL:HB	34:i:1860:A:N6	1.76	0.98
33:g:232:GLY:HA2	33:g:257:LYS:NZ	1.77	0.98
7:G:32:MET:HE1	7:G:100:CYS:HA	1.01	0.98
10:J:117:LEU:O	10:J:119:LEU:HD23	1.62	0.98
11:K:65:ARG:CB	11:K:65:ARG:HH11	1.76	0.98
12:L:22:ARG:NH1	12:L:22:ARG:HB3	1.79	0.98
16:P:111:MET:O	16:P:114:HIS:CD2	2.15	0.98
16:P:127:LYS:HE3	16:P:127:LYS:C	1.89	0.98
20:T:75:MET:CE	20:T:79:TYR:HE2	1.77	0.98
34:i:837:G:C2’	34:i:838:C:H5’	1.93	0.98
3:C:234:SER:C	22:V:23:ILE:CD1	2.37	0.98
4:D:21:LEU:CD1	4:D:48:ILE:CD1	2.42	0.98
6:F:73:THR:HG22	6:F:93:VAL:CG2	1.93	0.98
7:G:84:TYR:CE2	7:G:86:PRO:HG3	1.99	0.98
9:I:5:ARG:HG2	9:I:5:ARG:HH11	1.28	0.98
10:J:124:HIS:NE2	34:i:516:A:H5”	1.77	0.98
16:P:127:LYS:C	16:P:127:LYS:CE	2.36	0.98
19:S:42:HIS:HD2	20:T:45:LEU:CD1	1.52	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:137:LYS:O	19:S:141:ARG:NH2	1.96	0.98
21:U:51:LYS:HB2	21:U:90:ASP:HB2	1.41	0.98
30:d:13:LYS:HE3	30:d:14:PHE:HE2	0.91	0.98
7:G:183:ARG:HH22	34:i:308:C:H5	0.99	0.98
12:L:7:GLU:HG3	12:L:8:ARG:H	1.26	0.98
20:T:143:LYS:HD2	20:T:144:LYS:H	1.26	0.98
1:A:43:SER:OG	18:R:101:ASP:CG	2.06	0.97
7:G:50:VAL:HG13	7:G:111:LEU:HB3	1.45	0.97
8:H:144:ILE:HD12	23:W:52:ILE:HD13	1.42	0.97
9:I:161:LEU:CD1	9:I:199:LEU:HD12	1.85	0.97
16:P:46:SER:O	16:P:49:LEU:CD2	2.11	0.97
24:X:67:ARG:C	24:X:68:LYS:HG3	1.86	0.97
3:C:55:VAL:CG2	3:C:82:PHE:CE2	2.46	0.97
4:D:192:TRP:CE3	4:D:196:GLY:HA2	1.72	0.97
11:K:15:LEU:CD1	11:K:21:MET:HE2	1.94	0.97
14:N:55:ARG:HH12	28:b:47:PHE:HD2	1.02	0.97
20:T:143:LYS:O	20:T:144:LYS:HB3	1.62	0.97
24:X:60:LYS:HG3	24:X:116:PRO:HG3	1.44	0.97
33:g:100:ARG:HH11	33:g:100:ARG:CG	1.75	0.97
5:E:70:ILE:CG1	5:E:92:ILE:HD11	1.83	0.97
21:U:40:ILE:HD11	21:U:53:PRO:CB	1.94	0.97
22:V:11:LEU:HD12	22:V:12:TYR:HD2	0.93	0.97
25:Y:114:MET:HA	25:Y:124:ASN:CG	1.88	0.97
27:a:80:HIS:HE1	36:k:13:C:OP1	1.47	0.97
37:n:65:LEU:HG	37:n:93:LEU:HA	1.00	0.97
3:C:195:PRO:CB	3:C:221:PHE:CZ	2.36	0.97
10:J:170:PRO:CB	10:J:174:LYS:HE2	1.94	0.97
14:N:22:VAL:CB	14:N:23:PRO:HA	1.95	0.97
16:P:53:GLN:HE21	16:P:80:LEU:HD13	1.26	0.97
29:c:15:THR:CG2	29:c:33:GLU:CG	2.42	0.97
31:e:78:GLY:N	37:n:88:LYS:O	1.96	0.97
37:n:65:LEU:HG	37:n:93:LEU:CA	1.93	0.97
1:A:57:LYS:HZ1	22:V:70:LEU:HD11	0.93	0.97
1:A:118:GLU:HB3	3:C:50:LYS:HZ1	0.82	0.97
2:B:36:PRO:HB3	2:B:231:LEU:HD21	1.00	0.97
2:B:77:ASP:O	2:B:79:VAL:HG22	1.64	0.97
8:H:157:HIS:C	8:H:158:LEU:HD23	1.89	0.97
9:I:139:LYS:CB	9:I:145:ILE:HD11	1.93	0.97
11:K:2:LEU:O	11:K:3:MET:HB3	1.58	0.97
11:K:3:MET:CE	11:K:8:ARG:CZ	2.31	0.97
17:Q:21:ALA:HB2	17:Q:72:VAL:HG22	1.45	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:62:TYR:O	27:a:63:VAL:HB	1.15	0.97
29:c:67:ARG:HG2	29:c:68:LEU:H	0.87	0.97
33:g:194:TYR:OH	33:g:212:LYS:HD2	1.62	0.97
8:H:83:LEU:HD11	8:H:92:VAL:CB	1.92	0.97
9:I:10:LYS:HG3	9:I:11:ARG:N	1.78	0.97
10:J:110:LEU:HD12	10:J:130:ILE:CG1	1.87	0.97
10:J:165:TYR:N	10:J:165:TYR:HD1	1.60	0.97
13:M:76:LEU:O	13:M:128:PHE:CZ	2.18	0.97
25:Y:63:HIS:CB	25:Y:64:PHE:CE1	2.47	0.97
33:g:42:MET:HG3	33:g:92:LEU:CD1	1.95	0.97
36:k:19:U:H2'	37:n:70:TRP:CH2	1.95	0.97
3:C:223:LYS:CE	34:i:1351:C:O2	2.10	0.97
6:F:42:LYS:HE3	6:F:43:GLU:N	1.78	0.97
7:G:76:LEU:CD2	7:G:92:ARG:CG	2.41	0.97
10:J:138:ARG:NH1	10:J:156:HIS:CG	2.31	0.97
12:L:80:MET:SD	12:L:120:VAL:HG12	2.04	0.97
13:M:124:ILE:HA	13:M:127:TYR:HD2	1.28	0.97
14:N:19:ARG:HH12	28:b:84:HIS:C	1.73	0.97
20:T:77:LYS:HA	20:T:94:ARG:HG2	1.47	0.97
21:U:73:GLY:O	21:U:74:SER:C	2.08	0.97
22:V:18:SER:OG	22:V:72:LEU:CD1	2.13	0.97
26:Z:48:VAL:C	26:Z:83:LEU:CD1	2.38	0.97
36:k:20:U:H1'	37:n:67:LYS:HA	0.99	0.97
4:D:59:LEU:HD12	4:D:60:GLY:H	1.26	0.97
13:M:13:ASP:O	13:M:16:THR:N	1.98	0.97
22:V:19:ALA:HB3	22:V:59:ILE:CD1	1.95	0.97
24:X:51:VAL:HG13	24:X:70:VAL:HG13	1.47	0.97
26:Z:48:VAL:O	26:Z:83:LEU:CD1	2.12	0.97
5:E:21:ASP:CG	5:E:24:THR:HG21	1.87	0.97
7:G:183:ARG:NH2	34:i:308:C:C4	2.32	0.97
8:H:93:VAL:HG22	8:H:94:PHE:H	1.28	0.97
13:M:67:ALA:O	32:f:114:ILE:HD13	1.63	0.97
16:P:123:TYR:OH	19:S:124:ARG:CZ	2.11	0.97
20:T:119:TRP:CD1	34:i:1556:A:H2	1.82	0.97
22:V:9:VAL:HG12	22:V:10:ASP:N	1.76	0.97
32:f:98:VAL:HG12	32:f:99:LYS:H	0.80	0.97
2:B:137:LEU:HD23	2:B:215:VAL:HG13	1.44	0.97
8:H:163:GLN:OE1	8:H:189:PHE:HE2	1.38	0.97
11:K:62:PHE:CD1	11:K:67:PHE:CZ	2.51	0.97
14:N:12:SER:O	14:N:13:GLN:HG3	1.65	0.97
14:N:55:ARG:NH1	28:b:47:PHE:CE2	2.32	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:85:ASN:OD1	19:S:97:GLN:HA	1.65	0.97
20:T:84:ARG:HH21	20:T:84:ARG:CB	1.77	0.97
2:B:57:ILE:CD1	2:B:60:ASP:CG	2.33	0.96
2:B:125:VAL:HG11	2:B:173:THR:CG2	1.95	0.96
8:H:144:ILE:O	23:W:51:GLU:HA	1.65	0.96
11:K:83:LEU:HD12	11:K:85:LEU:HD21	1.45	0.96
12:L:82:MET:CE	34:i:363:G:H4'	1.93	0.96
15:O:31:CYS:CB	15:O:95:ILE:HG12	1.92	0.96
25:Y:18:LEU:CG	25:Y:20:ARG:HH11	1.76	0.96
25:Y:32:LYS:CG	25:Y:33:ALA:N	2.13	0.96
33:g:194:TYR:CZ	33:g:212:LYS:CD	2.41	0.96
3:C:138:GLY:O	3:C:141:ILE:CG2	2.14	0.96
4:D:46:THR:OG1	4:D:79:PHE:HZ	1.30	0.96
6:F:14:THR:CB	17:Q:56:LEU:CB	2.42	0.96
6:F:103:LEU:CD2	6:F:178:ILE:CD1	2.22	0.96
7:G:176:ILE:HB	7:G:179:LEU:HD23	1.00	0.96
11:K:30:PRO:C	11:K:31:LYS:HG3	1.73	0.96
33:g:88:ARG:HD2	33:g:90:TRP:CZ2	1.99	0.96
1:A:186:ARG:HH11	1:A:186:ARG:CG	1.78	0.96
5:E:122:LYS:CG	5:E:164:LEU:HD21	1.95	0.96
7:G:212:LEU:HA	7:G:215:LYS:CE	1.96	0.96
12:L:20:LYS:O	12:L:21:LYS:HB2	1.62	0.96
16:P:128:HIS:HE1	34:i:1516:C:H1'	1.28	0.96
18:R:100:PRO:O	18:R:103:LYS:N	1.90	0.96
18:R:120:THR:O	18:R:121:GLN:HB2	1.61	0.96
19:S:14:ARG:HH12	19:S:17:ASN:HA	0.84	0.96
26:Z:112:ASN:O	26:Z:113:THR:CG2	2.13	0.96
33:g:149:GLU:OE2	33:g:150:TRP:N	1.97	0.96
37:n:60:HIS:O	37:n:91:VAL:N	1.98	0.96
2:B:20:LYS:O	2:B:21:VAL:CG1	2.12	0.96
2:B:87:ILE:HD13	2:B:101:HIS:HD2	0.80	0.96
3:C:244:THR:CG2	3:C:246:PHE:CA	2.43	0.96
9:I:161:LEU:HD11	9:I:199:LEU:HD12	0.99	0.96
12:L:97:ARG:O	12:L:99:TYR:N	1.97	0.96
16:P:127:LYS:HZ1	16:P:127:LYS:C	1.73	0.96
17:Q:92:LEU:CG	17:Q:96:TYR:HE2	1.77	0.96
28:b:33:MET:CA	28:b:81:ARG:O	2.12	0.96
33:g:165:ILE:HG23	33:g:179:LEU:HD21	1.47	0.96
34:i:60:A:N6	34:i:325:G:O2'	1.97	0.96
6:F:112:LEU:HD23	6:F:116:ILE:HD11	1.45	0.96
9:I:194:GLU:HG2	12:L:12:LYS:HZ1	0.81	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:80:MET:HE1	12:L:121:GLN:HA	1.42	0.96
25:Y:36:PRO:HG2	25:Y:39:GLU:CD	1.83	0.96
26:Z:92:LEU:HD11	26:Z:109:TYR:CE1	2.00	0.96
31:e:118:ASN:CB	31:e:119:VAL:HG23	1.96	0.96
32:f:140:TYR:CE1	32:f:146:LEU:O	2.18	0.96
1:A:48:ILE:HG12	18:R:105:MET:HE1	1.43	0.96
2:B:67:PHE:CD1	15:O:47:LEU:C	2.44	0.96
17:Q:42:ILE:HG21	17:Q:51:LEU:HD23	1.47	0.96
4:D:43:PRO:C	4:D:44:THR:HG23	1.88	0.96
7:G:41:LEU:CD2	7:G:45:TRP:HZ3	1.37	0.96
8:H:122:LEU:HD13	8:H:123:THR:CA	1.95	0.96
8:H:147:LYS:HE2	8:H:153:LEU:HD12	1.47	0.96
9:I:136:ILE:HG22	9:I:139:LYS:HE3	1.48	0.96
10:J:30:LYS:CA	31:e:112:TYR:CE1	2.49	0.96
13:M:12:MET:CG	13:M:16:THR:HG23	1.95	0.96
18:R:22:THR:HG22	18:R:73:LEU:CD1	1.95	0.96
21:U:18:HIS:ND1	21:U:93:SER:O	1.98	0.96
24:X:29:LYS:CD	24:X:34:THR:HG21	1.94	0.96
31:e:124:GLY:O	31:e:125:LYS:CG	2.14	0.96
33:g:7:LEU:HD12	33:g:310:TRP:CD1	2.00	0.96
33:g:46:THR:O	33:g:47:ARG:HB3	1.18	0.96
34:i:24:C:H2'	34:i:25:A:H8	1.29	0.96
34:i:1823:G:H22	34:i:1845:A:C1'	1.79	0.96
3:C:149:PRO:HB2	3:C:233:TYR:CE2	2.00	0.96
4:D:48:ILE:CG2	4:D:86:LEU:HG	1.95	0.96
4:D:197:LYS:CB	4:D:198:ILE:CG2	2.30	0.96
5:E:130:PHE:HB3	5:E:138:HIS:CE1	2.00	0.96
6:F:36:GLN:CG	6:F:37:ASP:CG	2.38	0.96
6:F:141:VAL:CB	29:c:47:LYS:NZ	2.17	0.96
10:J:124:HIS:HE2	34:i:516:A:P	1.89	0.96
11:K:84:HIS:CE1	11:K:85:LEU:HA	2.01	0.96
14:N:137:PRO:O	14:N:138:ASN:CG	2.07	0.96
16:P:49:LEU:C	16:P:51:ARG:HD2	1.90	0.96
17:Q:19:ALA:HB1	17:Q:80:GLN:HE21	1.31	0.96
25:Y:13:MET:HE3	25:Y:14:THR:H	1.23	0.96
32:f:103:LEU:O	32:f:103:LEU:HD23	1.65	0.96
4:D:212:GLU:CD	4:D:212:GLU:H	1.71	0.96
7:G:162:LEU:HD12	7:G:162:LEU:O	1.65	0.96
8:H:8:ILE:HG23	8:H:9:VAL:HG22	0.98	0.96
17:Q:50:LYS:NZ	17:Q:85:ARG:HH22	1.58	0.96
29:c:5:ARG:CZ	29:c:5:ARG:N	2.29	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:120:MET:HE3	2:B:142:PHE:CZ	2.01	0.96
6:F:76:MET:HE2	6:F:169:ILE:HG21	1.43	0.96
7:G:32:MET:HE2	7:G:63:MET:SD	2.05	0.96
7:G:157:VAL:CG1	7:G:159:ARG:HG2	1.96	0.96
11:K:15:LEU:HD13	11:K:21:MET:CE	1.96	0.96
12:L:7:GLU:HG3	12:L:8:ARG:N	1.78	0.96
14:N:115:LEU:O	14:N:119:GLU:CG	2.13	0.96
18:R:121:GLN:HE21	18:R:121:GLN:C	1.74	0.96
19:S:94:LYS:HE3	19:S:95:TYR:O	1.66	0.96
20:T:77:LYS:HB2	20:T:94:ARG:CG	1.95	0.96
23:W:62:VAL:CG2	28:b:8:LEU:HD21	1.85	0.96
24:X:52:LEU:CD2	24:X:71:ARG:HB3	1.94	0.96
25:Y:7:ILE:CD1	25:Y:43:LYS:HG2	1.94	0.96
25:Y:122:LYS:HD3	25:Y:123:ALA:N	1.79	0.96
32:f:108:VAL:HG22	32:f:114:ILE:HG22	0.96	0.96
33:g:143:GLN:OE1	33:g:144:ASP:HB2	1.66	0.96
17:Q:9:SER:CB	17:Q:26:LYS:CE	2.43	0.95
33:g:57:ARG:HD2	33:g:94:THR:O	1.65	0.95
1:A:58:LEU:CD2	1:A:178:LEU:HD21	1.94	0.95
2:B:57:ILE:HG23	2:B:57:ILE:O	1.62	0.95
3:C:93:LYS:HD2	3:C:218:LEU:HD22	0.95	0.95
4:D:70:THR:CG2	4:D:86:LEU:HD13	1.96	0.95
6:F:204:ARG:HH12	29:c:59:LEU:HB3	1.28	0.95
7:G:64:LYS:CD	7:G:67:VAL:HG13	1.94	0.95
9:I:7:ASN:O	9:I:9:HIS:N	2.00	0.95
9:I:62:VAL:CG2	9:I:75:LYS:CE	2.45	0.95
10:J:61:LEU:HD13	10:J:94:LEU:HD13	1.48	0.95
19:S:47:LYS:HZ2	19:S:78:LYS:HB2	1.23	0.95
20:T:77:LYS:CA	20:T:94:ARG:HG2	1.96	0.95
21:U:67:LYS:CG	21:U:78:ASP:OD2	2.13	0.95
23:W:38:LEU:HA	23:W:41:MET:HE3	1.47	0.95
4:D:3:VAL:O	4:D:3:VAL:HG12	1.65	0.95
19:S:42:HIS:HE2	20:T:45:LEU:HD21	1.26	0.95
20:T:84:ARG:NH2	20:T:84:ARG:CB	2.29	0.95
21:U:103:SER:O	21:U:106:ILE:HG23	1.66	0.95
24:X:142:ARG:CB	24:X:142:ARG:NH1	2.29	0.95
25:Y:62:THR:HG22	25:Y:69:THR:HG22	1.45	0.95
25:Y:99:LYS:N	25:Y:99:LYS:CE	2.29	0.95
27:a:10:ARG:HG3	27:a:33:ASP:O	1.66	0.95
33:g:298:LEU:HD11	33:g:310:TRP:HE3	1.19	0.95
1:A:76:VAL:HG21	1:A:90:PHE:HD2	1.31	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:106:GLY:C	1:A:113:GLN:OE1	2.08	0.95
3:C:50:LYS:HD3	3:C:251:TYR:HE1	1.29	0.95
3:C:115:ILE:HD11	3:C:140:ILE:HG23	1.45	0.95
4:D:76:ARG:HD3	11:K:66:HIS:HE1	1.25	0.95
5:E:166:THR:O	5:E:168:LYS:HD3	1.65	0.95
8:H:10:LYS:HZ1	8:H:17:ASP:N	1.65	0.95
8:H:144:ILE:CG1	23:W:52:ILE:HG23	1.97	0.95
10:J:37:LEU:CG	10:J:42:GLU:CB	2.44	0.95
10:J:70:ARG:NH2	10:J:94:LEU:HD21	1.80	0.95
11:K:34:GLU:O	11:K:35:LEU:CB	2.11	0.95
13:M:94:ILE:CG2	13:M:95:ASP:N	2.18	0.95
17:Q:72:VAL:HG21	17:Q:84:ILE:CG2	1.96	0.95
33:g:26:GLN:HB3	33:g:74:ASP:O	1.64	0.95
5:E:86:PHE:HZ	5:E:182:MET:CE	1.79	0.95
7:G:142:ARG:HH11	7:G:142:ARG:CG	1.79	0.95
8:H:115:LYS:O	8:H:116:ARG:HB3	1.65	0.95
16:P:41:GLN:HE22	16:P:45:LEU:HG	0.81	0.95
20:T:102:ARG:NH2	20:T:105:GLN:OE1	2.00	0.95
23:W:7:LEU:HD11	23:W:33:VAL:HG11	1.46	0.95
1:A:17:LYS:HE2	1:A:17:LYS:N	1.79	0.95
1:A:176:TRP:HZ2	1:A:195:TRP:HE3	1.12	0.95
6:F:204:ARG:CZ	29:c:60:GLU:OE2	2.14	0.95
7:G:32:MET:CE	7:G:100:CYS:C	2.38	0.95
9:I:141:ARG:O	9:I:143:LYS:HB3	1.65	0.95
10:J:16:PRO:HD2	10:J:44:TRP:CZ2	2.02	0.95
10:J:37:LEU:CD2	10:J:42:GLU:HB2	1.96	0.95
10:J:127:ARG:HH11	10:J:127:ARG:HG3	0.79	0.95
10:J:134:HIS:CE1	10:J:163:SER:CB	2.41	0.95
16:P:114:HIS:NE2	19:S:113:ARG:NH1	2.13	0.95
17:Q:135:PRO:CG	17:Q:141:TYR:HE1	1.78	0.95
25:Y:12:PHE:CZ	25:Y:21:LYS:CB	2.49	0.95
2:B:153:THR:HG23	2:B:154:SER:N	1.79	0.95
3:C:110:LYS:HE2	3:C:112:PHE:HZ	1.15	0.95
4:D:70:THR:HG22	4:D:86:LEU:CD1	1.97	0.95
4:D:212:GLU:CB	18:R:19:LYS:HD2	1.95	0.95
5:E:19:MET:CE	34:i:842:G:C2'	2.45	0.95
9:I:107:THR:OG1	9:I:108:PRO:HD3	1.66	0.95
10:J:28:GLU:OE1	10:J:40:LYS:CD	2.13	0.95
10:J:32:ILE:HG21	31:e:108:ARG:HG2	1.46	0.95
10:J:46:VAL:HG11	10:J:106:LEU:CD1	1.97	0.95
12:L:35:ARG:HH21	12:L:63:THR:HG21	1.26	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:149:ALA:CA	12:L:156:GLN:HE21	1.79	0.95
16:P:41:GLN:HE21	16:P:84:ILE:HB	0.78	0.95
19:S:46:ARG:CZ	20:T:50:GLU:CG	2.44	0.95
31:e:105:ARG:NH2	31:e:105:ARG:CB	2.30	0.95
32:f:135:HIS:CB	32:f:138:ARG:HG2	1.85	0.95
33:g:172:LYS:CG	33:g:191:HIS:O	2.15	0.95
1:A:76:VAL:CG2	1:A:90:PHE:CD2	2.48	0.95
4:D:55:THR:O	4:D:58:VAL:CG2	2.15	0.95
7:G:157:VAL:HG13	7:G:158:VAL:N	1.63	0.95
8:H:37:LYS:HE2	8:H:41:ARG:NH1	1.81	0.95
9:I:62:VAL:HG21	9:I:75:LYS:NZ	1.82	0.95
10:J:169:ARG:CB	10:J:170:PRO:HD2	1.96	0.95
15:O:76:LEU:CD2	29:c:5:ARG:HD3	1.97	0.95
22:V:18:SER:OG	22:V:72:LEU:HD11	1.67	0.95
23:W:42:MET:HE3	23:W:50:PHE:CD2	2.02	0.95
24:X:115:ILE:HG22	24:X:115:ILE:O	1.65	0.95
31:e:127:LYS:HD3	31:e:128:GLY:N	1.82	0.95
1:A:110:ASN:OD1	34:i:1348:G:OP2	1.72	0.95
1:A:186:ARG:HG2	1:A:186:ARG:NH1	1.67	0.95
13:M:89:VAL:HG21	13:M:109:VAL:HG11	1.46	0.95
17:Q:47:LEU:HD23	17:Q:81:ILE:CD1	1.95	0.95
18:R:20:TYR:CE1	18:R:38:ILE:CG2	2.37	0.95
24:X:51:VAL:CG1	24:X:70:VAL:HG11	1.96	0.95
25:Y:7:ILE:CD1	25:Y:43:LYS:CB	2.44	0.95
25:Y:114:MET:HE1	25:Y:125:VAL:HG23	1.45	0.95
33:g:248:LEU:O	33:g:259:TRP:CZ3	2.19	0.95
1:A:34:MET:CE	1:A:37:TYR:CD2	2.49	0.95
3:C:186:GLY:HA3	10:J:54:ARG:NH2	1.82	0.95
7:G:157:VAL:CG1	7:G:159:ARG:CG	2.45	0.95
8:H:10:LYS:CE	8:H:17:ASP:N	2.28	0.95
9:I:139:LYS:O	9:I:140:LYS:HB3	1.67	0.95
9:I:194:GLU:CD	12:L:12:LYS:NZ	2.22	0.95
15:O:44:VAL:HG21	15:O:93:LEU:HD13	1.45	0.95
22:V:64:GLU:O	22:V:66:ASP:N	1.99	0.95
31:e:118:ASN:N	31:e:119:VAL:CB	2.29	0.95
33:g:219:TRP:CE3	33:g:226:HIS:HD2	1.83	0.95
34:i:127:C:N4	34:i:180:G:O2'	2.00	0.95
6:F:185:SER:CA	6:F:190:ILE:HG21	1.95	0.94
9:I:69:SER:HB2	12:L:19:ASN:HD21	0.87	0.94
21:U:67:LYS:CE	21:U:78:ASP:OD1	2.13	0.94
24:X:74:LEU:HD11	24:X:81:ILE:HD12	1.47	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:77:LEU:O	26:Z:78:LYS:HG2	1.66	0.94
33:g:12:LYS:HG2	33:g:13:GLY:H	1.26	0.94
33:g:194:TYR:OH	33:g:212:LYS:CD	2.14	0.94
33:g:219:TRP:CZ3	33:g:226:HIS:CD2	2.55	0.94
33:g:277:THR:CG2	33:g:278:SER:N	2.30	0.94
34:i:61:A:H2	34:i:326:A:N7	1.65	0.94
34:i:1207:G:N2	34:i:1684:C:N1	2.15	0.94
34:i:1824:U:C1'	34:i:1845:A:C2	2.50	0.94
10:J:48:PHE:HE1	10:J:52:LYS:HE3	1.24	0.94
10:J:170:PRO:CG	10:J:175:ARG:HG2	1.93	0.94
14:N:22:VAL:HB	14:N:23:PRO:CA	1.97	0.94
17:Q:24:HIS:CD2	17:Q:69:ARG:HB2	2.03	0.94
18:R:13:ALA:CA	18:R:54:VAL:HG22	1.97	0.94
20:T:76:THR:CB	20:T:95:GLY:O	2.16	0.94
28:b:64:CYS:HG	28:b:73:LEU:HD23	1.27	0.94
30:d:13:LYS:CE	30:d:14:PHE:CE2	2.50	0.94
31:e:125:LYS:O	31:e:126:LYS:HD2	1.65	0.94
1:A:177:MET:HE1	1:A:180:ARG:HH21	1.26	0.94
3:C:260:LYS:CD	3:C:261:THR:HG22	1.97	0.94
4:D:210:ILE:HD12	18:R:15:VAL:HG11	0.96	0.94
4:D:212:GLU:CG	18:R:19:LYS:HD3	1.90	0.94
5:E:48:LEU:HD21	5:E:70:ILE:CD1	1.96	0.94
8:H:57:ARG:HD2	8:H:89:GLY:O	1.67	0.94
17:Q:8:GLN:HB3	17:Q:99:TYR:CE1	2.01	0.94
21:U:41:ARG:O	21:U:45:GLU:HB2	1.65	0.94
32:f:144:CYS:HB3	32:f:147:THR:HG22	0.98	0.94
1:A:94:THR:HG21	1:A:182:VAL:HG21	1.45	0.94
2:B:57:ILE:O	2:B:60:ASP:N	1.99	0.94
6:F:25:THR:HG22	6:F:42:LYS:HD2	0.97	0.94
12:L:17:PHE:CE1	12:L:18:GLN:HB2	2.01	0.94
13:M:98:GLY:O	13:M:100:PRO:CD	2.13	0.94
31:e:79:SER:C	37:n:84:TYR:CE2	2.44	0.94
37:n:62:ARG:HG3	37:n:92:ILE:HA	0.97	0.94
4:D:212:GLU:CB	4:D:213:PRO:HD2	1.98	0.94
10:J:115:PHE:CD1	10:J:122:SER:N	2.35	0.94
10:J:122:SER:OG	10:J:124:HIS:CB	2.16	0.94
15:O:79:GLN:HB2	29:c:5:ARG:CG	1.96	0.94
16:P:10:ARG:NH2	16:P:11:THR:CG2	2.30	0.94
18:R:44:LYS:CG	18:R:47:ARG:CZ	2.44	0.94
19:S:33:ILE:HB	19:S:36:VAL:HG11	1.49	0.94
33:g:172:LYS:HE2	33:g:192:THR:CG2	1.93	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:61:A:C8	34:i:326:A:O3'	2.21	0.94
2:B:30:TRP:HE1	15:O:17:LEU:CD2	1.79	0.94
2:B:36:PRO:HB3	2:B:231:LEU:CD2	1.96	0.94
7:G:155:GLN:O	7:G:156:TYR:CD1	2.21	0.94
9:I:154:LYS:CD	9:I:155:ASN:N	2.29	0.94
16:P:33:LEU:HD21	16:P:87:PRO:HD3	0.97	0.94
17:Q:16:LYS:HD2	17:Q:17:LYS:N	1.82	0.94
23:W:3:ARG:NH2	23:W:9:ASP:OD2	2.01	0.94
23:W:104:LEU:HD11	23:W:106:THR:CG2	1.97	0.94
24:X:105:PHE:HE2	24:X:119:ARG:HA	0.86	0.94
26:Z:92:LEU:HD21	26:Z:109:TYR:CE1	2.01	0.94
27:a:51:ARG:NH1	29:c:40:ARG:HE	1.64	0.94
33:g:278:SER:OG	33:g:279:SER:HA	1.68	0.94
1:A:104:THR:O	1:A:107:THR:CG2	2.14	0.94
3:C:197:LYS:HA	3:C:200:LEU:HD21	0.96	0.94
7:G:67:VAL:HG21	7:G:99:GLY:HA2	1.45	0.94
13:M:61:TYR:HE1	13:M:108:CYS:HG	1.15	0.94
14:N:99:ARG:HH21	14:N:115:LEU:HD21	1.27	0.94
15:O:131:ASP:CB	27:a:67:LEU:CD2	2.46	0.94
18:R:99:ASP:O	18:R:119:VAL:CG1	2.03	0.94
30:d:27:ARG:HB2	30:d:27:ARG:NH1	1.82	0.94
31:e:97:GLU:OE1	31:e:98:LYS:N	2.01	0.94
1:A:21:ALA:HB1	1:A:173:LEU:HD12	1.49	0.94
3:C:67:TYR:HE1	22:V:27:LYS:HZ3	0.98	0.94
3:C:142:LEU:CA	3:C:145:LEU:HD21	1.94	0.94
3:C:244:THR:CG2	3:C:246:PHE:N	2.31	0.94
5:E:98:ASN:HD21	5:E:119:ALA:CB	1.81	0.94
7:G:33:ALA:H	7:G:52:ILE:HG23	1.30	0.94
8:H:145:ARG:HH11	8:H:155:LYS:HZ2	1.14	0.94
10:J:17:ARG:C	10:J:18:ARG:HG2	1.88	0.94
10:J:127:ARG:NH1	10:J:145:PRO:HB2	1.81	0.94
12:L:125:ILE:HB	12:L:146:THR:HG21	1.48	0.94
13:M:35:ILE:HD13	13:M:61:TYR:CZ	2.02	0.94
16:P:41:GLN:CD	16:P:84:ILE:CG2	2.20	0.94
17:Q:105:LYS:HD2	17:Q:105:LYS:C	1.92	0.94
19:S:136:THR:O	34:i:1516:C:H2'	1.67	0.94
20:T:63:HIS:O	20:T:67:ARG:HD2	1.67	0.94
28:b:10:PRO:HD2	28:b:15:GLU:OE2	1.67	0.94
29:c:15:THR:HG22	29:c:33:GLU:CG	1.97	0.94
31:e:81:ALA:C	37:n:82:ARG:CD	2.36	0.94
31:e:82:ARG:H	37:n:82:ARG:HD2	1.04	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:88:PRO:O	32:f:89:LYS:C	2.07	0.94
32:f:106:TYR:CZ	32:f:131:PHE:CZ	2.54	0.94
1:A:43:SER:HG	18:R:101:ASP:CG	1.75	0.94
2:B:209:ASP:OD1	2:B:211:PHE:CZ	2.21	0.94
3:C:63:LEU:HD13	3:C:67:TYR:OH	1.68	0.94
3:C:241:TRP:CD2	23:W:68:ARG:HD3	2.02	0.94
5:E:36:HIS:HB2	5:E:41:CYS:SG	2.08	0.94
5:E:128:LYS:HD3	5:E:130:PHE:CD1	2.03	0.94
13:M:28:HIS:CD2	13:M:115:GLY:CA	2.51	0.94
17:Q:57:LEU:HD13	17:Q:115:TYR:CE2	2.02	0.94
19:S:81:ASP:O	19:S:87:GLN:NE2	2.00	0.94
31:e:79:SER:C	37:n:84:TYR:HD2	1.75	0.94
33:g:172:LYS:NZ	33:g:192:THR:HG22	1.82	0.94
5:E:153:LEU:HD23	7:G:216:ARG:NH2	1.81	0.94
7:G:64:LYS:CD	7:G:64:LYS:C	2.40	0.94
10:J:127:ARG:NH1	10:J:145:PRO:CB	2.31	0.94
11:K:3:MET:SD	11:K:8:ARG:NH2	2.34	0.94
12:L:99:TYR:OH	24:X:14:ARG:CB	2.16	0.94
19:S:26:ILE:HD11	19:S:59:LEU:HD21	1.47	0.94
31:e:80:LEU:CG	37:n:83:ASP:CA	2.45	0.94
32:f:144:CYS:SG	32:f:147:THR:CG2	2.55	0.94
33:g:248:LEU:O	33:g:259:TRP:CE3	2.20	0.94
1:A:21:ALA:HB3	1:A:173:LEU:CD1	1.78	0.93
2:B:137:LEU:HD21	2:B:215:VAL:HG13	0.95	0.93
3:C:71:LEU:C	22:V:29:HIS:CE1	2.45	0.93
3:C:234:SER:C	22:V:23:ILE:HD11	1.93	0.93
7:G:27:PHE:CZ	7:G:41:LEU:CD1	2.51	0.93
12:L:96:ILE:O	12:L:100:ASN:HA	1.67	0.93
16:P:49:LEU:CA	16:P:51:ARG:HG3	1.96	0.93
17:Q:42:ILE:HG21	17:Q:51:LEU:HD21	1.46	0.93
19:S:58:GLU:O	19:S:59:LEU:CD2	2.17	0.93
19:S:132:ARG:CB	19:S:134:GLN:OE1	2.14	0.93
1:A:133:PRO:HD2	1:A:134:LEU:N	1.83	0.93
1:A:183:LEU:HB2	1:A:189:ILE:HD11	1.51	0.93
3:C:234:SER:CA	22:V:23:ILE:HD11	1.97	0.93
10:J:37:LEU:CD1	10:J:42:GLU:CB	2.42	0.93
10:J:37:LEU:CG	10:J:42:GLU:HB3	1.96	0.93
10:J:66:LYS:HZ2	34:i:687:G:C2'	1.80	0.93
11:K:28:HIS:CE1	30:d:8:TRP:HE1	1.87	0.93
15:O:31:CYS:SG	15:O:93:LEU:HB3	2.07	0.93
16:P:59:ARG:HD3	16:P:76:VAL:HG13	1.46	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:76:GLY:O	17:Q:80:GLN:CG	2.16	0.93
17:Q:109:LYS:HG3	17:Q:113:ILE:HD11	1.48	0.93
18:R:84:TYR:O	18:R:85:VAL:HG23	1.69	0.93
20:T:76:THR:HG22	20:T:96:SER:O	1.68	0.93
29:c:67:ARG:O	29:c:68:LEU:HD23	1.68	0.93
3:C:51:LEU:CD1	3:C:78:ILE:HD13	1.99	0.93
3:C:126:MET:HE1	3:C:223:LYS:HD2	1.50	0.93
3:C:169:VAL:HG21	3:C:228:ALA:O	1.68	0.93
6:F:21:GLY:O	6:F:22:LYS:HG3	1.67	0.93
9:I:67:TRP:HZ2	9:I:158:ILE:HD11	1.33	0.93
23:W:42:MET:CE	23:W:50:PHE:CD2	2.51	0.93
25:Y:27:VAL:HG11	25:Y:35:VAL:HG21	1.47	0.93
25:Y:52:PRO:HD2	25:Y:53:ASP:H	1.32	0.93
34:i:60:A:N6	34:i:326:A:C8	2.35	0.93
1:A:11:LYS:HG2	1:A:13:GLU:HG2	0.94	0.93
1:A:30:LEU:HD11	1:A:38:ILE:CD1	1.91	0.93
4:D:56:GLN:HA	4:D:59:LEU:HD23	1.50	0.93
4:D:112:GLY:O	4:D:113:LEU:HG	1.68	0.93
4:D:226:GLN:O	4:D:227:LYS:HG3	1.67	0.93
6:F:71:ARG:HH21	6:F:71:ARG:CG	1.80	0.93
7:G:162:LEU:HD23	7:G:172:LYS:HE2	1.46	0.93
9:I:110:ARG:NH2	9:I:124:LYS:HD3	1.84	0.93
10:J:10:ARG:NH1	10:J:10:ARG:CB	2.31	0.93
20:T:77:LYS:CB	20:T:94:ARG:HG2	1.98	0.93
21:U:111:GLU:OE1	21:U:111:GLU:HA	1.65	0.93
24:X:99:GLU:O	24:X:100:VAL:CG1	2.15	0.93
32:f:97:LYS:NZ	32:f:97:LYS:CB	2.32	0.93
1:A:17:LYS:N	1:A:17:LYS:CE	2.31	0.93
1:A:45:GLY:O	1:A:46:ILE:CG1	2.17	0.93
2:B:25:PHE:HE2	15:O:88:LEU:HD11	1.29	0.93
3:C:156:GLY:O	3:C:157:ASN:ND2	2.00	0.93
12:L:77:VAL:HG11	12:L:80:MET:SD	2.07	0.93
14:N:55:ARG:NH2	28:b:51:GLN:HE22	1.65	0.93
15:O:56:VAL:HG11	15:O:81:VAL:HG23	1.48	0.93
25:Y:55:ILE:CG1	25:Y:75:ILE:CG1	2.15	0.93
34:i:848:G:H5"	34:i:849:C:OP2	1.69	0.93
34:i:1635:A:O4'	35:j:40:C:H5'	1.66	0.93
1:A:48:ILE:HD13	18:R:105:MET:HE1	1.51	0.93
2:B:139:CYS:HB2	2:B:168:MET:SD	2.08	0.93
3:C:50:LYS:HD3	3:C:251:TYR:CE1	1.97	0.93
7:G:5:ILE:HD12	7:G:16:ILE:HD12	1.50	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:19:LYS:HE2	9:I:20:PRO:CD	1.98	0.93
10:J:165:TYR:N	10:J:165:TYR:CD1	2.27	0.93
15:O:31:CYS:HB2	15:O:95:ILE:HG12	1.51	0.93
20:T:143:LYS:CD	20:T:144:LYS:N	2.31	0.93
23:W:62:VAL:CB	28:b:8:LEU:CD2	2.42	0.93
33:g:2:THR:O	33:g:2:THR:HG23	1.67	0.93
2:B:126:ASP:OD1	2:B:136:HIS:CD2	2.21	0.93
5:E:248:ILE:HG13	10:J:72:PHE:CE1	1.99	0.93
6:F:42:LYS:O	6:F:44:LYS:HA	1.67	0.93
11:K:65:ARG:NH1	11:K:65:ARG:CB	2.31	0.93
15:O:44:VAL:HG21	15:O:93:LEU:CD1	1.99	0.93
25:Y:114:MET:O	25:Y:124:ASN:ND2	2.02	0.93
3:C:148:VAL:HB	3:C:149:PRO:HD2	1.51	0.93
3:C:244:THR:CG2	3:C:246:PHE:HA	1.99	0.93
9:I:21:TYR:CE2	9:I:22:HIS:HD2	1.85	0.93
9:I:37:LYS:O	9:I:59:ARG:CA	2.17	0.93
9:I:141:ARG:HB3	9:I:144:LYS:HB2	1.48	0.93
10:J:17:ARG:HB3	10:J:18:ARG:CG	1.99	0.93
10:J:124:HIS:NE2	34:i:516:A:OP1	2.02	0.93
15:O:52:THR:O	15:O:53:ILE:CG2	2.15	0.93
15:O:95:ILE:HD13	15:O:116:LEU:CD2	1.98	0.93
17:Q:19:ALA:CB	17:Q:74:GLY:O	2.17	0.93
17:Q:135:PRO:HD3	17:Q:141:TYR:CD1	2.02	0.93
21:U:62:ARG:HH12	21:U:64:THR:HG21	1.00	0.93
25:Y:62:THR:HG22	25:Y:69:THR:HG21	1.49	0.93
28:b:61:THR:HG23	28:b:62:VAL:O	1.69	0.93
31:e:80:LEU:CG	37:n:83:ASP:CB	2.36	0.93
31:e:80:LEU:HG	37:n:83:ASP:CB	1.98	0.93
31:e:82:ARG:HG3	37:n:82:ARG:CZ	1.98	0.93
34:i:1134:C:H5"	34:i:1135:C:OP2	1.69	0.93
3:C:55:VAL:CG1	3:C:82:PHE:HE2	1.77	0.93
4:D:35:SER:HG	4:D:97:CYS:HG	0.97	0.93
4:D:212:GLU:HB3	18:R:19:LYS:CD	1.96	0.93
6:F:14:THR:HG23	17:Q:56:LEU:HD22	1.50	0.93
8:H:145:ARG:CD	23:W:51:GLU:HG2	1.99	0.93
14:N:115:LEU:O	14:N:119:GLU:HG2	1.68	0.93
18:R:33:ARG:HB3	33:g:150:TRP:HZ2	1.13	0.93
28:b:3:LEU:N	28:b:3:LEU:CD2	2.29	0.93
28:b:10:PRO:CG	28:b:15:GLU:OE2	2.17	0.93
31:e:120:VAL:HG22	31:e:121:PRO:O	1.68	0.93
34:i:1826:A:H5'	34:i:1847:C:OP2	1.68	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:j:51:G:HO2'	35:j:52:G:H8	1.00	0.93
1:A:110:ASN:C	34:i:1347:G:C5'	2.38	0.93
5:E:208:VAL:HG21	5:E:225:ILE:CD1	1.93	0.93
7:G:25:ARG:CG	7:G:28:TYR:CD2	2.51	0.93
7:G:164:LYS:O	7:G:165:GLU:C	2.12	0.93
13:M:13:ASP:CB	13:M:16:THR:CB	2.27	0.93
17:Q:34:VAL:HG23	17:Q:39:LEU:HD23	0.95	0.93
17:Q:50:LYS:HZ1	17:Q:117:ARG:HD2	0.79	0.93
18:R:22:THR:CG2	18:R:73:LEU:HD11	1.99	0.93
25:Y:102:THR:HG21	25:Y:107:ARG:CD	1.98	0.93
1:A:34:MET:CE	1:A:37:TYR:CE2	2.51	0.92
1:A:39:TYR:CA	1:A:50:ASN:HD21	1.81	0.92
3:C:244:THR:HG23	3:C:246:PHE:H	1.20	0.92
4:D:226:GLN:CA	4:D:226:GLN:HE21	1.80	0.92
8:H:15:LYS:CB	8:H:16:PRO:HD2	1.97	0.92
10:J:50:LEU:HD12	10:J:102:ILE:HD13	1.45	0.92
14:N:55:ARG:NH2	28:b:51:GLN:CD	2.27	0.92
14:N:125:LEU:CD1	14:N:129:TYR:CE2	2.52	0.92
16:P:93:MET:SD	16:P:106:GLU:HB2	2.08	0.92
18:R:99:ASP:HA	18:R:119:VAL:HG13	1.49	0.92
23:W:62:VAL:HG21	28:b:8:LEU:HD23	0.93	0.92
26:Z:69:THR:CB	26:Z:70:PRO:HD3	1.99	0.92
26:Z:74:SER:HA	26:Z:79:ILE:HG22	1.50	0.92
27:a:58:VAL:CG1	27:a:59:PHE:H	1.56	0.92
33:g:282:GLU:HB3	33:g:283:PRO:CD	1.93	0.92
7:G:65:GLN:CA	7:G:100:CYS:SG	2.57	0.92
10:J:48:PHE:HZ	10:J:52:LYS:NZ	1.57	0.92
16:P:4:VAL:HA	16:P:10:ARG:HD2	1.46	0.92
18:R:99:ASP:HA	18:R:119:VAL:HG12	1.49	0.92
19:S:16:LEU:O	19:S:17:ASN:ND2	2.02	0.92
30:d:23:VAL:HG23	30:d:38:MET:HE1	1.00	0.92
31:e:118:ASN:H	31:e:119:VAL:HB	1.29	0.92
33:g:194:TYR:CZ	33:g:212:LYS:HB2	2.04	0.92
1:A:140:VAL:O	1:A:140:VAL:HG12	1.70	0.92
2:B:19:LYS:NZ	2:B:19:LYS:CB	2.29	0.92
3:C:99:LYS:HD2	3:C:100:GLN:N	1.84	0.92
3:C:126:MET:HE1	3:C:223:LYS:NZ	1.83	0.92
4:D:94:ARG:HG2	4:D:95:GLY:N	1.83	0.92
6:F:110:GLN:O	6:F:113:VAL:HG12	1.68	0.92
8:H:23:ILE:CD1	8:H:27:LEU:CD2	2.47	0.92
10:J:89:GLU:N	10:J:92:MET:CG	2.32	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:89:GLU:N	10:J:92:MET:HG3	1.83	0.92
13:M:18:LEU:HD22	13:M:22:LEU:HG	1.48	0.92
13:M:67:ALA:HB1	32:f:114:ILE:CG2	1.98	0.92
16:P:15:PHE:CE1	19:S:91:LYS:HD2	2.05	0.92
16:P:56:LEU:CD1	16:P:80:LEU:HD12	1.98	0.92
19:S:8:LYS:O	26:Z:49:LEU:HD22	1.67	0.92
30:d:10:HIS:CG	30:d:11:PRO:HD2	2.04	0.92
32:f:103:LEU:CD2	32:f:105:TYR:O	2.16	0.92
33:g:144:ASP:O	33:g:145:GLU:HG2	1.67	0.92
34:i:1206:G:O5'	34:i:1207:G:P	2.27	0.92
3:C:248:LYS:NZ	3:C:253:GLU:OE1	2.02	0.92
6:F:73:THR:HG22	6:F:93:VAL:HG21	0.96	0.92
14:N:28:LEU:C	14:N:29:THR:HG23	1.95	0.92
15:O:128:ARG:HA	27:a:62:TYR:OH	1.68	0.92
25:Y:92:ALA:CA	25:Y:97:TYR:O	2.17	0.92
31:e:79:SER:C	37:n:82:ARG:HB2	1.94	0.92
4:D:51:LEU:HG	4:D:91:VAL:HG22	1.51	0.92
5:E:98:ASN:HD21	5:E:119:ALA:HB2	1.34	0.92
6:F:42:LYS:HD3	6:F:42:LYS:H	0.88	0.92
7:G:157:VAL:HG11	7:G:159:ARG:CB	1.99	0.92
10:J:79:ARG:O	10:J:83:ARG:HG3	1.70	0.92
13:M:13:ASP:O	13:M:16:THR:CB	2.16	0.92
16:P:68:PRO:HB3	16:P:69:PRO:HD3	1.51	0.92
17:Q:47:LEU:CD2	17:Q:81:ILE:HD13	1.97	0.92
24:X:27:TYR:CZ	24:X:31:HIS:CD2	2.57	0.92
27:a:45:VAL:CG1	27:a:53:ILE:HD13	1.99	0.92
33:g:282:GLU:HG3	33:g:283:PRO:N	1.85	0.92
34:i:848:G:H3'	34:i:849:C:H5"	1.49	0.92
1:A:180:ARG:HH11	1:A:184:ARG:NH1	1.68	0.92
2:B:49:VAL:HG22	2:B:65:ARG:NH2	1.83	0.92
4:D:112:GLY:N	4:D:113:LEU:CD1	2.33	0.92
9:I:62:VAL:HB	9:I:75:LYS:HE2	1.49	0.92
10:J:30:LYS:HA	31:e:112:TYR:HE1	1.23	0.92
10:J:170:PRO:HA	10:J:174:LYS:HZ1	1.32	0.92
12:L:113:LEU:HD11	12:L:120:VAL:CG2	1.98	0.92
13:M:116:LYS:O	13:M:117:GLU:CB	2.17	0.92
25:Y:111:LYS:HZ3	25:Y:115:LYS:HZ1	1.17	0.92
28:b:63:LEU:HD23	28:b:63:LEU:O	1.69	0.92
34:i:1820:G:C5'	37:n:43:GLY:HA2	1.98	0.92
35:j:1:A:C6	35:j:72:A:C2	2.56	0.92
2:B:72:ALA:CA	2:B:79:VAL:HG23	1.99	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:123:GLY:HA2	3:C:226:PHE:HZ	1.33	0.92
4:D:166:TYR:CD1	4:D:200:PRO:CB	2.52	0.92
10:J:110:LEU:HD13	10:J:130:ILE:HD11	0.92	0.92
23:W:104:LEU:CD1	23:W:106:THR:CG2	2.47	0.92
26:Z:99:LEU:CD2	26:Z:109:TYR:HE1	1.77	0.92
33:g:26:GLN:HB2	33:g:74:ASP:HA	1.52	0.92
3:C:55:VAL:HG11	3:C:82:PHE:CE2	2.03	0.92
4:D:197:LYS:HB2	4:D:198:ILE:CB	1.99	0.92
7:G:50:VAL:CG1	7:G:111:LEU:HB3	1.99	0.92
10:J:17:ARG:HB3	10:J:18:ARG:HG2	1.49	0.92
16:P:59:ARG:CD	16:P:76:VAL:HG13	2.00	0.92
20:T:31:PRO:HB2	20:T:33:TRP:CE2	2.04	0.92
25:Y:21:LYS:N	25:Y:21:LYS:CD	2.30	0.92
32:f:102:VAL:CG1	32:f:103:LEU:N	2.29	0.92
33:g:4:GLN:NE2	33:g:268:ASP:OD2	2.02	0.92
3:C:241:TRP:CB	23:W:68:ARG:NH1	2.32	0.92
4:D:74:GLN:HE22	4:D:75:LYS:HE2	1.33	0.92
4:D:177:LEU:CD2	4:D:182:LEU:CD2	2.43	0.92
6:F:144:LEU:HD23	29:c:49:PRO:HB2	1.49	0.92
7:G:85:ARG:NE	25:Y:118:ARG:CZ	2.33	0.92
11:K:84:HIS:ND1	11:K:85:LEU:HA	1.85	0.92
16:P:49:LEU:HA	16:P:51:ARG:CG	1.99	0.92
18:R:91:LEU:HD13	18:R:92:ASP:CA	2.00	0.92
21:U:97:ILE:HG23	21:U:101:ILE:HD11	1.50	0.92
25:Y:29:HIS:HE1	25:Y:68:LYS:H	0.96	0.92
4:D:177:LEU:HD23	4:D:182:LEU:HD21	1.51	0.92
4:D:212:GLU:HB3	18:R:19:LYS:HD2	1.45	0.92
5:E:153:LEU:HD13	5:E:172:PHE:HZ	1.32	0.92
10:J:171:GLY:O	10:J:173:VAL:N	2.03	0.92
11:K:84:HIS:ND1	11:K:84:HIS:C	2.28	0.92
12:L:147:LYS:HD2	12:L:148:ALA:C	1.95	0.92
14:N:53:ILE:HD13	28:b:52:THR:HG21	1.49	0.92
15:O:44:VAL:CG2	15:O:93:LEU:HD13	2.00	0.92
16:P:33:LEU:HD23	16:P:87:PRO:HD2	1.51	0.92
24:X:29:LYS:HD3	24:X:34:THR:HG21	1.51	0.92
25:Y:87:PRO:HB2	25:Y:89:HIS:CE1	2.03	0.92
4:D:226:GLN:NE2	4:D:226:GLN:CA	2.32	0.91
7:G:227:GLN:HA	7:G:230:LYS:HD2	1.49	0.91
8:H:145:ARG:HD2	23:W:51:GLU:CD	1.94	0.91
9:I:206:LYS:CD	9:I:207:GLY:H	1.83	0.91
11:K:83:LEU:O	11:K:84:HIS:ND1	2.02	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:64:LEU:HD12	32:f:104:LYS:NZ	1.85	0.91
13:M:78:LYS:C	13:M:79:VAL:HG23	1.94	0.91
14:N:16:LEU:HD22	14:N:17:PRO:HD2	1.51	0.91
20:T:28:LEU:HD22	20:T:28:LEU:C	1.90	0.91
22:V:32:ILE:HG22	22:V:33:PRO:HD2	1.52	0.91
24:X:98:ASP:O	24:X:99:GLU:HB2	1.70	0.91
34:i:1824:U:O4'	34:i:1845:A:C2	2.22	0.91
3:C:60:ILE:O	3:C:82:PHE:HE1	1.44	0.91
5:E:1:MET:HE1	34:i:422:G:C8	2.06	0.91
6:F:91:ARG:HH12	6:F:94:LYS:HG3	1.33	0.91
6:F:167:LYS:CD	6:F:171:GLU:HG3	1.99	0.91
9:I:139:LYS:HB3	9:I:145:ILE:HD13	1.51	0.91
14:N:92:ILE:HG22	14:N:150:VAL:CG2	2.00	0.91
17:Q:85:ARG:HH22	17:Q:117:ARG:CG	1.82	0.91
17:Q:102:GLU:OE1	33:g:55:PRO:HG2	1.66	0.91
19:S:59:LEU:HD13	19:S:59:LEU:N	1.85	0.91
25:Y:44:LEU:HD11	25:Y:48:TYR:CD2	2.04	0.91
27:a:32:LYS:O	27:a:37:LYS:NZ	2.04	0.91
3:C:87:LEU:CD2	3:C:115:ILE:HG23	1.99	0.91
5:E:139:LEU:HD13	5:E:154:ILE:HG21	1.48	0.91
5:E:205:PHE:CE1	5:E:221:ARG:NH1	2.39	0.91
6:F:122:ARG:NE	6:F:193:LYS:HZ1	1.65	0.91
7:G:32:MET:SD	7:G:100:CYS:HA	1.99	0.91
7:G:162:LEU:HD23	7:G:172:LYS:CE	2.01	0.91
12:L:82:MET:HB2	12:L:85:THR:CG2	2.00	0.91
12:L:118:ARG:C	12:L:118:ARG:CD	2.31	0.91
14:N:46:THR:OG1	14:N:49:GLN:HG3	1.68	0.91
15:O:52:THR:HG21	34:i:949:C:H4'	1.51	0.91
16:P:53:GLN:CG	16:P:80:LEU:HD11	1.88	0.91
20:T:89:PRO:O	20:T:91:HIS:CD2	2.24	0.91
23:W:101:PHE:HA	23:W:113:HIS:HE1	1.33	0.91
28:b:4:ALA:O	28:b:5:LYS:HG3	1.69	0.91
33:g:274:VAL:HG23	33:g:274:VAL:O	1.68	0.91
34:i:1635:A:O4'	35:j:40:C:O4'	1.89	0.91
3:C:60:ILE:O	3:C:82:PHE:CZ	2.22	0.91
13:M:67:ALA:CB	32:f:108:VAL:HG21	2.01	0.91
19:S:117:ILE:C	19:S:118:ARG:HG2	1.94	0.91
25:Y:54:VAL:HG22	25:Y:79:LEU:HD23	1.49	0.91
30:d:8:TRP:CZ3	34:i:1507:U:O2'	2.21	0.91
5:E:48:LEU:HD21	5:E:70:ILE:HD12	1.51	0.91
7:G:162:LEU:HG	7:G:170:ARG:HB2	1.53	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:142:SER:CA	9:I:143:LYS:HB2	1.97	0.91
10:J:66:LYS:NZ	34:i:687:G:C3'	2.33	0.91
18:R:122:PRO:HB2	18:R:123:THR:OG1	1.69	0.91
19:S:121:ARG:HG2	19:S:131:VAL:HG13	1.48	0.91
24:X:56:GLY:O	31:e:76:VAL:HG12	1.70	0.91
25:Y:7:ILE:HD11	25:Y:43:LYS:CD	2.00	0.91
32:f:97:LYS:HB2	32:f:97:LYS:HZ3	1.34	0.91
33:g:7:LEU:HD11	33:g:310:TRP:NE1	1.74	0.91
33:g:32:LEU:CB	33:g:71:ILE:HD11	1.99	0.91
4:D:132:LYS:N	4:D:191:PRO:CG	2.33	0.91
10:J:37:LEU:CD2	10:J:42:GLU:CB	2.49	0.91
12:L:147:LYS:HG3	12:L:148:ALA:HA	1.24	0.91
17:Q:7:LEU:HD23	17:Q:8:GLN:OE1	1.69	0.91
21:U:22:ILE:HG12	21:U:114:VAL:HG22	1.52	0.91
23:W:104:LEU:HD11	23:W:106:THR:HG23	1.52	0.91
24:X:74:LEU:CD1	24:X:81:ILE:HD12	2.00	0.91
25:Y:9:THR:OG1	25:Y:48:TYR:OH	1.80	0.91
25:Y:44:LEU:HD11	25:Y:48:TYR:HE2	1.06	0.91
33:g:46:THR:CB	33:g:48:ASP:HB2	2.01	0.91
1:A:57:LYS:NZ	22:V:70:LEU:CD1	2.11	0.91
5:E:130:PHE:CG	5:E:138:HIS:NE2	2.38	0.91
16:P:84:ILE:O	16:P:86:LEU:HD21	1.68	0.91
16:P:127:LYS:NZ	16:P:127:LYS:CB	2.30	0.91
17:Q:78:VAL:CG1	17:Q:82:TYR:HE2	1.83	0.91
21:U:108:PRO:O	21:U:110:VAL:HG23	1.70	0.91
23:W:35:VAL:O	23:W:39:THR:HG23	1.70	0.91
24:X:114:ASP:C	24:X:116:PRO:HD3	1.94	0.91
34:i:24:C:H2'	34:i:25:A:C8	2.05	0.91
34:i:1831:G:C8	36:k:15:A:P	2.64	0.91
2:B:21:VAL:HG23	2:B:21:VAL:O	1.70	0.91
2:B:72:ALA:HB2	2:B:79:VAL:O	1.70	0.91
2:B:208:HIS:O	2:B:209:ASP:HB2	1.66	0.91
6:F:167:LYS:HD3	6:F:171:GLU:HG2	1.52	0.91
8:H:107:LYS:C	8:H:109:ARG:HA	1.96	0.91
14:N:19:ARG:NH1	28:b:84:HIS:OXT	2.04	0.91
1:A:52:LYS:NZ	1:A:52:LYS:HB3	1.86	0.91
1:A:205:ARG:CG	1:A:206:ASP:N	2.23	0.91
3:C:63:LEU:HG	3:C:83:LEU:HD13	1.51	0.91
3:C:126:MET:HE1	3:C:223:LYS:HZ2	1.36	0.91
10:J:115:PHE:HD1	10:J:122:SER:H	0.97	0.91
18:R:99:ASP:O	18:R:119:VAL:HG21	1.71	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1592:C:H4'	34:i:1598:G:C6	2.06	0.91
1:A:106:GLY:HA3	34:i:1347:G:HO2'	1.15	0.91
2:B:49:VAL:HG22	2:B:65:ARG:HH22	1.36	0.91
3:C:55:VAL:CB	3:C:82:PHE:CE2	2.54	0.91
11:K:3:MET:HE1	11:K:8:ARG:HH22	1.14	0.91
20:T:144:LYS:HB2	20:T:144:LYS:HZ3	1.36	0.91
22:V:32:ILE:HG22	22:V:33:PRO:CD	2.00	0.91
23:W:77:PRO:HD3	24:X:5:ARG:O	1.71	0.91
25:Y:10:ARG:CG	25:Y:24:VAL:HB	2.00	0.91
5:E:208:VAL:CB	5:E:225:ILE:HD13	2.01	0.90
9:I:141:ARG:CG	9:I:144:LYS:CB	2.37	0.90
10:J:39:ASN:OD1	10:J:42:GLU:N	2.03	0.90
13:M:61:TYR:HE1	13:M:108:CYS:SG	1.94	0.90
20:T:23:LYS:CD	20:T:54:TYR:CE2	2.54	0.90
30:d:5:GLN:HG2	30:d:7:TYR:HE2	1.26	0.90
4:D:218:LEU:CB	4:D:220:THR:HG23	1.98	0.90
5:E:62:LYS:HA	5:E:65:CYS:SG	2.11	0.90
7:G:64:LYS:HD2	7:G:64:LYS:O	1.69	0.90
8:H:6:ALA:HB1	8:H:10:LYS:HZ3	1.37	0.90
10:J:35:TYR:O	10:J:37:LEU:N	2.04	0.90
15:O:131:ASP:OD2	27:a:67:LEU:HD22	1.70	0.90
16:P:44:ARG:HH21	16:P:84:ILE:CB	1.83	0.90
16:P:49:LEU:HD12	16:P:51:ARG:HE	0.75	0.90
16:P:70:MET:O	16:P:71:GLU:HB2	1.68	0.90
25:Y:20:ARG:HG3	25:Y:74:MET:HE3	0.93	0.90
4:D:179:GLN:HB2	34:i:618:A:N1	1.84	0.90
7:G:157:VAL:CG1	7:G:159:ARG:N	2.09	0.90
10:J:130:ILE:HG12	10:J:135:ILE:CD1	1.99	0.90
11:K:41:PRO:O	11:K:41:PRO:HD2	1.70	0.90
16:P:125:PRO:O	16:P:126:VAL:HG23	1.70	0.90
17:Q:135:PRO:CD	17:Q:141:TYR:CD1	2.54	0.90
18:R:13:ALA:HA	18:R:54:VAL:CG2	2.01	0.90
21:U:27:ARG:O	21:U:28:ASN:C	2.11	0.90
32:f:144:CYS:CB	32:f:147:THR:CG2	2.39	0.90
33:g:40:ILE:HD11	33:g:80:SER:HB3	1.49	0.90
33:g:143:GLN:CD	33:g:144:ASP:N	2.30	0.90
34:i:1825:A:H5'	34:i:1845:A:N6	1.86	0.90
7:G:41:LEU:HD22	7:G:45:TRP:HE3	1.33	0.90
9:I:157:LYS:HB3	12:L:22:ARG:HH12	1.37	0.90
17:Q:49:TYR:O	17:Q:53:GLU:HG3	1.71	0.90
21:U:25:THR:HG22	21:U:86:LYS:HG2	1.54	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:112:ILE:HG22	34:i:1346:U:O2'	1.71	0.90
1:A:186:ARG:C	1:A:186:ARG:NH1	2.30	0.90
11:K:16:PHE:HD2	11:K:79:LEU:HB3	1.29	0.90
12:L:149:ALA:HB1	12:L:156:GLN:CG	1.77	0.90
19:S:95:TYR:N	19:S:95:TYR:CD1	2.28	0.90
23:W:4:MET:SD	23:W:4:MET:N	2.44	0.90
27:a:51:ARG:HH12	29:c:40:ARG:HE	1.16	0.90
1:A:141:ASN:HA	22:V:32:ILE:HG13	1.53	0.90
3:C:50:LYS:CE	3:C:251:TYR:HE1	1.83	0.90
3:C:73:ILE:HD11	3:C:78:ILE:HB	1.53	0.90
5:E:145:ARG:HG2	5:E:145:ARG:HH11	1.36	0.90
7:G:176:ILE:CG2	7:G:179:LEU:CB	2.49	0.90
10:J:92:MET:C	10:J:93:LYS:HE3	1.96	0.90
33:g:118:ARG:HH22	33:g:134:THR:HG21	1.36	0.90
1:A:66:VAL:HG13	1:A:186:ARG:CG	2.01	0.90
9:I:191:GLU:O	9:I:192:GLY:C	2.14	0.90
12:L:17:PHE:CE2	12:L:18:GLN:O	2.25	0.90
19:S:120:HIS:NE2	19:S:124:ARG:NH2	2.20	0.90
20:T:119:TRP:HE3	34:i:1557:C:O2'	1.55	0.90
22:V:55:ILE:CD1	22:V:68:SER:OG	2.17	0.90
25:Y:18:LEU:HB3	25:Y:20:ARG:HH11	0.74	0.90
33:g:143:GLN:CD	33:g:144:ASP:HB2	1.96	0.90
37:n:39:ILE:HD13	37:n:50:MET:HB3	1.53	0.90
1:A:5:LEU:HD22	1:A:5:LEU:O	1.70	0.90
4:D:59:LEU:HD12	4:D:60:GLY:CA	2.02	0.90
5:E:208:VAL:CG1	5:E:225:ILE:CD1	2.48	0.90
17:Q:24:HIS:NE2	17:Q:69:ARG:HB2	1.86	0.90
19:S:129:LEU:HD22	34:i:1516:C:H5'	1.53	0.90
25:Y:12:PHE:HZ	25:Y:21:LYS:HB3	1.33	0.90
31:e:81:ALA:HB1	37:n:82:ARG:HH11	1.34	0.90
34:i:181:A:H1'	34:i:182:C:C5	2.07	0.90
3:C:55:VAL:HG22	3:C:82:PHE:CE2	2.06	0.90
3:C:155:TRP:CZ3	23:W:97:ARG:NH1	2.20	0.90
12:L:76:VAL:HG12	12:L:125:ILE:HD13	1.53	0.90
12:L:125:ILE:HB	12:L:146:THR:CG2	2.01	0.90
15:O:19:PRO:HG3	15:O:27:VAL:CB	2.01	0.90
16:P:107:ILE:CA	16:P:111:MET:SD	2.60	0.90
1:A:5:LEU:CB	22:V:41:LYS:CE	2.50	0.90
1:A:110:ASN:C	34:i:1347:G:H5"	1.59	0.90
3:C:49:THR:HG23	3:C:75:GLU:OE1	1.72	0.90
4:D:158:ILE:HD12	4:D:189:MET:CE	1.98	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:221:THR:HB	4:D:222:PRO:HD2	1.54	0.90
8:H:143:ARG:NE	23:W:53:ILE:HG23	1.86	0.90
18:R:44:LYS:HE2	18:R:47:ARG:NH2	1.86	0.90
28:b:61:THR:HG23	28:b:62:VAL:N	1.84	0.90
3:C:67:TYR:CE1	22:V:27:LYS:NZ	2.40	0.89
6:F:71:ARG:HH21	6:F:71:ARG:HG2	1.35	0.89
16:P:107:ILE:HA	16:P:111:MET:HE1	1.51	0.89
17:Q:42:ILE:CD1	17:Q:51:LEU:CD1	2.49	0.89
17:Q:72:VAL:HG21	17:Q:84:ILE:HG23	1.52	0.89
18:R:11:LYS:O	18:R:15:VAL:HG23	1.72	0.89
18:R:121:GLN:C	18:R:121:GLN:NE2	2.30	0.89
24:X:29:LYS:HD2	24:X:34:THR:CB	2.00	0.89
28:b:2:PRO:HA	28:b:3:LEU:CD2	2.01	0.89
29:c:67:ARG:CG	29:c:68:LEU:N	2.30	0.89
34:i:520:U:C6	34:i:521:A:C8	2.60	0.89
34:i:1244:U:H1'	35:j:33:C:H5'	1.54	0.89
3:C:127:LYS:NZ	34:i:1353:A:OP1	2.06	0.89
3:C:260:LYS:CG	3:C:261:THR:N	2.30	0.89
16:P:41:GLN:CG	16:P:84:ILE:CG1	2.15	0.89
17:Q:92:LEU:HD11	17:Q:96:TYR:CZ	2.07	0.89
18:R:91:LEU:CD1	18:R:91:LEU:H	1.85	0.89
19:S:8:LYS:CD	19:S:9:PHE:CE1	2.43	0.89
19:S:8:LYS:HE3	19:S:9:PHE:CE1	2.07	0.89
19:S:58:GLU:O	19:S:59:LEU:HD13	1.72	0.89
24:X:60:LYS:HE2	24:X:116:PRO:CG	2.02	0.89
31:e:75:LYS:O	31:e:76:VAL:HG22	1.71	0.89
2:B:33:VAL:HG12	2:B:44:ILE:HD12	1.53	0.89
2:B:57:ILE:CD1	2:B:60:ASP:OD2	2.19	0.89
3:C:195:PRO:CD	3:C:221:PHE:CZ	2.55	0.89
3:C:241:TRP:CB	23:W:68:ARG:HH11	1.84	0.89
5:E:248:ILE:CB	10:J:72:PHE:CZ	2.47	0.89
6:F:91:ARG:HE	6:F:91:ARG:CA	1.85	0.89
6:F:116:ILE:HD13	6:F:116:ILE:H	1.30	0.89
8:H:101:LEU:HG	8:H:120:ARG:HG2	1.54	0.89
8:H:158:LEU:HD21	8:H:187:PHE:CE1	2.07	0.89
10:J:119:LEU:N	10:J:119:LEU:CD2	2.29	0.89
12:L:149:ALA:HB1	12:L:156:GLN:HB3	0.89	0.89
15:O:39:ASP:OD1	15:O:40:THR:N	2.05	0.89
16:P:127:LYS:NZ	16:P:127:LYS:C	2.29	0.89
19:S:11:HIS:HD2	19:S:23:ARG:HH21	1.16	0.89
23:W:30:CYS:SG	23:W:61:ILE:HD11	2.13	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:34:THR:CG2	25:Y:35:VAL:N	2.33	0.89
25:Y:122:LYS:HD3	25:Y:122:LYS:N	1.85	0.89
27:a:80:HIS:CE1	36:k:13:C:P	2.65	0.89
33:g:20:GLN:HE21	33:g:68:ASP:CB	1.85	0.89
2:B:72:ALA:HA	2:B:79:VAL:CG2	2.02	0.89
9:I:62:VAL:CG2	9:I:75:LYS:HE2	2.03	0.89
9:I:76:THR:HG22	9:I:77:ARG:N	1.87	0.89
10:J:38:ARG:NE	31:e:104:GLY:HA3	1.87	0.89
19:S:46:ARG:CZ	20:T:50:GLU:HG2	2.01	0.89
23:W:128:PHE:CE1	23:W:130:PHE:CD2	2.61	0.89
25:Y:78:SER:HB2	25:Y:81:TYR:CE2	2.06	0.89
25:Y:114:MET:HE1	25:Y:125:VAL:CG2	2.01	0.89
29:c:10:LYS:HD2	29:c:61:SER:HB3	1.54	0.89
33:g:5:MET:CE	33:g:312:VAL:HG22	2.02	0.89
33:g:286:CYS:SG	33:g:300:ALA:HB1	2.12	0.89
33:g:298:LEU:CD1	33:g:310:TRP:HE3	1.84	0.89
2:B:175:GLU:HG2	2:B:193:ILE:CD1	2.03	0.89
3:C:93:LYS:HD3	3:C:218:LEU:HD21	0.90	0.89
3:C:260:LYS:HD2	3:C:261:THR:CG2	2.03	0.89
10:J:138:ARG:NH1	10:J:156:HIS:ND1	2.11	0.89
13:M:85:LEU:HA	13:M:88:TRP:HE3	1.24	0.89
14:N:132:LYS:CA	14:N:132:LYS:CE	2.28	0.89
14:N:142:GLU:CG	14:N:144:SER:OG	2.20	0.89
16:P:49:LEU:HD13	16:P:51:ARG:HE	1.34	0.89
21:U:67:LYS:HE2	21:U:78:ASP:OD1	1.73	0.89
23:W:62:VAL:HG11	28:b:8:LEU:HG	1.52	0.89
26:Z:44:LEU:HD13	26:Z:45:ASN:N	1.87	0.89
26:Z:85:ARG:HB3	26:Z:85:ARG:CZ	2.01	0.89
36:k:20:U:C1'	37:n:67:LYS:CA	2.34	0.89
3:C:54:LEU:HD11	3:C:258:LEU:CD1	2.01	0.89
12:L:82:MET:CE	34:i:363:G:C4'	2.50	0.89
21:U:18:HIS:CE1	21:U:98:VAL:HG21	2.05	0.89
33:g:284:PRO:O	33:g:302:TYR:CD1	2.24	0.89
34:i:1825:A:C5'	34:i:1845:A:N6	2.36	0.89
4:D:197:LYS:N	4:D:198:ILE:C	2.30	0.89
6:F:122:ARG:CZ	6:F:193:LYS:HZ1	1.85	0.89
8:H:31:GLU:CD	8:H:41:ARG:CD	2.45	0.89
11:K:40:VAL:HG13	11:K:41:PRO:N	1.86	0.89
11:K:59:LYS:HD2	11:K:60:GLU:N	1.88	0.89
19:S:36:VAL:HG22	19:S:36:VAL:O	1.71	0.89
19:S:46:ARG:HH22	20:T:50:GLU:HB3	1.37	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:12:PHE:HZ	25:Y:21:LYS:CB	1.85	0.89
25:Y:37:LYS:O	25:Y:40:ILE:CG2	2.20	0.89
25:Y:92:ALA:HA	25:Y:97:TYR:HB3	1.54	0.89
1:A:133:PRO:CD	1:A:134:LEU:H	1.86	0.89
1:A:191:ARG:HG3	1:A:193:HIS:HB2	1.55	0.89
3:C:241:TRP:HB3	23:W:68:ARG:HH11	1.30	0.89
8:H:43:LEU:HD13	8:H:72:PHE:CE1	2.07	0.89
8:H:121:THR:HG23	8:H:124:ALA:H	1.37	0.89
9:I:153:LYS:O	9:I:154:LYS:CB	2.20	0.89
10:J:91:LYS:HA	10:J:96:TYR:CG	2.08	0.89
12:L:153:LYS:CG	14:N:131:THR:O	2.20	0.89
21:U:64:THR:CG2	21:U:79:ARG:HG2	1.99	0.89
31:e:80:LEU:H	37:n:82:ARG:CA	1.86	0.89
3:C:148:VAL:HB	3:C:149:PRO:CD	2.02	0.89
4:D:16:ILE:CG2	30:d:22:ARG:HH22	1.86	0.89
6:F:14:THR:OG1	17:Q:56:LEU:HB3	1.71	0.89
6:F:18:LYS:HE3	17:Q:115:TYR:HD1	1.34	0.89
6:F:112:LEU:HA	6:F:177:LEU:HD11	1.55	0.89
7:G:85:ARG:HD2	25:Y:118:ARG:HH22	1.35	0.89
9:I:154:LYS:CG	9:I:155:ASN:N	2.30	0.89
11:K:33:PRO:O	11:K:34:GLU:HB3	1.73	0.89
15:O:20:GLN:HG2	15:O:21:VAL:O	1.73	0.89
24:X:95:GLU:CD	24:X:140:ARG:NH2	2.31	0.89
25:Y:9:THR:HG1	25:Y:48:TYR:HH	1.07	0.89
25:Y:29:HIS:ND1	25:Y:67:GLY:HA2	1.87	0.89
28:b:10:PRO:CD	28:b:15:GLU:OE2	2.21	0.89
33:g:282:GLU:CG	33:g:283:PRO:N	2.30	0.89
34:i:1635:A:O4'	35:j:40:C:C5'	2.20	0.89
34:i:1824:U:C1'	34:i:1845:A:H2	1.86	0.89
3:C:64:GLU:OE1	22:V:11:LEU:HD13	1.73	0.89
3:C:156:GLY:C	3:C:157:ASN:ND2	2.30	0.89
7:G:77:LEU:HD11	7:G:95:LYS:HB2	1.50	0.89
9:I:62:VAL:CB	9:I:75:LYS:HE2	2.02	0.89
19:S:8:LYS:CB	19:S:9:PHE:CD1	2.37	0.89
19:S:9:PHE:CD1	19:S:9:PHE:N	2.37	0.89
21:U:67:LYS:HE2	21:U:78:ASP:CG	1.98	0.89
24:X:91:LEU:O	24:X:93:PHE:N	2.05	0.89
28:b:33:MET:HE3	28:b:79:PHE:HB2	0.90	0.89
34:i:60:A:H62	34:i:326:A:H8	1.18	0.89
34:i:1751:G:H22	34:i:1769:U:H3	1.20	0.89
7:G:41:LEU:CD2	7:G:45:TRP:CE3	2.27	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:57:ASP:OD2	7:G:98:ARG:CG	2.21	0.88
7:G:98:ARG:HD3	7:G:98:ARG:C	1.93	0.88
10:J:17:ARG:CB	10:J:18:ARG:CG	2.48	0.88
10:J:127:ARG:HH12	10:J:145:PRO:CB	1.85	0.88
15:O:142:ARG:HH12	27:a:27:ALA:HB2	1.31	0.88
25:Y:20:ARG:CD	25:Y:74:MET:CE	2.52	0.88
31:e:86:VAL:HA	31:e:89:GLN:HG2	1.55	0.88
33:g:119:GLN:NE2	33:g:121:VAL:HG22	1.85	0.88
36:k:19:U:O2'	37:n:70:TRP:HZ2	1.43	0.88
2:B:32:ASP:OD1	2:B:46:LYS:HD2	1.73	0.88
3:C:71:LEU:O	22:V:29:HIS:CE1	2.26	0.88
3:C:241:TRP:CG	23:W:68:ARG:HD3	2.08	0.88
4:D:221:THR:HB	4:D:222:PRO:CD	2.03	0.88
8:H:93:VAL:HG22	8:H:94:PHE:N	1.84	0.88
16:P:41:GLN:HG2	16:P:84:ILE:HG12	0.89	0.88
19:S:31:THR:HA	19:S:36:VAL:CG2	2.02	0.88
26:Z:99:LEU:HD21	26:Z:109:TYR:CE1	2.07	0.88
32:f:106:TYR:OH	32:f:131:PHE:HZ	1.29	0.88
34:i:1635:A:C2	35:j:30:G:C1'	2.54	0.88
3:C:51:LEU:HD22	3:C:51:LEU:C	1.95	0.88
9:I:140:LYS:HG3	9:I:141:ARG:N	1.83	0.88
14:N:28:LEU:CD1	14:N:58:HIS:NE2	2.36	0.88
17:Q:115:TYR:CD2	17:Q:116:ASP:N	2.42	0.88
19:S:34:LYS:CB	19:S:103:LEU:CD2	2.01	0.88
19:S:39:ARG:HD3	20:T:38:LYS:HE2	1.53	0.88
3:C:43:LYS:HA	3:C:43:LYS:HE3	1.55	0.88
3:C:192:ALA:C	3:C:195:PRO:HD2	1.99	0.88
4:D:157:MET:HE1	4:D:187:LYS:HD3	0.90	0.88
5:E:133:THR:O	5:E:134:LYS:HB2	1.74	0.88
6:F:63:LYS:CD	6:F:71:ARG:HH12	1.86	0.88
8:H:93:VAL:HG23	8:H:94:PHE:N	1.83	0.88
8:H:146:VAL:HG11	23:W:42:MET:SD	2.14	0.88
9:I:154:LYS:HG3	9:I:155:ASN:N	1.80	0.88
13:M:60:MET:HB3	32:f:104:LYS:HD2	1.52	0.88
18:R:100:PRO:CG	18:R:119:VAL:HG22	2.02	0.88
19:S:33:ILE:HB	19:S:36:VAL:CG1	2.03	0.88
22:V:71:ARG:NH1	28:b:3:LEU:O	2.07	0.88
25:Y:54:VAL:HG12	25:Y:76:TYR:N	1.89	0.88
1:A:141:ASN:OD1	22:V:31:SER:O	1.92	0.88
4:D:158:ILE:HD13	4:D:189:MET:HE2	1.47	0.88
10:J:15:THR:CG2	10:J:44:TRP:HZ3	1.80	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:30:ILE:HD11	19:S:45:LEU:HD21	1.54	0.88
25:Y:20:ARG:HD2	25:Y:74:MET:CE	2.02	0.88
33:g:219:TRP:CE3	33:g:226:HIS:CD2	2.61	0.88
34:i:1635:A:C4'	35:j:39:C:O3'	2.21	0.88
3:C:195:PRO:HD3	3:C:221:PHE:CZ	2.08	0.88
4:D:18:LYS:HZ2	4:D:37:VAL:CG2	1.87	0.88
4:D:97:CYS:SG	4:D:99:ILE:HG12	2.13	0.88
4:D:211:VAL:CG2	18:R:38:ILE:O	2.21	0.88
16:P:53:GLN:HE21	16:P:80:LEU:CD1	1.84	0.88
19:S:11:HIS:HD2	19:S:23:ARG:HH22	1.15	0.88
20:T:77:LYS:HB2	20:T:94:ARG:HD3	0.90	0.88
24:X:105:PHE:CG	24:X:112:VAL:HG23	2.09	0.88
25:Y:44:LEU:CD1	25:Y:48:TYR:CE2	2.53	0.88
26:Z:85:ARG:NH1	26:Z:85:ARG:CB	2.35	0.88
26:Z:92:LEU:HD23	26:Z:97:ILE:HG13	1.54	0.88
33:g:15:ASN:O	33:g:305:ASN:CG	2.17	0.88
2:B:67:PHE:CE1	15:O:47:LEU:HB2	2.08	0.88
4:D:135:GLU:CB	4:D:153:VAL:HG22	2.03	0.88
5:E:124:CYS:SG	5:E:162:ILE:HD13	2.14	0.88
5:E:248:ILE:CG1	10:J:72:PHE:CG	2.52	0.88
7:G:4:ASN:HA	7:G:15:LEU:HD23	1.56	0.88
7:G:157:VAL:CG1	7:G:158:VAL:N	2.29	0.88
10:J:110:LEU:CD1	10:J:130:ILE:HD11	1.78	0.88
13:M:115:GLY:O	13:M:116:LYS:HB2	1.73	0.88
16:P:111:MET:O	16:P:114:HIS:HD2	1.54	0.88
17:Q:85:ARG:NH1	17:Q:117:ARG:CG	2.26	0.88
17:Q:117:ARG:O	17:Q:118:THR:OG1	1.92	0.88
18:R:17:ILE:HG21	18:R:69:ILE:HD13	1.54	0.88
20:T:11:GLN:NE2	20:T:62:ARG:NH2	2.20	0.88
30:d:23:VAL:HG21	30:d:38:MET:HE2	1.54	0.88
34:i:431:C:C4'	34:i:1732:G:O2'	2.21	0.88
34:i:683:G:N2	34:i:733:G:C6	2.42	0.88
34:i:1206:G:P	34:i:1207:G:OP1	2.32	0.88
34:i:1826:A:O2'	34:i:1835:C:OP1	1.91	0.88
1:A:125:THR:HG22	1:A:175:TRP:HE1	1.39	0.88
3:C:151:ARG:NH1	3:C:240:LEU:CD1	2.25	0.88
3:C:218:LEU:HD12	3:C:219:GLY:N	1.88	0.88
6:F:47:LYS:CG	17:Q:117:ARG:NH2	2.31	0.88
8:H:14:GLU:OE1	8:H:16:PRO:HG2	1.74	0.88
11:K:11:ILE:HG23	11:K:49:MET:HE3	1.51	0.88
24:X:5:ARG:HH21	24:X:5:ARG:CB	1.86	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:118:ASN:HB3	31:e:119:VAL:HG23	1.53	0.88
1:A:57:LYS:HE2	22:V:70:LEU:HD11	1.51	0.88
3:C:55:VAL:CG1	3:C:82:PHE:CZ	2.37	0.88
10:J:134:HIS:O	10:J:135:ILE:CG2	2.22	0.88
11:K:83:LEU:HD13	11:K:85:LEU:CD2	2.02	0.88
14:N:24:THR:OG1	28:b:84:HIS:HE1	1.57	0.88
16:P:123:TYR:CZ	19:S:120:HIS:CE1	2.62	0.88
17:Q:61:GLU:O	17:Q:63:PHE:N	2.07	0.88
20:T:23:LYS:HD3	20:T:54:TYR:CE2	2.08	0.88
21:U:104:ILE:O	21:U:105:SER:C	2.13	0.88
23:W:90:GLN:HA	23:W:102:ILE:CD1	2.04	0.88
25:Y:34:THR:C	25:Y:35:VAL:HG22	1.98	0.88
27:a:76:SER:O	27:a:80:HIS:HB2	1.74	0.88
32:f:116:ARG:HH11	32:f:116:ARG:HG3	1.39	0.88
1:A:103:PHE:CE2	1:A:136:GLU:CD	2.50	0.88
6:F:91:ARG:HH12	6:F:94:LYS:CB	1.79	0.88
7:G:41:LEU:HD21	7:G:45:TRP:HZ3	1.09	0.88
10:J:39:ASN:OD1	10:J:42:GLU:CD	2.17	0.88
10:J:90:GLY:C	10:J:96:TYR:CE2	2.50	0.88
10:J:170:PRO:CA	10:J:174:LYS:NZ	2.37	0.88
11:K:60:GLU:OE2	11:K:67:PHE:CD1	2.21	0.88
11:K:71:LEU:HD23	11:K:76:ILE:HD11	1.54	0.88
17:Q:128:GLU:OE1	34:i:1644:U:H5'	1.74	0.88
19:S:54:LYS:N	19:S:54:LYS:HA	1.89	0.88
19:S:103:LEU:HD12	19:S:104:ASP:N	1.87	0.88
23:W:85:ASP:O	23:W:89:TRP:CD1	2.26	0.88
25:Y:32:LYS:HG2	25:Y:33:ALA:N	1.86	0.88
25:Y:61:ARG:N	25:Y:61:ARG:CD	2.35	0.88
26:Z:103:HIS:CD2	26:Z:105:ALA:CB	2.57	0.88
34:i:61:A:C2	34:i:326:A:N7	2.41	0.88
2:B:73:ASP:OD2	27:a:59:PHE:HZ	1.46	0.87
8:H:29:GLU:OE2	8:H:86:LYS:CE	2.22	0.87
10:J:90:GLY:C	10:J:96:TYR:CD2	2.52	0.87
18:R:13:ALA:HA	18:R:54:VAL:HG22	1.51	0.87
21:U:27:ARG:HG3	21:U:83:ARG:O	1.74	0.87
33:g:30:MET:HE2	33:g:42:MET:HE3	1.55	0.87
36:k:19:U:C3'	37:n:70:TRP:CZ2	2.57	0.87
4:D:123:LEU:CD2	4:D:154:ASP:HB3	2.03	0.87
6:F:42:LYS:HB2	6:F:45:TYR:CA	2.04	0.87
9:I:142:SER:HB2	9:I:143:LYS:HZ3	1.33	0.87
10:J:138:ARG:NH1	10:J:156:HIS:CD2	2.43	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:147:LYS:CG	12:L:148:ALA:CA	2.29	0.87
13:M:26:LEU:HD11	13:M:89:VAL:C	1.99	0.87
20:T:111:LYS:CB	20:T:126:GLN:HE22	1.84	0.87
20:T:119:TRP:HB3	34:i:1557:C:O2'	1.75	0.87
21:U:50:VAL:CG1	21:U:51:LYS:H	1.85	0.87
2:B:135:LEU:CD2	2:B:217:MET:SD	2.62	0.87
3:C:167:CYS:SG	23:W:95:PRO:CB	2.62	0.87
4:D:55:THR:C	4:D:58:VAL:HG22	1.98	0.87
7:G:213:LEU:HD12	7:G:214:ALA:N	1.90	0.87
9:I:25:ARG:HD2	9:I:27:TYR:CD2	2.08	0.87
10:J:89:GLU:CA	10:J:92:MET:CB	2.37	0.87
12:L:157:LYS:O	12:L:158:PHE:CD2	2.25	0.87
16:P:51:ARG:HD2	16:P:51:ARG:H	1.38	0.87
18:R:44:LYS:HE3	18:R:47:ARG:HH22	0.71	0.87
20:T:124:THR:HG23	20:T:126:GLN:N	1.89	0.87
21:U:62:ARG:NH1	21:U:64:THR:HG23	1.87	0.87
1:A:11:LYS:CD	1:A:13:GLU:HG3	2.03	0.87
3:C:50:LYS:CD	3:C:251:TYR:CD1	2.38	0.87
3:C:142:LEU:CA	3:C:145:LEU:HD23	2.04	0.87
3:C:260:LYS:HG3	3:C:261:THR:N	1.89	0.87
4:D:76:ARG:NE	11:K:66:HIS:ND1	2.22	0.87
6:F:201:LYS:HE3	6:F:204:ARG:NH2	1.88	0.87
7:G:36:VAL:HG12	7:G:37:ALA:H	1.36	0.87
8:H:158:LEU:HD21	8:H:187:PHE:HE1	1.37	0.87
13:M:13:ASP:O	13:M:16:THR:HG22	0.96	0.87
13:M:67:ALA:HB1	32:f:114:ILE:HG21	1.54	0.87
16:P:52:LYS:N	16:P:54:HIS:CD2	2.43	0.87
17:Q:21:ALA:CB	17:Q:72:VAL:HG22	2.03	0.87
18:R:29:HIS:CE1	33:g:65:PHE:CE2	2.63	0.87
24:X:107:ARG:O	24:X:110:HIS:ND1	2.05	0.87
28:b:12:PRO:HD2	28:b:13:GLU:N	1.87	0.87
29:c:21:THR:CG2	29:c:22:GLY:H	1.81	0.87
4:D:70:THR:HA	4:D:86:LEU:CD1	2.04	0.87
6:F:142:SER:OG	29:c:50:VAL:HG22	1.74	0.87
14:N:80:LEU:O	14:N:82:PRO:CD	2.23	0.87
19:S:47:LYS:NZ	19:S:78:LYS:CB	2.38	0.87
22:V:32:ILE:CD1	22:V:60:ARG:HH12	1.88	0.87
25:Y:122:LYS:N	25:Y:122:LYS:CD	2.36	0.87
26:Z:48:VAL:O	26:Z:48:VAL:HG12	1.72	0.87
27:a:22:ARG:NE	27:a:28:CYS:O	2.07	0.87
32:f:108:VAL:CG2	32:f:114:ILE:CG2	2.42	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:135:HIS:O	32:f:138:ARG:O	1.90	0.87
1:A:36:GLN:OE1	1:A:36:GLN:HA	1.74	0.87
4:D:218:LEU:HB2	4:D:220:THR:HG21	1.53	0.87
9:I:197:PHE:CE2	12:L:5:GLN:HG3	2.10	0.87
11:K:40:VAL:HG22	11:K:41:PRO:HD2	1.54	0.87
20:T:4:VAL:HA	20:T:8:ASP:OD2	1.72	0.87
28:b:81:ARG:CA	28:b:82:LYS:HB2	2.05	0.87
1:A:191:ARG:HG3	1:A:191:ARG:O	1.73	0.87
3:C:102:GLN:HG3	3:C:103:ALA:N	1.87	0.87
4:D:196:GLY:N	4:D:197:LYS:CA	2.38	0.87
6:F:14:THR:HG23	17:Q:56:LEU:CD2	1.99	0.87
24:X:105:PHE:CE2	24:X:118:VAL:O	2.27	0.87
25:Y:7:ILE:HG13	25:Y:43:LYS:HD3	1.57	0.87
28:b:73:LEU:HD13	28:b:79:PHE:CE2	2.08	0.87
1:A:125:THR:HA	1:A:147:LEU:HB2	1.55	0.87
3:C:260:LYS:CD	3:C:261:THR:H	1.88	0.87
5:E:248:ILE:HD11	10:J:72:PHE:CB	2.03	0.87
8:H:144:ILE:CD1	23:W:52:ILE:CG2	2.47	0.87
10:J:37:LEU:HD21	10:J:42:GLU:HB2	1.49	0.87
11:K:14:LEU:CD2	11:K:35:LEU:HD21	1.96	0.87
14:N:16:LEU:HD21	14:N:62:GLN:CD	1.99	0.87
16:P:4:VAL:CA	16:P:10:ARG:CD	1.99	0.87
22:V:65:SER:O	22:V:69:ILE:HG12	1.74	0.87
3:C:67:TYR:HE1	22:V:27:LYS:NZ	1.71	0.87
3:C:123:GLY:CA	3:C:226:PHE:HZ	1.87	0.87
4:D:132:LYS:HA	4:D:191:PRO:HG2	1.55	0.87
4:D:158:ILE:CD1	4:D:189:MET:SD	2.62	0.87
6:F:71:ARG:NH2	6:F:71:ARG:HG2	1.90	0.87
8:H:36:LEU:HD12	8:H:36:LEU:C	1.95	0.87
16:P:84:ILE:HD11	16:P:115:TYR:CE1	2.10	0.87
17:Q:16:LYS:NZ	34:i:1643:G:O6	2.08	0.87
17:Q:112:LEU:O	17:Q:116:ASP:N	2.08	0.87
18:R:91:LEU:CD1	18:R:92:ASP:CA	2.53	0.87
18:R:91:LEU:HD12	18:R:92:ASP:HA	1.56	0.87
19:S:65:GLU:O	19:S:69:THR:HG23	1.75	0.87
21:U:36:CYS:SG	21:U:53:PRO:CB	2.62	0.87
22:V:17:CYS:HG	22:V:56:CYS:HB3	1.06	0.87
30:d:23:VAL:HG21	30:d:38:MET:HE1	0.87	0.87
34:i:61:A:C2	34:i:326:A:C5	2.62	0.87
2:B:137:LEU:CD2	2:B:215:VAL:CG2	2.47	0.86
4:D:200:PRO:O	4:D:201:LYS:HG2	1.74	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:50:VAL:HG11	7:G:111:LEU:CG	2.04	0.86
10:J:32:ILE:O	10:J:35:TYR:O	1.91	0.86
10:J:37:LEU:O	31:e:105:ARG:HG3	1.73	0.86
12:L:80:MET:CE	12:L:121:GLN:CA	2.51	0.86
13:M:12:MET:HE1	13:M:120:ALA:HB2	1.54	0.86
17:Q:12:VAL:HG12	17:Q:13:PHE:N	1.88	0.86
20:T:31:PRO:C	20:T:33:TRP:H	1.82	0.86
25:Y:122:LYS:CD	25:Y:123:ALA:H	1.87	0.86
16:P:41:GLN:HG3	16:P:84:ILE:HG23	1.57	0.86
16:P:108:LYS:NZ	19:S:118:ARG:HH12	1.72	0.86
17:Q:42:ILE:CG2	17:Q:51:LEU:CD2	2.54	0.86
17:Q:43:GLU:HA	17:Q:45:ARG:N	1.90	0.86
18:R:37:GLU:OE1	18:R:38:ILE:HG23	1.75	0.86
21:U:62:ARG:HH12	21:U:64:THR:CG2	1.76	0.86
24:X:138:LYS:C	24:X:139:GLU:CD	2.43	0.86
1:A:97:THR:HG22	1:A:98:PRO:CD	2.02	0.86
4:D:47:GLU:CD	4:D:85:GLU:OE2	2.18	0.86
4:D:218:LEU:HD12	4:D:220:THR:CG2	2.04	0.86
5:E:23:LEU:O	5:E:24:THR:CG2	2.24	0.86
7:G:57:ASP:HA	7:G:106:LEU:HA	1.56	0.86
8:H:43:LEU:HD13	8:H:72:PHE:CD1	2.10	0.86
10:J:82:VAL:HG11	10:J:92:MET:CE	2.05	0.86
15:O:101:GLY:O	15:O:104:ARG:HB2	1.74	0.86
19:S:8:LYS:HA	26:Z:49:LEU:HD23	1.57	0.86
28:b:73:LEU:HD12	28:b:79:PHE:CZ	2.09	0.86
31:e:113:ASN:O	31:e:118:ASN:HB2	1.75	0.86
33:g:59:LEU:O	33:g:60:ARG:O	1.92	0.86
7:G:64:LYS:HG3	7:G:67:VAL:CG1	2.06	0.86
7:G:185:LEU:HA	7:G:188:LYS:HE3	1.55	0.86
7:G:227:GLN:HA	7:G:230:LYS:CD	2.06	0.86
8:H:10:LYS:NZ	8:H:17:ASP:N	2.23	0.86
10:J:102:ILE:HG22	10:J:106:LEU:HD13	1.56	0.86
14:N:54:LEU:O	14:N:58:HIS:O	1.93	0.86
17:Q:111:ILE:O	17:Q:114:GLN:HG2	1.74	0.86
18:R:100:PRO:C	18:R:103:LYS:H	1.82	0.86
24:X:108:LYS:HB3	24:X:110:HIS:NE2	1.89	0.86
25:Y:122:LYS:CD	25:Y:122:LYS:H	1.87	0.86
31:e:79:SER:O	37:n:84:TYR:CD2	2.26	0.86
33:g:71:ILE:HG22	33:g:72:SER:N	1.87	0.86
33:g:119:GLN:HE21	33:g:121:VAL:CG2	1.87	0.86
33:g:143:GLN:CD	33:g:144:ASP:HA	1.99	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:154:TYR:OH	3:C:162:PRO:CD	2.24	0.86
3:C:241:TRP:HB3	23:W:68:ARG:HH12	1.38	0.86
9:I:141:ARG:CD	9:I:144:LYS:HB2	1.88	0.86
10:J:177:ASN:O	10:J:180:LYS:HG3	1.76	0.86
13:M:12:MET:CG	13:M:16:THR:CG2	2.52	0.86
22:V:64:GLU:OE2	28:b:3:LEU:HD21	1.74	0.86
31:e:115:ARG:C	31:e:119:VAL:HG22	2.00	0.86
1:A:30:LEU:HG	1:A:31:ASP:O	1.75	0.86
2:B:53:GLN:O	2:B:56:LYS:O	1.93	0.86
7:G:64:LYS:HG3	7:G:67:VAL:HG13	1.55	0.86
9:I:139:LYS:HB2	9:I:145:ILE:HD11	1.56	0.86
9:I:154:LYS:HE2	9:I:154:LYS:HA	1.58	0.86
11:K:14:LEU:HD22	11:K:35:LEU:CG	2.04	0.86
12:L:4:ILE:N	12:L:4:ILE:CD1	2.30	0.86
13:M:124:ILE:O	13:M:127:TYR:CD2	2.28	0.86
15:O:20:GLN:CG	15:O:21:VAL:N	2.39	0.86
17:Q:25:CYS:SG	17:Q:91:ALA:CB	2.63	0.86
21:U:56:MET:HE1	21:U:88:LEU:HG	1.57	0.86
24:X:67:ARG:C	24:X:68:LYS:CG	2.48	0.86
26:Z:70:PRO:HD2	26:Z:71:ALA:N	1.90	0.86
28:b:32:PHE:O	28:b:81:ARG:O	1.94	0.86
31:e:82:ARG:CG	37:n:82:ARG:HE	1.84	0.86
33:g:143:GLN:CG	33:g:144:ASP:N	2.32	0.86
4:D:18:LYS:HD2	4:D:18:LYS:O	1.74	0.86
5:E:11:ARG:NH1	5:E:20:LEU:HB3	1.90	0.86
5:E:36:HIS:CB	5:E:41:CYS:SG	2.63	0.86
10:J:38:ARG:HE	31:e:105:ARG:H	0.92	0.86
10:J:66:LYS:NZ	34:i:687:G:C2'	2.36	0.86
10:J:177:ASN:O	10:J:180:LYS:CB	2.23	0.86
19:S:59:LEU:CD1	19:S:59:LEU:N	2.37	0.86
21:U:24:LEU:HD23	21:U:112:VAL:HG22	1.55	0.86
25:Y:45:ALA:HA	25:Y:55:ILE:HD12	1.58	0.86
32:f:144:CYS:SG	32:f:147:THR:HG23	2.16	0.86
33:g:175:LYS:HD3	33:g:177:TRP:CZ2	2.10	0.86
34:i:520:U:C5	34:i:521:A:C8	2.64	0.86
5:E:128:LYS:HD3	5:E:130:PHE:HE1	0.96	0.86
6:F:204:ARG:HD2	29:c:60:GLU:CD	2.00	0.86
13:M:28:HIS:CD2	13:M:113:ASP:OD2	2.29	0.86
13:M:28:HIS:HD2	13:M:113:ASP:OD2	1.59	0.86
14:N:27:LYS:HD2	14:N:28:LEU:N	1.91	0.86
15:O:62:VAL:HG22	15:O:72:TYR:OH	1.75	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:91:LEU:H	18:R:92:ASP:HA	1.39	0.86
20:T:64:LEU:N	20:T:64:LEU:HD23	1.90	0.86
23:W:93:LEU:CD2	23:W:128:PHE:CD2	2.57	0.86
25:Y:63:HIS:CB	25:Y:64:PHE:CD1	2.59	0.86
2:B:139:CYS:SG	2:B:212:VAL:HG12	2.16	0.86
4:D:21:LEU:O	4:D:25:LEU:HD23	1.76	0.86
4:D:123:LEU:HD21	4:D:154:ASP:CG	2.00	0.86
4:D:193:ASP:OD1	4:D:203:PRO:HA	1.76	0.86
6:F:28:VAL:HG22	6:F:110:GLN:HG2	1.57	0.86
12:L:10:TYR:HD2	12:L:12:LYS:HZ2	1.20	0.86
15:O:105:THR:O	15:O:106:LYS:CG	2.24	0.86
19:S:54:LYS:C	19:S:54:LYS:HA	1.99	0.86
23:W:129:PHE:C	23:W:129:PHE:CD1	2.45	0.86
24:X:126:ALA:O	24:X:128:VAL:HB	1.75	0.86
25:Y:10:ARG:HE	25:Y:24:VAL:HG11	0.75	0.86
29:c:11:LEU:HD13	29:c:35:MET:CE	2.06	0.86
3:C:102:GLN:CG	3:C:103:ALA:H	1.88	0.86
4:D:76:ARG:HE	11:K:66:HIS:CE1	1.90	0.86
6:F:53:ALA:O	17:Q:125:ARG:NH2	2.08	0.86
6:F:59:LYS:HD2	6:F:62:ARG:HH22	1.41	0.86
7:G:147:LEU:O	7:G:148:SER:OG	1.93	0.86
11:K:39:ASN:O	11:K:40:VAL:HG12	1.75	0.86
14:N:12:SER:O	14:N:13:GLN:HG2	1.73	0.86
15:O:54:CYS:SG	15:O:84:ARG:HB2	2.16	0.86
16:P:33:LEU:HD22	16:P:87:PRO:HG3	1.58	0.86
16:P:49:LEU:O	16:P:50:ARG:C	2.08	0.86
20:T:18:LEU:CD1	20:T:134:ILE:HD13	2.05	0.86
30:d:13:LYS:CD	30:d:14:PHE:HD2	1.88	0.86
1:A:66:VAL:HG22	1:A:186:ARG:CD	2.03	0.85
1:A:76:VAL:CG1	1:A:175:TRP:CH2	2.56	0.85
3:C:79:ILE:HD11	3:C:147:ILE:CD1	2.04	0.85
3:C:142:LEU:HA	3:C:145:LEU:HD23	1.56	0.85
4:D:46:THR:HG1	4:D:79:PHE:HZ	0.93	0.85
6:F:46:ALA:C	6:F:47:LYS:HD2	2.00	0.85
9:I:128:LYS:C	9:I:131:PRO:HD2	2.01	0.85
16:P:52:LYS:HA	16:P:54:HIS:CD2	2.09	0.85
33:g:194:TYR:OH	33:g:235:ILE:CD1	2.23	0.85
34:i:127:C:N3	34:i:180:G:C2'	2.39	0.85
34:i:181:A:H1'	34:i:182:C:C6	2.10	0.85
1:A:57:LYS:HE2	22:V:70:LEU:CD1	2.04	0.85
4:D:70:THR:HA	4:D:86:LEU:HD13	1.56	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:144:ILE:CG1	23:W:52:ILE:CG2	2.53	0.85
12:L:82:MET:HE2	12:L:85:THR:HG21	1.58	0.85
12:L:99:TYR:HH	24:X:14:ARG:HA	1.06	0.85
16:P:41:GLN:CG	16:P:84:ILE:HG23	2.03	0.85
29:c:11:LEU:CD1	29:c:35:MET:HE2	2.07	0.85
33:g:165:ILE:CG1	33:g:177:TRP:HB2	2.06	0.85
5:E:180:LEU:HD22	5:E:181:CYS:H	1.41	0.85
9:I:142:SER:CB	9:I:143:LYS:NZ	2.38	0.85
11:K:27:VAL:HG13	11:K:43:LEU:HD23	1.51	0.85
12:L:102:PHE:N	12:L:102:PHE:CD1	2.40	0.85
15:O:76:LEU:CA	29:c:5:ARG:HG2	2.06	0.85
19:S:26:ILE:HD11	19:S:59:LEU:CD2	2.05	0.85
25:Y:120:THR:O	25:Y:122:LYS:HD2	1.74	0.85
32:f:86:THR:O	32:f:87:THR:HB	1.74	0.85
2:B:31:TYR:HE1	2:B:94:LYS:H	1.20	0.85
3:C:82:PHE:C	3:C:83:LEU:HD12	2.00	0.85
5:E:151:ASP:HB3	7:G:212:LEU:CD2	2.06	0.85
9:I:62:VAL:HG21	9:I:75:LYS:HZ3	1.41	0.85
9:I:84:ASN:ND2	9:I:100:CYS:SG	2.48	0.85
9:I:85:ALA:HB1	12:L:8:ARG:NH1	1.89	0.85
9:I:161:LEU:HD13	9:I:199:LEU:HD11	1.55	0.85
12:L:151:THR:O	12:L:153:LYS:N	2.10	0.85
15:O:55:ARG:O	15:O:56:VAL:CG1	2.23	0.85
15:O:94:HIS:ND1	15:O:127:GLY:O	2.09	0.85
15:O:95:ILE:CD1	15:O:116:LEU:CD2	2.54	0.85
23:W:90:GLN:CA	23:W:102:ILE:HD11	2.06	0.85
30:d:27:ARG:CB	30:d:27:ARG:NH1	2.38	0.85
37:n:62:ARG:HG2	37:n:92:ILE:HD13	1.58	0.85
4:D:158:ILE:HD11	4:D:189:MET:HE1	0.86	0.85
12:L:80:MET:CE	12:L:121:GLN:HA	2.06	0.85
16:P:51:ARG:O	16:P:52:LYS:CB	2.22	0.85
18:R:100:PRO:HA	18:R:103:LYS:CB	2.03	0.85
24:X:125:VAL:O	24:X:128:VAL:N	2.10	0.85
26:Z:85:ARG:CG	26:Z:85:ARG:HH11	1.90	0.85
33:g:119:GLN:HE21	33:g:121:VAL:HG23	1.40	0.85
33:g:275:ILE:CD1	33:g:276:SER:H	1.89	0.85
1:A:180:ARG:HH11	1:A:184:ARG:CZ	1.90	0.85
4:D:132:LYS:CA	4:D:191:PRO:HG2	2.04	0.85
20:T:85:ASN:O	20:T:88:MET:HE3	1.77	0.85
21:U:97:ILE:HG23	21:U:101:ILE:CD1	2.07	0.85
1:A:145:ILE:HD13	1:A:159:ILE:CG2	2.06	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:28:LYS:CE	15:O:51:GLU:OE2	2.25	0.85
2:B:62:LEU:HD23	2:B:91:VAL:HG21	1.58	0.85
2:B:149:GLN:HE21	2:B:151:ARG:HG2	1.40	0.85
6:F:46:ALA:C	6:F:47:LYS:CD	2.50	0.85
6:F:119:SER:O	6:F:193:LYS:HG3	1.75	0.85
6:F:121:PRO:HA	6:F:193:LYS:HE3	1.58	0.85
8:H:100:ILE:HG12	8:H:125:VAL:HG21	1.58	0.85
10:J:37:LEU:HD21	10:J:42:GLU:C	2.01	0.85
11:K:36:ALA:C	11:K:38:LYS:N	2.30	0.85
15:O:61:LYS:O	15:O:62:VAL:CG2	2.23	0.85
22:V:78:ILE:CD1	22:V:79:VAL:H	1.89	0.85
25:Y:119:GLY:O	25:Y:121:ALA:N	2.10	0.85
33:g:255:SER:HB2	33:g:270:LEU:O	1.77	0.85
34:i:24:C:O2'	34:i:25:A:H5'	1.76	0.85
34:i:60:A:C2	34:i:326:A:H3'	1.85	0.85
2:B:25:PHE:HD2	15:O:88:LEU:CD2	1.87	0.85
10:J:46:VAL:CG1	10:J:102:ILE:HG23	2.07	0.85
16:P:68:PRO:CB	16:P:69:PRO:CD	2.53	0.85
17:Q:105:LYS:NZ	17:Q:109:LYS:HB2	1.90	0.85
25:Y:22:GLN:HB2	25:Y:74:MET:SD	2.14	0.85
33:g:31:ILE:CG2	33:g:43:TRP:HB2	2.07	0.85
35:j:1:A:N6	35:j:72:A:C2	2.45	0.85
2:B:75:GLN:HA	2:B:75:GLN:NE2	1.90	0.85
4:D:197:LYS:CB	4:D:198:ILE:CB	2.55	0.85
5:E:191:ARG:CZ	5:E:245:ARG:HD3	2.07	0.85
6:F:122:ARG:NH2	6:F:193:LYS:HZ1	1.74	0.85
6:F:123:GLU:CD	29:c:59:LEU:HD11	1.78	0.85
7:G:27:PHE:HE2	7:G:41:LEU:HD12	1.37	0.85
8:H:147:LYS:HE2	8:H:153:LEU:CD1	2.06	0.85
9:I:62:VAL:HG21	9:I:75:LYS:CE	2.05	0.85
11:K:74:GLU:OE1	11:K:74:GLU:HA	1.77	0.85
15:O:16:SER:HA	15:O:87:GLU:O	1.77	0.85
17:Q:42:ILE:CD1	17:Q:51:LEU:HD11	2.07	0.85
20:T:11:GLN:HE22	20:T:62:ARG:NH2	1.74	0.85
24:X:94:ILE:CG1	24:X:125:VAL:HG21	2.07	0.85
25:Y:7:ILE:HD12	25:Y:43:LYS:CB	2.05	0.85
25:Y:114:MET:CA	25:Y:124:ASN:HD22	1.87	0.85
31:e:80:LEU:H	37:n:82:ARG:C	1.83	0.85
33:g:191:HIS:HD2	33:g:195:LEU:HD11	1.40	0.85
4:D:97:CYS:SG	4:D:99:ILE:CG1	2.65	0.85
4:D:218:LEU:CB	4:D:220:THR:HG21	1.99	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:25:THR:CG2	6:F:41:VAL:CG2	2.54	0.85
6:F:201:LYS:CE	6:F:204:ARG:NH2	2.39	0.85
10:J:35:TYR:C	10:J:37:LEU:H	1.85	0.85
14:N:99:ARG:NH2	14:N:115:LEU:CD2	2.39	0.85
16:P:41:GLN:HA	16:P:84:ILE:CD1	2.07	0.85
18:R:92:ASP:O	18:R:93:GLN:HB3	1.74	0.85
19:S:94:LYS:CD	19:S:96:SER:OG	2.24	0.85
19:S:138:THR:N	19:S:141:ARG:HH21	1.74	0.85
26:Z:103:HIS:CD2	26:Z:105:ALA:N	2.45	0.85
32:f:140:TYR:CZ	32:f:146:LEU:HA	2.11	0.85
1:A:180:ARG:HD3	1:A:184:ARG:CZ	2.06	0.84
4:D:198:ILE:HD12	4:D:198:ILE:O	1.77	0.84
6:F:167:LYS:HD3	6:F:171:GLU:HB3	1.57	0.84
8:H:29:GLU:OE2	8:H:86:LYS:HE3	1.77	0.84
9:I:155:ASN:O	12:L:22:ARG:NE	2.10	0.84
22:V:74:LYS:HG3	22:V:75:SER:N	1.89	0.84
24:X:102:VAL:CG1	24:X:120:PHE:HB3	2.07	0.84
25:Y:120:THR:C	25:Y:122:LYS:HD2	2.02	0.84
3:C:120:GLY:HA2	3:C:150:VAL:CG2	2.07	0.84
4:D:179:GLN:CB	34:i:618:A:N1	2.29	0.84
7:G:68:LEU:O	7:G:69:THR:OG1	1.95	0.84
10:J:65:GLU:O	10:J:66:LYS:HB2	1.75	0.84
10:J:88:ASP:C	10:J:92:MET:CG	2.49	0.84
17:Q:9:SER:HB3	17:Q:26:LYS:CD	2.06	0.84
19:S:6:PRO:CA	26:Z:50:PHE:HB2	2.03	0.84
24:X:95:GLU:HG3	24:X:140:ARG:HH22	1.41	0.84
1:A:164:ASN:O	1:A:166:LYS:N	2.10	0.84
3:C:244:THR:HG22	3:C:246:PHE:HD2	1.41	0.84
4:D:212:GLU:HB2	4:D:213:PRO:CD	2.08	0.84
5:E:124:CYS:HB3	5:E:141:THR:HB	1.59	0.84
5:E:126:VAL:HG21	5:E:129:ILE:HD11	1.58	0.84
5:E:159:THR:HG21	5:E:227:VAL:HG23	1.56	0.84
7:G:27:PHE:CE2	7:G:41:LEU:CD1	2.60	0.84
10:J:48:PHE:HZ	10:J:52:LYS:HZ2	1.24	0.84
15:O:113:GLN:CG	27:a:46:GLU:CD	2.39	0.84
16:P:89:MET:HB3	16:P:107:ILE:CD1	2.07	0.84
25:Y:33:ALA:CB	34:i:571:U:O2'	2.24	0.84
33:g:46:THR:HB	33:g:48:ASP:HB2	1.57	0.84
34:i:1408:C:OP1	34:i:1408:C:H4'	1.76	0.84
34:i:1750:C:H2'	34:i:1751:G:C8	2.12	0.84
4:D:226:GLN:HA	4:D:226:GLN:HE21	1.34	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:52:ILE:HA	7:G:111:LEU:HD23	1.59	0.84
7:G:63:MET:HE3	7:G:106:LEU:CD1	2.07	0.84
9:I:70:GLU:OE2	9:I:117:TYR:OH	1.95	0.84
10:J:125:HIS:ND1	34:i:516:A:O2'	1.89	0.84
10:J:180:LYS:HG3	10:J:181:GLY:N	1.91	0.84
13:M:91:LEU:HD22	13:M:104:VAL:CG1	2.06	0.84
14:N:139:TRP:CZ3	14:N:140:LYS:C	2.55	0.84
15:O:56:VAL:HG11	15:O:81:VAL:CG2	2.04	0.84
17:Q:146:ARG:NE	35:j:33:C:C5'	1.85	0.84
19:S:58:GLU:O	19:S:59:LEU:CG	2.25	0.84
21:U:18:HIS:CE1	21:U:98:VAL:CG2	2.60	0.84
21:U:67:LYS:HE3	21:U:78:ASP:OD1	1.77	0.84
26:Z:69:THR:HB	26:Z:70:PRO:CD	2.05	0.84
29:c:67:ARG:C	29:c:68:LEU:CD2	2.50	0.84
30:d:12:ARG:HD2	30:d:17:GLY:O	1.77	0.84
33:g:248:LEU:C	33:g:259:TRP:HZ3	1.85	0.84
35:j:69:G:H2'	35:j:70:C:H5'	1.58	0.84
36:k:22:C:C1'	36:k:22:C:C2	2.60	0.84
4:D:56:GLN:O	4:D:59:LEU:CG	2.25	0.84
4:D:192:TRP:HE3	4:D:196:GLY:HA2	1.39	0.84
8:H:9:VAL:C	8:H:11:PRO:CD	2.51	0.84
10:J:87:LEU:HD11	10:J:91:LYS:CB	2.06	0.84
15:O:79:GLN:CG	29:c:5:ARG:HB2	2.07	0.84
25:Y:29:HIS:HE1	25:Y:67:GLY:C	1.58	0.84
25:Y:93:ARG:HG2	25:Y:93:ARG:NH1	1.71	0.84
27:a:45:VAL:HG12	27:a:53:ILE:HD13	1.58	0.84
28:b:54:VAL:O	28:b:63:LEU:HB3	1.77	0.84
32:f:116:ARG:HG3	32:f:116:ARG:NH1	1.91	0.84
33:g:143:GLN:NE2	33:g:144:ASP:HA	1.92	0.84
1:A:16:LEU:C	1:A:17:LYS:HE2	2.02	0.84
1:A:42:LYS:HG3	18:R:105:MET:SD	2.17	0.84
4:D:76:ARG:NE	11:K:66:HIS:HE1	1.55	0.84
6:F:34:SER:HB3	29:c:55:VAL:HB	1.57	0.84
11:K:1:MET:HE3	34:i:1270:G:N2	1.92	0.84
13:M:117:GLU:O	13:M:118:SER:OG	1.93	0.84
17:Q:42:ILE:HD13	17:Q:51:LEU:HD21	0.86	0.84
25:Y:59:GLY:O	25:Y:60:PHE:HB2	1.77	0.84
33:g:150:TRP:HB2	33:g:170:TRP:CD1	2.13	0.84
34:i:1824:U:H1'	34:i:1845:A:H2	1.41	0.84
4:D:123:LEU:CD2	4:D:154:ASP:CB	2.54	0.84
7:G:63:MET:HE3	7:G:106:LEU:CD2	2.08	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:215:LYS:O	7:G:218:LYS:HG3	1.78	0.84
10:J:138:ARG:O	10:J:138:ARG:HG2	1.77	0.84
11:K:26:ASP:OD2	11:K:29:MET:HG3	1.77	0.84
24:X:94:ILE:HD11	24:X:122:VAL:HG11	1.60	0.84
25:Y:29:HIS:ND1	25:Y:67:GLY:CA	2.37	0.84
25:Y:54:VAL:HG12	25:Y:76:TYR:H	1.43	0.84
28:b:12:PRO:CD	28:b:13:GLU:H	1.91	0.84
1:A:32:PHE:CE1	1:A:33:GLN:CG	2.61	0.84
4:D:202:LYS:HB2	4:D:203:PRO:CD	2.08	0.84
4:D:212:GLU:O	4:D:213:PRO:O	1.94	0.84
11:K:6:LYS:O	11:K:9:ILE:HG22	1.77	0.84
14:N:38:TYR:HE2	14:N:74:ILE:HG23	1.43	0.84
15:O:52:THR:HG21	34:i:949:C:C4’	2.08	0.84
21:U:49:LYS:O	21:U:50:VAL:CG1	2.24	0.84
25:Y:54:VAL:CG1	25:Y:76:TYR:N	2.40	0.84
3:C:260:LYS:CD	3:C:261:THR:N	2.41	0.84
6:F:91:ARG:NH1	6:F:94:LYS:CG	2.37	0.84
12:L:147:LYS:HG3	12:L:148:ALA:N	1.91	0.84
15:O:119:LEU:HD12	15:O:120:ALA:N	1.91	0.84
17:Q:34:VAL:CG2	17:Q:39:LEU:HD21	2.06	0.84
17:Q:114:GLN:HG3	17:Q:115:TYR:N	1.93	0.84
34:i:61:A:N3	34:i:326:A:C8	2.42	0.84
3:C:48:VAL:HG23	3:C:75:GLU:CD	2.03	0.84
7:G:212:LEU:HA	7:G:215:LYS:CD	2.07	0.84
8:H:122:LEU:CD1	8:H:123:THR:HG23	2.07	0.84
10:J:180:LYS:CD	10:J:180:LYS:C	2.50	0.84
13:M:92:CYS:HB2	13:M:101:ARG:HG3	1.60	0.84
16:P:4:VAL:O	16:P:4:VAL:HG12	1.76	0.84
16:P:97:TYR:HB2	16:P:102:PHE:CE1	2.13	0.84
18:R:32:LYS:HE2	18:R:33:ARG:HE	1.41	0.84
20:T:4:VAL:HG12	20:T:8:ASP:HB3	1.59	0.84
24:X:142:ARG:NH1	24:X:142:ARG:HG3	1.91	0.84
25:Y:50:THR:HG21	25:Y:75:ILE:HG21	1.60	0.84
34:i:181:A:C4’	34:i:182:C:C5’	2.45	0.84
34:i:1408:C:H2’	34:i:1409:G:C8	2.11	0.84
35:j:15:G:H22	35:j:47:C:H42	1.23	0.84
3:C:69:PHE:CZ	3:C:249:SER:HA	2.12	0.83
3:C:93:LYS:CE	3:C:218:LEU:CD2	2.48	0.83
4:D:126:ILE:HD12	4:D:134:CYS:CB	2.08	0.83
5:E:21:ASP:OD1	5:E:24:THR:HG21	1.76	0.83
6:F:63:LYS:HD3	6:F:71:ARG:HH22	1.41	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:84:TYR:HE2	7:G:86:PRO:HG3	1.43	0.83
11:K:84:HIS:ND1	11:K:85:LEU:N	2.25	0.83
18:R:100:PRO:CB	18:R:119:VAL:HG21	2.06	0.83
19:S:55:ARG:HG3	26:Z:48:VAL:HG11	1.60	0.83
25:Y:20:ARG:CD	25:Y:74:MET:HE2	2.08	0.83
28:b:16:LYS:HD3	28:b:16:LYS:N	1.93	0.83
28:b:36:LYS:CE	28:b:43:ILE:HD11	2.07	0.83
32:f:102:VAL:HG12	32:f:103:LEU:CA	2.06	0.83
33:g:2:THR:HG23	33:g:3:GLU:HG2	1.58	0.83
34:i:837:G:H2'	34:i:838:C:H5'	1.59	0.83
36:k:10:C:O2'	36:k:11:A:H5'	1.78	0.83
1:A:11:LYS:HD3	1:A:13:GLU:CG	2.08	0.83
8:H:143:ARG:HD3	23:W:53:ILE:HG12	0.86	0.83
10:J:31:LEU:O	10:J:35:TYR:HB2	1.77	0.83
14:N:55:ARG:NH2	28:b:51:GLN:OE1	2.11	0.83
17:Q:44:PRO:CG	17:Q:81:ILE:HD11	2.06	0.83
24:X:105:PHE:CD1	24:X:112:VAL:HG21	2.13	0.83
25:Y:55:ILE:CG1	25:Y:75:ILE:CD1	2.46	0.83
26:Z:99:LEU:HD22	26:Z:102:LYS:CD	2.04	0.83
28:b:16:LYS:CA	28:b:23:ARG:HH21	1.88	0.83
32:f:103:LEU:HD21	32:f:105:TYR:O	1.77	0.83
32:f:120:GLU:CD	32:f:128:ALA:O	2.20	0.83
33:g:175:LYS:CD	33:g:177:TRP:CZ2	2.62	0.83
1:A:54:THR:OG1	1:A:162:PRO:HG2	1.77	0.83
7:G:67:VAL:O	7:G:68:LEU:HB2	1.77	0.83
9:I:140:LYS:CG	9:I:141:ARG:N	2.37	0.83
13:M:61:TYR:CE1	13:M:108:CYS:SG	2.70	0.83
17:Q:12:VAL:HG12	17:Q:13:PHE:H	1.40	0.83
20:T:63:HIS:O	20:T:67:ARG:CD	2.26	0.83
1:A:23:THR:O	1:A:25:LEU:N	2.11	0.83
1:A:39:TYR:CB	1:A:50:ASN:ND2	2.40	0.83
2:B:94:LYS:CD	2:B:94:LYS:N	2.39	0.83
3:C:156:GLY:HA2	23:W:98:GLN:HE22	1.43	0.83
7:G:64:LYS:CG	7:G:67:VAL:CG1	2.55	0.83
7:G:195:LYS:O	7:G:199:THR:HG23	1.78	0.83
16:P:10:ARG:CZ	16:P:11:THR:HB	2.09	0.83
17:Q:44:PRO:O	17:Q:45:ARG:HG2	1.79	0.83
17:Q:114:GLN:CG	17:Q:115:TYR:H	1.91	0.83
18:R:91:LEU:HB2	18:R:92:ASP:CA	2.08	0.83
19:S:26:ILE:HG22	19:S:45:LEU:HD11	1.60	0.83
20:T:39:LEU:HD12	20:T:99:VAL:HG21	1.61	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:34:ASP:HB3	28:b:43:ILE:CG2	2.07	0.83
32:f:97:LYS:CB	32:f:97:LYS:HZ3	1.90	0.83
33:g:170:TRP:O	33:g:172:LYS:N	2.11	0.83
1:A:5:LEU:HD13	1:A:6:ASP:H	1.41	0.83
1:A:103:PHE:HZ	1:A:136:GLU:OE1	1.61	0.83
2:B:153:THR:CG2	2:B:154:SER:H	1.92	0.83
4:D:141:LYS:HD2	4:D:179:GLN:CG	2.07	0.83
8:H:9:VAL:C	8:H:11:PRO:HD3	2.02	0.83
12:L:82:MET:HE1	34:i:363:G:C4'	2.08	0.83
22:V:64:GLU:OE2	28:b:3:LEU:CD2	2.26	0.83
25:Y:78:SER:CB	25:Y:81:TYR:CE2	2.61	0.83
34:i:1700:C:O2'	34:i:1845:A:C4'	2.24	0.83
6:F:39:ILE:CG2	6:F:68:ILE:HG21	2.05	0.83
6:F:122:ARG:CZ	6:F:193:LYS:NZ	2.40	0.83
7:G:181:THR:OG1	7:G:182:PRO:CD	2.26	0.83
8:H:15:LYS:CB	8:H:16:PRO:CD	2.53	0.83
8:H:31:GLU:CD	8:H:41:ARG:HD2	2.02	0.83
12:L:59:LYS:HD3	12:L:112:HIS:CD2	2.12	0.83
13:M:12:MET:CE	13:M:120:ALA:HB2	2.09	0.83
17:Q:58:LEU:HD22	17:Q:111:ILE:CD1	2.09	0.83
17:Q:72:VAL:CG2	17:Q:84:ILE:CG2	2.56	0.83
17:Q:138:ARG:HH11	34:i:1641:C:H5"	1.44	0.83
19:S:61:GLU:C	19:S:64:VAL:HG22	2.02	0.83
23:W:129:PHE:O	23:W:129:PHE:CD1	2.30	0.83
24:X:56:GLY:CA	37:n:84:TYR:HE1	1.86	0.83
25:Y:54:VAL:CG1	25:Y:76:TYR:H	1.91	0.83
1:A:42:LYS:CG	18:R:105:MET:SD	2.67	0.83
2:B:130:THR:HG21	2:B:179:ASN:H	1.43	0.83
3:C:70:SER:C	22:V:29:HIS:CE1	2.57	0.83
3:C:98:GLN:CB	3:C:106:ARG:O	2.27	0.83
3:C:192:ALA:O	3:C:195:PRO:HD2	1.79	0.83
4:D:212:GLU:CB	18:R:19:LYS:HD3	2.03	0.83
5:E:70:ILE:CG1	5:E:92:ILE:HD12	1.88	0.83
5:E:198:ARG:O	5:E:198:ARG:HG2	1.75	0.83
6:F:14:THR:CB	17:Q:56:LEU:CD1	2.55	0.83
8:H:145:ARG:HD2	23:W:51:GLU:OE1	1.78	0.83
10:J:61:LEU:HD22	10:J:98:LEU:HD12	1.60	0.83
12:L:82:MET:HE1	34:i:363:G:C5'	2.08	0.83
17:Q:135:PRO:HD2	17:Q:141:TYR:CE1	2.11	0.83
19:S:8:LYS:O	26:Z:49:LEU:HD23	1.76	0.83
24:X:69:CYS:SG	24:X:84:PHE:HA	2.19	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:d:10:HIS:CD2	30:d:11:PRO:HD2	2.13	0.83
33:g:46:THR:OG1	33:g:48:ASP:CB	2.26	0.83
7:G:63:MET:HE2	7:G:106:LEU:HD11	1.61	0.83
9:I:103:LEU:HD23	9:I:172:LEU:HD13	1.59	0.83
14:N:38:TYR:CE2	14:N:74:ILE:HG22	2.07	0.83
16:P:4:VAL:C	16:P:10:ARG:HD3	2.03	0.83
17:Q:8:GLN:HB3	17:Q:99:TYR:CZ	2.12	0.83
18:R:5:ARG:C	18:R:10:LYS:HE2	2.02	0.83
24:X:74:LEU:HD11	24:X:81:ILE:CD1	2.08	0.83
25:Y:34:THR:HG22	25:Y:35:VAL:H	1.40	0.83
26:Z:91:LEU:HD22	26:Z:96:LEU:HD12	1.59	0.83
32:f:106:TYR:CZ	32:f:131:PHE:HZ	1.92	0.83
3:C:155:TRP:HH2	23:W:97:ARG:NH1	1.39	0.83
3:C:244:THR:HG21	3:C:246:PHE:HA	1.59	0.83
6:F:161:ALA:HB3	6:F:172:CYS:SG	2.18	0.83
12:L:97:ARG:O	12:L:98:LYS:C	2.22	0.83
13:M:50:CYS:O	13:M:77:ILE:HG22	1.78	0.83
15:O:44:VAL:HG12	15:O:53:ILE:HD11	1.58	0.83
17:Q:7:LEU:HD23	17:Q:8:GLN:H	1.44	0.83
17:Q:58:LEU:HD23	17:Q:111:ILE:CD1	1.95	0.83
18:R:5:ARG:CA	18:R:10:LYS:HZ1	1.92	0.83
20:T:11:GLN:HE21	20:T:62:ARG:CZ	1.89	0.83
24:X:27:TYR:CE1	24:X:31:HIS:CE1	2.67	0.83
24:X:126:ALA:HB3	24:X:128:VAL:CG1	2.08	0.83
26:Z:48:VAL:C	26:Z:83:LEU:HD12	2.04	0.83
34:i:1406:C:H42	34:i:1432:C:H42	1.26	0.83
6:F:195:GLU:OE1	6:F:195:GLU:HA	1.77	0.83
10:J:15:THR:CB	10:J:44:TRP:CZ3	2.62	0.83
28:b:83:GLN:O	28:b:84:HIS:O	1.97	0.83
1:A:2:SER:O	22:V:78:ILE:HD11	1.79	0.82
5:E:86:PHE:CZ	5:E:182:MET:CE	2.62	0.82
6:F:20:PHE:O	6:F:22:LYS:HA	1.78	0.82
6:F:91:ARG:HD2	17:Q:46:THR:HG21	1.60	0.82
12:L:40:ILE:HD11	12:L:68:ILE:CB	2.09	0.82
16:P:68:PRO:HB2	16:P:69:PRO:CD	2.09	0.82
18:R:5:ARG:N	18:R:10:LYS:HZ1	1.75	0.82
19:S:34:LYS:HB3	19:S:103:LEU:HD23	1.53	0.82
22:V:60:ARG:HG2	22:V:65:SER:HB3	1.58	0.82
31:e:78:GLY:H	37:n:88:LYS:C	1.85	0.82
4:D:56:GLN:HA	4:D:59:LEU:CD2	2.09	0.82
4:D:70:THR:HG22	4:D:86:LEU:HB2	1.61	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:76:ARG:HD3	11:K:66:HIS:CE1	2.05	0.82
5:E:129:ILE:HG13	5:E:139:LEU:HD23	1.44	0.82
8:H:40:LEU:HD21	8:H:43:LEU:HD12	0.84	0.82
10:J:48:PHE:CE1	10:J:52:LYS:NZ	2.42	0.82
17:Q:90:LYS:HD3	17:Q:120:LEU:HA	1.61	0.82
17:Q:102:GLU:CD	33:g:55:PRO:HG2	2.04	0.82
28:b:33:MET:CE	28:b:79:PHE:CD1	2.62	0.82
31:e:86:VAL:O	31:e:90:THR:HG23	1.79	0.82
33:g:10:THR:HB	33:g:306:LEU:HD21	1.59	0.82
1:A:141:ASN:HD21	22:V:29:HIS:CB	1.92	0.82
2:B:72:ALA:HB3	15:O:128:ARG:HH22	1.42	0.82
3:C:93:LYS:HE3	3:C:95:MET:HB3	1.60	0.82
3:C:120:GLY:HA2	3:C:150:VAL:HG22	1.60	0.82
3:C:229:ILE:HG13	3:C:230:SER:N	1.91	0.82
3:C:244:THR:HG22	3:C:244:THR:O	1.77	0.82
4:D:16:ILE:HD11	30:d:36:LEU:HG	1.59	0.82
4:D:158:ILE:HD11	4:D:189:MET:SD	2.19	0.82
5:E:43:PRO:CG	5:E:46:ILE:HD12	2.09	0.82
6:F:41:VAL:HG22	6:F:42:LYS:H	0.72	0.82
7:G:176:ILE:CG2	7:G:179:LEU:HD22	1.95	0.82
8:H:147:LYS:CE	8:H:153:LEU:HD12	2.08	0.82
10:J:45:ARG:O	10:J:49:THR:HG23	1.78	0.82
10:J:138:ARG:HB2	10:J:156:HIS:HB3	1.61	0.82
11:K:84:HIS:ND1	11:K:85:LEU:CA	2.42	0.82
13:M:71:GLU:O	13:M:72:HIS:O	1.98	0.82
15:O:17:LEU:HD23	15:O:18:GLY:N	1.94	0.82
16:P:53:GLN:HB3	16:P:56:LEU:HD12	1.61	0.82
16:P:118:GLU:O	19:S:119:ALA:CA	2.27	0.82
19:S:139:THR:O	19:S:141:ARG:HG2	1.75	0.82
22:V:32:ILE:HD12	22:V:60:ARG:HH12	1.42	0.82
22:V:55:ILE:CD1	22:V:65:SER:HA	2.08	0.82
24:X:126:ALA:C	24:X:128:VAL:HB	2.04	0.82
25:Y:55:ILE:HG22	25:Y:55:ILE:O	1.78	0.82
32:f:103:LEU:C	32:f:105:TYR:H	1.85	0.82
2:B:55:THR:O	2:B:56:LYS:CD	2.26	0.82
3:C:142:LEU:O	3:C:145:LEU:CD2	2.26	0.82
5:E:19:MET:HE2	34:i:842:G:C2'	2.07	0.82
6:F:142:SER:HB2	29:c:50:VAL:CG2	2.09	0.82
9:I:141:ARG:O	9:I:143:LYS:CE	2.27	0.82
9:I:154:LYS:C	9:I:154:LYS:HD3	2.01	0.82
11:K:96:ARG:CG	11:K:97:SER:H	1.91	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:76:LEU:O	13:M:128:PHE:CE1	2.32	0.82
17:Q:58:LEU:HD22	17:Q:111:ILE:HD12	1.61	0.82
17:Q:105:LYS:HZ3	17:Q:109:LYS:HB2	1.40	0.82
22:V:32:ILE:CD1	22:V:60:ARG:NH1	2.42	0.82
25:Y:7:ILE:CD1	25:Y:43:LYS:CD	2.55	0.82
25:Y:22:GLN:HB3	25:Y:74:MET:CE	2.09	0.82
31:e:113:ASN:HA	31:e:117:VAL:CG2	2.10	0.82
33:g:259:TRP:HE3	33:g:259:TRP:H	0.85	0.82
37:n:39:ILE:HD13	37:n:50:MET:CB	2.09	0.82
2:B:105:LEU:HD21	2:B:213:ARG:HA	1.59	0.82
3:C:58:MET:HE1	3:C:81:PHE:CZ	2.15	0.82
4:D:193:ASP:OD1	4:D:203:PRO:CA	2.28	0.82
7:G:38:ALA:HB1	7:G:45:TRP:O	1.78	0.82
16:P:46:SER:C	16:P:49:LEU:HB2	2.05	0.82
22:V:1:MET:HE2	22:V:10:ASP:HB2	0.86	0.82
24:X:88:ASP:OD1	31:e:84:GLY:HA2	1.80	0.82
26:Z:99:LEU:HD13	26:Z:102:LYS:CD	2.09	0.82
34:i:184:G:O2'	34:i:185:C:H5'	1.78	0.82
6:F:122:ARG:HE	6:F:193:LYS:HZ1	1.25	0.82
16:P:51:ARG:H	16:P:51:ARG:CD	1.92	0.82
18:R:110:ASP:O	18:R:111:PHE:HD2	1.62	0.82
21:U:18:HIS:CE1	21:U:93:SER:O	2.33	0.82
24:X:105:PHE:CG	24:X:112:VAL:CG2	2.62	0.82
34:i:1820:G:C4'	37:n:43:GLY:CA	2.52	0.82
1:A:76:VAL:HG21	1:A:90:PHE:CE2	2.15	0.82
4:D:74:GLN:HE21	4:D:75:LYS:HD3	1.45	0.82
6:F:75:SER:O	6:F:78:MET:HG3	1.78	0.82
7:G:1:MET:HE1	7:G:106:LEU:O	1.80	0.82
7:G:147:LEU:O	7:G:151:ASP:OD2	1.98	0.82
8:H:191:GLU:C	8:H:192:PHE:CD1	2.58	0.82
12:L:97:ARG:O	12:L:99:TYR:CA	2.26	0.82
16:P:14:LYS:O	16:P:22:LEU:HD23	1.78	0.82
17:Q:39:LEU:O	17:Q:42:ILE:CD1	2.28	0.82
17:Q:113:ILE:HG13	17:Q:120:LEU:HD11	1.60	0.82
18:R:99:ASP:CB	18:R:119:VAL:CG1	2.56	0.82
21:U:33:GLU:OE2	34:i:1443:G:O2'	1.95	0.82
21:U:97:ILE:CG2	21:U:101:ILE:CD1	2.58	0.82
25:Y:50:THR:O	25:Y:51:THR:OG1	1.97	0.82
30:d:13:LYS:HE3	30:d:14:PHE:CD2	2.15	0.82
34:i:1244:U:O4'	35:j:33:C:H5"	1.78	0.82
1:A:141:ASN:ND2	22:V:29:HIS:HB3	1.94	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:42:LYS:CA	6:F:45:TYR:H	1.91	0.82
6:F:179:ASN:O	6:F:182:LYS:O	1.97	0.82
7:G:29:GLU:HG2	7:G:29:GLU:O	1.78	0.82
10:J:10:ARG:CB	10:J:10:ARG:CZ	2.58	0.82
12:L:125:ILE:O	12:L:146:THR:HG22	1.79	0.82
13:M:64:LEU:CD1	32:f:104:LYS:NZ	2.40	0.82
16:P:39:ALA:HA	16:P:42:ARG:HE	1.43	0.82
19:S:10:GLN:HB3	19:S:13:LEU:HD21	1.62	0.82
19:S:16:LEU:C	19:S:17:ASN:CG	2.43	0.82
21:U:61:LEU:HD21	30:d:34:TYR:CE1	2.13	0.82
21:U:108:PRO:O	21:U:108:PRO:HG2	1.80	0.82
32:f:103:LEU:O	32:f:105:TYR:N	2.12	0.82
33:g:48:ASP:O	33:g:49:GLU:CG	2.27	0.82
33:g:118:ARG:HH21	33:g:134:THR:HG23	1.37	0.82
33:g:143:GLN:CD	33:g:144:ASP:CB	2.52	0.82
33:g:172:LYS:HE3	33:g:192:THR:HB	1.59	0.82
34:i:61:A:C5	34:i:326:A:H3'	2.10	0.82
1:A:159:ILE:CG2	1:A:159:ILE:O	2.28	0.82
1:A:202:TYR:O	1:A:203:PHE:CG	2.33	0.82
2:B:72:ALA:HA	2:B:79:VAL:HG23	1.61	0.82
2:B:153:THR:O	2:B:154:SER:OG	1.95	0.82
7:G:14:LYS:HZ1	7:G:123:GLY:CA	1.91	0.82
9:I:21:TYR:CD2	9:I:22:HIS:CD2	2.67	0.82
10:J:134:HIS:ND1	10:J:163:SER:HB3	1.94	0.82
11:K:2:LEU:O	11:K:3:MET:HE3	1.79	0.82
15:O:37:PHE:O	15:O:38:ASN:HB2	1.78	0.82
16:P:41:GLN:NE2	16:P:84:ILE:CG2	2.43	0.82
16:P:75:VAL:HG21	16:P:104:GLN:CD	2.04	0.82
17:Q:58:LEU:HD11	17:Q:108:ILE:HG23	1.60	0.82
17:Q:72:VAL:CG2	17:Q:84:ILE:HG22	2.10	0.82
20:T:87:VAL:HG13	20:T:88:MET:HG3	1.61	0.82
22:V:40:ASP:HB2	22:V:47:ASN:ND2	1.94	0.82
22:V:79:VAL:CG1	22:V:82:ASN:OD1	2.28	0.82
6:F:44:LYS:HE3	6:F:44:LYS:O	1.80	0.82
7:G:195:LYS:HE2	34:i:125:C:HO2'	1.42	0.82
8:H:83:LEU:CD2	8:H:92:VAL:CG1	2.57	0.82
9:I:155:ASN:ND2	9:I:156:ALA:HA	1.95	0.82
13:M:124:ILE:CA	13:M:127:TYR:CD2	2.62	0.82
20:T:31:PRO:CG	20:T:102:ARG:HG3	2.10	0.82
22:V:19:ALA:HB3	22:V:59:ILE:HD13	1.59	0.82
23:W:7:LEU:HD11	23:W:33:VAL:CG1	2.10	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:63:LEU:O	28:b:63:LEU:CD2	2.28	0.82
32:f:103:LEU:CD2	32:f:105:TYR:HB2	2.10	0.82
36:k:20:U:O4'	37:n:67:LYS:HA	1.80	0.82
1:A:127:PRO:HA	1:A:134:LEU:HD11	1.61	0.81
2:B:128:LYS:HG3	2:B:132:GLY:O	1.79	0.81
2:B:130:THR:CG2	2:B:179:ASN:H	1.93	0.81
4:D:112:GLY:O	4:D:113:LEU:CG	2.28	0.81
6:F:45:TYR:N	6:F:45:TYR:CD1	2.42	0.81
16:P:33:LEU:HD23	16:P:87:PRO:CD	1.97	0.81
16:P:123:TYR:OH	19:S:124:ARG:HG2	1.78	0.81
18:R:51:ALA:O	18:R:55:THR:HG23	1.80	0.81
20:T:23:LYS:CE	20:T:54:TYR:CD2	2.63	0.81
32:f:146:LEU:HD12	32:f:147:THR:HA	1.59	0.81
33:g:275:ILE:O	33:g:276:SER:CB	2.28	0.81
1:A:60:LEU:C	1:A:60:LEU:HD13	2.04	0.81
6:F:201:LYS:CD	6:F:204:ARG:NH2	2.39	0.81
7:G:32:MET:HE1	7:G:100:CYS:C	2.02	0.81
7:G:147:LEU:HD21	7:G:156:TYR:CE2	2.15	0.81
8:H:23:ILE:HD11	8:H:27:LEU:HD21	1.62	0.81
8:H:145:ARG:HH11	8:H:155:LYS:NZ	1.77	0.81
10:J:170:PRO:HG2	10:J:175:ARG:HG3	0.83	0.81
14:N:16:LEU:HD11	14:N:62:GLN:NE2	1.95	0.81
17:Q:146:ARG:CD	35:j:34:A:OP2	2.16	0.81
19:S:23:ARG:HD3	26:Z:48:VAL:HB	1.62	0.81
25:Y:29:HIS:CE1	25:Y:68:LYS:CA	2.62	0.81
26:Z:94:LYS:NZ	26:Z:95:GLY:H	1.78	0.81
2:B:48:LEU:O	15:O:51:GLU:OE1	1.97	0.81
2:B:151:ARG:HD2	2:B:153:THR:HG22	1.61	0.81
3:C:122:VAL:HG13	3:C:202:ALA:HA	1.61	0.81
4:D:135:GLU:HB2	4:D:153:VAL:HG22	1.61	0.81
5:E:126:VAL:CG2	5:E:129:ILE:HD11	2.10	0.81
5:E:130:PHE:CB	5:E:138:HIS:CE1	2.63	0.81
6:F:44:LYS:O	6:F:44:LYS:HD2	1.80	0.81
7:G:57:ASP:OD2	7:G:98:ARG:HG3	1.80	0.81
7:G:187:HIS:O	7:G:191:ARG:HG2	1.81	0.81
8:H:122:LEU:CD1	8:H:123:THR:H	1.93	0.81
9:I:136:ILE:CG2	9:I:139:LYS:CE	2.43	0.81
9:I:144:LYS:HE2	34:i:189:G:H5"	1.61	0.81
10:J:89:GLU:CB	10:J:92:MET:SD	2.68	0.81
11:K:97:SER:OG	11:K:98:ARG:N	2.10	0.81
12:L:94:HIS:HB2	12:L:105:ARG:CD	2.10	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:4:VAL:HA	16:P:10:ARG:CG	2.10	0.81
16:P:89:MET:C	16:P:107:ILE:HD11	2.05	0.81
17:Q:19:ALA:CB	17:Q:74:GLY:C	2.52	0.81
17:Q:85:ARG:HH12	17:Q:117:ARG:CB	1.93	0.81
17:Q:116:ASP:O	17:Q:117:ARG:HB2	1.78	0.81
18:R:99:ASP:CB	18:R:119:VAL:HG11	2.09	0.81
18:R:103:LYS:O	18:R:107:LYS:HG3	1.80	0.81
21:U:48:LEU:C	21:U:49:LYS:HG3	2.05	0.81
21:U:67:LYS:HE2	21:U:78:ASP:OD2	1.78	0.81
24:X:22:TRP:O	24:X:23:HIS:C	2.12	0.81
25:Y:29:HIS:HD1	25:Y:67:GLY:C	1.87	0.81
25:Y:46:LYS:HD2	25:Y:46:LYS:O	1.80	0.81
32:f:103:LEU:HD23	32:f:105:TYR:N	1.94	0.81
32:f:135:HIS:HB3	32:f:138:ARG:HG3	0.81	0.81
34:i:127:C:OP1	34:i:180:G:N2	2.14	0.81
34:i:370:G:C8	34:i:372:C:OP2	2.33	0.81
34:i:1825:A:C2	34:i:1846:C:OP1	2.32	0.81
36:k:12:A:O2'	36:k:13:C:H5'	1.78	0.81
2:B:26:SER:O	2:B:27:LYS:CG	2.28	0.81
4:D:202:LYS:CB	4:D:203:PRO:CD	2.57	0.81
5:E:175:PHE:HD2	5:E:175:PHE:O	1.63	0.81
6:F:134:VAL:CG1	6:F:136:ARG:NH2	2.43	0.81
9:I:206:LYS:CG	9:I:207:GLY:N	2.42	0.81
10:J:89:GLU:O	10:J:92:MET:CB	2.28	0.81
13:M:33:ARG:HH11	13:M:33:ARG:HG3	1.45	0.81
14:N:59:GLY:O	14:N:60:VAL:HG13	1.80	0.81
17:Q:9:SER:CA	17:Q:26:LYS:HG3	2.10	0.81
20:T:52:TRP:O	20:T:55:THR:HG22	1.80	0.81
23:W:20:ARG:HH12	34:i:1135:C:H1'	1.45	0.81
25:Y:99:LYS:CE	25:Y:99:LYS:C	2.54	0.81
25:Y:99:LYS:O	25:Y:99:LYS:CD	2.28	0.81
26:Z:69:THR:CB	26:Z:70:PRO:CD	2.58	0.81
37:n:97:ALA:O	37:n:100:ALA:N	2.13	0.81
4:D:78:GLY:O	4:D:80:PRO:HD3	1.79	0.81
7:G:85:ARG:NE	25:Y:118:ARG:NE	2.28	0.81
14:N:21:SER:C	14:N:22:VAL:HG13	2.04	0.81
16:P:14:LYS:O	16:P:22:LEU:CD2	2.28	0.81
17:Q:92:LEU:HD12	17:Q:96:TYR:CE2	2.14	0.81
19:S:95:TYR:N	19:S:95:TYR:HD1	1.72	0.81
25:Y:36:PRO:CG	25:Y:39:GLU:OE1	2.23	0.81
4:D:18:LYS:NZ	4:D:37:VAL:CG2	2.44	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:108:LYS:CB	4:D:113:LEU:HD22	2.10	0.81
5:E:11:ARG:O	5:E:12:VAL:HG23	1.80	0.81
6:F:39:ILE:CG2	6:F:68:ILE:HD13	2.11	0.81
6:F:122:ARG:HE	6:F:193:LYS:NZ	1.75	0.81
9:I:118:ALA:HB2	9:I:149:TYR:CE1	2.15	0.81
10:J:114:VAL:CG1	10:J:119:LEU:O	2.27	0.81
11:K:4:PRO:HG2	11:K:7:ASN:CB	2.11	0.81
11:K:84:HIS:HD2	13:M:27:ILE:HG13	1.44	0.81
12:L:149:ALA:HB2	12:L:156:GLN:HE21	1.00	0.81
16:P:10:ARG:HE	16:P:11:THR:H	1.27	0.81
16:P:41:GLN:CG	16:P:84:ILE:CB	2.31	0.81
18:R:20:TYR:OH	18:R:38:ILE:HB	1.74	0.81
18:R:33:ARG:NH1	33:g:125:ARG:HD2	1.96	0.81
24:X:29:LYS:HD3	24:X:34:THR:CG2	2.11	0.81
25:Y:18:LEU:HD13	25:Y:20:ARG:HH12	0.66	0.81
3:C:70:SER:O	22:V:29:HIS:CE1	2.33	0.81
4:D:105:LEU:HD21	4:D:184:ILE:HD12	1.62	0.81
7:G:162:LEU:CD2	7:G:172:LYS:NZ	2.44	0.81
10:J:30:LYS:HA	31:e:112:TYR:CZ	2.15	0.81
21:U:19:ARG:HA	21:U:92:HIS:ND1	1.95	0.81
21:U:73:GLY:O	21:U:74:SER:O	1.99	0.81
23:W:38:LEU:HD23	23:W:41:MET:HE1	1.61	0.81
24:X:105:PHE:CD1	24:X:112:VAL:CG2	2.64	0.81
24:X:126:ALA:O	24:X:128:VAL:CB	2.29	0.81
25:Y:17:LEU:HD12	25:Y:18:LEU:HG	1.61	0.81
27:a:80:HIS:CE1	36:k:13:C:OP1	2.33	0.81
34:i:127:C:N3	34:i:180:G:H2'	1.94	0.81
2:B:72:ALA:HB3	15:O:128:ARG:NH2	1.95	0.81
4:D:97:CYS:O	4:D:97:CYS:SG	2.38	0.81
6:F:145:ARG:HH11	29:c:49:PRO:HD3	1.45	0.81
7:G:155:GLN:O	7:G:156:TYR:HD1	1.64	0.81
10:J:88:ASP:O	10:J:92:MET:HG3	1.81	0.81
10:J:170:PRO:HB2	10:J:174:LYS:HB3	1.62	0.81
17:Q:92:LEU:HD11	17:Q:96:TYR:OH	1.81	0.81
19:S:94:LYS:CE	19:S:95:TYR:O	2.29	0.81
22:V:24:ILE:HD13	22:V:25:GLY:H	1.42	0.81
25:Y:32:LYS:HG2	25:Y:33:ALA:H	1.42	0.81
26:Z:62:VAL:CG1	26:Z:68:ILE:HD13	2.05	0.81
1:A:43:SER:O	1:A:44:ASP:OD1	1.97	0.81
3:C:79:ILE:HG12	3:C:144:LYS:HB3	1.63	0.81
6:F:40:ALA:H	6:F:68:ILE:HG23	1.43	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:27:PHE:HZ	7:G:41:LEU:CD1	1.92	0.81
7:G:195:LYS:HD3	34:i:126:G:H5'	1.60	0.81
14:N:25:TRP:CZ3	28:b:45:THR:HG21	2.15	0.81
16:P:49:LEU:C	16:P:50:ARG:HG3	2.06	0.81
18:R:122:PRO:CA	18:R:123:THR:CB	2.58	0.81
19:S:129:LEU:CD2	34:i:1516:C:H5'	2.11	0.81
23:W:6:VAL:HG13	23:W:29:PRO:HD2	1.63	0.81
27:a:49:ALA:HB1	27:a:53:ILE:CD1	2.11	0.81
29:c:11:LEU:HB3	29:c:35:MET:HE2	1.61	0.81
34:i:1825:A:C4	34:i:1846:C:H5'	2.12	0.81
1:A:131:HIS:O	1:A:135:THR:HG23	1.79	0.81
2:B:57:ILE:O	2:B:57:ILE:CG2	2.29	0.81
3:C:195:PRO:CD	3:C:221:PHE:HZ	1.92	0.81
4:D:12:VAL:HG13	30:d:36:LEU:HD11	1.56	0.81
4:D:195:SER:O	4:D:197:LYS:HA	1.80	0.81
12:L:101:ARG:HH12	24:X:5:ARG:HA	1.46	0.81
19:S:8:LYS:CE	19:S:9:PHE:CE1	2.63	0.81
22:V:67:ASP:O	22:V:70:LEU:N	2.14	0.81
25:Y:99:LYS:CE	25:Y:99:LYS:O	2.29	0.81
25:Y:114:MET:CE	25:Y:125:VAL:HG23	2.11	0.81
26:Z:70:PRO:CD	26:Z:71:ALA:H	1.93	0.81
33:g:17:TRP:CE3	33:g:36:ARG:CZ	2.63	0.81
3:C:84:GLY:CA	3:C:87:LEU:HB3	2.10	0.80
3:C:177:LEU:HD12	3:C:177:LEU:O	1.81	0.80
5:E:184:THR:C	5:E:189:LEU:HD13	2.06	0.80
8:H:15:LYS:HB3	8:H:16:PRO:HD2	1.61	0.80
9:I:128:LYS:HE2	9:I:133:GLU:OE1	1.81	0.80
14:N:38:TYR:CE2	14:N:74:ILE:HG23	2.13	0.80
15:O:129:ILE:HG21	27:a:44:ILE:HG21	1.60	0.80
16:P:44:ARG:NH2	16:P:84:ILE:HB	1.93	0.80
17:Q:9:SER:CB	17:Q:26:LYS:CD	2.59	0.80
17:Q:112:LEU:CD2	17:Q:119:LEU:HD13	2.00	0.80
21:U:40:ILE:HD11	21:U:53:PRO:HG3	0.81	0.80
21:U:108:PRO:O	21:U:108:PRO:CD	2.29	0.80
25:Y:7:ILE:HD11	25:Y:43:LYS:CB	2.11	0.80
25:Y:108:LYS:O	25:Y:111:LYS:HG3	1.82	0.80
32:f:95:ARG:HD3	32:f:96:LYS:H	1.46	0.80
33:g:144:ASP:O	33:g:145:GLU:CB	2.29	0.80
3:C:49:THR:HG23	3:C:75:GLU:CD	2.06	0.80
3:C:142:LEU:C	3:C:145:LEU:HD23	2.07	0.80
4:D:67:ARG:HH11	4:D:67:ARG:CG	1.92	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:86:PHE:HZ	5:E:182:MET:HE3	1.45	0.80
6:F:25:THR:CB	6:F:42:LYS:HG3	2.11	0.80
10:J:134:HIS:CE1	10:J:164:PRO:HD3	2.16	0.80
14:N:23:PRO:HD2	14:N:26:LEU:HD23	1.62	0.80
15:O:30:VAL:HG13	15:O:47:LEU:HD23	1.63	0.80
16:P:62:LYS:HG3	16:P:65:LYS:CE	2.11	0.80
18:R:99:ASP:O	18:R:119:VAL:CB	2.29	0.80
24:X:90:CYS:O	24:X:91:LEU:C	2.24	0.80
25:Y:101:LYS:O	25:Y:102:THR:CG2	2.29	0.80
26:Z:62:VAL:HA	26:Z:65:TYR:CE2	2.16	0.80
28:b:63:LEU:O	28:b:63:LEU:CG	2.29	0.80
34:i:1701:G:C1’	34:i:1844:A:O2’	2.26	0.80
36:k:19:U:C1’	37:n:70:TRP:CZ2	2.64	0.80
6:F:122:ARG:O	6:F:141:VAL:CG1	2.22	0.80
7:G:184:VAL:HG12	7:G:188:LYS:CE	2.09	0.80
10:J:16:PRO:CD	10:J:44:TRP:CZ2	2.64	0.80
11:K:28:HIS:CE1	30:d:8:TRP:CD1	2.65	0.80
18:R:99:ASP:CA	18:R:119:VAL:HG12	2.03	0.80
19:S:34:LYS:CG	19:S:103:LEU:HD21	2.10	0.80
25:Y:99:LYS:O	25:Y:99:LYS:CG	2.29	0.80
31:e:97:GLU:OE1	31:e:97:GLU:CA	2.28	0.80
31:e:118:ASN:CA	31:e:119:VAL:HB	2.10	0.80
33:g:93:THR:HB	33:g:94:THR:HG23	1.63	0.80
36:k:19:U:O2’	37:n:70:TRP:CH2	0.73	0.80
36:k:20:U:H1’	37:n:67:LYS:CB	2.10	0.80
1:A:60:LEU:HD13	1:A:60:LEU:O	1.81	0.80
4:D:59:LEU:CD1	4:D:60:GLY:H	1.86	0.80
5:E:241:GLY:O	5:E:244:ILE:HG13	1.81	0.80
9:I:155:ASN:O	12:L:22:ARG:HD3	1.80	0.80
10:J:37:LEU:HD11	10:J:42:GLU:HB3	0.81	0.80
10:J:114:VAL:HG12	10:J:120:ALA:CB	2.07	0.80
10:J:170:PRO:CB	10:J:174:LYS:CE	2.60	0.80
14:N:113:PHE:CE2	14:N:117:LEU:HD11	2.17	0.80
15:O:34:PHE:HZ	15:O:100:THR:HA	1.44	0.80
16:P:49:LEU:CD1	16:P:51:ARG:HH21	1.95	0.80
17:Q:105:LYS:CD	17:Q:105:LYS:C	2.54	0.80
21:U:46:LYS:HZ1	21:U:97:ILE:HG12	1.46	0.80
23:W:101:PHE:HA	23:W:113:HIS:CE1	2.16	0.80
24:X:52:LEU:HD12	24:X:53:GLU:CB	2.11	0.80
25:Y:3:ASP:O	25:Y:4:THR:OG1	1.98	0.80
25:Y:9:THR:CB	25:Y:48:TYR:OH	2.29	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:927:C:O5'	34:i:927:C:H6	1.63	0.80
2:B:72:ALA:HB1	2:B:77:ASP:OD2	1.80	0.80
5:E:19:MET:HE1	34:i:842:G:H2'	1.59	0.80
5:E:244:ILE:O	5:E:245:ARG:HB3	1.82	0.80
8:H:100:ILE:CG1	8:H:125:VAL:HG21	2.11	0.80
11:K:36:ALA:O	11:K:38:LYS:CG	2.29	0.80
11:K:39:ASN:O	11:K:40:VAL:CG1	2.29	0.80
25:Y:45:ALA:HA	25:Y:55:ILE:CD1	2.12	0.80
25:Y:114:MET:HG2	25:Y:124:ASN:HB3	1.62	0.80
31:e:80:LEU:CA	37:n:84:TYR:HE2	1.95	0.80
31:e:105:ARG:HB3	31:e:105:ARG:HH21	1.39	0.80
32:f:87:THR:CB	34:i:1503:G:H22	1.94	0.80
2:B:66:VAL:HG22	2:B:87:ILE:CB	2.10	0.80
4:D:97:CYS:O	4:D:98:ALA:C	2.23	0.80
4:D:112:GLY:O	4:D:113:LEU:CD1	2.30	0.80
6:F:138:ALA:HB2	6:F:200:ALA:O	1.81	0.80
9:I:138:ASN:O	9:I:139:LYS:O	1.99	0.80
10:J:172:ARG:NH2	34:i:552:U:C6	2.50	0.80
12:L:103:GLU:OE1	24:X:11:ARG:CZ	2.29	0.80
13:M:100:PRO:O	13:M:101:ARG:CD	2.30	0.80
17:Q:30:GLY:O	17:Q:31:LEU:CD1	2.29	0.80
19:S:39:ARG:CZ	20:T:38:LYS:CD	2.59	0.80
19:S:55:ARG:HH11	26:Z:80:ARG:HE	1.26	0.80
20:T:84:ARG:HB2	20:T:84:ARG:HH21	1.37	0.80
29:c:67:ARG:O	29:c:68:LEU:CD2	2.30	0.80
32:f:85:TYR:O	32:f:86:THR:CG2	2.29	0.80
33:g:175:LYS:NZ	33:g:187:ASN:OD1	2.15	0.80
1:A:4:ALA:HB1	22:V:39:VAL:HG21	1.63	0.80
2:B:57:ILE:O	2:B:58:ALA:C	2.21	0.80
2:B:70:SER:HB2	15:O:128:ARG:HD3	1.60	0.80
3:C:54:LEU:CD2	3:C:254:PHE:HB3	2.12	0.80
4:D:48:ILE:HG21	4:D:86:LEU:HG	1.63	0.80
6:F:19:LEU:HD22	6:F:24:SER:HA	1.61	0.80
6:F:42:LYS:O	6:F:42:LYS:CE	2.28	0.80
9:I:3:ILE:CG2	9:I:3:ILE:O	2.29	0.80
9:I:197:PHE:HE2	12:L:5:GLN:HG3	1.47	0.80
12:L:78:THR:HG22	12:L:87:VAL:O	1.82	0.80
14:N:12:SER:C	14:N:13:GLN:HG3	2.07	0.80
17:Q:50:LYS:HZ2	17:Q:85:ARG:HH21	0.81	0.80
20:T:31:PRO:HB3	20:T:33:TRP:CD2	2.17	0.80
20:T:114:GLU:OE2	20:T:122:LYS:HE3	1.81	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:W:36:ARG:O	23:W:39:THR:OG1	1.99	0.80
25:Y:7:ILE:CG1	25:Y:43:LYS:HD3	2.11	0.80
25:Y:99:LYS:HE3	25:Y:99:LYS:C	2.07	0.80
33:g:281:ALA:O	33:g:282:GLU:CB	2.29	0.80
33:g:298:LEU:CD1	33:g:310:TRP:CE3	2.63	0.80
1:A:21:ALA:HB1	1:A:173:LEU:CD1	2.05	0.80
1:A:24:HIS:O	1:A:25:LEU:C	2.24	0.80
4:D:226:GLN:O	4:D:227:LYS:CG	2.30	0.80
5:E:21:ASP:CG	5:E:24:THR:CG2	2.51	0.80
5:E:126:VAL:CG1	5:E:158:ASP:O	2.25	0.80
7:G:142:ARG:CD	7:G:147:LEU:CB	2.59	0.80
8:H:122:LEU:HD12	8:H:123:THR:HG23	1.63	0.80
10:J:130:ILE:CG1	10:J:135:ILE:HD13	2.10	0.80
16:P:5:GLU:N	16:P:10:ARG:NH1	2.30	0.80
18:R:21:TYR:HB3	18:R:71:ILE:HG21	1.62	0.80
22:V:78:ILE:HD13	22:V:79:VAL:N	1.95	0.80
24:X:29:LYS:CD	24:X:34:THR:CG2	2.58	0.80
25:Y:36:PRO:HG2	25:Y:39:GLU:HB2	1.64	0.80
2:B:94:LYS:N	2:B:94:LYS:HD2	1.95	0.80
2:B:209:ASP:O	2:B:210:VAL:HG23	1.82	0.80
3:C:154:TYR:CE1	3:C:162:PRO:CG	2.64	0.80
3:C:234:SER:HA	22:V:23:ILE:HD11	1.57	0.80
3:C:241:TRP:CG	23:W:68:ARG:HH11	2.00	0.80
4:D:197:LYS:CB	4:D:198:ILE:HG13	2.03	0.80
6:F:44:LYS:O	6:F:44:LYS:CD	2.29	0.80
7:G:179:LEU:C	7:G:179:LEU:HD12	2.07	0.80
8:H:65:PRO:CD	8:H:68:GLN:OE1	2.28	0.80
9:I:136:ILE:C	9:I:139:LYS:HG3	2.04	0.80
9:I:157:LYS:HB2	12:L:22:ARG:HD3	0.82	0.80
10:J:109:ARG:O	10:J:110:LEU:O	1.97	0.80
14:N:80:LEU:C	14:N:82:PRO:HD3	2.05	0.80
17:Q:44:PRO:HG2	17:Q:81:ILE:CD1	2.10	0.80
19:S:94:LYS:CD	19:S:95:TYR:O	2.30	0.80
20:T:91:HIS:CD2	20:T:91:HIS:N	2.50	0.80
22:V:42:VAL:O	22:V:43:THR:CG2	2.30	0.80
23:W:93:LEU:HD21	23:W:128:PHE:HD2	1.38	0.80
23:W:102:ILE:H	23:W:113:HIS:CE1	1.98	0.80
24:X:71:ARG:HE	24:X:82:THR:HG23	1.46	0.80
25:Y:7:ILE:HD11	25:Y:43:LYS:CG	2.11	0.80
26:Z:96:LEU:O	26:Z:112:ASN:HB3	1.80	0.80
31:e:113:ASN:OD1	31:e:117:VAL:HG21	1.82	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:102:VAL:HG12	32:f:103:LEU:H	1.43	0.80
32:f:102:VAL:HG12	32:f:103:LEU:HB2	1.64	0.80
2:B:21:VAL:O	2:B:21:VAL:CG2	2.30	0.80
3:C:50:LYS:HD2	3:C:251:TYR:HD1	1.39	0.80
6:F:36:GLN:CG	6:F:37:ASP:OD2	2.30	0.80
9:I:140:LYS:O	9:I:141:ARG:HG3	1.82	0.80
17:Q:92:LEU:HG	17:Q:96:TYR:HE2	1.46	0.80
19:S:12:ILE:O	19:S:12:ILE:CG2	2.30	0.80
21:U:48:LEU:N	21:U:48:LEU:CD2	2.29	0.80
27:a:107:ALA:HB1	27:a:108:PRO:CD	2.10	0.80
32:f:103:LEU:HD22	32:f:106:TYR:CD2	2.16	0.80
33:g:48:ASP:OD2	33:g:49:GLU:CB	2.29	0.80
34:i:1744:G:N7	34:i:1745:C:N4	2.30	0.80
5:E:49:ARG:HB3	5:E:55:ALA:HB3	1.62	0.79
5:E:208:VAL:HB	5:E:225:ILE:HD11	0.80	0.79
6:F:44:LYS:O	6:F:44:LYS:CE	2.30	0.79
8:H:83:LEU:HD12	8:H:84:GLU:N	1.96	0.79
10:J:110:LEU:HD11	10:J:130:ILE:HG12	1.62	0.79
11:K:83:LEU:HB2	11:K:85:LEU:CD2	2.12	0.79
12:L:147:LYS:CD	12:L:148:ALA:N	2.44	0.79
13:M:67:ALA:HB1	32:f:108:VAL:HG21	1.64	0.79
17:Q:38:PRO:O	17:Q:41:MET:HG2	1.82	0.79
19:S:36:VAL:O	19:S:36:VAL:CG2	2.30	0.79
20:T:65:TYR:HA	20:T:123:LEU:HD13	1.64	0.79
20:T:90:SER:C	20:T:91:HIS:CD2	2.60	0.79
22:V:19:ALA:O	23:W:23:ARG:NH2	2.15	0.79
27:a:107:ALA:HB1	27:a:108:PRO:HD3	1.63	0.79
3:C:51:LEU:O	3:C:51:LEU:CD2	2.30	0.79
3:C:154:TYR:HH	3:C:161:LYS:HA	1.45	0.79
4:D:214:LYS:CG	4:D:215:ASP:OD2	2.28	0.79
8:H:23:ILE:CD1	8:H:27:LEU:HD21	2.10	0.79
8:H:75:ILE:HG23	8:H:76:GLN:H	1.46	0.79
9:I:29:LEU:HG	9:I:30:GLY:H	1.45	0.79
17:Q:34:VAL:HG23	17:Q:39:LEU:HD21	1.60	0.79
19:S:136:THR:OG1	34:i:1516:C:P	2.40	0.79
28:b:16:LYS:CD	28:b:16:LYS:N	2.44	0.79
31:e:78:GLY:HA2	37:n:89:ALA:HA	1.62	0.79
33:g:149:GLU:OE2	33:g:149:GLU:CA	2.30	0.79
34:i:1826:A:C5'	34:i:1847:C:P	2.70	0.79
2:B:61:GLY:O	2:B:65:ARG:NE	2.16	0.79
3:C:93:LYS:HD3	3:C:218:LEU:CD2	1.75	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:198:ILE:CG1	4:D:198:ILE:O	2.30	0.79
4:D:212:GLU:O	4:D:213:PRO:C	2.25	0.79
5:E:100:ARG:CD	5:E:102:ILE:HD11	2.08	0.79
5:E:128:LYS:CD	5:E:130:PHE:CD1	2.63	0.79
5:E:130:PHE:CB	5:E:138:HIS:NE2	2.45	0.79
6:F:112:LEU:HA	6:F:177:LEU:CD1	2.11	0.79
6:F:127:ARG:O	6:F:127:ARG:CD	2.31	0.79
6:F:145:ARG:HD3	29:c:49:PRO:HD3	1.62	0.79
8:H:12:ASN:CB	8:H:46:THR:OG1	2.29	0.79
8:H:144:ILE:CD1	23:W:52:ILE:HD13	2.12	0.79
12:L:82:MET:HE1	34:i:363:G:H5'	1.63	0.79
13:M:93:LYS:O	13:M:94:ILE:CG2	2.25	0.79
15:O:64:ALA:O	15:O:66:ARG:N	2.15	0.79
18:R:44:LYS:HG3	18:R:47:ARG:NH1	1.96	0.79
25:Y:20:ARG:HG3	25:Y:74:MET:HE1	1.62	0.79
33:g:143:GLN:NE2	33:g:144:ASP:N	2.30	0.79
1:A:97:THR:HG23	1:A:98:PRO:CD	2.06	0.79
2:B:62:LEU:HD21	2:B:96:CYS:SG	2.23	0.79
2:B:137:LEU:HB2	2:B:172:MET:CE	2.03	0.79
3:C:55:VAL:HA	3:C:82:PHE:HZ	1.48	0.79
4:D:94:ARG:O	4:D:101:GLN:NE2	2.16	0.79
5:E:120:LYS:O	5:E:164:LEU:CB	2.30	0.79
5:E:130:PHE:CG	5:E:138:HIS:CE1	2.70	0.79
7:G:33:ALA:N	7:G:52:ILE:HG23	1.97	0.79
8:H:98:ARG:CZ	8:H:128:ALA:HB1	2.11	0.79
10:J:124:HIS:HD2	34:i:516:A:H5"	0.97	0.79
11:K:36:ALA:O	11:K:38:LYS:CD	2.29	0.79
13:M:124:ILE:HA	13:M:127:TYR:CE2	2.17	0.79
19:S:34:LYS:HB3	19:S:103:LEU:CG	2.11	0.79
32:f:103:LEU:HD23	32:f:103:LEU:C	2.07	0.79
1:A:3:GLY:HA3	22:V:78:ILE:HG12	1.65	0.79
4:D:217:ILE:O	4:D:218:LEU:HD22	1.82	0.79
5:E:117:GLU:HG3	5:E:118:GLU:H	1.46	0.79
5:E:182:MET:HE2	5:E:228:ILE:HG21	1.63	0.79
8:H:14:GLU:OE1	8:H:16:PRO:CB	2.29	0.79
8:H:14:GLU:OE1	8:H:16:PRO:CG	2.30	0.79
9:I:206:LYS:HG3	9:I:207:GLY:N	1.97	0.79
10:J:100:LEU:HG	10:J:101:LYS:H	1.44	0.79
12:L:158:PHE:CD2	12:L:158:PHE:N	2.29	0.79
15:O:20:GLN:CD	15:O:21:VAL:O	2.26	0.79
15:O:94:HIS:CG	15:O:127:GLY:O	2.35	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:85:ARG:NH1	17:Q:117:ARG:HB3	1.97	0.79
17:Q:109:LYS:HG2	17:Q:113:ILE:HD12	1.63	0.79
17:Q:127:CYS:HA	34:i:1643:G:H2'	1.65	0.79
18:R:1:MET:N	18:R:1:MET:O	2.15	0.79
21:U:50:VAL:HG22	21:U:52:GLY:N	1.97	0.79
24:X:52:LEU:HD11	24:X:71:ARG:HB2	1.64	0.79
33:g:143:GLN:OE1	33:g:144:ASP:CB	2.30	0.79
34:i:1825:A:H4'	34:i:1846:C:O2'	1.82	0.79
3:C:244:THR:HG23	3:C:246:PHE:CA	2.10	0.79
10:J:179:LYS:CG	10:J:182:GLN:OE1	2.30	0.79
13:M:31:LEU:HD12	13:M:33:ARG:HB3	1.64	0.79
14:N:38:TYR:CD1	14:N:78:LYS:CD	2.65	0.79
14:N:125:LEU:HD11	14:N:129:TYR:OH	1.83	0.79
16:P:5:GLU:O	16:P:6:GLN:CG	2.30	0.79
20:T:143:LYS:CD	20:T:144:LYS:H	1.95	0.79
21:U:97:ILE:HG22	21:U:101:ILE:HD12	1.63	0.79
24:X:40:PRO:CB	24:X:81:ILE:HD11	2.13	0.79
24:X:54:LYS:HD2	24:X:91:LEU:CD1	2.13	0.79
26:Z:48:VAL:HG21	26:Z:80:ARG:HD3	1.65	0.79
27:a:49:ALA:HB1	27:a:53:ILE:HD11	1.64	0.79
28:b:26:GLN:HG3	28:b:27:SER:N	1.98	0.79
28:b:46:VAL:CG2	28:b:63:LEU:HD21	2.13	0.79
29:c:5:ARG:N	29:c:5:ARG:NH1	2.30	0.79
33:g:194:TYR:CE2	33:g:212:LYS:CB	2.65	0.79
4:D:70:THR:CB	4:D:86:LEU:HD13	2.12	0.79
9:I:104:ILE:O	9:I:105:ASP:CG	2.25	0.79
9:I:206:LYS:HD2	9:I:207:GLY:N	1.98	0.79
13:M:28:HIS:O	13:M:29:ASP:HB2	1.82	0.79
15:O:75:MET:SD	15:O:118:ALA:HB2	2.22	0.79
25:Y:36:PRO:CG	25:Y:39:GLU:HG3	2.10	0.79
25:Y:98:GLU:OE2	25:Y:99:LYS:N	2.15	0.79
1:A:76:VAL:CG2	1:A:90:PHE:CE2	2.66	0.79
1:A:186:ARG:CD	1:A:186:ARG:O	2.31	0.79
4:D:195:SER:CA	4:D:197:LYS:O	2.30	0.79
5:E:159:THR:HG23	5:E:227:VAL:HG23	1.25	0.79
7:G:16:ILE:HD13	7:G:45:TRP:HZ2	0.70	0.79
9:I:157:LYS:CG	12:L:22:ARG:NH1	2.45	0.79
12:L:76:VAL:HG12	12:L:125:ILE:HD12	1.64	0.79
13:M:77:ILE:HG23	13:M:78:LYS:N	1.97	0.79
14:N:21:SER:O	14:N:22:VAL:CG1	2.30	0.79
14:N:131:THR:C	14:N:132:LYS:HD2	2.08	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:17:ILE:HG21	18:R:69:ILE:HD11	1.38	0.79
24:X:27:TYR:CE2	24:X:31:HIS:CD2	2.70	0.79
25:Y:32:LYS:HG3	25:Y:33:ALA:N	1.80	0.79
25:Y:55:ILE:CB	25:Y:75:ILE:HG12	2.12	0.79
32:f:103:LEU:O	32:f:103:LEU:CD2	2.30	0.79
34:i:196:U:H3	34:i:200:U:H3	1.29	0.79
34:i:1751:G:O2'	34:i:1752:G:H5'	1.83	0.79
37:n:62:ARG:CB	37:n:91:VAL:O	2.30	0.79
1:A:66:VAL:HG13	1:A:186:ARG:HD2	1.65	0.79
1:A:149:ASN:HB2	1:A:165:ASN:ND2	1.98	0.79
4:D:195:SER:O	4:D:197:LYS:CG	2.30	0.79
5:E:23:LEU:C	5:E:24:THR:HG23	2.05	0.79
6:F:61:PHE:CE2	29:c:51:ARG:HB2	2.16	0.79
7:G:137:ARG:HD2	7:G:140:ARG:HE	1.48	0.79
15:O:79:GLN:OE1	29:c:5:ARG:CB	2.30	0.79
19:S:87:GLN:O	19:S:88:LYS:C	2.21	0.79
19:S:94:LYS:CB	19:S:95:TYR:O	2.30	0.79
23:W:7:LEU:HD23	23:W:34:ILE:CG1	2.13	0.79
2:B:146:CYS:O	2:B:147:ASN:C	2.21	0.79
3:C:169:VAL:CG2	3:C:228:ALA:O	2.31	0.79
3:C:255:THR:HG23	3:C:256:ASP:OD1	1.82	0.79
4:D:47:GLU:OE2	4:D:85:GLU:OE2	1.99	0.79
7:G:36:VAL:HG12	7:G:37:ALA:N	1.94	0.79
7:G:162:LEU:CG	7:G:170:ARG:HB2	2.12	0.79
7:G:183:ARG:NH2	34:i:308:C:H5	1.61	0.79
8:H:149:ASP:O	8:H:151:SER:N	2.16	0.79
11:K:71:LEU:HD21	11:K:76:ILE:CD1	1.93	0.79
12:L:97:ARG:C	12:L:99:TYR:N	2.33	0.79
16:P:52:LYS:HA	16:P:54:HIS:HD2	1.47	0.79
19:S:80:PRO:HB2	19:S:82:TRP:CD1	2.18	0.79
21:U:56:MET:HE1	21:U:88:LEU:CG	2.12	0.79
23:W:38:LEU:HA	23:W:41:MET:CE	2.12	0.79
24:X:27:TYR:CE1	24:X:31:HIS:CD2	2.69	0.79
2:B:67:PHE:CD1	15:O:47:LEU:CB	2.66	0.78
4:D:197:LYS:N	4:D:199:GLY:N	2.30	0.78
9:I:139:LYS:HB2	9:I:145:ILE:CD1	2.08	0.78
10:J:170:PRO:HA	10:J:174:LYS:HZ3	1.46	0.78
11:K:65:ARG:HB3	11:K:65:ARG:CZ	2.12	0.78
13:M:31:LEU:HD11	13:M:109:VAL:HB	1.63	0.78
13:M:94:ILE:O	13:M:101:ARG:NH1	2.16	0.78
18:R:88:VAL:O	18:R:88:VAL:CG1	2.31	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:76:THR:OG1	20:T:94:ARG:HB3	1.83	0.78
25:Y:37:LYS:O	25:Y:40:ILE:HG23	1.82	0.78
27:a:34:LYS:O	27:a:35:ALA:HB3	1.81	0.78
31:e:92:LYS:HD3	31:e:92:LYS:N	1.95	0.78
33:g:109:LEU:HD12	33:g:151:VAL:O	1.83	0.78
33:g:201:SER:CB	33:g:202:PRO:CD	2.57	0.78
33:g:298:LEU:HD21	33:g:310:TRP:HB2	1.65	0.78
2:B:134:LEU:HD12	2:B:219:LYS:HB2	1.65	0.78
4:D:132:LYS:HA	4:D:191:PRO:CG	2.10	0.78
5:E:128:LYS:CD	5:E:130:PHE:HE1	1.85	0.78
6:F:49:LEU:HD12	6:F:50:PRO:CD	2.12	0.78
7:G:164:LYS:O	7:G:166:GLY:N	2.16	0.78
10:J:180:LYS:CD	10:J:180:LYS:O	2.30	0.78
13:M:51:VAL:HA	13:M:77:ILE:CG2	2.13	0.78
24:X:52:LEU:CD1	24:X:53:GLU:HG2	2.13	0.78
26:Z:94:LYS:HD3	26:Z:95:GLY:N	1.99	0.78
32:f:140:TYR:OH	32:f:146:LEU:HB2	1.83	0.78
34:i:239:U:H3	34:i:271:G:H1	1.29	0.78
1:A:113:GLN:HG3	34:i:1347:G:O4'	1.83	0.78
1:A:143:PRO:HB3	22:V:34:MET:SD	2.22	0.78
2:B:52:THR:HG22	2:B:58:ALA:CB	2.12	0.78
3:C:197:LYS:O	3:C:200:LEU:CG	2.30	0.78
4:D:198:ILE:O	4:D:198:ILE:CD1	2.32	0.78
7:G:32:MET:CE	7:G:63:MET:SD	2.72	0.78
13:M:71:GLU:CD	13:M:71:GLU:N	2.39	0.78
17:Q:6:PRO:O	17:Q:6:PRO:HG2	1.81	0.78
19:S:39:ARG:NH2	20:T:38:LYS:CD	2.45	0.78
26:Z:92:LEU:HD21	26:Z:109:TYR:CD1	2.18	0.78
28:b:81:ARG:CB	28:b:82:LYS:CB	2.45	0.78
34:i:1635:A:H2	35:j:30:G:H1'	1.42	0.78
4:D:209:SER:OG	18:R:40:ILE:HB	1.83	0.78
5:E:145:ARG:HG2	5:E:145:ARG:NH1	1.94	0.78
9:I:145:ILE:HA	9:I:148:LYS:HG3	1.63	0.78
12:L:80:MET:HE2	12:L:120:VAL:O	1.81	0.78
13:M:35:ILE:HB	13:M:61:TYR:CE2	2.19	0.78
13:M:98:GLY:C	13:M:100:PRO:HD3	2.08	0.78
17:Q:54:PRO:HG3	17:Q:88:ILE:HD12	1.66	0.78
18:R:122:PRO:CB	18:R:123:THR:OG1	2.30	0.78
22:V:79:VAL:HG12	22:V:82:ASN:OD1	1.83	0.78
24:X:67:ARG:HG2	24:X:115:ILE:HG12	1.66	0.78
1:A:34:MET:HE1	1:A:37:TYR:HE2	1.42	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:162:ASP:CG	4:D:166:TYR:HE2	1.92	0.78
4:D:218:LEU:O	4:D:218:LEU:CD2	2.30	0.78
6:F:127:ARG:O	6:F:127:ARG:CG	2.32	0.78
9:I:140:LYS:CD	9:I:141:ARG:H	1.96	0.78
12:L:1:MET:O	12:L:2:ALA:HB3	1.84	0.78
12:L:5:GLN:NE2	12:L:10:TYR:CD1	2.52	0.78
14:N:24:THR:HB	28:b:84:HIS:NE2	1.94	0.78
15:O:125:LYS:NZ	27:a:57:SER:O	2.14	0.78
18:R:98:VAL:HG13	18:R:102:THR:OG1	1.83	0.78
20:T:119:TRP:CD2	34:i:1557:C:H1'	2.18	0.78
22:V:24:ILE:O	22:V:24:ILE:CG2	2.30	0.78
24:X:139:GLU:O	24:X:141:PRO:CD	2.30	0.78
33:g:258:ILE:HG13	33:g:267:VAL:HB	1.65	0.78
1:A:14:ASP:HB3	1:A:18:PHE:HE2	1.46	0.78
1:A:59:LEU:HD23	1:A:181:GLU:HG2	1.63	0.78
2:B:90:ASP:CG	2:B:91:VAL:H	1.91	0.78
3:C:158:LYS:O	3:C:158:LYS:CE	2.30	0.78
8:H:28:LEU:HG	8:H:32:MET:HE3	1.64	0.78
10:J:117:LEU:O	10:J:119:LEU:N	2.15	0.78
12:L:82:MET:HE1	34:i:363:G:H4'	1.63	0.78
14:N:21:SER:O	14:N:22:VAL:CG2	2.30	0.78
16:P:10:ARG:HE	16:P:11:THR:N	1.81	0.78
16:P:15:PHE:CZ	19:S:91:LYS:HD2	2.18	0.78
19:S:8:LYS:CA	26:Z:49:LEU:HD23	2.13	0.78
20:T:99:VAL:O	20:T:103:VAL:HG23	1.82	0.78
21:U:69:PRO:O	21:U:69:PRO:CD	2.30	0.78
25:Y:36:PRO:HD2	25:Y:39:GLU:OE1	1.83	0.78
26:Z:77:LEU:O	26:Z:78:LYS:CG	2.31	0.78
26:Z:103:HIS:O	26:Z:106:GLN:N	2.12	0.78
31:e:80:LEU:HD11	37:n:83:ASP:CB	1.86	0.78
33:g:144:ASP:O	33:g:145:GLU:CG	2.30	0.78
1:A:113:GLN:HE21	34:i:1347:G:H1'	0.66	0.78
1:A:183:LEU:HB2	1:A:189:ILE:CD1	2.13	0.78
6:F:204:ARG:OXT	15:O:72:TYR:CB	2.32	0.78
8:H:166:VAL:CG2	8:H:173:PHE:CE2	2.67	0.78
11:K:4:PRO:HB2	11:K:7:ASN:H	1.49	0.78
12:L:71:ARG:HD3	12:L:73:LEU:HD21	0.79	0.78
16:P:41:GLN:CD	16:P:41:GLN:C	2.52	0.78
16:P:49:LEU:CD1	16:P:51:ARG:CZ	2.61	0.78
16:P:77:LYS:O	16:P:78:THR:CG2	2.31	0.78
16:P:128:HIS:HE1	34:i:1516:C:C2	2.02	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:105:PHE:CE2	24:X:119:ARG:C	2.62	0.78
25:Y:44:LEU:CD1	25:Y:48:TYR:CD2	2.66	0.78
31:e:97:GLU:OE1	31:e:97:GLU:HA	1.83	0.78
33:g:194:TYR:OH	33:g:235:ILE:HD12	1.83	0.78
34:i:1701:G:H1'	34:i:1844:A:O3'	1.83	0.78
34:i:1701:G:H1'	34:i:1844:A:O2'	1.84	0.78
4:D:158:ILE:HD13	4:D:189:MET:SD	2.24	0.78
5:E:229:GLY:HA2	5:E:235:TRP:CD1	2.18	0.78
6:F:20:PHE:C	6:F:22:LYS:N	2.40	0.78
7:G:217:MET:O	7:G:221:LYS:N	2.11	0.78
8:H:164:ASN:OD1	8:H:167:GLU:CD	2.26	0.78
13:M:89:VAL:HG12	13:M:90:GLY:H	1.47	0.78
15:O:62:VAL:CG2	15:O:72:TYR:OH	2.32	0.78
15:O:125:LYS:HZ1	27:a:58:VAL:N	1.80	0.78
16:P:44:ARG:HD3	16:P:115:TYR:HE1	1.47	0.78
16:P:127:LYS:O	16:P:127:LYS:CE	2.30	0.78
17:Q:109:LYS:CG	17:Q:113:ILE:CD1	2.48	0.78
18:R:115:SER:O	18:R:116:ASN:CG	2.27	0.78
23:W:11:LEU:C	23:W:14:ILE:HG12	2.07	0.78
24:X:60:LYS:CG	24:X:116:PRO:CG	2.58	0.78
28:b:73:LEU:HD13	28:b:79:PHE:CD2	2.18	0.78
37:n:59:CYS:HA	37:n:89:ALA:O	1.84	0.78
2:B:81:PHE:O	2:B:82:ARG:HB2	1.83	0.78
2:B:113:MET:HE1	2:B:211:PHE:HE2	0.69	0.78
7:G:153:VAL:O	7:G:155:GLN:N	2.16	0.78
17:Q:19:ALA:HB2	17:Q:75:GLY:CA	2.13	0.78
25:Y:29:HIS:CD2	25:Y:34:THR:H	2.02	0.78
25:Y:114:MET:C	25:Y:124:ASN:ND2	2.41	0.78
26:Z:44:LEU:CD1	26:Z:44:LEU:O	2.30	0.78
34:i:1751:G:O2'	34:i:1752:G:C5'	2.32	0.78
37:n:78:LEU:CD2	37:n:93:LEU:HD21	2.13	0.78
3:C:192:ALA:O	3:C:195:PRO:CD	2.31	0.78
6:F:14:THR:HG23	17:Q:56:LEU:CB	2.00	0.78
6:F:112:LEU:O	6:F:116:ILE:CD1	2.31	0.78
6:F:141:VAL:HG11	29:c:47:LYS:HZ1	1.48	0.78
12:L:40:ILE:O	12:L:40:ILE:HD13	1.84	0.78
14:N:55:ARG:HH21	28:b:51:GLN:CD	1.91	0.78
14:N:115:LEU:O	14:N:119:GLU:HG3	1.84	0.78
20:T:11:GLN:HE21	20:T:62:ARG:NH1	1.80	0.78
20:T:18:LEU:HB2	20:T:134:ILE:CD1	2.14	0.78
20:T:84:ARG:NH2	20:T:84:ARG:HG3	1.97	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:135:HIS:HB3	32:f:138:ARG:CB	2.14	0.78
33:g:49:GLU:O	33:g:50:THR:CG2	2.30	0.78
34:i:190:A:H2'	34:i:191:C:OP1	1.84	0.78
34:i:837:G:O2'	34:i:838:C:H5'	1.83	0.78
1:A:190:SER:O	1:A:191:ARG:CG	2.30	0.77
2:B:105:LEU:O	2:B:106:THR:CG2	2.30	0.77
4:D:200:PRO:O	4:D:201:LYS:CG	2.33	0.77
5:E:129:ILE:HG12	5:E:139:LEU:HD22	1.08	0.77
7:G:85:ARG:CZ	25:Y:118:ARG:NE	2.47	0.77
7:G:181:THR:CB	7:G:182:PRO:HD2	2.13	0.77
9:I:82:VAL:HG11	9:I:202:ILE:HD11	1.64	0.77
10:J:12:THR:O	10:J:48:PHE:CD2	2.37	0.77
10:J:138:ARG:NH1	10:J:156:HIS:NE2	2.31	0.77
18:R:98:VAL:CG1	18:R:102:THR:OG1	2.32	0.77
33:g:215:GLN:OE1	33:g:231:ASP:OD1	2.02	0.77
33:g:284:PRO:O	33:g:284:PRO:CG	2.30	0.77
34:i:1635:A:H5'	35:j:40:C:H5"	1.67	0.77
1:A:202:TYR:O	1:A:203:PHE:CD1	2.37	0.77
3:C:43:LYS:HE3	3:C:43:LYS:CA	2.14	0.77
5:E:165:GLU:CA	5:E:165:GLU:OE2	2.29	0.77
6:F:15:PRO:HD3	17:Q:56:LEU:HB3	1.67	0.77
6:F:154:LEU:HD11	6:F:155:CYS:SG	2.24	0.77
7:G:50:VAL:CG1	7:G:111:LEU:CD2	2.61	0.77
7:G:142:ARG:HH21	7:G:152:ASP:H	1.31	0.77
11:K:4:PRO:HG3	11:K:7:ASN:ND2	1.99	0.77
11:K:36:ALA:O	11:K:38:LYS:HG3	1.84	0.77
12:L:7:GLU:CG	12:L:8:ARG:HG3	2.14	0.77
12:L:109:MET:SD	12:L:140:PHE:CD1	2.77	0.77
12:L:147:LYS:CG	12:L:148:ALA:N	2.29	0.77
15:O:56:VAL:HG13	15:O:81:VAL:CG2	2.14	0.77
17:Q:42:ILE:HD13	17:Q:51:LEU:CD1	2.12	0.77
20:T:77:LYS:HD2	20:T:94:ARG:NH1	2.00	0.77
23:W:14:ILE:HG13	23:W:15:ASN:N	1.98	0.77
25:Y:122:LYS:H	25:Y:122:LYS:HD2	1.48	0.77
28:b:41:TYR:CD2	28:b:41:TYR:N	2.49	0.77
33:g:17:TRP:H	33:g:36:ARG:HG3	1.50	0.77
33:g:277:THR:HG22	33:g:278:SER:N	1.98	0.77
34:i:127:C:N3	34:i:180:G:O2'	2.00	0.77
37:n:79:VAL:HG12	37:n:91:VAL:HA	1.66	0.77
3:C:87:LEU:HD21	3:C:115:ILE:CG2	2.09	0.77
3:C:155:TRP:CZ2	23:W:97:ARG:HD3	2.18	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:16:ILE:HD13	30:d:22:ARG:HH22	1.43	0.77
5:E:100:ARG:CD	5:E:102:ILE:CD1	2.59	0.77
24:X:35:ALA:HA	24:X:39:ASN:ND2	1.98	0.77
26:Z:62:VAL:CG1	26:Z:68:ILE:CD1	2.62	0.77
33:g:40:ILE:CD1	33:g:80:SER:HB3	2.13	0.77
1:A:28:THR:O	1:A:47:TYR:HE2	1.67	0.77
1:A:39:TYR:HA	1:A:50:ASN:HD21	1.48	0.77
1:A:198:MET:N	1:A:198:MET:SD	2.57	0.77
8:H:36:LEU:C	8:H:36:LEU:HD13	2.03	0.77
8:H:52:GLU:HG3	8:H:58:LYS:HB3	1.67	0.77
8:H:147:LYS:CE	8:H:153:LEU:CD1	2.61	0.77
10:J:10:ARG:HB3	10:J:10:ARG:HH11	1.44	0.77
10:J:94:LEU:HD12	10:J:95:ASP:N	2.00	0.77
15:O:32:HIS:CE1	15:O:96:LYS:HD2	2.20	0.77
29:c:60:GLU:CD	29:c:60:GLU:H	1.92	0.77
33:g:12:LYS:HD2	33:g:13:GLY:HA3	1.57	0.77
1:A:13:GLU:O	1:A:17:LYS:CE	2.29	0.77
4:D:22:ASN:OD1	4:D:37:VAL:HG22	1.84	0.77
4:D:74:GLN:NE2	4:D:75:LYS:HE2	1.99	0.77
5:E:139:LEU:HD11	5:E:154:ILE:HG21	1.64	0.77
5:E:180:LEU:HD13	5:E:228:ILE:CG1	2.15	0.77
7:G:63:MET:CE	7:G:106:LEU:HD13	2.12	0.77
8:H:145:ARG:CD	23:W:51:GLU:CG	2.60	0.77
14:N:19:ARG:NH1	28:b:84:HIS:HB2	2.00	0.77
17:Q:9:SER:HB2	17:Q:26:LYS:HG3	1.35	0.77
18:R:27:ASP:O	18:R:31:ASN:ND2	2.18	0.77
21:U:61:LEU:CD2	30:d:34:TYR:CE2	2.36	0.77
24:X:29:LYS:CE	24:X:34:THR:HG21	2.14	0.77
34:i:1635:A:O3'	35:j:39:C:H4'	1.85	0.77
37:n:69:VAL:HG22	37:n:94:LYS:HD3	1.66	0.77
4:D:197:LYS:H	4:D:199:GLY:N	1.82	0.77
5:E:174:LYS:O	5:E:179:ASN:ND2	2.18	0.77
7:G:188:LYS:HA	7:G:191:ARG:CD	2.13	0.77
8:H:8:ILE:HG23	8:H:9:VAL:N	1.98	0.77
9:I:112:TRP:HH2	9:I:117:TYR:OH	1.68	0.77
12:L:82:MET:HE2	34:i:363:G:H4'	1.65	0.77
17:Q:32:ILE:O	17:Q:39:LEU:HG	1.85	0.77
21:U:56:MET:HE1	21:U:88:LEU:CD2	2.14	0.77
25:Y:120:THR:HB	25:Y:122:LYS:HE3	1.62	0.77
28:b:63:LEU:O	28:b:63:LEU:HG	1.84	0.77
31:e:105:ARG:CB	31:e:105:ARG:CZ	2.59	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:274:VAL:O	33:g:274:VAL:CG2	2.31	0.77
34:i:1700:C:O2'	34:i:1845:A:O3'	2.03	0.77
37:n:100:ALA:HA	37:n:103:LEU:HG	1.66	0.77
1:A:39:TYR:CA	1:A:50:ASN:ND2	2.47	0.77
1:A:158:ASP:HB3	22:V:65:SER:CB	2.15	0.77
2:B:137:LEU:CD2	2:B:215:VAL:CB	2.63	0.77
7:G:5:ILE:HG22	7:G:124:LEU:HD21	1.66	0.77
11:K:95:ARG:HA	11:K:95:ARG:HE	1.49	0.77
13:M:14:VAL:C	13:M:16:THR:H	1.93	0.77
13:M:124:ILE:CA	13:M:127:TYR:HD2	1.97	0.77
15:O:113:GLN:CD	27:a:46:GLU:CD	2.53	0.77
17:Q:6:PRO:O	17:Q:6:PRO:CG	2.29	0.77
20:T:124:THR:HG23	20:T:126:GLN:H	1.47	0.77
23:W:38:LEU:HD23	23:W:41:MET:CE	2.14	0.77
24:X:129:SER:OG	24:X:132:ALA:HB3	1.83	0.77
24:X:133:LEU:CD2	24:X:139:GLU:O	2.33	0.77
24:X:142:ARG:HB2	24:X:142:ARG:NH1	1.93	0.77
25:Y:84:LYS:O	25:Y:84:LYS:CD	2.31	0.77
25:Y:117:VAL:HG21	25:Y:124:ASN:OD1	1.85	0.77
25:Y:120:THR:CG2	25:Y:122:LYS:HE2	2.14	0.77
26:Z:58:LEU:HD23	26:Z:77:LEU:HD11	1.66	0.77
27:a:80:HIS:CD2	36:k:12:A:H5"	2.19	0.77
37:n:62:ARG:HG3	37:n:92:ILE:CG2	2.14	0.77
1:A:5:LEU:HB2	22:V:41:LYS:CE	2.14	0.77
1:A:118:GLU:HB2	3:C:50:LYS:NZ	1.98	0.77
2:B:149:GLN:NE2	2:B:151:ARG:HG2	1.99	0.77
3:C:244:THR:CG2	3:C:244:THR:O	2.29	0.77
9:I:25:ARG:NE	9:I:27:TYR:HE2	1.83	0.77
11:K:39:ASN:O	11:K:40:VAL:CB	2.32	0.77
14:N:24:THR:OG1	28:b:84:HIS:CE1	2.33	0.77
15:O:26:ASN:HB3	15:O:91:THR:OG1	1.84	0.77
16:P:50:ARG:N	16:P:51:ARG:HD2	1.99	0.77
16:P:125:PRO:O	16:P:126:VAL:CG2	2.32	0.77
20:T:75:MET:CE	20:T:79:TYR:CE2	2.61	0.77
20:T:119:TRP:CZ3	34:i:1557:C:O2	2.37	0.77
24:X:51:VAL:CG1	24:X:70:VAL:CG1	2.52	0.77
26:Z:48:VAL:C	26:Z:83:LEU:HD11	2.06	0.77
27:a:34:LYS:O	27:a:35:ALA:CB	2.32	0.77
30:d:13:LYS:HG3	30:d:14:PHE:CD2	2.06	0.77
31:e:81:ALA:CA	37:n:82:ARG:HD2	1.79	0.77
33:g:46:THR:C	33:g:48:ASP:N	2.42	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:57:ARG:CZ	33:g:94:THR:O	2.33	0.77
34:i:1517:A:C2	34:i:1518:C:C5	2.73	0.77
2:B:148:ASN:O	18:R:124:VAL:HA	1.85	0.77
3:C:56:LYS:HD2	3:C:57:ASP:OD1	1.85	0.77
5:E:38:LEU:O	5:E:38:LEU:CD1	2.30	0.77
6:F:44:LYS:C	6:F:45:TYR:CD1	2.62	0.77
7:G:64:LYS:C	7:G:64:LYS:HD3	2.09	0.77
8:H:122:LEU:CD1	8:H:123:THR:CG2	2.62	0.77
9:I:82:VAL:CG1	9:I:202:ILE:CD1	2.62	0.77
10:J:90:GLY:C	10:J:91:LYS:O	2.24	0.77
17:Q:105:LYS:CD	17:Q:105:LYS:O	2.30	0.77
18:R:17:ILE:HG22	18:R:69:ILE:CD1	2.04	0.77
19:S:139:THR:O	19:S:141:ARG:N	2.17	0.77
22:V:31:SER:C	22:V:32:ILE:HG13	2.08	0.77
26:Z:92:LEU:HD11	26:Z:99:LEU:HD21	1.66	0.77
32:f:109:ASP:O	32:f:110:GLU:C	2.27	0.77
32:f:116:ARG:HH11	32:f:116:ARG:CG	1.98	0.77
2:B:57:ILE:O	2:B:59:SER:N	2.18	0.77
2:B:63:LYS:C	2:B:63:LYS:HD3	2.10	0.77
4:D:2:ALA:HB3	4:D:3:VAL:C	2.04	0.77
5:E:204:SER:O	5:E:205:PHE:HB2	1.84	0.77
5:E:248:ILE:O	10:J:72:PHE:CE1	2.34	0.77
9:I:141:ARG:HB2	9:I:144:LYS:N	2.00	0.77
13:M:60:MET:HB3	32:f:104:LYS:CD	2.14	0.77
15:O:76:LEU:O	29:c:5:ARG:HG3	1.85	0.77
15:O:129:ILE:HG21	27:a:44:ILE:HG12	1.65	0.77
16:P:127:LYS:NZ	16:P:128:HIS:N	2.33	0.77
18:R:122:PRO:HG2	34:i:1106:G:H21	1.50	0.77
20:T:39:LEU:CD1	20:T:99:VAL:HG21	2.14	0.77
20:T:101:ARG:NH1	34:i:1560:C:C5	2.53	0.77
21:U:62:ARG:HH11	21:U:64:THR:CG2	1.92	0.77
25:Y:37:LYS:O	25:Y:40:ILE:HG22	1.83	0.77
33:g:87:LEU:CD1	33:g:101:PHE:HB3	2.11	0.77
1:A:58:LEU:HD23	1:A:178:LEU:HD21	1.57	0.76
2:B:123:ALA:HB2	2:B:165:ARG:HG2	1.67	0.76
3:C:50:LYS:HB2	3:C:258:LEU:HB3	1.68	0.76
4:D:70:THR:CA	4:D:86:LEU:HD13	2.14	0.76
4:D:226:GLN:O	4:D:227:LYS:CB	2.31	0.76
5:E:139:LEU:HG	5:E:150:PRO:HG3	1.67	0.76
10:J:39:ASN:O	10:J:42:GLU:HB2	1.84	0.76
10:J:39:ASN:N	10:J:42:GLU:HG2	2.00	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:66:LYS:CA	10:J:71:LEU:HD11	2.15	0.76
12:L:10:TYR:CD2	12:L:12:LYS:CE	2.66	0.76
13:M:13:ASP:HB2	13:M:16:THR:HB	0.81	0.76
16:P:108:LYS:N	16:P:111:MET:HE3	1.99	0.76
17:Q:98:LYS:C	33:g:57:ARG:NH2	2.43	0.76
18:R:91:LEU:CB	18:R:92:ASP:CA	2.61	0.76
18:R:99:ASP:O	18:R:119:VAL:CG2	2.32	0.76
28:b:62:VAL:HG22	28:b:63:LEU:H	1.49	0.76
31:e:114:ARG:O	31:e:119:VAL:HG22	1.83	0.76
32:f:103:LEU:HD21	32:f:105:TYR:HB2	1.66	0.76
2:B:113:MET:HE3	2:B:211:PHE:CZ	2.18	0.76
5:E:126:VAL:CG2	5:E:156:MET:HA	2.16	0.76
7:G:157:VAL:HG13	7:G:158:VAL:C	2.10	0.76
8:H:169:LYS:CB	8:H:173:PHE:CE2	2.67	0.76
9:I:97:VAL:HG22	9:I:100:CYS:SG	2.25	0.76
14:N:62:GLN:CB	14:N:65:PHE:CD2	2.64	0.76
16:P:128:HIS:CE1	34:i:1516:C:C1'	2.63	0.76
20:T:38:LYS:HD2	20:T:45:LEU:C	2.10	0.76
28:b:81:ARG:CB	28:b:82:LYS:CA	2.63	0.76
30:d:36:LEU:HD21	30:d:52:PHE:CE2	2.21	0.76
31:e:117:VAL:C	31:e:119:VAL:HB	2.09	0.76
33:g:165:ILE:HG12	33:g:177:TRP:HB2	1.67	0.76
33:g:181:ASN:O	33:g:181:ASN:OD1	2.03	0.76
34:i:1203:G:N2	36:k:15:A:H8	1.84	0.76
35:j:69:G:C2'	35:j:70:C:H5'	2.14	0.76
1:A:27:GLY:O	1:A:47:TYR:HD2	1.69	0.76
3:C:127:LYS:HD3	3:C:142:LEU:HD11	1.65	0.76
3:C:241:TRP:CD2	23:W:68:ARG:CD	2.69	0.76
4:D:70:THR:HG22	4:D:86:LEU:CB	2.15	0.76
6:F:91:ARG:NE	6:F:91:ARG:CA	2.33	0.76
6:F:116:ILE:N	6:F:116:ILE:CD1	2.39	0.76
9:I:155:ASN:C	9:I:157:LYS:H	1.93	0.76
10:J:29:LEU:CD2	31:e:112:TYR:HB2	2.15	0.76
10:J:171:GLY:C	10:J:173:VAL:H	1.92	0.76
18:R:100:PRO:CB	18:R:119:VAL:CG2	2.61	0.76
23:W:93:LEU:HD21	23:W:128:PHE:CE2	2.20	0.76
25:Y:87:PRO:HG2	25:Y:90:ARG:HB2	1.68	0.76
30:d:7:TYR:O	30:d:8:TRP:CB	2.34	0.76
33:g:144:ASP:O	33:g:144:ASP:CG	2.29	0.76
34:i:1210:A:H61	34:i:1680:U:H3	1.32	0.76
1:A:11:LYS:CD	1:A:13:GLU:CG	2.62	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:105:LEU:CD1	2:B:213:ARG:HB2	2.09	0.76
4:D:222:PRO:C	4:D:223:ILE:HD12	2.09	0.76
5:E:98:ASN:HD22	5:E:119:ALA:HB2	1.47	0.76
6:F:144:LEU:HD23	29:c:49:PRO:CB	2.16	0.76
6:F:204:ARG:OXT	15:O:72:TYR:CG	2.39	0.76
6:F:204:ARG:NE	29:c:60:GLU:OE2	2.17	0.76
8:H:8:ILE:HG23	8:H:9:VAL:H	1.49	0.76
8:H:157:HIS:O	8:H:158:LEU:HD23	1.84	0.76
10:J:46:VAL:HG11	10:J:106:LEU:HD11	1.66	0.76
11:K:96:ARG:HG3	11:K:97:SER:N	2.00	0.76
15:O:20:GLN:CG	15:O:21:VAL:O	2.34	0.76
16:P:5:GLU:O	16:P:6:GLN:CB	2.33	0.76
22:V:24:ILE:C	22:V:24:ILE:HD12	2.11	0.76
22:V:53:TYR:CE2	22:V:72:LEU:HB3	2.20	0.76
25:Y:32:LYS:HG2	25:Y:33:ALA:O	1.85	0.76
25:Y:93:ARG:HH11	25:Y:93:ARG:CG	1.87	0.76
26:Z:85:ARG:HH11	26:Z:85:ARG:HG2	1.50	0.76
26:Z:92:LEU:HD11	26:Z:109:TYR:CZ	2.20	0.76
33:g:286:CYS:N	33:g:302:TYR:CE1	2.53	0.76
34:i:1820:G:H5'	37:n:43:GLY:C	2.07	0.76
1:A:37:TYR:OH	1:A:160:ALA:HB3	1.85	0.76
3:C:244:THR:CG2	3:C:246:PHE:CD2	2.65	0.76
4:D:175:VAL:CG1	4:D:182:LEU:HB2	2.16	0.76
9:I:29:LEU:HG	9:I:30:GLY:N	2.01	0.76
13:M:94:ILE:HG23	13:M:95:ASP:H	0.67	0.76
16:P:10:ARG:NE	16:P:11:THR:HB	2.01	0.76
16:P:86:LEU:HD23	16:P:86:LEU:N	2.01	0.76
33:g:298:LEU:O	33:g:298:LEU:CD1	2.32	0.76
3:C:253:GLU:HG3	3:C:254:PHE:CD2	2.21	0.76
5:E:86:PHE:O	5:E:87:MET:HB2	1.86	0.76
6:F:79:HIS:O	6:F:80:GLY:C	2.29	0.76
7:G:58:LYS:O	7:G:59:GLN:HB2	1.85	0.76
7:G:157:VAL:HG22	7:G:158:VAL:H	1.50	0.76
8:H:10:LYS:N	8:H:11:PRO:CD	2.47	0.76
8:H:36:LEU:O	8:H:36:LEU:CD1	2.28	0.76
16:P:83:MET:CE	16:P:116:LEU:HD11	2.02	0.76
16:P:118:GLU:O	19:S:119:ALA:HA	1.86	0.76
18:R:97:GLU:HA	18:R:116:ASN:HB2	1.67	0.76
19:S:34:LYS:C	19:S:103:LEU:HD23	2.10	0.76
24:X:95:GLU:CG	24:X:140:ARG:NH2	2.49	0.76
24:X:115:ILE:O	24:X:115:ILE:CG2	2.29	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:82:ARG:CG	37:n:82:ARG:NE	2.39	0.76
31:e:115:ARG:C	31:e:119:VAL:HG21	2.10	0.76
34:i:1276:G:H1	34:i:1313:U:H3	1.34	0.76
1:A:120:ARG:CG	3:C:251:TYR:HE2	1.98	0.76
2:B:66:VAL:HG22	2:B:87:ILE:HG22	0.76	0.76
3:C:115:ILE:HD13	3:C:144:LYS:HG3	1.67	0.76
4:D:112:GLY:O	4:D:113:LEU:HD12	1.86	0.76
5:E:62:LYS:CD	5:E:80:ILE:CD1	2.45	0.76
6:F:42:LYS:CG	6:F:42:LYS:O	2.28	0.76
11:K:45:VAL:O	11:K:49:MET:HG2	1.84	0.76
12:L:10:TYR:CE2	12:L:12:LYS:CE	2.67	0.76
14:N:16:LEU:HD21	14:N:62:GLN:NE2	2.01	0.76
17:Q:85:ARG:O	17:Q:88:ILE:HG12	1.86	0.76
19:S:33:ILE:O	19:S:36:VAL:HG13	1.85	0.76
19:S:39:ARG:HD3	20:T:38:LYS:NZ	1.99	0.76
33:g:71:ILE:CG2	33:g:72:SER:N	2.48	0.76
35:j:49:A:H2	35:j:64:C:N3	1.82	0.76
2:B:83:LYS:NZ	15:O:130:GLU:CD	2.43	0.76
2:B:113:MET:SD	2:B:211:PHE:CZ	2.79	0.76
4:D:45:ARG:HA	4:D:83:SER:OG	1.86	0.76
5:E:49:ARG:HD3	5:E:50:ASN:N	2.00	0.76
9:I:85:ALA:CB	12:L:8:ARG:NH1	2.46	0.76
9:I:202:ILE:O	9:I:206:LYS:HB3	1.86	0.76
10:J:38:ARG:NE	31:e:105:ARG:H	1.77	0.76
12:L:5:GLN:O	12:L:7:GLU:N	2.19	0.76
16:P:77:LYS:O	16:P:78:THR:HG23	1.85	0.76
24:X:1:MET:O	24:X:2:GLY:C	2.29	0.76
25:Y:62:THR:CG2	25:Y:69:THR:HG22	2.14	0.76
28:b:62:VAL:HG22	28:b:74:THR:HG21	1.68	0.76
32:f:103:LEU:C	32:f:105:TYR:N	2.32	0.76
34:i:1207:G:N2	34:i:1684:C:C6	2.54	0.76
36:k:20:U:O2	37:n:67:LYS:HB3	1.85	0.76
5:E:74:GLY:C	5:E:75:LYS:HG2	2.10	0.76
7:G:98:ARG:HD3	7:G:99:GLY:H	1.50	0.76
7:G:142:ARG:NH2	7:G:152:ASP:H	1.84	0.76
7:G:181:THR:CB	7:G:182:PRO:CD	2.63	0.76
14:N:16:LEU:CD2	14:N:17:PRO:HD2	2.15	0.76
14:N:125:LEU:CD1	14:N:129:TYR:HE2	1.92	0.76
16:P:52:LYS:O	16:P:52:LYS:CD	2.30	0.76
18:R:13:ALA:HB1	18:R:54:VAL:HG22	1.67	0.76
21:U:102:THR:O	21:U:104:ILE:O	2.04	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:91:LEU:CD2	26:Z:96:LEU:HD12	2.16	0.76
33:g:143:GLN:O	33:g:146:SER:HB2	1.84	0.76
1:A:85:ARG:NH2	1:A:201:LEU:HD12	2.00	0.76
2:B:67:PHE:HE1	15:O:48:SER:N	1.84	0.76
3:C:115:ILE:HD12	3:C:143:ALA:HB3	1.69	0.76
3:C:198:LEU:HD11	3:C:226:PHE:HD1	1.50	0.76
4:D:2:ALA:C	4:D:4:GLN:H	1.94	0.76
7:G:85:ARG:HD3	25:Y:118:ARG:CZ	2.16	0.76
11:K:43:LEU:O	11:K:44:HIS:C	2.28	0.76
12:L:134:LEU:HD23	12:L:134:LEU:O	1.86	0.76
13:M:85:LEU:HD22	13:M:106:CYS:SG	2.25	0.76
17:Q:12:VAL:CG1	17:Q:13:PHE:H	1.99	0.76
19:S:120:HIS:CE1	19:S:124:ARG:HH21	2.01	0.76
20:T:77:LYS:CB	20:T:94:ARG:CG	2.60	0.76
21:U:50:VAL:CG2	21:U:52:GLY:CA	2.58	0.76
32:f:136:PHE:O	32:f:138:ARG:N	2.19	0.76
1:A:141:ASN:O	22:V:32:ILE:HG21	1.85	0.75
4:D:105:LEU:CD2	4:D:184:ILE:CD1	2.56	0.75
11:K:27:VAL:CG1	11:K:43:LEU:HD21	2.02	0.75
11:K:84:HIS:CD2	13:M:27:ILE:HD11	2.21	0.75
11:K:98:ARG:HG2	11:K:98:ARG:NH1	1.92	0.75
15:O:136:PRO:C	15:O:138:ASP:N	2.44	0.75
18:R:16:ILE:HG22	18:R:24:LEU:HD11	1.68	0.75
18:R:105:MET:O	18:R:109:LEU:HD12	1.84	0.75
25:Y:33:ALA:HB2	34:i:571:U:O2'	1.85	0.75
25:Y:44:LEU:CD1	25:Y:48:TYR:HE2	1.93	0.75
33:g:113:PHE:CE2	33:g:117:ASN:HA	2.21	0.75
33:g:143:GLN:O	33:g:146:SER:CB	2.33	0.75
33:g:248:LEU:C	33:g:259:TRP:CZ3	2.64	0.75
34:i:1635:A:C1'	35:j:40:C:O4'	2.34	0.75
3:C:262:HIS:CG	3:C:263:THR:H	2.02	0.75
4:D:12:VAL:CG1	30:d:36:LEU:CG	2.65	0.75
6:F:187:SER:O	6:F:190:ILE:HG22	1.85	0.75
19:S:39:ARG:NH2	20:T:38:LYS:HG2	2.02	0.75
33:g:2:THR:HG23	33:g:3:GLU:CG	2.16	0.75
34:i:1750:C:H2'	34:i:1751:G:N7	2.01	0.75
2:B:30:TRP:HE1	15:O:17:LEU:HD21	1.49	0.75
2:B:71:LEU:CG	2:B:84:PHE:HE2	1.99	0.75
9:I:9:HIS:O	9:I:10:LYS:HG2	1.86	0.75
13:M:49:LEU:HD13	13:M:50:CYS:N	2.00	0.75
16:P:46:SER:O	16:P:49:LEU:CG	2.35	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:53:GLN:NE2	16:P:80:LEU:CD1	2.43	0.75
17:Q:78:VAL:CG1	17:Q:82:TYR:CE2	2.68	0.75
18:R:121:GLN:NE2	18:R:122:PRO:N	2.34	0.75
19:S:11:HIS:CD2	19:S:23:ARG:HH21	1.95	0.75
21:U:46:LYS:NZ	21:U:97:ILE:HG12	1.99	0.75
21:U:50:VAL:O	21:U:51:LYS:CD	2.30	0.75
23:W:42:MET:HE1	23:W:50:PHE:CD2	2.20	0.75
24:X:76:LYS:O	24:X:77:ASN:OD1	2.04	0.75
28:b:48:SER:OG	28:b:49:HIS:HD2	1.68	0.75
29:c:67:ARG:CA	29:c:68:LEU:HD23	2.16	0.75
33:g:191:HIS:CD2	33:g:195:LEU:HD11	2.21	0.75
33:g:298:LEU:CG	33:g:310:TRP:HB2	2.16	0.75
34:i:1751:G:H2'	34:i:1752:G:H8	1.51	0.75
1:A:66:VAL:CG1	1:A:186:ARG:CB	2.63	0.75
4:D:188:ILE:HG22	4:D:190:LEU:HD22	1.68	0.75
5:E:143:ASP:CG	5:E:145:ARG:HD2	2.11	0.75
5:E:185:GLY:N	5:E:189:LEU:HD13	2.01	0.75
9:I:69:SER:HB3	12:L:19:ASN:CG	2.10	0.75
15:O:34:PHE:CZ	15:O:100:THR:HA	2.20	0.75
15:O:121:ARG:HH22	29:c:40:ARG:HH12	1.31	0.75
16:P:74:GLU:O	16:P:75:VAL:HB	1.86	0.75
17:Q:135:PRO:HD2	17:Q:141:TYR:CD1	2.21	0.75
17:Q:138:ARG:CG	34:i:1644:U:H4'	2.16	0.75
18:R:20:TYR:CE2	18:R:38:ILE:HD13	2.22	0.75
20:T:39:LEU:HD11	20:T:56:ARG:NH2	2.01	0.75
22:V:55:ILE:HD13	22:V:65:SER:CA	2.14	0.75
24:X:52:LEU:HD11	24:X:53:GLU:HG2	1.68	0.75
25:Y:34:THR:C	25:Y:35:VAL:CG2	2.53	0.75
27:a:28:CYS:SG	27:a:74:CYS:CB	2.74	0.75
33:g:48:ASP:O	33:g:49:GLU:CD	2.30	0.75
33:g:54:ILE:HG23	33:g:55:PRO:HD2	1.68	0.75
34:i:184:G:H2'	34:i:185:C:C6	2.22	0.75
1:A:57:LYS:HZ1	22:V:70:LEU:CG	1.99	0.75
2:B:131:ASP:CG	2:B:180:ASP:HB2	2.11	0.75
4:D:70:THR:CG2	4:D:86:LEU:HB2	2.15	0.75
4:D:218:LEU:CD1	4:D:220:THR:CG2	2.47	0.75
6:F:32:ASP:HB2	6:F:117:ILE:HG21	1.67	0.75
9:I:165:GLN:OE1	9:I:172:LEU:HD23	1.87	0.75
10:J:37:LEU:C	31:e:105:ARG:HG3	2.12	0.75
13:M:14:VAL:O	13:M:15:ASN:OD1	2.04	0.75
17:Q:6:PRO:O	17:Q:6:PRO:CD	2.28	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:121:ARG:HG2	19:S:131:VAL:CG1	2.17	0.75
20:T:75:MET:O	20:T:78:ILE:HG22	1.87	0.75
26:Z:103:HIS:NE2	26:Z:105:ALA:HB3	2.00	0.75
27:a:66:LYS:HB2	27:a:68:TYR:CE2	2.22	0.75
27:a:101:PHE:O	27:a:103:PRO:HD3	1.86	0.75
28:b:33:MET:CE	28:b:79:PHE:HB2	1.86	0.75
33:g:170:TRP:C	33:g:172:LYS:H	1.93	0.75
33:g:306:LEU:HD22	33:g:308:ARG:HG3	1.67	0.75
34:i:1191:A:H2'	34:i:1192:A:H8	1.50	0.75
1:A:94:THR:HG21	1:A:182:VAL:CG2	2.17	0.75
5:E:31:PRO:HG2	5:E:38:LEU:HD13	1.69	0.75
5:E:166:THR:OG1	5:E:168:LYS:HG3	1.86	0.75
8:H:53:VAL:HG22	8:H:57:ARG:C	2.05	0.75
13:M:85:LEU:CA	13:M:88:TRP:CE3	2.67	0.75
14:N:23:PRO:HD2	14:N:26:LEU:CD2	2.16	0.75
16:P:107:ILE:HB	16:P:111:MET:SD	2.26	0.75
17:Q:112:LEU:CD1	17:Q:120:LEU:HD21	2.16	0.75
19:S:26:ILE:CD1	19:S:59:LEU:HD21	2.17	0.75
20:T:30:VAL:O	20:T:31:PRO:C	2.29	0.75
25:Y:33:ALA:C	25:Y:34:THR:OG1	2.28	0.75
25:Y:54:VAL:HG13	25:Y:76:TYR:O	1.87	0.75
25:Y:102:THR:HG21	25:Y:107:ARG:CZ	2.12	0.75
26:Z:92:LEU:HD11	26:Z:109:TYR:HE1	1.51	0.75
32:f:151:ASN:OD1	32:f:151:ASN:O	2.04	0.75
34:i:520:U:H2'	34:i:521:A:H5'	1.69	0.75
34:i:1826:A:O2'	34:i:1835:C:P	2.45	0.75
1:A:154:LEU:HD12	22:V:63:GLY:CA	2.16	0.75
1:A:185:MET:SD	22:V:44:GLY:HA2	2.25	0.75
2:B:31:TYR:CD1	2:B:94:LYS:CA	2.68	0.75
4:D:123:LEU:HD11	4:D:154:ASP:HB2	1.68	0.75
5:E:94:LYS:O	5:E:95:THR:HG23	1.87	0.75
7:G:16:ILE:HG21	7:G:45:TRP:CZ2	2.22	0.75
7:G:162:LEU:CD2	7:G:170:ARG:HB2	2.17	0.75
21:U:69:PRO:O	21:U:69:PRO:CG	2.29	0.75
21:U:82:MET:HE2	30:d:51:GLY:HA3	1.68	0.75
28:b:61:THR:CG2	28:b:62:VAL:N	2.49	0.75
34:i:1244:U:H1'	35:j:33:C:C5'	2.09	0.75
3:C:244:THR:O	3:C:245:VAL:C	2.28	0.75
4:D:21:LEU:HD13	4:D:48:ILE:CD1	2.15	0.75
6:F:41:VAL:CG2	6:F:42:LYS:CD	2.64	0.75
6:F:45:TYR:N	6:F:45:TYR:HD1	1.85	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:102:LEU:HD13	26:Z:110:THR:CG2	2.17	0.75
6:F:134:VAL:HG11	6:F:136:ARG:HH21	1.52	0.75
8:H:106:ARG:HD3	34:i:857:A:C6	2.21	0.75
8:H:145:ARG:CD	23:W:51:GLU:CD	2.59	0.75
9:I:8:TRP:HZ3	9:I:20:PRO:HA	1.51	0.75
9:I:141:ARG:HB2	9:I:144:LYS:CA	2.16	0.75
13:M:35:ILE:HB	13:M:61:TYR:HE2	1.52	0.75
15:O:31:CYS:SG	15:O:93:LEU:CB	2.75	0.75
21:U:44:LYS:O	21:U:47:ASN:HA	1.87	0.75
21:U:97:ILE:CG2	21:U:101:ILE:HD11	2.17	0.75
25:Y:99:LYS:O	25:Y:99:LYS:HG2	1.86	0.75
31:e:78:GLY:N	37:n:88:LYS:C	2.44	0.75
33:g:12:LYS:HD2	33:g:13:GLY:HA2	0.75	0.75
33:g:48:ASP:CG	33:g:49:GLU:OE1	2.29	0.75
33:g:59:LEU:HD12	33:g:90:TRP:CE3	2.21	0.75
1:A:141:ASN:HD21	22:V:29:HIS:HB3	1.49	0.75
2:B:105:LEU:CD1	2:B:110:MET:HE1	2.15	0.75
4:D:53:THR:HG22	4:D:91:VAL:HG23	1.68	0.75
8:H:32:MET:O	8:H:33:ASN:CG	2.30	0.75
10:J:16:PRO:HD3	10:J:44:TRP:CE2	2.22	0.75
12:L:17:PHE:CD1	12:L:18:GLN:N	2.54	0.75
12:L:80:MET:HG3	12:L:86:ILE:HG22	1.68	0.75
12:L:112:HIS:HB2	12:L:134:LEU:HD13	1.68	0.75
13:M:33:ARG:O	13:M:33:ARG:HD2	1.87	0.75
15:O:113:GLN:OE1	27:a:45:VAL:O	2.05	0.75
16:P:18:ARG:HD2	16:P:37:TYR:HB3	1.66	0.75
16:P:39:ALA:HA	16:P:42:ARG:CD	2.17	0.75
16:P:49:LEU:C	16:P:51:ARG:N	2.45	0.75
17:Q:19:ALA:HB2	17:Q:75:GLY:HA3	1.67	0.75
20:T:119:TRP:CE3	34:i:1557:C:O2'	2.31	0.75
21:U:108:PRO:O	21:U:108:PRO:CG	2.30	0.75
24:X:60:LYS:CG	24:X:116:PRO:HG2	2.11	0.75
33:g:282:GLU:O	33:g:283:PRO:C	2.29	0.75
34:i:1825:A:O4'	34:i:1845:A:C5	2.40	0.75
37:n:60:HIS:O	37:n:90:ASP:OD1	2.04	0.75
2:B:19:LYS:HZ3	2:B:19:LYS:CB	1.97	0.74
3:C:126:MET:HE1	3:C:223:LYS:CD	2.17	0.74
5:E:43:PRO:CD	5:E:46:ILE:HD12	2.17	0.74
6:F:63:LYS:CD	6:F:71:ARG:NH2	2.35	0.74
7:G:77:LEU:O	7:G:92:ARG:HG3	1.86	0.74
8:H:11:PRO:HG2	8:H:12:ASN:N	2.02	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:135:PHE:HD2	8:H:136:PRO:HD3	1.51	0.74
9:I:142:SER:CB	9:I:143:LYS:HZ2	2.00	0.74
10:J:89:GLU:HB3	10:J:92:MET:SD	2.26	0.74
12:L:113:LEU:CD1	12:L:120:VAL:HG21	2.13	0.74
13:M:12:MET:CE	13:M:120:ALA:CB	2.61	0.74
15:O:19:PRO:HG3	15:O:27:VAL:HG21	0.75	0.74
15:O:100:THR:HG22	15:O:104:ARG:HG3	1.68	0.74
16:P:15:PHE:CE1	19:S:91:LYS:CD	2.70	0.74
18:R:20:TYR:CD2	18:R:38:ILE:HD13	2.22	0.74
21:U:19:ARG:HG3	21:U:92:HIS:ND1	2.01	0.74
22:V:40:ASP:O	22:V:42:VAL:HG23	1.87	0.74
23:W:128:PHE:HE1	23:W:130:PHE:CD2	2.01	0.74
34:i:1826:A:C5'	34:i:1847:C:OP2	2.34	0.74
37:n:62:ARG:CA	37:n:91:VAL:O	2.34	0.74
2:B:31:TYR:HD1	2:B:94:LYS:CA	1.99	0.74
3:C:181:ILE:HB	3:C:208:TYR:HB2	1.68	0.74
4:D:44:THR:O	4:D:45:ARG:HD3	1.87	0.74
4:D:200:PRO:O	4:D:201:LYS:CB	2.34	0.74
6:F:14:THR:CG2	17:Q:56:LEU:HD13	2.16	0.74
10:J:155:LYS:HE3	10:J:156:HIS:CE1	2.22	0.74
11:K:43:LEU:C	11:K:45:VAL:N	2.43	0.74
13:M:94:ILE:N	13:M:101:ARG:HD3	2.02	0.74
16:P:110:GLU:H	16:P:110:GLU:CD	1.94	0.74
17:Q:47:LEU:HD23	17:Q:81:ILE:HD12	1.62	0.74
18:R:122:PRO:C	18:R:123:THR:OG1	2.27	0.74
19:S:34:LYS:CA	19:S:103:LEU:HD21	2.15	0.74
31:e:80:LEU:O	31:e:83:VAL:HG23	1.87	0.74
32:f:103:LEU:O	32:f:104:LYS:C	2.28	0.74
33:g:149:GLU:OE2	33:g:149:GLU:C	2.29	0.74
33:g:162:ASN:CG	33:g:163:PRO:HD2	2.11	0.74
33:g:282:GLU:OE2	33:g:284:PRO:HD3	1.87	0.74
34:i:181:A:C8	34:i:182:C:N4	2.55	0.74
1:A:147:LEU:HD22	1:A:163:CYS:SG	2.27	0.74
3:C:234:SER:O	22:V:23:ILE:HD13	1.86	0.74
4:D:193:ASP:O	4:D:194:PRO:O	2.05	0.74
6:F:33:ILE:HD13	29:c:35:MET:HE3	1.68	0.74
7:G:71:GLY:HA2	7:G:98:ARG:NH2	2.02	0.74
10:J:17:ARG:HG2	10:J:18:ARG:HD3	0.75	0.74
10:J:37:LEU:CG	10:J:42:GLU:HB2	2.13	0.74
11:K:83:LEU:HB2	11:K:85:LEU:HD21	1.63	0.74
13:M:67:ALA:HB2	32:f:108:VAL:HG21	1.67	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:52:LYS:HD3	16:P:52:LYS:C	2.06	0.74
16:P:107:ILE:CB	16:P:111:MET:SD	2.75	0.74
19:S:111:LEU:CD2	19:S:125:HIS:CE1	2.71	0.74
21:U:108:PRO:O	21:U:109:GLY:C	2.30	0.74
23:W:62:VAL:HB	28:b:8:LEU:CD2	2.03	0.74
24:X:125:VAL:C	24:X:128:VAL:H	1.93	0.74
31:e:127:LYS:CD	31:e:128:GLY:N	2.44	0.74
33:g:43:TRP:CZ3	33:g:55:PRO:HD3	2.22	0.74
33:g:284:PRO:O	33:g:284:PRO:HG2	1.88	0.74
1:A:112:ILE:C	34:i:1346:U:O2'	2.29	0.74
3:C:55:VAL:CB	3:C:82:PHE:HE2	1.92	0.74
3:C:241:TRP:CE2	23:W:68:ARG:CD	2.70	0.74
8:H:80:VAL:HA	8:H:83:LEU:CD2	2.17	0.74
9:I:36:THR:HG21	9:I:179:PRO:HB2	1.68	0.74
9:I:76:THR:CG2	9:I:77:ARG:N	2.51	0.74
16:P:51:ARG:N	16:P:51:ARG:CD	2.50	0.74
25:Y:7:ILE:CD1	25:Y:43:LYS:HD3	2.17	0.74
26:Z:103:HIS:O	26:Z:105:ALA:N	2.20	0.74
31:e:80:LEU:N	37:n:84:TYR:CD2	2.55	0.74
31:e:80:LEU:N	37:n:84:TYR:CE2	2.55	0.74
33:g:5:MET:HE2	33:g:312:VAL:HG13	1.67	0.74
34:i:1823:G:N2	34:i:1845:A:C1'	2.43	0.74
37:n:35:TYR:N	37:n:35:TYR:HD1	1.85	0.74
1:A:57:LYS:NZ	22:V:70:LEU:CG	2.50	0.74
3:C:142:LEU:C	3:C:145:LEU:CD2	2.59	0.74
5:E:87:MET:HE1	5:E:236:ILE:HD13	1.68	0.74
7:G:32:MET:SD	7:G:100:CYS:O	2.46	0.74
8:H:6:ALA:O	8:H:10:LYS:HG3	1.85	0.74
8:H:146:VAL:HB	23:W:42:MET:HE1	1.69	0.74
9:I:130:THR:HB	9:I:131:PRO:HD3	1.67	0.74
12:L:17:PHE:CD1	12:L:18:GLN:HB2	2.21	0.74
14:N:92:ILE:O	14:N:96:VAL:HG23	1.88	0.74
15:O:16:SER:O	15:O:88:LEU:O	2.05	0.74
16:P:49:LEU:CD1	16:P:51:ARG:NH2	2.51	0.74
16:P:108:LYS:O	16:P:111:MET:CG	2.34	0.74
16:P:124:LYS:O	16:P:124:LYS:HG3	1.84	0.74
17:Q:130:LYS:HD2	17:Q:135:PRO:O	1.88	0.74
21:U:41:ARG:O	21:U:45:GLU:CB	2.36	0.74
25:Y:29:HIS:HD1	25:Y:67:GLY:HA2	1.51	0.74
25:Y:51:THR:HB	25:Y:52:PRO:CD	2.14	0.74
33:g:277:THR:HG23	33:g:278:SER:N	2.02	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:125:THR:CG2	1:A:175:TRP:HE1	1.99	0.74
1:A:174:MET:O	1:A:178:LEU:HG	1.86	0.74
3:C:63:LEU:HB3	3:C:67:TYR:CZ	2.23	0.74
3:C:168:LYS:HE3	23:W:95:PRO:HA	1.69	0.74
5:E:122:LYS:HG2	5:E:164:LEU:HD21	1.70	0.74
14:N:13:GLN:OE1	28:b:21:LYS:CE	2.33	0.74
15:O:64:ALA:HB1	15:O:66:ARG:HE	1.53	0.74
19:S:8:LYS:C	26:Z:49:LEU:HD23	2.12	0.74
21:U:66:ARG:NH2	21:U:75:LYS:HA	2.02	0.74
30:d:7:TYR:O	30:d:8:TRP:HB2	1.85	0.74
31:e:115:ARG:O	31:e:119:VAL:CG1	2.34	0.74
32:f:102:VAL:HG12	32:f:103:LEU:CB	2.16	0.74
33:g:48:ASP:O	33:g:49:GLU:HG3	1.87	0.74
34:i:182:C:H2'	34:i:183:G:O4'	1.88	0.74
2:B:151:ARG:HD2	2:B:153:THR:CG2	2.17	0.74
3:C:192:ALA:O	3:C:195:PRO:HG2	1.87	0.74
4:D:97:CYS:C	4:D:99:ILE:N	2.45	0.74
6:F:14:THR:HG23	6:F:15:PRO:CD	2.16	0.74
8:H:23:ILE:CD1	8:H:27:LEU:HD23	2.12	0.74
8:H:106:ARG:HD3	34:i:857:A:C5	2.23	0.74
10:J:37:LEU:HD23	10:J:43:VAL:HG23	1.70	0.74
10:J:124:HIS:NE2	34:i:516:A:C5'	2.44	0.74
14:N:24:THR:CG2	28:b:84:HIS:NE2	2.50	0.74
14:N:53:ILE:HD13	28:b:52:THR:CG2	2.11	0.74
15:O:41:PHE:CD1	15:O:57:THR:HG22	2.23	0.74
16:P:53:GLN:HE21	16:P:80:LEU:HD22	1.52	0.74
16:P:69:PRO:HD2	16:P:70:MET:N	2.01	0.74
19:S:8:LYS:C	26:Z:49:LEU:CD2	2.61	0.74
19:S:47:LYS:HZ1	19:S:78:LYS:CB	2.01	0.74
25:Y:9:THR:HB	25:Y:23:MET:HG3	1.69	0.74
33:g:228:TYR:OH	33:g:261:LEU:HD12	1.87	0.74
1:A:145:ILE:CD1	1:A:159:ILE:CG2	2.55	0.74
6:F:122:ARG:NE	6:F:193:LYS:HZ3	1.83	0.74
10:J:138:ARG:HH12	10:J:156:HIS:CD2	2.05	0.74
10:J:169:ARG:HB3	10:J:175:ARG:HH11	1.53	0.74
15:O:121:ARG:NH2	29:c:40:ARG:HH12	1.86	0.74
17:Q:48:GLN:O	17:Q:51:LEU:HG	1.87	0.74
17:Q:146:ARG:HD2	35:j:34:A:OP1	1.58	0.74
18:R:122:PRO:HG2	34:i:1107:U:H1'	1.70	0.74
23:W:11:LEU:CD1	23:W:74:VAL:HB	2.17	0.74
25:Y:62:THR:HA	25:Y:69:THR:HG22	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:80:LEU:HD12	37:n:83:ASP:HB2	0.75	0.74
34:i:1203:G:N2	36:k:15:A:C8	2.56	0.74
1:A:158:ASP:HB3	22:V:65:SER:HB2	1.68	0.74
2:B:104:ASP:OD1	2:B:105:LEU:N	2.21	0.74
3:C:156:GLY:HA2	23:W:98:GLN:NE2	2.03	0.74
6:F:76:MET:HE2	6:F:169:ILE:CG2	2.16	0.74
7:G:164:LYS:C	7:G:166:GLY:N	2.44	0.74
10:J:46:VAL:HG11	10:J:102:ILE:HG23	1.68	0.74
12:L:6:THR:O	12:L:7:GLU:O	2.06	0.74
12:L:151:THR:O	12:L:153:LYS:CD	2.33	0.74
15:O:19:PRO:HG3	15:O:27:VAL:CG1	2.17	0.74
16:P:49:LEU:C	16:P:51:ARG:CD	2.61	0.74
19:S:6:PRO:O	19:S:7:GLU:HB2	1.84	0.74
22:V:40:ASP:CB	22:V:47:ASN:HD21	1.98	0.74
24:X:56:GLY:O	31:e:76:VAL:CG1	2.35	0.74
37:n:65:LEU:CG	37:n:92:ILE:O	2.35	0.74
1:A:66:VAL:HG11	1:A:186:ARG:CB	2.17	0.74
3:C:51:LEU:C	3:C:51:LEU:CD2	2.61	0.74
9:I:182:CYS:SG	34:i:296:U:C5	2.81	0.74
10:J:21:GLU:O	10:J:22:LYS:C	2.31	0.74
10:J:28:GLU:OE1	10:J:40:LYS:NZ	2.20	0.74
10:J:131:ARG:HH11	10:J:143:ASN:HD21	1.36	0.74
11:K:83:LEU:HB2	11:K:85:LEU:CG	2.18	0.74
12:L:95:TYR:HA	12:L:102:PHE:CG	2.22	0.74
17:Q:92:LEU:HG	17:Q:96:TYR:CE2	2.23	0.74
20:T:28:LEU:C	20:T:28:LEU:CD2	2.61	0.74
24:X:67:ARG:O	24:X:68:LYS:CG	2.32	0.74
25:Y:111:LYS:HZ3	25:Y:115:LYS:NZ	1.85	0.74
27:a:81:SER:HB3	36:k:12:A:OP1	1.88	0.74
33:g:168:CYS:HB3	33:g:198:VAL:HG21	1.69	0.74
1:A:45:GLY:O	1:A:46:ILE:CD1	2.36	0.73
2:B:225:LEU:O	2:B:229:MET:HG2	1.87	0.73
7:G:32:MET:O	7:G:33:ALA:HB3	1.87	0.73
9:I:104:ILE:HG13	9:I:105:ASP:H	1.52	0.73
10:J:143:ASN:C	10:J:144:ILE:HG13	2.13	0.73
12:L:47:PRO:HG2	12:L:116:CYS:SG	2.27	0.73
17:Q:50:LYS:HA	17:Q:53:GLU:OE2	1.87	0.73
22:V:19:ALA:CB	22:V:59:ILE:HD13	2.17	0.73
24:X:52:LEU:HG	24:X:71:ARG:O	1.88	0.73
25:Y:13:MET:HE3	25:Y:14:THR:CA	2.18	0.73
33:g:17:TRP:N	33:g:36:ARG:HG3	2.03	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:40:ILE:HD11	33:g:80:SER:CB	2.17	0.73
34:i:893:U:O2'	34:i:894:U:O4'	2.06	0.73
2:B:49:VAL:HG22	2:B:65:ARG:CZ	2.18	0.73
4:D:216:GLU:OE1	4:D:216:GLU:C	2.30	0.73
10:J:48:PHE:CZ	10:J:52:LYS:CE	2.66	0.73
12:L:80:MET:CE	12:L:120:VAL:HG12	2.18	0.73
13:M:12:MET:O	13:M:13:ASP:OD1	2.05	0.73
13:M:38:ALA:O	13:M:42:LEU:HD23	1.87	0.73
15:O:113:GLN:CD	27:a:46:GLU:OE2	2.31	0.73
18:R:84:TYR:O	18:R:85:VAL:CG2	2.35	0.73
21:U:50:VAL:CG2	21:U:52:GLY:N	2.52	0.73
21:U:109:GLY:O	21:U:110:VAL:HG22	1.86	0.73
30:d:13:LYS:CD	30:d:14:PHE:CD2	2.67	0.73
1:A:180:ARG:NH1	1:A:184:ARG:NH1	2.37	0.73
2:B:150:ILE:HA	18:R:124:VAL:HG13	1.69	0.73
3:C:149:PRO:CG	3:C:149:PRO:O	2.30	0.73
4:D:10:LYS:CE	4:D:14:ASP:OD2	2.35	0.73
5:E:180:LEU:HD13	5:E:228:ILE:HD11	1.70	0.73
10:J:114:VAL:CG1	10:J:120:ALA:HB2	2.13	0.73
17:Q:39:LEU:O	17:Q:42:ILE:HD11	1.88	0.73
18:R:24:LEU:HD12	18:R:58:MET:HE3	1.68	0.73
20:T:87:VAL:HG21	34:i:1660:G:C2	2.23	0.73
21:U:19:ARG:O	21:U:116:ILE:O	2.05	0.73
22:V:47:ASN:O	22:V:48:GLY:C	2.29	0.73
23:W:6:VAL:HG12	23:W:34:ILE:HD11	1.68	0.73
23:W:42:MET:HE3	23:W:50:PHE:HD2	1.47	0.73
33:g:177:TRP:CZ3	33:g:184:LEU:HB3	2.24	0.73
34:i:835:C:H2'	34:i:837:G:C4'	2.17	0.73
1:A:102:ARG:HH22	34:i:1375:A:C2'	2.01	0.73
2:B:152:LYS:HD2	18:R:126:MET:CE	2.15	0.73
5:E:229:GLY:CA	5:E:235:TRP:CD1	2.71	0.73
7:G:63:MET:HA	7:G:98:ARG:O	1.88	0.73
11:K:47:LYS:O	11:K:50:GLN:HG2	1.88	0.73
14:N:28:LEU:O	14:N:29:THR:HG22	1.88	0.73
15:O:44:VAL:CG1	15:O:53:ILE:HD11	2.18	0.73
15:O:106:LYS:NZ	27:a:69:VAL:HG13	2.03	0.73
16:P:108:LYS:HB3	16:P:110:GLU:CD	2.13	0.73
20:T:31:PRO:HB3	20:T:33:TRP:CZ3	2.22	0.73
21:U:47:ASN:CG	21:U:47:ASN:O	2.29	0.73
22:V:31:SER:O	22:V:32:ILE:HG13	1.87	0.73
24:X:105:PHE:CD2	24:X:119:ARG:HA	2.21	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:126:ALA:C	24:X:128:VAL:N	2.40	0.73
28:b:2:PRO:C	28:b:3:LEU:CD2	2.58	0.73
33:g:143:GLN:NE2	33:g:144:ASP:H	1.86	0.73
1:A:58:LEU:HD21	1:A:178:LEU:HD23	0.74	0.73
3:C:154:TYR:CZ	3:C:162:PRO:CD	2.71	0.73
3:C:222:ALA:O	3:C:225:THR:HG22	1.89	0.73
5:E:180:LEU:HD22	5:E:181:CYS:N	2.04	0.73
7:G:180:VAL:C	7:G:181:THR:HG22	2.12	0.73
10:J:127:ARG:NH1	10:J:145:PRO:HB3	2.03	0.73
13:M:11:VAL:O	13:M:12:MET:CB	2.36	0.73
19:S:82:TRP:HA	19:S:87:GLN:HE22	1.52	0.73
20:T:63:HIS:O	20:T:67:ARG:NE	2.22	0.73
20:T:124:THR:CG2	20:T:127:GLY:H	2.02	0.73
23:W:53:ILE:CG2	28:b:25:VAL:CG2	2.65	0.73
28:b:84:HIS:CD2	28:b:84:HIS:N	2.54	0.73
31:e:80:LEU:O	31:e:82:ARG:N	2.21	0.73
31:e:123:PHE:C	31:e:125:LYS:H	1.95	0.73
2:B:52:THR:HG22	2:B:58:ALA:HB3	1.71	0.73
3:C:154:TYR:CZ	3:C:162:PRO:HD3	2.23	0.73
6:F:14:THR:CG2	17:Q:56:LEU:CD1	2.56	0.73
7:G:93:LYS:HD3	7:G:95:LYS:HD2	1.70	0.73
8:H:9:VAL:HG13	8:H:44:ASN:OD1	1.86	0.73
8:H:85:LYS:C	8:H:85:LYS:CD	2.51	0.73
10:J:61:LEU:CD1	10:J:94:LEU:CD1	2.61	0.73
10:J:82:VAL:HG11	10:J:92:MET:HE2	1.70	0.73
10:J:100:LEU:CG	10:J:101:LYS:H	2.01	0.73
10:J:138:ARG:O	10:J:138:ARG:CG	2.36	0.73
15:O:97:LEU:HD11	15:O:112:ALA:HB1	1.70	0.73
23:W:15:ASN:ND2	23:W:19:LYS:HE3	2.03	0.73
23:W:90:GLN:CA	23:W:102:ILE:CD1	2.64	0.73
25:Y:9:THR:CB	25:Y:48:TYR:HH	2.01	0.73
34:i:1519:G:C5'	35:j:28:G:O2'	2.37	0.73
34:i:1596:A:H5'	34:i:1597:U:C5	2.24	0.73
1:A:143:PRO:CB	22:V:34:MET:SD	2.76	0.73
2:B:67:PHE:HE1	15:O:47:LEU:C	1.97	0.73
4:D:2:ALA:CB	4:D:3:VAL:HA	1.96	0.73
4:D:40:ARG:CZ	21:U:107:GLU:OE2	2.36	0.73
4:D:161:GLY:O	4:D:164:VAL:HG12	1.88	0.73
5:E:125:LYS:HB3	5:E:226:PHE:CE1	2.23	0.73
6:F:45:TYR:C	6:F:47:LYS:HE2	2.13	0.73
7:G:157:VAL:HG11	7:G:159:ARG:HG3	1.62	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:183:ARG:HH21	34:i:308:C:H41	0.75	0.73
10:J:61:LEU:HD13	10:J:94:LEU:HD11	1.70	0.73
10:J:172:ARG:NH2	34:i:552:U:C5	2.57	0.73
14:N:139:TRP:CE3	14:N:140:LYS:N	2.57	0.73
33:g:100:ARG:HG3	33:g:100:ARG:NH1	1.89	0.73
33:g:248:LEU:O	33:g:259:TRP:HZ3	1.70	0.73
34:i:1701:G:H22	34:i:1843:G:N2	1.87	0.73
1:A:193:HIS:ND1	1:A:194:PRO:CD	2.51	0.73
2:B:139:CYS:CB	2:B:168:MET:SD	2.76	0.73
4:D:192:TRP:C	4:D:196:GLY:H	1.90	0.73
5:E:87:MET:HE2	5:E:182:MET:HE1	1.69	0.73
6:F:142:SER:CB	29:c:50:VAL:HG22	2.19	0.73
8:H:119:SER:O	8:H:120:ARG:NE	2.22	0.73
10:J:50:LEU:HD22	10:J:54:ARG:HG3	1.68	0.73
10:J:100:LEU:CG	10:J:101:LYS:N	2.50	0.73
12:L:147:LYS:HG3	12:L:148:ALA:CB	2.17	0.73
14:N:54:LEU:CB	14:N:60:VAL:HG21	2.18	0.73
15:O:22:ALA:C	15:O:24:GLY:H	1.93	0.73
16:P:80:LEU:O	16:P:116:LEU:HD12	1.89	0.73
17:Q:19:ALA:HB2	17:Q:75:GLY:N	2.03	0.73
18:R:44:LYS:CG	18:R:47:ARG:NH2	2.50	0.73
19:S:42:HIS:CD2	20:T:45:LEU:HG	2.23	0.73
19:S:47:LYS:HZ1	19:S:78:LYS:HB2	1.53	0.73
21:U:51:LYS:CB	21:U:90:ASP:HB2	2.18	0.73
21:U:82:MET:HE2	30:d:51:GLY:CA	2.19	0.73
33:g:2:THR:C	33:g:3:GLU:HG2	2.13	0.73
34:i:1824:U:H1'	34:i:1845:A:C2	2.20	0.73
2:B:105:LEU:C	2:B:106:THR:HG23	2.14	0.73
4:D:74:GLN:HB2	4:D:84:VAL:CG1	2.19	0.73
8:H:9:VAL:HG12	8:H:44:ASN:CG	2.13	0.73
8:H:164:ASN:HA	8:H:167:GLU:HG3	1.71	0.73
9:I:141:ARG:O	9:I:143:LYS:CB	2.36	0.73
10:J:32:ILE:HG21	31:e:108:ARG:CG	2.19	0.73
10:J:100:LEU:HD11	10:J:104:ASP:OD2	1.85	0.73
15:O:30:VAL:HG23	15:O:32:HIS:CD2	2.23	0.73
16:P:10:ARG:HE	16:P:11:THR:HB	1.52	0.73
19:S:11:HIS:CD2	19:S:23:ARG:HH22	1.96	0.73
19:S:34:LYS:C	19:S:103:LEU:CD2	2.61	0.73
19:S:94:LYS:HD3	19:S:95:TYR:O	1.89	0.73
28:b:36:LYS:HE3	28:b:43:ILE:HD11	1.71	0.73
33:g:116:ASP:O	33:g:117:ASN:HB2	1.89	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:144:ASP:C	33:g:146:SER:N	2.39	0.73
33:g:168:CYS:HB3	33:g:198:VAL:CG2	2.18	0.73
34:i:1186:A:N3	34:i:1709:U:O2'	2.22	0.73
3:C:154:TYR:HE1	3:C:162:PRO:HG3	1.46	0.73
7:G:162:LEU:HD23	7:G:172:LYS:NZ	2.04	0.73
8:H:66:VAL:HG22	8:H:96:ALA:HB1	1.70	0.73
8:H:71:SER:O	8:H:74:LYS:HB2	1.88	0.73
9:I:157:LYS:CB	12:L:22:ARG:CZ	2.42	0.73
10:J:134:HIS:HE1	10:J:164:PRO:HD3	1.53	0.73
10:J:180:LYS:O	10:J:180:LYS:HD2	1.88	0.73
14:N:27:LYS:H	14:N:27:LYS:CD	1.96	0.73
15:O:119:LEU:O	15:O:122:SER:OG	2.07	0.73
19:S:42:HIS:CB	20:T:45:LEU:HD11	2.17	0.73
19:S:54:LYS:C	19:S:54:LYS:CB	2.61	0.73
26:Z:96:LEU:O	26:Z:112:ASN:CB	2.37	0.73
26:Z:103:HIS:HD2	26:Z:105:ALA:N	1.87	0.73
27:a:80:HIS:NE2	36:k:12:A:H5"	2.04	0.73
1:A:30:LEU:CD2	1:A:35:GLU:CG	2.51	0.72
2:B:72:ALA:N	2:B:79:VAL:HG23	2.03	0.72
4:D:59:LEU:HD12	4:D:60:GLY:C	2.14	0.72
5:E:151:ASP:HB3	7:G:212:LEU:HD21	1.69	0.72
5:E:175:PHE:C	5:E:175:PHE:CD2	2.67	0.72
6:F:204:ARG:NH1	29:c:59:LEU:HB3	2.04	0.72
6:F:204:ARG:HH12	29:c:59:LEU:CB	2.01	0.72
7:G:64:LYS:CD	7:G:64:LYS:O	2.33	0.72
9:I:62:VAL:CG2	9:I:75:LYS:NZ	2.52	0.72
13:M:44:LYS:NZ	32:f:127:GLY:HA3	2.03	0.72
14:N:25:TRP:CD1	28:b:83:GLN:CB	2.72	0.72
16:P:53:GLN:HE21	16:P:80:LEU:CD2	2.02	0.72
19:S:42:HIS:HD2	20:T:45:LEU:HD11	1.01	0.72
20:T:77:LYS:HA	20:T:94:ARG:HA	1.71	0.72
33:g:64:HIS:CE1	33:g:65:PHE:CD2	2.77	0.72
33:g:219:TRP:CH2	33:g:226:HIS:HD2	2.07	0.72
34:i:61:A:H2	34:i:326:A:C5	2.04	0.72
1:A:106:GLY:CA	34:i:1348:G:C5'	2.37	0.72
3:C:138:GLY:C	3:C:141:ILE:HG22	2.14	0.72
5:E:92:ILE:CB	5:E:97:GLU:OE1	2.34	0.72
6:F:86:LYS:O	6:F:89:THR:HG22	1.88	0.72
6:F:166:ILE:H	6:F:166:ILE:HD12	1.54	0.72
8:H:122:LEU:HD12	8:H:123:THR:N	2.00	0.72
9:I:4:SER:O	9:I:6:ASP:N	2.22	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:87:LEU:HD11	10:J:91:LYS:HB2	1.70	0.72
15:O:32:HIS:HE1	15:O:96:LYS:HD2	1.53	0.72
16:P:93:MET:SD	16:P:106:GLU:CB	2.77	0.72
20:T:30:VAL:O	20:T:32:GLU:N	2.22	0.72
21:U:56:MET:CE	21:U:88:LEU:HD23	2.18	0.72
31:e:115:ARG:N	31:e:119:VAL:HG21	2.02	0.72
33:g:149:GLU:OE2	33:g:149:GLU:HA	1.85	0.72
33:g:261:LEU:CA	33:g:264:LYS:HE3	2.18	0.72
34:i:1429:C:O2'	34:i:1430:C:H5'	1.87	0.72
3:C:155:TRP:CH2	23:W:97:ARG:CZ	2.71	0.72
4:D:35:SER:OG	4:D:97:CYS:SG	2.34	0.72
9:I:48:VAL:CG2	9:I:52:ASN:HB3	2.19	0.72
9:I:54:LYS:HG2	9:I:181:GLN:O	1.89	0.72
10:J:101:LYS:HG2	10:J:103:GLU:OE1	1.89	0.72
10:J:147:PHE:O	10:J:148:ILE:HB	1.87	0.72
11:K:36:ALA:C	11:K:38:LYS:H	1.95	0.72
16:P:44:ARG:NE	16:P:84:ILE:CD1	2.14	0.72
16:P:49:LEU:HA	16:P:51:ARG:CD	2.19	0.72
16:P:69:PRO:HD2	16:P:70:MET:H	1.52	0.72
18:R:42:PRO:HD2	18:R:43:SER:N	1.97	0.72
19:S:111:LEU:HD21	19:S:125:HIS:CE1	2.24	0.72
21:U:109:GLY:C	21:U:110:VAL:HG23	2.13	0.72
25:Y:7:ILE:HD11	25:Y:43:LYS:HB3	1.71	0.72
25:Y:56:PHE:CB	25:Y:58:PHE:HE2	2.02	0.72
25:Y:102:THR:HB	25:Y:104:ARG:N	2.04	0.72
27:a:50:VAL:O	27:a:54:SER:N	2.22	0.72
33:g:124:SER:HB3	33:g:126:ASP:OD1	1.89	0.72
34:i:1635:A:N1	35:j:30:G:H1'	2.04	0.72
37:n:35:TYR:N	37:n:35:TYR:CD1	2.56	0.72
4:D:198:ILE:HG13	4:D:198:ILE:O	1.89	0.72
5:E:191:ARG:HD3	5:E:245:ARG:HB2	1.71	0.72
10:J:30:LYS:CA	31:e:112:TYR:HE1	1.93	0.72
16:P:125:PRO:O	16:P:126:VAL:CB	2.37	0.72
20:T:29:LYS:HE3	20:T:29:LYS:CA	2.10	0.72
21:U:59:LYS:HB2	21:U:84:ILE:HG23	1.70	0.72
22:V:45:ARG:O	22:V:46:PHE:C	2.30	0.72
23:W:14:ILE:HG13	23:W:15:ASN:H	1.54	0.72
24:X:108:LYS:CB	24:X:110:HIS:CE1	2.72	0.72
25:Y:92:ALA:HA	25:Y:97:TYR:CB	2.19	0.72
32:f:111:ASN:C	32:f:111:ASN:OD1	2.30	0.72
33:g:2:THR:O	33:g:3:GLU:CG	2.37	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:162:ASN:HD21	33:g:163:PRO:HD2	1.53	0.72
1:A:32:PHE:HE1	1:A:33:GLN:HE21	0.84	0.72
2:B:25:PHE:CE1	15:O:88:LEU:HD13	2.24	0.72
2:B:126:ASP:OD1	2:B:136:HIS:CG	2.41	0.72
3:C:131:GLU:O	3:C:134:THR:HG22	1.90	0.72
3:C:195:PRO:HG3	3:C:221:PHE:CZ	2.23	0.72
5:E:18:TRP:CE3	5:E:46:ILE:HD11	2.24	0.72
6:F:204:ARG:C	15:O:72:TYR:CG	2.67	0.72
11:K:38:LYS:O	11:K:39:ASN:HB2	1.90	0.72
13:M:12:MET:C	13:M:13:ASP:OD1	2.33	0.72
14:N:92:ILE:HG22	14:N:150:VAL:HG21	1.68	0.72
17:Q:78:VAL:HG13	17:Q:82:TYR:HE2	1.54	0.72
19:S:106:LYS:HD2	19:S:109:GLU:OE1	1.90	0.72
25:Y:56:PHE:CD2	25:Y:86:GLU:OE2	2.43	0.72
25:Y:91:LEU:C	25:Y:97:TYR:HB3	2.14	0.72
1:A:154:LEU:HD22	1:A:157:VAL:HG23	1.72	0.72
2:B:25:PHE:HE1	15:O:53:ILE:HG22	1.54	0.72
5:E:92:ILE:HG22	5:E:95:THR:OG1	1.89	0.72
5:E:248:ILE:HD12	10:J:72:PHE:CD1	2.16	0.72
8:H:10:LYS:CE	8:H:16:PRO:C	2.62	0.72
11:K:18:GLU:O	11:K:92:ALA:HB2	1.89	0.72
11:K:41:PRO:CD	11:K:41:PRO:O	2.31	0.72
12:L:5:GLN:O	12:L:6:THR:C	2.31	0.72
13:M:86:GLY:CA	13:M:106:CYS:HB2	2.20	0.72
14:N:6:ALA:HB1	14:N:7:PRO:HD3	1.71	0.72
15:O:72:TYR:HE1	15:O:76:LEU:HD11	1.54	0.72
17:Q:85:ARG:HH22	17:Q:117:ARG:CD	2.03	0.72
17:Q:108:ILE:HA	17:Q:111:ILE:HD12	1.70	0.72
17:Q:146:ARG:CD	35:j:33:C:H5"	2.20	0.72
20:T:11:GLN:NE2	20:T:62:ARG:NH1	2.36	0.72
20:T:110:LEU:O	20:T:111:LYS:HB2	1.90	0.72
23:W:3:ARG:CZ	23:W:9:ASP:OD2	2.37	0.72
24:X:89:GLY:O	24:X:92:ASN:HB2	1.89	0.72
33:g:172:LYS:CE	33:g:192:THR:CB	2.67	0.72
34:i:1516:C:OP2	34:i:1516:C:H6	1.72	0.72
34:i:1736:U:O4	34:i:1787:A:C2	2.42	0.72
34:i:1825:A:N3	34:i:1846:C:C5'	2.48	0.72
3:C:54:LEU:HD21	3:C:254:PHE:HB3	1.71	0.72
3:C:123:GLY:C	3:C:226:PHE:CZ	2.67	0.72
4:D:141:LYS:HD2	4:D:179:GLN:CD	2.15	0.72
4:D:166:TYR:HD1	4:D:200:PRO:CB	2.02	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:23:LEU:O	5:E:24:THR:OG1	2.08	0.72
5:E:98:ASN:HD21	5:E:119:ALA:CA	2.02	0.72
5:E:229:GLY:CA	5:E:235:TRP:HD1	2.03	0.72
8:H:14:GLU:CD	8:H:16:PRO:HB2	2.13	0.72
9:I:25:ARG:NE	9:I:27:TYR:CE2	2.57	0.72
9:I:144:LYS:C	9:I:145:ILE:HG23	2.15	0.72
10:J:162:ARG:O	10:J:162:ARG:HG2	1.88	0.72
10:J:170:PRO:CA	10:J:174:LYS:HZ3	2.01	0.72
15:O:95:ILE:HD12	15:O:116:LEU:HD21	1.71	0.72
16:P:68:PRO:HB2	16:P:69:PRO:HD3	1.70	0.72
18:R:88:VAL:O	18:R:88:VAL:HG13	1.89	0.72
18:R:115:SER:O	18:R:116:ASN:OD1	2.08	0.72
20:T:77:LYS:HG2	20:T:92:PHE:CZ	2.24	0.72
23:W:90:GLN:HB2	23:W:94:LEU:HD12	1.71	0.72
25:Y:102:THR:CB	25:Y:107:ARG:HE	2.02	0.72
29:c:10:LYS:HD3	29:c:34:PHE:HE1	1.52	0.72
34:i:61:A:N3	34:i:326:A:C5	2.57	0.72
1:A:39:TYR:CB	1:A:50:ASN:HD21	2.01	0.72
2:B:30:TRP:NE1	15:O:17:LEU:HD21	2.05	0.72
2:B:67:PHE:CE1	15:O:47:LEU:CB	2.72	0.72
2:B:228:LEU:HD13	2:B:232:HIS:HD2	1.55	0.72
5:E:248:ILE:HD12	10:J:72:PHE:CZ	2.22	0.72
6:F:41:VAL:HG22	6:F:42:LYS:HD2	1.69	0.72
8:H:148:LEU:O	8:H:148:LEU:HD23	1.89	0.72
9:I:112:TRP:CZ3	9:I:117:TYR:HE2	2.08	0.72
16:P:5:GLU:H	16:P:10:ARG:HH11	1.35	0.72
16:P:119:PHE:HA	19:S:119:ALA:HA	1.72	0.72
17:Q:98:LYS:HE3	17:Q:99:TYR:CZ	2.24	0.72
19:S:138:THR:HA	19:S:141:ARG:HH22	1.43	0.72
20:T:42:HIS:CE1	20:T:83:GLN:HB3	2.25	0.72
25:Y:78:SER:HB3	25:Y:81:TYR:HD2	0.57	0.72
1:A:149:ASN:OD1	1:A:150:THR:N	2.20	0.72
3:C:79:ILE:HD13	3:C:147:ILE:HD12	0.79	0.72
4:D:123:LEU:HD21	4:D:154:ASP:HB2	1.71	0.72
8:H:31:GLU:OE2	8:H:41:ARG:NE	2.22	0.72
8:H:83:LEU:HD22	8:H:92:VAL:CG1	2.05	0.72
8:H:143:ARG:HA	23:W:52:ILE:O	1.90	0.72
9:I:4:SER:O	9:I:5:ARG:C	2.32	0.72
10:J:37:LEU:HG	10:J:42:GLU:CB	2.20	0.72
14:N:26:LEU:HD21	14:N:66:VAL:CG2	2.20	0.72
15:O:64:ALA:HB1	15:O:66:ARG:NE	2.04	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:39:ALA:O	16:P:42:ARG:HG3	1.89	0.72
16:P:41:GLN:CD	16:P:41:GLN:O	2.33	0.72
16:P:121:ILE:HG22	19:S:120:HIS:CB	2.20	0.72
20:T:111:LYS:HB2	20:T:126:GLN:NE2	2.03	0.72
22:V:78:ILE:HG23	22:V:79:VAL:N	2.04	0.72
23:W:22:LYS:O	23:W:65:LEU:HD11	1.89	0.72
23:W:101:PHE:HB2	23:W:129:PHE:CE1	2.25	0.72
25:Y:18:LEU:HB2	25:Y:20:ARG:NH1	2.00	0.72
25:Y:111:LYS:NZ	25:Y:115:LYS:HZ1	1.88	0.72
33:g:306:LEU:HD23	33:g:307:VAL:N	2.03	0.72
34:i:60:A:N3	34:i:326:A:O3'	1.95	0.72
34:i:181:A:C8	34:i:182:C:C5	2.78	0.72
34:i:181:A:O4'	34:i:182:C:H5'	1.90	0.72
34:i:1206:G:H2'	34:i:1207:G:H4'	1.72	0.72
34:i:1741:U:O2'	34:i:1742:C:H5'	1.90	0.72
1:A:169:HIS:HB3	1:A:203:PHE:CZ	2.24	0.72
7:G:24:LEU:O	7:G:26:THR:N	2.23	0.72
7:G:85:ARG:CZ	25:Y:118:ARG:HE	2.03	0.72
8:H:32:MET:O	8:H:33:ASN:CB	2.38	0.72
9:I:106:SER:OG	9:I:171:LEU:HG	1.90	0.72
10:J:84:ILE:HG13	10:J:86:VAL:HG23	1.72	0.72
10:J:164:PRO:HA	10:J:167:GLY:O	1.90	0.72
16:P:121:ILE:HG22	19:S:120:HIS:HA	1.71	0.72
16:P:128:HIS:NE2	34:i:1516:C:H1'	2.04	0.72
23:W:17:ALA:HB2	23:W:25:VAL:CG1	2.20	0.72
23:W:42:MET:CE	23:W:50:PHE:CE2	2.73	0.72
23:W:128:PHE:CD1	23:W:129:PHE:N	2.58	0.72
33:g:71:ILE:HG22	33:g:72:SER:O	1.89	0.72
1:A:28:THR:HG22	1:A:46:ILE:HD13	1.72	0.71
1:A:127:PRO:HG3	1:A:152:SER:HB3	1.72	0.71
3:C:200:LEU:HD12	3:C:201:MET:SD	2.30	0.71
7:G:63:MET:HE1	7:G:106:LEU:HD13	1.68	0.71
7:G:142:ARG:CD	7:G:147:LEU:HB2	2.07	0.71
8:H:10:LYS:HB3	8:H:20:GLU:OE1	1.90	0.71
8:H:157:HIS:NE2	8:H:188:GLU:OE1	2.23	0.71
9:I:82:VAL:HG11	9:I:202:ILE:HD13	1.69	0.71
14:N:55:ARG:HH22	28:b:51:GLN:NE2	1.88	0.71
16:P:84:ILE:HG22	16:P:86:LEU:HD22	1.71	0.71
17:Q:12:VAL:HG11	17:Q:90:LYS:HB2	1.70	0.71
17:Q:58:LEU:HD21	17:Q:111:ILE:HD12	1.70	0.71
18:R:13:ALA:CB	18:R:54:VAL:CG2	2.68	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:U:97:ILE:CG2	21:U:101:ILE:HD12	2.18	0.71
33:g:98:THR:O	33:g:99:ARG:CD	2.38	0.71
34:i:683:G:N2	34:i:684:A:C2	2.58	0.71
34:i:927:C:O5'	34:i:927:C:C6	2.42	0.71
7:G:180:VAL:O	7:G:181:THR:CG2	2.30	0.71
7:G:227:GLN:O	7:G:230:LYS:HG3	1.90	0.71
8:H:140:VAL:O	14:N:18:TYR:CD2	2.43	0.71
10:J:110:LEU:HB3	10:J:130:ILE:HD13	1.73	0.71
15:O:38:ASN:O	15:O:68:GLU:OE1	2.07	0.71
20:T:16:ARG:CG	20:T:16:ARG:HH11	2.03	0.71
24:X:54:LYS:HD2	24:X:91:LEU:HD12	1.72	0.71
34:i:196:U:O2	34:i:199:G:N1	2.24	0.71
3:C:241:TRP:CE2	23:W:68:ARG:HD3	2.25	0.71
4:D:16:ILE:HG21	30:d:22:ARG:CZ	2.19	0.71
4:D:21:LEU:HD13	4:D:48:ILE:HD11	1.71	0.71
4:D:162:ASP:CG	4:D:166:TYR:CE2	2.68	0.71
5:E:36:HIS:O	5:E:41:CYS:SG	2.47	0.71
6:F:93:VAL:O	6:F:97:PHE:CE1	2.43	0.71
11:K:62:PHE:HE1	11:K:67:PHE:CE2	2.07	0.71
12:L:71:ARG:CD	12:L:73:LEU:CD2	2.41	0.71
17:Q:53:GLU:OE1	17:Q:85:ARG:NH2	2.24	0.71
18:R:101:ASP:O	18:R:105:MET:N	2.24	0.71
19:S:52:LEU:HD12	19:S:53:THR:N	2.05	0.71
20:T:77:LYS:CA	20:T:94:ARG:CG	2.68	0.71
22:V:18:SER:OG	22:V:72:LEU:HD13	1.90	0.71
23:W:128:PHE:CZ	23:W:130:PHE:CE2	2.78	0.71
24:X:2:GLY:O	24:X:3:LYS:CB	2.35	0.71
31:e:120:VAL:N	31:e:121:PRO:CD	2.36	0.71
34:i:1825:A:C4	34:i:1845:A:H2'	2.25	0.71
7:G:183:ARG:CZ	34:i:307:G:N7	2.53	0.71
22:V:9:VAL:CG1	22:V:10:ASP:N	2.52	0.71
24:X:142:ARG:CG	24:X:142:ARG:NH1	2.30	0.71
32:f:85:TYR:O	32:f:86:THR:HG23	1.90	0.71
33:g:118:ARG:HA	33:g:118:ARG:NE	2.03	0.71
1:A:127:PRO:CG	1:A:152:SER:HB3	2.19	0.71
4:D:176:LEU:O	4:D:177:LEU:HD13	1.90	0.71
4:D:197:LYS:HB3	4:D:198:ILE:HG23	0.77	0.71
5:E:94:LYS:C	5:E:95:THR:HG23	2.15	0.71
7:G:66:GLY:HA2	34:i:1740:A:O2'	1.90	0.71
9:I:70:GLU:HB3	9:I:72:CYS:SG	2.30	0.71
11:K:83:LEU:O	11:K:84:HIS:CB	2.34	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:40:ILE:CG2	12:L:44:PHE:HB2	2.21	0.71
12:L:97:ARG:HG2	12:L:98:LYS:N	2.05	0.71
16:P:41:GLN:CD	16:P:84:ILE:CB	2.61	0.71
16:P:126:VAL:HG12	16:P:127:LYS:H	0.60	0.71
18:R:122:PRO:CG	34:i:1106:G:H21	2.03	0.71
19:S:84:LEU:HD22	19:S:97:GLN:HB2	1.73	0.71
19:S:137:LYS:HG2	19:S:138:THR:CG2	2.17	0.71
23:W:27:ILE:CG1	23:W:61:ILE:HB	2.19	0.71
23:W:93:LEU:HG	23:W:93:LEU:O	1.88	0.71
28:b:5:LYS:NZ	28:b:5:LYS:CB	2.53	0.71
33:g:143:GLN:CG	33:g:144:ASP:HB2	2.19	0.71
34:i:1503:G:H1'	34:i:1503:G:O5'	1.88	0.71
2:B:38:MET:CE	2:B:186:ASN:HD21	1.75	0.71
4:D:53:THR:CG2	4:D:91:VAL:HB	2.19	0.71
5:E:73:ASP:OD2	5:E:122:LYS:NZ	2.20	0.71
5:E:112:HIS:NE2	5:E:237:SER:HB2	2.05	0.71
5:E:124:CYS:HB2	5:E:162:ILE:HD11	1.71	0.71
5:E:153:LEU:HD11	5:E:172:PHE:CZ	2.20	0.71
10:J:84:ILE:HD12	10:J:86:VAL:HG21	1.70	0.71
11:K:83:LEU:CB	11:K:85:LEU:CG	2.68	0.71
18:R:1:MET:HB3	18:R:2:GLY:N	2.05	0.71
18:R:91:LEU:CB	18:R:92:ASP:HA	2.17	0.71
24:X:95:GLU:CD	24:X:140:ARG:HH22	1.96	0.71
1:A:32:PHE:CD1	1:A:33:GLN:HG2	2.26	0.71
1:A:118:GLU:HB2	3:C:50:LYS:HZ3	1.55	0.71
1:A:154:LEU:HD22	1:A:157:VAL:CG2	2.21	0.71
4:D:98:ALA:H	4:D:188:ILE:HD12	1.55	0.71
5:E:11:ARG:O	5:E:12:VAL:CB	2.38	0.71
7:G:71:GLY:CA	7:G:98:ARG:NH2	2.54	0.71
9:I:148:LYS:O	9:I:152:ARG:HG3	1.90	0.71
10:J:15:THR:CG2	10:J:44:TRP:CE3	2.56	0.71
15:O:30:VAL:HB	15:O:32:HIS:NE2	2.06	0.71
18:R:95:ILE:HA	18:R:114:LEU:HD13	1.73	0.71
22:V:53:TYR:CZ	22:V:72:LEU:HB3	2.26	0.71
30:d:13:LYS:CE	30:d:14:PHE:HE2	1.86	0.71
31:e:80:LEU:C	37:n:82:ARG:HD2	2.01	0.71
31:e:119:VAL:CA	31:e:121:PRO:CD	2.66	0.71
33:g:76:GLN:NE2	33:g:76:GLN:HA	2.03	0.71
34:i:431:C:H4'	34:i:1732:G:HO2'	1.55	0.71
34:i:1652:G:H1	34:i:1662:U:H3	1.39	0.71
36:k:21:U:H5'	37:n:67:LYS:NZ	2.06	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:180:ARG:CD	1:A:184:ARG:NH2	2.53	0.71
2:B:160:GLN:CD	2:B:205:TYR:CD1	2.67	0.71
3:C:84:GLY:HA2	3:C:87:LEU:CB	2.16	0.71
7:G:50:VAL:CG1	7:G:111:LEU:HD13	2.11	0.71
8:H:65:PRO:C	8:H:67:PRO:HD2	2.15	0.71
10:J:114:VAL:HG13	10:J:119:LEU:O	1.90	0.71
14:N:5:HIS:CD2	14:N:121:ARG:HE	2.08	0.71
18:R:77:GLU:O	18:R:81:ARG:HG3	1.90	0.71
19:S:15:VAL:HG13	19:S:68:ILE:CD1	2.20	0.71
26:Z:102:LYS:HA	26:Z:107:VAL:HA	1.72	0.71
34:i:194:C:H2'	34:i:195:C:C6	2.26	0.71
1:A:111:GLN:HB3	3:C:48:VAL:HG11	1.73	0.71
1:A:123:VAL:HG22	1:A:145:ILE:HB	1.71	0.71
1:A:125:THR:HG22	1:A:175:TRP:NE1	2.05	0.71
2:B:195:LYS:HE2	2:B:195:LYS:HA	1.73	0.71
4:D:193:ASP:O	4:D:194:PRO:C	2.28	0.71
7:G:71:GLY:HA2	7:G:98:ARG:HH21	1.55	0.71
10:J:178:ALA:O	10:J:182:GLN:CG	2.34	0.71
15:O:16:SER:O	15:O:17:LEU:HB3	1.90	0.71
15:O:17:LEU:HG	15:O:18:GLY:H	1.55	0.71
16:P:62:LYS:CG	16:P:65:LYS:HE2	2.18	0.71
19:S:58:GLU:O	19:S:59:LEU:CD1	2.32	0.71
21:U:117:ALA:C	21:U:118:ASP:O	2.28	0.71
25:Y:37:LYS:C	25:Y:40:ILE:HG22	2.15	0.71
28:b:36:LYS:HG3	28:b:78:SER:HG	1.53	0.71
33:g:172:LYS:NZ	33:g:192:THR:CG2	2.53	0.71
35:j:19:A:H5'	35:j:20:A:OP2	1.89	0.71
3:C:123:GLY:HA2	3:C:226:PHE:CZ	2.24	0.71
3:C:238:PRO:HA	3:C:241:TRP:CD1	2.26	0.71
5:E:2:ALA:O	5:E:3:ARG:HG2	1.90	0.71
6:F:144:LEU:CD2	29:c:49:PRO:HB2	2.21	0.71
6:F:167:LYS:CE	6:F:171:GLU:HG3	2.21	0.71
8:H:172:THR:O	8:H:176:VAL:HG23	1.91	0.71
10:J:87:LEU:HD11	10:J:91:LYS:HB3	1.72	0.71
16:P:44:ARG:HE	16:P:84:ILE:HD12	0.55	0.71
16:P:48:GLY:O	16:P:50:ARG:HD2	1.91	0.71
16:P:100:LYS:HD2	16:P:101:THR:HG23	1.72	0.71
20:T:42:HIS:CE1	20:T:93:SER:CA	2.73	0.71
23:W:11:LEU:O	23:W:14:ILE:HG13	1.89	0.71
23:W:20:ARG:HH22	34:i:1135:C:H1'	1.56	0.71
23:W:36:ARG:CD	23:W:110:ILE:HD12	2.13	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:93:ARG:O	25:Y:93:ARG:HD2	1.91	0.71
28:b:73:LEU:CD1	28:b:79:PHE:CD2	2.74	0.71
29:c:46:VAL:HG11	29:c:50:VAL:CG2	2.21	0.71
1:A:158:ASP:HB3	22:V:65:SER:OG	1.91	0.70
5:E:11:ARG:O	5:E:12:VAL:CG2	2.39	0.70
5:E:99:PHE:CD1	5:E:113:ARG:HG3	2.19	0.70
6:F:53:ALA:HB1	17:Q:125:ARG:HH21	1.56	0.70
7:G:78:SER:OG	7:G:81:HIS:CD2	2.44	0.70
9:I:82:VAL:CG1	9:I:202:ILE:HD13	2.21	0.70
11:K:16:PHE:CE2	11:K:79:LEU:C	2.69	0.70
16:P:11:THR:O	16:P:12:PHE:CB	2.33	0.70
16:P:84:ILE:CD1	16:P:115:TYR:CE1	2.74	0.70
18:R:90:ALA:CA	18:R:91:LEU:HD12	2.21	0.70
25:Y:29:HIS:NE2	25:Y:69:THR:HG23	2.06	0.70
25:Y:54:VAL:O	25:Y:54:VAL:HG12	1.89	0.70
26:Z:99:LEU:HD21	26:Z:109:TYR:HE1	1.47	0.70
31:e:75:LYS:C	31:e:76:VAL:CG2	2.64	0.70
1:A:186:ARG:O	1:A:186:ARG:CZ	2.38	0.70
2:B:209:ASP:O	2:B:210:VAL:CB	2.39	0.70
3:C:236:LEU:HD23	3:C:237:THR:O	1.90	0.70
4:D:226:GLN:HE21	4:D:226:GLN:C	1.99	0.70
5:E:98:ASN:CG	5:E:119:ALA:HB2	2.15	0.70
5:E:166:THR:OG1	5:E:168:LYS:CG	2.38	0.70
8:H:40:LEU:HD23	8:H:43:LEU:CG	2.21	0.70
8:H:166:VAL:HG22	8:H:173:PHE:HE2	1.55	0.70
10:J:138:ARG:CB	10:J:156:HIS:HB3	2.21	0.70
11:K:2:LEU:HD13	11:K:3:MET:CA	2.21	0.70
11:K:18:GLU:C	11:K:92:ALA:CB	2.64	0.70
15:O:125:LYS:HA	27:a:56:VAL:HG12	1.73	0.70
16:P:44:ARG:HH22	16:P:84:ILE:H	1.38	0.70
16:P:62:LYS:C	16:P:65:LYS:HG2	2.14	0.70
17:Q:112:LEU:HD13	17:Q:120:LEU:CD2	2.21	0.70
19:S:42:HIS:HE2	20:T:45:LEU:CD2	1.86	0.70
23:W:3:ARG:C	23:W:4:MET:SD	2.74	0.70
29:c:5:ARG:O	29:c:6:VAL:CG2	2.37	0.70
29:c:11:LEU:CB	29:c:35:MET:HE2	2.20	0.70
30:d:30:LEU:HD23	30:d:38:MET:O	1.89	0.70
31:e:80:LEU:H	37:n:82:ARG:HB2	0.94	0.70
33:g:286:CYS:CB	33:g:302:TYR:CE2	2.70	0.70
1:A:57:LYS:CE	22:V:70:LEU:HD21	2.21	0.70
2:B:79:VAL:HG23	2:B:79:VAL:O	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:97:CYS:SG	4:D:99:ILE:HG13	2.30	0.70
4:D:202:LYS:HB2	4:D:203:PRO:HD2	1.72	0.70
5:E:85:GLY:N	5:E:88:ASP:OD2	2.21	0.70
5:E:152:PRO:HG3	7:G:209:TYR:CE1	2.27	0.70
6:F:204:ARG:O	15:O:72:TYR:CD2	2.44	0.70
8:H:122:LEU:HD12	8:H:123:THR:H	1.56	0.70
9:I:191:GLU:O	9:I:192:GLY:O	2.09	0.70
10:J:37:LEU:HD21	10:J:43:VAL:N	2.05	0.70
10:J:130:ILE:HG23	10:J:135:ILE:CD1	2.17	0.70
18:R:91:LEU:CG	18:R:92:ASP:HA	2.21	0.70
20:T:21:PHE:CD1	20:T:21:PHE:C	2.70	0.70
24:X:125:VAL:O	24:X:126:ALA:HB3	1.90	0.70
25:Y:18:LEU:HB3	25:Y:20:ARG:CZ	2.21	0.70
3:C:149:PRO:O	3:C:149:PRO:HG2	1.92	0.70
6:F:66:CYS:SG	6:F:67:PRO:HD2	2.31	0.70
7:G:32:MET:SD	7:G:100:CYS:C	2.74	0.70
9:I:105:ASP:O	9:I:169:GLY:O	2.09	0.70
11:K:16:PHE:HD2	11:K:79:LEU:CB	1.86	0.70
22:V:32:ILE:HD12	22:V:60:ARG:HH11	1.55	0.70
23:W:36:ARG:HD3	23:W:110:ILE:CD1	2.16	0.70
24:X:66:ILE:HD13	31:e:79:SER:O	1.92	0.70
24:X:142:ARG:HH11	24:X:142:ARG:HG3	1.49	0.70
25:Y:35:VAL:HG12	25:Y:36:PRO:CD	2.21	0.70
33:g:2:THR:CG2	33:g:3:GLU:HG2	2.20	0.70
33:g:306:LEU:HD23	33:g:307:VAL:C	2.17	0.70
35:j:10:G:H1	35:j:24:U:H3	1.39	0.70
1:A:120:ARG:CG	3:C:251:TYR:CE2	2.74	0.70
2:B:77:ASP:O	2:B:79:VAL:CG2	2.27	0.70
5:E:123:LEU:HD12	5:E:161:GLN:HA	1.72	0.70
15:O:52:THR:CG2	34:i:949:C:H4'	2.21	0.70
15:O:55:ARG:C	15:O:56:VAL:HG12	2.16	0.70
17:Q:50:LYS:HG3	17:Q:85:ARG:HH21	1.57	0.70
20:T:116:ASP:HB3	20:T:120:GLY:O	1.92	0.70
21:U:25:THR:CG2	21:U:86:LYS:HG2	2.21	0.70
24:X:95:GLU:O	24:X:98:ASP:HB2	1.92	0.70
25:Y:29:HIS:HD1	25:Y:67:GLY:CA	2.02	0.70
26:Z:65:TYR:HD2	26:Z:68:ILE:HG12	1.55	0.70
33:g:165:ILE:CG2	33:g:179:LEU:HD21	2.21	0.70
33:g:212:LYS:HG3	33:g:235:ILE:HD12	1.74	0.70
34:i:522:C:C2'	34:i:523:A:H5'	2.20	0.70
34:i:841:G:H2'	34:i:842:G:C8	2.27	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1513:C:OP2	34:i:1514:U:H2'	1.92	0.70
36:k:19:U:C1'	37:n:70:TRP:CE2	2.74	0.70
3:C:66:ILE:HG23	3:C:71:LEU:HB2	1.74	0.70
3:C:167:CYS:SG	3:C:168:LYS:N	2.58	0.70
3:C:186:GLY:CA	10:J:54:ARG:NH2	2.55	0.70
4:D:212:GLU:HG3	18:R:19:LYS:HD2	1.72	0.70
6:F:35:LEU:HD12	6:F:117:ILE:HG23	1.72	0.70
10:J:37:LEU:CD2	10:J:43:VAL:HG23	2.22	0.70
11:K:60:GLU:OE1	11:K:67:PHE:HE1	1.68	0.70
12:L:82:MET:HB2	12:L:85:THR:HG23	1.74	0.70
13:M:131:LYS:O	13:M:132:LYS:HG3	1.90	0.70
15:O:99:ALA:N	15:O:133:THR:CG2	2.38	0.70
16:P:70:MET:O	16:P:71:GLU:CB	2.40	0.70
17:Q:17:LYS:HE2	34:i:1643:G:C6	2.26	0.70
17:Q:85:ARG:NH1	17:Q:117:ARG:CB	2.51	0.70
19:S:15:VAL:HG13	19:S:68:ILE:HD11	1.73	0.70
20:T:101:ARG:HG2	20:T:105:GLN:NE2	2.07	0.70
25:Y:114:MET:HA	25:Y:124:ASN:HD22	1.43	0.70
26:Z:44:LEU:O	26:Z:44:LEU:HD12	1.91	0.70
33:g:24:THR:HG23	33:g:27:PHE:O	1.92	0.70
33:g:88:ARG:CD	33:g:90:TRP:CZ2	2.75	0.70
9:I:142:SER:HB3	9:I:143:LYS:CG	2.20	0.70
10:J:180:LYS:C	10:J:180:LYS:HD2	2.15	0.70
11:K:21:MET:SD	11:K:49:MET:SD	2.90	0.70
13:M:67:ALA:HB1	32:f:114:ILE:HG22	1.74	0.70
17:Q:112:LEU:O	17:Q:116:ASP:CA	2.40	0.70
19:S:7:GLU:CA	19:S:7:GLU:OE2	2.39	0.70
23:W:106:THR:OG1	23:W:111:MET:HE2	1.92	0.70
24:X:128:VAL:HG11	24:X:133:LEU:HD21	1.73	0.70
25:Y:114:MET:HE3	25:Y:125:VAL:N	2.06	0.70
26:Z:94:LYS:C	26:Z:94:LYS:CD	2.63	0.70
31:e:125:LYS:O	31:e:126:LYS:HB2	1.90	0.70
33:g:280:LYS:O	33:g:281:ALA:C	2.33	0.70
36:k:20:U:H5'	37:n:70:TRP:CH2	2.26	0.70
8:H:169:LYS:HB2	8:H:173:PHE:HE2	1.51	0.70
8:H:190:PRO:HB2	8:H:191:GLU:CG	2.22	0.70
9:I:144:LYS:O	9:I:145:ILE:HG23	1.91	0.70
10:J:15:THR:HB	10:J:44:TRP:CZ3	2.27	0.70
10:J:46:VAL:HG12	10:J:102:ILE:HG23	1.72	0.70
11:K:39:ASN:O	11:K:40:VAL:HB	1.91	0.70
12:L:99:TYR:C	12:L:100:ASN:OD1	2.35	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:44:LYS:O	13:M:46:GLN:N	2.25	0.70
16:P:13:ARG:C	16:P:14:LYS:HG2	2.16	0.70
16:P:15:PHE:HE2	16:P:110:GLU:HB3	1.55	0.70
18:R:24:LEU:CD1	18:R:58:MET:HE3	2.22	0.70
18:R:98:VAL:HG12	18:R:100:PRO:N	2.07	0.70
21:U:49:LYS:C	21:U:50:VAL:HG12	2.16	0.70
24:X:138:LYS:C	24:X:139:GLU:OE2	2.35	0.70
31:e:113:ASN:HD22	34:i:542:G:P	2.15	0.70
33:g:17:TRP:CE3	33:g:36:ARG:NH2	2.60	0.70
34:i:551:A:C2	34:i:552:U:N3	2.59	0.70
34:i:1823:G:N2	34:i:1844:A:N3	2.19	0.70
35:j:72:A:H8	35:j:72:A:H5'	1.56	0.70
2:B:28:LYS:HD3	15:O:51:GLU:OE2	1.91	0.70
3:C:60:ILE:C	3:C:82:PHE:CE1	2.69	0.70
4:D:132:LYS:CG	4:D:191:PRO:HG3	2.19	0.70
4:D:217:ILE:O	4:D:218:LEU:CD2	2.38	0.70
6:F:14:THR:HG23	6:F:15:PRO:HD3	1.73	0.70
6:F:141:VAL:CG2	6:F:146:ARG:HG2	2.22	0.70
9:I:193:LYS:HG3	12:L:10:TYR:CE1	2.26	0.70
10:J:29:LEU:HD22	31:e:112:TYR:HB2	1.72	0.70
11:K:40:VAL:HG23	11:K:44:HIS:N	2.07	0.70
13:M:12:MET:HE1	13:M:17:ALA:O	1.92	0.70
16:P:52:LYS:CA	16:P:54:HIS:CD2	2.74	0.70
17:Q:8:GLN:CB	17:Q:99:TYR:CZ	2.71	0.70
19:S:8:LYS:HD3	19:S:8:LYS:N	2.07	0.70
20:T:4:VAL:HG12	20:T:8:ASP:CB	2.21	0.70
24:X:58:GLU:OE1	37:n:60:HIS:CD2	2.45	0.70
28:b:6:ASP:O	28:b:8:LEU:N	2.24	0.70
33:g:184:LEU:HD12	33:g:184:LEU:O	1.90	0.70
34:i:184:G:C5	34:i:185:C:C4	2.80	0.70
34:i:1824:U:C4'	34:i:1845:A:N1	2.55	0.70
1:A:186:ARG:HH11	1:A:186:ARG:C	1.99	0.70
2:B:83:LYS:HZ2	15:O:130:GLU:CD	1.97	0.70
3:C:51:LEU:HD13	3:C:78:ILE:CD1	2.17	0.70
5:E:180:LEU:HD13	5:E:228:ILE:CD1	2.22	0.70
5:E:195:ILE:HG22	5:E:196:THR:N	2.06	0.70
6:F:122:ARG:NH2	6:F:193:LYS:NZ	2.40	0.70
8:H:193:GLN:H	8:H:193:GLN:CD	2.00	0.70
9:I:103:LEU:CD2	9:I:172:LEU:HD13	2.21	0.70
10:J:38:ARG:HG2	31:e:105:ARG:HB2	0.77	0.70
19:S:15:VAL:HG12	19:S:16:LEU:H	1.57	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:120:VAL:O	31:e:121:PRO:HB2	1.90	0.70
33:g:172:LYS:HE3	33:g:192:THR:CB	2.21	0.70
33:g:298:LEU:HD12	33:g:298:LEU:C	2.17	0.70
34:i:1825:A:C4'	34:i:1846:C:O2'	2.40	0.70
1:A:172:GLY:HA3	1:A:203:PHE:CD1	2.27	0.69
2:B:124:HIS:CD2	2:B:136:HIS:CE1	2.80	0.69
3:C:122:VAL:CG1	3:C:202:ALA:HA	2.22	0.69
5:E:62:LYS:HD3	5:E:80:ILE:HD11	0.80	0.69
6:F:18:LYS:HD2	17:Q:57:LEU:CD2	2.21	0.69
6:F:76:MET:CE	6:F:169:ILE:CG2	2.60	0.69
8:H:149:ASP:O	8:H:149:ASP:CG	2.34	0.69
10:J:26:ASP:CB	31:e:116:PHE:HZ	2.05	0.69
10:J:66:LYS:HA	10:J:71:LEU:CD1	2.19	0.69
10:J:87:LEU:CD1	10:J:91:LYS:CB	2.69	0.69
11:K:18:GLU:C	11:K:92:ALA:HB2	2.17	0.69
12:L:149:ALA:CB	12:L:156:GLN:CD	2.26	0.69
13:M:59:PRO:O	13:M:62:VAL:HG22	1.90	0.69
14:N:27:LYS:H	14:N:27:LYS:HE2	1.54	0.69
14:N:142:GLU:CD	14:N:144:SER:OG	2.34	0.69
23:W:78:ARG:CD	23:W:126:LEU:HD23	2.22	0.69
24:X:40:PRO:HB3	24:X:81:ILE:CD1	2.15	0.69
24:X:108:LYS:HB3	24:X:110:HIS:CE1	2.27	0.69
25:Y:54:VAL:CG2	25:Y:79:LEU:CD2	2.70	0.69
26:Z:92:LEU:CD1	26:Z:99:LEU:HD21	2.21	0.69
33:g:261:LEU:O	33:g:264:LYS:CD	2.40	0.69
34:i:1825:A:O4'	34:i:1845:A:C6	2.44	0.69
1:A:42:LYS:HG3	18:R:105:MET:CE	2.21	0.69
4:D:197:LYS:CB	4:D:198:ILE:HG12	2.11	0.69
6:F:128:ILE:HD11	29:c:68:LEU:HB2	1.75	0.69
7:G:159:ARG:HH21	7:G:171:THR:HA	1.57	0.69
8:H:117:PRO:O	8:H:120:ARG:N	2.24	0.69
8:H:145:ARG:CD	23:W:51:GLU:OE1	2.40	0.69
10:J:15:THR:HG22	10:J:44:TRP:HE3	1.48	0.69
10:J:179:LYS:HA	10:J:182:GLN:OE1	1.92	0.69
12:L:112:HIS:CD2	12:L:134:LEU:HD11	2.27	0.69
15:O:30:VAL:CG2	15:O:32:HIS:NE2	2.55	0.69
16:P:32:GLN:HA	16:P:35:GLN:OE1	1.92	0.69
16:P:49:LEU:HD13	16:P:51:ARG:HH21	1.56	0.69
17:Q:12:VAL:CG1	17:Q:13:PHE:N	2.55	0.69
18:R:37:GLU:OE1	18:R:38:ILE:CG2	2.39	0.69
18:R:90:ALA:HA	18:R:91:LEU:HD12	1.74	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:V:40:ASP:O	22:V:40:ASP:CG	2.33	0.69
24:X:32:LEU:O	24:X:37:LYS:HE3	1.91	0.69
28:b:12:PRO:HA	28:b:16:LYS:HE2	1.75	0.69
31:e:82:ARG:CG	37:n:82:ARG:NH2	2.55	0.69
1:A:102:ARG:CZ	34:i:1375:A:O2'	2.40	0.69
3:C:50:LYS:CE	3:C:251:TYR:CE1	2.67	0.69
3:C:126:MET:SD	34:i:1352:G:H4'	2.33	0.69
6:F:19:LEU:HD22	6:F:24:SER:CA	2.21	0.69
8:H:16:PRO:O	8:H:20:GLU:CD	2.36	0.69
10:J:91:LYS:O	10:J:93:LYS:N	2.25	0.69
12:L:147:LYS:HD2	12:L:149:ALA:N	2.07	0.69
13:M:13:ASP:O	13:M:16:THR:CA	2.41	0.69
16:P:98:ASN:O	16:P:122:THR:OG1	2.10	0.69
18:R:67:ARG:HH11	34:i:1371:G:H5'	1.57	0.69
18:R:102:THR:HA	18:R:105:MET:HB2	1.73	0.69
22:V:67:ASP:O	22:V:68:SER:C	2.35	0.69
25:Y:55:ILE:CD1	25:Y:75:ILE:CD1	2.70	0.69
29:c:5:ARG:N	29:c:5:ARG:NE	2.40	0.69
30:d:13:LYS:CE	30:d:14:PHE:CD2	2.75	0.69
33:g:46:THR:OG1	33:g:48:ASP:HB2	1.91	0.69
34:i:197:U:C5	34:i:198:U:C4	2.80	0.69
34:i:1519:G:C5'	35:j:29:G:H5'	2.13	0.69
1:A:113:GLN:HG3	34:i:1347:G:C4'	2.22	0.69
2:B:93:GLY:C	2:B:94:LYS:CD	2.65	0.69
3:C:234:SER:C	22:V:23:ILE:HD13	2.18	0.69
7:G:196:LYS:O	7:G:199:THR:OG1	2.08	0.69
8:H:12:ASN:HB3	8:H:46:THR:OG1	1.92	0.69
8:H:106:ARG:CD	34:i:857:A:C5	2.75	0.69
8:H:146:VAL:HG23	23:W:50:PHE:CE1	2.21	0.69
9:I:136:ILE:HG23	9:I:139:LYS:HE2	1.72	0.69
9:I:142:SER:HB2	9:I:143:LYS:HZ2	1.53	0.69
10:J:87:LEU:CD1	10:J:91:LYS:HB3	2.22	0.69
11:K:40:VAL:CG2	11:K:41:PRO:HD2	2.18	0.69
15:O:76:LEU:O	29:c:5:ARG:CG	2.40	0.69
16:P:108:LYS:HZ2	19:S:118:ARG:HH12	1.37	0.69
19:S:39:ARG:CD	20:T:38:LYS:HE3	2.05	0.69
31:e:82:ARG:HG3	37:n:82:ARG:NH2	2.07	0.69
31:e:114:ARG:HA	31:e:118:ASN:HB2	1.72	0.69
3:C:43:LYS:HA	3:C:43:LYS:CE	2.17	0.69
3:C:141:ILE:HG23	3:C:142:LEU:N	2.06	0.69
4:D:132:LYS:HB2	4:D:191:PRO:CD	2.19	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:18:TRP:CE3	5:E:46:ILE:CD1	2.75	0.69
5:E:180:LEU:HD13	5:E:228:ILE:HG13	1.74	0.69
6:F:40:ALA:N	6:F:68:ILE:HG23	2.08	0.69
6:F:122:ARG:HH21	6:F:193:LYS:HZ1	1.40	0.69
7:G:57:ASP:OD2	7:G:98:ARG:HG2	1.91	0.69
8:H:6:ALA:HB1	8:H:10:LYS:NZ	2.07	0.69
8:H:191:GLU:OE1	8:H:193:GLN:OE1	2.10	0.69
12:L:82:MET:HB2	12:L:85:THR:HG22	1.74	0.69
14:N:28:LEU:C	14:N:29:THR:CG2	2.61	0.69
14:N:53:ILE:CD1	28:b:52:THR:HG22	2.21	0.69
16:P:8:LYS:O	16:P:11:THR:CG2	2.37	0.69
19:S:50:ILE:CG1	19:S:63:GLU:HG2	2.22	0.69
21:U:47:ASN:HD22	21:U:47:ASN:N	1.88	0.69
24:X:99:GLU:C	24:X:100:VAL:HG13	2.18	0.69
25:Y:97:TYR:HD1	25:Y:98:GLU:N	1.89	0.69
27:a:45:VAL:HG23	27:a:46:GLU:H	1.56	0.69
32:f:97:LYS:HB2	32:f:97:LYS:HZ2	1.56	0.69
33:g:12:LYS:CD	33:g:13:GLY:N	2.51	0.69
33:g:76:GLN:HA	33:g:76:GLN:HE21	1.56	0.69
33:g:93:THR:CB	33:g:94:THR:HG23	2.22	0.69
34:i:192:U:H3	34:i:203:G:H1	1.41	0.69
34:i:1775:A:H2'	34:i:1776:G:C8	2.28	0.69
5:E:139:LEU:HD11	5:E:154:ILE:CG2	2.22	0.69
13:M:19:GLN:HG2	13:M:88:TRP:CD1	2.27	0.69
14:N:16:LEU:HD22	14:N:17:PRO:CD	2.21	0.69
14:N:114:ARG:HH21	14:N:114:ARG:HG2	1.57	0.69
16:P:121:ILE:HG22	19:S:120:HIS:HB2	1.74	0.69
27:a:102:ARG:O	27:a:103:PRO:C	2.35	0.69
28:b:83:GLN:HA	28:b:83:GLN:HE21	1.56	0.69
33:g:298:LEU:HD11	33:g:310:TRP:HB2	1.75	0.69
34:i:1244:U:N1	35:j:33:C:H5'	2.07	0.69
34:i:1820:G:H5"	37:n:43:GLY:CA	2.17	0.69
35:j:39:C:H2'	35:j:40:C:H6	1.58	0.69
2:B:209:ASP:O	2:B:210:VAL:CG2	2.40	0.69
4:D:40:ARG:NH1	21:U:107:GLU:OE2	2.26	0.69
4:D:66:ILE:O	4:D:70:THR:HG23	1.92	0.69
4:D:211:VAL:HG23	18:R:38:ILE:CA	2.21	0.69
4:D:215:ASP:O	4:D:216:GLU:HB2	1.93	0.69
5:E:55:ALA:C	5:E:56:LEU:HD23	2.17	0.69
5:E:126:VAL:HG22	5:E:157:ASN:H	1.57	0.69
5:E:163:ASP:O	5:E:164:LEU:HB2	1.91	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:28:VAL:HG13	6:F:110:GLN:CG	2.22	0.69
7:G:212:LEU:CA	7:G:215:LYS:HE2	2.18	0.69
8:H:135:PHE:HB3	8:H:136:PRO:CD	2.23	0.69
10:J:35:TYR:C	10:J:37:LEU:N	2.41	0.69
10:J:133:ARG:HD3	10:J:141:VAL:HG11	1.73	0.69
11:K:40:VAL:CG2	11:K:41:PRO:O	2.38	0.69
11:K:46:MET:HA	11:K:69:TRP:CH2	2.28	0.69
16:P:52:LYS:N	16:P:54:HIS:NE2	2.41	0.69
16:P:128:HIS:CD2	34:i:1517:A:O5'	2.46	0.69
24:X:29:LYS:CD	24:X:34:THR:CB	2.69	0.69
25:Y:19:GLN:HG2	25:Y:81:TYR:HD1	1.53	0.69
25:Y:51:THR:CB	25:Y:52:PRO:HD3	2.17	0.69
31:e:80:LEU:HD12	37:n:83:ASP:CG	2.15	0.69
33:g:32:LEU:HB2	33:g:71:ILE:CD1	2.16	0.69
34:i:1206:G:C3'	34:i:1207:G:O5'	2.36	0.69
1:A:106:GLY:HA3	34:i:1347:G:C2'	2.15	0.69
1:A:118:GLU:CB	3:C:50:LYS:HZ3	1.90	0.69
4:D:103:GLU:HA	4:D:103:GLU:OE2	1.91	0.69
4:D:132:LYS:HB2	4:D:191:PRO:HG3	0.70	0.69
4:D:192:TRP:CE3	4:D:196:GLY:CA	2.65	0.69
5:E:74:GLY:O	5:E:75:LYS:HG2	1.93	0.69
7:G:50:VAL:HG11	7:G:111:LEU:CD2	2.22	0.69
7:G:64:LYS:CE	7:G:67:VAL:HG13	2.22	0.69
8:H:6:ALA:CB	8:H:10:LYS:HD3	2.22	0.69
11:K:14:LEU:CD2	11:K:35:LEU:CD1	2.71	0.69
11:K:32:HIS:ND1	11:K:33:PRO:HD2	2.07	0.69
11:K:64:TRP:C	11:K:65:ARG:CG	2.66	0.69
13:M:12:MET:CE	13:M:17:ALA:O	2.40	0.69
13:M:18:LEU:HD22	13:M:22:LEU:CG	2.22	0.69
16:P:67:ALA:CB	16:P:73:PRO:HB3	2.23	0.69
18:R:21:TYR:CG	18:R:71:ILE:HD13	2.28	0.69
19:S:58:GLU:O	19:S:59:LEU:CB	2.40	0.69
20:T:119:TRP:CE3	34:i:1557:C:O2	2.45	0.69
22:V:18:SER:HB3	22:V:54:ALA:O	1.93	0.69
23:W:7:LEU:HD23	23:W:34:ILE:HG12	1.74	0.69
23:W:42:MET:HE2	23:W:49:GLU:HA	1.74	0.69
25:Y:52:PRO:HD2	25:Y:53:ASP:N	2.00	0.69
25:Y:52:PRO:CD	25:Y:53:ASP:H	2.04	0.69
25:Y:54:VAL:HG22	25:Y:79:LEU:CD2	2.23	0.69
25:Y:101:LYS:C	25:Y:102:THR:OG1	2.29	0.69
26:Z:48:VAL:O	26:Z:48:VAL:CG1	2.40	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:48:VAL:CG2	26:Z:80:ARG:CD	2.54	0.69
31:e:80:LEU:CA	37:n:84:TYR:CE2	2.76	0.69
31:e:81:ALA:HB1	37:n:82:ARG:NH1	1.97	0.69
31:e:82:ARG:H	37:n:82:ARG:CD	1.90	0.69
31:e:114:ARG:HA	31:e:118:ASN:CB	2.23	0.69
31:e:120:VAL:HG13	31:e:121:PRO:N	2.07	0.69
33:g:298:LEU:CD2	33:g:310:TRP:HB2	2.22	0.69
1:A:186:ARG:HD3	1:A:186:ARG:O	1.92	0.69
2:B:205:TYR:CD2	2:B:206:PRO:CD	2.58	0.69
3:C:69:PHE:CZ	3:C:247:THR:OG1	1.93	0.69
5:E:67:GLN:O	5:E:68:ARG:HG3	1.91	0.69
5:E:129:ILE:CB	5:E:139:LEU:HD23	2.22	0.69
8:H:57:ARG:CD	8:H:89:GLY:O	2.40	0.69
9:I:155:ASN:CA	12:L:22:ARG:HD2	2.22	0.69
10:J:125:HIS:CD2	10:J:129:LEU:CD1	2.70	0.69
10:J:140:GLN:NE2	25:Y:64:PHE:HE2	1.91	0.69
13:M:94:ILE:O	13:M:95:ASP:HB2	1.93	0.69
19:S:87:GLN:O	19:S:88:LYS:O	2.10	0.69
21:U:59:LYS:CB	21:U:84:ILE:HG22	2.12	0.69
25:Y:98:GLU:C	25:Y:98:GLU:OE2	2.35	0.69
28:b:33:MET:CE	28:b:35:VAL:HG22	2.06	0.69
29:c:65:ALA:C	29:c:66:ARG:CG	2.66	0.69
33:g:100:ARG:CG	33:g:100:ARG:NH1	2.44	0.69
3:C:76:SER:O	3:C:79:ILE:CG2	2.38	0.69
3:C:127:LYS:HZ2	34:i:1353:A:P	2.15	0.69
10:J:110:LEU:HD13	10:J:130:ILE:CG1	2.04	0.69
15:O:117:ARG:O	15:O:121:ARG:HB2	1.92	0.69
17:Q:138:ARG:HG3	34:i:1644:U:H4'	1.74	0.69
18:R:91:LEU:N	18:R:92:ASP:HA	2.01	0.69
19:S:39:ARG:CD	20:T:38:LYS:HE2	2.15	0.69
19:S:58:GLU:CA	19:S:59:LEU:HD13	2.21	0.69
25:Y:55:ILE:HG12	25:Y:75:ILE:HG12	0.70	0.69
25:Y:57:VAL:HG12	25:Y:60:PHE:HE2	1.58	0.69
32:f:140:TYR:CZ	32:f:146:LEU:O	2.45	0.69
36:k:19:U:HO2'	37:n:70:TRP:HH2	0.69	0.69
3:C:148:VAL:CB	3:C:149:PRO:CD	2.67	0.68
3:C:198:LEU:HD11	3:C:226:PHE:CD1	2.28	0.68
7:G:161:PRO:O	7:G:161:PRO:HD2	1.93	0.68
8:H:12:ASN:HD22	8:H:46:THR:CB	2.06	0.68
9:I:206:LYS:CD	9:I:207:GLY:N	2.56	0.68
15:O:121:ARG:NE	29:c:62:GLU:OE2	2.26	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:114:HIS:CE1	19:S:113:ARG:HH22	2.11	0.68
18:R:100:PRO:HG2	18:R:119:VAL:CG2	2.16	0.68
22:V:59:ILE:CG2	22:V:64:GLU:HB2	2.23	0.68
23:W:30:CYS:HA	23:W:34:ILE:HD12	1.74	0.68
33:g:175:LYS:HD3	33:g:177:TRP:CE2	2.28	0.68
33:g:176:VAL:CB	33:g:186:THR:HG22	2.17	0.68
36:k:20:U:C1'	37:n:67:LYS:O	2.41	0.68
37:n:35:TYR:HD1	37:n:35:TYR:H	1.40	0.68
1:A:42:LYS:HG3	18:R:105:MET:HE2	1.75	0.68
2:B:61:GLY:O	2:B:65:ARG:CZ	2.41	0.68
2:B:66:VAL:HG21	2:B:87:ILE:CG2	2.02	0.68
3:C:126:MET:CE	3:C:223:LYS:NZ	2.56	0.68
5:E:148:ARG:NH2	34:i:124:U:OP1	2.26	0.68
8:H:107:LYS:O	8:H:109:ARG:HA	1.94	0.68
14:N:92:ILE:CG2	14:N:150:VAL:CG2	2.71	0.68
15:O:79:GLN:HB2	29:c:5:ARG:HB3	1.19	0.68
15:O:125:LYS:HZ2	27:a:57:SER:C	2.01	0.68
16:P:19:GLY:N	19:S:92:ASP:HA	2.07	0.68
16:P:31:GLU:O	16:P:35:GLN:HG3	1.92	0.68
17:Q:42:ILE:CG2	17:Q:51:LEU:HD21	2.19	0.68
18:R:93:GLN:HG2	18:R:94:GLU:O	1.92	0.68
18:R:99:ASP:CB	18:R:119:VAL:HG12	2.22	0.68
24:X:133:LEU:HD21	24:X:139:GLU:O	1.91	0.68
31:e:119:VAL:O	31:e:121:PRO:HG2	1.92	0.68
34:i:1816:A:H2'	34:i:1817:A:H8	1.56	0.68
1:A:66:VAL:CG1	1:A:186:ARG:CD	2.71	0.68
1:A:113:GLN:CG	34:i:1347:G:O4'	2.41	0.68
5:E:73:ASP:CG	5:E:122:LYS:HZ2	2.00	0.68
6:F:141:VAL:CG2	29:c:47:LYS:HZ1	2.06	0.68
7:G:179:LEU:HD12	7:G:180:VAL:N	1.97	0.68
14:N:76:LYS:C	14:N:76:LYS:HD2	2.18	0.68
14:N:142:GLU:HG2	14:N:144:SER:OG	1.94	0.68
15:O:128:ARG:CA	27:a:62:TYR:OH	2.40	0.68
16:P:85:ILE:C	16:P:86:LEU:HD23	2.19	0.68
17:Q:33:LYS:HG3	17:Q:69:ARG:HG2	1.76	0.68
17:Q:43:GLU:HG2	17:Q:45:ARG:HB3	1.74	0.68
18:R:21:TYR:CB	18:R:71:ILE:HG21	2.23	0.68
18:R:72:LYS:O	18:R:76:GLU:HG2	1.93	0.68
22:V:15:ARG:O	22:V:24:ILE:HG22	1.93	0.68
25:Y:48:TYR:O	25:Y:50:THR:CG2	2.38	0.68
33:g:246:TYR:N	33:g:246:TYR:HD1	1.91	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:j:39:C:H2'	35:j:40:C:C6	2.29	0.68
37:n:62:ARG:HG2	37:n:91:VAL:O	1.93	0.68
1:A:149:ASN:HB2	1:A:165:ASN:CG	2.18	0.68
4:D:18:LYS:O	4:D:18:LYS:CD	2.42	0.68
4:D:112:GLY:C	4:D:113:LEU:CG	2.65	0.68
6:F:44:LYS:HD2	6:F:44:LYS:C	2.10	0.68
7:G:14:LYS:HZ1	7:G:123:GLY:HA2	1.59	0.68
11:K:40:VAL:HG21	11:K:45:VAL:H	1.59	0.68
12:L:137:THR:OG1	34:i:363:G:OP1	2.11	0.68
16:P:124:LYS:O	16:P:125:PRO:C	2.35	0.68
18:R:29:HIS:HB3	33:g:83:TRP:CH2	2.27	0.68
23:W:42:MET:HE3	23:W:50:PHE:CE2	2.27	0.68
31:e:82:ARG:CG	37:n:82:ARG:HH21	2.06	0.68
3:C:69:PHE:CE1	3:C:249:SER:HA	2.28	0.68
3:C:244:THR:HG22	3:C:246:PHE:CG	2.26	0.68
4:D:16:ILE:HG21	30:d:22:ARG:NH1	2.09	0.68
6:F:99:ILE:HD13	6:F:171:GLU:OE1	1.93	0.68
8:H:193:GLN:C	8:H:194:LEU:O	2.31	0.68
9:I:117:TYR:N	9:I:117:TYR:CD2	2.62	0.68
10:J:102:ILE:CG2	10:J:106:LEU:HD13	2.23	0.68
12:L:103:GLU:CD	24:X:11:ARG:CZ	2.66	0.68
12:L:118:ARG:O	12:L:119:ASP:HB2	1.93	0.68
16:P:22:LEU:HA	16:P:25:LEU:HB2	1.76	0.68
18:R:84:TYR:C	18:R:85:VAL:HG23	2.18	0.68
19:S:51:ASP:OD2	19:S:53:THR:OG1	2.12	0.68
19:S:137:LYS:HA	34:i:1516:C:C5	2.29	0.68
26:Z:96:LEU:O	26:Z:112:ASN:ND2	2.27	0.68
37:n:62:ARG:HG3	37:n:92:ILE:CB	2.23	0.68
1:A:76:VAL:CG1	1:A:87:VAL:HG12	2.23	0.68
1:A:147:LEU:CD2	1:A:163:CYS:SG	2.82	0.68
2:B:61:GLY:O	2:B:65:ARG:NH2	2.27	0.68
4:D:10:LYS:HE2	4:D:14:ASP:OD2	1.94	0.68
5:E:175:PHE:O	5:E:175:PHE:CD2	2.45	0.68
6:F:41:VAL:CG2	6:F:42:LYS:HD2	2.22	0.68
6:F:46:ALA:C	6:F:47:LYS:HD3	2.18	0.68
9:I:36:THR:O	9:I:95:THR:HG23	1.92	0.68
9:I:141:ARG:HG3	9:I:144:LYS:O	1.93	0.68
10:J:37:LEU:C	31:e:105:ARG:CG	2.65	0.68
10:J:134:HIS:C	10:J:135:ILE:HG23	2.17	0.68
14:N:50:ILE:O	14:N:54:LEU:HG	1.94	0.68
14:N:87:ASP:OD1	14:N:88:LEU:N	2.27	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:128:HIS:HD2	34:i:1517:A:C5'	2.07	0.68
17:Q:57:LEU:HD11	17:Q:115:TYR:OH	1.93	0.68
18:R:122:PRO:CB	18:R:123:THR:CB	2.71	0.68
19:S:42:HIS:CG	20:T:45:LEU:CD1	2.46	0.68
25:Y:57:VAL:C	25:Y:58:PHE:CD2	2.72	0.68
31:e:113:ASN:O	31:e:118:ASN:N	2.27	0.68
34:i:190:A:C2'	34:i:191:C:OP1	2.40	0.68
1:A:76:VAL:HG12	1:A:87:VAL:CG1	2.23	0.68
3:C:260:LYS:HD2	3:C:261:THR:N	2.08	0.68
4:D:43:PRO:C	4:D:44:THR:CG2	2.60	0.68
5:E:19:MET:HE1	34:i:842:G:C2'	2.20	0.68
7:G:30:LYS:HD2	7:G:30:LYS:N	2.08	0.68
7:G:77:LEU:CD1	7:G:95:LYS:HD3	2.23	0.68
9:I:141:ARG:C	9:I:143:LYS:HB3	2.19	0.68
25:Y:22:GLN:HB3	25:Y:74:MET:HE1	1.73	0.68
28:b:61:THR:CG2	28:b:62:VAL:O	2.40	0.68
30:d:50:ILE:HG21	30:d:52:PHE:HE2	1.59	0.68
33:g:42:MET:SD	33:g:56:GLN:HB3	2.34	0.68
37:n:78:LEU:HD23	37:n:93:LEU:CG	2.23	0.68
5:E:87:MET:O	5:E:122:LYS:HE3	1.94	0.68
5:E:139:LEU:CD1	5:E:154:ILE:CG2	2.69	0.68
6:F:123:GLU:HG3	29:c:59:LEU:HD11	1.74	0.68
9:I:149:TYR:HD1	9:I:152:ARG:HH12	1.34	0.68
10:J:14:VAL:HG23	10:J:48:PHE:CD1	2.29	0.68
10:J:38:ARG:HA	31:e:105:ARG:CG	2.23	0.68
10:J:61:LEU:CD1	10:J:94:LEU:HD13	2.22	0.68
13:M:12:MET:CE	13:M:17:ALA:C	2.41	0.68
17:Q:98:LYS:C	33:g:57:ARG:HH21	2.01	0.68
19:S:39:ARG:CD	20:T:38:LYS:NZ	2.57	0.68
19:S:91:LYS:C	19:S:92:ASP:OD2	2.37	0.68
20:T:42:HIS:CE1	20:T:93:SER:CB	2.76	0.68
23:W:7:LEU:HD23	23:W:34:ILE:HG13	1.75	0.68
28:b:61:THR:CG2	28:b:62:VAL:H	2.05	0.68
34:i:1750:C:O2'	34:i:1751:G:OP1	2.09	0.68
35:j:1:A:N1	35:j:72:A:N3	2.42	0.68
4:D:43:PRO:O	4:D:44:THR:CG2	2.38	0.68
6:F:113:VAL:HG13	6:F:114:ASN:N	2.08	0.68
7:G:38:ALA:CB	7:G:45:TRP:O	2.42	0.68
9:I:112:TRP:CH2	9:I:117:TYR:OH	2.46	0.68
10:J:122:SER:HG	10:J:124:HIS:HB2	1.58	0.68
11:K:59:LYS:HD2	11:K:60:GLU:H	1.58	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:49:LEU:HD13	13:M:50:CYS:H	1.58	0.68
14:N:46:THR:HG1	14:N:49:GLN:CG	2.06	0.68
15:O:41:PHE:CD1	15:O:57:THR:CG2	2.76	0.68
17:Q:78:VAL:HG12	17:Q:82:TYR:CE2	2.28	0.68
20:T:99:VAL:HG23	20:T:100:ALA:N	2.09	0.68
21:U:44:LYS:O	21:U:47:ASN:CA	2.42	0.68
21:U:50:VAL:CG2	21:U:51:LYS:O	2.38	0.68
21:U:83:ARG:CZ	30:d:55:LEU:HD13	2.23	0.68
24:X:52:LEU:CD1	24:X:53:GLU:N	2.54	0.68
30:d:10:HIS:CG	30:d:11:PRO:CD	2.76	0.68
33:g:228:TYR:CE2	33:g:230:LEU:HD11	2.29	0.68
33:g:248:LEU:O	33:g:259:TRP:HE3	1.75	0.68
1:A:23:THR:O	1:A:24:HIS:C	2.36	0.68
2:B:19:LYS:O	2:B:19:LYS:CG	2.42	0.68
4:D:211:VAL:O	18:R:38:ILE:O	2.12	0.68
5:E:1:MET:CE	34:i:422:G:C8	2.77	0.68
5:E:43:PRO:HG2	5:E:46:ILE:HD12	1.74	0.68
8:H:35:ASP:OD1	8:H:36:LEU:N	2.27	0.68
8:H:40:LEU:O	8:H:42:GLU:N	2.26	0.68
9:I:155:ASN:O	9:I:157:LYS:N	2.27	0.68
11:K:33:PRO:O	11:K:34:GLU:CB	2.42	0.68
13:M:79:VAL:HG12	13:M:80:ASP:N	2.09	0.68
16:P:30:TYR:O	16:P:34:MET:HG3	1.94	0.68
16:P:126:VAL:O	16:P:127:LYS:HB3	1.93	0.68
20:T:83:GLN:HE22	20:T:85:ASN:HA	1.59	0.68
21:U:82:MET:HE2	30:d:51:GLY:C	2.19	0.68
25:Y:13:MET:CE	25:Y:14:THR:C	2.66	0.68
26:Z:92:LEU:HD11	26:Z:109:TYR:OH	1.93	0.68
32:f:85:TYR:O	32:f:86:THR:HG22	1.94	0.68
33:g:259:TRP:HB3	33:g:266:ILE:HA	1.76	0.68
34:i:1517:A:C2	34:i:1518:C:C6	2.82	0.68
35:j:49:A:C2	35:j:64:C:N3	2.61	0.68
36:k:21:U:O4'	37:n:67:LYS:HE2	1.93	0.68
1:A:143:PRO:HD3	22:V:32:ILE:HG21	1.76	0.67
2:B:31:TYR:CE1	2:B:94:LYS:HA	2.29	0.67
2:B:97:LEU:HB3	2:B:232:HIS:CD2	2.29	0.67
2:B:103:MET:HE1	2:B:212:VAL:HG23	1.76	0.67
2:B:148:ASN:HD22	2:B:148:ASN:H	1.42	0.67
3:C:241:TRP:CE2	23:W:68:ARG:HD2	2.28	0.67
4:D:127:MET:HG2	4:D:154:ASP:OD2	1.94	0.67
4:D:216:GLU:O	4:D:217:ILE:HG13	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:159:THR:OG1	5:E:227:VAL:HG23	1.93	0.67
6:F:14:THR:OG1	17:Q:56:LEU:CD1	2.42	0.67
6:F:41:VAL:CG2	6:F:42:LYS:N	2.29	0.67
6:F:127:ARG:O	6:F:127:ARG:HG2	1.94	0.67
6:F:204:ARG:C	15:O:72:TYR:CD2	2.72	0.67
9:I:79:ILE:CG2	9:I:103:LEU:HB2	2.25	0.67
9:I:154:LYS:HD3	9:I:155:ASN:CA	2.22	0.67
10:J:38:ARG:NH2	31:e:104:GLY:H	1.88	0.67
12:L:148:ALA:C	12:L:150:GLY:N	2.50	0.67
13:M:13:ASP:C	13:M:16:THR:CB	2.49	0.67
13:M:24:THR:O	13:M:27:ILE:HG22	1.93	0.67
15:O:84:ARG:HA	15:O:87:GLU:HB2	1.75	0.67
18:R:90:ALA:HA	18:R:91:LEU:CD1	2.24	0.67
20:T:85:ASN:HB3	20:T:88:MET:HB2	1.76	0.67
23:W:18:GLU:HG2	23:W:65:LEU:HD13	1.76	0.67
23:W:128:PHE:HD1	23:W:129:PHE:N	1.92	0.67
24:X:60:LYS:CG	24:X:116:PRO:HG3	2.19	0.67
24:X:105:PHE:CZ	24:X:118:VAL:O	2.46	0.67
31:e:118:ASN:CB	31:e:119:VAL:CG2	2.72	0.67
31:e:124:GLY:C	31:e:125:LYS:CG	2.54	0.67
33:g:5:MET:CE	33:g:312:VAL:CG1	2.54	0.67
33:g:26:GLN:CB	33:g:74:ASP:HA	2.23	0.67
33:g:219:TRP:CH2	33:g:226:HIS:CD2	2.82	0.67
36:k:14:A:H2'	36:k:15:A:C8	2.30	0.67
2:B:77:ASP:HA	2:B:79:VAL:HG22	1.75	0.67
2:B:113:MET:HE3	2:B:209:ASP:CB	2.24	0.67
5:E:100:ARG:HD3	5:E:102:ILE:HD12	1.72	0.67
8:H:135:PHE:CD2	8:H:136:PRO:HD3	2.29	0.67
9:I:197:PHE:CE2	12:L:5:GLN:CG	2.76	0.67
11:K:12:TYR:CD2	11:K:82:TYR:HD2	2.11	0.67
11:K:83:LEU:HB2	11:K:85:LEU:HG	1.76	0.67
11:K:94:LEU:HD23	11:K:95:ARG:H	1.59	0.67
12:L:71:ARG:CG	12:L:73:LEU:HG	2.24	0.67
12:L:148:ALA:C	12:L:150:GLY:H	2.01	0.67
13:M:70:ALA:CB	13:M:71:GLU:OE2	2.41	0.67
16:P:49:LEU:HD13	16:P:51:ARG:NE	1.97	0.67
16:P:56:LEU:HD22	16:P:78:THR:HG22	1.76	0.67
18:R:95:ILE:H	18:R:114:LEU:HD13	1.58	0.67
19:S:39:ARG:NH2	20:T:38:LYS:CG	2.57	0.67
20:T:83:GLN:NE2	20:T:85:ASN:HA	2.09	0.67
21:U:40:ILE:HD11	21:U:53:PRO:HB3	1.74	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:20:GLN:NE2	33:g:68:ASP:CG	2.27	0.67
33:g:87:LEU:HB2	33:g:101:PHE:CD1	2.30	0.67
33:g:118:ARG:NH2	33:g:134:THR:CB	2.56	0.67
34:i:515:A:O3'	34:i:516:A:P	2.53	0.67
34:i:1635:A:C4'	35:j:40:C:C5'	2.68	0.67
1:A:176:TRP:HE3	1:A:177:MET:SD	2.16	0.67
1:A:193:HIS:ND1	1:A:194:PRO:HD3	2.09	0.67
3:C:158:LYS:HE2	3:C:158:LYS:C	2.18	0.67
5:E:64:ILE:HG12	25:Y:17:LEU:HD13	1.77	0.67
5:E:159:THR:CG2	5:E:227:VAL:HG22	2.04	0.67
6:F:112:LEU:HD23	6:F:116:ILE:CD1	2.22	0.67
8:H:145:ARG:NE	23:W:51:GLU:CD	2.52	0.67
10:J:84:ILE:CD1	10:J:86:VAL:HG21	2.24	0.67
10:J:171:GLY:C	10:J:173:VAL:N	2.48	0.67
10:J:177:ASN:HA	10:J:180:LYS:HB3	1.76	0.67
12:L:18:GLN:HE21	12:L:20:LYS:HD2	1.58	0.67
14:N:46:THR:O	14:N:50:ILE:HD12	1.93	0.67
15:O:63:LYS:O	15:O:64:ALA:HB2	1.94	0.67
15:O:143:LYS:O	15:O:143:LYS:HG2	1.81	0.67
16:P:109:PRO:O	16:P:112:ILE:HG13	1.93	0.67
16:P:128:HIS:HE1	34:i:1516:C:C1'	2.06	0.67
17:Q:113:ILE:HG13	17:Q:120:LEU:CD1	2.24	0.67
22:V:40:ASP:CB	22:V:47:ASN:HD22	2.06	0.67
22:V:66:ASP:O	22:V:67:ASP:C	2.30	0.67
26:Z:73:VAL:HG12	26:Z:79:ILE:CG2	2.18	0.67
29:c:34:PHE:O	29:c:34:PHE:CG	2.48	0.67
33:g:265:ILE:HG13	33:g:266:ILE:H	1.60	0.67
33:g:275:ILE:CD1	33:g:276:SER:N	2.51	0.67
34:i:489:G:N1	34:i:491:C:H1'	2.09	0.67
34:i:1823:G:N2	34:i:1845:A:C4	2.62	0.67
37:n:62:ARG:HG3	37:n:92:ILE:HG23	1.75	0.67
37:n:71:ILE:CG2	37:n:77:ILE:HD13	2.22	0.67
1:A:84:GLN:O	1:A:88:LEU:HD23	1.93	0.67
2:B:72:ALA:CB	15:O:128:ARG:HH22	2.08	0.67
5:E:102:ILE:CD1	5:E:236:ILE:HD12	2.24	0.67
7:G:85:ARG:HD2	25:Y:118:ARG:HH21	1.53	0.67
7:G:135:PRO:HG2	7:G:144:LEU:HD23	1.76	0.67
8:H:64:VAL:HG13	8:H:68:GLN:OE1	1.94	0.67
9:I:108:PRO:O	9:I:111:GLN:HG2	1.94	0.67
10:J:170:PRO:CA	10:J:174:LYS:HZ1	2.06	0.67
11:K:84:HIS:HD2	13:M:27:ILE:CG1	2.07	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:67:ALA:HB1	32:f:108:VAL:CG2	2.22	0.67
15:O:116:LEU:HD23	15:O:119:LEU:HD21	1.76	0.67
16:P:51:ARG:O	16:P:52:LYS:HB3	1.92	0.67
24:X:32:LEU:O	24:X:37:LYS:CE	2.42	0.67
25:Y:21:LYS:HE2	25:Y:77:ASP:CG	2.17	0.67
33:g:238:ALA:HB3	33:g:289:LEU:CD2	2.24	0.67
2:B:73:ASP:OD2	27:a:59:PHE:CZ	2.36	0.67
3:C:50:LYS:O	3:C:258:LEU:HD22	1.94	0.67
4:D:23:GLU:HG2	11:K:64:TRP:HE1	1.60	0.67
4:D:145:GLN:HG3	4:D:146:ARG:N	2.10	0.67
5:E:194:VAL:HG22	5:E:211:LYS:O	1.95	0.67
7:G:131:ARG:CD	7:G:131:ARG:HG2	2.15	0.67
9:I:5:ARG:HG2	9:I:5:ARG:NH1	2.05	0.67
10:J:15:THR:HG21	10:J:44:TRP:HZ3	1.58	0.67
14:N:26:LEU:HD12	14:N:27:LYS:HE3	1.76	0.67
20:T:112:MET:SD	20:T:127:GLY:HA2	2.34	0.67
27:a:87:ARG:HD2	34:i:1860:A:C6	2.29	0.67
29:c:6:VAL:HG13	29:c:7:GLN:N	2.09	0.67
31:e:75:LYS:C	31:e:76:VAL:HG22	2.19	0.67
33:g:42:MET:CB	33:g:92:LEU:HD11	2.23	0.67
33:g:74:ASP:HB2	33:g:76:GLN:HG2	1.75	0.67
37:n:38:VAL:CG2	37:n:77:ILE:HD11	2.25	0.67
2:B:125:VAL:HG21	2:B:169:MET:HG3	1.76	0.67
5:E:192:ILE:CD1	5:E:238:LEU:HD22	2.25	0.67
5:E:260:GLN:OE1	5:E:260:GLN:N	2.28	0.67
8:H:52:GLU:HA	8:H:58:LYS:HA	1.77	0.67
10:J:38:ARG:HA	31:e:105:ARG:CB	2.25	0.67
12:L:99:TYR:HD2	12:L:99:TYR:O	1.78	0.67
13:M:51:VAL:HA	13:M:77:ILE:HG22	1.76	0.67
14:N:26:LEU:HD21	14:N:66:VAL:HG21	1.76	0.67
17:Q:129:SER:O	17:Q:131:LYS:NZ	2.28	0.67
19:S:6:PRO:O	26:Z:49:LEU:HD11	1.94	0.67
20:T:77:LYS:CD	20:T:92:PHE:CE2	2.77	0.67
25:Y:114:MET:HA	25:Y:124:ASN:CB	2.24	0.67
34:i:141:A:H61	34:i:177:G:H21	1.43	0.67
34:i:181:A:C1'	34:i:182:C:C6	2.76	0.67
1:A:191:ARG:CG	1:A:193:HIS:HB2	2.24	0.67
3:C:241:TRP:C	3:C:242:LYS:HG3	2.17	0.67
4:D:48:ILE:HG23	4:D:86:LEU:HG	1.75	0.67
4:D:217:ILE:CG2	4:D:218:LEU:N	2.57	0.67
5:E:259:LYS:O	5:E:260:GLN:CD	2.38	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:28:VAL:CG2	6:F:110:GLN:HG2	2.24	0.67
6:F:154:LEU:CD1	6:F:155:CYS:SG	2.83	0.67
8:H:121:THR:O	8:H:125:VAL:HG23	1.94	0.67
8:H:146:VAL:O	23:W:49:GLU:HB2	1.94	0.67
9:I:104:ILE:O	9:I:105:ASP:CB	2.42	0.67
11:K:36:ALA:O	11:K:38:LYS:HD2	1.95	0.67
17:Q:112:LEU:CD1	17:Q:120:LEU:CD2	2.72	0.67
17:Q:134:GLY:HA2	17:Q:141:TYR:CD1	2.30	0.67
22:V:74:LYS:HG3	22:V:75:SER:H	1.58	0.67
23:W:104:LEU:HD12	23:W:106:THR:HG23	1.76	0.67
24:X:52:LEU:HD12	24:X:53:GLU:CA	2.24	0.67
25:Y:54:VAL:O	25:Y:75:ILE:CA	2.37	0.67
28:b:5:LYS:CB	28:b:5:LYS:HZ2	2.07	0.67
34:i:125:C:H6	34:i:125:C:H5'	1.60	0.67
34:i:1820:G:H5'	37:n:43:GLY:HA2	1.53	0.67
1:A:109:THR:O	1:A:110:ASN:HB2	1.95	0.67
1:A:141:ASN:C	22:V:32:ILE:CD1	2.68	0.67
1:A:183:LEU:CB	1:A:189:ILE:HD11	2.23	0.67
2:B:179:ASN:CB	2:B:183:GLU:OE1	2.43	0.67
2:B:225:LEU:CB	2:B:229:MET:HE2	2.21	0.67
3:C:48:VAL:HG23	3:C:75:GLU:CG	2.24	0.67
3:C:49:THR:CG2	3:C:75:GLU:HG3	2.25	0.67
4:D:216:GLU:O	4:D:217:ILE:CG1	2.43	0.67
6:F:25:THR:HG21	6:F:42:LYS:HG3	0.67	0.67
7:G:3:LEU:HD11	7:G:41:LEU:HD11	1.77	0.67
7:G:157:VAL:HG13	7:G:158:VAL:CA	2.25	0.67
8:H:12:ASN:CG	8:H:46:THR:OG1	2.38	0.67
11:K:9:ILE:O	11:K:13:GLU:HG2	1.94	0.67
11:K:36:ALA:O	11:K:38:LYS:N	2.28	0.67
14:N:13:GLN:CB	14:N:14:SER:O	2.43	0.67
16:P:13:ARG:C	16:P:14:LYS:CG	2.68	0.67
18:R:7:LYS:HB2	18:R:11:LYS:HE3	1.77	0.67
18:R:98:VAL:HG12	18:R:99:ASP:N	2.10	0.67
19:S:42:HIS:CE1	20:T:45:LEU:CD2	2.54	0.67
19:S:81:ASP:OD2	19:S:95:TYR:CD2	2.48	0.67
23:W:7:LEU:HD12	23:W:78:ARG:HH21	1.60	0.67
24:X:29:LYS:HE3	24:X:34:THR:HG21	1.75	0.67
24:X:108:LYS:HB2	24:X:110:HIS:CE1	2.30	0.67
25:Y:54:VAL:CG2	25:Y:79:LEU:HD23	2.23	0.67
26:Z:48:VAL:HA	26:Z:83:LEU:HD12	1.76	0.67
33:g:172:LYS:HZ3	33:g:192:THR:HG22	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:246:TYR:N	33:g:246:TYR:CD1	2.63	0.67
35:j:18:G:C5	35:j:56:G:N2	2.63	0.67
1:A:141:ASN:HD21	22:V:29:HIS:CA	2.07	0.67
2:B:25:PHE:CG	15:O:88:LEU:HD22	2.30	0.67
6:F:109:LEU:HD23	6:F:109:LEU:O	1.94	0.67
7:G:138:ALA:HB2	7:G:179:LEU:HB2	1.77	0.67
8:H:65:PRO:HG2	8:H:68:GLN:CD	2.19	0.67
8:H:75:ILE:HG23	8:H:76:GLN:N	2.10	0.67
8:H:177:TYR:HE2	8:H:183:LYS:HB2	1.59	0.67
9:I:110:ARG:NH2	9:I:124:LYS:CD	2.58	0.67
9:I:118:ALA:HB2	9:I:149:TYR:CZ	2.29	0.67
9:I:182:CYS:SG	34:i:296:U:C4	2.88	0.67
10:J:17:ARG:CG	10:J:17:ARG:O	2.29	0.67
13:M:67:ALA:CB	32:f:114:ILE:HG21	2.24	0.67
14:N:53:ILE:HD12	28:b:52:THR:CG2	2.13	0.67
15:O:101:GLY:O	15:O:104:ARG:CB	2.43	0.67
16:P:56:LEU:HD11	16:P:80:LEU:HD12	1.76	0.67
19:S:82:TRP:CD1	34:i:1562:G:C4	2.83	0.67
20:T:85:ASN:HB2	20:T:88:MET:O	1.95	0.67
24:X:52:LEU:CG	24:X:71:ARG:HB3	2.24	0.67
24:X:71:ARG:CG	24:X:82:THR:HG22	2.16	0.67
34:i:522:C:H2'	34:i:523:A:H5'	1.75	0.67
2:B:48:LEU:HD12	2:B:48:LEU:N	1.98	0.67
2:B:115:LYS:O	2:B:118:GLN:HG3	1.95	0.67
2:B:148:ASN:H	2:B:148:ASN:ND2	1.93	0.67
4:D:202:LYS:CB	4:D:203:PRO:HD3	2.25	0.67
6:F:49:LEU:CD1	6:F:50:PRO:HD2	2.16	0.67
8:H:60:ILE:CG2	8:H:92:VAL:HG22	2.25	0.67
8:H:140:VAL:O	14:N:18:TYR:CE2	2.47	0.67
9:I:142:SER:CA	9:I:143:LYS:CB	2.70	0.67
16:P:98:ASN:OD1	16:P:120:SER:CB	2.43	0.67
17:Q:50:LYS:CE	17:Q:117:ARG:HD2	2.25	0.67
18:R:21:TYR:CD2	18:R:73:LEU:HD12	2.30	0.67
18:R:29:HIS:HE2	33:g:65:PHE:HZ	1.33	0.67
20:T:85:ASN:ND2	20:T:91:HIS:CD2	2.63	0.67
22:V:59:ILE:HG23	22:V:64:GLU:HB2	1.75	0.67
22:V:77:GLY:HA2	22:V:78:ILE:O	1.95	0.67
24:X:3:LYS:O	24:X:4:CYS:O	2.13	0.67
26:Z:85:ARG:CB	26:Z:85:ARG:HH11	2.03	0.67
26:Z:103:HIS:O	26:Z:104:ARG:C	2.35	0.67
31:e:123:PHE:O	31:e:125:LYS:N	2.27	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:108:VAL:CG1	32:f:113:LYS:O	2.40	0.67
34:i:1654:U:H3'	34:i:1655:C:O2	1.95	0.67
37:n:62:ARG:CB	37:n:92:ILE:CA	2.67	0.67
1:A:140:VAL:O	1:A:140:VAL:CG1	2.43	0.66
4:D:74:GLN:HE21	4:D:75:LYS:CD	2.08	0.66
5:E:153:LEU:CD1	5:E:172:PHE:CE2	2.77	0.66
6:F:142:SER:CB	29:c:50:VAL:CG2	2.73	0.66
7:G:212:LEU:HA	7:G:215:LYS:HD3	1.76	0.66
9:I:10:LYS:HG3	9:I:11:ARG:H	1.60	0.66
11:K:87:PRO:C	11:K:89:ILE:H	2.03	0.66
13:M:71:GLU:O	13:M:72:HIS:C	2.38	0.66
17:Q:8:GLN:HG2	17:Q:99:TYR:HD1	1.53	0.66
19:S:6:PRO:O	19:S:7:GLU:CB	2.41	0.66
19:S:26:ILE:HG22	19:S:45:LEU:CD1	2.24	0.66
23:W:20:ARG:NH1	34:i:1135:C:H1'	2.11	0.66
27:a:7:ASN:O	27:a:7:ASN:OD1	2.13	0.66
31:e:120:VAL:O	31:e:121:PRO:CB	2.40	0.66
33:g:145:GLU:OE1	33:g:145:GLU:N	2.28	0.66
34:i:521:A:C2	34:i:544:A:N7	2.64	0.66
1:A:43:SER:OG	18:R:101:ASP:OD2	2.03	0.66
2:B:98:THR:O	2:B:232:HIS:CE1	2.48	0.66
3:C:51:LEU:O	3:C:55:VAL:HG23	1.94	0.66
3:C:161:LYS:HD2	3:C:162:PRO:HD2	1.77	0.66
5:E:9:LEU:HB2	5:E:30:ARG:HB2	1.76	0.66
5:E:102:ILE:HD13	5:E:236:ILE:HD12	1.75	0.66
5:E:250:GLU:O	5:E:254:LYS:HG2	1.95	0.66
6:F:67:PRO:HG2	6:F:70:GLU:HB3	1.76	0.66
7:G:32:MET:CE	7:G:100:CYS:O	2.43	0.66
10:J:110:LEU:HD11	10:J:135:ILE:HD12	1.77	0.66
12:L:82:MET:CE	12:L:85:THR:HG21	2.23	0.66
14:N:12:SER:C	14:N:13:GLN:CG	2.65	0.66
14:N:25:TRP:CD1	28:b:83:GLN:HB2	2.30	0.66
15:O:19:PRO:CG	15:O:27:VAL:HG22	2.16	0.66
17:Q:19:ALA:CB	17:Q:80:GLN:HE21	2.06	0.66
17:Q:50:LYS:HA	17:Q:53:GLU:CG	2.26	0.66
18:R:5:ARG:CB	18:R:10:LYS:HZ1	2.06	0.66
18:R:92:ASP:O	18:R:93:GLN:CB	2.43	0.66
19:S:88:LYS:H	19:S:95:TYR:HD1	1.42	0.66
19:S:106:LYS:CD	19:S:109:GLU:OE1	2.42	0.66
20:T:42:HIS:HE1	20:T:93:SER:CB	2.08	0.66
33:g:194:TYR:OH	33:g:235:ILE:HD11	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1721:G:H1	34:i:1802:U:H3	1.43	0.66
36:k:19:U:C2'	37:n:70:TRP:CZ3	2.69	0.66
1:A:185:MET:O	1:A:187:GLY:N	2.28	0.66
3:C:155:TRP:CE2	23:W:97:ARG:CD	2.78	0.66
4:D:226:GLN:O	4:D:227:LYS:HB2	1.94	0.66
5:E:48:LEU:HD11	5:E:70:ILE:CD1	2.26	0.66
5:E:167:GLY:C	5:E:168:LYS:HG2	2.19	0.66
5:E:191:ARG:HD3	5:E:245:ARG:CB	2.25	0.66
6:F:42:LYS:CB	6:F:46:ALA:N	2.59	0.66
12:L:49:GLU:HB2	12:L:116:CYS:SG	2.36	0.66
13:M:20:GLU:OE1	13:M:20:GLU:HA	1.96	0.66
13:M:44:LYS:HZ3	32:f:127:GLY:HA3	1.61	0.66
16:P:77:LYS:C	16:P:78:THR:HG23	2.20	0.66
16:P:100:LYS:HG2	34:i:1236:A:H61	1.61	0.66
19:S:94:LYS:HB3	19:S:95:TYR:C	2.19	0.66
24:X:5:ARG:NH2	34:i:1155:G:OP2	2.27	0.66
27:a:41:ILE:HG23	27:a:68:TYR:CD1	2.29	0.66
30:d:5:GLN:C	30:d:7:TYR:N	2.47	0.66
33:g:88:ARG:HD3	33:g:97:THR:OG1	1.95	0.66
33:g:88:ARG:HG2	33:g:97:THR:HG21	1.77	0.66
33:g:173:LEU:HD21	33:g:189:ILE:HG23	1.78	0.66
34:i:1330:G:H1	34:i:1492:U:H3	1.43	0.66
1:A:76:VAL:HG13	1:A:175:TRP:CZ3	2.25	0.66
1:A:133:PRO:CD	1:A:134:LEU:N	2.51	0.66
2:B:31:TYR:HE1	2:B:94:LYS:N	1.92	0.66
2:B:188:LEU:HD22	2:B:212:VAL:HG21	1.77	0.66
6:F:167:LYS:CD	6:F:171:GLU:HB3	2.24	0.66
7:G:16:ILE:HG21	7:G:45:TRP:CH2	2.30	0.66
9:I:67:TRP:CZ2	9:I:158:ILE:HD11	2.24	0.66
11:K:40:VAL:CG2	11:K:41:PRO:HD3	2.24	0.66
12:L:58:LYS:O	12:L:64:GLY:HA3	1.95	0.66
15:O:129:ILE:HG13	27:a:65:PRO:CD	2.25	0.66
15:O:142:ARG:HH11	27:a:27:ALA:CB	2.07	0.66
20:T:94:ARG:NH1	20:T:94:ARG:HG3	2.10	0.66
21:U:71:GLY:O	21:U:72:GLU:C	2.37	0.66
24:X:90:CYS:HA	24:X:93:PHE:HD2	1.61	0.66
26:Z:99:LEU:HD23	26:Z:109:TYR:CD1	2.27	0.66
26:Z:103:HIS:HD2	26:Z:105:ALA:HB3	1.58	0.66
27:a:84:VAL:HB	34:i:1860:A:H62	1.57	0.66
33:g:201:SER:HB2	33:g:202:PRO:HD2	1.74	0.66
2:B:28:LYS:HE2	15:O:51:GLU:OE2	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:69:PHE:CZ	3:C:247:THR:CG2	2.79	0.66
4:D:201:LYS:O	4:D:202:LYS:HB2	1.96	0.66
4:D:219:PRO:O	4:D:220:THR:O	2.13	0.66
6:F:122:ARG:C	6:F:141:VAL:HG13	2.18	0.66
6:F:145:ARG:CG	29:c:48:GLY:HA2	2.21	0.66
6:F:154:LEU:HD12	6:F:155:CYS:CA	2.25	0.66
7:G:4:ASN:HA	7:G:15:LEU:CD2	2.24	0.66
9:I:5:ARG:HH11	9:I:5:ARG:CG	2.04	0.66
9:I:7:ASN:C	9:I:9:HIS:H	2.02	0.66
9:I:191:GLU:N	9:I:195:LEU:HB2	2.11	0.66
19:S:111:LEU:HD22	19:S:125:HIS:ND1	2.09	0.66
20:T:40:ALA:CB	20:T:43:LYS:CG	2.58	0.66
26:Z:99:LEU:HD11	26:Z:102:LYS:CE	2.23	0.66
28:b:81:ARG:HB2	28:b:82:LYS:HD3	1.77	0.66
32:f:103:LEU:HD22	32:f:106:TYR:CE2	2.31	0.66
32:f:126:CYS:O	32:f:128:ALA:N	2.28	0.66
33:g:173:LEU:HD22	33:g:189:ILE:HA	1.77	0.66
34:i:195:C:O5'	34:i:195:C:H6	1.78	0.66
34:i:1266:G:N2	34:i:1508:C:O2	2.29	0.66
35:j:65:C:H2'	35:j:66:U:C6	2.30	0.66
2:B:63:LYS:O	2:B:63:LYS:HD3	1.95	0.66
2:B:76:ASN:ND2	2:B:76:ASN:O	2.29	0.66
3:C:57:ASP:O	3:C:58:MET:HB2	1.94	0.66
4:D:157:MET:HE3	4:D:187:LYS:HD2	1.78	0.66
5:E:248:ILE:CD1	10:J:72:PHE:CE2	2.45	0.66
5:E:259:LYS:C	5:E:260:GLN:OE1	2.39	0.66
7:G:211:LYS:C	7:G:215:LYS:HD3	2.21	0.66
10:J:29:LEU:HD22	31:e:112:TYR:CD1	2.31	0.66
13:M:13:ASP:C	13:M:16:THR:HB	2.13	0.66
13:M:51:VAL:HB	13:M:77:ILE:HG21	1.78	0.66
14:N:13:GLN:HB2	14:N:14:SER:O	1.95	0.66
14:N:129:TYR:O	14:N:134:VAL:HG13	1.96	0.66
16:P:10:ARG:NE	16:P:11:THR:N	2.34	0.66
17:Q:92:LEU:CG	17:Q:96:TYR:CE2	2.69	0.66
20:T:42:HIS:CE1	20:T:93:SER:HB3	2.30	0.66
25:Y:54:VAL:HG23	25:Y:79:LEU:HD21	1.77	0.66
28:b:73:LEU:CD1	28:b:79:PHE:CZ	2.71	0.66
33:g:48:ASP:OD2	33:g:49:GLU:N	2.28	0.66
33:g:212:LYS:HA	33:g:235:ILE:CG1	2.24	0.66
34:i:1191:A:H2'	34:i:1192:A:C8	2.31	0.66
2:B:87:ILE:HG21	2:B:101:HIS:CG	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:107:ARG:CZ	15:O:133:THR:O	2.43	0.66
4:D:53:THR:HG21	4:D:91:VAL:HB	1.78	0.66
5:E:117:GLU:O	5:E:119:ALA:N	2.26	0.66
6:F:154:LEU:HD12	6:F:154:LEU:C	2.19	0.66
7:G:120:ASP:O	7:G:121:ILE:HD13	1.95	0.66
8:H:6:ALA:CB	8:H:10:LYS:NZ	2.59	0.66
8:H:44:ASN:HB3	8:H:68:GLN:HE22	1.60	0.66
10:J:171:GLY:O	10:J:174:LYS:N	2.28	0.66
14:N:125:LEU:CD2	14:N:129:TYR:CZ	2.78	0.66
20:T:11:GLN:CD	20:T:62:ARG:NE	2.53	0.66
23:W:26:LEU:O	23:W:26:LEU:CD1	2.39	0.66
23:W:37:PHE:HD2	23:W:41:MET:HE2	1.60	0.66
25:Y:111:LYS:NZ	25:Y:115:LYS:NZ	2.43	0.66
29:c:65:ALA:C	29:c:66:ARG:HG2	2.20	0.66
31:e:125:LYS:C	31:e:126:LYS:CD	2.54	0.66
34:i:921:G:H1	34:i:1013:U:H3	1.42	0.66
36:k:11:A:C2	36:k:12:A:C5	2.82	0.66
4:D:2:ALA:HB1	4:D:4:GLN:N	2.09	0.66
4:D:193:ASP:CA	4:D:202:LYS:O	2.37	0.66
4:D:196:GLY:O	4:D:199:GLY:CA	2.44	0.66
4:D:201:LYS:C	4:D:203:PRO:HD2	2.13	0.66
5:E:152:PRO:HD2	7:G:212:LEU:HD21	1.78	0.66
6:F:42:LYS:CB	6:F:46:ALA:H	2.09	0.66
6:F:102:LEU:HD13	26:Z:110:THR:HG22	1.78	0.66
8:H:117:PRO:HG2	8:H:120:ARG:NE	2.11	0.66
9:I:139:LYS:HB3	9:I:145:ILE:HD11	1.57	0.66
10:J:38:ARG:HG2	31:e:105:ARG:CA	2.24	0.66
11:K:2:LEU:O	11:K:3:MET:CB	2.40	0.66
11:K:14:LEU:HD21	11:K:35:LEU:CD1	2.26	0.66
12:L:40:ILE:HG21	12:L:44:PHE:HB2	1.78	0.66
12:L:118:ARG:O	12:L:119:ASP:CB	2.43	0.66
15:O:41:PHE:CE1	15:O:57:THR:HG21	2.31	0.66
19:S:46:ARG:NE	20:T:50:GLU:CG	2.58	0.66
20:T:31:PRO:CG	20:T:102:ARG:CG	2.73	0.66
20:T:85:ASN:HD21	20:T:91:HIS:CD2	2.14	0.66
21:U:56:MET:HE1	21:U:88:LEU:HD23	1.77	0.66
23:W:17:ALA:CB	23:W:25:VAL:CG1	2.74	0.66
33:g:46:THR:C	33:g:48:ASP:H	2.00	0.66
34:i:1519:G:C5'	35:j:29:G:C5'	2.73	0.66
36:k:20:U:H6	36:k:20:U:O5'	1.79	0.66
2:B:49:VAL:HG22	2:B:65:ARG:NH1	2.11	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:87:LEU:HG	3:C:116:GLY:C	2.20	0.66
3:C:87:LEU:HD23	3:C:87:LEU:C	2.21	0.66
4:D:45:ARG:HG3	4:D:83:SER:O	1.95	0.66
4:D:74:GLN:NE2	4:D:75:LYS:CE	2.57	0.66
6:F:36:GLN:O	6:F:37:ASP:CB	2.43	0.66
8:H:6:ALA:CB	8:H:10:LYS:HZ3	2.07	0.66
10:J:50:LEU:CD1	10:J:102:ILE:HD13	2.22	0.66
16:P:98:ASN:OD1	16:P:120:SER:HB2	1.96	0.66
18:R:99:ASP:HB3	18:R:119:VAL:CG1	2.26	0.66
19:S:58:GLU:OE2	26:Z:49:LEU:HD13	1.96	0.66
24:X:52:LEU:CD1	24:X:53:GLU:CG	2.74	0.66
34:i:1825:A:O5'	34:i:1845:A:C6	2.49	0.66
35:j:49:A:H2'	35:j:50:U:C6	2.30	0.66
36:k:13:C:H6	36:k:13:C:O5'	1.79	0.66
1:A:180:ARG:HD3	1:A:184:ARG:HH21	1.57	0.66
1:A:205:ARG:NH1	18:R:82:ASP:O	2.29	0.66
4:D:59:LEU:CD1	4:D:60:GLY:O	2.44	0.66
4:D:112:GLY:H	4:D:113:LEU:CD1	2.08	0.66
5:E:21:ASP:OD2	5:E:24:THR:HG23	1.94	0.66
5:E:130:PHE:CD2	5:E:138:HIS:CE1	2.84	0.66
5:E:182:MET:CE	5:E:228:ILE:HG21	2.26	0.66
6:F:42:LYS:O	6:F:42:LYS:NZ	2.29	0.66
6:F:79:HIS:O	6:F:81:ARG:N	2.29	0.66
8:H:122:LEU:HD11	8:H:123:THR:CG2	2.26	0.66
10:J:158:ASP:OD1	10:J:159:PHE:N	2.27	0.66
14:N:4:MET:HE2	14:N:124:ARG:HH22	1.61	0.66
16:P:49:LEU:HD13	16:P:51:ARG:NH2	2.11	0.66
28:b:64:CYS:HG	28:b:73:LEU:CD2	1.94	0.66
34:i:835:C:H2'	34:i:837:G:H5'	1.78	0.66
34:i:1207:G:C5	34:i:1684:C:N3	2.58	0.66
1:A:172:GLY:HA3	1:A:203:PHE:CE1	2.31	0.65
3:C:146:SER:O	3:C:148:VAL:HG13	1.97	0.65
3:C:192:ALA:O	3:C:195:PRO:CG	2.43	0.65
4:D:16:ILE:CD1	30:d:22:ARG:NH2	2.42	0.65
5:E:43:PRO:HD2	5:E:43:PRO:O	1.96	0.65
5:E:74:GLY:C	5:E:75:LYS:CG	2.69	0.65
5:E:86:PHE:CZ	5:E:87:MET:HE2	2.31	0.65
5:E:159:THR:CB	5:E:227:VAL:HG23	2.24	0.65
5:E:258:ALA:O	5:E:259:LYS:HB2	1.96	0.65
5:E:259:LYS:NZ	5:E:260:GLN:OE1	2.29	0.65
7:G:50:VAL:CG1	7:G:111:LEU:CB	2.73	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:163:ASN:O	7:G:164:LYS:HB3	1.94	0.65
8:H:29:GLU:CD	8:H:86:LYS:HE3	2.20	0.65
10:J:130:ILE:HA	10:J:135:ILE:CD1	2.26	0.65
10:J:131:ARG:HH11	10:J:143:ASN:ND2	1.93	0.65
12:L:147:LYS:HD3	12:L:147:LYS:O	1.94	0.65
15:O:62:VAL:HG21	15:O:72:TYR:CZ	2.30	0.65
15:O:119:LEU:CD1	15:O:126:ILE:HD11	2.26	0.65
16:P:22:LEU:HD12	16:P:23:ASP:N	2.11	0.65
16:P:98:ASN:HD21	16:P:120:SER:HB2	1.60	0.65
17:Q:98:LYS:HE3	17:Q:99:TYR:CE2	2.30	0.65
17:Q:144:SER:O	17:Q:145:TYR:HB2	1.96	0.65
19:S:7:GLU:OE2	19:S:7:GLU:N	2.29	0.65
20:T:11:GLN:NE2	20:T:62:ARG:NE	2.44	0.65
26:Z:99:LEU:CD1	26:Z:102:LYS:CD	2.72	0.65
27:a:22:ARG:NH2	27:a:27:ALA:O	2.28	0.65
28:b:81:ARG:HB2	28:b:82:LYS:CD	2.26	0.65
32:f:108:VAL:HG22	32:f:114:ILE:CB	2.26	0.65
32:f:140:TYR:OH	32:f:146:LEU:C	2.38	0.65
34:i:903:G:C6	34:i:904:A:C6	2.84	0.65
34:i:1546:U:O4	34:i:1574:A:C2	2.49	0.65
34:i:1700:C:O2'	34:i:1845:A:C3'	2.43	0.65
34:i:1825:A:O5'	34:i:1845:A:N6	2.29	0.65
1:A:141:ASN:HA	22:V:32:ILE:CD1	2.25	0.65
2:B:147:ASN:O	2:B:149:GLN:N	2.29	0.65
3:C:61:LYS:HA	3:C:82:PHE:HE1	1.62	0.65
5:E:86:PHE:CZ	5:E:182:MET:HE1	2.31	0.65
7:G:147:LEU:HD21	7:G:156:TYR:HE2	1.58	0.65
10:J:124:HIS:O	10:J:125:HIS:C	2.38	0.65
11:K:16:PHE:HE2	11:K:79:LEU:CA	2.09	0.65
11:K:38:LYS:O	11:K:39:ASN:CB	2.45	0.65
17:Q:15:ARG:HH12	17:Q:20:THR:HG21	1.61	0.65
17:Q:72:VAL:HG23	17:Q:84:ILE:HG22	1.77	0.65
25:Y:87:PRO:O	25:Y:87:PRO:HD2	1.95	0.65
28:b:64:CYS:SG	28:b:73:LEU:CA	2.80	0.65
28:b:81:ARG:N	28:b:82:LYS:HB2	2.09	0.65
32:f:95:ARG:HD3	32:f:96:LYS:N	2.10	0.65
34:i:848:G:C3'	34:i:849:C:H5"	2.24	0.65
34:i:1206:G:H3'	34:i:1207:G:P	2.36	0.65
37:n:71:ILE:HG22	37:n:77:ILE:CD1	2.25	0.65
37:n:78:LEU:CD2	37:n:93:LEU:CD2	2.70	0.65
1:A:75:SER:HB2	1:A:122:LEU:HD23	1.76	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:118:GLU:CD	3:C:50:LYS:HZ3	2.04	0.65
1:A:193:HIS:CB	1:A:194:PRO:HD2	2.26	0.65
4:D:16:ILE:HG21	30:d:22:ARG:HH12	1.60	0.65
4:D:157:MET:HE3	4:D:187:LYS:CD	2.22	0.65
7:G:19:ASP:O	7:G:20:ASP:CB	2.43	0.65
10:J:82:VAL:CG1	10:J:92:MET:HE3	2.26	0.65
10:J:114:VAL:HG12	10:J:119:LEU:O	1.96	0.65
10:J:130:ILE:CG2	10:J:135:ILE:HD11	2.21	0.65
10:J:165:TYR:OH	34:i:551:A:H5'	1.97	0.65
13:M:89:VAL:HG12	13:M:90:GLY:N	2.11	0.65
14:N:16:LEU:CD2	14:N:17:PRO:CD	2.75	0.65
16:P:4:VAL:CA	16:P:10:ARG:CG	2.60	0.65
16:P:75:VAL:HG12	16:P:76:VAL:N	2.10	0.65
16:P:98:ASN:ND2	16:P:120:SER:HB2	2.12	0.65
18:R:31:ASN:ND2	18:R:55:THR:HG22	2.11	0.65
20:T:21:PHE:CD1	20:T:22:LEU:HD23	2.30	0.65
20:T:49:ASP:OD2	20:T:51:ASN:HB2	1.96	0.65
25:Y:20:ARG:HH21	25:Y:74:MET:HE2	1.60	0.65
25:Y:54:VAL:CG1	25:Y:76:TYR:C	2.68	0.65
33:g:144:ASP:O	33:g:145:GLU:HB2	1.97	0.65
34:i:1361:G:H2'	34:i:1362:G:C8	2.31	0.65
37:n:62:ARG:NE	37:n:92:ILE:HG23	2.11	0.65
2:B:49:VAL:CG2	2:B:65:ARG:NH1	2.59	0.65
2:B:49:VAL:CG2	2:B:65:ARG:HH12	2.09	0.65
2:B:70:SER:CB	15:O:128:ARG:HD3	2.26	0.65
3:C:147:ILE:O	22:V:27:LYS:HE3	1.96	0.65
5:E:72:ILE:CD1	5:E:82:TYR:CD2	2.80	0.65
5:E:165:GLU:OE2	5:E:165:GLU:N	2.29	0.65
6:F:36:GLN:HG3	6:F:37:ASP:OD2	1.95	0.65
6:F:176:GLU:CD	6:F:187:SER:OG	2.40	0.65
8:H:192:PHE:O	8:H:193:GLN:C	2.40	0.65
9:I:69:SER:HB2	12:L:19:ASN:HD22	1.53	0.65
10:J:34:GLU:HB2	10:J:35:TYR:HD2	1.61	0.65
12:L:17:PHE:CD1	12:L:18:GLN:O	2.49	0.65
12:L:152:LYS:C	12:L:154:GLN:H	2.05	0.65
15:O:30:VAL:CG2	15:O:32:HIS:CD2	2.80	0.65
15:O:129:ILE:HD12	27:a:44:ILE:HG21	1.77	0.65
16:P:53:GLN:O	16:P:56:LEU:HB2	1.97	0.65
20:T:29:LYS:C	20:T:30:VAL:CG1	2.70	0.65
20:T:77:LYS:CB	20:T:94:ARG:CD	2.48	0.65
20:T:85:ASN:O	20:T:88:MET:CE	2.43	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:124:THR:HG21	20:T:126:GLN:HB3	1.76	0.65
27:a:21:ILE:HG22	27:a:22:ARG:N	2.10	0.65
27:a:94:ASP:OD1	27:a:94:ASP:N	2.29	0.65
28:b:33:MET:SD	28:b:73:LEU:HD11	2.36	0.65
33:g:143:GLN:HG3	33:g:144:ASP:HB2	1.78	0.65
34:i:490:A:O2'	34:i:491:C:H5'	1.97	0.65
34:i:841:G:H3'	34:i:842:G:C8	2.31	0.65
37:n:62:ARG:HH11	37:n:92:ILE:CD1	2.07	0.65
2:B:42:ARG:HH22	2:B:232:HIS:HA	1.60	0.65
2:B:93:GLY:C	2:B:94:LYS:CG	2.69	0.65
3:C:155:TRP:CH2	23:W:97:ARG:HD3	2.32	0.65
4:D:55:THR:CA	4:D:58:VAL:HG22	2.27	0.65
5:E:72:ILE:HD13	5:E:82:TYR:CE2	2.32	0.65
6:F:115:ALA:CB	6:F:177:LEU:HD22	2.26	0.65
7:G:185:LEU:HB3	7:G:189:ARG:NH1	2.12	0.65
10:J:125:HIS:HA	34:i:516:A:O2'	1.97	0.65
10:J:169:ARG:CB	10:J:170:PRO:CD	2.45	0.65
18:R:119:VAL:HG23	18:R:119:VAL:O	1.96	0.65
20:T:77:LYS:HA	20:T:94:ARG:CG	2.26	0.65
22:V:9:VAL:HG12	22:V:10:ASP:H	1.60	0.65
26:Z:70:PRO:CD	26:Z:71:ALA:N	2.55	0.65
26:Z:99:LEU:CD1	26:Z:102:LYS:NZ	2.59	0.65
33:g:87:LEU:HD23	33:g:108:VAL:HG11	1.79	0.65
34:i:79:A:HO2'	34:i:80:G:H8	1.43	0.65
34:i:1635:A:O4'	35:j:40:C:C4'	2.44	0.65
34:i:1825:A:C8	34:i:1845:A:C5	2.58	0.65
4:D:163:PRO:HA	4:D:166:TYR:HD2	1.60	0.65
7:G:32:MET:O	7:G:33:ALA:CB	2.44	0.65
7:G:162:LEU:HD22	7:G:172:LYS:NZ	2.12	0.65
7:G:213:LEU:HD12	7:G:213:LEU:C	2.21	0.65
8:H:51:ILE:CD1	8:H:176:VAL:HA	2.26	0.65
9:I:119:LEU:O	9:I:120:PRO:O	2.15	0.65
9:I:145:ILE:HA	9:I:148:LYS:HD3	1.78	0.65
10:J:137:VAL:HG22	10:J:157:ILE:HG12	1.79	0.65
11:K:4:PRO:CG	11:K:7:ASN:ND2	2.60	0.65
15:O:53:ILE:HG13	15:O:53:ILE:O	1.94	0.65
16:P:13:ARG:O	16:P:14:LYS:HG3	1.97	0.65
16:P:41:GLN:HA	16:P:84:ILE:HD11	1.78	0.65
16:P:41:GLN:HB2	16:P:84:ILE:HG12	1.77	0.65
16:P:53:GLN:CB	16:P:56:LEU:HD12	2.26	0.65
17:Q:39:LEU:O	17:Q:42:ILE:HD12	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:46:ARG:NH1	20:T:50:GLU:HG2	2.12	0.65
21:U:47:ASN:O	21:U:47:ASN:ND2	2.29	0.65
22:V:41:LYS:C	22:V:43:THR:N	2.52	0.65
24:X:60:LYS:HE2	24:X:116:PRO:CB	2.26	0.65
25:Y:20:ARG:CD	25:Y:74:MET:HE3	2.25	0.65
29:c:34:PHE:O	29:c:34:PHE:CD2	2.49	0.65
34:i:1750:C:O2'	34:i:1751:G:H5'	1.96	0.65
1:A:39:TYR:N	1:A:50:ASN:ND2	2.44	0.65
1:A:159:ILE:HG22	1:A:159:ILE:O	1.96	0.65
5:E:130:PHE:HB2	5:E:138:HIS:CD2	2.31	0.65
7:G:102:VAL:HG22	7:G:109:LEU:HD21	1.79	0.65
7:G:142:ARG:CG	7:G:142:ARG:NH1	2.47	0.65
7:G:142:ARG:HH21	7:G:152:ASP:N	1.95	0.65
8:H:122:LEU:CD1	8:H:122:LEU:C	2.34	0.65
10:J:29:LEU:HD22	31:e:112:TYR:CB	2.27	0.65
10:J:50:LEU:CD1	10:J:102:ILE:CD1	2.72	0.65
13:M:14:VAL:C	13:M:16:THR:N	2.49	0.65
14:N:76:LYS:HD2	14:N:77:SER:N	2.11	0.65
16:P:44:ARG:CZ	16:P:84:ILE:HD12	2.24	0.65
18:R:77:GLU:HG3	18:R:80:ARG:HH21	1.60	0.65
19:S:46:ARG:NE	20:T:50:GLU:HG2	2.10	0.65
19:S:46:ARG:HH12	20:T:50:GLU:HA	1.62	0.65
24:X:52:LEU:HD21	24:X:71:ARG:HD3	1.79	0.65
28:b:1:MET:HA	28:b:1:MET:HE3	1.78	0.65
29:c:47:LYS:HG2	29:c:48:GLY:N	2.11	0.65
31:e:82:ARG:HD3	37:n:82:ARG:HH21	1.62	0.65
33:g:232:GLY:CA	33:g:257:LYS:NZ	2.56	0.65
34:i:198:U:H6	34:i:198:U:O5'	1.79	0.65
34:i:1751:G:H2'	34:i:1752:G:C8	2.31	0.65
37:n:62:ARG:N	37:n:91:VAL:O	2.30	0.65
1:A:42:LYS:CD	18:R:105:MET:CG	2.24	0.65
1:A:98:PRO:O	1:A:99:ILE:HG13	1.97	0.65
1:A:141:ASN:O	22:V:32:ILE:CG2	2.44	0.65
2:B:25:PHE:CG	15:O:88:LEU:HD13	2.32	0.65
2:B:32:ASP:OD1	2:B:46:LYS:CD	2.44	0.65
2:B:67:PHE:CD1	15:O:47:LEU:HB2	2.30	0.65
3:C:115:ILE:CD1	3:C:144:LYS:HG3	2.27	0.65
4:D:141:LYS:HD2	4:D:179:GLN:HG2	1.77	0.65
4:D:212:GLU:HG2	18:R:19:LYS:NZ	2.11	0.65
5:E:98:ASN:ND2	5:E:114:ILE:HG13	2.12	0.65
5:E:159:THR:HG21	5:E:227:VAL:CG2	2.21	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:227:GLN:O	7:G:231:ARG:HG3	1.96	0.65
9:I:155:ASN:C	9:I:155:ASN:OD1	2.36	0.65
9:I:194:GLU:HG2	12:L:10:TYR:CD2	2.32	0.65
10:J:78:LEU:HD13	10:J:92:MET:O	1.96	0.65
10:J:134:HIS:CE1	34:i:552:U:OP1	2.48	0.65
11:K:96:ARG:CG	11:K:97:SER:N	2.57	0.65
15:O:43:HIS:CG	15:O:43:HIS:O	2.47	0.65
16:P:44:ARG:HD2	16:P:82:ASP:O	1.97	0.65
25:Y:48:TYR:C	25:Y:50:THR:HG23	2.21	0.65
25:Y:63:HIS:ND1	25:Y:64:PHE:CD1	2.65	0.65
25:Y:87:PRO:CB	25:Y:89:HIS:CE1	2.80	0.65
33:g:119:GLN:NE2	33:g:131:LEU:HG	2.12	0.65
34:i:239:U:O2'	34:i:240:C:H5'	1.96	0.65
34:i:328:G:C6	34:i:329:A:C5	2.85	0.65
34:i:1244:U:C2	35:j:33:C:OP1	2.50	0.65
36:k:20:U:C2	37:n:67:LYS:C	2.73	0.65
37:n:61:ILE:CA	37:n:91:VAL:HB	2.23	0.65
37:n:62:ARG:HB2	37:n:92:ILE:CA	2.27	0.65
37:n:110:PRO:C	37:n:112:HIS:H	2.02	0.65
1:A:186:ARG:O	1:A:186:ARG:NE	2.30	0.65
4:D:179:GLN:O	4:D:179:GLN:NE2	2.30	0.65
4:D:201:LYS:HA	4:D:201:LYS:CE	2.14	0.65
6:F:36:GLN:C	6:F:37:ASP:CG	2.63	0.65
6:F:39:ILE:HG23	6:F:68:ILE:HD13	1.79	0.65
7:G:64:LYS:HE2	7:G:67:VAL:CG1	2.27	0.65
8:H:166:VAL:HG22	8:H:173:PHE:CE2	2.30	0.65
9:I:144:LYS:HE2	34:i:189:G:C5'	2.25	0.65
9:I:157:LYS:O	9:I:158:ILE:O	2.14	0.65
9:I:167:GLN:HG3	9:I:168:GLN:N	2.12	0.65
10:J:109:ARG:O	10:J:110:LEU:C	2.34	0.65
25:Y:10:ARG:NE	25:Y:24:VAL:CG1	2.40	0.65
25:Y:99:LYS:O	25:Y:99:LYS:NZ	2.29	0.65
26:Z:103:HIS:NE2	26:Z:105:ALA:CB	2.58	0.65
32:f:105:TYR:O	32:f:106:TYR:HD2	1.69	0.65
34:i:199:G:C5	34:i:200:U:C5	2.85	0.65
34:i:1823:G:N2	34:i:1845:A:N9	2.45	0.65
37:n:79:VAL:HA	37:n:90:ASP:O	1.97	0.65
37:n:99:GLU:O	37:n:103:LEU:HD23	1.96	0.65
1:A:7:VAL:HG22	22:V:43:THR:HG21	1.79	0.65
1:A:66:VAL:HG13	1:A:186:ARG:CB	2.27	0.65
2:B:26:SER:C	2:B:27:LYS:HG3	2.22	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:30:TRP:HE1	15:O:17:LEU:HD22	1.59	0.65
3:C:54:LEU:HD22	3:C:254:PHE:HB3	1.79	0.65
3:C:198:LEU:HD13	3:C:225:THR:HG23	1.77	0.65
5:E:98:ASN:ND2	5:E:114:ILE:CD1	2.60	0.65
6:F:20:PHE:HB3	6:F:23:TRP:HB2	1.78	0.65
6:F:51:HIS:ND1	17:Q:82:TYR:OH	2.30	0.65
7:G:50:VAL:HG11	7:G:111:LEU:HD22	1.73	0.65
9:I:21:TYR:CE1	34:i:423:A:H5'	2.32	0.65
9:I:85:ALA:HB1	12:L:8:ARG:CD	2.26	0.65
9:I:104:ILE:O	9:I:105:ASP:OD2	2.15	0.65
10:J:170:PRO:HD2	10:J:175:ARG:HH11	1.61	0.65
12:L:71:ARG:HG2	12:L:73:LEU:HG	1.78	0.65
14:N:25:TRP:CD1	28:b:83:GLN:HB3	2.32	0.65
15:O:117:ARG:HD2	29:c:62:GLU:CD	2.21	0.65
17:Q:140:ARG:HB3	34:i:1639:C:H4'	1.79	0.65
20:T:11:GLN:CD	20:T:62:ARG:CZ	2.70	0.65
20:T:31:PRO:CG	20:T:33:TRP:CZ2	2.79	0.65
21:U:33:GLU:OE1	21:U:55:ARG:NH2	2.29	0.65
24:X:4:CYS:SG	34:i:1157:U:OP2	2.55	0.65
24:X:108:LYS:HB3	24:X:110:HIS:HE2	1.60	0.65
27:a:58:VAL:CG1	27:a:59:PHE:N	2.22	0.65
29:c:11:LEU:HB3	29:c:35:MET:CE	2.27	0.65
32:f:103:LEU:HD22	32:f:106:TYR:HD2	1.62	0.65
33:g:175:LYS:HD2	33:g:177:TRP:CZ2	2.31	0.65
1:A:32:PHE:CD1	1:A:33:GLN:NE2	2.64	0.64
1:A:119:PRO:O	1:A:142:LEU:CD2	2.45	0.64
2:B:77:ASP:O	2:B:79:VAL:HG13	1.97	0.64
2:B:110:MET:HE1	2:B:213:ARG:HD2	1.78	0.64
5:E:258:ALA:O	5:E:259:LYS:CB	2.33	0.64
5:E:259:LYS:HG2	5:E:260:GLN:OE1	1.96	0.64
7:G:162:LEU:CD2	7:G:172:LYS:HZ3	2.07	0.64
8:H:163:GLN:O	8:H:166:VAL:HG12	1.97	0.64
13:M:85:LEU:HD13	13:M:106:CYS:SG	2.38	0.64
14:N:13:GLN:CD	28:b:21:LYS:HE2	2.21	0.64
14:N:139:TRP:CE3	14:N:140:LYS:CA	2.80	0.64
17:Q:47:LEU:HD23	17:Q:81:ILE:HD13	1.64	0.64
19:S:47:LYS:CE	19:S:78:LYS:HB2	2.26	0.64
19:S:92:ASP:OD2	19:S:92:ASP:N	2.30	0.64
21:U:27:ARG:CG	21:U:83:ARG:O	2.45	0.64
24:X:93:PHE:O	24:X:140:ARG:NH1	2.30	0.64
33:g:282:GLU:OE2	33:g:283:PRO:N	2.30	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:127:C:OP1	34:i:180:G:C2	2.50	0.64
34:i:489:G:C2	34:i:491:C:H1'	2.32	0.64
34:i:1215:C:H2'	34:i:1216:A:C8	2.33	0.64
36:k:19:U:C4'	37:n:70:TRP:CZ2	2.80	0.64
1:A:89:LYS:HB3	1:A:202:TYR:CZ	2.31	0.64
1:A:177:MET:CE	1:A:180:ARG:CZ	2.61	0.64
2:B:209:ASP:O	2:B:210:VAL:HB	1.97	0.64
3:C:58:MET:CE	3:C:81:PHE:HZ	2.10	0.64
3:C:154:TYR:OH	3:C:161:LYS:C	2.40	0.64
3:C:241:TRP:CD1	23:W:68:ARG:HD3	2.32	0.64
5:E:49:ARG:CB	5:E:55:ALA:HB3	2.28	0.64
5:E:151:ASP:OD2	5:E:151:ASP:N	2.30	0.64
8:H:85:LYS:O	8:H:85:LYS:CD	2.35	0.64
10:J:12:THR:C	10:J:48:PHE:CE2	2.75	0.64
10:J:48:PHE:HE1	10:J:52:LYS:CE	1.86	0.64
10:J:91:LYS:CA	10:J:96:TYR:CG	2.80	0.64
16:P:39:ALA:CA	16:P:42:ARG:HE	2.09	0.64
23:W:42:MET:HE2	23:W:48:GLY:O	1.96	0.64
24:X:139:GLU:CD	24:X:139:GLU:N	2.55	0.64
28:b:83:GLN:C	28:b:84:HIS:O	2.38	0.64
31:e:80:LEU:CD1	37:n:83:ASP:CA	2.72	0.64
33:g:79:LEU:CD2	33:g:89:LEU:HD13	2.27	0.64
1:A:40:LYS:HD3	1:A:41:ARG:H	1.62	0.64
2:B:116:LYS:O	2:B:117:TRP:HB2	1.95	0.64
4:D:207:HIS:O	4:D:208:VAL:HG23	1.97	0.64
4:D:215:ASP:O	4:D:216:GLU:CB	2.45	0.64
4:D:222:PRO:O	4:D:223:ILE:HB	1.98	0.64
5:E:71:LYS:HE3	5:E:75:LYS:HA	1.78	0.64
6:F:110:GLN:O	6:F:113:VAL:CG1	2.44	0.64
7:G:142:ARG:CD	7:G:147:LEU:HB3	2.26	0.64
10:J:35:TYR:CE1	10:J:112:THR:HG21	2.33	0.64
11:K:53:LYS:HG3	11:K:54:SER:N	2.11	0.64
11:K:71:LEU:CG	11:K:76:ILE:HD13	2.25	0.64
13:M:18:LEU:CD2	13:M:22:LEU:HG	2.25	0.64
14:N:54:LEU:HB3	14:N:60:VAL:CG2	2.20	0.64
14:N:89:TYR:CE1	14:N:150:VAL:HG13	2.32	0.64
14:N:139:TRP:CZ3	14:N:141:TYR:N	2.65	0.64
15:O:30:VAL:CG2	15:O:45:THR:OG1	2.46	0.64
15:O:37:PHE:O	15:O:38:ASN:CB	2.46	0.64
19:S:54:LYS:HD3	19:S:58:GLU:OE1	1.98	0.64
20:T:90:SER:C	20:T:91:HIS:HD2	2.03	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:95:GLY:O	20:T:96:SER:O	2.14	0.64
20:T:111:LYS:O	20:T:124:THR:HG21	1.97	0.64
20:T:124:THR:HG22	20:T:127:GLY:H	1.61	0.64
21:U:106:ILE:O	21:U:106:ILE:HG12	1.98	0.64
24:X:52:LEU:HD11	24:X:71:ARG:CB	2.28	0.64
25:Y:62:THR:CB	25:Y:69:THR:HG22	2.27	0.64
25:Y:114:MET:CE	25:Y:125:VAL:CG2	2.73	0.64
33:g:5:MET:CE	33:g:312:VAL:CG2	2.71	0.64
33:g:143:GLN:HG3	33:g:144:ASP:CB	2.27	0.64
34:i:1825:A:H4'	34:i:1847:C:H5'	1.79	0.64
37:n:33:GLN:NE2	37:n:81:LEU:O	2.29	0.64
37:n:103:LEU:HD22	37:n:106:TYR:CD2	2.33	0.64
1:A:180:ARG:NH1	1:A:184:ARG:HH12	1.95	0.64
2:B:28:LYS:CD	15:O:51:GLU:OE2	2.45	0.64
3:C:142:LEU:O	3:C:145:LEU:HD23	1.96	0.64
3:C:164:THR:HG23	3:C:165:VAL:H	1.63	0.64
3:C:236:LEU:CD2	3:C:237:THR:O	2.45	0.64
3:C:245:VAL:O	3:C:246:PHE:HB2	1.96	0.64
4:D:67:ARG:CG	4:D:67:ARG:NH1	2.56	0.64
4:D:209:SER:HG	18:R:40:ILE:HB	1.61	0.64
5:E:259:LYS:O	5:E:260:GLN:CG	2.45	0.64
7:G:145:PHE:HB3	7:G:147:LEU:HD13	1.77	0.64
9:I:3:ILE:O	9:I:3:ILE:HG22	1.97	0.64
9:I:206:LYS:CG	9:I:207:GLY:H	2.07	0.64
13:M:35:ILE:HD13	13:M:61:TYR:CE2	2.32	0.64
14:N:94:LYS:HG2	14:N:118:ILE:HD13	1.78	0.64
17:Q:116:ASP:CG	17:Q:117:ARG:H	2.04	0.64
19:S:20:ILE:HD11	19:S:33:ILE:HD11	1.79	0.64
21:U:19:ARG:CG	21:U:92:HIS:CE1	2.76	0.64
23:W:90:GLN:N	23:W:102:ILE:CD1	2.60	0.64
23:W:101:PHE:HD2	23:W:129:PHE:HE1	1.46	0.64
25:Y:54:VAL:HG13	25:Y:76:TYR:CA	2.27	0.64
32:f:89:LYS:O	32:f:89:LYS:CG	2.30	0.64
33:g:203:ASP:OD1	33:g:203:ASP:N	2.28	0.64
1:A:16:LEU:HB2	1:A:17:LYS:CE	2.28	0.64
1:A:34:MET:CE	1:A:37:TYR:HE2	2.02	0.64
1:A:193:HIS:ND1	1:A:194:PRO:HD2	2.12	0.64
2:B:25:PHE:CD2	15:O:88:LEU:HD21	2.30	0.64
2:B:105:LEU:HD11	2:B:213:ARG:CG	2.27	0.64
3:C:123:GLY:CA	3:C:226:PHE:CZ	2.76	0.64
3:C:126:MET:CE	3:C:223:LYS:HZ2	2.09	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:162:LEU:HG	7:G:170:ARG:CB	2.25	0.64
8:H:110:THR:CG2	8:H:110:THR:O	2.46	0.64
8:H:117:PRO:HD2	8:H:120:ARG:HD2	1.80	0.64
9:I:144:LYS:O	9:I:145:ILE:CB	2.45	0.64
9:I:144:LYS:HE2	34:i:189:G:P	2.37	0.64
9:I:155:ASN:C	9:I:157:LYS:N	2.56	0.64
11:K:50:GLN:O	11:K:53:LYS:HG2	1.98	0.64
16:P:41:GLN:NE2	16:P:45:LEU:CG	2.40	0.64
16:P:98:ASN:OD1	16:P:120:SER:OG	2.14	0.64
17:Q:34:VAL:HG21	17:Q:39:LEU:CD2	2.22	0.64
17:Q:109:LYS:HZ2	17:Q:113:ILE:HD11	1.61	0.64
17:Q:115:TYR:HD2	17:Q:116:ASP:H	1.44	0.64
27:a:10:ARG:HB3	27:a:34:LYS:HA	1.80	0.64
27:a:45:VAL:HG23	27:a:46:GLU:N	2.12	0.64
27:a:51:ARG:HG3	27:a:52:ASP:N	2.12	0.64
27:a:58:VAL:O	27:a:59:PHE:O	2.15	0.64
29:c:44:ARG:CZ	29:c:58:LEU:HD22	2.27	0.64
33:g:261:LEU:HD22	33:g:261:LEU:N	2.12	0.64
34:i:546:U:H2'	34:i:547:U:C5'	2.28	0.64
34:i:1822:C:O2	34:i:1843:G:C2	2.49	0.64
2:B:87:ILE:CG2	2:B:101:HIS:CD2	2.77	0.64
5:E:126:VAL:HG21	5:E:129:ILE:CD1	2.27	0.64
5:E:184:THR:C	5:E:189:LEU:CD1	2.70	0.64
10:J:84:ILE:HD12	10:J:86:VAL:CG2	2.28	0.64
11:K:3:MET:HG2	11:K:4:PRO:O	1.97	0.64
13:M:35:ILE:HG23	13:M:36:ARG:N	2.13	0.64
13:M:56:CYS:SG	13:M:57:ASP:N	2.71	0.64
13:M:91:LEU:CD2	13:M:104:VAL:HG13	2.21	0.64
14:N:59:GLY:O	14:N:60:VAL:CG1	2.45	0.64
16:P:10:ARG:HH21	16:P:11:THR:HG21	1.61	0.64
19:S:8:LYS:CA	26:Z:49:LEU:CD2	2.75	0.64
19:S:39:ARG:HH22	20:T:38:LYS:HG2	1.60	0.64
20:T:87:VAL:HG21	34:i:1660:G:N1	2.13	0.64
31:e:114:ARG:CA	31:e:118:ASN:HB2	2.26	0.64
32:f:130:VAL:HG11	32:f:143:LYS:HG2	1.80	0.64
34:i:520:U:C5	34:i:521:A:N9	2.66	0.64
2:B:71:LEU:HB2	2:B:84:PHE:CE2	2.33	0.64
2:B:181:LEU:O	2:B:185:VAL:HG23	1.97	0.64
3:C:217:THR:O	3:C:219:GLY:N	2.31	0.64
7:G:76:LEU:HD21	7:G:92:ARG:CG	2.19	0.64
8:H:10:LYS:HE3	8:H:16:PRO:C	2.22	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:84:HIS:CG	11:K:84:HIS:O	2.39	0.64
14:N:40:LEU:HB3	14:N:45:LEU:HD12	1.79	0.64
16:P:100:LYS:HG2	34:i:1236:A:N1	2.13	0.64
16:P:108:LYS:NZ	19:S:118:ARG:NH1	2.43	0.64
19:S:8:LYS:HB2	19:S:9:PHE:HD1	0.65	0.64
20:T:77:LYS:CG	20:T:92:PHE:HZ	2.03	0.64
20:T:144:LYS:NZ	20:T:144:LYS:CB	2.55	0.64
33:g:57:ARG:HD2	33:g:94:THR:C	2.22	0.64
34:i:848:G:H3'	34:i:849:C:C5'	2.24	0.64
34:i:1206:G:O5'	34:i:1207:G:OP1	2.14	0.64
34:i:1414:C:H42	34:i:1417:A:N6	1.96	0.64
1:A:176:TRP:CD1	1:A:199:PRO:HA	2.33	0.64
1:A:196:GLU:HA	1:A:196:GLU:OE2	1.97	0.64
2:B:178:THR:O	2:B:179:ASN:HB2	1.95	0.64
3:C:55:VAL:CG1	3:C:82:PHE:CD2	2.74	0.64
3:C:196:LYS:C	3:C:200:LEU:HD23	2.23	0.64
3:C:255:THR:CG2	3:C:256:ASP:OD1	2.45	0.64
4:D:3:VAL:O	4:D:3:VAL:CG1	2.37	0.64
4:D:74:GLN:HE22	4:D:75:LYS:CE	2.10	0.64
5:E:86:PHE:O	5:E:142:HIS:HE1	1.81	0.64
5:E:133:THR:O	5:E:134:LYS:CB	2.46	0.64
6:F:19:LEU:CD2	6:F:24:SER:HA	2.28	0.64
6:F:91:ARG:CD	17:Q:46:THR:HG21	2.26	0.64
8:H:87:PHE:O	8:H:88:SER:O	2.15	0.64
9:I:154:LYS:O	9:I:154:LYS:NZ	2.30	0.64
10:J:84:ILE:CD1	10:J:86:VAL:CG2	2.75	0.64
14:N:137:PRO:O	14:N:138:ASN:ND2	2.31	0.64
16:P:10:ARG:HE	16:P:11:THR:CB	2.11	0.64
16:P:110:GLU:N	16:P:110:GLU:OE2	2.30	0.64
21:U:67:LYS:O	21:U:68:THR:C	2.34	0.64
25:Y:20:ARG:C	25:Y:21:LYS:HD3	2.22	0.64
26:Z:65:TYR:HD2	26:Z:68:ILE:CG1	2.11	0.64
28:b:12:PRO:HD2	28:b:13:GLU:HG3	1.78	0.64
31:e:105:ARG:CB	31:e:105:ARG:HH21	2.04	0.64
33:g:273:GLU:HA	33:g:274:VAL:HG13	1.79	0.64
34:i:184:G:H8	34:i:184:G:O5'	1.81	0.64
4:D:63:GLY:O	4:D:67:ARG:NH1	2.31	0.64
4:D:123:LEU:HD21	4:D:154:ASP:OD2	1.97	0.64
4:D:166:TYR:HD1	4:D:200:PRO:HB2	1.53	0.64
4:D:216:GLU:O	4:D:217:ILE:HD12	1.97	0.64
9:I:82:VAL:CG1	9:I:202:ILE:HD11	2.25	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:28:GLU:CD	10:J:40:LYS:HD2	2.20	0.64
10:J:82:VAL:CG1	10:J:92:MET:CE	2.76	0.64
10:J:162:ARG:O	10:J:163:SER:C	2.41	0.64
11:K:57:TYR:CD1	11:K:75:GLY:HA2	2.33	0.64
12:L:5:GLN:NE2	12:L:10:TYR:CE1	2.59	0.64
12:L:113:LEU:HD11	12:L:120:VAL:CB	2.27	0.64
16:P:59:ARG:HD3	16:P:76:VAL:CG1	2.27	0.64
17:Q:98:LYS:HA	33:g:57:ARG:HH21	1.61	0.64
22:V:40:ASP:HB3	22:V:47:ASN:HD21	1.60	0.64
25:Y:5:VAL:HG12	25:Y:6:THR:N	2.12	0.64
32:f:139:HIS:HB3	32:f:150:PHE:O	1.96	0.64
33:g:83:TRP:O	33:g:85:GLY:N	2.31	0.64
34:i:520:U:O4	34:i:545:A:N3	2.31	0.64
1:A:52:LYS:HB3	1:A:52:LYS:HZ1	1.61	0.64
1:A:120:ARG:NH2	3:C:252:GLN:OE1	2.31	0.64
3:C:51:LEU:HD23	3:C:60:ILE:HD12	1.79	0.64
3:C:54:LEU:CD1	3:C:258:LEU:CD1	2.60	0.64
3:C:58:MET:CE	3:C:81:PHE:CZ	2.81	0.64
4:D:74:GLN:HB2	4:D:84:VAL:HG12	1.80	0.64
5:E:191:ARG:NE	5:E:245:ARG:HD3	2.13	0.64
6:F:112:LEU:O	6:F:116:ILE:HD11	1.97	0.64
6:F:195:GLU:O	6:F:199:VAL:HG23	1.97	0.64
7:G:64:LYS:HE2	7:G:67:VAL:HG13	1.79	0.64
7:G:210:ALA:O	7:G:213:LEU:HG	1.98	0.64
8:H:138:GLU:OE2	14:N:19:ARG:CA	2.46	0.64
10:J:29:LEU:HD22	31:e:112:TYR:HD1	1.62	0.64
10:J:61:LEU:HD23	10:J:98:LEU:HD11	1.74	0.64
12:L:22:ARG:CZ	12:L:22:ARG:HB3	2.27	0.64
16:P:83:MET:HB3	16:P:116:LEU:CD1	2.28	0.64
17:Q:50:LYS:NZ	17:Q:85:ARG:HH21	1.69	0.64
19:S:94:LYS:HD3	19:S:96:SER:HG	1.58	0.64
20:T:31:PRO:CB	20:T:33:TRP:CD2	2.77	0.64
25:Y:92:ALA:HA	25:Y:97:TYR:CA	2.27	0.64
31:e:80:LEU:H	37:n:83:ASP:N	1.96	0.64
33:g:162:ASN:CG	33:g:163:PRO:CD	2.71	0.64
34:i:1517:A:H2	34:i:1518:C:C5	2.16	0.64
2:B:75:GLN:NE2	2:B:75:GLN:CA	2.61	0.63
3:C:161:LYS:HD3	22:V:9:VAL:HG21	1.80	0.63
3:C:233:TYR:CE1	22:V:12:TYR:CZ	2.86	0.63
4:D:38:GLU:OE1	4:D:40:ARG:NH2	2.28	0.63
4:D:53:THR:HG22	4:D:91:VAL:CG2	2.27	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:28:VAL:HG13	6:F:110:GLN:OE1	1.97	0.63
8:H:190:PRO:HB2	8:H:191:GLU:HG2	1.79	0.63
9:I:8:TRP:CZ3	9:I:20:PRO:HA	2.32	0.63
10:J:16:PRO:O	10:J:17:ARG:C	2.33	0.63
10:J:37:LEU:HG	10:J:42:GLU:HB2	1.78	0.63
12:L:112:HIS:HB2	12:L:134:LEU:CD1	2.28	0.63
13:M:124:ILE:CA	13:M:127:TYR:CE2	2.80	0.63
14:N:6:ALA:HB1	14:N:7:PRO:CD	2.28	0.63
14:N:28:LEU:HD13	14:N:58:HIS:CE1	2.33	0.63
14:N:38:TYR:CE1	14:N:78:LYS:CG	2.82	0.63
16:P:123:TYR:CZ	19:S:120:HIS:NE2	2.66	0.63
18:R:44:LYS:HE3	18:R:47:ARG:CZ	2.22	0.63
18:R:71:ILE:O	18:R:75:GLU:HG3	1.97	0.63
20:T:119:TRP:CB	34:i:1557:C:O2'	2.46	0.63
25:Y:98:GLU:CD	25:Y:98:GLU:O	2.41	0.63
25:Y:111:LYS:HD2	25:Y:115:LYS:HE3	1.80	0.63
33:g:51:ASN:HB2	33:g:53:GLY:O	1.98	0.63
33:g:143:GLN:NE2	33:g:144:ASP:CA	2.56	0.63
33:g:285:GLN:C	33:g:302:TYR:CD1	2.77	0.63
34:i:1280:A:OP1	34:i:1282:G:H5'	1.98	0.63
34:i:1635:A:H1'	35:j:39:C:O2	1.98	0.63
35:j:51:G:O2'	35:j:52:G:H8	1.78	0.63
35:j:71:U:C3'	35:j:72:A:H5"	2.27	0.63
1:A:17:LYS:CE	1:A:17:LYS:H	2.08	0.63
1:A:193:HIS:HB3	1:A:194:PRO:HD2	1.80	0.63
1:A:205:ARG:O	1:A:206:ASP:HB2	1.97	0.63
3:C:117:ASP:CG	3:C:119:ASN:H	2.05	0.63
3:C:120:GLY:CA	3:C:150:VAL:HG22	2.29	0.63
3:C:237:THR:OG1	3:C:240:LEU:HD13	1.97	0.63
8:H:10:LYS:CB	8:H:20:GLU:OE1	2.46	0.63
8:H:37:LYS:HZ3	8:H:41:ARG:HG3	1.62	0.63
10:J:170:PRO:HB3	10:J:174:LYS:CE	2.27	0.63
10:J:177:ASN:C	10:J:180:LYS:HB3	2.24	0.63
13:M:78:LYS:O	13:M:79:VAL:CB	2.47	0.63
20:T:21:PHE:CE1	20:T:22:LEU:HD23	2.33	0.63
20:T:84:ARG:HB2	20:T:84:ARG:CZ	2.27	0.63
25:Y:56:PHE:HB3	25:Y:58:PHE:HE2	1.63	0.63
28:b:11:SER:O	28:b:15:GLU:HG3	1.99	0.63
30:d:45:GLN:C	30:d:46:TYR:HD2	2.06	0.63
31:e:80:LEU:N	37:n:82:ARG:CA	2.50	0.63
34:i:1413:C:H3'	34:i:1413:C:H6	1.62	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:66:VAL:HG11	22:V:46:PHE:CB	2.28	0.63
2:B:31:TYR:CE2	2:B:62:LEU:HD22	2.33	0.63
2:B:67:PHE:CD1	15:O:47:LEU:O	2.51	0.63
2:B:113:MET:SD	2:B:211:PHE:HE2	2.06	0.63
4:D:29:LEU:CB	4:D:34:TYR:HB2	2.28	0.63
5:E:11:ARG:O	5:E:12:VAL:HB	1.96	0.63
5:E:25:SER:CB	34:i:485:U:H1'	2.28	0.63
6:F:28:VAL:HA	6:F:110:GLN:OE1	1.99	0.63
6:F:42:LYS:HE3	6:F:43:GLU:CA	2.27	0.63
8:H:64:VAL:HG13	8:H:65:PRO:HD2	1.79	0.63
8:H:83:LEU:HD12	8:H:83:LEU:C	2.23	0.63
8:H:163:GLN:HG2	8:H:164:ASN:N	2.12	0.63
9:I:112:TRP:CZ3	9:I:117:TYR:CE2	2.86	0.63
10:J:16:PRO:HD2	10:J:44:TRP:CH2	2.32	0.63
14:N:21:SER:O	14:N:22:VAL:CB	2.46	0.63
14:N:60:VAL:HG23	14:N:60:VAL:O	1.97	0.63
17:Q:112:LEU:O	17:Q:116:ASP:HA	1.99	0.63
18:R:32:LYS:HE2	18:R:33:ARG:NE	2.11	0.63
24:X:122:VAL:HG12	24:X:130:LEU:HD11	1.79	0.63
30:d:10:HIS:ND1	30:d:10:HIS:C	2.55	0.63
36:k:21:U:C5'	37:n:67:LYS:NZ	2.61	0.63
4:D:126:ILE:CD1	4:D:134:CYS:CB	2.75	0.63
6:F:59:LYS:CD	6:F:62:ARG:HD3	2.23	0.63
6:F:165:ASN:OD1	6:F:167:LYS:HB2	1.98	0.63
7:G:19:ASP:O	7:G:20:ASP:CG	2.42	0.63
8:H:143:ARG:HE	23:W:53:ILE:CG2	1.99	0.63
9:I:140:LYS:O	9:I:144:LYS:O	2.14	0.63
9:I:145:ILE:CA	9:I:148:LYS:HG3	2.29	0.63
12:L:40:ILE:HG23	12:L:41:GLY:O	1.99	0.63
12:L:113:LEU:HD21	12:L:117:PHE:HB2	1.79	0.63
14:N:5:HIS:CD2	14:N:121:ARG:NE	2.66	0.63
15:O:19:PRO:CD	15:O:27:VAL:HG21	2.12	0.63
15:O:98:ARG:HG3	15:O:133:THR:HA	1.81	0.63
16:P:100:LYS:HG2	34:i:1236:A:N6	2.12	0.63
17:Q:28:GLY:HA3	17:Q:67:ASP:CG	2.23	0.63
17:Q:42:ILE:HD11	17:Q:51:LEU:CD1	2.29	0.63
19:S:39:ARG:HD3	20:T:38:LYS:HZ3	1.61	0.63
25:Y:117:VAL:CG2	25:Y:124:ASN:OD1	2.46	0.63
25:Y:119:GLY:O	25:Y:120:THR:C	2.42	0.63
33:g:292:SER:HB2	33:g:297:THR:HB	1.80	0.63
34:i:1825:A:N3	34:i:1846:C:OP1	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:59:LYS:CG	3:C:254:PHE:CE1	2.77	0.63
3:C:164:THR:HG23	3:C:165:VAL:N	2.12	0.63
4:D:59:LEU:HD12	4:D:60:GLY:O	1.99	0.63
6:F:129:GLY:O	6:F:134:VAL:HG22	1.97	0.63
9:I:112:TRP:CH2	9:I:117:TYR:CE2	2.86	0.63
13:M:13:ASP:OD1	13:M:13:ASP:N	2.30	0.63
15:O:117:ARG:CD	29:c:62:GLU:CD	2.69	0.63
19:S:85:ASN:HD21	19:S:98:VAL:H	1.47	0.63
21:U:50:VAL:HG23	21:U:89:ILE:HG23	1.79	0.63
31:e:82:ARG:CG	37:n:82:ARG:CZ	2.74	0.63
33:g:179:LEU:HD23	33:g:179:LEU:N	2.13	0.63
34:i:1244:U:H1'	35:j:33:C:OP2	1.98	0.63
1:A:139:TYR:C	1:A:140:VAL:HG23	2.23	0.63
3:C:70:SER:C	22:V:29:HIS:HE1	2.07	0.63
3:C:126:MET:CE	3:C:223:LYS:HD2	2.27	0.63
5:E:36:HIS:C	5:E:41:CYS:SG	2.82	0.63
5:E:64:ILE:HG13	25:Y:18:LEU:HD21	1.80	0.63
5:E:75:LYS:O	5:E:76:VAL:O	2.17	0.63
5:E:115:THR:HB	5:E:116:PRO:HD2	1.81	0.63
6:F:46:ALA:O	6:F:47:LYS:CD	2.39	0.63
8:H:158:LEU:HD11	8:H:187:PHE:CE1	2.33	0.63
9:I:36:THR:HB	9:I:57:ALA:O	1.97	0.63
9:I:58:LEU:HD11	34:i:1735:C:H5"	1.80	0.63
9:I:145:ILE:HA	9:I:148:LYS:CG	2.28	0.63
10:J:103:GLU:O	10:J:107:GLU:HG3	1.98	0.63
15:O:20:GLN:NE2	15:O:21:VAL:O	2.31	0.63
16:P:65:LYS:HG3	16:P:66:GLU:N	2.13	0.63
17:Q:138:ARG:HB2	34:i:1644:U:O3'	1.99	0.63
24:X:56:GLY:N	37:n:84:TYR:CE1	2.66	0.63
25:Y:101:LYS:O	25:Y:102:THR:CB	2.44	0.63
25:Y:114:MET:C	25:Y:124:ASN:HD22	2.06	0.63
25:Y:114:MET:HE2	25:Y:121:ALA:O	1.99	0.63
26:Z:99:LEU:HD11	26:Z:102:LYS:NZ	2.13	0.63
33:g:153:CYS:HB3	33:g:168:CYS:SG	2.39	0.63
33:g:265:ILE:HG13	33:g:266:ILE:N	2.14	0.63
34:i:1497:C:H2'	34:i:1498:C:O4'	1.99	0.63
35:j:12:G:C2	35:j:23:G:C2	2.86	0.63
3:C:126:MET:CG	34:i:1352:G:H4'	2.28	0.63
3:C:196:LYS:O	3:C:200:LEU:HD23	1.97	0.63
6:F:42:LYS:HB2	6:F:46:ALA:H	1.64	0.63
7:G:80:GLY:O	7:G:81:HIS:CG	2.52	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:80:ASP:OD1	9:I:94:LYS:HG2	1.98	0.63
10:J:16:PRO:O	10:J:18:ARG:N	2.32	0.63
11:K:48:ALA:O	11:K:52:LEU:HD23	1.98	0.63
13:M:89:VAL:CG2	13:M:109:VAL:HG11	2.26	0.63
14:N:27:LYS:HD2	14:N:28:LEU:H	1.64	0.63
18:R:93:GLN:O	18:R:94:GLU:C	2.40	0.63
19:S:34:LYS:CA	19:S:103:LEU:CD2	2.73	0.63
19:S:80:PRO:CG	19:S:82:TRP:CE2	2.82	0.63
21:U:48:LEU:HD12	21:U:91:LEU:HD22	1.79	0.63
22:V:53:TYR:OH	22:V:72:LEU:O	2.08	0.63
36:k:11:A:O2'	36:k:12:A:H5'	1.99	0.63
37:n:84:TYR:C	37:n:86:ASP:H	2.07	0.63
3:C:149:PRO:CD	3:C:149:PRO:O	2.45	0.63
6:F:112:LEU:CA	6:F:177:LEU:HD11	2.28	0.63
7:G:179:LEU:C	7:G:180:VAL:HG23	2.24	0.63
9:I:25:ARG:HD2	9:I:27:TYR:HE2	0.79	0.63
10:J:80:ARG:HA	10:J:83:ARG:CD	2.29	0.63
10:J:135:ILE:O	10:J:135:ILE:HG13	1.99	0.63
11:K:14:LEU:HD21	11:K:35:LEU:HD13	1.81	0.63
16:P:10:ARG:NH2	16:P:11:THR:HG21	2.10	0.63
17:Q:12:VAL:HG11	17:Q:90:LYS:CB	2.28	0.63
17:Q:76:GLY:H	17:Q:79:ALA:HB3	1.64	0.63
18:R:99:ASP:HB3	18:R:119:VAL:HG12	1.80	0.63
23:W:53:ILE:HG21	28:b:25:VAL:HG23	1.81	0.63
24:X:35:ALA:HA	24:X:39:ASN:HD22	1.60	0.63
24:X:126:ALA:CA	24:X:128:VAL:HB	2.28	0.63
25:Y:58:PHE:CE1	25:Y:72:PHE:CD2	2.87	0.63
28:b:61:THR:HG23	28:b:62:VAL:H	1.58	0.63
28:b:62:VAL:CG2	28:b:74:THR:HG21	2.29	0.63
36:k:19:U:HO2'	37:n:70:TRP:CZ3	1.56	0.63
1:A:60:LEU:C	1:A:60:LEU:CD1	2.71	0.63
1:A:125:THR:O	1:A:147:LEU:HD12	1.98	0.63
2:B:93:GLY:C	2:B:94:LYS:HD3	2.23	0.63
2:B:151:ARG:CD	2:B:153:THR:HG22	2.27	0.63
3:C:155:TRP:CE2	23:W:97:ARG:HD3	2.34	0.63
5:E:67:GLN:HG2	5:E:69:PHE:CE2	2.33	0.63
5:E:260:GLN:OE1	5:E:260:GLN:CA	2.47	0.63
6:F:45:TYR:O	6:F:47:LYS:HE3	1.94	0.63
7:G:74:ARG:HD3	7:G:94:ARG:CD	2.22	0.63
8:H:14:GLU:CG	8:H:16:PRO:HB2	2.29	0.63
10:J:118:GLY:O	10:J:120:ALA:N	2.29	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:114:ARG:HG2	14:N:114:ARG:NH2	2.11	0.63
15:O:128:ARG:C	15:O:129:ILE:HG12	2.18	0.63
15:O:131:ASP:OD2	27:a:67:LEU:CD2	2.45	0.63
16:P:21:ASP:O	16:P:25:LEU:N	2.29	0.63
16:P:32:GLN:HA	16:P:35:GLN:CD	2.24	0.63
16:P:44:ARG:HD3	16:P:115:TYR:CE1	2.33	0.63
17:Q:30:GLY:CA	17:Q:66:VAL:O	2.40	0.63
20:T:119:TRP:HE3	34:i:1557:C:HO2'	0.74	0.63
25:Y:92:ALA:O	25:Y:97:TYR:O	2.15	0.63
33:g:191:HIS:NE2	33:g:195:LEU:HD21	2.11	0.63
1:A:17:LYS:HE3	1:A:17:LYS:H	1.64	0.62
1:A:109:THR:C	34:i:1348:G:P	2.79	0.62
1:A:120:ARG:HG2	3:C:251:TYR:CE2	2.34	0.62
1:A:145:ILE:HA	1:A:159:ILE:HG21	1.78	0.62
2:B:133:TYR:CD1	2:B:217:MET:HE1	2.34	0.62
3:C:255:THR:HG23	3:C:256:ASP:N	2.13	0.62
4:D:70:THR:HG22	4:D:86:LEU:CG	2.29	0.62
5:E:62:LYS:HD2	5:E:80:ILE:CG1	2.28	0.62
5:E:98:ASN:ND2	5:E:114:ILE:HD11	2.13	0.62
7:G:25:ARG:O	7:G:27:PHE:N	2.31	0.62
8:H:66:VAL:CG2	8:H:97:GLN:O	2.47	0.62
11:K:3:MET:HG2	11:K:4:PRO:N	2.13	0.62
12:L:113:LEU:CD1	12:L:120:VAL:HG11	2.29	0.62
16:P:10:ARG:HE	16:P:11:THR:CA	2.11	0.62
16:P:100:LYS:CG	34:i:1236:A:H61	2.12	0.62
19:S:46:ARG:NH1	20:T:50:GLU:HA	2.14	0.62
22:V:62:MET:HG3	22:V:62:MET:O	1.98	0.62
26:Z:51:ASP:O	26:Z:53:ALA:N	2.32	0.62
29:c:15:THR:HG21	29:c:33:GLU:CG	2.16	0.62
32:f:147:THR:HG23	32:f:147:THR:O	1.98	0.62
33:g:37:ASP:O	33:g:38:LYS:HB2	1.99	0.62
33:g:48:ASP:C	33:g:49:GLU:CD	2.66	0.62
1:A:45:GLY:C	1:A:46:ILE:HG12	2.22	0.62
3:C:126:MET:HE1	3:C:223:LYS:CE	2.28	0.62
5:E:64:ILE:HG12	25:Y:17:LEU:CD1	2.29	0.62
5:E:87:MET:O	5:E:122:LYS:CE	2.47	0.62
6:F:44:LYS:CA	6:F:45:TYR:HD1	2.12	0.62
6:F:134:VAL:CG1	6:F:136:ARG:HH21	2.09	0.62
7:G:217:MET:O	7:G:221:LYS:HB2	1.98	0.62
8:H:147:LYS:HE3	8:H:153:LEU:HD11	1.81	0.62
12:L:94:HIS:HB3	12:L:105:ARG:HD2	1.75	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:124:ILE:HG13	13:M:125:GLU:N	2.13	0.62
15:O:31:CYS:HB2	15:O:95:ILE:CG1	2.27	0.62
15:O:72:TYR:CE1	15:O:76:LEU:HD11	2.33	0.62
16:P:111:MET:C	16:P:114:HIS:HD2	2.07	0.62
16:P:121:ILE:HG22	19:S:120:HIS:CA	2.29	0.62
17:Q:50:LYS:HZ1	17:Q:85:ARG:HH22	1.42	0.62
20:T:91:HIS:N	20:T:91:HIS:HD2	1.96	0.62
23:W:65:LEU:HD12	23:W:65:LEU:O	1.98	0.62
24:X:41:PHE:HZ	24:X:102:VAL:HG12	1.63	0.62
27:a:85:ARG:O	27:a:85:ARG:HG2	1.98	0.62
34:i:199:G:C6	34:i:200:U:C4	2.87	0.62
34:i:654:A:H61	34:i:1159:C:H42	1.44	0.62
34:i:936:U:H3	34:i:998:U:H3	1.46	0.62
34:i:1468:C:N4	34:i:1471:G:C8	2.65	0.62
1:A:5:LEU:CD1	1:A:6:ASP:N	2.51	0.62
1:A:157:VAL:O	22:V:66:ASP:CG	2.42	0.62
1:A:206:ASP:O	1:A:207:PRO:O	2.17	0.62
6:F:204:ARG:OXT	15:O:72:TYR:HB2	1.99	0.62
7:G:62:PRO:HG2	7:G:83:CYS:SG	2.38	0.62
7:G:135:PRO:CG	7:G:144:LEU:CD2	2.76	0.62
8:H:106:ARG:CD	34:i:857:A:C4	2.83	0.62
11:K:40:VAL:HG23	11:K:41:PRO:CD	2.28	0.62
15:O:117:ARG:HD2	29:c:62:GLU:OE1	1.99	0.62
16:P:39:ALA:CA	16:P:42:ARG:NE	2.56	0.62
17:Q:112:LEU:HD13	17:Q:120:LEU:HD21	1.80	0.62
18:R:100:PRO:CG	18:R:119:VAL:CG2	2.73	0.62
19:S:85:ASN:HD21	19:S:98:VAL:HB	1.64	0.62
24:X:5:ARG:HH21	24:X:5:ARG:CG	2.12	0.62
26:Z:48:VAL:CA	26:Z:83:LEU:HD12	2.29	0.62
33:g:46:THR:CB	33:g:48:ASP:H	2.12	0.62
34:i:683:G:N2	34:i:733:G:O6	2.31	0.62
34:i:1531:G:H8	34:i:1531:G:O5'	1.83	0.62
4:D:74:GLN:HG3	4:D:79:PHE:O	2.00	0.62
4:D:135:GLU:HB3	4:D:153:VAL:HG22	1.81	0.62
7:G:31:ARG:O	7:G:34:THR:HG23	1.99	0.62
7:G:191:ARG:HH22	34:i:303:G:H8	1.48	0.62
8:H:51:ILE:HD11	8:H:176:VAL:HA	1.81	0.62
8:H:138:GLU:CD	14:N:19:ARG:HB3	2.22	0.62
8:H:143:ARG:NE	23:W:53:ILE:HG12	2.11	0.62
8:H:160:LYS:HB2	8:H:192:PHE:HZ	1.64	0.62
8:H:170:VAL:HA	8:H:173:PHE:HD2	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:152:ARG:O	9:I:153:LYS:HB3	1.99	0.62
10:J:81:LEU:CD1	10:J:97:ILE:HD13	2.29	0.62
11:K:2:LEU:HD13	11:K:3:MET:H	0.53	0.62
15:O:77:ALA:O	15:O:81:VAL:HG23	1.98	0.62
22:V:56:CYS:SG	22:V:59:ILE:HG13	2.38	0.62
33:g:51:ASN:N	33:g:51:ASN:OD1	2.33	0.62
33:g:65:PHE:HB2	33:g:83:TRP:CD1	2.35	0.62
33:g:74:ASP:OD2	33:g:74:ASP:N	2.32	0.62
33:g:200:VAL:HG12	33:g:201:SER:O	2.00	0.62
33:g:282:GLU:CG	33:g:283:PRO:HD3	2.07	0.62
2:B:30:TRP:NE1	15:O:17:LEU:CD2	2.56	0.62
2:B:87:ILE:CD1	2:B:220:LYS:HZ3	2.13	0.62
2:B:150:ILE:HG23	2:B:150:ILE:O	1.97	0.62
2:B:228:LEU:CD1	2:B:232:HIS:HD2	2.12	0.62
4:D:53:THR:HG22	4:D:91:VAL:H	1.64	0.62
5:E:93:ASP:O	5:E:95:THR:N	2.32	0.62
6:F:42:LYS:HB2	6:F:45:TYR:H	0.82	0.62
6:F:136:ARG:O	6:F:203:ASN:CB	2.45	0.62
6:F:141:VAL:CG1	29:c:47:LYS:NZ	2.53	0.62
9:I:5:ARG:HH21	34:i:372:C:N4	1.96	0.62
10:J:110:LEU:O	10:J:112:THR:N	2.32	0.62
12:L:7:GLU:CG	12:L:8:ARG:N	2.41	0.62
12:L:118:ARG:CG	12:L:119:ASP:N	2.62	0.62
13:M:11:VAL:O	13:M:12:MET:HB3	1.99	0.62
15:O:17:LEU:CD2	15:O:18:GLY:N	2.63	0.62
16:P:69:PRO:CD	16:P:70:MET:N	2.61	0.62
17:Q:15:ARG:NH1	17:Q:20:THR:CG2	2.63	0.62
26:Z:62:VAL:HG11	26:Z:91:LEU:CD1	2.30	0.62
28:b:16:LYS:HD3	28:b:16:LYS:H	1.64	0.62
31:e:115:ARG:CA	31:e:119:VAL:CG2	2.76	0.62
33:g:46:THR:OG1	33:g:48:ASP:N	2.31	0.62
33:g:194:TYR:HE1	33:g:196:ASN:HD21	1.47	0.62
33:g:281:ALA:O	33:g:282:GLU:HB2	1.99	0.62
3:C:154:TYR:CZ	3:C:162:PRO:N	2.68	0.62
4:D:218:LEU:C	4:D:220:THR:HG23	2.24	0.62
5:E:176:ASP:O	5:E:195:ILE:HD12	2.00	0.62
6:F:141:VAL:CB	29:c:47:LYS:HE3	2.16	0.62
7:G:155:GLN:C	7:G:156:TYR:CD1	2.78	0.62
8:H:110:THR:O	8:H:110:THR:HG23	1.99	0.62
12:L:10:TYR:CD2	12:L:12:LYS:HE3	2.28	0.62
16:P:19:GLY:H	19:S:92:ASP:HA	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:30:ILE:CD1	19:S:45:LEU:HD21	2.29	0.62
23:W:29:PRO:O	23:W:30:CYS:HB3	1.99	0.62
23:W:30:CYS:HA	23:W:34:ILE:CD1	2.29	0.62
25:Y:22:GLN:CA	25:Y:74:MET:SD	2.88	0.62
25:Y:27:VAL:HG11	25:Y:35:VAL:CG2	2.25	0.62
27:a:85:ARG:H	34:i:1860:A:H61	1.48	0.62
28:b:1:MET:H2	28:b:2:PRO:HD3	1.63	0.62
33:g:4:GLN:C	33:g:5:MET:HE2	2.23	0.62
33:g:17:TRP:CZ3	33:g:36:ARG:NH2	2.67	0.62
33:g:59:LEU:HD12	33:g:90:TRP:CD2	2.34	0.62
34:i:181:A:C1'	34:i:182:C:C5	2.82	0.62
34:i:181:A:C4	34:i:182:C:C2	2.88	0.62
35:j:48:G:N1	35:j:49:A:C2	2.67	0.62
1:A:24:HIS:HB3	1:A:51:LEU:HD21	1.82	0.62
1:A:103:PHE:CZ	1:A:107:THR:OG1	2.53	0.62
2:B:113:MET:HE3	2:B:211:PHE:HZ	1.61	0.62
2:B:156:ALA:HB1	2:B:160:GLN:OE1	1.98	0.62
5:E:49:ARG:NH2	5:E:50:ASN:HD21	1.96	0.62
6:F:36:GLN:HG2	6:F:37:ASP:CG	2.25	0.62
6:F:123:GLU:CD	29:c:59:LEU:CD1	2.58	0.62
8:H:64:VAL:HG22	8:H:72:PHE:HE2	1.65	0.62
11:K:64:TRP:C	11:K:65:ARG:HG2	2.24	0.62
14:N:13:GLN:OE1	28:b:21:LYS:HG3	2.00	0.62
19:S:89:ASP:O	19:S:90:VAL:CB	2.47	0.62
23:W:41:MET:HG2	23:W:129:PHE:HD2	1.63	0.62
24:X:71:ARG:HE	24:X:82:THR:HG22	1.62	0.62
25:Y:34:THR:CG2	25:Y:35:VAL:H	2.07	0.62
1:A:149:ASN:CB	1:A:165:ASN:HD21	2.12	0.62
1:A:169:HIS:HD2	1:A:203:PHE:CE2	2.17	0.62
5:E:86:PHE:CE2	5:E:87:MET:HG2	2.34	0.62
6:F:36:GLN:HG2	6:F:37:ASP:OD2	1.99	0.62
6:F:42:LYS:O	6:F:42:LYS:HG2	1.99	0.62
6:F:76:MET:HB3	6:F:89:THR:OG1	2.00	0.62
6:F:91:ARG:HH21	17:Q:46:THR:CG2	2.13	0.62
10:J:177:ASN:O	10:J:180:LYS:HB3	1.96	0.62
12:L:94:HIS:ND1	12:L:96:ILE:HD11	2.14	0.62
13:M:124:ILE:C	13:M:127:TYR:CD2	2.77	0.62
15:O:125:LYS:CE	27:a:56:VAL:O	2.47	0.62
17:Q:76:GLY:O	17:Q:80:GLN:HG2	2.00	0.62
17:Q:85:ARG:HH22	17:Q:117:ARG:HD2	1.63	0.62
18:R:42:PRO:CD	18:R:43:SER:H	2.07	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:46:ARG:NE	20:T:50:GLU:CD	2.58	0.62
19:S:58:GLU:HB2	19:S:59:LEU:HD13	1.80	0.62
19:S:108:ARG:NH1	19:S:112:GLU:OE2	2.32	0.62
20:T:23:LYS:HD3	20:T:54:TYR:CD1	2.33	0.62
20:T:31:PRO:HB3	20:T:33:TRP:CE3	2.34	0.62
20:T:77:LYS:CD	20:T:92:PHE:HE2	2.11	0.62
20:T:130:ASP:OD2	20:T:131:LEU:CD2	2.48	0.62
21:U:69:PRO:O	21:U:69:PRO:HD2	1.98	0.62
26:Z:63:PRO:O	26:Z:111:ARG:NH1	2.33	0.62
30:d:27:ARG:HH21	34:i:1259:U:H4'	1.64	0.62
31:e:75:LYS:O	31:e:75:LYS:HG2	2.00	0.62
32:f:86:THR:OG1	32:f:87:THR:N	2.29	0.62
33:g:79:LEU:HD21	33:g:89:LEU:HD13	1.82	0.62
33:g:170:TRP:C	33:g:172:LYS:N	2.53	0.62
34:i:297:C:O2'	34:i:298:G:H5'	1.99	0.62
36:k:20:U:C1'	37:n:67:LYS:C	2.72	0.62
1:A:112:ILE:CA	34:i:1346:U:O2'	2.47	0.62
3:C:259:VAL:HG12	3:C:259:VAL:O	1.97	0.62
6:F:186:ASN:O	6:F:191:LYS:NZ	2.31	0.62
8:H:135:PHE:HD2	8:H:136:PRO:CD	2.12	0.62
9:I:33:ALA:HA	34:i:369:C:H5'	1.80	0.62
9:I:62:VAL:HG21	9:I:75:LYS:HE2	1.70	0.62
10:J:91:LYS:C	10:J:93:LYS:H	2.08	0.62
11:K:62:PHE:HE1	11:K:67:PHE:HE2	1.48	0.62
14:N:93:LYS:HG3	14:N:150:VAL:HG11	1.81	0.62
18:R:33:ARG:NH1	33:g:125:ARG:HH11	1.98	0.62
21:U:59:LYS:HE3	21:U:86:LYS:HE2	1.82	0.62
25:Y:58:PHE:CE1	25:Y:72:PHE:HD2	2.17	0.62
26:Z:80:ARG:CG	26:Z:82:SER:OG	2.40	0.62
33:g:212:LYS:O	33:g:213:ASP:C	2.37	0.62
34:i:522:C:O2'	34:i:523:A:H5'	2.00	0.62
2:B:38:MET:CE	2:B:186:ASN:ND2	2.52	0.62
2:B:62:LEU:HD23	2:B:91:VAL:CG2	2.28	0.62
2:B:87:ILE:CD1	2:B:220:LYS:NZ	2.63	0.62
4:D:200:PRO:O	4:D:201:LYS:HB2	1.98	0.62
4:D:212:GLU:CD	4:D:212:GLU:N	2.48	0.62
6:F:193:LYS:HE2	6:F:197:GLU:CD	2.25	0.62
7:G:162:LEU:HD22	7:G:172:LYS:HZ1	1.65	0.62
11:K:83:LEU:CB	11:K:85:LEU:HG	2.30	0.62
16:P:8:LYS:C	16:P:11:THR:HG22	2.24	0.62
17:Q:63:PHE:HD1	17:Q:68:ILE:HD11	1.65	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:36:GLU:OE2	18:R:47:ARG:HD2	2.00	0.62
19:S:54:LYS:N	19:S:54:LYS:CB	2.57	0.62
20:T:27:LYS:HG3	20:T:27:LYS:O	2.00	0.62
22:V:33:PRO:O	22:V:34:MET:HG2	2.00	0.62
30:d:5:GLN:HG2	30:d:7:TYR:CZ	2.35	0.62
34:i:835:C:O2'	34:i:837:G:H4'	2.00	0.62
37:n:102:SER:O	37:n:105:ALA:HB3	2.00	0.62
5:E:128:LYS:HG3	5:E:130:PHE:HD1	1.65	0.61
5:E:130:PHE:CB	5:E:138:HIS:CD2	2.83	0.61
6:F:42:LYS:CD	6:F:42:LYS:O	2.48	0.61
9:I:155:ASN:CG	9:I:156:ALA:N	2.57	0.61
9:I:190:LEU:HB2	9:I:195:LEU:HD13	1.82	0.61
10:J:16:PRO:C	10:J:18:ARG:N	2.52	0.61
10:J:35:TYR:CD1	10:J:112:THR:HG21	2.34	0.61
15:O:23:GLU:O	15:O:23:GLU:CG	2.33	0.61
20:T:119:TRP:CD1	34:i:1556:A:N1	2.67	0.61
24:X:56:GLY:HA3	37:n:84:TYR:CD1	2.31	0.61
24:X:57:VAL:O	24:X:67:ARG:HB2	2.00	0.61
24:X:90:CYS:HA	24:X:93:PHE:CD2	2.34	0.61
30:d:36:LEU:HD21	30:d:52:PHE:HE2	1.64	0.61
31:e:105:ARG:HH11	31:e:106:ALA:HB2	1.63	0.61
31:e:120:VAL:CG2	31:e:121:PRO:O	2.44	0.61
37:n:85:GLN:HA	37:n:85:GLN:OE1	1.99	0.61
1:A:176:TRP:HZ2	1:A:195:TRP:CE3	1.94	0.61
3:C:115:ILE:HD13	3:C:144:LYS:CG	2.29	0.61
6:F:154:LEU:CD1	6:F:155:CYS:N	2.55	0.61
7:G:177:GLN:HG2	7:G:178:ARG:H	1.66	0.61
8:H:193:GLN:CD	8:H:193:GLN:N	2.57	0.61
10:J:12:THR:O	10:J:48:PHE:CE2	2.53	0.61
12:L:86:ILE:HG21	12:L:113:LEU:HD12	1.82	0.61
13:M:45:ARG:H	13:M:45:ARG:HE	1.47	0.61
16:P:69:PRO:CD	16:P:70:MET:H	2.11	0.61
17:Q:58:LEU:HD13	17:Q:108:ILE:CG2	2.26	0.61
18:R:28:PHE:HA	18:R:55:THR:HG21	1.82	0.61
18:R:100:PRO:HD2	18:R:119:VAL:HG13	1.82	0.61
19:S:8:LYS:CD	19:S:8:LYS:N	2.63	0.61
19:S:58:GLU:HB2	19:S:59:LEU:CD1	2.30	0.61
19:S:90:VAL:HG12	19:S:91:LYS:HG2	1.82	0.61
20:T:31:PRO:C	20:T:33:TRP:N	2.36	0.61
21:U:59:LYS:CB	21:U:84:ILE:CG2	2.61	0.61
25:Y:76:TYR:CG	25:Y:82:ALA:HB2	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:65:TYR:N	26:Z:65:TYR:CD1	2.67	0.61
26:Z:103:HIS:HD2	26:Z:105:ALA:CA	2.13	0.61
28:b:84:HIS:N	28:b:84:HIS:HD2	1.98	0.61
33:g:100:ARG:HH22	34:i:1395:C:H5'	1.65	0.61
34:i:1592:C:C4'	34:i:1598:G:O6	2.33	0.61
1:A:30:LEU:O	1:A:31:ASP:CB	2.48	0.61
2:B:67:PHE:HD1	15:O:47:LEU:HB3	1.64	0.61
2:B:104:ASP:CG	2:B:105:LEU:H	2.07	0.61
4:D:221:THR:CB	4:D:222:PRO:CD	2.77	0.61
5:E:48:LEU:HD11	5:E:70:ILE:HD11	1.82	0.61
8:H:80:VAL:HA	8:H:83:LEU:HD21	1.82	0.61
8:H:83:LEU:HD13	8:H:92:VAL:HG21	0.62	0.61
13:M:51:VAL:HG13	13:M:109:VAL:CG2	2.30	0.61
14:N:25:TRP:HD1	28:b:83:GLN:HB3	1.63	0.61
15:O:41:PHE:HD1	15:O:57:THR:HG22	1.63	0.61
15:O:125:LYS:HA	27:a:56:VAL:CG1	2.31	0.61
16:P:5:GLU:O	16:P:6:GLN:HB2	1.97	0.61
17:Q:126:ARG:C	34:i:1643:G:H8	2.08	0.61
20:T:134:ILE:HG13	20:T:135:ALA:N	2.14	0.61
21:U:82:MET:CE	30:d:51:GLY:C	2.74	0.61
22:V:64:GLU:OE2	28:b:2:PRO:HA	2.00	0.61
25:Y:120:THR:CA	25:Y:122:LYS:HE2	2.29	0.61
28:b:12:PRO:O	28:b:16:LYS:CE	2.49	0.61
28:b:81:ARG:HB3	28:b:82:LYS:HA	1.81	0.61
30:d:13:LYS:HG2	30:d:14:PHE:CE2	2.31	0.61
2:B:25:PHE:CD2	15:O:88:LEU:CG	2.84	0.61
3:C:250:PRO:O	3:C:254:PHE:HB2	2.00	0.61
5:E:43:PRO:HA	5:E:82:TYR:O	2.00	0.61
6:F:78:MET:HB2	6:F:159:ARG:CZ	2.30	0.61
7:G:62:PRO:CG	7:G:83:CYS:SG	2.89	0.61
7:G:227:GLN:CA	7:G:230:LYS:HD2	2.29	0.61
11:K:25:LYS:HD2	11:K:62:PHE:HE1	1.65	0.61
14:N:18:TYR:O	14:N:19:ARG:C	2.39	0.61
14:N:62:GLN:HB2	14:N:65:PHE:CE2	2.32	0.61
15:O:17:LEU:CG	15:O:18:GLY:H	2.12	0.61
15:O:90:ILE:HG22	15:O:124:MET:HE2	1.82	0.61
17:Q:42:ILE:CG1	17:Q:51:LEU:HD21	2.28	0.61
17:Q:57:LEU:CD1	17:Q:115:TYR:CZ	2.60	0.61
18:R:87:GLU:O	18:R:88:VAL:HG12	2.00	0.61
20:T:45:LEU:HG	20:T:46:ALA:N	2.15	0.61
21:U:103:SER:C	21:U:104:ILE:O	2.39	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:73:VAL:CG1	26:Z:79:ILE:HG21	2.23	0.61
29:c:42:ILE:CG2	29:c:43:ILE:N	2.63	0.61
29:c:46:VAL:HG11	29:c:50:VAL:HG23	1.81	0.61
31:e:86:VAL:HA	31:e:89:GLN:CG	2.27	0.61
31:e:118:ASN:HB2	31:e:119:VAL:HG23	1.81	0.61
33:g:4:GLN:HE21	33:g:268:ASP:CG	2.05	0.61
34:i:454:A:H4'	34:i:455:A:OP2	2.00	0.61
34:i:520:U:C2'	34:i:521:A:H5'	2.30	0.61
34:i:526:A:N6	34:i:538:C:O2	2.34	0.61
1:A:149:ASN:HB2	1:A:165:ASN:HD21	1.65	0.61
1:A:158:ASP:O	1:A:159:ILE:HB	2.00	0.61
1:A:186:ARG:H	22:V:46:PHE:H	1.48	0.61
2:B:105:LEU:HD21	2:B:213:ARG:CA	2.28	0.61
2:B:188:LEU:CD2	2:B:212:VAL:HG21	2.31	0.61
3:C:151:ARG:CZ	3:C:240:LEU:HD11	2.28	0.61
4:D:29:LEU:HB2	4:D:34:TYR:HB2	1.81	0.61
4:D:227:LYS:HE3	33:g:187:ASN:HD22	1.65	0.61
5:E:70:ILE:CD1	5:E:92:ILE:HD11	2.29	0.61
5:E:87:MET:HG3	5:E:123:LEU:O	2.01	0.61
5:E:94:LYS:O	5:E:95:THR:CG2	2.48	0.61
5:E:104:ASP:HB2	5:E:108:ARG:H	1.65	0.61
5:E:163:ASP:O	5:E:164:LEU:CB	2.48	0.61
5:E:174:LYS:NZ	5:E:176:ASP:OD2	2.33	0.61
6:F:33:ILE:HD13	29:c:35:MET:CE	2.29	0.61
9:I:76:THR:HG21	9:I:105:ASP:HB2	1.81	0.61
9:I:144:LYS:O	9:I:145:ILE:CG2	2.49	0.61
10:J:125:HIS:NE2	10:J:129:LEU:HD11	2.15	0.61
10:J:136:ARG:HG3	10:J:160:SER:HB3	1.82	0.61
15:O:131:ASP:CG	27:a:67:LEU:CD2	2.73	0.61
17:Q:88:ILE:HG13	17:Q:89:SER:N	2.15	0.61
18:R:91:LEU:CB	18:R:92:ASP:C	2.67	0.61
19:S:26:ILE:O	19:S:30:ILE:HG13	2.01	0.61
25:Y:34:THR:HG22	25:Y:35:VAL:CA	2.30	0.61
25:Y:57:VAL:CG1	25:Y:60:PHE:HE2	2.12	0.61
26:Z:65:TYR:CD2	26:Z:68:ILE:HD11	2.35	0.61
27:a:103:PRO:HA	27:a:107:ALA:HB2	1.82	0.61
37:n:61:ILE:HG12	37:n:66:ARG:HB3	1.83	0.61
37:n:62:ARG:HG2	37:n:92:ILE:CD1	2.28	0.61
1:A:148:CYS:O	1:A:162:PRO:HA	2.00	0.61
4:D:47:GLU:HG2	4:D:85:GLU:HG3	1.78	0.61
4:D:177:LEU:HD12	4:D:178:ARG:NH2	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:25:SER:HB2	34:i:485:U:H1'	1.81	0.61
7:G:176:ILE:CG2	7:G:179:LEU:CG	2.78	0.61
7:G:227:GLN:HG2	7:G:230:LYS:HZ3	1.64	0.61
10:J:100:LEU:CD1	10:J:101:LYS:H	2.13	0.61
11:K:90:VAL:HG13	11:K:90:VAL:O	1.99	0.61
12:L:32:LYS:O	12:L:33:LEU:HD23	2.01	0.61
13:M:12:MET:HE2	13:M:17:ALA:C	1.73	0.61
19:S:40:TYR:CA	19:S:83:PHE:HZ	2.14	0.61
19:S:121:ARG:CG	19:S:131:VAL:HG13	2.25	0.61
20:T:40:ALA:HB3	20:T:43:LYS:CD	2.30	0.61
20:T:119:TRP:CG	34:i:1557:C:H1'	2.36	0.61
21:U:103:SER:O	21:U:106:ILE:HG21	1.96	0.61
24:X:138:LYS:CA	24:X:139:GLU:OE2	2.49	0.61
25:Y:7:ILE:HD11	25:Y:43:LYS:HD3	1.78	0.61
31:e:79:SER:N	37:n:81:LEU:HA	2.16	0.61
31:e:93:VAL:HG12	31:e:94:ALA:O	2.01	0.61
33:g:20:GLN:HB2	33:g:34:ALA:HB3	1.83	0.61
33:g:91:ASP:OD1	33:g:93:THR:OG1	2.12	0.61
33:g:113:PHE:CD1	33:g:120:ILE:HG12	2.35	0.61
37:n:60:HIS:HB2	37:n:90:ASP:OD2	2.01	0.61
1:A:14:ASP:OD2	1:A:55:TRP:CH2	2.53	0.61
2:B:117:TRP:HE3	2:B:153:THR:HB	1.65	0.61
3:C:148:VAL:CB	3:C:149:PRO:HD2	2.26	0.61
10:J:17:ARG:HG3	10:J:18:ARG:HG2	1.77	0.61
13:M:86:GLY:N	13:M:106:CYS:HB2	2.16	0.61
14:N:84:LEU:HD11	14:N:89:TYR:HB2	1.83	0.61
14:N:125:LEU:HD21	14:N:129:TYR:CZ	2.35	0.61
14:N:142:GLU:OE2	14:N:144:SER:OG	2.19	0.61
16:P:41:GLN:HE21	16:P:44:ARG:HH21	1.47	0.61
19:S:89:ASP:O	19:S:90:VAL:HB	1.98	0.61
20:T:44:GLU:HG3	34:i:1533:C:H4'	1.81	0.61
20:T:94:ARG:CG	20:T:94:ARG:HH11	2.14	0.61
21:U:108:PRO:O	21:U:108:PRO:HD2	2.00	0.61
26:Z:64:ASN:O	26:Z:111:ARG:CZ	2.48	0.61
33:g:298:LEU:CD1	33:g:310:TRP:HB2	2.30	0.61
35:j:70:C:H2'	35:j:71:U:H6	1.65	0.61
1:A:30:LEU:HD21	1:A:35:GLU:HG2	1.77	0.61
1:A:84:GLN:O	1:A:88:LEU:CD2	2.49	0.61
1:A:127:PRO:CB	1:A:153:PRO:HG2	2.22	0.61
2:B:67:PHE:CD1	15:O:47:LEU:HB3	2.34	0.61
3:C:161:LYS:HD3	22:V:9:VAL:CG2	2.31	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:122:LYS:HG3	5:E:164:LEU:HD21	1.81	0.61
6:F:103:LEU:HD22	6:F:178:ILE:CD1	2.23	0.61
8:H:37:LYS:NZ	8:H:41:ARG:HG3	2.16	0.61
9:I:87:ASN:OD1	9:I:89:GLU:HG2	2.00	0.61
10:J:29:LEU:O	31:e:112:TYR:CD1	2.54	0.61
10:J:37:LEU:HD21	10:J:42:GLU:CA	2.31	0.61
16:P:127:LYS:NZ	16:P:127:LYS:CA	2.63	0.61
19:S:27:ALA:O	19:S:31:THR:HG23	2.01	0.61
20:T:94:ARG:HG3	20:T:94:ARG:HH11	1.63	0.61
22:V:9:VAL:HG12	22:V:10:ASP:CA	2.31	0.61
24:X:71:ARG:NE	24:X:82:THR:CG2	2.58	0.61
27:a:45:VAL:HB	27:a:53:ILE:CD1	2.29	0.61
31:e:82:ARG:CD	37:n:82:ARG:HH21	2.12	0.61
34:i:192:U:O2'	34:i:193:C:H5'	2.00	0.61
34:i:924:G:H1	34:i:1009:U:H3	1.47	0.61
34:i:1635:A:H2	35:j:30:G:C1'	2.05	0.61
35:j:49:A:H2	35:j:64:C:C4	2.19	0.61
1:A:14:ASP:O	1:A:18:PHE:HD2	1.84	0.61
1:A:158:ASP:OD2	22:V:34:MET:HG3	2.01	0.61
1:A:180:ARG:CD	1:A:184:ARG:CZ	2.78	0.61
3:C:101:THR:CG2	3:C:103:ALA:C	2.68	0.61
4:D:31:GLU:HA	4:D:107:TYR:OH	2.00	0.61
4:D:55:THR:HA	4:D:58:VAL:HG22	1.83	0.61
4:D:218:LEU:HB2	4:D:220:THR:HG22	1.78	0.61
6:F:44:LYS:HB3	6:F:45:TYR:CD1	2.32	0.61
8:H:122:LEU:HD11	8:H:123:THR:HG22	1.83	0.61
10:J:124:HIS:O	10:J:126:ALA:N	2.33	0.61
11:K:47:LYS:HD3	11:K:50:GLN:CD	2.26	0.61
13:M:115:GLY:O	13:M:116:LYS:CB	2.44	0.61
15:O:20:GLN:HG2	15:O:21:VAL:C	2.25	0.61
16:P:41:GLN:HE22	16:P:45:LEU:CD1	2.12	0.61
24:X:1:MET:O	24:X:3:LYS:HB2	2.01	0.61
24:X:105:PHE:CG	24:X:112:VAL:HG21	2.33	0.61
25:Y:19:GLN:HG2	25:Y:81:TYR:CG	2.32	0.61
27:a:50:VAL:HA	27:a:53:ILE:HB	1.82	0.61
33:g:191:HIS:O	33:g:192:THR:HG22	2.00	0.61
34:i:71:G:H3'	34:i:72:C:H5"	1.82	0.61
34:i:1749:C:O5'	34:i:1749:C:H6	1.84	0.61
2:B:117:TRP:HE3	2:B:153:THR:CB	2.14	0.61
3:C:124:LEU:HD13	3:C:125:GLY:N	2.16	0.61
3:C:177:LEU:HD12	3:C:177:LEU:C	2.25	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:248:LYS:HD2	3:C:253:GLU:HB3	1.82	0.61
3:C:256:ASP:OD1	3:C:256:ASP:N	2.33	0.61
4:D:166:TYR:CE1	4:D:200:PRO:CB	2.83	0.61
6:F:25:THR:HG21	6:F:42:LYS:CB	2.19	0.61
7:G:63:MET:CE	7:G:106:LEU:CD2	2.78	0.61
8:H:35:ASP:C	8:H:37:LYS:H	2.09	0.61
8:H:169:LYS:HD2	8:H:173:PHE:HZ	1.66	0.61
9:I:85:ALA:C	12:L:8:ARG:NH1	2.59	0.61
10:J:10:ARG:CZ	10:J:10:ARG:HB2	2.29	0.61
10:J:147:PHE:HE2	10:J:149:VAL:HA	1.64	0.61
10:J:168:GLY:O	10:J:169:ARG:C	2.43	0.61
11:K:95:ARG:HD3	11:K:96:ARG:O	2.01	0.61
12:L:35:ARG:HH21	12:L:63:THR:CG2	2.10	0.61
14:N:94:LYS:HE3	14:N:118:ILE:HD11	1.81	0.61
16:P:114:HIS:HE1	19:S:113:ARG:HH22	1.47	0.61
22:V:53:TYR:CG	22:V:72:LEU:HD13	2.36	0.61
23:W:20:ARG:HB3	23:W:22:LYS:HD3	1.82	0.61
24:X:91:LEU:O	24:X:92:ASN:C	2.43	0.61
26:Z:44:LEU:HD21	26:Z:46:ASN:OD1	2.00	0.61
26:Z:80:ARG:HB3	26:Z:83:LEU:H	1.66	0.61
33:g:194:TYR:HE2	33:g:212:LYS:CE	2.12	0.61
34:i:1244:U:H1'	35:j:33:C:P	2.41	0.61
34:i:1442:A:O2'	34:i:1443:G:H5"	2.01	0.61
37:n:62:ARG:HG2	37:n:92:ILE:CA	2.13	0.61
1:A:14:ASP:HB3	1:A:18:PHE:CE2	2.34	0.60
2:B:57:ILE:HD12	2:B:60:ASP:OD2	1.99	0.60
4:D:216:GLU:O	4:D:217:ILE:CD1	2.49	0.60
7:G:131:ARG:CD	7:G:131:ARG:HG3	2.15	0.60
7:G:197:GLN:O	7:G:201:LYS:HG2	2.01	0.60
8:H:10:LYS:N	8:H:11:PRO:HD3	2.11	0.60
9:I:6:ASP:OD2	9:I:8:TRP:CD1	2.54	0.60
10:J:17:ARG:HB3	10:J:18:ARG:HG3	1.79	0.60
10:J:122:SER:OG	10:J:124:HIS:HB3	1.98	0.60
10:J:130:ILE:HA	10:J:135:ILE:HD13	1.81	0.60
11:K:12:TYR:CD2	11:K:82:TYR:CD2	2.89	0.60
16:P:28:MET:HB3	16:P:32:GLN:OE1	2.01	0.60
16:P:108:LYS:H	16:P:111:MET:CE	2.03	0.60
17:Q:8:GLN:HA	17:Q:99:TYR:OH	2.01	0.60
17:Q:140:ARG:O	17:Q:141:TYR:O	2.19	0.60
18:R:91:LEU:CD1	18:R:91:LEU:N	2.29	0.60
25:Y:10:ARG:HG2	25:Y:24:VAL:CB	2.20	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:81:SER:HB3	36:k:12:A:P	2.41	0.60
28:b:48:SER:OG	28:b:49:HIS:CD2	2.52	0.60
33:g:119:GLN:HE22	33:g:131:LEU:HG	1.66	0.60
34:i:181:A:N7	34:i:182:C:C4	2.69	0.60
2:B:25:PHE:HD2	15:O:88:LEU:HD22	1.44	0.60
2:B:206:PRO:O	2:B:207:LEU:HB2	2.01	0.60
5:E:23:LEU:O	5:E:24:THR:CB	2.49	0.60
8:H:166:VAL:HG23	8:H:173:PHE:CE2	2.35	0.60
9:I:48:VAL:HG23	9:I:52:ASN:HB3	1.82	0.60
10:J:10:ARG:CB	10:J:10:ARG:HH11	2.06	0.60
10:J:79:ARG:HD2	10:J:83:ARG:HD2	1.82	0.60
13:M:76:LEU:HD22	13:M:77:ILE:H	1.66	0.60
21:U:62:ARG:HH11	21:U:79:ARG:HD3	1.67	0.60
21:U:69:PRO:O	21:U:69:PRO:HG2	2.02	0.60
25:Y:7:ILE:HD12	25:Y:43:LYS:HB3	1.66	0.60
25:Y:110:ARG:O	25:Y:114:MET:HG3	2.01	0.60
33:g:8:ARG:HE	33:g:8:ARG:HA	0.63	0.60
33:g:298:LEU:HD21	33:g:310:TRP:CB	2.31	0.60
1:A:66:VAL:O	1:A:67:ALA:HB3	2.01	0.60
1:A:125:THR:CA	1:A:147:LEU:HB2	2.27	0.60
3:C:58:MET:HE1	3:C:81:PHE:HZ	1.66	0.60
3:C:155:TRP:CH2	23:W:97:ARG:CD	2.83	0.60
4:D:53:THR:O	4:D:90:LYS:HE2	2.01	0.60
4:D:179:GLN:HB2	34:i:618:A:C6	2.36	0.60
5:E:56:LEU:HD23	5:E:56:LEU:N	2.16	0.60
5:E:62:LYS:HD2	5:E:80:ILE:HG13	1.83	0.60
5:E:62:LYS:CA	5:E:65:CYS:SG	2.88	0.60
5:E:180:LEU:CD1	5:E:228:ILE:HD11	2.32	0.60
6:F:91:ARG:HH21	17:Q:46:THR:HG22	1.65	0.60
6:F:141:VAL:CG2	29:c:47:LYS:NZ	2.64	0.60
8:H:6:ALA:HA	8:H:10:LYS:HD3	0.72	0.60
8:H:23:ILE:HD13	8:H:23:ILE:O	2.02	0.60
9:I:48:VAL:HG22	9:I:52:ASN:C	2.25	0.60
10:J:77:LEU:O	10:J:81:LEU:HG	2.02	0.60
11:K:1:MET:HG3	34:i:1270:G:H5"	1.83	0.60
14:N:55:ARG:HH22	28:b:51:GLN:CD	2.07	0.60
16:P:15:PHE:CE2	16:P:110:GLU:HB3	2.34	0.60
16:P:49:LEU:CA	16:P:51:ARG:CG	2.68	0.60
17:Q:45:ARG:NH1	34:i:1588:C:H4'	2.16	0.60
24:X:126:ALA:CB	24:X:128:VAL:CB	2.57	0.60
32:f:90:LYS:O	32:f:91:ASN:O	2.19	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:163:PRO:HB2	33:g:179:LEU:HB2	1.83	0.60
33:g:255:SER:HB3	33:g:271:LYS:HG3	1.82	0.60
34:i:194:C:H2'	34:i:195:C:C5	2.36	0.60
34:i:1082:G:O2'	34:i:1083:A:H5'	2.01	0.60
34:i:1282:G:N2	34:i:1309:A:N7	2.49	0.60
1:A:127:PRO:HA	1:A:134:LEU:CD1	2.31	0.60
2:B:161:VAL:HG12	2:B:165:ARG:NH1	2.15	0.60
4:D:166:TYR:CE1	4:D:200:PRO:HB3	2.36	0.60
5:E:122:LYS:CD	5:E:164:LEU:HD21	2.31	0.60
7:G:226:GLU:C	7:G:230:LYS:HZ2	2.00	0.60
9:I:140:LYS:C	9:I:141:ARG:CG	2.73	0.60
10:J:16:PRO:CD	10:J:44:TRP:CE2	2.83	0.60
10:J:87:LEU:CD1	10:J:91:LYS:HB2	2.29	0.60
11:K:12:TYR:CZ	11:K:52:LEU:HD21	2.37	0.60
12:L:101:ARG:O	24:X:10:ALA:HB1	1.96	0.60
16:P:125:PRO:O	16:P:126:VAL:HB	2.00	0.60
16:P:127:LYS:HZ1	16:P:127:LYS:CA	2.14	0.60
20:T:38:LYS:HD2	20:T:46:ALA:N	2.17	0.60
21:U:40:ILE:HD13	21:U:53:PRO:CG	2.07	0.60
23:W:55:ASP:HA	28:b:25:VAL:HG13	1.83	0.60
23:W:88:LYS:HZ2	34:i:410:G:H5'	1.66	0.60
23:W:128:PHE:CD1	23:W:129:PHE:CA	2.84	0.60
27:a:10:ARG:CG	27:a:33:ASP:O	2.44	0.60
28:b:33:MET:SD	28:b:79:PHE:CD1	2.95	0.60
31:e:103:THR:O	31:e:104:GLY:C	2.42	0.60
32:f:102:VAL:O	32:f:104:LYS:N	2.34	0.60
34:i:830:C:C2	34:i:837:G:N2	2.69	0.60
34:i:1206:G:P	34:i:1207:G:P	2.98	0.60
37:n:58:LEU:HD22	37:n:58:LEU:N	2.16	0.60
2:B:225:LEU:O	2:B:229:MET:CG	2.48	0.60
3:C:63:LEU:CD1	3:C:67:TYR:OH	2.47	0.60
3:C:69:PHE:CZ	3:C:247:THR:CB	2.83	0.60
3:C:148:VAL:HB	3:C:149:PRO:HD3	1.83	0.60
4:D:98:ALA:N	4:D:188:ILE:HD12	2.17	0.60
5:E:154:ILE:HG21	5:E:160:ILE:HD11	1.83	0.60
6:F:36:GLN:O	6:F:37:ASP:HB2	2.00	0.60
10:J:81:LEU:HD12	10:J:97:ILE:HD11	1.83	0.60
10:J:92:MET:O	10:J:93:LYS:NZ	2.34	0.60
11:K:65:ARG:HH11	11:K:65:ARG:HB2	1.63	0.60
12:L:96:ILE:O	12:L:99:TYR:O	2.20	0.60
12:L:101:ARG:HB2	24:X:10:ALA:N	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:118:ARG:HG2	12:L:119:ASP:N	2.14	0.60
14:N:19:ARG:NH1	28:b:84:HIS:CB	2.64	0.60
16:P:7:LYS:O	16:P:9:LYS:N	2.31	0.60
17:Q:42:ILE:CD1	17:Q:51:LEU:HD22	2.03	0.60
18:R:5:ARG:HB2	18:R:10:LYS:HZ3	0.75	0.60
20:T:76:THR:C	20:T:95:GLY:H	1.98	0.60
20:T:119:TRP:CE3	34:i:1557:C:H1'	2.35	0.60
23:W:128:PHE:CD1	23:W:128:PHE:C	2.78	0.60
24:X:5:ARG:HH21	24:X:5:ARG:HB2	1.65	0.60
27:a:31:PRO:O	27:a:34:LYS:O	2.19	0.60
29:c:63:ARG:O	29:c:64:GLU:HB3	2.02	0.60
31:e:114:ARG:HA	31:e:118:ASN:ND2	2.15	0.60
32:f:103:LEU:HD23	32:f:105:TYR:CA	2.32	0.60
33:g:70:VAL:CG1	33:g:79:LEU:HB2	2.32	0.60
34:i:1825:A:O5'	34:i:1845:A:N1	2.34	0.60
1:A:80:ARG:NH1	1:A:165:ASN:O	2.32	0.60
1:A:119:PRO:HG2	1:A:142:LEU:CD1	2.27	0.60
2:B:42:ARG:NH2	2:B:232:HIS:HA	2.17	0.60
2:B:113:MET:CE	2:B:209:ASP:CB	2.79	0.60
6:F:59:LYS:HD3	6:F:62:ARG:CD	2.23	0.60
6:F:103:LEU:HG	6:F:103:LEU:O	2.00	0.60
6:F:128:ILE:O	6:F:134:VAL:HG13	2.02	0.60
7:G:192:ILE:HG13	7:G:193:ALA:N	2.17	0.60
8:H:50:GLU:OE2	8:H:90:LYS:HE2	2.02	0.60
8:H:117:PRO:C	8:H:119:SER:N	2.54	0.60
9:I:157:LYS:O	9:I:158:ILE:HG22	2.00	0.60
12:L:59:LYS:HE2	12:L:134:LEU:HD21	1.83	0.60
12:L:118:ARG:HG2	12:L:119:ASP:H	1.67	0.60
14:N:62:GLN:CB	14:N:65:PHE:CE2	2.82	0.60
18:R:33:ARG:HH11	33:g:125:ARG:HD2	1.65	0.60
23:W:96:SER:OG	23:W:98:GLN:HG2	2.01	0.60
25:Y:46:LYS:O	25:Y:46:LYS:CD	2.50	0.60
25:Y:63:HIS:CG	25:Y:64:PHE:CD1	2.88	0.60
25:Y:102:THR:CG2	25:Y:107:ARG:CD	2.68	0.60
26:Z:51:ASP:O	26:Z:52:LYS:CB	2.49	0.60
28:b:5:LYS:HZ2	28:b:5:LYS:HB3	1.67	0.60
31:e:118:ASN:CA	31:e:119:VAL:CB	2.77	0.60
33:g:46:THR:OG1	33:g:48:ASP:HB3	2.00	0.60
33:g:88:ARG:HD2	33:g:90:TRP:CE2	2.37	0.60
33:g:197:THR:HG21	33:g:238:ALA:HA	1.82	0.60
33:g:219:TRP:CD2	33:g:226:HIS:CD2	2.89	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:124:U:C2'	34:i:125:C:H5"	2.31	0.60
34:i:740:G:H2'	34:i:741:C:C6	2.36	0.60
1:A:119:PRO:HG3	1:A:122:LEU:HD21	1.84	0.60
1:A:202:TYR:O	1:A:203:PHE:CB	2.50	0.60
2:B:87:ILE:CG2	2:B:101:HIS:CG	2.84	0.60
2:B:87:ILE:HD12	2:B:220:LYS:HZ3	1.66	0.60
3:C:155:TRP:CE2	23:W:97:ARG:HD2	2.37	0.60
5:E:100:ARG:CD	5:E:102:ILE:HD12	2.31	0.60
7:G:1:MET:SD	7:G:106:LEU:O	2.60	0.60
8:H:143:ARG:CD	23:W:53:ILE:CG1	2.50	0.60
8:H:166:VAL:HG23	8:H:173:PHE:CZ	2.37	0.60
9:I:112:TRP:CH2	9:I:117:TYR:HE2	2.19	0.60
9:I:140:LYS:O	9:I:141:ARG:CG	2.49	0.60
10:J:106:LEU:O	10:J:109:ARG:HG3	2.02	0.60
11:K:65:ARG:CZ	30:d:25:SER:OG	2.46	0.60
11:K:84:HIS:CD2	13:M:27:ILE:CD1	2.84	0.60
12:L:111:VAL:HG23	12:L:140:PHE:C	2.27	0.60
17:Q:16:LYS:HE3	17:Q:17:LYS:HD2	1.83	0.60
17:Q:42:ILE:CG1	17:Q:51:LEU:CD2	2.79	0.60
19:S:8:LYS:HA	26:Z:49:LEU:CD2	2.30	0.60
21:U:67:LYS:CE	21:U:78:ASP:OD2	2.49	0.60
23:W:53:ILE:HG21	28:b:25:VAL:CG2	2.32	0.60
26:Z:85:ARG:NH1	26:Z:85:ARG:CG	2.55	0.60
33:g:119:GLN:HE22	33:g:121:VAL:HG22	1.64	0.60
33:g:240:CYS:HG	33:g:291:TRP:CD1	2.19	0.60
1:A:6:ASP:O	1:A:8:LEU:N	2.35	0.60
1:A:42:LYS:HD3	18:R:105:MET:SD	2.39	0.60
1:A:42:LYS:NZ	18:R:105:MET:HG3	2.17	0.60
5:E:100:ARG:HG2	5:E:102:ILE:HD12	1.83	0.60
5:E:124:CYS:SG	5:E:162:ILE:CD1	2.88	0.60
6:F:204:ARG:NH1	29:c:59:LEU:CB	2.63	0.60
7:G:142:ARG:HE	7:G:147:LEU:HB3	1.67	0.60
7:G:186:GLN:O	7:G:190:ARG:HG3	2.01	0.60
14:N:128:TYR:O	14:N:132:LYS:HG2	2.02	0.60
15:O:19:PRO:HG3	15:O:27:VAL:HG11	1.81	0.60
15:O:52:THR:C	15:O:53:ILE:HG23	2.16	0.60
16:P:13:ARG:O	16:P:14:LYS:CG	2.50	0.60
17:Q:111:ILE:C	17:Q:114:GLN:HG2	2.25	0.60
28:b:1:MET:N	28:b:2:PRO:HD3	2.16	0.60
28:b:10:PRO:HD2	28:b:10:PRO:O	2.01	0.60
29:c:5:ARG:N	29:c:5:ARG:CD	2.63	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:240:CYS:SG	33:g:291:TRP:HD1	2.25	0.60
33:g:260:ASP:O	33:g:264:LYS:HA	2.02	0.60
34:i:683:G:N2	34:i:733:G:N1	2.50	0.60
34:i:1408:C:C2'	34:i:1409:G:C8	2.85	0.60
37:n:103:LEU:HD22	37:n:106:TYR:CG	2.36	0.60
37:n:103:LEU:HD22	37:n:106:TYR:CE2	2.37	0.60
3:C:79:ILE:HD11	3:C:147:ILE:HD11	1.83	0.60
3:C:141:ILE:O	3:C:145:LEU:HD23	2.02	0.60
4:D:196:GLY:O	4:D:199:GLY:HA3	2.02	0.60
7:G:64:LYS:HG3	7:G:67:VAL:HG11	1.84	0.60
8:H:31:GLU:CD	8:H:41:ARG:HD3	2.26	0.60
10:J:10:ARG:HH11	10:J:10:ARG:CG	2.15	0.60
10:J:38:ARG:HG3	31:e:105:ARG:HB2	1.72	0.60
10:J:164:PRO:C	10:J:165:TYR:HD1	2.10	0.60
12:L:100:ASN:OD1	12:L:100:ASN:N	2.28	0.60
16:P:108:LYS:CB	16:P:110:GLU:OE1	2.45	0.60
18:R:29:HIS:HB3	33:g:83:TRP:HH2	1.67	0.60
23:W:53:ILE:HG22	28:b:25:VAL:CG2	2.31	0.60
27:a:95:ARG:O	34:i:1860:A:O2'	2.10	0.60
28:b:36:LYS:CG	28:b:78:SER:OG	2.46	0.60
31:e:80:LEU:O	31:e:81:ALA:C	2.45	0.60
32:f:109:ASP:O	32:f:110:GLU:O	2.19	0.60
32:f:144:CYS:CA	32:f:147:THR:HG22	2.31	0.60
32:f:146:LEU:HD12	32:f:147:THR:CA	2.28	0.60
34:i:1596:A:N6	34:i:1631:G:C2	2.70	0.60
2:B:49:VAL:HG12	2:B:50:THR:N	2.16	0.60
2:B:137:LEU:HD23	2:B:215:VAL:HA	1.84	0.60
2:B:148:ASN:HB2	18:R:123:THR:OG1	1.92	0.60
4:D:16:ILE:CG2	30:d:22:ARG:HH12	2.15	0.60
4:D:222:PRO:C	4:D:223:ILE:CD1	2.74	0.60
8:H:117:PRO:HD2	8:H:120:ARG:HB2	1.84	0.60
12:L:78:THR:HG23	12:L:79:LYS:N	2.17	0.60
12:L:80:MET:HE3	12:L:120:VAL:HG12	1.83	0.60
13:M:28:HIS:HD2	13:M:115:GLY:HA3	1.53	0.60
15:O:129:ILE:CG2	27:a:44:ILE:HG12	2.32	0.60
19:S:50:ILE:HG12	19:S:63:GLU:HG2	1.83	0.60
19:S:111:LEU:HD22	19:S:125:HIS:CE1	2.37	0.60
20:T:85:ASN:H	20:T:85:ASN:HD22	1.49	0.60
20:T:119:TRP:NE1	34:i:1556:A:N1	2.50	0.60
23:W:37:PHE:CE1	23:W:103:VAL:HG11	2.37	0.60
23:W:128:PHE:CE1	23:W:130:PHE:HE2	2.17	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:9:THR:HG21	25:Y:48:TYR:HE2	1.67	0.60
25:Y:12:PHE:HD1	25:Y:23:MET:HB3	1.67	0.60
33:g:100:ARG:HH22	34:i:1395:C:C5'	2.14	0.60
34:i:194:C:C2	34:i:195:C:C5	2.81	0.60
34:i:1287:A:H2'	34:i:1298:G:C8	2.37	0.60
34:i:1751:G:N2	34:i:1769:U:H3	1.97	0.60
1:A:27:GLY:O	1:A:47:TYR:CD2	2.54	0.59
1:A:58:LEU:HD21	1:A:178:LEU:CG	2.29	0.59
2:B:148:ASN:O	18:R:124:VAL:CA	2.50	0.59
6:F:123:GLU:CB	29:c:59:LEU:HD11	2.32	0.59
7:G:63:MET:CE	7:G:106:LEU:HD21	2.32	0.59
8:H:6:ALA:HB3	8:H:15:LYS:HE2	1.84	0.59
8:H:50:GLU:OE2	8:H:58:LYS:CD	2.44	0.59
10:J:34:GLU:HB2	10:J:35:TYR:CD2	2.35	0.59
10:J:122:SER:HG	10:J:124:HIS:CB	2.14	0.59
11:K:84:HIS:CD2	13:M:27:ILE:CG1	2.85	0.59
16:P:49:LEU:HA	16:P:51:ARG:NE	2.17	0.59
16:P:53:GLN:NE2	16:P:80:LEU:HD22	2.16	0.59
17:Q:18:THR:C	17:Q:75:GLY:CA	2.76	0.59
18:R:21:TYR:HD2	18:R:73:LEU:HD12	1.67	0.59
19:S:47:LYS:HZ2	19:S:78:LYS:CB	2.06	0.59
20:T:119:TRP:CE3	34:i:1557:C:C2'	2.85	0.59
33:g:2:THR:C	33:g:3:GLU:CG	2.71	0.59
1:A:14:ASP:O	1:A:18:PHE:CD2	2.55	0.59
3:C:42:ASP:OD1	3:C:43:LYS:N	2.35	0.59
3:C:108:ARG:NH2	3:C:128:CYS:SG	2.75	0.59
3:C:197:LYS:N	3:C:200:LEU:HD23	2.17	0.59
7:G:28:TYR:OH	7:G:104:ALA:HB2	2.01	0.59
8:H:158:LEU:HD23	8:H:158:LEU:N	2.17	0.59
9:I:141:ARG:O	9:I:142:SER:CB	2.50	0.59
10:J:177:ASN:C	10:J:180:LYS:HG2	2.19	0.59
11:K:90:VAL:O	11:K:90:VAL:HG22	2.02	0.59
14:N:76:LYS:C	14:N:76:LYS:CD	2.76	0.59
20:T:28:LEU:O	20:T:28:LEU:CD2	2.44	0.59
23:W:82:GLN:O	23:W:83:LEU:HB3	2.02	0.59
25:Y:62:THR:CA	25:Y:69:THR:HG22	2.32	0.59
27:a:2:THR:HG22	34:i:1195:A:H5"	1.83	0.59
28:b:12:PRO:CA	28:b:16:LYS:HE2	2.31	0.59
28:b:50:ALA:O	28:b:52:THR:N	2.35	0.59
28:b:81:ARG:HB2	28:b:82:LYS:CG	2.29	0.59
29:c:13:ARG:HG2	29:c:33:GLU:HB2	1.82	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:158:LYS:NZ	22:V:4:ASN:HA	2.16	0.59
5:E:49:ARG:NH2	5:E:50:ASN:ND2	2.50	0.59
5:E:86:PHE:CE1	5:E:182:MET:SD	2.95	0.59
5:E:129:ILE:CG2	5:E:139:LEU:CD2	2.79	0.59
5:E:166:THR:HB	5:E:168:LYS:NZ	2.17	0.59
5:E:204:SER:O	5:E:205:PHE:CB	2.50	0.59
7:G:7:PHE:HB2	7:G:124:LEU:HG	1.84	0.59
7:G:25:ARG:O	7:G:26:THR:C	2.46	0.59
7:G:70:HIS:CB	7:G:103:ASP:OD2	2.42	0.59
7:G:142:ARG:NE	7:G:147:LEU:HB3	2.17	0.59
10:J:46:VAL:HG12	10:J:102:ILE:HD12	1.82	0.59
13:M:45:ARG:H	13:M:45:ARG:NE	2.00	0.59
18:R:1:MET:C	18:R:1:MET:H2	1.90	0.59
19:S:88:LYS:N	19:S:94:LYS:O	2.35	0.59
23:W:41:MET:HG2	23:W:129:PHE:CD2	2.36	0.59
24:X:107:ARG:O	24:X:108:LYS:HB2	2.03	0.59
25:Y:55:ILE:HG13	25:Y:75:ILE:HG12	1.65	0.59
25:Y:98:GLU:OE2	25:Y:99:LYS:HA	2.02	0.59
26:Z:48:VAL:HG22	26:Z:80:ARG:HD2	1.79	0.59
32:f:97:LYS:HE3	34:i:1284:U:C4	2.37	0.59
33:g:172:LYS:HE2	33:g:192:THR:CB	2.31	0.59
1:A:106:GLY:N	34:i:1348:G:H5'	2.12	0.59
7:G:85:ARG:HD3	25:Y:118:ARG:NH1	2.16	0.59
8:H:190:PRO:HG2	8:H:192:PHE:CZ	2.38	0.59
9:I:3:ILE:O	9:I:3:ILE:HG23	1.97	0.59
9:I:128:LYS:O	9:I:131:PRO:HD2	2.02	0.59
10:J:79:ARG:O	10:J:83:ARG:CG	2.47	0.59
11:K:42:ASN:O	11:K:43:LEU:HD23	2.03	0.59
11:K:84:HIS:CD2	13:M:27:ILE:HG13	2.32	0.59
14:N:23:PRO:O	14:N:24:THR:HB	2.03	0.59
16:P:53:GLN:HE21	16:P:80:LEU:CG	2.14	0.59
17:Q:58:LEU:HD21	17:Q:111:ILE:HB	1.83	0.59
17:Q:63:PHE:CD1	17:Q:68:ILE:HD11	2.37	0.59
19:S:117:ILE:C	19:S:118:ARG:CG	2.66	0.59
21:U:86:LYS:C	21:U:87:ARG:HG2	2.27	0.59
22:V:40:ASP:OD2	22:V:45:ARG:HB2	2.02	0.59
24:X:67:ARG:CG	24:X:115:ILE:HG12	2.32	0.59
24:X:95:GLU:CB	24:X:140:ARG:HH22	2.15	0.59
26:Z:44:LEU:HD13	26:Z:44:LEU:O	1.95	0.59
31:e:105:ARG:NH1	31:e:106:ALA:N	2.49	0.59
37:n:102:SER:O	37:n:105:ALA:N	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:122:LEU:CD1	1:A:137:ALA:HB2	2.32	0.59
2:B:76:ASN:O	2:B:76:ASN:CG	2.39	0.59
2:B:92:GLN:O	2:B:95:ASN:HB2	2.02	0.59
3:C:154:TYR:CD2	3:C:158:LYS:HA	2.37	0.59
6:F:61:PHE:O	6:F:63:LYS:N	2.35	0.59
7:G:145:PHE:CB	7:G:147:LEU:CD1	2.65	0.59
9:I:76:THR:CG2	9:I:105:ASP:HB2	2.33	0.59
9:I:105:ASP:O	9:I:106:SER:HB2	2.02	0.59
10:J:38:ARG:NE	31:e:105:ARG:N	2.41	0.59
11:K:27:VAL:HG11	34:i:1270:G:N7	2.18	0.59
13:M:14:VAL:O	13:M:16:THR:N	2.35	0.59
14:N:119:GLU:O	14:N:123:HIS:CD2	2.55	0.59
16:P:75:VAL:CG1	16:P:76:VAL:N	2.64	0.59
17:Q:116:ASP:O	17:Q:117:ARG:CB	2.50	0.59
19:S:10:GLN:CB	19:S:13:LEU:HD21	2.32	0.59
23:W:90:GLN:N	23:W:102:ILE:HD11	2.17	0.59
25:Y:50:THR:OG1	25:Y:55:ILE:HD11	2.03	0.59
33:g:4:GLN:HG2	33:g:5:MET:H	1.67	0.59
33:g:143:GLN:O	33:g:146:SER:HB3	2.03	0.59
34:i:124:U:H2'	34:i:125:C:H5"	1.82	0.59
34:i:1244:U:O4'	35:j:33:C:C4'	2.48	0.59
1:A:61:ALA:HB2	1:A:161:ILE:HD11	1.83	0.59
3:C:71:LEU:O	22:V:29:HIS:HE1	1.82	0.59
3:C:93:LYS:HE3	3:C:95:MET:CB	2.30	0.59
3:C:236:LEU:HD23	3:C:237:THR:N	2.17	0.59
5:E:67:GLN:O	5:E:68:ARG:CG	2.50	0.59
5:E:67:GLN:OE1	5:E:67:GLN:HA	2.03	0.59
6:F:53:ALA:C	17:Q:125:ARG:HH22	2.08	0.59
7:G:24:LEU:O	7:G:25:ARG:C	2.45	0.59
8:H:37:LYS:CE	8:H:41:ARG:HH11	2.04	0.59
8:H:168:HIS:CE1	8:H:169:LYS:HG2	2.37	0.59
16:P:74:GLU:O	16:P:75:VAL:CB	2.50	0.59
17:Q:85:ARG:NH2	17:Q:117:ARG:CG	2.47	0.59
17:Q:102:GLU:OE1	33:g:55:PRO:HB2	1.97	0.59
18:R:14:ARG:O	18:R:18:GLU:HG3	2.03	0.59
23:W:62:VAL:HG11	28:b:8:LEU:CG	2.27	0.59
24:X:100:VAL:HG12	24:X:125:VAL:CG2	2.20	0.59
25:Y:88:LYS:HE3	25:Y:97:TYR:OH	2.03	0.59
25:Y:98:GLU:O	25:Y:99:LYS:HB3	2.03	0.59
25:Y:103:SER:O	25:Y:104:ARG:HB3	2.03	0.59
30:d:5:GLN:O	30:d:7:TYR:O	2.21	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:106:TYR:OH	32:f:131:PHE:HE2	1.75	0.59
33:g:281:ALA:O	33:g:282:GLU:HB3	2.03	0.59
34:i:522:C:H2'	34:i:523:A:H8	1.68	0.59
34:i:1523:G:H22	34:i:1660:G:H21	1.49	0.59
1:A:5:LEU:HD13	1:A:5:LEU:C	2.27	0.59
2:B:145:LYS:HA	2:B:149:GLN:OE1	2.02	0.59
3:C:93:LYS:CE	3:C:95:MET:HG2	2.31	0.59
3:C:154:TYR:HH	3:C:162:PRO:HD3	1.65	0.59
4:D:67:ARG:NH1	11:K:95:ARG:HG3	2.17	0.59
4:D:108:LYS:CA	4:D:113:LEU:HD22	2.33	0.59
6:F:194:ASP:O	6:F:194:ASP:OD1	2.21	0.59
9:I:19:LYS:HE2	9:I:20:PRO:HD3	1.83	0.59
9:I:55:TYR:CD2	9:I:55:TYR:N	2.68	0.59
9:I:62:VAL:HB	9:I:75:LYS:CE	2.29	0.59
9:I:141:ARG:HD3	9:I:144:LYS:CG	2.33	0.59
12:L:118:ARG:CD	12:L:119:ASP:N	2.66	0.59
13:M:64:LEU:HG	32:f:104:LYS:HZ2	1.66	0.59
13:M:95:ASP:HB2	13:M:101:ARG:NH1	2.17	0.59
19:S:80:PRO:HG3	19:S:82:TRP:CE2	2.38	0.59
20:T:77:LYS:HG2	20:T:92:PHE:HZ	1.65	0.59
24:X:74:LEU:CD1	24:X:81:ILE:CD1	2.71	0.59
25:Y:56:PHE:CG	25:Y:86:GLU:OE2	2.56	0.59
27:a:51:ARG:NH1	29:c:40:ARG:NE	2.43	0.59
27:a:103:PRO:HB3	27:a:107:ALA:CB	2.32	0.59
28:b:81:ARG:CB	28:b:82:LYS:HA	2.32	0.59
33:g:64:HIS:HE1	33:g:65:PHE:CE2	2.19	0.59
37:n:62:ARG:CG	37:n:91:VAL:O	2.49	0.59
1:A:14:ASP:CG	1:A:180:ARG:HH22	2.11	0.59
3:C:236:LEU:HD23	3:C:236:LEU:C	2.28	0.59
5:E:1:MET:SD	34:i:422:G:OP2	2.61	0.59
5:E:36:HIS:HB3	5:E:41:CYS:SG	2.42	0.59
5:E:256:LEU:HD12	5:E:257:ALA:N	2.16	0.59
5:E:260:GLN:O	5:E:261:SER:OG	2.13	0.59
6:F:104:THR:HG22	6:F:104:THR:O	2.03	0.59
6:F:166:ILE:HD12	6:F:166:ILE:N	2.16	0.59
7:G:13:GLN:O	7:G:14:LYS:HG2	2.02	0.59
7:G:14:LYS:HZ2	7:G:123:GLY:HA3	0.66	0.59
13:M:42:LEU:CD2	13:M:110:VAL:HG21	2.32	0.59
15:O:46:ASP:O	15:O:49:GLY:N	2.33	0.59
15:O:75:MET:CE	15:O:118:ALA:HB2	2.33	0.59
18:R:90:ALA:C	18:R:91:LEU:HD12	2.26	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:4:VAL:HG11	20:T:139:ALA:HB2	1.84	0.59
22:V:20:SER:HA	23:W:23:ARG:HH22	1.68	0.59
24:X:22:TRP:O	24:X:23:HIS:O	2.20	0.59
24:X:125:VAL:C	24:X:127:ASN:N	2.54	0.59
25:Y:37:LYS:HA	25:Y:40:ILE:CG2	2.32	0.59
26:Z:94:LYS:HZ3	26:Z:95:GLY:H	1.49	0.59
34:i:79:A:O2'	34:i:80:G:H8	1.85	0.59
34:i:1745:C:O5'	34:i:1745:C:H6	1.86	0.59
34:i:1825:A:H2	34:i:1846:C:OP1	1.80	0.59
1:A:74:VAL:HG22	1:A:121:LEU:HB3	1.84	0.59
1:A:118:GLU:CD	3:C:50:LYS:NZ	2.61	0.59
1:A:125:THR:O	1:A:147:LEU:HB2	2.00	0.59
1:A:180:ARG:NH1	1:A:184:ARG:NH2	2.50	0.59
2:B:52:THR:HG22	2:B:58:ALA:HB2	1.82	0.59
3:C:79:ILE:CD1	3:C:147:ILE:HD11	2.27	0.59
4:D:170:THR:HG22	4:D:171:ALA:N	2.18	0.59
4:D:192:TRP:N	4:D:192:TRP:CD1	2.67	0.59
5:E:159:THR:HG21	5:E:227:VAL:O	2.02	0.59
6:F:32:ASP:HB2	6:F:117:ILE:CG2	2.33	0.59
6:F:167:LYS:CD	6:F:171:GLU:HG2	2.20	0.59
7:G:59:GLN:H	34:i:157:U:H4'	1.67	0.59
8:H:43:LEU:HD21	8:H:71:SER:OG	2.03	0.59
9:I:21:TYR:OH	34:i:422:G:O3'	2.20	0.59
11:K:1:MET:N	11:K:2:LEU:O	2.33	0.59
16:P:33:LEU:HD21	16:P:87:PRO:CD	1.90	0.59
17:Q:54:PRO:CG	17:Q:88:ILE:HD12	2.32	0.59
20:T:16:ARG:CG	20:T:16:ARG:NH1	2.65	0.59
21:U:57:PRO:O	21:U:57:PRO:HD2	2.01	0.59
24:X:87:ASN:HB2	24:X:90:CYS:SG	2.43	0.59
33:g:12:LYS:HD2	33:g:13:GLY:N	2.03	0.59
34:i:1825:A:C5	34:i:1845:A:H2'	2.37	0.59
36:k:19:U:H1'	37:n:70:TRP:CD2	2.37	0.59
3:C:243:GLU:O	3:C:244:THR:CB	2.48	0.59
4:D:40:ARG:HD3	21:U:107:GLU:OE2	2.02	0.59
4:D:48:ILE:HG23	4:D:48:ILE:O	2.03	0.59
5:E:86:PHE:HE1	5:E:182:MET:SD	2.26	0.59
7:G:63:MET:HE3	7:G:106:LEU:HD22	1.84	0.59
7:G:135:PRO:HG2	7:G:144:LEU:CD2	2.32	0.59
11:K:89:ILE:O	11:K:90:VAL:HG12	2.02	0.59
13:M:64:LEU:HD11	32:f:104:LYS:HA	1.85	0.59
14:N:25:TRP:HZ3	28:b:45:THR:HG21	1.64	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:30:VAL:HG23	15:O:32:HIS:HD2	1.68	0.59
18:R:91:LEU:H	18:R:92:ASP:CA	2.15	0.59
22:V:55:ILE:CG2	22:V:60:ARG:CG	2.81	0.59
22:V:55:ILE:CG2	22:V:60:ARG:HG3	2.32	0.59
30:d:21:CYS:SG	30:d:23:VAL:HB	2.43	0.59
35:j:71:U:H2'	35:j:72:A:H5"	1.85	0.59
1:A:21:ALA:HB2	1:A:173:LEU:HD11	0.61	0.58
1:A:111:GLN:OE1	3:C:48:VAL:HB	2.03	0.58
3:C:158:LYS:HZ3	22:V:4:ASN:HA	1.68	0.58
4:D:71:ALA:O	4:D:75:LYS:HG2	2.01	0.58
4:D:74:GLN:NE2	4:D:75:LYS:CD	2.66	0.58
5:E:108:ARG:NH2	34:i:842:G:OP2	2.28	0.58
6:F:152:TRP:O	6:F:153:LEU:C	2.45	0.58
8:H:149:ASP:C	8:H:151:SER:N	2.61	0.58
9:I:154:LYS:O	12:L:22:ARG:HG3	2.02	0.58
15:O:98:ARG:HG3	15:O:133:THR:HG22	1.85	0.58
17:Q:85:ARG:O	17:Q:88:ILE:CG1	2.50	0.58
17:Q:109:LYS:NZ	17:Q:113:ILE:HD11	2.17	0.58
19:S:34:LYS:CB	19:S:103:LEU:HD23	2.20	0.58
23:W:20:ARG:NH2	34:i:1135:C:H1'	2.18	0.58
24:X:52:LEU:HD12	24:X:53:GLU:HB3	1.86	0.58
24:X:128:VAL:CG1	24:X:133:LEU:HD21	2.32	0.58
25:Y:76:TYR:CB	25:Y:82:ALA:HB2	2.33	0.58
26:Z:85:ARG:CZ	26:Z:85:ARG:CB	2.70	0.58
28:b:37:CYS:O	28:b:39:GLY:N	2.36	0.58
30:d:40:ARG:HG2	30:d:41:GLN:OE1	2.03	0.58
33:g:70:VAL:HG12	33:g:79:LEU:HB2	1.85	0.58
34:i:835:C:H2'	34:i:837:G:C5'	2.33	0.58
34:i:1407:G:H3'	34:i:1408:C:C5'	2.32	0.58
2:B:119:THR:HB	2:B:143:THR:HG23	1.83	0.58
3:C:185:ARG:HA	3:C:206:ASP:OD2	2.02	0.58
4:D:132:LYS:H	4:D:191:PRO:CD	1.88	0.58
6:F:56:TYR:CE1	6:F:66:CYS:HB2	2.38	0.58
6:F:144:LEU:HD23	29:c:49:PRO:CG	2.33	0.58
6:F:158:ALA:HA	6:F:172:CYS:SG	2.43	0.58
6:F:204:ARG:HD3	29:c:60:GLU:OE2	1.96	0.58
7:G:50:VAL:CG1	7:G:111:LEU:CG	2.78	0.58
8:H:144:ILE:HG13	23:W:52:ILE:HG23	1.83	0.58
13:M:44:LYS:C	13:M:46:GLN:H	2.12	0.58
19:S:8:LYS:HB2	19:S:9:PHE:CE1	2.26	0.58
20:T:40:ALA:N	20:T:43:LYS:HG3	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:W:23:ARG:HG2	23:W:23:ARG:HH11	1.66	0.58
24:X:126:ALA:O	24:X:128:VAL:CG2	2.51	0.58
25:Y:9:THR:HG21	25:Y:48:TYR:CE2	2.37	0.58
26:Z:52:LYS:O	26:Z:54:THR:N	2.35	0.58
32:f:103:LEU:HD23	32:f:105:TYR:H	1.66	0.58
33:g:194:TYR:CE2	33:g:212:LYS:CG	2.86	0.58
34:i:579:G:N3	34:i:581:U:C5	2.71	0.58
34:i:1287:A:H2'	34:i:1298:G:N7	2.17	0.58
1:A:2:SER:OG	1:A:5:LEU:O	2.16	0.58
1:A:57:LYS:HE2	22:V:70:LEU:CD2	2.31	0.58
2:B:108:ASP:OD1	2:B:109:LYS:N	2.36	0.58
2:B:150:ILE:CG1	18:R:124:VAL:HG13	2.22	0.58
3:C:43:LYS:HE3	3:C:43:LYS:C	2.28	0.58
5:E:86:PHE:CD2	5:E:87:MET:HG2	2.38	0.58
6:F:53:ALA:C	17:Q:125:ARG:NH2	2.61	0.58
8:H:46:THR:HG23	8:H:47:ALA:N	2.18	0.58
8:H:80:VAL:O	8:H:83:LEU:HG	2.03	0.58
8:H:145:ARG:NH1	8:H:155:LYS:HZ2	1.95	0.58
13:M:71:GLU:C	13:M:72:HIS:O	2.42	0.58
14:N:139:TRP:CE3	14:N:140:LYS:C	2.81	0.58
15:O:56:VAL:HG13	15:O:81:VAL:HG23	1.78	0.58
16:P:53:GLN:HG2	16:P:56:LEU:HD12	1.85	0.58
17:Q:118:THR:O	17:Q:120:LEU:N	2.36	0.58
18:R:120:THR:O	18:R:121:GLN:CB	2.44	0.58
19:S:53:THR:C	19:S:54:LYS:CA	2.72	0.58
20:T:23:LYS:CE	20:T:54:TYR:CE2	2.85	0.58
20:T:87:VAL:CG2	34:i:1660:G:C2	2.86	0.58
20:T:111:LYS:O	20:T:124:THR:CG2	2.51	0.58
23:W:3:ARG:NE	23:W:9:ASP:OD2	2.35	0.58
28:b:33:MET:HE3	28:b:79:PHE:CD1	2.34	0.58
33:g:20:GLN:NE2	33:g:68:ASP:CB	2.61	0.58
33:g:105:THR:OG1	33:g:126:ASP:HB3	2.02	0.58
34:i:127:C:H42	34:i:181:A:P	2.26	0.58
35:j:18:G:C4	35:j:56:G:N2	2.71	0.58
2:B:133:TYR:CZ	2:B:181:LEU:HD12	2.38	0.58
2:B:136:HIS:ND1	2:B:138:PHE:CZ	2.72	0.58
3:C:50:LYS:HB2	3:C:258:LEU:CB	2.34	0.58
5:E:129:ILE:CB	5:E:139:LEU:CD2	2.73	0.58
5:E:150:PRO:C	5:E:151:ASP:OD2	2.47	0.58
5:E:229:GLY:HA3	5:E:235:TRP:CD1	2.39	0.58
6:F:51:HIS:CD2	6:F:86:LYS:HD3	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:76:MET:HE1	6:F:169:ILE:CG2	2.22	0.58
10:J:37:LEU:CD2	10:J:42:GLU:HB3	2.25	0.58
10:J:65:GLU:O	10:J:66:LYS:CB	2.51	0.58
10:J:170:PRO:HG3	10:J:175:ARG:HG2	1.81	0.58
12:L:55:TYR:CD1	12:L:115:PRO:HG2	2.38	0.58
12:L:97:ARG:O	12:L:99:TYR:C	2.47	0.58
13:M:79:VAL:CG1	13:M:80:ASP:N	2.66	0.58
17:Q:92:LEU:O	17:Q:96:TYR:CD2	2.56	0.58
18:R:100:PRO:CA	18:R:103:LYS:HB2	2.09	0.58
20:T:87:VAL:HG13	20:T:88:MET:N	2.18	0.58
21:U:109:GLY:C	21:U:110:VAL:CG2	2.73	0.58
30:d:50:ILE:HG21	30:d:52:PHE:CE2	2.38	0.58
33:g:110:SER:HB2	33:g:153:CYS:HA	1.85	0.58
33:g:289:LEU:N	33:g:289:LEU:HD23	2.18	0.58
34:i:546:U:H2'	34:i:547:U:H5"	1.86	0.58
34:i:892:U:H2'	34:i:893:U:H5'	1.84	0.58
34:i:1820:G:H5"	37:n:43:GLY:HA2	1.77	0.58
2:B:25:PHE:CE1	15:O:53:ILE:HG22	2.38	0.58
2:B:160:GLN:NE2	2:B:205:TYR:CE1	2.55	0.58
4:D:212:GLU:HG2	18:R:19:LYS:CE	2.34	0.58
10:J:120:ALA:HA	10:J:125:HIS:HD2	1.68	0.58
11:K:27:VAL:HG11	11:K:43:LEU:HD22	1.67	0.58
12:L:86:ILE:HG13	12:L:111:VAL:HG13	1.84	0.58
14:N:28:LEU:CD1	14:N:58:HIS:CE1	2.85	0.58
16:P:10:ARG:NH2	16:P:11:THR:CB	2.30	0.58
18:R:1:MET:O	18:R:2:GLY:C	2.40	0.58
23:W:96:SER:OG	23:W:99:PHE:CE2	2.56	0.58
26:Z:94:LYS:CE	26:Z:95:GLY:H	2.16	0.58
27:a:24:THR:HG23	27:a:72:HIS:O	2.04	0.58
33:g:46:THR:CB	33:g:48:ASP:CB	2.78	0.58
34:i:181:A:N9	34:i:182:C:C5	2.71	0.58
1:A:183:LEU:CB	1:A:189:ILE:CD1	2.81	0.58
2:B:36:PRO:CB	2:B:231:LEU:CD2	2.71	0.58
4:D:35:SER:HA	4:D:99:ILE:HD11	0.73	0.58
4:D:202:LYS:HB2	4:D:203:PRO:HD3	1.82	0.58
6:F:14:THR:HG23	6:F:15:PRO:HD2	1.85	0.58
7:G:32:MET:SD	7:G:100:CYS:SG	3.01	0.58
7:G:32:MET:HA	7:G:52:ILE:HG23	1.86	0.58
7:G:43:GLU:O	7:G:44:GLU:C	2.46	0.58
7:G:137:ARG:HG3	7:G:140:ARG:HB3	1.85	0.58
8:H:143:ARG:NE	23:W:53:ILE:CG2	2.62	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:154:ILE:HG22	8:H:185:VAL:CG2	2.34	0.58
8:H:190:PRO:CB	8:H:191:GLU:HG2	2.33	0.58
9:I:29:LEU:HD21	9:I:31:ARG:HH12	1.69	0.58
9:I:129:LEU:O	9:I:134:GLU:HB2	2.03	0.58
9:I:144:LYS:HG2	34:i:189:G:H5'	1.86	0.58
9:I:149:TYR:HA	9:I:152:ARG:NH1	2.19	0.58
10:J:84:ILE:CG1	10:J:86:VAL:HG23	2.32	0.58
11:K:53:LYS:CA	11:K:58:VAL:HG13	2.34	0.58
19:S:120:HIS:CD2	19:S:120:HIS:C	2.81	0.58
21:U:56:MET:CE	21:U:88:LEU:CD2	2.77	0.58
25:Y:55:ILE:HD11	25:Y:75:ILE:HD13	1.85	0.58
32:f:87:THR:OG1	34:i:1503:G:N2	2.37	0.58
33:g:42:MET:HB2	33:g:92:LEU:HD11	1.84	0.58
33:g:69:VAL:HG22	33:g:70:VAL:H	1.69	0.58
34:i:64:A:H2	34:i:66:G:C8	2.21	0.58
34:i:1831:G:H2'	36:k:15:A:OP1	2.03	0.58
1:A:48:ILE:CG1	18:R:105:MET:HE2	2.26	0.58
1:A:52:LYS:HB3	1:A:52:LYS:HZ2	1.67	0.58
7:G:27:PHE:HZ	7:G:41:LEU:HD13	1.68	0.58
7:G:35:GLU:C	7:G:36:VAL:CG2	2.77	0.58
7:G:135:PRO:CG	7:G:144:LEU:HD23	2.33	0.58
8:H:14:GLU:CD	8:H:16:PRO:CB	2.77	0.58
9:I:85:ALA:HB1	12:L:8:ARG:HD2	1.85	0.58
9:I:145:ILE:HA	9:I:148:LYS:CD	2.33	0.58
10:J:84:ILE:O	10:J:108:ARG:CD	2.51	0.58
10:J:84:ILE:O	10:J:108:ARG:HD3	2.04	0.58
11:K:71:LEU:CG	11:K:76:ILE:CD1	2.80	0.58
12:L:71:ARG:HD2	12:L:73:LEU:HD11	1.84	0.58
14:N:16:LEU:CD1	14:N:62:GLN:HE22	2.03	0.58
15:O:34:PHE:CE1	15:O:99:ALA:C	2.81	0.58
16:P:98:ASN:CG	16:P:120:SER:HB2	2.29	0.58
20:T:125:PRO:HB3	34:i:1412:C:H5"	1.86	0.58
25:Y:91:LEU:C	25:Y:97:TYR:CB	2.77	0.58
26:Z:51:ASP:O	26:Z:52:LYS:HB2	2.02	0.58
31:e:120:VAL:HG22	31:e:121:PRO:N	2.18	0.58
33:g:32:LEU:HD11	33:g:40:ILE:CG2	2.32	0.58
33:g:131:LEU:HD23	33:g:132:TRP:N	2.18	0.58
33:g:306:LEU:HD23	33:g:306:LEU:C	2.29	0.58
34:i:1750:C:C2'	34:i:1751:G:C8	2.86	0.58
34:i:1816:A:H3'	34:i:1817:A:H2'	1.84	0.58
35:j:49:A:C2	35:j:64:C:N4	2.72	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:109:LEU:HD23	37:n:109:LEU:N	2.19	0.58
1:A:2:SER:OG	1:A:3:GLY:N	2.37	0.58
1:A:195:TRP:CE2	1:A:197:VAL:HB	2.39	0.58
2:B:53:GLN:HG2	2:B:56:LYS:HB2	1.86	0.58
2:B:66:VAL:CB	2:B:87:ILE:HG22	2.25	0.58
4:D:32:ASP:OD1	4:D:57:ASN:HB2	2.03	0.58
5:E:152:PRO:HG3	7:G:209:TYR:CZ	2.39	0.58
6:F:119:SER:O	6:F:121:PRO:HD3	2.04	0.58
7:G:176:ILE:HG21	7:G:179:LEU:CB	2.28	0.58
10:J:110:LEU:HB3	10:J:130:ILE:CD1	2.33	0.58
11:K:2:LEU:CG	11:K:3:MET:H	2.07	0.58
14:N:27:LYS:CD	14:N:27:LYS:N	2.63	0.58
18:R:90:ALA:C	18:R:91:LEU:HG	2.29	0.58
18:R:98:VAL:O	18:R:100:PRO:HD2	2.04	0.58
19:S:120:HIS:CD2	19:S:124:ARG:HG3	2.39	0.58
20:T:39:LEU:HD11	20:T:56:ARG:HH21	1.67	0.58
32:f:88:PRO:O	32:f:90:LYS:N	2.36	0.58
34:i:272:C:H6	34:i:272:C:H5"	1.68	0.58
34:i:1207:G:C2	34:i:1684:C:C6	2.84	0.58
37:n:57:ARG:HH12	37:n:81:LEU:HD13	1.68	0.58
2:B:117:TRP:CE3	2:B:153:THR:HB	2.37	0.58
3:C:55:VAL:HA	3:C:82:PHE:CZ	2.34	0.58
3:C:154:TYR:OH	3:C:161:LYS:N	2.34	0.58
3:C:154:TYR:CZ	3:C:161:LYS:CA	2.86	0.58
4:D:214:LYS:O	4:D:215:ASP:CG	2.46	0.58
5:E:62:LYS:CD	5:E:80:ILE:CG1	2.81	0.58
6:F:25:THR:CG2	6:F:41:VAL:HG22	2.32	0.58
8:H:144:ILE:O	23:W:51:GLU:CA	2.47	0.58
10:J:10:ARG:HB3	10:J:10:ARG:CZ	2.24	0.58
10:J:170:PRO:CB	10:J:174:LYS:NZ	2.67	0.58
11:K:89:ILE:O	11:K:89:ILE:HD13	2.03	0.58
12:L:17:PHE:HZ	12:L:19:ASN:OD1	1.86	0.58
13:M:77:ILE:CG2	13:M:78:LYS:H	2.06	0.58
17:Q:93:VAL:HG11	17:Q:105:LYS:HE2	0.58	0.58
20:T:31:PRO:HG2	20:T:102:ARG:CG	2.33	0.58
21:U:48:LEU:C	21:U:49:LYS:CG	2.74	0.58
30:d:46:TYR:HD2	30:d:46:TYR:N	2.01	0.58
31:e:115:ARG:CA	31:e:119:VAL:HG21	2.33	0.58
33:g:8:ARG:CA	33:g:8:ARG:NE	2.30	0.58
33:g:64:HIS:HB3	33:g:84:ASP:N	2.18	0.58
1:A:48:ILE:CD1	18:R:105:MET:SD	2.75	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:70:SER:HB3	15:O:128:ARG:NH1	2.18	0.58
2:B:105:LEU:O	2:B:106:THR:CB	2.52	0.58
2:B:144:LYS:O	2:B:144:LYS:HG3	2.03	0.58
5:E:156:MET:O	5:E:157:ASN:HB2	2.03	0.58
6:F:15:PRO:HD3	17:Q:56:LEU:CB	2.34	0.58
7:G:191:ARG:O	7:G:195:LYS:HG3	2.04	0.58
9:I:76:THR:CG2	9:I:77:ARG:H	2.17	0.58
10:J:81:LEU:CD1	10:J:97:ILE:CD1	2.81	0.58
15:O:125:LYS:NZ	27:a:56:VAL:O	2.37	0.58
16:P:41:GLN:NE2	16:P:45:LEU:CD1	2.67	0.58
21:U:83:ARG:HB3	21:U:85:HIS:HE1	1.68	0.58
22:V:1:MET:CE	22:V:10:ASP:CB	2.56	0.58
25:Y:21:LYS:HD3	25:Y:21:LYS:H	1.61	0.58
33:g:34:ALA:HB1	33:g:66:VAL:HG12	1.85	0.58
33:g:276:SER:O	33:g:277:THR:C	2.44	0.58
34:i:1238:U:C5	34:i:1515:G:C8	2.92	0.58
2:B:129:THR:OG1	2:B:133:TYR:HB2	2.03	0.57
2:B:226:GLY:O	2:B:230:GLU:HG3	2.05	0.57
3:C:93:LYS:CD	3:C:218:LEU:HD22	1.83	0.57
3:C:101:THR:HG23	3:C:103:ALA:C	2.28	0.57
6:F:42:LYS:HB2	6:F:46:ALA:N	2.19	0.57
7:G:185:LEU:O	7:G:189:ARG:HG3	2.04	0.57
8:H:154:ILE:CG2	8:H:154:ILE:O	2.51	0.57
9:I:22:HIS:CD2	9:I:25:ARG:HH11	2.22	0.57
11:K:51:SER:HB2	34:i:1273:C:H5'	1.85	0.57
12:L:130:GLU:HG2	12:L:131:CYS:N	2.19	0.57
16:P:49:LEU:N	16:P:51:ARG:HG3	2.18	0.57
17:Q:18:THR:O	17:Q:75:GLY:HA3	2.04	0.57
19:S:73:ASN:HB3	19:S:76:GLN:OE1	2.04	0.57
19:S:80:PRO:CG	19:S:82:TRP:NE1	2.67	0.57
21:U:47:ASN:HD22	21:U:47:ASN:H	1.51	0.57
22:V:74:LYS:HA	22:V:78:ILE:O	2.04	0.57
24:X:95:GLU:OE1	24:X:140:ARG:NH2	2.36	0.57
24:X:109:GLY:O	24:X:119:ARG:CD	2.42	0.57
25:Y:33:ALA:O	25:Y:34:THR:CB	2.49	0.57
26:Z:92:LEU:CD1	26:Z:109:TYR:CE1	2.84	0.57
26:Z:92:LEU:CD2	26:Z:97:ILE:HG13	2.30	0.57
27:a:36:ILE:HD13	27:a:78:ALA:HB3	1.84	0.57
33:g:173:LEU:HD22	33:g:189:ILE:HG12	1.86	0.57
34:i:885:U:H2'	34:i:886:U:H5"	1.86	0.57
1:A:24:HIS:HB2	1:A:49:ILE:O	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:59:LEU:HD23	1:A:181:GLU:CG	2.33	0.57
1:A:76:VAL:CG1	1:A:175:TRP:CZ3	2.83	0.57
2:B:125:VAL:CG2	2:B:169:MET:HG3	2.34	0.57
3:C:98:GLN:HB3	3:C:107:THR:HA	1.85	0.57
4:D:76:ARG:CD	11:K:66:HIS:ND1	2.67	0.57
5:E:117:GLU:HG3	5:E:118:GLU:N	2.18	0.57
5:E:248:ILE:CA	10:J:72:PHE:CE1	2.86	0.57
7:G:57:ASP:CG	7:G:98:ARG:HG3	2.29	0.57
7:G:185:LEU:HD23	7:G:188:LYS:HE3	1.86	0.57
9:I:138:ASN:O	9:I:139:LYS:C	2.47	0.57
10:J:179:LYS:HA	10:J:182:GLN:CD	2.29	0.57
13:M:28:HIS:O	13:M:29:ASP:CB	2.53	0.57
15:O:106:LYS:HZ2	27:a:69:VAL:HG13	1.69	0.57
18:R:98:VAL:CG1	18:R:99:ASP:N	2.68	0.57
19:S:58:GLU:CB	19:S:59:LEU:HD13	2.34	0.57
20:T:76:THR:CG2	20:T:95:GLY:O	2.52	0.57
23:W:77:PRO:HD2	23:W:79:PHE:CZ	2.39	0.57
23:W:128:PHE:CZ	23:W:130:PHE:HE2	2.22	0.57
24:X:105:PHE:CD2	24:X:119:ARG:C	2.82	0.57
25:Y:18:LEU:HD12	25:Y:20:ARG:NH1	2.08	0.57
27:a:21:ILE:CG2	27:a:22:ARG:N	2.66	0.57
30:d:11:PRO:HG2	34:i:1613:C:C4	2.39	0.57
33:g:119:GLN:OE1	33:g:179:LEU:HD13	2.04	0.57
34:i:1523:G:N2	34:i:1660:G:H21	2.03	0.57
34:i:1596:A:H5'	34:i:1597:U:H5	1.67	0.57
34:i:1748:G:O6	34:i:1772:C:N4	2.37	0.57
2:B:28:LYS:NZ	15:O:51:GLU:OE2	2.37	0.57
2:B:67:PHE:HE1	15:O:47:LEU:CA	2.16	0.57
2:B:136:HIS:CE1	2:B:138:PHE:HZ	2.20	0.57
5:E:43:PRO:HG2	5:E:46:ILE:CD1	2.34	0.57
6:F:141:VAL:CB	29:c:47:LYS:CE	2.57	0.57
7:G:3:LEU:CD1	7:G:41:LEU:HD11	2.33	0.57
7:G:28:TYR:C	7:G:30:LYS:H	2.13	0.57
7:G:177:GLN:O	7:G:178:ARG:HB2	2.03	0.57
8:H:60:ILE:HG21	8:H:92:VAL:HG22	1.86	0.57
10:J:89:GLU:O	10:J:91:LYS:O	2.23	0.57
10:J:134:HIS:HE2	34:i:552:U:P	2.26	0.57
12:L:97:ARG:HG2	12:L:98:LYS:CA	2.34	0.57
13:M:61:TYR:OH	13:M:108:CYS:SG	2.61	0.57
14:N:142:GLU:HG2	14:N:145:THR:HG23	1.86	0.57
15:O:120:ALA:O	27:a:56:VAL:HG21	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:142:ARG:HH12	27:a:27:ALA:CB	2.03	0.57
17:Q:47:LEU:O	17:Q:49:TYR:N	2.38	0.57
17:Q:126:ARG:O	34:i:1643:G:H5'	2.03	0.57
19:S:89:ASP:HB2	19:S:94:LYS:HB2	1.85	0.57
20:T:23:LYS:CD	20:T:54:TYR:CG	2.62	0.57
25:Y:20:ARG:CG	25:Y:74:MET:HE1	2.25	0.57
25:Y:92:ALA:C	25:Y:97:TYR:O	2.47	0.57
31:e:127:LYS:C	31:e:127:LYS:HD3	2.12	0.57
33:g:32:LEU:HD11	33:g:40:ILE:HG21	1.84	0.57
33:g:147:HIS:C	33:g:149:GLU:H	2.12	0.57
34:i:181:A:C5	34:i:182:C:N3	2.72	0.57
34:i:1236:A:C2	34:i:1264:C:H5'	2.39	0.57
6:F:145:ARG:CG	29:c:48:GLY:HA3	2.23	0.57
6:F:145:ARG:CD	29:c:49:PRO:HD2	2.25	0.57
7:G:159:ARG:HH22	7:G:161:PRO:CA	2.17	0.57
7:G:174:PRO:O	7:G:175:LYS:HB2	2.02	0.57
8:H:57:ARG:HD2	8:H:89:GLY:C	2.29	0.57
10:J:16:PRO:C	10:J:18:ARG:H	2.09	0.57
10:J:65:GLU:HA	10:J:70:ARG:HD3	1.87	0.57
10:J:87:LEU:HD12	10:J:91:LYS:HD3	1.87	0.57
11:K:39:ASN:C	11:K:40:VAL:HG12	2.28	0.57
11:K:61:GLN:O	11:K:67:PHE:HA	2.05	0.57
11:K:95:ARG:HA	11:K:95:ARG:NE	2.17	0.57
12:L:109:MET:SD	12:L:140:PHE:CE1	2.97	0.57
14:N:16:LEU:N	28:b:26:GLN:HE22	2.02	0.57
15:O:39:ASP:N	15:O:69:SER:HB3	2.20	0.57
16:P:127:LYS:HE3	16:P:128:HIS:CA	2.34	0.57
17:Q:15:ARG:NH1	17:Q:20:THR:HG21	2.19	0.57
17:Q:138:ARG:HH12	34:i:1641:C:H3'	1.69	0.57
18:R:61:ILE:HG23	18:R:74:GLN:HE22	1.70	0.57
19:S:15:VAL:CG1	19:S:68:ILE:HD11	2.33	0.57
20:T:29:LYS:C	20:T:30:VAL:HG13	2.29	0.57
24:X:105:PHE:HB3	24:X:112:VAL:HG21	1.86	0.57
29:c:65:ALA:O	29:c:66:ARG:HG2	2.04	0.57
34:i:527:C:O5'	34:i:527:C:H6	1.88	0.57
34:i:1458:U:H2'	34:i:1460:C:C4	2.39	0.57
1:A:5:LEU:C	1:A:5:LEU:CD2	2.61	0.57
2:B:31:TYR:CE1	2:B:94:LYS:N	2.68	0.57
3:C:192:ALA:HB3	3:C:195:PRO:CD	2.35	0.57
5:E:98:ASN:HD21	5:E:119:ALA:HA	1.68	0.57
6:F:44:LYS:CB	6:F:45:TYR:CE1	2.69	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:195:GLU:OE1	6:F:195:GLU:CA	2.49	0.57
6:F:204:ARG:OXT	29:c:63:ARG:NH1	2.33	0.57
7:G:159:ARG:HA	7:G:172:LYS:O	2.04	0.57
7:G:170:ARG:HG2	34:i:71:G:O6	2.05	0.57
9:I:142:SER:HB3	9:I:143:LYS:CD	2.34	0.57
10:J:15:THR:HB	10:J:44:TRP:CH2	2.39	0.57
13:M:85:LEU:O	13:M:89:VAL:HG23	2.05	0.57
15:O:117:ARG:CD	29:c:62:GLU:OE1	2.52	0.57
16:P:106:GLU:O	16:P:111:MET:HE1	2.03	0.57
17:Q:47:LEU:CB	17:Q:81:ILE:HD13	2.34	0.57
17:Q:50:LYS:CA	17:Q:53:GLU:HG3	2.34	0.57
17:Q:92:LEU:O	17:Q:96:TYR:HD2	1.87	0.57
18:R:20:TYR:CE2	18:R:38:ILE:CB	2.73	0.57
19:S:40:TYR:HA	19:S:83:PHE:HZ	1.68	0.57
20:T:18:LEU:HD13	20:T:134:ILE:CD1	2.16	0.57
20:T:65:TYR:CE2	20:T:128:GLN:HG3	2.39	0.57
22:V:42:VAL:O	22:V:43:THR:CB	2.52	0.57
24:X:126:ALA:O	24:X:128:VAL:N	2.37	0.57
30:d:46:TYR:N	30:d:46:TYR:CD2	2.72	0.57
33:g:172:LYS:HG2	33:g:191:HIS:O	2.03	0.57
33:g:282:GLU:CD	33:g:283:PRO:N	2.63	0.57
34:i:40:A:H61	34:i:504:U:H3	1.53	0.57
34:i:674:G:H1	34:i:914:U:H3	1.53	0.57
3:C:161:LYS:CD	3:C:162:PRO:HD2	2.35	0.57
4:D:79:PHE:O	4:D:80:PRO:C	2.47	0.57
6:F:142:SER:HB2	29:c:50:VAL:HG23	1.83	0.57
8:H:188:GLU:HG2	8:H:189:PHE:H	1.69	0.57
9:I:142:SER:HB3	9:I:143:LYS:CE	2.34	0.57
10:J:17:ARG:CA	10:J:18:ARG:HG2	2.35	0.57
10:J:32:ILE:O	10:J:35:TYR:C	2.48	0.57
10:J:165:TYR:HE2	34:i:550:A:HO2'	1.52	0.57
12:L:1:MET:O	12:L:2:ALA:CB	2.52	0.57
12:L:17:PHE:CD1	12:L:18:GLN:CB	2.87	0.57
12:L:102:PHE:N	12:L:102:PHE:HD1	1.95	0.57
15:O:17:LEU:CG	15:O:18:GLY:N	2.67	0.57
16:P:18:ARG:C	19:S:93:GLY:HA3	2.30	0.57
16:P:67:ALA:HB2	16:P:73:PRO:CB	2.35	0.57
17:Q:54:PRO:CG	17:Q:88:ILE:CD1	2.70	0.57
18:R:5:ARG:CA	18:R:10:LYS:NZ	2.59	0.57
22:V:19:ALA:CB	22:V:59:ILE:CD1	2.76	0.57
23:W:30:CYS:CA	23:W:34:ILE:HD12	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:55:ILE:CD1	25:Y:75:ILE:HD13	2.35	0.57
31:e:118:ASN:HB2	31:e:119:VAL:CG2	2.35	0.57
33:g:2:THR:O	33:g:3:GLU:HG2	2.04	0.57
33:g:30:MET:CE	33:g:42:MET:HE3	2.32	0.57
33:g:76:GLN:O	33:g:77:PHE:HD1	1.88	0.57
33:g:240:CYS:HG	33:g:291:TRP:HD1	1.53	0.57
2:B:67:PHE:CE1	15:O:47:LEU:CA	2.87	0.57
4:D:194:PRO:O	4:D:197:LYS:O	2.23	0.57
6:F:28:VAL:HG13	6:F:110:GLN:NE2	2.16	0.57
6:F:47:LYS:CB	17:Q:117:ARG:HH22	2.16	0.57
6:F:175:ASP:C	6:F:175:ASP:OD1	2.47	0.57
7:G:188:LYS:O	7:G:191:ARG:HG3	2.05	0.57
9:I:48:VAL:HG11	9:I:54:LYS:HB2	1.86	0.57
9:I:141:ARG:HD2	9:I:144:LYS:CB	1.99	0.57
9:I:148:LYS:HE2	9:I:152:ARG:NH2	2.20	0.57
10:J:50:LEU:HD12	10:J:102:ILE:CG1	2.35	0.57
15:O:75:MET:SD	15:O:114:SER:O	2.63	0.57
16:P:49:LEU:HD11	16:P:51:ARG:HH21	1.70	0.57
18:R:77:GLU:HG3	18:R:80:ARG:NH2	2.20	0.57
20:T:124:THR:CG2	20:T:126:GLN:HB3	2.35	0.57
25:Y:55:ILE:HA	25:Y:74:MET:O	2.04	0.57
29:c:10:LYS:HD3	29:c:34:PHE:CE1	2.38	0.57
31:e:105:ARG:CZ	31:e:106:ALA:N	2.68	0.57
31:e:115:ARG:CA	31:e:119:VAL:HG22	2.35	0.57
32:f:144:CYS:SG	32:f:147:THR:HG22	2.32	0.57
33:g:191:HIS:CD2	33:g:195:LEU:CD1	2.87	0.57
34:i:892:U:C2'	34:i:893:U:H5'	2.34	0.57
1:A:57:LYS:HE2	22:V:70:LEU:HD21	1.85	0.57
1:A:202:TYR:C	1:A:203:PHE:CD1	2.82	0.57
3:C:93:LYS:HE3	3:C:95:MET:HG2	1.86	0.57
6:F:110:GLN:C	6:F:113:VAL:HG12	2.28	0.57
9:I:62:VAL:HG23	9:I:75:LYS:CE	2.32	0.57
12:L:102:PHE:O	24:X:8:ARG:O	2.22	0.57
12:L:147:LYS:HE2	12:L:156:GLN:HE22	1.70	0.57
13:M:99:LYS:N	13:M:100:PRO:CD	2.68	0.57
14:N:27:LYS:HD2	14:N:27:LYS:C	2.25	0.57
15:O:106:LYS:HZ3	27:a:69:VAL:HG13	1.68	0.57
16:P:5:GLU:HG2	16:P:9:LYS:HE2	1.85	0.57
16:P:100:LYS:HG2	34:i:1236:A:C6	2.40	0.57
18:R:33:ARG:CB	33:g:150:TRP:HZ2	1.96	0.57
18:R:61:ILE:HG23	18:R:74:GLN:NE2	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:W:15:ASN:CG	23:W:19:LYS:HE3	2.29	0.57
25:Y:52:PRO:CD	25:Y:53:ASP:N	2.64	0.57
28:b:26:GLN:HG3	28:b:27:SER:CA	2.35	0.57
33:g:87:LEU:HB2	33:g:101:PHE:HB2	1.86	0.57
34:i:61:A:C5	34:i:326:A:C3'	2.79	0.57
34:i:1553:C:O2'	34:i:1554:C:H5'	2.05	0.57
35:j:15:G:N2	35:j:47:C:H42	1.98	0.57
1:A:106:GLY:HA3	1:A:113:GLN:HE22	1.67	0.57
3:C:60:ILE:C	3:C:82:PHE:HE1	2.09	0.57
4:D:162:ASP:HB3	4:D:163:PRO:HD3	1.86	0.57
4:D:214:LYS:O	4:D:214:LYS:HE2	2.04	0.57
8:H:106:ARG:CZ	34:i:857:A:C2	2.88	0.57
8:H:192:PHE:O	8:H:193:GLN:O	2.22	0.57
9:I:5:ARG:NH1	9:I:5:ARG:CG	2.65	0.57
11:K:5:LYS:O	11:K:5:LYS:CG	2.31	0.57
16:P:4:VAL:N	16:P:10:ARG:CD	2.51	0.57
20:T:5:THR:CG2	20:T:7:LYS:HB2	2.34	0.57
24:X:90:CYS:O	24:X:91:LEU:O	2.22	0.57
28:b:63:LEU:O	28:b:64:CYS:SG	2.63	0.57
34:i:520:U:C5	34:i:521:A:C4	2.93	0.57
35:j:66:U:O2	35:j:66:U:H2'	2.05	0.57
36:k:19:U:C1'	37:n:70:TRP:CH2	2.84	0.57
1:A:102:ARG:O	1:A:104:THR:N	2.38	0.57
4:D:23:GLU:CG	11:K:64:TRP:HE1	2.18	0.57
4:D:59:LEU:CG	4:D:60:GLY:H	2.16	0.57
4:D:218:LEU:CG	4:D:218:LEU:O	2.53	0.57
7:G:63:MET:HE3	7:G:106:LEU:HD21	1.86	0.57
8:H:117:PRO:HD2	8:H:120:ARG:CD	2.35	0.57
8:H:149:ASP:C	8:H:151:SER:H	2.13	0.57
9:I:136:ILE:O	9:I:139:LYS:CD	2.52	0.57
9:I:142:SER:CB	9:I:143:LYS:CB	2.29	0.57
9:I:154:LYS:O	12:L:22:ARG:CD	2.53	0.57
11:K:13:GLU:HG3	11:K:14:LEU:N	2.19	0.57
16:P:127:LYS:HE3	16:P:128:HIS:HA	1.86	0.57
17:Q:18:THR:HB	17:Q:75:GLY:H	1.70	0.57
20:T:40:ALA:O	20:T:43:LYS:HB2	2.05	0.57
25:Y:36:PRO:HD3	25:Y:39:GLU:OE1	1.98	0.57
25:Y:54:VAL:CG2	25:Y:79:LEU:HD21	2.35	0.57
26:Z:77:LEU:O	26:Z:78:LYS:CD	2.53	0.57
26:Z:92:LEU:CD1	26:Z:109:TYR:HE1	2.18	0.57
26:Z:105:ALA:O	26:Z:106:GLN:HG3	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:80:HIS:CE1	36:k:12:A:O3'	2.58	0.57
33:g:25:PRO:O	33:g:26:GLN:C	2.42	0.57
33:g:232:GLY:CA	33:g:257:LYS:HZ1	2.18	0.57
34:i:68:A:H61	34:i:81:U:H3	1.53	0.57
34:i:328:G:C5	34:i:329:A:N7	2.73	0.57
34:i:1206:G:C8	34:i:1207:G:OP2	2.57	0.57
34:i:1270:G:H5'	34:i:1270:G:N3	2.20	0.57
34:i:1458:U:H2'	34:i:1460:C:C5	2.40	0.57
37:n:77:ILE:HG22	37:n:78:LEU:H	1.69	0.57
1:A:4:ALA:O	1:A:8:LEU:HD22	2.05	0.56
1:A:119:PRO:O	1:A:142:LEU:HD22	2.04	0.56
1:A:189:ILE:O	1:A:190:SER:OG	2.22	0.56
2:B:71:LEU:HD13	2:B:84:PHE:HE2	0.85	0.56
2:B:120:MET:HB2	2:B:142:PHE:HE1	1.70	0.56
3:C:49:THR:HG23	3:C:75:GLU:CG	2.36	0.56
3:C:68:LEU:HD22	3:C:247:THR:HG21	1.87	0.56
3:C:161:LYS:HD3	22:V:9:VAL:HG11	1.85	0.56
4:D:149:SER:O	4:D:150:MET:SD	2.63	0.56
6:F:93:VAL:C	6:F:97:PHE:CE1	2.82	0.56
9:I:31:ARG:HG3	9:I:31:ARG:NH1	2.20	0.56
13:M:33:ARG:HH11	13:M:33:ARG:CG	2.15	0.56
14:N:11:LEU:O	14:N:11:LEU:HD12	2.05	0.56
15:O:38:ASN:O	15:O:68:GLU:HB3	2.05	0.56
16:P:44:ARG:CD	16:P:82:ASP:O	2.52	0.56
16:P:107:ILE:HG13	16:P:107:ILE:O	2.03	0.56
19:S:15:VAL:HG12	19:S:16:LEU:N	2.20	0.56
19:S:33:ILE:CB	19:S:36:VAL:CG1	2.80	0.56
24:X:105:PHE:HE2	24:X:118:VAL:C	2.13	0.56
28:b:49:HIS:CD2	28:b:49:HIS:N	2.72	0.56
32:f:114:ILE:O	32:f:114:ILE:HG13	2.04	0.56
33:g:76:GLN:HE21	33:g:76:GLN:CA	2.17	0.56
33:g:172:LYS:O	33:g:173:LEU:HD23	2.05	0.56
33:g:282:GLU:OE2	33:g:282:GLU:C	2.48	0.56
34:i:1748:G:C5	34:i:1749:C:N4	2.73	0.56
34:i:1749:C:C5	34:i:1750:C:N4	2.73	0.56
35:j:36:A:H3'	35:j:37:A:H8	1.70	0.56
2:B:67:PHE:HD1	15:O:47:LEU:C	2.10	0.56
3:C:197:LYS:C	3:C:200:LEU:HG	2.26	0.56
3:C:229:ILE:CG1	3:C:230:SER:N	2.65	0.56
4:D:123:LEU:HD11	4:D:154:ASP:CB	2.35	0.56
4:D:168:VAL:CG1	4:D:189:MET:SD	2.93	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:140:LYS:C	9:I:141:ARG:HG3	2.29	0.56
9:I:142:SER:HB3	9:I:143:LYS:HB2	0.62	0.56
9:I:144:LYS:C	9:I:145:ILE:HG12	2.25	0.56
11:K:71:LEU:CD2	11:K:76:ILE:HD11	2.13	0.56
12:L:148:ALA:O	12:L:150:GLY:O	2.23	0.56
15:O:44:VAL:HG22	15:O:93:LEU:HD13	1.84	0.56
17:Q:52:LEU:C	17:Q:54:PRO:HD2	2.30	0.56
17:Q:98:LYS:CA	33:g:57:ARG:HH21	2.17	0.56
17:Q:105:LYS:NZ	17:Q:109:LYS:CB	2.66	0.56
19:S:55:ARG:HG3	26:Z:48:VAL:CG1	2.34	0.56
19:S:85:ASN:ND2	19:S:98:VAL:H	2.03	0.56
20:T:76:THR:CA	20:T:95:GLY:O	2.53	0.56
21:U:101:ILE:O	21:U:105:SER:OG	2.23	0.56
24:X:52:LEU:HD12	24:X:53:GLU:CG	2.35	0.56
25:Y:99:LYS:C	25:Y:99:LYS:NZ	2.64	0.56
25:Y:120:THR:C	25:Y:122:LYS:CD	2.76	0.56
33:g:78:ALA:O	33:g:89:LEU:HD12	2.04	0.56
33:g:87:LEU:CD2	33:g:108:VAL:HG11	2.36	0.56
33:g:277:THR:HG23	33:g:278:SER:H	1.67	0.56
34:i:1327:C:N4	36:k:21:U:C4	2.73	0.56
1:A:108:PHE:CE2	1:A:122:LEU:HD11	2.41	0.56
1:A:127:PRO:HG2	1:A:153:PRO:CD	2.27	0.56
2:B:44:ILE:HD11	2:B:86:LEU:HD13	1.86	0.56
3:C:60:ILE:O	3:C:82:PHE:HZ	1.86	0.56
3:C:99:LYS:HD2	3:C:99:LYS:C	2.29	0.56
3:C:166:ARG:O	23:W:96:SER:HB3	2.04	0.56
3:C:195:PRO:HD3	3:C:221:PHE:CE2	2.40	0.56
3:C:226:PHE:O	3:C:229:ILE:HG12	2.05	0.56
3:C:250:PRO:HA	3:C:253:GLU:HG2	1.88	0.56
4:D:97:CYS:O	4:D:100:ALA:N	2.36	0.56
4:D:141:LYS:HE3	4:D:179:GLN:NE2	2.20	0.56
5:E:108:ARG:O	5:E:109:PHE:C	2.49	0.56
5:E:129:ILE:CG2	5:E:139:LEU:HD23	2.35	0.56
6:F:57:ALA:O	34:i:1674:A:N1	2.39	0.56
6:F:81:ARG:HE	6:F:82:ASN:HD21	1.52	0.56
6:F:159:ARG:NE	34:i:1530:U:O4	2.38	0.56
7:G:19:ASP:O	7:G:20:ASP:HB2	2.05	0.56
8:H:99:ARG:O	8:H:100:ILE:O	2.23	0.56
8:H:106:ARG:NE	34:i:857:A:C4	2.73	0.56
8:H:109:ARG:O	8:H:110:THR:HB	2.04	0.56
8:H:118:ARG:C	8:H:120:ARG:H	2.11	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:144:ILE:HD12	23:W:52:ILE:CD1	2.25	0.56
8:H:145:ARG:CG	23:W:51:GLU:HG2	2.34	0.56
10:J:61:LEU:CD1	10:J:94:LEU:HD11	2.33	0.56
10:J:131:ARG:NH1	10:J:143:ASN:HD21	2.01	0.56
10:J:136:ARG:HG3	10:J:160:SER:CB	2.35	0.56
11:K:1:MET:HB3	11:K:47:LYS:HB3	1.87	0.56
11:K:8:ARG:O	11:K:12:TYR:HD1	1.88	0.56
11:K:65:ARG:HB3	11:K:65:ARG:HH11	1.29	0.56
12:L:6:THR:HG23	12:L:7:GLU:N	2.19	0.56
12:L:40:ILE:HG13	12:L:68:ILE:HG13	1.88	0.56
13:M:76:LEU:C	13:M:128:PHE:CZ	2.82	0.56
16:P:41:GLN:C	16:P:41:GLN:OE1	2.48	0.56
16:P:49:LEU:HD12	16:P:50:ARG:N	2.20	0.56
16:P:49:LEU:CA	16:P:51:ARG:CD	2.83	0.56
16:P:56:LEU:CD1	16:P:80:LEU:CD1	2.79	0.56
17:Q:58:LEU:HD21	17:Q:111:ILE:CD1	2.28	0.56
17:Q:90:LYS:HD3	17:Q:120:LEU:CA	2.32	0.56
20:T:119:TRP:HB3	34:i:1557:C:C1'	2.35	0.56
20:T:144:LYS:HB2	20:T:144:LYS:HZ2	1.67	0.56
22:V:39:VAL:O	22:V:41:LYS:N	2.34	0.56
22:V:49:GLN:O	22:V:50:SER:O	2.23	0.56
25:Y:35:VAL:CG1	25:Y:36:PRO:HD2	2.28	0.56
25:Y:54:VAL:CG1	25:Y:76:TYR:CA	2.84	0.56
25:Y:66:GLY:HA3	34:i:572:U:OP1	2.04	0.56
26:Z:105:ALA:C	26:Z:106:GLN:HG3	2.30	0.56
28:b:6:ASP:OD2	28:b:9:HIS:HB2	2.05	0.56
31:e:114:ARG:HA	31:e:118:ASN:CG	2.30	0.56
32:f:97:LYS:HE3	34:i:1284:U:C5	2.41	0.56
33:g:43:TRP:HZ3	33:g:55:PRO:HD3	1.70	0.56
33:g:173:LEU:CD2	33:g:189:ILE:HG12	2.35	0.56
33:g:258:ILE:HD11	33:g:267:VAL:CG1	2.35	0.56
33:g:285:GLN:C	33:g:302:TYR:CE1	2.84	0.56
34:i:866:A:H1'	34:i:912:A:C2	2.41	0.56
34:i:1635:A:O3'	35:j:39:C:C4'	2.53	0.56
34:i:1831:G:H2'	36:k:15:A:OP2	2.04	0.56
35:j:49:A:C2	35:j:64:C:C4	2.93	0.56
37:n:103:LEU:HA	37:n:106:TYR:CG	2.40	0.56
1:A:115:ALA:O	1:A:117:ARG:HG2	2.05	0.56
1:A:142:LEU:N	22:V:32:ILE:CD1	2.69	0.56
3:C:55:VAL:CB	3:C:82:PHE:CZ	2.84	0.56
3:C:183:ALA:HB2	3:C:208:TYR:CD2	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:53:THR:HG22	4:D:91:VAL:CB	2.36	0.56
7:G:67:VAL:O	7:G:68:LEU:CB	2.50	0.56
7:G:162:LEU:O	7:G:162:LEU:CD1	2.49	0.56
8:H:15:LYS:HB3	8:H:16:PRO:HD3	1.82	0.56
8:H:135:PHE:HB3	8:H:136:PRO:HD3	1.87	0.56
9:I:165:GLN:HE21	9:I:171:LEU:HD22	1.70	0.56
10:J:110:LEU:HD12	10:J:130:ILE:HG12	1.55	0.56
11:K:43:LEU:H	11:K:46:MET:CB	2.18	0.56
12:L:5:GLN:OE1	12:L:10:TYR:HA	2.06	0.56
12:L:101:ARG:C	24:X:10:ALA:CB	2.59	0.56
16:P:53:GLN:HG3	16:P:80:LEU:HD11	1.84	0.56
16:P:67:ALA:HB2	16:P:73:PRO:HB3	1.87	0.56
18:R:42:PRO:CD	18:R:43:SER:N	2.67	0.56
20:T:85:ASN:HB3	20:T:88:MET:SD	2.46	0.56
24:X:105:PHE:HB3	24:X:112:VAL:CG2	2.36	0.56
25:Y:117:VAL:HB	25:Y:124:ASN:HD21	1.69	0.56
27:a:102:ARG:O	27:a:103:PRO:O	2.23	0.56
28:b:5:LYS:NZ	28:b:5:LYS:HB3	2.19	0.56
33:g:83:TRP:C	33:g:85:GLY:N	2.60	0.56
33:g:173:LEU:CD2	33:g:189:ILE:HA	2.36	0.56
1:A:180:ARG:NH1	1:A:184:ARG:CZ	2.64	0.56
2:B:57:ILE:C	2:B:59:SER:N	2.63	0.56
2:B:110:MET:CE	2:B:213:ARG:HD2	2.35	0.56
3:C:69:PHE:CZ	3:C:247:THR:HG21	2.40	0.56
4:D:55:THR:HA	4:D:58:VAL:CG2	2.35	0.56
4:D:116:ARG:O	4:D:120:TYR:HB2	2.04	0.56
6:F:44:LYS:CA	6:F:45:TYR:CD1	2.88	0.56
6:F:134:VAL:HG12	6:F:136:ARG:NH2	2.19	0.56
8:H:9:VAL:CA	8:H:11:PRO:HD3	2.36	0.56
8:H:142:LYS:C	8:H:143:ARG:HG2	2.30	0.56
9:I:154:LYS:CE	9:I:154:LYS:O	2.53	0.56
11:K:64:TRP:O	11:K:65:ARG:HG3	2.04	0.56
14:N:58:HIS:CD2	14:N:59:GLY:H	2.23	0.56
14:N:114:ARG:HD3	14:N:117:LEU:HD12	1.86	0.56
16:P:90:VAL:HG11	16:P:109:PRO:HG3	1.88	0.56
19:S:52:LEU:HD12	19:S:52:LEU:C	2.31	0.56
19:S:55:ARG:CG	26:Z:48:VAL:HG11	2.33	0.56
19:S:81:ASP:OD2	19:S:95:TYR:HD2	1.88	0.56
19:S:139:THR:O	19:S:140:GLY:C	2.49	0.56
20:T:23:LYS:HE2	20:T:54:TYR:CE2	2.41	0.56
21:U:50:VAL:HG22	21:U:51:LYS:N	2.19	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:W:128:PHE:HE1	23:W:130:PHE:CE2	2.09	0.56
25:Y:44:LEU:HG	25:Y:75:ILE:HD11	1.87	0.56
27:a:21:ILE:HD13	27:a:72:HIS:CE1	2.41	0.56
27:a:97:PRO:HB3	34:i:1862:U:H1'	1.87	0.56
28:b:61:THR:HG23	28:b:62:VAL:C	2.31	0.56
31:e:125:LYS:O	31:e:126:LYS:CB	2.53	0.56
33:g:284:PRO:HB2	33:g:304:ASP:N	2.21	0.56
34:i:1203:G:C2	36:k:15:A:C8	2.93	0.56
34:i:1297:A:H2'	34:i:1298:G:H5"	1.86	0.56
1:A:132:GLN:NE2	34:i:1374:A:C8	2.73	0.56
3:C:99:LYS:NZ	3:C:100:GLN:O	2.38	0.56
3:C:200:LEU:CD1	3:C:201:MET:SD	2.94	0.56
3:C:236:LEU:CD2	3:C:236:LEU:C	2.78	0.56
4:D:211:VAL:CG2	18:R:39:ALA:N	2.69	0.56
5:E:1:MET:HE1	34:i:422:G:H8	1.69	0.56
6:F:124:ASP:CG	6:F:125:SER:H	2.14	0.56
6:F:132:GLY:HA3	34:i:957:G:O2'	2.06	0.56
12:L:46:THR:HG23	12:L:46:THR:O	2.04	0.56
12:L:56:ILE:CG2	12:L:57:ASP:N	2.68	0.56
14:N:46:THR:HG1	14:N:49:GLN:HG2	1.61	0.56
14:N:125:LEU:CD1	14:N:129:TYR:CZ	2.89	0.56
20:T:85:ASN:CB	20:T:88:MET:HB2	2.35	0.56
34:i:1127:G:H5'	34:i:1127:G:H8	1.70	0.56
1:A:125:THR:C	1:A:147:LEU:CB	2.79	0.56
1:A:164:ASN:C	1:A:166:LYS:H	2.07	0.56
2:B:37:ALA:O	2:B:38:MET:C	2.42	0.56
2:B:179:ASN:HB3	2:B:183:GLU:HB2	1.88	0.56
3:C:63:LEU:HB3	3:C:67:TYR:CE2	2.40	0.56
4:D:18:LYS:CD	4:D:18:LYS:C	2.78	0.56
4:D:153:VAL:HG12	4:D:154:ASP:N	2.21	0.56
5:E:230:LYS:O	5:E:231:GLY:C	2.48	0.56
9:I:157:LYS:HB2	12:L:22:ARG:NE	2.19	0.56
10:J:67:ASP:O	10:J:70:ARG:N	2.38	0.56
13:M:100:PRO:O	13:M:101:ARG:NH1	2.39	0.56
14:N:67:THR:O	14:N:69:ASN:N	2.36	0.56
17:Q:19:ALA:CB	17:Q:75:GLY:HA3	2.33	0.56
17:Q:50:LYS:HA	17:Q:53:GLU:HG3	1.87	0.56
18:R:99:ASP:C	18:R:119:VAL:HG13	2.20	0.56
19:S:30:ILE:HG22	19:S:36:VAL:HG21	1.88	0.56
24:X:41:PHE:HZ	24:X:102:VAL:CG1	2.19	0.56
25:Y:20:ARG:HD3	25:Y:76:TYR:CE2	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:d:50:ILE:CG2	30:d:52:PHE:CE2	2.89	0.56
30:d:56:ASP:OXT	30:d:56:ASP:OD2	2.23	0.56
31:e:125:LYS:O	31:e:126:LYS:CD	2.45	0.56
33:g:36:ARG:O	33:g:38:LYS:N	2.38	0.56
34:i:197:U:H2'	34:i:198:U:H5'	1.86	0.56
34:i:1716:U:H3'	34:i:1717:G:H5'	1.87	0.56
1:A:77:ILE:HG12	1:A:99:ILE:HB	1.87	0.56
3:C:43:LYS:HG3	3:C:44:GLU:H	1.70	0.56
3:C:44:GLU:O	3:C:45:TRP:C	2.48	0.56
3:C:124:LEU:HD13	3:C:124:LEU:C	2.31	0.56
4:D:10:LYS:NZ	21:U:111:GLU:HG2	2.21	0.56
8:H:109:ARG:CZ	8:H:111:LYS:HD2	2.35	0.56
10:J:80:ARG:HA	10:J:83:ARG:HD3	1.86	0.56
10:J:170:PRO:HD2	10:J:175:ARG:HD2	1.88	0.56
10:J:177:ASN:CA	10:J:180:LYS:HB3	2.35	0.56
15:O:30:VAL:CB	15:O:32:HIS:NE2	2.69	0.56
19:S:26:ILE:CG1	19:S:59:LEU:HD21	2.36	0.56
20:T:4:VAL:CG2	20:T:136:GLY:HA2	2.35	0.56
20:T:18:LEU:HB2	20:T:134:ILE:HD12	1.87	0.56
22:V:18:SER:O	22:V:72:LEU:HD21	2.05	0.56
26:Z:94:LYS:HA	26:Z:94:LYS:HE2	1.88	0.56
30:d:5:GLN:CB	30:d:7:TYR:CD2	2.61	0.56
33:g:64:HIS:CE1	33:g:65:PHE:CE2	2.94	0.56
34:i:196:U:C2	34:i:199:G:N1	2.71	0.56
34:i:310:G:H2'	34:i:311:C:O5'	2.05	0.56
34:i:328:G:C6	34:i:329:A:C6	2.94	0.56
34:i:491:C:O2	34:i:491:C:H2'	2.06	0.56
34:i:1635:A:H1'	35:j:40:C:C6	2.41	0.56
34:i:1701:G:C2	34:i:1844:A:C1'	2.55	0.56
36:k:17:U:H2'	36:k:18:G:O4'	2.05	0.56
37:n:80:GLY:C	37:n:81:LEU:HG	2.30	0.56
1:A:106:GLY:HA2	34:i:1348:G:H5'	0.61	0.56
3:C:163:HIS:O	3:C:205:ASP:HB2	2.06	0.56
5:E:38:LEU:HD12	5:E:39:ARG:N	2.15	0.56
5:E:159:THR:C	5:E:160:ILE:HG13	2.30	0.56
5:E:205:PHE:CD1	5:E:221:ARG:CZ	2.89	0.56
6:F:141:VAL:HG11	29:c:47:LYS:NZ	2.19	0.56
7:G:73:VAL:HG12	7:G:74:ARG:N	2.20	0.56
8:H:8:ILE:CG2	8:H:9:VAL:H	2.19	0.56
8:H:158:LEU:HG	8:H:187:PHE:HD1	1.71	0.56
9:I:141:ARG:HD3	9:I:144:LYS:HB3	1.62	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:157:LYS:O	9:I:158:ILE:C	2.47	0.56
10:J:88:ASP:O	10:J:91:LYS:CB	2.41	0.56
13:M:77:ILE:HD12	13:M:79:VAL:HG23	1.88	0.56
14:N:4:MET:CE	14:N:124:ARG:NH2	2.68	0.56
15:O:44:VAL:HG21	15:O:93:LEU:HD11	1.85	0.56
16:P:30:TYR:O	16:P:34:MET:CG	2.54	0.56
16:P:56:LEU:HD12	16:P:80:LEU:HD12	1.87	0.56
16:P:56:LEU:HD22	16:P:78:THR:CG2	2.34	0.56
16:P:77:LYS:O	16:P:78:THR:HG22	2.06	0.56
16:P:127:LYS:O	16:P:127:LYS:CG	2.54	0.56
20:T:4:VAL:CB	20:T:8:ASP:HB2	2.36	0.56
23:W:88:LYS:NZ	34:i:410:G:H5'	2.21	0.56
25:Y:5:VAL:O	25:Y:6:THR:OG1	2.19	0.56
25:Y:23:MET:HE3	25:Y:44:LEU:HD21	1.86	0.56
25:Y:54:VAL:HG13	25:Y:76:TYR:N	2.18	0.56
29:c:46:VAL:HG11	29:c:50:VAL:HG21	1.86	0.56
31:e:127:LYS:HD2	31:e:127:LYS:N	2.19	0.56
37:n:70:TRP:O	37:n:71:ILE:C	2.49	0.56
1:A:159:ILE:O	1:A:159:ILE:HG23	2.04	0.56
3:C:149:PRO:CB	3:C:233:TYR:CD2	2.80	0.56
4:D:141:LYS:CE	4:D:179:GLN:NE2	2.69	0.56
4:D:175:VAL:O	4:D:175:VAL:HG13	2.05	0.56
4:D:176:LEU:C	4:D:177:LEU:HD13	2.30	0.56
4:D:212:GLU:CB	4:D:213:PRO:CD	2.76	0.56
6:F:182:LYS:NZ	6:F:182:LYS:CB	2.69	0.56
7:G:35:GLU:O	7:G:36:VAL:HG22	2.05	0.56
7:G:148:SER:C	7:G:150:GLU:H	2.14	0.56
7:G:211:LYS:O	7:G:215:LYS:HD3	2.06	0.56
8:H:6:ALA:HA	8:H:10:LYS:CG	2.34	0.56
10:J:17:ARG:CD	10:J:18:ARG:HD3	2.35	0.56
11:K:41:PRO:CD	11:K:43:LEU:HG	2.36	0.56
11:K:43:LEU:O	11:K:45:VAL:CA	2.51	0.56
12:L:156:GLN:CD	12:L:158:PHE:HE2	2.12	0.56
19:S:121:ARG:CG	19:S:131:VAL:CG1	2.82	0.56
20:T:40:ALA:CA	20:T:43:LYS:HG2	2.35	0.56
22:V:43:THR:O	22:V:44:GLY:C	2.49	0.56
33:g:188:HIS:HB3	33:g:219:TRP:CZ3	2.41	0.56
33:g:258:ILE:HD11	33:g:267:VAL:HG12	1.87	0.56
34:i:199:G:H8	34:i:199:G:O5'	1.89	0.56
36:k:20:U:H1'	37:n:67:LYS:C	2.26	0.56
37:n:82:ARG:O	37:n:84:TYR:N	2.39	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:7:VAL:HG22	1:A:8:LEU:HD12	1.88	0.55
2:B:29:ASP:C	2:B:29:ASP:OD1	2.49	0.55
2:B:63:LYS:C	2:B:63:LYS:CD	2.79	0.55
2:B:113:MET:CE	2:B:209:ASP:HB3	2.36	0.55
3:C:141:ILE:CG2	3:C:142:LEU:N	2.69	0.55
3:C:161:LYS:HD3	22:V:9:VAL:CG1	2.35	0.55
6:F:21:GLY:C	6:F:22:LYS:HG3	2.25	0.55
6:F:44:LYS:C	6:F:45:TYR:HD1	2.05	0.55
6:F:130:ARG:HH11	6:F:135:ARG:HG3	1.71	0.55
7:G:50:VAL:HG11	7:G:111:LEU:CB	2.35	0.55
7:G:120:ASP:N	7:G:120:ASP:OD1	2.38	0.55
9:I:48:VAL:HG11	9:I:54:LYS:HE3	1.87	0.55
9:I:83:TYR:HB3	9:I:101:ILE:HB	1.88	0.55
9:I:85:ALA:C	12:L:8:ARG:HH11	2.15	0.55
9:I:98:LYS:HD3	9:I:178:ARG:NE	2.21	0.55
10:J:78:LEU:HD23	10:J:97:ILE:HD11	1.86	0.55
12:L:149:ALA:O	12:L:150:GLY:O	2.24	0.55
14:N:53:ILE:HD11	28:b:52:THR:HG22	1.86	0.55
19:S:89:ASP:O	19:S:90:VAL:HG23	2.06	0.55
19:S:120:HIS:CD2	19:S:124:ARG:CD	2.89	0.55
23:W:93:LEU:O	23:W:93:LEU:CG	2.54	0.55
24:X:125:VAL:O	24:X:128:VAL:CA	2.53	0.55
33:g:16:GLY:H	33:g:37:ASP:HB3	1.72	0.55
33:g:64:HIS:CE1	33:g:65:PHE:HD2	2.23	0.55
33:g:116:ASP:O	33:g:117:ASN:CB	2.53	0.55
33:g:294:ASP:C	33:g:296:GLN:N	2.35	0.55
34:i:683:G:C2	34:i:733:G:O6	2.58	0.55
34:i:1236:A:H2'	34:i:1237:A:H5'	1.88	0.55
37:n:103:LEU:HD22	37:n:106:TYR:CD1	2.40	0.55
1:A:94:THR:CG2	1:A:182:VAL:CG2	2.84	0.55
1:A:145:ILE:HG23	1:A:159:ILE:CG2	2.36	0.55
3:C:218:LEU:HD12	3:C:219:GLY:CA	2.36	0.55
5:E:72:ILE:CD1	5:E:82:TYR:CE2	2.88	0.55
8:H:169:LYS:CB	8:H:173:PHE:CZ	2.89	0.55
9:I:9:HIS:O	9:I:10:LYS:CG	2.52	0.55
11:K:53:LYS:HA	11:K:58:VAL:CG1	2.36	0.55
12:L:153:LYS:HA	14:N:131:THR:O	2.06	0.55
13:M:76:LEU:C	13:M:128:PHE:HZ	2.15	0.55
13:M:86:GLY:C	13:M:91:LEU:HD11	2.31	0.55
15:O:52:THR:CG2	34:i:949:C:C4'	2.81	0.55
16:P:126:VAL:HG12	16:P:127:LYS:CA	2.33	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:7:LEU:HD22	17:Q:27:ARG:HD2	1.88	0.55
17:Q:45:ARG:HH11	34:i:1588:C:H4'	1.71	0.55
17:Q:124:PRO:CG	17:Q:125:ARG:N	2.69	0.55
21:U:67:LYS:CG	21:U:78:ASP:CG	2.78	0.55
21:U:83:ARG:CZ	30:d:55:LEU:CD1	2.84	0.55
25:Y:37:LYS:CA	25:Y:40:ILE:HG22	2.36	0.55
25:Y:63:HIS:HB2	25:Y:68:LYS:HD3	1.88	0.55
25:Y:120:THR:O	25:Y:122:LYS:N	2.37	0.55
34:i:1750:C:H6	34:i:1750:C:O5'	1.88	0.55
37:n:103:LEU:HD22	37:n:106:TYR:CZ	2.42	0.55
1:A:186:ARG:NH1	1:A:186:ARG:O	2.39	0.55
3:C:97:VAL:HB	34:i:11:A:O2'	2.06	0.55
4:D:59:LEU:CG	4:D:60:GLY:N	2.69	0.55
4:D:93:THR:O	4:D:93:THR:HG23	2.05	0.55
6:F:143:PRO:HA	6:F:146:ARG:HG3	1.88	0.55
7:G:141:ILE:HG21	7:G:153:VAL:HG13	1.87	0.55
8:H:11:PRO:HG2	8:H:12:ASN:H	1.71	0.55
10:J:125:HIS:HB2	34:i:517:C:H5'	1.87	0.55
11:K:12:TYR:OH	11:K:52:LEU:HD21	2.06	0.55
14:N:71:ILE:O	14:N:75:LEU:HD13	2.07	0.55
16:P:22:LEU:HA	16:P:25:LEU:HD12	1.87	0.55
17:Q:7:LEU:CD2	17:Q:8:GLN:H	2.17	0.55
22:V:55:ILE:HG22	22:V:60:ARG:HG3	1.87	0.55
23:W:93:LEU:CD2	23:W:128:PHE:HD2	2.10	0.55
25:Y:19:GLN:CD	25:Y:85:ASN:HD21	2.13	0.55
25:Y:120:THR:HG22	25:Y:122:LYS:HE2	1.89	0.55
33:g:57:ARG:NH1	33:g:94:THR:HA	2.21	0.55
33:g:71:ILE:CG2	33:g:72:SER:H	2.20	0.55
33:g:266:ILE:HG23	33:g:266:ILE:O	2.05	0.55
1:A:5:LEU:HB2	22:V:41:LYS:NZ	2.22	0.55
1:A:169:HIS:CD2	1:A:203:PHE:CE2	2.95	0.55
3:C:154:TYR:CZ	3:C:161:LYS:C	2.84	0.55
3:C:196:LYS:HD2	3:C:200:LEU:CD2	2.37	0.55
4:D:58:VAL:HG23	4:D:59:LEU:N	2.20	0.55
5:E:123:LEU:CD1	5:E:161:GLN:HA	2.37	0.55
5:E:126:VAL:CG2	5:E:129:ILE:CD1	2.84	0.55
5:E:129:ILE:HG23	5:E:139:LEU:HD23	1.88	0.55
5:E:181:CYS:SG	5:E:225:ILE:HG23	2.46	0.55
11:K:27:VAL:CB	11:K:43:LEU:CD2	2.82	0.55
11:K:40:VAL:HG22	11:K:41:PRO:C	2.30	0.55
16:P:70:MET:HG3	16:P:71:GLU:OE2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:123:TYR:CD2	19:S:120:HIS:CE1	2.55	0.55
18:R:62:GLN:HG3	18:R:62:GLN:O	2.06	0.55
19:S:135:HIS:CD2	34:i:1514:U:H1'	2.40	0.55
24:X:91:LEU:HD23	31:e:83:VAL:HG11	1.88	0.55
25:Y:46:LYS:O	25:Y:46:LYS:CG	2.55	0.55
31:e:116:PHE:N	31:e:119:VAL:HG21	2.21	0.55
33:g:96:THR:HG23	33:g:96:THR:O	2.05	0.55
34:i:1750:C:H4'	34:i:1751:G:OP1	2.04	0.55
34:i:1824:U:C1'	34:i:1845:A:N1	2.65	0.55
35:j:72:A:H5'	35:j:72:A:C8	2.41	0.55
1:A:139:TYR:O	1:A:140:VAL:CG2	2.54	0.55
2:B:124:HIS:HD2	2:B:136:HIS:CE1	2.19	0.55
3:C:262:HIS:ND1	3:C:263:THR:N	2.54	0.55
4:D:4:GLN:O	4:D:5:ILE:HG13	2.07	0.55
4:D:35:SER:C	4:D:99:ILE:HD11	2.29	0.55
5:E:100:ARG:CG	5:E:102:ILE:CD1	2.85	0.55
5:E:153:LEU:CD2	7:G:216:ARG:NH2	2.65	0.55
6:F:34:SER:HB3	29:c:55:VAL:CB	2.32	0.55
17:Q:109:LYS:NZ	17:Q:113:ILE:CD1	2.69	0.55
17:Q:138:ARG:HG2	34:i:1644:U:H4'	1.87	0.55
33:g:149:GLU:HB2	33:g:171:ASP:HB3	1.87	0.55
34:i:1825:A:C5'	34:i:1845:A:H61	2.19	0.55
36:k:11:A:N3	36:k:12:A:C8	2.74	0.55
36:k:19:U:H2'	36:k:19:U:O2	2.07	0.55
37:n:38:VAL:HG21	37:n:72:ASN:O	2.06	0.55
37:n:79:VAL:HG12	37:n:91:VAL:CA	2.35	0.55
1:A:34:MET:HE1	1:A:37:TYR:CD2	2.28	0.55
1:A:122:LEU:HD12	1:A:137:ALA:HB2	1.88	0.55
5:E:87:MET:CE	5:E:182:MET:HE1	2.35	0.55
6:F:122:ARG:HB2	6:F:123:GLU:OE1	2.05	0.55
7:G:135:PRO:CG	7:G:144:LEU:HD22	2.36	0.55
7:G:176:ILE:CG2	7:G:179:LEU:HB2	2.32	0.55
8:H:50:GLU:OE2	8:H:90:LYS:CE	2.55	0.55
8:H:87:PHE:CE2	8:H:90:LYS:NZ	2.73	0.55
9:I:21:TYR:O	9:I:22:HIS:O	2.25	0.55
11:K:53:LYS:HA	11:K:58:VAL:HG13	1.88	0.55
13:M:59:PRO:HB2	13:M:62:VAL:HG22	1.89	0.55
13:M:67:ALA:CA	32:f:114:ILE:HG21	2.37	0.55
14:N:4:MET:CE	14:N:124:ARG:HH22	2.19	0.55
16:P:89:MET:O	16:P:107:ILE:HD11	2.05	0.55
17:Q:45:ARG:O	17:Q:46:THR:C	2.49	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:53:GLU:O	17:Q:57:LEU:HG	2.07	0.55
17:Q:115:TYR:HE2	17:Q:119:LEU:HD11	1.72	0.55
19:S:18:THR:OG1	19:S:33:ILE:HG12	2.07	0.55
19:S:22:GLY:O	19:S:57:GLY:N	2.35	0.55
19:S:142:ARG:HA	34:i:1518:C:OP1	2.06	0.55
23:W:20:ARG:HH22	34:i:1135:C:C1'	2.20	0.55
24:X:27:TYR:CD2	24:X:31:HIS:CD2	2.94	0.55
26:Z:99:LEU:HD21	26:Z:102:LYS:HD3	1.80	0.55
33:g:2:THR:HG23	33:g:3:GLU:CD	2.31	0.55
33:g:102:VAL:HG12	33:g:103:GLY:N	2.21	0.55
35:j:62:A:C6	35:j:63:U:C4	2.94	0.55
1:A:106:GLY:CA	34:i:1347:G:HO2'	1.93	0.55
3:C:198:LEU:HD13	3:C:225:THR:CG2	2.37	0.55
3:C:198:LEU:HD23	3:C:198:LEU:O	2.06	0.55
4:D:77:PHE:O	4:D:79:PHE:N	2.40	0.55
5:E:71:LYS:HG2	5:E:76:VAL:N	2.21	0.55
6:F:78:MET:HB2	6:F:159:ARG:NH2	2.22	0.55
7:G:36:VAL:CG1	7:G:37:ALA:H	2.14	0.55
7:G:67:VAL:CG2	7:G:100:CYS:H	2.20	0.55
7:G:135:PRO:CD	7:G:144:LEU:CD2	2.85	0.55
7:G:188:LYS:HA	7:G:191:ARG:CG	2.37	0.55
7:G:225:GLN:C	7:G:227:GLN:H	2.14	0.55
7:G:227:GLN:HA	7:G:230:LYS:NZ	2.21	0.55
8:H:12:ASN:ND2	8:H:46:THR:CB	2.67	0.55
9:I:150:ASP:OD2	9:I:150:ASP:C	2.50	0.55
10:J:29:LEU:HB3	31:e:116:PHE:HE2	1.72	0.55
15:O:61:LYS:C	15:O:62:VAL:HG23	2.28	0.55
17:Q:10:VAL:HG12	17:Q:11:GLN:N	2.21	0.55
18:R:16:ILE:O	18:R:20:TYR:HB2	2.07	0.55
20:T:65:TYR:HE2	20:T:128:GLN:HG3	1.72	0.55
25:Y:13:MET:HE3	25:Y:14:THR:C	2.32	0.55
33:g:36:ARG:C	33:g:38:LYS:H	2.15	0.55
33:g:276:SER:C	33:g:277:THR:O	2.41	0.55
34:i:151:C:H2'	34:i:152:U:C6	2.42	0.55
34:i:272:C:H5"	34:i:272:C:C6	2.42	0.55
34:i:1817:A:C4'	34:i:1818:A:H1'	2.37	0.55
1:A:42:LYS:CE	18:R:105:MET:HG2	2.25	0.55
1:A:132:GLN:NE2	34:i:1374:A:H8	2.05	0.55
2:B:107:ARG:NH1	15:O:133:THR:O	2.40	0.55
3:C:240:LEU:N	3:C:240:LEU:HD12	2.21	0.55
4:D:77:PHE:O	4:D:78:GLY:C	2.50	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:212:GLU:HG2	18:R:19:LYS:HZ3	1.72	0.55
5:E:230:LYS:O	5:E:233:LYS:N	2.36	0.55
6:F:65:GLN:NE2	6:F:65:GLN:HA	2.16	0.55
7:G:35:GLU:C	7:G:36:VAL:HG23	2.32	0.55
8:H:37:LYS:HZ3	8:H:38:ALA:HA	1.71	0.55
9:I:191:GLU:CG	9:I:192:GLY:N	2.70	0.55
10:J:89:GLU:C	10:J:91:LYS:O	2.50	0.55
10:J:124:HIS:HD2	34:i:516:A:C5'	1.84	0.55
10:J:143:ASN:O	10:J:143:ASN:CG	2.49	0.55
13:M:89:VAL:HG21	13:M:109:VAL:CG1	2.27	0.55
14:N:2:GLY:O	14:N:3:ARG:CB	2.55	0.55
14:N:22:VAL:HB	14:N:23:PRO:C	2.32	0.55
33:g:110:SER:CB	33:g:153:CYS:HA	2.37	0.55
35:j:8:U:H1'	35:j:47:C:O2	2.07	0.55
37:n:47:LEU:HD21	37:n:91:VAL:HG21	1.87	0.55
37:n:110:PRO:HB2	37:n:112:HIS:CE1	2.42	0.55
1:A:71:PRO:HB2	1:A:95:GLY:HA3	1.88	0.55
1:A:106:GLY:O	1:A:110:ASN:HB2	2.07	0.55
1:A:118:GLU:CD	3:C:50:LYS:HE2	2.29	0.55
1:A:125:THR:C	1:A:147:LEU:HB2	2.32	0.55
2:B:125:VAL:CG1	2:B:173:THR:HG22	2.28	0.55
3:C:197:LYS:HG3	3:C:200:LEU:HD21	1.89	0.55
5:E:153:LEU:CD1	5:E:172:PHE:CE1	2.72	0.55
6:F:176:GLU:CD	6:F:187:SER:HG	2.10	0.55
7:G:159:ARG:HH22	7:G:161:PRO:N	2.05	0.55
7:G:170:ARG:HD2	7:G:172:LYS:HG2	1.88	0.55
9:I:25:ARG:HB3	9:I:27:TYR:CE2	2.41	0.55
10:J:34:GLU:CB	10:J:35:TYR:CD2	2.89	0.55
11:K:14:LEU:CG	11:K:35:LEU:HD21	2.36	0.55
13:M:64:LEU:HG	32:f:104:LYS:NZ	2.22	0.55
14:N:139:TRP:HZ3	14:N:141:TYR:N	2.03	0.55
15:O:131:ASP:CG	27:a:67:LEU:HD21	2.32	0.55
16:P:4:VAL:O	16:P:4:VAL:CG1	2.50	0.55
16:P:9:LYS:O	16:P:10:ARG:CZ	2.54	0.55
19:S:54:LYS:HB3	19:S:55:ARG:H	1.72	0.55
20:T:75:MET:HA	20:T:78:ILE:HG22	1.89	0.55
24:X:28:LYS:CE	24:X:32:LEU:HD11	2.37	0.55
25:Y:37:LYS:HA	25:Y:40:ILE:HG22	1.89	0.55
27:a:26:CYS:SG	27:a:74:CYS:SG	3.05	0.55
30:d:5:GLN:CA	30:d:7:TYR:CE2	2.90	0.55
34:i:1284:U:H3	34:i:1307:C:H42	1.55	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1496:G:H2'	34:i:1497:C:C6	2.42	0.55
2:B:53:GLN:C	2:B:55:THR:N	2.63	0.55
2:B:205:TYR:CG	2:B:206:PRO:CD	2.82	0.55
4:D:5:ILE:O	4:D:6:SER:N	2.33	0.55
5:E:69:PHE:CZ	25:Y:17:LEU:HA	2.42	0.55
6:F:15:PRO:HD3	17:Q:56:LEU:HA	1.88	0.55
6:F:15:PRO:HD3	17:Q:56:LEU:CA	2.36	0.55
7:G:64:LYS:CD	7:G:65:GLN:C	2.80	0.55
9:I:63:GLY:O	9:I:75:LYS:HG2	2.06	0.55
11:K:85:LEU:HD13	11:K:89:ILE:CG1	2.37	0.55
16:P:17:TYR:H	16:P:25:LEU:HD11	1.71	0.55
16:P:18:ARG:CZ	19:S:90:VAL:HG23	2.37	0.55
18:R:87:GLU:O	18:R:88:VAL:CB	2.55	0.55
18:R:91:LEU:HB2	18:R:93:GLN:H	1.66	0.55
20:T:9:VAL:CG1	20:T:13:GLU:HG3	2.37	0.55
21:U:67:LYS:CE	21:U:78:ASP:CG	2.68	0.55
26:Z:61:GLU:HB3	26:Z:65:TYR:OH	2.07	0.55
34:i:545:A:C6	34:i:546:U:C4	2.95	0.55
34:i:1024:A:H5"	34:i:1025:G:OP2	2.07	0.55
34:i:1206:G:OP2	34:i:1207:G:OP1	2.25	0.55
1:A:32:PHE:CE1	1:A:33:GLN:CD	2.85	0.54
2:B:25:PHE:HD2	15:O:88:LEU:HD21	1.66	0.54
4:D:219:PRO:O	4:D:220:THR:C	2.50	0.54
6:F:192:LYS:O	6:F:192:LYS:HD2	2.08	0.54
7:G:164:LYS:O	7:G:164:LYS:HG3	2.07	0.54
7:G:176:ILE:HG21	7:G:179:LEU:CG	2.32	0.54
9:I:148:LYS:CE	9:I:152:ARG:NH2	2.70	0.54
12:L:59:LYS:CE	12:L:134:LEU:HD21	2.37	0.54
14:N:124:ARG:O	14:N:127:ARG:HG2	2.06	0.54
15:O:125:LYS:HZ2	27:a:56:VAL:C	2.15	0.54
16:P:39:ALA:HA	16:P:42:ARG:CG	2.37	0.54
16:P:53:GLN:CG	16:P:56:LEU:HD12	2.37	0.54
19:S:23:ARG:HD3	26:Z:48:VAL:CB	2.34	0.54
20:T:14:PHE:CZ	20:T:131:LEU:HD12	2.42	0.54
20:T:39:LEU:HD11	20:T:56:ARG:CZ	2.36	0.54
22:V:35:ASN:OD1	22:V:52:THR:HB	2.07	0.54
25:Y:3:ASP:C	25:Y:4:THR:HG1	2.09	0.54
25:Y:10:ARG:CD	25:Y:24:VAL:HG11	2.34	0.54
29:c:18:LEU:HB3	29:c:29:GLN:CB	2.37	0.54
32:f:98:VAL:CG1	32:f:99:LYS:N	2.39	0.54
33:g:165:ILE:HG13	33:g:177:TRP:HB2	1.84	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:141:ASN:HA	22:V:32:ILE:HD11	1.89	0.54
1:A:185:MET:CE	22:V:39:VAL:CG1	2.66	0.54
2:B:105:LEU:HG	2:B:213:ARG:O	2.06	0.54
5:E:136:ILE:N	5:E:136:ILE:CD1	2.70	0.54
6:F:42:LYS:O	6:F:44:LYS:C	2.50	0.54
7:G:64:LYS:HD2	7:G:67:VAL:HG13	1.87	0.54
9:I:117:TYR:HE1	9:I:155:ASN:ND2	2.05	0.54
11:K:1:MET:HE3	34:i:1270:G:C2	2.43	0.54
12:L:17:PHE:CZ	12:L:19:ASN:OD1	2.61	0.54
13:M:98:GLY:C	13:M:100:PRO:CD	2.74	0.54
14:N:116:ILE:CA	14:N:119:GLU:HG3	2.37	0.54
16:P:49:LEU:HD12	16:P:50:ARG:H	1.71	0.54
16:P:107:ILE:CA	16:P:111:MET:CE	2.72	0.54
17:Q:102:GLU:OE1	33:g:55:PRO:CD	2.55	0.54
19:S:37:GLY:H	34:i:1625:A:H5"	1.71	0.54
23:W:10:ALA:O	23:W:13:SER:OG	2.22	0.54
28:b:32:PHE:O	28:b:81:ARG:C	2.50	0.54
31:e:103:THR:O	31:e:104:GLY:O	2.25	0.54
33:g:230:LEU:HD12	33:g:230:LEU:N	2.21	0.54
33:g:254:PRO:O	33:g:255:SER:HB3	2.07	0.54
34:i:830:C:C2	34:i:837:G:C2	2.96	0.54
34:i:1059:C:C6	34:i:1060:C:C5	2.95	0.54
34:i:1523:G:H22	34:i:1660:G:N2	2.05	0.54
2:B:138:PHE:CD2	2:B:138:PHE:N	2.74	0.54
3:C:55:VAL:HG21	3:C:82:PHE:HE2	1.63	0.54
3:C:197:LYS:CG	3:C:200:LEU:HD21	2.36	0.54
5:E:46:ILE:O	5:E:50:ASN:HB2	2.07	0.54
5:E:143:ASP:OD2	5:E:145:ARG:HD2	2.08	0.54
6:F:14:THR:OG1	17:Q:56:LEU:HD13	2.07	0.54
6:F:18:LYS:NZ	6:F:18:LYS:CB	2.68	0.54
8:H:83:LEU:HD21	8:H:92:VAL:HG11	1.81	0.54
8:H:157:HIS:O	8:H:158:LEU:CD2	2.54	0.54
9:I:54:LYS:CG	9:I:181:GLN:O	2.54	0.54
10:J:81:LEU:HD12	10:J:97:ILE:CD1	2.37	0.54
10:J:124:HIS:CD2	34:i:516:A:C4'	2.90	0.54
14:N:55:ARG:HH21	28:b:51:GLN:NE2	1.92	0.54
15:O:142:ARG:HH11	27:a:27:ALA:HB1	1.69	0.54
17:Q:44:PRO:O	17:Q:45:ARG:CG	2.54	0.54
18:R:95:ILE:N	18:R:114:LEU:HD13	2.23	0.54
19:S:36:VAL:HA	19:S:40:TYR:CD2	2.42	0.54
21:U:54:VAL:O	21:U:56:MET:SD	2.65	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:44:LEU:HD11	26:Z:46:ASN:CG	2.32	0.54
33:g:41:ILE:HD13	33:g:58:ALA:HA	1.89	0.54
34:i:1596:A:H5'	34:i:1597:U:C6	2.42	0.54
35:j:16:C:O2	35:j:59:A:O3'	2.24	0.54
36:k:22:C:C1'	36:k:22:C:O2	2.54	0.54
1:A:18:PHE:CZ	1:A:55:TRP:CZ3	2.96	0.54
1:A:149:ASN:N	1:A:165:ASN:ND2	2.56	0.54
1:A:193:HIS:CB	1:A:194:PRO:CD	2.84	0.54
2:B:195:LYS:HE2	2:B:195:LYS:CA	2.37	0.54
3:C:50:LYS:HG3	3:C:258:LEU:HD13	1.89	0.54
4:D:23:GLU:CB	11:K:64:TRP:HE1	2.20	0.54
4:D:28:GLU:OE1	4:D:28:GLU:HA	2.07	0.54
7:G:64:LYS:CD	7:G:65:GLN:O	2.56	0.54
7:G:76:LEU:HD13	7:G:92:ARG:HD2	1.90	0.54
7:G:122:PRO:HD2	7:G:123:GLY:N	2.22	0.54
10:J:134:HIS:CE1	10:J:163:SER:HB3	2.33	0.54
12:L:83:GLN:HG2	12:L:83:GLN:O	2.06	0.54
13:M:101:ARG:O	13:M:103:VAL:HG23	2.08	0.54
15:O:74:ALA:HB3	15:O:114:SER:OG	2.06	0.54
17:Q:144:SER:O	17:Q:145:TYR:CB	2.56	0.54
20:T:33:TRP:CD1	20:T:34:VAL:H	2.24	0.54
20:T:38:LYS:HD2	20:T:46:ALA:CA	2.37	0.54
33:g:100:ARG:NH1	33:g:100:ARG:CB	2.71	0.54
33:g:140:TYR:CG	33:g:182:CYS:SG	2.98	0.54
34:i:883:U:C5	34:i:884:U:C5	2.96	0.54
34:i:1564:A:C5	34:i:1565:G:H1'	2.43	0.54
34:i:1700:C:H1'	34:i:1845:A:O3'	2.03	0.54
1:A:32:PHE:HA	1:A:35:GLU:OE1	2.07	0.54
2:B:98:THR:O	2:B:232:HIS:HE1	1.91	0.54
2:B:153:THR:O	2:B:154:SER:CB	2.54	0.54
4:D:126:ILE:HD12	4:D:134:CYS:HB2	1.87	0.54
5:E:205:PHE:CE1	5:E:221:ARG:CZ	2.90	0.54
6:F:14:THR:CB	17:Q:56:LEU:CG	2.73	0.54
7:G:184:VAL:C	7:G:188:LYS:HE2	2.33	0.54
8:H:37:LYS:O	8:H:38:ALA:HB3	2.08	0.54
9:I:58:LEU:CD1	34:i:1735:C:H5"	2.37	0.54
12:L:20:LYS:O	12:L:21:LYS:CB	2.45	0.54
12:L:82:MET:HE2	12:L:85:THR:CG2	2.35	0.54
12:L:101:ARG:NH1	24:X:5:ARG:HA	2.18	0.54
12:L:134:LEU:HD23	12:L:134:LEU:C	2.33	0.54
13:M:15:ASN:OD1	13:M:15:ASN:C	2.50	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:92:ILE:HG22	14:N:150:VAL:HG23	1.86	0.54
15:O:28:PHE:CE1	15:O:92:ALA:HB1	2.43	0.54
18:R:33:ARG:HH11	33:g:125:ARG:CD	2.20	0.54
20:T:39:LEU:HD21	20:T:56:ARG:HH21	1.72	0.54
23:W:101:PHE:CD2	23:W:129:PHE:HE1	2.25	0.54
23:W:128:PHE:HD1	23:W:129:PHE:CA	2.20	0.54
25:Y:46:LYS:O	25:Y:47:MET:HG2	2.07	0.54
26:Z:99:LEU:CD1	26:Z:102:LYS:HD3	2.36	0.54
28:b:1:MET:N	28:b:2:PRO:CD	2.71	0.54
32:f:146:LEU:HD22	34:i:1288:C:H5'	1.89	0.54
33:g:94:THR:OG1	33:g:95:GLY:N	2.38	0.54
34:i:841:G:H3'	34:i:842:G:H8	1.72	0.54
34:i:848:G:C3'	34:i:849:C:C5'	2.85	0.54
34:i:1059:C:C5	34:i:1060:C:C5	2.96	0.54
34:i:1828:A:C2	34:i:1831:G:N1	2.76	0.54
1:A:109:THR:OG1	34:i:1348:G:C5'	2.55	0.54
2:B:31:TYR:CE1	2:B:94:LYS:CA	2.90	0.54
2:B:67:PHE:HD1	15:O:47:LEU:CB	2.19	0.54
3:C:59:LYS:HD2	3:C:254:PHE:HE1	1.72	0.54
5:E:130:PHE:HB3	5:E:138:HIS:ND1	2.23	0.54
6:F:68:ILE:HG13	6:F:69:VAL:N	2.21	0.54
7:G:55:GLY:HA2	7:G:110:ASN:ND2	2.23	0.54
7:G:177:GLN:CG	7:G:178:ARG:H	2.21	0.54
8:H:114:GLN:O	8:H:115:LYS:C	2.49	0.54
13:M:77:ILE:CG2	13:M:78:LYS:N	2.68	0.54
14:N:7:PRO:HD2	14:N:8:GLY:N	2.23	0.54
15:O:31:CYS:SG	15:O:95:ILE:CG1	2.95	0.54
15:O:72:TYR:C	15:O:72:TYR:CD1	2.86	0.54
16:P:51:ARG:O	16:P:52:LYS:HB2	2.07	0.54
17:Q:43:GLU:HG2	17:Q:45:ARG:CB	2.37	0.54
19:S:34:LYS:HD3	19:S:34:LYS:N	2.22	0.54
19:S:81:ASP:C	19:S:87:GLN:HE22	2.16	0.54
20:T:111:LYS:CG	20:T:126:GLN:HE22	2.20	0.54
24:X:27:TYR:CD1	24:X:31:HIS:CD2	2.94	0.54
25:Y:99:LYS:O	25:Y:100:LYS:O	2.25	0.54
27:a:107:ALA:CB	27:a:108:PRO:CD	2.86	0.54
30:d:5:GLN:CD	30:d:7:TYR:HE2	2.14	0.54
33:g:89:LEU:HB3	33:g:98:THR:OG1	2.07	0.54
34:i:516:A:C2	34:i:550:A:C2	2.95	0.54
34:i:1270:G:N3	34:i:1270:G:C5'	2.71	0.54
37:n:78:LEU:C	37:n:78:LEU:HD12	2.33	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:141:ASN:HD21	22:V:29:HIS:HA	1.72	0.54
1:A:149:ASN:CB	1:A:165:ASN:ND2	2.69	0.54
1:A:173:LEU:O	1:A:177:MET:HG2	2.07	0.54
1:A:179:ALA:HA	1:A:182:VAL:HG22	1.90	0.54
2:B:68:GLU:OE2	2:B:83:LYS:CE	2.45	0.54
2:B:72:ALA:CA	2:B:79:VAL:CG2	2.69	0.54
5:E:71:LYS:HG2	5:E:76:VAL:H	1.72	0.54
5:E:143:ASP:OD2	5:E:145:ARG:CD	2.55	0.54
5:E:165:GLU:OE2	5:E:165:GLU:HA	2.06	0.54
6:F:167:LYS:HE3	6:F:171:GLU:HG3	1.89	0.54
8:H:16:PRO:HA	8:H:17:ASP:CB	2.26	0.54
8:H:50:GLU:CD	8:H:58:LYS:HD3	2.29	0.54
8:H:120:ARG:HH12	34:i:909:A:H2'	1.72	0.54
8:H:122:LEU:HD13	8:H:123:THR:HA	1.87	0.54
9:I:66:SER:HA	9:I:73:THR:HA	1.89	0.54
9:I:201:LYS:NZ	12:L:8:ARG:HA	2.23	0.54
10:J:110:LEU:HD11	10:J:135:ILE:CD1	2.38	0.54
10:J:164:PRO:HB2	10:J:165:TYR:CD1	2.43	0.54
14:N:38:TYR:CE1	14:N:78:LYS:NZ	2.76	0.54
14:N:54:LEU:C	14:N:60:VAL:HG22	2.32	0.54
16:P:49:LEU:HD13	16:P:51:ARG:CZ	2.33	0.54
16:P:93:MET:SD	16:P:106:GLU:CA	2.95	0.54
17:Q:124:PRO:CD	17:Q:125:ARG:H	2.21	0.54
18:R:42:PRO:HD3	18:R:46:LEU:HD23	1.89	0.54
20:T:38:LYS:O	20:T:39:LEU:HB3	2.07	0.54
22:V:24:ILE:CD1	22:V:25:GLY:CA	2.85	0.54
24:X:105:PHE:CE2	24:X:118:VAL:C	2.85	0.54
25:Y:5:VAL:O	25:Y:6:THR:CB	2.56	0.54
32:f:100:LEU:C	32:f:102:VAL:H	2.14	0.54
32:f:146:LEU:HD12	32:f:147:THR:N	2.23	0.54
33:g:26:GLN:CB	33:g:74:ASP:O	2.48	0.54
33:g:32:LEU:HD21	33:g:69:VAL:HG21	1.90	0.54
33:g:69:VAL:HG22	33:g:70:VAL:N	2.23	0.54
33:g:143:GLN:CG	33:g:144:ASP:CB	2.82	0.54
35:j:3:C:H2'	35:j:4:A:H5'	1.90	0.54
35:j:65:C:H2'	35:j:66:U:H6	1.73	0.54
37:n:69:VAL:HG21	37:n:94:LYS:HB2	1.88	0.54
3:C:174:GLY:O	3:C:175:SER:CB	2.55	0.54
4:D:177:LEU:HD22	4:D:182:LEU:CD2	2.25	0.54
5:E:97:GLU:HB2	5:E:99:PHE:CE2	2.43	0.54
6:F:18:LYS:O	6:F:46:ALA:HB1	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:95:HIS:NE2	26:Z:103:HIS:CB	2.71	0.54
9:I:5:ARG:HH11	34:i:374:U:H3	1.56	0.54
11:K:1:MET:H2	11:K:2:LEU:C	2.14	0.54
17:Q:116:ASP:CG	17:Q:117:ARG:N	2.65	0.54
20:T:102:ARG:HH21	20:T:105:GLN:CD	2.09	0.54
24:X:52:LEU:CD1	24:X:71:ARG:HB2	2.37	0.54
25:Y:101:LYS:C	25:Y:102:THR:HG1	2.16	0.54
32:f:146:LEU:HD12	32:f:146:LEU:C	2.33	0.54
33:g:227:LEU:HB3	33:g:228:TYR:HD1	1.73	0.54
33:g:258:ILE:CG1	33:g:267:VAL:HB	2.37	0.54
33:g:261:LEU:HD22	33:g:261:LEU:H	1.73	0.54
34:i:296:U:H5"	34:i:297:C:C5	2.43	0.54
34:i:1206:G:N9	34:i:1207:G:O5'	2.38	0.54
34:i:1492:U:O2'	34:i:1494:A:O5'	2.25	0.54
1:A:113:GLN:N	34:i:1346:U:O2'	2.40	0.54
1:A:132:GLN:N	1:A:133:PRO:HD3	2.22	0.54
4:D:79:PHE:CE1	4:D:83:SER:HB3	2.42	0.54
9:I:7:ASN:C	9:I:9:HIS:N	2.59	0.54
9:I:174:CYS:HB2	9:I:190:LEU:HD21	1.90	0.54
10:J:138:ARG:HD3	10:J:156:HIS:ND1	2.22	0.54
12:L:86:ILE:CG2	12:L:113:LEU:HD12	2.38	0.54
15:O:31:CYS:SG	15:O:95:ILE:HG12	2.48	0.54
16:P:84:ILE:HG22	16:P:86:LEU:CD2	2.36	0.54
18:R:29:HIS:CD2	33:g:65:PHE:CZ	2.91	0.54
21:U:69:PRO:CB	30:d:41:GLN:HG3	2.37	0.54
21:U:79:ARG:HH12	34:i:1664:G:H4'	1.73	0.54
22:V:79:VAL:HG12	22:V:82:ASN:CG	2.33	0.54
28:b:6:ASP:O	28:b:7:LEU:C	2.51	0.54
28:b:19:HIS:HB3	28:b:22:LYS:HG3	1.90	0.54
33:g:61:GLY:C	33:g:88:ARG:NH2	2.66	0.54
33:g:280:LYS:C	33:g:281:ALA:O	2.51	0.54
33:g:286:CYS:CB	33:g:302:TYR:CZ	2.76	0.54
34:i:184:G:H2'	34:i:185:C:H6	1.71	0.54
34:i:520:U:H5	34:i:521:A:C5	2.26	0.54
34:i:522:C:H2'	34:i:523:A:C8	2.42	0.54
1:A:33:GLN:OE1	28:b:2:PRO:HB3	2.08	0.54
2:B:148:ASN:C	18:R:124:VAL:CA	2.80	0.54
2:B:160:GLN:HE22	2:B:205:TYR:HE1	1.49	0.54
2:B:178:THR:O	2:B:179:ASN:CB	2.56	0.54
9:I:48:VAL:CG1	9:I:54:LYS:HE3	2.38	0.54
11:K:16:PHE:CE2	11:K:79:LEU:CA	2.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:43:LEU:H	11:K:46:MET:HB3	1.73	0.54
12:L:96:ILE:HD13	12:L:102:PHE:HA	1.89	0.54
17:Q:63:PHE:CD1	17:Q:68:ILE:CD1	2.91	0.54
17:Q:98:LYS:CE	17:Q:99:TYR:CE2	2.91	0.54
20:T:77:LYS:O	20:T:92:PHE:HZ	1.91	0.54
20:T:82:ARG:HH11	34:i:1585:C:H5"	1.72	0.54
23:W:51:GLU:OE1	28:b:8:LEU:HD13	2.08	0.54
25:Y:56:PHE:CD2	25:Y:86:GLU:CD	2.76	0.54
28:b:4:ALA:C	28:b:5:LYS:HG3	2.32	0.54
34:i:296:U:H5"	34:i:297:C:C6	2.43	0.54
34:i:1546:U:C5	34:i:1572:G:C2	2.95	0.54
3:C:89:ASP:HB3	3:C:115:ILE:CG1	2.39	0.53
4:D:34:TYR:OH	4:D:37:VAL:HG13	2.08	0.53
4:D:39:VAL:O	4:D:39:VAL:HG13	2.07	0.53
4:D:46:THR:O	4:D:85:GLU:N	2.39	0.53
4:D:166:TYR:CE1	4:D:200:PRO:HB2	2.41	0.53
4:D:199:GLY:O	4:D:201:LYS:N	2.37	0.53
4:D:210:ILE:HD11	18:R:15:VAL:CG1	2.29	0.53
6:F:133:THR:O	6:F:135:ARG:HG2	2.08	0.53
14:N:64:ARG:O	14:N:67:THR:O	2.25	0.53
14:N:87:ASP:CG	14:N:129:TYR:OH	2.45	0.53
17:Q:111:ILE:HA	17:Q:114:GLN:CD	2.33	0.53
19:S:16:LEU:C	19:S:17:ASN:OD1	2.50	0.53
20:T:76:THR:OG1	20:T:94:ARG:HD2	2.08	0.53
21:U:73:GLY:C	21:U:74:SER:O	2.51	0.53
21:U:104:ILE:O	21:U:106:ILE:HG22	2.08	0.53
22:V:40:ASP:HB2	22:V:47:ASN:HD21	1.61	0.53
22:V:55:ILE:HG21	22:V:60:ARG:HG2	1.90	0.53
24:X:126:ALA:O	24:X:128:VAL:HG23	2.08	0.53
25:Y:82:ALA:O	25:Y:86:GLU:HB2	2.08	0.53
26:Z:46:ASN:HB3	26:Z:80:ARG:HA	1.90	0.53
26:Z:66:LYS:O	26:Z:110:THR:HA	2.08	0.53
29:c:60:GLU:CD	29:c:60:GLU:N	2.64	0.53
31:e:119:VAL:N	31:e:121:PRO:HD2	2.22	0.53
31:e:120:VAL:HG22	31:e:121:PRO:C	2.33	0.53
33:g:51:ASN:O	33:g:53:GLY:O	2.25	0.53
34:i:1743:G:H1	34:i:1780:U:H3	1.55	0.53
35:j:71:U:C2'	35:j:72:A:H5"	2.38	0.53
37:n:71:ILE:HA	37:n:94:LYS:HD2	1.90	0.53
37:n:78:LEU:HD12	37:n:79:VAL:N	2.23	0.53
37:n:103:LEU:HD22	37:n:106:TYR:CE1	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:149:ASN:H	1:A:165:ASN:HD21	1.57	0.53
1:A:180:ARG:O	1:A:184:ARG:HG3	2.06	0.53
2:B:67:PHE:CZ	15:O:48:SER:HB3	2.43	0.53
3:C:154:TYR:CE1	3:C:162:PRO:CD	2.91	0.53
5:E:100:ARG:NH2	5:E:122:LYS:HA	2.23	0.53
5:E:153:LEU:CD1	5:E:172:PHE:HZ	1.94	0.53
6:F:144:LEU:HD23	29:c:49:PRO:HG2	1.91	0.53
6:F:145:ARG:NH1	29:c:49:PRO:HD3	2.20	0.53
9:I:7:ASN:O	9:I:9:HIS:C	2.51	0.53
9:I:155:ASN:ND2	9:I:156:ALA:CA	2.70	0.53
11:K:14:LEU:CD1	11:K:35:LEU:HD11	2.38	0.53
11:K:37:ASP:C	11:K:38:LYS:HD3	2.33	0.53
11:K:83:LEU:HB3	11:K:85:LEU:CG	2.31	0.53
14:N:11:LEU:HD12	14:N:11:LEU:C	2.33	0.53
16:P:90:VAL:HA	16:P:107:ILE:HG13	1.90	0.53
20:T:83:GLN:NE2	20:T:85:ASN:CA	2.72	0.53
28:b:12:PRO:CD	28:b:13:GLU:N	2.55	0.53
34:i:1823:G:H2'	34:i:1844:A:N1	2.22	0.53
1:A:66:VAL:HG11	22:V:46:PHE:HB3	1.90	0.53
1:A:193:HIS:CG	1:A:194:PRO:HD2	2.42	0.53
2:B:140:VAL:O	2:B:210:VAL:HA	2.08	0.53
6:F:166:ILE:H	6:F:166:ILE:CD1	2.19	0.53
9:I:144:LYS:H	9:I:144:LYS:CD	2.22	0.53
9:I:149:TYR:HD1	9:I:152:ARG:NH1	2.05	0.53
9:I:158:ILE:C	12:L:22:ARG:NH2	2.67	0.53
13:M:67:ALA:CB	32:f:108:VAL:CG2	2.80	0.53
14:N:19:ARG:HH12	28:b:84:HIS:CB	2.20	0.53
20:T:16:ARG:NH1	20:T:16:ARG:HG2	2.23	0.53
24:X:88:ASP:OD2	31:e:87:ARG:HB2	2.08	0.53
25:Y:117:VAL:HB	25:Y:124:ASN:ND2	2.24	0.53
25:Y:118:ARG:O	25:Y:119:GLY:C	2.51	0.53
29:c:51:ARG:HG2	29:c:52:GLU:N	2.22	0.53
31:e:86:VAL:CA	31:e:89:GLN:HG2	2.34	0.53
32:f:135:HIS:ND1	32:f:138:ARG:HG2	2.22	0.53
34:i:328:G:C4	34:i:329:A:C8	2.95	0.53
4:D:162:ASP:OD1	4:D:162:ASP:O	2.27	0.53
5:E:124:CYS:HB2	5:E:162:ILE:CD1	2.39	0.53
5:E:166:THR:OG1	5:E:168:LYS:HG2	2.07	0.53
6:F:36:GLN:CG	6:F:37:ASP:OD1	2.30	0.53
6:F:138:ALA:CB	6:F:200:ALA:O	2.54	0.53
7:G:3:LEU:CD2	7:G:109:LEU:HB2	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:64:LYS:HE3	7:G:65:GLN:O	2.08	0.53
7:G:162:LEU:HD12	7:G:162:LEU:C	2.34	0.53
8:H:60:ILE:HG23	8:H:60:ILE:O	2.06	0.53
8:H:100:ILE:HG13	8:H:125:VAL:HG21	1.87	0.53
9:I:6:ASP:OD2	9:I:8:TRP:CG	2.62	0.53
9:I:117:TYR:H	9:I:117:TYR:HD2	1.57	0.53
12:L:157:LYS:O	12:L:158:PHE:CG	2.61	0.53
13:M:27:ILE:HG23	13:M:28:HIS:N	2.23	0.53
15:O:28:PHE:HB3	15:O:47:LEU:HD11	1.89	0.53
15:O:125:LYS:HZ1	27:a:58:VAL:CA	2.22	0.53
17:Q:51:LEU:C	17:Q:51:LEU:HD12	2.33	0.53
19:S:46:ARG:NH1	20:T:50:GLU:CB	2.70	0.53
20:T:14:PHE:HZ	20:T:131:LEU:CD1	2.21	0.53
20:T:45:LEU:HD23	20:T:48:TYR:HE1	1.73	0.53
21:U:18:HIS:CE1	21:U:98:VAL:HG22	2.39	0.53
33:g:64:HIS:CG	33:g:83:TRP:HB2	2.43	0.53
34:i:685:G:O6	34:i:731:C:N3	2.41	0.53
34:i:1596:A:H4'	34:i:1597:U:C6	2.43	0.53
34:i:1747:C:H2'	34:i:1747:C:O2	2.09	0.53
37:n:103:LEU:HD23	37:n:103:LEU:N	2.23	0.53
1:A:113:GLN:CD	34:i:1347:G:C1'	2.78	0.53
2:B:87:ILE:HD12	2:B:220:LYS:NZ	2.22	0.53
2:B:232:HIS:O	2:B:233:GLY:O	2.27	0.53
3:C:101:THR:HG22	3:C:103:ALA:O	1.93	0.53
4:D:45:ARG:CA	4:D:83:SER:OG	2.56	0.53
4:D:157:MET:HE1	4:D:187:LYS:CG	2.38	0.53
5:E:154:ILE:CG2	5:E:160:ILE:HD11	2.39	0.53
5:E:259:LYS:CG	5:E:260:GLN:OE1	2.56	0.53
6:F:204:ARG:HG3	29:c:63:ARG:NH1	2.23	0.53
7:G:142:ARG:HG3	7:G:142:ARG:NH1	2.08	0.53
8:H:135:PHE:CD2	8:H:136:PRO:CD	2.92	0.53
9:I:141:ARG:HB3	9:I:144:LYS:HG2	1.90	0.53
10:J:37:LEU:HG	10:J:38:ARG:H	1.73	0.53
10:J:172:ARG:CZ	34:i:552:U:C5	2.91	0.53
12:L:40:ILE:CD1	12:L:68:ILE:HB	2.22	0.53
15:O:30:VAL:HG21	15:O:32:HIS:NE2	2.23	0.53
15:O:34:PHE:HE1	15:O:99:ALA:C	2.15	0.53
16:P:4:VAL:HG22	16:P:10:ARG:HD2	1.91	0.53
24:X:91:LEU:O	24:X:94:ILE:N	2.31	0.53
25:Y:50:THR:CG2	25:Y:75:ILE:HG21	2.36	0.53
26:Z:92:LEU:CD2	26:Z:109:TYR:CE1	2.84	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:a:87:ARG:NH1	27:a:94:ASP:O	2.38	0.53
33:g:163:PRO:HB3	33:g:179:LEU:HD12	1.89	0.53
33:g:273:GLU:HG2	33:g:274:VAL:HG22	1.90	0.53
36:k:12:A:HO2'	36:k:13:C:H5'	1.71	0.53
1:A:76:VAL:HG12	1:A:87:VAL:HB	1.90	0.53
2:B:49:VAL:HG22	2:B:65:ARG:HH12	1.72	0.53
2:B:68:GLU:CD	2:B:83:LYS:HE2	2.32	0.53
2:B:120:MET:HB2	2:B:142:PHE:CE1	2.44	0.53
5:E:180:LEU:CD1	5:E:228:ILE:HG13	2.39	0.53
7:G:153:VAL:HG12	7:G:154:ARG:N	2.23	0.53
8:H:31:GLU:O	8:H:37:LYS:HB2	2.08	0.53
8:H:147:LYS:CE	8:H:153:LEU:HD11	2.36	0.53
10:J:21:GLU:C	10:J:23:SER:N	2.58	0.53
14:N:27:LYS:CE	14:N:27:LYS:N	2.57	0.53
14:N:135:LEU:HD22	14:N:139:TRP:CD1	2.43	0.53
18:R:122:PRO:HD2	34:i:1107:U:O4'	2.08	0.53
20:T:123:LEU:H	20:T:123:LEU:CD2	2.22	0.53
22:V:19:ALA:O	23:W:23:ARG:CZ	2.57	0.53
22:V:42:VAL:C	22:V:43:THR:OG1	2.51	0.53
23:W:17:ALA:HB2	23:W:25:VAL:HG11	1.89	0.53
24:X:51:VAL:CG1	24:X:70:VAL:HG13	2.31	0.53
25:Y:17:LEU:HD12	25:Y:17:LEU:C	2.34	0.53
26:Z:65:TYR:HD2	26:Z:68:ILE:CD1	2.22	0.53
27:a:81:SER:CA	36:k:12:A:OP1	2.56	0.53
30:d:30:LEU:HD23	30:d:38:MET:C	2.33	0.53
31:e:80:LEU:N	37:n:84:TYR:HE2	2.03	0.53
33:g:142:VAL:HG11	33:g:177:TRP:CE3	2.44	0.53
33:g:162:ASN:ND2	33:g:163:PRO:HD3	2.16	0.53
33:g:198:VAL:HG12	33:g:199:THR:N	2.22	0.53
34:i:1409:G:C6	34:i:1410:A:C5	2.96	0.53
2:B:87:ILE:CD1	2:B:101:HIS:CD2	2.62	0.53
6:F:32:ASP:OD2	6:F:117:ILE:HG23	2.08	0.53
6:F:130:ARG:HB3	6:F:135:ARG:H	1.74	0.53
7:G:58:LYS:HG2	7:G:105:ASN:O	2.09	0.53
7:G:162:LEU:HD21	7:G:170:ARG:HB2	1.88	0.53
8:H:40:LEU:HD11	8:H:75:ILE:HD13	1.90	0.53
9:I:157:LYS:CB	12:L:22:ARG:NE	2.71	0.53
9:I:182:CYS:SG	34:i:296:U:O4	2.65	0.53
11:K:60:GLU:HG3	11:K:69:TRP:NE1	2.24	0.53
14:N:17:PRO:HG2	34:i:1012:U:C6	2.43	0.53
14:N:84:LEU:HB2	14:N:88:LEU:HD23	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:6:PRO:O	17:Q:6:PRO:HD2	2.09	0.53
17:Q:34:VAL:HG21	17:Q:39:LEU:HD23	1.76	0.53
19:S:11:HIS:O	19:S:12:ILE:HB	2.08	0.53
20:T:72:VAL:O	20:T:76:THR:HG23	2.09	0.53
20:T:77:LYS:O	20:T:92:PHE:CZ	2.61	0.53
20:T:123:LEU:HD23	20:T:123:LEU:N	2.24	0.53
25:Y:61:ARG:CG	25:Y:61:ARG:NH2	2.38	0.53
28:b:2:PRO:O	28:b:4:ALA:N	2.41	0.53
31:e:97:GLU:OE1	31:e:97:GLU:C	2.50	0.53
31:e:113:ASN:O	31:e:118:ASN:CB	2.53	0.53
33:g:284:PRO:O	33:g:284:PRO:CD	2.52	0.53
34:i:1547:G:N7	34:i:1573:U:C4	2.77	0.53
3:C:55:VAL:HG22	3:C:82:PHE:CZ	2.42	0.53
4:D:46:THR:CB	4:D:79:PHE:CZ	2.89	0.53
4:D:47:GLU:CG	4:D:85:GLU:CG	2.71	0.53
4:D:167:TYR:CE2	4:D:204:LEU:CD2	2.92	0.53
5:E:45:ILE:HG23	5:E:46:ILE:N	2.24	0.53
5:E:98:ASN:ND2	5:E:114:ILE:CG1	2.72	0.53
5:E:206:ASP:O	5:E:222:LEU:N	2.41	0.53
6:F:18:LYS:NZ	6:F:18:LYS:HB3	2.18	0.53
7:G:32:MET:HE3	7:G:100:CYS:O	2.08	0.53
10:J:147:PHE:CE2	10:J:149:VAL:HA	2.44	0.53
13:M:77:ILE:HD12	13:M:78:LYS:O	2.09	0.53
14:N:116:ILE:C	14:N:119:GLU:HG3	2.34	0.53
15:O:76:LEU:HD23	29:c:5:ARG:HD3	1.90	0.53
16:P:15:PHE:HD2	16:P:110:GLU:OE2	1.91	0.53
16:P:49:LEU:C	16:P:50:ARG:CG	2.75	0.53
16:P:97:TYR:OH	16:P:100:LYS:HA	2.08	0.53
20:T:64:LEU:HD23	20:T:64:LEU:H	1.69	0.53
20:T:83:GLN:NE2	20:T:85:ASN:N	2.56	0.53
24:X:62:PRO:HD2	24:X:63:ASN:N	2.23	0.53
33:g:76:GLN:NE2	33:g:76:GLN:CA	2.71	0.53
33:g:234:ASP:CB	33:g:254:PRO:HD2	2.38	0.53
1:A:159:ILE:HD12	1:A:160:ALA:N	2.24	0.53
2:B:214:LYS:HG2	2:B:215:VAL:N	2.23	0.53
3:C:73:ILE:HG23	3:C:73:ILE:O	2.08	0.53
3:C:134:THR:HG23	3:C:135:ALA:N	2.24	0.53
5:E:192:ILE:HD13	5:E:238:LEU:HD22	1.91	0.53
5:E:260:GLN:O	5:E:261:SER:CB	2.57	0.53
6:F:20:PHE:CD2	6:F:23:TRP:HD1	2.27	0.53
6:F:113:VAL:CG1	6:F:114:ASN:N	2.72	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:73:GLN:NE2	8:H:135:PHE:CE1	2.77	0.53
8:H:122:LEU:CD1	8:H:123:THR:CA	2.71	0.53
11:K:1:MET:CE	34:i:1270:G:N2	2.69	0.53
11:K:50:GLN:HG3	11:K:51:SER:N	2.24	0.53
12:L:31:GLU:HG2	12:L:32:LYS:N	2.23	0.53
12:L:80:MET:CG	12:L:86:ILE:HG22	2.36	0.53
14:N:84:LEU:C	14:N:84:LEU:HD12	2.34	0.53
16:P:39:ALA:O	16:P:42:ARG:CG	2.56	0.53
17:Q:114:GLN:CG	17:Q:115:TYR:N	2.60	0.53
25:Y:103:SER:O	25:Y:104:ARG:CB	2.53	0.53
27:a:85:ARG:N	34:i:1860:A:H61	2.07	0.53
27:a:101:PHE:O	27:a:103:PRO:CD	2.56	0.53
32:f:103:LEU:CD2	32:f:105:TYR:CB	2.86	0.53
34:i:8:U:O2	34:i:1192:A:OP2	2.26	0.53
34:i:675:A:C2	34:i:914:U:C2	2.96	0.53
34:i:1492:U:H2'	34:i:1494:A:H8	1.74	0.53
35:j:22:C:H2'	35:j:23:G:C8	2.43	0.53
36:k:19:U:C3'	37:n:70:TRP:HZ2	2.19	0.53
2:B:130:THR:CG2	2:B:179:ASN:N	2.67	0.53
3:C:49:THR:HG23	3:C:75:GLU:HG3	1.90	0.53
4:D:29:LEU:O	4:D:32:ASP:HB2	2.08	0.53
4:D:208:VAL:O	4:D:208:VAL:HG12	2.08	0.53
5:E:256:LEU:HD12	5:E:256:LEU:C	2.34	0.53
8:H:37:LYS:NZ	8:H:38:ALA:HA	2.24	0.53
8:H:194:LEU:HB2	28:b:16:LYS:HG3	1.89	0.53
12:L:156:GLN:OE1	12:L:158:PHE:CZ	2.58	0.53
13:M:93:LYS:O	13:M:95:ASP:OD1	2.27	0.53
16:P:22:LEU:HD12	16:P:22:LEU:C	2.34	0.53
17:Q:143:LYS:HG2	17:Q:145:TYR:H	1.74	0.53
19:S:39:ARG:HH21	20:T:38:LYS:HZ1	0.55	0.53
20:T:102:ARG:CD	20:T:105:GLN:OE1	2.57	0.53
25:Y:44:LEU:CD1	25:Y:48:TYR:HD2	2.18	0.53
26:Z:62:VAL:HG13	26:Z:68:ILE:HD11	1.83	0.53
34:i:455:A:H1'	34:i:456:G:OP2	2.09	0.53
4:D:97:CYS:C	4:D:99:ILE:H	2.12	0.52
4:D:177:LEU:HD12	4:D:178:ARG:HH21	1.72	0.52
4:D:217:ILE:HG23	4:D:218:LEU:N	2.24	0.52
5:E:71:LYS:O	5:E:90:ILE:HA	2.09	0.52
5:E:163:ASP:HB3	5:E:167:GLY:O	2.10	0.52
7:G:227:GLN:C	7:G:230:LYS:HG3	2.34	0.52
8:H:9:VAL:C	8:H:11:PRO:HD2	2.32	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:69:SER:HB3	12:L:19:ASN:OD1	2.08	0.52
9:I:157:LYS:C	9:I:158:ILE:O	2.51	0.52
13:M:95:ASP:O	13:M:96:ARG:HG2	2.09	0.52
16:P:8:LYS:O	16:P:9:LYS:C	2.50	0.52
18:R:33:ARG:HH21	33:g:83:TRP:HE3	1.56	0.52
18:R:61:ILE:CG2	18:R:74:GLN:NE2	2.72	0.52
22:V:64:GLU:O	22:V:65:SER:C	2.52	0.52
23:W:104:LEU:HD12	23:W:104:LEU:C	2.34	0.52
26:Z:58:LEU:CD2	26:Z:77:LEU:HD11	2.38	0.52
32:f:140:TYR:CZ	32:f:146:LEU:CA	2.79	0.52
34:i:24:C:C2'	34:i:25:A:C8	2.86	0.52
34:i:127:C:C2	34:i:180:G:H2'	2.43	0.52
34:i:197:U:H2'	34:i:198:U:C5'	2.39	0.52
34:i:1537:C:N4	34:i:1586:C:H42	2.07	0.52
34:i:1700:C:HO2'	34:i:1845:A:C3'	2.16	0.52
2:B:55:THR:C	2:B:56:LYS:HD2	2.31	0.52
2:B:137:LEU:HD12	2:B:176:VAL:HG21	1.91	0.52
3:C:72:PRO:HA	22:V:29:HIS:NE2	2.25	0.52
3:C:187:THR:OG1	3:C:206:ASP:HB3	2.09	0.52
5:E:122:LYS:CG	5:E:164:LEU:CD2	2.80	0.52
7:G:135:PRO:CD	7:G:144:LEU:HD23	2.38	0.52
7:G:170:ARG:HG2	34:i:71:G:C6	2.44	0.52
9:I:138:ASN:C	9:I:139:LYS:O	2.53	0.52
11:K:2:LEU:HD23	34:i:1311:U:H4'	1.91	0.52
11:K:3:MET:SD	11:K:8:ARG:CZ	2.91	0.52
11:K:47:LYS:CD	11:K:50:GLN:NE2	2.72	0.52
11:K:49:MET:HB2	11:K:69:TRP:CZ2	2.44	0.52
13:M:51:VAL:CG1	13:M:109:VAL:HG23	2.39	0.52
13:M:72:HIS:O	13:M:73:GLN:HB3	2.10	0.52
14:N:4:MET:SD	14:N:124:ARG:NH1	2.82	0.52
18:R:22:THR:CG2	18:R:73:LEU:CD1	2.72	0.52
20:T:46:ALA:CB	20:T:47:PRO:CD	2.44	0.52
23:W:128:PHE:CD1	23:W:129:PHE:HA	2.43	0.52
34:i:606:A:H61	34:i:619:A:H61	1.56	0.52
34:i:1491:G:C2	34:i:1492:U:H1'	2.44	0.52
37:n:79:VAL:CA	37:n:90:ASP:O	2.56	0.52
3:C:250:PRO:O	3:C:254:PHE:HD2	1.93	0.52
4:D:178:ARG:O	34:i:1496:G:H4'	2.08	0.52
5:E:100:ARG:HG2	5:E:102:ILE:CD1	2.39	0.52
6:F:38:TYR:CD2	6:F:38:TYR:N	2.75	0.52
7:G:191:ARG:NH1	7:G:191:ARG:HB3	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:33:GLY:HA3	31:e:112:TYR:CD2	2.44	0.52
11:K:1:MET:HB3	11:K:47:LYS:CB	2.39	0.52
19:S:23:ARG:O	19:S:55:ARG:HD2	2.09	0.52
19:S:124:ARG:HB2	19:S:131:VAL:HG22	1.90	0.52
19:S:141:ARG:CD	34:i:1518:C:C5	2.91	0.52
20:T:31:PRO:HG3	20:T:102:ARG:HG3	1.91	0.52
20:T:62:ARG:HG3	20:T:63:HIS:N	2.24	0.52
20:T:123:LEU:H	20:T:123:LEU:HD23	1.75	0.52
23:W:55:ASP:CB	28:b:25:VAL:HG13	2.39	0.52
28:b:78:SER:O	28:b:79:PHE:HB3	2.08	0.52
28:b:83:GLN:NE2	28:b:83:GLN:HA	2.23	0.52
32:f:105:TYR:O	32:f:106:TYR:CG	2.60	0.52
32:f:108:VAL:HG21	32:f:114:ILE:CG2	2.29	0.52
34:i:1216:A:C2	34:i:1641:C:N4	2.77	0.52
3:C:192:ALA:N	3:C:195:PRO:HG2	2.25	0.52
3:C:197:LYS:C	3:C:200:LEU:CD2	2.80	0.52
7:G:161:PRO:O	7:G:161:PRO:CD	2.57	0.52
7:G:226:GLU:O	7:G:230:LYS:HG2	2.08	0.52
8:H:15:LYS:O	8:H:16:PRO:HB2	2.10	0.52
8:H:61:ILE:HG12	8:H:95:ILE:HD12	1.91	0.52
8:H:64:VAL:CG1	8:H:65:PRO:HD2	2.39	0.52
10:J:102:ILE:HG22	10:J:106:LEU:CD1	2.35	0.52
12:L:112:HIS:CG	12:L:134:LEU:HD11	2.45	0.52
12:L:147:LYS:CE	12:L:156:GLN:HE22	2.23	0.52
17:Q:116:ASP:CG	17:Q:118:THR:H	2.17	0.52
20:T:129:ARG:HB2	34:i:1413:C:H4'	1.91	0.52
21:U:16:ALA:O	21:U:94:PRO:HG3	2.10	0.52
25:Y:54:VAL:CG1	25:Y:54:VAL:O	2.57	0.52
25:Y:88:LYS:HG3	25:Y:97:TYR:CZ	2.45	0.52
26:Z:107:VAL:HB	26:Z:109:TYR:CE2	2.44	0.52
28:b:81:ARG:CA	28:b:82:LYS:CB	2.79	0.52
30:d:28:HIS:CD2	34:i:1322:U:O4	2.63	0.52
33:g:191:HIS:NE2	33:g:195:LEU:CD2	2.72	0.52
34:i:138:C:P	34:i:1768:C:H4'	2.48	0.52
1:A:190:SER:O	1:A:191:ARG:CB	2.58	0.52
2:B:19:LYS:O	2:B:19:LYS:HG3	2.09	0.52
3:C:68:LEU:O	22:V:15:ARG:NE	2.39	0.52
3:C:93:LYS:HE3	3:C:95:MET:CG	2.40	0.52
3:C:109:PHE:CD2	3:C:132:VAL:CG2	2.93	0.52
9:I:191:GLU:CG	9:I:192:GLY:H	2.23	0.52
10:J:79:ARG:NH1	10:J:83:ARG:HD2	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:83:ARG:CZ	10:J:150:ARG:HH21	2.22	0.52
10:J:83:ARG:NH2	10:J:150:ARG:NH2	2.57	0.52
10:J:125:HIS:NE2	10:J:129:LEU:HD21	2.25	0.52
11:K:62:PHE:CE1	11:K:67:PHE:HE2	2.17	0.52
12:L:86:ILE:CG1	12:L:111:VAL:HG13	2.39	0.52
12:L:117:PHE:CD2	12:L:145:VAL:HG23	2.45	0.52
17:Q:130:LYS:HG2	34:i:1664:G:H5'	1.92	0.52
19:S:47:LYS:HZ1	19:S:78:LYS:HB3	1.75	0.52
19:S:141:ARG:CD	34:i:1518:C:H5	2.23	0.52
20:T:11:GLN:OE1	20:T:62:ARG:HD3	2.09	0.52
22:V:79:VAL:HG11	22:V:82:ASN:OD1	2.06	0.52
25:Y:13:MET:HE2	25:Y:14:THR:C	2.20	0.52
25:Y:20:ARG:CD	25:Y:76:TYR:CZ	2.84	0.52
25:Y:87:PRO:CG	25:Y:90:ARG:HB2	2.39	0.52
32:f:135:HIS:C	32:f:138:ARG:O	2.53	0.52
33:g:15:ASN:O	33:g:305:ASN:ND2	2.43	0.52
33:g:121:VAL:HG12	33:g:122:SER:N	2.24	0.52
33:g:272:GLN:CD	33:g:272:GLN:H	2.18	0.52
33:g:284:PRO:HB2	33:g:303:THR:N	2.24	0.52
1:A:16:LEU:CB	1:A:17:LYS:HE2	2.39	0.52
1:A:141:ASN:O	22:V:32:ILE:CG1	2.41	0.52
1:A:145:ILE:HG23	1:A:159:ILE:HG21	1.91	0.52
2:B:57:ILE:CG1	2:B:60:ASP:OD1	2.52	0.52
2:B:150:ILE:CA	18:R:124:VAL:HG13	2.40	0.52
3:C:93:LYS:HE2	3:C:218:LEU:HD21	1.83	0.52
3:C:155:TRP:H	3:C:163:HIS:CE1	2.27	0.52
9:I:37:LYS:H	9:I:59:ARG:H	1.57	0.52
9:I:140:LYS:O	9:I:141:ARG:CB	2.56	0.52
10:J:26:ASP:HB3	31:e:116:PHE:CZ	2.44	0.52
13:M:12:MET:CG	13:M:17:ALA:N	2.71	0.52
13:M:67:ALA:C	32:f:114:ILE:HG21	2.35	0.52
13:M:85:LEU:HA	13:M:88:TRP:CZ3	2.39	0.52
13:M:103:VAL:O	13:M:103:VAL:HG12	2.09	0.52
14:N:15:ALA:C	28:b:26:GLN:NE2	2.67	0.52
14:N:26:LEU:HD21	14:N:66:VAL:HG22	1.91	0.52
15:O:117:ARG:NH1	29:c:62:GLU:CA	2.70	0.52
15:O:131:ASP:CG	27:a:67:LEU:HD22	2.34	0.52
17:Q:45:ARG:CG	17:Q:46:THR:N	2.72	0.52
17:Q:124:PRO:HD2	17:Q:125:ARG:H	1.75	0.52
19:S:90:VAL:CG1	19:S:91:LYS:CE	2.87	0.52
20:T:14:PHE:HZ	20:T:131:LEU:HD12	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:U:64:THR:HG22	21:U:79:ARG:CD	2.39	0.52
22:V:41:LYS:O	22:V:42:VAL:C	2.50	0.52
23:W:81:VAL:HG22	23:W:89:TRP:NE1	2.25	0.52
24:X:3:LYS:O	24:X:4:CYS:C	2.50	0.52
24:X:139:GLU:C	24:X:141:PRO:CD	2.66	0.52
25:Y:30:PRO:O	25:Y:67:GLY:HA3	2.09	0.52
28:b:9:HIS:O	28:b:10:PRO:O	2.28	0.52
28:b:54:VAL:CG1	28:b:63:LEU:HD22	2.40	0.52
30:d:44:ARG:HH21	34:i:1333:C:H5'	1.73	0.52
31:e:114:ARG:C	31:e:118:ASN:HB2	2.35	0.52
34:i:404:A:H61	34:i:413:U:H3	1.58	0.52
34:i:1358:U:H5"	34:i:1359:C:H5	1.75	0.52
34:i:1430:C:H3'	34:i:1431:C:O4'	2.08	0.52
35:j:34:A:O2'	35:j:35:U:H5'	2.09	0.52
1:A:30:LEU:HD13	1:A:38:ILE:HD13	1.68	0.52
1:A:42:LYS:NZ	18:R:105:MET:CG	2.73	0.52
3:C:142:LEU:O	3:C:145:LEU:HG	2.10	0.52
6:F:42:LYS:C	6:F:45:TYR:H	2.16	0.52
7:G:64:LYS:HD3	7:G:65:GLN:O	2.10	0.52
8:H:29:GLU:OE2	8:H:86:LYS:HE2	2.07	0.52
8:H:51:ILE:HD11	8:H:176:VAL:HG22	1.91	0.52
8:H:61:ILE:HD13	8:H:176:VAL:HG11	1.92	0.52
9:I:141:ARG:HB3	9:I:144:LYS:CG	2.40	0.52
10:J:82:VAL:HG13	10:J:92:MET:HE3	1.91	0.52
10:J:117:LEU:O	10:J:119:LEU:CD2	2.49	0.52
14:N:13:GLN:C	14:N:14:SER:O	2.47	0.52
15:O:43:HIS:NE2	15:O:45:THR:CG2	2.73	0.52
15:O:128:ARG:HG3	27:a:62:TYR:HH	1.69	0.52
17:Q:17:LYS:CE	34:i:1643:G:C6	2.93	0.52
17:Q:137:ALA:HB3	34:i:1644:U:H5"	1.92	0.52
18:R:21:TYR:HA	18:R:58:MET:HE1	1.92	0.52
19:S:71:MET:HG3	19:S:99:LEU:HD13	1.91	0.52
19:S:103:LEU:HD12	19:S:103:LEU:C	2.33	0.52
20:T:38:LYS:O	20:T:39:LEU:CB	2.58	0.52
20:T:85:ASN:ND2	20:T:90:SER:HA	2.24	0.52
33:g:70:VAL:HG22	33:g:71:ILE:N	2.24	0.52
33:g:194:TYR:CZ	33:g:212:LYS:CB	2.85	0.52
1:A:6:ASP:O	1:A:7:VAL:C	2.53	0.52
1:A:109:THR:OG1	34:i:1348:G:H5"	2.09	0.52
4:D:4:GLN:C	4:D:5:ILE:HG13	2.35	0.52
5:E:248:ILE:CG1	10:J:72:PHE:CZ	2.89	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:79:HIS:O	6:F:82:ASN:N	2.41	0.52
7:G:143:LYS:HA	7:G:143:LYS:CE	2.39	0.52
7:G:227:GLN:HA	7:G:230:LYS:CG	2.40	0.52
8:H:146:VAL:CG2	23:W:50:PHE:CD1	2.89	0.52
9:I:31:ARG:HG3	9:I:31:ARG:HH11	1.75	0.52
9:I:155:ASN:CG	9:I:156:ALA:HA	2.35	0.52
11:K:46:MET:HA	11:K:69:TRP:HH2	1.74	0.52
12:L:25:LEU:O	12:L:27:GLU:HA	2.09	0.52
13:M:52:LEU:O	13:M:85:LEU:HD12	2.10	0.52
13:M:124:ILE:HB	13:M:127:TYR:HE2	1.75	0.52
16:P:83:MET:HB3	16:P:116:LEU:HD12	1.91	0.52
16:P:127:LYS:CE	16:P:128:HIS:N	2.73	0.52
17:Q:8:GLN:CG	17:Q:99:TYR:CD1	2.47	0.52
17:Q:130:LYS:HE3	34:i:1664:G:H5"	1.91	0.52
19:S:137:LYS:O	19:S:141:ARG:CZ	2.56	0.52
20:T:31:PRO:CD	20:T:102:ARG:HG3	2.38	0.52
20:T:39:LEU:O	20:T:39:LEU:HG	2.09	0.52
24:X:5:ARG:NH2	24:X:5:ARG:CG	2.72	0.52
24:X:54:LYS:CD	24:X:91:LEU:HD12	2.38	0.52
25:Y:10:ARG:CD	25:Y:24:VAL:CG1	2.88	0.52
25:Y:114:MET:HE1	25:Y:125:VAL:HG22	1.87	0.52
28:b:2:PRO:O	28:b:3:LEU:C	2.52	0.52
32:f:106:TYR:HH	32:f:131:PHE:HZ	0.58	0.52
34:i:1741:U:O2'	34:i:1742:C:C5'	2.57	0.52
37:n:85:GLN:O	37:n:86:ASP:HB3	2.09	0.52
37:n:103:LEU:CD2	37:n:106:TYR:CE2	2.93	0.52
1:A:141:ASN:CA	22:V:32:ILE:HG13	2.19	0.52
1:A:154:LEU:CD1	1:A:154:LEU:O	2.43	0.52
2:B:175:GLU:HG2	2:B:193:ILE:HD12	1.87	0.52
2:B:209:ASP:C	2:B:210:VAL:HG23	2.34	0.52
3:C:47:PRO:HA	3:C:75:GLU:OE2	2.09	0.52
5:E:122:LYS:HG2	5:E:164:LEU:CD2	2.40	0.52
6:F:134:VAL:HG12	6:F:136:ARG:CZ	2.39	0.52
6:F:162:ALA:CB	6:F:169:ILE:HD13	2.40	0.52
7:G:35:GLU:O	7:G:36:VAL:CG2	2.58	0.52
8:H:166:VAL:CG2	8:H:173:PHE:HE2	2.14	0.52
9:I:158:ILE:O	12:L:22:ARG:NH2	2.43	0.52
12:L:40:ILE:HD13	12:L:40:ILE:C	2.33	0.52
14:N:19:ARG:HH11	28:b:84:HIS:HB2	1.75	0.52
14:N:125:LEU:HD22	14:N:129:TYR:CE2	2.45	0.52
15:O:119:LEU:HD12	15:O:119:LEU:C	2.35	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:41:GLN:NE2	16:P:41:GLN:O	2.43	0.52
18:R:17:ILE:CG2	18:R:71:ILE:HD11	2.40	0.52
20:T:84:ARG:C	20:T:86:GLY:N	2.67	0.52
25:Y:54:VAL:O	25:Y:76:TYR:N	2.42	0.52
28:b:64:CYS:HA	28:b:74:THR:HG23	1.92	0.52
33:g:19:THR:O	33:g:288:SER:HB3	2.09	0.52
33:g:141:THR:O	33:g:143:GLN:N	2.43	0.52
34:i:841:G:C3'	34:i:842:G:H8	2.23	0.52
37:n:60:HIS:HB2	37:n:90:ASP:CG	2.35	0.52
2:B:81:PHE:O	2:B:82:ARG:CB	2.56	0.52
5:E:11:ARG:C	5:E:12:VAL:HG23	2.35	0.52
5:E:127:ARG:HH22	34:i:334:U:H5"	1.75	0.52
5:E:143:ASP:O	5:E:144:ALA:HB3	2.09	0.52
5:E:255:ARG:HH21	34:i:840:U:H2'	1.75	0.52
7:G:157:VAL:HG13	7:G:159:ARG:H	0.73	0.52
8:H:99:ARG:HB2	34:i:909:A:C8	2.45	0.52
11:K:41:PRO:O	11:K:43:LEU:O	2.28	0.52
11:K:59:LYS:HD2	11:K:59:LYS:C	2.34	0.52
11:K:85:LEU:HD13	11:K:89:ILE:HD11	1.90	0.52
12:L:59:LYS:CD	12:L:112:HIS:NE2	2.72	0.52
12:L:101:ARG:HD2	24:X:6:GLY:O	2.10	0.52
12:L:147:LYS:HZ3	12:L:149:ALA:H	1.56	0.52
13:M:92:CYS:CB	13:M:101:ARG:HG3	2.37	0.52
15:O:27:VAL:N	15:O:91:THR:OG1	2.43	0.52
15:O:33:ILE:HG12	15:O:42:VAL:HG22	1.90	0.52
16:P:56:LEU:HD11	16:P:80:LEU:CD1	2.39	0.52
18:R:99:ASP:CA	18:R:119:VAL:HG13	2.13	0.52
20:T:76:THR:HA	20:T:95:GLY:O	2.10	0.52
23:W:65:LEU:HD12	23:W:65:LEU:C	2.35	0.52
25:Y:18:LEU:CB	25:Y:20:ARG:CZ	2.79	0.52
25:Y:20:ARG:C	25:Y:21:LYS:CD	2.82	0.52
28:b:6:ASP:C	28:b:8:LEU:N	2.68	0.52
32:f:82:LYS:NZ	34:i:1505:U:C2	2.77	0.52
33:g:143:GLN:OE1	33:g:144:ASP:CA	2.56	0.52
33:g:156:PHE:C	33:g:156:PHE:CD2	2.88	0.52
33:g:218:LEU:HD23	33:g:230:LEU:CD1	2.39	0.52
33:g:298:LEU:HG	33:g:310:TRP:HB2	1.92	0.52
34:i:181:A:O4'	34:i:182:C:C5'	2.56	0.52
1:A:57:LYS:CE	22:V:70:LEU:CD2	2.89	0.51
1:A:76:VAL:HG13	1:A:175:TRP:CZ2	2.37	0.51
1:A:184:ARG:N	1:A:189:ILE:HD12	2.25	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:70:THR:HA	4:D:86:LEU:HD11	1.87	0.51
4:D:123:LEU:HD23	4:D:123:LEU:O	2.10	0.51
5:E:29:PRO:O	5:E:30:ARG:HB3	2.10	0.51
6:F:42:LYS:HB3	6:F:46:ALA:N	2.25	0.51
8:H:10:LYS:HZ1	8:H:16:PRO:C	2.18	0.51
9:I:73:THR:O	9:I:74:ARG:HD2	2.09	0.51
10:J:94:LEU:HD12	10:J:94:LEU:C	2.34	0.51
12:L:17:PHE:CD2	12:L:18:GLN:O	2.63	0.51
13:M:102:LYS:O	13:M:103:VAL:C	2.52	0.51
14:N:22:VAL:CG2	14:N:23:PRO:HA	2.40	0.51
15:O:125:LYS:HE3	27:a:56:VAL:O	2.10	0.51
16:P:37:TYR:HA	19:S:88:LYS:CD	2.40	0.51
19:S:54:LYS:HB3	19:S:55:ARG:N	2.25	0.51
21:U:88:LEU:C	21:U:88:LEU:HD12	2.35	0.51
25:Y:50:THR:O	25:Y:51:THR:HG23	2.09	0.51
27:a:45:VAL:O	27:a:46:GLU:HG3	2.09	0.51
27:a:51:ARG:O	27:a:55:GLU:HG3	2.09	0.51
32:f:102:VAL:CG1	32:f:103:LEU:HB2	2.39	0.51
34:i:1200:A:H61	34:i:1689:U:H3	1.58	0.51
34:i:1831:G:H3'	36:k:15:A:OP1	2.10	0.51
35:j:5:G:O2'	35:j:6:A:H5'	2.11	0.51
37:n:62:ARG:HB2	37:n:91:VAL:O	2.08	0.51
37:n:78:LEU:HD23	37:n:93:LEU:HG	1.91	0.51
4:D:192:TRP:O	4:D:196:GLY:N	2.36	0.51
5:E:21:ASP:OD1	5:E:24:THR:CG2	2.54	0.51
5:E:248:ILE:CD1	10:J:72:PHE:CZ	2.90	0.51
6:F:138:ALA:CB	6:F:204:ARG:HB3	2.39	0.51
7:G:33:ALA:H	7:G:52:ILE:CG2	2.14	0.51
7:G:93:LYS:HG2	7:G:95:LYS:HG3	1.92	0.51
8:H:64:VAL:HG21	8:H:72:PHE:CD2	2.45	0.51
11:K:16:PHE:HE2	11:K:79:LEU:C	2.16	0.51
12:L:149:ALA:C	12:L:150:GLY:O	2.44	0.51
13:M:13:ASP:HB2	13:M:16:THR:OG1	2.04	0.51
14:N:25:TRP:CH2	28:b:45:THR:HG21	2.44	0.51
14:N:38:TYR:CZ	14:N:78:LYS:HG3	2.46	0.51
14:N:134:VAL:HG22	14:N:135:LEU:HG	1.91	0.51
15:O:20:GLN:HG2	15:O:21:VAL:CA	2.38	0.51
16:P:128:HIS:HD2	34:i:1517:A:O5'	1.90	0.51
19:S:46:ARG:CD	20:T:50:GLU:HG2	2.40	0.51
24:X:94:ILE:CD1	24:X:125:VAL:HG21	2.40	0.51
26:Z:103:HIS:CD2	26:Z:105:ALA:CA	2.90	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:c:42:ILE:HG23	29:c:43:ILE:N	2.25	0.51
31:e:78:GLY:C	37:n:81:LEU:HA	2.34	0.51
34:i:64:A:C2	34:i:66:G:C8	2.98	0.51
34:i:1755:U:H3	34:i:1765:G:H1	1.57	0.51
34:i:1817:A:H1'	34:i:1818:A:O5'	2.10	0.51
1:A:24:HIS:HB3	1:A:51:LEU:CD2	2.40	0.51
1:A:39:TYR:CD2	1:A:40:LYS:HB2	2.46	0.51
1:A:177:MET:CE	1:A:180:ARG:HH21	1.95	0.51
3:C:50:LYS:HA	3:C:53:ARG:HD2	1.91	0.51
3:C:185:ARG:O	10:J:54:ARG:NH2	2.43	0.51
3:C:196:LYS:HD2	3:C:200:LEU:HD23	1.93	0.51
3:C:253:GLU:HG3	3:C:254:PHE:CE2	2.46	0.51
4:D:47:GLU:HG3	4:D:85:GLU:OE2	1.98	0.51
5:E:94:LYS:C	5:E:95:THR:CG2	2.83	0.51
5:E:123:LEU:HD21	5:E:235:TRP:HB2	1.93	0.51
6:F:72:LEU:O	6:F:72:LEU:HD23	2.11	0.51
6:F:134:VAL:HG11	6:F:136:ARG:NH2	2.12	0.51
8:H:12:ASN:HB3	8:H:46:THR:HG1	1.73	0.51
8:H:23:ILE:O	8:H:27:LEU:HD23	2.09	0.51
9:I:154:LYS:C	9:I:154:LYS:NZ	2.69	0.51
11:K:3:MET:SD	11:K:8:ARG:NE	2.84	0.51
11:K:14:LEU:HD22	11:K:35:LEU:CD1	2.37	0.51
12:L:147:LYS:HG3	12:L:148:ALA:HB2	1.91	0.51
14:N:47:PRO:HG3	14:N:75:LEU:HD22	1.93	0.51
14:N:141:TYR:CD2	14:N:141:TYR:O	2.63	0.51
15:O:41:PHE:CD1	15:O:57:THR:HG21	2.45	0.51
16:P:9:LYS:C	16:P:10:ARG:CG	2.69	0.51
17:Q:42:ILE:HD11	17:Q:51:LEU:HD13	1.91	0.51
20:T:11:GLN:CD	34:i:1537:C:H5"	2.35	0.51
20:T:75:MET:O	20:T:79:TYR:HD2	1.94	0.51
20:T:85:ASN:HD21	20:T:91:HIS:HD2	1.56	0.51
25:Y:50:THR:C	25:Y:51:THR:HG23	2.35	0.51
26:Z:44:LEU:HD13	26:Z:45:ASN:CA	2.40	0.51
32:f:146:LEU:HD22	34:i:1288:C:C5'	2.40	0.51
34:i:181:A:C5	34:i:182:C:C2	2.99	0.51
34:i:1410:A:C5	34:i:1411:C:C5	2.99	0.51
1:A:45:GLY:O	1:A:46:ILE:HD13	2.10	0.51
1:A:98:PRO:O	1:A:98:PRO:HG2	2.11	0.51
2:B:83:LYS:HZ1	15:O:130:GLU:CD	2.17	0.51
2:B:137:LEU:HD23	2:B:215:VAL:CB	2.39	0.51
3:C:184:PRO:O	3:C:187:THR:HG23	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:153:LEU:HD12	5:E:172:PHE:CZ	2.36	0.51
8:H:32:MET:O	8:H:33:ASN:HB2	2.09	0.51
8:H:135:PHE:CD2	8:H:136:PRO:N	2.78	0.51
10:J:67:ASP:O	10:J:68:PRO:C	2.53	0.51
11:K:16:PHE:CE2	11:K:80:ARG:N	2.78	0.51
11:K:27:VAL:O	11:K:28:HIS:CG	2.63	0.51
14:N:141:TYR:CD2	14:N:141:TYR:C	2.88	0.51
15:O:30:VAL:O	15:O:44:VAL:HA	2.10	0.51
16:P:29:SER:OG	16:P:31:GLU:HB2	2.10	0.51
16:P:44:ARG:HG3	34:i:1615:A:OP1	2.10	0.51
17:Q:112:LEU:CD2	17:Q:119:LEU:CD1	2.72	0.51
17:Q:145:TYR:CD2	35:j:32:C:OP1	2.64	0.51
18:R:1:MET:HA	18:R:1:MET:CG	2.38	0.51
19:S:28:PHE:CZ	34:i:1598:G:C5	2.98	0.51
24:X:69:CYS:HB3	24:X:83:ALA:O	2.11	0.51
27:a:60:ASP:O	27:a:61:ALA:CB	2.58	0.51
33:g:20:GLN:HG3	33:g:68:ASP:HA	0.79	0.51
33:g:113:PHE:CE2	33:g:117:ASN:CA	2.93	0.51
34:i:1361:G:H2'	34:i:1362:G:H8	1.72	0.51
37:n:110:PRO:C	37:n:112:HIS:N	2.69	0.51
1:A:70:ASN:HB2	1:A:73:ASP:OD2	2.10	0.51
1:A:139:TYR:O	1:A:140:VAL:HG23	2.11	0.51
3:C:55:VAL:HG13	3:C:82:PHE:CD2	2.21	0.51
3:C:61:LYS:HA	3:C:82:PHE:CE1	2.44	0.51
4:D:192:TRP:N	4:D:192:TRP:HD1	2.07	0.51
5:E:64:ILE:CG1	25:Y:17:LEU:HD13	2.41	0.51
5:E:248:ILE:HD12	10:J:72:PHE:CE1	2.46	0.51
6:F:93:VAL:C	6:F:97:PHE:CD1	2.86	0.51
6:F:115:ALA:HB2	6:F:177:LEU:HD22	1.92	0.51
6:F:162:ALA:HB1	6:F:169:ILE:HD13	1.92	0.51
9:I:101:ILE:HD12	9:I:190:LEU:HD11	1.92	0.51
10:J:21:GLU:O	10:J:24:ARG:N	2.42	0.51
10:J:124:HIS:C	10:J:126:ALA:N	2.66	0.51
12:L:44:PHE:CD2	12:L:143:LEU:HD23	2.45	0.51
12:L:101:ARG:CB	24:X:7:LEU:O	2.43	0.51
13:M:61:TYR:HA	32:f:104:LYS:HZ1	1.76	0.51
15:O:63:LYS:O	15:O:64:ALA:CB	2.58	0.51
16:P:7:LYS:C	16:P:9:LYS:H	2.19	0.51
19:S:64:VAL:HG23	19:S:65:GLU:N	2.26	0.51
20:T:5:THR:HG23	20:T:7:LYS:HB2	1.91	0.51
20:T:64:LEU:N	20:T:64:LEU:CD2	2.63	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:130:ASP:OD2	20:T:131:LEU:HD23	2.11	0.51
21:U:53:PRO:HD2	21:U:53:PRO:O	2.08	0.51
24:X:67:ARG:HA	24:X:67:ARG:HE	1.75	0.51
24:X:138:LYS:N	24:X:139:GLU:OE2	2.44	0.51
25:Y:54:VAL:HG13	25:Y:76:TYR:C	2.33	0.51
30:d:30:LEU:CD2	30:d:38:MET:O	2.59	0.51
33:g:76:GLN:O	33:g:77:PHE:CD1	2.64	0.51
33:g:249:CYS:SG	33:g:256:ILE:HG23	2.50	0.51
34:i:454:A:C4'	34:i:455:A:OP2	2.57	0.51
1:A:30:LEU:CD1	1:A:38:ILE:HD12	2.24	0.51
4:D:24:PHE:HD2	4:D:25:LEU:HD22	1.76	0.51
4:D:178:ARG:HE	4:D:178:ARG:H	1.58	0.51
4:D:197:LYS:C	4:D:198:ILE:HG23	2.35	0.51
5:E:43:PRO:HD2	5:E:46:ILE:HB	1.92	0.51
6:F:14:THR:OG1	17:Q:56:LEU:CG	2.56	0.51
6:F:39:ILE:HG21	6:F:113:VAL:HG23	1.92	0.51
9:I:5:ARG:NH1	34:i:374:U:H3	2.08	0.51
10:J:50:LEU:HB2	10:J:102:ILE:CD1	2.40	0.51
10:J:169:ARG:HB3	10:J:170:PRO:HD3	1.85	0.51
11:K:4:PRO:CG	11:K:7:ASN:CG	2.83	0.51
11:K:25:LYS:HD2	11:K:62:PHE:CE1	2.46	0.51
17:Q:47:LEU:O	17:Q:48:GLN:C	2.54	0.51
18:R:5:ARG:HB2	18:R:10:LYS:CE	2.35	0.51
20:T:124:THR:HG23	20:T:127:GLY:H	1.74	0.51
22:V:73:ALA:O	22:V:77:GLY:N	2.44	0.51
23:W:90:GLN:CA	23:W:102:ILE:HD12	2.40	0.51
23:W:102:ILE:N	23:W:113:HIS:ND1	2.57	0.51
24:X:55:VAL:HG12	24:X:57:VAL:HG23	1.92	0.51
24:X:105:PHE:HE2	24:X:119:ARG:N	2.06	0.51
24:X:105:PHE:CB	24:X:112:VAL:CG2	2.89	0.51
24:X:122:VAL:CG1	24:X:130:LEU:HD11	2.40	0.51
29:c:67:ARG:O	29:c:68:LEU:CB	2.58	0.51
34:i:71:G:H3'	34:i:72:C:C5'	2.41	0.51
34:i:185:C:H6	34:i:185:C:O5'	1.94	0.51
34:i:848:G:C5'	34:i:849:C:OP2	2.51	0.51
35:j:33:C:O2	35:j:33:C:H2'	2.10	0.51
2:B:208:HIS:C	2:B:208:HIS:CD2	2.88	0.51
5:E:86:PHE:HZ	5:E:182:MET:HE1	1.66	0.51
5:E:181:CYS:SG	5:E:225:ILE:CG2	2.99	0.51
7:G:25:ARG:C	7:G:27:PHE:N	2.69	0.51
7:G:184:VAL:O	7:G:188:LYS:HE2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:203:LYS:HE2	7:G:207:ALA:HB2	1.92	0.51
8:H:65:PRO:HG2	8:H:68:GLN:NE2	2.25	0.51
9:I:148:LYS:HB2	9:I:152:ARG:NH2	2.26	0.51
10:J:83:ARG:NH2	10:J:150:ARG:HH21	2.09	0.51
12:L:49:GLU:OE1	12:L:49:GLU:HA	2.10	0.51
13:M:64:LEU:CG	32:f:104:LYS:NZ	2.74	0.51
15:O:90:ILE:HG22	15:O:124:MET:CE	2.41	0.51
16:P:18:ARG:NH1	19:S:88:LYS:HB3	2.26	0.51
16:P:33:LEU:HD22	16:P:87:PRO:HD3	1.16	0.51
16:P:86:LEU:CD2	16:P:86:LEU:N	2.72	0.51
19:S:40:TYR:O	19:S:44:VAL:HG23	2.11	0.51
22:V:41:LYS:C	22:V:43:THR:H	2.18	0.51
24:X:126:ALA:HB1	24:X:128:VAL:HB	1.83	0.51
26:Z:104:ARG:C	26:Z:104:ARG:NH1	2.69	0.51
27:a:61:ALA:O	27:a:62:TYR:CB	2.58	0.51
27:a:88:SER:O	27:a:92:ARG:HG3	2.11	0.51
31:e:116:PHE:N	31:e:119:VAL:CG2	2.73	0.51
31:e:119:VAL:O	31:e:121:PRO:CG	2.57	0.51
32:f:103:LEU:CD2	32:f:105:TYR:C	2.83	0.51
33:g:113:PHE:HD1	33:g:120:ILE:HG12	1.76	0.51
33:g:184:LEU:HD12	33:g:184:LEU:C	2.35	0.51
34:i:1497:C:O2'	34:i:1498:C:H5'	2.10	0.51
34:i:1588:C:H2'	34:i:1589:A:C8	2.46	0.51
34:i:1596:A:C5'	34:i:1597:U:C5	2.94	0.51
35:j:25:G:H1	35:j:43:A:H61	1.57	0.51
1:A:30:LEU:O	1:A:31:ASP:HB2	2.11	0.51
1:A:119:PRO:O	1:A:142:LEU:HD21	2.10	0.51
2:B:195:LYS:HA	2:B:195:LYS:CE	2.30	0.51
3:C:194:VAL:N	3:C:195:PRO:HD2	2.25	0.51
5:E:146:THR:C	5:E:147:ILE:HD13	2.35	0.51
7:G:41:LEU:HD21	7:G:45:TRP:CH2	2.36	0.51
7:G:155:GLN:HG2	34:i:76:U:H4'	1.92	0.51
8:H:83:LEU:HD21	8:H:92:VAL:CG1	2.38	0.51
9:I:43:ILE:HD12	34:i:297:C:N4	2.26	0.51
9:I:148:LYS:HE3	9:I:152:ARG:HH21	1.76	0.51
12:L:12:LYS:C	12:L:56:ILE:HD11	2.36	0.51
12:L:40:ILE:HG23	12:L:41:GLY:N	2.25	0.51
12:L:80:MET:HG3	12:L:86:ILE:CG2	2.39	0.51
13:M:12:MET:HG3	13:M:17:ALA:N	2.25	0.51
13:M:94:ILE:H	13:M:101:ARG:HD3	1.73	0.51
16:P:49:LEU:C	16:P:51:ARG:CA	2.81	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:84:ILE:HG13	17:Q:85:ARG:N	2.24	0.51
22:V:11:LEU:HD12	22:V:11:LEU:C	2.35	0.51
22:V:24:ILE:CD1	22:V:25:GLY:C	2.84	0.51
25:Y:12:PHE:CD1	25:Y:23:MET:HB3	2.45	0.51
25:Y:36:PRO:CG	25:Y:39:GLU:HB2	2.36	0.51
27:a:37:LYS:HG2	27:a:72:HIS:CE1	2.45	0.51
31:e:78:GLY:CA	37:n:88:LYS:O	2.57	0.51
31:e:113:ASN:ND2	34:i:542:G:P	2.79	0.51
31:e:113:ASN:CB	34:i:542:G:OP1	2.59	0.51
32:f:148:TYR:N	32:f:148:TYR:CD1	2.72	0.51
34:i:1165:G:H4'	34:i:1815:U:H5'	1.93	0.51
34:i:1825:A:H5'	34:i:1845:A:H61	1.71	0.51
35:j:53:A:N6	35:j:57:A:H8	1.75	0.51
1:A:158:ASP:CB	22:V:65:SER:OG	2.58	0.51
2:B:99:ASN:HD22	2:B:228:LEU:HD23	1.76	0.51
4:D:3:VAL:O	4:D:4:GLN:O	2.29	0.51
5:E:49:ARG:O	5:E:49:ARG:CD	2.42	0.51
5:E:207:VAL:CG1	5:E:219:ALA:HB1	2.41	0.51
6:F:128:ILE:HD11	29:c:68:LEU:CB	2.40	0.51
6:F:131:ALA:O	34:i:957:G:O2'	2.27	0.51
8:H:158:LEU:O	8:H:190:PRO:HD3	2.10	0.51
9:I:79:ILE:HG23	9:I:80:ASP:N	2.26	0.51
9:I:139:LYS:O	9:I:140:LYS:CB	2.46	0.51
10:J:58:ARG:O	10:J:62:THR:HG23	2.10	0.51
13:M:31:LEU:HD11	13:M:109:VAL:CB	2.38	0.51
13:M:46:GLN:HB3	13:M:112:LYS:HG2	1.93	0.51
14:N:82:PRO:O	14:N:83:ASP:C	2.52	0.51
17:Q:55:VAL:HG22	17:Q:63:PHE:CE2	2.45	0.51
17:Q:57:LEU:O	17:Q:111:ILE:HG21	2.11	0.51
24:X:134:TYR:HE1	31:e:87:ARG:HD3	1.75	0.51
25:Y:12:PHE:CZ	25:Y:21:LYS:HB2	2.44	0.51
25:Y:78:SER:O	25:Y:79:LEU:C	2.48	0.51
25:Y:119:GLY:CA	34:i:85:A:H5'	2.41	0.51
27:a:81:SER:CB	36:k:12:A:OP1	2.56	0.51
33:g:30:MET:HE2	33:g:42:MET:CE	2.35	0.51
33:g:176:VAL:HB	33:g:186:THR:CG2	2.25	0.51
34:i:1701:G:N2	34:i:1843:G:C2	2.78	0.51
35:j:16:C:H1'	35:j:59:A:H1'	1.93	0.51
36:k:20:U:H1'	37:n:67:LYS:HB3	1.90	0.51
1:A:122:LEU:HD12	1:A:137:ALA:CB	2.40	0.51
1:A:125:THR:O	1:A:147:LEU:CD1	2.59	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:67:GLN:O	5:E:68:ARG:CB	2.59	0.51
5:E:72:ILE:HD12	5:E:82:TYR:CD2	2.45	0.51
9:I:25:ARG:CZ	34:i:423:A:OP1	2.57	0.51
11:K:53:LYS:CB	11:K:58:VAL:HG13	2.41	0.51
12:L:147:LYS:NZ	12:L:156:GLN:NE2	2.59	0.51
13:M:26:LEU:HD11	13:M:89:VAL:O	2.11	0.51
14:N:142:GLU:CD	14:N:144:SER:HG	2.09	0.51
15:O:56:VAL:HG12	15:O:81:VAL:CG2	2.03	0.51
18:R:31:ASN:ND2	18:R:55:THR:CG2	2.74	0.51
19:S:85:ASN:HD21	19:S:98:VAL:N	2.09	0.51
20:T:23:LYS:HD2	20:T:54:TYR:CE2	2.45	0.51
23:W:105:THR:HG23	23:W:105:THR:O	2.10	0.51
24:X:77:ASN:O	24:X:79:LYS:N	2.44	0.51
25:Y:58:PHE:HE1	25:Y:72:PHE:CE2	2.28	0.51
25:Y:114:MET:HG2	25:Y:124:ASN:CB	2.37	0.51
27:a:36:ILE:HD13	27:a:78:ALA:CB	2.41	0.51
27:a:49:ALA:CB	27:a:53:ILE:CD1	2.85	0.51
33:g:4:GLN:HG2	33:g:5:MET:N	2.24	0.51
33:g:9:GLY:O	33:g:309:VAL:HG22	2.10	0.51
33:g:276:SER:O	33:g:277:THR:O	2.29	0.51
34:i:181:A:C4'	34:i:182:C:O5'	2.56	0.51
34:i:410:G:C5	34:i:411:G:H1'	2.46	0.51
34:i:841:G:C2'	34:i:842:G:C8	2.94	0.51
34:i:1469:G:H2'	34:i:1470:A:H5"	1.93	0.51
34:i:1742:C:H2'	34:i:1743:G:O4'	2.11	0.51
34:i:1825:A:C4'	34:i:1846:C:O3'	2.46	0.51
37:n:99:GLU:O	37:n:102:SER:N	2.44	0.51
37:n:103:LEU:HD13	37:n:106:TYR:CD2	2.46	0.51
1:A:18:PHE:CZ	1:A:55:TRP:CE3	2.99	0.50
1:A:149:ASN:N	1:A:165:ASN:HD21	2.09	0.50
1:A:157:VAL:HG23	1:A:157:VAL:O	2.12	0.50
1:A:158:ASP:O	1:A:158:ASP:CG	2.54	0.50
2:B:30:TRP:CE3	15:O:19:PRO:HB3	2.46	0.50
2:B:47:THR:CG2	2:B:67:PHE:CZ	2.81	0.50
3:C:99:LYS:HD2	3:C:100:GLN:H	1.72	0.50
4:D:76:ARG:CZ	11:K:66:HIS:NE2	2.69	0.50
5:E:130:PHE:O	5:E:137:PRO:HA	2.10	0.50
7:G:102:VAL:HG11	7:G:109:LEU:HD11	1.93	0.50
8:H:35:ASP:OD1	8:H:35:ASP:C	2.50	0.50
8:H:40:LEU:O	8:H:41:ARG:C	2.54	0.50
9:I:76:THR:HG22	9:I:77:ARG:H	1.71	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:59:LYS:HB2	12:L:112:HIS:CE1	2.46	0.50
17:Q:51:LEU:HD12	17:Q:52:LEU:N	2.26	0.50
18:R:17:ILE:HD11	18:R:54:VAL:HG13	1.94	0.50
19:S:90:VAL:HG12	19:S:91:LYS:N	2.25	0.50
20:T:45:LEU:HG	20:T:46:ALA:H	1.76	0.50
23:W:27:ILE:HG13	23:W:61:ILE:HB	1.93	0.50
24:X:52:LEU:CG	24:X:71:ARG:CB	2.88	0.50
25:Y:53:ASP:O	25:Y:79:LEU:CD2	2.59	0.50
25:Y:55:ILE:CD1	25:Y:75:ILE:HD11	2.41	0.50
31:e:105:ARG:C	31:e:105:ARG:NE	2.70	0.50
32:f:95:ARG:CD	32:f:96:LYS:H	2.19	0.50
32:f:103:LEU:HD21	32:f:105:TYR:CB	2.38	0.50
33:g:48:ASP:OD2	33:g:49:GLU:OE1	2.29	0.50
33:g:198:VAL:HG22	33:g:209:SER:CB	2.41	0.50
34:i:423:A:N1	34:i:424:G:C6	2.79	0.50
34:i:1596:A:C4'	34:i:1597:U:C5	2.94	0.50
34:i:1751:G:C2	34:i:1752:G:C5	2.99	0.50
1:A:120:ARG:CD	3:C:251:TYR:CE2	2.61	0.50
1:A:142:LEU:C	22:V:32:ILE:HD13	2.35	0.50
2:B:25:PHE:CD1	15:O:88:LEU:HD13	2.45	0.50
3:C:54:LEU:N	3:C:258:LEU:HD22	2.27	0.50
3:C:69:PHE:CE1	3:C:249:SER:CA	2.94	0.50
3:C:183:ALA:CB	3:C:208:TYR:CE2	2.94	0.50
4:D:59:LEU:HD12	4:D:59:LEU:C	2.25	0.50
4:D:135:GLU:HG2	4:D:187:LYS:HB3	1.93	0.50
4:D:162:ASP:OD1	4:D:166:TYR:CE2	2.65	0.50
5:E:87:MET:HE1	5:E:236:ILE:CD1	2.40	0.50
6:F:91:ARG:CD	17:Q:46:THR:CG2	2.89	0.50
7:G:79:LYS:O	7:G:81:HIS:CD2	2.65	0.50
7:G:212:LEU:CA	7:G:215:LYS:HD3	2.41	0.50
10:J:26:ASP:CB	31:e:116:PHE:CZ	2.92	0.50
10:J:79:ARG:C	10:J:79:ARG:CD	2.83	0.50
10:J:155:LYS:HE3	10:J:156:HIS:NE2	2.26	0.50
14:N:26:LEU:CD2	14:N:66:VAL:CG2	2.89	0.50
18:R:5:ARG:C	18:R:10:LYS:CE	2.76	0.50
18:R:13:ALA:HB1	18:R:57:LEU:HD12	1.92	0.50
19:S:55:ARG:NH1	26:Z:80:ARG:HE	2.03	0.50
19:S:88:LYS:N	19:S:95:TYR:CD1	2.72	0.50
20:T:11:GLN:NE2	34:i:1537:C:H5"	2.27	0.50
20:T:31:PRO:HG3	20:T:102:ARG:CG	2.41	0.50
22:V:42:VAL:O	22:V:43:THR:OG1	2.29	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:76:TYR:CD1	25:Y:82:ALA:HA	2.46	0.50
26:Z:99:LEU:CD2	26:Z:109:TYR:CZ	2.89	0.50
33:g:5:MET:HE1	33:g:312:VAL:CG2	2.39	0.50
33:g:49:GLU:O	33:g:50:THR:CB	2.57	0.50
33:g:164:ILE:HG23	33:g:176:VAL:HG13	1.92	0.50
34:i:1701:G:H1'	34:i:1844:A:C2'	2.40	0.50
2:B:136:HIS:CE1	2:B:138:PHE:CE1	2.99	0.50
3:C:115:ILE:HD11	3:C:140:ILE:CG2	2.30	0.50
5:E:192:ILE:HD11	5:E:238:LEU:HD22	1.92	0.50
8:H:73:GLN:HE21	8:H:135:PHE:HE1	1.59	0.50
10:J:42:GLU:OE1	10:J:42:GLU:HA	2.11	0.50
10:J:63:LEU:O	10:J:70:ARG:NH1	2.44	0.50
10:J:90:GLY:O	10:J:91:LYS:O	2.29	0.50
12:L:10:TYR:HD2	12:L:12:LYS:CE	2.14	0.50
12:L:17:PHE:CG	12:L:18:GLN:N	2.79	0.50
12:L:92:TYR:CE2	12:L:105:ARG:HB2	2.46	0.50
12:L:118:ARG:NH1	12:L:119:ASP:OD2	2.43	0.50
13:M:124:ILE:O	13:M:127:TYR:CE2	2.63	0.50
16:P:17:TYR:C	19:S:90:VAL:O	2.55	0.50
17:Q:140:ARG:CB	34:i:1639:C:H4'	2.42	0.50
18:R:92:ASP:O	18:R:93:GLN:CD	2.55	0.50
19:S:72:GLN:O	19:S:72:GLN:HG2	2.11	0.50
19:S:90:VAL:CG1	19:S:91:LYS:HE3	2.41	0.50
20:T:4:VAL:HG21	20:T:135:ALA:O	2.11	0.50
21:U:25:THR:HG22	21:U:86:LYS:CG	2.34	0.50
22:V:78:ILE:C	22:V:79:VAL:HG23	2.36	0.50
23:W:86:LEU:HD11	23:W:113:HIS:HB2	1.93	0.50
27:a:45:VAL:HB	27:a:53:ILE:HD12	1.94	0.50
29:c:67:ARG:HA	29:c:68:LEU:HD23	1.91	0.50
30:d:20:SER:O	30:d:30:LEU:HD11	2.11	0.50
30:d:26:ASN:HD21	34:i:1491:G:C2'	2.23	0.50
33:g:154:VAL:HG23	33:g:154:VAL:O	2.11	0.50
33:g:234:ASP:CG	33:g:254:PRO:HG2	2.36	0.50
34:i:25:A:O2'	34:i:26:U:C6	2.63	0.50
34:i:1563:C:N4	34:i:1564:A:C6	2.79	0.50
35:j:17:G:O3'	35:j:59:A:C2	2.62	0.50
2:B:38:MET:HE1	2:B:186:ASN:ND2	2.26	0.50
2:B:38:MET:HE1	2:B:186:ASN:HD21	1.70	0.50
2:B:145:LYS:HG3	2:B:149:GLN:HB3	1.93	0.50
3:C:68:LEU:CD2	3:C:247:THR:HG21	2.40	0.50
3:C:109:PHE:CD2	3:C:132:VAL:HG22	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:129:SER:HB2	3:C:134:THR:HG23	1.92	0.50
3:C:243:GLU:HA	22:V:16:LYS:NZ	2.27	0.50
3:C:244:THR:CG2	3:C:246:PHE:CG	2.94	0.50
4:D:214:LYS:C	4:D:215:ASP:CG	2.80	0.50
6:F:43:GLU:O	6:F:44:LYS:HB2	2.10	0.50
7:G:145:PHE:C	7:G:147:LEU:HD12	2.36	0.50
7:G:196:LYS:HG3	34:i:126:G:O6	2.12	0.50
8:H:10:LYS:HZ1	8:H:17:ASP:CA	2.23	0.50
8:H:50:GLU:CD	8:H:58:LYS:HE2	2.36	0.50
8:H:158:LEU:HG	8:H:187:PHE:CD1	2.46	0.50
8:H:191:GLU:CD	8:H:193:GLN:OE1	2.54	0.50
9:I:141:ARG:CB	9:I:144:LYS:CG	2.87	0.50
9:I:201:LYS:CE	12:L:8:ARG:HA	2.42	0.50
10:J:91:LYS:HA	10:J:96:TYR:CD2	2.45	0.50
12:L:40:ILE:CG1	12:L:68:ILE:HG13	2.41	0.50
12:L:59:LYS:CD	12:L:112:HIS:CD2	2.90	0.50
13:M:33:ARG:CG	13:M:33:ARG:NH1	2.74	0.50
13:M:83:LYS:HG3	13:M:103:VAL:HG12	1.93	0.50
17:Q:85:ARG:CD	17:Q:119:LEU:CD2	2.72	0.50
18:R:20:TYR:CE2	18:R:38:ILE:CD1	2.92	0.50
18:R:122:PRO:HB2	18:R:123:THR:HG1	1.74	0.50
25:Y:23:MET:CE	25:Y:44:LEU:HD21	2.40	0.50
31:e:82:ARG:N	37:n:82:ARG:NE	2.60	0.50
33:g:20:GLN:HE21	33:g:68:ASP:CA	2.25	0.50
33:g:64:HIS:HB3	33:g:84:ASP:H	1.76	0.50
33:g:144:ASP:O	33:g:144:ASP:OD2	2.30	0.50
35:j:70:C:C4	35:j:71:U:C5	2.99	0.50
37:n:48:GLU:OE2	37:n:58:LEU:HD11	2.11	0.50
2:B:53:GLN:CG	2:B:56:LYS:HB2	2.41	0.50
3:C:79:ILE:CD1	3:C:147:ILE:HD13	2.33	0.50
3:C:168:LYS:HE3	23:W:95:PRO:CA	2.39	0.50
4:D:51:LEU:HD12	4:D:89:GLU:O	2.11	0.50
4:D:123:LEU:CG	4:D:154:ASP:HB3	2.42	0.50
4:D:196:GLY:O	4:D:199:GLY:HA2	2.12	0.50
4:D:197:LYS:N	4:D:198:ILE:HG13	2.27	0.50
5:E:19:MET:HE3	34:i:842:G:H2'	1.78	0.50
5:E:136:ILE:N	5:E:136:ILE:HD12	2.26	0.50
5:E:212:ASP:OD2	5:E:214:ASN:HB2	2.12	0.50
6:F:91:ARG:NH1	6:F:94:LYS:HG3	2.11	0.50
6:F:151:ILE:O	6:F:154:LEU:HG	2.10	0.50
7:G:197:GLN:O	7:G:200:LYS:HG2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:155:ASN:CG	9:I:156:ALA:CA	2.85	0.50
11:K:60:GLU:HG2	11:K:69:TRP:CD1	2.46	0.50
12:L:103:GLU:OE1	24:X:11:ARG:NE	2.45	0.50
16:P:93:MET:SD	16:P:106:GLU:HA	2.51	0.50
18:R:34:VAL:HG12	18:R:38:ILE:HG12	1.94	0.50
18:R:44:LYS:CD	18:R:47:ARG:NH2	2.70	0.50
21:U:47:ASN:C	21:U:48:LEU:HD23	2.34	0.50
25:Y:29:HIS:HE1	25:Y:67:GLY:CA	2.06	0.50
25:Y:54:VAL:HG13	25:Y:76:TYR:H	1.71	0.50
33:g:181:ASN:OD1	33:g:181:ASN:C	2.54	0.50
34:i:1547:G:C6	34:i:1573:U:C2	3.00	0.50
1:A:16:LEU:CB	1:A:17:LYS:CE	2.89	0.50
1:A:111:GLN:NE2	1:A:116:PHE:CZ	2.79	0.50
1:A:149:ASN:HB2	1:A:165:ASN:OD1	2.12	0.50
2:B:149:GLN:HE21	2:B:151:ARG:CG	2.18	0.50
3:C:193:PRO:O	3:C:196:LYS:HG3	2.12	0.50
4:D:213:PRO:O	4:D:214:LYS:CB	2.37	0.50
7:G:147:LEU:CD2	7:G:156:TYR:HE2	2.24	0.50
8:H:154:ILE:CG2	8:H:185:VAL:CG2	2.89	0.50
11:K:62:PHE:CD1	11:K:67:PHE:CD2	2.96	0.50
11:K:71:LEU:HG	11:K:76:ILE:CD1	2.42	0.50
12:L:2:ALA:O	12:L:3:ASP:C	2.54	0.50
12:L:17:PHE:CD1	12:L:18:GLN:CA	2.94	0.50
15:O:44:VAL:HG11	15:O:93:LEU:CD2	2.41	0.50
16:P:49:LEU:H	16:P:51:ARG:HG3	1.77	0.50
16:P:83:MET:CE	16:P:116:LEU:CD1	2.78	0.50
17:Q:12:VAL:HG21	17:Q:91:ALA:HA	1.92	0.50
17:Q:85:ARG:HD3	17:Q:119:LEU:HD21	1.81	0.50
19:S:8:LYS:CE	19:S:9:PHE:HE1	2.05	0.50
21:U:87:ARG:NH1	34:i:1443:G:OP1	2.37	0.50
23:W:27:ILE:HD11	23:W:61:ILE:HD12	1.93	0.50
25:Y:20:ARG:HD3	25:Y:76:TYR:CE1	2.44	0.50
25:Y:33:ALA:C	25:Y:34:THR:HG1	2.19	0.50
25:Y:106:GLN:O	25:Y:110:ARG:HG3	2.12	0.50
27:a:44:ILE:HB	27:a:65:PRO:HG2	1.93	0.50
28:b:32:PHE:C	28:b:81:ARG:O	2.54	0.50
29:c:44:ARG:NH1	29:c:60:GLU:O	2.45	0.50
33:g:5:MET:HE1	33:g:312:VAL:HG11	1.85	0.50
33:g:48:ASP:O	33:g:49:GLU:OE2	2.29	0.50
33:g:64:HIS:O	33:g:82:SER:OG	2.29	0.50
33:g:168:CYS:HB3	33:g:198:VAL:HG23	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:177:TRP:CE3	33:g:184:LEU:HA	2.46	0.50
34:i:1206:G:OP2	34:i:1207:G:P	2.70	0.50
35:j:51:G:N3	35:j:52:G:C8	2.80	0.50
37:n:38:VAL:HG21	37:n:77:ILE:HD11	1.93	0.50
3:C:48:VAL:HG23	3:C:75:GLU:OE2	2.11	0.50
5:E:121:TYR:HA	5:E:163:ASP:O	2.12	0.50
8:H:135:PHE:CB	8:H:136:PRO:CD	2.88	0.50
10:J:26:ASP:CG	31:e:116:PHE:HZ	2.20	0.50
10:J:78:LEU:HD11	10:J:93:LYS:HA	1.92	0.50
11:K:97:SER:HG	11:K:98:ARG:H	1.57	0.50
13:M:79:VAL:CG1	13:M:80:ASP:H	2.25	0.50
15:O:62:VAL:CG2	15:O:72:TYR:CZ	2.92	0.50
16:P:14:LYS:C	16:P:22:LEU:HD23	2.37	0.50
16:P:127:LYS:HE3	16:P:128:HIS:N	2.25	0.50
20:T:84:ARG:O	20:T:86:GLY:N	2.45	0.50
23:W:17:ALA:HB2	23:W:25:VAL:HG12	1.92	0.50
24:X:56:GLY:N	37:n:84:TYR:CD1	2.80	0.50
25:Y:63:HIS:C	25:Y:64:PHE:CD1	2.89	0.50
25:Y:92:ALA:N	25:Y:97:TYR:CB	2.52	0.50
31:e:81:ALA:CB	37:n:82:ARG:CG	2.82	0.50
33:g:15:ASN:O	33:g:305:ASN:OD1	2.30	0.50
34:i:126:G:O2'	34:i:127:C:H5	1.95	0.50
34:i:221:A:C2	34:i:288:A:N6	2.79	0.50
34:i:1227:C:H2'	34:i:1228:U:C6	2.47	0.50
34:i:1405:A:C2	34:i:1406:C:C4	3.00	0.50
34:i:1406:C:H2'	34:i:1407:G:C8	2.46	0.50
34:i:1596:A:C5'	34:i:1597:U:C6	2.94	0.50
4:D:113:LEU:HD12	4:D:113:LEU:N	2.16	0.50
5:E:47:PHE:CE2	5:E:52:LEU:HD12	2.42	0.50
5:E:171:ASP:CG	5:E:172:PHE:HD2	2.20	0.50
10:J:136:ARG:HG2	10:J:141:VAL:HA	1.94	0.50
12:L:152:LYS:C	12:L:154:GLN:N	2.67	0.50
13:M:64:LEU:CD1	32:f:104:LYS:CE	2.90	0.50
16:P:75:VAL:HG21	16:P:104:GLN:NE2	2.27	0.50
17:Q:112:LEU:CB	17:Q:120:LEU:HD21	2.42	0.50
18:R:17:ILE:O	18:R:71:ILE:HD11	2.11	0.50
20:T:85:ASN:ND2	20:T:91:HIS:HD2	2.06	0.50
24:X:5:ARG:HH22	34:i:1155:G:P	2.35	0.50
24:X:51:VAL:HG21	24:X:94:ILE:CG2	2.41	0.50
34:i:312:C:H2'	34:i:313:C:C6	2.47	0.50
34:i:1330:G:C5	34:i:1494:A:C2	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1458:U:H3'	34:i:1459:U:C5'	2.39	0.50
1:A:140:VAL:HG13	3:C:72:PRO:HG3	1.94	0.50
1:A:179:ALA:O	1:A:183:LEU:HG	2.12	0.50
2:B:36:PRO:HA	2:B:231:LEU:HD23	1.92	0.50
3:C:221:PHE:C	3:C:221:PHE:CD2	2.90	0.50
4:D:21:LEU:HD22	4:D:25:LEU:HD21	1.94	0.50
7:G:32:MET:HE3	7:G:100:CYS:C	2.34	0.50
7:G:127:THR:C	7:G:128:THR:OG1	2.52	0.50
8:H:66:VAL:HG21	8:H:97:GLN:O	2.12	0.50
11:K:27:VAL:HA	11:K:43:LEU:CD2	2.41	0.50
12:L:72:ILE:N	12:L:72:ILE:HD12	2.26	0.50
13:M:76:LEU:CA	13:M:128:PHE:HZ	2.25	0.50
13:M:117:GLU:C	13:M:118:SER:HG	2.04	0.50
14:N:142:GLU:HG3	14:N:144:SER:OG	2.08	0.50
15:O:126:ILE:HG12	27:a:56:VAL:CG1	2.42	0.50
17:Q:111:ILE:O	17:Q:114:GLN:CG	2.54	0.50
17:Q:112:LEU:HD12	17:Q:120:LEU:CD2	2.42	0.50
17:Q:112:LEU:HD12	17:Q:120:LEU:HD21	1.94	0.50
19:S:26:ILE:CD1	19:S:59:LEU:CD2	2.81	0.50
19:S:124:ARG:CD	19:S:130:ARG:O	2.43	0.50
21:U:18:HIS:HE1	21:U:98:VAL:HG22	1.63	0.50
22:V:11:LEU:HD12	22:V:12:TYR:CG	2.38	0.50
22:V:33:PRO:HB2	22:V:53:TYR:O	2.11	0.50
25:Y:100:LYS:O	25:Y:100:LYS:CG	2.55	0.50
27:a:17:HIS:O	27:a:18:VAL:HG13	2.12	0.50
30:d:24:CYS:O	30:d:25:SER:HB2	2.12	0.50
31:e:105:ARG:NH1	31:e:106:ALA:HB2	2.26	0.50
31:e:124:GLY:O	31:e:125:LYS:CB	2.60	0.50
33:g:26:GLN:HB3	33:g:74:ASP:C	2.33	0.50
34:i:184:G:C6	34:i:185:C:C4	3.00	0.50
34:i:184:G:C2'	34:i:185:C:H5'	2.42	0.50
34:i:1414:C:H42	34:i:1417:A:H62	1.56	0.50
34:i:1744:G:C8	34:i:1745:C:N4	2.80	0.50
36:k:19:U:H1'	37:n:70:TRP:CE2	2.46	0.50
1:A:125:THR:HA	1:A:147:LEU:CB	2.35	0.49
2:B:71:LEU:HD13	2:B:84:PHE:CZ	2.26	0.49
2:B:228:LEU:CD1	2:B:232:HIS:CD2	2.94	0.49
5:E:136:ILE:HG13	5:E:149:TYR:CZ	2.46	0.49
5:E:151:ASP:HB3	7:G:212:LEU:HD22	1.94	0.49
7:G:220:ALA:O	7:G:223:LYS:HB2	2.12	0.49
8:H:9:VAL:O	8:H:45:ILE:HG13	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:79:LEU:HD23	8:H:79:LEU:O	2.12	0.49
9:I:152:ARG:O	9:I:153:LYS:CB	2.59	0.49
11:K:16:PHE:HE2	11:K:79:LEU:HB2	0.74	0.49
12:L:152:LYS:O	12:L:154:GLN:N	2.44	0.49
13:M:50:CYS:N	13:M:75:ASN:HD22	2.10	0.49
14:N:19:ARG:NH2	28:b:84:HIS:OXT	2.44	0.49
16:P:79:HIS:ND1	16:P:102:PHE:CZ	2.74	0.49
16:P:123:TYR:OH	19:S:124:ARG:CG	2.57	0.49
19:S:80:PRO:CB	19:S:82:TRP:NE1	2.75	0.49
20:T:111:LYS:HB3	20:T:126:GLN:HE21	1.68	0.49
22:V:18:SER:OG	22:V:18:SER:O	2.29	0.49
22:V:39:VAL:C	22:V:41:LYS:H	2.18	0.49
29:c:18:LEU:HB3	29:c:29:GLN:HB2	1.94	0.49
31:e:93:VAL:O	31:e:94:ALA:C	2.55	0.49
31:e:114:ARG:O	31:e:118:ASN:HB3	2.12	0.49
33:g:26:GLN:HB2	33:g:74:ASP:CA	2.34	0.49
33:g:64:HIS:O	33:g:65:PHE:C	2.54	0.49
33:g:91:ASP:HB3	33:g:94:THR:OG1	2.11	0.49
34:i:363:G:O2'	34:i:364:G:H5'	2.11	0.49
37:n:47:LEU:HD21	37:n:91:VAL:CG2	2.42	0.49
37:n:103:LEU:CD2	37:n:106:TYR:CZ	2.95	0.49
1:A:29:ASN:O	1:A:151:ASP:HB3	2.12	0.49
1:A:58:LEU:HD23	1:A:58:LEU:O	2.12	0.49
2:B:82:ARG:NH1	2:B:191:ASP:OD1	2.45	0.49
3:C:166:ARG:HG2	3:C:237:THR:HG21	1.95	0.49
4:D:21:LEU:HD22	4:D:25:LEU:CD2	2.42	0.49
4:D:132:LYS:N	4:D:191:PRO:HG2	2.17	0.49
4:D:220:THR:O	4:D:221:THR:O	2.30	0.49
5:E:124:CYS:HB3	5:E:141:THR:CB	2.36	0.49
5:E:129:ILE:CG2	5:E:139:LEU:HD21	2.42	0.49
6:F:15:PRO:CD	17:Q:56:LEU:HB3	2.41	0.49
7:G:137:ARG:HG3	7:G:140:ARG:CB	2.41	0.49
9:I:110:ARG:NH2	9:I:124:LYS:NZ	2.60	0.49
11:K:40:VAL:HG23	11:K:41:PRO:HD3	1.94	0.49
12:L:1:MET:O	12:L:2:ALA:O	2.29	0.49
13:M:36:ARG:HD3	34:i:1308:G:O6	2.12	0.49
14:N:5:HIS:HD2	14:N:121:ARG:NE	2.09	0.49
14:N:18:TYR:C	14:N:19:ARG:O	2.48	0.49
14:N:116:ILE:HA	14:N:119:GLU:HG3	1.93	0.49
15:O:55:ARG:O	15:O:81:VAL:HG22	2.12	0.49
19:S:51:ASP:CG	19:S:53:THR:OG1	2.55	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:143:LYS:CD	20:T:143:LYS:C	2.53	0.49
22:V:12:TYR:CE1	22:V:14:PRO:HG3	2.46	0.49
23:W:101:PHE:HD2	23:W:129:PHE:CE1	2.28	0.49
24:X:8:ARG:O	24:X:10:ALA:N	2.42	0.49
25:Y:87:PRO:O	25:Y:87:PRO:CD	2.60	0.49
33:g:49:GLU:O	33:g:50:THR:OG1	2.30	0.49
33:g:282:GLU:O	33:g:283:PRO:O	2.30	0.49
34:i:214:A:H61	34:i:295:C:H42	1.60	0.49
34:i:685:G:C6	34:i:732:C:C2	3.01	0.49
2:B:36:PRO:CA	2:B:231:LEU:HD21	2.42	0.49
3:C:198:LEU:HD23	3:C:198:LEU:C	2.37	0.49
4:D:164:VAL:HG13	4:D:165:ASN:N	2.27	0.49
5:E:191:ARG:NE	5:E:245:ARG:CD	2.75	0.49
7:G:162:LEU:CD2	7:G:170:ARG:HG3	2.42	0.49
8:H:37:LYS:HZ3	8:H:41:ARG:CG	2.25	0.49
8:H:45:ILE:HG13	8:H:45:ILE:O	2.11	0.49
9:I:144:LYS:N	9:I:144:LYS:CD	2.75	0.49
9:I:154:LYS:HD3	9:I:155:ASN:HA	1.94	0.49
10:J:38:ARG:HA	31:e:105:ARG:HG2	1.93	0.49
10:J:50:LEU:HD12	10:J:102:ILE:HD11	1.85	0.49
10:J:87:LEU:HD12	10:J:88:ASP:H	1.77	0.49
10:J:118:GLY:C	10:J:120:ALA:H	2.20	0.49
10:J:143:ASN:C	10:J:145:PRO:HD3	2.28	0.49
12:L:17:PHE:CE1	12:L:18:GLN:C	2.89	0.49
15:O:92:ALA:HB2	15:O:125:LYS:HB2	1.94	0.49
15:O:126:ILE:O	27:a:57:SER:HA	2.12	0.49
16:P:21:ASP:O	16:P:25:LEU:HG	2.12	0.49
17:Q:100:VAL:CG1	17:Q:101:ASP:N	2.44	0.49
19:S:88:LYS:O	19:S:89:ASP:C	2.46	0.49
19:S:111:LEU:CD2	19:S:125:HIS:ND1	2.75	0.49
19:S:141:ARG:HB3	34:i:1518:C:OP2	2.13	0.49
20:T:101:ARG:CG	20:T:105:GLN:NE2	2.75	0.49
20:T:119:TRP:HB3	34:i:1557:C:C2'	2.42	0.49
21:U:62:ARG:HD2	21:U:79:ARG:HD3	1.94	0.49
22:V:78:ILE:HG23	22:V:79:VAL:H	1.77	0.49
24:X:17:ARG:HH22	34:i:649:G:H21	1.58	0.49
24:X:52:LEU:HD12	24:X:53:GLU:HG2	1.91	0.49
26:Z:99:LEU:HD13	26:Z:102:LYS:HE2	0.55	0.49
26:Z:103:HIS:CD2	26:Z:103:HIS:C	2.89	0.49
27:a:41:ILE:CG2	27:a:68:TYR:CE1	2.95	0.49
29:c:67:ARG:O	29:c:68:LEU:HB3	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:f:148:TYR:N	32:f:148:TYR:HD1	2.05	0.49
33:g:172:LYS:HG3	33:g:192:THR:HA	1.94	0.49
36:k:21:U:C5'	37:n:67:LYS:HZ3	2.25	0.49
1:A:98:PRO:C	1:A:99:ILE:HG13	2.36	0.49
2:B:71:LEU:CB	2:B:84:PHE:HE2	2.25	0.49
2:B:105:LEU:HD11	2:B:213:ARG:HG3	1.93	0.49
2:B:137:LEU:HD21	2:B:215:VAL:HG11	1.78	0.49
3:C:142:LEU:C	3:C:145:LEU:HD21	2.33	0.49
4:D:46:THR:HB	4:D:84:VAL:HG23	1.93	0.49
4:D:141:LYS:CD	4:D:179:GLN:CG	2.87	0.49
6:F:95:HIS:NE2	26:Z:103:HIS:HB3	2.27	0.49
7:G:63:MET:HE3	7:G:106:LEU:HD13	1.83	0.49
7:G:67:VAL:CG2	7:G:99:GLY:HA2	2.32	0.49
8:H:169:LYS:O	8:H:172:THR:HG22	2.13	0.49
9:I:148:LYS:HE2	9:I:152:ARG:HH22	1.76	0.49
9:I:194:GLU:CG	12:L:12:LYS:CE	2.88	0.49
10:J:127:ARG:HH11	10:J:145:PRO:HB3	1.75	0.49
12:L:17:PHE:HE1	12:L:18:GLN:HB2	1.68	0.49
13:M:44:LYS:C	13:M:46:GLN:N	2.70	0.49
17:Q:128:GLU:HG3	34:i:1643:G:H5'	1.93	0.49
20:T:30:VAL:O	20:T:30:VAL:CG2	2.30	0.49
20:T:59:SER:O	20:T:62:ARG:HG2	2.12	0.49
20:T:77:LYS:HG3	20:T:92:PHE:HE2	0.73	0.49
21:U:104:ILE:C	21:U:105:SER:OG	2.56	0.49
21:U:108:PRO:O	21:U:110:VAL:CG2	2.53	0.49
24:X:27:TYR:CD2	24:X:31:HIS:HD2	2.30	0.49
24:X:56:GLY:N	37:n:84:TYR:HE1	2.08	0.49
24:X:102:VAL:HG11	24:X:120:PHE:HB3	1.91	0.49
25:Y:54:VAL:HG13	25:Y:76:TYR:HB2	1.95	0.49
29:c:11:LEU:CG	29:c:35:MET:HE2	2.42	0.49
29:c:66:ARG:O	29:c:68:LEU:CD2	2.60	0.49
33:g:36:ARG:C	33:g:38:LYS:N	2.69	0.49
33:g:142:VAL:HG11	33:g:177:TRP:CZ3	2.46	0.49
33:g:280:LYS:O	33:g:281:ALA:O	2.30	0.49
34:i:1513:C:P	34:i:1514:U:H2'	2.52	0.49
34:i:1596:A:H1'	34:i:1599:G:C6	2.47	0.49
34:i:1597:U:O2'	34:i:1598:G:H5'	2.13	0.49
34:i:1635:A:N3	35:j:39:C:O2	2.46	0.49
36:k:11:A:C4	36:k:12:A:N7	2.81	0.49
37:n:35:TYR:CE2	37:n:52:PHE:CD1	3.00	0.49
1:A:44:ASP:OD1	18:R:101:ASP:OD2	2.31	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:93:GLY:CA	2:B:94:LYS:HD3	2.41	0.49
2:B:131:ASP:N	2:B:131:ASP:OD1	2.38	0.49
3:C:55:VAL:HG11	3:C:82:PHE:CD2	2.45	0.49
5:E:129:ILE:CD1	5:E:139:LEU:HD22	2.32	0.49
5:E:129:ILE:HG23	5:E:139:LEU:CD2	2.42	0.49
5:E:185:GLY:CA	5:E:189:LEU:HD13	2.43	0.49
5:E:188:ASN:ND2	5:E:218:PHE:CD1	2.80	0.49
7:G:27:PHE:HE2	7:G:41:LEU:CD1	2.12	0.49
8:H:99:ARG:HB2	34:i:909:A:H8	1.75	0.49
15:O:62:VAL:HG12	15:O:63:LYS:N	2.28	0.49
18:R:98:VAL:HG11	18:R:103:LYS:N	2.28	0.49
20:T:14:PHE:CZ	20:T:131:LEU:CD1	2.95	0.49
20:T:16:ARG:HH11	20:T:16:ARG:HG3	1.77	0.49
20:T:78:ILE:HG23	20:T:79:TYR:N	2.27	0.49
22:V:5:ALA:O	22:V:7:GLU:N	2.45	0.49
22:V:53:TYR:CD2	22:V:72:LEU:HB3	2.47	0.49
24:X:51:VAL:HG22	24:X:70:VAL:HG11	1.95	0.49
24:X:126:ALA:O	24:X:127:ASN:C	2.54	0.49
25:Y:29:HIS:CD2	25:Y:34:THR:N	2.78	0.49
28:b:81:ARG:HB2	28:b:82:LYS:CA	2.26	0.49
33:g:142:VAL:CG1	33:g:177:TRP:CZ3	2.95	0.49
34:i:1459:U:H5'	34:i:1460:C:C6	2.48	0.49
2:B:90:ASP:CG	2:B:91:VAL:N	2.62	0.49
2:B:148:ASN:ND2	2:B:148:ASN:N	2.61	0.49
3:C:154:TYR:OH	3:C:162:PRO:N	2.45	0.49
3:C:183:ALA:HB2	3:C:208:TYR:CE2	2.48	0.49
4:D:188:ILE:HG22	4:D:190:LEU:CD2	2.41	0.49
4:D:207:HIS:O	4:D:208:VAL:CG2	2.60	0.49
7:G:163:ASN:O	7:G:163:ASN:OD1	2.30	0.49
14:N:26:LEU:CD2	14:N:66:VAL:HG22	2.42	0.49
14:N:73:ARG:NH1	34:i:912:A:C4	2.81	0.49
16:P:41:GLN:HA	16:P:84:ILE:HD13	1.88	0.49
19:S:8:LYS:CA	19:S:9:PHE:CD1	2.95	0.49
19:S:28:PHE:CZ	34:i:1598:G:C4	3.01	0.49
22:V:43:THR:O	22:V:44:GLY:O	2.29	0.49
22:V:68:SER:O	22:V:72:LEU:HG	2.13	0.49
27:a:61:ALA:O	27:a:62:TYR:HB3	2.12	0.49
29:c:12:ALA:HB1	29:c:32:VAL:HB	1.93	0.49
33:g:48:ASP:OD1	33:g:49:GLU:OE1	2.30	0.49
33:g:236:ILE:HG12	33:g:252:THR:HG22	1.93	0.49
34:i:1831:G:O2'	36:k:14:A:OP1	2.31	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:n:39:ILE:HD13	37:n:50:MET:HB2	1.92	0.49
37:n:62:ARG:HB2	37:n:92:ILE:C	2.37	0.49
1:A:39:TYR:HB3	1:A:48:ILE:O	2.12	0.49
1:A:98:PRO:O	1:A:99:ILE:CG1	2.60	0.49
2:B:49:VAL:HG23	2:B:65:ARG:HH12	1.76	0.49
2:B:153:THR:CG2	2:B:154:SER:N	2.53	0.49
3:C:142:LEU:O	3:C:145:LEU:HD21	2.11	0.49
4:D:70:THR:N	4:D:86:LEU:HD22	2.27	0.49
4:D:141:LYS:HE3	4:D:179:GLN:HE21	1.76	0.49
4:D:157:MET:SD	4:D:187:LYS:HD3	2.50	0.49
4:D:168:VAL:HG13	4:D:189:MET:SD	2.53	0.49
5:E:11:ARG:CZ	5:E:20:LEU:HB3	2.42	0.49
5:E:45:ILE:HG13	5:E:61:VAL:HG21	1.94	0.49
5:E:100:ARG:CG	5:E:102:ILE:HD12	2.42	0.49
5:E:145:ARG:HH11	5:E:145:ARG:CG	2.10	0.49
6:F:136:ARG:HD2	6:F:136:ARG:N	2.28	0.49
6:F:151:ILE:O	6:F:152:TRP:C	2.52	0.49
7:G:163:ASN:O	7:G:164:LYS:CB	2.59	0.49
8:H:163:GLN:O	8:H:164:ASN:C	2.54	0.49
9:I:143:LYS:O	9:I:144:LYS:C	2.55	0.49
10:J:78:LEU:HD13	10:J:92:MET:C	2.38	0.49
10:J:84:ILE:HG13	10:J:86:VAL:CG2	2.42	0.49
10:J:165:TYR:HE2	34:i:550:A:O2'	1.96	0.49
12:L:71:ARG:CD	12:L:73:LEU:CG	2.91	0.49
12:L:99:TYR:OH	24:X:14:ARG:CG	2.61	0.49
13:M:19:GLN:NE2	13:M:88:TRP:CD1	2.81	0.49
16:P:10:ARG:O	16:P:11:THR:O	2.30	0.49
16:P:90:VAL:HA	16:P:107:ILE:CD1	2.42	0.49
17:Q:16:LYS:HD2	17:Q:17:LYS:H	1.74	0.49
18:R:21:TYR:HB2	18:R:71:ILE:HD13	0.64	0.49
18:R:122:PRO:CA	18:R:123:THR:OG1	2.61	0.49
19:S:89:ASP:O	19:S:90:VAL:CG2	2.61	0.49
20:T:31:PRO:HG2	20:T:102:ARG:HG3	1.91	0.49
24:X:71:ARG:NE	24:X:82:THR:HG23	2.23	0.49
25:Y:93:ARG:C	25:Y:93:ARG:CD	2.85	0.49
26:Z:96:LEU:C	26:Z:112:ASN:HD22	2.20	0.49
33:g:32:LEU:CD2	33:g:69:VAL:HG21	2.42	0.49
33:g:143:GLN:HE21	33:g:144:ASP:H	1.60	0.49
33:g:172:LYS:HE3	33:g:192:THR:CG2	2.34	0.49
33:g:201:SER:CB	33:g:202:PRO:HD3	2.12	0.49
34:i:1266:G:C2	34:i:1508:C:O2	2.66	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1819:A:C6	37:n:46:ARG:HG2	2.48	0.49
34:i:1853:A:O2'	34:i:1854:A:H5'	2.13	0.49
1:A:44:ASP:OD1	1:A:44:ASP:N	2.43	0.49
1:A:66:VAL:O	1:A:67:ALA:CB	2.60	0.49
1:A:139:TYR:C	1:A:140:VAL:CG2	2.85	0.49
1:A:205:ARG:O	1:A:206:ASP:CB	2.61	0.49
2:B:53:GLN:O	2:B:54:GLY:C	2.55	0.49
4:D:53:THR:HG22	4:D:91:VAL:HB	1.95	0.49
7:G:147:LEU:HD21	7:G:156:TYR:CD2	2.46	0.49
8:H:190:PRO:HG2	8:H:192:PHE:CE1	2.48	0.49
10:J:93:LYS:HE3	10:J:93:LYS:N	2.26	0.49
10:J:164:PRO:HB2	10:J:165:TYR:CE1	2.48	0.49
10:J:170:PRO:HB3	10:J:174:LYS:HE2	1.83	0.49
12:L:113:LEU:HD11	12:L:120:VAL:HG11	1.93	0.49
13:M:33:ARG:HG3	13:M:33:ARG:NH1	2.21	0.49
13:M:93:LYS:H	13:M:101:ARG:CD	2.26	0.49
17:Q:62:ARG:HD3	17:Q:62:ARG:HA	1.47	0.49
20:T:33:TRP:C	20:T:35:ASP:H	2.21	0.49
21:U:68:THR:CG2	21:U:70:CYS:O	2.61	0.49
25:Y:33:ALA:O	25:Y:34:THR:OG1	2.29	0.49
29:c:17:VAL:HG13	29:c:17:VAL:O	2.13	0.49
30:d:10:HIS:C	30:d:10:HIS:HD1	2.21	0.49
30:d:27:ARG:NH1	30:d:27:ARG:HB3	2.26	0.49
31:e:92:LYS:HD3	31:e:92:LYS:H	1.73	0.49
33:g:190:GLY:C	33:g:217:MET:HE1	2.38	0.49
37:n:70:TRP:O	37:n:71:ILE:O	2.30	0.49
37:n:97:ALA:O	37:n:98:ASP:C	2.54	0.49
1:A:208:GLU:HG2	1:A:209:GLU:N	2.27	0.49
2:B:48:LEU:N	2:B:48:LEU:CD1	2.71	0.49
2:B:72:ALA:O	2:B:76:ASN:HA	2.13	0.49
3:C:197:LYS:CB	3:C:200:LEU:HD21	2.42	0.49
5:E:99:PHE:CZ	5:E:113:ARG:CG	2.93	0.49
5:E:166:THR:HB	5:E:168:LYS:HZ3	1.78	0.49
6:F:42:LYS:HB2	6:F:44:LYS:C	2.19	0.49
6:F:192:LYS:O	6:F:192:LYS:CD	2.61	0.49
7:G:33:ALA:N	7:G:52:ILE:CG2	2.74	0.49
7:G:68:LEU:C	7:G:69:THR:HG1	2.06	0.49
7:G:154:ARG:HG2	7:G:155:GLN:N	2.28	0.49
9:I:139:LYS:CD	9:I:145:ILE:HD12	2.43	0.49
9:I:197:PHE:CD2	12:L:5:GLN:CD	2.91	0.49
10:J:29:LEU:HB3	31:e:116:PHE:CE2	2.48	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:168:GLY:O	10:J:169:ARG:O	2.30	0.49
12:L:69:ARG:O	12:L:130:GLU:HB3	2.13	0.49
12:L:113:LEU:HD12	12:L:120:VAL:HG11	1.93	0.49
13:M:58:GLU:O	13:M:58:GLU:HG3	2.13	0.49
16:P:4:VAL:C	16:P:10:ARG:HH11	2.19	0.49
16:P:10:ARG:O	16:P:11:THR:C	2.54	0.49
16:P:79:HIS:CD2	34:i:1294:G:H1'	2.48	0.49
16:P:127:LYS:O	16:P:127:LYS:HG3	2.12	0.49
17:Q:9:SER:HB2	17:Q:26:LYS:CG	2.10	0.49
17:Q:138:ARG:NH1	34:i:1641:C:H5"	2.22	0.49
19:S:14:ARG:NH1	19:S:17:ASN:C	2.70	0.49
20:T:76:THR:C	20:T:95:GLY:N	2.64	0.49
21:U:48:LEU:CD2	21:U:48:LEU:H	2.11	0.49
21:U:82:MET:HE1	30:d:50:ILE:HG22	1.95	0.49
23:W:42:MET:CE	23:W:50:PHE:HD2	2.11	0.49
23:W:107:SER:HB3	34:i:856:G:H21	1.78	0.49
24:X:70:VAL:HG12	24:X:71:ARG:N	2.27	0.49
24:X:96:GLU:O	24:X:97:ASN:HB2	2.12	0.49
25:Y:120:THR:C	25:Y:122:LYS:H	2.19	0.49
28:b:81:ARG:CB	28:b:82:LYS:HD3	2.42	0.49
33:g:48:ASP:C	33:g:49:GLU:CG	2.86	0.49
33:g:83:TRP:C	33:g:85:GLY:H	2.19	0.49
33:g:119:GLN:HG3	33:g:120:ILE:N	2.24	0.49
34:i:1408:C:O2'	34:i:1409:G:O4'	2.27	0.49
3:C:94:ILE:O	3:C:94:ILE:HG22	2.13	0.49
4:D:79:PHE:HE1	4:D:83:SER:HB3	1.78	0.49
5:E:43:PRO:CD	5:E:43:PRO:O	2.60	0.49
5:E:178:GLY:H	5:E:195:ILE:HB	1.78	0.49
6:F:128:ILE:O	6:F:129:GLY:C	2.55	0.49
7:G:142:ARG:NH2	7:G:152:ASP:N	2.54	0.49
8:H:28:LEU:O	8:H:31:GLU:HB2	2.13	0.49
8:H:147:LYS:HE3	8:H:153:LEU:CD1	2.39	0.49
10:J:125:HIS:CE1	10:J:129:LEU:HD21	2.48	0.49
11:K:27:VAL:HA	11:K:43:LEU:HD23	1.95	0.49
15:O:79:GLN:CA	29:c:5:ARG:HB3	2.33	0.49
15:O:121:ARG:HG2	27:a:52:ASP:OD2	2.13	0.49
18:R:16:ILE:O	18:R:20:TYR:N	2.46	0.49
19:S:82:TRP:HB3	34:i:1562:G:C6	2.47	0.49
22:V:53:TYR:HB3	22:V:72:LEU:HD13	1.95	0.49
22:V:77:GLY:HA2	22:V:78:ILE:C	2.38	0.49
23:W:15:ASN:HD21	23:W:19:LYS:HE3	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:Y:68:LYS:O	25:Y:69:THR:CG2	2.61	0.49
27:a:21:ILE:CG2	27:a:22:ARG:H	2.26	0.49
34:i:1468:C:H2'	34:i:1469:G:O4'	2.13	0.49
37:n:81:LEU:HD13	37:n:86:ASP:OD1	2.13	0.49
1:A:76:VAL:HG12	1:A:87:VAL:HG12	1.86	0.48
2:B:70:SER:HB3	15:O:128:ARG:HH11	1.77	0.48
2:B:77:ASP:C	2:B:79:VAL:HG22	2.34	0.48
4:D:108:LYS:CA	4:D:113:LEU:CD2	2.91	0.48
6:F:59:LYS:HD2	6:F:62:ARG:HH21	0.66	0.48
6:F:142:SER:HB2	29:c:46:VAL:HG11	1.94	0.48
7:G:170:ARG:HD2	7:G:171:THR:O	2.13	0.48
8:H:37:LYS:O	8:H:38:ALA:CB	2.61	0.48
8:H:164:ASN:HA	8:H:167:GLU:CG	2.39	0.48
9:I:193:LYS:HG3	12:L:10:TYR:HE1	1.77	0.48
10:J:12:THR:C	10:J:48:PHE:CD2	2.90	0.48
10:J:37:LEU:HG	10:J:38:ARG:N	2.28	0.48
11:K:4:PRO:CG	11:K:7:ASN:HB2	2.26	0.48
14:N:19:ARG:CZ	28:b:84:HIS:OXT	2.61	0.48
14:N:37:ILE:HD11	14:N:63:VAL:HG11	1.95	0.48
14:N:125:LEU:HD11	14:N:129:TYR:CZ	2.47	0.48
15:O:143:LYS:CG	15:O:144:GLY:N	2.64	0.48
18:R:95:ILE:HA	18:R:114:LEU:HB3	1.95	0.48
20:T:77:LYS:HE3	20:T:92:PHE:CE2	2.48	0.48
25:Y:98:GLU:O	25:Y:98:GLU:OE1	2.30	0.48
26:Z:103:HIS:C	26:Z:105:ALA:N	2.69	0.48
33:g:2:THR:O	33:g:2:THR:CG2	2.37	0.48
33:g:38:LYS:HA	33:g:66:VAL:HG23	1.94	0.48
34:i:295:C:H4'	34:i:296:U:OP1	2.11	0.48
34:i:831:C:C4	34:i:833:A:OP2	2.66	0.48
34:i:835:C:H2'	34:i:837:G:O4'	2.13	0.48
36:k:20:U:O2	37:n:67:LYS:CB	2.60	0.48
1:A:14:ASP:OD2	1:A:55:TRP:HH2	1.96	0.48
1:A:30:LEU:HD13	1:A:38:ILE:HD11	0.49	0.48
1:A:89:LYS:HB3	1:A:202:TYR:CE2	2.48	0.48
2:B:53:GLN:C	2:B:55:THR:H	2.19	0.48
3:C:129:SER:CB	3:C:134:THR:HG23	2.43	0.48
3:C:218:LEU:HD12	3:C:218:LEU:C	2.38	0.48
4:D:1:MET:O	4:D:2:ALA:O	2.30	0.48
4:D:12:VAL:HG11	30:d:36:LEU:HD11	0.50	0.48
4:D:22:ASN:OD1	4:D:34:TYR:OH	2.30	0.48
7:G:16:ILE:HD13	7:G:45:TRP:CE2	2.34	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:176:ILE:HG21	7:G:179:LEU:HB2	1.94	0.48
9:I:8:TRP:CE3	9:I:8:TRP:O	2.66	0.48
14:N:38:TYR:CE2	14:N:78:LYS:HG3	2.47	0.48
14:N:139:TRP:CE3	14:N:139:TRP:C	2.91	0.48
15:O:129:ILE:HG21	27:a:44:ILE:CG2	2.38	0.48
16:P:65:LYS:HG3	16:P:66:GLU:H	1.78	0.48
16:P:71:GLU:HB3	16:P:72:LYS:HG3	1.93	0.48
17:Q:54:PRO:CG	17:Q:88:ILE:HD11	2.25	0.48
17:Q:124:PRO:HG2	17:Q:125:ARG:N	2.28	0.48
19:S:73:ASN:C	19:S:76:GLN:OE1	2.56	0.48
19:S:90:VAL:HG12	19:S:91:LYS:CE	2.42	0.48
19:S:90:VAL:HG12	19:S:91:LYS:CG	2.43	0.48
19:S:136:THR:OG1	34:i:1515:G:H5"	2.13	0.48
23:W:20:ARG:HH12	34:i:1135:C:C1'	2.22	0.48
23:W:115:GLU:HG2	23:W:119:LYS:HE3	1.95	0.48
24:X:91:LEU:C	24:X:93:PHE:H	2.20	0.48
25:Y:97:TYR:HD1	25:Y:98:GLU:H	1.58	0.48
27:a:87:ARG:HD3	34:i:1859:C:OP1	2.12	0.48
29:c:21:THR:CG2	29:c:22:GLY:N	2.51	0.48
34:i:1350:G:H8	34:i:1350:G:H5"	1.77	0.48
35:j:63:U:H2'	35:j:64:C:C6	2.49	0.48
36:k:19:U:C2'	37:n:70:TRP:HH2	1.99	0.48
3:C:131:GLU:HB3	4:D:116:ARG:HH12	1.78	0.48
4:D:85:GLU:C	4:D:86:LEU:HD12	2.37	0.48
5:E:259:LYS:O	5:E:260:GLN:OE1	2.29	0.48
7:G:227:GLN:HA	7:G:230:LYS:HZ3	1.78	0.48
9:I:194:GLU:CD	12:L:12:LYS:CE	2.86	0.48
10:J:180:LYS:CG	10:J:181:GLY:N	2.56	0.48
14:N:114:ARG:HH21	14:N:114:ARG:CG	2.26	0.48
20:T:11:GLN:O	20:T:15:VAL:HG13	2.12	0.48
20:T:76:THR:HG22	20:T:95:GLY:O	2.13	0.48
22:V:57:GLY:O	22:V:61:ARG:HG3	2.13	0.48
25:Y:22:GLN:HA	25:Y:74:MET:SD	2.52	0.48
26:Z:102:LYS:HA	26:Z:107:VAL:CA	2.40	0.48
27:a:5:ARG:NH2	34:i:1858:U:C5	2.82	0.48
31:e:105:ARG:NH1	31:e:106:ALA:H	2.10	0.48
33:g:4:GLN:CG	33:g:268:ASP:OD2	2.62	0.48
33:g:54:ILE:CG2	33:g:55:PRO:HD2	2.41	0.48
34:i:821:A:H2'	34:i:822:A:C8	2.48	0.48
34:i:1403:U:H2'	34:i:1404:U:C6	2.48	0.48
34:i:1546:U:C4	34:i:1547:G:O6	2.67	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:1641:C:C2	34:i:1673:A:C6	3.01	0.48
35:j:1:A:N1	35:j:72:A:C2	2.81	0.48
35:j:4:A:N6	35:j:69:G:C6	2.81	0.48
35:j:48:G:C6	35:j:49:A:C6	3.01	0.48
1:A:33:GLN:HE22	28:b:2:PRO:HB3	1.78	0.48
1:A:97:THR:HG22	1:A:98:PRO:N	2.28	0.48
2:B:119:THR:HB	2:B:143:THR:CG2	2.42	0.48
3:C:83:LEU:C	3:C:85:ALA:H	2.22	0.48
3:C:169:VAL:HG11	3:C:232:THR:HG22	1.95	0.48
4:D:16:ILE:HD11	30:d:36:LEU:CG	2.38	0.48
4:D:76:ARG:CG	11:K:66:HIS:ND1	2.77	0.48
4:D:123:LEU:CD2	4:D:154:ASP:OD2	2.61	0.48
4:D:214:LYS:HG3	4:D:214:LYS:O	2.07	0.48
9:I:6:ASP:OD2	9:I:8:TRP:N	2.46	0.48
9:I:41:ARG:NH2	34:i:296:U:OP2	2.47	0.48
10:J:147:PHE:O	10:J:148:ILE:CB	2.55	0.48
10:J:151:LEU:C	10:J:153:SER:H	2.20	0.48
14:N:38:TYR:CG	14:N:78:LYS:HD2	2.43	0.48
16:P:127:LYS:O	16:P:127:LYS:CD	2.61	0.48
17:Q:130:LYS:HA	17:Q:137:ALA:HA	1.95	0.48
18:R:13:ALA:HA	18:R:54:VAL:HG21	1.89	0.48
19:S:7:GLU:O	26:Z:50:PHE:O	2.31	0.48
19:S:8:LYS:CA	19:S:9:PHE:HD1	2.23	0.48
19:S:111:LEU:HD22	19:S:125:HIS:CG	2.49	0.48
20:T:65:TYR:CD1	20:T:65:TYR:C	2.91	0.48
24:X:28:LYS:HE3	24:X:32:LEU:HD11	1.95	0.48
25:Y:93:ARG:HD2	25:Y:93:ARG:C	2.38	0.48
26:Z:44:LEU:HD11	26:Z:46:ASN:ND2	2.29	0.48
27:a:10:ARG:HD3	34:i:1860:A:OP1	2.12	0.48
29:c:38:THR:C	29:c:40:ARG:H	2.22	0.48
33:g:100:ARG:HH11	33:g:100:ARG:CB	2.24	0.48
33:g:251:ALA:HB1	33:g:286:CYS:O	2.12	0.48
34:i:24:C:HO2'	34:i:25:A:H5'	1.76	0.48
34:i:1155:G:H2'	34:i:1156:U:O4'	2.13	0.48
35:j:4:A:O2'	35:j:5:G:OP2	2.32	0.48
1:A:127:PRO:HG2	1:A:152:SER:HB3	1.94	0.48
1:A:158:ASP:CB	22:V:65:SER:HB2	2.42	0.48
2:B:53:GLN:O	2:B:55:THR:N	2.47	0.48
3:C:124:LEU:N	3:C:226:PHE:CZ	2.81	0.48
4:D:10:LYS:HZ2	21:U:111:GLU:HG2	1.77	0.48
5:E:241:GLY:O	5:E:244:ILE:CG1	2.58	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:65:PRO:C	8:H:67:PRO:CD	2.86	0.48
8:H:126:HIS:NE2	8:H:181:THR:HG22	2.28	0.48
8:H:160:LYS:CB	8:H:192:PHE:HZ	2.27	0.48
8:H:169:LYS:HB2	8:H:173:PHE:CZ	2.47	0.48
9:I:104:ILE:HG13	9:I:105:ASP:N	2.26	0.48
9:I:144:LYS:H	9:I:144:LYS:HD3	1.78	0.48
10:J:164:PRO:HB3	10:J:170:PRO:O	2.12	0.48
11:K:40:VAL:HA	11:K:41:PRO:HD3	1.65	0.48
11:K:47:LYS:HD2	11:K:50:GLN:NE2	2.28	0.48
12:L:5:GLN:NE2	12:L:10:TYR:HD1	2.10	0.48
12:L:130:GLU:HG2	12:L:131:CYS:H	1.78	0.48
13:M:82:ASN:HD22	13:M:107:SER:HA	1.77	0.48
17:Q:45:ARG:HG2	17:Q:46:THR:H	1.78	0.48
19:S:136:THR:CB	34:i:1516:C:OP2	2.60	0.48
20:T:40:ALA:O	20:T:43:LYS:CG	2.62	0.48
20:T:42:HIS:NE2	20:T:83:GLN:HB3	2.28	0.48
21:U:49:LYS:C	21:U:50:VAL:CG1	2.84	0.48
22:V:11:LEU:HD12	22:V:12:TYR:N	2.29	0.48
25:Y:55:ILE:CG1	25:Y:75:ILE:HD13	2.41	0.48
34:i:86:C:H1'	34:i:170:A:N1	2.29	0.48
34:i:986:A:C2	34:i:988:A:C6	3.01	0.48
1:A:43:SER:C	1:A:44:ASP:CG	2.77	0.48
1:A:154:LEU:CD1	22:V:63:GLY:CA	2.85	0.48
1:A:161:ILE:CG2	1:A:174:MET:CE	2.91	0.48
3:C:54:LEU:N	3:C:258:LEU:CD2	2.77	0.48
4:D:140:GLY:HA2	34:i:1330:G:H5'	1.96	0.48
6:F:184:SER:O	6:F:185:SER:HB2	2.13	0.48
8:H:14:GLU:HG3	8:H:15:LYS:C	2.38	0.48
8:H:126:HIS:HA	8:H:129:ILE:HD12	1.96	0.48
8:H:149:ASP:O	8:H:149:ASP:OD1	2.31	0.48
9:I:31:ARG:HH11	9:I:31:ARG:CG	2.26	0.48
10:J:124:HIS:NE2	34:i:516:A:O5'	2.46	0.48
10:J:171:GLY:O	10:J:172:ARG:C	2.55	0.48
12:L:59:LYS:HD2	12:L:112:HIS:NE2	2.29	0.48
13:M:51:VAL:HG13	13:M:109:VAL:HG22	1.93	0.48
13:M:51:VAL:HG13	13:M:109:VAL:HG23	1.94	0.48
14:N:38:TYR:CD1	14:N:78:LYS:CG	2.95	0.48
15:O:16:SER:O	15:O:17:LEU:CB	2.61	0.48
16:P:108:LYS:HZ1	19:S:118:ARG:NH1	2.11	0.48
19:S:141:ARG:HD2	34:i:1518:C:C5	2.49	0.48
20:T:33:TRP:CD1	20:T:37:VAL:HG21	2.48	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:52:LEU:HG	24:X:71:ARG:C	2.37	0.48
25:Y:66:GLY:CA	34:i:572:U:OP1	2.62	0.48
25:Y:98:GLU:OE2	25:Y:99:LYS:CA	2.61	0.48
30:d:44:ARG:NH2	34:i:1333:C:H5'	2.29	0.48
33:g:200:VAL:CG1	33:g:204:GLY:HA2	2.44	0.48
34:i:1127:G:H5'	34:i:1127:G:C8	2.48	0.48
34:i:1191:A:O2'	34:i:1192:A:H5'	2.13	0.48
36:k:19:U:H1'	37:n:70:TRP:CE3	2.49	0.48
37:n:106:TYR:HB3	37:n:108:GLU:HG3	1.95	0.48
1:A:39:TYR:HB2	1:A:50:ASN:HD21	1.58	0.48
2:B:49:VAL:CG1	2:B:50:THR:N	2.77	0.48
2:B:93:GLY:C	2:B:94:LYS:HG2	2.38	0.48
3:C:142:LEU:O	3:C:145:LEU:CG	2.61	0.48
3:C:255:THR:CG2	3:C:256:ASP:N	2.76	0.48
5:E:48:LEU:CD2	5:E:70:ILE:CD1	2.81	0.48
6:F:116:ILE:H	6:F:116:ILE:CD1	2.00	0.48
8:H:29:GLU:HA	8:H:32:MET:SD	2.54	0.48
8:H:121:THR:HG22	8:H:124:ALA:CB	2.43	0.48
8:H:158:LEU:HD21	8:H:187:PHE:CD1	2.48	0.48
8:H:169:LYS:HD2	8:H:173:PHE:CZ	2.48	0.48
9:I:38:ILE:HD11	9:I:96:LEU:HD21	1.96	0.48
9:I:117:TYR:HE1	9:I:155:ASN:HD21	1.60	0.48
9:I:154:LYS:O	12:L:22:ARG:CG	2.61	0.48
10:J:90:GLY:O	10:J:96:TYR:HD2	1.77	0.48
14:N:114:ARG:CD	14:N:117:LEU:HD12	2.43	0.48
16:P:59:ARG:NE	16:P:76:VAL:HG13	2.29	0.48
17:Q:37:ARG:HB2	17:Q:38:PRO:HD2	1.95	0.48
17:Q:41:MET:O	17:Q:43:GLU:HG3	2.14	0.48
18:R:101:ASP:HA	18:R:104:GLU:HB2	1.95	0.48
19:S:10:GLN:NE2	19:S:57:GLY:O	2.44	0.48
19:S:26:ILE:HD11	19:S:59:LEU:CG	2.42	0.48
20:T:42:HIS:CD2	20:T:81:GLY:O	2.67	0.48
20:T:65:TYR:CD2	20:T:123:LEU:CD1	2.97	0.48
21:U:57:PRO:HA	34:i:1442:A:H5"	1.94	0.48
22:V:57:GLY:O	22:V:61:ARG:CG	2.61	0.48
24:X:52:LEU:HD12	24:X:52:LEU:C	2.34	0.48
26:Z:91:LEU:HB3	26:Z:97:ILE:HG12	1.95	0.48
29:c:32:VAL:HG22	29:c:42:ILE:O	2.14	0.48
32:f:108:VAL:HG22	32:f:114:ILE:HA	1.94	0.48
32:f:136:PHE:C	32:f:138:ARG:N	2.71	0.48
33:g:87:LEU:CB	33:g:101:PHE:HB2	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:215:GLN:CD	33:g:231:ASP:OD1	2.57	0.48
34:i:1824:U:H4'	34:i:1845:A:H61	1.79	0.48
37:n:71:ILE:N	37:n:71:ILE:HD12	2.28	0.48
37:n:80:GLY:O	37:n:81:LEU:HD23	2.14	0.48
1:A:18:PHE:CE2	1:A:55:TRP:CZ3	3.02	0.48
1:A:75:SER:HA	1:A:97:THR:O	2.13	0.48
1:A:184:ARG:HD3	1:A:192:GLU:HG2	1.96	0.48
3:C:259:VAL:O	3:C:260:LYS:O	2.30	0.48
4:D:207:HIS:C	4:D:208:VAL:HG23	2.38	0.48
4:D:223:ILE:HG22	4:D:224:SER:N	2.28	0.48
5:E:180:LEU:CD1	5:E:228:ILE:CD1	2.91	0.48
6:F:201:LYS:O	6:F:202:SER:O	2.32	0.48
10:J:48:PHE:HZ	10:J:52:LYS:HZ1	1.36	0.48
10:J:121:LYS:HA	10:J:121:LYS:HD3	1.65	0.48
11:K:40:VAL:HG21	11:K:45:VAL:HG23	1.95	0.48
12:L:1:MET:C	12:L:2:ALA:O	2.54	0.48
12:L:80:MET:HE3	12:L:120:VAL:CB	2.43	0.48
13:M:124:ILE:CB	13:M:127:TYR:HE2	2.27	0.48
14:N:116:ILE:O	14:N:119:GLU:HG3	2.13	0.48
15:O:66:ARG:HG2	15:O:67:ASP:N	2.27	0.48
15:O:71:PRO:HB3	15:O:114:SER:HB3	1.94	0.48
15:O:136:PRO:HB3	34:i:940:A:H1'	1.95	0.48
16:P:121:ILE:CG2	19:S:123:LEU:CD1	2.64	0.48
17:Q:18:THR:C	17:Q:75:GLY:HA3	2.37	0.48
17:Q:50:LYS:CE	17:Q:85:ARG:NH2	2.72	0.48
23:W:23:ARG:HG2	23:W:23:ARG:NH1	2.29	0.48
23:W:89:TRP:C	23:W:102:ILE:HD11	2.38	0.48
24:X:41:PHE:CZ	24:X:120:PHE:CD1	3.02	0.48
25:Y:104:ARG:HA	25:Y:107:ARG:NH2	2.29	0.48
26:Z:58:LEU:CD2	26:Z:77:LEU:CD1	2.91	0.48
26:Z:74:SER:HA	26:Z:79:ILE:CG2	2.34	0.48
27:a:45:VAL:CG1	27:a:53:ILE:CD1	2.83	0.48
27:a:45:VAL:HG11	27:a:53:ILE:HD13	1.92	0.48
29:c:20:ARG:HH12	34:i:1674:A:C5'	2.26	0.48
30:d:5:GLN:O	30:d:6:LEU:C	2.56	0.48
34:i:1654:U:H3	34:i:1659:A:H2	1.58	0.48
37:n:77:ILE:CG2	37:n:93:LEU:O	2.62	0.48
1:A:12:GLU:O	1:A:16:LEU:HG	2.14	0.48
2:B:25:PHE:HA	2:B:28:LYS:HD2	1.96	0.48
2:B:36:PRO:HA	2:B:231:LEU:CD2	2.44	0.48
2:B:87:ILE:HG23	2:B:101:HIS:HB2	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:54:LEU:H	3:C:258:LEU:HD22	1.79	0.48
4:D:29:LEU:HB3	4:D:34:TYR:HB2	1.94	0.48
4:D:110:LEU:HD23	4:D:110:LEU:O	2.12	0.48
5:E:48:LEU:HD11	5:E:70:ILE:HD13	1.93	0.48
10:J:110:LEU:CD1	10:J:135:ILE:HD12	2.42	0.48
12:L:101:ARG:HB2	24:X:10:ALA:HB2	1.95	0.48
14:N:52:VAL:HG13	28:b:51:GLN:OE1	2.13	0.48
16:P:37:TYR:CA	19:S:88:LYS:HD3	2.44	0.48
17:Q:24:HIS:NE2	17:Q:69:ARG:CB	2.68	0.48
19:S:52:LEU:O	19:S:54:LYS:N	2.46	0.48
20:T:31:PRO:O	20:T:33:TRP:CA	2.54	0.48
20:T:33:TRP:O	20:T:34:VAL:HB	2.13	0.48
22:V:12:TYR:HE1	22:V:14:PRO:HG3	1.79	0.48
23:W:26:LEU:HD12	23:W:26:LEU:C	2.33	0.48
24:X:128:VAL:O	24:X:129:SER:OG	2.24	0.48
34:i:1004:A:O2'	34:i:1005:A:H5'	2.14	0.48
37:n:97:ALA:O	37:n:100:ALA:CB	2.62	0.48
3:C:48:VAL:CG2	3:C:75:GLU:OE2	2.61	0.48
3:C:54:LEU:CD2	3:C:254:PHE:CB	2.88	0.48
3:C:59:LYS:HD2	3:C:254:PHE:CE1	2.48	0.48
3:C:244:THR:O	3:C:246:PHE:N	2.47	0.48
4:D:10:LYS:HE3	4:D:14:ASP:OD2	2.14	0.48
4:D:23:GLU:HG2	11:K:64:TRP:NE1	2.28	0.48
4:D:53:THR:CG2	4:D:91:VAL:CB	2.89	0.48
4:D:145:GLN:CG	4:D:146:ARG:N	2.77	0.48
5:E:126:VAL:HG21	5:E:156:MET:HA	1.91	0.48
5:E:132:GLY:N	5:E:136:ILE:O	2.47	0.48
7:G:64:LYS:HD2	7:G:100:CYS:SG	2.53	0.48
7:G:80:GLY:O	7:G:81:HIS:ND1	2.47	0.48
8:H:34:SER:O	8:H:35:ASP:OD1	2.32	0.48
8:H:120:ARG:NH1	34:i:909:A:C8	2.82	0.48
9:I:21:TYR:CZ	34:i:423:A:H5'	2.49	0.48
12:L:57:ASP:OD1	12:L:59:LYS:HB2	2.14	0.48
12:L:78:THR:CG2	12:L:79:LYS:N	2.77	0.48
13:M:46:GLN:HB3	13:M:112:LYS:CD	2.44	0.48
13:M:64:LEU:HD11	32:f:104:LYS:CE	2.43	0.48
13:M:111:VAL:HG11	13:M:114:TYR:HB3	1.95	0.48
14:N:84:LEU:HD12	14:N:84:LEU:O	2.14	0.48
14:N:125:LEU:HD22	14:N:129:TYR:CZ	2.49	0.48
15:O:128:ARG:CG	27:a:62:TYR:OH	2.49	0.48
17:Q:126:ARG:C	34:i:1643:G:C8	2.89	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:R:17:ILE:HG22	18:R:71:ILE:HD11	1.94	0.48
18:R:87:GLU:O	18:R:88:VAL:CG1	2.62	0.48
18:R:91:LEU:HD13	18:R:92:ASP:CB	2.43	0.48
19:S:42:HIS:HD2	20:T:45:LEU:CG	1.91	0.48
19:S:55:ARG:HH12	26:Z:82:SER:CB	2.27	0.48
19:S:90:VAL:HG12	19:S:91:LYS:CD	2.44	0.48
19:S:126:PHE:HD2	19:S:127:TRP:CD1	2.32	0.48
20:T:4:VAL:HB	20:T:8:ASP:HB2	1.94	0.48
20:T:33:TRP:CD1	20:T:34:VAL:N	2.82	0.48
20:T:84:ARG:C	20:T:86:GLY:H	2.22	0.48
21:U:68:THR:HB	21:U:70:CYS:O	2.14	0.48
24:X:40:PRO:CB	24:X:81:ILE:CD1	2.87	0.48
25:Y:111:LYS:HG3	25:Y:112:ASN:N	2.29	0.48
26:Z:94:LYS:CD	26:Z:95:GLY:N	2.73	0.48
26:Z:99:LEU:HD21	26:Z:109:TYR:CZ	2.48	0.48
28:b:36:LYS:CE	28:b:43:ILE:CD1	2.87	0.48
29:c:20:ARG:HH12	34:i:1674:A:H5”	1.77	0.48
31:e:80:LEU:N	37:n:82:ARG:C	2.65	0.48
31:e:118:ASN:H	31:e:119:VAL:CB	2.08	0.48
33:g:47:ARG:O	33:g:48:ASP:C	2.57	0.48
33:g:294:ASP:OD1	33:g:294:ASP:N	2.43	0.48
34:i:199:G:C5	34:i:200:U:C4	3.02	0.48
34:i:1513:C:H5”	34:i:1514:U:H5”	1.95	0.48
35:j:14:A:C6	35:j:21:G:C5	3.02	0.48
1:A:113:GLN:CD	34:i:1347:G:C4’	2.87	0.47
2:B:105:LEU:O	2:B:106:THR:OG1	2.30	0.47
3:C:148:VAL:CB	3:C:149:PRO:HD3	2.43	0.47
3:C:175:SER:O	3:C:213:GLY:HA3	2.14	0.47
4:D:196:GLY:C	4:D:199:GLY:CA	2.87	0.47
5:E:151:ASP:HB3	5:E:152:PRO:CD	2.43	0.47
5:E:152:PRO:HD2	7:G:212:LEU:CD2	2.42	0.47
6:F:138:ALA:HB3	6:F:204:ARG:HB3	1.96	0.47
6:F:185:SER:HA	6:F:190:ILE:HD12	1.96	0.47
7:G:70:HIS:HB2	7:G:103:ASP:CG	2.34	0.47
7:G:157:VAL:HG11	7:G:159:ARG:CA	2.43	0.47
8:H:154:ILE:HG22	8:H:185:VAL:HG23	1.95	0.47
9:I:154:LYS:O	12:L:22:ARG:HD2	2.14	0.47
13:M:35:ILE:CB	13:M:61:TYR:CE2	2.95	0.47
13:M:35:ILE:CG1	13:M:61:TYR:CE2	2.97	0.47
13:M:94:ILE:O	13:M:95:ASP:CB	2.62	0.47
14:N:94:LYS:CG	14:N:118:ILE:HD13	2.42	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:41:GLN:CA	16:P:84:ILE:HG12	2.43	0.47
17:Q:42:ILE:CB	17:Q:51:LEU:HD21	2.44	0.47
18:R:5:ARG:O	18:R:10:LYS:NZ	2.46	0.47
18:R:122:PRO:HD2	34:i:1107:U:C1'	2.44	0.47
19:S:30:ILE:O	19:S:32:ALA:N	2.47	0.47
19:S:39:ARG:HH22	20:T:38:LYS:CG	2.22	0.47
21:U:43:ALA:O	21:U:48:LEU:HG	2.14	0.47
23:W:53:ILE:HG22	28:b:25:VAL:HG22	1.96	0.47
25:Y:102:THR:HB	25:Y:104:ARG:H	1.78	0.47
26:Z:51:ASP:O	26:Z:52:LYS:C	2.53	0.47
27:a:85:ARG:O	27:a:86:ASN:C	2.56	0.47
27:a:95:ARG:H	27:a:95:ARG:HG2	1.42	0.47
32:f:97:LYS:HZ3	32:f:97:LYS:HB3	1.76	0.47
33:g:45:LEU:HD22	33:g:52:TYR:CD2	2.49	0.47
34:i:1645:A:C2	34:i:1646:A:H1'	2.50	0.47
37:n:62:ARG:CB	37:n:92:ILE:O	2.62	0.47
1:A:91:ALA:HA	1:A:96:ALA:HB3	1.96	0.47
1:A:102:ARG:HH22	34:i:1375:A:C4'	2.26	0.47
2:B:83:LYS:NZ	15:O:130:GLU:OE2	2.46	0.47
4:D:123:LEU:HD23	4:D:123:LEU:C	2.39	0.47
5:E:200:ARG:HG2	5:E:206:ASP:OD2	2.14	0.47
9:I:113:TYR:O	9:I:117:TYR:HD2	1.96	0.47
9:I:191:GLU:O	9:I:195:LEU:CB	2.62	0.47
10:J:28:GLU:OE1	10:J:40:LYS:CE	2.61	0.47
11:K:84:HIS:CE1	11:K:85:LEU:CA	2.85	0.47
12:L:14:PRO:HB2	12:L:15:THR:HG23	1.97	0.47
13:M:67:ALA:CB	32:f:114:ILE:CG2	2.82	0.47
14:N:91:LEU:HD21	34:i:921:G:C5'	2.44	0.47
18:R:21:TYR:CE2	18:R:73:LEU:HD12	2.48	0.47
19:S:33:ILE:HB	19:S:36:VAL:HG13	1.90	0.47
20:T:40:ALA:O	20:T:43:LYS:CB	2.62	0.47
21:U:44:LYS:HA	21:U:47:ASN:HA	1.96	0.47
25:Y:55:ILE:HG12	25:Y:75:ILE:HD11	1.81	0.47
25:Y:79:LEU:O	25:Y:83:LYS:HG3	2.14	0.47
27:a:45:VAL:O	27:a:46:GLU:CB	2.61	0.47
27:a:77:CYS:O	27:a:80:HIS:HB3	2.14	0.47
32:f:144:CYS:O	32:f:146:LEU:N	2.47	0.47
34:i:328:G:C5	34:i:329:A:C5	3.02	0.47
35:j:12:G:C2	35:j:23:G:N1	2.82	0.47
35:j:46:U:H3'	35:j:47:C:C5'	2.44	0.47
2:B:87:ILE:HG23	2:B:101:HIS:CB	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:118:GLU:C	5:E:120:LYS:N	2.70	0.47
7:G:79:LYS:HD2	7:G:80:GLY:N	2.30	0.47
7:G:121:ILE:CG2	7:G:122:PRO:HD2	2.26	0.47
7:G:207:ALA:O	7:G:211:LYS:HG3	2.13	0.47
8:H:64:VAL:CG2	8:H:72:PHE:CE2	2.97	0.47
10:J:32:ILE:HD13	31:e:108:ARG:HG2	1.96	0.47
10:J:121:LYS:O	10:J:122:SER:HB2	2.14	0.47
10:J:124:HIS:HB3	10:J:125:HIS:H	1.15	0.47
13:M:104:VAL:HG22	13:M:105:GLY:N	2.28	0.47
14:N:25:TRP:HB3	28:b:83:GLN:HG2	0.75	0.47
16:P:77:LYS:C	16:P:78:THR:CG2	2.81	0.47
17:Q:72:VAL:HG12	17:Q:80:GLN:NE2	2.29	0.47
19:S:42:HIS:CB	20:T:45:LEU:CD1	2.88	0.47
19:S:88:LYS:N	19:S:95:TYR:HD1	2.10	0.47
20:T:36:THR:HG23	20:T:37:VAL:N	2.29	0.47
20:T:119:TRP:CG	34:i:1556:A:C2	2.99	0.47
24:X:3:LYS:C	24:X:4:CYS:O	2.57	0.47
24:X:134:TYR:CE1	31:e:87:ARG:HD3	2.49	0.47
25:Y:55:ILE:CA	25:Y:75:ILE:HG12	2.44	0.47
26:Z:104:ARG:C	26:Z:104:ARG:HH11	2.23	0.47
29:c:10:LYS:CD	29:c:61:SER:HB3	2.37	0.47
29:c:15:THR:HG21	29:c:33:GLU:OE2	2.14	0.47
31:e:86:VAL:HG21	34:i:606:A:N3	2.29	0.47
32:f:103:LEU:HD22	32:f:105:TYR:O	2.08	0.47
32:f:127:GLY:O	32:f:129:GLY:N	2.48	0.47
33:g:174:VAL:HB	33:g:188:HIS:HB2	1.96	0.47
34:i:162:C:H2'	34:i:163:U:O4'	2.13	0.47
34:i:1327:C:N4	36:k:21:U:O4	2.47	0.47
3:C:241:TRP:CZ2	23:W:68:ARG:HD2	2.49	0.47
3:C:252:GLN:HE21	3:C:252:GLN:HB3	1.51	0.47
4:D:58:VAL:HG21	4:D:88:ALA:CB	2.44	0.47
4:D:137:VAL:HG22	4:D:151:LYS:HG3	1.95	0.47
6:F:53:ALA:HB1	17:Q:125:ARG:NH2	2.25	0.47
6:F:204:ARG:HD2	29:c:60:GLU:CG	2.44	0.47
7:G:25:ARG:HG3	7:G:28:TYR:CE2	2.47	0.47
7:G:73:VAL:CG1	7:G:74:ARG:N	2.78	0.47
16:P:65:LYS:HG3	16:P:66:GLU:HG3	1.96	0.47
17:Q:9:SER:OG	17:Q:26:LYS:HE3	2.13	0.47
18:R:95:ILE:CG2	18:R:115:SER:O	2.62	0.47
19:S:15:VAL:CG1	19:S:68:ILE:CD1	2.91	0.47
19:S:50:ILE:O	19:S:51:ASP:C	2.52	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:81:ASP:HA	19:S:84:LEU:HD12	1.95	0.47
20:T:83:GLN:HE22	20:T:85:ASN:CA	2.26	0.47
20:T:83:GLN:CD	20:T:83:GLN:C	2.81	0.47
21:U:16:ALA:O	21:U:17:ILE:HG13	2.14	0.47
23:W:55:ASP:HA	28:b:25:VAL:CG1	2.43	0.47
24:X:58:GLU:O	24:X:58:GLU:CG	2.62	0.47
25:Y:58:PHE:CD1	25:Y:72:PHE:HD2	2.31	0.47
33:g:4:GLN:CG	33:g:5:MET:H	2.28	0.47
33:g:258:ILE:HG13	33:g:258:ILE:O	2.13	0.47
34:i:520:U:O4	34:i:545:A:C2	2.68	0.47
34:i:546:U:C4	34:i:547:U:C5	3.02	0.47
34:i:1401:A:H61	34:i:1437:U:H3	1.62	0.47
34:i:1612:G:N1	34:i:1615:A:OP2	2.48	0.47
34:i:1665:C:H2'	34:i:1666:G:C8	2.50	0.47
1:A:4:ALA:CB	22:V:39:VAL:HG21	2.39	0.47
1:A:124:VAL:HG21	1:A:134:LEU:CD2	2.44	0.47
2:B:72:ALA:N	2:B:79:VAL:CG2	2.75	0.47
2:B:183:GLU:O	2:B:187:LYS:HB2	2.13	0.47
3:C:185:ARG:HB3	10:J:98:LEU:O	2.14	0.47
4:D:68:GLU:O	4:D:72:VAL:HG23	2.15	0.47
4:D:178:ARG:H	4:D:178:ARG:NE	2.13	0.47
6:F:63:LYS:CE	6:F:71:ARG:HH12	2.26	0.47
7:G:80:GLY:C	7:G:81:HIS:CG	2.92	0.47
9:I:70:GLU:O	9:I:71:CYS:HB3	2.14	0.47
11:K:11:ILE:CD1	11:K:45:VAL:HG22	2.45	0.47
12:L:125:ILE:HB	12:L:146:THR:HG22	1.92	0.47
12:L:136:LYS:HG2	12:L:137:THR:N	2.27	0.47
13:M:12:MET:CG	13:M:16:THR:HG22	2.40	0.47
13:M:93:LYS:N	13:M:101:ARG:HD3	2.28	0.47
14:N:14:SER:O	14:N:14:SER:OG	2.31	0.47
15:O:37:PHE:CD1	15:O:110:PRO:HD3	2.49	0.47
15:O:44:VAL:HG11	15:O:93:LEU:HD21	1.94	0.47
15:O:76:LEU:O	29:c:5:ARG:HG2	2.14	0.47
15:O:125:LYS:HZ1	27:a:58:VAL:HA	1.79	0.47
15:O:128:ARG:HA	27:a:62:TYR:CE1	2.43	0.47
16:P:17:TYR:CE1	16:P:18:ARG:HB2	2.49	0.47
16:P:49:LEU:O	16:P:50:ARG:CB	2.54	0.47
17:Q:50:LYS:HG3	17:Q:85:ARG:NH2	2.26	0.47
17:Q:102:GLU:CG	33:g:55:PRO:HG2	2.44	0.47
18:R:33:ARG:NH2	33:g:83:TRP:HE3	2.04	0.47
20:T:5:THR:HG22	20:T:8:ASP:CG	2.39	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:X:5:ARG:HH21	24:X:5:ARG:HB3	1.77	0.47
25:Y:51:THR:CB	25:Y:52:PRO:CD	2.82	0.47
34:i:343:C:H2'	34:i:344:U:C6	2.49	0.47
1:A:14:ASP:C	1:A:18:PHE:HD2	2.22	0.47
1:A:55:TRP:NE1	1:A:59:LEU:HD11	2.28	0.47
1:A:59:LEU:CD2	1:A:181:GLU:CG	2.93	0.47
1:A:85:ARG:NE	1:A:201:LEU:O	2.47	0.47
1:A:147:LEU:HD23	1:A:147:LEU:HA	1.64	0.47
2:B:132:GLY:O	2:B:133:TYR:C	2.56	0.47
4:D:40:ARG:CD	21:U:107:GLU:OE2	2.62	0.47
5:E:46:ILE:HA	5:E:50:ASN:HB2	1.97	0.47
6:F:36:GLN:O	6:F:36:GLN:HG2	2.14	0.47
8:H:29:GLU:OE1	8:H:86:LYS:HE3	2.15	0.47
9:I:76:THR:HG22	9:I:77:ARG:O	2.14	0.47
11:K:64:TRP:O	11:K:65:ARG:CG	2.63	0.47
12:L:12:LYS:O	12:L:56:ILE:HD11	2.15	0.47
12:L:80:MET:HE1	12:L:121:GLN:C	2.35	0.47
13:M:44:LYS:HA	13:M:45:ARG:HH21	1.80	0.47
17:Q:10:VAL:HG11	17:Q:94:ALA:HB1	1.96	0.47
17:Q:49:TYR:C	17:Q:53:GLU:HG3	2.39	0.47
18:R:13:ALA:CA	18:R:54:VAL:CG2	2.69	0.47
18:R:44:LYS:HG3	18:R:47:ARG:NE	2.19	0.47
19:S:80:PRO:HG3	19:S:82:TRP:NE1	2.28	0.47
24:X:1:MET:SD	24:X:1:MET:N	2.80	0.47
25:Y:29:HIS:CE1	25:Y:67:GLY:HA2	2.30	0.47
25:Y:29:HIS:CE1	25:Y:67:GLY:N	2.82	0.47
31:e:119:VAL:C	31:e:121:PRO:CG	2.88	0.47
33:g:118:ARG:HH21	33:g:134:THR:HG21	0.54	0.47
33:g:306:LEU:HD23	33:g:307:VAL:O	2.14	0.47
34:i:1232:G:H2'	34:i:1233:C:C6	2.49	0.47
34:i:1347:G:H2'	34:i:1348:G:C8	2.50	0.47
34:i:1634:G:N2	35:j:29:G:C2	2.83	0.47
34:i:1716:U:C3'	34:i:1717:G:H5'	2.44	0.47
34:i:1749:C:C4	34:i:1750:C:N4	2.83	0.47
34:i:1820:G:H5'	37:n:43:GLY:HA3	0.50	0.47
34:i:1825:A:C5'	34:i:1845:A:C6	2.98	0.47
35:j:24:U:H2'	35:j:25:G:C8	2.50	0.47
37:n:76:ILE:HG22	37:n:95:TYR:HD2	1.79	0.47
1:A:44:ASP:OD2	18:R:101:ASP:OD2	2.33	0.47
1:A:66:VAL:HG13	1:A:186:ARG:HG3	1.94	0.47
1:A:191:ARG:CD	1:A:193:HIS:HB2	2.45	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:137:LEU:HD23	2:B:215:VAL:CG1	2.18	0.47
2:B:137:LEU:HD23	2:B:215:VAL:CA	2.44	0.47
3:C:191:SER:OG	3:C:209:THR:HG21	2.15	0.47
5:E:57:THR:HB	5:E:59:ASP:H	1.80	0.47
5:E:64:ILE:CG1	25:Y:18:LEU:HD21	2.44	0.47
5:E:123:LEU:HD12	5:E:123:LEU:HA	1.77	0.47
5:E:195:ILE:O	5:E:196:THR:CB	2.62	0.47
6:F:61:PHE:O	6:F:62:ARG:C	2.57	0.47
6:F:149:GLN:O	6:F:153:LEU:HG	2.14	0.47
7:G:122:PRO:HD2	7:G:123:GLY:H	1.78	0.47
7:G:139:SER:O	7:G:143:LYS:HD2	2.14	0.47
7:G:185:LEU:CA	7:G:188:LYS:HE3	2.37	0.47
9:I:9:HIS:O	9:I:10:LYS:CB	2.62	0.47
9:I:69:SER:CB	12:L:19:ASN:CG	2.70	0.47
9:I:123:ARG:O	9:I:123:ARG:HD3	2.14	0.47
10:J:125:HIS:HD2	10:J:129:LEU:HD11	1.64	0.47
11:K:83:LEU:O	11:K:84:HIS:HB3	2.14	0.47
11:K:94:LEU:O	11:K:95:ARG:HB2	2.15	0.47
12:L:18:GLN:NE2	12:L:20:LYS:HD2	2.27	0.47
14:N:16:LEU:N	28:b:26:GLN:NE2	2.62	0.47
15:O:31:CYS:SG	15:O:95:ILE:HG13	2.55	0.47
15:O:44:VAL:CG1	15:O:93:LEU:HD22	2.45	0.47
15:O:44:VAL:HG13	15:O:93:LEU:HD22	1.96	0.47
15:O:79:GLN:OE1	29:c:5:ARG:CG	2.63	0.47
15:O:137:SER:CB	34:i:938:G:H21	2.28	0.47
16:P:10:ARG:CD	16:P:11:THR:H	2.24	0.47
16:P:44:ARG:CZ	16:P:82:ASP:O	2.62	0.47
16:P:94:VAL:HG12	16:P:96:VAL:CG2	2.44	0.47
17:Q:16:LYS:CE	34:i:1643:G:O6	2.62	0.47
17:Q:32:ILE:C	17:Q:39:LEU:HG	2.40	0.47
17:Q:127:CYS:HA	34:i:1643:G:C2'	2.40	0.47
20:T:66:LEU:HB2	20:T:67:ARG:HE	1.79	0.47
20:T:99:VAL:CG2	20:T:100:ALA:N	2.76	0.47
21:U:108:PRO:HG2	21:U:110:VAL:HG23	1.96	0.47
23:W:2:VAL:HG23	23:W:3:ARG:N	2.29	0.47
23:W:104:LEU:HD13	23:W:106:THR:CG2	2.42	0.47
23:W:120:HIS:O	23:W:120:HIS:CG	2.63	0.47
25:Y:119:GLY:HA2	34:i:85:A:C5'	2.44	0.47
26:Z:107:VAL:HG23	26:Z:108:ILE:H	1.80	0.47
29:c:7:GLN:OE1	29:c:7:GLN:O	2.32	0.47
31:e:115:ARG:O	31:e:119:VAL:HG22	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:147:HIS:C	33:g:149:GLU:N	2.71	0.47
33:g:189:ILE:HG22	33:g:190:GLY:N	2.29	0.47
33:g:293:ALA:HB3	33:g:294:ASP:OD1	2.15	0.47
34:i:1034:U:H2'	34:i:1035:C:H5'	1.97	0.47
34:i:1198:U:H3	34:i:1692:A:H61	1.62	0.47
34:i:1347:G:H2'	34:i:1348:G:H8	1.80	0.47
34:i:1547:G:C8	34:i:1573:U:C4	3.03	0.47
35:j:74:C:H2'	35:j:75:A:O4'	2.15	0.47
37:n:84:TYR:C	37:n:86:ASP:N	2.73	0.47
1:A:8:LEU:HD12	1:A:192:GLU:OE1	2.15	0.47
3:C:159:ILE:HG23	3:C:159:ILE:O	2.15	0.47
3:C:196:LYS:HG3	3:C:197:LYS:N	2.28	0.47
4:D:1:MET:HB3	4:D:2:ALA:H	1.54	0.47
4:D:59:LEU:CD1	4:D:60:GLY:C	2.86	0.47
4:D:217:ILE:HG22	4:D:218:LEU:N	2.30	0.47
5:E:49:ARG:HD2	5:E:50:ASN:CG	2.40	0.47
6:F:98:GLU:O	6:F:102:LEU:HG	2.15	0.47
7:G:168:LYS:HD2	34:i:72:C:C5	2.50	0.47
8:H:9:VAL:O	8:H:45:ILE:O	2.33	0.47
8:H:37:LYS:HD2	8:H:41:ARG:HD3	1.97	0.47
8:H:148:LEU:HD23	8:H:148:LEU:C	2.38	0.47
10:J:113:GLN:OE1	10:J:116:LYS:HD3	2.15	0.47
12:L:99:TYR:N	12:L:99:TYR:CD2	2.80	0.47
14:N:62:GLN:CB	14:N:65:PHE:HD2	2.00	0.47
17:Q:93:VAL:HG13	17:Q:105:LYS:CG	2.42	0.47
18:R:32:LYS:CE	18:R:33:ARG:HE	2.19	0.47
18:R:95:ILE:CA	18:R:114:LEU:HD13	2.42	0.47
24:X:126:ALA:CB	24:X:128:VAL:CG1	2.88	0.47
27:a:103:PRO:CB	27:a:107:ALA:CB	2.92	0.47
31:e:114:ARG:HG3	31:e:115:ARG:N	2.27	0.47
33:g:21:ILE:HG22	33:g:22:ALA:N	2.29	0.47
34:i:1507:U:C4	34:i:1508:C:N4	2.83	0.47
36:k:19:U:O3'	37:n:70:TRP:HZ2	1.98	0.47
2:B:83:LYS:O	2:B:103:MET:HA	2.14	0.47
2:B:144:LYS:HB3	2:B:208:HIS:HB3	1.97	0.47
2:B:175:GLU:CG	2:B:193:ILE:CD1	2.84	0.47
2:B:210:VAL:C	2:B:211:PHE:CG	2.93	0.47
3:C:55:VAL:CA	3:C:82:PHE:CZ	2.96	0.47
5:E:99:PHE:HE1	5:E:113:ARG:CG	2.02	0.47
5:E:166:THR:C	5:E:168:LYS:HG2	2.40	0.47
5:E:259:LYS:O	5:E:260:GLN:HG2	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:210:ALA:HA	7:G:213:LEU:CD2	2.45	0.47
10:J:114:VAL:O	10:J:120:ALA:HB3	2.15	0.47
10:J:174:LYS:HE2	10:J:174:LYS:HB3	1.42	0.47
11:K:4:PRO:HG2	11:K:7:ASN:CG	2.39	0.47
11:K:43:LEU:N	11:K:46:MET:H	2.13	0.47
12:L:31:GLU:OE1	12:L:31:GLU:N	2.42	0.47
13:M:34:GLY:HA3	34:i:1282:G:O6	2.15	0.47
13:M:113:ASP:C	13:M:115:GLY:H	2.23	0.47
15:O:37:PHE:CE1	15:O:110:PRO:HD3	2.50	0.47
15:O:43:HIS:O	15:O:43:HIS:CD2	2.68	0.47
15:O:79:GLN:HB3	29:c:5:ARG:HB2	1.53	0.47
17:Q:41:MET:O	17:Q:43:GLU:N	2.48	0.47
17:Q:88:ILE:HG13	17:Q:89:SER:H	1.78	0.47
20:T:55:THR:HG23	20:T:56:ARG:N	2.30	0.47
22:V:69:ILE:O	22:V:73:ALA:N	2.45	0.47
26:Z:65:TYR:CD2	26:Z:68:ILE:CD1	2.97	0.47
30:d:18:SER:C	30:d:19:ARG:HG2	2.40	0.47
32:f:83:LYS:O	32:f:84:SER:O	2.32	0.47
32:f:103:LEU:CD2	32:f:105:TYR:CA	2.93	0.47
33:g:197:THR:HG21	33:g:238:ALA:CA	2.44	0.47
34:i:526:A:H2'	34:i:527:C:H5'	1.96	0.47
34:i:1206:G:C8	34:i:1207:G:C5'	2.96	0.47
36:k:21:U:H3'	36:k:21:U:H6	1.80	0.47
1:A:132:GLN:N	1:A:133:PRO:CD	2.78	0.47
4:D:126:ILE:HD12	4:D:134:CYS:HB3	1.93	0.47
4:D:142:LEU:O	4:D:144:GLY:N	2.48	0.47
4:D:158:ILE:O	4:D:158:ILE:HG12	2.15	0.47
4:D:222:PRO:O	4:D:223:ILE:CD1	2.63	0.47
5:E:98:ASN:HD22	5:E:114:ILE:HG13	1.79	0.47
5:E:152:PRO:HD3	7:G:209:TYR:HE1	1.80	0.47
7:G:5:ILE:CD1	7:G:16:ILE:HD12	2.36	0.47
7:G:85:ARG:NE	25:Y:118:ARG:NH2	2.57	0.47
8:H:190:PRO:HB2	8:H:191:GLU:HG3	1.96	0.47
9:I:140:LYS:CD	9:I:141:ARG:N	2.72	0.47
9:I:141:ARG:C	9:I:143:LYS:CB	2.85	0.47
10:J:179:LYS:CA	10:J:182:GLN:OE1	2.61	0.47
12:L:4:ILE:HB	12:L:5:GLN:H	1.56	0.47
12:L:96:ILE:N	12:L:96:ILE:HD12	2.30	0.47
12:L:99:TYR:HH	24:X:14:ARG:CA	1.92	0.47
14:N:16:LEU:HD23	14:N:17:PRO:CD	2.45	0.47
15:O:52:THR:HG21	34:i:949:C:O4'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:42:ILE:CG2	17:Q:51:LEU:HD23	2.30	0.47
18:R:33:ARG:NH1	33:g:125:ARG:CD	2.74	0.47
19:S:40:TYR:CD1	19:S:44:VAL:CG2	2.98	0.47
19:S:80:PRO:HG3	19:S:82:TRP:CZ2	2.50	0.47
25:Y:120:THR:HB	25:Y:122:LYS:CD	2.42	0.47
29:c:11:LEU:HB3	29:c:35:MET:SD	2.55	0.47
29:c:66:ARG:O	29:c:68:LEU:HD23	2.15	0.47
34:i:1508:C:H2'	34:i:1509:G:H8	1.80	0.47
34:i:1693:C:C2	36:k:22:C:H5	2.34	0.47
34:i:1749:C:C5	34:i:1750:C:C4	3.03	0.47
35:j:48:G:H1	35:j:64:C:H42	1.63	0.47
37:n:62:ARG:NH1	37:n:92:ILE:HD11	2.19	0.47
2:B:24:PRO:O	2:B:28:LYS:HG3	2.15	0.46
2:B:36:PRO:CA	2:B:231:LEU:CD2	2.94	0.46
2:B:54:GLY:C	2:B:56:LYS:H	2.22	0.46
3:C:49:THR:HG21	3:C:75:GLU:HG3	1.97	0.46
3:C:122:VAL:CG1	3:C:202:ALA:CA	2.93	0.46
4:D:142:LEU:C	4:D:144:GLY:H	2.22	0.46
4:D:182:LEU:HD22	4:D:182:LEU:N	2.30	0.46
5:E:21:ASP:OD2	5:E:24:THR:HG22	2.01	0.46
5:E:25:SER:HB2	34:i:485:U:C1'	2.44	0.46
5:E:117:GLU:C	5:E:119:ALA:N	2.73	0.46
5:E:229:GLY:HA3	5:E:235:TRP:HD1	1.78	0.46
7:G:6:SER:OG	7:G:112:VAL:HG22	2.15	0.46
7:G:77:LEU:HD13	7:G:84:TYR:HB2	1.96	0.46
7:G:143:LYS:N	7:G:143:LYS:HE3	2.30	0.46
7:G:183:ARG:NH1	34:i:307:G:OP2	2.47	0.46
9:I:114:GLU:O	9:I:118:ALA:HA	2.16	0.46
9:I:129:LEU:O	9:I:134:GLU:CB	2.63	0.46
10:J:91:LYS:CA	10:J:96:TYR:CD2	2.99	0.46
16:P:17:TYR:CE2	16:P:25:LEU:CD2	2.98	0.46
17:Q:34:VAL:HG22	17:Q:39:LEU:HD21	1.93	0.46
17:Q:76:GLY:C	17:Q:80:GLN:HG3	2.34	0.46
17:Q:85:ARG:C	17:Q:88:ILE:HG12	2.39	0.46
17:Q:113:ILE:CG1	17:Q:120:LEU:CD1	2.92	0.46
19:S:117:ILE:O	19:S:117:ILE:HG22	2.15	0.46
21:U:83:ARG:NH2	30:d:55:LEU:HD13	2.30	0.46
24:X:124:LYS:HE2	24:X:124:LYS:HB3	1.65	0.46
25:Y:54:VAL:HG13	25:Y:76:TYR:CB	2.45	0.46
27:a:84:VAL:HG12	34:i:1861:U:C5	2.49	0.46
31:e:82:ARG:HG3	37:n:82:ARG:HH21	1.74	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:g:64:HIS:ND1	33:g:65:PHE:CD2	2.84	0.46
33:g:119:GLN:HE22	33:g:121:VAL:CG2	2.15	0.46
33:g:200:VAL:HG12	33:g:201:SER:N	2.30	0.46
33:g:273:GLU:CA	33:g:274:VAL:HG13	2.43	0.46
34:i:163:U:O2'	34:i:164:A:H5'	2.15	0.46
34:i:365:U:H3	34:i:379:A:H61	1.63	0.46
34:i:874:G:H1	34:i:904:A:H2	1.61	0.46
34:i:1751:G:C2'	34:i:1752:G:O5'	2.63	0.46
34:i:1823:G:C2'	34:i:1844:A:N1	2.78	0.46
34:i:1831:G:C2'	36:k:15:A:OP1	2.63	0.46
1:A:57:LYS:NZ	22:V:70:LEU:HG	2.30	0.46
1:A:81:ASN:HA	1:A:84:GLN:OE1	2.15	0.46
2:B:71:LEU:CB	2:B:84:PHE:CE2	2.99	0.46
2:B:71:LEU:HA	2:B:74:LEU:HB2	1.97	0.46
2:B:175:GLU:HG2	2:B:193:ILE:HD11	1.92	0.46
3:C:54:LEU:HD22	3:C:254:PHE:CB	2.44	0.46
3:C:196:LYS:C	3:C:196:LYS:CD	2.88	0.46
4:D:23:GLU:HB3	11:K:64:TRP:HE1	1.80	0.46
4:D:132:LYS:HB3	4:D:189:MET:HG3	1.96	0.46
4:D:226:GLN:C	4:D:227:LYS:HG3	2.38	0.46
5:E:166:THR:O	5:E:168:LYS:CD	2.51	0.46
5:E:212:ASP:C	5:E:214:ASN:H	2.23	0.46
6:F:55:ARG:HG3	6:F:55:ARG:O	2.15	0.46
6:F:71:ARG:HH21	6:F:71:ARG:HG3	1.72	0.46
6:F:141:VAL:HG22	6:F:146:ARG:HD3	1.96	0.46
7:G:28:TYR:C	7:G:30:LYS:N	2.74	0.46
7:G:51:ARG:HG2	7:G:51:ARG:HH11	1.79	0.46
7:G:64:LYS:HD2	7:G:65:GLN:C	2.40	0.46
7:G:68:LEU:HD22	7:G:68:LEU:N	2.31	0.46
7:G:143:LYS:HA	7:G:143:LYS:HE3	1.97	0.46
8:H:40:LEU:HD23	8:H:43:LEU:HG	1.96	0.46
8:H:146:VAL:HG11	23:W:50:PHE:CE2	2.50	0.46
10:J:29:LEU:C	31:e:112:TYR:CD1	2.92	0.46
10:J:87:LEU:HD11	10:J:92:MET:H	1.80	0.46
10:J:91:LYS:O	10:J:92:MET:C	2.54	0.46
11:K:30:PRO:HA	11:K:41:PRO:HB3	1.97	0.46
12:L:14:PRO:C	12:L:15:THR:HG23	2.40	0.46
12:L:76:VAL:O	12:L:76:VAL:HG23	2.16	0.46
14:N:91:LEU:HD21	34:i:921:G:H5"	1.97	0.46
15:O:35:ALA:HB2	15:O:112:ALA:CB	2.23	0.46
15:O:76:LEU:C	29:c:5:ARG:HG2	2.39	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:P:5:GLU:O	16:P:6:GLN:HG2	2.14	0.46
16:P:106:GLU:O	19:S:118:ARG:NH2	2.48	0.46
18:R:103:LYS:HG3	18:R:107:LYS:HE3	1.97	0.46
22:V:38:GLU:OE1	22:V:49:GLN:HB3	2.15	0.46
24:X:58:GLU:O	24:X:59:ALA:C	2.58	0.46
25:Y:47:MET:HE3	34:i:833:A:C5	2.49	0.46
28:b:6:ASP:C	28:b:8:LEU:H	2.23	0.46
28:b:62:VAL:O	28:b:63:LEU:CB	2.63	0.46
33:g:14:HIS:CE1	33:g:41:ILE:HG12	2.50	0.46
33:g:61:GLY:O	33:g:88:ARG:NH2	2.48	0.46
33:g:175:LYS:CE	33:g:184:LEU:HB2	2.46	0.46
34:i:519:A:N1	34:i:545:A:N1	2.63	0.46
34:i:1283:A:C8	34:i:1284:U:C6	3.03	0.46
34:i:1562:G:C6	34:i:1563:C:C4	3.03	0.46
1:A:3:GLY:HA3	22:V:78:ILE:CG1	2.42	0.46
1:A:26:GLY:N	1:A:47:TYR:O	2.46	0.46
2:B:71:LEU:C	2:B:79:VAL:HG21	2.40	0.46
2:B:90:ASP:OD2	2:B:91:VAL:N	2.48	0.46
3:C:227:ASP:O	3:C:231:LYS:HG3	2.15	0.46
6:F:18:LYS:HB3	6:F:18:LYS:HZ3	1.78	0.46
6:F:45:TYR:O	6:F:47:LYS:HD2	1.96	0.46
7:G:157:VAL:CG1	7:G:159:ARG:HG3	2.35	0.46
7:G:179:LEU:C	7:G:179:LEU:CD1	2.76	0.46
8:H:116:ARG:HA	8:H:117:PRO:HD3	1.50	0.46
9:I:29:LEU:CG	9:I:30:GLY:H	2.22	0.46
10:J:165:TYR:CE1	34:i:551:A:H5'	2.50	0.46
11:K:53:LYS:CA	11:K:58:VAL:CG1	2.94	0.46
12:L:112:HIS:CB	12:L:134:LEU:CD1	2.92	0.46
12:L:128:VAL:HG12	12:L:142:VAL:HA	1.98	0.46
16:P:15:PHE:CD2	16:P:110:GLU:OE2	2.69	0.46
16:P:37:TYR:CB	19:S:88:LYS:HD3	2.44	0.46
17:Q:43:GLU:HA	17:Q:44:PRO:C	2.41	0.46
19:S:40:TYR:CE1	19:S:44:VAL:HG21	2.50	0.46
19:S:80:PRO:HG2	19:S:82:TRP:CE2	2.48	0.46
21:U:27:ARG:CZ	21:U:82:MET:CG	2.94	0.46
24:X:129:SER:OG	24:X:132:ALA:CB	2.60	0.46
28:b:10:PRO:CD	28:b:10:PRO:O	2.63	0.46
33:g:175:LYS:HE2	33:g:184:LEU:HB2	1.97	0.46
33:g:284:PRO:HB2	33:g:304:ASP:H	1.80	0.46
34:i:519:A:N1	34:i:545:A:C2	2.83	0.46
34:i:684:A:H61	34:i:732:C:H42	1.61	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:149:ASN:H	1:A:165:ASN:ND2	2.13	0.46
1:A:180:ARG:NH1	1:A:184:ARG:HH22	2.11	0.46
2:B:44:ILE:HG23	2:B:69:VAL:HG21	1.97	0.46
2:B:228:LEU:CD2	2:B:232:HIS:CD2	2.98	0.46
4:D:197:LYS:CA	4:D:198:ILE:HG23	2.41	0.46
4:D:218:LEU:CA	4:D:220:THR:HG23	2.45	0.46
5:E:25:SER:OG	5:E:26:VAL:N	2.48	0.46
5:E:167:GLY:C	5:E:168:LYS:CG	2.88	0.46
6:F:112:LEU:HD23	6:F:112:LEU:C	2.39	0.46
7:G:62:PRO:HB2	7:G:83:CYS:SG	2.56	0.46
8:H:118:ARG:O	8:H:121:THR:HG22	2.15	0.46
8:H:153:LEU:CD2	8:H:184:ASP:HB2	2.46	0.46
9:I:119:LEU:N	9:I:120:PRO:CD	2.78	0.46
9:I:130:THR:N	9:I:131:PRO:CD	2.78	0.46
9:I:197:PHE:CD2	12:L:5:GLN:CG	2.99	0.46
13:M:102:LYS:H	13:M:102:LYS:HG2	1.22	0.46
14:N:131:THR:O	14:N:132:LYS:HD2	2.16	0.46
16:P:75:VAL:HG22	16:P:93:MET:HB3	1.96	0.46
19:S:103:LEU:CD1	19:S:104:ASP:N	2.72	0.46
20:T:21:PHE:HD1	20:T:22:LEU:HD23	1.79	0.46
22:V:55:ILE:HG22	22:V:60:ARG:CG	2.44	0.46
24:X:60:LYS:CD	24:X:116:PRO:HG3	2.44	0.46
24:X:102:VAL:HG13	24:X:120:PHE:HB3	1.91	0.46
25:Y:19:GLN:CG	25:Y:81:TYR:CD1	2.71	0.46
26:Z:54:THR:O	26:Z:58:LEU:HG	2.14	0.46
28:b:56:CYS:SG	28:b:57:VAL:N	2.89	0.46
30:d:5:GLN:HA	30:d:7:TYR:CZ	2.51	0.46
31:e:80:LEU:C	31:e:82:ARG:N	2.73	0.46
31:e:95:LYS:O	31:e:96:GLN:N	2.37	0.46
31:e:97:GLU:O	31:e:98:LYS:HB2	2.16	0.46
33:g:42:MET:HB2	33:g:92:LEU:CD1	2.45	0.46
34:i:199:G:H2'	34:i:200:U:H6	1.79	0.46
34:i:1404:U:H2'	34:i:1405:A:O4'	2.16	0.46
35:j:34:A:C2	36:k:18:G:C2	3.04	0.46
1:A:6:ASP:C	1:A:8:LEU:N	2.73	0.46
1:A:120:ARG:HG2	1:A:120:ARG:HH11	1.80	0.46
2:B:103:MET:O	2:B:214:LYS:HA	2.16	0.46
2:B:189:ILE:HB	2:B:190:PRO:HD3	1.96	0.46
3:C:63:LEU:CB	3:C:67:TYR:CE2	2.98	0.46
4:D:108:LYS:HA	4:D:113:LEU:HD21	1.97	0.46
4:D:212:GLU:HB3	18:R:19:LYS:CG	2.43	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:255:ARG:HH21	34:i:840:U:C2'	2.29	0.46
6:F:45:TYR:CA	6:F:47:LYS:HE2	2.44	0.46
6:F:62:ARG:O	6:F:63:LYS:C	2.58	0.46
6:F:204:ARG:HG3	29:c:63:ARG:HH11	1.79	0.46
7:G:64:LYS:C	7:G:64:LYS:HD2	2.18	0.46
7:G:71:GLY:O	7:G:98:ARG:NE	2.48	0.46
7:G:154:ARG:HH21	34:i:77:A:N6	2.13	0.46
7:G:181:THR:HA	7:G:182:PRO:HD3	1.23	0.46
7:G:185:LEU:HB3	7:G:189:ARG:HH12	1.80	0.46
8:H:50:GLU:CD	8:H:58:LYS:CE	2.88	0.46
9:I:97:VAL:O	9:I:100:CYS:HB2	2.15	0.46
10:J:169:ARG:HG2	10:J:175:ARG:NH1	2.30	0.46
14:N:27:LYS:H	14:N:27:LYS:HE3	1.71	0.46
14:N:38:TYR:CE1	14:N:78:LYS:HG3	2.50	0.46
16:P:41:GLN:HE21	16:P:84:ILE:CG1	2.22	0.46
18:R:84:TYR:C	18:R:85:VAL:CG2	2.87	0.46
19:S:55:ARG:HB2	19:S:58:GLU:HG3	1.96	0.46
20:T:45:LEU:HD23	20:T:48:TYR:CE1	2.49	0.46
20:T:143:LYS:HD3	20:T:143:LYS:HA	1.21	0.46
21:U:26:SER:OG	21:U:27:ARG:N	2.49	0.46
25:Y:19:GLN:CB	25:Y:81:TYR:HB3	2.46	0.46
28:b:26:GLN:HG3	28:b:27:SER:HA	1.97	0.46
32:f:103:LEU:CD2	32:f:106:TYR:CD2	2.95	0.46
33:g:163:PRO:HB2	33:g:179:LEU:HG	1.97	0.46
33:g:172:LYS:HE2	33:g:192:THR:CA	2.45	0.46
33:g:194:TYR:O	33:g:211:GLY:HA3	2.15	0.46
34:i:848:G:H3'	34:i:849:C:O4'	2.15	0.46
34:i:1701:G:H21	34:i:1844:A:H1'	0.65	0.46
34:i:1831:G:C8	36:k:15:A:OP2	2.69	0.46
37:n:103:LEU:N	37:n:103:LEU:CD2	2.78	0.46
1:A:70:ASN:O	1:A:73:ASP:OD1	2.33	0.46
1:A:76:VAL:HG12	1:A:87:VAL:CB	2.44	0.46
1:A:113:GLN:CG	34:i:1347:G:C4'	2.92	0.46
1:A:130:ASP:HB3	1:A:133:PRO:HG2	1.98	0.46
4:D:38:GLU:CG	4:D:49:ILE:HB	2.46	0.46
5:E:25:SER:CB	34:i:485:U:C1'	2.94	0.46
5:E:72:ILE:HD13	5:E:82:TYR:CD2	2.49	0.46
6:F:204:ARG:O	15:O:72:TYR:CE2	2.68	0.46
7:G:77:LEU:HD11	7:G:95:LYS:CB	2.35	0.46
7:G:162:LEU:HD21	7:G:170:ARG:HG3	1.97	0.46
8:H:23:ILE:HD13	8:H:23:ILE:C	2.40	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:139:ILE:HD12	8:H:139:ILE:N	2.30	0.46
10:J:86:VAL:HG11	10:J:105:PHE:CE1	2.51	0.46
12:L:59:LYS:HD3	12:L:134:LEU:HD21	1.98	0.46
14:N:16:LEU:HD23	14:N:16:LEU:HA	1.79	0.46
14:N:27:LYS:CD	14:N:28:LEU:H	2.29	0.46
14:N:93:LYS:CG	14:N:150:VAL:HG11	2.46	0.46
17:Q:51:LEU:O	17:Q:54:PRO:HD2	2.16	0.46
17:Q:128:GLU:HG3	34:i:1643:G:C5'	2.45	0.46
17:Q:138:ARG:O	34:i:1640:C:H4'	2.16	0.46
19:S:58:GLU:O	19:S:59:LEU:HB2	2.16	0.46
19:S:80:PRO:HB2	19:S:82:TRP:NE1	2.31	0.46
20:T:84:ARG:CB	20:T:84:ARG:CZ	2.82	0.46
20:T:87:VAL:CG1	20:T:88:MET:HG3	2.37	0.46
21:U:36:CYS:HG	21:U:53:PRO:HB3	1.77	0.46
21:U:47:ASN:ND2	21:U:47:ASN:H	2.14	0.46
21:U:61:LEU:HD13	30:d:34:TYR:CD2	2.51	0.46
22:V:9:VAL:HG12	22:V:10:ASP:HA	1.95	0.46
22:V:40:ASP:O	22:V:40:ASP:OD1	2.34	0.46
23:W:55:ASP:HB3	28:b:25:VAL:HG13	1.96	0.46
23:W:96:SER:OG	23:W:99:PHE:CD2	2.69	0.46
25:Y:43:LYS:O	25:Y:46:LYS:HG3	2.16	0.46
25:Y:50:THR:O	25:Y:51:THR:CB	2.63	0.46
25:Y:101:LYS:O	25:Y:102:THR:OG1	2.29	0.46
26:Z:90:GLU:O	26:Z:93:SER:N	2.43	0.46
33:g:33:SER:O	33:g:40:ILE:HG23	2.15	0.46
33:g:257:LYS:HG3	33:g:266:ILE:HD11	1.97	0.46
35:j:24:U:H2'	35:j:25:G:O4'	2.15	0.46
1:A:43:SER:OG	1:A:44:ASP:OD1	2.32	0.46
1:A:207:PRO:HB2	1:A:208:GLU:H	1.33	0.46
2:B:29:ASP:OD1	2:B:29:ASP:O	2.34	0.46
2:B:148:ASN:OD1	18:R:122:PRO:HB2	2.15	0.46
3:C:118:TYR:O	3:C:203:GLY:HA3	2.15	0.46
3:C:145:LEU:HG	3:C:146:SER:N	2.31	0.46
3:C:194:VAL:N	3:C:195:PRO:CD	2.79	0.46
3:C:244:THR:HG22	3:C:246:PHE:CB	2.45	0.46
4:D:132:LYS:HB3	4:D:189:MET:O	2.16	0.46
4:D:202:LYS:HB3	4:D:203:PRO:HD3	1.94	0.46
6:F:182:LYS:CB	6:F:182:LYS:HZ3	2.29	0.46
7:G:162:LEU:CD2	7:G:172:LYS:HE2	2.32	0.46
8:H:154:ILE:CG2	8:H:185:VAL:HG23	2.46	0.46
8:H:160:LYS:HB2	8:H:192:PHE:CZ	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:40:LYS:O	10:J:41:ARG:C	2.53	0.46
10:J:165:TYR:CZ	34:i:551:A:H5'	2.50	0.46
12:L:42:LEU:HB2	12:L:44:PHE:CE2	2.51	0.46
12:L:71:ARG:HD2	12:L:73:LEU:HD21	1.77	0.46
14:N:7:PRO:CD	14:N:8:GLY:N	2.78	0.46
15:O:82:ALA:O	15:O:86:LYS:HG2	2.15	0.46
15:O:98:ARG:HD2	15:O:132:VAL:HG23	1.97	0.46
16:P:37:TYR:HA	19:S:88:LYS:HD2	1.98	0.46
16:P:62:LYS:HA	16:P:65:LYS:HE2	1.96	0.46
17:Q:50:LYS:NZ	17:Q:117:ARG:HH11	2.14	0.46
19:S:73:ASN:O	19:S:76:GLN:OE1	2.34	0.46
21:U:77:TRP:CZ2	34:i:1663:U:H5'	2.51	0.46
23:W:17:ALA:CB	23:W:25:VAL:HG11	2.45	0.46
24:X:67:ARG:NH2	24:X:114:ASP:OD2	2.49	0.46
24:X:77:ASN:C	24:X:79:LYS:N	2.73	0.46
25:Y:68:LYS:C	25:Y:69:THR:HG23	2.41	0.46
26:Z:74:SER:CA	26:Z:79:ILE:HG22	2.33	0.46
31:e:82:ARG:O	31:e:85:LYS:HB2	2.16	0.46
32:f:85:TYR:C	32:f:86:THR:CG2	2.89	0.46
33:g:297:THR:HG22	33:g:298:LEU:N	2.30	0.46
34:i:125:C:H5'	34:i:125:C:C6	2.47	0.46
34:i:562:U:O5'	34:i:562:U:H6	1.98	0.46
34:i:1081:C:N3	34:i:1855:G:O6	2.48	0.46
36:k:11:A:N3	36:k:12:A:N7	2.64	0.46
36:k:20:U:O2	37:n:67:LYS:C	2.59	0.46
2:B:19:LYS:HB2	2:B:19:LYS:HZ2	1.73	0.46
2:B:93:GLY:O	2:B:94:LYS:HG2	2.15	0.46
2:B:148:ASN:HA	18:R:124:VAL:H	1.80	0.46
2:B:172:MET:HE2	2:B:172:MET:HB3	1.66	0.46
4:D:110:LEU:HD23	4:D:110:LEU:C	2.41	0.46
5:E:57:THR:OG1	5:E:60:GLU:N	2.41	0.46
5:E:98:ASN:HD21	5:E:114:ILE:HD11	1.81	0.46
5:E:128:LYS:CG	5:E:130:PHE:HD1	2.27	0.46
6:F:47:LYS:HD3	6:F:47:LYS:N	2.30	0.46
6:F:163:PHE:CD2	6:F:164:ARG:HG2	2.50	0.46
7:G:5:ILE:HG22	7:G:124:LEU:CD2	2.43	0.46
9:I:118:ALA:CB	9:I:149:TYR:CE1	2.94	0.46
10:J:41:ARG:HA	10:J:44:TRP:HB2	1.98	0.46
12:L:114:SER:OG	12:L:115:PRO:HD2	2.16	0.46
16:P:9:LYS:O	16:P:10:ARG:NE	2.49	0.46
16:P:94:VAL:HG12	16:P:96:VAL:HG23	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:21:PHE:HD1	20:T:22:LEU:N	2.14	0.46
20:T:31:PRO:HB2	20:T:33:TRP:NE1	2.28	0.46
20:T:38:LYS:HD2	20:T:46:ALA:HA	1.97	0.46
22:V:3:SER:O	22:V:4:ASN:C	2.58	0.46
23:W:55:ASP:CA	28:b:25:VAL:HG13	2.46	0.46
24:X:105:PHE:HE2	24:X:118:VAL:O	1.77	0.46
24:X:125:VAL:O	24:X:128:VAL:CB	2.64	0.46
25:Y:88:LYS:HE2	25:Y:99:LYS:HG3	1.97	0.46
31:e:126:LYS:HD2	31:e:126:LYS:N	2.21	0.46
34:i:107:A:H61	34:i:344:U:H3	1.63	0.46
34:i:1081:C:C2	34:i:1083:A:O4'	2.69	0.46
34:i:1439:C:C5	34:i:1440:U:C5	3.03	0.46
34:i:1459:U:H4'	34:i:1460:C:O5'	2.15	0.46
35:j:4:A:O2'	35:j:5:G:P	2.74	0.46
1:A:11:LYS:CG	1:A:13:GLU:HG3	2.21	0.46
1:A:14:ASP:OD1	1:A:180:ARG:NH2	2.48	0.46
2:B:67:PHE:HD1	15:O:47:LEU:O	1.95	0.46
2:B:131:ASP:OD1	2:B:180:ASP:HA	2.15	0.46
2:B:228:LEU:HD21	2:B:232:HIS:NE2	2.31	0.46
3:C:243:GLU:HA	22:V:16:LYS:HZ3	1.80	0.46
7:G:65:GLN:C	7:G:100:CYS:SG	2.99	0.46
8:H:168:HIS:CE1	8:H:169:LYS:HE2	2.51	0.46
9:I:42:ARG:NH1	34:i:1736:U:OP1	2.44	0.46
11:K:1:MET:HE2	11:K:2:LEU:HB3	1.98	0.46
11:K:55:ARG:NH1	34:i:1273:C:H5"	2.31	0.46
12:L:60:CYS:HB3	12:L:63:THR:OG1	2.16	0.46
15:O:119:LEU:HD11	15:O:126:ILE:HD11	1.97	0.46
17:Q:146:ARG:CD	35:j:34:A:OP1	2.48	0.46
21:U:59:LYS:HD2	21:U:84:ILE:HG21	1.97	0.46
21:U:116:ILE:O	21:U:117:ALA:HB2	2.16	0.46
23:W:27:ILE:HG12	23:W:61:ILE:HB	1.96	0.46
25:Y:32:LYS:HG2	25:Y:33:ALA:C	2.40	0.46
29:c:14:VAL:HG13	29:c:30:VAL:HG13	1.98	0.46
32:f:108:VAL:HG22	32:f:114:ILE:CA	2.45	0.46
34:i:96:C:H2'	34:i:97:U:C6	2.50	0.46
1:A:44:ASP:CG	18:R:101:ASP:OD2	2.59	0.46
3:C:121:HIS:O	3:C:122:VAL:HG13	2.16	0.46
3:C:150:VAL:C	3:C:233:TYR:CE2	2.94	0.46
4:D:34:TYR:O	4:D:99:ILE:HD12	2.16	0.46
4:D:223:ILE:HD12	4:D:223:ILE:N	2.31	0.46
5:E:195:ILE:CG2	5:E:196:THR:N	2.73	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:44:LYS:CD	6:F:44:LYS:C	2.78	0.46
6:F:88:MET:O	6:F:92:ILE:HG13	2.15	0.46
7:G:145:PHE:O	7:G:147:LEU:HD12	2.16	0.46
7:G:214:ALA:O	7:G:217:MET:HG2	2.15	0.46
8:H:50:GLU:OE1	8:H:58:LYS:HE2	2.15	0.46
8:H:119:SER:O	8:H:120:ARG:CZ	2.64	0.46
10:J:114:VAL:C	10:J:120:ALA:HB3	2.41	0.46
11:K:85:LEU:HD13	11:K:89:ILE:HG13	1.97	0.46
12:L:94:HIS:CB	12:L:105:ARG:CD	2.75	0.46
12:L:113:LEU:HD23	12:L:113:LEU:C	2.41	0.46
13:M:102:LYS:HG3	13:M:103:VAL:N	2.31	0.46
14:N:21:SER:C	14:N:22:VAL:CG1	2.75	0.46
15:O:79:GLN:HB2	29:c:5:ARG:HG2	1.91	0.46
17:Q:45:ARG:O	17:Q:48:GLN:HB3	2.16	0.46
20:T:4:VAL:CA	20:T:8:ASP:OD2	2.54	0.46
22:V:55:ILE:CD1	22:V:65:SER:O	2.64	0.46
23:W:30:CYS:SG	23:W:31:SER:N	2.89	0.46
24:X:27:TYR:CZ	24:X:31:HIS:CE1	2.99	0.46
24:X:89:GLY:HA2	31:e:83:VAL:HG12	1.97	0.46
24:X:105:PHE:CB	24:X:112:VAL:HG21	2.46	0.46
31:e:98:LYS:HB3	31:e:99:LYS:H	1.56	0.46
31:e:123:PHE:O	31:e:123:PHE:HD2	1.99	0.46
33:g:42:MET:SD	33:g:56:GLN:CB	3.04	0.46
33:g:175:LYS:HE2	33:g:184:LEU:CB	2.46	0.46
33:g:284:PRO:CB	33:g:304:ASP:N	2.78	0.46
34:i:126:G:HO2'	34:i:127:C:H5	1.58	0.46
34:i:215:U:O2'	34:i:296:U:N3	2.49	0.46
34:i:1065:U:H2'	34:i:1066:A:C8	2.51	0.46
34:i:1359:C:O5'	34:i:1359:C:H6	1.99	0.46
34:i:1493:G:H4'	34:i:1494:A:H5'	1.98	0.46
34:i:1748:G:C5	34:i:1749:C:C4	3.04	0.46
37:n:96:ASN:HB2	37:n:99:GLU:CD	2.41	0.46
1:A:59:LEU:CD2	1:A:181:GLU:HG2	2.42	0.45
3:C:241:TRP:HH2	23:W:44:HIS:O	1.98	0.45
4:D:40:ARG:NE	21:U:107:GLU:OE2	2.49	0.45
4:D:74:GLN:HB2	4:D:84:VAL:HG11	1.98	0.45
5:E:128:LYS:HB3	5:E:128:LYS:HE2	1.65	0.45
6:F:123:GLU:HB3	29:c:59:LEU:CD1	2.46	0.45
7:G:233:ARG:O	7:G:236:SER:OG	2.30	0.45
8:H:64:VAL:CG2	8:H:72:PHE:HE2	2.30	0.45
8:H:144:ILE:N	23:W:52:ILE:O	2.48	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:37:LYS:NZ	9:I:93:THR:HB	2.32	0.45
9:I:38:ILE:HD11	9:I:81:VAL:HG23	1.97	0.45
10:J:93:LYS:HE3	10:J:93:LYS:CA	2.45	0.45
10:J:179:LYS:HA	10:J:182:GLN:CG	2.46	0.45
11:K:60:GLU:CG	11:K:69:TRP:NE1	2.80	0.45
12:L:126:VAL:CG2	12:L:142:VAL:HG13	2.47	0.45
12:L:147:LYS:NZ	12:L:156:GLN:HE22	2.14	0.45
13:M:67:ALA:O	32:f:114:ILE:HG21	2.16	0.45
13:M:85:LEU:O	13:M:85:LEU:HD23	2.16	0.45
15:O:126:ILE:HG12	27:a:56:VAL:HG12	1.98	0.45
16:P:44:ARG:HH21	16:P:84:ILE:CA	2.28	0.45
17:Q:10:VAL:CG1	17:Q:11:GLN:N	2.78	0.45
17:Q:16:LYS:HD2	17:Q:16:LYS:C	2.41	0.45
18:R:6:THR:O	18:R:10:LYS:HG2	2.15	0.45
18:R:87:GLU:O	18:R:88:VAL:HB	2.15	0.45
18:R:105:MET:C	18:R:109:LEU:HD12	2.40	0.45
19:S:88:LYS:O	19:S:89:ASP:O	2.34	0.45
20:T:12:GLN:O	20:T:16:ARG:HB2	2.17	0.45
22:V:11:LEU:HD11	22:V:12:TYR:HE2	1.62	0.45
23:W:49:GLU:CD	23:W:64:ASN:HD22	2.24	0.45
25:Y:122:LYS:CD	25:Y:123:ALA:N	2.62	0.45
26:Z:77:LEU:O	26:Z:78:LYS:HD3	2.16	0.45
29:c:6:VAL:CG1	29:c:7:GLN:N	2.70	0.45
34:i:181:A:N7	34:i:182:C:N3	2.64	0.45
34:i:1411:C:C3'	34:i:1412:C:H5'	2.46	0.45
37:n:57:ARG:NH1	37:n:86:ASP:OD1	2.48	0.45
1:A:18:PHE:CZ	1:A:55:TRP:HZ3	2.34	0.45
2:B:53:GLN:O	2:B:56:LYS:N	2.49	0.45
2:B:72:ALA:CB	15:O:128:ARG:NH2	2.72	0.45
3:C:158:LYS:H	3:C:158:LYS:HG3	1.45	0.45
4:D:212:GLU:CG	18:R:19:LYS:NZ	2.78	0.45
4:D:217:ILE:O	4:D:218:LEU:HB3	2.15	0.45
6:F:28:VAL:HG22	6:F:110:GLN:CG	2.37	0.45
7:G:13:GLN:O	7:G:14:LYS:CG	2.63	0.45
7:G:195:LYS:CE	34:i:125:C:HO2'	2.20	0.45
8:H:149:ASP:O	8:H:150:GLY:C	2.59	0.45
8:H:163:GLN:O	8:H:165:ASN:N	2.49	0.45
10:J:66:LYS:C	10:J:71:LEU:CD1	2.89	0.45
10:J:87:LEU:HG	10:J:88:ASP:N	2.30	0.45
14:N:50:ILE:HG23	14:N:54:LEU:HD11	1.98	0.45
15:O:72:TYR:CE1	15:O:76:LEU:CD1	2.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:Q:8:GLN:CA	17:Q:99:TYR:CZ	2.99	0.45
21:U:69:PRO:HB3	30:d:41:GLN:HG3	1.98	0.45
23:W:30:CYS:SG	23:W:61:ILE:CD1	2.97	0.45
25:Y:32:LYS:CG	25:Y:33:ALA:O	2.61	0.45
30:d:33:LYS:HG3	34:i:1653:G:H5"	1.98	0.45
32:f:111:ASN:HA	32:f:112:GLY:HA2	1.78	0.45
34:i:126:G:N2	34:i:181:A:OP1	2.48	0.45
34:i:141:A:N6	34:i:177:G:H21	2.10	0.45
34:i:1748:G:O6	34:i:1772:C:N3	2.50	0.45
34:i:1819:A:N6	37:n:46:ARG:HG2	2.31	0.45
35:j:38:C:O2'	35:j:39:C:H5'	2.16	0.45
37:n:57:ARG:NH1	37:n:81:LEU:HD13	2.31	0.45
1:A:204:TYR:HD2	1:A:204:TYR:O	1.99	0.45
2:B:189:ILE:HB	2:B:190:PRO:CD	2.47	0.45
3:C:65:GLU:O	3:C:69:PHE:HD2	1.99	0.45
3:C:83:LEU:C	3:C:85:ALA:N	2.74	0.45
3:C:241:TRP:C	3:C:242:LYS:CG	2.89	0.45
5:E:149:TYR:CD2	7:G:205:GLU:HB3	2.51	0.45
6:F:32:ASP:OD2	6:F:35:LEU:HD12	2.16	0.45
6:F:103:LEU:O	6:F:103:LEU:CG	2.64	0.45
6:F:133:THR:HG21	15:O:66:ARG:NH1	2.31	0.45
7:G:142:ARG:NH1	7:G:142:ARG:HG2	2.30	0.45
8:H:16:PRO:O	8:H:20:GLU:OE1	2.34	0.45
8:H:84:GLU:O	8:H:88:SER:HA	2.16	0.45
8:H:188:GLU:HG2	8:H:189:PHE:N	2.30	0.45
9:I:141:ARG:O	9:I:143:LYS:NZ	2.49	0.45
12:L:95:TYR:C	12:L:96:ILE:HD12	2.40	0.45
13:M:13:ASP:O	13:M:14:VAL:C	2.58	0.45
13:M:102:LYS:HG3	13:M:103:VAL:H	1.81	0.45
15:O:79:GLN:HB3	29:c:5:ARG:CA	2.40	0.45
15:O:147:ARG:HG2	15:O:147:ARG:O	2.17	0.45
16:P:18:ARG:HD2	16:P:37:TYR:CB	2.41	0.45
16:P:41:GLN:NE2	16:P:84:ILE:CG1	2.79	0.45
16:P:108:LYS:HZ2	19:S:118:ARG:NH1	2.07	0.45
19:S:28:PHE:O	19:S:31:THR:OG1	2.29	0.45
19:S:88:LYS:N	19:S:95:TYR:CE1	2.77	0.45
23:W:49:GLU:OE1	23:W:64:ASN:ND2	2.49	0.45
24:X:52:LEU:CD1	24:X:53:GLU:CB	2.88	0.45
27:a:103:PRO:HB3	27:a:107:ALA:HB1	1.97	0.45
30:d:27:ARG:NH2	34:i:1259:U:H4'	2.31	0.45
33:g:164:ILE:CG2	33:g:176:VAL:HG13	2.46	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:484:C:N4	34:i:499:G:H21	2.14	0.45
34:i:1845:A:H3'	34:i:1846:C:C5'	2.47	0.45
2:B:144:LYS:HG2	2:B:206:PRO:HB3	1.99	0.45
4:D:193:ASP:HB3	4:D:194:PRO:HD3	1.98	0.45
7:G:168:LYS:HD2	34:i:72:C:C4	2.51	0.45
8:H:11:PRO:CG	8:H:12:ASN:H	2.26	0.45
9:I:36:THR:HG23	9:I:96:LEU:HB2	1.99	0.45
9:I:67:TRP:CD2	9:I:70:GLU:HG2	2.52	0.45
9:I:191:GLU:O	9:I:195:LEU:HB3	2.16	0.45
10:J:148:ILE:HG22	10:J:148:ILE:O	2.17	0.45
10:J:160:SER:O	10:J:162:ARG:N	2.50	0.45
10:J:177:ASN:HA	10:J:180:LYS:CB	2.44	0.45
11:K:2:LEU:HA	11:K:2:LEU:HD22	1.20	0.45
13:M:19:GLN:CG	13:M:88:TRP:CD1	2.98	0.45
13:M:26:LEU:CD1	13:M:89:VAL:C	2.81	0.45
16:P:17:TYR:CD2	16:P:25:LEU:HD21	2.51	0.45
21:U:44:LYS:O	21:U:45:GLU:C	2.58	0.45
23:W:15:ASN:ND2	23:W:19:LYS:CE	2.77	0.45
23:W:24:GLN:HG3	28:b:7:LEU:HG	1.99	0.45
28:b:31:TYR:CZ	28:b:81:ARG:NH1	2.85	0.45
30:d:34:TYR:HB2	30:d:36:LEU:HD13	1.99	0.45
31:e:82:ARG:HH11	37:n:82:ARG:HH21	1.63	0.45
31:e:114:ARG:O	31:e:118:ASN:CB	2.64	0.45
33:g:31:ILE:O	33:g:31:ILE:HG23	2.15	0.45
33:g:71:ILE:HG21	33:g:75:GLY:HA2	1.97	0.45
34:i:841:G:C3'	34:i:842:G:C8	2.98	0.45
35:j:11:C:O2'	35:j:12:G:H5'	2.16	0.45
35:j:51:G:O6	35:j:62:A:N6	2.50	0.45
1:A:102:ARG:HH21	1:A:105:PRO:HD2	1.82	0.45
1:A:141:ASN:CB	22:V:32:ILE:HG12	2.43	0.45
1:A:161:ILE:HG22	1:A:174:MET:HE2	1.98	0.45
2:B:144:LYS:CG	2:B:206:PRO:HB3	2.47	0.45
3:C:128:CYS:SG	34:i:1353:A:H5"	2.57	0.45
4:D:37:VAL:HG12	4:D:50:ILE:HD13	1.98	0.45
4:D:225:GLU:HG3	4:D:227:LYS:HE2	1.98	0.45
7:G:13:GLN:HA	7:G:124:LEU:HD11	1.98	0.45
7:G:173:ALA:HB3	34:i:77:A:H4'	1.99	0.45
9:I:81:VAL:HG11	9:I:91:VAL:HA	1.99	0.45
10:J:179:LYS:HA	10:J:182:GLN:HB2	1.99	0.45
11:K:41:PRO:HD2	11:K:43:LEU:HG	1.97	0.45
11:K:64:TRP:O	11:K:65:ARG:C	2.58	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:83:LEU:HD12	11:K:85:LEU:CD2	2.23	0.45
12:L:12:LYS:HE3	12:L:12:LYS:HB3	1.80	0.45
12:L:55:TYR:CD1	12:L:55:TYR:C	2.94	0.45
13:M:69:CYS:O	13:M:74:ILE:HD12	2.16	0.45
14:N:67:THR:C	14:N:69:ASN:H	2.24	0.45
14:N:94:LYS:HE3	14:N:118:ILE:CD1	2.46	0.45
14:N:137:PRO:O	14:N:138:ASN:CB	2.65	0.45
15:O:64:ALA:CB	15:O:66:ARG:HE	2.28	0.45
15:O:83:GLN:NE2	15:O:87:GLU:OE2	2.50	0.45
17:Q:19:ALA:CA	17:Q:74:GLY:C	2.89	0.45
19:S:50:ILE:O	19:S:52:LEU:N	2.49	0.45
19:S:82:TRP:CD1	34:i:1562:G:C5	3.04	0.45
24:X:21:LYS:HD2	24:X:27:TYR:CG	2.51	0.45
24:X:28:LYS:HE2	24:X:32:LEU:CD1	2.47	0.45
25:Y:56:PHE:CE1	25:Y:94:HIS:HE1	2.34	0.45
31:e:103:THR:HG21	34:i:514:U:H3'	1.98	0.45
32:f:82:LYS:NZ	34:i:1505:U:C6	2.83	0.45
33:g:32:LEU:CD2	33:g:69:VAL:CG2	2.95	0.45
33:g:270:LEU:HD13	33:g:310:TRP:CD2	2.51	0.45
34:i:317:G:H1'	34:i:318:U:C6	2.51	0.45
34:i:792:G:C3'	34:i:793:C:H5'	2.47	0.45
34:i:842:G:C8	34:i:842:G:O5'	2.70	0.45
34:i:1140:A:C2	34:i:1195:A:H4'	2.51	0.45
1:A:123:VAL:CG1	1:A:175:TRP:CH2	3.00	0.45
1:A:204:TYR:C	1:A:204:TYR:CD2	2.95	0.45
2:B:150:ILE:CG1	18:R:124:VAL:HG12	2.30	0.45
4:D:138:VAL:O	4:D:149:SER:HA	2.16	0.45
4:D:141:LYS:HZ3	34:i:1328:A:C2'	2.29	0.45
5:E:152:PRO:HD3	7:G:209:TYR:CE1	2.51	0.45
5:E:213:ALA:O	5:E:214:ASN:OD1	2.33	0.45
6:F:112:LEU:HA	6:F:177:LEU:HD13	1.96	0.45
6:F:175:ASP:OD1	6:F:175:ASP:O	2.35	0.45
7:G:2:LYS:HG3	7:G:17:GLU:HG2	1.99	0.45
7:G:16:ILE:HG21	7:G:45:TRP:HZ2	1.79	0.45
7:G:58:LYS:O	7:G:59:GLN:CB	2.57	0.45
7:G:98:ARG:C	7:G:98:ARG:CD	2.76	0.45
7:G:198:ARG:HH21	7:G:201:LYS:HG3	1.81	0.45
7:G:213:LEU:HD12	7:G:214:ALA:CA	2.47	0.45
8:H:14:GLU:CG	8:H:15:LYS:O	2.64	0.45
9:I:10:LYS:CG	9:I:11:ARG:H	2.27	0.45
9:I:73:THR:O	9:I:74:ARG:CD	2.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:110:LEU:CB	10:J:130:ILE:HD13	2.43	0.45
12:L:113:LEU:HD11	12:L:120:VAL:CG1	2.47	0.45
13:M:51:VAL:CG1	13:M:109:VAL:CG2	2.94	0.45
14:N:19:ARG:HH12	28:b:84:HIS:HB2	1.74	0.45
14:N:36:GLN:HG3	14:N:54:LEU:HD21	1.99	0.45
16:P:17:TYR:CD2	16:P:25:LEU:CD2	2.99	0.45
23:W:77:PRO:CD	24:X:5:ARG:O	2.54	0.45
24:X:45:SER:OG	24:X:46:HIS:HD2	2.00	0.45
24:X:67:ARG:HA	24:X:67:ARG:NE	2.31	0.45
27:a:85:ARG:O	27:a:87:ARG:HG3	2.17	0.45
31:e:80:LEU:N	37:n:84:TYR:HD2	2.00	0.45
31:e:107:LYS:O	31:e:111:GLN:HG3	2.17	0.45
31:e:114:ARG:C	31:e:114:ARG:CD	2.90	0.45
33:g:113:PHE:CE1	33:g:120:ILE:HG12	2.52	0.45
33:g:156:PHE:CD2	33:g:156:PHE:O	2.70	0.45
34:i:126:G:N2	34:i:180:G:O3'	2.49	0.45
35:j:26:C:H2'	35:j:27:U:H6	1.82	0.45
2:B:228:LEU:HD22	2:B:232:HIS:CD2	2.51	0.45
4:D:153:VAL:CG1	4:D:154:ASP:N	2.80	0.45
5:E:89:VAL:O	5:E:90:ILE:HB	2.16	0.45
5:E:151:ASP:O	5:E:153:LEU:N	2.50	0.45
6:F:32:ASP:CB	6:F:117:ILE:CG2	2.95	0.45
8:H:59:ALA:HB2	8:H:172:THR:OG1	2.17	0.45
8:H:73:GLN:NE2	8:H:135:PHE:HE1	2.14	0.45
8:H:103:LYS:CD	34:i:678:U:H2'	2.47	0.45
8:H:106:ARG:NE	34:i:857:A:N3	2.65	0.45
9:I:118:ALA:CB	9:I:149:TYR:CD1	3.00	0.45
10:J:18:ARG:HA	10:J:19:PRO:HD3	1.48	0.45
10:J:100:LEU:HD12	10:J:101:LYS:H	1.80	0.45
16:P:72:LYS:HA	16:P:73:PRO:HD3	1.83	0.45
17:Q:16:LYS:CD	17:Q:17:LYS:N	2.68	0.45
17:Q:74:GLY:HA2	34:i:1540:A:H4'	1.99	0.45
17:Q:81:ILE:O	17:Q:84:ILE:HG12	2.16	0.45
18:R:103:LYS:HD2	18:R:103:LYS:HA	1.32	0.45
21:U:46:LYS:HG2	21:U:46:LYS:O	2.17	0.45
23:W:7:LEU:HD21	23:W:33:VAL:HG12	1.99	0.45
24:X:94:ILE:CD1	24:X:122:VAL:HG11	2.37	0.45
24:X:107:ARG:HB3	24:X:110:HIS:O	2.17	0.45
25:Y:29:HIS:CE1	25:Y:68:LYS:H	1.82	0.45
25:Y:101:LYS:HB3	25:Y:102:THR:H	1.65	0.45
25:Y:119:GLY:HA2	34:i:85:A:H5'	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:b:6:ASP:OD1	28:b:6:ASP:N	2.50	0.45
29:c:15:THR:HG23	29:c:33:GLU:H	1.82	0.45
32:f:117:LEU:O	32:f:118:ARG:HB2	2.16	0.45
33:g:143:GLN:O	33:g:144:ASP:HB3	2.16	0.45
33:g:273:GLU:C	33:g:274:VAL:HG13	2.41	0.45
34:i:569:C:H2'	34:i:570:U:O4'	2.16	0.45
34:i:1411:C:H2'	34:i:1412:C:H5'	1.99	0.45
34:i:1635:A:C5'	35:j:40:C:C5'	2.45	0.45
34:i:1635:A:C5'	35:j:39:C:O3'	2.65	0.45
35:j:1:A:C6	35:j:72:A:H2	2.30	0.45
35:j:38:C:H2'	35:j:39:C:H6	1.82	0.45
37:n:77:ILE:HG22	37:n:78:LEU:N	2.30	0.45
1:A:7:VAL:CG2	22:V:43:THR:HG21	2.44	0.45
1:A:58:LEU:HA	1:A:161:ILE:HG12	1.98	0.45
3:C:120:GLY:C	3:C:150:VAL:HG22	2.42	0.45
4:D:12:VAL:CG1	30:d:36:LEU:HG	2.44	0.45
4:D:48:ILE:CG2	4:D:86:LEU:CG	2.82	0.45
6:F:110:GLN:HE21	6:F:110:GLN:CA	2.29	0.45
9:I:54:LYS:HD3	9:I:181:GLN:OE1	2.17	0.45
9:I:103:LEU:CD2	9:I:172:LEU:CD1	2.94	0.45
10:J:38:ARG:NE	31:e:104:GLY:CA	2.70	0.45
11:K:62:PHE:CZ	11:K:65:ARG:HA	2.52	0.45
12:L:71:ARG:CG	12:L:73:LEU:CG	2.94	0.45
13:M:77:ILE:CD1	13:M:78:LYS:N	2.80	0.45
13:M:127:TYR:CD1	13:M:127:TYR:C	2.93	0.45
14:N:125:LEU:CD2	14:N:129:TYR:CE2	3.00	0.45
19:S:81:ASP:HA	19:S:84:LEU:CD1	2.47	0.45
20:T:40:ALA:C	20:T:43:LYS:HG2	2.41	0.45
21:U:40:ILE:CD1	21:U:53:PRO:CD	2.88	0.45
22:V:56:CYS:SG	22:V:59:ILE:CG1	3.04	0.45
24:X:52:LEU:CD1	24:X:71:ARG:CB	2.95	0.45
25:Y:10:ARG:CG	25:Y:24:VAL:CB	2.85	0.45
28:b:54:VAL:HB	28:b:63:LEU:CD2	2.45	0.45
32:f:139:HIS:CB	32:f:150:PHE:O	2.63	0.45
34:i:1199:G:H2'	34:i:1200:A:C8	2.52	0.45
36:k:15:A:H8	36:k:15:A:O5'	2.00	0.45
1:A:36:GLN:NE2	1:A:53:ARG:HH12	2.14	0.45
2:B:151:ARG:HD2	2:B:154:SER:H	1.82	0.45
3:C:241:TRP:CG	23:W:68:ARG:NH1	2.73	0.45
4:D:151:LYS:HE2	4:D:151:LYS:HB2	1.59	0.45
5:E:153:LEU:HD21	7:G:216:ARG:NH1	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:20:PHE:HZ	6:F:50:PRO:HG3	1.80	0.45
8:H:100:ILE:HG12	8:H:125:VAL:CG2	2.37	0.45
8:H:172:THR:HG23	8:H:173:PHE:N	2.32	0.45
9:I:141:ARG:HB3	9:I:144:LYS:CB	2.22	0.45
13:M:35:ILE:HG22	34:i:1282:G:N7	2.32	0.45
14:N:137:PRO:C	14:N:138:ASN:CG	2.80	0.45
16:P:44:ARG:HH21	16:P:84:ILE:N	1.96	0.45
18:R:5:ARG:C	18:R:10:LYS:HZ1	2.25	0.45
19:S:83:PHE:O	19:S:83:PHE:CG	2.70	0.45
20:T:65:TYR:CD2	20:T:123:LEU:HD12	2.51	0.45
22:V:32:ILE:CG2	22:V:33:PRO:CD	2.86	0.45
26:Z:99:LEU:CG	26:Z:102:LYS:HD3	2.42	0.45
28:b:2:PRO:C	28:b:3:LEU:CG	2.89	0.45
33:g:32:LEU:CD1	33:g:40:ILE:CG2	2.95	0.45
34:i:181:A:N9	34:i:182:C:C4	2.82	0.45
34:i:551:A:C6	34:i:552:U:O4	2.70	0.45
34:i:1141:A:C5	34:i:1142:C:H1'	2.51	0.45
34:i:1491:G:O2'	34:i:1492:U:H5'	2.17	0.45
34:i:1519:G:O2'	35:j:29:G:P	2.71	0.45
1:A:66:VAL:HA	1:A:186:ARG:HD2	1.98	0.45
2:B:91:VAL:HG22	2:B:96:CYS:SG	2.57	0.45
3:C:69:PHE:CE1	3:C:247:THR:CG2	2.99	0.45
3:C:144:LYS:O	3:C:147:ILE:HG13	2.17	0.45
3:C:164:THR:CG2	3:C:165:VAL:H	2.24	0.45
3:C:260:LYS:HD2	3:C:261:THR:H	1.67	0.45
5:E:9:LEU:HD12	5:E:30:ARG:HA	2.00	0.45
6:F:61:PHE:HZ	29:c:51:ARG:HB2	1.15	0.45
6:F:141:VAL:HG21	29:c:47:LYS:NZ	2.31	0.45
6:F:145:ARG:HA	6:F:145:ARG:HD2	1.39	0.45
6:F:185:SER:OG	6:F:190:ILE:HD12	2.17	0.45
7:G:219:GLU:H	7:G:219:GLU:HG3	1.65	0.45
8:H:10:LYS:HB2	8:H:10:LYS:HE2	1.71	0.45
8:H:154:ILE:HG22	8:H:185:VAL:HG22	1.99	0.45
8:H:154:ILE:CG2	8:H:185:VAL:HG22	2.47	0.45
9:I:55:TYR:OH	34:i:296:U:H1'	2.16	0.45
15:O:16:SER:CA	15:O:87:GLU:O	2.56	0.45
15:O:129:ILE:HB	27:a:65:PRO:CG	2.28	0.45
17:Q:57:LEU:HD13	17:Q:115:TYR:CD2	2.49	0.45
20:T:31:PRO:O	20:T:33:TRP:CG	2.70	0.45
22:V:31:SER:C	22:V:32:ILE:CG1	2.86	0.45
24:X:52:LEU:O	24:X:96:GLU:CD	2.60	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:52:LYS:HB3	26:Z:53:ALA:H	1.49	0.45
26:Z:101:SER:O	26:Z:107:VAL:C	2.60	0.45
28:b:62:VAL:HG22	28:b:63:LEU:N	2.23	0.45
33:g:118:ARG:NE	33:g:118:ARG:CA	2.77	0.45
34:i:1683:C:H3'	34:i:1684:C:OP2	2.06	0.45
37:n:60:HIS:H	37:n:90:ASP:HA	1.81	0.45
37:n:69:VAL:CG2	37:n:94:LYS:HD3	2.41	0.45
1:A:158:ASP:O	1:A:159:ILE:CB	2.65	0.44
2:B:147:ASN:C	18:R:124:VAL:HG23	2.22	0.44
3:C:110:LYS:HA	3:C:128:CYS:HA	1.99	0.44
4:D:86:LEU:HD12	4:D:86:LEU:N	2.32	0.44
4:D:94:ARG:HE	4:D:94:ARG:HB3	1.40	0.44
4:D:112:GLY:N	4:D:113:LEU:HD11	2.29	0.44
4:D:197:LYS:H	4:D:198:ILE:HG13	1.80	0.44
4:D:223:ILE:CG2	4:D:224:SER:N	2.80	0.44
6:F:69:VAL:O	6:F:73:THR:HG23	2.16	0.44
7:G:67:VAL:HG22	7:G:100:CYS:SG	2.57	0.44
7:G:168:LYS:HE3	34:i:71:G:C8	2.53	0.44
8:H:44:ASN:HB3	8:H:68:GLN:NE2	2.29	0.44
10:J:110:LEU:HB3	10:J:111:GLN:H	1.48	0.44
13:M:35:ILE:HG23	13:M:36:ARG:H	1.83	0.44
14:N:54:LEU:C	14:N:60:VAL:CG2	2.90	0.44
15:O:30:VAL:HG23	15:O:45:THR:OG1	2.15	0.44
16:P:128:HIS:HB3	34:i:1517:A:C4	2.52	0.44
17:Q:115:TYR:CD2	17:Q:115:TYR:C	2.88	0.44
17:Q:135:PRO:CG	17:Q:141:TYR:CE1	2.71	0.44
23:W:25:VAL:O	23:W:62:VAL:HA	2.17	0.44
23:W:89:TRP:HB3	23:W:102:ILE:HD13	1.99	0.44
25:Y:33:ALA:HB1	34:i:571:U:O2'	2.15	0.44
25:Y:47:MET:O	34:i:833:A:C2	2.70	0.44
25:Y:56:PHE:C	25:Y:58:PHE:CE2	2.95	0.44
27:a:102:ARG:HA	27:a:103:PRO:HD2	1.45	0.44
30:d:44:ARG:NH1	30:d:44:ARG:HG2	2.31	0.44
33:g:144:ASP:O	33:g:145:GLU:C	2.58	0.44
33:g:225:LYS:HD2	33:g:225:LYS:HA	1.44	0.44
34:i:547:U:C4	34:i:548:G:C5	3.05	0.44
34:i:1045:A:C2	34:i:1066:A:C4	3.06	0.44
34:i:1839:A:H2'	34:i:1840:G:C8	2.52	0.44
35:j:53:A:C2	35:j:57:A:C6	2.69	0.44
36:k:21:U:H5"	36:k:22:C:OP2	2.17	0.44
2:B:72:ALA:CB	2:B:79:VAL:HG23	2.46	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:180:LEU:O	3:C:181:ILE:HD13	2.18	0.44
4:D:192:TRP:HE3	4:D:196:GLY:CA	2.15	0.44
5:E:153:LEU:HD21	7:G:216:ARG:HH12	1.82	0.44
6:F:112:LEU:O	6:F:116:ILE:HG12	2.16	0.44
7:G:59:GLN:N	34:i:157:U:H4'	2.31	0.44
8:H:109:ARG:HB3	8:H:110:THR:H	1.14	0.44
8:H:160:LYS:CB	8:H:192:PHE:CZ	3.00	0.44
10:J:67:ASP:O	10:J:69:ARG:N	2.50	0.44
10:J:91:LYS:CA	10:J:96:TYR:CB	2.71	0.44
10:J:100:LEU:HD11	10:J:104:ASP:CG	2.42	0.44
13:M:51:VAL:CB	13:M:77:ILE:HG21	2.46	0.44
15:O:59:GLY:O	15:O:60:MET:C	2.58	0.44
15:O:71:PRO:O	15:O:74:ALA:HB3	2.18	0.44
15:O:139:SER:OG	15:O:140:THR:N	2.50	0.44
15:O:147:ARG:HH21	15:O:150:ARG:NH2	2.15	0.44
16:P:121:ILE:CG2	19:S:120:HIS:HA	2.44	0.44
17:Q:8:GLN:HB3	17:Q:99:TYR:CD1	2.48	0.44
18:R:17:ILE:CG1	18:R:54:VAL:HG13	2.46	0.44
19:S:85:ASN:HD21	19:S:98:VAL:CB	2.29	0.44
20:T:21:PHE:CD1	20:T:22:LEU:N	2.85	0.44
21:U:67:LYS:CD	21:U:78:ASP:OD2	2.66	0.44
24:X:51:VAL:CG2	24:X:70:VAL:HG11	2.46	0.44
24:X:89:GLY:HA2	31:e:83:VAL:CG1	2.48	0.44
25:Y:86:GLU:O	25:Y:87:PRO:O	2.35	0.44
27:a:41:ILE:HG21	27:a:68:TYR:CE1	2.52	0.44
31:e:107:LYS:HG3	31:e:110:MET:HE2	1.99	0.44
33:g:240:CYS:SG	33:g:291:TRP:CD1	3.07	0.44
34:i:829:C:H2'	34:i:830:C:H6	1.82	0.44
34:i:984:C:O4'	34:i:984:C:C6	2.71	0.44
37:n:100:ALA:O	37:n:103:LEU:HB2	2.18	0.44
2:B:33:VAL:HG12	2:B:44:ILE:CD1	2.36	0.44
2:B:105:LEU:HD11	2:B:110:MET:HE1	1.99	0.44
2:B:175:GLU:CG	2:B:193:ILE:HD11	2.46	0.44
3:C:150:VAL:O	3:C:150:VAL:HG23	2.16	0.44
4:D:137:VAL:HB	4:D:185:LYS:HB2	1.99	0.44
4:D:217:ILE:HG22	4:D:218:LEU:HB3	1.98	0.44
5:E:92:ILE:CG2	5:E:95:THR:OG1	2.63	0.44
5:E:188:ASN:HD21	5:E:218:PHE:HB2	1.82	0.44
6:F:174:ALA:O	6:F:178:ILE:HG13	2.16	0.44
8:H:8:ILE:O	8:H:11:PRO:HD3	2.16	0.44
8:H:117:PRO:C	8:H:119:SER:H	2.20	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:121:THR:CG2	8:H:124:ALA:CB	2.95	0.44
9:I:144:LYS:CE	34:i:189:G:H5"	2.41	0.44
10:J:124:HIS:O	10:J:127:ARG:N	2.49	0.44
10:J:131:ARG:HA	10:J:143:ASN:OD1	2.17	0.44
11:K:1:MET:HG3	34:i:1270:G:C5'	2.47	0.44
11:K:14:LEU:HD11	11:K:35:LEU:HD11	1.99	0.44
11:K:27:VAL:HG13	11:K:43:LEU:HD22	0.44	0.44
11:K:52:LEU:O	11:K:55:ARG:HG3	2.17	0.44
11:K:80:ARG:HA	11:K:85:LEU:HD11	1.98	0.44
11:K:85:LEU:CB	11:K:86:PRO:HD2	2.47	0.44
11:K:89:ILE:CG2	11:K:90:VAL:H	2.30	0.44
14:N:38:TYR:CZ	14:N:74:ILE:HG23	2.51	0.44
16:P:44:ARG:HD3	34:i:1615:A:OP1	2.18	0.44
16:P:97:TYR:CD1	16:P:102:PHE:CE2	3.04	0.44
17:Q:28:GLY:H	17:Q:66:VAL:HA	1.82	0.44
17:Q:105:LYS:HZ3	17:Q:109:LYS:CB	2.19	0.44
18:R:72:LYS:H	18:R:72:LYS:HG2	1.58	0.44
19:S:82:TRP:HA	19:S:87:GLN:NE2	2.28	0.44
19:S:92:ASP:C	19:S:94:LYS:H	2.23	0.44
20:T:4:VAL:CG1	20:T:139:ALA:HB2	2.46	0.44
23:W:111:MET:HE1	23:W:121:THR:OG1	2.16	0.44
26:Z:94:LYS:CE	26:Z:95:GLY:N	2.81	0.44
26:Z:105:ALA:O	26:Z:106:GLN:CG	2.65	0.44
27:a:45:VAL:O	27:a:46:GLU:HB2	2.17	0.44
31:e:78:GLY:O	37:n:84:TYR:HB2	2.17	0.44
33:g:18:VAL:O	33:g:287:THR:HG23	2.17	0.44
33:g:87:LEU:O	33:g:101:PHE:HD1	2.00	0.44
33:g:176:VAL:CG2	33:g:186:THR:CG2	2.95	0.44
34:i:328:G:O6	34:i:329:A:C6	2.70	0.44
34:i:1409:G:H2'	34:i:1410:A:O4'	2.18	0.44
34:i:1413:C:C3'	34:i:1413:C:C6	3.00	0.44
34:i:1615:A:H4'	34:i:1616:U:C6	2.53	0.44
1:A:28:THR:CG2	1:A:46:ILE:HD13	2.45	0.44
1:A:76:VAL:HG13	1:A:175:TRP:HH2	1.62	0.44
2:B:19:LYS:HB3	2:B:19:LYS:HE2	1.46	0.44
2:B:89:GLU:O	2:B:90:ASP:HB2	2.17	0.44
3:C:89:ASP:HB3	3:C:115:ILE:HG12	2.00	0.44
3:C:157:ASN:O	3:C:159:ILE:N	2.50	0.44
4:D:21:LEU:HD23	4:D:21:LEU:HA	1.77	0.44
4:D:56:GLN:C	4:D:59:LEU:HG	2.31	0.44
5:E:2:ALA:O	5:E:3:ARG:CG	2.62	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:102:ILE:HG23	5:E:182:MET:SD	2.58	0.44
5:E:174:LYS:HB2	5:E:174:LYS:HE3	1.87	0.44
7:G:161:PRO:HA	7:G:170:ARG:O	2.17	0.44
7:G:186:GLN:HA	7:G:189:ARG:NH2	2.33	0.44
8:H:36:LEU:HD23	8:H:78:ARG:HH11	1.82	0.44
9:I:105:ASP:O	9:I:106:SER:CB	2.64	0.44
9:I:142:SER:CB	9:I:143:LYS:CE	2.93	0.44
10:J:35:TYR:CD2	10:J:35:TYR:N	2.85	0.44
10:J:61:LEU:HD23	10:J:98:LEU:CD1	2.36	0.44
10:J:101:LYS:CG	10:J:103:GLU:OE1	2.61	0.44
12:L:125:ILE:C	12:L:146:THR:HG22	2.40	0.44
13:M:31:LEU:C	13:M:31:LEU:HD13	2.42	0.44
14:N:26:LEU:HA	14:N:27:LYS:HE3	1.98	0.44
14:N:82:PRO:O	14:N:84:LEU:N	2.51	0.44
15:O:79:GLN:C	29:c:5:ARG:HB3	2.43	0.44
16:P:37:TYR:CA	19:S:88:LYS:CD	2.95	0.44
17:Q:126:ARG:CG	17:Q:127:CYS:N	2.81	0.44
18:R:44:LYS:CE	18:R:47:ARG:CZ	2.88	0.44
18:R:122:PRO:HB3	18:R:123:THR:HG23	1.56	0.44
19:S:7:GLU:C	19:S:8:LYS:CD	2.89	0.44
19:S:23:ARG:HD3	26:Z:48:VAL:CG2	2.46	0.44
20:T:119:TRP:HE3	34:i:1557:C:C2'	2.27	0.44
21:U:50:VAL:CG1	21:U:51:LYS:N	2.45	0.44
24:X:41:PHE:CE1	24:X:47:ALA:HB3	2.51	0.44
24:X:75:ILE:HA	24:X:75:ILE:HD13	1.73	0.44
26:Z:51:ASP:HB2	26:Z:54:THR:HG23	1.98	0.44
27:a:49:ALA:CB	27:a:53:ILE:HD12	2.48	0.44
27:a:75:VAL:HG12	27:a:79:ILE:HD12	1.99	0.44
28:b:19:HIS:CE1	28:b:20:LYS:HG2	2.53	0.44
28:b:54:VAL:HB	28:b:63:LEU:HD22	2.00	0.44
33:g:172:LYS:O	33:g:172:LYS:HD3	2.16	0.44
33:g:236:ILE:HG21	33:g:239:LEU:HD21	1.98	0.44
33:g:249:CYS:SG	33:g:256:ILE:CG2	3.05	0.44
34:i:195:C:N3	34:i:201:G:N1	2.65	0.44
34:i:207:U:C2'	34:i:208:G:O5'	2.65	0.44
34:i:1683:C:N3	34:i:1684:C:H5	2.15	0.44
34:i:1828:A:H3'	34:i:1829:A:H5"	2.00	0.44
37:n:38:VAL:CG2	37:n:77:ILE:CD1	2.94	0.44
2:B:23:ASP:HA	2:B:24:PRO:HD3	1.44	0.44
2:B:123:ALA:HB3	2:B:168:MET:SD	2.58	0.44
2:B:151:ARG:HG3	2:B:153:THR:H	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:64:ILE:CD1	25:Y:17:LEU:CD1	2.95	0.44
5:E:125:LYS:CB	5:E:226:PHE:CE1	2.96	0.44
5:E:126:VAL:HG22	5:E:157:ASN:N	2.29	0.44
6:F:151:ILE:HA	6:F:154:LEU:CD2	2.48	0.44
7:G:13:GLN:C	7:G:14:LYS:HG2	2.43	0.44
7:G:27:PHE:C	7:G:30:LYS:HG2	2.43	0.44
8:H:109:ARG:NH2	8:H:111:LYS:HD2	2.33	0.44
9:I:112:TRP:CH2	9:I:117:TYR:CZ	3.06	0.44
10:J:84:ILE:O	10:J:108:ARG:HD2	2.16	0.44
11:K:43:LEU:O	11:K:46:MET:N	2.50	0.44
12:L:20:LYS:CD	12:L:20:LYS:H	2.09	0.44
12:L:113:LEU:HD23	12:L:114:SER:O	2.18	0.44
13:M:13:ASP:CB	13:M:16:THR:OG1	2.64	0.44
14:N:17:PRO:HG3	28:b:28:PRO:HG3	1.99	0.44
14:N:50:ILE:O	14:N:54:LEU:CG	2.64	0.44
15:O:98:ARG:NH1	15:O:98:ARG:HG2	2.32	0.44
15:O:105:THR:O	15:O:106:LYS:CB	2.64	0.44
16:P:111:MET:O	16:P:112:ILE:C	2.60	0.44
17:Q:16:LYS:O	17:Q:17:LYS:C	2.61	0.44
18:R:21:TYR:CG	18:R:71:ILE:CD1	2.98	0.44
20:T:15:VAL:HG23	20:T:16:ARG:N	2.31	0.44
20:T:31:PRO:O	20:T:32:GLU:C	2.48	0.44
21:U:106:ILE:O	21:U:107:GLU:CB	2.65	0.44
23:W:90:GLN:HB3	23:W:102:ILE:HD12	2.00	0.44
25:Y:13:MET:HE3	25:Y:13:MET:C	2.30	0.44
25:Y:56:PHE:HB3	25:Y:58:PHE:CE2	2.47	0.44
26:Z:48:VAL:HG22	26:Z:80:ARG:HB2	1.99	0.44
33:g:232:GLY:HA2	33:g:257:LYS:HZ1	1.68	0.44
34:i:1404:U:H2'	34:i:1405:A:C8	2.52	0.44
34:i:1447:G:O2'	34:i:1470:A:N6	2.51	0.44
34:i:1546:U:C5	34:i:1572:G:C6	3.06	0.44
34:i:1597:U:C2'	34:i:1598:G:H5'	2.48	0.44
36:k:20:U:O4'	37:n:67:LYS:CA	2.60	0.44
1:A:58:LEU:CD2	1:A:58:LEU:O	2.66	0.44
1:A:88:LEU:HD13	1:A:88:LEU:HA	1.79	0.44
1:A:103:PHE:O	1:A:104:THR:HB	2.18	0.44
2:B:19:LYS:O	2:B:21:VAL:HG11	2.06	0.44
2:B:151:ARG:HG3	2:B:153:THR:N	2.33	0.44
3:C:51:LEU:CD2	3:C:60:ILE:HD12	2.48	0.44
3:C:163:HIS:H	3:C:163:HIS:CD2	2.36	0.44
4:D:59:LEU:HD13	4:D:60:GLY:O	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:222:PRO:O	4:D:223:ILE:CB	2.65	0.44
5:E:141:THR:OG1	5:E:143:ASP:OD1	2.36	0.44
6:F:192:LYS:CD	6:F:192:LYS:C	2.90	0.44
7:G:58:LYS:HG2	7:G:58:LYS:H	1.51	0.44
8:H:110:THR:HG23	34:i:795:U:H5'	2.00	0.44
8:H:154:ILE:HG22	8:H:154:ILE:O	2.17	0.44
9:I:144:LYS:N	9:I:144:LYS:HD2	2.33	0.44
10:J:132:GLN:O	10:J:133:ARG:HB2	2.16	0.44
11:K:8:ARG:HG2	11:K:12:TYR:CE1	2.53	0.44
14:N:134:VAL:HG22	14:N:135:LEU:N	2.31	0.44
15:O:20:GLN:HE21	15:O:22:ALA:HB2	1.82	0.44
15:O:124:MET:O	27:a:56:VAL:HG11	2.09	0.44
15:O:147:ARG:HH22	34:i:1848:U:P	2.40	0.44
16:P:44:ARG:NE	16:P:82:ASP:O	2.51	0.44
16:P:59:ARG:HG2	16:P:76:VAL:HG22	1.99	0.44
16:P:75:VAL:CG1	16:P:76:VAL:H	2.31	0.44
16:P:127:LYS:CE	16:P:128:HIS:CA	2.95	0.44
17:Q:42:ILE:HD12	17:Q:51:LEU:HD11	1.95	0.44
19:S:48:ALA:HB2	19:S:70:ILE:HD12	1.98	0.44
19:S:141:ARG:HD3	34:i:1518:C:H5	1.82	0.44
20:T:24:LYS:HD2	20:T:24:LYS:HA	1.70	0.44
20:T:87:VAL:CG1	20:T:88:MET:N	2.80	0.44
23:W:37:PHE:CZ	23:W:103:VAL:HG11	2.53	0.44
23:W:104:LEU:CD1	23:W:106:THR:HG22	2.43	0.44
26:Z:104:ARG:CZ	34:i:1590:U:C5	3.01	0.44
29:c:44:ARG:NE	29:c:58:LEU:HD22	2.31	0.44
31:e:115:ARG:N	31:e:119:VAL:CG2	2.71	0.44
32:f:94:LYS:HA	32:f:94:LYS:HD3	1.40	0.44
33:g:37:ASP:O	33:g:38:LYS:CB	2.66	0.44
33:g:45:LEU:HD13	33:g:52:TYR:HE2	1.83	0.44
34:i:987:G:C6	34:i:1130:G:H4'	2.53	0.44
34:i:1046:A:C5	34:i:1065:U:C2	3.06	0.44
34:i:1413:C:H3'	34:i:1413:C:C6	2.47	0.44
34:i:1546:U:H2'	34:i:1547:G:C8	2.52	0.44
34:i:1683:C:N3	34:i:1684:C:C5	2.85	0.44
34:i:1749:C:C4	34:i:1750:C:C4	3.05	0.44
35:j:28:G:O2'	35:j:29:G:H5'	2.16	0.44
37:n:110:PRO:CG	37:n:112:HIS:CE1	3.01	0.44
1:A:5:LEU:HD13	1:A:6:ASP:CB	2.48	0.44
1:A:57:LYS:HD3	1:A:159:ILE:HD11	1.99	0.44
1:A:77:ILE:HD11	1:A:122:LEU:HD22	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:161:ILE:HG21	1:A:174:MET:CE	2.48	0.44
2:B:31:TYR:CD2	2:B:62:LEU:HD22	2.52	0.44
3:C:231:LYS:HB3	3:C:231:LYS:HE3	1.46	0.44
3:C:244:THR:HG22	3:C:246:PHE:CA	2.43	0.44
4:D:99:ILE:HG13	4:D:100:ALA:N	2.33	0.44
4:D:132:LYS:HD3	4:D:191:PRO:CG	2.47	0.44
4:D:214:LYS:HG3	4:D:215:ASP:CG	2.33	0.44
5:E:59:ASP:OD1	5:E:63:LYS:HE3	2.18	0.44
6:F:115:ALA:HB3	6:F:177:LEU:HD22	1.99	0.44
6:F:154:LEU:CD1	6:F:154:LEU:C	2.88	0.44
7:G:85:ARG:NH1	25:Y:118:ARG:HH21	2.15	0.44
7:G:191:ARG:HG2	7:G:191:ARG:H	1.56	0.44
7:G:225:GLN:C	7:G:227:GLN:N	2.75	0.44
8:H:46:THR:CG2	8:H:63:PHE:CB	2.95	0.44
8:H:106:ARG:CZ	34:i:857:A:N3	2.81	0.44
8:H:117:PRO:O	8:H:119:SER:C	2.59	0.44
9:I:5:ARG:NH1	34:i:374:U:N3	2.66	0.44
9:I:205:ARG:O	9:I:206:LYS:O	2.35	0.44
12:L:97:ARG:HG2	12:L:98:LYS:HA	2.00	0.44
12:L:149:ALA:CA	12:L:156:GLN:NE2	2.58	0.44
14:N:92:ILE:CG2	14:N:150:VAL:HG23	2.45	0.44
14:N:132:LYS:HE3	14:N:132:LYS:C	2.36	0.44
16:P:56:LEU:CD2	16:P:78:THR:HG22	2.44	0.44
16:P:128:HIS:CD2	34:i:1517:A:O4'	2.71	0.44
18:R:17:ILE:O	18:R:71:ILE:CD1	2.66	0.44
19:S:15:VAL:HG11	19:S:68:ILE:HG12	1.99	0.44
20:T:9:VAL:HG12	20:T:10:ASN:N	2.32	0.44
23:W:20:ARG:CZ	34:i:1135:C:H1'	2.47	0.44
25:Y:78:SER:C	25:Y:80:ASP:N	2.75	0.44
26:Z:112:ASN:OD1	26:Z:112:ASN:N	2.28	0.44
34:i:520:U:C5	34:i:521:A:C5	3.05	0.44
34:i:835:C:C2'	34:i:837:G:C4'	2.92	0.44
37:n:100:ALA:HA	37:n:103:LEU:CG	2.44	0.44
1:A:49:ILE:CG2	1:A:50:ASN:N	2.81	0.44
1:A:169:HIS:ND1	1:A:169:HIS:N	2.66	0.44
2:B:105:LEU:CD2	2:B:213:ARG:O	2.66	0.44
2:B:131:ASP:CG	2:B:180:ASP:CB	2.88	0.44
3:C:69:PHE:CZ	3:C:249:SER:CA	2.94	0.44
3:C:93:LYS:HG2	3:C:95:MET:H	1.83	0.44
3:C:189:ILE:HG21	3:C:196:LYS:HA	1.99	0.44
3:C:244:THR:C	3:C:246:PHE:N	2.68	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:152:PRO:HG3	7:G:209:TYR:OH	2.17	0.44
5:E:181:CYS:O	5:E:192:ILE:HG23	2.18	0.44
5:E:258:ALA:HA	5:E:262:SER:OG	2.18	0.44
6:F:38:TYR:N	6:F:38:TYR:HD2	2.15	0.44
7:G:143:LYS:HE3	7:G:143:LYS:CA	2.48	0.44
8:H:38:ALA:H	8:H:41:ARG:HG2	1.82	0.44
8:H:87:PHE:O	8:H:88:SER:C	2.61	0.44
8:H:170:VAL:HA	8:H:173:PHE:CD2	2.48	0.44
9:I:123:ARG:O	9:I:124:LYS:O	2.35	0.44
9:I:140:LYS:N	9:I:145:ILE:HD11	2.32	0.44
10:J:101:LYS:N	10:J:101:LYS:HD2	2.31	0.44
10:J:110:LEU:HD23	10:J:110:LEU:HA	1.83	0.44
12:L:59:LYS:CD	12:L:134:LEU:HD21	2.47	0.44
12:L:148:ALA:O	12:L:150:GLY:N	2.51	0.44
12:L:153:LYS:CB	14:N:131:THR:O	2.66	0.44
13:M:12:MET:HG2	13:M:16:THR:HG22	1.98	0.44
13:M:58:GLU:C	13:M:60:MET:H	2.26	0.44
15:O:131:ASP:OD1	15:O:133:THR:HG23	2.18	0.44
19:S:23:ARG:O	19:S:55:ARG:CD	2.66	0.44
19:S:46:ARG:HD2	20:T:50:GLU:HG2	1.99	0.44
19:S:71:MET:HE3	19:S:99:LEU:HD13	2.00	0.44
21:U:33:GLU:CD	21:U:55:ARG:HH21	2.25	0.44
27:a:10:ARG:HH22	34:i:1861:U:P	2.40	0.44
29:c:14:VAL:HG23	29:c:54:ASP:O	2.18	0.44
33:g:76:GLN:C	33:g:77:PHE:CD1	2.96	0.44
33:g:121:VAL:CG1	33:g:122:SER:N	2.80	0.44
34:i:61:A:H1'	34:i:326:A:N3	2.32	0.44
34:i:148:U:C5	34:i:169:U:C4	3.06	0.44
34:i:522:C:H4'	34:i:523:A:OP1	2.18	0.44
4:D:98:ALA:CA	4:D:188:ILE:HD12	2.48	0.44
5:E:212:ASP:OD2	5:E:214:ASN:N	2.51	0.44
8:H:46:THR:CG2	8:H:63:PHE:HB3	2.47	0.44
8:H:79:LEU:HD22	8:H:83:LEU:HD23	1.99	0.44
9:I:191:GLU:HG2	9:I:192:GLY:H	1.82	0.44
11:K:18:GLU:C	11:K:92:ALA:HB3	2.39	0.44
11:K:40:VAL:CG2	11:K:44:HIS:N	2.77	0.44
13:M:49:LEU:HA	13:M:75:ASN:HB2	1.99	0.44
15:O:17:LEU:CD2	15:O:18:GLY:H	2.27	0.44
15:O:31:CYS:CB	15:O:95:ILE:CG1	2.80	0.44
16:P:18:ARG:HB3	19:S:93:GLY:HA3	2.00	0.44
16:P:62:LYS:CA	16:P:65:LYS:HE2	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:120:HIS:CD2	19:S:124:ARG:CG	3.01	0.44
22:V:55:ILE:CD1	22:V:65:SER:CA	2.86	0.44
24:X:3:LYS:HB3	24:X:3:LYS:HE2	1.59	0.44
25:Y:59:GLY:O	34:i:562:U:H5"	2.18	0.44
27:a:11:ALA:O	27:a:33:ASP:HB2	2.17	0.44
30:d:12:ARG:HD3	30:d:12:ARG:HA	1.75	0.44
31:e:80:LEU:HA	37:n:84:TYR:HE2	1.78	0.44
31:e:115:ARG:HE	31:e:115:ARG:HB2	1.71	0.44
33:g:258:ILE:CD1	33:g:267:VAL:CG1	2.95	0.44
34:i:1160:G:H3'	34:i:1161:G:H21	1.83	0.44
37:n:110:PRO:O	37:n:112:HIS:N	2.50	0.44
1:A:97:THR:HA	1:A:98:PRO:HD3	1.77	0.43
1:A:159:ILE:HD12	1:A:160:ALA:H	1.83	0.43
2:B:124:HIS:CG	2:B:136:HIS:NE2	2.83	0.43
2:B:136:HIS:HB2	2:B:218:LEU:HD11	2.00	0.43
3:C:71:LEU:C	22:V:29:HIS:HE1	2.18	0.43
3:C:89:ASP:HB3	3:C:115:ILE:HG13	2.00	0.43
4:D:43:PRO:O	4:D:44:THR:CB	2.65	0.43
5:E:90:ILE:HD11	5:E:101:LEU:HD11	1.99	0.43
5:E:192:ILE:HG22	5:E:193:GLY:N	2.33	0.43
5:E:205:PHE:CZ	5:E:221:ARG:NH1	2.86	0.43
6:F:49:LEU:HD21	17:Q:46:THR:O	2.18	0.43
7:G:147:LEU:O	7:G:148:SER:CB	2.66	0.43
7:G:151:ASP:O	7:G:152:ASP:HB3	2.18	0.43
8:H:158:LEU:CG	8:H:187:PHE:CD1	3.00	0.43
8:H:169:LYS:HB3	8:H:173:PHE:CZ	2.53	0.43
9:I:98:LYS:O	9:I:99:ASN:CB	2.66	0.43
10:J:91:LYS:C	10:J:93:LYS:N	2.71	0.43
10:J:136:ARG:HH12	10:J:161:LEU:HD12	1.81	0.43
11:K:21:MET:SD	11:K:49:MET:CE	3.06	0.43
12:L:55:TYR:CG	12:L:115:PRO:HG2	2.53	0.43
12:L:149:ALA:HB2	12:L:156:GLN:CB	2.16	0.43
12:L:150:GLY:C	12:L:151:THR:OG1	2.61	0.43
14:N:116:ILE:HA	14:N:119:GLU:CD	2.43	0.43
14:N:125:LEU:HD22	14:N:125:LEU:O	2.19	0.43
16:P:100:LYS:CD	16:P:101:THR:HG23	2.46	0.43
16:P:108:LYS:N	16:P:111:MET:CE	2.72	0.43
16:P:126:VAL:HG13	34:i:1515:G:H21	1.83	0.43
17:Q:17:LYS:HB3	17:Q:18:THR:H	1.70	0.43
17:Q:19:ALA:HB1	17:Q:74:GLY:O	2.13	0.43
17:Q:124:PRO:CD	17:Q:125:ARG:N	2.81	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:24:ARG:C	19:S:55:ARG:HD2	2.42	0.43
20:T:38:LYS:HE2	20:T:45:LEU:HA	1.99	0.43
20:T:111:LYS:HB2	20:T:126:GLN:CD	2.43	0.43
21:U:32:LEU:HD22	21:U:85:HIS:HB2	2.00	0.43
21:U:57:PRO:O	21:U:57:PRO:CD	2.66	0.43
22:V:39:VAL:C	22:V:41:LYS:N	2.76	0.43
22:V:58:ALA:HA	22:V:61:ARG:CD	2.47	0.43
23:W:24:GLN:HA	23:W:63:VAL:O	2.18	0.43
24:X:56:GLY:CA	37:n:84:TYR:CD1	2.93	0.43
24:X:101:LEU:HD23	24:X:101:LEU:HA	1.81	0.43
26:Z:94:LYS:NZ	26:Z:95:GLY:N	2.56	0.43
27:a:44:ILE:HD13	27:a:65:PRO:HG2	2.00	0.43
32:f:136:PHE:O	32:f:138:ARG:CB	2.66	0.43
33:g:150:TRP:HB2	33:g:170:TRP:HD1	1.73	0.43
33:g:239:LEU:CD2	33:g:250:ALA:HB2	2.48	0.43
33:g:293:ALA:HB3	33:g:294:ASP:CG	2.43	0.43
33:g:298:LEU:HD11	33:g:310:TRP:CB	2.48	0.43
34:i:361:A:N6	34:i:382:A:H61	2.16	0.43
34:i:1508:C:H2'	34:i:1509:G:C8	2.52	0.43
37:n:65:LEU:HG	37:n:92:ILE:O	2.11	0.43
37:n:110:PRO:CB	37:n:112:HIS:CE1	3.01	0.43
1:A:112:ILE:HD12	34:i:1346:U:H5'	1.72	0.43
2:B:48:LEU:O	2:B:48:LEU:HD13	2.19	0.43
2:B:147:ASN:HD22	2:B:147:ASN:HA	1.58	0.43
2:B:182:LYS:HA	2:B:182:LYS:HD3	1.62	0.43
5:E:18:TRP:CD2	5:E:46:ILE:CD1	3.02	0.43
6:F:112:LEU:HD23	6:F:112:LEU:O	2.18	0.43
6:F:122:ARG:CB	6:F:123:GLU:OE1	2.66	0.43
6:F:145:ARG:CG	29:c:48:GLY:CA	2.63	0.43
7:G:147:LEU:O	7:G:151:ASP:CG	2.59	0.43
8:H:144:ILE:O	23:W:52:ILE:N	2.51	0.43
8:H:158:LEU:CD2	8:H:187:PHE:CE1	2.93	0.43
9:I:155:ASN:HA	12:L:22:ARG:HD2	1.97	0.43
14:N:38:TYR:CE1	14:N:78:LYS:CD	3.01	0.43
14:N:114:ARG:HD3	14:N:114:ARG:HA	1.44	0.43
15:O:138:ASP:OD1	15:O:138:ASP:O	2.36	0.43
15:O:142:ARG:CZ	27:a:27:ALA:HB2	2.37	0.43
16:P:22:LEU:HA	16:P:25:LEU:CB	2.47	0.43
18:R:88:VAL:O	18:R:88:VAL:HG12	2.15	0.43
18:R:110:ASP:O	18:R:111:PHE:CD2	2.54	0.43
18:R:121:GLN:NE2	18:R:121:GLN:CA	2.76	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:S:39:ARG:O	19:S:43:VAL:HG23	2.18	0.43
20:T:85:ASN:OD1	20:T:91:HIS:NE2	2.51	0.43
21:U:44:LYS:C	21:U:46:LYS:N	2.74	0.43
24:X:107:ARG:O	24:X:108:LYS:CB	2.66	0.43
25:Y:44:LEU:HD12	25:Y:48:TYR:HD2	1.81	0.43
26:Z:62:VAL:HA	26:Z:65:TYR:CD2	2.52	0.43
27:a:2:THR:CG2	34:i:1195:A:H5"	2.48	0.43
27:a:45:VAL:O	27:a:46:GLU:CG	2.66	0.43
33:g:194:TYR:CE1	33:g:196:ASN:ND2	2.84	0.43
33:g:298:LEU:CD1	33:g:298:LEU:C	2.86	0.43
34:i:72:C:N3	34:i:73:C:C6	2.86	0.43
34:i:102:A:H5'	34:i:104:A:C4	2.53	0.43
1:A:102:ARG:NH1	34:i:1375:A:O2'	2.51	0.43
2:B:37:ALA:HA	2:B:42:ARG:HE	1.83	0.43
4:D:8:LYS:O	4:D:12:VAL:HG23	2.18	0.43
5:E:71:LYS:HE2	5:E:74:GLY:HA2	1.97	0.43
7:G:145:PHE:O	7:G:146:ASN:O	2.37	0.43
8:H:107:LYS:HD2	34:i:794:G:C2	2.53	0.43
8:H:117:PRO:O	8:H:119:SER:N	2.50	0.43
8:H:169:LYS:O	8:H:170:VAL:C	2.61	0.43
10:J:80:ARG:HH21	34:i:814:A:H3'	1.82	0.43
10:J:180:LYS:O	10:J:180:LYS:HD3	2.12	0.43
13:M:77:ILE:O	13:M:78:LYS:HB2	2.17	0.43
15:O:92:ALA:C	15:O:93:LEU:HG	2.44	0.43
23:W:105:THR:O	23:W:105:THR:CG2	2.66	0.43
24:X:71:ARG:NE	24:X:82:THR:HG22	2.27	0.43
25:Y:101:LYS:HZ2	25:Y:101:LYS:HG2	1.44	0.43
27:a:52:ASP:O	27:a:56:VAL:HG23	2.18	0.43
27:a:81:SER:HB3	36:k:11:A:O3'	2.18	0.43
32:f:87:THR:HG1	34:i:1503:G:N2	2.15	0.43
33:g:232:GLY:C	33:g:257:LYS:HZ1	2.24	0.43
33:g:282:GLU:OE2	33:g:284:PRO:CD	2.61	0.43
34:i:520:U:C4	34:i:545:A:C2	3.07	0.43
34:i:1209:C:C2'	34:i:1210:A:H5'	2.48	0.43
34:i:1615:A:H1'	34:i:1619:U:OP2	2.17	0.43
35:j:5:G:HO2'	35:j:6:A:H5'	1.82	0.43
35:j:70:C:H2'	35:j:71:U:C6	2.50	0.43
35:j:71:U:H3'	35:j:72:A:H5"	1.99	0.43
1:A:113:GLN:CD	34:i:1347:G:O2'	2.54	0.43
1:A:127:PRO:HD3	1:A:147:LEU:O	2.18	0.43
3:C:109:PHE:CD2	3:C:132:VAL:HG23	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:244:THR:O	3:C:246:PHE:HD2	2.01	0.43
4:D:18:LYS:HD2	4:D:18:LYS:C	2.37	0.43
4:D:216:GLU:OE1	4:D:217:ILE:N	2.51	0.43
6:F:171:GLU:OE2	26:Z:67:LEU:HD23	2.18	0.43
8:H:126:HIS:CE1	8:H:181:THR:HG22	2.54	0.43
9:I:58:LEU:O	9:I:59:ARG:HB2	2.19	0.43
10:J:130:ILE:CG1	10:J:135:ILE:CD1	2.80	0.43
11:K:47:LYS:HA	11:K:50:GLN:HG2	2.00	0.43
11:K:87:PRO:C	11:K:89:ILE:N	2.75	0.43
11:K:88:GLU:O	11:K:89:ILE:C	2.58	0.43
12:L:23:VAL:HG22	12:L:24:LEU:H	1.84	0.43
12:L:82:MET:SD	12:L:85:THR:HG23	2.59	0.43
14:N:21:SER:OG	14:N:22:VAL:N	2.49	0.43
16:P:15:PHE:CE1	19:S:91:LYS:HD3	2.49	0.43
16:P:65:LYS:CG	16:P:66:GLU:N	2.79	0.43
16:P:123:TYR:OH	19:S:120:HIS:NE2	2.51	0.43
17:Q:38:PRO:C	17:Q:40:GLU:H	2.26	0.43
17:Q:124:PRO:HG2	17:Q:125:ARG:HG3	2.00	0.43
17:Q:130:LYS:HG2	34:i:1664:G:C5'	2.48	0.43
18:R:100:PRO:C	18:R:103:LYS:N	2.60	0.43
18:R:104:GLU:OE2	18:R:107:LYS:HD2	2.18	0.43
20:T:5:THR:HG21	20:T:7:LYS:HB2	2.00	0.43
20:T:9:VAL:HG13	20:T:13:GLU:OE2	2.18	0.43
22:V:55:ILE:HG21	22:V:60:ARG:CG	2.47	0.43
24:X:28:LYS:HG2	24:X:32:LEU:HD12	2.00	0.43
24:X:67:ARG:O	24:X:84:PHE:HE1	2.02	0.43
25:Y:29:HIS:O	25:Y:31:GLY:N	2.51	0.43
25:Y:44:LEU:O	25:Y:45:ALA:C	2.60	0.43
25:Y:114:MET:CE	25:Y:121:ALA:O	2.64	0.43
26:Z:53:ALA:O	26:Z:57:LYS:HG3	2.18	0.43
26:Z:62:VAL:HA	26:Z:65:TYR:CZ	2.54	0.43
26:Z:103:HIS:HD2	26:Z:105:ALA:CB	2.14	0.43
27:a:81:SER:N	36:k:12:A:OP1	2.52	0.43
33:g:298:LEU:HD11	33:g:310:TRP:CD2	2.44	0.43
33:g:306:LEU:HD22	33:g:308:ARG:CG	2.44	0.43
34:i:883:U:C6	34:i:884:U:C6	3.06	0.43
34:i:1236:A:C2	34:i:1264:C:C5'	3.00	0.43
34:i:1639:C:H2'	34:i:1640:C:C6	2.54	0.43
34:i:1709:U:H2'	34:i:1710:A:C8	2.53	0.43
1:A:127:PRO:CG	1:A:153:PRO:HD2	2.31	0.43
2:B:99:ASN:ND2	2:B:228:LEU:HD23	2.32	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:166:ARG:CG	3:C:237:THR:HG21	2.49	0.43
3:C:180:LEU:HB3	3:C:207:CYS:SG	2.58	0.43
4:D:108:LYS:HA	4:D:113:LEU:CD2	2.48	0.43
4:D:192:TRP:O	4:D:193:ASP:C	2.51	0.43
5:E:11:ARG:NH1	5:E:21:ASP:OD1	2.51	0.43
5:E:64:ILE:HD11	25:Y:18:LEU:HD11	1.99	0.43
7:G:64:LYS:HD3	7:G:65:GLN:N	2.33	0.43
8:H:103:LYS:O	8:H:103:LYS:HG3	2.18	0.43
9:I:21:TYR:OH	34:i:423:A:H5'	2.18	0.43
9:I:172:LEU:HD22	9:I:172:LEU:N	2.34	0.43
12:L:10:TYR:CE2	12:L:12:LYS:HB3	2.53	0.43
13:M:35:ILE:CB	13:M:61:TYR:HE2	2.28	0.43
14:N:140:LYS:HG2	14:N:141:TYR:N	2.32	0.43
15:O:116:LEU:HD23	15:O:116:LEU:HA	1.77	0.43
16:P:84:ILE:HD11	16:P:115:TYR:CZ	2.52	0.43
17:Q:117:ARG:C	17:Q:118:THR:HG23	2.43	0.43
18:R:67:ARG:NH2	34:i:1460:C:H1'	2.33	0.43
19:S:72:GLN:O	19:S:73:ASN:OD1	2.35	0.43
23:W:30:CYS:C	23:W:34:ILE:HD12	2.44	0.43
23:W:80:ASP:OD2	34:i:799:C:H4'	2.18	0.43
24:X:1:MET:O	24:X:3:LYS:N	2.51	0.43
24:X:62:PRO:HD2	24:X:63:ASN:H	1.84	0.43
25:Y:18:LEU:HB3	25:Y:20:ARG:NE	2.33	0.43
26:Z:57:LYS:O	26:Z:61:GLU:HG3	2.19	0.43
27:a:24:THR:HG21	27:a:72:HIS:H	1.83	0.43
29:c:34:PHE:O	29:c:36:ASP:N	2.47	0.43
31:e:77:HIS:CG	37:n:87:ASN:C	2.94	0.43
32:f:140:TYR:HE1	32:f:146:LEU:O	1.90	0.43
33:g:5:MET:HE1	33:g:312:VAL:CB	2.43	0.43
33:g:5:MET:CE	33:g:312:VAL:CB	2.96	0.43
33:g:95:GLY:O	33:g:96:THR:HG22	2.18	0.43
33:g:131:LEU:HD23	33:g:132:TRP:H	1.81	0.43
34:i:181:A:C8	34:i:182:C:N3	2.85	0.43
1:A:145:ILE:HD12	1:A:159:ILE:CG2	2.27	0.43
3:C:110:LYS:CE	3:C:112:PHE:CZ	2.63	0.43
4:D:6:SER:N	34:i:1573:U:C5	2.87	0.43
4:D:67:ARG:CZ	11:K:95:ARG:HD2	2.48	0.43
5:E:34:GLY:HA3	5:E:83:PRO:HG2	2.00	0.43
5:E:53:LYS:HD3	5:E:53:LYS:HA	1.80	0.43
5:E:152:PRO:CG	7:G:209:TYR:CE1	3.01	0.43
7:G:143:LYS:CE	7:G:143:LYS:CA	2.96	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:162:LEU:HD23	7:G:172:LYS:HZ3	1.76	0.43
8:H:172:THR:CG2	8:H:173:PHE:N	2.81	0.43
10:J:100:LEU:HD11	10:J:104:ASP:CB	2.49	0.43
11:K:89:ILE:HG23	11:K:90:VAL:H	1.83	0.43
12:L:80:MET:HE3	12:L:120:VAL:CG1	2.47	0.43
14:N:53:ILE:O	14:N:57:SER:OG	2.32	0.43
15:O:147:ARG:HH21	15:O:150:ARG:HH21	1.65	0.43
16:P:43:ARG:HA	16:P:43:ARG:HD3	1.38	0.43
16:P:86:LEU:HG	16:P:89:MET:HE3	2.00	0.43
17:Q:7:LEU:O	17:Q:8:GLN:C	2.61	0.43
18:R:24:LEU:HD12	18:R:58:MET:CE	2.43	0.43
19:S:40:TYR:CE1	19:S:44:VAL:CG2	3.01	0.43
19:S:85:ASN:OD1	19:S:86:ARG:N	2.52	0.43
20:T:74:SER:OG	34:i:1582:G:N2	2.50	0.43
20:T:118:ASP:O	20:T:119:TRP:HB2	2.18	0.43
21:U:19:ARG:N	21:U:19:ARG:HD2	2.33	0.43
24:X:125:VAL:C	24:X:127:ASN:H	2.22	0.43
27:a:49:ALA:O	27:a:50:VAL:C	2.61	0.43
33:g:191:HIS:CE1	33:g:195:LEU:HD21	2.52	0.43
34:i:537:G:H2'	34:i:538:C:C6	2.54	0.43
34:i:579:G:H2'	34:i:580:A:OP2	2.19	0.43
2:B:97:LEU:HD22	2:B:232:HIS:CG	2.54	0.43
3:C:58:MET:N	3:C:58:MET:SD	2.92	0.43
4:D:84:VAL:HG22	4:D:85:GLU:N	2.33	0.43
6:F:91:ARG:HD2	17:Q:46:THR:CG2	2.40	0.43
6:F:112:LEU:HD23	6:F:116:ILE:CG1	2.49	0.43
6:F:133:THR:HG21	6:F:135:ARG:NH1	2.33	0.43
7:G:63:MET:HE2	7:G:106:LEU:HD21	2.00	0.43
7:G:131:ARG:HD2	34:i:168:C:H4'	2.01	0.43
7:G:192:ILE:HG13	7:G:193:ALA:H	1.84	0.43
8:H:64:VAL:CG1	8:H:68:GLN:HB2	2.48	0.43
8:H:194:LEU:H	8:H:194:LEU:HD12	1.83	0.43
9:I:42:ARG:HB3	9:I:58:LEU:O	2.19	0.43
9:I:161:LEU:HD22	9:I:161:LEU:HA	1.77	0.43
10:J:110:LEU:CD1	10:J:135:ILE:CD1	2.97	0.43
10:J:136:ARG:NE	10:J:160:SER:HB2	2.33	0.43
11:K:36:ALA:O	11:K:38:LYS:CA	2.66	0.43
11:K:66:HIS:O	11:K:67:PHE:HB2	2.18	0.43
12:L:21:LYS:HD3	12:L:21:LYS:HA	1.73	0.43
12:L:149:ALA:O	12:L:150:GLY:C	2.62	0.43
14:N:54:LEU:O	14:N:60:VAL:HG22	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:N:56:ASP:HB2	28:b:52:THR:OG1	2.18	0.43
15:O:146:ARG:HG3	15:O:146:ARG:NH1	2.34	0.43
15:O:147:ARG:HH21	15:O:150:ARG:CD	2.31	0.43
16:P:44:ARG:CD	34:i:1615:A:OP1	2.66	0.43
19:S:33:ILE:CG2	19:S:36:VAL:CG1	2.97	0.43
20:T:56:ARG:CD	20:T:103:VAL:HG21	2.48	0.43
22:V:41:LYS:HB3	22:V:42:VAL:H	1.55	0.43
24:X:29:LYS:HD3	24:X:29:LYS:HA	1.30	0.43
24:X:41:PHE:CZ	24:X:102:VAL:HG12	2.48	0.43
25:Y:38:THR:O	25:Y:42:GLU:HG3	2.18	0.43
25:Y:98:GLU:O	25:Y:99:LYS:CB	2.67	0.43
27:a:60:ASP:O	27:a:61:ALA:HB3	2.18	0.43
30:d:11:PRO:HG2	34:i:1613:C:N4	2.34	0.43
30:d:42:CYS:O	30:d:45:GLN:N	2.50	0.43
31:e:77:HIS:C	37:n:88:LYS:O	2.59	0.43
31:e:79:SER:CA	37:n:84:TYR:HD2	2.30	0.43
32:f:95:ARG:NE	32:f:95:ARG:HA	2.34	0.43
33:g:49:GLU:C	33:g:50:THR:OG1	2.57	0.43
34:i:1238:U:H4'	34:i:1239:U:H5"	2.01	0.43
34:i:1701:G:H1'	34:i:1844:A:C3'	2.48	0.43
34:i:1750:C:O5'	34:i:1750:C:C6	2.70	0.43
37:n:41:MET:HE3	37:n:71:ILE:HD13	2.01	0.43
37:n:47:LEU:HD22	37:n:71:ILE:HG12	1.99	0.43
2:B:87:ILE:HG23	2:B:101:HIS:CG	2.53	0.43
3:C:192:ALA:HB3	3:C:195:PRO:CG	2.48	0.43
4:D:53:THR:CG2	4:D:91:VAL:CG2	2.95	0.43
4:D:58:VAL:O	4:D:65:ARG:HB2	2.19	0.43
5:E:146:THR:HG23	5:E:146:THR:O	2.18	0.43
5:E:171:ASP:CG	5:E:172:PHE:CD2	2.96	0.43
5:E:201:HIS:HB2	5:E:205:PHE:O	2.19	0.43
6:F:127:ARG:O	6:F:127:ARG:HD2	2.16	0.43
6:F:190:ILE:HG23	6:F:191:LYS:N	2.33	0.43
8:H:14:GLU:HG2	8:H:15:LYS:O	2.18	0.43
8:H:65:PRO:HB2	8:H:67:PRO:HD2	2.00	0.43
10:J:66:LYS:C	10:J:71:LEU:HD11	2.43	0.43
10:J:128:VAL:O	10:J:132:GLN:HG3	2.19	0.43
11:K:1:MET:HG2	11:K:2:LEU:HB3	2.00	0.43
11:K:35:LEU:HB3	11:K:36:ALA:H	1.07	0.43
11:K:51:SER:O	11:K:55:ARG:HG2	2.19	0.43
13:M:35:ILE:CG2	13:M:36:ARG:N	2.80	0.43
15:O:30:VAL:HG13	15:O:47:LEU:HA	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:O:79:GLN:HE22	29:c:6:VAL:HB	1.83	0.43
16:P:88:GLU:HG3	16:P:89:MET:N	2.27	0.43
19:S:54:LYS:HD3	19:S:58:GLU:CD	2.43	0.43
19:S:77:TYR:O	19:S:78:LYS:HB2	2.19	0.43
21:U:44:LYS:C	21:U:47:ASN:HA	2.41	0.43
25:Y:102:THR:HB	25:Y:103:SER:C	2.43	0.43
28:b:81:ARG:H	28:b:82:LYS:HB2	1.83	0.43
33:g:83:TRP:O	33:g:84:ASP:C	2.59	0.43
33:g:212:LYS:CA	33:g:235:ILE:HG13	2.31	0.43
33:g:218:LEU:HD23	33:g:230:LEU:HD13	2.00	0.43
33:g:261:LEU:N	33:g:261:LEU:CD2	2.82	0.43
34:i:23:G:H1	34:i:641:U:H3	1.67	0.43
34:i:549:G:C5	34:i:550:A:C8	3.06	0.43
34:i:1371:G:H8	34:i:1371:G:O5'	2.02	0.43
1:A:143:PRO:HD3	22:V:32:ILE:CG2	2.48	0.43
3:C:68:LEU:O	22:V:15:ARG:NH2	2.52	0.43
5:E:49:ARG:CD	5:E:50:ASN:N	2.72	0.43
6:F:94:LYS:HD2	6:F:94:LYS:O	2.18	0.43
6:F:134:VAL:HB	6:F:136:ARG:NH2	2.34	0.43
9:I:108:PRO:HA	9:I:111:GLN:HG2	2.00	0.43
11:K:14:LEU:CB	11:K:35:LEU:HD21	2.49	0.43
13:M:40:LYS:HZ3	32:f:129:GLY:C	2.27	0.43
14:N:15:ALA:HB1	28:b:26:GLN:NE2	2.34	0.43
14:N:60:VAL:CG2	14:N:60:VAL:O	2.66	0.43
14:N:130:LYS:HD3	14:N:139:TRP:HB3	2.01	0.43
15:O:31:CYS:SG	15:O:93:LEU:HB2	2.58	0.43
15:O:106:LYS:HG3	27:a:69:VAL:HG11	2.01	0.43
16:P:17:TYR:CD1	16:P:18:ARG:HG3	2.54	0.43
17:Q:132:PHE:HB2	21:U:77:TRP:CD1	2.54	0.43
17:Q:146:ARG:HD2	35:j:34:A:OP2	1.82	0.43
18:R:50:ILE:O	18:R:51:ALA:C	2.62	0.43
24:X:128:VAL:HG12	24:X:133:LEU:HD11	2.01	0.43
25:Y:46:LYS:O	25:Y:47:MET:CG	2.67	0.43
29:c:10:LYS:CD	29:c:61:SER:CB	2.66	0.43
30:d:5:GLN:C	30:d:7:TYR:H	2.19	0.43
32:f:117:LEU:O	32:f:118:ARG:CB	2.67	0.43
32:f:147:THR:CG2	32:f:147:THR:O	2.65	0.43
33:g:212:LYS:CG	33:g:235:ILE:HD12	2.43	0.43
33:g:238:ALA:CB	33:g:289:LEU:CD2	2.94	0.43
34:i:370:G:H8	34:i:372:C:OP2	1.90	0.43
34:i:521:A:C2	34:i:543:U:O2	2.72	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:668:U:C2	34:i:1024:A:C6	3.07	0.43
34:i:791:A:H2'	34:i:792:G:C8	2.53	0.43
34:i:841:G:C2'	34:i:842:G:H8	2.32	0.43
34:i:842:G:H8	34:i:842:G:O5'	2.02	0.43
35:j:4:A:C6	35:j:69:G:C6	3.07	0.43
37:n:80:GLY:N	37:n:90:ASP:O	2.45	0.43
2:B:156:ALA:CB	2:B:160:GLN:OE1	2.65	0.43
4:D:6:SER:OG	4:D:8:LYS:HG3	2.19	0.43
4:D:124:ARG:NH1	4:D:128:GLU:OE1	2.51	0.43
4:D:209:SER:O	18:R:40:ILE:N	2.45	0.43
5:E:70:ILE:HG13	5:E:92:ILE:HD12	1.86	0.43
5:E:106:LYS:HA	5:E:106:LYS:HD2	1.56	0.43
6:F:91:ARG:HD3	17:Q:46:THR:CG2	2.49	0.43
7:G:32:MET:HE2	7:G:63:MET:HB3	1.99	0.43
7:G:70:HIS:HA	7:G:98:ARG:HH12	1.83	0.43
9:I:81:VAL:CG1	9:I:91:VAL:HA	2.48	0.43
10:J:34:GLU:O	10:J:123:ILE:HD12	2.19	0.43
10:J:102:ILE:CG2	10:J:106:LEU:CD1	2.93	0.43
10:J:125:HIS:HD1	34:i:516:A:HO2'	0.45	0.43
11:K:52:LEU:HA	11:K:55:ARG:HD3	2.00	0.43
12:L:42:LEU:HB2	12:L:44:PHE:CD2	2.54	0.43
13:M:31:LEU:HG	13:M:89:VAL:HG13	2.00	0.43
13:M:71:GLU:N	13:M:71:GLU:OE1	2.52	0.43
15:O:26:ASN:HB3	15:O:91:THR:HG1	1.83	0.43
15:O:92:ALA:CB	15:O:125:LYS:HB2	2.48	0.43
17:Q:84:ILE:O	17:Q:88:ILE:HG23	2.19	0.43
24:X:27:TYR:CG	24:X:31:HIS:CD2	3.07	0.43
24:X:67:ARG:O	24:X:68:LYS:CB	2.66	0.43
25:Y:58:PHE:HE1	25:Y:72:PHE:CD2	2.33	0.43
32:f:85:TYR:C	32:f:86:THR:HG23	2.43	0.43
32:f:105:TYR:C	32:f:106:TYR:CD2	2.87	0.43
33:g:4:GLN:NE2	33:g:268:ASP:CG	2.69	0.43
33:g:289:LEU:CD2	33:g:289:LEU:N	2.82	0.43
34:i:423:A:C2	34:i:424:G:C5	3.07	0.43
34:i:1192:A:C2	34:i:1193:G:H1'	2.53	0.43
34:i:1546:U:C5	34:i:1572:G:N1	2.87	0.43
36:k:19:U:O3'	37:n:70:TRP:CZ2	2.71	0.43
37:n:77:ILE:HG22	37:n:93:LEU:O	2.19	0.43
1:A:111:GLN:HE22	1:A:116:PHE:HZ	1.67	0.42
1:A:188:THR:O	1:A:188:THR:OG1	2.29	0.42
2:B:206:PRO:O	2:B:207:LEU:CB	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:170:THR:O	3:C:231:LYS:HD3	2.19	0.42
4:D:141:LYS:NZ	4:D:179:GLN:NE2	2.67	0.42
4:D:172:VAL:HG11	34:i:1331:G:H4'	2.00	0.42
5:E:2:ALA:C	5:E:3:ARG:CG	2.92	0.42
6:F:42:LYS:CB	6:F:45:TYR:CA	2.81	0.42
6:F:115:ALA:HB3	6:F:177:LEU:CD2	2.49	0.42
7:G:46:LYS:HG2	7:G:118:GLU:OE1	2.19	0.42
7:G:79:LYS:HA	7:G:86:PRO:HG2	2.01	0.42
9:I:42:ARG:C	9:I:43:ILE:HG13	2.44	0.42
10:J:37:LEU:CD2	10:J:43:VAL:CG2	2.96	0.42
10:J:134:HIS:HE1	34:i:552:U:OP1	2.00	0.42
11:K:71:LEU:HG	11:K:76:ILE:HD13	2.01	0.42
12:L:71:ARG:NH1	34:i:343:C:C4'	2.82	0.42
12:L:99:TYR:CZ	24:X:14:ARG:CA	2.71	0.42
13:M:27:ILE:CG2	13:M:28:HIS:N	2.81	0.42
13:M:104:VAL:CG2	13:M:105:GLY:N	2.82	0.42
14:N:38:TYR:CD2	14:N:78:LYS:HG3	2.53	0.42
17:Q:40:GLU:OE1	17:Q:40:GLU:HA	2.18	0.42
18:R:41:ILE:HG23	18:R:42:PRO:HD3	2.00	0.42
18:R:104:GLU:HA	18:R:107:LYS:HB2	2.00	0.42
20:T:141:ALA:O	20:T:142:LYS:CB	2.64	0.42
21:U:48:LEU:O	21:U:49:LYS:CB	2.66	0.42
21:U:82:MET:CE	30:d:51:GLY:CA	2.95	0.42
23:W:11:LEU:CA	23:W:14:ILE:HG12	2.49	0.42
23:W:107:SER:HA	34:i:858:A:C5	2.54	0.42
27:a:41:ILE:CG2	27:a:68:TYR:CD1	2.98	0.42
27:a:45:VAL:CG2	27:a:46:GLU:H	2.27	0.42
27:a:66:LYS:CB	27:a:68:TYR:CE2	3.00	0.42
30:d:30:LEU:HD22	30:d:31:ILE:N	2.33	0.42
34:i:478:U:H5'	34:i:479:A:H5'	2.01	0.42
36:k:21:U:O5'	37:n:67:LYS:NZ	2.48	0.42
37:n:65:LEU:O	37:n:69:VAL:HB	2.18	0.42
1:A:58:LEU:CD2	1:A:58:LEU:C	2.92	0.42
1:A:111:GLN:HB3	3:C:48:VAL:CG1	2.46	0.42
4:D:25:LEU:HD22	4:D:25:LEU:N	2.34	0.42
4:D:134:CYS:O	4:D:153:VAL:HG13	2.18	0.42
4:D:162:ASP:OD2	4:D:166:TYR:CE2	2.71	0.42
4:D:193:ASP:OD1	4:D:203:PRO:C	2.63	0.42
4:D:227:LYS:CE	33:g:187:ASN:HD22	2.28	0.42
5:E:118:GLU:HA	5:E:121:TYR:CE2	2.54	0.42
6:F:124:ASP:O	6:F:200:ALA:CB	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:121:ILE:CB	7:G:122:PRO:HD3	2.48	0.42
7:G:148:SER:C	7:G:150:GLU:N	2.77	0.42
8:H:37:LYS:HG3	8:H:38:ALA:N	2.29	0.42
8:H:80:VAL:HA	8:H:83:LEU:HG	2.00	0.42
9:I:140:LYS:HD3	9:I:141:ARG:N	2.33	0.42
9:I:143:LYS:HE2	9:I:143:LYS:HB3	1.83	0.42
9:I:145:ILE:C	9:I:148:LYS:HG3	2.43	0.42
10:J:36:GLY:HA2	31:e:109:ARG:HH11	1.84	0.42
10:J:122:SER:CB	34:i:517:C:OP1	2.67	0.42
11:K:1:MET:HG2	11:K:2:LEU:CB	2.49	0.42
17:Q:49:TYR:O	17:Q:53:GLU:N	2.50	0.42
19:S:82:TRP:CG	34:i:1562:G:C5	3.07	0.42
21:U:48:LEU:O	21:U:49:LYS:CG	2.67	0.42
24:X:95:GLU:HG3	24:X:140:ARG:NH2	2.20	0.42
26:Z:84:ALA:O	26:Z:85:ARG:C	2.63	0.42
28:b:15:GLU:O	28:b:23:ARG:NE	2.44	0.42
32:f:87:THR:CA	34:i:1503:G:H22	2.32	0.42
32:f:136:PHE:HD1	32:f:137:ASP:H	1.67	0.42
33:g:140:TYR:CE1	33:g:182:CYS:SG	2.98	0.42
33:g:228:TYR:HH	33:g:261:LEU:HD12	1.84	0.42
34:i:1784:A:C2	34:i:1785:A:C4	3.07	0.42
35:j:12:G:N1	35:j:23:G:C6	2.87	0.42
35:j:40:C:C2	35:j:41:A:C8	3.07	0.42
37:n:65:LEU:CD2	37:n:93:LEU:HA	2.43	0.42
1:A:7:VAL:HG22	1:A:8:LEU:N	2.33	0.42
2:B:56:LYS:CE	2:B:56:LYS:HA	2.48	0.42
6:F:63:LYS:HE2	34:i:1672:U:OP2	2.19	0.42
8:H:87:PHE:CD2	8:H:90:LYS:HD2	2.54	0.42
8:H:106:ARG:HD2	34:i:857:A:C5	2.54	0.42
8:H:126:HIS:O	8:H:130:LEU:HD22	2.19	0.42
9:I:108:PRO:C	9:I:111:GLN:HG2	2.44	0.42
10:J:50:LEU:CG	10:J:102:ILE:HD13	2.49	0.42
11:K:10:ALA:HA	11:K:13:GLU:HG2	2.01	0.42
11:K:49:MET:CB	11:K:69:TRP:CE2	3.02	0.42
12:L:22:ARG:HB2	12:L:23:VAL:H	1.66	0.42
15:O:34:PHE:CD2	15:O:98:ARG:NH1	2.87	0.42
16:P:34:MET:HE2	16:P:34:MET:HB2	1.75	0.42
16:P:40:ARG:HD2	16:P:40:ARG:O	2.19	0.42
18:R:104:GLU:CD	18:R:107:LYS:HD2	2.44	0.42
19:S:40:TYR:CD1	19:S:97:GLN:NE2	2.84	0.42
20:T:7:LYS:HE3	34:i:1426:C:O2'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:28:LEU:C	20:T:29:LYS:HG2	2.44	0.42
23:W:53:ILE:CG2	28:b:25:VAL:HG21	2.48	0.42
23:W:98:GLN:HE21	23:W:98:GLN:HB3	1.63	0.42
24:X:105:PHE:CD2	24:X:112:VAL:HG23	2.51	0.42
25:Y:14:THR:HG23	34:i:837:G:OP2	2.19	0.42
25:Y:47:MET:CE	34:i:833:A:C5	3.02	0.42
25:Y:52:PRO:C	25:Y:54:VAL:H	2.26	0.42
26:Z:71:ALA:O	26:Z:74:SER:OG	2.24	0.42
32:f:146:LEU:CD2	34:i:1288:C:H5'	2.49	0.42
34:i:278:U:C6	34:i:278:U:H5"	2.55	0.42
34:i:792:G:H3'	34:i:793:C:H5'	2.01	0.42
34:i:1244:U:O4'	35:j:33:C:H4'	2.17	0.42
34:i:1407:G:C6	34:i:1408:C:C2	3.06	0.42
34:i:1816:A:C2	34:i:1817:A:C6	3.06	0.42
1:A:16:LEU:HB2	1:A:17:LYS:NZ	2.35	0.42
1:A:75:SER:HB2	1:A:122:LEU:CD2	2.46	0.42
1:A:123:VAL:HG12	1:A:175:TRP:CH2	2.55	0.42
2:B:93:GLY:HA2	2:B:94:LYS:HD3	2.01	0.42
3:C:67:TYR:CD1	22:V:27:LYS:NZ	2.82	0.42
3:C:87:LEU:CD2	3:C:87:LEU:C	2.91	0.42
4:D:101:GLN:O	4:D:104:SER:HB2	2.19	0.42
5:E:231:GLY:C	5:E:233:LYS:H	2.28	0.42
6:F:38:TYR:HD1	6:F:144:LEU:HD13	1.84	0.42
7:G:122:PRO:O	7:G:126:ASP:HB3	2.19	0.42
8:H:69:LEU:O	8:H:73:GLN:CG	2.66	0.42
10:J:50:LEU:CB	10:J:102:ILE:CD1	2.97	0.42
14:N:49:GLN:HG2	14:N:49:GLN:H	1.59	0.42
15:O:92:ALA:O	15:O:93:LEU:HD23	2.19	0.42
19:S:30:ILE:C	19:S:32:ALA:H	2.27	0.42
20:T:47:PRO:CG	20:T:52:TRP:CD1	3.02	0.42
24:X:91:LEU:CD2	31:e:83:VAL:HG21	2.49	0.42
25:Y:44:LEU:HD12	25:Y:48:TYR:CD2	2.50	0.42
26:Z:104:ARG:HD3	34:i:1589:A:C8	2.54	0.42
28:b:31:TYR:CE1	28:b:81:ARG:NH1	2.87	0.42
33:g:171:ASP:O	33:g:172:LYS:HB3	2.19	0.42
33:g:208:ALA:HA	33:g:217:MET:O	2.19	0.42
34:i:342:U:H2'	34:i:343:C:O4'	2.19	0.42
34:i:1206:G:H2'	34:i:1207:G:C4'	2.47	0.42
36:k:20:U:H5'	37:n:70:TRP:HH2	1.80	0.42
1:A:5:LEU:HD13	1:A:6:ASP:CA	2.46	0.42
1:A:5:LEU:CD1	1:A:6:ASP:CB	2.98	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:90:PHE:HD1	1:A:179:ALA:HB2	1.83	0.42
3:C:51:LEU:HD23	3:C:60:ILE:CD1	2.46	0.42
3:C:134:THR:CG2	3:C:135:ALA:N	2.82	0.42
3:C:240:LEU:CD1	3:C:240:LEU:N	2.83	0.42
6:F:112:LEU:O	6:F:116:ILE:CG1	2.67	0.42
6:F:154:LEU:HD12	6:F:155:CYS:SG	2.58	0.42
6:F:184:SER:C	6:F:186:ASN:H	2.26	0.42
8:H:18:GLU:O	8:H:21:SER:HB2	2.18	0.42
8:H:83:LEU:CD1	8:H:92:VAL:CG1	2.94	0.42
8:H:121:THR:HG22	8:H:124:ALA:HB2	2.02	0.42
9:I:33:ALA:HB2	34:i:368:U:O2'	2.19	0.42
9:I:73:THR:HG21	34:i:293:A:H1'	2.02	0.42
9:I:149:TYR:CD1	9:I:152:ARG:NH1	2.68	0.42
11:K:2:LEU:CD1	11:K:3:MET:N	2.21	0.42
13:M:40:LYS:NZ	32:f:129:GLY:C	2.77	0.42
15:O:22:ALA:C	15:O:24:GLY:N	2.56	0.42
15:O:143:LYS:HG3	15:O:144:GLY:N	2.34	0.42
16:P:100:LYS:HD2	16:P:101:THR:N	2.35	0.42
19:S:8:LYS:HZ2	19:S:8:LYS:HG2	1.42	0.42
19:S:15:VAL:CG1	19:S:16:LEU:N	2.82	0.42
19:S:41:ALA:O	19:S:45:LEU:HG	2.19	0.42
19:S:136:THR:OG1	34:i:1515:G:C5'	2.67	0.42
21:U:66:ARG:CZ	21:U:75:LYS:HA	2.49	0.42
23:W:29:PRO:O	23:W:30:CYS:CB	2.66	0.42
24:X:62:PRO:CD	24:X:63:ASN:N	2.83	0.42
25:Y:93:ARG:O	25:Y:93:ARG:CD	2.65	0.42
26:Z:77:LEU:C	26:Z:78:LYS:HG2	2.39	0.42
31:e:80:LEU:C	31:e:82:ARG:H	2.27	0.42
33:g:258:ILE:CD1	33:g:267:VAL:HB	2.50	0.42
34:i:328:G:H2'	34:i:329:A:C8	2.54	0.42
34:i:491:C:O2	34:i:491:C:C2'	2.67	0.42
34:i:903:G:O6	34:i:904:A:C6	2.71	0.42
34:i:1209:C:H2'	34:i:1210:A:H5'	2.01	0.42
34:i:1619:U:H3'	34:i:1620:U:H6	1.83	0.42
34:i:1654:U:O2	34:i:1659:A:N1	2.53	0.42
35:j:42:G:N2	35:j:43:A:C4	2.88	0.42
35:j:71:U:H3'	35:j:72:A:C5'	2.49	0.42
1:A:186:ARG:NH1	1:A:187:GLY:N	2.67	0.42
2:B:55:THR:O	2:B:56:LYS:CB	2.66	0.42
2:B:113:MET:CE	2:B:211:PHE:HZ	2.13	0.42
2:B:148:ASN:CA	18:R:124:VAL:N	2.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:50:LYS:C	3:C:258:LEU:HD13	2.44	0.42
5:E:45:ILE:HD12	5:E:80:ILE:CG2	2.49	0.42
5:E:92:ILE:CG2	5:E:97:GLU:OE1	2.66	0.42
5:E:151:ASP:HA	5:E:152:PRO:HD3	1.44	0.42
8:H:65:PRO:O	8:H:66:VAL:HB	2.20	0.42
11:K:16:PHE:CZ	11:K:76:ILE:O	2.73	0.42
12:L:10:TYR:CE2	12:L:12:LYS:NZ	2.79	0.42
12:L:82:MET:SD	12:L:85:THR:CG2	3.08	0.42
14:N:56:ASP:OD1	28:b:52:THR:OG1	2.32	0.42
15:O:28:PHE:CE1	15:O:92:ALA:CB	3.02	0.42
15:O:129:ILE:HG13	27:a:65:PRO:HD3	1.99	0.42
16:P:67:ALA:HB2	16:P:73:PRO:CG	2.50	0.42
17:Q:13:PHE:CE2	34:i:1393:U:N3	2.88	0.42
18:R:13:ALA:HB2	18:R:54:VAL:CG2	2.48	0.42
19:S:28:PHE:CE1	34:i:1598:G:C8	3.08	0.42
19:S:36:VAL:HA	19:S:40:TYR:HD2	1.84	0.42
20:T:28:LEU:HD23	20:T:28:LEU:HA	1.58	0.42
22:V:45:ARG:HA	22:V:45:ARG:HD2	1.65	0.42
23:W:96:SER:OG	23:W:98:GLN:CG	2.68	0.42
25:Y:33:ALA:O	25:Y:34:THR:HB	2.19	0.42
26:Z:91:LEU:HD21	26:Z:96:LEU:HD12	1.98	0.42
29:c:65:ALA:HB1	29:c:66:ARG:H	1.60	0.42
33:g:17:TRP:CD2	33:g:36:ARG:CZ	3.02	0.42
33:g:241:PHE:O	33:g:291:TRP:CD1	2.73	0.42
34:i:207:U:H2'	34:i:208:G:O5'	2.19	0.42
34:i:1206:G:C2'	34:i:1207:G:O5'	2.68	0.42
34:i:1393:U:H4'	34:i:1394:G:C5'	2.50	0.42
34:i:1531:G:H2'	34:i:1532:A:H8	1.84	0.42
35:j:18:G:C2	35:j:56:G:N3	2.88	0.42
1:A:66:VAL:CG1	1:A:186:ARG:HD3	2.47	0.42
1:A:113:GLN:CD	34:i:1347:G:H4'	2.45	0.42
1:A:124:VAL:HG21	1:A:134:LEU:HD21	2.00	0.42
1:A:141:ASN:ND2	22:V:29:HIS:CA	2.78	0.42
2:B:130:THR:HG21	2:B:179:ASN:N	2.23	0.42
2:B:161:VAL:HG12	2:B:165:ARG:CZ	2.49	0.42
3:C:61:LYS:CA	3:C:82:PHE:HE1	2.30	0.42
3:C:127:LYS:CD	3:C:142:LEU:HD11	2.42	0.42
4:D:217:ILE:O	4:D:218:LEU:CB	2.67	0.42
7:G:159:ARG:NH2	7:G:161:PRO:N	2.68	0.42
7:G:175:LYS:NZ	34:i:306:C:H4'	2.35	0.42
8:H:23:ILE:HG23	8:H:24:SER:N	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:31:GLU:O	8:H:37:LYS:CB	2.68	0.42
9:I:139:LYS:HD2	9:I:145:ILE:HD12	2.01	0.42
9:I:197:PHE:HE1	12:L:8:ARG:O	2.03	0.42
13:M:61:TYR:HH	13:M:108:CYS:CB	2.32	0.42
15:O:38:ASN:O	15:O:39:ASP:HB2	2.19	0.42
15:O:72:TYR:CB	29:c:63:ARG:HH22	2.32	0.42
15:O:98:ARG:HE	15:O:134:PRO:HD3	1.84	0.42
16:P:10:ARG:NH2	16:P:11:THR:HG22	2.26	0.42
16:P:92:SER:OG	16:P:93:MET:N	2.52	0.42
17:Q:42:ILE:CG1	17:Q:51:LEU:HD22	2.46	0.42
17:Q:138:ARG:HH12	34:i:1641:C:C3'	2.31	0.42
19:S:111:LEU:HD13	19:S:125:HIS:NE2	2.35	0.42
20:T:75:MET:CA	20:T:78:ILE:HG22	2.49	0.42
20:T:123:LEU:CD2	20:T:123:LEU:N	2.82	0.42
21:U:61:LEU:O	21:U:81:GLN:HA	2.19	0.42
22:V:46:PHE:O	22:V:46:PHE:CG	2.72	0.42
23:W:24:GLN:N	23:W:24:GLN:OE1	2.53	0.42
23:W:37:PHE:CE1	23:W:103:VAL:CG1	3.03	0.42
26:Z:92:LEU:HD21	26:Z:109:TYR:HE1	1.69	0.42
32:f:89:LYS:HB2	32:f:89:LYS:HE2	1.44	0.42
33:g:21:ILE:CG2	33:g:22:ALA:N	2.82	0.42
33:g:143:GLN:HE21	33:g:143:GLN:HB2	1.33	0.42
33:g:299:PHE:CD1	33:g:309:VAL:HG12	2.54	0.42
34:i:36:U:C2	34:i:510:A:C2	3.07	0.42
34:i:368:U:C4	34:i:369:C:C4	3.08	0.42
34:i:1581:U:H3'	34:i:1582:G:C5'	2.49	0.42
37:n:112:HIS:CG	37:n:112:HIS:O	2.73	0.42
1:A:106:GLY:O	1:A:109:THR:O	2.38	0.42
2:B:60:ASP:C	2:B:62:LEU:H	2.27	0.42
3:C:48:VAL:HG23	3:C:75:GLU:HG2	2.01	0.42
5:E:7:LYS:HA	5:E:7:LYS:HD2	1.38	0.42
5:E:211:LYS:HE3	5:E:217:SER:OG	2.20	0.42
6:F:112:LEU:CB	6:F:177:LEU:HD11	2.50	0.42
6:F:123:GLU:CB	29:c:59:LEU:CD1	2.97	0.42
7:G:74:ARG:CD	7:G:94:ARG:HD2	2.27	0.42
8:H:16:PRO:O	8:H:20:GLU:OE2	2.37	0.42
8:H:43:LEU:HD13	8:H:72:PHE:HE1	1.72	0.42
8:H:145:ARG:NH1	8:H:155:LYS:NZ	2.57	0.42
9:I:139:LYS:CD	9:I:145:ILE:CD1	2.98	0.42
9:I:144:LYS:HD2	9:I:144:LYS:HA	1.86	0.42
9:I:154:LYS:C	9:I:154:LYS:HZ3	2.25	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:K:18:GLU:O	11:K:92:ALA:HB1	2.04	0.42
11:K:40:VAL:HG23	11:K:44:HIS:H	1.84	0.42
11:K:49:MET:HB3	11:K:69:TRP:CE2	2.55	0.42
11:K:97:SER:C	11:K:98:ARG:O	2.59	0.42
12:L:126:VAL:HG23	12:L:145:VAL:HA	2.02	0.42
14:N:36:GLN:O	14:N:40:LEU:HG	2.19	0.42
14:N:139:TRP:C	14:N:139:TRP:HE3	2.27	0.42
19:S:71:MET:HG3	19:S:99:LEU:CD1	2.48	0.42
20:T:78:ILE:CG2	20:T:79:TYR:N	2.82	0.42
21:U:97:ILE:O	21:U:101:ILE:HD12	2.20	0.42
23:W:11:LEU:HA	23:W:14:ILE:CD1	2.50	0.42
23:W:51:GLU:CD	28:b:8:LEU:HD13	2.45	0.42
24:X:23:HIS:O	24:X:24:ASP:C	2.61	0.42
24:X:58:GLU:O	24:X:59:ALA:O	2.38	0.42
26:Z:52:LYS:C	26:Z:54:THR:N	2.77	0.42
27:a:66:LYS:HB2	27:a:68:TYR:CZ	2.55	0.42
29:c:18:LEU:HB3	29:c:29:GLN:HB3	2.00	0.42
29:c:44:ARG:NH1	29:c:58:LEU:HD22	2.34	0.42
31:e:113:ASN:HB2	34:i:542:G:OP1	2.19	0.42
32:f:143:LYS:HB2	34:i:1306:U:H4'	2.00	0.42
33:g:31:ILE:HG23	33:g:43:TRP:CD1	2.54	0.42
34:i:199:G:C4	34:i:200:U:C5	3.08	0.42
34:i:742:C:C2	34:i:792:G:N2	2.87	0.42
34:i:1407:G:O6	34:i:1408:C:C4	2.73	0.42
35:j:48:G:C2	35:j:49:A:N3	2.88	0.42
35:j:51:G:C6	35:j:62:A:N6	2.87	0.42
2:B:30:TRP:CD1	15:O:17:LEU:HD21	2.55	0.42
2:B:71:LEU:C	2:B:79:VAL:CG2	2.93	0.42
2:B:208:HIS:NE2	2:B:209:ASP:OD2	2.53	0.42
3:C:72:PRO:N	22:V:29:HIS:CE1	2.87	0.42
3:C:113:VAL:HG12	3:C:114:ALA:N	2.35	0.42
3:C:149:PRO:HD2	3:C:149:PRO:O	2.19	0.42
4:D:58:VAL:CG2	4:D:59:LEU:N	2.83	0.42
4:D:226:GLN:HB3	4:D:227:LYS:H	1.59	0.42
5:E:67:GLN:C	5:E:68:ARG:CG	2.88	0.42
5:E:153:LEU:H	5:E:153:LEU:HG	1.42	0.42
6:F:20:PHE:HB3	6:F:23:TRP:CB	2.46	0.42
6:F:61:PHE:HZ	29:c:51:ARG:CA	2.21	0.42
6:F:121:PRO:CA	6:F:193:LYS:HE3	2.39	0.42
7:G:122:PRO:CD	7:G:123:GLY:N	2.83	0.42
8:H:117:PRO:HD2	8:H:120:ARG:CB	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:H:118:ARG:C	8:H:120:ARG:N	2.75	0.42
8:H:140:VAL:HG21	8:H:159:ASP:HA	2.01	0.42
9:I:163:GLU:O	9:I:166:PHE:HB2	2.20	0.42
9:I:191:GLU:HG2	9:I:192:GLY:N	2.34	0.42
11:K:9:ILE:HG23	11:K:10:ALA:N	2.35	0.42
11:K:14:LEU:HB2	11:K:35:LEU:HD21	2.02	0.42
11:K:85:LEU:HG	11:K:85:LEU:H	1.54	0.42
11:K:85:LEU:HD13	11:K:89:ILE:CD1	2.48	0.42
15:O:103:ASN:O	15:O:104:ARG:O	2.38	0.42
16:P:41:GLN:NE2	16:P:84:ILE:HD13	2.34	0.42
18:R:100:PRO:CD	18:R:119:VAL:HG13	2.48	0.42
19:S:88:LYS:H	19:S:95:TYR:HE1	1.61	0.42
20:T:75:MET:C	20:T:78:ILE:HG22	2.43	0.42
20:T:77:LYS:HD2	20:T:94:ARG:HH11	1.77	0.42
20:T:124:THR:OG1	20:T:125:PRO:HD2	2.19	0.42
24:X:32:LEU:O	24:X:37:LYS:NZ	2.52	0.42
27:a:45:VAL:CB	27:a:53:ILE:CD1	2.97	0.42
27:a:75:VAL:HG12	27:a:79:ILE:CD1	2.50	0.42
32:f:146:LEU:HD22	34:i:1288:C:H4'	2.02	0.42
33:g:34:ALA:HB1	33:g:66:VAL:CG1	2.47	0.42
33:g:218:LEU:HD13	33:g:218:LEU:HA	1.94	0.42
33:g:261:LEU:HA	33:g:264:LYS:HE3	1.99	0.42
34:i:444:U:H2'	34:i:445:A:C8	2.54	0.42
34:i:1537:C:C5	34:i:1538:U:C5	3.08	0.42
1:A:102:ARG:O	1:A:103:PHE:C	2.63	0.42
2:B:146:CYS:O	2:B:148:ASN:N	2.51	0.42
3:C:53:ARG:NH1	3:C:258:LEU:O	2.51	0.42
3:C:63:LEU:HD12	3:C:83:LEU:HD22	2.02	0.42
3:C:154:TYR:CG	3:C:158:LYS:HB3	2.55	0.42
4:D:41:VAL:O	4:D:41:VAL:HG13	2.19	0.42
5:E:25:SER:OG	34:i:485:U:H1'	2.20	0.42
5:E:195:ILE:O	5:E:196:THR:OG1	2.36	0.42
6:F:45:TYR:O	6:F:46:ALA:C	2.63	0.42
6:F:86:LYS:O	6:F:90:VAL:HG23	2.19	0.42
6:F:112:LEU:O	6:F:116:ILE:HD13	2.18	0.42
6:F:115:ALA:HB3	6:F:116:ILE:HD13	2.02	0.42
7:G:170:ARG:CD	7:G:171:THR:O	2.67	0.42
9:I:55:TYR:CZ	34:i:296:U:H1'	2.55	0.42
11:K:41:PRO:O	11:K:42:ASN:C	2.62	0.42
12:L:45:LYS:O	12:L:47:PRO:HD3	2.20	0.42
12:L:146:THR:CG2	12:L:147:LYS:N	2.81	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:26:LEU:HD11	13:M:90:GLY:N	2.33	0.42
13:M:76:LEU:HD23	13:M:76:LEU:HA	1.79	0.42
13:M:93:LYS:O	13:M:94:ILE:C	2.61	0.42
14:N:99:ARG:O	14:N:103:GLU:HG2	2.20	0.42
15:O:91:THR:C	15:O:124:MET:CE	2.92	0.42
16:P:28:MET:SD	16:P:32:GLN:OE1	2.78	0.42
16:P:60:LEU:HD13	16:P:89:MET:HG3	2.02	0.42
17:Q:80:GLN:O	17:Q:81:ILE:C	2.62	0.42
19:S:25:LYS:HG3	19:S:54:LYS:O	2.19	0.42
20:T:47:PRO:HG2	20:T:52:TRP:CD1	2.55	0.42
22:V:41:LYS:HD2	22:V:41:LYS:HA	1.39	0.42
23:W:15:ASN:O	23:W:19:LYS:HG3	2.20	0.42
24:X:58:GLU:OE2	37:n:60:HIS:CD2	2.73	0.42
24:X:140:ARG:C	24:X:141:PRO:O	2.59	0.42
25:Y:18:LEU:C	25:Y:19:GLN:OE1	2.63	0.42
27:a:37:LYS:HG2	27:a:72:HIS:ND1	2.35	0.42
28:b:64:CYS:SG	28:b:73:LEU:CG	2.97	0.42
28:b:83:GLN:NE2	28:b:83:GLN:CA	2.83	0.42
29:c:59:LEU:O	29:c:60:GLU:C	2.62	0.42
31:e:82:ARG:HH11	37:n:82:ARG:NH2	2.17	0.42
32:f:104:LYS:HA	32:f:104:LYS:HD3	1.40	0.42
33:g:26:GLN:CB	33:g:74:ASP:CA	2.97	0.42
33:g:48:ASP:OD2	33:g:49:GLU:CA	2.67	0.42
33:g:280:LYS:HZ2	33:g:280:LYS:HG3	1.51	0.42
34:i:537:G:H2'	34:i:538:C:C5	2.54	0.42
34:i:1125:G:C6	34:i:1126:G:C6	3.08	0.42
34:i:1283:A:N3	34:i:1311:U:C5	2.88	0.42
35:j:4:A:O2'	35:j:5:G:C8	2.69	0.42
37:n:71:ILE:O	37:n:71:ILE:CD1	2.68	0.42
37:n:112:HIS:O	37:n:112:HIS:CD2	2.73	0.42
1:A:9:GLN:CB	1:A:10:MET:SD	2.90	0.41
1:A:57:LYS:HD2	1:A:160:ALA:O	2.20	0.41
2:B:87:ILE:O	2:B:87:ILE:HG13	2.19	0.41
4:D:29:LEU:CD2	4:D:65:ARG:NH2	2.83	0.41
4:D:98:ALA:HA	4:D:188:ILE:CD1	2.50	0.41
6:F:20:PHE:CD2	6:F:23:TRP:CD1	3.07	0.41
6:F:44:LYS:CB	6:F:45:TYR:CD1	2.99	0.41
6:F:95:HIS:NE2	26:Z:103:HIS:HB2	2.35	0.41
6:F:127:ARG:O	6:F:127:ARG:HD3	2.16	0.41
6:F:190:ILE:CG2	6:F:191:LYS:N	2.82	0.41
8:H:65:PRO:CG	8:H:68:GLN:CD	2.90	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:I:55:TYR:CE2	34:i:296:U:O2	2.73	0.41
9:I:93:THR:O	9:I:94:LYS:HB2	2.20	0.41
9:I:145:ILE:O	9:I:149:TYR:CD2	2.73	0.41
10:J:79:ARG:CD	10:J:83:ARG:HD2	2.49	0.41
10:J:82:VAL:HG21	10:J:92:MET:HG2	2.02	0.41
10:J:139:LYS:HD2	10:J:139:LYS:HA	1.52	0.41
11:K:31:LYS:HA	11:K:40:VAL:O	2.20	0.41
11:K:37:ASP:CA	11:K:38:LYS:HD3	2.50	0.41
14:N:38:TYR:CZ	14:N:78:LYS:CG	3.02	0.41
15:O:32:HIS:O	15:O:43:HIS:HB3	2.20	0.41
16:P:5:GLU:O	16:P:6:GLN:HG3	2.16	0.41
16:P:15:PHE:HD1	16:P:15:PHE:HA	1.63	0.41
16:P:17:TYR:CE2	16:P:25:LEU:HD21	2.54	0.41
17:Q:102:GLU:OE1	33:g:55:PRO:N	2.31	0.41
17:Q:123:ASP:HA	17:Q:124:PRO:HD3	1.87	0.41
17:Q:131:LYS:O	17:Q:132:PHE:C	2.63	0.41
19:S:39:ARG:CZ	20:T:38:LYS:HD3	2.49	0.41
20:T:33:TRP:HB2	20:T:36:THR:HG22	2.02	0.41
20:T:77:LYS:CE	20:T:92:PHE:CE2	3.03	0.41
20:T:129:ARG:CB	34:i:1413:C:H4'	2.50	0.41
21:U:68:THR:HG22	21:U:69:PRO:HD2	2.01	0.41
24:X:58:GLU:CD	37:n:60:HIS:CD2	2.98	0.41
24:X:70:VAL:CG1	24:X:71:ARG:N	2.82	0.41
28:b:36:LYS:NZ	28:b:43:ILE:HD11	2.34	0.41
28:b:62:VAL:O	28:b:63:LEU:HB2	2.20	0.41
31:e:105:ARG:O	31:e:109:ARG:HG2	2.19	0.41
33:g:142:VAL:C	33:g:143:GLN:O	2.59	0.41
33:g:163:PRO:HB2	33:g:179:LEU:CG	2.50	0.41
33:g:198:VAL:CG1	33:g:199:THR:N	2.82	0.41
34:i:181:A:N9	34:i:182:C:C6	2.88	0.41
34:i:603:C:C5	34:i:617:U:C4	3.08	0.41
34:i:683:G:C2	34:i:684:A:C2	3.06	0.41
34:i:1119:C:O2	34:i:1119:C:H2'	2.19	0.41
34:i:1297:A:C2'	34:i:1298:G:H5"	2.50	0.41
35:j:1:A:C6	35:j:72:A:N3	2.84	0.41
35:j:15:G:H22	35:j:47:C:N4	2.02	0.41
37:n:103:LEU:O	37:n:106:TYR:HB2	2.20	0.41
37:n:103:LEU:O	37:n:106:TYR:N	2.53	0.41
1:A:124:VAL:CG1	1:A:130:ASP:HB2	2.50	0.41
1:A:149:ASN:CG	1:A:150:THR:H	2.20	0.41
1:A:152:SER:HB3	1:A:153:PRO:HD2	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:79:VAL:O	2:B:79:VAL:CG2	2.62	0.41
3:C:60:ILE:C	3:C:82:PHE:CZ	2.97	0.41
3:C:82:PHE:C	3:C:83:LEU:CD1	2.85	0.41
3:C:174:GLY:O	3:C:175:SER:OG	2.37	0.41
3:C:198:LEU:C	3:C:198:LEU:CD2	2.93	0.41
3:C:225:THR:HG23	3:C:226:PHE:N	2.35	0.41
4:D:12:VAL:CG1	30:d:36:LEU:HD12	2.16	0.41
5:E:20:LEU:HD21	5:E:50:ASN:ND2	2.35	0.41
7:G:64:LYS:HB3	7:G:97:VAL:HG11	2.02	0.41
7:G:78:SER:OG	7:G:81:HIS:NE2	2.52	0.41
7:G:84:TYR:CE2	7:G:86:PRO:CG	2.88	0.41
7:G:85:ARG:CZ	25:Y:118:ARG:CZ	2.92	0.41
7:G:183:ARG:NH1	34:i:307:G:C8	2.47	0.41
8:H:121:THR:CG2	8:H:124:ALA:HB2	2.50	0.41
10:J:136:ARG:NH1	10:J:161:LEU:HB2	2.35	0.41
10:J:180:LYS:HG3	10:J:181:GLY:H	1.78	0.41
12:L:71:ARG:CG	12:L:73:LEU:CD2	2.98	0.41
14:N:130:LYS:HE2	14:N:130:LYS:HB2	1.78	0.41
15:O:136:PRO:O	15:O:138:ASP:CA	2.63	0.41
16:P:17:TYR:CE1	16:P:18:ARG:HG3	2.55	0.41
16:P:97:TYR:CZ	16:P:99:GLY:C	2.98	0.41
17:Q:145:TYR:HD1	17:Q:145:TYR:HA	1.43	0.41
19:S:42:HIS:NE2	20:T:45:LEU:CG	2.56	0.41
20:T:40:ALA:O	20:T:43:LYS:HG2	2.20	0.41
20:T:55:THR:CG2	20:T:56:ARG:N	2.82	0.41
21:U:37:ALA:O	21:U:41:ARG:HG3	2.20	0.41
21:U:117:ALA:O	21:U:118:ASP:O	2.39	0.41
28:b:32:PHE:CE1	28:b:47:PHE:CD1	3.08	0.41
30:d:50:ILE:HG22	30:d:52:PHE:CE2	2.54	0.41
33:g:261:LEU:O	33:g:264:LYS:HD2	2.18	0.41
33:g:271:LYS:HE2	33:g:271:LYS:HB2	1.81	0.41
34:i:685:G:H1	34:i:732:C:H1'	1.85	0.41
34:i:1301:C:H2'	34:i:1302:U:C6	2.55	0.41
34:i:1513:C:OP1	34:i:1514:U:H3'	2.19	0.41
34:i:1590:U:C5	34:i:1591:U:C5	3.08	0.41
1:A:204:TYR:HD2	1:A:204:TYR:C	2.28	0.41
2:B:24:PRO:O	2:B:27:LYS:HB2	2.20	0.41
2:B:120:MET:CB	2:B:142:PHE:CE1	3.04	0.41
4:D:5:ILE:C	34:i:1573:U:C5	2.98	0.41
4:D:65:ARG:HE	4:D:65:ARG:HB3	1.56	0.41
4:D:67:ARG:HG3	4:D:67:ARG:NH1	2.10	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:82:GLY:O	4:D:83:SER:C	2.45	0.41
4:D:123:LEU:CD2	4:D:123:LEU:C	2.93	0.41
5:E:31:PRO:CG	5:E:38:LEU:HD13	2.45	0.41
5:E:122:LYS:HD2	5:E:164:LEU:HD21	2.01	0.41
6:F:37:ASP:OD1	6:F:37:ASP:N	2.53	0.41
6:F:141:VAL:HG22	6:F:146:ARG:HG2	1.98	0.41
9:I:157:LYS:CB	12:L:22:ARG:CD	2.54	0.41
10:J:32:ILE:C	10:J:35:TYR:O	2.59	0.41
10:J:66:LYS:HZ1	34:i:688:U:P	2.28	0.41
10:J:84:ILE:CD1	10:J:86:VAL:HG23	2.49	0.41
10:J:169:ARG:HB3	10:J:175:ARG:NH1	2.26	0.41
11:K:4:PRO:HD2	11:K:44:HIS:CE1	2.54	0.41
11:K:12:TYR:CD2	11:K:79:LEU:HD22	2.55	0.41
12:L:6:THR:O	12:L:7:GLU:C	2.53	0.41
12:L:40:ILE:CG2	12:L:41:GLY:N	2.83	0.41
13:M:113:ASP:O	13:M:114:TYR:CG	2.73	0.41
14:N:24:THR:C	14:N:26:LEU:N	2.77	0.41
15:O:117:ARG:NH1	29:c:62:GLU:HA	2.35	0.41
15:O:129:ILE:N	27:a:62:TYR:OH	2.49	0.41
17:Q:42:ILE:O	17:Q:43:GLU:C	2.63	0.41
17:Q:44:PRO:CB	17:Q:81:ILE:HD11	2.50	0.41
22:V:33:PRO:CB	22:V:53:TYR:O	2.69	0.41
24:X:8:ARG:C	24:X:10:ALA:H	2.28	0.41
25:Y:54:VAL:HG12	25:Y:75:ILE:HG23	2.02	0.41
25:Y:87:PRO:HB2	25:Y:89:HIS:ND1	2.30	0.41
25:Y:97:TYR:CD1	25:Y:98:GLU:N	2.79	0.41
28:b:36:LYS:HE3	28:b:43:ILE:CD1	2.45	0.41
29:c:15:THR:HG21	29:c:33:GLU:CD	2.45	0.41
32:f:146:LEU:HD22	34:i:1288:C:C4'	2.50	0.41
33:g:131:LEU:C	33:g:131:LEU:CD2	2.94	0.41
33:g:142:VAL:HG11	33:g:177:TRP:CD2	2.55	0.41
34:i:24:C:C2'	34:i:25:A:H5'	2.49	0.41
34:i:1749:C:N4	34:i:1750:C:H42	2.18	0.41
37:n:103:LEU:HB3	37:n:109:LEU:CD1	2.50	0.41
1:A:30:LEU:HD11	1:A:38:ILE:HD12	1.90	0.41
1:A:49:ILE:HG22	1:A:50:ASN:N	2.35	0.41
2:B:41:ILE:HD12	2:B:41:ILE:HG21	1.77	0.41
2:B:55:THR:O	2:B:56:LYS:CG	2.66	0.41
2:B:140:VAL:CG1	2:B:211:PHE:HD2	2.33	0.41
3:C:59:LYS:HD3	3:C:59:LYS:HA	1.39	0.41
4:D:20:GLU:HG2	11:K:64:TRP:CE3	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:D:77:PHE:C	4:D:79:PHE:N	2.78	0.41
4:D:166:TYR:HD1	4:D:200:PRO:CG	2.33	0.41
5:E:123:LEU:HD21	5:E:235:TRP:CB	2.51	0.41
5:E:248:ILE:HD11	10:J:72:PHE:HB3	1.97	0.41
6:F:29:GLN:CD	6:F:29:GLN:N	2.78	0.41
6:F:115:ALA:CB	6:F:177:LEU:CD2	2.96	0.41
7:G:70:HIS:CD2	7:G:103:ASP:OD2	2.73	0.41
7:G:213:LEU:C	7:G:213:LEU:CD1	2.92	0.41
8:H:6:ALA:HB2	8:H:10:LYS:NZ	2.36	0.41
8:H:80:VAL:HA	8:H:83:LEU:CG	2.50	0.41
11:K:4:PRO:HG2	11:K:7:ASN:ND2	2.36	0.41
14:N:56:ASP:OD1	28:b:52:THR:CG2	2.67	0.41
15:O:31:CYS:HB3	15:O:95:ILE:HG12	1.92	0.41
16:P:81:ARG:HB3	34:i:1616:U:O2	2.21	0.41
20:T:37:VAL:HG12	20:T:39:LEU:N	2.35	0.41
21:U:26:SER:HB2	21:U:110:VAL:HA	2.02	0.41
22:V:66:ASP:O	22:V:67:ASP:O	2.39	0.41
24:X:66:ILE:HG21	37:n:84:TYR:CZ	2.55	0.41
25:Y:62:THR:OG1	34:i:571:U:C4'	2.68	0.41
26:Z:96:LEU:O	26:Z:112:ASN:CG	2.64	0.41
31:e:76:VAL:O	31:e:77:HIS:C	2.62	0.41
32:f:106:TYR:CZ	32:f:131:PHE:CE2	2.99	0.41
33:g:105:THR:OG1	33:g:126:ASP:CB	2.68	0.41
33:g:176:VAL:HG21	33:g:221:LEU:CD1	2.50	0.41
33:g:234:ASP:HB2	33:g:254:PRO:HD2	2.02	0.41
34:i:109:U:H6	34:i:109:U:O5'	2.04	0.41
34:i:603:C:C5	34:i:617:U:N3	2.88	0.41
34:i:1079:A:C2	34:i:1855:G:C4	3.08	0.41
34:i:1411:C:C5	34:i:1412:C:N1	2.89	0.41
34:i:1469:G:H21	34:i:1471:G:H2'	1.84	0.41
34:i:1546:U:O4'	34:i:1553:C:H1'	2.21	0.41
35:j:16:C:O5'	35:j:16:C:H6	2.03	0.41
37:n:103:LEU:CB	37:n:109:LEU:HD11	2.50	0.41
3:C:69:PHE:CE1	3:C:247:THR:HG23	2.55	0.41
3:C:186:GLY:C	10:J:54:ARG:NH2	2.78	0.41
4:D:73:VAL:O	4:D:77:PHE:HD2	2.03	0.41
5:E:86:PHE:CZ	5:E:182:MET:SD	3.13	0.41
5:E:169:ILE:O	5:E:169:ILE:HG13	2.21	0.41
6:F:103:LEU:HD23	6:F:178:ILE:HD13	0.52	0.41
7:G:28:TYR:O	7:G:29:GLU:HB3	2.20	0.41
9:I:191:GLU:O	9:I:195:LEU:N	2.42	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:J:34:GLU:HB3	10:J:35:TYR:CE2	2.55	0.41
10:J:170:PRO:CD	10:J:175:ARG:CG	2.94	0.41
10:J:180:LYS:HD2	10:J:181:GLY:N	2.35	0.41
12:L:151:THR:O	12:L:152:LYS:C	2.63	0.41
17:Q:58:LEU:CD2	17:Q:111:ILE:HB	2.47	0.41
17:Q:63:PHE:HD1	17:Q:68:ILE:CD1	2.27	0.41
17:Q:88:ILE:O	17:Q:91:ALA:HB3	2.20	0.41
18:R:33:ARG:NH2	33:g:83:TRP:CZ3	2.86	0.41
19:S:61:GLU:O	19:S:64:VAL:HG23	2.10	0.41
20:T:63:HIS:CE1	34:i:1582:G:N2	2.88	0.41
21:U:44:LYS:HB2	21:U:49:LYS:HA	2.03	0.41
25:Y:21:LYS:CE	25:Y:77:ASP:OD1	2.48	0.41
25:Y:104:ARG:HA	25:Y:107:ARG:CZ	2.51	0.41
25:Y:120:THR:HG22	34:i:151:C:OP1	2.20	0.41
31:e:120:VAL:H	31:e:120:VAL:HG12	1.38	0.41
34:i:60:A:N7	34:i:325:G:H1'	2.35	0.41
34:i:99:A:H61	34:i:423:A:H1'	1.85	0.41
34:i:603:C:C5	34:i:617:U:C2	3.09	0.41
34:i:1447:G:H1'	34:i:1470:A:N6	2.35	0.41
34:i:1458:U:H3'	34:i:1459:U:H5'	2.01	0.41
34:i:1700:C:H2'	34:i:1701:G:C8	2.56	0.41
37:n:62:ARG:CG	37:n:92:ILE:CD1	2.98	0.41
37:n:84:TYR:O	37:n:86:ASP:N	2.51	0.41
1:A:18:PHE:HZ	1:A:55:TRP:CZ3	2.37	0.41
2:B:110:MET:HE1	2:B:213:ARG:CD	2.47	0.41
3:C:195:PRO:HG3	3:C:221:PHE:CE1	2.54	0.41
3:C:245:VAL:O	3:C:246:PHE:CB	2.65	0.41
4:D:79:PHE:CG	4:D:84:VAL:HB	2.55	0.41
4:D:192:TRP:C	4:D:194:PRO:N	2.61	0.41
5:E:45:ILE:HA	5:E:61:VAL:HG11	2.03	0.41
5:E:192:ILE:HD13	5:E:238:LEU:CD2	2.51	0.41
6:F:89:THR:HG23	6:F:90:VAL:N	2.35	0.41
6:F:204:ARG:NH1	29:c:59:LEU:HB2	2.36	0.41
7:G:145:PHE:CB	7:G:147:LEU:HD13	2.47	0.41
8:H:39:GLN:CG	8:H:40:LEU:N	2.83	0.41
9:I:141:ARG:O	9:I:142:SER:HB3	2.19	0.41
9:I:199:LEU:HD23	9:I:199:LEU:HA	1.86	0.41
11:K:84:HIS:NE2	13:M:27:ILE:HD11	2.34	0.41
11:K:94:LEU:CD2	11:K:95:ARG:H	2.31	0.41
13:M:18:LEU:HD21	13:M:22:LEU:HD21	2.01	0.41
13:M:84:LYS:HB3	13:M:88:TRP:CZ2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:124:ILE:O	13:M:128:PHE:HB2	2.21	0.41
14:N:64:ARG:HH22	34:i:914:U:H5'	1.84	0.41
14:N:116:ILE:HA	14:N:119:GLU:OE1	2.20	0.41
14:N:129:TYR:HB2	14:N:135:LEU:HD12	2.03	0.41
16:P:36:LEU:HA	16:P:37:TYR:CG	2.56	0.41
16:P:67:ALA:HB1	16:P:73:PRO:HB3	1.98	0.41
19:S:52:LEU:HD12	19:S:53:THR:CA	2.51	0.41
22:V:43:THR:HB	22:V:44:GLY:H	1.71	0.41
23:W:18:GLU:HG2	23:W:65:LEU:CD1	2.47	0.41
24:X:21:LYS:HB3	24:X:27:TYR:CE2	2.55	0.41
24:X:95:GLU:HB2	24:X:140:ARG:HH22	1.84	0.41
25:Y:29:HIS:O	25:Y:30:PRO:C	2.63	0.41
31:e:103:THR:HG21	34:i:514:U:C6	2.56	0.41
33:g:32:LEU:HD23	33:g:69:VAL:CG2	2.50	0.41
33:g:145:GLU:N	33:g:145:GLU:CD	2.68	0.41
34:i:184:G:C5	34:i:185:C:N4	2.88	0.41
35:j:60:C:O2'	35:j:61:C:H5'	2.20	0.41
1:A:42:LYS:HZ3	18:R:105:MET:HG3	1.83	0.41
1:A:53:ARG:HH11	1:A:53:ARG:HD3	1.50	0.41
1:A:57:LYS:NZ	22:V:70:LEU:HD21	2.35	0.41
1:A:109:THR:C	34:i:1347:G:O3'	2.64	0.41
1:A:157:VAL:O	22:V:66:ASP:OD2	2.38	0.41
1:A:161:ILE:CG2	1:A:174:MET:HE2	2.51	0.41
3:C:98:GLN:NE2	34:i:11:A:H5'	2.36	0.41
5:E:21:ASP:CG	5:E:24:THR:HG23	2.39	0.41
5:E:43:PRO:HD3	5:E:46:ILE:HD12	2.00	0.41
5:E:123:LEU:HD22	5:E:236:ILE:HG23	2.02	0.41
5:E:260:GLN:OE1	5:E:260:GLN:HA	2.20	0.41
6:F:112:LEU:C	6:F:112:LEU:CD2	2.93	0.41
6:F:124:ASP:CA	6:F:200:ALA:HB2	2.51	0.41
7:G:64:LYS:CE	7:G:65:GLN:O	2.69	0.41
7:G:174:PRO:HB2	7:G:175:LYS:H	1.50	0.41
8:H:83:LEU:HD12	8:H:84:GLU:CA	2.51	0.41
8:H:107:LYS:C	8:H:109:ARG:CA	2.82	0.41
8:H:146:VAL:HG23	23:W:50:PHE:CD1	2.52	0.41
9:I:155:ASN:HD21	9:I:156:ALA:HA	1.83	0.41
10:J:170:PRO:C	10:J:174:LYS:HZ3	2.28	0.41
11:K:58:VAL:HG23	11:K:70:TYR:O	2.20	0.41
11:K:80:ARG:HA	11:K:85:LEU:CD1	2.50	0.41
12:L:50:ALA:N	12:L:116:CYS:SG	2.94	0.41
12:L:122:ILE:O	12:L:122:ILE:HG13	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:M:35:ILE:CD1	13:M:61:TYR:CE2	3.02	0.41
14:N:37:ILE:HD11	14:N:63:VAL:CG1	2.51	0.41
14:N:107:LYS:HA	14:N:107:LYS:HD2	1.68	0.41
15:O:62:VAL:HG21	15:O:72:TYR:OH	2.11	0.41
16:P:41:GLN:OE1	16:P:45:LEU:HD12	2.21	0.41
18:R:24:LEU:HB2	18:R:58:MET:HE3	2.03	0.41
20:T:49:ASP:O	20:T:52:TRP:HD1	2.03	0.41
21:U:75:LYS:H	21:U:75:LYS:HG3	1.25	0.41
22:V:41:LYS:O	22:V:43:THR:CA	2.67	0.41
24:X:52:LEU:HG	24:X:71:ARG:CB	2.51	0.41
25:Y:92:ALA:CA	25:Y:97:TYR:C	2.64	0.41
25:Y:99:LYS:O	25:Y:99:LYS:HD2	2.15	0.41
26:Z:84:ALA:O	26:Z:87:ALA:N	2.54	0.41
26:Z:91:LEU:HD23	26:Z:91:LEU:HA	1.82	0.41
28:b:36:LYS:HE2	28:b:43:ILE:HG12	2.03	0.41
31:e:123:PHE:C	31:e:123:PHE:CD2	2.99	0.41
33:g:142:VAL:CG1	33:g:177:TRP:CH2	3.04	0.41
33:g:218:LEU:HD23	33:g:230:LEU:HD11	2.03	0.41
34:i:168:C:C5	34:i:169:U:C4	3.09	0.41
34:i:727:G:H2'	34:i:728:U:H5'	2.01	0.41
34:i:837:G:H2'	34:i:838:C:C5'	2.41	0.41
34:i:1115:A:H3'	34:i:1116:U:H5"	2.02	0.41
34:i:1430:C:C3'	34:i:1431:C:O4'	2.69	0.41
34:i:1817:A:H4'	34:i:1818:A:H1'	2.02	0.41
35:j:40:C:O2'	35:j:41:A:H5'	2.21	0.41
37:n:38:VAL:CB	37:n:72:ASN:O	2.68	0.41
1:A:36:GLN:O	1:A:53:ARG:CZ	2.69	0.41
1:A:118:GLU:CD	3:C:50:LYS:CE	2.86	0.41
2:B:130:THR:HG23	2:B:179:ASN:N	2.36	0.41
2:B:147:ASN:O	18:R:124:VAL:CB	2.60	0.41
3:C:168:LYS:CG	23:W:95:PRO:HA	2.51	0.41
3:C:246:PHE:HB3	3:C:247:THR:H	1.63	0.41
3:C:260:LYS:HD2	3:C:261:THR:CB	2.50	0.41
4:D:111:GLY:CA	4:D:113:LEU:HD11	2.51	0.41
5:E:197:ASN:O	5:E:209:HIS:N	2.48	0.41
7:G:65:GLN:NE2	34:i:1741:U:OP1	2.54	0.41
7:G:68:LEU:N	7:G:68:LEU:CD2	2.84	0.41
7:G:171:THR:HB	34:i:75:G:N2	2.36	0.41
10:J:34:GLU:C	10:J:35:TYR:CD2	2.98	0.41
10:J:84:ILE:CG1	10:J:86:VAL:CG2	2.99	0.41
11:K:3:MET:CG	11:K:4:PRO:O	2.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:46:THR:HA	12:L:47:PRO:HD2	1.91	0.41
12:L:52:GLU:C	12:L:52:GLU:CD	2.88	0.41
13:M:43:ASP:O	13:M:44:LYS:HG3	2.20	0.41
14:N:2:GLY:O	14:N:3:ARG:HB2	2.19	0.41
14:N:94:LYS:CE	34:i:1006:G:OP1	2.68	0.41
15:O:137:SER:HB2	34:i:938:G:H21	1.85	0.41
20:T:11:GLN:CD	20:T:62:ARG:CD	2.93	0.41
20:T:102:ARG:HD3	20:T:105:GLN:OE1	2.21	0.41
21:U:68:THR:HB	21:U:70:CYS:C	2.45	0.41
23:W:7:LEU:CD2	23:W:34:ILE:HG13	2.46	0.41
23:W:107:SER:HA	34:i:858:A:C4	2.56	0.41
24:X:125:VAL:O	24:X:126:ALA:CB	2.61	0.41
25:Y:55:ILE:HA	25:Y:75:ILE:HG12	2.02	0.41
27:a:81:SER:CB	36:k:12:A:P	3.09	0.41
28:b:47:PHE:CD2	28:b:49:HIS:O	2.74	0.41
29:c:62:GLU:HB3	29:c:63:ARG:H	1.44	0.41
30:d:30:LEU:CD2	30:d:31:ILE:N	2.84	0.41
33:g:32:LEU:HD23	33:g:69:VAL:HG22	2.01	0.41
34:i:221:A:C2	34:i:289:G:C6	3.09	0.41
34:i:924:G:H2'	34:i:925:G:C8	2.56	0.41
34:i:1740:A:C2	34:i:1741:U:C5	3.08	0.41
37:n:35:TYR:O	37:n:36:ALA:HB2	2.20	0.41
1:A:33:GLN:NE2	28:b:2:PRO:HB3	2.36	0.41
1:A:186:ARG:HH11	1:A:186:ARG:CA	2.33	0.41
1:A:200:ASP:C	1:A:202:TYR:O	2.64	0.41
2:B:127:VAL:HG11	2:B:176:VAL:HB	2.02	0.41
2:B:137:LEU:HB3	2:B:172:MET:HE1	1.90	0.41
2:B:223:PHE:HB3	2:B:224:GLU:H	1.39	0.41
3:C:127:LYS:HD2	3:C:127:LYS:HA	1.34	0.41
3:C:161:LYS:HA	3:C:162:PRO:HD3	1.55	0.41
3:C:167:CYS:SG	3:C:168:LYS:HG3	2.60	0.41
4:D:1:MET:O	4:D:2:ALA:C	2.62	0.41
4:D:29:LEU:CD1	4:D:50:ILE:HG21	2.51	0.41
4:D:53:THR:HG22	4:D:91:VAL:N	2.34	0.41
4:D:123:LEU:CD1	4:D:154:ASP:HB2	2.46	0.41
4:D:146:ARG:HD3	4:D:146:ARG:HA	1.63	0.41
4:D:164:VAL:CG1	4:D:165:ASN:N	2.83	0.41
4:D:212:GLU:HB2	18:R:19:LYS:HD3	1.96	0.41
5:E:34:GLY:HA3	5:E:83:PRO:CG	2.51	0.41
5:E:185:GLY:HA2	5:E:189:LEU:HD13	2.03	0.41
6:F:42:LYS:O	6:F:45:TYR:N	2.53	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:47:LYS:HB3	17:Q:117:ARG:HH22	1.86	0.41
7:G:16:ILE:HD12	7:G:45:TRP:CZ2	2.42	0.41
7:G:32:MET:HA	7:G:52:ILE:CG2	2.51	0.41
8:H:58:LYS:O	8:H:90:LYS:HA	2.21	0.41
8:H:75:ILE:CG2	8:H:76:GLN:H	2.25	0.41
8:H:84:GLU:C	8:H:84:GLU:CD	2.88	0.41
8:H:133:LEU:HD13	8:H:173:PHE:HA	2.02	0.41
8:H:159:ASP:O	8:H:160:LYS:CB	2.69	0.41
9:I:48:VAL:HG11	9:I:54:LYS:CE	2.50	0.41
9:I:134:GLU:O	9:I:135:GLU:C	2.64	0.41
9:I:146:GLN:HA	9:I:149:TYR:HD2	1.86	0.41
9:I:191:GLU:CA	9:I:195:LEU:HB2	2.50	0.41
10:J:26:ASP:CA	31:e:116:PHE:HZ	2.34	0.41
10:J:53:ILE:HD13	10:J:105:PHE:CZ	2.55	0.41
10:J:131:ARG:NH1	10:J:143:ASN:ND2	2.63	0.41
10:J:136:ARG:HG2	10:J:141:VAL:CA	2.51	0.41
11:K:3:MET:HA	11:K:4:PRO:HD2	1.66	0.41
12:L:56:ILE:HG22	12:L:57:ASP:N	2.35	0.41
12:L:107:LYS:CD	34:i:344:U:OP2	2.69	0.41
12:L:133:PRO:O	34:i:374:U:H5'	2.21	0.41
13:M:18:LEU:CD2	13:M:18:LEU:C	2.94	0.41
13:M:22:LEU:HD12	13:M:88:TRP:HB3	2.02	0.41
13:M:76:LEU:N	13:M:128:PHE:CZ	2.88	0.41
13:M:82:ASN:ND2	13:M:107:SER:HA	2.36	0.41
13:M:89:VAL:CG1	13:M:90:GLY:H	2.24	0.41
14:N:136:PRO:HD2	14:N:139:TRP:HD1	1.86	0.41
15:O:64:ALA:C	15:O:66:ARG:N	2.76	0.41
15:O:84:ARG:HA	15:O:87:GLU:CB	2.47	0.41
15:O:121:ARG:O	15:O:122:SER:C	2.63	0.41
15:O:126:ILE:H	27:a:57:SER:HA	1.84	0.41
16:P:110:GLU:C	16:P:112:ILE:H	2.28	0.41
17:Q:15:ARG:NH1	17:Q:20:THR:HG22	2.35	0.41
17:Q:43:GLU:HA	17:Q:45:ARG:H	1.81	0.41
17:Q:85:ARG:HH12	17:Q:117:ARG:HG3	1.68	0.41
17:Q:146:ARG:NE	35:j:33:C:O5'	2.32	0.41
18:R:120:THR:HG22	34:i:1107:U:H5'	2.03	0.41
18:R:122:PRO:HG2	34:i:1106:G:N2	2.28	0.41
19:S:30:ILE:C	19:S:32:ALA:N	2.79	0.41
19:S:82:TRP:CZ2	34:i:1562:G:H1'	2.56	0.41
20:T:119:TRP:CH2	34:i:1557:C:O2	2.74	0.41
21:U:68:THR:CB	21:U:70:CYS:O	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:U:79:ARG:NH2	34:i:1663:U:O3'	2.54	0.41
22:V:64:GLU:O	22:V:67:ASP:N	2.53	0.41
23:W:55:ASP:C	23:W:57:ARG:H	2.29	0.41
23:W:94:LEU:HA	23:W:95:PRO:HD3	1.81	0.41
24:X:129:SER:O	24:X:133:LEU:HG	2.20	0.41
24:X:138:LYS:CA	24:X:139:GLU:CD	2.93	0.41
27:a:24:THR:CG2	27:a:72:HIS:H	2.34	0.41
27:a:28:CYS:SG	27:a:74:CYS:SG	3.15	0.41
27:a:95:ARG:CZ	34:i:987:G:C6	3.03	0.41
28:b:12:PRO:O	28:b:16:LYS:HE2	2.21	0.41
28:b:63:LEU:O	28:b:64:CYS:CB	2.68	0.41
29:c:67:ARG:C	29:c:68:LEU:CG	2.89	0.41
31:e:119:VAL:O	31:e:119:VAL:HG12	2.19	0.41
32:f:136:PHE:O	32:f:137:ASP:HB2	2.19	0.41
33:g:30:MET:HG2	33:g:31:ILE:N	2.35	0.41
33:g:46:THR:HB	33:g:48:ASP:CB	2.39	0.41
33:g:102:VAL:CG1	33:g:103:GLY:N	2.83	0.41
33:g:119:GLN:OE1	33:g:179:LEU:CD1	2.68	0.41
34:i:685:G:N1	34:i:732:C:H1'	2.36	0.41
34:i:1856:G:H1'	34:i:1857:A:H2'	2.03	0.41
35:j:16:C:O2	35:j:59:A:C3'	2.65	0.41
35:j:25:G:C6	35:j:26:C:N4	2.89	0.41
35:j:51:G:C2	35:j:52:G:C8	3.09	0.41
36:k:14:A:H2'	36:k:15:A:H8	1.80	0.41
37:n:62:ARG:CG	37:n:92:ILE:HG23	2.45	0.41
37:n:62:ARG:CB	37:n:92:ILE:C	2.94	0.41
1:A:14:ASP:C	1:A:18:PHE:CD2	2.99	0.41
1:A:145:ILE:CA	1:A:159:ILE:CG2	2.77	0.41
2:B:72:ALA:CB	2:B:79:VAL:O	2.57	0.41
2:B:88:THR:HG23	2:B:96:CYS:HB3	2.03	0.41
2:B:155:TYR:N	2:B:155:TYR:HD1	2.18	0.41
3:C:59:LYS:CD	3:C:254:PHE:CE1	3.04	0.41
3:C:168:LYS:HG3	23:W:95:PRO:HA	2.03	0.41
5:E:59:ASP:O	5:E:63:LYS:HG3	2.20	0.41
5:E:143:ASP:OD1	5:E:145:ARG:HD2	2.21	0.41
7:G:121:ILE:CG1	7:G:122:PRO:HD3	2.51	0.41
9:I:139:LYS:HD2	9:I:149:TYR:OH	2.21	0.41
9:I:165:GLN:CD	9:I:172:LEU:HD23	2.46	0.41
10:J:21:GLU:C	10:J:23:SER:H	2.27	0.41
10:J:132:GLN:O	34:i:552:U:H4'	2.21	0.41
12:L:70:GLY:O	12:L:72:ILE:HD12	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:134:LEU:C	12:L:134:LEU:CD2	2.93	0.41
13:M:31:LEU:CD1	13:M:33:ARG:HB3	2.43	0.41
14:N:38:TYR:CD1	14:N:78:LYS:HG3	2.56	0.41
15:O:42:VAL:HG12	15:O:43:HIS:N	2.35	0.41
15:O:94:HIS:NE2	15:O:127:GLY:HA3	2.36	0.41
15:O:106:LYS:HB2	15:O:106:LYS:HE2	1.96	0.41
15:O:125:LYS:HE3	15:O:125:LYS:HB3	1.37	0.41
16:P:78:THR:O	16:P:102:PHE:HE1	2.03	0.41
16:P:89:MET:HB3	16:P:107:ILE:HD11	1.96	0.41
16:P:97:TYR:HA	16:P:101:THR:O	2.21	0.41
17:Q:78:VAL:HG13	17:Q:82:TYR:CE2	2.43	0.41
18:R:93:GLN:C	18:R:94:GLU:O	2.56	0.41
18:R:98:VAL:O	18:R:100:PRO:CD	2.69	0.41
19:S:138:THR:CA	19:S:141:ARG:CZ	2.65	0.41
20:T:40:ALA:HB3	20:T:43:LYS:HE3	2.02	0.41
20:T:40:ALA:CA	20:T:43:LYS:CG	2.98	0.41
20:T:116:ASP:CB	20:T:120:GLY:O	2.65	0.41
22:V:16:LYS:O	22:V:17:CYS:C	2.63	0.41
25:Y:35:VAL:HG12	25:Y:39:GLU:OE1	2.20	0.41
27:a:80:HIS:NE2	36:k:12:A:C5'	2.79	0.41
29:c:42:ILE:HG23	29:c:43:ILE:H	1.84	0.41
31:e:77:HIS:O	31:e:78:GLY:O	2.38	0.41
31:e:113:ASN:CG	34:i:542:G:OP1	2.59	0.41
34:i:685:G:O6	34:i:732:C:C2	2.74	0.41
35:j:71:U:C3'	35:j:72:A:C5'	2.98	0.41
37:n:73:THR:HG22	37:n:73:THR:O	2.21	0.41
1:A:125:THR:HG22	1:A:175:TRP:CE2	2.56	0.40
1:A:180:ARG:HD3	1:A:184:ARG:NE	2.36	0.40
1:A:191:ARG:HD3	1:A:193:HIS:CD2	2.56	0.40
2:B:232:HIS:C	2:B:233:GLY:O	2.59	0.40
3:C:127:LYS:HE3	3:C:128:CYS:H	1.86	0.40
3:C:151:ARG:HH12	3:C:240:LEU:HD13	1.67	0.40
3:C:176:VAL:HG11	3:C:221:PHE:HA	2.03	0.40
3:C:191:SER:HB3	3:C:195:PRO:HG2	2.03	0.40
4:D:76:ARG:HD2	4:D:76:ARG:O	2.21	0.40
4:D:170:THR:CG2	4:D:171:ALA:N	2.84	0.40
6:F:167:LYS:CG	6:F:171:GLU:HG2	2.50	0.40
7:G:27:PHE:CE1	7:G:111:LEU:HD11	2.56	0.40
7:G:59:GLN:HA	34:i:157:U:O2'	2.22	0.40
7:G:176:ILE:HG22	7:G:179:LEU:HD23	1.83	0.40
7:G:191:ARG:NH2	34:i:303:G:C8	2.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:200:LYS:HG3	7:G:201:LYS:N	2.35	0.40
7:G:213:LEU:CD1	7:G:214:ALA:N	2.73	0.40
8:H:117:PRO:O	8:H:120:ARG:HB2	2.21	0.40
8:H:117:PRO:CD	8:H:120:ARG:HD2	2.49	0.40
8:H:159:ASP:O	8:H:190:PRO:HG3	2.21	0.40
9:I:29:LEU:HD21	9:I:31:ARG:NH1	2.34	0.40
9:I:157:LYS:HG2	12:L:22:ARG:NH1	2.34	0.40
12:L:56:ILE:O	12:L:57:ASP:C	2.64	0.40
12:L:73:LEU:HD22	12:L:90:ARG:NH2	2.36	0.40
14:N:18:TYR:O	14:N:19:ARG:O	2.39	0.40
15:O:72:TYR:HB3	29:c:63:ARG:HH22	1.85	0.40
15:O:76:LEU:HA	29:c:5:ARG:CG	2.20	0.40
15:O:98:ARG:NE	15:O:134:PRO:HD3	2.37	0.40
16:P:46:SER:C	16:P:49:LEU:HD22	2.42	0.40
16:P:49:LEU:HA	16:P:51:ARG:HE	1.84	0.40
20:T:21:PHE:HE1	20:T:22:LEU:HD23	1.85	0.40
20:T:102:ARG:HD2	20:T:102:ARG:HA	1.70	0.40
20:T:141:ALA:C	20:T:142:LYS:CG	2.87	0.40
21:U:72:GLU:OE2	34:i:1242:A:H1'	2.21	0.40
22:V:46:PHE:C	22:V:46:PHE:CD1	2.99	0.40
23:W:36:ARG:HE	23:W:110:ILE:HB	1.85	0.40
24:X:88:ASP:OD2	31:e:87:ARG:CB	2.69	0.40
25:Y:62:THR:OG1	34:i:571:U:H4'	2.21	0.40
33:g:2:THR:O	33:g:2:THR:OG1	2.30	0.40
33:g:102:VAL:O	33:g:132:TRP:HH2	2.03	0.40
34:i:1206:G:N7	34:i:1207:G:OP2	2.54	0.40
34:i:1244:U:C6	35:j:33:C:H5'	2.56	0.40
37:n:37:GLN:HB2	37:n:52:PHE:CE1	2.56	0.40
37:n:103:LEU:C	37:n:106:TYR:H	2.29	0.40
1:A:126:ASP:O	1:A:130:ASP:HB2	2.21	0.40
1:A:134:LEU:CD2	1:A:144:THR:HG21	2.51	0.40
2:B:145:LYS:CA	2:B:149:GLN:OE1	2.68	0.40
2:B:147:ASN:C	2:B:149:GLN:N	2.79	0.40
2:B:148:ASN:OD1	18:R:123:THR:OG1	2.39	0.40
3:C:54:LEU:HB3	3:C:60:ILE:HG13	2.02	0.40
4:D:123:LEU:HA	4:D:126:ILE:HG12	2.01	0.40
4:D:197:LYS:N	4:D:199:GLY:CA	2.84	0.40
5:E:164:LEU:HD22	5:E:164:LEU:HA	1.77	0.40
6:F:36:GLN:O	6:F:37:ASP:CG	2.61	0.40
6:F:61:PHE:C	6:F:63:LYS:N	2.78	0.40
6:F:192:LYS:HA	6:F:192:LYS:HD3	1.69	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:49:VAL:CG2	7:G:115:LYS:HE2	2.51	0.40
8:H:10:LYS:NZ	8:H:16:PRO:C	2.74	0.40
8:H:20:GLU:O	8:H:23:ILE:HG22	2.21	0.40
8:H:87:PHE:HD2	8:H:90:LYS:HD2	1.86	0.40
8:H:148:LEU:C	8:H:148:LEU:CD2	2.94	0.40
9:I:158:ILE:HG23	9:I:159:SER:N	2.36	0.40
12:L:18:GLN:HE21	12:L:18:GLN:HB3	1.44	0.40
12:L:139:ARG:HG2	34:i:342:U:C5'	2.51	0.40
14:N:23:PRO:O	14:N:24:THR:CB	2.66	0.40
17:Q:85:ARG:HA	17:Q:88:ILE:HG12	2.03	0.40
17:Q:128:GLU:HG3	34:i:1643:G:H3'	2.02	0.40
18:R:7:LYS:O	18:R:11:LYS:HG3	2.21	0.40
18:R:22:THR:HG22	18:R:73:LEU:HD12	1.92	0.40
19:S:46:ARG:NH1	20:T:50:GLU:CA	2.81	0.40
20:T:87:VAL:HG12	20:T:88:MET:CE	2.52	0.40
21:U:79:ARG:NH2	34:i:1664:G:O5'	2.55	0.40
23:W:8:ALA:O	23:W:12:LYS:HG3	2.21	0.40
24:X:20:GLN:O	24:X:21:LYS:C	2.62	0.40
25:Y:61:ARG:HD3	25:Y:70:THR:O	2.22	0.40
25:Y:102:THR:CG2	25:Y:107:ARG:HD3	2.50	0.40
26:Z:62:VAL:HG11	26:Z:91:LEU:HD11	2.03	0.40
28:b:15:GLU:HB2	28:b:16:LYS:HD3	2.03	0.40
33:g:21:ILE:HG22	33:g:290:ALA:CB	2.51	0.40
33:g:38:LYS:HB2	33:g:38:LYS:HE2	1.47	0.40
33:g:87:LEU:CG	33:g:101:PHE:HB2	2.48	0.40
33:g:98:THR:C	33:g:99:ARG:HD2	2.37	0.40
34:i:181:A:H4'	34:i:182:C:OP1	2.17	0.40
34:i:384:G:H5"	34:i:384:G:C8	2.56	0.40
34:i:548:G:C6	34:i:549:G:C6	3.09	0.40
34:i:728:U:H2'	34:i:729:C:C6	2.56	0.40
34:i:1041:U:C5	34:i:1042:U:C5	3.09	0.40
34:i:1229:G:C6	34:i:1230:C:C4	3.09	0.40
34:i:1634:G:N2	35:j:29:G:N2	2.68	0.40
34:i:1700:C:C1'	34:i:1845:A:O3'	2.68	0.40
34:i:1750:C:O2'	34:i:1751:G:P	2.79	0.40
34:i:1750:C:HO2'	34:i:1751:G:P	2.36	0.40
36:k:19:U:O4'	37:n:70:TRP:CE2	2.74	0.40
1:A:159:ILE:HD12	1:A:159:ILE:HA	1.27	0.40
4:D:141:LYS:O	4:D:141:LYS:HG3	2.18	0.40
5:E:18:TRP:CD2	5:E:46:ILE:HD13	2.56	0.40
5:E:47:PHE:CD2	5:E:52:LEU:HD12	2.57	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:F:121:PRO:HA	6:F:193:LYS:CE	2.41	0.40
7:G:173:ALA:CB	34:i:77:A:H4'	2.51	0.40
7:G:176:ILE:CG1	7:G:179:LEU:CD2	2.98	0.40
9:I:8:TRP:CD1	9:I:22:HIS:HE1	2.40	0.40
10:J:115:PHE:CD1	10:J:122:SER:CA	3.04	0.40
11:K:42:ASN:CG	11:K:46:MET:HB2	2.47	0.40
13:M:71:GLU:OE1	13:M:71:GLU:CA	2.68	0.40
14:N:4:MET:HE1	14:N:124:ARG:NH2	2.36	0.40
14:N:16:LEU:HA	14:N:17:PRO:HD3	1.87	0.40
14:N:101:HIS:CE1	14:N:105:ASN:HD22	2.40	0.40
15:O:39:ASP:C	15:O:40:THR:HG23	2.46	0.40
15:O:90:ILE:O	15:O:124:MET:HE1	2.21	0.40
15:O:129:ILE:HG13	27:a:65:PRO:HD2	2.03	0.40
17:Q:61:GLU:O	17:Q:62:ARG:C	2.63	0.40
18:R:17:ILE:HG13	18:R:54:VAL:HG13	2.03	0.40
19:S:137:LYS:HE3	34:i:1232:G:O6	2.21	0.40
20:T:99:VAL:HG23	20:T:100:ALA:H	1.83	0.40
21:U:61:LEU:CG	30:d:34:TYR:CE2	3.01	0.40
22:V:33:PRO:HB2	22:V:34:MET:H	1.73	0.40
24:X:76:LYS:HD3	34:i:473:C:OP1	2.21	0.40
27:a:45:VAL:C	27:a:46:GLU:HG3	2.46	0.40
28:b:23:ARG:O	28:b:24:LEU:C	2.64	0.40
33:g:194:TYR:CZ	33:g:212:LYS:CG	3.03	0.40
34:i:66:G:O2'	34:i:67:C:H5'	2.21	0.40
34:i:846:C:C5	34:i:847:C:C5	3.09	0.40
34:i:883:U:C6	34:i:884:U:C5	3.10	0.40
34:i:1428:U:C4	34:i:1429:C:C4	3.09	0.40
34:i:1536:G:C2'	34:i:1537:C:H5'	2.51	0.40
34:i:1635:A:N9	35:j:40:C:O4'	2.54	0.40
34:i:1644:U:O2	34:i:1670:A:C2	2.74	0.40
1:A:57:LYS:CD	22:V:70:LEU:HD21	2.51	0.40
2:B:54:GLY:C	2:B:56:LYS:N	2.80	0.40
2:B:66:VAL:HG22	2:B:87:ILE:CA	2.51	0.40
2:B:119:THR:O	2:B:142:PHE:HA	2.21	0.40
3:C:151:ARG:NH2	22:V:1:MET:SD	2.94	0.40
3:C:186:GLY:HA3	10:J:54:ARG:HH21	1.77	0.40
3:C:238:PRO:HA	3:C:241:TRP:NE1	2.35	0.40
4:D:7:LYS:O	4:D:11:PHE:HD1	2.04	0.40
6:F:41:VAL:HG13	6:F:42:LYS:N	2.35	0.40
7:G:1:MET:HE2	7:G:1:MET:HB3	1.86	0.40
7:G:129:VAL:HG13	7:G:130:PRO:HD2	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:G:137:ARG:H	7:G:137:ARG:HG2	1.58	0.40
8:H:51:ILE:O	8:H:51:ILE:HG13	2.22	0.40
8:H:117:PRO:O	8:H:118:ARG:C	2.61	0.40
8:H:145:ARG:HD3	8:H:155:LYS:NZ	2.36	0.40
8:H:152:ARG:O	8:H:153:LEU:HD23	2.21	0.40
9:I:110:ARG:HE	9:I:128:LYS:NZ	2.18	0.40
12:L:45:LYS:HD2	12:L:45:LYS:HA	1.90	0.40
15:O:17:LEU:HD23	15:O:18:GLY:CA	2.51	0.40
15:O:128:ARG:NE	27:a:62:TYR:HE1	2.20	0.40
17:Q:18:THR:O	17:Q:79:ALA:HB1	2.22	0.40
17:Q:21:ALA:HB2	17:Q:72:VAL:CG2	2.32	0.40
17:Q:106:LYS:HD3	17:Q:106:LYS:HA	1.90	0.40
17:Q:117:ARG:O	17:Q:118:THR:CB	2.68	0.40
19:S:40:TYR:OH	19:S:99:LEU:HD21	2.21	0.40
19:S:85:ASN:CG	19:S:98:VAL:H	2.29	0.40
20:T:64:LEU:HD12	20:T:113:VAL:HG11	2.03	0.40
21:U:63:ILE:HG21	30:d:43:PHE:CE2	2.56	0.40
22:V:5:ALA:C	22:V:7:GLU:H	2.29	0.40
22:V:74:LYS:CA	22:V:79:VAL:HB	2.51	0.40
23:W:17:ALA:O	23:W:22:LYS:HB2	2.22	0.40
23:W:49:GLU:H	23:W:64:ASN:HD22	1.69	0.40
24:X:45:SER:C	24:X:46:HIS:CD2	2.99	0.40
25:Y:29:HIS:HA	25:Y:30:PRO:HD2	1.97	0.40
25:Y:57:VAL:CA	25:Y:58:PHE:CD2	3.04	0.40
25:Y:64:PHE:N	25:Y:64:PHE:HD1	2.09	0.40
25:Y:99:LYS:CE	25:Y:99:LYS:H	2.25	0.40
26:Z:111:ARG:HH11	26:Z:114:LYS:NZ	2.18	0.40
27:a:87:ARG:O	27:a:92:ARG:HG2	2.21	0.40
29:c:32:VAL:O	29:c:32:VAL:HG23	2.22	0.40
33:g:20:GLN:CG	33:g:67:SER:O	2.70	0.40
33:g:286:CYS:N	33:g:302:TYR:CD1	2.86	0.40
34:i:1392:A:H5"	34:i:1392:A:N3	2.37	0.40
34:i:1429:C:C2'	34:i:1430:C:O5'	2.69	0.40
37:n:39:ILE:HG22	37:n:40:LYS:N	2.37	0.40
1:A:154:LEU:HD13	1:A:154:LEU:C	2.36	0.40
1:A:158:ASP:CA	22:V:65:SER:OG	2.70	0.40
1:A:193:HIS:CG	1:A:194:PRO:CD	3.03	0.40
3:C:50:LYS:HG2	3:C:51:LEU:N	2.36	0.40
3:C:254:PHE:O	3:C:257:HIS:CB	2.70	0.40
4:D:47:GLU:HA	4:D:85:GLU:HG2	2.04	0.40
4:D:151:LYS:NZ	34:i:1482:A:OP2	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:E:85:GLY:HA2	5:E:109:PHE:CZ	2.57	0.40
7:G:26:THR:HG21	7:G:40:ALA:HB1	2.02	0.40
8:H:117:PRO:HG2	8:H:120:ARG:HE	1.81	0.40
11:K:9:ILE:CG2	11:K:10:ALA:N	2.82	0.40
11:K:47:LYS:HE2	34:i:1270:G:O4'	2.22	0.40
11:K:57:TYR:O	11:K:71:LEU:HD12	2.21	0.40
13:M:78:LYS:HD2	13:M:79:VAL:H	1.86	0.40
13:M:113:ASP:O	13:M:114:TYR:CD2	2.74	0.40
15:O:34:PHE:HE1	15:O:100:THR:N	2.19	0.40
15:O:97:LEU:CD1	15:O:112:ALA:HB1	2.45	0.40
16:P:30:TYR:OH	16:P:51:ARG:NH1	2.54	0.40
16:P:49:LEU:C	16:P:51:ARG:HA	2.28	0.40
16:P:89:MET:HB3	16:P:107:ILE:HD13	1.98	0.40
17:Q:90:LYS:HD3	17:Q:120:LEU:C	2.46	0.40
19:S:131:VAL:O	19:S:131:VAL:HG12	2.21	0.40
21:U:40:ILE:HD13	21:U:53:PRO:CD	2.50	0.40
21:U:50:VAL:HG22	21:U:51:LYS:CA	2.35	0.40
24:X:55:VAL:HG12	24:X:57:VAL:CG2	2.52	0.40
26:Z:104:ARG:HA	26:Z:104:ARG:HD2	1.38	0.40
33:g:11:LEU:HD11	33:g:45:LEU:HD21	2.03	0.40
33:g:17:TRP:CD1	33:g:303:THR:O	2.74	0.40
33:g:106:LYS:HB3	33:g:107:ASP:H	1.64	0.40
33:g:258:ILE:HG13	33:g:268:ASP:H	1.86	0.40
34:i:1707:A:C2	34:i:1816:A:C2	3.09	0.40
34:i:1751:G:O2'	34:i:1752:G:O5'	2.39	0.40
34:i:1817:A:C4'	34:i:1818:A:O4'	2.69	0.40
34:i:1860:A:H2'	34:i:1861:U:C6	2.56	0.40
35:j:5:G:N2	35:j:67:C:O2	2.53	0.40
35:j:62:A:C6	35:j:63:U:C5	3.09	0.40

All (81) 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)
31:e:123:PHE:CD1	34:i:1759:C:C4'[3_564]	0.62	1.58
31:e:123:PHE:CE1	34:i:1759:C:C5'[3_564]	0.70	1.50
34:i:531:U:O2'	34:i:1767:C:O4'[3_564]	0.72	1.48
31:e:125:LYS:CE	34:i:1761:C:OP1[3_564]	0.73	1.47
11:K:97:SER:O	34:i:76:U:OP1[3_564]	0.95	1.25
31:e:123:PHE:O	34:i:1760:C:OP1[3_564]	1.07	1.13

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:e:123:PHE:C	34:i:1760:C:OP1[3_564]	1.13	1.07
11:K:97:SER:O	34:i:76:U:P[3_564]	1.16	1.04
34:i:137:U:OP2	34:i:531:U:O4[2_665]	1.16	1.04
31:e:123:PHE:CB	34:i:1759:C:O3'[3_564]	1.25	0.95
11:K:96:ARG:NH1	34:i:76:U:N1[3_564]	1.29	0.91
11:K:97:SER:C	34:i:76:U:OP1[3_564]	1.29	0.91
34:i:531:U:O2'	34:i:1767:C:C1'[3_564]	1.30	0.90
34:i:533:C:OP1	34:i:1755:U:C4'[3_564]	1.31	0.89
31:e:123:PHE:O	34:i:1760:C:P[3_564]	1.32	0.88
31:e:123:PHE:CD2	34:i:1760:C:OP2[3_564]	1.33	0.87
31:e:123:PHE:CD1	34:i:1759:C:C5'[3_564]	1.39	0.81
9:I:200:ARG:NH2	34:i:1036:G:OP2[4_555]	1.43	0.77
34:i:531:U:O2	34:i:1767:C:O2'[3_564]	1.44	0.76
19:S:112:GLU:OE2	34:i:725:C:OP1[5_664]	1.49	0.71
31:e:123:PHE:CG	34:i:1759:C:C3'[3_564]	1.52	0.68
11:K:96:ARG:NH1	34:i:76:U:C2[3_564]	1.53	0.67
34:i:533:C:OP1	34:i:1755:U:C3'[3_564]	1.54	0.66
34:i:533:C:OP1	34:i:1755:U:O3'[3_564]	1.56	0.64
31:e:123:PHE:CG	34:i:1759:C:O3'[3_564]	1.58	0.62
31:e:123:PHE:CD1	34:i:1759:C:C3'[3_564]	1.59	0.61
11:K:96:ARG:CD	34:i:76:U:C6[3_564]	1.60	0.60
11:K:96:ARG:CZ	34:i:76:U:C1'[3_564]	1.61	0.59
31:e:123:PHE:C	34:i:1760:C:P[3_564]	1.67	0.53
34:i:137:U:OP2	34:i:531:U:C4[2_665]	1.67	0.53
9:I:200:ARG:NH2	34:i:1036:G:P[4_555]	1.68	0.52
31:e:123:PHE:CE1	34:i:1759:C:C4'[3_564]	1.68	0.52
11:K:97:SER:O	34:i:76:U:OP2[3_564]	1.69	0.51
34:i:531:U:C2	34:i:1767:C:O2'[3_564]	1.70	0.50
31:e:123:PHE:CG	34:i:1759:C:C4'[3_564]	1.71	0.49
34:i:137:U:P	34:i:531:U:O4[2_665]	1.72	0.48
11:K:96:ARG:NE	34:i:76:U:O4'[3_564]	1.75	0.45
31:e:123:PHE:CB	34:i:1760:C:P[3_564]	1.76	0.44
31:e:123:PHE:CG	34:i:1760:C:OP2[3_564]	1.78	0.42
31:e:123:PHE:CD2	34:i:1760:C:P[3_564]	1.80	0.40
31:e:123:PHE:O	34:i:1760:C:O5'[3_564]	1.80	0.40
31:e:125:LYS:CD	34:i:1761:C:OP1[3_564]	1.80	0.40
34:i:531:U:C1'	34:i:1767:C:C4'[3_564]	1.82	0.38
31:e:123:PHE:CA	34:i:1760:C:OP1[3_564]	1.83	0.37
34:i:531:U:O2'	34:i:1767:C:C4'[3_564]	1.87	0.33
11:K:96:ARG:CZ	34:i:76:U:N1[3_564]	1.88	0.32
31:e:123:PHE:C	34:i:1760:C:OP2[3_564]	1.90	0.30

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:i:531:U:C2'	34:i:1767:C:O4'[3_564]	1.91	0.29
7:G:154:ARG:CD	11:K:96:ARG:NH2[2_665]	1.92	0.28
31:e:123:PHE:CA	34:i:1760:C:OP2[3_564]	1.93	0.27
31:e:123:PHE:CA	34:i:1760:C:P[3_564]	1.93	0.27
31:e:123:PHE:CE1	34:i:1759:C:O5'[3_564]	1.93	0.27
34:i:531:U:C1'	34:i:1767:C:O2'[3_564]	1.93	0.27
11:K:96:ARG:NH1	34:i:76:U:C1'[3_564]	1.94	0.26
34:i:531:U:N1	34:i:1767:C:O2'[3_564]	1.94	0.26
31:e:123:PHE:CG	34:i:1760:C:P[3_564]	1.95	0.25
34:i:532:U:O3'	34:i:1755:U:O4'[3_564]	1.95	0.25
7:G:155:GLN:CD	11:K:98:ARG:O[2_665]	1.96	0.24
7:G:155:GLN:NE2	11:K:98:ARG:O[2_665]	1.96	0.24
11:K:96:ARG:NE	34:i:76:U:C1'[3_564]	1.96	0.24
34:i:533:C:OP2	34:i:1755:U:O2'[3_564]	1.97	0.23
34:i:137:U:OP1	34:i:531:U:O4[2_665]	1.98	0.22
34:i:531:U:O2	34:i:1767:C:C2'[3_564]	1.99	0.21
9:I:200:ARG:NH2	34:i:1036:G:O5'[4_555]	2.00	0.20
31:e:123:PHE:CZ	34:i:1759:C:C5'[3_564]	2.01	0.19
34:i:531:U:O4'	34:i:1767:C:C4'[3_564]	2.04	0.16
34:i:531:U:C2'	34:i:1767:C:O2'[3_564]	2.05	0.15
34:i:533:C:P	34:i:1755:U:C4'[3_564]	2.05	0.15
31:e:125:LYS:NZ	34:i:1761:C:OP1[3_564]	2.06	0.14
34:i:532:U:O3'	34:i:1755:U:O2'[3_564]	2.08	0.12
11:K:97:SER:CA	34:i:76:U:OP1[3_564]	2.09	0.11
34:i:533:C:P	34:i:1755:U:O2'[3_564]	2.09	0.11
34:i:531:U:O2	34:i:1768:C:C5'[3_564]	2.10	0.10
11:K:96:ARG:NH1	34:i:76:U:O2[3_564]	2.13	0.07
31:e:123:PHE:CB	34:i:1760:C:OP2[3_564]	2.13	0.07
31:e:123:PHE:CD2	34:i:1760:C:O5'[3_564]	2.13	0.07
34:i:137:U:OP2	34:i:531:U:N3[2_665]	2.13	0.07
31:e:123:PHE:O	34:i:1760:C:OP2[3_564]	2.16	0.04
11:K:96:ARG:NH1	34:i:76:U:C6[3_564]	2.18	0.02
34:i:136:C:O3'	34:i:532:U:N3[2_665]	2.18	0.02
34:i:531:U:C2'	34:i:1767:C:C4'[3_564]	2.18	0.02

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
1	A	206/295 (70%)	156 (76%)	23 (11%)	27 (13%)	0 4
2	B	213/264 (81%)	174 (82%)	24 (11%)	15 (7%)	1 11
3	C	224/278 (81%)	199 (89%)	14 (6%)	11 (5%)	1 16
4	D	225/243 (93%)	180 (80%)	23 (10%)	22 (10%)	0 7
5	E	261/263 (99%)	210 (80%)	27 (10%)	24 (9%)	0 8
6	F	189/204 (93%)	162 (86%)	15 (8%)	12 (6%)	1 13
7	G	235/249 (94%)	201 (86%)	19 (8%)	15 (6%)	1 12
8	H	188/194 (97%)	146 (78%)	11 (6%)	31 (16%)	0 2
9	I	204/208 (98%)	169 (83%)	13 (6%)	22 (11%)	0 6
10	J	180/194 (93%)	138 (77%)	18 (10%)	24 (13%)	0 4
11	K	96/165 (58%)	67 (70%)	11 (12%)	18 (19%)	0 2
12	L	156/158 (99%)	132 (85%)	10 (6%)	14 (9%)	0 8
13	M	122/132 (92%)	85 (70%)	16 (13%)	21 (17%)	0 2
14	N	148/151 (98%)	123 (83%)	19 (13%)	6 (4%)	2 18
15	O	134/151 (89%)	101 (75%)	14 (10%)	19 (14%)	0 3
16	P	125/145 (86%)	92 (74%)	16 (13%)	17 (14%)	0 3
17	Q	139/146 (95%)	110 (79%)	19 (14%)	10 (7%)	1 11
18	R	124/135 (92%)	97 (78%)	13 (10%)	14 (11%)	0 5
19	S	135/152 (89%)	106 (78%)	20 (15%)	9 (7%)	1 12
20	T	139/145 (96%)	119 (86%)	10 (7%)	10 (7%)	1 11
21	U	102/119 (86%)	76 (74%)	10 (10%)	16 (16%)	0 2
22	V	80/83 (96%)	55 (69%)	11 (14%)	14 (18%)	0 2
23	W	127/130 (98%)	111 (87%)	14 (11%)	2 (2%)	7 38
24	X	140/143 (98%)	121 (86%)	11 (8%)	8 (6%)	1 14
25	Y	124/133 (93%)	91 (73%)	15 (12%)	18 (14%)	0 3
26	Z	73/125 (58%)	52 (71%)	12 (16%)	9 (12%)	0 4
27	a	105/115 (91%)	72 (69%)	14 (13%)	19 (18%)	0 2
28	b	82/84 (98%)	57 (70%)	14 (17%)	11 (13%)	0 4
29	c	62/69 (90%)	44 (71%)	13 (21%)	5 (8%)	1 9

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
30	d	51/56 (91%)	46 (90%)	3 (6%)	2 (4%)	2 19
31	e	57/133 (43%)	37 (65%)	7 (12%)	13 (23%)	0 1
32	f	69/156 (44%)	38 (55%)	13 (19%)	18 (26%)	0 1
33	g	311/317 (98%)	271 (87%)	23 (7%)	17 (6%)	1 14
37	n	80/144 (56%)	61 (76%)	15 (19%)	4 (5%)	1 16
All	All	4906/5679 (86%)	3899 (80%)	510 (10%)	497 (10%)	0 7

All (497) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	9	GLN
1	A	31	ASP
1	A	45	GLY
1	A	103	PHE
1	A	164	ASN
1	A	165	ASN
1	A	188	THR
1	A	192	GLU
1	A	203	PHE
1	A	207	PRO
2	B	27	LYS
2	B	77	ASP
2	B	78	GLU
2	B	106	THR
2	B	154	SER
2	B	179	ASN
2	B	206	PRO
2	B	210	VAL
3	C	102	GLN
3	C	104	GLY
3	C	117	ASP
3	C	218	LEU
3	C	260	LYS
4	D	2	ALA
4	D	4	GLN
4	D	93	THR
4	D	98	ALA
4	D	202	LYS
4	D	205	PRO
4	D	213	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	D	214	LYS
4	D	216	GLU
4	D	220	THR
4	D	221	THR
4	D	222	PRO
4	D	223	ILE
4	D	226	GLN
5	E	12	VAL
5	E	24	THR
5	E	76	VAL
5	E	95	THR
5	E	163	ASP
5	E	196	THR
5	E	260	GLN
5	E	261	SER
6	F	43	GLU
6	F	44	LYS
6	F	202	SER
6	F	203	ASN
7	G	20	ASP
7	G	154	ARG
7	G	164	LYS
7	G	174	PRO
7	G	175	LYS
7	G	180	VAL
7	G	181	THR
8	H	15	LYS
8	H	16	PRO
8	H	33	ASN
8	H	35	ASP
8	H	66	VAL
8	H	88	SER
8	H	108	SER
8	H	109	ARG
8	H	110	THR
8	H	116	ARG
8	H	135	PHE
8	H	137	SER
8	H	138	GLU
8	H	160	LYS
8	H	190	PRO
9	I	8	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	I	120	PRO
9	I	124	LYS
9	I	131	PRO
9	I	133	GLU
9	I	139	LYS
9	I	140	LYS
9	I	142	SER
9	I	143	LYS
9	I	145	ILE
9	I	153	LYS
9	I	154	LYS
9	I	158	ILE
9	I	206	LYS
10	J	19	PRO
10	J	22	LYS
10	J	36	GLY
10	J	110	LEU
10	J	111	GLN
10	J	118	GLY
10	J	119	LEU
10	J	122	SER
10	J	138	ARG
10	J	161	LEU
10	J	163	SER
10	J	169	ARG
10	J	170	PRO
10	J	172	ARG
11	K	2	LEU
11	K	3	MET
11	K	30	PRO
11	K	35	LEU
11	K	39	ASN
11	K	40	VAL
11	K	41	PRO
11	K	44	HIS
11	K	63	ALA
11	K	88	GLU
11	K	89	ILE
12	L	5	GLN
12	L	6	THR
12	L	7	GLU
12	L	20	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	L	23	VAL
12	L	147	LYS
12	L	152	LYS
12	L	153	LYS
13	M	12	MET
13	M	15	ASN
13	M	44	LYS
13	M	72	HIS
13	M	77	ILE
13	M	78	LYS
13	M	79	VAL
13	M	81	ASP
13	M	89	VAL
13	M	96	ARG
13	M	100	PRO
13	M	116	LYS
13	M	117	GLU
14	N	22	VAL
15	O	23	GLU
15	O	52	THR
15	O	53	ILE
15	O	64	ALA
15	O	104	ARG
15	O	137	SER
15	O	138	ASP
15	O	139	SER
15	O	140	THR
16	P	6	GLN
16	P	11	THR
16	P	12	PHE
16	P	37	TYR
16	P	38	SER
16	P	68	PRO
16	P	69	PRO
16	P	71	GLU
16	P	73	PRO
16	P	75	VAL
16	P	125	PRO
16	P	126	VAL
16	P	127	LYS
17	Q	19	ALA
17	Q	61	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	Q	62	ARG
17	Q	117	ARG
17	Q	119	LEU
17	Q	141	TYR
18	R	88	VAL
18	R	89	SER
18	R	100	PRO
18	R	101	ASP
18	R	121	GLN
18	R	123	THR
19	S	11	HIS
19	S	53	THR
19	S	59	LEU
19	S	90	VAL
20	T	5	THR
20	T	31	PRO
20	T	32	GLU
20	T	33	TRP
20	T	34	VAL
20	T	96	SER
20	T	143	LYS
21	U	51	LYS
21	U	94	PRO
21	U	95	SER
21	U	107	GLU
21	U	118	ASP
22	V	4	ASN
22	V	10	ASP
22	V	42	VAL
22	V	43	THR
22	V	44	GLY
22	V	50	SER
22	V	65	SER
22	V	78	ILE
24	X	3	LYS
24	X	4	CYS
25	Y	6	THR
25	Y	30	PRO
25	Y	34	THR
25	Y	86	GLU
25	Y	87	PRO
25	Y	100	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	Y	104	ARG
25	Y	120	THR
26	Z	93	SER
26	Z	104	ARG
26	Z	108	ILE
26	Z	113	THR
27	a	28	CYS
27	a	46	GLU
27	a	47	ALA
27	a	58	VAL
27	a	59	PHE
27	a	61	ALA
27	a	63	VAL
27	a	64	LEU
27	a	98	PRO
27	a	99	PRO
27	a	103	PRO
28	b	62	VAL
28	b	63	LEU
28	b	64	CYS
29	c	8	PRO
29	c	67	ARG
30	d	8	TRP
31	e	76	VAL
31	e	78	GLY
31	e	81	ALA
31	e	98	LYS
31	e	119	VAL
31	e	121	PRO
31	e	126	LYS
32	f	84	SER
32	f	85	TYR
32	f	86	THR
32	f	91	ASN
32	f	102	VAL
32	f	106	TYR
32	f	110	GLU
32	f	128	ALA
33	g	3	GLU
33	g	48	ASP
33	g	52	TYR
33	g	96	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	g	282	GLU
33	g	283	PRO
37	n	71	ILE
37	n	83	ASP
1	A	7	VAL
1	A	96	ALA
1	A	112	ILE
1	A	140	VAL
1	A	159	ILE
1	A	186	ARG
1	A	190	SER
1	A	191	ARG
2	B	93	GLY
2	B	209	ASP
3	C	43	LYS
3	C	246	PHE
4	D	78	GLY
4	D	194	PRO
4	D	201	LYS
4	D	208	VAL
5	E	104	ASP
5	E	164	LEU
6	F	21	GLY
6	F	32	ASP
6	F	41	VAL
6	F	54	GLY
6	F	79	HIS
7	G	26	THR
7	G	146	ASN
7	G	153	VAL
8	H	11	PRO
8	H	17	ASP
8	H	38	ALA
8	H	41	ARG
8	H	76	GLN
8	H	100	ILE
8	H	112	ASN
8	H	120	ARG
8	H	159	ASP
8	H	193	GLN
9	I	22	HIS
9	I	192	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	J	106	LEU
10	J	120	ALA
10	J	124	HIS
10	J	135	ILE
10	J	148	ILE
11	K	34	GLU
11	K	91	PRO
12	L	4	ILE
12	L	21	LYS
12	L	22	ARG
12	L	57	ASP
13	M	45	ARG
14	N	68	GLY
15	O	54	CYS
15	O	56	VAL
16	P	54	HIS
17	Q	32	ILE
17	Q	100	VAL
18	R	93	GLN
18	R	112	GLY
18	R	125	GLY
19	S	17	ASN
19	S	31	THR
19	S	140	GLY
20	T	142	LYS
21	U	74	SER
21	U	98	VAL
22	V	6	GLY
22	V	33	PRO
22	V	48	GLY
23	W	66	THR
24	X	59	ALA
25	Y	95	GLY
25	Y	99	LYS
25	Y	119	GLY
26	Z	53	ALA
27	a	35	ALA
28	b	2	PRO
28	b	38	PRO
28	b	81	ARG
31	e	77	HIS
31	e	104	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	e	124	GLY
32	f	98	VAL
32	f	127	GLY
32	f	148	TYR
33	g	49	GLU
33	g	60	ARG
33	g	144	ASP
33	g	159	ASN
33	g	171	ASP
33	g	281	ALA
33	g	295	GLY
37	n	111	GLU
1	A	11	LYS
1	A	30	LEU
1	A	194	PRO
1	A	205	ARG
2	B	56	LYS
2	B	82	ARG
4	D	218	LEU
5	E	25	SER
5	E	168	LYS
5	E	194	VAL
5	E	205	PHE
7	G	69	THR
8	H	18	GLU
8	H	117	PRO
8	H	150	GLY
9	I	105	ASP
9	I	106	SER
9	I	144	LYS
10	J	91	LYS
11	K	28	HIS
11	K	87	PRO
13	M	91	LEU
14	N	28	LEU
15	O	32	HIS
16	P	17	TYR
16	P	39	ALA
18	R	86	PRO
18	R	122	PRO
20	T	29	LYS
21	U	70	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	U	93	SER
21	U	110	VAL
24	X	92	ASN
25	Y	5	VAL
25	Y	53	ASP
25	Y	60	PHE
25	Y	63	HIS
27	a	13	LYS
27	a	97	PRO
27	a	102	ARG
27	a	107	ALA
28	b	7	LEU
29	c	65	ALA
31	e	127	LYS
31	e	129	PRO
32	f	137	ASP
32	f	138	ARG
33	g	84	ASP
33	g	255	SER
33	g	285	GLN
37	n	34	GLU
1	A	104	THR
2	B	224	GLU
3	C	244	THR
3	C	249	SER
5	E	30	ARG
5	E	119	ALA
5	E	189	LEU
6	F	37	ASP
7	G	33	ALA
7	G	122	PRO
10	J	151	LEU
10	J	162	ARG
11	K	67	PHE
11	K	95	ARG
12	L	119	ASP
13	M	29	ASP
13	M	94	ILE
13	M	113	ASP
15	O	17	LEU
15	O	83	GLN
16	P	50	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	R	95	ILE
19	S	12	ILE
20	T	46	ALA
21	U	50	VAL
21	U	116	ILE
22	V	79	VAL
24	X	9	THR
24	X	129	SER
25	Y	102	THR
26	Z	111	ARG
26	Z	114	LYS
27	a	62	TYR
28	b	24	LEU
29	c	63	ARG
32	f	145	CYS
33	g	37	ASP
1	A	23	THR
3	C	164	THR
4	D	80	PRO
5	E	90	ILE
5	E	134	LYS
5	E	213	ALA
9	I	52	ASN
9	I	59	ARG
11	K	38	LYS
12	L	2	ALA
13	M	59	PRO
13	M	95	ASP
14	N	3	ARG
14	N	138	ASN
15	O	22	ALA
15	O	38	ASN
17	Q	43	GLU
18	R	99	ASP
19	S	7	GLU
21	U	26	SER
21	U	117	ALA
23	W	67	GLY
24	X	99	GLU
25	Y	51	THR
25	Y	121	ALA
26	Z	62	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	Z	78	LYS
27	a	105	GLY
28	b	10	PRO
29	c	39	SER
31	e	97	GLU
32	f	93	HIS
32	f	94	LYS
32	f	147	THR
1	A	110	ASN
5	E	73	ASP
6	F	46	ALA
6	F	183	GLY
7	G	68	LEU
7	G	165	GLU
8	H	170	VAL
10	J	68	PRO
10	J	116	LYS
14	N	60	VAL
15	O	24	GLY
15	O	136	PRO
22	V	9	VAL
24	X	78	GLY
4	D	63	GLY
9	I	119	LEU
21	U	104	ILE
22	V	77	GLY
32	f	87	THR
5	E	152	PRO
8	H	10	LYS
1	A	95	GLY
1	A	98	PRO
2	B	24	PRO
3	C	161	LYS
5	E	195	ILE
5	E	231	GLY
15	O	62	VAL
17	Q	42	ILE
27	a	96	THR
28	b	37	CYS
30	d	11	PRO
2	B	21	VAL
8	H	93	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	M	30	GLY
28	b	9	HIS
4	D	200	PRO
18	R	15	VAL
21	U	29	VAL

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	174/244 (71%)	141 (81%)	33 (19%)	1	8
2	B	196/231 (85%)	153 (78%)	43 (22%)	1	6
3	C	187/215 (87%)	142 (76%)	45 (24%)	1	4
4	D	190/202 (94%)	144 (76%)	46 (24%)	1	4
5	E	225/225 (100%)	170 (76%)	55 (24%)	1	4
6	F	161/170 (95%)	114 (71%)	47 (29%)	0	2
7	G	207/218 (95%)	157 (76%)	50 (24%)	1	4
8	H	170/174 (98%)	124 (73%)	46 (27%)	0	3
9	I	177/179 (99%)	137 (77%)	40 (23%)	1	6
10	J	157/168 (94%)	128 (82%)	29 (18%)	1	8
11	K	89/136 (65%)	63 (71%)	26 (29%)	0	2
12	L	142/142 (100%)	106 (75%)	36 (25%)	0	3
13	M	101/108 (94%)	78 (77%)	23 (23%)	1	6
14	N	130/131 (99%)	100 (77%)	30 (23%)	1	5
15	O	106/119 (89%)	88 (83%)	18 (17%)	2	10
16	P	116/130 (89%)	86 (74%)	30 (26%)	0	3
17	Q	117/121 (97%)	83 (71%)	34 (29%)	0	2
18	R	114/121 (94%)	87 (76%)	27 (24%)	1	4
19	S	119/132 (90%)	95 (80%)	24 (20%)	1	7
20	T	113/116 (97%)	84 (74%)	29 (26%)	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
21	U	94/107 (88%)	72 (77%)	22 (23%)	1 5
22	V	67/68 (98%)	47 (70%)	20 (30%)	0 2
23	W	112/113 (99%)	97 (87%)	15 (13%)	4 14
24	X	114/115 (99%)	90 (79%)	24 (21%)	1 6
25	Y	108/115 (94%)	85 (79%)	23 (21%)	1 6
26	Z	66/103 (64%)	53 (80%)	13 (20%)	1 7
27	a	91/99 (92%)	76 (84%)	15 (16%)	2 10
28	b	76/76 (100%)	64 (84%)	12 (16%)	2 12
29	c	57/62 (92%)	43 (75%)	14 (25%)	1 4
30	d	47/49 (96%)	35 (74%)	12 (26%)	0 3
31	e	49/106 (46%)	27 (55%)	22 (45%)	0 0
32	f	64/140 (46%)	42 (66%)	22 (34%)	0 1
33	g	272/275 (99%)	219 (80%)	53 (20%)	1 7
37	n	66/123 (54%)	44 (67%)	22 (33%)	0 2
All	All	4274/4833 (88%)	3274 (77%)	1000 (23%)	1 5

All (1000) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	5	LEU
1	A	7	VAL
1	A	10	MET
1	A	12	GLU
1	A	13	GLU
1	A	17	LYS
1	A	19	LEU
1	A	25	LEU
1	A	36	GLN
1	A	40	LYS
1	A	42	LYS
1	A	44	ASP
1	A	52	LYS
1	A	54	THR
1	A	58	LEU
1	A	60	LEU
1	A	63	ARG
1	A	74	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	88	LEU
1	A	89	LYS
1	A	128	ARG
1	A	139	TYR
1	A	147	LEU
1	A	155	ARG
1	A	159	ILE
1	A	169	HIS
1	A	181	GLU
1	A	186	ARG
1	A	188	THR
1	A	196	GLU
1	A	198	MET
1	A	204	TYR
1	A	207	PRO
2	B	19	LYS
2	B	20	LYS
2	B	21	VAL
2	B	22	VAL
2	B	34	LYS
2	B	41	ILE
2	B	46	LYS
2	B	48	LEU
2	B	52	THR
2	B	55	THR
2	B	56	LYS
2	B	57	ILE
2	B	75	GLN
2	B	78	GLU
2	B	82	ARG
2	B	83	LYS
2	B	89	GLU
2	B	94	LYS
2	B	115	LYS
2	B	116	LYS
2	B	131	ASP
2	B	138	PHE
2	B	144	LYS
2	B	145	LYS
2	B	148	ASN
2	B	150	ILE
2	B	151	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	158	HIS
2	B	162	ARG
2	B	165	ARG
2	B	166	LYS
2	B	172	MET
2	B	181	LEU
2	B	182	LYS
2	B	195	LYS
2	B	208	HIS
2	B	211	PHE
2	B	213	ARG
2	B	214	LYS
2	B	219	LYS
2	B	222	LYS
2	B	227	LYS
2	B	229	MET
3	C	43	LYS
3	C	48	VAL
3	C	49	THR
3	C	50	LYS
3	C	51	LEU
3	C	56	LYS
3	C	58	MET
3	C	59	LYS
3	C	61	LYS
3	C	79	ILE
3	C	87	LEU
3	C	89	ASP
3	C	95	MET
3	C	98	GLN
3	C	99	LYS
3	C	100	GLN
3	C	101	THR
3	C	105	GLN
3	C	119	ASN
3	C	127	LYS
3	C	131	GLU
3	C	145	LEU
3	C	151	ARG
3	C	152	ARG
3	C	157	ASN
3	C	158	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	C	161	LYS
3	C	168	LYS
3	C	169	VAL
3	C	196	LYS
3	C	197	LYS
3	C	201	MET
3	C	221	PHE
3	C	223	LYS
3	C	231	LYS
3	C	235	TYR
3	C	236	LEU
3	C	242	LYS
3	C	244	THR
3	C	246	PHE
3	C	247	THR
3	C	248	LYS
3	C	252	GLN
3	C	256	ASP
3	C	260	LYS
4	D	8	LYS
4	D	10	LYS
4	D	18	LYS
4	D	21	LEU
4	D	31	GLU
4	D	35	SER
4	D	44	THR
4	D	56	GLN
4	D	64	ARG
4	D	67	ARG
4	D	74	GLN
4	D	76	ARG
4	D	79	PHE
4	D	89	GLU
4	D	90	LYS
4	D	94	ARG
4	D	103	GLU
4	D	113	LEU
4	D	120	TYR
4	D	127	MET
4	D	129	SER
4	D	146	ARG
4	D	151	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	D	156	LEU
4	D	157	MET
4	D	158	ILE
4	D	176	LEU
4	D	177	LEU
4	D	178	ARG
4	D	182	LEU
4	D	187	LYS
4	D	190	LEU
4	D	192	TRP
4	D	197	LYS
4	D	198	ILE
4	D	202	LYS
4	D	207	HIS
4	D	211	VAL
4	D	212	GLU
4	D	214	LYS
4	D	215	ASP
4	D	216	GLU
4	D	217	ILE
4	D	218	LEU
4	D	220	THR
4	D	226	GLN
5	E	1	MET
5	E	3	ARG
5	E	6	LYS
5	E	7	LYS
5	E	9	LEU
5	E	10	LYS
5	E	38	LEU
5	E	39	ARG
5	E	48	LEU
5	E	49	ARG
5	E	56	LEU
5	E	65	CYS
5	E	67	GLN
5	E	68	ARG
5	E	77	ARG
5	E	94	LYS
5	E	97	GLU
5	E	106	LYS
5	E	118	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	E	120	LYS
5	E	122	LYS
5	E	123	LEU
5	E	125	LYS
5	E	126	VAL
5	E	128	LYS
5	E	130	PHE
5	E	133	THR
5	E	136	ILE
5	E	145	ARG
5	E	147	ILE
5	E	148	ARG
5	E	151	ASP
5	E	153	LEU
5	E	164	LEU
5	E	165	GLU
5	E	168	LYS
5	E	174	LYS
5	E	175	PHE
5	E	180	LEU
5	E	181	CYS
5	E	191	ARG
5	E	198	ARG
5	E	200	ARG
5	E	202	PRO
5	E	211	LYS
5	E	212	ASP
5	E	221	ARG
5	E	222	LEU
5	E	237	SER
5	E	240	ARG
5	E	242	LYS
5	E	245	ARG
5	E	246	LEU
5	E	259	LYS
5	E	260	GLN
6	F	18	LYS
6	F	29	GLN
6	F	36	GLN
6	F	37	ASP
6	F	38	TYR
6	F	41	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	F	42	LYS
6	F	43	GLU
6	F	44	LYS
6	F	47	LYS
6	F	49	LEU
6	F	60	ARG
6	F	62	ARG
6	F	63	LYS
6	F	65	GLN
6	F	71	ARG
6	F	72	LEU
6	F	76	MET
6	F	78	MET
6	F	85	LYS
6	F	88	MET
6	F	91	ARG
6	F	94	LYS
6	F	95	HIS
6	F	98	GLU
6	F	110	GLN
6	F	116	ILE
6	F	122	ARG
6	F	123	GLU
6	F	125	SER
6	F	127	ARG
6	F	128	ILE
6	F	130	ARG
6	F	136	ARG
6	F	141	VAL
6	F	145	ARG
6	F	164	ARG
6	F	167	LYS
6	F	173	LEU
6	F	175	ASP
6	F	177	LEU
6	F	182	LYS
6	F	190	ILE
6	F	192	LYS
6	F	195	GLU
6	F	202	SER
6	F	204	ARG
7	G	1	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	G	2	LYS
7	G	13	GLN
7	G	17	GLU
7	G	19	ASP
7	G	25	ARG
7	G	29	GLU
7	G	30	LYS
7	G	31	ARG
7	G	32	MET
7	G	44	GLU
7	G	58	LYS
7	G	64	LYS
7	G	74	ARG
7	G	76	LEU
7	G	77	LEU
7	G	79	LYS
7	G	98	ARG
7	G	115	LYS
7	G	116	LYS
7	G	120	ASP
7	G	121	ILE
7	G	124	LEU
7	G	126	ASP
7	G	127	THR
7	G	128	THR
7	G	131	ARG
7	G	133	LEU
7	G	137	ARG
7	G	142	ARG
7	G	143	LYS
7	G	145	PHE
7	G	150	GLU
7	G	158	VAL
7	G	164	LYS
7	G	168	LYS
7	G	170	ARG
7	G	172	LYS
7	G	178	ARG
7	G	179	LEU
7	G	180	VAL
7	G	191	ARG
7	G	196	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	G	198	ARG
7	G	212	LEU
7	G	218	LYS
7	G	219	GLU
7	G	224	ARG
7	G	230	LYS
7	G	233	ARG
8	H	9	VAL
8	H	10	LYS
8	H	11	PRO
8	H	14	GLU
8	H	15	LYS
8	H	16	PRO
8	H	23	ILE
8	H	32	MET
8	H	34	SER
8	H	36	LEU
8	H	37	LYS
8	H	40	LEU
8	H	57	ARG
8	H	58	LYS
8	H	61	ILE
8	H	69	LEU
8	H	70	LYS
8	H	72	PHE
8	H	74	LYS
8	H	81	ARG
8	H	82	GLU
8	H	85	LYS
8	H	93	VAL
8	H	99	ARG
8	H	105	THR
8	H	107	LYS
8	H	109	ARG
8	H	111	LYS
8	H	112	ASN
8	H	113	LYS
8	H	116	ARG
8	H	118	ARG
8	H	120	ARG
8	H	122	LEU
8	H	131	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	H	133	LEU
8	H	143	ARG
8	H	145	ARG
8	H	154	ILE
8	H	157	HIS
8	H	158	LEU
8	H	160	LYS
8	H	163	GLN
8	H	185	VAL
8	H	193	GLN
8	H	194	LEU
9	I	3	ILE
9	I	5	ARG
9	I	6	ASP
9	I	13	LYS
9	I	18	ARG
9	I	19	LYS
9	I	23	LYS
9	I	25	ARG
9	I	31	ARG
9	I	37	LYS
9	I	41	ARG
9	I	49	ARG
9	I	56	ARG
9	I	70	GLU
9	I	74	ARG
9	I	75	LYS
9	I	92	ARG
9	I	100	CYS
9	I	110	ARG
9	I	117	TYR
9	I	119	LEU
9	I	124	LYS
9	I	129	LEU
9	I	140	LYS
9	I	141	ARG
9	I	143	LYS
9	I	144	LYS
9	I	148	LYS
9	I	150	ASP
9	I	154	LYS
9	I	155	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	I	157	LYS
9	I	158	ILE
9	I	161	LEU
9	I	167	GLN
9	I	178	ARG
9	I	202	ILE
9	I	203	LYS
9	I	205	ARG
9	I	206	LYS
10	J	8	VAL
10	J	10	ARG
10	J	17	ARG
10	J	18	ARG
10	J	21	GLU
10	J	29	LEU
10	J	38	ARG
10	J	42	GLU
10	J	50	LEU
10	J	58	ARG
10	J	66	LYS
10	J	69	ARG
10	J	79	ARG
10	J	89	GLU
10	J	93	LYS
10	J	101	LYS
10	J	109	ARG
10	J	110	LEU
10	J	119	LEU
10	J	121	LYS
10	J	127	ARG
10	J	139	LYS
10	J	143	ASN
10	J	162	ARG
10	J	165	TYR
10	J	172	ARG
10	J	174	LYS
10	J	176	LYS
10	J	180	LYS
11	K	1	MET
11	K	2	LEU
11	K	3	MET
11	K	5	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	K	13	GLU
11	K	17	LYS
11	K	18	GLU
11	K	20	VAL
11	K	31	LYS
11	K	34	GLU
11	K	35	LEU
11	K	37	ASP
11	K	38	LYS
11	K	43	LEU
11	K	53	LYS
11	K	55	ARG
11	K	65	ARG
11	K	74	GLU
11	K	84	HIS
11	K	85	LEU
11	K	89	ILE
11	K	93	THR
11	K	94	LEU
11	K	95	ARG
11	K	96	ARG
11	K	98	ARG
12	L	1	MET
12	L	4	ILE
12	L	7	GLU
12	L	8	ARG
12	L	15	THR
12	L	18	GLN
12	L	20	LYS
12	L	22	ARG
12	L	25	LEU
12	L	30	LYS
12	L	40	ILE
12	L	49	GLU
12	L	56	ILE
12	L	69	ARG
12	L	71	ARG
12	L	79	LYS
12	L	80	MET
12	L	82	MET
12	L	83	GLN
12	L	89	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	L	97	ARG
12	L	99	TYR
12	L	100	ASN
12	L	101	ARG
12	L	102	PHE
12	L	111	VAL
12	L	118	ARG
12	L	121	GLN
12	L	136	LYS
12	L	147	LYS
12	L	151	THR
12	L	153	LYS
12	L	155	PHE
12	L	156	GLN
12	L	157	LYS
12	L	158	PHE
13	M	12	MET
13	M	13	ASP
13	M	18	LEU
13	M	20	GLU
13	M	23	LYS
13	M	26	LEU
13	M	28	HIS
13	M	33	ARG
13	M	36	ARG
13	M	40	LYS
13	M	43	ASP
13	M	45	ARG
13	M	71	GLU
13	M	76	LEU
13	M	77	ILE
13	M	78	LYS
13	M	83	LYS
13	M	85	LEU
13	M	91	LEU
13	M	94	ILE
13	M	101	ARG
13	M	102	LYS
13	M	117	GLU
14	N	3	ARG
14	N	9	LYS
14	N	16	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	N	21	SER
14	N	27	LYS
14	N	49	GLN
14	N	50	ILE
14	N	53	ILE
14	N	56	ASP
14	N	64	ARG
14	N	70	LYS
14	N	73	ARG
14	N	76	LYS
14	N	78	LYS
14	N	80	LEU
14	N	93	LYS
14	N	94	LYS
14	N	104	ARG
14	N	107	LYS
14	N	112	LYS
14	N	114	ARG
14	N	119	GLU
14	N	121	ARG
14	N	125	LEU
14	N	130	LYS
14	N	133	ARG
14	N	134	VAL
14	N	140	LYS
14	N	141	TYR
14	N	142	GLU
15	O	23	GLU
15	O	25	GLU
15	O	28	PHE
15	O	65	ASP
15	O	66	ARG
15	O	72	TYR
15	O	90	ILE
15	O	104	ARG
15	O	116	LEU
15	O	117	ARG
15	O	121	ARG
15	O	125	LYS
15	O	128	ARG
15	O	129	ILE
15	O	138	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	O	141	ARG
15	O	146	ARG
15	O	150	ARG
16	P	5	GLU
16	P	6	GLN
16	P	7	LYS
16	P	9	LYS
16	P	10	ARG
16	P	13	ARG
16	P	14	LYS
16	P	15	PHE
16	P	17	TYR
16	P	34	MET
16	P	40	ARG
16	P	41	GLN
16	P	43	ARG
16	P	50	ARG
16	P	52	LYS
16	P	61	ARG
16	P	64	LYS
16	P	71	GLU
16	P	72	LYS
16	P	84	ILE
16	P	86	LEU
16	P	88	GLU
16	P	89	MET
16	P	100	LYS
16	P	104	GLN
16	P	110	GLU
16	P	111	MET
16	P	122	THR
16	P	124	LYS
16	P	127	LYS
17	Q	6	PRO
17	Q	7	LEU
17	Q	13	PHE
17	Q	17	LYS
17	Q	20	THR
17	Q	24	HIS
17	Q	26	LYS
17	Q	29	ASN
17	Q	33	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	Q	37	ARG
17	Q	40	GLU
17	Q	41	MET
17	Q	56	LEU
17	Q	62	ARG
17	Q	73	LYS
17	Q	80	GLN
17	Q	85	ARG
17	Q	101	ASP
17	Q	102	GLU
17	Q	105	LYS
17	Q	107	GLU
17	Q	109	LYS
17	Q	111	ILE
17	Q	115	TYR
17	Q	117	ARG
17	Q	120	LEU
17	Q	126	ARG
17	Q	130	LYS
17	Q	131	LYS
17	Q	135	PRO
17	Q	140	ARG
17	Q	142	GLN
17	Q	145	TYR
17	Q	146	ARG
18	R	1	MET
18	R	8	THR
18	R	10	LYS
18	R	32	LYS
18	R	38	ILE
18	R	47	ARG
18	R	59	LYS
18	R	63	ARG
18	R	69	ILE
18	R	72	LYS
18	R	78	ARG
18	R	83	ASN
18	R	87	GLU
18	R	88	VAL
18	R	89	SER
18	R	91	LEU
18	R	93	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	R	94	GLU
18	R	95	ILE
18	R	103	LYS
18	R	105	MET
18	R	111	PHE
18	R	117	LEU
18	R	118	GLN
18	R	120	THR
18	R	121	GLN
18	R	123	THR
19	S	7	GLU
19	S	8	LYS
19	S	9	PHE
19	S	11	HIS
19	S	12	ILE
19	S	17	ASN
19	S	24	ARG
19	S	34	LYS
19	S	36	VAL
19	S	39	ARG
19	S	50	ILE
19	S	59	LEU
19	S	63	GLU
19	S	71	MET
19	S	78	LYS
19	S	87	GLN
19	S	90	VAL
19	S	92	ASP
19	S	94	LYS
19	S	118	ARG
19	S	130	ARG
19	S	134	GLN
19	S	137	LYS
19	S	142	ARG
20	T	11	GLN
20	T	16	ARG
20	T	21	PHE
20	T	23	LYS
20	T	28	LEU
20	T	29	LYS
20	T	30	VAL
20	T	31	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	T	38	LYS
20	T	44	GLU
20	T	62	ARG
20	T	64	LEU
20	T	66	LEU
20	T	72	VAL
20	T	82	ARG
20	T	83	GLN
20	T	84	ARG
20	T	88	MET
20	T	91	HIS
20	T	93	SER
20	T	94	ARG
20	T	97	LYS
20	T	102	ARG
20	T	111	LYS
20	T	121	ARG
20	T	130	ASP
20	T	133	ARG
20	T	143	LYS
20	T	144	LYS
21	U	19	ARG
21	U	20	ILE
21	U	21	ARG
21	U	24	LEU
21	U	33	GLU
21	U	44	LYS
21	U	47	ASN
21	U	48	LEU
21	U	49	LYS
21	U	51	LYS
21	U	62	ARG
21	U	68	THR
21	U	72	GLU
21	U	75	LYS
21	U	85	HIS
21	U	87	ARG
21	U	104	ILE
21	U	105	SER
21	U	106	ILE
21	U	107	GLU
21	U	108	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	U	111	GLU
22	V	1	MET
22	V	7	GLU
22	V	16	LYS
22	V	22	ARG
22	V	24	ILE
22	V	31	SER
22	V	32	ILE
22	V	40	ASP
22	V	41	LYS
22	V	42	VAL
22	V	43	THR
22	V	45	ARG
22	V	49	GLN
22	V	51	LYS
22	V	52	THR
22	V	55	ILE
22	V	61	ARG
22	V	64	GLU
22	V	74	LYS
22	V	78	ILE
23	W	3	ARG
23	W	4	MET
23	W	18	GLU
23	W	20	ARG
23	W	23	ARG
23	W	52	ILE
23	W	64	ASN
23	W	75	ILE
23	W	84	LYS
23	W	98	GLN
23	W	103	VAL
23	W	114	GLU
23	W	124	LYS
23	W	128	PHE
23	W	129	PHE
24	X	1	MET
24	X	3	LYS
24	X	5	ARG
24	X	7	LEU
24	X	12	LYS
24	X	21	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	X	29	LYS
24	X	37	LYS
24	X	67	ARG
24	X	68	LYS
24	X	71	ARG
24	X	75	ILE
24	X	80	LYS
24	X	91	LEU
24	X	101	LEU
24	X	107	ARG
24	X	108	LYS
24	X	110	HIS
24	X	115	ILE
24	X	128	VAL
24	X	135	LYS
24	X	139	GLU
24	X	141	PRO
24	X	142	ARG
25	Y	16	ARG
25	Y	20	ARG
25	Y	21	LYS
25	Y	23	MET
25	Y	29	HIS
25	Y	32	LYS
25	Y	35	VAL
25	Y	44	LEU
25	Y	46	LYS
25	Y	58	PHE
25	Y	61	ARG
25	Y	64	PHE
25	Y	68	LYS
25	Y	93	ARG
25	Y	96	LEU
25	Y	98	GLU
25	Y	99	LYS
25	Y	100	LYS
25	Y	101	LYS
25	Y	102	THR
25	Y	111	LYS
25	Y	118	ARG
25	Y	122	LYS
26	Z	44	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	Z	50	PHE
26	Z	52	LYS
26	Z	65	TYR
26	Z	85	ARG
26	Z	91	LEU
26	Z	94	LYS
26	Z	102	LYS
26	Z	103	HIS
26	Z	104	ARG
26	Z	107	VAL
26	Z	112	ASN
26	Z	114	LYS
27	a	12	LYS
27	a	15	ARG
27	a	26	CYS
27	a	38	LYS
27	a	41	ILE
27	a	44	ILE
27	a	50	VAL
27	a	51	ARG
27	a	60	ASP
27	a	63	VAL
27	a	70	LYS
27	a	82	LYS
27	a	85	ARG
27	a	94	ASP
27	a	95	ARG
28	b	3	LEU
28	b	5	LYS
28	b	16	LYS
28	b	20	LYS
28	b	26	GLN
28	b	41	TYR
28	b	42	LYS
28	b	49	HIS
28	b	51	GLN
28	b	53	VAL
28	b	83	GLN
28	b	84	HIS
29	c	5	ARG
29	c	6	VAL
29	c	7	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	c	13	ARG
29	c	35	MET
29	c	42	ILE
29	c	44	ARG
29	c	47	LYS
29	c	51	ARG
29	c	62	GLU
29	c	63	ARG
29	c	64	GLU
29	c	67	ARG
29	c	68	LEU
30	d	7	TYR
30	d	10	HIS
30	d	13	LYS
30	d	16	GLN
30	d	19	ARG
30	d	27	ARG
30	d	30	LEU
30	d	33	LYS
30	d	44	ARG
30	d	46	TYR
30	d	53	ILE
30	d	56	ASP
31	e	76	VAL
31	e	80	LEU
31	e	85	LYS
31	e	92	LYS
31	e	95	LYS
31	e	97	GLU
31	e	98	LYS
31	e	100	LYS
31	e	101	LYS
31	e	103	THR
31	e	105	ARG
31	e	108	ARG
31	e	110	MET
31	e	114	ARG
31	e	115	ARG
31	e	117	VAL
31	e	120	VAL
31	e	122	THR
31	e	123	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	e	125	LYS
31	e	126	LYS
31	e	127	LYS
32	f	86	THR
32	f	88	PRO
32	f	89	LYS
32	f	90	LYS
32	f	94	LYS
32	f	95	ARG
32	f	96	LYS
32	f	97	LYS
32	f	104	LYS
32	f	107	LYS
32	f	109	ASP
32	f	110	GLU
32	f	111	ASN
32	f	113	LYS
32	f	116	ARG
32	f	118	ARG
32	f	121	CYS
32	f	130	VAL
32	f	135	HIS
32	f	136	PHE
32	f	139	HIS
32	f	150	PHE
33	g	5	MET
33	g	8	ARG
33	g	12	LYS
33	g	24	THR
33	g	25	PRO
33	g	36	ARG
33	g	38	LYS
33	g	44	LYS
33	g	47	ARG
33	g	50	THR
33	g	51	ASN
33	g	57	ARG
33	g	60	ARG
33	g	64	HIS
33	g	68	ASP
33	g	74	ASP
33	g	76	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	g	87	LEU
33	g	88	ARG
33	g	93	THR
33	g	100	ARG
33	g	118	ARG
33	g	119	GLN
33	g	131	LEU
33	g	135	LEU
33	g	139	LYS
33	g	140	TYR
33	g	143	GLN
33	g	145	GLU
33	g	146	SER
33	g	149	GLU
33	g	156	PHE
33	g	161	SER
33	g	175	LYS
33	g	179	LEU
33	g	183	LYS
33	g	185	LYS
33	g	192	THR
33	g	203	ASP
33	g	212	LYS
33	g	218	LEU
33	g	225	LYS
33	g	246	TYR
33	g	259	TRP
33	g	264	LYS
33	g	271	LYS
33	g	275	ILE
33	g	276	SER
33	g	277	THR
33	g	279	SER
33	g	280	LYS
33	g	289	LEU
33	g	294	ASP
37	n	34	GLU
37	n	35	TYR
37	n	39	ILE
37	n	47	LEU
37	n	48	GLU
37	n	56	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	n	62	ARG
37	n	64	LYS
37	n	66	ARG
37	n	69	VAL
37	n	71	ILE
37	n	74	SER
37	n	77	ILE
37	n	78	LEU
37	n	81	LEU
37	n	83	ASP
37	n	85	GLN
37	n	95	TYR
37	n	101	ARG
37	n	102	SER
37	n	103	LEU
37	n	109	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (117) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	9	GLN
1	A	24	HIS
1	A	50	ASN
1	A	132	GLN
1	A	141	ASN
1	A	169	HIS
2	B	53	GLN
2	B	75	GLN
2	B	101	HIS
2	B	124	HIS
2	B	147	ASN
2	B	148	ASN
2	B	179	ASN
2	B	202	GLN
2	B	232	HIS
3	C	100	GLN
3	C	157	ASN
4	D	74	GLN
4	D	174	HIS
4	D	179	GLN
4	D	226	GLN
5	E	8	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	E	17	HIS
5	E	50	ASN
5	E	98	ASN
5	E	142	HIS
5	E	188	ASN
5	E	209	HIS
6	F	29	GLN
6	F	65	GLN
6	F	83	ASN
6	F	137	GLN
6	F	186	ASN
7	G	56	ASN
7	G	65	GLN
7	G	81	HIS
7	G	187	HIS
8	H	12	ASN
8	H	73	GLN
8	H	163	GLN
8	H	168	HIS
9	I	9	HIS
9	I	22	HIS
9	I	64	ASN
9	I	84	ASN
9	I	99	ASN
9	I	165	GLN
11	K	28	HIS
11	K	39	ASN
11	K	66	HIS
12	L	18	GLN
12	L	19	ASN
12	L	121	GLN
12	L	156	GLN
13	M	19	GLN
13	M	28	HIS
13	M	75	ASN
13	M	82	ASN
14	N	5	HIS
14	N	62	GLN
14	N	90	HIS
14	N	105	ASN
14	N	123	HIS
15	O	20	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	P	41	GLN
16	P	53	GLN
16	P	79	HIS
16	P	103	ASN
16	P	114	HIS
16	P	128	HIS
17	Q	80	GLN
18	R	74	GLN
18	R	121	GLN
19	S	11	HIS
19	S	42	HIS
19	S	87	GLN
20	T	11	GLN
20	T	12	GLN
20	T	42	HIS
20	T	63	HIS
20	T	83	GLN
20	T	85	ASN
20	T	126	GLN
20	T	128	GLN
21	U	18	HIS
21	U	47	ASN
22	V	47	ASN
22	V	76	HIS
23	W	5	ASN
23	W	15	ASN
23	W	44	HIS
23	W	64	ASN
23	W	98	GLN
24	X	39	ASN
24	X	46	HIS
25	Y	29	HIS
25	Y	94	HIS
26	Z	103	HIS
27	a	17	HIS
27	a	80	HIS
28	b	49	HIS
28	b	83	GLN
28	b	84	HIS
30	d	26	ASN
30	d	28	HIS
30	d	45	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	f	151	ASN
33	g	20	GLN
33	g	64	HIS
33	g	76	GLN
33	g	119	GLN
33	g	143	GLN
33	g	162	ASN
33	g	181	ASN
33	g	196	ASN
33	g	226	HIS
37	n	112	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
34	i	1720/1863 (92%)	498 (28%)	0
35	j	74/75 (98%)	17 (22%)	0
36	k	12/24 (50%)	3 (25%)	0
All	All	1806/1962 (92%)	518 (28%)	0

All (518) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
34	i	2	A
34	i	3	C
34	i	4	C
34	i	8	U
34	i	16	G
34	i	25	A
34	i	26	U
34	i	32	U
34	i	33	G
34	i	41	G
34	i	44	U
34	i	45	A
34	i	46	A
34	i	50	A
34	i	56	G
34	i	59	U
34	i	66	G
34	i	67	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	68	A
34	i	70	G
34	i	72	C
34	i	73	C
34	i	74	G
34	i	75	G
34	i	76	U
34	i	77	A
34	i	78	C
34	i	79	A
34	i	80	G
34	i	99	A
34	i	102	A
34	i	103	A
34	i	113	G
34	i	126	G
34	i	140	U
34	i	141	A
34	i	142	C
34	i	143	U
34	i	147	A
34	i	148	U
34	i	155	G
34	i	160	U
34	i	161	U
34	i	162	C
34	i	170	A
34	i	176	U
34	i	182	C
34	i	183	G
34	i	184	G
34	i	187	C
34	i	188	U
34	i	189	G
34	i	190	A
34	i	191	C
34	i	197	U
34	i	198	U
34	i	199	G
34	i	203	G
34	i	205	G
34	i	206	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	212	G
34	i	213	C
34	i	223	A
34	i	224	U
34	i	225	C
34	i	226	A
34	i	229	A
34	i	230	C
34	i	232	A
34	i	233	A
34	i	234	C
34	i	235	C
34	i	238	G
34	i	273	G
34	i	275	C
34	i	276	U
34	i	277	U
34	i	278	U
34	i	279	G
34	i	286	C
34	i	287	U
34	i	298	G
34	i	299	G
34	i	300	G
34	i	303	G
34	i	304	A
34	i	307	G
34	i	309	A
34	i	311	C
34	i	313	C
34	i	314	U
34	i	315	C
34	i	316	C
34	i	317	G
34	i	318	U
34	i	320	G
34	i	322	G
34	i	326	A
34	i	332	C
34	i	337	G
34	i	339	A
34	i	346	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	352	C
34	i	354	A
34	i	357	U
34	i	359	C
34	i	375	G
34	i	376	C
34	i	379	A
34	i	382	A
34	i	390	C
34	i	397	G
34	i	398	A
34	i	399	C
34	i	416	A
34	i	438	A
34	i	440	C
34	i	442	G
34	i	449	C
34	i	454	A
34	i	456	G
34	i	460	G
34	i	461	G
34	i	462	C
34	i	463	A
34	i	464	G
34	i	466	A
34	i	472	G
34	i	477	U
34	i	482	C
34	i	484	C
34	i	486	C
34	i	515	A
34	i	521	A
34	i	522	C
34	i	523	A
34	i	525	G
34	i	537	G
34	i	539	C
34	i	541	U
34	i	542	G
34	i	543	U
34	i	546	U
34	i	547	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	549	G
34	i	550	A
34	i	554	A
34	i	555	G
34	i	566	A
34	i	574	A
34	i	576	G
34	i	578	G
34	i	580	A
34	i	581	U
34	i	582	C
34	i	583	C
34	i	586	U
34	i	590	G
34	i	595	A
34	i	596	G
34	i	597	U
34	i	598	C
34	i	600	G
34	i	604	G
34	i	609	A
34	i	610	G
34	i	618	A
34	i	619	A
34	i	624	A
34	i	631	A
34	i	632	U
34	i	633	A
34	i	634	G
34	i	645	A
34	i	646	G
34	i	658	A
34	i	659	A
34	i	660	A
34	i	661	A
34	i	662	A
34	i	669	A
34	i	678	U
34	i	679	U
34	i	683	G
34	i	684	A
34	i	685	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	686	G
34	i	687	G
34	i	689	G
34	i	691	G
34	i	727	G
34	i	728	U
34	i	729	C
34	i	730	C
34	i	731	C
34	i	734	C
34	i	735	C
34	i	736	C
34	i	740	G
34	i	743	U
34	i	744	C
34	i	793	C
34	i	794	G
34	i	795	U
34	i	806	A
34	i	807	A
34	i	808	A
34	i	814	A
34	i	817	G
34	i	818	U
34	i	826	A
34	i	827	G
34	i	830	C
34	i	831	C
34	i	832	G
34	i	833	A
34	i	834	G
34	i	835	C
34	i	836	C
34	i	838	C
34	i	839	C
34	i	841	G
34	i	843	A
34	i	849	C
34	i	860	A
34	i	864	G
34	i	865	A
34	i	866	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	867	U
34	i	869	G
34	i	870	G
34	i	871	A
34	i	872	C
34	i	873	C
34	i	874	G
34	i	877	G
34	i	882	A
34	i	883	U
34	i	884	U
34	i	886	U
34	i	890	G
34	i	891	G
34	i	893	U
34	i	899	A
34	i	900	A
34	i	907	C
34	i	909	A
34	i	910	U
34	i	916	A
34	i	917	G
34	i	929	G
34	i	947	C
34	i	951	A
34	i	962	U
34	i	965	U
34	i	966	G
34	i	967	G
34	i	972	G
34	i	974	G
34	i	986	A
34	i	988	A
34	i	995	G
34	i	997	A
34	i	1004	A
34	i	1013	U
34	i	1019	A
34	i	1021	U
34	i	1027	A
34	i	1035	C
34	i	1041	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1045	A
34	i	1046	A
34	i	1047	G
34	i	1048	A
34	i	1050	G
34	i	1056	A
34	i	1057	U
34	i	1058	A
34	i	1068	U
34	i	1069	U
34	i	1073	A
34	i	1074	C
34	i	1079	A
34	i	1092	G
34	i	1093	G
34	i	1105	C
34	i	1106	G
34	i	1107	U
34	i	1111	U
34	i	1112	C
34	i	1113	C
34	i	1114	C
34	i	1116	U
34	i	1119	C
34	i	1127	G
34	i	1132	U
34	i	1134	C
34	i	1136	G
34	i	1137	G
34	i	1139	A
34	i	1144	A
34	i	1145	A
34	i	1146	A
34	i	1149	C
34	i	1150	U
34	i	1151	U
34	i	1153	G
34	i	1154	G
34	i	1157	U
34	i	1162	G
34	i	1164	G
34	i	1199	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1202	G
34	i	1204	A
34	i	1205	A
34	i	1208	G
34	i	1210	A
34	i	1211	C
34	i	1212	C
34	i	1213	A
34	i	1217	G
34	i	1220	G
34	i	1232	G
34	i	1233	C
34	i	1238	U
34	i	1241	G
34	i	1247	A
34	i	1249	A
34	i	1250	C
34	i	1252	G
34	i	1253	G
34	i	1255	A
34	i	1256	A
34	i	1259	U
34	i	1260	C
34	i	1270	G
34	i	1271	G
34	i	1272	A
34	i	1274	A
34	i	1279	C
34	i	1280	A
34	i	1281	G
34	i	1296	U
34	i	1297	A
34	i	1299	C
34	i	1303	U
34	i	1304	U
34	i	1310	U
34	i	1311	U
34	i	1312	C
34	i	1313	U
34	i	1320	G
34	i	1325	U
34	i	1338	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1339	U
34	i	1344	G
34	i	1354	U
34	i	1367	U
34	i	1368	U
34	i	1369	C
34	i	1374	A
34	i	1390	G
34	i	1391	C
34	i	1392	A
34	i	1393	U
34	i	1394	G
34	i	1397	A
34	i	1398	A
34	i	1400	U
34	i	1402	G
34	i	1403	U
34	i	1405	A
34	i	1406	C
34	i	1408	C
34	i	1413	C
34	i	1414	C
34	i	1415	C
34	i	1422	U
34	i	1426	C
34	i	1431	C
34	i	1433	C
34	i	1445	G
34	i	1448	A
34	i	1450	A
34	i	1452	G
34	i	1455	G
34	i	1458	U
34	i	1461	A
34	i	1470	A
34	i	1471	G
34	i	1472	A
34	i	1473	U
34	i	1474	U
34	i	1485	A
34	i	1486	G
34	i	1489	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1490	U
34	i	1491	G
34	i	1504	A
34	i	1506	G
34	i	1507	U
34	i	1508	C
34	i	1511	G
34	i	1514	U
34	i	1515	G
34	i	1516	C
34	i	1519	G
34	i	1528	A
34	i	1530	U
34	i	1532	A
34	i	1535	G
34	i	1539	C
34	i	1540	A
34	i	1545	G
34	i	1546	U
34	i	1547	G
34	i	1548	C
34	i	1549	C
34	i	1551	A
34	i	1552	C
34	i	1553	C
34	i	1558	G
34	i	1559	C
34	i	1565	G
34	i	1573	U
34	i	1575	A
34	i	1577	C
34	i	1580	U
34	i	1582	G
34	i	1583	A
34	i	1593	G
34	i	1594	U
34	i	1595	G
34	i	1597	U
34	i	1599	G
34	i	1616	U
34	i	1617	U
34	i	1618	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1627	G
34	i	1628	A
34	i	1632	A
34	i	1633	G
34	i	1634	G
34	i	1643	G
34	i	1649	G
34	i	1652	G
34	i	1660	G
34	i	1675	G
34	i	1683	C
34	i	1684	C
34	i	1690	A
34	i	1694	A
34	i	1696	C
34	i	1697	G
34	i	1716	U
34	i	1717	G
34	i	1722	G
34	i	1724	U
34	i	1741	U
34	i	1743	G
34	i	1745	C
34	i	1747	C
34	i	1748	G
34	i	1749	C
34	i	1750	C
34	i	1751	G
34	i	1755	U
34	i	1774	G
34	i	1775	A
34	i	1776	G
34	i	1777	C
34	i	1778	G
34	i	1779	C
34	i	1780	U
34	i	1790	G
34	i	1792	C
34	i	1799	G
34	i	1818	A
34	i	1819	A
34	i	1820	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	i	1822	C
34	i	1823	G
34	i	1825	A
34	i	1826	A
34	i	1829	A
34	i	1832	U
34	i	1833	U
34	i	1843	G
34	i	1845	A
34	i	1846	C
34	i	1852	G
34	i	1855	G
34	i	1856	G
34	i	1857	A
34	i	1858	U
34	i	1859	C
34	i	1861	U
34	i	1863	A
35	j	4	A
35	j	5	G
35	j	8	U
35	j	16	C
35	j	17	G
35	j	18	G
35	j	19	A
35	j	20	A
35	j	46	U
35	j	47	C
35	j	48	G
35	j	52	G
35	j	66	U
35	j	70	C
35	j	72	A
35	j	74	C
35	j	75	A
36	k	14	A
36	k	15	A
36	k	22	C

There are no RNA pucker outliers to report.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides 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
34	i	11
10	J	3
19	S	2
4	D	1
31	e	1
9	I	1
21	U	1
3	C	1
7	G	1
18	R	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	i	326:A	O3'	327:C	P	9.94
1	i	309:A	O3'	310:G	P	7.21
1	i	209:C	O3'	210:G	P	6.66
1	i	1826:A	O3'	1827:C	P	5.44
1	i	304:A	O3'	305:U	P	4.93
1	i	1206:G	O3'	1207:G	P	4.13
1	i	1698:C	O3'	1699:C	P	3.74

Continued on next page...

Continued from previous page...

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	i	183:G	O3'	184:G	P	3.17
1	i	550:A	O3'	551:A	P	2.80
1	i	515:A	O3'	516:A	P	2.53
1	i	1683:C	O3'	1684:C	P	2.23
1	D	5:ILE	C	6:SER	N	1.82
1	e	95:LYS	C	96:GLN	N	1.76
1	J	118:GLY	C	119:LEU	N	1.73
1	I	43:ILE	C	44:HIS	N	1.67
1	J	146:SER	C	147:PHE	N	1.61
1	U	93:SER	C	94:PRO	N	1.61
1	S	141:ARG	C	142:ARG	N	1.60
1	C	93:LYS	C	94:ILE	N	1.18
1	G	130:PRO	C	131:ARG	N	1.16
1	R	1:MET	C	2:GLY	N	1.13
1	S	40:TYR	C	41:ALA	N	1.09
1	J	85:GLY	C	86:VAL	N	0.95

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	A	208/295 (70%)	0.14	19 (9%) 15 22	188, 273, 325, 347	0
2	B	215/264 (81%)	-0.08	7 (3%) 49 45	140, 249, 309, 321	0
3	C	226/278 (81%)	2.23	77 (34%) 1 6	76, 163, 267, 284	0
4	D	227/243 (93%)	1.04	49 (21%) 2 9	110, 175, 253, 280	0
5	E	263/263 (100%)	0.57	37 (14%) 6 15	38, 138, 196, 225	0
6	F	191/204 (93%)	0.60	30 (15%) 5 13	133, 175, 212, 224	0
7	G	237/249 (95%)	0.26	18 (7%) 20 26	68, 198, 289, 311	0
8	H	190/194 (97%)	-0.04	15 (7%) 18 25	129, 278, 329, 340	0
9	I	206/208 (99%)	0.80	35 (16%) 4 12	17, 164, 268, 289	0
10	J	182/194 (93%)	0.44	22 (12%) 8 17	73, 158, 221, 258	0
11	K	98/165 (59%)	0.72	18 (18%) 3 11	167, 238, 289, 308	0
12	L	158/158 (100%)	1.06	38 (24%) 2 9	22, 90, 224, 255	0
13	M	124/132 (93%)	-0.30	5 (4%) 42 41	280, 347, 384, 417	0
14	N	150/151 (99%)	0.05	15 (10%) 12 20	46, 118, 251, 261	0
15	O	136/151 (90%)	-0.03	8 (5%) 28 32	45, 205, 320, 353	0
16	P	127/145 (87%)	0.15	5 (3%) 43 42	163, 254, 297, 310	0
17	Q	141/146 (96%)	0.43	18 (12%) 7 16	108, 200, 225, 231	0
18	R	126/135 (93%)	-0.12	7 (5%) 30 34	130, 194, 302, 306	0
19	S	137/152 (90%)	0.45	16 (11%) 9 17	151, 218, 239, 249	0
20	T	141/145 (97%)	0.48	21 (14%) 5 14	161, 214, 230, 234	0
21	U	104/119 (87%)	0.90	19 (18%) 3 11	116, 213, 258, 269	0
22	V	82/83 (98%)	0.01	4 (4%) 35 36	175, 237, 316, 328	0
23	W	129/130 (99%)	1.55	35 (27%) 1 8	75, 141, 196, 216	0
24	X	142/143 (99%)	1.07	31 (21%) 2 9	22, 54, 84, 93	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
25	Y	126/133 (94%)	-0.06	3 (2%) 59 52	85, 153, 198, 218	0
26	Z	75/125 (60%)	-0.25	4 (5%) 32 34	197, 207, 217, 225	0
27	a	107/115 (93%)	1.47	28 (26%) 1 8	55, 111, 285, 317	0
28	b	84/84 (100%)	-0.18	2 (2%) 59 52	156, 236, 276, 286	0
29	c	64/69 (92%)	0.03	5 (7%) 19 25	125, 173, 216, 221	0
30	d	53/56 (94%)	3.14	21 (39%) 1 5	136, 159, 235, 256	0
31	e	59/133 (44%)	-0.01	6 (10%) 12 20	63, 136, 177, 192	0
32	f	71/156 (45%)	-0.32	3 (4%) 40 40	145, 320, 392, 408	0
33	g	313/317 (98%)	0.01	23 (7%) 21 27	190, 248, 277, 291	0
34	i	1797/1863 (96%)	-0.02	72 (4%) 42 41	13, 142, 348, 527	0
35	j	75/75 (100%)	-0.10	3 (4%) 42 41	308, 379, 421, 436	0
36	k	13/24 (54%)	1.65	5 (38%) 1 5	186, 317, 324, 325	0
37	n	82/144 (56%)	0.16	6 (7%) 21 27	212, 216, 222, 224	0
All	All	6859/7641 (89%)	0.35	730 (10%) 11 19	13, 190, 328, 527	0

All (730) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
27	a	100	ARG	21.0
3	C	212	GLY	19.0
3	C	194	VAL	17.1
23	W	75	ILE	16.3
3	C	172	ARG	16.1
30	d	50	ILE	15.6
3	C	177	LEU	14.7
30	d	49	ASP	14.6
3	C	178	VAL	14.5
4	D	16	ILE	14.4
7	G	45	TRP	14.1
3	C	213	GLY	14.0
3	C	221	PHE	13.3
23	W	125	ILE	13.2
3	C	193	PRO	12.9
19	S	67	VAL	12.6
3	C	222	ALA	12.5
7	G	41	LEU	12.4
30	d	43	PHE	12.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	i	418	U	12.3
4	D	21	LEU	12.2
3	C	219	GLY	12.2
10	J	77	LEU	11.9
6	F	173	LEU	11.8
23	W	79	PHE	11.7
30	d	36	LEU	11.6
27	a	96	THR	11.2
24	X	14	ARG	11.1
3	C	211	ALA	10.9
30	d	52	PHE	10.9
3	C	199	LEU	10.8
4	D	18	LYS	10.7
3	C	180	LEU	10.7
6	F	72	LEU	10.6
27	a	93	LYS	10.5
3	C	92	LEU	10.4
23	W	89	TRP	10.4
30	d	46	TYR	10.2
3	C	229	ILE	10.1
9	I	96	LEU	10.1
9	I	78	ILE	10.0
21	U	28	ASN	9.8
34	i	1138	G	9.8
3	C	225	THR	9.7
30	d	53	ILE	9.6
5	E	70	ILE	9.5
23	W	74	VAL	9.5
3	C	210	SER	9.5
27	a	94	ASP	9.4
34	i	1153	G	9.3
27	a	97	PRO	9.2
9	I	185	ALA	9.2
9	I	62	VAL	9.2
27	a	101	PHE	9.1
3	C	198	LEU	9.1
3	C	195	PRO	9.0
4	D	69	LEU	8.7
5	E	90	ILE	8.7
30	d	22	ARG	8.7
30	d	48	LYS	8.7
4	D	73	VAL	8.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	a	90	GLU	8.5
3	C	176	VAL	8.4
3	C	105	GLN	8.3
3	C	173	CYS	8.2
23	W	126	LEU	8.2
23	W	127	GLY	8.0
9	I	40	PRO	8.0
12	L	103	GLU	7.9
6	F	112	LEU	7.9
24	X	10	ALA	7.8
12	L	96	ILE	7.8
4	D	37	VAL	7.7
16	P	94	VAL	7.7
34	i	1149	C	7.6
3	C	171	GLY	7.5
24	X	13	LEU	7.4
3	C	107	THR	7.2
30	d	38	MET	7.1
34	i	1351	C	7.1
12	L	99	TYR	7.0
4	D	12	VAL	7.0
10	J	81	LEU	7.0
10	J	97	ILE	7.0
19	S	64	VAL	6.9
19	S	118	ARG	6.9
24	X	7	LEU	6.8
34	i	1549	C	6.8
5	E	72	ILE	6.7
23	W	93	LEU	6.7
23	W	77	PRO	6.7
9	I	61	ASP	6.7
3	C	106	ARG	6.6
4	D	148	LYS	6.6
21	U	82	MET	6.5
23	W	37	PHE	6.5
9	I	38	ILE	6.5
27	a	85	ARG	6.5
3	C	218	LEU	6.4
23	W	102	ILE	6.4
4	D	39	VAL	6.4
9	I	60	LEU	6.4
24	X	69	CYS	6.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
23	W	103	VAL	6.4
10	J	68	PRO	6.3
3	C	130	LYS	6.3
21	U	27	ARG	6.3
4	D	48	ILE	6.2
3	C	175	SER	6.1
6	F	129	GLY	6.1
34	i	1057	U	5.9
4	D	17	PHE	5.9
14	N	149	LEU	5.9
27	a	91	ALA	5.8
6	F	177	LEU	5.8
3	C	220	ASN	5.8
21	U	75	LYS	5.7
3	C	228	ALA	5.7
21	U	84	ILE	5.7
11	K	64	TRP	5.7
3	C	124	LEU	5.7
11	K	25	LYS	5.6
14	N	148	ALA	5.6
6	F	154	LEU	5.6
30	d	47	ALA	5.6
14	N	147	SER	5.5
4	D	22	ASN	5.5
27	a	95	ARG	5.5
30	d	51	GLY	5.5
34	i	848	G	5.5
3	C	192	ALA	5.4
34	i	1150	U	5.4
12	L	95	TYR	5.4
3	C	209	THR	5.3
14	N	106	ARG	5.3
25	Y	118	ARG	5.3
7	G	97	VAL	5.3
30	d	45	GLN	5.3
13	M	130	CYS	5.2
30	d	9	SER	5.2
24	X	11	ARG	5.2
23	W	76	SER	5.1
5	E	47	PHE	5.1
4	D	149	SER	5.1
34	i	1139	A	5.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	i	1142	C	5.1
4	D	19	ALA	5.0
9	I	77	ARG	5.0
4	D	143	ARG	5.0
12	L	94	HIS	5.0
4	D	115	VAL	5.0
34	i	4	C	5.0
24	X	26	GLN	4.9
33	g	32	LEU	4.9
4	D	11	PHE	4.8
6	F	127	ARG	4.8
27	a	98	PRO	4.8
14	N	146	ALA	4.8
3	C	223	LYS	4.8
32	f	136	PHE	4.8
5	E	73	ASP	4.7
3	C	204	ILE	4.7
12	L	109	MET	4.7
34	i	697	G	4.7
34	i	723	G	4.7
9	I	102	VAL	4.7
8	H	149	ASP	4.7
9	I	75	LYS	4.7
29	c	68	LEU	4.7
24	X	2	GLY	4.6
4	D	145	GLN	4.6
4	D	25	LEU	4.6
4	D	14	ASP	4.6
3	C	174	GLY	4.6
23	W	104	LEU	4.6
10	J	21	GLU	4.6
19	S	123	LEU	4.6
27	a	108	PRO	4.6
34	i	1419	C	4.6
3	C	214	CYS	4.6
14	N	151	ALA	4.5
5	E	6	LYS	4.5
5	E	21	ASP	4.5
26	Z	45	ASN	4.5
8	H	193	GLN	4.5
20	T	36	THR	4.5
3	C	131	GLU	4.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	i	698	G	4.5
4	D	150	MET	4.5
11	K	37	ASP	4.5
3	C	150	VAL	4.5
19	S	71	MET	4.5
4	D	15	GLY	4.5
25	Y	17	LEU	4.4
4	D	24	PHE	4.4
4	D	146	ARG	4.4
11	K	21	MET	4.4
4	D	114	ALA	4.3
6	F	131	ALA	4.3
21	U	25	THR	4.3
3	C	114	ALA	4.3
23	W	78	ARG	4.3
4	D	13	ALA	4.3
24	X	108	LYS	4.3
5	E	24	THR	4.2
8	H	163	GLN	4.2
34	i	1846	C	4.2
9	I	42	ARG	4.2
27	a	36	ILE	4.2
3	C	202	ALA	4.2
34	i	1143	C	4.1
9	I	53	LYS	4.1
3	C	191	SER	4.1
20	T	93	SER	4.1
3	C	104	GLY	4.1
23	W	10	ALA	4.1
30	d	6	LEU	4.1
6	F	126	THR	4.1
3	C	207	CYS	4.1
8	H	189	PHE	4.1
4	D	50	ILE	4.1
27	a	99	PRO	4.0
34	i	1137	G	4.0
10	J	105	PHE	4.0
4	D	142	LEU	4.0
9	I	20	PRO	4.0
34	i	1420	G	4.0
4	D	216	GLU	4.0
10	J	152	ASP	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	T	32	GLU	3.9
20	T	35	ASP	3.9
23	W	14	ILE	3.9
17	Q	135	PRO	3.9
30	d	25	SER	3.9
34	i	125	C	3.9
34	i	1140	A	3.9
21	U	85	HIS	3.9
3	C	226	PHE	3.9
34	i	1637	U	3.9
32	f	137	ASP	3.9
6	F	93	VAL	3.9
17	Q	92	LEU	3.9
7	G	121	ILE	3.9
27	a	79	ILE	3.8
21	U	62	ARG	3.8
17	Q	6	PRO	3.8
5	E	2	ALA	3.8
29	c	23	SER	3.8
10	J	94	LEU	3.8
21	U	39	LEU	3.8
3	C	169	VAL	3.8
6	F	128	ILE	3.8
13	M	95	ASP	3.8
24	X	19	ASP	3.8
34	i	1622	C	3.8
23	W	66	THR	3.8
3	C	132	VAL	3.7
11	K	61	GLN	3.7
12	L	97	ARG	3.7
33	g	58	ALA	3.7
12	L	73	LEU	3.7
24	X	34	THR	3.7
1	A	66	VAL	3.7
7	G	50	VAL	3.7
3	C	227	ASP	3.7
19	S	101	ASN	3.7
33	g	33	SER	3.7
34	i	695	C	3.7
9	I	63	GLY	3.7
17	Q	54	PRO	3.7
8	H	112	ASN	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	U	26	SER	3.6
33	g	31	ILE	3.6
24	X	39	ASN	3.6
20	T	44	GLU	3.6
5	E	139	LEU	3.6
34	i	1141	A	3.6
5	E	44	LEU	3.6
9	I	207	GLY	3.6
23	W	21	GLY	3.6
4	D	116	ARG	3.6
12	L	101	ARG	3.6
17	Q	146	ARG	3.6
28	b	24	LEU	3.6
6	F	153	LEU	3.6
3	C	84	GLY	3.6
5	E	4	GLY	3.6
11	K	62	PHE	3.5
3	C	224	ALA	3.5
21	U	83	ARG	3.5
9	I	24	LYS	3.5
34	i	696	G	3.5
12	L	134	LEU	3.5
24	X	94	ILE	3.5
34	i	694	G	3.5
20	T	85	ASN	3.5
8	H	148	LEU	3.5
36	k	19	U	3.5
23	W	84	LYS	3.5
24	X	61	GLN	3.5
35	j	31	C	3.5
4	D	147	ALA	3.5
10	J	73	GLU	3.4
24	X	38	ALA	3.4
7	G	27	PHE	3.4
4	D	72	VAL	3.4
4	D	178	ARG	3.4
24	X	25	LYS	3.4
24	X	70	VAL	3.4
23	W	86	LEU	3.4
5	E	53	LYS	3.4
27	a	42	ARG	3.4
5	E	88	ASP	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	E	160	ILE	3.4
5	E	23	LEU	3.4
3	C	109	PHE	3.4
27	a	102	ARG	3.4
24	X	30	ALA	3.4
34	i	375	G	3.4
3	C	99	LYS	3.4
31	e	79	SER	3.4
6	F	132	GLY	3.4
1	A	178	LEU	3.4
36	k	18	G	3.4
23	W	23	ARG	3.4
23	W	112	ASP	3.4
3	C	197	LYS	3.3
4	D	213	PRO	3.3
9	I	23	LYS	3.3
5	E	5	PRO	3.3
3	C	170	THR	3.3
14	N	88	LEU	3.3
30	d	31	ILE	3.3
20	T	83	GLN	3.3
3	C	103	ALA	3.3
34	i	39	A	3.3
4	D	151	LYS	3.3
2	B	156	ALA	3.3
2	B	121	ILE	3.3
33	g	78	ALA	3.3
23	W	7	LEU	3.3
14	N	92	ILE	3.3
16	P	105	VAL	3.2
34	i	294	C	3.2
34	i	722	C	3.2
4	D	20	GLU	3.2
34	i	1843	G	3.2
3	C	97	VAL	3.2
34	i	3	C	3.2
4	D	144	GLY	3.2
8	H	110	THR	3.2
27	a	88	SER	3.2
23	W	24	GLN	3.2
24	X	29	LYS	3.2
34	i	1845	A	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	g	22	ALA	3.1
19	S	105	ASN	3.1
34	i	1580	U	3.1
4	D	136	VAL	3.1
8	H	166	VAL	3.1
3	C	262	HIS	3.1
34	i	14	C	3.1
27	a	86	ASN	3.1
30	d	55	LEU	3.1
7	G	153	VAL	3.1
8	H	167	GLU	3.1
10	J	86	VAL	3.1
17	Q	115	TYR	3.1
5	E	92	ILE	3.1
17	Q	51	LEU	3.0
9	I	100	CYS	3.0
12	L	128	VAL	3.0
3	C	134	THR	3.0
3	C	87	LEU	3.0
24	X	106	GLY	3.0
24	X	32	LEU	3.0
3	C	243	GLU	3.0
6	F	189	ALA	3.0
11	K	63	ALA	3.0
6	F	116	ILE	3.0
24	X	77	ASN	3.0
23	W	115	GLU	3.0
34	i	1847	C	3.0
3	C	133	ALA	3.0
33	g	203	ASP	3.0
33	g	205	SER	3.0
20	T	42	HIS	3.0
2	B	100	PHE	3.0
23	W	22	LYS	3.0
37	n	68	LYS	3.0
33	g	41	ILE	3.0
34	i	1421	G	3.0
23	W	64	ASN	3.0
3	C	122	VAL	3.0
6	F	109	LEU	2.9
22	V	10	ASP	2.9
11	K	28	HIS	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	Q	132	PHE	2.9
7	G	191	ARG	2.9
20	T	37	VAL	2.9
34	i	1844	A	2.9
11	K	68	TYR	2.9
21	U	79	ARG	2.9
34	i	478	U	2.9
24	X	42	GLY	2.9
31	e	88	GLY	2.9
21	U	61	LEU	2.9
30	d	12	ARG	2.9
14	N	103	GLU	2.9
22	V	21	ASN	2.9
16	P	52	LYS	2.9
5	E	162	ILE	2.9
27	a	19	GLN	2.9
7	G	194	LEU	2.9
10	J	78	LEU	2.9
5	E	124	CYS	2.9
12	L	6	THR	2.9
21	U	63	ILE	2.8
36	k	14	A	2.8
3	C	263	THR	2.8
20	T	115	LYS	2.8
11	K	15	LEU	2.8
27	a	78	ALA	2.8
9	I	193	LYS	2.8
5	E	101	LEU	2.8
1	A	65	ILE	2.8
6	F	137	GLN	2.8
24	X	85	VAL	2.8
5	E	7	LYS	2.8
9	I	104	ILE	2.8
14	N	7	PRO	2.8
14	N	144	SER	2.8
27	a	20	PRO	2.8
15	O	138	ASP	2.8
7	G	83	CYS	2.7
12	L	120	VAL	2.7
20	T	69	GLY	2.7
12	L	13	GLN	2.7
5	E	25	SER	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	i	468	G	2.7
32	f	83	LYS	2.7
11	K	67	PHE	2.7
12	L	34	PRO	2.7
24	X	37	LYS	2.7
1	A	129	ALA	2.7
11	K	36	ALA	2.7
34	i	2	A	2.7
34	i	1635	A	2.7
8	H	191	GLU	2.7
18	R	126	MET	2.7
12	L	39	ASN	2.7
6	F	97	PHE	2.7
12	L	140	PHE	2.7
1	A	159	ILE	2.7
33	g	21	ILE	2.7
5	E	145	ARG	2.7
14	N	150	VAL	2.7
29	c	22	GLY	2.7
30	d	8	TRP	2.7
16	P	24	GLN	2.7
37	n	91	VAL	2.7
12	L	54	THR	2.7
34	i	258	G	2.7
23	W	67	GLY	2.7
12	L	102	PHE	2.7
7	G	3	LEU	2.7
10	J	74	GLY	2.7
17	Q	133	GLY	2.7
4	D	215	ASP	2.6
27	a	92	ARG	2.6
34	i	724	C	2.6
12	L	155	PHE	2.6
18	R	22	THR	2.6
6	F	113	VAL	2.6
27	a	84	VAL	2.6
3	C	98	GLN	2.6
35	j	32	C	2.6
9	I	192	GLY	2.6
19	S	117	ILE	2.6
7	G	22	ARG	2.6
10	J	66	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	L	32	LYS	2.6
20	T	94	ARG	2.6
23	W	41	MET	2.6
34	i	417	U	2.6
27	a	89	ARG	2.6
30	d	32	ARG	2.6
12	L	146	THR	2.6
19	S	125	HIS	2.6
1	A	84	GLN	2.6
5	E	186	GLY	2.6
34	i	15	U	2.6
16	P	68	PRO	2.6
33	g	39	THR	2.6
9	I	65	PHE	2.5
26	Z	43	LYS	2.5
34	i	729	C	2.5
6	F	130	ARG	2.5
20	T	99	VAL	2.5
33	g	222	ASN	2.5
34	i	296	U	2.5
4	D	190	LEU	2.5
6	F	111	VAL	2.5
17	Q	145	TYR	2.5
2	B	64	GLY	2.5
7	G	18	VAL	2.5
34	i	243	C	2.5
10	J	69	ARG	2.5
5	E	260	GLN	2.5
19	S	104	ASP	2.5
12	L	98	LYS	2.5
12	L	68	ILE	2.5
28	b	25	VAL	2.5
5	E	122	LYS	2.5
4	D	96	LEU	2.5
7	G	85	ARG	2.5
18	R	125	GLY	2.5
20	T	88	MET	2.5
1	A	200	ASP	2.5
33	g	246	TYR	2.5
1	A	81	ASN	2.5
17	Q	53	GLU	2.5
3	C	108	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	A	101	GLY	2.5
15	O	103	ASN	2.5
36	k	10	C	2.5
8	H	142	LYS	2.5
1	A	60	LEU	2.4
5	E	205	PHE	2.4
4	D	217	ILE	2.4
12	L	18	GLN	2.4
1	A	151	ASP	2.4
12	L	19	ASN	2.4
34	i	1693	C	2.4
34	i	1582	G	2.4
10	J	9	CYS	2.4
9	I	69	SER	2.4
9	I	160	SER	2.4
34	i	658	A	2.4
34	i	1636	A	2.4
10	J	10	ARG	2.4
1	A	206	ASP	2.4
10	J	57	ALA	2.4
15	O	116	LEU	2.4
34	i	1746	C	2.4
5	E	50	ASN	2.4
11	K	39	ASN	2.4
19	S	68	ILE	2.4
6	F	199	VAL	2.4
7	G	96	SER	2.4
17	Q	144	SER	2.4
12	L	26	GLY	2.4
12	L	93	LEU	2.4
6	F	69	VAL	2.4
10	J	15	THR	2.4
15	O	110	PRO	2.4
3	C	129	SER	2.4
7	G	237	LEU	2.4
37	n	59	CYS	2.4
21	U	106	ILE	2.4
21	U	118	ASP	2.4
4	D	117	ARG	2.4
2	B	43	ASN	2.4
31	e	77	HIS	2.4
33	g	244	ASN	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	g	92	LEU	2.4
33	g	115	SER	2.4
12	L	23	VAL	2.4
3	C	242	LYS	2.4
24	X	1	MET	2.4
15	O	108	PRO	2.3
5	E	22	LYS	2.3
18	R	72	LYS	2.3
3	C	83	LEU	2.3
17	Q	43	GLU	2.3
34	i	987	G	2.3
6	F	100	ILE	2.3
7	G	38	ALA	2.3
12	L	86	ILE	2.3
26	Z	87	ALA	2.3
17	Q	37	ARG	2.3
34	i	693	A	2.3
5	E	248	ILE	2.3
17	Q	111	ILE	2.3
20	T	12	GLN	2.3
34	i	13	C	2.3
8	H	144	ILE	2.3
12	L	157	LYS	2.3
1	A	19	LEU	2.3
34	i	1058	A	2.3
23	W	128	PHE	2.3
20	T	41	LYS	2.3
1	A	128	ARG	2.3
10	J	72	PHE	2.3
24	X	21	LYS	2.3
10	J	14	VAL	2.3
3	C	179	ARG	2.3
9	I	41	ARG	2.3
7	G	44	GLU	2.3
4	D	110	LEU	2.3
20	T	45	LEU	2.3
10	J	59	GLU	2.2
18	R	75	GLU	2.2
33	g	133	ASN	2.2
12	L	137	THR	2.2
4	D	10	LYS	2.2
12	L	33	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	g	69	VAL	2.2
2	B	151	ARG	2.2
13	M	96	ARG	2.2
13	M	101	ARG	2.2
23	W	20	ARG	2.2
33	g	262	GLU	2.2
34	i	730	C	2.2
9	I	45	THR	2.2
22	V	27	LYS	2.2
26	Z	78	LYS	2.2
29	c	21	THR	2.2
4	D	112	GLY	2.2
12	L	53	GLY	2.2
19	S	102	GLY	2.2
1	A	79	SER	2.2
15	O	83	GLN	2.2
19	S	21	ASP	2.2
8	H	164	ASN	2.2
18	R	26	ASN	2.2
24	X	130	LEU	2.2
24	X	55	VAL	2.2
14	N	143	SER	2.2
11	K	38	LYS	2.2
12	L	142	VAL	2.2
1	A	100	ALA	2.2
3	C	137	ARG	2.2
6	F	108	PRO	2.2
24	X	23	HIS	2.2
9	I	175	ILE	2.2
12	L	88	ILE	2.2
12	L	37	TYR	2.2
4	D	153	VAL	2.2
34	i	397	G	2.2
35	j	30	G	2.2
23	W	70	ASN	2.2
17	Q	31	LEU	2.2
2	B	32	ASP	2.2
34	i	177	G	2.2
3	C	215	THR	2.2
23	W	19	LYS	2.2
5	E	8	HIS	2.2
4	D	120	TYR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	I	196	GLU	2.2
5	E	87	MET	2.2
5	E	182	MET	2.2
11	K	46	MET	2.2
11	K	65	ARG	2.2
34	i	293	A	2.2
3	C	89	ASP	2.1
6	F	58	ALA	2.1
19	S	128	GLY	2.1
21	U	78	ASP	2.1
31	e	94	ALA	2.1
34	i	1736	U	2.1
17	Q	34	VAL	2.1
22	V	20	SER	2.1
11	K	70	TYR	2.1
3	C	112	PHE	2.1
25	Y	44	LEU	2.1
15	O	105	THR	2.1
31	e	76	VAL	2.1
6	F	125	SER	2.1
20	T	98	SER	2.1
9	I	39	GLY	2.1
19	S	109	GLU	2.1
23	W	34	ILE	2.1
9	I	95	THR	2.1
27	a	16	GLY	2.1
3	C	241	TRP	2.1
14	N	42	LYS	2.1
19	S	127	TRP	2.1
33	g	55	PRO	2.1
6	F	155	CYS	2.1
34	i	1652	G	2.1
24	X	125	VAL	2.1
5	E	1	MET	2.1
8	H	165	ASN	2.1
21	U	43	ALA	2.1
10	J	7	TRP	2.1
3	C	239	ASP	2.1
4	D	111	GLY	2.1
5	E	94	LYS	2.1
5	E	135	GLY	2.1
14	N	84	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	C	94	ILE	2.1
15	O	107	THR	2.1
20	T	10	ASN	2.1
37	n	113	ALA	2.1
6	F	202	SER	2.1
3	C	148	VAL	2.1
9	I	205	ARG	2.0
31	e	87	ARG	2.0
33	g	42	MET	2.0
34	i	203	G	2.0
34	i	1352	G	2.0
36	k	13	C	2.0
1	A	131	HIS	2.0
9	I	101	ILE	2.0
37	n	97	ALA	2.0
27	a	43	ASN	2.0
17	Q	55	VAL	2.0
20	T	25	SER	2.0
8	H	187	PHE	2.0
34	i	377	C	2.0
34	i	62	G	2.0
1	A	62	ALA	2.0
27	a	104	ALA	2.0
33	g	204	GLY	2.0
37	n	32	GLY	2.0
34	i	1825	A	2.0
13	M	100	PRO	2.0
33	g	202	PRO	2.0
11	K	60	GLU	2.0
12	L	52	GLU	2.0
20	T	84	ARG	2.0
21	U	107	GLU	2.0
34	i	719	C	2.0
1	A	45	GLY	2.0
9	I	204	ALA	2.0
18	R	124	VAL	2.0
29	c	66	ARG	2.0
6	F	192	LYS	2.0
9	I	206	LYS	2.0

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

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

6.3 Carbohydrates (i)

There are no oligosaccharides in this entry.

6.4 Ligands (i)

There are no ligands in this entry.

6.5 Other polymers (i)

There are no such residues in this entry.