



Full wwPDB X-ray Structure Validation Report ⓘ

Mar 5, 2026 – 09:47 PM UTC

PDB ID : 2D3O / pdb_00002d3o
Title : Structure of Ribosome Binding Domain of the Trigger Factor on the 50S ribosomal subunit from *D. radiodurans*
Authors : Schlutzen, F.; Wilson, D.N.; Hansen, H.A.; Tian, P.; Harms, J.M.; McInnes, S.J.; Albrecht, R.; Buerger, J.; Wilbanks, S.M.; Fucini, P.
Deposited on : 2005-09-30
Resolution : 3.35 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)	:	NOT EXECUTED
EDS	:	NOT EXECUTED
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.49

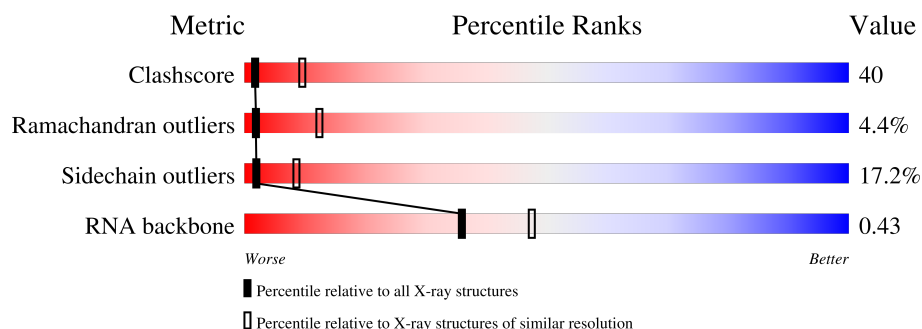
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.35 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	1116 (3.40-3.32)
Ramachandran outliers	187476	1101 (3.40-3.32)
Sidechain outliers	187428	1101 (3.40-3.32)
RNA backbone	3983	1110 (3.72-3.00)

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

Note EDS was not executed.

Mol	Chain	Length	Quality of chain
1	0	2880	
2	R	95	
3	S	115	
4	W	67	
5	1	112	

2 Entry composition

There are 5 unique types of molecules in this entry. The entry contains 63004 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	0	2802	Total	C	N	O	P	0	0	0
			60132	26824	11089	19418	2801			

- Molecule 2 is a protein called 50S RIBOSOMAL PROTEIN L23.

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

- Molecule 3 is a protein called 50S RIBOSOMAL PROTEIN L24.

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

- Molecule 4 is a protein called 50S RIBOSOMAL PROTEIN L29.

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

- Molecule 5 is a protein called Trigger Factor.

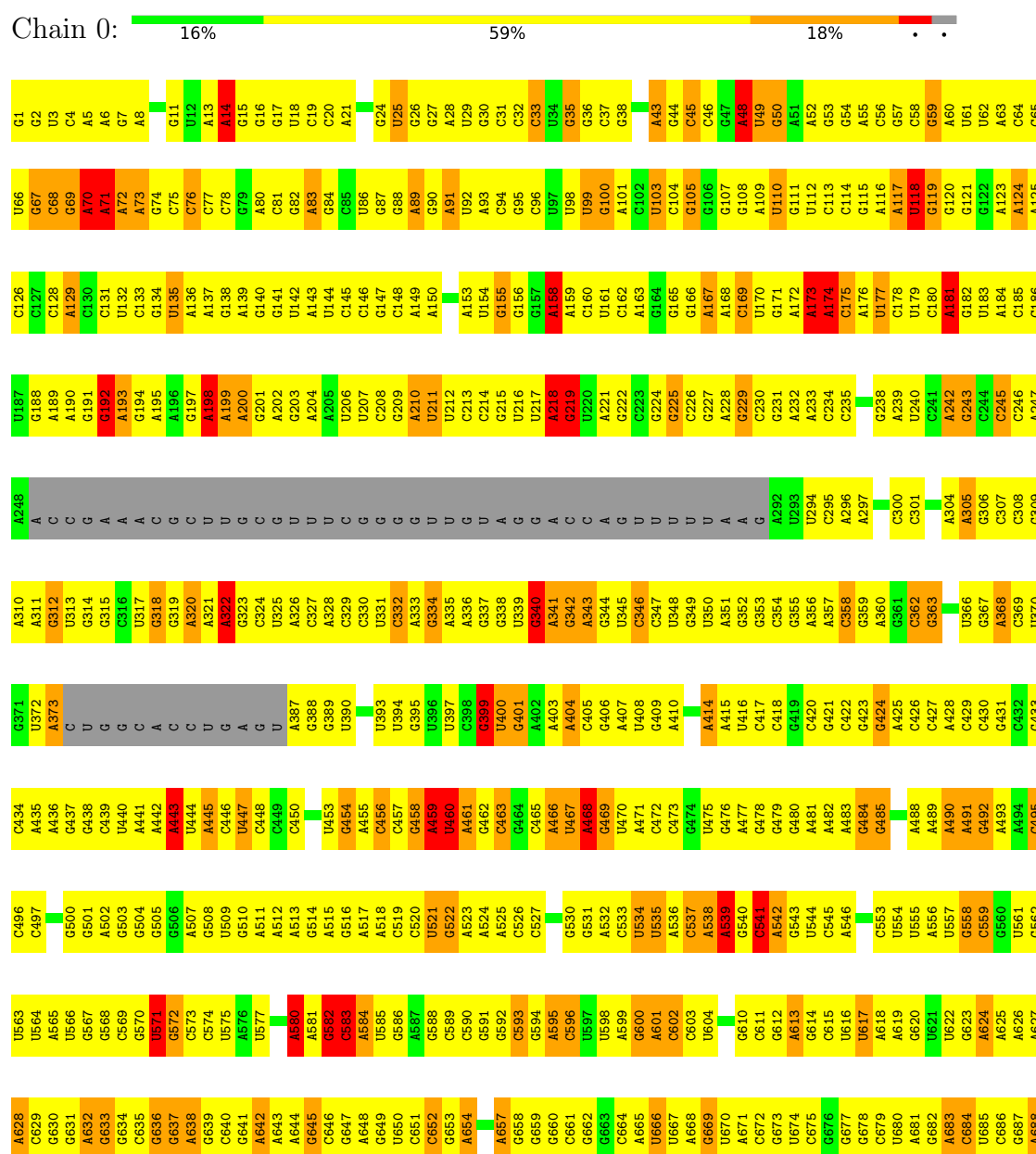
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	1	100	Total	C	N	O	0	0	0
			788	494	146	148			

3 Residue-property plots

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

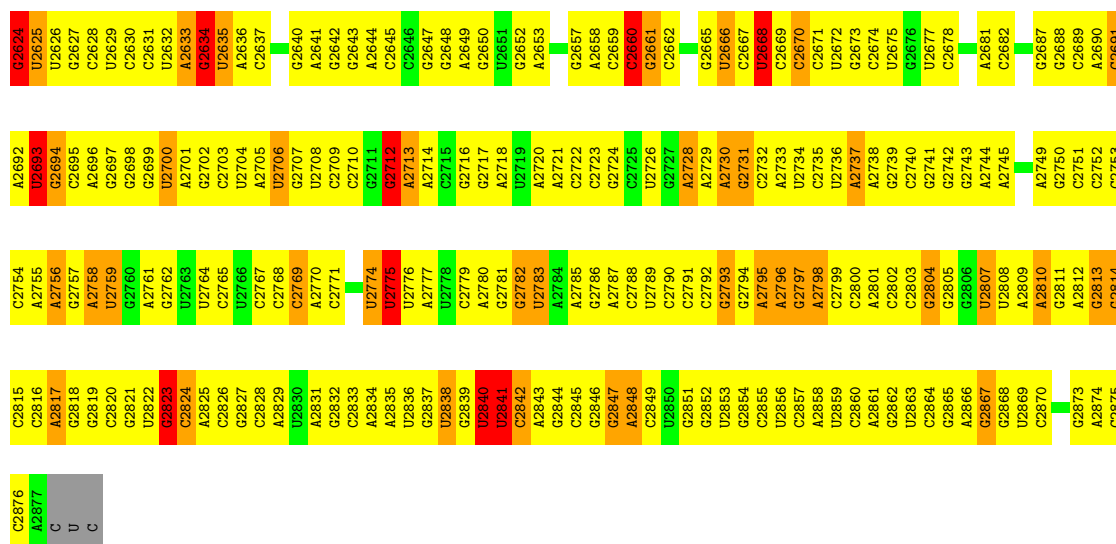
Note EDS was not executed.

• Molecule 1: 23S RIBOSOMAL RNA



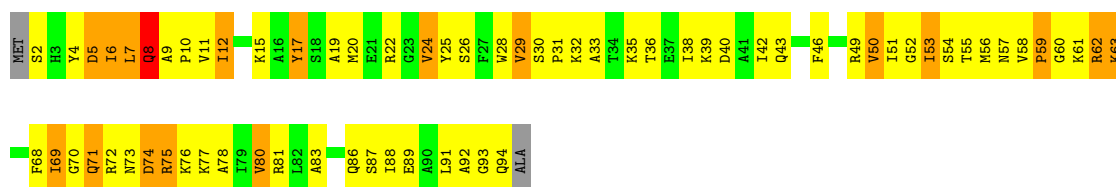
C1580	C1581	A1582	A1583	G1584	A1585	A1586	A1587	A1588	G1589	C1590	U1591	U1592	C1593	U1594	A1595	A1596	A1597	A1598	A1599	U1600	G1601	G1602	A1603	A1604	A1605	A1606	G1607	U1608	G1609	G1610	A1611	U1612	G1613	C1614	C1615	A1619	C1620	G1621	G1622	C1623	A1624	A1625	A1626	C1627	C1628	G1629	A1630	G1631	A1632	A1633	A1634	G1635	G1636	U1637	G1642		U1647					
U1453	U1464	C1465	C1466	A1457	A1458	U1459	G1460	C1461	C1462	A1463	A1464	C1465	C1466	U1467	A1468	U1469	U1470	G1471	C1472	U1473	U1474	U1475	U1476	C1477	U1478	G1479	G1480	U1481	U1482	U1483	G1484	U1485	A1486	C1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	A1495	G1496	C1497	G1498	A1499	U1500	C1501	G1502	G1503	U1504	U1505	G1506	G1507	G1508	U1509	A1510	A1511	A1512	U1513		
U1392	G1393	G1394	A1395	C1396	G1397	A1398	C1399	A1400	G1401	G1402	U1403	A1404	A1405	A1406	G1407	A1408	U1409	U1410	C1411	C1412	U1413	G1414	C1415	C1416	C1417	G1418	U1419	A1420	U1421	C1422	G1423	U1424	C1425	U1426	G1427	G1428	A1429			A1433	U1434	G1435	G1436	A1437	G1438	G1439	G1440	A1441	C1442	C1443	C1444	U1445	U1446	U1447	U1448	C1449	G1450	U1451	U1452			
C1256	U1257	G1258	A1259	U1260	G1261	U1262	G1263	C1264	G1265	G1266	G1267	C1270	C1271	C1272	C1273	C1274	A1275	G1276	G1277	G1278	G1279	G1280	G1281	G1282	G1283	G1284	G1285	G1286	G1287	G1288	A1289	G1290	G1291	G1292	G1293	G1294	G1295	G1296	G1297	G1298	A1299	A1300	U1301	C1302	U1303	U1304	U1305	U1306	G1309	C1310	C1311	G1312	U1313	A1314	G1315	G1316	G1317	A1318	G1324	U1325	U1326	C1327
C1328	U1329	G1330	G1331	G1332	G1333	A1334	A1335	G1336	G1337	G1338	U1339	C1340	G1341	U1342	C1343	C1344	G1345	C1346	C1347	C1348	A1349	G1350	G1351	G1352	A1353	A1354	A1355	G1356	U1357	C1358	G1359	C1363	C1364	U1365	A1366	A1367	G1368	G1369	U1370	G1371	U1372	G1373	G1374	C1375	A1378	A1379	C1380	G1381	G1382	C1383	G1384	C1385	A1386	C1389	G1390	A1391						
U1392	G1393	G1394	A1395	C1396	G1397	A1398	C1399	A1400	G1401	G1402	U1403	A1404	A1405	A1406	G1407	A1408	U1409	U1410	C1411	C1412	U1413	G1414	C1415	C1416	C1417	G1418	U1419	A1420	U1421	C1422	G1423	U1424	C1425	U1426	G1427	G1428	A1429			A1433	U1434	G1435	G1436	A1437	G1438	G1439	G1440	A1441	C1442	C1443	C1444	U1445	U1446	U1447	U1448	C1449	G1450	U1451	U1452			
A1453	U1464	C1465	C1466	A1457	A1458	U1459	G1460	C1461	C1462	A1463	A1464	C1465	C1466	U1467	A1468	U1469	U1470	G1471	C1472	U1473	U1474	U1475	U1476	C1477	U1478	G1479	G1480	U1481	U1482	U1483	G1484	U1485	A1486	C1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	A1495	G1496	C1497	G1498	A1499	U1500	C1501	G1502	G1503	U1504	U1505	G1506	G1507	G1508	U1509	A1510	A1511	A1512	U1513		
C1514	U1515	A1516	C1517	C1518	G1519	G1520	U1521	C1522	A1523	C1524	C1528	C1529	U1530	A1531	A1532	G1533	A1534	G1535	U1536	U1537	U1538	U1539	C1540	G1541	G1542	G1543	A1544	G1545	C1546	C1549	U1550	U1551	G1552	G1553	G1557	C1558	G1559	A1560	A1561	G1562	U1563	U1564	A1567	A1568	A1569	C1570	C1571	G1572	G1573	A1574	C1575	G1576	U1577	U1578	U1579							
U752	U753	A754	C755	A756	U757	G758	C759	U760	G761	A762	U763	A764	C765	A766	G767	U770	C771	C772	G773	A774	U775	G776	A777	G778	U779	U780	G781	A782	G783	U784	U785	C786	G787	G788	A789	U790	U791	U792	G793	A794	A795	A796	U797	G798	C799	U800	A801	G741	G742	A743	C744	A806	G746	A807	C808	C809	U810	G811	C751			
A813	G814	U815	U816	C817	G818	C819	U820	A821	G822	U823	U824	C825	U826	C827	G828	C829	C830	G831	A832	A833	G834	U835	G836	U837	A838	U839	U840	C841	A842	G843	G844	U845	A846	C847	A848	G849	C850	C851	U852	G853	C854	G855	A856	U857	G858	U859	U860	A861	G862	C863	C864	A865	G866	U867	A868	C869	C870	U871	G872			
C935	A936	C937	G938	C939	G940	U941	U942	U943	A944	G945	U946	C947	C948	G951	A952	G953	U954	G955	A956	G957	G958	C959	U960	C961	C962	C968	C969	U970	C971	U972	C973	U974	C975	C976	C977	U978	A979	U980	G981	C982	G983	A984	G985	U986	A987	A988	A989	A990	C991	U992	C998	A999										
G1000	A1001	C1002	C1003	C1004	U1005	C1006	A1007	U1008	A1009	G1010	U1011	A1012	G1013	G1014	C1015	G1016	C1017	U1018	U1019	A1020	C1021	A1022	C1023	G1024	A1025	U1026	C1027	U1028	G1029	C1030	U1031	C1032	C1033	U1034	G1035	G1036	U1037	U1038	A1039	C1040	G1041	C1042	A1043	U1044	G1045	U1046	G1047	C1054	A1055	U1056	A1057	G1058	C1059	A1060	A1061	C1064	A1065					
G1069	U1070	C1071	U1072	U1073	C1074	U1075	U1076	U1077	A1078	G1079	A1080	U1081	G1082	C1083	C1086	G1087	A1088	C1089	C1090	C1091	U1092	C1093	C1094	A1095	A1096	U1097	C1098	G1099	A1099	U1100	U1101	G1102	C1103	G1104	U1105	A1106	A1107	U1108	A1109	C1113	C1114	G1115	U1116	G1117	C1120	G1121	A1122	G1123	U1124	G1125	A1126	G1127	C1128	A1129	U1130	G1131	C1132					
G1133	C1134	G1135	G1136	A1137	A1138	A1139	U1140	U1141	G1142	A1143	U1144	G1145	G1146	G1147	C1148	C1149	C1150	U1151	C1152	A1153	A1154	G1155	A1158	U1159	C1160	U1161	G1162	C1163	C1164	G1165	U1166	A1167	G1168	C1169	U1170	A1171	U1172	G1173	G1174	A1175	U1176	U1177	C1178	A1179	A1180	C1181	U1182	C1183	G1184	C1185	A1188	G1189	C1190	G1191	A1192	G1193	U1194					
U1195	G1196	U1197	C1198	U1199	U1200	G1201	U1202	A1203	G1204	G1205	G1206	G1207	A1208	G1209	C1210	G1211	U1212	A1215	G1216	U1217	C1218	C1219	G1220	C1221	G1222	U1223	A1224	G1225	A1226	U1227	G1228	C1229	C1230	A1231	U1232	A1233	C1234	C1235	G1236	G1237	A1238	A1239	G1240	U1241	A1242	G1243	U1244	G1245	G1246	U1247	A1250	A1251	C1252	C1253	A1254	A1255						
C1256	U1257	G1258	A1259	U1260	G1261	U1262	G1263	C1264	G1265	G1266	G1267	C1270	C1271	C1272	C1273	C1274	A1275	G1276	G1277	G1278	G1279	G1280	G1281	G1282	G1283	G1284	G1285	G1286	G1287	G1288	A1289	G1290	G1291	G1292	G1293	G1294	G1295	G1296	G1297	G1298	A1299	A1300	U1301	C1302	U1303	U1304	U1305	U1306	G1309	C1310	C1311	G1312	U1313	A1314	G1315	G1316	G1317	A1318	G1324	U1325	U1326	C1327
C1328	U1329	G1330	G1331	G1332	G1333	A1334	A1335	G1336	G1337	G1338	U1339	C1340	G1341	U1342	C1343	C1344	G1345	C1346	C1347	C1348	A1349	G1350	G1351	G1352	A1353	A1354	A1355	G1356	U1357	C1358	G1359	C1363	C1364	U1365	A1366	A1367	G1368	G1369	U1370	G1371	U1372	G1373	G1374	C1375	A1378	A1379	C1380	G1381	G1382	C1383	G1384	C1385	A1386	C1389	G1390	A1391						
U1392	G1393	G1394	A1395	C1396	G1397	A1398	C1399	A1400	G1401	G1402	U1403	A1404	A1405	A1406	G1407	A1408	U1409	U1410	C1411	C1412	U1413	G1414	C1415	C1416	C1417	G1418	U1419	A1420	U1421	C1422	G1423	U1424	C1425	U1426	G1427	G1428	A1429			A1433	U1434	G1435	G1436	A1437	G1438	G1439	G1440	A1441	C1442	C1443	C1444	U1445	U1446	U1447	U1448	C1449	G1450	U1451	U1452			
A1453	U1464	C1465	C1466	A1457	A1458	U1459	G1460	C1461	C1462	A1463	A1464	C1465	C1466	U1467	A1468	U1469	U1470	G1471	C1472	U1473	U1474	U1475	U1476	C1477	U1478	G1479	G1480	U1481	U1482	U1483	G1484	U1485	A1486	C1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	A1495	G1496	C1497	G1498	A1499	U1500	C1501	G1502	G1503	U1504	U1505	G1506	G1507	G1508	U1509	A1510	A1511	A1512	U1513		
C1514	U1515	A1516	C1517	C1518	G1519	G1520	U1521	C1522	A1523	C1524	C1528	C1529	U1530	A1531	A1532	G1533	A1534	G1535	U1536	U1537	U1538	U1539	C1540	G1541	G1542	G1543	A1544	G1545	C1546	C1549	U1550	U1551	G1552	G1553	G1557	C1558	G1559	A1560	A1561	G1562	U1563	U1564	A1567	A1568	A1569	C1570	C1571	G1572	G1573	A1574	C1575	G1576	U1577	U1578	U1579							





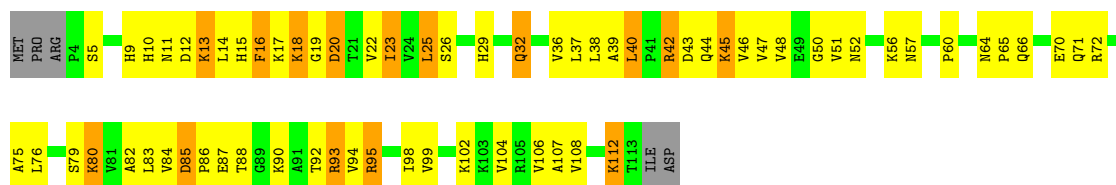
• Molecule 2: 50S RIBOSOMAL PROTEIN L23

Chain R: 25% 54% 18% ..



• Molecule 3: 50S RIBOSOMAL PROTEIN L24

Chain S: 37% 45% 13% .



• Molecule 4: 50S RIBOSOMAL PROTEIN L29

Chain W: 30% 55% 13% .



• Molecule 5: Trigger Factor

Chain 1: 40% 40% 9% 11%



H74	Y75	S76	Q77	R80	E81	V87	D88	A89	T90	V91	V96	Q97	S98	G99	Q100	A101	F102	E103	F104	T105	V106	K107	G108	E109	THR	TYR	PRO
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	-----	-----	-----

4 Data and refinement statistics

Xtriage (Phenix) and EDS were not executed - this section is therefore incomplete.

Property	Value	Source
Space group	I 2 2 2	Depositor
Cell constants a, b, c, α , β , γ	169.50 Å 410.50 Å 695.20 Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	29.84 – 3.35	Depositor
% Data completeness (in resolution range)	(Not available) (29.84-3.35)	Depositor
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
Refinement program	CNS 1.1	Depositor
R, R_{free}	0.299 , 0.322	Depositor
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	63004	wwPDB-VP
Average B, all atoms (Å ²)	54.0	wwPDB-VP

5 Model quality [i](#)

5.1 Standard geometry [i](#)

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	0	0.47	2/67338 (0.0%)	0.86	165/105044 (0.2%)
2	R	0.53	0/737	1.15	7/988 (0.7%)
3	S	0.48	0/835	1.00	4/1121 (0.4%)
4	W	0.45	0/537	0.81	0/714
5	1	0.50	0/802	0.94	2/1084 (0.2%)
All	All	0.47	2/70249 (0.0%)	0.86	178/108951 (0.2%)

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	0	0	169
2	R	0	1
All	All	0	170

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	0	2776	U	C1'-N1	6.58	1.58	1.48
1	0	2775	U	C1'-N1	6.41	1.58	1.48

All (178) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	1975	G	C2'-C3'-O3'	10.66	125.50	109.50
2	R	71	GLN	OE1-CD-NE2	-10.27	112.33	122.60
1	0	1141	U	C2'-C3'-O3'	10.07	124.61	109.50
5	1	65	GLN	OE1-CD-NE2	-9.81	112.79	122.60
3	S	44	GLN	OE1-CD-NE2	-9.78	112.82	122.60
3	S	66	GLN	OE1-CD-NE2	-9.78	112.82	122.60
2	R	86	GLN	OE1-CD-NE2	-9.64	112.96	122.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	R	8	GLN	OE1-CD-NE2	-9.34	113.26	122.60
1	0	2034	A	N9-C1'-C2'	8.86	127.28	114.00
1	0	1467	U	N1-C1'-C2'	8.82	125.23	112.00
1	0	1342	U	N1-C1'-C2'	8.47	126.71	114.00
1	0	1631	C	N1-C1'-C2'	8.45	124.68	112.00
1	0	1775	A	C2'-C3'-O3'	8.22	121.83	109.50
1	0	1777	A	C4'-C3'-O3'	-8.17	100.74	113.00
1	0	2545	A	C4'-C3'-O3'	-8.08	100.88	113.00
1	0	2841	U	C2'-C3'-O3'	7.69	121.04	109.50
1	0	842	A	C4'-C3'-O3'	-7.67	101.50	113.00
1	0	1299	A	C2'-C3'-O3'	7.62	120.93	109.50
1	0	1278	A	C2'-C3'-O3'	7.61	120.91	109.50
1	0	1749	G	N9-C1'-C2'	7.58	123.38	112.00
1	0	789	G	C2'-C3'-O3'	7.50	120.76	109.50
1	0	814	G	C2'-C3'-O3'	-7.50	102.45	113.70
1	0	469	G	C4'-C3'-O3'	-7.37	101.94	113.00
1	0	582	G	N9-C1'-C2'	7.34	123.01	112.00
1	0	2237	C	C2'-C3'-O3'	7.32	120.48	109.50
1	0	2593	A	C4'-C3'-O3'	-7.26	102.10	113.00
1	0	2756	A	C4'-C3'-O3'	-7.26	102.11	113.00
1	0	1664	G	N9-C1'-C2'	7.20	122.79	112.00
2	R	71	GLN	CG-CD-NE2	7.14	127.11	116.40
1	0	70	A	C4'-C3'-O3'	-7.11	102.34	113.00
1	0	793	G	C4'-C3'-O3'	-7.10	102.35	113.00
1	0	1167	A	N9-C1'-C2'	7.10	122.65	112.00
1	0	2693	U	C4'-C3'-O3'	-7.04	102.45	113.00
1	0	1392	U	C4'-C3'-O3'	-6.99	102.52	113.00
1	0	1583	A	C4'-C3'-O3'	-6.95	102.57	113.00
1	0	2560	G	N9-C1'-C2'	6.92	122.39	112.00
1	0	434	C	N1-C1'-C2'	6.86	122.29	112.00
1	0	322	A	N9-C1'-C2'	6.83	122.25	112.00
1	0	777	A	N9-C1'-C2'	6.82	124.24	114.00
1	0	2014	A	C4'-C3'-O3'	-6.82	102.77	113.00
1	0	2823	G	C2'-C3'-O3'	6.81	119.72	109.50
1	0	1631	C	C4'-C3'-O3'	-6.80	102.80	113.00
1	0	1357	U	N1-C1'-C2'	6.76	122.14	112.00
1	0	443	A	N9-C1'-C2'	6.74	122.11	112.00
1	0	1715	A	N9-C1'-C2'	6.68	124.02	114.00
1	0	2841	U	N1-C1'-C2'	6.68	124.01	114.00
3	S	66	GLN	CG-CD-NE2	6.66	126.39	116.40
5	1	65	GLN	CG-CD-NE2	6.66	126.39	116.40
1	0	1278	A	N9-C1'-C2'	6.65	123.98	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	S	44	GLN	CG-CD-NE2	6.63	126.35	116.40
1	0	460	U	C4'-C3'-O3'	-6.61	103.08	113.00
1	0	340	G	N9-C1'-C2'	6.56	121.84	112.00
1	0	1263	G	N9-C1'-C2'	6.51	123.76	114.00
2	R	86	GLN	CG-CD-NE2	6.50	126.15	116.40
1	0	2476	A	C4'-C3'-O3'	-6.41	99.78	109.40
1	0	522	G	N9-C1'-C2'	6.38	121.57	112.00
1	0	2589	C	C4'-C3'-O3'	-6.37	103.45	113.00
1	0	118	U	C4'-C3'-O3'	-6.31	103.54	113.00
1	0	698	A	N9-C1'-C2'	6.26	123.39	114.00
1	0	2624	G	N9-C1'-C2'	6.21	123.32	114.00
1	0	2437	G	C4'-C3'-O3'	-6.21	103.69	113.00
1	0	1634	A	C2'-C3'-O3'	6.20	118.80	109.50
1	0	173	A	C4'-C3'-O3'	-6.18	103.73	113.00
1	0	1469	U	C2'-C3'-O3'	-6.16	104.46	113.70
1	0	460	U	N1-C1'-C2'	6.15	121.22	112.00
1	0	1581	C	N1-C1'-C2'	6.13	121.20	112.00
1	0	571	U	C4'-C3'-O3'	-6.08	100.28	109.40
1	0	2555	G	C4'-C3'-O3'	-6.07	103.89	113.00
1	0	192	G	C2'-C3'-O3'	6.06	118.59	109.50
1	0	2496	C	C4'-C3'-O3'	-6.06	103.91	113.00
1	0	2617	G	C4'-C3'-O3'	-6.06	103.92	113.00
1	0	181	A	C2'-C3'-O3'	-6.05	104.63	113.70
1	0	1749	G	C4'-C3'-O3'	-6.05	103.93	113.00
2	R	8	GLN	CG-CD-NE2	6.02	125.43	116.40
1	0	600	G	N9-C1'-C2'	6.01	121.01	112.00
1	0	805	G	C4'-C3'-O3'	-5.98	104.02	113.00
1	0	198	A	C2'-C3'-O3'	5.95	118.42	109.50
1	0	2261	G	C4'-C3'-O3'	5.95	118.32	109.40
1	0	1723	U	N1-C1'-C2'	5.94	120.91	112.00
1	0	522	G	C4'-C3'-O3'	-5.92	104.12	113.00
1	0	1698	C	N1-C1'-C2'	5.92	122.88	114.00
1	0	1963	G	N9-C1'-C2'	5.90	122.84	114.00
1	0	1324	G	C4'-C3'-O3'	-5.89	104.16	113.00
1	0	312	G	N9-C1'-C2'	5.89	120.83	112.00
1	0	177	U	N1-C1'-C2'	5.88	120.82	112.00
1	0	2303	C	C4'-C3'-O3'	-5.86	104.21	113.00
1	0	2047	C	C4'-C3'-O3'	-5.85	104.23	113.00
1	0	2485	U	C3'-C2'-O2'	5.84	119.47	110.70
1	0	788	G	C2'-C3'-O3'	5.84	118.27	109.50
1	0	1410	U	N1-C1'-C2'	5.84	122.77	114.00
1	0	805	G	N9-C1'-C2'	5.84	120.76	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	860	U	N1-C1'-C2'	5.82	120.73	112.00
1	0	596	C	C4'-C3'-O3'	-5.82	104.27	113.00
1	0	689	A	N9-C1'-C2'	5.82	120.73	112.00
1	0	1723	U	C4'-C3'-O3'	-5.80	104.30	113.00
1	0	1142	G	N9-C1'-C2'	5.79	120.68	112.00
1	0	580	A	N9-C1'-C2'	5.76	120.64	112.00
1	0	1923	U	C4'-C3'-O3'	-5.74	104.39	113.00
1	0	1233	A	C2'-C3'-O3'	-5.73	105.11	113.70
1	0	1199	U	N1-C1'-C2'	5.72	120.58	112.00
1	0	1963	G	C4'-C3'-O3'	-5.70	100.85	109.40
1	0	1581	C	C4'-C3'-O3'	-5.67	104.50	113.00
1	0	571	U	N1-C1'-C2'	5.66	122.48	114.00
1	0	490	A	C4'-C3'-O3'	-5.65	104.52	113.00
1	0	795	A	C2'-C3'-O3'	-5.65	101.02	109.50
1	0	1152	C	N1-C1'-C2'	5.63	120.44	112.00
1	0	2624	G	C4'-C3'-O3'	-5.61	100.99	109.40
1	0	1315	A	C2'-C3'-O3'	-5.60	105.30	113.70
1	0	794	A	C2'-C3'-O3'	-5.58	105.33	113.70
1	0	447	U	N1-C1'-C2'	5.57	120.36	112.00
1	0	322	A	C4'-C3'-O3'	-5.57	104.65	113.00
1	0	541	C	C4'-C3'-O3'	-5.56	104.66	113.00
1	0	1715	A	C2'-C3'-O3'	5.55	117.83	109.50
1	0	48	A	C2'-C3'-O3'	-5.54	105.39	113.70
1	0	2521	A	C2'-C3'-O3'	-5.53	105.40	113.70
2	R	61	LYS	N-CA-CB	5.53	118.09	109.85
1	0	2660	C	N1-C1'-C2'	5.53	122.29	114.00
1	0	1583	A	N9-C1'-C2'	5.52	120.28	112.00
1	0	775	U	C4'-C3'-O3'	-5.51	104.73	113.00
1	0	1938	U	C2'-C3'-O3'	5.51	117.77	109.50
1	0	2480	C	N1-C1'-C2'	5.50	120.25	112.00
1	0	1315	A	N9-C1'-C2'	5.48	120.22	112.00
1	0	468	A	N9-C1'-C2'	5.47	120.20	112.00
1	0	1773	C	N1-C1'-C2'	5.46	120.20	112.00
1	0	789	G	N9-C1'-C2'	5.46	122.19	114.00
1	0	2426	G	N9-C1'-C2'	5.45	120.18	112.00
1	0	1398	G	N9-C1'-C2'	5.43	120.14	112.00
1	0	2756	A	N9-C1'-C2'	5.42	120.14	112.00
1	0	2303	C	N1-C1'-C2'	5.42	120.13	112.00
1	0	1338	G	C5'-C4'-C3'	5.41	123.32	115.20
1	0	2237	C	N1-C1'-C2'	5.39	122.08	114.00
1	0	2545	A	N9-C1'-C2'	5.38	120.06	112.00
1	0	2476	A	N9-C1'-C2'	5.37	122.05	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	993	C	N1-C1'-C2'	5.36	120.04	112.00
1	0	2469	G	C2'-C3'-O3'	-5.36	105.66	113.70
1	0	539	A	C2'-C3'-O3'	-5.35	105.68	113.70
1	0	1664	G	C4'-C3'-O3'	-5.34	104.99	113.00
1	0	985	G	N9-C1'-C2'	5.32	119.98	112.00
1	0	2014	A	N9-C1'-C2'	5.32	119.99	112.00
1	0	459	A	N9-C1'-C2'	5.32	119.98	112.00
1	0	2496	C	N1-C1'-C2'	5.32	119.98	112.00
1	0	798	G	C3'-C2'-O2'	5.31	118.66	110.70
1	0	2712	G	C4'-C3'-O3'	-5.26	105.11	113.00
1	0	332	C	C2'-C3'-O3'	-5.25	105.82	113.70
1	0	2498	U	N1-C1'-C2'	5.25	119.87	112.00
1	0	1000	G	N9-C1'-C2'	5.25	119.87	112.00
1	0	1670	G	O4'-C1'-C2'	5.24	111.04	105.80
1	0	1337	G	N9-C1'-C2'	5.24	121.86	114.00
1	0	1340	C	C5'-C4'-C3'	-5.24	108.14	116.00
1	0	2059	U	C2'-C3'-O3'	5.24	121.55	113.70
1	0	1342	U	C4'-C3'-O3'	-5.23	101.55	109.40
1	0	1689	U	C3'-C2'-O2'	5.23	118.54	110.70
1	0	219	G	N9-C1'-C2'	5.21	119.82	112.00
1	0	1469	U	OP1-P-O3'	-5.21	92.35	108.00
1	0	1811	A	N9-C1'-C2'	5.21	119.82	112.00
1	0	2668	U	C2'-C3'-O3'	-5.21	105.88	113.70
1	0	1975	G	N9-C1'-C2'	5.20	121.80	114.00
1	0	399	G	C4'-C3'-O3'	-5.17	105.24	113.00
1	0	513	A	C4'-C3'-O3'	-5.17	105.25	113.00
1	0	2018	G	C2'-C3'-O3'	-5.16	105.95	113.70
1	0	2823	G	O4'-C1'-C2'	5.16	110.96	105.80
1	0	2482	A	N9-C1'-C2'	5.12	121.69	114.00
1	0	158	A	C4'-C3'-O3'	-5.11	105.33	113.00
1	0	582	G	C4'-C3'-O3'	-5.09	105.37	113.00
1	0	878	C	C4'-C3'-O3'	-5.08	105.38	113.00
1	0	983	G	C4'-C3'-O3'	-5.08	105.38	113.00
1	0	1459	U	N1-C1'-C2'	5.08	119.62	112.00
1	0	1664	G	C2'-C3'-O3'	-5.08	106.09	113.70
1	0	580	A	C4'-C3'-O3'	-5.07	105.40	113.00
1	0	761	G	N9-C1'-C2'	5.06	119.58	112.00
1	0	167	A	C4'-C3'-O3'	-5.05	105.42	113.00
1	0	1919	A	N9-C1'-C2'	5.04	119.57	112.00
1	0	804	C	N1-C1'-C2'	5.04	121.56	114.00
1	0	1000	G	C4'-C3'-O3'	-5.04	105.44	113.00
1	0	698	A	C4'-C3'-O3'	-5.03	101.85	109.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	0	218	A	C4'-C3'-O3'	-5.01	105.48	113.00
1	0	1567	A	C4'-C3'-O3'	-5.00	105.50	113.00
1	0	2840	U	C4'-C3'-O3'	-5.00	105.49	113.00

There are no chirality outliers.

All (170) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	0	1000	G	Sidechain
1	0	1005	U	Sidechain
1	0	1009	C	Sidechain
1	0	1018	C	Sidechain
1	0	1141	U	Sidechain
1	0	1142	G	Sidechain
1	0	1158	A	Sidechain
1	0	1167	A	Sidechain
1	0	118	U	Sidechain
1	0	1206	G	Sidechain
1	0	1212	U	Sidechain
1	0	1247	U	Sidechain
1	0	1250	A	Sidechain
1	0	1262	U	Sidechain
1	0	1263	G	Sidechain
1	0	1284	G	Sidechain
1	0	1285	A	Sidechain
1	0	1286	U	Sidechain
1	0	1309	G	Sidechain
1	0	1313	U	Sidechain
1	0	1315	A	Sidechain
1	0	1316	G	Sidechain
1	0	1324	G	Sidechain
1	0	1325	U	Sidechain
1	0	1329	U	Sidechain
1	0	1341	G	Sidechain
1	0	1342	U	Sidechain
1	0	1344	C	Sidechain
1	0	1350	G	Sidechain
1	0	1357	U	Sidechain
1	0	1370	U	Sidechain
1	0	1373	G	Sidechain
1	0	1381	G	Sidechain
1	0	14	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	0	1407	G	Sidechain
1	0	1410	U	Sidechain
1	0	1414	G	Sidechain
1	0	1467	U	Sidechain
1	0	1470	G	Sidechain
1	0	1481	U	Sidechain
1	0	1531	C	Sidechain
1	0	1581	C	Sidechain
1	0	1583	A	Sidechain
1	0	1631	C	Sidechain
1	0	1632	A	Sidechain
1	0	1647	U	Sidechain
1	0	1672	A	Sidechain
1	0	1681	A	Sidechain
1	0	169	C	Sidechain
1	0	1692	C	Sidechain
1	0	1697	U	Sidechain
1	0	1710	U	Sidechain
1	0	1727	C	Sidechain
1	0	174	A	Sidechain
1	0	1740	G	Sidechain
1	0	1749	G	Sidechain
1	0	1757	C	Sidechain
1	0	1770	U	Sidechain
1	0	1771	A	Sidechain
1	0	1776	A	Sidechain
1	0	1810	U	Sidechain
1	0	1817	U	Sidechain
1	0	1818	G	Sidechain
1	0	1820	G	Sidechain
1	0	1834	G	Sidechain
1	0	1927	U	Sidechain
1	0	1933	G	Sidechain
1	0	1963	G	Sidechain
1	0	1964	A	Sidechain
1	0	1966	C	Sidechain
1	0	1967	U	Sidechain
1	0	1995	G	Sidechain
1	0	1999	U	Sidechain
1	0	2001	G	Sidechain
1	0	2004	U	Sidechain
1	0	2012	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	0	2025	A	Sidechain
1	0	2034	A	Sidechain
1	0	2047	C	Sidechain
1	0	2062	U	Sidechain
1	0	2074	U	Sidechain
1	0	211	U	Sidechain
1	0	2237	C	Sidechain
1	0	2246	A	Sidechain
1	0	2251	U	Sidechain
1	0	2312	A	Sidechain
1	0	2392	G	Sidechain
1	0	2393	G	Sidechain
1	0	2394	G	Sidechain
1	0	2404	A	Sidechain
1	0	2417	U	Sidechain
1	0	2428	U	Sidechain
1	0	2447	G	Sidechain
1	0	2469	G	Sidechain
1	0	2470	U	Sidechain
1	0	2472	U	Sidechain
1	0	2476	A	Sidechain
1	0	2482	A	Sidechain
1	0	2485	U	Sidechain
1	0	2498	U	Sidechain
1	0	25	U	Sidechain
1	0	2502	G	Sidechain
1	0	2540	A	Sidechain
1	0	2541	U	Sidechain
1	0	2542	U	Sidechain
1	0	2543	A	Sidechain
1	0	2557	G	Sidechain
1	0	2559	U	Sidechain
1	0	2565	C	Sidechain
1	0	2584	U	Sidechain
1	0	2590	U	Sidechain
1	0	2592	U	Sidechain
1	0	2614	A	Sidechain
1	0	2624	G	Sidechain
1	0	2634	G	Sidechain
1	0	2635	U	Sidechain
1	0	2666	U	Sidechain
1	0	2693	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	0	2706	U	Sidechain
1	0	2793	G	Sidechain
1	0	2795	A	Sidechain
1	0	2797	G	Sidechain
1	0	2804	G	Sidechain
1	0	2807	U	Sidechain
1	0	2813	G	Sidechain
1	0	2814	G	Sidechain
1	0	2817	A	Sidechain
1	0	2838	U	Sidechain
1	0	2840	U	Sidechain
1	0	320	A	Sidechain
1	0	334	G	Sidechain
1	0	340	G	Sidechain
1	0	43	A	Sidechain
1	0	443	A	Sidechain
1	0	445	A	Sidechain
1	0	454	G	Sidechain
1	0	480	G	Sidechain
1	0	521	U	Sidechain
1	0	534	U	Sidechain
1	0	535	U	Sidechain
1	0	559	C	Sidechain
1	0	571	U	Sidechain
1	0	583	C	Sidechain
1	0	699	G	Sidechain
1	0	71	A	Sidechain
1	0	712	A	Sidechain
1	0	753	U	Sidechain
1	0	757	U	Sidechain
1	0	759	C	Sidechain
1	0	786	U	Sidechain
1	0	806	A	Sidechain
1	0	813	A	Sidechain
1	0	814	G	Sidechain
1	0	818	G	Sidechain
1	0	819	C	Sidechain
1	0	824	U	Sidechain
1	0	840	U	Sidechain
1	0	841	G	Sidechain
1	0	863	C	Sidechain
1	0	873	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	0	932	G	Sidechain
1	0	954	U	Sidechain
1	0	969	U	Sidechain
1	0	978	U	Sidechain
1	0	985	G	Sidechain
1	0	989	G	Sidechain
1	0	991	A	Sidechain
1	0	993	C	Sidechain
1	0	999	A	Sidechain
2	R	17	TYR	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	0	60132	0	30298	3516	0
2	R	726	0	753	130	0
3	S	825	0	881	119	0
4	W	533	0	558	81	0
5	1	788	0	784	75	0
All	All	63004	0	33274	3852	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 40.

All (3852) 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)
2:R:69:ILE:CG2	2:R:70:GLY:H	1.26	1.38
1:0:1325:U:H1'	1:0:1619:A:N1	1.50	1.25
3:S:92:THR:HB	3:S:95:ARG:HH22	1.05	1.18
1:0:67:G:H21	1:0:72:A:H2'	1.09	1.16
1:0:918:A:H2'	1:0:919:U:H5''	1.29	1.15
1:0:940:G:H3'	1:0:941:U:H5''	1.16	1.15
1:0:1625:A:H1'	1:0:1632:A:H1'	1.26	1.15
2:R:62:ARG:HB3	2:R:62:ARG:HH11	1.04	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:168:A:H2'	1:0:169:C:H6	1.14	1.10
1:0:1791:C:H2'	1:0:1792:C:H5''	1.19	1.09
1:0:1151:U:H5''	1:0:1153:A:H5'	1.33	1.09
1:0:1029:C:H2'	1:0:1030:U:H5''	1.31	1.08
1:0:2691:C:H2'	1:0:2692:A:C8	1.88	1.08
1:0:1072:U:H3'	1:0:1073:G:H5'	1.36	1.07
1:0:2581:A:H3'	1:0:2582:G:H5''	1.30	1.07
1:0:1467:U:H3'	1:0:1468:A:H5'	1.23	1.07
1:0:788:G:H5'	1:0:790:A:H1'	1.34	1.06
1:0:1345:G:H2'	1:0:1625:A:C2	1.90	1.06
1:0:2198:U:H3'	1:0:2199:C:H5''	1.31	1.06
1:0:1537:U:H2'	1:0:1538:A:C8	1.90	1.06
4:W:1:MET:HG2	4:W:2:LYS:HG2	1.32	1.06
1:0:1572:C:C2'	1:0:1573:G:H5''	1.86	1.05
1:0:460:U:O4	1:0:592:G:H1'	1.54	1.05
1:0:2106:G:H2'	1:0:2107:G:H5''	1.36	1.04
1:0:1572:C:H2'	1:0:1573:G:H5''	1.08	1.04
1:0:2245:A:H4'	1:0:2246:A:N7	1.71	1.03
1:0:100:G:H1	3:S:102:LYS:HB3	1.18	1.03
5:1:55:ASN:HD22	5:1:55:ASN:N	1.56	1.03
1:0:2466:G:H2'	1:0:2467:A:H8	1.21	1.03
1:0:104:C:H2'	1:0:105:G:H5''	1.36	1.02
1:0:942:U:H2'	1:0:943:U:O4'	1.59	1.02
1:0:1715:A:H1'	1:0:1717:A:H5''	1.41	1.02
1:0:1182:U:H3'	1:0:1183:C:H5''	1.39	1.02
1:0:168:A:H2'	1:0:169:C:C6	1.94	1.02
3:S:16:PHE:HD2	3:S:80:LYS:HZ1	1.07	1.02
1:0:2548:G:H2'	1:0:2549:G:H5''	1.42	1.01
1:0:1458:A:H3'	1:0:1459:U:C5'	1.87	1.01
1:0:2197:U:H2'	1:0:2198:U:C6	1.96	1.01
2:R:69:ILE:HG22	2:R:70:GLY:N	1.30	1.01
1:0:701:U:O2	1:0:800:U:H4'	1.61	1.00
1:0:2496:C:O2'	1:0:2497:A:H5'	1.60	1.00
2:R:62:ARG:HB3	2:R:62:ARG:NH1	1.74	1.00
1:0:2507:U:H2'	1:0:2509:A:H5''	1.43	1.00
5:1:30:VAL:O	5:1:34:LEU:HG	1.60	1.00
1:0:67:G:N2	1:0:72:A:H2'	1.77	0.99
1:0:88:G:H3'	1:0:89:A:H5''	1.43	0.99
2:R:7:LEU:HB2	4:W:29:ARG:NH2	1.76	0.99
3:S:92:THR:HG22	3:S:106:VAL:HB	1.45	0.98
1:0:1754:G:N2	1:0:1756:C:H5''	1.77	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1166:A:H2'	1:0:1167:A:H5''	1.42	0.98
1:0:813:A:H1'	1:0:815:A:H5'	1.45	0.98
1:0:2240:C:H2'	1:0:2241:U:H5'	1.42	0.98
1:0:1608:U:H2'	1:0:1609:G:H8	1.29	0.98
1:0:616:U:H2'	1:0:617:U:H5''	1.44	0.97
4:W:1:MET:HG2	4:W:2:LYS:CG	1.92	0.97
1:0:2030:U:H2'	1:0:2031:A:H8	1.30	0.97
1:0:681:A:H2'	1:0:683:A:N7	1.78	0.97
1:0:1313:U:H4'	1:0:1314:A:O5'	1.65	0.96
1:0:2482:A:H4'	1:0:2483:U:OP1	1.65	0.96
4:W:2:LYS:H	4:W:3:PRO:HD2	1.30	0.96
1:0:1057:A:H3'	1:0:1058:G:H5'	1.46	0.96
1:0:405:C:H2'	1:0:406:G:H8	1.26	0.96
3:S:85:ASP:CG	3:S:86:PRO:HD3	1.90	0.95
1:0:2299:A:H1'	1:0:2312:A:H62	1.32	0.95
1:0:1299:A:H2'	1:0:1301:U:OP2	1.66	0.94
3:S:92:THR:HB	3:S:95:ARG:NH2	1.82	0.94
1:0:161:U:H4'	1:0:194:G:H21	1.27	0.94
1:0:2057:U:H2'	1:0:2058:U:C6	2.03	0.93
1:0:357:A:H2'	1:0:358:C:H5'	1.48	0.93
1:0:564:U:H2'	1:0:565:A:C8	2.02	0.93
1:0:1071:U:H4'	1:0:1072:U:H5	1.31	0.93
1:0:1373:G:N2	1:0:2192:U:H3	1.66	0.93
1:0:1474:A:O2'	1:0:1475:U:H5'	1.68	0.93
1:0:210:A:H61	1:0:442:A:H61	1.08	0.93
3:S:83:LEU:O	3:S:90:LYS:HE2	1.69	0.93
1:0:1345:G:H2'	1:0:1625:A:H2	1.34	0.92
5:1:90:THR:HB	5:1:107:LYS:NZ	1.83	0.92
1:0:717:G:H2'	1:0:739:G:H22	1.31	0.92
1:0:1736:C:H2'	1:0:1737:G:H8	1.34	0.92
1:0:1748:U:H3	1:0:1753:A:H2	1.08	0.92
1:0:994:A:H62	1:0:995:A:H2	1.12	0.92
1:0:929:A:H3'	1:0:930:A:H5''	1.52	0.92
1:0:2198:U:H3'	1:0:2199:C:C5'	2.00	0.92
5:1:55:ASN:HD22	5:1:55:ASN:H	1.15	0.91
1:0:516:G:HO2'	1:0:517:A:H8	1.11	0.91
1:0:689:A:H8	1:0:2052:G:H21	1.10	0.91
1:0:2691:C:H2'	1:0:2692:A:H8	1.35	0.91
1:0:2634:G:H2'	1:0:2643:G:O6	1.69	0.91
1:0:367:G:H2'	1:0:368:A:H5''	1.50	0.91
1:0:401:G:H2'	1:0:403:A:N7	1.86	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:940:G:H3'	1:0:941:U:C5'	2.01	0.91
1:0:2187:A:H2'	1:0:2188:A:H8	1.36	0.91
1:0:872:G:H2'	1:0:928:G:C6	2.06	0.91
2:R:33:ALA:H	2:R:76:LYS:HE3	1.37	0.90
2:R:33:ALA:N	2:R:76:LYS:HE3	1.87	0.90
2:R:10:PRO:HG3	4:W:30:PHE:HA	1.52	0.90
1:0:1166:A:C2'	1:0:1167:A:H5''	2.00	0.90
1:0:2770:A:H5''	1:0:2867:G:N2	1.87	0.90
1:0:490:A:O2'	1:0:491:A:H5'	1.70	0.90
1:0:2074:U:H3'	1:0:2075:U:H5''	1.52	0.90
1:0:63:A:H5''	2:R:71:GLN:HB3	1.52	0.90
1:0:516:G:O2'	1:0:517:A:H8	1.53	0.89
2:R:43:GLN:HG2	2:R:50:VAL:HG23	1.54	0.89
1:0:940:G:C3'	1:0:941:U:H5''	2.01	0.89
1:0:317:U:H3	1:0:321:A:N6	1.71	0.89
1:0:73:A:N1	4:W:44:ARG:HD3	1.88	0.89
1:0:1586:A:H2'	1:0:1587:A:C8	2.07	0.89
1:0:2240:C:C2'	1:0:2241:U:H5'	2.01	0.89
1:0:139:A:H2'	1:0:140:G:C8	2.08	0.89
1:0:941:U:H2'	1:0:942:U:O4'	1.71	0.89
1:0:136:A:H2'	1:0:137:A:O4'	1.73	0.88
1:0:139:A:H2'	1:0:140:G:H8	1.34	0.88
1:0:1586:A:H2'	1:0:1587:A:H8	1.36	0.88
1:0:1234:C:OP2	1:0:1234:C:H6	1.57	0.88
2:R:29:VAL:HG22	2:R:76:LYS:HB2	1.56	0.88
1:0:1011:A:H2'	1:0:1012:A:H8	1.38	0.88
1:0:1345:G:N2	1:0:1625:A:H3'	1.87	0.88
1:0:2466:G:H2'	1:0:2467:A:C8	2.08	0.88
3:S:85:ASP:OD1	3:S:86:PRO:HD3	1.71	0.88
1:0:1373:G:H22	1:0:2192:U:H3	0.90	0.88
1:0:1392:U:O2'	1:0:1393:G:H5'	1.73	0.88
1:0:2266:A:N6	1:0:2323:U:H1'	1.87	0.88
1:0:2519:C:H2'	1:0:2520:A:H5'	1.55	0.88
1:0:76:C:H6	1:0:76:C:H5'	1.39	0.88
1:0:403:A:H5''	1:0:404:A:OP1	1.73	0.88
1:0:2811:G:H2'	1:0:2812:A:C8	2.08	0.88
1:0:2524:G:O2'	1:0:2525:U:H5'	1.74	0.87
1:0:128:C:H2'	1:0:129:A:H5''	1.56	0.87
1:0:1914:U:H3	1:0:1952:A:H62	1.20	0.87
1:0:2548:G:C2'	1:0:2549:G:H5''	2.04	0.87
1:0:788:G:H5'	1:0:790:A:C1'	2.03	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:659:G:H2'	1:0:660:G:C8	2.10	0.87
1:0:1608:U:H2'	1:0:1609:G:C8	2.08	0.87
2:R:56:MET:HE1	2:R:58:VAL:HG22	1.54	0.87
5:1:50:ARG:HG3	5:1:51:LYS:H	1.39	0.87
5:1:73:THR:O	5:1:77:GLN:HG3	1.75	0.87
1:0:813:A:H1'	1:0:815:A:C5'	2.05	0.87
1:0:70:A:O2'	1:0:71:A:H5''	1.74	0.86
1:0:752:G:H5''	1:0:753:U:OP1	1.75	0.86
1:0:765:C:HO2'	1:0:766:A:H8	1.18	0.86
4:W:37:LEU:HD23	4:W:39:GLN:H	1.40	0.86
1:0:2418:A:N1	1:0:2564:U:H4'	1.90	0.86
1:0:1736:C:H2'	1:0:1737:G:C8	2.10	0.86
1:0:104:C:C2'	1:0:105:G:H5''	2.05	0.86
1:0:2598:C:H2'	1:0:2599:U:C6	2.11	0.86
1:0:2:G:H2'	1:0:3:U:C6	2.11	0.85
1:0:2441:U:H2'	1:0:2442:C:H6	1.39	0.85
1:0:918:A:C2'	1:0:919:U:H5''	2.06	0.85
1:0:1083:C:H42	1:0:1103:C:N4	1.75	0.85
1:0:1199:U:H3'	1:0:1200:G:H5''	1.58	0.85
1:0:1791:C:H2'	1:0:1792:C:C5'	2.06	0.85
1:0:2058:U:H3'	1:0:2217:G:H22	1.40	0.85
1:0:2259:G:H4'	1:0:2306:A:H5'	1.58	0.85
1:0:1563:U:H2'	1:0:1564:U:C6	2.12	0.85
1:0:2598:C:H2'	1:0:2599:U:H6	1.40	0.85
3:S:14:LEU:HD13	3:S:16:PHE:HE1	1.40	0.85
1:0:405:C:H2'	1:0:406:G:C8	2.11	0.85
1:0:1190:C:H2'	1:0:1191:G:C8	2.12	0.85
1:0:82:G:O2'	1:0:83:A:H5'	1.74	0.85
1:0:1852:G:H2'	1:0:1853:C:H6	1.37	0.84
1:0:1124:U:H2'	1:0:1125:G:H8	1.41	0.84
1:0:1493:A:H3'	1:0:1494:G:H8	1.39	0.84
1:0:799:C:O2'	1:0:800:U:H5'	1.77	0.84
1:0:947:C:H2'	1:0:948:C:H6	1.42	0.84
1:0:865:A:H2'	1:0:866:U:H6	1.42	0.84
1:0:48:A:H2	1:0:118:U:H3	1.22	0.84
1:0:1921:A:H2'	1:0:1922:U:H4'	1.59	0.84
1:0:2054:A:H2'	1:0:2055:G:H8	1.41	0.84
1:0:2770:A:H5''	1:0:2867:G:H21	1.42	0.84
4:W:56:VAL:HA	4:W:59:GLU:OE1	1.77	0.84
3:S:57:ASN:HD22	3:S:72:ARG:HH12	1.26	0.84
1:0:161:U:H4'	1:0:194:G:N2	1.92	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:947:C:H2'	1:0:948:C:C6	2.13	0.83
3:S:14:LEU:HD13	3:S:16:PHE:CE1	2.13	0.83
3:S:15:HIS:HE1	3:S:80:LYS:HZ2	1.26	0.83
1:0:1467:U:H3'	1:0:1468:A:C5'	2.06	0.83
1:0:577:U:H5'	1:0:956:A:N6	1.93	0.83
1:0:362:C:H2'	1:0:363:G:H4'	1.61	0.83
1:0:446:C:H2'	1:0:447:U:O4'	1.78	0.83
1:0:1071:U:H4'	1:0:1072:U:C5	2.13	0.83
1:0:1380:C:H2'	1:0:1381:G:H5'	1.60	0.83
1:0:1764:A:N7	1:0:1821:A:H1'	1.93	0.83
1:0:1223:G:H4'	1:0:1224:A:O5'	1.79	0.83
2:R:63:LYS:HD2	2:R:69:ILE:O	1.77	0.83
1:0:545:C:O2'	1:0:546:A:H5'	1.77	0.83
1:0:582:G:H2'	1:0:583:C:H3'	1.61	0.83
1:0:1902:A:H2'	1:0:1903:C:H5''	1.61	0.83
1:0:58:C:H3'	1:0:59:G:H5''	1.61	0.82
1:0:1457:A:H2'	1:0:1458:A:O4'	1.79	0.82
2:R:7:LEU:HB2	4:W:29:ARG:HH21	1.41	0.82
1:0:978:U:H2'	1:0:979:A:H8	1.44	0.82
1:0:1882:G:H21	1:0:1885:C:N4	1.76	0.82
1:0:594:G:C6	1:0:1264:C:H2'	2.14	0.82
1:0:2058:U:H3'	1:0:2217:G:N2	1.94	0.82
1:0:584:A:O2'	1:0:585:U:H5'	1.80	0.82
1:0:2197:U:H2'	1:0:2198:U:H6	1.45	0.82
2:R:32:LYS:N	2:R:76:LYS:HE2	1.95	0.82
1:0:1076:U:H3'	1:0:1077:U:C5'	2.09	0.82
1:0:2613:A:O2'	1:0:2614:A:H5'	1.80	0.82
1:0:2779:C:H2'	1:0:2780:A:C8	2.14	0.82
1:0:309:G:N2	1:0:350:U:H5	1.77	0.82
1:0:468:A:O2'	1:0:469:G:H4'	1.79	0.82
1:0:672:C:O2'	1:0:673:G:H5'	1.80	0.82
1:0:1211:G:O2'	1:0:1212:U:H5'	1.80	0.82
1:0:976:C:O2'	1:0:977:G:H5'	1.81	0.81
1:0:1006:C:H3'	1:0:1006:C:H6	1.44	0.81
1:0:1791:C:O2'	1:0:1793:A:H5'	1.80	0.81
1:0:2404:A:H5'	1:0:2406:C:O4'	1.79	0.81
1:0:1221:C:H2'	1:0:1222:G:H8	1.45	0.81
1:0:693:A:H2'	1:0:694:G:C8	2.14	0.81
1:0:1043:A:H2	1:0:1133:G:H22	1.29	0.81
1:0:2124:C:H2'	1:0:2125:C:C6	2.15	0.81
1:0:2598:C:O2'	1:0:2599:U:H5'	1.80	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2708:U:H2'	1:0:2709:C:C6	2.16	0.81
1:0:29:U:H2'	1:0:30:G:H8	1.44	0.81
1:0:564:U:H2'	1:0:565:A:H8	1.42	0.81
1:0:1011:A:H2'	1:0:1012:A:C8	2.15	0.81
1:0:1029:C:C2'	1:0:1030:U:H5''	2.09	0.81
1:0:1610:A:H2'	1:0:1611:U:C6	2.16	0.81
1:0:1619:A:H8	1:0:1620:C:C6	1.99	0.81
1:0:543:G:H2'	1:0:544:U:C6	2.16	0.81
1:0:2299:A:H1'	1:0:2312:A:N6	1.95	0.81
1:0:2695:C:H2'	1:0:2696:A:H8	1.44	0.81
4:W:2:LYS:HG3	4:W:3:PRO:HD3	1.63	0.81
4:W:17:GLU:HB2	4:W:53:LEU:HD11	1.63	0.80
5:1:97:GLN:HG3	5:1:100:GLN:HE21	1.45	0.80
1:0:574:C:H4'	1:0:1266:G:C6	2.16	0.80
1:0:1595:A:H2'	1:0:1596:A:O4'	1.81	0.80
1:0:1528:C:H3'	1:0:1529:C:H5''	1.64	0.80
1:0:771:C:H2'	1:0:772:G:H8	1.46	0.80
1:0:1030:U:H2'	1:0:1031:C:H5'	1.64	0.80
1:0:1083:C:H42	1:0:1103:C:H41	1.28	0.80
2:R:50:VAL:HG11	2:R:80:VAL:HB	1.64	0.80
5:1:67:ARG:O	5:1:71:LEU:HG	1.80	0.80
1:0:1422:C:H2'	1:0:1423:A:H8	1.45	0.80
4:W:14:PHE:CE2	4:W:57:LYS:HB3	2.17	0.80
1:0:693:A:H2'	1:0:694:G:H8	1.46	0.80
1:0:1016:C:C5	1:0:1154:A:H1'	2.16	0.80
1:0:1354:A:OP1	1:0:1354:A:O4'	1.99	0.80
1:0:1493:A:H2'	1:0:1494:G:O4'	1.82	0.80
1:0:2737:A:H2'	1:0:2738:A:H5'	1.63	0.80
1:0:2781:G:C2'	1:0:2782:G:H5''	2.11	0.80
4:W:18:ILE:HG22	4:W:22:LYS:NZ	1.97	0.80
1:0:1791:C:C2'	1:0:1792:C:H5''	2.07	0.80
1:0:810:U:H2'	1:0:811:G:H8	1.47	0.80
1:0:1656:U:O2'	1:0:1657:A:H5''	1.81	0.80
1:0:1851:A:H61	1:0:1867:A:H1'	1.47	0.80
1:0:1966:C:H4'	1:0:2585:C:H4'	1.63	0.79
1:0:1938:U:O2'	1:0:1939:U:H5'	1.83	0.79
1:0:1563:U:H2'	1:0:1564:U:H6	1.46	0.79
1:0:1820:G:H4'	1:0:1821:A:OP1	1.81	0.79
1:0:1953:A:H5'	1:0:1954:A:OP1	1.82	0.79
1:0:1358:C:H1'	1:0:1409:U:H3	1.47	0.79
1:0:2245:A:H4'	1:0:2246:A:C5	2.17	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1190:C:H2'	1:0:1191:G:H8	1.46	0.79
1:0:1725:C:H2'	1:0:1726:C:H6	1.47	0.79
1:0:2441:U:H2'	1:0:2442:C:C6	2.18	0.79
1:0:213:C:H42	1:0:238:G:H1	1.31	0.79
1:0:466:A:C5'	1:0:467:U:H5'	2.12	0.79
1:0:537:C:C6	1:0:2759:U:H2'	2.16	0.79
1:0:1588:A:H2'	1:0:1589:G:H8	1.47	0.79
1:0:2507:U:H2'	1:0:2509:A:C5'	2.12	0.79
1:0:2642:G:O2'	1:0:2643:G:H5'	1.82	0.79
2:R:93:GLY:C	5:1:50:ARG:HH21	1.90	0.79
5:1:50:ARG:HG3	5:1:51:LYS:N	1.97	0.79
1:0:1458:A:H3'	1:0:1459:U:H5'	1.62	0.78
1:0:2057:U:H2'	1:0:2058:U:H6	1.40	0.78
1:0:211:U:O2	1:0:211:U:H2'	1.79	0.78
1:0:1047:G:H1	1:0:1130:U:H3	1.30	0.78
1:0:1683:G:O2'	1:0:1684:G:H5'	1.84	0.78
1:0:2054:A:H2'	1:0:2055:G:C8	2.18	0.78
1:0:2187:A:H2'	1:0:2188:A:C8	2.18	0.78
1:0:857:U:C2'	1:0:858:G:H5'	2.13	0.78
1:0:983:G:C6	1:0:984:A:N6	2.50	0.78
1:0:1174:G:H2'	1:0:1175:A:C8	2.19	0.78
1:0:1673:C:H2'	1:0:1674:C:H6	1.47	0.78
1:0:1830:C:H42	1:0:1881:U:H3'	1.48	0.78
1:0:2124:C:H2'	1:0:2125:C:H6	1.47	0.78
2:R:28:TRP:HZ3	2:R:75:ARG:NE	1.81	0.78
1:0:48:A:N6	1:0:154:U:C5	2.51	0.78
1:0:2691:C:C6	1:0:2691:C:H3'	2.18	0.78
1:0:208:C:H2'	1:0:209:G:O4'	1.84	0.78
1:0:1495:G:H2'	1:0:1496:G:H8	1.47	0.78
1:0:1720:G:O2'	1:0:1721:G:H5'	1.84	0.78
1:0:1766:U:H2'	1:0:1767:G:H5'	1.65	0.78
3:S:15:HIS:HE1	3:S:80:LYS:NZ	1.80	0.78
1:0:612:G:O3'	1:0:613:A:H4'	1.83	0.77
1:0:2604:G:H2'	1:0:2605:C:C6	2.19	0.77
1:0:659:G:H2'	1:0:660:G:H8	1.50	0.77
1:0:1949:A:H1'	1:0:2572:U:H4'	1.65	0.77
1:0:2468:G:H2'	1:0:2469:G:O4'	1.84	0.77
1:0:1852:G:H2'	1:0:1853:C:C6	2.19	0.77
1:0:103:U:H2'	1:0:104:C:H6	1.50	0.77
1:0:1124:U:H2'	1:0:1125:G:C8	2.18	0.77
1:0:2840:U:H2'	1:0:2841:U:C5	2.20	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:668:A:H2'	1:0:669:G:O4'	1.83	0.77
2:R:43:GLN:OE1	2:R:49:ARG:HA	1.83	0.77
4:W:10:GLN:CD	4:W:10:GLN:H	1.91	0.77
1:0:337:G:H21	3:S:10:HIS:CD2	2.01	0.77
1:0:774:A:H8	1:0:774:A:O5'	1.66	0.77
1:0:2570:C:H2'	1:0:2571:G:C8	2.19	0.77
1:0:1026:U:O2'	1:0:1027:C:H5'	1.85	0.77
5:1:90:THR:HB	5:1:107:LYS:HZ3	1.49	0.77
1:0:1557:G:O2'	1:0:1558:C:H5'	1.85	0.77
1:0:1774:A:H2	1:0:2567:G:O4'	1.68	0.77
1:0:745:C:H2'	1:0:746:G:H5'	1.68	0.77
1:0:1452:U:O2'	1:0:1453:A:H5'	1.85	0.77
1:0:2270:U:O2'	1:0:2271:C:H5'	1.85	0.77
1:0:2402:U:H4'	1:0:2404:A:N7	2.00	0.77
1:0:2736:U:O2'	1:0:2737:A:H5'	1.85	0.77
1:0:58:C:H5'	1:0:59:G:OP2	1.84	0.76
1:0:569:C:O2'	1:0:570:G:H5'	1.85	0.76
1:0:2548:G:C2	1:0:2549:G:C8	2.73	0.76
1:0:1333:G:N2	1:0:1344:C:H41	1.82	0.76
1:0:1337:G:H4'	1:0:1632:A:H62	1.49	0.76
1:0:978:U:H2'	1:0:979:A:C8	2.20	0.76
1:0:1174:G:H2'	1:0:1175:A:H8	1.50	0.76
1:0:1493:A:C2	1:0:1494:G:H1'	2.21	0.76
1:0:1629:G:H22	1:0:1633:C:H2'	1.49	0.76
3:S:25:LEU:HD13	3:S:25:LEU:N	2.01	0.76
1:0:2856:U:H2'	1:0:2857:C:H6	1.50	0.76
2:R:31:PRO:C	2:R:76:LYS:HE2	2.10	0.76
2:R:38:ILE:HD13	2:R:53:ILE:HD11	1.66	0.76
1:0:3:U:H2'	1:0:4:C:C6	2.20	0.76
1:0:1818:G:H2'	1:0:1819:U:C6	2.20	0.76
1:0:2661:G:O6	1:0:2708:U:H1'	1.84	0.76
3:S:18:LYS:HD3	3:S:18:LYS:H	1.50	0.76
1:0:873:U:O2	1:0:2247:A:H5''	1.85	0.76
1:0:1468:A:H5''	1:0:1472:C:N4	2.01	0.76
1:0:2788:C:O2'	1:0:2789:U:H5'	1.84	0.76
1:0:521:U:C5	1:0:522:G:N3	2.54	0.76
1:0:1108:U:H2'	1:0:1109:A:O4'	1.86	0.76
1:0:1352:G:N2	1:0:1619:A:H1'	2.01	0.76
1:0:2585:C:O2'	1:0:2586:G:H5'	1.86	0.76
1:0:1979:C:H2'	1:0:1980:A:O4'	1.86	0.75
1:0:2074:U:H3'	1:0:2075:U:C5'	2.16	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S:25:LEU:HD13	3:S:25:LEU:H	1.51	0.75
1:0:1778:U:O2'	1:0:1779:C:H5'	1.86	0.75
1:0:1865:C:H2'	1:0:1866:G:O4'	1.86	0.75
1:0:833:A:H1'	1:0:954:U:O2'	1.86	0.75
1:0:857:U:H2'	1:0:858:G:H5'	1.69	0.75
1:0:1021:A:N3	1:0:1164:C:H1'	2.00	0.75
1:0:2581:A:H3'	1:0:2582:G:C5'	2.11	0.75
3:S:45:LYS:CG	3:S:75:ALA:HB1	2.17	0.75
1:0:1354:A:H5''	1:0:1410:U:O2	1.86	0.75
1:0:1964:A:H3'	1:0:1965:U:C5'	2.17	0.75
3:S:15:HIS:CE1	3:S:80:LYS:HZ2	2.04	0.75
1:0:88:G:H3'	1:0:89:A:C5'	2.15	0.75
1:0:2018:G:H5''	1:0:2019:C:OP2	1.86	0.75
1:0:2469:G:H5''	1:0:2470:U:OP1	1.85	0.75
3:S:17:LYS:HB2	3:S:20:ASP:OD2	1.86	0.75
1:0:861:G:C2	1:0:944:A:H1'	2.20	0.75
1:0:929:A:H5''	1:0:2247:A:N6	2.02	0.75
1:0:1418:C:H2'	1:0:1419:G:C8	2.21	0.75
1:0:1939:U:H1'	1:0:2531:U:OP1	1.86	0.75
1:0:2:G:H2'	1:0:3:U:H6	1.48	0.75
5:1:50:ARG:CG	5:1:51:LYS:H	2.00	0.75
1:0:782:U:H2'	1:0:783:G:H8	1.50	0.75
1:0:1467:U:C3'	1:0:1468:A:H5'	2.12	0.75
1:0:2194:A:C3'	1:0:2195:C:H5''	2.16	0.75
1:0:2668:U:H5'	1:0:2669:C:H5'	1.68	0.75
1:0:2691:C:OP1	1:0:2694:G:H4'	1.87	0.75
4:W:29:ARG:CB	4:W:29:ARG:HH11	2.00	0.75
1:0:2066:G:H2'	1:0:2067:U:O4'	1.87	0.75
2:R:94:GLN:HA	5:1:51:LYS:HD3	1.67	0.75
1:0:1775:A:H4'	1:0:1776:A:O5'	1.86	0.74
1:0:190:A:O2'	1:0:191:G:H5'	1.87	0.74
1:0:1006:C:H3'	1:0:1006:C:C6	2.22	0.74
1:0:1552:C:H2'	1:0:1553:G:O4'	1.87	0.74
1:0:1872:A:H1'	1:0:2070:G:H5'	1.68	0.74
1:0:1757:C:O2'	1:0:1758:C:H5'	1.88	0.74
1:0:2184:C:H2'	1:0:2185:U:H6	1.50	0.74
4:W:37:LEU:CD2	4:W:39:GLN:H	2.01	0.74
1:0:1508:G:C5'	1:0:1509:A:H5''	2.17	0.74
1:0:70:A:OP2	1:0:111:G:H4'	1.87	0.74
1:0:2535:C:H2'	1:0:2536:G:O4'	1.87	0.74
1:0:2753:C:H2'	1:0:2754:C:H6	1.51	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:W:29:ARG:HH11	4:W:29:ARG:HB3	1.53	0.74
1:0:841:G:N1	1:0:2226:A:H4'	2.03	0.74
1:0:2106:G:C2'	1:0:2107:G:H5''	2.16	0.74
1:0:1072:U:H3'	1:0:1073:G:C5'	2.15	0.74
1:0:2180:U:O4	1:0:2203:G:H2'	1.87	0.74
1:0:2301:A:H2'	1:0:2302:G:O4'	1.87	0.74
5:1:96:VAL:HG22	5:1:102:PHE:CE1	2.23	0.74
1:0:619:A:H2'	1:0:620:G:C8	2.23	0.74
1:0:2334:C:H6	1:0:2334:C:O5'	1.70	0.74
1:0:2498:U:H2'	1:0:2520:A:N6	2.01	0.74
1:0:173:A:C6	1:0:818:G:N2	2.55	0.74
4:W:2:LYS:H	4:W:3:PRO:CD	2.00	0.74
1:0:689:A:H8	1:0:2052:G:N2	1.85	0.74
1:0:2522:G:H5'	1:0:2522:G:H8	1.53	0.74
4:W:14:PHE:HE2	4:W:57:LYS:HB3	1.52	0.74
1:0:1412:C:H4'	2:R:22:ARG:HH12	1.52	0.73
1:0:1570:C:H3'	1:0:1571:G:C5'	2.18	0.73
2:R:2:SER:N	2:R:5:ASP:CG	2.46	0.73
1:0:751:G:H2'	1:0:752:G:H5'	1.70	0.73
1:0:317:U:H3	1:0:321:A:H62	1.35	0.73
1:0:792:U:O2'	1:0:793:G:H5'	1.86	0.73
1:0:1949:A:O2'	1:0:2572:U:H5'	1.87	0.73
1:0:93:A:O2'	1:0:94:C:H5'	1.89	0.73
3:S:94:VAL:HB	3:S:107:ALA:HB3	1.70	0.73
1:0:27:G:N2	1:0:522:G:O2'	2.21	0.73
1:0:1179:A:H2'	1:0:1180:A:C8	2.24	0.73
1:0:2454:C:H42	1:0:2508:G:H22	1.36	0.73
1:0:745:C:C2'	1:0:746:G:H5'	2.18	0.73
1:0:2329:C:H2'	1:0:2330:G:O4'	1.88	0.73
1:0:820:U:H2'	1:0:821:A:H8	1.54	0.73
1:0:1191:G:H2'	1:0:1192:A:H8	1.54	0.73
1:0:2005:U:H5''	1:0:2006:G:OP1	1.88	0.73
2:R:94:GLN:HG2	5:1:51:LYS:HE2	1.70	0.73
4:W:21:ARG:HD2	4:W:21:ARG:N	2.03	0.73
5:1:25:ARG:H	5:1:25:ARG:HD2	1.51	0.73
1:0:460:U:C4	1:0:592:G:H1'	2.24	0.73
1:0:1537:U:H2'	1:0:1538:A:H8	1.47	0.73
1:0:2107:G:C3'	1:0:2108:G:H5'	2.18	0.73
1:0:2321:C:H2'	1:0:2322:U:O4'	1.89	0.73
1:0:2826:C:C2'	1:0:2827:G:H5'	2.18	0.73
1:0:445:A:O2'	1:0:446:C:H5'	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:751:G:C2'	1:0:752:G:H5'	2.18	0.73
1:0:1345:G:H22	1:0:1625:A:H3'	1.54	0.73
1:0:1434:U:H2'	1:0:1435:G:H8	1.53	0.73
1:0:2444:C:O2'	1:0:2445:C:H5'	1.89	0.73
1:0:246:C:H5	1:0:373:A:N3	1.86	0.73
1:0:349:G:P	3:S:13:LYS:NZ	2.62	0.73
2:R:28:TRP:CZ3	2:R:75:ARG:NE	2.56	0.73
1:0:161:U:C4'	1:0:194:G:H21	2.01	0.72
1:0:466:A:H4'	1:0:467:U:H5'	1.70	0.72
1:0:466:A:C4'	1:0:467:U:H5'	2.18	0.72
1:0:577:U:H5'	1:0:956:A:H61	1.53	0.72
1:0:623:G:O4'	1:0:626:A:N6	2.23	0.72
1:0:1159:U:H2'	1:0:1160:C:H6	1.53	0.72
1:0:1182:U:H3'	1:0:1183:C:C5'	2.17	0.72
1:0:1228:G:O5'	1:0:1228:G:H8	1.73	0.72
1:0:1333:G:N2	1:0:1344:C:N4	2.37	0.72
1:0:1651:U:H5''	1:0:1652:G:OP2	1.89	0.72
1:0:239:A:H5''	1:0:620:G:H5'	1.72	0.72
1:0:859:U:H4'	1:0:860:U:C5	2.24	0.72
1:0:441:A:H2'	1:0:442:A:O4'	1.90	0.72
1:0:1252:C:C2'	1:0:1253:C:H5''	2.19	0.72
1:0:1493:A:H3'	1:0:1494:G:C8	2.24	0.72
1:0:1763:G:N2	1:0:1765:C:H5''	2.04	0.72
1:0:2737:A:C2'	1:0:2738:A:H5'	2.20	0.72
1:0:2826:C:H2'	1:0:2827:G:H5'	1.71	0.72
1:0:466:A:H5''	1:0:467:U:H5'	1.70	0.72
1:0:813:A:C1'	1:0:815:A:H5'	2.18	0.72
1:0:1302:C:OP1	1:0:1664:G:N2	2.20	0.72
1:0:2491:C:H3'	1:0:2492:G:H5''	1.70	0.72
1:0:2840:U:H2'	1:0:2841:U:H5	1.54	0.72
1:0:16:G:O5'	1:0:16:G:H8	1.73	0.72
1:0:174:A:N1	1:0:840:U:O4	2.23	0.72
1:0:537:C:H6	1:0:2759:U:H2'	1.53	0.72
1:0:1170:U:O2'	1:0:1171:A:H5'	1.90	0.72
1:0:1726:C:H2'	1:0:1727:C:C6	2.24	0.72
3:S:57:ASN:ND2	3:S:72:ARG:HH12	1.85	0.72
1:0:1:G:H2'	1:0:2:G:C8	2.25	0.72
1:0:1531:C:O2	1:0:1573:G:H1'	1.90	0.72
1:0:1730:G:H2'	1:0:1731:C:C6	2.24	0.72
1:0:2652:G:H2'	1:0:2653:A:H8	1.55	0.72
3:S:18:LYS:HE2	3:S:19:GLY:N	2.05	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1710:U:H6	1:0:1710:U:O5'	1.73	0.72
1:0:1888:C:H4'	1:0:1912:G:C8	2.24	0.72
3:S:98:ILE:HG22	3:S:99:VAL:HG13	1.72	0.72
1:0:216:U:H2'	1:0:217:U:O4'	1.89	0.71
1:0:792:U:C2'	1:0:793:G:H5'	2.20	0.71
1:0:1495:G:N2	1:0:1529:C:H1'	2.05	0.71
1:0:2150:U:H1'	1:0:2154:A:H61	1.54	0.71
4:W:41:HIS:C	4:W:41:HIS:CD2	2.68	0.71
1:0:841:G:H1	1:0:2226:A:H4'	1.55	0.71
1:0:415:A:H2'	1:0:416:U:H5'	1.72	0.71
1:0:1226:A:H1'	1:0:1250:A:H2	1.55	0.71
1:0:2836:U:O2'	1:0:2837:G:H5'	1.88	0.71
1:0:1200:G:H5''	1:0:1200:G:H8	1.56	0.71
1:0:1369:G:H2'	1:0:1370:U:O4'	1.91	0.71
1:0:1825:C:O2'	1:0:1826:U:H5'	1.89	0.71
3:S:75:ALA:O	3:S:76:LEU:HD23	1.90	0.71
3:S:112:LYS:N	3:S:112:LYS:HD2	2.05	0.71
1:0:86:U:P	3:S:42:ARG:HH21	2.13	0.71
1:0:1635:G:O2'	1:0:1636:G:H5'	1.89	0.71
1:0:1774:A:C2	1:0:2567:G:O4'	2.43	0.71
1:0:1902:A:C2'	1:0:1903:C:H5''	2.20	0.71
1:0:2030:U:H2'	1:0:2031:A:C8	2.21	0.71
1:0:2397:A:H2'	1:0:2398:U:H6	1.54	0.71
1:0:2454:C:N4	1:0:2508:G:H22	1.87	0.71
1:0:598:U:H2'	1:0:599:A:O4'	1.90	0.71
1:0:782:U:H2'	1:0:783:G:C8	2.24	0.71
3:S:80:LYS:C	3:S:80:LYS:HD3	2.16	0.71
3:S:82:ALA:C	3:S:83:LEU:HD12	2.15	0.71
1:0:1514:C:OP2	1:0:1514:C:H6	1.73	0.71
1:0:1631:C:H3'	1:0:1632:A:H5''	1.72	0.71
1:0:304:A:H2'	1:0:305:A:H5''	1.73	0.71
1:0:1854:G:O2'	1:0:1855:G:H5'	1.91	0.71
1:0:2212:U:H2'	1:0:2213:G:C8	2.26	0.71
1:0:2811:G:H2'	1:0:2812:A:H8	1.53	0.71
1:0:641:G:H2'	1:0:642:A:H5''	1.73	0.70
1:0:1528:C:C3'	1:0:1529:C:H5''	2.21	0.70
1:0:1915:A:N1	1:0:1956:G:H1'	2.06	0.70
1:0:170:U:O2	1:0:170:U:H2'	1.90	0.70
1:0:1101:U:H3	1:0:1113:C:H1'	1.56	0.70
1:0:1220:G:H2'	1:0:1221:C:C6	2.26	0.70
1:0:1610:A:H2'	1:0:1611:U:H6	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2779:C:H2'	1:0:2780:A:H8	1.54	0.70
1:0:2781:G:H2'	1:0:2782:G:H5''	1.72	0.70
5:1:107:LYS:HD3	5:1:107:LYS:H	1.56	0.70
1:0:207:U:H2'	1:0:208:C:C6	2.25	0.70
1:0:815:A:N3	1:0:815:A:H2'	2.06	0.70
1:0:986:A:H2'	1:0:987:G:H5'	1.73	0.70
1:0:2024:U:O2'	1:0:2025:A:H5'	1.91	0.70
2:R:69:ILE:CG2	2:R:70:GLY:N	2.05	0.70
1:0:2713:A:H2'	1:0:2714:A:H8	1.57	0.70
1:0:222:G:H1'	1:0:397:U:O2	1.92	0.70
1:0:230:C:H2'	1:0:231:G:H5'	1.74	0.70
1:0:1000:G:OP1	1:0:1168:G:H4'	1.91	0.70
3:S:52:ASN:ND2	3:S:71:GLN:HE21	1.89	0.70
1:0:930:A:OP1	1:0:930:A:H4'	1.90	0.70
1:0:1016:C:C6	1:0:1154:A:H1'	2.27	0.70
1:0:2043:A:H1'	1:0:2481:G:C1'	2.22	0.70
1:0:2569:A:H2'	1:0:2570:C:C6	2.26	0.70
1:0:582:G:C2'	1:0:583:C:H3'	2.21	0.70
1:0:603:C:H2'	1:0:604:U:H6	1.55	0.70
1:0:1619:A:C8	1:0:1620:C:C6	2.79	0.70
1:0:1683:G:C2'	1:0:1684:G:H5'	2.22	0.70
1:0:692:C:O2'	1:0:693:A:H5'	1.92	0.70
1:0:936:A:H2'	1:0:937:C:O4'	1.92	0.70
1:0:1818:G:H2'	1:0:1819:U:H6	1.54	0.70
1:0:2519:C:C2'	1:0:2520:A:H5'	2.22	0.70
2:R:94:GLN:O	5:1:50:ARG:NH2	2.25	0.70
1:0:146:C:H2'	1:0:147:G:C8	2.26	0.70
1:0:973:U:H2'	1:0:974:U:H6	1.56	0.70
1:0:2687:G:O2'	1:0:2688:G:H5'	1.91	0.70
1:0:167:A:N6	1:0:184:A:H1'	2.07	0.69
1:0:1226:A:C1'	1:0:1250:A:C2	2.74	0.69
1:0:2245:A:H2'	1:0:2245:A:N3	2.06	0.69
1:0:2274:C:H2'	1:0:2275:U:H5'	1.72	0.69
1:0:2322:U:C2'	1:0:2323:U:H5'	2.22	0.69
2:R:69:ILE:HG22	2:R:70:GLY:CA	2.20	0.69
1:0:103:U:H2'	1:0:104:C:C6	2.27	0.69
1:0:176:A:H2'	1:0:2412:A:H61	1.56	0.69
1:0:482:A:H2'	1:0:483:A:O4'	1.92	0.69
1:0:540:G:N2	1:0:2004:U:C2	2.60	0.69
1:0:860:U:H2'	1:0:860:U:O2	1.91	0.69
1:0:861:G:N2	1:0:944:A:H1'	2.07	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1164:C:H2'	1:0:1165:G:O4'	1.93	0.69
1:0:1226:A:C1'	1:0:1250:A:H2	2.05	0.69
1:0:1604:A:H2'	1:0:1605:A:H8	1.55	0.69
1:0:2495:G:H2'	1:0:2496:C:O4'	1.91	0.69
1:0:1151:U:H5''	1:0:1153:A:C5'	2.19	0.69
1:0:1619:A:H8	1:0:1620:C:C5	2.09	0.69
1:0:1888:C:H2'	1:0:1913:G:C5	2.28	0.69
1:0:197:G:N3	1:0:210:A:H2	1.90	0.69
1:0:367:G:C2'	1:0:368:A:H5''	2.23	0.69
1:0:1787:U:H2'	1:0:1788:C:C6	2.28	0.69
1:0:1888:C:O2'	1:0:1912:G:H2'	1.92	0.69
1:0:2210:C:H2'	1:0:2211:U:C6	2.28	0.69
1:0:2691:C:C6	1:0:2691:C:C3'	2.76	0.69
1:0:176:A:H3'	1:0:177:U:C5	2.26	0.69
1:0:357:A:C2'	1:0:358:C:H5'	2.23	0.69
1:0:521:U:C5	1:0:522:G:C4	2.80	0.69
1:0:2111:C:H2'	1:0:2112:C:C6	2.27	0.69
1:0:2262:C:H2'	1:0:2263:C:H5'	1.74	0.69
1:0:2446:C:H2'	1:0:2447:G:O4'	1.93	0.69
1:0:91:A:H2'	1:0:92:U:C6	2.27	0.69
1:0:1197:U:H2'	1:0:1198:C:O4'	1.92	0.69
1:0:2148:G:H3'	1:0:2149:G:C8	2.28	0.69
1:0:5:A:H2'	1:0:6:A:H8	1.58	0.69
1:0:68:C:C2	1:0:72:A:C4	2.81	0.69
1:0:210:A:N6	1:0:442:A:H61	1.87	0.69
1:0:1690:U:O2'	1:0:1691:G:H5'	1.93	0.69
2:R:11:VAL:O	2:R:12:ILE:HG13	1.93	0.69
1:0:58:C:H3'	1:0:59:G:C5'	2.21	0.69
1:0:317:U:N3	1:0:321:A:N6	2.40	0.69
1:0:521:U:O4	1:0:522:G:N3	2.26	0.69
1:0:2322:U:H2'	1:0:2323:U:H5'	1.73	0.69
2:R:4:TYR:CD2	4:W:23:LYS:HB3	2.28	0.69
1:0:91:A:H2'	1:0:92:U:H6	1.58	0.69
1:0:750:C:H2'	1:0:751:G:O4'	1.93	0.69
1:0:1462:C:H2'	1:0:1463:A:C8	2.28	0.69
1:0:2107:G:H2'	1:0:2108:G:H5'	1.75	0.69
1:0:2266:A:H62	1:0:2323:U:H1'	1.56	0.69
2:R:56:MET:HE2	2:R:57:ASN:O	1.93	0.69
1:0:2644:A:O2'	1:0:2645:C:H5'	1.93	0.69
1:0:28:A:H1'	1:0:523:A:C2	2.28	0.68
1:0:1137:A:H5''	1:0:1138:A:OP1	1.93	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1727:C:H4'	1:0:2833:C:O2	1.93	0.68
3:S:18:LYS:HE2	3:S:18:LYS:C	2.18	0.68
1:0:688:A:C8	1:0:817:A:C2	2.81	0.68
1:0:717:G:C2'	1:0:739:G:H22	2.05	0.68
1:0:1310:C:H2'	1:0:1311:C:H6	1.58	0.68
5:1:90:THR:HB	5:1:107:LYS:HZ1	1.55	0.68
1:0:88:G:C3'	1:0:89:A:H5''	2.23	0.68
1:0:174:A:N1	1:0:840:U:C4	2.60	0.68
1:0:585:U:H2'	1:0:586:G:C8	2.29	0.68
1:0:1429:A:H1'	1:0:1603:A:C6	2.28	0.68
1:0:2319:G:H2'	1:0:2320:G:H8	1.58	0.68
1:0:1030:U:C2'	1:0:1031:C:H5'	2.24	0.68
1:0:1567:A:H2'	1:0:1568:A:C8	2.28	0.68
1:0:2570:C:H2'	1:0:2571:G:H8	1.55	0.68
1:0:490:A:O2'	1:0:491:A:H3'	1.93	0.68
1:0:638:A:N6	1:0:647:G:H2'	2.09	0.68
1:0:1096:A:H3'	1:0:1096:A:N3	2.08	0.68
1:0:2509:A:H2'	1:0:2510:A:H5''	1.74	0.68
1:0:2751:C:H2'	1:0:2752:C:C6	2.29	0.68
1:0:2708:U:H2'	1:0:2709:C:H6	1.58	0.68
4:W:36:GLN:HE21	5:1:55:ASN:HB3	1.58	0.68
1:0:48:A:N3	1:0:50:G:N2	2.42	0.68
1:0:192:G:C4'	1:0:193:A:H4'	2.23	0.68
1:0:1226:A:H1'	1:0:1250:A:C2	2.29	0.68
1:0:2007:G:O2'	1:0:2008:C:H5'	1.94	0.68
1:0:539:A:N7	1:0:2006:G:C5	2.61	0.68
1:0:2528:G:H2'	1:0:2529:G:H8	1.59	0.68
3:S:52:ASN:HD21	3:S:71:GLN:HE21	1.41	0.68
4:W:17:GLU:HB2	4:W:53:LEU:CD1	2.22	0.68
5:1:24:ASN:HD22	5:1:25:ARG:CZ	2.07	0.68
1:0:212:U:H1'	1:0:443:A:H2	1.57	0.68
1:0:213:C:N4	1:0:238:G:H1	1.92	0.68
1:0:788:G:C5'	1:0:790:A:H1'	2.21	0.68
1:0:889:C:H2'	1:0:890:U:H6	1.59	0.68
1:0:1184:G:H2'	1:0:1185:C:H5''	1.74	0.68
1:0:2279:G:O2'	1:0:2280:A:H5'	1.93	0.68
1:0:2828:C:H2'	1:0:2829:A:H8	1.59	0.68
3:S:48:VAL:HG12	3:S:50:GLY:H	1.59	0.68
1:0:48:A:H1'	1:0:50:G:N3	2.09	0.68
1:0:1105:U:O2	1:0:1107:A:H8	1.77	0.68
1:0:1503:G:H2'	1:0:1504:G:C8	2.29	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1859:A:H2'	1:0:1860:A:O4'	1.94	0.68
1:0:1947:G:H2'	1:0:1950:C:OP1	1.94	0.68
2:R:73:ASN:O	2:R:75:ARG:NH1	2.27	0.68
5:1:77:GLN:HA	5:1:80:ARG:HD2	1.76	0.68
1:0:29:U:H2'	1:0:30:G:C8	2.27	0.67
1:0:665:A:H3'	1:0:666:U:C5'	2.23	0.67
1:0:745:C:H2'	1:0:746:G:C5'	2.24	0.67
1:0:865:A:H2'	1:0:866:U:C6	2.27	0.67
1:0:940:G:H2'	1:0:941:U:C4'	2.25	0.67
1:0:946:U:H2'	1:0:947:C:C6	2.29	0.67
1:0:2380:U:H2'	1:0:2381:A:H5'	1.75	0.67
1:0:2604:G:H2'	1:0:2605:C:H6	1.59	0.67
1:0:2633:A:H5''	1:0:2634:G:OP1	1.94	0.67
1:0:404:A:H5'	1:0:425:A:H4'	1.76	0.67
1:0:846:A:H2'	1:0:847:C:C6	2.30	0.67
1:0:1122:A:O2'	1:0:1123:G:H4'	1.94	0.67
1:0:1437:A:O2'	1:0:1438:G:H5'	1.93	0.67
3:S:112:LYS:CD	3:S:112:LYS:H	2.08	0.67
1:0:165:G:H2'	1:0:166:G:H5'	1.77	0.67
1:0:489:A:H8	1:0:489:A:O5'	1.76	0.67
1:0:561:U:H1'	1:0:1233:A:C2	2.29	0.67
1:0:2262:C:C2'	1:0:2263:C:H5'	2.24	0.67
2:R:32:LYS:CA	2:R:76:LYS:HE2	2.23	0.67
5:1:32:ALA:HB1	5:1:36:ARG:HH21	1.58	0.67
1:0:68:C:O2	1:0:68:C:H2'	1.94	0.67
1:0:2062:U:H2'	1:0:2063:A:H8	1.59	0.67
1:0:2133:G:H2'	1:0:2134:U:C6	2.30	0.67
1:0:2740:C:O2'	1:0:2741:G:H5'	1.94	0.67
5:1:15:LYS:HD2	5:1:15:LYS:C	2.19	0.67
1:0:640:C:H4'	1:0:660:G:H21	1.59	0.67
1:0:1223:G:N1	1:0:1250:A:N7	2.42	0.67
1:0:1745:C:O2'	1:0:1746:A:H5'	1.95	0.67
1:0:1842:G:O2'	1:0:1843:U:H5'	1.94	0.67
1:0:2148:G:H3'	1:0:2149:G:H8	1.58	0.67
1:0:2839:G:C2	1:0:2840:U:C2	2.83	0.67
5:1:31:TRP:CZ2	5:1:54:GLU:HG3	2.30	0.67
1:0:202:A:H2'	1:0:203:G:O4'	1.94	0.67
1:0:995:A:H5''	1:0:996:C:H5	1.58	0.67
1:0:1039:A:H61	1:0:1136:G:H2'	1.60	0.67
1:0:2311:U:C5'	1:0:2315:A:H61	2.07	0.67
1:0:2436:U:H2'	1:0:2437:G:O4'	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:128:C:C2'	1:0:129:A:H5''	2.24	0.67
1:0:629:C:H2'	1:0:630:G:O4'	1.95	0.67
1:0:653:G:H2'	1:0:654:A:H4'	1.76	0.67
1:0:1278:A:H2	1:0:1997:A:H62	1.41	0.67
1:0:2145:A:H1'	1:0:2156:A:C6	2.29	0.67
1:0:2571:G:H2'	1:0:2572:U:O4'	1.94	0.67
1:0:2867:G:OP2	1:0:2867:G:H8	1.78	0.67
2:R:19:ALA:O	2:R:24:VAL:HG23	1.93	0.67
4:W:18:ILE:HG22	4:W:22:LYS:HZ1	1.57	0.67
1:0:338:G:H5'	3:S:9:HIS:CE1	2.30	0.67
1:0:930:A:H5'	1:0:931:G:C8	2.29	0.67
1:0:2673:G:N2	1:0:2696:A:C4	2.63	0.67
2:R:5:ASP:N	2:R:5:ASP:OD2	2.27	0.67
1:0:738:G:O5'	1:0:738:G:H8	1.78	0.67
1:0:1725:C:H2'	1:0:1726:C:C6	2.29	0.67
1:0:2698:G:H2'	1:0:2699:G:C8	2.30	0.67
1:0:1401:G:O2'	1:0:1541:G:H5'	1.95	0.67
1:0:2111:C:H2'	1:0:2112:C:H6	1.60	0.67
5:1:63:GLU:CD	5:1:63:GLU:H	2.02	0.67
1:0:341:A:H1'	1:0:1223:G:O6	1.95	0.66
1:0:1221:C:H2'	1:0:1222:G:C8	2.29	0.66
1:0:1418:C:H2'	1:0:1419:G:H8	1.58	0.66
1:0:1532:A:H2'	1:0:1533:G:H8	1.60	0.66
1:0:2194:A:H2'	1:0:2195:C:H5''	1.76	0.66
1:0:2286:G:H2'	1:0:2286:G:N3	2.10	0.66
1:0:2182:A:C2	1:0:2183:C:H1'	2.30	0.66
1:0:2833:C:O5'	1:0:2833:C:H6	1.78	0.66
1:0:2863:U:H2'	1:0:2864:C:H6	1.61	0.66
1:0:664:C:H2'	1:0:665:A:C8	2.30	0.66
1:0:1356:G:O4'	1:0:1613:G:H2'	1.95	0.66
1:0:1391:A:H2'	1:0:1392:U:C6	2.29	0.66
1:0:1572:C:H2'	1:0:1573:G:C5'	2.04	0.66
1:0:1658:A:H2'	1:0:1659:G:O4'	1.95	0.66
1:0:1824:C:O5'	1:0:1824:C:H6	1.79	0.66
1:0:2071:G:O2'	1:0:2072:C:H5'	1.95	0.66
1:0:2397:A:H2'	1:0:2398:U:C6	2.30	0.66
1:0:976:C:O4'	1:0:2252:A:N3	2.28	0.66
1:0:1766:U:C2'	1:0:1767:G:H5'	2.25	0.66
1:0:689:A:H2	1:0:815:A:H61	1.43	0.66
1:0:704:G:O2'	1:0:705:C:H5'	1.95	0.66
1:0:732:G:H2'	1:0:733:G:C8	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:876:A:H2'	1:0:877:G:C8	2.30	0.66
1:0:1888:C:H4'	1:0:1912:G:H8	1.61	0.66
1:0:2705:A:O2'	1:0:2706:U:C6	2.49	0.66
5:1:31:TRP:HZ2	5:1:54:GLU:HG3	1.57	0.66
5:1:97:GLN:CG	5:1:100:GLN:HE21	2.08	0.66
1:0:1231:A:H2'	1:0:1232:U:C6	2.31	0.66
1:0:1301:U:O4	1:0:1340:C:H1'	1.96	0.66
1:0:2691:C:H3'	1:0:2691:C:H6	1.57	0.66
1:0:86:U:H1'	1:0:95:G:N2	2.11	0.66
1:0:804:C:O2'	1:0:805:G:H5''	1.96	0.66
1:0:1975:G:H22	1:0:1979:C:H5	1.42	0.66
2:R:7:LEU:CB	4:W:29:ARG:HH21	2.08	0.66
1:0:1:G:H2'	1:0:2:G:H8	1.59	0.66
1:0:2246:A:H2'	1:0:2246:A:N3	2.11	0.66
3:S:20:ASP:OD2	3:S:20:ASP:N	2.28	0.66
5:1:55:ASN:N	5:1:55:ASN:ND2	2.28	0.66
1:0:20:C:H2'	1:0:21:A:H8	1.61	0.66
1:0:246:C:C5	1:0:373:A:N3	2.64	0.66
1:0:531:G:H2'	1:0:532:A:H8	1.61	0.66
1:0:792:U:H2'	1:0:793:G:C5'	2.26	0.66
1:0:1218:C:H2'	1:0:1219:C:C6	2.30	0.66
1:0:1514:C:O4'	1:0:1593:C:H4'	1.96	0.66
1:0:1763:G:H2'	1:0:1764:A:H5'	1.78	0.66
1:0:1996:A:O2'	1:0:1997:A:H5'	1.96	0.66
1:0:2437:G:O2'	1:0:2438:A:C8	2.49	0.66
1:0:2787:A:O2'	1:0:2788:C:H5'	1.94	0.66
5:1:32:ALA:O	5:1:36:ARG:HG3	1.95	0.66
1:0:441:A:O2'	1:0:442:A:H5'	1.96	0.65
1:0:765:C:O2'	1:0:766:A:H8	1.78	0.65
1:0:2459:C:H2'	1:0:2460:G:H5'	1.78	0.65
1:0:2759:U:O5'	1:0:2759:U:H6	1.79	0.65
4:W:28:LEU:HD11	4:W:42:ARG:HG3	1.77	0.65
1:0:841:G:H22	1:0:2226:A:H5'	1.61	0.65
1:0:1198:C:H5''	1:0:1199:U:H4'	1.78	0.65
1:0:1350:G:H2'	1:0:1351:G:H8	1.59	0.65
1:0:1437:A:H2'	1:0:1438:G:H8	1.61	0.65
1:0:1515:U:O2'	1:0:1516:A:H5'	1.96	0.65
1:0:1626:A:H5''	1:0:1627:C:OP2	1.96	0.65
1:0:2826:C:H2'	1:0:2827:G:C5'	2.26	0.65
1:0:210:A:H61	1:0:442:A:N6	1.89	0.65
1:0:603:C:H2'	1:0:604:U:C6	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:718:A:N6	1:0:739:G:H1'	2.11	0.65
1:0:2372:A:H2'	1:0:2373:C:C6	2.31	0.65
2:R:63:LYS:CD	2:R:69:ILE:O	2.44	0.65
1:0:76:C:O2'	1:0:77:C:H5'	1.95	0.65
1:0:841:G:H1	1:0:2226:A:C4'	2.09	0.65
1:0:1922:U:OP1	1:0:1923:U:H3'	1.95	0.65
1:0:1937:G:N3	1:0:2530:C:H5'	2.12	0.65
1:0:2658:A:O2'	1:0:2659:C:H5'	1.96	0.65
1:0:1218:C:H2'	1:0:1219:C:H6	1.60	0.65
1:0:2179:C:H2'	1:0:2180:U:O4'	1.96	0.65
1:0:119:G:H2'	1:0:120:G:H8	1.60	0.65
1:0:169:C:H2'	1:0:170:U:H5'	1.79	0.65
1:0:700:C:H2'	1:0:701:U:O4'	1.97	0.65
1:0:889:C:H2'	1:0:890:U:C6	2.32	0.65
1:0:1416:A:O2'	1:0:1417:C:H5'	1.96	0.65
1:0:1422:C:H2'	1:0:1423:A:C8	2.30	0.65
1:0:1803:G:O2'	1:0:1804:U:H5'	1.97	0.65
1:0:810:U:H2'	1:0:811:G:C8	2.29	0.65
1:0:841:G:C2	1:0:2226:A:H4'	2.32	0.65
1:0:1008:G:O2'	1:0:1009:C:H5'	1.95	0.65
3:S:25:LEU:HD11	3:S:80:LYS:HA	1.79	0.65
1:0:540:G:N2	1:0:2004:U:N3	2.45	0.65
1:0:931:G:H2'	1:0:932:G:H5'	1.79	0.65
1:0:1413:U:H2'	1:0:1414:G:C8	2.32	0.65
1:0:2062:U:H2'	1:0:2063:A:C8	2.32	0.65
1:0:2153:A:H2'	1:0:2154:A:H5'	1.78	0.65
1:0:104:C:H2'	1:0:105:G:C5'	2.22	0.65
1:0:753:U:H2'	1:0:754:G:O5'	1.96	0.65
4:W:43:VAL:HG12	4:W:47:ARG:NH2	2.11	0.65
1:0:521:U:H5	1:0:522:G:C2	2.15	0.65
1:0:930:A:H3'	1:0:931:G:C8	2.31	0.65
1:0:1081:A:H5'	1:0:1082:G:H5''	1.78	0.65
1:0:1159:U:H2'	1:0:1160:C:C6	2.31	0.65
1:0:1468:A:H5''	1:0:1472:C:H41	1.61	0.65
1:0:1690:U:C2'	1:0:1691:G:H5'	2.27	0.65
1:0:2060:A:P	1:0:2060:A:H3'	2.38	0.65
1:0:31:C:H2'	1:0:32:C:O4'	1.97	0.64
1:0:368:A:H2'	1:0:369:C:O4'	1.97	0.64
1:0:614:G:N2	1:0:634:G:N2	2.45	0.64
1:0:955:G:H5''	1:0:956:A:H5'	1.79	0.64
1:0:1337:G:C4'	1:0:1632:A:H62	2.10	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1456:C:O2'	1:0:1457:A:H5'	1.97	0.64
1:0:1794:A:H2	1:0:1814:G:N3	1.95	0.64
1:0:792:U:H2'	1:0:793:G:H5'	1.77	0.64
1:0:2194:A:C2'	1:0:2195:C:H5''	2.27	0.64
1:0:2759:U:O5'	1:0:2759:U:C6	2.51	0.64
1:0:2838:U:H2'	1:0:2839:G:H8	1.61	0.64
1:0:639:G:H4'	1:0:661:C:O2'	1.97	0.64
1:0:1404:C:N4	1:0:1407:G:C8	2.66	0.64
1:0:2266:A:N3	1:0:2268:G:H1'	2.11	0.64
1:0:521:U:C4	1:0:522:G:N3	2.65	0.64
1:0:1220:G:H2'	1:0:1221:C:H6	1.62	0.64
1:0:2266:A:C2	1:0:2268:G:H1'	2.32	0.64
1:0:794:A:H5'	1:0:795:A:N7	2.12	0.64
1:0:2327:U:O5'	1:0:2327:U:H6	1.80	0.64
1:0:26:G:N1	1:0:27:G:N2	2.45	0.64
1:0:58:C:H1'	1:0:72:A:C8	2.33	0.64
1:0:309:G:OP1	3:S:93:ARG:HA	1.98	0.64
1:0:408:U:H2'	1:0:409:G:C8	2.32	0.64
1:0:815:A:C2	1:0:816:U:C2	2.86	0.64
5:1:40:VAL:HG12	5:1:42:GLY:H	1.63	0.64
1:0:1918:G:H1'	1:0:1947:G:N2	2.12	0.64
1:0:2825:A:H2'	1:0:2826:C:C6	2.32	0.64
1:0:48:A:H4'	1:0:49:U:O5'	1.96	0.64
1:0:83:A:H8	1:0:83:A:O5'	1.81	0.64
1:0:457:C:O2'	1:0:458:G:H5'	1.96	0.64
1:0:813:A:O2'	1:0:814:G:H3'	1.98	0.64
1:0:1325:U:H1'	1:0:1619:A:C6	2.30	0.64
1:0:1501:C:H2'	1:0:1502:G:O4'	1.97	0.64
1:0:1558:C:H2'	1:0:1559:G:O4'	1.98	0.64
1:0:2279:G:H2'	1:0:2280:A:H8	1.63	0.64
1:0:14:A:H3'	1:0:14:A:OP2	1.98	0.64
1:0:132:U:H2'	1:0:133:C:H6	1.62	0.64
1:0:230:C:C2'	1:0:231:G:H5'	2.27	0.64
1:0:583:C:H4'	1:0:584:A:O5'	1.98	0.64
1:0:1921:A:H2'	1:0:1922:U:C4'	2.28	0.64
1:0:2107:G:C2'	1:0:2108:G:H5'	2.27	0.64
1:0:2184:C:H2'	1:0:2185:U:C6	2.33	0.64
1:0:2508:G:OP2	1:0:2509:A:H5'	1.98	0.64
1:0:2722:C:H2'	1:0:2723:C:H6	1.62	0.64
3:S:42:ARG:HG2	3:S:42:ARG:HH11	1.62	0.64
1:0:696:U:C2	1:0:697:G:C8	2.86	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2043:A:H1'	1:0:2481:G:H1'	1.79	0.64
1:0:2241:U:H2'	1:0:2242:C:H6	1.63	0.64
1:0:2691:C:H2'	1:0:2692:A:N7	2.11	0.64
1:0:2756:A:N6	1:0:2762:G:N3	2.46	0.64
1:0:173:A:N1	1:0:818:G:N2	2.47	0.63
1:0:539:A:N7	1:0:2006:G:C6	2.66	0.63
1:0:1974:U:H2'	1:0:1975:G:H5'	1.80	0.63
3:S:112:LYS:HD2	3:S:112:LYS:H	1.62	0.63
1:0:155:G:O2'	1:0:156:G:H5'	1.97	0.63
1:0:317:U:C3'	1:0:318:G:H5''	2.28	0.63
1:0:427:C:H2'	1:0:428:A:C8	2.33	0.63
1:0:1356:G:H2'	1:0:1356:G:N3	2.13	0.63
1:0:450:C:O5'	1:0:450:C:H6	1.82	0.63
1:0:929:A:C5'	1:0:2247:A:H61	2.12	0.63
1:0:1083:C:N4	1:0:1103:C:H41	1.94	0.63
1:0:1495:G:H2'	1:0:1496:G:C8	2.33	0.63
1:0:1715:A:H1'	1:0:1717:A:C5'	2.24	0.63
3:S:90:LYS:HB2	3:S:108:VAL:HG21	1.79	0.63
1:0:309:G:N2	1:0:350:U:C5	2.64	0.63
1:0:1437:A:H2'	1:0:1438:G:C8	2.33	0.63
1:0:1681:A:C6	1:0:2706:U:C5	2.85	0.63
1:0:95:G:O2'	1:0:96:C:H5'	1.99	0.63
1:0:635:C:C3'	1:0:636:G:H5''	2.28	0.63
1:0:1197:U:O5'	1:0:1197:U:H6	1.81	0.63
1:0:1541:G:N2	1:0:1562:G:H22	1.96	0.63
1:0:1754:G:N2	1:0:1756:C:C5'	2.58	0.63
1:0:1866:G:H8	1:0:1866:G:O5'	1.80	0.63
1:0:2032:G:O2'	1:0:2033:C:H5'	1.98	0.63
1:0:2624:G:H4'	1:0:2712:G:O2'	1.98	0.63
1:0:2826:C:O2'	1:0:2827:G:H5'	1.98	0.63
1:0:403:A:C5'	1:0:404:A:OP1	2.45	0.63
1:0:841:G:N2	1:0:2226:A:H4'	2.12	0.63
1:0:1534:A:H2'	1:0:1535:C:H6	1.61	0.63
1:0:1902:A:C3'	1:0:1903:C:H5''	2.29	0.63
1:0:2194:A:H3'	1:0:2195:C:H5''	1.81	0.63
1:0:438:G:O2'	1:0:439:C:H5'	1.99	0.63
1:0:566:U:O2'	1:0:567:G:H5'	1.99	0.63
1:0:624:A:H3'	1:0:625:A:H8	1.63	0.63
1:0:640:C:C4'	1:0:660:G:H21	2.11	0.63
1:0:1260:A:N6	1:0:1262:U:O2	2.32	0.63
1:0:1511:A:H2	1:0:1594:U:H1'	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S:57:ASN:HD22	3:S:72:ARG:NH1	1.95	0.63
1:0:921:A:O2'	1:0:922:A:H5'	1.99	0.63
1:0:983:G:OP2	1:0:985:G:H5''	1.98	0.63
1:0:1404:C:H5'	1:0:1405:A:OP2	1.98	0.63
1:0:2632:U:H6	1:0:2632:U:O5'	1.80	0.63
1:0:2640:G:H2'	1:0:2641:A:O4'	1.98	0.63
1:0:2847:G:C2	1:0:2848:A:N6	2.66	0.63
2:R:39:LYS:O	2:R:43:GLN:HG3	1.98	0.63
1:0:641:G:H4'	1:0:651:C:O2'	1.98	0.63
1:0:746:G:N7	1:0:774:A:C6	2.67	0.63
1:0:1438:G:H2'	1:0:1439:G:H5'	1.81	0.63
1:0:1493:A:N3	1:0:1494:G:H1'	2.14	0.63
2:R:51:ILE:HD11	2:R:83:ALA:HB2	1.80	0.63
1:0:471:A:C2	1:0:481:A:C4	2.87	0.62
1:0:490:A:N6	1:0:492:G:N3	2.47	0.62
1:0:493:A:OP2	1:0:517:A:N6	2.28	0.62
1:0:641:G:C2'	1:0:642:A:H5''	2.28	0.62
1:0:1570:C:H3'	1:0:1571:G:H5'	1.81	0.62
1:0:1933:G:C8	1:0:1934:U:H5	2.17	0.62
1:0:1345:G:N2	1:0:1625:A:C3'	2.62	0.62
1:0:1619:A:C8	1:0:1620:C:C5	2.87	0.62
1:0:2241:U:H2'	1:0:2242:C:C6	2.34	0.62
1:0:2306:A:H2'	1:0:2307:A:C8	2.34	0.62
1:0:347:C:H2'	1:0:348:U:H6	1.64	0.62
1:0:712:A:H4'	1:0:1651:U:C4	2.35	0.62
1:0:852:U:H1'	1:0:1205:G:H1'	1.81	0.62
1:0:62:U:H2'	1:0:63:A:C8	2.34	0.62
1:0:683:A:H5''	1:0:684:C:OP1	1.99	0.62
1:0:1392:U:OP1	1:0:1392:U:H6	1.82	0.62
1:0:2764:U:H2'	1:0:2765:C:C6	2.35	0.62
3:S:29:HIS:HB3	3:S:32:GLN:HG3	1.82	0.62
1:0:426:C:H4'	1:0:1863:U:O2'	1.99	0.62
1:0:929:A:H5''	1:0:2247:A:H61	1.64	0.62
1:0:1173:G:H2'	1:0:1174:G:H8	1.63	0.62
1:0:2061:C:H1'	1:0:2413:A:N3	2.14	0.62
1:0:2438:A:H2'	1:0:2439:U:O4'	1.99	0.62
1:0:64:C:O4'	2:R:68:PHE:HB3	2.00	0.62
1:0:192:G:H4'	1:0:193:A:O5'	1.99	0.62
1:0:488:A:H8	1:0:488:A:OP1	1.83	0.62
1:0:574:C:H4'	1:0:1266:G:N1	2.15	0.62
1:0:614:G:O2'	1:0:615:C:H5'	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1252:C:O2'	1:0:1253:C:H5''	2.00	0.62
1:0:1825:C:C2'	1:0:1826:U:H5'	2.29	0.62
3:S:85:ASP:H	3:S:86:PRO:CD	2.12	0.62
1:0:1288:A:H2'	1:0:1289:A:O4'	2.00	0.62
1:0:75:C:H2'	1:0:76:C:H5'	1.82	0.62
1:0:622:U:H2'	1:0:623:G:O4'	2.00	0.62
1:0:1039:A:N6	1:0:1136:G:H2'	2.15	0.62
1:0:1325:U:H5''	1:0:1326:U:OP1	1.99	0.62
1:0:1339:U:H6	1:0:1339:U:H5'	1.64	0.62
1:0:1442:C:H2'	1:0:1443:G:OP1	2.00	0.62
1:0:2222:U:O2'	1:0:2223:U:H5'	2.00	0.62
1:0:2628:C:O2'	1:0:2629:U:H5'	2.00	0.62
2:R:63:LYS:HB2	2:R:63:LYS:NZ	2.15	0.62
1:0:400:U:O2	1:0:400:U:H2'	2.00	0.62
1:0:1032:A:O2'	1:0:1134:C:H5''	1.99	0.62
1:0:1286:U:H4'	1:0:1288:A:OP2	2.00	0.62
1:0:1851:A:N6	1:0:1867:A:H1'	2.14	0.62
1:0:2674:C:H2'	1:0:2675:U:C6	2.34	0.62
1:0:5:A:O2'	1:0:6:A:H5'	1.99	0.61
1:0:349:G:P	3:S:13:LYS:HZ2	2.22	0.61
1:0:441:A:C2'	1:0:442:A:H5'	2.30	0.61
1:0:678:G:H2'	1:0:679:C:H6	1.64	0.61
1:0:1560:A:H2'	1:0:1561:A:O4'	2.00	0.61
1:0:1692:C:O2'	1:0:1693:A:H5'	2.00	0.61
1:0:2473:G:H2'	1:0:2474:G:H8	1.64	0.61
1:0:2739:G:O5'	1:0:2739:G:H8	1.82	0.61
5:1:24:ASN:HD22	5:1:25:ARG:NH2	1.98	0.61
1:0:215:G:H21	1:0:632:A:H8	1.48	0.61
1:0:538:A:O5'	1:0:538:A:H8	1.82	0.61
1:0:2494:C:H2'	1:0:2495:G:H8	1.64	0.61
1:0:2862:G:O2'	1:0:2863:U:H5'	2.00	0.61
2:R:94:GLN:HA	5:1:51:LYS:CD	2.30	0.61
1:0:994:A:N7	1:0:995:A:N3	2.48	0.61
1:0:1231:A:H2'	1:0:1232:U:H6	1.64	0.61
1:0:1408:A:N3	1:0:1411:C:C4	2.69	0.61
1:0:1493:A:C3'	1:0:1494:G:H8	2.12	0.61
1:0:2579:A:C6	1:0:2580:C:N4	2.69	0.61
1:0:2827:G:H2'	1:0:2828:C:C6	2.34	0.61
4:W:7:ARG:HD2	4:W:8:ASN:N	2.15	0.61
5:1:69:ARG:HH22	5:1:70:LEU:HD23	1.63	0.61
1:0:311:A:H2'	1:0:345:U:O2'	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:313:U:O2'	1:0:314:G:H5'	2.01	0.61
1:0:428:A:H2'	1:0:429:C:O4'	2.00	0.61
1:0:987:G:H2'	1:0:988:G:H8	1.65	0.61
1:0:1382:G:C6	1:0:1383:C:C5	2.88	0.61
1:0:1730:G:H2'	1:0:1731:C:H6	1.63	0.61
1:0:2657:G:H2'	1:0:2658:A:C8	2.34	0.61
2:R:91:LEU:HD22	2:R:91:LEU:N	2.15	0.61
3:S:80:LYS:C	3:S:80:LYS:CD	2.74	0.61
1:0:18:U:O2'	1:0:19:C:H5'	2.01	0.61
1:0:230:C:H2'	1:0:231:G:C5'	2.31	0.61
1:0:613:A:H2'	1:0:614:G:H8	1.65	0.61
1:0:988:G:O2'	1:0:989:G:H5'	2.01	0.61
1:0:1478:U:H2'	1:0:1479:G:C8	2.36	0.61
1:0:2059:U:OP2	1:0:2217:G:N2	2.33	0.61
1:0:2123:G:H2'	1:0:2124:C:C6	2.34	0.61
3:S:25:LEU:N	3:S:25:LEU:CD1	2.63	0.61
1:0:635:C:H2'	1:0:636:G:H5''	1.82	0.61
1:0:1698:C:O2'	1:0:1753:A:H2'	2.00	0.61
1:0:1785:A:H4'	1:0:1883:A:C6	2.36	0.61
1:0:1817:U:O5'	1:0:1817:U:H6	1.83	0.61
1:0:2677:U:H2'	1:0:2678:C:C6	2.36	0.61
1:0:7:G:H2'	1:0:8:A:O4'	2.01	0.61
1:0:141:G:H2'	1:0:142:U:O4'	2.00	0.61
1:0:1046:U:H3	1:0:1131:G:H1	1.48	0.61
5:1:70:LEU:O	5:1:74:HIS:CD2	2.54	0.61
1:0:488:A:H2'	1:0:489:A:C8	2.35	0.61
1:0:929:A:H3'	1:0:930:A:C5'	2.29	0.61
1:0:982:C:O2'	1:0:983:G:H5'	2.01	0.61
1:0:992:A:H2	1:0:2010:G:N3	1.99	0.61
1:0:1123:G:O2'	1:0:1124:U:H5'	2.01	0.61
1:0:2210:C:H2'	1:0:2211:U:H6	1.64	0.61
1:0:2262:C:H2'	1:0:2263:C:C5'	2.31	0.61
1:0:2657:G:H2'	1:0:2658:A:H8	1.66	0.61
1:0:2800:C:H2'	1:0:2801:A:O4'	2.01	0.61
4:W:4:SER:HB3	4:W:7:ARG:NH2	2.15	0.61
1:0:45:C:OP2	1:0:192:G:H3'	2.01	0.61
1:0:207:U:H2'	1:0:208:C:H6	1.63	0.61
1:0:357:A:H8	1:0:357:A:O5'	1.83	0.61
1:0:627:A:H2'	1:0:628:A:C8	2.36	0.61
1:0:1006:C:C6	1:0:1006:C:C3'	2.84	0.61
1:0:2781:G:O2'	1:0:2782:G:H5''	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:22:ARG:HE	2:R:24:VAL:CG2	2.13	0.61
1:0:847:C:H1'	1:0:2337:A:C2	2.36	0.60
1:0:985:G:C4	1:0:1200:G:N2	2.69	0.60
1:0:1440:G:H3'	1:0:1441:A:C5'	2.31	0.60
1:0:2827:G:H2'	1:0:2828:C:H6	1.65	0.60
1:0:1238:A:O2'	1:0:1239:A:H5'	2.00	0.60
1:0:1715:A:O2'	1:0:1716:G:H3'	2.00	0.60
1:0:1750:A:H1'	1:0:2690:A:C2	2.36	0.60
1:0:2506:C:O2'	1:0:2507:U:H5'	2.02	0.60
1:0:2779:C:O5'	1:0:2779:C:H6	1.84	0.60
1:0:245:C:H5'	1:0:372:U:O2'	2.02	0.60
1:0:1252:C:H2'	1:0:1253:C:H5''	1.84	0.60
1:0:1861:G:O2'	1:0:1862:C:H5'	2.01	0.60
1:0:2839:G:H2'	1:0:2840:U:C6	2.37	0.60
3:S:82:ALA:CB	3:S:83:LEU:HD12	2.30	0.60
1:0:26:G:C6	1:0:27:G:N2	2.70	0.60
1:0:65:C:H2'	1:0:66:U:O4'	2.02	0.60
1:0:1615:C:OP1	2:R:35:LYS:HB2	2.02	0.60
1:0:1785:A:H2'	1:0:1786:C:C6	2.36	0.60
1:0:2335:U:O2'	1:0:2336:G:H5'	2.01	0.60
1:0:2689:C:H2'	1:0:2690:A:H8	1.67	0.60
1:0:2793:G:N1	1:0:2794:G:C5	2.69	0.60
1:0:1326:U:O4	1:0:1619:A:N6	2.35	0.60
1:0:1442:C:C2'	1:0:1443:G:OP1	2.50	0.60
1:0:1468:A:H8	1:0:1468:A:O5'	1.84	0.60
1:0:2048:C:O2'	1:0:2049:C:H5'	2.02	0.60
1:0:2838:U:C4	1:0:2839:G:N7	2.70	0.60
1:0:100:G:N1	3:S:102:LYS:HD3	2.15	0.60
1:0:304:A:C3'	1:0:305:A:H5''	2.32	0.60
1:0:508:G:O2'	1:0:509:U:H5'	2.01	0.60
1:0:591:G:H2'	1:0:592:G:C8	2.35	0.60
1:0:1438:G:P	1:0:1439:G:OP2	2.60	0.60
1:0:1458:A:C3'	1:0:1459:U:C5'	2.72	0.60
1:0:1582:A:C2'	1:0:1583:A:OP1	2.49	0.60
1:0:2198:U:H2'	1:0:2199:C:O4'	2.02	0.60
1:0:2216:G:O5'	1:0:2216:G:H8	1.84	0.60
1:0:2507:U:C2'	1:0:2509:A:H5''	2.27	0.60
1:0:2660:C:C2	1:0:2704:U:O4	2.55	0.60
1:0:2785:A:H2'	1:0:2786:G:O4'	2.01	0.60
3:S:18:LYS:HD3	3:S:18:LYS:N	2.14	0.60
1:0:55:A:O2'	1:0:56:C:H5'	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:173:A:N6	1:0:818:G:N2	2.49	0.60
1:0:354:C:H2'	1:0:355:G:O4'	2.02	0.60
1:0:539:A:OP2	1:0:2025:A:N6	2.35	0.60
1:0:813:A:H2'	1:0:813:A:N3	2.17	0.60
1:0:1076:U:H3'	1:0:1077:U:H5''	1.83	0.60
1:0:2086:U:H6	1:0:2086:U:O5'	1.84	0.60
2:R:6:ILE:C	2:R:7:LEU:HD13	2.27	0.60
1:0:957:G:O2'	1:0:958:G:H5'	2.02	0.60
1:0:2716:G:O2'	1:0:2717:G:H5'	2.01	0.60
1:0:192:G:C1'	1:0:193:A:H4'	2.31	0.60
1:0:194:G:H2'	1:0:195:A:O4'	2.01	0.60
1:0:876:A:H2'	1:0:877:G:H8	1.67	0.60
1:0:1253:C:H2'	1:0:1254:G:C5'	2.32	0.60
1:0:1312:G:H5'	1:0:1314:A:H1'	1.84	0.60
1:0:1437:A:C4	1:0:1438:G:N7	2.70	0.60
1:0:1470:G:O2'	1:0:1471:G:H5'	2.02	0.60
1:0:2591:C:C5	1:0:2592:U:H5	2.19	0.60
1:0:24:G:N2	1:0:527:C:C2	2.69	0.60
1:0:585:U:H4'	1:0:2481:G:N7	2.15	0.60
1:0:1019:U:H5''	1:0:1020:A:OP1	2.02	0.60
1:0:1298:G:N1	1:0:1342:U:OP1	2.32	0.60
1:0:1339:U:H5'	1:0:1339:U:C6	2.37	0.60
1:0:2001:G:H2'	1:0:2002:A:C8	2.36	0.60
1:0:2407:G:H5''	1:0:2408:G:OP1	2.02	0.60
1:0:2569:A:H2'	1:0:2570:C:H6	1.66	0.60
2:R:69:ILE:HG22	2:R:70:GLY:H	0.46	0.60
1:0:77:C:H2'	1:0:78:C:C6	2.37	0.59
1:0:672:C:C2'	1:0:673:G:H5'	2.32	0.59
1:0:826:U:H2'	1:0:827:C:C6	2.37	0.59
1:0:1337:G:H1'	1:0:1632:A:N6	2.16	0.59
1:0:2324:G:N2	1:0:2360:C:H2'	2.17	0.59
1:0:617:U:C6	1:0:632:A:N6	2.71	0.59
1:0:773:G:O2'	1:0:774:A:H5'	2.02	0.59
1:0:1302:C:O2'	1:0:1303:U:H5'	2.02	0.59
1:0:1345:G:C5	1:0:1625:A:C6	2.90	0.59
1:0:1578:U:H2'	1:0:1579:G:C8	2.37	0.59
1:0:1604:A:H2'	1:0:1605:A:C8	2.37	0.59
1:0:1690:U:H2'	1:0:1691:G:H5'	1.82	0.59
1:0:1922:U:O5'	1:0:1923:U:H5''	2.03	0.59
1:0:2591:C:C4	1:0:2592:U:C5	2.90	0.59
1:0:2856:U:O2'	1:0:2857:C:H5'	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:43:GLN:HG2	2:R:50:VAL:CG2	2.29	0.59
3:S:25:LEU:CD1	3:S:80:LYS:HA	2.32	0.59
1:0:803:C:H5'	1:0:804:C:OP2	2.02	0.59
1:0:1588:A:C5	1:0:1589:G:N7	2.70	0.59
1:0:1748:U:N3	1:0:1753:A:H2	1.91	0.59
1:0:2797:G:O5'	1:0:2797:G:H8	1.85	0.59
2:R:29:VAL:CG2	2:R:76:LYS:HB2	2.31	0.59
5:1:25:ARG:HD2	5:1:25:ARG:N	2.17	0.59
1:0:329:C:H2'	1:0:330:C:H6	1.67	0.59
1:0:541:C:N4	1:0:572:G:H8	2.00	0.59
1:0:941:U:H4'	1:0:941:U:OP1	2.01	0.59
1:0:2829:A:C6	1:0:2839:G:C6	2.91	0.59
3:S:95:ARG:HH12	3:S:106:VAL:HA	1.67	0.59
1:0:304:A:C2'	1:0:305:A:H5''	2.32	0.59
1:0:544:U:C4	1:0:545:C:N4	2.70	0.59
1:0:732:G:H2'	1:0:733:G:H8	1.66	0.59
1:0:1330:G:H2'	1:0:1331:G:O4'	2.01	0.59
1:0:1391:A:H2'	1:0:1392:U:H6	1.66	0.59
1:0:1941:C:O2'	1:0:1942:G:H5'	2.02	0.59
1:0:2240:C:C2'	1:0:2241:U:C5'	2.80	0.59
1:0:2459:C:C2'	1:0:2460:G:H5'	2.31	0.59
2:R:20:MET:HE3	2:R:92:ALA:HA	1.85	0.59
1:0:195:A:H2	1:0:212:U:H4'	1.68	0.59
1:0:520:C:O2'	1:0:1249:G:H5''	2.02	0.59
1:0:1301:U:O2'	1:0:1664:G:N2	2.35	0.59
1:0:1631:C:H3'	1:0:1632:A:C5'	2.32	0.59
1:0:1764:A:C5	1:0:1821:A:H1'	2.37	0.59
1:0:2487:G:O2'	1:0:2488:G:H5'	2.02	0.59
1:0:2588:U:H5'	1:0:2589:C:OP2	2.01	0.59
1:0:20:C:O2'	1:0:21:A:H5'	2.03	0.59
1:0:198:A:H4'	1:0:199:A:OP2	2.02	0.59
1:0:521:U:C5	1:0:522:G:C2	2.89	0.59
1:0:677:G:O2'	1:0:678:G:H5'	2.03	0.59
1:0:1544:A:O2'	1:0:1545:G:H5'	2.03	0.59
1:0:1567:A:O2'	1:0:1568:A:H5'	2.03	0.59
1:0:1708:C:H2'	1:0:1709:U:C6	2.37	0.59
1:0:1778:U:H5'	1:0:2568:A:O2'	2.01	0.59
1:0:2387:U:H2'	1:0:2388:G:C8	2.38	0.59
1:0:2585:C:C2'	1:0:2586:G:H5'	2.31	0.59
1:0:113:C:O2'	1:0:114:C:H5'	2.02	0.59
1:0:349:G:P	3:S:13:LYS:HZ1	2.24	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1350:G:H2'	1:0:1351:G:C8	2.37	0.59
1:0:1391:A:N7	1:0:1393:G:C5	2.70	0.59
1:0:1697:U:H3	1:0:1754:G:H3'	1.68	0.59
1:0:1892:C:N4	1:0:1903:C:H42	2.00	0.59
1:0:2151:G:H2'	1:0:2153:A:OP2	2.03	0.59
1:0:2174:G:H2'	1:0:2175:A:C8	2.38	0.59
1:0:2494:C:H2'	1:0:2495:G:C8	2.38	0.59
1:0:2706:U:H2'	1:0:2706:U:O2	2.01	0.59
1:0:2722:C:O2'	1:0:2723:C:H5'	2.03	0.59
1:0:95:G:H4'	4:W:41:HIS:ND1	2.17	0.59
1:0:100:G:H1	3:S:102:LYS:CB	2.05	0.59
1:0:192:G:O4'	1:0:193:A:H4'	2.03	0.59
1:0:2142:G:O2'	1:0:2143:G:H5'	2.03	0.59
1:0:2484:G:O2'	1:0:2485:U:H5'	2.03	0.59
1:0:2642:G:H2'	1:0:2643:G:O4'	2.03	0.59
2:R:62:ARG:HH11	2:R:62:ARG:CB	1.96	0.59
5:1:69:ARG:HG2	5:1:69:ARG:HH21	1.67	0.59
1:0:19:C:H2'	1:0:20:C:C6	2.38	0.59
1:0:742:G:C4	1:0:1766:U:O2	2.56	0.59
1:0:1508:G:H5'	1:0:1509:A:H5''	1.84	0.59
1:0:1763:G:C2'	1:0:1764:A:H5'	2.33	0.59
3:S:45:LYS:HG3	3:S:75:ALA:HB1	1.84	0.59
5:1:51:LYS:HG2	5:1:51:LYS:O	2.03	0.59
5:1:91:VAL:HA	5:1:106:VAL:HG22	1.84	0.59
1:0:582:G:H5'	1:0:583:C:OP2	2.03	0.58
1:0:638:A:H61	1:0:647:G:H2'	1.67	0.58
1:0:1436:G:H22	1:0:1593:C:H1'	1.68	0.58
1:0:1844:C:O2'	1:0:1845:A:H5'	2.02	0.58
1:0:1858:C:H2'	1:0:1859:A:C8	2.38	0.58
1:0:2546:G:H2'	1:0:2547:C:C6	2.38	0.58
1:0:2758:A:O2'	1:0:2759:U:P	2.61	0.58
1:0:2859:U:C4	1:0:2860:C:C2	2.91	0.58
1:0:13:A:O2'	1:0:14:A:N7	2.36	0.58
1:0:1029:C:H2'	1:0:1030:U:C5'	2.20	0.58
1:0:1309:G:N2	1:0:1662:G:C4	2.71	0.58
1:0:1385:C:C2	1:0:1386:A:C8	2.91	0.58
1:0:2742:G:O2'	1:0:2743:G:H5'	2.02	0.58
1:0:67:G:N2	1:0:73:A:H4'	2.19	0.58
1:0:322:A:O2'	1:0:343:A:O4'	2.22	0.58
1:0:619:A:H2'	1:0:620:G:H8	1.64	0.58
1:0:742:G:O6	1:0:1765:C:N3	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1014:G:N2	1:0:1015:U:C2	2.71	0.58
1:0:1793:A:O2'	1:0:1794:A:H5'	2.03	0.58
1:0:2012:A:H2'	1:0:2014:A:OP1	2.03	0.58
1:0:2176:U:H6	1:0:2176:U:O5'	1.85	0.58
1:0:172:A:C5	1:0:175:C:H5	2.22	0.58
1:0:490:A:HO2'	1:0:491:A:H5'	1.69	0.58
1:0:533:C:H2'	1:0:534:U:O4'	2.03	0.58
1:0:984:A:H2	1:0:1201:G:N2	2.00	0.58
1:0:2107:G:H3'	1:0:2108:G:H5'	1.84	0.58
1:0:2677:U:H2'	1:0:2678:C:H6	1.68	0.58
2:R:58:VAL:O	2:R:75:ARG:NH1	2.35	0.58
1:0:471:A:C2	1:0:481:A:C5	2.92	0.58
1:0:490:A:C6	1:0:492:G:H1'	2.38	0.58
1:0:581:A:O2'	1:0:2018:G:N2	2.36	0.58
1:0:613:A:H61	1:0:635:C:N4	2.01	0.58
1:0:841:G:H22	1:0:2226:A:C5'	2.17	0.58
1:0:1007:A:C2	1:0:1008:G:C8	2.91	0.58
1:0:1262:U:H3'	1:0:1262:U:H6	1.69	0.58
1:0:2209:G:C5	1:0:2210:C:H5	2.22	0.58
1:0:2769:C:C2'	1:0:2770:A:H5'	2.34	0.58
1:0:985:G:H1'	1:0:1001:A:N6	2.18	0.58
1:0:2058:U:H3'	1:0:2217:G:C2	2.39	0.58
1:0:2427:A:OP2	1:0:2478:C:OP2	2.20	0.58
1:0:1174:G:C2	1:0:1175:A:C5	2.92	0.58
1:0:2043:A:H1'	1:0:2481:G:O4'	2.03	0.58
1:0:2610:G:H4'	1:0:2866:A:H5'	1.86	0.58
2:R:8:GLN:N	4:W:29:ARG:HH22	2.01	0.58
1:0:73:A:H3'	1:0:73:A:N3	2.19	0.58
1:0:221:A:H2'	1:0:222:G:C5'	2.33	0.58
1:0:1210:C:O2	1:0:1210:C:H2'	2.02	0.58
1:0:1383:C:C2	1:0:1384:G:C8	2.91	0.58
1:0:1502:G:H2'	1:0:1503:G:H8	1.69	0.58
1:0:1545:G:H8	1:0:1545:G:O5'	1.87	0.58
1:0:1931:G:O2'	1:0:1932:G:H5'	2.04	0.58
1:0:2007:G:C2	1:0:2023:C:C2	2.92	0.58
3:S:18:LYS:H	3:S:18:LYS:CD	2.17	0.58
1:0:199:A:N1	1:0:201:G:C2	2.72	0.58
1:0:1366:A:H2'	1:0:1367:A:C8	2.39	0.58
1:0:1572:C:O5'	1:0:1572:C:H6	1.87	0.58
1:0:1673:C:H2'	1:0:1674:C:C6	2.34	0.58
1:0:1969:G:O2'	1:0:1970:G:H5'	2.04	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2404:A:H4'	1:0:2405:A:O5'	2.04	0.58
1:0:2427:A:OP1	1:0:2478:C:OP1	2.22	0.58
1:0:2555:G:H5'	1:0:2557:G:N7	2.18	0.58
1:0:2688:G:O2'	1:0:2689:C:H5'	2.04	0.58
2:R:4:TYR:HD2	4:W:23:LYS:HB3	1.68	0.58
2:R:7:LEU:HD13	2:R:7:LEU:N	2.18	0.58
4:W:4:SER:HB3	4:W:7:ARG:HH21	1.69	0.58
1:0:338:G:H2'	1:0:339:U:C6	2.39	0.58
1:0:356:A:H2'	1:0:357:A:C8	2.39	0.58
1:0:1081:A:H5'	1:0:1082:G:C5'	2.34	0.58
1:0:2482:A:O2'	1:0:2484:G:OP2	2.22	0.58
1:0:2492:G:H2'	1:0:2493:U:C6	2.39	0.58
4:W:1:MET:HG2	4:W:2:LYS:HG3	1.81	0.58
1:0:68:C:H1'	1:0:72:A:H1'	1.86	0.57
1:0:201:G:H2'	1:0:202:A:C8	2.39	0.57
1:0:214:C:O2'	1:0:215:G:H5'	2.03	0.57
1:0:427:C:H1'	1:0:1856:U:H1'	1.86	0.57
1:0:1653:C:O2	1:0:1751:A:H2	1.87	0.57
1:0:1777:A:N6	1:0:2585:C:O4'	2.37	0.57
1:0:2861:A:H2'	1:0:2862:G:H8	1.68	0.57
2:R:8:GLN:N	4:W:29:ARG:NH2	2.52	0.57
2:R:43:GLN:CG	2:R:50:VAL:HG23	2.30	0.57
5:1:96:VAL:HG22	5:1:102:PHE:CZ	2.39	0.57
1:0:5:A:H2'	1:0:6:A:C8	2.39	0.57
1:0:27:G:H1'	1:0:523:A:H61	1.69	0.57
1:0:343:A:OP2	1:0:343:A:H8	1.87	0.57
1:0:1574:A:O4'	1:0:1574:A:OP1	2.22	0.57
1:0:1629:G:N2	1:0:1633:C:H2'	2.20	0.57
1:0:2616:U:H2'	1:0:2617:G:O4'	2.04	0.57
5:1:69:ARG:NH1	5:1:70:LEU:HG	2.19	0.57
1:0:1459:U:O5'	1:0:1459:U:H6	1.87	0.57
1:0:2144:C:O2'	1:0:2156:A:H1'	2.04	0.57
1:0:2447:G:O2'	1:0:2448:A:H5'	2.04	0.57
2:R:10:PRO:HD3	4:W:30:PHE:CD1	2.39	0.57
1:0:200:A:OP2	1:0:200:A:H4'	2.03	0.57
1:0:766:A:O2'	1:0:767:G:H5'	2.04	0.57
1:0:940:G:H2'	1:0:941:U:O4'	2.04	0.57
1:0:1198:C:OP1	1:0:1199:U:H1'	2.04	0.57
1:0:1615:C:OP2	2:R:35:LYS:HE3	2.04	0.57
1:0:2053:G:C6	1:0:2054:A:C6	2.92	0.57
1:0:2177:U:H2'	1:0:2178:U:H6	1.67	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2197:U:H2'	1:0:2198:U:C5	2.37	0.57
2:R:71:GLN:HG3	2:R:72:ARG:N	2.19	0.57
1:0:349:G:OP1	3:S:13:LYS:NZ	2.37	0.57
1:0:356:A:H2'	1:0:357:A:N7	2.20	0.57
1:0:492:G:H2'	1:0:517:A:C6	2.39	0.57
1:0:562:G:H2'	1:0:563:U:O4'	2.04	0.57
1:0:567:G:C4	1:0:568:G:C8	2.92	0.57
1:0:638:A:H2'	1:0:639:G:O4'	2.04	0.57
1:0:810:U:O2'	1:0:811:G:H5'	2.05	0.57
1:0:979:A:O2'	1:0:980:G:H5'	2.04	0.57
1:0:1508:G:H5''	1:0:1509:A:H5''	1.84	0.57
1:0:1544:A:H2'	1:0:1545:G:C8	2.39	0.57
1:0:1925:C:H2'	1:0:1926:U:H5	1.69	0.57
3:S:95:ARG:HD2	3:S:95:ARG:N	2.20	0.57
1:0:428:A:O2'	1:0:429:C:H5'	2.04	0.57
1:0:670:U:H2'	1:0:671:A:C8	2.40	0.57
1:0:1429:A:H1'	1:0:1603:A:N1	2.20	0.57
1:0:1534:A:O2'	1:0:1535:C:H5'	2.04	0.57
1:0:2209:G:H2'	1:0:2210:C:H6	1.69	0.57
1:0:2277:A:H2'	1:0:2278:A:O4'	2.04	0.57
1:0:2602:G:H2'	1:0:2603:G:H8	1.68	0.57
1:0:2770:A:H8	1:0:2770:A:O5'	1.88	0.57
4:W:23:LYS:HG3	4:W:24:GLU:N	2.20	0.57
5:1:69:ARG:HH22	5:1:70:LEU:CD2	2.18	0.57
1:0:401:G:C2'	1:0:403:A:N7	2.65	0.57
1:0:415:A:C2'	1:0:416:U:H5'	2.34	0.57
1:0:760:U:O2	1:0:1997:A:H1'	2.04	0.57
1:0:854:G:C2	1:0:855:G:C4	2.92	0.57
1:0:1807:A:O2'	1:0:1808:C:H4'	2.05	0.57
1:0:2198:U:H2'	1:0:2199:C:C4'	2.35	0.57
1:0:2409:A:H2'	1:0:2410:U:C5'	2.34	0.57
1:0:2602:G:N3	1:0:2603:G:C8	2.73	0.57
2:R:31:PRO:O	2:R:76:LYS:NZ	2.33	0.57
4:W:18:ILE:HG22	4:W:22:LYS:HZ3	1.69	0.57
1:0:521:U:OP2	1:0:522:G:C6	2.58	0.57
1:0:623:G:O3'	1:0:625:A:OP2	2.23	0.57
1:0:665:A:H3'	1:0:666:U:H5''	1.85	0.57
1:0:677:G:C2	1:0:678:G:C8	2.93	0.57
1:0:1582:A:H2'	1:0:1583:A:OP1	2.05	0.57
1:0:1730:G:N1	1:0:1737:G:C6	2.72	0.57
1:0:2630:C:O2'	1:0:2631:C:H5'	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2875:C:O2'	1:0:2876:C:H5'	2.04	0.57
3:S:85:ASP:OD1	3:S:90:LYS:NZ	2.38	0.57
4:W:55:THR:O	4:W:59:GLU:HG3	2.04	0.57
1:0:137:A:H2'	1:0:138:G:H5'	1.85	0.57
1:0:1596:A:H2'	1:0:1597:A:O4'	2.05	0.57
1:0:2261:G:H4'	1:0:2262:C:OP2	2.02	0.57
1:0:2311:U:H5'	1:0:2315:A:H61	1.70	0.57
1:0:33:C:N4	1:0:458:G:O2'	2.35	0.57
1:0:409:G:O2'	1:0:410:A:H5'	2.04	0.57
1:0:691:C:H2'	1:0:692:C:H6	1.68	0.57
1:0:863:C:O2'	1:0:864:C:H5'	2.05	0.57
1:0:919:U:H2'	1:0:920:G:O5'	2.05	0.57
1:0:1034:U:H2'	1:0:1035:G:O4'	2.05	0.57
1:0:1255:A:H2'	1:0:1256:C:H6	1.68	0.57
1:0:1364:C:H2'	1:0:1365:U:C6	2.39	0.57
1:0:1445:A:C2	1:0:1446:U:C2	2.93	0.57
1:0:1457:A:C2'	1:0:1458:A:O4'	2.52	0.57
1:0:2209:G:C5	1:0:2210:C:C5	2.93	0.57
1:0:2384:G:H21	1:0:2391:A:H62	1.53	0.57
1:0:2634:G:H2'	1:0:2643:G:C6	2.39	0.57
1:0:19:C:H2'	1:0:20:C:H6	1.70	0.56
1:0:394:U:H2'	1:0:395:G:H8	1.69	0.56
1:0:1436:G:H2'	1:0:1437:A:O4'	2.04	0.56
1:0:1830:C:N4	1:0:1881:U:H3'	2.19	0.56
1:0:2170:C:H2'	1:0:2171:U:O4'	2.05	0.56
1:0:2510:A:H2'	1:0:2511:G:H5'	1.85	0.56
1:0:2793:G:O2'	1:0:2794:G:H5'	2.05	0.56
1:0:841:G:H22	1:0:2226:A:H4'	1.70	0.56
1:0:932:G:H2'	1:0:933:G:H8	1.70	0.56
1:0:1398:G:C5	1:0:1416:A:C6	2.93	0.56
1:0:1514:C:OP2	1:0:1514:C:C6	2.56	0.56
1:0:1518:C:H2'	1:0:1519:G:H8	1.70	0.56
1:0:1917:C:H2'	1:0:1918:G:O4'	2.05	0.56
1:0:2053:G:C6	1:0:2054:A:C5	2.93	0.56
5:1:97:GLN:OE1	5:1:100:GLN:NE2	2.38	0.56
1:0:66:U:O2	1:0:67:G:N7	2.39	0.56
1:0:167:A:H62	1:0:184:A:H1'	1.69	0.56
1:0:333:A:H1'	1:0:351:A:C4	2.41	0.56
1:0:588:G:O2'	1:0:2002:A:OP1	2.23	0.56
1:0:616:U:H5	1:0:630:G:C6	2.23	0.56
1:0:616:U:C2'	1:0:617:U:H5''	2.27	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:622:U:C2	1:0:626:A:N6	2.73	0.56
1:0:1209:G:C2	1:0:1210:C:C6	2.92	0.56
1:0:1286:U:O3'	1:0:1288:A:OP2	2.23	0.56
1:0:1451:C:H2'	1:0:1452:U:C6	2.39	0.56
1:0:1567:A:O2'	1:0:1568:A:C5'	2.54	0.56
1:0:1577:G:O2'	1:0:1578:U:H5'	2.05	0.56
1:0:1736:C:C2	1:0:1737:G:N7	2.74	0.56
1:0:2094:C:H2'	1:0:2096:U:OP2	2.04	0.56
1:0:2793:G:C2	1:0:2794:G:C8	2.92	0.56
3:S:11:ASN:OD1	3:S:12:ASP:N	2.38	0.56
3:S:16:PHE:HD2	3:S:80:LYS:NZ	1.93	0.56
1:0:317:U:H3'	1:0:318:G:H5''	1.87	0.56
1:0:346:C:C6	1:0:346:C:OP1	2.59	0.56
1:0:534:U:H2'	1:0:535:U:C6	2.40	0.56
1:0:540:G:O3'	1:0:541:C:H4'	2.06	0.56
1:0:691:C:O2'	1:0:692:C:H5'	2.05	0.56
1:0:858:G:H5''	1:0:859:U:OP1	2.06	0.56
1:0:1253:C:H2'	1:0:1254:G:H5'	1.85	0.56
1:0:1278:A:O2'	1:0:1279:G:P	2.63	0.56
1:0:1764:A:N7	1:0:1821:A:C1'	2.67	0.56
1:0:2053:G:C2	1:0:2054:A:C4	2.93	0.56
1:0:2338:C:H2'	1:0:2339:A:C8	2.40	0.56
1:0:16:G:O5'	1:0:16:G:C8	2.56	0.56
1:0:246:C:C5	1:0:373:A:H1'	2.41	0.56
1:0:441:A:H2'	1:0:442:A:C5'	2.35	0.56
1:0:619:A:H61	1:0:629:C:N4	2.04	0.56
1:0:986:A:C2	1:0:1001:A:N9	2.74	0.56
1:0:1001:A:H62	1:0:1200:G:H1'	1.70	0.56
1:0:1244:U:H2'	1:0:1245:G:H8	1.70	0.56
1:0:2171:U:H2'	1:0:2172:U:C6	2.40	0.56
1:0:346:C:OP1	1:0:346:C:H6	1.89	0.56
1:0:941:U:O2'	1:0:942:U:H5'	2.05	0.56
1:0:1005:U:O2	1:0:1007:A:N7	2.38	0.56
1:0:1057:A:H3'	1:0:1058:G:C5'	2.30	0.56
1:0:1105:U:O2	1:0:1107:A:C8	2.58	0.56
1:0:1223:G:O2'	1:0:1224:A:OP2	2.21	0.56
1:0:1305:C:H2'	1:0:1306:U:O4'	2.04	0.56
1:0:1468:A:O5'	1:0:1468:A:C8	2.59	0.56
1:0:1478:U:H2'	1:0:1479:G:H8	1.68	0.56
1:0:1538:A:O2'	1:0:1539:U:H5'	2.06	0.56
1:0:1714:A:H5'	1:0:1715:A:O5'	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1770:U:O4	1:0:1776:A:N6	2.39	0.56
1:0:1823:G:C6	1:0:1824:C:N4	2.74	0.56
1:0:2299:A:H5'	1:0:2300:G:C8	2.40	0.56
1:0:2372:A:H2'	1:0:2373:C:H6	1.70	0.56
1:0:2565:C:C5	1:0:2587:G:N2	2.72	0.56
1:0:2770:A:C8	1:0:2770:A:OP2	2.59	0.56
2:R:75:ARG:HG3	2:R:75:ARG:HH11	1.70	0.56
4:W:3:PRO:HB2	4:W:5:GLU:HG3	1.87	0.56
1:0:537:C:O2'	1:0:2025:A:C2	2.58	0.56
1:0:1767:G:N2	1:0:1768:U:C1'	2.69	0.56
1:0:2011:U:H2'	1:0:2012:A:C8	2.41	0.56
1:0:2524:G:C2'	1:0:2525:U:H5'	2.35	0.56
1:0:2818:G:O2'	1:0:2819:G:H5'	2.04	0.56
3:S:15:HIS:CE1	3:S:80:LYS:NZ	2.68	0.56
1:0:737:C:O5'	1:0:737:C:H6	1.88	0.56
1:0:1079:G:H2'	1:0:1080:A:O4'	2.06	0.56
1:0:1748:U:N3	1:0:1753:A:C2	2.61	0.56
1:0:1860:A:H2'	1:0:1861:G:O4'	2.05	0.56
1:0:2081:U:O5'	1:0:2081:U:H6	1.89	0.56
1:0:2690:A:OP1	1:0:2692:A:P	2.64	0.56
1:0:2831:A:H2'	1:0:2832:G:O4'	2.06	0.56
1:0:67:G:C2	1:0:73:A:H4'	2.41	0.56
1:0:80:A:H2'	1:0:81:C:O4'	2.06	0.56
1:0:622:U:H2'	1:0:626:A:H61	1.69	0.56
1:0:695:G:O2'	1:0:696:U:H5'	2.06	0.56
1:0:956:A:C5	1:0:2427:A:H2	2.23	0.56
1:0:1080:A:H4'	1:0:1107:A:O2'	2.06	0.56
1:0:1134:C:O2'	1:0:1135:C:H5'	2.06	0.56
1:0:1164:C:H3'	1:0:1165:G:H8	1.70	0.56
1:0:1198:C:C5'	1:0:1199:U:H4'	2.35	0.56
1:0:125:A:H5''	1:0:126:C:O4'	2.06	0.56
1:0:594:G:O6	1:0:1264:C:H2'	2.05	0.56
1:0:1192:A:H2'	1:0:1193:G:H8	1.70	0.56
1:0:1314:A:N7	1:0:1316:G:C8	2.74	0.56
1:0:2209:G:C4	1:0:2210:C:C5	2.94	0.56
1:0:2334:C:O5'	1:0:2334:C:C6	2.58	0.56
1:0:2377:U:H6	1:0:2377:U:O5'	1.88	0.56
1:0:2828:C:C2	1:0:2829:A:C8	2.94	0.56
1:0:2856:U:H2'	1:0:2857:C:C6	2.36	0.56
2:R:22:ARG:HE	2:R:24:VAL:HG21	1.72	0.56
1:0:1076:U:H3'	1:0:1077:U:H5'	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1220:G:O2'	1:0:1221:C:H5'	2.06	0.55
1:0:1302:C:H2'	1:0:1303:U:H6	1.70	0.55
1:0:1358:C:H1'	1:0:1409:U:N3	2.20	0.55
1:0:1532:A:H2'	1:0:1533:G:C8	2.40	0.55
1:0:1685:A:O2'	1:0:1686:A:OP2	2.24	0.55
1:0:1873:A:N7	1:0:1874:G:C8	2.74	0.55
1:0:2086:U:H2'	1:0:2087:U:H6	1.70	0.55
1:0:2107:G:H1	1:0:2156:A:N6	2.04	0.55
1:0:2324:G:H4'	1:0:2326:C:H5''	1.88	0.55
1:0:2560:G:N1	1:0:2589:C:C4	2.73	0.55
1:0:2794:G:C6	1:0:2796:A:C2	2.94	0.55
1:0:66:U:O2	1:0:67:G:C8	2.59	0.55
1:0:300:C:H2'	1:0:301:C:O4'	2.06	0.55
1:0:490:A:N7	1:0:492:G:C4	2.74	0.55
1:0:765:C:H5	1:0:1772:C:C1'	2.20	0.55
1:0:1013:G:H22	1:0:1165:G:H1'	1.71	0.55
1:0:1871:G:H3'	1:0:1871:G:N3	2.21	0.55
1:0:2279:G:H2'	1:0:2280:A:C8	2.41	0.55
1:0:2630:C:H2'	1:0:2631:C:C6	2.41	0.55
1:0:165:G:C2'	1:0:166:G:H5'	2.36	0.55
1:0:647:G:H1'	1:0:649:G:O2'	2.06	0.55
1:0:1288:A:O2'	1:0:1289:A:H5'	2.06	0.55
1:0:1412:C:H2'	1:0:1413:U:C6	2.41	0.55
1:0:2522:G:H5'	1:0:2522:G:C8	2.40	0.55
3:S:85:ASP:CG	3:S:86:PRO:CD	2.75	0.55
1:0:439:C:H2'	1:0:440:U:O4'	2.06	0.55
1:0:546:A:N6	1:0:565:A:H61	2.05	0.55
1:0:878:C:N4	1:0:920:G:C8	2.75	0.55
1:0:1979:C:C2'	1:0:1980:A:O4'	2.54	0.55
1:0:1989:C:O2'	1:0:2798:A:N3	2.38	0.55
1:0:2502:G:O6	1:0:2520:A:C2	2.59	0.55
3:S:37:LEU:HD12	3:S:47:VAL:HG12	1.87	0.55
1:0:1355:A:C8	1:0:1410:U:H1'	2.41	0.55
1:0:1454:U:H2'	1:0:1455:C:H6	1.71	0.55
1:0:1779:C:N4	1:0:1780:A:C6	2.74	0.55
1:0:1902:A:H3'	1:0:1903:C:H5''	1.88	0.55
1:0:2021:G:O2'	1:0:2022:C:H5'	2.07	0.55
1:0:2307:A:H2'	1:0:2308:A:C8	2.41	0.55
1:0:2545:A:O2'	1:0:2546:G:OP2	2.24	0.55
3:S:40:LEU:H	3:S:40:LEU:HD12	1.72	0.55
3:S:87:GLU:O	3:S:88:THR:HG23	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:199:A:C2	1:0:201:G:C4	2.95	0.55
1:0:204:A:N6	1:0:2386:G:C8	2.75	0.55
1:0:337:G:N2	3:S:10:HIS:CD2	2.73	0.55
1:0:355:G:H8	1:0:355:G:O5'	1.90	0.55
1:0:543:G:C5	1:0:570:G:N2	2.74	0.55
1:0:1404:C:O2	2:R:15:LYS:HG3	2.06	0.55
1:0:1656:U:C2'	1:0:1657:A:H5''	2.37	0.55
1:0:1698:C:O2'	1:0:1753:A:C2'	2.54	0.55
1:0:2829:A:N6	1:0:2839:G:O6	2.40	0.55
4:W:1:MET:CG	4:W:2:LYS:HG2	2.22	0.55
1:0:3:U:C2	1:0:4:C:C5	2.95	0.55
1:0:309:G:OP1	3:S:95:ARG:NE	2.40	0.55
1:0:1188:A:H62	1:0:1189:G:H21	1.54	0.55
1:0:1234:C:OP2	1:0:1234:C:C6	2.48	0.55
1:0:1712:G:H3'	1:0:1712:G:N3	2.22	0.55
1:0:1777:A:HO2'	1:0:1778:U:P	2.30	0.55
1:0:2426:G:H1'	1:0:2480:C:C5	2.42	0.55
1:0:98:U:H5'	1:0:99:U:H5''	1.89	0.55
1:0:173:A:N1	1:0:818:G:C2	2.74	0.55
1:0:955:G:C8	1:0:955:G:H3'	2.41	0.55
1:0:973:U:H2'	1:0:974:U:C6	2.40	0.55
1:0:982:C:H2'	1:0:983:G:C5'	2.37	0.55
1:0:1766:U:H2'	1:0:1767:G:C5'	2.36	0.55
1:0:1794:A:H2'	1:0:1795:C:H5'	1.89	0.55
1:0:2797:G:H2'	1:0:2798:A:H5''	1.89	0.55
1:0:2858:A:H3'	1:0:2859:U:H5'	1.88	0.55
2:R:7:LEU:HB2	4:W:29:ARG:HH22	1.69	0.55
2:R:93:GLY:C	5:1:50:ARG:NH2	2.62	0.55
1:0:221:A:H2'	1:0:222:G:H5'	1.88	0.55
1:0:1147:G:H2'	1:0:1148:G:C8	2.42	0.55
1:0:1347:C:O2'	1:0:1348:C:H5'	2.07	0.55
1:0:1440:G:H3'	1:0:1441:A:H5'	1.88	0.55
1:0:1980:A:C2	1:0:1981:A:C4	2.94	0.55
1:0:2025:A:N3	1:0:2025:A:H2'	2.22	0.55
1:0:2238:G:C5	1:0:2406:C:N4	2.74	0.55
1:0:2470:U:H2'	1:0:2471:U:H5'	1.89	0.55
1:0:2754:C:O2'	1:0:2755:A:H5'	2.07	0.55
1:0:2770:A:H8	1:0:2770:A:P	2.30	0.55
1:0:136:A:H3'	1:0:137:A:C8	2.41	0.55
1:0:216:U:H5''	1:0:601:A:N6	2.22	0.55
1:0:765:C:H5	1:0:1772:C:H1'	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:790:A:N7	1:0:806:A:H2	2.04	0.55
1:0:987:G:H4'	1:0:1167:A:N7	2.22	0.55
1:0:1095:A:H3'	1:0:1096:A:H5''	1.88	0.55
1:0:1541:G:H22	1:0:1562:G:N2	2.05	0.55
1:0:2053:G:H2'	1:0:2054:A:C8	2.42	0.55
1:0:2065:A:C4	1:0:2218:G:N2	2.74	0.55
1:0:2105:U:H2'	1:0:2106:G:H8	1.72	0.55
1:0:2280:A:H2'	1:0:2281:C:H6	1.71	0.55
1:0:2785:A:H61	1:0:2865:G:H1'	1.71	0.55
1:0:48:A:N1	1:0:154:U:O4	2.40	0.54
1:0:338:G:H2'	1:0:339:U:H6	1.72	0.54
1:0:531:G:O2'	1:0:532:A:H5'	2.07	0.54
1:0:1192:A:H2'	1:0:1193:G:C8	2.42	0.54
1:0:1299:A:C2'	1:0:1301:U:OP2	2.46	0.54
1:0:1528:C:H2'	1:0:1529:C:C4'	2.37	0.54
1:0:1793:A:N6	1:0:1809:G:H21	2.04	0.54
1:0:2252:A:C2'	1:0:2253:A:H5'	2.37	0.54
1:0:2548:G:H2'	1:0:2549:G:C5'	2.27	0.54
1:0:2636:A:O2'	1:0:2637:C:H5'	2.07	0.54
3:S:85:ASP:N	3:S:86:PRO:CD	2.70	0.54
1:0:18:U:HO2'	1:0:19:C:H5'	1.71	0.54
1:0:54:G:C2	1:0:55:A:C8	2.95	0.54
1:0:225:G:C5'	1:0:226:C:H5'	2.38	0.54
1:0:333:A:O4'	1:0:351:A:H1'	2.07	0.54
1:0:616:U:O4	1:0:617:U:H5	1.89	0.54
1:0:722:C:H2'	1:0:723:C:H6	1.72	0.54
1:0:789:G:H4'	1:0:790:A:O5'	2.07	0.54
1:0:1116:U:H2'	1:0:1117:G:C8	2.42	0.54
1:0:1717:A:H2'	1:0:1718:A:H5'	1.88	0.54
1:0:2200:G:C5	1:0:2201:G:N7	2.75	0.54
1:0:2415:G:N2	1:0:2577:A:C2	2.72	0.54
1:0:2446:C:O2'	1:0:2447:G:H5'	2.07	0.54
1:0:2712:G:H3'	1:0:2713:A:H5'	1.90	0.54
1:0:2785:A:N6	1:0:2865:G:H1'	2.22	0.54
1:0:417:C:O5'	1:0:417:C:H6	1.89	0.54
1:0:635:C:C2'	1:0:636:G:H5''	2.37	0.54
1:0:851:C:O2'	1:0:852:U:H5'	2.06	0.54
1:0:986:A:C2	1:0:1001:A:C4	2.95	0.54
1:0:1484:G:O6	1:0:1538:A:N1	2.39	0.54
1:0:1572:C:C3'	1:0:1573:G:H5''	2.37	0.54
1:0:1978:U:H3'	1:0:1979:C:H5''	1.88	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2502:G:O2'	1:0:2503:G:H5'	2.07	0.54
1:0:2633:A:H1'	1:0:2635:U:C5	2.43	0.54
1:0:2787:A:H2	1:0:2864:C:C2	2.25	0.54
1:0:82:G:N1	1:0:100:G:H2'	2.22	0.54
1:0:166:G:H1'	1:0:184:A:N6	2.21	0.54
1:0:188:G:H2'	1:0:189:A:C8	2.43	0.54
1:0:1184:G:C2'	1:0:1185:C:H5''	2.38	0.54
1:0:1301:U:C2'	1:0:1302:C:OP1	2.55	0.54
1:0:1325:U:C1'	1:0:1619:A:N1	2.46	0.54
1:0:1887:G:N2	1:0:1911:A:H2	2.05	0.54
1:0:2698:G:H2'	1:0:2699:G:H8	1.72	0.54
1:0:2823:G:O2'	1:0:2824:C:P	2.65	0.54
2:R:32:LYS:CA	2:R:76:LYS:CE	2.84	0.54
4:W:29:ARG:CB	4:W:29:ARG:NH1	2.68	0.54
1:0:134:G:H2'	1:0:135:U:H5'	1.89	0.54
1:0:317:U:H2'	1:0:318:G:H5''	1.90	0.54
1:0:749:C:H2'	1:0:750:C:H6	1.73	0.54
1:0:820:U:O2'	1:0:821:A:H5'	2.07	0.54
1:0:984:A:H1'	1:0:1202:U:C5	2.43	0.54
1:0:1441:A:O2'	1:0:1442:C:H5''	2.06	0.54
1:0:1460:G:C2	1:0:1461:C:C2	2.95	0.54
1:0:1557:G:H2'	1:0:1558:C:O4'	2.08	0.54
1:0:2126:U:H3'	1:0:2127:U:C5'	2.37	0.54
1:0:2195:C:C4	1:0:2196:U:C4	2.96	0.54
1:0:2232:G:H2'	1:0:2233:C:H6	1.73	0.54
1:0:2326:C:H2'	1:0:2327:U:C6	2.42	0.54
1:0:2492:G:C6	1:0:2493:U:C4	2.96	0.54
5:1:34:LEU:O	5:1:38:VAL:HG23	2.07	0.54
5:1:50:ARG:CG	5:1:51:LYS:N	2.62	0.54
1:0:623:G:H4'	1:0:625:A:H62	1.72	0.54
1:0:793:G:C4	1:0:795:A:C2	2.95	0.54
1:0:1332:G:N1	1:0:1333:G:C2	2.74	0.54
1:0:1557:G:C2'	1:0:1558:C:H5'	2.37	0.54
1:0:2005:U:H2'	1:0:2595:C:O2'	2.08	0.54
1:0:2182:A:H2'	1:0:2183:C:O4'	2.07	0.54
1:0:2232:G:H2'	1:0:2233:C:C6	2.43	0.54
1:0:2376:G:C2	1:0:2399:C:C2	2.95	0.54
1:0:2477:C:O2	1:0:2478:C:C5	2.61	0.54
1:0:2513:A:C2	1:0:2514:G:H1'	2.43	0.54
1:0:2860:C:H2'	1:0:2861:A:H5'	1.89	0.54
2:R:53:ILE:HD13	2:R:53:ILE:C	2.33	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:67:G:H3'	1:0:68:C:H6	1.72	0.54
1:0:175:C:N4	1:0:225:G:H1	2.06	0.54
1:0:525:A:O2'	1:0:526:C:H5'	2.08	0.54
1:0:1242:A:H2'	1:0:1243:G:C8	2.43	0.54
1:0:1545:G:O2'	1:0:1546:C:H5'	2.07	0.54
1:0:1726:C:H2'	1:0:1727:C:H6	1.72	0.54
1:0:2080:U:H2'	1:0:2081:U:C6	2.43	0.54
1:0:2355:A:H2'	1:0:2356:A:O4'	2.07	0.54
1:0:2391:A:H8	1:0:2391:A:O5'	1.90	0.54
1:0:2569:A:O2'	1:0:2570:C:H5'	2.08	0.54
1:0:2782:G:H5'	1:0:2782:G:N3	2.22	0.54
1:0:2838:U:O2'	1:0:2839:G:H5'	2.08	0.54
4:W:52:GLN:O	4:W:53:LEU:HD23	2.08	0.54
1:0:11:G:H8	1:0:11:G:O5'	1.91	0.54
1:0:100:G:N1	3:S:102:LYS:HB3	2.03	0.54
1:0:167:A:C2	1:0:168:A:C4	2.96	0.54
1:0:199:A:N1	1:0:201:G:C4	2.75	0.54
1:0:1443:G:H2'	1:0:1444:C:H6	1.73	0.54
1:0:1452:U:C2	1:0:1571:G:N2	2.76	0.54
1:0:1974:U:O2'	1:0:1975:G:H5''	2.08	0.54
1:0:2396:C:O2'	1:0:2397:A:H5'	2.08	0.54
1:0:2713:A:O2'	1:0:2714:A:H5'	2.08	0.54
1:0:2799:C:H2'	1:0:2800:C:O4'	2.08	0.54
1:0:472:C:O5'	1:0:472:C:H6	1.91	0.54
1:0:674:U:H2'	1:0:675:C:O4'	2.08	0.54
1:0:867:G:C2	1:0:936:A:C2	2.96	0.54
1:0:1392:U:C6	1:0:1392:U:OP1	2.61	0.54
1:0:1660:G:N2	1:0:1661:C:H1'	2.23	0.54
1:0:2204:A:O2'	1:0:2205:C:P	2.65	0.54
2:R:11:VAL:C	2:R:12:ILE:HG13	2.33	0.54
3:S:17:LYS:HB2	3:S:20:ASP:CG	2.32	0.54
1:0:191:G:O2'	1:0:192:G:H5'	2.06	0.54
1:0:541:C:N4	1:0:572:G:C8	2.76	0.54
1:0:742:G:H3'	1:0:742:G:N3	2.23	0.54
1:0:1040:A:H2'	1:0:1041:G:O4'	2.08	0.54
1:0:1141:U:O2'	1:0:1142:G:H5'	2.08	0.54
1:0:1202:U:O2'	1:0:1203:A:H5'	2.08	0.54
1:0:1661:C:O2	1:0:1661:C:H2'	2.08	0.54
1:0:1706:A:C4	1:0:1717:A:N1	2.76	0.54
1:0:1779:C:O5'	1:0:1779:C:H6	1.91	0.54
1:0:442:A:H2'	1:0:443:A:C8	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:634:G:H8	1:0:634:G:O5'	1.91	0.53
1:0:805:G:N7	1:0:2419:C:H1'	2.24	0.53
1:0:1448:A:C6	1:0:1449:C:N4	2.76	0.53
1:0:1449:C:O2'	1:0:1450:G:H5'	2.08	0.53
1:0:1549:C:H2'	1:0:1550:C:C6	2.43	0.53
1:0:1717:A:H2'	1:0:1718:A:C5'	2.38	0.53
1:0:1869:A:O2'	1:0:1870:U:H5'	2.08	0.53
1:0:1958:G:H2'	1:0:1959:U:C6	2.43	0.53
1:0:15:G:C6	1:0:16:G:C6	2.96	0.53
1:0:192:G:H4'	1:0:193:A:H4'	1.89	0.53
1:0:232:A:C2	1:0:233:A:C4	2.96	0.53
1:0:347:C:H2'	1:0:348:U:C6	2.44	0.53
1:0:775:U:H5'	1:0:776:G:C8	2.42	0.53
1:0:788:G:O2'	1:0:789:G:OP2	2.23	0.53
1:0:1215:A:H2'	1:0:1216:G:H8	1.73	0.53
1:0:1246:G:N3	1:0:1247:U:C6	2.76	0.53
1:0:1369:G:C6	1:0:1370:U:N3	2.76	0.53
1:0:1453:A:C4	1:0:1569:A:N6	2.76	0.53
1:0:2431:C:O2'	1:0:2432:A:H5'	2.07	0.53
1:0:2670:C:C2	1:0:2671:C:C5	2.96	0.53
1:0:2860:C:C2'	1:0:2861:A:H5'	2.37	0.53
4:W:37:LEU:HD23	4:W:38:ALA:N	2.22	0.53
1:0:493:A:H4'	3:S:56:LYS:HE3	1.88	0.53
1:0:1255:A:H2'	1:0:1256:C:C6	2.43	0.53
1:0:2174:G:H2'	1:0:2175:A:H8	1.72	0.53
1:0:387:A:H2'	1:0:387:A:N3	2.24	0.53
1:0:476:G:H2'	1:0:477:A:C8	2.42	0.53
1:0:1758:C:C4	1:0:1759:A:N7	2.77	0.53
1:0:1766:U:O5'	1:0:1766:U:H6	1.91	0.53
1:0:1842:G:H5'	1:0:1842:G:H8	1.73	0.53
1:0:1962:C:C2'	1:0:1963:G:H5'	2.39	0.53
1:0:2619:G:C6	1:0:2755:A:C2	2.96	0.53
1:0:441:A:H2'	1:0:442:A:H5'	1.91	0.53
1:0:574:C:C4'	1:0:1266:G:N1	2.72	0.53
1:0:641:G:C3'	1:0:642:A:H5''	2.38	0.53
1:0:678:G:H2'	1:0:679:C:C6	2.43	0.53
1:0:942:U:H2'	1:0:943:U:C4'	2.39	0.53
1:0:1002:C:OP2	1:0:1200:G:OP2	2.26	0.53
1:0:1086:C:N4	1:0:1087:C:N3	2.57	0.53
1:0:1301:U:C4	1:0:1340:C:H1'	2.43	0.53
1:0:1636:G:O2'	1:0:1637:U:H5'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2014:A:C6	1:0:2477:C:H1'	2.43	0.53
1:0:2084:G:H2'	1:0:2085:G:C8	2.43	0.53
1:0:2086:U:H2'	1:0:2087:U:C6	2.44	0.53
1:0:2170:C:H2'	1:0:2171:U:C4'	2.39	0.53
1:0:2828:C:H2'	1:0:2829:A:C8	2.40	0.53
4:W:41:HIS:C	4:W:41:HIS:HD2	2.15	0.53
1:0:362:C:H2'	1:0:363:G:C4'	2.36	0.53
1:0:623:G:C1'	1:0:626:A:H62	2.21	0.53
1:0:640:C:H4'	1:0:660:G:N2	2.24	0.53
1:0:798:G:H2'	1:0:799:C:H5'	1.89	0.53
1:0:839:U:N3	1:0:841:G:H1'	2.24	0.53
1:0:1514:C:H5'	1:0:1593:C:C5'	2.38	0.53
1:0:2196:U:H2'	1:0:2197:U:O4'	2.09	0.53
1:0:2252:A:O2'	1:0:2253:A:H5'	2.08	0.53
1:0:2670:C:N3	1:0:2671:C:C5	2.77	0.53
1:0:2754:C:C2'	1:0:2755:A:H5'	2.39	0.53
1:0:2796:A:H2'	1:0:2797:G:C8	2.44	0.53
1:0:57:G:N2	1:0:72:A:C8	2.76	0.53
1:0:62:U:H3'	1:0:63:A:C8	2.44	0.53
1:0:583:C:O2'	1:0:584:A:OP2	2.21	0.53
1:0:1064:C:O5'	1:0:1064:C:H6	1.92	0.53
1:0:1218:C:O2'	1:0:1219:C:H5'	2.08	0.53
1:0:1300:A:C2	1:0:1666:G:H4'	2.44	0.53
1:0:1407:G:H2'	1:0:1408:A:C8	2.43	0.53
1:0:2491:C:C3'	1:0:2492:G:H5''	2.36	0.53
1:0:2519:C:H2'	1:0:2520:A:C5'	2.33	0.53
1:0:2548:G:N1	1:0:2549:G:N7	2.57	0.53
1:0:827:C:O2'	1:0:828:C:H5'	2.08	0.53
1:0:1054:C:H2'	1:0:1055:A:C4'	2.39	0.53
1:0:1054:C:H2'	1:0:1055:A:H4'	1.91	0.53
1:0:1140:A:H2	1:0:2548:G:N3	2.07	0.53
1:0:1296:G:H2'	1:0:1298:G:OP2	2.09	0.53
1:0:1404:C:C4	1:0:1407:G:N7	2.76	0.53
1:0:1446:U:H2'	1:0:1447:U:H6	1.74	0.53
1:0:1459:U:O5'	1:0:1459:U:C6	2.62	0.53
1:0:1725:C:C2	1:0:1726:C:C5	2.97	0.53
1:0:2198:U:C3'	1:0:2199:C:C5'	2.82	0.53
1:0:2335:U:O5'	1:0:2335:U:H6	1.90	0.53
1:0:2362:G:H2'	1:0:2363:G:O4'	2.08	0.53
1:0:2689:C:O2'	1:0:2690:A:H5'	2.09	0.53
5:1:15:LYS:HD2	5:1:16:VAL:N	2.24	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:19:C:C2	1:0:20:C:C5	2.97	0.53
1:0:603:C:C2	1:0:604:U:C5	2.97	0.53
1:0:705:C:H2'	1:0:706:A:C8	2.43	0.53
1:0:753:U:C2'	1:0:754:G:O5'	2.57	0.53
1:0:797:A:N6	1:0:805:G:H1'	2.24	0.53
1:0:922:A:C2	1:0:923:A:C2	2.97	0.53
1:0:946:U:C2	1:0:947:C:C5	2.97	0.53
1:0:1166:A:C3'	1:0:1167:A:H5''	2.39	0.53
1:0:1653:C:H2'	1:0:1654:A:C8	2.44	0.53
1:0:1724:C:C4	1:0:1747:G:C6	2.97	0.53
1:0:1776:A:HO2'	1:0:1777:A:P	2.32	0.53
1:0:1777:A:O2'	1:0:1778:U:OP1	2.27	0.53
1:0:1873:A:H2	1:0:2213:G:N3	2.06	0.53
1:0:1974:U:H2'	1:0:1975:G:C5'	2.39	0.53
1:0:1987:G:C5	1:0:1988:A:C8	2.97	0.53
2:R:30:SER:O	2:R:76:LYS:HG3	2.08	0.53
4:W:28:LEU:HA	4:W:31:GLN:OE1	2.09	0.53
1:0:407:A:H2'	1:0:408:U:C6	2.44	0.53
1:0:1358:C:C2'	1:0:1359:G:H5''	2.39	0.53
1:0:2031:A:C2	1:0:2032:G:C4	2.97	0.53
1:0:2111:C:O2'	1:0:2112:C:H5'	2.08	0.53
1:0:2204:A:O2'	1:0:2205:C:OP2	2.25	0.53
1:0:2235:G:O2'	1:0:2236:U:H5'	2.09	0.53
1:0:2324:G:O2'	1:0:2325:A:H5''	2.09	0.53
2:R:32:LYS:HA	2:R:76:LYS:CE	2.39	0.53
1:0:131:C:O2'	1:0:132:U:H5'	2.08	0.52
1:0:541:C:H41	1:0:572:G:H8	1.55	0.52
1:0:718:A:C2	1:0:740:A:H1'	2.45	0.52
1:0:770:U:O2'	1:0:771:C:H5'	2.08	0.52
1:0:792:U:C2'	1:0:793:G:C5'	2.87	0.52
1:0:1333:G:H22	1:0:1344:C:N4	2.07	0.52
1:0:1518:C:H2'	1:0:1519:G:C8	2.43	0.52
1:0:1542:G:C6	1:0:1559:G:H2'	2.43	0.52
1:0:1892:C:H6	1:0:1892:C:O5'	1.91	0.52
1:0:1903:C:H2'	1:0:1904:G:C8	2.43	0.52
1:0:1960:A:C2	1:0:1961:A:C4	2.98	0.52
1:0:1999:U:H2'	1:0:2000:U:O4'	2.09	0.52
1:0:2006:G:H2'	1:0:2007:G:O5'	2.09	0.52
1:0:2026:C:OP2	1:0:2759:U:C4	2.62	0.52
1:0:2026:C:OP2	1:0:2759:U:O4	2.27	0.52
1:0:2074:U:C5	1:0:2075:U:C5	2.97	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2217:G:H5''	1:0:2218:G:OP1	2.08	0.52
1:0:2420:C:H2'	1:0:2421:C:H6	1.74	0.52
1:0:590:C:H2'	1:0:591:G:H8	1.75	0.52
1:0:690:A:C6	1:0:815:A:C6	2.97	0.52
1:0:708:G:OP1	1:0:1393:G:O2'	2.27	0.52
1:0:1246:G:C2	1:0:1247:U:C6	2.97	0.52
1:0:1305:C:H2'	1:0:1306:U:C6	2.45	0.52
1:0:1434:U:O2'	1:0:1435:G:H5'	2.09	0.52
1:0:1633:C:H5''	1:0:1634:A:OP2	2.09	0.52
1:0:1834:G:N2	1:0:1884:A:C4	2.77	0.52
1:0:1887:G:N2	1:0:1911:A:C2	2.76	0.52
1:0:2401:A:HO2'	1:0:2403:C:H6	1.56	0.52
1:0:2487:G:C4	1:0:2488:G:C8	2.97	0.52
1:0:2822:U:H6	1:0:2822:U:O5'	1.92	0.52
1:0:2845:C:O2'	1:0:2846:G:H5'	2.10	0.52
2:R:2:SER:N	2:R:5:ASP:OD2	2.42	0.52
5:1:30:VAL:HG13	5:1:34:LEU:HD21	1.92	0.52
1:0:211:U:O2	1:0:211:U:C2'	2.53	0.52
1:0:218:A:O2'	1:0:219:G:H4'	2.08	0.52
1:0:613:A:H2'	1:0:614:G:C8	2.44	0.52
1:0:1090:C:H2'	1:0:1091:C:C6	2.44	0.52
1:0:1287:A:N1	1:0:1662:G:H5'	2.24	0.52
1:0:1325:U:H4'	1:0:1326:U:C5	2.44	0.52
1:0:1986:G:C6	1:0:1987:G:C5	2.98	0.52
1:0:2010:G:C5	1:0:2011:U:C4	2.98	0.52
1:0:2387:U:H2'	1:0:2388:G:H8	1.72	0.52
1:0:2494:C:N3	1:0:2549:G:C6	2.77	0.52
1:0:141:G:H2'	1:0:142:U:H6	1.75	0.52
1:0:765:C:C5	1:0:1772:C:H1'	2.44	0.52
1:0:883:A:C6	1:0:920:G:C6	2.97	0.52
1:0:1127:C:H2'	1:0:1128:G:H8	1.74	0.52
1:0:1228:G:C6	1:0:1229:C:N3	2.77	0.52
1:0:1696:C:O2	1:0:1973:C:H1'	2.09	0.52
1:0:1767:G:N2	1:0:1768:U:H1'	2.25	0.52
1:0:1859:A:H2'	1:0:1860:A:C8	2.44	0.52
1:0:2528:G:H2'	1:0:2529:G:C8	2.43	0.52
1:0:2866:A:H2'	1:0:2867:G:C8	2.45	0.52
3:S:70:GLU:OE1	3:S:72:ARG:HD2	2.09	0.52
4:W:17:GLU:CB	4:W:53:LEU:HD11	2.38	0.52
1:0:194:G:O6	1:0:444:U:O2	2.27	0.52
1:0:201:G:C2	1:0:202:A:C4	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:664:C:H2'	1:0:665:A:N7	2.25	0.52
1:0:872:G:H2'	1:0:928:G:O6	2.10	0.52
1:0:1301:U:C5	1:0:1340:C:O2	2.63	0.52
1:0:1404:C:N4	1:0:1407:G:N7	2.57	0.52
1:0:2549:G:C8	1:0:2549:G:H5'	2.44	0.52
1:0:2672:U:O2'	1:0:2673:G:H5'	2.10	0.52
1:0:2836:U:H3'	1:0:2836:U:C6	2.44	0.52
1:0:2863:U:C2	1:0:2864:C:C6	2.98	0.52
2:R:8:GLN:H	4:W:29:ARG:HH22	1.55	0.52
1:0:67:G:C3'	1:0:68:C:H6	2.23	0.52
1:0:109:A:H2'	1:0:110:U:H5''	1.92	0.52
1:0:165:G:H2'	1:0:166:G:C5'	2.38	0.52
1:0:312:G:C4	1:0:328:A:C2	2.97	0.52
1:0:536:A:N6	1:0:2605:C:H4'	2.25	0.52
1:0:582:G:H2'	1:0:583:C:C3'	2.38	0.52
1:0:930:A:H5'	1:0:931:G:N7	2.24	0.52
1:0:1211:G:C2'	1:0:1212:U:H5'	2.39	0.52
1:0:1531:C:H2'	1:0:1532:A:H5'	1.92	0.52
1:0:1693:A:N6	1:0:1694:A:N1	2.58	0.52
1:0:1790:G:N2	1:0:1811:A:OP2	2.42	0.52
1:0:2197:U:O2'	1:0:2198:U:H5'	2.08	0.52
1:0:2352:A:H2'	1:0:2353:G:C8	2.45	0.52
1:0:2555:G:H2'	1:0:2555:G:N3	2.23	0.52
3:S:92:THR:CG2	3:S:106:VAL:HB	2.32	0.52
1:0:37:C:H2'	1:0:38:G:C8	2.45	0.52
1:0:635:C:H3'	1:0:636:G:H5''	1.90	0.52
1:0:707:U:O5'	1:0:707:U:H6	1.92	0.52
1:0:828:C:H2'	1:0:829:C:H6	1.74	0.52
1:0:875:G:C2'	1:0:876:A:H5'	2.40	0.52
1:0:1349:A:O2'	1:0:1350:G:H5'	2.09	0.52
1:0:1385:C:H2'	1:0:1386:A:O4'	2.10	0.52
1:0:1440:G:H8	1:0:1440:G:O5'	1.93	0.52
1:0:2420:C:O2'	1:0:2421:C:H5'	2.09	0.52
1:0:2443:C:C2	1:0:2466:G:N2	2.77	0.52
1:0:242:A:N7	1:0:442:A:N1	2.57	0.52
1:0:799:C:C2'	1:0:800:U:H5'	2.39	0.52
1:0:839:U:OP1	1:0:2408:G:OP2	2.28	0.52
1:0:1543:G:N2	1:0:1560:A:C2	2.78	0.52
1:0:1766:U:H3'	1:0:1766:U:C6	2.45	0.52
1:0:1837:G:O2'	1:0:1838:G:H5'	2.09	0.52
1:0:1854:G:C2	1:0:1855:G:C8	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1994:U:H2'	1:0:1995:G:H5'	1.91	0.52
5:1:57:VAL:HB	5:1:61:TYR:HB2	1.91	0.52
1:0:43:A:C2	1:0:44:G:C2	2.97	0.52
1:0:168:A:C4	1:0:169:C:C5	2.98	0.52
1:0:405:C:C2	1:0:406:G:C8	2.98	0.52
1:0:408:U:H2'	1:0:409:G:N7	2.25	0.52
1:0:565:A:H2'	1:0:566:U:C6	2.45	0.52
1:0:585:U:O2'	1:0:2481:G:C6	2.63	0.52
1:0:986:A:H2	1:0:1001:A:N9	2.08	0.52
1:0:987:G:O6	1:0:999:A:C2	2.63	0.52
1:0:1011:A:N6	1:0:1012:A:N6	2.57	0.52
1:0:1141:U:C5	1:0:2009:U:OP2	2.63	0.52
1:0:1215:A:H2'	1:0:1216:G:C8	2.45	0.52
1:0:1373:G:C5	1:0:1374:G:C8	2.97	0.52
1:0:1982:C:H4'	1:0:2703:C:O2	2.09	0.52
1:0:2042:A:C5	1:0:2482:A:C2	2.97	0.52
1:0:2196:U:C4	1:0:2197:U:C4	2.98	0.52
1:0:2261:G:C6	1:0:2404:A:C2	2.98	0.52
1:0:2288:A:C8	1:0:2289:A:N7	2.78	0.52
1:0:2701:A:H2'	1:0:2702:G:O4'	2.10	0.52
2:R:81:ARG:HH11	2:R:81:ARG:HG3	1.73	0.52
1:0:185:C:H2'	1:0:186:C:H6	1.75	0.52
1:0:199:A:N6	1:0:201:G:C6	2.78	0.52
1:0:351:A:C6	1:0:352:G:C4	2.98	0.52
1:0:1356:G:H5'	1:0:1614:C:OP2	2.10	0.52
1:0:1458:A:H3'	1:0:1459:U:H5''	1.88	0.52
1:0:1997:A:H2'	1:0:1998:A:C8	2.45	0.52
1:0:2040:A:H2'	1:0:2041:A:C8	2.45	0.52
1:0:2076:G:C6	1:0:2204:A:N7	2.78	0.52
1:0:2548:G:C3'	1:0:2549:G:H5''	2.40	0.52
1:0:137:A:C2'	1:0:138:G:H5'	2.40	0.51
1:0:211:U:O2	1:0:212:U:O4'	2.28	0.51
1:0:525:A:C8	1:0:526:C:C6	2.98	0.51
1:0:863:C:H42	1:0:939:C:H42	1.57	0.51
1:0:1372:A:H2'	1:0:1373:G:O4'	2.10	0.51
1:0:1636:G:H2'	1:0:1637:U:C6	2.44	0.51
1:0:1709:U:O5'	1:0:1709:U:H6	1.94	0.51
1:0:1746:A:C2	1:0:2696:A:H1'	2.45	0.51
1:0:1856:U:OP1	1:0:2389:G:O2'	2.26	0.51
1:0:1892:C:H42	1:0:1903:C:H42	1.58	0.51
1:0:2011:U:O2'	1:0:2012:A:H5'	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2084:G:H2'	1:0:2085:G:H8	1.75	0.51
1:0:2497:A:OP2	1:0:2498:U:C5	2.64	0.51
1:0:2546:G:H2'	1:0:2547:C:H6	1.74	0.51
2:R:11:VAL:HG23	2:R:26:SER:O	2.10	0.51
2:R:28:TRP:CZ3	2:R:75:ARG:HB2	2.46	0.51
1:0:26:G:H1'	1:0:524:A:N6	2.24	0.51
1:0:82:G:HO2'	1:0:83:A:H5'	1.72	0.51
1:0:212:U:O2	1:0:443:A:C2	2.63	0.51
1:0:230:C:O2'	1:0:231:G:H5'	2.10	0.51
1:0:317:U:C2'	1:0:318:G:H5''	2.41	0.51
1:0:1142:G:H2'	1:0:1143:A:H8	1.75	0.51
1:0:1250:A:O2'	1:0:1251:G:O4'	2.28	0.51
1:0:1735:G:O2'	1:0:1736:C:H5'	2.10	0.51
1:0:2050:G:H5''	1:0:2051:U:OP2	2.11	0.51
1:0:2052:G:C2	1:0:2053:G:C8	2.99	0.51
1:0:2264:C:O4'	1:0:2267:A:N6	2.43	0.51
1:0:2670:C:O2	1:0:2671:C:C6	2.63	0.51
3:S:45:LYS:HG2	3:S:75:ALA:CB	2.40	0.51
1:0:584:A:H2'	1:0:585:U:H6	1.75	0.51
1:0:720:A:H2'	1:0:721:C:H6	1.76	0.51
1:0:765:C:O2'	1:0:766:A:P	2.68	0.51
1:0:847:C:H1'	1:0:2337:A:N3	2.25	0.51
1:0:940:G:N7	1:0:941:U:C6	2.78	0.51
1:0:1210:C:N3	1:0:1211:G:C5	2.78	0.51
1:0:1337:G:H1'	1:0:1632:A:H61	1.75	0.51
1:0:2048:C:H1'	1:0:2428:U:O2	2.09	0.51
1:0:2141:A:H2'	1:0:2142:G:H4'	1.92	0.51
3:S:23:ILE:C	3:S:23:ILE:HD12	2.36	0.51
1:0:659:G:C6	1:0:660:G:C6	2.98	0.51
1:0:700:C:O2'	1:0:701:U:H5'	2.09	0.51
1:0:823:U:OP1	1:0:1266:G:N7	2.44	0.51
1:0:824:U:H1'	1:0:1264:C:C6	2.45	0.51
1:0:982:C:OP2	1:0:985:G:N1	2.44	0.51
1:0:1404:C:C4	1:0:1406:A:C8	2.98	0.51
1:0:1693:A:C2'	1:0:1694:A:H5'	2.40	0.51
1:0:1850:G:O2'	1:0:1851:A:H5'	2.10	0.51
1:0:2016:A:H2'	1:0:2018:G:OP2	2.10	0.51
1:0:2459:C:H2'	1:0:2460:G:C5'	2.40	0.51
1:0:136:A:H3'	1:0:137:A:H8	1.74	0.51
1:0:1427:G:H2'	1:0:1428:G:O4'	2.11	0.51
1:0:1708:C:N3	1:0:1714:A:C2	2.78	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2105:U:H2'	1:0:2106:G:C8	2.45	0.51
1:0:2310:G:N2	1:0:2364:C:C4	2.79	0.51
1:0:2383:C:H2'	1:0:2384:G:O4'	2.10	0.51
1:0:2487:G:H2'	1:0:2488:G:H8	1.75	0.51
1:0:2780:A:H2'	1:0:2781:G:H8	1.75	0.51
1:0:2818:G:C2'	1:0:2819:G:H5'	2.41	0.51
1:0:18:U:H2'	1:0:19:C:H6	1.76	0.51
1:0:55:A:N6	1:0:69:G:H1	2.09	0.51
1:0:68:C:C1'	1:0:72:A:H1'	2.40	0.51
1:0:171:G:C2	1:0:179:U:C2	2.99	0.51
1:0:414:A:H2'	1:0:415:A:H8	1.75	0.51
1:0:624:A:H2'	1:0:625:A:H5'	1.91	0.51
1:0:1393:G:C2	1:0:1394:G:C8	2.98	0.51
1:0:1514:C:O4'	1:0:1593:C:C4'	2.59	0.51
1:0:2011:U:H2'	1:0:2012:A:H8	1.75	0.51
1:0:2280:A:H2'	1:0:2281:C:C6	2.45	0.51
1:0:2811:G:C6	1:0:2812:A:N6	2.79	0.51
1:0:2833:C:H2'	1:0:2834:A:O4'	2.11	0.51
1:0:502:A:H2'	1:0:503:G:O4'	2.10	0.51
1:0:789:G:O6	1:0:2055:G:OP1	2.28	0.51
1:0:846:A:C5	1:0:847:C:C4	2.99	0.51
1:0:976:C:C2'	1:0:977:G:H5'	2.41	0.51
1:0:1139:A:O2'	1:0:1140:A:O4'	2.28	0.51
1:0:1541:G:H2'	1:0:1542:G:H5'	1.93	0.51
1:0:2309:G:N2	1:0:2365:U:C2	2.79	0.51
1:0:2836:U:C6	1:0:2836:U:C3'	2.94	0.51
3:S:52:ASN:HD21	3:S:71:GLN:HG3	1.75	0.51
1:0:76:C:H5'	1:0:76:C:C6	2.32	0.51
1:0:110:U:H2'	1:0:111:G:O4'	2.11	0.51
1:0:117:A:H4'	1:0:118:U:O5'	2.11	0.51
1:0:543:G:C4	1:0:570:G:N2	2.79	0.51
1:0:808:C:H2'	1:0:809:C:H6	1.75	0.51
1:0:838:A:H2'	1:0:839:U:H6	1.76	0.51
1:0:1225:G:H2'	1:0:1249:G:H22	1.75	0.51
1:0:1724:C:N3	1:0:1725:C:C4	2.78	0.51
1:0:2225:G:H2'	1:0:2226:A:C8	2.46	0.51
1:0:2836:U:H6	1:0:2836:U:H5''	1.75	0.51
2:R:56:MET:CE	2:R:57:ASN:O	2.57	0.51
1:0:459:A:H4'	1:0:459:A:OP1	2.10	0.51
1:0:940:G:C3'	1:0:941:U:C5'	2.75	0.51
1:0:982:C:P	1:0:985:G:N2	2.84	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1035:G:OP1	1:0:1037:U:OP1	2.29	0.51
1:0:1077:U:H2'	1:0:1078:A:H5''	1.93	0.51
1:0:1164:C:H3'	1:0:1165:G:C8	2.46	0.51
1:0:1925:C:H2'	1:0:1926:U:C5	2.44	0.51
1:0:2053:G:H2'	1:0:2054:A:H8	1.76	0.51
1:0:2133:G:H2'	1:0:2134:U:H6	1.75	0.51
1:0:2404:A:O2'	1:0:2405:A:P	2.69	0.51
1:0:2492:G:C5	1:0:2493:U:C4	2.99	0.51
1:0:2549:G:H5'	1:0:2549:G:H8	1.76	0.51
3:S:112:LYS:N	3:S:112:LYS:CD	2.63	0.51
5:1:70:LEU:O	5:1:74:HIS:NE2	2.44	0.51
1:0:26:G:C2	1:0:27:G:N2	2.79	0.51
1:0:169:C:C2'	1:0:170:U:H5'	2.41	0.51
1:0:503:G:H2'	1:0:504:G:O4'	2.11	0.51
1:0:755:C:O2'	1:0:756:C:H5'	2.11	0.51
1:0:860:U:O2	1:0:860:U:C2'	2.59	0.51
1:0:1255:A:C4	1:0:1256:C:C5	2.99	0.51
1:0:1761:G:O2'	1:0:1762:C:H5'	2.11	0.51
1:0:1882:G:H21	1:0:1885:C:H42	1.56	0.51
1:0:2069:U:O5'	1:0:2069:U:H6	1.93	0.51
1:0:2397:A:H2'	1:0:2398:U:O4'	2.11	0.51
1:0:2429:A:OP1	1:0:2476:A:C8	2.64	0.51
1:0:2705:A:O2'	1:0:2706:U:C5	2.63	0.51
1:0:2764:U:H2'	1:0:2765:C:H6	1.74	0.51
1:0:2770:A:C5'	1:0:2867:G:H21	2.19	0.51
1:0:2799:C:C4	1:0:2800:C:C2	2.98	0.51
1:0:43:A:C6	1:0:44:G:C6	2.99	0.50
1:0:45:C:C2	1:0:46:C:C5	2.99	0.50
1:0:80:A:O4'	1:0:305:A:C2	2.64	0.50
1:0:141:G:H2'	1:0:142:U:C6	2.46	0.50
1:0:394:U:H3	1:0:406:G:H1	1.59	0.50
1:0:482:A:O2'	1:0:483:A:H5'	2.11	0.50
1:0:516:G:H4'	1:0:519:C:H1'	1.92	0.50
1:0:622:U:C2'	1:0:626:A:H61	2.23	0.50
1:0:1358:C:H2'	1:0:1359:G:H5''	1.92	0.50
1:0:1404:C:H41	1:0:1406:A:H3'	1.75	0.50
1:0:1631:C:OP2	1:0:1633:C:N4	2.44	0.50
1:0:1682:A:O2'	1:0:1683:G:H5'	2.11	0.50
1:0:1975:G:O2'	1:0:1976:U:OP2	2.20	0.50
1:0:2048:C:H2'	1:0:2049:C:O4'	2.11	0.50
1:0:2173:G:O2'	1:0:2174:G:H5'	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2701:A:C2	1:0:2848:A:C4	2.99	0.50
1:0:2764:U:O2'	1:0:2765:C:H5'	2.11	0.50
1:0:2836:U:C2'	1:0:2837:G:H5'	2.40	0.50
1:0:62:U:H3'	1:0:63:A:H8	1.76	0.50
1:0:490:A:O2'	1:0:491:A:C5'	2.52	0.50
1:0:538:A:N6	1:0:2027:C:OP1	2.45	0.50
1:0:600:G:C6	1:0:602:C:C4	2.99	0.50
1:0:698:A:H1'	1:0:701:U:O4	2.11	0.50
1:0:715:U:H2'	1:0:716:U:O4'	2.11	0.50
1:0:754:G:C2	1:0:770:U:O2	2.64	0.50
1:0:944:A:O2'	1:0:945:G:H5'	2.12	0.50
1:0:983:G:N1	1:0:984:A:N6	2.56	0.50
1:0:1210:C:C2	1:0:1211:G:C8	3.00	0.50
1:0:1315:A:H5''	1:0:1316:G:OP2	2.11	0.50
1:0:2389:G:N2	1:0:2390:A:H1'	2.26	0.50
1:0:2473:G:O2'	1:0:2474:G:H5'	2.11	0.50
1:0:2492:G:C2	1:0:2493:U:C2	2.99	0.50
1:0:2648:G:N2	1:0:2649:A:H1'	2.27	0.50
1:0:2689:C:H2'	1:0:2690:A:C8	2.46	0.50
1:0:2720:A:C6	1:0:2744:A:C8	3.00	0.50
1:0:2838:U:H2'	1:0:2839:G:C8	2.44	0.50
4:W:7:ARG:HD2	4:W:7:ARG:C	2.36	0.50
1:0:619:A:H61	1:0:629:C:H42	1.59	0.50
1:0:640:C:H4'	1:0:660:G:N3	2.26	0.50
1:0:709:A:C2	1:0:710:C:C2	2.99	0.50
1:0:1001:A:O5'	1:0:1002:C:OP2	2.29	0.50
1:0:1498:G:O2'	1:0:1499:A:H5'	2.12	0.50
1:0:1838:G:H2'	1:0:1839:A:O4'	2.11	0.50
1:0:1934:U:O2	1:0:1936:A:C8	2.64	0.50
1:0:2357:A:H2'	1:0:2358:C:H5'	1.92	0.50
1:0:2404:A:O2'	1:0:2405:A:OP2	2.25	0.50
1:0:2527:G:C2	1:0:2540:A:C2	2.99	0.50
1:0:2550:C:N4	1:0:2553:G:C8	2.79	0.50
1:0:2621:G:H2'	1:0:2622:G:H8	1.77	0.50
1:0:2756:A:H4'	1:0:2758:A:OP1	2.12	0.50
3:S:85:ASP:C	3:S:87:GLU:H	2.19	0.50
1:0:24:G:C2	1:0:527:C:C2	2.99	0.50
1:0:322:A:H1'	1:0:343:A:C5	2.46	0.50
1:0:690:A:N1	1:0:815:A:C6	2.79	0.50
1:0:939:C:H2'	1:0:940:G:C8	2.47	0.50
1:0:979:A:H2'	1:0:980:G:C8	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1511:A:H2'	1:0:1512:A:O4'	2.11	0.50
1:0:1586:A:C6	1:0:1587:A:C6	2.99	0.50
1:0:1763:G:N2	1:0:1765:C:C5'	2.73	0.50
1:0:1800:A:C6	1:0:1802:A:C6	3.00	0.50
1:0:1975:G:N2	1:0:1979:C:H5	2.07	0.50
1:0:1982:C:O2'	1:0:1983:G:H5'	2.11	0.50
1:0:2595:C:O2'	1:0:2596:C:H5'	2.11	0.50
1:0:2724:G:H1'	1:0:2741:G:N2	2.27	0.50
1:0:2834:A:N6	1:0:2835:A:N6	2.59	0.50
1:0:2860:C:H2'	1:0:2861:A:C5'	2.41	0.50
1:0:68:C:C2'	1:0:72:A:H1'	2.42	0.50
1:0:1512:A:H2'	1:0:1514:C:C5	2.47	0.50
1:0:1552:C:O2'	1:0:1553:G:H5'	2.12	0.50
1:0:1672:A:C2	1:0:2032:G:H5''	2.46	0.50
1:0:2447:G:N2	1:0:2460:G:H2'	2.27	0.50
1:0:2511:G:H2'	1:0:2512:A:O4'	2.11	0.50
1:0:2549:G:C2	1:0:2550:C:C2	3.00	0.50
3:S:23:ILE:C	3:S:23:ILE:CD1	2.84	0.50
1:0:71:A:H8	1:0:71:A:O5'	1.94	0.50
1:0:296:A:N6	1:0:297:A:N6	2.59	0.50
1:0:337:G:N2	3:S:10:HIS:NE2	2.59	0.50
1:0:604:U:O2	1:0:604:U:H2'	2.12	0.50
1:0:788:G:H4'	1:0:789:G:O5'	2.12	0.50
1:0:820:U:C2	1:0:821:A:C8	3.00	0.50
1:0:961:G:C5	1:0:962:C:C5	2.99	0.50
1:0:984:A:H2	1:0:1201:G:H21	1.57	0.50
1:0:987:G:H2'	1:0:988:G:C8	2.45	0.50
1:0:994:A:N7	1:0:995:A:C2	2.80	0.50
1:0:1352:G:N2	1:0:1619:A:N3	2.55	0.50
1:0:1404:C:N4	1:0:1406:A:H3'	2.27	0.50
1:0:1491:C:H2'	1:0:1492:A:O4'	2.12	0.50
1:0:1615:C:P	2:R:35:LYS:HB2	2.52	0.50
1:0:1743:C:O2'	1:0:1744:G:H5'	2.12	0.50
1:0:2203:G:HO2'	1:0:2204:A:C1'	2.25	0.50
1:0:2210:C:O2'	1:0:2211:U:H5'	2.11	0.50
1:0:2355:A:OP1	1:0:2355:A:C8	2.65	0.50
1:0:2474:G:C6	1:0:2475:C:C4	3.00	0.50
1:0:2591:C:C4	1:0:2592:U:H5	2.30	0.50
1:0:2618:A:H1'	1:0:2758:A:C2	2.47	0.50
1:0:2851:G:H2'	1:0:2852:G:C8	2.46	0.50
1:0:159:A:H61	1:0:192:G:H1	1.58	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1092:U:H2'	1:0:1093:U:C6	2.46	0.50
1:0:1289:A:C2	1:0:1290:A:C8	2.99	0.50
1:0:1578:U:H2'	1:0:1579:G:H8	1.76	0.50
1:0:1882:G:H21	1:0:1885:C:H41	1.58	0.50
1:0:2182:A:C6	1:0:2204:A:C2	3.00	0.50
1:0:2526:U:C6	1:0:2545:A:C5	2.99	0.50
1:0:14:A:OP2	1:0:15:G:OP2	2.28	0.50
1:0:313:U:H2'	1:0:314:G:H8	1.77	0.50
1:0:322:A:C2	1:0:342:G:OP2	2.65	0.50
1:0:496:C:O2'	1:0:497:C:H5'	2.12	0.50
1:0:617:U:H2'	1:0:618:A:C8	2.46	0.50
1:0:831:G:C2'	1:0:832:A:H5''	2.42	0.50
1:0:914:C:H2'	1:0:915:C:C6	2.46	0.50
1:0:953:G:C6	1:0:954:U:C2	3.00	0.50
1:0:1780:A:H8	1:0:1780:A:O5'	1.94	0.50
1:0:1804:U:O2'	1:0:1805:G:H5'	2.11	0.50
1:0:1919:A:O4'	1:0:1923:U:C4	2.65	0.50
1:0:1949:A:H61	1:0:2581:A:H61	1.60	0.50
1:0:2002:A:H2'	1:0:2003:A:O5'	2.12	0.50
1:0:2502:G:C6	1:0:2520:A:C2	2.99	0.50
3:S:45:LYS:HG2	3:S:75:ALA:HB1	1.93	0.50
1:0:170:U:O2	1:0:170:U:C2'	2.60	0.50
1:0:765:C:O2'	1:0:766:A:O5'	2.30	0.50
1:0:1139:A:H1'	1:0:2495:G:O2'	2.12	0.50
1:0:1438:G:C2'	1:0:1439:G:H5'	2.42	0.50
1:0:1606:C:O2'	1:0:1607:A:H5'	2.12	0.50
1:0:1625:A:H2'	1:0:1625:A:N3	2.27	0.50
1:0:1834:G:H2'	1:0:1835:C:O4'	2.12	0.50
1:0:2630:C:H2'	1:0:2631:C:H6	1.77	0.50
1:0:2840:U:H2'	1:0:2841:U:C6	2.46	0.50
4:W:2:LYS:HG3	4:W:3:PRO:CD	2.38	0.50
1:0:712:A:H2'	1:0:713:G:O4'	2.12	0.49
1:0:718:A:C8	1:0:740:A:C2	3.00	0.49
1:0:1004:A:H2'	1:0:1005:U:H5'	1.94	0.49
1:0:1008:G:H2'	1:0:1009:C:H6	1.77	0.49
1:0:1313:U:HO2'	1:0:1314:A:P	2.35	0.49
1:0:1389:C:C5	1:0:1390:G:C5	2.99	0.49
1:0:1474:A:C6	1:0:1476:G:C5	3.00	0.49
1:0:1921:A:C2'	1:0:1922:U:H4'	2.37	0.49
1:0:2415:G:N3	1:0:2577:A:H2	2.10	0.49
1:0:2692:A:H5''	1:0:2693:U:OP2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2817:A:O2'	1:0:2818:G:H5'	2.12	0.49
1:0:172:A:N1	1:0:178:C:N3	2.59	0.49
1:0:188:G:H2'	1:0:189:A:H8	1.78	0.49
1:0:567:G:H2'	1:0:568:G:H8	1.76	0.49
1:0:602:C:H2'	1:0:603:C:H6	1.76	0.49
1:0:932:G:H2'	1:0:933:G:C8	2.47	0.49
1:0:989:G:O4'	1:0:1012:A:H2	1.94	0.49
1:0:1389:C:H2'	1:0:1390:G:O4'	2.12	0.49
1:0:1569:A:C2	1:0:1571:G:C8	3.00	0.49
1:0:2145:A:H1'	1:0:2156:A:N1	2.28	0.49
1:0:2588:U:H3'	1:0:2589:C:H5'	1.95	0.49
1:0:311:A:C5	1:0:345:U:H4'	2.47	0.49
1:0:430:C:H2'	1:0:431:G:H8	1.77	0.49
1:0:614:G:H22	1:0:634:G:N2	2.06	0.49
1:0:1116:U:H2'	1:0:1117:G:H8	1.76	0.49
1:0:1286:U:C6	1:0:1986:G:H4'	2.47	0.49
1:0:1515:U:H2'	1:0:1516:A:O4'	2.12	0.49
1:0:1651:U:C5'	1:0:1652:G:OP2	2.59	0.49
1:0:1757:C:O2	1:0:1970:G:C2	2.65	0.49
1:0:2295:C:H2'	1:0:2296:U:O4'	2.12	0.49
1:0:2529:G:C6	1:0:2530:C:C4	3.00	0.49
5:1:25:ARG:HA	5:1:28:ASP:OD2	2.12	0.49
1:0:160:C:O2'	1:0:445:A:N3	2.42	0.49
1:0:404:A:C6	1:0:405:C:C4	3.00	0.49
1:0:497:C:O2	1:0:505:G:C2	2.65	0.49
1:0:516:G:C2'	1:0:517:A:OP2	2.60	0.49
1:0:568:G:H2'	1:0:569:C:H6	1.77	0.49
1:0:688:A:N3	1:0:2422:C:O2'	2.43	0.49
1:0:1397:A:O5'	1:0:1397:A:H8	1.95	0.49
1:0:1698:C:H2'	1:0:1753:A:N3	2.28	0.49
1:0:1831:G:O2'	1:0:1832:G:H5'	2.11	0.49
1:0:1980:A:C2'	1:0:1981:A:H5'	2.43	0.49
1:0:2125:C:H3'	1:0:2126:U:C5'	2.42	0.49
1:0:2526:U:C2	1:0:2545:A:N6	2.81	0.49
1:0:2691:C:C3'	1:0:2691:C:H6	2.20	0.49
1:0:2698:G:O2'	1:0:2699:G:H5'	2.12	0.49
1:0:2796:A:O2'	1:0:2801:A:N1	2.45	0.49
2:R:25:TYR:CE2	2:R:88:ILE:HD13	2.47	0.49
4:W:2:LYS:N	4:W:3:PRO:HD2	2.13	0.49
1:0:35:G:O2'	1:0:36:G:O5'	2.30	0.49
1:0:198:A:O4'	1:0:210:A:H1'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:218:A:H8	1:0:218:A:OP1	1.95	0.49
1:0:318:G:H5'	1:0:318:G:H8	1.78	0.49
1:0:687:G:C2	1:0:817:A:C2	3.01	0.49
1:0:830:C:N4	1:0:831:G:C6	2.80	0.49
1:0:1216:G:C6	1:0:1217:U:C4	3.00	0.49
1:0:1221:C:C2	1:0:1222:G:C8	3.01	0.49
1:0:1349:A:P	2:R:63:LYS:O	2.70	0.49
1:0:1381:G:C2	1:0:1382:G:C8	3.00	0.49
1:0:1670:G:H4'	1:0:1671:A:O5'	2.12	0.49
1:0:1774:A:O5'	1:0:1774:A:H8	1.95	0.49
1:0:1949:A:C2	1:0:2572:U:H1'	2.48	0.49
1:0:1949:A:N3	1:0:2572:U:H4'	2.27	0.49
1:0:2266:A:H61	1:0:2323:U:H1'	1.70	0.49
1:0:2268:G:H1	1:0:2322:U:H3	1.59	0.49
1:0:2275:U:P	1:0:2275:U:C6	3.05	0.49
1:0:2517:C:O2'	1:0:2518:C:H5'	2.12	0.49
3:S:40:LEU:HD11	3:S:45:LYS:HB2	1.95	0.49
5:1:104:PHE:CD1	5:1:106:VAL:HG23	2.48	0.49
1:0:114:C:O2'	1:0:115:G:H5'	2.12	0.49
1:0:243:G:OP2	1:0:243:G:O4'	2.31	0.49
1:0:436:A:OP1	1:0:437:G:H5''	2.11	0.49
1:0:953:G:H1'	1:0:1203:A:C2	2.48	0.49
1:0:2578:G:O2'	1:0:2579:A:H5'	2.12	0.49
1:0:2791:C:H2'	1:0:2792:C:H6	1.78	0.49
1:0:306:G:H2'	1:0:307:C:H6	1.77	0.49
1:0:332:C:H5''	1:0:333:A:OP2	2.13	0.49
1:0:442:A:C6	1:0:443:A:N6	2.81	0.49
1:0:685:U:O2'	1:0:686:C:H5'	2.12	0.49
1:0:688:A:C6	1:0:689:A:N6	2.81	0.49
1:0:811:G:N1	1:0:812:G:C5	2.81	0.49
1:0:830:C:O2'	1:0:852:U:H5''	2.11	0.49
1:0:956:A:C6	1:0:2427:A:C2	3.01	0.49
1:0:1340:C:N4	1:0:1341:G:N1	2.61	0.49
1:0:1416:A:H2'	1:0:1417:C:H6	1.77	0.49
1:0:2308:A:H2'	1:0:2309:G:O4'	2.13	0.49
1:0:2438:A:N6	1:0:2473:G:C6	2.80	0.49
1:0:2550:C:C4	1:0:2553:G:C8	3.01	0.49
1:0:2696:A:C2	1:0:2697:G:C5	3.00	0.49
1:0:2787:A:C2	1:0:2864:C:C2	3.00	0.49
1:0:2792:C:C2	1:0:2805:G:N2	2.81	0.49
2:R:6:ILE:N	2:R:7:LEU:HD13	2.28	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:8:GLN:HB3	2:R:28:TRP:HB2	1.94	0.49
3:S:22:VAL:HG22	3:S:82:ALA:HA	1.94	0.49
1:0:324:C:H2'	1:0:325:U:O4'	2.13	0.49
1:0:336:A:H2'	1:0:337:G:C8	2.47	0.49
1:0:526:C:H1'	1:0:1274:C:O2'	2.13	0.49
1:0:765:C:H5	1:0:1772:C:O2	1.96	0.49
1:0:794:A:H5'	1:0:795:A:C8	2.47	0.49
1:0:1438:G:C2	1:0:1591:U:C2	3.00	0.49
1:0:1681:A:N1	1:0:2706:U:C6	2.80	0.49
1:0:2292:C:C4	1:0:2293:G:N7	2.81	0.49
1:0:2518:C:H2'	1:0:2519:C:H6	1.77	0.49
1:0:2549:G:C4	1:0:2550:C:C6	3.01	0.49
1:0:2825:A:C4	1:0:2826:C:C5	3.00	0.49
1:0:228:A:C5	1:0:229:G:H1'	2.47	0.49
1:0:309:G:P	3:S:95:ARG:HE	2.36	0.49
1:0:636:G:H2'	1:0:637:G:H5'	1.94	0.49
1:0:856:A:H2'	1:0:857:U:O4'	2.13	0.49
1:0:1041:G:C6	1:0:1136:G:N2	2.81	0.49
1:0:1174:G:N2	1:0:1175:A:C4	2.81	0.49
1:0:1327:C:H2'	1:0:1328:C:C6	2.46	0.49
1:0:1443:G:H2'	1:0:1444:C:C6	2.47	0.49
1:0:1501:C:C2	1:0:1502:G:C8	3.00	0.49
1:0:1542:G:H1'	1:0:1561:A:N6	2.28	0.49
1:0:1887:G:N2	1:0:1888:C:C2	2.81	0.49
1:0:2320:G:H2'	1:0:2321:C:C6	2.48	0.49
1:0:2380:U:C2'	1:0:2381:A:H5'	2.43	0.49
1:0:2873:G:O2'	1:0:2874:A:H5'	2.13	0.49
1:0:48:A:N6	1:0:154:U:H5	2.05	0.49
1:0:546:A:N6	1:0:565:A:N6	2.61	0.49
1:0:679:C:C2	1:0:680:U:C5	3.01	0.49
1:0:751:G:H2'	1:0:752:G:C5'	2.41	0.49
1:0:947:C:C2	1:0:948:C:C5	3.01	0.49
1:0:958:G:H2'	1:0:959:C:H6	1.77	0.49
1:0:1004:A:H2'	1:0:1005:U:C5'	2.43	0.49
1:0:1474:A:H3'	1:0:1474:A:N3	2.27	0.49
1:0:1692:C:H2'	1:0:1693:A:O5'	2.12	0.49
1:0:2064:U:H2'	1:0:2065:A:H8	1.78	0.49
1:0:2205:C:O2'	1:0:2206:C:H5'	2.12	0.49
2:R:7:LEU:CG	4:W:29:ARG:HH21	2.26	0.49
2:R:53:ILE:O	2:R:53:ILE:HG23	2.12	0.49
4:W:7:ARG:C	4:W:7:ARG:CD	2.86	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:105:G:H8	1:0:105:G:H5'	1.78	0.48
1:0:228:A:H2'	1:0:229:G:O4'	2.13	0.48
1:0:311:A:O2'	1:0:329:C:O2	2.31	0.48
1:0:351:A:H2'	1:0:352:G:H5'	1.94	0.48
1:0:829:C:C2	1:0:1206:G:N2	2.81	0.48
1:0:940:G:C5	1:0:941:U:C6	3.01	0.48
1:0:952:A:H2'	1:0:953:G:O4'	2.13	0.48
1:0:1287:A:C6	1:0:1315:A:C2	3.01	0.48
1:0:1407:G:N2	1:0:1411:C:C6	2.81	0.48
1:0:1463:A:C2	1:0:1479:G:C2	3.01	0.48
1:0:1685:A:H4'	1:0:1686:A:O5'	2.13	0.48
1:0:1910:A:H8	1:0:1910:A:O5'	1.96	0.48
1:0:1956:G:H8	1:0:1956:G:H5'	1.78	0.48
1:0:1993:G:O2'	1:0:1994:U:H5'	2.13	0.48
1:0:2195:C:O2'	1:0:2196:U:H5'	2.12	0.48
1:0:2523:G:O2'	1:0:2524:G:H5'	2.12	0.48
1:0:2531:U:C2	1:0:2533:U:H5''	2.47	0.48
1:0:2627:G:C5	1:0:2652:G:C2	3.00	0.48
2:R:4:TYR:CD2	4:W:23:LYS:CB	2.96	0.48
2:R:10:PRO:CG	4:W:30:PHE:HA	2.36	0.48
4:W:43:VAL:HG12	4:W:47:ARG:CZ	2.43	0.48
1:0:113:C:N3	1:0:114:C:C5	2.81	0.48
1:0:145:C:C2	1:0:153:A:C2	3.00	0.48
1:0:336:A:H2'	1:0:337:G:H8	1.79	0.48
1:0:718:A:H61	1:0:739:G:H1'	1.78	0.48
1:0:764:A:N7	1:0:802:A:C5	2.81	0.48
1:0:982:C:C2'	1:0:983:G:H5'	2.43	0.48
1:0:1261:G:O2'	1:0:1262:U:P	2.70	0.48
1:0:2039:G:H2'	1:0:2039:G:N3	2.27	0.48
1:0:2272:A:C6	1:0:2273:C:C4	3.01	0.48
1:0:2379:G:O2'	1:0:2380:U:H5'	2.12	0.48
1:0:2469:G:H8	1:0:2469:G:O5'	1.96	0.48
1:0:2532:G:H2'	1:0:2533:U:O4'	2.13	0.48
1:0:2823:G:HO2'	1:0:2824:C:P	2.36	0.48
1:0:2849:C:H6	1:0:2849:C:O5'	1.95	0.48
2:R:7:LEU:HD23	4:W:29:ARG:HH21	1.78	0.48
2:R:28:TRP:CE3	2:R:75:ARG:HB2	2.48	0.48
2:R:29:VAL:HG23	2:R:30:SER:O	2.14	0.48
2:R:91:LEU:HD22	2:R:91:LEU:H	1.78	0.48
1:0:3:U:H2'	1:0:4:C:H6	1.71	0.48
1:0:574:C:H4'	1:0:1266:G:O6	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:746:G:C8	1:0:774:A:C6	3.01	0.48
1:0:754:G:H2'	1:0:755:C:O5'	2.14	0.48
1:0:836:G:H2'	1:0:837:U:H6	1.78	0.48
1:0:839:U:C2	1:0:841:G:H1'	2.47	0.48
1:0:1132:C:H2'	1:0:1133:G:O4'	2.14	0.48
1:0:1419:G:O2'	1:0:1420:A:H5'	2.12	0.48
1:0:1829:C:H4'	1:0:1911:A:H1'	1.95	0.48
1:0:2063:A:H2'	1:0:2064:U:C6	2.48	0.48
1:0:2210:C:C2	1:0:2211:U:C6	3.02	0.48
1:0:2359:U:H2'	1:0:2360:C:C6	2.48	0.48
1:0:2559:U:H2'	1:0:2560:G:H5'	1.95	0.48
1:0:2625:U:O5'	1:0:2625:U:H6	1.96	0.48
1:0:2729:A:N6	1:0:2730:A:N7	2.60	0.48
1:0:2834:A:O2'	1:0:2835:A:H5'	2.13	0.48
1:0:317:U:H3'	1:0:318:G:C5'	2.44	0.48
1:0:344:G:C5	1:0:345:U:C5	3.01	0.48
1:0:590:C:H2'	1:0:591:G:C8	2.49	0.48
1:0:754:G:C6	1:0:755:C:N4	2.82	0.48
1:0:838:A:H2'	1:0:839:U:C6	2.48	0.48
1:0:1007:A:C6	1:0:1171:A:C2	3.01	0.48
1:0:1469:U:O5'	1:0:1470:G:OP2	2.30	0.48
1:0:1514:C:H4'	1:0:1592:U:O2'	2.12	0.48
1:0:2106:G:H2'	1:0:2107:G:C5'	2.25	0.48
1:0:2355:A:OP1	1:0:2355:A:H8	1.97	0.48
1:0:2845:C:C4	1:0:2846:G:N7	2.81	0.48
2:R:54:SER:O	2:R:78:ALA:HA	2.14	0.48
1:0:83:A:H8	1:0:83:A:P	2.36	0.48
1:0:344:G:C4	1:0:345:U:C6	3.00	0.48
1:0:613:A:H61	1:0:635:C:H42	1.62	0.48
1:0:657:A:C2	1:0:658:G:C4	3.01	0.48
1:0:961:G:H2'	1:0:962:C:H6	1.77	0.48
1:0:1313:U:O2'	1:0:1314:A:P	2.71	0.48
1:0:1460:G:O2'	1:0:1461:C:H5'	2.13	0.48
1:0:1476:G:C2	1:0:1477:C:C2	3.01	0.48
1:0:1933:G:H2'	1:0:1934:U:H6	1.78	0.48
1:0:2293:G:H2'	1:0:2294:U:C6	2.49	0.48
1:0:2547:C:C2	1:0:2548:G:C8	3.01	0.48
1:0:2627:G:H2'	1:0:2628:C:C6	2.48	0.48
1:0:2696:A:O2'	1:0:2697:G:H5'	2.13	0.48
1:0:2738:A:H2'	1:0:2739:G:H5'	1.96	0.48
1:0:2770:A:O5'	1:0:2770:A:C8	2.66	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:R:59:PRO:HA	2:R:73:ASN:O	2.14	0.48
3:S:40:LEU:HD12	3:S:40:LEU:N	2.29	0.48
3:S:75:ALA:C	3:S:76:LEU:HD23	2.39	0.48
3:S:93:ARG:O	3:S:93:ARG:HG2	2.12	0.48
4:W:24:GLU:OE2	4:W:42:ARG:NH2	2.47	0.48
1:0:405:C:C4	1:0:406:G:N7	2.82	0.48
1:0:1077:U:C2'	1:0:1078:A:H5''	2.44	0.48
1:0:1434:U:C2	1:0:1435:G:C8	3.01	0.48
1:0:1523:A:H8	1:0:1523:A:O5'	1.97	0.48
1:0:1683:G:H2'	1:0:1684:G:H5'	1.92	0.48
1:0:2264:C:C4'	1:0:2267:A:H62	2.27	0.48
1:0:2284:U:H2'	1:0:2285:U:H5''	1.95	0.48
1:0:2497:A:OP2	1:0:2498:U:C4	2.67	0.48
1:0:2585:C:H2'	1:0:2586:G:O4'	2.13	0.48
1:0:2841:U:O2'	1:0:2842:C:P	2.71	0.48
4:W:10:GLN:CD	4:W:10:GLN:N	2.68	0.48
1:0:83:A:C8	1:0:83:A:OP2	2.66	0.48
1:0:115:G:C6	1:0:117:A:N6	2.82	0.48
1:0:162:C:H2'	1:0:163:A:O4'	2.12	0.48
1:0:477:A:H2'	1:0:478:G:H5'	1.94	0.48
1:0:538:A:O5'	1:0:538:A:C8	2.66	0.48
1:0:928:G:O5'	1:0:928:G:H8	1.97	0.48
1:0:976:C:C1'	1:0:2252:A:C2	2.97	0.48
1:0:1174:G:N2	1:0:1175:A:C5	2.81	0.48
1:0:1250:A:O2'	1:0:1251:G:C4'	2.61	0.48
1:0:1295:U:C5	1:0:1296:G:N7	2.82	0.48
1:0:1558:C:O2'	1:0:1559:G:H5'	2.13	0.48
1:0:1763:G:H22	1:0:1765:C:H5''	1.78	0.48
1:0:1765:C:O5'	1:0:1765:C:H6	1.97	0.48
1:0:1914:U:H3	1:0:1952:A:N6	2.00	0.48
1:0:2197:U:C4	1:0:2198:U:O4	2.67	0.48
1:0:2274:C:C2'	1:0:2275:U:H5'	2.43	0.48
1:0:2637:C:O5'	1:0:2637:C:H6	1.96	0.48
1:0:116:A:H2'	1:0:118:U:C5	2.49	0.48
1:0:245:C:O2	1:0:245:C:H2'	2.13	0.48
1:0:359:G:N2	1:0:360:A:H1'	2.29	0.48
1:0:421:G:C5	1:0:422:C:C5	3.02	0.48
1:0:568:G:H2'	1:0:569:C:C6	2.49	0.48
1:0:668:A:C2'	1:0:669:G:O4'	2.60	0.48
1:0:673:G:H8	1:0:673:G:O5'	1.96	0.48
1:0:692:C:O2'	1:0:693:A:C5'	2.61	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:803:C:H5'	1:0:804:C:P	2.54	0.48
1:0:984:A:O2'	1:0:1201:G:O2'	2.27	0.48
1:0:1198:C:OP1	1:0:1199:U:C1'	2.62	0.48
1:0:1742:G:O2'	1:0:1743:C:H5'	2.13	0.48
1:0:1825:C:H2'	1:0:1826:U:C5'	2.44	0.48
1:0:2061:C:O4'	1:0:2413:A:H1'	2.13	0.48
1:0:2565:C:H5	1:0:2587:G:N2	2.12	0.48
1:0:2603:G:N2	1:0:2604:G:C1'	2.77	0.48
1:0:2848:A:H5''	1:0:2849:C:OP2	2.14	0.48
1:0:2873:G:H2'	1:0:2874:A:O4'	2.14	0.48
1:0:37:C:O2	1:0:456:C:O2	2.32	0.48
1:0:109:A:C2'	1:0:110:U:H5''	2.44	0.48
1:0:224:G:H4'	1:0:399:G:C6	2.48	0.48
1:0:330:C:H2'	1:0:331:U:H5'	1.95	0.48
1:0:543:G:H2'	1:0:544:U:H6	1.73	0.48
1:0:1003:C:H2'	1:0:1004:A:H8	1.78	0.48
1:0:1491:C:H2'	1:0:1492:A:H8	1.78	0.48
1:0:1541:G:H2'	1:0:1542:G:C5'	2.43	0.48
1:0:1588:A:C4	1:0:1589:G:C8	3.02	0.48
1:0:1610:A:C4	1:0:1611:U:C5	3.02	0.48
1:0:1764:A:N7	1:0:1782:A:H2	2.10	0.48
1:0:1949:A:H1'	1:0:2572:U:C4'	2.40	0.48
1:0:1949:A:H1'	1:0:2572:U:C5'	2.44	0.48
1:0:2196:U:C2'	1:0:2197:U:H5'	2.43	0.48
1:0:2401:A:H2'	1:0:2403:C:C5	2.49	0.48
1:0:2695:C:H2'	1:0:2696:A:C8	2.34	0.48
1:0:2735:C:O2	1:0:2735:C:H2'	2.13	0.48
1:0:2834:A:H62	1:0:2835:A:N6	2.12	0.48
2:R:62:ARG:HD2	2:R:62:ARG:C	2.39	0.48
1:0:414:A:H2'	1:0:415:A:C8	2.49	0.48
1:0:841:G:H2'	1:0:842:A:C8	2.49	0.48
1:0:1168:G:C6	1:0:1169:C:N4	2.82	0.48
1:0:1168:G:C6	1:0:1169:C:C4	3.02	0.48
1:0:1309:G:C2	1:0:1662:G:C4	3.02	0.48
1:0:1859:A:H2'	1:0:1860:A:H8	1.79	0.48
1:0:1972:G:O2'	1:0:1973:C:H5'	2.14	0.48
1:0:2020:G:H2'	1:0:2021:G:C8	2.49	0.48
1:0:2176:U:O2'	1:0:2177:U:H5'	2.14	0.48
1:0:2177:U:O2'	1:0:2178:U:H5'	2.13	0.48
1:0:2262:C:N3	1:0:2368:G:C2	2.82	0.48
1:0:2409:A:H2'	1:0:2410:U:H5'	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2446:C:H6	1:0:2446:C:O5'	1.97	0.48
1:0:2585:C:H2'	1:0:2586:G:C5'	2.44	0.48
1:0:2626:U:O2'	1:0:2627:G:H5'	2.14	0.48
1:0:2825:A:C6	1:0:2826:C:C4	3.01	0.48
2:R:8:GLN:HG2	2:R:75:ARG:HB3	1.95	0.48
3:S:22:VAL:HG13	3:S:82:ALA:HA	1.96	0.48
1:0:161:U:H4'	1:0:194:G:C2	2.48	0.47
1:0:209:G:N2	1:0:433:G:OP1	2.47	0.47
1:0:326:A:N6	1:0:327:C:H42	2.12	0.47
1:0:945:G:C5	1:0:946:U:C5	3.01	0.47
1:0:1250:A:HO2'	1:0:1251:G:C4'	2.27	0.47
1:0:1313:U:O2	1:0:1642:G:C6	2.67	0.47
1:0:1352:G:H21	1:0:1619:A:H1'	1.78	0.47
1:0:1469:U:H6	1:0:1470:G:N7	2.12	0.47
1:0:1681:A:N6	1:0:2706:U:C5	2.82	0.47
1:0:2204:A:C2'	1:0:2205:C:OP2	2.62	0.47
1:0:57:G:OP1	2:R:74:ASP:OD1	2.32	0.47
1:0:310:A:OP1	3:S:93:ARG:HB2	2.13	0.47
1:0:314:G:H2'	1:0:315:G:H8	1.78	0.47
1:0:619:A:N6	1:0:629:C:H42	2.13	0.47
1:0:819:C:C2	1:0:820:U:C5	3.02	0.47
1:0:930:A:C5'	1:0:931:G:C8	2.97	0.47
1:0:1207:G:N2	1:0:1208:A:C4	2.82	0.47
1:0:1246:G:C4	1:0:1247:U:C5	3.02	0.47
1:0:1411:C:O2'	1:0:1412:C:H5'	2.14	0.47
1:0:1766:U:C6	1:0:1766:U:C3'	2.97	0.47
1:0:1770:U:O2	1:0:1774:A:C6	2.67	0.47
1:0:1821:A:N6	1:0:1960:A:N6	2.61	0.47
1:0:1964:A:H5''	1:0:1965:U:OP2	2.14	0.47
1:0:2691:C:C2'	1:0:2692:A:N7	2.76	0.47
2:R:94:GLN:O	5:1:50:ARG:CZ	2.62	0.47
4:W:18:ILE:O	4:W:22:LYS:HE2	2.14	0.47
4:W:37:LEU:HD23	4:W:37:LEU:C	2.39	0.47
5:1:77:GLN:O	5:1:81:GLU:HG3	2.14	0.47
1:0:692:C:H2'	1:0:693:A:C8	2.49	0.47
1:0:765:C:C5	1:0:1772:C:O2	2.67	0.47
1:0:1003:C:H2'	1:0:1004:A:C8	2.49	0.47
1:0:1147:G:H2'	1:0:1148:G:H8	1.79	0.47
1:0:1215:A:N1	1:0:1257:U:O4	2.47	0.47
1:0:1218:C:H42	1:0:1255:A:N6	2.13	0.47
1:0:1230:C:O2'	1:0:1231:A:H5'	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1247:U:H2'	1:0:1248:G:O4'	2.13	0.47
1:0:1262:U:H3'	1:0:1262:U:C6	2.49	0.47
1:0:1403:U:H3	1:0:1408:A:N6	2.12	0.47
1:0:1486:A:H2'	1:0:1487:C:C6	2.49	0.47
1:0:1918:G:N2	1:0:1947:G:C5	2.83	0.47
1:0:2320:G:C2	1:0:2321:C:C2	3.02	0.47
1:0:2498:U:OP2	1:0:2498:U:H6	1.96	0.47
1:0:2614:A:H2'	1:0:2615:U:O5'	2.14	0.47
1:0:2652:G:N3	1:0:2653:A:C8	2.82	0.47
1:0:2665:G:H2'	1:0:2666:U:C6	2.50	0.47
1:0:45:C:H2'	1:0:46:C:C6	2.49	0.47
1:0:112:U:C2	1:0:113:C:C5	3.02	0.47
1:0:841:G:H22	1:0:2226:A:C4'	2.27	0.47
1:0:847:C:O2'	1:0:848:A:H5'	2.14	0.47
1:0:919:U:C2'	1:0:920:G:O5'	2.62	0.47
1:0:984:A:H1'	1:0:1202:U:C6	2.48	0.47
1:0:1226:A:N9	1:0:1250:A:C2	2.82	0.47
1:0:1381:G:O2'	1:0:1382:G:H5'	2.14	0.47
1:0:2379:G:H2'	1:0:2380:U:O4'	2.15	0.47
2:R:56:MET:CE	2:R:58:VAL:HG22	2.36	0.47
3:S:25:LEU:HD22	3:S:25:LEU:C	2.40	0.47
1:0:146:C:H2'	1:0:147:G:H8	1.74	0.47
1:0:652:C:H42	1:0:657:A:H61	1.60	0.47
1:0:929:A:C2	1:0:930:A:H1'	2.50	0.47
1:0:1011:A:N1	1:0:1166:A:C4	2.82	0.47
1:0:1141:U:N3	1:0:2008:C:OP1	2.42	0.47
1:0:1278:A:O2'	1:0:1279:G:O5'	2.28	0.47
1:0:1404:C:H1'	2:R:15:LYS:HD3	1.97	0.47
1:0:1947:G:C6	1:0:1950:C:C5	3.03	0.47
1:0:1970:G:N2	1:0:1971:C:C2	2.82	0.47
1:0:2043:A:N3	1:0:2481:G:C4	2.83	0.47
1:0:67:G:C4	1:0:72:A:C2	3.03	0.47
1:0:321:A:OP1	3:S:26:SER:C	2.57	0.47
1:0:421:G:O2'	1:0:422:C:H5'	2.15	0.47
1:0:525:A:C8	1:0:526:C:C5	3.02	0.47
1:0:583:C:C6	1:0:2038:C:H5''	2.50	0.47
1:0:854:G:N2	1:0:855:G:C4	2.83	0.47
1:0:1091:C:O5'	1:0:1091:C:H6	1.97	0.47
1:0:1140:A:C2	1:0:2549:G:O4'	2.68	0.47
1:0:1726:C:O2'	1:0:2834:A:N3	2.44	0.47
1:0:1779:C:N4	1:0:1780:A:N6	2.62	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2383:C:N1	1:0:2393:G:N2	2.62	0.47
3:S:11:ASN:OD1	3:S:13:LYS:HD3	2.14	0.47
5:1:76:SER:HB3	5:1:80:ARG:CZ	2.44	0.47
1:0:13:A:C2	1:0:535:U:H2'	2.49	0.47
1:0:16:G:O2'	1:0:17:G:H5'	2.14	0.47
1:0:67:G:N2	1:0:73:A:C4'	2.77	0.47
1:0:200:A:OP2	1:0:200:A:C4'	2.63	0.47
1:0:225:G:H5'	1:0:226:C:H5'	1.96	0.47
1:0:246:C:N3	1:0:247:A:N7	2.62	0.47
1:0:310:A:C6	1:0:311:A:C2	3.03	0.47
1:0:372:U:H3'	1:0:372:U:H6	1.80	0.47
1:0:406:G:C6	1:0:407:A:N7	2.82	0.47
1:0:460:U:H5	1:0:592:G:O2'	1.97	0.47
1:0:466:A:H4'	1:0:467:U:OP2	2.14	0.47
1:0:468:A:N3	1:0:470:U:C5	2.83	0.47
1:0:644:A:H2'	1:0:645:G:C5'	2.45	0.47
1:0:682:G:H5''	1:0:683:A:OP2	2.14	0.47
1:0:742:G:C5	1:0:1766:U:O2	2.68	0.47
1:0:805:G:N7	1:0:2419:C:C1'	2.77	0.47
1:0:838:A:O2'	1:0:839:U:H5'	2.15	0.47
1:0:1001:A:N6	1:0:1200:G:H1'	2.29	0.47
1:0:1080:A:H4'	1:0:1107:A:HO2'	1.80	0.47
1:0:1175:A:O2'	1:0:1176:U:H5'	2.15	0.47
1:0:1332:G:C6	1:0:1333:G:N1	2.82	0.47
1:0:1359:G:H5'	1:0:1359:G:H8	1.79	0.47
1:0:1373:G:N7	1:0:1374:G:C8	2.82	0.47
1:0:1482:U:N1	1:0:1562:G:N2	2.63	0.47
1:0:1625:A:C4	1:0:1632:A:N3	2.82	0.47
1:0:1994:U:H2'	1:0:1995:G:C5'	2.45	0.47
1:0:2058:U:H3'	1:0:2217:G:N1	2.29	0.47
1:0:2200:G:C4	1:0:2201:G:C8	3.03	0.47
1:0:2209:G:C4	1:0:2210:C:H5	2.32	0.47
1:0:2429:A:N3	1:0:2429:A:H2'	2.30	0.47
1:0:2537:C:C4	1:0:2538:C:C4	3.03	0.47
1:0:2665:G:C2	1:0:2704:U:O2	2.68	0.47
4:W:9:LEU:HD23	4:W:9:LEU:N	2.30	0.47
1:0:67:G:H2'	1:0:68:C:C6	2.50	0.47
1:0:366:U:H2'	1:0:367:G:H8	1.79	0.47
1:0:475:U:C2	1:0:801:A:N6	2.82	0.47
1:0:600:G:H3'	1:0:601:A:H5''	1.96	0.47
1:0:1122:A:HO2'	1:0:1123:G:H4'	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1173:G:O2'	1:0:1174:G:H5'	2.15	0.47
1:0:1177:U:C2	1:0:1197:U:O2	2.67	0.47
1:0:1313:U:H5'	1:0:1314:A:N3	2.30	0.47
1:0:1428:G:O3'	1:0:1429:A:H8	1.97	0.47
1:0:1446:U:H2'	1:0:1447:U:C6	2.50	0.47
1:0:1595:A:H2'	1:0:1596:A:C8	2.50	0.47
1:0:1629:G:C2	1:0:1633:C:C2	3.03	0.47
1:0:1725:C:O2	1:0:1742:G:C2	2.68	0.47
1:0:2364:C:O2'	1:0:2365:U:H5'	2.15	0.47
1:0:2469:G:C5'	1:0:2470:U:OP1	2.59	0.47
1:0:2789:U:H2'	1:0:2790:C:H6	1.79	0.47
1:0:2802:C:H2'	1:0:2803:C:H6	1.79	0.47
2:R:11:VAL:CG2	2:R:26:SER:O	2.63	0.47
3:S:87:GLU:O	3:S:88:THR:CG2	2.62	0.47
1:0:107:G:C6	1:0:108:G:C5	3.03	0.47
1:0:308:C:H2'	1:0:309:G:O4'	2.15	0.47
1:0:322:A:H8	1:0:322:A:OP1	1.98	0.47
1:0:404:A:C2	1:0:424:G:N2	2.83	0.47
1:0:669:G:H2'	1:0:670:U:O4'	2.15	0.47
1:0:755:C:H2'	1:0:756:C:C6	2.49	0.47
1:0:1741:G:N1	1:0:1742:G:C5	2.83	0.47
1:0:1791:C:H1'	1:0:1793:A:H5'	1.97	0.47
1:0:1970:G:C2	1:0:1971:C:C2	3.03	0.47
1:0:2198:U:C4	1:0:2199:C:C6	3.02	0.47
1:0:2271:C:C2'	1:0:2272:A:O5'	2.63	0.47
1:0:2437:G:O2'	1:0:2438:A:N7	2.47	0.47
1:0:2451:G:C2	1:0:2454:C:N3	2.83	0.47
1:0:2712:G:H5'	1:0:2713:A:C8	2.50	0.47
1:0:2832:G:C4	1:0:2834:A:OP2	2.68	0.47
2:R:17:TYR:OH	2:R:94:GLN:O	2.29	0.47
1:0:174:A:N6	1:0:2409:A:N7	2.61	0.47
1:0:516:G:O2'	1:0:517:A:C8	2.41	0.47
1:0:803:C:P	1:0:1772:C:N4	2.88	0.47
1:0:865:A:C4	1:0:866:U:C5	3.03	0.47
1:0:930:A:H3'	1:0:931:G:H8	1.78	0.47
1:0:986:A:C2	1:0:1001:A:C8	3.03	0.47
1:0:1514:C:H4'	1:0:1593:C:H5'	1.95	0.47
1:0:1520:G:H2'	1:0:1521:U:H6	1.80	0.47
1:0:1745:C:H2'	1:0:1746:A:O4'	2.15	0.47
1:0:2077:G:H8	1:0:2077:G:O5'	1.98	0.47
1:0:2081:U:H2'	1:0:2082:C:C6	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2108:G:H5''	1:0:2109:A:H5'	1.97	0.47
1:0:2327:U:H2'	1:0:2328:G:H8	1.79	0.47
1:0:2560:G:N1	1:0:2589:C:C5	2.82	0.47
1:0:2708:U:C2	1:0:2709:C:C5	3.03	0.47
2:R:63:LYS:HB2	2:R:63:LYS:HZ3	1.80	0.47
3:S:39:ALA:C	3:S:40:LEU:HG	2.39	0.47
3:S:40:LEU:CD1	3:S:45:LYS:HB2	2.45	0.47
1:0:29:U:O2'	1:0:30:G:H5'	2.15	0.46
1:0:80:A:O4'	1:0:305:A:H2	1.97	0.46
1:0:229:G:H2'	1:0:230:C:H6	1.80	0.46
1:0:388:G:H2'	1:0:389:G:H8	1.79	0.46
1:0:422:C:O2'	1:0:423:G:H5'	2.15	0.46
1:0:472:C:O2'	1:0:473:C:H5'	2.15	0.46
1:0:596:C:O2	1:0:684:C:O4'	2.33	0.46
1:0:812:G:C6	1:0:813:A:N6	2.83	0.46
1:0:882:C:C4	1:0:883:A:N7	2.83	0.46
1:0:922:A:C2	1:0:923:A:H2	2.33	0.46
1:0:934:G:O2'	1:0:935:C:H5'	2.15	0.46
1:0:974:U:O2'	1:0:2229:G:N2	2.47	0.46
1:0:998:C:C2'	1:0:999:A:O5'	2.64	0.46
1:0:1105:U:C2	1:0:1107:A:H5''	2.50	0.46
1:0:1380:C:C2'	1:0:1381:G:H5'	2.39	0.46
1:0:1445:A:N1	1:0:1446:U:C2	2.83	0.46
1:0:1450:G:H2'	1:0:1451:C:C6	2.50	0.46
1:0:1692:C:C2'	1:0:1693:A:O5'	2.63	0.46
1:0:1961:A:O2'	1:0:1962:C:H5'	2.15	0.46
1:0:1965:U:O5'	1:0:1965:U:H6	1.99	0.46
1:0:2217:G:C5'	1:0:2218:G:N7	2.78	0.46
1:0:2484:G:O2'	1:0:2485:U:C5'	2.62	0.46
1:0:2602:G:C2	1:0:2603:G:C8	3.03	0.46
1:0:2617:G:HO2'	1:0:2618:A:H8	1.63	0.46
1:0:2695:C:O2'	1:0:2696:A:H5'	2.14	0.46
1:0:2720:A:C2	1:0:2744:A:C4	3.02	0.46
1:0:2736:U:C2'	1:0:2737:A:H5'	2.44	0.46
1:0:2841:U:O2	1:0:2843:A:H1'	2.15	0.46
2:R:28:TRP:HA	2:R:77:LYS:HA	1.97	0.46
1:0:179:U:O2'	1:0:180:C:H5'	2.15	0.46
1:0:224:G:C2	1:0:229:G:C6	3.04	0.46
1:0:641:G:N2	1:0:644:A:OP2	2.48	0.46
1:0:828:C:H2'	1:0:829:C:C6	2.49	0.46
1:0:888:G:H2'	1:0:889:C:O4'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:888:G:N2	1:0:915:C:C2	2.83	0.46
1:0:931:G:C2'	1:0:932:G:H5'	2.44	0.46
1:0:1098:G:C6	1:0:1114:A:C2	3.03	0.46
1:0:1153:A:C4	1:0:1155:G:N7	2.83	0.46
1:0:1196:G:H2'	1:0:1197:U:O4'	2.15	0.46
1:0:1228:G:H3'	1:0:1228:G:C8	2.50	0.46
1:0:1358:C:C3'	1:0:1359:G:H5''	2.45	0.46
1:0:1725:C:N4	1:0:1726:C:H41	2.14	0.46
1:0:1933:G:C8	1:0:1934:U:C5	3.01	0.46
1:0:2405:A:OP1	1:0:2405:A:C8	2.68	0.46
1:0:2780:A:H2'	1:0:2781:G:C8	2.49	0.46
1:0:2810:A:C2	1:0:2853:U:OP2	2.69	0.46
1:0:2831:A:C5	1:0:2837:G:N2	2.83	0.46
2:R:33:ALA:N	2:R:76:LYS:CE	2.68	0.46
1:0:68:C:C5	1:0:72:A:C2	3.04	0.46
1:0:537:C:O2'	1:0:2025:A:N1	2.48	0.46
1:0:971:A:C3'	1:0:972:C:H5''	2.44	0.46
1:0:982:C:OP2	1:0:985:G:C2	2.69	0.46
1:0:1246:G:C5	1:0:1247:U:C5	3.03	0.46
1:0:1395:A:C6	1:0:1396:C:N3	2.82	0.46
1:0:1425:G:C2	1:0:1607:A:C2	3.03	0.46
1:0:1464:A:C2	1:0:1478:U:O2	2.68	0.46
1:0:1636:G:H2'	1:0:1637:U:H6	1.78	0.46
1:0:1785:A:H4'	1:0:1883:A:N1	2.30	0.46
1:0:2023:C:H2'	1:0:2024:U:C6	2.50	0.46
1:0:2241:U:H4'	1:0:2307:A:C2	2.50	0.46
1:0:2324:G:C2	1:0:2360:C:H2'	2.50	0.46
1:0:2371:A:C4	1:0:2372:A:C8	3.04	0.46
1:0:2418:A:N1	1:0:2564:U:C4'	2.71	0.46
1:0:2674:C:H2'	1:0:2675:U:H6	1.79	0.46
1:0:2737:A:O2'	1:0:2738:A:H5'	2.14	0.46
1:0:2824:C:O2	1:0:2841:U:O2'	2.33	0.46
1:0:2838:U:N3	1:0:2839:G:N7	2.64	0.46
2:R:42:ILE:HG12	2:R:80:VAL:HG11	1.97	0.46
1:0:319:G:C6	1:0:320:A:C6	3.04	0.46
1:0:491:A:H2'	1:0:492:G:OP1	2.15	0.46
1:0:516:G:H2'	1:0:517:A:OP2	2.16	0.46
1:0:622:U:C2'	1:0:623:G:H5'	2.46	0.46
1:0:720:A:H2'	1:0:721:C:C6	2.49	0.46
1:0:873:U:H3'	1:0:873:U:H6	1.80	0.46
1:0:958:G:H2'	1:0:959:C:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1850:G:O6	1:0:1867:A:H2'	2.16	0.46
1:0:1888:C:O2'	1:0:1912:G:C2'	2.63	0.46
1:0:2006:G:C2'	1:0:2007:G:O5'	2.64	0.46
1:0:2217:G:H5'	1:0:2218:G:N7	2.30	0.46
1:0:2433:G:O2'	1:0:2434:G:H5'	2.16	0.46
1:0:2451:G:H2'	1:0:2454:C:H42	1.80	0.46
1:0:2623:A:H2'	1:0:2624:G:O4'	2.15	0.46
1:0:2823:G:O2'	1:0:2824:C:OP2	2.31	0.46
4:W:29:ARG:NH1	4:W:29:ARG:HB2	2.31	0.46
1:0:43:A:C2	1:0:44:G:C4	3.03	0.46
1:0:318:G:H21	1:0:341:A:H62	1.63	0.46
1:0:394:U:O2'	1:0:395:G:H5'	2.14	0.46
1:0:600:G:N1	1:0:602:C:N3	2.63	0.46
1:0:698:A:C5	1:0:787:A:C2	3.04	0.46
1:0:796:A:C4	1:0:798:G:H1'	2.51	0.46
1:0:818:G:H5'	1:0:819:C:H5	1.80	0.46
1:0:830:C:C4	1:0:831:G:C5	3.03	0.46
1:0:1364:C:N3	1:0:1394:G:C6	2.84	0.46
1:0:1540:C:H2'	1:0:1541:G:O5'	2.16	0.46
1:0:1936:A:C2	1:0:2529:G:O4'	2.69	0.46
1:0:2229:G:C8	1:0:2475:C:H5''	2.50	0.46
1:0:2815:C:H2'	1:0:2816:C:C6	2.50	0.46
3:S:23:ILE:HD13	3:S:25:LEU:HD12	1.97	0.46
4:W:30:PHE:CD1	4:W:30:PHE:N	2.83	0.46
5:1:55:ASN:H	5:1:55:ASN:ND2	1.94	0.46
1:0:78:C:O2	1:0:357:A:H2	1.97	0.46
1:0:318:G:H21	1:0:341:A:N6	2.13	0.46
1:0:627:A:C2	1:0:628:A:C6	3.03	0.46
1:0:679:C:H2'	1:0:680:U:C6	2.51	0.46
1:0:736:G:H2'	1:0:737:C:C6	2.49	0.46
1:0:927:C:H2'	1:0:928:G:C8	2.51	0.46
1:0:994:A:N6	1:0:995:A:C2	2.66	0.46
1:0:1044:U:C6	1:0:2730:A:C2	3.02	0.46
1:0:1076:U:C3'	1:0:1077:U:C5'	2.88	0.46
1:0:1598:C:H2'	1:0:1599:G:O4'	2.15	0.46
1:0:2230:G:H2'	1:0:2230:G:N3	2.30	0.46
1:0:2238:G:C5	1:0:2239:C:C5	3.03	0.46
1:0:2262:C:O2'	1:0:2263:C:H5'	2.16	0.46
1:0:2458:U:C4	1:0:2459:C:C5	3.03	0.46
1:0:2560:G:O6	1:0:2589:C:C2	2.69	0.46
1:0:2598:C:O2'	1:0:2599:U:C5'	2.59	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2758:A:O2'	1:0:2759:U:OP1	2.31	0.46
1:0:2814:G:N2	1:0:2815:C:H1'	2.31	0.46
1:0:2825:A:H2'	1:0:2826:C:H6	1.80	0.46
1:0:27:G:H1'	1:0:523:A:N6	2.31	0.46
1:0:149:A:H2'	1:0:150:A:C8	2.51	0.46
1:0:155:G:H2'	1:0:156:G:O4'	2.15	0.46
1:0:599:A:C2	1:0:681:A:C2	3.03	0.46
1:0:819:C:H2'	1:0:820:U:H6	1.81	0.46
1:0:874:A:C2	1:0:929:A:C2	3.04	0.46
1:0:1054:C:O2'	1:0:1055:A:H4'	2.16	0.46
1:0:1440:G:C6	1:0:1441:A:N7	2.84	0.46
1:0:1735:G:C6	1:0:1736:C:C4	3.04	0.46
1:0:1782:A:H61	1:0:1820:G:H2'	1.81	0.46
1:0:2203:G:O2'	1:0:2204:A:C1'	2.64	0.46
1:0:2226:A:H2'	1:0:2227:C:C6	2.51	0.46
1:0:2751:C:H2'	1:0:2752:C:H6	1.76	0.46
4:W:37:LEU:CD2	4:W:37:LEU:C	2.89	0.46
1:0:171:G:C2'	1:0:172:A:H5'	2.46	0.46
1:0:629:C:O2'	1:0:630:G:H5'	2.15	0.46
1:0:955:G:C8	1:0:955:G:C3'	2.98	0.46
1:0:1095:A:H3'	1:0:1095:A:N3	2.31	0.46
1:0:1290:A:H2'	1:0:1291:G:C8	2.51	0.46
1:0:1364:C:C2	1:0:1394:G:C2	3.03	0.46
1:0:1391:A:C2'	1:0:1392:U:C6	2.99	0.46
1:0:1583:A:H5'	1:0:1584:G:N2	2.30	0.46
1:0:1825:C:H2'	1:0:1826:U:H5'	1.98	0.46
1:0:1831:G:C5	1:0:1832:G:C8	3.04	0.46
1:0:2009:U:H3	1:0:2020:G:H1	1.63	0.46
1:0:2268:G:H5'	1:0:2363:G:O2'	2.16	0.46
1:0:2597:G:O2'	1:0:2598:C:H5'	2.15	0.46
1:0:2608:A:N7	1:0:2869:U:C4	2.84	0.46
1:0:2681:A:C6	1:0:2682:C:C4	3.04	0.46
1:0:2787:A:O2'	1:0:2788:C:C5'	2.63	0.46
1:0:2791:C:O2	1:0:2858:A:O2'	2.34	0.46
2:R:62:ARG:NH1	2:R:62:ARG:CB	2.64	0.46
3:S:64:ASN:ND2	5:1:68:ASP:HB3	2.30	0.46
5:1:90:THR:O	5:1:106:VAL:HG13	2.15	0.46
1:0:48:A:H2	1:0:118:U:N3	2.03	0.46
1:0:367:G:C3'	1:0:368:A:H5''	2.46	0.46
1:0:745:C:O2'	1:0:746:G:H5'	2.16	0.46
1:0:1741:G:C2	1:0:1742:G:C8	3.03	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1766:U:C5	1:0:1767:G:C8	3.04	0.46
1:0:1770:U:C5	1:0:1775:A:N7	2.84	0.46
1:0:2333:A:N6	1:0:2343:C:N4	2.63	0.46
1:0:2836:U:H2'	1:0:2837:G:O4'	2.15	0.46
3:S:46:VAL:H	3:S:76:LEU:H	1.64	0.46
3:S:93:ARG:O	3:S:93:ARG:CG	2.62	0.46
1:0:199:A:N1	1:0:201:G:N3	2.63	0.46
1:0:239:A:C2	1:0:240:U:O2	2.69	0.46
1:0:753:U:C4	1:0:771:C:O2	2.68	0.46
1:0:764:A:N7	1:0:802:A:C6	2.84	0.46
1:0:801:A:H8	1:0:801:A:OP2	1.98	0.46
1:0:1064:C:C4	1:0:1065:A:N7	2.84	0.46
1:0:1249:G:O2'	1:0:1250:A:P	2.73	0.46
1:0:1292:A:C2'	1:0:1293:A:H5'	2.46	0.46
1:0:1807:A:H1'	1:0:1809:G:C4	2.51	0.46
1:0:1931:G:C4	1:0:1932:G:C8	3.04	0.46
1:0:2068:C:H1'	1:0:2214:G:N2	2.31	0.46
1:0:2155:U:H2'	1:0:2156:A:H5'	1.99	0.46
1:0:2386:G:C6	1:0:2387:U:O4	2.68	0.46
1:0:2429:A:C2	1:0:2430:A:C4	3.04	0.46
1:0:2559:U:C2'	1:0:2560:G:H5'	2.46	0.46
4:W:2:LYS:N	4:W:3:PRO:CD	2.69	0.46
1:0:70:A:C2'	1:0:71:A:OP2	2.64	0.45
1:0:322:A:H1'	1:0:343:A:C4	2.51	0.45
1:0:441:A:C2'	1:0:442:A:C5'	2.94	0.45
1:0:1200:G:H2'	1:0:1201:G:H5'	1.98	0.45
1:0:1439:G:H2'	1:0:1440:G:C8	2.51	0.45
1:0:1453:A:N6	1:0:1568:A:O2'	2.49	0.45
1:0:1659:G:C4	1:0:1660:G:C8	3.04	0.45
1:0:1788:C:C4	1:0:1789:U:C5	3.04	0.45
1:0:1902:A:H3'	1:0:1903:C:C5'	2.45	0.45
1:0:2048:C:C2	1:0:2425:G:N2	2.85	0.45
1:0:2261:G:N1	1:0:2404:A:C2	2.84	0.45
1:0:2293:G:H2'	1:0:2294:U:H6	1.79	0.45
1:0:2293:G:O2'	1:0:2294:U:H5'	2.16	0.45
1:0:2395:C:C2'	1:0:2396:C:H5'	2.47	0.45
1:0:2471:U:O2	1:0:2471:U:H2'	2.17	0.45
1:0:2673:G:C2	1:0:2696:A:C4	3.04	0.45
1:0:2797:G:H2'	1:0:2798:A:C5'	2.46	0.45
1:0:2869:U:H2'	1:0:2870:C:C6	2.50	0.45
2:R:6:ILE:HG22	2:R:29:VAL:HB	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:S:15:HIS:C	3:S:15:HIS:ND1	2.74	0.45
5:1:69:ARG:HG2	5:1:69:ARG:NH2	2.30	0.45
1:0:118:U:C2	1:0:143:A:C6	3.03	0.45
1:0:333:A:H1'	1:0:351:A:N9	2.31	0.45
1:0:577:U:O2	1:0:577:U:H2'	2.17	0.45
1:0:679:C:H2'	1:0:680:U:H6	1.81	0.45
1:0:725:C:HO2'	1:0:726:G:H8	1.59	0.45
1:0:1223:G:H21	1:0:1225:G:N2	2.15	0.45
1:0:1392:U:HO2'	1:0:1393:G:H5'	1.77	0.45
1:0:1754:G:OP1	1:0:1754:G:H4'	2.16	0.45
1:0:2343:C:O2'	1:0:2344:G:H5'	2.15	0.45
1:0:2464:G:O2'	1:0:2465:G:H5'	2.15	0.45
1:0:2621:G:O2'	1:0:2622:G:H5'	2.17	0.45
1:0:2659:C:N4	1:0:2660:C:H41	2.15	0.45
1:0:2741:G:O2'	1:0:2742:G:H5'	2.16	0.45
2:R:8:GLN:HB3	2:R:28:TRP:CB	2.45	0.45
2:R:9:ALA:O	2:R:28:TRP:CD1	2.68	0.45
2:R:40:ASP:C	2:R:40:ASP:OD1	2.58	0.45
1:0:110:U:H6	1:0:110:U:H5'	1.82	0.45
1:0:228:A:H2'	1:0:229:G:C4'	2.46	0.45
1:0:510:G:N2	1:0:512:A:H3'	2.31	0.45
1:0:1199:U:H3'	1:0:1200:G:C5'	2.39	0.45
1:0:1368:G:O2'	1:0:1369:G:H5'	2.16	0.45
1:0:1491:C:H2'	1:0:1492:A:C8	2.52	0.45
1:0:1969:G:N3	1:0:1970:G:C8	2.85	0.45
1:0:2177:U:C4	1:0:2178:U:C5	3.05	0.45
1:0:2265:A:H5''	1:0:2266:A:O4'	2.16	0.45
1:0:2348:A:O2'	1:0:2349:G:H5'	2.17	0.45
1:0:2533:U:H2'	1:0:2534:U:C6	2.50	0.45
1:0:2608:A:HO2'	1:0:2609:G:P	2.39	0.45
1:0:6:A:O2'	1:0:7:G:H5'	2.16	0.45
1:0:179:U:O5'	1:0:179:U:H6	1.99	0.45
1:0:202:A:N6	1:0:203:G:C2	2.84	0.45
1:0:859:U:H4'	1:0:860:U:C6	2.50	0.45
1:0:1162:A:C2	1:0:1163:C:C2	3.04	0.45
1:0:1698:C:H5''	1:0:1699:A:OP2	2.17	0.45
1:0:1872:A:C1'	1:0:2070:G:H5'	2.42	0.45
1:0:2431:C:H2'	1:0:2432:A:O4'	2.17	0.45
1:0:2470:U:O2'	1:0:2549:G:OP1	2.21	0.45
1:0:2721:A:H2'	1:0:2722:C:O4'	2.16	0.45
5:1:62:VAL:O	5:1:66:VAL:HG23	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:117:A:H5'	1:0:118:U:OP1	2.16	0.45
1:0:132:U:O2	1:0:140:G:C2	2.70	0.45
1:0:495:C:N4	1:0:507:A:C2	2.85	0.45
1:0:752:G:C5'	1:0:753:U:OP1	2.56	0.45
1:0:1033:G:O6	1:0:1150:C:C5	2.70	0.45
1:0:1216:G:C2	1:0:1257:U:O2	2.70	0.45
1:0:1444:C:H2'	1:0:1445:A:H8	1.81	0.45
1:0:1722:G:C2	1:0:1723:U:O2	2.70	0.45
1:0:1928:G:H2'	1:0:1929:U:O4'	2.15	0.45
1:0:2199:C:H2'	1:0:2200:G:O4'	2.16	0.45
1:0:2245:A:N3	1:0:2245:A:C2'	2.78	0.45
1:0:2295:C:H2'	1:0:2296:U:C6	2.50	0.45
1:0:2297:G:O2'	1:0:2300:G:O6	2.33	0.45
1:0:2467:A:N1	1:0:2468:G:C5	2.85	0.45
1:0:2477:C:O2'	1:0:2478:C:H5'	2.17	0.45
1:0:2519:C:H2'	1:0:2519:C:O2	2.15	0.45
3:S:18:LYS:N	3:S:18:LYS:CD	2.79	0.45
4:W:63:LYS:HA	4:W:63:LYS:HE3	1.98	0.45
1:0:314:G:H2'	1:0:315:G:C8	2.52	0.45
1:0:369:C:O2'	1:0:370:U:H5'	2.17	0.45
1:0:595:A:N1	1:0:822:G:O2'	2.44	0.45
1:0:825:C:H2'	1:0:826:U:H6	1.82	0.45
1:0:1035:G:N7	1:0:1036:G:N7	2.65	0.45
1:0:1086:C:C4	1:0:1087:C:C2	3.04	0.45
1:0:1207:G:O2'	1:0:1208:A:H5'	2.16	0.45
1:0:1246:G:C4	1:0:1247:U:C6	3.05	0.45
1:0:1448:A:H61	1:0:1574:A:H61	1.65	0.45
1:0:1653:C:H2'	1:0:1654:A:H8	1.80	0.45
1:0:1682:A:H2'	1:0:1683:G:O4'	2.17	0.45
1:0:1979:C:O4'	1:0:1979:C:OP1	2.35	0.45
1:0:2098:G:H3'	1:0:2099:G:H5'	1.98	0.45
1:0:2212:U:N3	1:0:2213:G:C6	2.85	0.45
1:0:2541:U:H2'	1:0:2542:U:O4'	2.17	0.45
1:0:2594:U:C2	1:0:2595:C:C5	3.05	0.45
1:0:2694:G:N2	1:0:2695:C:C2	2.85	0.45
1:0:124:A:H3'	1:0:125:A:C8	2.52	0.45
1:0:168:A:O2'	1:0:169:C:H5'	2.17	0.45
1:0:569:C:C2'	1:0:570:G:H5'	2.46	0.45
1:0:773:G:C2'	1:0:774:A:H5'	2.47	0.45
1:0:1015:U:O4'	1:0:1021:A:C5	2.70	0.45
1:0:1028:G:O2'	1:0:1029:C:H5'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1033:G:C6	1:0:1150:C:C4	3.05	0.45
1:0:1313:U:H1'	1:0:1642:G:C2	2.52	0.45
1:0:1457:A:H2'	1:0:1458:A:C8	2.52	0.45
1:0:1923:U:O2'	1:0:1924:C:C5	2.70	0.45
1:0:1962:C:O2'	1:0:1963:G:H5'	2.17	0.45
1:0:2077:G:O5'	1:0:2077:G:C8	2.70	0.45
1:0:2492:G:C6	1:0:2493:U:O4	2.70	0.45
1:0:2733:A:C2'	1:0:2734:U:H5'	2.46	0.45
1:0:2800:C:C6	1:0:2801:A:C8	3.05	0.45
1:0:2826:C:C2'	1:0:2827:G:C5'	2.88	0.45
4:W:34:ALA:HA	5:1:56:ARG:NH2	2.32	0.45
1:0:140:G:O2'	1:0:141:G:H5'	2.17	0.45
1:0:171:G:O2'	1:0:172:A:H5'	2.17	0.45
1:0:532:A:H2'	1:0:533:C:C6	2.51	0.45
1:0:824:U:O2	1:0:1264:C:C5	2.70	0.45
1:0:1225:G:H2'	1:0:1249:G:N2	2.32	0.45
1:0:1338:G:OP2	1:0:1632:A:N7	2.50	0.45
1:0:2058:U:C3'	1:0:2217:G:H22	2.21	0.45
1:0:2144:C:O2	1:0:2156:A:H2	2.00	0.45
1:0:2237:C:O2'	1:0:2238:G:P	2.74	0.45
1:0:2309:G:H2'	1:0:2310:G:O4'	2.16	0.45
1:0:2348:A:H2'	1:0:2349:G:C8	2.52	0.45
1:0:2359:U:H2'	1:0:2360:C:H6	1.81	0.45
1:0:2672:U:H2'	1:0:2673:G:C8	2.52	0.45
1:0:2839:G:C2	1:0:2840:U:O2	2.70	0.45
5:1:43:PHE:CD1	5:1:43:PHE:N	2.84	0.45
1:0:36:G:N2	1:0:37:C:C2	2.85	0.45
1:0:71:A:N6	1:0:110:U:H4'	2.31	0.45
1:0:171:G:H2'	1:0:172:A:O4'	2.17	0.45
1:0:202:A:N6	1:0:203:G:N2	2.64	0.45
1:0:592:G:C2'	1:0:593:C:O5'	2.65	0.45
1:0:615:C:N4	1:0:631:G:H21	2.14	0.45
1:0:616:U:C4	1:0:617:U:H5	2.35	0.45
1:0:746:G:C8	1:0:774:A:N6	2.85	0.45
1:0:778:G:H5'	1:0:778:G:H8	1.82	0.45
1:0:782:U:C2	1:0:783:G:C8	3.05	0.45
1:0:876:A:O2'	1:0:877:G:H5'	2.16	0.45
1:0:956:A:C5	1:0:2427:A:C2	3.03	0.45
1:0:1693:A:N6	1:0:1694:A:C6	2.85	0.45
1:0:1701:C:O2	1:0:1701:C:H2'	2.17	0.45
1:0:1720:G:C2	1:0:1721:G:C8	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1766:U:H6	1:0:1766:U:H3'	1.82	0.45
1:0:1786:C:O5'	1:0:1786:C:H6	2.00	0.45
1:0:1949:A:N6	1:0:2581:A:H61	2.14	0.45
1:0:2518:C:O2'	1:0:2519:C:H5'	2.17	0.45
2:R:20:MET:CE	2:R:92:ALA:HA	2.45	0.45
2:R:31:PRO:C	2:R:76:LYS:CE	2.88	0.45
1:0:159:A:C5	1:0:160:C:C4	3.05	0.45
1:0:188:G:C6	1:0:189:A:C6	3.05	0.45
1:0:208:C:C2'	1:0:209:G:H5'	2.47	0.45
1:0:463:C:C2	1:0:465:C:C5	3.04	0.45
1:0:543:G:C5	1:0:544:U:C4	3.05	0.45
1:0:575:U:H4'	1:0:822:G:OP2	2.17	0.45
1:0:610:G:C6	1:0:611:C:C4	3.05	0.45
1:0:614:G:H2'	1:0:615:C:H6	1.82	0.45
1:0:705:C:H2'	1:0:706:A:H8	1.82	0.45
1:0:717:G:H2'	1:0:739:G:N2	2.14	0.45
1:0:929:A:C2	1:0:930:A:C1'	3.00	0.45
1:0:961:G:H2'	1:0:962:C:O4'	2.17	0.45
1:0:1177:U:N3	1:0:1197:U:O2	2.50	0.45
1:0:1195:U:H2'	1:0:1196:G:C8	2.52	0.45
1:0:1625:A:C5	1:0:1632:A:H2	2.34	0.45
1:0:1693:A:H2'	1:0:1694:A:H5'	1.99	0.45
1:0:1782:A:N6	1:0:1820:G:O2'	2.50	0.45
1:0:1938:U:O3'	1:0:1939:U:H6	2.00	0.45
1:0:2336:G:C4	1:0:2338:C:OP2	2.69	0.45
2:R:93:GLY:O	5:1:50:ARG:NH2	2.40	0.45
1:0:82:G:N2	1:0:101:A:OP2	2.45	0.44
1:0:593:C:O5'	1:0:593:C:H6	2.00	0.44
1:0:756:C:H2'	1:0:757:U:H6	1.82	0.44
1:0:1016:C:C2	1:0:1017:C:C5	3.05	0.44
1:0:1177:U:N3	1:0:1196:G:N1	2.65	0.44
1:0:1314:A:C2	1:0:1642:G:N2	2.81	0.44
1:0:1314:A:C8	1:0:1316:G:C8	3.05	0.44
1:0:1433:A:N7	1:0:1594:U:O4	2.50	0.44
1:0:1672:A:C6	1:0:1673:C:C2	3.05	0.44
1:0:1704:G:C6	1:0:1705:U:C4	3.05	0.44
1:0:1782:A:N6	1:0:1820:G:H2'	2.31	0.44
1:0:1859:A:C2'	1:0:1860:A:O4'	2.64	0.44
1:0:1998:A:O5'	1:0:1998:A:H8	2.00	0.44
1:0:2038:C:H2'	1:0:2483:U:H5'	1.98	0.44
1:0:2201:G:O2'	1:0:2202:G:H5'	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2275:U:OP1	1:0:2275:U:C5	2.70	0.44
1:0:2473:G:N3	1:0:2474:G:C8	2.85	0.44
1:0:2659:C:N3	1:0:2660:C:C5	2.85	0.44
1:0:2665:G:C6	1:0:2666:U:N3	2.85	0.44
1:0:2842:C:H6	1:0:2842:C:OP1	2.00	0.44
2:R:55:THR:OG1	2:R:76:LYS:HD3	2.17	0.44
3:S:98:ILE:HG22	3:S:99:VAL:N	2.32	0.44
1:0:60:A:OP2	4:W:47:ARG:NH2	2.51	0.44
1:0:120:G:O2'	1:0:121:G:H5'	2.17	0.44
1:0:308:C:C2'	1:0:309:G:H5'	2.47	0.44
1:0:602:C:C4	1:0:603:C:C5	3.05	0.44
1:0:700:C:N3	1:0:801:A:O4'	2.50	0.44
1:0:838:A:H2'	1:0:839:U:O4'	2.18	0.44
1:0:873:U:O2	1:0:2247:A:C5'	2.62	0.44
1:0:875:G:H2'	1:0:876:A:H5'	1.99	0.44
1:0:1016:C:C6	1:0:1154:A:C1'	2.99	0.44
1:0:1223:G:C6	1:0:1250:A:N7	2.85	0.44
1:0:1244:U:H2'	1:0:1245:G:C8	2.51	0.44
1:0:1312:G:N2	1:0:1657:A:C8	2.86	0.44
1:0:1369:G:N1	1:0:1370:U:C2	2.85	0.44
1:0:1586:A:C4	1:0:1587:A:C8	3.05	0.44
1:0:1595:A:O2'	1:0:1596:A:H5'	2.17	0.44
1:0:1624:A:O2'	1:0:1626:A:OP2	2.33	0.44
1:0:1686:A:H5''	1:0:2529:G:OP1	2.18	0.44
1:0:2051:U:H3'	1:0:2051:U:H6	1.81	0.44
1:0:2125:C:N4	1:0:2126:U:H5	2.15	0.44
1:0:2148:G:H2'	1:0:2149:G:O4'	2.17	0.44
1:0:2150:U:O5'	1:0:2150:U:H6	2.00	0.44
1:0:2196:U:C5	1:0:2197:U:C5	3.05	0.44
1:0:2220:A:C2	1:0:2221:G:C5	3.05	0.44
1:0:2602:G:C2	1:0:2603:G:N7	2.86	0.44
1:0:2793:G:C6	1:0:2794:G:N7	2.84	0.44
1:0:52:A:N6	1:0:115:G:O2'	2.49	0.44
1:0:198:A:H62	1:0:440:U:H3	1.65	0.44
1:0:198:A:N7	1:0:243:G:C6	2.85	0.44
1:0:234:C:C5	1:0:235:C:C5	3.05	0.44
1:0:826:U:O2	1:0:1238:A:H2	2.00	0.44
1:0:940:G:C6	1:0:941:U:C2	3.06	0.44
1:0:1227:A:O2'	1:0:1228:G:H5'	2.17	0.44
1:0:1257:U:O2'	1:0:1258:G:H5'	2.18	0.44
1:0:1337:G:H3'	1:0:1338:G:H5'	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1469:U:H5'	1:0:1470:G:C8	2.52	0.44
1:0:1516:A:C5	1:0:1517:C:C5	3.05	0.44
1:0:1541:G:N2	1:0:1562:G:N2	2.62	0.44
1:0:1686:A:H5''	1:0:1687:C:OP2	2.18	0.44
1:0:1978:U:C4	1:0:1979:C:C5	3.05	0.44
1:0:2186:G:O2'	1:0:2187:A:H5'	2.17	0.44
1:0:2253:A:N6	1:0:2255:G:N3	2.66	0.44
1:0:2288:A:H2'	1:0:2289:A:C8	2.53	0.44
1:0:2375:G:C2	1:0:2400:G:C2	3.05	0.44
1:0:2433:G:C2'	1:0:2434:G:H5'	2.47	0.44
1:0:2449:G:O2'	1:0:2450:A:H5'	2.17	0.44
1:0:2474:G:C5	1:0:2475:C:C5	3.05	0.44
1:0:2501:U:O2'	1:0:2626:U:H5''	2.17	0.44
1:0:2810:A:H2	1:0:2853:U:OP2	2.00	0.44
4:W:31:GLN:HB3	4:W:36:GLN:HB2	1.98	0.44
1:0:203:G:C2	1:0:204:A:C2	3.05	0.44
1:0:630:G:H8	1:0:630:G:O5'	2.00	0.44
1:0:642:A:N6	1:0:643:A:C2	2.85	0.44
1:0:831:G:O2'	1:0:832:A:H5''	2.17	0.44
1:0:973:U:C2	1:0:974:U:C5	3.06	0.44
1:0:1145:C:N3	1:0:1149:G:C6	2.85	0.44
1:0:1188:A:H2'	1:0:1189:G:O4'	2.17	0.44
1:0:1469:U:H5'	1:0:1470:G:N7	2.32	0.44
1:0:1469:U:OP2	1:0:1471:G:OP2	2.36	0.44
1:0:1882:G:N2	1:0:1885:C:N4	2.56	0.44
1:0:2010:G:N2	1:0:2020:G:C4	2.85	0.44
1:0:2219:U:O2'	1:0:2220:A:H5'	2.18	0.44
1:0:2596:C:H2'	1:0:2597:G:H8	1.82	0.44
1:0:2661:G:O6	1:0:2708:U:O2'	2.27	0.44
1:0:2786:G:N2	1:0:2787:A:N3	2.65	0.44
1:0:2792:C:C2	1:0:2805:G:C2	3.05	0.44
2:R:8:GLN:O	4:W:29:ARG:NH1	2.50	0.44
2:R:52:GLY:O	2:R:80:VAL:HA	2.18	0.44
1:0:45:C:OP2	1:0:192:G:H8	1.99	0.44
1:0:100:G:C6	3:S:102:LYS:HD3	2.53	0.44
1:0:428:A:C2'	1:0:429:C:H5'	2.48	0.44
1:0:473:C:C2	1:0:479:G:C2	3.05	0.44
1:0:754:G:N1	1:0:770:U:C2	2.86	0.44
1:0:1054:C:C2'	1:0:1055:A:H4'	2.47	0.44
1:0:1073:G:H2'	1:0:1073:G:N3	2.32	0.44
1:0:1086:C:N3	1:0:1087:C:C2	2.86	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1159:U:O2'	1:0:1160:C:H5'	2.17	0.44
1:0:1199:U:O5'	1:0:1200:G:C5'	2.66	0.44
1:0:1329:U:O2'	1:0:1330:G:H5'	2.17	0.44
1:0:1673:C:O2'	1:0:1674:C:H5'	2.18	0.44
1:0:2415:G:H21	1:0:2577:A:H2	1.57	0.44
1:0:2826:C:C4	1:0:2827:G:N7	2.86	0.44
1:0:19:C:H5'	1:0:563:U:OP1	2.18	0.44
1:0:116:A:H2'	1:0:118:U:H5	1.82	0.44
1:0:233:A:O2'	1:0:234:C:H5'	2.17	0.44
1:0:491:A:H2	1:0:509:U:O2	1.99	0.44
1:0:543:G:C2	1:0:544:U:C2	3.05	0.44
1:0:565:A:H2'	1:0:566:U:H6	1.83	0.44
1:0:799:C:H2'	1:0:800:U:O4'	2.18	0.44
1:0:880:C:O5'	1:0:880:C:H6	2.00	0.44
1:0:1016:C:O2	1:0:1016:C:H2'	2.18	0.44
1:0:1140:A:C2	1:0:2548:G:N3	2.86	0.44
1:0:1207:G:C2	1:0:1208:A:C4	3.06	0.44
1:0:1235:C:O2'	1:0:1236:G:H5'	2.18	0.44
1:0:1365:U:H1'	1:0:1586:A:C2	2.52	0.44
1:0:1514:C:H5'	1:0:1593:C:H5''	2.00	0.44
1:0:1579:G:O2'	1:0:1580:C:H5'	2.16	0.44
1:0:1920:A:C6	1:0:1922:U:C5	3.06	0.44
1:0:2555:G:N3	1:0:2555:G:C2'	2.81	0.44
3:S:16:PHE:C	3:S:16:PHE:HD1	2.26	0.44
4:W:46:LEU:HD23	4:W:46:LEU:HA	1.76	0.44
1:0:58:C:N4	1:0:59:G:N3	2.66	0.44
1:0:404:A:C5	1:0:405:C:C4	3.05	0.44
1:0:633:G:H8	1:0:633:G:O5'	2.01	0.44
1:0:817:A:H5''	1:0:818:G:OP1	2.18	0.44
1:0:959:C:H2'	1:0:960:U:C6	2.52	0.44
1:0:1007:A:C5	1:0:1171:A:C2	3.05	0.44
1:0:1038:U:O2'	1:0:1039:A:H5'	2.18	0.44
1:0:1303:U:H2'	1:0:1304:U:C6	2.53	0.44
1:0:1938:U:C2'	1:0:1939:U:H5'	2.48	0.44
1:0:1974:U:C2'	1:0:1975:G:C5'	2.96	0.44
1:0:2016:A:N6	1:0:2019:C:C2	2.86	0.44
1:0:2098:G:O6	1:0:2100:A:OP1	2.36	0.44
1:0:2576:G:C6	1:0:2577:A:N6	2.86	0.44
1:0:2749:A:C2'	1:0:2750:G:H5'	2.47	0.44
1:0:67:G:C2	1:0:72:A:N3	2.85	0.44
1:0:754:G:C2'	1:0:755:C:O5'	2.65	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:829:C:C4	1:0:1206:G:N1	2.86	0.44
1:0:1142:G:C2'	1:0:1143:A:O5'	2.66	0.44
1:0:1153:A:C5	1:0:1155:G:O6	2.71	0.44
1:0:1198:C:H5''	1:0:1199:U:C4'	2.48	0.44
1:0:1459:U:H6	1:0:1459:U:P	2.41	0.44
1:0:1920:A:H2'	1:0:1921:A:C8	2.53	0.44
1:0:1938:U:O2'	1:0:1939:U:OP1	2.26	0.44
1:0:1969:G:C4	1:0:1970:G:C8	3.06	0.44
1:0:2454:C:H42	1:0:2508:G:N2	2.10	0.44
1:0:2603:G:N2	1:0:2604:G:N9	2.66	0.44
1:0:2706:U:O2	1:0:2706:U:C2'	2.66	0.44
1:0:68:C:O2	1:0:68:C:C2'	2.65	0.44
1:0:137:A:H2'	1:0:138:G:O4'	2.18	0.44
1:0:218:A:N1	1:0:232:A:H5''	2.33	0.44
1:0:344:G:N2	1:0:345:U:H1'	2.33	0.44
1:0:394:U:H2'	1:0:395:G:C8	2.50	0.44
1:0:466:A:O2'	1:0:467:U:OP2	2.34	0.44
1:0:986:A:H2	1:0:1001:A:C1'	2.31	0.44
1:0:1168:G:OP2	1:0:1169:C:OP2	2.34	0.44
1:0:1305:C:O2'	1:0:1306:U:H5'	2.18	0.44
1:0:2002:A:C2'	1:0:2003:A:O5'	2.66	0.44
1:0:2198:U:C2	1:0:2199:C:O4'	2.71	0.44
1:0:2395:C:H2'	1:0:2396:C:H5'	1.99	0.44
1:0:2548:G:C2	1:0:2549:G:N7	2.86	0.44
1:0:2601:C:H1'	1:0:2799:C:H42	1.83	0.44
1:0:2687:G:C2'	1:0:2688:G:H5'	2.47	0.44
1:0:2726:U:C2	1:0:2739:G:N2	2.86	0.44
2:R:17:TYR:OH	2:R:94:GLN:C	2.61	0.44
1:0:143:A:H2'	1:0:144:U:C6	2.52	0.43
1:0:246:C:N3	1:0:247:A:C5	2.86	0.43
1:0:405:C:C2'	1:0:406:G:H8	2.13	0.43
1:0:836:G:H2'	1:0:837:U:C6	2.53	0.43
1:0:1200:G:C2'	1:0:1201:G:H5'	2.48	0.43
1:0:1209:G:C2	1:0:1210:C:C5	3.07	0.43
1:0:1295:U:C5	1:0:1296:G:C5	3.06	0.43
1:0:1339:U:O2'	1:0:1993:G:O2'	2.32	0.43
1:0:1480:G:H2'	1:0:1481:U:O4'	2.17	0.43
1:0:1511:A:C2	1:0:1594:U:H1'	2.47	0.43
1:0:1824:C:H2'	1:0:1825:C:H5'	1.99	0.43
1:0:2081:U:H3	1:0:2174:G:H1	1.64	0.43
1:0:2125:C:C3'	1:0:2126:U:C5'	2.96	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2170:C:H2'	1:0:2171:U:H4'	2.00	0.43
1:0:2198:U:H2'	1:0:2199:C:H4'	1.98	0.43
1:0:2228:U:H5''	1:0:2229:G:OP2	2.18	0.43
1:0:2767:C:C4	1:0:2768:C:C5	3.06	0.43
2:R:29:VAL:CG2	2:R:76:LYS:HD2	2.47	0.43
5:1:27:TYR:OH	5:1:63:GLU:HB3	2.18	0.43
1:0:15:G:C6	1:0:16:G:C5	3.06	0.43
1:0:126:C:H3'	1:0:126:C:C6	2.53	0.43
1:0:168:A:O2'	1:0:169:C:O4'	2.32	0.43
1:0:214:C:C2	1:0:215:G:C8	3.06	0.43
1:0:470:U:O4	1:0:481:A:N7	2.51	0.43
1:0:589:C:N4	1:0:590:C:N4	2.66	0.43
1:0:794:A:H4'	1:0:795:A:C8	2.53	0.43
1:0:832:A:C2	1:0:833:A:H1'	2.54	0.43
1:0:976:C:HO2'	1:0:977:G:H5'	1.80	0.43
1:0:1061:A:N1	1:0:2731:G:O6	2.51	0.43
1:0:1366:A:C6	1:0:1367:A:C6	3.06	0.43
1:0:1441:A:HO2'	1:0:1442:C:H6	1.59	0.43
1:0:1466:C:H6	1:0:1466:C:H5''	1.83	0.43
1:0:1685:A:O2'	1:0:1686:A:P	2.76	0.43
1:0:1715:A:O2'	1:0:1716:G:C3'	2.66	0.43
1:0:1807:A:H1'	1:0:1809:G:N9	2.33	0.43
1:0:1827:G:H1'	1:0:1914:U:N3	2.33	0.43
1:0:1933:G:H2'	1:0:1934:U:C6	2.53	0.43
1:0:2058:U:H3'	1:0:2217:G:H1	1.83	0.43
1:0:2253:A:N6	1:0:2255:G:C4	2.86	0.43
1:0:2380:U:H2'	1:0:2381:A:C5'	2.47	0.43
1:0:2422:C:H2'	1:0:2423:G:H8	1.82	0.43
1:0:2488:G:C2	1:0:2489:C:C6	3.06	0.43
1:0:62:U:C3'	1:0:63:A:H8	2.31	0.43
1:0:158:A:C2	1:0:159:A:C4	3.07	0.43
1:0:172:A:C6	1:0:175:C:H5	2.36	0.43
1:0:179:U:H2'	1:0:180:C:C6	2.53	0.43
1:0:300:C:H2'	1:0:301:C:C5'	2.48	0.43
1:0:311:A:H1'	1:0:330:C:H1'	2.00	0.43
1:0:713:G:H8	1:0:713:G:H5''	1.84	0.43
1:0:777:A:C2	1:0:794:A:C2	3.06	0.43
1:0:956:A:O2'	1:0:957:G:OP1	2.28	0.43
1:0:968:C:H3'	1:0:968:C:H6	1.83	0.43
1:0:998:C:H2'	1:0:999:A:O5'	2.17	0.43
1:0:1142:G:O2'	1:0:1143:A:O5'	2.35	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1236:G:C6	1:0:1240:G:C6	3.07	0.43
1:0:1262:U:C6	1:0:1262:U:C3'	3.01	0.43
1:0:1289:A:O2'	1:0:1290:A:H5'	2.18	0.43
1:0:1299:A:O2'	1:0:1300:A:OP1	2.35	0.43
1:0:1368:G:C6	1:0:1369:G:C5	3.06	0.43
1:0:1416:A:H2'	1:0:1417:C:C6	2.52	0.43
1:0:1717:A:C2'	1:0:1718:A:H5'	2.48	0.43
1:0:1964:A:H5''	1:0:1965:U:P	2.58	0.43
1:0:2185:U:H2'	1:0:2186:G:C8	2.53	0.43
1:0:2431:C:N4	1:0:2432:A:C6	2.87	0.43
1:0:2717:G:O2'	1:0:2718:A:H5'	2.19	0.43
1:0:2863:U:C2	1:0:2864:C:C5	3.06	0.43
3:S:14:LEU:HD23	3:S:14:LEU:HA	1.83	0.43
3:S:16:PHE:C	3:S:16:PHE:CD1	2.95	0.43
5:1:90:THR:CB	5:1:107:LYS:NZ	2.70	0.43
1:0:53:G:N2	1:0:54:G:H1'	2.34	0.43
1:0:128:C:H2'	1:0:129:A:C5'	2.37	0.43
1:0:197:G:N3	1:0:210:A:C2	2.79	0.43
1:0:326:A:N6	1:0:327:C:N4	2.66	0.43
1:0:339:U:C6	1:0:339:U:O5'	2.71	0.43
1:0:356:A:C2	1:0:357:A:N6	2.86	0.43
1:0:929:A:C3'	1:0:930:A:H5''	2.35	0.43
1:0:1127:C:C2	1:0:1128:G:C8	3.07	0.43
1:0:1385:C:O2	1:0:1386:A:C1'	2.66	0.43
1:0:1385:C:N3	1:0:1386:A:C5	2.87	0.43
1:0:1462:C:C2	1:0:1480:G:N2	2.87	0.43
1:0:1489:C:H3'	1:0:1490:U:C5'	2.47	0.43
1:0:1629:G:C6	1:0:1635:G:O6	2.71	0.43
1:0:1715:A:O2'	1:0:1716:G:C5'	2.66	0.43
1:0:1754:G:H21	1:0:1756:C:H5''	1.70	0.43
1:0:1783:G:O2'	1:0:1784:C:H5'	2.18	0.43
1:0:1811:A:H1'	1:0:1813:A:C4	2.54	0.43
1:0:1919:A:H2	1:0:1925:C:N4	2.17	0.43
1:0:2231:G:O2'	1:0:2232:G:H5'	2.18	0.43
1:0:2388:G:C4	1:0:2389:G:C8	3.07	0.43
1:0:2477:C:O2	1:0:2477:C:H2'	2.18	0.43
1:0:2733:A:H2'	1:0:2734:U:H5'	2.00	0.43
1:0:45:C:H2'	1:0:46:C:H6	1.83	0.43
1:0:55:A:C2	1:0:56:C:C2	3.06	0.43
1:0:75:C:OP1	4:W:48:ARG:NE	2.51	0.43
1:0:211:U:H2'	1:0:212:U:H5'	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:304:A:H3'	1:0:305:A:H5''	2.01	0.43
1:0:462:G:O6	1:0:465:C:OP1	2.37	0.43
1:0:523:A:H4'	1:0:1230:C:H5'	2.01	0.43
1:0:534:U:C2	1:0:535:U:C5	3.06	0.43
1:0:1167:A:OP1	1:0:1167:A:O4'	2.36	0.43
1:0:1287:A:C2	1:0:1310:C:O2	2.71	0.43
1:0:1355:A:OP1	1:0:1411:C:OP1	2.36	0.43
1:0:1773:C:O2'	1:0:1774:A:H5'	2.17	0.43
1:0:1792:C:H6	1:0:1792:C:O5'	2.02	0.43
1:0:2629:U:O2	1:0:2650:G:C2	2.72	0.43
3:S:45:LYS:CG	3:S:75:ALA:CB	2.91	0.43
1:0:55:A:N6	1:0:69:G:N1	2.66	0.43
1:0:139:A:C2	1:0:140:G:C5	3.06	0.43
1:0:317:U:O2'	1:0:1224:A:N7	2.52	0.43
1:0:329:C:O2'	1:0:330:C:H5'	2.18	0.43
1:0:525:A:C2'	1:0:526:C:H5'	2.48	0.43
1:0:537:C:O4'	1:0:2759:U:C2	2.72	0.43
1:0:630:G:H5''	1:0:631:G:OP2	2.18	0.43
1:0:644:A:H2'	1:0:645:G:O4'	2.19	0.43
1:0:793:G:H2'	1:0:795:A:C5	2.54	0.43
1:0:1628:C:C4	1:0:1629:G:N7	2.86	0.43
1:0:1685:A:HO2'	1:0:1687:C:H5	1.65	0.43
1:0:1763:G:N2	1:0:1765:C:OP1	2.49	0.43
1:0:2165:A:H2'	1:0:2166:G:C8	2.54	0.43
1:0:2219:U:H2'	1:0:2220:A:H8	1.83	0.43
1:0:2549:G:N2	1:0:2550:C:H1'	2.33	0.43
1:0:2585:C:C2'	1:0:2586:G:C5'	2.96	0.43
1:0:2635:U:O2	1:0:2635:U:H2'	2.18	0.43
1:0:2728:A:C8	1:0:2728:A:H3'	2.53	0.43
1:0:2782:G:H2'	1:0:2783:U:O5'	2.17	0.43
1:0:2799:C:C4	1:0:2800:C:N3	2.86	0.43
1:0:188:G:C2	1:0:189:A:C4	3.07	0.43
1:0:581:A:H2'	1:0:582:G:O4'	2.19	0.43
1:0:706:A:H1'	1:0:1367:A:H1'	2.00	0.43
1:0:855:G:C6	1:0:856:A:C6	3.07	0.43
1:0:940:G:H2'	1:0:941:U:H4'	1.98	0.43
1:0:971:A:C6	1:0:973:U:H1'	2.54	0.43
1:0:971:A:C2	1:0:2475:C:H1'	2.54	0.43
1:0:1081:A:H3'	1:0:1108:U:H4'	2.01	0.43
1:0:1223:G:C5	1:0:1250:A:N6	2.87	0.43
1:0:1621:C:H4'	1:0:1626:A:C6	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1621:C:H4'	1:0:1626:A:N6	2.34	0.43
1:0:1885:C:C5	1:0:1886:G:C8	3.06	0.43
1:0:1887:G:C2	1:0:1911:A:H2	2.37	0.43
1:0:1913:G:O2'	1:0:1914:U:H5	2.01	0.43
1:0:2021:G:C2	1:0:2022:C:C2	3.07	0.43
1:0:2053:G:C4	1:0:2054:A:C8	3.06	0.43
1:0:2218:G:H8	1:0:2218:G:O5'	2.02	0.43
1:0:2227:C:H2'	1:0:2228:U:H5'	2.00	0.43
1:0:2228:U:H5''	1:0:2229:G:P	2.58	0.43
1:0:2450:A:N6	1:0:2451:G:C2	2.87	0.43
1:0:2697:G:O2'	1:0:2698:G:H5'	2.18	0.43
1:0:2758:A:C2'	1:0:2759:U:OP1	2.66	0.43
1:0:2817:A:N6	1:0:2818:G:C6	2.87	0.43
1:0:2873:G:C6	1:0:2874:A:C5	3.06	0.43
1:0:35:G:C2'	1:0:36:G:O5'	2.66	0.43
1:0:746:G:N7	1:0:774:A:C5	2.86	0.43
1:0:833:A:H2'	1:0:834:A:O4'	2.18	0.43
1:0:912:A:C8	1:0:912:A:H3'	2.54	0.43
1:0:1081:A:N6	1:0:1107:A:C2	2.86	0.43
1:0:1345:G:C6	1:0:1625:A:C5	3.06	0.43
1:0:1356:G:C6	1:0:1357:U:O4	2.71	0.43
1:0:1588:A:C4	1:0:1589:G:N7	2.87	0.43
1:0:1737:G:H2'	1:0:1738:U:C6	2.54	0.43
1:0:1768:U:N3	1:0:1769:U:C4	2.87	0.43
1:0:1920:A:N1	1:0:1922:U:C5	2.87	0.43
1:0:1964:A:H3'	1:0:1965:U:H5'	1.98	0.43
1:0:2495:G:C2	1:0:2496:C:C2	3.07	0.43
1:0:2661:G:H2'	1:0:2662:C:O5'	2.19	0.43
1:0:2811:G:O6	1:0:2812:A:N6	2.52	0.43
1:0:2817:A:C2'	1:0:2818:G:H5'	2.49	0.43
1:0:2832:G:H2'	1:0:2834:A:OP2	2.19	0.43
5:1:24:ASN:ND2	5:1:25:ARG:NH2	2.66	0.43
1:0:201:G:H2'	1:0:202:A:H8	1.84	0.43
1:0:353:G:O2'	1:0:354:C:H5'	2.18	0.43
1:0:389:G:H2'	1:0:390:U:C6	2.53	0.43
1:0:521:U:OP2	1:0:522:G:O6	2.37	0.43
1:0:627:A:H2'	1:0:628:A:H8	1.83	0.43
1:0:770:U:C2'	1:0:771:C:H5'	2.49	0.43
1:0:818:G:N1	1:0:2051:U:OP1	2.45	0.43
1:0:885:A:H2'	1:0:886:A:C8	2.54	0.43
1:0:1030:U:C4	1:0:1153:A:N6	2.87	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1096:A:N3	1:0:1096:A:C3'	2.80	0.43
1:0:1200:G:H5''	1:0:1200:G:C8	2.45	0.43
1:0:1336:G:O2'	1:0:1337:G:H5'	2.19	0.43
1:0:1391:A:O2'	1:0:1392:U:C5	2.71	0.43
1:0:1854:G:O2'	1:0:1855:G:C5'	2.64	0.43
1:0:2052:G:O2'	1:0:2053:G:H5'	2.18	0.43
1:0:2347:C:C2'	1:0:2348:A:H5'	2.49	0.43
1:0:2429:A:N6	1:0:2480:C:O2	2.52	0.43
1:0:2549:G:H2'	1:0:2550:C:H6	1.83	0.43
1:0:2579:A:C2	1:0:2580:C:C4	3.06	0.43
1:0:2825:A:C2	1:0:2826:C:C2	3.07	0.43
1:0:2844:G:H2'	1:0:2845:C:O5'	2.19	0.43
1:0:43:A:H8	1:0:43:A:O5'	2.02	0.43
1:0:86:U:H1'	1:0:95:G:H22	1.80	0.43
1:0:93:A:H2	4:W:40:PRO:HG2	1.83	0.43
1:0:658:G:H1'	1:0:2330:G:OP1	2.18	0.43
1:0:703:A:O2'	1:0:793:G:OP1	2.34	0.43
1:0:761:G:OP1	1:0:2591:C:N4	2.51	0.43
1:0:818:G:H5'	1:0:819:C:C5	2.54	0.43
1:0:855:G:C6	1:0:856:A:C5	3.07	0.43
1:0:979:A:H2'	1:0:980:G:H8	1.83	0.43
1:0:1011:A:C8	1:0:1165:G:N2	2.87	0.43
1:0:1142:G:H2'	1:0:1143:A:C8	2.53	0.43
1:0:1412:C:C5'	2:R:22:ARG:HH22	2.32	0.43
1:0:1501:C:O2'	1:0:1502:G:H5'	2.19	0.43
1:0:1545:G:H2'	1:0:1546:C:O4'	2.19	0.43
1:0:1775:A:H4'	1:0:1776:A:C5'	2.49	0.43
1:0:1794:A:C2	1:0:1814:G:N3	2.81	0.43
1:0:1922:U:O4	1:0:1950:C:H1'	2.18	0.43
1:0:2216:G:H2'	1:0:2218:G:O6	2.18	0.43
1:0:2241:U:H4'	1:0:2307:A:H2	1.82	0.43
1:0:2286:G:N3	1:0:2286:G:C2'	2.81	0.43
1:0:2364:C:OP1	1:0:2365:U:OP2	2.37	0.43
1:0:2409:A:H2'	1:0:2410:U:O5'	2.19	0.43
1:0:2603:G:N2	1:0:2604:G:C4	2.87	0.43
1:0:2616:U:C2	1:0:2762:G:N2	2.86	0.43
1:0:2699:G:O2'	1:0:2700:U:H5'	2.19	0.43
3:S:13:LYS:H	3:S:13:LYS:HG2	1.71	0.43
1:0:112:U:C2	1:0:113:C:C6	3.06	0.42
1:0:201:G:O2'	1:0:202:A:H5'	2.19	0.42
1:0:213:C:H42	1:0:239:A:N6	2.17	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:310:A:H2'	1:0:311:A:O4'	2.19	0.42
1:0:481:A:C6	1:0:482:A:C6	3.06	0.42
1:0:614:G:N2	1:0:634:G:C2	2.84	0.42
1:0:870:C:O2	1:0:933:G:C2	2.72	0.42
1:0:876:A:H2'	1:0:877:G:O4'	2.19	0.42
1:0:1002:C:N4	1:0:1003:C:N4	2.67	0.42
1:0:1153:A:O2'	1:0:1154:A:H3'	2.19	0.42
1:0:1393:G:N2	1:0:1586:A:N1	2.67	0.42
1:0:1724:C:C4	1:0:1747:G:O6	2.71	0.42
1:0:1773:C:N3	1:0:2565:C:N4	2.56	0.42
1:0:2053:G:C2	1:0:2421:C:C2	3.07	0.42
1:0:2063:A:C2	1:0:2064:U:C2	3.07	0.42
1:0:2482:A:O2'	1:0:2483:U:P	2.76	0.42
1:0:2700:U:H5'	1:0:2700:U:C6	2.53	0.42
5:1:107:LYS:HD3	5:1:107:LYS:N	2.23	0.42
1:0:69:G:H3'	1:0:111:G:O2'	2.19	0.42
1:0:126:C:H6	1:0:126:C:H5''	1.84	0.42
1:0:193:A:N1	1:0:194:G:N3	2.66	0.42
1:0:229:G:O2'	1:0:230:C:H5'	2.19	0.42
1:0:339:U:H6	1:0:339:U:O5'	2.02	0.42
1:0:567:G:C5	1:0:568:G:N7	2.87	0.42
1:0:616:U:C5	1:0:630:G:C6	3.07	0.42
1:0:762:A:H4'	1:0:1284:G:N3	2.35	0.42
1:0:765:C:H41	1:0:1772:C:H1'	1.84	0.42
1:0:960:U:H2'	1:0:961:G:H8	1.84	0.42
1:0:976:C:H1'	1:0:2252:A:C2	2.54	0.42
1:0:1006:C:H6	1:0:1006:C:C3'	2.20	0.42
1:0:1011:A:N6	1:0:1166:A:C8	2.88	0.42
1:0:1296:G:H22	1:0:1299:A:H5''	1.83	0.42
1:0:1374:G:C2	1:0:1375:C:C6	3.07	0.42
1:0:1632:A:O2'	1:0:1633:C:P	2.77	0.42
1:0:1780:A:C6	1:0:1781:C:C4	3.07	0.42
1:0:1794:A:C8	1:0:1795:C:C6	3.07	0.42
1:0:1811:A:C2'	1:0:1812:U:OP2	2.67	0.42
1:0:1949:A:N3	1:0:2572:U:C4'	2.82	0.42
1:0:2749:A:H2'	1:0:2750:G:H5'	2.00	0.42
1:0:2859:U:C4	1:0:2860:C:O2	2.73	0.42
1:0:37:C:H2'	1:0:38:G:H8	1.84	0.42
1:0:69:G:C2	1:0:112:U:C4	3.07	0.42
1:0:94:C:C2'	1:0:95:G:O5'	2.67	0.42
1:0:306:G:O2'	1:0:307:C:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:542:A:H2'	1:0:543:G:H5'	2.01	0.42
1:0:573:C:H2'	1:0:574:C:O4'	2.19	0.42
1:0:594:G:H3'	1:0:1264:C:H42	1.84	0.42
1:0:646:C:O2	1:0:650:U:H4'	2.19	0.42
1:0:773:G:H2'	1:0:774:A:O4'	2.19	0.42
1:0:797:A:N7	1:0:805:G:N3	2.67	0.42
1:0:846:A:H2'	1:0:847:C:H6	1.79	0.42
1:0:873:U:O2	1:0:2247:A:O4'	2.38	0.42
1:0:876:A:C2	1:0:877:G:C4	3.06	0.42
1:0:1251:G:C2	1:0:1252:C:C2	3.06	0.42
1:0:1299:A:O2'	1:0:1300:A:P	2.76	0.42
1:0:1448:A:H2'	1:0:1449:C:C6	2.55	0.42
1:0:1460:G:H2'	1:0:1461:C:H6	1.85	0.42
1:0:1908:C:H5	1:0:1912:G:O6	2.02	0.42
1:0:2014:A:C6	1:0:2477:C:C1'	3.03	0.42
1:0:2143:G:H2'	1:0:2144:C:C6	2.54	0.42
1:0:2200:G:C6	1:0:2201:G:C5	3.08	0.42
1:0:2325:A:C2	1:0:2362:G:N1	2.87	0.42
1:0:2346:G:O2'	1:0:2347:C:H5'	2.18	0.42
1:0:2443:C:C2	1:0:2466:G:C2	3.07	0.42
1:0:2526:U:C5	1:0:2545:A:C5	3.08	0.42
1:0:2621:G:N3	1:0:2622:G:C8	2.87	0.42
1:0:2802:C:H2'	1:0:2803:C:C6	2.54	0.42
1:0:2819:G:H2'	1:0:2820:C:H6	1.84	0.42
1:0:420:C:O2'	1:0:421:G:H5'	2.20	0.42
1:0:492:G:H2'	1:0:517:A:N1	2.34	0.42
1:0:668:A:O2'	1:0:669:G:C4'	2.68	0.42
1:0:867:G:C6	1:0:868:U:C4	3.08	0.42
1:0:1312:G:H2'	1:0:1656:U:O4	2.18	0.42
1:0:1456:C:C2'	1:0:1457:A:H5'	2.50	0.42
1:0:1657:A:H2'	1:0:1658:A:O4'	2.19	0.42
1:0:1762:C:C2	1:0:1763:G:C8	3.08	0.42
1:0:2055:G:O2'	1:0:2056:C:H5'	2.19	0.42
1:0:2184:C:C2	1:0:2185:U:C5	3.07	0.42
1:0:2312:A:H2'	1:0:2313:G:OP2	2.19	0.42
1:0:2509:A:C2'	1:0:2510:A:H5''	2.45	0.42
1:0:2571:G:C2	1:0:2582:G:C2	3.07	0.42
1:0:2610:G:C6	1:0:2611:A:N7	2.87	0.42
5:1:71:LEU:HA	5:1:74:HIS:ND1	2.34	0.42
1:0:112:U:N3	1:0:113:C:C5	2.87	0.42
1:0:541:C:HO2'	1:0:542:A:P	2.43	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:584:A:H2'	1:0:585:U:C6	2.54	0.42
1:0:590:C:O2'	1:0:591:G:H5'	2.19	0.42
1:0:623:G:C5'	1:0:625:A:H62	2.33	0.42
1:0:784:U:H2'	1:0:785:U:C6	2.55	0.42
1:0:833:A:C2'	1:0:834:A:H5'	2.50	0.42
1:0:912:A:H3'	1:0:912:A:H8	1.84	0.42
1:0:914:C:H2'	1:0:915:C:H6	1.84	0.42
1:0:1270:C:H2'	1:0:1271:C:C6	2.55	0.42
1:0:1664:G:O5'	1:0:1665:C:OP1	2.38	0.42
1:0:1685:A:N1	1:0:1976:U:C6	2.88	0.42
1:0:1778:U:H2'	1:0:1779:C:C6	2.54	0.42
1:0:1785:A:H2'	1:0:1786:C:C5	2.55	0.42
1:0:1918:G:C4	1:0:1945:C:N4	2.87	0.42
1:0:1969:G:C2	1:0:1970:G:C8	3.07	0.42
1:0:2020:G:C6	1:0:2021:G:C6	3.07	0.42
1:0:2332:G:H2'	1:0:2333:A:O5'	2.20	0.42
1:0:2465:G:C2	1:0:2466:G:C4	3.08	0.42
2:R:91:LEU:N	2:R:91:LEU:CD2	2.81	0.42
1:0:81:C:C4	1:0:82:G:C2	3.08	0.42
1:0:617:U:N1	1:0:632:A:N6	2.67	0.42
1:0:749:C:C4	1:0:750:C:C5	3.07	0.42
1:0:929:A:H5'	1:0:2247:A:H61	1.83	0.42
1:0:955:G:H5''	1:0:956:A:C5'	2.48	0.42
1:0:1355:A:C5	1:0:1410:U:C6	3.07	0.42
1:0:1462:C:O2	1:0:1560:A:H2	2.02	0.42
1:0:1745:C:C2'	1:0:1746:A:H5'	2.49	0.42
1:0:1873:A:C8	1:0:1874:G:C8	3.07	0.42
1:0:2007:G:H2'	1:0:2008:C:H6	1.85	0.42
1:0:2491:C:H2'	1:0:2492:G:O4'	2.19	0.42
1:0:2598:C:H2'	1:0:2599:U:C5	2.54	0.42
1:0:2636:A:H2'	1:0:2637:C:C5'	2.50	0.42
1:0:2793:G:C6	1:0:2794:G:C5	3.07	0.42
1:0:2811:G:C6	1:0:2812:A:C6	3.07	0.42
3:S:85:ASP:H	3:S:86:PRO:HD3	1.84	0.42
1:0:28:A:H1'	1:0:523:A:N1	2.34	0.42
1:0:317:U:O5'	1:0:317:U:H6	2.03	0.42
1:0:393:U:H2'	1:0:394:U:H6	1.85	0.42
1:0:430:C:H2'	1:0:431:G:C8	2.55	0.42
1:0:430:C:O5'	1:0:430:C:H6	2.03	0.42
1:0:618:A:H2'	1:0:619:A:H5'	2.01	0.42
1:0:623:G:H4'	1:0:625:A:N6	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:716:U:O4	1:0:717:G:C2	2.73	0.42
1:0:792:U:H2'	1:0:793:G:O5'	2.20	0.42
1:0:861:G:C5	1:0:862:A:N7	2.88	0.42
1:0:1032:A:C2	1:0:1034:U:C2	3.07	0.42
1:0:1120:C:N4	1:0:1121:G:C2	2.87	0.42
1:0:1408:A:C2	1:0:1411:C:N3	2.88	0.42
1:0:1553:G:H8	1:0:1553:G:O5'	2.03	0.42
1:0:2010:G:H2'	1:0:2011:U:C6	2.55	0.42
1:0:2184:C:C4	1:0:2185:U:C4	3.08	0.42
1:0:2433:G:C5	1:0:2434:G:C8	3.08	0.42
1:0:2503:G:C4	1:0:2504:G:C8	3.07	0.42
1:0:2526:U:C6	1:0:2545:A:C6	3.07	0.42
1:0:2787:A:C2	1:0:2864:C:N3	2.88	0.42
2:R:46:PHE:CD1	2:R:46:PHE:N	2.87	0.42
1:0:53:G:C6	1:0:115:G:N2	2.88	0.42
1:0:56:C:O5'	1:0:56:C:H6	2.03	0.42
1:0:192:G:O2'	1:0:193:A:H5''	2.20	0.42
1:0:481:A:N6	1:0:482:A:C6	2.88	0.42
1:0:708:G:C6	1:0:781:G:C6	3.08	0.42
1:0:859:U:H2'	1:0:860:U:OP2	2.19	0.42
1:0:979:A:C2	1:0:980:G:C4	3.08	0.42
1:0:1228:G:C8	1:0:1228:G:C3'	3.02	0.42
1:0:1236:G:N1	1:0:1240:G:C6	2.88	0.42
1:0:1337:G:C2	1:0:1341:G:N1	2.87	0.42
1:0:1363:C:O2'	1:0:1364:C:H5'	2.20	0.42
1:0:1411:C:N3	1:0:1412:C:C4	2.88	0.42
1:0:1588:A:O2'	1:0:1589:G:H5'	2.20	0.42
1:0:1673:C:O5'	1:0:1673:C:H6	2.02	0.42
1:0:2320:G:C6	1:0:2321:C:C4	3.08	0.42
1:0:2376:G:N2	1:0:2399:C:H1'	2.35	0.42
1:0:2490:U:H2'	1:0:2491:C:C6	2.55	0.42
1:0:2647:G:O2'	1:0:2648:G:H5'	2.20	0.42
2:R:80:VAL:HG23	2:R:81:ARG:N	2.35	0.42
5:1:97:GLN:CD	5:1:100:GLN:HE21	2.27	0.42
1:0:20:C:C2	1:0:21:A:C8	3.08	0.42
1:0:132:U:O2	1:0:140:G:N2	2.53	0.42
1:0:225:G:O5'	1:0:226:C:H5'	2.19	0.42
1:0:600:G:C2	1:0:602:C:C2	3.08	0.42
1:0:672:C:H2'	1:0:673:G:H5'	2.02	0.42
1:0:717:G:H1'	1:0:740:A:N6	2.35	0.42
1:0:720:A:C4	1:0:721:C:C5	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:860:U:C4	1:0:945:G:N2	2.88	0.42
1:0:1139:A:HO2'	1:0:1140:A:C4'	2.32	0.42
1:0:1223:G:O2'	1:0:1224:A:P	2.77	0.42
1:0:1720:G:N3	1:0:1721:G:C8	2.87	0.42
1:0:1737:G:H2'	1:0:1738:U:H6	1.85	0.42
1:0:1752:U:H2'	1:0:1753:A:H5'	2.02	0.42
1:0:1976:U:O2	1:0:1976:U:H2'	2.18	0.42
1:0:1980:A:H2'	1:0:1981:A:H5'	2.01	0.42
1:0:1986:G:C6	1:0:1987:G:N7	2.88	0.42
1:0:2036:G:C2	1:0:2596:C:C2	3.07	0.42
1:0:2356:A:H2'	1:0:2357:A:C8	2.54	0.42
1:0:2377:U:C2'	1:0:2378:G:O5'	2.68	0.42
1:0:2394:G:C6	1:0:2395:C:N4	2.88	0.42
1:0:2445:C:C2	1:0:2464:G:C2	3.08	0.42
1:0:2471:U:C2	1:0:2472:U:C5	3.07	0.42
1:0:2660:C:C4	1:0:2704:U:C5	3.08	0.42
1:0:2661:G:O2'	1:0:2662:C:H5'	2.20	0.42
1:0:2665:G:C5	1:0:2666:U:C4	3.08	0.42
1:0:104:C:C3'	1:0:105:G:H5''	2.49	0.42
1:0:119:G:N2	1:0:129:A:C4	2.88	0.42
1:0:167:A:H2'	1:0:168:A:C8	2.55	0.42
1:0:170:U:O2	1:0:171:G:C8	2.73	0.42
1:0:326:A:C6	1:0:327:C:N3	2.88	0.42
1:0:357:A:C3'	1:0:358:C:H5'	2.50	0.42
1:0:404:A:C4	1:0:424:G:N2	2.86	0.42
1:0:721:C:H6	1:0:721:C:O5'	2.03	0.42
1:0:951:G:H2'	1:0:952:A:C4'	2.49	0.42
1:0:957:G:N1	1:0:958:G:C5	2.87	0.42
1:0:982:C:H2'	1:0:983:G:H5'	2.02	0.42
1:0:1013:G:N2	1:0:1165:G:H1'	2.33	0.42
1:0:1029:C:C3'	1:0:1030:U:H5''	2.49	0.42
1:0:1184:G:C3'	1:0:1185:C:H5''	2.50	0.42
1:0:1248:G:N1	1:0:1249:G:N2	2.67	0.42
1:0:1625:A:C4	1:0:1632:A:C2	3.07	0.42
1:0:1767:G:C2	1:0:1768:U:C6	3.07	0.42
1:0:1780:A:C2'	1:0:1781:C:H5'	2.50	0.42
1:0:2196:U:O2'	1:0:2197:U:H5'	2.20	0.42
1:0:2465:G:C2'	1:0:2466:G:O5'	2.68	0.42
1:0:2813:G:H2'	1:0:2814:G:O4'	2.19	0.42
1:0:2821:G:H2'	1:0:2822:U:C6	2.55	0.42
5:1:71:LEU:HD23	5:1:71:LEU:N	2.34	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:128:C:C3'	1:0:129:A:H5''	2.50	0.41
1:0:340:G:C1'	1:0:488:A:H1'	2.50	0.41
1:0:500:G:C2	1:0:501:G:H1'	2.55	0.41
1:0:617:U:N3	1:0:632:A:N7	2.68	0.41
1:0:678:G:O2'	1:0:679:C:H5'	2.20	0.41
1:0:745:C:H2'	1:0:746:G:O4'	2.20	0.41
1:0:930:A:H3'	1:0:931:G:O4'	2.20	0.41
1:0:945:G:O2'	1:0:946:U:H5'	2.20	0.41
1:0:982:C:P	1:0:985:G:C2	3.13	0.41
1:0:1030:U:C5	1:0:1153:A:N6	2.73	0.41
1:0:1076:U:C3'	1:0:1077:U:H5''	2.50	0.41
1:0:1293:A:C2	1:0:1294:G:C4	3.08	0.41
1:0:1333:G:H8	1:0:1333:G:O5'	2.03	0.41
1:0:1440:G:H8	1:0:1440:G:P	2.43	0.41
1:0:1656:U:H2'	1:0:1657:A:C5'	2.50	0.41
1:0:1694:A:C2'	1:0:1695:U:O5'	2.68	0.41
1:0:1715:A:H8	1:0:1715:A:OP1	2.03	0.41
1:0:1817:U:H3'	1:0:1817:U:C6	2.55	0.41
1:0:1872:A:O2'	1:0:1873:A:H5'	2.20	0.41
1:0:2498:U:OP2	1:0:2498:U:C6	2.73	0.41
1:0:2552:C:OP1	1:0:2553:G:OP1	2.38	0.41
1:0:2624:G:C5'	1:0:2712:G:O2'	2.68	0.41
1:0:2697:G:C2'	1:0:2698:G:H5'	2.51	0.41
1:0:2840:U:H3'	1:0:2841:U:H6	1.85	0.41
1:0:142:U:H5''	1:0:143:A:OP1	2.20	0.41
1:0:399:G:O2'	1:0:400:U:P	2.78	0.41
1:0:643:A:N3	1:0:2382:C:H1'	2.34	0.41
1:0:931:G:C6	1:0:932:G:C5	3.09	0.41
1:0:1011:A:C2	1:0:1166:A:C2	3.07	0.41
1:0:1011:A:C5	1:0:1012:A:N7	2.88	0.41
1:0:1363:C:H2'	1:0:1364:C:H5'	2.01	0.41
1:0:1371:G:O5'	1:0:1371:G:H8	2.03	0.41
1:0:1459:U:O2	1:0:1477:C:OP2	2.37	0.41
1:0:1479:G:O2'	1:0:1480:G:H5'	2.19	0.41
1:0:1558:C:C2'	1:0:1559:G:H5'	2.50	0.41
1:0:2321:C:O2'	1:0:2322:U:H5'	2.19	0.41
1:0:2377:U:H2'	1:0:2378:G:O5'	2.19	0.41
1:0:2793:G:C2	1:0:2794:G:N9	2.88	0.41
2:R:15:LYS:HD2	2:R:15:LYS:HA	1.83	0.41
5:1:14:PHE:N	5:1:14:PHE:CD1	2.88	0.41
5:1:49:PRO:HB2	5:1:50:ARG:H	1.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:36:G:C2	1:0:37:C:C2	3.09	0.41
1:0:215:G:C6	1:0:216:U:C2	3.09	0.41
1:0:224:G:H4'	1:0:399:G:C5	2.55	0.41
1:0:224:G:C4'	1:0:399:G:C6	3.03	0.41
1:0:226:C:C5	1:0:2374:C:OP1	2.73	0.41
1:0:295:C:H42	1:0:296:A:N6	2.18	0.41
1:0:343:A:N6	1:0:346:C:C4	2.88	0.41
1:0:459:A:OP1	1:0:459:A:C4'	2.68	0.41
1:0:641:G:N1	1:0:645:G:C6	2.89	0.41
1:0:702:A:H2'	1:0:792:U:O2'	2.20	0.41
1:0:765:C:C5	1:0:1772:C:C1'	3.01	0.41
1:0:849:G:C8	1:0:850:C:C5	3.08	0.41
1:0:1192:A:C2	1:0:1193:G:N7	2.88	0.41
1:0:1199:U:C5	1:0:1201:G:O6	2.73	0.41
1:0:1249:G:HO2'	1:0:1250:A:P	2.43	0.41
1:0:1444:C:H2'	1:0:1445:A:C8	2.56	0.41
1:0:1501:C:C4	1:0:1502:G:N7	2.88	0.41
1:0:1541:G:H2'	1:0:1542:G:O5'	2.21	0.41
1:0:1583:A:O2'	1:0:1584:G:OP2	2.33	0.41
1:0:1656:U:C2'	1:0:1657:A:C5'	2.98	0.41
1:0:1795:C:N4	1:0:1806:G:N2	2.67	0.41
1:0:1996:A:O2'	1:0:1997:A:C5'	2.65	0.41
1:0:2144:C:O2	1:0:2156:A:C2	2.73	0.41
1:0:2310:G:N2	1:0:2364:C:N3	2.67	0.41
1:0:2347:C:O2'	1:0:2348:A:H5'	2.20	0.41
1:0:2396:C:H5'	1:0:2396:C:H6	1.85	0.41
1:0:2516:U:H2'	1:0:2517:C:H6	1.85	0.41
1:0:2652:G:O2'	1:0:2653:A:H5'	2.20	0.41
1:0:2838:U:O4	1:0:2839:G:O6	2.39	0.41
3:S:42:ARG:HG2	3:S:42:ARG:NH1	2.32	0.41
4:W:25:LEU:CD1	4:W:43:VAL:HG22	2.49	0.41
1:0:147:G:C5	1:0:148:C:H1'	2.54	0.41
1:0:180:C:C4	1:0:181:A:N7	2.89	0.41
1:0:211:U:H2'	1:0:212:U:C5'	2.51	0.41
1:0:497:C:C2	1:0:505:G:C2	3.08	0.41
1:0:500:G:C6	1:0:501:G:C4	3.08	0.41
1:0:804:C:O2'	1:0:805:G:C5'	2.68	0.41
1:0:985:G:H1'	1:0:1001:A:H62	1.84	0.41
1:0:994:A:N7	1:0:995:A:C4	2.87	0.41
1:0:1139:A:O2'	1:0:1140:A:O5'	2.38	0.41
1:0:1408:A:H2	1:0:1411:C:C2	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1460:G:H2'	1:0:1461:C:C6	2.55	0.41
1:0:1508:G:C5	1:0:1512:A:N6	2.88	0.41
1:0:1581:C:O2'	1:0:1582:A:O5'	2.26	0.41
1:0:1607:A:C6	1:0:1608:U:C4	3.08	0.41
1:0:1759:A:C6	1:0:1968:G:C6	3.08	0.41
1:0:1780:A:N6	1:0:1781:C:N4	2.67	0.41
1:0:1851:A:O5'	1:0:1851:A:H8	2.03	0.41
1:0:1956:G:C6	1:0:1957:C:C4	3.08	0.41
1:0:2006:G:N2	1:0:2024:U:O2	2.53	0.41
1:0:2177:U:H2'	1:0:2178:U:C6	2.53	0.41
1:0:2218:G:C2'	1:0:2219:U:H5'	2.51	0.41
1:0:2252:A:H2'	1:0:2253:A:O4'	2.21	0.41
1:0:2333:A:N6	1:0:2343:C:H42	2.18	0.41
1:0:2339:A:C2	1:0:2340:C:H1'	2.56	0.41
1:0:2418:A:C2	1:0:2564:U:H4'	2.55	0.41
1:0:2451:G:C4	1:0:2454:C:N4	2.88	0.41
1:0:2528:G:C2	1:0:2529:G:N7	2.88	0.41
1:0:2837:G:H8	1:0:2837:G:O5'	2.02	0.41
1:0:2842:C:OP1	1:0:2842:C:C6	2.74	0.41
4:W:13:ASP:O	4:W:16:LYS:HB3	2.21	0.41
1:0:387:A:H1'	1:0:414:A:N6	2.36	0.41
1:0:580:A:N7	1:0:584:A:N6	2.68	0.41
1:0:762:A:C6	1:0:1634:A:C2	3.09	0.41
1:0:829:C:C4	1:0:1206:G:C2	3.09	0.41
1:0:867:G:C5	1:0:868:U:C5	3.08	0.41
1:0:1171:A:C5	1:0:1172:U:C4	3.09	0.41
1:0:1363:C:C2'	1:0:1364:C:H5'	2.50	0.41
1:0:1391:A:N7	1:0:1393:G:N7	2.68	0.41
1:0:1928:G:OP1	1:0:1928:G:C8	2.73	0.41
1:0:2035:G:O2'	1:0:2036:G:H5'	2.20	0.41
1:0:2410:U:OP2	1:0:2411:A:OP2	2.39	0.41
1:0:2603:G:C2	1:0:2604:G:C8	3.08	0.41
1:0:2614:A:C2'	1:0:2615:U:O5'	2.68	0.41
1:0:2779:C:H3'	1:0:2779:C:C6	2.55	0.41
1:0:2803:C:H2'	1:0:2804:G:H8	1.85	0.41
1:0:2836:U:H3'	1:0:2836:U:H6	1.83	0.41
3:S:51:VAL:O	3:S:51:VAL:HG12	2.21	0.41
1:0:29:U:O5'	1:0:29:U:H6	2.03	0.41
1:0:60:A:H2'	1:0:61:U:H5'	2.02	0.41
1:0:109:A:H2'	1:0:110:U:C5'	2.51	0.41
1:0:114:C:H2'	1:0:115:G:O4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:162:C:O5'	1:0:162:C:H6	2.03	0.41
1:0:239:A:C5'	1:0:620:G:H5'	2.45	0.41
1:0:468:A:C2	1:0:470:U:C4	3.08	0.41
1:0:520:C:C4	1:0:521:U:C6	3.08	0.41
1:0:638:A:C5	1:0:647:G:N2	2.89	0.41
1:0:644:A:H2'	1:0:645:G:H5'	2.02	0.41
1:0:668:A:O2'	1:0:669:G:H4'	2.21	0.41
1:0:770:U:H3'	1:0:770:U:C6	2.56	0.41
1:0:798:G:O2'	1:0:1770:U:H5''	2.20	0.41
1:0:1294:G:O2'	1:0:1295:U:H5'	2.20	0.41
1:0:1310:C:H2'	1:0:1311:C:C6	2.45	0.41
1:0:1441:A:C4	1:0:1586:A:OP2	2.73	0.41
1:0:1567:A:H2'	1:0:1568:A:H8	1.83	0.41
1:0:1690:U:H2'	1:0:1691:G:C5'	2.50	0.41
1:0:1859:A:C4	1:0:1860:A:C8	3.09	0.41
1:0:1923:U:O2'	1:0:1924:C:H5	2.04	0.41
1:0:1999:U:O2'	1:0:2000:U:H5'	2.20	0.41
1:0:2055:G:C2	1:0:2417:U:O2	2.74	0.41
2:R:38:ILE:HG21	2:R:53:ILE:HD11	2.02	0.41
1:0:953:G:C6	1:0:954:U:N3	2.89	0.41
1:0:970:A:N6	1:0:971:A:N6	2.69	0.41
1:0:1011:A:C6	1:0:1166:A:C5	3.09	0.41
1:0:1055:A:H3'	1:0:1056:U:C5'	2.51	0.41
1:0:1253:C:H2'	1:0:1254:G:O5'	2.20	0.41
1:0:1474:A:C2'	1:0:1475:U:H5'	2.49	0.41
1:0:1604:A:O2'	1:0:1605:A:H5'	2.21	0.41
1:0:1958:G:H2'	1:0:1959:U:H6	1.83	0.41
1:0:1964:A:H3'	1:0:1965:U:H5''	1.98	0.41
1:0:1981:A:H4'	1:0:2704:U:O2'	2.21	0.41
1:0:2074:U:C5	1:0:2075:U:C6	3.09	0.41
1:0:2526:U:C4	1:0:2545:A:N7	2.89	0.41
1:0:2537:C:H2'	1:0:2538:C:O4'	2.21	0.41
2:R:88:ILE:HG13	2:R:89:GLU:N	2.35	0.41
2:R:91:LEU:H	2:R:91:LEU:CD2	2.34	0.41
3:S:85:ASP:H	3:S:86:PRO:HD2	1.86	0.41
1:0:199:A:OP2	1:0:199:A:O4'	2.38	0.41
1:0:348:U:O3'	3:S:13:LYS:NZ	2.52	0.41
1:0:484:G:N2	1:0:485:G:C4	2.89	0.41
1:0:624:A:C2'	1:0:625:A:H5'	2.51	0.41
1:0:644:A:H2'	1:0:645:G:C4'	2.51	0.41
1:0:644:A:N3	1:0:2382:C:H4'	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:661:C:H2'	1:0:662:G:H8	1.85	0.41
1:0:829:C:C6	1:0:1206:G:N2	2.89	0.41
1:0:941:U:C2'	1:0:942:U:H5'	2.50	0.41
1:0:1069:G:H8	1:0:1069:G:O5'	2.03	0.41
1:0:1103:C:C5	1:0:1104:G:N7	2.88	0.41
1:0:1108:U:C2'	1:0:1109:A:H5'	2.51	0.41
1:0:1160:C:O2'	1:0:1161:U:H5'	2.20	0.41
1:0:1359:G:H5'	1:0:1359:G:C8	2.56	0.41
1:0:1369:G:C2	1:0:1370:U:C2	3.08	0.41
1:0:1412:C:H5'	2:R:22:ARG:HH22	1.85	0.41
1:0:1716:G:O6	1:0:1754:G:C4	2.74	0.41
1:0:1817:U:C6	1:0:1817:U:C3'	3.04	0.41
1:0:1837:G:H2'	1:0:1838:G:H8	1.85	0.41
1:0:1918:G:N2	1:0:1947:G:C8	2.89	0.41
1:0:2007:G:C6	1:0:2008:C:N4	2.88	0.41
1:0:2526:U:C5	1:0:2545:A:N7	2.89	0.41
1:0:2713:A:H8	1:0:2713:A:O5'	2.04	0.41
1:0:2799:C:C5	1:0:2800:C:C4	3.09	0.41
2:R:35:LYS:HD3	2:R:53:ILE:O	2.20	0.41
1:0:55:A:C2'	1:0:56:C:H5'	2.51	0.41
1:0:137:A:H2'	1:0:138:G:C5'	2.50	0.41
1:0:173:A:H2'	1:0:173:A:N3	2.36	0.41
1:0:294:U:H2'	1:0:295:C:H6	1.86	0.41
1:0:389:G:H2'	1:0:390:U:C5	2.55	0.41
1:0:525:A:H2'	1:0:526:C:C5'	2.51	0.41
1:0:582:G:C3'	1:0:583:C:H3'	2.50	0.41
1:0:614:G:C5	1:0:615:C:C5	3.09	0.41
1:0:747:A:H2'	1:0:748:A:O5'	2.20	0.41
1:0:756:C:H2'	1:0:757:U:O4'	2.21	0.41
1:0:857:U:O2'	1:0:858:G:H5'	2.21	0.41
1:0:931:G:C5	1:0:932:G:C8	3.09	0.41
1:0:961:G:C4	1:0:962:C:C6	3.09	0.41
1:0:982:C:C2'	1:0:983:G:C5'	2.99	0.41
1:0:1181:C:O5'	1:0:1181:C:H6	2.02	0.41
1:0:1201:G:H8	1:0:1201:G:O5'	2.04	0.41
1:0:1223:G:C4	1:0:1250:A:N6	2.83	0.41
1:0:1231:A:C6	1:0:1245:G:C6	3.09	0.41
1:0:1317:G:O2'	1:0:1318:A:H5'	2.21	0.41
1:0:1332:G:C2	1:0:1333:G:C2	3.09	0.41
1:0:1453:A:N6	1:0:1568:A:HO2'	2.18	0.41
1:0:1472:C:H5''	1:0:1473:U:OP2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:1512:A:H5''	1:0:1513:U:OP1	2.21	0.41
1:0:1532:A:C2	1:0:1533:G:C5	3.09	0.41
1:0:1626:A:C5'	1:0:1627:C:OP2	2.65	0.41
1:0:1683:G:H2'	1:0:1684:G:C5'	2.51	0.41
1:0:1696:C:C5	1:0:1697:U:C5	3.09	0.41
1:0:1745:C:H2'	1:0:1746:A:C5'	2.51	0.41
1:0:1788:C:N3	1:0:1815:G:C6	2.89	0.41
1:0:1789:U:C4	1:0:1811:A:C2	3.09	0.41
1:0:1941:C:H2'	1:0:1942:G:H8	1.86	0.41
1:0:2014:A:H1'	1:0:2434:G:O2'	2.20	0.41
1:0:2024:U:C2	1:0:2025:A:H8	2.38	0.41
1:0:2146:A:O2'	1:0:2147:C:H5'	2.21	0.41
1:0:2198:U:C3'	1:0:2199:C:C4'	2.99	0.41
1:0:2199:C:C2	1:0:2200:G:C8	3.09	0.41
1:0:2213:G:O2'	1:0:2214:G:H5'	2.20	0.41
1:0:2242:C:N4	1:0:2257:A:C6	2.89	0.41
1:0:2271:C:H2'	1:0:2272:A:O5'	2.21	0.41
1:0:2286:G:O2'	1:0:2290:A:N1	2.53	0.41
1:0:2322:U:H4'	1:0:2352:A:O3'	2.21	0.41
1:0:2355:A:H8	1:0:2355:A:P	2.44	0.41
1:0:2375:G:O2'	1:0:2376:G:H5'	2.21	0.41
1:0:2419:C:N4	1:0:2420:C:O2	2.54	0.41
1:0:2436:U:O2'	1:0:2437:G:H5'	2.20	0.41
1:0:2666:U:H2'	1:0:2667:C:O4'	2.21	0.41
1:0:2671:C:O2'	1:0:2672:U:H5'	2.20	0.41
1:0:2724:G:N7	1:0:2735:C:H1'	2.36	0.41
1:0:2739:G:H2'	1:0:2740:C:O4'	2.21	0.41
2:R:94:GLN:HA	5:1:51:LYS:CE	2.50	0.41
5:1:107:LYS:HG2	5:1:108:GLY:N	2.35	0.41
5:1:109:GLU:H	5:1:109:GLU:HG3	1.60	0.41
1:0:632:A:C2	1:0:633:G:C5	3.09	0.41
1:0:819:C:C2	1:0:820:U:H5	2.38	0.41
1:0:1210:C:N3	1:0:1211:G:N7	2.69	0.41
1:0:1626:A:C4'	1:0:1627:C:OP2	2.69	0.41
1:0:1729:C:H2'	1:0:1730:G:C8	2.55	0.41
1:0:1787:U:H2'	1:0:1788:C:H6	1.82	0.41
1:0:1850:G:O6	1:0:1867:A:C2'	2.69	0.41
1:0:1928:G:C2	1:0:1929:U:C2	3.09	0.41
1:0:2046:C:N4	1:0:2047:C:N4	2.69	0.41
1:0:2225:G:H2'	1:0:2226:A:H8	1.85	0.41
1:0:2264:C:H4'	1:0:2267:A:H62	1.84	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2447:G:O2'	1:0:2448:A:C5'	2.67	0.41
1:0:2603:G:N2	1:0:2604:G:H1'	2.36	0.41
1:0:2764:U:O2'	1:0:2765:C:C5'	2.69	0.41
1:0:2774:U:H2'	1:0:2775:U:H5''	2.03	0.41
4:W:28:LEU:CD1	4:W:42:ARG:HG3	2.49	0.41
1:0:212:U:C2	1:0:443:A:C2	3.09	0.40
1:0:319:G:C1'	1:0:511:A:O4'	2.69	0.40
1:0:388:G:H2'	1:0:389:G:C8	2.55	0.40
1:0:404:A:C6	1:0:405:C:N3	2.89	0.40
1:0:460:U:C5	1:0:592:G:H1'	2.55	0.40
1:0:492:G:H2'	1:0:517:A:N6	2.35	0.40
1:0:545:C:O2'	1:0:546:A:C5'	2.60	0.40
1:0:873:U:OP1	1:0:2245:A:N6	2.55	0.40
1:0:1073:G:C8	1:0:1099:A:N3	2.89	0.40
1:0:1437:A:O2'	1:0:1438:G:C5'	2.68	0.40
1:0:1502:G:H2'	1:0:1503:G:C8	2.53	0.40
1:0:1537:U:C4	1:0:1538:A:N6	2.90	0.40
1:0:1713:G:C6	1:0:1714:A:C4	3.09	0.40
1:0:1881:U:H6	1:0:1881:U:O5'	2.04	0.40
1:0:1982:C:C2'	1:0:1983:G:H5'	2.52	0.40
1:0:2079:A:O2'	1:0:2080:U:H5'	2.21	0.40
1:0:2180:U:C5	1:0:2203:G:C5	3.09	0.40
1:0:2306:A:C5	1:0:2307:A:C6	3.09	0.40
1:0:2440:C:O2'	1:0:2441:U:H5'	2.21	0.40
1:0:2524:G:C2'	1:0:2525:U:C5'	2.99	0.40
1:0:2593:A:O2'	1:0:2594:U:H5'	2.21	0.40
1:0:2817:A:N1	1:0:2851:G:C6	2.89	0.40
1:0:2841:U:O2'	1:0:2842:C:OP2	2.37	0.40
3:S:84:VAL:HG13	3:S:88:THR:O	2.21	0.40
1:0:110:U:H5'	1:0:110:U:C6	2.56	0.40
1:0:120:G:N2	1:0:121:G:H1'	2.36	0.40
1:0:341:A:H3'	1:0:341:A:H8	1.86	0.40
1:0:461:A:N6	1:0:462:G:C6	2.89	0.40
1:0:472:C:C6	1:0:472:C:H3'	2.57	0.40
1:0:509:U:O2	1:0:510:G:O4'	2.39	0.40
1:0:866:U:O2'	1:0:867:G:H5'	2.21	0.40
1:0:942:U:O2'	1:0:943:U:H5'	2.21	0.40
1:0:1399:C:O2'	1:0:1484:G:O2'	2.39	0.40
1:0:1660:G:C2	1:0:1661:C:N1	2.89	0.40
1:0:1834:G:H2'	1:0:1835:C:C6	2.55	0.40
1:0:2467:A:C2	1:0:2468:G:C5	3.09	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2504:G:H2'	1:0:2504:G:N3	2.36	0.40
1:0:2652:G:C4	1:0:2653:A:C8	3.09	0.40
1:0:43:A:C2	1:0:44:G:N3	2.89	0.40
1:0:62:U:C2'	1:0:63:A:C8	3.02	0.40
1:0:63:A:H5''	2:R:71:GLN:CB	2.37	0.40
1:0:86:U:P	3:S:42:ARG:NH2	2.88	0.40
1:0:435:A:N6	1:0:436:A:N6	2.70	0.40
1:0:530:G:C6	1:0:531:G:C6	3.09	0.40
1:0:573:C:C2	1:0:574:C:C6	3.10	0.40
1:0:867:G:H2'	1:0:868:U:O4'	2.21	0.40
1:0:968:C:H3'	1:0:968:C:C6	2.57	0.40
1:0:1032:A:H3'	1:0:1033:G:H4'	2.04	0.40
1:0:1073:G:C8	1:0:1099:A:C2	3.10	0.40
1:0:1094:C:H4'	1:0:1096:A:C2	2.56	0.40
1:0:1313:U:O2'	1:0:1314:A:OP2	2.35	0.40
1:0:1804:U:O2'	1:0:1805:G:C5'	2.70	0.40
1:0:1884:A:O2'	1:0:1885:C:H5'	2.21	0.40
1:0:1962:C:H2'	1:0:1963:G:H5'	2.02	0.40
1:0:2260:C:H2'	1:0:2261:G:H8	1.87	0.40
1:0:2738:A:C2'	1:0:2739:G:H5'	2.50	0.40
1:0:2826:C:H6	1:0:2826:C:O5'	2.04	0.40
1:0:2845:C:C2'	1:0:2846:G:H5'	2.52	0.40
4:W:13:ASP:O	4:W:17:GLU:OE2	2.39	0.40
1:0:749:C:C5	1:0:750:C:H5	2.40	0.40
1:0:1148:G:C5	1:0:1149:G:H1'	2.57	0.40
1:0:1248:G:C6	1:0:1249:G:N1	2.88	0.40
1:0:1369:G:C6	1:0:1370:U:C2	3.08	0.40
1:0:1394:G:H2'	1:0:1395:A:O5'	2.21	0.40
1:0:1768:U:C2	1:0:1769:U:C5	3.09	0.40
1:0:1785:A:H2'	1:0:1786:C:H6	1.84	0.40
1:0:1788:C:N4	1:0:1789:U:O4	2.54	0.40
1:0:1900:U:O2'	1:0:1901:A:H5'	2.22	0.40
1:0:1943:A:H2'	1:0:1944:C:O4'	2.21	0.40
1:0:1964:A:C3'	1:0:1965:U:C5'	2.95	0.40
1:0:1979:C:O2'	1:0:1980:A:C4'	2.69	0.40
1:0:2031:A:C6	1:0:2600:A:N1	2.90	0.40
1:0:2201:G:C2	1:0:2202:G:C8	3.10	0.40
1:0:2260:C:O4'	1:0:2367:A:C2	2.75	0.40
1:0:2418:A:O5'	1:0:2418:A:H8	2.04	0.40
1:0:2549:G:H2'	1:0:2550:C:O4'	2.21	0.40
1:0:2629:U:O2'	1:0:2630:C:H5'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:0:2710:C:O5'	1:0:2710:C:H6	2.04	0.40
1:0:2713:A:C4	1:0:2714:A:C8	3.09	0.40
1:0:2781:G:H2'	1:0:2782:G:C5'	2.46	0.40
1:0:2818:G:H2'	1:0:2819:G:C5'	2.51	0.40
1:0:2825:A:C6	1:0:2826:C:N4	2.89	0.40
1:0:2827:G:H2'	1:0:2828:C:O4'	2.20	0.40
1:0:70:A:OP1	1:0:111:G:H1'	2.22	0.40
1:0:203:G:O2'	1:0:204:A:H5'	2.22	0.40
1:0:339:U:O2'	3:S:79:S:HB3	2.21	0.40
1:0:482:A:C2'	1:0:483:A:H5'	2.51	0.40
1:0:521:U:H2'	1:0:522:G:H5'	2.02	0.40
1:0:557:U:H5''	1:0:558:G:OP1	2.22	0.40
1:0:674:U:H6	1:0:674:U:O5'	2.04	0.40
1:0:706:A:O2'	1:0:707:U:H5'	2.21	0.40
1:0:780:U:H2'	1:0:781:G:H8	1.86	0.40
1:0:984:A:HO2'	1:0:1201:G:HO2'	1.60	0.40
1:0:1293:A:O2'	1:0:1294:G:H5'	2.21	0.40
1:0:1340:C:H3'	1:0:1341:G:C8	2.57	0.40
1:0:1382:G:C2	1:0:1383:C:C6	3.09	0.40
1:0:1436:G:C8	1:0:1437:A:C8	3.10	0.40
1:0:1888:C:HO2'	1:0:1912:G:H2'	1.87	0.40
1:0:2073:A:C2	1:0:2209:G:C2	3.09	0.40
1:0:2143:G:C5	1:0:2144:C:C4	3.10	0.40
1:0:2320:G:C5	1:0:2321:C:C4	3.10	0.40
1:0:2338:C:H2'	1:0:2339:A:H8	1.83	0.40
1:0:2425:G:H8	1:0:2425:G:O5'	2.04	0.40
1:0:2610:G:C6	1:0:2611:A:C5	3.08	0.40
1:0:2749:A:H2'	1:0:2750:G:C5'	2.50	0.40
1:0:2753:C:H2'	1:0:2754:C:C6	2.42	0.40
3:S:95:ARG:NH1	3:S:106:VAL:HA	2.34	0.40
4:W:41:HIS:CD2	4:W:42:ARG:N	2.89	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	R	91/95 (96%)	70 (77%)	16 (18%)	5 (6%)	1	9
3	S	108/115 (94%)	79 (73%)	24 (22%)	5 (5%)	2	11
4	W	64/67 (96%)	54 (84%)	8 (12%)	2 (3%)	3	17
5	1	98/112 (88%)	81 (83%)	13 (13%)	4 (4%)	2	14
All	All	361/389 (93%)	284 (79%)	61 (17%)	16 (4%)	2	12

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	S	42	ARG
3	S	65	PRO
4	W	2	LYS
5	1	49	PRO
2	R	69	ILE
5	1	50	ARG
3	S	60	PRO
3	S	93	ARG
5	1	99	GLY
2	R	8	GLN
2	R	6	ILE
4	W	10	GLN
2	R	12	ILE
2	R	60	GLY
5	1	87	VAL
3	S	85	ASP

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	R	75/76 (99%)	61 (81%)	14 (19%)	1	6
3	S	91/96 (95%)	74 (81%)	17 (19%)	1	6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	W	54/55 (98%)	44 (82%)	10 (18%)	1	7
5	1	83/93 (89%)	72 (87%)	11 (13%)	4	15
All	All	303/320 (95%)	251 (83%)	52 (17%)	2	8

All (52) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	R	5	ASP
2	R	7	LEU
2	R	24	VAL
2	R	29	VAL
2	R	36	THR
2	R	50	VAL
2	R	53	ILE
2	R	59	PRO
2	R	62	ARG
2	R	63	LYS
2	R	74	ASP
2	R	75	ARG
2	R	80	VAL
2	R	87	SER
3	S	5	SER
3	S	13	LYS
3	S	16	PHE
3	S	18	LYS
3	S	20	ASP
3	S	23	ILE
3	S	25	LEU
3	S	32	GLN
3	S	36	VAL
3	S	38	LEU
3	S	40	LEU
3	S	43	ASP
3	S	45	LYS
3	S	80	LYS
3	S	95	ARG
3	S	104	VAL
3	S	112	LYS
4	W	5	GLU
4	W	6	MET
4	W	9	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	W	29	ARG
4	W	37	LEU
4	W	41	HIS
4	W	44	ARG
4	W	46	LEU
4	W	50	VAL
4	W	54	ASN
5	1	17	SER
5	1	25	ARG
5	1	43	PHE
5	1	53	ILE
5	1	55	ASN
5	1	62	VAL
5	1	63	GLU
5	1	88	ASP
5	1	100	GLN
5	1	107	LYS
5	1	109	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (12) such sidechains are listed below:

Mol	Chain	Res	Type
2	R	94	GLN
3	S	15	HIS
3	S	32	GLN
3	S	57	ASN
3	S	64	ASN
3	S	71	GLN
4	W	36	GLN
4	W	54	ASN
5	1	24	ASN
5	1	55	ASN
5	1	97	GLN
5	1	100	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	0	2798/2880 (97%)	582 (20%)	88 (3%)

All (582) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	0	14	A
1	0	25	U
1	0	33	C
1	0	35	G
1	0	45	C
1	0	49	U
1	0	50	G
1	0	59	G
1	0	67	G
1	0	68	C
1	0	69	G
1	0	70	A
1	0	71	A
1	0	72	A
1	0	73	A
1	0	74	G
1	0	76	C
1	0	83	A
1	0	84	G
1	0	87	G
1	0	89	A
1	0	90	G
1	0	91	A
1	0	99	U
1	0	100	G
1	0	103	U
1	0	105	G
1	0	110	U
1	0	117	A
1	0	118	U
1	0	119	G
1	0	123	A
1	0	124	A
1	0	129	A
1	0	135	U
1	0	155	G
1	0	158	A
1	0	173	A
1	0	174	A
1	0	175	C
1	0	181	A
1	0	182	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	183	U
1	0	193	A
1	0	199	A
1	0	200	A
1	0	206	U
1	0	210	A
1	0	218	A
1	0	219	G
1	0	225	G
1	0	227	G
1	0	229	G
1	0	242	A
1	0	243	G
1	0	245	C
1	0	305	A
1	0	318	G
1	0	322	A
1	0	323	G
1	0	334	G
1	0	335	A
1	0	340	G
1	0	341	A
1	0	342	G
1	0	343	A
1	0	346	C
1	0	358	C
1	0	362	C
1	0	363	G
1	0	368	A
1	0	373	A
1	0	399	G
1	0	400	U
1	0	401	G
1	0	404	A
1	0	414	A
1	0	418	C
1	0	424	G
1	0	443	A
1	0	448	C
1	0	453	U
1	0	454	G
1	0	455	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	456	C
1	0	459	A
1	0	460	U
1	0	461	A
1	0	463	C
1	0	467	U
1	0	468	A
1	0	484	G
1	0	491	A
1	0	492	G
1	0	495	C
1	0	514	G
1	0	515	A
1	0	518	A
1	0	537	C
1	0	538	A
1	0	539	A
1	0	541	C
1	0	542	A
1	0	553	C
1	0	554	U
1	0	555	U
1	0	556	A
1	0	558	G
1	0	559	C
1	0	572	G
1	0	580	A
1	0	582	G
1	0	583	C
1	0	584	A
1	0	593	C
1	0	595	A
1	0	601	A
1	0	602	C
1	0	613	A
1	0	617	U
1	0	624	A
1	0	628	A
1	0	632	A
1	0	633	G
1	0	636	G
1	0	637	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	638	A
1	0	642	A
1	0	645	G
1	0	648	A
1	0	652	C
1	0	654	A
1	0	657	A
1	0	666	U
1	0	667	U
1	0	669	G
1	0	684	C
1	0	688	A
1	0	690	A
1	0	699	G
1	0	700	C
1	0	703	A
1	0	728	G
1	0	741	G
1	0	742	G
1	0	743	A
1	0	752	G
1	0	753	U
1	0	754	G
1	0	760	U
1	0	765	C
1	0	766	A
1	0	775	U
1	0	776	G
1	0	778	G
1	0	789	G
1	0	790	A
1	0	794	A
1	0	795	A
1	0	796	A
1	0	797	A
1	0	798	G
1	0	801	A
1	0	802	A
1	0	803	C
1	0	806	A
1	0	807	A
1	0	813	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	814	G
1	0	815	A
1	0	818	G
1	0	819	C
1	0	825	C
1	0	832	A
1	0	840	U
1	0	841	G
1	0	843	G
1	0	844	G
1	0	859	U
1	0	873	U
1	0	874	A
1	0	879	A
1	0	919	U
1	0	920	G
1	0	922	A
1	0	926	C
1	0	930	A
1	0	931	G
1	0	941	U
1	0	944	A
1	0	952	A
1	0	957	G
1	0	968	C
1	0	970	A
1	0	972	C
1	0	973	U
1	0	981	C
1	0	984	A
1	0	994	A
1	0	995	A
1	0	996	C
1	0	1005	U
1	0	1006	C
1	0	1016	C
1	0	1019	U
1	0	1022	A
1	0	1023	U
1	0	1024	G
1	0	1030	U
1	0	1032	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1033	G
1	0	1036	G
1	0	1037	U
1	0	1044	U
1	0	1045	G
1	0	1056	U
1	0	1057	A
1	0	1058	G
1	0	1059	A
1	0	1072	U
1	0	1073	G
1	0	1077	U
1	0	1078	A
1	0	1081	A
1	0	1089	C
1	0	1090	C
1	0	1095	A
1	0	1096	A
1	0	1101	U
1	0	1120	C
1	0	1137	A
1	0	1138	A
1	0	1140	A
1	0	1142	G
1	0	1143	A
1	0	1145	C
1	0	1146	G
1	0	1149	G
1	0	1152	C
1	0	1153	A
1	0	1154	A
1	0	1155	G
1	0	1167	A
1	0	1168	G
1	0	1182	U
1	0	1183	C
1	0	1185	C
1	0	1199	U
1	0	1200	G
1	0	1224	A
1	0	1226	A
1	0	1233	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1234	C
1	0	1240	G
1	0	1249	G
1	0	1250	A
1	0	1253	C
1	0	1254	G
1	0	1261	G
1	0	1262	U
1	0	1264	C
1	0	1265	G
1	0	1266	G
1	0	1269	G
1	0	1278	A
1	0	1279	G
1	0	1284	G
1	0	1285	A
1	0	1288	A
1	0	1289	A
1	0	1300	A
1	0	1302	C
1	0	1313	U
1	0	1314	A
1	0	1316	G
1	0	1324	G
1	0	1326	U
1	0	1327	C
1	0	1334	A
1	0	1337	G
1	0	1338	G
1	0	1339	U
1	0	1340	C
1	0	1342	U
1	0	1343	C
1	0	1346	C
1	0	1354	A
1	0	1358	C
1	0	1359	G
1	0	1378	A
1	0	1381	G
1	0	1391	A
1	0	1392	U
1	0	1397	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1398	G
1	0	1405	A
1	0	1409	U
1	0	1411	C
1	0	1428	G
1	0	1430	G
1	0	1433	A
1	0	1441	A
1	0	1442	C
1	0	1443	G
1	0	1459	U
1	0	1465	G
1	0	1467	U
1	0	1468	A
1	0	1469	U
1	0	1470	G
1	0	1475	U
1	0	1476	G
1	0	1482	U
1	0	1484	G
1	0	1490	U
1	0	1491	C
1	0	1498	G
1	0	1505	U
1	0	1513	U
1	0	1514	C
1	0	1524	C
1	0	1528	C
1	0	1529	C
1	0	1552	C
1	0	1562	G
1	0	1571	G
1	0	1573	G
1	0	1574	A
1	0	1576	G
1	0	1583	A
1	0	1585	A
1	0	1595	A
1	0	1601	U
1	0	1619	A
1	0	1623	C
1	0	1625	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1627	C
1	0	1632	A
1	0	1633	C
1	0	1634	A
1	0	1635	G
1	0	1648	C
1	0	1651	U
1	0	1652	G
1	0	1657	A
1	0	1661	C
1	0	1664	G
1	0	1665	C
1	0	1671	A
1	0	1686	A
1	0	1691	G
1	0	1692	C
1	0	1698	C
1	0	1709	U
1	0	1712	G
1	0	1715	A
1	0	1716	G
1	0	1717	A
1	0	1723	U
1	0	1724	C
1	0	1732	U
1	0	1747	G
1	0	1749	G
1	0	1750	A
1	0	1754	G
1	0	1755	G
1	0	1764	A
1	0	1771	A
1	0	1772	C
1	0	1773	C
1	0	1775	A
1	0	1776	A
1	0	1777	A
1	0	1778	U
1	0	1791	C
1	0	1801	C
1	0	1802	A
1	0	1807	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1808	C
1	0	1811	A
1	0	1812	U
1	0	1821	A
1	0	1831	G
1	0	1840	A
1	0	1842	G
1	0	1884	A
1	0	1890	G
1	0	1903	C
1	0	1906	U
1	0	1919	A
1	0	1920	A
1	0	1922	U
1	0	1926	U
1	0	1927	U
1	0	1928	G
1	0	1938	U
1	0	1939	U
1	0	1948	C
1	0	1949	A
1	0	1950	C
1	0	1953	A
1	0	1954	A
1	0	1955	G
1	0	1956	G
1	0	1964	A
1	0	1965	U
1	0	1974	U
1	0	1976	U
1	0	1979	C
1	0	1980	A
1	0	2004	U
1	0	2006	G
1	0	2007	G
1	0	2009	U
1	0	2011	U
1	0	2014	A
1	0	2015	G
1	0	2016	A
1	0	2019	C
1	0	2026	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	2029	G
1	0	2034	A
1	0	2035	G
1	0	2038	C
1	0	2039	G
1	0	2043	A
1	0	2044	G
1	0	2045	A
1	0	2051	U
1	0	2052	G
1	0	2060	A
1	0	2064	U
1	0	2075	U
1	0	2076	G
1	0	2099	G
1	0	2107	G
1	0	2110	G
1	0	2115	C
1	0	2116	G
1	0	2117	A
1	0	2126	U
1	0	2127	U
1	0	2128	U
1	0	2129	U
1	0	2140	G
1	0	2142	G
1	0	2181	A
1	0	2188	A
1	0	2189	A
1	0	2191	A
1	0	2192	U
1	0	2195	C
1	0	2199	C
1	0	2204	A
1	0	2205	C
1	0	2217	G
1	0	2218	G
1	0	2222	U
1	0	2229	G
1	0	2230	G
1	0	2238	G
1	0	2241	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	2245	A
1	0	2246	A
1	0	2247	A
1	0	2252	A
1	0	2254	C
1	0	2255	G
1	0	2262	C
1	0	2268	G
1	0	2275	U
1	0	2285	U
1	0	2286	G
1	0	2287	G
1	0	2288	A
1	0	2291	U
1	0	2298	U
1	0	2300	G
1	0	2306	A
1	0	2313	G
1	0	2314	A
1	0	2315	A
1	0	2325	A
1	0	2326	C
1	0	2362	G
1	0	2364	C
1	0	2369	U
1	0	2378	G
1	0	2385	U
1	0	2396	C
1	0	2402	U
1	0	2403	C
1	0	2405	A
1	0	2406	C
1	0	2407	G
1	0	2408	G
1	0	2409	A
1	0	2410	U
1	0	2418	A
1	0	2419	C
1	0	2420	C
1	0	2426	G
1	0	2427	A
1	0	2428	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	2448	A
1	0	2454	C
1	0	2455	A
1	0	2470	U
1	0	2476	A
1	0	2477	C
1	0	2481	G
1	0	2482	A
1	0	2483	U
1	0	2484	G
1	0	2485	U
1	0	2492	G
1	0	2497	A
1	0	2498	U
1	0	2499	C
1	0	2508	G
1	0	2509	A
1	0	2521	A
1	0	2522	G
1	0	2545	A
1	0	2546	G
1	0	2549	G
1	0	2552	C
1	0	2561	G
1	0	2565	C
1	0	2582	G
1	0	2588	U
1	0	2591	C
1	0	2593	A
1	0	2594	U
1	0	2609	G
1	0	2624	G
1	0	2625	U
1	0	2633	A
1	0	2634	G
1	0	2660	C
1	0	2661	G
1	0	2668	U
1	0	2670	C
1	0	2691	C
1	0	2693	U
1	0	2694	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	2700	U
1	0	2707	G
1	0	2712	G
1	0	2713	A
1	0	2728	A
1	0	2730	A
1	0	2731	G
1	0	2732	C
1	0	2737	A
1	0	2745	A
1	0	2757	G
1	0	2758	A
1	0	2759	U
1	0	2761	A
1	0	2769	C
1	0	2771	C
1	0	2774	U
1	0	2775	U
1	0	2777	A
1	0	2782	G
1	0	2783	U
1	0	2795	A
1	0	2796	A
1	0	2798	A
1	0	2807	U
1	0	2808	U
1	0	2809	A
1	0	2810	A
1	0	2824	C
1	0	2841	U
1	0	2842	C
1	0	2847	G
1	0	2854	G
1	0	2855	C
1	0	2867	G
1	0	2868	G

All (88) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	0	48	A
1	0	67	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	117	A
1	0	192	G
1	0	198	A
1	0	399	G
1	0	454	G
1	0	458	G
1	0	466	A
1	0	485	G
1	0	571	U
1	0	583	C
1	0	683	A
1	0	698	A
1	0	741	G
1	0	765	C
1	0	777	A
1	0	788	G
1	0	789	G
1	0	795	A
1	0	801	A
1	0	804	C
1	0	814	G
1	0	956	A
1	0	1139	A
1	0	1141	U
1	0	1223	G
1	0	1225	G
1	0	1249	G
1	0	1261	G
1	0	1263	G
1	0	1264	C
1	0	1266	G
1	0	1278	A
1	0	1299	A
1	0	1301	U
1	0	1313	U
1	0	1337	G
1	0	1338	G
1	0	1342	U
1	0	1355	A
1	0	1357	U
1	0	1410	U
1	0	1442	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	1626	A
1	0	1632	A
1	0	1633	C
1	0	1634	A
1	0	1651	U
1	0	1664	G
1	0	1670	G
1	0	1684	G
1	0	1685	A
1	0	1691	G
1	0	1698	C
1	0	1715	A
1	0	1775	A
1	0	1777	A
1	0	1807	A
1	0	1811	A
1	0	1820	G
1	0	1889	G
1	0	1938	U
1	0	1963	G
1	0	1975	G
1	0	2016	A
1	0	2018	G
1	0	2034	A
1	0	2059	U
1	0	2204	A
1	0	2228	U
1	0	2237	C
1	0	2254	C
1	0	2261	G
1	0	2404	A
1	0	2409	A
1	0	2418	A
1	0	2476	A
1	0	2482	A
1	0	2624	G
1	0	2633	A
1	0	2660	C
1	0	2693	U
1	0	2758	A
1	0	2823	G
1	0	2841	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	0	2848	A
1	0	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

EDS was not executed - this section is therefore empty.

6.2 Non-standard residues in protein, DNA, RNA chains

EDS was not executed - this section is therefore empty.

6.3 Carbohydrates

EDS was not executed - this section is therefore empty.

6.4 Ligands

EDS was not executed - this section is therefore empty.

6.5 Other polymers

EDS was not executed - this section is therefore empty.