



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 18, 2026 – 04:29 AM UTC

PDB ID : 2ZJQ / pdb_00002zjq
Title : Interaction of L7 with L11 induced by Micrococin binding to the Deinococcus radiodurans 50S subunit
Authors : Harms, J.M.; Wilson, D.N.; Schlutzen, F.; Connell, S.R.; Stachelhaus, T.; Zaborowska, Z.; Spahn, C.M.T.; Fucini, P.
Deposited on : 2008-03-08
Resolution : 3.30 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

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

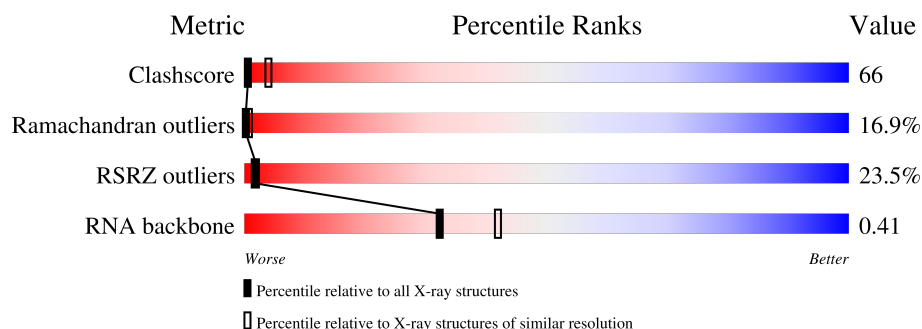
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.30 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Clashscore	190562	1209 (3.32-3.28)
Ramachandran outliers	187476	1188 (3.32-3.28)
RSRZ outliers	180081	1169 (3.32-3.28)
RNA backbone	3983	1048 (3.60-3.00)

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

Mol	Chain	Length	Quality of chain
1	X	2880	18% 12% 50% 21% 11% 7%
2	Y	122	23% 16% 69% 15%
3	A	274	26% 19% 55% 13% 12%
4	B	211	20% 24% 54% 18%
5	C	205	16% 13% 53% 29%
6	D	180	23% 9% 69% 20%
7	E	185	12% 18% 60% 15% 8%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
8	F	144	
9	G	174	
10	H	134	
11	I	156	
12	J	142	
13	K	116	
14	L	114	
15	M	166	
16	N	118	
17	O	100	
18	P	134	
19	Q	95	
20	R	115	
21	S	237	
22	T	91	
23	U	81	
24	V	67	
25	W	55	
26	Z	60	
27	1	55	
28	2	47	
29	3	66	
30	4	37	
31	5	122	

2 Entry composition

There are 31 unique types of molecules in this entry. The entry contains 84395 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called ribosomal 23S RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	X	2686	Total	C	N	O	P	0	0	0
			57651	25718	10642	18606	2685			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	Y	122	Total	C	N	O	P	0	0	0
			2598	1161	476	840	121			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	A	240	Total	C	N	O	S	0	0	0
			1826	1137	366	321	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	B	205	Total	C	N	O	S	0	0	0
			1539	965	295	271	8			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	C	197	Total	C	N	O	S	0	0	0
			1506	935	287	282	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	D	177	Total	C	N	O	S	0	0	0
			1400	892	247	254	7			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	E	171	Total	C	N	O	S	0	0	0
			1286	812	237	236	1			

- Molecule 8 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	F	144	Total	C	N	O	S	0	0	0
			1043	663	179	196	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	G	142	Total	C	N	O	S	0	0	0
			1114	704	209	198	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	H	134	Total	C	N	O	S	0	0	0
			997	614	198	180	5			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	I	141	Total	C	N	O	0	0	0
			1067	655	216	196			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	J	136	Total	C	N	O	S	0	0	0
			1090	696	202	185	7			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
J	1	MET	-	initiating methionine	UNP Q9RXJ5

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	K	113	Total	C	N	O	S	0	0	0
			878	541	178	157	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	L	104	Total	C	N	O		0	0	0
			779	476	161	142				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	M	108	Total	C	N	O		0	0	0
			871	543	172	156				

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	O	94	Total	C	N	O		0	0	0
			741	465	139	137				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	P	127	Total	C	N	O	S	0	0	0
			1014	639	199	174	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Q	93	Total	C	N	O	S	0	0	0
			726	458	136	130	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	110	Total	C	N	O	S	0	0	0
			825	513	160	151	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	S	175	Total	C	N	O	S	0	0	0
			1345	849	236	254	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	T	84	Total	C	N	O	S	0	0	0
			625	393	122	109	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	U	72	Total	C	N	O	S	0	0	0
			552	341	116	95				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	V	66	Total	C	N	O	S	0	0	0
			533	327	107	96	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	W	55	Total	C	N	O	S	0	0	0
			424	264	82	76	2			

- Molecule 26 is a protein called 50S ribosomal protein L32.

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

- Molecule 27 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
27	1	53	Total C 53 53	0	0	53

- Molecule 28 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
28	2	46	Total C 46 46	0	0	46

- Molecule 29 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
29	3	63	Total C 63 63	0	0	63

- Molecule 30 is a protein called 50S ribosomal protein L36.

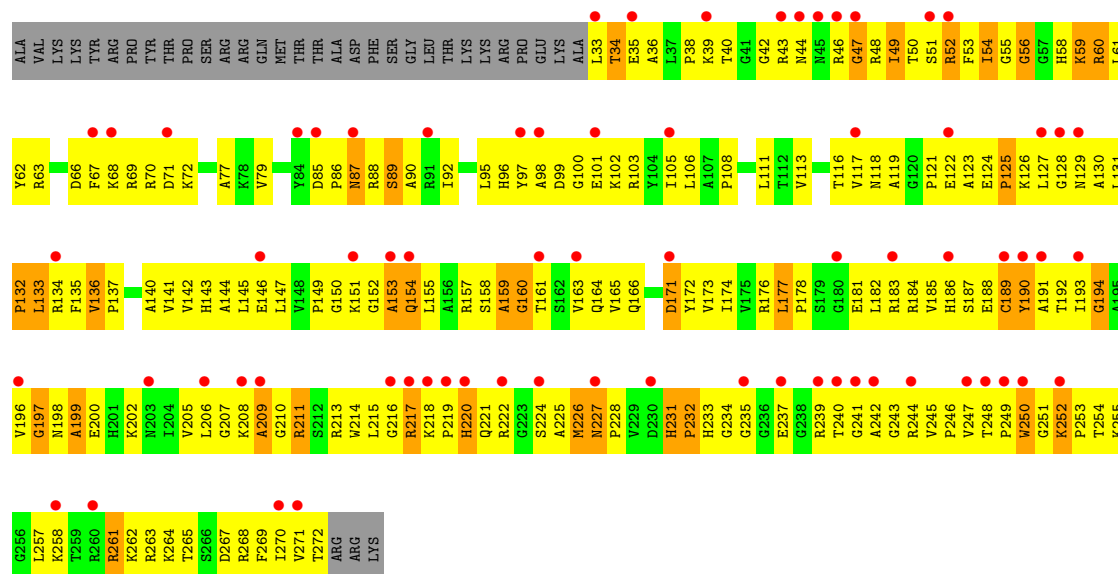
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
30	4	37	Total C N O S 297 179 66 47 5	0	0	0

- Molecule 31 is a protein called 50S ribosomal protein L7/L12.

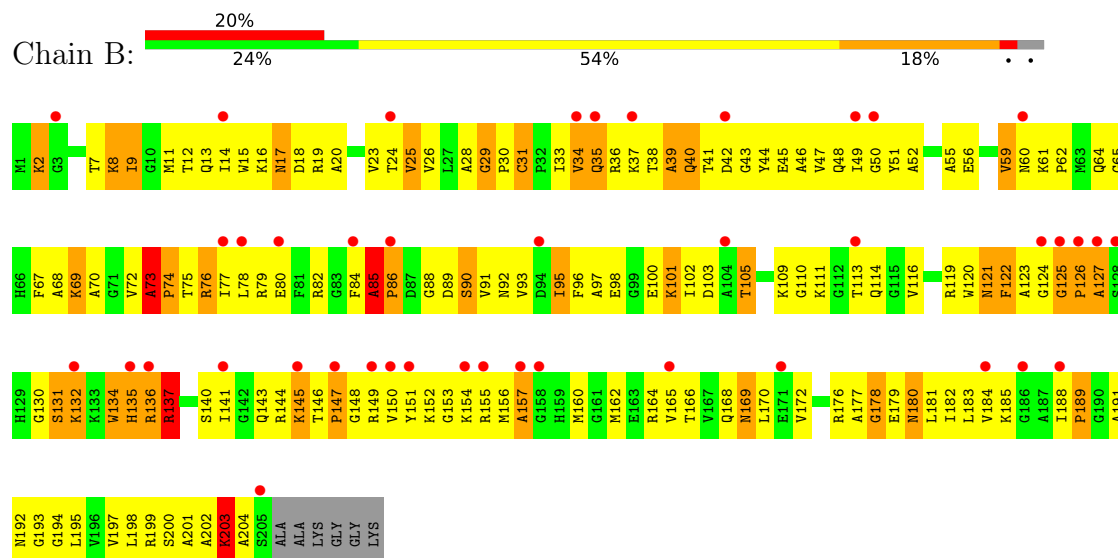
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
31	5	71	Total C 71 71	0	0	71

U1409	C1348	A1285	G1285	G1165	U1105	U1044	C982	U819	U859	A797	C737	C615
U1410	A1349	U1286	A1226	A1166	A1106	G1045	G983	G920	U860	G798	G738	U616
C1411	G1350	A1287	A1167	A1168	U1108	U1046	A984	A921	G861	G799	G739	A618
C1412	G1351	A1288	G1228	G1169	U1109	U1047	G985	A922	A862	U800	A740	A619
G1413	G1352	A1289	C1229	C1169	G1049	U1048	A986	A923	C863	A801	G741	G620
U1414	A1353	A1290	U1170	G1110	G1050	U1049	G987	U895	C864	A802	G742	U621
A1415	A1354	G1291	A1171	C1111	U1051	U1050	G988	U896	A865	C803	A743	C622
A1416	A1355	A1292	U1172	U1112	C1052	U1051	A991	C926	U866	C804	C744	U622
C1417	G1356	A1293	G1173	C1113	G1053	U1052	A992	C927	G867	G805	C745	G623
G1418	G1357	G1294	G1174	A1114	C1054	U1053	A993	G928	U868	A806	G746	A624
C1419	C1358	U1295	A1175	C1115	C993	U1054	C992	A929	C869	A807	A747	A625
A1420	G1359	G1296	U1176	U1116	A994	U1055	A994	A930	C870	C808	A748	A626
U1421	G1360	G1297	U1177	G1117	U1056	U1056	A995	A931	C871	C809	C749	A627
C1422	G1361	U1298	C1178	G1118	A1057	U1057	C996	G932	G872	U810	C750	A628
A1423	A1362	A1299	A1179	U1119	G1058	U1058	C997	G933	U873	G811	G751	C629
U1424	C1363	A1300	A1180	C1120	C1059	U1059	C998	G934	A874	G812	G752	G630
G1425	C1364	U1301	G1181	A1121	A1061	U1060	C999	C935	G875	A813	U753	G631
U1426	U1365	C1302	U1182	A1122	G1062	U1061	A999	A936	A876	G814	G754	A632
G1427	A1366	G1243	C1183	G1123	C1063	U1062	C1000	C937	G877	A815	C755	G633
A1428	A1367	U1244	G1184	U1124	C1064	U1063	C1001	G938	C878	U816	C756	G634
G1429	G1368	C1245	C1185	U1125	U1065	U1064	C1002	G939	A879	C822	A762	C640
U1430	C1369	U1246	G1186	A1126	G1066	U1065	A1011	U946	C880	U823	A763	G641
U1431	U1370	G1247	A1187	C1127	G1067	U1066	A1012	C947	U881	U824	A764	A642
A1432	C1371	G1248	G1188	A1128	U1068	U1067	A1013	G948	C882	C819	C765	A643
A1433	A1372	U1249	A1189	G1129	G1069	U1068	G1013	G949	U883	U826	C766	A644
U1434	G1373	A1250	C1190	U1130	G1070	U1069	G1014	G950	C884	C827	G767	G645
G1436	G1374	G1251	G1191	C1131	U1071	U1070	A1015	G951	U890	C828	A768	C646
C1437	C1375	C1252	A1192	C1132	U1072	U1071	C1016	A952	A891	C829	U769	C647
G1438	G1376	U1315	G1193	G1133	G1073	U1072	A1017	G953	G	C830	G770	A648
U1439	C1377	G1316	U1194	C1134	G1074	U1073	C1018	U954	G	G831	A709	G649
A1440	A1378	C1317	U1195	C1135	C1075	U1074	U1019	G955	G	A832	C710	U650
G1441	C1380	A1320	G1196	G1136	U1076	U1075	A1020	A956	G	A833	G773	C651
A1442	G1381	G1321	U1197	A1137	U1077	U1076	A1021	G957	C	A834	A774	C652
G1443	C1382	A1259	U1199	A1139	U1078	U1077	A1022	G958	C	U835	G775	G653
C1444	G1383	G1322	G1200	C1140	G1079	U1078	G1023	C959	C	G836	G776	A654
A1445	A1384	G1323	G1201	U1141	A1080	A1081	A1024	U960	U	U837	A777	U655
U1446	C1385	U1325	U1202	G1142	G1082	G1083	G1085	G964	A	A838	G778	U656
A1447	A1386	C1326	A1203	A1143	C1083	C1084	U1026	A964	C	U839	U779	A657
C1448	C1387	G1327	G1204	U1144	A1084	U1085	C1027	G965	C	U840	U780	G658
G1449	G1389	U1328	G1205	C1145	G1086	U1086	G1028	A966	A	G841	G781	C659
U1450	A1390	G1329	G1206	G1146	C1087	U1087	C1029	G967	G	A842	A719	G660
A1451	C1391	G1330	U1207	G1147	U1088	U1088	U1030	C968	C	G843	A720	C661
U1452	U1392	G1331	A1208	G1148	C1089	U1089	C1031	U969	U	G844	U784	G662
G1453	G1393	G1332	G1209	G1149	C1090	U1090	A1032	A970	C	U845	U785	G663
U1454	C1394	A1334	C1210	C1150	U1091	U1091	G1033	A971	A	C847	U786	C664
C1455	A1395	G1335	U1212	A1153	U1092	U1092	U1034	C972	C	A848	A787	A665
A1456	C1396	U1336	C1214	G1154	C1093	U1093	G1035	U973	C	G849	G788	U666
U1457	G1397	G1337	A1215	G1155	A1094	U1094	G1036	U974	A	C850	A789	U667
A1458	C1398	A1338	G1216	U1156	A1095	U1095	U1037	C975	A	C851	A790	A668
G1459	A1400	U1339	C1217	G1157	U1096	U1096	C1038	G976	C	U852	G791	G669
C1460	C1401	G1340	U1218	A1158	G1097	U1097	U1039	C977	U	C914	U792	U670
A1461	G1402	G1341	C1219	U1159	U1098	U1098	A1040	G978	C	G855	G793	A671
U1462	A1463	U1342	U1220	C1160	U1099	U1099	G1041	U979	C	A856	A794	C672
G1463	C1404	C1343	G1221	U1161	U1100	U1101	G1042	G980	U	U857	G795	G673
A1464	A1405	C1344	C1222	A1162	U1101	U1102	C1103	C981	A	G858	A796	U674
G1465	U1406	G1345	G1223	C1163	U1102	U1103	A1043					
C1466	C1407	A1282	A1224	C1164	G1104							
U1467	A1468	C1283										
U1469	A1469											

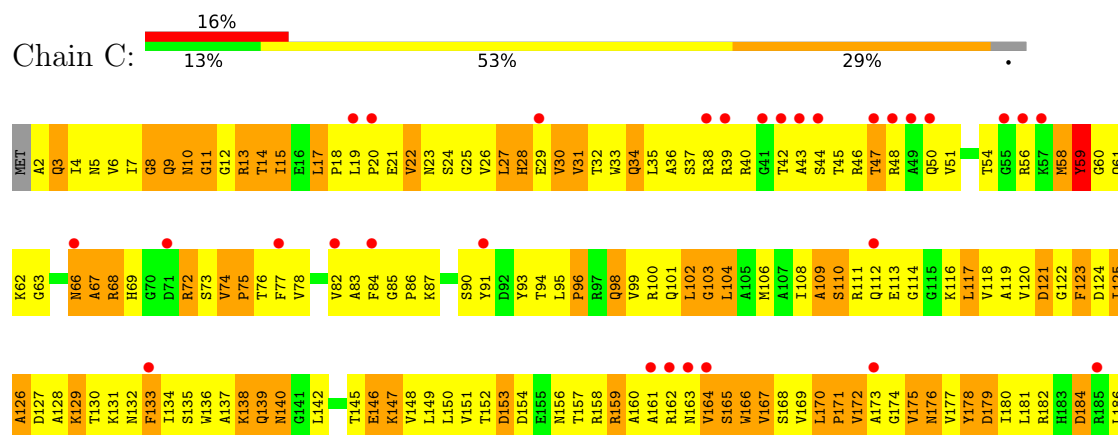


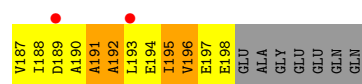


• Molecule 4: 50S ribosomal protein L3

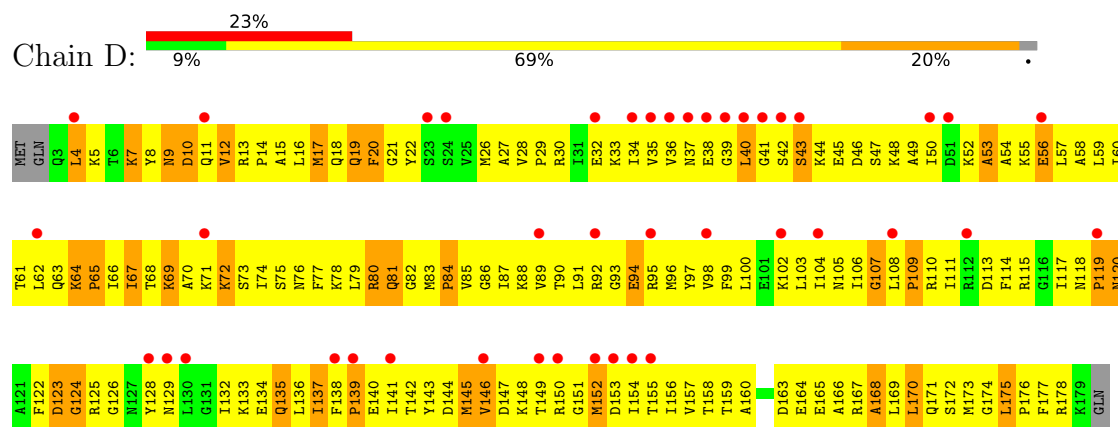


• Molecule 5: 50S ribosomal protein L4

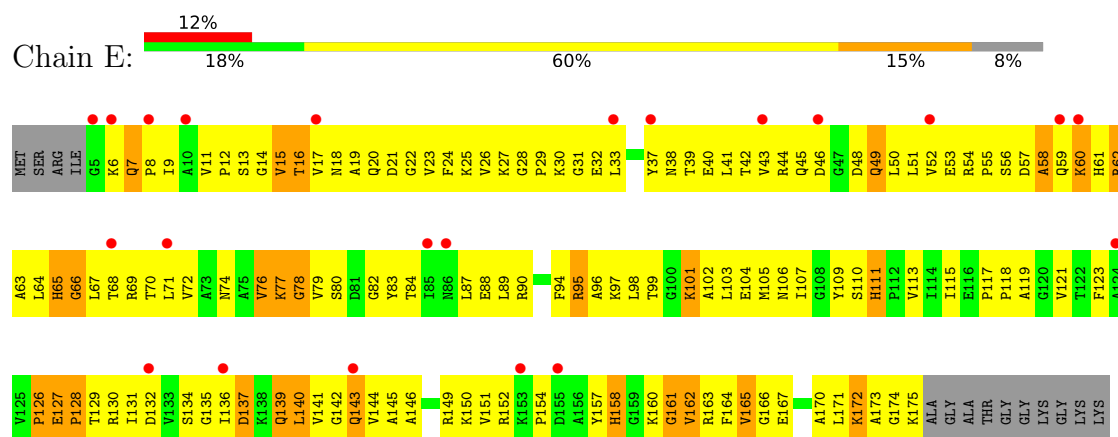




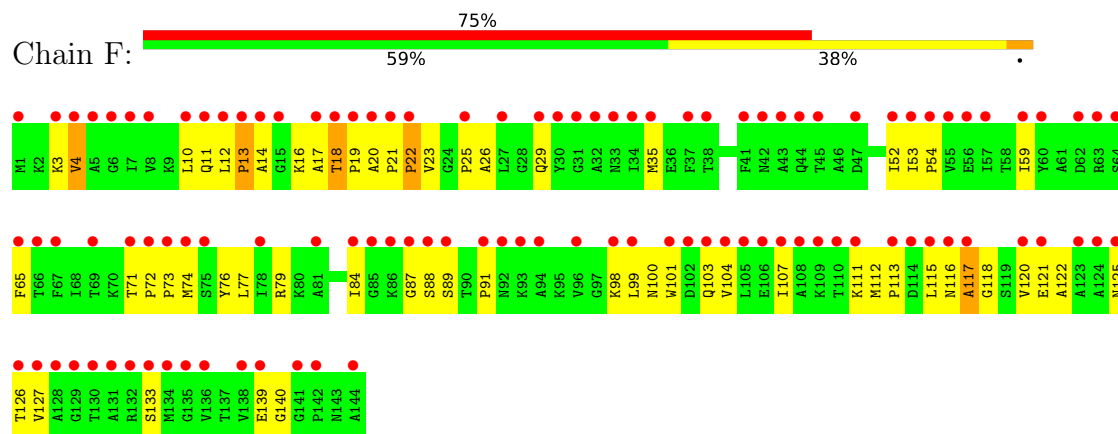
• Molecule 6: 50S ribosomal protein L5



• Molecule 7: 50S ribosomal protein L6

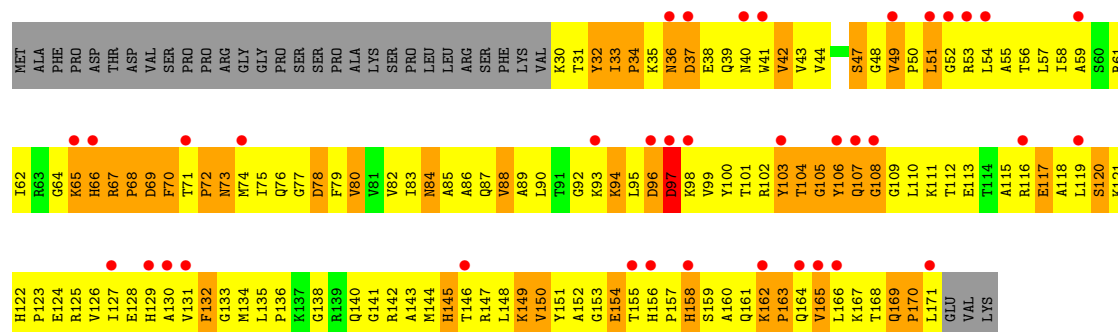


• Molecule 8: 50S ribosomal protein L11

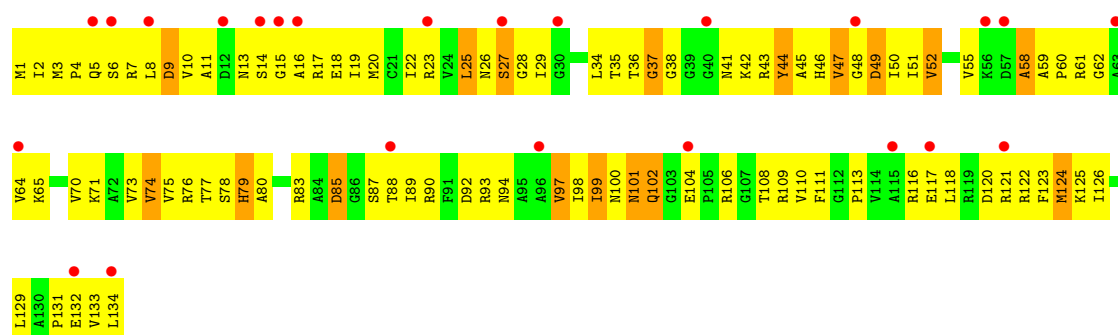


• Molecule 9: 50S ribosomal protein L13

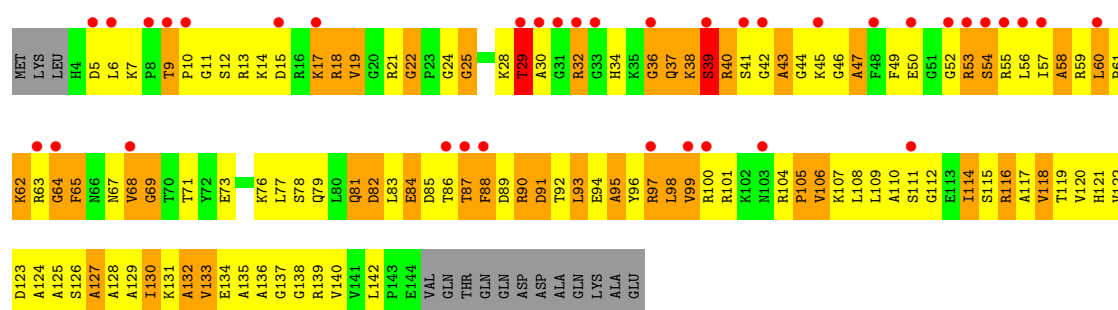
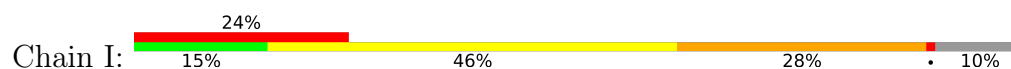




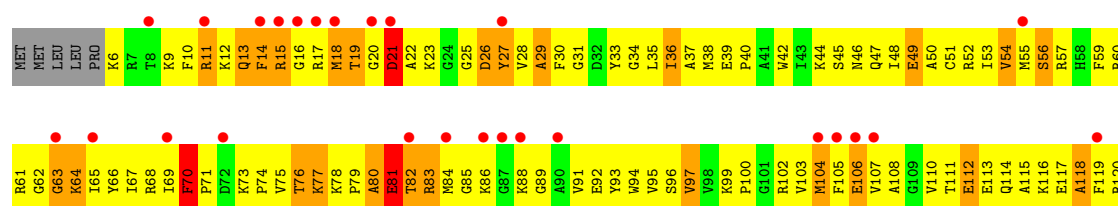
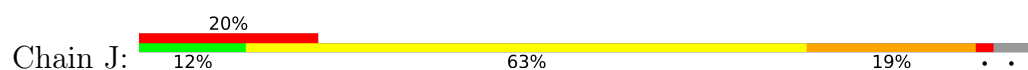
• Molecule 10: 50S ribosomal protein L14

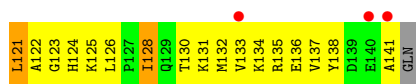


• Molecule 11: 50S ribosomal protein L15

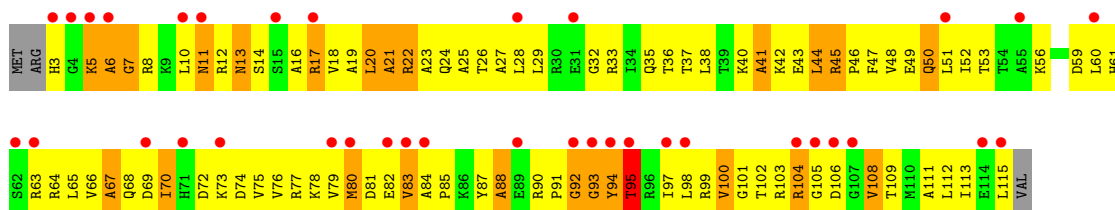
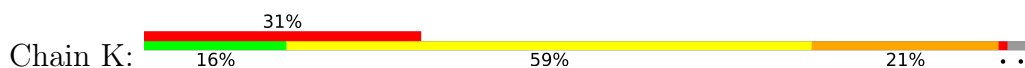


• Molecule 12: 50S ribosomal protein L16

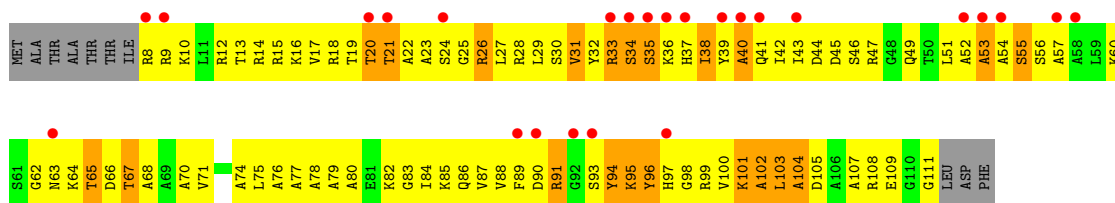
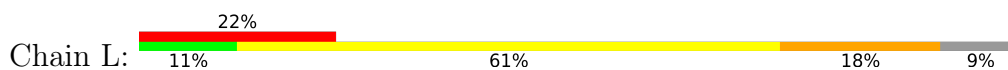




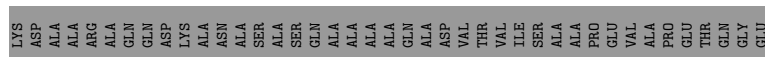
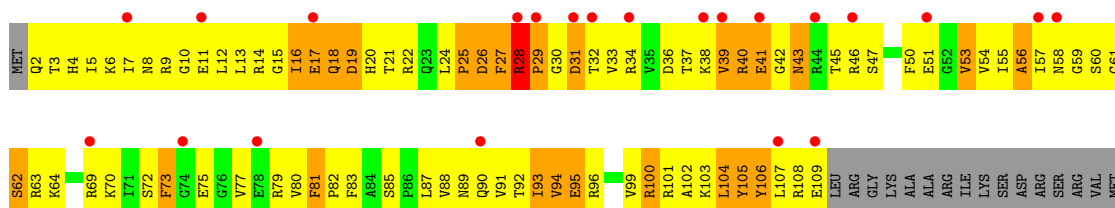
• Molecule 13: 50S ribosomal protein L17



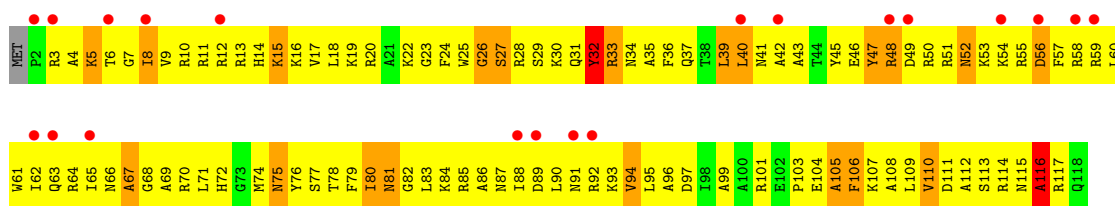
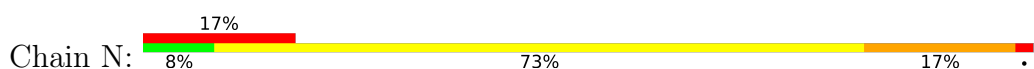
• Molecule 14: 50S ribosomal protein L18



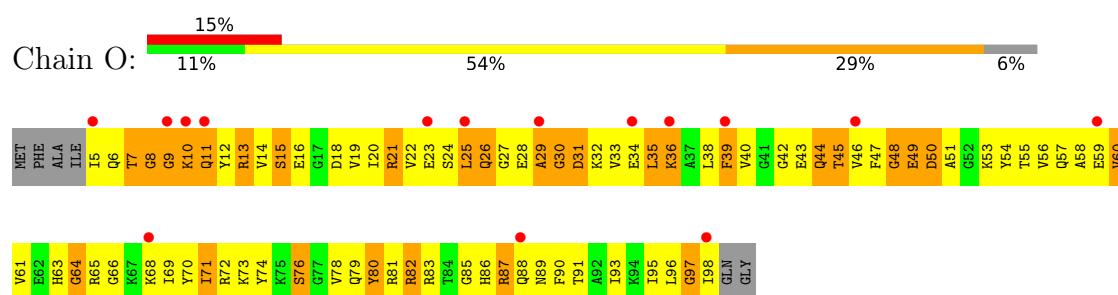
• Molecule 15: 50S ribosomal protein L19



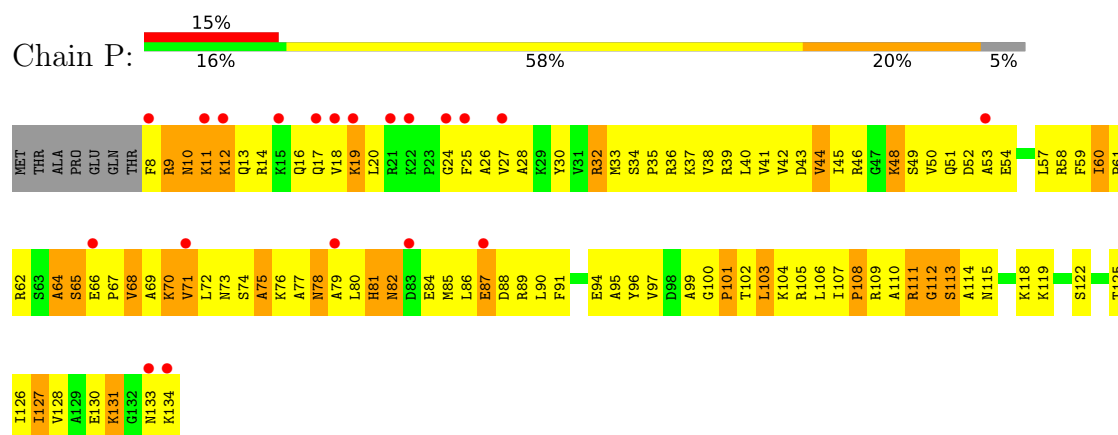
• Molecule 16: 50S ribosomal protein L20



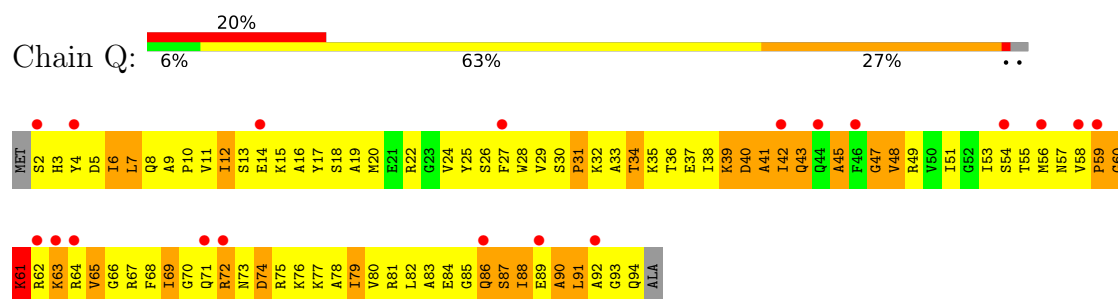
• Molecule 17: 50S ribosomal protein L21



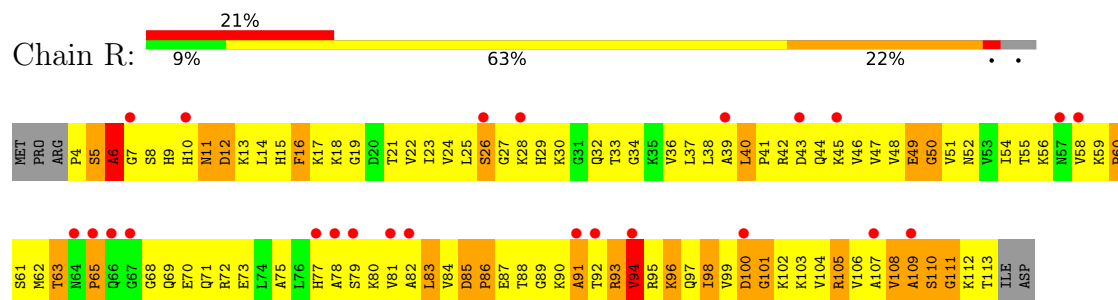
• Molecule 18: 50S ribosomal protein L22



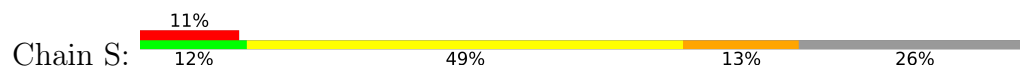
• Molecule 19: 50S ribosomal protein L23

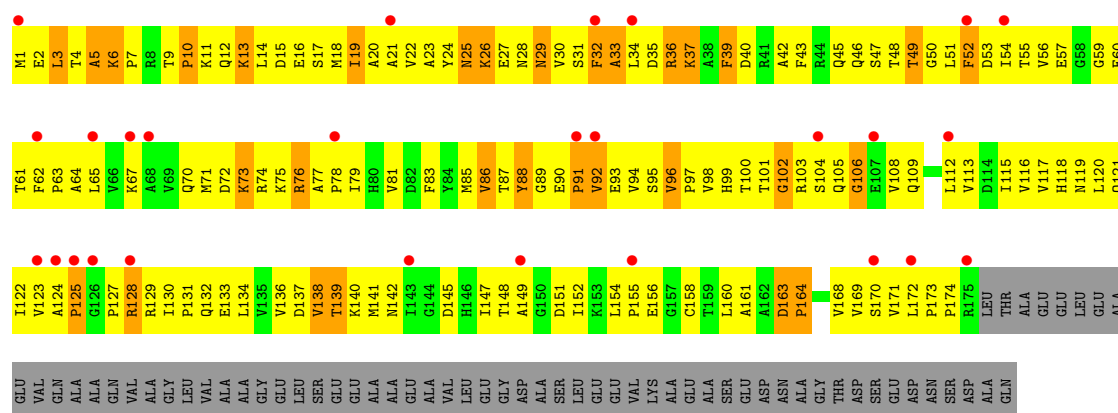


• Molecule 20: 50S ribosomal protein L24



• Molecule 21: 50S ribosomal protein L25

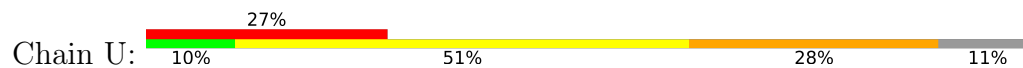




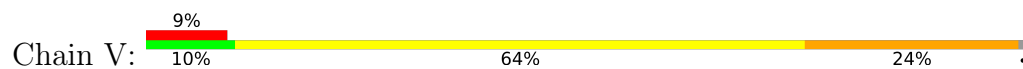
• Molecule 22: 50S ribosomal protein L27



• Molecule 23: 50S ribosomal protein L28

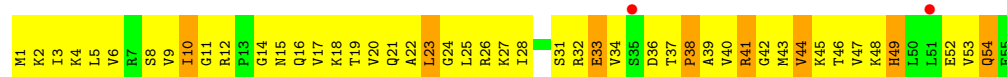


• Molecule 24: 50S ribosomal protein L29

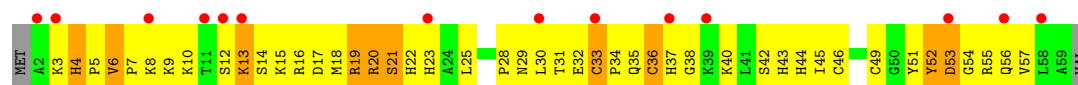


• Molecule 25: 50S ribosomal protein L30

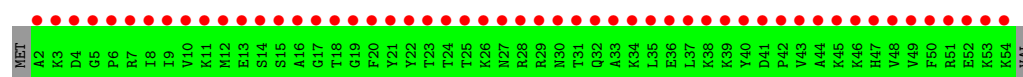




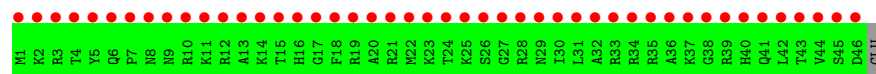
- Molecule 26: 50S ribosomal protein L32



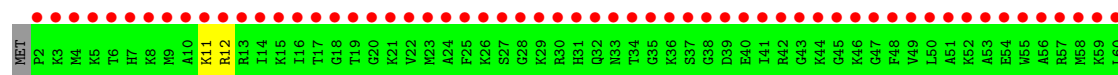
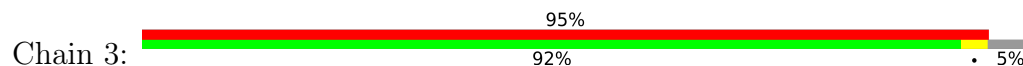
- Molecule 27: 50S ribosomal protein L33



- Molecule 28: 50S ribosomal protein L34



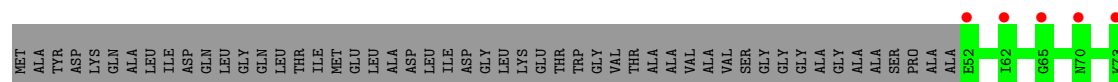
- Molecule 29: 50S ribosomal protein L35

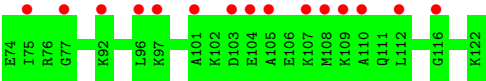


- Molecule 30: 50S ribosomal protein L36



- Molecule 31: 50S ribosomal protein L7/L12





4 Data and refinement statistics

Property	Value	Source
Space group	I 2 2 2	Depositor
Cell constants a, b, c, α , β , γ	169.90Å 408.90Å 694.50Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	30.00 – 3.30 30.00 – 3.31	Depositor EDS
% Data completeness (in resolution range)	97.8 (30.00-3.30) 97.1 (30.00-3.31)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	0.13	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.26 (at 3.31Å)	Xtriage
Refinement program	CNS	Depositor
R, R_{free}	0.302 , 0.339 (Not available) , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å ²)	73.4	Xtriage
Anisotropy	0.201	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.16 , 52.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.42$, $\langle L^2 \rangle = 0.24$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.86	EDS
Total number of atoms	84395	wwPDB-VP
Average B, all atoms (Å ²)	59.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.69% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	X	0.61	4/64561 (0.0%)	1.05	457/100708 (0.5%)
2	Y	0.44	0/2904	0.79	2/4525 (0.0%)
3	A	0.73	1/1862 (0.1%)	1.24	17/2510 (0.7%)
4	B	0.95	0/1567	1.38	26/2105 (1.2%)
5	C	0.76	0/1529	1.27	21/2070 (1.0%)
6	D	0.69	0/1419	1.15	12/1903 (0.6%)
7	E	0.68	0/1308	1.22	9/1771 (0.5%)
8	F	0.28	0/1062	0.70	0/1440
9	G	0.79	0/1138	1.42	20/1539 (1.3%)
10	H	1.04	0/1007	1.34	13/1352 (1.0%)
11	I	0.78	1/1081 (0.1%)	1.33	12/1448 (0.8%)
12	J	0.82	1/1113 (0.1%)	1.29	18/1486 (1.2%)
13	K	1.15	2/886 (0.2%)	1.38	15/1188 (1.3%)
14	L	0.64	0/785	1.23	6/1048 (0.6%)
15	M	0.94	1/884 (0.1%)	1.44	16/1186 (1.3%)
16	N	0.76	0/994	1.18	9/1323 (0.7%)
17	O	0.71	1/750 (0.1%)	1.13	5/1000 (0.5%)
18	P	1.02	0/1027	1.36	12/1373 (0.9%)
19	Q	0.82	1/737 (0.1%)	1.30	12/988 (1.2%)
20	R	0.75	0/835	1.36	10/1121 (0.9%)
21	S	0.69	0/1370	1.17	10/1862 (0.5%)
22	T	0.72	0/633	1.15	3/838 (0.4%)
23	U	0.76	0/556	1.35	7/741 (0.9%)
24	V	0.63	0/537	1.13	6/714 (0.8%)
25	W	0.70	0/426	1.17	4/568 (0.7%)
26	Z	0.82	0/469	1.33	5/629 (0.8%)
30	4	0.68	0/298	1.08	0/390
All	All	0.66	12/91738 (0.0%)	1.10	727/137826 (0.5%)

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	X	2	281
2	Y	0	2
5	C	0	1
9	G	0	1
16	N	0	1
17	O	0	1
22	T	0	1
All	All	2	288

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	X	1056	U	O5'-C5'	6.84	1.52	1.42
13	K	80	MET	SD-CE	-6.52	1.63	1.79
1	X	557	U	C1'-N1	6.25	1.56	1.47
1	X	2322	U	O5'-C5'	6.10	1.51	1.42
13	K	94	TYR	CA-C	-6.09	1.45	1.52
1	X	1056	U	P-O5'	5.92	1.68	1.59
11	I	29	THR	CA-CB	5.81	1.63	1.53
19	Q	79	ILE	CA-CB	-5.67	1.47	1.54
3	A	226	MET	SD-CE	-5.49	1.65	1.79
15	M	73	PHE	CA-C	-5.38	1.48	1.53
12	J	18	MET	CG-SD	5.33	1.94	1.80
17	O	71	ILE	CA-CB	-5.02	1.48	1.53

All (727) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	1055	A	N9-C1'-C2'	-26.43	72.36	112.00
1	X	557	U	N1-C1'-C2'	17.00	139.50	114.00
1	X	417	C	N1-C1'-C2'	15.49	137.24	114.00
1	X	1975	G	C2'-C3'-O3'	14.32	130.99	109.50
9	G	69	ASP	N-CA-C	-11.66	99.05	113.28
1	X	1278	A	N9-C1'-C2'	11.46	129.19	112.00
1	X	1056	U	O4'-C4'-C3'	-11.42	92.58	104.00
1	X	2324	G	N9-C1'-C2'	11.38	129.07	112.00
3	A	211	ARG	N-CA-C	-11.32	98.96	111.07
1	X	2841	U	C2'-C3'-O3'	11.17	126.25	109.50
1	X	556	A	N9-C1'-C2'	10.97	130.46	114.00
15	M	43	ASN	N-CA-C	-10.96	99.74	113.55
1	X	558	G	C3'-C2'-C1'	-10.93	90.37	101.30
15	M	3	THR	N-CA-C	-10.89	94.40	110.52
1	X	2319	G	P-O3'-C3'	-10.87	103.90	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	1865	C	O4'-C4'-C3'	-10.72	93.28	104.00
18	P	60	ILE	CA-C-N	10.66	130.50	119.19
18	P	60	ILE	C-N-CA	10.66	130.50	119.19
23	U	33	LYS	N-CA-C	-10.63	100.44	113.41
1	X	2195	C	N1-C1'-C2'	-10.51	96.23	112.00
1	X	1288	A	N9-C1'-C2'	10.39	127.58	112.00
6	D	17	MET	N-CA-C	-10.38	99.78	111.82
1	X	804	C	C4'-C3'-O3'	-10.25	94.02	109.40
1	X	777	A	C2'-C3'-O3'	10.18	124.78	109.50
14	L	34	SER	N-CA-C	-10.18	100.26	111.36
1	X	2823	G	C2'-C3'-O3'	10.15	124.73	109.50
7	E	145	ALA	N-CA-C	-10.10	100.06	112.38
1	X	2854	G	N9-C1'-C2'	10.00	128.99	114.00
26	Z	13	LYS	N-CA-C	-9.97	100.38	112.54
1	X	728	G	O4'-C4'-C3'	-9.94	94.06	104.00
9	G	94	LYS	N-CA-C	-9.94	97.11	113.50
1	X	1723	U	C2'-C3'-O3'	9.88	124.32	109.50
1	X	2034	A	N9-C1'-C2'	9.87	128.80	114.00
20	R	40	LEU	CA-C-N	9.85	132.15	119.84
20	R	40	LEU	C-N-CA	9.85	132.15	119.84
26	Z	6	VAL	CA-C-N	9.71	129.47	119.76
26	Z	6	VAL	C-N-CA	9.71	129.47	119.76
4	B	125	GLY	CA-C-N	9.67	131.93	119.84
4	B	125	GLY	C-N-CA	9.67	131.93	119.84
1	X	1632	A	N9-C1'-C2'	9.49	128.24	114.00
1	X	1055	A	P-O3'-C3'	9.49	134.43	120.20
1	X	2795	A	N9-C1'-C2'	9.48	126.22	112.00
16	N	67	ALA	N-CA-C	-9.45	101.91	113.15
11	I	32	ARG	N-CA-C	-9.44	94.75	109.76
24	V	23	LYS	N-CA-C	-9.34	102.01	113.97
14	L	65	THR	N-CA-C	-9.34	100.84	112.88
13	K	83	VAL	N-CA-C	9.33	120.14	110.72
1	X	728	G	C3'-C2'-C1'	-9.25	92.05	101.30
15	M	31	ASP	N-CA-C	9.25	122.27	110.24
1	X	415	A	N9-C1'-C2'	9.23	125.85	112.00
1	X	2608	A	C2'-C3'-O3'	9.20	123.30	109.50
15	M	28	ARG	CA-C-N	9.14	131.26	119.84
15	M	28	ARG	C-N-CA	9.14	131.26	119.84
1	X	968	C	N1-C1'-C2'	9.13	125.69	112.00
1	X	1854	G	P-O3'-C3'	-9.02	106.67	120.20
1	X	1337	G	N9-C1'-C2'	8.95	127.43	114.00
1	X	1845	A	O4'-C4'-C3'	-8.84	95.16	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
15	M	19	ASP	N-CA-C	-8.82	102.29	113.23
1	X	1664	G	N9-C1'-C2'	8.65	124.98	112.00
1	X	2854	G	C4'-C3'-O3'	-8.64	96.44	109.40
3	A	136	VAL	N-CA-C	8.56	115.35	107.56
4	B	136	ARG	N-CA-C	8.53	121.32	110.24
18	P	75	ALA	N-CA-C	-8.53	102.78	113.01
1	X	2197	U	C3'-C2'-C1'	-8.46	92.84	101.30
1	X	556	A	P-O3'-C3'	8.44	132.87	120.20
1	X	1775	A	C2'-C3'-O3'	8.44	122.16	109.50
1	X	1919	A	C4'-C3'-O3'	-8.44	100.34	113.00
1	X	1167	A	N9-C1'-C2'	8.44	124.66	112.00
11	I	60	LEU	CA-C-N	8.43	129.09	119.99
11	I	60	LEU	C-N-CA	8.43	129.09	119.99
1	X	557	U	C3'-C2'-C1'	8.42	109.92	101.50
20	R	86	PRO	N-CA-C	-8.38	105.97	114.68
12	J	36	ILE	N-CA-C	8.34	119.78	108.11
21	S	163	ASP	CA-C-N	8.30	130.22	119.84
21	S	163	ASP	C-N-CA	8.30	130.22	119.84
1	X	1853	C	P-O3'-C3'	-8.30	107.75	120.20
1	X	983	G	C4'-C3'-O3'	-8.29	100.57	113.00
1	X	2476	A	C4'-C3'-O3'	-8.24	100.63	113.00
20	R	101	GLY	N-CA-C	-8.24	105.25	114.40
1	X	731	A	N9-C1'-C2'	8.22	124.33	112.00
1	X	1142	G	N9-C1'-C2'	8.20	126.29	114.00
3	A	189	CYS	N-CA-C	8.09	121.92	108.73
3	A	34	THR	N-CA-C	8.03	121.45	108.76
19	Q	61	LYS	N-CA-C	8.03	127.90	110.80
1	X	1055	A	C4'-C3'-O3'	8.01	125.01	113.00
1	X	1314	A	N9-C1'-C2'	7.99	125.99	114.00
1	X	490	A	C2'-C3'-O3'	7.98	121.47	109.50
1	X	1979	C	N1-C1'-C2'	7.96	125.94	114.00
5	C	72	ARG	N-CA-C	-7.96	100.65	111.87
1	X	418	C	N1-C1'-C2'	7.95	123.92	112.00
9	G	130	ALA	N-CA-C	-7.95	102.56	114.64
4	B	134	TRP	N-CA-C	-7.92	99.33	110.50
4	B	34	VAL	N-CA-C	7.91	119.99	111.77
11	I	97	ARG	N-CA-C	-7.88	102.68	111.82
4	B	8	LYS	N-CA-C	-7.87	100.73	110.41
1	X	2404	A	C2'-C3'-O3'	7.86	121.30	109.50
11	I	130	ILE	N-CA-C	-7.84	103.61	110.74
1	X	556	A	C4'-C3'-O3'	7.84	121.16	109.40
1	X	2693	U	N1-C1'-C2'	7.84	125.75	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	2198	U	P-O5'-C5'	-7.80	109.19	120.90
1	X	1285	A	N9-C1'-C2'	7.78	125.67	114.00
18	P	48	LYS	N-CA-C	7.75	118.85	108.38
1	X	2824	C	C2'-C3'-O3'	7.74	121.11	109.50
1	X	555	U	O4'-C4'-C3'	-7.71	96.29	104.00
11	I	22	GLY	CA-C-N	7.69	128.29	120.14
11	I	22	GLY	C-N-CA	7.69	128.29	120.14
1	X	2323	U	C4'-C3'-O3'	7.66	124.48	113.00
19	Q	57	ASN	N-CA-C	7.65	120.76	110.35
21	S	96	VAL	N-CA-C	7.65	116.45	107.73
16	N	40	LEU	N-CA-C	-7.63	102.53	112.68
15	M	59	GLY	N-CA-C	7.63	121.00	111.85
5	C	167	VAL	N-CA-C	7.62	120.12	109.29
1	X	1407	G	N9-C1'-C2'	7.60	123.39	112.00
1	X	1923	U	C2'-C3'-O3'	7.58	120.87	109.50
1	X	955	G	N9-C1'-C2'	7.55	123.33	112.00
5	C	3	GLN	N-CA-C	7.55	120.83	108.52
4	B	90	SER	N-CA-C	7.54	121.02	108.73
9	G	103	TYR	N-CA-C	7.53	121.24	107.99
1	X	580	A	C4'-C3'-O3'	-7.52	98.12	109.40
5	C	133	PHE	N-CA-C	-7.52	103.09	111.28
1	X	2189	A	P-O3'-C3'	7.52	131.47	120.20
9	G	66	HIS	N-CA-C	-7.51	104.22	113.15
1	X	2005	U	C2'-C3'-O3'	-7.48	98.28	109.50
1	X	2823	G	N9-C1'-C2'	7.46	125.19	114.00
9	G	120	SER	N-CA-C	-7.43	102.46	113.61
1	X	1812	U	N1-C1'-C2'	7.42	123.12	112.00
1	X	1033	G	N9-C1'-C2'	7.41	123.11	112.00
1	X	1979	C	C1'-C2'-O2'	-7.40	100.70	111.80
9	G	150	VAL	N-CA-C	7.38	119.73	109.55
1	X	1790	G	C2'-C3'-O3'	7.37	120.55	109.50
1	X	1441	A	C2'-C3'-O3'	7.36	120.54	109.50
7	E	127	GLU	N-CA-C	-7.32	100.21	110.31
1	X	1468	A	O4'-C1'-C2'	-7.31	100.29	107.60
1	X	1852	G	P-O3'-C3'	-7.31	109.24	120.20
12	J	134	LYS	N-CA-C	7.29	122.10	111.02
1	X	1631	C	N1-C1'-C2'	7.29	122.94	112.00
3	A	231	HIS	CA-C-N	7.28	128.94	119.84
3	A	231	HIS	C-N-CA	7.28	128.94	119.84
1	X	683	A	N9-C1'-C2'	7.26	124.89	114.00
1	X	2323	U	O4'-C1'-N1	7.26	119.39	108.50
1	X	417	C	C3'-C2'-C1'	7.25	108.75	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	132	GLN	N-CA-C	-7.24	104.82	112.93
1	X	1288	A	C1'-C2'-O2'	-7.23	97.55	108.40
15	M	40	ARG	N-CA-C	7.23	120.02	111.71
1	X	218	A	N9-C1'-C2'	7.22	124.84	114.00
1	X	2229	G	C4'-C3'-O3'	-7.22	98.57	109.40
22	T	19	LYS	N-CA-C	7.22	126.17	110.80
1	X	2712	G	C4'-C3'-O3'	-7.21	102.18	113.00
17	O	64	GLY	N-CA-C	7.20	122.26	111.18
4	B	168	GLN	N-CA-C	7.17	120.00	110.53
1	X	2323	U	P-O3'-C3'	7.17	130.95	120.20
1	X	925	U	C4'-C3'-O3'	7.17	120.15	109.40
1	X	1353	A	N9-C1'-C2'	7.16	124.74	114.00
9	G	42	VAL	N-CA-C	7.15	119.41	109.55
1	X	2693	U	C1'-C2'-O2'	-7.14	101.08	111.80
12	J	76	THR	N-CA-C	7.13	119.96	109.69
1	X	596	C	N1-C1'-C2'	7.11	124.67	114.00
1	X	985	G	N9-C1'-C2'	7.11	124.67	114.00
1	X	2405	A	C4'-C3'-O3'	7.10	120.05	109.40
1	X	2437	G	C4'-C3'-O3'	-7.10	102.35	113.00
1	X	2322	U	N1-C1'-C2'	7.10	122.65	112.00
1	X	1333	G	C3'-C2'-O2'	7.09	121.34	110.70
1	X	2014	A	C2'-C3'-O3'	7.08	120.12	109.50
1	X	1570	C	C2'-C3'-O3'	-7.07	103.10	113.70
1	X	1513	U	C2'-C3'-O3'	-7.06	103.11	113.70
1	X	399	G	C4'-C3'-O3'	-7.05	102.42	113.00
9	G	121	LYS	N-CA-C	-7.05	104.81	113.41
16	N	6	THR	N-CA-C	-7.03	102.54	113.02
16	N	41	ASN	N-CA-C	-7.01	103.65	111.71
1	X	558	G	C4'-C3'-O3'	6.99	123.48	113.00
1	X	814	G	C4'-C3'-O3'	6.98	119.88	109.40
1	X	1975	G	N9-C1'-C2'	6.97	124.46	114.00
1	X	1633	C	C4'-C3'-O3'	-6.96	98.95	109.40
1	X	1167	A	C4'-C3'-O3'	-6.95	102.57	113.00
1	X	2545	A	C4'-C3'-O3'	-6.94	102.59	113.00
1	X	1006	C	C2'-C3'-O3'	6.94	119.91	109.50
1	X	1849	G	N9-C1'-C2'	6.92	122.38	112.00
21	S	15	ASP	N-CA-C	-6.92	103.48	112.68
1	X	2322	U	P-O3'-C3'	6.90	130.55	120.20
10	H	85	ASP	N-CA-C	-6.89	104.74	113.01
7	E	111	HIS	CA-C-N	6.88	126.86	119.78
7	E	111	HIS	C-N-CA	6.88	126.86	119.78
1	X	2038	C	C2'-C3'-O3'	-6.86	103.42	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	T	69	PHE	N-CA-C	6.85	119.57	108.41
12	J	70	PHE	CA-C-N	6.84	128.39	119.84
12	J	70	PHE	C-N-CA	6.84	128.39	119.84
1	X	1807	A	N9-C1'-C2'	6.84	124.25	114.00
1	X	2313	G	N9-C1'-C2'	6.83	124.24	114.00
1	X	1872	A	C2'-C3'-O3'	6.83	123.94	113.70
1	X	728	G	N9-C1'-C2'	6.82	122.22	112.00
1	X	538	A	C2'-C3'-O3'	6.80	123.91	113.70
1	X	1937	G	N9-C1'-C2'	6.80	122.20	112.00
1	X	801	A	C2'-C3'-O3'	6.80	119.70	109.50
1	X	2496	C	C4'-C3'-O3'	-6.80	102.80	113.00
20	R	109	ALA	N-CA-C	-6.78	103.81	111.07
13	K	41	ALA	N-CA-C	-6.78	103.50	111.03
1	X	1473	U	C2'-C3'-O3'	6.78	119.67	109.50
1	X	2321	C	O3'-P-O5'	6.77	114.16	104.00
4	B	31	CYS	CA-C-N	6.77	127.22	120.52
4	B	31	CYS	C-N-CA	6.77	127.22	120.52
1	X	1811	A	C2'-C3'-O3'	6.75	119.63	109.50
1	X	555	U	C3'-C2'-C1'	-6.75	94.55	101.30
3	A	87	ASN	N-CA-C	-6.75	104.18	113.56
5	C	170	LEU	CA-C-N	6.73	128.25	119.84
5	C	170	LEU	C-N-CA	6.73	128.25	119.84
13	K	90	ARG	CA-C-N	6.73	128.25	119.84
13	K	90	ARG	C-N-CA	6.73	128.25	119.84
1	X	490	A	C4'-C3'-O3'	-6.71	99.33	109.40
1	X	2476	A	N9-C1'-C2'	6.71	122.06	112.00
23	U	67	LEU	N-CA-C	-6.70	104.37	112.54
1	X	1278	A	C2'-C3'-O3'	6.70	123.74	113.70
5	C	102	LEU	N-CA-C	-6.69	105.23	113.19
10	H	52	VAL	N-CA-C	-6.69	98.60	108.97
1	X	1856	U	P-O3'-C3'	-6.68	110.18	120.20
1	X	1212	U	C2'-C3'-O3'	6.68	123.71	113.70
4	B	137	ARG	N-CA-C	-6.68	95.05	109.81
10	H	9	ASP	N-CA-C	-6.64	100.69	110.52
22	T	51	VAL	N-CA-C	6.64	117.20	107.37
1	X	571	U	C4'-C3'-O3'	-6.64	103.05	113.00
1	X	1261	G	C2'-C3'-O3'	6.63	119.45	109.50
1	X	1250	A	N9-C1'-C2'	6.63	121.95	112.00
1	X	1265	G	N9-C1'-C2'	6.63	123.95	114.00
1	X	1036	G	C2'-C3'-O3'	6.62	119.43	109.50
1	X	1264	C	N1-C1'-C2'	6.62	121.93	112.00
14	L	25	GLY	N-CA-C	-6.62	105.34	114.67

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	G	145	HIS	N-CA-C	-6.62	104.14	111.82
1	X	2190	A	C4'-C3'-O3'	6.61	122.92	113.00
1	X	1654	A	C3'-C2'-O2'	6.61	120.62	110.70
1	X	1919	A	N9-C1'-C2'	6.61	121.91	112.00
16	N	80	ILE	N-CA-C	6.61	117.23	110.82
13	K	44	LEU	N-CA-C	6.61	119.04	111.11
3	A	224	SER	N-CA-C	-6.61	104.97	113.16
1	X	541	C	N1-C1'-C2'	6.59	123.89	114.00
1	X	1031	C	C2'-C3'-O3'	6.58	119.38	109.50
12	J	49	GLU	N-CA-C	-6.58	103.22	111.11
20	R	6	ALA	N-CA-C	6.54	124.73	110.80
1	X	1250	A	C4'-C3'-O3'	-6.54	103.19	113.00
1	X	684	C	C5'-C4'-C3'	-6.54	106.20	116.00
12	J	77	LYS	N-CA-C	6.54	118.08	108.86
1	X	780	U	C2'-C3'-O3'	6.53	123.50	113.70
1	X	1475	U	N1-C1'-C2'	6.53	121.79	112.00
3	A	89	SER	N-CA-C	-6.53	102.23	111.56
1	X	2660	C	C2'-C3'-O3'	-6.52	99.71	109.50
11	I	53	ARG	N-CA-C	6.51	117.72	108.54
1	X	841	G	N9-C1'-C2'	6.51	121.77	112.00
1	X	1552	C	C2'-C3'-O3'	6.51	119.27	109.50
1	X	2795	A	C4'-C3'-O3'	-6.51	103.24	113.00
1	X	1774	A	C4'-C3'-O3'	-6.50	103.25	113.00
1	X	1859	A	P-O3'-C3'	-6.50	110.45	120.20
1	X	2560	G	N9-C1'-C2'	6.50	123.74	114.00
1	X	2496	C	N1-C1'-C2'	6.49	121.73	112.00
1	X	460	U	N1-C1'-C2'	6.49	123.73	114.00
1	X	34	U	C4'-C3'-O3'	-6.48	103.28	113.00
4	B	193	GLY	N-CA-C	-6.47	106.51	114.92
1	X	2198	U	N1-C1'-C2'	6.46	121.69	112.00
1	X	742	G	N9-C1'-C2'	6.46	121.69	112.00
1	X	2252	A	N9-C1'-C2'	6.45	121.67	112.00
1	X	1927	U	C2'-C3'-O3'	6.44	119.16	109.50
1	X	1056	U	C5'-C4'-C3'	6.43	125.65	116.00
1	X	1927	U	N1-C1'-C2'	6.43	123.65	114.00
1	X	2867	G	C2'-C3'-O3'	6.41	119.12	109.50
21	S	32	PHE	N-CA-C	6.41	117.90	108.86
1	X	818	G	N9-C1'-C2'	6.41	123.61	114.00
1	X	1582	A	N9-C1'-C2'	6.41	123.61	114.00
9	G	108	GLY	N-CA-C	-6.41	98.00	113.18
1	X	177	U	N1-C1'-C2'	6.40	121.60	112.00
1	X	2687	G	C4'-C3'-O3'	-6.40	103.40	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	D	72	LYS	N-CA-C	-6.39	104.67	113.56
13	K	104	ARG	N-CA-C	6.39	121.43	112.93
1	X	2663	U	C5'-C4'-C3'	-6.39	106.42	116.00
1	X	490	A	N9-C1'-C2'	6.38	123.56	114.00
1	X	729	A	O4'-C4'-C3'	-6.37	97.63	104.00
5	C	27	LEU	N-CA-C	-6.36	105.00	112.89
1	X	1699	A	C3'-C2'-O2'	6.36	120.24	110.70
1	X	2824	C	N1-C1'-C2'	6.35	123.53	114.00
9	G	80	VAL	N-CA-C	6.35	117.44	108.36
1	X	2057	U	C5'-C4'-C3'	-6.34	106.48	116.00
1	X	1473	U	C1'-C2'-O2'	-6.34	102.28	111.80
1	X	804	C	N1-C1'-C2'	6.34	123.51	114.00
1	X	824	U	C4'-C3'-O3'	-6.34	99.90	109.40
1	X	1326	U	C2'-C3'-O3'	-6.33	104.21	113.70
1	X	466	A	C2'-C3'-O3'	6.32	118.98	109.50
4	B	34	VAL	CB-CA-C	-6.30	104.09	112.46
1	X	460	U	C4'-C3'-O3'	-6.29	99.96	109.40
1	X	343	A	N9-C1'-C2'	6.29	121.43	112.00
1	X	2252	A	C4'-C3'-O3'	-6.28	103.58	113.00
1	X	769	C	C2'-C3'-O3'	-6.27	104.29	113.70
1	X	1339	U	C3'-C2'-O2'	6.25	120.08	110.70
16	N	39	LEU	N-CA-C	6.25	120.59	113.15
1	X	1632	A	C2'-C3'-O3'	6.25	118.87	109.50
19	Q	45	ALA	N-CA-C	-6.25	105.60	113.72
1	X	1871	G	O4'-C4'-C3'	-6.24	97.76	104.00
1	X	312	G	N9-C1'-C2'	6.24	123.36	114.00
1	X	1225	G	C4'-C3'-O3'	-6.24	103.65	113.00
1	X	3	U	C2'-C3'-O3'	6.23	123.05	113.70
6	D	20	PHE	CA-C-O	6.22	121.55	117.94
18	P	65	SER	N-CA-C	6.22	117.72	111.07
1	X	50	G	C4'-C3'-O3'	-6.21	103.68	113.00
1	X	1249	G	N9-C1'-C2'	6.21	121.31	112.00
11	I	87	THR	N-CA-C	-6.21	104.81	113.37
1	X	1357	U	C2'-C3'-O3'	6.20	118.80	109.50
1	X	434	C	N1-C1'-C2'	6.20	121.30	112.00
1	X	797	A	C4'-C3'-O3'	-6.20	103.70	113.00
1	X	2617	G	C4'-C3'-O3'	-6.19	103.72	113.00
17	O	97	GLY	N-CA-C	6.19	120.54	112.25
16	N	52	ASN	N-CA-C	6.18	120.93	112.04
1	X	729	A	C3'-C2'-C1'	-6.17	95.13	101.30
20	R	100	ASP	N-CA-C	-6.17	101.08	109.54
1	X	1689	U	C3'-C2'-O2'	6.17	119.96	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	S	29	ASN	N-CA-C	-6.17	99.84	108.54
15	M	81	PHE	N-CA-C	6.17	118.56	109.62
19	Q	90	ALA	N-CA-C	-6.17	105.03	114.16
1	X	2075	U	N1-C1'-C2'	6.15	121.23	112.00
1	X	2327	U	P-O3'-C3'	-6.15	110.98	120.20
1	X	522	G	C4'-C3'-O3'	-6.15	103.78	113.00
1	X	2426	G	C2'-C3'-O3'	6.14	118.71	109.50
1	X	1153	A	C2'-C3'-O3'	6.13	122.90	113.70
1	X	2706	U	C2'-C3'-O3'	6.13	118.70	109.50
21	S	52	PHE	N-CA-C	6.13	118.27	109.14
1	X	1716	G	N9-C1'-C2'	6.12	123.18	114.00
1	X	1845	A	C3'-C2'-C1'	-6.12	95.18	101.30
1	X	1407	G	C4'-C3'-O3'	-6.11	103.84	113.00
6	D	20	PHE	CB-CA-C	-6.08	108.32	117.07
1	X	1979	C	C2'-C3'-O3'	6.07	118.61	109.50
12	J	81	GLU	N-CA-C	6.07	123.74	110.80
1	X	1474	A	C2'-C3'-O3'	6.07	118.61	109.50
3	A	194	GLY	N-CA-C	6.07	119.13	111.85
1	X	2197	U	O3'-P-O5'	-6.07	94.90	104.00
9	G	106	TYR	N-CA-C	-6.06	101.67	110.64
1	X	690	A	C2'-C3'-O3'	-6.06	104.61	113.70
4	B	178	GLY	N-CA-C	-6.05	107.54	115.47
1	X	73	A	C2'-C3'-O3'	6.04	118.56	109.50
1	X	408	U	C4'-C3'-O3'	-6.04	103.94	113.00
19	Q	7	LEU	N-CA-C	-6.04	101.73	110.24
1	X	789	G	C2'-C3'-O3'	6.04	118.55	109.50
1	X	2323	U	O5'-C5'-C4'	-6.03	102.45	111.50
4	B	73	ALA	CA-C-N	6.03	127.37	119.84
4	B	73	ALA	C-N-CA	6.03	127.37	119.84
7	E	21	ASP	CB-CA-C	-6.03	107.91	116.34
1	X	752	G	C2'-C3'-O3'	-6.02	100.47	109.50
1	X	199	A	C2'-C3'-O3'	-6.02	100.47	109.50
12	J	19	THR	N-CA-C	6.02	118.00	108.79
1	X	541	C	C4'-C3'-O3'	-6.02	100.37	109.40
19	Q	88	ILE	N-CA-C	-6.02	98.86	107.77
1	X	795	A	C1'-C2'-O2'	-6.01	102.78	111.80
1	X	2326	C	P-O3'-C3'	-6.01	111.18	120.20
1	X	2195	C	O4'-C1'-C2'	6.01	113.61	107.60
5	C	74	VAL	CA-C-N	6.00	127.34	119.84
5	C	74	VAL	C-N-CA	6.00	127.34	119.84
1	X	1812	U	C4'-C3'-O3'	-6.00	104.00	113.00
1	X	994	A	C2'-C3'-O3'	6.00	118.50	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	R	94	VAL	N-CA-C	5.99	121.79	109.34
1	X	791	G	C2'-C3'-O3'	-5.99	104.72	113.70
1	X	2756	A	C2'-C3'-O3'	5.99	118.48	109.50
1	X	1410	U	N1-C1'-C2'	5.98	122.97	114.00
1	X	1056	U	O4'-C1'-N1	5.97	117.45	108.50
1	X	1921	A	C2'-C3'-O3'	5.96	118.44	109.50
1	X	1153	A	C4'-C3'-O3'	-5.96	104.06	113.00
1	X	2320	G	P-O3'-C3'	-5.96	111.26	120.20
5	C	58	MET	N-CA-C	5.95	123.48	110.80
25	W	6	VAL	N-CA-C	5.95	117.91	112.43
1	X	1861	G	P-O3'-C3'	-5.95	111.28	120.20
17	O	50	ASP	N-CA-C	-5.95	105.73	112.87
1	X	540	G	C2'-C3'-O3'	-5.94	104.79	113.70
1	X	2633	A	N9-C1'-C2'	5.94	122.91	114.00
1	X	334	G	C2'-C3'-O3'	5.93	118.40	109.50
1	X	1733	U	C4'-C3'-O3'	-5.93	104.11	113.00
1	X	757	U	C4'-C3'-O3'	-5.92	104.12	113.00
1	X	2189	A	C2'-C3'-O3'	5.92	122.58	113.70
9	G	49	VAL	N-CA-C	5.92	114.52	109.02
1	X	1288	A	C5'-C4'-C3'	5.92	124.87	116.00
10	H	106	ARG	N-CA-C	-5.92	106.04	113.20
1	X	840	U	C2'-C3'-O3'	-5.91	104.83	113.70
1	X	59	G	N9-C1'-C2'	5.91	120.87	112.00
1	X	416	U	N1-C1'-C2'	5.91	120.86	112.00
1	X	2756	A	N9-C1'-C2'	5.91	122.86	114.00
1	X	814	G	C1'-C2'-O2'	-5.90	102.94	111.80
4	B	25	VAL	CB-CA-C	-5.90	104.92	111.35
3	A	136	VAL	CA-C-N	5.90	125.92	119.90
3	A	136	VAL	C-N-CA	5.90	125.92	119.90
9	G	97	ASP	N-CA-C	5.90	123.37	110.80
3	A	261	ARG	N-CA-C	5.90	116.88	108.74
9	G	76	GLN	N-CA-C	-5.89	103.88	113.19
9	G	117	GLU	N-CA-C	-5.89	104.21	111.75
1	X	1854	G	C2'-C3'-O3'	-5.89	104.87	113.70
1	X	969	U	C2'-C3'-O3'	5.88	118.31	109.50
1	X	1846	A	P-O5'-C5'	-5.88	112.09	120.90
1	X	2330	G	N9-C1'-C2'	5.88	120.81	112.00
1	X	1671	A	C2'-C3'-O3'	-5.87	104.89	113.70
1	X	2469	G	N9-C1'-C2'	5.87	122.81	114.00
1	X	1137	A	C2'-C3'-O3'	-5.87	104.89	113.70
1	X	1716	G	C2'-C3'-O3'	5.86	118.29	109.50
1	X	400	U	C4'-C3'-O3'	-5.84	100.64	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	728	G	C2'-C3'-O3'	5.84	122.46	113.70
1	X	557	U	C2'-C3'-O3'	5.83	118.24	109.50
1	X	1852	G	O4'-C4'-C3'	-5.83	98.17	104.00
1	X	2525	U	C4'-C3'-O3'	-5.83	104.26	113.00
18	P	64	ALA	N-CA-C	-5.83	106.13	113.18
1	X	1873	A	P-O5'-C5'	-5.82	112.16	120.90
10	H	102	GLN	N-CA-C	-5.82	104.69	113.89
1	X	2614	A	C4'-C3'-O3'	-5.82	104.27	113.00
18	P	127	ILE	N-CA-C	5.82	116.25	107.75
16	N	116	ALA	N-CA-C	-5.82	98.41	110.80
1	X	2363	G	C4'-C3'-O3'	-5.82	104.28	113.00
1	X	2370	G	N9-C1'-C2'	5.81	122.72	114.00
11	I	39	SER	N-CA-C	-5.81	98.42	110.80
1	X	123	A	N9-C1'-C2'	5.81	120.71	112.00
4	B	101	LYS	N-CA-C	-5.80	100.83	110.17
1	X	2477	C	C2'-C3'-O3'	-5.80	105.00	113.70
1	X	2617	G	N9-C1'-C2'	5.80	120.69	112.00
4	B	203	LYS	N-CA-C	-5.79	98.46	110.80
1	X	2008	C	C4'-C3'-O3'	-5.79	104.32	113.00
1	X	1581	C	C4'-C3'-O3'	-5.78	100.73	109.40
1	X	1854	G	O4'-C4'-C3'	-5.77	98.23	104.00
1	X	2592	U	C4'-C3'-O3'	-5.77	104.34	113.00
19	Q	58	VAL	CA-C-N	5.77	127.05	119.84
19	Q	58	VAL	C-N-CA	5.77	127.05	119.84
1	X	69	G	N9-C1'-C2'	5.76	122.65	114.00
1	X	1630	A	C4'-C3'-O3'	-5.76	104.35	113.00
1	X	2191	A	N9-C1'-C2'	5.76	120.65	112.00
7	E	137	ASP	N-CA-C	5.76	117.45	109.15
1	X	878	C	N1-C1'-C2'	5.76	122.64	114.00
1	X	1152	C	N1-C1'-C2'	5.75	120.63	112.00
1	X	2196	U	P-O3'-C3'	5.74	128.81	120.20
1	X	2521	A	N9-C1'-C2'	5.74	122.61	114.00
15	M	41	GLU	N-CA-C	5.74	118.03	109.59
1	X	2428	U	N1-C1'-C2'	5.74	122.61	114.00
1	X	7	G	C5'-C4'-C3'	-5.74	107.39	116.00
1	X	1963	G	C2'-C3'-O3'	5.74	118.10	109.50
15	M	18	GLN	N-CA-C	-5.73	105.62	113.30
1	X	1142	G	C1'-C2'-O2'	-5.73	103.20	111.80
12	J	14	PHE	N-CA-C	5.73	115.58	108.19
5	C	28	HIS	N-CA-C	-5.72	104.67	111.03
1	X	2848	A	C4'-C3'-O3'	-5.72	100.82	109.40
1	X	1664	G	C4'-C3'-O3'	-5.71	104.43	113.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	2545	A	N9-C1'-C2'	5.71	120.56	112.00
1	X	333	A	N9-C1'-C2'	5.70	120.56	112.00
1	X	1618	U	N1-C1'-C2'	5.70	122.55	114.00
1	X	417	C	P-O3'-C3'	5.70	128.75	120.20
1	X	2337	A	C2'-C3'-O3'	-5.69	105.16	113.70
1	X	399	G	N9-C1'-C2'	5.69	120.53	112.00
1	X	1336	G	C4'-C3'-O3'	-5.68	104.48	113.00
1	X	557	U	O4'-C1'-C2'	-5.68	100.12	105.80
3	A	133	LEU	N-CA-C	5.68	117.47	111.28
1	X	571	U	N1-C1'-C2'	5.67	120.51	112.00
1	X	1439	G	C2'-C3'-O3'	5.67	122.21	113.70
1	X	1800	A	N9-C1'-C2'	5.67	120.51	112.00
1	X	1583	A	N9-C1'-C2'	5.67	122.50	114.00
21	S	73	LYS	N-CA-C	-5.67	102.13	110.52
25	W	41	ARG	N-CA-C	-5.67	105.10	111.28
1	X	580	A	N9-C1'-C2'	5.66	122.49	114.00
1	X	1139	A	C2'-C3'-O3'	5.65	117.98	109.50
1	X	2190	A	N9-C1'-C2'	-5.65	103.53	112.00
1	X	1772	C	N1-C1'-C2'	5.65	122.47	114.00
1	X	2731	G	N9-C1'-C2'	5.64	120.47	112.00
12	J	48	ILE	N-CA-C	-5.64	106.31	111.67
1	X	2200	G	P-O5'-C5'	-5.64	112.44	120.90
1	X	747	A	C5'-C4'-C3'	5.64	124.46	116.00
1	X	1872	A	P-O3'-C3'	5.64	128.66	120.20
1	X	1980	A	O4'-C4'-C3'	-5.63	98.37	104.00
1	X	2330	G	C4'-C3'-O3'	-5.63	104.56	113.00
19	Q	39	LYS	N-CA-C	-5.62	105.15	111.28
1	X	1412	C	C2'-C3'-O3'	5.62	122.13	113.70
1	X	1947	G	N9-C1'-C2'	5.62	122.43	114.00
1	X	596	C	C4'-C3'-O3'	-5.62	100.97	109.40
1	X	1081	A	N9-C1'-C2'	5.62	120.42	112.00
1	X	2199	C	C5'-C4'-C3'	-5.61	107.59	116.00
13	K	108	VAL	CB-CA-C	-5.61	103.53	111.21
1	X	699	G	C1'-C2'-O2'	-5.60	103.40	111.80
1	X	682	G	C4'-C3'-O3'	5.60	117.80	109.40
9	G	96	ASP	N-CA-C	-5.60	101.06	109.79
1	X	564	U	C3'-C2'-O2'	5.60	119.09	110.70
1	X	2846	G	C4'-C3'-O3'	-5.60	104.61	113.00
23	U	43	ARG	N-CA-C	5.59	116.46	108.74
3	A	242	ALA	N-CA-C	5.59	118.20	108.76
1	X	2188	A	C4'-C3'-C2'	5.58	108.18	102.60
4	B	200	SER	N-CA-C	-5.58	103.01	110.55

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	2016	A	N9-C1'-C2'	5.58	122.37	114.00
1	X	2693	U	O4'-C1'-C2'	5.58	111.38	105.80
15	M	81	PHE	CA-C-N	5.58	128.04	120.79
15	M	81	PHE	C-N-CA	5.58	128.04	120.79
1	X	2559	U	C4'-C3'-O3'	-5.58	104.63	113.00
10	H	49	ASP	N-CA-C	-5.58	100.80	109.72
13	K	95	THR	N-CA-C	-5.57	98.94	110.80
1	X	1357	U	C4'-C3'-O3'	-5.57	101.05	109.40
1	X	332	C	C2'-C3'-O3'	-5.56	105.36	113.70
13	K	93	GLY	CA-C-N	-5.56	115.16	123.00
13	K	93	GLY	C-N-CA	-5.56	115.16	123.00
1	X	682	G	C2'-C3'-O3'	-5.55	101.17	109.50
1	X	1978	U	C3'-C2'-O2'	5.55	119.03	110.70
23	U	25	ARG	N-CA-C	-5.55	105.28	113.72
1	X	1953	A	N9-C1'-C2'	5.55	122.33	114.00
23	U	54	ASN	N-CA-C	-5.55	101.03	108.86
1	X	424	G	C4'-C3'-O3'	5.55	117.72	109.40
1	X	1357	U	N1-C1'-C2'	5.55	122.32	114.00
1	X	458	G	N9-C1'-C2'	5.55	122.32	114.00
23	U	68	ARG	N-CA-C	-5.55	104.63	111.40
14	L	35	SER	N-CA-C	-5.54	101.77	110.36
19	Q	74	ASP	N-CA-C	5.54	122.61	110.80
2	Y	91	A	C3'-C2'-O2'	5.54	119.01	110.70
1	X	198	A	C2'-C3'-O3'	5.53	117.80	109.50
5	C	140	ASN	N-CA-C	-5.53	105.14	112.94
1	X	983	G	N9-C1'-C2'	5.53	120.29	112.00
4	B	114	GLN	N-CA-C	5.52	118.48	109.59
1	X	469	G	C2'-C3'-O3'	5.52	117.78	109.50
20	R	78	ALA	N-CA-C	-5.52	106.86	113.21
9	G	47	SER	N-CA-C	5.52	118.35	110.24
1	X	758	G	C2'-C3'-O3'	5.52	121.97	113.70
2	Y	68	A	C2'-C3'-O3'	-5.51	105.43	113.70
20	R	105	ARG	CB-CA-C	-5.51	107.51	114.40
1	X	557	U	P-O3'-C3'	5.51	128.46	120.20
1	X	2674	C	C4'-C3'-O3'	-5.51	104.74	113.00
1	X	1267	A	C4'-C3'-O3'	-5.50	104.74	113.00
25	W	44	VAL	N-CA-C	5.50	115.64	110.30
1	X	2315	A	N9-C1'-C2'	5.49	120.24	112.00
1	X	1979	C	C3'-C2'-O2'	-5.49	106.37	114.60
1	X	1865	C	P-O3'-C3'	-5.49	111.97	120.20
5	C	100	ARG	N-CA-C	-5.49	106.66	113.19
1	X	984	A	C1'-C2'-O2'	-5.48	103.58	111.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	2015	G	C2'-C3'-O3'	5.48	117.72	109.50
1	X	2608	A	N9-C1'-C2'	5.47	122.21	114.00
13	K	35	GLN	N-CA-C	-5.46	101.67	110.14
18	P	71	VAL	N-CA-C	-5.46	105.79	111.58
1	X	2199	C	O3'-P-O5'	-5.46	95.81	104.00
1	X	2549	G	C2'-C3'-O3'	-5.46	105.51	113.70
23	U	49	LYS	N-CA-C	5.46	116.57	108.60
1	X	1843	U	P-O3'-C3'	-5.46	112.02	120.20
1	X	1711	C	C4'-C3'-O3'	5.46	117.58	109.40
12	J	9	LYS	N-CA-C	5.46	119.10	112.23
16	N	81	ASN	N-CA-C	-5.44	105.45	111.71
1	X	1920	A	C2'-C3'-O3'	-5.44	105.54	113.70
7	E	95	ARG	N-CA-C	5.44	116.67	108.46
1	X	1845	A	C2'-C3'-O3'	5.44	121.86	113.70
1	X	33	C	C2'-C3'-O3'	5.44	117.66	109.50
1	X	321	A	C4'-C3'-O3'	-5.44	104.84	113.00
1	X	2192	U	N1-C1'-C2'	5.44	120.16	112.00
1	X	1771	A	N9-C1'-C2'	5.44	122.15	114.00
1	X	1459	U	C2'-C3'-O3'	5.43	117.65	109.50
1	X	1469	U	N1-C1'-C2'	5.43	120.15	112.00
13	K	5	LYS	N-CA-C	5.43	119.64	112.25
1	X	1790	G	C1'-C2'-O2'	-5.43	103.66	111.80
1	X	118	U	N1-C1'-C2'	5.42	122.13	114.00
1	X	1684	G	C4'-C3'-O3'	-5.42	101.28	109.40
3	A	227	ASN	N-CA-C	5.41	118.40	109.58
1	X	761	G	C2'-C3'-O3'	-5.41	105.58	113.70
1	X	1855	G	P-O3'-C3'	-5.41	112.09	120.20
6	D	135	GLN	N-CA-C	-5.41	106.66	113.20
1	X	1920	A	N9-C1'-C2'	5.40	120.10	112.00
13	K	22	ARG	N-CA-C	-5.40	104.94	112.45
1	X	1141	U	C2'-C3'-O3'	5.39	117.59	109.50
1	X	460	U	O4'-C1'-C2'	5.39	111.19	105.80
1	X	795	A	C2'-C3'-O3'	-5.38	101.42	109.50
1	X	843	G	C2'-C3'-O3'	5.38	117.58	109.50
1	X	1052	C	P-O5'-C5'	-5.38	112.82	120.90
6	D	7	LYS	N-CA-C	-5.38	104.86	111.75
7	E	172	LYS	N-CA-C	-5.38	105.31	111.07
12	J	21	ASP	N-CA-C	5.38	122.27	110.80
5	C	147	LYS	N-CA-C	-5.38	101.89	109.96
1	X	459	A	C4'-C3'-O3'	-5.38	104.94	113.00
1	X	1937	G	C4'-C3'-O3'	-5.38	104.94	113.00
7	E	101	LYS	N-CA-C	-5.38	106.47	114.64

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	752	G	C4'-C3'-O3'	5.37	117.45	109.40
1	X	2189	A	C4'-C3'-C2'	-5.37	97.23	102.60
1	X	1883	A	C4'-C3'-O3'	-5.37	104.95	113.00
1	X	1194	U	C2'-C3'-O3'	5.36	121.75	113.70
1	X	1680	U	C3'-C2'-O2'	5.36	118.74	110.70
1	X	1000	G	C4'-C3'-O3'	-5.36	101.36	109.40
1	X	1862	C	C4'-C3'-C2'	5.36	107.96	102.60
15	M	100	ARG	N-CA-C	5.36	117.31	110.61
5	C	146	GLU	N-CA-C	5.36	118.29	109.72
1	X	173	A	N9-C1'-C2'	5.36	122.03	114.00
1	X	1267	A	N9-C1'-C2'	5.36	120.03	112.00
1	X	2312	A	C2'-C3'-O3'	5.36	117.53	109.50
1	X	2599	U	N1-C1'-C2'	5.35	120.03	112.00
1	X	417	C	C4'-C3'-O3'	5.35	117.43	109.40
18	P	103	LEU	N-CA-C	5.35	117.65	109.62
1	X	463	C	C2'-C3'-O3'	-5.35	105.68	113.70
21	S	39	PHE	N-CA-C	-5.35	105.86	112.38
1	X	1854	G	C4'-C3'-O3'	5.34	121.01	113.00
1	X	2299	A	C2'-C3'-O3'	-5.34	105.69	113.70
6	D	43	SER	N-CA-C	-5.34	106.02	112.54
1	X	675	C	C3'-C2'-O2'	5.34	118.71	110.70
1	X	780	U	N1-C1'-C2'	-5.34	103.99	112.00
4	B	85	ALA	N-CA-C	5.33	121.60	109.81
1	X	34	U	N1-C1'-C2'	5.33	120.00	112.00
1	X	1867	A	C2'-C3'-O3'	5.33	121.70	113.70
1	X	1289	A	C4'-C3'-O3'	-5.33	105.00	113.00
1	X	218	A	C4'-C3'-O3'	-5.33	101.41	109.40
1	X	2665	G	C4'-C3'-O3'	-5.32	105.02	113.00
1	X	218	A	C2'-C3'-O3'	5.32	117.48	109.50
1	X	2418	A	C2'-C3'-O3'	-5.32	101.53	109.50
1	X	320	A	N9-C1'-C2'	5.31	119.97	112.00
1	X	638	A	C4'-C3'-O3'	5.30	117.35	109.40
1	X	2488	G	C4'-C3'-O3'	-5.30	105.05	113.00
1	X	2668	U	C5'-C4'-C3'	-5.30	107.26	115.20
1	X	760	U	C4'-C3'-O3'	-5.29	105.06	113.00
10	H	124	MET	N-CA-C	5.29	120.05	111.37
17	O	76	SER	N-CA-C	5.29	117.69	110.55
18	P	78	ASN	N-CA-C	-5.29	106.50	113.12
1	X	765	C	C2'-C3'-O3'	5.29	121.63	113.70
10	H	44	TYR	N-CA-C	5.29	118.02	109.40
6	D	64	LYS	CA-C-N	5.28	125.26	120.03
6	D	64	LYS	C-N-CA	5.28	125.26	120.03

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	L	101	LYS	N-CA-C	-5.27	105.94	112.38
1	X	943	U	C4'-C3'-O3'	-5.27	105.09	113.00
1	X	1337	G	C4'-C3'-O3'	-5.27	101.49	109.40
1	X	1666	G	O4'-C4'-C3'	-5.27	98.73	104.00
10	H	78	SER	N-CA-C	-5.27	106.92	113.19
1	X	518	A	N9-C1'-C2'	5.27	119.91	112.00
5	C	74	VAL	N-CA-C	5.27	113.51	109.19
1	X	761	G	N9-C1'-C2'	5.26	119.90	112.00
9	G	149	LYS	N-CA-C	5.26	116.00	107.32
1	X	818	G	C4'-C3'-O3'	-5.26	101.51	109.40
1	X	2555	G	C1'-C2'-O2'	5.26	116.29	108.40
1	X	2018	G	C2'-C3'-O3'	5.26	117.39	109.50
11	I	140	VAL	N-CA-C	-5.25	102.80	109.58
1	X	219	G	N9-C1'-C2'	5.25	119.88	112.00
1	X	467	U	N1-C1'-C2'	5.25	119.88	112.00
12	J	118	ALA	N-CA-C	-5.25	105.97	112.38
1	X	1632	A	C1'-C2'-O2'	-5.24	103.93	111.80
1	X	609	U	C3'-C2'-O2'	5.24	118.56	110.70
1	X	2039	G	C4'-C3'-O3'	-5.24	105.14	113.00
4	B	59	VAL	N-CA-C	5.24	120.24	109.34
1	X	1857	G	P-O3'-C3'	-5.24	112.34	120.20
13	K	50	GLN	N-CA-C	-5.23	104.64	111.02
10	H	25	LEU	N-CA-C	-5.23	102.74	110.48
1	X	400	U	N1-C1'-C2'	5.22	121.83	114.00
5	C	17	LEU	CA-C-N	5.22	125.22	119.90
5	C	17	LEU	C-N-CA	5.22	125.22	119.90
10	H	97	VAL	N-CA-C	5.21	114.25	106.85
3	A	171	ASP	N-CA-C	-5.21	108.18	114.75
5	C	59	TYR	CB-CA-C	-5.21	108.93	116.54
1	X	1233	A	C2'-C3'-O3'	5.21	117.31	109.50
10	H	101	ASN	N-CA-C	5.21	121.89	110.80
1	X	1723	U	N1-C1'-C2'	5.20	121.80	114.00
4	B	189	PRO	N-CA-C	5.20	118.50	111.22
1	X	2596	C	C4'-C3'-O3'	-5.20	105.20	113.00
24	V	38	ALA	N-CA-C	-5.20	107.11	113.50
1	X	118	U	C4'-C3'-O3'	-5.20	101.61	109.40
1	X	13	A	C4'-C3'-O3'	5.19	117.19	109.40
1	X	1300	A	C4'-C3'-O3'	-5.19	105.21	113.00
1	X	2323	U	C5'-C4'-O4'	-5.19	102.02	109.80
1	X	1855	G	C5'-C4'-C3'	5.18	123.77	116.00
24	V	13	ASP	N-CA-C	-5.18	105.06	111.33
1	X	1634	A	C2'-C3'-O3'	5.17	117.26	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	1127	C	C4'-C3'-O3'	-5.17	105.24	113.00
12	J	85	GLY	N-CA-C	-5.17	103.14	110.63
1	X	528	G	C2'-C3'-O3'	-5.16	105.95	113.70
12	J	104	MET	N-CA-C	-5.16	107.11	113.41
19	Q	6	ILE	N-CA-C	5.16	120.08	109.34
1	X	71	A	C2'-C3'-O3'	5.16	117.24	109.50
1	X	1561	A	C2'-C3'-O3'	5.16	121.44	113.70
1	X	2204	A	C2'-C3'-O3'	5.16	117.24	109.50
1	X	2692	A	C2'-C3'-O3'	-5.16	105.96	113.70
1	X	400	U	C2'-C3'-O3'	5.16	117.24	109.50
1	X	2190	A	C3'-C2'-C1'	-5.16	96.14	101.30
12	J	128	ILE	N-CA-C	5.16	116.61	109.29
15	M	96	ARG	CA-C-N	-5.16	117.61	122.66
15	M	96	ARG	C-N-CA	-5.16	117.61	122.66
1	X	764	A	C4'-C3'-O3'	-5.15	105.27	113.00
10	H	58	ALA	N-CA-C	-5.15	102.16	110.14
1	X	1005	U	C4'-C3'-O3'	-5.15	105.27	113.00
1	X	1863	U	P-O3'-C3'	-5.15	112.47	120.20
1	X	1057	A	P-O3'-C3'	5.15	127.92	120.20
1	X	984	A	N9-C1'-C2'	5.14	121.71	114.00
1	X	1871	G	P-O3'-C3'	-5.14	112.49	120.20
1	X	59	G	C4'-C3'-O3'	-5.14	105.30	113.00
1	X	1949	A	C4'-C3'-O3'	-5.13	105.30	113.00
1	X	2322	U	C3'-C2'-C1'	5.13	106.43	101.30
14	L	21	THR	N-CA-C	5.12	116.26	108.12
18	P	44	VAL	CB-CA-C	-5.12	104.43	111.65
1	X	1182	U	C2'-C3'-O3'	5.11	121.37	113.70
1	X	1867	A	P-O3'-C3'	5.11	127.87	120.20
1	X	1314	A	C4'-C3'-O3'	-5.11	101.73	109.40
1	X	2322	U	C5'-C4'-C3'	5.11	123.67	116.00
5	C	191	ALA	N-CA-C	-5.11	107.11	113.19
1	X	1869	A	P-O5'-C5'	-5.11	113.24	120.90
19	Q	60	GLY	N-CA-C	5.11	125.28	113.18
1	X	173	A	C1'-C2'-O2'	-5.11	104.14	111.80
25	W	33	GLU	N-CA-C	-5.11	101.38	109.96
1	X	805	G	N9-C1'-C2'	5.10	121.66	114.00
1	X	1139	A	N9-C1'-C2'	5.10	121.65	114.00
1	X	241	C	C4'-C3'-O3'	-5.10	105.36	113.00
1	X	38	G	C2'-C3'-O3'	5.09	121.34	113.70
1	X	1820	G	C4'-C3'-O3'	5.09	117.04	109.40
1	X	1988	A	C2'-C3'-O3'	-5.09	106.06	113.70
11	I	58	ALA	N-CA-C	-5.09	102.47	110.36

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	X	177	U	C4'-C3'-O3'	-5.09	105.36	113.00
1	X	759	C	N1-C1'-C2'	5.09	119.63	112.00
24	V	34	ALA	N-CA-C	-5.09	107.12	113.38
1	X	1800	A	C4'-C3'-O3'	-5.09	105.37	113.00
1	X	1919	A	O4'-C4'-C3'	5.09	109.09	104.00
24	V	14	PHE	N-CA-C	-5.08	104.82	111.02
1	X	761	G	C3'-C2'-O2'	-5.08	103.08	110.70
1	X	1998	A	C4'-C3'-O3'	-5.08	105.38	113.00
18	P	19	LYS	N-CA-C	-5.08	107.74	114.04
17	O	82	ARG	N-CA-C	5.08	118.31	107.70
1	X	1142	G	C4'-C3'-O3'	-5.07	101.79	109.40
6	D	65	PRO	N-CA-C	5.07	119.02	111.41
1	X	89	A	C4'-C3'-O3'	-5.07	105.40	113.00
1	X	2006	G	C2'-C3'-O3'	-5.07	106.10	113.70
1	X	683	A	C2'-C3'-O3'	5.07	117.10	109.50
1	X	1312	G	C1'-C2'-O2'	-5.07	100.80	108.40
1	X	2704	U	C2'-C3'-O3'	-5.07	106.10	113.70
1	X	2552	C	N1-C1'-C2'	5.06	119.60	112.00
4	B	85	ALA	C-N-CD	-5.06	104.25	125.00
1	X	537	C	N1-C1'-C2'	5.06	119.59	112.00
1	X	1583	A	O4'-C1'-C2'	5.06	110.86	105.80
1	X	2321	C	C5'-C4'-C3'	5.05	123.58	116.00
1	X	1309	G	C2'-C3'-O3'	-5.05	106.13	113.70
24	V	6	MET	N-CA-C	-5.04	105.22	112.13
1	X	1883	A	N9-C1'-C2'	5.04	119.56	112.00
1	X	1996	A	C4'-C3'-O3'	-5.04	105.44	113.00
1	X	558	G	C1'-O4'-C4'	-5.03	104.87	109.90
1	X	728	G	O4'-C1'-C2'	-5.03	102.57	107.60
1	X	1263	G	O4'-C1'-C2'	5.03	110.83	105.80
1	X	1652	G	C4'-C3'-O3'	-5.03	105.46	113.00
13	K	78	LYS	N-CA-C	-5.02	105.49	110.97
1	X	2675	U	C4'-C3'-O3'	-5.02	105.47	113.00
12	J	54	VAL	N-CA-C	-5.02	106.17	110.74
1	X	1791	C	C4'-C3'-O3'	5.02	116.93	109.40
26	Z	33	CYS	CA-C-N	5.01	124.50	119.19
26	Z	33	CYS	C-N-CA	5.01	124.50	119.19
1	X	454	G	C4'-C3'-O3'	5.01	116.91	109.40
6	D	109	PRO	N-CA-C	-5.01	106.57	113.53
4	B	105	THR	N-CA-C	5.01	118.89	108.53
6	D	139	PRO	N-CA-C	-5.00	108.09	114.35

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	X	1278	A	C1'
1	X	2592	U	C1'

All (288) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	C	59	TYR	Sidechain
9	G	32	TYR	Sidechain
16	N	32	TYR	Sidechain
17	O	80	TYR	Sidechain
22	T	20	TYR	Sidechain
1	X	1000	G	Sidechain
1	X	1030	U	Sidechain
1	X	1033	G	Sidechain
1	X	1040	A	Sidechain
1	X	1054	C	Sidechain
1	X	1056	U	Sidechain
1	X	112	U	Sidechain
1	X	1142	G	Sidechain
1	X	1152	C	Sidechain
1	X	1153	A	Sidechain
1	X	1167	A	Sidechain
1	X	1173	G	Sidechain
1	X	1177	U	Sidechain
1	X	118	U	Sidechain
1	X	1193	G	Sidechain
1	X	1200	G	Sidechain
1	X	1202	U	Sidechain
1	X	1204	G	Sidechain
1	X	1205	G	Sidechain
1	X	1208	A	Sidechain
1	X	1214	C	Sidechain
1	X	1224	A	Sidechain
1	X	1230	C	Sidechain
1	X	1240	G	Sidechain
1	X	1250	A	Sidechain
1	X	1251	G	Sidechain
1	X	1265	G	Sidechain
1	X	1267	A	Sidechain
1	X	1268	U	Sidechain
1	X	1276	U	Sidechain
1	X	128	C	Sidechain
1	X	1280	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	1281	A	Sidechain
1	X	1282	A	Sidechain
1	X	1284	G	Sidechain
1	X	1293	A	Sidechain
1	X	1294	G	Sidechain
1	X	1296	G	Sidechain
1	X	13	A	Sidechain
1	X	1313	U	Sidechain
1	X	1322	G	Sidechain
1	X	1325	U	Sidechain
1	X	1326	U	Sidechain
1	X	1338	G	Sidechain
1	X	1342	U	Sidechain
1	X	1356	G	Sidechain
1	X	1357	U	Sidechain
1	X	1373	G	Sidechain
1	X	1429	A	Sidechain
1	X	1467	U	Sidechain
1	X	1469	U	Sidechain
1	X	1482	U	Sidechain
1	X	15	G	Sidechain
1	X	1566	G	Sidechain
1	X	1583	A	Sidechain
1	X	1618	U	Sidechain
1	X	1631	C	Sidechain
1	X	1632	A	Sidechain
1	X	1637	U	Sidechain
1	X	165	G	Sidechain
1	X	1659	G	Sidechain
1	X	1662	G	Sidechain
1	X	1671	A	Sidechain
1	X	1675	C	Sidechain
1	X	1677	C	Sidechain
1	X	1679	U	Sidechain
1	X	1683	G	Sidechain
1	X	1684	G	Sidechain
1	X	169	C	Sidechain
1	X	1690	U	Sidechain
1	X	1710	U	Sidechain
1	X	1716	G	Sidechain
1	X	1717	A	Sidechain
1	X	1747	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	1748	U	Sidechain
1	X	1749	G	Sidechain
1	X	1768	U	Sidechain
1	X	1771	A	Sidechain
1	X	178	C	Sidechain
1	X	1807	A	Sidechain
1	X	182	G	Sidechain
1	X	184	A	Sidechain
1	X	1849	G	Sidechain
1	X	1851	A	Sidechain
1	X	1920	A	Sidechain
1	X	1923	U	Sidechain
1	X	1930	C	Sidechain
1	X	1938	U	Sidechain
1	X	1975	G	Sidechain
1	X	1979	C	Sidechain
1	X	198	A	Sidechain
1	X	1987	G	Sidechain
1	X	1993	G	Sidechain
1	X	1994	U	Sidechain
1	X	1996	A	Sidechain
1	X	2000	U	Sidechain
1	X	2003	A	Sidechain
1	X	2007	G	Sidechain
1	X	2014	A	Sidechain
1	X	2023	C	Sidechain
1	X	2028	C	Sidechain
1	X	2046	C	Sidechain
1	X	2047	C	Sidechain
1	X	2058	U	Sidechain
1	X	207	U	Sidechain
1	X	218	A	Sidechain
1	X	2189	A	Sidechain
1	X	219	G	Sidechain
1	X	2192	U	Sidechain
1	X	2195	C	Sidechain
1	X	2196	U	Sidechain
1	X	2235	G	Sidechain
1	X	2239	C	Sidechain
1	X	225	G	Sidechain
1	X	2258	G	Sidechain
1	X	2275	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	2311	U	Sidechain
1	X	2315	A	Sidechain
1	X	2323	U	Sidechain
1	X	2324	G	Sidechain
1	X	2363	G	Sidechain
1	X	2369	U	Sidechain
1	X	2371	A	Sidechain
1	X	2391	A	Sidechain
1	X	2416	U	Sidechain
1	X	2427	A	Sidechain
1	X	2432	A	Sidechain
1	X	2433	G	Sidechain
1	X	2447	G	Sidechain
1	X	2456	U	Sidechain
1	X	2460	G	Sidechain
1	X	2463	G	Sidechain
1	X	2469	G	Sidechain
1	X	2482	A	Sidechain
1	X	2485	U	Sidechain
1	X	2487	G	Sidechain
1	X	2496	C	Sidechain
1	X	2498	U	Sidechain
1	X	2508	G	Sidechain
1	X	2525	U	Sidechain
1	X	2526	U	Sidechain
1	X	2528	G	Sidechain
1	X	2540	A	Sidechain
1	X	2541	U	Sidechain
1	X	2542	U	Sidechain
1	X	2548	G	Sidechain
1	X	2549	G	Sidechain
1	X	2557	G	Sidechain
1	X	2565	C	Sidechain
1	X	2588	U	Sidechain
1	X	2590	U	Sidechain
1	X	2592	U	Sidechain
1	X	2594	U	Sidechain
1	X	2596	C	Sidechain
1	X	2599	U	Sidechain
1	X	2621	G	Sidechain
1	X	2624	G	Sidechain
1	X	2629	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	2633	A	Sidechain
1	X	2635	U	Sidechain
1	X	2638	G	Sidechain
1	X	2658	A	Sidechain
1	X	2661	G	Sidechain
1	X	2663	U	Sidechain
1	X	2679	G	Sidechain
1	X	2683	C	Sidechain
1	X	2685	A	Sidechain
1	X	2692	A	Sidechain
1	X	2694	G	Sidechain
1	X	2696	A	Sidechain
1	X	2698	G	Sidechain
1	X	2700	U	Sidechain
1	X	2702	G	Sidechain
1	X	2704	U	Sidechain
1	X	2711	G	Sidechain
1	X	2730	A	Sidechain
1	X	2736	U	Sidechain
1	X	2751	C	Sidechain
1	X	2770	A	Sidechain
1	X	2785	A	Sidechain
1	X	2792	C	Sidechain
1	X	2797	G	Sidechain
1	X	2805	G	Sidechain
1	X	2806	G	Sidechain
1	X	2807	U	Sidechain
1	X	2809	A	Sidechain
1	X	2819	G	Sidechain
1	X	2824	C	Sidechain
1	X	2846	G	Sidechain
1	X	2847	G	Sidechain
1	X	2849	C	Sidechain
1	X	2855	C	Sidechain
1	X	2867	G	Sidechain
1	X	29	U	Sidechain
1	X	302	U	Sidechain
1	X	320	A	Sidechain
1	X	331	U	Sidechain
1	X	342	G	Sidechain
1	X	346	C	Sidechain
1	X	390	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	396	U	Sidechain
1	X	398	C	Sidechain
1	X	399	G	Sidechain
1	X	400	U	Sidechain
1	X	404	A	Sidechain
1	X	408	U	Sidechain
1	X	412	U	Sidechain
1	X	415	A	Sidechain
1	X	43	A	Sidechain
1	X	437	G	Sidechain
1	X	447	U	Sidechain
1	X	460	U	Sidechain
1	X	467	U	Sidechain
1	X	474	G	Sidechain
1	X	475	U	Sidechain
1	X	480	G	Sidechain
1	X	482	A	Sidechain
1	X	486	U	Sidechain
1	X	489	A	Sidechain
1	X	490	A	Sidechain
1	X	496	C	Sidechain
1	X	505	G	Sidechain
1	X	513	A	Sidechain
1	X	530	G	Sidechain
1	X	540	G	Sidechain
1	X	544	U	Sidechain
1	X	557	U	Sidechain
1	X	566	U	Sidechain
1	X	576	A	Sidechain
1	X	581	A	Sidechain
1	X	59	G	Sidechain
1	X	596	C	Sidechain
1	X	612	G	Sidechain
1	X	654	A	Sidechain
1	X	671	A	Sidechain
1	X	681	A	Sidechain
1	X	683	A	Sidechain
1	X	685	U	Sidechain
1	X	706	A	Sidechain
1	X	712	A	Sidechain
1	X	743	A	Sidechain
1	X	757	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	X	760	U	Sidechain
1	X	761	G	Sidechain
1	X	765	C	Sidechain
1	X	766	A	Sidechain
1	X	767	G	Sidechain
1	X	770	U	Sidechain
1	X	774	A	Sidechain
1	X	780	U	Sidechain
1	X	792	U	Sidechain
1	X	800	U	Sidechain
1	X	801	A	Sidechain
1	X	804	C	Sidechain
1	X	813	A	Sidechain
1	X	814	G	Sidechain
1	X	816	U	Sidechain
1	X	820	U	Sidechain
1	X	823	U	Sidechain
1	X	824	U	Sidechain
1	X	825	C	Sidechain
1	X	831	G	Sidechain
1	X	840	U	Sidechain
1	X	847	C	Sidechain
1	X	852	U	Sidechain
1	X	859	U	Sidechain
1	X	873	U	Sidechain
1	X	878	C	Sidechain
1	X	919	U	Sidechain
1	X	924	C	Sidechain
1	X	956	A	Sidechain
1	X	958	G	Sidechain
1	X	967	G	Sidechain
1	X	969	U	Sidechain
1	X	974	U	Sidechain
1	X	978	U	Sidechain
1	X	991	A	Sidechain
1	X	992	A	Sidechain
1	X	993	C	Sidechain
1	X	998	C	Sidechain
1	X	999	A	Sidechain
2	Y	17	A	Sidechain
2	Y	89	G	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	X	57651	0	29046	4361	0
2	Y	2598	0	1328	183	0
3	A	1826	0	1885	389	0
4	B	1539	0	1600	254	0
5	C	1506	0	1525	372	0
6	D	1400	0	1481	417	0
7	E	1286	0	1336	252	0
8	F	1043	0	1088	71	0
9	G	1114	0	1144	294	0
10	H	997	0	1046	174	1
11	I	1067	0	1103	296	0
12	J	1090	0	1125	279	0
13	K	878	0	930	139	1
14	L	779	0	820	234	0
15	M	871	0	894	196	0
16	N	978	0	1020	246	0
17	O	741	0	756	206	0
18	P	1014	0	1096	193	0
19	Q	726	0	753	168	0
20	R	825	0	881	274	0
21	S	1345	0	1372	286	0
22	T	625	0	655	105	0
23	U	552	0	604	211	0
24	V	533	0	558	94	0
25	W	424	0	470	87	0
26	Z	457	0	464	82	0
27	1	53	0	0	0	0
28	2	46	0	0	0	0
29	3	63	0	0	2	0
30	4	297	0	330	70	0
31	5	71	0	0	0	0
All	All	84395	0	55310	9121	1

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 66.

All (9121) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1854:G:O2'	1:X:1855:G:H5'	1.31	1.28
1:X:2195:C:C5	1:X:2196:U:C5	2.22	1.28
1:X:729:A:H2'	1:X:730:C:O4'	1.19	1.25
1:X:2196:U:H2'	1:X:2197:U:C6	1.74	1.21
1:X:731:A:H2'	1:X:732:G:O4'	1.34	1.21
4:B:116:VAL:H	4:B:136:ARG:NE	1.38	1.20
4:B:116:VAL:N	4:B:136:ARG:HE	1.37	1.20
1:X:2736:U:O2'	1:X:2737:A:H5''	1.39	1.19
1:X:304:A:H2'	1:X:305:A:H5''	1.22	1.19
13:K:3:HIS:ND1	13:K:5:LYS:HD2	1.58	1.19
24:V:2:LYS:HA	24:V:6:MET:HE2	1.24	1.17
1:X:333:A:H3'	5:C:162:ARG:CZ	1.74	1.16
23:U:51:ILE:HG23	23:U:59:THR:HA	1.27	1.16
4:B:75:THR:O	4:B:76:ARG:HB3	1.44	1.15
23:U:62:LEU:HD23	23:U:67:LEU:CD1	1.77	1.15
21:S:97:PRO:HA	21:S:119:ASN:HA	1.28	1.14
1:X:2323:U:O2	1:X:2323:U:H2'	1.36	1.14
26:Z:4:HIS:HB3	26:Z:5:PRO:CD	1.75	1.14
20:R:23:ILE:HD12	20:R:23:ILE:H	1.10	1.13
23:U:31:GLY:HA2	23:U:32:ARG:HH11	0.98	1.13
2:Y:43:G:H5''	6:D:66:ILE:HD11	1.27	1.13
20:R:40:LEU:HB2	20:R:45:LYS:HB2	1.26	1.13
23:U:41:VAL:HG23	23:U:42:GLN:H	0.98	1.12
7:E:57:ASP:HB3	7:E:62:ARG:HE	1.06	1.12
19:Q:51:ILE:HD11	19:Q:83:ALA:HA	1.16	1.12
12:J:34:GLY:HA2	12:J:106:GLU:HA	1.30	1.12
25:W:4:LYS:HG3	25:W:52:GLU:HB3	1.26	1.12
7:E:98:LEU:HD12	7:E:99:THR:H	1.07	1.11
17:O:5:ILE:HG13	17:O:6:GLN:H	1.09	1.11
15:M:28:ARG:HB2	15:M:29:PRO:HD3	1.28	1.11
14:L:40:ALA:HB2	14:L:103:LEU:HD11	1.27	1.11
3:A:43:ARG:H	3:A:43:ARG:HD2	1.07	1.11
5:C:102:LEU:HD21	5:C:106:MET:HE3	1.32	1.11
5:C:148:VAL:HB	5:C:167:VAL:HG12	1.22	1.11
1:X:1279:G:H22	18:P:37:LYS:HB2	1.16	1.10
3:A:149:PRO:HA	3:A:189:CYS:SG	1.91	1.10
1:X:1268:U:H2'	5:C:66:ASN:HB3	1.32	1.10
21:S:113:VAL:HG13	21:S:171:VAL:HG22	1.24	1.10
1:X:2194:A:H3'	1:X:2195:C:H5''	1.31	1.10
1:X:1072:U:O4	8:F:10:LEU:HA	1.52	1.09
1:X:623:G:H3'	1:X:624:A:H5''	1.31	1.09
1:X:1052:C:C2'	1:X:1053:G:H5''	1.82	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1052:C:C3'	1:X:1053:G:H5''	1.83	1.09
26:Z:4:HIS:HB3	26:Z:5:PRO:HD3	1.23	1.09
14:L:33:ARG:HH11	14:L:100:VAL:HA	1.09	1.09
1:X:2482:A:H4'	1:X:2483:U:OP1	1.38	1.09
10:H:23:ARG:NH2	10:H:23:ARG:HB3	1.68	1.09
1:X:788:G:H5'	1:X:790:A:H1'	1.33	1.08
9:G:61:ARG:NE	9:G:65:LYS:HD2	1.68	1.08
1:X:1107:A:H3'	1:X:1108:U:H5''	1.36	1.08
2:Y:46:G:H4'	6:D:92:ARG:HH12	1.13	1.08
1:X:2170:C:H3'	1:X:2171:U:H5''	1.35	1.08
9:G:103:TYR:HB3	9:G:107:GLN:HE21	1.14	1.07
1:X:558:G:H3'	1:X:558:G:N3	1.70	1.07
5:C:176:ASN:HD21	5:C:178:TYR:HB3	1.04	1.07
23:U:32:ARG:H	23:U:32:ARG:NE	1.51	1.07
23:U:48:LYS:HG2	23:U:49:LYS:N	1.67	1.07
1:X:1279:G:N2	18:P:37:LYS:HB2	1.70	1.07
1:X:2310:G:H4'	22:T:43:THR:H	1.16	1.07
1:X:886:A:H1'	12:J:30:PHE:HE1	1.19	1.06
1:X:2672:U:H2'	1:X:2673:G:H8	1.20	1.06
1:X:2198:U:H2'	1:X:2199:C:O4'	1.53	1.06
1:X:2332:G:H1'	22:T:34:GLY:HA3	1.32	1.06
10:H:116:ARG:HD2	15:M:38:LYS:HE2	1.37	1.06
1:X:1550:C:H2'	1:X:1553:G:N2	1.70	1.06
4:B:116:VAL:HG13	4:B:136:ARG:HH21	1.15	1.06
10:H:23:ARG:HB3	10:H:23:ARG:HH21	1.14	1.06
1:X:1056:U:O2	1:X:1056:U:C2'	2.00	1.06
1:X:1142:G:H4'	9:G:103:TYR:HE2	1.18	1.05
9:G:132:PHE:CZ	9:G:145:HIS:HB2	1.91	1.05
21:S:100:THR:HG23	21:S:138:VAL:HG21	1.38	1.05
1:X:1508:G:H5'	1:X:1509:A:H5''	1.38	1.05
1:X:1698:C:O2'	1:X:1753:A:H2'	1.56	1.05
22:T:71:ASN:HD22	22:T:77:ARG:HD3	0.91	1.05
1:X:1919:A:H2	1:X:1926:U:N3	1.54	1.05
22:T:71:ASN:ND2	22:T:77:ARG:HD3	1.71	1.05
10:H:83:ARG:HD2	10:H:89:ILE:HD11	1.33	1.04
12:J:12:LYS:O	12:J:13:GLN:HB2	1.52	1.04
1:X:2796:A:H2'	1:X:2797:G:C8	1.90	1.04
1:X:2194:A:H2'	1:X:2195:C:O4'	1.56	1.04
1:X:2796:A:H2'	1:X:2797:G:H8	1.23	1.04
6:D:65:PRO:HB3	6:D:89:VAL:HG22	1.34	1.04
15:M:34:ARG:CZ	15:M:88:VAL:HG11	1.88	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2581:A:H3'	1:X:2582:G:H5''	1.40	1.03
3:A:142:VAL:HG12	3:A:193:ILE:HA	1.40	1.03
1:X:317:U:H2'	1:X:318:G:H5''	1.36	1.03
1:X:1885:C:H5'	3:A:244:ARG:HD2	1.40	1.03
5:C:197:GLU:HG2	5:C:198:GLU:HG3	1.41	1.03
21:S:46:GLN:HB3	21:S:50:GLY:HA3	1.37	1.03
1:X:347:C:H4'	20:R:15:HIS:CD2	1.93	1.03
20:R:96:LYS:HG3	20:R:97:GLN:H	1.22	1.03
1:X:1053:G:H2'	1:X:1054:C:H6	1.22	1.03
1:X:2195:C:C4	1:X:2196:U:C4	2.45	1.03
24:V:50:VAL:HA	24:V:53:LEU:HD12	1.35	1.03
9:G:55:ALA:HB1	9:G:134:MET:HE1	1.40	1.03
20:R:108:VAL:HG12	20:R:109:ALA:H	1.19	1.03
1:X:1185:C:H2'	1:X:1186:G:H3'	1.39	1.02
6:D:106:ILE:HG23	6:D:110:ARG:HD2	1.40	1.02
20:R:105:ARG:HH22	20:R:112:LYS:HA	1.19	1.02
1:X:886:A:H1'	12:J:30:PHE:CE1	1.92	1.02
7:E:50:LEU:HD23	7:E:51:LEU:H	1.24	1.02
20:R:90:LYS:HB2	20:R:108:VAL:HG21	1.41	1.02
21:S:113:VAL:HA	21:S:171:VAL:HA	1.37	1.02
19:Q:69:ILE:CD1	19:Q:70:GLY:H	1.71	1.02
23:U:32:ARG:HE	23:U:32:ARG:N	1.56	1.02
25:W:2:LYS:HB3	25:W:54:GLN:HB3	1.40	1.02
5:C:110:SER:HA	5:C:113:GLU:OE1	1.59	1.02
5:C:176:ASN:ND2	5:C:178:TYR:HB3	1.75	1.02
11:I:30:ALA:HB3	11:I:34:HIS:CE1	1.92	1.02
1:X:1386:A:H5''	1:X:2191:A:N6	1.75	1.02
23:U:62:LEU:CD2	23:U:67:LEU:HD12	1.88	1.02
1:X:517:A:H5''	1:X:518:A:H5'	1.41	1.01
1:X:663:G:H3'	1:X:664:C:H5''	1.39	1.01
1:X:1978:U:H3'	1:X:1979:C:H5''	1.38	1.01
14:L:55:SER:O	14:L:71:VAL:HB	1.59	1.01
30:4:9:LYS:H	30:4:9:LYS:HD2	1.23	1.01
1:X:653:G:H2'	1:X:654:A:H5''	1.41	1.01
1:X:1631:C:H1'	18:P:108:PRO:HG2	1.41	1.01
1:X:1790:G:H5''	3:A:261:ARG:HH22	1.20	1.01
7:E:43:VAL:HG21	7:E:52:VAL:HG22	1.42	1.01
1:X:1466:C:H2'	1:X:1467:U:O4'	1.60	1.01
1:X:2194:A:C3'	1:X:2195:C:H5''	1.89	1.01
1:X:2781:G:H2'	1:X:2782:G:H5''	1.37	1.01
14:L:33:ARG:HG3	14:L:38:ILE:HB	1.42	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1052:C:H2'	1:X:1053:G:H5''	1.41	1.01
23:U:48:LYS:CG	23:U:49:LYS:H	1.72	1.01
4:B:150:VAL:HG21	4:B:154:LYS:HE2	1.40	1.00
4:B:152:LYS:HB2	9:G:106:TYR:HB3	1.43	1.00
1:X:1053:G:H2'	1:X:1054:C:C6	1.95	1.00
14:L:33:ARG:CZ	14:L:103:LEU:HB2	1.91	1.00
15:M:38:LYS:HB3	15:M:46:ARG:HB3	1.38	1.00
1:X:729:A:C2'	1:X:730:C:O4'	2.08	1.00
12:J:28:VAL:HB	12:J:137:VAL:HB	1.41	1.00
21:S:10:PRO:O	21:S:13:LYS:HG3	1.61	1.00
23:U:49:LYS:HB2	23:U:61:TRP:HA	1.41	1.00
15:M:46:ARG:HG3	15:M:47:SER:H	1.21	1.00
3:A:43:ARG:N	3:A:43:ARG:HH11	1.59	1.00
18:P:37:LYS:HE2	18:P:64:ALA:HB2	1.43	1.00
21:S:13:LYS:HB2	21:S:13:LYS:HZ2	1.26	1.00
23:U:29:GLY:C	23:U:31:GLY:H	1.61	1.00
3:A:42:GLY:C	3:A:43:ARG:HH11	1.70	1.00
21:S:64:ALA:HA	21:S:86:VAL:H	1.25	1.00
1:X:2212:U:H2'	1:X:2213:G:C8	1.96	1.00
1:X:2767:C:H1'	4:B:62:PRO:HG3	1.42	0.99
6:D:13:ARG:NH1	6:D:14:PRO:HG3	1.76	0.99
23:U:48:LYS:HG2	23:U:49:LYS:H	0.84	0.99
1:X:1072:U:H1'	1:X:1081:A:H1'	1.44	0.99
5:C:7:ILE:HB	5:C:120:VAL:H	1.25	0.99
1:X:1057:A:H2'	1:X:1057:A:N3	1.76	0.99
3:A:67:PHE:HB3	3:A:153:ALA:H	1.26	0.99
6:D:150:ARG:HG2	6:D:151:GLY:H	1.25	0.99
21:S:127:PRO:O	21:S:128:ARG:HG2	1.61	0.99
9:G:93:LYS:N	9:G:93:LYS:HD2	1.78	0.99
12:J:28:VAL:HG21	12:J:135:ARG:HA	1.41	0.99
15:M:99:VAL:HG21	15:M:104:LEU:HD21	1.44	0.99
1:X:1850:G:N2	1:X:1867:A:N7	2.08	0.99
3:A:252:LYS:N	3:A:252:LYS:HE3	1.77	0.99
6:D:122:PHE:HB3	6:D:129:ASN:HD22	1.24	0.99
16:N:66:ASN:HB2	16:N:70:ARG:HH12	1.26	0.99
1:X:402:A:C8	1:X:2392:G:H4'	1.98	0.98
1:X:558:G:N3	1:X:558:G:C5'	2.26	0.98
1:X:2075:U:O2'	1:X:2076:G:H5''	1.63	0.98
1:X:2083:G:H1	1:X:2172:U:H3	1.09	0.98
4:B:116:VAL:HG22	4:B:136:ARG:NE	1.77	0.98
20:R:107:ALA:HB1	20:R:111:GLY:HA2	1.43	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:U:62:LEU:HD23	23:U:67:LEU:HD12	0.99	0.98
2:Y:43:G:H5'	2:Y:44:C:H5'	1.46	0.98
23:U:13:LEU:HG	23:U:14:VAL:H	1.29	0.98
1:X:1854:G:H2'	1:X:1855:G:OP2	1.61	0.98
6:D:40:LEU:HA	6:D:150:ARG:NH2	1.78	0.98
12:J:79:PRO:HD3	12:J:88:LYS:HZ2	1.28	0.98
1:X:731:A:O2'	1:X:732:G:H5'	1.64	0.98
3:A:183:ARG:HB3	3:A:183:ARG:HH11	1.26	0.98
7:E:43:VAL:HB	7:E:52:VAL:HG13	1.45	0.98
1:X:1313:U:H4'	1:X:1314:A:O5'	1.63	0.98
14:L:16:LYS:HE2	14:L:28:ARG:HH12	1.22	0.98
20:R:38:LEU:HD12	20:R:47:VAL:HG21	1.43	0.98
1:X:813:A:H4'	1:X:814:G:O5'	1.64	0.97
1:X:1542:G:N2	1:X:1562:G:H1	1.61	0.97
11:I:81:GLN:HE22	11:I:115:SER:HA	1.29	0.97
26:Z:6:VAL:HG22	26:Z:7:PRO:HD2	1.46	0.97
30:4:19:ARG:NH1	30:4:24:LEU:HD22	1.78	0.97
1:X:1850:G:O2'	1:X:1851:A:H8	1.46	0.97
22:T:71:ASN:HD22	22:T:77:ARG:CD	1.77	0.97
23:U:31:GLY:HA2	23:U:32:ARG:NH1	1.77	0.97
1:X:75:C:H2'	1:X:76:C:H5''	1.43	0.97
1:X:1573:G:H3'	1:X:1574:A:H5''	1.42	0.97
1:X:1173:G:H4'	17:O:22:VAL:HG22	1.44	0.97
20:R:80:LYS:HE3	20:R:80:LYS:O	1.64	0.97
1:X:693:A:H2'	1:X:694:G:H8	1.30	0.97
1:X:729:A:H3'	1:X:729:A:N3	1.79	0.97
3:A:133:LEU:HB2	3:A:187:SER:HB2	1.47	0.97
9:G:33:ILE:HB	9:G:34:PRO:CD	1.92	0.97
10:H:27:SER:HB3	10:H:50:ILE:H	1.27	0.97
4:B:154:LYS:HE3	4:B:156:MET:SD	2.04	0.96
9:G:33:ILE:HB	9:G:34:PRO:HD2	1.44	0.96
1:X:1067:G:H21	1:X:1114:A:H62	1.14	0.96
1:X:2807:U:H5'	1:X:2807:U:H6	1.30	0.96
1:X:333:A:H5''	5:C:162:ARG:NH1	1.78	0.96
1:X:652:C:N4	1:X:657:A:H61	1.62	0.96
3:A:183:ARG:HB3	3:A:183:ARG:NH1	1.80	0.96
13:K:79:VAL:HA	13:K:83:VAL:HG13	1.47	0.96
1:X:731:A:C2'	1:X:732:G:O4'	2.13	0.96
1:X:542:A:C2	1:X:2004:U:H2'	2.00	0.96
11:I:93:LEU:O	11:I:97:ARG:HG3	1.66	0.96
1:X:219:G:N2	1:X:231:G:H2'	1.81	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:652:C:H42	1:X:657:A:N6	1.62	0.96
1:X:757:U:H2'	1:X:758:G:H5'	1.48	0.96
1:X:1790:G:H5''	3:A:261:ARG:NH2	1.80	0.96
6:D:57:LEU:O	6:D:60:ILE:HG12	1.63	0.96
14:L:40:ALA:HB1	14:L:75:LEU:HD22	1.45	0.96
3:A:43:ARG:HD2	3:A:43:ARG:N	1.79	0.96
15:M:102:ALA:O	15:M:103:LYS:HD2	1.64	0.96
11:I:94:GLU:HA	11:I:97:ARG:NE	1.81	0.95
1:X:1052:C:H3'	1:X:1053:G:C5'	1.95	0.95
5:C:95:LEU:HD23	5:C:96:PRO:HD2	1.48	0.95
1:X:34:U:HO2'	20:R:4:PRO:N	1.64	0.95
1:X:1193:G:H2'	1:X:1194:U:H5''	1.49	0.95
1:X:1231:A:H2'	1:X:1232:U:C6	2.01	0.95
1:X:1919:A:C2	1:X:1926:U:N3	2.35	0.95
15:M:28:ARG:CB	15:M:29:PRO:HD3	1.90	0.95
23:U:41:VAL:HG23	23:U:42:GLN:N	1.80	0.95
1:X:2074:U:H3'	1:X:2075:U:H5''	1.48	0.95
9:G:155:THR:HA	9:G:158:HIS:HD2	1.31	0.95
24:V:41:HIS:HD2	24:V:42:ARG:H	1.14	0.95
1:X:528:G:H5'	18:P:39:ARG:HH22	1.29	0.94
1:X:1091:C:H1'	8:F:126:THR:HA	1.45	0.94
1:X:1281:A:H1'	1:X:2592:U:C4	2.02	0.94
19:Q:25:TYR:OH	19:Q:87:SER:HA	1.66	0.94
13:K:79:VAL:HA	13:K:83:VAL:CG1	1.96	0.94
16:N:66:ASN:HB3	16:N:76:TYR:HB2	1.48	0.94
9:G:61:ARG:NH2	9:G:61:ARG:HB3	1.81	0.94
20:R:25:LEU:HD12	20:R:81:VAL:H	1.32	0.94
3:A:177:LEU:HD12	3:A:181:GLU:HB3	1.45	0.94
3:A:247:VAL:HG23	3:A:248:THR:HG23	1.47	0.94
12:J:15:ARG:HD2	12:J:73:LYS:HG3	1.46	0.94
1:X:1142:G:H4'	9:G:103:TYR:CE2	2.03	0.94
1:X:2551:A:C8	4:B:144:ARG:HD3	2.01	0.94
1:X:757:U:C2'	1:X:758:G:H5'	1.96	0.94
1:X:857:U:H3'	1:X:858:G:H8	1.28	0.94
1:X:2563:U:H2'	1:X:2564:U:H5''	1.47	0.94
1:X:796:A:C8	1:X:797:A:H4'	2.02	0.94
9:G:61:ARG:HE	9:G:65:LYS:HD2	1.22	0.94
9:G:158:HIS:HA	9:G:161:GLN:CD	1.91	0.94
17:O:5:ILE:HG13	17:O:6:GLN:N	1.76	0.94
20:R:95:ARG:H	20:R:95:ARG:HD2	1.29	0.94
10:H:7:ARG:NH1	10:H:20:MET:HE3	1.83	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:13:ARG:HG2	11:I:13:ARG:HH21	1.30	0.93
1:X:501:G:H2'	1:X:502:A:C8	2.03	0.93
20:R:17:LYS:HB3	20:R:18:LYS:HZ3	1.32	0.93
1:X:2307:A:H2'	1:X:2308:A:C8	2.03	0.93
1:X:2447:G:O2'	1:X:2448:A:H5'	1.68	0.93
4:B:116:VAL:HG22	4:B:136:ARG:CZ	1.99	0.93
15:M:79:ARG:HH11	15:M:79:ARG:HG3	1.32	0.93
11:I:11:GLY:H	11:I:14:LYS:HB3	1.31	0.93
1:X:940:G:OP1	25:W:37:THR:HG21	1.68	0.93
16:N:72:HIS:HD2	16:N:110:VAL:HG21	1.31	0.93
1:X:1231:A:H2'	1:X:1232:U:H6	1.28	0.93
7:E:9:ILE:HG21	7:E:50:LEU:HB3	1.51	0.93
14:L:27:LEU:HD22	14:L:44:ASP:HA	1.46	0.93
1:X:558:G:H3'	1:X:558:G:C4	2.00	0.93
17:O:36:LYS:HZ2	17:O:54:TYR:HB3	1.28	0.93
1:X:1056:U:O2	1:X:1056:U:H2'	1.14	0.93
6:D:79:LEU:HA	6:D:80:ARG:CZ	2.00	0.92
1:X:476:G:H2'	1:X:477:A:C8	2.04	0.92
1:X:1448:A:H61	1:X:1574:A:H61	1.08	0.92
20:R:15:HIS:HD1	20:R:16:PHE:HD2	1.10	0.92
2:Y:46:G:C4'	6:D:92:ARG:HH12	1.81	0.92
5:C:112:GLN:O	5:C:116:LYS:HE2	1.69	0.92
11:I:94:GLU:HB3	11:I:97:ARG:HH11	1.34	0.92
1:X:98:U:H5'	1:X:99:U:H5''	1.52	0.92
5:C:48:ARG:H	5:C:48:ARG:HD2	1.34	0.92
24:V:41:HIS:CD2	24:V:42:ARG:H	1.86	0.92
1:X:493:A:H4'	20:R:56:LYS:HE3	1.50	0.92
1:X:1501:C:H2'	1:X:1502:G:O4'	1.70	0.92
5:C:3:GLN:HG2	5:C:116:LYS:HD2	1.51	0.92
1:X:1441:A:H1'	1:X:1442:C:C5	2.05	0.92
9:G:140:GLN:HG2	9:G:144:MET:HE2	1.49	0.92
3:A:33:LEU:HD12	3:A:63:ARG:HH22	1.35	0.91
16:N:61:TRP:HZ3	16:N:94:VAL:H	0.93	0.91
22:T:41:ARG:HH11	22:T:41:ARG:HG3	1.32	0.91
1:X:1468:A:H5''	1:X:1472:C:N4	1.85	0.91
19:Q:65:VAL:HG12	19:Q:66:GLY:H	1.33	0.91
23:U:28:GLY:HA3	23:U:32:ARG:HB3	1.52	0.91
1:X:1440:G:H3'	1:X:1441:A:H5''	1.52	0.91
1:X:1656:U:O2'	1:X:1657:A:H5''	1.69	0.91
21:S:62:PHE:HB3	21:S:85:MET:SD	2.11	0.91
1:X:1223:G:H4'	1:X:1224:A:H5''	1.52	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1586:A:H5'	3:A:38:PRO:HG3	1.51	0.91
1:X:208:C:H2'	1:X:209:G:H5'	1.52	0.91
1:X:333:A:H5'	5:C:162:ARG:HG3	1.50	0.91
1:X:1849:G:N3	1:X:1868:A:N6	2.19	0.91
3:A:42:GLY:H	3:A:43:ARG:NH1	1.67	0.91
14:L:33:ARG:CG	14:L:38:ILE:HB	1.99	0.91
1:X:824:U:H1'	1:X:1264:C:H1'	1.52	0.91
1:X:1075:C:C5'	8:F:87:GLY:HA3	2.01	0.91
1:X:1281:A:H1'	1:X:2592:U:O4	1.71	0.91
1:X:224:G:H4'	1:X:399:G:C6	2.05	0.91
1:X:1623:C:H4'	1:X:1624:A:O5'	1.69	0.91
14:L:33:ARG:NH1	14:L:100:VAL:HA	1.86	0.91
20:R:18:LYS:HB3	20:R:39:ALA:HB2	1.52	0.91
25:W:12:ARG:HG2	25:W:12:ARG:HH11	1.33	0.91
2:Y:36:A:HO2'	2:Y:37:C:H5	1.13	0.90
1:X:347:C:H4'	20:R:15:HIS:HD2	1.33	0.90
1:X:1052:C:H3'	1:X:1053:G:H5''	1.48	0.90
21:S:10:PRO:HG2	21:S:14:LEU:HD11	1.51	0.90
24:V:1:MET:HG3	24:V:2:LYS:HG2	1.51	0.90
1:X:1166:A:H2'	1:X:1167:A:H5''	1.53	0.90
1:X:1173:G:H4'	17:O:22:VAL:CG2	2.01	0.90
1:X:1744:G:OP1	15:M:100:ARG:HD2	1.72	0.90
1:X:2541:U:H4'	10:H:23:ARG:NH1	1.85	0.90
1:X:482:A:H2'	1:X:483:A:O4'	1.71	0.90
10:H:13:ASN:ND2	10:H:109:ARG:HG2	1.86	0.90
25:W:46:THR:HG22	25:W:47:VAL:HG13	1.52	0.90
2:Y:46:G:H4'	6:D:92:ARG:NH1	1.86	0.90
1:X:516:G:HO2'	1:X:517:A:H8	1.14	0.90
1:X:2796:A:OP2	13:K:3:HIS:CE1	2.24	0.90
22:T:71:ASN:HB2	22:T:77:ARG:HH11	1.35	0.90
23:U:49:LYS:HB3	23:U:61:TRP:CE3	2.07	0.90
1:X:1218:C:C4'	11:I:13:ARG:HH11	1.84	0.90
17:O:65:ARG:HH11	17:O:65:ARG:HG3	1.34	0.90
3:A:252:LYS:HE3	3:A:252:LYS:H	1.35	0.90
3:A:270:ILE:HG13	3:A:271:VAL:H	1.35	0.90
12:J:37:ALA:HB2	12:J:104:MET:HE2	1.53	0.90
1:X:693:A:H2'	1:X:694:G:C8	2.07	0.90
1:X:1252:C:O2'	1:X:1253:C:H5''	1.72	0.90
1:X:2222:U:H2'	1:X:2223:U:C6	2.06	0.90
1:X:2616:U:H5''	4:B:82:ARG:NH2	1.85	0.90
1:X:2781:G:C2'	1:X:2782:G:H5''	2.01	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:93:ILE:HG22	15:M:94:VAL:H	1.36	0.90
16:N:61:TRP:HZ3	16:N:94:VAL:N	1.69	0.90
20:R:108:VAL:HG12	20:R:109:ALA:N	1.82	0.90
1:X:228:A:H5'	11:I:53:ARG:NH2	1.86	0.89
1:X:538:A:H3'	1:X:538:A:N3	1.86	0.89
1:X:939:C:H5''	1:X:940:G:O5'	1.71	0.89
1:X:2417:U:O2'	1:X:2418:A:H5''	1.72	0.89
3:A:243:GLY:H	3:A:244:ARG:HH11	1.17	0.89
17:O:13:ARG:HG2	17:O:14:VAL:H	1.35	0.89
1:X:1086:C:H3'	1:X:1087:C:H5''	1.53	0.89
13:K:91:PRO:O	13:K:92:GLY:O	1.90	0.89
1:X:172:A:C5	1:X:175:C:H5	1.90	0.89
13:K:32:GLY:HA2	13:K:115:LEU:HD12	1.54	0.89
1:X:2496:C:O2'	1:X:2497:A:H3'	1.72	0.89
10:H:23:ARG:HH21	10:H:23:ARG:CB	1.83	0.89
1:X:1118:G:H2'	1:X:1119:U:H5''	1.53	0.89
1:X:1859:A:H2'	1:X:1860:A:C8	2.08	0.89
1:X:2828:C:H2'	1:X:2829:A:H8	1.36	0.89
20:R:18:LYS:H	20:R:18:LYS:HD3	1.36	0.89
1:X:1312:G:H5''	1:X:1313:U:OP1	1.72	0.89
7:E:76:VAL:C	7:E:78:GLY:H	1.80	0.89
16:N:101:ARG:O	16:N:103:PRO:HD3	1.73	0.89
21:S:134:LEU:HD21	21:S:152:ILE:HG21	1.54	0.89
1:X:516:G:O2'	1:X:517:A:H8	1.56	0.89
7:E:11:VAL:HG12	7:E:15:VAL:HG21	1.55	0.89
10:H:25:LEU:HD11	10:H:52:VAL:HG23	1.55	0.89
14:L:34:SER:HB2	14:L:94:TYR:OH	1.73	0.89
16:N:61:TRP:CZ3	16:N:94:VAL:N	2.41	0.89
16:N:61:TRP:O	16:N:65:ILE:HG13	1.73	0.89
17:O:5:ILE:CG1	17:O:6:GLN:H	1.80	0.89
1:X:2195:C:C6	1:X:2196:U:C6	2.61	0.89
1:X:987:G:H4'	1:X:1167:A:N7	1.88	0.89
1:X:1281:A:H1'	1:X:2592:U:C5	2.08	0.89
3:A:250:TRP:O	3:A:255:LYS:NZ	2.05	0.89
5:C:148:VAL:CB	5:C:167:VAL:HG12	2.03	0.89
6:D:13:ARG:HB3	6:D:14:PRO:HD3	1.54	0.89
6:D:79:LEU:HA	6:D:80:ARG:NH1	1.88	0.89
6:D:171:GLN:HA	6:D:175:LEU:HB3	1.51	0.89
9:G:67:ARG:HB3	9:G:70:PHE:HA	1.53	0.89
10:H:122:ARG:HH11	10:H:124:MET:HE2	1.37	0.89
1:X:1782:A:H1'	3:A:208:LYS:HE3	1.55	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:17:LYS:HB3	20:R:18:LYS:NZ	1.88	0.88
1:X:1092:U:H4'	8:F:122:ALA:HB1	1.54	0.88
1:X:1745:C:P	15:M:101:ARG:HH22	1.96	0.88
1:X:2726:U:H2'	1:X:2727:G:H5'	1.56	0.88
1:X:2796:A:H5''	4:B:162:MET:HE1	1.53	0.88
16:N:88:ILE:HG23	17:O:49:GLU:HB2	1.53	0.88
25:W:4:LYS:CG	25:W:52:GLU:HB3	2.03	0.88
14:L:60:LYS:HG2	14:L:62:GLY:H	1.37	0.88
12:J:125:LYS:HD2	12:J:125:LYS:N	1.88	0.88
1:X:310:A:H61	5:C:162:ARG:HH22	1.17	0.88
1:X:427:C:H2'	1:X:428:A:C8	2.09	0.88
4:B:194:GLY:HA2	15:M:2:GLN:HB3	1.54	0.88
6:D:4:LEU:HG	6:D:5:LYS:H	1.35	0.88
1:X:98:U:C5'	1:X:99:U:H5''	2.03	0.88
1:X:304:A:C2'	1:X:305:A:H5''	2.03	0.88
18:P:109:ARG:HG3	18:P:110:ALA:H	1.39	0.88
19:Q:7:LEU:HD22	19:Q:7:LEU:C	1.98	0.88
1:X:116:A:H5'	1:X:117:A:H8	1.36	0.88
1:X:1448:A:N6	1:X:1574:A:H61	1.71	0.88
1:X:2063:A:H2'	1:X:2064:U:C6	2.07	0.88
11:I:117:ALA:O	11:I:118:VAL:HG13	1.73	0.88
1:X:27:G:H1'	1:X:523:A:N6	1.88	0.88
5:C:2:ALA:HB1	5:C:13:ARG:HA	1.54	0.88
6:D:12:VAL:O	6:D:16:LEU:HG	1.74	0.88
15:M:106:TYR:CE1	15:M:107:LEU:CD2	2.57	0.88
1:X:623:G:C3'	1:X:624:A:H5''	2.03	0.88
2:Y:30:C:OP1	14:L:37:HIS:HB3	1.72	0.88
6:D:4:LEU:CG	6:D:5:LYS:H	1.87	0.88
20:R:22:VAL:HG11	20:R:80:LYS:HD2	1.54	0.88
13:K:13:ASN:HD22	13:K:14:SER:N	1.71	0.88
15:M:104:LEU:O	15:M:106:TYR:N	2.07	0.88
16:N:82:GLY:HA3	16:N:113:SER:OG	1.74	0.88
23:U:23:LYS:HD2	23:U:35:THR:CG2	2.02	0.88
1:X:687:G:O2'	1:X:688:A:H5'	1.74	0.87
1:X:1052:C:C3'	1:X:1053:G:C5'	2.52	0.87
19:Q:34:THR:O	19:Q:38:ILE:HG22	1.74	0.87
1:X:501:G:H2'	1:X:502:A:H8	1.39	0.87
16:N:75:ASN:ND2	16:N:77:SER:HB3	1.89	0.87
7:E:30:LYS:HB2	7:E:79:VAL:HA	1.56	0.87
1:X:1781:C:OP1	3:A:219:PRO:HB2	1.73	0.87
9:G:115:ALA:O	9:G:118:ALA:HB3	1.72	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:10:HIS:O	20:R:11:ASN:HB2	1.72	0.87
1:X:635:C:H2'	1:X:636:G:H5''	1.55	0.87
1:X:1474:A:H4'	1:X:1475:U:O5'	1.75	0.87
1:X:1747:G:H4'	1:X:1749:G:H1'	1.56	0.87
3:A:258:LYS:NZ	3:A:261:ARG:HH21	1.72	0.87
23:U:53:GLU:O	23:U:78:ILE:HG22	1.74	0.87
1:X:37:C:H2'	1:X:38:G:C8	2.09	0.87
1:X:208:C:C2'	1:X:209:G:H5'	2.04	0.87
3:A:258:LYS:HZ2	3:A:261:ARG:HH21	1.21	0.87
16:N:22:LYS:HG3	16:N:23:GLY:H	1.40	0.87
23:U:27:ASP:HA	23:U:32:ARG:NH2	1.89	0.87
11:I:98:LEU:O	11:I:99:VAL:HG13	1.73	0.87
14:L:33:ARG:NH1	14:L:103:LEU:HB2	1.89	0.87
21:S:3:LEU:HD21	21:S:32:PHE:HB3	1.54	0.87
21:S:3:LEU:HD13	21:S:33:ALA:C	1.98	0.87
1:X:682:G:H2'	1:X:682:G:N3	1.86	0.86
1:X:833:A:H1'	1:X:954:U:O2'	1.75	0.86
6:D:29:PRO:HG2	6:D:165:GLU:HB3	1.53	0.86
6:D:46:ASP:C	6:D:48:LYS:H	1.83	0.86
6:D:75:SER:H	6:D:79:LEU:HD22	1.38	0.86
11:I:18:ARG:HB2	11:I:21:ARG:HB2	1.55	0.86
15:M:33:VAL:HA	15:M:51:GLU:HB2	1.57	0.86
17:O:38:LEU:HD13	17:O:39:PHE:N	1.89	0.86
19:Q:68:PHE:O	19:Q:69:ILE:HD12	1.75	0.86
1:X:1128:G:H3'	1:X:1129:A:H5''	1.57	0.86
1:X:1584:G:H4'	3:A:59:LYS:CG	2.04	0.86
18:P:32:ARG:C	18:P:32:ARG:HE	1.82	0.86
23:U:41:VAL:CG2	23:U:42:GLN:H	1.84	0.86
1:X:128:C:H2'	1:X:129:A:H5''	1.56	0.86
1:X:663:G:C3'	1:X:664:C:H5''	2.05	0.86
1:X:796:A:H8	1:X:797:A:H4'	1.37	0.86
23:U:51:ILE:HG12	23:U:59:THR:HG22	1.57	0.86
1:X:555:U:H3'	1:X:555:U:H6	1.40	0.86
1:X:824:U:H1'	1:X:1264:C:C1'	2.05	0.86
3:A:132:PRO:HD3	3:A:190:TYR:CD2	2.10	0.86
1:X:1075:C:O2'	8:F:89:SER:HB3	1.74	0.86
7:E:172:LYS:HZ2	7:E:172:LYS:HB2	1.40	0.86
10:H:116:ARG:HH22	15:M:41:GLU:HG2	1.40	0.86
18:P:36:ARG:NH2	26:Z:20:ARG:CZ	2.38	0.86
1:X:857:U:H3'	1:X:858:G:C8	2.11	0.86
1:X:1095:A:H2'	1:X:1096:A:H5''	1.56	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:51:ILE:CD1	19:Q:83:ALA:HA	2.03	0.86
1:X:914:C:H2'	1:X:915:C:H6	1.41	0.86
1:X:1095:A:C3'	1:X:1096:A:H5''	2.06	0.86
3:A:153:ALA:O	3:A:154:GLN:HG3	1.75	0.86
9:G:154:GLU:C	9:G:157:PRO:HD2	2.01	0.86
1:X:2581:A:H5'	1:X:2582:G:OP2	1.74	0.86
20:R:98:ILE:HG22	20:R:99:VAL:H	1.39	0.86
20:R:105:ARG:NH2	20:R:112:LYS:HA	1.90	0.86
1:X:333:A:H3'	5:C:162:ARG:NH2	1.90	0.86
1:X:333:A:H5''	5:C:162:ARG:HH11	1.37	0.86
6:D:115:ARG:HB2	6:D:178:ARG:HD2	1.58	0.86
15:M:102:ALA:C	15:M:103:LYS:HD2	2.01	0.86
21:S:19:ILE:HG22	21:S:20:ALA:H	1.41	0.86
1:X:1166:A:C2'	1:X:1167:A:H5''	2.05	0.86
1:X:2239:C:H2'	1:X:2240:C:H6	1.40	0.86
15:M:106:TYR:CE1	15:M:107:LEU:HD21	2.11	0.86
1:X:1448:A:H61	1:X:1574:A:N6	1.73	0.85
1:X:168:A:O2'	1:X:169:C:H5'	1.76	0.85
1:X:755:C:H2'	1:X:756:C:C6	2.11	0.85
1:X:1993:G:O2'	1:X:1994:U:H5'	1.74	0.85
5:C:7:ILE:HG21	5:C:121:ASP:O	1.76	0.85
6:D:70:ALA:HB3	6:D:83:MET:H	1.39	0.85
7:E:139:GLN:HB3	7:E:143:GLN:CD	2.01	0.85
15:M:99:VAL:HG22	15:M:100:ARG:H	1.41	0.85
30:4:25:VAL:HG21	30:4:34:GLN:HE21	1.41	0.85
1:X:1539:U:H2'	1:X:1540:C:H6	1.40	0.85
12:J:77:LYS:HG3	12:J:78:LYS:H	1.40	0.85
18:P:8:PHE:O	18:P:9:ARG:HB2	1.75	0.85
30:4:9:LYS:HD2	30:4:9:LYS:N	1.89	0.85
6:D:13:ARG:CZ	6:D:14:PRO:HG3	2.06	0.85
7:E:38:ASN:HB2	7:E:41:LEU:HB2	1.59	0.85
7:E:126:PRO:HG2	7:E:127:GLU:H	1.41	0.85
12:J:62:GLY:HA3	12:J:64:LYS:CE	2.06	0.85
1:X:1117:G:H2'	1:X:1118:G:C8	2.12	0.85
1:X:2241:U:H5	22:T:17:ASN:HD21	1.24	0.85
7:E:98:LEU:HD12	7:E:99:THR:N	1.90	0.85
7:E:136:ILE:H	7:E:136:ILE:HD12	1.41	0.85
15:M:34:ARG:NE	15:M:88:VAL:HG11	1.90	0.85
16:N:88:ILE:HG12	17:O:49:GLU:OE1	1.77	0.85
1:X:2661:G:O6	1:X:2708:U:H1'	1.76	0.85
1:X:1526:U:H2'	1:X:1527:G:O4'	1.75	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:61:ARG:HE	9:G:65:LYS:CD	1.90	0.84
18:P:106:LEU:HD23	18:P:107:ILE:N	1.92	0.84
3:A:243:GLY:H	3:A:244:ARG:NH1	1.74	0.84
16:N:66:ASN:HB2	16:N:70:ARG:NH1	1.90	0.84
19:Q:66:GLY:C	19:Q:68:PHE:H	1.82	0.84
23:U:11:LYS:HZ1	23:U:75:TYR:HB2	1.42	0.84
1:X:1268:U:C2'	5:C:66:ASN:HB3	2.07	0.84
1:X:1681:A:H61	1:X:1979:C:H42	1.23	0.84
12:J:20:GLY:C	12:J:99:LYS:HE2	2.02	0.84
12:J:63:GLY:O	12:J:65:ILE:N	2.09	0.84
12:J:116:LYS:HE2	12:J:132:MET:HE2	1.59	0.84
16:N:3:ARG:HG2	16:N:3:ARG:HH11	1.42	0.84
1:X:143:A:H2'	1:X:144:U:C6	2.12	0.84
1:X:1016:C:C5	1:X:1154:A:H1'	2.13	0.84
23:U:70:LEU:HB3	23:U:79:GLU:OE2	1.76	0.84
30:4:25:VAL:HB	30:4:34:GLN:HB2	1.58	0.84
1:X:2787:A:H2'	1:X:2788:C:H6	1.41	0.84
5:C:5:ASN:HA	5:C:118:VAL:HG21	1.59	0.84
6:D:36:VAL:HG22	6:D:154:ILE:HG13	1.58	0.84
23:U:52:ARG:HD2	23:U:79:GLU:HA	1.59	0.84
1:X:427:C:H1'	1:X:1856:U:H1'	1.60	0.84
14:L:54:ALA:H	14:L:75:LEU:HD13	1.43	0.84
26:Z:8:LYS:O	26:Z:9:LYS:HG2	1.78	0.84
1:X:1670:G:H4'	1:X:1671:A:OP1	1.75	0.84
5:C:26:VAL:O	5:C:30:VAL:HG23	1.76	0.84
6:D:65:PRO:HB2	6:D:87:ILE:HG22	1.60	0.84
6:D:167:ARG:HA	6:D:170:LEU:HD12	1.59	0.84
13:K:13:ASN:ND2	13:K:16:ALA:H	1.76	0.84
1:X:2293:G:H4'	6:D:155:THR:HG21	1.60	0.84
11:I:108:LEU:HB2	11:I:122:VAL:HG11	1.59	0.84
14:L:66:ASP:C	14:L:68:ALA:H	1.82	0.84
1:X:2291:U:OP1	6:D:71:LYS:HB2	1.78	0.83
9:G:110:LEU:N	9:G:110:LEU:HD23	1.91	0.83
1:X:871:U:O2'	1:X:2247:A:H2'	1.78	0.83
2:Y:16:U:H1'	2:Y:109:G:H21	1.42	0.83
14:L:16:LYS:HE2	14:L:28:ARG:NH1	1.94	0.83
7:E:50:LEU:HD23	7:E:51:LEU:N	1.92	0.83
1:X:1472:C:H3'	1:X:1473:U:H6	1.43	0.83
1:X:1658:A:H2'	1:X:1659:G:O4'	1.77	0.83
1:X:2177:U:H2'	1:X:2178:U:C6	2.14	0.83
1:X:2195:C:C6	1:X:2196:U:C5	2.66	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:164:VAL:O	5:C:166:TRP:N	2.12	0.83
30:4:1:MET:HE3	30:4:35:ARG:NH2	1.94	0.83
1:X:88:G:H3'	1:X:89:A:H5''	1.58	0.83
1:X:2263:C:H1'	1:X:2304:G:N2	1.93	0.83
4:B:116:VAL:HG13	4:B:136:ARG:NH2	1.94	0.83
1:X:558:G:C8	1:X:559:C:C5	2.66	0.83
1:X:795:A:C2	3:A:226:MET:HE3	2.13	0.83
18:P:27:VAL:HG23	18:P:125:THR:HG22	1.59	0.83
21:S:123:VAL:HG23	21:S:161:ALA:CB	2.08	0.83
1:X:95:G:H4'	24:V:41:HIS:ND1	1.94	0.83
1:X:553:C:H5'	1:X:554:U:OP1	1.77	0.83
4:B:136:ARG:HG2	4:B:137:ARG:N	1.91	0.83
13:K:100:VAL:HG12	13:K:101:GLY:N	1.94	0.83
16:N:7:GLY:O	16:N:8:ILE:HG13	1.77	0.83
21:S:6:LYS:H	21:S:7:PRO:HD3	1.43	0.83
21:S:123:VAL:N	21:S:161:ALA:HB2	1.93	0.83
24:V:37:LEU:HD21	24:V:40:PRO:HA	1.60	0.83
1:X:1506:C:H2'	3:A:99:ASP:OD1	1.78	0.83
4:B:152:LYS:HD2	9:G:106:TYR:H	1.41	0.83
19:Q:63:LYS:HG3	19:Q:64:ARG:N	1.91	0.83
23:U:29:GLY:O	23:U:31:GLY:N	2.10	0.83
24:V:41:HIS:CD2	24:V:42:ARG:N	2.46	0.83
1:X:555:U:H3'	1:X:555:U:C6	2.14	0.83
1:X:2177:U:H2'	1:X:2178:U:H6	1.44	0.83
1:X:2261:G:H4'	1:X:2262:C:OP2	1.78	0.83
4:B:136:ARG:HG2	4:B:137:ARG:H	1.43	0.83
10:H:116:ARG:HH21	15:M:40:ARG:HB2	1.41	0.83
10:H:132:GLU:HG2	10:H:134:LEU:HG	1.61	0.83
19:Q:7:LEU:O	19:Q:7:LEU:HD13	1.77	0.83
20:R:23:ILE:HD12	20:R:23:ILE:N	1.87	0.83
1:X:755:C:H2'	1:X:756:C:H6	1.42	0.83
1:X:1391:A:O2'	1:X:1392:U:C6	2.31	0.83
1:X:1508:G:H5'	1:X:1509:A:C5'	2.08	0.83
1:X:2210:C:H2'	1:X:2211:U:C6	2.13	0.83
9:G:103:TYR:HB3	9:G:107:GLN:NE2	1.94	0.83
14:L:15:ARG:HD2	14:L:91:ARG:HH11	1.44	0.83
17:O:12:TYR:O	17:O:13:ARG:HB2	1.77	0.83
20:R:93:ARG:HH22	20:R:108:VAL:HA	1.43	0.83
25:W:9:VAL:O	25:W:12:ARG:HB2	1.79	0.83
1:X:1467:U:H3'	1:X:1467:U:H6	1.44	0.82
5:C:48:ARG:HB2	5:C:51:VAL:HG22	1.61	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:135:GLN:HG3	6:D:151:GLY:HA2	1.59	0.82
24:V:2:LYS:CA	24:V:6:MET:HE2	2.08	0.82
1:X:33:C:O2'	1:X:34:U:H5''	1.77	0.82
1:X:490:A:O2'	1:X:491:A:H5'	1.78	0.82
1:X:752:G:H4'	1:X:753:U:OP1	1.77	0.82
1:X:1075:C:O2'	8:F:89:SER:CB	2.27	0.82
3:A:66:ASP:OD1	3:A:69:ARG:HG3	1.79	0.82
9:G:51:LEU:CD1	9:G:88:VAL:HG21	2.09	0.82
13:K:16:ALA:C	13:K:18:VAL:H	1.83	0.82
1:X:1075:C:H5''	8:F:87:GLY:HA3	1.62	0.82
5:C:3:GLN:HE22	5:C:4:ILE:HG12	1.45	0.82
16:N:70:ARG:HG3	16:N:70:ARG:HH11	1.43	0.82
1:X:332:C:C1'	5:C:159:ARG:HE	1.92	0.82
1:X:1077:U:H2'	1:X:1079:G:OP2	1.79	0.82
1:X:1626:A:H5''	1:X:1627:C:OP2	1.78	0.82
1:X:2672:U:H2'	1:X:2673:G:C8	2.11	0.82
1:X:2795:A:H4'	13:K:5:LYS:HE3	1.61	0.82
1:X:627:A:H2'	1:X:628:A:C8	2.14	0.82
5:C:153:ASP:OD1	5:C:172:VAL:HA	1.80	0.82
7:E:89:LEU:HD21	7:E:131:ILE:HD11	1.60	0.82
12:J:125:LYS:NZ	12:J:125:LYS:HB3	1.94	0.82
15:M:50:PHE:CZ	15:M:70:LYS:HB3	2.14	0.82
23:U:51:ILE:CG2	23:U:59:THR:HA	2.09	0.82
20:R:90:LYS:CB	20:R:108:VAL:HG21	2.09	0.82
23:U:13:LEU:HG	23:U:14:VAL:N	1.90	0.82
1:X:116:A:H5'	1:X:117:A:C8	2.13	0.82
1:X:1051:U:H2'	1:X:1052:C:H6	1.45	0.82
1:X:1734:C:H5''	1:X:1735:G:C8	2.14	0.82
6:D:65:PRO:HB3	6:D:89:VAL:CG2	2.09	0.82
20:R:85:ASP:H	20:R:86:PRO:CD	1.91	0.82
21:S:7:PRO:HG2	21:S:9:THR:O	1.79	0.82
1:X:73:A:H5''	1:X:74:G:O4'	1.79	0.82
1:X:558:G:N3	1:X:558:G:H5''	1.93	0.82
7:E:45:GLN:HG3	7:E:49:GLN:O	1.80	0.82
7:E:57:ASP:HB3	7:E:62:ARG:NE	1.92	0.82
7:E:76:VAL:C	7:E:78:GLY:N	2.34	0.82
19:Q:90:ALA:C	19:Q:92:ALA:H	1.85	0.82
1:X:1193:G:C2'	1:X:1194:U:H5''	2.10	0.82
1:X:2306:A:H2'	1:X:2307:A:C8	2.14	0.82
1:X:2375:G:H4'	23:U:32:ARG:O	1.79	0.82
6:D:74:ILE:HG23	6:D:80:ARG:HA	1.60	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1281:A:C1'	1:X:2592:U:H5	1.93	0.81
1:X:2498:U:H4'	1:X:2499:C:OP1	1.77	0.81
7:E:131:ILE:HG22	7:E:132:ASP:H	1.45	0.81
7:E:131:ILE:HG22	7:E:132:ASP:N	1.95	0.81
9:G:55:ALA:CB	9:G:134:MET:HE1	2.10	0.81
1:X:1064:C:O5'	1:X:1064:C:H6	1.63	0.81
1:X:1218:C:H5'	11:I:13:ARG:HH11	1.44	0.81
2:Y:53:G:P	14:L:64:LYS:HZ3	2.03	0.81
6:D:108:LEU:HA	6:D:111:ILE:HD12	1.60	0.81
6:D:122:PHE:HB3	6:D:129:ASN:ND2	1.94	0.81
11:I:86:THR:C	11:I:88:PHE:H	1.86	0.81
19:Q:66:GLY:O	19:Q:68:PHE:N	2.13	0.81
24:V:50:VAL:CA	24:V:53:LEU:HD12	2.10	0.81
1:X:317:U:C2'	1:X:318:G:H5''	2.09	0.81
1:X:427:C:O2	1:X:1856:U:H4'	1.80	0.81
1:X:1778:U:H2'	1:X:1779:C:H6	1.46	0.81
1:X:1922:U:H4'	1:X:1923:U:OP2	1.80	0.81
1:X:2237:C:H4'	1:X:2238:G:OP2	1.80	0.81
1:X:2266:A:N6	1:X:2323:U:H3	1.77	0.81
1:X:2288:A:H2'	1:X:2289:A:H8	1.44	0.81
1:X:2850:U:H5'	1:X:2850:U:H6	1.44	0.81
9:G:92:GLY:C	9:G:93:LYS:HD2	2.05	0.81
12:J:69:ILE:CG2	12:J:104:MET:HA	2.09	0.81
1:X:1095:A:C2'	1:X:1096:A:H5''	2.10	0.81
5:C:2:ALA:CB	5:C:13:ARG:HA	2.10	0.81
21:S:141:MET:HB3	21:S:171:VAL:CG2	2.10	0.81
1:X:471:A:H2'	1:X:472:C:O4'	1.80	0.81
1:X:1452:U:O2'	1:X:1453:A:H5'	1.80	0.81
1:X:2322:U:H2'	1:X:2323:U:C6	2.14	0.81
1:X:2581:A:H3'	1:X:2582:G:C5'	2.11	0.81
1:X:2726:U:H1'	7:E:139:GLN:HE21	1.45	0.81
1:X:2811:G:H2'	1:X:2812:A:C8	2.16	0.81
3:A:164:GLN:HE22	3:A:166:GLN:HE22	1.27	0.81
4:B:75:THR:O	4:B:76:ARG:CB	2.29	0.81
7:E:89:LEU:HD21	7:E:105:MET:HE1	1.61	0.81
13:K:7:GLY:O	13:K:8:ARG:HG2	1.81	0.81
19:Q:12:ILE:H	19:Q:12:ILE:HD13	1.44	0.81
21:S:64:ALA:HA	21:S:86:VAL:N	1.95	0.81
1:X:559:C:H2'	1:X:560:G:O4'	1.80	0.81
1:X:609:U:H4'	11:I:18:ARG:CZ	2.10	0.81
1:X:1849:G:H1'	1:X:1868:A:H61	1.45	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:26:VAL:HG22	11:I:18:ARG:HH11	1.45	0.81
5:C:28:HIS:CE1	11:I:21:ARG:HH11	1.98	0.81
7:E:9:ILE:HD12	7:E:51:LEU:HA	1.63	0.81
12:J:35:LEU:HD23	12:J:105:PHE:HD2	1.44	0.81
19:Q:38:ILE:O	19:Q:42:ILE:HG22	1.80	0.81
21:S:113:VAL:CG1	21:S:171:VAL:HG22	2.10	0.81
1:X:400:U:O2'	1:X:401:G:H5''	1.80	0.81
1:X:1218:C:C5'	11:I:13:ARG:HH11	1.93	0.81
1:X:1339:U:H5''	1:X:1994:U:H1'	1.62	0.81
1:X:2867:G:OP2	1:X:2867:G:H8	1.64	0.81
17:O:65:ARG:HG2	17:O:87:ARG:HD2	1.62	0.81
20:R:48:VAL:O	20:R:50:GLY:N	2.14	0.81
1:X:1072:U:C1'	1:X:1081:A:H1'	2.10	0.81
7:E:105:MET:HB2	7:E:113:VAL:HB	1.63	0.81
11:I:120:VAL:HG12	11:I:122:VAL:HG13	1.63	0.81
20:R:105:ARG:HH22	20:R:112:LYS:CA	1.93	0.81
1:X:2482:A:C4'	1:X:2483:U:OP1	2.27	0.81
3:A:42:GLY:C	3:A:43:ARG:NH1	2.39	0.81
6:D:72:LYS:HA	6:D:81:GLN:C	2.06	0.81
9:G:36:ASN:O	9:G:38:GLU:N	2.13	0.81
15:M:46:ARG:HG3	15:M:47:SER:N	1.95	0.81
21:S:127:PRO:HA	21:S:130:ILE:HD11	1.62	0.81
30:4:9:LYS:H	30:4:9:LYS:CD	1.93	0.81
1:X:645:G:H2'	1:X:646:C:C6	2.15	0.81
1:X:653:G:C2'	1:X:654:A:H5''	2.10	0.81
1:X:1857:G:N2	1:X:1860:A:OP2	2.14	0.81
1:X:2395:C:C2'	1:X:2396:C:H5''	2.10	0.81
1:X:2441:U:H2'	1:X:2442:C:C6	2.15	0.81
15:M:27:PHE:HB3	15:M:93:ILE:HD12	1.62	0.81
20:R:18:LYS:HD3	20:R:18:LYS:N	1.96	0.81
1:X:1074:G:O2'	1:X:1075:C:H5'	1.80	0.80
1:X:2796:A:H5''	4:B:162:MET:CE	2.10	0.80
2:Y:112:A:H2'	2:Y:113:G:C8	2.16	0.80
7:E:94:PHE:CD2	7:E:107:ILE:HG22	2.16	0.80
9:G:51:LEU:HD12	9:G:88:VAL:HG21	1.63	0.80
17:O:25:LEU:HB2	17:O:32:LYS:HZ1	1.46	0.80
18:P:126:ILE:HD12	18:P:127:ILE:N	1.97	0.80
1:X:403:A:H3'	1:X:403:A:OP2	1.80	0.80
1:X:2343:C:H4'	22:T:56:ASP:OD1	1.81	0.80
1:X:2640:G:H2'	1:X:2641:A:C8	2.15	0.80
2:Y:25:G:H2'	2:Y:26:G:N7	1.96	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:134:ILE:O	5:C:137:ALA:HB3	1.81	0.80
6:D:108:LEU:HA	6:D:111:ILE:CD1	2.11	0.80
19:Q:29:VAL:HG11	19:Q:38:ILE:HD12	1.62	0.80
21:S:70:GLN:NE2	21:S:70:GLN:HA	1.94	0.80
1:X:1517:C:H2'	1:X:1518:C:H6	1.46	0.80
21:S:3:LEU:HB2	21:S:34:LEU:HB3	1.62	0.80
23:U:52:ARG:HD2	23:U:79:GLU:C	2.05	0.80
30:4:19:ARG:HH11	30:4:24:LEU:HD22	1.42	0.80
1:X:2617:G:P	4:B:82:ARG:HH22	2.04	0.80
3:A:132:PRO:HA	3:A:190:TYR:HA	1.62	0.80
9:G:116:ARG:HD2	9:G:119:LEU:HD12	1.63	0.80
11:I:28:LYS:HZ2	11:I:37:GLN:H	1.27	0.80
14:L:27:LEU:CD2	14:L:44:ASP:HA	2.11	0.80
20:R:80:LYS:HZ2	20:R:82:ALA:HA	1.44	0.80
20:R:93:ARG:HH12	20:R:108:VAL:CA	1.95	0.80
21:S:23:ALA:HA	21:S:83:PHE:O	1.80	0.80
1:X:155:G:O2'	1:X:156:G:H5'	1.81	0.80
1:X:1745:C:OP1	15:M:101:ARG:NH2	2.15	0.80
1:X:2557:G:N7	4:B:140:SER:HB2	1.95	0.80
7:E:43:VAL:CG2	7:E:52:VAL:HG22	2.10	0.80
11:I:86:THR:OG1	11:I:118:VAL:HG12	1.79	0.80
12:J:44:LYS:HB2	12:J:47:GLN:HG3	1.64	0.80
13:K:13:ASN:HD21	13:K:16:ALA:H	1.28	0.80
20:R:55:THR:HG21	20:R:72:ARG:NH1	1.97	0.80
23:U:22:GLY:HA3	23:U:39:LYS:HE2	1.64	0.80
25:W:16:GLN:O	25:W:20:VAL:HG23	1.81	0.80
1:X:691:C:H2'	1:X:692:C:H6	1.45	0.80
1:X:704:G:H2'	1:X:705:C:H6	1.46	0.80
1:X:1574:A:H2'	1:X:1575:C:H5''	1.63	0.80
1:X:2196:U:C2'	1:X:2197:U:C6	2.62	0.80
1:X:2266:A:H62	1:X:2323:U:H3	1.29	0.80
1:X:2516:U:H2'	1:X:2517:C:C6	2.17	0.80
1:X:2616:U:H5''	4:B:82:ARG:HH21	1.44	0.80
5:C:130:THR:HA	5:C:160:ALA:HB1	1.62	0.80
11:I:13:ARG:HH21	11:I:13:ARG:CG	1.95	0.80
16:N:33:ARG:HH11	16:N:33:ARG:HG3	1.47	0.80
1:X:645:G:H2'	1:X:646:C:H6	1.47	0.80
1:X:1281:A:C1'	1:X:2592:U:C5	2.65	0.80
1:X:1810:U:H5''	3:A:158:SER:HB3	1.64	0.80
6:D:60:ILE:HG13	6:D:61:THR:HG23	1.62	0.80
14:L:68:ALA:HB1	14:L:102:ALA:CB	2.11	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:10:PRO:HA	19:Q:27:PHE:HB3	1.64	0.80
22:T:40:GLN:HE21	22:T:57:HIS:HB3	1.44	0.80
1:X:227:G:O2'	11:I:53:ARG:NE	2.14	0.80
1:X:666:U:H2'	1:X:667:U:H4'	1.63	0.80
1:X:1508:G:C5'	1:X:1509:A:H5''	2.12	0.80
3:A:183:ARG:HH11	3:A:183:ARG:CB	1.94	0.80
4:B:67:PHE:CZ	4:B:75:THR:HG22	2.16	0.80
10:H:27:SER:HB3	10:H:50:ILE:N	1.96	0.80
11:I:53:ARG:HG3	11:I:53:ARG:HH21	1.45	0.80
11:I:81:GLN:HB3	11:I:114:ILE:HG22	1.64	0.80
19:Q:7:LEU:HD11	24:V:26:MET:HG3	1.64	0.80
22:T:3:HIS:HD2	22:T:5:LYS:HD3	1.46	0.80
1:X:542:A:N1	1:X:2004:U:H2'	1.96	0.80
1:X:1021:A:N3	1:X:1164:C:H1'	1.97	0.80
9:G:61:ARG:HB3	9:G:61:ARG:HH21	1.42	0.80
17:O:12:TYR:HB2	17:O:39:PHE:HA	1.64	0.80
21:S:100:THR:OG1	21:S:138:VAL:HG11	1.81	0.80
22:T:31:VAL:HG11	22:T:37:LEU:HD21	1.63	0.80
6:D:60:ILE:HG22	6:D:140:GLU:HB2	1.61	0.80
21:S:18:MET:HA	21:S:36:ARG:H	1.46	0.80
21:S:105:GLN:O	21:S:142:ASN:HA	1.82	0.80
23:U:31:GLY:CA	23:U:32:ARG:HH11	1.89	0.80
1:X:652:C:H42	1:X:657:A:H61	0.83	0.79
1:X:729:A:H2'	1:X:730:C:C1'	2.12	0.79
1:X:1468:A:C8	1:X:1468:A:O5'	2.36	0.79
1:X:1542:G:N2	1:X:1562:G:H22	1.80	0.79
1:X:2210:C:H2'	1:X:2211:U:H6	1.47	0.79
6:D:35:VAL:HG23	6:D:155:THR:HB	1.63	0.79
14:L:64:LYS:H	14:L:64:LYS:HD3	1.47	0.79
1:X:75:C:C2'	1:X:76:C:H5''	2.12	0.79
1:X:109:A:H2'	1:X:110:U:H5''	1.61	0.79
7:E:9:ILE:CG2	7:E:50:LEU:HB3	2.10	0.79
21:S:23:ALA:HB2	21:S:83:PHE:HB2	1.62	0.79
21:S:30:VAL:HB	21:S:32:PHE:CZ	2.17	0.79
1:X:1007:A:H1'	17:O:6:GLN:HG2	1.62	0.79
1:X:1051:U:H2'	1:X:1052:C:C6	2.16	0.79
5:C:166:TRP:N	5:C:166:TRP:HE3	1.80	0.79
9:G:90:LEU:HB2	9:G:94:LYS:HE3	1.63	0.79
14:L:36:LYS:HA	14:L:36:LYS:HE3	1.62	0.79
23:U:11:LYS:NZ	23:U:75:TYR:HB2	1.97	0.79
24:V:7:ARG:HD2	24:V:8:ASN:N	1.97	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2302:G:H1	1:X:2311:U:H5	1.28	0.79
23:U:70:LEU:HD21	23:U:77:GLY:O	1.82	0.79
1:X:525:A:H2'	1:X:526:C:H5'	1.64	0.79
6:D:11:GLN:O	6:D:15:ALA:HB3	1.82	0.79
17:O:20:ILE:HD12	17:O:21:ARG:N	1.98	0.79
1:X:503:G:H2'	1:X:504:G:O4'	1.82	0.79
1:X:1436:G:H2'	1:X:1437:A:H8	1.47	0.79
4:B:31:CYS:HB3	4:B:49:ILE:HG12	1.64	0.79
9:G:132:PHE:CE1	9:G:145:HIS:HB2	2.18	0.79
14:L:15:ARG:HD2	14:L:91:ARG:HD3	1.65	0.79
16:N:66:ASN:CB	16:N:70:ARG:HH12	1.96	0.79
21:S:18:MET:SD	21:S:35:ASP:HA	2.22	0.79
1:X:105:G:H5'	1:X:105:G:H8	1.47	0.79
2:Y:108:G:O2'	2:Y:109:G:H5'	1.83	0.79
16:N:22:LYS:C	16:N:24:PHE:H	1.90	0.79
21:S:120:LEU:HD23	21:S:121:GLN:H	1.48	0.79
1:X:305:A:H2'	1:X:306:G:H5'	1.64	0.79
1:X:2357:A:H4'	14:L:26:ARG:NH1	1.98	0.79
3:A:125:PRO:HG3	3:A:131:LEU:CD1	2.13	0.79
6:D:13:ARG:HG2	6:D:17:MET:HE1	1.63	0.79
11:I:134:GLU:HG2	11:I:138:GLY:O	1.82	0.79
20:R:40:LEU:CB	20:R:45:LYS:HB2	2.11	0.79
1:X:409:G:O2'	1:X:410:A:H5'	1.83	0.79
1:X:537:C:H1'	1:X:538:A:C6	2.18	0.79
1:X:1736:C:H2'	1:X:1737:G:C8	2.18	0.79
18:P:126:ILE:HD12	18:P:127:ILE:H	1.48	0.79
1:X:862:A:H2'	1:X:863:C:C6	2.17	0.79
1:X:1584:G:H4'	3:A:59:LYS:HG2	1.63	0.79
1:X:2225:G:C2	1:X:2405:A:H1'	2.18	0.79
3:A:164:GLN:OE1	3:A:176:ARG:HB3	1.83	0.79
15:M:79:ARG:HH11	15:M:79:ARG:CG	1.95	0.79
24:V:2:LYS:CG	24:V:3:PRO:HD3	2.13	0.79
25:W:1:MET:C	25:W:34:VAL:HG12	2.08	0.79
1:X:969:U:H5''	12:J:17:ARG:NH1	1.98	0.78
1:X:1223:G:H4'	1:X:1224:A:C5'	2.12	0.78
1:X:2787:A:H2'	1:X:2788:C:C6	2.18	0.78
6:D:8:TYR:O	6:D:12:VAL:HB	1.83	0.78
6:D:74:ILE:HG12	6:D:80:ARG:HA	1.63	0.78
14:L:54:ALA:O	14:L:71:VAL:HG23	1.83	0.78
20:R:95:ARG:NH1	20:R:106:VAL:HA	1.98	0.78
1:X:1118:G:C2'	1:X:1119:U:H5''	2.14	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1854:G:C2'	1:X:1855:G:OP2	2.27	0.78
1:X:1885:C:C5'	3:A:244:ARG:HD2	2.14	0.78
12:J:34:GLY:HA2	12:J:106:GLU:CA	2.13	0.78
17:O:35:LEU:HD22	17:O:36:LYS:O	1.83	0.78
9:G:100:TYR:HB2	9:G:116:ARG:NH1	1.98	0.78
11:I:10:PRO:HA	11:I:14:LYS:HB2	1.65	0.78
12:J:44:LYS:HB2	12:J:47:GLN:CD	2.07	0.78
14:L:83:GLY:C	14:L:84:ILE:HD12	2.09	0.78
15:M:82:PRO:HB2	15:M:85:SER:HB2	1.66	0.78
1:X:2310:G:H4'	22:T:43:THR:N	1.94	0.78
18:P:41:VAL:HG21	18:P:64:ALA:HB3	1.64	0.78
1:X:1286:U:H4'	1:X:1288:A:OP2	1.83	0.78
11:I:120:VAL:CG1	11:I:122:VAL:HG13	2.13	0.78
12:J:35:LEU:HB3	12:J:105:PHE:HB2	1.65	0.78
15:M:103:LYS:O	15:M:104:LEU:HB2	1.83	0.78
21:S:141:MET:HA	21:S:145:ASP:OD1	1.82	0.78
23:U:52:ARG:HH12	23:U:67:LEU:HD11	1.49	0.78
1:X:150:A:H2'	1:X:151:G:O4'	1.82	0.78
1:X:1058:G:H2'	1:X:1121:G:H1	1.48	0.78
6:D:32:GLU:HB3	6:D:157:VAL:HG12	1.64	0.78
6:D:108:LEU:CD1	6:D:117:ILE:HD11	2.13	0.78
6:D:132:ILE:HB	6:D:152:MET:O	1.84	0.78
7:E:126:PRO:HG3	7:E:130:ARG:HD3	1.65	0.78
9:G:105:GLY:C	9:G:110:LEU:HD12	2.09	0.78
11:I:82:ASP:H	11:I:114:ILE:HG21	1.49	0.78
12:J:27:TYR:HB3	12:J:137:VAL:HG21	1.64	0.78
1:X:788:G:H5'	1:X:790:A:C1'	2.10	0.78
1:X:155:G:C2'	1:X:156:G:H5'	2.13	0.78
1:X:1031:C:H41	1:X:1153:A:N6	1.81	0.78
1:X:2036:G:O2'	1:X:2037:A:H5'	1.83	0.78
1:X:2080:U:H2'	1:X:2081:U:C6	2.19	0.78
1:X:172:A:C6	1:X:175:C:H5	2.01	0.78
1:X:555:U:OP2	1:X:556:A:H2'	1.83	0.78
1:X:1075:C:H5'	8:F:87:GLY:HA3	1.65	0.78
1:X:2195:C:C5	1:X:2196:U:C4	2.68	0.78
12:J:22:ALA:HB2	12:J:100:PRO:O	1.83	0.78
19:Q:4:TYR:HE1	19:Q:45:ALA:HA	1.49	0.78
1:X:421:G:H2'	1:X:422:C:H6	1.48	0.78
1:X:558:G:N3	1:X:558:G:C3'	2.46	0.78
1:X:1075:C:H5''	8:F:87:GLY:CA	2.14	0.78
1:X:583:C:H1'	1:X:2038:C:C6	2.19	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J:44:LYS:HB2	12:J:47:GLN:CG	2.13	0.77
1:X:824:U:C1'	1:X:1264:C:H1'	2.14	0.77
1:X:832:A:OP2	1:X:1201:G:N2	2.17	0.77
1:X:1275:A:C2	26:Z:10:LYS:HE2	2.19	0.77
5:C:3:GLN:NE2	5:C:4:ILE:HG12	1.99	0.77
9:G:62:ILE:O	9:G:77:GLY:HA3	1.85	0.77
15:M:34:ARG:NH1	15:M:81:PHE:HB3	1.99	0.77
17:O:36:LYS:HZ2	17:O:54:TYR:CB	1.97	0.77
1:X:1061:A:O2'	1:X:1062:G:H5'	1.83	0.77
25:W:36:ASP:CG	25:W:41:ARG:HH12	1.92	0.77
1:X:1711:C:H4'	1:X:1712:G:H5''	1.65	0.77
1:X:2769:C:H2'	1:X:2770:A:C8	2.19	0.77
9:G:100:TYR:HB2	9:G:116:ARG:HH11	1.49	0.77
12:J:62:GLY:HA3	12:J:64:LYS:HE3	1.66	0.77
21:S:3:LEU:HD12	21:S:4:THR:N	1.99	0.77
25:W:40:VAL:HA	25:W:43:MET:HG3	1.65	0.77
1:X:954:U:H2'	1:X:955:G:H5''	1.66	0.77
1:X:1525:A:H3'	1:X:1526:U:H6	1.48	0.77
1:X:2323:U:O2	1:X:2323:U:C2'	2.17	0.77
1:X:2356:A:H1'	14:L:89:PHE:CE2	2.20	0.77
1:X:2710:C:O2'	1:X:2711:G:H5'	1.84	0.77
6:D:7:LYS:HA	6:D:10:ASP:HB2	1.67	0.77
6:D:46:ASP:O	6:D:50:ILE:HG13	1.85	0.77
7:E:44:ARG:HH22	7:E:46:ASP:HB2	1.49	0.77
14:L:64:LYS:HD3	14:L:64:LYS:N	1.98	0.77
1:X:560:G:O2'	1:X:1233:A:N3	2.16	0.77
1:X:1053:G:H1	1:X:1124:U:H3	1.31	0.77
1:X:1513:U:OP2	1:X:1514:C:H5	1.66	0.77
11:I:76:LYS:HG3	11:I:111:SER:HB2	1.65	0.77
20:R:96:LYS:CG	20:R:97:GLN:H	1.93	0.77
23:U:28:GLY:HA3	23:U:32:ARG:CB	2.14	0.77
1:X:1071:U:H4'	1:X:1072:U:O5'	1.82	0.77
1:X:1264:C:H5''	16:N:13:ARG:NE	2.00	0.77
3:A:42:GLY:H	3:A:43:ARG:HH12	1.32	0.77
6:D:16:LEU:HD22	6:D:20:PHE:CE1	2.20	0.77
16:N:85:ARG:HH21	16:N:85:ARG:HG3	1.50	0.77
23:U:28:GLY:HA3	23:U:32:ARG:CA	2.15	0.77
1:X:810:U:H6	1:X:810:U:H3'	1.49	0.77
13:K:28:LEU:CD2	13:K:115:LEU:HG	2.15	0.77
23:U:49:LYS:HB3	23:U:61:TRP:CD2	2.20	0.77
1:X:647:G:O6	11:I:107:LYS:HE3	1.85	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:150:ARG:HG2	6:D:151:GLY:N	2.00	0.77
1:X:1107:A:C3'	1:X:1108:U:H5''	2.14	0.77
1:X:1179:A:H2'	1:X:1180:A:C8	2.20	0.77
1:X:1610:A:H2'	1:X:1611:U:C6	2.19	0.77
1:X:2286:G:C6	1:X:2287:G:H1'	2.20	0.77
11:I:126:SER:OG	11:I:129:ALA:HB2	1.84	0.77
14:L:33:ARG:HH11	14:L:100:VAL:CA	1.94	0.77
1:X:1608:U:H2'	1:X:1609:G:H8	1.50	0.76
1:X:1953:A:H5'	1:X:1954:A:OP1	1.85	0.76
1:X:2170:C:H3'	1:X:2171:U:C5'	2.12	0.76
1:X:2195:C:C4	1:X:2196:U:C5	2.72	0.76
1:X:2569:A:H2'	1:X:2570:C:H6	1.48	0.76
1:X:2653:A:O2'	10:H:41:ASN:ND2	2.18	0.76
1:X:2712:G:H3'	1:X:2713:A:H5'	1.67	0.76
7:E:68:THR:O	7:E:72:VAL:HG23	1.85	0.76
9:G:104:THR:OG1	9:G:110:LEU:HB3	1.84	0.76
21:S:73:LYS:O	21:S:74:ARG:HB2	1.85	0.76
23:U:19:ILE:HA	23:U:42:GLN:HA	1.66	0.76
26:Z:16:ARG:HD3	26:Z:20:ARG:CZ	2.15	0.76
1:X:1128:G:C3'	1:X:1129:A:H5''	2.14	0.76
5:C:132:ASN:O	5:C:135:SER:HB3	1.85	0.76
19:Q:75:ARG:HH11	19:Q:75:ARG:HG3	1.49	0.76
23:U:29:GLY:C	23:U:31:GLY:N	2.37	0.76
1:X:1373:G:O6	1:X:1385:C:C4	2.39	0.76
1:X:1539:U:H2'	1:X:1540:C:C6	2.20	0.76
1:X:1644:G:H2'	1:X:1645:U:C6	2.19	0.76
1:X:1737:G:H2'	1:X:1738:U:H6	1.50	0.76
1:X:1914:U:H6	1:X:1914:U:H5'	1.50	0.76
1:X:2054:A:H2'	1:X:2055:G:H8	1.51	0.76
3:A:182:LEU:HD12	3:A:269:PHE:CD2	2.20	0.76
15:M:99:VAL:HG22	15:M:100:ARG:N	1.99	0.76
17:O:26:GLN:HG2	17:O:27:GLY:H	1.50	0.76
21:S:113:VAL:HG13	21:S:171:VAL:CG2	2.11	0.76
1:X:460:U:O4	1:X:592:G:H1'	1.85	0.76
1:X:814:G:OP1	5:C:50:GLN:HB2	1.85	0.76
1:X:1573:G:H3'	1:X:1574:A:C5'	2.14	0.76
1:X:2617:G:OP2	4:B:82:ARG:NH2	2.18	0.76
2:Y:31:A:H2'	2:Y:32:C:C6	2.20	0.76
6:D:106:ILE:HG23	6:D:110:ARG:CD	2.16	0.76
10:H:109:ARG:HG3	10:H:111:PHE:HE1	1.50	0.76
13:K:13:ASN:HD21	13:K:16:ALA:N	1.83	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:U:27:ASP:H	23:U:32:ARG:HH21	1.32	0.76
1:X:71:A:N6	1:X:110:U:H4'	2.00	0.76
1:X:843:G:H1'	1:X:2427:A:C6	2.20	0.76
1:X:1486:A:H2'	1:X:1487:C:C6	2.20	0.76
1:X:2352:A:H2'	1:X:2353:G:H8	1.50	0.76
1:X:2630:C:O2'	1:X:2631:C:H5'	1.85	0.76
3:A:164:GLN:HE22	3:A:166:GLN:NE2	1.81	0.76
24:V:2:LYS:HG2	24:V:3:PRO:HD3	1.68	0.76
1:X:333:A:H5'	5:C:162:ARG:CG	2.16	0.76
1:X:585:U:H2'	1:X:586:G:C8	2.20	0.76
1:X:1324:G:H1'	1:X:1326:U:C5	2.20	0.76
1:X:2691:C:HO2'	1:X:2692:A:H8	1.33	0.76
3:A:143:HIS:ND1	3:A:194:GLY:O	2.17	0.76
6:D:30:ARG:HE	6:D:159:THR:HG21	1.49	0.76
10:H:73:VAL:HG21	10:H:123:PHE:CE2	2.20	0.76
21:S:117:VAL:CG2	21:S:168:VAL:HA	2.15	0.76
23:U:23:LYS:HB2	23:U:35:THR:HG23	1.67	0.76
1:X:451:A:H2'	1:X:452:G:C8	2.20	0.76
1:X:1794:A:O2'	3:A:257:LEU:HD12	1.85	0.76
1:X:2713:A:O2'	1:X:2714:A:H5'	1.85	0.76
5:C:112:GLN:HA	5:C:116:LYS:HB3	1.66	0.76
6:D:83:MET:O	6:D:85:VAL:HG13	1.85	0.76
20:R:93:ARG:HH22	20:R:108:VAL:HG13	1.50	0.76
1:X:766:A:O2'	1:X:767:G:H5'	1.86	0.76
1:X:925:U:H4'	1:X:926:C:OP1	1.85	0.76
1:X:2212:U:H2'	1:X:2213:G:H8	1.51	0.76
4:B:178:GLY:O	4:B:179:GLU:HG2	1.86	0.76
9:G:44:VAL:HG11	9:G:54:LEU:HD11	1.66	0.76
13:K:16:ALA:O	13:K:18:VAL:N	2.19	0.76
1:X:543:G:H5'	16:N:24:PHE:CE1	2.20	0.76
1:X:2084:G:H2'	1:X:2085:G:H8	1.51	0.76
6:D:46:ASP:HB2	6:D:49:ALA:CB	2.16	0.76
17:O:25:LEU:HB2	17:O:32:LYS:NZ	2.00	0.76
17:O:29:ALA:O	17:O:31:ASP:N	2.19	0.76
1:X:340:G:OP2	1:X:340:G:H8	1.68	0.76
1:X:2811:G:H2'	1:X:2812:A:H8	1.50	0.76
10:H:116:ARG:CD	15:M:38:LYS:HE2	2.13	0.76
14:L:101:LYS:O	14:L:104:ALA:HB3	1.86	0.76
20:R:25:LEU:CD1	20:R:81:VAL:H	1.98	0.76
23:U:22:GLY:HA3	23:U:39:LYS:CD	2.15	0.76
1:X:820:U:H2'	1:X:821:A:H8	1.51	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:127:LEU:HD23	3:A:193:ILE:HG22	1.67	0.75
6:D:75:SER:HB2	6:D:79:LEU:HD13	1.67	0.75
20:R:108:VAL:CG1	20:R:109:ALA:H	1.91	0.75
23:U:27:ASP:HA	23:U:32:ARG:CZ	2.16	0.75
1:X:1542:G:H21	1:X:1562:G:H22	1.34	0.75
1:X:2326:C:H2'	1:X:2327:U:H6	1.51	0.75
3:A:206:LEU:C	3:A:211:ARG:HD3	2.11	0.75
9:G:132:PHE:HB2	9:G:145:HIS:CE1	2.21	0.75
11:I:76:LYS:HB3	11:I:79:GLN:HG2	1.66	0.75
14:L:33:ARG:NH2	14:L:103:LEU:HB2	2.01	0.75
17:O:44:GLN:O	17:O:46:VAL:HG23	1.84	0.75
19:Q:69:ILE:CD1	19:Q:70:GLY:N	2.49	0.75
21:S:51:LEU:HD23	21:S:51:LEU:H	1.50	0.75
21:S:70:GLN:O	21:S:79:ILE:HG22	1.86	0.75
24:V:35:GLY:O	24:V:36:GLN:HB2	1.86	0.75
24:V:50:VAL:HA	24:V:53:LEU:CD1	2.15	0.75
1:X:1051:U:H2'	1:X:1052:C:O4'	1.85	0.75
1:X:1292:A:C2'	1:X:1293:A:H5'	2.16	0.75
1:X:2405:A:H4'	1:X:2406:C:OP2	1.85	0.75
2:Y:43:G:C5'	6:D:66:ILE:HD11	2.14	0.75
3:A:149:PRO:CA	3:A:189:CYS:SG	2.73	0.75
7:E:51:LEU:HD12	7:E:52:VAL:H	1.52	0.75
12:J:75:VAL:HB	12:J:93:TYR:HE2	1.52	0.75
17:O:36:LYS:NZ	17:O:54:TYR:HB3	2.01	0.75
1:X:124:A:H2'	1:X:125:A:C8	2.20	0.75
1:X:1069:G:H2'	1:X:1070:G:H5''	1.68	0.75
1:X:2023:C:H2'	1:X:2024:U:C6	2.21	0.75
1:X:2035:G:O2'	1:X:2036:G:H5'	1.86	0.75
1:X:2275:U:H4'	1:X:2276:C:OP1	1.85	0.75
3:A:33:LEU:CD1	3:A:63:ARG:HH22	1.99	0.75
5:C:102:LEU:CD2	5:C:106:MET:HE3	2.16	0.75
18:P:66:GLU:HB3	18:P:67:PRO:HD3	1.67	0.75
1:X:416:U:O2'	1:X:417:C:H5	1.70	0.75
1:X:648:A:H4'	1:X:649:G:O4'	1.86	0.75
6:D:80:ARG:HD3	6:D:83:MET:HB3	1.68	0.75
6:D:111:ILE:HA	6:D:137:ILE:CG2	2.16	0.75
13:K:49:GLU:O	13:K:52:ILE:HG12	1.86	0.75
21:S:141:MET:HG2	21:S:145:ASP:HB3	1.67	0.75
1:X:16:G:C2	1:X:535:U:O2	2.39	0.75
1:X:389:G:H2'	1:X:390:U:C6	2.21	0.75
1:X:1514:C:O4'	1:X:1593:C:H4'	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1979:C:H2'	1:X:1980:A:O4'	1.86	0.75
4:B:146:THR:HB	4:B:147:PRO:HD2	1.69	0.75
7:E:84:THR:HA	7:E:134:SER:HA	1.68	0.75
9:G:116:ARG:NE	9:G:126:VAL:HG13	2.02	0.75
11:I:97:ARG:O	11:I:98:LEU:HB3	1.86	0.75
20:R:25:LEU:CD1	20:R:81:VAL:HG23	2.16	0.75
21:S:71:MET:HA	21:S:78:PRO:HA	1.69	0.75
21:S:91:PRO:HD3	21:S:127:PRO:HD3	1.68	0.75
1:X:731:A:H2'	1:X:732:G:C4'	2.15	0.75
1:X:1218:C:H5'	11:I:13:ARG:NH1	2.01	0.75
1:X:1851:A:H62	1:X:1866:G:H21	1.35	0.75
1:X:2564:U:H5'	1:X:2565:C:OP1	1.86	0.75
3:A:252:LYS:H	3:A:253:PRO:HD2	1.50	0.75
6:D:108:LEU:HD13	6:D:117:ILE:HD11	1.66	0.75
6:D:128:TYR:O	6:D:156:ILE:HB	1.87	0.75
9:G:116:ARG:HE	9:G:126:VAL:HG13	1.51	0.75
21:S:3:LEU:HD21	21:S:32:PHE:CB	2.16	0.75
1:X:13:A:O2'	1:X:15:G:N7	2.18	0.75
1:X:638:A:O2'	1:X:639:G:C8	2.40	0.75
1:X:2619:G:C6	1:X:2755:A:C2	2.74	0.75
9:G:105:GLY:O	9:G:106:TYR:C	2.30	0.75
12:J:28:VAL:CG2	12:J:135:ARG:HA	2.16	0.75
12:J:40:PRO:HG3	12:J:99:LYS:NZ	2.01	0.75
14:L:10:LYS:O	14:L:14:ARG:HG3	1.86	0.75
19:Q:10:PRO:HD3	24:V:30:PHE:CD2	2.21	0.75
21:S:3:LEU:CD2	21:S:32:PHE:HB3	2.16	0.75
24:V:38:ALA:C	24:V:40:PRO:HD3	2.11	0.75
4:B:7:THR:HG22	4:B:8:LYS:O	1.86	0.75
1:X:787:A:H5''	3:A:48:ARG:NH2	2.02	0.74
1:X:2322:U:O2'	1:X:2323:U:H1'	1.87	0.74
13:K:49:GLU:OE1	13:K:95:THR:HG22	1.87	0.74
16:N:47:TYR:O	16:N:49:ASP:N	2.20	0.74
17:O:68:LYS:HD2	17:O:86:HIS:O	1.87	0.74
21:S:113:VAL:HG22	21:S:171:VAL:HG13	1.68	0.74
1:X:174:A:C2	1:X:175:C:O2	2.40	0.74
1:X:709:A:O2'	1:X:710:C:H5'	1.87	0.74
1:X:757:U:H2'	1:X:758:G:C5'	2.17	0.74
1:X:1354:A:H3'	1:X:1410:U:O2	1.87	0.74
3:A:244:ARG:N	3:A:244:ARG:HD3	2.03	0.74
6:D:38:GLU:HG2	6:D:57:LEU:HD11	1.68	0.74
12:J:79:PRO:HD3	12:J:88:LYS:NZ	2.02	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:61:LYS:H	19:Q:72:ARG:HA	1.51	0.74
20:R:38:LEU:HB2	20:R:47:VAL:CG2	2.17	0.74
22:T:51:VAL:HG21	22:T:79:ILE:O	1.85	0.74
1:X:63:A:O2'	19:Q:70:GLY:HA2	1.86	0.74
1:X:1090:C:O2'	1:X:1091:C:H5'	1.87	0.74
1:X:1850:G:N2	1:X:1867:A:C8	2.54	0.74
1:X:2691:C:OP1	1:X:2694:G:H4'	1.87	0.74
1:X:2870:C:H2'	1:X:2871:U:H6	1.50	0.74
2:Y:50:U:O3'	14:L:97:HIS:CD2	2.40	0.74
3:A:231:HIS:CD2	3:A:233:HIS:H	2.04	0.74
6:D:38:GLU:HB3	6:D:87:ILE:HD12	1.69	0.74
6:D:136:LEU:O	6:D:137:ILE:HG23	1.87	0.74
9:G:84:ASN:O	9:G:152:ALA:HA	1.86	0.74
10:H:75:VAL:HG12	10:H:118:LEU:HD21	1.68	0.74
12:J:99:LYS:HE3	12:J:100:PRO:HD2	1.69	0.74
21:S:142:ASN:H	21:S:145:ASP:CG	1.95	0.74
1:X:2218:G:O4'	3:A:249:PRO:HG3	1.86	0.74
1:X:2708:U:H2'	1:X:2709:C:C6	2.22	0.74
5:C:22:VAL:HG13	5:C:106:MET:HG2	1.69	0.74
5:C:27:LEU:O	5:C:31:VAL:HG22	1.87	0.74
12:J:28:VAL:H	12:J:137:VAL:HG21	1.52	0.74
13:K:10:LEU:HD23	13:K:17:ARG:CB	2.17	0.74
20:R:82:ALA:O	20:R:83:LEU:O	2.04	0.74
25:W:23:LEU:HD21	25:W:43:MET:HB3	1.70	0.74
30:4:1:MET:HE1	30:4:33:LYS:HB3	1.69	0.74
1:X:3:U:H2'	1:X:4:C:C6	2.23	0.74
1:X:2563:U:C2'	1:X:2564:U:H5''	2.18	0.74
7:E:9:ILE:HD12	7:E:51:LEU:CA	2.18	0.74
13:K:13:ASN:HD22	13:K:13:ASN:C	1.95	0.74
16:N:74:MET:CE	16:N:79:PHE:HA	2.15	0.74
18:P:33:MET:CE	18:P:37:LYS:HZ3	1.99	0.74
1:X:1337:G:H1'	1:X:1632:A:N6	2.03	0.74
1:X:1775:A:H4'	1:X:1776:A:O5'	1.84	0.74
1:X:2286:G:N2	1:X:2290:A:H61	1.86	0.74
1:X:2289:A:H2	6:D:79:LEU:HD21	1.52	0.74
9:G:164:GLN:O	9:G:165:VAL:HG13	1.88	0.74
25:W:40:VAL:HA	25:W:43:MET:CG	2.17	0.74
1:X:202:A:H2'	1:X:203:G:O4'	1.87	0.74
1:X:788:G:C5'	1:X:790:A:H1'	2.17	0.74
1:X:1018:C:H3'	1:X:1019:U:H5''	1.70	0.74
1:X:1430:G:H2'	1:X:1431:U:C6	2.22	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:63:ARG:O	11:I:64:GLY:C	2.31	0.74
17:O:39:PHE:CE1	17:O:46:VAL:HB	2.22	0.74
19:Q:62:ARG:HH12	19:Q:73:ASN:ND2	1.84	0.74
19:Q:69:ILE:HD13	19:Q:70:GLY:H	1.49	0.74
26:Z:51:TYR:CE1	26:Z:55:ARG:HB2	2.21	0.74
1:X:1057:A:N3	1:X:1057:A:C2'	2.50	0.74
1:X:1119:U:H5'	1:X:1119:U:H6	1.52	0.74
1:X:1845:A:N1	1:X:2070:G:H1'	2.03	0.74
1:X:2217:G:H5''	1:X:2218:G:OP1	1.87	0.74
1:X:2634:G:H2'	1:X:2643:G:O6	1.87	0.74
1:X:2812:A:H2'	1:X:2813:G:H8	1.51	0.74
5:C:102:LEU:O	5:C:102:LEU:HD23	1.88	0.74
5:C:179:ASP:O	5:C:182:ARG:HB3	1.88	0.74
16:N:93:LYS:HD2	16:N:93:LYS:O	1.88	0.74
18:P:87:GLU:HA	18:P:90:LEU:HG	1.69	0.74
1:X:947:C:H2'	1:X:948:C:C6	2.23	0.74
1:X:1194:U:H2'	1:X:1195:U:C6	2.23	0.74
1:X:1656:U:C2'	1:X:1657:A:H5''	2.16	0.74
4:B:146:THR:O	4:B:147:PRO:C	2.27	0.74
6:D:45:GLU:HB2	6:D:78:LYS:NZ	2.03	0.74
6:D:106:ILE:HG21	6:D:139:PRO:HB3	1.68	0.74
6:D:123:ASP:C	6:D:125:ARG:N	2.44	0.74
14:L:28:ARG:HA	14:L:88:VAL:O	1.88	0.74
15:M:28:ARG:HB2	15:M:29:PRO:CD	2.15	0.74
18:P:95:ALA:HB2	18:P:126:ILE:HD13	1.70	0.74
30:4:15:LYS:O	30:4:17:VAL:HG23	1.87	0.74
1:X:542:A:N6	1:X:2003:A:N3	2.36	0.74
1:X:1314:A:O2'	1:X:1315:A:H3'	1.86	0.74
1:X:1404:C:H5'	1:X:1405:A:OP2	1.88	0.74
1:X:1782:A:N1	1:X:1821:A:H5'	2.02	0.74
1:X:1811:A:H4'	1:X:1812:U:H5''	1.70	0.74
12:J:113:GLU:HA	12:J:116:LYS:HB2	1.70	0.74
3:A:218:LYS:HD2	3:A:218:LYS:C	2.13	0.73
6:D:5:LYS:O	6:D:8:TYR:HB3	1.87	0.73
15:M:79:ARG:HG3	15:M:79:ARG:NH1	1.92	0.73
20:R:85:ASP:H	20:R:86:PRO:HD3	1.51	0.73
20:R:106:VAL:HG23	20:R:113:THR:HG21	1.69	0.73
23:U:13:LEU:O	23:U:14:VAL:HG13	1.88	0.73
1:X:964:A:OP1	12:J:18:MET:SD	2.46	0.73
1:X:1226:A:N6	1:X:1249:G:H1'	2.02	0.73
4:B:183:LEU:HD11	15:M:16:ILE:CG2	2.18	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:72:HIS:CD2	16:N:110:VAL:HG21	2.21	0.73
16:N:93:LYS:CE	17:O:10:LYS:HZ3	2.01	0.73
17:O:39:PHE:CE2	17:O:51:ALA:HB1	2.22	0.73
19:Q:69:ILE:HD12	19:Q:70:GLY:H	1.49	0.73
20:R:11:ASN:O	20:R:13:LYS:N	2.21	0.73
1:X:1018:C:H3'	1:X:1019:U:C5'	2.19	0.73
15:M:34:ARG:NH1	15:M:88:VAL:HG21	2.04	0.73
16:N:79:PHE:HD2	16:N:80:ILE:HD13	1.52	0.73
20:R:60:PRO:O	20:R:62:MET:N	2.21	0.73
21:S:64:ALA:N	21:S:86:VAL:HG23	2.03	0.73
23:U:10:LYS:HG2	23:U:11:LYS:N	2.04	0.73
1:X:890:U:H2'	1:X:891:A:H8	1.53	0.73
1:X:2404:A:H1'	1:X:2406:C:C4	2.23	0.73
2:Y:36:A:O2'	2:Y:37:C:H5	1.71	0.73
10:H:7:ARG:NH1	10:H:20:MET:CE	2.52	0.73
23:U:53:GLU:HB2	23:U:56:GLN:O	1.87	0.73
1:X:1075:C:O2'	8:F:89:SER:CA	2.36	0.73
1:X:1142:G:C4'	9:G:103:TYR:HE2	2.01	0.73
1:X:1512:A:H2'	1:X:1514:C:C5	2.23	0.73
1:X:1804:U:H2'	1:X:1805:G:H8	1.54	0.73
1:X:2023:C:H2'	1:X:2024:U:H6	1.54	0.73
1:X:2082:C:H2'	1:X:2083:G:H5'	1.71	0.73
1:X:2522:G:H2'	1:X:2523:G:O4'	1.89	0.73
5:C:24:SER:HB2	11:I:15:ASP:OD1	1.89	0.73
6:D:38:GLU:HB3	6:D:87:ILE:HB	1.69	0.73
9:G:36:ASN:CG	9:G:37:ASP:H	1.95	0.73
11:I:81:GLN:NE2	11:I:115:SER:HA	2.01	0.73
1:X:954:U:OP2	11:I:38:LYS:NZ	2.19	0.73
1:X:1018:C:C4	1:X:1019:U:H5	2.07	0.73
1:X:1268:U:C2	5:C:66:ASN:HA	2.24	0.73
1:X:2325:A:O2'	1:X:2326:C:OP2	2.06	0.73
1:X:2511:G:H2'	1:X:2512:A:H8	1.53	0.73
1:X:2691:C:O2'	1:X:2692:A:H8	1.72	0.73
2:Y:9:G:H5'	14:L:32:TYR:CE2	2.22	0.73
13:K:73:LYS:O	13:K:76:VAL:HG12	1.88	0.73
21:S:24:TYR:O	21:S:85:MET:HB2	1.88	0.73
1:X:76:C:H5'	1:X:76:C:H6	1.54	0.73
1:X:332:C:H5''	1:X:333:A:OP2	1.88	0.73
1:X:525:A:H2	1:X:1273:G:N3	1.87	0.73
1:X:554:U:O2	1:X:554:U:H2'	1.87	0.73
1:X:760:U:C5	26:Z:3:LYS:HG3	2.22	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1171:A:H2'	1:X:1172:U:C6	2.24	0.73
1:X:1277:G:OP1	26:Z:19:ARG:NH2	2.22	0.73
1:X:1644:G:H2'	1:X:1645:U:H6	1.54	0.73
1:X:2195:C:H2'	1:X:2196:U:O4'	1.89	0.73
1:X:2629:U:O2'	1:X:2630:C:H5'	1.88	0.73
11:I:92:THR:O	11:I:94:GLU:N	2.22	0.73
17:O:28:GLU:O	17:O:30:GLY:N	2.21	0.73
18:P:45:ILE:HD11	18:P:57:LEU:HG	1.71	0.73
23:U:11:LYS:NZ	23:U:75:TYR:CD1	2.56	0.73
1:X:171:G:O2'	1:X:172:A:H5'	1.88	0.73
1:X:224:G:H4'	1:X:399:G:C5	2.23	0.73
1:X:1075:C:O2'	8:F:89:SER:HA	1.89	0.73
1:X:1699:A:H2'	1:X:1700:C:C6	2.24	0.73
3:A:88:ARG:HG2	3:A:90:ALA:HB3	1.69	0.73
6:D:81:GLN:HG2	6:D:82:GLY:H	1.54	0.73
9:G:131:VAL:C	9:G:133:GLY:H	1.96	0.73
15:M:43:ASN:ND2	15:M:43:ASN:C	2.44	0.73
19:Q:29:VAL:HG11	19:Q:38:ILE:CD1	2.19	0.73
20:R:93:ARG:HH12	20:R:108:VAL:C	1.96	0.73
21:S:54:ILE:HG22	21:S:54:ILE:O	1.88	0.73
1:X:417:C:O3'	1:X:418:C:H4'	1.87	0.73
1:X:528:G:H5'	18:P:39:ARG:NH2	2.01	0.73
1:X:590:C:OP2	16:N:33:ARG:HG3	1.89	0.73
1:X:1710:U:H4'	1:X:1711:C:OP2	1.88	0.73
1:X:2195:C:N4	1:X:2196:U:C4	2.56	0.73
1:X:2198:U:H2'	1:X:2199:C:C1'	2.18	0.73
1:X:2326:C:H2'	1:X:2327:U:C6	2.24	0.73
10:H:28:GLY:O	10:H:35:THR:N	2.18	0.73
23:U:27:ASP:C	23:U:32:ARG:HD3	2.14	0.73
1:X:172:A:N1	1:X:178:C:N3	2.37	0.73
1:X:972:C:H5'	1:X:973:U:OP2	1.87	0.73
1:X:1142:G:O2'	1:X:1143:A:O5'	2.07	0.73
1:X:1166:A:H5''	16:N:55:ARG:HD3	1.70	0.73
1:X:2448:A:H2'	1:X:2449:G:O4'	1.89	0.73
1:X:48:A:H1'	1:X:50:G:C2	2.23	0.72
1:X:100:G:O6	20:R:102:LYS:HE2	1.88	0.72
1:X:678:G:O2'	1:X:679:C:H5'	1.89	0.72
3:A:132:PRO:HD3	3:A:190:TYR:CE2	2.23	0.72
5:C:26:VAL:HG22	11:I:18:ARG:NH1	2.04	0.72
6:D:50:ILE:O	6:D:53:ALA:HB3	1.88	0.72
10:H:25:LEU:HD12	10:H:51:ILE:HA	1.71	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:11:GLY:H	11:I:14:LYS:CB	2.01	0.72
11:I:17:LYS:O	11:I:18:ARG:HG3	1.88	0.72
19:Q:53:ILE:HD13	19:Q:80:VAL:HG13	1.70	0.72
19:Q:69:ILE:HD12	19:Q:70:GLY:N	2.03	0.72
20:R:93:ARG:HH12	20:R:108:VAL:HA	1.52	0.72
23:U:52:ARG:HD2	23:U:79:GLU:CA	2.18	0.72
26:Z:4:HIS:CB	26:Z:5:PRO:HD3	2.13	0.72
1:X:356:A:H2'	1:X:357:A:C8	2.24	0.72
1:X:731:A:O2'	1:X:732:G:C5'	2.35	0.72
1:X:2228:U:H5''	1:X:2229:G:OP2	1.89	0.72
1:X:2400:G:H21	23:U:33:LYS:NZ	1.87	0.72
3:A:54:ILE:HG23	3:A:54:ILE:O	1.88	0.72
3:A:172:TYR:HA	3:A:186:HIS:HA	1.70	0.72
23:U:50:ALA:CB	23:U:52:ARG:HH22	2.02	0.72
1:X:403:A:H3'	1:X:403:A:P	2.28	0.72
1:X:1125:G:H2'	1:X:1126:A:H8	1.53	0.72
1:X:1223:G:C5'	1:X:1224:A:H5''	2.18	0.72
1:X:2375:G:H1'	23:U:33:LYS:NZ	2.04	0.72
1:X:2691:C:H4'	1:X:2692:A:OP1	1.88	0.72
5:C:3:GLN:CG	5:C:116:LYS:HD2	2.19	0.72
9:G:66:HIS:CG	16:N:71:LEU:HD13	2.24	0.72
10:H:75:VAL:HG23	10:H:76:ARG:HG3	1.70	0.72
11:I:28:LYS:HZ2	11:I:37:GLN:N	1.87	0.72
11:I:86:THR:H	11:I:116:ARG:HH12	1.36	0.72
12:J:36:ILE:HG23	12:J:102:ARG:O	1.89	0.72
12:J:136:GLU:HA	12:J:138:TYR:HE2	1.53	0.72
21:S:10:PRO:HG2	21:S:14:LEU:CD1	2.20	0.72
21:S:18:MET:HA	21:S:36:ARG:N	2.03	0.72
1:X:636:G:H5'	1:X:636:G:H8	1.54	0.72
1:X:1006:C:H4'	1:X:1007:A:OP1	1.89	0.72
1:X:1705:U:O2	1:X:1717:A:H5''	1.89	0.72
1:X:1933:G:C8	1:X:1934:U:H5	2.06	0.72
1:X:2364:C:H2'	1:X:2365:U:H6	1.54	0.72
3:A:184:ARG:NH2	3:A:268:ARG:HH11	1.88	0.72
3:A:246:PRO:HD3	3:A:251:GLY:H	1.54	0.72
11:I:77:LEU:HB2	11:I:111:SER:H	1.52	0.72
20:R:25:LEU:CD1	20:R:25:LEU:H	2.02	0.72
24:V:4:SER:C	24:V:6:MET:H	1.95	0.72
1:X:689:A:H2'	1:X:690:A:H5'	1.71	0.72
1:X:1092:U:O2'	8:F:117:ALA:HB1	1.88	0.72
1:X:1167:A:H61	16:N:48:ARG:HD3	1.55	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:48:A:H4'	1:X:49:U:C5'	2.20	0.72
1:X:757:U:O2'	1:X:758:G:H5'	1.89	0.72
1:X:777:A:H62	1:X:1766:U:H3	1.35	0.72
1:X:1791:C:OP1	3:A:263:ARG:HG3	1.89	0.72
1:X:2325:A:HO2'	1:X:2326:C:P	2.12	0.72
1:X:2404:A:H4'	1:X:2405:A:C5'	2.20	0.72
3:A:145:LEU:HD12	3:A:146:GLU:N	2.03	0.72
5:C:173:ALA:HB1	5:C:193:LEU:CD1	2.20	0.72
6:D:33:LYS:HB2	6:D:91:LEU:O	1.89	0.72
10:H:100:ASN:C	10:H:100:ASN:OD1	2.32	0.72
11:I:53:ARG:HD2	11:I:53:ARG:O	1.90	0.72
20:R:96:LYS:HG3	20:R:97:GLN:N	2.03	0.72
1:X:2084:G:H2'	1:X:2085:G:C8	2.25	0.72
1:X:2167:A:H2'	1:X:2168:A:C8	2.25	0.72
1:X:2266:A:C2	1:X:2268:G:H1'	2.25	0.72
1:X:2522:G:H21	1:X:2625:U:H5''	1.54	0.72
2:Y:27:A:H61	2:Y:55:C:H3'	1.53	0.72
17:O:22:VAL:HA	17:O:91:THR:OG1	1.89	0.72
19:Q:69:ILE:HD13	19:Q:70:GLY:O	1.89	0.72
20:R:22:VAL:HG22	20:R:83:LEU:H	1.55	0.72
20:R:93:ARG:NH2	20:R:108:VAL:HA	2.04	0.72
30:4:1:MET:HE2	30:4:1:MET:HA	1.72	0.72
1:X:868:U:H3	1:X:934:G:H1	1.37	0.72
1:X:958:G:H2'	1:X:959:C:H6	1.55	0.72
1:X:1050:G:H2'	1:X:1051:U:H5'	1.71	0.72
1:X:1091:C:O2	8:F:126:THR:HG23	1.90	0.72
1:X:1850:G:HO2'	1:X:1851:A:H8	0.73	0.72
1:X:2236:U:H2'	1:X:2237:C:H6	1.54	0.72
2:Y:3:A:H2'	2:Y:4:C:H5'	1.72	0.72
6:D:134:GLU:HG2	6:D:136:LEU:H	1.54	0.72
23:U:54:ASN:O	23:U:56:GLN:N	2.21	0.72
1:X:208:C:N4	1:X:209:G:H21	1.87	0.72
1:X:617:U:H3'	1:X:617:U:O2	1.89	0.72
3:A:38:PRO:HA	3:A:61:LEU:HD22	1.71	0.72
4:B:9:ILE:HG22	15:M:13:LEU:HD11	1.72	0.72
6:D:111:ILE:HA	6:D:137:ILE:HG22	1.69	0.72
14:L:97:HIS:O	14:L:101:LYS:HB2	1.90	0.72
18:P:35:PRO:HG2	18:P:99:ALA:HB2	1.71	0.72
20:R:93:ARG:HG2	20:R:93:ARG:HH11	1.54	0.72
1:X:1348:C:H2'	1:X:1349:A:H8	1.55	0.72
1:X:1475:U:OP2	1:X:1475:U:H4'	1.90	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2440:C:H2'	1:X:2441:U:H6	1.55	0.72
20:R:93:ARG:NH2	20:R:108:VAL:HG13	2.05	0.72
20:R:110:SER:OG	20:R:112:LYS:HE3	1.90	0.72
21:S:36:ARG:HG2	21:S:40:ASP:OD1	1.90	0.72
21:S:92:VAL:HG23	21:S:93:GLU:H	1.54	0.72
1:X:187:U:O2'	1:X:188:G:H5'	1.89	0.71
1:X:706:A:O2'	1:X:707:U:H5'	1.90	0.71
1:X:1092:U:O2'	8:F:117:ALA:CB	2.38	0.71
1:X:1542:G:H22	1:X:1562:G:H1	0.77	0.71
1:X:1573:G:C3'	1:X:1574:A:H5''	2.18	0.71
3:A:246:PRO:CD	3:A:251:GLY:H	2.03	0.71
5:C:129:LYS:C	5:C:131:LYS:H	1.98	0.71
7:E:11:VAL:CG1	7:E:15:VAL:HG21	2.20	0.71
7:E:126:PRO:HD2	7:E:130:ARG:O	1.90	0.71
15:M:104:LEU:O	15:M:107:LEU:N	2.23	0.71
22:T:46:LYS:HB2	22:T:78:PHE:CE2	2.25	0.71
1:X:417:C:N1	1:X:419:G:C8	2.58	0.71
1:X:2053:G:C2	1:X:2054:A:C4	2.79	0.71
1:X:2280:A:H2'	1:X:2281:C:C6	2.25	0.71
1:X:2441:U:H2'	1:X:2442:C:H6	1.55	0.71
1:X:2736:U:H4'	1:X:2737:A:OP1	1.87	0.71
1:X:2812:A:H2'	1:X:2813:G:C8	2.24	0.71
17:O:48:GLY:O	17:O:50:ASP:N	2.22	0.71
19:Q:19:ALA:O	19:Q:22:ARG:HG2	1.90	0.71
1:X:956:A:C4	1:X:2427:A:C2	2.79	0.71
1:X:1144:U:H2'	1:X:1147:G:OP1	1.90	0.71
5:C:28:HIS:ND1	11:I:17:LYS:HA	2.04	0.71
9:G:109:GLY:C	9:G:110:LEU:HD23	2.16	0.71
12:J:71:PRO:HA	12:J:96:SER:HB2	1.71	0.71
1:X:504:G:H4'	18:P:27:VAL:HG13	1.72	0.71
1:X:542:A:H2	1:X:2004:U:H2'	1.52	0.71
1:X:666:U:H2'	1:X:667:U:C4'	2.20	0.71
1:X:958:G:H2'	1:X:959:C:C6	2.25	0.71
1:X:2794:G:C6	1:X:2796:A:C2	2.79	0.71
11:I:30:ALA:H	11:I:34:HIS:CD2	2.08	0.71
12:J:99:LYS:HG3	12:J:100:PRO:HD2	1.71	0.71
17:O:11:GLN:HE22	17:O:38:LEU:HB3	1.54	0.71
20:R:59:LYS:HB3	20:R:62:MET:HB2	1.71	0.71
25:W:2:LYS:HD2	25:W:32:ARG:O	1.90	0.71
1:X:37:C:H2'	1:X:38:G:H8	1.54	0.71
1:X:517:A:C5'	1:X:518:A:H5'	2.20	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:88:LYS:HE2	6:D:90:THR:OG1	1.90	0.71
17:O:69:ILE:O	17:O:69:ILE:HG22	1.89	0.71
21:S:64:ALA:CA	21:S:86:VAL:HG23	2.21	0.71
23:U:51:ILE:HG23	23:U:59:THR:CA	2.14	0.71
1:X:1071:U:H1'	1:X:1073:G:C5'	2.19	0.71
1:X:2795:A:H4'	13:K:5:LYS:CE	2.20	0.71
5:C:7:ILE:HB	5:C:120:VAL:N	2.03	0.71
6:D:46:ASP:C	6:D:48:LYS:N	2.48	0.71
6:D:171:GLN:HG3	6:D:175:LEU:O	1.90	0.71
12:J:122:ALA:HA	12:J:125:LYS:HD3	1.72	0.71
16:N:91:ASN:O	16:N:93:LYS:N	2.22	0.71
21:S:3:LEU:HD21	21:S:32:PHE:CD2	2.26	0.71
1:X:589:C:H4'	16:N:31:GLN:NE2	2.05	0.71
1:X:1283:C:H5''	1:X:1284:G:H5'	1.72	0.71
1:X:2301:A:H2'	1:X:2302:G:H8	1.55	0.71
2:Y:19:C:H2'	2:Y:20:A:O4'	1.90	0.71
11:I:104:ARG:HB3	11:I:105:PRO:HD2	1.73	0.71
19:Q:63:LYS:HB3	19:Q:69:ILE:O	1.90	0.71
21:S:89:GLY:O	21:S:127:PRO:HD2	1.90	0.71
23:U:32:ARG:HG2	23:U:34:THR:H	1.56	0.71
1:X:222:G:O2'	1:X:223:C:H5'	1.91	0.71
1:X:1072:U:O4	8:F:10:LEU:CA	2.35	0.71
1:X:2081:U:H2'	1:X:2082:C:O4'	1.90	0.71
1:X:2240:C:O2'	1:X:2241:U:H5'	1.90	0.71
3:A:44:ASN:HB3	3:A:49:ILE:HA	1.72	0.71
12:J:69:ILE:HG21	12:J:104:MET:HG2	1.71	0.71
15:M:108:ARG:O	15:M:109:GLU:HG3	1.91	0.71
17:O:20:ILE:HD12	17:O:21:ARG:HG2	1.71	0.71
20:R:83:LEU:O	20:R:84:VAL:HG23	1.91	0.71
1:X:109:A:C2'	1:X:110:U:H5''	2.20	0.71
1:X:1834:G:H2'	1:X:1835:C:C6	2.26	0.71
1:X:2063:A:H2'	1:X:2064:U:H6	1.53	0.71
1:X:2200:G:O2'	3:A:149:PRO:HG2	1.91	0.71
1:X:2241:U:C5	22:T:17:ASN:ND2	2.59	0.71
3:A:163:VAL:HG22	3:A:177:LEU:HA	1.73	0.71
5:C:104:LEU:N	5:C:104:LEU:HD23	2.06	0.71
6:D:92:ARG:CA	6:D:96:MET:HB2	2.21	0.71
6:D:106:ILE:O	6:D:110:ARG:HB2	1.90	0.71
14:L:10:LYS:HB3	14:L:14:ARG:HE	1.55	0.71
21:S:34:LEU:HD13	21:S:35:ASP:O	1.90	0.71
1:X:841:G:H2'	1:X:842:A:C8	2.26	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1031:C:O2	1:X:1031:C:H2'	1.89	0.71
1:X:2286:G:C5	1:X:2287:G:H1'	2.26	0.71
4:B:181:LEU:CD1	15:M:16:ILE:HD11	2.20	0.71
17:O:36:LYS:HD2	17:O:54:TYR:C	2.15	0.71
1:X:403:A:H5''	1:X:404:A:OP1	1.90	0.70
1:X:416:U:O2'	1:X:417:C:C5	2.43	0.70
1:X:558:G:C4	1:X:558:G:C3'	2.74	0.70
1:X:760:U:C6	26:Z:3:LYS:HG3	2.26	0.70
1:X:1168:G:O2'	25:W:28:ILE:HD11	1.91	0.70
1:X:1173:G:H2'	1:X:1174:G:H8	1.56	0.70
1:X:1629:G:H2'	1:X:1633:C:H42	1.55	0.70
1:X:2338:C:O2'	11:I:56:LEU:HD11	1.91	0.70
3:A:49:ILE:HG12	3:A:50:THR:N	2.05	0.70
4:B:105:THR:HG23	4:B:197:VAL:HB	1.72	0.70
5:C:128:ALA:O	5:C:130:THR:N	2.23	0.70
6:D:123:ASP:O	6:D:125:ARG:N	2.24	0.70
6:D:134:GLU:CD	6:D:136:LEU:HB2	2.15	0.70
14:L:38:ILE:HD12	14:L:39:TYR:H	1.55	0.70
1:X:558:G:N3	1:X:558:G:O5'	2.24	0.70
1:X:689:A:C8	1:X:2422:C:H1'	2.26	0.70
1:X:1117:G:H2'	1:X:1118:G:H8	1.55	0.70
1:X:2170:C:H2'	1:X:2171:U:H4'	1.71	0.70
1:X:2198:U:C2	1:X:2199:C:C6	2.79	0.70
6:D:10:ASP:HA	6:D:14:PRO:HG2	1.72	0.70
7:E:54:ARG:NE	7:E:57:ASP:OD2	2.25	0.70
11:I:119:THR:HG23	11:I:139:ARG:O	1.91	0.70
12:J:27:TYR:HB3	12:J:137:VAL:CG2	2.21	0.70
23:U:62:LEU:HD23	23:U:67:LEU:CG	2.20	0.70
1:X:172:A:C5	1:X:175:C:C5	2.76	0.70
1:X:320:A:N3	1:X:340:G:O2'	2.23	0.70
1:X:1630:A:N1	18:P:114:ALA:HB2	2.06	0.70
1:X:2195:C:H2'	1:X:2196:U:C1'	2.22	0.70
1:X:2691:C:H2'	1:X:2692:A:H5''	1.73	0.70
11:I:28:LYS:HZ2	11:I:36:GLY:CA	2.03	0.70
12:J:136:GLU:HA	12:J:138:TYR:CE2	2.26	0.70
20:R:107:ALA:CB	20:R:111:GLY:HA2	2.20	0.70
1:X:166:G:H2'	1:X:182:G:N2	2.06	0.70
1:X:192:G:H4'	1:X:193:A:O5'	1.91	0.70
1:X:554:U:O2	1:X:554:U:C2'	2.38	0.70
1:X:1179:A:H2'	1:X:1180:A:H8	1.56	0.70
1:X:1182:U:H5'	1:X:1182:U:H6	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1629:G:C6	1:X:1635:G:O6	2.44	0.70
1:X:2252:A:C2	1:X:2253:A:C5	2.79	0.70
1:X:2307:A:H2'	1:X:2308:A:H8	1.53	0.70
1:X:2395:C:O2'	1:X:2396:C:H5''	1.91	0.70
5:C:173:ALA:HB1	5:C:193:LEU:HD13	1.72	0.70
11:I:108:LEU:HB3	11:I:125:ALA:HB2	1.71	0.70
14:L:38:ILE:CD1	14:L:40:ALA:H	2.04	0.70
19:Q:62:ARG:O	19:Q:63:LYS:HB3	1.89	0.70
21:S:37:LYS:O	21:S:40:ASP:HB2	1.90	0.70
1:X:428:A:H2'	1:X:429:C:C6	2.26	0.70
1:X:2236:U:H2'	1:X:2237:C:C6	2.25	0.70
1:X:2663:U:C4	1:X:2664:G:N7	2.59	0.70
1:X:2691:C:C2'	1:X:2692:A:H5''	2.21	0.70
1:X:2757:G:OP2	1:X:2761:A:O2'	2.08	0.70
6:D:135:GLN:HG3	6:D:151:GLY:CA	2.20	0.70
7:E:139:GLN:C	7:E:143:GLN:HG3	2.17	0.70
10:H:41:ASN:O	10:H:42:LYS:HB3	1.90	0.70
13:K:81:ASP:O	13:K:85:PRO:HG2	1.92	0.70
15:M:104:LEU:C	15:M:106:TYR:N	2.49	0.70
18:P:10:ASN:O	18:P:11:LYS:C	2.34	0.70
1:X:490:A:O2'	1:X:492:G:H5''	1.92	0.70
1:X:971:A:H4'	1:X:2436:U:H5'	1.73	0.70
1:X:1066:G:H2'	1:X:1067:G:C8	2.26	0.70
1:X:1073:G:OP2	1:X:1081:A:H4'	1.91	0.70
1:X:1122:A:O2'	1:X:1123:G:H4'	1.91	0.70
1:X:2511:G:H2'	1:X:2512:A:C8	2.27	0.70
1:X:2828:C:H2'	1:X:2829:A:C8	2.25	0.70
14:L:30:SER:C	14:L:31:VAL:HG12	2.17	0.70
18:P:69:ALA:O	18:P:72:LEU:N	2.25	0.70
20:R:93:ARG:O	20:R:95:ARG:HD2	1.92	0.70
21:S:70:GLN:HA	21:S:70:GLN:HE21	1.56	0.70
23:U:22:GLY:HA3	23:U:39:LYS:CE	2.20	0.70
30:4:1:MET:CE	30:4:33:LYS:HB3	2.21	0.70
1:X:2074:U:H3'	1:X:2075:U:C5'	2.21	0.70
1:X:2509:A:N7	7:E:172:LYS:HE2	2.04	0.70
4:B:181:LEU:HD13	15:M:16:ILE:HD11	1.72	0.70
6:D:4:LEU:HG	6:D:5:LYS:N	2.05	0.70
6:D:22:TYR:CE2	6:D:28:VAL:HA	2.27	0.70
6:D:78:LYS:O	6:D:80:ARG:NH1	2.25	0.70
9:G:98:LYS:NZ	9:G:116:ARG:CZ	2.54	0.70
22:T:47:ALA:HB1	22:T:51:VAL:O	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:W:9:VAL:CG1	25:W:17:VAL:HG22	2.22	0.70
1:X:333:A:H3'	5:C:162:ARG:NH1	2.05	0.70
1:X:621:U:H2'	1:X:622:U:C6	2.26	0.70
1:X:1135:C:H2'	1:X:1136:G:H8	1.56	0.70
1:X:1716:G:H4'	1:X:1717:A:OP1	1.92	0.70
1:X:2043:A:OP1	5:C:63:GLY:N	2.24	0.70
11:I:108:LEU:HB3	11:I:125:ALA:CB	2.21	0.70
19:Q:7:LEU:HD22	19:Q:8:GLN:N	2.06	0.70
21:S:71:MET:CB	21:S:78:PRO:HA	2.22	0.70
22:T:3:HIS:CD2	22:T:5:LYS:HD3	2.26	0.70
1:X:433:G:N2	1:X:434:C:H1'	2.07	0.70
1:X:1129:A:OP1	1:X:1129:A:H4'	1.91	0.70
1:X:1314:A:C2'	1:X:1315:A:H3'	2.21	0.70
1:X:1342:U:C5'	1:X:1343:C:H5	2.05	0.70
1:X:1513:U:H5''	1:X:1514:C:OP2	1.91	0.70
1:X:2426:G:H3'	1:X:2479:U:OP2	1.92	0.70
5:C:166:TRP:N	5:C:166:TRP:CE3	2.60	0.70
14:L:60:LYS:HG2	14:L:62:GLY:N	2.06	0.70
15:M:93:ILE:O	15:M:94:VAL:HG23	1.91	0.70
15:M:99:VAL:CG2	15:M:100:ARG:H	2.04	0.70
21:S:149:ALA:HB3	21:S:164:PRO:HA	1.74	0.70
1:X:674:U:H1'	11:I:22:GLY:HA2	1.72	0.70
1:X:1342:U:H5'	1:X:1343:C:H5	1.56	0.70
1:X:1838:G:H2'	1:X:1839:A:O4'	1.92	0.70
1:X:1882:G:H21	1:X:1885:C:H41	1.40	0.70
1:X:2199:C:C2	1:X:2200:G:C8	2.80	0.70
2:Y:2:C:HO5'	2:Y:2:C:H6	1.38	0.70
3:A:42:GLY:N	3:A:43:ARG:NH1	2.39	0.70
5:C:180:ILE:HG23	5:C:181:LEU:H	1.56	0.70
7:E:127:GLU:C	7:E:129:THR:H	1.99	0.70
16:N:79:PHE:CD2	16:N:80:ILE:HD13	2.26	0.70
20:R:25:LEU:HD11	20:R:81:VAL:HG23	1.74	0.70
1:X:17:G:H2'	1:X:18:U:C6	2.27	0.69
1:X:930:A:H8	1:X:930:A:O5'	1.75	0.69
4:B:141:ILE:HG21	4:B:154:LYS:HZ3	1.57	0.69
12:J:76:THR:HB	12:J:88:LYS:O	1.91	0.69
15:M:104:LEU:O	15:M:105:TYR:C	2.34	0.69
1:X:1016:C:O2'	9:G:56:THR:HG21	1.91	0.69
1:X:1092:U:O2'	8:F:117:ALA:HA	1.91	0.69
1:X:1998:A:N3	26:Z:6:VAL:HG23	2.06	0.69
6:D:5:LYS:C	6:D:8:TYR:HB3	2.17	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:111:ILE:CD1	6:D:137:ILE:HD12	2.22	0.69
6:D:134:GLU:HG2	6:D:136:LEU:HB2	1.74	0.69
6:D:134:GLU:CG	6:D:136:LEU:HB2	2.22	0.69
14:L:21:THR:HG22	14:L:22:ALA:N	2.06	0.69
14:L:87:VAL:HG12	14:L:88:VAL:H	1.55	0.69
1:X:651:C:H2'	1:X:652:C:H5''	1.75	0.69
1:X:687:G:C2'	1:X:688:A:H5'	2.22	0.69
1:X:969:U:C5	12:J:17:ARG:HB2	2.27	0.69
1:X:1074:G:H2'	1:X:1075:C:O4'	1.91	0.69
1:X:2198:U:C2'	1:X:2199:C:O4'	2.38	0.69
1:X:2256:G:OP2	12:J:86:LYS:HD2	1.93	0.69
1:X:2431:C:H2'	1:X:2432:A:C8	2.27	0.69
6:D:45:GLU:HB2	6:D:78:LYS:HZ3	1.55	0.69
6:D:47:SER:HA	6:D:50:ILE:CD1	2.23	0.69
7:E:98:LEU:CD1	7:E:99:THR:H	1.95	0.69
9:G:32:TYR:OH	9:G:35:LYS:HE3	1.93	0.69
16:N:91:ASN:O	16:N:93:LYS:HG3	1.90	0.69
19:Q:91:LEU:HD22	19:Q:91:LEU:N	2.07	0.69
21:S:100:THR:HG23	21:S:138:VAL:CG2	2.21	0.69
23:U:28:GLY:O	23:U:31:GLY:N	2.25	0.69
30:4:22:ARG:HG2	30:4:22:ARG:HH11	1.57	0.69
1:X:199:A:N6	1:X:209:G:H1'	2.07	0.69
1:X:417:C:C2	1:X:419:G:C5	2.80	0.69
1:X:1292:A:H2'	1:X:1293:A:H5'	1.74	0.69
1:X:1339:U:H5	1:X:1664:G:HO2'	1.37	0.69
1:X:2352:A:H2'	1:X:2353:G:C8	2.27	0.69
1:X:2779:C:H2'	1:X:2780:A:C8	2.27	0.69
2:Y:68:A:H4'	2:Y:69:G:N7	2.06	0.69
6:D:74:ILE:HG12	6:D:80:ARG:CA	2.22	0.69
9:G:93:LYS:N	9:G:93:LYS:CD	2.54	0.69
13:K:13:ASN:ND2	13:K:14:SER:N	2.39	0.69
16:N:96:ALA:O	16:N:99:ALA:HB3	1.92	0.69
1:X:403:A:H4'	1:X:404:A:O5'	1.93	0.69
1:X:1017:C:O2	9:G:134:MET:HG2	1.93	0.69
1:X:1919:A:H2	1:X:1926:U:C2	2.11	0.69
1:X:2297:G:O2'	1:X:2300:G:O6	2.10	0.69
1:X:2356:A:H2	14:L:91:ARG:HH22	1.37	0.69
1:X:2735:C:H2'	30:4:19:ARG:HD3	1.75	0.69
2:Y:17:A:H1'	2:Y:112:A:C8	2.28	0.69
2:Y:25:G:H2'	2:Y:26:G:C5	2.28	0.69
2:Y:106:U:O3'	21:S:67:LYS:NZ	2.25	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:30:LYS:HG2	7:E:79:VAL:O	1.91	0.69
21:S:3:LEU:HD21	21:S:32:PHE:CG	2.27	0.69
1:X:673:G:H5'	5:C:93:TYR:CD1	2.28	0.69
1:X:862:A:H2'	1:X:863:C:H6	1.56	0.69
1:X:1241:G:O2'	1:X:1242:A:H5'	1.93	0.69
1:X:2598:C:O2'	1:X:2599:U:H5'	1.93	0.69
1:X:2847:G:H2'	1:X:2848:A:C8	2.27	0.69
3:A:88:ARG:O	3:A:89:SER:HB3	1.93	0.69
3:A:258:LYS:HZ2	3:A:261:ARG:NH2	1.91	0.69
4:B:120:TRP:CD1	4:B:155:ARG:HB3	2.28	0.69
9:G:61:ARG:CZ	9:G:65:LYS:HD2	2.22	0.69
18:P:14:ARG:HA	18:P:17:GLN:HG2	1.73	0.69
1:X:171:G:H2'	1:X:172:A:O4'	1.93	0.69
1:X:765:C:O2'	1:X:766:A:OP2	2.11	0.69
1:X:2546:G:H2'	1:X:2547:C:C6	2.27	0.69
1:X:2769:C:H2'	1:X:2770:A:H8	1.57	0.69
1:X:2795:A:O2'	13:K:5:LYS:NZ	2.25	0.69
13:K:3:HIS:ND1	13:K:5:LYS:CD	2.49	0.69
1:X:305:A:C2'	1:X:306:G:H5'	2.23	0.69
1:X:451:A:H2'	1:X:452:G:H8	1.58	0.69
1:X:568:G:H2'	1:X:569:C:H6	1.56	0.69
1:X:731:A:C2'	1:X:732:G:C4'	2.70	0.69
1:X:982:C:H2'	1:X:983:G:H5'	1.75	0.69
1:X:1072:U:H4'	1:X:1073:G:OP2	1.92	0.69
1:X:1415:C:O2'	1:X:1416:A:H5'	1.92	0.69
1:X:2198:U:C4	1:X:2199:C:C5	2.81	0.69
1:X:2507:U:OP1	30:4:31:LYS:HE3	1.93	0.69
1:X:2795:A:O3'	13:K:3:HIS:HE1	1.75	0.69
5:C:48:ARG:C	5:C:50:GLN:H	2.01	0.69
5:C:158:ARG:O	5:C:160:ALA:N	2.26	0.69
6:D:79:LEU:O	6:D:80:ARG:HB3	1.92	0.69
6:D:92:ARG:HH21	6:D:92:ARG:HG3	1.57	0.69
7:E:109:TYR:HE1	7:E:152:ARG:CZ	2.05	0.69
7:E:127:GLU:O	7:E:129:THR:N	2.22	0.69
9:G:159:SER:C	9:G:161:GLN:H	2.00	0.69
10:H:73:VAL:HG22	10:H:73:VAL:O	1.92	0.69
11:I:76:LYS:HD3	11:I:79:GLN:NE2	2.08	0.69
12:J:56:SER:O	12:J:57:ARG:C	2.36	0.69
12:J:80:ALA:O	12:J:81:GLU:HB3	1.93	0.69
13:K:11:ASN:OD1	13:K:17:ARG:NH2	2.26	0.69
14:L:13:THR:O	14:L:17:VAL:HG12	1.93	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:P:64:ALA:O	18:P:68:VAL:HG23	1.93	0.69
20:R:25:LEU:HG	20:R:81:VAL:HG23	1.74	0.69
22:T:3:HIS:CG	22:T:4:LYS:H	2.10	0.69
23:U:10:LYS:HG2	23:U:11:LYS:HG3	1.74	0.69
1:X:460:U:O2'	1:X:461:A:OP1	2.11	0.69
1:X:839:U:OP1	1:X:2408:G:OP2	2.10	0.69
1:X:1515:U:H2'	1:X:1516:A:H8	1.58	0.69
1:X:1734:C:C4	1:X:1735:G:H1'	2.27	0.69
1:X:2034:A:OP1	4:B:137:ARG:NH2	2.25	0.69
1:X:2272:A:P	14:L:18:ARG:HH12	2.16	0.69
6:D:123:ASP:C	6:D:125:ARG:H	1.98	0.69
6:D:152:MET:CE	6:D:154:ILE:HD11	2.23	0.69
14:L:101:LYS:HG2	14:L:105:ASP:OD2	1.92	0.69
1:X:830:C:H2'	1:X:831:G:C8	2.28	0.69
1:X:925:U:O2'	1:X:926:C:H5'	1.93	0.69
1:X:2796:A:H4'	4:B:162:MET:HE3	1.73	0.69
6:D:74:ILE:HA	6:D:79:LEU:HB3	1.73	0.69
9:G:36:ASN:CG	9:G:37:ASP:N	2.51	0.69
14:L:38:ILE:HD11	14:L:40:ALA:H	1.58	0.69
15:M:37:THR:CG2	15:M:39:VAL:HG13	2.23	0.69
20:R:15:HIS:ND1	20:R:16:PHE:HD2	1.87	0.69
23:U:32:ARG:H	23:U:32:ARG:HE	0.75	0.69
1:X:333:A:H2'	1:X:350:U:O2	1.92	0.68
1:X:637:G:H1	11:I:101:ARG:CD	2.05	0.68
1:X:1118:G:C3'	1:X:1119:U:H5''	2.23	0.68
1:X:1467:U:H3'	1:X:1468:A:H5'	1.74	0.68
1:X:2027:C:N3	1:X:2028:C:C5	2.61	0.68
1:X:2725:C:H2'	1:X:2726:U:C6	2.28	0.68
3:A:244:ARG:C	3:A:252:LYS:HE2	2.18	0.68
5:C:148:VAL:HB	5:C:167:VAL:CG1	2.12	0.68
11:I:94:GLU:HB3	11:I:97:ARG:NH1	2.06	0.68
12:J:78:LYS:HE3	12:J:81:GLU:HA	1.74	0.68
15:M:24:LEU:O	15:M:25:PRO:O	2.11	0.68
24:V:55:THR:O	24:V:59:GLU:HG3	1.93	0.68
1:X:748:A:H5'	1:X:749:C:OP2	1.93	0.68
1:X:861:G:H2'	1:X:862:A:H5'	1.75	0.68
1:X:1094:C:H2'	1:X:1096:A:C5'	2.23	0.68
1:X:1472:C:H3'	1:X:1473:U:C6	2.26	0.68
1:X:2395:C:H2'	1:X:2396:C:H5''	1.74	0.68
19:Q:14:GLU:HG3	19:Q:15:LYS:N	2.09	0.68
20:R:93:ARG:HH22	20:R:108:VAL:CA	2.07	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:V:13:ASP:OD1	24:V:16:LYS:HD3	1.93	0.68
26:Z:42:SER:O	26:Z:43:HIS:HB2	1.93	0.68
1:X:654:A:H2'	1:X:654:A:N3	2.08	0.68
1:X:876:A:P	12:J:23:LYS:HD3	2.33	0.68
1:X:1012:A:H2'	1:X:1013:G:O4'	1.93	0.68
1:X:1188:A:H8	1:X:1188:A:O5'	1.77	0.68
1:X:1514:C:H4'	1:X:1593:C:H5'	1.75	0.68
1:X:1770:U:O2	1:X:1774:A:C5	2.46	0.68
1:X:2756:A:O2'	1:X:2757:G:OP2	2.10	0.68
4:B:109:LYS:HE2	4:B:191:ALA:HB2	1.76	0.68
5:C:23:ASN:O	5:C:27:LEU:HD12	1.94	0.68
7:E:117:PRO:HD3	7:E:123:PHE:CE1	2.29	0.68
11:I:73:GLU:OE1	11:I:73:GLU:N	2.26	0.68
15:M:39:VAL:HA	15:M:45:THR:HG23	1.74	0.68
17:O:86:HIS:CG	17:O:87:ARG:N	2.60	0.68
19:Q:63:LYS:CB	19:Q:69:ILE:O	2.42	0.68
20:R:59:LYS:O	20:R:60:PRO:O	2.11	0.68
20:R:84:VAL:HA	20:R:90:LYS:HE2	1.75	0.68
1:X:62:U:H5''	1:X:63:A:OP1	1.93	0.68
1:X:227:G:O3'	11:I:53:ARG:HG2	1.93	0.68
1:X:1092:U:O2'	8:F:117:ALA:CA	2.41	0.68
1:X:1277:G:H8	1:X:1277:G:O5'	1.75	0.68
1:X:1279:G:O2'	1:X:1995:G:N1	2.24	0.68
1:X:1856:U:C2'	1:X:1857:G:O5'	2.42	0.68
1:X:2311:U:O2	1:X:2311:U:H3'	1.93	0.68
9:G:104:THR:O	9:G:105:GLY:O	2.12	0.68
12:J:77:LYS:HG3	12:J:78:LYS:N	2.07	0.68
14:L:43:ILE:HG23	14:L:49:GLN:O	1.94	0.68
19:Q:37:GLU:O	19:Q:40:ASP:HB3	1.93	0.68
20:R:91:ALA:O	20:R:92:THR:HG23	1.94	0.68
21:S:6:LYS:HB3	21:S:32:PHE:HA	1.74	0.68
1:X:389:G:H2'	1:X:390:U:C5	2.29	0.68
1:X:465:C:O2'	1:X:467:U:H1'	1.94	0.68
1:X:1342:U:H5''	1:X:1343:C:C5	2.29	0.68
1:X:1427:G:H2'	1:X:1428:G:H1'	1.76	0.68
1:X:1468:A:H5''	1:X:1472:C:H41	1.59	0.68
1:X:2372:A:H5''	11:I:61:PRO:HB3	1.74	0.68
1:X:2665:G:C6	1:X:2666:U:N3	2.61	0.68
1:X:2799:C:C5	1:X:2800:C:C4	2.82	0.68
5:C:194:GLU:O	5:C:195:ILE:HG12	1.94	0.68
7:E:76:VAL:O	7:E:78:GLY:N	2.26	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:136:ILE:HD12	7:E:136:ILE:N	2.08	0.68
9:G:70:PHE:HB2	16:N:64:ARG:HG2	1.76	0.68
13:K:74:ASP:OD1	13:K:77:ARG:NH2	2.26	0.68
14:L:21:THR:O	14:L:24:SER:HB2	1.93	0.68
16:N:14:HIS:O	16:N:17:VAL:N	2.24	0.68
18:P:10:ASN:OD1	18:P:13:GLN:HG2	1.93	0.68
1:X:103:U:H2'	1:X:104:C:H6	1.59	0.68
1:X:208:C:N4	1:X:209:G:N2	2.41	0.68
1:X:1151:U:H5''	1:X:1153:A:H5''	1.75	0.68
1:X:2309:G:H2'	1:X:2310:G:H5'	1.75	0.68
4:B:154:LYS:CE	4:B:156:MET:SD	2.80	0.68
5:C:12:GLY:O	5:C:14:THR:N	2.26	0.68
13:K:10:LEU:HD23	13:K:17:ARG:HB2	1.73	0.68
17:O:86:HIS:CD2	17:O:87:ARG:N	2.62	0.68
21:S:21:ALA:O	21:S:32:PHE:HB2	1.94	0.68
21:S:123:VAL:HG23	21:S:161:ALA:HB2	1.76	0.68
23:U:52:ARG:NH1	23:U:67:LEU:HD11	2.09	0.68
1:X:191:G:O2'	1:X:192:G:H5'	1.94	0.68
1:X:421:G:H2'	1:X:422:C:C6	2.27	0.68
1:X:1107:A:H3'	1:X:1108:U:C5'	2.20	0.68
1:X:2286:G:H21	1:X:2290:A:H61	1.39	0.68
5:C:117:LEU:HD22	5:C:187:VAL:HG22	1.76	0.68
5:C:130:THR:O	5:C:134:ILE:HG13	1.92	0.68
12:J:75:VAL:HB	12:J:93:TYR:CE2	2.29	0.68
12:J:79:PRO:CD	12:J:88:LYS:HZ2	2.06	0.68
13:K:20:LEU:O	13:K:23:ALA:N	2.26	0.68
19:Q:35:LYS:O	19:Q:38:ILE:HG23	1.94	0.68
21:S:48:THR:O	21:S:49:THR:HG23	1.94	0.68
1:X:219:G:H22	1:X:231:G:H2'	1.59	0.68
1:X:564:U:H2'	1:X:565:A:C8	2.29	0.68
1:X:984:A:H1'	1:X:1202:U:C5	2.28	0.68
1:X:1142:G:C4'	9:G:103:TYR:CE2	2.76	0.68
5:C:136:TRP:CD1	5:C:137:ALA:N	2.62	0.68
18:P:67:PRO:O	18:P:69:ALA:N	2.27	0.68
22:T:71:ASN:HD21	22:T:74:LYS:HD3	1.59	0.68
1:X:761:G:P	18:P:110:ALA:HB2	2.33	0.68
1:X:1780:A:H2'	1:X:1781:C:O4'	1.93	0.68
3:A:133:LEU:CB	3:A:187:SER:HB2	2.23	0.68
5:C:109:ALA:O	5:C:112:GLN:N	2.27	0.68
11:I:30:ALA:H	11:I:34:HIS:CG	2.12	0.68
14:L:15:ARG:HA	14:L:15:ARG:HH11	1.59	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:93:LYS:HD2	17:O:10:LYS:HZ3	1.58	0.68
21:S:117:VAL:HG23	21:S:168:VAL:HA	1.76	0.68
1:X:225:G:C6	1:X:2410:U:H5'	2.29	0.68
1:X:1342:U:C5'	1:X:1343:C:C5	2.77	0.68
1:X:1347:C:O2'	1:X:1348:C:H5'	1.93	0.68
1:X:1525:A:H3'	1:X:1526:U:C6	2.28	0.68
1:X:1816:G:O2'	1:X:1817:U:H5'	1.94	0.68
1:X:2848:A:H2	13:K:6:ALA:HB1	1.59	0.68
1:X:2867:G:OP2	1:X:2867:G:C8	2.45	0.68
5:C:117:LEU:HD23	5:C:117:LEU:C	2.19	0.68
7:E:9:ILE:HD12	7:E:51:LEU:N	2.09	0.68
11:I:62:LYS:HD3	29:3:12:ARG:CA	2.23	0.68
18:P:37:LYS:CE	18:P:64:ALA:HB2	2.22	0.68
22:T:31:VAL:HG22	22:T:67:VAL:HG23	1.76	0.68
23:U:58:LYS:O	23:U:59:THR:HG23	1.94	0.68
1:X:417:C:C2	1:X:419:G:N7	2.62	0.67
1:X:1511:A:H2'	1:X:1512:A:C8	2.28	0.67
1:X:1851:A:H62	1:X:1866:G:N2	1.91	0.67
1:X:2429:A:C2	1:X:2430:A:C4	2.81	0.67
11:I:56:LEU:O	11:I:58:ALA:O	2.12	0.67
20:R:18:LYS:HA	20:R:36:VAL:CG1	2.23	0.67
23:U:49:LYS:CB	23:U:61:TRP:HA	2.19	0.67
25:W:44:VAL:HG12	25:W:45:LYS:HZ1	1.58	0.67
1:X:402:A:C8	1:X:2392:G:C4'	2.76	0.67
1:X:634:G:H2'	1:X:635:C:H6	1.59	0.67
1:X:729:A:H2'	1:X:730:C:C4'	2.24	0.67
1:X:1072:U:H1'	1:X:1081:A:C1'	2.23	0.67
1:X:1978:U:C3'	1:X:1979:C:H5''	2.19	0.67
1:X:2870:C:H2'	1:X:2871:U:C6	2.28	0.67
5:C:22:VAL:HG12	5:C:23:ASN:N	2.08	0.67
6:D:13:ARG:CG	6:D:17:MET:HE1	2.23	0.67
15:M:106:TYR:CE1	15:M:107:LEU:HD23	2.29	0.67
16:N:86:ALA:C	16:N:88:ILE:N	2.49	0.67
19:Q:76:LYS:HG2	19:Q:76:LYS:O	1.94	0.67
21:S:43:PHE:CE1	21:S:47:SER:HA	2.29	0.67
26:Z:45:ILE:HG21	26:Z:57:VAL:CG2	2.23	0.67
30:4:13:ASN:O	30:4:14:CYS:C	2.37	0.67
1:X:717:G:H2'	1:X:739:G:H22	1.58	0.67
6:D:107:GLY:O	6:D:111:ILE:HG13	1.94	0.67
11:I:77:LEU:HD22	11:I:110:ALA:HA	1.75	0.67
11:I:94:GLU:O	11:I:99:VAL:HG22	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:18:LYS:HA	20:R:36:VAL:HG12	1.76	0.67
20:R:46:VAL:HG12	20:R:48:VAL:HG23	1.75	0.67
1:X:105:G:H5'	1:X:105:G:C8	2.30	0.67
1:X:635:C:C2'	1:X:636:G:H5''	2.24	0.67
1:X:2229:G:O2'	1:X:2230:G:OP2	2.12	0.67
1:X:2508:G:OP2	7:E:172:LYS:HD3	1.94	0.67
3:A:243:GLY:N	3:A:244:ARG:NH1	2.41	0.67
6:D:12:VAL:HG11	6:D:169:LEU:HD13	1.77	0.67
11:I:28:LYS:NZ	11:I:37:GLN:H	1.93	0.67
12:J:125:LYS:HD2	12:J:125:LYS:H	1.54	0.67
16:N:66:ASN:ND2	16:N:70:ARG:HH12	1.91	0.67
18:P:37:LYS:HE2	18:P:64:ALA:CB	2.21	0.67
19:Q:65:VAL:HG12	19:Q:66:GLY:N	2.08	0.67
19:Q:66:GLY:C	19:Q:68:PHE:N	2.52	0.67
19:Q:88:ILE:HD12	19:Q:88:ILE:O	1.94	0.67
21:S:112:LEU:O	21:S:172:LEU:N	2.27	0.67
1:X:70:A:OP1	1:X:110:U:H2'	1.95	0.67
1:X:98:U:H3'	1:X:98:U:H6	1.60	0.67
1:X:306:G:N2	1:X:355:G:H1'	2.10	0.67
1:X:712:A:H2'	1:X:713:G:O4'	1.95	0.67
1:X:1040:A:C8	1:X:1041:G:C8	2.83	0.67
1:X:1121:G:H2'	1:X:1122:A:C8	2.29	0.67
1:X:1123:G:H2'	1:X:1124:U:O4'	1.93	0.67
1:X:1128:G:H3'	1:X:1129:A:C5'	2.24	0.67
1:X:1221:C:H2'	1:X:1222:G:H8	1.59	0.67
1:X:1507:A:O2'	3:A:101:GLU:HB3	1.94	0.67
1:X:1745:C:O2'	1:X:1746:A:H5'	1.95	0.67
1:X:1783:G:O2'	1:X:1784:C:H5'	1.94	0.67
11:I:134:GLU:C	11:I:136:ALA:H	2.02	0.67
18:P:14:ARG:HA	18:P:17:GLN:CG	2.25	0.67
20:R:90:LYS:O	20:R:91:ALA:O	2.12	0.67
1:X:50:G:H1'	1:X:116:A:H61	1.59	0.67
1:X:1223:G:C4'	1:X:1224:A:H5''	2.25	0.67
1:X:2440:C:H2'	1:X:2441:U:C6	2.30	0.67
2:Y:56:G:H2'	2:Y:57:U:O4'	1.94	0.67
10:H:76:ARG:O	10:H:94:ASN:HA	1.95	0.67
16:N:3:ARG:HG2	16:N:3:ARG:NH1	2.09	0.67
21:S:141:MET:HB3	21:S:171:VAL:HG23	1.75	0.67
1:X:350:U:H6	1:X:350:U:O5'	1.78	0.67
1:X:568:G:H2'	1:X:569:C:C6	2.30	0.67
1:X:914:C:H2'	1:X:915:C:C6	2.29	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2263:C:H1'	1:X:2304:G:H22	1.60	0.67
1:X:2873:G:H21	9:G:162:LYS:NZ	1.92	0.67
3:A:184:ARG:NH2	3:A:268:ARG:NH1	2.42	0.67
5:C:43:ALA:HB3	5:C:87:LYS:C	2.19	0.67
9:G:72:PRO:O	9:G:73:ASN:C	2.38	0.67
13:K:87:TYR:CE1	13:K:94:TYR:HD2	2.12	0.67
15:M:55:ILE:O	15:M:56:ALA:HB2	1.93	0.67
23:U:70:LEU:HD22	23:U:79:GLU:HG2	1.75	0.67
1:X:497:C:H5'	1:X:497:C:H6	1.60	0.67
1:X:2333:A:H4'	22:T:35:ASN:OD1	1.94	0.67
7:E:38:ASN:HB2	7:E:41:LEU:CD2	2.25	0.67
13:K:100:VAL:HG12	13:K:101:GLY:H	1.59	0.67
21:S:6:LYS:HB2	21:S:31:SER:C	2.19	0.67
22:T:54:GLY:N	22:T:60:PHE:HE1	1.93	0.67
23:U:51:ILE:HA	23:U:59:THR:O	1.95	0.67
1:X:173:A:H61	1:X:844:G:H21	1.43	0.67
1:X:765:C:C4	1:X:1772:C:H1'	2.30	0.67
1:X:1324:G:H1'	1:X:1326:U:C4	2.30	0.67
1:X:2273:C:H5'	14:L:95:LYS:CE	2.24	0.67
1:X:2400:G:H21	23:U:33:LYS:CE	2.07	0.67
3:A:90:ALA:HA	3:A:198:ASN:HB2	1.77	0.67
6:D:4:LEU:HD11	6:D:173:MET:HE1	1.76	0.67
11:I:45:LYS:HE3	11:I:47:ALA:HB3	1.76	0.67
12:J:35:LEU:HD23	12:J:105:PHE:CD2	2.28	0.67
12:J:40:PRO:HG3	12:J:99:LYS:HZ1	1.58	0.67
14:L:102:ALA:O	14:L:103:LEU:C	2.37	0.67
16:N:47:TYR:CE1	17:O:73:LYS:NZ	2.63	0.67
17:O:28:GLU:C	17:O:30:GLY:H	2.01	0.67
18:P:9:ARG:HB3	18:P:13:GLN:HG3	1.77	0.67
21:S:3:LEU:HD13	21:S:33:ALA:O	1.95	0.67
21:S:13:LYS:HB2	21:S:13:LYS:NZ	2.04	0.67
21:S:141:MET:HB3	21:S:171:VAL:HG21	1.75	0.67
30:4:25:VAL:CB	30:4:34:GLN:HB2	2.24	0.67
1:X:810:U:H3'	1:X:810:U:C6	2.30	0.67
1:X:888:G:H2'	1:X:889:C:O4'	1.95	0.67
1:X:984:A:H1'	1:X:1202:U:C6	2.29	0.67
2:Y:33:C:C4'	6:D:26:MET:HE1	2.24	0.67
3:A:118:ASN:HD22	3:A:123:ALA:HB2	1.59	0.67
4:B:188:ILE:HG23	4:B:189:PRO:HD2	1.77	0.67
6:D:104:ILE:HG21	6:D:174:GLY:HA3	1.77	0.67
9:G:79:PHE:CE2	9:G:147:ARG:HG2	2.28	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:O:13:ARG:HE	17:O:95:ILE:HG21	1.60	0.67
20:R:93:ARG:NH1	20:R:108:VAL:HA	2.10	0.67
23:U:41:VAL:O	23:U:42:GLN:HB2	1.94	0.67
1:X:568:G:O2'	1:X:569:C:H5'	1.94	0.66
1:X:1055:A:C4	1:X:1055:A:H3'	2.28	0.66
1:X:1058:G:H2'	1:X:1121:G:N1	2.10	0.66
1:X:1233:A:O2'	1:X:1234:C:OP1	2.13	0.66
1:X:1493:A:H2'	1:X:1494:G:O4'	1.95	0.66
1:X:2024:U:O2'	1:X:2025:A:H5'	1.95	0.66
1:X:2344:G:H4'	22:T:60:PHE:CZ	2.30	0.66
1:X:2672:U:O2	1:X:2697:G:C2	2.47	0.66
1:X:2741:G:O2'	1:X:2742:G:H5'	1.94	0.66
4:B:61:LYS:HB3	4:B:62:PRO:HD3	1.76	0.66
6:D:70:ALA:CB	6:D:83:MET:H	2.08	0.66
12:J:66:TYR:HB2	12:J:106:GLU:CD	2.20	0.66
1:X:177:U:C4	1:X:225:G:N2	2.63	0.66
1:X:746:G:N7	1:X:774:A:C6	2.64	0.66
1:X:824:U:H1'	1:X:1264:C:N1	2.10	0.66
1:X:982:C:H2'	1:X:983:G:C5'	2.25	0.66
1:X:995:A:OP2	1:X:996:C:N4	2.27	0.66
1:X:1736:C:H2'	1:X:1737:G:H8	1.60	0.66
1:X:2222:U:H2'	1:X:2223:U:H6	1.55	0.66
1:X:2304:G:P	1:X:2304:G:H8	2.18	0.66
2:Y:30:C:OP1	14:L:37:HIS:CB	2.42	0.66
3:A:67:PHE:HB3	3:A:153:ALA:N	2.05	0.66
5:C:45:THR:HG22	5:C:47:THR:H	1.60	0.66
5:C:102:LEU:HD21	5:C:106:MET:CE	2.19	0.66
7:E:96:ALA:HA	7:E:104:GLU:O	1.95	0.66
7:E:105:MET:HE1	7:E:131:ILE:HD11	1.77	0.66
14:L:54:ALA:N	14:L:75:LEU:HD13	2.09	0.66
15:M:22:ARG:HD3	15:M:24:LEU:HD21	1.77	0.66
15:M:43:ASN:C	15:M:43:ASN:HD22	2.03	0.66
15:M:103:LYS:O	15:M:104:LEU:CB	2.43	0.66
19:Q:51:ILE:HD11	19:Q:83:ALA:CA	2.10	0.66
20:R:17:LYS:C	20:R:19:GLY:H	2.01	0.66
20:R:23:ILE:H	20:R:23:ILE:CD1	1.80	0.66
21:S:51:LEU:HD23	21:S:51:LEU:N	2.09	0.66
1:X:760:U:O2	1:X:1997:A:H1'	1.96	0.66
1:X:1095:A:H3'	1:X:1096:A:H5''	1.76	0.66
1:X:1795:C:OP1	3:A:257:LEU:HD22	1.96	0.66
1:X:1854:G:HO2'	1:X:1855:G:H5'	1.56	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2169:A:H2'	1:X:2170:C:C6	2.28	0.66
1:X:2708:U:H2'	1:X:2709:C:H6	1.57	0.66
5:C:5:ASN:HA	5:C:118:VAL:CG2	2.26	0.66
11:I:42:GLY:O	11:I:43:ALA:HB2	1.93	0.66
20:R:82:ALA:O	20:R:83:LEU:HD12	1.96	0.66
21:S:100:THR:O	21:S:101:THR:HG23	1.94	0.66
23:U:21:ARG:C	23:U:39:LYS:HD2	2.19	0.66
1:X:176:A:H3'	1:X:177:U:C5	2.29	0.66
1:X:417:C:C5	1:X:419:G:C4	2.84	0.66
1:X:417:C:C6	1:X:419:G:N9	2.64	0.66
1:X:731:A:N3	1:X:731:A:H5''	2.10	0.66
1:X:797:A:H5''	3:A:227:ASN:HD21	1.61	0.66
1:X:1468:A:C8	1:X:1468:A:P	2.88	0.66
1:X:1469:U:O2	13:K:63:ARG:HD3	1.96	0.66
1:X:2821:G:H2'	1:X:2822:U:C6	2.31	0.66
2:Y:112:A:H2'	2:Y:113:G:H8	1.59	0.66
9:G:69:ASP:C	9:G:70:PHE:HD2	2.03	0.66
11:I:71:THR:HG21	11:I:104:ARG:CZ	2.26	0.66
23:U:63:SER:O	23:U:64:ALA:C	2.37	0.66
30:4:31:LYS:H	30:4:31:LYS:HD2	1.61	0.66
1:X:736:G:H2'	1:X:737:C:O4'	1.96	0.66
1:X:1095:A:H2'	1:X:1096:A:O4'	1.94	0.66
1:X:1448:A:H2'	1:X:1449:C:C6	2.30	0.66
1:X:1705:U:H2'	1:X:1715:A:N1	2.11	0.66
5:C:5:ASN:HD22	5:C:5:ASN:N	1.93	0.66
7:E:43:VAL:HB	7:E:52:VAL:HA	1.77	0.66
9:G:52:GLY:O	9:G:53:ARG:C	2.39	0.66
12:J:19:THR:HG23	12:J:99:LYS:HD3	1.77	0.66
15:M:33:VAL:HG22	15:M:51:GLU:OE1	1.96	0.66
21:S:3:LEU:HB2	21:S:34:LEU:CA	2.25	0.66
1:X:919:U:O2'	1:X:920:G:H5'	1.95	0.66
1:X:1105:U:N3	1:X:1107:A:H5''	2.10	0.66
1:X:1226:A:H62	1:X:1249:G:H1'	1.59	0.66
3:A:163:VAL:CG2	3:A:177:LEU:HA	2.24	0.66
12:J:125:LYS:HB3	12:J:125:LYS:HZ2	1.59	0.66
16:N:32:TYR:O	16:N:35:ALA:N	2.29	0.66
18:P:9:ARG:HD2	18:P:13:GLN:HG3	1.76	0.66
20:R:84:VAL:HA	20:R:90:LYS:CD	2.25	0.66
20:R:93:ARG:N	20:R:95:ARG:NH2	2.43	0.66
1:X:538:A:C2	1:X:2025:A:C6	2.84	0.66
1:X:1778:U:H2'	1:X:1779:C:C6	2.30	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1850:G:C2'	1:X:1851:A:H8	2.06	0.66
3:A:244:ARG:N	3:A:244:ARG:CD	2.59	0.66
14:L:66:ASP:C	14:L:68:ALA:N	2.51	0.66
15:M:60:SER:HA	15:M:64:LYS:HD2	1.77	0.66
16:N:17:VAL:O	16:N:18:LEU:C	2.39	0.66
21:S:21:ALA:HB2	21:S:81:VAL:HB	1.77	0.66
1:X:305:A:H2'	1:X:306:G:C5'	2.26	0.66
1:X:627:A:OP1	5:C:34:GLN:OE1	2.13	0.66
1:X:793:G:H2'	1:X:795:A:N7	2.11	0.66
1:X:1068:A:C8	1:X:1097:A:H2'	2.31	0.66
1:X:1166:A:C3'	1:X:1167:A:H5''	2.26	0.66
1:X:1287:A:N3	1:X:1310:C:H1'	2.11	0.66
1:X:1332:G:H2'	1:X:1333:G:O4'	1.96	0.66
1:X:1337:G:O2'	1:X:1632:A:C6	2.48	0.66
1:X:2780:A:H2'	1:X:2781:G:H8	1.61	0.66
6:D:46:ASP:HB2	6:D:49:ALA:HB3	1.76	0.66
14:L:75:LEU:O	14:L:78:ALA:HB3	1.94	0.66
22:T:42:GLY:O	22:T:57:HIS:CD2	2.48	0.66
1:X:192:G:C4'	1:X:193:A:H4'	2.25	0.66
1:X:636:G:H2'	1:X:637:G:H5'	1.78	0.66
1:X:738:G:H8	1:X:738:G:O5'	1.78	0.66
1:X:1073:G:H1'	1:X:1099:A:N7	2.11	0.66
1:X:1075:C:HO2'	8:F:89:SER:HB3	1.60	0.66
1:X:1135:C:C2	1:X:1136:G:C8	2.84	0.66
1:X:1359:G:H5'	1:X:1359:G:H8	1.60	0.66
1:X:1625:A:H4'	1:X:1626:A:OP1	1.95	0.66
1:X:1794:A:O3'	3:A:257:LEU:HB3	1.94	0.66
1:X:2713:A:N1	4:B:203:LYS:HG2	2.10	0.66
1:X:2796:A:P	13:K:3:HIS:HE1	2.19	0.66
7:E:6:LYS:HB3	7:E:69:ARG:HD2	1.77	0.66
8:F:53:ILE:HG12	8:F:72:PRO:HG3	1.76	0.66
14:L:27:LEU:O	14:L:88:VAL:N	2.28	0.66
18:P:103:LEU:HB2	18:P:119:LYS:HB2	1.78	0.66
20:R:98:ILE:C	20:R:100:ASP:H	2.04	0.66
23:U:28:GLY:CA	23:U:32:ARG:HB3	2.25	0.66
23:U:51:ILE:CG1	23:U:59:THR:HG22	2.24	0.66
25:W:37:THR:HA	25:W:41:ARG:NH2	2.10	0.66
1:X:758:G:H2'	1:X:759:C:H5''	1.76	0.66
1:X:1734:C:C5	1:X:1735:G:H1'	2.30	0.66
3:A:147:LEU:HD21	3:A:155:LEU:HD11	1.78	0.66
5:C:19:LEU:HB3	5:C:20:PRO:HA	1.78	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:138:LYS:C	5:C:140:ASN:H	2.04	0.66
5:C:154:ASP:HB2	5:C:157:THR:CG2	2.26	0.66
10:H:116:ARG:HH22	15:M:41:GLU:CG	2.07	0.66
12:J:66:TYR:HB2	12:J:106:GLU:OE1	1.96	0.66
13:K:69:ASP:C	13:K:70:ILE:HG12	2.21	0.66
16:N:89:ASP:O	16:N:90:LEU:HG	1.95	0.66
20:R:25:LEU:CD1	20:R:81:VAL:N	2.59	0.66
23:U:52:ARG:CD	23:U:79:GLU:HA	2.25	0.66
25:W:38:PRO:N	25:W:41:ARG:NE	2.44	0.66
1:X:566:U:O2'	1:X:567:G:H5'	1.95	0.65
1:X:683:A:H5''	11:I:45:LYS:CA	2.25	0.65
1:X:1253:C:H5'	1:X:1253:C:H6	1.61	0.65
1:X:1716:G:O3'	1:X:1717:A:H4'	1.95	0.65
3:A:88:ARG:HH11	3:A:88:ARG:HG3	1.61	0.65
3:A:181:GLU:O	3:A:182:LEU:HD23	1.96	0.65
5:C:165:SER:HB3	5:C:166:TRP:CZ3	2.31	0.65
14:L:20:THR:HG21	14:L:23:ALA:HB3	1.78	0.65
17:O:64:GLY:HA3	17:O:90:PHE:CZ	2.31	0.65
21:S:3:LEU:HD12	21:S:3:LEU:C	2.21	0.65
22:T:31:VAL:HG13	22:T:67:VAL:CG2	2.25	0.65
23:U:23:LYS:HD2	23:U:35:THR:HG21	1.78	0.65
23:U:46:LEU:C	23:U:47:HIS:ND1	2.54	0.65
25:W:12:ARG:HH11	25:W:12:ARG:CG	2.09	0.65
1:X:689:A:C2'	1:X:690:A:H5'	2.26	0.65
1:X:1429:A:O2'	1:X:1430:G:H4'	1.96	0.65
1:X:1507:A:O4'	3:A:99:ASP:HB3	1.95	0.65
1:X:1918:G:C4	1:X:1945:C:N4	2.64	0.65
3:A:46:ARG:HD3	3:A:47:GLY:N	2.11	0.65
5:C:58:MET:SD	5:C:69:HIS:HB2	2.36	0.65
6:D:136:LEU:C	6:D:137:ILE:HG12	2.20	0.65
12:J:28:VAL:N	12:J:137:VAL:HG11	2.10	0.65
12:J:42:TRP:HB3	12:J:95:VAL:HG11	1.78	0.65
15:M:32:THR:HG22	15:M:33:VAL:N	2.10	0.65
22:T:74:LYS:O	22:T:76:ALA:N	2.20	0.65
23:U:14:VAL:HB	23:U:47:HIS:CE1	2.31	0.65
23:U:17:SER:OG	23:U:45:ASN:N	2.29	0.65
23:U:27:ASP:CA	23:U:32:ARG:HD3	2.27	0.65
1:X:409:G:H1'	23:U:45:ASN:HD22	1.61	0.65
1:X:794:A:H5'	3:A:218:LYS:NZ	2.11	0.65
1:X:813:A:C2	1:X:815:A:C8	2.85	0.65
1:X:824:U:H4'	1:X:1264:C:O2'	1.96	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:826:U:C2	1:X:827:C:C5	2.84	0.65
1:X:871:U:C2'	1:X:2247:A:H2'	2.27	0.65
1:X:1517:C:H2'	1:X:1518:C:C6	2.29	0.65
1:X:1522:C:H2'	1:X:1523:A:C4'	2.27	0.65
1:X:1675:C:OP1	4:B:134:TRP:NE1	2.29	0.65
1:X:2194:A:C3'	1:X:2195:C:C5'	2.73	0.65
1:X:2379:G:O2'	1:X:2380:U:H5'	1.95	0.65
1:X:2395:C:H2'	1:X:2396:C:C5'	2.27	0.65
1:X:2659:C:N4	1:X:2660:C:H41	1.95	0.65
3:A:166:GLN:HB2	3:A:174:ILE:HG22	1.78	0.65
6:D:56:GLU:O	6:D:57:LEU:C	2.40	0.65
9:G:94:LYS:O	9:G:117:GLU:HB2	1.96	0.65
9:G:113:GLU:CD	9:G:113:GLU:H	2.03	0.65
13:K:69:ASP:O	13:K:70:ILE:HG12	1.97	0.65
19:Q:55:THR:O	19:Q:56:MET:HG2	1.96	0.65
30:4:30:VAL:O	30:4:32:HIS:N	2.29	0.65
1:X:918:A:H2'	1:X:919:U:H5''	1.77	0.65
1:X:1264:C:H5'	16:N:13:ARG:NH1	2.12	0.65
1:X:2256:G:P	12:J:86:LYS:HD2	2.36	0.65
1:X:2613:A:H2'	1:X:2614:A:H8	1.61	0.65
1:X:2824:C:H1'	1:X:2843:A:C4	2.31	0.65
5:C:22:VAL:HA	5:C:106:MET:HG3	1.79	0.65
6:D:15:ALA:O	6:D:19:GLN:HB2	1.97	0.65
9:G:77:GLY:O	9:G:78:ASP:O	2.15	0.65
21:S:10:PRO:HB2	21:S:13:LYS:HE3	1.77	0.65
23:U:53:GLU:OE2	23:U:57:VAL:HA	1.97	0.65
1:X:229:G:H2'	1:X:230:C:H6	1.61	0.65
1:X:683:A:H5''	11:I:45:LYS:HA	1.79	0.65
1:X:1467:U:H3'	1:X:1467:U:C6	2.28	0.65
11:I:28:LYS:HD2	11:I:36:GLY:HA3	1.78	0.65
11:I:107:LYS:HG3	11:I:108:LEU:N	2.12	0.65
21:S:3:LEU:HA	21:S:34:LEU:HA	1.76	0.65
22:T:41:ARG:HG3	22:T:41:ARG:NH1	2.06	0.65
23:U:23:LYS:HD2	23:U:35:THR:HG23	1.77	0.65
1:X:163:A:H2'	1:X:164:G:C8	2.32	0.65
1:X:940:G:OP1	1:X:940:G:H4'	1.96	0.65
1:X:1032:A:O2'	1:X:1134:C:H5''	1.96	0.65
1:X:1053:G:C5	1:X:1054:C:C5	2.85	0.65
1:X:1238:A:H5'	17:O:85:GLY:H	1.61	0.65
1:X:1281:A:O4'	1:X:2592:U:H5	1.78	0.65
1:X:1841:G:H2'	1:X:1842:G:H5'	1.78	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2760:G:H22	9:G:125:ARG:HH12	1.43	0.65
3:A:271:VAL:O	3:A:272:THR:OG1	2.12	0.65
4:B:120:TRP:CE2	4:B:155:ARG:HD2	2.32	0.65
4:B:120:TRP:CD2	4:B:155:ARG:HD2	2.32	0.65
10:H:10:VAL:HG23	10:H:17:ARG:O	1.96	0.65
14:L:37:HIS:ND1	14:L:37:HIS:O	2.29	0.65
15:M:33:VAL:HA	15:M:51:GLU:CB	2.25	0.65
21:S:3:LEU:HB2	21:S:34:LEU:CB	2.27	0.65
21:S:106:GLY:HA2	21:S:109:GLN:OE1	1.96	0.65
21:S:120:LEU:HD23	21:S:121:GLN:N	2.12	0.65
30:4:3:VAL:HA	30:4:35:ARG:O	1.97	0.65
1:X:5:A:O2'	1:X:6:A:H5'	1.96	0.65
1:X:136:A:H2'	1:X:137:A:O4'	1.97	0.65
1:X:704:G:O2'	1:X:705:C:H5'	1.97	0.65
1:X:863:C:H2'	1:X:864:C:C6	2.31	0.65
1:X:1069:G:C2'	1:X:1070:G:H5''	2.25	0.65
1:X:1113:C:H2'	1:X:1114:A:H8	1.62	0.65
1:X:2615:U:H4'	4:B:80:GLU:OE2	1.97	0.65
1:X:2676:G:C2	1:X:2690:A:C2	2.84	0.65
7:E:38:ASN:O	7:E:41:LEU:HB3	1.96	0.65
17:O:25:LEU:HD12	17:O:32:LYS:HZ3	1.62	0.65
1:X:48:A:H4'	1:X:49:U:O5'	1.96	0.65
1:X:48:A:C8	1:X:50:G:N2	2.65	0.65
1:X:359:G:H2'	1:X:360:A:H8	1.62	0.65
1:X:648:A:H5'	1:X:649:G:H4'	1.78	0.65
1:X:659:G:H2'	1:X:660:G:C8	2.31	0.65
1:X:718:A:H62	1:X:739:G:H1'	1.62	0.65
6:D:36:VAL:HG22	6:D:154:ILE:CG1	2.27	0.65
6:D:38:GLU:N	6:D:87:ILE:O	2.25	0.65
7:E:131:ILE:CG2	7:E:132:ASP:H	2.09	0.65
9:G:40:ASN:HB3	9:G:78:ASP:OD1	1.97	0.65
11:I:39:SER:O	11:I:40:ARG:HB2	1.97	0.65
12:J:62:GLY:HA3	12:J:64:LYS:NZ	2.11	0.65
23:U:70:LEU:HD23	23:U:74:PRO:HA	1.78	0.65
30:4:2:LYS:HG2	30:4:4:ARG:HD3	1.77	0.65
1:X:482:A:C2'	1:X:483:A:O4'	2.45	0.65
1:X:648:A:H4'	1:X:649:G:O5'	1.95	0.65
1:X:1101:U:O2	1:X:1113:C:H1'	1.97	0.65
1:X:2055:G:O2'	1:X:2056:C:H5'	1.95	0.65
1:X:2245:A:H1'	1:X:2251:U:O4	1.96	0.65
1:X:2322:U:C2'	1:X:2323:U:C6	2.80	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2334:C:O2'	22:T:24:LYS:HE3	1.96	0.65
6:D:135:GLN:HA	6:D:138:PHE:CE1	2.32	0.65
10:H:16:ALA:HB2	10:H:64:VAL:HG11	1.78	0.65
10:H:60:PRO:O	10:H:61:ARG:HB2	1.96	0.65
21:S:120:LEU:CD2	21:S:121:GLN:N	2.59	0.65
23:U:17:SER:OG	23:U:44:ALA:HA	1.97	0.65
23:U:35:THR:HG22	23:U:35:THR:O	1.95	0.65
1:X:333:A:C3'	5:C:162:ARG:CZ	2.65	0.65
1:X:1504:G:H2'	1:X:1505:U:C2	2.30	0.65
1:X:2061:C:H2'	1:X:2062:U:O4'	1.96	0.65
1:X:2210:C:OP1	23:U:45:ASN:HA	1.96	0.65
1:X:2322:U:C3'	1:X:2323:U:C6	2.79	0.65
1:X:2382:C:N4	1:X:2394:G:C6	2.65	0.65
1:X:2561:G:H8	1:X:2561:G:H5'	1.62	0.65
1:X:2720:A:H2'	1:X:2721:A:C8	2.32	0.65
2:Y:33:C:H4'	6:D:26:MET:HE1	1.77	0.65
4:B:15:TRP:NE1	4:B:20:ALA:HB2	2.12	0.65
6:D:75:SER:HB2	6:D:79:LEU:CD1	2.26	0.65
11:I:73:GLU:HG2	11:I:101:ARG:CB	2.27	0.65
16:N:70:ARG:NH1	16:N:70:ARG:HG3	2.06	0.65
23:U:53:GLU:CD	23:U:57:VAL:HA	2.22	0.65
1:X:76:C:H5'	1:X:76:C:C6	2.31	0.64
1:X:482:A:O2'	1:X:483:A:H5'	1.97	0.64
1:X:537:C:O2'	1:X:538:A:C2	2.49	0.64
1:X:704:G:H2'	1:X:705:C:C6	2.30	0.64
1:X:1039:A:C5	1:X:1136:G:N2	2.65	0.64
1:X:1142:G:C8	9:G:107:GLN:HG2	2.32	0.64
1:X:1218:C:O2'	1:X:1219:C:H5'	1.97	0.64
1:X:1513:U:OP2	1:X:1514:C:C5	2.48	0.64
1:X:1524:C:H5''	1:X:1525:A:H8	1.62	0.64
1:X:2074:U:H1'	23:U:48:LYS:HE3	1.79	0.64
1:X:2468:G:H2'	1:X:2469:G:O4'	1.97	0.64
1:X:2586:G:N1	1:X:2587:G:C2	2.65	0.64
3:A:206:LEU:O	3:A:211:ARG:HD3	1.97	0.64
4:B:34:VAL:O	4:B:35:GLN:HB2	1.97	0.64
5:C:48:ARG:NE	5:C:87:LYS:HE2	2.11	0.64
5:C:128:ALA:HB2	5:C:159:ARG:CZ	2.26	0.64
5:C:150:LEU:N	5:C:150:LEU:HD12	2.12	0.64
6:D:122:PHE:CB	6:D:129:ASN:HD22	2.06	0.64
9:G:105:GLY:O	9:G:110:LEU:HD12	1.97	0.64
9:G:131:VAL:C	9:G:133:GLY:N	2.53	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:732:G:H8	1:X:732:G:O5'	1.80	0.64
1:X:2167:A:H2'	1:X:2168:A:H8	1.61	0.64
1:X:2196:U:H2'	1:X:2197:U:N1	2.12	0.64
3:A:132:PRO:O	3:A:136:VAL:HG23	1.98	0.64
5:C:149:LEU:C	5:C:150:LEU:HD12	2.22	0.64
11:I:76:LYS:HG3	11:I:111:SER:CB	2.26	0.64
11:I:128:ALA:O	11:I:132:ALA:HB2	1.97	0.64
16:N:8:ILE:HG22	16:N:11:ARG:HH21	1.62	0.64
16:N:31:GLN:O	16:N:35:ALA:HB2	1.97	0.64
18:P:13:GLN:O	18:P:16:GLN:HG3	1.96	0.64
20:R:84:VAL:HG11	20:R:88:THR:N	2.11	0.64
1:X:149:A:H2'	1:X:150:A:C8	2.32	0.64
1:X:189:A:O2'	1:X:190:A:H5'	1.97	0.64
1:X:592:G:P	16:N:10:ARG:HH11	2.20	0.64
1:X:760:U:C5	26:Z:3:LYS:HA	2.32	0.64
1:X:857:U:H2'	1:X:858:G:O4'	1.97	0.64
1:X:1046:U:H3	1:X:1131:G:H1	1.45	0.64
1:X:1770:U:C5	1:X:1775:A:N7	2.65	0.64
1:X:2627:G:O2'	10:H:38:GLY:HA2	1.98	0.64
3:A:121:PRO:HG2	3:A:122:GLU:OE1	1.98	0.64
5:C:193:LEU:O	5:C:193:LEU:HD23	1.97	0.64
7:E:67:LEU:O	7:E:71:LEU:HG	1.96	0.64
14:L:37:HIS:O	14:L:37:HIS:CG	2.50	0.64
14:L:79:ALA:O	14:L:82:LYS:HB2	1.96	0.64
16:N:58:ARG:O	16:N:62:ILE:HG13	1.96	0.64
16:N:105:ALA:O	16:N:108:ALA:N	2.30	0.64
21:S:154:LEU:HD13	21:S:158:CYS:O	1.96	0.64
1:X:387:A:H2'	1:X:387:A:N3	2.11	0.64
1:X:922:A:H2'	1:X:923:A:C8	2.33	0.64
1:X:1544:A:C2	1:X:1560:A:C4	2.85	0.64
1:X:1683:G:O2'	1:X:1684:G:H5'	1.96	0.64
1:X:1737:G:H2'	1:X:1738:U:C6	2.33	0.64
1:X:2570:C:OP1	3:A:239:ARG:HD3	1.97	0.64
1:X:2852:G:O2'	1:X:2853:U:H5'	1.97	0.64
1:X:2871:U:H2'	1:X:2872:U:C6	2.32	0.64
5:C:187:VAL:O	5:C:187:VAL:HG12	1.95	0.64
6:D:37:ASN:HA	6:D:87:ILE:O	1.97	0.64
6:D:47:SER:HA	6:D:50:ILE:HD12	1.79	0.64
7:E:64:LEU:HA	7:E:67:LEU:HD12	1.78	0.64
15:M:95:GLU:HG3	15:M:95:GLU:O	1.96	0.64
19:Q:42:ILE:HG23	19:Q:43:GLN:H	1.61	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:25:U:H5'	18:P:99:ALA:O	1.97	0.64
1:X:168:A:H2'	1:X:169:C:H6	1.62	0.64
1:X:394:U:OP1	23:U:19:ILE:HD11	1.96	0.64
1:X:487:G:H4'	1:X:512:A:N1	2.13	0.64
1:X:1069:G:C3'	1:X:1070:G:H5''	2.28	0.64
1:X:1424:U:H2'	1:X:1425:G:C8	2.32	0.64
1:X:2243:C:H2'	1:X:2244:C:O4'	1.98	0.64
1:X:2429:A:OP1	1:X:2476:A:C8	2.51	0.64
1:X:2701:A:C2	1:X:2702:G:H1'	2.33	0.64
4:B:49:ILE:HG23	4:B:50:GLY:N	2.12	0.64
7:E:87:LEU:HD22	7:E:162:VAL:HG12	1.79	0.64
7:E:105:MET:HE2	7:E:105:MET:HA	1.78	0.64
9:G:67:ARG:HB3	9:G:70:PHE:CA	2.26	0.64
9:G:168:THR:O	9:G:169:GLN:O	2.16	0.64
10:H:116:ARG:HH11	15:M:38:LYS:HZ3	1.44	0.64
13:K:45:ARG:HB3	13:K:46:PRO:HD3	1.80	0.64
21:S:3:LEU:HD13	21:S:33:ALA:H	1.62	0.64
1:X:457:C:O3'	16:N:3:ARG:HD3	1.96	0.64
1:X:463:C:OP1	5:C:46:ARG:NH1	2.30	0.64
1:X:2451:G:O6	1:X:2455:A:H4'	1.98	0.64
2:Y:42:U:H2'	2:Y:45:C:H5	1.62	0.64
4:B:14:ILE:HD12	4:B:23:VAL:HG21	1.79	0.64
7:E:7:GLN:O	7:E:51:LEU:HD13	1.98	0.64
11:I:17:LYS:HA	11:I:21:ARG:HE	1.62	0.64
17:O:42:GLY:O	17:O:43:GLU:HB2	1.98	0.64
20:R:55:THR:O	20:R:70:GLU:N	2.30	0.64
21:S:154:LEU:HD21	21:S:160:LEU:HD21	1.80	0.64
25:W:23:LEU:HD21	25:W:43:MET:CB	2.27	0.64
1:X:27:G:H1'	1:X:523:A:H61	1.61	0.64
1:X:321:A:OP1	20:R:27:GLY:N	2.30	0.64
1:X:497:C:H5'	1:X:497:C:C6	2.32	0.64
1:X:1273:G:H2'	1:X:1274:C:O4'	1.97	0.64
1:X:1342:U:O4'	1:X:1342:U:OP1	2.16	0.64
1:X:1373:G:H2'	1:X:1374:G:H5'	1.79	0.64
1:X:1416:A:H2'	1:X:1417:C:H6	1.61	0.64
1:X:1436:G:H2'	1:X:1437:A:C8	2.31	0.64
1:X:2054:A:H2'	1:X:2055:G:C8	2.33	0.64
1:X:2281:C:H1'	6:D:125:ARG:HH22	1.62	0.64
4:B:59:VAL:HG12	4:B:64:GLN:HG3	1.79	0.64
6:D:32:GLU:HB3	6:D:157:VAL:CG1	2.28	0.64
10:H:29:ILE:HG21	10:H:123:PHE:CE1	2.33	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:108:LEU:O	11:I:109:LEU:HD23	1.97	0.64
12:J:21:ASP:N	12:J:99:LYS:HE2	2.12	0.64
13:K:51:LEU:HD11	13:K:66:VAL:HG13	1.80	0.64
16:N:66:ASN:HD22	16:N:70:ARG:HH12	1.44	0.64
16:N:82:GLY:O	16:N:85:ARG:HB2	1.97	0.64
17:O:65:ARG:HH11	17:O:65:ARG:CG	2.08	0.64
19:Q:14:GLU:HG3	19:Q:15:LYS:HD2	1.79	0.64
25:W:45:LYS:HA	25:W:45:LYS:HE3	1.78	0.64
1:X:50:G:H1'	1:X:116:A:N6	2.13	0.64
1:X:104:C:H2'	1:X:105:G:H5''	1.80	0.64
1:X:542:A:H5'	1:X:543:G:O4'	1.98	0.64
1:X:618:A:C2	1:X:632:A:N7	2.66	0.64
1:X:1053:G:C2'	1:X:1054:C:H6	2.06	0.64
1:X:1468:A:P	1:X:1468:A:H8	2.19	0.64
1:X:1598:C:O5'	1:X:1598:C:H6	1.81	0.64
1:X:2364:C:H2'	1:X:2365:U:C6	2.32	0.64
1:X:2594:U:C2	1:X:2595:C:C5	2.86	0.64
1:X:2725:C:H1'	7:E:143:GLN:HG2	1.78	0.64
3:A:72:LYS:HE2	3:A:97:TYR:CD2	2.32	0.64
3:A:243:GLY:C	3:A:244:ARG:NE	2.56	0.64
6:D:39:GLY:HA2	6:D:86:GLY:HA2	1.80	0.64
7:E:27:LYS:HA	7:E:32:GLU:HA	1.79	0.64
7:E:117:PRO:HD3	7:E:123:PHE:CD1	2.33	0.64
9:G:68:PRO:O	9:G:70:PHE:CE2	2.50	0.64
13:K:11:ASN:OD1	13:K:17:ARG:CZ	2.46	0.64
14:L:30:SER:O	14:L:31:VAL:HG12	1.97	0.64
14:L:33:ARG:HH12	14:L:103:LEU:H	1.44	0.64
16:N:26:GLY:O	16:N:28:ARG:N	2.31	0.64
16:N:47:TYR:C	16:N:49:ASP:H	2.04	0.64
18:P:102:THR:HG21	18:P:104:LYS:NZ	2.12	0.64
20:R:27:GLY:O	20:R:30:LYS:HG2	1.98	0.64
1:X:1804:U:H2'	1:X:1805:G:C8	2.33	0.64
1:X:2080:U:H2'	1:X:2081:U:H6	1.61	0.64
1:X:2296:U:H2'	1:X:2297:G:H5'	1.80	0.64
1:X:2569:A:H2'	1:X:2570:C:C6	2.32	0.64
1:X:2859:U:N3	26:Z:52:TYR:CE1	2.66	0.64
3:A:108:PRO:HG2	3:A:111:LEU:HG	1.80	0.64
3:A:231:HIS:ND1	3:A:247:VAL:HA	2.12	0.64
3:A:237:GLU:O	3:A:237:GLU:HG2	1.98	0.64
5:C:158:ARG:HD3	5:C:169:VAL:HG13	1.78	0.64
6:D:41:GLY:HA2	6:D:44:LYS:O	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:92:ARG:HG3	6:D:92:ARG:NH2	2.13	0.64
7:E:76:VAL:O	7:E:80:SER:HB3	1.97	0.64
9:G:154:GLU:N	9:G:157:PRO:HG2	2.13	0.64
12:J:113:GLU:C	12:J:115:ALA:H	2.03	0.64
16:N:93:LYS:CD	17:O:10:LYS:HZ3	2.11	0.64
1:X:460:U:C4	1:X:592:G:H1'	2.32	0.64
1:X:1504:G:H2'	1:X:1505:U:O2	1.98	0.64
1:X:1816:G:O2'	3:A:252:LYS:HG2	1.98	0.64
1:X:1816:G:OP1	3:A:52:ARG:HD3	1.98	0.64
1:X:2043:A:H1'	1:X:2481:G:O4'	1.98	0.64
1:X:2490:U:H2'	1:X:2491:C:O4'	1.97	0.64
1:X:2550:C:N4	1:X:2553:G:C8	2.66	0.64
1:X:2690:A:OP1	1:X:2692:A:OP2	2.16	0.64
2:Y:4:C:H3'	2:Y:4:C:C6	2.32	0.64
3:A:163:VAL:HG22	3:A:177:LEU:CA	2.27	0.64
5:C:31:VAL:HG23	5:C:32:THR:H	1.62	0.64
9:G:33:ILE:HD11	9:G:35:LYS:NZ	2.13	0.64
10:H:13:ASN:HD21	10:H:109:ARG:HG2	1.63	0.64
11:I:107:LYS:HA	11:I:124:ALA:O	1.97	0.64
15:M:17:GLU:HG3	15:M:62:SER:OG	1.98	0.64
18:P:85:MET:HE2	18:P:130:GLU:HG3	1.80	0.64
18:P:109:ARG:HG3	18:P:110:ALA:N	2.13	0.64
21:S:3:LEU:HD13	21:S:33:ALA:N	2.12	0.64
21:S:19:ILE:HG12	21:S:36:ARG:HA	1.80	0.64
24:V:37:LEU:HD22	24:V:40:PRO:HG3	1.79	0.64
1:X:84:G:N3	1:X:101:A:C2	2.66	0.63
1:X:244:C:H2'	1:X:245:C:O4'	1.99	0.63
1:X:1288:A:H2'	1:X:1289:A:O4'	1.98	0.63
1:X:1855:G:O2'	1:X:1856:U:H5'	1.99	0.63
1:X:2003:A:O2'	1:X:2004:U:H3'	1.97	0.63
1:X:2314:A:O2'	1:X:2315:A:H8	1.80	0.63
5:C:122:GLY:C	5:C:124:ASP:N	2.55	0.63
6:D:65:PRO:CB	6:D:89:VAL:HG22	2.19	0.63
9:G:49:VAL:HG13	9:G:50:PRO:HD2	1.80	0.63
9:G:162:LYS:N	9:G:163:PRO:CD	2.61	0.63
20:R:44:GLN:O	20:R:77:HIS:HA	1.97	0.63
1:X:26:G:N1	1:X:27:G:N2	2.46	0.63
1:X:33:C:N4	1:X:458:G:O2'	2.30	0.63
1:X:198:A:N7	1:X:243:G:C5	2.66	0.63
1:X:889:C:H2'	1:X:890:U:C6	2.34	0.63
1:X:1238:A:H5'	17:O:85:GLY:N	2.13	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1324:G:H2'	1:X:1325:U:C6	2.33	0.63
1:X:1594:U:H2'	1:X:1595:A:H8	1.62	0.63
1:X:1812:U:O2	3:A:159:ALA:HB1	1.98	0.63
1:X:2511:G:O2'	1:X:2512:A:H5'	1.97	0.63
2:Y:46:G:C5'	6:D:92:ARG:HH12	2.10	0.63
4:B:121:ASN:O	4:B:122:PHE:O	2.15	0.63
6:D:8:TYR:HB2	6:D:173:MET:HE1	1.80	0.63
6:D:69:LYS:HE2	6:D:84:PRO:HG3	1.80	0.63
11:I:122:VAL:HG21	11:I:125:ALA:HB2	1.80	0.63
12:J:21:ASP:HA	12:J:99:LYS:HG3	1.80	0.63
12:J:69:ILE:HG21	12:J:104:MET:HA	1.78	0.63
15:M:26:ASP:CG	15:M:27:PHE:N	2.53	0.63
20:R:41:PRO:HG2	20:R:42:ARG:H	1.63	0.63
23:U:51:ILE:HG12	23:U:59:THR:CG2	2.26	0.63
25:W:2:LYS:HB3	25:W:54:GLN:CB	2.24	0.63
26:Z:8:LYS:O	26:Z:9:LYS:CG	2.45	0.63
1:X:34:U:H1'	20:R:4:PRO:HA	1.80	0.63
1:X:1518:C:H2'	1:X:1519:G:C8	2.33	0.63
3:A:71:ASP:CG	3:A:103:ARG:HH12	2.06	0.63
3:A:118:ASN:ND2	3:A:123:ALA:HB2	2.12	0.63
9:G:55:ALA:HB1	9:G:134:MET:CE	2.23	0.63
11:I:105:PRO:O	11:I:106:VAL:CG2	2.46	0.63
16:N:75:ASN:O	16:N:76:TYR:C	2.41	0.63
20:R:93:ARG:HH22	20:R:108:VAL:CG1	2.12	0.63
25:W:12:ARG:HG2	25:W:12:ARG:NH1	2.12	0.63
1:X:1:G:H2'	1:X:2:G:C8	2.33	0.63
1:X:346:C:H2'	1:X:347:C:H6	1.62	0.63
1:X:357:A:N7	1:X:358:C:H1'	2.14	0.63
1:X:822:G:C2'	1:X:823:U:H5'	2.28	0.63
1:X:1949:A:O2'	1:X:2572:U:H5'	1.97	0.63
1:X:2065:A:H3'	1:X:2066:G:H8	1.62	0.63
1:X:2433:G:O2'	1:X:2434:G:H5'	1.98	0.63
11:I:76:LYS:HB3	11:I:79:GLN:CG	2.28	0.63
15:M:89:ASN:HB3	15:M:90:GLN:OE1	1.99	0.63
20:R:52:ASN:HD21	20:R:71:GLN:CD	2.06	0.63
21:S:71:MET:CA	21:S:78:PRO:HA	2.28	0.63
24:V:29:ARG:O	24:V:32:ALA:HB3	1.99	0.63
1:X:168:A:H2'	1:X:169:C:C6	2.33	0.63
1:X:314:G:H2'	1:X:315:G:C8	2.34	0.63
1:X:322:A:O2'	1:X:343:A:H4'	1.98	0.63
1:X:417:C:H4'	1:X:418:C:H5'	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1279:G:C2	18:P:37:LYS:HB2	2.32	0.63
1:X:1369:G:N2	1:X:1370:U:H1'	2.14	0.63
1:X:1766:U:H2'	1:X:1767:G:H5'	1.79	0.63
1:X:1998:A:O5'	1:X:1998:A:H8	1.82	0.63
1:X:2327:U:O2'	1:X:2328:G:H5'	1.99	0.63
2:Y:20:A:H2'	2:Y:21:C:C6	2.34	0.63
4:B:149:ARG:NH1	9:G:106:TYR:HD1	1.96	0.63
5:C:119:ALA:HB3	5:C:189:ASP:OD2	1.98	0.63
6:D:55:LYS:O	6:D:58:ALA:HB3	1.98	0.63
11:I:64:GLY:O	11:I:65:PHE:HB3	1.98	0.63
17:O:36:LYS:HD2	17:O:55:THR:N	2.12	0.63
18:P:102:THR:HG21	18:P:104:LYS:HZ3	1.62	0.63
20:R:25:LEU:CG	20:R:81:VAL:HG23	2.27	0.63
21:S:154:LEU:HD21	21:S:160:LEU:CG	2.28	0.63
25:W:19:THR:O	25:W:23:LEU:HG	1.98	0.63
1:X:728:G:C8	1:X:730:C:OP1	2.52	0.63
1:X:774:A:H8	1:X:774:A:O5'	1.80	0.63
1:X:1416:A:H2'	1:X:1417:C:C6	2.33	0.63
1:X:2264:C:H5'	1:X:2267:A:N6	2.13	0.63
1:X:2679:G:N2	1:X:2687:G:C4	2.66	0.63
1:X:2807:U:H5'	1:X:2807:U:C6	2.23	0.63
1:X:2823:G:O2'	1:X:2824:C:OP2	2.15	0.63
3:A:249:PRO:O	3:A:250:TRP:HB2	1.99	0.63
4:B:30:PRO:N	4:B:180:ASN:ND2	2.47	0.63
5:C:187:VAL:HG12	5:C:189:ASP:HB2	1.78	0.63
8:F:25:PRO:HB3	8:F:29:GLN:HE21	1.62	0.63
14:L:42:ILE:C	14:L:43:ILE:HD12	2.24	0.63
18:P:66:GLU:O	18:P:69:ALA:HB3	1.98	0.63
21:S:89:GLY:C	21:S:127:PRO:HD2	2.23	0.63
21:S:100:THR:CG2	21:S:101:THR:N	2.61	0.63
26:Z:17:ASP:O	26:Z:18:MET:C	2.42	0.63
1:X:431:G:H2'	1:X:432:C:C6	2.34	0.63
1:X:553:C:C5'	1:X:554:U:OP1	2.46	0.63
1:X:626:A:O2'	5:C:176:ASN:HB2	1.99	0.63
1:X:670:U:H2'	1:X:671:A:C8	2.34	0.63
1:X:689:A:H8	1:X:2422:C:H1'	1.64	0.63
1:X:746:G:N7	1:X:774:A:C5	2.67	0.63
1:X:822:G:H2'	1:X:823:U:H5'	1.80	0.63
1:X:1440:G:H3'	1:X:1441:A:C5'	2.27	0.63
1:X:1468:A:H5''	1:X:1472:C:H42	1.62	0.63
1:X:2707:G:H8	1:X:2707:G:H5'	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:218:LYS:HD2	3:A:219:PRO:O	1.98	0.63
7:E:12:PRO:O	7:E:15:VAL:HG13	1.99	0.63
9:G:154:GLU:H	9:G:157:PRO:CD	2.11	0.63
9:G:156:HIS:HB2	9:G:157:PRO:HD3	1.79	0.63
11:I:18:ARG:HB2	11:I:21:ARG:HD3	1.80	0.63
12:J:36:ILE:CD1	12:J:133:VAL:HG11	2.29	0.63
13:K:48:VAL:O	13:K:52:ILE:HG23	1.98	0.63
16:N:93:LYS:HE2	17:O:5:ILE:HG21	1.80	0.63
19:Q:92:ALA:O	19:Q:94:GLN:N	2.32	0.63
21:S:3:LEU:CD1	21:S:33:ALA:H	2.11	0.63
21:S:138:VAL:O	21:S:141:MET:HB2	1.97	0.63
1:X:223:C:H2'	1:X:224:G:H5'	1.81	0.63
1:X:691:C:H2'	1:X:692:C:C6	2.32	0.63
1:X:828:C:H2'	1:X:829:C:H6	1.64	0.63
1:X:2324:G:O2'	1:X:2325:A:OP2	2.16	0.63
1:X:2357:A:H61	14:L:18:ARG:CZ	2.12	0.63
3:A:142:VAL:CG1	3:A:193:ILE:HD13	2.29	0.63
4:B:188:ILE:HG23	4:B:189:PRO:CD	2.29	0.63
14:L:33:ARG:HH22	14:L:103:LEU:H	1.47	0.63
21:S:51:LEU:HB3	21:S:64:ALA:O	1.98	0.63
23:U:70:LEU:HB3	23:U:79:GLU:CD	2.23	0.63
30:4:34:GLN:O	30:4:35:ARG:HB2	1.98	0.63
1:X:48:A:H1'	1:X:50:G:N3	2.14	0.63
1:X:109:A:C3'	1:X:110:U:H5''	2.29	0.63
1:X:417:C:H1'	1:X:419:G:C8	2.34	0.63
1:X:872:G:O2'	1:X:873:U:H6	1.82	0.63
1:X:1426:U:H2'	1:X:1427:G:O4'	1.98	0.63
1:X:1502:G:O2'	1:X:1503:G:H5'	1.98	0.63
1:X:1979:C:C2'	1:X:1980:A:O4'	2.47	0.63
1:X:2075:U:HO2'	1:X:2076:G:H5''	1.64	0.63
1:X:2205:C:H2'	1:X:2206:C:H5'	1.81	0.63
1:X:2825:A:C2	1:X:2826:C:C2	2.87	0.63
2:Y:16:U:C1'	2:Y:109:G:H21	2.12	0.63
6:D:74:ILE:HG12	6:D:80:ARG:C	2.24	0.63
9:G:132:PHE:CE2	9:G:145:HIS:HB2	2.34	0.63
10:H:100:ASN:OD1	10:H:102:GLN:HG2	1.99	0.63
11:I:52:GLY:O	11:I:57:ILE:HG13	1.98	0.63
11:I:94:GLU:HA	11:I:97:ARG:HE	1.60	0.63
17:O:36:LYS:HD2	17:O:55:THR:HA	1.79	0.63
18:P:87:GLU:HG3	18:P:88:ASP:OD2	1.98	0.63
20:R:16:PHE:HB3	20:R:82:ALA:HB1	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:29:HIS:CD2	20:R:51:VAL:HG22	2.33	0.63
1:X:757:U:C2'	1:X:758:G:C5'	2.76	0.62
1:X:929:A:H2	2:Y:81:C:O2	1.82	0.62
1:X:1467:U:C6	1:X:1467:U:C3'	2.81	0.62
1:X:1486:A:H2'	1:X:1487:C:H6	1.63	0.62
1:X:2598:C:H2'	1:X:2599:U:H6	1.64	0.62
1:X:2700:U:C2	1:X:2701:A:C8	2.87	0.62
7:E:87:LEU:HD22	7:E:162:VAL:CG1	2.29	0.62
11:I:32:ARG:NH1	17:O:81:ARG:NH2	2.46	0.62
13:K:10:LEU:HD22	13:K:13:ASN:O	1.98	0.62
22:T:32:LYS:HG2	22:T:33:ALA:H	1.64	0.62
24:V:45:GLN:O	24:V:46:LEU:C	2.42	0.62
1:X:2:G:H2'	1:X:3:U:C6	2.34	0.62
1:X:1726:C:O2'	1:X:2834:A:N3	2.29	0.62
3:A:72:LYS:NZ	3:A:99:ASP:OD2	2.32	0.62
3:A:145:LEU:HD12	3:A:146:GLU:H	1.62	0.62
4:B:11:MET:HA	4:B:23:VAL:O	1.99	0.62
4:B:103:ASP:OD2	4:B:202:ALA:N	2.31	0.62
6:D:74:ILE:HA	6:D:79:LEU:CB	2.29	0.62
7:E:18:ASN:C	7:E:20:GLN:H	2.06	0.62
9:G:66:HIS:O	9:G:70:PHE:CE1	2.53	0.62
25:W:27:LYS:O	25:W:28:ILE:C	2.41	0.62
30:4:19:ARG:O	30:4:20:HIS:C	2.43	0.62
1:X:620:G:N2	1:X:630:G:H1'	2.14	0.62
1:X:967:G:O6	12:J:17:ARG:NH1	2.31	0.62
1:X:2334:C:H4'	22:T:24:LYS:HD2	1.81	0.62
1:X:2824:C:OP1	15:M:100:ARG:NH1	2.32	0.62
3:A:261:ARG:O	3:A:264:LYS:CB	2.47	0.62
6:D:10:ASP:O	6:D:14:PRO:HD2	1.98	0.62
6:D:74:ILE:CG2	6:D:80:ARG:HA	2.28	0.62
8:F:59:ILE:HG12	8:F:65:PHE:HB3	1.82	0.62
10:H:83:ARG:CD	10:H:89:ILE:HD11	2.20	0.62
15:M:108:ARG:O	15:M:109:GLU:CG	2.47	0.62
16:N:66:ASN:ND2	16:N:70:ARG:NH1	2.47	0.62
19:Q:55:THR:O	19:Q:56:MET:CG	2.47	0.62
30:4:29:ASN:HD21	30:4:31:LYS:HD3	1.64	0.62
1:X:3:U:H2'	1:X:4:C:H6	1.63	0.62
1:X:303:C:O5'	1:X:303:C:H6	1.81	0.62
1:X:860:U:O2	1:X:860:U:H2'	1.99	0.62
1:X:1065:A:O2'	1:X:1066:G:H5'	1.97	0.62
1:X:2396:C:H5'	1:X:2396:C:H6	1.63	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:H:88:THR:HB	15:M:80:VAL:HB	1.82	0.62
10:H:113:PRO:HB2	10:H:134:LEU:HD12	1.82	0.62
20:R:22:VAL:CG1	20:R:80:LYS:HD2	2.29	0.62
23:U:50:ALA:HB1	23:U:52:ARG:HH22	1.64	0.62
1:X:566:U:H2'	1:X:567:G:H8	1.64	0.62
1:X:1094:C:H2'	1:X:1096:A:H5'	1.82	0.62
1:X:1339:U:H5	1:X:1664:G:O2'	1.82	0.62
1:X:1466:C:C2'	1:X:1467:U:O4'	2.43	0.62
1:X:1474:A:O2'	1:X:1475:U:H5'	1.99	0.62
1:X:2075:U:O2	1:X:2075:U:H2'	1.99	0.62
1:X:2375:G:H1'	23:U:33:LYS:HZ2	1.63	0.62
1:X:2540:A:O2'	10:H:23:ARG:NH2	2.33	0.62
4:B:121:ASN:O	4:B:122:PHE:C	2.39	0.62
4:B:134:TRP:O	4:B:135:HIS:C	2.41	0.62
5:C:102:LEU:HD23	5:C:106:MET:HB2	1.80	0.62
5:C:116:LYS:O	5:C:117:LEU:HB2	1.99	0.62
11:I:14:LYS:HG3	11:I:14:LYS:O	1.97	0.62
1:X:70:A:H4'	1:X:71:A:H3'	1.81	0.62
1:X:417:C:C1'	1:X:419:G:C8	2.82	0.62
1:X:880:C:O5'	1:X:880:C:H6	1.82	0.62
1:X:2178:U:H2'	1:X:2179:C:H6	1.64	0.62
3:A:186:HIS:O	3:A:186:HIS:ND1	2.32	0.62
3:A:217:ARG:O	3:A:218:LYS:C	2.42	0.62
3:A:251:GLY:HA3	3:A:255:LYS:NZ	2.15	0.62
6:D:111:ILE:HG12	6:D:137:ILE:HB	1.81	0.62
9:G:53:ARG:HH22	9:G:171:LEU:HB2	1.64	0.62
16:N:75:ASN:HD21	16:N:77:SER:HB3	1.62	0.62
17:O:11:GLN:NE2	17:O:38:LEU:HB3	2.14	0.62
18:P:27:VAL:CG2	18:P:125:THR:HG22	2.29	0.62
19:Q:75:ARG:HG3	19:Q:75:ARG:NH1	2.14	0.62
24:V:30:PHE:O	24:V:31:GLN:C	2.42	0.62
1:X:155:G:H2'	1:X:156:G:H5'	1.81	0.62
1:X:531:G:H2'	1:X:532:A:H8	1.63	0.62
1:X:582:G:H5'	1:X:583:C:OP2	1.99	0.62
1:X:1128:G:C2'	1:X:1129:A:H5''	2.29	0.62
1:X:1279:G:OP2	18:P:36:ARG:NH2	2.32	0.62
1:X:2288:A:H2'	1:X:2289:A:C8	2.30	0.62
1:X:2687:G:O2'	1:X:2688:G:H5'	1.99	0.62
1:X:2699:G:O2'	1:X:2700:U:H5'	1.99	0.62
1:X:2764:U:H2'	1:X:2765:C:C6	2.34	0.62
1:X:2863:U:H2'	1:X:2864:C:H6	1.62	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:215:LEU:HD12	3:A:215:LEU:N	2.14	0.62
6:D:86:GLY:C	6:D:87:ILE:HG13	2.24	0.62
19:Q:53:ILE:HD12	19:Q:79:ILE:O	2.00	0.62
20:R:46:VAL:CG1	20:R:48:VAL:HG23	2.30	0.62
21:S:36:ARG:O	21:S:40:ASP:OD2	2.18	0.62
23:U:78:ILE:HD13	23:U:79:GLU:N	2.15	0.62
1:X:104:C:C2'	1:X:105:G:H5''	2.30	0.62
1:X:490:A:O2'	1:X:491:A:C5'	2.48	0.62
1:X:981:C:O2'	1:X:995:A:H4'	1.98	0.62
1:X:1062:G:H4'	1:X:2732:C:O2'	2.00	0.62
1:X:1128:G:H2'	1:X:1129:A:H5''	1.80	0.62
1:X:1299:A:H2'	1:X:1301:U:OP2	1.99	0.62
1:X:1394:G:O2'	1:X:1395:A:H5'	1.99	0.62
1:X:2013:A:H5''	1:X:2014:A:OP1	1.99	0.62
1:X:2484:G:O2'	1:X:2485:U:H5'	2.00	0.62
1:X:2664:G:O2'	1:X:2665:G:H5'	2.00	0.62
7:E:131:ILE:CG2	7:E:132:ASP:N	2.63	0.62
7:E:157:TYR:C	7:E:171:LEU:HD23	2.25	0.62
9:G:117:GLU:O	9:G:120:SER:OG	2.16	0.62
11:I:89:ASP:O	11:I:90:ARG:HB2	2.00	0.62
14:L:8:ARG:HB3	14:L:8:ARG:HH11	1.64	0.62
19:Q:53:ILE:HD13	19:Q:80:VAL:CG1	2.28	0.62
20:R:15:HIS:O	20:R:16:PHE:HB3	1.98	0.62
22:T:21:LEU:CD1	22:T:41:ARG:HG2	2.30	0.62
24:V:37:LEU:HD21	24:V:40:PRO:CA	2.27	0.62
1:X:773:G:C2'	1:X:774:A:H5'	2.30	0.62
1:X:1673:C:C2	1:X:1674:C:C5	2.88	0.62
1:X:1682:A:O2'	1:X:1683:G:H5'	2.00	0.62
1:X:2239:C:H2'	1:X:2240:C:C6	2.28	0.62
1:X:2725:C:O2'	7:E:143:GLN:CG	2.48	0.62
3:A:117:VAL:HG13	3:A:128:GLY:O	2.00	0.62
6:D:111:ILE:CG2	6:D:114:PHE:HB2	2.30	0.62
6:D:114:PHE:C	6:D:115:ARG:HG3	2.24	0.62
7:E:154:PRO:HA	7:E:160:LYS:O	2.00	0.62
10:H:29:ILE:HA	10:H:34:LEU:HD23	1.81	0.62
11:I:53:ARG:O	11:I:53:ARG:CD	2.47	0.62
12:J:77:LYS:O	12:J:79:PRO:HD3	1.99	0.62
14:L:60:LYS:HB2	14:L:63:ASN:O	1.99	0.62
16:N:60:LEU:O	16:N:60:LEU:HD22	1.99	0.62
16:N:66:ASN:HD22	16:N:70:ARG:NH1	1.98	0.62
16:N:86:ALA:C	16:N:88:ILE:H	2.06	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:P:87:GLU:HA	18:P:90:LEU:CG	2.29	0.62
23:U:28:GLY:H	23:U:32:ARG:NE	1.97	0.62
23:U:46:LEU:C	23:U:47:HIS:CG	2.77	0.62
1:X:132:U:O2'	1:X:133:C:H5'	2.00	0.62
1:X:1167:A:N6	16:N:48:ARG:HD3	2.14	0.62
1:X:1258:G:P	11:I:17:LYS:HE2	2.39	0.62
1:X:1474:A:C2	1:X:1476:G:C6	2.88	0.62
1:X:1630:A:N6	18:P:112:GLY:O	2.32	0.62
1:X:1631:C:H1'	18:P:108:PRO:CG	2.25	0.62
1:X:2741:G:H21	7:E:150:LYS:NZ	1.97	0.62
3:A:36:ALA:HB1	3:A:62:TYR:O	2.00	0.62
3:A:181:GLU:C	3:A:182:LEU:HD23	2.25	0.62
7:E:139:GLN:O	7:E:142:GLY:N	2.32	0.62
9:G:142:ARG:C	9:G:144:MET:H	2.07	0.62
18:P:67:PRO:C	18:P:69:ALA:N	2.57	0.62
1:X:10:A:O2'	1:X:11:G:H5'	2.00	0.61
1:X:34:U:H1'	20:R:4:PRO:CA	2.30	0.61
1:X:477:A:C2	1:X:809:C:O4'	2.53	0.61
1:X:490:A:HO2'	1:X:492:G:H5''	1.64	0.61
1:X:840:U:O2	1:X:2225:G:H4'	1.99	0.61
1:X:1031:C:O2'	1:X:1032:A:H5''	1.99	0.61
1:X:1248:G:C2	1:X:1249:G:N2	2.69	0.61
1:X:2235:G:N2	1:X:2254:C:C4	2.68	0.61
1:X:2324:G:C6	1:X:2326:C:N4	2.68	0.61
4:B:72:VAL:O	4:B:73:ALA:CB	2.48	0.61
13:K:47:PHE:C	13:K:47:PHE:CD2	2.78	0.61
16:N:8:ILE:HG22	16:N:11:ARG:NH2	2.15	0.61
23:U:49:LYS:HA	23:U:62:LEU:H	1.64	0.61
24:V:11:ALA:O	24:V:14:PHE:HB2	2.00	0.61
1:X:544:U:H2'	1:X:545:C:C6	2.35	0.61
1:X:1102:G:O2'	1:X:1103:C:H5'	2.00	0.61
1:X:1383:C:C2	1:X:1384:G:C8	2.88	0.61
1:X:2282:G:H4'	6:D:122:PHE:HD1	1.65	0.61
1:X:2728:A:H2'	1:X:2729:A:H8	1.65	0.61
1:X:2796:A:OP2	13:K:3:HIS:NE2	2.33	0.61
3:A:70:ARG:HH22	3:A:149:PRO:HA	1.65	0.61
3:A:72:LYS:HZ2	3:A:99:ASP:CG	2.07	0.61
5:C:129:LYS:C	5:C:131:LYS:N	2.58	0.61
6:D:67:ILE:HG21	6:D:84:PRO:HB3	1.81	0.61
7:E:43:VAL:HB	7:E:52:VAL:CG1	2.24	0.61
9:G:141:GLY:HA2	9:G:144:MET:HE3	1.80	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:H:79:HIS:CG	10:H:80:ALA:H	2.17	0.61
13:K:45:ARG:HB3	13:K:46:PRO:CD	2.30	0.61
13:K:60:LEU:O	13:K:61:HIS:C	2.38	0.61
15:M:104:LEU:HD23	15:M:106:TYR:CE2	2.34	0.61
20:R:11:ASN:C	20:R:11:ASN:HD22	2.09	0.61
22:T:17:ASN:O	22:T:19:LYS:HG2	2.00	0.61
30:4:25:VAL:HG21	30:4:34:GLN:NE2	2.13	0.61
1:X:540:G:O2'	1:X:542:A:C2	2.45	0.61
1:X:1448:A:H2'	1:X:1449:C:H6	1.64	0.61
1:X:1553:G:H2'	1:X:1554:G:C8	2.35	0.61
1:X:1745:C:N4	1:X:1746:A:N6	2.48	0.61
1:X:2033:C:O2'	4:B:141:ILE:HD11	1.99	0.61
1:X:2082:C:H2'	1:X:2083:G:C5'	2.30	0.61
1:X:2234:G:H2'	1:X:2235:G:O4'	2.00	0.61
1:X:2324:G:H4'	1:X:2326:C:H5''	1.81	0.61
1:X:2343:C:O2	22:T:36:ILE:HD11	1.99	0.61
1:X:2404:A:H1'	1:X:2406:C:C5	2.35	0.61
7:E:17:VAL:HG12	7:E:18:ASN:N	2.15	0.61
9:G:61:ARG:NH1	9:G:78:ASP:OD2	2.34	0.61
11:I:58:ALA:C	11:I:60:LEU:H	2.08	0.61
12:J:19:THR:HG22	12:J:20:GLY:N	2.14	0.61
16:N:76:TYR:O	16:N:80:ILE:HG12	1.99	0.61
1:X:172:A:C2	1:X:227:G:N2	2.67	0.61
1:X:692:C:O2'	1:X:693:A:H5'	1.99	0.61
1:X:731:A:O2'	1:X:732:G:C4'	2.49	0.61
1:X:794:A:H5'	3:A:218:LYS:HZ2	1.65	0.61
1:X:801:A:O2'	1:X:802:A:OP2	2.17	0.61
1:X:1372:A:N7	1:X:1373:G:N7	2.48	0.61
1:X:1517:C:H4'	3:A:96:HIS:CD2	2.35	0.61
1:X:1812:U:C4	3:A:160:GLY:O	2.54	0.61
1:X:2178:U:O2'	1:X:2179:C:H5'	2.01	0.61
1:X:2471:U:O2'	1:X:2472:U:H5'	2.00	0.61
1:X:2615:U:OP1	4:B:80:GLU:N	2.33	0.61
1:X:2726:U:C2'	1:X:2727:G:H5'	2.30	0.61
3:A:142:VAL:HG11	3:A:193:ILE:HD13	1.81	0.61
3:A:231:HIS:HD1	3:A:247:VAL:HA	1.64	0.61
4:B:12:THR:OG1	15:M:17:GLU:OE1	2.17	0.61
5:C:48:ARG:HD2	5:C:48:ARG:N	2.13	0.61
5:C:153:ASP:C	5:C:154:ASP:OD1	2.42	0.61
6:D:74:ILE:HG23	6:D:80:ARG:CA	2.30	0.61
6:D:174:GLY:O	6:D:175:LEU:HB2	1.99	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:H:70:VAL:HG22	10:H:71:LYS:N	2.16	0.61
11:I:45:LYS:CE	11:I:47:ALA:HB3	2.30	0.61
11:I:54:SER:OG	11:I:59:ARG:NH1	2.34	0.61
13:K:10:LEU:HD23	13:K:17:ARG:HG2	1.81	0.61
19:Q:72:ARG:O	19:Q:73:ASN:OD1	2.17	0.61
20:R:91:ALA:O	20:R:108:VAL:HG22	2.01	0.61
21:S:123:VAL:HG23	21:S:161:ALA:CA	2.30	0.61
23:U:11:LYS:HZ1	23:U:75:TYR:HD1	1.45	0.61
1:X:864:C:O2'	25:W:42:GLY:HA3	2.01	0.61
1:X:1394:G:H2'	1:X:1395:A:H8	1.65	0.61
1:X:1428:G:H22	1:X:1602:G:C5'	2.14	0.61
1:X:1573:G:O5'	1:X:1574:A:H5''	2.00	0.61
1:X:1732:U:H4'	1:X:1733:U:OP2	2.00	0.61
1:X:2201:G:H2'	1:X:2202:G:H8	1.65	0.61
1:X:2517:C:O2'	1:X:2518:C:H5'	1.99	0.61
1:X:2753:C:OP1	4:B:164:ARG:HD3	2.01	0.61
2:Y:58:G:H4'	2:Y:59:A:H5''	1.81	0.61
5:C:136:TRP:HD1	5:C:137:ALA:N	1.98	0.61
6:D:4:LEU:CD1	6:D:5:LYS:H	2.11	0.61
6:D:144:ASP:O	6:D:145:MET:HB2	2.01	0.61
8:F:18:THR:HB	8:F:19:PRO:HD3	1.82	0.61
11:I:76:LYS:CG	11:I:111:SER:HB2	2.30	0.61
16:N:66:ASN:HA	16:N:69:ALA:HB3	1.82	0.61
21:S:96:VAL:O	21:S:120:LEU:N	2.27	0.61
21:S:127:PRO:O	21:S:128:ARG:CG	2.43	0.61
1:X:173:A:H5'	1:X:174:A:OP2	1.99	0.61
1:X:527:C:O2'	18:P:39:ARG:NH2	2.33	0.61
1:X:1094:C:C2'	1:X:1096:A:H5'	2.29	0.61
1:X:1805:G:N3	3:A:50:THR:HG21	2.16	0.61
1:X:2313:G:H1'	14:L:13:THR:HB	1.83	0.61
1:X:2356:A:HO2'	14:L:89:PHE:HZ	1.47	0.61
1:X:2541:U:O2'	10:H:23:ARG:NH1	2.33	0.61
3:A:132:PRO:CA	3:A:190:TYR:HA	2.28	0.61
5:C:90:SER:O	5:C:91:TYR:C	2.44	0.61
6:D:33:LYS:HA	6:D:96:MET:SD	2.41	0.61
7:E:9:ILE:CD1	7:E:51:LEU:HA	2.29	0.61
11:I:86:THR:H	11:I:116:ARG:NH1	1.98	0.61
14:L:66:ASP:O	14:L:68:ALA:N	2.33	0.61
24:V:50:VAL:HA	24:V:53:LEU:HB2	1.82	0.61
30:4:29:ASN:OD1	30:4:31:LYS:N	2.34	0.61
1:X:39:C:O2	5:C:40:ARG:NH2	2.34	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:717:G:O2'	1:X:718:A:P	2.58	0.61
1:X:1053:G:H4'	1:X:1054:C:OP1	2.01	0.61
1:X:1628:C:C4	1:X:1629:G:N7	2.69	0.61
1:X:2194:A:H2'	1:X:2195:C:C4'	2.31	0.61
1:X:2311:U:H5'	1:X:2315:A:N6	2.15	0.61
1:X:2548:G:O2'	1:X:2549:G:H5'	2.00	0.61
2:Y:53:G:N2	2:Y:54:U:H5	1.99	0.61
6:D:108:LEU:HD23	6:D:111:ILE:HD12	1.83	0.61
9:G:142:ARG:O	9:G:144:MET:N	2.33	0.61
12:J:55:MET:HG2	12:J:118:ALA:O	2.01	0.61
1:X:213:C:H2'	1:X:214:C:H6	1.66	0.61
1:X:651:C:C2'	1:X:652:C:H5''	2.30	0.61
1:X:2662:C:H2'	1:X:2663:U:C6	2.36	0.61
1:X:2819:G:H2'	1:X:2820:C:H6	1.66	0.61
2:Y:25:G:H2'	2:Y:26:G:C8	2.35	0.61
9:G:113:GLU:CD	9:G:113:GLU:N	2.56	0.61
12:J:26:ASP:HB3	12:J:68:ARG:HH22	1.66	0.61
15:M:99:VAL:CG2	15:M:100:ARG:N	2.64	0.61
16:N:88:ILE:HG22	17:O:48:GLY:C	2.25	0.61
17:O:13:ARG:HG2	17:O:14:VAL:N	2.10	0.61
21:S:6:LYS:H	21:S:7:PRO:CD	2.12	0.61
1:X:78:C:O2'	1:X:79:G:H5'	2.00	0.61
1:X:401:G:OP1	23:U:35:THR:HB	2.01	0.61
1:X:600:G:C6	1:X:602:C:C4	2.89	0.61
1:X:754:G:C6	1:X:770:U:O2	2.54	0.61
1:X:1091:C:H4'	8:F:125:ASN:HB3	1.83	0.61
1:X:1391:A:O2'	1:X:1392:U:P	2.59	0.61
1:X:2436:U:O2	1:X:2474:G:C2	2.54	0.61
9:G:162:LYS:H	9:G:163:PRO:CD	2.14	0.61
12:J:68:ARG:HD3	12:J:106:GLU:OE2	2.01	0.61
15:M:34:ARG:NE	15:M:88:VAL:CG1	2.63	0.61
17:O:13:ARG:CG	17:O:14:VAL:H	2.06	0.61
20:R:93:ARG:HG2	20:R:93:ARG:NH1	2.16	0.61
1:X:34:U:H1'	20:R:4:PRO:N	2.16	0.61
1:X:555:U:C6	1:X:555:U:C3'	2.84	0.61
1:X:558:G:N3	1:X:558:G:C4'	2.63	0.61
1:X:674:U:H2'	1:X:675:C:O4'	2.00	0.61
1:X:717:G:C2'	1:X:739:G:H22	2.12	0.61
1:X:1997:A:H2'	1:X:1998:A:C8	2.35	0.61
1:X:2252:A:O2'	1:X:2253:A:H5'	2.00	0.61
4:B:14:ILE:HG12	15:M:20:HIS:CD2	2.36	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:35:VAL:HG13	6:D:90:THR:HA	1.83	0.61
7:E:44:ARG:HH21	7:E:44:ARG:HG3	1.64	0.61
9:G:53:ARG:NH2	9:G:171:LEU:HB2	2.15	0.61
9:G:72:PRO:O	9:G:74:MET:N	2.33	0.61
11:I:81:GLN:NE2	11:I:115:SER:CA	2.63	0.61
17:O:9:GLY:O	17:O:10:LYS:HB3	2.00	0.61
18:P:17:GLN:HG3	18:P:18:VAL:HG23	1.83	0.61
19:Q:20:MET:SD	19:Q:92:ALA:HA	2.41	0.61
22:T:71:ASN:CB	22:T:77:ARG:HH11	2.11	0.61
23:U:46:LEU:O	23:U:47:HIS:ND1	2.32	0.61
24:V:56:VAL:HA	24:V:59:GLU:OE1	2.01	0.61
25:W:38:PRO:HD3	25:W:41:ARG:HE	1.66	0.61
30:4:1:MET:SD	30:4:2:LYS:N	2.73	0.61
1:X:208:C:H2'	1:X:209:G:C5'	2.28	0.60
1:X:402:A:H8	1:X:2392:G:H4'	1.57	0.60
1:X:525:A:C2'	1:X:526:C:H5'	2.31	0.60
1:X:774:A:O5'	1:X:774:A:C8	2.53	0.60
1:X:820:U:H2'	1:X:821:A:C8	2.35	0.60
1:X:1095:A:H2'	1:X:1096:A:C5'	2.30	0.60
1:X:1142:G:C1'	9:G:103:TYR:CD2	2.84	0.60
1:X:1181:C:H2'	1:X:1182:U:H5''	1.82	0.60
1:X:1238:A:C6	1:X:1239:A:N1	2.69	0.60
1:X:1673:C:H5''	4:B:136:ARG:HD3	1.82	0.60
1:X:2586:G:C2	1:X:2587:G:C4	2.89	0.60
1:X:2698:G:H4'	15:M:103:LYS:HG2	1.83	0.60
3:A:142:VAL:CG1	3:A:193:ILE:HA	2.24	0.60
5:C:61:GLN:NE2	5:C:61:GLN:HA	2.15	0.60
5:C:194:GLU:O	5:C:195:ILE:HG23	2.01	0.60
6:D:67:ILE:O	6:D:69:LYS:N	2.34	0.60
6:D:74:ILE:CG1	6:D:80:ARG:HA	2.31	0.60
11:I:19:VAL:O	11:I:19:VAL:HG12	2.01	0.60
11:I:76:LYS:HD3	11:I:79:GLN:HE21	1.65	0.60
12:J:35:LEU:HD11	12:J:130:THR:OG1	2.00	0.60
12:J:69:ILE:HG23	12:J:104:MET:HA	1.82	0.60
16:N:22:LYS:C	16:N:24:PHE:N	2.59	0.60
1:X:695:G:O2'	1:X:696:U:H5'	2.00	0.60
1:X:947:C:H2'	1:X:948:C:H6	1.63	0.60
1:X:1141:U:O2'	1:X:1142:G:O5'	2.19	0.60
1:X:1182:U:H2'	1:X:1183:C:O4'	2.00	0.60
1:X:1661:C:O2'	1:X:1662:G:H5'	2.01	0.60
6:D:80:ARG:HD3	6:D:83:MET:CB	2.30	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:54:ARG:HG2	7:E:54:ARG:HH21	1.64	0.60
7:E:172:LYS:O	7:E:173:ALA:HB3	1.99	0.60
8:F:13:PRO:HB2	8:F:16:LYS:HD3	1.83	0.60
11:I:86:THR:C	11:I:88:PHE:N	2.55	0.60
13:K:20:LEU:O	13:K:22:ARG:N	2.34	0.60
14:L:87:VAL:HG12	14:L:88:VAL:N	2.16	0.60
18:P:36:ARG:NH2	26:Z:20:ARG:NH2	2.49	0.60
20:R:39:ALA:O	20:R:41:PRO:HD3	2.00	0.60
20:R:95:ARG:HD2	20:R:95:ARG:N	2.08	0.60
22:T:50:GLY:C	22:T:62:LEU:HD23	2.26	0.60
23:U:24:ALA:C	23:U:26:ALA:H	2.09	0.60
26:Z:35:GLN:O	26:Z:37:HIS:N	2.34	0.60
1:X:65:C:H1'	1:X:88:G:N2	2.15	0.60
1:X:224:G:N2	1:X:227:G:H3'	2.16	0.60
1:X:1053:G:C4	1:X:1054:C:C5	2.89	0.60
1:X:1119:U:H6	1:X:1119:U:C5'	2.14	0.60
1:X:1374:G:O2'	1:X:1375:C:H5'	2.02	0.60
1:X:1569:A:H2'	1:X:1570:C:H5''	1.83	0.60
1:X:2372:A:O2'	1:X:2373:C:H5'	2.01	0.60
1:X:2537:C:H2'	1:X:2538:C:O4'	2.00	0.60
9:G:35:LYS:HG2	9:G:69:ASP:OD2	2.00	0.60
10:H:73:VAL:HG21	10:H:123:PHE:CD2	2.36	0.60
12:J:102:ARG:HG3	12:J:103:VAL:N	2.16	0.60
18:P:36:ARG:NH2	26:Z:20:ARG:NE	2.49	0.60
23:U:27:ASP:N	23:U:32:ARG:HD3	2.16	0.60
1:X:82:G:N1	1:X:100:G:H2'	2.17	0.60
1:X:172:A:C6	1:X:175:C:C5	2.87	0.60
1:X:1850:G:O2'	1:X:1851:A:O4'	2.20	0.60
1:X:2736:U:O2'	1:X:2737:A:C5'	2.32	0.60
6:D:46:ASP:HB2	6:D:49:ALA:H	1.66	0.60
6:D:171:GLN:HA	6:D:175:LEU:CB	2.30	0.60
7:E:84:THR:HB	7:E:134:SER:CB	2.31	0.60
10:H:41:ASN:ND2	10:H:41:ASN:H	1.99	0.60
10:H:70:VAL:HG21	10:H:98:ILE:HG23	1.82	0.60
12:J:77:LYS:CG	12:J:78:LYS:H	2.13	0.60
16:N:93:LYS:O	16:N:94:VAL:HB	2.01	0.60
21:S:75:LYS:C	21:S:77:ALA:H	2.09	0.60
1:X:342:G:H4'	1:X:343:A:OP1	2.01	0.60
1:X:433:G:H21	1:X:434:C:H1'	1.67	0.60
1:X:864:C:H5''	25:W:46:THR:OG1	2.01	0.60
1:X:1007:A:H1'	17:O:6:GLN:CG	2.30	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1430:G:H2'	1:X:1431:U:H6	1.62	0.60
1:X:1597:A:H2'	1:X:1598:C:C6	2.36	0.60
1:X:2029:G:H2'	1:X:2030:U:H6	1.67	0.60
1:X:2035:G:H4'	4:B:143:GLN:O	2.01	0.60
1:X:2445:C:H5''	30:4:6:SER:HB2	1.82	0.60
1:X:2473:G:H2'	1:X:2474:G:H8	1.67	0.60
1:X:2642:G:O2'	1:X:2643:G:H5'	2.01	0.60
4:B:95:ILE:HG22	4:B:96:PHE:N	2.15	0.60
6:D:63:GLN:HG3	6:D:95:ARG:HH21	1.66	0.60
6:D:111:ILE:HG22	6:D:114:PHE:HB2	1.82	0.60
9:G:35:LYS:O	9:G:36:ASN:HB3	2.00	0.60
11:I:81:GLN:HE22	11:I:115:SER:CA	2.09	0.60
12:J:14:PHE:O	12:J:15:ARG:HG3	2.01	0.60
20:R:48:VAL:C	20:R:50:GLY:H	2.07	0.60
20:R:56:LYS:HA	20:R:68:GLY:O	2.02	0.60
1:X:28:A:H1'	1:X:523:A:C2	2.35	0.60
1:X:198:A:H4'	1:X:199:A:OP2	2.02	0.60
1:X:611:C:H6	1:X:611:C:H5''	1.67	0.60
1:X:1288:A:N6	1:X:1309:G:H5'	2.17	0.60
1:X:2725:C:O2'	7:E:143:GLN:HG2	2.02	0.60
1:X:2795:A:H4'	13:K:5:LYS:NZ	2.17	0.60
3:A:46:ARG:HD3	3:A:46:ARG:C	2.26	0.60
3:A:111:LEU:HD21	3:A:127:LEU:O	2.02	0.60
14:L:42:ILE:HG22	14:L:52:ALA:H	1.67	0.60
20:R:24:VAL:HB	20:R:29:HIS:O	2.01	0.60
20:R:92:THR:HB	20:R:95:ARG:HH22	1.67	0.60
20:R:111:GLY:C	20:R:112:LYS:HD2	2.26	0.60
23:U:22:GLY:N	23:U:39:LYS:HB2	2.16	0.60
1:X:967:G:O6	12:J:17:ARG:NH2	2.34	0.60
1:X:1474:A:H1'	1:X:1475:U:H5'	1.84	0.60
1:X:2388:G:C4	1:X:2389:G:C8	2.90	0.60
1:X:2712:G:H3'	1:X:2713:A:C5'	2.32	0.60
2:Y:56:G:N2	6:D:26:MET:HE2	2.17	0.60
4:B:116:VAL:HG22	4:B:136:ARG:NH2	2.17	0.60
4:B:183:LEU:HD11	15:M:16:ILE:HG21	1.83	0.60
4:B:201:ALA:HB1	4:B:204:ALA:HB2	1.82	0.60
5:C:104:LEU:HD23	5:C:104:LEU:H	1.66	0.60
6:D:138:PHE:HB2	6:D:141:ILE:HB	1.82	0.60
12:J:52:ARG:HG3	12:J:67:ILE:HD11	1.83	0.60
15:M:55:ILE:HG22	15:M:104:LEU:HB2	1.82	0.60
17:O:36:LYS:HD2	17:O:55:THR:CA	2.30	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:80:LYS:HZ2	20:R:82:ALA:CA	2.12	0.60
1:X:698:A:C8	1:X:787:A:C6	2.90	0.60
1:X:749:C:H2'	1:X:750:C:H6	1.66	0.60
1:X:1061:A:C2'	1:X:1062:G:H5'	2.32	0.60
1:X:1275:A:H2	26:Z:10:LYS:HE2	1.66	0.60
1:X:1787:U:H4'	3:A:254:THR:H	1.67	0.60
1:X:2322:U:H3'	1:X:2323:U:C6	2.37	0.60
1:X:2437:G:O2'	1:X:2438:A:N7	2.31	0.60
1:X:2522:G:H5'	1:X:2522:G:H8	1.67	0.60
7:E:57:ASP:CB	7:E:62:ARG:HE	1.97	0.60
9:G:103:TYR:O	9:G:107:GLN:NE2	2.34	0.60
11:I:77:LEU:HB3	11:I:112:GLY:N	2.16	0.60
11:I:126:SER:O	11:I:129:ALA:HB3	2.01	0.60
14:L:52:ALA:O	14:L:53:ALA:HB3	2.01	0.60
23:U:17:SER:CB	23:U:44:ALA:HA	2.32	0.60
1:X:103:U:H2'	1:X:104:C:C6	2.37	0.60
1:X:492:G:H2'	1:X:517:A:N6	2.17	0.60
1:X:958:G:C4	1:X:959:C:C5	2.90	0.60
1:X:1838:G:H3'	1:X:1839:A:H8	1.67	0.60
1:X:2036:G:C2'	1:X:2037:A:H5'	2.32	0.60
2:Y:46:G:H5'	6:D:92:ARG:HH22	1.67	0.60
3:A:52:ARG:NH2	3:A:53:PHE:CZ	2.70	0.60
4:B:51:TYR:N	4:B:75:THR:OG1	2.34	0.60
5:C:104:LEU:CD1	5:C:175:VAL:HG21	2.32	0.60
5:C:173:ALA:CB	5:C:193:LEU:HB2	2.32	0.60
5:C:176:ASN:O	5:C:180:ILE:HG22	2.01	0.60
7:E:38:ASN:HB2	7:E:41:LEU:HD22	1.83	0.60
7:E:38:ASN:ND2	7:E:64:LEU:HD13	2.16	0.60
12:J:22:ALA:CB	12:J:100:PRO:O	2.48	0.60
14:L:33:ARG:HG2	14:L:38:ILE:HB	1.82	0.60
18:P:28:ALA:HB2	18:P:71:VAL:HG22	1.83	0.60
19:Q:11:VAL:HG23	19:Q:27:PHE:HA	1.84	0.60
21:S:91:PRO:HG2	21:S:92:VAL:H	1.67	0.60
1:X:174:A:H8	1:X:2051:U:N3	1.99	0.60
1:X:1218:C:C1'	11:I:13:ARG:HE	2.14	0.60
1:X:1283:C:H5''	1:X:1284:G:C5'	2.31	0.60
1:X:1439:G:H2'	1:X:1440:G:C8	2.37	0.60
1:X:1741:G:O2'	1:X:1742:G:H5'	2.01	0.60
1:X:2709:C:H5''	4:B:185:LYS:HE3	1.83	0.60
1:X:2796:A:P	13:K:3:HIS:CE1	2.95	0.60
6:D:8:TYR:O	6:D:12:VAL:CB	2.49	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:13:ARG:HH21	6:D:17:MET:HE1	1.65	0.60
6:D:73:SER:O	6:D:79:LEU:HB3	2.02	0.60
12:J:19:THR:CG2	12:J:20:GLY:N	2.64	0.60
16:N:7:GLY:O	16:N:9:VAL:HG23	2.02	0.60
17:O:14:VAL:O	17:O:15:SER:CB	2.50	0.60
17:O:19:VAL:HG13	17:O:90:PHE:CD1	2.37	0.60
21:S:55:THR:CG2	21:S:59:GLY:HA2	2.32	0.60
1:X:37:C:H4'	1:X:463:C:OP1	2.02	0.59
1:X:165:G:H2'	1:X:166:G:H5'	1.85	0.59
1:X:233:A:O2'	1:X:234:C:H5'	2.02	0.59
1:X:1026:U:O2'	1:X:1027:C:H5'	2.01	0.59
1:X:1332:G:C6	1:X:1333:G:N1	2.70	0.59
1:X:2018:G:O2'	1:X:2019:C:OP1	2.19	0.59
1:X:2400:G:H21	23:U:33:LYS:HE3	1.66	0.59
4:B:52:ALA:O	4:B:75:THR:O	2.20	0.59
4:B:153:GLY:O	4:B:154:LYS:C	2.43	0.59
5:C:148:VAL:O	5:C:167:VAL:HA	2.02	0.59
5:C:154:ASP:HB2	5:C:157:THR:HG23	1.84	0.59
6:D:16:LEU:HD12	6:D:28:VAL:HG13	1.84	0.59
6:D:111:ILE:HD13	6:D:137:ILE:HD12	1.82	0.59
14:L:80:ALA:C	14:L:82:LYS:H	2.10	0.59
21:S:92:VAL:O	21:S:93:GLU:HG3	2.02	0.59
21:S:123:VAL:HG23	21:S:161:ALA:HA	1.84	0.59
24:V:18:ILE:HG23	24:V:50:VAL:HG13	1.84	0.59
26:Z:6:VAL:CG2	26:Z:7:PRO:HD2	2.28	0.59
1:X:1033:G:O2'	1:X:1034:U:H5'	2.02	0.59
1:X:1385:C:H1'	1:X:2192:U:C5	2.36	0.59
1:X:1505:U:H2'	1:X:1506:C:H5''	1.83	0.59
1:X:2186:G:O3'	3:A:151:LYS:HD3	2.02	0.59
1:X:2516:U:H2'	1:X:2517:C:H6	1.61	0.59
1:X:2586:G:C2	1:X:2587:G:N3	2.70	0.59
1:X:2640:G:H2'	1:X:2641:A:H8	1.66	0.59
6:D:40:LEU:HA	6:D:150:ARG:CZ	2.32	0.59
6:D:75:SER:N	6:D:79:LEU:HD22	2.15	0.59
17:O:36:LYS:HD3	17:O:39:PHE:CE2	2.37	0.59
21:S:25:ASN:OD1	21:S:26:LYS:N	2.32	0.59
21:S:168:VAL:HG12	21:S:169:VAL:HG13	1.83	0.59
25:W:1:MET:O	25:W:34:VAL:HG12	2.01	0.59
1:X:174:A:C8	1:X:2051:U:N3	2.71	0.59
1:X:218:A:H5'	1:X:220:U:H1'	1.83	0.59
1:X:617:U:H5	1:X:632:A:C2	2.19	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:857:U:C3'	1:X:858:G:H8	2.09	0.59
1:X:1031:C:H41	1:X:1153:A:H61	1.47	0.59
1:X:1503:G:H2'	1:X:1504:G:C8	2.38	0.59
1:X:1684:G:O2'	1:X:1974:U:O4	2.18	0.59
2:Y:12:C:H2'	2:Y:13:C:O4'	2.03	0.59
5:C:30:VAL:O	5:C:31:VAL:C	2.45	0.59
6:D:38:GLU:CB	6:D:87:ILE:HB	2.31	0.59
9:G:32:TYR:CZ	9:G:35:LYS:HE3	2.38	0.59
10:H:122:ARG:HH11	10:H:124:MET:CE	2.13	0.59
12:J:77:LYS:O	12:J:88:LYS:NZ	2.35	0.59
14:L:28:ARG:O	14:L:42:ILE:HD13	2.02	0.59
15:M:22:ARG:NH2	15:M:89:ASN:O	2.34	0.59
15:M:70:LYS:O	15:M:77:VAL:N	2.32	0.59
17:O:57:GLN:H	17:O:97:GLY:CA	2.15	0.59
17:O:63:HIS:CE1	17:O:91:THR:HG23	2.38	0.59
21:S:72:ASP:OD1	21:S:75:LYS:HD2	2.03	0.59
21:S:97:PRO:CA	21:S:119:ASN:HA	2.19	0.59
25:W:44:VAL:HG12	25:W:45:LYS:NZ	2.17	0.59
1:X:32:C:OP1	1:X:1251:G:H5'	2.02	0.59
1:X:163:A:H2'	1:X:164:G:H8	1.68	0.59
1:X:615:C:H41	11:I:100:ARG:HH12	1.50	0.59
1:X:871:U:O2'	1:X:2247:A:C2'	2.50	0.59
1:X:1059:A:N6	1:X:1122:A:C2	2.70	0.59
1:X:1071:U:H5''	1:X:1072:U:OP1	2.02	0.59
1:X:1474:A:C1'	1:X:1475:U:H5'	2.32	0.59
1:X:1831:G:C4	1:X:1832:G:C8	2.91	0.59
1:X:1854:G:C6	1:X:1864:G:C6	2.90	0.59
1:X:1856:U:O2'	1:X:1857:G:O5'	2.21	0.59
1:X:1926:U:H4'	1:X:1927:U:O5'	2.01	0.59
1:X:2195:C:N4	1:X:2196:U:O4	2.35	0.59
1:X:2217:G:H5'	1:X:2218:G:N7	2.18	0.59
1:X:2620:G:OP2	9:G:102:ARG:NH2	2.36	0.59
2:Y:58:G:H4'	2:Y:59:A:C5'	2.32	0.59
7:E:51:LEU:HD12	7:E:52:VAL:N	2.16	0.59
7:E:84:THR:CA	7:E:134:SER:HA	2.31	0.59
7:E:90:ARG:NH2	7:E:163:ARG:NH1	2.50	0.59
9:G:88:VAL:HG22	9:G:89:ALA:H	1.67	0.59
13:K:102:THR:HA	13:K:109:THR:HA	1.82	0.59
16:N:110:VAL:HG12	16:N:111:ASP:N	2.17	0.59
20:R:98:ILE:HG22	20:R:99:VAL:N	2.16	0.59
20:R:100:ASP:C	20:R:102:LYS:N	2.59	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:W:14:GLY:O	25:W:18:LYS:HG2	2.03	0.59
1:X:826:U:H2'	1:X:827:C:C6	2.37	0.59
1:X:1004:A:OP2	16:N:51:ARG:NH1	2.36	0.59
1:X:1550:C:H2'	1:X:1553:G:H21	1.63	0.59
1:X:2041:A:H8	1:X:2041:A:O5'	1.85	0.59
1:X:2420:C:O2'	1:X:2421:C:H5'	2.02	0.59
1:X:2594:U:H2'	1:X:2595:C:H6	1.68	0.59
2:Y:116:C:H2'	2:Y:117:G:O4'	2.03	0.59
3:A:261:ARG:O	3:A:264:LYS:HB2	2.02	0.59
6:D:65:PRO:CA	6:D:89:VAL:HG13	2.31	0.59
6:D:103:LEU:HD11	6:D:108:LEU:HG	1.82	0.59
7:E:157:TYR:O	7:E:171:LEU:HD23	2.02	0.59
12:J:11:ARG:NH2	12:J:15:ARG:HH22	2.00	0.59
20:R:40:LEU:HB2	20:R:45:LYS:CB	2.17	0.59
20:R:80:LYS:O	20:R:80:LYS:CE	2.47	0.59
20:R:84:VAL:HA	20:R:90:LYS:CE	2.32	0.59
21:S:13:LYS:O	21:S:16:GLU:O	2.21	0.59
21:S:94:VAL:HG21	21:S:130:ILE:HG21	1.84	0.59
1:X:807:A:H2'	1:X:808:C:H6	1.67	0.59
1:X:1250:A:HO2'	1:X:1251:G:C4'	2.14	0.59
1:X:1391:A:H1'	1:X:1392:U:C4	2.37	0.59
1:X:1391:A:H1'	1:X:1392:U:N3	2.18	0.59
1:X:1681:A:N6	1:X:1979:C:H42	1.98	0.59
1:X:2175:A:H2'	1:X:2176:U:C6	2.37	0.59
1:X:2301:A:H2'	1:X:2302:G:C8	2.36	0.59
1:X:2400:G:N2	23:U:33:LYS:NZ	2.49	0.59
1:X:2541:U:H4'	10:H:23:ARG:HH12	1.66	0.59
1:X:2736:U:H1'	1:X:2737:A:C8	2.38	0.59
3:A:172:TYR:CE1	3:A:186:HIS:HB3	2.36	0.59
3:A:268:ARG:HB3	3:A:269:PHE:CD2	2.38	0.59
4:B:136:ARG:O	4:B:137:ARG:HB2	2.03	0.59
9:G:155:THR:HA	9:G:158:HIS:CD2	2.24	0.59
10:H:116:ARG:NH2	15:M:40:ARG:HB2	2.16	0.59
11:I:7:LYS:O	11:I:9:THR:HG23	2.02	0.59
14:L:37:HIS:CE1	14:L:39:TYR:CZ	2.91	0.59
20:R:11:ASN:O	20:R:12:ASP:C	2.46	0.59
20:R:22:VAL:HG11	20:R:80:LYS:CD	2.28	0.59
24:V:42:ARG:NH1	24:V:45:GLN:NE2	2.51	0.59
25:W:2:LYS:HD3	25:W:33:GLU:OE2	2.01	0.59
1:X:1034:U:H5'	1:X:1034:U:H6	1.67	0.59
1:X:1681:A:C2	1:X:2706:U:C2	2.90	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1998:A:C2	26:Z:6:VAL:HG23	2.38	0.59
1:X:2698:G:O2'	1:X:2699:G:H5'	2.03	0.59
1:X:2827:G:C6	1:X:2828:C:N3	2.71	0.59
1:X:2829:A:C6	1:X:2839:G:C6	2.90	0.59
3:A:124:GLU:O	3:A:126:LYS:HG3	2.03	0.59
3:A:142:VAL:HB	3:A:192:THR:O	2.02	0.59
5:C:3:GLN:OE1	5:C:3:GLN:HA	2.01	0.59
6:D:8:TYR:HD1	6:D:173:MET:SD	2.26	0.59
7:E:43:VAL:CB	7:E:52:VAL:HG13	2.28	0.59
11:I:13:ARG:CG	11:I:13:ARG:NH2	2.60	0.59
11:I:32:ARG:NH2	17:O:79:GLN:HA	2.18	0.59
20:R:15:HIS:ND1	20:R:16:PHE:CD2	2.66	0.59
21:S:105:GLN:OE1	21:S:140:LYS:HA	2.02	0.59
26:Z:35:GLN:C	26:Z:37:HIS:H	2.10	0.59
1:X:665:A:H2	1:X:666:U:H5''	1.67	0.59
1:X:1052:C:H3'	1:X:1053:G:H5'	1.82	0.59
1:X:1265:G:O2'	1:X:1266:G:O4'	2.19	0.59
1:X:2369:U:O2	1:X:2369:U:H2'	2.03	0.59
4:B:38:THR:O	4:B:40:GLN:N	2.32	0.59
4:B:183:LEU:HD11	15:M:16:ILE:HG23	1.84	0.59
5:C:58:MET:SD	5:C:69:HIS:CB	2.91	0.59
6:D:13:ARG:CB	6:D:14:PRO:HD3	2.32	0.59
7:E:37:TYR:CD2	7:E:68:THR:HG23	2.38	0.59
8:F:104:VAL:HG13	8:F:127:VAL:HG11	1.83	0.59
13:K:45:ARG:O	13:K:48:VAL:HG12	2.02	0.59
17:O:87:ARG:O	17:O:87:ARG:HG3	2.01	0.59
23:U:28:GLY:O	23:U:29:GLY:C	2.46	0.59
1:X:148:C:H3'	1:X:149:A:C8	2.38	0.59
1:X:641:G:H4'	1:X:651:C:O2'	2.03	0.59
1:X:1301:U:C2	1:X:1340:C:O2	2.55	0.59
1:X:2184:C:C4	1:X:2185:U:C4	2.91	0.59
1:X:2309:G:C2'	1:X:2310:G:H5'	2.33	0.59
1:X:2484:G:O2'	1:X:2485:U:C5'	2.51	0.59
1:X:2494:C:O2'	1:X:2495:G:H5'	2.02	0.59
5:C:62:LYS:HD3	5:C:62:LYS:C	2.28	0.59
6:D:4:LEU:HD11	6:D:173:MET:CE	2.32	0.59
6:D:168:ALA:O	6:D:169:LEU:C	2.45	0.59
9:G:67:ARG:HH21	9:G:70:PHE:C	2.11	0.59
10:H:26:ASN:HB3	10:H:38:GLY:H	1.66	0.59
15:M:93:ILE:HG22	15:M:94:VAL:N	2.15	0.59
20:R:25:LEU:H	20:R:25:LEU:HD13	1.67	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:60:PRO:O	20:R:65:PRO:HG3	2.02	0.59
20:R:86:PRO:HD3	20:R:90:LYS:HD3	1.84	0.59
1:X:202:A:C2	1:X:203:G:H1'	2.38	0.59
1:X:431:G:H2'	1:X:432:C:H6	1.66	0.59
1:X:861:G:C2'	1:X:862:A:H5'	2.32	0.59
1:X:1279:G:OP1	26:Z:23:HIS:HE1	1.86	0.59
1:X:1281:A:H2'	1:X:1282:A:O4'	2.03	0.59
1:X:1372:A:C5	1:X:1373:G:N7	2.71	0.59
1:X:1685:A:H2'	1:X:1691:G:N7	2.18	0.59
1:X:1985:G:OP1	13:K:10:LEU:HD13	2.02	0.59
1:X:1994:U:O4	1:X:1995:G:C5	2.56	0.59
1:X:2194:A:C2'	1:X:2195:C:H5''	2.32	0.59
1:X:2691:C:O2'	1:X:2692:A:P	2.60	0.59
3:A:131:LEU:N	3:A:131:LEU:HD23	2.17	0.59
3:A:227:ASN:O	3:A:228:PRO:C	2.45	0.59
4:B:152:LYS:CB	9:G:106:TYR:HB3	2.25	0.59
10:H:2:ILE:HB	10:H:45:ALA:HB3	1.85	0.59
20:R:5:SER:O	20:R:6:ALA:HB3	2.02	0.59
20:R:10:HIS:O	20:R:11:ASN:CB	2.48	0.59
20:R:38:LEU:HB2	20:R:47:VAL:HG23	1.85	0.59
26:Z:44:HIS:N	26:Z:44:HIS:CD2	2.71	0.59
30:4:30:VAL:C	30:4:32:HIS:H	2.11	0.59
1:X:76:C:H6	1:X:76:C:C5'	2.16	0.58
1:X:225:G:C5	1:X:2410:U:H5'	2.38	0.58
1:X:1142:G:H1'	9:G:103:TYR:CD2	2.38	0.58
1:X:1542:G:N2	1:X:1562:G:N2	2.49	0.58
1:X:1971:C:O2'	1:X:1972:G:H5'	2.02	0.58
2:Y:15:A:C6	2:Y:72:C:H5'	2.38	0.58
3:A:39:LYS:HE3	3:A:40:THR:O	2.03	0.58
3:A:222:ARG:HH22	3:A:225:ALA:HB2	1.68	0.58
6:D:152:MET:HE3	6:D:154:ILE:HD11	1.84	0.58
12:J:34:GLY:C	12:J:119:PHE:HE1	2.10	0.58
12:J:97:VAL:O	12:J:97:VAL:HG23	2.02	0.58
13:K:43:GLU:O	13:K:46:PRO:HD2	2.03	0.58
14:L:33:ARG:HH12	14:L:103:LEU:N	2.01	0.58
14:L:107:ALA:C	14:L:109:GLU:H	2.11	0.58
16:N:17:VAL:CG1	16:N:39:LEU:HD12	2.33	0.58
17:O:21:ARG:HD2	17:O:21:ARG:H	1.68	0.58
20:R:52:ASN:OD1	20:R:71:GLN:HG2	2.03	0.58
20:R:85:ASP:CG	20:R:86:PRO:HD3	2.28	0.58
20:R:96:LYS:CG	20:R:97:GLN:N	2.64	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:4:29:ASN:OD1	30:4:30:VAL:N	2.36	0.58
1:X:469:G:O2'	1:X:470:U:OP2	2.20	0.58
1:X:541:C:H4'	1:X:542:A:C8	2.39	0.58
1:X:830:C:H2'	1:X:831:G:H8	1.67	0.58
1:X:1050:G:H2'	1:X:1051:U:C5'	2.33	0.58
1:X:1300:A:C2	1:X:1301:U:C2	2.90	0.58
1:X:1781:C:H2'	1:X:1782:A:C5	2.38	0.58
1:X:2015:G:N1	1:X:2551:A:C8	2.71	0.58
1:X:2200:G:H2'	1:X:2201:G:H8	1.68	0.58
1:X:2689:C:H2'	1:X:2690:A:C8	2.38	0.58
1:X:2849:C:H2'	1:X:2850:U:H5'	1.85	0.58
4:B:67:PHE:CZ	4:B:78:LEU:HD11	2.39	0.58
5:C:31:VAL:O	5:C:34:GLN:N	2.36	0.58
5:C:197:GLU:HG2	5:C:198:GLU:N	2.17	0.58
7:E:126:PRO:HG2	7:E:127:GLU:N	2.17	0.58
7:E:164:PHE:O	7:E:165:VAL:C	2.46	0.58
13:K:100:VAL:O	26:Z:44:HIS:HB3	2.03	0.58
19:Q:11:VAL:HB	19:Q:26:SER:O	2.03	0.58
20:R:84:VAL:HG22	20:R:90:LYS:HG2	1.86	0.58
20:R:90:LYS:CG	20:R:108:VAL:HG21	2.33	0.58
1:X:94:C:H2'	1:X:95:G:O4'	2.04	0.58
1:X:340:G:OP1	1:X:340:G:H3'	2.04	0.58
1:X:728:G:O2'	1:X:729:A:OP1	2.17	0.58
1:X:1003:C:O2'	17:O:71:ILE:HD11	2.03	0.58
1:X:1105:U:H3	1:X:1107:A:H5''	1.66	0.58
1:X:1250:A:O2'	1:X:1251:G:O4'	2.20	0.58
1:X:1292:A:H2'	1:X:1293:A:C5'	2.33	0.58
1:X:1782:A:H1'	3:A:208:LYS:CE	2.30	0.58
1:X:1921:A:O2'	1:X:1922:U:OP1	2.21	0.58
1:X:1978:U:H3'	1:X:1979:C:C5'	2.25	0.58
1:X:2226:A:H2'	1:X:2227:C:C6	2.39	0.58
1:X:2527:G:C6	1:X:2540:A:N1	2.72	0.58
1:X:2556:A:H5''	1:X:2557:G:H5'	1.85	0.58
9:G:39:GLN:HG3	9:G:39:GLN:O	2.03	0.58
14:L:33:ARG:HH22	14:L:103:LEU:N	2.01	0.58
17:O:12:TYR:O	17:O:13:ARG:CB	2.51	0.58
17:O:65:ARG:HG2	17:O:87:ARG:CD	2.30	0.58
21:S:6:LYS:O	21:S:31:SER:OG	2.15	0.58
21:S:25:ASN:OD1	21:S:27:GLU:N	2.34	0.58
22:T:40:GLN:OE1	22:T:45:PHE:N	2.28	0.58
23:U:27:ASP:CA	23:U:32:ARG:NH2	2.66	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:415:A:C2'	1:X:416:U:H5'	2.33	0.58
1:X:795:A:N1	3:A:226:MET:HE3	2.17	0.58
1:X:982:C:C2'	1:X:983:G:H5'	2.33	0.58
1:X:996:C:O5'	1:X:996:C:H6	1.86	0.58
1:X:1134:C:H2'	1:X:1135:C:H6	1.68	0.58
1:X:1424:U:H2'	1:X:1425:G:H8	1.68	0.58
1:X:1781:C:O2'	3:A:209:ALA:HB2	2.04	0.58
3:A:59:LYS:O	3:A:60:ARG:O	2.22	0.58
6:D:16:LEU:HD12	6:D:28:VAL:CG1	2.33	0.58
7:E:27:LYS:HG2	7:E:32:GLU:HB3	1.85	0.58
9:G:44:VAL:CG1	9:G:54:LEU:HD11	2.34	0.58
15:M:39:VAL:HG12	15:M:45:THR:CG2	2.33	0.58
16:N:66:ASN:HA	16:N:69:ALA:CB	2.34	0.58
19:Q:42:ILE:O	19:Q:43:GLN:C	2.47	0.58
20:R:93:ARG:NH1	20:R:108:VAL:O	2.36	0.58
20:R:93:ARG:CA	20:R:95:ARG:CZ	2.82	0.58
21:S:103:ARG:HD3	21:S:108:VAL:HG23	1.84	0.58
22:T:21:LEU:HD11	22:T:41:ARG:NE	2.17	0.58
1:X:341:A:O2'	1:X:342:G:OP1	2.22	0.58
1:X:427:C:O2	1:X:1856:U:C4'	2.51	0.58
1:X:988:G:N3	1:X:1012:A:H2	2.02	0.58
1:X:1018:C:C4	1:X:1019:U:C5	2.90	0.58
1:X:1075:C:C5'	8:F:87:GLY:CA	2.77	0.58
1:X:1770:U:C2	1:X:1774:A:N7	2.72	0.58
1:X:1807:A:P	1:X:1814:G:H4'	2.44	0.58
1:X:1939:U:H1'	1:X:2531:U:OP1	2.04	0.58
1:X:2247:A:H5'	1:X:2248:A:OP2	2.03	0.58
1:X:2681:A:O2'	1:X:2682:C:H5'	2.04	0.58
3:A:126:LYS:O	3:A:193:ILE:HB	2.03	0.58
4:B:97:ALA:O	4:B:100:GLU:HG3	2.04	0.58
7:E:44:ARG:HH22	7:E:46:ASP:CB	2.17	0.58
10:H:2:ILE:HD12	10:H:8:LEU:HD21	1.86	0.58
10:H:23:ARG:NH2	10:H:23:ARG:CB	2.51	0.58
19:Q:43:GLN:OE1	19:Q:49:ARG:HA	2.04	0.58
20:R:25:LEU:O	20:R:26:SER:O	2.20	0.58
20:R:52:ASN:ND2	20:R:71:GLN:NE2	2.51	0.58
20:R:54:ILE:HD13	20:R:71:GLN:HA	1.83	0.58
23:U:21:ARG:HA	23:U:40:ARG:H	1.67	0.58
23:U:33:LYS:O	23:U:34:THR:HB	2.03	0.58
1:X:236:C:H2'	1:X:237:G:H8	1.69	0.58
1:X:584:A:C2	1:X:585:U:C5	2.90	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:698:A:H5''	1:X:699:G:OP1	2.03	0.58
1:X:1301:U:H5''	1:X:1302:C:OP2	2.02	0.58
1:X:1472:C:C3'	1:X:1473:U:H6	2.16	0.58
1:X:1737:G:O2'	1:X:1738:U:H5'	2.03	0.58
1:X:2171:U:H4'	1:X:2171:U:OP1	2.03	0.58
1:X:2190:A:C8	1:X:2190:A:H3'	2.39	0.58
2:Y:75:A:C2	2:Y:76:U:H1'	2.38	0.58
3:A:53:PHE:HD1	3:A:217:ARG:HH21	1.50	0.58
4:B:59:VAL:CG1	4:B:64:GLN:HG3	2.34	0.58
4:B:101:LYS:HA	4:B:170:LEU:O	2.04	0.58
11:I:73:GLU:HG2	11:I:101:ARG:HB2	1.84	0.58
20:R:100:ASP:C	20:R:102:LYS:H	2.12	0.58
21:S:49:THR:HG22	21:S:94:VAL:HG11	1.85	0.58
1:X:140:G:H2'	1:X:141:G:H8	1.69	0.58
1:X:677:G:O2'	1:X:678:G:H5'	2.03	0.58
1:X:1069:G:O2'	8:F:116:ASN:OD1	2.12	0.58
1:X:1275:A:N3	26:Z:10:LYS:HE2	2.18	0.58
1:X:1782:A:N6	1:X:1820:G:O2'	2.37	0.58
1:X:2691:C:H5''	1:X:2694:G:H5''	1.86	0.58
4:B:19:ARG:HG3	4:B:19:ARG:O	2.04	0.58
5:C:67:ALA:O	5:C:68:ARG:CB	2.51	0.58
5:C:150:LEU:HA	5:C:187:VAL:HB	1.84	0.58
7:E:39:THR:C	7:E:41:LEU:H	2.10	0.58
9:G:169:GLN:HE21	9:G:170:PRO:C	2.11	0.58
10:H:116:ARG:HD2	15:M:38:LYS:CE	2.24	0.58
11:I:7:LYS:HD3	11:I:7:LYS:N	2.19	0.58
12:J:15:ARG:CD	12:J:73:LYS:HG3	2.28	0.58
15:M:27:PHE:C	15:M:28:ARG:HG2	2.27	0.58
19:Q:27:PHE:N	19:Q:27:PHE:CD1	2.71	0.58
21:S:92:VAL:C	21:S:93:GLU:HG3	2.28	0.58
22:T:46:LYS:HD2	22:T:76:ALA:HB1	1.85	0.58
23:U:78:ILE:HD13	23:U:79:GLU:H	1.68	0.58
1:X:17:G:H2'	1:X:18:U:H6	1.66	0.58
1:X:66:U:H1'	1:X:87:G:N2	2.19	0.58
1:X:424:G:H4'	1:X:425:A:O5'	2.03	0.58
1:X:1053:G:C4	1:X:1054:C:C6	2.92	0.58
1:X:1522:C:H2'	1:X:1523:A:H4'	1.85	0.58
1:X:1562:G:H5''	1:X:1563:U:H5'	1.85	0.58
1:X:2356:A:H1'	14:L:89:PHE:CZ	2.38	0.58
1:X:2594:U:O2	1:X:2595:C:C6	2.57	0.58
1:X:2850:U:H5'	1:X:2850:U:C6	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:34:C:H2'	2:Y:35:C:C6	2.39	0.58
2:Y:92:G:H22	12:J:39:GLU:HG2	1.68	0.58
6:D:92:ARG:C	6:D:96:MET:HB2	2.29	0.58
10:H:2:ILE:CD1	10:H:8:LEU:HD21	2.33	0.58
12:J:78:LYS:HE2	12:J:80:ALA:O	2.04	0.58
21:S:148:THR:HB	21:S:164:PRO:O	2.03	0.58
22:T:32:LYS:O	22:T:61:ALA:HB3	2.03	0.58
22:T:44:LYS:HE3	22:T:45:PHE:HE1	1.69	0.58
26:Z:45:ILE:HD13	26:Z:57:VAL:HG22	1.85	0.58
1:X:1033:G:N2	1:X:1035:G:C2	2.72	0.58
1:X:1933:G:N7	1:X:1934:U:C5	2.72	0.58
1:X:2011:U:H2'	1:X:2012:A:C8	2.39	0.58
1:X:2063:A:C2	1:X:2064:U:C2	2.92	0.58
1:X:2544:A:H2'	1:X:2545:A:H1'	1.86	0.58
1:X:2576:G:C6	1:X:2577:A:C6	2.92	0.58
1:X:2695:C:H3'	1:X:2695:C:H6	1.69	0.58
3:A:117:VAL:HG22	3:A:128:GLY:HA3	1.84	0.58
9:G:84:ASN:O	9:G:85:ALA:HB3	2.04	0.58
11:I:32:ARG:NH2	17:O:81:ARG:NE	2.51	0.58
11:I:130:ILE:O	11:I:132:ALA:N	2.37	0.58
16:N:40:LEU:HB3	17:O:74:TYR:CE2	2.39	0.58
16:N:81:ASN:HD21	16:N:85:ARG:HE	1.51	0.58
18:P:52:ASP:O	18:P:53:ALA:C	2.46	0.58
19:Q:13:SER:HG	19:Q:16:ALA:HB3	1.68	0.58
20:R:84:VAL:CA	20:R:90:LYS:HE2	2.33	0.58
21:S:100:THR:HG22	21:S:101:THR:N	2.19	0.58
24:V:42:ARG:NH1	24:V:45:GLN:OE1	2.37	0.58
26:Z:3:LYS:O	26:Z:4:HIS:C	2.47	0.58
1:X:609:U:C4'	11:I:18:ARG:CZ	2.82	0.58
1:X:787:A:H5''	3:A:48:ARG:HH22	1.69	0.58
1:X:805:G:N7	1:X:2419:C:H1'	2.18	0.58
1:X:1404:C:N4	1:X:1407:G:C8	2.72	0.58
1:X:1557:G:O2'	1:X:1558:C:H5'	2.04	0.58
1:X:1979:C:H6	1:X:1979:C:OP1	1.87	0.58
1:X:2205:C:H2'	1:X:2206:C:C5'	2.34	0.58
1:X:2837:G:O2'	1:X:2838:U:H5'	2.03	0.58
6:D:15:ALA:HA	6:D:18:GLN:HB2	1.85	0.58
6:D:75:SER:CB	6:D:79:LEU:HD22	2.34	0.58
10:H:46:HIS:O	10:H:47:VAL:C	2.46	0.58
12:J:121:LEU:O	12:J:124:HIS:N	2.37	0.58
19:Q:6:ILE:HG22	19:Q:7:LEU:N	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:62:ARG:NH1	19:Q:73:ASN:ND2	2.52	0.58
1:X:310:A:H61	5:C:162:ARG:NH2	1.96	0.57
1:X:540:G:O6	1:X:2006:G:OP1	2.22	0.57
1:X:558:G:P	1:X:558:G:O4'	2.62	0.57
1:X:617:U:C5	1:X:632:A:C2	2.92	0.57
1:X:729:A:H3'	1:X:729:A:C4	2.38	0.57
1:X:754:G:C6	1:X:755:C:N4	2.72	0.57
1:X:953:G:H1'	1:X:1203:A:C2	2.38	0.57
1:X:1071:U:H1'	1:X:1073:G:H5''	1.87	0.57
1:X:1242:A:O2'	1:X:1243:G:H5'	2.03	0.57
1:X:1432:G:H2'	1:X:1594:U:O4	2.03	0.57
1:X:2195:C:C2'	1:X:2196:U:O4'	2.52	0.57
1:X:2551:A:N7	4:B:144:ARG:HD3	2.18	0.57
1:X:2596:C:O2'	1:X:2597:G:H5'	2.04	0.57
1:X:2678:C:O2'	1:X:2679:G:H5'	2.04	0.57
1:X:2764:U:H2'	1:X:2765:C:H6	1.69	0.57
2:Y:30:C:H2'	2:Y:31:A:C8	2.38	0.57
4:B:116:VAL:CG1	4:B:136:ARG:HH21	2.04	0.57
5:C:195:ILE:O	5:C:195:ILE:HG13	2.03	0.57
12:J:15:ARG:HG3	12:J:15:ARG:HH11	1.69	0.57
15:M:105:TYR:C	15:M:107:LEU:N	2.61	0.57
16:N:47:TYR:CE2	16:N:51:ARG:HD3	2.38	0.57
17:O:26:GLN:HA	17:O:63:HIS:NE2	2.18	0.57
17:O:61:VAL:HG23	17:O:93:ILE:HA	1.86	0.57
21:S:22:VAL:HA	21:S:32:PHE:HD1	1.68	0.57
21:S:23:ALA:CB	21:S:83:PHE:HB2	2.31	0.57
23:U:50:ALA:HB3	23:U:52:ARG:HH22	1.69	0.57
24:V:42:ARG:NH1	24:V:45:GLN:HE22	2.02	0.57
1:X:150:A:H3'	1:X:151:G:H8	1.69	0.57
1:X:458:G:P	16:N:3:ARG:HD3	2.44	0.57
1:X:628:A:OP2	1:X:628:A:H8	1.86	0.57
1:X:698:A:C2	1:X:702:A:C6	2.91	0.57
1:X:2011:U:H2'	1:X:2012:A:H8	1.68	0.57
1:X:2326:C:C2	1:X:2327:U:C5	2.92	0.57
3:A:154:GLN:O	3:A:155:LEU:HD23	2.04	0.57
5:C:189:ASP:OD1	5:C:190:ALA:N	2.37	0.57
6:D:70:ALA:C	6:D:72:LYS:H	2.13	0.57
6:D:108:LEU:HD11	6:D:117:ILE:HD11	1.86	0.57
9:G:61:ARG:HH22	9:G:78:ASP:HB2	1.68	0.57
9:G:142:ARG:C	9:G:144:MET:N	2.61	0.57
12:J:44:LYS:HD3	12:J:47:GLN:NE2	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J:113:GLU:C	12:J:115:ALA:N	2.62	0.57
12:J:128:ILE:HD12	12:J:128:ILE:C	2.29	0.57
13:K:16:ALA:O	13:K:19:ALA:N	2.36	0.57
25:W:38:PRO:CD	25:W:41:ARG:HE	2.17	0.57
1:X:554:U:H5''	1:X:556:A:C2	2.39	0.57
1:X:664:C:H5'	1:X:664:C:H6	1.69	0.57
1:X:769:C:H2'	1:X:770:U:H5'	1.87	0.57
1:X:986:A:H2'	1:X:987:G:H5'	1.85	0.57
1:X:1006:C:N3	9:G:31:THR:OG1	2.31	0.57
1:X:1231:A:C4	1:X:1232:U:C5	2.91	0.57
1:X:1391:A:H1'	1:X:1392:U:C2	2.39	0.57
7:E:18:ASN:O	7:E:20:GLN:N	2.37	0.57
7:E:65:HIS:C	7:E:67:LEU:H	2.11	0.57
11:I:54:SER:O	11:I:59:ARG:NH2	2.37	0.57
12:J:69:ILE:O	12:J:70:PHE:O	2.22	0.57
12:J:80:ALA:HB1	12:J:81:GLU:OE1	2.04	0.57
15:M:105:TYR:O	15:M:107:LEU:N	2.37	0.57
16:N:24:PHE:HB2	16:N:29:SER:HB3	1.86	0.57
18:P:80:LEU:O	18:P:84:GLU:N	2.36	0.57
20:R:59:LYS:HD3	20:R:62:MET:HG3	1.86	0.57
21:S:64:ALA:CB	21:S:85:MET:HA	2.33	0.57
23:U:10:LYS:NZ	23:U:77:GLY:HA3	2.18	0.57
1:X:176:A:H2'	1:X:177:U:H5	1.69	0.57
1:X:417:C:C6	1:X:419:G:C8	2.93	0.57
1:X:510:G:N2	1:X:512:A:H3'	2.19	0.57
1:X:863:C:H4'	25:W:18:LYS:HB2	1.86	0.57
1:X:1033:G:N2	1:X:1035:G:N2	2.51	0.57
1:X:1252:C:C2'	1:X:1253:C:H5''	2.34	0.57
1:X:1314:A:H2'	1:X:1315:A:H3'	1.84	0.57
1:X:2053:G:N2	1:X:2054:A:N3	2.53	0.57
1:X:2284:U:H2'	1:X:2285:U:H5''	1.85	0.57
5:C:189:ASP:O	5:C:190:ALA:C	2.47	0.57
6:D:16:LEU:O	6:D:20:PHE:CD1	2.57	0.57
6:D:33:LYS:HD2	6:D:90:THR:CG2	2.34	0.57
6:D:92:ARG:HA	6:D:96:MET:HB2	1.87	0.57
7:E:43:VAL:HG23	7:E:51:LEU:O	2.04	0.57
7:E:71:LEU:O	7:E:74:ASN:HB2	2.04	0.57
9:G:106:TYR:O	9:G:110:LEU:CD1	2.53	0.57
9:G:122:HIS:O	9:G:123:PRO:C	2.45	0.57
14:L:27:LEU:HD13	14:L:51:LEU:HD22	1.87	0.57
16:N:22:LYS:O	16:N:24:PHE:N	2.36	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:82:G:C2	1:X:100:G:H2'	2.40	0.57
1:X:449:C:H2'	1:X:450:C:H6	1.69	0.57
1:X:620:G:O2'	1:X:621:U:H5'	2.02	0.57
1:X:759:C:H6	1:X:759:C:H5'	1.70	0.57
1:X:796:A:H2'	1:X:797:A:O3'	2.04	0.57
1:X:957:G:H2'	1:X:958:G:H8	1.69	0.57
1:X:999:A:H5''	25:W:8:SER:HB2	1.87	0.57
1:X:1391:A:O2'	1:X:1392:U:O5'	2.22	0.57
1:X:1459:U:H4'	1:X:1460:G:OP1	2.04	0.57
1:X:1525:A:C5	1:X:1526:U:H1'	2.38	0.57
1:X:1561:A:H2'	1:X:1562:G:O4'	2.04	0.57
1:X:1608:U:H2'	1:X:1609:G:C8	2.36	0.57
1:X:1626:A:C5'	1:X:1627:C:OP2	2.50	0.57
1:X:1831:G:C5	1:X:1832:G:N7	2.73	0.57
1:X:1996:A:OP1	18:P:118:LYS:HE3	2.04	0.57
1:X:2014:A:H1'	1:X:2434:G:O2'	2.04	0.57
1:X:2292:C:O2'	1:X:2293:G:H5'	2.04	0.57
1:X:2299:A:H2'	1:X:2299:A:N3	2.19	0.57
1:X:2323:U:O2'	1:X:2324:G:H5'	2.05	0.57
1:X:2720:A:C6	1:X:2744:A:C8	2.93	0.57
5:C:151:VAL:CG1	5:C:173:ALA:HA	2.34	0.57
6:D:70:ALA:HB3	6:D:83:MET:N	2.14	0.57
7:E:38:ASN:CB	7:E:41:LEU:HB2	2.33	0.57
7:E:44:ARG:HG3	7:E:44:ARG:NH2	2.20	0.57
10:H:117:GLU:HA	10:H:120:ASP:OD2	2.04	0.57
11:I:13:ARG:NH2	11:I:13:ARG:H	2.02	0.57
11:I:56:LEU:O	11:I:57:ILE:C	2.47	0.57
12:J:15:ARG:HD3	12:J:73:LYS:NZ	2.18	0.57
12:J:20:GLY:O	12:J:99:LYS:HG2	2.05	0.57
12:J:128:ILE:HD12	12:J:128:ILE:O	2.04	0.57
19:Q:11:VAL:HG23	19:Q:27:PHE:CA	2.35	0.57
1:X:176:A:H2'	1:X:177:U:C5	2.40	0.57
1:X:467:U:O2	1:X:467:U:H2'	2.04	0.57
1:X:504:G:H4'	18:P:27:VAL:CG1	2.34	0.57
1:X:618:A:C4	1:X:632:A:N6	2.73	0.57
1:X:760:U:O3'	18:P:110:ALA:CB	2.52	0.57
1:X:871:U:OP1	22:T:44:LYS:NZ	2.35	0.57
1:X:1188:A:H3'	1:X:1189:G:C8	2.40	0.57
1:X:1206:G:O2'	1:X:1207:G:H5'	2.04	0.57
1:X:2319:G:H2'	1:X:2320:G:H8	1.67	0.57
1:X:2356:A:O2'	14:L:89:PHE:HZ	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2475:C:C2'	1:X:2476:A:H5'	2.33	0.57
1:X:2532:G:C6	1:X:2533:U:C2	2.93	0.57
1:X:2753:C:O2'	1:X:2754:C:H5'	2.04	0.57
4:B:67:PHE:CD2	4:B:74:PRO:HA	2.40	0.57
4:B:183:LEU:HD21	15:M:16:ILE:HD13	1.86	0.57
5:C:126:ALA:O	5:C:127:ASP:HB2	2.03	0.57
7:E:28:GLY:HA3	7:E:79:VAL:CG2	2.35	0.57
9:G:42:VAL:HG13	9:G:166:LEU:O	2.04	0.57
12:J:62:GLY:C	12:J:64:LYS:H	2.12	0.57
19:Q:6:ILE:O	19:Q:7:LEU:C	2.48	0.57
20:R:85:ASP:H	20:R:90:LYS:HD3	1.69	0.57
24:V:35:GLY:O	24:V:36:GLN:CB	2.51	0.57
1:X:192:G:O4'	1:X:193:A:H4'	2.05	0.57
1:X:446:C:H2'	1:X:447:U:O4'	2.04	0.57
1:X:497:C:C6	1:X:497:C:H3'	2.40	0.57
1:X:765:C:C5	1:X:1772:C:C2	2.93	0.57
1:X:1060:C:H2'	1:X:1061:A:C8	2.40	0.57
1:X:1289:A:C2	1:X:1290:A:C8	2.93	0.57
1:X:1350:G:H2'	1:X:1351:G:H8	1.69	0.57
1:X:1422:C:O2'	1:X:1423:A:H5'	2.04	0.57
1:X:1468:A:C5'	1:X:1472:C:N4	2.64	0.57
1:X:1675:C:OP1	4:B:134:TRP:CE2	2.58	0.57
1:X:1686:A:H5''	1:X:1687:C:OP2	2.04	0.57
1:X:1811:A:H5''	3:A:161:THR:CG2	2.34	0.57
2:Y:80:A:H2'	2:Y:81:C:O4'	2.04	0.57
5:C:48:ARG:C	5:C:50:GLN:N	2.60	0.57
5:C:61:GLN:HA	5:C:61:GLN:HE21	1.69	0.57
5:C:139:GLN:CA	5:C:139:GLN:HE21	2.16	0.57
9:G:33:ILE:CB	9:G:34:PRO:CD	2.75	0.57
11:I:123:ASP:OD1	11:I:123:ASP:O	2.22	0.57
16:N:82:GLY:HA3	16:N:113:SER:HG	1.70	0.57
20:R:97:GLN:HB2	20:R:101:GLY:HA2	1.86	0.57
21:S:6:LYS:N	21:S:7:PRO:HD3	2.18	0.57
1:X:546:A:H2'	1:X:547:U:C6	2.40	0.57
1:X:807:A:H2'	1:X:808:C:C6	2.39	0.57
1:X:1056:U:C2'	1:X:1057:A:OP2	2.53	0.57
1:X:1418:C:H2'	1:X:1419:G:C8	2.40	0.57
1:X:1724:C:N3	1:X:1747:G:C6	2.72	0.57
1:X:1808:C:C5	3:A:62:TYR:CE2	2.93	0.57
1:X:1868:A:H2'	1:X:1869:A:O4'	2.04	0.57
1:X:2424:G:OP1	5:C:68:ARG:NH2	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2609:G:H2'	1:X:2610:G:H8	1.70	0.57
5:C:138:LYS:O	5:C:140:ASN:N	2.37	0.57
9:G:90:LEU:HD23	9:G:93:LYS:O	2.04	0.57
10:H:7:ARG:HH11	10:H:20:MET:HE3	1.69	0.57
10:H:8:LEU:HD22	10:H:94:ASN:HB3	1.87	0.57
10:H:13:ASN:C	10:H:15:GLY:N	2.62	0.57
12:J:95:VAL:HG12	12:J:96:SER:N	2.18	0.57
13:K:49:GLU:OE1	13:K:95:THR:CG2	2.52	0.57
14:L:101:LYS:HE2	14:L:105:ASP:OD2	2.04	0.57
16:N:75:ASN:OD1	16:N:78:THR:HB	2.05	0.57
17:O:14:VAL:O	17:O:15:SER:HB2	2.04	0.57
18:P:50:VAL:HB	18:P:90:LEU:O	2.05	0.57
24:V:28:LEU:O	24:V:31:GLN:HB2	2.05	0.57
25:W:31:SER:O	25:W:32:ARG:HB3	2.03	0.57
1:X:28:A:C2	1:X:523:A:C1'	2.87	0.57
1:X:28:A:C2	1:X:523:A:H1'	2.40	0.57
1:X:1514:C:C4'	1:X:1593:C:H5'	2.35	0.57
1:X:1972:G:H2'	1:X:1973:C:H6	1.70	0.57
1:X:2335:U:P	22:T:24:LYS:HZ2	2.28	0.57
1:X:2448:A:H61	1:X:2460:G:H1'	1.70	0.57
1:X:2551:A:N7	4:B:145:LYS:HB2	2.19	0.57
3:A:70:ARG:NH2	3:A:189:CYS:SG	2.78	0.57
5:C:82:VAL:O	5:C:83:ALA:C	2.47	0.57
6:D:63:GLN:HE21	6:D:95:ARG:HD2	1.68	0.57
7:E:59:GLN:C	7:E:61:HIS:N	2.59	0.57
9:G:65:LYS:C	9:G:67:ARG:H	2.12	0.57
9:G:83:ILE:HG13	9:G:84:ASN:ND2	2.19	0.57
11:I:86:THR:HG1	11:I:118:VAL:HG12	1.69	0.57
12:J:79:PRO:O	12:J:80:ALA:HB3	2.03	0.57
14:L:10:LYS:C	14:L:14:ARG:HG3	2.30	0.57
16:N:17:VAL:HG12	16:N:39:LEU:HD12	1.87	0.57
16:N:33:ARG:HG3	16:N:33:ARG:NH1	2.14	0.57
17:O:57:GLN:H	17:O:97:GLY:HA3	1.70	0.57
18:P:44:VAL:HG21	18:P:60:ILE:HD11	1.86	0.57
1:X:192:G:C1'	1:X:193:A:H4'	2.35	0.57
1:X:572:G:N3	16:N:37:GLN:NE2	2.52	0.57
1:X:1004:A:H2	17:O:21:ARG:HH21	1.53	0.57
1:X:1235:C:H2'	1:X:1236:G:C8	2.40	0.57
1:X:1339:U:H5''	1:X:1994:U:C1'	2.35	0.57
1:X:1477:C:O2'	1:X:2681:A:H1'	2.05	0.57
1:X:1482:U:OP2	1:X:1562:G:O2'	2.23	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1570:C:H5'	1:X:1571:G:OP2	2.05	0.57
1:X:2387:U:H2'	1:X:2388:G:H8	1.69	0.57
1:X:2698:G:H2'	1:X:2699:G:C8	2.40	0.57
1:X:2792:C:H2'	1:X:2793:G:O5'	2.05	0.57
4:B:147:PRO:C	4:B:149:ARG:H	2.12	0.57
5:C:104:LEU:N	5:C:177:VAL:HG22	2.20	0.57
5:C:112:GLN:HA	5:C:116:LYS:CB	2.32	0.57
5:C:112:GLN:HA	5:C:116:LYS:CG	2.34	0.57
5:C:191:ALA:O	5:C:194:GLU:C	2.48	0.57
9:G:108:GLY:N	9:G:110:LEU:HG	2.19	0.57
11:I:71:THR:HG21	11:I:104:ARG:NH2	2.20	0.57
12:J:76:THR:HG22	12:J:89:GLY:O	2.05	0.57
21:S:122:ILE:HA	21:S:161:ALA:H	1.69	0.57
24:V:14:PHE:CD2	24:V:57:LYS:HB2	2.40	0.57
25:W:16:GLN:HG2	25:W:47:VAL:HG12	1.85	0.57
1:X:192:G:H4'	1:X:193:A:H4'	1.86	0.56
1:X:458:G:OP1	16:N:3:ARG:HD3	2.05	0.56
1:X:615:C:H41	11:I:100:ARG:NH1	2.02	0.56
1:X:678:G:H4'	11:I:50:GLU:OE1	2.05	0.56
1:X:1345:G:N7	1:X:1625:A:H2'	2.20	0.56
1:X:2042:A:O3'	5:C:63:GLY:HA2	2.05	0.56
1:X:2665:G:C2	1:X:2704:U:O2	2.58	0.56
1:X:2714:A:H2'	1:X:2715:C:H6	1.68	0.56
6:D:34:ILE:O	6:D:91:LEU:HB2	2.05	0.56
6:D:69:LYS:HG2	6:D:84:PRO:HA	1.87	0.56
6:D:93:GLY:O	6:D:96:MET:HB3	2.05	0.56
9:G:169:GLN:HE21	9:G:171:LEU:N	2.03	0.56
10:H:13:ASN:ND2	10:H:108:THR:OG1	2.38	0.56
12:J:28:VAL:CB	12:J:137:VAL:HB	2.27	0.56
14:L:29:LEU:HD13	14:L:75:LEU:HD21	1.87	0.56
18:P:67:PRO:C	18:P:69:ALA:H	2.13	0.56
20:R:25:LEU:HG	20:R:81:VAL:CG2	2.35	0.56
21:S:93:GLU:HA	21:S:125:PRO:HD3	1.86	0.56
24:V:2:LYS:HG3	24:V:3:PRO:HD3	1.87	0.56
1:X:1332:G:C5	1:X:1333:G:C6	2.93	0.56
1:X:1371:G:O5'	1:X:1371:G:H8	1.88	0.56
1:X:1556:A:H2'	1:X:1557:G:H8	1.69	0.56
1:X:2302:G:H21	1:X:2316:G:H5'	1.69	0.56
1:X:2473:G:O2'	12:J:81:GLU:HB2	2.05	0.56
1:X:2699:G:O2'	1:X:2700:U:C5'	2.53	0.56
1:X:2851:G:OP1	15:M:8:ASN:HA	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:72:LYS:HA	6:D:81:GLN:CA	2.35	0.56
6:D:170:LEU:HB3	6:D:175:LEU:HD23	1.87	0.56
10:H:70:VAL:CG2	10:H:71:LYS:N	2.67	0.56
10:H:132:GLU:HG3	10:H:133:VAL:H	1.70	0.56
12:J:79:PRO:O	12:J:80:ALA:CB	2.54	0.56
14:L:75:LEU:O	14:L:78:ALA:N	2.37	0.56
15:M:94:VAL:O	15:M:95:GLU:HB3	2.04	0.56
16:N:93:LYS:NZ	17:O:10:LYS:HZ3	2.03	0.56
20:R:34:GLY:O	20:R:48:VAL:HG13	2.05	0.56
22:T:37:LEU:O	22:T:38:VAL:CG2	2.53	0.56
1:X:75:C:H2'	1:X:76:C:C5'	2.28	0.56
1:X:333:A:C2'	1:X:350:U:O2	2.52	0.56
1:X:706:A:H2'	1:X:707:U:H6	1.71	0.56
1:X:729:A:C2'	1:X:730:C:C4'	2.83	0.56
1:X:752:G:C4'	1:X:753:U:OP1	2.49	0.56
1:X:815:A:H2'	1:X:816:U:C6	2.39	0.56
1:X:886:A:C1'	12:J:30:PHE:HE1	2.06	0.56
1:X:1094:C:O5'	1:X:1094:C:H6	1.89	0.56
1:X:1223:G:H5''	1:X:1224:A:H5''	1.85	0.56
1:X:1256:C:O2'	1:X:1257:U:H5'	2.05	0.56
1:X:1629:G:C4	1:X:1633:C:C4	2.93	0.56
1:X:1747:G:H4'	1:X:1749:G:C1'	2.33	0.56
1:X:1941:C:O2'	1:X:1942:G:H5'	2.06	0.56
1:X:2071:G:O2'	1:X:2072:C:H5'	2.06	0.56
1:X:2282:G:H4'	6:D:122:PHE:HA	1.86	0.56
1:X:2431:C:C4	1:X:2432:A:C6	2.94	0.56
1:X:2604:G:H2'	1:X:2605:C:O4'	2.05	0.56
1:X:2702:G:C6	1:X:2703:C:N3	2.73	0.56
1:X:2799:C:C4	1:X:2800:C:N3	2.74	0.56
2:Y:4:C:C6	2:Y:4:C:C3'	2.88	0.56
2:Y:16:U:H1'	2:Y:109:G:N2	2.17	0.56
3:A:198:ASN:O	3:A:199:ALA:HB3	2.06	0.56
3:A:221:GLN:O	3:A:222:ARG:C	2.48	0.56
4:B:76:ARG:NH1	15:M:4:HIS:HB2	2.21	0.56
5:C:46:ARG:O	5:C:47:THR:C	2.47	0.56
5:C:165:SER:HB3	5:C:166:TRP:CE3	2.40	0.56
5:C:166:TRP:HE3	5:C:166:TRP:H	1.49	0.56
5:C:180:ILE:HG23	5:C:181:LEU:N	2.20	0.56
6:D:30:ARG:HB2	6:D:159:THR:CG2	2.35	0.56
6:D:151:GLY:O	6:D:152:MET:HB3	2.05	0.56
7:E:11:VAL:HG21	7:E:50:LEU:HB2	1.86	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:140:LEU:HA	7:E:143:GLN:HB2	1.86	0.56
9:G:106:TYR:O	9:G:108:GLY:N	2.38	0.56
10:H:132:GLU:HG3	10:H:133:VAL:N	2.19	0.56
11:I:28:LYS:NZ	11:I:36:GLY:HA2	2.20	0.56
11:I:108:LEU:HD23	11:I:129:ALA:HB1	1.86	0.56
12:J:15:ARG:HD3	12:J:73:LYS:HZ3	1.71	0.56
12:J:69:ILE:O	12:J:70:PHE:C	2.48	0.56
12:J:137:VAL:O	12:J:138:TYR:CD1	2.58	0.56
16:N:36:PHE:O	16:N:39:LEU:HB2	2.04	0.56
16:N:93:LYS:HD2	17:O:10:LYS:NZ	2.21	0.56
17:O:78:VAL:HG13	17:O:78:VAL:O	2.05	0.56
20:R:38:LEU:HB2	20:R:47:VAL:HB	1.88	0.56
23:U:11:LYS:NZ	23:U:75:TYR:HD1	1.99	0.56
1:X:553:C:H2'	1:X:557:U:C5	2.41	0.56
1:X:876:A:OP2	12:J:23:LYS:HD3	2.05	0.56
1:X:1467:U:C4	1:X:1473:U:N3	2.58	0.56
1:X:1917:C:H2'	1:X:1918:G:H5'	1.86	0.56
1:X:1933:G:C8	1:X:1934:U:C5	2.91	0.56
1:X:2081:U:H2'	1:X:2082:C:H6	1.70	0.56
1:X:2229:G:H5'	12:J:84:MET:HG2	1.87	0.56
1:X:2324:G:C4	1:X:2326:C:C5	2.94	0.56
1:X:2873:G:N2	9:G:162:LYS:NZ	2.54	0.56
4:B:149:ARG:HH12	9:G:106:TYR:HD1	1.53	0.56
5:C:162:ARG:HG2	5:C:162:ARG:O	2.05	0.56
5:C:169:VAL:HG12	5:C:170:LEU:N	2.20	0.56
8:F:20:ALA:HB3	8:F:21:PRO:HD3	1.86	0.56
9:G:67:ARG:O	9:G:70:PHE:CE1	2.58	0.56
10:H:13:ASN:HD22	10:H:109:ARG:HG2	1.67	0.56
14:L:43:ILE:HD12	14:L:43:ILE:N	2.20	0.56
19:Q:4:TYR:CD2	24:V:23:LYS:HB2	2.40	0.56
30:4:10:MET:N	30:4:14:CYS:SG	2.72	0.56
1:X:1:G:H2'	1:X:2:G:H8	1.70	0.56
1:X:242:A:H61	1:X:440:U:H2'	1.70	0.56
1:X:810:U:C5	1:X:811:G:N7	2.73	0.56
1:X:818:G:O2'	1:X:844:G:O2'	2.24	0.56
1:X:938:G:H2'	1:X:940:G:C8	2.41	0.56
1:X:953:G:H8	1:X:953:G:O5'	1.88	0.56
1:X:1223:G:H5'	1:X:1225:G:O4'	2.06	0.56
1:X:1681:A:H61	1:X:1979:C:N4	1.98	0.56
1:X:1710:U:H5'	1:X:1711:C:H5	1.71	0.56
1:X:1835:C:O2'	3:A:254:THR:OG1	2.15	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1951:G:O2'	1:X:1952:A:O4'	2.19	0.56
1:X:1981:A:O2'	1:X:2704:U:O2'	2.23	0.56
1:X:2000:U:O2'	1:X:2002:A:OP2	2.22	0.56
1:X:2194:A:H3'	1:X:2195:C:C5'	2.22	0.56
1:X:2331:A:H2	22:T:33:ALA:HB1	1.70	0.56
1:X:2392:G:H2'	1:X:2393:G:O4'	2.04	0.56
1:X:2426:G:H4'	1:X:2427:A:O5'	2.06	0.56
1:X:2610:G:N3	1:X:2785:A:H2	2.03	0.56
1:X:2736:U:O5'	30:4:19:ARG:HG2	2.06	0.56
5:C:122:GLY:O	5:C:124:ASP:N	2.38	0.56
7:E:22:GLY:O	7:E:24:PHE:HD1	1.89	0.56
9:G:73:ASN:O	9:G:140:GLN:OE1	2.23	0.56
13:K:10:LEU:HD23	13:K:17:ARG:CG	2.35	0.56
15:M:5:ILE:CD1	15:M:7:ILE:HB	2.35	0.56
17:O:54:TYR:CD1	17:O:54:TYR:N	2.73	0.56
17:O:90:PHE:CD1	17:O:90:PHE:C	2.83	0.56
23:U:27:ASP:N	23:U:32:ARG:HH21	2.01	0.56
1:X:46:C:O2'	1:X:47:G:H5'	2.06	0.56
1:X:143:A:H2'	1:X:144:U:H6	1.68	0.56
1:X:155:G:H2'	1:X:156:G:C5'	2.36	0.56
1:X:467:U:O2'	1:X:468:A:OP1	2.24	0.56
1:X:689:A:C2	1:X:815:A:N6	2.71	0.56
1:X:1099:A:N6	8:F:133:SER:HB3	2.20	0.56
1:X:1221:C:H2'	1:X:1222:G:C8	2.41	0.56
1:X:1764:A:H2'	1:X:1765:C:H5'	1.86	0.56
1:X:1845:A:C2'	1:X:1846:A:O5'	2.53	0.56
1:X:1856:U:H3	1:X:1861:G:H1	1.54	0.56
1:X:1913:G:H5''	1:X:1914:U:OP1	2.05	0.56
1:X:1953:A:C5'	1:X:1954:A:OP1	2.53	0.56
5:C:109:ALA:O	5:C:110:SER:C	2.49	0.56
9:G:36:ASN:C	9:G:38:GLU:H	2.09	0.56
11:I:105:PRO:O	11:I:106:VAL:HG23	2.05	0.56
16:N:61:TRP:CZ3	16:N:93:LYS:HA	2.40	0.56
18:P:109:ARG:HD3	18:P:115:ASN:ND2	2.20	0.56
19:Q:22:ARG:HG3	19:Q:24:VAL:HG23	1.88	0.56
20:R:85:ASP:C	20:R:87:GLU:H	2.14	0.56
20:R:98:ILE:CG2	20:R:99:VAL:H	2.03	0.56
23:U:52:ARG:O	23:U:53:GLU:HB3	2.06	0.56
30:4:22:ARG:HD2	30:4:37:GLY:HA3	1.86	0.56
1:X:340:G:OP2	1:X:340:G:C8	2.56	0.56
1:X:525:A:C2	1:X:1273:G:N3	2.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:542:A:N6	1:X:2003:A:H1'	2.21	0.56
1:X:1399:C:O2'	1:X:1400:A:H5'	2.05	0.56
1:X:1757:C:O2	1:X:1970:G:C2	2.58	0.56
1:X:2322:U:H2'	1:X:2323:U:N1	2.20	0.56
4:B:176:ARG:HE	15:M:16:ILE:HG12	1.70	0.56
7:E:24:PHE:N	7:E:24:PHE:CD1	2.72	0.56
7:E:54:ARG:NE	7:E:62:ARG:HG2	2.21	0.56
7:E:56:SER:C	7:E:57:ASP:OD1	2.48	0.56
7:E:59:GLN:O	7:E:61:HIS:N	2.39	0.56
11:I:68:VAL:O	11:I:68:VAL:HG12	2.05	0.56
13:K:28:LEU:HD21	13:K:115:LEU:HG	1.87	0.56
14:L:68:ALA:HB1	14:L:102:ALA:HB1	1.86	0.56
16:N:65:ILE:HG12	16:N:96:ALA:HB2	1.88	0.56
16:N:66:ASN:C	16:N:68:GLY:H	2.14	0.56
16:N:74:MET:HE1	16:N:79:PHE:HA	1.86	0.56
16:N:88:ILE:HG22	17:O:48:GLY:O	2.06	0.56
18:P:13:GLN:HA	18:P:16:GLN:OE1	2.06	0.56
20:R:93:ARG:C	20:R:95:ARG:CZ	2.78	0.56
20:R:93:ARG:CZ	20:R:108:VAL:HA	2.36	0.56
21:S:103:ARG:HD3	21:S:108:VAL:CG2	2.35	0.56
1:X:20:C:H2'	1:X:21:A:H8	1.71	0.56
1:X:81:C:H5''	1:X:307:C:H5'	1.88	0.56
1:X:131:C:O2'	1:X:132:U:H5'	2.06	0.56
1:X:405:C:H2'	1:X:406:G:H8	1.69	0.56
1:X:577:U:O2	1:X:579:G:C8	2.59	0.56
1:X:890:U:H2'	1:X:891:A:C8	2.39	0.56
1:X:1830:C:N4	1:X:1881:U:H2'	2.21	0.56
1:X:1974:U:H2'	1:X:1975:G:H5'	1.88	0.56
1:X:2273:C:H5'	14:L:95:LYS:HD2	1.88	0.56
1:X:2340:C:H2'	1:X:2341:G:H5'	1.88	0.56
1:X:2448:A:N6	1:X:2460:G:H1'	2.21	0.56
1:X:2728:A:OP1	7:E:70:THR:HG21	2.05	0.56
3:A:43:ARG:N	3:A:43:ARG:CD	2.59	0.56
4:B:91:VAL:HB	4:B:93:VAL:HG12	1.86	0.56
6:D:108:LEU:HD22	6:D:114:PHE:CE1	2.41	0.56
9:G:95:LEU:HD21	9:G:117:GLU:OE2	2.06	0.56
9:G:155:THR:O	9:G:158:HIS:HB2	2.06	0.56
10:H:76:ARG:NH2	15:M:75:GLU:OE2	2.38	0.56
13:K:98:LEU:HD22	26:Z:56:GLN:HG2	1.87	0.56
13:K:100:VAL:CG1	13:K:101:GLY:H	2.16	0.56
14:L:22:ALA:C	14:L:24:SER:N	2.63	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:L:36:LYS:N	14:L:36:LYS:HD2	2.20	0.56
18:P:111:ARG:O	18:P:113:SER:N	2.37	0.56
19:Q:4:TYR:CE1	19:Q:45:ALA:HA	2.37	0.56
19:Q:81:ARG:HG3	19:Q:81:ARG:HH11	1.70	0.56
1:X:221:A:C6	1:X:232:A:C8	2.94	0.56
1:X:333:A:OP1	5:C:162:ARG:HB2	2.05	0.56
1:X:689:A:C2	1:X:690:A:C8	2.94	0.56
1:X:844:G:O3'	11:I:41:SER:HB2	2.05	0.56
1:X:1003:C:O2'	17:O:71:ILE:CD1	2.54	0.56
1:X:1007:A:H4'	16:N:93:LYS:HB3	1.88	0.56
1:X:1585:A:N1	1:X:1586:A:C2	2.74	0.56
1:X:1672:A:H3'	1:X:1673:C:H6	1.70	0.56
1:X:1734:C:H5''	1:X:1735:G:H8	1.70	0.56
1:X:2190:A:H8	1:X:2191:A:OP2	1.89	0.56
1:X:2422:C:O2'	1:X:2423:G:H5'	2.05	0.56
1:X:2585:C:H2'	1:X:2586:G:H5'	1.88	0.56
4:B:85:ALA:N	4:B:86:PRO:HD2	2.21	0.56
5:C:112:GLN:CD	5:C:116:LYS:HD3	2.31	0.56
5:C:135:SER:O	5:C:138:LYS:HB2	2.04	0.56
5:C:136:TRP:CD1	5:C:136:TRP:C	2.83	0.56
5:C:139:GLN:HE21	5:C:139:GLN:HA	1.70	0.56
7:E:95:ARG:HG3	7:E:106:ASN:HB3	1.86	0.56
9:G:51:LEU:HD13	9:G:88:VAL:HG21	1.85	0.56
9:G:66:HIS:CB	16:N:71:LEU:HD13	2.36	0.56
12:J:119:PHE:O	12:J:120:ARG:C	2.49	0.56
17:O:15:SER:HA	17:O:95:ILE:HG22	1.87	0.56
19:Q:92:ALA:C	19:Q:94:GLN:H	2.13	0.56
20:R:105:ARG:HH12	20:R:112:LYS:HA	1.70	0.56
21:S:2:GLU:O	21:S:3:LEU:C	2.49	0.56
21:S:141:MET:HG2	21:S:145:ASP:CB	2.33	0.56
22:T:37:LEU:O	22:T:38:VAL:HG23	2.06	0.56
24:V:38:ALA:O	24:V:40:PRO:HD3	2.04	0.56
1:X:162:C:H2'	1:X:163:A:H8	1.71	0.56
1:X:353:G:H2'	1:X:354:C:H6	1.71	0.56
1:X:649:G:N1	1:X:660:G:N1	2.54	0.56
1:X:666:U:OP1	1:X:666:U:H4'	2.05	0.56
1:X:1183:C:H2'	1:X:1184:G:C8	2.41	0.56
1:X:2081:U:H2'	1:X:2082:C:C6	2.40	0.56
1:X:2271:C:P	14:L:18:ARG:HH21	2.29	0.56
1:X:2271:C:H2'	1:X:2272:A:H8	1.71	0.56
1:X:2431:C:O2'	1:X:2432:A:H5'	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:164:GLN:NE2	3:A:166:GLN:NE2	2.52	0.56
4:B:105:THR:CG2	4:B:197:VAL:HB	2.36	0.56
7:E:144:VAL:C	7:E:146:ALA:N	2.60	0.56
11:I:76:LYS:CB	11:I:79:GLN:HG2	2.36	0.56
11:I:107:LYS:HG3	11:I:108:LEU:H	1.71	0.56
16:N:17:VAL:HG21	16:N:32:TYR:HE1	1.71	0.56
17:O:6:GLN:O	17:O:7:THR:CB	2.54	0.56
19:Q:40:ASP:O	19:Q:41:ALA:C	2.48	0.56
24:V:13:ASP:O	24:V:17:GLU:HG2	2.06	0.56
1:X:110:U:H6	1:X:110:U:H5'	1.70	0.55
1:X:401:G:H5'	1:X:402:A:OP2	2.05	0.55
1:X:810:U:C6	1:X:810:U:C3'	2.88	0.55
1:X:930:A:N7	1:X:931:G:C8	2.74	0.55
1:X:1007:A:C2	1:X:1008:G:C8	2.95	0.55
1:X:1060:C:H2'	1:X:1061:A:H8	1.71	0.55
1:X:1086:C:C3'	1:X:1087:C:H5''	2.34	0.55
1:X:1673:C:C5'	4:B:136:ARG:HD3	2.36	0.55
1:X:1794:A:O3'	3:A:257:LEU:HD13	2.06	0.55
1:X:1947:G:N1	1:X:1950:C:C4	2.74	0.55
5:C:104:LEU:HD12	5:C:175:VAL:HG21	1.88	0.55
7:E:171:LEU:N	7:E:171:LEU:HD12	2.21	0.55
7:E:172:LYS:HB2	7:E:172:LYS:NZ	2.18	0.55
9:G:154:GLU:N	9:G:154:GLU:OE1	2.39	0.55
12:J:19:THR:CG2	12:J:99:LYS:NZ	2.69	0.55
14:L:33:ARG:NH2	14:L:103:LEU:CB	2.68	0.55
15:M:6:LYS:O	15:M:7:ILE:HG12	2.06	0.55
19:Q:15:LYS:O	19:Q:18:SER:N	2.39	0.55
23:U:19:ILE:HG22	23:U:42:GLN:HG3	1.89	0.55
1:X:427:C:H1'	1:X:1856:U:C1'	2.36	0.55
1:X:665:A:C2	1:X:666:U:H6	2.23	0.55
1:X:836:G:H2'	1:X:837:U:H6	1.72	0.55
1:X:2325:A:O2'	1:X:2326:C:P	2.61	0.55
1:X:2336:G:N2	1:X:2338:C:H3'	2.22	0.55
1:X:2519:C:O2'	1:X:2520:A:H5'	2.06	0.55
1:X:2728:A:H4'	7:E:66:GLY:O	2.06	0.55
2:Y:92:G:N2	12:J:39:GLU:HG2	2.21	0.55
3:A:97:TYR:O	3:A:98:ALA:C	2.50	0.55
3:A:166:GLN:HB2	3:A:174:ILE:CG2	2.35	0.55
3:A:184:ARG:HH21	3:A:268:ARG:HH11	1.52	0.55
5:C:108:ILE:HG22	5:C:109:ALA:N	2.20	0.55
6:D:111:ILE:HG12	6:D:137:ILE:CB	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:P:32:ARG:HH21	18:P:33:MET:HA	1.71	0.55
18:P:80:LEU:HD21	18:P:87:GLU:HB3	1.87	0.55
19:Q:12:ILE:HG12	19:Q:13:SER:H	1.70	0.55
21:S:55:THR:HG22	21:S:59:GLY:HA2	1.88	0.55
1:X:23:G:C6	1:X:528:G:C6	2.94	0.55
1:X:1096:A:H2'	1:X:1097:A:O4'	2.06	0.55
1:X:1683:G:O3'	10:H:6:SER:OG	2.23	0.55
1:X:1982:C:H4'	1:X:2703:C:O2	2.06	0.55
1:X:2273:C:H5'	14:L:95:LYS:HE3	1.88	0.55
1:X:2524:G:O2'	1:X:2525:U:H5'	2.06	0.55
4:B:25:VAL:HG13	4:B:183:LEU:HD21	1.88	0.55
4:B:84:PHE:CD2	4:B:85:ALA:N	2.74	0.55
6:D:124:GLY:HA2	6:D:163:ASP:OD2	2.07	0.55
7:E:84:THR:CB	7:E:134:SER:HA	2.37	0.55
9:G:162:LYS:N	9:G:163:PRO:HD2	2.20	0.55
10:H:1:MET:CB	10:H:44:TYR:HB3	2.36	0.55
10:H:25:LEU:HD12	10:H:51:ILE:CA	2.36	0.55
11:I:117:ALA:C	11:I:118:VAL:HG22	2.31	0.55
14:L:28:ARG:HD2	14:L:90:ASP:CG	2.31	0.55
17:O:30:GLY:O	17:O:31:ASP:C	2.48	0.55
19:Q:8:GLN:O	19:Q:9:ALA:HB2	2.05	0.55
19:Q:62:ARG:NH1	19:Q:73:ASN:HD21	2.05	0.55
21:S:36:ARG:C	21:S:40:ASP:CG	2.74	0.55
25:W:34:VAL:HG22	25:W:40:VAL:HG11	1.87	0.55
1:X:84:G:N3	1:X:101:A:H2	2.02	0.55
1:X:409:G:C2'	1:X:410:A:H5'	2.36	0.55
1:X:455:A:N7	5:C:39:ARG:HG3	2.21	0.55
1:X:886:A:C1'	12:J:30:PHE:CE1	2.79	0.55
1:X:1096:A:H2'	1:X:1097:A:C4	2.41	0.55
1:X:1324:G:H2'	1:X:1325:U:H6	1.69	0.55
1:X:1729:C:H2'	1:X:1730:G:C8	2.41	0.55
1:X:1929:U:H2'	1:X:1930:C:C6	2.42	0.55
1:X:2009:U:O2	1:X:2021:G:N2	2.40	0.55
3:A:67:PHE:CE1	3:A:157:ARG:NH2	2.74	0.55
4:B:25:VAL:HG13	4:B:183:LEU:CD2	2.36	0.55
6:D:94:GLU:O	6:D:98:VAL:HG23	2.07	0.55
7:E:58:ALA:H	7:E:62:ARG:HG3	1.71	0.55
12:J:26:ASP:HB3	12:J:68:ARG:NH2	2.21	0.55
12:J:81:GLU:HG2	12:J:82:THR:N	2.21	0.55
14:L:71:VAL:HG22	14:L:103:LEU:HG	1.88	0.55
15:M:34:ARG:HH21	15:M:91:VAL:CG2	2.20	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:48:VAL:HG22	19:Q:49:ARG:N	2.21	0.55
21:S:19:ILE:HG22	21:S:20:ALA:N	2.18	0.55
21:S:91:PRO:CG	21:S:92:VAL:H	2.19	0.55
22:T:52:GLY:N	22:T:62:LEU:HD21	2.22	0.55
26:Z:19:ARG:O	26:Z:21:SER:N	2.40	0.55
1:X:318:G:N2	1:X:321:A:O4'	2.39	0.55
1:X:612:G:H2'	1:X:668:A:H61	1.70	0.55
1:X:640:C:H4'	1:X:660:G:H21	1.71	0.55
1:X:760:U:O3'	18:P:110:ALA:HB2	2.06	0.55
1:X:801:A:O2'	1:X:802:A:P	2.64	0.55
1:X:913:A:N7	1:X:914:C:C5	2.74	0.55
1:X:1287:A:C2'	1:X:1288:A:H5''	2.36	0.55
1:X:1354:A:H1'	19:Q:54:SER:HB2	1.89	0.55
1:X:1869:A:H2'	1:X:1870:U:O4'	2.06	0.55
1:X:2684:A:H2'	1:X:2685:A:H8	1.71	0.55
1:X:2691:C:O2'	1:X:2692:A:O5'	2.24	0.55
3:A:68:LYS:HD3	3:A:68:LYS:H	1.70	0.55
6:D:53:ALA:O	6:D:57:LEU:HG	2.05	0.55
9:G:128:GLU:O	9:G:145:HIS:CE1	2.59	0.55
11:I:28:LYS:HZ2	11:I:36:GLY:HA2	1.70	0.55
16:N:50:ARG:C	16:N:52:ASN:N	2.62	0.55
16:N:59:ARG:O	16:N:63:GLN:HG3	2.06	0.55
16:N:86:ALA:O	16:N:89:ASP:N	2.40	0.55
19:Q:88:ILE:HD12	19:Q:88:ILE:C	2.31	0.55
21:S:154:LEU:HD21	21:S:160:LEU:CD2	2.36	0.55
22:T:56:ASP:OD2	22:T:58:THR:OG1	2.24	0.55
23:U:23:LYS:CB	23:U:35:THR:HG23	2.36	0.55
25:W:39:ALA:O	25:W:43:MET:HG2	2.06	0.55
1:X:86:U:P	20:R:42:ARG:HH21	2.29	0.55
1:X:470:U:C5	1:X:480:G:N2	2.75	0.55
1:X:692:C:O2	1:X:693:A:C8	2.60	0.55
1:X:793:G:H21	1:X:796:A:H62	1.55	0.55
1:X:1003:C:H4'	17:O:71:ILE:HD13	1.89	0.55
1:X:1811:A:H5'	3:A:158:SER:OG	2.06	0.55
1:X:1831:G:C5	1:X:1832:G:C8	2.95	0.55
1:X:2397:A:H2'	1:X:2398:U:O4'	2.07	0.55
1:X:2585:C:C2'	1:X:2586:G:H5'	2.37	0.55
1:X:2594:U:O2	1:X:2595:C:C5	2.60	0.55
3:A:105:ILE:HG22	3:A:106:LEU:O	2.07	0.55
5:C:54:THR:CB	5:C:73:SER:HB3	2.36	0.55
6:D:35:VAL:O	6:D:154:ILE:HG13	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:F:11:GLN:HG2	8:F:54:PRO:HB3	1.89	0.55
11:I:24:GLY:O	11:I:25:GLY:O	2.25	0.55
16:N:91:ASN:C	16:N:93:LYS:N	2.63	0.55
17:O:36:LYS:HE3	17:O:55:THR:C	2.31	0.55
18:P:14:ARG:HA	18:P:17:GLN:NE2	2.21	0.55
21:S:91:PRO:CG	21:S:125:PRO:HG2	2.37	0.55
22:T:42:GLY:O	22:T:57:HIS:HD2	1.86	0.55
23:U:15:VAL:HG23	23:U:16:ASN:N	2.21	0.55
1:X:114:C:H2'	1:X:115:G:C8	2.42	0.55
1:X:203:G:N2	1:X:204:A:C2	2.75	0.55
1:X:546:A:H2'	1:X:547:U:H6	1.72	0.55
1:X:732:G:H8	1:X:732:G:P	2.29	0.55
1:X:739:G:O2'	1:X:740:A:O5'	2.25	0.55
1:X:1003:C:O3'	17:O:71:ILE:HD13	2.05	0.55
1:X:1145:C:C6	1:X:1147:G:OP2	2.60	0.55
1:X:1314:A:H2	1:X:1642:G:H21	1.52	0.55
1:X:1909:U:H5	1:X:1911:A:N6	2.04	0.55
1:X:2029:G:N3	1:X:2602:G:C2	2.75	0.55
1:X:2044:G:O2'	1:X:2045:A:OP2	2.21	0.55
1:X:2199:C:N3	1:X:2200:G:N7	2.55	0.55
1:X:2310:G:C4'	22:T:42:GLY:HA3	2.36	0.55
1:X:2662:C:H2'	1:X:2663:U:H6	1.71	0.55
1:X:2685:A:C2	1:X:2686:C:C2	2.95	0.55
2:Y:95:U:H2'	2:Y:96:C:C6	2.42	0.55
3:A:163:VAL:HG22	3:A:176:ARG:O	2.07	0.55
3:A:208:LYS:O	3:A:209:ALA:O	2.24	0.55
6:D:4:LEU:HD21	6:D:173:MET:HE3	1.87	0.55
6:D:16:LEU:O	6:D:20:PHE:HB2	2.06	0.55
6:D:58:ALA:HA	6:D:63:GLN:O	2.05	0.55
9:G:33:ILE:C	9:G:33:ILE:HD12	2.32	0.55
9:G:64:GLY:C	9:G:67:ARG:HG3	2.32	0.55
9:G:159:SER:O	9:G:161:GLN:N	2.36	0.55
10:H:1:MET:SD	10:H:1:MET:N	2.69	0.55
12:J:42:TRP:HB3	12:J:95:VAL:CG1	2.37	0.55
12:J:119:PHE:CD1	12:J:132:MET:SD	3.00	0.55
13:K:21:ALA:O	13:K:25:ALA:HB2	2.06	0.55
15:M:33:VAL:HG22	15:M:51:GLU:HB2	1.89	0.55
19:Q:92:ALA:C	19:Q:94:GLN:N	2.65	0.55
24:V:4:SER:HB3	24:V:7:ARG:CZ	2.37	0.55
25:W:38:PRO:HD3	25:W:41:ARG:HH21	1.71	0.55
1:X:215:G:H2'	1:X:216:U:O4'	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:357:A:H2'	1:X:358:C:H5'	1.89	0.55
1:X:679:C:H2'	1:X:680:U:C6	2.41	0.55
1:X:954:U:C2'	1:X:955:G:H5''	2.34	0.55
1:X:1004:A:O2'	1:X:1005:U:H5'	2.07	0.55
1:X:1038:U:C5	1:X:1137:A:C2	2.94	0.55
1:X:1672:A:H3'	1:X:1673:C:C6	2.41	0.55
1:X:1745:C:P	15:M:101:ARG:NH2	2.73	0.55
1:X:1769:U:C5	1:X:1775:A:N3	2.75	0.55
1:X:1810:U:H3'	3:A:157:ARG:HG3	1.88	0.55
1:X:2007:G:C2	1:X:2023:C:O2	2.60	0.55
1:X:2174:G:H2'	1:X:2175:A:C8	2.42	0.55
1:X:2187:A:H2'	1:X:2188:A:C8	2.42	0.55
1:X:2198:U:C6	1:X:2198:U:OP2	2.60	0.55
1:X:2262:C:C5	1:X:2368:G:C4	2.95	0.55
1:X:2394:G:H2'	1:X:2395:C:C6	2.42	0.55
1:X:2532:G:N1	1:X:2533:U:O2	2.40	0.55
3:A:160:GLY:H	3:A:196:VAL:HG23	1.72	0.55
3:A:271:VAL:HG12	3:A:272:THR:HG23	1.88	0.55
5:C:24:SER:O	5:C:28:HIS:N	2.34	0.55
5:C:112:GLN:HB3	5:C:116:LYS:NZ	2.22	0.55
5:C:153:ASP:CG	5:C:172:VAL:HA	2.32	0.55
9:G:69:ASP:C	9:G:70:PHE:CD2	2.85	0.55
9:G:107:GLN:HA	9:G:110:LEU:HG	1.87	0.55
10:H:65:LYS:N	10:H:65:LYS:HD2	2.21	0.55
11:I:68:VAL:O	11:I:69:GLY:O	2.24	0.55
14:L:40:ALA:CB	14:L:103:LEU:HD11	2.19	0.55
15:M:106:TYR:HE1	15:M:107:LEU:HD21	1.71	0.55
22:T:14:ARG:HG3	22:T:15:ASP:CG	2.32	0.55
1:X:167:A:C6	1:X:168:A:C6	2.95	0.55
1:X:416:U:O2'	1:X:419:G:H1'	2.06	0.55
1:X:632:A:H2'	1:X:633:G:H5'	1.88	0.55
1:X:1000:G:C8	25:W:10:ILE:HD11	2.41	0.55
1:X:1088:A:H2'	1:X:1089:C:O4'	2.06	0.55
1:X:1374:G:C2	1:X:1375:C:C6	2.95	0.55
1:X:2202:G:O2'	3:A:262:LYS:HD3	2.07	0.55
5:C:104:LEU:H	5:C:104:LEU:CD2	2.20	0.55
7:E:22:GLY:O	7:E:24:PHE:CD1	2.59	0.55
9:G:57:LEU:HD22	9:G:170:PRO:HA	1.89	0.55
10:H:48:GLY:O	10:H:121:ARG:HG3	2.07	0.55
10:H:97:VAL:O	10:H:97:VAL:HG12	2.06	0.55
10:H:100:ASN:O	10:H:102:GLN:N	2.35	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:L:68:ALA:HB1	14:L:102:ALA:HB2	1.88	0.55
16:N:14:HIS:O	16:N:15:LYS:C	2.48	0.55
16:N:22:LYS:HG3	16:N:23:GLY:N	2.18	0.55
16:N:65:ILE:CG1	16:N:96:ALA:HB2	2.37	0.55
19:Q:78:ALA:C	19:Q:79:ILE:HG13	2.32	0.55
20:R:37:LEU:HB2	20:R:47:VAL:O	2.07	0.55
24:V:13:ASP:O	24:V:17:GLU:N	2.40	0.55
30:4:7:VAL:HG13	30:4:25:VAL:HG21	1.87	0.55
1:X:113:C:O2'	1:X:114:C:H5'	2.07	0.55
1:X:1099:A:H61	8:F:133:SER:HB3	1.71	0.55
1:X:1189:G:H2'	1:X:1190:C:O4'	2.07	0.55
1:X:1215:A:H2'	1:X:1216:G:C8	2.42	0.55
1:X:1917:C:C2'	1:X:1918:G:H5'	2.36	0.55
1:X:1994:U:H2'	1:X:1995:G:H5'	1.89	0.55
4:B:125:GLY:O	4:B:126:PRO:O	2.25	0.55
4:B:149:ARG:NH1	9:G:106:TYR:CD1	2.75	0.55
5:C:117:LEU:HD22	5:C:187:VAL:HA	1.87	0.55
6:D:152:MET:HE2	6:D:154:ILE:HD11	1.88	0.55
10:H:122:ARG:NH1	10:H:124:MET:HE2	2.16	0.55
11:I:90:ARG:HA	11:I:121:HIS:ND1	2.21	0.55
19:Q:33:ALA:O	19:Q:34:THR:O	2.25	0.55
21:S:137:ASP:HB3	21:S:140:LYS:HE2	1.88	0.55
23:U:64:ALA:C	23:U:66:ALA:H	2.14	0.55
24:V:47:ARG:O	24:V:48:ARG:C	2.50	0.55
1:X:107:G:N2	1:X:108:G:H1'	2.22	0.54
1:X:583:C:H4'	1:X:584:A:O5'	2.07	0.54
1:X:636:G:H8	1:X:636:G:C5'	2.20	0.54
1:X:837:U:H2'	1:X:838:A:H8	1.73	0.54
1:X:1053:G:H1'	1:X:1125:G:N2	2.22	0.54
1:X:1149:G:O2'	1:X:1150:C:H5'	2.07	0.54
1:X:1332:G:H2'	1:X:1333:G:C1'	2.38	0.54
1:X:1746:A:H2'	1:X:1747:G:O5'	2.07	0.54
1:X:2856:U:C2	1:X:2857:C:C5	2.95	0.54
2:Y:68:A:H4'	2:Y:69:G:C8	2.42	0.54
3:A:53:PHE:O	3:A:54:ILE:C	2.49	0.54
4:B:144:ARG:O	4:B:146:THR:N	2.40	0.54
5:C:33:TRP:O	5:C:36:ALA:HB3	2.07	0.54
10:H:83:ARG:HH11	15:M:40:ARG:NE	2.04	0.54
12:J:44:LYS:HD3	12:J:47:GLN:CD	2.32	0.54
14:L:39:TYR:O	14:L:40:ALA:C	2.49	0.54
15:M:61:GLY:O	15:M:63:ARG:N	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:O:13:ARG:HB2	17:O:13:ARG:NH2	2.21	0.54
20:R:77:HIS:C	20:R:79:SER:H	2.15	0.54
23:U:67:LEU:O	23:U:71:SER:HB3	2.08	0.54
1:X:469:G:O2'	1:X:470:U:P	2.65	0.54
1:X:539:A:H5'	1:X:540:G:OP1	2.08	0.54
1:X:1122:A:C2	1:X:1123:G:H1'	2.42	0.54
1:X:1515:U:H2'	1:X:1516:A:C8	2.42	0.54
1:X:1551:U:H5'	1:X:1552:C:C6	2.42	0.54
1:X:1629:G:C2'	1:X:1633:C:H42	2.20	0.54
1:X:2293:G:H21	6:D:123:ASP:CG	2.14	0.54
4:B:47:VAL:HG12	4:B:48:GLN:N	2.22	0.54
4:B:75:THR:HG23	4:B:76:ARG:N	2.22	0.54
6:D:7:LYS:O	6:D:11:GLN:N	2.40	0.54
6:D:40:LEU:HD12	6:D:85:VAL:O	2.07	0.54
6:D:52:LYS:HG2	6:D:147:ASP:OD1	2.07	0.54
6:D:169:LEU:O	6:D:170:LEU:C	2.50	0.54
9:G:141:GLY:O	9:G:144:MET:HB2	2.07	0.54
11:I:71:THR:HG22	11:I:104:ARG:HD3	1.89	0.54
12:J:15:ARG:HB3	12:J:73:LYS:HZ2	1.72	0.54
12:J:59:PHE:CD1	12:J:65:ILE:HD11	2.41	0.54
14:L:8:ARG:NH1	14:L:8:ARG:CB	2.70	0.54
16:N:79:PHE:CD2	16:N:79:PHE:C	2.85	0.54
16:N:86:ALA:O	16:N:88:ILE:N	2.40	0.54
18:P:32:ARG:HE	18:P:32:ARG:CA	2.19	0.54
20:R:93:ARG:HG2	20:R:94:VAL:HG23	1.90	0.54
20:R:108:VAL:CG1	20:R:109:ALA:N	2.52	0.54
21:S:64:ALA:HA	21:S:85:MET:HA	1.90	0.54
22:T:37:LEU:C	22:T:38:VAL:HG23	2.32	0.54
1:X:497:C:H6	1:X:497:C:H3'	1.72	0.54
1:X:688:A:C6	1:X:689:A:N6	2.76	0.54
1:X:971:A:H4'	1:X:2436:U:C5'	2.37	0.54
1:X:1655:C:H4'	1:X:2689:C:O2	2.08	0.54
1:X:2240:C:OP2	22:T:18:PRO:HD2	2.06	0.54
1:X:2541:U:C4'	10:H:23:ARG:NH1	2.64	0.54
1:X:2817:A:H2'	1:X:2818:G:O4'	2.07	0.54
5:C:122:GLY:HA2	5:C:124:ASP:OD1	2.07	0.54
5:C:147:LYS:HB2	5:C:184:ASP:H	1.71	0.54
5:C:178:TYR:O	5:C:179:ASP:C	2.50	0.54
9:G:132:PHE:CG	9:G:145:HIS:ND1	2.75	0.54
9:G:146:THR:O	9:G:149:LYS:HE3	2.07	0.54
12:J:82:THR:O	12:J:83:ARG:CB	2.55	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:K:43:GLU:OE1	13:K:44:LEU:HA	2.07	0.54
14:L:84:ILE:HD12	14:L:84:ILE:N	2.23	0.54
16:N:78:THR:HG23	16:N:117:ARG:CZ	2.36	0.54
30:4:15:LYS:HB2	30:4:26:ILE:HG13	1.89	0.54
1:X:437:G:O2'	1:X:438:G:H5'	2.07	0.54
1:X:617:U:C5	1:X:632:A:N1	2.76	0.54
1:X:665:A:C2	1:X:666:U:C6	2.96	0.54
1:X:1071:U:H4'	1:X:1072:U:C5'	2.36	0.54
1:X:1091:C:O2'	8:F:126:THR:N	2.41	0.54
1:X:1538:A:H2'	1:X:1539:U:C6	2.42	0.54
1:X:1685:A:C8	1:X:1691:G:C6	2.95	0.54
1:X:1933:G:N7	1:X:1934:U:H5	2.05	0.54
1:X:2038:C:H2'	1:X:2483:U:H4'	1.89	0.54
1:X:2407:G:H5''	1:X:2408:G:OP1	2.07	0.54
1:X:2414:A:C2'	1:X:2415:G:O5'	2.55	0.54
1:X:2701:A:H2'	1:X:2702:G:O5'	2.08	0.54
1:X:2722:C:H5''	30:4:35:ARG:HH12	1.73	0.54
2:Y:59:A:C2	6:D:26:MET:HB3	2.42	0.54
3:A:248:THR:HB	3:A:249:PRO:HD2	1.88	0.54
4:B:152:LYS:HD2	9:G:106:TYR:N	2.18	0.54
6:D:81:GLN:CG	6:D:82:GLY:H	2.15	0.54
6:D:106:ILE:CG2	6:D:110:ARG:HD2	2.25	0.54
12:J:79:PRO:HD2	12:J:88:LYS:HD2	1.89	0.54
13:K:91:PRO:O	13:K:92:GLY:C	2.50	0.54
13:K:98:LEU:O	13:K:99:ARG:C	2.51	0.54
14:L:35:SER:C	14:L:36:LYS:HD2	2.33	0.54
16:N:45:TYR:O	16:N:46:GLU:C	2.49	0.54
16:N:66:ASN:HD22	16:N:70:ARG:HH22	1.54	0.54
19:Q:20:MET:C	19:Q:22:ARG:H	2.15	0.54
20:R:93:ARG:NH1	20:R:108:VAL:C	2.65	0.54
1:X:89:A:H8	1:X:89:A:OP1	1.90	0.54
1:X:558:G:H8	1:X:559:C:C5	2.23	0.54
1:X:737:C:H2'	1:X:738:G:C8	2.42	0.54
1:X:773:G:H2'	1:X:774:A:O4'	2.08	0.54
1:X:1036:G:C4	1:X:1145:C:H1'	2.42	0.54
1:X:1089:C:H1'	1:X:1099:A:C2	2.42	0.54
1:X:1096:A:H4'	1:X:1097:A:OP1	2.07	0.54
1:X:1141:U:H4'	1:X:1142:G:OP1	2.06	0.54
1:X:1154:A:O2'	1:X:1155:G:OP1	2.24	0.54
1:X:1757:C:N3	1:X:1970:G:C6	2.76	0.54
1:X:1933:G:C5	1:X:1934:U:C5	2.96	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2178:U:H2'	1:X:2179:C:C6	2.42	0.54
1:X:2690:A:OP1	1:X:2692:A:P	2.65	0.54
1:X:2691:C:O2'	1:X:2692:A:C5'	2.55	0.54
1:X:2779:C:H2'	1:X:2780:A:O4'	2.07	0.54
2:Y:108:G:C2'	2:Y:109:G:H5'	2.38	0.54
3:A:86:PRO:O	3:A:87:ASN:HB2	2.07	0.54
3:A:263:ARG:O	3:A:267:ASP:HB2	2.07	0.54
5:C:148:VAL:N	5:C:166:TRP:O	2.33	0.54
6:D:142:THR:O	6:D:146:VAL:HG13	2.07	0.54
7:E:24:PHE:HD1	7:E:24:PHE:H	1.54	0.54
10:H:49:ASP:O	10:H:74:VAL:HG23	2.08	0.54
11:I:29:THR:HA	11:I:34:HIS:HB2	1.90	0.54
12:J:61:ARG:O	12:J:64:LYS:NZ	2.41	0.54
14:L:102:ALA:O	14:L:104:ALA:N	2.40	0.54
16:N:13:ARG:O	16:N:16:LYS:HB2	2.08	0.54
20:R:33:THR:OG1	20:R:34:GLY:N	2.40	0.54
22:T:41:ARG:HH11	22:T:41:ARG:CG	2.11	0.54
24:V:3:PRO:O	24:V:5:GLU:N	2.40	0.54
24:V:32:ALA:HA	24:V:37:LEU:HB2	1.89	0.54
25:W:23:LEU:HD23	25:W:43:MET:HE3	1.90	0.54
1:X:224:G:C4'	1:X:399:G:C6	2.86	0.54
1:X:497:C:C6	1:X:497:C:C3'	2.90	0.54
1:X:715:U:O2'	1:X:716:U:H5'	2.08	0.54
1:X:879:A:H2'	1:X:879:A:N3	2.23	0.54
1:X:1053:G:H2'	1:X:1054:C:O4'	2.07	0.54
1:X:1142:G:C8	1:X:2008:C:H4'	2.43	0.54
1:X:1339:U:O2	1:X:1339:U:C2'	2.56	0.54
1:X:1386:A:H5''	1:X:2191:A:C6	2.42	0.54
1:X:1631:C:H2'	1:X:1631:C:O2	2.08	0.54
1:X:2204:A:O2'	1:X:2205:C:OP2	2.25	0.54
1:X:2250:G:H8	1:X:2250:G:O5'	1.91	0.54
1:X:2312:A:H4'	1:X:2313:G:O5'	2.08	0.54
1:X:2527:G:C2	1:X:2540:A:C2	2.95	0.54
1:X:2861:A:C2	1:X:2862:G:C4	2.96	0.54
9:G:67:ARG:HE	9:G:70:PHE:HA	1.73	0.54
11:I:13:ARG:HG2	11:I:14:LYS:N	2.22	0.54
12:J:106:GLU:CD	12:J:106:GLU:N	2.65	0.54
13:K:11:ASN:ND2	13:K:12:ARG:HG2	2.22	0.54
14:L:27:LEU:HD22	14:L:44:ASP:CA	2.29	0.54
15:M:105:TYR:C	15:M:107:LEU:H	2.15	0.54
17:O:10:LYS:HE3	17:O:11:GLN:HG2	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:63:LYS:HD3	19:Q:69:ILE:O	2.08	0.54
20:R:38:LEU:HD12	20:R:47:VAL:CG2	2.27	0.54
20:R:106:VAL:CG2	20:R:113:THR:HG21	2.37	0.54
23:U:52:ARG:NH1	23:U:67:LEU:CD1	2.70	0.54
24:V:4:SER:C	24:V:6:MET:N	2.65	0.54
26:Z:35:GLN:C	26:Z:37:HIS:N	2.64	0.54
1:X:577:U:P	11:I:40:ARG:NH2	2.80	0.54
1:X:1038:U:H5	1:X:1137:A:C2	2.25	0.54
1:X:1347:C:N3	1:X:1348:C:C5	2.76	0.54
1:X:1483:G:N2	1:X:1541:G:H1'	2.23	0.54
1:X:2795:A:C2	15:M:2:GLN:N	2.76	0.54
1:X:2806:G:O4'	1:X:2858:A:C2	2.61	0.54
6:D:19:GLN:HB3	6:D:20:PHE:CD1	2.43	0.54
9:G:150:VAL:HG12	9:G:151:TYR:N	2.22	0.54
12:J:28:VAL:H	12:J:137:VAL:HG11	1.72	0.54
12:J:28:VAL:O	12:J:29:ALA:HB2	2.07	0.54
12:J:37:ALA:HA	12:J:130:THR:HG22	1.90	0.54
13:K:36:THR:OG1	13:K:37:THR:N	2.40	0.54
13:K:113:ILE:HG23	13:K:113:ILE:O	2.06	0.54
14:L:20:THR:CG2	14:L:23:ALA:HB3	2.37	0.54
18:P:59:PHE:O	18:P:60:ILE:C	2.51	0.54
18:P:87:GLU:HA	18:P:90:LEU:CD1	2.38	0.54
18:P:106:LEU:HD23	18:P:106:LEU:C	2.32	0.54
19:Q:91:LEU:N	19:Q:91:LEU:CD2	2.70	0.54
22:T:44:LYS:HG2	22:T:45:PHE:CE1	2.43	0.54
23:U:22:GLY:HA3	23:U:39:LYS:HG3	1.89	0.54
1:X:683:A:H5'	11:I:45:LYS:N	2.22	0.54
1:X:729:A:O2'	1:X:730:C:H4'	2.07	0.54
1:X:777:A:C3'	1:X:778:G:H5'	2.38	0.54
1:X:1234:C:H2'	1:X:1235:C:H6	1.73	0.54
1:X:1264:C:C5'	16:N:13:ARG:CZ	2.86	0.54
1:X:1304:U:H2'	1:X:1305:C:C6	2.43	0.54
1:X:1443:G:H2'	1:X:1444:C:H6	1.71	0.54
1:X:1541:G:H2'	1:X:1542:G:O4'	2.08	0.54
1:X:1918:G:C5	1:X:1945:C:N4	2.76	0.54
1:X:2292:C:H5'	6:D:37:ASN:ND2	2.23	0.54
1:X:2356:A:C2	14:L:91:ARG:NH2	2.73	0.54
1:X:2624:G:H4'	1:X:2712:G:O2'	2.08	0.54
1:X:2625:U:H6	1:X:2625:U:OP2	1.91	0.54
1:X:2679:G:O2'	1:X:2680:U:H5'	2.08	0.54
1:X:2797:G:C2'	1:X:2798:A:O5'	2.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2873:G:H2'	1:X:2874:A:C8	2.43	0.54
2:Y:72:C:O2'	2:Y:73:C:H5'	2.07	0.54
3:A:268:ARG:HB3	3:A:269:PHE:CE2	2.42	0.54
5:C:122:GLY:C	5:C:124:ASP:H	2.15	0.54
5:C:173:ALA:C	5:C:175:VAL:H	2.16	0.54
6:D:170:LEU:HB3	6:D:175:LEU:CD2	2.38	0.54
9:G:101:THR:CG2	9:G:102:ARG:N	2.70	0.54
10:H:13:ASN:C	10:H:15:GLY:H	2.16	0.54
11:I:53:ARG:NH2	11:I:53:ARG:HG3	2.21	0.54
13:K:52:ILE:HG13	13:K:53:THR:N	2.22	0.54
14:L:15:ARG:HD2	14:L:91:ARG:CD	2.37	0.54
14:L:34:SER:HB2	14:L:94:TYR:CZ	2.42	0.54
14:L:94:TYR:CD2	14:L:94:TYR:N	2.74	0.54
15:M:82:PRO:O	15:M:83:PHE:C	2.50	0.54
20:R:24:VAL:HG23	20:R:32:GLN:O	2.08	0.54
20:R:90:LYS:O	20:R:90:LYS:HG3	2.08	0.54
21:S:6:LYS:N	21:S:7:PRO:CD	2.71	0.54
23:U:32:ARG:HG2	23:U:34:THR:N	2.23	0.54
26:Z:12:SER:HB2	26:Z:15:LYS:H	1.72	0.54
1:X:322:A:O2'	1:X:343:A:C4'	2.55	0.54
1:X:614:G:O2'	1:X:615:C:H5'	2.07	0.54
1:X:882:C:H2'	1:X:883:A:H8	1.71	0.54
1:X:1586:A:H5'	3:A:38:PRO:CG	2.32	0.54
1:X:1587:A:C2	1:X:1588:A:C5	2.96	0.54
1:X:1801:C:N4	23:U:48:LYS:HG3	2.22	0.54
1:X:2031:A:C2	1:X:2600:A:C2	2.96	0.54
1:X:2226:A:H2'	1:X:2227:C:H6	1.71	0.54
1:X:2395:C:C2'	1:X:2396:C:C5'	2.82	0.54
1:X:2508:G:O5'	1:X:2509:A:H5''	2.08	0.54
1:X:2519:C:H2'	1:X:2520:A:O4'	2.08	0.54
2:Y:53:G:H21	2:Y:54:U:H5	1.53	0.54
3:A:208:LYS:CE	3:A:208:LYS:HA	2.38	0.54
6:D:133:LYS:O	6:D:134:GLU:C	2.51	0.54
11:I:11:GLY:O	11:I:14:LYS:N	2.41	0.54
14:L:42:ILE:CG2	14:L:52:ALA:H	2.20	0.54
18:P:66:GLU:HB3	18:P:67:PRO:CD	2.37	0.54
20:R:96:LYS:O	20:R:104:VAL:HG12	2.08	0.54
1:X:55:A:C2	1:X:56:C:C2	2.96	0.54
1:X:971:A:H61	12:J:83:ARG:HH22	1.56	0.54
1:X:1134:C:O2'	1:X:1135:C:H5'	2.08	0.54
1:X:1218:C:O4'	11:I:13:ARG:NE	2.36	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1301:U:N1	1:X:1340:C:O2	2.41	0.54
1:X:1601:U:H4'	1:X:1602:G:OP2	2.07	0.54
1:X:1795:C:H5'	3:A:257:LEU:HD13	1.89	0.54
1:X:1802:A:H2'	1:X:1803:G:O4'	2.08	0.54
1:X:2771:C:C6	1:X:2771:C:H5''	2.43	0.54
2:Y:30:C:H2'	2:Y:31:A:H8	1.73	0.54
3:A:231:HIS:HD2	3:A:233:HIS:H	1.54	0.54
5:C:39:ARG:NH1	5:C:39:ARG:HG2	2.23	0.54
9:G:124:GLU:HG3	9:G:152:ALA:HB2	1.91	0.54
10:H:23:ARG:HH12	10:H:25:LEU:HD23	1.73	0.54
12:J:64:LYS:HD2	12:J:64:LYS:N	2.23	0.54
16:N:105:ALA:O	16:N:106:PHE:C	2.50	0.54
17:O:74:TYR:OH	17:O:76:SER:HB3	2.07	0.54
21:S:109:GLN:NE2	21:S:142:ASN:OD1	2.41	0.54
22:T:4:LYS:C	22:T:5:LYS:HD2	2.32	0.54
26:Z:20:ARG:C	26:Z:22:HIS:H	2.16	0.54
1:X:165:G:H1'	1:X:1378:A:C6	2.43	0.53
1:X:392:G:N2	1:X:409:G:C4	2.76	0.53
1:X:1053:G:C6	1:X:1054:C:C4	2.96	0.53
1:X:1188:A:H8	1:X:1188:A:P	2.31	0.53
1:X:1246:G:C5	1:X:1247:U:C5	2.95	0.53
1:X:1280:U:C5	1:X:1995:G:N2	2.76	0.53
1:X:1289:A:C2	1:X:1290:A:N7	2.76	0.53
1:X:1442:C:O2'	1:X:1443:G:OP1	2.18	0.53
1:X:1522:C:H2'	1:X:1523:A:C5'	2.38	0.53
1:X:1582:A:C6	3:A:214:TRP:CZ2	2.96	0.53
1:X:1914:U:O4	1:X:1952:A:N7	2.41	0.53
1:X:2495:G:O2'	1:X:2496:C:H5'	2.07	0.53
1:X:2496:C:C5	1:X:2521:A:C5	2.96	0.53
1:X:2666:U:H2'	1:X:2667:C:O4'	2.07	0.53
3:A:108:PRO:HA	3:A:196:VAL:HA	1.89	0.53
4:B:116:VAL:CG2	4:B:136:ARG:NE	2.64	0.53
5:C:108:ILE:O	5:C:109:ALA:O	2.26	0.53
5:C:158:ARG:HD3	5:C:169:VAL:CG1	2.38	0.53
6:D:97:TYR:HD2	6:D:100:LEU:HD23	1.73	0.53
6:D:105:ASN:C	6:D:109:PRO:HG2	2.32	0.53
8:F:16:LYS:HD2	8:F:16:LYS:N	2.23	0.53
9:G:58:ILE:HG23	9:G:80:VAL:HG11	1.90	0.53
9:G:67:ARG:O	9:G:70:PHE:CD1	2.61	0.53
10:H:116:ARG:NH1	15:M:38:LYS:HZ3	2.04	0.53
12:J:78:LYS:CE	12:J:81:GLU:HA	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:41:GLU:O	15:M:42:GLY:C	2.50	0.53
16:N:7:GLY:C	16:N:9:VAL:H	2.16	0.53
18:P:94:GLU:O	18:P:126:ILE:HD12	2.08	0.53
19:Q:20:MET:HE3	19:Q:92:ALA:O	2.08	0.53
21:S:64:ALA:HB2	21:S:85:MET:HE2	1.90	0.53
21:S:120:LEU:CD2	21:S:121:GLN:H	2.17	0.53
21:S:155:PRO:HD2	21:S:158:CYS:HB2	1.90	0.53
22:T:45:PHE:HA	22:T:77:ARG:HB2	1.90	0.53
24:V:42:ARG:NE	24:V:46:LEU:HD21	2.22	0.53
1:X:39:C:H2'	1:X:40:U:C6	2.43	0.53
1:X:204:A:N6	1:X:2386:G:C8	2.76	0.53
1:X:219:G:H2'	1:X:231:G:O6	2.08	0.53
1:X:356:A:H2'	1:X:357:A:N7	2.23	0.53
1:X:661:C:C2	1:X:662:G:C8	2.96	0.53
1:X:731:A:C2'	1:X:732:G:H5'	2.36	0.53
1:X:777:A:OP2	3:A:214:TRP:CH2	2.61	0.53
1:X:1149:G:N3	1:X:1154:A:H2	2.05	0.53
1:X:1264:C:H5''	16:N:13:ARG:CZ	2.38	0.53
1:X:1367:A:H2'	1:X:1368:G:O4'	2.08	0.53
1:X:1467:U:H6	1:X:1467:U:C3'	2.15	0.53
1:X:1609:G:H3'	1:X:1610:A:H8	1.73	0.53
1:X:2284:U:H4'	6:D:133:LYS:HE2	1.89	0.53
1:X:2387:U:H2'	1:X:2388:G:C8	2.43	0.53
1:X:2444:C:O2'	1:X:2445:C:H5'	2.08	0.53
1:X:2497:A:H5''	1:X:2498:U:OP2	2.07	0.53
1:X:2598:C:H2'	1:X:2599:U:C6	2.41	0.53
2:Y:56:G:H2'	2:Y:57:U:H6	1.72	0.53
2:Y:110:U:C3'	2:Y:111:C:H5''	2.39	0.53
7:E:136:ILE:H	7:E:136:ILE:CD1	2.16	0.53
8:F:79:ARG:HG2	8:F:84:ILE:HB	1.90	0.53
9:G:131:VAL:O	9:G:133:GLY:N	2.41	0.53
13:K:49:GLU:O	13:K:50:GLN:C	2.51	0.53
15:M:57:ILE:O	15:M:58:ASN:C	2.50	0.53
16:N:91:ASN:C	16:N:93:LYS:H	2.11	0.53
18:P:71:VAL:HG12	18:P:126:ILE:CG2	2.38	0.53
20:R:52:ASN:HD21	20:R:71:GLN:NE2	2.05	0.53
23:U:22:GLY:HA3	23:U:39:LYS:CG	2.38	0.53
23:U:28:GLY:HA3	23:U:32:ARG:HA	1.90	0.53
23:U:64:ALA:O	23:U:66:ALA:N	2.37	0.53
23:U:75:TYR:C	23:U:77:GLY:H	2.15	0.53
1:X:242:A:C2'	1:X:243:G:H4'	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:404:A:C5	1:X:405:C:C4	2.96	0.53
1:X:631:G:H4'	1:X:632:A:H5''	1.90	0.53
1:X:860:U:O2	1:X:860:U:C2'	2.57	0.53
1:X:914:C:O2'	1:X:915:C:H5'	2.09	0.53
1:X:1433:A:C2	1:X:1435:G:C8	2.97	0.53
1:X:1558:C:O2'	1:X:1559:G:H5'	2.09	0.53
1:X:1611:U:H2'	1:X:1612:U:O4'	2.07	0.53
1:X:1935:A:C6	1:X:1936:A:N1	2.76	0.53
1:X:2197:U:H5'	1:X:2198:U:OP1	2.08	0.53
1:X:2301:A:C4	1:X:2302:G:C8	2.97	0.53
1:X:2382:C:O2	1:X:2382:C:H2'	2.07	0.53
3:A:208:LYS:HE3	3:A:208:LYS:HA	1.91	0.53
5:C:22:VAL:CG1	5:C:23:ASN:N	2.71	0.53
5:C:109:ALA:O	5:C:111:ARG:N	2.41	0.53
5:C:119:ALA:HB3	5:C:189:ASP:CG	2.34	0.53
6:D:16:LEU:O	6:D:20:PHE:HD1	1.90	0.53
10:H:28:GLY:C	10:H:35:THR:HG1	2.14	0.53
12:J:62:GLY:C	12:J:64:LYS:HD2	2.33	0.53
17:O:35:LEU:HD22	17:O:36:LYS:N	2.24	0.53
19:Q:33:ALA:O	19:Q:34:THR:C	2.52	0.53
20:R:38:LEU:HB2	20:R:47:VAL:CB	2.38	0.53
20:R:94:VAL:O	20:R:94:VAL:HG12	2.08	0.53
25:W:42:GLY:O	25:W:43:MET:C	2.52	0.53
1:X:70:A:H4'	1:X:71:A:O5'	2.08	0.53
1:X:98:U:H3'	1:X:98:U:C6	2.42	0.53
1:X:428:A:H1'	1:X:1857:G:H5'	1.91	0.53
1:X:599:A:H2'	1:X:600:G:C8	2.44	0.53
1:X:651:C:C3'	1:X:652:C:H5''	2.39	0.53
1:X:1212:U:H2'	1:X:1213:U:H6	1.73	0.53
1:X:1235:C:H2'	1:X:1236:G:H8	1.73	0.53
1:X:1745:C:N4	1:X:1746:A:C6	2.76	0.53
1:X:1774:A:C2	1:X:2566:A:C5	2.97	0.53
1:X:1840:A:H2'	1:X:1841:G:O4'	2.08	0.53
1:X:2056:C:H2'	1:X:2057:U:H6	1.74	0.53
1:X:2058:U:C4	1:X:2217:G:C6	2.97	0.53
1:X:2085:G:H2'	1:X:2086:U:C6	2.43	0.53
1:X:2247:A:H5''	1:X:2247:A:C8	2.44	0.53
1:X:2620:G:OP1	9:G:104:THR:HG22	2.07	0.53
1:X:2695:C:H3'	1:X:2695:C:C6	2.43	0.53
1:X:2725:C:H2'	1:X:2726:U:H6	1.71	0.53
2:Y:15:A:C2'	2:Y:16:U:H5''	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:132:PRO:CD	3:A:190:TYR:CD2	2.88	0.53
5:C:117:LEU:HD23	5:C:118:VAL:N	2.23	0.53
7:E:140:LEU:O	7:E:144:VAL:HG23	2.09	0.53
9:G:47:SER:C	9:G:49:VAL:H	2.16	0.53
15:M:24:LEU:HB3	15:M:25:PRO:HD2	1.91	0.53
16:N:66:ASN:CG	16:N:70:ARG:HH12	2.16	0.53
19:Q:9:ALA:HB1	19:Q:10:PRO:HD2	1.90	0.53
20:R:55:THR:O	20:R:69:GLN:HA	2.08	0.53
20:R:93:ARG:C	20:R:95:ARG:NH1	2.66	0.53
24:V:58:ALA:O	24:V:61:ALA:HB3	2.09	0.53
1:X:148:C:H3'	1:X:149:A:H8	1.73	0.53
1:X:165:G:C2'	1:X:166:G:H5'	2.38	0.53
1:X:653:G:C3'	1:X:654:A:H5''	2.38	0.53
1:X:770:U:O2'	1:X:771:C:H5'	2.08	0.53
1:X:863:C:H4'	25:W:18:LYS:CB	2.38	0.53
1:X:1339:U:O2	1:X:1339:U:H2'	2.08	0.53
1:X:1984:A:H4'	1:X:2668:U:H2'	1.90	0.53
1:X:2019:C:O2'	1:X:2020:G:H5'	2.08	0.53
1:X:2273:C:C5'	14:L:95:LYS:HD2	2.39	0.53
1:X:2691:C:O2'	1:X:2692:A:C8	2.52	0.53
1:X:2769:C:C2'	1:X:2770:A:C8	2.89	0.53
5:C:176:ASN:ND2	5:C:179:ASP:H	2.07	0.53
8:F:21:PRO:HB2	8:F:22:PRO:HD3	1.90	0.53
10:H:77:THR:C	10:H:79:HIS:H	2.15	0.53
11:I:98:LEU:O	11:I:99:VAL:CG1	2.53	0.53
13:K:103:ARG:NH2	13:K:106:ASP:OD2	2.29	0.53
16:N:14:HIS:O	16:N:16:LYS:N	2.42	0.53
17:O:12:TYR:CG	17:O:13:ARG:N	2.75	0.53
19:Q:68:PHE:O	19:Q:69:ILE:C	2.50	0.53
20:R:93:ARG:O	20:R:95:ARG:CD	2.57	0.53
23:U:11:LYS:HZ1	23:U:75:TYR:CB	2.15	0.53
23:U:15:VAL:HG23	23:U:16:ASN:H	1.74	0.53
23:U:24:ALA:C	23:U:26:ALA:N	2.67	0.53
1:X:219:G:C2'	1:X:220:U:OP2	2.57	0.53
1:X:314:G:H2'	1:X:315:G:H8	1.72	0.53
1:X:322:A:C2	1:X:342:G:H3'	2.44	0.53
1:X:332:C:H1'	5:C:159:ARG:HE	1.73	0.53
1:X:396:U:O4	1:X:398:C:C2	2.62	0.53
1:X:1268:U:N3	5:C:66:ASN:HA	2.23	0.53
1:X:1292:A:O2'	1:X:1293:A:H5'	2.08	0.53
1:X:1406:A:N6	19:Q:15:LYS:HD3	2.22	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1519:G:H2'	1:X:1520:G:H8	1.73	0.53
1:X:1690:U:H2'	1:X:1691:G:H5'	1.89	0.53
1:X:2048:C:H1'	1:X:2428:U:N3	2.24	0.53
1:X:2213:G:N2	1:X:2214:G:C4	2.76	0.53
1:X:2306:A:H2'	1:X:2307:A:H8	1.68	0.53
1:X:2404:A:H4'	1:X:2405:A:H5'	1.91	0.53
1:X:2807:U:HO2'	1:X:2808:U:P	2.32	0.53
4:B:198:LEU:HD12	4:B:198:LEU:N	2.24	0.53
5:C:43:ALA:HB1	5:C:86:PRO:C	2.34	0.53
6:D:5:LYS:HA	6:D:8:TYR:HB3	1.90	0.53
8:F:54:PRO:HD3	8:F:73:PRO:HD3	1.90	0.53
9:G:47:SER:O	9:G:49:VAL:N	2.42	0.53
10:H:29:ILE:HG21	10:H:123:PHE:HE1	1.73	0.53
11:I:11:GLY:O	11:I:12:SER:C	2.51	0.53
12:J:36:ILE:HD11	12:J:133:VAL:HG11	1.90	0.53
16:N:31:GLN:O	16:N:32:TYR:O	2.26	0.53
16:N:66:ASN:HD22	16:N:70:ARG:NH2	2.06	0.53
17:O:15:SER:HA	17:O:95:ILE:CG2	2.39	0.53
18:P:62:ARG:NH1	26:Z:25:LEU:HD11	2.24	0.53
20:R:93:ARG:HA	20:R:95:ARG:CZ	2.38	0.53
21:S:94:VAL:HG23	21:S:125:PRO:HG3	1.90	0.53
23:U:52:ARG:NH1	23:U:79:GLU:OE1	2.39	0.53
1:X:71:A:C6	1:X:110:U:H4'	2.43	0.53
1:X:177:U:H2'	1:X:178:C:O4'	2.09	0.53
1:X:463:C:C2	1:X:465:C:C5	2.96	0.53
1:X:762:A:H4'	1:X:1284:G:N3	2.23	0.53
1:X:969:U:H5''	12:J:17:ARG:HH11	1.71	0.53
1:X:1142:G:HO2'	1:X:1143:A:P	2.31	0.53
1:X:1970:G:O2'	1:X:1971:C:H5'	2.07	0.53
1:X:2048:C:O2	1:X:2428:U:N3	2.35	0.53
1:X:2080:U:C4	1:X:2081:U:C4	2.97	0.53
1:X:2324:G:C2'	1:X:2325:A:OP2	2.57	0.53
1:X:2703:C:H2'	1:X:2704:U:O4'	2.09	0.53
1:X:2850:U:O2'	15:M:10:GLY:HA3	2.07	0.53
4:B:31:CYS:HB3	4:B:49:ILE:CG1	2.36	0.53
6:D:16:LEU:HD22	6:D:20:PHE:HE1	1.69	0.53
6:D:71:LYS:HB3	6:D:73:SER:OG	2.08	0.53
7:E:29:PRO:HG2	7:E:79:VAL:O	2.08	0.53
7:E:103:LEU:HB2	7:E:123:PHE:CD2	2.43	0.53
9:G:154:GLU:H	9:G:157:PRO:HD2	1.72	0.53
9:G:169:GLN:NE2	9:G:171:LEU:C	2.65	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J:35:LEU:HB2	12:J:119:PHE:CD1	2.44	0.53
14:L:17:VAL:HG13	14:L:18:ARG:N	2.24	0.53
16:N:52:ASN:C	16:N:54:LYS:N	2.64	0.53
17:O:32:LYS:O	17:O:57:GLN:HA	2.08	0.53
17:O:59:GLU:O	17:O:60:VAL:C	2.51	0.53
19:Q:54:SER:OG	19:Q:79:ILE:HB	2.09	0.53
20:R:85:ASP:N	20:R:86:PRO:CD	2.63	0.53
21:S:100:THR:CG2	21:S:138:VAL:HG21	2.24	0.53
1:X:119:G:H2'	1:X:120:G:H8	1.74	0.53
1:X:688:A:N6	1:X:689:A:N6	2.57	0.53
1:X:986:A:O3'	16:N:48:ARG:NH2	2.41	0.53
1:X:1443:G:H2'	1:X:1444:C:C6	2.44	0.53
1:X:2265:A:H4'	1:X:2266:A:O5'	2.07	0.53
1:X:2299:A:O2'	1:X:2312:A:N6	2.42	0.53
1:X:2310:G:O4'	22:T:42:GLY:HA3	2.07	0.53
1:X:2344:G:H4'	22:T:60:PHE:CE2	2.44	0.53
1:X:2404:A:H4'	1:X:2405:A:H5''	1.91	0.53
1:X:2527:G:C6	1:X:2540:A:C2	2.97	0.53
1:X:2800:C:H3'	1:X:2801:A:H8	1.73	0.53
4:B:84:PHE:CZ	4:B:86:PRO:HG2	2.44	0.53
5:C:8:GLY:O	5:C:9:GLN:HB3	2.09	0.53
5:C:35:LEU:O	5:C:39:ARG:N	2.37	0.53
5:C:101:GLN:C	5:C:103:GLY:H	2.17	0.53
6:D:54:ALA:O	6:D:55:LYS:C	2.51	0.53
10:H:100:ASN:ND2	10:H:104:GLU:HG3	2.24	0.53
16:N:32:TYR:O	16:N:33:ARG:C	2.51	0.53
17:O:56:VAL:HA	17:O:97:GLY:HA3	1.91	0.53
20:R:88:THR:O	20:R:89:GLY:C	2.49	0.53
24:V:24:GLU:OE2	24:V:46:LEU:HD11	2.07	0.53
26:Z:33:CYS:O	26:Z:37:HIS:HA	2.09	0.53
1:X:104:C:H2'	1:X:105:G:C5'	2.38	0.53
1:X:310:A:N3	1:X:330:C:O2'	2.35	0.53
1:X:418:C:OP2	1:X:418:C:O4'	2.27	0.53
1:X:592:G:P	16:N:10:ARG:NH1	2.82	0.53
1:X:610:G:H1	1:X:670:U:H3	1.57	0.53
1:X:611:C:H5''	1:X:611:C:C6	2.43	0.53
1:X:629:C:H2'	1:X:630:G:O4'	2.08	0.53
1:X:698:A:N7	1:X:787:A:C5	2.77	0.53
1:X:975:C:O2'	1:X:2252:A:H1'	2.08	0.53
1:X:1034:U:H2'	1:X:1035:G:H5'	1.91	0.53
1:X:1105:U:O2	1:X:1107:A:C8	2.62	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1296:G:H22	1:X:1299:A:H5''	1.74	0.53
1:X:1467:U:H3'	1:X:1468:A:C5'	2.38	0.53
1:X:1651:U:H4'	1:X:1652:G:OP2	2.02	0.53
1:X:1744:G:OP1	15:M:100:ARG:CD	2.52	0.53
1:X:1919:A:H2	1:X:1926:U:H3	1.23	0.53
1:X:2201:G:H5''	3:A:188:GLU:OE2	2.09	0.53
1:X:2245:A:H4'	1:X:2246:A:OP2	2.09	0.53
1:X:2382:C:C4	1:X:2394:G:C2	2.97	0.53
8:F:3:LYS:HD3	8:F:3:LYS:H	1.73	0.53
9:G:68:PRO:O	9:G:70:PHE:CD2	2.62	0.53
10:H:121:ARG:O	10:H:122:ARG:HB2	2.09	0.53
14:L:29:LEU:C	14:L:90:ASP:OD1	2.52	0.53
14:L:89:PHE:CD1	14:L:89:PHE:N	2.74	0.53
16:N:30:LYS:NZ	16:N:30:LYS:HB3	2.23	0.53
19:Q:61:LYS:HB2	19:Q:72:ARG:HD3	1.91	0.53
20:R:59:LYS:CD	20:R:62:MET:HG3	2.39	0.53
21:S:30:VAL:HG12	21:S:31:SER:O	2.08	0.53
21:S:91:PRO:HG3	21:S:125:PRO:HG2	1.90	0.53
1:X:48:A:O2'	1:X:49:U:OP2	2.26	0.53
1:X:318:G:H21	1:X:341:A:H62	1.57	0.53
1:X:329:C:O2'	1:X:330:C:H5'	2.09	0.53
1:X:417:C:C4	1:X:419:G:C4	2.97	0.53
1:X:969:U:C5'	12:J:17:ARG:NH1	2.71	0.53
1:X:1622:G:H4'	1:X:1624:A:C2	2.43	0.53
1:X:2033:C:H1'	4:B:156:MET:HE1	1.91	0.53
1:X:2187:A:C6	1:X:2188:A:C6	2.97	0.53
1:X:2306:A:C5	1:X:2367:A:N1	2.77	0.53
1:X:2735:C:H3'	30:4:19:ARG:HE	1.73	0.53
1:X:2845:C:H5''	13:K:65:LEU:HD11	1.91	0.53
3:A:177:LEU:HB3	3:A:178:PRO:HD2	1.91	0.53
5:C:104:LEU:N	5:C:104:LEU:CD2	2.72	0.53
5:C:108:ILE:O	5:C:109:ALA:C	2.50	0.53
6:D:13:ARG:HH21	6:D:17:MET:CE	2.22	0.53
6:D:36:VAL:HG13	6:D:152:MET:HE3	1.90	0.53
6:D:81:GLN:HG2	6:D:82:GLY:N	2.22	0.53
6:D:118:ASN:HD21	6:D:120:ASN:ND2	2.07	0.53
9:G:169:GLN:NE2	9:G:171:LEU:O	2.42	0.53
10:H:133:VAL:O	15:M:38:LYS:NZ	2.38	0.53
12:J:55:MET:HB3	12:J:65:ILE:HD13	1.90	0.53
14:L:54:ALA:HB3	14:L:75:LEU:CA	2.39	0.53
15:M:108:ARG:C	15:M:109:GLU:HG3	2.34	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:105:ARG:NH2	20:R:112:LYS:CA	2.64	0.53
22:T:71:ASN:HB2	22:T:77:ARG:HD2	1.91	0.53
25:W:45:LYS:HA	25:W:45:LYS:CE	2.39	0.53
1:X:174:A:H8	1:X:2051:U:C4	2.27	0.52
1:X:304:A:H2'	1:X:305:A:C5'	2.15	0.52
1:X:428:A:H2'	1:X:429:C:O4'	2.09	0.52
1:X:520:C:O2	1:X:520:C:H2'	2.08	0.52
1:X:719:A:H2'	1:X:720:A:H5'	1.90	0.52
1:X:857:U:O5'	1:X:857:U:H6	1.92	0.52
1:X:971:A:C4'	1:X:2436:U:H4'	2.39	0.52
1:X:1089:C:H5''	1:X:1090:C:OP1	2.09	0.52
1:X:1179:A:C2	1:X:1196:G:C2	2.97	0.52
1:X:1355:A:O2'	1:X:1357:U:OP2	2.27	0.52
1:X:1386:A:H5''	1:X:2191:A:H62	1.68	0.52
1:X:1710:U:H5'	1:X:1711:C:C5	2.44	0.52
1:X:1841:G:C2'	1:X:1842:G:H5'	2.39	0.52
1:X:1978:U:O2	10:H:3:MET:HE1	2.08	0.52
1:X:2475:C:O2'	1:X:2476:A:H5'	2.08	0.52
1:X:2596:C:C2'	1:X:2597:G:H5'	2.39	0.52
1:X:2796:A:C4'	4:B:162:MET:HE3	2.37	0.52
3:A:149:PRO:HG3	3:A:186:HIS:NE2	2.24	0.52
5:C:33:TRP:CE3	5:C:34:GLN:HG2	2.44	0.52
6:D:97:TYR:HA	6:D:100:LEU:HB3	1.91	0.52
7:E:7:GLN:H	7:E:8:PRO:CD	2.22	0.52
7:E:101:LYS:O	7:E:123:PHE:HB2	2.09	0.52
12:J:55:MET:HE1	12:J:105:PHE:CD1	2.44	0.52
12:J:86:LYS:O	12:J:88:LYS:HG3	2.09	0.52
19:Q:88:ILE:O	19:Q:89:GLU:C	2.52	0.52
20:R:93:ARG:N	20:R:95:ARG:HH22	2.06	0.52
22:T:82:GLU:O	22:T:83:ALA:O	2.27	0.52
24:V:41:HIS:O	24:V:42:ARG:C	2.51	0.52
25:W:37:THR:O	25:W:38:PRO:C	2.53	0.52
1:X:194:G:H2'	1:X:195:A:O4'	2.09	0.52
1:X:476:G:C6	1:X:477:A:N6	2.78	0.52
1:X:777:A:OP2	3:A:214:TRP:HH2	1.91	0.52
1:X:917:U:H5''	12:J:141:ALA:C	2.34	0.52
1:X:1629:G:C6	1:X:1633:C:C5	2.97	0.52
1:X:1658:A:N6	1:X:1659:G:C2	2.77	0.52
1:X:2625:U:OP2	1:X:2625:U:C6	2.62	0.52
1:X:2780:A:H2'	1:X:2781:G:C8	2.43	0.52
1:X:2796:A:O2'	1:X:2797:G:H5'	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:265:THR:C	3:A:267:ASP:H	2.18	0.52
4:B:93:VAL:C	4:B:95:ILE:H	2.17	0.52
6:D:72:LYS:HA	6:D:81:GLN:O	2.08	0.52
9:G:61:ARG:HE	9:G:65:LYS:CE	2.22	0.52
9:G:88:VAL:HG13	9:G:89:ALA:N	2.22	0.52
9:G:157:PRO:C	9:G:161:GLN:NE2	2.67	0.52
11:I:58:ALA:O	11:I:59:ARG:HB2	2.08	0.52
11:I:61:PRO:O	11:I:62:LYS:HB2	2.09	0.52
13:K:59:ASP:O	13:K:60:LEU:C	2.52	0.52
19:Q:63:LYS:HE3	19:Q:65:VAL:HA	1.91	0.52
20:R:17:LYS:C	20:R:19:GLY:N	2.66	0.52
20:R:105:ARG:CZ	20:R:112:LYS:HA	2.40	0.52
26:Z:45:ILE:HG21	26:Z:57:VAL:HG23	1.89	0.52
1:X:743:A:C2	1:X:744:C:C2	2.97	0.52
1:X:832:A:H2'	1:X:833:A:H5'	1.91	0.52
1:X:1253:C:H2'	1:X:1254:G:O5'	2.09	0.52
1:X:1348:C:H2'	1:X:1349:A:C8	2.40	0.52
1:X:1542:G:N2	1:X:1562:G:N1	2.37	0.52
1:X:1583:A:H8	1:X:1583:A:OP2	1.92	0.52
1:X:1886:G:H2'	1:X:1887:G:H8	1.73	0.52
1:X:1911:A:H2'	1:X:1912:G:H1'	1.91	0.52
1:X:2001:G:H2'	1:X:2002:A:O4'	2.09	0.52
1:X:2052:G:C2	1:X:2053:G:C8	2.97	0.52
2:Y:44:C:O2	6:D:90:THR:N	2.40	0.52
3:A:35:GLU:HG3	3:A:35:GLU:O	2.10	0.52
3:A:44:ASN:N	3:A:44:ASN:ND2	2.53	0.52
3:A:262:LYS:C	3:A:264:LYS:N	2.65	0.52
5:C:45:THR:HG21	5:C:85:GLY:HA3	1.89	0.52
6:D:47:SER:HA	6:D:50:ILE:HD11	1.91	0.52
6:D:108:LEU:HA	6:D:111:ILE:CG1	2.39	0.52
6:D:118:ASN:ND2	6:D:119:PRO:HD2	2.25	0.52
6:D:175:LEU:HD12	6:D:176:PRO:HD2	1.90	0.52
7:E:95:ARG:HA	7:E:128:PRO:O	2.09	0.52
10:H:110:VAL:HG12	10:H:111:PHE:N	2.24	0.52
12:J:31:GLY:CA	12:J:108:ALA:HB2	2.40	0.52
12:J:36:ILE:HD12	12:J:133:VAL:HG11	1.91	0.52
19:Q:59:PRO:O	19:Q:75:ARG:NH2	2.42	0.52
20:R:82:ALA:C	20:R:83:LEU:HD12	2.33	0.52
30:4:30:VAL:C	30:4:32:HIS:N	2.66	0.52
1:X:210:A:H61	1:X:441:A:H62	1.57	0.52
1:X:463:C:N4	1:X:466:A:OP2	2.29	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:538:A:H5''	9:G:142:ARG:HH12	1.75	0.52
1:X:965:G:H2'	1:X:966:A:O4'	2.09	0.52
1:X:972:C:C5'	1:X:973:U:OP2	2.57	0.52
1:X:1378:A:H2'	1:X:1379:A:H8	1.74	0.52
1:X:1968:G:O2'	1:X:1969:G:H5'	2.10	0.52
1:X:2076:G:N3	1:X:2181:A:N6	2.57	0.52
1:X:2171:U:C4	1:X:2172:U:C4	2.98	0.52
1:X:2652:G:C2	1:X:2653:A:C8	2.97	0.52
4:B:144:ARG:C	4:B:146:THR:H	2.18	0.52
5:C:74:VAL:HB	5:C:75:PRO:HD2	1.90	0.52
5:C:136:TRP:O	5:C:137:ALA:C	2.52	0.52
14:L:64:LYS:HG2	14:L:65:THR:HG23	1.91	0.52
18:P:69:ALA:O	18:P:71:VAL:N	2.43	0.52
20:R:93:ARG:HA	20:R:95:ARG:NH2	2.24	0.52
1:X:4:C:O2'	1:X:5:A:H5'	2.09	0.52
1:X:19:C:H5'	1:X:563:U:OP1	2.10	0.52
1:X:89:A:OP1	1:X:89:A:O4'	2.27	0.52
1:X:172:A:C2	1:X:178:C:O2	2.62	0.52
1:X:422:C:H2'	1:X:423:G:H8	1.74	0.52
1:X:543:G:H5'	16:N:24:PHE:CD1	2.43	0.52
1:X:623:G:H3'	1:X:624:A:C5'	2.22	0.52
1:X:1656:U:H2'	1:X:1657:A:C5'	2.39	0.52
1:X:1747:G:C4'	1:X:1749:G:H1'	2.35	0.52
1:X:1909:U:H5'	1:X:1911:A:OP2	2.09	0.52
1:X:2005:U:H4'	1:X:2006:G:OP1	2.10	0.52
1:X:2055:G:C2	1:X:2417:U:O2	2.62	0.52
1:X:2562:G:C6	1:X:2563:U:N3	2.77	0.52
3:A:96:HIS:CE1	3:A:97:TYR:O	2.63	0.52
3:A:231:HIS:CD2	3:A:233:HIS:HB2	2.45	0.52
4:B:131:SER:C	4:B:132:LYS:HG2	2.34	0.52
5:C:112:GLN:C	5:C:114:GLY:H	2.18	0.52
5:C:129:LYS:O	5:C:131:LYS:N	2.31	0.52
9:G:65:LYS:HG2	9:G:66:HIS:N	2.24	0.52
9:G:99:VAL:O	9:G:99:VAL:HG12	2.09	0.52
11:I:64:GLY:O	11:I:65:PHE:CB	2.58	0.52
14:L:100:VAL:C	14:L:102:ALA:N	2.67	0.52
17:O:34:GLU:O	17:O:35:LEU:O	2.28	0.52
18:P:81:HIS:HD2	18:P:82:ASN:OD1	1.93	0.52
19:Q:90:ALA:C	19:Q:92:ALA:N	2.57	0.52
20:R:84:VAL:HG13	20:R:86:PRO:HD2	1.90	0.52
1:X:930:A:H5''	2:Y:100:G:O2'	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:983:G:H3'	1:X:984:A:H5''	1.92	0.52
1:X:1093:U:H2'	1:X:1094:C:O4'	2.10	0.52
1:X:1128:G:C3'	1:X:1129:A:C5'	2.86	0.52
1:X:1212:U:H2'	1:X:1213:U:C6	2.44	0.52
1:X:1301:U:O2'	1:X:1664:G:N2	2.40	0.52
1:X:1336:G:OP1	18:P:105:ARG:NH1	2.41	0.52
1:X:1534:A:H2'	1:X:1535:C:H6	1.75	0.52
1:X:1574:A:O2'	1:X:1575:C:H3'	2.10	0.52
1:X:1662:G:H5''	1:X:1663:C:H5'	1.91	0.52
1:X:1856:U:H2'	1:X:1857:G:O5'	2.09	0.52
1:X:2258:G:C6	1:X:2259:G:N7	2.78	0.52
2:Y:35:C:O2'	2:Y:36:A:H5'	2.09	0.52
4:B:75:THR:HG23	4:B:76:ARG:H	1.74	0.52
4:B:184:VAL:HG12	4:B:185:LYS:O	2.10	0.52
5:C:28:HIS:HA	11:I:15:ASP:OD2	2.09	0.52
6:D:52:LYS:NZ	6:D:149:THR:HA	2.24	0.52
6:D:70:ALA:HB3	6:D:81:GLN:O	2.09	0.52
7:E:7:GLN:H	7:E:8:PRO:HD3	1.75	0.52
7:E:24:PHE:HD1	7:E:24:PHE:N	2.06	0.52
7:E:38:ASN:OD1	7:E:64:LEU:HD22	2.09	0.52
12:J:28:VAL:HG23	12:J:137:VAL:CG2	2.39	0.52
14:L:32:TYR:C	14:L:34:SER:H	2.17	0.52
18:P:103:LEU:O	18:P:104:LYS:C	2.53	0.52
19:Q:6:ILE:CG2	19:Q:7:LEU:N	2.72	0.52
19:Q:55:THR:O	19:Q:56:MET:SD	2.68	0.52
19:Q:64:ARG:O	19:Q:65:VAL:CG2	2.58	0.52
20:R:105:ARG:HH12	20:R:112:LYS:CA	2.22	0.52
23:U:22:GLY:CA	23:U:39:LYS:HD2	2.40	0.52
1:X:196:A:H2	1:X:211:U:O2	1.91	0.52
1:X:490:A:O2'	1:X:491:A:H3'	2.09	0.52
1:X:739:G:O2'	1:X:740:A:H8	1.93	0.52
1:X:771:C:O2'	1:X:772:G:H5'	2.09	0.52
1:X:777:A:O2'	1:X:778:G:OP1	2.24	0.52
1:X:827:C:O2'	1:X:828:C:H5'	2.09	0.52
1:X:829:C:O2'	1:X:830:C:H5'	2.10	0.52
1:X:965:G:H1'	1:X:2253:A:N1	2.25	0.52
1:X:1332:G:C2'	1:X:1333:G:O4'	2.57	0.52
1:X:1794:A:O2'	3:A:257:LEU:CD1	2.56	0.52
1:X:2811:G:C6	1:X:2858:A:C6	2.98	0.52
1:X:2852:G:C2'	1:X:2853:U:H5'	2.39	0.52
2:Y:15:A:H2	2:Y:71:G:N3	2.06	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:46:G:H5'	6:D:92:ARG:HH12	1.72	0.52
5:C:31:VAL:O	5:C:32:THR:C	2.51	0.52
5:C:48:ARG:O	5:C:51:VAL:HG22	2.09	0.52
12:J:33:TYR:O	12:J:106:GLU:HA	2.10	0.52
13:K:26:THR:HG23	13:K:75:VAL:HG11	1.92	0.52
14:L:28:ARG:NH1	14:L:90:ASP:OD2	2.43	0.52
14:L:85:LYS:HG2	14:L:86:GLN:HG2	1.92	0.52
15:M:104:LEU:HA	15:M:106:TYR:CD2	2.45	0.52
16:N:32:TYR:O	16:N:34:ASN:N	2.43	0.52
16:N:40:LEU:HB3	17:O:74:TYR:CD2	2.44	0.52
18:P:25:PHE:HD1	18:P:127:ILE:HD11	1.75	0.52
21:S:141:MET:HA	21:S:145:ASP:CG	2.35	0.52
1:X:88:G:H2'	1:X:89:A:C8	2.45	0.52
1:X:537:C:O2	1:X:537:C:H2'	2.10	0.52
1:X:589:C:H4'	16:N:31:GLN:HE22	1.75	0.52
1:X:632:A:H2'	1:X:633:G:C5'	2.40	0.52
1:X:648:A:H5''	1:X:649:G:OP1	2.09	0.52
1:X:1011:A:C6	1:X:1166:A:C5	2.98	0.52
1:X:1086:C:H3'	1:X:1087:C:C5'	2.34	0.52
1:X:1267:A:N1	5:C:76:THR:HG21	2.24	0.52
1:X:1281:A:C4'	1:X:2592:U:H5	2.22	0.52
1:X:1375:C:N3	1:X:1376:C:C5	2.77	0.52
1:X:1707:A:H3'	1:X:1708:C:H6	1.75	0.52
1:X:1767:G:N2	1:X:1768:U:H1'	2.25	0.52
1:X:1965:U:C2	1:X:1966:C:C5	2.98	0.52
1:X:1966:C:H4'	1:X:2585:C:H4'	1.92	0.52
1:X:2074:U:C3'	1:X:2075:U:H5''	2.32	0.52
1:X:2673:G:H2'	1:X:2674:C:H6	1.75	0.52
2:Y:9:G:H5'	14:L:32:TYR:CD2	2.44	0.52
2:Y:63:A:O2'	2:Y:64:C:H5'	2.10	0.52
3:A:124:GLU:O	3:A:126:LYS:N	2.42	0.52
5:C:13:ARG:H	5:C:13:ARG:HD2	1.75	0.52
5:C:148:VAL:CG1	5:C:167:VAL:HG12	2.40	0.52
6:D:4:LEU:HD21	6:D:173:MET:CE	2.39	0.52
6:D:143:TYR:HA	6:D:146:VAL:CG2	2.39	0.52
11:I:17:LYS:C	11:I:21:ARG:HD3	2.35	0.52
11:I:78:SER:N	11:I:112:GLY:HA3	2.25	0.52
11:I:90:ARG:O	11:I:121:HIS:HB2	2.10	0.52
13:K:60:LEU:HG	13:K:64:ARG:HD2	1.92	0.52
13:K:97:ILE:HA	13:K:112:LEU:O	2.10	0.52
14:L:39:TYR:O	14:L:41:GLN:N	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:20:ARG:NH1	17:O:83:ARG:NH2	2.58	0.52
16:N:88:ILE:O	17:O:48:GLY:HA3	2.10	0.52
16:N:91:ASN:HA	16:N:93:LYS:HZ2	1.73	0.52
17:O:40:VAL:HG12	17:O:45:THR:HA	1.91	0.52
17:O:43:GLU:O	17:O:45:THR:N	2.43	0.52
19:Q:83:ALA:C	19:Q:85:GLY:N	2.66	0.52
20:R:92:THR:C	20:R:95:ARG:NH2	2.68	0.52
21:S:39:PHE:HA	21:S:42:ALA:HB3	1.92	0.52
21:S:104:SER:OG	21:S:113:VAL:HG21	2.09	0.52
24:V:31:GLN:O	24:V:32:ALA:C	2.53	0.52
1:X:140:G:H2'	1:X:141:G:C8	2.45	0.52
1:X:356:A:C2'	1:X:357:A:C8	2.93	0.52
1:X:709:A:C2'	1:X:710:C:H5'	2.39	0.52
1:X:1042:G:H2'	1:X:1043:A:C8	2.45	0.52
1:X:1200:G:H2'	1:X:1201:G:H8	1.75	0.52
1:X:1707:A:C8	1:X:1708:C:C5	2.98	0.52
1:X:1808:C:C5	3:A:62:TYR:CD2	2.97	0.52
1:X:1927:U:O2	1:X:1938:U:H5''	2.09	0.52
1:X:2058:U:H1'	1:X:2576:G:H21	1.74	0.52
1:X:2240:C:C6	22:T:17:ASN:OD1	2.62	0.52
1:X:2689:C:H2'	1:X:2690:A:H8	1.75	0.52
1:X:2779:C:C6	1:X:2779:C:H3'	2.44	0.52
1:X:2795:A:H4'	13:K:5:LYS:HZ2	1.74	0.52
2:Y:46:G:C2	2:Y:50:U:O2	2.62	0.52
2:Y:75:A:C6	2:Y:76:U:C2	2.98	0.52
2:Y:123:U:OP1	2:Y:123:U:H3'	2.09	0.52
4:B:31:CYS:O	4:B:90:SER:N	2.43	0.52
5:C:127:ASP:CB	5:C:129:LYS:HE2	2.40	0.52
6:D:5:LYS:CA	6:D:8:TYR:HB3	2.39	0.52
6:D:35:VAL:O	6:D:154:ILE:HA	2.10	0.52
7:E:31:GLY:O	7:E:79:VAL:HG12	2.10	0.52
8:F:112:MET:N	8:F:113:PRO:CD	2.73	0.52
10:H:70:VAL:HG21	10:H:98:ILE:CG2	2.39	0.52
10:H:97:VAL:HG11	10:H:126:ILE:CD1	2.40	0.52
13:K:13:ASN:ND2	13:K:13:ASN:C	2.68	0.52
15:M:33:VAL:HG22	15:M:51:GLU:CD	2.34	0.52
17:O:13:ARG:HB2	17:O:13:ARG:CZ	2.39	0.52
18:P:51:GLN:O	18:P:54:GLU:HB2	2.09	0.52
18:P:97:VAL:CG1	18:P:122:SER:HB3	2.40	0.52
19:Q:28:TRP:CE3	19:Q:75:ARG:HB3	2.44	0.52
21:S:100:THR:CG2	21:S:101:THR:H	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:Z:46:CYS:HG	26:Z:49:CYS:HG	1.57	0.52
1:X:35:G:O2'	1:X:36:G:O5'	2.19	0.52
1:X:197:G:N3	1:X:210:A:H2	2.07	0.52
1:X:235:C:N4	1:X:236:C:N3	2.58	0.52
1:X:333:A:H5''	5:C:162:ARG:HD2	1.92	0.52
1:X:525:A:H2'	1:X:526:C:C5'	2.38	0.52
1:X:531:G:H2'	1:X:532:A:C8	2.43	0.52
1:X:988:G:N3	1:X:1012:A:C2	2.77	0.52
1:X:1287:A:H2'	1:X:1288:A:H5''	1.92	0.52
1:X:1656:U:C2'	1:X:1657:A:C5'	2.86	0.52
1:X:1811:A:H5''	3:A:161:THR:HG21	1.91	0.52
1:X:1813:A:H2'	1:X:1814:G:H8	1.75	0.52
1:X:2205:C:C2'	1:X:2206:C:H5'	2.40	0.52
1:X:2298:U:O2'	1:X:2299:A:C4	2.63	0.52
1:X:2310:G:C6	1:X:2311:U:C5	2.98	0.52
1:X:2351:G:C2	1:X:2352:A:C5	2.98	0.52
1:X:2505:G:O2'	30:4:1:MET:N	2.39	0.52
1:X:2741:G:N2	7:E:150:LYS:NZ	2.58	0.52
1:X:2788:C:O2'	1:X:2789:U:H5'	2.10	0.52
1:X:2874:A:H2'	1:X:2875:C:C6	2.44	0.52
2:Y:65:A:H2'	2:Y:66:G:H8	1.73	0.52
3:A:130:ALA:HA	3:A:191:ALA:O	2.10	0.52
4:B:144:ARG:O	4:B:146:THR:O	2.28	0.52
5:C:158:ARG:CD	5:C:169:VAL:CG1	2.87	0.52
9:G:96:ASP:CG	9:G:97:ASP:H	2.18	0.52
9:G:169:GLN:O	9:G:170:PRO:O	2.28	0.52
10:H:42:LYS:NZ	10:H:44:TYR:O	2.43	0.52
11:I:18:ARG:O	11:I:19:VAL:HB	2.09	0.52
12:J:64:LYS:N	12:J:64:LYS:CD	2.73	0.52
16:N:52:ASN:O	16:N:54:LYS:N	2.43	0.52
16:N:91:ASN:HA	16:N:93:LYS:NZ	2.25	0.52
18:P:89:ARG:CG	18:P:89:ARG:O	2.58	0.52
18:P:100:GLY:C	18:P:101:PRO:O	2.52	0.52
20:R:60:PRO:C	20:R:62:MET:N	2.68	0.52
21:S:3:LEU:HB2	21:S:34:LEU:HA	1.91	0.52
21:S:62:PHE:HB3	21:S:85:MET:CE	2.39	0.52
30:4:7:VAL:HG13	30:4:25:VAL:CG2	2.39	0.52
30:4:11:CYS:HG	30:4:32:HIS:CE1	2.27	0.52
1:X:128:C:C2'	1:X:129:A:H5''	2.33	0.51
1:X:167:A:C2	1:X:168:A:C4	2.98	0.51
1:X:514:G:H2'	1:X:514:G:N3	2.26	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:541:C:OP1	1:X:570:G:N1	2.43	0.51
1:X:600:G:O6	1:X:602:C:N4	2.44	0.51
1:X:610:G:O3'	5:C:98:GLN:NE2	2.43	0.51
1:X:1071:U:H1'	1:X:1073:G:H5'	1.92	0.51
1:X:1337:G:C2	1:X:1341:G:N1	2.78	0.51
1:X:1339:U:C5	1:X:1664:G:O2'	2.61	0.51
1:X:1372:A:C8	1:X:1373:G:N7	2.78	0.51
1:X:1426:U:C2'	1:X:1427:G:H5'	2.39	0.51
1:X:1432:G:H21	1:X:1596:A:H62	1.58	0.51
1:X:1448:A:N6	1:X:1574:A:N6	2.43	0.51
1:X:1499:A:H2'	1:X:1500:U:O4'	2.10	0.51
1:X:1811:A:O2'	1:X:1812:U:P	2.68	0.51
1:X:1949:A:H1'	1:X:2572:U:C5'	2.40	0.51
1:X:2551:A:C4	4:B:144:ARG:NH1	2.78	0.51
1:X:2629:U:H5'	10:H:35:THR:HG21	1.92	0.51
1:X:2698:G:H2'	1:X:2699:G:H8	1.75	0.51
1:X:2849:C:O2'	1:X:2850:U:H5''	2.10	0.51
2:Y:44:C:N4	6:D:88:LYS:NZ	2.58	0.51
3:A:270:ILE:HG13	3:A:271:VAL:N	2.16	0.51
4:B:2:LYS:HD3	4:B:95:ILE:HD12	1.91	0.51
5:C:5:ASN:HB2	5:C:10:ASN:HA	1.92	0.51
5:C:33:TRP:CD1	5:C:95:LEU:HB2	2.45	0.51
6:D:52:LYS:O	6:D:56:GLU:HB2	2.10	0.51
6:D:111:ILE:HA	6:D:137:ILE:HG21	1.90	0.51
10:H:133:VAL:O	10:H:133:VAL:HG12	2.08	0.51
11:I:28:LYS:NZ	11:I:36:GLY:CA	2.72	0.51
12:J:39:GLU:HG2	12:J:40:PRO:HD2	1.92	0.51
13:K:66:VAL:HG12	13:K:70:ILE:HG13	1.93	0.51
20:R:52:ASN:ND2	20:R:73:GLU:OE1	2.43	0.51
20:R:71:GLN:O	20:R:72:ARG:HG3	2.10	0.51
21:S:36:ARG:C	21:S:40:ASP:OD2	2.54	0.51
21:S:46:GLN:CB	21:S:50:GLY:HA3	2.25	0.51
21:S:123:VAL:H	21:S:161:ALA:HB2	1.71	0.51
21:S:128:ARG:N	21:S:130:ILE:HD11	2.25	0.51
1:X:137:A:C2	1:X:138:G:H1'	2.45	0.51
1:X:311:A:C8	1:X:345:U:O2'	2.59	0.51
1:X:595:A:C2	1:X:823:U:O4'	2.63	0.51
1:X:940:G:O2'	25:W:40:VAL:HG23	2.10	0.51
1:X:1092:U:C4'	8:F:122:ALA:HB1	2.36	0.51
1:X:1470:G:C2	1:X:1471:G:C8	2.99	0.51
1:X:1807:A:OP2	1:X:1814:G:H5''	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1845:A:H2'	1:X:1846:A:C8	2.45	0.51
1:X:2247:A:H5''	1:X:2247:A:H8	1.75	0.51
2:Y:37:C:H2'	2:Y:38:C:O4'	2.10	0.51
5:C:191:ALA:O	5:C:194:GLU:O	2.29	0.51
6:D:12:VAL:CG1	6:D:169:LEU:HD13	2.40	0.51
6:D:30:ARG:HB2	6:D:159:THR:HG23	1.92	0.51
9:G:90:LEU:HB2	9:G:94:LYS:CE	2.37	0.51
10:H:73:VAL:CG2	10:H:123:PHE:CE2	2.91	0.51
11:I:118:VAL:O	11:I:138:GLY:HA3	2.11	0.51
12:J:71:PRO:CA	12:J:96:SER:HB2	2.40	0.51
15:M:55:ILE:HA	15:M:104:LEU:HD12	1.92	0.51
16:N:66:ASN:HB3	16:N:76:TYR:CB	2.32	0.51
20:R:29:HIS:NE2	20:R:51:VAL:HG22	2.26	0.51
24:V:56:VAL:O	24:V:59:GLU:N	2.43	0.51
25:W:10:ILE:HG22	25:W:11:GLY:N	2.24	0.51
26:Z:36:CYS:C	26:Z:38:GLY:H	2.18	0.51
1:X:165:G:H1'	1:X:1378:A:N6	2.25	0.51
1:X:318:G:N1	1:X:321:A:OP2	2.44	0.51
1:X:333:A:H5''	5:C:162:ARG:CZ	2.39	0.51
1:X:610:G:O2'	5:C:98:GLN:NE2	2.44	0.51
1:X:649:G:O2'	1:X:650:U:H5'	2.10	0.51
1:X:687:G:H2'	1:X:817:A:H61	1.75	0.51
1:X:843:G:O2'	1:X:844:G:OP1	2.28	0.51
1:X:969:U:C4	12:J:17:ARG:HB2	2.45	0.51
1:X:1020:A:C6	1:X:1021:A:N1	2.78	0.51
1:X:1329:U:H2'	1:X:1330:G:H8	1.75	0.51
1:X:1425:G:O2'	1:X:1426:U:H5'	2.09	0.51
1:X:1479:G:H2'	1:X:1480:G:C8	2.45	0.51
1:X:1544:A:C2	1:X:1560:A:C5	2.98	0.51
1:X:1584:G:H4'	3:A:59:LYS:CB	2.40	0.51
1:X:1603:A:H8	1:X:1603:A:OP2	1.94	0.51
1:X:1730:G:O2'	1:X:1731:C:H5'	2.09	0.51
1:X:1979:C:O2'	1:X:1980:A:C4'	2.59	0.51
1:X:2371:A:C8	1:X:2372:A:C8	2.98	0.51
1:X:2429:A:H2	1:X:2430:A:C4	2.28	0.51
1:X:2819:G:H2'	1:X:2820:C:C6	2.43	0.51
5:C:30:VAL:O	5:C:32:THR:N	2.44	0.51
5:C:39:ARG:HG2	5:C:39:ARG:HH11	1.74	0.51
7:E:158:HIS:HA	7:E:171:LEU:HD21	1.91	0.51
9:G:92:GLY:CA	9:G:93:LYS:HD2	2.40	0.51
12:J:60:ARG:HG2	12:J:60:ARG:HH11	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J:76:THR:CB	12:J:88:LYS:O	2.58	0.51
13:K:76:VAL:O	13:K:79:VAL:CG1	2.57	0.51
14:L:104:ALA:O	14:L:105:ASP:C	2.52	0.51
16:N:47:TYR:HD2	16:N:48:ARG:N	2.08	0.51
17:O:23:GLU:O	17:O:25:LEU:N	2.44	0.51
17:O:49:GLU:C	17:O:51:ALA:H	2.18	0.51
18:P:107:ILE:O	18:P:107:ILE:HG23	2.10	0.51
23:U:10:LYS:HG2	23:U:11:LYS:CG	2.40	0.51
1:X:31:C:H2'	1:X:32:C:O4'	2.11	0.51
1:X:112:U:C2	1:X:113:C:C5	2.98	0.51
1:X:221:A:H2'	1:X:222:G:O4'	2.10	0.51
1:X:339:U:O4	1:X:343:A:H8	1.93	0.51
1:X:538:A:H2'	1:X:2025:A:H2	1.75	0.51
1:X:637:G:H1	11:I:101:ARG:HD3	1.74	0.51
1:X:719:A:C2'	1:X:720:A:H5'	2.41	0.51
1:X:1135:C:H2'	1:X:1136:G:C8	2.41	0.51
1:X:1293:A:H2'	1:X:1294:G:O5'	2.11	0.51
1:X:1478:U:O2'	1:X:1479:G:H5'	2.11	0.51
1:X:1705:U:O2'	1:X:1717:A:N7	2.38	0.51
1:X:1985:G:H5''	13:K:13:ASN:HA	1.92	0.51
1:X:2199:C:H5''	1:X:2200:G:OP2	2.10	0.51
1:X:2282:G:H4'	6:D:122:PHE:CD1	2.46	0.51
1:X:2356:A:N3	14:L:89:PHE:CE1	2.79	0.51
1:X:2594:U:H2'	1:X:2595:C:C6	2.45	0.51
1:X:2600:A:C5	1:X:2601:C:C5	2.98	0.51
1:X:2667:C:C5	1:X:2699:G:C6	2.99	0.51
1:X:2814:G:N2	1:X:2815:C:H1'	2.25	0.51
2:Y:45:C:H2'	6:D:92:ARG:NE	2.25	0.51
3:A:79:VAL:O	3:A:79:VAL:HG12	2.08	0.51
3:A:213:ARG:C	3:A:215:LEU:N	2.68	0.51
4:B:144:ARG:C	4:B:146:THR:N	2.68	0.51
5:C:19:LEU:HA	5:C:20:PRO:C	2.35	0.51
5:C:112:GLN:C	5:C:114:GLY:N	2.68	0.51
7:E:43:VAL:CB	7:E:52:VAL:HA	2.40	0.51
7:E:89:LEU:CD2	7:E:131:ILE:HD11	2.37	0.51
9:G:106:TYR:CE2	9:G:108:GLY:CA	2.94	0.51
16:N:81:ASN:O	16:N:84:LYS:HB3	2.09	0.51
17:O:14:VAL:O	17:O:14:VAL:HG12	2.11	0.51
17:O:28:GLU:C	17:O:30:GLY:N	2.65	0.51
17:O:40:VAL:CG1	17:O:45:THR:HA	2.41	0.51
18:P:41:VAL:O	18:P:42:VAL:C	2.51	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:P:105:ARG:CZ	18:P:119:LYS:HE3	2.40	0.51
20:R:25:LEU:HD13	20:R:25:LEU:N	2.24	0.51
21:S:1:MET:HG3	21:S:52:PHE:CE2	2.46	0.51
1:X:303:C:H2'	1:X:304:A:H5''	1.93	0.51
1:X:357:A:H3'	1:X:358:C:H6	1.74	0.51
1:X:412:U:H5	23:U:68:ARG:NH1	2.08	0.51
1:X:663:G:C2'	1:X:664:C:H5''	2.41	0.51
1:X:701:U:O2	1:X:800:U:H4'	2.10	0.51
1:X:1019:U:O2'	1:X:1020:A:O5'	2.28	0.51
1:X:1122:A:H2	1:X:1123:G:H1'	1.75	0.51
1:X:1314:A:H2	1:X:1642:G:N3	2.08	0.51
1:X:1399:C:H2'	1:X:1400:A:H8	1.74	0.51
1:X:1479:G:H2'	1:X:1480:G:H8	1.75	0.51
1:X:1748:U:O4	1:X:1753:A:H2	1.93	0.51
1:X:2662:C:N4	1:X:2707:G:H21	2.09	0.51
6:D:38:GLU:HB3	6:D:87:ILE:CD1	2.40	0.51
6:D:108:LEU:HB3	6:D:114:PHE:CZ	2.45	0.51
9:G:59:ALA:HB1	9:G:134:MET:O	2.11	0.51
10:H:10:VAL:HG23	10:H:17:ARG:C	2.36	0.51
15:M:11:GLU:O	15:M:12:LEU:C	2.50	0.51
18:P:9:ARG:O	18:P:10:ASN:HB3	2.10	0.51
19:Q:54:SER:HG	19:Q:79:ILE:HB	1.74	0.51
23:U:54:ASN:CG	23:U:55:GLY:N	2.69	0.51
24:V:42:ARG:NH1	24:V:45:GLN:CD	2.69	0.51
1:X:38:G:H1	1:X:453:U:H3	1.59	0.51
1:X:93:A:O2'	1:X:94:C:H5'	2.11	0.51
1:X:216:U:H2'	1:X:217:U:O4'	2.11	0.51
1:X:404:A:C6	1:X:405:C:N3	2.78	0.51
1:X:449:C:O2'	1:X:450:C:H5'	2.09	0.51
1:X:632:A:C2	1:X:633:G:C4	2.98	0.51
1:X:774:A:C8	1:X:774:A:H3'	2.46	0.51
1:X:790:A:H62	1:X:806:A:H2	1.59	0.51
1:X:979:A:O2'	1:X:980:G:H5'	2.11	0.51
1:X:1323:G:H3'	1:X:1324:G:N2	2.24	0.51
1:X:1668:G:OP1	13:K:40:LYS:HG3	2.10	0.51
1:X:1819:U:O2'	1:X:1820:G:H5'	2.10	0.51
1:X:2046:C:O2	1:X:2430:A:C2	2.64	0.51
1:X:2065:A:H3'	1:X:2066:G:C8	2.44	0.51
1:X:2246:A:N6	1:X:2251:U:H3	2.09	0.51
1:X:2289:A:H3'	1:X:2290:A:H8	1.75	0.51
1:X:2368:G:H5''	1:X:2369:U:O5'	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2423:G:C6	1:X:2424:G:N7	2.79	0.51
1:X:2464:G:OP1	12:J:47:GLN:NE2	2.39	0.51
1:X:2701:A:C2'	1:X:2702:G:O5'	2.59	0.51
1:X:2705:A:O2'	1:X:2706:U:C6	2.64	0.51
5:C:47:THR:OG1	5:C:87:LYS:HD3	2.10	0.51
7:E:40:GLU:OE2	7:E:61:HIS:CE1	2.63	0.51
9:G:33:ILE:HD11	9:G:35:LYS:HZ3	1.75	0.51
14:L:102:ALA:C	14:L:104:ALA:N	2.66	0.51
16:N:20:ARG:HD2	16:N:39:LEU:HD13	1.93	0.51
20:R:106:VAL:O	20:R:107:ALA:HB2	2.11	0.51
21:S:73:LYS:O	21:S:74:ARG:CB	2.51	0.51
22:T:56:ASP:CG	22:T:58:THR:HG1	2.18	0.51
23:U:21:ARG:HA	23:U:39:LYS:HB2	1.92	0.51
25:W:40:VAL:HA	25:W:43:MET:HG2	1.92	0.51
1:X:455:A:H2	1:X:1258:G:N3	2.09	0.51
1:X:717:G:O2'	1:X:718:A:O5'	2.29	0.51
1:X:849:G:C5	1:X:850:C:C4	2.99	0.51
1:X:994:A:O2'	1:X:995:A:P	2.68	0.51
1:X:1219:C:H2'	1:X:1220:G:O4'	2.11	0.51
1:X:1237:G:O3'	17:O:85:GLY:HA3	2.11	0.51
1:X:1337:G:O2'	1:X:1632:A:N1	2.44	0.51
1:X:1373:G:H2'	1:X:1374:G:C5'	2.41	0.51
1:X:2210:C:C2	1:X:2211:U:C5	2.99	0.51
1:X:2302:G:C6	1:X:2303:C:C4	2.99	0.51
1:X:2334:C:O5'	1:X:2334:C:H6	1.93	0.51
1:X:2484:G:C6	1:X:2555:G:C4	2.99	0.51
2:Y:122:U:H5''	2:Y:123:U:OP1	2.11	0.51
3:A:72:LYS:HG2	3:A:103:ARG:NH1	2.25	0.51
5:C:24:SER:O	5:C:25:GLY:C	2.54	0.51
5:C:127:ASP:CB	5:C:129:LYS:HG2	2.41	0.51
6:D:35:VAL:CG2	6:D:155:THR:HB	2.36	0.51
6:D:60:ILE:HA	6:D:140:GLU:HG3	1.93	0.51
6:D:111:ILE:HG12	6:D:137:ILE:CG2	2.41	0.51
6:D:128:TYR:HB3	6:D:156:ILE:HD12	1.91	0.51
8:F:10:LEU:N	8:F:10:LEU:HD23	2.26	0.51
9:G:95:LEU:HD21	9:G:117:GLU:CD	2.36	0.51
9:G:108:GLY:H	9:G:110:LEU:HG	1.74	0.51
10:H:9:ASP:OD1	10:H:93:ARG:NH2	2.43	0.51
12:J:95:VAL:CG1	12:J:96:SER:N	2.73	0.51
15:M:106:TYR:CD1	15:M:107:LEU:HD23	2.45	0.51
16:N:93:LYS:HE2	17:O:10:LYS:CE	2.40	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:P:67:PRO:O	18:P:68:VAL:C	2.53	0.51
20:R:43:ASP:O	20:R:44:GLN:HB2	2.10	0.51
21:S:115:ILE:HA	21:S:169:VAL:HG12	1.93	0.51
1:X:43:A:N1	1:X:44:G:C6	2.79	0.51
1:X:227:G:O2'	11:I:53:ARG:CZ	2.58	0.51
1:X:417:C:N3	1:X:419:G:C5	2.79	0.51
1:X:664:C:O3'	1:X:665:A:H3'	2.11	0.51
1:X:769:C:C2'	1:X:770:U:H5'	2.40	0.51
1:X:1517:C:C6	1:X:1518:C:H5	2.28	0.51
1:X:1574:A:C2'	1:X:1575:C:H5''	2.39	0.51
1:X:1602:G:H5'	1:X:1603:A:OP2	2.11	0.51
1:X:2014:A:C5	1:X:2477:C:H1'	2.45	0.51
1:X:2055:G:C2'	1:X:2056:C:H5'	2.40	0.51
1:X:2272:A:P	14:L:15:ARG:HH21	2.34	0.51
1:X:2429:A:O2'	1:X:2430:A:H5'	2.11	0.51
4:B:97:ALA:N	4:B:100:GLU:OE2	2.43	0.51
6:D:80:ARG:O	6:D:81:GLN:O	2.29	0.51
7:E:9:ILE:HG22	7:E:11:VAL:HG23	1.92	0.51
7:E:65:HIS:C	7:E:67:LEU:N	2.69	0.51
10:H:7:ARG:HD3	10:H:18:GLU:OE1	2.11	0.51
13:K:103:ARG:HG2	13:K:104:ARG:H	1.76	0.51
21:S:98:VAL:HG21	21:S:168:VAL:HG13	1.93	0.51
22:T:52:GLY:N	22:T:62:LEU:CD2	2.74	0.51
23:U:17:SER:HB2	23:U:44:ALA:HA	1.92	0.51
30:4:29:ASN:OD1	30:4:29:ASN:C	2.54	0.51
1:X:165:G:H2'	1:X:166:G:C5'	2.41	0.51
1:X:209:G:N2	1:X:433:G:OP1	2.44	0.51
1:X:706:A:H2'	1:X:707:U:C6	2.45	0.51
1:X:759:C:H5'	1:X:759:C:C6	2.46	0.51
1:X:824:U:O2	1:X:1263:G:H3'	2.09	0.51
1:X:827:C:OP1	17:O:82:ARG:HA	2.11	0.51
1:X:865:A:H2'	1:X:866:U:C6	2.46	0.51
1:X:1075:C:HO2'	8:F:89:SER:CA	2.23	0.51
1:X:1088:A:N6	1:X:1100:G:OP1	2.44	0.51
1:X:1601:U:O5'	1:X:1601:U:H6	1.94	0.51
1:X:1619:A:C5	1:X:1620:C:C5	2.99	0.51
1:X:2074:U:OP2	1:X:2075:U:H3'	2.11	0.51
1:X:2170:C:H2'	1:X:2171:U:C4'	2.39	0.51
1:X:2273:C:H5'	14:L:95:LYS:CD	2.41	0.51
1:X:2400:G:N2	23:U:33:LYS:HZ2	2.09	0.51
3:A:52:ARG:NH2	3:A:53:PHE:HZ	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:166:GLN:HB2	3:A:174:ILE:O	2.09	0.51
5:C:6:VAL:HG23	5:C:118:VAL:HG23	1.92	0.51
5:C:163:ASN:ND2	5:C:166:TRP:HB2	2.26	0.51
5:C:169:VAL:CG1	5:C:170:LEU:N	2.73	0.51
6:D:9:ASN:O	6:D:14:PRO:HD2	2.10	0.51
9:G:101:THR:HG23	9:G:103:TYR:CD1	2.46	0.51
9:G:158:HIS:HA	9:G:161:GLN:NE2	2.26	0.51
13:K:20:LEU:O	13:K:21:ALA:C	2.53	0.51
17:O:15:SER:HB3	17:O:95:ILE:O	2.11	0.51
17:O:65:ARG:HG3	17:O:65:ARG:NH1	2.12	0.51
1:X:102:C:C5	1:X:103:U:C4	2.99	0.51
1:X:408:U:O2'	1:X:409:G:C8	2.63	0.51
1:X:631:G:O2'	1:X:632:A:O5'	2.22	0.51
1:X:666:U:H3'	1:X:667:U:H5''	1.92	0.51
1:X:871:U:O2'	1:X:2248:A:H5''	2.11	0.51
1:X:1031:C:O2	1:X:1031:C:C2'	2.54	0.51
1:X:1043:A:H5''	30:4:9:LYS:NZ	2.26	0.51
1:X:1411:C:O2'	1:X:1412:C:H5'	2.11	0.51
1:X:1552:C:H1'	1:X:1553:G:N3	2.26	0.51
1:X:1579:G:O2'	1:X:1580:C:H5'	2.11	0.51
1:X:1757:C:C2	1:X:1970:G:C2	2.99	0.51
1:X:1770:U:O2	1:X:1774:A:C6	2.64	0.51
1:X:1777:A:O2'	1:X:1778:U:OP1	2.25	0.51
1:X:2335:U:O2'	1:X:2336:G:H5'	2.10	0.51
1:X:2507:U:O3'	1:X:2508:G:H8	1.93	0.51
1:X:2729:A:C2	1:X:2730:A:N7	2.79	0.51
1:X:2814:G:C4	1:X:2815:C:C6	2.99	0.51
3:A:252:LYS:N	3:A:253:PRO:HD2	2.23	0.51
4:B:120:TRP:O	4:B:121:ASN:HB2	2.10	0.51
4:B:150:VAL:CG2	4:B:154:LYS:HE2	2.29	0.51
5:C:35:LEU:HA	5:C:38:ARG:HG3	1.93	0.51
5:C:158:ARG:C	5:C:160:ALA:N	2.68	0.51
6:D:5:LYS:HA	6:D:8:TYR:CB	2.41	0.51
6:D:38:GLU:HB3	6:D:87:ILE:CB	2.40	0.51
7:E:83:TYR:O	7:E:135:GLY:N	2.44	0.51
11:I:71:THR:O	11:I:104:ARG:HB3	2.11	0.51
13:K:24:GLN:HB3	13:K:44:LEU:HD22	1.93	0.51
16:N:47:TYR:C	16:N:49:ASP:N	2.62	0.51
16:N:93:LYS:O	16:N:94:VAL:CB	2.58	0.51
17:O:18:ASP:C	17:O:18:ASP:OD1	2.54	0.51
17:O:53:LYS:HB2	17:O:54:TYR:CD1	2.46	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Q:88:ILE:O	19:Q:88:ILE:CD1	2.59	0.51
20:R:105:ARG:NH1	20:R:112:LYS:HA	2.26	0.51
21:S:6:LYS:HA	21:S:32:PHE:O	2.10	0.51
23:U:28:GLY:O	23:U:30:VAL:N	2.44	0.51
1:X:101:A:C6	1:X:102:C:C2	2.99	0.50
1:X:172:A:N7	1:X:175:C:C5	2.79	0.50
1:X:330:C:C2	1:X:331:U:C6	2.99	0.50
1:X:333:A:O4'	1:X:351:A:H1'	2.10	0.50
1:X:339:U:O4	1:X:343:A:C8	2.64	0.50
1:X:589:C:H4'	16:N:31:GLN:CD	2.35	0.50
1:X:837:U:O2'	1:X:838:A:H5'	2.11	0.50
1:X:1452:U:HO2'	1:X:1453:A:H5'	1.75	0.50
1:X:1556:A:H2'	1:X:1557:G:C8	2.45	0.50
1:X:1791:C:H5'	1:X:1792:C:OP1	2.11	0.50
1:X:1935:A:C4	10:H:22:ILE:HD11	2.46	0.50
1:X:2048:C:H2'	1:X:2049:C:H6	1.74	0.50
3:A:213:ARG:C	3:A:215:LEU:H	2.18	0.50
6:D:36:VAL:CG1	6:D:152:MET:HE3	2.41	0.50
6:D:153:ASP:C	6:D:154:ILE:HD12	2.36	0.50
7:E:59:GLN:C	7:E:61:HIS:H	2.19	0.50
7:E:126:PRO:HG3	7:E:130:ARG:CD	2.40	0.50
9:G:123:PRO:O	9:G:124:GLU:C	2.54	0.50
9:G:159:SER:C	9:G:161:GLN:N	2.64	0.50
11:I:92:THR:C	11:I:94:GLU:N	2.70	0.50
12:J:73:LYS:O	12:J:94:TRP:CD1	2.65	0.50
12:J:136:GLU:CA	12:J:138:TYR:CE2	2.94	0.50
16:N:14:HIS:C	16:N:16:LYS:N	2.67	0.50
18:P:66:GLU:O	18:P:67:PRO:C	2.53	0.50
23:U:17:SER:HB2	23:U:43:ARG:O	2.11	0.50
23:U:22:GLY:HA3	23:U:39:LYS:HD2	1.93	0.50
23:U:66:ALA:O	23:U:70:LEU:HB2	2.11	0.50
26:Z:36:CYS:O	26:Z:36:CYS:SG	2.69	0.50
1:X:334:G:H5'	5:C:162:ARG:HH21	1.76	0.50
1:X:546:A:N6	1:X:565:A:N6	2.59	0.50
1:X:664:C:H3'	1:X:665:A:C2	2.46	0.50
1:X:676:G:N2	1:X:950:G:O3'	2.44	0.50
1:X:1465:G:H2'	1:X:1466:C:C6	2.46	0.50
1:X:1467:U:C6	1:X:1467:U:H5''	2.46	0.50
1:X:1810:U:OP2	3:A:157:ARG:HD3	2.11	0.50
1:X:1926:U:OP1	1:X:1926:U:H6	1.95	0.50
1:X:1934:U:C2	1:X:1936:A:OP2	2.64	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2405:A:H2'	1:X:2405:A:N3	2.26	0.50
1:X:2592:U:C6	1:X:2592:U:O2'	2.57	0.50
1:X:2779:C:H3'	1:X:2779:C:H6	1.76	0.50
3:A:95:LEU:HD12	3:A:105:ILE:HD12	1.93	0.50
3:A:243:GLY:C	3:A:244:ARG:CD	2.84	0.50
5:C:48:ARG:HB2	5:C:51:VAL:CG2	2.37	0.50
7:E:40:GLU:OE2	7:E:61:HIS:HE1	1.94	0.50
7:E:137:ASP:OD2	7:E:139:GLN:HB2	2.11	0.50
12:J:49:GLU:OE1	12:J:52:ARG:NH2	2.44	0.50
13:K:66:VAL:O	13:K:68:GLN:N	2.44	0.50
13:K:95:THR:CG2	13:K:95:THR:O	2.59	0.50
14:L:79:ALA:O	14:L:83:GLY:N	2.41	0.50
17:O:70:TYR:HD1	17:O:70:TYR:H	1.57	0.50
20:R:15:HIS:O	20:R:16:PHE:CB	2.59	0.50
23:U:28:GLY:N	23:U:32:ARG:NE	2.59	0.50
24:V:4:SER:HB3	24:V:7:ARG:NE	2.26	0.50
1:X:412:U:C5	23:U:68:ARG:NH1	2.79	0.50
1:X:1142:G:O4'	9:G:103:TYR:HD2	1.94	0.50
1:X:1344:C:H2'	1:X:1346:C:C5	2.47	0.50
1:X:1683:G:N2	1:X:1978:U:C2	2.79	0.50
1:X:1767:G:N2	1:X:1768:U:C1'	2.74	0.50
1:X:1794:A:H2	1:X:1814:G:N3	2.09	0.50
1:X:1811:A:H1'	1:X:1813:A:C5	2.47	0.50
1:X:1964:A:H5''	1:X:1965:U:OP2	2.11	0.50
1:X:2246:A:H61	1:X:2251:U:H3	1.60	0.50
1:X:2728:A:H2'	1:X:2729:A:C8	2.44	0.50
1:X:2791:C:O2	1:X:2858:A:O2'	2.26	0.50
1:X:2797:G:O2'	1:X:2798:A:O5'	2.25	0.50
3:A:42:GLY:CA	3:A:43:ARG:NH1	2.74	0.50
4:B:39:ALA:HA	4:B:44:TYR:N	2.27	0.50
6:D:65:PRO:HB3	6:D:89:VAL:HG13	1.92	0.50
7:E:28:GLY:HA3	7:E:79:VAL:HB	1.93	0.50
9:G:40:ASN:OD1	9:G:42:VAL:HG23	2.10	0.50
9:G:132:PHE:CD2	9:G:145:HIS:CG	3.00	0.50
9:G:135:LEU:O	9:G:136:PRO:C	2.54	0.50
14:L:38:ILE:HD12	14:L:39:TYR:N	2.25	0.50
16:N:66:ASN:CB	16:N:76:TYR:HB2	2.32	0.50
17:O:16:GLU:H	17:O:95:ILE:HB	1.75	0.50
23:U:53:GLU:HB3	23:U:58:LYS:HB2	1.94	0.50
23:U:59:THR:O	23:U:60:VAL:O	2.29	0.50
1:X:20:C:O2'	1:X:21:A:H5'	2.10	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:136:A:H3'	1:X:137:A:H8	1.75	0.50
1:X:201:G:N2	1:X:202:A:C4	2.79	0.50
1:X:302:U:N3	1:X:361:G:N2	2.59	0.50
1:X:719:A:H2'	1:X:720:A:C5'	2.41	0.50
1:X:982:C:H2'	1:X:983:G:O5'	2.11	0.50
1:X:1139:A:O2'	1:X:1140:A:P	2.70	0.50
1:X:1312:G:C5'	1:X:1313:U:OP1	2.51	0.50
1:X:1385:C:H1'	1:X:2192:U:C6	2.46	0.50
1:X:1469:U:P	1:X:1470:G:OP2	2.69	0.50
1:X:1744:G:H5''	15:M:100:ARG:HD3	1.93	0.50
1:X:2212:U:C2'	1:X:2213:G:H8	2.23	0.50
1:X:2276:C:O5'	1:X:2276:C:H6	1.94	0.50
1:X:2856:U:N3	1:X:2857:C:C4	2.80	0.50
2:Y:4:C:H5'	2:Y:4:C:H6	1.77	0.50
2:Y:46:G:H5'	6:D:92:ARG:NH2	2.26	0.50
3:A:68:LYS:O	3:A:70:ARG:HG3	2.11	0.50
3:A:247:VAL:HG23	3:A:248:THR:N	2.26	0.50
5:C:173:ALA:HB1	5:C:193:LEU:HB2	1.93	0.50
6:D:108:LEU:HD22	6:D:114:PHE:HE1	1.75	0.50
7:E:26:VAL:HB	7:E:33:LEU:O	2.12	0.50
7:E:142:GLY:C	7:E:144:VAL:H	2.19	0.50
10:H:79:HIS:O	10:H:90:ARG:HB3	2.12	0.50
12:J:99:LYS:CG	12:J:100:PRO:HD2	2.39	0.50
14:L:43:ILE:HG22	14:L:44:ASP:N	2.27	0.50
14:L:97:HIS:O	14:L:101:LYS:CB	2.59	0.50
15:M:32:THR:CG2	15:M:33:VAL:N	2.74	0.50
18:P:9:ARG:HB3	18:P:13:GLN:HB2	1.93	0.50
21:S:106:GLY:HA2	21:S:109:GLN:CD	2.37	0.50
23:U:48:LYS:O	23:U:61:TRP:HE3	1.95	0.50
1:X:346:C:H2'	1:X:347:C:C6	2.46	0.50
1:X:518:A:N6	18:P:30:TYR:CG	2.79	0.50
1:X:1313:U:HO2'	1:X:1314:A:P	2.34	0.50
1:X:1524:C:H3'	1:X:1525:A:O4'	2.10	0.50
1:X:1569:A:C2'	1:X:1570:C:H5''	2.41	0.50
1:X:2079:A:H61	1:X:2175:A:N6	2.10	0.50
1:X:2280:A:H2'	1:X:2281:C:H6	1.73	0.50
1:X:2291:U:O2'	6:D:37:ASN:ND2	2.44	0.50
1:X:2521:A:N1	1:X:2546:G:C6	2.79	0.50
1:X:2633:A:C2	1:X:2635:U:O4	2.64	0.50
2:Y:44:C:H4'	6:D:64:LYS:O	2.11	0.50
3:A:125:PRO:HG3	3:A:131:LEU:HD11	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:243:GLY:CA	3:A:244:ARG:NH1	2.74	0.50
4:B:16:LYS:O	4:B:17:ASN:HB2	2.12	0.50
4:B:141:ILE:HG23	4:B:154:LYS:HD3	1.92	0.50
5:C:7:ILE:C	5:C:120:VAL:HB	2.36	0.50
6:D:22:TYR:CZ	6:D:29:PRO:HD3	2.46	0.50
6:D:41:GLY:O	6:D:43:SER:N	2.45	0.50
7:E:65:HIS:O	7:E:67:LEU:N	2.44	0.50
7:E:72:VAL:O	7:E:76:VAL:HG23	2.12	0.50
7:E:87:LEU:HD13	7:E:162:VAL:HG11	1.93	0.50
8:F:121:GLU:CD	8:F:121:GLU:H	2.19	0.50
10:H:55:VAL:HG11	10:H:58:ALA:HB2	1.93	0.50
10:H:70:VAL:CG2	10:H:98:ILE:HG23	2.42	0.50
11:I:9:THR:O	11:I:13:ARG:HD2	2.11	0.50
11:I:78:SER:CA	11:I:112:GLY:HA3	2.40	0.50
11:I:117:ALA:HA	11:I:137:GLY:HA3	1.93	0.50
14:L:20:THR:HG22	14:L:21:THR:N	2.27	0.50
15:M:38:LYS:C	15:M:40:ARG:H	2.19	0.50
15:M:55:ILE:O	15:M:56:ALA:CB	2.60	0.50
17:O:11:GLN:HA	17:O:38:LEU:O	2.11	0.50
17:O:36:LYS:HZ1	17:O:98:ILE:HB	1.76	0.50
18:P:106:LEU:HD23	18:P:107:ILE:H	1.76	0.50
19:Q:17:TYR:HE1	19:Q:94:GLN:HB2	1.75	0.50
20:R:22:VAL:HG13	20:R:81:VAL:O	2.11	0.50
21:S:149:ALA:C	21:S:151:ASP:H	2.20	0.50
22:T:74:LYS:C	22:T:76:ALA:H	2.15	0.50
23:U:63:SER:O	23:U:66:ALA:N	2.44	0.50
26:Z:45:ILE:HG21	26:Z:57:VAL:HG21	1.94	0.50
1:X:37:C:H1'	5:C:44:SER:OG	2.12	0.50
1:X:45:C:OP2	1:X:192:G:H3'	2.12	0.50
1:X:201:G:C2	1:X:202:A:C4	3.00	0.50
1:X:417:C:C6	1:X:419:G:C4	2.99	0.50
1:X:469:G:N2	1:X:480:G:H2'	2.27	0.50
1:X:659:G:C6	1:X:660:G:C6	2.99	0.50
1:X:663:G:H2'	1:X:664:C:C4'	2.41	0.50
1:X:1247:U:OP2	18:P:11:LYS:CE	2.59	0.50
1:X:1885:C:C4'	3:A:244:ARG:HD2	2.42	0.50
1:X:2198:U:N3	1:X:2199:C:C5	2.79	0.50
1:X:2377:U:O5'	1:X:2377:U:H6	1.95	0.50
1:X:2527:G:N1	1:X:2540:A:C2	2.80	0.50
1:X:2760:G:C2'	1:X:2761:A:OP1	2.60	0.50
1:X:2863:U:H2'	1:X:2864:C:O4'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:54:U:H2'	2:Y:55:C:O4'	2.12	0.50
3:A:132:PRO:HB3	3:A:190:TYR:HD2	1.77	0.50
3:A:141:VAL:HG22	3:A:164:GLN:HB3	1.93	0.50
3:A:219:PRO:O	3:A:220:HIS:O	2.29	0.50
6:D:8:TYR:HA	6:D:173:MET:HE1	1.93	0.50
6:D:13:ARG:HB3	6:D:14:PRO:CD	2.36	0.50
6:D:40:LEU:HD23	6:D:53:ALA:HB2	1.93	0.50
9:G:150:VAL:CG1	9:G:151:TYR:N	2.74	0.50
11:I:62:LYS:HE2	29:3:11:LYS:CA	2.41	0.50
14:L:76:ALA:HB1	14:L:111:GLY:N	2.27	0.50
14:L:93:SER:O	14:L:95:LYS:N	2.45	0.50
16:N:12:ARG:HA	16:N:15:LYS:NZ	2.26	0.50
20:R:4:PRO:O	20:R:5:SER:C	2.54	0.50
21:S:24:TYR:O	21:S:85:MET:N	2.44	0.50
21:S:73:LYS:C	21:S:75:LYS:H	2.20	0.50
22:T:51:VAL:CG2	22:T:79:ILE:O	2.59	0.50
23:U:51:ILE:HG12	23:U:59:THR:CB	2.41	0.50
25:W:37:THR:C	25:W:41:ARG:HG3	2.36	0.50
25:W:38:PRO:N	25:W:41:ARG:HE	2.07	0.50
30:4:1:MET:HE3	30:4:35:ARG:CZ	2.41	0.50
1:X:38:G:N3	5:C:42:THR:HG22	2.27	0.50
1:X:357:A:O5'	1:X:357:A:H8	1.95	0.50
1:X:422:C:O2'	1:X:423:G:H5'	2.10	0.50
1:X:748:A:C5'	1:X:749:C:OP2	2.59	0.50
1:X:816:U:C2'	1:X:817:A:H5'	2.42	0.50
1:X:954:U:P	11:I:38:LYS:HZ3	2.32	0.50
1:X:1324:G:O2'	1:X:1325:U:O5'	2.29	0.50
1:X:1513:U:H2'	1:X:1594:U:OP1	2.11	0.50
1:X:1529:C:O2'	1:X:1530:U:H5'	2.11	0.50
1:X:1888:C:H2'	1:X:1913:G:N7	2.25	0.50
1:X:2329:C:H2'	1:X:2330:G:O4'	2.11	0.50
1:X:2332:G:H2'	1:X:2333:A:O4'	2.11	0.50
1:X:2447:G:HO2'	1:X:2448:A:H8	1.58	0.50
1:X:2562:G:C5	1:X:2563:U:C4	3.00	0.50
1:X:2727:G:O3'	7:E:70:THR:HG21	2.11	0.50
1:X:2845:C:O2'	1:X:2846:G:H5'	2.11	0.50
1:X:2867:G:O2'	1:X:2868:G:OP2	2.26	0.50
2:Y:53:G:H5'	14:L:64:LYS:NZ	2.26	0.50
3:A:262:LYS:C	3:A:264:LYS:H	2.19	0.50
7:E:54:ARG:HG2	7:E:54:ARG:NH2	2.27	0.50
7:E:87:LEU:HB2	7:E:131:ILE:HB	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:118:PRO:HG2	7:E:121:VAL:CG2	2.42	0.50
11:I:18:ARG:HB2	11:I:21:ARG:CB	2.34	0.50
12:J:111:THR:O	12:J:112:GLU:C	2.54	0.50
13:K:33:ARG:HD3	13:K:112:LEU:HD22	1.92	0.50
14:L:9:ARG:O	14:L:10:LYS:C	2.55	0.50
16:N:104:GLU:O	16:N:107:LYS:HB3	2.11	0.50
18:P:66:GLU:O	18:P:69:ALA:N	2.41	0.50
25:W:4:LYS:CD	25:W:52:GLU:HB3	2.42	0.50
1:X:79:G:O2'	1:X:80:A:H5'	2.11	0.50
1:X:91:A:H2'	1:X:92:U:C6	2.46	0.50
1:X:350:U:O5'	1:X:350:U:C6	2.62	0.50
1:X:671:A:H2'	1:X:672:C:C6	2.47	0.50
1:X:678:G:O3'	11:I:50:GLU:OE1	2.29	0.50
1:X:1141:U:HO2'	1:X:1142:G:P	2.34	0.50
1:X:1494:G:O2'	1:X:1574:A:H2	1.94	0.50
1:X:1707:A:C8	1:X:1708:C:C6	3.00	0.50
1:X:2185:U:H2'	1:X:2186:G:C8	2.47	0.50
1:X:2204:A:H4'	1:X:2205:C:O5'	2.12	0.50
1:X:2546:G:H2'	1:X:2547:C:H6	1.73	0.50
1:X:2714:A:H2'	1:X:2715:C:C6	2.46	0.50
1:X:2849:C:C2	1:X:2850:U:C5	2.99	0.50
3:A:182:LEU:O	3:A:268:ARG:HB2	2.12	0.50
5:C:3:GLN:CD	5:C:4:ILE:N	2.70	0.50
6:D:12:VAL:HG22	6:D:172:SER:OG	2.12	0.50
6:D:172:SER:OG	6:D:173:MET:N	2.45	0.50
7:E:23:VAL:O	7:E:25:LYS:N	2.42	0.50
7:E:109:TYR:CE1	7:E:152:ARG:CZ	2.92	0.50
9:G:101:THR:C	9:G:102:ARG:CG	2.85	0.50
14:L:77:ALA:O	14:L:80:ALA:HB3	2.12	0.50
16:N:109:LEU:O	16:N:110:VAL:C	2.55	0.50
17:O:11:GLN:OE1	17:O:38:LEU:HD12	2.12	0.50
20:R:91:ALA:O	20:R:92:THR:CG2	2.58	0.50
1:X:48:A:N7	1:X:154:U:C4	2.80	0.50
1:X:168:A:O2'	1:X:169:C:C5'	2.55	0.50
1:X:171:G:C2'	1:X:172:A:H5'	2.41	0.50
1:X:486:U:H4'	1:X:519:C:H2'	1.93	0.50
1:X:731:A:C2'	1:X:732:G:C5'	2.90	0.50
1:X:871:U:H2'	1:X:2247:A:N3	2.27	0.50
1:X:889:C:H2'	1:X:890:U:O4'	2.11	0.50
1:X:1189:G:H8	1:X:1189:G:O5'	1.94	0.50
1:X:1356:G:H1'	1:X:1613:G:C2	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1699:A:H2'	1:X:1700:C:H6	1.75	0.50
1:X:2015:G:H4'	1:X:2016:A:OP1	2.12	0.50
1:X:2060:A:H1'	1:X:2414:A:O4'	2.12	0.50
1:X:2174:G:C6	1:X:2175:A:C6	2.99	0.50
1:X:2394:G:OP1	11:I:63:ARG:CZ	2.59	0.50
1:X:2484:G:O6	1:X:2555:G:H2'	2.12	0.50
1:X:2642:G:H2'	1:X:2643:G:C5'	2.41	0.50
1:X:2686:C:H2'	1:X:2687:G:H8	1.77	0.50
2:Y:9:G:H5'	14:L:32:TYR:CZ	2.46	0.50
2:Y:52:G:N2	2:Y:53:G:H1'	2.26	0.50
3:A:133:LEU:O	3:A:136:VAL:HB	2.12	0.50
4:B:33:ILE:HG13	4:B:89:ASP:HA	1.92	0.50
6:D:118:ASN:HD21	6:D:120:ASN:HD22	1.59	0.50
7:E:45:GLN:NE2	7:E:48:ASP:O	2.44	0.50
7:E:84:THR:HB	7:E:134:SER:HA	1.93	0.50
9:G:95:LEU:CD2	9:G:117:GLU:OE2	2.59	0.50
10:H:25:LEU:HD21	10:H:52:VAL:HG23	1.94	0.50
10:H:117:GLU:O	10:H:120:ASP:HB2	2.12	0.50
13:K:66:VAL:O	13:K:67:ALA:C	2.53	0.50
13:K:76:VAL:O	13:K:79:VAL:HG12	2.12	0.50
17:O:49:GLU:C	17:O:51:ALA:N	2.65	0.50
18:P:80:LEU:O	18:P:81:HIS:C	2.55	0.50
20:R:93:ARG:N	20:R:107:ALA:O	2.45	0.50
22:T:46:LYS:O	22:T:78:PHE:CD2	2.64	0.50
23:U:22:GLY:N	23:U:39:LYS:HD2	2.26	0.50
23:U:41:VAL:CG2	23:U:42:GLN:N	2.54	0.50
1:X:177:U:H3'	1:X:178:C:C6	2.46	0.49
1:X:539:A:N6	1:X:2025:A:H1'	2.26	0.49
1:X:622:U:O2	1:X:628:A:H2	1.95	0.49
1:X:717:G:C2'	1:X:739:G:N2	2.75	0.49
1:X:718:A:C8	1:X:740:A:C4	3.00	0.49
1:X:1051:U:C2'	1:X:1052:C:O4'	2.59	0.49
1:X:1089:C:O4'	1:X:1099:A:H2	1.95	0.49
1:X:1557:G:H2'	1:X:1558:C:H6	1.76	0.49
1:X:1661:C:O2	1:X:1661:C:H2'	2.12	0.49
1:X:1774:A:N1	1:X:2566:A:C4	2.80	0.49
1:X:2223:U:H2'	1:X:2224:U:C6	2.47	0.49
1:X:2642:G:C2'	1:X:2643:G:H5'	2.41	0.49
1:X:2799:C:H2'	1:X:2800:C:O4'	2.11	0.49
1:X:2817:A:C2	1:X:2851:G:C2	3.00	0.49
2:Y:39:C:H5'	2:Y:40:C:OP2	2.11	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:E:39:THR:C	7:E:41:LEU:N	2.67	0.49
8:F:112:MET:CG	8:F:113:PRO:HD3	2.42	0.49
10:H:36:THR:O	10:H:37:GLY:O	2.30	0.49
11:I:81:GLN:O	11:I:83:LEU:N	2.45	0.49
12:J:64:LYS:HE2	12:J:110:VAL:HG13	1.94	0.49
13:K:45:ARG:HD3	13:K:97:ILE:HD11	1.93	0.49
14:L:37:HIS:CE1	14:L:39:TYR:CE2	3.00	0.49
16:N:94:VAL:O	16:N:97:ASP:N	2.45	0.49
17:O:33:VAL:HG23	17:O:33:VAL:O	2.12	0.49
23:U:34:THR:HG23	23:U:35:THR:N	2.27	0.49
24:V:42:ARG:NH2	24:V:46:LEU:HD21	2.26	0.49
30:4:17:VAL:HG12	30:4:18:ARG:N	2.26	0.49
1:X:415:A:C3'	1:X:416:U:H5'	2.43	0.49
1:X:543:G:C5	1:X:544:U:C4	3.00	0.49
1:X:623:G:C2	1:X:627:A:C5	3.00	0.49
1:X:773:G:O2'	1:X:774:A:H5'	2.12	0.49
1:X:1056:U:H2'	1:X:1057:A:OP2	2.11	0.49
1:X:1525:A:H2'	1:X:1526:U:O4'	2.13	0.49
1:X:1699:A:H61	1:X:1723:U:H3	1.58	0.49
1:X:1958:G:H2'	1:X:1959:U:C6	2.47	0.49
1:X:2048:C:H5'	1:X:2230:G:H21	1.76	0.49
1:X:2053:G:N2	1:X:2054:A:H1'	2.27	0.49
1:X:2684:A:C4	1:X:2685:A:C8	3.01	0.49
1:X:2829:A:C6	1:X:2839:G:N1	2.80	0.49
1:X:2841:U:H4'	1:X:2842:C:H5'	1.94	0.49
3:A:133:LEU:HB2	3:A:187:SER:CB	2.31	0.49
3:A:143:HIS:HD1	3:A:194:GLY:C	2.18	0.49
3:A:222:ARG:HB3	3:A:222:ARG:HH21	1.75	0.49
4:B:33:ILE:HG21	4:B:36:ARG:NH1	2.27	0.49
5:C:152:THR:OG1	5:C:154:ASP:OD1	2.26	0.49
5:C:195:ILE:O	5:C:196:VAL:HB	2.11	0.49
7:E:58:ALA:N	7:E:62:ARG:HG3	2.26	0.49
8:F:76:TYR:HA	8:F:79:ARG:HE	1.77	0.49
9:G:50:PRO:O	9:G:51:LEU:C	2.55	0.49
9:G:52:GLY:O	9:G:55:ALA:HB3	2.12	0.49
17:O:20:ILE:CD1	17:O:21:ARG:HG2	2.41	0.49
20:R:25:LEU:HD12	20:R:25:LEU:H	1.77	0.49
21:S:64:ALA:CA	21:S:86:VAL:H	2.12	0.49
21:S:130:ILE:N	21:S:130:ILE:HD12	2.27	0.49
22:T:3:HIS:CG	22:T:4:LYS:N	2.78	0.49
22:T:37:LEU:N	22:T:37:LEU:HD12	2.27	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:V:4:SER:HA	24:V:7:ARG:HG3	1.93	0.49
25:W:36:ASP:CG	25:W:41:ARG:NH1	2.68	0.49
30:4:10:MET:HE3	30:4:32:HIS:HA	1.93	0.49
1:X:454:G:H4'	1:X:455:A:OP1	2.12	0.49
1:X:455:A:C2	1:X:1258:G:N3	2.80	0.49
1:X:481:A:C6	1:X:482:A:C6	3.00	0.49
1:X:545:C:O2'	1:X:546:A:H5'	2.12	0.49
1:X:689:A:N1	1:X:815:A:N1	2.61	0.49
1:X:1142:G:O4'	9:G:103:TYR:CD2	2.65	0.49
1:X:1240:G:OP2	16:N:16:LYS:HE3	2.12	0.49
1:X:1406:A:H62	19:Q:15:LYS:HD3	1.77	0.49
1:X:1418:C:H2'	1:X:1419:G:H8	1.77	0.49
1:X:1711:C:H4'	1:X:1712:G:OP1	2.10	0.49
1:X:1786:C:C4	1:X:1787:U:C5	3.00	0.49
1:X:2035:G:H1'	4:B:149:ARG:O	2.11	0.49
1:X:2073:A:C6	1:X:2074:U:C4	3.00	0.49
1:X:2484:G:C6	1:X:2555:G:C5	3.01	0.49
1:X:2496:C:O2'	1:X:2497:A:O5'	2.29	0.49
1:X:2616:U:H2'	1:X:2617:G:O4'	2.13	0.49
1:X:2769:C:C2'	1:X:2770:A:H8	2.25	0.49
1:X:2871:U:H2'	1:X:2872:U:H6	1.74	0.49
2:Y:5:C:H2'	2:Y:6:C:O4'	2.13	0.49
4:B:25:VAL:HG11	15:M:16:ILE:HD12	1.94	0.49
4:B:151:TYR:HB3	9:G:106:TYR:CD2	2.47	0.49
5:C:84:PHE:CD2	5:C:84:PHE:N	2.78	0.49
5:C:117:LEU:O	5:C:188:ILE:HG13	2.12	0.49
5:C:149:LEU:O	5:C:187:VAL:HB	2.12	0.49
5:C:154:ASP:OD1	5:C:154:ASP:N	2.45	0.49
5:C:187:VAL:CG1	5:C:189:ASP:HB2	2.43	0.49
6:D:135:GLN:O	6:D:138:PHE:CD1	2.65	0.49
7:E:164:PHE:O	7:E:167:GLU:N	2.45	0.49
9:G:132:PHE:CB	9:G:145:HIS:CE1	2.94	0.49
9:G:154:GLU:O	9:G:157:PRO:HD2	2.11	0.49
11:I:86:THR:N	11:I:116:ARG:HH12	2.07	0.49
12:J:121:LEU:O	12:J:122:ALA:C	2.53	0.49
14:L:51:LEU:N	14:L:51:LEU:CD1	2.74	0.49
15:M:99:VAL:HG21	15:M:104:LEU:CD2	2.29	0.49
17:O:70:TYR:N	17:O:70:TYR:CD1	2.80	0.49
21:S:51:LEU:N	21:S:65:LEU:CD1	2.75	0.49
21:S:87:THR:HG22	21:S:88:TYR:N	2.28	0.49
1:X:445:A:H2'	1:X:446:C:C6	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:496:C:C2'	1:X:497:C:H5''	2.42	0.49
1:X:510:G:C2	1:X:512:A:H3'	2.48	0.49
1:X:553:C:C4	1:X:557:U:C2	3.01	0.49
1:X:847:C:C2	1:X:848:A:C8	3.00	0.49
1:X:969:U:C5'	12:J:17:ARG:HH11	2.25	0.49
1:X:1336:G:O2'	1:X:1337:G:H5'	2.12	0.49
1:X:1442:C:H2'	1:X:1585:A:OP2	2.11	0.49
1:X:2270:U:OP1	1:X:2359:U:O2'	2.30	0.49
2:Y:31:A:H2'	2:Y:32:C:H6	1.75	0.49
3:A:125:PRO:HG3	3:A:131:LEU:HD13	1.90	0.49
3:A:134:ARG:NE	3:A:135:PHE:CE2	2.81	0.49
6:D:35:VAL:HG12	6:D:36:VAL:H	1.76	0.49
7:E:17:VAL:CG1	7:E:18:ASN:N	2.75	0.49
9:G:102:ARG:HG3	9:G:112:THR:O	2.12	0.49
11:I:53:ARG:HH21	11:I:53:ARG:CG	2.19	0.49
20:R:85:ASP:N	20:R:86:PRO:HD3	2.23	0.49
21:S:4:THR:HG22	21:S:57:GLU:HB2	1.94	0.49
23:U:41:VAL:HG21	23:U:43:ARG:HH22	1.76	0.49
23:U:46:LEU:HA	23:U:47:HIS:CE1	2.47	0.49
1:X:27:G:O2'	1:X:28:A:O5'	2.30	0.49
1:X:603:C:H2'	1:X:604:U:C6	2.47	0.49
1:X:829:C:C4	1:X:1206:G:N1	2.80	0.49
1:X:1044:U:H4'	1:X:1045:G:OP1	2.11	0.49
1:X:1089:C:C5'	1:X:1090:C:OP1	2.60	0.49
1:X:1211:G:C4	1:X:1212:U:C5	3.00	0.49
1:X:1329:U:O2'	1:X:1330:G:H5'	2.12	0.49
1:X:1534:A:H2'	1:X:1535:C:C6	2.47	0.49
1:X:1552:C:O2'	1:X:1553:G:O5'	2.29	0.49
1:X:1594:U:H2'	1:X:1595:A:C8	2.45	0.49
1:X:1621:C:O4'	1:X:1626:A:C6	2.65	0.49
1:X:1815:G:O2'	1:X:1816:G:H5'	2.13	0.49
1:X:1919:A:C6	1:X:1928:G:C4	3.00	0.49
1:X:1920:A:C2	1:X:1922:U:C5	3.01	0.49
1:X:2083:G:H2'	1:X:2084:G:C8	2.48	0.49
3:A:105:ILE:CG2	3:A:106:LEU:N	2.75	0.49
3:A:270:ILE:O	3:A:271:VAL:C	2.56	0.49
5:C:34:GLN:OE1	5:C:176:ASN:OD1	2.29	0.49
6:D:122:PHE:HD2	6:D:129:ASN:H	1.59	0.49
9:G:84:ASN:N	9:G:153:GLY:O	2.45	0.49
9:G:94:LYS:O	9:G:117:GLU:CB	2.60	0.49
9:G:115:ALA:O	9:G:118:ALA:CB	2.54	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:162:LYS:H	9:G:163:PRO:HD2	1.75	0.49
10:H:22:ILE:HG22	10:H:23:ARG:N	2.27	0.49
10:H:46:HIS:O	10:H:47:VAL:O	2.31	0.49
10:H:73:VAL:O	10:H:73:VAL:HG13	2.12	0.49
15:M:34:ARG:HH21	15:M:91:VAL:HG23	1.78	0.49
18:P:50:VAL:CG1	18:P:90:LEU:O	2.60	0.49
18:P:76:LYS:O	18:P:79:ALA:N	2.46	0.49
20:R:59:LYS:HB3	20:R:62:MET:CB	2.41	0.49
20:R:62:MET:O	20:R:63:THR:C	2.55	0.49
21:S:18:MET:N	21:S:36:ARG:HB2	2.27	0.49
21:S:19:ILE:HB	21:S:34:LEU:HD11	1.93	0.49
22:T:23:VAL:HG13	22:T:38:VAL:HG22	1.95	0.49
1:X:357:A:H3'	1:X:358:C:C6	2.47	0.49
1:X:357:A:C5	1:X:358:C:H1'	2.47	0.49
1:X:791:G:C5	1:X:792:U:C5	3.00	0.49
1:X:817:A:H2'	1:X:819:C:C4	2.47	0.49
1:X:861:G:H1'	1:X:944:A:N3	2.28	0.49
1:X:1086:C:H2'	1:X:1086:C:O2	2.11	0.49
1:X:1087:C:O2'	8:F:91:PRO:HG2	2.12	0.49
1:X:1089:C:C1'	1:X:1099:A:H2	2.25	0.49
1:X:1092:U:H4'	8:F:122:ALA:CB	2.37	0.49
1:X:1218:C:C4'	11:I:13:ARG:NH1	2.66	0.49
1:X:1247:U:H2'	1:X:1248:G:O4'	2.12	0.49
1:X:1687:C:OP2	1:X:2529:G:OP1	2.31	0.49
1:X:1710:U:O2'	1:X:1711:C:P	2.71	0.49
1:X:2031:A:C6	1:X:2600:A:N1	2.80	0.49
1:X:2084:G:O2'	1:X:2085:G:H5'	2.12	0.49
1:X:2284:U:C3'	1:X:2285:U:H5''	2.42	0.49
1:X:2473:G:H2'	1:X:2474:G:C8	2.47	0.49
2:Y:15:A:H2'	2:Y:16:U:H5''	1.95	0.49
2:Y:50:U:O3'	14:L:97:HIS:HD2	1.92	0.49
3:A:33:LEU:HD12	3:A:63:ARG:NH2	2.14	0.49
9:G:67:ARG:HE	9:G:70:PHE:CA	2.26	0.49
10:H:79:HIS:CD2	10:H:80:ALA:H	2.31	0.49
12:J:79:PRO:CD	12:J:88:LYS:HD2	2.42	0.49
14:L:67:THR:O	14:L:70:ALA:HB3	2.13	0.49
14:L:97:HIS:CG	14:L:98:GLY:H	2.30	0.49
16:N:47:TYR:CD2	16:N:48:ARG:N	2.80	0.49
17:O:9:GLY:O	17:O:10:LYS:CB	2.60	0.49
18:P:80:LEU:O	18:P:81:HIS:O	2.31	0.49
19:Q:84:GLU:HA	19:Q:84:GLU:OE2	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:105:ARG:NH1	20:R:112:LYS:C	2.71	0.49
23:U:22:GLY:CA	23:U:39:LYS:CD	2.89	0.49
23:U:53:GLU:HB3	23:U:58:LYS:N	2.27	0.49
25:W:5:LEU:HB2	25:W:25:LEU:HD13	1.94	0.49
25:W:46:THR:HG22	25:W:47:VAL:N	2.26	0.49
1:X:53:G:N2	1:X:54:G:H1'	2.28	0.49
1:X:208:C:H41	1:X:209:G:N2	2.09	0.49
1:X:467:U:O2	1:X:467:U:C2'	2.61	0.49
1:X:805:G:N7	1:X:2419:C:C1'	2.76	0.49
1:X:836:G:H2'	1:X:837:U:C6	2.47	0.49
1:X:1074:G:C2'	1:X:1075:C:H5'	2.42	0.49
1:X:1105:U:C2	1:X:1107:A:H5''	2.48	0.49
1:X:1105:U:C2	1:X:1107:A:OP2	2.65	0.49
1:X:1171:A:H2'	1:X:1172:U:H6	1.74	0.49
1:X:1323:G:H3'	1:X:1324:G:H21	1.77	0.49
1:X:1510:A:C8	1:X:1511:A:N7	2.81	0.49
1:X:2216:G:H8	1:X:2216:G:O5'	1.96	0.49
1:X:2255:G:C2	1:X:2256:G:C8	3.00	0.49
1:X:2275:U:C4'	1:X:2276:C:OP1	2.57	0.49
1:X:2426:G:O2'	1:X:2427:A:OP2	2.30	0.49
1:X:2703:C:O2'	1:X:2704:U:H5'	2.12	0.49
3:A:153:ALA:O	3:A:154:GLN:CG	2.57	0.49
3:A:243:GLY:CA	3:A:244:ARG:CZ	2.90	0.49
4:B:68:ALA:C	4:B:70:ALA:H	2.21	0.49
6:D:46:ASP:O	6:D:48:LYS:N	2.45	0.49
9:G:66:HIS:HB3	16:N:71:LEU:HD13	1.94	0.49
12:J:79:PRO:CD	12:J:88:LYS:NZ	2.72	0.49
15:M:14:ARG:NH2	15:M:18:GLN:OE1	2.45	0.49
18:P:71:VAL:CG1	18:P:126:ILE:HG22	2.43	0.49
18:P:72:LEU:C	18:P:74:SER:H	2.20	0.49
18:P:74:SER:C	18:P:76:LYS:N	2.70	0.49
19:Q:90:ALA:O	19:Q:92:ALA:N	2.38	0.49
21:S:24:TYR:HB3	21:S:29:ASN:HA	1.94	0.49
22:T:32:LYS:CG	22:T:33:ALA:H	2.25	0.49
24:V:1:MET:HG3	24:V:3:PRO:HD3	1.94	0.49
1:X:314:G:H2'	1:X:315:G:O4'	2.13	0.49
1:X:501:G:C2'	1:X:502:A:H8	2.19	0.49
1:X:617:U:O2	1:X:617:U:C3'	2.59	0.49
1:X:729:A:O2'	1:X:730:C:C4'	2.60	0.49
1:X:769:C:H2'	1:X:770:U:C5'	2.43	0.49
1:X:789:G:H4'	1:X:790:A:O5'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1536:G:H2'	1:X:1537:U:H6	1.78	0.49
1:X:1587:A:N1	1:X:1588:A:C6	2.80	0.49
1:X:1745:C:N3	1:X:1746:A:C5	2.81	0.49
1:X:2015:G:N2	1:X:2551:A:OP2	2.46	0.49
1:X:2335:U:H4'	22:T:20:TYR:CE2	2.48	0.49
1:X:2791:C:H2'	1:X:2792:C:H6	1.77	0.49
3:A:123:ALA:O	3:A:125:PRO:HD3	2.12	0.49
4:B:179:GLU:C	4:B:181:LEU:N	2.69	0.49
5:C:35:LEU:O	5:C:38:ARG:N	2.46	0.49
5:C:138:LYS:C	5:C:140:ASN:N	2.71	0.49
5:C:139:GLN:CA	5:C:139:GLN:NE2	2.74	0.49
6:D:73:SER:O	6:D:80:ARG:N	2.42	0.49
7:E:126:PRO:CG	7:E:127:GLU:H	2.15	0.49
11:I:85:ASP:HA	11:I:116:ARG:NH1	2.28	0.49
15:M:34:ARG:HE	15:M:91:VAL:HG22	1.77	0.49
15:M:37:THR:HG23	15:M:39:VAL:HG13	1.95	0.49
15:M:39:VAL:CG1	15:M:45:THR:HG23	2.42	0.49
16:N:108:ALA:O	16:N:112:ALA:HB2	2.13	0.49
18:P:49:SER:OG	18:P:51:GLN:HB2	2.12	0.49
18:P:96:TYR:CD1	18:P:96:TYR:C	2.90	0.49
19:Q:43:GLN:O	19:Q:47:GLY:N	2.46	0.49
20:R:22:VAL:HG12	20:R:23:ILE:N	2.27	0.49
20:R:59:LYS:HZ3	20:R:62:MET:HE2	1.78	0.49
23:U:41:VAL:O	23:U:42:GLN:CB	2.60	0.49
1:X:14:A:N6	1:X:15:G:C2	2.81	0.49
1:X:110:U:H5'	1:X:110:U:C6	2.47	0.49
1:X:428:A:N1	1:X:2388:G:C6	2.81	0.49
1:X:488:A:H2'	1:X:489:A:C8	2.48	0.49
1:X:492:G:OP1	1:X:492:G:H4'	2.13	0.49
1:X:501:G:C2'	1:X:502:A:C8	2.89	0.49
1:X:828:C:H2'	1:X:829:C:C6	2.46	0.49
1:X:985:G:C4	1:X:1000:G:C2	3.01	0.49
1:X:986:A:C2'	1:X:987:G:H5'	2.43	0.49
1:X:1204:G:H2'	1:X:1205:G:H8	1.78	0.49
1:X:1210:C:H1'	1:X:1239:A:C4	2.48	0.49
1:X:1427:G:H2'	1:X:1428:G:C1'	2.41	0.49
1:X:1455:C:O2'	1:X:1456:C:H5'	2.13	0.49
1:X:1536:G:H2'	1:X:1537:U:C6	2.47	0.49
1:X:1810:U:C6	3:A:157:ARG:HD2	2.48	0.49
1:X:2035:G:N2	1:X:2036:G:C4	2.81	0.49
1:X:2307:A:N1	1:X:2308:A:C6	2.81	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2529:G:C6	1:X:2530:C:N4	2.80	0.49
1:X:2561:G:H5'	1:X:2561:G:C8	2.45	0.49
3:A:56:GLY:H	3:A:217:ARG:H	1.61	0.49
5:C:5:ASN:N	5:C:5:ASN:ND2	2.59	0.49
6:D:80:ARG:N	6:D:80:ARG:HD2	2.28	0.49
6:D:110:ARG:HG2	6:D:110:ARG:HH21	1.78	0.49
7:E:70:THR:O	7:E:74:ASN:ND2	2.46	0.49
10:H:97:VAL:O	10:H:99:ILE:HG23	2.13	0.49
11:I:77:LEU:CB	11:I:111:SER:H	2.25	0.49
13:K:76:VAL:HA	13:K:79:VAL:HG12	1.94	0.49
14:L:8:ARG:HH11	14:L:8:ARG:CB	2.24	0.49
14:L:101:LYS:HE2	14:L:105:ASP:CG	2.37	0.49
20:R:92:THR:C	20:R:95:ARG:HH22	2.20	0.49
24:V:42:ARG:CZ	24:V:46:LEU:HD21	2.43	0.49
1:X:155:G:C2'	1:X:156:G:C5'	2.89	0.49
1:X:242:A:O2'	1:X:243:G:H4'	2.12	0.49
1:X:471:A:C2	1:X:481:A:C4	3.01	0.49
1:X:728:G:C2'	1:X:729:A:OP1	2.60	0.49
1:X:844:G:H5''	11:I:41:SER:HB3	1.95	0.49
1:X:872:G:N2	1:X:928:G:H2'	2.27	0.49
1:X:913:A:H2'	1:X:914:C:O5'	2.13	0.49
1:X:1374:G:HO2'	1:X:1375:C:H5'	1.78	0.49
1:X:1383:C:H2'	1:X:1384:G:H8	1.78	0.49
1:X:1494:G:H2'	1:X:1495:G:O4'	2.13	0.49
1:X:1629:G:C2	1:X:1633:C:C2	3.01	0.49
1:X:2434:G:C2	1:X:2477:C:N4	2.81	0.49
1:X:2670:C:C2	1:X:2671:C:C5	3.00	0.49
1:X:2673:G:C6	1:X:2696:A:C6	3.01	0.49
1:X:2709:C:O2	1:X:2709:C:H2'	2.13	0.49
2:Y:64:C:H2'	2:Y:65:A:H8	1.77	0.49
3:A:218:LYS:C	3:A:218:LYS:CD	2.82	0.49
4:B:55:ALA:O	4:B:59:VAL:HG23	2.13	0.49
6:D:72:LYS:HA	6:D:81:GLN:HA	1.93	0.49
6:D:134:GLU:OE2	6:D:136:LEU:HD12	2.13	0.49
7:E:37:TYR:CZ	7:E:72:VAL:HG22	2.48	0.49
9:G:157:PRO:C	9:G:159:SER:H	2.19	0.49
11:I:73:GLU:OE2	11:I:104:ARG:C	2.56	0.49
11:I:85:ASP:O	11:I:86:THR:C	2.56	0.49
15:M:24:LEU:C	15:M:25:PRO:O	2.53	0.49
15:M:26:ASP:OD1	15:M:27:PHE:N	2.45	0.49
16:N:78:THR:HG23	16:N:117:ARG:NE	2.28	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:81:ASN:ND2	16:N:85:ARG:HE	2.10	0.49
17:O:65:ARG:CG	17:O:65:ARG:NH1	2.68	0.49
20:R:101:GLY:C	20:R:103:LYS:H	2.21	0.49
1:X:169:C:H2'	1:X:170:U:O4'	2.12	0.48
1:X:518:A:OP2	1:X:518:A:C4'	2.60	0.48
1:X:638:A:H4'	1:X:639:G:H5'	1.95	0.48
1:X:665:A:H3'	1:X:665:A:N3	2.28	0.48
1:X:703:A:O2'	1:X:793:G:OP1	2.29	0.48
1:X:760:U:H5	26:Z:3:LYS:HA	1.77	0.48
1:X:838:A:H2'	1:X:839:U:O4'	2.13	0.48
1:X:1162:A:H2'	1:X:1163:C:C6	2.48	0.48
1:X:2014:A:C6	1:X:2477:C:H1'	2.48	0.48
1:X:2170:C:C3'	1:X:2171:U:C5'	2.89	0.48
1:X:2212:U:C2'	1:X:2213:G:C8	2.85	0.48
1:X:2271:C:OP1	14:L:18:ARG:NH2	2.43	0.48
1:X:2621:G:O2'	1:X:2622:G:H5'	2.12	0.48
1:X:2687:G:C2'	1:X:2688:G:H5'	2.43	0.48
1:X:2813:G:H2'	1:X:2814:G:O4'	2.13	0.48
2:Y:35:C:H2'	2:Y:36:A:O4'	2.13	0.48
3:A:126:LYS:HB2	3:A:129:ASN:HD22	1.78	0.48
3:A:143:HIS:ND1	3:A:194:GLY:C	2.71	0.48
5:C:45:THR:CB	5:C:86:PRO:HD2	2.43	0.48
5:C:129:LYS:O	5:C:130:THR:HB	2.11	0.48
5:C:136:TRP:C	5:C:140:ASN:HD22	2.21	0.48
6:D:56:GLU:O	6:D:59:LEU:N	2.46	0.48
6:D:74:ILE:HA	6:D:80:ARG:N	2.27	0.48
6:D:111:ILE:HG12	6:D:137:ILE:HG21	1.94	0.48
8:F:74:MET:HG3	8:F:111:LYS:HE2	1.95	0.48
10:H:92:ASP:OD1	15:M:69:ARG:NH2	2.45	0.48
15:M:31:ASP:OD2	15:M:31:ASP:N	2.46	0.48
16:N:8:ILE:O	16:N:12:ARG:HG3	2.13	0.48
18:P:89:ARG:O	18:P:89:ARG:HG2	2.13	0.48
18:P:134:LYS:OXT	18:P:134:LYS:HG2	2.11	0.48
23:U:10:LYS:NZ	23:U:70:LEU:HD11	2.28	0.48
25:W:38:PRO:CD	25:W:41:ARG:HH21	2.26	0.48
1:X:84:G:H5'	20:R:39:ALA:O	2.13	0.48
1:X:387:A:C2	1:X:388:G:C8	3.01	0.48
1:X:419:G:O2'	1:X:420:C:H5'	2.13	0.48
1:X:459:A:C2	1:X:466:A:C8	3.01	0.48
1:X:541:C:C4'	1:X:542:A:C8	2.96	0.48
1:X:609:U:C1'	11:I:18:ARG:NH2	2.76	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:622:U:O2	1:X:628:A:C2	2.66	0.48
1:X:637:G:N1	11:I:101:ARG:HD3	2.27	0.48
1:X:657:A:N3	1:X:2329:C:O2'	2.45	0.48
1:X:682:G:H5''	1:X:683:A:OP2	2.12	0.48
1:X:826:U:O2'	1:X:1238:A:H1'	2.12	0.48
1:X:969:U:H5''	12:J:17:ARG:HH12	1.77	0.48
1:X:993:C:O5'	1:X:993:C:H6	1.96	0.48
1:X:1004:A:C4	1:X:1005:U:C5	3.01	0.48
1:X:1053:G:C4	1:X:1125:G:C2	3.01	0.48
1:X:1464:A:H2'	1:X:1465:G:O4'	2.13	0.48
1:X:1830:C:H42	1:X:1881:U:H2'	1.78	0.48
1:X:2039:G:H2'	1:X:2039:G:N3	2.28	0.48
1:X:2052:G:C6	1:X:2053:G:N7	2.80	0.48
1:X:2524:G:C2	1:X:2525:U:C2	3.01	0.48
2:Y:67:C:O2'	2:Y:68:A:H5'	2.12	0.48
2:Y:69:G:O2'	2:Y:70:C:H5'	2.12	0.48
3:A:88:ARG:HG3	3:A:88:ARG:NH1	2.27	0.48
3:A:243:GLY:C	3:A:244:ARG:HD3	2.38	0.48
4:B:40:GLN:O	4:B:40:GLN:HG2	2.12	0.48
4:B:85:ALA:H	4:B:86:PRO:HD2	1.78	0.48
4:B:192:ASN:HB2	15:M:9:ARG:NH1	2.28	0.48
10:H:109:ARG:HA	10:H:129:LEU:HD13	1.95	0.48
11:I:116:ARG:HG2	11:I:117:ALA:O	2.14	0.48
12:J:33:TYR:O	12:J:106:GLU:CA	2.62	0.48
12:J:91:VAL:HG12	12:J:91:VAL:O	2.13	0.48
14:L:33:ARG:NH1	14:L:103:LEU:H	2.09	0.48
16:N:27:SER:C	16:N:29:SER:H	2.21	0.48
16:N:52:ASN:C	16:N:54:LYS:H	2.21	0.48
20:R:46:VAL:O	20:R:75:ALA:HA	2.13	0.48
21:S:64:ALA:HB2	21:S:85:MET:HA	1.95	0.48
23:U:28:GLY:N	23:U:32:ARG:HD3	2.27	0.48
1:X:169:C:H2'	1:X:170:U:H5'	1.95	0.48
1:X:220:U:O2	1:X:220:U:H2'	2.12	0.48
1:X:322:A:H2	1:X:342:G:H3'	1.78	0.48
1:X:603:C:H2'	1:X:603:C:O2	2.12	0.48
1:X:636:G:H5'	1:X:636:G:C8	2.42	0.48
1:X:648:A:H5'	1:X:649:G:C4'	2.43	0.48
1:X:871:U:H2'	1:X:2247:A:H2'	1.95	0.48
1:X:1075:C:H5''	8:F:87:GLY:C	2.38	0.48
1:X:1140:A:C4	1:X:2549:G:H1'	2.47	0.48
1:X:1186:G:N2	1:X:1187:A:H62	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1188:A:H2'	1:X:1189:G:O4'	2.13	0.48
1:X:1215:A:C2	1:X:1258:G:C4	3.01	0.48
1:X:1352:G:OP2	19:Q:77:LYS:NZ	2.46	0.48
1:X:1491:C:C2	1:X:1492:A:C8	3.01	0.48
1:X:1623:C:C4'	1:X:1624:A:O5'	2.52	0.48
1:X:1744:G:O6	1:X:1747:G:C6	2.66	0.48
1:X:2235:G:N2	1:X:2254:C:N4	2.61	0.48
1:X:2279:G:H2'	1:X:2280:A:C8	2.48	0.48
1:X:2335:U:OP1	22:T:24:LYS:NZ	2.45	0.48
1:X:2506:C:H5''	30:4:30:VAL:HB	1.96	0.48
1:X:2691:C:C2'	1:X:2692:A:C5'	2.91	0.48
2:Y:59:A:H1'	6:D:27:ALA:HB2	1.95	0.48
3:A:160:GLY:HA2	3:A:196:VAL:CG2	2.43	0.48
4:B:56:GLU:HA	4:B:59:VAL:CG2	2.43	0.48
4:B:72:VAL:O	4:B:73:ALA:HB2	2.13	0.48
4:B:195:LEU:H	15:M:2:GLN:HG2	1.78	0.48
5:C:28:HIS:O	5:C:29:GLU:C	2.57	0.48
11:I:96:TYR:N	11:I:96:TYR:CD1	2.81	0.48
12:J:25:GLY:O	12:J:26:ASP:O	2.31	0.48
12:J:35:LEU:HB2	12:J:119:PHE:CE1	2.49	0.48
14:L:41:GLN:HA	14:L:53:ALA:CB	2.43	0.48
16:N:85:ARG:HG3	16:N:85:ARG:NH2	2.25	0.48
17:O:12:TYR:HB2	17:O:39:PHE:CA	2.38	0.48
17:O:20:ILE:HD12	17:O:20:ILE:C	2.37	0.48
21:S:54:ILE:HD12	21:S:85:MET:HE1	1.96	0.48
21:S:115:ILE:HG23	21:S:169:VAL:HG12	1.95	0.48
22:T:31:VAL:CG1	22:T:37:LEU:HD21	2.39	0.48
24:V:26:MET:O	24:V:27:GLU:C	2.57	0.48
25:W:44:VAL:CG1	25:W:45:LYS:NZ	2.77	0.48
1:X:742:G:O2'	1:X:776:G:H4'	2.12	0.48
1:X:835:U:O2'	1:X:836:G:H5'	2.14	0.48
1:X:861:G:N2	1:X:943:U:H1'	2.29	0.48
1:X:1096:A:H2'	1:X:1097:A:N9	2.28	0.48
1:X:1187:A:C6	1:X:1188:A:C2	3.01	0.48
1:X:1189:G:O2'	1:X:1190:C:H5'	2.13	0.48
1:X:1393:G:C2	1:X:1394:G:C8	3.01	0.48
1:X:1452:U:C5	1:X:1568:A:C2	3.01	0.48
1:X:1468:A:C5'	1:X:1472:C:H42	2.25	0.48
1:X:1584:G:H4'	3:A:59:LYS:HB3	1.95	0.48
1:X:1790:G:C5'	3:A:261:ARG:NH2	2.67	0.48
1:X:1871:G:H3'	1:X:1871:G:N3	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1937:G:O2'	1:X:1939:U:C5	2.63	0.48
1:X:1969:G:C2	1:X:1970:G:C8	3.02	0.48
1:X:2029:G:C2	1:X:2602:G:C2	3.01	0.48
1:X:2325:A:C2	1:X:2362:G:C6	3.02	0.48
1:X:2355:A:H2'	1:X:2356:A:O4'	2.12	0.48
1:X:2550:C:O2	4:B:143:GLN:HG2	2.13	0.48
1:X:2738:A:O2'	1:X:2739:G:H5'	2.13	0.48
1:X:2766:U:O2	4:B:62:PRO:HB3	2.14	0.48
1:X:2825:A:O2'	1:X:2826:C:H5'	2.13	0.48
3:A:208:LYS:C	3:A:209:ALA:O	2.55	0.48
3:A:243:GLY:C	3:A:244:ARG:CZ	2.86	0.48
4:B:141:ILE:CG2	4:B:154:LYS:HZ3	2.26	0.48
5:C:77:PHE:O	5:C:78:VAL:C	2.56	0.48
9:G:66:HIS:HB3	16:N:67:ALA:O	2.12	0.48
12:J:19:THR:HG21	12:J:99:LYS:HZ2	1.78	0.48
12:J:99:LYS:HE3	12:J:100:PRO:CD	2.41	0.48
14:L:60:LYS:CG	14:L:62:GLY:H	2.18	0.48
16:N:85:ARG:HG2	16:N:116:ALA:O	2.14	0.48
18:P:27:VAL:HA	18:P:125:THR:HA	1.96	0.48
21:S:3:LEU:HD13	21:S:33:ALA:CA	2.43	0.48
21:S:3:LEU:CD1	21:S:33:ALA:N	2.74	0.48
23:U:13:LEU:CG	23:U:14:VAL:N	2.71	0.48
24:V:18:ILE:HG12	24:V:53:LEU:HB3	1.95	0.48
1:X:312:G:C5	1:X:328:A:C6	3.02	0.48
1:X:435:A:N1	1:X:436:A:C6	2.81	0.48
1:X:953:G:H1'	1:X:1203:A:H2	1.78	0.48
1:X:956:A:C5	1:X:2427:A:C2	3.01	0.48
1:X:1077:U:N3	1:X:1079:G:H5''	2.29	0.48
1:X:1874:G:H8	1:X:1874:G:OP2	1.96	0.48
1:X:2190:A:C8	1:X:2190:A:C3'	2.88	0.48
1:X:2209:G:C5	1:X:2210:C:C5	3.01	0.48
1:X:2296:U:C2'	1:X:2297:G:H5'	2.44	0.48
1:X:2356:A:N3	14:L:89:PHE:CZ	2.82	0.48
1:X:2685:A:C2	1:X:2686:C:N1	2.81	0.48
1:X:2792:C:C2'	1:X:2793:G:O5'	2.62	0.48
3:A:152:GLY:O	3:A:153:ALA:O	2.32	0.48
4:B:131:SER:O	4:B:132:LYS:HG2	2.14	0.48
6:D:138:PHE:HB2	6:D:141:ILE:CB	2.42	0.48
6:D:156:ILE:CG2	6:D:158:THR:HG23	2.43	0.48
6:D:171:GLN:CA	6:D:175:LEU:HB3	2.34	0.48
9:G:55:ALA:O	9:G:56:THR:C	2.56	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:127:ILE:HG22	9:G:128:GLU:N	2.27	0.48
9:G:169:GLN:NE2	9:G:171:LEU:N	2.62	0.48
10:H:46:HIS:N	10:H:49:ASP:OD2	2.32	0.48
11:I:89:ASP:N	11:I:89:ASP:OD1	2.45	0.48
17:O:51:ALA:C	17:O:53:LYS:N	2.69	0.48
18:P:71:VAL:HG12	18:P:126:ILE:HG22	1.95	0.48
18:P:79:ALA:O	18:P:85:MET:CG	2.61	0.48
22:T:21:LEU:HD11	22:T:41:ARG:CD	2.43	0.48
22:T:57:HIS:N	22:T:57:HIS:ND1	2.62	0.48
25:W:22:ALA:O	25:W:24:GLY:N	2.46	0.48
1:X:674:U:H1'	11:I:22:GLY:CA	2.42	0.48
1:X:862:A:H2'	1:X:863:C:O4'	2.13	0.48
1:X:1583:A:H5'	3:A:58:HIS:ND1	2.28	0.48
1:X:2011:U:O2'	1:X:2012:A:H5'	2.13	0.48
1:X:2195:C:C4	1:X:2196:U:N3	2.82	0.48
1:X:2308:A:H2'	1:X:2309:G:C8	2.49	0.48
1:X:2570:C:OP1	3:A:239:ARG:CD	2.62	0.48
1:X:2823:G:O2'	1:X:2824:C:P	2.72	0.48
3:A:98:ALA:O	3:A:99:ASP:C	2.56	0.48
5:C:34:GLN:O	5:C:35:LEU:C	2.55	0.48
5:C:35:LEU:CA	5:C:38:ARG:HG3	2.44	0.48
5:C:186:LEU:HD12	5:C:187:VAL:N	2.29	0.48
6:D:91:LEU:HB3	6:D:96:MET:HA	1.95	0.48
7:E:9:ILE:HB	7:E:50:LEU:O	2.14	0.48
10:H:25:LEU:HD21	10:H:52:VAL:CG2	2.43	0.48
10:H:70:VAL:HG22	10:H:71:LYS:O	2.13	0.48
10:H:116:ARG:NH1	15:M:38:LYS:CE	2.76	0.48
11:I:120:VAL:HG11	11:I:122:VAL:HG13	1.92	0.48
12:J:38:MET:HE3	12:J:131:LYS:NZ	2.29	0.48
12:J:112:GLU:O	12:J:115:ALA:HB3	2.14	0.48
12:J:116:LYS:CE	12:J:132:MET:HE2	2.39	0.48
16:N:7:GLY:C	16:N:8:ILE:HG13	2.39	0.48
16:N:52:ASN:O	16:N:55:ARG:N	2.47	0.48
16:N:85:ARG:HH21	16:N:85:ARG:CG	2.18	0.48
17:O:29:ALA:HA	17:O:59:GLU:HB3	1.95	0.48
17:O:35:LEU:CD2	17:O:36:LYS:N	2.76	0.48
19:Q:4:TYR:CE2	24:V:23:LYS:HD2	2.49	0.48
19:Q:62:ARG:O	19:Q:70:GLY:HA3	2.14	0.48
23:U:11:LYS:O	23:U:12:ASN:ND2	2.47	0.48
24:V:50:VAL:O	24:V:53:LEU:HB2	2.14	0.48
24:V:64:GLY:O	24:V:65:GLU:CB	2.62	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:239:A:C2	1:X:443:A:N3	2.82	0.48
1:X:393:U:H4'	23:U:19:ILE:O	2.12	0.48
1:X:493:A:H4'	20:R:56:LYS:CE	2.35	0.48
1:X:540:G:C6	1:X:2006:G:OP1	2.66	0.48
1:X:985:G:C4	1:X:1200:G:N2	2.81	0.48
1:X:1002:C:H2'	1:X:1003:C:H6	1.78	0.48
1:X:1105:U:O2	1:X:1107:A:H8	1.97	0.48
1:X:1238:A:C2	1:X:1239:A:C2	3.01	0.48
1:X:1257:U:H2'	1:X:1258:G:H8	1.78	0.48
1:X:2423:G:C6	1:X:2424:G:C5	3.02	0.48
1:X:2784:A:C6	1:X:2866:A:C8	3.01	0.48
3:A:246:PRO:O	3:A:247:VAL:C	2.55	0.48
4:B:28:ALA:O	4:B:29:GLY:O	2.32	0.48
4:B:176:ARG:C	4:B:177:ALA:O	2.53	0.48
5:C:3:GLN:NE2	5:C:4:ILE:CG1	2.75	0.48
5:C:72:ARG:HG3	5:C:77:PHE:CE2	2.48	0.48
6:D:106:ILE:O	6:D:110:ARG:CB	2.60	0.48
6:D:123:ASP:O	6:D:124:GLY:C	2.56	0.48
6:D:138:PHE:HB2	6:D:141:ILE:HG12	1.95	0.48
7:E:22:GLY:HA2	7:E:24:PHE:HE1	1.78	0.48
10:H:100:ASN:HD21	10:H:104:GLU:HG3	1.79	0.48
11:I:81:GLN:HB3	11:I:114:ILE:CG2	2.39	0.48
11:I:96:TYR:N	11:I:96:TYR:HD1	2.11	0.48
12:J:34:GLY:O	12:J:132:MET:HG3	2.14	0.48
16:N:88:ILE:HG23	17:O:49:GLU:CB	2.37	0.48
16:N:105:ALA:O	16:N:107:LYS:N	2.47	0.48
18:P:18:VAL:HG12	18:P:19:LYS:N	2.29	0.48
21:S:51:LEU:H	21:S:51:LEU:CD2	2.17	0.48
21:S:72:ASP:O	21:S:75:LYS:O	2.31	0.48
1:X:30:G:O2'	1:X:31:C:H5'	2.14	0.48
1:X:199:A:N1	1:X:201:G:C2	2.82	0.48
1:X:219:G:O2'	1:X:220:U:P	2.72	0.48
1:X:812:G:C4	1:X:813:A:N7	2.81	0.48
1:X:868:U:H2'	1:X:869:C:C6	2.49	0.48
1:X:939:C:OP2	1:X:940:G:H8	1.96	0.48
1:X:1038:U:H5	1:X:1137:A:N3	2.12	0.48
1:X:1091:C:O2'	8:F:125:ASN:HB2	2.12	0.48
1:X:1102:G:C6	1:X:1103:C:C4	3.02	0.48
1:X:1498:G:N2	1:X:1523:A:H1'	2.29	0.48
1:X:1918:G:C2	1:X:1947:G:C4	3.01	0.48
1:X:1972:G:H2'	1:X:1973:C:C6	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1982:C:OP1	1:X:2704:U:H5'	2.14	0.48
1:X:2063:A:H5'	23:U:38:THR:O	2.14	0.48
1:X:2199:C:O2	1:X:2199:C:H2'	2.13	0.48
1:X:2597:G:O2'	1:X:2598:C:H5'	2.14	0.48
2:Y:2:C:H6	2:Y:2:C:O5'	1.94	0.48
2:Y:27:A:H61	2:Y:55:C:C3'	2.24	0.48
3:A:150:GLY:C	3:A:152:GLY:H	2.20	0.48
4:B:92:ASN:HA	4:B:95:ILE:HB	1.96	0.48
5:C:101:GLN:C	5:C:103:GLY:N	2.71	0.48
5:C:165:SER:HB3	5:C:166:TRP:HZ3	1.77	0.48
7:E:146:ALA:O	7:E:150:LYS:HG3	2.14	0.48
8:F:3:LYS:HG2	8:F:4:VAL:N	2.27	0.48
9:G:103:TYR:C	9:G:107:GLN:NE2	2.72	0.48
11:I:87:THR:O	11:I:93:LEU:HD13	2.14	0.48
11:I:92:THR:C	11:I:94:GLU:H	2.22	0.48
14:L:64:LYS:N	14:L:64:LYS:CD	2.74	0.48
16:N:47:TYR:C	16:N:47:TYR:CD2	2.91	0.48
17:O:38:LEU:O	17:O:39:PHE:HB3	2.14	0.48
19:Q:83:ALA:C	19:Q:85:GLY:H	2.22	0.48
21:S:3:LEU:O	21:S:56:VAL:HA	2.14	0.48
1:X:242:A:O3'	1:X:243:G:H4'	2.14	0.48
1:X:492:G:O2'	1:X:493:A:H8	1.97	0.48
1:X:538:A:H2'	1:X:2025:A:C2	2.49	0.48
1:X:663:G:C3'	1:X:664:C:C5'	2.86	0.48
1:X:759:C:C1'	1:X:761:G:N2	2.77	0.48
1:X:1200:G:O2'	1:X:1201:G:H5'	2.13	0.48
1:X:1264:C:H5'	16:N:13:ARG:CZ	2.44	0.48
1:X:1321:A:H2'	1:X:1322:G:O4'	2.14	0.48
1:X:1352:G:C6	1:X:1353:A:N6	2.81	0.48
1:X:1373:G:N2	1:X:1374:G:H1'	2.29	0.48
1:X:1386:A:C5'	1:X:2191:A:N6	2.63	0.48
1:X:1475:U:O2	1:X:1475:U:H2'	2.13	0.48
1:X:1621:C:H5'	1:X:1626:A:N6	2.29	0.48
1:X:1673:C:H2'	1:X:1674:C:H6	1.79	0.48
1:X:1984:A:H2'	1:X:1985:G:O4'	2.14	0.48
1:X:2007:G:C2	1:X:2023:C:C2	3.02	0.48
1:X:2175:A:H2'	1:X:2176:U:H6	1.79	0.48
1:X:2262:C:H2'	1:X:2263:C:O4'	2.14	0.48
1:X:2288:A:C4	1:X:2289:A:N7	2.82	0.48
1:X:2447:G:H22	1:X:2460:G:H2'	1.78	0.48
1:X:2581:A:C3'	1:X:2582:G:H5''	2.29	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2683:C:C5	1:X:2684:A:N7	2.82	0.48
2:Y:53:G:H5''	14:L:64:LYS:CE	2.44	0.48
2:Y:108:G:H4'	21:S:26:LYS:HE3	1.96	0.48
3:A:44:ASN:CB	3:A:49:ILE:HA	2.43	0.48
3:A:257:LEU:HD23	3:A:257:LEU:HA	1.66	0.48
4:B:9:ILE:HB	4:B:25:VAL:O	2.14	0.48
4:B:39:ALA:HA	4:B:43:GLY:C	2.39	0.48
4:B:134:TRP:O	4:B:135:HIS:O	2.31	0.48
5:C:127:ASP:HB2	5:C:129:LYS:HG2	1.95	0.48
6:D:4:LEU:O	6:D:5:LYS:HB3	2.14	0.48
6:D:114:PHE:HZ	6:D:176:PRO:HG3	1.78	0.48
6:D:156:ILE:HG22	6:D:158:THR:HG23	1.96	0.48
7:E:74:ASN:O	7:E:78:GLY:N	2.47	0.48
9:G:104:THR:O	9:G:107:GLN:NE2	2.46	0.48
13:K:38:LEU:HD12	13:K:38:LEU:O	2.14	0.48
16:N:3:ARG:HH12	16:N:5:LYS:HG2	1.78	0.48
16:N:65:ILE:HG12	16:N:96:ALA:CB	2.44	0.48
16:N:117:ARG:NH2	16:N:117:ARG:HG3	2.29	0.48
17:O:74:TYR:CZ	17:O:76:SER:HB3	2.49	0.48
18:P:10:ASN:O	18:P:10:ASN:OD1	2.31	0.48
21:S:71:MET:H	21:S:71:MET:HE2	1.78	0.48
21:S:128:ARG:H	21:S:130:ILE:HD11	1.79	0.48
1:X:319:G:H1'	1:X:511:A:O4'	2.14	0.48
1:X:521:U:H5''	1:X:522:G:OP2	2.13	0.48
1:X:543:G:C5	1:X:544:U:C5	3.02	0.48
1:X:683:A:O2'	1:X:684:C:O5'	2.30	0.48
1:X:683:A:O2'	1:X:684:C:P	2.71	0.48
1:X:760:U:C4	26:Z:3:LYS:HG3	2.49	0.48
1:X:826:U:N3	1:X:827:C:C4	2.82	0.48
1:X:840:U:H4'	1:X:841:G:C2	2.49	0.48
1:X:1173:G:H2'	1:X:1174:G:C8	2.42	0.48
1:X:1321:A:C2	1:X:1322:G:H1'	2.49	0.48
1:X:1354:A:P	1:X:1410:U:H3	2.37	0.48
1:X:1787:U:H2'	1:X:1788:C:C6	2.49	0.48
1:X:1982:C:OP1	1:X:2703:C:O2'	2.31	0.48
1:X:2013:A:C5'	1:X:2014:A:OP1	2.62	0.48
1:X:2274:C:H2'	1:X:2275:U:H6	1.79	0.48
1:X:2311:U:C4'	1:X:2315:A:N6	2.76	0.48
1:X:2629:U:H2'	1:X:2630:C:O5'	2.13	0.48
1:X:2850:U:H6	1:X:2850:U:C5'	2.19	0.48
1:X:2863:U:H2'	1:X:2864:C:C6	2.45	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:3:A:C2'	2:Y:4:C:H5'	2.41	0.48
4:B:120:TRP:O	4:B:121:ASN:CB	2.62	0.48
4:B:188:ILE:CG2	4:B:189:PRO:CD	2.92	0.48
5:C:153:ASP:C	5:C:154:ASP:CG	2.82	0.48
6:D:15:ALA:O	6:D:18:GLN:C	2.57	0.48
7:E:9:ILE:HG22	7:E:11:VAL:CG2	2.43	0.48
7:E:84:THR:HB	7:E:134:SER:OG	2.14	0.48
7:E:99:THR:HB	7:E:102:ALA:HB3	1.95	0.48
10:H:2:ILE:HD13	10:H:2:ILE:HA	1.72	0.48
10:H:62:GLY:O	10:H:65:LYS:NZ	2.39	0.48
10:H:110:VAL:CG1	10:H:111:PHE:N	2.76	0.48
12:J:6:LYS:O	12:J:71:PRO:HD2	2.14	0.48
12:J:30:PHE:HB3	12:J:66:TYR:CD2	2.49	0.48
13:K:10:LEU:CD2	13:K:17:ARG:HB2	2.41	0.48
13:K:60:LEU:O	13:K:63:ARG:HB3	2.12	0.48
13:K:84:ALA:N	13:K:85:PRO:CD	2.76	0.48
14:L:33:ARG:HH22	14:L:103:LEU:CA	2.27	0.48
15:M:39:VAL:HG12	15:M:45:THR:HG23	1.94	0.48
16:N:85:ARG:NH2	16:N:85:ARG:CG	2.76	0.48
17:O:68:LYS:CE	17:O:86:HIS:H	2.27	0.48
19:Q:12:ILE:HG12	19:Q:13:SER:N	2.29	0.48
20:R:58:VAL:C	20:R:60:PRO:HD3	2.38	0.48
21:S:94:VAL:HG12	21:S:95:SER:N	2.29	0.48
1:X:197:G:H22	1:X:242:A:H62	1.62	0.47
1:X:518:A:OP2	1:X:518:A:H4'	2.13	0.47
1:X:683:A:C5'	11:I:45:LYS:HA	2.43	0.47
1:X:922:A:N1	1:X:2256:G:H1'	2.29	0.47
1:X:994:A:HO2'	1:X:995:A:P	2.37	0.47
1:X:1028:G:C6	1:X:1157:G:C6	3.02	0.47
1:X:1165:G:H8	1:X:1165:G:O5'	1.96	0.47
1:X:1355:A:O2'	1:X:1356:G:OP1	2.30	0.47
1:X:1547:U:H2'	1:X:1548:U:C6	2.49	0.47
1:X:1675:C:O5'	1:X:1675:C:H6	1.96	0.47
1:X:1725:C:O2'	1:X:1726:C:H5'	2.14	0.47
1:X:1812:U:C2	3:A:159:ALA:O	2.67	0.47
1:X:1855:G:C2	1:X:1863:U:O2	2.67	0.47
1:X:2036:G:C2	1:X:2596:C:C2	3.02	0.47
1:X:2178:U:C2	1:X:2179:C:C5	3.02	0.47
1:X:2351:G:C2	1:X:2352:A:N7	2.82	0.47
1:X:2422:C:O2	1:X:2423:G:C8	2.67	0.47
1:X:2463:G:H5''	12:J:46:ASN:OD1	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2471:U:H2'	1:X:2472:U:C6	2.49	0.47
1:X:2501:U:O2'	1:X:2626:U:OP1	2.30	0.47
1:X:2637:C:H2'	1:X:2638:G:O4'	2.14	0.47
1:X:2720:A:C6	1:X:2721:A:C6	3.02	0.47
1:X:2725:C:O2'	7:E:143:GLN:HG3	2.13	0.47
2:Y:7:C:C2	2:Y:8:C:C5	3.02	0.47
2:Y:82:U:O2	2:Y:83:C:C5	2.67	0.47
3:A:102:LYS:O	3:A:103:ARG:HG3	2.14	0.47
5:C:9:GLN:HG2	5:C:120:VAL:HG21	1.94	0.47
5:C:48:ARG:CB	5:C:51:VAL:HG22	2.38	0.47
5:C:112:GLN:HA	5:C:116:LYS:CD	2.43	0.47
5:C:122:GLY:O	5:C:123:PHE:C	2.57	0.47
5:C:125:ILE:HG22	5:C:126:ALA:N	2.29	0.47
6:D:52:LYS:HZ1	6:D:149:THR:HA	1.79	0.47
7:E:115:ILE:HD11	7:E:151:VAL:HG21	1.96	0.47
7:E:172:LYS:O	7:E:173:ALA:CB	2.62	0.47
9:G:34:PRO:HA	9:G:69:ASP:CG	2.39	0.47
11:I:76:LYS:O	11:I:79:GLN:HB2	2.14	0.47
12:J:44:LYS:CB	12:J:47:GLN:HG3	2.41	0.47
12:J:64:LYS:HG2	12:J:108:ALA:O	2.14	0.47
12:J:128:ILE:CD1	12:J:130:THR:HG23	2.44	0.47
18:P:112:GLY:O	18:P:113:SER:C	2.55	0.47
21:S:54:ILE:O	21:S:54:ILE:CG2	2.60	0.47
21:S:75:LYS:O	21:S:77:ALA:N	2.47	0.47
21:S:98:VAL:HG21	21:S:168:VAL:CG1	2.44	0.47
21:S:172:LEU:HD22	21:S:173:PRO:HD2	1.96	0.47
22:T:46:LYS:HE3	22:T:76:ALA:HA	1.95	0.47
24:V:62:ARG:HG2	24:V:62:ARG:NH1	2.28	0.47
26:Z:40:LYS:HE3	26:Z:42:SER:HA	1.94	0.47
26:Z:45:ILE:HD13	26:Z:57:VAL:CG2	2.44	0.47
30:4:4:ARG:O	30:4:36:GLN:HA	2.14	0.47
30:4:29:ASN:HD21	30:4:31:LYS:CD	2.27	0.47
1:X:73:A:H4'	1:X:74:G:O5'	2.14	0.47
1:X:205:A:H2'	1:X:206:U:H5'	1.97	0.47
1:X:230:C:C2'	1:X:231:G:H5'	2.43	0.47
1:X:361:G:H8	1:X:361:G:O5'	1.96	0.47
1:X:392:G:N2	1:X:409:G:C5	2.81	0.47
1:X:558:G:H2'	1:X:559:C:O4'	2.13	0.47
1:X:816:U:H2'	1:X:817:A:H5'	1.96	0.47
1:X:931:G:H5'	2:Y:83:C:O4'	2.14	0.47
1:X:1017:C:O4'	9:G:56:THR:HG23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1324:G:C8	1:X:1326:U:O4	2.67	0.47
1:X:1357:U:O2'	1:X:1358:C:OP1	2.27	0.47
1:X:1811:A:H1'	1:X:1813:A:C6	2.49	0.47
1:X:2271:C:P	14:L:18:ARG:NH2	2.87	0.47
1:X:2285:U:H5'	1:X:2286:G:O4'	2.14	0.47
1:X:2307:A:C6	1:X:2308:A:N6	2.82	0.47
1:X:2311:U:O2	1:X:2311:U:C3'	2.61	0.47
1:X:2472:U:C4	1:X:2473:G:C8	3.02	0.47
1:X:2696:A:O2'	1:X:2697:G:H5'	2.14	0.47
1:X:2714:A:N1	4:B:203:LYS:HE3	2.29	0.47
4:B:141:ILE:HG21	4:B:154:LYS:NZ	2.29	0.47
5:C:34:GLN:O	5:C:37:SER:N	2.45	0.47
6:D:35:VAL:O	6:D:154:ILE:HG23	2.13	0.47
6:D:65:PRO:CB	6:D:89:VAL:HG13	2.44	0.47
9:G:35:LYS:HG2	9:G:69:ASP:CG	2.38	0.47
9:G:64:GLY:HA3	9:G:67:ARG:HD2	1.95	0.47
10:H:98:ILE:HG22	10:H:99:ILE:N	2.28	0.47
11:I:58:ALA:C	11:I:60:LEU:N	2.73	0.47
11:I:90:ARG:HH21	11:I:93:LEU:HD12	1.79	0.47
12:J:61:ARG:HG2	12:J:61:ARG:HH11	1.79	0.47
16:N:40:LEU:O	16:N:43:ALA:HB3	2.13	0.47
16:N:50:ARG:O	16:N:51:ARG:C	2.57	0.47
17:O:40:VAL:HG12	17:O:45:THR:N	2.29	0.47
18:P:50:VAL:HG12	18:P:90:LEU:O	2.14	0.47
21:S:52:PHE:O	21:S:54:ILE:HG13	2.14	0.47
30:4:22:ARG:HH11	30:4:22:ARG:CG	2.25	0.47
1:X:26:G:O5'	1:X:26:G:H8	1.97	0.47
1:X:199:A:H62	1:X:209:G:H1'	1.78	0.47
1:X:863:C:H5'	25:W:18:LYS:HG3	1.96	0.47
1:X:1121:G:C2'	1:X:1122:A:C8	2.97	0.47
1:X:1142:G:O2'	1:X:1143:A:H8	1.97	0.47
1:X:1264:C:C5'	16:N:13:ARG:NH1	2.76	0.47
1:X:1490:U:H2'	1:X:1491:C:H6	1.78	0.47
1:X:1496:G:C2'	1:X:1497:C:O5'	2.62	0.47
1:X:1585:A:C6	1:X:1586:A:C6	3.03	0.47
1:X:1686:A:C2	1:X:1977:C:H1'	2.49	0.47
1:X:1786:C:O5'	1:X:1786:C:H6	1.97	0.47
1:X:1830:C:H41	1:X:1881:U:H3'	1.77	0.47
1:X:2200:G:H2'	1:X:2201:G:C8	2.49	0.47
1:X:2299:A:C2	1:X:2312:A:C5	3.02	0.47
1:X:2714:A:H2'	1:X:2715:C:O4'	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2762:G:O2'	1:X:2763:U:H5'	2.14	0.47
2:Y:98:C:O5'	2:Y:98:C:H6	1.97	0.47
4:B:25:VAL:HA	4:B:183:LEU:HD23	1.96	0.47
4:B:179:GLU:O	4:B:181:LEU:N	2.48	0.47
5:C:99:VAL:C	5:C:101:GLN:H	2.22	0.47
5:C:153:ASP:OD1	5:C:153:ASP:N	2.47	0.47
5:C:177:VAL:O	5:C:180:ILE:HG23	2.13	0.47
6:D:16:LEU:O	6:D:20:PHE:CB	2.63	0.47
6:D:75:SER:HB2	6:D:79:LEU:HD22	1.95	0.47
7:E:15:VAL:O	7:E:16:THR:OG1	2.27	0.47
7:E:162:VAL:HG12	7:E:163:ARG:N	2.29	0.47
7:E:164:PHE:HB2	7:E:167:GLU:OE1	2.13	0.47
10:H:1:MET:HB3	10:H:44:TYR:HB3	1.96	0.47
11:I:73:GLU:OE2	11:I:105:PRO:O	2.32	0.47
13:K:99:ARG:HA	13:K:111:ALA:CB	2.45	0.47
14:L:63:ASN:HB2	14:L:67:THR:HG23	1.95	0.47
17:O:5:ILE:CG1	17:O:6:GLN:N	2.51	0.47
18:P:35:PRO:O	18:P:39:ARG:CD	2.63	0.47
19:Q:41:ALA:O	19:Q:42:ILE:C	2.58	0.47
20:R:59:LYS:NZ	20:R:62:MET:HE2	2.29	0.47
21:S:154:LEU:HD21	21:S:160:LEU:HG	1.95	0.47
1:X:228:A:P	11:I:53:ARG:HG2	2.55	0.47
1:X:402:A:N7	1:X:2392:G:H4'	2.27	0.47
1:X:488:A:C6	1:X:489:A:C6	3.02	0.47
1:X:704:G:C4	1:X:705:C:C6	3.02	0.47
1:X:1352:G:H2'	1:X:1353:A:C8	2.49	0.47
1:X:1837:G:O2'	1:X:1838:G:H5'	2.14	0.47
1:X:1974:U:H2'	1:X:1975:G:C5'	2.45	0.47
1:X:2209:G:H4'	23:U:46:LEU:C	2.39	0.47
1:X:2294:U:O2'	6:D:125:ARG:HG3	2.14	0.47
1:X:2594:U:H2'	1:X:2594:U:O2	2.14	0.47
2:Y:17:A:HO2'	2:Y:112:A:H8	1.60	0.47
3:A:244:ARG:O	3:A:252:LYS:HE2	2.13	0.47
5:C:130:THR:O	5:C:131:LYS:C	2.58	0.47
6:D:175:LEU:HG	6:D:177:PHE:CE1	2.49	0.47
7:E:37:TYR:CE2	7:E:68:THR:HG23	2.50	0.47
9:G:41:TRP:CZ3	9:G:79:PHE:CG	3.02	0.47
9:G:102:ARG:NH2	9:G:112:THR:HG21	2.29	0.47
10:H:122:ARG:NH1	10:H:124:MET:CE	2.75	0.47
11:I:71:THR:O	11:I:104:ARG:HD3	2.14	0.47
13:K:83:VAL:HG23	13:K:87:TYR:CE2	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:34:ARG:NH2	15:M:88:VAL:HG11	2.26	0.47
16:N:12:ARG:O	16:N:16:LYS:HG3	2.14	0.47
16:N:93:LYS:CE	17:O:5:ILE:HG21	2.44	0.47
17:O:36:LYS:HZ2	17:O:55:THR:N	2.13	0.47
19:Q:15:LYS:O	19:Q:16:ALA:C	2.56	0.47
19:Q:20:MET:C	19:Q:22:ARG:N	2.71	0.47
21:S:71:MET:H	21:S:71:MET:CE	2.26	0.47
1:X:10:A:H2'	1:X:11:G:C8	2.49	0.47
1:X:332:C:H5'	5:C:128:ALA:HB1	1.97	0.47
1:X:466:A:O2'	1:X:467:U:OP2	2.23	0.47
1:X:538:A:C4	1:X:2025:A:C2	3.03	0.47
1:X:543:G:C6	1:X:544:U:C4	3.02	0.47
1:X:558:G:H8	1:X:559:C:C4	2.32	0.47
1:X:583:C:C1'	1:X:2038:C:C6	2.94	0.47
1:X:663:G:H3'	1:X:664:C:C5'	2.27	0.47
1:X:761:G:C8	1:X:763:A:C8	3.03	0.47
1:X:957:G:O2'	1:X:958:G:H5'	2.15	0.47
1:X:984:A:H1'	1:X:1202:U:C4	2.49	0.47
1:X:994:A:O2'	1:X:995:A:OP1	2.28	0.47
1:X:1032:A:C8	1:X:1032:A:H3'	2.49	0.47
1:X:1050:G:C2'	1:X:1051:U:C5'	2.92	0.47
1:X:1066:G:H2'	1:X:1067:G:H8	1.79	0.47
1:X:1078:A:OP1	1:X:1078:A:H3'	2.15	0.47
1:X:1211:G:N2	1:X:1263:G:C5	2.83	0.47
1:X:1368:G:C6	1:X:1390:G:N2	2.82	0.47
1:X:1411:C:H2'	1:X:1412:C:O5'	2.14	0.47
1:X:1505:U:C2	1:X:1506:C:C5	3.02	0.47
1:X:1668:G:OP1	13:K:40:LYS:HE3	2.15	0.47
1:X:1707:A:H3'	1:X:1708:C:C6	2.49	0.47
1:X:1790:G:C8	3:A:181:GLU:OE1	2.67	0.47
1:X:1873:A:C8	1:X:1874:G:C8	3.03	0.47
1:X:1949:A:N3	1:X:2572:U:C4'	2.77	0.47
1:X:2020:G:H2'	1:X:2021:G:C8	2.49	0.47
1:X:2184:C:H2'	1:X:2185:U:C6	2.49	0.47
1:X:2258:G:C2'	1:X:2259:G:O5'	2.62	0.47
1:X:2492:G:C2	1:X:2493:U:C2	3.02	0.47
1:X:2695:C:C6	1:X:2695:C:C3'	2.97	0.47
1:X:2700:U:O2'	1:X:2701:A:H5'	2.14	0.47
1:X:2827:G:O2'	1:X:2828:C:H5'	2.15	0.47
2:Y:64:C:C2	2:Y:65:A:C8	3.03	0.47
2:Y:119:G:H4'	14:L:57:ALA:HB1	1.96	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:105:THR:HG21	4:B:199:ARG:NH2	2.30	0.47
4:B:141:ILE:CG2	4:B:154:LYS:NZ	2.77	0.47
4:B:181:LEU:HD12	15:M:16:ILE:HD11	1.96	0.47
5:C:128:ALA:HB2	5:C:159:ARG:NE	2.29	0.47
6:D:124:GLY:C	6:D:126:GLY:H	2.21	0.47
9:G:67:ARG:HH21	9:G:71:THR:N	2.12	0.47
9:G:132:PHE:CZ	9:G:142:ARG:HA	2.49	0.47
9:G:158:HIS:O	9:G:161:GLN:HB2	2.15	0.47
13:K:66:VAL:C	13:K:68:GLN:N	2.71	0.47
14:L:15:ARG:CD	14:L:91:ARG:HD3	2.41	0.47
15:M:39:VAL:CA	15:M:45:THR:HG23	2.44	0.47
16:N:76:TYR:O	16:N:77:SER:C	2.57	0.47
17:O:13:ARG:CB	17:O:13:ARG:CZ	2.92	0.47
18:P:37:LYS:HG2	18:P:38:VAL:N	2.30	0.47
19:Q:71:GLN:HG2	19:Q:72:ARG:N	2.29	0.47
20:R:16:PHE:HB3	20:R:82:ALA:CB	2.45	0.47
20:R:93:ARG:CA	20:R:95:ARG:NH2	2.78	0.47
20:R:110:SER:OG	20:R:111:GLY:N	2.47	0.47
21:S:96:VAL:N	21:S:120:LEU:O	2.40	0.47
26:Z:32:GLU:HG3	26:Z:37:HIS:O	2.15	0.47
1:X:17:G:C4	1:X:18:U:C5	3.02	0.47
1:X:317:U:C3'	1:X:318:G:H5''	2.45	0.47
1:X:319:G:OP1	18:P:12:LYS:HE3	2.13	0.47
1:X:549:G:C6	1:X:550:C:C4	3.03	0.47
1:X:913:A:O5'	1:X:913:A:H8	1.96	0.47
1:X:982:C:N4	1:X:983:G:C6	2.83	0.47
1:X:1016:C:C5	1:X:1154:A:C1'	2.91	0.47
1:X:1068:A:H8	1:X:1097:A:H2'	1.78	0.47
1:X:1141:U:C4	4:B:147:PRO:HD3	2.50	0.47
1:X:1459:U:C2	1:X:1475:U:H1'	2.49	0.47
1:X:2009:U:H2'	1:X:2010:G:O4'	2.15	0.47
1:X:2015:G:C8	4:B:145:LYS:NZ	2.76	0.47
1:X:2431:C:N4	1:X:2432:A:C6	2.83	0.47
1:X:2558:C:O2'	1:X:2559:U:H5'	2.14	0.47
1:X:2690:A:H5''	1:X:2691:C:H5'	1.96	0.47
1:X:2779:C:C6	1:X:2779:C:C3'	2.98	0.47
2:Y:73:C:C5	2:Y:74:A:N7	2.83	0.47
4:B:123:ALA:O	4:B:124:GLY:C	2.57	0.47
5:C:10:ASN:OD1	5:C:10:ASN:O	2.33	0.47
6:D:46:ASP:CB	6:D:49:ALA:H	2.27	0.47
9:G:84:ASN:HA	9:G:153:GLY:O	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:13:ARG:HB3	11:I:13:ARG:CZ	2.44	0.47
11:I:105:PRO:C	11:I:106:VAL:HG23	2.39	0.47
12:J:81:GLU:O	12:J:82:THR:C	2.56	0.47
13:K:45:ARG:HG3	13:K:95:THR:HG21	1.96	0.47
16:N:25:TRP:O	16:N:26:GLY:O	2.31	0.47
17:O:18:ASP:OD1	17:O:20:ILE:HG22	2.14	0.47
17:O:36:LYS:HE3	17:O:55:THR:O	2.15	0.47
18:P:34:SER:O	18:P:35:PRO:C	2.54	0.47
20:R:51:VAL:HG12	20:R:52:ASN:N	2.29	0.47
20:R:55:THR:HG21	20:R:72:ARG:HH11	1.79	0.47
21:S:32:PHE:O	21:S:33:ALA:HB2	2.15	0.47
21:S:50:GLY:C	21:S:65:LEU:HD11	2.39	0.47
21:S:54:ILE:HB	21:S:62:PHE:O	2.14	0.47
21:S:98:VAL:C	21:S:99:HIS:ND1	2.73	0.47
1:X:29:U:C4'	16:N:11:ARG:HH22	2.28	0.47
1:X:125:A:H5''	1:X:126:C:O4'	2.14	0.47
1:X:127:C:O2'	1:X:128:C:H5'	2.15	0.47
1:X:196:A:O2'	1:X:197:G:H5'	2.14	0.47
1:X:334:G:O2'	1:X:335:A:P	2.72	0.47
1:X:340:G:O4'	1:X:488:A:H1'	2.15	0.47
1:X:405:C:H2'	1:X:406:G:C8	2.49	0.47
1:X:633:G:H8	1:X:633:G:O5'	1.98	0.47
1:X:654:A:N3	1:X:654:A:C2'	2.78	0.47
1:X:682:G:N3	1:X:682:G:C2'	2.66	0.47
1:X:689:A:H2	1:X:690:A:C8	2.32	0.47
1:X:692:C:H2'	1:X:693:A:H8	1.79	0.47
1:X:837:U:H2'	1:X:838:A:C8	2.49	0.47
1:X:838:A:O2'	1:X:839:U:H5'	2.13	0.47
1:X:1031:C:O2'	1:X:1032:A:C5'	2.62	0.47
1:X:1032:A:H3'	1:X:1032:A:H8	1.79	0.47
1:X:1131:G:C6	1:X:1132:C:C4	3.02	0.47
1:X:1301:U:O4	13:K:105:GLY:HA3	2.15	0.47
1:X:1337:G:C4	1:X:1341:G:O6	2.68	0.47
1:X:1383:C:H5'	3:A:46:ARG:HG3	1.96	0.47
1:X:1474:A:C2'	1:X:1475:U:H5'	2.43	0.47
1:X:1476:G:C6	1:X:1477:C:C4	3.03	0.47
1:X:1482:U:H2'	1:X:1483:G:C8	2.49	0.47
1:X:1501:C:C2'	1:X:1502:G:O4'	2.54	0.47
1:X:1564:U:H2'	1:X:1565:G:O4'	2.15	0.47
1:X:1637:U:O2'	1:X:1638:G:C8	2.62	0.47
1:X:1711:C:H5''	1:X:1712:G:OP1	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1728:A:C2	1:X:1739:G:C2	3.03	0.47
1:X:2375:G:H1'	23:U:33:LYS:HZ3	1.80	0.47
1:X:2381:A:C2'	1:X:2382:C:OP2	2.62	0.47
1:X:2576:G:C5	1:X:2577:A:C6	3.03	0.47
1:X:2664:G:C2	1:X:2665:G:C8	3.02	0.47
1:X:2706:U:O2'	1:X:2707:G:H5''	2.15	0.47
1:X:2756:A:HO2'	1:X:2757:G:P	2.35	0.47
1:X:2862:G:C2	1:X:2863:U:C2	3.03	0.47
2:Y:110:U:H3'	2:Y:111:C:H5''	1.95	0.47
3:A:268:ARG:C	3:A:269:PHE:CD2	2.93	0.47
4:B:9:ILE:HG22	4:B:9:ILE:O	2.15	0.47
4:B:164:ARG:HG2	4:B:165:VAL:N	2.29	0.47
5:C:45:THR:HG21	5:C:86:PRO:HD2	1.96	0.47
5:C:154:ASP:OD2	5:C:157:THR:OG1	2.32	0.47
6:D:7:LYS:O	6:D:8:TYR:C	2.58	0.47
6:D:8:TYR:CB	6:D:173:MET:HE1	2.44	0.47
6:D:29:PRO:HB3	6:D:160:ALA:HB2	1.96	0.47
6:D:52:LYS:HD3	6:D:56:GLU:CD	2.40	0.47
6:D:113:ASP:O	6:D:115:ARG:NH2	2.48	0.47
6:D:167:ARG:O	6:D:170:LEU:HB2	2.14	0.47
7:E:7:GLN:OE1	7:E:8:PRO:HD3	2.13	0.47
7:E:44:ARG:NH2	7:E:46:ASP:HB2	2.25	0.47
7:E:118:PRO:HG2	7:E:121:VAL:HG21	1.97	0.47
9:G:67:ARG:HB2	9:G:70:PHE:CD1	2.49	0.47
10:H:7:ARG:HH12	10:H:20:MET:CE	2.27	0.47
11:I:18:ARG:CB	11:I:21:ARG:HD3	2.44	0.47
11:I:117:ALA:HA	11:I:137:GLY:CA	2.45	0.47
12:J:76:THR:CG2	12:J:88:LYS:O	2.63	0.47
12:J:131:LYS:HD2	21:S:76:ARG:NH2	2.29	0.47
13:K:63:ARG:CZ	13:K:80:MET:HG2	2.45	0.47
13:K:94:TYR:CZ	13:K:115:LEU:O	2.68	0.47
14:L:40:ALA:O	14:L:53:ALA:HA	2.14	0.47
14:L:71:VAL:O	14:L:75:LEU:HB2	2.15	0.47
15:M:22:ARG:HD3	15:M:24:LEU:CD2	2.43	0.47
16:N:75:ASN:OD1	16:N:78:THR:CB	2.63	0.47
20:R:38:LEU:CD1	20:R:47:VAL:HG21	2.30	0.47
20:R:84:VAL:CG1	20:R:88:THR:N	2.77	0.47
20:R:90:LYS:HB2	20:R:108:VAL:CG2	2.30	0.47
20:R:105:ARG:HH12	20:R:112:LYS:C	2.23	0.47
21:S:19:ILE:CD1	21:S:36:ARG:HA	2.44	0.47
21:S:75:LYS:C	21:S:77:ALA:N	2.71	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:S:100:THR:HG23	21:S:101:THR:H	1.80	0.47
22:T:32:LYS:O	22:T:61:ALA:CB	2.63	0.47
26:Z:4:HIS:CB	26:Z:5:PRO:CD	2.66	0.47
1:X:38:G:C2'	1:X:39:C:O5'	2.62	0.47
1:X:204:A:N7	1:X:2386:G:C4'	2.78	0.47
1:X:229:G:N3	1:X:230:C:C6	2.83	0.47
1:X:566:U:H2'	1:X:567:G:C8	2.47	0.47
1:X:654:A:N3	1:X:655:A:H5'	2.30	0.47
1:X:1402:G:O6	1:X:1408:A:N7	2.48	0.47
1:X:1407:G:C6	1:X:1408:A:C6	3.03	0.47
1:X:1435:G:O2'	1:X:1436:G:H5'	2.14	0.47
1:X:1569:A:N1	1:X:1571:G:H1'	2.30	0.47
1:X:1629:G:H2'	1:X:1633:C:N4	2.24	0.47
1:X:1724:C:C2	1:X:1747:G:C6	3.03	0.47
1:X:1766:U:C2'	1:X:1767:G:H5'	2.44	0.47
1:X:1812:U:O2	1:X:1812:U:H2'	2.14	0.47
1:X:2379:G:N2	1:X:2380:U:H1'	2.30	0.47
1:X:2414:A:H2'	1:X:2415:G:O5'	2.14	0.47
1:X:2431:C:H2'	1:X:2432:A:H8	1.75	0.47
1:X:2528:G:C2	1:X:2529:G:N7	2.83	0.47
1:X:2663:U:N3	1:X:2664:G:C8	2.83	0.47
2:Y:44:C:H2'	2:Y:45:C:O4'	2.14	0.47
3:A:210:GLY:O	3:A:213:ARG:HB2	2.15	0.47
4:B:17:ASN:C	4:B:18:ASP:OD2	2.58	0.47
5:C:162:ARG:CG	5:C:162:ARG:O	2.62	0.47
6:D:80:ARG:N	6:D:80:ARG:CD	2.77	0.47
6:D:119:PRO:HG2	6:D:120:ASN:H	1.79	0.47
12:J:33:TYR:CE2	12:J:112:GLU:HA	2.49	0.47
12:J:70:PHE:HA	12:J:71:PRO:HD3	1.62	0.47
14:L:37:HIS:O	14:L:38:ILE:O	2.33	0.47
14:L:107:ALA:C	14:L:109:GLU:N	2.73	0.47
20:R:112:LYS:O	20:R:113:THR:OG1	2.31	0.47
22:T:41:ARG:HD3	22:T:41:ARG:HA	1.73	0.47
23:U:13:LEU:CG	23:U:14:VAL:H	2.15	0.47
23:U:24:ALA:O	23:U:25:ARG:HB2	2.15	0.47
26:Z:52:TYR:O	26:Z:53:ASP:HB2	2.14	0.47
1:X:98:U:H5''	1:X:99:U:OP1	2.15	0.47
1:X:428:A:H2'	1:X:429:C:H6	1.77	0.47
1:X:527:C:OP2	26:Z:13:LYS:HD3	2.14	0.47
1:X:691:C:C2	1:X:692:C:C5	3.02	0.47
1:X:732:G:O5'	1:X:732:G:C8	2.65	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:761:G:H1	18:P:111:ARG:HH21	1.61	0.47
1:X:791:G:O5'	1:X:791:G:H8	1.98	0.47
1:X:1050:G:C2'	1:X:1051:U:H5'	2.43	0.47
1:X:1583:A:OP1	3:A:60:ARG:NH2	2.48	0.47
1:X:1607:A:H2'	1:X:1608:U:C6	2.49	0.47
1:X:2002:A:N7	26:Z:9:LYS:HE2	2.29	0.47
1:X:2081:U:H3	1:X:2174:G:H1	1.63	0.47
1:X:2211:U:O2'	1:X:2212:U:H5'	2.14	0.47
1:X:2371:A:O2'	11:I:59:ARG:O	2.32	0.47
2:Y:39:C:H5''	2:Y:40:C:C5	2.50	0.47
2:Y:68:A:C2	2:Y:111:C:C2	3.03	0.47
4:B:84:PHE:CG	4:B:85:ALA:N	2.83	0.47
5:C:186:LEU:HG	5:C:188:ILE:HG12	1.96	0.47
6:D:77:PHE:N	6:D:77:PHE:CD1	2.83	0.47
7:E:61:HIS:C	7:E:63:ALA:H	2.22	0.47
7:E:117:PRO:HD3	7:E:123:PHE:HE1	1.77	0.47
7:E:174:GLY:O	7:E:175:LYS:O	2.32	0.47
9:G:61:ARG:NH2	9:G:78:ASP:OD2	2.47	0.47
9:G:75:ILE:HG21	9:G:144:MET:SD	2.55	0.47
10:H:109:ARG:HG3	10:H:111:PHE:CE1	2.39	0.47
11:I:76:LYS:O	11:I:79:GLN:HG2	2.14	0.47
11:I:94:GLU:HA	11:I:97:ARG:CZ	2.44	0.47
12:J:27:TYR:HB3	12:J:28:VAL:H	1.62	0.47
12:J:69:ILE:HG21	12:J:104:MET:CG	2.42	0.47
14:L:37:HIS:O	14:L:38:ILE:C	2.57	0.47
15:M:107:LEU:C	15:M:109:GLU:H	2.23	0.47
16:N:12:ARG:O	16:N:13:ARG:C	2.58	0.47
17:O:40:VAL:HG12	17:O:45:THR:CA	2.44	0.47
18:P:62:ARG:CZ	26:Z:25:LEU:HD11	2.45	0.47
19:Q:9:ALA:O	19:Q:28:TRP:N	2.46	0.47
19:Q:36:THR:O	19:Q:37:GLU:C	2.58	0.47
19:Q:65:VAL:CG1	19:Q:66:GLY:H	2.14	0.47
20:R:11:ASN:C	20:R:13:LYS:N	2.73	0.47
21:S:34:LEU:C	21:S:34:LEU:HD12	2.40	0.47
21:S:37:LYS:N	21:S:40:ASP:OD1	2.47	0.47
21:S:131:PRO:C	21:S:133:GLU:H	2.22	0.47
21:S:136:VAL:HG12	21:S:137:ASP:N	2.29	0.47
1:X:197:G:N2	1:X:242:A:H62	2.12	0.47
1:X:210:A:C2'	1:X:211:U:H5'	2.45	0.47
1:X:416:U:H4'	1:X:419:G:O2'	2.15	0.47
1:X:471:A:C8	1:X:472:C:C6	3.03	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:649:G:C5	1:X:650:U:C5	3.03	0.47
1:X:704:G:C5	1:X:705:C:C5	3.02	0.47
1:X:746:G:C8	1:X:774:A:C6	3.03	0.47
1:X:862:A:C2	1:X:863:C:C2	3.03	0.47
1:X:958:G:C2	1:X:959:C:C4	3.02	0.47
1:X:1142:G:H1'	9:G:103:TYR:CE2	2.50	0.47
1:X:1142:G:OP1	9:G:107:GLN:O	2.32	0.47
1:X:1830:C:N4	1:X:1881:U:H3'	2.30	0.47
1:X:2027:C:C4	1:X:2028:C:C5	3.04	0.47
1:X:2652:G:N3	1:X:2653:A:C8	2.83	0.47
2:Y:46:G:H5'	6:D:92:ARG:NH1	2.30	0.47
3:A:70:ARG:C	3:A:72:LYS:H	2.23	0.47
4:B:50:GLY:HA2	4:B:78:LEU:HD23	1.96	0.47
5:C:119:ALA:N	5:C:189:ASP:HA	2.30	0.47
5:C:192:ALA:C	5:C:194:GLU:N	2.72	0.47
6:D:8:TYR:CA	6:D:173:MET:HE1	2.45	0.47
6:D:22:TYR:OH	6:D:29:PRO:HD3	2.15	0.47
12:J:128:ILE:C	12:J:128:ILE:CD1	2.88	0.47
14:L:33:ARG:NH2	14:L:103:LEU:H	2.11	0.47
16:N:108:ALA:HB1	17:O:47:PHE:CE2	2.50	0.47
17:O:86:HIS:CD2	17:O:86:HIS:C	2.93	0.47
18:P:9:ARG:HB3	18:P:13:GLN:CG	2.44	0.47
18:P:36:ARG:HH21	26:Z:20:ARG:NE	2.13	0.47
18:P:62:ARG:NH2	26:Z:25:LEU:HD11	2.29	0.47
20:R:84:VAL:HA	20:R:90:LYS:HD3	1.95	0.47
21:S:4:THR:HB	21:S:57:GLU:HB2	1.96	0.47
22:T:66:LYS:CE	22:T:68:VAL:HG22	2.45	0.47
23:U:15:VAL:O	23:U:16:ASN:O	2.33	0.47
25:W:37:THR:O	25:W:40:VAL:N	2.48	0.47
1:X:187:U:H2'	1:X:188:G:H8	1.79	0.46
1:X:199:A:C2	1:X:201:G:C4	3.03	0.46
1:X:225:G:C2	1:X:2410:U:H4'	2.51	0.46
1:X:490:A:C2'	1:X:491:A:H5'	2.45	0.46
1:X:540:G:N3	1:X:2004:U:O2'	2.48	0.46
1:X:613:A:C2	1:X:636:G:N3	2.82	0.46
1:X:632:A:C2	1:X:633:G:C8	3.03	0.46
1:X:654:A:O4'	1:X:654:A:OP1	2.33	0.46
1:X:1007:A:C6	1:X:1171:A:C2	3.03	0.46
1:X:1515:U:O2'	1:X:1516:A:H5'	2.15	0.46
1:X:1585:A:N6	1:X:1586:A:C6	2.83	0.46
1:X:1599:G:N2	1:X:1600:U:H1'	2.30	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1673:C:N3	1:X:1674:C:C5	2.82	0.46
1:X:1681:A:H2'	1:X:1682:A:H8	1.80	0.46
1:X:1698:C:HO2'	1:X:1753:A:H2'	1.75	0.46
1:X:1872:A:H1'	1:X:2070:G:H5'	1.96	0.46
1:X:1873:A:H4'	1:X:2069:U:H4'	1.97	0.46
1:X:1986:G:C6	1:X:1987:G:C5	3.03	0.46
1:X:2043:A:O2'	1:X:2044:G:OP2	2.33	0.46
1:X:2238:G:C6	1:X:2239:C:C4	3.03	0.46
1:X:2410:U:O2	1:X:2412:A:C8	2.68	0.46
1:X:2633:A:N6	1:X:2645:C:OP2	2.48	0.46
1:X:2667:C:H5	1:X:2699:G:C6	2.33	0.46
1:X:2861:A:O2'	26:Z:31:THR:HG23	2.15	0.46
3:A:105:ILE:HG22	3:A:106:LEU:N	2.29	0.46
5:C:14:THR:O	5:C:15:ILE:HB	2.16	0.46
6:D:9:ASN:O	6:D:10:ASP:C	2.59	0.46
6:D:12:VAL:C	6:D:16:LEU:HG	2.37	0.46
6:D:57:LEU:HA	6:D:60:ILE:CD1	2.44	0.46
6:D:132:ILE:O	6:D:152:MET:O	2.33	0.46
7:E:61:HIS:C	7:E:63:ALA:N	2.73	0.46
7:E:139:GLN:HB3	7:E:143:GLN:OE1	2.15	0.46
10:H:13:ASN:O	10:H:15:GLY:N	2.48	0.46
11:I:18:ARG:HD2	11:I:21:ARG:HD2	1.97	0.46
11:I:83:LEU:HD23	11:I:83:LEU:HA	1.74	0.46
11:I:117:ALA:CB	11:I:137:GLY:HA3	2.44	0.46
12:J:19:THR:HG22	12:J:99:LYS:NZ	2.31	0.46
12:J:125:LYS:HB3	12:J:125:LYS:HZ3	1.78	0.46
14:L:33:ARG:NH1	14:L:100:VAL:CA	2.67	0.46
15:M:50:PHE:CE1	15:M:70:LYS:HD3	2.49	0.46
16:N:93:LYS:HE2	17:O:10:LYS:HD3	1.96	0.46
17:O:66:GLY:O	17:O:87:ARG:NH1	2.48	0.46
20:R:24:VAL:O	20:R:30:LYS:HA	2.14	0.46
20:R:25:LEU:HD11	20:R:81:VAL:N	2.30	0.46
24:V:12:THR:O	24:V:15:ALA:HB3	2.15	0.46
25:W:22:ALA:HB1	25:W:43:MET:HE1	1.97	0.46
1:X:98:U:C6	1:X:98:U:C3'	2.97	0.46
1:X:200:A:C6	1:X:435:A:C5	3.04	0.46
1:X:516:G:O2'	1:X:517:A:P	2.73	0.46
1:X:559:C:C2	1:X:560:G:H1'	2.50	0.46
1:X:627:A:C2	1:X:628:A:C2	3.03	0.46
1:X:640:C:C4	1:X:641:G:N7	2.83	0.46
1:X:697:G:C2	1:X:807:A:C2	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:706:A:C6	1:X:783:G:N1	2.83	0.46
1:X:729:A:N3	1:X:729:A:C3'	2.66	0.46
1:X:886:A:C2	1:X:917:U:C2	3.03	0.46
1:X:1068:A:H3'	1:X:1069:G:H8	1.79	0.46
1:X:1082:G:H1'	1:X:1100:G:C4	2.50	0.46
1:X:1139:A:O2'	1:X:1140:A:O4'	2.34	0.46
1:X:1313:U:O2'	1:X:1314:A:OP2	2.33	0.46
1:X:1549:C:H2'	1:X:1550:C:C6	2.50	0.46
1:X:1695:U:O2	1:X:1974:U:H1'	2.14	0.46
1:X:1916:G:H2'	1:X:1917:C:H6	1.80	0.46
1:X:2031:A:H2'	1:X:2032:G:O4'	2.15	0.46
1:X:2322:U:H3'	1:X:2323:U:H6	1.80	0.46
1:X:2756:A:C2'	1:X:2757:G:OP2	2.63	0.46
3:A:118:ASN:CG	3:A:119:ALA:N	2.74	0.46
4:B:165:VAL:CG1	4:B:166:THR:N	2.76	0.46
5:C:34:GLN:NE2	5:C:176:ASN:OD1	2.47	0.46
7:E:7:GLN:O	7:E:9:ILE:HG13	2.15	0.46
7:E:97:LYS:O	7:E:98:LEU:HB2	2.15	0.46
9:G:32:TYR:OH	9:G:35:LYS:CE	2.62	0.46
9:G:86:ALA:HA	9:G:123:PRO:HB3	1.96	0.46
11:I:67:ASN:O	11:I:68:VAL:HB	2.15	0.46
12:J:27:TYR:HB3	12:J:137:VAL:HG11	1.98	0.46
12:J:53:ILE:O	12:J:53:ILE:HG22	2.15	0.46
12:J:113:GLU:O	12:J:115:ALA:N	2.49	0.46
14:L:36:LYS:NZ	14:L:99:ARG:HD2	2.30	0.46
14:L:47:ARG:O	14:L:49:GLN:N	2.47	0.46
17:O:7:THR:O	17:O:8:GLY:C	2.56	0.46
19:Q:76:LYS:O	19:Q:76:LYS:CG	2.57	0.46
23:U:50:ALA:HB3	23:U:52:ARG:NH2	2.30	0.46
1:X:198:A:C8	1:X:243:G:N7	2.83	0.46
1:X:230:C:H2'	1:X:231:G:H5'	1.97	0.46
1:X:310:A:O2'	1:X:311:A:H5'	2.15	0.46
1:X:540:G:O6	1:X:2006:G:P	2.73	0.46
1:X:973:U:O2'	1:X:974:U:H5'	2.14	0.46
1:X:1257:U:O2'	1:X:1258:G:H5'	2.15	0.46
1:X:1916:G:O2'	1:X:1917:C:H5'	2.14	0.46
1:X:2701:A:C2	1:X:2702:G:C1'	2.98	0.46
2:Y:15:A:C2	2:Y:71:G:H2'	2.51	0.46
3:A:116:THR:O	3:A:117:VAL:HG23	2.15	0.46
3:A:200:GLU:HG3	3:A:202:LYS:HB3	1.97	0.46
5:C:22:VAL:CG1	5:C:23:ASN:H	2.29	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:35:LEU:O	5:C:36:ALA:C	2.58	0.46
7:E:150:LYS:C	7:E:152:ARG:N	2.72	0.46
10:H:113:PRO:HD3	15:M:72:SER:O	2.15	0.46
11:I:54:SER:OG	11:I:59:ARG:CZ	2.64	0.46
11:I:86:THR:HG22	11:I:86:THR:O	2.15	0.46
12:J:28:VAL:HG23	12:J:137:VAL:HG21	1.97	0.46
12:J:49:GLU:C	12:J:51:CYS:H	2.24	0.46
12:J:81:GLU:CD	12:J:81:GLU:N	2.74	0.46
15:M:91:VAL:HG12	15:M:92:THR:N	2.30	0.46
16:N:93:LYS:HD3	17:O:5:ILE:HG22	1.98	0.46
17:O:6:GLN:O	17:O:7:THR:OG1	2.29	0.46
17:O:54:TYR:H	17:O:54:TYR:HD1	1.64	0.46
18:P:32:ARG:NH1	18:P:119:LYS:HB3	2.30	0.46
19:Q:35:LYS:HD3	19:Q:53:ILE:HG23	1.98	0.46
21:S:147:ILE:HB	21:S:169:VAL:HG22	1.97	0.46
23:U:15:VAL:HG12	23:U:46:LEU:CD2	2.45	0.46
24:V:62:ARG:HG2	24:V:62:ARG:HH11	1.80	0.46
26:Z:17:ASP:C	26:Z:19:ARG:N	2.72	0.46
1:X:122:G:C2'	1:X:123:A:H5''	2.45	0.46
1:X:637:G:C6	11:I:101:ARG:HD3	2.50	0.46
1:X:765:C:N4	1:X:1772:C:O2	2.48	0.46
1:X:793:G:OP1	3:A:217:ARG:NH1	2.49	0.46
1:X:1234:C:O2	1:X:1242:A:C2	2.68	0.46
1:X:1399:C:H2'	1:X:1400:A:C8	2.50	0.46
1:X:1567:A:H2'	1:X:1568:A:O4'	2.15	0.46
1:X:1625:A:H1'	1:X:1632:A:O2'	2.14	0.46
1:X:1634:A:O2'	1:X:1635:G:H5'	2.15	0.46
1:X:1744:G:C6	1:X:1747:G:N1	2.83	0.46
1:X:1786:C:C5	1:X:1787:U:C5	3.04	0.46
1:X:2029:G:O2'	1:X:2030:U:H5'	2.15	0.46
1:X:2314:A:C4	1:X:2316:G:C8	3.04	0.46
1:X:2338:C:HO2'	11:I:56:LEU:HD11	1.79	0.46
1:X:2500:C:H2'	1:X:2501:U:C6	2.50	0.46
1:X:2796:A:O5'	1:X:2796:A:H8	1.99	0.46
1:X:2809:A:H2'	1:X:2854:G:O6	2.15	0.46
2:Y:44:C:N3	6:D:90:THR:HB	2.31	0.46
3:A:53:PHE:CE2	3:A:220:HIS:HA	2.50	0.46
3:A:121:PRO:HB2	3:A:135:PHE:CE1	2.51	0.46
3:A:246:PRO:N	3:A:252:LYS:HD3	2.31	0.46
4:B:130:GLY:O	4:B:131:SER:CB	2.62	0.46
5:C:17:LEU:HA	5:C:18:PRO:HD3	1.79	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:74:VAL:O	5:C:77:PHE:N	2.47	0.46
7:E:72:VAL:C	7:E:74:ASN:N	2.72	0.46
10:H:28:GLY:O	10:H:35:THR:OG1	2.25	0.46
10:H:113:PRO:CB	10:H:134:LEU:HD12	2.44	0.46
11:I:56:LEU:C	11:I:58:ALA:O	2.58	0.46
12:J:50:ALA:O	12:J:125:LYS:HG3	2.15	0.46
12:J:62:GLY:O	12:J:64:LYS:HG3	2.15	0.46
13:K:24:GLN:O	13:K:25:ALA:C	2.58	0.46
13:K:66:VAL:O	13:K:69:ASP:N	2.47	0.46
14:L:60:LYS:HD3	14:L:60:LYS:N	2.30	0.46
14:L:101:LYS:O	14:L:101:LYS:HG2	2.15	0.46
15:M:32:THR:HG22	15:M:33:VAL:H	1.81	0.46
18:P:11:LYS:O	18:P:12:LYS:C	2.57	0.46
18:P:66:GLU:O	18:P:69:ALA:CB	2.61	0.46
18:P:75:ALA:O	18:P:128:VAL:CG2	2.64	0.46
22:T:58:THR:HG22	22:T:59:LEU:N	2.31	0.46
1:X:42:G:H2'	1:X:43:A:C8	2.50	0.46
1:X:413:G:H8	1:X:413:G:O5'	1.99	0.46
1:X:431:G:C4	1:X:432:C:C5	3.04	0.46
1:X:505:G:N3	18:P:82:ASN:ND2	2.60	0.46
1:X:813:A:C2	1:X:815:A:H8	2.34	0.46
1:X:813:A:C4'	1:X:814:G:O5'	2.49	0.46
1:X:871:U:H1'	1:X:2248:A:H5'	1.96	0.46
1:X:1068:A:H3'	1:X:1069:G:C8	2.51	0.46
1:X:1191:G:C6	1:X:1192:A:C6	3.03	0.46
1:X:1300:A:N7	13:K:106:ASP:HB3	2.30	0.46
1:X:1361:G:C6	1:X:1615:C:N4	2.84	0.46
1:X:1436:G:C4	1:X:1437:A:C8	3.04	0.46
1:X:1773:C:H2'	1:X:2587:G:O2'	2.15	0.46
1:X:1858:C:H2'	1:X:1859:A:O4'	2.15	0.46
1:X:1872:A:H1'	1:X:2070:G:O4'	2.15	0.46
1:X:1873:A:C4'	1:X:2069:U:H4'	2.46	0.46
1:X:2080:U:O2'	1:X:2081:U:H5'	2.16	0.46
1:X:2228:U:C5'	1:X:2229:G:OP2	2.61	0.46
1:X:2431:C:H42	1:X:2483:U:H3	1.61	0.46
1:X:2728:A:P	7:E:70:THR:HG21	2.56	0.46
1:X:2755:A:O2'	1:X:2756:A:H5'	2.15	0.46
1:X:2810:A:C2	1:X:2853:U:C4	3.04	0.46
1:X:2856:U:O4	1:X:2857:C:N4	2.48	0.46
2:Y:27:A:N6	2:Y:55:C:H3'	2.25	0.46
2:Y:32:C:H2'	2:Y:33:C:H5'	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:111:C:H6	2:Y:111:C:H5'	1.81	0.46
3:A:134:ARG:HB3	3:A:187:SER:OG	2.14	0.46
3:A:246:PRO:HG2	3:A:248:THR:O	2.16	0.46
4:B:79:ARG:HD3	4:B:79:ARG:HA	1.49	0.46
5:C:7:ILE:HG22	5:C:8:GLY:N	2.31	0.46
6:D:13:ARG:O	6:D:16:LEU:HB2	2.14	0.46
6:D:53:ALA:C	6:D:57:LEU:HG	2.40	0.46
6:D:74:ILE:HG23	6:D:79:LEU:O	2.16	0.46
6:D:106:ILE:O	6:D:107:GLY:O	2.33	0.46
6:D:151:GLY:O	6:D:152:MET:CB	2.63	0.46
9:G:33:ILE:O	9:G:69:ASP:HB3	2.15	0.46
10:H:79:HIS:CG	10:H:80:ALA:N	2.82	0.46
12:J:62:GLY:HA3	12:J:64:LYS:HZ2	1.80	0.46
15:M:53:VAL:CG1	15:M:54:VAL:N	2.77	0.46
18:P:50:VAL:CB	18:P:90:LEU:O	2.64	0.46
18:P:60:ILE:HA	18:P:61:PRO:HD3	1.65	0.46
20:R:55:THR:N	20:R:70:GLU:O	2.48	0.46
21:S:105:GLN:O	21:S:141:MET:O	2.34	0.46
22:T:25:LYS:HA	22:T:29:GLU:OE1	2.15	0.46
23:U:66:ALA:O	23:U:70:LEU:N	2.49	0.46
24:V:4:SER:O	24:V:6:MET:N	2.48	0.46
24:V:13:ASP:HA	24:V:16:LYS:HB3	1.97	0.46
30:4:1:MET:HA	30:4:1:MET:CE	2.41	0.46
1:X:24:G:H2'	1:X:25:U:O4'	2.15	0.46
1:X:43:A:C6	1:X:44:G:C6	3.03	0.46
1:X:65:C:C4	1:X:66:U:C5	3.03	0.46
1:X:330:C:H2'	1:X:331:U:O4'	2.16	0.46
1:X:340:G:H4'	1:X:341:A:OP1	2.11	0.46
1:X:415:A:O2'	1:X:416:U:H5'	2.16	0.46
1:X:558:G:H5''	1:X:558:G:C2	2.49	0.46
1:X:648:A:H4'	1:X:649:G:C4'	2.45	0.46
1:X:717:G:HO2'	1:X:718:A:P	2.39	0.46
1:X:946:U:C2	1:X:947:C:C5	3.03	0.46
1:X:947:C:C2	1:X:948:C:C5	3.03	0.46
1:X:1075:C:HO2'	8:F:89:SER:CB	2.22	0.46
1:X:1360:G:C6	1:X:1361:G:N7	2.84	0.46
1:X:1588:A:C5	1:X:1589:G:N7	2.84	0.46
1:X:1597:A:C2	1:X:1598:C:N3	2.84	0.46
1:X:1769:U:C5	1:X:1775:A:C4	3.04	0.46
1:X:1770:U:O4	1:X:1776:A:C6	2.69	0.46
1:X:2015:G:H1	1:X:2551:A:C1'	2.29	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2068:C:H2'	1:X:2069:U:O4'	2.15	0.46
1:X:2194:A:H2'	1:X:2195:C:H5''	1.98	0.46
1:X:2284:U:C2'	1:X:2285:U:H5''	2.45	0.46
1:X:2505:G:C2'	30:4:1:MET:H1	2.29	0.46
1:X:2604:G:H2'	1:X:2605:C:C6	2.50	0.46
1:X:2663:U:C2	1:X:2664:G:C8	3.04	0.46
3:A:122:GLU:OE1	3:A:122:GLU:N	2.49	0.46
5:C:112:GLN:C	5:C:116:LYS:HE2	2.36	0.46
6:D:63:GLN:HB3	6:D:89:VAL:HG12	1.96	0.46
6:D:69:LYS:C	6:D:85:VAL:HG22	2.40	0.46
7:E:41:LEU:HD21	7:E:68:THR:OG1	2.16	0.46
7:E:95:ARG:O	7:E:106:ASN:HB3	2.16	0.46
11:I:5:ASP:HB3	11:I:6:LEU:H	1.57	0.46
11:I:76:LYS:C	11:I:79:GLN:HG2	2.40	0.46
12:J:96:SER:O	12:J:97:VAL:C	2.58	0.46
14:L:37:HIS:NE2	14:L:39:TYR:CZ	2.83	0.46
14:L:41:GLN:HA	14:L:53:ALA:HB2	1.98	0.46
14:L:42:ILE:HD13	14:L:43:ILE:H	1.80	0.46
15:M:80:VAL:O	15:M:82:PRO:HD3	2.16	0.46
16:N:83:LEU:HD23	16:N:89:ASP:HB3	1.97	0.46
18:P:26:ALA:HB2	18:P:75:ALA:HA	1.96	0.46
20:R:15:HIS:O	20:R:82:ALA:CB	2.63	0.46
21:S:63:PRO:C	21:S:86:VAL:HG23	2.40	0.46
24:V:42:ARG:HH12	24:V:45:GLN:HE22	1.61	0.46
26:Z:16:ARG:HD3	26:Z:20:ARG:NH2	2.30	0.46
1:X:166:G:H1	1:X:182:G:HO2'	1.60	0.46
1:X:184:A:C8	1:X:185:C:C5	3.04	0.46
1:X:454:G:C6	1:X:456:C:N4	2.83	0.46
1:X:594:G:H2'	1:X:595:A:N7	2.30	0.46
1:X:610:G:O2'	5:C:98:GLN:CD	2.58	0.46
1:X:646:C:O2'	1:X:650:U:OP1	2.23	0.46
1:X:666:U:C2'	1:X:667:U:H4'	2.41	0.46
1:X:801:A:C2'	1:X:802:A:OP2	2.64	0.46
1:X:872:G:OP2	1:X:872:G:C8	2.68	0.46
1:X:938:G:O2'	1:X:939:C:O5'	2.32	0.46
1:X:1011:A:C4	1:X:1166:A:N6	2.84	0.46
1:X:1032:A:C2	1:X:1034:U:C2	3.03	0.46
1:X:1092:U:H2'	1:X:1093:U:C6	2.50	0.46
1:X:1290:A:O2'	1:X:1291:G:H5'	2.16	0.46
1:X:1350:G:H2'	1:X:1351:G:C8	2.50	0.46
1:X:1394:G:H2'	1:X:1395:A:C8	2.47	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1476:G:C6	1:X:1477:C:N3	2.83	0.46
1:X:1993:G:C2'	1:X:1994:U:H5'	2.45	0.46
1:X:1996:A:C2'	1:X:1997:A:H5'	2.45	0.46
1:X:2437:G:O2'	1:X:2438:A:C8	2.65	0.46
1:X:2490:U:H2'	1:X:2491:C:C6	2.50	0.46
1:X:2692:A:H5'	1:X:2693:U:OP2	2.16	0.46
1:X:2823:G:N3	1:X:2824:C:C5	2.84	0.46
3:A:160:GLY:HA2	3:A:196:VAL:HG22	1.97	0.46
3:A:205:VAL:C	3:A:207:GLY:N	2.73	0.46
4:B:88:GLY:O	4:B:89:ASP:OD1	2.34	0.46
7:E:61:HIS:O	7:E:63:ALA:N	2.49	0.46
7:E:105:MET:HE1	7:E:131:ILE:CD1	2.44	0.46
7:E:170:ALA:C	7:E:171:LEU:HD12	2.40	0.46
9:G:138:GLY:O	9:G:142:ARG:HG3	2.16	0.46
9:G:157:PRO:C	9:G:159:SER:N	2.71	0.46
10:H:108:THR:O	10:H:109:ARG:HB3	2.15	0.46
11:I:142:LEU:N	11:I:142:LEU:HD23	2.30	0.46
12:J:116:LYS:NZ	12:J:132:MET:HB3	2.31	0.46
14:L:27:LEU:HD13	14:L:51:LEU:CD2	2.45	0.46
15:M:4:HIS:O	15:M:5:ILE:C	2.59	0.46
19:Q:9:ALA:O	19:Q:27:PHE:CB	2.63	0.46
21:S:120:LEU:HD22	21:S:121:GLN:N	2.29	0.46
21:S:128:ARG:HG3	21:S:129:ARG:N	2.31	0.46
1:X:38:G:O2'	1:X:39:C:H5'	2.15	0.46
1:X:78:C:O2	1:X:357:A:H2	1.99	0.46
1:X:176:A:C2'	1:X:177:U:H5	2.29	0.46
1:X:426:C:H4'	1:X:1863:U:O2'	2.14	0.46
1:X:577:U:OP1	11:I:40:ARG:NH2	2.49	0.46
1:X:735:G:O2'	1:X:736:G:H5'	2.15	0.46
1:X:754:G:O2'	1:X:755:C:H5'	2.16	0.46
1:X:829:C:C2	1:X:1206:G:N2	2.83	0.46
1:X:1114:A:N3	1:X:1114:A:H2'	2.30	0.46
1:X:1159:U:O2'	1:X:1160:C:H5'	2.15	0.46
1:X:1206:G:C2'	1:X:1207:G:H5'	2.45	0.46
1:X:1224:A:O2'	1:X:1225:G:P	2.74	0.46
1:X:1331:G:N2	1:X:1332:G:H1'	2.31	0.46
1:X:1715:A:C8	1:X:1717:A:H1'	2.50	0.46
1:X:1882:G:H21	1:X:1885:C:N4	2.09	0.46
1:X:1910:A:H8	1:X:1910:A:O5'	1.98	0.46
1:X:2498:U:C5	1:X:2520:A:C6	3.04	0.46
1:X:2673:G:H2'	1:X:2674:C:C6	2.51	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2867:G:O2'	1:X:2868:G:P	2.74	0.46
3:A:247:VAL:CG2	3:A:248:THR:HG23	2.34	0.46
4:B:91:VAL:HG12	4:B:92:ASN:H	1.81	0.46
4:B:154:LYS:O	4:B:154:LYS:HG3	2.14	0.46
6:D:88:LYS:CE	6:D:90:THR:OG1	2.63	0.46
6:D:148:LYS:CG	6:D:149:THR:H	2.29	0.46
6:D:163:ASP:O	6:D:164:GLU:C	2.58	0.46
8:F:103:GLN:N	8:F:103:GLN:OE1	2.49	0.46
11:I:122:VAL:HG23	11:I:124:ALA:H	1.81	0.46
13:K:48:VAL:O	13:K:52:ILE:N	2.46	0.46
15:M:103:LYS:HG3	15:M:105:TYR:CE2	2.50	0.46
17:O:38:LEU:HD13	17:O:39:PHE:H	1.77	0.46
19:Q:2:SER:OG	19:Q:3:HIS:N	2.40	0.46
21:S:64:ALA:CA	21:S:85:MET:HA	2.46	0.46
21:S:104:SER:CB	21:S:113:VAL:HG21	2.45	0.46
21:S:149:ALA:C	21:S:151:ASP:N	2.73	0.46
22:T:50:GLY:O	22:T:62:LEU:HD23	2.15	0.46
1:X:408:U:H2'	1:X:409:G:N7	2.31	0.46
1:X:423:G:C6	1:X:431:G:C6	3.03	0.46
1:X:596:C:C4	1:X:684:C:C2	3.03	0.46
1:X:717:G:N3	1:X:739:G:C2	2.84	0.46
1:X:1299:A:O2'	1:X:1300:A:OP1	2.30	0.46
1:X:1419:G:H2'	1:X:1420:A:C8	2.50	0.46
1:X:1433:A:H2'	1:X:1433:A:N3	2.31	0.46
1:X:1552:C:H4'	1:X:1553:G:OP1	2.15	0.46
1:X:1693:A:N6	1:X:1694:A:C6	2.84	0.46
1:X:1839:A:O2'	1:X:1840:A:C8	2.68	0.46
1:X:2302:G:C5	1:X:2303:C:C5	3.03	0.46
1:X:2328:G:OP2	1:X:2328:G:H8	1.99	0.46
2:Y:23:G:C6	2:Y:24:U:C4	3.04	0.46
3:A:164:GLN:NE2	3:A:166:GLN:HE22	2.03	0.46
3:A:207:GLY:C	3:A:208:LYS:NZ	2.74	0.46
6:D:10:ASP:C	6:D:14:PRO:HD2	2.40	0.46
6:D:52:LYS:HG3	6:D:147:ASP:HB2	1.97	0.46
9:G:61:ARG:HG2	9:G:65:LYS:HZ2	1.79	0.46
9:G:105:GLY:CA	9:G:110:LEU:HD12	2.45	0.46
11:I:82:ASP:H	11:I:114:ILE:CG2	2.23	0.46
11:I:101:ARG:NH1	11:I:104:ARG:NH2	2.64	0.46
12:J:49:GLU:C	12:J:51:CYS:N	2.73	0.46
12:J:62:GLY:O	12:J:64:LYS:N	2.43	0.46
12:J:120:ARG:O	12:J:121:LEU:C	2.57	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:5:ILE:C	15:M:5:ILE:HD12	2.40	0.46
15:M:38:LYS:O	15:M:40:ARG:N	2.49	0.46
16:N:107:LYS:O	16:N:110:VAL:HB	2.15	0.46
18:P:75:ALA:O	18:P:128:VAL:HG21	2.16	0.46
19:Q:63:LYS:HG3	19:Q:64:ARG:H	1.74	0.46
20:R:16:PHE:HZ	20:R:46:VAL:HG22	1.80	0.46
20:R:51:VAL:CG1	20:R:52:ASN:N	2.79	0.46
21:S:104:SER:HA	21:S:139:THR:HA	1.96	0.46
23:U:51:ILE:CD1	23:U:59:THR:HG22	2.45	0.46
25:W:26:ARG:C	25:W:27:LYS:HG2	2.41	0.46
1:X:400:U:H4'	1:X:401:G:O4'	2.15	0.46
1:X:684:C:H41	11:I:43:ALA:CB	2.28	0.46
1:X:754:G:H2'	1:X:755:C:H6	1.80	0.46
1:X:759:C:O2'	1:X:760:U:OP2	2.29	0.46
1:X:810:U:H2'	1:X:811:G:H8	1.80	0.46
1:X:814:G:OP1	5:C:50:GLN:CD	2.59	0.46
1:X:945:G:O2'	1:X:946:U:H5'	2.16	0.46
1:X:1174:G:C2	1:X:1175:A:N7	2.84	0.46
1:X:1309:G:H2'	1:X:1310:C:H6	1.80	0.46
1:X:1417:C:O2'	1:X:1418:C:H5'	2.15	0.46
1:X:1777:A:C2	1:X:1921:A:C5	3.03	0.46
1:X:1919:A:C2	1:X:1928:G:C8	3.03	0.46
1:X:1938:U:O2'	1:X:1939:U:H5'	2.16	0.46
1:X:2061:C:C2	1:X:2062:U:C6	3.03	0.46
1:X:2310:G:N2	1:X:2364:C:C4	2.84	0.46
1:X:2323:U:P	1:X:2323:U:O4'	2.74	0.46
1:X:2487:G:H1'	1:X:2561:G:N2	2.30	0.46
1:X:2660:C:C4	1:X:2704:U:C5	3.03	0.46
1:X:2684:A:H2'	1:X:2685:A:C8	2.51	0.46
1:X:2771:C:H5''	1:X:2771:C:H6	1.78	0.46
3:A:33:LEU:CD1	3:A:63:ARG:NH2	2.75	0.46
3:A:245:VAL:HA	3:A:251:GLY:HA2	1.98	0.46
4:B:105:THR:O	4:B:105:THR:OG1	2.32	0.46
6:D:108:LEU:HA	6:D:111:ILE:HG13	1.98	0.46
6:D:108:LEU:N	6:D:109:PRO:CD	2.79	0.46
6:D:111:ILE:HB	6:D:114:PHE:HB2	1.97	0.46
7:E:59:GLN:O	7:E:60:LYS:C	2.60	0.46
7:E:71:LEU:HA	7:E:74:ASN:HD22	1.81	0.46
12:J:17:ARG:HG3	12:J:17:ARG:O	2.16	0.46
14:L:42:ILE:HD13	14:L:43:ILE:N	2.31	0.46
15:M:63:ARG:HB2	15:M:63:ARG:HH11	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:56:ASP:O	16:N:57:PHE:C	2.55	0.46
17:O:39:PHE:HE2	17:O:51:ALA:HB1	1.79	0.46
18:P:14:ARG:HA	18:P:17:GLN:HE21	1.80	0.46
18:P:57:LEU:O	18:P:58:ARG:C	2.59	0.46
18:P:96:TYR:CZ	18:P:125:THR:OG1	2.64	0.46
18:P:106:LEU:C	18:P:106:LEU:CD2	2.89	0.46
19:Q:13:SER:OG	19:Q:16:ALA:HB3	2.16	0.46
19:Q:14:GLU:O	19:Q:15:LYS:C	2.56	0.46
1:X:116:A:C5'	1:X:117:A:H8	2.20	0.45
1:X:184:A:N7	1:X:185:C:C5	2.84	0.45
1:X:207:U:O2'	1:X:208:C:H5'	2.16	0.45
1:X:212:U:C2	1:X:443:A:N1	2.83	0.45
1:X:304:A:N7	1:X:356:A:N6	2.64	0.45
1:X:322:A:O2'	1:X:323:G:P	2.73	0.45
1:X:538:A:N3	1:X:538:A:C3'	2.70	0.45
1:X:649:G:C2	1:X:661:C:C2	3.04	0.45
1:X:843:G:H1'	1:X:2427:A:N1	2.30	0.45
1:X:932:G:H2'	1:X:933:G:C8	2.51	0.45
1:X:1112:U:O2'	1:X:1113:C:H5'	2.16	0.45
1:X:1125:G:O2'	1:X:1126:A:H5'	2.16	0.45
1:X:1304:U:H2'	1:X:1305:C:H6	1.79	0.45
1:X:1439:G:O5'	1:X:1439:G:H8	1.98	0.45
1:X:1733:U:O4'	1:X:1733:U:OP1	2.34	0.45
1:X:1838:G:C2	1:X:1878:C:N3	2.85	0.45
1:X:2043:A:C2	1:X:2481:G:C5	3.04	0.45
1:X:2352:A:C4	1:X:2353:G:N7	2.84	0.45
1:X:2498:U:C4'	1:X:2499:C:OP1	2.55	0.45
1:X:2526:U:C6	1:X:2545:A:C5	3.04	0.45
1:X:2775:U:H5'	1:X:2776:U:H5''	1.98	0.45
1:X:2861:A:C2	1:X:2862:G:C5	3.04	0.45
2:Y:20:A:C2	2:Y:69:G:C6	3.03	0.45
3:A:55:GLY:O	3:A:56:GLY:O	2.33	0.45
3:A:79:VAL:CG1	3:A:113:VAL:HA	2.46	0.45
4:B:47:VAL:O	4:B:80:GLU:HA	2.16	0.45
4:B:121:ASN:C	4:B:122:PHE:O	2.59	0.45
4:B:126:PRO:O	4:B:127:ALA:HB2	2.15	0.45
5:C:30:VAL:HG12	5:C:31:VAL:N	2.30	0.45
5:C:34:GLN:O	5:C:38:ARG:HG3	2.16	0.45
5:C:192:ALA:C	5:C:194:GLU:H	2.23	0.45
6:D:9:ASN:O	6:D:12:VAL:N	2.48	0.45
6:D:57:LEU:HA	6:D:60:ILE:HD11	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:136:LEU:O	6:D:137:ILE:HG12	2.16	0.45
9:G:65:LYS:C	9:G:67:ARG:N	2.73	0.45
11:I:7:LYS:O	11:I:7:LYS:HG2	2.15	0.45
11:I:28:LYS:CD	11:I:36:GLY:HA3	2.45	0.45
11:I:30:ALA:HB3	11:I:34:HIS:NE2	2.28	0.45
11:I:32:ARG:NH2	17:O:79:GLN:CA	2.80	0.45
13:K:74:ASP:O	13:K:75:VAL:C	2.56	0.45
13:K:113:ILE:O	13:K:113:ILE:CG2	2.64	0.45
14:L:31:VAL:HG23	14:L:38:ILE:HD13	1.97	0.45
14:L:33:ARG:NH1	14:L:100:VAL:O	2.49	0.45
17:O:36:LYS:NZ	17:O:55:THR:O	2.48	0.45
21:S:77:ALA:HA	21:S:78:PRO:HD3	1.76	0.45
1:X:89:A:H4'	1:X:90:G:O4'	2.16	0.45
1:X:240:U:H2'	1:X:241:C:O4'	2.16	0.45
1:X:465:C:C2'	1:X:467:U:H1'	2.47	0.45
1:X:488:A:C2	1:X:489:A:C4	3.04	0.45
1:X:743:A:N3	1:X:744:C:C6	2.85	0.45
1:X:1088:A:H2	1:X:1099:A:N3	2.13	0.45
1:X:1187:A:H3'	1:X:1188:A:C8	2.51	0.45
1:X:1198:C:O5'	1:X:1198:C:H6	2.00	0.45
1:X:1258:G:OP2	11:I:17:LYS:HE2	2.17	0.45
1:X:1437:A:O2'	1:X:1438:G:H5'	2.16	0.45
1:X:1660:G:C5	1:X:1661:C:C5	3.03	0.45
1:X:1699:A:C6	1:X:1700:C:C4	3.05	0.45
1:X:1914:U:H3	1:X:1952:A:H62	1.62	0.45
1:X:2027:C:C2	1:X:2028:C:C6	3.04	0.45
1:X:2196:U:C4	1:X:2197:U:C4	3.05	0.45
1:X:2208:U:O2	23:U:48:LYS:NZ	2.49	0.45
1:X:2311:U:H5'	1:X:2315:A:H61	1.79	0.45
1:X:2735:C:H2'	30:4:19:ARG:CD	2.46	0.45
1:X:2749:A:H2'	1:X:2750:G:O4'	2.16	0.45
2:Y:44:C:OP1	6:D:64:LYS:HE2	2.17	0.45
2:Y:54:U:H2'	2:Y:55:C:C6	2.51	0.45
4:B:9:ILE:HG22	15:M:13:LEU:CD1	2.43	0.45
4:B:13:GLN:O	4:B:14:ILE:HG13	2.16	0.45
4:B:65:GLY:O	4:B:69:LYS:N	2.48	0.45
6:D:50:ILE:HG13	6:D:50:ILE:H	1.39	0.45
6:D:52:LYS:HD3	6:D:56:GLU:OE1	2.17	0.45
8:F:73:PRO:O	8:F:77:LEU:HG	2.17	0.45
9:G:61:ARG:HH22	9:G:78:ASP:CB	2.29	0.45
19:Q:88:ILE:O	19:Q:88:ILE:CG1	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:S:35:ASP:O	21:S:36:ARG:O	2.35	0.45
21:S:64:ALA:C	21:S:86:VAL:HG23	2.41	0.45
23:U:26:ALA:HB1	23:U:27:ASP:OD1	2.16	0.45
1:X:28:A:C2	1:X:523:A:N9	2.85	0.45
1:X:154:U:H5'	1:X:155:G:OP2	2.16	0.45
1:X:178:C:O2'	1:X:179:U:H5'	2.16	0.45
1:X:242:A:N6	1:X:441:A:C8	2.83	0.45
1:X:546:A:N6	1:X:565:A:H61	2.13	0.45
1:X:609:U:H1'	11:I:18:ARG:NH2	2.31	0.45
1:X:632:A:H3'	1:X:632:A:N3	2.30	0.45
1:X:673:G:C5'	5:C:93:TYR:CD1	2.96	0.45
1:X:711:C:O2'	1:X:747:A:N6	2.49	0.45
1:X:761:G:H2'	1:X:763:A:N7	2.31	0.45
1:X:837:U:H1'	1:X:2337:A:N7	2.31	0.45
1:X:872:G:OP2	1:X:872:G:H8	1.99	0.45
1:X:2002:A:OP2	26:Z:9:LYS:HD2	2.16	0.45
1:X:2047:C:H1'	1:X:2429:A:C5	2.51	0.45
1:X:2320:G:H2'	1:X:2321:C:H6	1.81	0.45
1:X:2705:A:O2'	1:X:2706:U:P	2.74	0.45
1:X:2708:U:C2	1:X:2709:C:C5	3.04	0.45
2:Y:53:G:OP2	14:L:64:LYS:HE2	2.17	0.45
3:A:50:THR:HG22	3:A:51:SER:N	2.31	0.45
3:A:133:LEU:HB3	3:A:173:VAL:HG21	1.97	0.45
3:A:197:GLY:C	3:A:199:ALA:N	2.71	0.45
4:B:56:GLU:HA	4:B:59:VAL:HG23	1.98	0.45
5:C:28:HIS:O	5:C:31:VAL:HG23	2.16	0.45
6:D:115:ARG:HB2	6:D:178:ARG:CD	2.39	0.45
6:D:123:ASP:O	6:D:126:GLY:N	2.50	0.45
7:E:163:ARG:HD3	7:E:167:GLU:HB3	1.98	0.45
9:G:157:PRO:C	9:G:161:GLN:HE21	2.25	0.45
11:I:18:ARG:HD2	11:I:21:ARG:CD	2.47	0.45
11:I:86:THR:N	11:I:116:ARG:NH1	2.64	0.45
11:I:127:ALA:C	11:I:129:ALA:H	2.25	0.45
12:J:36:ILE:HD11	12:J:133:VAL:HG21	1.98	0.45
13:K:12:ARG:HB2	13:K:16:ALA:HB3	1.98	0.45
14:L:54:ALA:CB	14:L:75:LEU:HA	2.47	0.45
16:N:56:ASP:O	16:N:59:ARG:HB3	2.16	0.45
19:Q:7:LEU:C	19:Q:7:LEU:CD2	2.71	0.45
21:S:4:THR:CB	21:S:57:GLU:HB2	2.46	0.45
22:T:56:ASP:CG	22:T:58:THR:OG1	2.59	0.45
22:T:71:ASN:HD21	22:T:74:LYS:HA	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:U:41:VAL:HG21	23:U:43:ARG:NH2	2.31	0.45
23:U:48:LYS:C	23:U:61:TRP:CE3	2.94	0.45
1:X:40:U:C4	1:X:41:G:N7	2.85	0.45
1:X:349:G:H2'	1:X:350:U:C6	2.52	0.45
1:X:804:C:O2'	1:X:805:G:C5'	2.64	0.45
1:X:815:A:C2	1:X:816:U:C2	3.05	0.45
1:X:922:A:C6	1:X:923:A:C6	3.05	0.45
1:X:969:U:O2	2:Y:92:G:H5''	2.15	0.45
1:X:1191:G:H2'	1:X:1192:A:O4'	2.15	0.45
1:X:1355:A:C2'	1:X:1357:U:OP2	2.64	0.45
1:X:1376:C:O2'	1:X:1800:A:H1'	2.15	0.45
1:X:1419:G:H2'	1:X:1420:A:H8	1.82	0.45
1:X:1769:U:N3	1:X:1778:U:N3	2.65	0.45
1:X:2027:C:C2	1:X:2604:G:C2	3.04	0.45
1:X:2321:C:O2'	1:X:2353:G:H5''	2.16	0.45
1:X:2526:U:H2'	1:X:2527:G:C8	2.52	0.45
1:X:2605:C:H2'	1:X:2606:G:O4'	2.17	0.45
2:Y:7:C:H2'	2:Y:8:C:C6	2.51	0.45
2:Y:15:A:C2	2:Y:71:G:N3	2.85	0.45
4:B:11:MET:HG2	4:B:24:THR:OG1	2.16	0.45
4:B:76:ARG:HG2	4:B:77:ILE:HG13	1.97	0.45
5:C:197:GLU:CG	5:C:198:GLU:N	2.78	0.45
9:G:103:TYR:CE2	9:G:111:LYS:HB3	2.52	0.45
9:G:103:TYR:CZ	9:G:111:LYS:CB	3.00	0.45
10:H:83:ARG:NH1	15:M:40:ARG:NE	2.65	0.45
12:J:10:PHE:CD1	12:J:11:ARG:N	2.84	0.45
16:N:62:ILE:HG23	16:N:76:TYR:CE1	2.52	0.45
16:N:66:ASN:HB2	16:N:76:TYR:H	1.81	0.45
16:N:68:GLY:O	16:N:71:LEU:HB3	2.16	0.45
18:P:41:VAL:O	18:P:44:VAL:HG22	2.17	0.45
18:P:59:PHE:CG	26:Z:30:LEU:HD21	2.51	0.45
18:P:76:LYS:C	18:P:78:ASN:N	2.73	0.45
20:R:37:LEU:N	20:R:47:VAL:O	2.49	0.45
21:S:25:ASN:O	21:S:26:LYS:HB3	2.17	0.45
21:S:60:GLU:O	21:S:61:THR:C	2.59	0.45
21:S:163:ASP:CG	21:S:164:PRO:HD2	2.41	0.45
23:U:50:ALA:CB	23:U:52:ARG:NH2	2.76	0.45
25:W:38:PRO:HA	25:W:41:ARG:HD2	1.98	0.45
1:X:527:C:O2'	1:X:528:G:H5'	2.15	0.45
1:X:704:G:C6	1:X:705:C:C4	3.05	0.45
1:X:736:G:C2	1:X:737:C:H1'	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1064:C:O5'	1:X:1064:C:C6	2.55	0.45
1:X:1075:C:H4'	8:F:88:SER:O	2.16	0.45
1:X:1186:G:H21	1:X:1187:A:H62	1.62	0.45
1:X:1200:G:H2'	1:X:1201:G:O4'	2.16	0.45
1:X:1526:U:H3'	1:X:1527:G:H8	1.82	0.45
1:X:1634:A:O2'	1:X:1635:G:OP1	2.30	0.45
1:X:1811:A:O2'	1:X:1812:U:O5'	2.33	0.45
1:X:1851:A:N6	1:X:1866:G:H21	2.09	0.45
1:X:1973:C:H2'	1:X:1974:U:O4'	2.17	0.45
1:X:2035:G:C2'	1:X:2036:G:H5'	2.47	0.45
1:X:2266:A:C2	1:X:2325:A:N7	2.85	0.45
1:X:2526:U:C5	1:X:2545:A:C5	3.05	0.45
1:X:2657:G:H2'	1:X:2658:A:C8	2.51	0.45
1:X:2659:C:N4	1:X:2660:C:N4	2.63	0.45
1:X:2824:C:H4'	1:X:2825:A:H5'	1.98	0.45
3:A:143:HIS:O	3:A:144:ALA:HB3	2.16	0.45
3:A:231:HIS:HA	3:A:232:PRO:HD3	1.85	0.45
5:C:67:ALA:O	5:C:68:ARG:HB2	2.17	0.45
6:D:4:LEU:HD12	6:D:5:LYS:H	1.80	0.45
6:D:134:GLU:HG2	6:D:136:LEU:N	2.28	0.45
9:G:69:ASP:O	16:N:64:ARG:CZ	2.65	0.45
9:G:98:LYS:HZ1	9:G:116:ARG:CZ	2.27	0.45
10:H:64:VAL:C	10:H:65:LYS:HD2	2.42	0.45
10:H:85:ASP:HB3	15:M:87:LEU:HG	1.99	0.45
11:I:85:ASP:HA	11:I:116:ARG:HH12	1.80	0.45
12:J:19:THR:CG2	12:J:20:GLY:H	2.29	0.45
14:L:67:THR:O	14:L:68:ALA:C	2.60	0.45
15:M:55:ILE:HG22	15:M:104:LEU:CB	2.47	0.45
15:M:104:LEU:C	15:M:106:TYR:H	2.21	0.45
20:R:25:LEU:CD1	20:R:25:LEU:N	2.70	0.45
21:S:19:ILE:CG1	21:S:36:ARG:HA	2.47	0.45
23:U:54:ASN:OD1	23:U:55:GLY:N	2.49	0.45
1:X:142:U:H5''	1:X:143:A:OP2	2.17	0.45
1:X:228:A:H8	1:X:228:A:O5'	2.00	0.45
1:X:405:C:C2	1:X:406:G:C8	3.04	0.45
1:X:408:U:HO2'	1:X:409:G:H8	1.59	0.45
1:X:487:G:N2	1:X:490:A:O4'	2.50	0.45
1:X:571:U:O2'	1:X:581:A:O4'	2.28	0.45
1:X:580:A:C8	1:X:584:A:N6	2.85	0.45
1:X:713:G:O2'	1:X:1649:A:N3	2.46	0.45
1:X:810:U:C4	1:X:811:G:N7	2.84	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:879:A:OP1	1:X:879:A:C8	2.70	0.45
1:X:1095:A:H2'	1:X:1096:A:C4'	2.46	0.45
1:X:1261:G:O2'	1:X:1262:U:P	2.75	0.45
1:X:1428:G:N2	1:X:1602:G:C5'	2.79	0.45
1:X:1728:A:H2'	1:X:1729:C:O4'	2.17	0.45
1:X:1778:U:C2'	1:X:1779:C:H6	2.22	0.45
1:X:2053:G:N2	1:X:2054:A:C4	2.85	0.45
1:X:2642:G:H2'	1:X:2643:G:H5'	1.99	0.45
1:X:2681:A:C2'	1:X:2682:C:H5'	2.46	0.45
1:X:2831:A:N6	1:X:2832:G:C6	2.84	0.45
2:Y:37:C:H2'	2:Y:38:C:C1'	2.47	0.45
3:A:108:PRO:HB3	3:A:143:HIS:CE1	2.51	0.45
4:B:67:PHE:HZ	4:B:75:THR:HG22	1.74	0.45
7:E:94:PHE:CG	7:E:107:ILE:HG22	2.51	0.45
7:E:103:LEU:HB2	7:E:123:PHE:CG	2.52	0.45
10:H:7:ARG:HD3	10:H:18:GLU:CD	2.42	0.45
11:I:134:GLU:O	11:I:136:ALA:N	2.49	0.45
20:R:21:THR:O	20:R:83:LEU:HA	2.15	0.45
20:R:23:ILE:HD11	20:R:84:VAL:HG23	1.98	0.45
20:R:28:LYS:O	20:R:29:HIS:HB2	2.16	0.45
21:S:70:GLN:HE21	21:S:70:GLN:CA	2.21	0.45
23:U:28:GLY:N	23:U:32:ARG:CD	2.79	0.45
23:U:52:ARG:NH1	23:U:67:LEU:HG	2.31	0.45
25:W:15:ASN:O	25:W:18:LYS:HB2	2.16	0.45
1:X:24:G:C6	1:X:25:U:N3	2.85	0.45
1:X:318:G:H21	1:X:341:A:N6	2.14	0.45
1:X:427:C:H2'	1:X:428:A:H8	1.71	0.45
1:X:491:A:C2	1:X:510:G:O4'	2.70	0.45
1:X:716:U:C5	1:X:717:G:C5	3.05	0.45
1:X:826:U:O2	1:X:827:C:C6	2.70	0.45
1:X:861:G:H22	1:X:943:U:H1'	1.82	0.45
1:X:954:U:H2'	1:X:955:G:C5'	2.41	0.45
1:X:1076:U:H2'	1:X:1077:U:O4'	2.16	0.45
1:X:1211:G:H2'	1:X:1212:U:C6	2.52	0.45
1:X:1238:A:O2'	1:X:1239:A:H5'	2.16	0.45
1:X:1505:U:H3'	1:X:1505:U:H6	1.80	0.45
1:X:1552:C:O2	1:X:1553:G:C2	2.70	0.45
1:X:1715:A:H4'	1:X:1716:G:H3'	1.99	0.45
1:X:2029:G:H2'	1:X:2030:U:C6	2.49	0.45
1:X:2199:C:C4	1:X:2200:G:N7	2.85	0.45
1:X:2294:U:H1'	6:D:123:ASP:OD1	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2302:G:N1	1:X:2311:U:C5	2.80	0.45
1:X:2312:A:O2'	1:X:2313:G:OP2	2.31	0.45
1:X:2327:U:O4	1:X:2361:G:C2	2.70	0.45
1:X:2340:C:C2'	1:X:2341:G:H5'	2.47	0.45
1:X:2484:G:N7	1:X:2555:G:C2	2.85	0.45
1:X:2670:C:C6	1:X:2847:G:N1	2.84	0.45
1:X:2677:U:H2'	1:X:2678:C:C6	2.52	0.45
1:X:2710:C:C2'	1:X:2711:G:H5'	2.46	0.45
3:A:72:LYS:CG	3:A:103:ARG:NH1	2.80	0.45
4:B:97:ALA:O	4:B:98:GLU:C	2.60	0.45
5:C:7:ILE:CG2	5:C:120:VAL:O	2.65	0.45
5:C:153:ASP:OD2	5:C:172:VAL:HG13	2.16	0.45
6:D:8:TYR:HA	6:D:173:MET:SD	2.56	0.45
6:D:86:GLY:C	6:D:87:ILE:CG1	2.89	0.45
9:G:70:PHE:CD2	9:G:70:PHE:N	2.85	0.45
9:G:168:THR:O	9:G:169:GLN:C	2.59	0.45
14:L:52:ALA:O	14:L:53:ALA:CB	2.64	0.45
16:N:15:LYS:O	16:N:19:LYS:HB3	2.15	0.45
18:P:46:ARG:HH11	18:P:46:ARG:HG2	1.82	0.45
18:P:48:LYS:O	18:P:49:SER:C	2.57	0.45
19:Q:5:ASP:OD2	19:Q:5:ASP:N	2.43	0.45
20:R:90:LYS:C	20:R:91:ALA:O	2.60	0.45
21:S:10:PRO:HB2	21:S:14:LEU:HG	1.98	0.45
21:S:122:ILE:C	21:S:122:ILE:HD12	2.41	0.45
30:4:35:ARG:HG2	30:4:37:GLY:O	2.17	0.45
1:X:189:A:C2'	1:X:190:A:H5'	2.46	0.45
1:X:229:G:H2'	1:X:230:C:C6	2.46	0.45
1:X:242:A:H61	1:X:440:U:C2'	2.29	0.45
1:X:548:G:C2	1:X:549:G:C8	3.05	0.45
1:X:684:C:O3'	5:C:84:PHE:HZ	2.00	0.45
1:X:743:A:C2	1:X:744:C:C6	3.05	0.45
1:X:751:G:H2'	1:X:752:G:C8	2.52	0.45
1:X:1017:C:H1'	9:G:134:MET:HB3	1.98	0.45
1:X:1314:A:H2	1:X:1642:G:N2	2.14	0.45
1:X:1544:A:C8	1:X:1545:G:H1'	2.52	0.45
1:X:1714:A:OP2	1:X:1715:A:H3'	2.16	0.45
1:X:1801:C:H42	23:U:48:LYS:HG3	1.81	0.45
1:X:1861:G:O2'	1:X:1862:C:H5'	2.17	0.45
1:X:1947:G:C6	1:X:1950:C:N4	2.85	0.45
1:X:2201:G:O2'	1:X:2202:G:H5'	2.17	0.45
2:Y:68:A:H61	2:Y:110:U:H3'	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:77:ALA:HA	3:A:96:HIS:O	2.17	0.45
3:A:165:VAL:HG13	3:A:173:VAL:CG1	2.46	0.45
4:B:51:TYR:CG	4:B:52:ALA:N	2.81	0.45
4:B:155:ARG:HG3	4:B:155:ARG:NH1	2.31	0.45
5:C:50:GLN:O	5:C:50:GLN:HG3	2.15	0.45
6:D:58:ALA:O	6:D:62:LEU:N	2.50	0.45
9:G:51:LEU:HD13	9:G:88:VAL:HG11	1.97	0.45
9:G:125:ARG:O	9:G:129:HIS:N	2.41	0.45
11:I:127:ALA:C	11:I:129:ALA:N	2.74	0.45
12:J:27:TYR:HB3	12:J:137:VAL:CG1	2.47	0.45
15:M:16:ILE:O	15:M:16:ILE:HG22	2.16	0.45
17:O:7:THR:HG22	17:O:8:GLY:N	2.31	0.45
17:O:15:SER:HA	17:O:95:ILE:HB	1.99	0.45
21:S:90:GLU:OE1	21:S:90:GLU:HA	2.17	0.45
21:S:91:PRO:CG	21:S:125:PRO:CG	2.94	0.45
23:U:15:VAL:HG12	23:U:46:LEU:HD22	1.98	0.45
23:U:32:ARG:HG2	23:U:33:LYS:N	2.32	0.45
1:X:684:C:H41	11:I:43:ALA:HB1	1.82	0.45
1:X:720:A:H2'	1:X:721:C:C6	2.52	0.45
1:X:749:C:O5'	1:X:749:C:H6	2.00	0.45
1:X:774:A:C8	1:X:774:A:C3'	3.00	0.45
1:X:793:G:H2'	1:X:795:A:C5	2.52	0.45
1:X:982:C:C4	1:X:983:G:C5	3.05	0.45
1:X:1011:A:C4	1:X:1166:A:C6	3.04	0.45
1:X:1105:U:H3	1:X:1107:A:C5'	2.28	0.45
1:X:1200:G:H2'	1:X:1201:G:C8	2.52	0.45
1:X:1228:G:C6	1:X:1229:C:C4	3.05	0.45
1:X:1351:G:C2	1:X:1352:G:C4	3.04	0.45
1:X:1393:G:N3	1:X:1393:G:H2'	2.32	0.45
1:X:1419:G:H2'	1:X:1420:A:O4'	2.16	0.45
1:X:1733:U:H2'	1:X:1734:C:H6	1.81	0.45
1:X:1785:A:H2'	1:X:1786:C:C6	2.52	0.45
1:X:2282:G:H1'	6:D:129:ASN:ND2	2.32	0.45
1:X:2509:A:N7	7:E:172:LYS:CE	2.76	0.45
1:X:2562:G:C6	1:X:2563:U:C4	3.04	0.45
1:X:2630:C:C2'	1:X:2631:C:H5'	2.46	0.45
1:X:2630:C:H2'	1:X:2631:C:H6	1.82	0.45
1:X:2686:C:H2'	1:X:2687:G:C8	2.52	0.45
1:X:2700:U:N3	1:X:2701:A:N7	2.63	0.45
2:Y:50:U:H2'	2:Y:51:G:H8	1.82	0.45
2:Y:55:C:H2'	2:Y:56:G:C5'	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:110:U:O2	2:Y:110:U:H2'	2.17	0.45
2:Y:119:G:C2	2:Y:120:G:C4	3.05	0.45
3:A:200:GLU:HG3	3:A:202:LYS:CB	2.47	0.45
5:C:104:LEU:O	5:C:108:ILE:HB	2.17	0.45
5:C:148:VAL:HG12	5:C:150:LEU:HD11	1.99	0.45
6:D:4:LEU:HD12	6:D:5:LYS:N	2.32	0.45
6:D:79:LEU:CA	6:D:80:ARG:CZ	2.85	0.45
6:D:111:ILE:CB	6:D:114:PHE:HB2	2.47	0.45
6:D:134:GLU:HG2	6:D:136:LEU:CB	2.44	0.45
9:G:43:VAL:O	9:G:167:LYS:HG3	2.17	0.45
9:G:61:ARG:NE	9:G:65:LYS:CD	2.55	0.45
9:G:105:GLY:O	9:G:107:GLN:N	2.49	0.45
10:H:5:GLN:O	10:H:20:MET:HE2	2.17	0.45
12:J:19:THR:HG22	12:J:99:LYS:HZ3	1.82	0.45
12:J:137:VAL:C	12:J:138:TYR:CG	2.95	0.45
13:K:41:ALA:O	13:K:42:LYS:C	2.60	0.45
16:N:24:PHE:CB	16:N:29:SER:HB3	2.47	0.45
16:N:50:ARG:C	16:N:52:ASN:H	2.25	0.45
16:N:91:ASN:O	16:N:92:ARG:HB2	2.16	0.45
18:P:14:ARG:CA	18:P:17:GLN:HG2	2.46	0.45
20:R:103:LYS:HG2	20:R:104:VAL:H	1.82	0.45
21:S:148:THR:HA	21:S:168:VAL:HG23	1.99	0.45
24:V:7:ARG:C	24:V:9:LEU:N	2.75	0.45
26:Z:15:LYS:C	26:Z:17:ASP:N	2.74	0.45
1:X:42:G:H2'	1:X:43:A:O4'	2.16	0.45
1:X:161:U:C4	1:X:190:A:N6	2.84	0.45
1:X:169:C:C2'	1:X:170:U:H5'	2.47	0.45
1:X:678:G:HO2'	1:X:679:C:H5'	1.79	0.45
1:X:795:A:C2	3:A:226:MET:HG2	2.52	0.45
1:X:874:A:H2'	1:X:875:G:O4'	2.16	0.45
1:X:939:C:C5'	1:X:940:G:O5'	2.54	0.45
1:X:1073:G:C1'	1:X:1099:A:N7	2.80	0.45
1:X:1175:A:C2	1:X:1176:U:C2	3.04	0.45
1:X:1659:G:C6	1:X:1660:G:C5	3.05	0.45
1:X:1711:C:C4'	1:X:1712:G:OP1	2.65	0.45
1:X:1916:G:H2'	1:X:1917:C:C6	2.52	0.45
1:X:2057:U:H1'	1:X:2577:A:H1'	1.98	0.45
1:X:2070:G:H8	1:X:2070:G:O5'	2.00	0.45
1:X:2219:U:C2	1:X:2220:A:C8	3.05	0.45
1:X:2824:C:O2	1:X:2824:C:H2'	2.16	0.45
1:X:2824:C:O2'	1:X:2825:A:P	2.75	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:42:U:N3	2:Y:45:C:H5''	2.31	0.45
3:A:216:GLY:O	3:A:217:ARG:O	2.34	0.45
3:A:270:ILE:HG13	3:A:271:VAL:HG23	1.98	0.45
4:B:45:GLU:O	4:B:46:ALA:HB2	2.17	0.45
4:B:75:THR:HG23	4:B:77:ILE:H	1.82	0.45
4:B:152:LYS:H	9:G:106:TYR:HB3	1.81	0.45
5:C:7:ILE:CB	5:C:120:VAL:H	2.13	0.45
5:C:22:VAL:HG12	5:C:23:ASN:H	1.76	0.45
5:C:60:GLY:O	5:C:61:GLN:C	2.57	0.45
5:C:150:LEU:N	5:C:150:LEU:CD1	2.79	0.45
5:C:191:ALA:HA	5:C:194:GLU:HB3	1.98	0.45
6:D:30:ARG:HB2	6:D:159:THR:HG21	1.99	0.45
6:D:106:ILE:O	6:D:107:GLY:C	2.60	0.45
6:D:143:TYR:HA	6:D:146:VAL:HG21	1.99	0.45
7:E:88:GLU:OE2	7:E:90:ARG:HD2	2.18	0.45
9:G:61:ARG:HH21	9:G:61:ARG:CB	2.22	0.45
12:J:34:GLY:C	12:J:119:PHE:CE1	2.94	0.45
12:J:40:PRO:HG3	12:J:99:LYS:HZ2	1.79	0.45
12:J:106:GLU:OE1	12:J:106:GLU:N	2.50	0.45
13:K:60:LEU:O	13:K:63:ARG:N	2.49	0.45
15:M:26:ASP:CG	15:M:27:PHE:H	2.17	0.45
19:Q:35:LYS:HA	19:Q:38:ILE:CG2	2.47	0.45
19:Q:83:ALA:O	19:Q:85:GLY:N	2.50	0.45
20:R:15:HIS:ND1	20:R:15:HIS:O	2.48	0.45
21:S:65:LEU:HA	21:S:65:LEU:HD12	1.64	0.45
21:S:92:VAL:HG23	21:S:93:GLU:N	2.28	0.45
1:X:98:U:OP2	1:X:99:U:H5	2.00	0.44
1:X:219:G:HO2'	1:X:220:U:P	2.40	0.44
1:X:408:U:O2'	1:X:409:G:H8	2.00	0.44
1:X:810:U:C6	1:X:811:G:C8	3.05	0.44
1:X:830:C:H2'	1:X:831:G:O4'	2.17	0.44
1:X:877:G:N2	1:X:925:U:C2	2.85	0.44
1:X:1147:G:H2'	1:X:1148:G:H8	1.82	0.44
1:X:1391:A:N3	1:X:1392:U:C2	2.86	0.44
1:X:1445:A:H2'	1:X:1446:U:O4'	2.17	0.44
1:X:1527:G:H2'	1:X:1528:C:C6	2.52	0.44
1:X:2039:G:C2	1:X:2040:A:C8	3.05	0.44
1:X:2058:U:H3'	1:X:2217:G:N2	2.31	0.44
1:X:2206:C:N4	1:X:2207:G:C6	2.85	0.44
1:X:2256:G:OP2	12:J:86:LYS:CD	2.64	0.44
1:X:2399:C:O5'	1:X:2399:C:H6	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2536:G:C6	1:X:2537:C:N4	2.85	0.44
1:X:2799:C:C4	1:X:2800:C:C4	3.05	0.44
1:X:2812:A:C2	1:X:2813:G:C5	3.05	0.44
2:Y:93:G:H2'	2:Y:94:G:O4'	2.17	0.44
3:A:63:ARG:NE	3:A:85:ASP:OD1	2.50	0.44
3:A:131:LEU:N	3:A:131:LEU:CD2	2.80	0.44
3:A:211:ARG:O	3:A:214:TRP:N	2.47	0.44
3:A:246:PRO:HD2	3:A:251:GLY:H	1.77	0.44
5:C:26:VAL:CG2	11:I:18:ARG:HH11	2.24	0.44
6:D:99:PHE:O	6:D:102:LYS:HB2	2.18	0.44
8:F:71:THR:OG1	8:F:111:LYS:HG2	2.16	0.44
9:G:49:VAL:HG21	9:G:170:PRO:HG2	1.98	0.44
9:G:70:PHE:CB	16:N:64:ARG:HG2	2.46	0.44
11:I:32:ARG:CZ	17:O:81:ARG:CZ	2.95	0.44
13:K:27:ALA:O	13:K:28:LEU:C	2.58	0.44
13:K:28:LEU:C	13:K:28:LEU:HD23	2.42	0.44
14:L:68:ALA:O	14:L:71:VAL:HG13	2.17	0.44
20:R:48:VAL:C	20:R:50:GLY:N	2.70	0.44
20:R:54:ILE:CD1	20:R:71:GLN:HB2	2.47	0.44
23:U:23:LYS:HB2	23:U:36:GLY:O	2.17	0.44
24:V:32:ALA:HB2	24:V:37:LEU:HD12	1.99	0.44
1:X:39:C:H2'	1:X:40:U:H6	1.82	0.44
1:X:95:G:H4'	24:V:41:HIS:CE1	2.50	0.44
1:X:192:G:O2'	1:X:193:A:OP2	2.35	0.44
1:X:492:G:H2'	1:X:517:A:H61	1.81	0.44
1:X:774:A:H8	1:X:774:A:H3'	1.81	0.44
1:X:802:A:H4'	1:X:803:C:OP1	2.16	0.44
1:X:1325:U:H4'	1:X:1326:U:O5'	2.16	0.44
1:X:1412:C:O2'	1:X:1413:U:H5'	2.17	0.44
1:X:1573:G:C5'	1:X:1574:A:H5''	2.48	0.44
1:X:1587:A:C2	1:X:1588:A:C4	3.04	0.44
1:X:1751:A:O5'	1:X:1751:A:H8	2.00	0.44
1:X:1766:U:H2'	1:X:1767:G:C5'	2.44	0.44
1:X:1923:U:O2'	1:X:1924:C:P	2.75	0.44
1:X:2284:U:H6	1:X:2284:U:H5''	1.82	0.44
1:X:2372:A:H2'	1:X:2373:C:H6	1.82	0.44
1:X:2447:G:O2'	1:X:2448:A:H8	2.00	0.44
1:X:2484:G:O2'	1:X:2485:U:H5''	2.17	0.44
1:X:2578:G:C6	1:X:2579:A:N7	2.85	0.44
1:X:2598:C:H1'	4:B:154:LYS:CE	2.47	0.44
1:X:2722:C:H5''	30:4:35:ARG:NH1	2.31	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2753:C:H2'	1:X:2754:C:H6	1.82	0.44
1:X:2834:A:O2'	1:X:2835:A:H5'	2.17	0.44
2:Y:7:C:H2'	2:Y:8:C:H6	1.81	0.44
2:Y:75:A:N3	2:Y:75:A:H2'	2.32	0.44
3:A:79:VAL:HG12	3:A:113:VAL:HA	1.99	0.44
3:A:85:ASP:HB2	3:A:92:ILE:HD12	1.99	0.44
5:C:34:GLN:NE2	5:C:178:TYR:HB2	2.32	0.44
5:C:148:VAL:HG12	5:C:150:LEU:CD1	2.47	0.44
6:D:138:PHE:HB2	6:D:141:ILE:CG1	2.47	0.44
7:E:50:LEU:CD2	7:E:51:LEU:N	2.73	0.44
12:J:44:LYS:HE3	12:J:93:TYR:HE1	1.82	0.44
12:J:55:MET:O	12:J:56:SER:C	2.61	0.44
12:J:64:LYS:H	12:J:64:LYS:HD2	1.81	0.44
13:K:44:LEU:O	13:K:44:LEU:HD12	2.17	0.44
14:L:97:HIS:CG	14:L:98:GLY:N	2.82	0.44
16:N:66:ASN:HD22	16:N:70:ARG:CZ	2.29	0.44
17:O:38:LEU:HA	17:O:46:VAL:O	2.17	0.44
17:O:63:HIS:ND1	17:O:91:THR:HG23	2.32	0.44
19:Q:32:LYS:H	19:Q:32:LYS:HG3	1.53	0.44
19:Q:68:PHE:O	19:Q:70:GLY:N	2.50	0.44
20:R:54:ILE:HA	20:R:70:GLU:O	2.17	0.44
21:S:101:THR:O	21:S:102:GLY:O	2.35	0.44
23:U:15:VAL:O	23:U:16:ASN:C	2.60	0.44
24:V:1:MET:C	24:V:2:LYS:HG2	2.42	0.44
24:V:39:GLN:HB3	24:V:42:ARG:HB2	2.00	0.44
26:Z:36:CYS:C	26:Z:38:GLY:N	2.73	0.44
1:X:28:A:H2	1:X:523:A:H1'	1.82	0.44
1:X:199:A:C2	1:X:201:G:N3	2.86	0.44
1:X:415:A:H2'	1:X:416:U:O4'	2.18	0.44
1:X:461:A:H4'	16:N:3:ARG:HE	1.82	0.44
1:X:466:A:H4'	1:X:467:U:O5'	2.16	0.44
1:X:745:C:H2'	1:X:746:G:O4'	2.17	0.44
1:X:759:C:C2'	1:X:760:U:OP2	2.66	0.44
1:X:812:G:N1	1:X:813:A:N6	2.65	0.44
1:X:1022:A:H2'	1:X:1024:G:O4'	2.17	0.44
1:X:1186:G:O2'	1:X:1187:A:O5'	2.26	0.44
1:X:1331:G:H2'	1:X:1331:G:N3	2.33	0.44
1:X:1332:G:H2'	1:X:1333:G:N9	2.33	0.44
1:X:1363:C:O2'	1:X:1364:C:H5'	2.17	0.44
1:X:1534:A:C6	1:X:1535:C:C4	3.06	0.44
1:X:1685:A:C8	1:X:1691:G:C5	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1764:A:C8	1:X:1764:A:H3'	2.53	0.44
1:X:1845:A:N3	1:X:2212:U:O2'	2.46	0.44
1:X:2197:U:C4	1:X:2198:U:C4	3.06	0.44
1:X:2518:C:H4'	30:4:3:VAL:HG21	1.99	0.44
2:Y:78:A:H2'	2:Y:79:U:O4'	2.18	0.44
2:Y:92:G:H22	12:J:39:GLU:CG	2.30	0.44
3:A:186:HIS:CD2	3:A:188:GLU:HB2	2.52	0.44
5:C:3:GLN:OE1	5:C:3:GLN:CA	2.66	0.44
5:C:102:LEU:CD2	5:C:102:LEU:O	2.61	0.44
7:E:44:ARG:NH2	7:E:45:GLN:C	2.76	0.44
7:E:45:GLN:CG	7:E:49:GLN:O	2.58	0.44
8:F:13:PRO:O	8:F:52:ILE:HA	2.18	0.44
8:F:77:LEU:HD11	8:F:111:LYS:HD2	1.99	0.44
12:J:92:GLU:HG3	12:J:93:TYR:CD2	2.53	0.44
15:M:104:LEU:HD23	15:M:106:TYR:HE2	1.80	0.44
17:O:36:LYS:NZ	17:O:55:THR:N	2.65	0.44
18:P:9:ARG:HD2	18:P:13:GLN:CG	2.46	0.44
20:R:36:VAL:O	20:R:37:LEU:HD23	2.17	0.44
20:R:59:LYS:HA	20:R:62:MET:HG3	1.99	0.44
21:S:50:GLY:C	21:S:65:LEU:CD1	2.90	0.44
23:U:52:ARG:O	23:U:53:GLU:CB	2.64	0.44
24:V:22:LYS:HG2	24:V:25:LEU:HD23	1.98	0.44
1:X:32:C:H5'	1:X:1251:G:O5'	2.17	0.44
1:X:48:A:OP1	1:X:49:U:H5''	2.18	0.44
1:X:115:G:C6	1:X:117:A:N6	2.85	0.44
1:X:172:A:N6	1:X:175:C:H5	2.15	0.44
1:X:343:A:H3'	1:X:343:A:N3	2.32	0.44
1:X:476:G:H2'	1:X:477:A:H8	1.74	0.44
1:X:490:A:O2'	1:X:491:A:P	2.76	0.44
1:X:528:G:H5''	18:P:39:ARG:HH12	1.82	0.44
1:X:529:U:H2'	1:X:530:G:H8	1.82	0.44
1:X:637:G:O6	11:I:101:ARG:HD3	2.18	0.44
1:X:825:C:H2'	1:X:826:U:H6	1.82	0.44
1:X:1031:C:H4'	1:X:1032:A:O5'	2.18	0.44
1:X:1758:C:C2	1:X:1969:G:C2	3.06	0.44
1:X:1782:A:C2	1:X:1821:A:H4'	2.52	0.44
1:X:1918:G:C6	1:X:1945:C:C5	3.05	0.44
1:X:2199:C:C3'	1:X:2200:G:H5'	2.34	0.44
1:X:2256:G:OP1	12:J:86:LYS:HD2	2.16	0.44
1:X:2494:C:O2'	1:X:2495:G:C5'	2.66	0.44
1:X:2666:U:C5	1:X:2667:C:C4	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2703:C:P	4:B:109:LYS:HZ3	2.40	0.44
3:A:96:HIS:HE1	3:A:100:GLY:C	2.26	0.44
3:A:208:LYS:N	3:A:208:LYS:HZ2	2.15	0.44
4:B:105:THR:HG21	4:B:199:ARG:HH21	1.81	0.44
4:B:120:TRP:CG	4:B:155:ARG:HB3	2.53	0.44
5:C:30:VAL:O	5:C:33:TRP:N	2.48	0.44
5:C:156:ASN:O	5:C:159:ARG:HB3	2.18	0.44
7:E:74:ASN:C	7:E:76:VAL:N	2.75	0.44
8:F:19:PRO:HB2	8:F:22:PRO:CD	2.47	0.44
9:G:106:TYR:O	9:G:110:LEU:HD11	2.15	0.44
10:H:29:ILE:CG2	10:H:123:PHE:HE1	2.30	0.44
11:I:91:ASP:HA	11:I:94:GLU:OE2	2.18	0.44
13:K:10:LEU:O	13:K:11:ASN:OD1	2.35	0.44
17:O:66:GLY:O	17:O:87:ARG:CZ	2.65	0.44
18:P:65:SER:O	18:P:66:GLU:C	2.57	0.44
19:Q:12:ILE:CG1	19:Q:13:SER:H	2.30	0.44
19:Q:75:ARG:NH1	19:Q:75:ARG:CG	2.80	0.44
20:R:14:LEU:HG	20:R:41:PRO:HB3	1.98	0.44
20:R:16:PHE:CD2	20:R:80:LYS:NZ	2.65	0.44
21:S:49:THR:CG2	21:S:94:VAL:HG11	2.47	0.44
21:S:113:VAL:HG22	21:S:171:VAL:CG1	2.45	0.44
24:V:21:ARG:O	24:V:25:LEU:HB2	2.18	0.44
26:Z:36:CYS:HB3	26:Z:49:CYS:SG	2.57	0.44
1:X:333:A:C5'	5:C:162:ARG:CD	2.95	0.44
1:X:631:G:H4'	1:X:632:A:C5'	2.47	0.44
1:X:855:G:N2	1:X:948:C:C2	2.85	0.44
1:X:932:G:H2'	1:X:933:G:H8	1.81	0.44
1:X:999:A:C5'	25:W:8:SER:HB2	2.47	0.44
1:X:1188:A:P	1:X:1188:A:C8	3.10	0.44
1:X:1342:U:H5'	1:X:1343:C:C5	2.42	0.44
1:X:1345:G:C8	1:X:1625:A:H2'	2.53	0.44
1:X:1359:G:C6	1:X:1617:G:C6	3.06	0.44
1:X:1385:C:H2'	1:X:1386:A:O4'	2.18	0.44
1:X:1698:C:O2'	1:X:1753:A:C2'	2.46	0.44
1:X:1713:G:C6	1:X:1714:A:C4	3.05	0.44
1:X:1785:A:O4'	1:X:1883:A:C2	2.70	0.44
1:X:2289:A:H3'	1:X:2290:A:C8	2.51	0.44
1:X:2495:G:C4	1:X:2548:G:N2	2.85	0.44
1:X:2564:U:C5'	1:X:2565:C:OP1	2.62	0.44
1:X:2597:G:H21	4:B:150:VAL:HG11	1.82	0.44
1:X:2634:G:C2'	1:X:2643:G:O6	2.62	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2793:G:N1	1:X:2794:G:C5	2.85	0.44
5:C:46:ARG:HB3	5:C:51:VAL:HG23	2.00	0.44
5:C:164:VAL:C	5:C:166:TRP:N	2.75	0.44
6:D:8:TYR:HB2	6:D:173:MET:CE	2.46	0.44
8:F:98:LYS:HZ3	8:F:139:GLU:HB2	1.82	0.44
9:G:155:THR:HG23	9:G:156:HIS:N	2.33	0.44
11:I:45:LYS:HD3	11:I:46:GLY:N	2.33	0.44
12:J:21:ASP:HA	12:J:99:LYS:CG	2.46	0.44
18:P:87:GLU:C	18:P:89:ARG:H	2.26	0.44
19:Q:81:ARG:HG3	19:Q:81:ARG:NH1	2.33	0.44
21:S:139:THR:O	21:S:140:LYS:C	2.60	0.44
23:U:27:ASP:N	23:U:32:ARG:CD	2.79	0.44
1:X:496:C:H2'	1:X:497:C:C5'	2.48	0.44
1:X:623:G:C3'	1:X:624:A:C5'	2.86	0.44
1:X:679:C:OP1	11:I:50:GLU:HG3	2.18	0.44
1:X:1035:G:C6	1:X:1036:G:C6	3.05	0.44
1:X:1068:A:H2'	1:X:1068:A:N3	2.33	0.44
1:X:1211:G:C2	1:X:1263:G:C5	3.06	0.44
1:X:1246:G:C6	1:X:1247:U:C5	3.06	0.44
1:X:1356:G:O4'	1:X:1613:G:H2'	2.18	0.44
1:X:1511:A:H2'	1:X:1512:A:H8	1.80	0.44
1:X:1514:C:C4'	1:X:1593:C:C5'	2.96	0.44
1:X:1550:C:C2'	1:X:1553:G:N2	2.61	0.44
1:X:1573:G:O5'	1:X:1574:A:C5'	2.65	0.44
1:X:1944:C:H2'	1:X:1945:C:O4'	2.17	0.44
1:X:2279:G:H2'	1:X:2280:A:H8	1.80	0.44
1:X:2395:C:H2'	1:X:2396:C:H5'	1.99	0.44
1:X:2429:A:C2	1:X:2430:A:C5	3.06	0.44
1:X:2760:G:H2'	1:X:2761:A:OP1	2.18	0.44
1:X:2823:G:HO2'	1:X:2824:C:P	2.37	0.44
3:A:126:LYS:HB2	3:A:129:ASN:ND2	2.32	0.44
4:B:37:LYS:HD2	4:B:42:ASP:CG	2.42	0.44
5:C:72:ARG:HG3	5:C:77:PHE:CD2	2.53	0.44
6:D:114:PHE:HZ	6:D:176:PRO:CG	2.31	0.44
7:E:64:LEU:O	7:E:67:LEU:HB2	2.17	0.44
8:F:111:LYS:O	8:F:115:LEU:HG	2.17	0.44
9:G:54:LEU:HD13	9:G:170:PRO:HG3	2.00	0.44
12:J:26:ASP:CB	12:J:68:ARG:HH22	2.30	0.44
13:K:79:VAL:HG13	13:K:80:MET:N	2.33	0.44
14:L:33:ARG:NH2	14:L:68:ALA:O	2.51	0.44
16:N:11:ARG:HB3	16:N:15:LYS:HZ2	1.83	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:113:SER:O	16:N:114:ARG:C	2.60	0.44
21:S:53:ASP:OD2	21:S:53:ASP:N	2.50	0.44
1:X:26:G:C6	1:X:27:G:N2	2.86	0.44
1:X:200:A:N1	1:X:420:C:O2'	2.47	0.44
1:X:242:A:N6	1:X:440:U:H2'	2.33	0.44
1:X:318:G:H5'	1:X:318:G:H8	1.82	0.44
1:X:337:G:O2'	20:R:9:HIS:ND1	2.51	0.44
1:X:445:A:H2'	1:X:446:C:H6	1.83	0.44
1:X:490:A:HO2'	1:X:491:A:P	2.38	0.44
1:X:531:G:O2'	1:X:532:A:H5'	2.18	0.44
1:X:632:A:C2	1:X:633:G:C5	3.05	0.44
1:X:718:A:C2	1:X:719:A:C4	3.06	0.44
1:X:739:G:O2'	1:X:740:A:P	2.75	0.44
1:X:972:C:C4'	1:X:973:U:OP2	2.66	0.44
1:X:1051:U:C6	1:X:1051:U:H3'	2.52	0.44
1:X:1189:G:C2'	1:X:1190:C:H5'	2.47	0.44
1:X:1359:G:O2'	1:X:1360:G:H5'	2.17	0.44
1:X:1473:U:O2'	1:X:1474:A:OP2	2.30	0.44
1:X:1714:A:OP2	1:X:1715:A:C3'	2.65	0.44
1:X:1723:U:O2'	1:X:1724:C:OP1	2.35	0.44
1:X:1804:U:O2'	1:X:1805:G:H5'	2.17	0.44
1:X:2718:A:H2'	1:X:2719:U:O5'	2.18	0.44
1:X:2825:A:H2'	1:X:2826:C:C6	2.52	0.44
2:Y:26:G:H2'	2:Y:58:G:O6	2.17	0.44
2:Y:47:A:H8	6:D:92:ARG:NH1	2.16	0.44
2:Y:50:U:H3'	2:Y:50:U:C6	2.52	0.44
5:C:137:ALA:O	5:C:138:LYS:C	2.60	0.44
6:D:4:LEU:CG	6:D:5:LYS:N	2.58	0.44
6:D:70:ALA:N	6:D:85:VAL:HG22	2.33	0.44
6:D:75:SER:HB2	6:D:79:LEU:CD2	2.47	0.44
6:D:175:LEU:HG	6:D:177:PHE:HE1	1.83	0.44
7:E:103:LEU:HD22	7:E:123:PHE:CE2	2.53	0.44
7:E:107:ILE:HD11	7:E:151:VAL:HG12	2.00	0.44
7:E:174:GLY:C	7:E:175:LYS:O	2.61	0.44
8:F:99:LEU:C	8:F:99:LEU:HD12	2.42	0.44
9:G:127:ILE:O	9:G:128:GLU:C	2.60	0.44
11:I:30:ALA:CB	11:I:34:HIS:CE1	2.82	0.44
12:J:31:GLY:HA3	12:J:108:ALA:HB2	1.99	0.44
14:L:94:TYR:O	14:L:96:TYR:N	2.50	0.44
14:L:98:GLY:O	14:L:99:ARG:C	2.60	0.44
16:N:50:ARG:O	16:N:52:ASN:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:94:VAL:O	16:N:95:LEU:C	2.61	0.44
17:O:74:TYR:OH	17:O:76:SER:CB	2.65	0.44
18:P:24:GLY:O	18:P:127:ILE:HA	2.17	0.44
18:P:86:LEU:N	18:P:130:GLU:OE2	2.49	0.44
21:S:1:MET:HG3	21:S:52:PHE:CD2	2.53	0.44
21:S:86:VAL:HG12	21:S:87:THR:N	2.32	0.44
23:U:10:LYS:HZ1	23:U:77:GLY:HA3	1.81	0.44
25:W:22:ALA:C	25:W:24:GLY:H	2.26	0.44
30:4:30:VAL:HG23	30:4:31:LYS:N	2.33	0.44
1:X:62:U:H4'	1:X:63:A:H8	1.83	0.44
1:X:115:G:N1	1:X:117:A:N6	2.66	0.44
1:X:302:U:C4	1:X:361:G:N2	2.86	0.44
1:X:498:C:O2'	18:P:73:ASN:O	2.29	0.44
1:X:575:U:H2'	1:X:576:A:H8	1.82	0.44
1:X:628:A:C8	1:X:628:A:OP2	2.67	0.44
1:X:734:G:H2'	1:X:735:G:H8	1.83	0.44
1:X:759:C:C1'	1:X:761:G:H21	2.31	0.44
1:X:847:C:C4	1:X:848:A:N7	2.86	0.44
1:X:1173:G:N3	17:O:88:GLN:NE2	2.66	0.44
1:X:1188:A:C8	1:X:1188:A:OP2	2.71	0.44
1:X:1359:G:C6	1:X:1617:G:N1	2.85	0.44
1:X:1636:G:C5	1:X:1637:U:C5	3.06	0.44
1:X:1685:A:O2'	1:X:1686:A:OP2	2.35	0.44
1:X:1813:A:H2'	1:X:1814:G:C8	2.52	0.44
1:X:1837:G:C2	1:X:1879:G:C2	3.06	0.44
1:X:1993:G:HO2'	1:X:1994:U:H5'	1.78	0.44
1:X:2175:A:O2'	1:X:2176:U:H5'	2.18	0.44
1:X:2340:C:H2'	1:X:2341:G:C5'	2.48	0.44
1:X:2654:A:H5'	10:H:42:LYS:H	1.82	0.44
1:X:2676:G:C6	1:X:2690:A:N1	2.86	0.44
1:X:2799:C:N4	1:X:2800:C:N3	2.66	0.44
2:Y:71:G:C5	2:Y:72:C:C5	3.06	0.44
2:Y:75:A:C2	2:Y:76:U:C1'	3.00	0.44
3:A:105:ILE:O	3:A:106:LEU:C	2.60	0.44
3:A:218:LYS:CD	3:A:219:PRO:O	2.66	0.44
5:C:99:VAL:C	5:C:101:GLN:N	2.73	0.44
7:E:146:ALA:O	7:E:149:ARG:N	2.51	0.44
11:I:47:ALA:HA	11:I:49:PHE:CE2	2.53	0.44
11:I:95:ALA:O	11:I:98:LEU:N	2.44	0.44
12:J:44:LYS:O	12:J:45:SER:C	2.61	0.44
12:J:64:LYS:O	12:J:107:VAL:HA	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:K:41:ALA:O	13:K:44:LEU:N	2.51	0.44
14:L:8:ARG:NH1	14:L:8:ARG:HB2	2.32	0.44
14:L:29:LEU:O	14:L:90:ASP:OD1	2.36	0.44
14:L:100:VAL:C	14:L:102:ALA:H	2.26	0.44
17:O:39:PHE:CE1	17:O:46:VAL:CB	2.98	0.44
19:Q:56:MET:HA	19:Q:56:MET:HE3	1.99	0.44
22:T:21:LEU:HD12	22:T:41:ARG:HG2	1.99	0.44
23:U:19:ILE:HD12	23:U:40:ARG:HG3	2.00	0.44
1:X:26:G:C2	1:X:27:G:N2	2.85	0.44
1:X:172:A:N6	1:X:175:C:C5	2.86	0.44
1:X:313:U:H2'	1:X:314:G:C8	2.53	0.44
1:X:404:A:C6	1:X:405:C:C4	3.06	0.44
1:X:471:A:H3'	1:X:472:C:H6	1.83	0.44
1:X:566:U:O2'	1:X:567:G:C5'	2.64	0.44
1:X:967:G:O6	12:J:17:ARG:CZ	2.66	0.44
1:X:1019:U:O2'	1:X:1020:A:C5'	2.66	0.44
1:X:1118:G:H2'	1:X:1119:U:C5'	2.37	0.44
1:X:1123:G:C5	1:X:1124:U:C5	3.06	0.44
1:X:1147:G:C4	1:X:1148:G:C8	3.06	0.44
1:X:1505:U:H2'	1:X:1506:C:C5'	2.48	0.44
1:X:1552:C:H1'	1:X:1553:G:C4	2.53	0.44
1:X:1685:A:N7	1:X:1691:G:C6	2.86	0.44
1:X:1754:G:H2'	1:X:1755:G:H5'	1.99	0.44
1:X:1917:C:H2'	1:X:1918:G:C5'	2.48	0.44
1:X:2086:U:H6	1:X:2086:U:O5'	2.00	0.44
1:X:2166:G:H2'	1:X:2167:A:H5'	1.98	0.44
1:X:2200:G:C5	1:X:2201:G:N7	2.86	0.44
1:X:2256:G:P	12:J:86:LYS:HB2	2.58	0.44
1:X:2395:C:O5'	1:X:2395:C:H6	2.00	0.44
1:X:2508:G:C5'	1:X:2509:A:H5''	2.47	0.44
1:X:2550:C:C4	1:X:2553:G:C8	3.06	0.44
1:X:2660:C:C2	1:X:2704:U:O4	2.70	0.44
1:X:2697:G:O2'	1:X:2698:G:H5'	2.18	0.44
1:X:2751:C:H2'	1:X:2752:C:C6	2.52	0.44
3:A:228:PRO:HD3	3:A:235:GLY:N	2.33	0.44
4:B:176:ARG:NH2	15:M:19:ASP:OD2	2.51	0.44
7:E:139:GLN:O	7:E:140:LEU:C	2.60	0.44
8:F:12:LEU:HD13	8:F:17:ALA:HB2	2.00	0.44
9:G:98:LYS:HZ2	9:G:116:ARG:CZ	2.31	0.44
10:H:85:ASP:OD2	10:H:87:SER:HB3	2.18	0.44
11:I:47:ALA:C	11:I:49:PHE:N	2.73	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:I:117:ALA:O	11:I:118:VAL:CG1	2.56	0.44
12:J:99:LYS:HD2	12:J:100:PRO:HD3	2.00	0.44
14:L:54:ALA:HB3	14:L:75:LEU:HA	1.99	0.44
14:L:104:ALA:O	14:L:108:ARG:N	2.34	0.44
15:M:38:LYS:C	15:M:40:ARG:N	2.75	0.44
15:M:43:ASN:ND2	15:M:43:ASN:O	2.43	0.44
16:N:66:ASN:C	16:N:68:GLY:N	2.74	0.44
16:N:88:ILE:CG2	17:O:48:GLY:O	2.65	0.44
18:P:9:ARG:HB3	18:P:13:GLN:CB	2.48	0.44
18:P:46:ARG:HD3	18:P:95:ALA:H	1.83	0.44
19:Q:12:ILE:O	19:Q:16:ALA:HB3	2.18	0.44
26:Z:19:ARG:HB2	26:Z:19:ARG:HH11	1.83	0.44
1:X:406:G:C5	1:X:407:A:N7	2.86	0.43
1:X:603:C:O2	1:X:603:C:C2'	2.65	0.43
1:X:691:C:O2'	1:X:692:C:H5'	2.17	0.43
1:X:888:G:O2'	1:X:889:C:H5'	2.17	0.43
1:X:940:G:N2	25:W:43:MET:SD	2.90	0.43
1:X:980:G:O3'	25:W:11:GLY:HA2	2.18	0.43
1:X:1186:G:H21	1:X:1187:A:N6	2.16	0.43
1:X:1325:U:O2'	1:X:1327:C:C5	2.71	0.43
1:X:1333:G:N2	1:X:1344:C:N4	2.65	0.43
1:X:1411:C:C2'	1:X:1412:C:O5'	2.66	0.43
1:X:1777:A:H1'	1:X:1921:A:N6	2.33	0.43
1:X:1914:U:H6	1:X:1914:U:C5'	2.25	0.43
1:X:2082:C:C2'	1:X:2083:G:C5'	2.96	0.43
1:X:2372:A:H5''	11:I:61:PRO:CB	2.44	0.43
1:X:2415:G:N3	1:X:2577:A:H2	2.16	0.43
1:X:2617:G:O2'	1:X:2618:A:H8	2.01	0.43
1:X:2695:C:H2'	1:X:2696:A:H8	1.83	0.43
1:X:2824:C:H4'	1:X:2825:A:C5'	2.48	0.43
2:Y:95:U:H2'	2:Y:96:C:H6	1.81	0.43
3:A:96:HIS:HE1	3:A:100:GLY:CA	2.31	0.43
4:B:155:ARG:HG3	4:B:155:ARG:HH11	1.82	0.43
5:C:158:ARG:O	5:C:159:ARG:C	2.61	0.43
6:D:74:ILE:HA	6:D:79:LEU:C	2.43	0.43
6:D:74:ILE:CA	6:D:79:LEU:HB3	2.44	0.43
6:D:106:ILE:CG2	6:D:139:PRO:HB3	2.43	0.43
6:D:132:ILE:HG22	6:D:133:LYS:N	2.33	0.43
7:E:109:TYR:N	7:E:109:TYR:CD1	2.85	0.43
8:F:79:ARG:HA	8:F:84:ILE:HB	2.00	0.43
9:G:101:THR:HG23	9:G:102:ARG:N	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:125:ARG:NH1	9:G:128:GLU:OE1	2.49	0.43
11:I:105:PRO:O	11:I:106:VAL:HG22	2.17	0.43
11:I:129:ALA:O	11:I:133:VAL:HG23	2.18	0.43
12:J:44:LYS:O	12:J:47:GLN:N	2.47	0.43
12:J:125:LYS:NZ	12:J:125:LYS:CB	2.74	0.43
13:K:100:VAL:HG22	26:Z:45:ILE:HD12	2.00	0.43
14:L:38:ILE:HD11	14:L:103:LEU:CD1	2.48	0.43
15:M:11:GLU:C	15:M:13:LEU:N	2.76	0.43
15:M:63:ARG:HB2	15:M:63:ARG:NH1	2.33	0.43
18:P:27:VAL:HG13	18:P:27:VAL:O	2.18	0.43
20:R:25:LEU:HD13	20:R:79:SER:O	2.18	0.43
21:S:155:PRO:HG2	21:S:158:CYS:SG	2.58	0.43
23:U:22:GLY:CA	23:U:39:LYS:HG3	2.47	0.43
23:U:70:LEU:CD2	23:U:74:PRO:HA	2.47	0.43
1:X:4:C:C2	1:X:2874:A:C2	3.06	0.43
1:X:20:C:H2'	1:X:21:A:C8	2.51	0.43
1:X:1081:A:C6	1:X:1108:U:H4'	2.53	0.43
1:X:1200:G:C2'	1:X:1201:G:H5'	2.48	0.43
1:X:1230:C:C2	1:X:1246:G:C2	3.06	0.43
1:X:1271:C:H2'	1:X:1272:G:O4'	2.18	0.43
1:X:1425:G:C2'	1:X:1426:U:H5'	2.48	0.43
1:X:1505:U:H3'	1:X:1505:U:C6	2.53	0.43
1:X:1629:G:C6	1:X:1635:G:C6	3.06	0.43
1:X:1735:G:C6	1:X:1736:C:C4	3.06	0.43
1:X:1791:C:H4'	1:X:1792:C:OP1	2.18	0.43
1:X:1918:G:H1'	1:X:1947:G:N2	2.33	0.43
1:X:1918:G:N2	1:X:1947:G:N9	2.65	0.43
1:X:1924:C:C6	1:X:1948:C:C2	3.07	0.43
1:X:2036:G:H2'	1:X:2037:A:C5'	2.48	0.43
1:X:2225:G:N1	1:X:2405:A:H1'	2.34	0.43
1:X:2313:G:N3	14:L:13:THR:HB	2.33	0.43
1:X:2578:G:C5	1:X:2579:A:N7	2.86	0.43
1:X:2770:A:O2'	1:X:2771:C:OP2	2.34	0.43
1:X:2797:G:H8	1:X:2797:G:O5'	2.01	0.43
2:Y:53:G:C5'	14:L:64:LYS:NZ	2.82	0.43
3:A:182:LEU:HB2	3:A:268:ARG:HB2	2.00	0.43
3:A:245:VAL:C	3:A:252:LYS:HD3	2.43	0.43
4:B:151:TYR:CD1	9:G:106:TYR:CZ	3.06	0.43
6:D:92:ARG:HH21	6:D:92:ARG:CG	2.28	0.43
6:D:148:LYS:HG3	6:D:149:THR:N	2.34	0.43
7:E:37:TYR:HE2	7:E:71:LEU:HB2	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:G:54:LEU:O	9:G:57:LEU:HB3	2.18	0.43
10:H:3:MET:HB2	10:H:4:PRO:HD2	2.00	0.43
10:H:25:LEU:HD11	10:H:52:VAL:CG2	2.38	0.43
10:H:36:THR:O	10:H:37:GLY:C	2.61	0.43
11:I:65:PHE:CD1	11:I:65:PHE:C	2.96	0.43
12:J:62:GLY:CA	12:J:64:LYS:HE3	2.44	0.43
13:K:72:ASP:OD2	13:K:72:ASP:C	2.61	0.43
17:O:13:ARG:CG	17:O:14:VAL:N	2.75	0.43
20:R:22:VAL:HG22	20:R:83:LEU:N	2.29	0.43
21:S:137:ASP:OD2	21:S:138:VAL:N	2.51	0.43
23:U:52:ARG:NH1	23:U:67:LEU:CG	2.81	0.43
25:W:34:VAL:HG22	25:W:40:VAL:CG1	2.48	0.43
30:4:1:MET:HE2	30:4:33:LYS:HB3	1.98	0.43
30:4:22:ARG:HG2	30:4:22:ARG:NH1	2.27	0.43
1:X:85:C:H2'	1:X:86:U:O4'	2.19	0.43
1:X:416:U:H4'	1:X:419:G:C1'	2.48	0.43
1:X:417:C:H4'	1:X:418:C:C5'	2.47	0.43
1:X:647:G:C6	11:I:107:LYS:HE3	2.54	0.43
1:X:742:G:H2'	1:X:1766:U:H1'	2.01	0.43
1:X:1291:G:O2'	1:X:1292:A:H5'	2.18	0.43
1:X:1373:G:C2'	1:X:1374:G:H5'	2.48	0.43
1:X:1629:G:N2	1:X:1633:C:C2	2.86	0.43
1:X:1938:U:O2'	1:X:1939:U:OP1	2.30	0.43
1:X:1996:A:O2'	1:X:1997:A:H5'	2.18	0.43
1:X:2262:C:C2	1:X:2368:G:C2	3.07	0.43
1:X:2276:C:C5	1:X:2297:G:N2	2.86	0.43
1:X:2383:C:O2	1:X:2383:C:H2'	2.17	0.43
1:X:2609:G:H2'	1:X:2610:G:C8	2.51	0.43
1:X:2685:A:H8	1:X:2685:A:O5'	2.02	0.43
2:Y:71:G:N3	2:Y:71:G:H2'	2.33	0.43
2:Y:85:G:C5'	25:W:49:HIS:CD2	3.02	0.43
3:A:135:PHE:O	3:A:137:PRO:HD3	2.19	0.43
3:A:166:GLN:CB	3:A:174:ILE:HG22	2.46	0.43
6:D:40:LEU:CD2	6:D:53:ALA:HB2	2.48	0.43
10:H:98:ILE:C	10:H:99:ILE:HG23	2.43	0.43
10:H:116:ARG:NH1	15:M:38:LYS:HE2	2.33	0.43
11:I:36:GLY:O	11:I:37:GLN:HB2	2.18	0.43
11:I:73:GLU:CG	11:I:101:ARG:HG3	2.49	0.43
12:J:30:PHE:HB3	12:J:66:TYR:CE2	2.54	0.43
15:M:12:LEU:HD23	15:M:12:LEU:HA	1.83	0.43
15:M:26:ASP:O	15:M:27:PHE:CD2	2.71	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:4:ALA:O	16:N:5:LYS:O	2.37	0.43
19:Q:14:GLU:CG	19:Q:15:LYS:N	2.80	0.43
19:Q:39:LYS:O	19:Q:42:ILE:HG23	2.18	0.43
20:R:93:ARG:CG	20:R:94:VAL:N	2.81	0.43
21:S:16:GLU:O	21:S:18:MET:HG2	2.18	0.43
23:U:75:TYR:O	23:U:76:LYS:HB2	2.18	0.43
30:4:10:MET:O	30:4:11:CYS:HB3	2.18	0.43
1:X:84:G:C5'	20:R:39:ALA:HB3	2.48	0.43
1:X:216:U:OP1	1:X:601:A:C8	2.72	0.43
1:X:312:G:C6	1:X:328:A:C6	3.07	0.43
1:X:319:G:C1'	1:X:511:A:O4'	2.66	0.43
1:X:346:C:C2	1:X:347:C:C5	3.06	0.43
1:X:358:C:H6	1:X:358:C:O5'	2.02	0.43
1:X:607:C:O5'	1:X:607:C:H6	2.02	0.43
1:X:619:A:H2'	1:X:620:G:O4'	2.18	0.43
1:X:636:G:H2'	1:X:637:G:C5'	2.47	0.43
1:X:678:G:C5	1:X:679:C:C5	3.06	0.43
1:X:767:G:O2'	1:X:768:U:H5'	2.18	0.43
1:X:982:C:O2'	1:X:983:G:H5'	2.17	0.43
1:X:1015:U:O4'	1:X:1021:A:C5	2.71	0.43
1:X:1051:U:C6	1:X:1051:U:C3'	3.02	0.43
1:X:1094:C:H2'	1:X:1095:A:H3'	1.99	0.43
1:X:1329:U:C2	1:X:1330:G:C8	3.07	0.43
1:X:1349:A:H2'	1:X:1350:G:H8	1.82	0.43
1:X:1432:G:H21	1:X:1596:A:N6	2.16	0.43
1:X:1517:C:C2	1:X:1518:C:C5	3.06	0.43
1:X:1550:C:H4'	1:X:1551:U:H5	1.83	0.43
1:X:1787:U:O2	1:X:1788:C:C6	2.71	0.43
1:X:1802:A:O2'	1:X:1803:G:H5'	2.18	0.43
1:X:1958:G:H2'	1:X:1959:U:H6	1.82	0.43
1:X:2029:G:C4	1:X:2602:G:C2	3.06	0.43
1:X:2065:A:OP1	23:U:43:ARG:NH1	2.51	0.43
1:X:2196:U:C2'	1:X:2197:U:H6	2.29	0.43
1:X:2395:C:OP2	11:I:63:ARG:NH1	2.51	0.43
1:X:2502:G:O2'	1:X:2503:G:H5'	2.19	0.43
1:X:2578:G:C4	1:X:2579:A:C8	3.07	0.43
1:X:2876:C:H2'	1:X:2877:A:C4	2.52	0.43
2:Y:62:C:C2	2:Y:63:A:N7	2.86	0.43
2:Y:96:C:H2'	2:Y:97:C:H6	1.82	0.43
3:A:131:LEU:HD21	3:A:193:ILE:HG12	2.00	0.43
3:A:140:ALA:O	3:A:164:GLN:HA	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:26:VAL:HB	4:B:182:ILE:HG23	2.01	0.43
4:B:93:VAL:O	4:B:95:ILE:N	2.51	0.43
5:C:8:GLY:O	5:C:9:GLN:CB	2.67	0.43
5:C:108:ILE:CG2	5:C:109:ALA:N	2.81	0.43
6:D:106:ILE:C	6:D:109:PRO:HD2	2.43	0.43
7:E:22:GLY:HA2	7:E:24:PHE:CE1	2.53	0.43
7:E:26:VAL:C	7:E:27:LYS:HG3	2.43	0.43
7:E:44:ARG:HH22	7:E:46:ASP:CA	2.31	0.43
7:E:161:GLY:O	7:E:162:VAL:C	2.61	0.43
9:G:66:HIS:O	9:G:67:ARG:O	2.36	0.43
9:G:83:ILE:O	9:G:84:ASN:HB2	2.18	0.43
11:I:90:ARG:HD2	11:I:93:LEU:HD12	2.00	0.43
12:J:59:PHE:O	12:J:60:ARG:C	2.60	0.43
13:K:73:LYS:O	13:K:76:VAL:CG1	2.63	0.43
15:M:33:VAL:CG2	15:M:51:GLU:OE1	2.65	0.43
15:M:72:SER:O	15:M:73:PHE:HB2	2.18	0.43
16:N:24:PHE:O	16:N:29:SER:HB3	2.18	0.43
16:N:66:ASN:CB	16:N:76:TYR:H	2.32	0.43
17:O:64:GLY:O	17:O:89:ASN:HA	2.17	0.43
18:P:41:VAL:C	18:P:43:ASP:N	2.75	0.43
18:P:94:GLU:CG	18:P:127:ILE:HB	2.48	0.43
19:Q:84:GLU:C	19:Q:86:GLN:H	2.27	0.43
20:R:85:ASP:CG	20:R:86:PRO:CD	2.92	0.43
20:R:85:ASP:N	20:R:90:LYS:HD3	2.32	0.43
20:R:100:ASP:O	20:R:100:ASP:OD1	2.36	0.43
21:S:56:VAL:O	21:S:57:GLU:C	2.61	0.43
21:S:141:MET:CE	21:S:169:VAL:HG23	2.48	0.43
25:W:4:LYS:HD2	25:W:52:GLU:CG	2.47	0.43
30:4:22:ARG:CG	30:4:22:ARG:NH1	2.79	0.43
1:X:26:G:H1'	1:X:524:A:N6	2.33	0.43
1:X:33:C:O2'	1:X:34:U:C5'	2.60	0.43
1:X:75:C:OP1	24:V:48:ARG:NH2	2.51	0.43
1:X:77:C:H2'	1:X:78:C:C6	2.54	0.43
1:X:307:C:C4	1:X:308:C:H5	2.36	0.43
1:X:518:A:C6	18:P:30:TYR:CE2	3.07	0.43
1:X:610:G:C8	1:X:610:G:H3'	2.54	0.43
1:X:731:A:C3'	1:X:732:G:O4'	2.67	0.43
1:X:784:U:H2'	1:X:785:U:C6	2.53	0.43
1:X:831:G:N2	1:X:1204:G:C6	2.86	0.43
1:X:1213:U:H2'	1:X:1214:C:C6	2.53	0.43
1:X:1347:C:C2	1:X:1348:C:C5	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1605:A:O2'	1:X:1606:C:H5'	2.19	0.43
1:X:1826:U:O4'	1:X:1952:A:C2	2.71	0.43
1:X:2036:G:H2'	1:X:2037:A:H5'	2.01	0.43
1:X:2044:G:H5''	1:X:2482:A:N1	2.34	0.43
1:X:2065:A:C8	1:X:2066:G:N7	2.86	0.43
1:X:2509:A:H62	7:E:172:LYS:HZ1	1.66	0.43
1:X:2598:C:C4'	4:B:150:VAL:CG2	2.96	0.43
1:X:2655:C:O2	1:X:2712:G:N2	2.51	0.43
1:X:2718:A:C2	1:X:2719:U:H1'	2.53	0.43
2:Y:76:U:O4	2:Y:105:G:N2	2.49	0.43
3:A:163:VAL:HG22	3:A:177:LEU:C	2.44	0.43
3:A:197:GLY:O	3:A:198:ASN:C	2.62	0.43
4:B:2:LYS:HA	4:B:84:PHE:CD1	2.53	0.43
5:C:45:THR:O	5:C:87:LYS:NZ	2.49	0.43
6:D:75:SER:CB	6:D:79:LEU:HD13	2.42	0.43
9:G:103:TYR:CZ	9:G:111:LYS:HA	2.53	0.43
9:G:119:LEU:HD23	9:G:119:LEU:HA	1.88	0.43
9:G:154:GLU:N	9:G:157:PRO:CD	2.80	0.43
9:G:154:GLU:N	9:G:157:PRO:HD2	2.34	0.43
11:I:32:ARG:CZ	17:O:79:GLN:HA	2.48	0.43
11:I:117:ALA:HA	11:I:137:GLY:C	2.43	0.43
12:J:19:THR:CG2	12:J:99:LYS:HZ2	2.30	0.43
15:M:5:ILE:HD12	15:M:5:ILE:O	2.19	0.43
16:N:74:MET:HB3	16:N:75:ASN:H	1.46	0.43
16:N:74:MET:HE2	16:N:79:PHE:HA	1.99	0.43
17:O:93:ILE:C	17:O:93:ILE:HD12	2.44	0.43
18:P:87:GLU:CG	18:P:88:ASP:OD2	2.64	0.43
19:Q:63:LYS:HB2	19:Q:69:ILE:O	2.17	0.43
20:R:18:LYS:N	20:R:18:LYS:CD	2.74	0.43
20:R:85:ASP:C	20:R:87:GLU:N	2.76	0.43
22:T:50:GLY:O	22:T:62:LEU:CD2	2.67	0.43
23:U:48:LYS:C	23:U:61:TRP:HE3	2.26	0.43
26:Z:42:SER:O	26:Z:43:HIS:CB	2.65	0.43
1:X:125:A:H5''	1:X:126:C:C6	2.54	0.43
1:X:165:G:C1'	1:X:1378:A:C6	3.01	0.43
1:X:223:C:H2'	1:X:224:G:C5'	2.47	0.43
1:X:318:G:H22	1:X:321:A:C5'	2.31	0.43
1:X:390:U:O5'	1:X:390:U:H6	2.02	0.43
1:X:719:A:H2'	1:X:720:A:O4'	2.19	0.43
1:X:731:A:O2'	1:X:732:G:H4'	2.18	0.43
1:X:805:G:C8	1:X:2419:C:H1'	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:872:G:H2'	1:X:873:U:OP2	2.18	0.43
1:X:1088:A:C2	1:X:1099:A:C2	3.07	0.43
1:X:1126:A:C2	1:X:1127:C:C2	3.06	0.43
1:X:1140:A:O2'	1:X:2494:C:H1'	2.17	0.43
1:X:1279:G:H1	18:P:37:LYS:HG3	1.83	0.43
1:X:1326:U:O2	1:X:1326:U:C2'	2.67	0.43
1:X:1441:A:O2'	1:X:1442:C:P	2.77	0.43
1:X:1742:G:C6	1:X:1743:C:N4	2.86	0.43
1:X:1835:C:O2'	3:A:254:THR:CB	2.66	0.43
1:X:1874:G:C6	1:X:1875:C:C4	3.07	0.43
1:X:2169:A:H2'	1:X:2170:C:H6	1.82	0.43
1:X:2271:C:H2'	1:X:2272:A:C8	2.53	0.43
1:X:2310:G:H4'	22:T:42:GLY:HA3	2.00	0.43
1:X:2314:A:O2'	1:X:2315:A:C8	2.67	0.43
1:X:2324:G:O2'	1:X:2325:A:P	2.77	0.43
1:X:2336:G:N2	1:X:2339:A:OP2	2.45	0.43
1:X:2382:C:C4	1:X:2394:G:N1	2.86	0.43
1:X:2731:G:O4'	1:X:2731:G:N3	2.51	0.43
1:X:2807:U:H6	1:X:2807:U:C5'	2.14	0.43
1:X:2807:U:O2'	1:X:2808:U:O5'	2.37	0.43
1:X:2831:A:C6	1:X:2837:G:C6	3.06	0.43
7:E:9:ILE:HD12	7:E:50:LEU:C	2.43	0.43
10:H:43:ARG:HD3	10:H:44:TYR:CE2	2.54	0.43
12:J:55:MET:CG	12:J:118:ALA:O	2.66	0.43
13:K:52:ILE:CG1	13:K:53:THR:N	2.82	0.43
14:L:33:ARG:HD2	14:L:100:VAL:HG23	2.01	0.43
15:M:14:ARG:HH22	15:M:18:GLN:CD	2.27	0.43
16:N:12:ARG:HA	16:N:15:LYS:HZ3	1.84	0.43
16:N:32:TYR:CD2	16:N:33:ARG:N	2.86	0.43
18:P:45:ILE:HD11	18:P:57:LEU:CG	2.43	0.43
19:Q:25:TYR:CE2	19:Q:82:LEU:HD11	2.54	0.43
20:R:18:LYS:HA	20:R:36:VAL:HG11	1.97	0.43
21:S:141:MET:HA	21:S:145:ASP:CB	2.49	0.43
21:S:154:LEU:HD11	21:S:160:LEU:HG	2.00	0.43
24:V:18:ILE:C	24:V:20:ALA:H	2.26	0.43
30:4:22:ARG:HD2	30:4:37:GLY:CA	2.47	0.43
1:X:402:A:H2'	1:X:402:A:N3	2.33	0.43
1:X:455:A:H1'	1:X:1215:A:O4'	2.18	0.43
1:X:632:A:H3'	1:X:633:G:C8	2.53	0.43
1:X:716:U:O4	1:X:717:G:C2	2.71	0.43
1:X:810:U:H2'	1:X:811:G:O4'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:872:G:C2'	1:X:873:U:OP2	2.67	0.43
1:X:886:A:C2	1:X:917:U:O2	2.72	0.43
1:X:953:G:H2'	1:X:954:U:O4'	2.18	0.43
1:X:1011:A:O2'	1:X:1012:A:H5'	2.19	0.43
1:X:1090:C:H2'	1:X:1091:C:H6	1.84	0.43
1:X:1279:G:O2'	1:X:1280:U:OP2	2.37	0.43
1:X:1391:A:N7	1:X:1393:G:C5	2.86	0.43
1:X:1399:C:O2'	1:X:1400:A:C5'	2.66	0.43
1:X:1402:G:H2'	1:X:1403:U:O4'	2.19	0.43
1:X:1461:C:H2'	1:X:1462:C:C6	2.53	0.43
1:X:1517:C:C4	1:X:1518:C:N4	2.87	0.43
1:X:1540:C:O2	1:X:1540:C:H2'	2.18	0.43
1:X:1745:C:H5'	15:M:106:TYR:CD2	2.52	0.43
1:X:1832:G:C6	1:X:1833:U:C4	3.06	0.43
1:X:1838:G:H3'	1:X:1839:A:C8	2.49	0.43
1:X:1909:U:H5	1:X:1911:A:H62	1.64	0.43
1:X:2037:A:N1	1:X:2595:C:C4	2.87	0.43
1:X:2272:A:P	14:L:15:ARG:NH2	2.92	0.43
1:X:2381:A:H2'	1:X:2382:C:OP2	2.18	0.43
1:X:2447:G:OP1	12:J:120:ARG:NH2	2.51	0.43
1:X:2568:A:O2'	1:X:2569:A:H5'	2.18	0.43
1:X:2586:G:N2	1:X:2587:G:N3	2.66	0.43
1:X:2586:G:C6	1:X:2587:G:C6	3.06	0.43
1:X:2700:U:O2	1:X:2701:A:C8	2.71	0.43
4:B:152:LYS:H	9:G:106:TYR:CB	2.31	0.43
5:C:10:ASN:O	5:C:11:GLY:O	2.37	0.43
5:C:130:THR:O	5:C:133:PHE:HB3	2.19	0.43
6:D:70:ALA:C	6:D:72:LYS:N	2.77	0.43
6:D:123:ASP:OD1	6:D:125:ARG:HG3	2.18	0.43
7:E:43:VAL:HG22	7:E:44:ARG:N	2.32	0.43
8:F:14:ALA:HB3	8:F:16:LYS:HZ2	1.84	0.43
9:G:61:ARG:HB3	9:G:61:ARG:CZ	2.46	0.43
10:H:3:MET:O	10:H:6:SER:HB2	2.19	0.43
11:I:18:ARG:O	11:I:19:VAL:CB	2.67	0.43
11:I:83:LEU:O	11:I:84:GLU:HB2	2.18	0.43
12:J:66:TYR:O	12:J:106:GLU:OE1	2.36	0.43
12:J:93:TYR:CD2	12:J:93:TYR:N	2.86	0.43
13:K:94:TYR:CE2	13:K:115:LEU:O	2.71	0.43
14:L:22:ALA:O	14:L:23:ALA:C	2.61	0.43
19:Q:64:ARG:C	19:Q:65:VAL:HG23	2.43	0.43
20:R:18:LYS:HE2	20:R:18:LYS:C	2.43	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:U:50:ALA:HB3	23:U:67:LEU:CD1	2.49	0.43
24:V:42:ARG:HE	24:V:46:LEU:HD21	1.83	0.43
1:X:22:C:C2	1:X:23:G:C8	3.06	0.43
1:X:518:A:C5	18:P:30:TYR:CZ	3.06	0.43
1:X:649:G:N2	1:X:661:C:C2	2.86	0.43
1:X:699:G:H4'	1:X:700:C:OP2	2.18	0.43
1:X:743:A:C2	1:X:744:C:N1	2.87	0.43
1:X:936:A:H2'	1:X:937:C:C6	2.54	0.43
1:X:1053:G:C5	1:X:1054:C:C4	3.06	0.43
1:X:1287:A:C2	1:X:1315:A:H2	2.36	0.43
1:X:1526:U:H2'	1:X:1527:G:C8	2.53	0.43
1:X:1627:C:N4	1:X:1628:C:N4	2.67	0.43
1:X:1824:C:N4	1:X:1825:C:C4	2.87	0.43
1:X:1858:C:H2'	1:X:1859:A:C8	2.53	0.43
1:X:2046:C:O2	1:X:2429:A:N1	2.52	0.43
1:X:2238:G:C5	1:X:2406:C:N4	2.86	0.43
1:X:2344:G:H4'	22:T:60:PHE:CE1	2.54	0.43
1:X:2869:U:H2'	1:X:2870:C:O4'	2.18	0.43
3:A:49:ILE:CG1	3:A:50:THR:N	2.78	0.43
3:A:222:ARG:HB3	3:A:222:ARG:NH2	2.33	0.43
5:C:58:MET:SD	5:C:69:HIS:HB3	2.58	0.43
5:C:136:TRP:CD2	5:C:140:ASN:ND2	2.87	0.43
6:D:22:TYR:CE2	6:D:29:PRO:HD3	2.54	0.43
6:D:29:PRO:HB3	6:D:160:ALA:HA	2.00	0.43
6:D:33:LYS:CB	6:D:91:LEU:O	2.64	0.43
7:E:38:ASN:H	7:E:41:LEU:HD23	1.83	0.43
9:G:156:HIS:N	9:G:157:PRO:CD	2.81	0.43
11:I:32:ARG:NH2	17:O:81:ARG:HE	2.16	0.43
12:J:31:GLY:HA2	12:J:108:ALA:HB2	2.01	0.43
12:J:75:VAL:HG21	12:J:95:VAL:HG21	2.01	0.43
14:L:29:LEU:HD12	14:L:30:SER:N	2.34	0.43
14:L:63:ASN:HB3	14:L:67:THR:N	2.34	0.43
14:L:75:LEU:O	14:L:78:ALA:CB	2.62	0.43
14:L:97:HIS:CD2	14:L:98:GLY:H	2.36	0.43
15:M:8:ASN:C	15:M:10:GLY:N	2.76	0.43
16:N:75:ASN:O	16:N:78:THR:N	2.52	0.43
17:O:68:LYS:HA	17:O:87:ARG:HB3	2.00	0.43
1:X:14:A:C6	1:X:536:A:C2	3.07	0.43
1:X:173:A:OP2	11:I:53:ARG:NH2	2.52	0.43
1:X:206:U:H3'	1:X:206:U:H6	1.84	0.43
1:X:591:G:H2'	1:X:592:G:C8	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:613:A:O2'	1:X:614:G:P	2.76	0.43
1:X:742:G:N3	1:X:1766:U:H1'	2.34	0.43
1:X:804:C:O2'	1:X:805:G:O5'	2.37	0.43
1:X:831:G:N2	1:X:1204:G:O6	2.51	0.43
1:X:931:G:H4'	2:Y:83:C:C4'	2.49	0.43
1:X:971:A:O4'	1:X:2436:U:H4'	2.19	0.43
1:X:1042:G:N1	1:X:1135:C:C4	2.87	0.43
1:X:1168:G:C2	1:X:1169:C:C2	3.07	0.43
1:X:1255:A:H2'	1:X:1256:C:C6	2.54	0.43
1:X:1313:U:H2'	1:X:1652:G:OP1	2.18	0.43
1:X:1375:C:C2	1:X:1376:C:C6	3.07	0.43
1:X:1569:A:C6	1:X:1571:G:C4	3.07	0.43
1:X:1727:C:C2	1:X:1740:G:N2	2.87	0.43
1:X:1779:C:O2	1:X:1779:C:H2'	2.19	0.43
1:X:1844:C:O2'	1:X:1845:A:O5'	2.37	0.43
1:X:1910:A:C2	1:X:1911:A:C2	3.07	0.43
1:X:1954:A:O2'	3:A:239:ARG:HB3	2.18	0.43
1:X:2197:U:C4	1:X:2198:U:C5	3.06	0.43
1:X:2237:C:O2'	1:X:2238:G:OP1	2.36	0.43
1:X:2247:A:H5'	1:X:2248:A:P	2.59	0.43
1:X:2265:A:HO2'	1:X:2266:A:H8	1.63	0.43
1:X:2293:G:C6	1:X:2294:U:C4	3.06	0.43
1:X:2487:G:C4	1:X:2561:G:N1	2.87	0.43
1:X:2608:A:O2'	1:X:2609:G:OP2	2.35	0.43
1:X:2691:C:O2'	1:X:2692:A:OP1	2.37	0.43
1:X:2738:A:OP2	1:X:2739:G:OP2	2.37	0.43
1:X:2779:C:C2'	1:X:2780:A:O4'	2.67	0.43
6:D:65:PRO:HB3	6:D:89:VAL:CG1	2.48	0.43
7:E:42:THR:O	7:E:53:GLU:N	2.52	0.43
7:E:164:PHE:O	7:E:167:GLU:HB2	2.19	0.43
8:F:23:VAL:HG13	8:F:26:ALA:HB3	2.01	0.43
8:F:100:ASN:HB3	8:F:103:GLN:HE22	1.84	0.43
9:G:154:GLU:N	9:G:157:PRO:CG	2.81	0.43
10:H:77:THR:C	10:H:79:HIS:N	2.73	0.43
11:I:36:GLY:O	11:I:37:GLN:CB	2.67	0.43
11:I:82:ASP:N	11:I:114:ILE:HG21	2.27	0.43
12:J:26:ASP:O	12:J:27:TYR:HD1	2.01	0.43
12:J:92:GLU:OE1	12:J:92:GLU:HA	2.18	0.43
14:L:51:LEU:N	14:L:51:LEU:HD12	2.34	0.43
15:M:27:PHE:HB3	15:M:93:ILE:CD1	2.39	0.43
15:M:29:PRO:C	15:M:30:GLY:O	2.62	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:N:30:LYS:HB3	16:N:30:LYS:HZ2	1.83	0.43
19:Q:91:LEU:HD13	19:Q:91:LEU:HA	1.81	0.43
21:S:4:THR:CG2	21:S:57:GLU:HB2	2.48	0.43
21:S:61:THR:O	21:S:62:PHE:CD2	2.71	0.43
21:S:96:VAL:C	21:S:119:ASN:OD1	2.62	0.43
21:S:163:ASP:HA	21:S:164:PRO:HD3	1.75	0.43
23:U:51:ILE:O	23:U:52:ARG:HD3	2.19	0.43
23:U:62:LEU:HD23	23:U:67:LEU:CB	2.48	0.43
24:V:24:GLU:O	24:V:25:LEU:C	2.61	0.43
25:W:3:ILE:HG21	25:W:25:LEU:HD11	2.01	0.43
25:W:38:PRO:HA	25:W:41:ARG:CD	2.49	0.43
1:X:16:G:C2	1:X:17:G:C8	3.07	0.43
1:X:57:G:C4	1:X:58:C:C5	3.07	0.43
1:X:137:A:H2'	1:X:138:G:O4'	2.19	0.43
1:X:174:A:O2'	1:X:2223:U:OP1	2.37	0.43
1:X:546:A:H61	1:X:565:A:N6	2.16	0.43
1:X:634:G:H2'	1:X:635:C:C6	2.46	0.43
1:X:734:G:O2'	1:X:735:G:H5'	2.18	0.43
1:X:819:C:O2'	1:X:820:U:H5'	2.19	0.43
1:X:1249:G:OP2	1:X:1249:G:C8	2.72	0.43
1:X:1330:G:C4	1:X:1331:G:C8	3.06	0.43
1:X:1424:U:C2	1:X:1425:G:C8	3.07	0.43
1:X:1474:A:H2'	1:X:1474:A:N3	2.34	0.43
1:X:1526:U:H3'	1:X:1527:G:C8	2.54	0.43
1:X:1549:C:H2'	1:X:1550:C:O4'	2.19	0.43
1:X:1573:G:C3'	1:X:1574:A:C5'	2.88	0.43
1:X:1602:G:P	1:X:1602:G:O4'	2.77	0.43
1:X:1636:G:H2'	1:X:1637:U:H6	1.83	0.43
1:X:1746:A:C2'	1:X:1747:G:O5'	2.67	0.43
1:X:1872:A:C1'	1:X:2070:G:H5'	2.49	0.43
1:X:2006:G:H4'	1:X:2596:C:O2'	2.19	0.43
1:X:2083:G:N2	1:X:2172:U:O2	2.51	0.43
1:X:2599:U:O4'	4:B:156:MET:HG3	2.18	0.43
2:Y:67:C:C5	2:Y:111:C:C5	3.07	0.43
3:A:131:LEU:HD23	3:A:131:LEU:H	1.83	0.43
3:A:155:LEU:HD13	3:A:177:LEU:HD21	2.01	0.43
3:A:171:ASP:O	3:A:186:HIS:HA	2.17	0.43
3:A:251:GLY:HA3	3:A:255:LYS:CE	2.49	0.43
4:B:75:THR:HG21	4:B:78:LEU:HD21	2.01	0.43
5:C:45:THR:C	5:C:47:THR:H	2.26	0.43
5:C:176:ASN:O	5:C:177:VAL:C	2.62	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:114:PHE:O	6:D:115:ARG:HG3	2.19	0.43
10:H:116:ARG:NH1	15:M:38:LYS:NZ	2.67	0.43
14:L:27:LEU:HB3	14:L:42:ILE:CD1	2.48	0.43
15:M:100:ARG:O	15:M:101:ARG:HB3	2.19	0.43
18:P:76:LYS:O	18:P:78:ASN:N	2.52	0.43
19:Q:27:PHE:HZ	19:Q:42:ILE:HD13	1.83	0.43
21:S:52:PHE:CG	21:S:53:ASP:N	2.87	0.43
21:S:90:GLU:HA	21:S:127:PRO:HD3	2.00	0.43
21:S:145:ASP:O	21:S:170:SER:HA	2.19	0.43
21:S:154:LEU:HD21	21:S:160:LEU:HD11	2.01	0.43
25:W:23:LEU:CD2	25:W:43:MET:HE3	2.49	0.43
1:X:80:A:C6	1:X:81:C:N3	2.87	0.42
1:X:331:U:O2'	5:C:162:ARG:HD2	2.18	0.42
1:X:393:U:O2'	1:X:394:U:H5'	2.18	0.42
1:X:421:G:C6	1:X:433:G:C6	3.07	0.42
1:X:497:C:H6	1:X:497:C:C3'	2.30	0.42
1:X:503:G:C4	1:X:504:G:C8	3.07	0.42
1:X:562:G:H2'	1:X:563:U:O4'	2.19	0.42
1:X:1314:A:C2	1:X:1642:G:N2	2.77	0.42
1:X:1330:G:H2'	1:X:1331:G:O4'	2.19	0.42
1:X:1389:C:N4	1:X:1390:G:N1	2.67	0.42
1:X:1514:C:O4'	1:X:1593:C:C4'	2.60	0.42
1:X:1551:U:H5'	1:X:1552:C:C5	2.53	0.42
1:X:1685:A:H4'	1:X:1686:A:O5'	2.19	0.42
1:X:1854:G:C2'	1:X:1855:G:H5'	2.40	0.42
1:X:1873:A:N7	1:X:1874:G:C8	2.87	0.42
1:X:2184:C:H2'	1:X:2185:U:H6	1.83	0.42
1:X:2289:A:C2	6:D:79:LEU:HD11	2.54	0.42
1:X:2496:C:HO2'	1:X:2497:A:P	2.41	0.42
1:X:2551:A:HO2'	1:X:2552:C:P	2.41	0.42
1:X:2637:C:N4	1:X:2643:G:N2	2.67	0.42
1:X:2818:G:C6	1:X:2819:G:C5	3.07	0.42
2:Y:62:C:H2'	2:Y:63:A:C8	2.54	0.42
3:A:211:ARG:HG2	3:A:211:ARG:HH11	1.84	0.42
3:A:222:ARG:NH2	3:A:222:ARG:CB	2.82	0.42
4:B:102:ILE:H	4:B:170:LEU:H	1.67	0.42
5:C:23:ASN:C	5:C:27:LEU:CD1	2.92	0.42
5:C:58:MET:HG2	5:C:59:TYR:N	2.34	0.42
11:I:32:ARG:CZ	17:O:81:ARG:NE	2.82	0.42
13:K:26:THR:O	13:K:29:LEU:N	2.52	0.42
14:L:8:ARG:HB3	14:L:8:ARG:NH1	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:17:GLU:O	15:M:21:THR:OG1	2.29	0.42
16:N:52:ASN:O	16:N:53:LYS:C	2.62	0.42
17:O:32:LYS:N	17:O:58:ALA:O	2.40	0.42
18:P:100:GLY:O	18:P:101:PRO:O	2.37	0.42
19:Q:88:ILE:HD11	19:Q:91:LEU:HB2	2.00	0.42
20:R:84:VAL:HG11	20:R:87:GLU:C	2.43	0.42
21:S:43:PHE:CD1	21:S:47:SER:HA	2.54	0.42
21:S:148:THR:CB	21:S:164:PRO:O	2.67	0.42
26:Z:51:TYR:HA	26:Z:54:GLY:O	2.19	0.42
1:X:185:C:H2'	1:X:186:C:H6	1.84	0.42
1:X:413:G:C8	1:X:413:G:H3'	2.53	0.42
1:X:496:C:H2'	1:X:497:C:H5''	2.00	0.42
1:X:611:C:O4'	5:C:98:GLN:OE1	2.36	0.42
1:X:691:C:C4	1:X:692:C:C5	3.07	0.42
1:X:754:G:H2'	1:X:755:C:C6	2.54	0.42
1:X:1033:G:C6	1:X:1151:U:C5	3.07	0.42
1:X:1040:A:N7	1:X:1041:G:C8	2.87	0.42
1:X:1078:A:C2	1:X:1079:G:C4	3.07	0.42
1:X:1104:G:H1'	1:X:1109:A:H61	1.84	0.42
1:X:1226:A:C1'	1:X:1250:A:C2	3.02	0.42
1:X:1349:A:H2'	1:X:1350:G:C8	2.54	0.42
1:X:1368:G:C4	1:X:1369:G:C8	3.08	0.42
1:X:1661:C:O2	1:X:1661:C:C2'	2.68	0.42
1:X:1816:G:H2'	1:X:1817:U:H6	1.84	0.42
1:X:1949:A:H1'	1:X:2572:U:H5'	2.00	0.42
1:X:2015:G:O6	1:X:2551:A:C4	2.72	0.42
1:X:2027:C:C2	1:X:2604:G:N2	2.86	0.42
1:X:2048:C:H1'	1:X:2428:U:H3	1.83	0.42
1:X:2083:G:C8	1:X:2083:G:H3'	2.55	0.42
1:X:2598:C:OP1	4:B:152:LYS:NZ	2.51	0.42
4:B:179:GLU:O	4:B:180:ASN:C	2.61	0.42
5:C:130:THR:O	5:C:133:PHE:N	2.52	0.42
7:E:28:GLY:HA3	7:E:79:VAL:HG21	2.01	0.42
8:F:100:ASN:H	8:F:103:GLN:NE2	2.17	0.42
9:G:33:ILE:O	9:G:69:ASP:CG	2.61	0.42
10:H:4:PRO:O	10:H:5:GLN:CB	2.67	0.42
10:H:25:LEU:HD11	10:H:52:VAL:N	2.34	0.42
11:I:77:LEU:HD23	11:I:112:GLY:O	2.19	0.42
12:J:15:ARG:HB3	12:J:16:GLY:H	1.41	0.42
12:J:42:TRP:CB	12:J:95:VAL:HG11	2.47	0.42
13:K:106:ASP:CG	13:K:108:VAL:HG23	2.44	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:L:70:ALA:O	14:L:74:ALA:HB2	2.19	0.42
16:N:93:LYS:HD3	17:O:5:ILE:CG2	2.48	0.42
17:O:61:VAL:HG23	17:O:93:ILE:CA	2.49	0.42
21:S:5:ALA:C	21:S:6:LYS:HG2	2.41	0.42
21:S:63:PRO:O	21:S:86:VAL:N	2.52	0.42
22:T:56:ASP:C	22:T:58:THR:N	2.76	0.42
30:4:19:ARG:H	30:4:24:LEU:CD1	2.32	0.42
30:4:25:VAL:CG2	30:4:34:GLN:HB2	2.49	0.42
1:X:174:A:H2'	1:X:174:A:N3	2.34	0.42
1:X:322:A:N3	1:X:322:A:H2'	2.35	0.42
1:X:396:U:N3	1:X:398:C:C4	2.87	0.42
1:X:417:C:N3	1:X:419:G:C6	2.87	0.42
1:X:773:G:H2'	1:X:774:A:H5'	1.99	0.42
1:X:818:G:HO2'	1:X:844:G:HO2'	1.51	0.42
1:X:991:A:C6	1:X:992:A:N1	2.87	0.42
1:X:1089:C:O2'	1:X:1099:A:OP1	2.37	0.42
1:X:1300:A:C8	13:K:106:ASP:OD2	2.73	0.42
1:X:1498:G:C4	1:X:1523:A:C2	3.07	0.42
1:X:1631:C:O2	1:X:1631:C:C2'	2.66	0.42
1:X:1728:A:O2'	1:X:1729:C:H5'	2.20	0.42
1:X:1847:G:H8	1:X:1847:G:O5'	2.02	0.42
1:X:2046:C:O2	1:X:2430:A:N1	2.51	0.42
1:X:2320:G:H2'	1:X:2321:C:C6	2.54	0.42
1:X:2323:U:O2'	1:X:2324:G:H3'	2.19	0.42
1:X:2470:U:H2'	1:X:2470:U:O2	2.19	0.42
1:X:2667:C:C5	1:X:2699:G:C5	3.07	0.42
1:X:2720:A:C8	1:X:2743:G:N2	2.88	0.42
1:X:2727:G:N2	1:X:2736:U:C6	2.87	0.42
2:Y:50:U:H2'	2:Y:51:G:C8	2.53	0.42
2:Y:62:C:C2	2:Y:63:A:C8	3.07	0.42
4:B:51:TYR:O	4:B:52:ALA:C	2.58	0.42
6:D:13:ARG:O	6:D:17:MET:SD	2.77	0.42
6:D:32:GLU:HG2	6:D:33:LYS:HG2	2.02	0.42
6:D:65:PRO:HB2	6:D:87:ILE:CG2	2.41	0.42
7:E:126:PRO:CG	7:E:130:ARG:HB3	2.49	0.42
7:E:157:TYR:O	7:E:158:HIS:CG	2.72	0.42
9:G:42:VAL:HG12	9:G:43:VAL:N	2.33	0.42
9:G:85:ALA:O	9:G:88:VAL:N	2.50	0.42
11:I:134:GLU:C	11:I:136:ALA:N	2.69	0.42
12:J:54:VAL:O	12:J:55:MET:C	2.61	0.42
14:L:16:LYS:O	14:L:19:THR:HB	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:M:29:PRO:O	15:M:30:GLY:O	2.37	0.42
19:Q:68:PHE:C	19:Q:69:ILE:HD12	2.41	0.42
20:R:16:PHE:CE2	20:R:80:LYS:NZ	2.87	0.42
20:R:95:ARG:HG3	20:R:105:ARG:O	2.18	0.42
20:R:98:ILE:HB	20:R:100:ASP:H	1.83	0.42
23:U:53:GLU:OE2	23:U:57:VAL:HG22	2.19	0.42
1:X:115:G:C6	1:X:117:A:C6	3.07	0.42
1:X:182:G:O2'	1:X:183:U:OP2	2.36	0.42
1:X:698:A:C2	1:X:702:A:N1	2.87	0.42
1:X:869:C:O2	1:X:934:G:C2	2.72	0.42
1:X:1016:C:O2	1:X:1016:C:H2'	2.18	0.42
1:X:1098:G:OP2	1:X:1098:G:H8	2.02	0.42
1:X:1236:G:N2	1:X:1239:A:OP2	2.48	0.42
1:X:1247:U:OP2	18:P:11:LYS:HE2	2.19	0.42
1:X:1332:G:N7	1:X:1333:G:C6	2.87	0.42
1:X:1705:U:O4'	1:X:1718:A:N6	2.52	0.42
1:X:1869:A:O2'	1:X:1870:U:H5'	2.19	0.42
1:X:1978:U:OP2	1:X:1979:C:H3'	2.19	0.42
1:X:1996:A:N6	1:X:2592:U:C4	2.87	0.42
1:X:2014:A:O2'	1:X:2015:G:P	2.77	0.42
1:X:2048:C:H2'	1:X:2049:C:C6	2.54	0.42
1:X:2229:G:N3	1:X:2229:G:O4'	2.51	0.42
1:X:2438:A:C6	1:X:2439:U:N3	2.88	0.42
1:X:2756:A:H4'	1:X:2758:A:OP1	2.20	0.42
1:X:2799:C:C5	1:X:2800:C:C5	3.08	0.42
1:X:2814:G:C2	1:X:2815:C:H1'	2.54	0.42
3:A:69:ARG:CZ	3:A:105:ILE:HD13	2.49	0.42
3:A:210:GLY:HA2	3:A:213:ARG:CG	2.50	0.42
3:A:214:TRP:HE3	3:A:214:TRP:HA	1.85	0.42
5:C:95:LEU:HD23	5:C:96:PRO:CD	2.34	0.42
6:D:11:GLN:O	6:D:15:ALA:CB	2.62	0.42
6:D:148:LYS:HG3	6:D:149:THR:H	1.83	0.42
7:E:109:TYR:HE1	7:E:152:ARG:NH1	2.16	0.42
8:F:101:TRP:HZ3	8:F:140:GLY:HA3	1.85	0.42
8:F:107:ILE:HG23	8:F:111:LYS:HD3	2.02	0.42
9:G:42:VAL:CG1	9:G:43:VAL:N	2.81	0.42
9:G:58:ILE:HG21	9:G:148:LEU:HD13	2.01	0.42
9:G:85:ALA:C	9:G:87:GLN:N	2.76	0.42
10:H:16:ALA:HA	10:H:58:ALA:HA	2.01	0.42
11:I:82:ASP:HA	11:I:114:ILE:CD1	2.49	0.42
11:I:120:VAL:HG12	11:I:122:VAL:H	1.83	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:J:106:GLU:OE1	12:J:106:GLU:O	2.38	0.42
14:L:89:PHE:HB2	14:L:91:ARG:HH21	1.85	0.42
17:O:42:GLY:O	17:O:43:GLU:CB	2.67	0.42
19:Q:11:VAL:H	19:Q:27:PHE:HA	1.84	0.42
19:Q:88:ILE:CD1	19:Q:91:LEU:HB2	2.50	0.42
20:R:8:SER:C	20:R:10:HIS:N	2.76	0.42
21:S:5:ALA:O	21:S:6:LYS:HB3	2.19	0.42
23:U:23:LYS:HA	23:U:36:GLY:O	2.19	0.42
25:W:22:ALA:C	25:W:24:GLY:N	2.76	0.42
26:Z:29:ASN:HD22	26:Z:29:ASN:HA	1.51	0.42
1:X:162:C:H2'	1:X:163:A:C8	2.54	0.42
1:X:333:A:C5'	5:C:162:ARG:HD2	2.49	0.42
1:X:582:G:O4'	1:X:582:G:OP2	2.38	0.42
1:X:649:G:N2	1:X:660:G:N2	2.67	0.42
1:X:678:G:C6	1:X:679:C:C4	3.08	0.42
1:X:874:A:H1'	1:X:929:A:N6	2.34	0.42
1:X:1013:G:H8	1:X:1013:G:H5''	1.84	0.42
1:X:1017:C:O2'	1:X:1018:C:H5'	2.20	0.42
1:X:1025:A:C2	1:X:1160:C:C2	3.07	0.42
1:X:1053:G:C2	1:X:1054:C:C2	3.08	0.42
1:X:1101:U:C2	1:X:1113:C:H1'	2.53	0.42
1:X:1234:C:H2'	1:X:1235:C:C6	2.53	0.42
1:X:1257:U:OP1	11:I:17:LYS:HE3	2.18	0.42
1:X:1293:A:O2'	1:X:1294:G:H5'	2.20	0.42
1:X:1377:G:H1'	1:X:1381:G:N2	2.35	0.42
1:X:1629:G:C4	1:X:1633:C:N4	2.87	0.42
1:X:2067:U:H2'	1:X:2068:C:C6	2.54	0.42
1:X:2262:C:H5''	1:X:2368:G:O2'	2.19	0.42
1:X:2289:A:C2	6:D:79:LEU:HD21	2.42	0.42
1:X:2468:G:C6	1:X:2469:G:N1	2.87	0.42
1:X:2526:U:H2'	1:X:2527:G:H8	1.84	0.42
1:X:2634:G:O2'	1:X:2643:G:N1	2.50	0.42
1:X:2796:A:C5'	4:B:162:MET:CE	2.91	0.42
1:X:2823:G:O2'	1:X:2824:C:C6	2.72	0.42
1:X:2827:G:C5	1:X:2828:C:C4	3.08	0.42
2:Y:42:U:H1'	2:Y:47:A:N6	2.34	0.42
2:Y:45:C:H5'	2:Y:46:G:OP1	2.19	0.42
3:A:117:VAL:HG22	3:A:128:GLY:CA	2.50	0.42
3:A:155:LEU:HD13	3:A:177:LEU:CD2	2.50	0.42
4:B:31:CYS:HB3	4:B:49:ILE:CD1	2.49	0.42
4:B:97:ALA:H	4:B:100:GLU:CD	2.27	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:43:ALA:HB1	5:C:86:PRO:HB2	2.01	0.42
5:C:47:THR:HB	5:C:48:ARG:HD2	2.00	0.42
5:C:151:VAL:HG11	5:C:173:ALA:HA	2.00	0.42
6:D:34:ILE:HD13	6:D:156:ILE:HA	2.02	0.42
6:D:40:LEU:HD21	6:D:87:ILE:HD11	2.01	0.42
6:D:65:PRO:N	6:D:89:VAL:HG13	2.34	0.42
6:D:106:ILE:O	6:D:110:ARG:N	2.46	0.42
7:E:98:LEU:HD12	7:E:102:ALA:O	2.19	0.42
7:E:109:TYR:CE1	7:E:152:ARG:NH1	2.87	0.42
9:G:116:ARG:O	9:G:117:GLU:C	2.61	0.42
10:H:11:ALA:O	10:H:110:VAL:HA	2.20	0.42
11:I:90:ARG:NH2	11:I:93:LEU:HD12	2.34	0.42
12:J:97:VAL:O	12:J:97:VAL:CG2	2.67	0.42
14:L:15:ARG:O	14:L:16:LYS:C	2.62	0.42
14:L:42:ILE:HG23	14:L:51:LEU:HB2	2.01	0.42
15:M:24:LEU:O	15:M:25:PRO:C	2.63	0.42
18:P:36:ARG:CZ	26:Z:20:ARG:CZ	2.96	0.42
18:P:89:ARG:HG3	18:P:131:LYS:HB3	2.01	0.42
18:P:91:PHE:HD1	18:P:91:PHE:H	1.68	0.42
19:Q:29:VAL:HG23	19:Q:30:SER:N	2.33	0.42
21:S:97:PRO:HB2	21:S:99:HIS:HE1	1.84	0.42
21:S:98:VAL:HG11	21:S:168:VAL:CG1	2.50	0.42
21:S:141:MET:SD	21:S:147:ILE:HG12	2.60	0.42
22:T:40:GLN:NE2	22:T:42:GLY:O	2.53	0.42
23:U:19:ILE:H	23:U:19:ILE:HG23	1.58	0.42
24:V:22:LYS:HA	24:V:25:LEU:HB3	2.01	0.42
25:W:9:VAL:HG13	25:W:17:VAL:HG22	1.99	0.42
30:4:11:CYS:SG	30:4:32:HIS:CE1	3.12	0.42
1:X:24:G:C6	1:X:25:U:C2	3.07	0.42
1:X:303:C:O2	1:X:360:A:C2	2.73	0.42
1:X:678:G:O3'	11:I:50:GLU:CD	2.63	0.42
1:X:697:G:C2	1:X:787:A:C2	3.08	0.42
1:X:794:A:H4'	3:A:221:GLN:OE1	2.19	0.42
1:X:833:A:N3	1:X:954:U:O2'	2.47	0.42
1:X:849:G:C5	1:X:850:C:C5	3.07	0.42
1:X:1122:A:C2'	1:X:1123:G:O5'	2.67	0.42
1:X:1200:G:N7	1:X:1201:G:N7	2.68	0.42
1:X:1429:A:C2	1:X:1603:A:H1'	2.54	0.42
1:X:1673:C:C2	1:X:1674:C:H5	2.37	0.42
1:X:1733:U:H2'	1:X:1734:C:C6	2.55	0.42
1:X:1790:G:HO2'	1:X:1791:C:C5'	2.32	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1811:A:H4'	1:X:1812:U:C5'	2.46	0.42
1:X:1947:G:O2'	1:X:1950:C:P	2.78	0.42
1:X:1971:C:C2'	1:X:1972:G:H5'	2.49	0.42
1:X:2043:A:HO2'	1:X:2044:G:P	2.43	0.42
1:X:2056:C:H2'	1:X:2057:U:C6	2.52	0.42
1:X:2196:U:C3'	1:X:2197:U:H6	2.33	0.42
1:X:2225:G:H2'	1:X:2226:A:C8	2.55	0.42
1:X:2258:G:C4	1:X:2259:G:C8	3.07	0.42
1:X:2269:G:H2'	1:X:2270:U:C6	2.55	0.42
1:X:2269:G:H2'	1:X:2270:U:H6	1.83	0.42
1:X:2494:C:N3	1:X:2549:G:C6	2.88	0.42
1:X:2608:A:O2'	1:X:2609:G:P	2.77	0.42
1:X:2691:C:H2'	1:X:2692:A:H3'	2.02	0.42
1:X:2707:G:C4	1:X:2708:U:C5	3.08	0.42
1:X:2741:G:N2	7:E:150:LYS:HZ3	2.17	0.42
1:X:2856:U:N3	1:X:2857:C:C5	2.87	0.42
3:A:97:TYR:C	3:A:99:ASP:N	2.73	0.42
3:A:245:VAL:N	3:A:252:LYS:HE2	2.33	0.42
4:B:110:GLY:O	13:K:3:HIS:CD2	2.73	0.42
5:C:20:PRO:HG2	5:C:21:GLU:H	1.85	0.42
6:D:71:LYS:O	6:D:72:LYS:HB2	2.20	0.42
7:E:127:GLU:C	7:E:129:THR:N	2.66	0.42
9:G:101:THR:HG23	9:G:103:TYR:CE1	2.55	0.42
9:G:157:PRO:O	9:G:159:SER:N	2.53	0.42
10:H:41:ASN:O	10:H:42:LYS:CB	2.61	0.42
10:H:59:ALA:HB1	10:H:60:PRO:CD	2.50	0.42
11:I:123:ASP:O	11:I:124:ALA:HB2	2.19	0.42
12:J:40:PRO:CG	12:J:99:LYS:NZ	2.79	0.42
12:J:128:ILE:CD1	12:J:130:THR:CG2	2.98	0.42
14:L:31:VAL:O	14:L:94:TYR:HE1	2.02	0.42
15:M:33:VAL:HG23	15:M:94:VAL:HG21	2.01	0.42
16:N:74:MET:SD	16:N:79:PHE:HB2	2.60	0.42
16:N:93:LYS:CE	17:O:10:LYS:NZ	2.78	0.42
17:O:19:VAL:HG13	17:O:90:PHE:CG	2.55	0.42
19:Q:27:PHE:CZ	19:Q:42:ILE:HD13	2.55	0.42
19:Q:47:GLY:O	19:Q:48:VAL:HB	2.19	0.42
19:Q:86:GLN:O	19:Q:87:SER:OG	2.37	0.42
21:S:22:VAL:O	21:S:83:PHE:N	2.43	0.42
21:S:51:LEU:CA	21:S:65:LEU:HD13	2.49	0.42
21:S:128:ARG:CG	21:S:129:ARG:N	2.82	0.42
24:V:37:LEU:CD2	24:V:40:PRO:CA	2.97	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:W:12:ARG:HA	25:W:12:ARG:HD3	1.76	0.42
26:Z:14:SER:O	26:Z:17:ASP:HB2	2.19	0.42
1:X:172:A:N7	1:X:175:C:H5	2.12	0.42
1:X:204:A:N6	1:X:2386:G:H8	2.18	0.42
1:X:244:C:H3'	1:X:245:C:H5''	2.02	0.42
1:X:319:G:N7	18:P:12:LYS:NZ	2.64	0.42
1:X:504:G:N2	18:P:78:ASN:HD21	2.18	0.42
1:X:609:U:H4'	11:I:18:ARG:NH1	2.35	0.42
1:X:640:C:C4'	1:X:660:G:H21	2.32	0.42
1:X:665:A:C2	1:X:666:U:H5''	2.52	0.42
1:X:959:C:H2'	1:X:960:U:C6	2.54	0.42
1:X:1163:C:H2'	1:X:1164:C:H6	1.85	0.42
1:X:1414:G:H2'	1:X:1415:C:O4'	2.19	0.42
1:X:1544:A:C8	1:X:1545:G:C1'	3.03	0.42
1:X:1672:A:O4'	4:B:113:THR:HG22	2.18	0.42
1:X:1713:G:C5	1:X:1714:A:C8	3.08	0.42
1:X:1809:G:OP1	3:A:88:ARG:NH2	2.51	0.42
1:X:1956:G:C6	1:X:1957:C:C4	3.07	0.42
1:X:2082:C:C2'	1:X:2083:G:H5'	2.43	0.42
1:X:2209:G:H4'	23:U:46:LEU:HB2	2.01	0.42
1:X:2279:G:O2'	1:X:2280:A:H5'	2.19	0.42
1:X:2667:C:H5	1:X:2699:G:C5	2.37	0.42
1:X:2738:A:C2'	1:X:2739:G:H5'	2.49	0.42
3:A:231:HIS:CE1	3:A:247:VAL:HA	2.55	0.42
4:B:88:GLY:O	4:B:89:ASP:CG	2.62	0.42
5:C:135:SER:O	5:C:136:TRP:C	2.61	0.42
7:E:38:ASN:ND2	7:E:64:LEU:CD1	2.81	0.42
9:G:66:HIS:HA	16:N:67:ALA:HB1	2.00	0.42
12:J:64:LYS:CB	12:J:108:ALA:O	2.68	0.42
14:L:54:ALA:N	14:L:75:LEU:CD1	2.81	0.42
14:L:87:VAL:C	14:L:88:VAL:CG2	2.93	0.42
14:L:98:GLY:O	14:L:101:LYS:N	2.53	0.42
15:M:13:LEU:O	15:M:14:ARG:C	2.62	0.42
16:N:114:ARG:NH1	16:N:115:ASN:OD1	2.52	0.42
18:P:35:PRO:O	18:P:39:ARG:HD2	2.19	0.42
20:R:58:VAL:O	20:R:60:PRO:HD3	2.19	0.42
30:4:19:ARG:HH11	30:4:19:ARG:HG3	1.85	0.42
1:X:43:A:H8	1:X:43:A:O5'	2.02	0.42
1:X:322:A:C2'	1:X:323:G:OP1	2.67	0.42
1:X:559:C:O2	1:X:560:G:H1'	2.19	0.42
1:X:577:U:O2	1:X:579:G:H8	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:589:C:H5''	16:N:31:GLN:HE22	1.84	0.42
1:X:720:A:C5	1:X:721:C:C4	3.07	0.42
1:X:769:C:O2'	1:X:770:U:H5'	2.20	0.42
1:X:1061:A:N1	1:X:2731:G:C6	2.88	0.42
1:X:1250:A:O2'	1:X:1251:G:C1'	2.68	0.42
1:X:1301:U:H2'	1:X:1340:C:O2	2.19	0.42
1:X:1394:G:C4	1:X:1395:A:C8	3.08	0.42
1:X:1595:A:H2'	1:X:1596:A:C8	2.55	0.42
1:X:2477:C:H5'	1:X:2477:C:H6	1.85	0.42
1:X:2636:A:H2'	1:X:2637:C:H5'	2.01	0.42
1:X:2713:A:N1	4:B:203:LYS:CG	2.80	0.42
2:Y:78:A:O5'	2:Y:78:A:H8	2.02	0.42
2:Y:102:A:C4	2:Y:103:A:C8	3.08	0.42
4:B:29:GLY:C	4:B:180:ASN:HD22	2.28	0.42
4:B:178:GLY:C	4:B:179:GLU:HG2	2.43	0.42
5:C:158:ARG:HD2	5:C:169:VAL:CG1	2.50	0.42
9:G:132:PHE:CE2	9:G:145:HIS:CB	3.02	0.42
11:I:42:GLY:O	11:I:43:ALA:CB	2.60	0.42
13:K:25:ALA:O	13:K:26:THR:C	2.61	0.42
13:K:45:ARG:CB	13:K:46:PRO:CD	2.94	0.42
15:M:36:ASP:C	15:M:36:ASP:OD1	2.62	0.42
16:N:7:GLY:O	16:N:9:VAL:N	2.52	0.42
17:O:10:LYS:HG3	17:O:11:GLN:HG2	2.01	0.42
21:S:3:LEU:CA	21:S:34:LEU:HA	2.48	0.42
22:T:37:LEU:C	22:T:38:VAL:CG2	2.93	0.42
22:T:41:ARG:NH1	22:T:41:ARG:CG	2.73	0.42
22:T:56:ASP:C	22:T:58:THR:H	2.27	0.42
26:Z:3:LYS:HD2	26:Z:3:LYS:N	2.35	0.42
1:X:57:G:H2'	1:X:58:C:H6	1.85	0.42
1:X:318:G:H5'	1:X:318:G:C8	2.55	0.42
1:X:347:C:H2'	1:X:348:U:C6	2.54	0.42
1:X:528:G:C5'	18:P:39:ARG:HH12	2.33	0.42
1:X:528:G:H2'	1:X:529:U:C6	2.54	0.42
1:X:847:C:N3	1:X:848:A:N7	2.67	0.42
1:X:956:A:C2	1:X:2427:A:N3	2.88	0.42
1:X:1135:C:C2	1:X:1136:G:N7	2.88	0.42
1:X:1249:G:O2'	1:X:1250:A:O5'	2.35	0.42
1:X:1404:C:C2	1:X:1406:A:N7	2.87	0.42
1:X:1675:C:OP1	4:B:134:TRP:CD1	2.73	0.42
1:X:1750:A:N7	1:X:2675:U:H1'	2.35	0.42
1:X:1781:C:H5''	3:A:219:PRO:HG2	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1845:A:H2'	1:X:1846:A:O5'	2.20	0.42
1:X:1885:C:H5'	3:A:244:ARG:CD	2.28	0.42
1:X:2346:G:O2'	1:X:2347:C:H5'	2.20	0.42
1:X:2598:C:C4'	4:B:150:VAL:HG22	2.49	0.42
1:X:2836:U:O2'	1:X:2837:G:H5'	2.20	0.42
2:Y:15:A:O2'	2:Y:17:A:H5''	2.20	0.42
3:A:208:LYS:HA	3:A:208:LYS:NZ	2.34	0.42
4:B:156:MET:O	4:B:157:ALA:C	2.63	0.42
5:C:22:VAL:HG22	5:C:106:MET:O	2.20	0.42
5:C:45:THR:CG2	5:C:47:THR:H	2.29	0.42
6:D:9:ASN:O	6:D:13:ARG:N	2.52	0.42
6:D:27:ALA:O	6:D:28:VAL:C	2.62	0.42
6:D:32:GLU:O	6:D:33:LYS:HB3	2.20	0.42
6:D:122:PHE:O	6:D:124:GLY:N	2.53	0.42
7:E:28:GLY:HA3	7:E:79:VAL:CB	2.50	0.42
7:E:78:GLY:C	7:E:80:SER:H	2.28	0.42
7:E:137:ASP:O	7:E:141:VAL:HG23	2.19	0.42
10:H:76:ARG:NH1	10:H:113:PRO:O	2.52	0.42
12:J:51:CYS:SG	12:J:126:LEU:HD21	2.60	0.42
16:N:101:ARG:C	16:N:103:PRO:HD3	2.44	0.42
17:O:40:VAL:HG12	17:O:43:GLU:O	2.20	0.42
17:O:64:GLY:HA3	17:O:90:PHE:CE2	2.54	0.42
18:P:102:THR:HG22	18:P:104:LYS:HD3	2.02	0.42
18:P:133:ASN:ND2	18:P:133:ASN:N	2.68	0.42
19:Q:35:LYS:O	19:Q:38:ILE:CG2	2.67	0.42
19:Q:84:GLU:C	19:Q:86:GLN:N	2.78	0.42
20:R:18:LYS:HZ3	20:R:19:GLY:N	2.18	0.42
20:R:18:LYS:HE2	20:R:19:GLY:N	2.35	0.42
22:T:3:HIS:CD2	22:T:4:LYS:H	2.37	0.42
25:W:5:LEU:HG	25:W:28:ILE:HA	2.02	0.42
25:W:45:LYS:O	25:W:48:LYS:HB2	2.20	0.42
1:X:81:C:H2'	1:X:82:G:O4'	2.20	0.42
1:X:146:C:H2'	1:X:147:G:O4'	2.20	0.42
1:X:148:C:O2	1:X:148:C:H2'	2.19	0.42
1:X:173:A:H61	1:X:844:G:N2	2.13	0.42
1:X:333:A:H5''	5:C:162:ARG:CD	2.50	0.42
1:X:788:G:O2'	1:X:789:G:OP2	2.29	0.42
1:X:814:G:OP2	5:C:56:ARG:NH1	2.53	0.42
1:X:840:U:H4'	1:X:841:G:N2	2.35	0.42
1:X:1089:C:C1'	1:X:1099:A:C2	3.03	0.42
1:X:1279:G:OP1	26:Z:23:HIS:CE1	2.69	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1310:C:OP1	1:X:2689:C:H4'	2.20	0.42
1:X:1347:C:C2'	1:X:1348:C:H5'	2.48	0.42
1:X:1421:U:H2'	1:X:1422:C:H6	1.85	0.42
1:X:1439:G:C2	1:X:1440:G:C2	3.08	0.42
1:X:1588:A:O2'	1:X:1589:G:H5'	2.20	0.42
1:X:1681:A:C2	1:X:2706:U:N1	2.88	0.42
1:X:1824:C:H6	1:X:1824:C:O5'	2.03	0.42
1:X:2332:G:C6	1:X:2344:G:N2	2.88	0.42
1:X:2366:U:H6	1:X:2366:U:H3'	1.85	0.42
1:X:2376:G:C2	1:X:2399:C:C2	3.08	0.42
1:X:2500:C:H5'	1:X:2544:A:H4'	2.02	0.42
1:X:2559:U:H2'	1:X:2560:G:O4'	2.20	0.42
1:X:2586:G:N1	1:X:2587:G:N3	2.67	0.42
1:X:2614:A:H2'	1:X:2615:U:O5'	2.20	0.42
1:X:2661:G:N2	1:X:2662:C:C2	2.88	0.42
1:X:2692:A:C5'	1:X:2693:U:OP2	2.68	0.42
1:X:2765:C:O3'	4:B:69:LYS:NZ	2.52	0.42
1:X:2848:A:C2	13:K:6:ALA:HB1	2.47	0.42
2:Y:15:A:O2'	2:Y:16:U:H5''	2.20	0.42
2:Y:15:A:N1	2:Y:71:G:H2'	2.35	0.42
2:Y:25:G:C2'	2:Y:26:G:C8	3.02	0.42
2:Y:42:U:H2'	2:Y:45:C:C5	2.49	0.42
3:A:108:PRO:HD2	3:A:111:LEU:HD12	2.00	0.42
3:A:134:ARG:HG3	3:A:135:PHE:CD2	2.55	0.42
5:C:56:ARG:HG2	5:C:56:ARG:HH21	1.85	0.42
5:C:61:GLN:NE2	5:C:61:GLN:CA	2.81	0.42
6:D:79:LEU:C	6:D:80:ARG:NE	2.77	0.42
9:G:82:VAL:HB	9:G:150:VAL:HG22	2.02	0.42
14:L:22:ALA:O	14:L:24:SER:N	2.53	0.42
15:M:53:VAL:HG12	15:M:54:VAL:N	2.34	0.42
20:R:25:LEU:HD12	20:R:81:VAL:N	2.11	0.42
21:S:137:ASP:CG	21:S:140:LYS:HE2	2.45	0.42
24:V:18:ILE:O	24:V:20:ALA:N	2.53	0.42
1:X:333:A:H5'	5:C:162:ARG:CD	2.50	0.41
1:X:353:G:H2'	1:X:354:C:C6	2.52	0.41
1:X:464:G:C4	1:X:469:G:C6	3.08	0.41
1:X:673:G:H5'	5:C:93:TYR:CE1	2.55	0.41
1:X:701:U:H5'	1:X:1771:A:H2	1.85	0.41
1:X:804:C:HO2'	1:X:805:G:P	2.43	0.41
1:X:913:A:C5	1:X:914:C:C5	3.08	0.41
1:X:931:G:H4'	2:Y:83:C:H4'	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:977:G:H5'	1:X:2251:U:O2	2.20	0.41
1:X:1039:A:N6	1:X:1136:G:H2'	2.35	0.41
1:X:1098:G:C2'	1:X:1099:A:O5'	2.68	0.41
1:X:1156:U:H2'	1:X:1157:G:H8	1.85	0.41
1:X:1187:A:OP2	1:X:1188:A:OP2	2.38	0.41
1:X:1324:G:H1'	1:X:1326:U:O4	2.20	0.41
1:X:1505:U:O2'	1:X:1506:C:O4'	2.31	0.41
1:X:1750:A:C8	1:X:2675:U:H1'	2.56	0.41
1:X:1921:A:HO2'	1:X:1922:U:P	2.41	0.41
1:X:2006:G:N2	1:X:2024:U:C2	2.88	0.41
1:X:2073:A:C5	1:X:2074:U:C4	3.08	0.41
1:X:2290:A:C8	1:X:2290:A:O5'	2.73	0.41
1:X:2300:G:H3'	1:X:2300:G:N3	2.35	0.41
1:X:2345:A:H4'	22:T:62:LEU:HD12	2.02	0.41
1:X:2526:U:C4	1:X:2545:A:N7	2.88	0.41
1:X:2598:C:P	4:B:152:LYS:HZ3	2.43	0.41
1:X:2673:G:C6	1:X:2696:A:N1	2.88	0.41
1:X:2784:A:C2	1:X:2866:A:C4	3.08	0.41
1:X:2787:A:C4	1:X:2788:C:C5	3.08	0.41
1:X:2831:A:N1	1:X:2837:G:C6	2.88	0.41
3:A:67:PHE:CD1	3:A:157:ARG:NH2	2.88	0.41
3:A:206:LEU:O	3:A:211:ARG:CD	2.67	0.41
3:A:210:GLY:HA2	3:A:213:ARG:HG2	2.01	0.41
3:A:252:LYS:H	3:A:253:PRO:CD	2.26	0.41
4:B:34:VAL:O	4:B:34:VAL:HG23	2.18	0.41
4:B:49:ILE:HD11	4:B:90:SER:HB3	2.02	0.41
4:B:68:ALA:C	4:B:70:ALA:N	2.78	0.41
5:C:104:LEU:H	5:C:177:VAL:HG22	1.84	0.41
6:D:146:VAL:HB	6:D:147:ASP:H	1.56	0.41
7:E:164:PHE:O	7:E:166:GLY:N	2.53	0.41
10:H:13:ASN:HD22	10:H:109:ARG:CG	2.31	0.41
18:P:110:ALA:O	18:P:111:ARG:O	2.38	0.41
20:R:23:ILE:CD1	20:R:81:VAL:O	2.68	0.41
20:R:91:ALA:C	20:R:108:VAL:HG22	2.45	0.41
20:R:110:SER:HG	20:R:112:LYS:HE3	1.82	0.41
21:S:37:LYS:HA	21:S:40:ASP:OD1	2.19	0.41
22:T:40:GLN:HE22	22:T:43:THR:HA	1.85	0.41
22:T:68:VAL:HG12	22:T:69:PHE:N	2.34	0.41
23:U:26:ALA:C	23:U:27:ASP:OD1	2.63	0.41
26:Z:20:ARG:O	26:Z:22:HIS:N	2.53	0.41
30:4:19:ARG:NH1	30:4:19:ARG:HG3	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:65:C:C2	1:X:88:G:C2	3.08	0.41
1:X:88:G:C3'	1:X:89:A:H5''	2.39	0.41
1:X:119:G:H2'	1:X:120:G:C8	2.53	0.41
1:X:156:G:C6	1:X:157:G:N7	2.88	0.41
1:X:188:G:N1	1:X:189:A:C5	2.88	0.41
1:X:227:G:HO2'	11:I:53:ARG:NE	2.14	0.41
1:X:230:C:O2'	1:X:231:G:H5'	2.20	0.41
1:X:432:C:C2	1:X:433:G:C8	3.08	0.41
1:X:533:C:H1'	1:X:563:U:O2'	2.20	0.41
1:X:596:C:C2	1:X:684:C:O4'	2.72	0.41
1:X:614:G:C6	1:X:636:G:C6	3.08	0.41
1:X:689:A:H8	1:X:2052:G:H21	1.66	0.41
1:X:1148:G:H5''	1:X:1149:G:OP2	2.19	0.41
1:X:1153:A:O2'	1:X:1154:A:O5'	2.34	0.41
1:X:1289:A:N3	1:X:1290:A:C8	2.89	0.41
1:X:1467:U:C2'	1:X:1468:A:OP1	2.68	0.41
1:X:1549:C:H2'	1:X:1550:C:H6	1.84	0.41
1:X:1836:C:N3	1:X:1880:G:C2	2.88	0.41
1:X:1996:A:C2	18:P:109:ARG:NH2	2.87	0.41
1:X:2196:U:H3'	1:X:2197:U:H6	1.84	0.41
1:X:2576:G:C6	1:X:2577:A:N6	2.88	0.41
1:X:2614:A:C2'	1:X:2615:U:O5'	2.67	0.41
1:X:2795:A:N1	15:M:2:GLN:N	2.68	0.41
1:X:2811:G:C6	1:X:2812:A:N6	2.88	0.41
1:X:2814:G:C2	1:X:2815:C:C1'	3.03	0.41
3:A:70:ARG:C	3:A:72:LYS:N	2.78	0.41
3:A:211:ARG:O	3:A:214:TRP:HB2	2.20	0.41
3:A:247:VAL:CG2	3:A:248:THR:N	2.82	0.41
4:B:28:ALA:O	4:B:29:GLY:C	2.62	0.41
7:E:109:TYR:O	7:E:111:HIS:N	2.53	0.41
9:G:61:ARG:HH22	9:G:78:ASP:CG	2.29	0.41
11:I:28:LYS:HZ2	11:I:36:GLY:C	2.27	0.41
11:I:29:THR:HA	11:I:34:HIS:CB	2.50	0.41
12:J:28:VAL:O	12:J:29:ALA:CB	2.68	0.41
12:J:81:GLU:CG	12:J:82:THR:N	2.82	0.41
12:J:125:LYS:N	12:J:125:LYS:CD	2.65	0.41
12:J:136:GLU:HA	12:J:136:GLU:OE1	2.20	0.41
13:K:28:LEU:HD23	13:K:28:LEU:O	2.19	0.41
17:O:66:GLY:O	17:O:87:ARG:HD3	2.20	0.41
18:P:41:VAL:CG2	18:P:64:ALA:HB3	2.43	0.41
20:R:112:LYS:O	20:R:113:THR:HG23	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:S:173:PRO:HB2	21:S:174:PRO:HD2	2.02	0.41
1:X:23:G:N2	1:X:24:G:C4	2.88	0.41
1:X:37:C:O2'	5:C:44:SER:CB	2.69	0.41
1:X:65:C:C2'	1:X:66:U:H5'	2.49	0.41
1:X:102:C:C5	1:X:103:U:C5	3.08	0.41
1:X:140:G:O2'	1:X:141:G:H5'	2.20	0.41
1:X:204:A:N6	1:X:2386:G:O4'	2.54	0.41
1:X:430:C:C2	1:X:431:G:C8	3.08	0.41
1:X:584:A:N3	1:X:585:U:C5	2.88	0.41
1:X:684:C:C5	11:I:43:ALA:HB1	2.55	0.41
1:X:691:C:C5	1:X:692:C:H5	2.39	0.41
1:X:918:A:C2'	1:X:919:U:H5''	2.47	0.41
1:X:987:G:C2	1:X:988:G:N7	2.88	0.41
1:X:1153:A:C2	1:X:1155:G:C4	3.09	0.41
1:X:1257:U:H2'	1:X:1258:G:C8	2.54	0.41
1:X:1290:A:C2	1:X:1291:G:C5	3.08	0.41
1:X:1400:A:H5'	1:X:1484:G:H4'	2.02	0.41
1:X:1554:G:O2'	1:X:1555:A:H5'	2.20	0.41
1:X:1619:A:C5	1:X:1620:C:C4	3.09	0.41
1:X:1715:A:H4'	1:X:1716:G:O5'	2.20	0.41
1:X:1782:A:O2'	3:A:207:GLY:O	2.34	0.41
1:X:1789:U:O2'	1:X:1793:A:H1'	2.21	0.41
1:X:1838:G:H2'	1:X:1839:A:C8	2.55	0.41
1:X:1855:G:C2'	1:X:1856:U:H5'	2.50	0.41
1:X:1909:U:C5	1:X:1911:A:N6	2.86	0.41
1:X:1961:A:O2'	1:X:1962:C:H5'	2.20	0.41
1:X:2014:A:C6	1:X:2477:C:C1'	3.04	0.41
1:X:2219:U:O2'	1:X:2220:A:H5'	2.19	0.41
1:X:2236:U:C2	1:X:2237:C:C5	3.09	0.41
1:X:2252:A:C2	1:X:2253:A:C4	3.07	0.41
1:X:2350:G:C6	1:X:2351:G:N7	2.88	0.41
1:X:2597:G:C2	1:X:2598:C:C2	3.09	0.41
1:X:2706:U:O2'	1:X:2707:G:C5'	2.68	0.41
2:Y:5:C:H2'	2:Y:6:C:C6	2.55	0.41
3:A:205:VAL:C	3:A:207:GLY:H	2.28	0.41
4:B:127:ALA:HB2	4:B:135:HIS:CE1	2.55	0.41
4:B:169:ASN:O	4:B:170:LEU:HD23	2.21	0.41
5:C:54:THR:OG1	5:C:73:SER:HB3	2.20	0.41
9:G:108:GLY:O	9:G:110:LEU:CD2	2.68	0.41
11:I:13:ARG:NH2	11:I:13:ARG:CB	2.83	0.41
13:K:29:LEU:HD21	13:K:48:VAL:CG2	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:L:41:GLN:HG2	14:L:43:ILE:HD11	2.01	0.41
16:N:43:ALA:HB3	17:O:74:TYR:HB3	2.02	0.41
16:N:57:PHE:O	16:N:60:LEU:N	2.51	0.41
16:N:61:TRP:CH2	16:N:94:VAL:N	2.79	0.41
17:O:35:LEU:O	17:O:36:LYS:CB	2.67	0.41
17:O:47:PHE:O	17:O:51:ALA:HB2	2.20	0.41
18:P:74:SER:C	18:P:76:LYS:H	2.25	0.41
18:P:134:LYS:HE2	18:P:134:LYS:HB3	1.81	0.41
20:R:36:VAL:HG22	20:R:48:VAL:HG22	2.01	0.41
21:S:42:ALA:O	21:S:43:PHE:C	2.63	0.41
22:T:24:LYS:HA	22:T:24:LYS:HD3	1.93	0.41
22:T:84:ALA:O	22:T:85:GLN:C	2.63	0.41
23:U:62:LEU:HD23	23:U:67:LEU:HB2	2.02	0.41
25:W:18:LYS:O	25:W:21:GLN:N	2.53	0.41
26:Z:34:PRO:HB2	26:Z:35:GLN:HE21	1.85	0.41
1:X:115:G:C2	1:X:117:A:N6	2.89	0.41
1:X:312:G:C6	1:X:328:A:C5	3.08	0.41
1:X:409:G:H2'	1:X:410:A:C5'	2.50	0.41
1:X:479:G:H2'	1:X:480:G:O4'	2.21	0.41
1:X:643:A:H1'	1:X:2382:C:O2'	2.20	0.41
1:X:658:G:O2'	1:X:659:G:H5'	2.20	0.41
1:X:1079:G:C6	1:X:1080:A:C6	3.09	0.41
1:X:1125:G:H2'	1:X:1126:A:C8	2.44	0.41
1:X:1153:A:C4	1:X:1155:G:C5	3.08	0.41
1:X:1218:C:H4'	11:I:9:THR:OG1	2.20	0.41
1:X:1421:U:H2'	1:X:1422:C:C6	2.56	0.41
1:X:1693:A:C6	1:X:1694:A:C6	3.08	0.41
1:X:1714:A:O2'	1:X:1961:A:OP1	2.35	0.41
1:X:1872:A:O2'	1:X:2070:G:H5'	2.21	0.41
1:X:1888:C:H4'	1:X:1912:G:C8	2.55	0.41
1:X:1933:G:H2'	1:X:1934:U:H6	1.85	0.41
1:X:2166:G:C2'	1:X:2167:A:H5'	2.50	0.41
1:X:2302:G:C4	1:X:2303:C:C5	3.08	0.41
1:X:2352:A:C2	1:X:2353:G:C5	3.08	0.41
1:X:2394:G:H2'	1:X:2395:C:H6	1.84	0.41
1:X:2492:G:C6	1:X:2493:U:C4	3.09	0.41
1:X:2502:G:O6	1:X:2520:A:C2	2.74	0.41
1:X:2661:G:O2'	1:X:2662:C:H5'	2.20	0.41
1:X:2796:A:C6	1:X:2797:G:C6	3.08	0.41
1:X:2856:U:O2'	1:X:2857:C:H5'	2.20	0.41
1:X:2873:G:H2'	1:X:2874:A:H8	1.82	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:Y:54:U:H2'	2:Y:55:C:H6	1.84	0.41
2:Y:64:C:O2'	2:Y:65:A:H5'	2.19	0.41
2:Y:112:A:H2'	2:Y:113:G:O4'	2.20	0.41
3:A:185:VAL:O	3:A:186:HIS:C	2.61	0.41
3:A:214:TRP:HA	3:A:214:TRP:CE3	2.55	0.41
4:B:39:ALA:HB3	4:B:45:GLU:OE2	2.20	0.41
4:B:119:ARG:HD2	4:B:160:MET:HB2	2.02	0.41
5:C:13:ARG:HD2	5:C:13:ARG:N	2.34	0.41
5:C:102:LEU:CD2	5:C:106:MET:CE	2.89	0.41
5:C:170:LEU:HD12	5:C:170:LEU:HA	1.58	0.41
5:C:173:ALA:HB1	5:C:193:LEU:CB	2.50	0.41
6:D:34:ILE:HD13	6:D:34:ILE:HA	1.91	0.41
6:D:38:GLU:OE1	6:D:38:GLU:HA	2.20	0.41
6:D:75:SER:H	6:D:79:LEU:CD2	2.22	0.41
9:G:33:ILE:C	9:G:33:ILE:CD1	2.93	0.41
10:H:116:ARG:NH1	10:H:116:ARG:HG3	2.35	0.41
10:H:132:GLU:HB2	15:M:73:PHE:HE1	1.84	0.41
11:I:55:ARG:C	11:I:57:ILE:H	2.28	0.41
12:J:82:THR:O	12:J:83:ARG:HB2	2.18	0.41
16:N:83:LEU:HD21	16:N:109:LEU:HD22	2.02	0.41
17:O:26:GLN:HG2	17:O:27:GLY:N	2.26	0.41
18:P:69:ALA:O	18:P:70:LYS:C	2.63	0.41
19:Q:89:GLU:HB2	19:Q:91:LEU:HD23	2.01	0.41
21:S:3:LEU:CB	21:S:34:LEU:HB3	2.41	0.41
21:S:91:PRO:CG	21:S:92:VAL:N	2.83	0.41
23:U:32:ARG:HG2	23:U:33:LYS:H	1.85	0.41
23:U:51:ILE:CB	23:U:59:THR:HA	2.51	0.41
24:V:24:GLU:O	24:V:26:MET:N	2.53	0.41
25:W:3:ILE:HG22	25:W:4:LYS:N	2.35	0.41
1:X:204:A:N7	1:X:2386:G:H5'	2.35	0.41
1:X:235:C:C5	1:X:236:C:C4	3.08	0.41
1:X:359:G:H2'	1:X:360:A:C8	2.48	0.41
1:X:532:A:C2	1:X:533:C:C2	3.08	0.41
1:X:541:C:N3	1:X:572:G:C8	2.89	0.41
1:X:612:G:H2'	1:X:668:A:N6	2.34	0.41
1:X:653:G:C3'	1:X:654:A:C5'	2.98	0.41
1:X:705:C:OP1	3:A:55:GLY:O	2.37	0.41
1:X:794:A:C5'	3:A:218:LYS:HZ2	2.33	0.41
1:X:913:A:C8	1:X:914:C:C5	3.09	0.41
1:X:987:G:H4'	1:X:1167:A:C5	2.54	0.41
1:X:1433:A:C5	1:X:1435:G:C5	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1534:A:O2'	1:X:1535:C:H5'	2.19	0.41
1:X:1725:C:C2	1:X:1742:G:C2	3.09	0.41
1:X:1777:A:H4'	1:X:1778:U:OP1	2.20	0.41
1:X:1810:U:C5	3:A:157:ARG:CZ	3.03	0.41
1:X:1886:G:C2	1:X:1887:G:C8	3.08	0.41
1:X:2282:G:H2'	1:X:2283:G:H8	1.86	0.41
1:X:2351:G:H2'	1:X:2351:G:N3	2.36	0.41
1:X:2394:G:H3'	11:I:63:ARG:HH11	1.84	0.41
1:X:2670:C:N3	1:X:2671:C:C5	2.88	0.41
1:X:2697:G:C4	1:X:2698:G:C8	3.09	0.41
1:X:2775:U:H5'	1:X:2776:U:C5'	2.51	0.41
1:X:2826:C:O5'	1:X:2826:C:H6	2.04	0.41
1:X:2841:U:O2'	1:X:2842:C:OP2	2.35	0.41
2:Y:4:C:H3'	2:Y:4:C:H6	1.85	0.41
2:Y:36:A:C2	2:Y:46:G:C5	3.08	0.41
3:A:262:LYS:O	3:A:264:LYS:N	2.53	0.41
5:C:158:ARG:C	5:C:160:ALA:H	2.28	0.41
5:C:190:ALA:C	5:C:192:ALA:H	2.28	0.41
6:D:60:ILE:O	6:D:99:PHE:CD1	2.74	0.41
7:E:12:PRO:HD2	7:E:76:VAL:CG1	2.51	0.41
7:E:54:ARG:HE	7:E:57:ASP:HB3	1.86	0.41
9:G:117:GLU:C	9:G:119:LEU:N	2.78	0.41
9:G:134:MET:HE3	9:G:134:MET:HB2	1.87	0.41
11:I:104:ARG:HB3	11:I:105:PRO:CD	2.47	0.41
13:K:10:LEU:CD2	13:K:17:ARG:CB	2.93	0.41
14:L:75:LEU:O	14:L:76:ALA:C	2.62	0.41
16:N:68:GLY:O	16:N:71:LEU:CB	2.69	0.41
17:O:30:GLY:O	17:O:32:LYS:HG2	2.19	0.41
18:P:8:PHE:CG	18:P:9:ARG:N	2.89	0.41
19:Q:91:LEU:CD2	19:Q:91:LEU:H	2.33	0.41
23:U:21:ARG:O	23:U:39:LYS:HD2	2.21	0.41
24:V:39:GLN:O	24:V:40:PRO:C	2.58	0.41
25:W:12:ARG:CG	25:W:12:ARG:NH1	2.71	0.41
25:W:38:PRO:CD	25:W:41:ARG:NE	2.82	0.41
26:Z:15:LYS:HA	26:Z:18:MET:CG	2.50	0.41
1:X:137:A:H2'	1:X:138:G:H5'	2.02	0.41
1:X:223:C:C4	1:X:224:G:C8	3.08	0.41
1:X:310:A:H2	1:X:331:U:C4'	2.33	0.41
1:X:341:A:H2	1:X:1223:G:H2'	1.86	0.41
1:X:388:G:H2'	1:X:389:G:H8	1.85	0.41
1:X:423:G:C6	1:X:431:G:N1	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:681:A:C2	1:X:683:A:C6	3.08	0.41
1:X:716:U:C5	1:X:717:G:C6	3.08	0.41
1:X:814:G:H4'	1:X:815:A:OP2	2.21	0.41
1:X:1224:A:HO2'	1:X:1225:G:P	2.43	0.41
1:X:1257:U:O3'	11:I:17:LYS:HE2	2.21	0.41
1:X:1357:U:H4'	1:X:1397:A:C6	2.55	0.41
1:X:1411:C:H2'	1:X:1412:C:H6	1.85	0.41
1:X:1452:U:C2'	1:X:1453:A:H5'	2.50	0.41
1:X:1467:U:C3'	1:X:1468:A:H5'	2.46	0.41
1:X:1610:A:H2'	1:X:1611:U:H6	1.75	0.41
1:X:1811:A:HO2'	1:X:1812:U:P	2.42	0.41
1:X:1850:G:H2'	1:X:1851:A:H8	1.84	0.41
1:X:1994:U:H2'	1:X:1995:G:C5'	2.50	0.41
1:X:2240:C:P	22:T:18:PRO:HD2	2.61	0.41
1:X:2350:G:H2'	1:X:2351:G:O4'	2.20	0.41
1:X:2449:G:C2	1:X:2450:A:C8	3.08	0.41
1:X:2524:G:C2'	1:X:2525:U:O5'	2.69	0.41
1:X:2619:G:O6	1:X:2755:A:C2	2.73	0.41
1:X:2810:A:H61	1:X:2853:U:H2'	1.86	0.41
3:A:118:ASN:ND2	3:A:119:ALA:O	2.54	0.41
3:A:209:ALA:O	3:A:211:ARG:N	2.52	0.41
4:B:105:THR:CG2	4:B:199:ARG:HH21	2.33	0.41
4:B:110:GLY:O	13:K:3:HIS:NE2	2.53	0.41
6:D:49:ALA:O	6:D:50:ILE:C	2.62	0.41
11:I:32:ARG:NH2	17:O:79:GLN:C	2.78	0.41
13:K:43:GLU:OE1	13:K:43:GLU:C	2.63	0.41
15:M:79:ARG:CG	15:M:79:ARG:NH1	2.61	0.41
17:O:93:ILE:HD12	17:O:93:ILE:O	2.20	0.41
18:P:79:ALA:HB1	18:P:85:MET:SD	2.60	0.41
18:P:79:ALA:HB2	18:P:128:VAL:HG21	2.02	0.41
18:P:87:GLU:HA	18:P:90:LEU:HD12	2.02	0.41
19:Q:31:PRO:O	19:Q:76:LYS:CD	2.69	0.41
19:Q:42:ILE:HG13	19:Q:43:GLN:N	2.36	0.41
22:T:30:VAL:C	22:T:31:VAL:O	2.62	0.41
22:T:66:LYS:HE3	22:T:68:VAL:HG22	2.02	0.41
26:Z:44:HIS:N	26:Z:44:HIS:HD2	2.17	0.41
1:X:7:G:C2	1:X:8:A:C4	3.09	0.41
1:X:55:A:O4'	1:X:125:A:C2	2.74	0.41
1:X:56:C:C2	1:X:57:G:C8	3.09	0.41
1:X:67:G:C2'	1:X:68:C:O5'	2.69	0.41
1:X:173:A:N6	1:X:844:G:H21	2.15	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:520:C:O2'	1:X:1249:G:H5''	2.21	0.41
1:X:542:A:C2	1:X:2004:U:C6	3.08	0.41
1:X:701:U:H4'	1:X:1771:A:C2	2.56	0.41
1:X:760:U:O3'	18:P:110:ALA:HB3	2.21	0.41
1:X:871:U:C6	1:X:2247:A:C2	3.09	0.41
1:X:931:G:C4	1:X:932:G:C8	3.08	0.41
1:X:1043:A:H5'	30:4:7:VAL:O	2.21	0.41
1:X:1056:U:O2'	1:X:1057:A:OP2	2.39	0.41
1:X:1253:C:H5'	1:X:1253:C:C6	2.48	0.41
1:X:1262:U:H5''	16:N:4:ALA:HB3	2.03	0.41
1:X:1314:A:C2'	1:X:1315:A:O5'	2.69	0.41
1:X:1391:A:N3	1:X:1392:U:O2	2.53	0.41
1:X:1412:C:C2'	1:X:1413:U:O5'	2.69	0.41
1:X:2404:A:O2'	1:X:2405:A:P	2.79	0.41
1:X:2596:C:H2'	1:X:2597:G:H5'	2.02	0.41
1:X:2704:U:OP2	4:B:111:LYS:HE2	2.21	0.41
1:X:2826:C:H2'	1:X:2827:G:O4'	2.20	0.41
2:Y:6:C:N4	2:Y:7:C:N4	2.69	0.41
2:Y:62:C:H2'	2:Y:63:A:H8	1.85	0.41
2:Y:67:C:H2'	2:Y:111:C:N4	2.34	0.41
3:A:39:LYS:HG3	3:A:40:THR:N	2.35	0.41
3:A:246:PRO:HD3	3:A:251:GLY:N	2.29	0.41
4:B:177:ALA:C	4:B:179:GLU:N	2.78	0.41
6:D:29:PRO:HB3	6:D:160:ALA:CA	2.51	0.41
6:D:104:ILE:HG21	6:D:174:GLY:CA	2.47	0.41
7:E:44:ARG:NH2	7:E:45:GLN:O	2.54	0.41
10:H:102:GLN:HB2	10:H:104:GLU:CG	2.50	0.41
10:H:110:VAL:C	10:H:111:PHE:HD1	2.29	0.41
12:J:122:ALA:O	12:J:123:GLY:C	2.63	0.41
15:M:15:GLY:C	15:M:17:GLU:H	2.28	0.41
16:N:25:TRP:C	16:N:26:GLY:O	2.63	0.41
19:Q:2:SER:N	19:Q:5:ASP:OD1	2.54	0.41
19:Q:72:ARG:C	19:Q:73:ASN:CG	2.88	0.41
20:R:86:PRO:CD	20:R:90:LYS:HD3	2.50	0.41
24:V:24:GLU:C	24:V:26:MET:N	2.79	0.41
24:V:42:ARG:O	24:V:43:VAL:C	2.63	0.41
30:4:26:ILE:HG13	30:4:26:ILE:O	2.20	0.41
1:X:67:G:H2'	1:X:68:C:H6	1.85	0.41
1:X:312:G:C4	1:X:313:U:C5	3.08	0.41
1:X:416:U:H5''	1:X:419:G:H4'	2.03	0.41
1:X:419:G:C2'	1:X:420:C:O5'	2.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:848:A:C2	1:X:849:G:C1'	3.04	0.41
1:X:886:A:H1'	12:J:30:PHE:CD1	2.50	0.41
1:X:923:A:H2	1:X:2256:G:N3	2.18	0.41
1:X:1029:C:N3	1:X:1030:U:O4	2.54	0.41
1:X:1071:U:O2'	1:X:1072:U:H5''	2.21	0.41
1:X:1184:G:O6	1:X:1185:C:N4	2.53	0.41
1:X:1193:G:H2'	1:X:1194:U:C5'	2.36	0.41
1:X:1280:U:C4	1:X:1995:G:N2	2.89	0.41
1:X:1483:G:C2	1:X:1541:G:N3	2.88	0.41
1:X:1615:C:H2'	1:X:1616:C:H6	1.86	0.41
1:X:1687:C:O5'	1:X:1687:C:H6	2.04	0.41
1:X:1742:G:C2	1:X:1743:C:C4	3.08	0.41
1:X:1775:A:P	1:X:1775:A:H3'	2.61	0.41
1:X:2065:A:H2'	1:X:2066:G:O4'	2.21	0.41
1:X:2176:U:H6	1:X:2176:U:O5'	2.04	0.41
1:X:2657:G:H2'	1:X:2658:A:O4'	2.20	0.41
2:Y:96:C:H2'	2:Y:97:C:C6	2.55	0.41
3:A:34:THR:OG1	3:A:35:GLU:N	2.53	0.41
3:A:117:VAL:CG2	3:A:128:GLY:HA3	2.50	0.41
3:A:206:LEU:CA	3:A:211:ARG:HD3	2.51	0.41
4:B:41:THR:OG1	4:B:42:ASP:N	2.52	0.41
4:B:77:ILE:C	4:B:78:LEU:HG	2.45	0.41
6:D:83:MET:HG3	6:D:84:PRO:HD2	2.03	0.41
6:D:108:LEU:HB3	6:D:114:PHE:CE1	2.55	0.41
7:E:17:VAL:CG1	7:E:18:ASN:H	2.34	0.41
7:E:43:VAL:CG2	7:E:44:ARG:N	2.83	0.41
7:E:103:LEU:HB3	7:E:115:ILE:HB	2.03	0.41
10:H:43:ARG:HG2	10:H:43:ARG:HH11	1.86	0.41
11:I:14:LYS:O	11:I:14:LYS:CG	2.63	0.41
12:J:69:ILE:HG21	12:J:104:MET:CA	2.48	0.41
12:J:76:THR:HG22	12:J:89:GLY:C	2.46	0.41
12:J:93:TYR:N	12:J:93:TYR:HD2	2.19	0.41
14:L:24:SER:C	14:L:26:ARG:H	2.28	0.41
14:L:30:SER:C	14:L:31:VAL:CG1	2.86	0.41
14:L:47:ARG:H	14:L:47:ARG:HG3	1.63	0.41
14:L:89:PHE:CD1	14:L:91:ARG:NH2	2.89	0.41
18:P:80:LEU:CD2	18:P:87:GLU:HB3	2.49	0.41
19:Q:34:THR:HG1	19:Q:37:GLU:CD	2.27	0.41
21:S:10:PRO:C	21:S:13:LYS:HG3	2.41	0.41
23:U:52:ARG:CD	23:U:79:GLU:C	2.88	0.41
1:X:11:G:H8	1:X:11:G:O5'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:176:A:N6	1:X:2413:A:C5	2.89	0.41
1:X:223:C:C4	1:X:224:G:N7	2.88	0.41
1:X:437:G:N2	1:X:438:G:C4	2.88	0.41
1:X:537:C:O2	1:X:537:C:C2'	2.68	0.41
1:X:578:U:H2'	1:X:579:G:O4'	2.21	0.41
1:X:589:C:O3'	16:N:31:GLN:NE2	2.54	0.41
1:X:620:G:C6	1:X:621:U:C4	3.08	0.41
1:X:654:A:H2	1:X:655:A:H3'	1.85	0.41
1:X:789:G:O6	1:X:2055:G:OP1	2.38	0.41
1:X:824:U:O2	1:X:1264:C:C6	2.74	0.41
1:X:1156:U:C6	1:X:1156:U:H3'	2.56	0.41
1:X:1299:A:C8	1:X:1299:A:H3'	2.55	0.41
1:X:1366:A:C6	1:X:1367:A:C6	3.09	0.41
1:X:1456:C:C2	1:X:1566:G:C2	3.09	0.41
1:X:1468:A:C8	1:X:1468:A:OP2	2.73	0.41
1:X:1498:G:C5	1:X:1523:A:C5	3.08	0.41
1:X:1619:A:C4	1:X:1620:C:C6	3.09	0.41
1:X:1725:C:H2'	1:X:1726:C:H6	1.86	0.41
1:X:1742:G:O2'	1:X:1743:C:H5'	2.20	0.41
1:X:1938:U:H5	1:X:2536:G:N2	2.19	0.41
1:X:1965:U:H2'	1:X:1966:C:C6	2.56	0.41
1:X:2053:G:H21	1:X:2054:A:H1'	1.84	0.41
1:X:2185:U:H6	1:X:2185:U:O5'	2.04	0.41
1:X:2309:G:N2	1:X:2365:U:C2	2.89	0.41
1:X:2452:U:O2	1:X:2452:U:H2'	2.21	0.41
1:X:2526:U:C2	1:X:2545:A:N6	2.89	0.41
1:X:2576:G:C6	1:X:2577:A:N1	2.89	0.41
1:X:2703:C:P	4:B:109:LYS:NZ	2.94	0.41
1:X:2737:A:N3	1:X:2737:A:H2'	2.36	0.41
1:X:2791:C:O2'	1:X:2792:C:H5'	2.20	0.41
1:X:2795:A:C4'	13:K:5:LYS:HE3	2.41	0.41
1:X:2823:G:O2'	1:X:2824:C:H6	2.04	0.41
2:Y:64:C:H2'	2:Y:65:A:C8	2.56	0.41
2:Y:103:A:C6	2:Y:104:A:C5	3.09	0.41
3:A:121:PRO:HB2	3:A:135:PHE:HE1	1.86	0.41
3:A:243:GLY:N	3:A:244:ARG:HD3	2.35	0.41
4:B:34:VAL:HG11	4:B:67:PHE:HE1	1.86	0.41
4:B:38:THR:C	4:B:40:GLN:N	2.79	0.41
5:C:86:PRO:HG2	5:C:86:PRO:O	2.21	0.41
5:C:149:LEU:HD12	5:C:150:LEU:N	2.36	0.41
5:C:172:VAL:O	5:C:172:VAL:HG12	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:C:173:ALA:C	5:C:175:VAL:N	2.77	0.41
5:C:174:GLY:O	5:C:175:VAL:O	2.39	0.41
5:C:176:ASN:HD22	5:C:179:ASP:H	1.67	0.41
6:D:45:GLU:HB2	6:D:78:LYS:HZ1	1.84	0.41
6:D:154:ILE:HD12	6:D:154:ILE:N	2.36	0.41
8:F:35:MET:SD	8:F:35:MET:C	3.04	0.41
9:G:58:ILE:HG22	9:G:62:ILE:CD1	2.50	0.41
9:G:153:GLY:C	9:G:157:PRO:HG2	2.46	0.41
10:H:25:LEU:CD1	10:H:52:VAL:HG23	2.36	0.41
10:H:29:ILE:CG2	10:H:123:PHE:CE1	3.02	0.41
10:H:73:VAL:O	10:H:74:VAL:C	2.64	0.41
11:I:45:LYS:HG2	11:I:46:GLY:H	1.86	0.41
11:I:77:LEU:HA	11:I:77:LEU:HD12	1.76	0.41
12:J:23:LYS:HA	21:S:73:LYS:NZ	2.35	0.41
12:J:27:TYR:CB	12:J:137:VAL:HG11	2.51	0.41
12:J:78:LYS:HA	12:J:88:LYS:HZ3	1.85	0.41
12:J:99:LYS:CE	12:J:100:PRO:HD2	2.42	0.41
12:J:122:ALA:CA	12:J:125:LYS:HD3	2.46	0.41
14:L:42:ILE:CG2	14:L:51:LEU:HB2	2.51	0.41
15:M:37:THR:HG21	15:M:39:VAL:HG13	2.02	0.41
15:M:106:TYR:CD1	15:M:106:TYR:C	2.99	0.41
16:N:14:HIS:CD2	16:N:32:TYR:CE1	3.08	0.41
16:N:17:VAL:O	16:N:20:ARG:N	2.53	0.41
16:N:39:LEU:HA	16:N:42:ALA:CB	2.51	0.41
16:N:117:ARG:HG3	16:N:117:ARG:HH21	1.85	0.41
17:O:21:ARG:H	17:O:21:ARG:CD	2.30	0.41
17:O:60:VAL:HA	17:O:93:ILE:HG22	2.03	0.41
17:O:72:ARG:HA	17:O:82:ARG:O	2.21	0.41
18:P:35:PRO:O	18:P:39:ARG:HD3	2.21	0.41
18:P:107:ILE:HG23	18:P:115:ASN:HB2	2.03	0.41
20:R:84:VAL:HG22	20:R:88:THR:O	2.21	0.41
21:S:10:PRO:O	21:S:11:LYS:C	2.64	0.41
24:V:3:PRO:O	24:V:4:SER:C	2.64	0.41
24:V:37:LEU:CD2	24:V:40:PRO:N	2.84	0.41
25:W:5:LEU:HD23	25:W:28:ILE:N	2.36	0.41
25:W:37:THR:O	25:W:41:ARG:HG3	2.21	0.41
26:Z:13:LYS:O	26:Z:17:ASP:OD2	2.39	0.41
30:4:10:MET:HE2	30:4:34:GLN:CD	2.46	0.41
1:X:188:G:C2	1:X:189:A:C4	3.09	0.41
1:X:317:U:C3'	1:X:318:G:C5'	2.99	0.41
1:X:341:A:O2'	1:X:342:G:P	2.79	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:394:U:H2'	1:X:395:G:C8	2.55	0.41
1:X:417:C:C4	1:X:419:G:C5	3.09	0.41
1:X:504:G:N3	1:X:504:G:H2'	2.36	0.41
1:X:511:A:C6	1:X:512:A:C6	3.08	0.41
1:X:609:U:H1'	11:I:18:ARG:HH22	1.86	0.41
1:X:618:A:OP1	5:C:94:THR:HG21	2.21	0.41
1:X:638:A:O4'	1:X:648:A:N6	2.54	0.41
1:X:725:C:H2'	1:X:726:G:C8	2.55	0.41
1:X:849:G:C8	1:X:850:C:C5	3.09	0.41
1:X:956:A:H5'	1:X:957:G:OP2	2.21	0.41
1:X:972:C:H4'	1:X:973:U:OP2	2.20	0.41
1:X:985:G:C6	1:X:1000:G:C6	3.08	0.41
1:X:1065:A:C2'	1:X:1066:G:H5'	2.51	0.41
1:X:1142:G:H8	1:X:2008:C:H4'	1.86	0.41
1:X:1227:A:H2'	1:X:1228:G:O4'	2.20	0.41
1:X:1264:C:H5''	16:N:13:ARG:HE	1.78	0.41
1:X:1383:C:C4	1:X:1384:G:N7	2.89	0.41
1:X:1450:G:O2'	1:X:1451:C:H5'	2.20	0.41
1:X:1596:A:H2'	1:X:1597:A:O4'	2.21	0.41
1:X:1683:G:H4'	10:H:6:SER:OG	2.22	0.41
1:X:1782:A:O3'	3:A:205:VAL:O	2.39	0.41
1:X:1938:U:C5	1:X:2536:G:N2	2.89	0.41
1:X:2012:A:H3'	1:X:2014:A:OP1	2.20	0.41
1:X:2187:A:N6	1:X:2188:A:N6	2.69	0.41
1:X:2235:G:N2	1:X:2254:C:C5	2.89	0.41
1:X:2454:C:O5'	1:X:2454:C:H6	2.03	0.41
1:X:2528:G:H2'	1:X:2529:G:H8	1.86	0.41
1:X:2661:G:C2	1:X:2662:C:C2	3.09	0.41
1:X:2703:C:OP1	4:B:109:LYS:NZ	2.48	0.41
1:X:2829:A:C2	1:X:2830:U:C2	3.09	0.41
3:A:163:VAL:HG21	3:A:177:LEU:HA	2.00	0.41
4:B:95:ILE:HA	4:B:95:ILE:HD13	1.65	0.41
4:B:177:ALA:C	4:B:179:GLU:H	2.28	0.41
5:C:137:ALA:O	5:C:138:LYS:O	2.39	0.41
5:C:145:THR:HG22	5:C:146:GLU:OE2	2.21	0.41
6:D:29:PRO:C	6:D:169:LEU:HD22	2.45	0.41
6:D:147:ASP:HB2	6:D:148:LYS:H	1.70	0.41
8:F:112:MET:HG2	8:F:113:PRO:HD3	2.03	0.41
9:G:98:LYS:HG3	9:G:116:ARG:HB2	2.02	0.41
9:G:128:GLU:O	9:G:145:HIS:HE1	2.00	0.41
10:H:17:ARG:HE	10:H:59:ALA:HB2	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:H:116:ARG:O	10:H:116:ARG:HG2	2.19	0.41
10:H:131:PRO:HB2	15:M:73:PHE:CD1	2.56	0.41
11:I:120:VAL:C	11:I:121:HIS:HD2	2.29	0.41
12:J:99:LYS:CD	12:J:100:PRO:CD	2.99	0.41
12:J:100:PRO:C	12:J:102:ARG:H	2.29	0.41
15:M:105:TYR:O	15:M:106:TYR:C	2.63	0.41
17:O:38:LEU:HD22	17:O:46:VAL:O	2.21	0.41
18:P:49:SER:C	18:P:51:GLN:N	2.76	0.41
19:Q:51:ILE:HD12	19:Q:82:LEU:O	2.21	0.41
24:V:4:SER:HB3	24:V:7:ARG:NH2	2.35	0.41
24:V:18:ILE:C	24:V:20:ALA:N	2.79	0.41
24:V:52:GLN:C	24:V:54:ASN:N	2.79	0.41
1:X:14:A:C5	1:X:536:A:C2	3.09	0.40
1:X:64:C:O2'	1:X:65:C:H5'	2.21	0.40
1:X:95:G:O2'	1:X:96:C:H5'	2.20	0.40
1:X:171:G:HO2'	1:X:172:A:H5'	1.82	0.40
1:X:176:A:C3'	1:X:177:U:C5	3.03	0.40
1:X:188:G:O2'	1:X:189:A:H5'	2.21	0.40
1:X:609:U:O2'	11:I:18:ARG:NH1	2.54	0.40
1:X:617:U:H5	1:X:632:A:H2	1.66	0.40
1:X:825:C:OP1	16:N:13:ARG:NH1	2.46	0.40
1:X:1129:A:C5	1:X:1130:U:C4	3.08	0.40
1:X:1153:A:O2'	1:X:1154:A:C5'	2.69	0.40
1:X:1188:A:H2'	1:X:1189:G:C8	2.56	0.40
1:X:1332:G:C5	1:X:1333:G:N1	2.90	0.40
1:X:1443:G:O2'	1:X:1444:C:H5'	2.21	0.40
1:X:1505:U:C6	1:X:1505:U:C3'	3.05	0.40
1:X:1582:A:C5	3:A:214:TRP:CE2	3.09	0.40
1:X:1622:G:H4'	1:X:1624:A:N3	2.37	0.40
1:X:1690:U:C2'	1:X:1691:G:H5'	2.51	0.40
1:X:1872:A:N1	1:X:2213:G:H1'	2.35	0.40
1:X:1919:A:N1	1:X:1928:G:C1'	2.85	0.40
1:X:1963:G:O2'	1:X:1964:A:P	2.80	0.40
1:X:1999:U:O2'	26:Z:7:PRO:O	2.38	0.40
1:X:2080:U:N3	1:X:2081:U:C4	2.90	0.40
1:X:2195:C:H2'	1:X:2196:U:C6	2.56	0.40
1:X:2209:G:C5	1:X:2210:C:H5	2.39	0.40
1:X:2357:A:H4'	14:L:26:ARG:HH12	1.83	0.40
1:X:2357:A:H61	14:L:18:ARG:NH1	2.19	0.40
1:X:2401:A:N7	1:X:2403:C:N4	2.68	0.40
1:X:2495:G:OP1	9:G:111:LYS:NZ	2.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:2524:G:H2'	1:X:2525:U:O5'	2.21	0.40
1:X:2805:G:H2'	1:X:2806:G:O4'	2.21	0.40
2:Y:63:A:H2'	2:Y:64:C:H6	1.87	0.40
2:Y:63:A:C6	2:Y:64:C:C4	3.09	0.40
3:A:101:GLU:OE1	3:A:103:ARG:NE	2.49	0.40
4:B:19:ARG:HH12	4:B:185:LYS:HZ1	1.69	0.40
4:B:93:VAL:C	4:B:95:ILE:N	2.79	0.40
5:C:28:HIS:C	5:C:30:VAL:N	2.77	0.40
5:C:137:ALA:HB1	5:C:142:LEU:HB2	2.04	0.40
5:C:139:GLN:CD	5:C:139:GLN:N	2.79	0.40
5:C:149:LEU:HD12	5:C:168:SER:O	2.21	0.40
5:C:151:VAL:O	5:C:189:ASP:HB3	2.21	0.40
6:D:55:LYS:O	6:D:59:LEU:HG	2.21	0.40
7:E:139:GLN:HB3	7:E:143:GLN:NE2	2.35	0.40
9:G:30:LYS:HE3	9:G:30:LYS:HB2	1.89	0.40
10:H:7:ARG:HA	10:H:19:ILE:O	2.21	0.40
10:H:132:GLU:HB2	15:M:73:PHE:CE1	2.56	0.40
11:I:32:ARG:HH21	17:O:81:ARG:HG3	1.84	0.40
12:J:15:ARG:CB	12:J:73:LYS:HZ2	2.35	0.40
12:J:111:THR:O	12:J:114:GLN:N	2.53	0.40
13:K:87:TYR:O	13:K:88:ALA:C	2.64	0.40
14:L:12:ARG:O	14:L:16:LYS:N	2.44	0.40
14:L:89:PHE:HB2	14:L:91:ARG:NH2	2.35	0.40
15:M:9:ARG:O	15:M:10:GLY:C	2.63	0.40
15:M:61:GLY:C	15:M:63:ARG:N	2.79	0.40
16:N:22:LYS:CG	16:N:23:GLY:H	2.14	0.40
17:O:8:GLY:O	17:O:9:GLY:O	2.39	0.40
17:O:58:ALA:CB	17:O:93:ILE:HD13	2.51	0.40
21:S:28:ASN:OD1	21:S:28:ASN:N	2.54	0.40
22:T:58:THR:O	22:T:59:LEU:HD23	2.21	0.40
26:Z:31:THR:HG22	26:Z:32:GLU:N	2.35	0.40
1:X:131:C:C4	1:X:132:U:C4	3.09	0.40
1:X:439:C:C4	1:X:440:U:C5	3.09	0.40
1:X:450:C:O2	1:X:450:C:H2'	2.21	0.40
1:X:460:U:HO2'	1:X:461:A:P	2.44	0.40
1:X:486:U:C4'	1:X:519:C:H2'	2.51	0.40
1:X:692:C:C2	1:X:693:A:C8	3.09	0.40
1:X:698:A:H61	1:X:791:G:H1'	1.86	0.40
1:X:824:U:C4'	1:X:1264:C:H1'	2.51	0.40
1:X:922:A:C2	1:X:923:A:C2	3.09	0.40
1:X:1035:G:P	1:X:1036:G:O3'	2.79	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:X:1038:U:O2	1:X:2466:G:O3'	2.39	0.40
1:X:1153:A:H5'	1:X:1153:A:C8	2.56	0.40
1:X:1253:C:C2'	1:X:1254:G:O5'	2.69	0.40
1:X:1411:C:H2'	1:X:1412:C:C6	2.56	0.40
1:X:1428:G:N2	1:X:1602:G:O5'	2.50	0.40
1:X:1500:U:O2'	1:X:1501:C:H5'	2.21	0.40
1:X:1586:A:C5	1:X:1587:A:N7	2.89	0.40
1:X:1834:G:H2'	1:X:1835:C:H6	1.83	0.40
1:X:2009:U:O2	1:X:2021:G:C2	2.73	0.40
1:X:2026:C:C4	1:X:2757:G:C2	3.09	0.40
1:X:2027:C:N1	1:X:2604:G:N2	2.69	0.40
1:X:2293:G:H2'	1:X:2294:U:C6	2.56	0.40
1:X:2294:U:O2'	6:D:125:ARG:CG	2.68	0.40
1:X:2364:C:OP1	1:X:2365:U:OP2	2.39	0.40
1:X:2674:C:H2'	1:X:2675:U:H6	1.85	0.40
1:X:2685:A:C2	1:X:2686:C:C6	3.10	0.40
1:X:2757:G:H5''	1:X:2758:A:H5''	2.02	0.40
1:X:2765:C:C1'	4:B:35:GLN:HE22	2.34	0.40
1:X:2821:G:H2'	1:X:2822:U:H6	1.84	0.40
1:X:2856:U:C4	1:X:2857:C:N4	2.89	0.40
2:Y:20:A:H2'	2:Y:21:C:H6	1.82	0.40
2:Y:114:C:H6	2:Y:114:C:O5'	2.04	0.40
3:A:173:VAL:HG23	3:A:187:SER:HB3	2.03	0.40
3:A:197:GLY:O	3:A:199:ALA:O	2.39	0.40
5:C:171:PRO:O	5:C:173:ALA:N	2.54	0.40
7:E:26:VAL:O	7:E:27:LYS:HG3	2.21	0.40
7:E:84:THR:HB	7:E:134:SER:CA	2.52	0.40
9:G:168:THR:C	9:G:169:GLN:O	2.64	0.40
10:H:116:ARG:HH11	10:H:116:ARG:HG3	1.86	0.40
11:I:94:GLU:CA	11:I:97:ARG:HE	2.29	0.40
11:I:97:ARG:O	11:I:98:LEU:CB	2.62	0.40
14:L:36:LYS:N	14:L:36:LYS:CD	2.83	0.40
14:L:80:ALA:C	14:L:82:LYS:N	2.77	0.40
16:N:27:SER:C	16:N:29:SER:N	2.79	0.40
16:N:113:SER:O	16:N:116:ALA:N	2.54	0.40
17:O:39:PHE:CD1	17:O:39:PHE:C	2.99	0.40
17:O:86:HIS:CG	17:O:87:ARG:H	2.39	0.40
18:P:33:MET:CE	18:P:37:LYS:NZ	2.78	0.40
18:P:69:ALA:C	18:P:71:VAL:N	2.79	0.40
19:Q:15:LYS:O	19:Q:19:ALA:N	2.49	0.40
19:Q:64:ARG:O	19:Q:65:VAL:HG23	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:R:70:GLU:OE1	20:R:72:ARG:HD2	2.22	0.40
20:R:98:ILE:C	20:R:100:ASP:N	2.71	0.40
1:X:8:A:C6	1:X:9:U:C4	3.10	0.40
1:X:428:A:C5	1:X:429:C:C4	3.09	0.40
1:X:492:G:C2'	1:X:517:A:N6	2.84	0.40
1:X:567:G:H2'	1:X:568:G:H8	1.86	0.40
1:X:595:A:H8	1:X:595:A:O5'	2.04	0.40
1:X:708:G:H1	1:X:780:U:H3	1.70	0.40
1:X:859:U:H1'	1:X:860:U:C4	2.56	0.40
1:X:930:A:C3'	1:X:930:A:C8	3.04	0.40
1:X:946:U:N3	1:X:947:C:C5	2.89	0.40
1:X:1368:G:H2'	1:X:1369:G:H8	1.86	0.40
1:X:1374:G:C2	1:X:1375:C:C5	3.09	0.40
1:X:1563:U:H2'	1:X:1564:U:C6	2.56	0.40
1:X:1689:U:N3	1:X:1690:U:C4	2.89	0.40
1:X:1780:A:C5	1:X:1781:C:C5	3.09	0.40
1:X:1781:C:OP1	3:A:219:PRO:CB	2.58	0.40
1:X:2055:G:N1	1:X:2417:U:C2	2.89	0.40
1:X:2240:C:N4	1:X:2259:G:O6	2.55	0.40
1:X:2707:G:H5'	1:X:2707:G:C8	2.50	0.40
3:A:72:LYS:HE3	3:A:99:ASP:OD2	2.22	0.40
3:A:206:LEU:O	3:A:207:GLY:C	2.63	0.40
3:A:209:ALA:C	3:A:211:ARG:H	2.28	0.40
3:A:219:PRO:O	3:A:220:HIS:C	2.64	0.40
5:C:116:LYS:O	5:C:117:LEU:CB	2.65	0.40
6:D:166:ALA:C	6:D:170:LEU:HG	2.47	0.40
7:E:78:GLY:C	7:E:80:SER:N	2.78	0.40
9:G:96:ASP:CG	9:G:97:ASP:N	2.79	0.40
9:G:122:HIS:HA	9:G:124:GLU:OE1	2.21	0.40
10:H:97:VAL:HG11	10:H:126:ILE:HD12	2.02	0.40
11:I:82:ASP:HA	11:I:114:ILE:HD12	2.03	0.40
12:J:62:GLY:C	12:J:64:LYS:N	2.78	0.40
12:J:99:LYS:HG3	12:J:100:PRO:CD	2.46	0.40
14:L:55:SER:O	14:L:71:VAL:CB	2.49	0.40
15:M:39:VAL:HG12	15:M:45:THR:HG21	2.02	0.40
19:Q:71:GLN:C	19:Q:72:ARG:O	2.64	0.40
20:R:22:VAL:CG1	20:R:23:ILE:HD12	2.52	0.40
20:R:49:GLU:HA	20:R:73:GLU:OE2	2.21	0.40
20:R:54:ILE:HD12	20:R:71:GLN:HB2	2.04	0.40
20:R:91:ALA:O	20:R:108:VAL:CG2	2.67	0.40
21:S:24:TYR:HB2	21:S:29:ASN:OD1	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:V:42:ARG:HD2	24:V:42:ARG:HA	1.79	0.40
1:X:77:C:H2'	1:X:78:C:H6	1.84	0.40
1:X:116:A:C8	1:X:118:U:C4	3.09	0.40
1:X:152:G:O2'	1:X:153:A:H5'	2.21	0.40
1:X:169:C:H2'	1:X:170:U:C5'	2.51	0.40
1:X:332:C:H1'	5:C:159:ARG:NE	2.35	0.40
1:X:468:A:H1'	1:X:470:U:C6	2.56	0.40
1:X:469:G:O2'	1:X:480:G:N1	2.54	0.40
1:X:559:C:H2'	1:X:560:G:C4'	2.52	0.40
1:X:592:G:OP2	16:N:10:ARG:NH1	2.39	0.40
1:X:610:G:C2	1:X:671:A:C2	3.09	0.40
1:X:699:G:C4'	1:X:700:C:OP2	2.70	0.40
1:X:758:G:C2'	1:X:759:C:H5''	2.46	0.40
1:X:797:A:N7	1:X:805:G:C4	2.90	0.40
1:X:820:U:OP1	11:I:40:ARG:NH1	2.55	0.40
1:X:1074:G:C2'	1:X:1075:C:C5'	3.00	0.40
1:X:1078:A:H2'	1:X:1079:G:C8	2.57	0.40
1:X:1106:A:P	1:X:1106:A:H8	2.44	0.40
1:X:1278:A:O2'	1:X:1279:G:P	2.79	0.40
1:X:1409:U:H5''	1:X:1410:U:OP2	2.21	0.40
1:X:1478:U:H2'	1:X:1479:G:H8	1.86	0.40
1:X:1538:A:C6	1:X:1539:U:N3	2.89	0.40
1:X:1555:A:H2'	1:X:1556:A:C8	2.57	0.40
1:X:1609:G:C2	1:X:1610:A:C4	3.09	0.40
1:X:1621:C:H1'	1:X:1626:A:C4	2.57	0.40
1:X:1656:U:H2'	1:X:1657:A:H5''	1.94	0.40
1:X:1733:U:C2	1:X:1734:C:C5	3.09	0.40
1:X:1932:G:C6	1:X:1933:G:C6	3.09	0.40
1:X:2194:A:C2'	1:X:2195:C:O4'	2.48	0.40
1:X:2200:G:C4	1:X:2201:G:C8	3.10	0.40
1:X:2313:G:N2	14:L:17:VAL:HB	2.37	0.40
1:X:2324:G:N3	1:X:2360:C:H2'	2.35	0.40
1:X:2388:G:C5	1:X:2389:G:N7	2.90	0.40
1:X:2661:G:C6	1:X:2708:U:H1'	2.51	0.40
1:X:2861:A:H2'	1:X:2862:G:H8	1.86	0.40
2:Y:63:A:H2'	2:Y:64:C:C6	2.56	0.40
5:C:190:ALA:C	5:C:192:ALA:N	2.80	0.40
7:E:76:VAL:O	7:E:77:LYS:C	2.62	0.40
12:J:107:VAL:HG13	12:J:119:PHE:CE2	2.57	0.40
14:L:22:ALA:C	14:L:24:SER:H	2.27	0.40
15:M:26:ASP:O	15:M:27:PHE:CG	2.75	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:O:34:GLU:HB2	17:O:56:VAL:HG23	2.04	0.40
17:O:51:ALA:O	17:O:53:LYS:N	2.54	0.40
18:P:40:LEU:HD13	18:P:62:ARG:HH12	1.86	0.40
20:R:24:VAL:HG13	20:R:80:LYS:HB3	2.03	0.40
21:S:3:LEU:C	21:S:3:LEU:CD1	2.89	0.40
21:S:71:MET:HB2	21:S:78:PRO:HA	2.01	0.40
21:S:154:LEU:HD23	21:S:154:LEU:HA	1.88	0.40
1:X:62:U:H4'	1:X:63:A:C8	2.56	0.40
1:X:131:C:O5'	1:X:131:C:H6	2.05	0.40
1:X:173:A:P	11:I:53:ARG:HH12	2.44	0.40
1:X:199:A:N1	1:X:201:G:N3	2.69	0.40
1:X:207:U:N3	1:X:208:C:C4	2.90	0.40
1:X:320:A:O2'	1:X:340:G:H2'	2.21	0.40
1:X:332:C:OP2	5:C:129:LYS:C	2.65	0.40
1:X:439:C:O5'	1:X:439:C:H6	2.05	0.40
1:X:441:A:C8	1:X:442:A:C8	3.10	0.40
1:X:481:A:N6	1:X:482:A:C6	2.89	0.40
1:X:610:G:C2'	5:C:98:GLN:NE2	2.85	0.40
1:X:836:G:C6	1:X:848:A:C6	3.09	0.40
1:X:876:A:H2'	1:X:877:G:C8	2.57	0.40
1:X:1117:G:O2'	1:X:1118:G:H5'	2.21	0.40
1:X:1118:G:H3'	1:X:1119:U:H5''	2.01	0.40
1:X:1173:G:H21	17:O:88:GLN:HE21	1.69	0.40
1:X:1336:G:C2'	1:X:1337:G:O5'	2.70	0.40
1:X:1367:A:C8	1:X:1368:G:C8	3.09	0.40
1:X:1474:A:H4'	1:X:1475:U:C5'	2.51	0.40
1:X:1498:G:C5	1:X:1523:A:C6	3.10	0.40
1:X:1613:G:H5''	1:X:1614:C:H5'	2.03	0.40
1:X:1656:U:H2'	1:X:1657:A:H5'	2.03	0.40
1:X:1850:G:C2'	1:X:1851:A:C8	2.95	0.40
1:X:2001:G:P	26:Z:9:LYS:HE3	2.62	0.40
1:X:2035:G:N3	4:B:149:ARG:HA	2.36	0.40
1:X:2065:A:C8	1:X:2066:G:C8	3.09	0.40
1:X:2171:U:C4	1:X:2172:U:O4	2.74	0.40
1:X:2307:A:C2	1:X:2308:A:C5	3.10	0.40
1:X:2585:C:O2'	1:X:2586:G:H5'	2.20	0.40
1:X:2659:C:H5'	4:B:189:PRO:HA	2.03	0.40
2:Y:94:G:OP1	12:J:20:GLY:HA2	2.21	0.40
3:A:55:GLY:H	3:A:217:ARG:H	1.70	0.40
3:A:72:LYS:CE	3:A:99:ASP:OD2	2.70	0.40
5:C:72:ARG:HA	5:C:77:PHE:CD2	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:D:5:LYS:O	6:D:9:ASN:ND2	2.54	0.40
6:D:119:PRO:HB2	6:D:167:ARG:NH1	2.36	0.40
9:G:72:PRO:HB2	9:G:73:ASN:H	1.59	0.40
9:G:84:ASN:CA	9:G:153:GLY:O	2.69	0.40
14:L:37:HIS:HE1	14:L:39:TYR:CE2	2.39	0.40
14:L:44:ASP:OD1	14:L:44:ASP:O	2.39	0.40
17:O:97:GLY:O	17:O:98:ILE:C	2.64	0.40
18:P:90:LEU:HD23	18:P:90:LEU:HA	1.86	0.40
19:Q:61:LYS:N	19:Q:72:ARG:HA	2.27	0.40
20:R:28:LYS:HG2	20:R:29:HIS:N	2.36	0.40
20:R:86:PRO:O	20:R:87:GLU:HB2	2.21	0.40
21:S:70:GLN:O	21:S:79:ILE:CG2	2.64	0.40
21:S:154:LEU:CD2	21:S:160:LEU:HD21	2.47	0.40
22:T:31:VAL:HG22	22:T:67:VAL:CG2	2.47	0.40
23:U:62:LEU:HG	23:U:67:LEU:HB2	2.04	0.40
24:V:7:ARG:HD2	24:V:8:ASN:H	1.83	0.40
25:W:14:GLY:O	25:W:17:VAL:HB	2.21	0.40
26:Z:12:SER:C	26:Z:14:SER:N	2.73	0.40

All (1) 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)
10:H:125:LYS:NZ	13:K:82:GLU:OE2[8_555]	2.08	0.12

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	
3	A	238/274 (87%)	150 (63%)	62 (26%)	26 (11%)	0	2
4	B	203/211 (96%)	143 (70%)	29 (14%)	31 (15%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	C	195/205 (95%)	89 (46%)	60 (31%)	46 (24%)	0	0
6	D	175/180 (97%)	101 (58%)	44 (25%)	30 (17%)	0	1
7	E	169/185 (91%)	98 (58%)	43 (25%)	28 (17%)	0	1
8	F	142/144 (99%)	113 (80%)	22 (16%)	7 (5%)	1	12
9	G	140/174 (80%)	76 (54%)	35 (25%)	29 (21%)	0	0
10	H	132/134 (98%)	108 (82%)	16 (12%)	8 (6%)	1	9
11	I	139/156 (89%)	63 (45%)	36 (26%)	40 (29%)	0	0
12	J	134/142 (94%)	74 (55%)	39 (29%)	21 (16%)	0	1
13	K	111/116 (96%)	75 (68%)	20 (18%)	16 (14%)	0	1
14	L	102/114 (90%)	52 (51%)	31 (30%)	19 (19%)	0	0
15	M	106/166 (64%)	57 (54%)	32 (30%)	17 (16%)	0	1
16	N	115/118 (98%)	68 (59%)	30 (26%)	17 (15%)	0	1
17	O	92/100 (92%)	53 (58%)	14 (15%)	25 (27%)	0	0
18	P	125/134 (93%)	87 (70%)	20 (16%)	18 (14%)	0	1
19	Q	91/95 (96%)	46 (50%)	23 (25%)	22 (24%)	0	0
20	R	108/115 (94%)	57 (53%)	28 (26%)	23 (21%)	0	0
21	S	173/237 (73%)	99 (57%)	43 (25%)	31 (18%)	0	0
22	T	82/91 (90%)	48 (58%)	24 (29%)	10 (12%)	0	1
23	U	70/81 (86%)	35 (50%)	18 (26%)	17 (24%)	0	0
24	V	64/67 (96%)	32 (50%)	19 (30%)	13 (20%)	0	0
25	W	53/55 (96%)	36 (68%)	11 (21%)	6 (11%)	0	2
26	Z	56/60 (93%)	35 (62%)	13 (23%)	8 (14%)	0	1
30	4	35/37 (95%)	23 (66%)	6 (17%)	6 (17%)	0	1
All	All	3050/3391 (90%)	1818 (60%)	718 (24%)	514 (17%)	0	1

All (514) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	A	54	ILE
3	A	59	LYS
3	A	60	ARG
3	A	153	ALA
3	A	154	GLN
3	A	209	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	A	217	ARG
3	A	220	HIS
3	A	240	THR
4	B	40	GLN
4	B	73	ALA
4	B	74	PRO
4	B	76	ARG
4	B	85	ALA
4	B	86	PRO
4	B	122	PHE
4	B	126	PRO
4	B	127	ALA
4	B	132	LYS
4	B	135	HIS
4	B	137	ARG
4	B	147	PRO
5	C	9	GLN
5	C	10	ASN
5	C	13	ARG
5	C	22	VAL
5	C	30	VAL
5	C	31	VAL
5	C	67	ALA
5	C	109	ALA
5	C	129	LYS
5	C	138	LYS
5	C	139	GLN
5	C	153	ASP
5	C	159	ARG
5	C	164	VAL
5	C	165	SER
5	C	172	VAL
5	C	175	VAL
5	C	178	TYR
5	C	192	ALA
5	C	195	ILE
6	D	81	GLN
6	D	120	ASN
6	D	137	ILE
6	D	145	MET
6	D	168	ALA
7	E	15	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	E	19	ALA
7	E	55	PRO
7	E	119	ALA
7	E	126	PRO
7	E	139	GLN
7	E	165	VAL
9	G	37	ASP
9	G	67	ARG
9	G	73	ASN
9	G	78	ASP
9	G	97	ASP
9	G	104	THR
9	G	105	GLY
9	G	107	GLN
9	G	165	VAL
9	G	170	PRO
10	H	27	SER
10	H	37	GLY
10	H	47	VAL
10	H	101	ASN
11	I	17	LYS
11	I	39	SER
11	I	65	PHE
11	I	91	ASP
11	I	93	LEU
11	I	99	VAL
11	I	105	PRO
11	I	118	VAL
12	J	13	GLN
12	J	21	ASP
12	J	26	ASP
12	J	27	TYR
12	J	64	LYS
12	J	70	PHE
12	J	80	ALA
12	J	81	GLU
12	J	82	THR
12	J	83	ARG
13	K	11	ASN
13	K	21	ALA
13	K	92	GLY
14	L	31	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	L	38	ILE
14	L	40	ALA
14	L	45	ASP
14	L	46	SER
14	L	55	SER
14	L	56	SER
14	L	94	TYR
14	L	95	LYS
14	L	96	TYR
14	L	104	ALA
15	M	25	PRO
15	M	27	PHE
15	M	29	PRO
15	M	53	VAL
15	M	62	SER
15	M	105	TYR
16	N	5	LYS
16	N	8	ILE
16	N	27	SER
16	N	32	TYR
16	N	33	ARG
16	N	48	ARG
16	N	94	VAL
17	O	7	THR
17	O	9	GLY
17	O	10	LYS
17	O	13	ARG
17	O	29	ALA
17	O	30	GLY
17	O	35	LEU
17	O	36	LYS
17	O	44	GLN
17	O	49	GLU
18	P	9	ARG
18	P	11	LYS
18	P	81	HIS
18	P	87	GLU
18	P	131	LYS
19	Q	12	ILE
19	Q	34	THR
19	Q	63	LYS
19	Q	67	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	Q	69	ILE
19	Q	74	ASP
19	Q	86	GLN
20	R	5	SER
20	R	11	ASN
20	R	12	ASP
20	R	26	SER
20	R	49	GLU
20	R	60	PRO
20	R	63	THR
20	R	83	LEU
20	R	91	ALA
20	R	96	LYS
21	S	6	LYS
21	S	17	SER
21	S	26	LYS
21	S	33	ALA
21	S	36	ARG
21	S	37	LYS
21	S	49	THR
21	S	86	VAL
21	S	91	PRO
21	S	92	VAL
21	S	118	HIS
22	T	3	HIS
22	T	4	LYS
22	T	7	VAL
22	T	19	LYS
22	T	83	ALA
23	U	14	VAL
23	U	16	ASN
23	U	32	ARG
23	U	60	VAL
24	V	2	LYS
24	V	4	SER
24	V	32	ALA
24	V	36	GLN
24	V	65	GLU
25	W	53	VAL
26	Z	4	HIS
26	Z	20	ARG
3	A	52	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	A	56	GLY
3	A	159	ALA
3	A	197	GLY
3	A	234	GLY
3	A	250	TRP
4	B	17	ASN
4	B	29	GLY
4	B	35	GLN
4	B	145	LYS
4	B	180	ASN
5	C	8	GLY
5	C	11	GLY
5	C	66	ASN
5	C	68	ARG
5	C	110	SER
5	C	161	ALA
5	C	166	TRP
5	C	196	VAL
6	D	9	ASN
6	D	10	ASP
6	D	40	LEU
6	D	42	SER
6	D	68	THR
6	D	94	GLU
6	D	107	GLY
6	D	119	PRO
6	D	123	ASP
6	D	170	LEU
7	E	13	SER
7	E	16	THR
7	E	58	ALA
7	E	76	VAL
7	E	82	GLY
7	E	110	SER
7	E	140	LEU
7	E	143	GLN
7	E	161	GLY
7	E	162	VAL
8	F	13	PRO
9	G	33	ILE
9	G	36	ASN
9	G	48	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	G	65	LYS
9	G	68	PRO
9	G	72	PRO
9	G	169	GLN
11	I	18	ARG
11	I	19	VAL
11	I	25	GLY
11	I	36	GLY
11	I	37	GLN
11	I	44	GLY
11	I	47	ALA
11	I	62	LYS
11	I	64	GLY
11	I	68	VAL
11	I	69	GLY
11	I	98	LEU
11	I	106	VAL
11	I	127	ALA
11	I	131	LYS
11	I	135	ALA
12	J	11	ARG
12	J	29	ALA
12	J	112	GLU
13	K	6	ALA
13	K	17	ARG
13	K	20	LEU
13	K	56	LYS
13	K	70	ILE
13	K	95	THR
14	L	33	ARG
14	L	67	THR
14	L	91	ARG
14	L	102	ALA
15	M	17	GLU
15	M	28	ARG
15	M	39	VAL
15	M	94	VAL
15	M	95	GLU
16	N	26	GLY
16	N	47	TYR
16	N	110	VAL
16	N	116	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	O	8	GLY
17	O	15	SER
17	O	25	LEU
17	O	26	GLN
17	O	48	GLY
17	O	96	LEU
18	P	32	ARG
18	P	70	LYS
18	P	111	ARG
18	P	112	GLY
19	Q	41	ALA
19	Q	42	ILE
19	Q	47	GLY
19	Q	48	VAL
19	Q	61	LYS
19	Q	72	ARG
19	Q	93	GLY
20	R	7	GLY
20	R	16	PHE
20	R	65	PRO
20	R	110	SER
21	S	13	LYS
21	S	76	ARG
21	S	88	TYR
21	S	102	GLY
21	S	128	ARG
21	S	156	GLU
22	T	21	LEU
22	T	31	VAL
22	T	35	ASN
22	T	75	GLY
23	U	29	GLY
23	U	30	VAL
23	U	34	THR
23	U	42	GLN
23	U	47	HIS
23	U	55	GLY
23	U	59	THR
23	U	65	ASN
24	V	10	GLN
25	W	10	ILE
25	W	23	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	W	49	HIS
25	W	54	GLN
26	Z	36	CYS
30	4	14	CYS
30	4	20	HIS
30	4	21	GLY
30	4	31	LYS
30	4	35	ARG
3	A	47	GLY
3	A	125	PRO
3	A	190	TYR
3	A	199	ALA
3	A	241	GLY
4	B	169	ASN
5	C	14	THR
5	C	15	ILE
5	C	47	THR
5	C	104	LEU
5	C	171	PRO
5	C	176	ASN
5	C	179	ASP
6	D	19	GLN
6	D	53	ALA
6	D	69	LYS
6	D	76	ASN
6	D	80	ARG
6	D	84	PRO
6	D	124	GLY
6	D	152	MET
7	E	7	GLN
7	E	60	LYS
7	E	62	ARG
7	E	128	PRO
8	F	118	GLY
9	G	70	PHE
9	G	143	ALA
9	G	154	GLU
9	G	163	PRO
10	H	14	SER
10	H	79	HIS
11	I	29	THR
11	I	38	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	I	54	SER
11	I	82	ASP
11	I	116	ARG
11	I	132	ALA
12	J	15	ARG
12	J	56	SER
12	J	97	VAL
12	J	106	GLU
12	J	117	GLU
13	K	13	ASN
13	K	88	ALA
13	K	93	GLY
13	K	100	VAL
14	L	103	LEU
15	M	56	ALA
15	M	106	TYR
16	N	87	ASN
17	O	11	GLN
17	O	21	ARG
17	O	24	SER
17	O	31	ASP
17	O	80	TYR
18	P	10	ASN
18	P	12	LYS
19	Q	59	PRO
19	Q	60	GLY
19	Q	65	VAL
20	R	6	ALA
20	R	85	ASP
20	R	93	ARG
21	S	3	LEU
21	S	10	PRO
23	U	41	VAL
24	V	5	GLU
24	V	8	ASN
24	V	19	ASP
26	Z	21	SER
26	Z	52	TYR
3	A	160	GLY
4	B	2	LYS
4	B	39	ALA
4	B	60	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	B	131	SER
4	B	157	ALA
4	B	203	LYS
5	C	103	GLY
5	C	117	LEU
5	C	121	ASP
5	C	184	ASP
6	D	4	LEU
6	D	12	VAL
6	D	56	GLU
6	D	146	VAL
7	E	49	GLN
7	E	77	LYS
7	E	78	GLY
8	F	22	PRO
9	G	51	LEU
9	G	158	HIS
11	I	84	GLU
11	I	90	ARG
11	I	95	ALA
12	J	74	PRO
12	J	121	LEU
13	K	67	ALA
14	L	20	THR
15	M	26	ASP
15	M	104	LEU
16	N	15	LYS
16	N	56	ASP
16	N	75	ASN
16	N	105	ALA
16	N	106	PHE
17	O	39	PHE
17	O	45	THR
18	P	68	VAL
18	P	82	ASN
19	Q	91	LEU
20	R	61	SER
20	R	108	VAL
21	S	5	ALA
21	S	19	ILE
21	S	25	ASN
21	S	45	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	S	106	GLY
22	T	13	GLY
23	U	15	VAL
23	U	53	GLU
24	V	25	LEU
26	Z	53	ASP
3	A	177	LEU
3	A	252	LYS
4	B	69	LYS
4	B	121	ASN
5	C	34	GLN
5	C	96	PRO
5	C	98	GLN
5	C	126	ALA
7	E	65	HIS
7	E	66	GLY
7	E	158	HIS
8	F	4	VAL
8	F	120	VAL
9	G	132	PHE
11	I	40	ARG
11	I	43	ALA
11	I	88	PHE
11	I	133	VAL
13	K	45	ARG
14	L	26	ARG
14	L	53	ALA
15	M	93	ILE
17	O	87	ARG
18	P	20	LEU
18	P	77	ALA
18	P	101	PRO
18	P	108	PRO
19	Q	40	ASP
19	Q	43	GLN
19	Q	87	SER
21	S	12	GLN
21	S	124	ALA
23	U	27	ASP
23	U	40	ARG
24	V	45	GLN
26	Z	19	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	C	123	PHE
6	D	21	GLY
7	E	14	GLY
8	F	117	ALA
9	G	84	ASN
9	G	160	ALA
11	I	81	GLN
15	M	16	ILE
17	O	60	VAL
18	P	113	SER
20	R	50	GLY
20	R	111	GLY
21	S	125	PRO
21	S	138	VAL
21	S	139	THR
24	V	39	GLN
3	A	232	PRO
5	C	125	ILE
9	G	34	PRO
24	V	43	VAL
26	Z	28	PRO
3	A	49	ILE
4	B	95	ILE
6	D	67	ILE
6	D	175	LEU
10	H	74	VAL
10	H	99	ILE
12	J	63	GLY
13	K	7	GLY
20	R	94	VAL
4	B	9	ILE
8	F	18	THR
9	G	162	LYS
11	I	114	ILE
21	S	116	VAL
21	S	164	PRO
30	4	16	VAL
3	A	132	PRO
5	C	75	PRO
9	G	88	VAL
11	I	9	THR
19	Q	31	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	R	98	ILE
4	B	148	GLY
4	B	172	VAL
25	W	38	PRO

5.3.2 Protein sidechains ⓘ

There are no protein residues with a non-rotameric sidechain to report in this entry.

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	X	2680/2880 (93%)	704 (26%)	300 (11%)
2	Y	121/122 (99%)	23 (19%)	0
All	All	2801/3002 (93%)	727 (25%)	300 (10%)

All (727) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	X	4	C
1	X	13	A
1	X	14	A
1	X	34	U
1	X	35	G
1	X	39	C
1	X	45	C
1	X	49	U
1	X	51	A
1	X	59	G
1	X	63	A
1	X	70	A
1	X	71	A
1	X	72	A
1	X	74	G
1	X	76	C
1	X	82	G
1	X	83	A
1	X	84	G
1	X	87	G
1	X	89	A
1	X	90	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	91	A
1	X	98	U
1	X	99	U
1	X	100	G
1	X	105	G
1	X	110	U
1	X	111	G
1	X	116	A
1	X	117	A
1	X	118	U
1	X	119	G
1	X	123	A
1	X	124	A
1	X	129	A
1	X	135	U
1	X	143	A
1	X	147	G
1	X	149	A
1	X	158	A
1	X	173	A
1	X	181	A
1	X	182	G
1	X	193	A
1	X	199	A
1	X	200	A
1	X	205	A
1	X	206	U
1	X	207	U
1	X	210	A
1	X	218	A
1	X	219	G
1	X	220	U
1	X	225	G
1	X	242	A
1	X	243	G
1	X	245	C
1	X	247	A
1	X	304	A
1	X	305	A
1	X	318	G
1	X	323	G
1	X	333	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	334	G
1	X	335	A
1	X	340	G
1	X	341	A
1	X	342	G
1	X	343	A
1	X	399	G
1	X	400	U
1	X	401	G
1	X	403	A
1	X	404	A
1	X	414	A
1	X	416	U
1	X	417	C
1	X	418	C
1	X	419	G
1	X	420	C
1	X	424	G
1	X	425	A
1	X	441	A
1	X	447	U
1	X	455	A
1	X	456	C
1	X	458	G
1	X	459	A
1	X	460	U
1	X	461	A
1	X	463	C
1	X	467	U
1	X	468	A
1	X	469	G
1	X	470	U
1	X	491	A
1	X	492	G
1	X	497	C
1	X	504	G
1	X	513	A
1	X	514	G
1	X	515	A
1	X	517	A
1	X	519	C
1	X	537	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	538	A
1	X	539	A
1	X	540	G
1	X	541	C
1	X	542	A
1	X	554	U
1	X	555	U
1	X	556	A
1	X	557	U
1	X	558	G
1	X	559	C
1	X	571	U
1	X	572	G
1	X	577	U
1	X	580	A
1	X	581	A
1	X	582	G
1	X	583	C
1	X	584	A
1	X	587	A
1	X	595	A
1	X	601	A
1	X	611	C
1	X	613	A
1	X	614	G
1	X	624	A
1	X	625	A
1	X	626	A
1	X	627	A
1	X	628	A
1	X	631	G
1	X	632	A
1	X	633	G
1	X	636	G
1	X	637	G
1	X	639	G
1	X	648	A
1	X	649	G
1	X	652	C
1	X	654	A
1	X	655	A
1	X	657	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	664	C
1	X	665	A
1	X	666	U
1	X	667	U
1	X	668	A
1	X	683	A
1	X	684	C
1	X	699	G
1	X	700	C
1	X	718	A
1	X	728	G
1	X	729	A
1	X	730	C
1	X	731	A
1	X	732	G
1	X	740	A
1	X	742	G
1	X	743	A
1	X	752	G
1	X	753	U
1	X	754	G
1	X	758	G
1	X	759	C
1	X	760	U
1	X	766	A
1	X	775	U
1	X	776	G
1	X	778	G
1	X	781	G
1	X	789	G
1	X	790	A
1	X	795	A
1	X	796	A
1	X	797	A
1	X	798	G
1	X	802	A
1	X	803	C
1	X	804	C
1	X	805	G
1	X	806	A
1	X	807	A
1	X	813	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	814	G
1	X	815	A
1	X	818	G
1	X	819	C
1	X	825	C
1	X	832	A
1	X	840	U
1	X	841	G
1	X	842	A
1	X	843	G
1	X	844	G
1	X	859	U
1	X	860	U
1	X	862	A
1	X	872	G
1	X	873	U
1	X	879	A
1	X	919	U
1	X	922	A
1	X	926	C
1	X	927	C
1	X	939	C
1	X	940	G
1	X	952	A
1	X	955	G
1	X	956	A
1	X	957	G
1	X	968	C
1	X	969	U
1	X	970	A
1	X	972	C
1	X	973	U
1	X	984	A
1	X	985	G
1	X	994	A
1	X	995	A
1	X	996	C
1	X	999	A
1	X	1006	C
1	X	1007	A
1	X	1016	C
1	X	1019	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1023	U
1	X	1024	G
1	X	1032	A
1	X	1033	G
1	X	1034	U
1	X	1036	G
1	X	1037	U
1	X	1044	U
1	X	1045	G
1	X	1051	U
1	X	1053	G
1	X	1054	C
1	X	1055	A
1	X	1056	U
1	X	1057	A
1	X	1058	G
1	X	1059	A
1	X	1060	C
1	X	1070	G
1	X	1071	U
1	X	1072	U
1	X	1073	G
1	X	1078	A
1	X	1079	G
1	X	1081	A
1	X	1082	G
1	X	1086	C
1	X	1087	C
1	X	1090	C
1	X	1095	A
1	X	1096	A
1	X	1097	A
1	X	1098	G
1	X	1099	A
1	X	1108	U
1	X	1115	C
1	X	1119	U
1	X	1123	G
1	X	1128	G
1	X	1129	A
1	X	1137	A
1	X	1138	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1139	A
1	X	1140	A
1	X	1142	G
1	X	1143	A
1	X	1145	C
1	X	1146	G
1	X	1152	C
1	X	1153	A
1	X	1154	A
1	X	1155	G
1	X	1167	A
1	X	1168	G
1	X	1182	U
1	X	1183	C
1	X	1185	C
1	X	1186	G
1	X	1187	A
1	X	1189	G
1	X	1192	A
1	X	1194	U
1	X	1195	U
1	X	1213	U
1	X	1220	G
1	X	1224	A
1	X	1225	G
1	X	1233	A
1	X	1234	C
1	X	1249	G
1	X	1250	A
1	X	1251	G
1	X	1253	C
1	X	1254	G
1	X	1262	U
1	X	1264	C
1	X	1265	G
1	X	1266	G
1	X	1267	A
1	X	1269	G
1	X	1278	A
1	X	1279	G
1	X	1284	G
1	X	1285	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1286	U
1	X	1288	A
1	X	1289	A
1	X	1297	A
1	X	1300	A
1	X	1302	C
1	X	1313	U
1	X	1314	A
1	X	1315	A
1	X	1316	G
1	X	1319	C
1	X	1324	G
1	X	1325	U
1	X	1326	U
1	X	1334	A
1	X	1337	G
1	X	1338	G
1	X	1339	U
1	X	1342	U
1	X	1343	C
1	X	1345	G
1	X	1346	C
1	X	1353	A
1	X	1354	A
1	X	1355	A
1	X	1356	G
1	X	1358	C
1	X	1359	G
1	X	1365	U
1	X	1391	A
1	X	1392	U
1	X	1398	G
1	X	1410	U
1	X	1411	C
1	X	1413	U
1	X	1428	G
1	X	1429	A
1	X	1430	G
1	X	1432	G
1	X	1433	A
1	X	1434	U
1	X	1440	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1441	A
1	X	1442	C
1	X	1443	G
1	X	1460	G
1	X	1465	G
1	X	1467	U
1	X	1468	A
1	X	1469	U
1	X	1470	G
1	X	1473	U
1	X	1474	A
1	X	1475	U
1	X	1476	G
1	X	1482	U
1	X	1490	U
1	X	1497	C
1	X	1498	G
1	X	1509	A
1	X	1513	U
1	X	1514	C
1	X	1523	A
1	X	1524	C
1	X	1525	A
1	X	1528	C
1	X	1551	U
1	X	1552	C
1	X	1553	G
1	X	1554	G
1	X	1562	G
1	X	1563	U
1	X	1570	C
1	X	1571	G
1	X	1574	A
1	X	1575	C
1	X	1576	G
1	X	1582	A
1	X	1583	A
1	X	1585	A
1	X	1601	U
1	X	1602	G
1	X	1603	A
1	X	1608	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1619	A
1	X	1624	A
1	X	1625	A
1	X	1626	A
1	X	1627	C
1	X	1632	A
1	X	1633	C
1	X	1634	A
1	X	1635	G
1	X	1648	C
1	X	1651	U
1	X	1652	G
1	X	1657	A
1	X	1664	G
1	X	1665	C
1	X	1671	A
1	X	1685	A
1	X	1686	A
1	X	1691	G
1	X	1692	C
1	X	1699	A
1	X	1710	U
1	X	1711	C
1	X	1712	G
1	X	1713	G
1	X	1715	A
1	X	1716	G
1	X	1717	A
1	X	1724	C
1	X	1732	U
1	X	1733	U
1	X	1734	C
1	X	1747	G
1	X	1749	G
1	X	1750	A
1	X	1754	G
1	X	1755	G
1	X	1764	A
1	X	1771	A
1	X	1772	C
1	X	1773	C
1	X	1776	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1777	A
1	X	1778	U
1	X	1782	A
1	X	1790	G
1	X	1791	C
1	X	1792	C
1	X	1793	A
1	X	1800	A
1	X	1801	C
1	X	1802	A
1	X	1807	A
1	X	1808	C
1	X	1812	U
1	X	1813	A
1	X	1821	A
1	X	1822	C
1	X	1831	G
1	X	1842	G
1	X	1845	A
1	X	1846	A
1	X	1851	A
1	X	1852	G
1	X	1854	G
1	X	1855	G
1	X	1856	U
1	X	1857	G
1	X	1859	A
1	X	1861	G
1	X	1865	C
1	X	1867	A
1	X	1868	A
1	X	1871	G
1	X	1872	A
1	X	1873	A
1	X	1874	G
1	X	1883	A
1	X	1910	A
1	X	1912	G
1	X	1914	U
1	X	1919	A
1	X	1920	A
1	X	1921	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1922	U
1	X	1923	U
1	X	1924	C
1	X	1926	U
1	X	1927	U
1	X	1928	G
1	X	1938	U
1	X	1939	U
1	X	1946	U
1	X	1947	G
1	X	1948	C
1	X	1949	A
1	X	1950	C
1	X	1951	G
1	X	1953	A
1	X	1954	A
1	X	1955	G
1	X	1964	A
1	X	1965	U
1	X	1976	U
1	X	1979	C
1	X	1980	A
1	X	2004	U
1	X	2005	U
1	X	2006	G
1	X	2014	A
1	X	2015	G
1	X	2016	A
1	X	2017	U
1	X	2019	C
1	X	2026	C
1	X	2034	A
1	X	2035	G
1	X	2038	C
1	X	2039	G
1	X	2044	G
1	X	2045	A
1	X	2046	C
1	X	2050	G
1	X	2051	U
1	X	2052	G
1	X	2075	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2076	G
1	X	2080	U
1	X	2083	G
1	X	2089	C
1	X	2171	U
1	X	2181	A
1	X	2190	A
1	X	2191	A
1	X	2192	U
1	X	2195	C
1	X	2196	U
1	X	2197	U
1	X	2198	U
1	X	2199	C
1	X	2200	G
1	X	2205	C
1	X	2217	G
1	X	2218	G
1	X	2229	G
1	X	2230	G
1	X	2237	C
1	X	2238	G
1	X	2245	A
1	X	2246	A
1	X	2247	A
1	X	2254	C
1	X	2255	G
1	X	2261	G
1	X	2262	C
1	X	2265	A
1	X	2266	A
1	X	2267	A
1	X	2268	G
1	X	2276	C
1	X	2284	U
1	X	2285	U
1	X	2286	G
1	X	2287	G
1	X	2288	A
1	X	2291	U
1	X	2298	U
1	X	2300	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2306	A
1	X	2313	G
1	X	2314	A
1	X	2321	C
1	X	2322	U
1	X	2323	U
1	X	2324	G
1	X	2325	A
1	X	2326	C
1	X	2328	G
1	X	2333	A
1	X	2349	G
1	X	2351	G
1	X	2362	G
1	X	2364	C
1	X	2369	U
1	X	2386	G
1	X	2396	C
1	X	2397	A
1	X	2402	U
1	X	2403	C
1	X	2405	A
1	X	2406	C
1	X	2407	G
1	X	2408	G
1	X	2409	A
1	X	2410	U
1	X	2418	A
1	X	2419	C
1	X	2420	C
1	X	2427	A
1	X	2428	U
1	X	2448	A
1	X	2452	U
1	X	2455	A
1	X	2461	G
1	X	2469	G
1	X	2470	U
1	X	2476	A
1	X	2477	C
1	X	2481	G
1	X	2482	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2483	U
1	X	2484	G
1	X	2485	U
1	X	2486	C
1	X	2488	G
1	X	2492	G
1	X	2497	A
1	X	2498	U
1	X	2499	C
1	X	2502	G
1	X	2508	G
1	X	2521	A
1	X	2522	G
1	X	2545	A
1	X	2546	G
1	X	2552	C
1	X	2553	G
1	X	2557	G
1	X	2561	G
1	X	2564	U
1	X	2565	C
1	X	2581	A
1	X	2582	G
1	X	2588	U
1	X	2591	C
1	X	2592	U
1	X	2593	A
1	X	2594	U
1	X	2608	A
1	X	2609	G
1	X	2616	U
1	X	2624	G
1	X	2625	U
1	X	2633	A
1	X	2634	G
1	X	2641	A
1	X	2650	G
1	X	2660	C
1	X	2661	G
1	X	2668	U
1	X	2669	C
1	X	2670	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2691	C
1	X	2692	A
1	X	2693	U
1	X	2694	G
1	X	2700	U
1	X	2702	G
1	X	2706	U
1	X	2707	G
1	X	2712	G
1	X	2713	A
1	X	2730	A
1	X	2731	G
1	X	2732	C
1	X	2736	U
1	X	2737	A
1	X	2738	A
1	X	2744	A
1	X	2745	A
1	X	2746	G
1	X	2757	G
1	X	2758	A
1	X	2759	U
1	X	2760	G
1	X	2761	A
1	X	2770	A
1	X	2771	C
1	X	2775	U
1	X	2777	A
1	X	2778	U
1	X	2779	C
1	X	2780	A
1	X	2782	G
1	X	2783	U
1	X	2795	A
1	X	2796	A
1	X	2798	A
1	X	2807	U
1	X	2808	U
1	X	2809	A
1	X	2810	A
1	X	2811	G
1	X	2824	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2825	A
1	X	2841	U
1	X	2842	C
1	X	2847	G
1	X	2850	U
1	X	2854	G
1	X	2855	C
1	X	2860	C
1	X	2867	G
1	X	2868	G
2	Y	4	C
2	Y	14	C
2	Y	15	A
2	Y	17	A
2	Y	18	G
2	Y	26	G
2	Y	27	A
2	Y	28	A
2	Y	37	C
2	Y	38	C
2	Y	40	C
2	Y	43	G
2	Y	44	C
2	Y	46	G
2	Y	47	A
2	Y	59	A
2	Y	69	G
2	Y	99	G
2	Y	102	A
2	Y	111	C
2	Y	112	A
2	Y	115	G
2	Y	123	U

All (300) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	X	3	U
1	X	13	A
1	X	33	C
1	X	38	G
1	X	48	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	69	G
1	X	70	A
1	X	71	A
1	X	73	A
1	X	118	U
1	X	154	U
1	X	173	A
1	X	176	A
1	X	181	A
1	X	192	G
1	X	198	A
1	X	199	A
1	X	218	A
1	X	219	G
1	X	226	C
1	X	312	G
1	X	322	A
1	X	334	G
1	X	340	G
1	X	341	A
1	X	342	G
1	X	399	G
1	X	400	U
1	X	403	A
1	X	417	C
1	X	424	G
1	X	454	G
1	X	458	G
1	X	460	U
1	X	466	A
1	X	467	U
1	X	468	A
1	X	469	G
1	X	485	G
1	X	490	A
1	X	513	A
1	X	516	G
1	X	538	A
1	X	539	A
1	X	541	C
1	X	542	A
1	X	553	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	554	U
1	X	555	U
1	X	556	A
1	X	557	U
1	X	580	A
1	X	582	G
1	X	583	C
1	X	596	C
1	X	613	A
1	X	631	G
1	X	638	A
1	X	648	A
1	X	664	C
1	X	682	G
1	X	683	A
1	X	698	A
1	X	699	G
1	X	717	G
1	X	728	G
1	X	729	A
1	X	730	C
1	X	739	G
1	X	741	G
1	X	751	G
1	X	752	G
1	X	759	C
1	X	765	C
1	X	775	U
1	X	777	A
1	X	780	U
1	X	788	G
1	X	789	G
1	X	795	A
1	X	801	A
1	X	802	A
1	X	803	C
1	X	804	C
1	X	805	G
1	X	806	A
1	X	813	A
1	X	814	G
1	X	818	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	824	U
1	X	842	A
1	X	843	G
1	X	872	G
1	X	878	C
1	X	925	U
1	X	938	G
1	X	939	C
1	X	955	G
1	X	956	A
1	X	969	U
1	X	972	C
1	X	984	A
1	X	985	G
1	X	994	A
1	X	1000	G
1	X	1006	C
1	X	1023	U
1	X	1031	C
1	X	1036	G
1	X	1044	U
1	X	1053	G
1	X	1055	A
1	X	1071	U
1	X	1072	U
1	X	1096	A
1	X	1122	A
1	X	1139	A
1	X	1141	U
1	X	1142	G
1	X	1152	C
1	X	1153	A
1	X	1154	A
1	X	1182	U
1	X	1186	G
1	X	1194	U
1	X	1212	U
1	X	1223	G
1	X	1224	A
1	X	1233	A
1	X	1249	G
1	X	1260	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1261	G
1	X	1263	G
1	X	1265	G
1	X	1266	G
1	X	1278	A
1	X	1285	A
1	X	1299	A
1	X	1301	U
1	X	1313	U
1	X	1314	A
1	X	1315	A
1	X	1324	G
1	X	1325	U
1	X	1337	G
1	X	1338	G
1	X	1342	U
1	X	1345	G
1	X	1353	A
1	X	1354	A
1	X	1355	A
1	X	1357	U
1	X	1391	A
1	X	1409	U
1	X	1410	U
1	X	1412	C
1	X	1439	G
1	X	1441	A
1	X	1442	C
1	X	1459	U
1	X	1473	U
1	X	1474	A
1	X	1496	G
1	X	1552	C
1	X	1561	A
1	X	1562	G
1	X	1575	C
1	X	1581	C
1	X	1582	A
1	X	1583	A
1	X	1601	U
1	X	1607	A
1	X	1618	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1623	C
1	X	1624	A
1	X	1625	A
1	X	1626	A
1	X	1632	A
1	X	1633	C
1	X	1634	A
1	X	1651	U
1	X	1664	G
1	X	1670	G
1	X	1685	A
1	X	1691	G
1	X	1698	C
1	X	1710	U
1	X	1711	C
1	X	1715	A
1	X	1716	G
1	X	1723	U
1	X	1732	U
1	X	1749	G
1	X	1771	A
1	X	1772	C
1	X	1775	A
1	X	1777	A
1	X	1790	G
1	X	1791	C
1	X	1799	A
1	X	1807	A
1	X	1811	A
1	X	1820	G
1	X	1830	C
1	X	1845	A
1	X	1867	A
1	X	1872	A
1	X	1913	G
1	X	1919	A
1	X	1920	A
1	X	1921	A
1	X	1922	U
1	X	1923	U
1	X	1926	U
1	X	1927	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	1938	U
1	X	1947	G
1	X	1953	A
1	X	1963	G
1	X	1975	G
1	X	1979	C
1	X	2004	U
1	X	2005	U
1	X	2014	A
1	X	2015	G
1	X	2016	A
1	X	2018	G
1	X	2034	A
1	X	2043	A
1	X	2044	G
1	X	2045	A
1	X	2050	G
1	X	2075	U
1	X	2088	U
1	X	2195	C
1	X	2196	U
1	X	2197	U
1	X	2204	A
1	X	2217	G
1	X	2228	U
1	X	2229	G
1	X	2237	C
1	X	2245	A
1	X	2254	C
1	X	2261	G
1	X	2265	A
1	X	2267	A
1	X	2275	U
1	X	2312	A
1	X	2313	G
1	X	2322	U
1	X	2323	U
1	X	2325	A
1	X	2370	G
1	X	2396	C
1	X	2404	A
1	X	2405	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2418	A
1	X	2426	G
1	X	2427	A
1	X	2428	U
1	X	2460	G
1	X	2469	G
1	X	2482	A
1	X	2485	U
1	X	2496	C
1	X	2497	A
1	X	2498	U
1	X	2521	A
1	X	2551	A
1	X	2560	G
1	X	2580	C
1	X	2589	C
1	X	2592	U
1	X	2593	A
1	X	2608	A
1	X	2624	G
1	X	2633	A
1	X	2660	C
1	X	2668	U
1	X	2669	C
1	X	2691	C
1	X	2693	U
1	X	2705	A
1	X	2706	U
1	X	2712	G
1	X	2736	U
1	X	2756	A
1	X	2758	A
1	X	2759	U
1	X	2760	G
1	X	2770	A
1	X	2807	U
1	X	2810	A
1	X	2823	G
1	X	2824	C
1	X	2841	U
1	X	2848	A
1	X	2854	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	X	2867	G

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](#)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	X	2686/2880 (93%)	1.15	505 (18%) 3 3	11, 57, 103, 131	0
2	Y	122/122 (100%)	1.48	28 (22%) 2 2	29, 80, 102, 108	0
3	A	240/274 (87%)	1.57	71 (29%) 1 1	35, 65, 77, 90	0
4	B	205/211 (97%)	1.33	42 (20%) 2 2	30, 53, 64, 77	0
5	C	197/205 (96%)	1.20	32 (16%) 4 4	38, 60, 71, 83	0
6	D	177/180 (98%)	1.34	42 (23%) 2 1	54, 67, 76, 84	0
7	E	171/185 (92%)	0.95	22 (12%) 7 6	50, 64, 75, 80	0
8	F	144/144 (100%)	2.99	108 (75%) 0 0	0, 0, 83, 88	0
9	G	142/174 (81%)	1.38	37 (26%) 1 1	47, 59, 69, 77	0
10	H	134/134 (100%)	1.41	24 (17%) 3 3	27, 52, 62, 69	0
11	I	141/156 (90%)	1.56	37 (26%) 1 1	40, 63, 75, 83	0
12	J	136/142 (95%)	1.23	29 (21%) 2 2	45, 61, 72, 78	0
13	K	113/116 (97%)	1.57	36 (31%) 1 1	37, 50, 60, 63	0
14	L	104/114 (91%)	1.33	25 (24%) 2 1	52, 63, 73, 78	0
15	M	108/166 (65%)	1.37	22 (20%) 3 2	23, 53, 65, 73	0
16	N	117/118 (99%)	1.28	20 (17%) 4 4	39, 57, 69, 75	0
17	O	94/100 (94%)	1.10	15 (15%) 5 4	42, 61, 72, 79	0
18	P	127/134 (94%)	1.20	20 (15%) 5 4	34, 52, 66, 76	0
19	Q	93/95 (97%)	1.16	19 (20%) 3 2	47, 58, 73, 78	0
20	R	110/115 (95%)	1.31	24 (21%) 2 2	49, 62, 73, 85	0
21	S	175/237 (73%)	1.23	27 (15%) 5 4	55, 65, 76, 87	0
22	T	84/91 (92%)	1.56	29 (34%) 1 1	50, 61, 74, 80	0
23	U	72/81 (88%)	1.50	22 (30%) 1 1	52, 64, 73, 78	0
24	V	66/67 (98%)	0.82	6 (9%) 15 11	54, 63, 75, 81	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
25	W	55/55 (100%)	0.65	2 (3%) 46 31	48, 58, 70, 79	0
26	Z	58/60 (96%)	1.52	14 (24%) 2 1	35, 53, 66, 69	0
27	1	53/55 (96%)	16.64	53 (100%) 0 0	53, 61, 68, 71	0
28	2	46/47 (97%)	15.59	46 (100%) 0 0	43, 56, 62, 63	0
29	3	63/66 (95%)	14.60	63 (100%) 0 0	50, 58, 65, 67	0
30	4	37/37 (100%)	1.07	6 (16%) 4 4	52, 63, 71, 76	0
31	5	71/122 (58%)	1.50	20 (28%) 1 1	0, 0, 0, 0	0
All	All	6141/6683 (91%)	1.66	1446 (23%) 2 2	0, 60, 91, 131	0

All (1446) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
27	1	7	ARG	45.6
27	1	15	SER	32.7
27	1	5	GLY	28.8
29	3	27	SER	27.3
29	3	22	VAL	26.6
28	2	4	THR	25.9
29	3	2	PRO	25.9
27	1	42	PRO	24.9
28	2	42	LEU	24.4
27	1	33	ALA	23.8
29	3	20	GLY	23.3
28	2	7	PRO	23.3
29	3	7	HIS	22.7
28	2	27	GLY	22.2
27	1	51	ARG	21.9
29	3	42	ARG	21.6
28	2	43	THR	21.5
27	1	40	TYR	21.4
29	3	62	LEU	20.8
27	1	44	ALA	20.8
28	2	44	VAL	20.7
29	3	33	ASN	20.6
29	3	41	ILE	20.4
29	3	24	ALA	20.3
27	1	43	VAL	19.7
27	1	35	LEU	19.7
27	1	24	THR	19.4
28	2	34	ARG	19.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	1	46	LYS	18.8
28	2	36	ALA	18.7
29	3	63	PRO	18.6
27	1	38	LYS	18.5
28	2	13	ALA	18.5
27	1	47	HIS	18.5
29	3	8	LYS	18.4
29	3	40	GLU	18.4
27	1	19	GLY	18.2
27	1	25	THR	18.2
27	1	54	LYS	18.1
28	2	9	ASN	18.0
29	3	18	GLY	17.9
29	3	28	GLY	17.8
27	1	30	ASN	17.8
29	3	19	THR	17.7
28	2	17	GLY	17.5
28	2	11	LYS	17.4
27	1	28	ARG	17.4
27	1	32	GLN	17.4
28	2	45	SER	17.4
29	3	30	ARG	17.4
27	1	31	THR	17.3
28	2	20	ALA	17.3
29	3	43	GLY	17.3
29	3	39	ASP	17.2
27	1	27	ASN	17.1
28	2	16	HIS	17.0
28	2	46	ASP	16.9
29	3	44	LYS	16.8
27	1	36	GLU	16.8
27	1	53	LYS	16.8
28	2	14	LYS	16.7
27	1	52	GLU	16.7
27	1	16	ALA	16.6
29	3	17	THR	16.6
28	2	26	SER	16.4
27	1	10	VAL	16.4
27	1	29	ARG	16.3
29	3	31	HIS	16.2
29	3	11	LYS	16.2
27	1	13	GLU	16.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	3	13	ARG	16.1
29	3	47	GLY	16.0
29	3	9	MET	15.8
29	3	46	LYS	15.7
28	2	15	THR	15.6
27	1	8	ILE	15.6
28	2	33	ARG	15.6
28	2	37	LYS	15.5
28	2	8	ASN	15.4
28	2	39	ARG	15.3
29	3	37	SER	15.2
28	2	24	THR	15.2
28	2	21	ARG	15.1
28	2	38	GLY	15.1
28	2	25	LYS	15.0
29	3	12	ARG	15.0
28	2	18	PHE	15.0
28	2	12	ARG	14.9
27	1	18	THR	14.9
28	2	10	ARG	14.9
27	1	14	SER	14.8
29	3	38	GLY	14.7
29	3	54	GLU	14.7
27	1	26	LYS	14.4
29	3	34	THR	14.4
29	3	29	LYS	14.4
29	3	6	THR	14.3
27	1	2	ALA	14.3
28	2	32	ALA	14.3
29	3	64	ARG	14.2
27	1	21	TYR	14.2
29	3	49	VAL	14.1
28	2	30	ILE	14.0
27	1	20	PHE	13.9
29	3	61	MET	13.9
9	G	97	ASP	13.9
29	3	59	LYS	13.8
28	2	35	ARG	13.7
27	1	41	ASP	13.6
28	2	28	ARG	13.4
27	1	34	LYS	13.4
28	2	40	HIS	13.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	3	45	GLY	13.1
28	2	6	GLN	13.1
29	3	10	ALA	13.0
27	1	45	LYS	12.8
29	3	26	LYS	12.7
29	3	35	GLY	12.5
27	1	17	GLY	12.4
29	3	36	LYS	12.3
27	1	23	THR	12.2
29	3	25	PHE	11.9
28	2	5	TYR	11.7
28	2	29	ASN	11.7
27	1	9	ILE	11.6
27	1	37	LEU	11.5
1	X	731	A	11.5
29	3	14	ILE	11.3
27	1	22	TYR	11.3
28	2	2	LYS	11.3
28	2	23	LYS	11.3
27	1	50	PHE	11.2
28	2	3	ARG	11.1
27	1	6	PRO	11.0
29	3	23	MET	11.0
27	1	3	LYS	10.9
27	1	48	VAL	10.6
28	2	19	ARG	10.5
28	2	22	MET	10.3
27	1	12	MET	10.3
28	2	31	LEU	10.1
29	3	48	PHE	10.1
29	3	16	ILE	10.0
27	1	4	ASP	10.0
29	3	51	ALA	10.0
29	3	55	TRP	9.8
29	3	15	LYS	9.8
27	1	49	VAL	9.7
31	5	101	ALA	9.6
29	3	32	GLN	9.5
29	3	52	LYS	9.4
29	3	5	LYS	9.1
8	F	133	SER	9.0
11	I	29	THR	8.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	S	92	VAL	8.9
8	F	130	THR	8.8
29	3	3	LYS	8.7
28	2	41	GLN	8.7
1	X	2409	A	8.6
29	3	53	ALA	8.5
29	3	4	MET	8.4
27	1	11	LYS	8.4
29	3	57	ARG	8.2
3	A	219	PRO	8.1
1	X	514	G	7.8
27	1	39	LYS	7.7
1	X	2776	U	7.7
4	B	135	HIS	7.6
1	X	2324	G	7.5
1	X	2088	U	7.5
29	3	50	LEU	7.5
1	X	1081	A	7.2
1	X	1055	A	7.2
21	S	91	PRO	7.1
28	2	1	MET	7.1
1	X	2775	U	7.0
8	F	115	LEU	7.0
1	X	2408	G	6.9
14	L	40	ALA	6.9
31	5	108	MET	6.8
22	T	15	ASP	6.8
1	X	1080	A	6.8
29	3	21	LYS	6.7
13	K	17	ARG	6.7
1	X	1085	G	6.7
20	R	43	ASP	6.6
23	U	67	LEU	6.6
1	X	2330	G	6.6
3	A	220	HIS	6.5
29	3	58	MET	6.5
16	N	48	ARG	6.5
1	X	248	A	6.5
8	F	123	ALA	6.4
10	H	63	ALA	6.4
29	3	60	LEU	6.4
1	X	1058	G	6.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1104	G	6.4
1	X	2290	A	6.3
31	5	70	ASN	6.3
8	F	99	LEU	6.2
2	Y	41	A	6.2
8	F	134	MET	6.2
15	M	34	ARG	6.1
18	P	24	GLY	6.1
8	F	91	PRO	6.1
1	X	1522	C	6.1
31	5	104	GLU	6.0
3	A	242	ALA	5.9
1	X	556	A	5.9
1	X	1074	G	5.9
8	F	4	VAL	5.9
23	U	62	LEU	5.8
10	H	27	SER	5.8
11	I	55	ARG	5.8
1	X	1098	G	5.7
7	E	37	TYR	5.7
12	J	84	MET	5.7
1	X	1086	C	5.6
3	A	237	GLU	5.6
1	X	2196	U	5.6
4	B	154	LYS	5.6
1	X	558	G	5.6
5	C	47	THR	5.6
8	F	31	GLY	5.6
1	X	100	G	5.5
5	C	44	SER	5.5
15	M	109	GLU	5.4
9	G	106	TYR	5.4
1	X	1067	G	5.4
10	H	15	GLY	5.4
1	X	730	C	5.4
1	X	2323	U	5.4
1	X	1863	U	5.3
8	F	124	ALA	5.3
10	H	64	VAL	5.3
1	X	1059	A	5.3
1	X	2777	A	5.3
1	X	1107	A	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	2778	U	5.2
1	X	1523	A	5.2
1	X	1524	C	5.1
2	Y	123	U	5.1
8	F	126	THR	5.1
12	J	72	ASP	5.1
1	X	2780	A	5.1
1	X	2166	G	5.1
1	X	555	U	5.1
26	Z	56	GLN	5.1
3	A	203	ASN	5.1
8	F	96	VAL	5.0
20	R	58	VAL	5.0
1	X	1057	A	5.0
8	F	117	ALA	5.0
11	I	36	GLY	5.0
1	X	358	C	4.9
17	O	39	PHE	4.9
1	X	2089	C	4.9
7	E	5	GLY	4.9
1	X	871	U	4.9
1	X	1092	U	4.9
14	L	36	LYS	4.9
1	X	434	C	4.9
1	X	2877	A	4.9
31	5	62	ILE	4.9
31	5	105	ALA	4.9
1	X	1084	A	4.9
1	X	1606	C	4.9
1	X	1432	G	4.9
16	N	56	ASP	4.9
8	F	66	THR	4.8
8	F	32	ALA	4.8
3	A	84	TYR	4.8
9	G	103	TYR	4.8
1	X	343	A	4.8
1	X	1847	G	4.8
14	L	53	ALA	4.8
31	5	97	LYS	4.8
11	I	48	PHE	4.8
1	X	1108	U	4.8
22	T	8	GLY	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	2370	G	4.8
11	I	32	ARG	4.8
8	F	88	SER	4.7
1	X	1223	G	4.7
1	X	1856	U	4.7
9	G	40	ASN	4.7
23	U	49	LYS	4.7
1	X	1093	U	4.7
1	X	1912	G	4.7
8	F	89	SER	4.7
5	C	66	ASN	4.7
12	J	82	THR	4.6
20	R	57	ASN	4.6
5	C	112	GLN	4.6
1	X	727	U	4.6
1	X	1187	A	4.6
1	X	2268	G	4.6
3	A	241	GLY	4.6
1	X	1734	C	4.6
1	X	1037	U	4.6
1	X	1605	A	4.6
5	C	57	LYS	4.5
1	X	1393	G	4.5
29	3	56	ALA	4.5
8	F	131	ALA	4.5
11	I	53	ARG	4.5
1	X	1857	G	4.5
17	O	36	LYS	4.5
10	H	23	ARG	4.5
1	X	177	U	4.5
1	X	2779	C	4.4
1	X	1279	G	4.4
23	U	52	ARG	4.4
7	E	143	GLN	4.4
4	B	34	VAL	4.4
20	R	7	GLY	4.4
1	X	1105	U	4.4
24	V	4	SER	4.4
23	U	79	GLU	4.4
1	X	226	C	4.4
1	X	427	C	4.4
12	J	15	ARG	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	I	5	ASP	4.4
17	O	34	GLU	4.3
1	X	1189	G	4.3
1	X	1020	A	4.3
1	X	1095	A	4.3
1	X	2270	U	4.3
10	H	14	SER	4.3
3	A	128	GLY	4.3
8	F	129	GLY	4.3
14	L	41	GLN	4.3
3	A	271	VAL	4.3
18	P	134	LYS	4.3
8	F	105	LEU	4.3
1	X	651	C	4.3
4	B	136	ARG	4.3
21	S	32	PHE	4.3
26	Z	2	ALA	4.3
1	X	388	G	4.3
1	X	1552	C	4.3
15	M	78	GLU	4.2
1	X	1071	U	4.2
1	X	1111	C	4.2
19	Q	27	PHE	4.2
8	F	19	PRO	4.2
9	G	129	HIS	4.2
6	D	141	ILE	4.2
1	X	2291	U	4.2
1	X	1054	C	4.2
11	I	42	GLY	4.2
8	F	127	VAL	4.2
22	T	69	PHE	4.2
8	F	5	ALA	4.1
1	X	641	G	4.1
1	X	1069	G	4.1
1	X	1077	U	4.1
4	B	24	THR	4.1
20	R	77	HIS	4.1
11	I	30	ALA	4.1
13	K	83	VAL	4.0
18	P	19	LYS	4.0
1	X	665	A	4.0
1	X	2165	A	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1091	C	4.0
11	I	56	LEU	4.0
1	X	1594	U	4.0
1	X	1073	G	4.0
12	J	106	GLU	4.0
8	F	6	GLY	4.0
14	L	90	ASP	4.0
1	X	83	A	4.0
6	D	43	SER	4.0
8	F	128	ALA	4.0
1	X	1951	G	4.0
15	M	58	ASN	4.0
14	L	20	THR	4.0
3	A	101	GLU	4.0
3	A	217	ARG	3.9
8	F	132	ARG	3.9
13	K	3	HIS	3.9
8	F	45	THR	3.9
8	F	142	PRO	3.9
1	X	1083	C	3.9
11	I	100	ARG	3.9
1	X	1076	U	3.9
8	F	111	LYS	3.9
3	A	33	LEU	3.9
5	C	19	LEU	3.9
6	D	38	GLU	3.9
18	P	133	ASN	3.9
1	X	200	A	3.9
1	X	1850	G	3.9
17	O	98	ILE	3.9
9	G	59	ALA	3.9
1	X	557	U	3.9
8	F	104	VAL	3.9
15	M	28	ARG	3.9
4	B	94	ASP	3.9
20	R	26	SER	3.9
17	O	10	LYS	3.9
1	X	1021	A	3.9
1	X	2190	A	3.9
1	X	2247	A	3.9
5	C	48	ARG	3.9
1	X	2284	U	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	F	42	ASN	3.9
3	A	46	ARG	3.8
1	X	118	U	3.8
1	X	1070	G	3.8
1	X	1072	U	3.8
5	C	189	ASP	3.8
8	F	52	ILE	3.8
10	H	121	ARG	3.8
11	I	63	ARG	3.8
8	F	102	ASP	3.8
1	X	423	G	3.8
10	H	40	GLY	3.8
9	G	107	GLN	3.8
5	C	43	ALA	3.8
3	A	186	HIS	3.8
1	X	1510	A	3.8
1	X	1888	C	3.8
1	X	2326	C	3.8
8	F	57	ILE	3.8
8	F	120	VAL	3.8
11	I	15	ASP	3.8
1	X	729	A	3.8
1	X	1365	U	3.8
8	F	110	THR	3.8
1	X	968	C	3.7
1	X	1094	C	3.7
22	T	9	SER	3.7
1	X	1121	G	3.7
8	F	107	ILE	3.7
1	X	2090	U	3.7
7	E	85	ILE	3.7
15	M	57	ILE	3.7
12	J	86	LYS	3.7
1	X	1116	U	3.7
1	X	1188	A	3.7
8	F	47	ASP	3.7
11	I	97	ARG	3.7
1	X	2316	G	3.7
9	G	41	TRP	3.7
8	F	65	PHE	3.7
8	F	17	ALA	3.7
1	X	1103	C	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	B	158	GLY	3.7
19	Q	2	SER	3.6
1	X	1066	G	3.6
1	X	1082	G	3.6
1	X	1909	U	3.6
1	X	1122	A	3.6
3	A	250	TRP	3.6
8	F	108	ALA	3.6
4	B	128	SER	3.6
8	F	35	MET	3.6
23	U	10	LYS	3.6
1	X	2694	G	3.6
8	F	33	ASN	3.6
1	X	1877	C	3.6
11	I	8	PRO	3.6
1	X	875	G	3.6
1	X	2173	G	3.6
3	A	151	LYS	3.6
26	Z	30	LEU	3.6
8	F	64	SER	3.6
1	X	2456	U	3.6
22	T	35	ASN	3.6
12	J	69	ILE	3.6
19	Q	42	ILE	3.6
4	B	205	SER	3.6
5	C	71	ASP	3.6
1	X	1050	G	3.5
11	I	31	GLY	3.5
11	I	33	GLY	3.5
8	F	138	VAL	3.5
10	H	16	ALA	3.5
6	D	37	ASN	3.5
1	X	1469	U	3.5
1	X	1515	U	3.5
22	T	10	SER	3.5
1	X	356	A	3.5
1	X	984	A	3.5
1	X	559	C	3.5
8	F	116	ASN	3.5
11	I	87	THR	3.5
4	B	3	GLY	3.5
4	B	184	VAL	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	T	62	LEU	3.5
17	O	23	GLU	3.5
1	X	1867	A	3.5
14	L	39	TYR	3.5
1	X	1079	G	3.5
22	T	19	LYS	3.5
1	X	305	A	3.5
1	X	774	A	3.5
1	X	1954	A	3.5
1	X	1115	C	3.5
6	D	152	MET	3.5
8	F	1	MET	3.5
1	X	1184	G	3.5
1	X	1186	G	3.5
1	X	873	U	3.5
3	A	191	ALA	3.4
1	X	70	A	3.4
10	H	12	ASP	3.4
3	A	208	LYS	3.4
1	X	1508	G	3.4
1	X	930	A	3.4
1	X	1872	A	3.4
3	A	216	GLY	3.4
5	C	49	ALA	3.4
9	G	130	ALA	3.4
16	N	92	ARG	3.4
5	C	42	THR	3.4
1	X	940	G	3.4
5	C	91	TYR	3.4
30	4	18	ARG	3.4
1	X	2497	A	3.4
21	S	125	PRO	3.4
1	X	1090	C	3.4
6	D	4	LEU	3.4
15	M	41	GLU	3.4
1	X	413	G	3.4
1	X	459	A	3.3
1	X	1097	A	3.3
1	X	1753	A	3.3
18	P	8	PHE	3.3
1	X	537	C	3.3
1	X	878	C	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	F	62	ASP	3.3
10	H	5	GLN	3.3
1	X	734	G	3.3
14	L	89	PHE	3.3
1	X	1109	A	3.3
4	B	188	ILE	3.3
12	J	141	ALA	3.3
1	X	416	U	3.3
3	A	249	PRO	3.3
5	C	20	PRO	3.3
3	A	239	ARG	3.3
1	X	1146	G	3.3
1	X	2867	G	3.3
11	I	52	GLY	3.3
21	S	104	SER	3.3
6	D	153	ASP	3.3
1	X	1429	A	3.3
1	X	1525	A	3.3
8	F	113	PRO	3.3
6	D	112	ARG	3.3
8	F	73	PRO	3.3
1	X	2731	G	3.3
1	X	1061	A	3.3
9	G	36	ASN	3.3
1	X	1060	C	3.3
1	X	1531	C	3.3
8	F	106	GLU	3.3
20	R	82	ALA	3.3
21	S	124	ALA	3.3
12	J	16	GLY	3.3
31	5	116	GLY	3.3
22	T	14	ARG	3.2
1	X	1570	C	3.2
1	X	2082	C	3.2
31	5	109	LYS	3.2
3	A	85	ASP	3.2
16	N	89	ASP	3.2
19	Q	86	GLN	3.2
20	R	78	ALA	3.2
23	U	45	ASN	3.2
31	5	112	LEU	3.2
1	X	1023	U	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1056	U	3.2
1	X	728	G	3.2
2	Y	27	A	3.2
2	Y	51	G	3.2
20	R	79	SER	3.2
23	U	47	HIS	3.2
1	X	1593	C	3.2
2	Y	111	C	3.2
13	K	106	ASP	3.2
3	A	183	ARG	3.2
6	D	92	ARG	3.2
6	D	35	VAL	3.2
8	F	18	THR	3.2
1	X	424	G	3.2
1	X	1882	G	3.2
23	U	16	ASN	3.2
3	A	67	PHE	3.2
16	N	12	ARG	3.2
8	F	86	LYS	3.1
3	A	189	CYS	3.1
8	F	135	GLY	3.1
1	X	429	C	3.1
1	X	773	G	3.1
1	X	1803	G	3.1
1	X	2170	C	3.1
8	F	84	ILE	3.1
14	L	52	ALA	3.1
26	Z	58	LEU	3.1
1	X	2322	U	3.1
13	K	104	ARG	3.1
19	Q	72	ARG	3.1
1	X	242	A	3.1
2	Y	68	A	3.1
17	O	5	ILE	3.1
1	X	1633	C	3.1
1	X	306	G	3.1
1	X	2077	G	3.1
1	X	2286	G	3.1
1	X	2582	G	3.1
1	X	2774	U	3.1
13	K	10	LEU	3.1
13	K	51	LEU	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	410	A	3.1
1	X	601	A	3.1
10	H	30	GLY	3.1
16	N	2	PRO	3.1
1	X	1041	G	3.1
14	L	43	ILE	3.1
8	F	144	ALA	3.1
19	Q	71	GLN	3.1
3	A	224	SER	3.1
14	L	34	SER	3.1
4	B	171	GLU	3.1
1	X	1065	A	3.1
1	X	1106	A	3.1
5	C	193	LEU	3.0
13	K	98	LEU	3.0
1	X	1913	G	3.0
1	X	2287	G	3.0
9	G	52	GLY	3.0
15	M	69	ARG	3.0
18	P	21	ARG	3.0
6	D	42	SER	3.0
6	D	34	ILE	3.0
6	D	154	ILE	3.0
8	F	114	ASP	3.0
23	U	27	ASP	3.0
10	H	134	LEU	3.0
1	X	1099	A	3.0
14	L	37	HIS	3.0
1	X	664	C	3.0
3	A	180	GLY	3.0
8	F	59	ILE	3.0
1	X	2087	U	3.0
1	X	2402	U	3.0
4	B	147	PRO	3.0
8	F	54	PRO	3.0
1	X	355	G	3.0
1	X	540	G	3.0
2	Y	120	G	3.0
3	A	91	ARG	3.0
3	A	134	ARG	3.0
11	I	64	GLY	3.0
31	5	107	LYS	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	2267	A	3.0
8	F	55	VAL	3.0
1	X	2444	C	3.0
8	F	14	ALA	3.0
1	X	79	G	3.0
8	F	11	GLN	3.0
8	F	29	GLN	3.0
1	X	1068	A	3.0
1	X	1468	A	3.0
1	X	1919	A	3.0
11	I	10	PRO	3.0
1	X	2329	C	3.0
13	K	107	GLY	3.0
1	X	2081	U	3.0
1	X	2385	U	3.0
5	C	50	GLN	3.0
5	C	133	PHE	3.0
22	T	12	ASN	3.0
9	G	146	THR	3.0
21	S	143	ILE	3.0
15	M	38	LYS	2.9
22	T	5	LYS	2.9
13	K	79	VAL	2.9
1	X	422	C	2.9
4	B	60	ASN	2.9
1	X	656	U	2.9
26	Z	11	THR	2.9
12	J	88	LYS	2.9
11	I	41	SER	2.9
8	F	87	GLY	2.9
1	X	841	G	2.9
1	X	2083	G	2.9
1	X	2269	G	2.9
4	B	84	PHE	2.9
1	X	247	A	2.9
3	A	87	ASN	2.9
13	K	5	LYS	2.9
1	X	347	C	2.9
1	X	759	C	2.9
1	X	1075	C	2.9
10	H	104	GLU	2.9
11	I	39	SER	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	D	40	LEU	2.9
18	P	17	GLN	2.9
1	X	872	G	2.9
1	X	1117	G	2.9
2	Y	52	G	2.9
2	Y	66	G	2.9
13	K	89	GLU	2.9
1	X	360	A	2.9
1	X	2266	A	2.9
1	X	398	C	2.9
1	X	417	C	2.9
1	X	667	U	2.9
31	5	77	GLY	2.9
20	R	10	HIS	2.9
19	Q	63	LYS	2.9
8	F	103	GLN	2.9
18	P	79	ALA	2.9
5	C	163	ASN	2.9
4	B	165	VAL	2.9
7	E	43	VAL	2.9
22	T	13	GLY	2.9
1	X	877	G	2.9
1	X	1078	A	2.9
1	X	1920	A	2.9
1	X	1921	A	2.9
7	E	33	LEU	2.9
9	G	119	LEU	2.9
1	X	1848	U	2.8
1	X	2080	U	2.8
8	F	44	GLN	2.8
24	V	36	GLN	2.8
3	A	240	THR	2.8
20	R	65	PRO	2.8
15	M	39	VAL	2.8
3	A	39	LYS	2.8
8	F	93	LYS	2.8
26	Z	3	LYS	2.8
1	X	1096	A	2.8
1	X	836	G	2.8
1	X	1733	U	2.8
1	X	1887	G	2.8
1	X	2368	G	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	2447	G	2.8
1	X	2179	C	2.8
11	I	50	GLU	2.8
13	K	114	GLU	2.8
16	N	3	ARG	2.8
19	Q	62	ARG	2.8
4	B	35	GLN	2.8
6	D	24	SER	2.8
11	I	54	SER	2.8
30	4	19	ARG	2.8
3	A	196	VAL	2.8
7	E	17	VAL	2.8
4	B	37	LYS	2.8
12	J	140	GLU	2.8
16	N	6	THR	2.8
18	P	87	GLU	2.8
12	J	104	MET	2.8
17	O	9	GLY	2.8
1	X	182	G	2.8
2	Y	29	C	2.8
21	S	123	VAL	2.8
23	U	48	LYS	2.8
15	M	51	GLU	2.8
16	N	49	ASP	2.8
1	X	1845	A	2.8
1	X	1851	A	2.8
1	X	1949	A	2.8
2	Y	60	A	2.8
13	K	71	HIS	2.8
3	A	222	ARG	2.8
1	X	307	C	2.8
1	X	1190	C	2.8
1	X	2193	C	2.8
4	B	104	ALA	2.8
1	X	645	G	2.8
1	X	2320	G	2.8
1	X	2389	G	2.8
16	N	65	ILE	2.8
1	X	400	U	2.7
1	X	1499	A	2.7
1	X	2289	A	2.7
24	V	52	GLN	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	691	C	2.7
1	X	2008	C	2.7
3	A	193	ILE	2.7
14	L	24	SER	2.7
14	L	35	SER	2.7
11	I	86	THR	2.7
23	U	8	THR	2.7
8	F	101	TRP	2.7
1	X	1553	G	2.7
7	E	6	LYS	2.7
8	F	20	ALA	2.7
16	N	42	ALA	2.7
4	B	86	PRO	2.7
1	X	919	U	2.7
2	Y	16	U	2.7
1	X	123	A	2.7
1	X	304	A	2.7
1	X	2167	A	2.7
31	5	65	GLY	2.7
3	A	52	ARG	2.7
3	A	244	ARG	2.7
8	F	3	LYS	2.7
18	P	83	ASP	2.7
20	R	100	ASP	2.7
8	F	60	TYR	2.7
20	R	109	ALA	2.7
18	P	27	VAL	2.7
13	K	28	LEU	2.7
1	X	1849	G	2.7
6	D	104	ILE	2.7
26	Z	33	CYS	2.7
13	K	93	GLY	2.7
20	R	67	GLY	2.7
21	S	126	GLY	2.7
4	B	113	THR	2.7
10	H	6	SER	2.7
1	X	1378	A	2.7
13	K	55	ALA	2.7
1	X	1052	C	2.7
8	F	7	ILE	2.7
15	M	29	PRO	2.7
12	J	14	PHE	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	Z	13	LYS	2.7
3	A	161	THR	2.7
1	X	74	G	2.7
1	X	2214	G	2.7
19	Q	54	SER	2.7
1	X	1030	U	2.7
1	X	2197	U	2.7
6	D	62	LEU	2.7
3	A	230	ASP	2.7
26	Z	23	HIS	2.7
1	X	441	A	2.6
1	X	1603	A	2.6
11	I	57	ILE	2.6
6	D	138	PHE	2.6
2	Y	2	C	2.6
11	I	9	THR	2.6
30	4	27	CYS	2.6
9	G	171	LEU	2.6
1	X	662	G	2.6
1	X	931	G	2.6
1	X	1100	G	2.6
1	X	2076	G	2.6
8	F	34	ILE	2.6
10	H	57	ASP	2.6
12	J	21	ASP	2.6
1	X	1548	U	2.6
6	D	129	ASN	2.6
8	F	92	ASN	2.6
16	N	58	ARG	2.6
1	X	404	A	2.6
1	X	1588	A	2.6
8	F	139	GLU	2.6
14	L	57	ALA	2.6
19	Q	92	ALA	2.6
1	X	1031	C	2.6
12	J	11	ARG	2.6
16	N	59	ARG	2.6
3	A	71	ASP	2.6
3	A	47	GLY	2.6
1	X	170	U	2.6
18	P	66	GLU	2.6
19	Q	89	GLU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	192	G	2.6
1	X	633	G	2.6
3	A	248	THR	2.6
8	F	71	THR	2.6
20	R	94	VAL	2.6
1	X	91	A	2.6
1	X	994	A	2.6
1	X	1516	A	2.6
1	X	2427	A	2.6
2	Y	28	A	2.6
9	G	162	LYS	2.6
18	P	11	LYS	2.6
23	U	20	ARG	2.6
1	X	1087	C	2.6
1	X	1858	C	2.6
1	X	2271	C	2.6
5	C	55	GLY	2.6
6	D	39	GLY	2.6
14	L	63	ASN	2.6
14	L	92	GLY	2.6
3	A	35	GLU	2.6
11	I	60	LEU	2.6
1	X	12	U	2.6
6	D	149	THR	2.6
8	F	43	ALA	2.6
22	T	39	ARG	2.6
1	X	658	G	2.6
1	X	732	G	2.6
1	X	1110	G	2.6
1	X	2634	G	2.6
12	J	119	PHE	2.6
13	K	94	TYR	2.6
1	X	322	A	2.6
1	X	2168	A	2.6
1	X	2404	A	2.6
16	N	40	LEU	2.6
17	O	25	LEU	2.6
23	U	46	LEU	2.6
1	X	185	C	2.6
1	X	1615	C	2.6
10	H	132	GLU	2.6
6	D	36	VAL	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	I	45	LYS	2.6
15	M	44	ARG	2.6
4	B	14	ILE	2.5
31	5	75	ILE	2.5
21	S	62	PHE	2.5
1	X	616	U	2.5
3	A	190	TYR	2.5
8	F	21	PRO	2.5
4	B	50	GLY	2.5
8	F	85	GLY	2.5
16	N	63	GLN	2.5
21	S	112	LEU	2.5
1	X	562	G	2.5
1	X	733	G	2.5
1	X	1428	G	2.5
1	X	1831	G	2.5
1	X	2078	G	2.5
3	A	258	LYS	2.5
6	D	95	ARG	2.5
13	K	69	ASP	2.5
22	T	17	ASN	2.5
1	X	632	A	2.5
1	X	2299	A	2.5
7	E	68	THR	2.5
9	G	155	THR	2.5
21	S	1	MET	2.5
1	X	1019	U	2.5
1	X	1467	U	2.5
1	X	2428	U	2.5
9	G	166	LEU	2.5
11	I	6	LEU	2.5
23	U	9	GLY	2.5
9	G	116	ARG	2.5
16	N	54	LYS	2.5
3	A	227	ASN	2.5
31	5	52	GLU	2.5
22	T	79	ILE	2.5
1	X	311	A	2.5
1	X	1088	A	2.5
1	X	1625	A	2.5
1	X	1802	A	2.5
1	X	1883	A	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	2181	A	2.5
1	X	2386	G	2.5
2	Y	118	G	2.5
8	F	25	PRO	2.5
8	F	30	TYR	2.5
1	X	744	C	2.5
1	X	1164	C	2.5
15	M	46	ARG	2.5
22	T	7	VAL	2.5
22	T	23	VAL	2.5
1	X	1431	U	2.5
1	X	1922	U	2.5
5	C	29	GLU	2.5
16	N	88	ILE	2.5
8	F	37	PHE	2.5
11	I	88	PHE	2.5
22	T	60	PHE	2.5
6	D	108	LEU	2.5
14	L	97	HIS	2.5
19	Q	4	TYR	2.5
22	T	32	LYS	2.5
1	X	174	A	2.5
22	T	73	GLY	2.5
6	D	98	VAL	2.5
7	E	59	GLN	2.5
12	J	107	VAL	2.5
1	X	191	G	2.5
1	X	406	G	2.5
1	X	421	G	2.5
1	X	726	G	2.5
1	X	1394	G	2.5
1	X	1527	G	2.5
1	X	2782	G	2.5
2	Y	109	G	2.5
3	A	51	SER	2.5
13	K	15	SER	2.5
1	X	175	C	2.5
1	X	418	C	2.5
1	X	2799	C	2.5
8	F	56	GLU	2.5
13	K	63	ARG	2.5
19	Q	64	ARG	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	K	4	GLY	2.5
22	T	31	VAL	2.5
8	F	81	ALA	2.4
8	F	94	ALA	2.4
14	L	54	ALA	2.4
1	X	1511	A	2.4
1	X	1604	A	2.4
1	X	2457	A	2.4
3	A	122	GLU	2.4
4	B	145	LYS	2.4
5	C	162	ARG	2.4
8	F	125	ASN	2.4
12	J	17	ARG	2.4
1	X	194	G	2.4
1	X	520	C	2.4
1	X	1348	C	2.4
1	X	1801	C	2.4
1	X	1827	G	2.4
1	X	2567	G	2.4
2	Y	90	C	2.4
8	F	72	PRO	2.4
1	X	1101	U	2.4
1	X	1202	U	2.4
1	X	1452	U	2.4
12	J	27	TYR	2.4
26	Z	37	HIS	2.4
12	J	87	GLY	2.4
3	A	98	ALA	2.4
17	O	88	GLN	2.4
1	X	333	A	2.4
1	X	539	A	2.4
1	X	2189	A	2.4
2	Y	15	A	2.4
21	S	155	PRO	2.4
1	X	553	C	2.4
2	Y	30	C	2.4
8	F	53	ILE	2.4
10	H	115	ALA	2.4
1	X	699	G	2.4
1	X	1165	G	2.4
1	X	1284	G	2.4
1	X	1426	U	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1526	U	2.4
2	Y	58	G	2.4
3	A	252	LYS	2.4
8	F	109	LYS	2.4
8	F	75	SER	2.4
26	Z	12	SER	2.4
8	F	10	LEU	2.4
11	I	99	VAL	2.4
8	F	15	GLY	2.4
22	T	22	GLY	2.4
1	X	210	A	2.4
1	X	1137	A	2.4
1	X	1585	A	2.4
1	X	2357	A	2.4
5	C	38	ARG	2.4
18	P	15	LYS	2.4
1	X	1357	U	2.4
1	X	1830	C	2.4
1	X	1950	C	2.4
1	X	2458	U	2.4
1	X	2628	C	2.4
6	D	32	GLU	2.4
13	K	82	GLU	2.4
1	X	594	G	2.4
1	X	2230	G	2.4
1	X	2548	G	2.4
6	D	119	PRO	2.4
21	S	78	PRO	2.4
7	E	155	ASP	2.4
26	Z	53	ASP	2.4
5	C	56	ARG	2.4
12	J	18	MET	2.4
14	L	33	ARG	2.4
19	Q	44	GLN	2.4
1	X	408	U	2.4
1	X	784	U	2.4
4	B	126	PRO	2.4
20	R	81	VAL	2.4
1	X	45	C	2.3
1	X	426	C	2.3
1	X	1514	C	2.3
4	B	49	ILE	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	B	132	LYS	2.3
13	K	97	ILE	2.3
21	S	67	LYS	2.3
23	U	44	ALA	2.3
8	F	74	MET	2.3
1	X	166	G	2.3
1	X	227	G	2.3
1	X	938	G	2.3
1	X	1193	G	2.3
1	X	1533	G	2.3
1	X	1735	G	2.3
21	S	52	PHE	2.3
17	O	46	VAL	2.3
8	F	13	PRO	2.3
11	I	111	SER	2.3
3	A	105	ILE	2.3
6	D	155	THR	2.3
7	E	60	LYS	2.3
8	F	38	THR	2.3
20	R	45	LYS	2.3
5	C	185	ARG	2.3
18	P	53	ALA	2.3
1	X	1049	C	2.3
1	X	2273	C	2.3
4	B	42	ASP	2.3
3	A	127	LEU	2.3
15	M	107	LEU	2.3
21	S	172	LEU	2.3
17	O	11	GLN	2.3
24	V	39	GLN	2.3
10	H	117	GLU	2.3
1	X	203	G	2.3
1	X	224	G	2.3
1	X	1045	G	2.3
1	X	1356	G	2.3
1	X	2781	G	2.3
9	G	93	LYS	2.3
22	T	11	LYS	2.3
26	Z	8	LYS	2.3
31	5	73	LYS	2.3
6	D	41	GLY	2.3
9	G	108	GLY	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	J	63	GLY	2.3
3	A	209	ALA	2.3
9	G	158	HIS	2.3
1	X	2371	A	2.3
3	A	171	ASP	2.3
1	X	1528	C	2.3
2	Y	88	C	2.3
23	U	33	LYS	2.3
31	5	92	LYS	2.3
14	L	8	ARG	2.3
5	C	161	ALA	2.3
7	E	10	ALA	2.3
10	H	8	LEU	2.3
21	S	34	LEU	2.3
1	X	631	G	2.3
1	X	858	G	2.3
1	X	861	G	2.3
1	X	887	G	2.3
1	X	1261	G	2.3
1	X	2283	G	2.3
4	B	151	TYR	2.3
3	A	45	ASN	2.3
16	N	91	ASN	2.3
3	A	154	GLN	2.3
9	G	37	ASP	2.3
15	M	31	ASP	2.3
3	A	218	LYS	2.3
1	X	2079	A	2.3
1	X	2265	A	2.3
2	Y	3	A	2.3
3	A	117	VAL	2.3
23	U	25	ARG	2.3
3	A	270	ILE	2.3
8	F	22	PRO	2.3
15	M	7	ILE	2.3
1	X	803	C	2.3
2	Y	21	C	2.3
22	T	21	LEU	2.3
25	W	35	SER	2.3
3	A	68	LYS	2.3
3	A	129	ASN	2.3
10	H	56	LYS	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	K	11	ASN	2.3
13	K	73	LYS	2.3
9	G	96	ASP	2.3
22	T	68	VAL	2.3
1	X	1	G	2.2
1	X	90	G	2.2
1	X	359	G	2.2
1	X	967	G	2.2
1	X	1173	G	2.2
1	X	1747	G	2.2
7	E	136	ILE	2.2
21	S	54	ILE	2.2
13	K	105	GLY	2.2
19	Q	59	PRO	2.2
1	X	387	A	2.2
1	X	815	A	2.2
1	X	1512	A	2.2
1	X	1810	U	2.2
1	X	2412	A	2.2
2	Y	57	U	2.2
18	P	25	PHE	2.2
6	D	23	SER	2.2
6	D	71	LYS	2.2
9	G	65	LYS	2.2
21	S	170	SER	2.2
1	X	661	C	2.2
1	X	972	C	2.2
1	X	1150	C	2.2
1	X	2453	C	2.2
1	X	2477	C	2.2
1	X	2580	C	2.2
3	A	44	ASN	2.2
9	G	131	VAL	2.2
4	B	80	GLU	2.2
3	A	235	GLY	2.2
21	S	68	ALA	2.2
8	F	67	PHE	2.2
1	X	209	G	2.2
1	X	811	G	2.2
1	X	2350	G	2.2
9	G	71	THR	2.2
20	R	92	THR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1881	U	2.2
23	U	40	ARG	2.2
1	X	357	A	2.2
1	X	657	A	2.2
1	X	1910	A	2.2
1	X	1961	A	2.2
3	A	163	VAL	2.2
3	A	247	VAL	2.2
7	E	86	ASN	2.2
11	I	103	ASN	2.2
8	F	78	ILE	2.2
8	F	121	GLU	2.2
1	X	541	C	2.2
1	X	1779	C	2.2
1	X	1792	C	2.2
1	X	2072	C	2.2
5	C	41	GLY	2.2
5	C	173	ALA	2.2
21	S	149	ALA	2.2
22	T	33	ALA	2.2
25	W	51	LEU	2.2
4	B	155	ARG	2.2
6	D	150	ARG	2.2
30	4	32	HIS	2.2
19	Q	58	VAL	2.2
16	N	8	ILE	2.2
1	X	72	A	2.2
1	X	805	G	2.2
1	X	1224	A	2.2
1	X	1354	A	2.2
1	X	1820	G	2.2
1	X	2085	G	2.2
1	X	2455	A	2.2
1	X	2481	G	2.2
1	X	2593	A	2.2
6	D	130	LEU	2.2
19	Q	14	GLU	2.2
10	H	48	GLY	2.2
13	K	92	GLY	2.2
21	S	21	ALA	2.2
9	G	98	LYS	2.2
18	P	12	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	A	260	ARG	2.2
8	F	41	PHE	2.2
1	X	2195	C	2.2
4	B	150	VAL	2.2
5	C	164	VAL	2.2
8	F	8	VAL	2.2
6	D	11	GLN	2.2
6	D	50	ILE	2.2
13	K	80	MET	2.2
7	E	124	ALA	2.2
10	H	96	ALA	2.2
22	T	61	ALA	2.2
1	X	1051	U	2.2
1	X	2736	U	2.2
7	E	8	PRO	2.2
30	4	31	LYS	2.2
7	E	132	ASP	2.2
31	5	103	ASP	2.2
1	X	193	A	2.2
1	X	655	A	2.2
1	X	913	A	2.2
1	X	1032	A	2.2
1	X	164	G	2.2
1	X	522	G	2.2
1	X	888	G	2.2
1	X	920	G	2.2
1	X	2071	G	2.2
1	X	2328	G	2.2
1	X	2384	G	2.2
2	Y	23	G	2.2
7	E	52	VAL	2.1
1	X	46	C	2.1
1	X	180	C	2.1
1	X	330	C	2.1
9	G	127	ILE	2.1
7	E	71	LEU	2.1
9	G	51	LEU	2.1
9	G	164	GLN	2.1
6	D	56	GLU	2.1
15	M	17	GLU	2.1
31	5	110	ALA	2.1
15	M	74	GLY	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	4	21	GLY	2.1
1	X	1044	U	2.1
1	X	1244	U	2.1
2	Y	42	U	2.1
6	D	146	VAL	2.1
9	G	156	HIS	2.1
8	F	69	THR	2.1
1	X	1839	A	2.1
1	X	2411	A	2.1
1	X	2738	A	2.1
4	B	77	ILE	2.1
6	D	128	TYR	2.1
22	T	20	TYR	2.1
23	U	51	ILE	2.1
7	E	153	LYS	2.1
9	G	54	LEU	2.1
11	I	17	LYS	2.1
20	R	28	LYS	2.1
1	X	399	G	2.1
1	X	788	G	2.1
1	X	1407	G	2.1
1	X	1430	G	2.1
1	X	1841	G	2.1
1	X	2039	G	2.1
1	X	2174	G	2.1
9	G	74	MET	2.1
9	G	53	ARG	2.1
20	R	107	ALA	2.1
21	S	128	ARG	2.1
24	V	48	ARG	2.1
3	A	146	GLU	2.1
15	M	11	GLU	2.1
1	X	864	C	2.1
1	X	1002	C	2.1
1	X	1791	C	2.1
1	X	1844	C	2.1
12	J	105	PHE	2.1
19	Q	46	PHE	2.1
6	D	89	VAL	2.1
7	E	46	ASP	2.1
1	X	1038	U	2.1
1	X	2171	U	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	A	97	TYR	2.1
4	B	78	LEU	2.1
14	L	21	THR	2.1
17	O	68	LYS	2.1
18	P	22	LYS	2.1
21	S	175	ARG	2.1
4	B	127	ALA	2.1
13	K	84	ALA	2.1
1	X	1774	A	2.1
4	B	124	GLY	2.1
4	B	186	GLY	2.1
1	X	735	G	2.1
1	X	1854	G	2.1
1	X	2300	G	2.1
5	C	82	VAL	2.1
18	P	18	VAL	2.1
1	X	1549	C	2.1
1	X	1862	C	2.1
1	X	2446	C	2.1
1	X	2530	C	2.1
26	Z	39	LYS	2.1
10	H	88	THR	2.1
23	U	34	THR	2.1
19	Q	56	MET	2.1
14	L	58	ALA	2.1
17	O	29	ALA	2.1
1	X	1600	U	2.1
1	X	2285	U	2.1
22	T	6	GLY	2.1
5	C	77	PHE	2.1
8	F	136	VAL	2.1
9	G	165	VAL	2.1
11	I	68	VAL	2.1
1	X	205	A	2.1
1	X	483	A	2.1
6	D	102	LYS	2.1
8	F	98	LYS	2.1
20	R	64	ASN	2.1
3	A	43	ARG	2.1
8	F	12	LEU	2.1
8	F	63	ARG	2.1
13	K	115	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
16	N	62	ILE	2.1
21	S	65	LEU	2.1
9	G	66	HIS	2.1
23	U	43	ARG	2.1
6	D	51	ASP	2.1
12	J	8	THR	2.1
13	K	95	THR	2.1
15	M	32	THR	2.1
1	X	346	C	2.1
1	X	583	C	2.1
1	X	914	C	2.1
1	X	1253	C	2.1
1	X	951	G	2.1
1	X	1118	G	2.1
1	X	1149	G	2.1
1	X	2388	G	2.1
1	X	2437	G	2.1
4	B	157	ALA	2.1
12	J	90	ALA	2.1
20	R	91	ALA	2.1
13	K	31	GLU	2.1
17	O	59	GLU	2.1
21	S	107	GLU	2.1
1	X	1601	U	2.0
1	X	2294	U	2.0
18	P	71	VAL	2.0
13	K	62	SER	2.0
14	L	93	SER	2.0
3	A	206	LEU	2.0
5	C	39	ARG	2.0
8	F	27	LEU	2.0
12	J	65	ILE	2.0
14	L	9	ARG	2.0
24	V	42	ARG	2.0
31	5	96	LEU	2.0
12	J	55	MET	2.0
1	X	1366	A	2.0
1	X	1595	A	2.0
1	X	2618	A	2.0
20	R	39	ALA	2.0
8	F	141	GLY	2.0
15	M	90	GLN	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	X	1089	C	2.0
1	X	1327	C	2.0
1	X	1945	C	2.0
2	Y	14	C	2.0
9	G	49	VAL	2.0
1	X	134	G	2.0
1	X	319	G	2.0
1	X	1498	G	2.0
1	X	2018	G	2.0
1	X	2346	G	2.0
2	Y	46	G	2.0
4	B	149	ARG	2.0
1	X	98	U	2.0
1	X	2498	U	2.0
1	X	2594	U	2.0
3	A	153	ALA	2.0
13	K	6	ALA	2.0
4	B	125	GLY	2.0
5	C	84	PHE	2.0
12	J	20	GLY	2.0
6	D	139	PRO	2.0
20	R	66	GLN	2.0
1	X	425	A	2.0
1	X	654	A	2.0
1	X	885	A	2.0
1	X	2730	A	2.0
12	J	133	VAL	2.0
13	K	60	LEU	2.0
4	B	141	ILE	2.0
1	X	81	C	2.0
1	X	721	C	2.0
1	X	2260	C	2.0

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

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

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

There are no ligands in this entry.

6.5 Other polymers [i](#)

There are no such residues in this entry.