



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 20, 2016 – 02:31 AM GMT

PDB ID : 5E7K
Title : Structure of T. thermophilus 70S ribosome complex with mRNA and cognate tRNA^{Lys} in the A-site
Authors : Rozov, A.; Demeshkina, N.; Khusainov, I.; Yusupov, M.; Yusupova, G.
Deposited on : 2015-10-12
Resolution : 3.20 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
<http://wwpdb.org/validation/2016/XrayValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20026982
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20026982

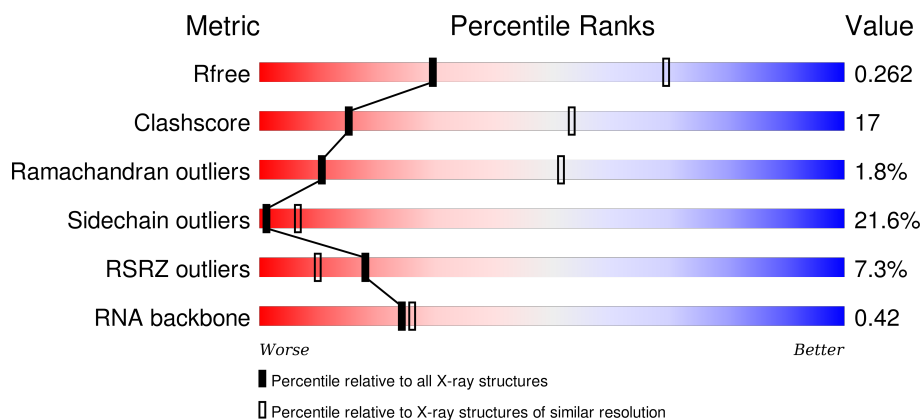
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.20 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	91344	1124 (3.24-3.16)
Clashscore	102246	1024 (3.22-3.18)
Ramachandran outliers	100387	1004 (3.22-3.18)
Sidechain outliers	100360	1003 (3.22-3.18)
RSRZ outliers	91569	1129 (3.24-3.16)
RNA backbone	2183	1079 (3.70-2.70)

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

Mol	Chain	Length	Quality of chain
1	13	1522	
1	1G	1522	
2	12	256	
2	1E	256	


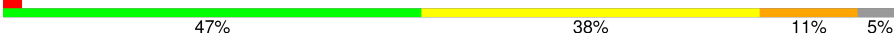



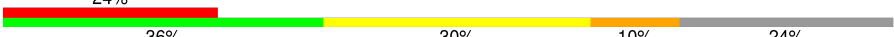
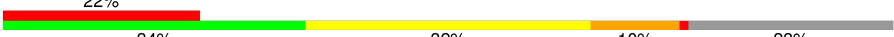
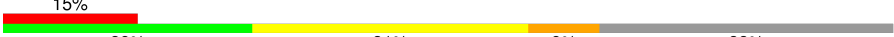
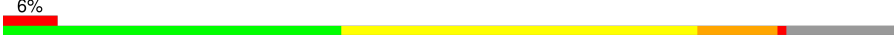

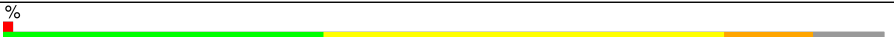
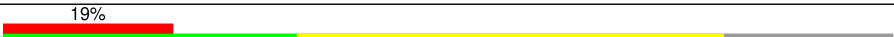

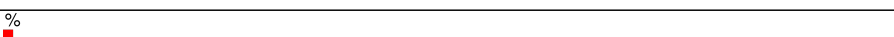
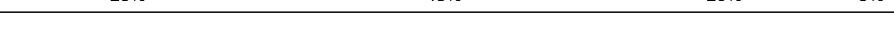
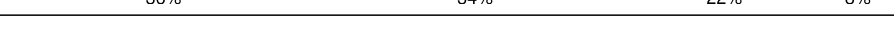



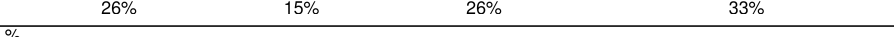
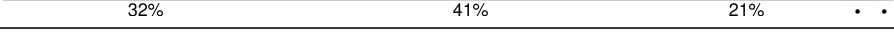
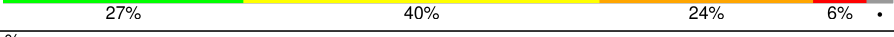
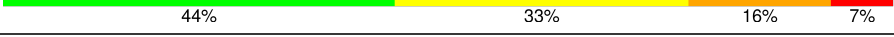


Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	22	239	
3	2E	239	
4	32	209	
4	3E	209	
5	42	162	
5	4E	162	
6	52	101	
6	5E	101	
7	62	156	
7	6E	156	
8	72	138	
8	7E	138	
9	82	128	
9	8E	128	
10	1A	105	
10	1I	105	
11	2A	129	
11	2I	129	
12	3A	132	
12	3I	132	
13	4A	126	
13	4I	126	
14	5A	61	
14	5I	61	
15	6A	89	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	6I	89	
16	7A	88	
16	7I	88	
17	8A	105	
17	8I	105	
18	9A	88	
18	9I	88	
19	AA	93	
19	AI	93	
20	BA	106	
20	BI	106	
21	1B	27	
21	1F	27	
22	1K	75	
23	2K	77	
23	2L	77	
24	3K	76	
25	4K	27	
25	4L	27	
26	14	2917	
26	1H	2917	
27	16	122	
27	1J	122	
28	71	229	
28	79	229	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
29	11	276	
29	19	276	
30	21	206	
30	29	206	
31	31	210	
31	39	210	
32	41	182	
32	49	182	
33	51	180	
33	59	180	
34	61	148	
34	69	148	
35	15	140	
35	58	140	
36	25	122	
36	68	122	
37	35	150	
37	78	150	
38	45	141	
38	88	141	
39	55	118	
39	98	118	
40	65	112	
40	A8	112	
41	75	146	

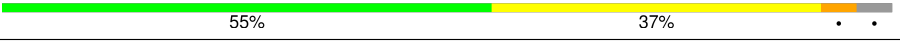

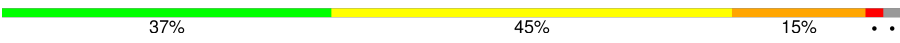
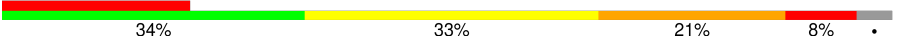
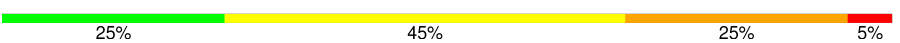
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
41	B8	146	
42	85	118	
42	C8	118	
43	95	101	
43	D8	101	
44	A5	113	
44	E8	113	
45	B5	96	
45	F8	96	
46	C5	110	
46	G8	110	
47	D5	206	
47	H8	206	
48	E5	85	
48	I8	85	
49	F5	98	
49	J8	98	
50	G5	72	
50	K8	72	
51	H5	60	
51	L8	60	
52	M8	71	
53	J5	60	
53	N8	60	
54	L5	49	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
54	P8	49	
55	M5	65	
55	Q8	65	
56	1L	76	
57	3L	76	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	13	1601	-	-	-	X
58	MG	13	1604	-	-	-	X
58	MG	13	1609	-	-	-	X
58	MG	13	1614	-	-	-	X
58	MG	13	1617	-	-	-	X
58	MG	13	1623	-	-	-	X
58	MG	13	1624	-	-	-	X
58	MG	13	1628	-	-	-	X
58	MG	13	1636	-	-	-	X
58	MG	13	1637	-	-	-	X
58	MG	13	1645	-	-	-	X
58	MG	13	1648	-	-	-	X
58	MG	13	1649	-	-	-	X
58	MG	13	1655	-	-	-	X
58	MG	13	1658	-	-	-	X
58	MG	13	1667	-	-	-	X
58	MG	13	1669	-	-	-	X
58	MG	13	1680	-	-	-	X
58	MG	13	1696	-	-	-	X
58	MG	13	1702	-	-	-	X
58	MG	13	1704	-	-	-	X
58	MG	13	1732	-	-	-	X
58	MG	14	3003	-	-	-	X
58	MG	14	3004	-	-	-	X
58	MG	14	3006	-	-	-	X
58	MG	14	3009	-	-	-	X
58	MG	14	3010	-	-	-	X
58	MG	14	3015	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	14	3016	-	-	-	X
58	MG	14	3020	-	-	-	X
58	MG	14	3021	-	-	-	X
58	MG	14	3026	-	-	-	X
58	MG	14	3031	-	-	-	X
58	MG	14	3040	-	-	-	X
58	MG	14	3046	-	-	-	X
58	MG	14	3053	-	-	-	X
58	MG	14	3057	-	-	-	X
58	MG	14	3058	-	-	-	X
58	MG	14	3060	-	-	-	X
58	MG	14	3061	-	-	-	X
58	MG	14	3064	-	-	-	X
58	MG	14	3065	-	-	-	X
58	MG	14	3066	-	-	-	X
58	MG	14	3070	-	-	-	X
58	MG	14	3075	-	-	-	X
58	MG	14	3076	-	-	-	X
58	MG	14	3081	-	-	-	X
58	MG	14	3082	-	-	-	X
58	MG	14	3085	-	-	-	X
58	MG	14	3088	-	-	-	X
58	MG	14	3093	-	-	-	X
58	MG	14	3100	-	-	-	X
58	MG	14	3101	-	-	-	X
58	MG	14	3105	-	-	-	X
58	MG	14	3107	-	-	-	X
58	MG	14	3110	-	-	-	X
58	MG	14	3117	-	-	-	X
58	MG	14	3122	-	-	-	X
58	MG	14	3124	-	-	-	X
58	MG	14	3126	-	-	-	X
58	MG	14	3127	-	-	-	X
58	MG	14	3134	-	-	-	X
58	MG	14	3144	-	-	-	X
58	MG	14	3145	-	-	-	X
58	MG	14	3149	-	-	-	X
58	MG	14	3153	-	-	-	X
58	MG	14	3155	-	-	-	X
58	MG	14	3157	-	-	-	X
58	MG	14	3158	-	-	-	X
58	MG	14	3173	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	14	3184	-	-	-	X
58	MG	14	3192	-	-	-	X
58	MG	14	3193	-	-	-	X
58	MG	14	3195	-	-	-	X
58	MG	14	3201	-	-	-	X
58	MG	14	3202	-	-	-	X
58	MG	14	3204	-	-	-	X
58	MG	14	3209	-	-	-	X
58	MG	14	3212	-	-	-	X
58	MG	14	3213	-	-	-	X
58	MG	14	3214	-	-	-	X
58	MG	14	3215	-	-	-	X
58	MG	14	3216	-	-	-	X
58	MG	14	3220	-	-	-	X
58	MG	14	3223	-	-	-	X
58	MG	14	3224	-	-	-	X
58	MG	14	3230	-	-	-	X
58	MG	14	3231	-	-	-	X
58	MG	14	3233	-	-	-	X
58	MG	14	3235	-	-	-	X
58	MG	14	3242	-	-	-	X
58	MG	14	3243	-	-	-	X
58	MG	14	3246	-	-	-	X
58	MG	14	3247	-	-	-	X
58	MG	14	3248	-	-	-	X
58	MG	14	3249	-	-	-	X
58	MG	14	3250	-	-	-	X
58	MG	14	3251	-	-	-	X
58	MG	14	3254	-	-	-	X
58	MG	14	3255	-	-	-	X
58	MG	14	3267	-	-	-	X
58	MG	14	3274	-	-	-	X
58	MG	14	3284	-	-	-	X
58	MG	14	3287	-	-	-	X
58	MG	14	3290	-	-	-	X
58	MG	14	3299	-	-	-	X
58	MG	14	3302	-	-	-	X
58	MG	14	3312	-	-	-	X
58	MG	14	3338	-	-	-	X
58	MG	14	3397	-	-	-	X
58	MG	16	204	-	-	-	X
58	MG	1G	1601	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1G	1602	-	-	-	X
58	MG	1G	1607	-	-	-	X
58	MG	1G	1609	-	-	-	X
58	MG	1G	1613	-	-	-	X
58	MG	1G	1615	-	-	-	X
58	MG	1G	1616	-	-	-	X
58	MG	1G	1620	-	-	-	X
58	MG	1G	1625	-	-	-	X
58	MG	1G	1627	-	-	-	X
58	MG	1G	1628	-	-	-	X
58	MG	1G	1634	-	-	-	X
58	MG	1G	1636	-	-	-	X
58	MG	1G	1641	-	-	-	X
58	MG	1G	1649	-	-	-	X
58	MG	1G	1655	-	-	-	X
58	MG	1G	1668	-	-	-	X
58	MG	1G	1675	-	-	-	X
58	MG	1H	3004	-	-	-	X
58	MG	1H	3006	-	-	-	X
58	MG	1H	3010	-	-	-	X
58	MG	1H	3013	-	-	-	X
58	MG	1H	3015	-	-	-	X
58	MG	1H	3020	-	-	-	X
58	MG	1H	3037	-	-	-	X
58	MG	1H	3048	-	-	-	X
58	MG	1H	3051	-	-	-	X
58	MG	1H	3053	-	-	-	X
58	MG	1H	3056	-	-	-	X
58	MG	1H	3058	-	-	-	X
58	MG	1H	3062	-	-	-	X
58	MG	1H	3063	-	-	-	X
58	MG	1H	3064	-	-	-	X
58	MG	1H	3065	-	-	-	X
58	MG	1H	3066	-	-	-	X
58	MG	1H	3067	-	-	-	X
58	MG	1H	3071	-	-	-	X
58	MG	1H	3072	-	-	-	X
58	MG	1H	3074	-	-	-	X
58	MG	1H	3075	-	-	-	X
58	MG	1H	3077	-	-	-	X
58	MG	1H	3080	-	-	-	X
58	MG	1H	3082	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1H	3088	-	-	-	X
58	MG	1H	3090	-	-	-	X
58	MG	1H	3091	-	-	-	X
58	MG	1H	3095	-	-	-	X
58	MG	1H	3096	-	-	-	X
58	MG	1H	3101	-	-	-	X
58	MG	1H	3102	-	-	-	X
58	MG	1H	3103	-	-	-	X
58	MG	1H	3109	-	-	-	X
58	MG	1H	3110	-	-	-	X
58	MG	1H	3115	-	-	-	X
58	MG	1H	3117	-	-	-	X
58	MG	1H	3119	-	-	-	X
58	MG	1H	3120	-	-	-	X
58	MG	1H	3124	-	-	-	X
58	MG	1H	3126	-	-	-	X
58	MG	1H	3128	-	-	-	X
58	MG	1H	3136	-	-	-	X
58	MG	1H	3139	-	-	-	X
58	MG	1H	3140	-	-	-	X
58	MG	1H	3147	-	-	-	X
58	MG	1H	3148	-	-	-	X
58	MG	1H	3153	-	-	-	X
58	MG	1H	3163	-	-	-	X
58	MG	1H	3166	-	-	-	X
58	MG	1H	3176	-	-	-	X
58	MG	1H	3177	-	-	-	X
58	MG	1H	3183	-	-	-	X
58	MG	1H	3187	-	-	-	X
58	MG	1H	3191	-	-	-	X
58	MG	1H	3192	-	-	-	X
58	MG	1H	3199	-	-	-	X
58	MG	1H	3211	-	-	-	X
58	MG	1H	3217	-	-	-	X
58	MG	1H	3239	-	-	-	X
58	MG	1H	3242	-	-	-	X
58	MG	1H	3243	-	-	-	X
58	MG	1H	3247	-	-	-	X
58	MG	1H	3255	-	-	-	X
58	MG	1H	3256	-	-	-	X
58	MG	1H	3258	-	-	-	X
58	MG	1H	3260	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1H	3261	-	-	-	X
58	MG	1H	3263	-	-	-	X
58	MG	1H	3265	-	-	-	X
58	MG	1H	3272	-	-	-	X
58	MG	1H	3273	-	-	-	X
58	MG	1H	3279	-	-	-	X
58	MG	1H	3283	-	-	-	X
58	MG	1H	3285	-	-	-	X
58	MG	1H	3290	-	-	-	X
58	MG	1H	3291	-	-	-	X
58	MG	1H	3302	-	-	-	X
58	MG	1H	3303	-	-	-	X
58	MG	1H	3312	-	-	-	X
58	MG	1H	3318	-	-	-	X
58	MG	1H	3321	-	-	-	X
58	MG	1H	3331	-	-	-	X
58	MG	1H	3347	-	-	-	X
58	MG	1H	3357	-	-	-	X
58	MG	1H	3368	-	-	-	X
58	MG	1H	3375	-	-	-	X
58	MG	1H	3394	-	-	-	X
58	MG	1H	3430	-	-	-	X
58	MG	2I	302	-	-	-	X
58	MG	29	301	-	-	-	X
58	MG	2K	101	-	-	-	X
58	MG	2L	101	-	-	-	X
58	MG	35	201	-	-	-	X
59	SF4	32	301	-	-	X	-

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 294444 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	13	1496	Total	C	N	O	P	0	0	0
			32157	14313	5960	10388	1496			
1	1G	1507	Total	C	N	O	P	0	0	0
			32391	14418	6004	10463	1506			

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
13	1542	G	-	expression tag	GB 55771382
13	1543	C	-	expression tag	GB 55771382
13	1544	U	-	expression tag	GB 55771382
1G	1542	G	-	expression tag	GB 55771382
1G	1543	C	-	expression tag	GB 55771382
1G	1544	U	-	expression tag	GB 55771382

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1E	231	Total	C	N	O	S	0	0	0
			1874	1199	334	336	5			
2	12	210	Total	C	N	O	S	0	0	0
			1721	1100	309	308	4			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	2E	205	Total	C	N	O	S	0	0	0
			1605	1011	313	280	1			
3	22	196	Total	C	N	O	S	0	0	0
			1541	975	298	267	1			

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	3E	207	Total	C	N	O	S	0	0	0
			1698	1064	338	289	7			
4	32	208	Total	C	N	O	S	0	0	0
			1702	1066	339	290	7			

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	4E	149	Total	C	N	O	S	0	0	0
			1142	722	216	200	4			
5	42	148	Total	C	N	O	S	0	0	0
			1134	718	215	197	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	5E	100	Total	C	N	O	S	0	0	0
			837	528	154	152	3			
6	52	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	154	Total	C	N	O	S	0	0	0
			1242	770	250	216	6			
7	62	138	Total	C	N	O	S	0	0	0
			1110	689	221	194	6			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	7E	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			
8	72	137	Total	C	N	O	S	0	0	0
			1107	700	214	191	2			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	8E	126	Total	C	N	O		0	0	0
			1000	634	196	170				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	82	121	Total	C	N	O	0	0	0
			953	605	186	162			

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1I	91	Total	C	N	O	S	0	0	0
			734	459	144	130	1			
10	1A	80	Total	C	N	O		0	0	0
			646	403	129	114				

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	2I	111	Total	C	N	O	S	0	0	0
			823	512	154	154	3			
11	2A	113	Total	C	N	O	S	0	0	0
			835	520	156	156	3			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	3I	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			
12	3A	122	Total	C	N	O	S	0	0	0
			956	603	193	159	1			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	4I	119	Total	C	N	O	S	0	0	0
			942	582	194	164	2			
13	4A	111	Total	C	N	O	S	0	0	0
			893	552	183	156	2			

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	5I	60	Total	C	N	O	S	0	0	0
			491	312	104	71	4			
14	5A	59	Total	C	N	O	S	0	0	0
			486	309	103	70	4			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	6I	87	Total	C	N	O	S	0	0	0
			729	457	146	124	2			
15	6A	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	68	Total	C	N	O	0	0	0
			549	352	105	92			
18	9A	67	Total	C	N	O	0	0	0
			544	349	104	91			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	81	Total	C	N	O	S	0	0	0
			654	417	122	113	2			
19	AA	62	Total	C	N	O	S	0	0	0
			481	306	85	88	2			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	97	Total	C	N	O	S	0	0	0
			746	461	157	126	2			
20	BA	99	Total	C	N	O	S	0	0	0
			762	470	162	128	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	1F	23	Total	C	N	O		0	0	0
			199	122	48	29				
21	1B	22	Total	C	N	O		0	0	0
			188	116	44	28				

- Molecule 22 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
22	1K	71	Total	C	N	O	P	S	0	0	0
			1520	681	264	503	71	1			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1K	?	-	G	deletion	GB 836716955

- Molecule 23 is a RNA chain called tRNA^{fMet}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
23	2K	77	Total	C	N	O	P	S	0	0	0
			1646	735	297	536	77	1			
23	2L	77	Total	C	N	O	P	S	0	0	0
			1646	735	297	536	77	1			

- Molecule 24 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	3K	76	Total	C	N	O	P	0	0	0
			1611	721	281	534	75			

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	4K	19	Total	C	N	O	P	0	0	0
			419	188	89	123	19			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	4L	18	Total	C	N	O	P	0	0	0
			397	178	84	117	18			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	1H	2833	Total	C	N	O	P	0	0	0
			61028	27159	11418	19618	2833			
26	14	2861	Total	C	N	O	P	0	0	0
			61630	27429	11535	19806	2860			

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	UNK	conflict	GB 55771382
1H	654A	A	G	conflict	GB 55771382
1H	654E	C	G	conflict	GB 55771382
1H	654P	G	C	conflict	GB 55771382
1H	654T	A	C	conflict	GB 55771382
1H	1058	U	G	conflict	GB 55771382
1H	1080	A	C	conflict	GB 55771382
14	158	U	UNK	conflict	GB 55771382
14	654A	A	G	conflict	GB 55771382
14	654E	C	G	conflict	GB 55771382
14	654P	G	C	conflict	GB 55771382
14	654T	A	C	conflict	GB 55771382
14	1058	U	G	conflict	GB 55771382
14	1080	A	C	conflict	GB 55771382

- Molecule 27 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
27	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 28 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	71	133	Total	C	N	O	S	0	0	0
			1033	651	194	187	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
28	79	57	Total	C	N	O	0	0	0
			456	283	91	82			

- Molecule 29 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	11	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			
29	19	274	Total	C	N	O	S	0	0	0
			2125	1341	422	359	3			

- Molecule 30 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	21	203	Total	C	N	O	S	0	0	0
			1558	985	298	269	6			
30	29	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			

- Molecule 31 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
31	39	204	Total	C	N	O	S	0	0	0
			1602	1022	299	279	2			

- Molecule 32 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	41	179	Total	C	N	O	S	0	0	0
			1457	931	265	257	4			
32	49	179	Total	C	N	O	S	0	0	0
			1458	931	266	257	4			

- Molecule 33 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	51	171	Total	C	N	O	S	0	0	0
			1312	832	246	233	1			
33	59	73	Total	C	N	O		0	0	0
			568	356	116	96				

- Molecule 34 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	61	146	Total	C	N	O	S	0	0	0
			1136	726	201	208	1			
34	69	145	Total	C	N	O	S	0	0	0
			1131	723	200	207	1			

- Molecule 35 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	58	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
35	15	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			

- Molecule 36 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	68	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			
36	25	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			

- Molecule 37 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	78	147	Total	C	N	O	S	0	0	0
			1122	698	229	192	3			
37	35	147	Total	C	N	O	S	0	0	0
			1122	698	229	192	3			

- Molecule 38 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	88	141	Total	C	N	O	S	0	0	0
			1113	709	210	187	7			
38	45	138	Total	C	N	O	S	0	0	0
			1099	702	208	183	6			

- Molecule 39 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
39	55	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			

- Molecule 40 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	A8	111	Total	C	N	O	S	0	0	0
			881	556	176	149				
40	65	110	Total	C	N	O	S	0	0	0
			876	553	175	148				

- Molecule 41 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	B8	133	Total	C	N	O	S	0	0	0
			1109	691	228	189	1			
41	75	133	Total	C	N	O	S	0	0	0
			1109	691	228	189	1			

- Molecule 42 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	C8	115	Total	C	N	O	S	0	0	0
			950	603	199	147	1			
42	85	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 43 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	D8	100	Total	C	N	O	S	0	0	0
			774	499	141	133	1			
43	95	100	Total	C	N	O	S	0	0	0
			774	499	141	133	1			

- Molecule 44 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	E8	112	Total	C	N	O	S	0	0	0
			890	560	175	153	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	A5	113	Total	C	N	O	S	0	0	0
			899	566	177	154	2			

- Molecule 45 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	F8	95	Total	C	N	O	S	0	0	0
			743	482	134	126	1			
45	B5	94	Total	C	N	O		0	0	0
			735	477	133	125				

- Molecule 46 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	G8	105	Total	C	N	O	S	0	0	0
			796	513	150	128	5			
46	C5	104	Total	C	N	O	S	0	0	0
			794	510	152	127	5			

- Molecule 47 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	H8	171	Total	C	N	O	S	0	0	0
			1373	876	247	247	3			
47	D5	132	Total	C	N	O	S	0	0	0
			1074	691	193	188	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	I8	76	Total	C	N	O	S	0	0	0
			606	376	128	101	1			
48	E5	77	Total	C	N	O	S	0	0	0
			608	375	129	103	1			

- Molecule 49 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	J8	94	Total	C	N	O	S	0	0	0
			737	463	146	127	1			
49	F5	94	Total	C	N	O	S	0	0	0
			737	463	146	127	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	K8	68	Total	C	N	O	S	0	0	0
			568	352	115	100	1			
50	G5	66	Total	C	N	O	S	0	0	0
			558	346	113	98	1			

- Molecule 51 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	L8	58	Total	C	N	O	0	0	0
			459	293	89	77			
51	H5	58	Total	C	N	O	0	0	0
			459	293	89	77			

- Molecule 52 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M8	47	Total	C	N	O	S	0	0	0
			366	234	61	66	5			

- Molecule 53 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	N8	48	Total	C	N	O	S	0	0	0
			369	229	75	60	5			
53	J5	56	Total	C	N	O	S	0	0	0
			434	272	87	70	5			

- Molecule 54 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	P8	47	Total	C	N	O	S	0	0	0
			401	246	99	54	2			
54	L5	47	Total	C	N	O	S	0	0	0
			401	246	99	54	2			

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	Q8	64	Total	C	N	O	S	0	0	0
			516	331	102	81	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	M5	64	Total	C	N	O	S	0	0	0
			516	331	102	81	2			

- Molecule 56 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	1L	73	Total	C	N	O	P	S	0	0
			1563	700	271	518	73	1		

- Molecule 57 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	3L	76	Total	C	N	O	P		0	0
			1612	722	281	534	75			

- Molecule 58 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

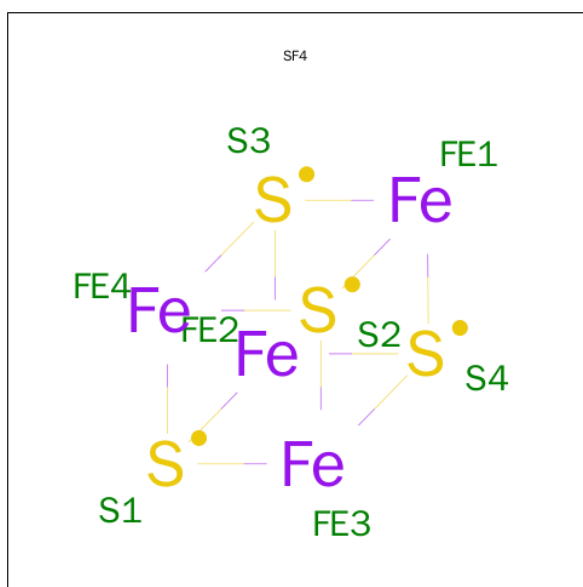
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	98	1	Total	Mg	0	0
			1	1		
58	45	2	Total	Mg	0	0
			2	2		
58	P8	1	Total	Mg	0	0
			1	1		
58	13	132	Total	Mg	0	0
			132	132		
58	1J	5	Total	Mg	0	0
			5	5		
58	1E	1	Total	Mg	0	0
			1	1		
58	35	3	Total	Mg	0	0
			3	3		
58	16	9	Total	Mg	0	0
			9	9		
58	25	1	Total	Mg	0	0
			1	1		
58	3K	1	Total	Mg	0	0
			1	1		
58	21	2	Total	Mg	0	0
			2	2		
58	2K	3	Total	Mg	0	0
			3	3		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	Q8	1	Total 1	Mg 1	0	0
58	L8	1	Total 1	Mg 1	0	0
58	I8	3	Total 3	Mg 3	0	0
58	5E	1	Total 1	Mg 1	0	0
58	29	4	Total 4	Mg 4	0	0
58	78	1	Total 1	Mg 1	0	0
58	J8	1	Total 1	Mg 1	0	0
58	39	1	Total 1	Mg 1	0	0
58	1G	90	Total 90	Mg 90	0	0
58	1H	467	Total 467	Mg 467	0	0
58	E5	1	Total 1	Mg 1	0	0
58	88	1	Total 1	Mg 1	0	0
58	14	399	Total 399	Mg 399	0	0
58	55	1	Total 1	Mg 1	0	0
58	6A	1	Total 1	Mg 1	0	0
58	1K	1	Total 1	Mg 1	0	0
58	41	1	Total 1	Mg 1	0	0
58	2L	2	Total 2	Mg 2	0	0

- Molecule 59 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe₄S₄).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
59	3E	1	Total	Fe	S	0	0
			8	4	4		
59	32	1	Total	Fe	S	0	0
			8	4	4		

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	C5	1	Total	Zn	0	0
			1	1		
60	5A	1	Total	Zn	0	0
			1	1		
60	G8	1	Total	Zn	0	0
			1	1		
60	5I	1	Total	Zn	0	0
			1	1		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	13	126	Total	O	0	0
			126	126		
61	3I	2	Total	O	0	0
			2	2		
61	5I	2	Total	O	0	0
			2	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1K	8	Total 8	O 8	0	0
61	3K	1	Total 1	O 1	0	0
61	4K	2	Total 2	O 2	0	0
61	1H	629	Total 629	O 629	0	0
61	16	29	Total 29	O 29	0	0
61	11	7	Total 7	O 7	0	0
61	21	4	Total 4	O 4	0	0
61	31	9	Total 9	O 9	0	0
61	58	2	Total 2	O 2	0	0
61	78	7	Total 7	O 7	0	0
61	88	1	Total 1	O 1	0	0
61	B8	1	Total 1	O 1	0	0
61	E8	2	Total 2	O 2	0	0
61	F8	1	Total 1	O 1	0	0
61	G8	1	Total 1	O 1	0	0
61	I8	3	Total 3	O 3	0	0
61	L8	2	Total 2	O 2	0	0
61	1G	78	Total 78	O 78	0	0
61	32	1	Total 1	O 1	0	0
61	5A	2	Total 2	O 2	0	0
61	14	417	Total 417	O 417	0	0

Continued on next page...

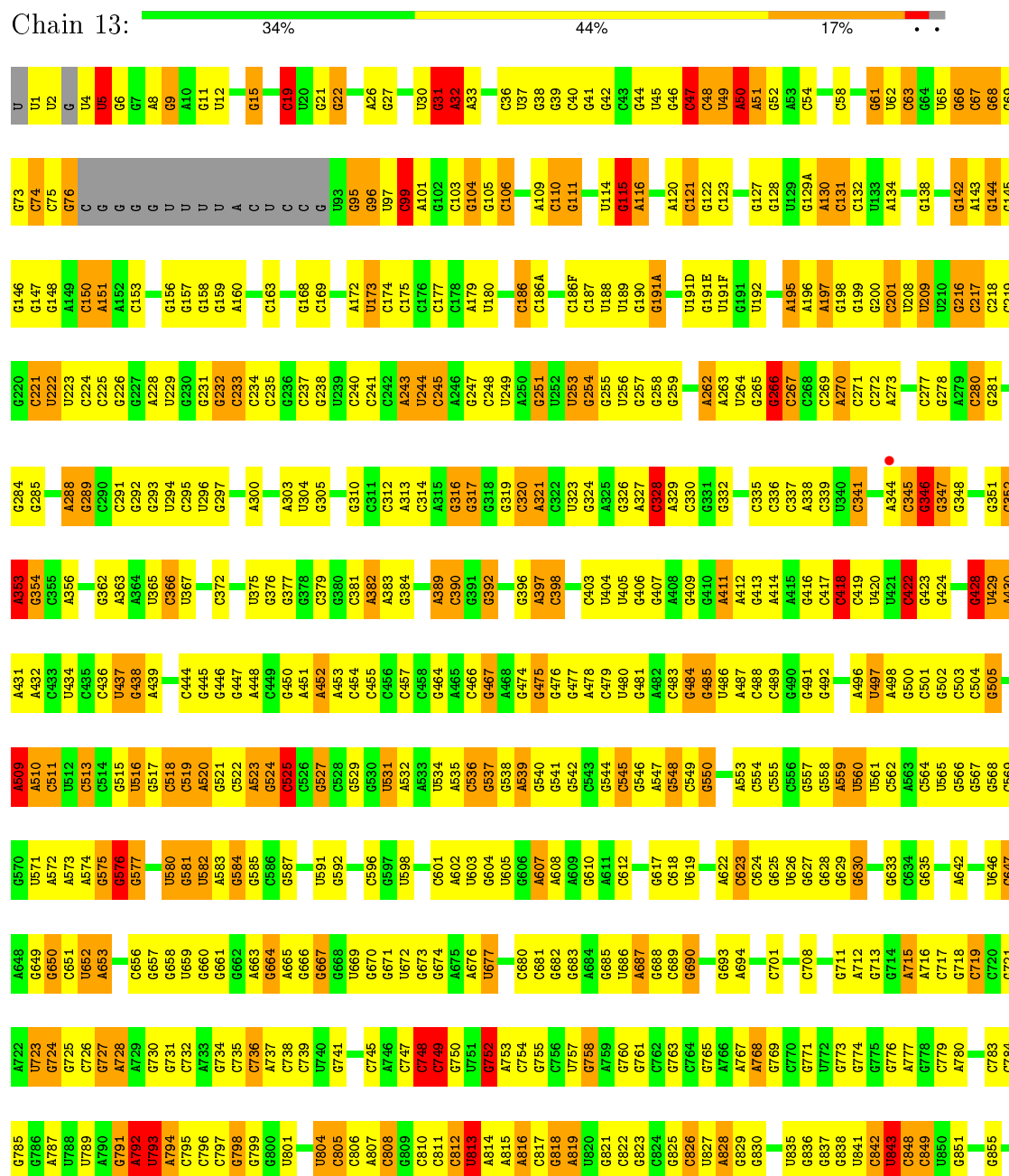
Continued from previous page...

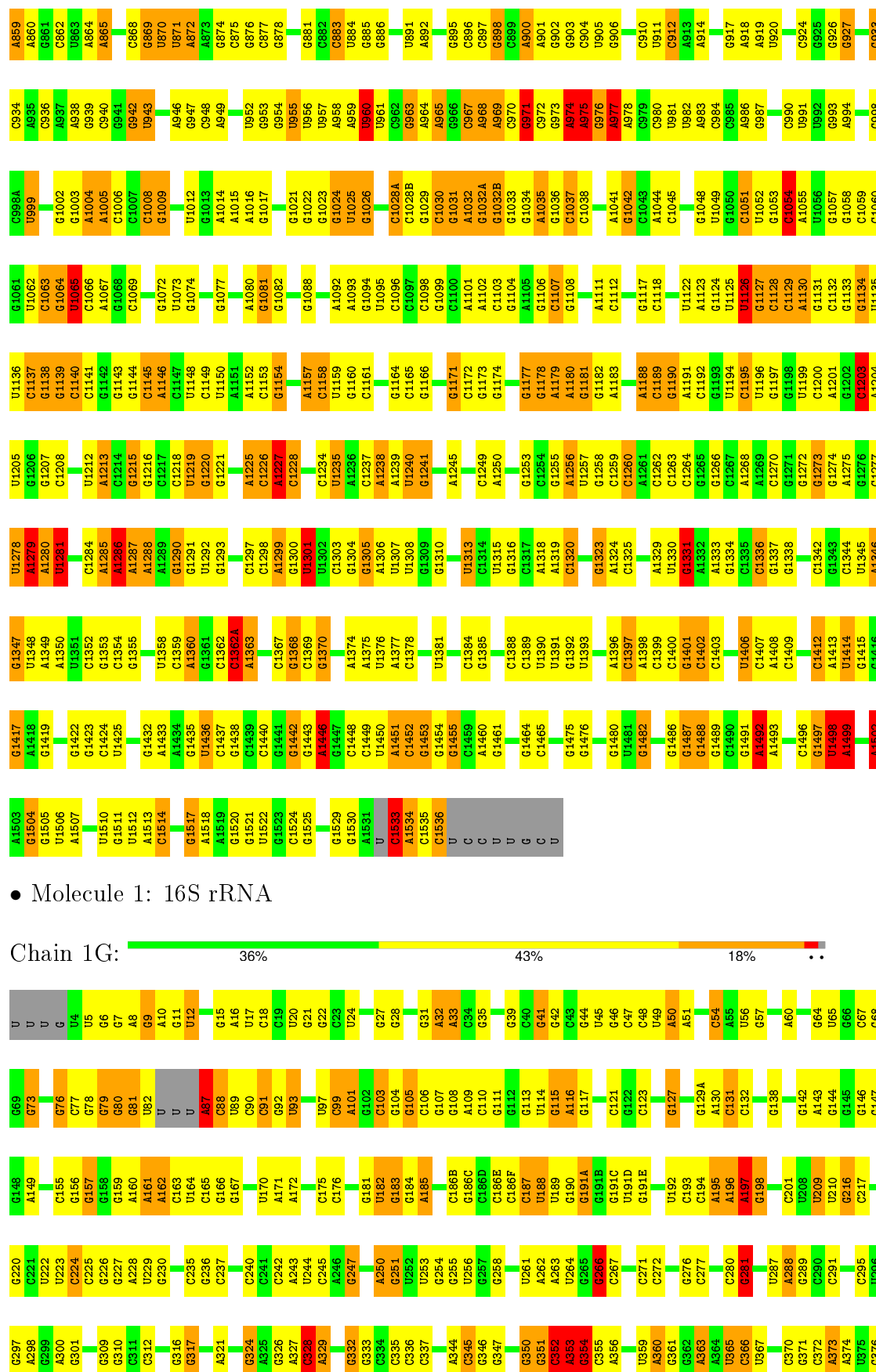
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	1J	6	Total 6	O 6	0	0
61	19	8	Total 8	O 8	0	0
61	29	2	Total 2	O 2	0	0
61	39	5	Total 5	O 5	0	0
61	35	1	Total 1	O 1	0	0
61	55	1	Total 1	O 1	0	0
61	A5	1	Total 1	O 1	0	0
61	H5	2	Total 2	O 2	0	0

3 Residue-property plots

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

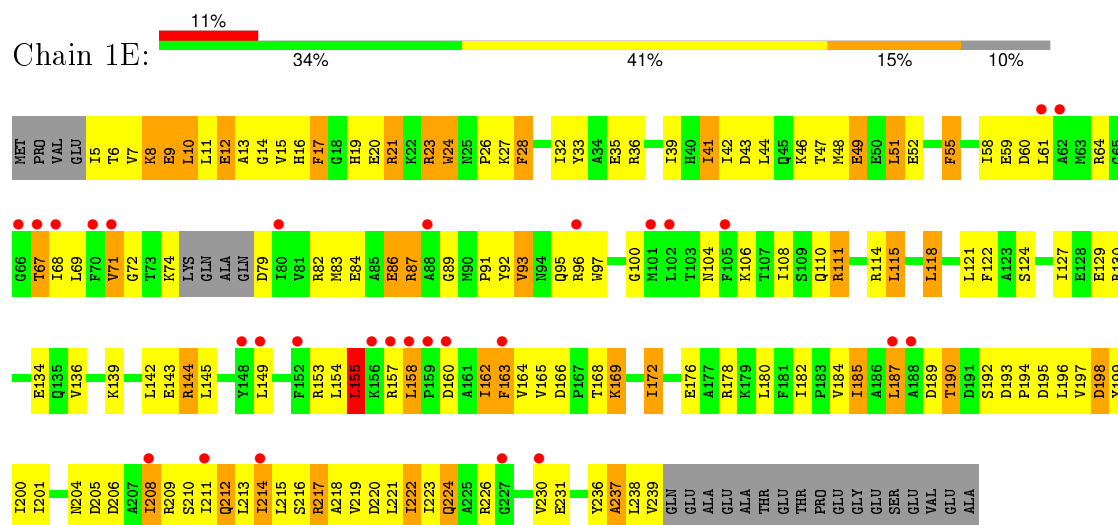
• Molecule 1: 16S rRNA



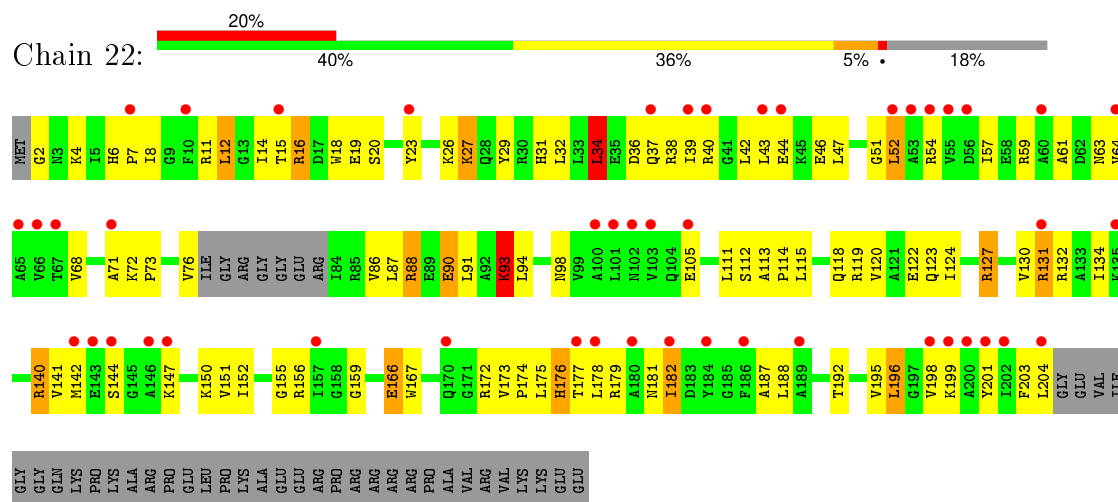


G377	C449	A532	C600	G674	A768	G851	G933	U999	G1061	U1135	C1200	G1267	C1328	C1400	G1486	G1487	G1488	G1489	C1490	U1495	C1491	C1492	C1493	C1494	U1495	U1498	A1499	G1505	U1506	A1507	G1511	U1512	C1513	C1514	C1515	C1516	G1517	A1518	A1519	G1520	G1521	U1522	G1525	G1526	G1529	G1530	A1531	U1532	C1533	C1534	C1535	C1536	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

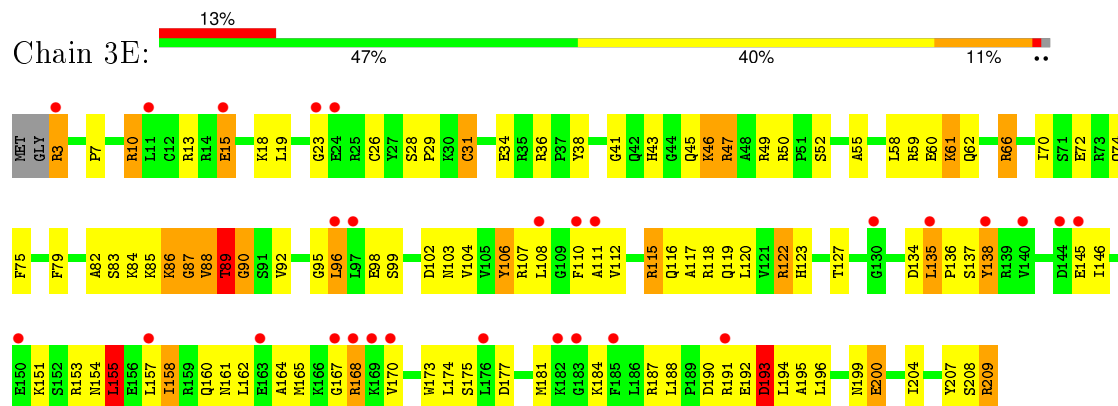
• Molecule 2: 30S ribosomal protein S2



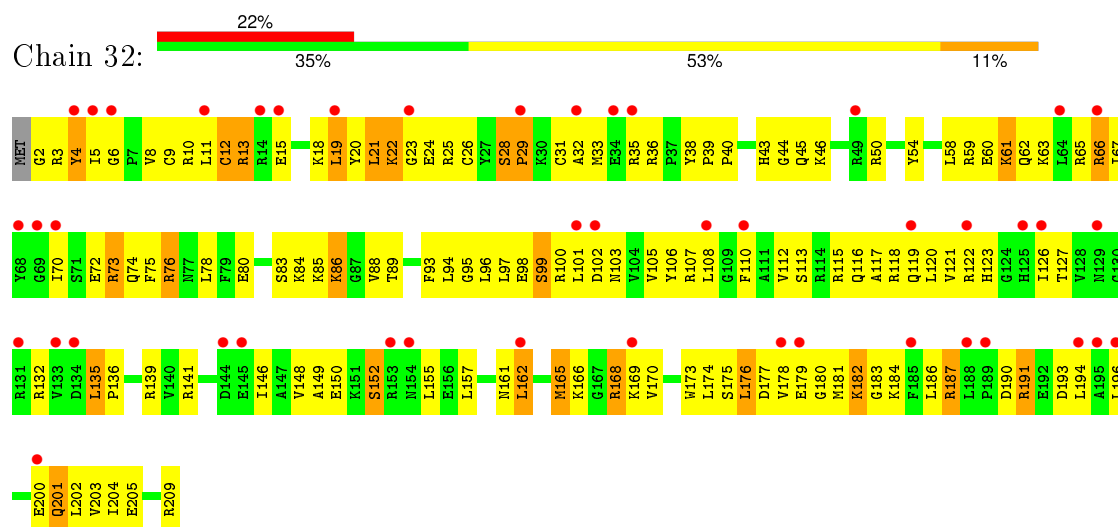
- Molecule 3: 30S ribosomal protein S3



- Molecule 4: 30S ribosomal protein S4

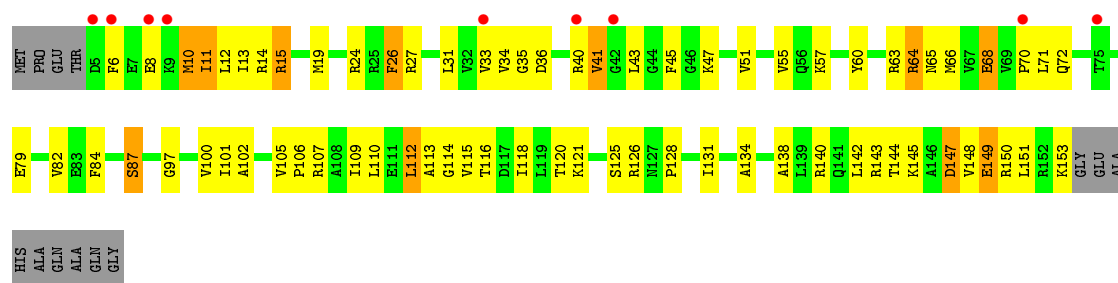


- Molecule 4: 30S ribosomal protein S4

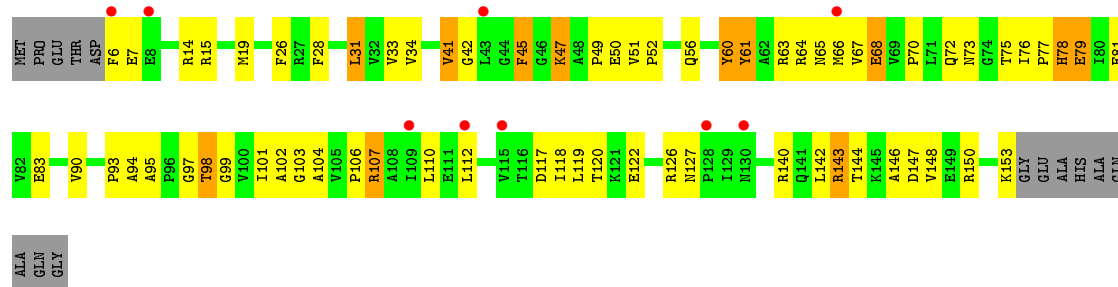


- Molecule 5: 30S ribosomal protein S5





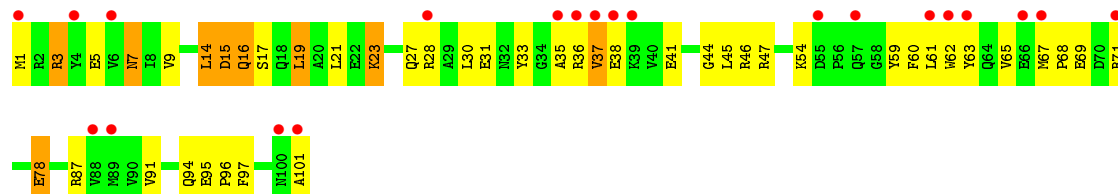
• Molecule 5: 30S ribosomal protein S5



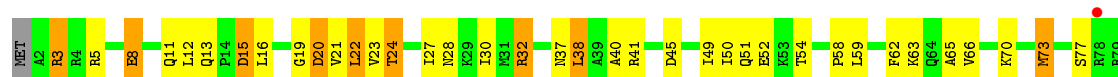
• Molecule 6: 30S ribosomal protein S6



• Molecule 6: 30S ribosomal protein S6



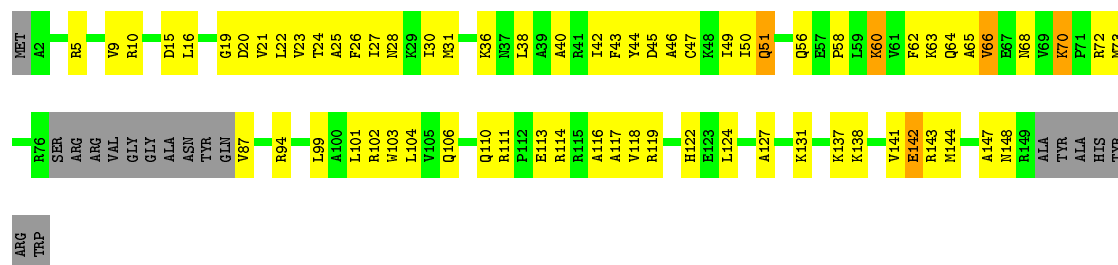
• Molecule 7: 30S ribosomal protein S7





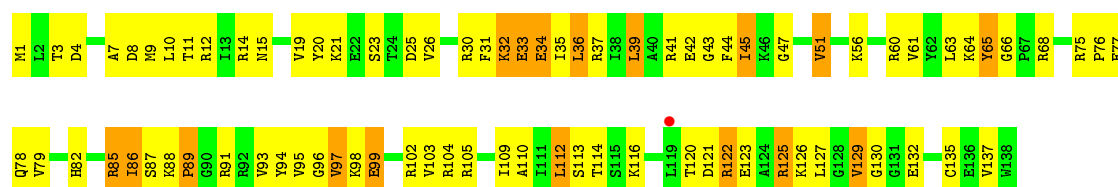
• Molecule 7: 30S ribosomal protein S7

Chain 62: 44% 41% 12%



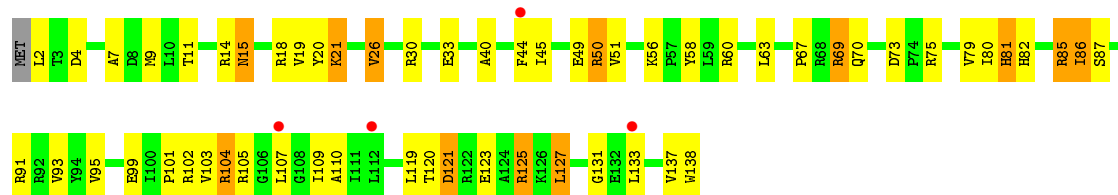
• Molecule 8: 30S ribosomal protein S8

Chain 7E: 41% 47% 12%



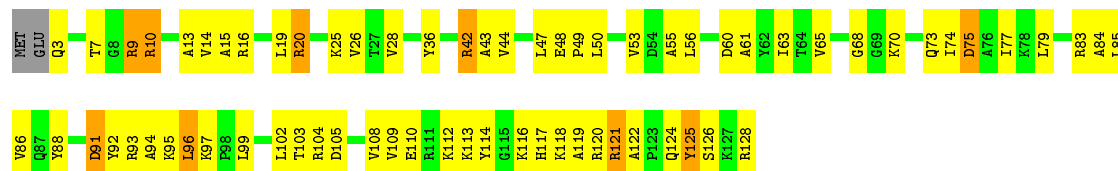
• Molecule 8: 30S ribosomal protein S8

Chain 72: 3% 57% 33% 9%



• Molecule 9: 30S ribosomal protein S9

Chain 8E: 45% 47% 7%



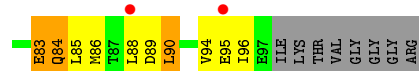
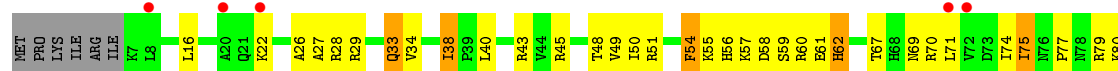
• Molecule 9: 30S ribosomal protein S9

Chain 82: 2% 36% 45% 13% 5%





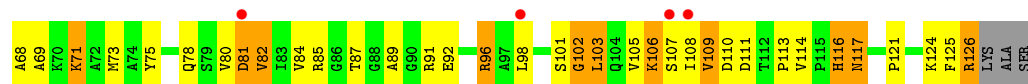
• Molecule 10: 30S ribosomal protein S10



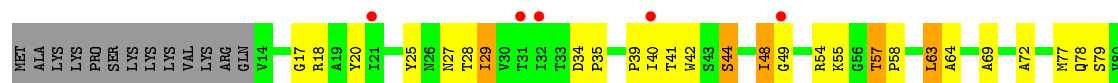
• Molecule 10: 30S ribosomal protein S10



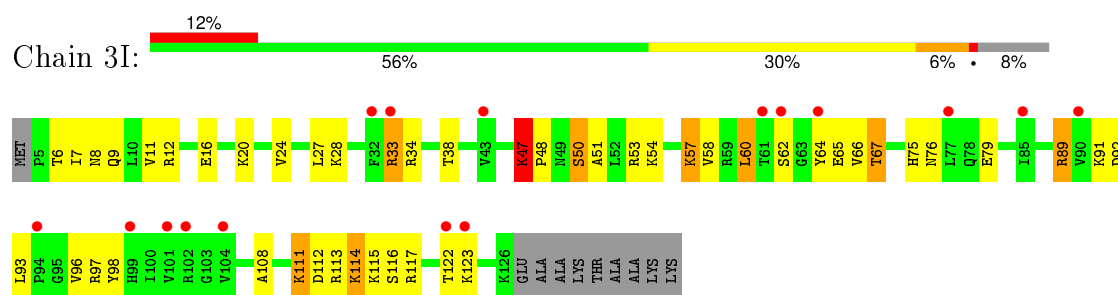
• Molecule 11: 30S ribosomal protein S11



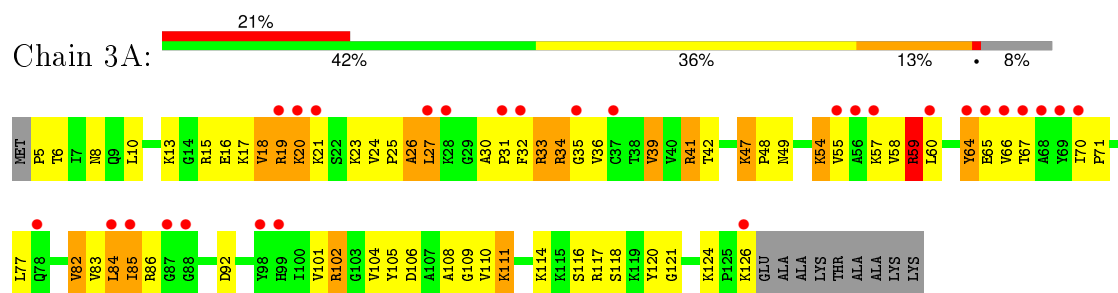
• Molecule 11: 30S ribosomal protein S11



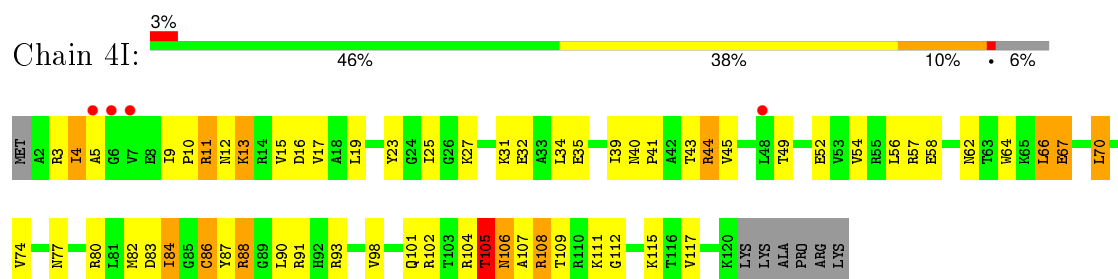
• Molecule 12: 30S ribosomal protein S12



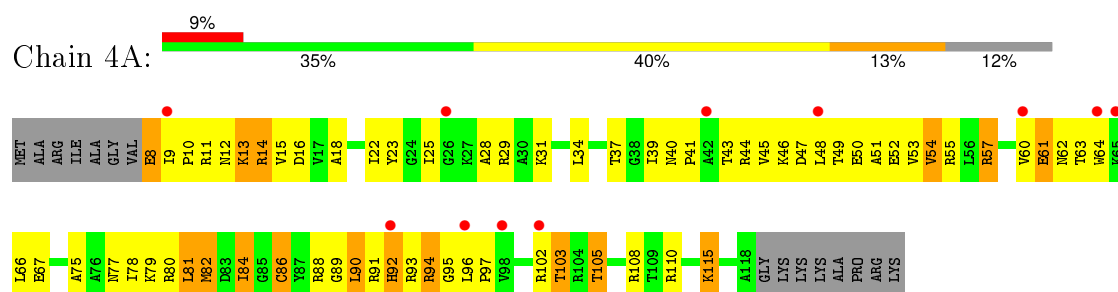
- Molecule 12: 30S ribosomal protein S12



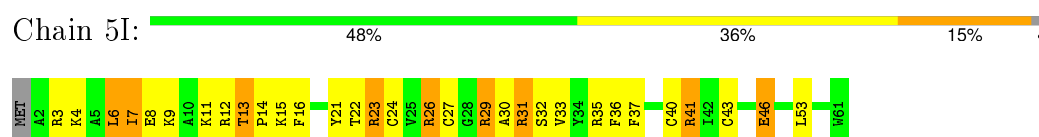
- Molecule 13: 30S ribosomal protein S13



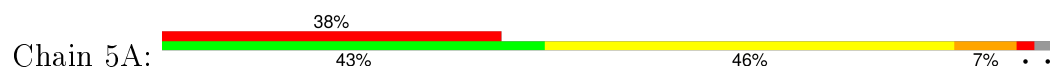
- Molecule 13: 30S ribosomal protein S13

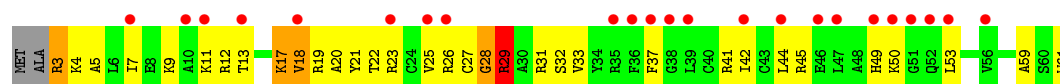


- Molecule 14: 30S ribosomal protein S14 type Z

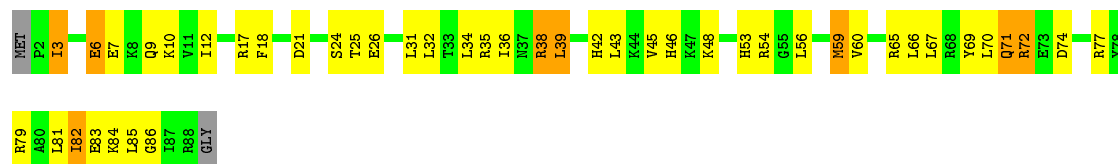


- Molecule 14: 30S ribosomal protein S14 type Z

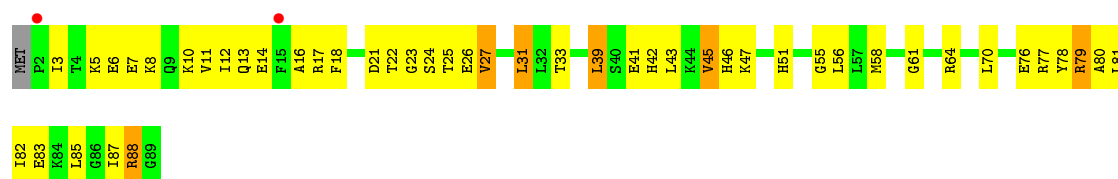




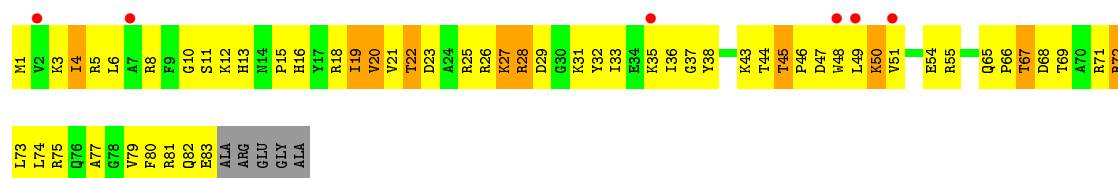
- Molecule 15: 30S ribosomal protein S15



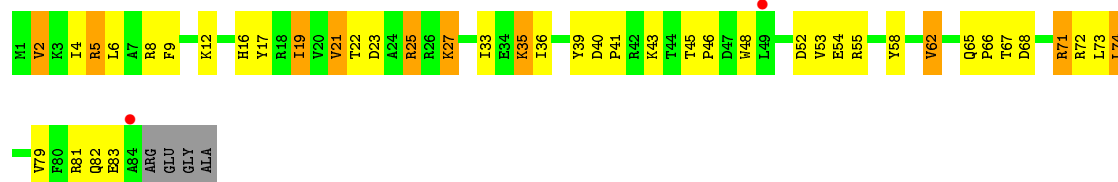
- Molecule 15: 30S ribosomal protein S15



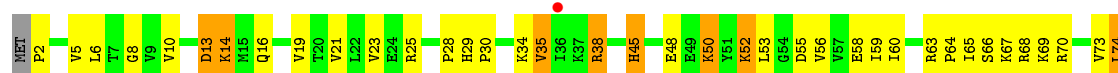
- Molecule 16: 30S ribosomal protein S16

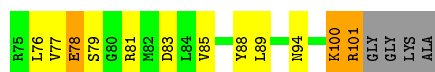


- Molecule 16: 30S ribosomal protein S16

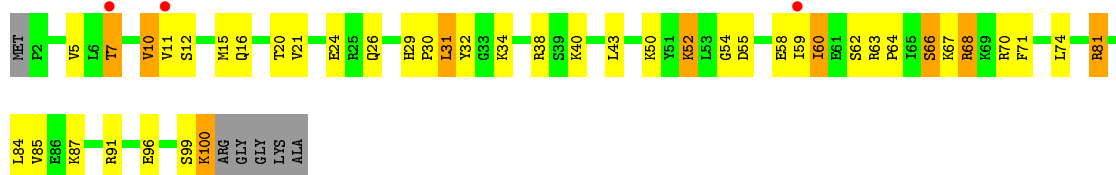


- Molecule 17: 30S ribosomal protein S17





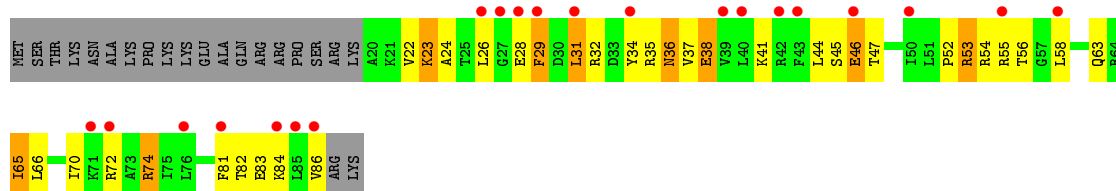
- Molecule 17: 30S ribosomal protein S17



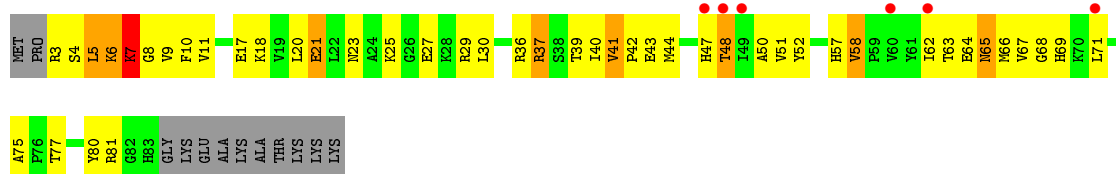
- Molecule 18: 30S ribosomal protein S18



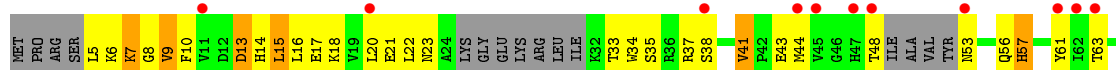
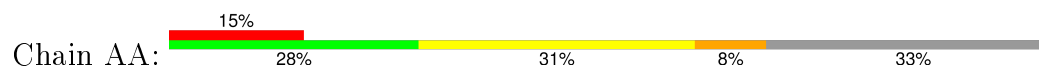
- Molecule 18: 30S ribosomal protein S18

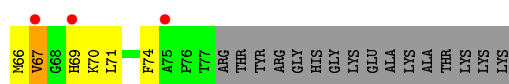


- Molecule 19: 30S ribosomal protein S19

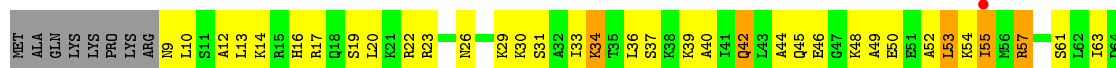


- Molecule 19: 30S ribosomal protein S19





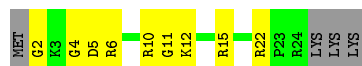
- Molecule 20: 30S ribosomal protein S20



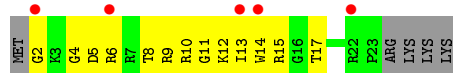
- Molecule 20: 30S ribosomal protein S20



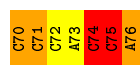
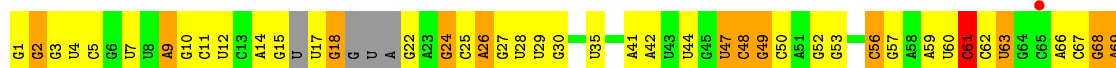
- Molecule 21: 30S ribosomal protein Thx



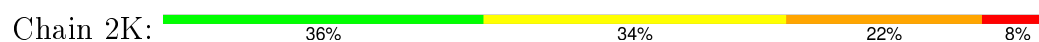
- Molecule 21: 30S ribosomal protein Thx

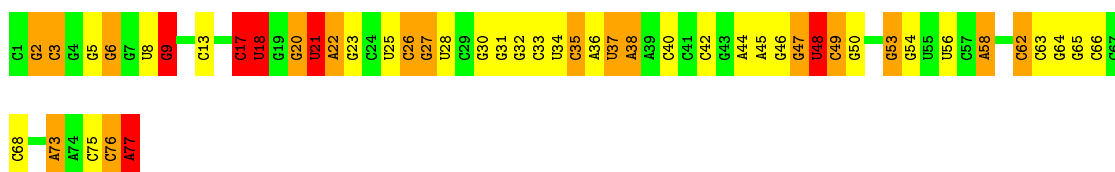


- Molecule 22: tRNA^{Lys}



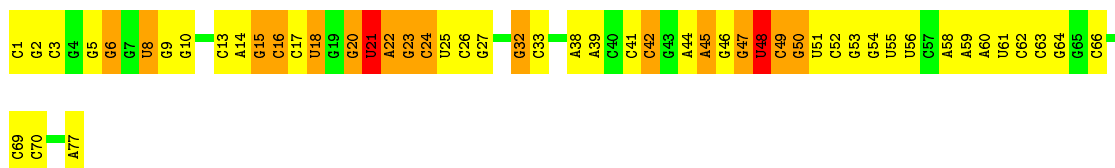
- Molecule 23: tRNA^{Met}





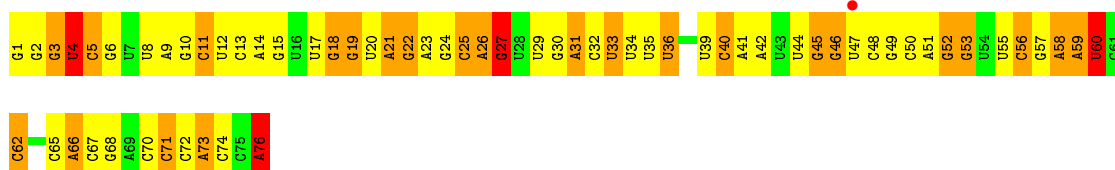
• Molecule 23: tRNAfMet

Chain 2L: 32% 45% 19%



• Molecule 24: tRNAly

Chain 3K: 16% 47% 32% 5%



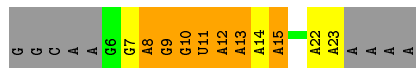
• Molecule 25: mRNA

Chain 4K: 4% 22% 22% 26% 30%



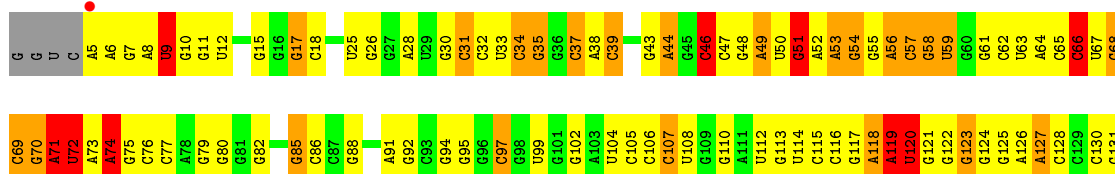
• Molecule 25: mRNA

Chain 4L: 26% 15% 26% 33%



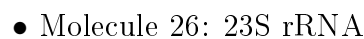
• Molecule 26: 23S rRNA

Chain 1H: 27% 40% 24% 6%



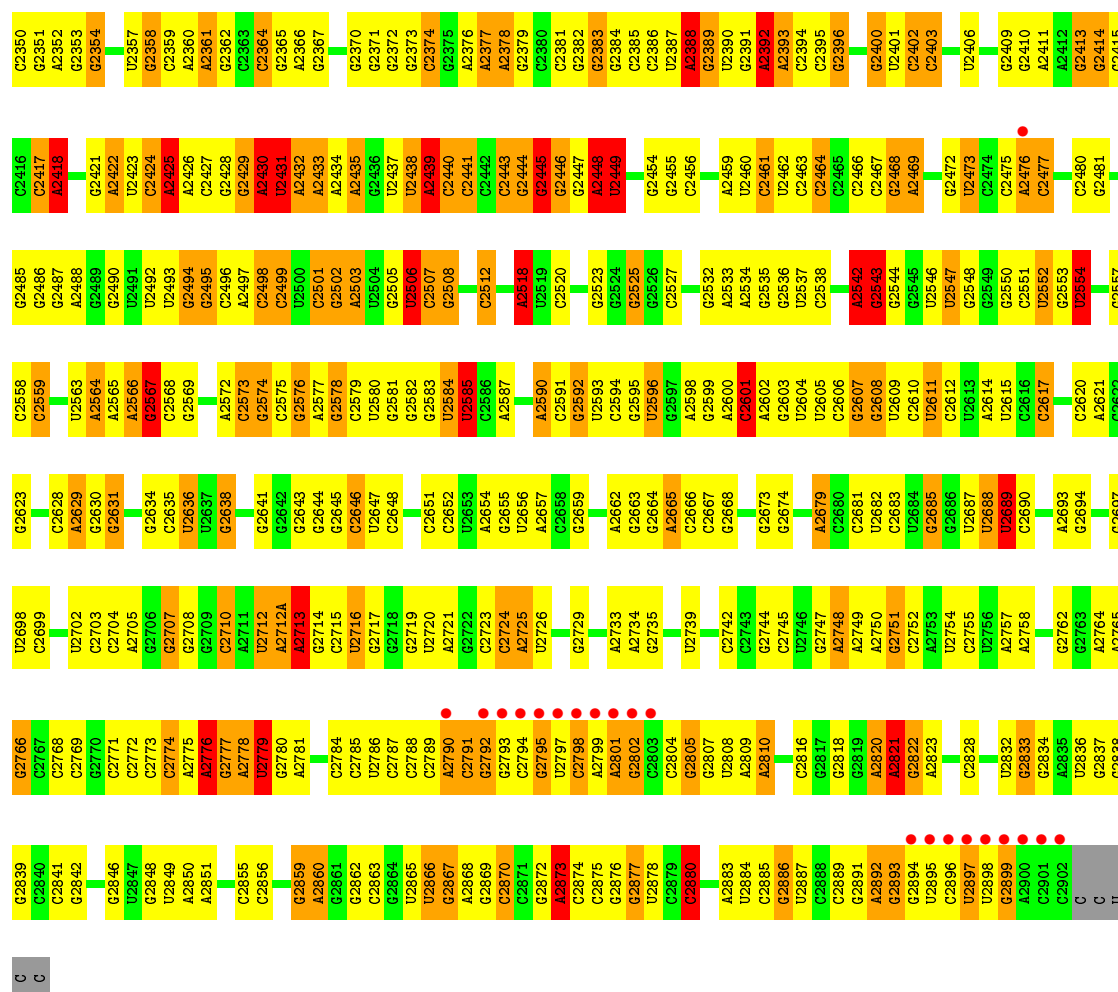
G	G1024	A959	U895	U826	A761	C698	G654D	G593	U519	G452	U383	A311	G270	G204	G132
A	G1025	A960	A	U827	U762	A699	C	U994	U524	C453	U384	G312	A270A	G205	C133
U	U1026	G961	C898	U828	G763	G700	C	C995	G	A454	G386	G315	G270E	U206	C134
G	A1027	G962	A899	A829	G765	G702	G	G996	G527	C455	U387	G317	U270F	A207	G138
C	G1031	U963	G830	G830	G766	U703	C	U997	A528	C456	G388	G317	C270G	C208	G139
C	A1032	G964	A900	G831	G767	G704	A	G999	A529	C457	G389	G318	C270H	C210	A140
U	U1033	G965	A901	G832	U768	G705	C	G000	G530	U458	A390	G319	G270I	A211	A141
U	G1034	G966	C904	G833	G769	A706	G	C601	G531	U459	G391	A320	G270J	G212	C141A
A	U1035	G968	U905	C834	U770	G707	C	G602	A532	C461	C392	G321	C270K	A213	G142
U	G1036	G	G906	A835	G771	G708	G	A603	G533	C462	C393	G321	U270L	G214	C143
A	G1037	G972	U907	G836	U773	U709	G	G604	U534	C463	A394	G323	U270M	G215	C144
C	A1040	A973	C908	G837	A774	G710	G654Q	U606	A536	U464	U395	A324	U270N	G216	G145
C	G1041	G974	A909	C838	G775	G711	C654R	U607	C637	U465	G396		U270O	G217	G146
U	G1042	G974A	A910	U839	G776	U713	C654S	U608	G	U466	G397	U328	C270P	A218	U147
C	C1043		A911	C840	A777	U714	A654T	A609	C543	U467	G398	A330	C270Q		U148
C	G1044	A981	U913	A841	G778	G715	A655	U613	A547	U468	G399	A331	G270R	A222	C151
U	A1045	C982	U914	G843	G780	G717	G656		A548	U470	U403	A332	G270S	A223	C152
G	A1046	A983	C915	C844	G781	A718	U857	A616	A549	A471	U403	G333	G270V	G224	C153
G	G1107	A984	G916	G845	A782	C719	C658	G617	G550	A472	U404	C334	G270W	A225	C154
U	U1108	A985	A917	C846	A783	C720	C659	G617	G551	A473	U405	C335		A227	C155
C	C1048	C986	A918	U847	A784	C721	G660	G620	G552	G474	C409	C337	G271B	A228	U161
U	A1050	G987	U922	G848	G785	A722	G661	G621	U553		C410	C337	U271C	A229	U162
U	G1051	A988	C923	C850	G786	G723	G662	G622	U554	A477	G410	U338	G271		U163
C	C1052	G989	C924		U787	U724	G663	G623	G556	A478	G411	U339	G272	U233	U164
A	C1053	A990	C925	G855	A788	G725	C664	G624		A479	A412	A340		C234	U165
G		C991	G926	C856	A789		C665	G625	G559	A480	C413		C273C	U235	G171
G		G992	A926	C857	C790	G728	G666	U626		A481	C414	C343		C236	C172
A		G993	G928	C858	G791	G729	U667	G627	U562	A482	A415	G344	C273F	U239	G173
U		C994	U930	U858	G792	C730	G668	G628	G563	A483	C416	A345	G274		C174
C		G995	G931	C859	G793	C731	G669	G629	C565	A484	C417	A346	G275		G175
U		A996	G932	U860	G794	C732	A670	G630	C566		G418	A347		G242	G176
U		G997	A933	A861	C795	G733	C671	G631	C567		G424	G351	C277	U243	G177
U		C998	G934	A863	C796	A734	C672	G632	C568		G425	G352	A278	A244	G178
G		U999	C935	A864	C797	A735	C673	A632	A567		C426	G353	C279		G179
C		A1000	G936	C864	A800	C736	G674	A633	U568	A491	U427	G354		C246	G180
C	A1126	A1001	C937	C865	G801	C737	A675	A634	U569	A492	A428	G355	U284	G247	A181
U	A1127	G1002	U937	A866	A802	G738	A676	C635	G570	A493	G429	G356	C285	C248	A182
U	A1128	G1003	G938		U803	U740	A677	G636	A571	G494	G430	A357	C286	C249	C183
A	A1129	C1004	G939	A870	U804	U741	C678	A637	A572	G495	U431		C287	C250	C184
U	U1130	C1005	G940		A804	G742	C679	G638	G573		A432	G363	C288	A251	U185
A		C1006	A941	G873	G805	G743	G680	U639	C574	U500	A433	A363	A289	C252	G186
A		C1007	G942		C806	G744	G681	C640	A575	A501	C433	A363A		C253	G187
G		C1008	U943	A878	U807	G745	G682	C641	U576	A502	U434	G363B		C254	G188
C		A1009	G944	G879	G808	G746	C683	G642	G577	A503	C435	G363C	G295	G255	G189
A		A1010	A945	G880	G809	A747	G684		A578	U504	C436	G363D	C296	A256	A190
G		G1011	G946	G881	U810	U747	A685	C645	G579	A505	G438	U363E	G298	A257	G191
C		U1012	G947	G882	U811	G748	G686	A646	C580	A506	A363F	A299	G299	G258	C192
C		C1013	G948		C812	C749	C687	G647	C581	A507	G439	C364	A300	G259	U193
A		U1014	C949	C	U813		U688	G648	G582	G508	G442	C365	G301	G260	G194
U		G1015	G950	C	C814	A751	A689	G649	G583	C509	A443		C302	G261	A195
C		C1016	C951	C	C815	A752	G690	C650	C584	C510	G372		U303	A262	A196
A		G1017	G952	A	C816	C753	C691	G651	G585	U511	C445	G372	G304	C263	A197
U		C1018	A953	C	C817	C754	C692	G652	A586	G512	C446	C375	U305	C264	C198
U		U1019	G954	C	G818	C755	C693	A653	C587		A447	C376	U306	A265	A199
U		A1020	C955	A			U694	A654	U588	A515	U448		G307	G266	G201
A		G1021	G956	G	A821	C758		A654A	C589	C516	A449	U380	G308	C267	C202
A		U1022	A957	C893	U822	G759	G695	C894B	C589	C517	G450	G381	G309	C268	U202
A		U1023	U958	C894	G823	G760	C697	G654C	G592	G518	C451	G382	A310	U269	C203

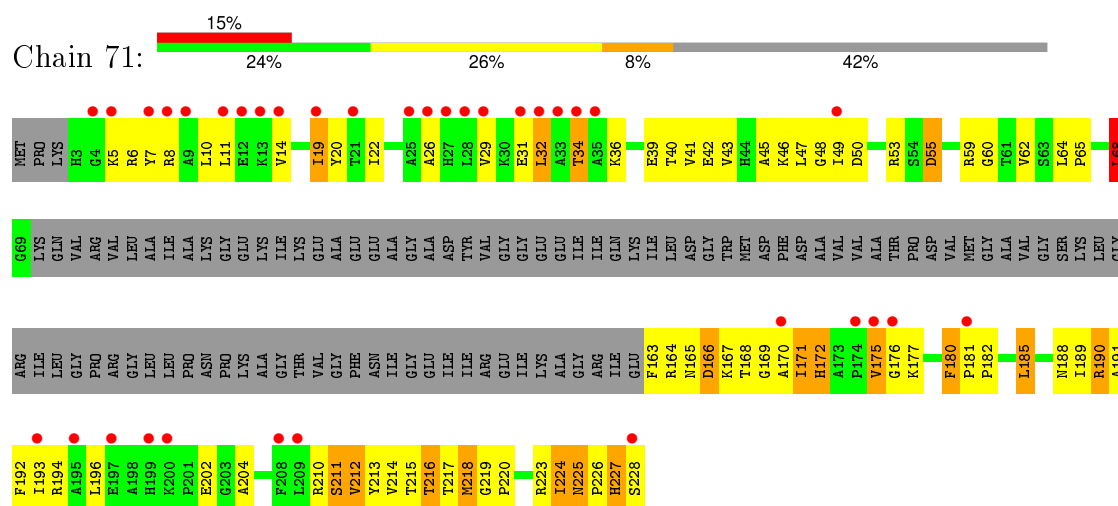
G2110	U2041	G1975	G1903	U1820	U1757	C1672	G1613	G1551	A1486	G1418	A1354	C1293		A1155
G2111	A2042	U1976	G1904	A1821	G1758	U1673	A1614	G1552	G1487	A1419	G1355	U1294	C1225	A1156
G2112	C2043	A1977	G1905	G1822	A1759	C1674	G1615	A1553	G1488	A1420		C1295		G1157
U2113	C2044	A1978	G1906	G1823	A1760	C1675	A1616	A1554	U1489	G1421	G1358	G1296	G1228	C1158
G2114	C2045	C1979		G1824	A1761	A1676	C1617	G1555	A1490	G1422	A1359	C1297	G1229	U1159
G2115	G2046	G1980	C1909	A1825	A1762	A1677	A1618	G1556	G1491	G1423	A1360	G1298	G1229A	G1160
G2116	U2047	A1981		G1826	G1763	G1678	G1619	C1557	G1492	G1424	G1361	G1299		C1161
A2117	G2048	C1982	A1912	C1827	G1764	U1679	G1620	A1558	C1493	G1425	C1362	U1300	G1232	G1162
G2120	A2051	G1983	A1913	G1828	C1765	U1680	G1621	A1559	A1494	G1426	C1363	A1301		G1163
G2121	C2052	G1984	C1914	A1829	G1766	C1681	G1622	G1560	A1495	A1427	C1364	A1302	G1238	G1164
U2122	G2053	G1985	U1915	C1830	U1767	G1682	G1623	G1561	A1496	C1428	A1365	G1303	G1239	U1165
G2123	A2054	A1986	A1916	G1831	C1683	G1624	G1624	A1562	U1497	G1429	A1366	C1304	U1240	G1166
G2124	C2055	G1987	U1917	C1832	C1684	C1625	G1625	G1563		C1430	A1367	C1305	A1241	
G2125	G2056	C1988	A1918	U1833	G1771	G1685	G1626	C1564	C1501	U1431	G1368	C1306	A1242	G1170
G2126	A2057	G1989	A1919	U1834	G1772	C1686	G1627	C1565	C1502	U1432	G1369	A1307	G1243	G1171
G2127	G2058	G1990	C1920	C1835	A1773	G1687	G1628	A1566	U1503	U1433	C1370	A1308	G1244	G1173
G2128	A2059	U1991		C1836	U1775	U1688	U1629	A1567	C1504	A1434	G1371	G1309	G1245	A1174
G2129	C2060	G1992	C1921	G1837	G1776	U1689	G1630	G1568	G1505	G1435	U1372		A1246	U1175
G2130	U2061	U1993	U1926	C1838	U1777	A1690	C1630A	A1569	C1506	G1436	A1373	U1312	A1247	G1176
U2131	A2062	C1994	A1927	G1839	U1778	C1691	A1631	A1570	A1507	C1437	G1374	U1313	G1248	A1177
G2132	G2063		A1928		U1779		A1632	A1571	U1508	U1438	C1375	U1314	U1249	G1178
G2133	C2064	G2000	G1929	G1842	A1780	G1695	G1633	A1572	C1509	A1439	C1376	C1315	G1250	C1179
A2134	C2065	A2001	G1930	C1843	C1781	G1696	A1634	G1573	A1510	G1440	G1377	U1316	G1251	C1180
A2135	C2066	G2002		C1844	C1782	G1696	G1635	C1574	A1511	G1441	A1378	A1317	G1252	C1181
G2136	G2067	G2003	G1935	A1847	A1783	G1697	C1636	C1575	G1512	G1442	A1379	C1318	A1253	A1182
C2137	U2068	G2004	A1936		A1784	A1698	A1637	U1576	C1513	G1443	G1380	G1319	A1254	G1183
G2138	C2069	A2005	U1937	U1851	A1785	G1699	G1638	C1577	U1514	G1444	G1381	C1320	U1255	G1184
C2139	G2070	C2006	G1938	U1852	A1786	A1700	U1639	C1578	C1515	A1444A	G1382	A1321	G1256	C1185
C2140	A2071	G2007	A1939	A1853	A1787	G1701	C1640	A1579	U1516	C1445	C1383	A1322	G1257	G1186
G2141	G2072		U1940	C1857	C1788	G1702	A1641	A1580	U1517	C1446	A1384	U1323	C1258	G1187
G2142	C2073	A2012	C1941	G1857	A1789	G1703	G1642	A1581	C1518		G1385	G1324	G1259	U1188
G2143		A2013	G1942	G1858	C1790	G1704	G1643	C1582	G1519	G1449A	G1386	G1325	G1260	A1189
U2144	C2078	A2014	U1943	A1859	A1791	G1705	C1644	A1583	U1520		C1387	U1326	C1261	G1190
C2145	G2080	A2015	U1944		G1792	U1706	G1645	C1585	G1521	A1453	G1388	C1327	A1262	G1191
C2146	C2081	U2016	G1945	U1864	C1793	G1707	C1646	A1586	U1522	U1454	G1389	G1328	G1263	G1192
G2147	A2082	U2017	U1946	U1869	U1794	G1708	G1647	A1587	U1523	G1455		U1329	G1264	G1193
G2148	G2083	G2018	G1947	G1870	C1795	U1709	G1648	C1588	G1524		U1394	C1330	A1265	A1194
G2149	C2084	A2019	G1948	A1871	U1796	C1710	G1649	C1589	G1525	G1459	A1395	G1331	G1266	G1195
U2150	C2085	C2021	G1949	A1872	C1797	C1711	G1650	U1590	G1526		U1396	G1332	U1267	C1196
G2151	U2086	G2022	G1950	C1878	U1798	C1712	A1651	G1591	G1527	G1461	U1397	G1333	A1268	G1197
G2152	G2087		U1955	C1879	C1800	G1726	G1653	C1592	A1528	C1462	C1398	U1335	A1269	U1198
G2153		A2023	U1956	G1881	G1727	C1654	A1654	G1594	C1532	G1463	C1399	A1336	G1271	C1200
G2154	C2093	C2024	C1957	G1882	A1802	G1728	A1655	G1595	C1533	C1464	G1400	G1337	U1272	C1201
G2155	G2094	C2025		G1883	A1803	A1729	C1656	A1596	G1534	G1465	G1401	G1338	U1273	
G2156	C2095	G2027	C1961	A1884	C1804	U1730	C1657	A1597	U1535	C1466	G1402	G1339	A1274	A1204
A2158		U2028	C1962	A1885	U1805	G1731	C1658	C1598	A1536	C1467	C1403	U1340	A1275	U1205
G2159	U2098	G2029	U1963		C1806	A1732	U1659	C1599	C1537	C1468	U1341	U1341	A1276	G1206
G2160	A2099	A2030	G1964	G1888	G1807	C1735	C1660	C1600	G1538	A1469	U1405	A1342	G1277	
G2161	G2100	A2031	C1965	A1889	U1808	C1741	G1661	G1601	G1539	G1470	U1406	G1343	A1278	A1210
G2162	G2101	G2032	A1966	A1890	A1809	C1741	C1662	U1602	G1540	A1471	C1407	G1344	G1279	G1211
C2163	U2102	A2033	C1967	G1895	A1810	G1748	C1663	A1603	A1543		C1408	G1345	G1280	G1212
G2164	C2103	U2034	G1968	C1896	G1811	A1749	A1664	C1604	A1544	G1475	C1409	G1346	A1284	G1216
G2165	G2104	U2035	G1969	G1897	A1812	C1752	A1665	C1605	C1545	G1476		G1347	A1285	G1217
G2166	C2036	C2037	A1970	G1898	G1813	G1753	G1666	G1606	A1545	G1477	A1412	G1348	A1286	C1218
G2167	C2037	G2038	C1971	G1899	G1816	C1754	G1667	G1607	C1547	G1478	G1413	A1349	A1287	G1219
G2168	C2106	C2039	A1972	G1899	G1817	C1755	A1668	A1608	C1548	G1480	G1414	C1350		A1220
A2169	C2107	G1973	U1818	A1900	G1817	A1755	A1669	A1609	C1549	U1482	U1415	C1351	C1291	G1221
G2170	C2108		U1819	A1901	G1818	G1756	A1670	A1610	C1550		G1417	A1353	U1292	G1222



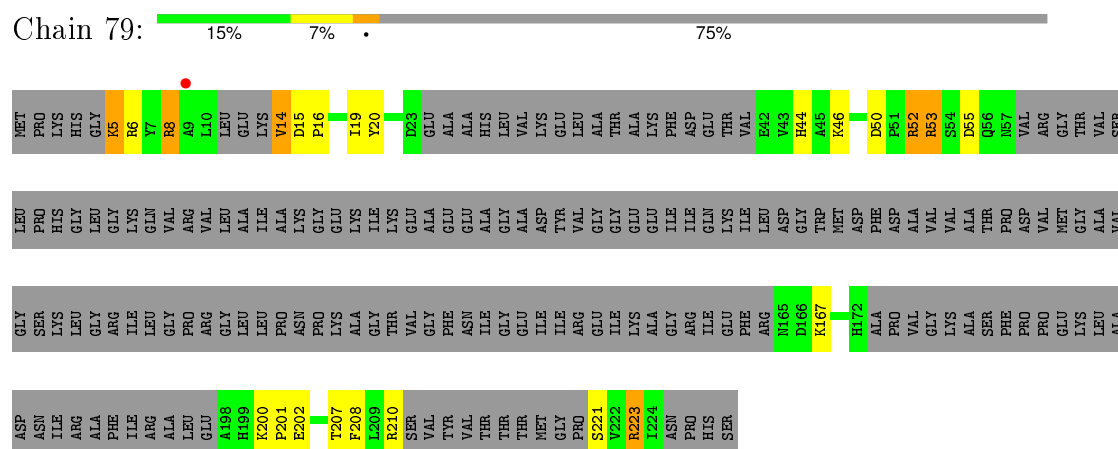




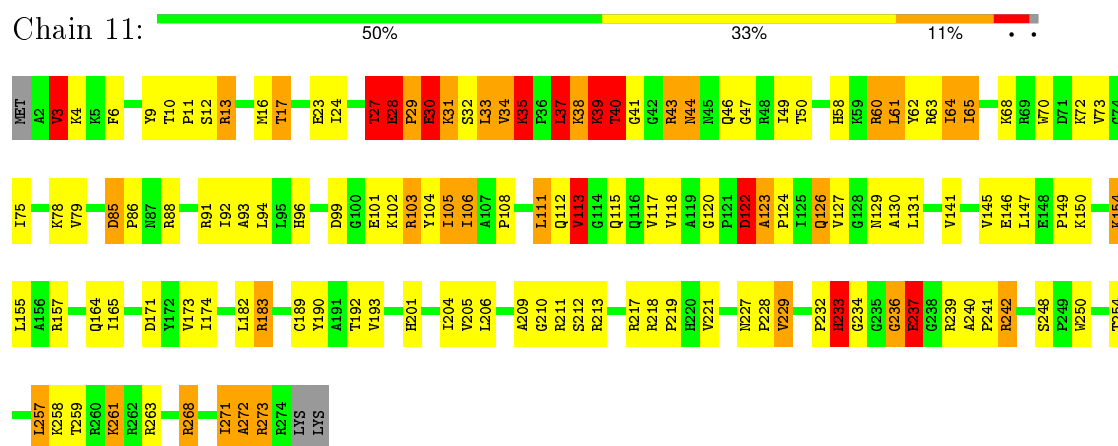




- Molecule 28: 50S ribosomal protein L1

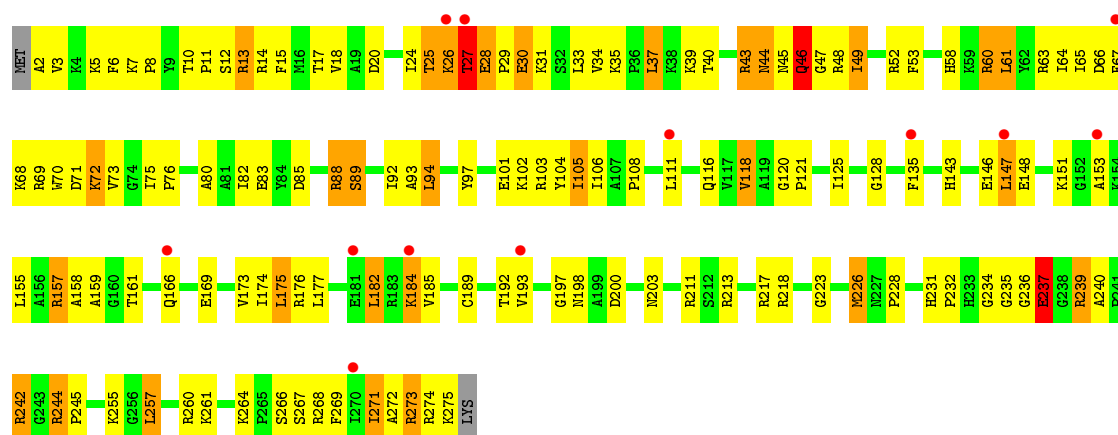


- Molecule 29: 50S ribosomal protein L2

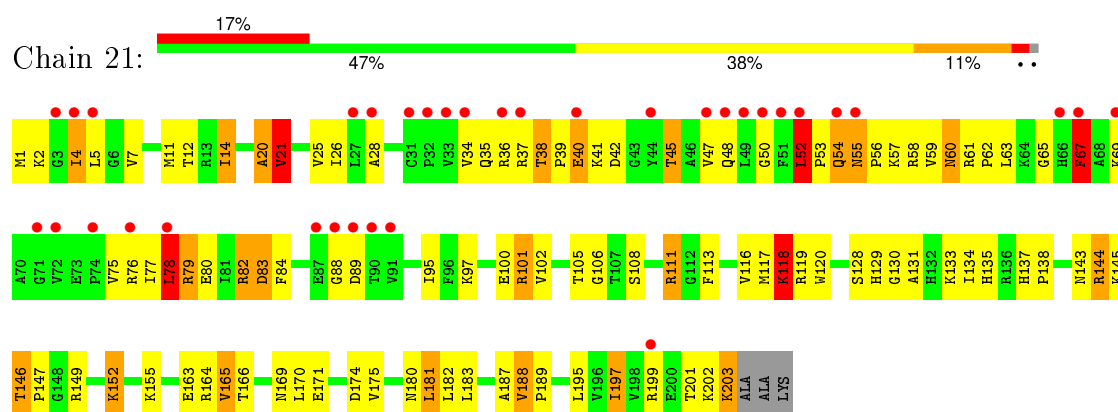


- Molecule 29: 50S ribosomal protein L2

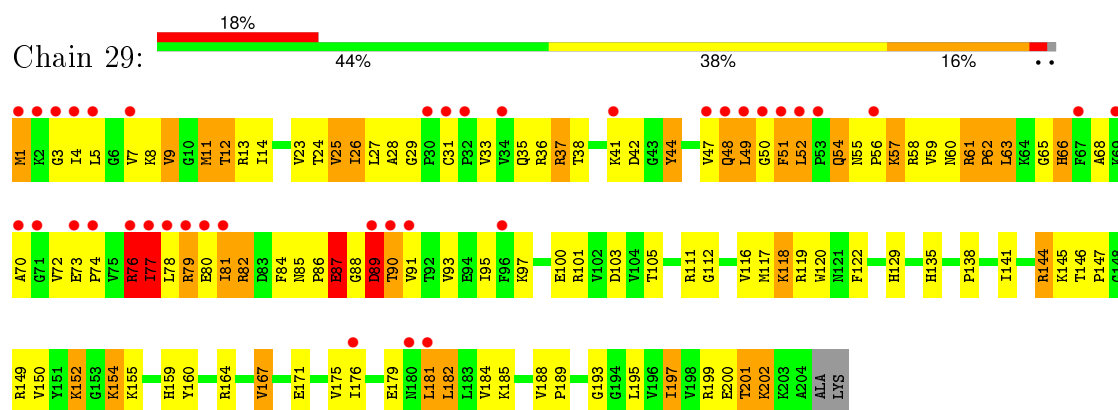




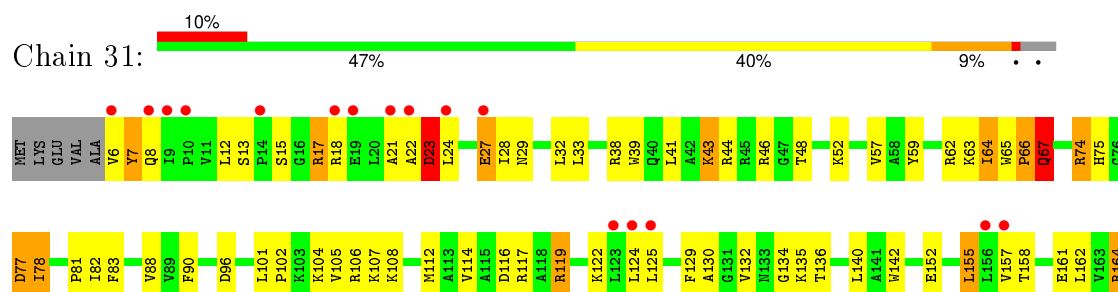
• Molecule 30: 50S ribosomal protein L3



• Molecule 30: 50S ribosomal protein L3

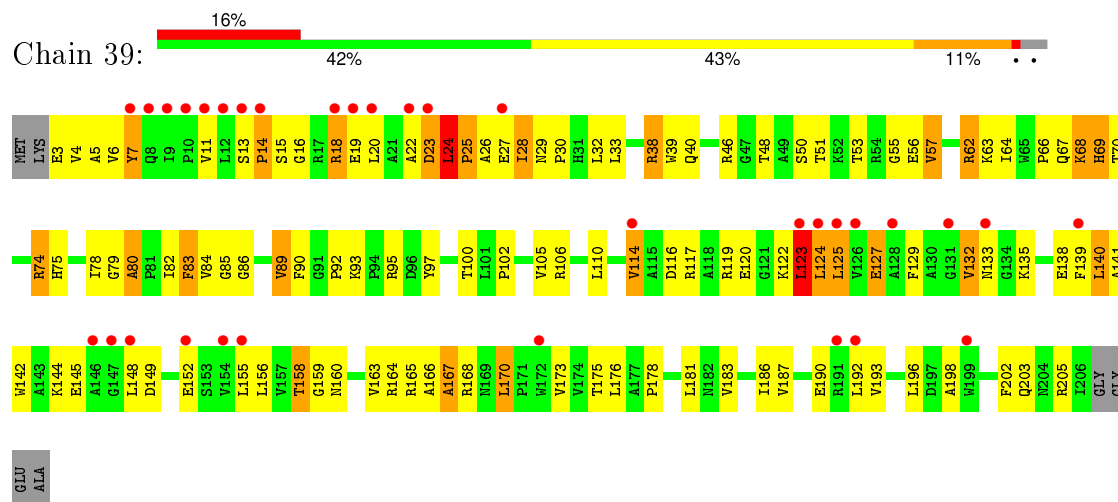


• Molecule 31: 50S ribosomal protein L4

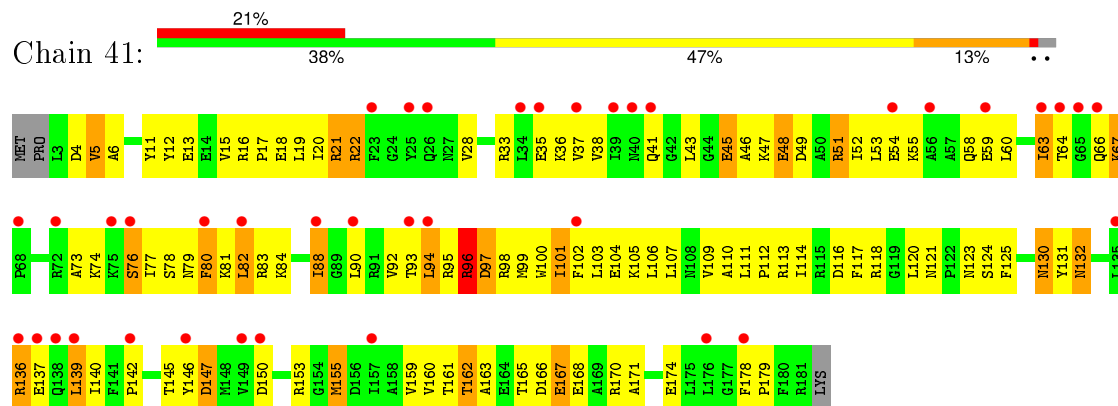




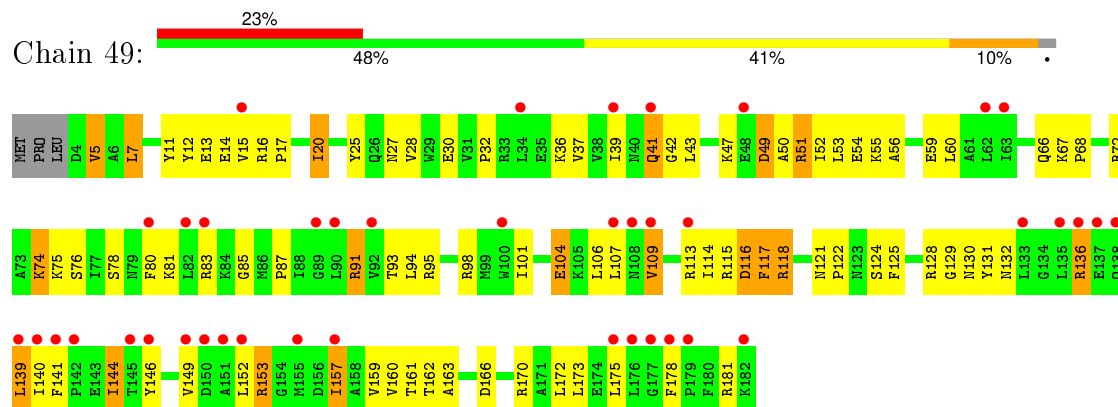
- Molecule 31: 50S ribosomal protein L4



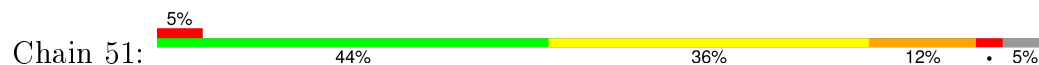
- Molecule 32: 50S ribosomal protein L5



- Molecule 32: 50S ribosomal protein L5

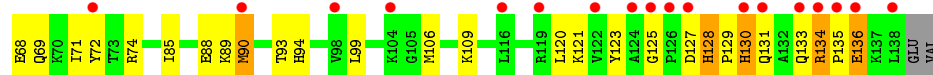
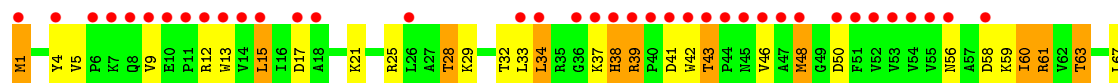
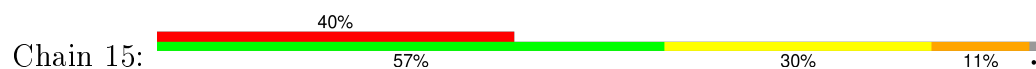


- Molecule 33: 50S ribosomal protein L6

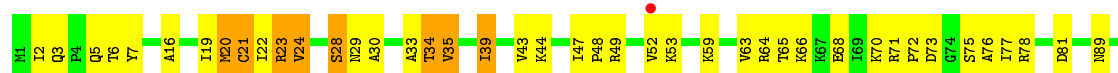




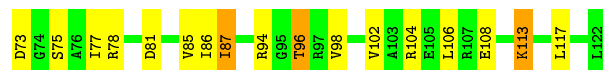
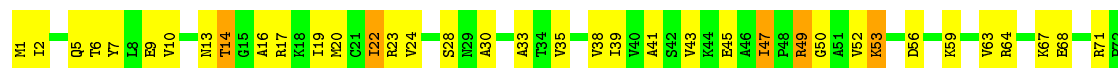
• Molecule 35: 50S ribosomal protein L13



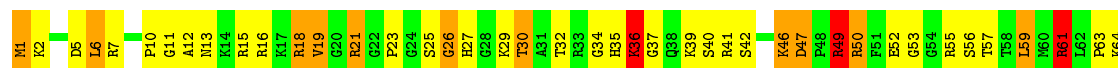
• Molecule 36: 50S ribosomal protein L14



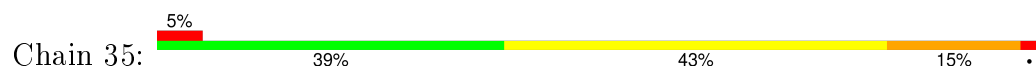
• Molecule 36: 50S ribosomal protein L14

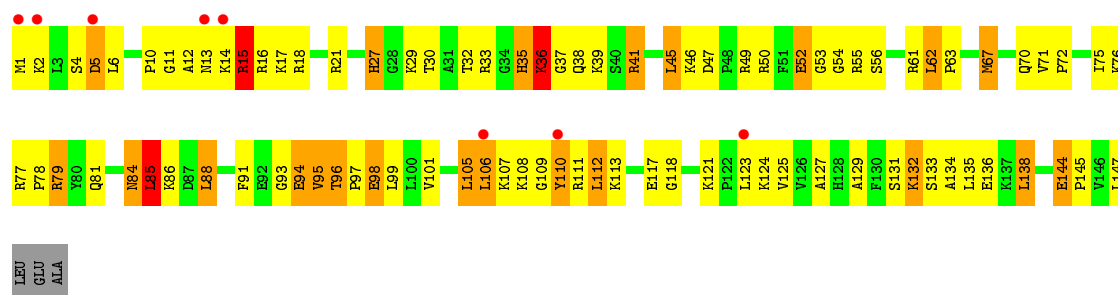


• Molecule 37: 50S ribosomal protein L15

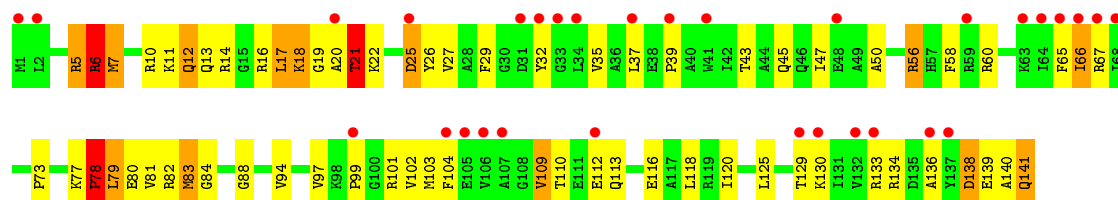


• Molecule 37: 50S ribosomal protein L15

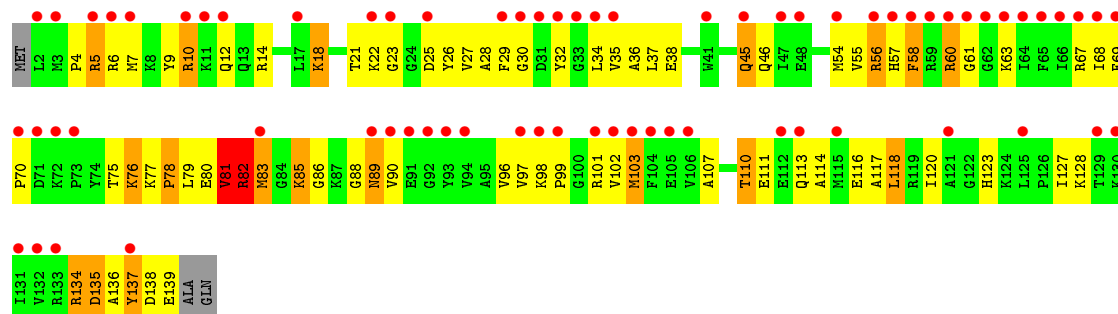
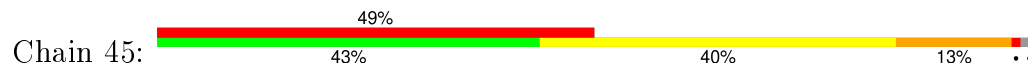




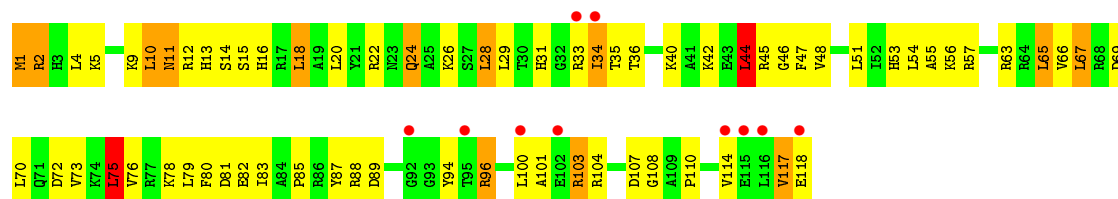
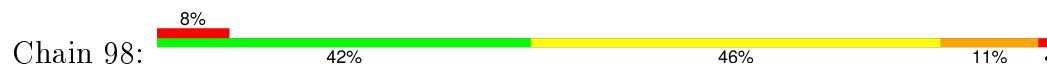
• Molecule 38: 50S ribosomal protein L16



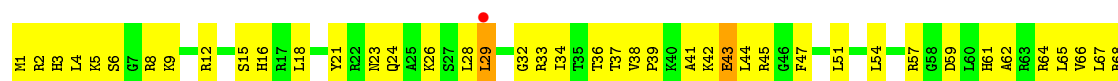
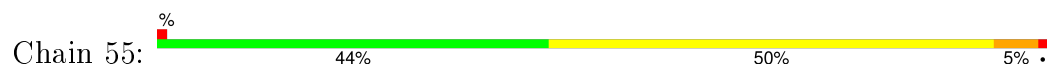
• Molecule 38: 50S ribosomal protein L16

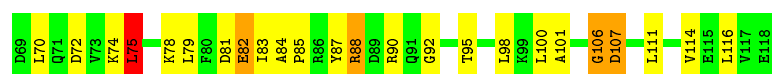


• Molecule 39: 50S ribosomal protein L17

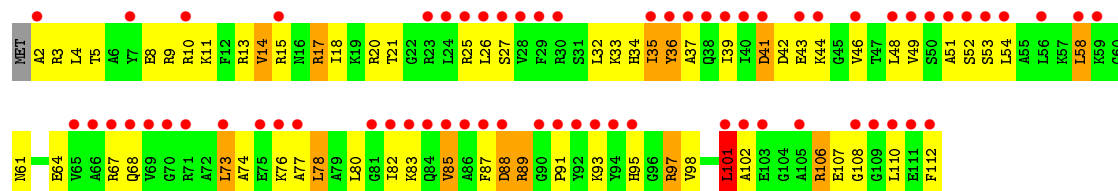
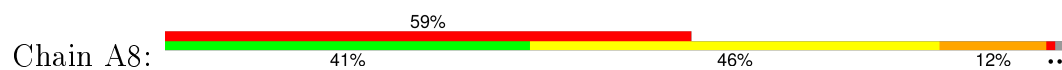


• Molecule 39: 50S ribosomal protein L17





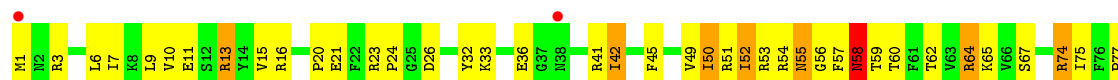
- Molecule 40: 50S ribosomal protein L18



- Molecule 40: 50S ribosomal protein L18



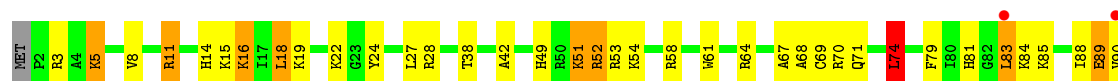
- Molecule 41: 50S ribosomal protein L19

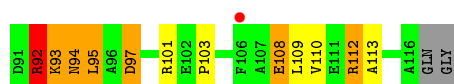


- Molecule 41: 50S ribosomal protein L19

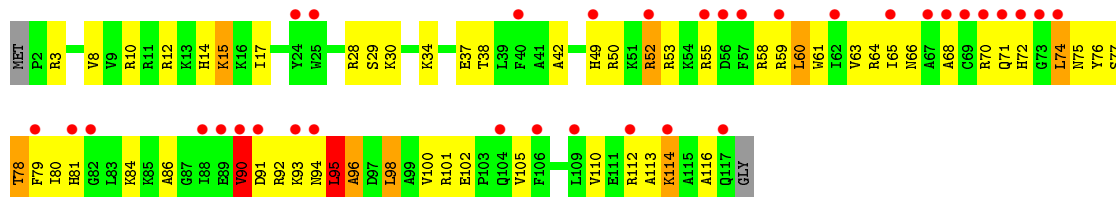


- Molecule 42: 50S ribosomal protein L20





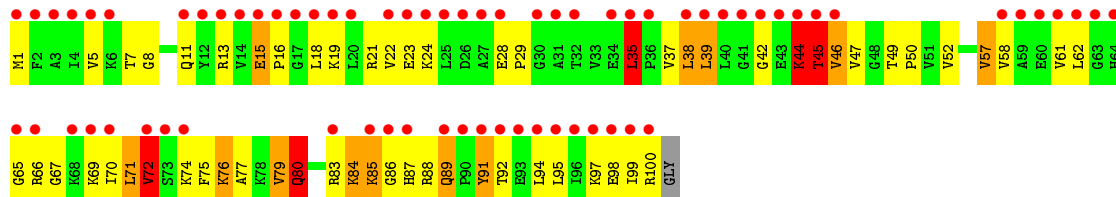
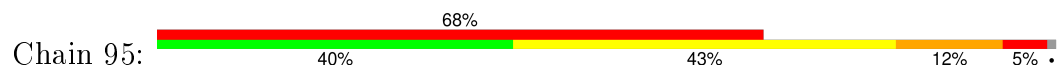
- Molecule 42: 50S ribosomal protein L20



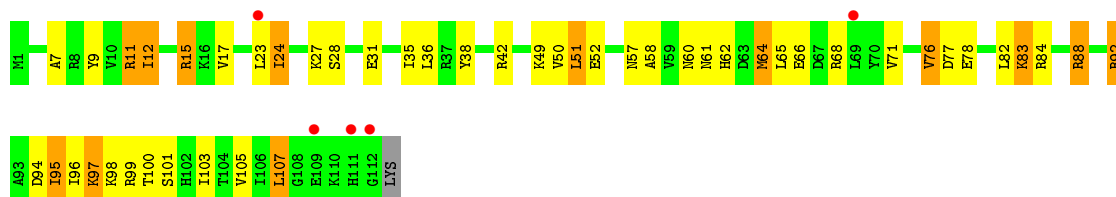
- Molecule 43: 50S ribosomal protein L21



- Molecule 43: 50S ribosomal protein L21

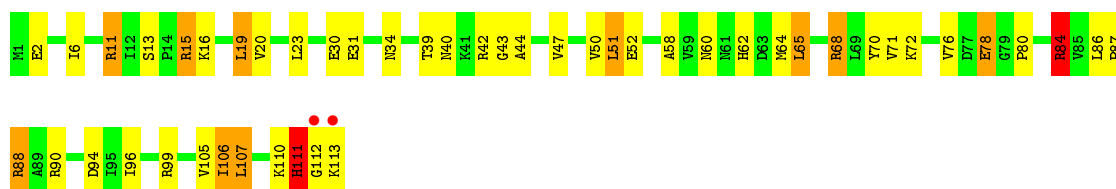


- Molecule 44: 50S ribosomal protein L22

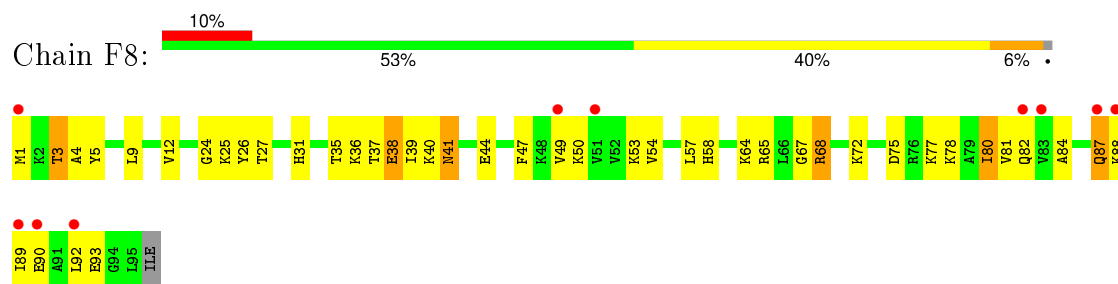


- Molecule 44: 50S ribosomal protein L22

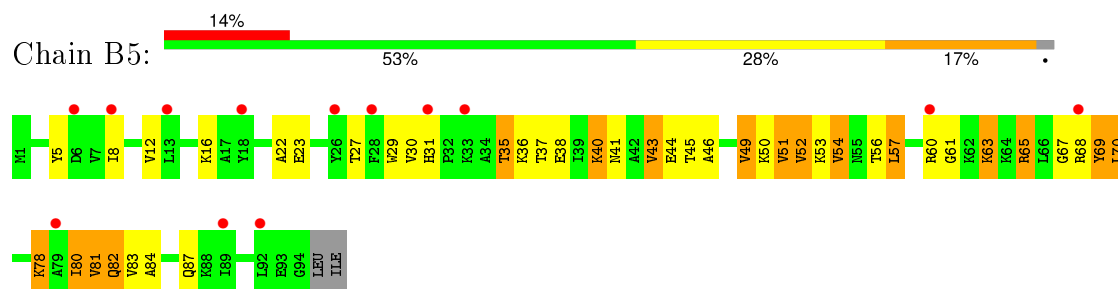




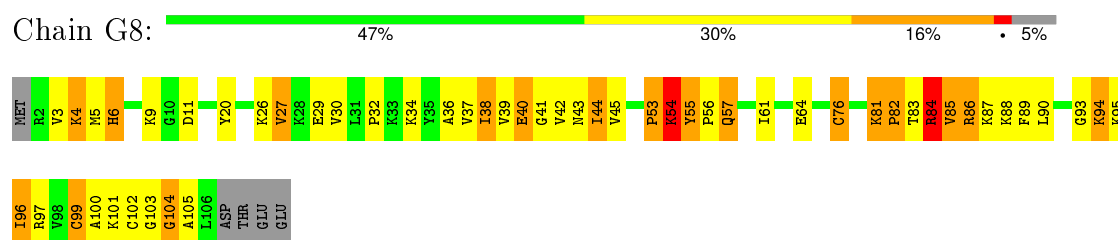
• Molecule 45: 50S ribosomal protein L23



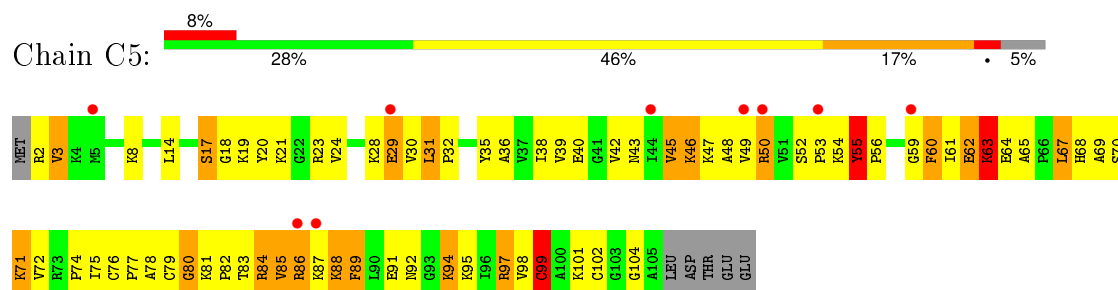
• Molecule 45: 50S ribosomal protein L23



• Molecule 46: 50S ribosomal protein L24

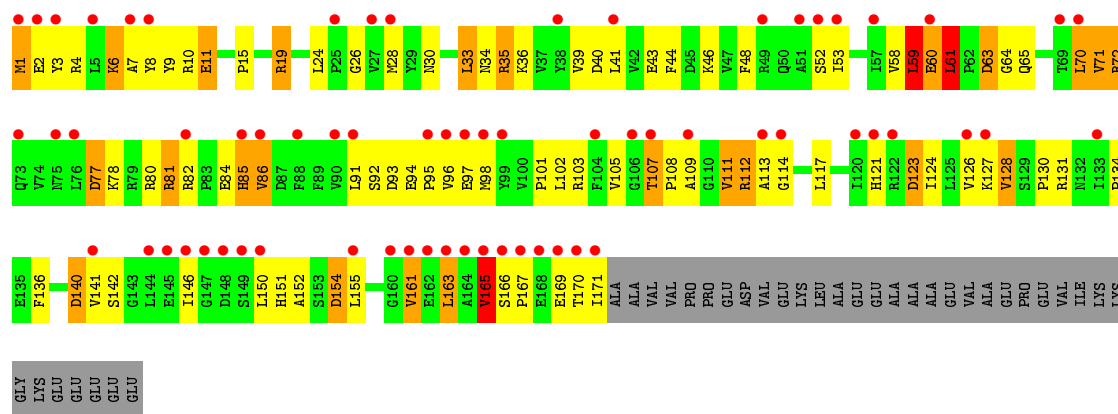


• Molecule 46: 50S ribosomal protein L24

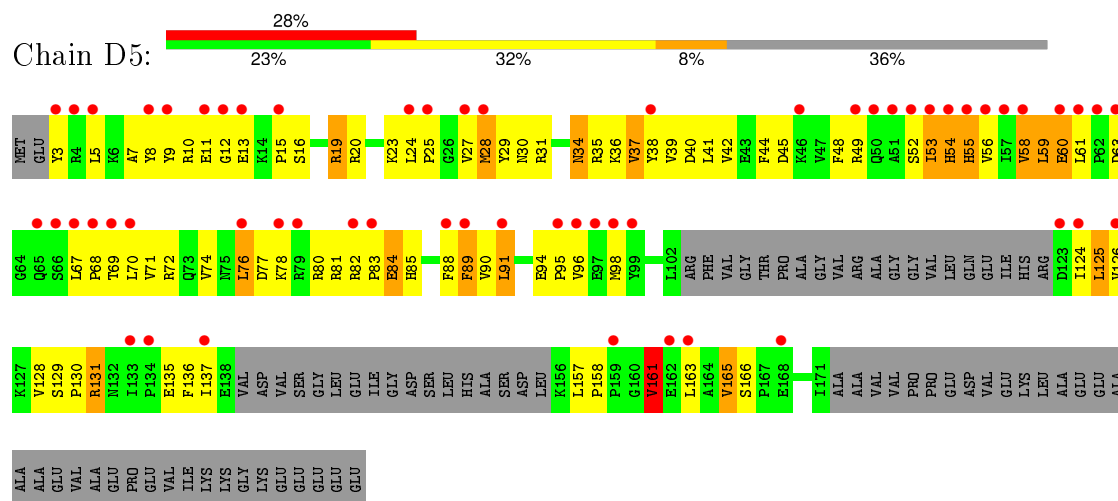


• Molecule 47: 50S ribosomal protein L25

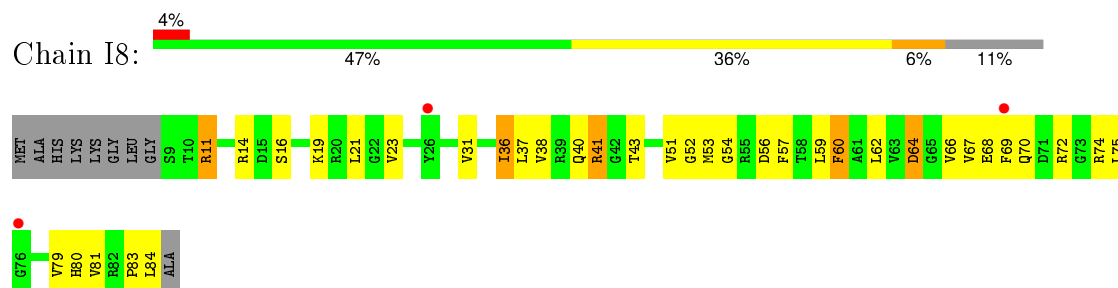




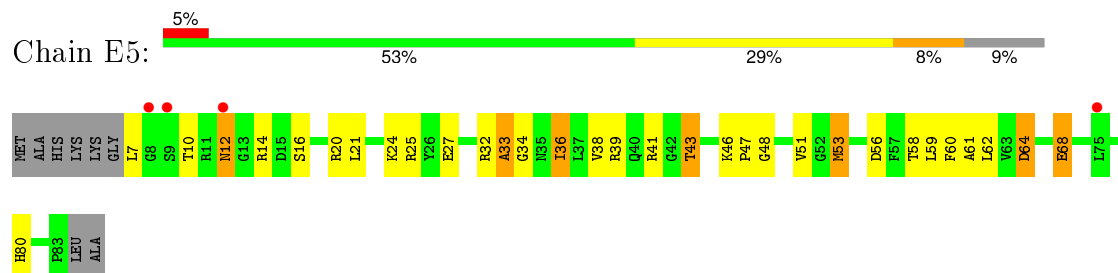
- Molecule 47: 50S ribosomal protein L25



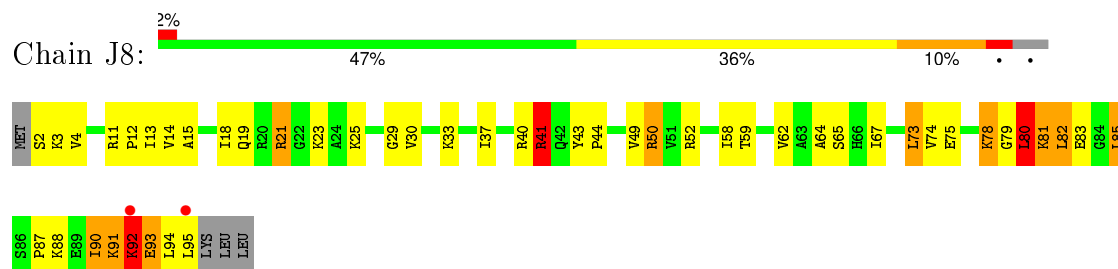
- Molecule 48: 50S ribosomal protein L27



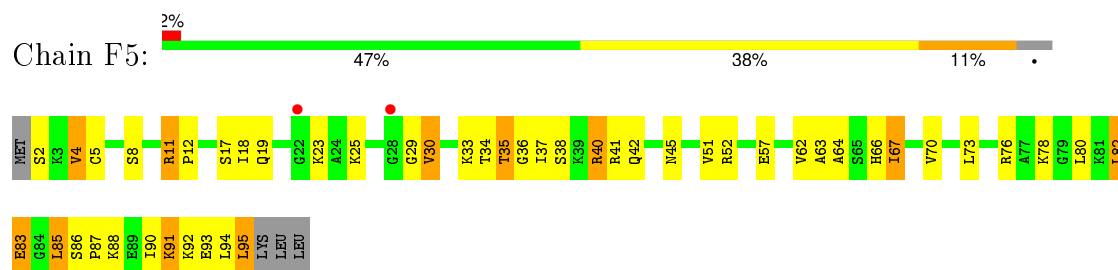
- Molecule 48: 50S ribosomal protein L27



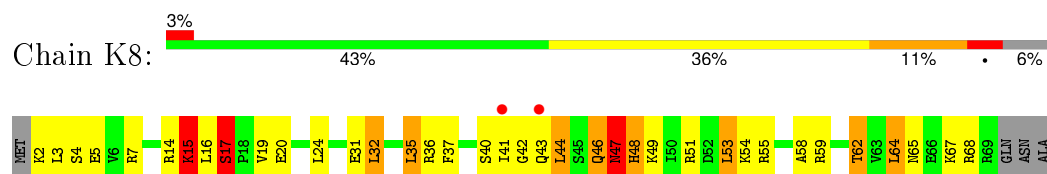
- Molecule 49: 50S ribosomal protein L28



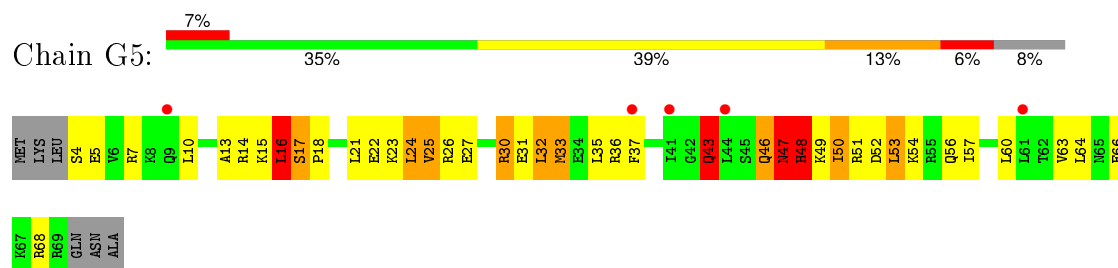
- Molecule 49: 50S ribosomal protein L28



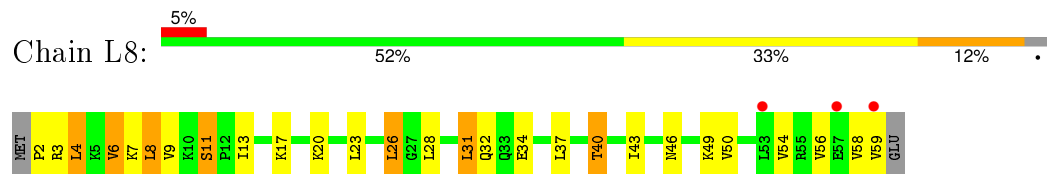
- Molecule 50: 50S ribosomal protein L29



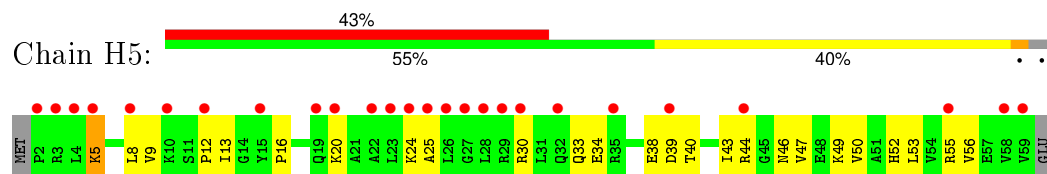
- Molecule 50: 50S ribosomal protein L29



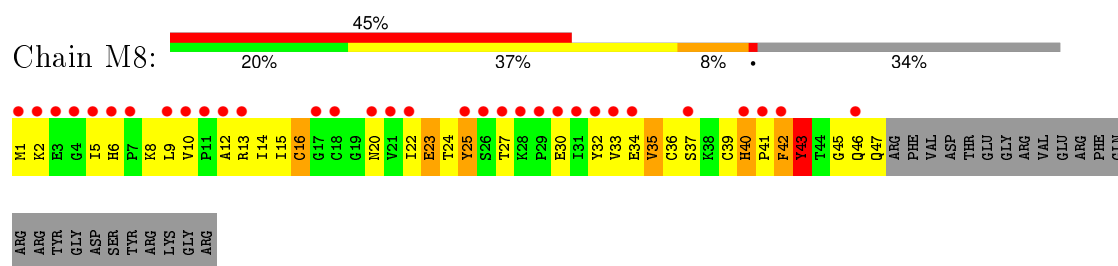
- Molecule 51: 50S ribosomal protein L30



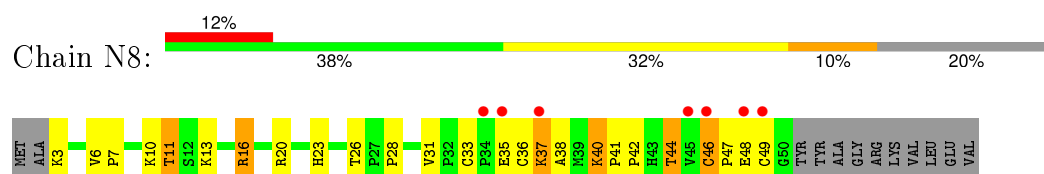
- Molecule 51: 50S ribosomal protein L30



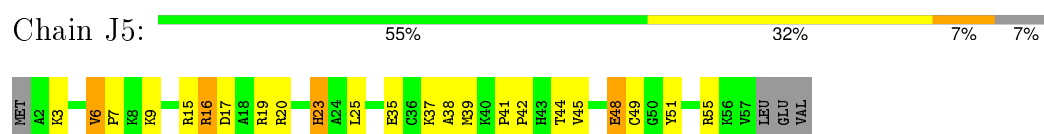
- Molecule 52: 50S ribosomal protein L31



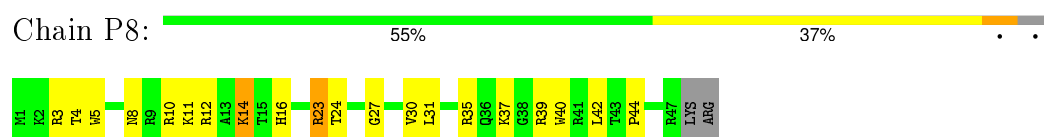
- Molecule 53: 50S ribosomal protein L32



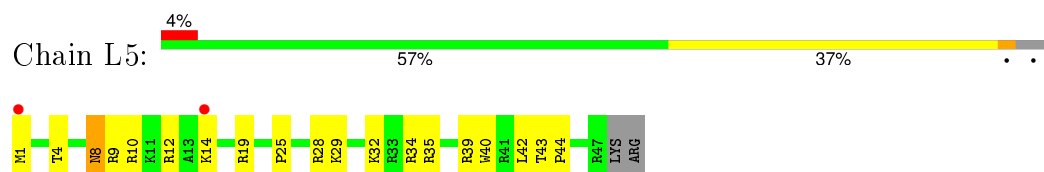
- Molecule 53: 50S ribosomal protein L32



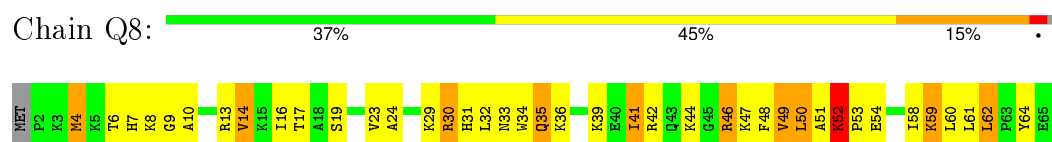
- Molecule 54: 50S ribosomal protein L34



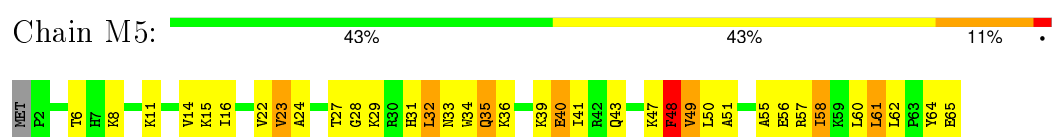
- Molecule 54: 50S ribosomal protein L34



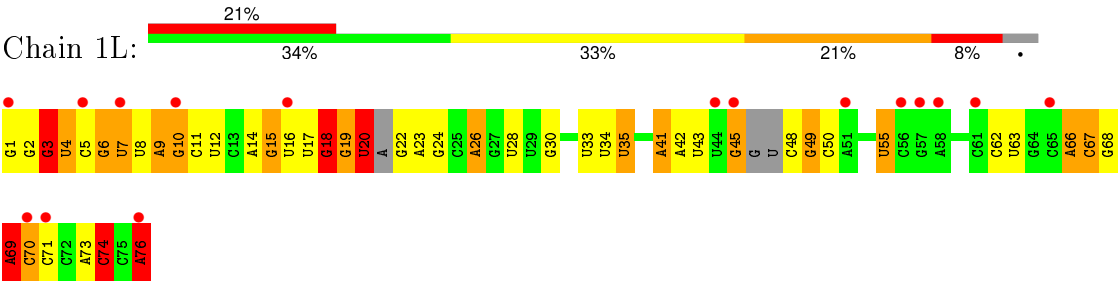
- Molecule 55: 50S ribosomal protein L35



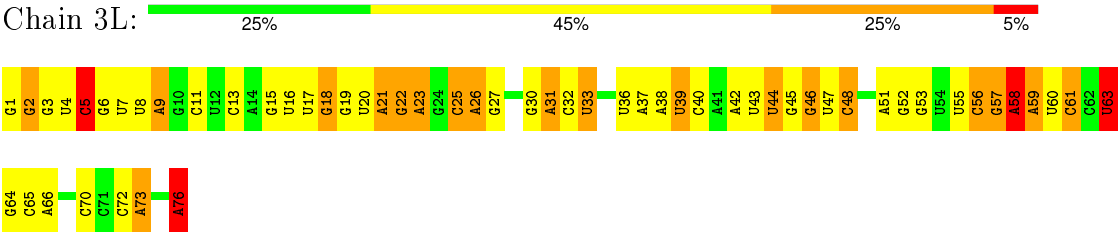
- Molecule 55: 50S ribosomal protein L35



- Molecule 56: tRNA^{Lys}



● Molecule 57: tRNA^{Lys}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	209.50Å 450.10Å 621.60Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	173.72 – 3.20 173.72 – 3.20	Depositor EDS
% Data completeness (in resolution range)	100.0 (173.72-3.20) 93.8 (173.72-3.20)	Depositor EDS
R_{merge}	0.38	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.59 (at 3.19Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.191 , 0.258 0.197 , 0.262	Depositor DCC
R_{free} test set	2000 reflections (0.22%)	DCC
Wilson B-factor (Å ²)	91.4	Xtriage
Anisotropy	0.325	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 77.5	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtriage
Outliers	0 of 955810 reflections	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	294444	wwPDB-VP
Average B, all atoms (Å ²)	107.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.46% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, OMC, ZN, U8U, G7M, SF4, MG, 4SU, T6A, PSU

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\# Z > 5$	RMSZ	$\# Z > 5$
1	13	0.75	5/35994 (0.0%)	1.39	368/56171 (0.7%)
1	1G	0.64	1/36258 (0.0%)	1.26	191/56589 (0.3%)
2	12	0.44	0/1752	0.74	1/2360 (0.0%)
2	1E	0.46	0/1908	0.74	4/2573 (0.2%)
3	22	0.40	0/1564	0.64	1/2109 (0.0%)
3	2E	0.49	0/1629	0.67	0/2195
4	32	0.48	0/1732	0.74	1/2318 (0.0%)
4	3E	0.52	0/1728	0.74	1/2313 (0.0%)
5	42	0.45	0/1150	0.69	0/1548
5	4E	0.53	0/1158	0.71	0/1559
6	52	0.51	0/855	0.68	0/1154
6	5E	0.57	0/850	0.72	0/1147
7	62	0.43	0/1122	0.65	0/1500
7	6E	0.43	0/1259	0.59	0/1686
8	72	0.41	0/1127	0.65	0/1517
8	7E	0.47	0/1135	0.74	1/1527 (0.1%)
9	82	0.42	0/971	0.71	0/1304
9	8E	0.44	0/1019	0.66	0/1367
10	1A	0.42	0/658	0.60	0/885
10	1I	0.51	0/747	0.75	1/1006 (0.1%)
11	2A	0.45	0/850	0.63	0/1150
11	2I	0.49	0/838	0.69	0/1133
12	3A	0.55	0/972	0.83	2/1301 (0.2%)
12	3I	0.72	0/972	0.87	0/1301
13	4A	0.42	0/903	0.72	1/1211 (0.1%)
13	4I	0.53	0/952	0.73	0/1277
14	5A	0.47	0/495	0.72	1/657 (0.2%)
14	5I	0.62	0/500	0.75	0/664
15	6A	0.44	0/744	0.59	0/992
15	6I	0.52	0/740	0.71	0/987
16	7A	0.49	0/721	0.74	0/970
16	7I	0.47	0/716	0.73	0/963

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	8A	0.45	0/836	0.64	0/1117
17	8I	0.52	0/847	0.70	0/1131
18	9A	0.46	0/549	0.70	0/732
18	9I	0.53	0/554	0.77	0/739
19	AA	0.44	0/490	0.70	0/662
19	AI	0.53	0/668	0.79	0/899
20	BA	0.43	0/764	0.73	0/1007
20	BI	0.43	0/748	0.65	1/986 (0.1%)
21	1B	0.47	0/192	0.70	0/252
21	1F	0.52	0/203	0.68	0/266
22	1K	0.66	0/1565	1.29	14/2429 (0.6%)
23	2K	0.84	1/1721 (0.1%)	1.50	32/2682 (1.2%)
23	2L	0.66	1/1721 (0.1%)	1.24	10/2682 (0.4%)
24	3K	0.67	0/1799	1.31	17/2801 (0.6%)
25	4K	0.91	0/473	1.34	1/737 (0.1%)
25	4L	0.67	0/448	1.13	0/698
26	14	0.90	57/69023 (0.1%)	1.59	1407/107740 (1.3%)
26	1H	1.06	113/68351 (0.2%)	1.80	2304/106700 (2.2%)
27	16	0.84	0/2928	1.55	47/4568 (1.0%)
27	1J	0.70	0/2928	1.36	28/4568 (0.6%)
28	71	0.46	0/1055	0.72	1/1425 (0.1%)
28	79	0.43	0/459	0.90	3/608 (0.5%)
29	11	0.82	2/2170 (0.1%)	1.01	7/2926 (0.2%)
29	19	0.71	1/2175 (0.0%)	0.93	3/2933 (0.1%)
30	21	0.67	0/1591	0.96	2/2146 (0.1%)
30	29	0.63	0/1596	0.92	2/2153 (0.1%)
31	31	0.73	1/1620 (0.1%)	0.91	1/2194 (0.0%)
31	39	0.62	0/1637	0.90	3/2218 (0.1%)
32	41	0.52	0/1481	0.78	1/1994 (0.1%)
32	49	0.43	0/1482	0.68	0/1994
33	51	0.68	0/1337	1.00	9/1809 (0.5%)
33	59	0.46	0/577	0.88	2/776 (0.3%)
34	61	0.52	0/1151	0.80	2/1558 (0.1%)
34	69	0.46	0/1146	0.77	3/1551 (0.2%)
35	15	0.46	0/1131	0.68	0/1525
35	58	0.60	0/1131	0.82	0/1525
36	25	0.58	0/942	0.74	0/1269
36	68	0.67	0/942	0.81	0/1269
37	35	0.61	0/1139	0.98	2/1514 (0.1%)
37	78	0.70	0/1139	1.12	8/1514 (0.5%)
38	45	0.69	0/1120	0.97	4/1498 (0.3%)
38	88	0.78	0/1134	0.98	2/1519 (0.1%)
39	55	0.64	0/981	0.85	1/1312 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
39	98	0.56	0/981	0.85	1/1312 (0.1%)
40	65	0.51	0/886	0.86	3/1180 (0.3%)
40	A8	0.63	0/891	0.85	1/1187 (0.1%)
41	75	0.56	0/1123	0.72	0/1500
41	B8	0.66	0/1123	0.82	0/1500
42	85	0.59	0/977	0.75	1/1301 (0.1%)
42	C8	0.67	0/968	0.82	1/1289 (0.1%)
43	95	0.70	0/785	0.87	1/1052 (0.1%)
43	D8	0.58	0/785	0.90	4/1052 (0.4%)
44	A5	0.62	0/910	0.84	1/1220 (0.1%)
44	E8	0.66	0/901	0.87	0/1209
45	B5	0.68	0/749	0.79	0/1007
45	F8	0.76	0/757	0.87	0/1017
46	C5	0.63	0/807	0.93	2/1076 (0.2%)
46	G8	0.82	1/809 (0.1%)	1.08	4/1080 (0.4%)
47	D5	0.51	0/1098	0.73	0/1487
47	H8	0.53	0/1403	0.81	1/1901 (0.1%)
48	E5	0.57	0/616	0.84	0/821
48	I8	0.76	0/614	0.94	0/819
49	F5	0.66	0/744	0.88	1/989 (0.1%)
49	J8	0.73	0/744	0.93	4/989 (0.4%)
50	G5	0.59	0/560	0.82	2/741 (0.3%)
50	K8	0.72	0/570	0.97	0/755
51	H5	0.49	0/464	0.66	0/623
51	L8	0.63	0/464	0.84	0/623
52	M8	0.53	0/375	0.95	2/507 (0.4%)
53	J5	0.61	0/448	0.81	0/606
53	N8	0.69	1/381 (0.3%)	0.86	0/516
54	L5	0.69	0/409	0.89	0/540
54	P8	0.85	0/409	1.07	2/540 (0.4%)
55	M5	0.75	0/524	1.00	3/691 (0.4%)
55	Q8	0.79	0/524	1.17	4/691 (0.6%)
56	1L	0.61	1/1613 (0.1%)	1.18	11/2504 (0.4%)
57	3L	0.65	0/1733	1.28	14/2699 (0.5%)
All	All	0.81	185/317108 (0.1%)	1.41	4553/475084 (1.0%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	13	1	0

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
2	12	0	4
2	1E	0	4
3	22	0	2
4	32	0	1
4	3E	0	1
9	82	0	1
9	8E	0	1
10	1I	0	1
11	2A	0	1
11	2I	0	1
12	3I	0	1
13	4A	0	2
13	4I	0	3
14	5A	0	1
18	9I	0	1
19	AI	0	2
20	BA	0	2
28	71	0	3
29	11	0	4
29	19	0	4
30	21	0	5
30	29	0	5
31	31	0	4
31	39	0	7
32	41	0	1
32	49	0	1
33	51	0	6
34	61	0	4
34	69	0	2
37	35	0	3
37	78	0	5
38	45	0	6
38	88	0	1
39	55	0	1
39	98	0	1
40	65	0	1
41	75	0	1
41	B8	0	1
42	85	0	4
42	C8	0	2
43	95	0	2
43	D8	0	3

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
44	A5	0	2
45	B5	0	1
45	F8	0	2
46	C5	0	3
46	G8	0	7
47	D5	0	2
47	H8	0	4
49	J8	0	2
50	G5	0	4
50	K8	0	3
52	M8	0	2
55	M5	0	2
55	Q8	0	1
All	All	1	141

All (185) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	774	A	N9-C4	-11.99	1.30	1.37
26	1H	2430	A	N9-C4	-11.47	1.30	1.37
26	1H	783	A	N3-C4	-11.40	1.28	1.34
26	14	2430	A	N9-C4	-10.71	1.31	1.37
26	14	528	A	N9-C4	-10.24	1.31	1.37
26	14	774	A	N9-C4	-10.23	1.31	1.37
26	14	783	A	N9-C4	-10.20	1.31	1.37
26	1H	1614	A	N9-C4	-9.66	1.32	1.37
26	1H	783	A	N7-C5	-9.63	1.33	1.39
26	1H	676	A	N9-C4	-9.57	1.32	1.37
26	1H	74	A	N9-C4	-9.21	1.32	1.37
26	1H	1698	A	N3-C4	-9.07	1.29	1.34
26	1H	472	A	N3-C4	-8.57	1.29	1.34
26	1H	2476	A	N9-C4	8.44	1.43	1.37
26	14	783	A	N3-C4	-8.32	1.29	1.34
26	1H	783	A	N9-C4	-8.23	1.32	1.37
26	1H	265	A	N9-C4	-8.03	1.33	1.37
26	1H	1142(A)	A	N9-C4	-8.00	1.33	1.37
26	14	1678	G	N9-C4	-7.91	1.31	1.38
26	1H	71	A	N9-C4	-7.84	1.33	1.37
26	1H	57	C	N3-C4	-7.82	1.28	1.33
26	14	783	A	N7-C5	-7.78	1.34	1.39
26	1H	1698	A	N9-C4	-7.77	1.33	1.37
26	1H	676	A	N9-C8	7.71	1.44	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1786	A	N9-C4	-7.64	1.33	1.37
26	1H	1786	A	C5-C6	-7.54	1.34	1.41
26	1H	783	A	C5-C6	-7.47	1.34	1.41
26	14	945	A	C5-C6	-7.46	1.34	1.41
26	14	2287	A	N9-C4	-7.38	1.33	1.37
26	1H	2287	A	N9-C4	-7.36	1.33	1.37
26	14	783	A	C5-C6	-7.31	1.34	1.41
26	1H	774	A	C5-C6	-7.26	1.34	1.41
26	14	2873	A	N7-C5	-7.24	1.34	1.39
26	1H	2346	A	N7-C5	-7.20	1.34	1.39
26	1H	676	A	C5-C4	7.16	1.43	1.38
26	1H	138	G	N9-C8	7.16	1.42	1.37
26	14	1950	G	C2-N3	7.12	1.38	1.32
26	1H	2062	A	N7-C5	7.08	1.43	1.39
26	1H	1780	A	N3-C4	-7.00	1.30	1.34
26	14	2518	A	C5-C6	-6.99	1.34	1.41
26	1H	1899	G	N3-C4	-6.92	1.30	1.35
26	1H	2062	A	N3-C4	6.89	1.39	1.34
26	1H	197	A	N3-C4	-6.88	1.30	1.34
26	1H	71	A	C5-C6	-6.86	1.34	1.41
26	1H	1899	G	N9-C4	-6.84	1.32	1.38
26	14	786	C	N3-C4	-6.80	1.29	1.33
26	14	2725	A	N9-C4	-6.79	1.33	1.37
26	1H	693	C	N3-C4	-6.74	1.29	1.33
26	1H	679	C	N1-C6	-6.73	1.33	1.37
26	1H	2442	C	N1-C6	-6.71	1.33	1.37
26	1H	576	U	N3-C4	-6.68	1.32	1.38
26	1H	945	A	C5-C6	-6.64	1.35	1.41
26	1H	2062	A	C5-C6	6.52	1.47	1.41
26	1H	528	A	N9-C4	-6.50	1.33	1.37
26	1H	1966	A	N9-C4	-6.42	1.34	1.37
26	1H	1786	A	N7-C5	-6.39	1.35	1.39
26	1H	1354	A	N3-C4	-6.31	1.31	1.34
26	14	2518	A	N9-C4	-6.28	1.34	1.37
26	1H	698	C	N1-C6	-6.24	1.33	1.37
26	1H	2032	G	N7-C5	-6.22	1.35	1.39
26	1H	838	C	N1-C6	-6.22	1.33	1.37
26	1H	780	G	N9-C4	-6.20	1.32	1.38
26	14	766	C	N1-C6	-6.19	1.33	1.37
26	1H	805	G	N7-C5	-6.17	1.35	1.39
26	14	580	C	N3-C4	-6.16	1.29	1.33
26	14	1676	A	N3-C4	-6.14	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	775	G	N9-C8	-6.11	1.33	1.37
26	1H	966	G	C6-N1	-6.05	1.35	1.39
26	14	1332	G	C5-C4	6.04	1.42	1.38
26	1H	2563	U	C2-N3	-6.04	1.33	1.37
26	14	2430	A	N3-C4	-6.01	1.31	1.34
26	1H	775	G	N7-C5	-6.00	1.35	1.39
26	14	2441	C	N3-C4	-5.98	1.29	1.33
26	1H	138	G	C6-N1	5.96	1.43	1.39
29	19	30	GLU	CG-CD	5.96	1.60	1.51
26	14	1698	A	N7-C5	-5.95	1.35	1.39
26	14	751	A	N9-C4	-5.94	1.34	1.37
1	13	792	A	N9-C4	-5.92	1.34	1.37
23	2K	75	C	N3-C4	-5.91	1.29	1.33
26	14	1142(A)	A	N3-C4	-5.90	1.31	1.34
26	1H	592	G	N3-C4	-5.87	1.31	1.35
26	14	766	C	N3-C4	-5.85	1.29	1.33
26	14	2518	A	N7-C5	-5.83	1.35	1.39
46	G8	84	ARG	CG-CD	5.82	1.66	1.51
26	1H	2062	A	N9-C4	5.80	1.41	1.37
26	1H	1950	G	N9-C8	5.79	1.42	1.37
26	1H	777	A	N3-C4	-5.79	1.31	1.34
26	14	788	A	N9-C4	5.76	1.41	1.37
26	1H	1624	G	C5-C4	-5.75	1.34	1.38
26	1H	945	A	N9-C4	-5.75	1.34	1.37
29	11	30	GLU	CG-CD	5.73	1.60	1.51
26	1H	2346	A	N3-C4	-5.71	1.31	1.34
26	1H	845	G	C2-N3	5.71	1.37	1.32
26	1H	2254	C	N1-C2	-5.70	1.34	1.40
26	14	1788	C	N1-C6	-5.69	1.33	1.37
26	1H	2490	G	C5-C6	-5.68	1.36	1.42
26	1H	1624	G	N3-C4	-5.68	1.31	1.35
26	1H	939	G	N3-C4	-5.67	1.31	1.35
26	1H	599	G	N9-C8	-5.66	1.33	1.37
26	1H	1278	A	N7-C5	-5.66	1.35	1.39
26	1H	1792	G	C6-N1	-5.64	1.35	1.39
26	14	74	A	N9-C4	-5.61	1.34	1.37
26	1H	122	G	N9-C4	-5.59	1.33	1.38
1	13	792	A	N3-C4	-5.59	1.31	1.34
26	14	2506	U	N1-C2	5.59	1.43	1.38
26	1H	2751	G	N3-C4	-5.59	1.31	1.35
26	1H	860	U	N1-C2	5.57	1.43	1.38
26	14	216	A	N9-C4	-5.55	1.34	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	251	A	C6-N1	-5.54	1.31	1.35
26	1H	1678	G	N9-C8	5.54	1.41	1.37
26	14	1786	A	N3-C4	-5.53	1.31	1.34
26	14	1605	C	N1-C6	-5.53	1.33	1.37
26	1H	471	A	N9-C4	-5.53	1.34	1.37
26	14	2025	C	N1-C6	-5.51	1.33	1.37
26	14	90	U	N1-C2	5.51	1.43	1.38
26	1H	1678	G	N9-C4	-5.50	1.33	1.38
26	1H	678	C	N3-C4	-5.49	1.30	1.33
26	1H	966	G	N1-C2	-5.48	1.33	1.37
26	1H	1786	A	N9-C4	-5.48	1.34	1.37
26	14	1950	G	C5-C6	5.48	1.47	1.42
1	13	1227	A	N9-C4	-5.45	1.34	1.37
26	1H	1354	A	N9-C4	-5.44	1.34	1.37
26	1H	2248	C	N3-C4	-5.44	1.30	1.33
26	1H	202	U	C4-O4	-5.44	1.19	1.23
1	13	428	G	N9-C4	-5.44	1.33	1.38
56	1L	76	A	N9-C4	5.42	1.41	1.37
26	14	664	C	N1-C6	-5.41	1.33	1.37
26	14	2243	U	N3-C4	-5.41	1.33	1.38
26	1H	265	A	N3-C4	-5.40	1.31	1.34
26	1H	2506	U	N1-C2	5.40	1.43	1.38
26	1H	2575	C	N3-C4	-5.39	1.30	1.33
26	1H	2713	A	N9-C4	-5.39	1.34	1.37
26	1H	127	A	C5-C6	-5.38	1.36	1.41
26	14	974(A)	C	C4-C5	5.38	1.47	1.43
26	1H	1927	A	N7-C5	-5.35	1.36	1.39
26	1H	212	G	N7-C5	-5.35	1.36	1.39
26	1H	2453	A	N7-C5	-5.31	1.36	1.39
26	1H	663	G	N9-C8	-5.30	1.34	1.37
26	14	1021	A	N9-C4	-5.30	1.34	1.37
26	14	733	G	N9-C8	-5.29	1.34	1.37
26	1H	2053	G	C5-C6	-5.27	1.37	1.42
26	1H	2452	C	N1-C6	-5.27	1.33	1.37
26	14	1899	G	N3-C4	-5.26	1.31	1.35
26	14	1899	G	N9-C4	-5.25	1.33	1.38
31	31	57	VAL	CB-CG1	-5.24	1.41	1.52
26	14	1204	A	N9-C4	-5.24	1.34	1.37
26	1H	2392	A	N7-C5	-5.24	1.36	1.39
26	1H	1332	G	C5-C4	5.23	1.42	1.38
26	14	2542	A	N7-C5	5.23	1.42	1.39
1	13	539	A	N3-C4	-5.23	1.31	1.34

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1786	A	N1-C2	5.22	1.39	1.34
26	1H	2246	G	N9-C8	-5.21	1.34	1.37
26	14	1616	A	N9-C4	-5.19	1.34	1.37
29	11	122	ASP	CB-CG	5.19	1.62	1.51
26	1H	1308	A	N3-C4	-5.19	1.31	1.34
26	1H	2713	A	C5-C4	5.18	1.42	1.38
26	14	2713	A	C5-C4	5.18	1.42	1.38
26	1H	138	G	C5-C4	5.17	1.42	1.38
26	1H	1977	A	C6-N1	-5.17	1.31	1.35
23	2L	77	A	N9-C4	-5.16	1.34	1.37
26	1H	73	A	C5-C4	-5.16	1.35	1.38
26	1H	1349	A	N9-C8	5.15	1.41	1.37
26	1H	2392	A	N9-C4	-5.15	1.34	1.37
53	N8	6	VAL	CB-CG1	-5.14	1.42	1.52
26	1H	2377	A	N9-C4	-5.14	1.34	1.37
26	1H	2068	U	C2-N3	-5.14	1.34	1.37
26	14	2377	A	N9-C4	-5.14	1.34	1.37
26	14	2076	U	N1-C2	-5.13	1.33	1.38
26	14	646	A	N9-C4	5.12	1.41	1.37
26	1H	71	A	C6-N6	-5.11	1.29	1.33
26	14	1784	A	C6-N1	-5.11	1.31	1.35
26	1H	1623	G	C6-N1	-5.10	1.35	1.39
26	14	2873	A	C5-C6	-5.10	1.36	1.41
26	14	74	A	N3-C4	-5.10	1.31	1.34
1	1G	1473	A	N9-C4	-5.08	1.34	1.37
26	14	2346	A	N3-C4	-5.07	1.31	1.34
26	1H	1632	A	C5-C6	-5.07	1.36	1.41
26	1H	216	A	N9-C4	-5.06	1.34	1.37
26	1H	2053	G	C5-C4	-5.06	1.34	1.38
26	1H	1331	A	N3-C4	-5.05	1.31	1.34
26	1H	1784	A	C6-N1	-5.04	1.32	1.35
26	1H	2230	G	N3-C4	-5.04	1.31	1.35
26	1H	621	A	N9-C4	-5.04	1.34	1.37
26	1H	621	A	C5-C4	5.04	1.42	1.38
26	14	471	A	N9-C4	-5.03	1.34	1.37

All (4553) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1899	G	N3-C4-N9	-19.34	114.40	126.00
26	1H	783	A	C8-N9-C4	-17.08	98.97	105.80
26	14	2518	A	N1-C6-N6	17.07	128.84	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	676	A	C2-N3-C4	-16.88	102.16	110.60
26	14	774	A	C2-N3-C4	-16.75	102.23	110.60
26	1H	1829	A	O5'-P-OP1	-16.50	90.85	105.70
26	1H	774	A	C2-N3-C4	-16.22	102.49	110.60
26	1H	783	A	N7-C8-N9	16.11	121.85	113.80
26	14	1332	G	C6-C5-N7	-16.08	120.75	130.40
26	1H	945	A	N1-C6-N6	16.00	128.20	118.60
26	1H	783	A	C5-N7-C8	-15.90	95.95	103.90
26	1H	71	A	C2-N3-C4	-15.51	102.84	110.60
26	1H	2490	G	C4-C5-N7	15.51	117.00	110.80
26	1H	1786	A	C2-N3-C4	-15.43	102.88	110.60
26	1H	1786	A	N1-C6-N6	15.29	127.77	118.60
26	14	945	A	N1-C6-N6	15.11	127.67	118.60
26	14	1332	G	N1-C6-O6	14.97	128.88	119.90
26	14	2053	G	N1-C6-O6	14.86	128.81	119.90
26	1H	945	A	C6-C5-N7	-14.84	121.91	132.30
26	1H	586	A	O5'-P-OP2	-14.43	92.71	105.70
26	14	783	A	C2-N3-C4	-14.41	103.39	110.60
26	1H	2490	G	C6-C5-N7	-14.33	121.80	130.40
26	14	528	A	C2-N3-C4	-14.30	103.45	110.60
26	1H	1786	A	C6-C5-N7	-14.28	122.31	132.30
26	14	1786	A	C5-N7-C8	-14.28	96.76	103.90
26	14	783	A	C5-N7-C8	-14.19	96.80	103.90
26	14	1786	A	N7-C8-N9	14.05	120.83	113.80
26	14	1332	G	C2-N3-C4	-13.95	104.92	111.90
26	1H	2287	A	C2-N3-C4	-13.92	103.64	110.60
26	14	783	A	N1-C6-N6	13.72	126.83	118.60
26	1H	783	A	C6-C5-N7	-13.62	122.76	132.30
26	1H	2346	A	N1-C2-N3	13.59	136.10	129.30
26	1H	2490	G	C5-N7-C8	-13.43	97.58	104.30
26	14	1332	G	C5-N7-C8	-13.40	97.60	104.30
26	14	1899	G	N3-C4-N9	-13.38	117.97	126.00
26	1H	1618	A	O5'-P-OP2	-13.37	93.67	105.70
26	1H	2598	A	O5'-P-OP1	-13.21	93.81	105.70
26	1H	74	A	C2-N3-C4	-13.20	104.00	110.60
26	1H	1899	G	N3-C4-C5	13.15	135.18	128.60
26	14	1332	G	C4-C5-N7	13.14	116.06	110.80
26	1H	1776	G	O5'-P-OP2	-13.05	93.96	105.70
26	1H	1899	G	N3-C2-N2	-13.04	110.77	119.90
26	14	2518	A	C6-C5-N7	-13.03	123.18	132.30
26	1H	576	U	N3-C2-O2	-13.03	113.08	122.20
26	1H	774	A	N3-C4-C5	12.99	135.89	126.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	917	A	O5'-P-OP1	-12.91	94.08	105.70
26	1H	1376	C	O5'-P-OP1	-12.88	94.11	105.70
26	1H	1332	G	C5-N7-C8	-12.87	97.86	104.30
26	1H	1336	A	N1-C6-N6	-12.83	110.90	118.60
26	14	945	A	C6-C5-N7	-12.78	123.35	132.30
26	1H	1698	A	C2-N3-C4	-12.74	104.23	110.60
26	14	530	G	C6-C5-N7	-12.73	122.76	130.40
26	1H	1394	U	O5'-P-OP1	-12.69	94.28	105.70
26	1H	1786	A	C5-N7-C8	-12.56	97.62	103.90
26	1H	1899	G	N9-C4-C5	12.53	110.41	105.40
26	1H	140	A	N7-C8-N9	12.47	120.04	113.80
26	14	74	A	C2-N3-C4	-12.39	104.40	110.60
26	1H	74	A	C5-N7-C8	-12.37	97.71	103.90
26	14	2518	A	C5-N7-C8	-12.30	97.75	103.90
1	13	792	A	C2-N3-C4	-12.26	104.47	110.60
26	1H	2581	G	O5'-P-OP1	-12.26	94.67	105.70
26	14	2873	A	C6-C5-N7	-12.25	123.72	132.30
26	1H	576	U	C5-C4-O4	12.24	133.24	125.90
26	1H	676	A	N3-C4-C5	12.19	135.34	126.80
26	1H	1332	G	C2-N3-C4	-12.17	105.81	111.90
26	1H	945	A	C5-N7-C8	-12.13	97.84	103.90
26	1H	1678	G	N3-C4-C5	12.08	134.64	128.60
26	14	835	A	O5'-P-OP2	-12.08	94.83	105.70
26	14	1786	A	C2-N3-C4	-12.04	104.58	110.60
26	1H	138	G	C5-N7-C8	-12.00	98.30	104.30
26	14	1332	G	N7-C8-N9	11.98	119.09	113.10
26	14	2873	A	N1-C6-N6	11.96	125.77	118.60
26	1H	1496	A	N1-C6-N6	11.89	125.73	118.60
26	1H	1204	A	O4'-C1'-N9	11.87	117.69	108.20
26	1H	1332	G	C4-C5-N7	11.85	115.54	110.80
26	1H	676	A	C5-N7-C8	-11.85	97.98	103.90
24	3K	76	A	N1-C6-N6	11.82	125.69	118.60
26	14	2430	A	C2-N3-C4	-11.81	104.70	110.60
26	1H	679	C	C6-N1-C2	11.77	125.01	120.30
26	1H	1899	G	C2-N3-C4	-11.73	106.03	111.90
26	1H	945	A	C2-N3-C4	-11.73	104.74	110.60
26	1H	2699	C	C6-N1-C2	11.65	124.96	120.30
26	14	1678	G	N3-C4-C5	11.64	134.42	128.60
26	1H	1496	A	C5-N7-C8	-11.60	98.10	103.90
26	1H	774	A	N1-C6-N6	11.56	125.53	118.60
26	1H	1950	G	N7-C8-N9	11.55	118.88	113.10
26	1H	1271	G	O5'-P-OP2	-11.55	95.30	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2607	G	O5'-P-OP2	-11.55	95.31	105.70
26	1H	974	G	O5'-P-OP2	-11.54	95.32	105.70
1	1G	1322	C	N1-C2-O2	11.50	125.80	118.90
26	1H	621	A	C2-N3-C4	-11.46	104.87	110.60
26	1H	917	A	C2-N3-C4	-11.39	104.90	110.60
26	1H	576	U	N1-C2-N3	11.38	121.73	114.90
26	1H	140	A	C5-N7-C8	-11.38	98.21	103.90
26	1H	530	G	N1-C6-O6	-11.37	113.08	119.90
26	1H	2430	A	C2-N3-C4	-11.34	104.93	110.60
26	14	2873	A	N7-C8-N9	11.34	119.47	113.80
26	14	783	A	C6-C5-N7	-11.28	124.41	132.30
26	14	945	A	C4-C5-N7	11.27	116.33	110.70
26	1H	2346	A	C6-C5-N7	-11.26	124.42	132.30
26	1H	676	A	N3-C4-N9	-11.23	118.42	127.40
26	14	2518	A	C4-C5-N7	11.21	116.30	110.70
26	1H	966	G	N1-C6-O6	-11.20	113.18	119.90
26	1H	1786	A	C4-C5-N7	11.16	116.28	110.70
26	1H	2681	C	C6-N1-C2	-11.15	115.84	120.30
26	14	1899	G	C2-N3-C4	-11.14	106.33	111.90
26	1H	1950	G	C5-N7-C8	-11.06	98.77	104.30
26	14	783	A	C4-C5-N7	11.04	116.22	110.70
26	1H	138	G	N7-C8-N9	11.01	118.60	113.10
26	1H	138	G	C4-C5-N7	10.98	115.19	110.80
26	1H	141	A	N1-C6-N6	10.93	125.16	118.60
26	14	1602	U	O5'-P-OP2	10.93	123.81	110.70
26	1H	2330	G	N1-C6-O6	10.93	126.46	119.90
26	1H	2490	G	N7-C8-N9	10.91	118.56	113.10
26	1H	1950	G	C8-N9-C4	-10.87	102.05	106.40
26	1H	1332	G	N7-C8-N9	10.84	118.52	113.10
26	1H	2688	U	C5-C4-O4	10.83	132.40	125.90
26	1H	945	A	C4-C5-N7	10.81	116.11	110.70
26	1H	1496	A	N7-C8-N9	10.80	119.20	113.80
26	14	2079	U	O5'-P-OP1	-10.80	95.98	105.70
26	14	774	A	N3-C4-C5	10.79	134.35	126.80
26	14	783	A	N7-C8-N9	10.76	119.18	113.80
26	1H	140	A	C8-N9-C4	-10.73	101.51	105.80
26	1H	1678	G	C5-N7-C8	-10.73	98.94	104.30
26	1H	783	A	N1-C6-N6	10.71	125.03	118.60
26	14	1786	A	C8-N9-C4	-10.66	101.53	105.80
26	1H	783	A	C2-N3-C4	-10.64	105.28	110.60
26	1H	1786	A	N7-C8-N9	10.63	119.12	113.80
26	1H	1678	G	C2-N3-C4	-10.60	106.60	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2518	A	C2-N3-C4	-10.60	105.30	110.60
26	1H	2392	A	C5-N7-C8	-10.59	98.60	103.90
26	14	2779	U	N3-C2-O2	-10.55	114.81	122.20
26	1H	783	A	C4-C5-N7	10.53	115.96	110.70
26	1H	2346	A	C2-N3-C4	-10.52	105.34	110.60
26	1H	1614	A	C5-N7-C8	-10.52	98.64	103.90
26	1H	774	A	C5-N7-C8	-10.51	98.65	103.90
26	1H	2713	A	C5-N7-C8	-10.49	98.66	103.90
26	1H	2417	C	O5'-P-OP2	-10.48	96.27	105.70
26	14	1678	G	N3-C4-N9	-10.47	119.72	126.00
26	1H	698	C	C6-N1-C2	10.47	124.49	120.30
26	14	2873	A	C5-N7-C8	-10.47	98.66	103.90
26	1H	2053	G	C5-C6-O6	-10.42	122.35	128.60
26	1H	1678	G	N1-C6-O6	10.40	126.14	119.90
26	1H	74	A	N1-C6-N6	10.39	124.83	118.60
26	1H	2346	A	C4-C5-C6	10.38	122.19	117.00
26	1H	46	C	O5'-P-OP1	-10.36	96.37	105.70
26	14	1899	G	N3-C4-C5	10.34	133.77	128.60
26	14	2443	C	O5'-P-OP1	-10.30	96.43	105.70
26	14	530	G	C4-C5-N7	10.29	114.92	110.80
26	14	1616	A	C5-N7-C8	-10.29	98.76	103.90
26	1H	729	G	C8-N9-C4	-10.28	102.29	106.40
26	1H	966	G	C5-C6-O6	10.27	134.76	128.60
26	1H	2508	G	N1-C6-O6	10.27	126.06	119.90
26	14	330	A	C2-N3-C4	-10.22	105.49	110.60
26	1H	621	A	C5-N7-C8	-10.21	98.79	103.90
26	1H	2554	U	O5'-P-OP2	-10.21	96.51	105.70
26	1H	2430	A	N3-C4-C5	10.20	133.94	126.80
26	1H	1496	A	C4-C5-N7	10.19	115.79	110.70
26	1H	195	A	O5'-P-OP2	-10.16	96.56	105.70
26	1H	1678	G	N3-C4-N9	-10.16	119.91	126.00
26	14	2030	A	O5'-P-OP2	-10.15	96.57	105.70
26	1H	2346	A	O4'-C1'-N9	10.13	116.31	108.20
26	1H	447	A	O5'-P-OP1	-10.13	96.58	105.70
26	1H	689	A	O5'-P-OP2	-10.10	96.61	105.70
26	1H	46	C	C6-N1-C2	-10.10	116.26	120.30
26	1H	609	A	N1-C6-N6	10.09	124.66	118.60
26	1H	71	A	C5-N7-C8	-10.09	98.86	103.90
26	14	1678	G	C5-N7-C8	-10.09	99.26	104.30
26	1H	681	G	C8-N9-C4	10.06	110.42	106.40
26	1H	2430	A	N3-C4-N9	-10.06	119.35	127.40
26	14	621	A	C2-N3-C4	-10.04	105.58	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1790	C	C5-C4-N4	10.04	127.22	120.20
26	1H	391	G	N1-C6-O6	10.02	125.91	119.90
26	1H	1784	A	N1-C6-N6	-10.01	112.60	118.60
26	1H	107	C	C6-N1-C2	10.00	124.30	120.30
26	1H	945	A	C4-C5-C6	9.96	121.98	117.00
26	1H	1021	A	N7-C8-N9	9.96	118.78	113.80
26	1H	1332	G	C6-C5-N7	-9.96	124.42	130.40
26	1H	2346	A	N7-C8-N9	9.96	118.78	113.80
1	13	1279	A	C8-N9-C4	-9.94	101.83	105.80
26	1H	2598	A	O5'-P-OP2	9.93	122.61	110.70
1	1G	254	G	O5'-P-OP1	-9.93	96.77	105.70
26	14	1332	G	C4-N9-C1'	9.93	139.40	126.50
1	13	1493	A	O5'-P-OP1	-9.88	96.81	105.70
26	1H	1210	A	N1-C6-N6	9.88	124.53	118.60
26	1H	2346	A	N1-C6-N6	9.85	124.51	118.60
26	1H	613	U	N3-C2-O2	-9.85	115.31	122.20
26	1H	2755	C	C6-N1-C2	-9.80	116.38	120.30
26	14	2554	U	O5'-P-OP1	-9.80	96.88	105.70
26	14	2042	A	O5'-P-OP2	-9.79	96.89	105.70
26	1H	74	A	N7-C8-N9	9.77	118.68	113.80
26	1H	202	U	C5-C4-O4	-9.77	120.04	125.90
26	14	528	A	N3-C4-C5	9.75	133.62	126.80
26	1H	1616	A	C5-N7-C8	-9.74	99.03	103.90
26	14	2076	U	O5'-P-OP2	-9.73	96.94	105.70
26	1H	2447	G	O5'-P-OP1	-9.73	96.94	105.70
26	1H	1309	G	O5'-P-OP2	-9.71	96.96	105.70
26	1H	71	A	N1-C2-N3	9.71	134.15	129.30
26	1H	774	A	O5'-P-OP2	-9.70	96.97	105.70
26	14	802	A	O5'-P-OP2	-9.70	96.97	105.70
55	Q8	52	LYS	N-CA-C	-9.70	84.81	111.00
26	1H	1807	G	N1-C6-O6	9.69	125.71	119.90
26	1H	839	U	O5'-P-OP2	-9.68	96.98	105.70
26	1H	1786	A	N1-C2-N3	9.67	134.14	129.30
26	1H	2330	G	C5-C6-O6	-9.66	122.81	128.60
26	1H	1678	G	C4-C5-N7	9.66	114.66	110.80
28	79	53	ARG	NE-CZ-NH1	-9.65	115.47	120.30
26	14	2249	U	C6-N1-C2	-9.65	115.21	121.00
26	1H	179	G	N1-C6-O6	9.63	125.68	119.90
26	1H	774	A	N3-C4-N9	-9.63	119.70	127.40
26	1H	1698	A	N1-C2-N3	9.61	134.10	129.30
26	14	2443	C	O5'-P-OP2	9.61	122.23	110.70
26	14	1406	U	C5-C6-N1	9.60	127.50	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1698	A	C6-C5-N7	-9.60	125.58	132.30
26	14	2873	A	C2-N3-C4	-9.55	105.82	110.60
26	1H	1437	C	C6-N1-C2	-9.54	116.48	120.30
26	14	2287	A	C2-N3-C4	-9.54	105.83	110.60
26	1H	265	A	C2-N3-C4	-9.54	105.83	110.60
26	14	2430	A	N3-C4-C5	9.53	133.47	126.80
26	1H	140	A	N1-C6-N6	9.53	124.32	118.60
26	1H	2584	U	N3-C2-O2	-9.50	115.55	122.20
26	1H	593	G	O5'-P-OP2	-9.50	97.15	105.70
26	1H	613	U	C5-C4-O4	9.50	131.60	125.90
27	1J	30	C	C6-N1-C2	-9.49	116.51	120.30
26	14	74	A	C5-C6-N1	-9.48	112.96	117.70
26	1H	2506	U	N1-C2-O2	9.48	129.44	122.80
26	14	1790	C	C2-N1-C1'	-9.48	108.37	118.80
26	14	793	A	O5'-P-OP2	-9.48	97.17	105.70
26	1H	2476	A	C8-N9-C4	-9.47	102.01	105.80
26	1H	2392	A	N1-C6-N6	9.47	124.28	118.60
26	1H	858	U	O5'-P-OP2	-9.45	97.19	105.70
26	1H	1528	A	N7-C8-N9	9.45	118.53	113.80
26	1H	2688	U	N3-C2-O2	-9.45	115.59	122.20
26	1H	203	C	C5-C4-N4	-9.44	113.59	120.20
1	13	690	G	C6-C5-N7	-9.44	124.74	130.40
26	1H	2689	U	C5-C4-O4	9.44	131.56	125.90
26	1H	984	A	O5'-P-OP2	-9.42	97.22	105.70
26	1H	140	A	C6-C5-N7	-9.41	125.71	132.30
26	14	1698	A	N1-C6-N6	9.41	124.25	118.60
26	1H	1632	A	N1-C6-N6	9.40	124.24	118.60
26	1H	2250	G	N9-C4-C5	9.40	109.16	105.40
26	14	1332	G	N1-C2-N3	9.40	129.54	123.90
26	1H	801	G	O5'-P-OP2	-9.39	97.25	105.70
26	14	945	A	N9-C4-C5	-9.39	102.05	105.80
26	1H	828	U	C5-C4-O4	9.38	131.53	125.90
26	1H	530	G	C5-C6-O6	9.37	134.22	128.60
26	1H	1931	U	N3-C2-O2	-9.37	115.64	122.20
26	1H	828	U	N3-C4-O4	-9.37	112.84	119.40
46	G8	81	LYS	C-N-CD	-9.36	100.01	120.60
26	1H	1698	A	C5-N7-C8	-9.35	99.23	103.90
26	1H	805	G	O5'-P-OP1	-9.34	97.29	105.70
26	14	530	G	N1-C6-O6	9.34	125.50	119.90
26	14	1616	A	C2-N3-C4	-9.34	105.93	110.60
26	14	307	G	N1-C6-O6	9.34	125.50	119.90
26	14	774	A	N3-C4-N9	-9.34	119.93	127.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1L	74	C	N1-C2-O2	9.33	124.50	118.90
26	1H	2681	C	N3-C2-O2	-9.32	115.38	121.90
26	1H	1528	A	C8-N9-C4	-9.31	102.08	105.80
26	14	676	A	C2-N3-C4	-9.30	105.95	110.60
26	1H	31	C	O5'-P-OP1	-9.30	97.33	105.70
26	14	1496	A	N7-C8-N9	9.29	118.44	113.80
26	1H	678	C	C5-C6-N1	-9.29	116.36	121.00
26	1H	2036	C	O5'-P-OP2	-9.26	97.36	105.70
26	1H	945	A	N1-C2-N3	9.26	133.93	129.30
26	1H	945	A	N7-C8-N9	9.26	118.43	113.80
26	1H	330	A	N1-C2-N3	9.25	133.93	129.30
26	1H	788	A	N1-C6-N6	9.25	124.15	118.60
26	1H	2708	G	O5'-P-OP2	-9.24	97.38	105.70
26	14	71	A	C5-N7-C8	-9.23	99.28	103.90
26	14	1790	C	N3-C4-N4	-9.23	111.54	118.00
26	1H	99	U	C2-N1-C1'	9.22	128.76	117.70
26	1H	676	A	O4'-C1'-N9	9.22	115.57	108.20
26	14	4	C	C2-N1-C1'	9.20	128.91	118.80
26	1H	1614	A	N1-C6-N6	9.19	124.11	118.60
26	1H	141	A	C5-N7-C8	-9.19	99.31	103.90
26	1H	774	A	C4-C5-N7	9.19	115.29	110.70
1	1G	1322	C	N3-C2-O2	-9.19	115.47	121.90
26	14	528	A	N3-C4-N9	-9.18	120.05	127.40
26	14	828	U	C5-C4-O4	9.18	131.41	125.90
26	14	945	A	C2-N3-C4	-9.18	106.01	110.60
26	14	2386	C	C6-N1-C2	9.18	123.97	120.30
26	1H	1984	G	O5'-P-OP2	-9.18	97.44	105.70
26	1H	830	G	C8-N9-C4	-9.17	102.73	106.40
26	1H	945	A	C5-C6-N6	-9.17	116.37	123.70
26	1H	2392	A	C4-C5-N7	9.16	115.28	110.70
26	1H	2490	G	N1-C6-O6	9.16	125.40	119.90
26	1H	2392	A	C2-N3-C4	-9.16	106.02	110.60
26	14	733	G	N3-C4-N9	9.15	131.49	126.00
26	14	2518	A	N7-C8-N9	9.14	118.37	113.80
26	14	1796	U	O5'-P-OP1	-9.12	97.49	105.70
26	1H	1253	A	N1-C6-N6	9.11	124.07	118.60
26	1H	676	A	N7-C8-N9	9.10	118.35	113.80
26	1H	2506	U	N3-C2-O2	-9.10	115.83	122.20
1	13	1301	U	C2-N1-C1'	9.09	128.60	117.70
24	3K	76	A	C6-C5-N7	-9.09	125.94	132.30
26	1H	2055	C	N3-C4-C5	-9.09	118.27	121.90
26	1H	245	G	N1-C6-O6	9.08	125.35	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	528	A	C2-N3-C4	-9.07	106.07	110.60
26	14	684	G	C8-N9-C4	-9.06	102.77	106.40
26	1H	105	C	C6-N1-C2	-9.03	116.69	120.30
1	13	49	U	P-O3'-C3'	9.02	130.53	119.70
26	1H	2490	G	C5-C6-O6	-9.02	123.19	128.60
26	14	805	G	O5'-P-OP1	-9.02	97.58	105.70
26	1H	138	G	C5-C6-O6	-9.02	123.19	128.60
26	1H	71	A	C4-C5-N7	9.01	115.20	110.70
26	1H	773	U	N1-C2-O2	-9.01	116.50	122.80
26	1H	783	A	N1-C2-N3	9.01	133.80	129.30
26	1H	120	U	C4-C5-C6	8.99	125.10	119.70
26	14	2873	A	N1-C2-N3	8.99	133.79	129.30
26	1H	2392	A	N7-C8-N9	8.98	118.29	113.80
26	14	2250	G	O5'-P-OP1	-8.98	97.62	105.70
26	1H	1962	C	C6-N1-C2	-8.97	116.71	120.30
26	1H	2346	A	C8-N9-C4	-8.95	102.22	105.80
26	14	2713	A	C5-N7-C8	-8.95	99.42	103.90
26	1H	1623	G	N1-C6-O6	-8.94	114.53	119.90
26	14	1812	A	O5'-P-OP2	-8.94	97.65	105.70
26	1H	1807	G	C5-C6-O6	-8.93	123.24	128.60
26	1H	508	G	C6-C5-N7	-8.93	125.05	130.40
26	1H	1982	C	O5'-P-OP2	-8.93	97.67	105.70
26	14	2387	U	C5-C6-N1	-8.93	118.24	122.70
1	13	1279	A	N7-C8-N9	8.92	118.26	113.80
26	1H	2712	U	C2-N3-C4	-8.91	121.66	127.00
26	1H	330	A	C2-N3-C4	-8.90	106.15	110.60
26	14	1142	U	C2-N1-C1'	8.88	128.36	117.70
26	1H	508	G	C8-N9-C1'	-8.88	115.45	127.00
26	14	676	A	C5-N7-C8	-8.88	99.46	103.90
1	13	5	U	C2-N1-C1'	8.87	128.35	117.70
26	1H	1827	C	C6-N1-C2	-8.87	116.75	120.30
26	14	1431	U	C5-C6-N1	8.87	127.14	122.70
26	14	1801	G	C5-C6-O6	-8.87	123.28	128.60
26	1H	183	C	N1-C2-O2	8.87	124.22	118.90
26	1H	270(O)	U	C2-N1-C1'	8.87	128.34	117.70
26	1H	1366	A	O5'-P-OP1	8.87	121.34	110.70
26	1H	2053	G	N1-C6-O6	8.86	125.21	119.90
26	1H	461	C	N1-C2-O2	-8.85	113.59	118.90
26	14	495	G	O5'-P-OP1	-8.85	97.73	105.70
26	14	1932	A	O5'-P-OP1	-8.85	97.73	105.70
26	14	2430	A	N3-C4-N9	-8.85	120.32	127.40
26	1H	1021	A	C8-N9-C4	-8.84	102.26	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	945	A	C5-N7-C8	-8.84	99.48	103.90
57	3L	76	A	C5-N7-C8	-8.83	99.48	103.90
26	14	2447	G	C4-C5-N7	-8.83	107.27	110.80
26	14	2053	G	C6-C5-N7	-8.82	125.11	130.40
26	1H	1786	A	C4-C5-C6	8.81	121.41	117.00
26	14	2518	A	O4'-C1'-N9	-8.81	101.15	108.20
26	14	2873	A	C4-C5-C6	8.81	121.41	117.00
26	14	1332	G	C8-N9-C1'	-8.80	115.56	127.00
26	1H	74	A	C6-C5-N7	-8.79	126.14	132.30
26	14	2053	G	C5-C6-N1	-8.79	107.10	111.50
1	1G	117	G	N1-C6-O6	8.77	125.16	119.90
26	1H	245	G	C6-C5-N7	-8.77	125.14	130.40
26	1H	2392	A	C5-C6-N1	-8.77	113.31	117.70
13	4A	95	GLY	N-CA-C	8.76	135.00	113.10
1	13	1489	G	C8-N9-C4	8.76	109.90	106.40
26	1H	1366	A	N1-C6-N6	8.75	123.85	118.60
26	1H	1394	U	O5'-P-OP2	8.74	121.19	110.70
26	14	675	A	C8-N9-C4	8.73	109.29	105.80
26	1H	2311	A	C2-N3-C4	-8.73	106.24	110.60
26	1H	845	G	OP1-P-O3'	8.72	124.38	105.20
26	14	1618	A	C8-N9-C4	-8.72	102.31	105.80
26	1H	837	C	O5'-P-OP1	-8.71	97.86	105.70
26	1H	2256	G	O5'-P-OP2	-8.70	97.87	105.70
1	13	843	U	C2-N1-C1'	8.70	128.14	117.70
26	1H	796	C	C6-N1-C2	8.70	123.78	120.30
26	14	1783	A	C8-N9-C4	-8.69	102.32	105.80
1	13	328	C	N1-C2-O2	8.68	124.11	118.90
24	3K	76	A	C5-N7-C8	-8.68	99.56	103.90
26	1H	676	A	C5-C6-N1	-8.65	113.37	117.70
1	13	792	A	N1-C2-N3	8.64	133.62	129.30
26	1H	788	A	N9-C4-C5	-8.64	102.34	105.80
26	14	575	A	N1-C6-N6	8.64	123.78	118.60
26	1H	211	A	N1-C6-N6	8.63	123.78	118.60
26	1H	1255	U	N3-C4-O4	8.63	125.44	119.40
26	14	2392	A	C2-N3-C4	-8.63	106.29	110.60
57	3L	76	A	N7-C8-N9	8.62	118.11	113.80
26	1H	1021	A	C5-N7-C8	-8.61	99.59	103.90
26	14	1783	A	N9-C4-C5	8.62	109.25	105.80
26	1H	2508	G	C5-C6-O6	-8.61	123.43	128.60
26	1H	508	G	C4-C5-N7	8.60	114.24	110.80
26	1H	1616	A	N7-C8-N9	8.60	118.10	113.80
26	1H	784	A	N1-C6-N6	-8.60	113.44	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1496	A	C6-C5-N7	-8.59	126.28	132.30
26	14	2598	A	O5'-P-OP1	-8.59	97.97	105.70
26	1H	2429	G	N3-C2-N2	-8.59	113.89	119.90
26	14	774	A	C5-N7-C8	-8.57	99.61	103.90
26	14	2301	C	C6-N1-C2	-8.56	116.87	120.30
57	3L	76	A	N1-C6-N6	8.56	123.74	118.60
26	14	1204	A	C2-N3-C4	-8.56	106.32	110.60
26	1H	580	C	C6-N1-C2	-8.55	116.88	120.30
26	1H	2404	C	O5'-P-OP1	-8.55	98.00	105.70
26	1H	148	C	C5-C6-N1	-8.55	116.73	121.00
26	1H	74	A	C4-C5-N7	8.54	114.97	110.70
26	14	1786	A	C4-C5-N7	8.54	114.97	110.70
26	1H	783	A	C4-C5-C6	8.53	121.27	117.00
26	1H	1825	A	O5'-P-OP2	-8.53	98.02	105.70
26	14	1658	C	C6-N1-C2	-8.52	116.89	120.30
26	14	1780	A	N1-C6-N6	-8.52	113.49	118.60
1	13	892	A	C2-N3-C4	-8.51	106.35	110.60
26	1H	138	G	C8-N9-C4	-8.49	103.00	106.40
22	1K	76	A	N7-C8-N9	8.49	118.04	113.80
26	1H	259	G	N1-C6-O6	8.49	124.99	119.90
26	1H	1255	U	N1-C2-O2	-8.49	116.86	122.80
26	1H	2681	C	P-O3'-C3'	8.48	129.88	119.70
26	14	1382	G	C4-C5-N7	8.48	114.19	110.80
26	14	216	A	C8-N9-C4	8.47	109.19	105.80
26	1H	491	G	O5'-P-OP1	-8.47	98.08	105.70
26	1H	915	C	N1-C2-O2	8.47	123.98	118.90
26	1H	835	A	O5'-P-OP2	-8.46	98.09	105.70
26	1H	2062	A	C8-N9-C4	8.46	109.18	105.80
26	14	1304	C	N1-C2-O2	8.46	123.97	118.90
26	14	1605	C	N1-C2-O2	-8.45	113.83	118.90
26	1H	2030	A	C5-C6-N6	-8.44	116.95	123.70
26	14	1332	G	C5-C6-N1	-8.43	107.28	111.50
26	14	2725	A	C2-N3-C4	-8.43	106.39	110.60
26	1H	140	A	C4-C5-N7	8.42	114.91	110.70
26	14	2880	C	C6-N1-C2	-8.42	116.93	120.30
1	13	1533	C	C2-N1-C1'	8.42	128.06	118.80
26	1H	621	A	N1-C6-N6	8.42	123.65	118.60
26	1H	917	A	N1-C2-N3	8.40	133.50	129.30
28	79	53	ARG	NE-CZ-NH2	8.40	124.50	120.30
26	1H	265	A	C5-N7-C8	-8.40	99.70	103.90
26	1H	391	G	C6-C5-N7	-8.38	125.37	130.40
26	1H	576	U	N3-C4-O4	-8.38	113.53	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1190	G	O5'-P-OP1	-8.38	98.16	105.70
26	1H	202	U	N3-C4-C5	8.37	119.62	114.60
26	1H	1786	A	N9-C4-C5	-8.37	102.45	105.80
26	14	1790	C	C6-N1-C1'	8.37	130.84	120.80
1	13	656	C	C5-C6-N1	8.36	125.18	121.00
26	1H	537	C	O5'-P-OP1	8.37	120.74	110.70
26	1H	1972	A	N1-C6-N6	8.36	123.61	118.60
1	1G	1487	G	C5-C6-O6	-8.36	123.59	128.60
26	14	2712	U	C5-C6-N1	-8.36	118.52	122.70
26	1H	2346	A	C4-N9-C1'	8.35	141.33	126.30
26	14	2213	U	C2-N1-C1'	8.35	127.72	117.70
26	14	2346	A	N1-C2-N3	8.35	133.47	129.30
12	3A	27	LEU	CA-CB-CG	8.34	134.49	115.30
26	14	2873	A	C4-C5-N7	8.34	114.87	110.70
1	13	328	C	C2-N1-C1'	8.33	127.97	118.80
26	1H	2352	A	O5'-P-OP1	-8.33	98.20	105.70
1	13	428	G	N3-C4-N9	-8.33	121.00	126.00
26	14	2437	U	C5-C4-O4	8.33	130.90	125.90
26	1H	2287	A	N1-C2-N3	8.32	133.46	129.30
37	78	61	ARG	NE-CZ-NH1	8.32	124.46	120.30
26	1H	1142(A)	A	C2-N3-C4	-8.31	106.44	110.60
26	1H	678	C	C6-N1-C2	8.31	123.62	120.30
26	14	1908	C	C6-N1-C2	-8.31	116.98	120.30
38	45	82	ARG	N-CA-C	8.31	133.43	111.00
26	1H	2036	C	C6-N1-C2	-8.30	116.98	120.30
26	14	675	A	N9-C4-C5	-8.30	102.48	105.80
26	14	774	A	N1-C6-N6	8.30	123.58	118.60
24	3K	76	A	C4-C5-N7	8.29	114.84	110.70
26	14	34	C	N1-C2-O2	8.29	123.87	118.90
26	14	2387	U	N3-C4-O4	-8.28	113.60	119.40
26	1H	138	G	O4'-C1'-N9	8.28	114.82	108.20
26	14	733	G	N3-C4-C5	-8.28	124.46	128.60
26	1H	141	A	C4-C5-N7	8.27	114.83	110.70
26	14	729	G	N1-C2-N2	8.27	123.64	116.20
55	M5	48	PHE	C-N-CA	8.27	142.38	121.70
26	1H	333	G	O5'-P-OP2	-8.26	98.26	105.70
26	1H	1632	A	C4-C5-N7	8.26	114.83	110.70
26	14	621	A	C5-C6-N1	-8.24	113.58	117.70
26	1H	1225	C	C6-N1-C2	8.24	123.59	120.30
1	13	623	C	C5-C6-N1	8.22	125.11	121.00
26	1H	271(B)	G	N3-C4-C5	-8.21	124.50	128.60
1	1G	1301	U	C2-N1-C1'	8.21	127.55	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1279	G	N1-C6-O6	-8.21	114.98	119.90
26	1H	845	G	P-O3'-C3'	8.20	129.54	119.70
26	14	774	A	C5-C6-N1	-8.20	113.60	117.70
26	1H	196	A	O4'-C1'-N9	8.19	114.75	108.20
26	1H	2713	A	N7-C8-N9	8.19	117.90	113.80
1	13	910	C	C6-N1-C2	8.19	123.58	120.30
26	1H	477	A	O5'-P-OP2	-8.19	98.33	105.70
26	1H	508	G	C4-N9-C1'	8.19	137.15	126.50
26	1H	1614	A	O5'-P-OP1	-8.19	98.33	105.70
26	1H	2392	A	C6-C5-N7	-8.19	126.57	132.30
26	1H	2406	U	O5'-P-OP1	-8.19	98.33	105.70
1	13	974	A	C5-N7-C8	-8.19	99.81	103.90
26	1H	2713	A	C2-N3-C4	-8.18	106.51	110.60
26	14	468	G	O5'-P-OP2	8.17	120.51	110.70
26	1H	2250	G	C8-N9-C4	-8.17	103.13	106.40
26	1H	49	A	O5'-P-OP2	-8.17	98.35	105.70
26	14	694	U	O5'-P-OP2	-8.17	98.35	105.70
26	1H	2374	C	C5-C6-N1	-8.16	116.92	121.00
26	1H	1950	G	C4-C5-N7	8.16	114.06	110.80
26	14	1393	A	O5'-P-OP2	-8.15	98.36	105.70
26	1H	74	A	C5-C6-N1	-8.15	113.62	117.70
26	1H	1899	G	C5-C6-O6	8.15	133.49	128.60
26	1H	2234	G	O5'-P-OP2	-8.15	98.36	105.70
26	14	694	U	N3-C2-O2	-8.14	116.50	122.20
26	1H	99	U	N3-C2-O2	-8.14	116.50	122.20
26	1H	621	A	C4-C5-N7	8.13	114.76	110.70
26	1H	2712	U	C2-N1-C1'	8.13	127.45	117.70
26	1H	1903	G	C5-C6-O6	8.12	133.47	128.60
26	1H	737	C	N1-C2-O2	-8.11	114.03	118.90
26	14	2272	U	N3-C2-O2	-8.11	116.53	122.20
26	1H	1210	A	C6-C5-N7	-8.10	126.63	132.30
26	14	828	U	N1-C2-O2	8.09	128.47	122.80
26	1H	1604	C	N1-C2-O2	-8.09	114.05	118.90
26	14	388	G	N3-C4-N9	-8.09	121.14	126.00
26	1H	2503	A	N1-C2-N3	-8.09	125.25	129.30
26	14	1899	G	N3-C2-N2	-8.09	114.24	119.90
1	13	690	G	C4-N9-C1'	8.09	137.01	126.50
23	2K	27	G	N1-C6-O6	8.09	124.75	119.90
26	14	828	U	N3-C2-O2	-8.09	116.54	122.20
26	1H	508	G	N9-C4-C5	-8.08	102.17	105.40
26	1H	2713	A	N1-C6-N6	8.08	123.45	118.60
26	1H	846	C	O5'-P-OP2	-8.08	98.43	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	575	A	C8-N9-C4	8.07	109.03	105.80
26	1H	679	C	C5-C6-N1	-8.07	116.96	121.00
26	1H	2857	G	O5'-P-OP1	-8.07	98.44	105.70
26	1H	51	G	O5'-P-OP1	-8.06	98.44	105.70
26	14	265	A	C2-N3-C4	-8.06	106.57	110.60
26	14	1496	A	C8-N9-C4	-8.06	102.58	105.80
26	14	2592	G	O5'-P-OP2	-8.05	98.46	105.70
26	1H	787	U	O5'-P-OP1	8.05	120.36	110.70
26	14	1616	A	N7-C8-N9	8.05	117.82	113.80
26	14	729	G	C2-N3-C4	8.04	115.92	111.90
26	14	806	C	O5'-P-OP1	-8.04	98.46	105.70
26	1H	827	U	O5'-P-OP1	8.03	120.34	110.70
26	1H	1453	A	N1-C6-N6	8.03	123.42	118.60
26	14	1142	U	N1-C2-O2	8.03	128.42	122.80
26	14	2518	A	N9-C4-C5	-8.03	102.59	105.80
26	14	530	G	N7-C8-N9	8.02	117.11	113.10
26	1H	1699	G	O5'-P-OP1	-8.02	98.48	105.70
26	14	128	C	C6-N1-C2	-8.02	117.09	120.30
26	1H	2689	U	N3-C4-O4	-8.01	113.79	119.40
26	1H	1022	G	N9-C4-C5	8.00	108.60	105.40
26	1H	1293	C	O5'-P-OP2	8.00	120.30	110.70
26	14	2873	A	C8-N9-C4	-8.00	102.60	105.80
26	1H	1767	C	O5'-P-OP1	-8.00	98.50	105.70
26	1H	2688	U	N1-C2-N3	8.00	119.70	114.90
26	14	1678	G	C2-N3-C4	-8.00	107.90	111.90
26	14	783	A	C8-N9-C4	-7.99	102.60	105.80
26	1H	71	A	N1-C6-N6	7.99	123.39	118.60
26	1H	1900	A	O5'-P-OP1	7.99	120.28	110.70
26	14	2430	A	N1-C6-N6	7.99	123.39	118.60
26	1H	1598	C	OP1-P-O3'	7.98	122.76	105.20
26	14	733	G	C8-N9-C1'	-7.98	116.62	127.00
26	1H	243	U	O5'-P-OP2	-7.98	98.52	105.70
26	1H	613	U	N3-C4-O4	-7.98	113.82	119.40
26	1H	936	C	C6-N1-C2	7.97	123.49	120.30
26	14	1276	A	N9-C4-C5	-7.97	102.61	105.80
26	1H	2713	A	C4-C5-N7	7.97	114.68	110.70
26	14	471	A	C2-N3-C4	-7.97	106.62	110.60
26	1H	2751	G	C5-C6-O6	7.96	133.38	128.60
26	1H	1697	G	C5-C6-O6	-7.96	123.82	128.60
26	14	1332	G	N9-C4-C5	-7.96	102.22	105.40
26	1H	1314	C	C2-N1-C1'	7.96	127.55	118.80
1	1G	1260	C	C6-N1-C2	-7.96	117.12	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	468	G	N1-C6-O6	7.96	124.67	119.90
26	1H	445	C	C6-N1-C2	-7.95	117.12	120.30
26	14	530	G	C5-N7-C8	-7.95	100.33	104.30
26	14	1332	G	C5-C6-O6	-7.95	123.83	128.60
26	1H	2346	A	C5-N7-C8	-7.95	99.93	103.90
26	1H	270(L)	U	C5-C6-N1	7.94	126.67	122.70
1	13	974	A	O4'-C1'-N9	7.93	114.55	108.20
23	2K	18	U	C2-N1-C1'	7.93	127.22	117.70
26	14	1780	A	O5'-P-OP2	-7.93	98.56	105.70
1	13	808	C	O5'-P-OP1	-7.93	98.56	105.70
26	1H	2755	C	C5-C6-N1	7.93	124.97	121.00
26	14	512	G	O4'-C1'-N9	7.93	114.54	108.20
1	1G	1139	G	N3-C4-C5	7.92	132.56	128.60
1	13	1446	A	O4'-C1'-N9	7.92	114.54	108.20
26	1H	768	G	O5'-P-OP2	-7.92	98.58	105.70
26	1H	2375	G	C8-N9-C4	7.91	109.56	106.40
26	1H	1129	A	O5'-P-OP2	-7.91	98.58	105.70
26	1H	668	G	O5'-P-OP2	-7.90	98.59	105.70
26	1H	678	C	N3-C4-C5	7.90	125.06	121.90
26	1H	1950	G	O4'-C1'-N9	7.90	114.52	108.20
26	14	2518	A	C5-C6-N6	-7.90	117.38	123.70
1	13	1517	G	O5'-P-OP2	-7.89	98.60	105.70
26	14	690	G	C8-N9-C4	7.89	109.56	106.40
1	13	690	G	O4'-C1'-N9	7.88	114.50	108.20
26	1H	1393	A	O5'-P-OP2	-7.88	98.61	105.70
26	1H	2205	C	O5'-P-OP2	-7.87	98.61	105.70
26	1H	1653	G	P-O3'-C3'	7.87	129.14	119.70
26	1H	1758	G	N3-C2-N2	-7.87	114.39	119.90
27	16	6	C	N1-C2-O2	-7.87	114.18	118.90
26	14	2249	U	N3-C2-O2	-7.87	116.69	122.20
26	1H	1603	A	C8-N9-C4	-7.87	102.65	105.80
26	1H	528	A	N3-C4-C5	7.86	132.30	126.80
26	14	1936	A	O4'-C1'-N9	7.85	114.48	108.20
26	1H	1931	U	N1-C2-N3	7.85	119.61	114.90
26	1H	464	U	O5'-P-OP1	-7.85	98.64	105.70
26	14	783	A	C5-C6-N1	-7.85	113.78	117.70
26	14	2518	A	C5-C6-N1	-7.84	113.78	117.70
26	1H	2681	C	C2-N1-C1'	7.84	127.42	118.80
1	13	428	G	N3-C4-C5	7.84	132.52	128.60
26	14	189	G	C5-C6-O6	-7.84	123.90	128.60
1	13	974	A	N7-C8-N9	7.84	117.72	113.80
26	1H	189	G	N1-C6-O6	7.83	124.60	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	773	U	N1-C2-N3	7.83	119.60	114.90
26	1H	1355	G	N1-C6-O6	-7.83	115.20	119.90
26	1H	1955	U	N3-C2-O2	-7.83	116.72	122.20
26	1H	2441	C	N3-C4-N4	-7.83	112.52	118.00
26	14	1614	A	C2-N3-C4	-7.83	106.69	110.60
1	13	816	A	N1-C6-N6	-7.83	113.90	118.60
26	1H	279	C	C6-N1-C2	-7.82	117.17	120.30
26	1H	1614	A	C4-C5-N7	7.82	114.61	110.70
26	14	71	A	N1-C6-N6	7.82	123.29	118.60
26	14	117	G	O5'-P-OP1	7.82	120.08	110.70
26	14	752	A	N1-C2-N3	7.81	133.21	129.30
26	14	1336	A	O5'-P-OP2	-7.81	98.67	105.70
26	1H	1253	A	N9-C4-C5	-7.81	102.68	105.80
26	1H	1899	G	C8-N9-C4	-7.80	103.28	106.40
26	1H	1336	A	N9-C4-C5	7.79	108.92	105.80
26	1H	1204	A	C2-N3-C4	-7.79	106.70	110.60
26	1H	1408	C	N1-C2-O2	-7.78	114.23	118.90
26	1H	736	C	O5'-P-OP1	-7.77	98.70	105.70
1	1G	1395	C	O5'-P-OP1	-7.77	98.70	105.70
26	1H	190	A	N1-C6-N6	7.77	123.26	118.60
1	13	963	G	N3-C4-N9	7.77	130.66	126.00
26	14	2287	A	C8-N9-C4	7.77	108.91	105.80
26	1H	2607	G	C6-C5-N7	-7.76	125.74	130.40
1	1G	690	G	C5-N7-C8	-7.76	100.42	104.30
1	13	715	A	O5'-P-OP2	-7.76	98.71	105.70
1	13	690	G	N7-C8-N9	7.76	116.98	113.10
26	1H	2565	A	O5'-P-OP1	-7.76	98.72	105.70
26	1H	1528	A	C5-N7-C8	-7.76	100.02	103.90
26	14	2060	A	O4'-C1'-N9	7.76	114.41	108.20
1	13	5	U	N1-C2-O2	7.76	128.23	122.80
26	1H	930	U	C5-C4-O4	7.75	130.55	125.90
26	1H	678	C	C2-N3-C4	-7.75	116.03	119.90
26	1H	1819	A	C5-C6-N6	-7.75	117.50	123.70
26	1H	2442	C	C5-C4-N4	-7.75	114.78	120.20
26	1H	1616	A	C4-C5-N7	7.74	114.57	110.70
26	1H	1839	G	N3-C2-N2	7.73	125.31	119.90
26	1H	467	G	O5'-P-OP2	-7.73	98.74	105.70
26	14	2392	A	C5-C6-N1	-7.73	113.83	117.70
26	1H	1759	A	O5'-P-OP1	-7.73	98.74	105.70
26	14	1544	C	C2-N1-C1'	7.73	127.30	118.80
26	1H	698	C	C5-C6-N1	-7.73	117.14	121.00
26	1H	2246	G	OP1-P-O3'	7.73	122.20	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	59	171	LEU	CA-CB-CG	7.73	133.07	115.30
1	13	1533	C	N1-C2-O2	7.72	123.53	118.90
26	14	929	G	N1-C6-O6	7.72	124.53	119.90
26	14	2335	A	O4'-C1'-N9	7.72	114.38	108.20
26	14	1796	U	O5'-P-OP2	7.72	119.96	110.70
26	1H	141	A	N7-C8-N9	7.71	117.66	113.80
1	1G	1281	U	C5-C6-N1	7.71	126.56	122.70
26	1H	1558	A	C2-N3-C4	-7.71	106.75	110.60
26	14	140	A	C5-N7-C8	-7.71	100.05	103.90
26	14	1659	U	O5'-P-OP2	-7.71	98.77	105.70
26	14	2439	A	N1-C6-N6	7.70	123.22	118.60
26	1H	201	C	C6-N1-C2	7.70	123.38	120.30
26	1H	1806	C	OP1-P-OP2	7.70	131.15	119.60
26	14	307	G	C5-C6-O6	-7.69	123.98	128.60
26	14	1382	G	N3-C4-C5	7.69	132.44	128.60
26	1H	2288	A	N1-C6-N6	7.68	123.21	118.60
26	14	312	G	O5'-P-OP1	-7.68	98.79	105.70
26	1H	1298	C	C5-C6-N1	7.68	124.84	121.00
26	1H	1780	A	N9-C4-C5	7.68	108.87	105.80
23	2K	77	A	C5-N7-C8	-7.68	100.06	103.90
26	14	733	G	C4-N9-C1'	7.67	136.48	126.50
26	14	2502	G	C5-C6-N1	7.67	115.34	111.50
26	1H	2330	G	C6-C5-N7	-7.67	125.80	130.40
26	14	945	A	C5-C6-N6	-7.67	117.56	123.70
26	1H	681	G	N9-C4-C5	-7.67	102.33	105.40
26	14	1564	C	N3-C4-N4	-7.67	112.63	118.00
26	1H	1694	C	P-O3'-C3'	7.67	128.90	119.70
26	1H	576	U	C6-N1-C2	-7.66	116.40	121.00
26	14	49	A	P-O3'-C3'	7.66	128.89	119.70
1	13	687	A	P-O3'-C3'	7.66	128.89	119.70
26	1H	203	C	N1-C2-O2	-7.66	114.31	118.90
26	1H	1899	G	N1-C2-N3	7.66	128.49	123.90
26	1H	1961	C	O5'-P-OP1	-7.65	98.81	105.70
26	1H	146	G	N9-C4-C5	-7.65	102.34	105.40
26	1H	446	G	N1-C6-O6	7.63	124.48	119.90
26	1H	2502	G	C8-N9-C4	-7.63	103.35	106.40
26	1H	2066	C	C6-N1-C2	-7.63	117.25	120.30
1	13	765	G	C8-N9-C1'	-7.62	117.09	127.00
26	1H	1313	U	C5-C6-N1	7.62	126.51	122.70
1	1G	690	G	C4-C5-N7	7.62	113.85	110.80
26	1H	606	U	O5'-P-OP2	-7.62	98.84	105.70
26	14	2346	A	N1-C6-N6	7.62	123.17	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1786	A	C6-C5-N7	-7.62	126.97	132.30
26	1H	141	A	C6-C5-N7	-7.61	126.97	132.30
26	1H	1654	A	O5'-P-OP1	-7.61	98.85	105.70
26	14	1307	A	O5'-P-OP1	-7.61	98.85	105.70
26	14	1786	A	N9-C1'-C2'	7.61	123.89	114.00
26	1H	2275	C	N1-C2-O2	-7.59	114.35	118.90
26	14	1616	A	C4-C5-N7	7.59	114.50	110.70
26	1H	691	C	N1-C2-O2	-7.59	114.35	118.90
26	14	2598	A	OP2-P-O3'	7.59	121.89	105.20
26	1H	2246	G	N3-C4-N9	7.58	130.55	126.00
26	1H	99	U	N1-C2-O2	7.58	128.10	122.80
26	1H	2438	U	O5'-P-OP2	-7.57	98.89	105.70
26	1H	1513	C	C5-C6-N1	7.57	124.78	121.00
26	1H	1698	A	C6-C5-N7	-7.56	127.01	132.30
26	1H	1942	C	C4-C5-C6	-7.56	113.62	117.40
1	13	428	G	C2-N3-C4	-7.55	108.12	111.90
26	1H	736	C	O5'-P-OP2	7.55	119.76	110.70
26	14	1204	A	O4'-C1'-N9	7.55	114.24	108.20
26	1H	2062	A	C2-N3-C4	7.55	114.38	110.60
26	1H	2458	G	N3-C2-N2	-7.55	114.61	119.90
26	14	1942	C	C6-N1-C2	-7.55	117.28	120.30
26	14	1570	A	N1-C6-N6	7.54	123.12	118.60
26	14	2053	G	C5-C6-O6	-7.54	124.08	128.60
26	14	528	A	C4-N9-C1'	-7.54	112.73	126.30
26	1H	1955	U	N1-C2-N3	7.54	119.42	114.90
26	1H	1992	G	C5-C6-N1	7.54	115.27	111.50
26	14	71	A	N7-C8-N9	7.54	117.57	113.80
26	1H	226	G	O4'-C1'-N9	7.53	114.23	108.20
26	1H	2507	C	C6-N1-C2	-7.53	117.29	120.30
26	1H	2053	G	C4-C5-N7	7.53	113.81	110.80
26	14	468	G	OP1-P-OP2	-7.53	108.30	119.60
26	1H	1564	C	N3-C2-O2	-7.53	116.63	121.90
26	14	2051	A	C8-N9-C4	-7.53	102.79	105.80
26	1H	640	C	C6-N1-C2	-7.52	117.29	120.30
26	14	2327	A	N1-C6-N6	-7.52	114.09	118.60
26	14	1496	A	C5-N7-C8	-7.52	100.14	103.90
26	1H	2577	A	N9-C4-C5	7.51	108.81	105.80
26	14	2301	C	C5-C6-N1	7.51	124.76	121.00
26	1H	140	A	OP2-P-O3'	7.51	121.73	105.20
26	14	1827	C	C6-N1-C2	-7.51	117.30	120.30
26	14	2249	U	C5-C6-N1	7.51	126.45	122.70
26	1H	1636	C	N3-C4-C5	-7.51	118.90	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	685	A	O4'-C1'-N9	7.51	114.20	108.20
26	1H	1914	C	C5-C4-N4	7.50	125.45	120.20
26	1H	1204	A	N1-C2-N3	7.50	133.05	129.30
26	1H	1616	A	N1-C6-N6	7.50	123.10	118.60
26	14	1798	U	O5'-P-OP2	-7.50	98.95	105.70
26	1H	245	G	C5-C6-O6	-7.50	124.10	128.60
26	1H	2238	G	O5'-P-OP2	-7.48	98.97	105.70
26	1H	1658	C	N1-C2-O2	-7.48	114.41	118.90
26	14	211	A	N1-C6-N6	7.48	123.09	118.60
33	51	153	LYS	C-N-CD	-7.47	104.16	120.60
26	1H	1300	U	N1-C2-N3	7.47	119.38	114.90
26	1H	2430	A	C5-N7-C8	-7.47	100.17	103.90
26	1H	140	A	C5-C6-N6	-7.47	117.73	123.70
26	1H	464	U	C5-C6-N1	-7.47	118.97	122.70
26	1H	1394	U	C5-C6-N1	7.46	126.43	122.70
26	1H	1776	G	C4-C5-N7	7.46	113.78	110.80
26	1H	1614	A	C2-N3-C4	-7.46	106.87	110.60
26	1H	2030	A	N1-C6-N6	7.46	123.07	118.60
26	1H	57	C	N3-C4-N4	-7.45	112.78	118.00
26	14	148	C	C6-N1-C2	7.45	123.28	120.30
26	1H	203	C	N3-C4-N4	7.45	123.22	118.00
27	1J	89	G	O5'-P-OP1	-7.45	99.00	105.70
26	14	783	A	N3-C4-C5	7.44	132.01	126.80
26	14	2023	G	O5'-P-OP2	-7.44	99.00	105.70
26	1H	1363	C	C5-C6-N1	-7.44	117.28	121.00
27	16	100	G	N3-C4-N9	7.44	130.46	126.00
1	13	1128	C	C6-N1-C2	-7.43	117.33	120.30
26	1H	1993	U	O5'-P-OP1	-7.43	99.01	105.70
26	14	2335	A	N1-C6-N6	-7.43	114.14	118.60
26	1H	1914	C	N3-C2-O2	-7.43	116.70	121.90
26	14	800	A	O5'-P-OP1	-7.42	99.02	105.70
27	1J	81	G	C4-C5-N7	7.42	113.77	110.80
26	1H	1900	A	O5'-P-OP2	-7.42	99.02	105.70
26	1H	2477	C	N3-C2-O2	-7.42	116.71	121.90
46	G8	81	LYS	C-N-CA	7.42	153.17	122.00
26	1H	512	G	O4'-C1'-N9	7.42	114.13	108.20
26	14	1899	G	C8-N9-C1'	7.42	136.64	127.00
26	14	741	G	O5'-P-OP1	-7.41	99.03	105.70
26	14	1950	G	C4-N9-C1'	7.41	136.13	126.50
26	14	691	C	C6-N1-C2	7.41	123.26	120.30
26	1H	1253	A	C5-C6-N6	-7.40	117.78	123.70
1	1G	449	C	N3-C2-O2	-7.40	116.72	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	860	U	C4-C5-C6	7.40	124.14	119.70
26	14	2275	C	C6-N1-C2	-7.39	117.34	120.30
26	1H	202	U	C6-N1-C1'	-7.39	110.85	121.20
26	1H	263	C	N1-C2-O2	7.39	123.34	118.90
26	1H	1399	C	C6-N1-C2	-7.39	117.34	120.30
1	1G	1301	U	N1-C2-O2	7.39	127.97	122.80
26	1H	1786	A	C5-C6-N6	-7.38	117.79	123.70
26	14	1780	A	N9-C4-C5	7.38	108.75	105.80
26	14	1266	G	C8-N9-C4	7.38	109.35	106.40
26	1H	587	C	C2-N1-C1'	7.37	126.91	118.80
26	14	2374	C	C6-N1-C2	7.37	123.25	120.30
26	14	2346	A	C6-C5-N7	-7.36	127.14	132.30
26	1H	670	A	C8-N9-C4	7.36	108.74	105.80
26	1H	1401	G	C8-N9-C4	-7.36	103.46	106.40
26	1H	2331	G	N1-C2-N2	-7.36	109.58	116.20
54	P8	39	ARG	NE-CZ-NH2	-7.36	116.62	120.30
26	14	140	A	N7-C8-N9	7.36	117.48	113.80
26	1H	424	G	N1-C6-O6	7.36	124.31	119.90
26	14	2581	G	N1-C2-N3	7.36	128.31	123.90
26	1H	1021	A	C2-N3-C4	-7.35	106.92	110.60
26	14	2307	G	C4-N9-C1'	7.35	136.06	126.50
26	1H	1819	A	N1-C6-N6	7.35	123.01	118.60
26	1H	1899	G	OP2-P-O3'	7.34	121.36	105.20
26	1H	510	C	O5'-P-OP2	-7.34	99.09	105.70
26	14	2713	A	N7-C8-N9	7.34	117.47	113.80
26	1H	2577	A	N1-C6-N6	-7.34	114.20	118.60
26	14	1790	C	OP1-P-O3'	7.34	121.34	105.20
26	1H	740	U	O5'-P-OP1	7.34	119.50	110.70
26	1H	777	A	N1-C2-N3	7.34	132.97	129.30
26	14	590	A	N1-C6-N6	-7.34	114.20	118.60
26	1H	141	A	C5-C6-N6	-7.33	117.83	123.70
26	1H	270(K)	C	C6-N1-C2	-7.33	117.37	120.30
1	13	1407	C	O5'-P-OP2	-7.33	99.10	105.70
26	1H	2488	A	N1-C6-N6	7.33	123.00	118.60
26	14	1373	A	C8-N9-C4	7.33	108.73	105.80
26	14	2237	G	N1-C6-O6	-7.33	115.50	119.90
1	13	1492	A	O5'-P-OP1	7.33	119.50	110.70
1	13	1502	A	C2-N3-C4	-7.33	106.94	110.60
26	1H	744	G	N1-C6-O6	-7.33	115.50	119.90
26	14	2503	A	N1-C2-N3	-7.33	125.64	129.30
26	14	2873	A	O5'-P-OP1	-7.32	99.11	105.70
26	14	494	G	N1-C6-O6	7.32	124.29	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1255	U	N3-C4-C5	-7.32	110.21	114.60
26	14	388	G	N9-C4-C5	7.32	108.33	105.40
1	13	1354	C	C6-N1-C2	-7.32	117.37	120.30
26	1H	599	G	C8-N9-C4	7.31	109.33	106.40
26	14	676	A	N7-C8-N9	7.31	117.46	113.80
26	1H	1938	A	O4'-C1'-N9	7.31	114.05	108.20
26	14	1332	G	C4-C5-C6	7.31	123.19	118.80
26	1H	838	C	C4-C5-C6	7.31	121.05	117.40
26	1H	2242	G	C4-C5-N7	-7.31	107.88	110.80
26	1H	2329	G	C8-N9-C4	7.31	109.32	106.40
26	14	1142(A)	A	N1-C2-N3	7.31	132.95	129.30
26	1H	1334	G	C6-C5-N7	-7.30	126.02	130.40
26	14	1742	C	C2-N1-C1'	7.30	126.83	118.80
26	1H	528	A	N3-C4-N9	-7.30	121.56	127.40
26	1H	1496	A	C5-C6-N6	-7.30	117.86	123.70
26	1H	1366	A	N9-C4-C5	-7.30	102.88	105.80
26	1H	2518	A	C5-N7-C8	-7.30	100.25	103.90
26	1H	508	G	N3-C4-N9	7.29	130.38	126.00
26	1H	1914	C	N3-C4-N4	-7.29	112.90	118.00
26	1H	2084	C	C5-C6-N1	-7.29	117.36	121.00
1	13	1158	C	N1-C2-O2	7.29	123.27	118.90
26	1H	2073	C	OP2-P-O3'	7.29	121.23	105.20
26	1H	2712	U	O4'-C1'-N1	7.29	114.03	108.20
22	1K	76	A	O4'-C1'-N9	7.28	114.02	108.20
26	14	1780	A	O5'-P-OP1	7.28	119.44	110.70
26	1H	284	U	O5'-P-OP1	-7.28	99.15	105.70
26	14	943	U	O5'-P-OP1	-7.28	99.15	105.70
26	1H	1026	U	O4'-C1'-N1	7.28	114.02	108.20
1	1G	812	C	P-O3'-C3'	7.28	128.43	119.70
26	1H	2506	U	C2-N1-C1'	7.27	126.43	117.70
26	1H	216	A	O5'-P-OP1	-7.27	99.16	105.70
40	65	110	LEU	CA-CB-CG	7.27	132.03	115.30
1	13	967	C	N1-C2-O2	-7.27	114.54	118.90
26	1H	1642	G	O5'-P-OP1	-7.27	99.16	105.70
1	13	1228	C	C6-N1-C2	-7.27	117.39	120.30
1	13	509	A	P-O3'-C3'	7.27	128.42	119.70
26	14	2000	G	O5'-P-OP1	7.27	119.42	110.70
26	1H	1430	C	OP1-P-O3'	7.27	121.19	105.20
26	1H	1831	G	C8-N9-C4	-7.27	103.49	106.40
26	1H	917	A	C5-C6-N1	-7.26	114.07	117.70
26	14	801	G	N1-C6-O6	-7.26	115.54	119.90
26	1H	693	C	C5-C6-N1	-7.25	117.37	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	252	G	O5'-P-OP2	-7.25	99.17	105.70
26	14	621	A	C5-N7-C8	-7.25	100.27	103.90
26	14	2053	G	C4-C5-C6	7.25	123.15	118.80
26	14	621	A	N7-C8-N9	7.25	117.43	113.80
26	1H	247	G	C8-N9-C4	7.25	109.30	106.40
1	13	748	C	C6-N1-C2	-7.25	117.40	120.30
26	1H	239	U	N3-C4-O4	-7.25	114.33	119.40
27	16	30	C	C6-N1-C2	-7.25	117.40	120.30
26	14	265	A	N1-C6-N6	7.25	122.95	118.60
26	1H	2465	C	C5-C6-N1	-7.25	117.38	121.00
26	1H	1309	G	O5'-P-OP1	7.25	119.39	110.70
26	1H	1314	C	C6-N1-C2	-7.24	117.40	120.30
26	14	2542	A	C8-N9-C4	7.24	108.70	105.80
1	13	898	G	O5'-P-OP1	-7.24	99.18	105.70
1	13	963	G	N1-C2-N2	-7.24	109.68	116.20
26	1H	681	G	N3-C2-N2	7.24	124.97	119.90
26	14	2473	U	C2-N1-C1'	7.24	126.39	117.70
26	1H	2422	A	N1-C6-N6	-7.24	114.26	118.60
26	1H	2490	G	C4-N9-C1'	7.23	135.90	126.50
26	1H	2311	A	N1-C2-N3	7.23	132.91	129.30
26	1H	2439	A	N1-C6-N6	7.23	122.94	118.60
26	1H	126	A	N1-C6-N6	-7.23	114.26	118.60
26	1H	1004	C	N3-C4-C5	-7.23	119.01	121.90
26	14	189	G	N1-C6-O6	7.23	124.23	119.90
26	1H	2712	U	C6-N1-C1'	-7.22	111.09	121.20
26	1H	2060	A	P-O3'-C3'	7.22	128.36	119.70
1	1G	690	G	N3-C4-C5	7.22	132.21	128.60
26	1H	1210	A	C4-C5-N7	7.22	114.31	110.70
26	1H	1778	U	OP2-P-O3'	7.21	121.06	105.20
26	1H	1764	G	C4-C5-N7	-7.21	107.92	110.80
26	14	2567	G	C8-N9-C4	7.21	109.28	106.40
57	3L	76	A	C6-C5-N7	-7.20	127.26	132.30
26	14	1190	G	O5'-P-OP1	-7.20	99.22	105.70
1	1G	1449	C	C2-N1-C1'	7.20	126.72	118.80
26	1H	2012	G	O5'-P-OP1	-7.20	99.22	105.70
26	14	2554	U	O5'-P-OP2	7.20	119.34	110.70
26	1H	1366	A	C8-N9-C4	7.20	108.68	105.80
46	C5	80	GLY	N-CA-C	7.20	131.09	113.10
57	3L	1	G	C2-N3-C4	7.20	115.50	111.90
38	45	78	PRO	N-CA-C	7.19	130.80	112.10
26	14	199	A	N1-C6-N6	-7.18	114.29	118.60
26	1H	1350	C	C6-N1-C2	7.18	123.17	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	78	49	ARG	NE-CZ-NH1	7.18	123.89	120.30
26	14	34	C	N3-C2-O2	-7.18	116.87	121.90
26	14	1318	C	O5'-P-OP2	7.18	119.31	110.70
26	14	2295	C	C6-N1-C2	-7.18	117.43	120.30
26	1H	2502	G	O5'-P-OP1	-7.18	99.24	105.70
26	14	372	G	O4'-C1'-N9	7.18	113.94	108.20
26	1H	1006	C	O5'-P-OP1	-7.17	99.24	105.70
26	14	446	G	N9-C4-C5	-7.17	102.53	105.40
26	1H	2697	G	OP1-P-OP2	7.17	130.36	119.60
26	1H	388	G	O5'-P-OP2	-7.17	99.25	105.70
26	14	2307	G	O4'-C1'-N9	7.17	113.94	108.20
26	14	2377	A	C8-N9-C4	7.17	108.67	105.80
26	14	1700	A	O5'-P-OP2	7.17	119.30	110.70
26	1H	187	G	C8-N9-C1'	-7.17	117.68	127.00
26	14	1382	G	C5-C6-O6	-7.17	124.30	128.60
26	1H	1790	C	N3-C4-C5	7.16	124.77	121.90
26	1H	669	G	N3-C2-N2	-7.16	114.89	119.90
26	1H	686	G	C5-C6-O6	-7.16	124.31	128.60
26	14	1408	C	N1-C2-O2	-7.16	114.61	118.90
26	14	2392	A	N7-C8-N9	7.15	117.38	113.80
26	14	265	A	C5-N7-C8	-7.15	100.32	103.90
26	1H	2610	C	O5'-P-OP1	-7.15	99.27	105.70
26	1H	1255	U	N3-C2-O2	7.15	127.20	122.20
26	14	307	G	C4-C5-N7	7.14	113.66	110.80
26	14	929	G	C6-C5-N7	-7.14	126.11	130.40
1	13	585	G	O5'-P-OP2	-7.14	99.27	105.70
26	1H	2440	C	C2-N3-C4	7.14	123.47	119.90
26	14	1899	G	N9-C4-C5	7.14	108.26	105.40
1	1G	974	A	O4'-C1'-N9	7.14	113.91	108.20
26	14	1409	C	O5'-P-OP2	-7.14	99.28	105.70
26	14	236	C	C6-N1-C2	7.13	123.15	120.30
26	14	684	G	N9-C4-C5	7.13	108.25	105.40
26	1H	537	C	O5'-P-OP2	-7.13	99.28	105.70
26	1H	1354	A	O5'-P-OP2	-7.13	99.28	105.70
26	1H	265	A	N7-C8-N9	7.13	117.36	113.80
26	1H	117	G	N3-C4-N9	7.13	130.28	126.00
26	1H	1781	C	C6-N1-C2	7.13	123.15	120.30
26	14	2323	G	C8-N9-C4	7.12	109.25	106.40
26	14	134	C	C6-N1-C2	7.12	123.15	120.30
1	13	1227	A	C5-N7-C8	-7.12	100.34	103.90
26	14	74	A	N1-C2-N3	7.12	132.86	129.30
1	13	580	U	C5-C6-N1	-7.11	119.14	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1698	A	N1-C6-N6	7.11	122.87	118.60
26	1H	1785	A	OP2-P-O3'	7.11	120.85	105.20
1	13	1301	U	C6-N1-C1'	-7.11	111.25	121.20
26	1H	630	G	N3-C4-C5	7.11	132.15	128.60
26	1H	860	U	N3-C2-O2	-7.11	117.22	122.20
27	16	8	U	O5'-P-OP1	7.11	119.23	110.70
26	14	2774	C	C6-N1-C2	7.11	123.14	120.30
1	13	523	A	N1-C6-N6	7.11	122.86	118.60
26	1H	1660	C	N3-C4-C5	7.10	124.74	121.90
26	14	71	A	C4-C5-N7	7.10	114.25	110.70
26	14	2494	G	O5'-P-OP1	-7.10	99.31	105.70
26	1H	1623	G	C5-C6-O6	7.10	132.86	128.60
26	14	687	C	O5'-P-OP1	-7.10	99.31	105.70
26	14	2446	G	OP2-P-O3'	7.10	120.81	105.20
32	41	94	LEU	CA-CB-CG	7.10	131.62	115.30
26	1H	1003	G	O5'-P-OP1	-7.09	99.31	105.70
26	1H	1992	G	P-O3'-C3'	7.09	128.21	119.70
26	1H	2291	U	C5-C4-O4	7.09	130.16	125.90
1	1G	1198	G	O5'-P-OP1	-7.09	99.32	105.70
26	1H	247	G	N9-C4-C5	-7.09	102.56	105.40
26	1H	1158	C	C5-C6-N1	-7.09	117.45	121.00
26	1H	1678	G	N7-C8-N9	7.09	116.64	113.10
26	14	1645	G	N3-C4-C5	-7.09	125.06	128.60
26	1H	57	C	C5-C4-N4	7.09	125.16	120.20
26	14	671	C	C2-N3-C4	-7.08	116.36	119.90
26	1H	1788	C	N3-C4-C5	-7.08	119.07	121.90
26	1H	2287	A	N3-C4-C5	7.08	131.76	126.80
26	14	1682	G	O5'-P-OP2	-7.08	99.33	105.70
26	14	2042	A	C8-N9-C4	7.08	108.63	105.80
26	14	1786	A	C5-C6-N1	-7.08	114.16	117.70
26	1H	1644	C	C6-N1-C2	-7.08	117.47	120.30
26	14	1321	A	C8-N9-C4	7.08	108.63	105.80
22	1K	76	A	C8-N9-C4	-7.08	102.97	105.80
24	3K	76	A	C5-C6-N6	-7.08	118.04	123.70
26	1H	2004	G	O5'-P-OP2	-7.08	99.33	105.70
26	14	1627	G	C5-C6-N1	-7.08	107.96	111.50
26	1H	120	U	N3-C2-O2	-7.07	117.25	122.20
1	13	677	U	OP1-P-O3'	7.07	120.75	105.20
26	14	140	A	C4-C5-N7	7.07	114.23	110.70
26	14	1276	A	N1-C6-N6	7.07	122.84	118.60
26	14	2498	C	O5'-P-OP1	7.07	119.19	110.70
26	14	4	C	C6-N1-C1'	-7.07	112.32	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1791	A	OP1-P-OP2	-7.06	109.00	119.60
26	1H	1752	C	C6-N1-C2	7.06	123.12	120.30
26	1H	146	G	C4-C5-N7	7.06	113.62	110.80
26	1H	693	C	C4-C5-C6	7.06	120.93	117.40
26	1H	2062	A	N7-C8-N9	-7.06	110.27	113.80
26	1H	120	U	C5-C4-O4	7.06	130.13	125.90
26	1H	179	G	C5-C6-O6	-7.05	124.37	128.60
26	1H	2234	G	O5'-P-OP1	7.05	119.17	110.70
1	1G	253	U	O5'-P-OP1	-7.05	99.35	105.70
26	14	1629	U	N3-C2-O2	7.05	127.14	122.20
26	1H	1633	G	OP2-P-O3'	7.05	120.71	105.20
26	14	788	A	N1-C6-N6	7.05	122.83	118.60
1	1G	1227	A	C2-N3-C4	7.04	114.12	110.60
26	14	2518	A	C4-C5-C6	7.04	120.52	117.00
26	1H	1695	G	C4-N9-C1'	7.04	135.65	126.50
26	1H	391	G	C5-C6-N1	-7.04	107.98	111.50
26	1H	925	C	O5'-P-OP2	-7.04	99.37	105.70
26	1H	1755	A	C8-N9-C4	-7.04	102.98	105.80
26	1H	1496	A	C8-N9-C4	-7.03	102.99	105.80
26	1H	271(B)	G	C8-N9-C4	-7.03	103.59	106.40
26	1H	945	A	N9-C4-C5	-7.03	102.99	105.80
26	1H	1249	U	N3-C2-O2	7.03	127.12	122.20
26	1H	2704	C	C6-N1-C2	7.03	123.11	120.30
26	1H	504	U	C2-N1-C1'	7.03	126.13	117.70
26	14	528	A	N1-C2-N3	7.03	132.81	129.30
26	1H	1697	G	C6-C5-N7	-7.03	126.19	130.40
26	14	1443	G	N1-C6-O6	7.03	124.11	119.90
26	1H	856	C	O5'-P-OP1	-7.02	99.38	105.70
57	3L	76	A	C4-C5-N7	7.02	114.21	110.70
1	1G	1354	C	C5-C6-N1	7.02	124.51	121.00
1	13	1227	A	C2-N3-C4	-7.02	107.09	110.60
26	1H	775	G	N3-C2-N2	7.01	124.81	119.90
26	1H	1614	A	N7-C8-N9	7.01	117.31	113.80
26	1H	1210	A	C5-N7-C8	-7.01	100.39	103.90
26	1H	140	A	O4'-C1'-N9	7.01	113.81	108.20
26	1H	826	U	N1-C2-O2	-7.01	117.89	122.80
1	1G	337	C	C5-C6-N1	7.01	124.50	121.00
26	1H	1660	C	N3-C4-N4	-7.01	113.09	118.00
26	1H	2070	G	O5'-P-OP2	-7.01	99.39	105.70
26	14	1614	A	N1-C6-N6	7.01	122.81	118.60
26	14	2032	G	C5-C6-O6	-7.01	124.40	128.60
26	1H	1563	G	C5-C6-O6	7.00	132.80	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1427	A	N1-C6-N6	-7.00	114.40	118.60
26	14	1640	C	N1-C2-O2	7.00	123.10	118.90
26	1H	1968	G	C5-C6-O6	-7.00	124.40	128.60
26	1H	2699	C	N3-C4-C5	7.00	124.70	121.90
26	14	1154	G	C5-C6-O6	-7.00	124.40	128.60
26	1H	982	C	C6-N1-C2	-7.00	117.50	120.30
26	1H	1649	G	N3-C4-C5	-7.00	125.10	128.60
27	16	29	A	C8-N9-C4	-7.00	103.00	105.80
26	14	2477	C	C2-N1-C1'	7.00	126.50	118.80
26	14	2567	G	N7-C8-N9	-7.00	109.60	113.10
1	13	582	U	N3-C2-O2	-7.00	117.30	122.20
26	1H	681	G	N1-C2-N2	-7.00	109.90	116.20
26	1H	945	A	O4'-C1'-N9	7.00	113.80	108.20
1	13	901	A	N1-C6-N6	6.99	122.80	118.60
26	1H	2559	C	C6-N1-C2	-6.99	117.50	120.30
26	1H	1513	C	C6-N1-C2	-6.99	117.50	120.30
26	1H	2437	U	N3-C2-O2	-6.99	117.31	122.20
26	1H	382	G	C8-N9-C4	6.99	109.19	106.40
26	1H	189	G	C5-C6-O6	-6.99	124.41	128.60
26	1H	1404	C	O5'-P-OP2	-6.99	99.41	105.70
26	1H	1758	G	N1-C2-N2	6.99	122.49	116.20
26	1H	217	G	O5'-P-OP1	-6.98	99.41	105.70
26	1H	693	C	C5-C4-N4	6.98	125.09	120.20
26	14	684	G	N3-C4-C5	-6.98	125.11	128.60
26	1H	812	C	N1-C2-O2	-6.98	114.71	118.90
26	1H	1368	G	N3-C4-C5	-6.98	125.11	128.60
26	1H	1634	A	O5'-P-OP2	-6.98	99.42	105.70
26	1H	2655	G	O4'-C1'-N9	6.98	113.78	108.20
26	1H	1915	U	N3-C2-O2	-6.98	117.32	122.20
26	1H	2374	C	C6-N1-C2	6.98	123.09	120.30
1	13	1195	C	C6-N1-C2	-6.97	117.51	120.30
26	1H	2584	U	N1-C2-N3	6.97	119.08	114.90
26	1H	752	A	P-O3'-C3'	6.97	128.07	119.70
26	1H	1403	C	O5'-P-OP2	-6.97	99.42	105.70
57	3L	5	C	C6-N1-C2	-6.97	117.51	120.30
26	14	380	U	OP1-P-OP2	6.97	130.06	119.60
26	14	1645	G	N3-C4-N9	6.97	130.18	126.00
26	14	2392	A	C8-N9-C4	-6.97	103.01	105.80
26	1H	815	C	C6-N1-C2	6.97	123.09	120.30
26	1H	263	C	N3-C2-O2	-6.96	117.02	121.90
26	14	1698	A	C4-C5-C6	6.96	120.48	117.00
26	1H	1829	A	N1-C6-N6	-6.96	114.42	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	508	G	N1-C6-O6	6.96	124.08	119.90
1	1G	360	A	C8-N9-C4	6.96	108.58	105.80
26	1H	271(B)	G	P-O3'-C3'	6.96	128.05	119.70
26	1H	1938	A	N1-C6-N6	6.96	122.78	118.60
26	1H	127	A	C5-C6-N6	-6.96	118.14	123.70
26	1H	1544	C	C6-N1-C2	6.96	123.08	120.30
26	1H	1528	A	C6-C5-N7	-6.96	127.43	132.30
26	14	603	A	O4'-C1'-N9	6.96	113.76	108.20
26	1H	787	U	N1-C2-N3	6.95	119.07	114.90
26	1H	2261	C	C5-C6-N1	6.95	124.47	121.00
26	14	1543	A	O5'-P-OP1	6.95	119.04	110.70
26	14	2279	G	N1-C6-O6	-6.95	115.73	119.90
1	13	1498	U	O4'-C1'-N1	-6.95	102.64	108.20
26	1H	945	A	C4-N9-C1'	6.95	138.81	126.30
26	1H	2389	G	OP1-P-O3'	6.95	120.48	105.20
26	1H	1427	A	N9-C4-C5	6.95	108.58	105.80
1	1G	224	C	C6-N1-C2	6.94	123.08	120.30
26	14	510	C	O5'-P-OP2	-6.94	99.45	105.70
26	1H	2751	G	C8-N9-C4	-6.94	103.62	106.40
1	1G	1487	G	N1-C6-O6	6.94	124.06	119.90
26	14	863	A	C8-N9-C4	-6.94	103.03	105.80
26	14	2295	C	C5-C6-N1	6.94	124.47	121.00
26	14	2053	G	N3-C2-N2	-6.94	115.05	119.90
10	1I	84	GLN	CA-CB-CG	6.93	128.65	113.40
26	1H	860	U	C5-C6-N1	-6.93	119.23	122.70
1	1G	653	A	O4'-C1'-N9	6.93	113.75	108.20
26	14	2438	U	O5'-P-OP2	-6.93	99.46	105.70
27	16	6	C	N3-C4-N4	6.93	122.85	118.00
26	1H	1918	A	N9-C4-C5	-6.93	103.03	105.80
26	1H	917	A	N1-C6-N6	6.92	122.75	118.60
26	14	675	A	N1-C6-N6	6.92	122.75	118.60
26	1H	1627	G	O5'-P-OP2	-6.92	99.47	105.70
26	1H	2390	U	O5'-P-OP1	-6.92	99.47	105.70
26	1H	122	G	OP1-P-OP2	6.92	129.98	119.60
26	14	974(A)	C	C5-C4-N4	6.92	125.04	120.20
26	1H	383	U	O4'-C1'-N1	6.92	113.73	108.20
26	1H	989	G	C5-C6-O6	-6.92	124.45	128.60
26	1H	2565	A	N1-C2-N3	-6.92	125.84	129.30
26	14	1678	G	O5'-P-OP1	-6.92	99.47	105.70
1	13	353	A	C8-N9-C4	-6.91	103.03	105.80
26	14	1678	G	C4-C5-N7	6.91	113.57	110.80
26	1H	1843	C	C6-N1-C2	6.91	123.06	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1597	A	O4'-C1'-N9	6.91	113.73	108.20
26	1H	528	A	C5-C6-N1	-6.91	114.25	117.70
26	1H	1564	C	N1-C2-O2	6.91	123.05	118.90
26	1H	1808	U	N3-C2-O2	6.91	127.04	122.20
26	14	1992	G	P-O3'-C3'	6.91	127.99	119.70
27	1J	89	G	O5'-P-OP2	-6.91	99.48	105.70
26	1H	2453	A	C8-N9-C4	-6.91	103.04	105.80
26	14	670	A	C8-N9-C4	6.91	108.56	105.80
26	1H	1284	A	O5'-P-OP2	-6.90	99.49	105.70
26	1H	1313	U	C6-N1-C2	-6.90	116.86	121.00
1	13	1301	U	C5-C6-N1	6.90	126.15	122.70
26	1H	1827	C	C5-C6-N1	6.90	124.45	121.00
24	3K	76	A	N7-C8-N9	6.90	117.25	113.80
26	1H	1600	C	O5'-P-OP2	-6.90	99.49	105.70
26	14	2275	C	P-O3'-C3'	6.89	127.97	119.70
26	1H	391	G	C2-N3-C4	-6.89	108.45	111.90
26	1H	198	C	N3-C4-C5	6.89	124.66	121.90
26	1H	329	G	O5'-P-OP2	-6.89	99.50	105.70
26	14	2346	A	N7-C8-N9	6.89	117.25	113.80
26	1H	1632	A	C5-N7-C8	-6.89	100.46	103.90
1	13	1502	A	C5-N7-C8	-6.89	100.46	103.90
26	1H	448	U	C5-C6-N1	-6.89	119.26	122.70
26	1H	1656	C	C2-N3-C4	6.89	123.34	119.90
26	14	2092	U	C5-C4-O4	6.89	130.03	125.90
26	1H	628	G	N1-C6-O6	-6.88	115.77	119.90
26	1H	2508	G	N3-C2-N2	-6.88	115.08	119.90
26	1H	830	G	N7-C8-N9	6.88	116.54	113.10
1	13	765	G	C4-N9-C1'	6.88	135.44	126.50
1	13	792	A	N1-C6-N6	6.88	122.73	118.60
26	1H	54	G	O5'-P-OP1	-6.88	99.51	105.70
26	1H	1784	A	C5-C6-N6	6.88	129.20	123.70
26	1H	2273	A	C2-N3-C4	6.88	114.04	110.60
26	1H	2392	A	C8-N9-C4	-6.87	103.05	105.80
26	1H	400	G	N1-C6-O6	6.87	124.02	119.90
26	1H	2286	A	C4-N9-C1'	6.87	138.67	126.30
26	14	2264	C	O5'-P-OP2	6.87	118.94	110.70
26	1H	122	G	C2-N3-C4	-6.87	108.47	111.90
26	14	585	G	C4-N9-C1'	6.87	135.43	126.50
26	1H	695	G	C5-C6-O6	6.86	132.72	128.60
26	1H	2286	A	N1-C6-N6	6.86	122.72	118.60
26	14	748	G	C4-N9-C1'	-6.86	117.58	126.50
26	1H	755	C	N3-C4-C5	-6.86	119.16	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1395	A	C8-N9-C4	6.86	108.54	105.80
26	1H	1697	G	C4-C5-N7	6.86	113.54	110.80
26	14	1314	C	C2-N1-C1'	6.86	126.35	118.80
26	1H	391	G	C8-N9-C1'	-6.86	118.08	127.00
26	1H	1613	G	N1-C6-O6	-6.86	115.78	119.90
26	1H	1201	C	N3-C2-O2	6.86	126.70	121.90
26	1H	2346	A	C5-C6-N1	-6.86	114.27	117.70
1	1G	841	U	C5-C6-N1	6.86	126.13	122.70
26	14	2390	U	O5'-P-OP1	-6.86	99.53	105.70
1	13	1331	G	C8-N9-C4	-6.85	103.66	106.40
26	14	630	G	C8-N9-C4	6.85	109.14	106.40
26	14	2454	G	O5'-P-OP2	-6.85	99.53	105.70
1	1G	60	A	C8-N9-C4	6.85	108.54	105.80
26	14	952	G	OP1-P-OP2	-6.85	109.33	119.60
26	14	1899	G	N1-C2-N3	6.85	128.01	123.90
26	1H	1147	C	C6-N1-C2	6.84	123.04	120.30
26	1H	1528	A	O4'-C1'-N9	6.84	113.68	108.20
26	14	748	G	C8-N9-C1'	6.84	135.90	127.00
26	1H	1780	A	C5-C6-N6	6.84	129.17	123.70
26	1H	2006	C	C6-N1-C2	6.84	123.04	120.30
1	1G	968	A	N1-C6-N6	6.84	122.70	118.60
26	14	252	G	N1-C6-O6	-6.84	115.80	119.90
26	1H	1336	A	C5-C6-N6	6.83	129.17	123.70
26	1H	990	A	C8-N9-C4	-6.83	103.07	105.80
26	1H	1927	A	C8-N9-C4	-6.83	103.07	105.80
1	13	525	C	C5-C6-N1	6.83	124.42	121.00
26	1H	2387	U	OP2-P-O3'	6.83	120.23	105.20
26	1H	1022	G	C4-C5-N7	-6.83	108.07	110.80
26	1H	192	C	N1-C2-O2	-6.83	114.80	118.90
22	1K	76	A	C5-N7-C8	-6.83	100.49	103.90
26	1H	2244	U	OP1-P-OP2	-6.83	109.36	119.60
26	1H	2490	G	C8-N9-C4	-6.82	103.67	106.40
26	1H	2506	U	P-O3'-C3'	6.82	127.89	119.70
27	1J	60	C	C6-N1-C2	-6.82	117.57	120.30
26	1H	120	U	C5-C6-N1	-6.82	119.29	122.70
26	1H	123	G	C5-C6-O6	-6.82	124.51	128.60
26	1H	1394	U	C2-N3-C4	6.82	131.09	127.00
1	13	537	G	O5'-P-OP1	-6.82	99.56	105.70
26	1H	621	A	N7-C8-N9	6.82	117.21	113.80
26	1H	2688	U	C6-N1-C2	-6.82	116.91	121.00
26	14	1283	G	N3-C4-C5	-6.82	125.19	128.60
26	1H	2490	G	O4'-C1'-N9	6.81	113.65	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2573	C	C2-N1-C1'	6.81	126.29	118.80
1	1G	587	G	N1-C6-O6	6.81	123.99	119.90
1	1G	1259	C	C6-N1-C2	-6.81	117.58	120.30
26	1H	1594	G	N7-C8-N9	6.81	116.50	113.10
26	1H	2054	A	OP2-P-O3'	6.81	120.18	105.20
26	14	1559	G	N1-C6-O6	6.81	123.99	119.90
1	13	765	G	N3-C4-N9	6.81	130.08	126.00
26	1H	2437	U	C6-N1-C2	-6.81	116.92	121.00
26	1H	729	G	N7-C8-N9	6.80	116.50	113.10
29	11	37	LEU	CA-CB-CG	-6.80	99.65	115.30
26	14	2477	C	N1-C2-O2	6.80	122.98	118.90
26	1H	676	A	OP1-P-OP2	6.80	129.80	119.60
26	1H	676	A	C4-C5-N7	6.80	114.10	110.70
26	1H	1332	G	N1-C6-O6	6.80	123.98	119.90
26	1H	1647	G	N1-C6-O6	-6.80	115.82	119.90
26	1H	409	C	C6-N1-C2	6.80	123.02	120.30
26	14	71	A	C6-C5-N7	-6.79	127.54	132.30
26	1H	44	A	N7-C8-N9	6.79	117.20	113.80
26	1H	954	G	N3-C2-N2	-6.79	115.14	119.90
26	14	58	G	C6-C5-N7	-6.79	126.32	130.40
26	14	2048	G	C8-N9-C4	-6.79	103.68	106.40
26	1H	1347	G	OP1-P-O3'	6.79	120.14	105.20
34	69	77	LEU	CA-CB-CG	6.79	130.92	115.30
22	1K	35	U	O5'-P-OP1	-6.79	99.59	105.70
26	1H	265	A	C5-C6-N1	-6.79	114.31	117.70
26	1H	1942	C	C5-C6-N1	6.79	124.39	121.00
26	1H	2689	U	N1-C2-N3	6.79	118.97	114.90
26	14	744	G	C8-N9-C4	6.79	109.11	106.40
26	1H	2699	C	C2-N1-C1'	-6.78	111.34	118.80
26	14	575	A	C5-C6-N6	-6.78	118.27	123.70
26	1H	1563	G	N1-C6-O6	-6.78	115.83	119.90
26	14	2032	G	N1-C6-O6	6.78	123.97	119.90
26	14	1912	A	O5'-P-OP1	-6.77	99.60	105.70
1	13	328	C	N3-C2-O2	-6.77	117.16	121.90
26	14	211	A	C5-C6-N6	-6.77	118.29	123.70
26	1H	142	G	C4-N9-C1'	-6.76	117.70	126.50
26	1H	2238	G	OP1-P-OP2	6.76	129.75	119.60
26	1H	664	C	O5'-P-OP2	-6.76	99.61	105.70
26	1H	127	A	N1-C6-N6	6.76	122.66	118.60
26	1H	866	A	N9-C4-C5	-6.76	103.10	105.80
26	14	127	A	OP1-P-O3'	6.76	120.08	105.20
26	1H	694	U	N3-C2-O2	-6.76	117.47	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	856	C	N1-C2-O2	-6.76	114.84	118.90
26	1H	2261	C	C6-N1-C2	-6.76	117.60	120.30
26	1H	2330	G	C2-N3-C4	-6.76	108.52	111.90
1	1G	110	C	C6-N1-C2	6.76	123.00	120.30
26	1H	1899	G	C6-C5-N7	6.76	134.45	130.40
26	14	458	G	O5'-P-OP2	-6.76	99.62	105.70
57	3L	63	U	C6-N1-C2	-6.75	116.95	121.00
26	14	2346	A	C4-C5-C6	6.75	120.38	117.00
27	16	100	G	C8-N9-C1'	-6.74	118.23	127.00
26	14	733	G	C4-C5-C6	6.74	122.85	118.80
26	14	2248	C	N3-C2-O2	-6.74	117.18	121.90
26	14	265	A	C6-C5-N7	-6.74	127.58	132.30
26	1H	797	C	C5-C6-N1	-6.74	117.63	121.00
26	14	855	G	C8-N9-C4	-6.74	103.70	106.40
26	1H	246	C	C5-C6-N1	-6.74	117.63	121.00
26	1H	2751	G	N1-C6-O6	-6.74	115.86	119.90
26	14	575	A	O5'-P-OP1	-6.74	99.64	105.70
26	14	179	G	N1-C6-O6	6.74	123.94	119.90
26	1H	2601	C	N3-C2-O2	-6.74	117.19	121.90
26	1H	1022	G	P-O3'-C3'	6.73	127.78	119.70
26	1H	2829	C	O5'-P-OP2	6.73	118.78	110.70
26	1H	468	G	C5-C6-O6	-6.73	124.56	128.60
26	14	1684	C	O5'-P-OP2	-6.73	99.64	105.70
26	1H	1359	A	N1-C2-N3	6.73	132.66	129.30
26	1H	2442	C	C2-N3-C4	-6.73	116.54	119.90
2	1E	155	LEU	CA-CB-CG	-6.73	99.83	115.30
26	1H	2062	A	C5-N7-C8	6.72	107.26	103.90
26	1H	2603	G	OP1-P-O3'	6.72	120.00	105.20
26	1H	784	A	O4'-C1'-N9	6.72	113.58	108.20
26	1H	1695	G	N3-C4-N9	6.72	130.03	126.00
26	1H	2028	U	C6-N1-C2	-6.72	116.97	121.00
26	14	2001	A	N1-C6-N6	6.72	122.63	118.60
26	14	2072	G	C4-C5-N7	6.72	113.49	110.80
26	1H	48	G	OP2-P-O3'	6.72	119.98	105.20
26	1H	1395	A	O4'-C1'-N9	6.72	113.58	108.20
1	1G	1281	U	C2-N1-C1'	6.72	125.76	117.70
26	1H	259	G	C5-C6-O6	-6.72	124.57	128.60
26	1H	599	G	N7-C8-N9	-6.72	109.74	113.10
26	1H	693	C	C2-N1-C1'	-6.72	111.41	118.80
26	1H	2681	C	C2'-C3'-O3'	6.72	124.45	113.70
26	14	409	C	C6-N1-C2	6.72	122.99	120.30
26	14	1142	U	C6-N1-C1'	-6.72	111.80	121.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2433	A	N1-C2-N3	6.71	132.66	129.30
1	13	897	C	C6-N1-C2	6.71	122.98	120.30
1	13	623	C	C6-N1-C2	-6.71	117.62	120.30
26	1H	395	U	N1-C2-O2	6.71	127.50	122.80
26	1H	266	G	O5'-P-OP2	-6.71	99.66	105.70
26	1H	1109	C	N1-C2-O2	6.71	122.92	118.90
26	1H	2442	C	N3-C4-N4	6.71	122.69	118.00
26	14	190	A	C8-N9-C4	6.71	108.48	105.80
26	1H	1204	A	C6-C5-N7	-6.70	127.61	132.30
26	14	530	G	C5-C6-O6	-6.70	124.58	128.60
26	14	530	G	C4-N9-C1'	6.70	135.22	126.50
26	14	2584	U	N3-C2-O2	-6.70	117.51	122.20
1	13	745	C	C6-N1-C2	-6.70	117.62	120.30
26	14	775	G	N3-C4-N9	6.70	130.02	126.00
26	1H	1328	G	O5'-P-OP2	-6.70	99.67	105.70
26	1H	1981	A	N1-C6-N6	-6.70	114.58	118.60
26	14	922	U	O5'-P-OP1	-6.70	99.67	105.70
1	13	862	C	C6-N1-C2	6.70	122.98	120.30
26	1H	609	A	N9-C4-C5	-6.70	103.12	105.80
26	1H	2232	U	C5-C4-O4	6.70	129.92	125.90
24	3K	71	C	C6-N1-C2	-6.69	117.62	120.30
22	1K	61	C	C2-N1-C1'	6.69	126.16	118.80
26	1H	630	G	C8-N9-C4	6.69	109.08	106.40
26	14	1678	G	N7-C8-N9	6.69	116.45	113.10
26	14	2503	A	C2-N3-C4	6.69	113.95	110.60
26	1H	1799	G	N3-C4-N9	6.69	130.01	126.00
1	1G	1354	C	C6-N1-C2	-6.69	117.62	120.30
26	14	727	A	O5'-P-OP1	-6.69	99.68	105.70
26	1H	270(O)	U	C6-N1-C1'	-6.69	111.84	121.20
26	14	2499	C	C2-N1-C1'	6.69	126.16	118.80
26	14	2607	G	O5'-P-OP1	6.69	118.73	110.70
26	1H	2286	A	C6-C5-N7	-6.69	127.62	132.30
1	13	656	C	C6-N1-C2	-6.68	117.63	120.30
26	1H	71	A	C6-C5-N7	-6.68	127.62	132.30
26	1H	1764	G	N9-C4-C5	6.68	108.07	105.40
26	14	1564	C	N3-C2-O2	-6.68	117.22	121.90
1	13	690	G	C5-N7-C8	-6.68	100.96	104.30
26	14	783	A	N1-C2-N3	6.68	132.64	129.30
26	1H	689	A	C2-N3-C4	-6.68	107.26	110.60
26	1H	1940	U	C5-C4-O4	-6.68	121.89	125.90
26	14	2464	C	C6-N1-C2	6.68	122.97	120.30
1	13	963	G	C8-N9-C1'	-6.68	118.32	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1336	A	C6-N1-C2	-6.67	114.59	118.60
1	13	892	A	N1-C2-N3	6.67	132.63	129.30
26	1H	658	C	O5'-P-OP2	-6.67	99.69	105.70
57	3L	1	G	N3-C4-C5	-6.67	125.27	128.60
26	14	2495	G	O5'-P-OP2	-6.67	99.70	105.70
26	1H	99	U	C6-N1-C1'	-6.67	111.86	121.20
26	1H	307	G	N3-C4-C5	-6.67	125.27	128.60
26	14	1571	A	C5-C6-N6	-6.67	118.37	123.70
26	1H	657	U	O5'-P-OP2	-6.67	99.70	105.70
26	14	1616	A	C6-C5-N7	-6.67	127.64	132.30
1	13	797	C	N1-C2-O2	-6.66	114.90	118.90
26	1H	1333	C	C5-C6-N1	6.66	124.33	121.00
26	1H	1559	G	N3-C4-C5	6.66	131.93	128.60
26	14	2331	G	C8-N9-C4	6.66	109.07	106.40
26	1H	195	A	N1-C6-N6	6.66	122.60	118.60
26	1H	2303	G	OP1-P-O3'	6.66	119.86	105.20
26	1H	847	U	C5-C6-N1	-6.66	119.37	122.70
26	1H	1653	G	N3-C4-N9	6.66	130.00	126.00
26	1H	2490	G	C2-N3-C4	-6.66	108.57	111.90
26	1H	1792	G	N1-C6-O6	-6.66	115.91	119.90
26	1H	1789	A	C5-C6-N1	6.66	121.03	117.70
26	14	2261	C	O5'-P-OP1	6.66	118.69	110.70
26	14	2433	A	N1-C2-N3	6.65	132.63	129.30
26	14	71	A	C2-N3-C4	-6.65	107.27	110.60
26	14	585	G	C8-N9-C1'	-6.65	118.35	127.00
26	14	190	A	N9-C4-C5	-6.65	103.14	105.80
26	14	775	G	N3-C4-C5	-6.65	125.28	128.60
26	14	2430	A	C5-N7-C8	-6.65	100.57	103.90
26	1H	576	U	C4-C5-C6	6.65	123.69	119.70
26	1H	1366	A	O5'-P-OP2	-6.65	99.72	105.70
26	14	531	C	N3-C4-C5	-6.65	119.24	121.90
26	1H	2665	A	C2-N3-C4	-6.65	107.28	110.60
26	14	71	A	P-O3'-C3'	6.65	127.68	119.70
26	14	76	C	C6-N1-C2	-6.65	117.64	120.30
1	13	1158	C	C2-N1-C1'	6.65	126.11	118.80
23	2K	6	G	C8-N9-C4	6.65	109.06	106.40
26	1H	2477	C	N1-C2-O2	6.65	122.89	118.90
26	14	746	A	O5'-P-OP1	-6.65	99.72	105.70
26	1H	445	C	N3-C2-O2	-6.64	117.25	121.90
26	1H	1266	G	C8-N9-C4	6.64	109.06	106.40
26	1H	2329	G	N7-C8-N9	-6.64	109.78	113.10
26	1H	1313	U	C2-N1-C1'	6.64	125.67	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	454	A	O5'-P-OP2	-6.64	99.72	105.70
26	1H	621	A	N3-C4-C5	6.64	131.45	126.80
26	1H	1053	C	C6-N1-C2	-6.64	117.64	120.30
26	14	774	A	N1-C2-N3	6.64	132.62	129.30
26	14	1644	C	N1-C2-O2	6.63	122.88	118.90
26	14	827	U	N1-C2-O2	-6.63	118.16	122.80
26	1H	410	G	N1-C6-O6	6.63	123.88	119.90
26	1H	1303	G	C5-C6-O6	6.63	132.58	128.60
26	14	1914	C	C6-N1-C2	-6.63	117.65	120.30
56	1L	18	G	OP1-P-O3'	6.63	119.78	105.20
26	1H	258	G	N3-C2-N2	6.63	124.54	119.90
26	1H	2401	U	C5-C6-N1	6.63	126.01	122.70
26	14	1614	A	C5-C6-N1	-6.63	114.39	117.70
26	1H	1804	C	O5'-P-OP1	6.62	118.65	110.70
26	1H	2469	A	C5-N7-C8	-6.62	100.59	103.90
1	13	5	U	N3-C2-O2	-6.62	117.56	122.20
26	1H	2275	C	N3-C2-O2	6.62	126.54	121.90
26	14	2507	C	C6-N1-C2	-6.62	117.65	120.30
26	1H	2250	G	C5-C6-O6	6.62	132.57	128.60
26	14	945	A	C4-C5-C6	6.62	120.31	117.00
26	1H	1644	C	N1-C2-O2	6.62	122.87	118.90
1	13	582	U	N1-C2-O2	6.62	127.43	122.80
26	1H	146	G	N1-C6-O6	6.62	123.87	119.90
1	13	19	C	C6-N1-C2	-6.61	117.66	120.30
26	1H	107	C	C5-C4-N4	-6.61	115.57	120.20
26	14	2596	U	N1-C2-N3	6.61	118.87	114.90
26	14	2776	A	P-O3'-C3'	6.61	127.64	119.70
26	1H	655	A	N7-C8-N9	6.61	117.11	113.80
26	14	2051	A	N7-C8-N9	6.61	117.11	113.80
26	14	1225	C	C6-N1-C2	6.61	122.94	120.30
1	1G	1469	G	N1-C6-O6	6.61	123.86	119.90
26	1H	663	G	C4-C5-C6	6.60	122.76	118.80
26	1H	702	G	C5-C6-N1	-6.60	108.20	111.50
26	1H	909	A	O5'-P-OP2	-6.60	99.76	105.70
26	1H	1426	G	N1-C6-O6	-6.60	115.94	119.90
26	1H	2502	G	N9-C4-C5	6.60	108.04	105.40
26	14	690	G	N7-C8-N9	-6.60	109.80	113.10
26	1H	2409	G	C4-C5-N7	6.59	113.44	110.80
26	14	84	A	C8-N9-C4	6.59	108.44	105.80
26	14	784	A	C5-C6-N1	-6.59	114.40	117.70
26	1H	2246	G	N3-C4-C5	-6.59	125.30	128.60
33	51	3	ARG	NE-CZ-NH2	6.59	123.59	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1431	C	C6-N1-C2	-6.59	117.66	120.30
26	14	679	C	N1-C2-O2	-6.59	114.94	118.90
26	1H	1162	G	C8-N9-C4	-6.59	103.76	106.40
26	1H	1905	C	OP1-P-OP2	-6.59	109.72	119.60
26	1H	1992	G	N3-C4-C5	-6.59	125.31	128.60
26	1H	1427	A	C6-N1-C2	-6.59	114.65	118.60
26	1H	2581	G	N1-C2-N2	-6.59	110.27	116.20
1	1G	1502	A	N7-C8-N9	6.59	117.09	113.80
26	14	2585	U	C2-N1-C1'	6.59	125.60	117.70
26	1H	811	U	O5'-P-OP1	-6.58	99.77	105.70
26	1H	930	U	N3-C4-O4	-6.58	114.79	119.40
26	1H	2751	G	N7-C8-N9	6.58	116.39	113.10
26	1H	691	C	N3-C2-O2	6.58	126.51	121.90
26	1H	2439	A	OP1-P-O3'	6.58	119.68	105.20
26	14	746	A	O5'-P-OP2	6.58	118.60	110.70
26	14	694	U	O5'-P-OP1	6.58	118.60	110.70
1	13	789	U	N3-C2-O2	-6.58	117.60	122.20
26	1H	1354	A	C2-N3-C4	-6.58	107.31	110.60
26	1H	1698	A	C4-C5-N7	6.58	113.99	110.70
29	11	39	LYS	N-CA-C	6.58	128.75	111.00
26	14	528	A	C8-N9-C1'	6.58	139.54	127.70
26	14	1506	C	C6-N1-C2	-6.58	117.67	120.30
1	13	219	C	C6-N1-C2	-6.57	117.67	120.30
1	1G	209	U	N3-C2-O2	-6.57	117.60	122.20
29	19	44	ASN	C-N-CA	6.57	138.13	121.70
1	13	1301	U	C5-C4-O4	-6.57	121.96	125.90
34	61	38	LEU	CA-CB-CG	6.57	130.41	115.30
26	14	2359	C	N3-C4-N4	-6.57	113.40	118.00
26	14	1610	A	OP1-P-O3'	6.57	119.64	105.20
26	1H	2418	A	C2-N3-C4	6.56	113.88	110.60
1	13	690	G	C4-C5-N7	6.56	113.42	110.80
26	1H	1624	G	N7-C8-N9	-6.56	109.82	113.10
1	1G	266	G	P-O3'-C3'	6.56	127.57	119.70
26	14	935	C	C6-N1-C2	6.56	122.92	120.30
26	14	1142(A)	A	C2-N3-C4	-6.56	107.32	110.60
26	1H	1332	G	N1-C2-N3	6.56	127.83	123.90
26	14	801	G	C6-C5-N7	6.56	134.34	130.40
26	14	1021	A	C2-N3-C4	-6.56	107.32	110.60
26	1H	1594	G	C8-N9-C4	-6.56	103.78	106.40
26	1H	74	A	N3-C4-C5	6.55	131.38	126.80
26	1H	2690	C	O5'-P-OP1	-6.55	99.81	105.70
27	16	79	C	C6-N1-C2	-6.55	117.68	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1994	C	O5'-P-OP2	-6.55	99.81	105.70
26	1H	585	G	O5'-P-OP1	-6.55	99.81	105.70
26	14	980	A	O5'-P-OP2	-6.55	99.81	105.70
26	1H	254	G	C5-C6-O6	-6.55	124.67	128.60
1	1G	812	C	C6-N1-C2	-6.55	117.68	120.30
26	14	1239	G	N1-C6-O6	6.55	123.83	119.90
26	14	1804	C	C6-N1-C2	-6.55	117.68	120.30
1	13	816	A	N9-C4-C5	6.54	108.42	105.80
26	1H	750	A	OP2-P-O3'	6.54	119.60	105.20
26	1H	1142(A)	A	N3-C4-C5	6.54	131.38	126.80
26	1H	1786	A	C5-C6-N1	-6.54	114.43	117.70
26	14	1086	A	O4'-C1'-N9	6.54	113.44	108.20
26	14	1189	A	OP1-P-OP2	-6.54	109.79	119.60
26	1H	780	G	OP2-P-O3'	6.54	119.59	105.20
26	1H	2430	A	C8-N9-C1'	6.54	139.47	127.70
47	H8	61	LEU	CA-CB-CG	6.54	130.34	115.30
26	14	1950	G	N1-C6-O6	-6.54	115.97	119.90
26	14	2388	A	O4'-C1'-N9	6.54	113.43	108.20
26	1H	395	U	N3-C2-O2	-6.54	117.62	122.20
1	13	328	C	C6-N1-C1'	-6.54	112.96	120.80
26	1H	865	C	C4-C5-C6	-6.53	114.13	117.40
1	13	1498	U	C5-C4-O4	-6.53	121.98	125.90
26	1H	774	A	C5-C6-N1	-6.53	114.44	117.70
26	14	1544	C	O4'-C1'-N1	6.53	113.42	108.20
26	14	1571	A	N1-C6-N6	6.53	122.52	118.60
26	14	811	U	C5-C4-O4	6.53	129.82	125.90
26	1H	1786	A	C4-N9-C1'	6.53	138.05	126.30
23	2K	27	G	C5-C6-O6	-6.53	124.69	128.60
26	1H	146	G	C5-C6-O6	-6.53	124.69	128.60
26	1H	1916	A	C8-N9-C4	-6.53	103.19	105.80
26	14	2605	U	N3-C4-O4	-6.52	114.83	119.40
26	14	2477	C	C6-N1-C2	-6.52	117.69	120.30
26	1H	1670	C	C4-C5-C6	6.52	120.66	117.40
26	1H	2609	U	O5'-P-OP2	-6.52	99.83	105.70
26	14	1904	G	C4-C5-N7	-6.52	108.19	110.80
1	13	768	A	O5'-P-OP2	-6.51	99.84	105.70
26	1H	1363	C	N3-C4-N4	-6.51	113.44	118.00
26	14	24	G	C2-N3-C4	-6.51	108.64	111.90
26	14	693	C	OP2-P-O3'	6.51	119.52	105.20
26	14	2229	C	C6-N1-C2	6.51	122.90	120.30
26	1H	966	G	N3-C2-N2	6.51	124.45	119.90
26	1H	955	C	O5'-P-OP2	-6.50	99.85	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	224	G	O5'-P-OP2	-6.50	99.85	105.70
26	1H	1321	A	C8-N9-C4	6.50	108.40	105.80
1	1G	1260	C	C5-C6-N1	6.50	124.25	121.00
26	14	486	C	N3-C4-N4	6.50	122.55	118.00
26	14	1984	G	C8-N9-C4	6.50	109.00	106.40
1	13	1158	C	C6-N1-C2	-6.50	117.70	120.30
1	13	1355	G	C8-N9-C4	-6.50	103.80	106.40
26	1H	202	U	C2-N1-C1'	6.50	125.50	117.70
26	1H	208	C	C6-N1-C2	6.50	122.90	120.30
26	1H	598	G	OP1-P-OP2	6.50	129.34	119.60
1	1G	666	G	C6-C5-N7	-6.50	126.50	130.40
26	1H	458	G	N9-C4-C5	6.49	108.00	105.40
26	1H	1210	A	N7-C8-N9	6.49	117.05	113.80
26	14	1327	C	N1-C2-O2	-6.49	115.00	118.90
26	14	1658	C	N3-C4-C5	-6.49	119.30	121.90
26	1H	71	A	N3-C4-C5	6.49	131.34	126.80
26	1H	1616	A	OP1-P-O3'	6.49	119.48	105.20
26	14	307	G	C6-C5-N7	-6.49	126.50	130.40
26	1H	1698	A	N7-C8-N9	6.49	117.05	113.80
26	1H	383	U	C2-N1-C1'	-6.49	109.91	117.70
26	14	1602	U	C5-C4-O4	6.49	129.79	125.90
26	1H	270(L)	U	C6-N1-C2	-6.48	117.11	121.00
26	1H	791	C	C6-N1-C2	6.48	122.89	120.30
26	1H	2417	C	O5'-P-OP1	6.48	118.48	110.70
26	1H	784	A	N9-C4-C5	6.48	108.39	105.80
26	14	871	U	O5'-P-OP2	6.48	118.48	110.70
26	1H	793	A	C5-C6-N6	-6.47	118.52	123.70
26	1H	1294	U	O5'-P-OP1	-6.47	99.87	105.70
26	14	840	C	C6-N1-C2	6.47	122.89	120.30
26	14	2281	C	C2-N1-C1'	6.47	125.92	118.80
26	14	2346	A	O4'-C1'-N9	6.47	113.38	108.20
26	1H	1654	A	C8-N9-C4	-6.47	103.21	105.80
26	14	1698	A	C4-C5-N7	6.47	113.93	110.70
26	1H	2250	G	C2-N3-C4	6.47	115.13	111.90
26	14	2446	G	O5'-P-OP2	-6.47	99.88	105.70
26	1H	391	G	C4-N9-C1'	6.46	134.91	126.50
26	1H	1890	A	N1-C6-N6	-6.46	114.72	118.60
26	1H	2042	A	O5'-P-OP2	-6.46	99.88	105.70
26	1H	1142(A)	A	N3-C4-N9	-6.46	122.23	127.40
1	1G	610	G	O5'-P-OP2	-6.46	99.89	105.70
26	1H	2620	C	N1-C2-O2	-6.46	115.02	118.90
26	14	2707	G	C5-C6-N1	6.46	114.73	111.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	741	G	O5'-P-OP2	6.46	118.45	110.70
26	14	2235	G	N3-C4-N9	6.46	129.88	126.00
1	13	550	G	N1-C6-O6	-6.46	116.03	119.90
1	13	974	A	C4-C5-N7	6.46	113.93	110.70
26	1H	668	G	OP1-P-O3'	6.46	119.40	105.20
26	14	1695	G	C4-N9-C1'	6.46	134.90	126.50
1	13	418	C	C6-N1-C2	-6.45	117.72	120.30
26	14	497	A	O5'-P-OP2	-6.45	99.89	105.70
26	1H	2502	G	OP2-P-O3'	6.45	119.39	105.20
26	14	330	A	N1-C6-N6	6.45	122.47	118.60
26	14	1334	G	O5'-P-OP2	6.45	118.44	110.70
26	1H	1678	G	C5-C6-O6	-6.45	124.73	128.60
26	14	1695	G	C6-C5-N7	-6.45	126.53	130.40
26	14	2392	A	C5-N7-C8	-6.45	100.68	103.90
26	14	2755	C	C6-N1-C2	-6.45	117.72	120.30
26	14	2578	G	C8-N9-C4	6.45	108.98	106.40
1	13	5	U	C6-N1-C1'	-6.45	112.18	121.20
26	1H	2591	C	N3-C4-N4	6.45	122.51	118.00
26	1H	1573	G	N9-C4-C5	-6.44	102.82	105.40
26	1H	1632	A	N9-C4-C5	-6.44	103.22	105.80
26	1H	2085	C	C6-N1-C2	6.44	122.88	120.30
26	14	1544	C	C6-N1-C1'	-6.44	113.07	120.80
26	1H	1013	C	N3-C2-O2	6.44	126.41	121.90
33	51	10	PRO	N-CA-C	6.44	128.84	112.10
26	14	2030	A	OP1-P-OP2	6.44	129.26	119.60
26	1H	398	G	C6-C5-N7	-6.44	126.54	130.40
26	1H	681	G	N7-C8-N9	-6.44	109.88	113.10
26	1H	2430	A	N1-C6-N6	6.44	122.46	118.60
26	14	736	C	O5'-P-OP1	-6.44	99.91	105.70
26	14	2426	A	N7-C8-N9	6.44	117.02	113.80
26	1H	2527	C	C6-N1-C2	-6.44	117.73	120.30
1	13	32	A	C8-N9-C4	-6.43	103.23	105.80
26	1H	1120	G	N1-C6-O6	6.43	123.76	119.90
26	1H	2436	G	O5'-P-OP2	-6.43	99.91	105.70
26	1H	73	A	C5-C6-N1	6.43	120.92	117.70
26	1H	860	U	C2-N1-C1'	6.43	125.42	117.70
26	14	2000	G	OP2-P-O3'	6.43	119.34	105.20
26	1H	246	C	C6-N1-C2	6.43	122.87	120.30
26	1H	672	C	O5'-P-OP1	6.43	118.41	110.70
26	1H	1480	G	N7-C8-N9	6.42	116.31	113.10
26	14	1407	C	C4-C5-C6	-6.42	114.19	117.40
26	14	729	G	N3-C2-N2	-6.42	115.40	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2443	C	C6-N1-C2	-6.42	117.73	120.30
42	85	95	LEU	CA-CB-CG	-6.42	100.54	115.30
26	1H	973	A	C2-N3-C4	-6.42	107.39	110.60
26	1H	1013	C	N1-C2-O2	-6.42	115.05	118.90
26	14	2508	G	C5-C6-O6	-6.42	124.75	128.60
26	14	1653	G	O5'-P-OP2	-6.42	99.93	105.70
26	14	2213	U	C5-C6-N1	6.41	125.91	122.70
26	14	1407	C	C5-C6-N1	6.41	124.21	121.00
26	14	1271	G	N3-C4-N9	6.41	129.85	126.00
26	14	1323	U	N1-C2-O2	-6.41	118.31	122.80
1	13	897	C	C5-C6-N1	-6.41	117.80	121.00
23	2K	18	U	N1-C2-O2	6.41	127.28	122.80
26	1H	635	C	C6-N1-C2	-6.41	117.74	120.30
26	14	1831	G	C2-N3-C4	-6.41	108.70	111.90
26	14	1985	G	N1-C6-O6	6.41	123.74	119.90
26	1H	2621	A	C8-N9-C4	6.40	108.36	105.80
26	14	2592	G	N3-C4-C5	-6.40	125.40	128.60
26	1H	2469	A	N1-C6-N6	6.40	122.44	118.60
1	1G	197	A	P-O3'-C3'	6.40	127.38	119.70
1	1G	690	G	O4'-C1'-N9	6.40	113.32	108.20
26	14	140	A	N1-C6-N6	6.40	122.44	118.60
26	14	388	G	C8-N9-C4	-6.40	103.84	106.40
26	14	1564	C	C5-C4-N4	6.40	124.68	120.20
26	14	2587	A	O5'-P-OP1	-6.40	99.94	105.70
1	13	789	U	C5-C4-O4	6.40	129.74	125.90
26	1H	2585	U	N3-C4-O4	-6.40	114.92	119.40
1	13	115	G	C8-N9-C4	-6.40	103.84	106.40
26	1H	245	G	C4-C5-N7	6.40	113.36	110.80
26	1H	1427	A	C8-N9-C4	-6.39	103.24	105.80
26	1H	2028	U	N3-C4-C5	-6.39	110.76	114.60
26	1H	2054	A	C4-C5-N7	6.39	113.90	110.70
23	2L	77	A	N1-C6-N6	6.39	122.44	118.60
1	13	977	A	N1-C6-N6	-6.39	114.76	118.60
26	1H	1940	U	N3-C4-O4	6.39	123.87	119.40
26	1H	776	G	OP1-P-OP2	6.39	129.18	119.60
26	1H	812	C	C6-N1-C2	-6.39	117.75	120.30
26	1H	2260	C	OP2-P-O3'	6.39	119.25	105.20
26	14	1427	A	N9-C4-C5	6.39	108.35	105.80
26	14	48	G	C8-N9-C4	-6.38	103.85	106.40
26	1H	698	C	C4-C5-C6	6.38	120.59	117.40
26	14	1801	G	N1-C6-O6	6.38	123.73	119.90
26	1H	2351	G	N3-C4-N9	6.38	129.83	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2447	G	C4-N9-C1'	-6.38	118.21	126.50
1	1G	450	G	N3-C4-C5	6.38	131.79	128.60
26	14	537	C	C5-C6-N1	6.38	124.19	121.00
23	2K	77	A	C4-C5-N7	6.38	113.89	110.70
26	1H	1308	A	N9-C4-C5	6.38	108.35	105.80
26	14	90	U	N1-C2-O2	6.38	127.26	122.80
57	3L	58	A	P-O3'-C3'	6.38	127.35	119.70
26	1H	2226	C	N3-C4-C5	6.37	124.45	121.90
26	1H	2827	C	N1-C2-O2	-6.37	115.08	118.90
37	78	49	ARG	NE-CZ-NH2	-6.37	117.11	120.30
1	1G	337	C	C6-N1-C2	-6.37	117.75	120.30
26	14	2502	G	C6-N1-C2	-6.37	121.28	125.10
26	14	1620	G	OP1-P-OP2	-6.37	110.04	119.60
26	1H	52	A	O5'-P-OP2	-6.37	99.97	105.70
26	1H	613	U	N1-C2-N3	6.37	118.72	114.90
26	1H	1575	C	C5-C6-N1	6.37	124.18	121.00
26	1H	2338	G	O5'-P-OP1	-6.37	99.97	105.70
26	14	2286	A	N7-C8-N9	6.37	116.98	113.80
1	13	422	C	C2-N1-C1'	6.36	125.80	118.80
23	2K	25	U	C5-C4-O4	6.36	129.72	125.90
26	1H	782	A	N1-C2-N3	6.36	132.48	129.30
26	1H	1672	C	O5'-P-OP1	-6.36	99.97	105.70
26	1H	1786	A	OP1-P-O3'	6.36	119.20	105.20
26	1H	2226	C	C6-N1-C2	6.36	122.84	120.30
26	14	1594	G	C8-N9-C4	-6.36	103.86	106.40
26	1H	72	U	N3-C4-O4	6.36	123.85	119.40
26	14	1950	G	N3-C2-N2	6.36	124.35	119.90
26	1H	945	A	C8-N9-C1'	-6.36	116.25	127.70
26	14	2011	U	N3-C2-O2	6.36	126.65	122.20
26	14	982	C	C5-C6-N1	6.36	124.18	121.00
26	1H	775	G	N3-C4-N9	6.36	129.81	126.00
1	1G	1488	G	C8-N9-C4	6.36	108.94	106.40
24	3K	36	U	OP1-P-O3'	6.35	119.18	105.20
26	1H	788	A	OP2-P-O3'	6.35	119.18	105.20
26	1H	1971	A	O5'-P-OP2	-6.35	99.98	105.70
26	1H	2443	C	O5'-P-OP1	-6.35	99.98	105.70
26	14	808	G	OP1-P-OP2	6.35	129.13	119.60
26	14	817	C	C5-C6-N1	6.35	124.17	121.00
26	1H	863	A	O5'-P-OP2	-6.35	99.99	105.70
26	14	1904	G	C5-C6-O6	6.35	132.41	128.60
26	14	2873	A	C4-N9-C1'	6.35	137.73	126.30
26	1H	222	A	P-O3'-C3'	6.35	127.32	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2476	A	N3-C4-C5	-6.35	122.36	126.80
26	1H	2573	C	N3-C4-N4	6.35	122.44	118.00
26	1H	1636	C	N1-C2-O2	-6.35	115.09	118.90
26	14	2247	A	N1-C6-N6	-6.35	114.79	118.60
27	1J	103	U	C5-C6-N1	-6.35	119.53	122.70
1	13	974	A	N1-C6-N6	6.34	122.41	118.60
26	1H	382	G	N9-C4-C5	-6.34	102.86	105.40
26	1H	1632	A	C5-C6-N6	-6.34	118.62	123.70
26	14	1025	G	N3-C4-C5	6.34	131.77	128.60
26	14	1655	A	N1-C6-N6	6.34	122.41	118.60
26	1H	1649	G	N3-C4-N9	6.34	129.81	126.00
26	14	945	A	O4'-C1'-N9	6.34	113.27	108.20
26	14	1618	A	N7-C8-N9	6.34	116.97	113.80
26	1H	1022	G	N3-C2-N2	-6.34	115.46	119.90
26	1H	742	G	C4-C5-N7	-6.34	108.27	110.80
26	14	1287	A	N1-C6-N6	-6.34	114.80	118.60
1	13	115	G	P-O3'-C3'	6.33	127.30	119.70
26	1H	1950	G	N3-C4-N9	-6.33	122.20	126.00
26	1H	1607	C	O5'-P-OP1	-6.33	100.00	105.70
26	1H	1616	A	C6-C5-N7	-6.33	127.87	132.30
26	1H	1809	A	C5-C6-N6	-6.33	118.64	123.70
26	14	675	A	C5-C6-N6	-6.33	118.64	123.70
1	13	1498	U	C2-N1-C1'	6.33	125.29	117.70
26	1H	127	A	N9-C4-C5	-6.33	103.27	105.80
26	1H	446	G	N9-C4-C5	-6.33	102.87	105.40
26	1H	729	G	C4-N9-C1'	6.33	134.73	126.50
26	14	1304	C	N3-C2-O2	-6.33	117.47	121.90
1	13	1502	A	C4-C5-N7	6.32	113.86	110.70
26	1H	2530	A	O5'-P-OP2	-6.32	100.01	105.70
26	14	804	A	C8-N9-C4	6.32	108.33	105.80
26	14	388	G	N3-C2-N2	-6.32	115.47	119.90
26	14	2432	A	N1-C6-N6	6.32	122.39	118.60
26	1H	808	G	O5'-P-OP2	-6.32	100.01	105.70
26	14	2502	G	N9-C4-C5	6.32	107.93	105.40
26	14	2822	G	N1-C6-O6	6.32	123.69	119.90
26	14	1640	C	N3-C2-O2	-6.32	117.48	121.90
27	16	81	G	C6-C5-N7	-6.32	126.61	130.40
1	1G	1157	A	P-O3'-C3'	6.32	127.28	119.70
26	14	1901	A	C2-N3-C4	6.32	113.76	110.60
26	1H	700	G	N1-C6-O6	6.31	123.69	119.90
26	1H	935	C	O5'-P-OP2	6.31	118.27	110.70
26	14	558	G	C8-N9-C4	6.31	108.92	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	239	U	C2-N1-C1'	-6.31	110.13	117.70
26	1H	1142(A)	A	C5-C6-N1	-6.31	114.55	117.70
26	1H	1314	C	N3-C2-O2	-6.30	117.49	121.90
26	1H	1779	U	O5'-P-OP2	-6.30	100.03	105.70
26	1H	2478	A	O5'-P-OP1	-6.30	100.03	105.70
26	14	1950	G	C5-C6-O6	6.30	132.38	128.60
26	1H	664	C	C6-N1-C2	6.30	122.82	120.30
26	1H	2519	U	N1-C2-O2	-6.30	118.39	122.80
26	1H	2581	G	N3-C2-N2	6.30	124.31	119.90
26	1H	1955	U	O4'-C1'-N1	6.30	113.24	108.20
26	1H	974(A)	C	N3-C2-O2	-6.30	117.49	121.90
26	14	1327	C	C2-N1-C1'	-6.30	111.87	118.80
22	1K	74	C	N1-C2-O2	6.30	122.68	118.90
26	1H	670	A	N9-C4-C5	-6.30	103.28	105.80
26	1H	1695	G	C8-N9-C1'	-6.30	118.82	127.00
26	14	2880	C	N3-C4-C5	-6.30	119.38	121.90
26	1H	62	C	C6-N1-C2	6.29	122.82	120.30
26	1H	2439	A	O5'-P-OP2	-6.29	100.03	105.70
26	14	1328	G	N3-C4-N9	6.29	129.78	126.00
26	1H	609	A	C5-C6-N6	-6.29	118.67	123.70
33	51	6	ARG	N-CA-C	-6.29	94.01	111.00
26	14	2873	A	C5-C6-N1	-6.29	114.55	117.70
26	1H	594	U	C6-N1-C2	6.29	124.78	121.00
26	14	1629	U	N1-C2-O2	-6.29	118.40	122.80
1	13	577	G	C8-N9-C4	6.29	108.92	106.40
26	1H	1204	A	C4-N9-C1'	6.29	137.62	126.30
26	1H	599	G	C5-N7-C8	6.29	107.44	104.30
26	1H	776	G	N3-C2-N2	-6.29	115.50	119.90
26	1H	405	U	N1-C2-O2	6.28	127.20	122.80
55	Q8	52	LYS	C-N-CD	-6.28	106.78	120.60
26	14	621	A	N1-C6-N6	6.28	122.37	118.60
1	13	773	G	O5'-P-OP2	-6.28	100.05	105.70
26	1H	2665	A	C6-C5-N7	-6.28	127.90	132.30
33	51	3	ARG	CG-CD-NE	6.28	124.99	111.80
26	14	1378	A	C8-N9-C4	6.28	108.31	105.80
26	1H	755	C	C6-N1-C2	-6.28	117.79	120.30
23	2K	73	A	C8-N9-C4	6.28	108.31	105.80
23	2L	48	U	P-O3'-C3'	6.28	127.23	119.70
26	1H	148	C	C2-N3-C4	-6.27	116.76	119.90
26	1H	2782	G	N1-C6-O6	6.27	123.66	119.90
1	13	1107	C	N3-C4-C5	-6.27	119.39	121.90
26	1H	68	G	C8-N9-C4	-6.27	103.89	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1187	G	O5'-P-OP2	-6.27	100.06	105.70
1	1G	1517	G	O5'-P-OP2	-6.27	100.06	105.70
26	14	2439	A	P-O3'-C3'	6.27	127.22	119.70
26	1H	245	G	C4-N9-C1'	6.27	134.65	126.50
26	1H	2751	G	C5-N7-C8	-6.27	101.17	104.30
26	1H	731	C	N3-C4-N4	6.26	122.39	118.00
26	1H	1304	C	N3-C4-C5	6.26	124.41	121.90
26	14	1386	C	C6-N1-C2	-6.26	117.79	120.30
26	14	2386	C	C5-C6-N1	-6.26	117.87	121.00
26	1H	411	G	N3-C4-C5	-6.26	125.47	128.60
26	1H	1201	C	N1-C2-O2	-6.26	115.14	118.90
26	1H	2054	A	C5-N7-C8	-6.26	100.77	103.90
26	1H	2336	A	C2-N3-C4	6.26	113.73	110.60
26	1H	735	A	C8-N9-C4	6.26	108.30	105.80
2	1E	14	GLY	N-CA-C	6.26	128.75	113.10
26	1H	2573	C	C6-N1-C2	-6.26	117.80	120.30
26	1H	983	A	C8-N9-C4	6.26	108.30	105.80
26	1H	1297	C	C6-N1-C2	-6.26	117.80	120.30
26	1H	2346	A	C8-N9-C1'	-6.26	116.44	127.70
26	14	1404	C	O5'-P-OP1	-6.26	100.07	105.70
26	1H	1198	U	N3-C4-O4	-6.25	115.02	119.40
26	14	2011	U	O5'-P-OP1	-6.25	100.07	105.70
26	1H	209	C	C5-C6-N1	-6.25	117.88	121.00
26	1H	270(O)	U	C5-C6-N1	6.25	125.83	122.70
26	14	120	U	OP1-P-OP2	-6.25	110.22	119.60
26	1H	2618	G	C8-N9-C4	-6.25	103.90	106.40
26	1H	1338	G	C2-N3-C4	6.25	115.02	111.90
26	1H	1614	A	C6-C5-N7	-6.25	127.93	132.30
26	1H	1990	C	C6-N1-C2	-6.25	117.80	120.30
29	19	271	ILE	N-CA-C	6.25	127.87	111.00
26	1H	44	A	C8-N9-C4	-6.25	103.30	105.80
26	1H	1614	A	O4'-C1'-N9	6.25	113.20	108.20
27	16	81	G	C4-C5-N7	6.25	113.30	110.80
1	1G	817	C	O5'-P-OP2	-6.25	100.08	105.70
26	14	1320	C	N3-C4-C5	-6.25	119.40	121.90
26	1H	1648	C	C2-N1-C1'	-6.25	111.93	118.80
26	14	2024	G	N1-C6-O6	6.25	123.65	119.90
1	13	41	G	C8-N9-C4	6.24	108.90	106.40
26	1H	279	C	C5-C6-N1	6.24	124.12	121.00
26	1H	308	G	C4-N9-C1'	6.24	134.62	126.50
26	1H	1623	G	N1-C2-N2	-6.24	110.58	116.20
26	1H	2377	A	N1-C6-N6	6.24	122.35	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2698	U	O5'-P-OP2	-6.24	100.08	105.70
26	14	4	C	N1-C2-O2	6.24	122.64	118.90
26	14	4	C	C5-C6-N1	6.24	124.12	121.00
26	14	212	G	O5'-P-OP2	-6.24	100.08	105.70
26	14	1406	U	C4-C5-C6	-6.24	115.96	119.70
26	1H	822	U	N1-C2-N3	6.24	118.64	114.90
26	14	2078	C	OP1-P-O3'	6.24	118.93	105.20
26	1H	403	U	N1-C2-O2	6.24	127.17	122.80
1	1G	1502	A	C8-N9-C4	-6.24	103.31	105.80
26	14	2593	U	C5-C4-O4	6.24	129.64	125.90
26	1H	188	G	OP1-P-OP2	6.23	128.95	119.60
26	1H	2430	A	C4-N9-C1'	-6.23	115.08	126.30
54	P8	23	ARG	NE-CZ-NH1	6.23	123.42	120.30
26	14	1404	C	N1-C2-O2	6.23	122.64	118.90
24	3K	76	A	C2-N3-C4	-6.23	107.48	110.60
26	1H	695	G	N1-C6-O6	-6.23	116.16	119.90
26	14	863	A	O5'-P-OP2	-6.23	100.09	105.70
26	14	1827	C	N3-C2-O2	-6.23	117.54	121.90
26	1H	121	G	C5-C6-N1	6.23	114.61	111.50
26	1H	2311	A	C5-N7-C8	-6.23	100.79	103.90
26	14	396	G	C8-N9-C4	-6.23	103.91	106.40
26	1H	732	C	C4-C5-C6	6.22	120.51	117.40
26	1H	1267	U	OP2-P-O3'	6.22	118.89	105.20
26	14	48	G	N9-C4-C5	6.22	107.89	105.40
26	1H	1204	A	C4-C5-C6	6.22	120.11	117.00
26	14	114	U	C2-N1-C1'	6.22	125.16	117.70
26	14	2210	G	C4-N9-C1'	6.22	134.59	126.50
26	1H	1905	C	C6-N1-C2	-6.22	117.81	120.30
1	1G	1127	G	O5'-P-OP1	-6.22	100.11	105.70
26	14	682	G	O5'-P-OP1	6.22	118.16	110.70
26	14	2297	C	O5'-P-OP1	-6.22	100.11	105.70
26	14	90	U	N3-C2-O2	-6.21	117.85	122.20
26	1H	906	G	C5-C6-O6	-6.21	124.87	128.60
26	14	1296	G	OP2-P-O3'	6.21	118.87	105.20
26	1H	849	A	C8-N9-C4	6.21	108.28	105.80
26	1H	1395	A	N7-C8-N9	-6.21	110.69	113.80
26	1H	2676	C	C6-N1-C2	6.21	122.78	120.30
26	14	574	C	N3-C4-N4	-6.21	113.65	118.00
8	7E	112	LEU	CA-CB-CG	6.21	129.58	115.30
26	1H	524	U	N3-C2-O2	-6.21	117.85	122.20
26	1H	1251	C	N1-C2-O2	6.21	122.62	118.90
26	1H	2708	G	C8-N9-C1'	-6.21	118.93	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	71	A	N1-C2-N3	6.21	132.41	129.30
1	13	897	C	N1-C2-O2	-6.21	115.18	118.90
27	16	98	G	C6-C5-N7	-6.21	126.68	130.40
1	1G	812	C	N3-C4-C5	-6.21	119.42	121.90
26	1H	434	U	O5'-P-OP2	-6.21	100.11	105.70
26	1H	946	G	O5'-P-OP1	-6.21	100.11	105.70
26	1H	1973	G	C8-N9-C4	-6.21	103.92	106.40
27	16	47	C	C6-N1-C2	6.20	122.78	120.30
26	1H	307	G	N3-C4-N9	6.20	129.72	126.00
1	13	67	C	C6-N1-C2	-6.20	117.82	120.30
26	1H	676	A	C8-N9-C4	-6.20	103.32	105.80
26	1H	764	A	N1-C6-N6	6.20	122.32	118.60
26	14	130	C	C6-N1-C2	6.20	122.78	120.30
26	14	267	C	N3-C2-O2	-6.20	117.56	121.90
26	14	684	G	N1-C6-O6	-6.20	116.18	119.90
26	14	1818	U	O5'-P-OP2	-6.20	100.12	105.70
26	1H	1555	G	C4-N9-C1'	6.20	134.56	126.50
26	1H	1653	G	N3-C4-C5	-6.20	125.50	128.60
26	1H	2447	G	C8-N9-C1'	6.20	135.06	127.00
26	14	2713	A	N1-C6-N6	6.20	122.32	118.60
26	1H	697	C	N1-C2-O2	-6.20	115.18	118.90
26	1H	2241	A	N1-C2-N3	6.20	132.40	129.30
26	1H	2516	G	O5'-P-OP2	-6.20	100.12	105.70
26	14	2279	G	C5-C6-O6	6.20	132.32	128.60
24	3K	60	U	C5-C6-N1	6.19	125.80	122.70
26	14	2087	G	N9-C4-C5	-6.19	102.92	105.40
26	1H	1817	G	C5-C6-O6	6.19	132.31	128.60
26	1H	1298	C	C6-N1-C2	-6.19	117.82	120.30
26	1H	71	A	O4'-C1'-N9	-6.19	103.25	108.20
26	1H	1777	U	OP2-P-O3'	6.19	118.81	105.20
12	3A	59	ARG	NE-CZ-NH1	6.19	123.39	120.30
26	14	2287	A	N3-C4-C5	6.19	131.13	126.80
1	13	31	G	P-O3'-C3'	6.18	127.12	119.70
26	14	676	A	O4'-C1'-N9	6.18	113.15	108.20
26	14	1658	C	N3-C4-N4	6.18	122.33	118.00
26	14	1992	G	N3-C4-C5	-6.18	125.51	128.60
26	1H	2007	C	O5'-P-OP2	-6.18	100.14	105.70
26	1H	2469	A	C4-C5-N7	6.18	113.79	110.70
49	J8	85	LEU	CA-CB-CG	-6.18	101.08	115.30
26	14	24	G	N3-C4-C5	6.18	131.69	128.60
26	14	1950	G	N3-C4-C5	-6.18	125.51	128.60
26	14	1187	G	N1-C6-O6	6.18	123.61	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	3E	87	GLY	N-CA-C	6.18	128.54	113.10
26	1H	658	C	O5'-P-OP1	6.18	118.11	110.70
26	1H	2286	A	C4-C5-C6	6.18	120.09	117.00
26	14	982	C	C6-N1-C2	-6.18	117.83	120.30
26	14	2307	G	N7-C8-N9	6.18	116.19	113.10
26	1H	28	A	C2-N3-C4	6.17	113.69	110.60
26	1H	71	A	C5-C6-N6	-6.17	118.76	123.70
26	1H	1197	G	OP2-P-O3'	6.17	118.78	105.20
26	1H	1437	C	N3-C2-O2	-6.17	117.58	121.90
26	1H	2319	G	N9-C4-C5	-6.17	102.93	105.40
26	1H	433	C	OP2-P-O3'	6.17	118.77	105.20
26	1H	410	G	O5'-P-OP1	-6.17	100.15	105.70
26	14	1258	C	OP2-P-O3'	6.17	118.77	105.20
26	1H	1125	G	N7-C8-N9	-6.17	110.02	113.10
26	1H	1359	A	N1-C6-N6	6.17	122.30	118.60
26	14	2387	U	N3-C4-C5	6.17	118.30	114.60
26	1H	966	G	N1-C2-N2	-6.16	110.65	116.20
26	1H	1344	G	C4-C5-N7	6.16	113.27	110.80
26	14	602	G	C4-N9-C1'	6.16	134.51	126.50
1	1G	197	A	N7-C8-N9	6.16	116.88	113.80
26	1H	789	A	O5'-P-OP1	-6.16	100.16	105.70
26	1H	845	G	N1-C2-N2	-6.16	110.66	116.20
26	1H	2712	U	C5-C4-O4	-6.16	122.20	125.90
33	59	153	LYS	C-N-CD	6.16	141.34	128.40
26	1H	508	G	N9-C1'-C2'	6.16	122.01	114.00
26	1H	1569	A	O4'-C1'-N9	6.16	113.13	108.20
26	14	1928	A	C8-N9-C4	6.16	108.26	105.80
26	1H	127	A	C4-C5-N7	6.16	113.78	110.70
1	13	690	G	C8-N9-C1'	-6.16	119.00	127.00
1	13	826	C	C6-N1-C2	-6.16	117.84	120.30
26	14	2449	U	C5-C4-O4	-6.16	122.21	125.90
26	1H	974(A)	C	N3-C4-C5	-6.15	119.44	121.90
26	1H	839	U	OP1-P-OP2	6.15	128.83	119.60
26	14	2818	G	C5-C6-O6	-6.15	124.91	128.60
1	13	516	U	C6-N1-C2	-6.15	117.31	121.00
26	1H	911	A	N1-C6-N6	6.15	122.29	118.60
1	1G	1322	C	C2-N1-C1'	6.15	125.56	118.80
26	14	2319	G	N1-C6-O6	-6.15	116.21	119.90
1	13	1096	C	C6-N1-C2	-6.15	117.84	120.30
1	1G	1449	C	C6-N1-C1'	-6.15	113.42	120.80
23	2K	6	G	N9-C4-C5	-6.14	102.94	105.40
26	1H	982	C	C5-C6-N1	6.14	124.07	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2271	G	N3-C4-N9	6.14	129.69	126.00
26	14	2362	G	C8-N9-C4	6.14	108.86	106.40
26	1H	1147	C	C5-C6-N1	-6.14	117.93	121.00
26	1H	1259	G	C8-N9-C4	6.14	108.86	106.40
26	1H	1279	G	N1-C6-O6	-6.14	116.21	119.90
26	1H	2250	G	N1-C6-O6	-6.14	116.21	119.90
26	1H	2424	C	C2-N3-C4	6.14	122.97	119.90
26	1H	134	C	N3-C2-O2	-6.14	117.60	121.90
26	1H	1393	A	OP1-P-O3'	6.14	118.71	105.20
26	1H	1555	G	O5'-P-OP1	-6.14	100.17	105.70
26	14	1352	U	O5'-P-OP2	-6.14	100.17	105.70
26	1H	330	A	C5-N7-C8	-6.14	100.83	103.90
26	1H	462	C	OP1-P-OP2	6.14	128.81	119.60
26	14	102	G	O4'-C1'-N9	6.14	113.11	108.20
26	14	2576	G	C8-N9-C4	6.14	108.86	106.40
26	14	2689	U	P-O3'-C3'	6.14	127.07	119.70
26	1H	1568	G	N1-C6-O6	6.14	123.58	119.90
26	1H	2427	C	N1-C2-O2	-6.14	115.22	118.90
1	1G	1301	U	C6-N1-C1'	-6.14	112.61	121.20
26	14	267	C	N1-C2-O2	6.14	122.58	118.90
26	1H	2419	U	OP1-P-O3'	6.13	118.69	105.20
26	1H	763	G	OP2-P-O3'	6.13	118.69	105.20
1	1G	117	G	C5-C6-O6	-6.13	124.92	128.60
26	1H	187	G	C4-N9-C1'	6.13	134.47	126.50
26	1H	2439	A	O4'-C1'-N9	-6.13	103.30	108.20
26	14	2688	U	N3-C2-O2	-6.13	117.91	122.20
1	13	520	A	N1-C2-N3	6.13	132.36	129.30
1	13	575	G	N3-C4-N9	-6.13	122.33	126.00
1	13	690	G	C8-N9-C4	-6.13	103.95	106.40
26	14	1700	A	O5'-P-OP1	-6.13	100.19	105.70
26	14	1972	A	OP2-P-O3'	6.13	118.68	105.20
26	14	2542	A	N7-C8-N9	-6.13	110.74	113.80
26	1H	2012	G	C8-N9-C4	6.12	108.85	106.40
26	1H	2488	A	C6-C5-N7	-6.12	128.01	132.30
26	14	125	G	N9-C4-C5	-6.12	102.95	105.40
26	1H	1423	G	N3-C2-N2	6.12	124.19	119.90
26	14	947	G	N3-C2-N2	-6.12	115.61	119.90
26	14	1818	U	OP1-P-O3'	6.12	118.67	105.20
26	1H	2330	G	C8-N9-C4	6.12	108.85	106.40
26	14	1289	C	O5'-P-OP1	-6.12	100.19	105.70
26	14	2078	C	O5'-P-OP2	6.12	118.05	110.70
26	1H	2699	C	C5-C6-N1	-6.12	117.94	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2346	A	C2-N3-C4	-6.12	107.54	110.60
26	1H	805	G	OP1-P-O3'	6.12	118.66	105.20
26	1H	1308	A	N1-C2-N3	6.12	132.36	129.30
26	1H	2019	A	N1-C6-N6	6.12	122.27	118.60
26	14	1616	A	C5-C6-N1	-6.12	114.64	117.70
26	14	2617	C	C6-N1-C2	6.12	122.75	120.30
26	1H	683	C	N3-C4-C5	6.12	124.35	121.90
26	1H	848	G	C8-N9-C1'	-6.12	119.05	127.00
26	14	2607	G	C6-C5-N7	-6.12	126.73	130.40
1	13	576	G	N1-C6-O6	6.12	123.57	119.90
1	13	1414	U	OP2-P-O3'	6.12	118.66	105.20
26	1H	211	A	OP2-P-O3'	6.12	118.66	105.20
26	1H	1899	G	C5-C6-N1	-6.12	108.44	111.50
1	13	575	G	O5'-P-OP2	-6.11	100.20	105.70
26	1H	203	C	N3-C2-O2	6.11	126.18	121.90
26	1H	2577	A	C5-C6-N6	6.11	128.59	123.70
1	1G	555	C	C6-N1-C2	-6.11	117.86	120.30
26	14	570	G	C8-N9-C4	-6.11	103.95	106.40
26	1H	48	G	N1-C6-O6	-6.11	116.23	119.90
26	14	974(A)	C	N3-C2-O2	-6.11	117.62	121.90
26	14	1757	U	C2-N1-C1'	-6.11	110.37	117.70
26	14	2313	C	C6-N1-C2	-6.11	117.86	120.30
1	13	956	U	C6-N1-C2	-6.11	117.33	121.00
26	1H	2681	C	N1-C2-O2	6.11	122.56	118.90
26	14	265	A	C4-C5-N7	6.11	113.75	110.70
26	14	1309	G	N1-C6-O6	6.11	123.56	119.90
1	13	974	A	C6-C5-N7	-6.11	128.03	132.30
26	1H	974(A)	C	N1-C2-O2	6.11	122.56	118.90
26	1H	2330	G	N9-C4-C5	-6.11	102.96	105.40
26	1H	2453	A	N9-C4-C5	6.11	108.24	105.80
26	14	1772	G	O5'-P-OP2	-6.11	100.20	105.70
26	1H	1695	G	C6-C5-N7	-6.10	126.74	130.40
26	14	1347	G	OP1-P-O3'	6.10	118.62	105.20
26	1H	1285	G	C5-C6-O6	-6.10	124.94	128.60
26	1H	1647	G	C4-C5-N7	-6.10	108.36	110.80
26	1H	1767	C	C2-N3-C4	-6.10	116.85	119.90
1	1G	449	C	C6-N1-C2	-6.10	117.86	120.30
26	14	1805	U	O5'-P-OP1	-6.10	100.21	105.70
1	13	36	C	C6-N1-C2	-6.10	117.86	120.30
26	1H	1937	A	C4-C5-C6	6.10	120.05	117.00
26	1H	1157	G	N1-C6-O6	6.09	123.56	119.90
26	1H	2429	G	OP2-P-O3'	6.09	118.61	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	69	C	C6-N1-C2	-6.09	117.86	120.30
1	13	1203	C	C6-N1-C2	-6.09	117.86	120.30
1	13	437	U	C2-N1-C1'	6.09	125.01	117.70
26	1H	1313	U	N3-C4-C5	-6.09	110.95	114.60
26	14	558	G	N7-C8-N9	-6.09	110.06	113.10
26	1H	961	C	OP1-P-O3'	6.09	118.59	105.20
26	1H	1333	C	C6-N1-C2	-6.09	117.86	120.30
26	14	2279	G	N3-C2-N2	6.09	124.16	119.90
26	14	2430	A	C5-C6-N1	-6.08	114.66	117.70
26	14	792	G	O4'-C1'-N9	-6.08	103.33	108.20
26	1H	247	G	C4-C5-N7	6.08	113.23	110.80
26	1H	1691	C	C6-N1-C2	-6.08	117.87	120.30
26	1H	2555	U	N1-C2-N3	6.08	118.55	114.90
26	14	1302	A	OP1-P-OP2	6.08	128.72	119.60
26	1H	1374	G	N1-C6-O6	6.08	123.55	119.90
26	1H	2607	G	N3-C2-N2	6.08	124.15	119.90
1	13	1498	U	P-O3'-C3'	6.07	126.99	119.70
26	1H	410	G	N3-C2-N2	-6.07	115.65	119.90
26	1H	1158	C	C2-N3-C4	-6.07	116.86	119.90
26	1H	1858	G	N1-C6-O6	6.07	123.54	119.90
26	1H	2345	G	C8-N9-C4	-6.07	103.97	106.40
26	14	2243	U	OP1-P-OP2	6.07	128.71	119.60
26	14	1385	G	O4'-C1'-N9	6.07	113.06	108.20
26	14	2256	G	O5'-P-OP2	-6.07	100.24	105.70
1	1G	913	A	P-O3'-C3'	6.07	126.98	119.70
1	13	1096	C	C5-C6-N1	6.07	124.03	121.00
26	1H	126	A	C5-C6-N6	6.07	128.55	123.70
26	1H	738	G	N7-C8-N9	6.07	116.13	113.10
26	1H	569	U	C6-N1-C2	6.07	124.64	121.00
26	1H	915	C	N3-C2-O2	-6.07	117.65	121.90
26	1H	2599	G	C5-N7-C8	6.07	107.33	104.30
26	14	1616	A	N1-C6-N6	6.07	122.24	118.60
26	14	1742	C	C5-C6-N1	6.07	124.03	121.00
26	1H	2286	A	N7-C8-N9	6.06	116.83	113.80
26	1H	249	C	C6-N1-C2	-6.06	117.88	120.30
26	1H	2575	C	C5-C6-N1	-6.06	117.97	121.00
26	14	1698	A	C2-N3-C4	-6.06	107.57	110.60
26	14	1801	G	C4-C5-N7	6.06	113.22	110.80
26	14	2590	A	C8-N9-C4	6.06	108.22	105.80
1	13	776	G	O5'-P-OP1	-6.06	100.25	105.70
26	14	1831	G	N1-C6-O6	6.06	123.54	119.90
26	1H	49	A	C5-N7-C8	6.06	106.93	103.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1573	G	C8-N9-C4	6.06	108.82	106.40
26	14	1446	C	C6-N1-C2	-6.06	117.88	120.30
55	M5	48	PHE	CA-C-N	6.06	130.53	117.20
26	1H	1344	G	N1-C6-O6	6.06	123.53	119.90
26	14	856	C	C6-N1-C2	-6.06	117.88	120.30
26	14	1784	A	N1-C6-N6	-6.06	114.97	118.60
26	1H	1993	U	OP2-P-O3'	6.06	118.52	105.20
1	13	1502	A	N1-C6-N6	6.05	122.23	118.60
1	13	1533	C	C6-N1-C1'	-6.05	113.53	120.80
26	1H	1174	A	N9-C1'-C2'	-6.05	105.34	112.00
26	1H	669	G	N9-C4-C5	6.05	107.82	105.40
1	13	760	G	N1-C6-O6	6.05	123.53	119.90
26	1H	245	G	C8-N9-C1'	-6.05	119.13	127.00
26	1H	247	G	N3-C2-N2	6.05	124.14	119.90
26	1H	693	C	O5'-P-OP2	-6.05	100.25	105.70
26	14	2023	G	N1-C6-O6	6.05	123.53	119.90
26	14	2713	A	C4-C5-N7	6.05	113.72	110.70
26	1H	1304	C	O5'-P-OP1	6.05	117.96	110.70
26	1H	2587	A	C2-N3-C4	-6.05	107.58	110.60
43	D8	40	LEU	CA-CB-CG	6.05	129.21	115.30
26	14	265	A	N7-C8-N9	6.05	116.83	113.80
26	1H	223	A	O5'-P-OP2	-6.05	100.26	105.70
26	1H	698	C	OP1-P-OP2	6.05	128.67	119.60
26	1H	1899	G	C4-C5-N7	-6.05	108.38	110.80
26	14	1366	A	O5'-P-OP2	-6.05	100.26	105.70
1	13	865	A	N1-C6-N6	6.04	122.23	118.60
26	1H	732	C	C6-N1-C2	-6.04	117.88	120.30
26	1H	2587	A	N1-C2-N3	6.04	132.32	129.30
26	1H	2242	G	C5-C6-O6	6.04	132.23	128.60
26	1H	764	A	C2-N3-C4	-6.04	107.58	110.60
26	1H	848	G	C8-N9-C4	6.04	108.82	106.40
26	1H	1369	G	N3-C4-C5	-6.04	125.58	128.60
26	14	677	A	C8-N9-C4	-6.04	103.38	105.80
26	14	1783	A	C5-C6-N6	6.04	128.53	123.70
26	1H	130	C	C6-N1-C2	6.04	122.72	120.30
26	1H	183	C	N3-C2-O2	-6.04	117.67	121.90
26	1H	1501	C	O5'-P-OP2	6.04	117.94	110.70
26	1H	2028	U	N3-C4-O4	6.04	123.63	119.40
26	14	226	G	N1-C6-O6	6.04	123.52	119.90
34	61	77	LEU	CA-CB-CG	6.04	129.18	115.30
1	13	727	G	O5'-P-OP1	-6.03	100.27	105.70
1	13	910	C	N3-C4-C5	6.03	124.31	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1227	A	N1-C6-N6	6.03	122.22	118.60
26	1H	865	C	OP1-P-OP2	-6.03	110.56	119.60
26	1H	2477	C	C6-N1-C2	-6.03	117.89	120.30
26	1H	59	U	C6-N1-C2	-6.03	117.38	121.00
24	3K	12	U	C5-C6-N1	6.03	125.71	122.70
1	1G	687	A	P-O3'-C3'	6.03	126.93	119.70
1	13	1408	A	C8-N9-C4	-6.03	103.39	105.80
26	1H	1658	C	N3-C4-N4	6.03	122.22	118.00
26	1H	2540	C	C6-N1-C2	6.03	122.71	120.30
26	14	41	C	C6-N1-C2	6.03	122.71	120.30
26	14	380	U	O5'-P-OP2	-6.03	100.28	105.70
26	14	833	U	N1-C2-O2	-6.03	118.58	122.80
1	13	254	G	O5'-P-OP1	-6.02	100.28	105.70
26	1H	210	C	C6-N1-C2	6.02	122.71	120.30
26	1H	1327	C	N3-C4-C5	-6.02	119.49	121.90
26	1H	1332	G	N3-C4-C5	6.02	131.61	128.60
26	14	1657	C	N3-C4-C5	6.02	124.31	121.90
26	14	1938	A	N1-C6-N6	6.02	122.21	118.60
26	1H	333	G	C4-N9-C1'	6.02	134.33	126.50
26	1H	743	G	O5'-P-OP1	-6.02	100.28	105.70
26	14	2251	G	C8-N9-C1'	-6.02	119.18	127.00
1	13	896	C	C6-N1-C2	6.02	122.71	120.30
1	13	1489	G	N7-C8-N9	-6.02	110.09	113.10
26	1H	1644	C	C5-C6-N1	6.02	124.01	121.00
26	1H	2450	A	C5-C6-N6	6.02	128.51	123.70
26	1H	2590	A	C2-N3-C4	-6.02	107.59	110.60
26	1H	1109	C	N3-C2-O2	-6.01	117.69	121.90
26	1H	1654	A	C5-C6-N6	6.01	128.51	123.70
26	1H	1698	A	C5-C6-N1	-6.01	114.69	117.70
26	1H	2607	G	C4-C5-N7	6.01	113.21	110.80
26	14	188	G	N9-C4-C5	-6.01	102.99	105.40
1	13	577	G	N9-C4-C5	-6.01	103.00	105.40
26	1H	2275	C	OP1-P-O3'	6.01	118.42	105.20
26	1H	2304	G	O5'-P-OP1	-6.01	100.29	105.70
1	13	1525	G	OP1-P-OP2	-6.01	110.59	119.60
26	1H	119	A	N1-C6-N6	-6.01	114.99	118.60
26	1H	764	A	OP1-P-OP2	-6.01	110.59	119.60
26	1H	1817	G	N1-C6-O6	-6.01	116.29	119.90
26	1H	1927	A	N3-C4-C5	-6.01	122.59	126.80
26	14	1520	U	C5-C4-O4	6.01	129.51	125.90
26	14	2779	U	N1-C2-O2	6.01	127.01	122.80
26	1H	1962	C	N3-C4-C5	-6.01	119.50	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2503	A	C2-N3-C4	6.01	113.60	110.60
1	13	509	A	C8-N9-C4	-6.01	103.40	105.80
1	13	584	G	N1-C6-O6	-6.00	116.30	119.90
26	1H	2689	U	C5-C6-N1	-6.00	119.70	122.70
26	14	866	A	N9-C4-C5	-6.00	103.40	105.80
26	1H	1510	A	C2-N3-C4	6.00	113.60	110.60
26	1H	2287	A	N3-C4-N9	-6.00	122.60	127.40
26	14	1791	A	O5'-P-OP2	6.00	117.90	110.70
26	1H	453	C	C2-N1-C1'	-6.00	112.20	118.80
26	14	911	A	C8-N9-C4	-6.00	103.40	105.80
26	14	2447	G	P-O3'-C3'	6.00	126.90	119.70
26	1H	1616	A	C8-N9-C4	-6.00	103.40	105.80
26	14	1904	G	N1-C6-O6	-6.00	116.30	119.90
26	14	2866	U	O5'-P-OP2	-6.00	100.30	105.70
27	1J	60	C	C5-C6-N1	6.00	124.00	121.00
26	1H	2394	C	O5'-P-OP2	-6.00	100.31	105.70
1	1G	1438	G	C8-N9-C4	5.99	108.80	106.40
26	14	792	G	N3-C4-N9	5.99	129.60	126.00
26	14	1992	G	C8-N9-C4	-5.99	104.00	106.40
26	14	2593	U	N3-C2-O2	-5.99	118.00	122.20
26	1H	1210	A	C5-C6-N6	-5.99	118.91	123.70
26	1H	1299	G	O5'-P-OP2	5.99	117.89	110.70
26	1H	1616	A	C5-C6-N6	-5.99	118.91	123.70
26	14	2447	G	N9-C4-C5	5.99	107.80	105.40
26	1H	596	G	O5'-P-OP2	5.99	117.89	110.70
26	1H	1502	C	C6-N1-C2	-5.99	117.90	120.30
26	1H	1567	A	OP1-P-O3'	5.99	118.38	105.20
26	1H	2441	C	N1-C2-O2	5.99	122.49	118.90
26	14	1374	G	N3-C4-N9	5.99	129.59	126.00
1	13	253	U	O5'-P-OP2	5.99	117.89	110.70
26	1H	126	A	C4-C5-N7	-5.99	107.71	110.70
26	1H	2368	C	C6-N1-C2	-5.99	117.91	120.30
57	3L	76	A	O4'-C1'-N9	5.99	112.99	108.20
26	14	2273	A	O5'-P-OP2	-5.99	100.31	105.70
26	14	1277	G	C8-N9-C4	5.99	108.79	106.40
26	14	138	G	C8-N9-C4	-5.98	104.01	106.40
26	14	866	A	C8-N9-C1'	-5.98	116.93	127.70
26	14	1313	U	N1-C2-O2	-5.98	118.61	122.80
26	1H	265	A	O4'-C1'-N9	5.98	112.99	108.20
26	1H	469	G	N1-C6-O6	-5.98	116.31	119.90
26	1H	1607	C	OP1-P-OP2	5.98	128.57	119.60
26	14	2713	A	C2-N3-C4	-5.98	107.61	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	569	U	C5-C6-N1	-5.98	119.71	122.70
26	14	602	G	C6-C5-N7	-5.98	126.81	130.40
26	1H	391	G	C4-C5-C6	5.98	122.39	118.80
26	1H	2712	U	N3-C4-C5	5.98	118.19	114.60
26	14	288	C	C2-N1-C1'	5.98	125.38	118.80
26	1H	2429	G	N9-C4-C5	5.98	107.79	105.40
26	14	1313	U	O5'-P-OP2	-5.98	100.32	105.70
26	14	2012	G	C6-C5-N7	-5.98	126.81	130.40
1	13	748	C	C5-C6-N1	5.97	123.99	121.00
26	1H	2465	C	C2-N3-C4	-5.97	116.91	119.90
26	14	141	A	C5-N7-C8	-5.97	100.91	103.90
26	14	1154	G	N1-C6-O6	5.97	123.48	119.90
26	1H	648	G	N3-C2-N2	-5.97	115.72	119.90
1	13	428	G	N3-C2-N2	-5.97	115.72	119.90
26	1H	1654	A	N1-C6-N6	-5.97	115.02	118.60
26	14	485	C	C6-N1-C2	-5.97	117.91	120.30
26	1H	1809	A	N1-C6-N6	5.97	122.18	118.60
26	1H	1972	A	C5-C6-N6	-5.97	118.92	123.70
26	14	1976	U	N1-C2-O2	-5.97	118.62	122.80
26	1H	918	A	C8-N9-C4	-5.97	103.41	105.80
26	14	747	U	N3-C2-O2	5.97	126.38	122.20
26	14	921	G	C8-N9-C4	-5.97	104.01	106.40
26	1H	777	A	OP2-P-O3'	5.96	118.32	105.20
43	D8	94	LEU	CA-CB-CG	5.96	129.02	115.30
26	1H	117	G	C5-C6-O6	-5.96	125.02	128.60
27	16	41	U	C5-C6-N1	-5.96	119.72	122.70
1	1G	925	G	N1-C6-O6	5.96	123.48	119.90
1	13	1227	A	N7-C8-N9	5.96	116.78	113.80
26	1H	793	A	N1-C6-N6	5.96	122.17	118.60
27	16	115	G	C5-N7-C8	-5.96	101.32	104.30
26	14	704	G	N1-C6-O6	5.96	123.47	119.90
26	14	2543	G	C8-N9-C4	5.96	108.78	106.40
26	14	1598	C	O5'-P-OP2	5.96	117.85	110.70
1	13	758	G	N1-C6-O6	5.96	123.47	119.90
1	13	843	U	N1-C2-O2	5.95	126.97	122.80
1	13	1260	C	C6-N1-C2	-5.95	117.92	120.30
1	13	1402	C	C4-C5-C6	5.95	120.38	117.40
26	1H	1403	C	N1-C2-O2	5.95	122.47	118.90
26	14	1257	C	N3-C4-C5	-5.95	119.52	121.90
26	1H	2830	G	C8-N9-C4	-5.95	104.02	106.40
26	14	669	G	C2-N3-C4	5.95	114.88	111.90
26	1H	1905	C	OP1-P-O3'	5.95	118.29	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2827	C	N3-C2-O2	5.95	126.06	121.90
26	14	974	G	N9-C4-C5	5.95	107.78	105.40
26	14	1775	U	N3-C4-O4	-5.95	115.23	119.40
26	1H	1566	A	C8-N9-C4	-5.95	103.42	105.80
26	14	1204	A	C5-C6-N1	-5.95	114.72	117.70
26	1H	1021	A	C5-C6-N1	-5.95	114.73	117.70
26	1H	125	G	N3-C2-N2	5.95	124.06	119.90
26	1H	2558	C	N3-C4-C5	5.95	124.28	121.90
26	1H	2590	A	OP1-P-O3'	5.95	118.28	105.20
26	1H	439	G	O5'-P-OP2	5.94	117.83	110.70
26	1H	699	A	N1-C6-N6	5.94	122.17	118.60
1	13	1491	G	OP2-P-O3'	5.94	118.27	105.20
26	1H	773	U	N1-C2-N3	5.94	118.47	114.90
26	1H	2288	A	N9-C4-C5	-5.94	103.42	105.80
26	14	782	A	C6-N1-C2	-5.94	115.03	118.60
26	1H	2286	A	C8-N9-C1'	-5.94	117.01	127.70
26	1H	2422	A	N9-C4-C5	5.94	108.18	105.80
26	14	1698	A	C5-N7-C8	-5.94	100.93	103.90
26	14	2441	C	N3-C2-O2	-5.94	117.74	121.90
26	14	1327	C	N3-C2-O2	5.94	126.06	121.90
1	13	1065	U	P-O3'-C3'	5.94	126.83	119.70
26	1H	1403	C	C6-N1-C2	-5.94	117.92	120.30
26	14	1908	C	N3-C4-C5	-5.94	119.53	121.90
1	13	32	A	N7-C8-N9	5.94	116.77	113.80
26	1H	746	A	C6-N1-C2	-5.94	115.04	118.60
26	1H	2688	U	C4-C5-C6	5.94	123.26	119.70
26	14	2502	G	C2-N3-C4	5.94	114.87	111.90
26	1H	815	C	O5'-P-OP1	5.93	117.82	110.70
42	C8	74	LEU	CA-CB-CG	5.93	128.95	115.30
26	14	1727	U	C5-C4-O4	5.93	129.46	125.90
26	14	2023	G	C4-C5-N7	5.93	113.17	110.80
1	13	970	C	C6-N1-C2	-5.93	117.93	120.30
26	1H	49	A	N7-C8-N9	-5.93	110.83	113.80
26	1H	1624	G	C8-N9-C4	5.93	108.77	106.40
26	1H	1764	G	C5-C6-O6	5.93	132.16	128.60
26	1H	2254	C	N1-C2-O2	-5.93	115.34	118.90
26	1H	122	G	C8-N9-C4	5.93	108.77	106.40
49	J8	41	ARG	NE-CZ-NH1	5.93	123.27	120.30
1	1G	690	G	C2-N3-C4	-5.93	108.94	111.90
26	14	559	G	C5-C6-N1	-5.93	108.53	111.50
26	14	1778	U	O5'-P-OP1	-5.93	100.36	105.70
26	1H	337	C	C6-N1-C2	5.93	122.67	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2428	G	P-O3'-C3'	5.93	126.81	119.70
1	13	765	G	N3-C4-C5	-5.93	125.64	128.60
1	13	1512	U	O5'-P-OP2	-5.93	100.37	105.70
26	1H	424	G	C5-C6-O6	-5.93	125.05	128.60
26	1H	1368	G	C4-N9-C1'	5.93	134.21	126.50
1	13	903	G	O5'-P-OP2	-5.92	100.37	105.70
26	1H	1837	C	C6-N1-C2	-5.92	117.93	120.30
26	1H	1879	C	C6-N1-C2	-5.92	117.93	120.30
26	1H	1950	G	N3-C4-C5	5.92	131.56	128.60
26	1H	2465	C	C6-N1-C2	5.92	122.67	120.30
1	1G	117	G	C6-C5-N7	-5.92	126.85	130.40
56	1L	3	G	OP1-P-O3'	5.92	118.22	105.20
1	13	1128	C	N3-C2-O2	-5.92	117.76	121.90
56	1L	74	C	C2-N1-C1'	5.92	125.31	118.80
1	13	1455	G	N3-C4-C5	5.92	131.56	128.60
26	14	774	A	C4-C5-N7	5.92	113.66	110.70
26	14	2237	G	N1-C2-N2	-5.92	110.87	116.20
26	14	2725	A	N3-C4-C5	5.92	130.94	126.80
1	13	111	G	N3-C4-C5	5.92	131.56	128.60
26	1H	2441	C	C5-C4-N4	5.92	124.34	120.20
1	1G	585	G	N3-C4-C5	-5.92	125.64	128.60
1	1G	1206	G	C6-C5-N7	-5.92	126.85	130.40
26	14	1899	G	C4-N9-C1'	-5.92	118.81	126.50
1	13	1279	A	C4-N9-C1'	5.91	136.95	126.30
26	1H	728	G	O5'-P-OP2	-5.91	100.38	105.70
26	14	2755	C	C2-N1-C1'	5.91	125.30	118.80
26	1H	609	A	C4-C5-N7	5.91	113.66	110.70
26	1H	630	G	C2-N3-C4	-5.91	108.94	111.90
26	1H	2713	A	N3-C4-C5	5.91	130.94	126.80
1	13	752	G	N1-C6-O6	5.91	123.45	119.90
1	13	760	G	C6-C5-N7	-5.91	126.85	130.40
26	1H	1990	C	N3-C4-C5	-5.91	119.54	121.90
49	J8	80	LEU	CA-CB-CG	5.91	128.89	115.30
26	1H	585	G	OP2-P-O3'	5.91	118.20	105.20
1	1G	1028	C	C5-C6-N1	5.91	123.95	121.00
26	14	2424	C	O5'-P-OP1	-5.91	100.38	105.70
1	13	761	G	N3-C4-N9	5.91	129.54	126.00
26	1H	2318	G	O4'-C1'-N9	5.91	112.92	108.20
26	14	733	G	C6-C5-N7	-5.91	126.86	130.40
26	1H	2377	A	C2-N3-C4	-5.90	107.65	110.60
1	13	728	A	C8-N9-C4	-5.90	103.44	105.80
26	1H	788	A	C5-C6-N1	-5.90	114.75	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1142	U	O5'-P-OP1	5.90	117.78	110.70
26	1H	1626	G	O5'-P-OP2	5.90	117.78	110.70
1	13	366	C	O5'-P-OP1	-5.90	100.39	105.70
22	1K	61	C	N1-C2-O2	5.90	122.44	118.90
26	1H	1274	A	C8-N9-C4	-5.90	103.44	105.80
26	1H	641	C	O5'-P-OP1	-5.90	100.39	105.70
1	1G	748	C	P-O3'-C3'	5.90	126.78	119.70
26	14	2012	G	C4-C5-N7	5.90	113.16	110.80
26	1H	686	G	C6-C5-N7	-5.89	126.86	130.40
26	1H	1394	U	C6-N1-C2	-5.89	117.46	121.00
26	1H	1678	G	C6-C5-N7	-5.89	126.86	130.40
26	14	2012	G	N1-C6-O6	5.89	123.44	119.90
26	1H	2507	C	N3-C2-O2	-5.89	117.78	121.90
26	14	809	G	OP1-P-O3'	5.89	118.17	105.20
26	14	2346	A	C4-N9-C1'	5.89	136.91	126.30
1	13	749	C	C2-N1-C1'	5.89	125.28	118.80
26	1H	145	G	N7-C8-N9	-5.89	110.16	113.10
26	1H	941	A	OP1-P-OP2	-5.89	110.77	119.60
26	1H	1331	A	N9-C4-C5	5.89	108.16	105.80
26	1H	2639	A	C2-N3-C4	-5.89	107.66	110.60
26	14	1386	C	N3-C4-C5	-5.89	119.54	121.90
26	14	2030	A	N1-C6-N6	5.89	122.13	118.60
26	14	2523	G	N1-C6-O6	5.89	123.43	119.90
31	39	68	LYS	C-N-CA	-5.89	106.97	121.70
1	13	1524	C	N3-C4-C5	5.89	124.25	121.90
26	1H	1192	G	O5'-P-OP2	-5.89	100.40	105.70
26	14	130	C	N3-C4-C5	5.89	124.25	121.90
1	13	437	U	C6-N1-C2	-5.89	117.47	121.00
26	1H	461	C	C4-C5-C6	5.89	120.34	117.40
26	14	802	A	C6-N1-C2	-5.89	115.07	118.60
26	1H	2688	U	N3-C4-O4	-5.88	115.28	119.40
1	1G	518	C	O5'-P-OP1	5.88	117.76	110.70
34	69	12	LEU	CB-CG-CD1	5.88	121.00	111.00
27	16	49	C	C5-C6-N1	5.88	123.94	121.00
26	1H	464	U	O5'-P-OP2	5.88	117.76	110.70
26	1H	802	A	OP2-P-O3'	5.88	118.14	105.20
26	14	74	A	C6-C5-N7	-5.88	128.18	132.30
26	14	330	A	C4-C5-N7	5.88	113.64	110.70
26	14	461	C	C6-N1-C2	-5.88	117.95	120.30
26	1H	859	G	N3-C4-C5	5.88	131.54	128.60
26	1H	1918	A	C4-C5-N7	5.88	113.64	110.70
26	1H	2199	A	C8-N9-C4	-5.88	103.45	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2822	G	N9-C4-C5	-5.88	103.05	105.40
29	11	85	ASP	C-N-CD	5.88	140.75	128.40
26	14	866	A	C4-N9-C1'	5.88	136.88	126.30
26	14	1280	G	O5'-P-OP2	5.88	117.75	110.70
26	14	1313	U	N3-C4-O4	5.88	123.52	119.40
26	1H	1776	G	C5-C6-O6	-5.88	125.07	128.60
26	14	1187	G	N7-C8-N9	5.88	116.04	113.10
26	14	529	A	C6-C5-N7	-5.88	128.19	132.30
26	14	2439	A	C6-C5-N7	-5.88	128.19	132.30
23	2K	18	U	C6-N1-C1'	-5.87	112.98	121.20
26	1H	404	C	P-O3'-C3'	5.87	126.75	119.70
26	1H	699	A	N1-C2-N3	-5.87	126.36	129.30
26	1H	1332	G	C8-N9-C4	-5.87	104.05	106.40
1	1G	1181	G	N3-C4-N9	5.87	129.52	126.00
26	14	1656	C	N1-C2-O2	-5.87	115.38	118.90
26	14	1822	G	O5'-P-OP2	5.87	117.75	110.70
26	14	2828	C	N1-C2-O2	-5.87	115.38	118.90
26	1H	793	A	O5'-P-OP2	-5.87	100.42	105.70
26	1H	2607	G	N1-C2-N2	-5.87	110.92	116.20
26	14	2598	A	C8-N9-C4	5.87	108.15	105.80
26	1H	1784	A	O4'-C1'-N9	-5.87	103.50	108.20
26	1H	2368	C	N1-C2-O2	5.87	122.42	118.90
26	1H	1480	G	C8-N9-C4	-5.87	104.05	106.40
26	14	2477	C	N3-C2-O2	-5.87	117.79	121.90
26	1H	1558	A	P-O3'-C3'	5.87	126.74	119.70
26	1H	2676	C	N3-C4-C5	5.87	124.25	121.90
26	14	530	G	C4-C5-C6	5.87	122.32	118.80
26	14	1681	G	C4-C5-N7	5.87	113.15	110.80
23	2K	21	U	C2-N1-C1'	5.87	124.74	117.70
26	1H	667	U	N3-C4-O4	5.87	123.51	119.40
26	14	585	G	C6-C5-N7	-5.87	126.88	130.40
26	14	2502	G	OP2-P-O3'	5.87	118.10	105.20
26	1H	1654	A	N9-C4-C5	5.86	108.14	105.80
26	14	252	G	C2-N3-C4	5.86	114.83	111.90
26	14	1742	C	C6-N1-C2	-5.86	117.95	120.30
26	1H	1348	G	O5'-P-OP1	-5.86	100.42	105.70
26	1H	141	A	O5'-P-OP2	-5.86	100.43	105.70
26	1H	729	G	OP2-P-O3'	5.86	118.09	105.20
26	1H	1464	C	C6-N1-C2	-5.86	117.96	120.30
26	1H	1603	A	OP1-P-O3'	5.86	118.09	105.20
26	1H	1793	C	OP2-P-O3'	5.86	118.09	105.20
26	1H	1918	A	C8-N9-C4	5.86	108.14	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	123	G	N1-C6-O6	5.86	123.41	119.90
26	1H	947	G	N3-C4-C5	5.86	131.53	128.60
26	14	945	A	C5-C6-N1	-5.86	114.77	117.70
26	14	1187	G	C8-N9-C4	-5.86	104.06	106.40
25	4K	18	G	P-O3'-C3'	5.86	126.73	119.70
26	1H	117	G	C4-C5-N7	5.86	113.14	110.80
1	1G	666	G	N1-C6-O6	5.86	123.41	119.90
26	14	764	A	C2-N3-C4	5.86	113.53	110.60
26	14	2378	A	C8-N9-C4	5.86	108.14	105.80
26	1H	1495	A	OP1-P-O3'	5.85	118.08	105.20
26	1H	2525	G	N1-C6-O6	5.85	123.41	119.90
26	1H	394	A	N1-C6-N6	-5.85	115.09	118.60
26	14	2581	G	C8-N9-C4	-5.85	104.06	106.40
26	1H	693	C	C6-N1-C1'	5.85	127.82	120.80
26	1H	1904	G	OP2-P-O3'	5.85	118.07	105.20
26	14	2638	G	C5-C6-O6	5.85	132.11	128.60
26	1H	862	G	N3-C4-C5	-5.85	125.67	128.60
26	1H	1502	C	C5-C6-N1	5.85	123.92	121.00
26	14	912	C	C6-N1-C2	-5.85	117.96	120.30
26	14	2447	G	OP1-P-OP2	-5.85	110.83	119.60
26	1H	254	G	N1-C6-O6	5.85	123.41	119.90
26	14	278	A	OP1-P-O3'	5.85	118.06	105.20
26	14	1616	A	O4'-C1'-N9	5.85	112.88	108.20
26	1H	1160	G	C8-N9-C4	-5.85	104.06	106.40
1	13	792	A	O4'-C1'-N9	5.84	112.88	108.20
26	1H	82	G	OP1-P-O3'	5.84	118.06	105.20
26	14	803	U	O5'-P-OP1	5.84	117.71	110.70
26	14	2283	C	N1-C2-O2	-5.84	115.39	118.90
26	1H	1928	A	N1-C2-N3	-5.84	126.38	129.30
26	14	761	A	N1-C6-N6	-5.84	115.09	118.60
26	14	2251	G	C4-N9-C1'	5.84	134.09	126.50
26	14	2573	C	N3-C4-N4	5.84	122.09	118.00
26	1H	628	G	C4-C5-N7	-5.84	108.47	110.80
26	1H	672	C	O5'-P-OP2	-5.84	100.45	105.70
26	1H	860	U	C6-N1-C1'	-5.84	113.03	121.20
26	14	1342	A	N1-C2-N3	5.84	132.22	129.30
26	14	2418	A	N1-C6-N6	5.84	122.10	118.60
1	13	1205	U	N1-C2-N3	5.83	118.40	114.90
26	1H	2039	C	C6-N1-C2	-5.83	117.97	120.30
26	1H	2416	C	O5'-P-OP2	-5.83	100.45	105.70
26	14	247	G	C8-N9-C4	5.83	108.73	106.40
26	14	676	A	C4-C5-N7	5.83	113.62	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	32	A	N1-C2-N3	5.83	132.22	129.30
26	1H	318	C	OP1-P-O3'	5.83	118.03	105.20
26	1H	2059	A	C2-N3-C4	-5.83	107.68	110.60
1	13	1452	C	O4'-C1'-N1	5.83	112.86	108.20
26	1H	74	A	O4'-C1'-N9	-5.83	103.54	108.20
26	1H	1189	A	OP1-P-O3'	5.83	118.02	105.20
26	1H	1760	A	C8-N9-C4	-5.83	103.47	105.80
26	14	2547	U	O5'-P-OP2	-5.83	100.46	105.70
26	1H	893	C	P-O3'-C3'	5.82	126.69	119.70
27	16	103	U	O5'-P-OP1	5.82	117.69	110.70
1	1G	1071	C	N1-C2-O2	5.82	122.39	118.90
26	14	775	G	N1-C2-N2	-5.82	110.96	116.20
26	14	2425	A	O4'-C1'-N9	5.82	112.86	108.20
1	13	1525	G	C8-N9-C4	5.82	108.73	106.40
26	14	621	A	C8-N9-C4	-5.82	103.47	105.80
26	14	871	U	C5-C6-N1	5.82	125.61	122.70
26	1H	495	G	N1-C6-O6	5.82	123.39	119.90
26	1H	775	G	N1-C2-N2	-5.82	110.97	116.20
26	1H	1351	C	N1-C2-O2	-5.82	115.41	118.90
26	1H	1443	G	N1-C6-O6	5.82	123.39	119.90
26	14	2243	U	O5'-P-OP1	-5.82	100.46	105.70
26	1H	1555	G	N3-C4-C5	-5.82	125.69	128.60
26	14	1166	C	C6-N1-C2	-5.82	117.97	120.30
26	14	1409	C	OP1-P-OP2	5.82	128.32	119.60
26	14	2239	G	N3-C2-N2	5.82	123.97	119.90
26	1H	695	G	N3-C2-N2	5.81	123.97	119.90
26	1H	2501	C	C5-C6-N1	-5.81	118.09	121.00
26	14	1257	C	N1-C2-O2	-5.81	115.41	118.90
26	14	2023	G	C6-C5-N7	-5.81	126.91	130.40
26	14	2430	A	O5'-P-OP1	-5.81	100.47	105.70
26	1H	99	U	O4'-C1'-N1	5.81	112.85	108.20
26	1H	1593	G	OP1-P-O3'	5.81	117.98	105.20
26	1H	2082	A	O5'-P-OP2	-5.81	100.47	105.70
26	1H	2429	G	N3-C4-N9	-5.81	122.51	126.00
26	1H	211	A	N9-C4-C5	-5.81	103.48	105.80
26	14	684	G	C2-N3-C4	5.81	114.80	111.90
26	14	2245	U	OP1-P-OP2	-5.81	110.89	119.60
26	1H	444	C	O5'-P-OP1	5.81	117.67	110.70
26	1H	1690	A	O5'-P-OP1	-5.81	100.47	105.70
26	1H	2686	G	N3-C4-C5	-5.81	125.70	128.60
26	1H	2844	G	C6-C5-N7	-5.81	126.92	130.40
26	14	1819	A	O5'-P-OP1	-5.81	100.47	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	39	80	ALA	C-N-CD	5.81	140.59	128.40
1	13	1407	C	C5-C6-N1	5.80	123.90	121.00
26	1H	762	U	C2-N1-C1'	5.80	124.67	117.70
26	1H	1969	A	O5'-P-OP2	5.80	117.67	110.70
26	1H	250	G	C8-N9-C4	-5.80	104.08	106.40
26	1H	910	A	C5-C6-N1	-5.80	114.80	117.70
26	1H	1564	C	N3-C4-N4	-5.80	113.94	118.00
26	14	2056	G	C4-N9-C1'	5.80	134.04	126.50
26	1H	2392	A	N3-C4-C5	5.80	130.86	126.80
26	14	1443	G	C6-C5-N7	-5.80	126.92	130.40
26	1H	933	A	O5'-P-OP2	-5.80	100.48	105.70
26	14	1304	C	N3-C4-N4	-5.80	113.94	118.00
26	14	2387	U	C6-N1-C2	5.80	124.48	121.00
26	14	2565	A	N9-C4-C5	-5.80	103.48	105.80
26	1H	1674	G	O4'-C1'-N9	-5.80	103.56	108.20
26	1H	601	C	N3-C4-C5	5.79	124.22	121.90
26	14	1642	G	C5-C6-N1	5.79	114.40	111.50
1	1G	335	C	N1-C2-O2	5.79	122.38	118.90
26	1H	452	G	C2-N3-C4	5.79	114.80	111.90
26	1H	2061	G	OP1-P-O3'	5.79	117.94	105.20
26	14	1216	G	C5-C6-N1	-5.79	108.61	111.50
1	1G	561	U	OP1-P-O3'	5.79	117.94	105.20
26	1H	1834	U	C2-N1-C1'	5.79	124.64	117.70
26	14	602	G	C8-N9-C1'	-5.79	119.48	127.00
26	1H	706	A	O5'-P-OP1	-5.79	100.49	105.70
1	13	509	A	C2'-C3'-O3'	5.78	122.95	113.70
26	1H	750	A	OP1-P-O3'	-5.78	92.48	105.20
26	14	537	C	C6-N1-C2	-5.78	117.99	120.30
26	14	2387	U	N3-C2-O2	-5.78	118.15	122.20
26	1H	2395	C	C5-C4-N4	-5.78	116.15	120.20
1	1G	894	G	N1-C6-O6	5.78	123.37	119.90
1	13	1407	C	C2-N3-C4	5.78	122.79	119.90
26	1H	1625	C	N1-C2-O2	5.78	122.37	118.90
33	51	153	LYS	C-N-CA	5.78	146.28	122.00
1	1G	1487	G	N3-C2-N2	-5.78	115.85	119.90
26	14	1602	U	N3-C4-C5	-5.78	111.13	114.60
26	14	2237	G	N3-C2-N2	5.78	123.95	119.90
26	14	288	C	N1-C2-O2	5.78	122.37	118.90
26	1H	148	C	C6-N1-C2	5.78	122.61	120.30
26	14	1618	A	N1-C6-N6	-5.78	115.13	118.60
26	1H	259	G	N9-C4-C5	-5.78	103.09	105.40
26	1H	640	C	OP1-P-O3'	5.78	117.91	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1363	C	OP2-P-O3'	5.78	117.91	105.20
26	1H	1607	C	N1-C2-O2	5.77	122.36	118.90
26	14	182	A	N1-C6-N6	5.77	122.06	118.60
26	1H	184	C	C5-C4-N4	5.77	124.24	120.20
26	1H	684	G	N3-C4-C5	-5.77	125.71	128.60
26	1H	1402	C	OP2-P-O3'	5.77	117.90	105.20
26	1H	1807	G	C6-C5-N7	-5.77	126.94	130.40
26	14	1323	U	N3-C2-O2	5.77	126.24	122.20
26	14	1964	G	C5-C6-O6	5.77	132.06	128.60
1	13	896	C	C5-C6-N1	-5.77	118.11	121.00
26	1H	141(A)	C	OP2-P-O3'	5.77	117.89	105.20
26	1H	566	U	C6-N1-C2	5.77	124.46	121.00
26	1H	928	G	C5-C6-O6	-5.77	125.14	128.60
26	1H	1125	G	C6-C5-N7	5.77	133.86	130.40
26	1H	1125	G	C8-N9-C4	5.77	108.71	106.40
26	1H	1912	A	P-O3'-C3'	5.77	126.62	119.70
26	1H	746	A	N1-C2-N3	5.77	132.18	129.30
26	1H	841	A	N1-C6-N6	5.77	122.06	118.60
26	14	2279	G	N1-C2-N2	-5.77	111.01	116.20
26	14	2593	U	N1-C2-O2	5.77	126.84	122.80
26	1H	838	C	C5-C6-N1	-5.76	118.12	121.00
26	1H	2448	A	C5-N7-C8	-5.76	101.02	103.90
1	1G	301	G	N1-C6-O6	5.76	123.36	119.90
26	14	2267	A	OP1-P-OP2	5.76	128.25	119.60
26	1H	1274	A	N7-C8-N9	5.76	116.68	113.80
26	1H	676	A	N1-C2-N3	5.76	132.18	129.30
26	1H	859	G	C8-N9-C4	5.76	108.70	106.40
26	1H	1697	G	N9-C4-C5	-5.76	103.09	105.40
26	1H	1852	C	N1-C2-O2	-5.76	115.44	118.90
1	1G	1270	C	C6-N1-C2	-5.76	118.00	120.30
26	1H	49	A	N3-C4-N9	5.76	132.01	127.40
26	1H	461	C	N3-C4-C5	-5.76	119.60	121.90
26	1H	1366	A	C5-C6-N6	-5.76	119.09	123.70
26	14	190	A	N1-C6-N6	5.76	122.06	118.60
26	14	1978	A	OP2-P-O3'	5.76	117.87	105.20
26	1H	834	C	N3-C4-N4	5.76	122.03	118.00
1	13	562	C	O5'-P-OP2	-5.76	100.52	105.70
26	1H	1918	A	N1-C6-N6	5.76	122.05	118.60
26	1H	2476	A	N7-C8-N9	5.76	116.68	113.80
26	1H	2525	G	N1-C2-N2	5.76	121.38	116.20
26	1H	791	C	OP2-P-O3'	5.75	117.86	105.20
26	1H	1901	A	C2-N3-C4	5.75	113.48	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	248	G	N3-C4-C5	-5.75	125.72	128.60
26	1H	1674	G	C4-N9-C1'	5.75	133.98	126.50
26	1H	2711	A	OP1-P-O3'	5.75	117.86	105.20
27	16	111	U	C5-C4-O4	5.75	129.35	125.90
46	G8	84	ARG	N-CA-C	-5.75	95.46	111.00
26	14	252	G	C4-C5-N7	-5.75	108.50	110.80
26	14	1336	A	C5-C6-N1	5.75	120.58	117.70
23	2K	58	A	O5'-P-OP2	5.75	117.60	110.70
26	1H	1157	G	C8-N9-C1'	-5.75	119.53	127.00
1	1G	511	C	O4'-C1'-N1	5.75	112.80	108.20
26	14	2065	C	C6-N1-C2	-5.75	118.00	120.30
26	1H	598	G	O5'-P-OP2	-5.75	100.53	105.70
26	1H	1053	C	N1-C2-O2	5.75	122.35	118.90
26	1H	1300	U	C6-N1-C2	-5.75	117.55	121.00
26	1H	2422	A	C5-C6-N6	5.75	128.30	123.70
26	14	1022	G	P-O3'-C3'	5.75	126.60	119.70
26	1H	146	G	C8-N9-C4	5.74	108.70	106.40
26	1H	458	G	C4-C5-N7	-5.74	108.50	110.80
26	1H	1937	A	O5'-P-OP1	5.74	117.59	110.70
1	1G	690	G	N1-C6-O6	5.74	123.35	119.90
26	14	783	A	N3-C4-N9	-5.74	122.81	127.40
26	14	1574	C	C6-N1-C2	-5.74	118.00	120.30
26	14	2598	A	N9-C4-C5	-5.74	103.50	105.80
26	14	1704	G	N1-C6-O6	5.74	123.34	119.90
1	13	1205	U	N1-C2-O2	-5.74	118.78	122.80
26	14	788	A	C6-C5-N7	-5.74	128.28	132.30
26	14	1022	G	N9-C4-C5	5.74	107.69	105.40
26	14	1314	C	C6-N1-C1'	-5.74	113.92	120.80
26	14	1950	G	N7-C8-N9	5.74	115.97	113.10
1	1G	1270	C	C5-C6-N1	5.74	123.87	121.00
26	14	74	A	N1-C6-N6	5.74	122.04	118.60
26	14	79	G	C5-C6-O6	-5.74	125.16	128.60
26	14	2346	A	C5-N7-C8	-5.74	101.03	103.90
1	13	749	C	N1-C2-O2	5.73	122.34	118.90
26	14	195	A	C2-N3-C4	-5.73	107.73	110.60
26	14	447	A	O4'-C1'-N9	-5.73	103.61	108.20
26	1H	845	G	C5-N7-C8	-5.73	101.43	104.30
1	1G	328	C	C2-N1-C1'	5.73	125.11	118.80
26	1H	1497	U	OP1-P-O3'	5.73	117.81	105.20
26	14	1656	C	C6-N1-C2	-5.73	118.01	120.30
26	1H	700	G	N3-C2-N2	-5.73	115.89	119.90
1	13	509	A	C6-N1-C2	-5.73	115.16	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1140	C	C6-N1-C2	-5.73	118.01	120.30
26	1H	788	A	C8-N9-C4	5.73	108.09	105.80
26	1H	1967	C	N3-C2-O2	-5.73	117.89	121.90
26	1H	2283	C	N1-C2-O2	-5.73	115.46	118.90
26	14	929	G	N7-C8-N9	5.73	115.96	113.10
26	14	792	G	N3-C2-N2	5.73	123.91	119.90
26	14	2056	G	N3-C4-N9	5.73	129.44	126.00
26	14	2818	G	C8-N9-C4	5.73	108.69	106.40
26	1H	445	C	N3-C4-C5	-5.72	119.61	121.90
26	1H	1216	G	C8-N9-C4	-5.72	104.11	106.40
26	1H	1786	A	C8-N9-C1'	-5.72	117.40	127.70
26	1H	2333	A	C2-N3-C4	5.72	113.46	110.60
26	14	786	C	N3-C4-N4	-5.72	113.99	118.00
26	14	1569	A	O4'-C1'-N9	5.72	112.78	108.20
26	14	2239	G	N3-C4-N9	5.72	129.43	126.00
26	1H	308	G	N3-C4-N9	5.72	129.43	126.00
26	1H	1022	G	C6-N1-C2	-5.72	121.67	125.10
27	16	49	C	N3-C4-N4	5.72	122.00	118.00
26	14	198	C	C6-N1-C2	-5.72	118.01	120.30
26	14	2587	A	N1-C6-N6	5.72	122.03	118.60
1	13	900	A	N1-C6-N6	5.72	122.03	118.60
26	1H	847	U	C2-N3-C4	-5.72	123.57	127.00
26	1H	1229(A)	G	O5'-P-OP2	-5.72	100.55	105.70
26	14	951	C	OP1-P-O3'	5.72	117.78	105.20
26	14	1373	A	N7-C8-N9	-5.72	110.94	113.80
26	14	1786	A	N1-C2-N3	5.72	132.16	129.30
1	13	1158	C	N3-C2-O2	-5.72	117.90	121.90
26	1H	761	A	O5'-P-OP2	-5.72	100.55	105.70
27	16	96	G	C2-N3-C4	5.72	114.76	111.90
29	11	39	LYS	C-N-CA	5.72	135.99	121.70
26	1H	758	C	N3-C4-C5	5.72	124.19	121.90
26	1H	845	G	N3-C2-N2	5.72	123.90	119.90
26	1H	58	G	C8-N9-C4	-5.71	104.11	106.40
26	14	2387	U	C2-N3-C4	-5.71	123.57	127.00
26	1H	1272	A	O4'-C1'-N9	5.71	112.77	108.20
26	1H	749	C	N3-C2-O2	-5.71	117.90	121.90
26	1H	1278	A	N1-C6-N6	5.71	122.03	118.60
26	1H	2276	G	N3-C4-N9	5.71	129.43	126.00
26	1H	2019	A	N7-C8-N9	5.71	116.66	113.80
26	1H	449	A	OP1-P-OP2	-5.71	111.04	119.60
26	1H	1035	U	C5-C4-O4	5.71	129.32	125.90
23	2K	17	C	C2-N1-C1'	5.71	125.08	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2246	G	C5-N7-C8	5.71	107.15	104.30
26	14	1599	C	N3-C4-C5	-5.71	119.62	121.90
26	1H	1336	A	C6-C5-N7	5.71	136.29	132.30
1	13	1103	C	O5'-P-OP2	-5.70	100.57	105.70
26	1H	400	G	C5-C6-O6	-5.70	125.18	128.60
26	1H	1800	C	N3-C4-C5	-5.70	119.62	121.90
27	16	45	A	N7-C8-N9	5.70	116.65	113.80
26	14	188	G	C8-N9-C4	5.70	108.68	106.40
26	1H	566	U	OP1-P-O3'	5.70	117.74	105.20
26	1H	2508	G	C5-N7-C8	-5.70	101.45	104.30
27	16	24	G	N3-C4-C5	-5.70	125.75	128.60
1	1G	123	C	O5'-P-OP2	-5.70	100.57	105.70
1	13	1281	U	N1-C2-O2	5.70	126.79	122.80
26	1H	142	G	N3-C4-C5	5.70	131.45	128.60
26	14	2444	G	C5-C6-O6	5.70	132.02	128.60
26	1H	2242	G	C6-C5-N7	5.70	133.82	130.40
27	1J	8	U	O5'-P-OP2	-5.70	100.57	105.70
23	2K	17	C	C6-N1-C2	-5.70	118.02	120.30
26	1H	73	A	C2-N3-C4	5.70	113.45	110.60
26	1H	593	G	OP1-P-OP2	5.70	128.14	119.60
26	1H	2555	U	N1-C2-O2	-5.70	118.81	122.80
26	1H	2592	G	O5'-P-OP2	-5.70	100.57	105.70
26	14	216	A	N9-C4-C5	-5.70	103.52	105.80
26	14	801	G	C4-N9-C1'	-5.70	119.10	126.50
26	1H	2056	G	N3-C4-C5	-5.69	125.75	128.60
26	14	534	U	O5'-P-OP2	-5.69	100.58	105.70
26	14	801	G	C8-N9-C1'	5.69	134.40	127.00
26	1H	601	C	N1-C2-O2	5.69	122.31	118.90
26	1H	674	G	C8-N9-C4	5.69	108.68	106.40
26	1H	1649	G	C4-N9-C1'	5.69	133.90	126.50
26	1H	2330	G	C4-C5-N7	5.69	113.08	110.80
26	14	836	G	OP1-P-OP2	-5.69	111.07	119.60
26	14	2490	G	N1-C6-O6	-5.69	116.49	119.90
26	1H	1521	G	C8-N9-C4	-5.69	104.12	106.40
26	1H	2026	C	C4-C5-C6	5.69	120.24	117.40
26	14	198	C	C5-C6-N1	5.69	123.84	121.00
26	1H	195	A	O5'-P-OP1	5.69	117.52	110.70
26	1H	949	C	N3-C2-O2	5.69	125.88	121.90
26	1H	966	G	O5'-P-OP2	-5.69	100.58	105.70
26	14	967	C	O5'-P-OP2	-5.69	100.58	105.70
26	1H	1579	A	C8-N9-C4	-5.69	103.53	105.80
26	1H	1632	A	C6-C5-N7	-5.68	128.32	132.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2000	G	O5'-P-OP1	5.68	117.52	110.70
26	1H	2639	A	C5-N7-C8	-5.68	101.06	103.90
26	1H	2032	G	C5-N7-C8	5.68	107.14	104.30
26	1H	2508	G	C6-C5-N7	-5.68	126.99	130.40
23	2L	77	A	C8-N9-C4	5.68	108.07	105.80
1	13	955	U	C5-C6-N1	5.68	125.54	122.70
26	1H	1602	U	O5'-P-OP2	5.68	117.52	110.70
26	1H	2611	U	N3-C4-C5	5.68	118.01	114.60
26	14	330	A	C5-N7-C8	-5.68	101.06	103.90
26	14	771	G	OP1-P-O3'	5.68	117.70	105.20
26	1H	950	G	N3-C4-C5	-5.68	125.76	128.60
26	1H	1210	A	C8-N9-C4	-5.68	103.53	105.80
26	14	784	A	C5-C6-N6	5.68	128.24	123.70
26	1H	669	G	N1-C2-N2	5.68	121.31	116.20
39	98	75	LEU	CA-CB-CG	5.68	128.36	115.30
26	1H	1192	G	N1-C6-O6	5.68	123.31	119.90
1	13	1417	G	N3-C4-N9	5.67	129.40	126.00
23	2K	25	U	N3-C2-O2	-5.67	118.23	122.20
26	1H	382	G	C5-C6-O6	-5.67	125.19	128.60
26	1H	865	C	N3-C4-C5	5.67	124.17	121.90
26	1H	464	U	N1-C2-N3	5.67	118.30	114.90
26	14	2033	A	C5-C6-N1	5.67	120.54	117.70
26	1H	333	G	C8-N9-C1'	-5.67	119.63	127.00
26	1H	1427	A	N1-C2-N3	5.67	132.14	129.30
26	1H	2392	A	O5'-P-OP2	5.67	117.51	110.70
26	1H	2506	U	C5-C4-O4	5.67	129.30	125.90
26	14	764	A	C8-N9-C4	-5.67	103.53	105.80
26	14	2447	G	C8-N9-C1'	5.67	134.37	127.00
1	13	1502	A	C6-C5-N7	-5.67	128.33	132.30
26	14	1644	C	O5'-P-OP2	-5.67	100.60	105.70
1	13	1051	C	C6-N1-C2	-5.67	118.03	120.30
26	1H	270(K)	C	C5-C6-N1	5.67	123.83	121.00
26	1H	1125	G	N1-C6-O6	-5.67	116.50	119.90
26	1H	1421	G	N1-C6-O6	5.67	123.30	119.90
26	1H	1790	C	P-O3'-C3'	5.67	126.50	119.70
26	1H	2277	G	N1-C6-O6	-5.67	116.50	119.90
26	1H	2398	U	C5-C4-O4	5.67	129.30	125.90
26	14	1318	C	O5'-P-OP1	-5.67	100.60	105.70
26	1H	985	C	N3-C4-N4	-5.67	114.03	118.00
26	1H	1253	A	C8-N9-C4	5.67	108.07	105.80
26	14	1992	G	C2'-C3'-O3'	5.67	122.77	113.70
26	1H	97	C	N1-C2-O2	5.66	122.30	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	796	C	O5'-P-OP2	-5.66	100.60	105.70
26	1H	1839	G	C8-N9-C1'	-5.66	119.64	127.00
26	14	2249	U	N3-C4-C5	-5.66	111.20	114.60
26	14	1780	A	C5-C6-N6	5.66	128.23	123.70
1	13	895	G	N3-C4-N9	-5.66	122.60	126.00
1	13	1126	U	N3-C2-O2	-5.66	118.24	122.20
26	1H	459	U	OP2-P-O3'	5.66	117.65	105.20
26	1H	863	A	O5'-P-OP1	5.66	117.49	110.70
26	1H	1301	A	O5'-P-OP1	-5.66	100.61	105.70
26	1H	2577	A	C8-N9-C4	-5.66	103.53	105.80
14	5A	28	GLY	N-CA-C	5.66	127.25	113.10
26	1H	996	A	C8-N9-C4	5.66	108.06	105.80
26	1H	1780	A	N3-C4-N9	-5.66	122.87	127.40
26	14	1786	A	N3-C4-C5	5.66	130.76	126.80
26	1H	179	G	C2-N3-C4	-5.66	109.07	111.90
26	1H	1121	C	N3-C4-C5	5.66	124.16	121.90
26	1H	2082	A	O5'-P-OP1	5.66	117.49	110.70
1	13	1504	G	O5'-P-OP1	-5.66	100.61	105.70
26	1H	474	G	N3-C4-N9	-5.66	122.61	126.00
26	1H	1781	C	O5'-P-OP1	-5.66	100.61	105.70
26	1H	1931	U	C5-C4-O4	5.66	129.29	125.90
26	1H	1979	C	C6-N1-C2	-5.65	118.04	120.30
26	1H	309	G	N3-C4-C5	-5.65	125.77	128.60
26	1H	1931	U	C4-C5-C6	5.65	123.09	119.70
26	14	1276	A	OP1-P-OP2	-5.65	111.12	119.60
26	14	2359	C	C5-C4-N4	5.65	124.16	120.20
38	45	81	VAL	N-CA-C	5.65	126.26	111.00
1	13	281	G	N3-C4-N9	5.65	129.39	126.00
1	13	328	C	O5'-P-OP1	-5.65	100.61	105.70
26	1H	572	A	C8-N9-C4	-5.65	103.54	105.80
26	1H	982	C	OP1-P-O3'	5.65	117.63	105.20
26	1H	1354	A	N1-C2-N3	5.65	132.12	129.30
26	1H	1600	C	OP1-P-O3'	5.65	117.63	105.20
1	1G	99	C	C6-N1-C2	-5.65	118.04	120.30
26	14	2235	G	C5-C6-O6	-5.65	125.21	128.60
24	3K	27	G	N3-C4-C5	-5.65	125.78	128.60
26	1H	328	U	N3-C4-C5	-5.65	111.21	114.60
26	14	204	A	N1-C6-N6	5.65	121.99	118.60
26	14	694	U	OP1-P-OP2	-5.65	111.13	119.60
26	14	804	A	N7-C8-N9	-5.65	110.98	113.80
26	14	2456	C	C6-N1-C2	-5.65	118.04	120.30
1	13	1533	C	N3-C2-O2	-5.65	117.95	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1019	U	C5-C4-O4	5.65	129.29	125.90
29	11	257	LEU	CA-CB-CG	5.65	128.29	115.30
26	14	331	A	OP1-P-OP2	5.65	128.07	119.60
26	14	876	C	N1-C2-O2	5.65	122.29	118.90
26	14	273(F)	C	C2-N1-C1'	5.65	125.01	118.80
26	1H	2439	A	C5-N7-C8	-5.64	101.08	103.90
26	1H	2503	A	N1-C6-N6	5.64	121.99	118.60
26	14	2502	G	C8-N9-C4	-5.64	104.14	106.40
1	1G	932	C	N1-C2-O2	5.64	122.28	118.90
26	14	1972	A	C2-N3-C4	5.64	113.42	110.60
26	1H	296	C	C5-C6-N1	-5.64	118.18	121.00
26	1H	2060	A	OP1-P-O3'	-5.64	92.79	105.20
26	14	923	C	O5'-P-OP1	-5.64	100.62	105.70
26	1H	578	A	OP2-P-O3'	5.64	117.61	105.20
26	1H	2029	G	O5'-P-OP1	-5.64	100.62	105.70
26	14	580	C	C6-N1-C2	-5.64	118.04	120.30
26	14	744	G	C2-N3-C4	-5.64	109.08	111.90
26	14	1329	U	O5'-P-OP1	-5.64	100.62	105.70
2	1E	187	LEU	CA-CB-CG	5.64	128.26	115.30
26	1H	1528	A	C4-C5-N7	5.64	113.52	110.70
26	1H	1694	C	OP2-P-O3'	5.64	117.60	105.20
26	1H	1916	A	N1-C2-N3	5.64	132.12	129.30
26	1H	2247	A	N1-C2-N3	5.64	132.12	129.30
26	14	565	C	C6-N1-C2	5.64	122.55	120.30
1	13	690	G	N1-C6-O6	5.63	123.28	119.90
26	1H	179	G	N3-C2-N2	-5.63	115.96	119.90
26	1H	466	A	N1-C6-N6	5.63	121.98	118.60
26	1H	528	A	C5-N7-C8	-5.63	101.08	103.90
1	1G	1314	C	C6-N1-C2	-5.63	118.05	120.30
26	14	1178	C	N1-C2-O2	5.63	122.28	118.90
26	14	1823	G	C5-N7-C8	-5.63	101.48	104.30
26	1H	74	A	N1-C2-N3	5.63	132.12	129.30
26	1H	1613	G	N3-C2-N2	5.63	123.84	119.90
26	1H	524	U	N1-C2-O2	5.63	126.74	122.80
26	1H	670	A	O5'-P-OP1	5.63	117.46	110.70
26	1H	1828	G	OP1-P-OP2	-5.63	111.15	119.60
26	1H	1950	G	O5'-P-OP1	-5.63	100.63	105.70
26	14	2490	G	C8-N9-C4	-5.63	104.15	106.40
26	1H	822	U	N3-C2-O2	-5.63	118.26	122.20
26	14	2427	C	N1-C2-O2	-5.63	115.52	118.90
26	1H	1594	G	C4-N9-C1'	5.63	133.82	126.50
1	13	437	U	N3-C2-O2	-5.63	118.26	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	974	G	N1-C6-O6	-5.63	116.52	119.90
26	14	1950	G	C8-N9-C1'	-5.63	119.69	127.00
26	14	2213	U	C6-N1-C1'	-5.63	113.32	121.20
26	14	2275	C	C5-C6-N1	5.63	123.81	121.00
26	14	2755	C	C5-C6-N1	5.63	123.81	121.00
26	14	2778	A	O5'-P-OP2	-5.63	100.64	105.70
26	1H	2319	G	C4-C5-N7	5.62	113.05	110.80
26	14	2307	G	C8-N9-C1'	-5.62	119.69	127.00
26	1H	1614	A	N3-C4-C5	5.62	130.74	126.80
26	1H	1625	C	N3-C2-O2	-5.62	117.96	121.90
26	1H	1905	C	C5-C6-N1	5.62	123.81	121.00
37	78	23	PRO	C-N-CA	-5.62	110.49	122.30
26	14	2772	C	N3-C2-O2	-5.62	117.96	121.90
1	13	891	U	OP2-P-O3'	5.62	117.57	105.20
26	14	140	A	C8-N9-C4	-5.62	103.55	105.80
26	14	2710	C	N1-C2-O2	-5.62	115.53	118.90
26	1H	208	C	N3-C4-C5	5.62	124.15	121.90
26	1H	1972	A	C6-C5-N7	-5.62	128.37	132.30
26	1H	2441	C	N3-C2-O2	-5.62	117.97	121.90
26	14	1786	A	C4-N9-C1'	5.62	136.42	126.30
26	1H	44	A	C5-N7-C8	-5.62	101.09	103.90
26	1H	1948	G	N7-C8-N9	5.62	115.91	113.10
1	1G	894	G	C4-C5-N7	5.62	113.05	110.80
23	2L	15	G	C5-C6-O6	5.62	131.97	128.60
1	13	1499	A	C8-N9-C4	5.62	108.05	105.80
26	1H	17	G	N3-C4-C5	-5.62	125.79	128.60
26	1H	777	A	C6-N1-C2	-5.62	115.23	118.60
26	1H	1858	G	C5-C6-N1	-5.62	108.69	111.50
26	14	2822	G	O5'-P-OP2	-5.62	100.64	105.70
26	1H	1142(A)	A	C5-N7-C8	-5.61	101.09	103.90
29	11	272	ALA	N-CA-C	5.61	126.16	111.00
33	51	4	ILE	N-CA-C	-5.61	95.84	111.00
26	14	1955	U	C2-N3-C4	-5.61	123.63	127.00
26	14	2275	C	C5'-C4'-O4'	-5.61	102.36	109.10
26	1H	1780	A	N1-C6-N6	-5.61	115.23	118.60
1	1G	1502	A	C5-N7-C8	-5.61	101.09	103.90
26	14	1312	U	O5'-P-OP1	-5.61	100.65	105.70
26	1H	265	A	N3-C4-C5	5.61	130.72	126.80
26	1H	1023	U	O5'-P-OP1	-5.61	100.65	105.70
26	14	315	G	O5'-P-OP2	-5.61	100.65	105.70
1	13	575	G	C4-N9-C1'	-5.61	119.21	126.50
1	13	1504	G	N3-C4-C5	5.61	131.40	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1972	A	N3-C4-N9	5.61	131.88	127.40
26	1H	2234	G	C8-N9-C4	5.61	108.64	106.40
1	1G	1404	C	C6-N1-C2	-5.61	118.06	120.30
26	14	933	A	C5-N7-C8	-5.61	101.10	103.90
26	14	2072	G	N9-C4-C5	-5.61	103.16	105.40
26	1H	732	C	N1-C2-N3	5.60	123.12	119.20
26	14	729	G	C5-C6-O6	-5.60	125.24	128.60
26	14	2039	C	N3-C2-O2	-5.60	117.98	121.90
40	65	73	LEU	CA-CB-CG	5.60	128.19	115.30
1	13	1518	A	C4-C5-N7	-5.60	107.90	110.70
26	1H	961	C	N3-C2-O2	-5.60	117.98	121.90
26	1H	2439	A	C4-C5-N7	5.60	113.50	110.70
49	F5	36	GLY	N-CA-C	5.60	127.10	113.10
55	M5	61	LEU	CA-CB-CG	5.60	128.19	115.30
26	14	383	U	O5'-P-OP2	5.60	117.42	110.70
26	14	642	G	C8-N9-C4	-5.60	104.16	106.40
26	1H	305	U	C6-N1-C2	-5.60	117.64	121.00
26	1H	655	A	C8-N9-C4	-5.60	103.56	105.80
26	1H	723	G	O5'-P-OP2	-5.60	100.66	105.70
26	1H	1040	C	N1-C2-O2	5.60	122.26	118.90
26	14	2715	C	O5'-P-OP1	5.60	117.42	110.70
26	1H	141(A)	C	OP1-P-O3'	-5.60	92.89	105.20
26	1H	941	A	OP2-P-O3'	5.60	117.51	105.20
26	1H	1246	A	N1-C6-N6	-5.60	115.24	118.60
26	1H	2409	G	C5-C6-O6	-5.60	125.24	128.60
26	14	2345	G	N9-C4-C5	5.60	107.64	105.40
26	14	2358	G	N3-C2-N2	-5.60	115.98	119.90
27	1J	47	C	OP1-P-O3'	5.60	117.52	105.20
26	14	705	A	N1-C6-N6	5.60	121.96	118.60
1	13	963	G	N9-C4-C5	-5.59	103.16	105.40
26	1H	1032	A	C8-N9-C4	5.59	108.04	105.80
26	1H	1334	G	C4-N9-C1'	5.59	133.77	126.50
26	1H	1697	G	N3-C4-N9	5.59	129.36	126.00
26	1H	2060	A	OP2-P-O3'	5.59	117.51	105.20
1	1G	1139	G	C8-N9-C4	5.59	108.64	106.40
23	2K	23	G	N3-C4-C5	5.59	131.40	128.60
26	1H	51	G	O4'-C1'-N9	-5.59	103.73	108.20
26	1H	733	G	O5'-P-OP2	-5.59	100.67	105.70
26	1H	1758	G	P-O3'-C3'	5.59	126.41	119.70
26	1H	2283	C	N3-C2-O2	5.59	125.81	121.90
26	1H	2665	A	N1-C6-N6	5.59	121.95	118.60
26	14	1827	C	N1-C2-O2	5.59	122.25	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	75	C	N1-C2-O2	5.59	122.25	118.90
26	14	836	G	N1-C2-N3	-5.59	120.55	123.90
26	14	469	G	C5-C6-N1	5.59	114.29	111.50
26	14	1619	G	O5'-P-OP2	-5.59	100.67	105.70
26	1H	1561	G	OP1-P-O3'	5.59	117.49	105.20
26	1H	2518	A	N7-C8-N9	5.59	116.59	113.80
27	16	14	U	OP1-P-OP2	5.59	127.98	119.60
26	14	676	A	N1-C2-N3	5.59	132.09	129.30
26	1H	1331	A	N1-C2-N3	5.58	132.09	129.30
26	1H	1340	U	O4'-C1'-N1	5.58	112.67	108.20
26	1H	2078	C	O5'-P-OP2	5.58	117.40	110.70
26	1H	126	A	N9-C4-C5	5.58	108.03	105.80
26	1H	1938	A	OP1-P-OP2	5.58	127.97	119.60
26	1H	2036	C	OP2-P-O3'	5.58	117.48	105.20
1	1G	1259	C	C5-C6-N1	5.58	123.79	121.00
1	13	804	U	O5'-P-OP2	-5.58	100.68	105.70
1	13	1498	U	C6-N1-C1'	-5.58	113.39	121.20
24	3K	5	C	C6-N1-C2	-5.58	118.07	120.30
24	3K	76	A	N9-C4-C5	-5.58	103.57	105.80
26	1H	1565	C	O4'-C1'-N1	5.58	112.67	108.20
26	1H	1938	A	C5-C6-N6	-5.58	119.23	123.70
26	1H	2713	A	C6-C5-N7	-5.58	128.39	132.30
1	1G	317	G	N1-C6-O6	5.58	123.25	119.90
26	14	523	C	C5-C6-N1	5.58	123.79	121.00
26	14	2030	A	C5-C6-N6	-5.58	119.23	123.70
26	1H	391	G	N1-C2-N3	5.58	127.25	123.90
26	14	1762	A	C6-N1-C2	5.58	121.95	118.60
26	14	1934	C	N1-C2-O2	5.58	122.25	118.90
26	14	2610	C	C6-N1-C2	5.58	122.53	120.30
1	13	963	G	C4-N9-C1'	5.58	133.75	126.50
26	1H	1186	G	C2-N3-C4	5.58	114.69	111.90
26	1H	1758	G	OP2-P-O3'	5.58	117.47	105.20
26	1H	1972	A	C4-C5-C6	5.58	119.79	117.00
26	1H	508	G	C3'-C2'-C1'	-5.58	97.04	101.50
26	1H	1360	A	N1-C6-N6	5.58	121.94	118.60
26	14	794	G	C4-C5-N7	-5.58	108.57	110.80
26	14	2601	C	C6-N1-C2	-5.58	118.07	120.30
26	1H	398	G	N1-C6-O6	5.57	123.24	119.90
26	1H	1188	U	OP2-P-O3'	5.57	117.46	105.20
26	1H	1255	U	C4-C5-C6	5.57	123.04	119.70
1	1G	245	C	N1-C2-O2	-5.57	115.56	118.90
23	2L	21	U	N3-C2-O2	-5.57	118.30	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	119	A	C4-C5-N7	-5.57	107.91	110.70
26	1H	409	C	N3-C2-O2	5.57	125.80	121.90
26	14	2585	U	OP1-P-O3'	5.57	117.46	105.20
1	13	971	G	O5'-P-OP1	5.57	117.38	110.70
26	1H	570	G	C8-N9-C4	-5.57	104.17	106.40
26	1H	863	A	OP2-P-O3'	5.57	117.46	105.20
26	1H	864	G	C4-C5-N7	5.57	113.03	110.80
26	1H	1446	C	C6-N1-C2	-5.57	118.07	120.30
26	1H	1489	U	C5-C4-O4	5.57	129.24	125.90
26	1H	2525	G	C5-C6-O6	-5.57	125.26	128.60
26	1H	633	A	O5'-P-OP2	5.57	117.38	110.70
26	1H	693	C	N3-C4-N4	-5.57	114.10	118.00
26	1H	2331	G	N3-C2-N2	5.57	123.80	119.90
1	1G	352	C	C6-N1-C2	-5.57	118.07	120.30
26	14	2430	A	C4-N9-C1'	-5.57	116.28	126.30
26	1H	844	C	N1-C2-O2	-5.57	115.56	118.90
26	1H	2827	C	C5-C4-N4	-5.57	116.30	120.20
27	16	29	A	N7-C8-N9	5.57	116.58	113.80
26	14	2327	A	N9-C4-C5	5.57	108.03	105.80
26	14	2623	G	N3-C4-C5	-5.57	125.82	128.60
26	1H	117	G	C6-C5-N7	-5.57	127.06	130.40
26	1H	1120	G	C5-C6-O6	-5.57	125.26	128.60
26	14	2346	A	C8-N9-C4	-5.57	103.57	105.80
26	1H	2253	G	O5'-P-OP2	-5.56	100.69	105.70
1	13	723	U	C5-C6-N1	5.56	125.48	122.70
23	2K	18	U	N3-C2-O2	-5.56	118.31	122.20
26	1H	2567	G	C5-C6-O6	-5.56	125.26	128.60
26	14	933	A	N7-C8-N9	5.56	116.58	113.80
26	14	2447	G	C5-N7-C8	5.56	107.08	104.30
1	1G	529	G	N1-C6-O6	5.56	123.24	119.90
26	14	828	U	N3-C4-O4	-5.56	115.51	119.40
26	14	1471	A	C8-N9-C4	-5.56	103.58	105.80
26	14	1800	C	OP1-P-O3'	5.56	117.43	105.20
26	14	1950	G	C8-N9-C4	-5.56	104.18	106.40
26	14	2239	G	N9-C4-C5	-5.56	103.18	105.40
26	1H	2247	A	C2-N3-C4	-5.56	107.82	110.60
26	1H	2270	G	C5-C6-O6	-5.56	125.27	128.60
26	1H	2375	G	N9-C4-C5	-5.56	103.18	105.40
26	14	1129	A	O5'-P-OP2	-5.56	100.70	105.70
26	14	2324	C	C6-N1-C2	5.56	122.52	120.30
26	14	579	G	N3-C2-N2	-5.56	116.01	119.90
26	14	1600	C	O5'-P-OP2	-5.56	100.70	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	187	C	C5-C6-N1	5.55	123.78	121.00
26	14	1026	U	C5-C6-N1	5.55	125.48	122.70
26	14	2779	U	N3-C4-O4	-5.55	115.51	119.40
26	1H	2606	C	O5'-P-OP1	-5.55	100.70	105.70
1	1G	1404	C	C5-C6-N1	5.55	123.78	121.00
26	14	737	C	N1-C2-O2	-5.55	115.57	118.90
26	14	1807	G	N1-C6-O6	5.55	123.23	119.90
26	1H	187	G	C6-C5-N7	-5.55	127.07	130.40
26	1H	1198	U	C2-N3-C4	-5.55	123.67	127.00
26	1H	1204	A	C8-N9-C1'	-5.55	117.71	127.70
26	1H	1574	C	C5-C6-N1	-5.55	118.23	121.00
26	1H	1776	G	N1-C6-O6	5.55	123.23	119.90
26	14	273(F)	C	C6-N1-C2	-5.55	118.08	120.30
26	14	945	A	C4-N9-C1'	5.55	136.29	126.30
26	1H	51	G	OP2-P-O3'	5.55	117.40	105.20
26	1H	256	A	C2-N3-C4	-5.55	107.83	110.60
26	1H	795	C	C4-C5-C6	5.55	120.17	117.40
26	1H	2490	G	N9-C4-C5	-5.55	103.18	105.40
1	1G	1529	G	C8-N9-C4	-5.55	104.18	106.40
26	1H	1249	U	N1-C2-O2	-5.54	118.92	122.80
26	1H	2450	A	N1-C2-N3	5.54	132.07	129.30
29	19	235	GLY	N-CA-C	5.54	126.96	113.10
1	13	99	C	C5-C6-N1	5.54	123.77	121.00
26	1H	2442	C	OP1-P-O3'	5.54	117.40	105.20
26	14	1783	A	N1-C6-N6	-5.54	115.27	118.60
26	14	1926	U	N1-C2-N3	5.54	118.23	114.90
1	13	130	A	C5-C6-N6	-5.54	119.27	123.70
20	BI	99	LEU	CA-CB-CG	5.54	128.04	115.30
26	1H	509	C	OP2-P-O3'	5.54	117.39	105.20
26	1H	686	G	C4-C5-N7	5.54	113.02	110.80
26	1H	1204	A	C5-C6-N1	-5.54	114.93	117.70
26	14	950	G	N3-C4-C5	-5.54	125.83	128.60
26	1H	949	C	C6-N1-C2	5.54	122.52	120.30
26	1H	2199	A	O5'-P-OP1	-5.54	100.71	105.70
27	16	45	A	C8-N9-C4	-5.54	103.58	105.80
1	1G	28	G	C8-N9-C4	-5.54	104.18	106.40
27	1J	117	G	N3-C4-C5	5.54	131.37	128.60
26	1H	2062	A	N1-C6-N6	-5.54	115.28	118.60
26	1H	2440	C	N3-C4-C5	-5.54	119.68	121.90
52	M8	39	CYS	N-CA-C	-5.54	96.05	111.00
1	1G	800	G	O5'-P-OP2	-5.54	100.72	105.70
26	14	2584	U	OP1-P-OP2	-5.54	111.29	119.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1623	G	N1-C2-N3	5.54	127.22	123.90
26	1H	2607	G	N3-C4-N9	5.54	129.32	126.00
26	1H	2618	G	N9-C4-C5	5.54	107.61	105.40
1	1G	353	A	OP2-P-O3'	5.54	117.38	105.20
1	1G	1028	C	C6-N1-C2	-5.54	118.08	120.30
26	14	939	G	N1-C6-O6	5.54	123.22	119.90
26	1H	2311	A	N7-C8-N9	5.54	116.57	113.80
1	1G	970	C	C5-C6-N1	5.54	123.77	121.00
23	2L	24	C	C6-N1-C2	-5.54	118.09	120.30
26	1H	70	G	OP1-P-OP2	-5.53	111.30	119.60
26	1H	1426	G	N9-C4-C5	5.53	107.61	105.40
26	1H	2399	G	C5-N7-C8	5.53	107.07	104.30
1	1G	817	C	C6-N1-C2	5.53	122.51	120.30
26	14	1933	G	C6-C5-N7	-5.53	127.08	130.40
26	1H	835	A	O5'-P-OP1	5.53	117.34	110.70
26	1H	2509	G	O5'-P-OP1	-5.53	100.72	105.70
26	14	1688	U	O5'-P-OP2	-5.53	100.72	105.70
26	1H	528	A	C6-N1-C2	5.53	121.92	118.60
26	1H	2451	A	N1-C6-N6	-5.53	115.28	118.60
1	1G	771	G	C5-C6-O6	5.53	131.92	128.60
1	1G	1374	A	O4'-C1'-N9	5.53	112.62	108.20
26	14	537	C	C2-N1-C1'	5.53	124.88	118.80
26	14	848	G	N3-C4-N9	5.53	129.32	126.00
26	14	2435	A	C8-N9-C4	-5.53	103.59	105.80
1	13	793	U	N1-C2-O2	-5.53	118.93	122.80
1	13	1313	U	C5-C6-N1	5.53	125.46	122.70
26	1H	122	G	N3-C4-C5	5.53	131.36	128.60
26	1H	737	C	C2-N1-C1'	-5.53	112.72	118.80
26	1H	1403	C	N3-C2-O2	-5.53	118.03	121.90
26	1H	2374	C	C2-N3-C4	-5.53	117.14	119.90
1	13	346	G	C4-N9-C1'	5.52	133.68	126.50
26	1H	474	G	C8-N9-C4	-5.52	104.19	106.40
56	1L	3	G	P-O3'-C3'	5.52	126.33	119.70
26	14	413	C	C6-N1-C2	-5.52	118.09	120.30
26	14	866	A	N1-C6-N6	5.52	121.91	118.60
26	14	1696	G	O5'-P-OP2	-5.52	100.73	105.70
1	13	971	G	O5'-P-OP2	-5.52	100.73	105.70
26	1H	245	G	N9-C4-C5	-5.52	103.19	105.40
26	1H	2437	U	OP2-P-O3'	5.52	117.35	105.20
1	1G	945	G	N1-C6-O6	5.52	123.21	119.90
26	14	835	A	O5'-P-OP1	5.52	117.33	110.70
26	14	2688	U	C5-C4-O4	5.52	129.21	125.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1204	A	N1-C6-N6	5.52	121.91	118.60
1	1G	690	G	N3-C4-N9	-5.52	122.69	126.00
26	14	761	A	C8-N9-C4	5.52	108.01	105.80
26	1H	187	G	N3-C4-N9	5.52	129.31	126.00
26	1H	1969	A	O5'-P-OP1	-5.52	100.73	105.70
55	Q8	46	ARG	C-N-CA	5.52	135.50	121.70
1	13	791	G	C5-C6-O6	-5.52	125.29	128.60
26	1H	1968	G	C2-N3-C4	5.52	114.66	111.90
26	14	133	C	C6-N1-C2	5.52	122.51	120.30
26	1H	1644	C	C2-N1-C1'	5.52	124.87	118.80
26	14	2772	C	N1-C2-O2	5.52	122.21	118.90
27	1J	98	G	N9-C4-C5	-5.52	103.19	105.40
1	13	1107	C	C6-N1-C2	-5.51	118.09	120.30
26	1H	775	G	C6-C5-N7	-5.51	127.09	130.40
26	1H	1378	A	O5'-P-OP1	-5.51	100.74	105.70
26	14	1342	A	N1-C6-N6	5.51	121.91	118.60
27	1J	44	G	C4-N9-C1'	-5.51	119.33	126.50
26	1H	2448	A	C5-C6-N6	-5.51	119.29	123.70
26	14	1967	C	O5'-P-OP2	-5.51	100.74	105.70
26	14	2286	A	C8-N9-C4	-5.51	103.59	105.80
26	14	2590	A	O5'-P-OP2	5.51	117.31	110.70
1	13	810	C	O5'-P-OP1	-5.51	100.74	105.70
26	1H	245	G	N3-C4-N9	5.51	129.31	126.00
1	1G	1356	G	C8-N9-C4	-5.51	104.20	106.40
26	14	2501	C	C2-N1-C1'	-5.51	112.74	118.80
1	13	791	G	OP2-P-O3'	5.51	117.32	105.20
1	13	1279	A	C6-C5-N7	-5.51	128.44	132.30
26	1H	860	U	N1-C2-O2	5.51	126.66	122.80
26	1H	1568	G	N3-C4-C5	5.51	131.35	128.60
26	1H	1899	G	O4'-C1'-N9	5.51	112.61	108.20
26	14	453	C	C6-N1-C2	5.51	122.50	120.30
26	14	1304	C	N3-C4-C5	5.51	124.10	121.90
1	13	967	C	N3-C2-O2	5.51	125.76	121.90
1	13	1360	A	O4'-C1'-N9	5.51	112.61	108.20
26	1H	691	C	O5'-P-OP1	5.51	117.31	110.70
26	1H	2261	C	OP1-P-OP2	-5.51	111.34	119.60
26	14	2281	C	C6-N1-C1'	-5.51	114.19	120.80
1	13	783	C	C6-N1-C2	5.51	122.50	120.30
1	13	1482	G	O5'-P-OP2	-5.51	100.74	105.70
26	1H	145	G	C8-N9-C4	5.51	108.60	106.40
26	1H	2429	G	N1-C2-N2	5.51	121.16	116.20
3	22	34	LEU	CA-CB-CG	5.51	127.97	115.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	516	C	C5-C4-N4	-5.51	116.34	120.20
26	1H	1937	A	C5-C6-N1	-5.50	114.95	117.70
26	14	1355	G	N3-C4-C5	-5.50	125.85	128.60
26	14	2525	G	C5-C6-O6	5.50	131.90	128.60
26	14	2594	C	N3-C4-N4	5.50	121.85	118.00
1	13	1400	C	C5-C4-N4	-5.50	116.35	120.20
26	1H	1232	G	C5-C6-O6	-5.50	125.30	128.60
26	1H	1414	G	C8-N9-C4	-5.50	104.20	106.40
26	1H	2500	U	OP2-P-O3'	5.50	117.31	105.20
26	14	393	C	N3-C2-O2	-5.50	118.05	121.90
26	14	849	A	OP1-P-O3'	5.50	117.31	105.20
26	14	1784	A	OP1-P-O3'	5.50	117.31	105.20
26	1H	2665	A	C5-N7-C8	-5.50	101.15	103.90
1	1G	209	U	N1-C2-O2	5.50	126.65	122.80
26	14	1289	C	C6-N1-C2	-5.50	118.10	120.30
1	13	843	U	C5-C6-N1	5.50	125.45	122.70
26	1H	2373	G	C8-N9-C1'	-5.50	119.85	127.00
26	14	446	G	C4-C5-N7	5.50	113.00	110.80
26	14	585	G	C4-C5-C6	5.50	122.10	118.80
26	14	2547	U	OP2-P-O3'	5.50	117.30	105.20
26	1H	1621	U	N1-C2-O2	-5.50	118.95	122.80
1	1G	366	C	C6-N1-C2	5.50	122.50	120.30
26	14	692	C	C5-C4-N4	-5.50	116.35	120.20
26	14	1313	U	C5-C6-N1	5.50	125.45	122.70
26	14	1698	A	N1-C2-N3	5.50	132.05	129.30
26	14	2870	C	C6-N1-C2	-5.50	118.10	120.30
1	13	758	G	N3-C2-N2	-5.50	116.05	119.90
26	1H	932	G	N9-C4-C5	5.50	107.60	105.40
26	1H	939	G	N1-C2-N2	-5.50	111.25	116.20
26	1H	1623	G	N3-C4-C5	-5.50	125.85	128.60
26	14	1955	U	N3-C2-O2	-5.50	118.35	122.20
26	14	2581	G	N3-C4-C5	-5.50	125.85	128.60
1	13	545	C	N3-C4-N4	-5.50	114.15	118.00
1	1G	701	C	N1-C2-O2	5.50	122.20	118.90
26	1H	691	C	C5-C4-N4	-5.49	116.35	120.20
26	1H	2039	C	C5-C6-N1	5.49	123.75	121.00
26	1H	2827	C	N3-C4-N4	5.49	121.85	118.00
2	12	187	LEU	CA-CB-CG	5.49	127.93	115.30
26	1H	445	C	N1-C2-N3	5.49	123.04	119.20
26	1H	775	G	N9-C4-C5	-5.49	103.20	105.40
26	1H	1663	C	OP1-P-O3'	5.49	117.28	105.20
23	2L	77	A	N9-C4-C5	-5.49	103.60	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	9	U	C2-N1-C1'	5.49	124.29	117.70
26	14	705	A	C5-C6-N6	-5.49	119.31	123.70
26	14	1382	G	N9-C4-C5	-5.49	103.20	105.40
26	1H	589	C	O5'-P-OP2	-5.49	100.76	105.70
26	1H	738	G	O5'-P-OP1	5.49	117.29	110.70
26	1H	1528	A	N1-C6-N6	5.49	121.89	118.60
27	16	100	G	C4-N9-C1'	5.49	133.63	126.50
1	1G	281	G	N3-C4-N9	5.49	129.29	126.00
1	1G	1486	G	C8-N9-C4	5.49	108.59	106.40
26	14	2841	C	N1-C2-O2	-5.49	115.61	118.90
26	14	800	A	OP1-P-OP2	5.49	127.83	119.60
26	1H	566	U	N1-C2-N3	-5.49	111.61	114.90
26	14	2023	G	C5-C6-O6	-5.49	125.31	128.60
1	13	1492	A	O5'-P-OP2	-5.48	100.76	105.70
1	13	1496	C	C5-C6-N1	-5.48	118.26	121.00
26	1H	141(A)	C	C5-C6-N1	5.48	123.74	121.00
26	1H	430	G	N1-C6-O6	5.48	123.19	119.90
26	1H	2375	G	N7-C8-N9	-5.48	110.36	113.10
26	14	2346	A	N9-C1'-C2'	5.48	121.13	114.00
1	13	795	C	O5'-P-OP2	-5.48	100.77	105.70
26	1H	1839	G	N9-C4-C5	-5.48	103.21	105.40
26	1H	2581	G	C4-N9-C1'	5.48	133.63	126.50
26	14	2377	A	N3-C4-C5	5.48	130.64	126.80
26	1H	210	C	N3-C4-C5	5.48	124.09	121.90
57	3L	63	U	C5-C6-N1	5.48	125.44	122.70
26	14	1248	G	OP1-P-OP2	-5.48	111.38	119.60
1	13	238	G	C8-N9-C4	5.48	108.59	106.40
26	1H	2699	C	C2-N3-C4	-5.48	117.16	119.90
26	14	1359	A	C8-N9-C4	5.48	107.99	105.80
26	14	2073	C	N1-C2-O2	-5.48	115.61	118.90
26	14	2387	U	N1-C2-O2	5.48	126.64	122.80
26	14	2512	C	C6-N1-C2	5.48	122.49	120.30
26	14	1187	G	C5-C6-N1	-5.48	108.76	111.50
26	14	1318	C	C5-C6-N1	5.48	123.74	121.00
26	14	2512	C	N3-C4-C5	5.48	124.09	121.90
26	1H	1700	A	O5'-P-OP2	-5.48	100.77	105.70
1	1G	1502	A	C6-C5-N7	-5.48	128.47	132.30
26	14	1802	A	C6-N1-C2	-5.48	115.31	118.60
1	13	865	A	C5-N7-C8	-5.47	101.16	103.90
26	14	1259	G	OP1-P-OP2	-5.47	111.39	119.60
26	14	1835	G	C4-N9-C1'	5.47	133.62	126.50
26	14	2237	G	C5-C6-O6	5.47	131.88	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	548	G	O5'-P-OP2	-5.47	100.78	105.70
26	1H	332	A	OP2-P-O3'	5.47	117.24	105.20
26	1H	1278	A	C5-C6-N6	-5.47	119.32	123.70
26	1H	1429	G	N1-C6-O6	-5.47	116.62	119.90
26	1H	2025	C	C6-N1-C2	-5.47	118.11	120.30
26	14	2424	C	OP2-P-O3'	5.47	117.24	105.20
26	1H	1470	G	O5'-P-OP1	-5.47	100.78	105.70
26	1H	1579	A	N7-C8-N9	5.47	116.53	113.80
26	1H	2581	G	C5-C6-O6	5.47	131.88	128.60
56	1L	69	A	P-O3'-C3'	5.47	126.26	119.70
26	1H	47	C	C6-N1-C2	-5.47	118.11	120.30
26	1H	1189	A	O5'-P-OP1	-5.47	100.78	105.70
26	1H	1950	G	C6-C5-N7	-5.47	127.12	130.40
26	1H	2377	A	C4-C5-N7	5.47	113.43	110.70
1	13	1144	G	N3-C4-N9	-5.47	122.72	126.00
26	1H	9	U	C5-C6-N1	5.47	125.43	122.70
26	1H	46	C	O5'-P-OP2	5.47	117.26	110.70
26	1H	395	U	C2-N1-C1'	5.47	124.26	117.70
26	1H	648	G	C4-C5-N7	-5.47	108.61	110.80
26	1H	1521	G	N7-C8-N9	5.47	115.83	113.10
26	14	48	G	C5-C6-O6	5.47	131.88	128.60
26	14	58	G	C4-N9-C1'	5.47	133.61	126.50
26	14	2502	G	N1-C6-O6	-5.47	116.62	119.90
1	13	1488	G	C6-C5-N7	-5.46	127.12	130.40
26	1H	308	G	C8-N9-C1'	-5.46	119.90	127.00
26	1H	461	C	O5'-P-OP1	-5.46	100.78	105.70
4	32	135	LEU	CA-CB-CG	5.46	127.87	115.30
26	14	1386	C	O5'-P-OP1	-5.46	100.78	105.70
26	14	1704	G	C5-C6-O6	-5.46	125.32	128.60
26	1H	2418	A	OP1-P-OP2	-5.46	111.41	119.60
26	1H	2449	U	O5'-P-OP1	-5.46	100.78	105.70
26	1H	124	G	C5-C6-N1	5.46	114.23	111.50
26	1H	211	A	C5-C6-N6	-5.46	119.33	123.70
26	1H	446	G	C5-C6-O6	-5.46	125.32	128.60
26	1H	796	C	C5-C6-N1	-5.46	118.27	121.00
26	1H	1831	G	N7-C8-N9	5.46	115.83	113.10
26	1H	1943	U	OP1-P-OP2	5.46	127.79	119.60
26	14	992	C	N1-C2-O2	5.46	122.18	118.90
26	14	1698	A	C5-C6-N6	-5.46	119.33	123.70
26	14	2779	U	N1-C2-N3	5.46	118.18	114.90
1	13	422	C	C5-C6-N1	5.46	123.73	121.00
1	13	1219	U	C6-N1-C2	-5.46	117.72	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1280	G	OP1-P-OP2	-5.46	111.41	119.60
26	1H	1429	G	C5-C6-O6	5.46	131.88	128.60
26	1H	1776	G	C5-N7-C8	-5.46	101.57	104.30
26	1H	2236	C	O5'-P-OP1	-5.46	100.79	105.70
27	16	44	G	C8-N9-C1'	5.46	134.10	127.00
56	1L	74	C	N3-C2-O2	-5.46	118.08	121.90
26	14	211	A	N9-C4-C5	-5.46	103.62	105.80
26	14	2048	G	N7-C8-N9	5.46	115.83	113.10
26	1H	728	G	C8-N9-C4	5.46	108.58	106.40
26	1H	1555	G	N3-C4-N9	5.46	129.27	126.00
26	1H	2488	A	C4-C5-C6	5.46	119.73	117.00
27	16	81	G	C2-N3-C4	-5.46	109.17	111.90
26	14	945	A	C8-N9-C1'	-5.46	117.88	127.70
26	14	2573	C	C2-N1-C1'	5.46	124.80	118.80
26	1H	271(B)	G	C4-N9-C1'	5.46	133.59	126.50
26	1H	2406	U	O4'-C1'-N1	-5.46	103.84	108.20
1	13	965	A	N1-C6-N6	5.45	121.87	118.60
26	1H	684	G	OP1-P-OP2	5.45	127.78	119.60
27	16	44	G	C4-N9-C1'	-5.45	119.41	126.50
28	79	53	ARG	CG-CD-NE	-5.45	100.35	111.80
26	1H	108	U	N1-C2-O2	5.45	126.62	122.80
26	1H	2395	C	C6-N1-C1'	-5.45	114.26	120.80
26	14	955	C	C6-N1-C1'	5.45	127.34	120.80
26	1H	701	G	C8-N9-C4	-5.45	104.22	106.40
27	16	54	G	C5-N7-C8	-5.45	101.58	104.30
26	14	955	C	C6-N1-C2	-5.45	118.12	120.30
1	13	963	G	N1-C2-N3	5.45	127.17	123.90
22	1K	75	C	N3-C2-O2	-5.45	118.09	121.90
26	1H	795	C	C5-C6-N1	-5.45	118.28	121.00
26	1H	1021	A	N1-C6-N6	5.45	121.87	118.60
26	1H	1344	G	C5-C6-O6	-5.45	125.33	128.60
26	1H	1462	C	C6-N1-C2	-5.45	118.12	120.30
26	1H	2766	G	C4-N9-C1'	5.45	133.58	126.50
26	1H	574	C	OP1-P-OP2	5.45	127.77	119.60
26	1H	1888	G	N3-C4-N9	5.45	129.27	126.00
26	1H	624	C	C5-C6-N1	5.45	123.72	121.00
26	1H	651	G	C2-N3-C4	5.45	114.62	111.90
26	1H	677	A	C8-N9-C4	-5.45	103.62	105.80
26	1H	1909	C	OP1-P-O3'	5.45	117.18	105.20
1	1G	12	U	N3-C2-O2	-5.45	118.39	122.20
26	14	2610	C	O5'-P-OP1	-5.45	100.80	105.70
1	13	891	U	N1-C2-O2	5.44	126.61	122.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1259	G	N3-C2-N2	5.44	123.71	119.90
26	14	1627	G	O5'-P-OP2	-5.44	100.80	105.70
26	14	1906	G	C8-N9-C4	-5.44	104.22	106.40
26	14	2066	C	C5-C6-N1	5.44	123.72	121.00
26	1H	1437	C	O5'-P-OP2	-5.44	100.80	105.70
26	1H	2033	A	N1-C6-N6	-5.44	115.33	118.60
26	1H	2424	C	OP1-P-OP2	5.44	127.77	119.60
1	1G	913	A	C8-N9-C4	-5.44	103.62	105.80
26	14	1775	U	C5-C6-N1	-5.44	119.98	122.70
1	13	1303	C	C2-N1-C1'	5.44	124.78	118.80
26	1H	190	A	C5-C6-N6	-5.44	119.35	123.70
26	1H	1264	G	C6-C5-N7	-5.44	127.14	130.40
26	1H	2072	G	OP1-P-O3'	5.44	117.17	105.20
26	14	1423	G	C8-N9-C4	5.44	108.58	106.40
26	14	1854	A	C8-N9-C4	-5.44	103.62	105.80
1	13	1417	G	N3-C4-C5	-5.44	125.88	128.60
26	1H	2427	C	OP2-P-O3'	5.44	117.17	105.20
1	13	1279	A	C5-N7-C8	-5.44	101.18	103.90
26	1H	973	A	O5'-P-OP2	-5.44	100.81	105.70
26	1H	1400	G	N9-C4-C5	5.44	107.58	105.40
26	14	574	C	C2-N1-C1'	-5.44	112.82	118.80
1	13	577	G	O5'-P-OP2	-5.44	100.81	105.70
26	1H	445	C	C4-C5-C6	5.44	120.12	117.40
26	1H	577	G	N1-C2-N2	-5.44	111.31	116.20
26	1H	780	G	C2-N3-C4	-5.44	109.18	111.90
27	16	40	U	C5-C4-O4	-5.44	122.64	125.90
27	16	98	G	OP1-P-OP2	5.44	127.75	119.60
26	14	632	A	O5'-P-OP2	5.44	117.22	110.70
26	1H	70	G	C8-N9-C4	-5.43	104.23	106.40
1	1G	1526	G	C5-C6-O6	-5.43	125.34	128.60
37	35	85	LEU	CA-CB-CG	5.43	127.80	115.30
1	13	1158	C	C5-C6-N1	5.43	123.72	121.00
26	1H	766	C	C5-C4-N4	-5.43	116.40	120.20
26	1H	2644	G	N3-C4-N9	-5.43	122.74	126.00
26	14	1241	A	C5-C6-N1	-5.43	114.98	117.70
26	14	1276	A	C4-C5-N7	5.43	113.42	110.70
26	14	1657	C	C5-C4-N4	-5.43	116.40	120.20
27	1J	74	U	C5-C4-O4	5.43	129.16	125.90
26	1H	2368	C	N3-C2-O2	-5.43	118.10	121.90
1	1G	950	U	C5-C6-N1	5.43	125.42	122.70
26	14	203	C	C2-N3-C4	-5.43	117.18	119.90
26	1H	787	U	C2-N3-C4	-5.43	123.74	127.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2783	G	C4-N9-C1'	5.43	133.56	126.50
26	14	1156	A	O4'-C1'-N9	-5.43	103.86	108.20
1	13	566	G	O5'-P-OP2	-5.43	100.81	105.70
26	1H	2295	C	C6-N1-C2	-5.43	118.13	120.30
57	3L	76	A	C5-C6-N6	-5.43	119.36	123.70
26	14	516	C	N3-C4-N4	5.43	121.80	118.00
26	14	671	C	N1-C2-N3	5.43	123.00	119.20
26	14	1283	G	OP1-P-OP2	5.43	127.74	119.60
26	1H	776	G	N9-C4-C5	5.42	107.57	105.40
26	1H	783	A	C5-C6-N6	-5.42	119.36	123.70
26	1H	813	U	OP1-P-OP2	5.42	127.74	119.60
26	1H	1443	G	N3-C2-N2	-5.42	116.10	119.90
26	14	530	G	C8-N9-C4	-5.42	104.23	106.40
26	14	2307	G	C8-N9-C4	-5.42	104.23	106.40
1	13	36	C	C5-C6-N1	5.42	123.71	121.00
26	1H	251	A	O5'-P-OP1	-5.42	100.82	105.70
26	1H	2424	C	N1-C2-O2	5.42	122.15	118.90
26	14	37	C	O5'-P-OP2	-5.42	100.82	105.70
1	13	422	C	N3-C4-N4	5.42	121.79	118.00
26	1H	500	G	C6-C5-N7	5.42	133.65	130.40
26	1H	517	C	C2-N1-C1'	5.42	124.76	118.80
26	1H	1616	A	O4'-C1'-N9	5.42	112.53	108.20
27	16	61	G	C8-N9-C4	-5.42	104.23	106.40
37	78	26	GLY	N-CA-C	-5.42	99.55	113.10
1	1G	352	C	C5-C6-N1	5.42	123.71	121.00
1	13	422	C	C6-N1-C1'	-5.42	114.30	120.80
1	13	883	C	C6-N1-C2	-5.42	118.13	120.30
23	2K	76	C	C6-N1-C2	-5.42	118.13	120.30
26	1H	649	G	O5'-P-OP2	-5.42	100.83	105.70
26	1H	734	A	OP1-P-OP2	5.42	127.72	119.60
26	1H	1695	G	N3-C4-C5	-5.42	125.89	128.60
26	14	189	G	N9-C4-C5	-5.42	103.23	105.40
26	1H	1628	G	C6-C5-N7	-5.42	127.15	130.40
26	14	1468	C	C5-C6-N1	5.42	123.71	121.00
26	14	2245	U	C5-C6-N1	5.42	125.41	122.70
37	35	45	LEU	CA-CB-CG	5.42	127.75	115.30
26	1H	1983	C	OP2-P-O3'	5.41	117.11	105.20
52	M8	39	CYS	C-N-CA	5.41	135.24	121.70
1	1G	197	A	C8-N9-C4	-5.41	103.64	105.80
26	14	1388	G	O5'-P-OP2	-5.41	100.83	105.70
26	14	1772	G	OP1-P-OP2	5.41	127.72	119.60
26	14	1779	U	O5'-P-OP2	-5.41	100.83	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2199	A	O5'-P-OP1	-5.41	100.83	105.70
26	1H	1021	A	C6-C5-N7	-5.41	128.51	132.30
26	1H	2711	A	P-O3'-C3'	5.41	126.19	119.70
1	13	1200	C	N1-C2-O2	5.41	122.15	118.90
26	1H	699	A	C5-C6-N6	-5.41	119.37	123.70
26	14	252	G	N3-C4-C5	-5.41	125.89	128.60
1	13	484	G	P-O3'-C3'	5.41	126.19	119.70
26	1H	77	C	N3-C4-N4	5.41	121.79	118.00
27	16	49	C	C5-C4-N4	-5.41	116.41	120.20
26	1H	755	C	C4-C5-C6	5.41	120.10	117.40
26	1H	2019	A	C8-N9-C4	-5.41	103.64	105.80
26	14	499	U	N1-C2-N3	5.41	118.14	114.90
26	14	2724	C	N1-C2-O2	-5.41	115.66	118.90
38	45	61	GLY	N-CA-C	5.41	126.62	113.10
1	13	130	A	N1-C6-N6	5.41	121.84	118.60
1	13	1480	G	N3-C2-N2	-5.41	116.12	119.90
26	1H	702	G	C4-C5-C6	5.41	122.04	118.80
26	1H	715	G	N1-C2-N2	-5.41	111.33	116.20
26	1H	2286	A	C8-N9-C4	-5.41	103.64	105.80
26	14	732	C	C4-C5-C6	5.41	120.10	117.40
26	1H	1786	A	N9-C1'-C2'	5.40	121.03	114.00
26	14	1342	A	C6-C5-N7	-5.40	128.52	132.30
1	13	647	C	C5-C6-N1	5.40	123.70	121.00
26	1H	692	C	C2-N3-C4	-5.40	117.20	119.90
26	1H	2262	U	C6-N1-C2	-5.40	117.76	121.00
26	14	689	A	O5'-P-OP2	-5.40	100.84	105.70
26	14	1085	A	P-O3'-C3'	5.40	126.18	119.70
26	14	1237	A	N1-C6-N6	-5.40	115.36	118.60
26	1H	389	G	C8-N9-C4	5.40	108.56	106.40
26	1H	657	U	C5-C4-O4	5.40	129.14	125.90
26	1H	1019	U	N3-C2-O2	-5.40	118.42	122.20
26	1H	1334	G	N7-C8-N9	5.40	115.80	113.10
26	14	1836	C	O5'-P-OP2	-5.40	100.84	105.70
26	14	2364	C	N3-C2-O2	-5.40	118.12	121.90
26	1H	68	G	N3-C2-N2	-5.40	116.12	119.90
26	1H	1336	A	C4-C5-N7	-5.40	108.00	110.70
26	1H	2503	A	C5-C6-N6	-5.40	119.38	123.70
26	1H	2607	G	N9-C4-C5	-5.40	103.24	105.40
29	11	60	ARG	NE-CZ-NH2	-5.40	117.60	120.30
1	13	1305	G	N1-C2-N2	-5.40	111.34	116.20
26	1H	1594	G	N3-C4-C5	-5.40	125.90	128.60
26	1H	2229	C	C5-C4-N4	-5.40	116.42	120.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2357	U	O5'-P-OP2	-5.40	100.84	105.70
26	14	115	C	C6-N1-C2	5.40	122.46	120.30
26	14	2041	U	N3-C4-O4	5.40	123.18	119.40
1	1G	1406	U	OP1-P-OP2	-5.39	111.51	119.60
26	14	1988	C	C5-C4-N4	-5.39	116.42	120.20
26	1H	53	A	OP1-P-O3'	5.39	117.06	105.20
26	1H	683	C	C6-N1-C2	5.39	122.46	120.30
26	1H	828	U	N1-C2-O2	5.39	126.58	122.80
26	1H	840	C	C6-N1-C2	5.39	122.46	120.30
26	1H	1316	U	O5'-P-OP2	-5.39	100.85	105.70
26	1H	1622	G	N1-C6-O6	-5.39	116.67	119.90
26	1H	2003	G	OP2-P-O3'	5.39	117.06	105.20
26	1H	2573	C	O5'-P-OP2	-5.39	100.85	105.70
26	14	783	A	C5-C6-N6	-5.39	119.39	123.70
26	14	1605	C	N3-C2-O2	5.39	125.67	121.90
1	13	233	C	C6-N1-C2	-5.39	118.14	120.30
26	1H	834	C	OP2-P-O3'	5.39	117.06	105.20
56	1L	20	U	C2-N1-C1'	5.39	124.17	117.70
26	14	621	A	C6-C5-N7	-5.39	128.53	132.30
1	13	960	U	C2-N1-C1'	5.39	124.17	117.70
26	1H	142	G	N3-C2-N2	-5.39	116.13	119.90
26	1H	463	G	N3-C2-N2	5.39	123.67	119.90
26	1H	791	C	P-O3'-C3'	5.39	126.17	119.70
26	1H	1220	A	N1-C6-N6	-5.39	115.37	118.60
26	1H	2057	A	C5-C6-N6	-5.39	119.39	123.70
26	1H	2567	G	N1-C6-O6	5.39	123.13	119.90
26	14	1886	C	C6-N1-C2	-5.39	118.14	120.30
26	1H	197	A	OP2-P-O3'	5.39	117.06	105.20
26	1H	415	A	N1-C6-N6	5.39	121.83	118.60
26	1H	845	G	C6-C5-N7	-5.39	127.17	130.40
34	69	131	LYS	C-N-CD	-5.39	108.75	120.60
26	1H	621	A	C6-C5-N7	-5.39	128.53	132.30
26	1H	1879	C	C5-C6-N1	5.39	123.69	121.00
26	1H	2199	A	OP2-P-O3'	5.39	117.05	105.20
1	1G	87	A	P-O3'-C3'	5.39	126.16	119.70
26	14	1251	C	OP1-P-OP2	5.39	127.68	119.60
26	14	2473	U	N1-C2-O2	5.39	126.57	122.80
1	13	843	U	N3-C2-O2	-5.38	118.43	122.20
1	13	900	A	C5-C6-N6	-5.38	119.39	123.70
26	1H	1274	A	C4-C5-C6	5.38	119.69	117.00
26	1H	1453	A	C8-N9-C4	5.38	107.95	105.80
23	2L	42	C	N1-C2-O2	5.38	122.13	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	667	U	N3-C4-O4	5.38	123.17	119.40
46	C5	31	LEU	CA-CB-CG	5.38	127.68	115.30
26	1H	1663	C	N3-C4-N4	5.38	121.77	118.00
26	1H	2019	A	C6-C5-N7	-5.38	128.53	132.30
26	1H	2351	G	C6-C5-N7	-5.38	127.17	130.40
26	1H	2365	G	O5'-P-OP2	-5.38	100.86	105.70
26	1H	2830	G	N7-C8-N9	5.38	115.79	113.10
43	D8	82	ARG	NE-CZ-NH1	-5.38	117.61	120.30
46	G8	84	ARG	NE-CZ-NH1	5.38	122.99	120.30
26	14	528	A	C5-C6-N1	-5.38	115.01	117.70
26	14	1356	G	O5'-P-OP1	-5.38	100.86	105.70
26	14	1651	G	C5-C6-O6	-5.38	125.37	128.60
26	14	2320	A	P-O3'-C3'	5.38	126.16	119.70
26	14	2498	C	OP1-P-OP2	-5.38	111.53	119.60
30	21	65	GLY	N-CA-C	-5.38	99.65	113.10
1	13	1235	U	C5-C6-N1	5.38	125.39	122.70
26	1H	2346	A	C4-C5-N7	5.38	113.39	110.70
26	1H	2399	G	N7-C8-N9	-5.38	110.41	113.10
26	1H	2599	G	N1-C6-O6	-5.38	116.67	119.90
1	1G	1301	U	N3-C2-O2	-5.38	118.44	122.20
26	14	398	G	N1-C6-O6	-5.38	116.67	119.90
26	14	574	C	C5-C4-N4	5.38	123.97	120.20
26	14	1154	G	C4-C5-N7	5.38	112.95	110.80
26	14	1993	U	O5'-P-OP1	-5.38	100.86	105.70
26	14	2507	C	N3-C4-C5	-5.38	119.75	121.90
1	13	961	U	N3-C4-O4	-5.38	115.64	119.40
1	13	975	A	O4'-C1'-N9	-5.38	103.90	108.20
26	1H	1653	G	C4-N9-C1'	5.38	133.49	126.50
26	1H	2336	A	C8-N9-C4	-5.38	103.65	105.80
27	16	56	G	N3-C4-N9	5.38	129.23	126.00
33	51	166	GLY	N-CA-C	5.38	126.54	113.10
26	14	1661	G	C8-N9-C4	5.38	108.55	106.40
1	13	656	C	C2-N3-C4	5.38	122.59	119.90
1	13	1329	A	N1-C6-N6	5.38	121.83	118.60
26	1H	788	A	C6-N1-C2	5.38	121.83	118.60
1	13	266	G	O4'-C1'-N9	-5.37	103.90	108.20
26	1H	804	A	C8-N9-C4	5.37	107.95	105.80
26	1H	845	G	N7-C8-N9	5.37	115.79	113.10
26	1H	947	G	N1-C6-O6	5.37	123.12	119.90
26	14	1382	G	OP2-P-O3'	5.37	117.02	105.20
26	14	1806	C	C6-N1-C2	5.37	122.45	120.30
26	1H	416	C	N3-C4-N4	-5.37	114.24	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	840	C	N3-C4-C5	5.37	124.05	121.90
26	1H	1654	A	O5'-P-OP2	5.37	117.15	110.70
26	1H	2665	A	N7-C8-N9	5.37	116.49	113.80
27	16	56	G	N3-C4-C5	-5.37	125.92	128.60
1	1G	377	G	N3-C4-C5	-5.37	125.91	128.60
26	14	2389	G	C8-N9-C4	-5.37	104.25	106.40
1	13	690	G	C5-C6-O6	-5.37	125.38	128.60
26	1H	508	G	C5-C6-O6	-5.37	125.38	128.60
26	14	273(F)	C	N1-C2-O2	5.37	122.12	118.90
26	14	1844	C	OP1-P-OP2	-5.37	111.55	119.60
26	14	2525	G	C4-C5-N7	-5.37	108.65	110.80
26	1H	2745	C	C6-N1-C2	-5.37	118.15	120.30
26	1H	250	G	OP1-P-O3'	5.37	117.00	105.20
26	1H	577	G	N3-C4-N9	5.37	129.22	126.00
26	1H	910	A	C4-C5-C6	5.37	119.68	117.00
26	1H	945	A	O5'-P-OP2	-5.36	100.87	105.70
26	1H	2036	C	C5-C6-N1	5.36	123.68	121.00
1	1G	453	A	O5'-P-OP1	-5.36	100.87	105.70
26	14	989	G	O5'-P-OP1	-5.36	100.87	105.70
26	14	1614	A	C6-C5-N7	-5.36	128.55	132.30
1	13	752	G	C6-C5-N7	-5.36	127.18	130.40
26	1H	1352	U	N3-C2-O2	5.36	125.95	122.20
26	14	138	G	N3-C4-C5	-5.36	125.92	128.60
23	2K	77	A	N1-C6-N6	5.36	121.82	118.60
26	1H	214	G	C8-N9-C4	-5.36	104.25	106.40
26	14	393	C	N3-C4-C5	-5.36	119.76	121.90
26	14	2001	A	C5-C6-N6	-5.36	119.41	123.70
26	14	2607	G	C5-C6-O6	-5.36	125.38	128.60
26	1H	1440	G	OP1-P-O3'	5.36	116.99	105.20
1	13	1054	C	N1-C2-O2	5.36	122.11	118.90
26	1H	815	C	C5-C6-N1	-5.36	118.32	121.00
26	1H	2502	G	N3-C4-C5	-5.36	125.92	128.60
26	1H	259	G	C6-C5-N7	-5.36	127.19	130.40
26	1H	568	U	C6-N1-C2	5.36	124.21	121.00
26	1H	1942	C	N3-C4-C5	5.36	124.04	121.90
55	Q8	62	LEU	C-N-CD	5.36	139.65	128.40
26	14	1319	G	C4-N9-C1'	5.36	133.46	126.50
26	14	2226	C	N1-C2-O2	5.36	122.11	118.90
26	14	2877	G	C5-C6-N1	-5.36	108.82	111.50
26	1H	120	U	N1-C2-N3	5.35	118.11	114.90
26	14	796	C	N3-C4-C5	5.35	124.04	121.90
26	1H	199	A	C2-N3-C4	5.35	113.28	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	388	G	OP1-P-OP2	5.35	127.63	119.60
26	1H	658	C	N1-C2-O2	5.35	122.11	118.90
26	1H	1304	C	C4-C5-C6	-5.35	114.72	117.40
26	1H	2489	G	C6-C5-N7	-5.35	127.19	130.40
1	1G	563	A	O4'-C1'-N9	5.35	112.48	108.20
1	13	792	A	C8-N9-C4	5.35	107.94	105.80
1	13	1498	U	N3-C4-O4	5.35	123.14	119.40
26	1H	458	G	O4'-C1'-N9	5.35	112.48	108.20
26	1H	621	A	C5-C6-N1	-5.35	115.02	117.70
26	1H	1034	G	C5-C6-O6	-5.35	125.39	128.60
26	14	676	A	C8-N9-C4	-5.35	103.66	105.80
26	14	2508	G	N1-C6-O6	5.35	123.11	119.90
26	1H	451	C	N1-C2-O2	-5.35	115.69	118.90
26	1H	2060	A	O5'-P-OP1	-5.35	100.89	105.70
26	1H	2272	U	O5'-P-OP1	5.35	117.12	110.70
1	13	904	C	N3-C2-O2	-5.35	118.16	121.90
26	1H	142	G	C8-N9-C1'	5.35	133.95	127.00
26	1H	609	A	C6-C5-N7	-5.35	128.56	132.30
26	1H	1567	A	N1-C6-N6	5.35	121.81	118.60
26	14	205	G	O4'-C1'-N9	5.35	112.48	108.20
26	14	1301	A	O4'-C1'-N9	5.35	112.48	108.20
26	14	2210	G	C8-N9-C1'	-5.35	120.05	127.00
26	1H	621	A	N1-C2-N3	5.34	131.97	129.30
26	1H	2525	G	N3-C2-N2	-5.34	116.16	119.90
26	14	463	G	OP1-P-O3'	5.34	116.96	105.20
26	14	2724	C	OP2-P-O3'	5.34	116.96	105.20
1	13	963	G	C6-C5-N7	-5.34	127.19	130.40
26	1H	1368	G	C8-N9-C4	-5.34	104.26	106.40
26	14	2595	G	O5'-P-OP1	-5.34	100.89	105.70
27	1J	3	C	N3-C4-C5	-5.34	119.76	121.90
1	13	635	G	N1-C6-O6	5.34	123.10	119.90
26	1H	71	A	N7-C8-N9	5.34	116.47	113.80
26	1H	974(A)	C	C6-N1-C2	-5.34	118.16	120.30
26	1H	1297	C	OP1-P-O3'	5.34	116.95	105.20
26	1H	2399	G	C4-C5-N7	-5.34	108.66	110.80
1	1G	670	G	O5'-P-OP1	-5.34	100.89	105.70
26	14	1342	A	O4'-C1'-N9	5.34	112.47	108.20
26	14	1377	G	N3-C4-C5	-5.34	125.93	128.60
26	1H	783	A	N9-C1'-C2'	-5.34	106.13	112.00
26	1H	1259	G	C5-C6-N1	5.34	114.17	111.50
27	16	100	G	N9-C4-C5	-5.34	103.26	105.40
26	14	569	U	C6-N1-C2	5.34	124.20	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	832	G	OP1-P-O3'	5.34	116.95	105.20
26	14	930	U	N3-C2-O2	-5.34	118.46	122.20
26	14	2072	G	C5-C6-O6	-5.34	125.40	128.60
26	1H	1128	A	OP2-P-O3'	5.34	116.94	105.20
26	1H	315	G	N3-C4-N9	-5.34	122.80	126.00
26	1H	1928	A	C2-N3-C4	5.34	113.27	110.60
26	1H	2686	G	O5'-P-OP1	-5.34	100.90	105.70
26	14	330	A	N3-C4-C5	5.34	130.53	126.80
26	14	1187	G	C5-N7-C8	-5.34	101.63	104.30
1	13	843	U	C6-N1-C1'	-5.33	113.73	121.20
26	1H	1698	A	O4'-C1'-N9	5.33	112.47	108.20
26	1H	2751	G	N1-C2-N3	5.33	127.10	123.90
27	16	105	G	C5-C6-O6	-5.33	125.40	128.60
26	14	1645	G	C4-N9-C1'	5.33	133.44	126.50
26	1H	1669	A	O4'-C1'-N9	5.33	112.47	108.20
26	1H	2741	A	C8-N9-C4	5.33	107.93	105.80
31	31	62	ARG	NE-CZ-NH2	-5.33	117.63	120.30
26	14	1254	A	N1-C2-N3	5.33	131.97	129.30
26	1H	1051	G	N7-C8-N9	5.33	115.77	113.10
26	1H	1916	A	N7-C8-N9	5.33	116.47	113.80
26	1H	1967	C	O5'-P-OP2	-5.33	100.90	105.70
30	21	52	LEU	C-N-CD	-5.33	108.87	120.60
26	14	603	A	N7-C8-N9	5.33	116.47	113.80
26	14	803	U	C5-C6-N1	-5.33	120.03	122.70
26	14	1681	G	C5-N7-C8	-5.33	101.63	104.30
26	14	2327	A	C4-C5-N7	-5.33	108.03	110.70
26	14	801	G	N3-C4-N9	-5.33	122.80	126.00
26	14	871	U	O5'-P-OP1	-5.33	100.90	105.70
26	14	1341	U	OP1-P-O3'	5.33	116.92	105.20
26	14	2821	A	C2-N3-C4	-5.33	107.94	110.60
1	13	575	G	C8-N9-C1'	5.33	133.93	127.00
26	1H	411	G	N9-C4-C5	5.33	107.53	105.40
26	1H	623	G	C5-C6-O6	-5.33	125.40	128.60
1	1G	1096	C	C6-N1-C2	-5.33	118.17	120.30
57	3L	1	G	N3-C4-N9	5.33	129.20	126.00
26	14	462	C	C2-N3-C4	-5.33	117.24	119.90
26	14	1774	C	C5-C4-N4	-5.33	116.47	120.20
26	1H	811	U	N1-C2-O2	-5.32	119.07	122.80
49	J8	79	GLY	N-CA-C	5.32	126.41	113.10
26	1H	2311	A	C6-C5-N7	-5.32	128.57	132.30
1	13	799	G	C8-N9-C4	5.32	108.53	106.40
26	1H	972	G	O5'-P-OP1	5.32	117.08	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	576	G	C4-N9-C1'	5.32	133.41	126.50
26	1H	110	G	C8-N9-C4	5.32	108.53	106.40
26	1H	1192	G	C6-C5-N7	-5.32	127.21	130.40
26	14	191	A	N1-C2-N3	-5.32	126.64	129.30
26	14	694	U	N1-C2-O2	5.32	126.52	122.80
26	14	2547	U	C2-N1-C1'	-5.32	111.32	117.70
27	1J	27	C	C5-C6-N1	5.32	123.66	121.00
26	1H	1382	G	C5-C6-O6	-5.32	125.41	128.60
26	1H	1523	U	C5-C6-N1	5.32	125.36	122.70
26	14	529	A	N1-C6-N6	5.32	121.79	118.60
26	14	1107	G	C8-N9-C4	-5.32	104.27	106.40
26	1H	651	G	N1-C6-O6	-5.31	116.71	119.90
26	1H	2280	G	OP1-P-O3'	5.31	116.89	105.20
1	1G	1498	U	P-O3'-C3'	5.31	126.08	119.70
26	1H	121	G	C5-C6-O6	-5.31	125.41	128.60
26	1H	1328	G	O5'-P-OP1	5.31	117.08	110.70
26	1H	1680	U	C6-N1-C2	5.31	124.19	121.00
1	1G	392	G	C8-N9-C4	5.31	108.53	106.40
56	1L	18	G	P-O3'-C3'	5.31	126.08	119.70
26	14	248	G	C5-C6-N1	5.31	114.16	111.50
26	14	1808	U	N1-C2-N3	-5.31	111.71	114.90
1	1G	690	G	N7-C8-N9	5.31	115.75	113.10
1	1G	1119	C	C6-N1-C2	-5.31	118.17	120.30
1	1G	1139	G	N3-C4-N9	-5.31	122.81	126.00
1	13	58	C	N1-C2-O2	5.31	122.08	118.90
26	1H	192	C	N3-C2-O2	5.31	125.62	121.90
26	1H	580	C	N1-C2-N3	5.31	122.92	119.20
26	1H	773	U	C2-N3-C4	-5.31	123.81	127.00
26	1H	866	A	C8-N9-C1'	-5.31	118.14	127.70
1	1G	754	C	N1-C2-O2	5.31	122.09	118.90
26	14	49	A	OP2-P-O3'	5.31	116.88	105.20
26	14	1411	C	O5'-P-OP2	-5.31	100.92	105.70
26	1H	2234	G	N7-C8-N9	-5.31	110.45	113.10
26	1H	2239	G	C5-C6-N1	5.31	114.15	111.50
26	1H	2583	G	N1-C2-N2	-5.31	111.42	116.20
26	1H	2782	G	C6-C5-N7	-5.31	127.22	130.40
26	14	51	G	C8-N9-C4	5.31	108.52	106.40
26	14	1332	G	N1-C2-N2	-5.31	111.42	116.20
26	14	1404	C	N3-C2-O2	-5.31	118.18	121.90
26	14	2417	C	O5'-P-OP2	-5.31	100.92	105.70
26	1H	1198	U	N3-C2-O2	-5.31	118.49	122.20
26	1H	1248	G	N3-C2-N2	-5.31	116.19	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	236	C	N3-C4-C5	-5.30	119.78	121.90
26	1H	1917	U	C5-C4-O4	5.30	129.08	125.90
1	1G	401	C	O5'-P-OP2	-5.30	100.93	105.70
26	14	1968	G	C4-C5-N7	5.30	112.92	110.80
26	1H	265	A	C6-C5-N7	-5.30	128.59	132.30
26	1H	663	G	N3-C4-C5	-5.30	125.95	128.60
26	1H	140	A	C4-N9-C1'	5.30	135.84	126.30
26	1H	265	A	C8-N9-C4	-5.30	103.68	105.80
26	1H	630	G	N9-C4-C5	-5.30	103.28	105.40
26	1H	866	A	C4-N9-C1'	5.30	135.84	126.30
26	1H	1312	U	O5'-P-OP1	-5.30	100.93	105.70
26	14	1203	G	N3-C2-N2	5.30	123.61	119.90
26	14	1441	G	C8-N9-C4	5.30	108.52	106.40
23	2K	3	C	C6-N1-C2	-5.30	118.18	120.30
26	1H	454	A	O5'-P-OP2	-5.30	100.93	105.70
26	1H	840	C	N1-C2-O2	-5.30	115.72	118.90
26	14	486	C	C6-N1-C2	-5.30	118.18	120.30
26	14	1558	A	P-O3'-C3'	5.30	126.06	119.70
26	14	2679	A	O5'-P-OP2	-5.30	100.93	105.70
23	2K	48	U	P-O3'-C3'	5.30	126.06	119.70
26	1H	587	C	C6-N1-C1'	-5.30	114.44	120.80
27	16	44	G	P-O3'-C3'	5.30	126.06	119.70
26	14	1332	G	N9-C1'-C2'	-5.30	106.17	112.00
26	14	2610	C	C5-C6-N1	-5.30	118.35	121.00
26	14	2712	U	N3-C2-O2	-5.30	118.49	122.20
1	13	761	G	N3-C4-C5	-5.29	125.95	128.60
26	1H	125	G	N1-C2-N2	-5.29	111.44	116.20
26	1H	403	U	N3-C2-O2	-5.29	118.49	122.20
26	1H	2448	A	N1-C6-N6	5.29	121.78	118.60
26	14	848	G	C4-N9-C1'	5.29	133.38	126.50
26	14	1704	G	C4-C5-N7	5.29	112.92	110.80
26	14	2502	G	N3-C4-C5	-5.29	125.95	128.60
26	1H	676	A	C6-N1-C2	5.29	121.78	118.60
26	14	1229(A)	G	C2-N3-C4	-5.29	109.25	111.90
26	14	1599	C	C6-N1-C2	-5.29	118.18	120.30
1	13	560	U	P-O3'-C3'	5.29	126.05	119.70
26	1H	797	C	C6-N1-C2	5.29	122.42	120.30
26	1H	945	A	N9-C1'-C2'	5.29	120.88	114.00
26	1H	2351	G	C8-N9-C1'	-5.29	120.12	127.00
26	14	446	G	C5-C6-O6	-5.29	125.43	128.60
26	14	1686	C	N3-C4-N4	5.29	121.70	118.00
26	1H	2351	G	C4-N9-C1'	5.29	133.38	126.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2L	21	U	N1-C2-O2	5.29	126.50	122.80
26	14	190	A	C4-C5-N7	5.29	113.34	110.70
26	14	2244	U	C5-C6-N1	-5.29	120.06	122.70
26	1H	774	A	C4-N9-C1'	-5.29	116.78	126.30
26	1H	1346	G	N3-C2-N2	5.29	123.60	119.90
1	1G	945	G	C4-N9-C1'	5.29	133.37	126.50
26	14	664	C	N3-C2-O2	-5.29	118.20	121.90
26	1H	704	G	C8-N9-C4	-5.28	104.29	106.40
26	1H	1111	A	O5'-P-OP1	-5.28	100.94	105.70
26	1H	1558	A	N1-C2-N3	5.28	131.94	129.30
26	1H	1663	C	C5-C4-N4	-5.28	116.50	120.20
1	1G	1246	C	C6-N1-C2	-5.28	118.19	120.30
26	14	34	C	P-O3'-C3'	5.28	126.04	119.70
26	14	470	A	C4-C5-N7	5.28	113.34	110.70
26	1H	1438	U	C6-N1-C2	-5.28	117.83	121.00
1	1G	932	C	C2-N1-C1'	5.28	124.61	118.80
1	13	758	G	C5-C6-O6	-5.28	125.43	128.60
26	1H	1294	U	OP1-P-O3'	5.28	116.82	105.20
26	1H	2592	G	C6-C5-N7	-5.28	127.23	130.40
1	1G	529	G	C5-C6-O6	-5.28	125.43	128.60
26	1H	626	U	OP1-P-O3'	5.28	116.81	105.20
26	1H	1324	G	O4'-C1'-N9	5.28	112.42	108.20
26	1H	1319	G	N7-C8-N9	5.28	115.74	113.10
26	1H	2591	C	C6-N1-C2	-5.28	118.19	120.30
26	14	126	A	OP2-P-O3'	5.28	116.81	105.20
26	14	1955	U	C5-C6-N1	-5.28	120.06	122.70
26	14	2576	G	N9-C4-C5	-5.28	103.29	105.40
26	1H	46	C	N3-C4-C5	-5.28	119.79	121.90
26	1H	685	A	N1-C6-N6	5.28	121.77	118.60
26	1H	1778	U	P-O3'-C3'	5.28	126.03	119.70
26	1H	2426	A	N1-C2-N3	-5.28	126.66	129.30
1	1G	1227	A	N1-C6-N6	-5.28	115.43	118.60
26	14	2425	A	OP2-P-O3'	5.28	116.81	105.20
27	1J	89	G	N3-C4-N9	5.28	129.16	126.00
26	1H	530	G	N9-C4-C5	5.27	107.51	105.40
26	1H	2065	C	C6-N1-C2	-5.27	118.19	120.30
1	13	748	C	P-O3'-C3'	5.27	126.03	119.70
1	13	1359	C	O5'-P-OP1	-5.27	100.95	105.70
26	1H	256	A	C5-C6-N1	-5.27	115.06	117.70
26	1H	780	G	C5-N7-C8	-5.27	101.66	104.30
26	1H	1051	G	C8-N9-C4	-5.27	104.29	106.40
26	1H	1697	G	N1-C6-O6	5.27	123.06	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1799	G	N3-C2-N2	5.27	123.59	119.90
1	1G	266	G	N3-C4-C5	-5.27	125.96	128.60
27	1J	30	C	C2-N1-C1'	5.27	124.60	118.80
26	1H	1992	G	OP2-P-O3'	5.27	116.80	105.20
27	16	12	C	O4'-C1'-N1	5.27	112.42	108.20
26	14	1969	A	N1-C6-N6	-5.27	115.44	118.60
26	1H	651	G	C8-N9-C4	-5.27	104.29	106.40
26	1H	1204	A	N7-C8-N9	5.27	116.44	113.80
26	1H	1672	C	OP2-P-O3'	5.27	116.79	105.20
26	1H	2308	G	N1-C6-O6	5.27	123.06	119.90
26	1H	2601	C	N1-C2-O2	5.27	122.06	118.90
26	14	1914	C	N3-C2-O2	-5.27	118.21	121.90
1	13	1281	U	C2-N1-C1'	5.27	124.02	117.70
26	1H	735	A	O5'-P-OP2	-5.27	100.96	105.70
26	1H	1543	A	C5-C6-N1	-5.27	115.07	117.70
26	1H	2329	G	OP1-P-OP2	5.27	127.50	119.60
27	16	115	G	N7-C8-N9	5.27	115.73	113.10
26	14	1241	A	C2-N3-C4	-5.27	107.97	110.60
1	13	798	G	OP2-P-O3'	5.27	116.79	105.20
26	1H	1977	A	N1-C2-N3	5.27	131.93	129.30
26	14	197	A	OP2-P-O3'	5.27	116.78	105.20
1	13	1088	G	N1-C6-O6	5.26	123.06	119.90
26	1H	69	C	O5'-P-OP1	-5.26	100.96	105.70
26	1H	793	A	C6-N1-C2	-5.26	115.44	118.60
26	1H	964	C	C6-N1-C2	-5.26	118.19	120.30
26	1H	2426	A	C4-C5-C6	-5.26	114.37	117.00
56	1L	74	C	C6-N1-C1'	-5.26	114.48	120.80
26	14	740	U	OP1-P-O3'	5.26	116.78	105.20
26	14	2039	C	N1-C2-O2	5.26	122.06	118.90
26	1H	1367	A	C2-N3-C4	-5.26	107.97	110.60
26	14	2546	U	C5-C4-O4	5.26	129.06	125.90
1	13	30	U	N3-C2-O2	5.26	125.88	122.20
1	13	1290	G	C8-N9-C4	-5.26	104.30	106.40
26	1H	330	A	N7-C8-N9	5.26	116.43	113.80
26	14	190	A	N3-C4-C5	5.26	130.48	126.80
26	14	1618	A	N9-C4-C5	5.26	107.91	105.80
26	14	1815	A	OP1-P-O3'	5.26	116.78	105.20
27	1J	6	C	C6-N1-C2	5.26	122.41	120.30
26	1H	211	A	C2-N3-C4	-5.26	107.97	110.60
26	1H	586	A	N7-C8-N9	-5.26	111.17	113.80
26	1H	2624	G	O5'-P-OP2	-5.26	100.97	105.70
1	1G	335	C	N3-C2-O2	-5.26	118.22	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	266	G	P-O3'-C3'	5.26	126.01	119.70
26	1H	265	A	N3-C4-N9	-5.26	123.19	127.40
26	1H	2346	A	N9-C1'-C2'	5.26	120.83	114.00
26	14	179	G	C5-C6-O6	-5.26	125.44	128.60
1	13	901	A	C2-N3-C4	-5.26	107.97	110.60
26	1H	126	A	OP2-P-O3'	5.26	116.76	105.20
26	1H	393	C	N1-C2-O2	-5.26	115.75	118.90
26	1H	518	G	N1-C6-O6	-5.26	116.75	119.90
26	1H	1509	C	OP1-P-O3'	5.26	116.77	105.20
26	1H	2052	G	O5'-P-OP1	-5.26	100.97	105.70
26	14	1803	A	O4'-C1'-N9	5.26	112.41	108.20
26	14	2283	C	N3-C2-O2	5.26	125.58	121.90
26	14	2444	G	N1-C6-O6	-5.26	116.75	119.90
26	1H	840	C	C2-N3-C4	-5.25	117.27	119.90
26	1H	1516	U	N3-C2-O2	-5.25	118.52	122.20
26	14	788	A	C8-N9-C4	-5.25	103.70	105.80
22	1K	74	C	C2-N1-C1'	5.25	124.58	118.80
26	1H	107	C	N3-C2-O2	5.25	125.58	121.90
26	1H	1438	U	C5-C6-N1	5.25	125.33	122.70
26	1H	1453	A	N9-C4-C5	-5.25	103.70	105.80
26	1H	1678	G	C8-N9-C4	-5.25	104.30	106.40
1	1G	560	U	C2-N1-C1'	5.25	124.00	117.70
26	14	2454	G	O5'-P-OP1	5.25	117.00	110.70
26	14	2473	U	N3-C2-O2	-5.25	118.52	122.20
1	13	40	C	O5'-P-OP2	-5.25	100.97	105.70
1	13	956	U	C5-C6-N1	5.25	125.33	122.70
26	1H	699	A	C2-N3-C4	5.25	113.23	110.60
26	14	2461	C	C6-N1-C2	5.25	122.40	120.30
26	1H	115	C	C5-C4-N4	-5.25	116.53	120.20
1	1G	865	A	C8-N9-C4	-5.25	103.70	105.80
26	1H	1344	G	N9-C4-C5	-5.25	103.30	105.40
26	1H	1566	A	N9-C4-C5	5.25	107.90	105.80
1	1G	992	U	P-O3'-C3'	5.25	126.00	119.70
26	14	3	U	C2-N1-C1'	5.25	124.00	117.70
26	14	48	G	N1-C6-O6	-5.25	116.75	119.90
30	29	50	GLY	N-CA-C	5.25	126.22	113.10
1	1G	953	G	N3-C4-C5	-5.25	125.98	128.60
1	1G	1322	C	C6-N1-C1'	-5.25	114.51	120.80
26	14	2587	A	C5-C6-N6	-5.25	119.50	123.70
26	1H	189	G	C8-N9-C4	5.24	108.50	106.40
26	1H	216	A	C8-N9-C4	5.24	107.90	105.80
26	1H	1808	U	N3-C4-O4	5.24	123.07	119.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2708	G	C4-N9-C1'	5.24	133.32	126.50
26	14	1332	G	O4'-C1'-N9	-5.24	104.01	108.20
26	14	1594	G	N7-C8-N9	5.24	115.72	113.10
26	14	2235	G	C8-N9-C1'	-5.24	120.18	127.00
26	14	2259	G	C5-C6-O6	-5.24	125.45	128.60
26	1H	568	U	C5-C6-N1	-5.24	120.08	122.70
26	1H	715	G	N3-C2-N2	5.24	123.57	119.90
26	1H	1157	G	C4-N9-C1'	5.24	133.31	126.50
1	13	437	U	C5-C6-N1	5.24	125.32	122.70
26	1H	447	A	C8-N9-C4	-5.24	103.70	105.80
26	1H	694	U	O5'-P-OP1	5.24	116.99	110.70
26	1H	1192	G	C8-N9-C4	5.24	108.50	106.40
26	14	233	A	C8-N9-C4	5.24	107.90	105.80
26	1H	1603	A	N7-C8-N9	5.24	116.42	113.80
26	1H	1977	A	C2-N3-C4	-5.24	107.98	110.60
26	14	307	G	C5-N7-C8	-5.24	101.68	104.30
26	14	330	A	N9-C4-C5	-5.24	103.70	105.80
26	14	2382	G	N3-C4-N9	5.24	129.14	126.00
26	1H	1246	A	OP1-P-OP2	5.24	127.46	119.60
26	1H	1548	C	C6-N1-C2	-5.24	118.20	120.30
26	1H	1992	G	C6-N1-C2	-5.24	121.96	125.10
26	14	2431	U	N1-C2-O2	-5.24	119.13	122.80
1	13	952	U	O5'-P-OP1	-5.24	100.99	105.70
26	1H	2249	U	C5-C6-N1	5.24	125.32	122.70
26	14	802	A	C5-C6-N1	5.24	120.32	117.70
26	1H	1198	U	N3-C4-C5	5.23	117.74	114.60
26	1H	1888	G	N3-C4-C5	-5.23	125.98	128.60
26	1H	2026	C	OP2-P-O3'	5.23	116.71	105.20
26	1H	2250	G	C4-C5-N7	-5.23	108.71	110.80
26	1H	2434	A	C8-N9-C4	5.23	107.89	105.80
26	1H	2601	C	C6-N1-C2	-5.23	118.21	120.30
26	1H	2620	C	N3-C2-O2	5.23	125.56	121.90
38	88	26	TYR	CA-CB-CG	5.23	123.34	113.40
26	14	34	C	C2-N1-C1'	5.23	124.56	118.80
26	14	510	C	C6-N1-C2	-5.23	118.21	120.30
26	14	1266	G	N7-C8-N9	-5.23	110.48	113.10
26	14	1804	C	C5-C6-N1	5.23	123.62	121.00
26	14	2573	C	C6-N1-C1'	-5.23	114.52	120.80
1	13	520	A	C4-C5-C6	5.23	119.61	117.00
24	3K	76	A	O4'-C1'-N9	5.23	112.39	108.20
26	14	470	A	OP1-P-O3'	5.23	116.71	105.20
26	14	1142	U	N3-C2-O2	-5.23	118.54	122.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2029	G	O5'-P-OP1	-5.23	100.99	105.70
26	1H	333	G	O4'-C1'-N9	-5.23	104.02	108.20
26	1H	1348	G	OP1-P-O3'	5.23	116.70	105.20
26	1H	842	G	N3-C4-C5	5.23	131.21	128.60
1	1G	1243	C	OP1-P-OP2	-5.23	111.76	119.60
26	14	265	A	O4'-C1'-N9	5.23	112.38	108.20
26	14	1698	A	P-O3'-C3'	5.23	125.97	119.70
26	14	2430	A	O5'-P-OP2	5.23	116.97	110.70
26	1H	1707	G	C4-C5-N7	5.23	112.89	110.80
26	14	817	C	C2-N3-C4	5.23	122.51	119.90
1	13	523	A	C4-C5-N7	5.22	113.31	110.70
1	13	529	G	N9-C4-C5	-5.22	103.31	105.40
26	1H	120	U	N3-C4-C5	-5.22	111.47	114.60
26	14	655	A	C2-N3-C4	-5.22	107.99	110.60
26	1H	2031	A	C2-N3-C4	5.22	113.21	110.60
30	29	78	LEU	CA-CB-CG	5.22	127.31	115.30
1	13	1331	G	N7-C8-N9	5.22	115.71	113.10
26	1H	453	C	C6-N1-C1'	5.22	127.06	120.80
26	1H	1325	G	N3-C4-C5	-5.22	125.99	128.60
26	1H	708	C	O5'-P-OP2	-5.22	101.00	105.70
26	1H	1031	G	C6-N1-C2	-5.22	121.97	125.10
26	14	125	G	C6-C5-N7	-5.22	127.27	130.40
26	14	179	G	C8-N9-C4	5.22	108.49	106.40
26	14	859	G	N3-C4-N9	-5.22	122.87	126.00
1	13	1227	A	C4-C5-N7	5.21	113.31	110.70
26	1H	251	A	N1-C6-N6	-5.21	115.47	118.60
26	1H	447	A	N1-C6-N6	-5.21	115.47	118.60
26	1H	577	G	OP1-P-OP2	-5.21	111.78	119.60
26	1H	2508	G	N7-C8-N9	5.21	115.71	113.10
26	1H	2591	C	C5-C4-N4	-5.21	116.55	120.20
26	14	1276	A	C2-N3-C4	-5.21	107.99	110.60
26	14	1574	C	C5-C6-N1	5.21	123.61	121.00
26	1H	766	C	C4-C5-C6	5.21	120.01	117.40
1	13	221	C	C6-N1-C2	-5.21	118.22	120.30
26	1H	250	G	N1-C6-O6	-5.21	116.77	119.90
26	1H	458	G	C8-N9-C1'	5.21	133.78	127.00
26	1H	569	U	C5-C6-N1	-5.21	120.09	122.70
26	1H	840	C	C2-N1-C1'	-5.21	113.07	118.80
26	1H	1967	C	OP2-P-O3'	5.21	116.66	105.20
26	1H	2308	G	C4-C5-N7	5.21	112.89	110.80
26	1H	2335	A	O4'-C1'-N9	5.21	112.37	108.20
26	14	1630(A)	C	N1-C2-O2	-5.21	115.77	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2712	U	C2-N3-C4	-5.21	123.87	127.00
1	13	320	C	C6-N1-C2	5.21	122.38	120.30
26	1H	664	C	C5-C6-N1	-5.21	118.39	121.00
26	1H	715	G	N3-C4-N9	5.21	129.12	126.00
26	1H	1606	G	O5'-P-OP2	-5.21	101.01	105.70
26	1H	1616	A	OP1-P-OP2	5.21	127.41	119.60
26	1H	2373	G	C5-C6-O6	-5.21	125.47	128.60
26	1H	2617	C	N3-C2-O2	5.21	125.55	121.90
26	14	2295	C	C2-N1-C1'	5.21	124.53	118.80
26	14	2460	U	O5'-P-OP1	-5.21	101.01	105.70
26	14	2501	C	P-O3'-C3'	5.21	125.95	119.70
26	1H	932	G	C5-C6-O6	5.21	131.72	128.60
26	1H	1248	G	C5-C6-N1	-5.21	108.90	111.50
26	1H	1550	C	N1-C2-O2	-5.21	115.78	118.90
26	1H	2686	G	OP1-P-OP2	5.21	127.41	119.60
1	1G	1227	A	C5-C6-N1	5.21	120.30	117.70
26	14	456	C	N1-C2-O2	-5.21	115.78	118.90
26	14	826	U	N1-C2-N3	5.21	118.02	114.90
26	14	1548	C	OP1-P-O3'	5.21	116.66	105.20
26	14	2445	G	OP2-P-O3'	5.21	116.65	105.20
26	1H	738	G	C5-N7-C8	-5.21	101.70	104.30
26	1H	909	A	N9-C4-C5	5.21	107.88	105.80
26	1H	144	C	C5-C6-N1	-5.20	118.40	121.00
26	1H	2466	C	OP2-P-O3'	5.20	116.65	105.20
26	1H	2616	C	C6-N1-C2	-5.20	118.22	120.30
26	14	90	U	O4'-C1'-N1	5.20	112.36	108.20
26	14	752	A	P-O3'-C3'	5.20	125.94	119.70
26	14	1145	C	C6-N1-C2	-5.20	118.22	120.30
26	14	1930	G	C4-C5-N7	-5.20	108.72	110.80
26	1H	25	U	C5-C4-O4	-5.20	122.78	125.90
26	1H	719	C	C6-N1-C2	-5.20	118.22	120.30
26	1H	1678	G	N3-C2-N2	-5.20	116.26	119.90
26	1H	1829	A	N9-C4-C5	5.20	107.88	105.80
1	1G	1412	C	N1-C2-O2	-5.20	115.78	118.90
26	14	2596	U	OP1-P-OP2	5.20	127.40	119.60
1	13	192	U	O5'-P-OP1	-5.20	101.02	105.70
1	13	901	A	C6-C5-N7	-5.20	128.66	132.30
26	1H	580	C	C4-C5-C6	5.20	120.00	117.40
26	1H	1675	C	N3-C4-N4	-5.20	114.36	118.00
26	1H	2451	A	C4-C5-C6	-5.20	114.40	117.00
1	1G	437	U	N3-C2-O2	-5.20	118.56	122.20
1	1G	450	G	N3-C4-N9	-5.20	122.88	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1449	C	N1-C2-O2	5.20	122.02	118.90
26	14	941	A	C2-N3-C4	5.20	113.20	110.60
26	14	1950	G	C2-N3-C4	5.20	114.50	111.90
26	14	2033	A	C6-N1-C2	-5.20	115.48	118.60
26	14	2584	U	N1-C2-O2	5.20	126.44	122.80
1	13	428	G	C4-N9-C1'	-5.20	119.74	126.50
26	1H	124	G	C5-C6-O6	-5.20	125.48	128.60
26	1H	491	G	C8-N9-C4	5.20	108.48	106.40
26	1H	2366	A	OP2-P-O3'	5.20	116.64	105.20
1	1G	508	C	O5'-P-OP1	-5.20	101.02	105.70
1	1G	1403	C	N3-C4-C5	5.20	123.98	121.90
26	14	139	G	O5'-P-OP2	5.20	116.94	110.70
1	13	104	G	C4-N9-C1'	-5.20	119.74	126.50
1	13	667	G	C8-N9-C4	-5.20	104.32	106.40
26	1H	1565	C	OP2-P-O3'	5.20	116.63	105.20
26	14	1135	C	C6-N1-C1'	-5.20	114.56	120.80
26	1H	1971	A	C2-N3-C4	5.19	113.20	110.60
26	1H	2407	G	O5'-P-OP1	5.19	116.93	110.70
26	14	1926	U	N3-C2-O2	-5.19	118.56	122.20
26	1H	1548	C	OP1-P-O3'	5.19	116.62	105.20
26	1H	2014	A	N1-C6-N6	5.19	121.72	118.60
26	1H	2351	G	N3-C4-C5	-5.19	126.00	128.60
1	1G	1498	U	C2-N1-C1'	5.19	123.93	117.70
26	14	194	G	C2-N3-C4	-5.19	109.30	111.90
26	14	273(F)	C	N3-C2-O2	-5.19	118.27	121.90
26	14	2766	G	C6-C5-N7	-5.19	127.28	130.40
1	13	186	C	C6-N1-C2	-5.19	118.22	120.30
26	1H	594	U	C5-C6-N1	-5.19	120.11	122.70
26	1H	1355	G	N3-C2-N2	5.19	123.53	119.90
26	1H	1804	C	OP1-P-OP2	-5.19	111.81	119.60
26	1H	2085	C	O5'-P-OP2	-5.19	101.03	105.70
26	1H	2621	A	N9-C4-C5	-5.19	103.72	105.80
26	1H	2690	C	C4-C5-C6	5.19	120.00	117.40
26	14	733	G	N1-C2-N2	-5.19	111.53	116.20
26	14	956	G	N1-C6-O6	5.19	123.01	119.90
44	A5	84	ARG	NE-CZ-NH1	-5.19	117.70	120.30
23	2K	62	C	C6-N1-C2	-5.19	118.22	120.30
26	1H	1426	G	C8-N9-C4	-5.19	104.32	106.40
1	13	912	C	N1-C2-O2	-5.19	115.79	118.90
26	1H	691	C	P-O3'-C3'	-5.19	113.48	119.70
26	1H	787	U	N1-C2-O2	-5.19	119.17	122.80
26	1H	790	C	C6-N1-C2	5.19	122.38	120.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1575	C	N1-C2-O2	5.19	122.01	118.90
26	1H	2543	G	C8-N9-C4	5.19	108.47	106.40
26	1H	2618	G	N3-C4-C5	-5.19	126.01	128.60
26	14	2435	A	N7-C8-N9	5.19	116.39	113.80
26	1H	1777	U	N3-C4-C5	-5.18	111.49	114.60
26	1H	2590	A	N1-C2-N3	5.18	131.89	129.30
1	1G	183	G	N1-C6-O6	5.18	123.01	119.90
26	14	1971	A	OP1-P-O3'	5.18	116.61	105.20
1	13	518	C	N3-C4-N4	5.18	121.63	118.00
26	1H	1767	C	N3-C2-O2	-5.18	118.27	121.90
26	14	2000	G	C8-N9-C4	5.18	108.47	106.40
26	14	1309	G	C5-C6-N1	-5.18	108.91	111.50
1	13	651	C	N3-C2-O2	-5.18	118.27	121.90
1	13	1502	A	N7-C8-N9	5.18	116.39	113.80
26	1H	113	G	N3-C4-C5	5.18	131.19	128.60
26	1H	1948	G	N3-C2-N2	5.18	123.53	119.90
1	1G	328	C	N1-C2-O2	5.18	122.01	118.90
26	14	500	G	C8-N9-C4	5.18	108.47	106.40
26	14	509	C	OP2-P-O3'	5.18	116.60	105.20
26	14	2421	G	OP1-P-O3'	5.18	116.59	105.20
22	1K	76	A	N1-C6-N6	5.18	121.71	118.60
26	1H	227	A	C8-N9-C4	-5.18	103.73	105.80
26	1H	389	G	C8-N9-C1'	-5.18	120.27	127.00
26	1H	780	G	N1-C6-O6	5.18	123.01	119.90
33	51	13	LYS	N-CA-C	5.18	124.98	111.00
26	1H	845	G	C2-N3-C4	-5.18	109.31	111.90
26	1H	954	G	C8-N9-C4	-5.18	104.33	106.40
26	1H	2717	G	OP1-P-OP2	5.18	127.36	119.60
40	A8	101	LEU	CA-CB-CG	5.18	127.21	115.30
1	1G	720	C	C6-N1-C2	-5.18	118.23	120.30
26	14	1616	A	N3-C4-C5	5.18	130.42	126.80
26	14	1893	C	C6-N1-C2	-5.18	118.23	120.30
26	14	2430	A	C8-N9-C1'	5.18	137.02	127.70
26	1H	119	A	C5-C6-N6	5.17	127.84	123.70
26	1H	302	C	N3-C2-O2	-5.17	118.28	121.90
26	1H	430	G	C5-C6-O6	-5.17	125.50	128.60
26	14	1379	A	N1-C6-N6	5.17	121.70	118.60
26	14	2053	G	N9-C4-C5	-5.17	103.33	105.40
26	1H	710	G	N1-C6-O6	5.17	123.00	119.90
26	1H	974	G	OP1-P-OP2	5.17	127.36	119.60
26	1H	1269	A	O5'-P-OP1	-5.17	101.04	105.70
26	1H	205	G	N3-C4-N9	5.17	129.10	126.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1617	C	O5'-P-OP1	-5.17	101.05	105.70
1	1G	784	C	C6-N1-C2	5.17	122.37	120.30
26	14	1940	U	C4-C5-C6	5.17	122.80	119.70
27	1J	81	G	N1-C6-O6	5.17	123.00	119.90
1	13	1286	A	C8-N9-C4	-5.17	103.73	105.80
26	1H	860	U	C2-N3-C4	-5.17	123.90	127.00
26	1H	729	G	N9-C4-C5	5.17	107.47	105.40
26	1H	1437	C	C2-N1-C1'	5.17	124.49	118.80
26	1H	1636	C	OP1-P-O3'	5.17	116.57	105.20
26	1H	1710	C	O5'-P-OP2	-5.17	101.05	105.70
26	1H	1764	G	N1-C6-O6	-5.17	116.80	119.90
26	1H	1823	G	N1-C2-N3	5.17	127.00	123.90
27	16	81	G	C5-N7-C8	-5.17	101.72	104.30
26	1H	1279	G	C5-C6-O6	5.17	131.70	128.60
26	1H	2073	C	N1-C2-O2	-5.17	115.80	118.90
26	14	2361	A	C2-N3-C4	-5.17	108.02	110.60
26	1H	465	G	OP2-P-O3'	5.17	116.56	105.20
26	1H	502	A	C6-N1-C2	-5.17	115.50	118.60
26	1H	1929	G	C8-N9-C4	5.17	108.47	106.40
26	14	211	A	C8-N9-C4	5.17	107.87	105.80
1	13	104	G	C8-N9-C1'	5.16	133.71	127.00
23	2K	40	C	C5-C6-N1	5.16	123.58	121.00
26	1H	73	A	C5-C6-N6	-5.16	119.57	123.70
26	1H	821	A	OP1-P-OP2	5.16	127.35	119.60
26	1H	2172	U	C2-N1-C1'	5.16	123.90	117.70
26	1H	2665	A	C4-C5-N7	5.16	113.28	110.70
26	1H	2689	U	C2-N1-C1'	-5.16	111.50	117.70
26	14	1021	A	C5-N7-C8	-5.16	101.32	103.90
27	1J	79	C	OP2-P-O3'	5.16	116.56	105.20
26	1H	112	U	N1-C2-N3	-5.16	111.80	114.90
26	14	782	A	N7-C8-N9	5.16	116.38	113.80
26	1H	693	C	OP1-P-OP2	5.16	127.34	119.60
26	1H	770	G	N3-C4-N9	-5.16	122.90	126.00
1	1G	560	U	C3'-C2'-C1'	5.16	105.63	101.50
43	95	35	LEU	CA-CB-CG	5.16	127.17	115.30
1	13	1488	G	N3-C4-N9	5.16	129.09	126.00
23	2K	27	G	C6-C5-N7	-5.16	127.31	130.40
26	1H	2712	U	N3-C2-O2	-5.16	118.59	122.20
1	1G	1535	C	N1-C2-O2	5.16	122.00	118.90
26	14	385	C	N1-C2-O2	5.16	122.00	118.90
26	14	388	G	C8-N9-C1'	5.16	133.71	127.00
26	14	1342	A	N9-C1'-C2'	5.16	120.71	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	445	C	OP1-P-O3'	5.16	116.55	105.20
26	1H	1247	A	C6-N1-C2	-5.16	115.51	118.60
1	1G	1181	G	N3-C4-C5	-5.16	126.02	128.60
26	14	1204	A	N3-C4-C5	5.16	130.41	126.80
26	14	1446	C	N1-C2-O2	5.16	121.99	118.90
26	1H	148	C	C4-C5-C6	5.16	119.98	117.40
26	1H	2056	G	O5'-P-OP2	-5.16	101.06	105.70
26	14	760	G	N3-C2-N2	-5.16	116.29	119.90
1	13	288	A	N1-C6-N6	5.15	121.69	118.60
1	13	1301	U	OP1-P-O3'	5.15	116.54	105.20
26	1H	746	A	N9-C4-C5	5.15	107.86	105.80
26	1H	1162	G	N7-C8-N9	5.15	115.68	113.10
26	1H	2428	G	C5-C6-O6	5.15	131.69	128.60
26	14	782	A	C8-N9-C4	-5.15	103.74	105.80
26	14	1506	C	C5-C6-N1	5.15	123.58	121.00
1	13	623	C	C2-N3-C4	5.15	122.48	119.90
26	1H	120	U	O5'-P-OP2	5.15	116.88	110.70
26	1H	1008	C	O5'-P-OP1	-5.15	101.06	105.70
26	1H	1157	G	C6-C5-N7	-5.15	127.31	130.40
26	1H	2287	A	C5-N7-C8	-5.15	101.32	103.90
26	14	692	C	N3-C2-O2	5.15	125.51	121.90
26	14	1938	A	C5-C6-N6	-5.15	119.58	123.70
26	14	2499	C	N3-C2-O2	-5.15	118.29	121.90
26	1H	227	A	N9-C4-C5	5.15	107.86	105.80
26	1H	1888	G	C4-N9-C1'	5.15	133.20	126.50
26	1H	2710	C	C6-N1-C2	5.15	122.36	120.30
26	14	610	C	C5-C6-N1	-5.15	118.42	121.00
26	14	972	G	C8-N9-C4	-5.15	104.34	106.40
26	14	1695	G	C8-N9-C4	-5.15	104.34	106.40
26	14	2056	G	C8-N9-C1'	-5.15	120.31	127.00
26	14	2867	G	N1-C6-O6	-5.15	116.81	119.90
26	1H	1256	G	C4-N9-C1'	5.15	133.19	126.50
1	1G	1285	A	P-O3'-C3'	5.15	125.88	119.70
26	14	1742	C	N1-C2-O2	5.15	121.99	118.90
26	14	2304	G	N3-C4-N9	-5.15	122.91	126.00
1	13	50	A	C2-N3-C4	5.15	113.17	110.60
1	13	1518	A	C5-N7-C8	5.15	106.47	103.90
26	1H	1603	A	N9-C4-C5	5.15	107.86	105.80
26	1H	2538	C	C6-N1-C2	5.15	122.36	120.30
26	14	197	A	N1-C2-N3	5.15	131.87	129.30
26	14	1142(A)	A	O4'-C1'-N9	-5.15	104.08	108.20
26	1H	298	G	C5-C6-O6	-5.15	125.51	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1430	C	N3-C4-C5	-5.15	119.84	121.90
26	1H	2052	G	OP2-P-O3'	5.15	116.52	105.20
26	1H	2446	G	C5-C6-O6	-5.15	125.51	128.60
1	1G	288	A	N1-C6-N6	5.15	121.69	118.60
26	1H	335	C	C5-C6-N1	5.14	123.57	121.00
26	1H	2070	G	C8-N9-C4	5.14	108.46	106.40
26	1H	2602	A	C2-N3-C4	5.14	113.17	110.60
27	16	19	G	N3-C4-C5	5.14	131.17	128.60
26	14	808	G	N1-C2-N2	-5.14	111.57	116.20
26	14	1332	G	OP1-P-O3'	5.14	116.52	105.20
2	1E	158	LEU	CA-CB-CG	5.14	127.13	115.30
23	2K	31	G	O5'-P-OP2	5.14	116.87	110.70
26	1H	250	G	N7-C8-N9	5.14	115.67	113.10
26	1H	517	C	N3-C4-N4	5.14	121.60	118.00
26	1H	1790	C	C5-C4-N4	-5.14	116.60	120.20
26	14	515	A	C8-N9-C4	-5.14	103.74	105.80
1	13	47	C	C4-C5-C6	5.14	119.97	117.40
1	13	518	C	C6-N1-C2	5.14	122.36	120.30
1	13	1192	C	C2-N1-C1'	5.14	124.45	118.80
26	1H	1128	A	C5-C6-N6	-5.14	119.59	123.70
26	1H	2473	U	N1-C2-O2	5.14	126.40	122.80
26	1H	2518	A	O5'-P-OP2	5.14	116.87	110.70
1	1G	1533	C	P-O3'-C3'	5.14	125.87	119.70
26	1H	272	G	C8-N9-C4	5.14	108.45	106.40
26	1H	576	U	OP1-P-OP2	5.14	127.31	119.60
26	1H	2019	A	C5-C6-N6	-5.14	119.59	123.70
1	13	865	A	N7-C8-N9	5.14	116.37	113.80
1	13	910	C	C2-N3-C4	-5.14	117.33	119.90
26	1H	965	C	C6-N1-C2	-5.14	118.25	120.30
26	14	256	A	C2-N3-C4	-5.14	108.03	110.60
26	14	1032	A	C8-N9-C4	5.14	107.86	105.80
27	1J	103	U	O5'-P-OP2	-5.14	101.08	105.70
1	13	910	C	C5-C6-N1	-5.13	118.43	121.00
26	1H	916	G	N7-C8-N9	5.13	115.67	113.10
26	1H	1992	G	C8-N9-C4	-5.13	104.35	106.40
27	16	53	A	C8-N9-C4	-5.13	103.75	105.80
37	78	65	ARG	NE-CZ-NH2	-5.13	117.73	120.30
26	14	575	A	N9-C4-C5	-5.13	103.75	105.80
26	14	1386	C	C5-C6-N1	5.13	123.57	121.00
26	14	2432	A	C5-C6-N6	-5.13	119.59	123.70
1	13	509	A	C2-N3-C4	5.13	113.17	110.60
26	1H	974(A)	C	C2-N1-C1'	5.13	124.45	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1258	C	C5-C6-N1	-5.13	118.43	121.00
26	1H	1665	A	OP1-P-O3'	5.13	116.49	105.20
50	G5	33	MET	CB-CG-SD	-5.13	97.00	112.40
26	1H	1022	G	C8-N9-C4	-5.13	104.35	106.40
26	1H	1681	G	N3-C4-C5	5.13	131.17	128.60
26	1H	1901	A	C8-N9-C4	-5.13	103.75	105.80
26	1H	2665	A	N1-C2-N3	5.13	131.87	129.30
1	1G	73	G	C5-C6-N1	-5.13	108.94	111.50
26	14	1984	G	N9-C4-C5	-5.13	103.35	105.40
26	1H	736	C	N3-C2-O2	5.13	125.49	121.90
27	1J	117	G	N3-C4-N9	-5.13	122.92	126.00
1	13	576	G	C6-C5-N7	-5.13	127.32	130.40
26	1H	983	A	N7-C8-N9	-5.13	111.23	113.80
26	1H	1516	U	OP1-P-O3'	5.13	116.48	105.20
26	1H	1699	G	O4'-C1'-N9	5.13	112.30	108.20
26	1H	2418	A	N1-C2-N3	-5.13	126.74	129.30
26	1H	2875	C	O5'-P-OP1	-5.13	101.08	105.70
26	14	1661	G	O5'-P-OP2	-5.13	101.08	105.70
1	13	830	G	N3-C4-C5	5.13	131.16	128.60
26	1H	424	G	N3-C2-N2	-5.13	116.31	119.90
26	14	270(O)	U	N1-C2-O2	5.13	126.39	122.80
26	1H	259	G	C4-C5-N7	5.12	112.85	110.80
26	14	1249	U	C5-C6-N1	-5.12	120.14	122.70
26	1H	1389	G	OP1-P-O3'	5.12	116.47	105.20
1	13	1488	G	C5-C6-O6	-5.12	125.53	128.60
26	1H	599	G	N3-C2-N2	5.12	123.49	119.90
26	1H	647	G	C8-N9-C4	-5.12	104.35	106.40
26	1H	648	G	N3-C4-N9	-5.12	122.93	126.00
26	1H	1808	U	C5-C4-O4	-5.12	122.83	125.90
26	1H	2712	U	N1-C2-N3	5.12	117.97	114.90
26	14	945	A	N7-C8-N9	5.12	116.36	113.80
26	14	1647	G	O5'-P-OP2	5.12	116.85	110.70
26	14	2270	G	N1-C6-O6	-5.12	116.83	119.90
26	14	2688	U	C4-C5-C6	5.12	122.77	119.70
26	14	74	A	C5-N7-C8	-5.12	101.34	103.90
26	14	620	G	C8-N9-C4	-5.12	104.35	106.40
26	14	642	G	N7-C8-N9	5.12	115.66	113.10
26	1H	1381	G	OP1-P-OP2	-5.12	111.92	119.60
26	14	183	C	OP2-P-O3'	5.12	116.46	105.20
26	14	2580	U	O5'-P-OP2	5.12	116.84	110.70
26	14	2265	U	N3-C4-O4	5.12	122.98	119.40
26	14	2685	G	OP1-P-O3'	5.12	116.46	105.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	100	G	N1-C2-N2	-5.12	111.60	116.20
26	14	798	G	N1-C6-O6	-5.12	116.83	119.90
26	14	1348	G	C5-C6-O6	-5.12	125.53	128.60
26	14	1698	A	C4-N9-C1'	5.12	135.51	126.30
26	14	2239	G	C8-N9-C4	5.12	108.45	106.40
26	14	2527	C	C6-N1-C2	-5.12	118.25	120.30
26	14	2542	A	O5'-P-OP2	-5.12	101.09	105.70
26	1H	198	C	C5-C4-N4	-5.11	116.62	120.20
26	1H	664	C	OP1-P-OP2	5.11	127.27	119.60
26	1H	1256	G	C8-N9-C1'	-5.11	120.35	127.00
26	1H	1379	A	N9-C1'-C2'	5.11	120.65	114.00
1	1G	925	G	N9-C4-C5	-5.11	103.36	105.40
26	14	248	G	C6-N1-C2	-5.11	122.03	125.10
26	14	1249	U	C6-N1-C2	5.11	124.07	121.00
26	14	2448	A	C5-C6-N6	-5.11	119.61	123.70
1	13	1362(A)	C	C6-N1-C2	5.11	122.34	120.30
1	13	1406	U	OP2-P-O3'	5.11	116.44	105.20
26	1H	256	A	N9-C4-C5	-5.11	103.76	105.80
26	1H	575	A	N9-C4-C5	-5.11	103.76	105.80
26	1H	667	U	OP2-P-O3'	5.11	116.44	105.20
26	1H	681	G	N3-C4-N9	5.11	129.07	126.00
26	1H	2428	G	N1-C6-O6	-5.11	116.83	119.90
26	1H	2618	G	C4-C5-N7	-5.11	108.76	110.80
26	14	847	U	C2-N1-C1'	-5.11	111.57	117.70
26	14	2729	G	C4-C5-N7	5.11	112.84	110.80
26	1H	733	G	N3-C2-N2	5.11	123.48	119.90
26	14	1128	A	C5-C6-N1	5.11	120.25	117.70
26	1H	1476	C	C5-C6-N1	5.11	123.55	121.00
26	1H	2823	A	O5'-P-OP1	-5.11	101.10	105.70
43	D8	95	LEU	CA-CB-CG	5.11	127.05	115.30
26	14	922	U	OP1-P-O3'	5.11	116.44	105.20
26	14	2069	G	O5'-P-OP1	-5.11	101.10	105.70
1	13	1504	G	C8-N9-C4	5.11	108.44	106.40
23	2K	9	G	C2-N3-C4	5.11	114.45	111.90
26	1H	68	G	N9-C4-C5	5.11	107.44	105.40
26	1H	2487	G	C5-C6-O6	-5.11	125.54	128.60
26	1H	2520	C	N3-C2-O2	-5.11	118.33	121.90
26	14	252	G	C5-N7-C8	5.11	106.85	104.30
26	1H	105	C	N3-C2-O2	-5.10	118.33	121.90
26	1H	2500	U	N3-C2-O2	-5.10	118.63	122.20
26	14	1999	C	OP2-P-O3'	5.10	116.43	105.20
26	14	2378	A	N9-C4-C5	-5.10	103.76	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	422	C	C2-N3-C4	5.10	122.45	119.90
26	1H	858	U	OP2-P-O3'	5.10	116.42	105.20
26	1H	939	G	C5-C6-O6	5.10	131.66	128.60
26	1H	1445	C	N1-C2-O2	5.10	121.96	118.90
26	1H	1517	G	OP1-P-O3'	5.10	116.42	105.20
26	14	51	G	O5'-P-OP2	-5.10	101.11	105.70
26	14	2008	C	N1-C2-O2	-5.10	115.84	118.90
26	1H	865	C	N1-C2-N3	-5.10	115.63	119.20
26	14	2051	A	C5-N7-C8	-5.10	101.35	103.90
26	14	2430	A	N1-C2-N3	5.10	131.85	129.30
27	1J	81	G	N9-C4-C5	-5.10	103.36	105.40
26	1H	141(A)	C	N3-C4-N4	5.10	121.57	118.00
26	1H	2311	A	O4'-C1'-N9	5.10	112.28	108.20
26	14	1776	G	N3-C4-N9	5.10	129.06	126.00
1	13	497	U	N1-C2-O2	5.10	126.37	122.80
26	14	866	A	O4'-C1'-N9	-5.10	104.12	108.20
26	14	2084	C	N1-C2-O2	-5.10	115.84	118.90
26	1H	1239	G	OP2-P-O3'	5.10	116.41	105.20
26	1H	2231	C	O5'-P-OP1	5.10	116.82	110.70
26	14	932	G	N3-C4-N9	-5.10	122.94	126.00
26	1H	563	G	OP2-P-O3'	5.09	116.41	105.20
26	1H	802	A	C5-N7-C8	-5.09	101.35	103.90
26	1H	1559	G	C2-N3-C4	-5.09	109.35	111.90
26	14	791	C	P-O3'-C3'	5.09	125.81	119.70
26	14	2427	C	OP2-P-O3'	5.09	116.41	105.20
1	13	1301	U	N3-C4-O4	5.09	122.97	119.40
24	3K	71	C	O4'-C1'-N1	5.09	112.27	108.20
26	1H	410	G	O5'-P-OP2	5.09	116.81	110.70
26	1H	450	G	N7-C8-N9	5.09	115.65	113.10
26	1H	2708	G	N3-C4-N9	5.09	129.06	126.00
26	14	1286	A	N9-C4-C5	5.09	107.84	105.80
1	13	736	C	N3-C2-O2	-5.09	118.34	121.90
26	1H	430	G	C6-C5-N7	-5.09	127.35	130.40
26	1H	840	C	C5-C6-N1	-5.09	118.45	121.00
26	1H	974	G	N1-C6-O6	5.09	122.95	119.90
26	1H	2603	G	O5'-P-OP1	-5.09	101.12	105.70
26	1H	2766	G	C8-N9-C1'	-5.09	120.38	127.00
26	14	733	G	N3-C2-N2	5.09	123.46	119.90
26	1H	651	G	N3-C4-C5	-5.09	126.06	128.60
26	1H	2655	G	C8-N9-C1'	5.09	133.61	127.00
37	78	71	VAL	C-N-CD	5.09	139.09	128.40
26	14	1558	A	C2-N3-C4	-5.09	108.06	110.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	238	G	N7-C8-N9	-5.09	110.56	113.10
1	13	901	A	C4-C5-N7	5.09	113.24	110.70
1	13	1412	C	N3-C4-C5	5.09	123.94	121.90
26	1H	79	G	C8-N9-C4	-5.09	104.36	106.40
26	1H	275	G	C8-N9-C4	5.09	108.43	106.40
26	1H	731	C	OP1-P-O3'	5.09	116.39	105.20
26	1H	1834	U	C6-N1-C2	-5.09	117.95	121.00
26	1H	2490	G	C8-N9-C1'	-5.09	120.39	127.00
1	1G	769	G	C4-N9-C1'	5.09	133.11	126.50
26	14	1328	G	N3-C2-N2	5.09	123.46	119.90
26	14	1961	C	C2-N1-C1'	-5.09	113.20	118.80
26	1H	397	G	N3-C4-C5	5.08	131.14	128.60
1	13	905	U	N3-C4-C5	5.08	117.65	114.60
26	1H	686	G	N9-C4-C5	-5.08	103.37	105.40
26	1H	1899	G	C8-N9-C1'	5.08	133.61	127.00
26	1H	2084	C	C4-C5-C6	5.08	119.94	117.40
26	1H	2362	G	C8-N9-C4	5.08	108.43	106.40
28	71	68	LEU	CA-CB-CG	5.08	126.99	115.30
50	G5	16	LEU	N-CA-C	-5.08	97.27	111.00
26	1H	259	G	C8-N9-C4	5.08	108.43	106.40
26	1H	847	U	N1-C2-N3	5.08	117.95	114.90
26	1H	2250	G	C6-C5-N7	5.08	133.45	130.40
26	14	249	C	N1-C1'-C2'	5.08	120.61	114.00
26	14	876	C	N3-C2-O2	-5.08	118.34	121.90
26	14	917	A	C2-N3-C4	5.08	113.14	110.60
23	2K	28	U	OP2-P-O3'	5.08	116.38	105.20
26	1H	2199	A	N3-C4-C5	-5.08	123.24	126.80
26	14	1650	G	C8-N9-C4	-5.08	104.37	106.40
26	14	2299	G	C5-C6-O6	-5.08	125.55	128.60
26	1H	916	G	C8-N9-C4	-5.08	104.37	106.40
26	1H	1325	G	C5-C6-O6	-5.08	125.55	128.60
26	14	116	C	OP2-P-O3'	5.08	116.37	105.20
26	14	213	A	C8-N9-C4	5.08	107.83	105.80
26	14	1827	C	OP1-P-O3'	5.08	116.37	105.20
26	14	2076	U	N1-C2-O2	-5.08	119.24	122.80
26	1H	66	C	C6-N1-C2	-5.08	118.27	120.30
26	14	729	G	OP2-P-O3'	5.08	116.37	105.20
26	1H	1306	C	C2-N1-C1'	-5.08	113.22	118.80
26	1H	1400	G	C8-N9-C4	-5.08	104.37	106.40
26	1H	1658	C	C6-N1-C2	-5.08	118.27	120.30
26	14	736	C	N3-C2-O2	5.08	125.45	121.90
1	13	813	U	N3-C4-C5	5.07	117.64	114.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	76	A	C4-C5-N7	5.07	113.24	110.70
26	1H	533	G	N1-C2-N2	-5.07	111.63	116.20
26	1H	987	G	OP1-P-O3'	5.07	116.36	105.20
26	1H	1301	A	O4'-C1'-N9	5.07	112.26	108.20
26	1H	1425	G	OP1-P-O3'	5.07	116.36	105.20
26	1H	2379	G	N3-C4-N9	5.07	129.04	126.00
26	1H	2558	C	C2-N3-C4	-5.07	117.36	119.90
1	13	22	G	N3-C2-N2	-5.07	116.35	119.90
26	1H	655	A	C5-N7-C8	-5.07	101.36	103.90
26	14	670	A	N9-C4-C5	-5.07	103.77	105.80
26	14	1029	A	O5'-P-OP2	-5.07	101.14	105.70
26	1H	432	A	C5-C6-N6	-5.07	119.64	123.70
26	1H	529	A	N7-C8-N9	5.07	116.33	113.80
26	1H	632	A	OP1-P-OP2	-5.07	112.00	119.60
26	1H	803	U	OP2-P-O3'	5.07	116.36	105.20
26	1H	1266	G	N9-C4-C5	-5.07	103.37	105.40
26	1H	1649	G	C8-N9-C1'	-5.07	120.41	127.00
1	1G	377	G	N3-C4-N9	5.07	129.04	126.00
26	14	581	C	C6-N1-C2	-5.07	118.27	120.30
26	14	1138	G	C4-C5-N7	5.07	112.83	110.80
26	14	1394	U	N1-C2-O2	5.07	126.35	122.80
26	14	2376	A	N1-C6-N6	5.07	121.64	118.60
26	14	2466	C	OP2-P-O3'	5.07	116.36	105.20
31	39	123	LEU	CA-CB-CG	5.07	126.96	115.30
23	2K	77	A	C5-C6-N6	-5.07	119.64	123.70
26	1H	2360	A	C2-N3-C4	-5.07	108.06	110.60
40	65	101	LEU	CA-CB-CG	5.07	126.96	115.30
1	13	575	G	O4'-C1'-N9	-5.07	104.15	108.20
26	1H	77	C	C5-C4-N4	-5.07	116.65	120.20
26	1H	735	A	C2-N3-C4	-5.07	108.07	110.60
26	1H	2373	G	C6-C5-N7	-5.07	127.36	130.40
26	1H	2828	C	C6-N1-C2	5.07	122.33	120.30
1	1G	967	C	C2-N1-C1'	5.07	124.38	118.80
26	14	208	C	N3-C4-C5	5.07	123.93	121.90
26	14	855	G	N7-C8-N9	5.07	115.63	113.10
26	14	864	G	OP1-P-OP2	-5.07	112.00	119.60
26	14	1698	A	N7-C8-N9	5.07	116.33	113.80
26	14	2299	G	N1-C6-O6	5.07	122.94	119.90
26	14	2329	G	N1-C2-N2	-5.07	111.64	116.20
26	14	2707	G	N1-C6-O6	-5.07	116.86	119.90
26	1H	878	A	O4'-C1'-N9	5.07	112.25	108.20
26	1H	1306	C	O5'-P-OP2	5.07	116.78	110.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2199	A	N1-C6-N6	-5.07	115.56	118.60
27	16	42	C	N1-C2-O2	-5.07	115.86	118.90
26	14	1355	G	N3-C4-N9	5.07	129.04	126.00
26	14	2244	U	C4-C5-C6	5.07	122.74	119.70
1	13	1409	C	N3-C4-N4	-5.06	114.45	118.00
23	2K	5	G	N3-C4-C5	5.06	131.13	128.60
26	1H	2822	G	C6-C5-N7	-5.06	127.36	130.40
26	14	493	G	N1-C6-O6	5.06	122.94	119.90
23	2K	27	G	C4-C5-N7	5.06	112.83	110.80
24	3K	4	U	C5-C6-N1	5.06	125.23	122.70
26	1H	132	G	O5'-P-OP1	-5.06	101.14	105.70
26	1H	1408	C	N3-C4-N4	5.06	121.54	118.00
26	1H	1564	C	C6-N1-C2	-5.06	118.28	120.30
26	1H	2166	G	O4'-C1'-N9	5.06	112.25	108.20
27	16	105	G	N1-C6-O6	5.06	122.94	119.90
26	14	738	G	C4-N9-C1'	5.06	133.08	126.50
26	14	1374	G	C6-C5-N7	-5.06	127.36	130.40
26	14	1912	A	O5'-P-OP2	5.06	116.77	110.70
26	1H	1246	A	N1-C2-N3	5.06	131.83	129.30
26	1H	1293	C	OP1-P-OP2	-5.06	112.01	119.60
26	1H	1362	C	O5'-P-OP2	-5.06	101.14	105.70
26	14	307	G	N9-C4-C5	-5.06	103.38	105.40
26	14	2581	G	O4'-C1'-N9	5.06	112.25	108.20
1	13	690	G	C4-C5-C6	5.06	121.84	118.80
26	1H	209	C	N3-C4-C5	5.06	123.92	121.90
26	1H	773	U	C5-C6-N1	-5.06	120.17	122.70
26	1H	774	A	C8-N9-C1'	5.06	136.81	127.70
26	1H	2777	G	O4'-C1'-N9	-5.06	104.15	108.20
26	14	1933	G	N9-C4-C5	-5.06	103.38	105.40
26	14	2822	G	C5-C6-O6	-5.06	125.56	128.60
1	13	1305	G	C5-C6-N1	-5.06	108.97	111.50
23	2K	38	A	OP2-P-O3'	5.06	116.33	105.20
26	1H	864	G	C5-C6-N1	5.06	114.03	111.50
26	1H	1555	G	C8-N9-C1'	-5.06	120.43	127.00
26	1H	2066	C	C5-C6-N1	5.06	123.53	121.00
1	1G	266	G	O4'-C1'-N9	-5.06	104.15	108.20
26	14	826	U	N1-C2-O2	-5.06	119.26	122.80
26	14	1348	G	N1-C6-O6	5.06	122.94	119.90
1	13	886	G	C4-N9-C1'	5.06	133.07	126.50
26	1H	2391	G	O5'-P-OP1	-5.06	101.15	105.70
1	1G	33	A	C8-N9-C4	-5.06	103.78	105.80
26	14	491	G	C5-C6-O6	5.06	131.63	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1087	G	C4-N9-C1'	5.06	133.07	126.50
26	14	2439	A	C5-C6-N6	-5.06	119.66	123.70
26	14	2449	U	N3-C4-O4	5.06	122.94	119.40
26	1H	1402	C	O5'-P-OP1	-5.05	101.15	105.70
26	1H	1501	C	O5'-P-OP1	-5.05	101.15	105.70
26	1H	2716	U	O5'-P-OP2	-5.05	101.15	105.70
1	1G	550	G	C8-N9-C4	-5.05	104.38	106.40
1	1G	701	C	N3-C2-O2	-5.05	118.36	121.90
26	14	1933	G	C4-C5-N7	5.05	112.82	110.80
27	1J	55	U	N3-C4-C5	-5.05	111.57	114.60
1	13	63	C	C6-N1-C2	-5.05	118.28	120.30
1	13	569	C	C2-N1-C1'	-5.05	113.24	118.80
26	1H	49	A	C2-N3-C4	5.05	113.13	110.60
26	1H	218	A	C8-N9-C4	-5.05	103.78	105.80
26	1H	1254	A	O5'-P-OP1	-5.05	101.15	105.70
1	1G	360	A	N9-C4-C5	-5.05	103.78	105.80
26	14	128	C	C2'-C3'-O3'	5.05	121.78	113.70
26	14	141	A	O4'-C1'-N9	5.05	112.24	108.20
26	1H	130	C	C6-N1-C1'	-5.05	114.74	120.80
26	1H	141	A	O4'-C1'-N9	5.05	112.24	108.20
26	1H	783	A	C4-N9-C1'	5.05	135.39	126.30
26	1H	1648	C	C6-N1-C1'	5.05	126.86	120.80
26	1H	1842	G	O5'-P-OP2	-5.05	101.16	105.70
1	1G	1139	G	C4-N9-C1'	-5.05	119.94	126.50
26	14	270(K)	C	C5-C6-N1	5.05	123.53	121.00
26	1H	2048	G	N1-C2-N2	5.05	120.74	116.20
26	14	1276	A	C8-N9-C4	5.05	107.82	105.80
26	1H	472	A	N1-C2-N3	5.05	131.82	129.30
26	1H	741	G	O5'-P-OP2	-5.05	101.16	105.70
26	1H	807	U	C5-C4-O4	-5.05	122.87	125.90
26	1H	1634	A	OP1-P-OP2	5.05	127.17	119.60
26	1H	2296	U	N3-C4-O4	5.05	122.93	119.40
26	1H	2387	U	C5-C6-N1	-5.05	120.18	122.70
26	1H	1445	C	C6-N1-C2	-5.04	118.28	120.30
26	14	1119	C	C2-N1-C1'	-5.04	113.25	118.80
27	1J	89(A)	A	C8-N9-C4	-5.04	103.78	105.80
26	1H	214	G	N7-C8-N9	5.04	115.62	113.10
26	1H	786	C	N3-C4-N4	-5.04	114.47	118.00
26	14	697	C	O5'-P-OP1	-5.04	101.16	105.70
26	1H	80	G	C4-C5-N7	-5.04	108.78	110.80
26	1H	201	C	O5'-P-OP2	-5.04	101.16	105.70
26	1H	1395	A	C4-N9-C1'	-5.04	117.22	126.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1800	C	OP1-P-O3'	5.04	116.29	105.20
38	88	17	LEU	CA-CB-CG	-5.04	103.71	115.30
26	14	1407	C	C5-C4-N4	-5.04	116.67	120.20
26	1H	898	C	N1-C2-O2	5.04	121.92	118.90
26	1H	2199	A	N7-C8-N9	5.04	116.32	113.80
26	1H	2438	U	N3-C2-O2	-5.04	118.67	122.20
26	1H	141(A)	C	C5-C4-N4	-5.04	116.67	120.20
26	1H	142	G	C5-C6-O6	-5.04	125.58	128.60
26	1H	1899	G	O3'-P-O5'	-5.04	94.43	104.00
37	78	61	ARG	NE-CZ-NH2	-5.04	117.78	120.30
26	14	613	U	C2-N1-C1'	5.04	123.75	117.70
26	14	676	A	N3-C4-C5	5.04	130.33	126.80
26	14	784	A	P-O3'-C3'	5.04	125.75	119.70
26	14	1463	C	C6-N1-C2	-5.04	118.28	120.30
26	14	2433	A	C4-C5-C6	5.04	119.52	117.00
26	1H	2267	A	OP1-P-O3'	5.04	116.28	105.20
26	14	2873	A	C5-C6-N6	-5.04	119.67	123.70
1	13	752	G	C5-C6-O6	-5.04	125.58	128.60
1	13	943	U	O5'-P-OP1	-5.04	101.17	105.70
26	1H	1238	G	N1-C6-O6	-5.04	116.88	119.90
26	1H	1349	A	C2-N3-C4	-5.04	108.08	110.60
26	1H	1564	C	C5-C4-N4	5.04	123.72	120.20
26	1H	1899	G	N1-C2-N2	5.04	120.73	116.20
1	1G	1472	U	C5-C6-N1	-5.04	120.18	122.70
1	13	924	C	C6-N1-C2	-5.03	118.29	120.30
26	1H	663	G	C4-N9-C1'	5.03	133.04	126.50
26	1H	1914	C	C6-N1-C2	-5.03	118.29	120.30
26	1H	2457	U	N3-C2-O2	5.03	125.72	122.20
26	1H	2554	U	N3-C4-O4	5.03	122.92	119.40
26	14	1142	U	C5-C6-N1	5.03	125.22	122.70
26	14	1779	U	O4'-C1'-N1	5.03	112.23	108.20
26	14	2429	G	O5'-P-OP1	5.03	116.74	110.70
27	1J	81	G	C6-C5-N7	-5.03	127.38	130.40
39	55	75	LEU	CA-CB-CG	5.03	126.88	115.30
26	1H	1544	C	N3-C4-C5	5.03	123.91	121.90
56	1L	69	A	OP1-P-O3'	5.03	116.27	105.20
26	14	2272	U	N1-C2-O2	5.03	126.32	122.80
1	13	895	G	N9-C4-C5	5.03	107.41	105.40
26	1H	817	C	C6-N1-C2	-5.03	118.29	120.30
26	1H	1443	G	C5-C6-N1	-5.03	108.98	111.50
26	1H	2069	G	OP2-P-O3'	5.03	116.27	105.20
26	1H	2251	G	O5'-P-OP1	-5.03	101.17	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1467	G	O5'-P-OP2	-5.03	101.17	105.70
26	14	909	A	OP2-P-O3'	5.03	116.27	105.20
26	14	2547	U	C5-C6-N1	-5.03	120.19	122.70
26	1H	632	A	O5'-P-OP2	5.03	116.73	110.70
26	14	1128	A	OP2-P-O3'	5.03	116.26	105.20
26	14	2859	G	P-O3'-C3'	5.03	125.73	119.70
1	13	1437	C	C5-C4-N4	-5.03	116.68	120.20
26	1H	620	G	O5'-P-OP2	-5.03	101.17	105.70
26	1H	1800	C	O5'-P-OP2	5.03	116.73	110.70
26	14	775	G	O4'-C1'-N9	5.03	112.22	108.20
26	14	1377	G	C8-N9-C4	-5.03	104.39	106.40
1	13	110	C	C5-C6-N1	-5.03	118.49	121.00
1	13	771	G	N3-C2-N2	-5.03	116.38	119.90
26	1H	592	G	OP2-P-O3'	5.03	116.26	105.20
26	1H	1200	C	OP1-P-OP2	-5.03	112.06	119.60
26	1H	2439	A	C6-C5-N7	-5.03	128.78	132.30
26	14	2779	U	C5-C4-O4	5.03	128.92	125.90
26	1H	194	G	C8-N9-C4	5.02	108.41	106.40
26	1H	1807	G	N9-C4-C5	-5.02	103.39	105.40
26	14	382	G	OP1-P-O3'	5.02	116.25	105.20
26	14	2559	C	O5'-P-OP1	-5.02	101.18	105.70
26	1H	474	G	N9-C4-C5	5.02	107.41	105.40
26	1H	776	G	C4-C5-N7	-5.02	108.79	110.80
26	1H	808	G	OP1-P-OP2	5.02	127.13	119.60
26	1H	2254	C	C5-C4-N4	5.02	123.72	120.20
27	16	16	G	N1-C6-O6	5.02	122.91	119.90
26	14	1313	U	C6-N1-C2	-5.02	117.99	121.00
26	14	1496	A	O4'-C1'-N9	5.02	112.22	108.20
26	1H	1368	G	N3-C4-N9	5.02	129.01	126.00
1	1G	534	U	OP2-P-O3'	5.02	116.25	105.20
26	1H	1210	A	P-O3'-C3'	5.02	125.72	119.70
26	1H	2129	C	C6-N1-C2	-5.02	118.29	120.30
26	1H	2690	C	N3-C4-C5	-5.02	119.89	121.90
26	1H	2856	C	C2-N1-C1'	5.02	124.32	118.80
1	1G	312	C	C6-N1-C2	-5.02	118.29	120.30
26	14	804	A	OP1-P-O3'	5.02	116.24	105.20
26	14	1374	G	N1-C6-O6	5.02	122.91	119.90
26	1H	1403	C	N3-C4-N4	-5.02	114.49	118.00
26	14	3	U	N1-C2-O2	5.02	126.31	122.80
26	14	566	U	C5-C4-O4	-5.02	122.89	125.90
26	14	1801	G	O5'-P-OP1	-5.02	101.18	105.70
26	14	2057	A	C8-N9-C4	5.02	107.81	105.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	322	A	OP2-P-O3'	5.02	116.24	105.20
26	14	932	G	N3-C4-C5	5.02	131.11	128.60
26	14	2023	G	C5-N7-C8	-5.02	101.79	104.30
26	14	2035	G	O4'-C1'-N9	5.02	112.21	108.20
26	14	2331	G	N9-C4-C5	-5.02	103.39	105.40
1	13	789	U	C4-C5-C6	5.01	122.71	119.70
26	1H	250	G	C5-C6-O6	5.01	131.61	128.60
26	1H	1274	A	C6-C5-N7	-5.01	128.79	132.30
26	1H	1602	U	O5'-P-OP1	-5.01	101.19	105.70
26	1H	1955	U	C5-C6-N1	-5.01	120.19	122.70
1	1G	1128	C	N3-C4-C5	-5.01	119.89	121.90
1	1G	1200	C	C2-N1-C1'	5.01	124.31	118.80
26	14	2265	U	O5'-P-OP1	-5.01	101.19	105.70
26	14	2402	C	C6-N1-C2	-5.01	118.29	120.30
26	14	1313	U	C2-N1-C1'	5.01	123.72	117.70
26	14	1786	A	N3-C4-N9	-5.01	123.39	127.40
1	13	1069	C	C6-N1-C2	-5.01	118.30	120.30
26	1H	472	A	N9-C4-C5	5.01	107.80	105.80
26	1H	580	C	N3-C2-O2	-5.01	118.39	121.90
26	1H	762	U	OP1-P-O3'	5.01	116.23	105.20
26	1H	1640	C	O5'-P-OP1	5.01	116.71	110.70
26	1H	1810	A	C8-N9-C4	-5.01	103.80	105.80
26	1H	2710	C	C5-C6-N1	-5.01	118.49	121.00
1	1G	354	G	C6-C5-N7	-5.01	127.39	130.40
23	2L	77	A	C2-N3-C4	-5.01	108.09	110.60
26	14	114	U	C6-N1-C1'	-5.01	114.18	121.20
26	14	121	G	C5-N7-C8	-5.01	101.79	104.30
26	14	1633	G	C5-C6-O6	-5.01	125.59	128.60
26	1H	568	U	C2-N3-C4	-5.01	123.99	127.00
26	1H	2291	U	C6-N1-C1'	5.01	128.21	121.20
26	1H	2703	C	C6-N1-C2	-5.01	118.30	120.30
1	1G	209	U	C2-N1-C1'	5.01	123.71	117.70
27	1J	98	G	N1-C6-O6	5.01	122.91	119.90
1	13	571	U	C6-N1-C2	-5.01	118.00	121.00
1	13	1259	C	C6-N1-C2	-5.01	118.30	120.30
26	1H	72	U	OP1-P-O3'	5.01	116.22	105.20
26	1H	2275	C	C5-C6-N1	5.01	123.50	121.00
26	1H	864	G	C8-N9-C4	-5.01	104.40	106.40
26	1H	1820	U	O5'-P-OP2	-5.01	101.19	105.70
1	1G	73	G	N1-C6-O6	5.01	122.90	119.90
26	14	2	G	C4-N9-C1'	5.01	133.01	126.50
26	14	249	C	N1-C2-O2	5.01	121.90	118.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1774	C	C5-C6-N1	5.01	123.50	121.00
26	14	1914	C	C2-N1-C1'	5.01	124.31	118.80
26	14	1786	A	OP1-P-O3'	5.00	116.21	105.20
26	1H	1007	C	N3-C4-C5	5.00	123.90	121.90
26	1H	1544	C	N1-C2-O2	5.00	121.90	118.90
26	1H	1653	G	C8-N9-C1'	-5.00	120.50	127.00
26	14	1827	C	C5-C6-N1	5.00	123.50	121.00
26	14	2177	C	O4'-C1'-N1	5.00	112.20	108.20
26	14	2543	G	C5-C6-O6	-5.00	125.60	128.60
26	14	2584	U	C2-N1-C1'	5.00	123.70	117.70
27	1J	30	C	C5-C6-N1	5.00	123.50	121.00
22	1K	74	C	C6-N1-C1'	-5.00	114.80	120.80
26	1H	115	C	O5'-P-OP1	-5.00	101.20	105.70
26	14	1568	G	N3-C4-C5	5.00	131.10	128.60

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	13	792	A	C1'

All (141) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
29	11	113	VAL	Peptide
29	11	233	HIS	Peptide
29	11	236	GLY	Peptide
29	11	237	GLU	Peptide
2	12	12	GLU	Peptide
2	12	19	HIS	Peptide
2	12	219	VAL	Peptide
2	12	22	LYS	Peptide
29	19	197	GLY	Peptide
29	19	237	GLU	Peptide
29	19	27	THR	Peptide
29	19	28	GLU	Peptide
2	1E	12	GLU	Peptide
2	1E	15	VAL	Peptide
2	1E	169	LYS	Peptide
2	1E	9	GLU	Peptide
10	1I	75	ILE	Peptide
30	21	20	ALA	Peptide
30	21	21	VAL	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
30	21	67	PHE	Peptide
30	21	78	LEU	Peptide
30	21	82	ARG	Peptide
3	22	86	VAL	Peptide
3	22	93	LYS	Peptide
30	29	44	TYR	Peptide
30	29	61	ARG	Peptide
30	29	76	ARG	Peptide
30	29	87	GLU	Peptide
30	29	89	ASP	Peptide
11	2A	49	GLY	Peptide
11	2I	102	GLY	Peptide
31	31	196	LEU	Peptide
31	31	22	ALA	Peptide
31	31	23	ASP	Peptide
31	31	67	GLN	Peptide
4	32	29	PRO	Peptide
37	35	110	TYR	Peptide
37	35	36	LYS	Peptide
37	35	5	ASP	Peptide
31	39	127	GLU	Peptide
31	39	14	PRO	Peptide
31	39	166	ALA	Peptide
31	39	20	LEU	Peptide
31	39	24	LEU	Peptide
31	39	69	HIS	Mainchain
31	39	89	VAL	Peptide
4	3E	193	ASP	Peptide
12	3I	47	LYS	Peptide
32	41	95	ARG	Peptide
38	45	134	ARG	Peptide
38	45	135	ASP	Peptide
38	45	137	TYR	Peptide
38	45	58	PHE	Peptide
38	45	80	GLU	Peptide
38	45	82	ARG	Peptide
32	49	13	GLU	Peptide
13	4A	92	HIS	Peptide
13	4A	94	ARG	Peptide
13	4I	105	THR	Peptide
13	4I	107	ALA	Peptide
13	4I	66	LEU	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
33	51	137	ASP	Peptide
33	51	152	ARG	Peptide
33	51	156	ALA	Peptide
33	51	2	SER	Peptide
33	51	20	ALA	Peptide
33	51	40	GLU	Peptide
39	55	106	GLY	Peptide
14	5A	27	CYS	Peptide
34	61	11	ASN	Peptide
34	61	114	LEU	Peptide
34	61	134	PRO	Peptide
34	61	82	ARG	Peptide
40	65	59	LYS	Peptide
34	69	112	LYS	Peptide
34	69	142	VAL	Peptide
28	71	211	SER	Peptide
28	71	31	GLU	Peptide
28	71	39	GLU	Peptide
41	75	12	SER	Peptide
37	78	13	ASN	Peptide
37	78	18	ARG	Peptide
37	78	19	VAL	Peptide
37	78	36	LYS	Peptide
37	78	70	GLN	Peptide
9	82	117	HIS	Peptide
42	85	72	HIS	Peptide
42	85	90	VAL	Peptide
42	85	95	LEU	Peptide
42	85	98	LEU	Peptide
38	88	21	THR	Peptide
9	8E	110	GLU	Peptide
43	95	44	LYS	Peptide
43	95	49	THR	Peptide
39	98	44	LEU	Peptide
18	9I	33	ASP	Peptide
44	A5	111	HIS	Peptide
44	A5	43	GLY	Peptide
19	AI	6	LYS	Peptide
19	AI	7	LYS	Peptide
45	B5	61	GLY	Peptide
41	B8	58	ASN	Peptide
20	BA	11	SER	Peptide

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
20	BA	72	LEU	Peptide
46	C5	50	ARG	Peptide
46	C5	91	GLU	Peptide
46	C5	99	CYS	Peptide
42	C8	92	ARG	Peptide
42	C8	95	LEU	Peptide
47	D5	136	PHE	Peptide
47	D5	61	LEU	Peptide
43	D8	36	PRO	Peptide
43	D8	44	LYS	Peptide
43	D8	48	GLY	Peptide
45	F8	24	GLY	Peptide
45	F8	3	THR	Peptide
50	G5	15	LYS	Peptide
50	G5	16	LEU	Peptide
50	G5	17	SER	Peptide
50	G5	43	GLN	Peptide
46	G8	104	GLY	Peptide
46	G8	5	MET	Peptide
46	G8	53	PRO	Peptide
46	G8	54	LYS	Peptide
46	G8	84	ARG	Peptide
46	G8	94	LYS	Peptide
46	G8	99	CYS	Peptide
47	H8	117	LEU	Peptide
47	H8	165	VAL	Peptide
47	H8	59	LEU	Peptide
47	H8	63	ASP	Peptide
49	J8	75	GLU	Peptide
49	J8	92	LYS	Peptide
50	K8	15	LYS	Peptide
50	K8	17	SER	Peptide
50	K8	46	GLN	Peptide
55	M5	40	GLU	Peptide
55	M5	48	PHE	Peptide
52	M8	40	HIS	Peptide
52	M8	43	TYR	Peptide
55	Q8	52	LYS	Peptide

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32157	0	16233	755	0
1	1G	32391	0	16353	749	0
2	12	1721	0	1758	101	0
2	1E	1874	0	1926	103	0
3	22	1541	0	1606	69	0
3	2E	1605	0	1668	58	0
4	32	1702	0	1765	110	0
4	3E	1698	0	1761	83	0
5	42	1134	0	1200	45	0
5	4E	1142	0	1204	62	0
6	52	842	0	857	30	0
6	5E	837	0	852	35	0
7	62	1110	0	1163	49	0
7	6E	1242	0	1286	44	0
8	72	1107	0	1165	39	0
8	7E	1115	0	1177	58	0
9	82	953	0	983	70	0
9	8E	1000	0	1031	58	0
10	1A	646	0	662	33	0
10	1I	734	0	761	43	0
11	2A	835	0	847	31	0
11	2I	823	0	833	49	0
12	3A	956	0	1046	56	0
12	3I	956	0	1046	33	0
13	4A	893	0	946	61	0
13	4I	942	0	997	53	0
14	5A	486	0	525	25	0
14	5I	491	0	529	26	0
15	6A	733	0	771	34	0
15	6I	729	0	768	29	0
16	7A	705	0	725	29	0
16	7I	700	0	720	47	0
17	8A	823	0	891	35	0
17	8I	834	0	904	42	0
18	9A	544	0	605	26	0
18	9I	549	0	607	36	0
19	AA	481	0	468	32	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	AI	654	0	675	44	0
20	BA	762	0	861	32	0
20	BI	746	0	843	49	0
21	1B	188	0	195	13	0
21	1F	199	0	208	5	0
22	1K	1520	0	778	41	0
23	2K	1646	0	843	30	0
23	2L	1646	0	843	40	0
24	3K	1611	0	817	48	0
25	4K	419	0	208	6	0
25	4L	397	0	197	12	0
26	14	61630	0	31073	1315	0
26	1H	61028	0	30763	1351	0
27	16	2617	0	1328	55	0
27	1J	2617	0	1328	65	0
28	71	1033	0	1048	77	0
28	79	456	0	460	22	0
29	11	2120	0	2197	131	0
29	19	2125	0	2199	104	0
30	21	1558	0	1624	83	0
30	29	1563	0	1629	117	0
31	31	1585	0	1632	89	0
31	39	1602	0	1649	80	0
32	41	1457	0	1514	94	0
32	49	1458	0	1516	59	0
33	51	1312	0	1384	66	0
33	59	568	0	595	48	0
34	61	1136	0	1223	57	0
34	69	1131	0	1218	48	0
35	15	1104	0	1180	38	0
35	58	1104	0	1180	54	0
36	25	932	0	996	36	0
36	68	932	0	996	42	0
37	35	1122	0	1206	77	0
37	78	1122	0	1206	94	0
38	45	1099	0	1154	79	0
38	88	1113	0	1157	51	0
39	55	967	0	1033	49	0
39	98	967	0	1033	49	0
40	65	876	0	938	65	0
40	A8	881	0	943	52	0
41	75	1109	0	1170	55	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
41	B8	1109	0	1170	60	0
42	85	959	0	1019	53	0
42	C8	950	0	1011	52	0
43	95	774	0	849	63	0
43	D8	774	0	849	43	0
44	A5	899	0	964	28	0
44	E8	890	0	951	25	0
45	B5	735	0	785	35	0
45	F8	743	0	794	36	0
46	C5	794	0	886	68	0
46	G8	796	0	886	45	0
47	D5	1074	0	1086	53	0
47	H8	1373	0	1402	59	0
48	E5	608	0	622	26	0
48	I8	606	0	625	30	0
49	F5	737	0	813	32	0
49	J8	737	0	813	39	0
50	G5	558	0	610	33	0
50	K8	568	0	614	36	0
51	H5	459	0	512	10	0
51	L8	459	0	512	18	0
52	M8	366	0	370	37	0
53	J5	434	0	454	22	0
53	N8	369	0	388	22	0
54	L5	401	0	436	14	0
54	P8	401	0	436	14	0
55	M5	516	0	582	28	0
55	Q8	516	0	582	34	0
56	1L	1563	0	799	42	0
57	3L	1612	0	819	41	0
58	13	132	0	0	0	0
58	14	399	0	0	0	0
58	16	9	0	0	0	0
58	1E	1	0	0	0	0
58	1G	90	0	0	0	0
58	1H	467	0	0	0	0
58	1J	5	0	0	0	0
58	1K	1	0	0	0	0
58	21	2	0	0	0	0
58	25	1	0	0	0	0
58	29	4	0	0	0	0
58	2K	3	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	2L	2	0	0	0	0
58	35	3	0	0	0	0
58	39	1	0	0	0	0
58	3K	1	0	0	0	0
58	41	1	0	0	0	0
58	45	2	0	0	0	0
58	55	1	0	0	0	0
58	5E	1	0	0	0	0
58	6A	1	0	0	0	0
58	78	1	0	0	0	0
58	88	1	0	0	0	0
58	98	1	0	0	0	0
58	E5	1	0	0	0	0
58	I8	3	0	0	0	0
58	J8	1	0	0	0	0
58	L8	1	0	0	0	0
58	P8	1	0	0	0	0
58	Q8	1	0	0	0	0
59	32	8	0	0	2	0
59	3E	8	0	0	1	0
60	5A	1	0	0	0	0
60	5I	1	0	0	0	0
60	C5	1	0	0	0	0
60	G8	1	0	0	0	0
61	11	7	0	0	5	0
61	13	126	0	0	21	0
61	14	417	0	0	73	0
61	16	29	0	0	6	0
61	19	8	0	0	1	0
61	1G	78	0	0	9	0
61	1H	629	0	0	101	0
61	1J	6	0	0	1	0
61	1K	8	0	0	0	0
61	21	4	0	0	2	0
61	29	2	0	0	0	0
61	31	9	0	0	0	0
61	32	1	0	0	0	0
61	35	1	0	0	0	0
61	39	5	0	0	0	0
61	3I	2	0	0	0	0
61	3K	1	0	0	0	0
61	4K	2	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	55	1	0	0	0	0
61	58	2	0	0	0	0
61	5A	2	0	0	0	0
61	5I	2	0	0	0	0
61	78	7	0	0	2	0
61	88	1	0	0	0	0
61	A5	1	0	0	0	0
61	B8	1	0	0	0	0
61	E8	2	0	0	0	0
61	F8	1	0	0	0	0
61	G8	1	0	0	0	0
61	H5	2	0	0	1	0
61	I8	3	0	0	1	0
61	L8	2	0	0	1	0
All	All	294444	0	196318	8229	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 17.

All (8229) 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)
46:G8:100:ALA:HB1	46:G8:101:LYS:HG2	1.34	1.09
55:M5:48:PHE:HB2	55:M5:49:VAL:HG22	1.31	1.07
26:14:161:U:H5'	26:14:171:G:H21	1.18	1.06
26:1H:2711:A:OP2	61:1H:3501:HOH:O	1.73	1.05
26:14:2002:G:N7	61:14:3505:HOH:O	1.91	1.03
26:1H:2714:G:OP2	61:1H:3501:HOH:O	1.77	1.01
26:1H:913:U:O4	61:1H:3503:HOH:O	1.78	1.01
9:82:5:TYR:HA	9:82:87:GLN:HE21	1.23	1.01
43:95:85:LYS:HD2	43:95:86:GLY:H	1.25	1.00
26:1H:450:G:OP2	61:1H:3502:HOH:O	1.78	1.00
26:14:2415:G:H4'	37:35:67:MET:H	1.26	0.99
26:1H:1496:A:H8	26:1H:1577:C:HO2'	0.99	0.98
26:1H:748:G:OP2	61:1H:3504:HOH:O	1.82	0.96
1:13:510:A:OP2	4:3E:49:ARG:NH2	1.98	0.96
26:14:1771:C:HO2'	26:14:1786:A:H8	1.11	0.95
26:14:676:A:H8	26:14:2069:G:H21	1.08	0.94
7:62:113:GLU:HB2	7:62:119:ARG:HG2	1.47	0.94
46:C5:97:ARG:NH1	46:C5:104:GLY:O	2.00	0.94
30:21:135:HIS:NE2	61:21:401:HOH:O	1.99	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:450:G:OP2	61:14:3502:HOH:O	1.85	0.94
26:1H:1771:C:HO2'	26:1H:1786:A:H8	1.01	0.93
26:14:2448:A:OP2	61:14:3501:HOH:O	1.84	0.93
9:82:112:LYS:HA	9:82:119:ALA:HB2	1.50	0.93
26:14:1418:G:N7	61:14:3513:HOH:O	2.01	0.93
26:14:733:G:OP2	61:14:3503:HOH:O	1.86	0.93
45:F8:3:THR:O	45:F8:5:TYR:N	2.02	0.93
10:1I:48:THR:HA	10:1I:62:HIS:HB3	1.50	0.93
61:14:3506:HOH:O	39:55:3:HIS:NE2	2.01	0.93
26:14:900:A:H2'	26:14:901:A:H8	1.34	0.93
26:14:67:U:H3	26:14:74:A:H2	1.15	0.91
1:13:1003:G:H1	1:13:1037:C:H42	1.19	0.91
26:1H:2308:G:H1	26:1H:2311:A:H2	1.18	0.91
26:14:2685:G:O6	61:14:3504:HOH:O	1.87	0.91
1:1G:1347:G:N7	9:82:10:ARG:NH2	2.19	0.91
26:14:660:G:H21	37:35:12:ALA:HB2	1.34	0.91
26:1H:2502:G:OP2	61:1H:3505:HOH:O	1.87	0.91
1:13:455:C:N3	1:13:477:G:N2	2.18	0.91
10:1A:51:ARG:HB2	10:1A:60:ARG:HA	1.50	0.90
26:14:2499:C:OP2	61:14:3501:HOH:O	1.90	0.90
26:14:2392:A:H2	26:14:2424:C:H42	1.16	0.90
19:AI:40:ILE:HG23	19:AI:41:VAL:HG13	1.54	0.89
26:1H:1050:A:H2'	26:1H:1051:G:H8	1.34	0.89
26:1H:1602:U:O4	61:1H:3506:HOH:O	1.88	0.89
26:14:2357:U:OP1	48:E5:20:ARG:NH1	2.06	0.89
43:D8:10:LYS:NZ	43:D8:23:GLU:OE1	2.05	0.89
29:11:146:GLU:HB2	29:11:189:CYS:HB3	1.55	0.89
24:3K:30:G:H1	24:3K:40:C:H42	1.20	0.89
29:11:242:ARG:O	61:11:401:HOH:O	1.91	0.89
26:1H:1479:G:N7	26:1H:1510:A:N6	2.21	0.89
26:14:833:U:O2	37:35:55:ARG:NH1	2.05	0.88
26:14:1225:C:H4'	43:95:85:LYS:HG2	1.54	0.88
14:5A:7:ILE:HD11	14:5A:28:GLY:HA2	1.54	0.88
26:14:2873:A:H8	39:55:6:SER:H	1.21	0.88
4:32:157:LEU:O	4:32:161:ASN:ND2	2.07	0.88
27:16:82:G:N7	61:16:301:HOH:O	2.06	0.88
1:1G:975:A:H4'	1:1G:976:G:H5''	1.56	0.88
26:1H:2392:A:H2	26:1H:2424:C:H42	1.22	0.88
28:71:40:THR:OG1	28:71:218:MET:SD	2.32	0.88
26:14:1632:A:N7	61:14:3518:HOH:O	2.06	0.88
26:1H:2139:C:H42	26:1H:2152:G:H22	1.20	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7A:35:LYS:HD3	16:7A:35:LYS:H	1.39	0.88
1:1G:1502:A:H2	1:1G:1505:G:H1	1.17	0.87
1:13:362:G:O2'	12:3I:33:ARG:NH2	2.06	0.87
26:1H:2271:G:N7	61:1H:3531:HOH:O	2.07	0.87
1:13:1346:A:H5''	9:8E:120:ARG:HH12	1.37	0.87
31:31:6:VAL:HG21	31:31:119:ARG:HB3	1.57	0.87
46:G8:94:LYS:HZ2	46:G8:95:LYS:H	1.23	0.87
26:14:2592:G:N7	61:14:3520:HOH:O	2.07	0.86
33:51:153:LYS:HB2	33:51:155:SER:H	1.39	0.86
26:14:761:A:N7	61:14:3521:HOH:O	2.07	0.86
36:25:14:THR:HG21	36:25:86:ILE:HG13	1.58	0.86
13:4A:81:LEU:HB3	13:4A:89:GLY:HA3	1.57	0.86
30:29:54:GLN:NE2	30:29:73:GLU:O	2.08	0.85
1:1G:258:G:N7	61:1G:1703:HOH:O	2.09	0.85
26:14:943:U:OP2	37:35:36:LYS:NZ	2.10	0.85
36:25:2:ILE:HD12	36:25:6:THR:HG21	1.57	0.85
29:11:182:LEU:H	29:11:272:ALA:HB3	1.40	0.85
13:4I:23:TYR:HB3	13:4I:67:GLU:HB2	1.58	0.85
1:1G:1162:C:H42	1:1G:1174:G:H1	1.24	0.85
26:1H:1021:A:H62	26:1H:1141:U:H3	1.21	0.85
26:1H:2597:G:O3'	61:1H:3508:HOH:O	1.95	0.85
47:H8:111:VAL:HG12	47:H8:146:ILE:HD13	1.58	0.85
50:K8:3:LEU:HA	50:K8:5:GLU:HB2	1.59	0.85
30:29:14:ILE:HB	41:75:14:TYR:HE2	1.41	0.85
11:2A:29:ILE:HG22	11:2A:44:SER:HB2	1.59	0.85
1:1G:1348:U:H3	1:1G:1374:A:H2	1.22	0.84
41:B8:3:ARG:HB2	41:B8:6:LEU:HB2	1.58	0.84
32:49:161:THR:HG22	32:49:163:ALA:H	1.40	0.84
26:1H:270(J):G:H1	26:1H:270(P):C:H42	1.24	0.84
26:1H:585:G:OP1	61:1H:3507:HOH:O	1.94	0.84
33:59:171:LEU:HD13	33:59:172:LYS:H	1.41	0.84
26:1H:761:A:N7	61:1H:3536:HOH:O	2.09	0.84
38:45:25:ASP:HB3	38:45:102:VAL:H	1.41	0.84
26:1H:563:G:OP2	61:1H:3510:HOH:O	1.95	0.84
1:13:1239:A:H62	1:13:1299:A:H62	1.24	0.84
16:7A:40:ASP:HB3	16:7A:48:TRP:HB2	1.60	0.84
26:14:84:A:N6	26:14:102:G:O2'	2.11	0.84
50:G5:50:ILE:HD12	50:G5:51:ARG:H	1.39	0.84
1:1G:1248:A:N3	9:82:70:LYS:NZ	2.24	0.84
41:B8:57:PHE:O	41:B8:58:ASN:ND2	2.09	0.83
26:1H:49:A:N7	26:1H:120:U:H5	1.76	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:586:A:OP2	61:1H:3513:HOH:O	1.96	0.83
52:M8:40:HIS:HE1	52:M8:46:GLN:HA	1.41	0.83
26:1H:730:C:OP2	61:1H:3511:HOH:O	1.95	0.83
26:14:841:A:H61	26:14:937:U:H3	1.26	0.83
34:69:99:GLU:O	34:69:103:ARG:NH1	2.11	0.83
31:39:181:LEU:HD11	31:39:186:ILE:HD11	1.61	0.83
1:13:1502:A:H2	1:13:1505:G:H1	1.27	0.83
26:14:974:G:O2'	26:14:975:G:N7	2.11	0.83
26:1H:2789:C:H1'	26:1H:2892:A:H2	1.43	0.83
46:C5:14:LEU:HB2	46:C5:75:ILE:HD11	1.60	0.83
26:1H:1970:A:OP2	61:1H:3509:HOH:O	1.95	0.83
32:41:112:PRO:HB3	52:M8:37:SER:H	1.44	0.83
12:3I:117:ARG:HB3	12:3I:122:THR:HB	1.60	0.83
1:13:963:G:N2	1:13:972:C:N3	2.26	0.83
37:35:39:LYS:HD2	37:35:45:LEU:HD21	1.58	0.82
29:19:43:ARG:HB3	29:19:49:ILE:HA	1.59	0.82
41:B8:3:ARG:O	41:B8:7:ILE:N	2.11	0.82
26:1H:1265:A:OP2	61:1H:3514:HOH:O	1.97	0.82
45:B5:41:ASN:HA	45:B5:44:GLU:HB2	1.61	0.82
26:1H:586:A:OP2	61:1H:3512:HOH:O	1.96	0.82
30:29:60:ASN:HB2	30:29:62:PRO:HD2	1.61	0.82
57:3L:18:G:H2'	57:3L:57:G:H21	1.42	0.82
1:1G:452:A:H4'	16:7A:72:ARG:HH12	1.43	0.82
26:1H:1728:G:H3'	26:1H:1729:A:H5'	1.61	0.82
35:58:96:GLU:O	35:58:98:VAL:N	2.13	0.82
1:13:1423:G:OP1	36:68:49:ARG:NH2	2.13	0.82
4:32:162:LEU:HA	4:32:165:MET:HB2	1.59	0.82
26:1H:2137:C:O2	26:1H:2155:G:N1	2.13	0.82
5:42:102:ALA:HB1	5:42:106:PRO:HG2	1.62	0.82
1:1G:862:C:H1'	1:1G:874:G:H5''	1.62	0.82
31:31:157:VAL:HB	31:31:194:MET:HG2	1.60	0.82
26:1H:862:G:OP2	61:1H:3516:HOH:O	1.98	0.81
3:2E:16:ARG:HD2	3:2E:54:ARG:HH21	1.44	0.81
26:1H:620:G:H4'	26:1H:621:A:H5''	1.60	0.81
27:16:15:A:H5'	27:16:16:G:C8	2.15	0.81
1:13:1292:U:OP1	7:6E:41:ARG:NH2	2.13	0.81
26:1H:142:G:H1'	45:F8:37:THR:HG21	1.60	0.81
26:14:958:U:OP2	38:45:14:ARG:NH1	2.14	0.81
26:1H:1249:U:OP1	61:1H:3515:HOH:O	1.97	0.81
1:1G:838:G:N2	1:1G:848:C:N3	2.29	0.81
43:D8:56:SER:H	43:D8:100:ARG:HB2	1.44	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:187:G:N7	61:1H:3545:HOH:O	2.12	0.81
26:1H:1130:U:O2	30:21:149:ARG:NH2	2.14	0.81
30:21:174:ASP:HB3	30:21:183:LEU:HD13	1.61	0.81
27:1J:80:U:H2'	27:1J:81:G:H21	1.43	0.81
26:1H:2117:A:O2'	26:1H:2147:G:N2	2.14	0.81
41:75:77:PRO:HG2	41:75:80:SER:HB2	1.63	0.81
26:1H:71:A:H2	45:F8:31:HIS:HE2	1.23	0.81
26:14:259:G:H21	26:14:621:A:H8	1.25	0.81
17:8I:67:LYS:HA	17:8I:70:ARG:HH12	1.46	0.81
7:62:20:ASP:HB3	7:62:23:VAL:HB	1.61	0.81
1:13:1305:G:H21	1:13:1331:G:H2'	1.46	0.81
1:13:413:G:O2'	1:13:428:G:N2	2.13	0.80
33:51:98:LEU:HD21	33:51:125:VAL:H	1.46	0.80
27:1J:18:G:H1	27:1J:65:C:H42	1.28	0.80
26:14:252:G:OP2	37:35:50:ARG:NH2	2.15	0.80
1:1G:780:A:OP2	61:1G:1701:HOH:O	1.98	0.80
28:71:68:LEU:HB2	28:71:176:GLY:HA2	1.64	0.80
26:1H:2431:U:OP2	61:1H:3518:HOH:O	1.99	0.80
1:1G:1534:A:N6	25:4L:10:G:O6	2.14	0.80
26:1H:733:G:OP2	61:1H:3517:HOH:O	1.99	0.80
31:39:123:LEU:O	31:39:125:LEU:N	2.15	0.80
10:1A:48:THR:HA	10:1A:62:HIS:HB3	1.62	0.80
26:14:2497:A:O3'	61:14:3507:HOH:O	1.98	0.80
32:49:129:GLY:O	32:49:130:ASN:ND2	2.14	0.80
16:7I:74:LEU:HA	16:7I:77:ALA:HB2	1.64	0.80
18:9I:38:GLU:HA	18:9I:41:LYS:HZ2	1.46	0.80
1:1G:54:C:N4	1:1G:353:A:OP2	2.14	0.80
1:1G:1413:A:H61	1:1G:1487:G:H1	1.28	0.80
50:K8:32:LEU:HD11	50:K8:54:LYS:HG2	1.62	0.80
26:14:1434:A:H61	26:14:1558:A:H62	1.29	0.79
26:14:1639:U:OP1	61:14:3511:HOH:O	2.00	0.79
1:1G:1321:C:H41	1:1G:1322:C:H41	1.30	0.79
26:14:2821:A:OP2	61:14:3506:HOH:O	1.98	0.79
1:13:975:A:H4'	1:13:976:G:H5''	1.63	0.79
28:71:166:ASP:N	28:71:166:ASP:OD1	2.15	0.79
26:14:249:C:OP1	61:14:3508:HOH:O	1.99	0.79
26:14:1013:C:O2	26:14:1149:G:N2	2.15	0.79
26:14:1792:G:N2	26:14:1827:C:O2	2.13	0.79
31:31:185:ASP:OD1	31:31:188:ARG:NH1	2.15	0.79
26:14:785:G:OP2	61:14:3512:HOH:O	2.01	0.79
1:1G:1305:G:H22	1:1G:1331:G:H2'	1.46	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2305:A:O2'	32:41:136:ARG:NH1	2.16	0.79
14:5I:23:ARG:HH11	14:5I:30:ALA:HB2	1.48	0.79
26:14:486:C:O2'	44:A5:60:ASN:ND2	2.16	0.79
34:61:73:GLU:HG3	34:61:136:VAL:HG23	1.63	0.79
1:1G:1256:A:H62	1:1G:1277:C:H3'	1.47	0.79
2:12:11:LEU:HG	2:12:217:ARG:HH22	1.48	0.79
40:65:41:ASP:OD2	40:65:44:LYS:NZ	2.13	0.79
42:85:34:LYS:NZ	42:85:37:GLU:OE1	2.14	0.79
9:8E:15:ALA:HB2	9:8E:65:VAL:HG23	1.64	0.79
26:14:1633:G:O6	61:14:3510:HOH:O	2.00	0.79
1:1G:1535:C:H42	25:4L:9:G:H1	1.30	0.79
24:3K:3:G:N2	24:3K:71:C:N3	2.31	0.79
26:1H:2032:G:H21	30:21:146:THR:HG23	1.46	0.79
50:K8:15:LYS:HZ2	50:K8:15:LYS:H	1.28	0.78
30:29:52:LEU:HD23	30:29:76:ARG:HD3	1.65	0.78
26:1H:141:A:OP2	26:1H:141(A):C:N4	2.16	0.78
1:1G:630:G:H3'	1:1G:631:G:H5'	1.64	0.78
1:1G:1262:C:H42	1:1G:1273:G:H1	1.28	0.78
22:1K:5:C:O2	22:1K:68:G:N2	2.15	0.78
26:14:2379:G:O2'	40:65:17:ARG:NH1	2.16	0.78
8:72:69:ARG:NH1	8:72:75:ARG:O	2.16	0.78
28:71:212:VAL:HB	28:71:226:PRO:HD3	1.64	0.78
26:14:329:G:H1	46:C5:19:LYS:HZ3	1.30	0.78
1:13:452:A:H62	1:13:480:U:H3	1.29	0.78
45:F8:36:LYS:HA	45:F8:39:ILE:HD12	1.65	0.78
1:1G:1028:C:N3	1:1G:1033:G:N2	2.29	0.78
4:32:23:GLY:N	4:32:26:CYS:SG	2.57	0.78
49:F5:82:LEU:HD23	49:F5:83:GLU:HG2	1.65	0.78
26:14:1382:G:O6	61:14:3509:HOH:O	1.99	0.78
43:95:69:LYS:HB2	43:95:86:GLY:HA3	1.65	0.78
26:1H:1050:A:H2'	26:1H:1051:G:C8	2.18	0.78
26:1H:676:A:H8	26:1H:2069:G:H21	1.32	0.78
8:72:121:ASP:OD1	8:72:125:ARG:NH2	2.16	0.78
53:J5:16:ARG:NH1	53:J5:17:ASP:OD1	2.17	0.78
48:E5:47:PRO:HG3	48:E5:53:MET:HG3	1.65	0.78
32:49:125:PHE:HB3	32:49:166:ASP:HB2	1.65	0.78
26:14:273(F):C:H3'	26:14:274:G:H5"	1.65	0.78
26:1H:943:U:OP2	37:78:36:LYS:NZ	2.17	0.78
26:1H:2572:A:C8	30:21:144:ARG:HD2	2.19	0.78
23:2K:6:G:H1	23:2K:68:C:H42	1.30	0.78
50:K8:4:SER:CB	50:K8:7:ARG:H	1.97	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:259:G:O2'	26:1H:621:A:O2'	2.02	0.78
29:19:228:PRO:O	61:19:301:HOH:O	2.01	0.78
26:14:2163:C:OP2	26:14:2165:G:N2	2.16	0.78
26:14:2270:G:OP2	61:14:3515:HOH:O	2.02	0.78
19:AI:50:ALA:HB1	19:AI:57:HIS:HB3	1.67	0.77
34:61:72:LEU:HD11	34:61:107:VAL:HG21	1.66	0.77
26:1H:1228:G:OP2	42:C8:16:LYS:NZ	2.16	0.77
26:14:161:U:H5'	26:14:171:G:N2	1.98	0.77
1:1G:1256:A:N6	1:1G:1278:U:OP2	2.18	0.77
26:1H:2312:U:H5'	32:41:88:ILE:HD13	1.65	0.77
7:62:23:VAL:HG13	7:62:43:PHE:HE2	1.49	0.77
26:1H:571:A:H5'	26:1H:2030:A:H62	1.48	0.77
50:G5:23:LYS:NZ	50:G5:27:GLU:OE2	2.16	0.77
14:5I:9:LYS:HA	14:5I:12:ARG:HG2	1.66	0.77
9:8E:50:LEU:HD23	9:8E:85:LEU:HD11	1.66	0.77
26:14:1327:C:OP2	61:14:3514:HOH:O	2.01	0.77
1:1G:1127:G:O2'	1:1G:1128:C:H5'	1.84	0.77
3:22:44:GLU:HA	3:22:52:LEU:HD11	1.66	0.77
26:14:1022:G:H22	26:14:1142(A):A:H2	1.33	0.77
1:13:1256:A:N6	1:13:1278:U:OP2	2.17	0.77
28:71:45:ALA:HB2	28:71:212:VAL:HG23	1.65	0.77
30:21:105:THR:OG1	30:21:199:ARG:NH2	2.13	0.77
14:5I:26:ARG:NH1	14:5I:43:CYS:SG	2.58	0.77
26:14:77:C:O3'	50:G5:14:ARG:NH2	2.17	0.77
26:14:1689:A:H62	26:14:1698:A:H2	1.32	0.77
40:65:62:LYS:HA	40:65:65:VAL:HG12	1.66	0.77
1:13:974:A:OP2	14:5I:41:ARG:NH1	2.17	0.77
26:1H:2111:C:N4	26:1H:2147:G:O6	2.18	0.77
26:1H:1355:G:O6	61:1H:3519:HOH:O	2.01	0.77
8:72:7:ALA:HB2	8:72:85:ARG:HD3	1.66	0.77
1:1G:826:C:O2	1:1G:874:G:N2	2.16	0.77
1:13:486:U:H2'	1:13:487:A:H8	1.50	0.77
32:41:46:ALA:HB2	32:41:52:ILE:HB	1.67	0.77
26:14:1678:G:H22	26:14:1989:G:H22	1.30	0.77
36:25:104:ARG:HD2	41:75:36:GLU:HB2	1.66	0.77
34:69:81:VAL:H	34:69:143:SER:HB2	1.49	0.77
26:1H:563:G:OP2	61:1H:3520:HOH:O	2.02	0.76
2:1E:19:HIS:CE1	2:1E:206:ASP:HB2	2.20	0.76
1:13:1305:G:N2	1:13:1331:G:H2'	2.00	0.76
26:14:2065:C:O2	26:14:2445:G:N2	2.16	0.76
26:1H:1352:U:OP1	61:1H:3521:HOH:O	2.02	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2315:G:OP1	32:41:36:LYS:NZ	2.18	0.76
4:3E:86:LYS:HA	4:3E:87:GLY:C	2.03	0.76
1:1G:235:C:H5'	17:8A:70:ARG:HG2	1.68	0.76
26:1H:1455:G:OP2	61:1H:3523:HOH:O	2.03	0.76
8:7E:87:SER:HB2	8:7E:93:VAL:HB	1.66	0.76
26:14:1044:G:O2'	26:14:1047:G:O2'	2.02	0.76
5:4E:8:GLU:HG2	5:4E:34:VAL:HG22	1.65	0.76
40:65:12:PHE:O	40:65:16:ASN:ND2	2.17	0.76
26:1H:2712(A):A:OP2	61:1H:3501:HOH:O	2.02	0.76
1:13:664:G:H22	1:13:741:G:H1	1.33	0.76
40:65:106:ARG:NH1	40:65:107:GLU:OE2	2.18	0.76
26:1H:1664:A:OP2	61:1H:3526:HOH:O	2.03	0.76
29:11:29:PRO:HB2	29:11:30:GLU:HA	1.66	0.76
26:1H:1342:A:OP2	61:1H:3525:HOH:O	2.04	0.76
26:14:1434:A:H61	26:14:1558:A:N6	1.84	0.76
26:14:1970:A:OP2	61:14:3517:HOH:O	2.04	0.76
33:51:6:ARG:HD2	33:51:54:ARG:HH12	1.50	0.76
3:22:20:SER:HB2	3:22:40:ARG:HH22	1.49	0.76
26:14:2293:C:H5''	40:65:89:ARG:HH21	1.51	0.76
1:13:1291:G:OP1	7:6E:37:ASN:ND2	2.18	0.76
37:35:98:GLU:HA	37:35:101:VAL:HG12	1.68	0.76
26:1H:2452:C:OP1	61:1H:3527:HOH:O	2.04	0.76
26:1H:1678:G:H22	26:1H:1989:G:H22	1.33	0.76
26:1H:450:G:O6	61:1H:3524:HOH:O	2.03	0.76
42:C8:92:ARG:O	42:C8:94:ASN:N	2.19	0.76
28:71:48:GLY:HA2	28:71:210:ARG:HD2	1.66	0.76
26:14:2287:A:N6	26:14:2344:U:H3	1.83	0.76
26:1H:1416:G:O2'	26:1H:1417:C:O5'	2.04	0.76
48:I8:72:ARG:HB3	48:I8:75:LEU:HB2	1.68	0.76
22:1K:7:U:H3	22:1K:66:A:H61	1.32	0.76
8:7E:95:VAL:HG23	8:7E:99:GLU:HB2	1.67	0.76
29:19:31:LYS:HE3	29:19:33:LEU:HB3	1.68	0.76
13:4I:13:LYS:O	13:4I:44:ARG:NH1	2.19	0.76
1:1G:1104:G:H4'	2:12:111:ARG:HE	1.51	0.76
26:14:2331:G:H4'	48:E5:43:THR:H	1.49	0.76
1:1G:413:G:H2'	1:1G:428:G:H22	1.50	0.76
26:1H:2169:A:N7	26:1H:2170:A:N6	2.34	0.76
33:51:6:ARG:HH21	33:51:7:LEU:HD11	1.51	0.76
26:14:1942:C:OP2	26:14:1943:U:O2'	2.03	0.76
50:G5:47:ASN:O	50:G5:49:LYS:N	2.17	0.76
26:14:1593:G:H2'	26:14:1594:G:C8	2.21	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:998:G:N2	1:1G:1043:C:N3	2.32	0.76
26:1H:963:U:OP1	61:1H:3522:HOH:O	2.02	0.76
24:3K:71:C:O2	26:1H:1851:U:O2'	2.04	0.75
41:B8:54:ARG:HA	41:B8:59:THR:HB	1.66	0.75
26:14:1430:C:H2'	26:14:1431:U:H6	1.51	0.75
1:1G:1356:G:H2'	1:1G:1357:A:C8	2.21	0.75
29:19:83:GLU:OE1	29:19:104:TYR:OH	2.03	0.75
26:1H:1778:U:H2'	26:1H:1784:A:N6	2.01	0.75
26:1H:2635:C:O2	26:1H:2783:G:N2	2.18	0.75
37:78:47:ASP:OD2	37:78:50:ARG:NH2	2.19	0.75
26:14:1812:A:O2'	29:19:45:ASN:HB2	1.85	0.75
30:21:50:GLY:HA2	30:21:77:ILE:HA	1.68	0.75
26:1H:2636:U:OP1	30:21:79:ARG:HA	1.87	0.75
1:13:396:G:O2'	1:13:398:C:OP1	2.03	0.75
46:G8:85:VAL:O	46:G8:86:ARG:HD3	1.87	0.75
4:3E:60:GLU:OE2	4:3E:199:ASN:N	2.15	0.75
26:1H:86:C:H4'	26:1H:104:U:H1'	1.67	0.75
26:14:1774:C:N4	26:14:1790:C:O2	2.19	0.75
26:1H:583:G:N7	61:1H:3564:HOH:O	2.18	0.75
5:4E:102:ALA:HB1	5:4E:106:PRO:HG2	1.69	0.75
5:4E:144:THR:OG1	5:4E:147:ASP:OD1	2.04	0.75
26:1H:442:G:H1'	31:31:48:THR:HG21	1.66	0.75
1:13:1127:G:H2'	1:13:1128:C:C2	2.21	0.75
20:BI:71:THR:HG22	20:BI:72:LEU:H	1.50	0.75
2:12:49:GLU:N	2:12:49:GLU:OE1	2.20	0.75
55:Q8:52:LYS:O	55:Q8:54:GLU:N	2.20	0.75
1:1G:976:G:N2	1:1G:1362(A):C:OP2	2.15	0.75
26:1H:1466:G:N2	26:1H:1547:C:N3	2.35	0.75
41:75:108:ARG:HA	41:75:111:ARG:HG3	1.66	0.75
26:14:2292:C:OP1	40:65:17:ARG:NH2	2.20	0.75
26:1H:1416:G:HO2'	26:1H:1417:C:H6	1.34	0.75
26:14:141:A:H8	26:14:1595:G:H21	1.32	0.75
1:13:980:C:O2	61:13:1801:HOH:O	2.01	0.75
34:61:92:VAL:HG13	34:61:120:ILE:HG23	1.68	0.75
20:BI:73:HIS:HB3	20:BI:74:LYS:HG2	1.69	0.75
26:14:1041:C:O2	26:14:1114:G:N2	2.17	0.75
1:13:601:C:H2'	1:13:602:A:H8	1.50	0.75
1:13:1145:C:H4'	1:13:1146:A:H5'	1.68	0.74
24:3K:33:U:H2'	24:3K:35:U:H5	1.50	0.74
26:1H:1257:C:H4'	31:31:83:PHE:CD1	2.22	0.74
41:B8:50:ILE:HD13	41:B8:64:ARG:HB3	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:68:63:VAL:HG23	36:68:64:ARG:HG2	1.69	0.74
34:61:39:ALA:HB1	34:61:44:LEU:HD13	1.66	0.74
26:1H:1590:U:H2'	26:1H:1591:G:H8	1.50	0.74
34:69:102:SER:O	34:69:106:GLY:N	2.20	0.74
47:H8:165:VAL:HG22	47:H8:167:PRO:HD3	1.68	0.74
31:31:6:VAL:N	31:31:24:LEU:O	2.20	0.74
31:39:24:LEU:HD21	31:39:119:ARG:HB3	1.68	0.74
7:6E:111:ARG:NH1	7:6E:113:GLU:OE2	2.20	0.74
38:45:75:THR:HB	38:45:86:GLY:HA3	1.67	0.74
50:K8:47:ASN:O	50:K8:49:LYS:N	2.19	0.74
1:1G:857:C:H3'	1:1G:858:G:H8	1.52	0.74
23:2L:9:G:O2'	23:2L:10:G:N7	2.18	0.74
12:3A:47:LYS:HG3	12:3A:48:PRO:HD2	1.67	0.74
1:1G:1305:G:N2	1:1G:1331:G:H2'	2.02	0.74
26:1H:1658:C:OP1	61:1H:3528:HOH:O	2.04	0.74
26:1H:1406:U:H2'	26:1H:1407:C:C6	2.21	0.74
26:1H:1602:U:O4	61:1H:3525:HOH:O	2.03	0.74
27:16:42:C:O2'	32:41:67:LYS:O	2.05	0.74
24:3K:65:C:H2'	24:3K:66:A:C8	2.23	0.74
12:3I:113:ARG:HH21	12:3I:116:SER:HB2	1.52	0.74
46:G8:76:CYS:SG	46:G8:97:ARG:HG3	2.27	0.74
19:AI:40:ILE:HD11	19:AI:62:ILE:HD12	1.69	0.74
1:13:253:U:OP2	17:8I:67:LYS:NZ	2.19	0.74
1:13:448:A:OP2	1:13:485:G:N2	2.15	0.74
26:1H:2130:U:OP2	28:7I:6:ARG:NH1	2.20	0.74
1:1G:1173:G:OP1	7:62:5:ARG:NH2	2.20	0.74
26:1H:2502:G:OP2	61:1H:3529:HOH:O	2.05	0.74
26:1H:2154:G:H2'	26:1H:2155:G:H8	1.51	0.74
31:31:185:ASP:HA	31:31:188:ARG:HD3	1.68	0.74
1:1G:411:A:H62	1:1G:413:G:H21	1.33	0.74
2:1E:60:ASP:HB3	2:1E:64:ARG:HH21	1.50	0.74
8:7E:21:LYS:O	8:7E:65:TYR:OH	2.05	0.74
33:51:30:LYS:HD2	33:51:81:GLU:H	1.52	0.74
26:14:2010:G:H5''	44:A5:42:ARG:HB2	1.68	0.74
26:14:1364:G:OP2	49:F5:2:SER:N	2.21	0.74
1:1G:800:G:O6	61:1G:1702:HOH:O	2.05	0.74
50:K8:15:LYS:HZ2	50:K8:15:LYS:N	1.86	0.74
26:14:2162:G:O2'	26:14:2173:A:OP1	2.05	0.74
41:B8:50:ILE:HD11	41:B8:102:ILE:HD12	1.69	0.74
1:1G:542:G:OP1	4:32:10:ARG:NH2	2.18	0.74
19:AI:18:LYS:NZ	19:AI:18:LYS:O	2.20	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2499:C:OP2	61:14:3516:HOH:O	2.03	0.74
1:13:454:C:N4	1:13:479:C:O2	2.20	0.74
31:39:116:ASP:OD2	37:35:1:MET:N	2.21	0.74
26:1H:155:C:H42	26:1H:171:G:H1	1.35	0.74
30:29:81:ILE:HG22	30:29:82:ARG:H	1.53	0.74
28:71:225:ASN:N	28:71:225:ASN:HD22	1.86	0.74
5:42:70:PRO:HB3	5:42:144:THR:HG22	1.69	0.74
1:13:153:C:H42	1:13:168:G:H22	1.34	0.74
28:71:193:ILE:HD12	28:71:226:PRO:HB2	1.69	0.74
1:1G:1104:G:O2'	2:12:111:ARG:NH2	2.21	0.74
6:5E:97:PHE:HB2	18:9I:32:ARG:HH11	1.53	0.74
30:21:82:ARG:O	30:21:84:PHE:N	2.20	0.74
5:42:6:PHE:HB2	5:42:63:ARG:HH21	1.53	0.74
26:14:2415:G:H4'	37:35:67:MET:N	2.02	0.73
1:13:963:G:N3	10:1I:55:LYS:NZ	2.35	0.73
31:39:5:ALA:HB1	31:39:125:LEU:HD21	1.70	0.73
55:M5:22:VAL:HB	55:M5:55:ALA:HB1	1.70	0.73
40:A8:11:LYS:HD3	40:A8:91:PRO:HD3	1.68	0.73
1:1G:991:U:O4	1:1G:1212:U:O2'	2.05	0.73
29:19:44:ASN:ND2	29:19:46:GLN:HG3	2.03	0.73
26:14:848:G:H2'	26:14:849:A:C8	2.23	0.73
26:14:2547:U:O2	36:25:23:ARG:NH2	2.21	0.73
26:1H:2213:U:O2	49:J8:52:ARG:NH2	2.21	0.73
26:14:1063:G:O6	26:14:1075:C:O2'	2.05	0.73
56:1L:2:G:N2	56:1L:71:C:N3	2.36	0.73
1:1G:673:G:H2'	1:1G:674:G:C8	2.23	0.73
4:32:168:ARG:HA	4:32:168:ARG:HH11	1.52	0.73
26:1H:602:G:HO2'	26:1H:604:G:HO2'	1.32	0.73
33:51:158:HIS:HA	33:51:170:ARG:CZ	2.18	0.73
1:13:963:G:H1	1:13:972:C:H42	1.35	0.73
38:45:75:THR:HA	38:45:89:ASN:HA	1.70	0.73
26:1H:1009:A:OP2	35:58:37:LYS:NZ	2.20	0.73
26:1H:1026:U:H1'	26:1H:1027:A:O5'	1.88	0.73
42:85:28:ARG:NH1	42:85:38:THR:OG1	2.20	0.73
2:1E:82:ARG:NE	2:1E:92:TYR:OH	2.20	0.73
46:C5:87:LYS:HG2	46:C5:88:LYS:H	1.53	0.73
51:L8:13:ILE:O	61:L8:201:HOH:O	2.05	0.73
43:D8:1:MET:SD	43:D8:43:GLU:HG2	2.29	0.73
27:1J:73:A:OP2	61:1J:301:HOH:O	2.06	0.73
1:13:737:A:H2'	1:13:738:C:C6	2.24	0.73
26:14:1027:A:H2	26:14:2487:G:HO2'	1.34	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:182:LEU:N	29:11:272:ALA:HB3	2.02	0.73
26:1H:270(V):G:N7	61:1H:3572:HOH:O	2.21	0.73
2:12:223:ILE:HA	2:12:224:GLN:HG2	1.71	0.73
15:6I:39:LEU:HB3	15:6I:56:LEU:HD12	1.71	0.73
26:1H:822:U:O2'	26:1H:823:G:H5'	1.88	0.73
1:13:407:G:OP1	4:3E:115:ARG:NH2	2.21	0.73
27:1J:104:A:OP1	47:D5:72:ARG:NH2	2.22	0.73
1:13:262:A:H2'	1:13:263:A:C8	2.23	0.73
34:69:7:GLU:HG3	34:69:8:PRO:HD2	1.69	0.73
2:1E:48:MET:HA	2:1E:51:LEU:HB2	1.70	0.73
26:14:329:G:H1	46:C5:19:LYS:NZ	1.86	0.73
37:78:19:VAL:HG13	37:78:21:ARG:H	1.53	0.73
26:14:1899:G:N2	26:14:1902:C:H41	1.86	0.73
9:82:28:VAL:HG22	9:82:63:ILE:HB	1.69	0.73
26:1H:1189:A:OP2	61:1H:3530:HOH:O	2.07	0.73
9:82:121:ARG:NH1	9:82:122:ALA:O	2.22	0.73
27:16:80:U:H2'	27:16:81:G:H21	1.52	0.73
56:1L:8:U:O2'	56:1L:45:G:N2	2.22	0.73
26:14:1430:C:H2'	26:14:1431:U:C6	2.24	0.73
47:D5:30:ASN:HA	47:D5:89:PHE:HE1	1.53	0.73
26:14:792:G:OP2	61:14:3519:HOH:O	2.06	0.73
2:1E:7:VAL:HB	2:1E:217:ARG:HD2	1.69	0.72
2:12:80:ILE:HD12	2:12:84:GLU:HG3	1.71	0.72
13:4I:91:ARG:HB2	13:4I:98:VAL:HG12	1.71	0.72
1:13:509:A:OP2	61:13:1802:HOH:O	2.07	0.72
26:1H:2379:G:O2'	40:A8:17:ARG:NH1	2.22	0.72
5:4E:64:ARG:N	5:4E:64:ARG:HH11	1.86	0.72
30:29:54:GLN:H	30:29:74:PRO:HA	1.54	0.72
36:25:104:ARG:NH2	41:75:43:GLN:OE1	2.23	0.72
26:14:873:G:H1'	38:45:29:PHE:HE2	1.54	0.72
51:H5:13:ILE:O	61:H5:101:HOH:O	2.07	0.72
9:82:16:ARG:HH21	9:82:64:THR:HG21	1.54	0.72
26:1H:1352:U:OP1	61:1H:3534:HOH:O	2.08	0.72
24:3K:13:C:H2'	24:3K:14:A:H8	1.55	0.72
1:13:1023:G:H3'	1:13:1024:G:H5''	1.70	0.72
26:1H:780:G:H21	26:1H:783:A:N6	1.86	0.72
1:13:1391:U:H2'	1:13:1392:G:C8	2.25	0.72
1:1G:589:C:H42	1:1G:650:G:H1	1.34	0.72
26:1H:2210:G:H5'	26:1H:2211:G:N7	2.04	0.72
2:1E:115:LEU:HD21	2:1E:153:ARG:HD3	1.69	0.72
8:7E:41:ARG:NH2	8:7E:123:GLU:OE1	2.21	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1359:C:O2'	1:1G:1361:G:N7	2.22	0.72
30:29:116:VAL:HG11	30:29:138:PRO:HB3	1.72	0.72
26:1H:548:A:N3	43:D8:21:ARG:NH2	2.38	0.72
26:14:1226:G:OP1	43:95:69:LYS:NZ	2.21	0.72
41:75:132:LYS:HG2	41:75:133:GLU:HG3	1.72	0.72
1:13:812:C:N3	61:13:1812:HOH:O	2.23	0.72
26:14:1443:G:H1	26:14:1548:C:H42	1.37	0.72
26:1H:2154:G:H2'	26:1H:2155:G:C8	2.24	0.72
56:1L:9:A:H3'	56:1L:10:G:C8	2.23	0.72
15:6I:25:THR:HG21	15:6I:70:LEU:HB2	1.70	0.72
26:14:1676:A:OP2	61:14:3522:HOH:O	2.07	0.72
13:4A:77:ASN:HA	13:4A:80:ARG:HD3	1.71	0.72
7:6E:16:LEU:HD21	9:8E:42:ARG:HA	1.71	0.72
26:1H:2140:C:H42	26:1H:2151:G:H1	1.38	0.72
27:1J:4:C:H42	27:1J:116:G:H1	1.36	0.72
1:13:1238:A:N3	1:13:1241:G:O2'	2.22	0.72
26:1H:138:G:N2	45:F8:44:GLU:OE2	2.18	0.72
26:1H:2287:A:C2	26:1H:2346:A:H2	2.06	0.72
26:1H:2309:A:H2'	26:1H:2310:A:O4'	1.88	0.72
11:2A:54:ARG:O	11:2A:57:THR:OG1	2.06	0.72
26:14:597:U:H2'	26:14:598:G:C8	2.25	0.72
26:1H:2303:G:O2'	32:41:132:ASN:OD1	2.07	0.72
29:11:35:LYS:HZ2	29:11:35:LYS:N	1.88	0.72
4:32:168:ARG:NH1	4:32:169:LYS:H	1.87	0.72
26:14:2823:A:OP1	30:29:159:HIS:NE2	2.23	0.72
26:1H:2432:A:OP2	61:1H:3533:HOH:O	2.07	0.72
26:14:602:G:O2'	26:14:604:G:O2'	2.03	0.71
29:11:93:ALA:HB3	29:11:105:ILE:HG22	1.70	0.71
26:14:990:A:H8	26:14:990:A:H5'	1.55	0.71
39:55:51:LEU:HD22	39:55:66:VAL:HG23	1.70	0.71
26:14:459:U:H5''	54:L5:40:TRP:CD2	2.25	0.71
24:3K:19:G:H1'	24:3K:57:G:H21	1.54	0.71
4:3E:18:LYS:NZ	4:3E:26:CYS:O	2.23	0.71
49:F5:80:LEU:HD12	49:F5:82:LEU:HB2	1.72	0.71
40:65:50:SER:O	40:65:76:LYS:NZ	2.15	0.71
42:C8:19:LYS:HG3	42:C8:22:LYS:HE3	1.71	0.71
26:14:2439:A:C8	26:14:2439:A:H5'	2.25	0.71
26:1H:2795:G:N2	26:1H:2799:A:OP2	2.23	0.71
1:13:1306:A:H61	1:13:1331:G:H1'	1.54	0.71
29:11:10:THR:OG1	29:11:13:ARG:HB2	1.90	0.71
50:G5:25:VAL:HG13	50:G5:60:LEU:HD23	1.71	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2287:A:H62	26:1H:2344:U:H3	1.37	0.71
6:5E:50:TYR:OH	18:9I:74:ARG:O	2.04	0.71
56:1L:28:U:H3	56:1L:42:A:H2	1.39	0.71
26:14:138:G:N2	45:B5:44:GLU:OE2	2.14	0.71
26:14:1141:U:OP2	35:15:63:THR:OG1	2.04	0.71
26:1H:1590:U:H2'	26:1H:1591:G:C8	2.24	0.71
1:1G:800:G:N7	61:1G:1706:HOH:O	2.23	0.71
1:13:1263:C:H2'	1:13:1264:C:H6	1.56	0.71
44:E8:24:ILE:HG12	44:E8:36:LEU:HD21	1.73	0.71
26:14:635:C:O2'	26:14:639:U:OP1	2.07	0.71
33:59:54:ARG:NH2	33:59:57:ASP:OD1	2.23	0.71
26:1H:2656:U:H3	26:1H:2665:A:H2	1.38	0.71
36:25:63:VAL:HG12	36:25:106:LEU:HD11	1.71	0.71
22:1K:52:G:N2	22:1K:62:C:N3	2.34	0.71
26:1H:226:G:H21	26:1H:228:A:H2	1.37	0.71
26:1H:1535:U:H5''	26:1H:1537:C:N4	2.06	0.71
46:C5:60:PHE:HD1	46:C5:60:PHE:H	1.37	0.71
17:8I:13:ASP:HA	17:8I:19:VAL:HG12	1.71	0.71
26:14:2115:G:H1'	26:14:2171:A:H61	1.55	0.71
26:14:2498:C:OP2	61:14:3501:HOH:O	2.08	0.71
17:8A:81:ARG:HB3	17:8A:84:LEU:HD12	1.73	0.71
9:8E:10:ARG:NE	9:8E:105:ASP:OD2	2.22	0.71
50:G5:13:ALA:HA	50:G5:16:LEU:HD23	1.73	0.71
26:1H:2062:A:OP1	61:1H:3532:HOH:O	2.07	0.71
42:85:92:ARG:NH2	43:95:11:GLN:H	1.88	0.71
1:1G:1228:C:OP1	13:4A:115:LYS:NZ	2.23	0.71
43:95:44:LYS:O	43:95:46:VAL:N	2.21	0.71
32:49:5:VAL:HG11	32:49:101:ILE:HG22	1.71	0.71
1:1G:684:A:N6	61:1G:1707:HOH:O	2.23	0.71
1:13:1159:U:O4'	1:13:1182:G:N2	2.24	0.71
28:71:5:LYS:HA	28:71:8:ARG:HB2	1.73	0.71
2:1E:43:ASP:HB3	2:1E:46:LYS:HD2	1.72	0.71
26:1H:2061:G:OP1	61:1H:3535:HOH:O	2.08	0.70
26:14:2392:A:H2	26:14:2424:C:N4	1.88	0.70
26:14:2128:C:H42	26:14:2160:G:H1	1.39	0.70
29:11:68:LYS:HB3	29:11:70:TRP:CZ3	2.26	0.70
26:1H:747:U:O2	26:1H:2014:A:H1'	1.90	0.70
1:13:1171:G:H2'	1:13:1172:C:H6	1.56	0.70
45:B5:63:LYS:H	45:B5:63:LYS:HE3	1.54	0.70
37:35:55:ARG:HG2	37:35:56:SER:H	1.56	0.70
29:19:44:ASN:HB3	29:19:45:ASN:C	2.12	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1128:C:O2'	1:13:1146:A:N1	2.24	0.70
1:1G:560:U:H5'	1:1G:566:G:N2	2.06	0.70
26:14:34:C:O2'	26:14:35:G:O5'	2.09	0.70
26:14:1225:C:O3'	43:95:85:LYS:HA	1.91	0.70
42:C8:92:ARG:CZ	43:D8:11:GLN:H	2.04	0.70
26:1H:2105:C:H2'	26:1H:2106:G:H8	1.56	0.70
32:49:60:LEU:HD22	32:49:68:PRO:HB3	1.71	0.70
26:1H:298:G:N7	46:G8:84:ARG:NH2	2.39	0.70
38:45:21:THR:HG22	38:45:23:GLY:HA3	1.73	0.70
11:2A:27:ASN:OD1	11:2A:28:THR:N	2.25	0.70
26:1H:625:G:N7	37:78:107:LYS:NZ	2.39	0.70
26:14:389:G:H22	37:35:72:PRO:HD3	1.56	0.70
26:1H:1218:C:OP2	42:C8:15:LYS:NZ	2.24	0.70
26:1H:55:G:H2'	26:1H:56:A:H8	1.56	0.70
1:13:235:C:H5'	17:8I:70:ARG:HG2	1.73	0.70
4:3E:157:LEU:O	4:3E:161:ASN:ND2	2.24	0.70
13:4A:8:GLU:OE1	32:49:115:ARG:NH2	2.24	0.70
57:3L:58:A:O2'	57:3L:59:A:O5'	2.09	0.70
49:J8:41:ARG:HH11	49:J8:41:ARG:HG3	1.56	0.70
43:95:1:MET:HB3	43:95:42:GLY:HA3	1.73	0.70
27:1J:18:G:N2	27:1J:65:C:N3	2.38	0.70
1:1G:1349:A:OP2	9:82:118:LYS:NZ	2.24	0.70
26:1H:2051:A:OP2	61:1H:3538:HOH:O	2.09	0.70
7:62:27:ILE:HD12	7:62:40:ALA:HA	1.73	0.70
26:1H:307:G:N7	61:1H:3581:HOH:O	2.24	0.70
37:35:52:GLU:OE1	37:35:54:GLY:N	2.23	0.70
26:1H:2135:A:N6	26:1H:2156:G:O2'	2.24	0.70
2:1E:208:ILE:HG22	2:1E:211:ILE:HD11	1.74	0.70
26:14:2197:U:H1'	26:14:2198:A:C8	2.27	0.70
6:5E:38:GLU:OE1	6:5E:64:GLN:NE2	2.25	0.70
1:13:608:A:OP2	61:13:1804:HOH:O	2.08	0.70
26:14:1856:G:N2	26:14:1886:C:O2	2.25	0.70
1:1G:490:G:P	4:32:132:ARG:HH22	2.15	0.70
39:98:24:GLN:HE22	39:98:36:THR:HG21	1.57	0.70
4:32:95:GLY:O	4:32:99:SER:OG	2.10	0.70
1:13:8:A:H62	4:3E:208:SER:HB3	1.56	0.70
26:1H:31:C:OP1	61:1H:3537:HOH:O	2.09	0.70
11:2I:27:ASN:OD1	11:2I:28:THR:N	2.24	0.70
3:2E:131:ARG:HH21	3:2E:135:LYS:HE3	1.57	0.70
47:H8:19:ARG:NH1	47:H8:84:GLU:O	2.25	0.70
4:32:19:LEU:HD12	4:32:21:LEU:HD11	1.74	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:8:LYS:HG2	2:1E:9:GLU:H	1.56	0.70
26:1H:1298:C:H5''	26:1H:1299:G:OP2	1.90	0.70
27:16:100:G:OP2	61:16:302:HOH:O	2.10	0.70
31:31:66:PRO:O	31:31:67:GLN:HB3	1.90	0.70
9:8E:86:VAL:HG21	9:8E:96:LEU:HD22	1.74	0.70
30:29:14:ILE:HB	41:75:14:TYR:CE2	2.27	0.69
26:1H:1728:G:H8	26:1H:1732:A:H62	1.38	0.69
19:AA:37:ARG:O	19:AA:70:LYS:NZ	2.25	0.69
19:AA:7:LYS:HB2	19:AA:8:GLY:HA2	1.74	0.69
5:4E:101:ILE:O	5:4E:120:THR:OG1	2.10	0.69
26:14:2720:U:H3	26:14:2873:A:H2	1.39	0.69
30:29:47:VAL:HG21	30:29:86:PRO:HD2	1.74	0.69
26:14:831:G:N7	61:14:3558:HOH:O	2.26	0.69
41:B8:56:GLY:O	41:B8:59:THR:HG23	1.91	0.69
6:5E:89:MET:HG3	18:9I:76:LEU:HD21	1.74	0.69
26:14:397:G:N7	61:14:3554:HOH:O	2.24	0.69
30:29:27:LEU:HG	41:75:1:MET:HG3	1.74	0.69
1:1G:1342:C:H4'	9:82:125:TYR:HB2	1.74	0.69
26:14:2280:G:O2'	26:14:2388:A:N1	2.22	0.69
26:1H:1243:G:N7	61:1H:3589:HOH:O	2.25	0.69
11:2I:124:LYS:HD2	11:2I:125:PHE:HE1	1.57	0.69
26:14:1453:A:OP2	61:14:3523:HOH:O	2.08	0.69
34:69:75:LEU:HD13	34:69:77:LEU:HD22	1.74	0.69
26:1H:1434:A:H61	26:1H:1558:A:N6	1.89	0.69
3:22:47:LEU:O	3:22:51:GLY:N	2.25	0.69
26:1H:1593:G:H2'	26:1H:1594:G:C8	2.27	0.69
40:A8:48:LEU:HD22	40:A8:82:ILE:HD11	1.74	0.69
26:1H:2849:U:OP2	41:B8:95:ARG:NH1	2.25	0.69
26:14:1954:G:O2'	26:14:1956:U:O4	2.06	0.69
1:1G:957:U:H1'	1:1G:960:U:H5	1.57	0.69
38:88:104:PHE:HE2	38:88:125:LEU:HD11	1.57	0.69
31:31:167:ALA:HB1	31:31:173:VAL:HG11	1.73	0.69
26:1H:1021:A:H8	26:1H:1022:G:H5''	1.57	0.69
56:1L:76:A:O2'	26:14:2583:G:N2	2.25	0.69
1:13:1368:G:H5''	9:8E:112:LYS:HB3	1.74	0.69
13:4A:78:ILE:HG23	13:4A:92:HIS:HB3	1.74	0.69
26:1H:1570:A:H5'	29:11:37:LEU:HD21	1.74	0.69
26:1H:1833:U:H2'	26:1H:1834:U:H6	1.56	0.69
47:D5:76:LEU:HA	47:D5:83:PRO:HA	1.75	0.69
2:1E:192:SER:OG	2:1E:193:ASP:N	2.25	0.69
26:14:71:A:H2	45:B5:31:HIS:CE1	2.10	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2062:A:OP1	61:14:3526:HOH:O	2.11	0.69
7:62:148:ASN:ND2	7:62:148:ASN:O	2.26	0.69
26:14:270(L):U:O2'	26:14:270(N):G:N2	2.25	0.69
26:1H:270(K):C:H2'	26:1H:270(N):G:H22	1.57	0.69
37:78:18:ARG:O	61:78:301:HOH:O	2.09	0.69
45:B5:57:LEU:HD11	45:B5:78:LYS:HE2	1.75	0.69
4:32:100:ARG:NH1	4:32:102:ASP:OD2	2.26	0.69
1:1G:1124:G:O2'	1:1G:1145:C:N4	2.26	0.69
1:1G:420:U:O2'	1:1G:423:G:O6	2.10	0.69
9:8E:128:ARG:NH2	23:2K:36:A:OP2	2.19	0.69
9:82:65:VAL:HG21	9:82:73:GLN:HB3	1.74	0.69
26:1H:731:C:OP2	61:1H:3511:HOH:O	2.09	0.69
30:21:105:THR:HG1	30:21:199:ARG:HH21	1.40	0.69
26:1H:1678:G:N2	26:1H:1989:G:H22	1.91	0.69
26:14:2287:A:H62	26:14:2344:U:H3	1.38	0.69
13:4A:79:LYS:HA	13:4A:82:MET:HB2	1.73	0.69
26:14:760:G:OP1	61:14:3524:HOH:O	2.10	0.69
1:13:501:C:H2'	1:13:502:G:H8	1.58	0.69
26:14:1210:A:H5'	26:14:1212:G:H5'	1.74	0.69
30:21:38:THR:HG22	30:21:41:LYS:HB2	1.75	0.69
1:13:1315:U:HO2'	1:13:1360:A:HO2'	1.40	0.69
1:13:446:G:H1	1:13:488:C:H42	1.41	0.69
26:1H:459:U:H5''	54:P8:40:TRP:CD2	2.28	0.69
26:14:1997:G:OP2	61:14:3525:HOH:O	2.10	0.69
26:1H:1036:G:N2	26:1H:1119:C:O2	2.20	0.69
1:13:811:C:N3	61:13:1814:HOH:O	2.26	0.69
1:13:1455:G:H5''	20:BI:31:SER:HB2	1.74	0.69
11:2I:85:ARG:HE	11:2I:111:ASP:HB3	1.57	0.69
1:13:1130:A:O2'	9:8E:3:GLN:NE2	2.26	0.69
22:1K:76:A:H8	26:1H:2583:G:H21	1.40	0.69
26:1H:2592:G:N7	61:1H:3584:HOH:O	2.24	0.69
22:1K:74:C:H42	26:1H:2508:G:H5'	1.58	0.69
30:29:200:GLU:N	30:29:200:GLU:OE1	2.20	0.69
8:72:44:PHE:HD2	8:72:80:ILE:HG12	1.58	0.69
11:2A:98:LEU:O	11:2A:101:SER:OG	2.08	0.69
26:14:2409:G:N7	61:14:3555:HOH:O	2.25	0.69
18:9I:59:SER:OG	18:9I:60:ALA:N	2.26	0.69
3:22:26:LYS:HG3	3:22:27:LYS:HG2	1.75	0.69
50:K8:31:GLU:HB2	50:K8:53:LEU:HD11	1.74	0.69
2:12:21:ARG:HA	2:12:39:ILE:H	1.57	0.69
13:4A:13:LYS:HD3	13:4A:14:ARG:H	1.58	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:P8:27:GLY:HA2	54:P8:30:VAL:HG23	1.75	0.68
1:13:1286:A:C8	1:13:1287:A:H4'	2.27	0.68
20:BI:69:GLY:O	20:BI:73:HIS:NE2	2.26	0.68
50:K8:42:GLY:O	50:K8:44:LEU:N	2.26	0.68
26:14:945:A:N3	61:14:3559:HOH:O	2.26	0.68
29:19:93:ALA:HB3	29:19:105:ILE:HG22	1.75	0.68
33:59:9:ILE:O	33:59:69:ARG:NH1	2.26	0.68
1:13:524:G:H2'	1:13:525:C:C6	2.29	0.68
1:13:259:G:OP2	20:BI:83:ARG:NH1	2.27	0.68
49:J8:87:PRO:HA	49:J8:90:ILE:HG13	1.74	0.68
36:25:13:ASN:ND2	36:25:96:THR:OG1	2.26	0.68
9:82:10:ARG:NH1	9:82:105:ASP:OD2	2.26	0.68
30:29:3:GLY:HA3	30:29:81:ILE:HD12	1.76	0.68
52:M8:40:HIS:CE1	52:M8:46:GLN:HA	2.26	0.68
4:32:12:CYS:SG	4:32:18:LYS:HA	2.33	0.68
26:1H:943:U:OP2	37:78:36:LYS:HG3	1.93	0.68
42:85:91:ASP:OD1	42:85:96:ALA:N	2.25	0.68
61:1H:3934:HOH:O	37:78:26:GLY:HA2	1.93	0.68
26:1H:818:G:OP2	61:1H:3540:HOH:O	2.10	0.68
26:1H:2292:C:OP1	40:A8:17:ARG:NH2	2.25	0.68
33:59:9:ILE:HG22	33:59:52:VAL:H	1.58	0.68
26:1H:1441:G:H2'	26:1H:1442:G:C8	2.29	0.68
1:13:310:G:OP2	16:7I:27:LYS:NZ	2.25	0.68
1:13:798:G:N7	61:13:1815:HOH:O	2.26	0.68
10:1A:40:LEU:HD22	10:1A:71:LEU:HD13	1.76	0.68
1:13:1422:G:H5''	36:68:48:PRO:HB3	1.75	0.68
43:D8:44:LYS:O	43:D8:46:VAL:N	2.25	0.68
18:9A:36:ASN:ND2	18:9A:36:ASN:O	2.27	0.68
1:13:542:G:OP1	4:3E:10:ARG:NH2	2.26	0.68
26:1H:1701:A:OP2	61:1H:3544:HOH:O	2.12	0.68
26:14:2689:U:OP2	26:14:2719:G:N2	2.25	0.68
26:1H:120:U:OP2	61:1H:3541:HOH:O	2.11	0.68
27:16:15:A:H5'	27:16:16:G:H8	1.57	0.68
18:9I:38:GLU:HA	18:9I:41:LYS:NZ	2.08	0.68
2:1E:19:HIS:HE1	2:1E:206:ASP:HB2	1.57	0.68
37:78:21:ARG:HD2	61:78:306:HOH:O	1.93	0.68
2:1E:33:TYR:HB2	2:1E:43:ASP:HB2	1.75	0.68
26:1H:2580:U:H4'	30:21:130:GLY:HA3	1.75	0.68
51:L8:26:LEU:HD21	51:L8:46:ASN:HB3	1.74	0.68
43:95:70:ILE:N	43:95:86:GLY:O	2.24	0.68
26:14:2689:U:P	26:14:2719:G:H22	2.16	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1321:C:N4	1:1G:1322:C:H41	1.92	0.68
26:1H:528:A:O2'	26:1H:529:A:H5''	1.93	0.68
39:98:56:LYS:HE3	39:98:88:ARG:HA	1.75	0.68
26:1H:287:C:H2'	26:1H:288:C:H6	1.58	0.68
2:12:118:LEU:HD11	2:12:141:GLU:HG2	1.75	0.68
26:1H:1652:A:H2'	26:1H:1653:G:H5'	1.74	0.68
38:45:38:GLU:HG3	38:45:127:ILE:HG22	1.76	0.68
5:42:101:ILE:O	5:42:120:THR:OG1	2.12	0.68
26:1H:2789:C:H1'	26:1H:2892:A:C2	2.28	0.68
6:52:7:ASN:N	6:52:7:ASN:OD1	2.24	0.68
38:88:79:LEU:HD12	38:88:80:GLU:HG3	1.75	0.68
1:13:1497:G:H2'	1:13:1498:U:H5'	1.76	0.68
26:1H:760:G:OP1	61:1H:3546:HOH:O	2.12	0.68
26:14:2787:C:O2'	30:29:61:ARG:O	2.10	0.68
38:45:88:GLY:O	38:45:89:ASN:ND2	2.27	0.68
26:1H:2176:A:OP1	28:71:7:TYR:OH	2.08	0.68
47:H8:95:PRO:HB2	47:H8:127:LYS:HE2	1.74	0.68
26:14:2681:C:H5	26:14:2725:A:H62	1.42	0.68
5:42:42:GLY:HA3	5:42:65:ASN:O	1.93	0.68
32:41:97:ASP:O	32:41:100:TRP:N	2.27	0.68
3:2E:136:GLN:OE1	3:2E:140:ARG:NH1	2.26	0.68
26:14:1174:A:H2'	26:14:1176:G:H5'	1.74	0.68
1:1G:1266:G:N2	1:1G:1270:C:N3	2.42	0.68
1:13:737:A:H2'	1:13:738:C:H6	1.58	0.68
12:3A:70:ILE:HD13	12:3A:77:LEU:HD12	1.73	0.68
1:1G:1054:C:H6	1:1G:1196:U:HO2'	1.39	0.68
1:1G:532:A:N6	1:1G:1206:G:O2'	2.27	0.68
31:31:130:ALA:H	31:31:132:VAL:HG13	1.59	0.68
26:1H:336:C:OP1	46:G8:83:THR:HG23	1.93	0.68
2:12:11:LEU:HG	2:12:217:ARG:NH2	2.09	0.68
12:3A:47:LYS:HG3	12:3A:48:PRO:CD	2.24	0.68
26:1H:780:G:H21	26:1H:783:A:H62	1.41	0.68
46:C5:50:ARG:HG3	46:C5:53:PRO:HG2	1.75	0.68
1:13:27:G:H4'	4:3E:209:ARG:HD3	1.76	0.68
13:4I:39:ILE:HD12	13:4I:56:LEU:HD22	1.75	0.68
1:1G:1221:G:OP1	1:1G:1321:C:N4	2.26	0.67
38:88:65:PHE:O	38:88:66:ILE:HG13	1.94	0.67
1:1G:1124:G:HO2'	1:1G:1145:C:N4	1.92	0.67
29:19:69:ARG:NH2	29:19:128:GLY:O	2.25	0.67
1:13:612:C:O2	1:13:629:G:N2	2.26	0.67
48:I8:11:ARG:O	48:I8:14:ARG:NH2	2.27	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1456:G:OP2	61:1H:3542:HOH:O	2.11	0.67
1:13:1122:U:O4	1:13:1123:A:N6	2.26	0.67
36:25:17:ARG:HB2	36:25:45:GLU:HG2	1.75	0.67
1:1G:571:U:H3	1:1G:864:A:H61	1.40	0.67
20:BA:51:GLU:HA	20:BA:54:LYS:HE3	1.75	0.67
26:1H:2127:G:H1	26:1H:2161:C:H2'	1.58	0.67
1:13:353:A:H5'	1:13:353:A:H8	1.59	0.67
26:1H:1899:G:N2	26:1H:1902:C:C5	2.62	0.67
26:14:733:G:N7	61:14:3521:HOH:O	2.27	0.67
28:71:59:ARG:HB2	28:71:164:ARG:HD2	1.75	0.67
1:1G:777:A:H2	11:2A:119:CYS:HB3	1.60	0.67
44:A5:65:LEU:HD13	44:A5:68:ARG:HD3	1.76	0.67
26:1H:2308:G:N1	26:1H:2311:A:H2	1.89	0.67
50:K8:4:SER:OG	50:K8:7:ARG:N	2.27	0.67
26:1H:1664:A:OP2	61:1H:3543:HOH:O	2.12	0.67
26:1H:1534:G:N1	26:1H:1539:G:N3	2.41	0.67
32:41:96:ARG:HB2	32:41:96:ARG:HH11	1.59	0.67
26:1H:1045:A:H1'	26:1H:1047:G:C5	2.28	0.67
41:B8:26:ASP:HB3	41:B8:92:GLY:H	1.60	0.67
44:E8:97:LYS:HE2	44:E8:99:ARG:NH2	2.10	0.67
26:1H:1386:C:H2'	26:1H:1387:C:H6	1.59	0.67
26:1H:934:G:H2'	26:1H:935:C:H6	1.59	0.67
1:13:505:G:OP1	61:13:1807:HOH:O	2.12	0.67
48:E5:36:ILE:HD11	48:E5:39:ARG:HG2	1.75	0.67
1:1G:875:C:H1'	8:72:15:ASN:HD21	1.59	0.67
26:14:2469:A:H8	38:45:56:ARG:HH21	1.42	0.67
1:13:1266:G:N2	1:13:1270:C:N3	2.42	0.67
12:3A:41:ARG:NH1	12:3A:41:ARG:HB3	2.09	0.67
2:1E:100:GLY:O	2:1E:104:ASN:N	2.21	0.67
44:A5:88:ARG:NH1	44:A5:94:ASP:OD2	2.23	0.67
1:1G:613:C:O3'	4:32:86:LYS:NZ	2.27	0.67
33:51:8:PRO:HG2	33:51:69:ARG:HH21	1.60	0.67
26:1H:686:G:O5'	54:P8:11:LYS:NZ	2.28	0.67
14:5I:6:LEU:HB3	14:5I:23:ARG:HH22	1.60	0.67
9:8E:43:ALA:HA	9:8E:74:ILE:HD13	1.76	0.67
1:13:601:C:H2'	1:13:602:A:C8	2.29	0.67
26:14:1159:U:H2'	26:14:1160:G:H8	1.59	0.67
26:1H:1441:G:H2'	26:1H:1442:G:H8	1.59	0.67
26:14:305:U:H2'	26:14:306:U:C6	2.30	0.67
12:3I:24:VAL:HB	12:3I:27:LEU:HD12	1.77	0.67
26:1H:516:C:OP1	53:N8:13:LYS:NZ	2.27	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:957:U:H1'	1:1G:960:U:C5	2.29	0.67
1:1G:1025:U:H5'	1:1G:1026:G:H5'	1.75	0.67
1:1G:768:A:OP2	61:1G:1704:HOH:O	2.13	0.67
26:14:2306:C:H3'	26:14:2307:G:H5''	1.75	0.67
30:21:101:ARG:HG2	30:21:169:ASN:OD1	1.95	0.67
26:1H:2131:G:H1'	26:1H:2158:A:C6	2.30	0.67
40:A8:85:VAL:HG23	40:A8:112:PHE:HZ	1.58	0.67
11:2A:34:ASP:HB3	11:2A:40:ILE:HD11	1.77	0.67
26:14:1534:G:H3'	26:14:1535:U:H5''	1.77	0.67
14:5I:27:CYS:SG	14:5I:29:ARG:HB2	2.35	0.67
2:1E:28:PHE:HD2	2:1E:190:THR:HG23	1.59	0.67
29:19:108:PRO:HB3	29:19:143:HIS:HE1	1.60	0.67
1:1G:983:A:H61	1:1G:1222:G:H22	1.41	0.67
4:32:173:TRP:CD1	4:32:174:LEU:HG	2.30	0.67
46:G8:82:PRO:HG3	46:G8:97:ARG:HD2	1.77	0.67
38:45:25:ASP:CB	38:45:102:VAL:H	2.07	0.67
26:14:140:A:H8	26:14:1408:C:HO2'	1.43	0.67
26:1H:252:G:OP2	37:78:50:ARG:NH1	2.28	0.67
41:B8:108:ARG:HG3	41:B8:109:GLU:N	2.10	0.67
1:1G:1003:G:N2	1:1G:1005:A:OP1	2.28	0.67
32:41:113:ARG:HE	52:M8:34:GLU:HG2	1.60	0.67
49:F5:29:GLY:O	49:F5:30:VAL:HG22	1.94	0.67
35:58:57:ALA:C	35:58:59:LYS:H	1.98	0.67
26:14:2378:A:H4'	40:65:23:ARG:HH11	1.60	0.67
27:16:8:U:N3	27:16:112:G:O6	2.17	0.67
26:14:1729:A:H2'	26:14:1731:G:N2	2.10	0.67
46:C5:28:LYS:NZ	46:C5:64:GLU:OE2	2.28	0.67
1:13:618:C:H5''	1:13:619:U:H5''	1.75	0.67
11:2A:82:VAL:HB	11:2A:108:ILE:HG12	1.77	0.66
57:3L:9:A:H5'	57:3L:11:C:H41	1.60	0.66
1:13:671:G:H2'	1:13:672:U:H6	1.61	0.66
30:21:128:SER:OG	30:21:129:HIS:N	2.26	0.66
26:14:1578:U:OP2	61:14:3527:HOH:O	2.13	0.66
48:E5:32:ARG:O	48:E5:34:GLY:N	2.28	0.66
2:12:144:ARG:HA	2:12:147:LYS:HE3	1.77	0.66
1:13:610:G:O6	61:13:1803:HOH:O	2.08	0.66
34:69:65:ALA:O	34:69:69:LYS:N	2.28	0.66
11:2A:48:ILE:HD11	11:2A:64:ALA:HA	1.76	0.66
26:1H:1972:A:H2'	26:1H:1973:G:H8	1.57	0.66
37:78:115:LEU:HA	37:78:134:ALA:HB2	1.77	0.66
26:1H:1689:A:H62	26:1H:1698:A:H2	1.43	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:82:5:TYR:HA	9:82:87:GLN:NE2	2.06	0.66
29:19:49:ILE:HD11	29:19:52:ARG:HA	1.75	0.66
26:1H:607:U:H3	26:1H:621:A:H2	1.43	0.66
29:19:148:GLU:HB2	29:19:151:LYS:HD2	1.76	0.66
9:82:96:LEU:HG	9:82:101:PHE:HB2	1.77	0.66
42:85:100:VAL:HG12	42:85:101:ARG:HG3	1.77	0.66
1:13:576:G:O5'	61:13:1810:HOH:O	2.14	0.66
3:22:119:ARG:HH12	3:22:140:ARG:HG2	1.59	0.66
1:13:438:G:H4'	4:3E:123:HIS:CD2	2.30	0.66
44:E8:58:ALA:HB1	44:E8:64:MET:HE2	1.77	0.66
37:78:61:ARG:HG3	37:78:61:ARG:HH11	1.60	0.66
52:M8:40:HIS:ND1	52:M8:45:GLY:O	2.28	0.66
33:51:6:ARG:HA	33:51:66:GLY:HA2	1.78	0.66
30:21:97:LYS:N	30:21:100:GLU:OE1	2.26	0.66
43:D8:65:GLY:HA3	43:D8:91:TYR:CE1	2.31	0.66
26:1H:2232:U:P	49:J8:40:ARG:HH12	2.18	0.66
26:1H:1138:G:H21	35:58:106:MET:HE3	1.59	0.66
34:61:110:ASP:HB2	34:61:112:LYS:HG2	1.77	0.66
26:14:1169:G:H1	26:14:1180:C:H42	1.41	0.66
33:59:72:ILE:HA	33:59:75:ALA:HB3	1.77	0.66
26:1H:1210:A:H8	26:1H:1210:A:H5'	1.59	0.66
1:1G:1095:U:OP1	1:1G:1108:G:N2	2.24	0.66
26:1H:2362:G:OP1	55:Q8:44:LYS:NZ	2.24	0.66
1:1G:926:G:N2	25:4L:15:A:OP2	2.28	0.66
26:1H:1607:C:O2	61:1H:3539:HOH:O	2.10	0.66
55:M5:24:ALA:N	55:M5:48:PHE:O	2.28	0.66
30:21:38:THR:HG23	30:21:40:GLU:H	1.60	0.66
26:14:1378:A:O2'	26:14:1380:G:N7	2.24	0.66
1:1G:1287:A:H2'	1:1G:1288:A:C8	2.30	0.66
49:F5:64:ALA:HA	49:F5:67:ILE:HD13	1.77	0.66
26:1H:860:U:H5	26:1H:917:A:C2	2.14	0.66
1:1G:130:A:C8	17:8A:63:ARG:HG3	2.30	0.66
26:14:2638:G:OP2	30:29:82:ARG:NH2	2.29	0.66
1:13:504:C:OP1	61:13:1807:HOH:O	2.13	0.66
34:61:110:ASP:OD1	34:61:110:ASP:N	2.26	0.66
1:13:21:G:OP1	61:13:1808:HOH:O	2.13	0.66
1:1G:1016:A:HO2'	1:1G:1217:C:HO2'	1.43	0.66
1:1G:934:C:O2'	1:1G:1344:C:OP2	2.11	0.66
1:1G:1300:G:O2'	1:1G:1301:U:O5'	2.13	0.66
26:1H:1021:A:C8	26:1H:1022:G:H5''	2.30	0.66
34:61:31:LEU:HD21	34:61:38:LEU:HD12	1.76	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2287:A:H2	26:1H:2346:A:H2	1.42	0.66
22:1K:48:C:O2'	22:1K:59:A:O4'	2.12	0.66
36:25:24:VAL:HA	36:25:39:ILE:HG22	1.76	0.66
26:1H:392:C:OP1	61:1H:3548:HOH:O	2.13	0.66
1:13:1060:C:O2'	10:1I:56:HIS:ND1	2.27	0.66
27:16:72:G:OP2	61:16:303:HOH:O	2.12	0.66
1:1G:1126:U:H4'	1:1G:1127:G:C8	2.30	0.66
1:1G:1318:A:H1'	19:AA:37:ARG:HD2	1.76	0.66
26:14:71:A:H3'	26:14:71:A:OP2	1.94	0.66
1:13:871:U:OP1	61:13:1809:HOH:O	2.13	0.66
35:15:67:LEU:HG	35:15:88:GLU:HG2	1.78	0.66
32:49:93:THR:HG21	32:49:95:ARG:HH21	1.61	0.66
1:1G:45:U:H2'	1:1G:46:G:C8	2.30	0.66
32:49:124:SER:HB2	32:49:131:TYR:CE1	2.31	0.66
47:D5:77:ASP:OD2	47:D5:80:ARG:NH1	2.29	0.66
24:3K:29:U:H2'	24:3K:30:G:H8	1.61	0.66
55:M5:14:VAL:HG11	55:M5:22:VAL:HG13	1.77	0.66
27:16:81:G:N2	61:16:307:HOH:O	2.28	0.66
50:K8:41:ILE:HD13	50:K8:44:LEU:HG	1.77	0.66
38:88:78:PRO:O	38:88:79:LEU:HB3	1.96	0.66
1:13:628:G:H2'	1:13:629:G:C8	2.29	0.66
26:1H:1641:A:H5''	26:1H:1642:G:OP2	1.95	0.66
1:1G:1023:G:H5''	1:1G:1024:G:H21	1.60	0.66
26:1H:2057:A:OP2	61:1H:3550:HOH:O	2.14	0.66
26:1H:1525:G:H2'	26:1H:1526:G:H8	1.61	0.66
26:14:676:A:H8	26:14:2069:G:N2	1.89	0.66
26:14:731:C:OP1	61:14:3532:HOH:O	2.15	0.66
26:14:1614:A:OP2	61:14:3528:HOH:O	2.13	0.66
46:G8:54:LYS:HA	46:G8:56:PRO:HD3	1.78	0.66
43:D8:59:ALA:HB2	43:D8:96:ILE:HD13	1.78	0.66
2:1E:67:THR:HG21	2:1E:155:LEU:HD13	1.77	0.66
1:1G:243:A:H4'	1:1G:244:U:H5''	1.78	0.66
26:14:2836:U:H2'	26:14:2837:G:C8	2.29	0.66
26:1H:140:A:H8	26:1H:1408:C:HO2'	1.43	0.65
26:14:94:G:N3	50:G5:47:ASN:ND2	2.44	0.65
26:1H:1990:C:OP2	61:1H:3549:HOH:O	2.14	0.65
26:1H:176:G:O2'	26:1H:177:G:H5'	1.96	0.65
26:1H:900:A:H3'	26:1H:901:A:H8	1.60	0.65
26:14:780:G:OP1	29:19:218:ARG:NH2	2.29	0.65
26:14:879:G:O2'	26:14:898:C:N4	2.29	0.65
3:22:16:ARG:HH22	3:22:181:ASN:HD22	1.43	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:B8:107:ASP:O	41:B8:110:ILE:HG23	1.96	0.65
26:1H:2287:A:N6	26:1H:2344:U:H3	1.94	0.65
26:14:117:G:OP1	26:14:124:G:N1	2.26	0.65
1:1G:376:G:O3'	16:7A:5:ARG:NH1	2.27	0.65
27:1J:15:A:H1'	27:1J:109:G:C8	2.31	0.65
31:31:136:THR:HG22	31:31:166:ALA:O	1.96	0.65
26:14:1165:U:H2'	26:14:1166:C:C6	2.30	0.65
1:13:1323:G:H2'	1:13:1324:A:C8	2.31	0.65
51:H5:39:ASP:O	51:H5:44:ARG:NH1	2.29	0.65
5:4E:84:PHE:HB3	5:4E:134:ALA:HB2	1.77	0.65
26:14:1055:G:N2	26:14:1086:A:O4'	2.29	0.65
12:3A:71:PRO:O	12:3A:102:ARG:NH1	2.29	0.65
26:14:2064:C:H2'	26:14:2065:C:C6	2.31	0.65
26:14:93:C:H5'	26:14:94:G:OP2	1.96	0.65
28:71:59:ARG:HG3	28:71:164:ARG:HG2	1.77	0.65
30:21:201:THR:HG22	30:21:203:LYS:H	1.60	0.65
31:31:29:ASN:H	31:31:112:MET:HE1	1.62	0.65
27:1J:42:C:H2'	32:49:66:GLN:HE21	1.60	0.65
26:14:1416:G:O2'	26:14:1417:C:O5'	2.14	0.65
1:13:403:C:OP1	4:3E:137:SER:OG	2.12	0.65
1:13:404:U:OP1	4:3E:118:ARG:NH1	2.28	0.65
26:14:1164:G:H1	26:14:1185:C:H42	1.43	0.65
30:29:87:GLU:OE2	30:29:87:GLU:N	2.29	0.65
26:1H:1515:C:H2'	26:1H:1516:U:H6	1.60	0.65
26:1H:1165:U:H2'	26:1H:1166:C:C6	2.32	0.65
29:19:25:THR:OG1	29:19:26:LYS:N	2.21	0.65
54:L5:12:ARG:HH21	54:L5:44:PRO:HB3	1.59	0.65
43:95:71:LEU:N	43:95:86:GLY:HA2	2.12	0.65
1:13:1003:G:N2	1:13:1037:C:N3	2.36	0.65
26:1H:2159:G:H2'	26:1H:2160:G:O4'	1.96	0.65
26:14:603:A:H8	26:14:604:G:H1'	1.61	0.65
26:1H:1417:C:OP2	61:1H:3552:HOH:O	2.14	0.65
30:21:77:ILE:O	30:21:79:ARG:N	2.29	0.65
26:1H:1405:U:H2'	26:1H:1406:U:C6	2.31	0.65
11:2A:48:ILE:HG21	11:2A:63:LEU:HG	1.78	0.65
24:3K:53:G:N2	24:3K:62:C:O2	2.29	0.65
26:14:2462:U:H2'	26:14:2463:C:C6	2.31	0.65
1:13:316:G:OP2	1:13:351:G:O2'	2.13	0.65
31:39:140:LEU:HD21	31:39:170:LEU:HD21	1.78	0.65
7:62:21:VAL:HG23	7:62:22:LEU:HD12	1.77	0.65
31:39:129:PHE:HA	31:39:142:TRP:CD1	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:25:64:ARG:NH1	36:25:81:ASP:OD1	2.29	0.65
26:14:796:C:H2'	26:14:797:C:C6	2.32	0.65
26:14:2846:G:N7	61:14:3567:HOH:O	2.30	0.65
26:1H:2061:G:P	61:1H:3535:HOH:O	2.55	0.65
46:C5:75:ILE:HG23	46:C5:80:GLY:HA2	1.78	0.65
26:14:1534:G:H3'	26:14:1535:U:C5'	2.26	0.65
26:14:1278:A:OP1	39:55:36:THR:HG22	1.96	0.65
13:4A:102:ARG:HD3	13:4A:105:THR:HG23	1.79	0.65
26:1H:2394:C:H2'	26:1H:2395:C:H6	1.61	0.65
26:1H:1971:A:C4	29:11:241:PRO:HD3	2.31	0.65
26:14:26:G:OP1	44:A5:80:PRO:HB3	1.97	0.65
4:32:31:CYS:HB2	4:32:33:MET:O	1.96	0.65
26:1H:1359:A:H2	26:1H:1372:U:O4	1.80	0.65
29:19:45:ASN:O	29:19:47:GLY:N	2.30	0.65
26:1H:1899:G:N2	26:1H:1902:C:H5	1.93	0.65
17:8A:63:ARG:HG2	17:8A:64:PRO:HD2	1.79	0.65
26:14:1106:G:H3'	26:14:1107:G:H8	1.62	0.65
1:1G:1028(B):C:O2	1:1G:1030:C:N4	2.29	0.65
14:5A:59:ALA:HB1	14:5A:61:TRP:HZ3	1.62	0.65
26:14:2444:G:OP2	31:39:68:LYS:NZ	2.26	0.65
1:1G:407:G:H2'	1:1G:408:A:C8	2.32	0.65
26:14:907:U:O2'	38:45:101:ARG:NH2	2.27	0.65
1:13:1139:G:H4'	1:13:1140:C:H5'	1.79	0.65
36:25:24:VAL:HB	36:25:33:ALA:HB2	1.79	0.65
32:41:17:PRO:HA	32:41:20:ILE:HD12	1.79	0.65
36:68:34:THR:OG1	36:68:35:VAL:N	2.30	0.65
57:3L:63:U:H2'	57:3L:64:G:H8	1.62	0.65
26:14:89:G:H3'	26:14:90:U:H5''	1.78	0.65
49:F5:52:ARG:NH2	49:F5:57:GLU:OE1	2.30	0.65
17:8I:76:LEU:HD11	17:8I:79:SER:HB2	1.78	0.65
1:13:642:A:N3	8:7E:113:SER:OG	2.29	0.65
40:65:78:LEU:HD11	40:65:107:GLU:HB3	1.78	0.65
26:1H:1899:G:H22	26:1H:1902:C:N4	1.95	0.65
26:1H:2334:G:O6	48:I8:74:ARG:NH2	2.29	0.65
45:B5:51:VAL:H	45:B5:83:VAL:HG23	1.62	0.65
5:42:60:TYR:HB3	5:42:64:ARG:CZ	2.27	0.65
1:13:346:G:OP1	41:B8:41:ARG:NH2	2.27	0.65
55:M5:22:VAL:HG12	55:M5:50:LEU:HD23	1.79	0.65
26:1H:2232:U:OP1	49:J8:40:ARG:NH1	2.24	0.65
26:14:49:A:H4'	26:14:50:U:H5''	1.78	0.65
40:A8:34:HIS:CE1	40:A8:54:LEU:HD23	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2880:C:H1'	39:55:92:GLY:HA3	1.78	0.65
1:1G:352:C:O2'	1:1G:354:G:OP1	2.13	0.65
19:AI:41:VAL:HG11	19:AI:67:VAL:HA	1.79	0.64
1:13:812:C:O2	61:13:1805:HOH:O	2.11	0.64
50:K8:42:GLY:C	50:K8:44:LEU:H	2.00	0.64
35:58:56:ASN:N	35:58:125:GLY:O	2.22	0.64
46:G8:55:TYR:CE1	46:G8:61:ILE:HD11	2.32	0.64
13:4A:53:VAL:O	13:4A:57:ARG:N	2.23	0.64
20:BI:89:ARG:HD2	20:BI:104:LEU:HD11	1.79	0.64
26:14:972:G:O2'	61:14:3531:HOH:O	2.14	0.64
18:9A:22:VAL:HG22	18:9A:23:LYS:H	1.62	0.64
26:14:1963:U:H5''	26:14:1963:U:O2	1.97	0.64
12:3I:53:ARG:HG3	12:3I:53:ARG:HH11	1.61	0.64
13:4A:31:LYS:HA	13:4A:34:LEU:HD12	1.78	0.64
1:1G:448:A:P	1:1G:485:G:H22	2.20	0.64
19:AI:41:VAL:HG21	19:AI:67:VAL:HG22	1.79	0.64
1:1G:1162:C:N3	1:1G:1174:G:N2	2.42	0.64
33:51:6:ARG:NH2	33:51:7:LEU:HD11	2.11	0.64
5:42:148:VAL:HG21	8:72:107:LEU:HD22	1.78	0.64
1:1G:1080:A:H5'	5:42:14:ARG:NH2	2.12	0.64
2:1E:121:LEU:HA	2:1E:124:SER:HB2	1.79	0.64
1:1G:108:G:H5'	1:1G:109:A:H5''	1.77	0.64
49:J8:78:LYS:NZ	49:J8:78:LYS:O	2.25	0.64
2:1E:198:ASP:N	2:1E:198:ASP:OD1	2.30	0.64
32:41:21:ARG:HH11	32:41:21:ARG:HB2	1.61	0.64
9:82:84:ALA:HA	9:82:87:GLN:HB2	1.80	0.64
26:14:2689:U:H5''	26:14:2713:A:C2	2.32	0.64
4:32:168:ARG:HD3	4:32:169:LYS:N	2.13	0.64
30:29:120:TRP:CD1	30:29:155:LYS:HB3	2.31	0.64
38:88:66:ILE:O	38:88:104:PHE:N	2.31	0.64
26:14:1174:A:C2	26:14:1176:G:H4'	2.31	0.64
1:13:143:A:H5''	1:13:144:G:H5'	1.79	0.64
18:9I:22:VAL:O	18:9I:42:ARG:NH2	2.30	0.64
26:14:1653:G:H3'	39:55:2:ARG:HG2	1.79	0.64
8:7E:64:LYS:HG2	8:7E:79:VAL:HG21	1.78	0.64
30:29:51:PHE:O	30:29:74:PRO:HB2	1.97	0.64
42:85:66:ASN:HB2	42:85:76:TYR:HB2	1.78	0.64
17:8A:67:LYS:HA	17:8A:70:ARG:HH12	1.61	0.64
50:G5:25:VAL:HG12	50:G5:57:ILE:HG23	1.80	0.64
13:4A:78:ILE:HD12	13:4A:92:HIS:ND1	2.12	0.64
37:78:138:LEU:HD12	37:78:144:GLU:HG3	1.78	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:61:144:VAL:HG22	34:61:145:VAL:HG23	1.78	0.64
26:1H:2327:A:H2'	26:1H:2328:A:C8	2.31	0.64
37:35:14:LYS:O	37:35:16:ARG:N	2.31	0.64
26:14:1757:U:H3	26:14:1762:A:H2	1.42	0.64
1:13:963:G:H21	10:1I:55:LYS:NZ	1.96	0.64
1:1G:837:G:H2'	1:1G:838:G:O4'	1.97	0.64
1:13:153:C:N4	1:13:168:G:H22	1.95	0.64
15:6I:39:LEU:HD13	15:6I:56:LEU:HB2	1.80	0.64
28:79:52:ARG:HB3	28:79:52:ARG:HH11	1.62	0.64
26:14:2317:C:H2'	26:14:2318:G:O4'	1.98	0.64
39:55:78:LYS:O	39:55:83:ILE:HG13	1.96	0.64
26:1H:2492:U:H2'	26:1H:2493:U:C6	2.33	0.64
5:4E:27:ARG:HH21	5:4E:47:LYS:HB3	1.61	0.64
19:AI:5:LEU:HD12	19:AI:9:VAL:H	1.62	0.64
1:1G:10:A:H2'	1:1G:11:G:H8	1.63	0.64
30:29:31:CYS:SG	30:29:51:PHE:HB2	2.38	0.64
26:14:2877:G:P	41:75:2:ASN:HD21	2.20	0.64
19:AI:8:GLY:HA2	19:AI:10:PHE:CE1	2.32	0.64
26:14:2776:A:OP1	26:14:2776:A:H3'	1.98	0.64
31:39:66:PRO:O	31:39:67:GLN:HB3	1.97	0.64
1:1G:1143:G:H2'	1:1G:1144:G:C8	2.32	0.64
26:14:576:U:OP1	61:14:3533:HOH:O	2.15	0.64
9:8E:13:ALA:HB2	9:8E:68:GLY:HA3	1.80	0.64
1:13:179:A:H2'	1:13:180:U:H6	1.63	0.64
26:14:1778:U:H2'	26:14:1784:A:N6	2.13	0.64
17:8A:99:SER:OG	17:8A:100:LYS:N	2.31	0.64
1:1G:973:G:H3'	1:1G:974:A:H5''	1.79	0.64
30:29:54:GLN:HA	30:29:54:GLN:HE21	1.63	0.64
31:39:51:THR:HG23	31:39:92:PRO:HG2	1.80	0.64
22:1K:53:G:H1	22:1K:61:C:H42	1.46	0.64
26:1H:1186:G:OP1	61:1H:3551:HOH:O	2.14	0.64
28:71:26:ALA:HB1	28:71:185:LEU:HB3	1.79	0.64
47:D5:94:GLU:O	47:D5:130:PRO:HD3	1.97	0.64
26:1H:1194:A:OP2	26:1H:1194:A:H8	1.81	0.64
1:1G:1069:C:H42	1:1G:1106:G:H1	1.44	0.64
3:2E:15:THR:HG21	3:2E:181:ASN:HA	1.79	0.64
26:1H:2788:C:H5'	30:21:61:ARG:HH12	1.63	0.64
1:1G:887:G:H21	1:1G:1489:G:H4'	1.63	0.64
8:72:51:VAL:HG11	8:72:60:ARG:HE	1.61	0.64
26:14:1678:G:H22	26:14:1989:G:N2	1.95	0.64
26:14:2065:C:H1'	26:14:2449:U:H3	1.63	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:925:C:H2'	26:14:926:A:H8	1.62	0.64
26:14:2377:A:H4'	40:65:111:GLU:HG2	1.80	0.64
26:14:2056:G:H1	53:J5:3:LYS:HB3	1.63	0.64
2:1E:219:VAL:HA	2:1E:222:ILE:HD11	1.79	0.64
1:1G:1028(A):C:H41	1:1G:1029:G:H1'	1.63	0.64
5:4E:57:LYS:HA	5:4E:60:TYR:HB3	1.80	0.64
10:1A:44:VAL:HG22	10:1A:66:ARG:HB3	1.80	0.64
3:22:32:LEU:HD22	3:22:59:ARG:HH12	1.63	0.64
48:E5:38:VAL:HB	48:E5:59:LEU:HD12	1.80	0.64
40:65:85:VAL:HG22	40:65:110:LEU:HB2	1.79	0.64
26:14:2134:A:N6	26:14:2156:G:H2'	2.13	0.64
35:15:42:TRP:HA	35:15:48:MET:HE1	1.79	0.64
1:1G:448:A:OP2	1:1G:485:G:N2	2.28	0.64
47:D5:53:ILE:HG22	47:D5:71:VAL:HG13	1.80	0.64
1:13:559:A:OP1	5:4E:126:ARG:NH2	2.31	0.64
26:1H:2110:G:N2	26:1H:2180:U:O2	2.31	0.64
7:62:116:ALA:HA	7:62:119:ARG:HE	1.63	0.64
1:13:1128:C:H5'	9:8E:16:ARG:HH22	1.63	0.64
26:1H:1899:G:H22	26:1H:1902:C:H41	1.46	0.64
26:14:1416:G:H1	26:14:1582:C:H42	1.45	0.64
20:BI:30:LYS:HE2	20:BI:80:ARG:HH22	1.62	0.64
29:19:30:GLU:HG3	29:19:63:ARG:CZ	2.28	0.64
26:1H:880:G:H2'	26:1H:881:G:C8	2.32	0.64
23:2K:33:OMC:HM22	23:2K:34:U:H5'	1.79	0.64
43:D8:37:VAL:O	43:D8:38:LEU:HG	1.98	0.64
26:1H:1328:G:H2'	26:1H:1330:C:C5	2.33	0.64
1:1G:1256:A:N6	1:1G:1277:C:H3'	2.13	0.63
26:14:1899:G:N2	26:14:1902:C:N4	2.45	0.63
27:16:28:C:OP1	40:A8:36:TYR:OH	2.11	0.63
1:1G:963:G:N3	10:1A:55:LYS:NZ	2.46	0.63
1:13:848:C:H2'	1:13:849:C:O4'	1.98	0.63
1:1G:371:G:O2'	1:1G:373:A:N7	2.30	0.63
26:1H:958:U:OP2	38:88:14:ARG:NH1	2.31	0.63
35:58:129:PRO:O	35:58:134:ARG:NH1	2.31	0.63
1:13:1062:U:H2'	1:13:1063:C:C6	2.33	0.63
3:2E:147:LYS:HB3	3:2E:203:PHE:CD2	2.33	0.63
1:13:339:C:OP2	36:68:97:ARG:NH1	2.30	0.63
33:59:159:GLU:O	33:59:163:TYR:OH	2.16	0.63
54:L5:25:PRO:HA	54:L5:28:ARG:HG3	1.80	0.63
1:13:501:C:H2'	1:13:502:G:C8	2.34	0.63
47:D5:45:ASP:OD1	47:D5:49:ARG:NH1	2.31	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1157:A:N6	1:13:1178:G:H21	1.95	0.63
13:4I:16:ASP:HB2	13:4I:31:LYS:HE3	1.81	0.63
27:1J:89(A):A:H5'	27:1J:90:C:OP2	1.99	0.63
1:13:8:A:N7	4:3E:208:SER:OG	2.25	0.63
1:1G:1095:U:P	1:1G:1108:G:H1	2.21	0.63
26:14:674:G:O2'	31:39:74:ARG:HG3	1.98	0.63
26:14:198:C:H5'	26:14:2244:U:OP1	1.99	0.63
26:14:1138:G:H21	35:15:106:MET:HE3	1.63	0.63
26:1H:65:C:H2'	26:1H:66:C:H6	1.63	0.63
26:1H:1156:A:C8	42:C8:51:LYS:HG2	2.33	0.63
28:71:55:ASP:N	28:71:55:ASP:OD1	2.29	0.63
26:1H:97:C:OP1	50:K8:2:LYS:N	2.32	0.63
37:78:95:VAL:HG21	37:78:123:LEU:HD13	1.79	0.63
55:M5:48:PHE:CB	55:M5:49:VAL:HG22	2.18	0.63
26:1H:1533:C:H3'	26:1H:1534:G:H5''	1.80	0.63
1:13:1165:C:O2	1:13:1171:G:N2	2.24	0.63
26:1H:330:A:HO2'	26:1H:331:A:H8	1.45	0.63
1:1G:1266:G:N2	1:1G:1269:A:OP2	2.32	0.63
1:13:626:U:H2'	1:13:627:G:C8	2.33	0.63
43:D8:37:VAL:HG12	43:D8:55:ALA:O	1.98	0.63
1:13:1446:A:OP1	1:13:1446:A:H4'	1.99	0.63
57:3L:21:A:N1	57:3L:46:G:N1	2.47	0.63
43:95:35:LEU:O	43:95:37:VAL:HG22	1.98	0.63
46:C5:8:LYS:NZ	46:C5:95:LYS:HD3	2.13	0.63
7:62:42:ILE:HG23	7:62:117:ALA:HB2	1.81	0.63
1:13:649:G:H2'	1:13:650:G:H8	1.62	0.63
26:1H:1578:U:OP2	61:1H:3554:HOH:O	2.15	0.63
1:13:407:G:O4'	4:3E:119:GLN:NE2	2.31	0.63
1:13:1315:U:O2'	1:13:1360:A:O2'	2.13	0.63
26:1H:1550:C:H2'	26:1H:1551:C:H6	1.64	0.63
8:72:11:THR:O	8:72:15:ASN:HB2	1.98	0.63
1:1G:1133:G:N2	1:1G:1141:C:O2	2.32	0.63
13:4A:11:ARG:HA	13:4A:45:VAL:HB	1.81	0.63
12:3A:59:ARG:NH1	12:3A:65:GLU:OE1	2.31	0.63
33:51:113:VAL:HG11	33:51:151:ILE:HD13	1.81	0.63
26:1H:778:G:O6	61:1H:3547:HOH:O	2.12	0.63
1:13:251:G:O6	1:13:271:C:N4	2.32	0.63
44:E8:27:LYS:HB3	44:E8:31:GLU:HG3	1.80	0.63
26:1H:1339:G:H21	26:1H:1603:A:H1'	1.64	0.63
38:45:32:TYR:HD2	38:45:114:ALA:HB3	1.64	0.63
1:13:1260:C:H4'	1:13:1284:C:H5'	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:M5:23:VAL:HA	55:M5:49:VAL:H	1.63	0.63
1:1G:1239:A:O2'	1:1G:1298:C:N4	2.30	0.63
26:14:1633:G:O6	61:14:3530:HOH:O	2.14	0.63
37:78:49:ARG:HG3	37:78:49:ARG:HH11	1.63	0.63
26:14:780:G:H21	26:14:783:A:H62	1.45	0.63
26:1H:805:G:OP1	61:1H:3555:HOH:O	2.15	0.63
2:12:127:ILE:O	2:12:130:ARG:NE	2.29	0.63
42:C8:97:ASP:OD1	42:C8:101:ARG:NH1	2.28	0.63
42:85:75:ASN:OD1	42:85:78:THR:OG1	2.15	0.63
1:13:875:C:O2'	8:7E:14:ARG:NH1	2.31	0.63
11:2I:58:PRO:HD3	11:2I:89:ALA:HB1	1.80	0.63
31:31:78:ILE:HA	31:31:83:PHE:CD2	2.34	0.63
2:12:22:LYS:HB3	2:12:40:HIS:NE2	2.13	0.63
26:1H:1047:G:N2	26:1H:1110:G:H2'	2.13	0.63
26:14:287:C:H2'	26:14:288:C:H6	1.63	0.63
6:5E:100:ASN:HB2	18:9I:28:GLU:HA	1.81	0.63
26:1H:1475:G:H1	26:1H:1518:C:H42	1.45	0.63
26:1H:2400:G:H2'	26:1H:2401:U:H6	1.63	0.63
9:8E:125:TYR:HD1	9:8E:126:SER:N	1.97	0.63
4:3E:82:ALA:O	4:3E:86:LYS:HB3	1.98	0.63
42:85:91:ASP:O	42:85:92:ARG:HG2	1.98	0.63
13:4A:13:LYS:HD3	13:4A:14:ARG:N	2.14	0.63
1:1G:1142:G:H3'	1:1G:1143:G:C8	2.34	0.63
23:2K:62:C:H2'	23:2K:63:C:H6	1.63	0.63
16:7A:74:LEU:HD12	16:7A:79:VAL:HG21	1.79	0.63
26:1H:588:U:H2'	26:1H:589:C:C6	2.33	0.63
11:2A:81:ASP:OD1	11:2A:81:ASP:N	2.31	0.63
1:1G:1435:G:H2'	1:1G:1436:U:C6	2.33	0.63
26:1H:1416:G:O2'	26:1H:1417:C:H6	1.82	0.63
1:13:1297:C:OP1	13:4I:13:LYS:NZ	2.30	0.63
55:Q8:49:VAL:O	55:Q8:51:ALA:N	2.32	0.63
26:14:2378:A:O2'	40:65:21:THR:HG21	1.99	0.63
1:13:1533:C:H4'	1:13:1534:A:C8	2.34	0.63
1:13:1081:G:H2'	1:13:1082:G:H8	1.62	0.63
1:1G:192:U:O4'	20:BA:103:GLY:HA2	1.98	0.63
4:32:148:VAL:HG12	4:32:152:SER:HB2	1.80	0.63
3:2E:150:LYS:HE3	3:2E:152:ILE:HD11	1.81	0.63
37:35:101:VAL:HG21	37:35:108:LYS:HB2	1.80	0.62
1:1G:589:C:N3	1:1G:650:G:N2	2.37	0.62
28:79:19:ILE:HG12	28:79:223:ARG:HG3	1.81	0.62
47:H8:9:TYR:HE2	47:H8:35:ARG:HH11	1.45	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:6:HIS:CE1	3:22:8:ILE:HB	2.34	0.62
2:1E:118:LEU:HB3	2:1E:142:LEU:HD13	1.81	0.62
40:A8:106:ARG:HE	40:A8:106:ARG:C	2.01	0.62
26:1H:458:G:O2'	26:1H:469:G:O6	2.12	0.62
2:1E:136:VAL:HA	2:1E:139:LYS:HB2	1.81	0.62
47:H8:102:LEU:HD21	47:H8:124:ILE:HG22	1.81	0.62
26:14:1754:C:OP1	41:75:96:ARG:NH1	2.32	0.62
12:3A:24:VAL:O	12:3A:26:ALA:N	2.31	0.62
7:62:60:LYS:HA	7:62:63:LYS:HG2	1.81	0.62
1:1G:1259:C:N4	1:1G:1260:C:O2	2.32	0.62
26:14:903:C:H2'	26:14:904:C:C6	2.34	0.62
1:1G:538:G:H5''	12:3A:114:LYS:HB2	1.80	0.62
40:65:106:ARG:HA	40:65:110:LEU:HD11	1.80	0.62
28:71:19:ILE:HG23	28:71:223:ARG:HG2	1.81	0.62
40:A8:89:ARG:HG2	40:A8:89:ARG:O	1.98	0.62
13:4A:16:ASP:HB3	13:4A:34:LEU:HD11	1.80	0.62
22:1K:56:C:H5''	38:88:60:ARG:HH22	1.64	0.62
26:1H:1667:G:O2'	26:1H:1991:U:O4	2.14	0.62
26:14:646:A:H2'	26:14:647:G:O4'	1.99	0.62
19:AA:41:VAL:HG23	19:AA:44:MET:HG3	1.80	0.62
26:1H:50:U:H3'	26:1H:51:G:H5'	1.82	0.62
26:14:2228:G:OP1	29:19:261:LYS:NZ	2.31	0.62
1:13:186:C:O4'	20:BI:81:LYS:NZ	2.31	0.62
1:1G:964:A:N3	1:1G:969:A:O2'	2.28	0.62
2:12:52:GLU:OE1	2:12:53:ARG:N	2.32	0.62
26:14:30:G:O6	61:14:3529:HOH:O	2.13	0.62
46:C5:83:THR:HG22	46:C5:84:ARG:H	1.63	0.62
26:1H:2032:G:H21	30:21:146:THR:CG2	2.11	0.62
27:16:43:C:OP1	32:41:67:LYS:NZ	2.31	0.62
45:B5:8:ILE:O	50:G5:36:ARG:NH2	2.32	0.62
26:14:265:A:C8	26:14:266:G:H1'	2.34	0.62
34:61:78:THR:HG22	34:61:141:LYS:HB2	1.80	0.62
1:1G:437:U:H5''	4:32:155:LEU:HD11	1.81	0.62
2:12:219:VAL:CG2	2:12:221:LEU:H	2.12	0.62
26:1H:1434:A:H61	26:1H:1558:A:H61	1.45	0.62
14:5I:6:LEU:HB3	14:5I:23:ARG:NH2	2.14	0.62
1:13:736:C:H2'	1:13:737:A:C8	2.33	0.62
1:1G:407:G:H2'	1:1G:408:A:H8	1.63	0.62
13:4A:16:ASP:N	13:4A:16:ASP:OD1	2.31	0.62
32:49:39:ILE:HG12	32:49:157:ILE:HG23	1.81	0.62
34:61:77:LEU:HD13	34:61:140:LEU:HB3	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:49:56:ALA:HA	32:49:59:GLU:HB2	1.80	0.62
4:32:94:LEU:HA	4:32:97:LEU:HD12	1.81	0.62
29:11:201:HIS:O	29:11:204:ILE:HG13	2.00	0.62
26:1H:2680:C:H5'	30:21:189:PRO:HA	1.81	0.62
2:12:24:TRP:HE1	2:12:26:PRO:HG3	1.63	0.62
50:G5:43:GLN:CD	50:G5:43:GLN:H	2.02	0.62
32:41:161:THR:HG22	32:41:163:ALA:H	1.64	0.62
20:BI:23:ARG:HA	20:BI:26:ASN:HD22	1.63	0.62
1:13:1238:A:H62	1:13:1301:U:H3	1.46	0.62
26:1H:1900:A:C8	26:1H:1900:A:H5'	2.33	0.62
26:14:1639:U:H4'	26:14:2699:C:H4'	1.81	0.62
29:19:33:LEU:HD23	29:19:34:VAL:HG13	1.80	0.62
8:72:44:PHE:HA	8:72:79:VAL:HG11	1.81	0.62
26:1H:1972:A:H2'	26:1H:1973:G:C8	2.33	0.62
1:13:881:G:OP2	12:3I:12:ARG:NH2	2.33	0.62
2:12:75:LYS:HA	2:12:78:GLN:HB2	1.80	0.62
11:2I:48:ILE:HG21	11:2I:63:LEU:HD13	1.80	0.62
35:58:38:HIS:O	42:C8:67:ALA:HB1	1.99	0.62
32:41:38:VAL:HG22	32:41:93:THR:HG23	1.81	0.62
26:14:2346:A:C2	26:14:2383:G:C2	2.88	0.62
23:2K:2:G:H2'	23:2K:3:C:C6	2.35	0.62
46:G8:30:VAL:HG22	46:G8:37:VAL:HG12	1.82	0.62
1:1G:1147:C:O2	9:82:16:ARG:NH1	2.25	0.62
26:14:1027:A:C2	26:14:2488:A:H5'	2.35	0.62
26:14:1169:G:N2	26:14:1180:C:N3	2.44	0.62
35:15:56:ASN:H	35:15:125:GLY:HA3	1.63	0.62
26:14:528:A:C2	26:14:2043:C:H4'	2.34	0.62
4:3E:98:GLU:O	4:3E:103:ASN:ND2	2.31	0.62
26:1H:882:G:H1	26:1H:894:C:H42	1.47	0.62
18:9I:22:VAL:HG13	18:9I:42:ARG:HH22	1.65	0.62
28:71:53:ARG:NH1	28:71:55:ASP:OD2	2.33	0.62
1:13:51:A:OP2	1:13:52:G:H8	1.83	0.62
26:1H:2577:A:H5''	26:1H:2578:G:H5'	1.82	0.62
1:13:1492:A:H5''	12:3I:47:LYS:HB3	1.82	0.62
26:1H:1433:U:O2	26:1H:1561:G:C2	2.53	0.62
1:13:1305:G:O2'	1:13:1331:G:N2	2.32	0.62
27:1J:3:C:H2'	27:1J:4:C:C6	2.34	0.62
27:1J:44:G:H1'	27:1J:47:C:H42	1.64	0.62
2:1E:28:PHE:CE2	2:1E:190:THR:HA	2.34	0.62
30:21:4:ILE:HD13	30:21:28:ALA:HB1	1.81	0.62
47:H8:101:PRO:HA	47:H8:123:ASP:HB3	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2331:G:O3'	48:I8:43:THR:HG22	2.00	0.62
9:82:17:VAL:HG22	9:82:63:ILE:HG12	1.82	0.62
26:14:900:A:H2'	26:14:901:A:C8	2.25	0.62
26:14:2438:U:O3'	26:14:2439:A:H3'	1.99	0.62
18:9I:39:VAL:O	18:9I:42:ARG:HB2	2.00	0.62
30:21:116:VAL:O	30:21:117:MET:HB3	1.98	0.62
31:39:64:ILE:HD11	31:39:75:HIS:HB2	1.82	0.62
33:51:46:GLU:OE1	33:51:51:ARG:NH2	2.33	0.62
26:1H:2142:C:H2'	26:1H:2143:C:C6	2.35	0.62
7:62:111:ARG:NH2	7:62:122:HIS:HB3	2.13	0.62
26:14:2688:U:H5	26:14:2720:U:OP2	1.83	0.62
26:1H:1900:A:H5'	26:1H:1900:A:H8	1.65	0.62
26:14:139:G:N2	26:14:141:A:N1	2.46	0.62
27:1J:44:G:H5"	27:1J:45:A:OP1	1.99	0.62
26:1H:719:C:H2'	26:1H:720:C:C6	2.35	0.62
3:2E:119:ARG:O	3:2E:123:GLN:HG3	2.00	0.62
45:B5:51:VAL:HG13	45:B5:81:VAL:HG23	1.82	0.62
1:13:345:C:H4'	1:13:346:G:C5	2.35	0.62
26:14:1921:G:H2'	26:14:1922:G:H8	1.65	0.62
33:51:83:TYR:O	33:51:84:SER:OG	2.18	0.62
1:13:222:U:H2'	1:13:223:U:H6	1.64	0.62
1:1G:1204:A:OP1	14:5A:3:ARG:NH1	2.31	0.62
4:32:70:ILE:HD11	4:32:75:PHE:HD2	1.65	0.62
41:B8:60:THR:HG22	41:B8:77:PRO:HA	1.81	0.62
30:29:25:VAL:HG12	30:29:26:ILE:H	1.64	0.62
26:14:2016:U:O2	53:J5:7:PRO:HG2	1.99	0.62
26:1H:1188:U:H4'	43:D8:79:VAL:HG22	1.82	0.61
17:8I:76:LEU:HD12	17:8I:77:VAL:H	1.63	0.61
31:39:78:ILE:HA	31:39:83:PHE:CD2	2.35	0.61
1:13:474:G:H5"	16:7I:81:ARG:HE	1.64	0.61
1:13:1015:A:H2'	1:13:1016:A:H8	1.65	0.61
26:14:6:A:N7	26:14:2899:G:N2	2.47	0.61
39:98:51:LEU:HD22	39:98:66:VAL:HG13	1.82	0.61
43:95:85:LYS:CD	43:95:86:GLY:H	2.07	0.61
26:14:1435:G:H1	26:14:1557:C:H42	1.47	0.61
1:1G:1316:G:H4'	14:5A:18:VAL:HG11	1.81	0.61
32:41:35:GLU:OE1	32:41:36:LYS:N	2.33	0.61
1:1G:324:G:N1	1:1G:327:A:OP2	2.33	0.61
26:1H:1196:C:H41	37:78:16:ARG:HH12	1.46	0.61
53:J5:41:PRO:O	53:J5:44:THR:OG1	2.18	0.61
19:AI:21:GLU:O	19:AI:25:LYS:HB2	1.99	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:185:ILE:CG2	2:1E:199:TYR:HB2	2.30	0.61
26:14:2822:G:OP2	61:14:3506:HOH:O	2.16	0.61
4:32:22:LYS:HD3	4:32:25:ARG:HD2	1.83	0.61
1:1G:857:C:H3'	1:1G:858:G:C8	2.35	0.61
27:1J:104:A:H2'	27:1J:105:G:O4'	2.00	0.61
17:8I:13:ASP:H	17:8I:14:LYS:NZ	1.98	0.61
21:1B:8:THR:HG23	21:1B:11:GLY:H	1.63	0.61
1:13:323:U:H2'	1:13:324:G:O4'	1.98	0.61
41:75:50:ILE:HD11	41:75:102:ILE:HD11	1.81	0.61
41:75:55:ASN:N	41:75:59:THR:HG22	2.15	0.61
42:85:49:HIS:HA	42:85:52:ARG:HB3	1.81	0.61
12:3I:38:THR:HB	12:3I:57:LYS:HB3	1.83	0.61
40:65:30:ARG:HG3	40:65:35:ILE:HD12	1.80	0.61
50:G5:63:VAL:O	50:G5:66:GLU:HG2	2.00	0.61
1:1G:1149:C:OP2	9:82:9:ARG:NH1	2.33	0.61
10:1A:49:VAL:O	10:1A:60:ARG:HB2	2.00	0.61
26:1H:2150:U:H2'	26:1H:2151:G:C8	2.36	0.61
26:14:1210:A:H5'	26:14:1212:G:C5'	2.30	0.61
1:13:346:G:H21	1:13:347:G:H1'	1.64	0.61
35:58:130:HIS:C	35:58:134:ARG:HH22	2.03	0.61
26:1H:870:A:OP1	38:88:5:ARG:NH2	2.34	0.61
1:13:67:C:H2'	1:13:68:G:C8	2.36	0.61
26:14:1935:G:H1'	26:14:1964:G:N2	2.15	0.61
1:13:200:G:N2	1:13:218:C:O2	2.33	0.61
4:32:60:GLU:HG2	4:32:202:LEU:HB2	1.82	0.61
4:3E:95:GLY:O	4:3E:99:SER:OG	2.17	0.61
4:3E:61:LYS:NZ	4:3E:72:GLU:OE2	2.26	0.61
1:1G:1311:G:N2	1:1G:1326:C:O2	2.29	0.61
1:13:804:U:H5''	1:13:805:C:OP2	2.00	0.61
26:14:1070:A:H8	26:14:1093:G:C2	2.19	0.61
1:1G:1449:C:H3'	1:1G:1450:U:H4'	1.81	0.61
43:95:67:GLY:O	43:95:88:ARG:HD2	2.01	0.61
4:32:31:CYS:C	4:32:33:MET:H	2.03	0.61
33:51:81:GLU:O	33:51:81:GLU:HG2	2.00	0.61
1:13:1178:G:OP2	9:8E:93:ARG:NH2	2.34	0.61
26:14:2674:G:H4'	36:25:30:ALA:HB2	1.81	0.61
26:1H:34:C:O2'	26:1H:35:G:OP2	2.18	0.61
36:68:2:ILE:HD12	36:68:6:THR:HG21	1.81	0.61
13:4A:23:TYR:HB3	13:4A:67:GLU:HA	1.82	0.61
55:Q8:33:ASN:HA	55:Q8:36:LYS:HD2	1.82	0.61
43:95:85:LYS:CG	43:95:87:HIS:H	2.13	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:G8:87:LYS:O	46:G8:94:LYS:HB2	2.00	0.61
30:29:51:PHE:CG	30:29:52:LEU:N	2.68	0.61
26:1H:654(A):A:H2	26:1H:654(T):A:N1	1.98	0.61
26:14:958:U:O2	27:1J:89(A):A:O2'	2.15	0.61
2:1E:74:LYS:HB2	2:1E:208:ILE:HG21	1.81	0.61
31:31:29:ASN:H	31:31:112:MET:CE	2.12	0.61
22:1K:17:U:HO2'	22:1K:57:G:H1	1.47	0.61
4:3E:167:GLY:HA2	29:19:135:PHE:CZ	2.35	0.61
26:1H:1266:G:O2'	26:1H:2012:G:O6	2.14	0.61
1:13:110:C:O2'	16:7I:25:ARG:O	2.17	0.61
8:72:86:ILE:HG21	8:72:133:LEU:HD22	1.81	0.61
29:19:158:ALA:HB3	29:19:161:THR:HG21	1.82	0.61
2:12:91:PRO:HG2	2:12:155:LEU:HD23	1.80	0.61
47:D5:67:LEU:HD22	47:D5:90:VAL:HG11	1.81	0.61
16:7I:45:THR:HB	16:7I:47:ASP:H	1.66	0.61
11:2I:62:GLN:O	11:2I:66:LEU:HG	1.99	0.61
33:51:10:PRO:HD2	33:51:50:VAL:O	2.00	0.61
3:22:93:LYS:HD3	3:22:93:LYS:H	1.63	0.61
26:1H:305:U:H2'	26:1H:306:U:C6	2.36	0.61
26:1H:861:A:N3	27:16:79:C:O2'	2.32	0.61
34:69:98:ALA:HA	34:69:109:ILE:HD11	1.82	0.61
27:16:81:G:OP2	61:16:304:HOH:O	2.16	0.61
56:1L:76:A:H2'	26:14:2584:U:H1'	1.81	0.61
22:1K:57:G:OP2	38:88:60:ARG:NH2	2.33	0.61
31:31:199:TRP:HE1	31:31:203:GLN:HE22	1.48	0.61
18:9A:37:VAL:O	18:9A:41:LYS:N	2.28	0.61
26:14:1670:C:O2	30:29:129:HIS:NE2	2.33	0.61
34:61:93:THR:HA	34:61:119:PRO:HB3	1.83	0.61
55:Q8:14:VAL:HG23	55:Q8:24:ALA:HB2	1.83	0.61
41:75:99:LEU:HD22	41:75:101:PHE:HE1	1.65	0.61
19:AA:15:LEU:HD13	19:AA:18:LYS:HD2	1.82	0.61
31:31:155:LEU:HD12	31:31:174:VAL:HG22	1.82	0.61
26:14:1226:G:H5'	43:95:85:LYS:H	1.66	0.61
40:65:74:ALA:O	40:65:78:LEU:HD12	2.01	0.61
5:4E:36:ASP:OD2	5:4E:40:ARG:NH2	2.32	0.61
40:A8:37:ALA:HB2	40:A8:101:LEU:HD21	1.83	0.61
26:14:382:G:H1	26:14:392:C:H42	1.48	0.61
15:6I:7:GLU:OE1	15:6I:38:ARG:NH2	2.33	0.61
7:6E:15:ASP:OD2	7:6E:19:GLY:N	2.34	0.61
26:1H:2144:U:H1'	26:1H:2148:G:N2	2.16	0.61
3:22:18:TRP:HE3	3:22:18:TRP:H	1.49	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2135:A:O2'	26:1H:2159:G:O2'	2.11	0.61
30:29:54:GLN:HA	30:29:54:GLN:NE2	2.15	0.61
1:1G:413:G:H2'	1:1G:428:G:N2	2.16	0.61
26:14:2584:U:H2'	26:14:2585:U:H2'	1.83	0.61
26:14:580:C:H2'	26:14:581:C:H6	1.65	0.61
29:11:17:THR:HG22	29:11:204:ILE:HA	1.82	0.61
4:3E:102:ASP:OD1	4:3E:103:ASN:N	2.34	0.61
26:1H:662:G:OP1	37:78:15:ARG:NH1	2.34	0.61
26:1H:2422:A:N7	55:Q8:31:HIS:HE1	1.99	0.61
12:3A:60:LEU:HD21	12:3A:66:VAL:HG22	1.83	0.61
20:BI:45:GLN:HB2	20:BI:91:LEU:HD13	1.83	0.61
3:2E:58:GLU:HB2	3:2E:65:ALA:HB3	1.82	0.61
2:1E:130:ARG:HB3	2:1E:134:GLU:HG2	1.83	0.61
37:35:85:LEU:HA	37:35:88:LEU:HD22	1.83	0.61
26:1H:1409:C:H42	26:1H:1593:G:H1	1.47	0.61
26:1H:2867:G:OP2	41:B8:119:LYS:NZ	2.18	0.61
39:55:87:TYR:HD1	39:55:90:ARG:HE	1.47	0.61
26:14:2275:C:H6	26:14:2275:C:H5'	1.64	0.61
1:13:1030:C:H2'	1:13:1031:G:C8	2.36	0.61
43:95:21:ARG:NH2	43:95:65:GLY:O	2.33	0.61
26:14:498:G:H21	46:C5:47:LYS:HZ1	1.49	0.61
26:1H:910:A:H62	38:88:12:GLN:HA	1.65	0.61
43:D8:24:LYS:HA	43:D8:92:THR:HG23	1.83	0.61
15:6I:82:ILE:O	15:6I:86:GLY:N	2.34	0.61
15:6A:25:THR:HG21	15:6A:70:LEU:HB2	1.82	0.61
26:1H:2246:G:H2'	26:1H:2247:A:H8	1.66	0.61
26:1H:409:C:OP1	61:1H:3556:HOH:O	2.16	0.61
26:14:2572:A:C8	30:29:144:ARG:HD2	2.36	0.61
26:1H:2301:C:H2'	26:1H:2302:G:H8	1.66	0.60
26:1H:2845:G:H2'	26:1H:2846:G:H8	1.65	0.60
26:14:848:G:C4	26:14:933:A:H8	2.19	0.60
13:4A:8:GLU:HB3	32:49:115:ARG:HH21	1.66	0.60
7:62:31:MET:HG3	7:62:36:LYS:HA	1.82	0.60
9:8E:112:LYS:HA	9:8E:119:ALA:HB2	1.83	0.60
26:1H:2563:U:H4'	36:68:28:SER:HA	1.83	0.60
2:12:112:VAL:HG22	2:12:149:LEU:HD13	1.82	0.60
33:51:86:GLU:HG3	33:51:87:LEU:H	1.64	0.60
1:1G:523:A:H61	12:3A:92:ASP:HB2	1.66	0.60
26:14:1019:U:H2'	26:14:1020:A:C8	2.36	0.60
1:1G:411:A:H61	1:1G:430:A:H62	1.47	0.60
26:14:71:A:C8	26:14:71:A:H5'	2.36	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:801:G:OP2	61:1H:3557:HOH:O	2.16	0.60
26:14:1496:A:H8	26:14:1577:C:HO2'	1.44	0.60
1:1G:547:A:OP2	4:32:2:GLY:N	2.33	0.60
17:8A:59:ILE:HG22	17:8A:71:PHE:HD2	1.65	0.60
1:1G:99:C:H2'	1:1G:101:A:C8	2.37	0.60
3:22:172:ARG:HH12	3:22:174:PRO:HG3	1.66	0.60
1:1G:1499:A:H1'	1:1G:1520:G:H5'	1.84	0.60
23:2L:9:G:N3	23:2L:46:G:H2'	2.17	0.60
26:1H:1534:G:H21	26:1H:1538:G:N2	1.99	0.60
29:19:30:GLU:OE1	29:19:63:ARG:NE	2.27	0.60
29:11:17:THR:HG22	29:11:205:VAL:H	1.65	0.60
26:1H:2680:C:O2'	26:1H:2681:C:H5'	2.00	0.60
26:14:2875:C:O2	41:75:3:ARG:NH1	2.34	0.60
26:1H:910:A:C5	38:88:13:GLN:HG3	2.36	0.60
42:C8:69:CYS:HB3	42:C8:74:LEU:HD13	1.83	0.60
26:1H:1805:U:O2	29:11:50:THR:HB	2.01	0.60
20:BA:25:ARG:O	20:BA:29:LYS:HG2	2.01	0.60
12:3A:82:VAL:O	12:3A:106:ASP:HB2	2.00	0.60
20:BA:41:ILE:HG21	20:BA:87:LYS:HD2	1.83	0.60
1:13:1226:C:H4'	19:AI:80:TYR:OH	2.01	0.60
30:29:12:THR:O	30:29:23:VAL:HG22	2.00	0.60
26:1H:1503:U:H2'	26:1H:1504:C:H6	1.65	0.60
26:14:1167:U:O2	26:14:1183:G:N2	2.35	0.60
26:1H:1022:G:H4'	26:1H:1023:U:O5'	2.01	0.60
32:41:112:PRO:HB3	52:M8:37:SER:N	2.15	0.60
1:1G:827:U:H3	1:1G:872:A:H62	1.47	0.60
29:11:27:THR:OG1	29:11:28:GLU:N	2.31	0.60
26:14:2134:A:H62	26:14:2156:G:H2'	1.66	0.60
26:1H:2443:C:H2'	26:1H:2444:G:H8	1.65	0.60
31:31:67:GLN:HG3	31:31:67:GLN:O	2.02	0.60
41:B8:26:ASP:HB2	41:B8:91:ARG:HA	1.83	0.60
34:61:110:ASP:HB2	34:61:112:LYS:H	1.66	0.60
26:14:2657:A:H62	26:14:2664:G:H21	1.49	0.60
19:AA:14:HIS:CE1	19:AA:15:LEU:HD23	2.36	0.60
12:3A:60:LEU:HD23	12:3A:64:TYR:HB3	1.82	0.60
24:3K:6:G:N2	24:3K:67:C:O2	2.34	0.60
42:85:90:VAL:HA	43:95:39:LEU:HD13	1.83	0.60
24:3K:25:C:H2'	24:3K:26:A:O4'	2.00	0.60
1:13:1104:G:OP1	2:1E:144:ARG:NH1	2.33	0.60
43:95:58:VAL:HG13	43:95:97:LYS:HB2	1.84	0.60
26:1H:1412:A:H2'	26:1H:1413:G:H8	1.66	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:59:171:LEU:CD1	33:59:172:LYS:H	2.14	0.60
29:11:68:LYS:HB3	29:11:70:TRP:CE3	2.36	0.60
20:BI:89:ARG:CZ	20:BI:104:LEU:HD21	2.31	0.60
20:BI:20:LEU:O	20:BI:23:ARG:HG2	2.01	0.60
41:75:56:GLY:O	41:75:59:THR:HG23	2.01	0.60
26:1H:1800:C:OP2	29:11:183:ARG:NH2	2.33	0.60
26:1H:1871:A:H2'	26:1H:1872:A:C8	2.35	0.60
26:1H:322:A:H5'	26:1H:340:A:H1'	1.83	0.60
1:13:918:A:H2'	1:13:919:A:C8	2.37	0.60
23:2L:41:C:H2'	23:2L:42:C:H6	1.67	0.60
37:35:95:VAL:HA	37:35:99:LEU:HD23	1.83	0.60
26:14:1786:A:C2	26:14:2606:C:H1'	2.37	0.60
37:35:47:ASP:OD2	37:35:50:ARG:NH1	2.35	0.60
29:19:242:ARG:H	29:19:242:ARG:HH11	1.47	0.60
1:13:505:G:N7	61:13:1821:HOH:O	2.32	0.60
1:1G:1343:G:H2'	1:1G:1344:C:C6	2.37	0.60
31:31:197:ASP:N	31:31:197:ASP:OD1	2.35	0.60
29:11:228:PRO:O	61:11:402:HOH:O	2.16	0.60
1:13:584:G:O6	61:13:1806:HOH:O	2.12	0.60
1:13:954:G:H2'	1:13:955:U:C6	2.37	0.60
16:7I:49:LEU:HD12	16:7I:50:LYS:H	1.65	0.60
10:1A:13:HIS:HB3	10:1A:68:HIS:CE1	2.36	0.60
47:D5:19:ARG:NH1	47:D5:84:GLU:O	2.35	0.60
26:14:1109:C:H2'	26:14:1110:G:H1'	1.84	0.60
26:1H:2845:G:H2'	26:1H:2846:G:C8	2.37	0.60
26:1H:934:G:H2'	26:1H:935:C:C6	2.35	0.60
1:13:1008:C:H2'	1:13:1009:G:O4'	2.01	0.60
30:29:12:THR:HG22	30:29:13:ARG:H	1.66	0.60
49:F5:85:LEU:HA	49:F5:87:PRO:HD2	1.84	0.60
33:51:15:VAL:HG13	33:51:28:GLY:HA3	1.84	0.60
9:8E:108:VAL:HG22	9:8E:109:VAL:H	1.67	0.60
34:61:68:LEU:HA	34:61:71:ILE:HG22	1.84	0.60
10:1A:80:LYS:O	10:1A:84:GLN:NE2	2.34	0.60
46:G8:38:ILE:HD11	46:G8:64:GLU:HG3	1.83	0.60
26:1H:2712(A):A:H5''	26:1H:2713:A:OP2	2.02	0.60
43:95:84:LYS:HE2	43:95:85:LYS:HB2	1.83	0.60
26:14:1786:A:H2	26:14:2606:C:H1'	1.67	0.60
26:1H:620:G:H4'	26:1H:621:A:C5'	2.32	0.60
1:13:486:U:H2'	1:13:487:A:C8	2.36	0.60
26:14:1171:G:N2	26:14:1174:A:N1	2.48	0.60
1:13:626:U:H2'	1:13:627:G:H8	1.65	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:837:G:OP2	1:13:842:C:N4	2.25	0.60
26:14:910:A:H62	38:45:12:GLN:HA	1.65	0.60
45:B5:5:TYR:HD1	50:G5:33:MET:SD	2.24	0.60
32:49:53:LEU:HD21	32:49:87:PRO:HB2	1.83	0.60
26:1H:754:C:H2'	26:1H:755:C:H6	1.66	0.60
17:8A:24:GLU:OE2	17:8A:26:GLN:NE2	2.31	0.60
34:69:59:ALA:HA	34:69:62:LYS:HG2	1.84	0.60
30:21:170:LEU:HD21	30:21:187:ALA:HB3	1.83	0.60
1:1G:438:G:H4'	4:32:123:HIS:ND1	2.16	0.60
7:62:113:GLU:O	7:62:119:ARG:HD3	2.02	0.60
26:1H:1113:U:OP1	33:51:2:SER:N	2.35	0.60
1:13:1423:G:P	36:68:49:ARG:HH22	2.24	0.60
5:4E:110:LEU:HD13	5:4E:118:ILE:HD13	1.84	0.60
18:9I:22:VAL:HG13	18:9I:42:ARG:NH2	2.16	0.60
1:1G:404:U:P	4:32:118:ARG:HH11	2.25	0.60
37:35:105:LEU:O	37:35:106:LEU:HB3	2.01	0.60
26:14:620:G:H5''	26:14:620:G:N3	2.16	0.60
2:1E:93:VAL:HG21	2:1E:97:TRP:HD1	1.66	0.60
25:4K:23:A:O2'	25:4K:24:A:N7	2.28	0.60
35:58:39:ARG:NH2	35:58:41:ASP:OD2	2.35	0.60
4:32:107:ARG:HH12	4:32:194:LEU:HD12	1.65	0.60
26:1H:2593:U:H2'	26:1H:2594:C:H6	1.67	0.60
26:14:120:U:OP2	61:14:3535:HOH:O	2.16	0.60
16:7A:21:VAL:HG22	16:7A:33:ILE:HD12	1.84	0.60
26:14:1507:A:C4	26:14:1508:A:H1'	2.36	0.60
6:52:3:ARG:NH2	6:52:38:GLU:OE1	2.33	0.60
26:14:34:C:O2'	26:14:35:G:H8	1.85	0.59
41:75:3:ARG:HG2	41:75:6:LEU:H	1.67	0.59
26:1H:802:A:OP1	61:1H:3559:HOH:O	2.17	0.59
11:2I:98:LEU:O	11:2I:101:SER:OG	2.20	0.59
26:14:479:A:N3	26:14:481:G:H5''	2.17	0.59
3:2E:174:PRO:HB2	3:2E:177:THR:HB	1.84	0.59
46:C5:52:SER:HB2	46:C5:56:PRO:HA	1.83	0.59
26:1H:2855:C:H2'	26:1H:2856:C:H6	1.66	0.59
26:1H:646:A:H2'	26:1H:647:G:O4'	2.01	0.59
2:1E:36:ARG:HB3	2:1E:41:ILE:HD11	1.84	0.59
26:1H:858:U:O2	26:1H:2268:A:H2'	2.02	0.59
1:13:541:G:N7	61:13:1820:HOH:O	2.32	0.59
26:14:2394:C:H1'	61:14:3826:HOH:O	2.01	0.59
7:62:62:PHE:HA	7:62:124:LEU:HD22	1.84	0.59
9:82:6:GLY:HA3	9:82:84:ALA:HB2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:517:C:OP1	53:J5:16:ARG:NH2	2.35	0.59
26:1H:2845:G:OP2	61:1H:3558:HOH:O	2.17	0.59
40:A8:11:LYS:HD2	40:A8:15:ARG:NH2	2.17	0.59
26:1H:2132:U:C2	28:71:5:LYS:HD3	2.37	0.59
1:13:437:U:H5'	4:3E:155:LEU:HD21	1.84	0.59
26:1H:719:C:H2'	26:1H:720:C:H6	1.67	0.59
42:85:98:LEU:C	42:85:100:VAL:H	2.05	0.59
1:13:1015:A:H2'	1:13:1016:A:C8	2.37	0.59
29:19:223:GLY:HA2	29:19:226:MET:HG3	1.85	0.59
2:12:73:THR:HG21	2:12:97:TRP:H	1.67	0.59
26:1H:2469:A:H2	26:1H:2481:G:H21	1.47	0.59
26:1H:651:G:OP1	55:Q8:19:SER:OG	2.18	0.59
4:3E:153:ARG:HB3	4:3E:181:MET:SD	2.41	0.59
2:12:165:VAL:HG23	2:12:166:ASP:H	1.67	0.59
56:1L:33:U:O2'	56:1L:34:U8U:N	2.28	0.59
1:1G:501:C:H2'	1:1G:502:G:H8	1.67	0.59
26:1H:2529:G:H5''	26:1H:2530:A:H5''	1.84	0.59
1:1G:401:C:O2'	1:1G:621:A:N3	2.34	0.59
46:G8:87:LYS:HD3	46:G8:88:LYS:H	1.65	0.59
46:G8:87:LYS:HD3	46:G8:88:LYS:N	2.17	0.59
26:14:1678:G:N2	26:14:1989:G:H22	2.00	0.59
26:14:2476:A:H2	26:14:2481:G:H22	1.48	0.59
5:4E:45:PHE:CE2	5:4E:47:LYS:HD2	2.38	0.59
26:14:566:U:OP1	37:35:29:LYS:NZ	2.32	0.59
26:14:863:A:H2'	26:14:864:G:C8	2.37	0.59
7:62:102:ARG:O	7:62:106:GLN:HG2	2.02	0.59
26:1H:1577:C:H5''	61:1H:3554:HOH:O	2.01	0.59
1:13:1239:A:H62	1:13:1299:A:N6	1.97	0.59
7:62:15:ASP:OD1	7:62:44:TYR:OH	2.21	0.59
4:32:22:LYS:HG3	59:32:301:SF4:S3	2.42	0.59
26:14:94:G:H21	50:G5:47:ASN:HD22	1.48	0.59
23:2K:17:C:H3'	23:2K:18:U:H2'	1.84	0.59
38:88:139:GLU:OE1	38:88:141:GLN:HB3	2.02	0.59
26:14:302:C:H2'	26:14:303:U:C6	2.37	0.59
38:88:37:LEU:HD21	38:88:130:LYS:HB2	1.84	0.59
1:13:1345:U:O2	1:13:1375:A:N6	2.34	0.59
13:4I:49:THR:HB	13:4I:52:GLU:HG2	1.85	0.59
10:1I:57:LYS:O	10:1I:60:ARG:NH2	2.35	0.59
31:39:123:LEU:O	31:39:193:VAL:HA	2.03	0.59
26:1H:1418:G:OP1	26:1H:1588:C:O2'	2.19	0.59
46:C5:62:GLU:CD	46:C5:63:LYS:H	2.05	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:377:G:H5'	16:7A:5:ARG:HH12	1.68	0.59
3:2E:40:ARG:O	3:2E:44:GLU:HG2	2.01	0.59
1:13:835:U:H3	1:13:851:G:H1	1.49	0.59
26:1H:2319:G:N7	40:A8:2:ALA:HB1	2.18	0.59
26:14:1337:G:H2'	26:14:1338:G:H8	1.67	0.59
9:8E:114:TYR:HE2	10:1I:59:SER:HA	1.68	0.59
1:1G:587:G:N2	1:1G:754:C:OP2	2.36	0.59
39:98:12:ARG:HD3	39:98:16:HIS:CD2	2.37	0.59
26:1H:1221:C:H2'	26:1H:1222:C:H6	1.67	0.59
37:35:15:ARG:CZ	37:35:15:ARG:HB2	2.32	0.59
26:1H:1509:C:H2'	26:1H:1511:A:C8	2.38	0.59
30:29:55:ASN:HB2	30:29:58:ARG:NH2	2.18	0.59
38:45:25:ASP:HB3	38:45:102:VAL:HB	1.84	0.59
40:65:44:LYS:HB3	40:65:46:VAL:HG12	1.84	0.59
28:71:225:ASN:N	28:71:225:ASN:ND2	2.50	0.59
1:13:130:A:N3	1:13:263:A:O2'	2.34	0.59
26:14:2306:C:H2'	26:14:2307:G:H21	1.68	0.59
1:1G:1286:A:C8	1:1G:1287:A:H4'	2.38	0.59
1:13:624:C:O3'	16:7I:10:GLY:HA2	2.02	0.59
26:14:2211:G:O2'	26:14:2212:A:OP1	2.20	0.59
26:14:1671:U:HO2'	26:14:1673:U:H5	1.47	0.59
26:1H:1709:U:H1'	26:1H:2860:A:N3	2.17	0.59
29:19:6:PHE:HE1	29:19:18:VAL:HG23	1.68	0.59
21:1F:5:ASP:O	21:1F:11:GLY:HA3	2.02	0.59
1:1G:1134:G:C2	1:1G:1135:U:H1'	2.38	0.59
51:L8:7:LYS:HE2	51:L8:32:GLN:HG3	1.83	0.59
1:13:1273:G:H3'	1:13:1274:G:H8	1.67	0.59
39:98:101:ALA:HA	53:N8:44:THR:HG21	1.85	0.59
9:82:77:ILE:O	9:82:81:ILE:HG12	2.02	0.59
26:14:2031:A:N3	26:14:2455:G:O2'	2.28	0.59
23:2L:10:G:N2	23:2L:27:G:H1'	2.18	0.59
28:71:224:ILE:C	28:71:225:ASN:HD22	2.06	0.59
26:14:847:U:OP2	61:14:3534:HOH:O	2.17	0.59
26:14:2468:G:H5''	26:14:2476:A:N6	2.17	0.59
1:1G:598:U:H2'	1:1G:599:C:C6	2.37	0.59
26:14:2250:G:C2	38:45:82:ARG:HB3	2.37	0.59
7:62:68:ASN:ND2	7:62:127:ALA:O	2.30	0.59
16:7A:23:ASP:OD1	16:7A:25:ARG:NH1	2.35	0.59
43:D8:47:VAL:HG22	43:D8:48:GLY:H	1.67	0.59
26:14:1188:U:O2'	26:14:1189:A:H5'	2.02	0.59
1:1G:1125:U:H2'	1:1G:1126:U:C5	2.37	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:70:G:H21	26:1H:71:A:H62	1.50	0.59
26:14:1110:G:H2'	26:14:1111:A:O4'	2.02	0.59
9:8E:3:GLN:OE1	9:8E:20:ARG:NH1	2.36	0.59
1:1G:1291:G:H4'	9:82:39:GLY:HA3	1.85	0.59
31:39:68:LYS:HG3	31:39:69:HIS:NE2	2.17	0.59
26:14:89:G:H3'	26:14:90:U:C5'	2.33	0.59
1:1G:1258:G:H2'	1:1G:1259:C:H6	1.68	0.59
47:D5:15:PRO:HB2	47:D5:19:ARG:NH2	2.17	0.59
46:G8:42:VAL:HG23	46:G8:43:ASN:N	2.18	0.59
26:14:531:C:OP1	26:14:561:G:N2	2.35	0.59
8:72:120:THR:HG23	8:72:123:GLU:H	1.68	0.59
2:1E:87:ARG:NH1	2:1E:220:ASP:OD1	2.35	0.59
1:13:417:C:H2'	1:13:418:C:H6	1.68	0.59
2:1E:237:ALA:O	2:1E:239:VAL:N	2.36	0.59
1:1G:222:U:H2'	1:1G:223:U:C6	2.37	0.59
37:35:63:PRO:HD3	55:M5:27:THR:HG22	1.84	0.59
26:1H:1705:G:C2'	26:1H:1706:U:H5'	2.32	0.59
26:1H:2117:A:HO2'	26:1H:2147:G:N2	2.00	0.59
7:6E:111:ARG:NH2	7:6E:126:ASP:OD2	2.36	0.59
42:85:65:ILE:HD11	42:85:93:LYS:HA	1.85	0.59
1:13:1031:G:H2'	1:13:1032:A:H5'	1.84	0.59
49:F5:92:LYS:O	49:F5:94:LEU:N	2.35	0.59
1:1G:501:C:H2'	1:1G:502:G:C8	2.38	0.59
2:12:19:HIS:CD2	2:12:204:ASN:HB3	2.38	0.59
1:13:1396:A:H4'	1:13:1397:C:H5''	1.85	0.59
26:1H:2102:U:H2'	26:1H:2103:C:C6	2.37	0.59
26:1H:574:C:O2	30:21:145:LYS:NZ	2.35	0.59
26:1H:234:C:H2'	26:1H:235:U:H6	1.66	0.59
44:E8:51:LEU:HD23	44:E8:105:VAL:HG11	1.84	0.59
26:14:273(C):C:N3	26:14:363(C):G:N2	2.47	0.59
26:14:273(C):C:H42	26:14:363(C):G:H1	1.50	0.59
24:3K:30:G:N2	24:3K:40:C:N3	2.41	0.59
26:14:841:A:N6	26:14:937:U:H3	2.00	0.59
1:1G:277:C:P	17:8A:68:ARG:HH12	2.26	0.59
26:1H:1608:A:O2'	26:1H:1610:A:OP2	2.13	0.59
26:1H:2492:U:H2'	26:1H:2493:U:H6	1.67	0.59
2:1E:185:ILE:HG22	2:1E:199:TYR:HB2	1.85	0.59
44:E8:35:ILE:HG23	53:N8:28:PRO:HD2	1.85	0.59
9:82:7:THR:H	9:82:83:ARG:HD3	1.67	0.59
4:3E:107:ARG:HH22	4:3E:194:LEU:HD23	1.66	0.59
2:12:95:GLN:HB3	2:12:148:TYR:HD1	1.68	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:19:5:LYS:HG2	29:19:17:THR:HG22	1.85	0.59
26:1H:443:A:H1'	26:1H:1201:C:O4'	2.03	0.59
32:49:114:ILE:HD13	32:49:140:ILE:HG21	1.83	0.59
32:49:144:ILE:HD12	32:49:149:VAL:HG12	1.85	0.59
43:D8:85:LYS:NZ	43:D8:85:LYS:HB2	2.18	0.59
26:14:2567:G:H2'	26:14:2568:C:C6	2.38	0.59
27:16:15:A:H3'	27:16:16:G:H5'	1.85	0.58
1:13:411:A:C4	1:13:413:G:H1'	2.37	0.58
1:1G:1316:G:H22	1:1G:1319:A:P	2.25	0.58
26:1H:2572:A:N7	30:21:144:ARG:HD2	2.18	0.58
26:14:2547:U:H2'	26:14:2548:G:H8	1.68	0.58
26:14:1899:G:H22	26:14:1902:C:N4	2.01	0.58
26:14:34:C:HO2'	26:14:35:G:P	2.26	0.58
26:1H:1443:G:H1	26:1H:1548:C:H42	1.50	0.58
1:13:838:G:H1	1:13:848:C:H42	1.49	0.58
43:D8:47:VAL:HG22	43:D8:48:GLY:N	2.18	0.58
26:1H:2299:G:O6	61:1H:3553:HOH:O	2.14	0.58
28:79:5:LYS:HA	28:79:8:ARG:HG2	1.84	0.58
1:1G:572:A:H5'	1:1G:573:A:OP2	2.03	0.58
26:14:1113:U:H5'	33:59:2:SER:HA	1.85	0.58
1:13:813:U:OP2	1:13:816:A:N6	2.36	0.58
1:13:1064:G:H4'	1:13:1065:U:OP1	2.03	0.58
12:3A:8:ASN:OD1	17:8A:34:LYS:NZ	2.27	0.58
26:14:270(F):U:H3	26:14:270(T):G:H1	1.51	0.58
26:14:251:A:C5	26:14:252:G:H1'	2.38	0.58
34:61:69:LYS:O	34:61:73:GLU:HB2	2.03	0.58
26:1H:1593:G:H2'	26:1H:1594:G:H8	1.64	0.58
26:14:2156:G:N7	26:14:2157:G:N2	2.51	0.58
1:13:258:G:H2'	1:13:259:G:H8	1.68	0.58
1:1G:1243:C:OP1	21:1B:10:ARG:NE	2.36	0.58
26:14:2611:U:H5'	26:14:2611:U:H6	1.67	0.58
30:21:57:LYS:HG2	30:21:59:VAL:HG12	1.85	0.58
27:1J:28:C:H2'	27:1J:29:A:H8	1.68	0.58
30:29:119:ARG:HA	30:29:160:TYR:CD2	2.38	0.58
26:14:2184:G:H2'	26:14:2185:C:C6	2.38	0.58
28:71:49:ILE:HD12	28:71:50:ASP:H	1.68	0.58
3:22:11:ARG:NH2	3:22:177:THR:O	2.36	0.58
32:41:35:GLU:HG3	32:41:36:LYS:HB3	1.85	0.58
1:1G:276:G:O3'	17:8A:68:ARG:NH1	2.36	0.58
48:I8:11:ARG:HH11	48:I8:11:ARG:HB2	1.69	0.58
49:J8:92:LYS:HA	49:J8:95:LEU:HD12	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:594:G:H1	1:1G:645:C:H42	1.50	0.58
47:D5:23:LYS:HD3	47:D5:40:ASP:HA	1.85	0.58
1:13:177:C:OP1	20:BI:65:LYS:NZ	2.32	0.58
47:D5:55:HIS:HE2	47:D5:135:GLU:HG2	1.67	0.58
26:14:802:A:H4'	61:14:3765:HOH:O	2.03	0.58
28:79:201:PRO:HD2	28:79:208:PHE:CE1	2.39	0.58
7:6E:50:ILE:HB	7:6E:58:PRO:HB3	1.83	0.58
1:1G:1162:C:N4	1:1G:1174:G:H1	1.97	0.58
26:14:602:G:OP2	26:14:602:G:H8	1.86	0.58
26:1H:70:G:H21	26:1H:71:A:N6	2.01	0.58
7:6E:111:ARG:HD2	7:6E:123:GLU:HB2	1.83	0.58
1:1G:1037:C:H2'	1:1G:1038:C:H6	1.66	0.58
35:15:42:TRP:O	42:85:64:ARG:NH2	2.35	0.58
11:2I:17:GLY:O	11:2I:80:VAL:HA	2.03	0.58
6:5E:23:LYS:HA	6:5E:26:ILE:HD12	1.86	0.58
29:11:11:PRO:O	29:11:12:SER:OG	2.16	0.58
26:14:957:A:H5'	38:45:76:LYS:HD3	1.84	0.58
1:1G:518:C:H5''	1:1G:519:C:C6	2.38	0.58
44:A5:2:GLU:OE2	44:A5:72:LYS:HE3	2.03	0.58
30:29:103:ASP:OD1	30:29:201:THR:HG23	2.03	0.58
31:31:183:VAL:O	31:31:187:VAL:HG23	2.03	0.58
26:14:273(F):C:H3'	26:14:274:G:C5'	2.33	0.58
26:14:141:A:H8	26:14:1595:G:N2	2.02	0.58
26:1H:2784:C:O2'	30:21:37:ARG:NH1	2.37	0.58
26:1H:1257:C:OP1	31:31:75:HIS:HE1	1.86	0.58
18:9I:59:SER:H	18:9I:62:GLU:HB2	1.67	0.58
26:1H:2022:U:O2'	26:1H:2617:C:H5'	2.04	0.58
4:32:119:GLN:HG2	4:32:123:HIS:HD2	1.68	0.58
10:1I:38:ILE:HG23	10:1I:71:LEU:O	2.03	0.58
1:1G:396:G:O2'	1:1G:398:C:OP1	2.15	0.58
26:1H:1935:G:H1'	26:1H:1964:G:N2	2.17	0.58
26:14:1599:C:H2'	26:14:1600:C:H6	1.69	0.58
26:14:2659:G:N2	26:14:2662:A:OP2	2.37	0.58
26:14:2104:G:H2'	26:14:2105:C:C6	2.38	0.58
26:14:1826:G:H4'	29:19:242:ARG:HE	1.69	0.58
27:1J:51:G:OP2	40:65:59:LYS:NZ	2.36	0.58
26:14:1364:G:N7	49:F5:2:SER:HB2	2.18	0.58
13:4A:8:GLU:OE2	13:4A:10:PRO:HD3	2.03	0.58
9:82:117:HIS:O	9:82:118:LYS:HB2	2.04	0.58
26:1H:330:A:O2'	26:1H:331:A:H8	1.86	0.58
26:14:731:C:H5''	61:14:3532:HOH:O	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:28:C:H2'	27:1J:29:A:C8	2.38	0.58
2:12:30:ARG:NH2	2:12:194:PRO:HB2	2.18	0.58
1:1G:920:U:H2'	1:1G:921:U:C6	2.37	0.58
32:49:7:LEU:HG	32:49:104:GLU:HB2	1.85	0.58
26:14:774:A:H2	26:14:787:U:HO2'	1.50	0.58
34:61:113:ARG:HB3	34:61:131:LYS:HD3	1.84	0.58
1:1G:584:G:H5'	17:8A:91:ARG:NH1	2.18	0.58
2:1E:111:ARG:HD2	2:1E:145:LEU:HD21	1.84	0.58
52:M8:13:ARG:HH12	52:M8:22:ILE:HG23	1.68	0.58
2:12:54:THR:HA	2:12:57:PHE:HB2	1.85	0.58
26:1H:1412:A:H2'	26:1H:1413:G:C8	2.39	0.58
32:49:114:ILE:HD11	32:49:140:ILE:HD13	1.86	0.58
6:52:15:ASP:O	6:52:19:LEU:HB2	2.02	0.58
26:14:868:U:H2'	26:14:869:G:C8	2.39	0.58
1:1G:317:G:H1	1:1G:336:C:H42	1.49	0.58
36:68:120:GLU:OE1	41:B8:67:SER:OG	2.15	0.58
56:1L:3:G:H4'	56:1L:4:U:OP1	2.02	0.58
56:1L:55:PSU:OP1	38:45:55:VAL:HG11	2.04	0.58
26:1H:1430:C:H2'	26:1H:1431:U:C6	2.37	0.58
30:29:54:GLN:NE2	30:29:73:GLU:HG2	2.19	0.58
1:13:1028(A):C:N3	1:13:1032(A):G:N2	2.51	0.58
2:1E:158:LEU:HD13	2:1E:182:ILE:HD11	1.86	0.58
32:41:18:GLU:O	32:41:22:ARG:HB2	2.03	0.58
26:14:1292:U:H2'	26:14:1293:C:C6	2.39	0.58
26:14:2557:G:H2'	26:14:2558:C:C6	2.39	0.58
34:61:33:ARG:HB3	34:61:35:LEU:HD13	1.85	0.58
49:F5:40:ARG:NH2	49:F5:42:GLN:HG2	2.19	0.58
26:1H:2177:C:H5''	28:71:213:TYR:CD1	2.38	0.58
1:13:718:G:H5'	11:2I:117:ASN:HB2	1.85	0.58
39:55:106:GLY:O	39:55:107:ASP:HB3	2.03	0.58
1:13:1003:G:H2'	1:13:1004:A:H4'	1.85	0.58
55:M5:14:VAL:HG11	55:M5:58:ILE:HD11	1.86	0.58
1:1G:1292:U:H2'	1:1G:1293:G:C8	2.39	0.58
22:1K:17:U:HO2'	22:1K:57:G:N2	2.02	0.58
26:1H:1400:G:H2'	26:1H:1401:G:C8	2.39	0.58
3:22:63:ASN:HA	3:22:98:ASN:HB2	1.85	0.58
2:1E:212:GLN:O	2:1E:216:SER:OG	2.21	0.58
36:25:73:ASP:OD2	41:75:32:TYR:OH	2.16	0.58
40:A8:10:ARG:O	40:A8:14:VAL:HG13	2.03	0.58
26:14:721:C:H2'	26:14:722:A:C8	2.39	0.58
26:1H:1021:A:H8	26:1H:1021:A:H3'	1.69	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:78:19:VAL:HG12	37:78:27:HIS:HB3	1.86	0.58
49:F5:86:SER:N	49:F5:87:PRO:HD2	2.17	0.58
2:12:71:VAL:HG11	2:12:164:VAL:HA	1.86	0.58
1:13:836:G:OP1	18:9I:61:LYS:NZ	2.32	0.58
13:4A:46:LYS:NZ	13:4A:47:ASP:OD2	2.36	0.58
35:15:34:LEU:HD21	35:15:120:LEU:HB2	1.85	0.58
2:12:189:ASP:H	2:12:192:SER:HB2	1.69	0.58
1:1G:955:U:H2'	1:1G:956:U:H6	1.68	0.58
26:14:1412:A:H2'	26:14:1413:G:C8	2.38	0.58
7:6E:20:ASP:HB3	7:6E:23:VAL:HG23	1.85	0.58
1:1G:1483:A:H1'	26:14:1948:G:H1'	1.84	0.58
26:14:2018:G:OP1	53:J5:9:LYS:NZ	2.36	0.58
26:14:993:G:OP1	42:85:50:ARG:NH2	2.37	0.57
24:3K:29:U:H2'	24:3K:30:G:C8	2.39	0.57
26:1H:270(J):G:H2'	26:1H:270(K):C:H4'	1.86	0.57
57:3L:18:G:H21	57:3L:57:G:H2'	1.69	0.57
26:1H:1257:C:H4'	31:31:83:PHE:CE1	2.39	0.57
27:16:43:C:P	32:41:67:LYS:HZ1	2.26	0.57
1:1G:649:G:H2'	1:1G:650:G:H8	1.69	0.57
26:14:1169:G:H1	26:14:1180:C:N4	2.02	0.57
1:13:1316:G:H22	1:13:1319:A:H5'	1.68	0.57
30:29:105:THR:HG21	30:29:164:ARG:HE	1.68	0.57
41:75:5:ALA:O	41:75:8:LYS:N	2.37	0.57
57:3L:3:G:H1	57:3L:70:C:H42	1.52	0.57
26:14:2343:C:HO2'	26:14:2373:G:HO2'	1.52	0.57
26:14:1342:A:H2	26:14:1602:U:H3	1.52	0.57
26:14:2052:G:H2'	26:14:2053:G:H8	1.69	0.57
10:1I:40:LEU:HB2	10:1I:69:ASN:HB2	1.84	0.57
28:71:188:ASN:HA	28:71:191:ALA:HB3	1.87	0.57
19:AI:36:ARG:HD2	19:AI:52:TYR:O	2.04	0.57
26:1H:1657:C:H2'	26:1H:1658:C:C6	2.39	0.57
26:1H:2210:G:H3'	26:1H:2211:G:C8	2.38	0.57
28:71:185:LEU:O	28:71:189:ILE:HG13	2.04	0.57
26:1H:2246:G:H2'	26:1H:2247:A:C8	2.39	0.57
5:4E:15:ARG:NE	5:4E:26:PHE:HE2	2.02	0.57
26:14:2023:G:OP2	26:14:2617:C:H4'	2.04	0.57
26:14:1432:C:H2'	26:14:1433:U:O4'	2.03	0.57
3:2E:7:PRO:O	3:2E:11:ARG:HG2	2.03	0.57
15:6A:39:LEU:HD12	15:6A:56:LEU:HD13	1.86	0.57
36:25:49:ARG:HA	36:25:53:LYS:HE3	1.84	0.57
32:41:111:LEU:HD23	32:41:114:ILE:HD12	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7I:4:ILE:HD12	16:7I:66:PRO:HB3	1.86	0.57
26:1H:2887:U:H2'	26:1H:2888:C:C6	2.39	0.57
26:14:1187:G:H8	26:14:1187:G:O5'	1.87	0.57
26:1H:796:C:H2'	26:1H:797:C:C6	2.39	0.57
44:A5:51:LEU:HD23	44:A5:105:VAL:HG11	1.86	0.57
26:14:1816:G:OP2	29:19:39:LYS:NZ	2.30	0.57
8:7E:45:ILE:HB	8:7E:47:GLY:H	1.67	0.57
19:AI:41:VAL:HB	19:AI:42:PRO:HA	1.85	0.57
52:M8:40:HIS:HA	52:M8:41:PRO:O	2.03	0.57
26:14:2293:C:H5''	40:65:89:ARG:NH2	2.19	0.57
26:14:1022:G:O2'	26:14:1023:U:OP2	2.18	0.57
26:14:1817:G:OP1	29:19:88:ARG:NH2	2.35	0.57
1:1G:1285:A:H4'	1:1G:1286:A:O5'	2.04	0.57
29:19:25:THR:HG23	29:19:82:ILE:H	1.68	0.57
24:3K:76:A:H8	26:1H:2394:C:H42	1.52	0.57
47:D5:69:THR:HG22	47:D5:90:VAL:HG22	1.84	0.57
4:3E:162:LEU:HA	4:3E:165:MET:HB3	1.86	0.57
1:1G:186(B):C:O4'	20:BA:89:ARG:NH2	2.36	0.57
26:1H:784:A:O4'	29:11:227:ASN:ND2	2.36	0.57
1:1G:1008:C:H42	1:1G:1021:G:H1	1.52	0.57
52:M8:16:CYS:HB3	52:M8:36:CYS:H	1.68	0.57
10:1I:77:PRO:HB2	10:1I:79:ARG:HH12	1.69	0.57
26:14:2537:U:H2'	26:14:2538:C:C6	2.38	0.57
26:1H:309:G:N3	26:1H:329:G:O2'	2.37	0.57
47:H8:134:PRO:HG3	47:H8:161:VAL:HG11	1.86	0.57
42:C8:88:ILE:O	42:C8:90:VAL:N	2.37	0.57
43:D8:98:GLU:OE1	43:D8:100:ARG:NH1	2.37	0.57
34:69:72:LEU:HD21	34:69:107:VAL:HG11	1.85	0.57
23:2L:24:C:H2'	23:2L:25:U:C6	2.38	0.57
26:14:2547:U:H2'	26:14:2548:G:C8	2.39	0.57
26:1H:1533:C:C6	26:1H:1534:G:H5''	2.39	0.57
26:1H:1525:G:H2'	26:1H:1526:G:C8	2.39	0.57
1:1G:407:G:OP1	4:32:115:ARG:NE	2.34	0.57
2:1E:162:ILE:HD11	2:1E:182:ILE:HG21	1.86	0.57
2:12:27:LYS:HE3	2:12:194:PRO:HD2	1.87	0.57
1:13:114:U:H2'	1:13:115:G:C8	2.39	0.57
31:31:165:ARG:HA	31:31:168:ARG:HD3	1.86	0.57
39:98:13:HIS:CD2	39:98:15:SER:HB3	2.40	0.57
30:29:41:LYS:HG3	30:29:42:ASP:H	1.70	0.57
26:1H:1682:G:OP1	26:1H:1699:G:N1	2.34	0.57
26:1H:1794:U:H2'	26:1H:1795:C:C6	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:600:G:N2	26:1H:605:C:O3'	2.36	0.57
26:1H:2272:U:H5''	26:1H:2273:A:OP1	2.04	0.57
57:3L:32:C:H2'	57:3L:33:U:C4	2.38	0.57
1:1G:1347:G:N2	1:1G:1373:G:H2'	2.20	0.57
26:1H:1022:G:N2	26:1H:1142(A):A:N1	2.51	0.57
26:1H:2598:A:P	61:1H:3508:HOH:O	2.61	0.57
30:21:182:LEU:HD12	30:21:183:LEU:H	1.69	0.57
26:14:607:U:H3	26:14:621:A:H2	1.51	0.57
32:41:132:ASN:N	32:41:132:ASN:OD1	2.36	0.57
6:52:9:VAL:HB	6:52:87:ARG:HB2	1.86	0.57
26:14:34:C:H1'	26:14:35:G:OP1	2.04	0.57
40:A8:34:HIS:HB2	40:A8:36:TYR:CE1	2.40	0.57
26:1H:65:C:H2'	26:1H:66:C:C6	2.39	0.57
12:3A:60:LEU:HB2	12:3A:64:TYR:HB2	1.86	0.57
26:1H:2593:U:H2'	26:1H:2594:C:C6	2.40	0.57
26:1H:2655:G:O2'	26:1H:2664:G:O6	2.18	0.57
26:1H:1361:G:O6	26:1H:1370:C:N4	2.19	0.57
26:14:2118:U:O2'	26:14:2145:C:O2	2.19	0.57
26:14:870:A:P	38:45:6:ARG:HE	2.28	0.57
26:14:2432:A:C8	49:F5:33:LYS:HD2	2.38	0.57
26:14:987:G:O2'	26:14:1000:A:N3	2.34	0.57
1:1G:261:U:OP2	20:BA:79:ARG:NH2	2.38	0.57
9:82:9:ARG:HG2	9:82:14:VAL:HG23	1.86	0.57
1:13:452:A:OP2	16:7I:43:LYS:NZ	2.26	0.57
1:13:1129:C:O2	1:13:1143:G:N2	2.38	0.57
39:98:34:ILE:HG22	39:98:114:VAL:HB	1.86	0.57
1:13:258:G:H2'	1:13:259:G:C8	2.39	0.57
37:78:90:ARG:HG3	37:78:91:PHE:CE1	2.39	0.57
33:51:83:TYR:HB2	33:51:134:SER:HA	1.86	0.57
5:4E:15:ARG:HE	5:4E:26:PHE:HE2	1.52	0.57
28:79:5:LYS:HA	28:79:8:ARG:HB2	1.85	0.57
2:12:180:LEU:HB2	2:12:182:ILE:HD13	1.86	0.57
1:13:680:C:H2'	1:13:681:C:H6	1.69	0.57
4:32:15:GLU:OE1	4:32:66:ARG:NH1	2.37	0.57
37:35:13:ASN:C	37:35:15:ARG:H	2.06	0.57
26:1H:140:A:H8	26:1H:1408:C:O2'	1.87	0.57
1:13:976:G:N2	1:13:1362(A):C:OP2	2.32	0.57
4:3E:87:GLY:HA2	4:3E:88:VAL:HG22	1.87	0.57
26:14:929:G:O6	61:14:3534:HOH:O	2.16	0.57
13:4A:84:ILE:HG23	19:AA:74:PHE:CE1	2.40	0.57
26:14:1654:A:OP2	39:55:1:MET:N	2.37	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:69:77:LEU:HB2	34:69:141:LYS:HE2	1.86	0.57
57:3L:5:C:H2'	57:3L:6:G:C8	2.38	0.57
26:1H:1646:C:O3'	61:1H:3562:HOH:O	2.17	0.57
56:1L:74:C:H41	26:14:2508:G:H5'	1.70	0.57
41:75:107:ASP:OD1	41:75:107:ASP:N	2.38	0.57
5:42:31:LEU:HA	5:42:45:PHE:HB2	1.86	0.57
20:BA:49:ALA:HA	20:BA:52:ALA:HB3	1.86	0.57
26:1H:2807:G:H3'	26:1H:2808:U:H5''	1.86	0.57
36:68:59:LYS:NZ	36:68:89:ASN:OD1	2.38	0.57
5:4E:51:VAL:O	5:4E:55:VAL:HG23	2.04	0.57
11:2I:50:TYR:HD2	11:2I:54:ARG:HB2	1.69	0.57
26:14:1406:U:H5''	26:14:1406:U:H6	1.69	0.57
26:14:2345:G:N3	26:14:2381:C:H2'	2.20	0.57
47:H8:107:THR:HG22	47:H8:108:PRO:HD3	1.87	0.57
26:1H:2301:C:H2'	26:1H:2302:G:C8	2.40	0.57
1:1G:963:G:H21	10:1A:55:LYS:HZ2	1.53	0.57
1:13:838:G:O6	1:13:848:C:N4	2.37	0.57
1:1G:1324:A:H2'	1:1G:1325:C:C6	2.40	0.57
1:1G:584:G:H5'	17:8A:91:ARG:HH12	1.68	0.57
26:14:1927:A:H2'	26:14:1928:A:C8	2.40	0.57
2:1E:187:LEU:HA	2:1E:201:ILE:O	2.05	0.57
1:13:1510:U:H2'	1:13:1511:G:C8	2.39	0.57
26:1H:507:A:H5''	26:1H:508:G:H3'	1.86	0.57
31:31:6:VAL:HG12	31:31:7:TYR:H	1.69	0.57
56:1L:7:U:N3	56:1L:49:G:N7	2.53	0.57
40:A8:27:SER:HA	40:A8:88:ASP:HB2	1.87	0.57
50:G5:24:LEU:HD22	50:G5:60:LEU:HD21	1.87	0.57
1:13:1165:C:N4	1:13:1166:G:O6	2.38	0.57
49:F5:87:PRO:HA	49:F5:90:ILE:HG23	1.86	0.57
57:3L:4:U:H2'	57:3L:5:C:O4'	2.05	0.57
39:98:78:LYS:O	39:98:83:ILE:HG13	2.03	0.57
1:13:1213:A:O2'	1:13:1215:G:N7	2.31	0.57
16:7I:20:VAL:HG21	16:7I:32:TYR:CD2	2.40	0.57
12:3A:39:VAL:HG12	12:3A:57:LYS:HD3	1.86	0.57
26:14:2151:G:H2'	26:14:2152:G:O4'	2.05	0.57
1:1G:187:C:H2'	1:1G:188:U:O4'	2.05	0.57
26:1H:764:A:O4'	29:11:213:ARG:HG3	2.05	0.57
1:1G:1061:G:N2	1:1G:1195:C:O2	2.32	0.57
47:H8:11:GLU:O	47:H8:36:LYS:NZ	2.30	0.57
26:1H:2308:G:N3	26:1H:2308:G:H2'	2.20	0.57
24:3K:3:G:H1	24:3K:70:C:H42	1.52	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:69:143:SER:OG	34:69:145:VAL:N	2.37	0.57
24:3K:11:C:N4	24:3K:24:G:H1	2.03	0.57
38:88:66:ILE:HD12	38:88:67:ARG:H	1.70	0.57
9:82:99:LEU:HB3	9:82:101:PHE:CD2	2.39	0.57
26:1H:1164:G:H2'	26:1H:1165:U:C6	2.40	0.57
1:13:917:G:H2'	1:13:918:A:C8	2.40	0.57
16:7I:49:LEU:HD12	16:7I:50:LYS:N	2.20	0.57
29:19:39:LYS:O	29:19:40:THR:HG23	2.04	0.57
12:3A:57:LYS:HG3	12:3A:67:THR:HG22	1.87	0.57
39:98:103:ARG:NH1	39:98:108:GLY:O	2.38	0.57
34:61:124:GLY:H	34:61:142:VAL:HG23	1.69	0.57
12:3A:84:LEU:HG	12:3A:105:TYR:CE2	2.39	0.57
30:29:91:VAL:HB	30:29:95:ILE:HD11	1.86	0.57
26:1H:2123:G:H1'	28:71:172:HIS:HB2	1.86	0.57
26:1H:1889:A:N1	26:1H:2234:G:H1'	2.19	0.57
30:29:197:ILE:HD11	30:29:199:ARG:HE	1.69	0.57
37:78:83:VAL:HG12	37:78:112:LEU:HD21	1.85	0.57
1:13:911:U:OP2	12:3I:97:ARG:NH1	2.37	0.57
26:14:1449(A):G:N2	26:14:1450:C:O2	2.37	0.57
26:14:1455:G:OP2	61:14:3536:HOH:O	2.17	0.57
26:1H:1509:C:H2'	26:1H:1511:A:H8	1.70	0.56
31:39:25:PRO:C	31:39:27:GLU:H	2.07	0.56
1:13:976:G:OP1	14:5I:32:SER:N	2.35	0.56
40:A8:88:ASP:O	40:A8:89:ARG:HB3	2.04	0.56
26:14:1442:G:H2'	26:14:1443:G:C8	2.40	0.56
41:B8:26:ASP:O	41:B8:49:VAL:HG12	2.05	0.56
2:1E:20:GLU:HB2	2:1E:190:THR:HB	1.87	0.56
1:13:142:G:H2'	1:13:143:A:H8	1.69	0.56
1:13:221:C:H2'	1:13:222:U:H6	1.69	0.56
52:M8:12:ALA:HB3	52:M8:24:THR:HB	1.86	0.56
26:14:2019:A:N7	53:J5:9:LYS:HE3	2.19	0.56
26:1H:1785:A:H2'	26:1H:1787:A:N7	2.20	0.56
1:13:757:U:OP1	1:13:822:C:O2'	2.22	0.56
1:13:1014:A:C2	1:13:1219:U:H1'	2.39	0.56
20:BI:57:ARG:CZ	20:BI:102:GLY:HA2	2.36	0.56
1:13:877:C:H5"	8:7E:88:LYS:HD3	1.86	0.56
4:32:166:LYS:HA	4:32:178:VAL:HG11	1.86	0.56
20:BI:10:LEU:HD11	20:BI:12:ALA:HB3	1.85	0.56
34:69:93:THR:HB	34:69:96:ASP:H	1.70	0.56
50:K8:17:SER:HB3	50:K8:67:LYS:HE3	1.87	0.56
25:4L:13:A:H2'	25:4L:14:A:O4'	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:61:4:ILE:HG13	34:61:39:ALA:HB2	1.85	0.56
23:2L:48:U:O2'	23:2L:49:C:OP2	2.18	0.56
26:1H:1046:A:H4'	26:1H:1047:G:OP2	2.05	0.56
26:14:2468:G:H5''	26:14:2476:A:H61	1.68	0.56
26:14:1582:C:HO2'	26:14:1586:A:H8	1.53	0.56
28:71:185:LEU:HD12	28:71:189:ILE:HD11	1.86	0.56
26:14:579:G:H2'	26:14:580:C:C6	2.40	0.56
26:1H:1221:C:H2'	26:1H:1222:C:C6	2.40	0.56
52:M8:13:ARG:HA	52:M8:24:THR:HG21	1.87	0.56
26:1H:1794:U:H2'	26:1H:1795:C:H6	1.70	0.56
26:14:5:A:N6	26:14:7:G:O6	2.38	0.56
1:13:1077:G:N2	1:13:1080:A:OP2	2.31	0.56
1:13:244:U:H4'	1:13:245:C:O5'	2.05	0.56
6:52:68:PRO:HG2	6:52:71:ARG:HB2	1.86	0.56
1:1G:22:G:H4'	1:1G:885:G:C8	2.40	0.56
26:1H:517:C:OP1	53:N8:16:ARG:NH2	2.37	0.56
1:1G:1392:G:H21	1:1G:1502:A:H8	1.53	0.56
33:51:153:LYS:HB2	33:51:155:SER:N	2.16	0.56
30:29:54:GLN:NE2	30:29:55:ASN:OD1	2.38	0.56
3:2E:16:ARG:HB2	3:2E:16:ARG:HH11	1.69	0.56
7:62:23:VAL:HG13	7:62:43:PHE:CE2	2.36	0.56
14:5I:23:ARG:NH1	14:5I:30:ALA:HB2	2.18	0.56
17:8A:66:SER:O	17:8A:70:ARG:NH1	2.38	0.56
1:13:1245:A:N6	1:13:1291:G:O6	2.38	0.56
2:1E:61:LEU:HA	2:1E:64:ARG:HG2	1.86	0.56
41:75:133:GLU:N	41:75:133:GLU:OE2	2.38	0.56
26:14:2439:A:H8	26:14:2439:A:H5'	1.68	0.56
42:85:92:ARG:HD2	43:95:11:GLN:OE1	2.05	0.56
57:3L:8:U:O2'	57:3L:48:C:O2	2.19	0.56
4:32:21:LEU:HD12	4:32:21:LEU:H	1.70	0.56
26:1H:1385:G:O6	26:1H:1403:C:N4	2.38	0.56
26:14:2880:C:O2'	39:55:90:ARG:HD3	2.05	0.56
1:1G:973:G:O4'	10:1A:55:LYS:HG3	2.05	0.56
30:29:12:THR:C	30:29:23:VAL:HG22	2.26	0.56
24:3K:26:A:H2'	24:3K:27:G:H5'	1.86	0.56
1:1G:519:C:H2'	1:1G:520:A:O4'	2.05	0.56
4:3E:15:GLU:OE1	4:3E:66:ARG:NH1	2.38	0.56
1:13:1057:G:H4'	3:2E:197:GLY:H	1.69	0.56
36:68:24:VAL:HB	36:68:33:ALA:HB2	1.85	0.56
27:1J:103:U:HO2'	47:D5:29:TYR:HH	1.53	0.56
26:14:1028:A:N6	26:14:1125:G:H2'	2.21	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:1B:12:LYS:HB3	21:1B:17:THR:O	2.06	0.56
1:13:256:U:H2'	1:13:257:G:C8	2.40	0.56
5:42:95:ALA:O	5:42:98:THR:OG1	2.22	0.56
1:1G:653:A:H8	8:72:56:LYS:HE3	1.71	0.56
39:98:72:ASP:O	39:98:76:VAL:HG23	2.05	0.56
26:1H:1187:G:H5''	43:D8:81:TYR:CE2	2.40	0.56
28:79:14:VAL:N	28:79:20:TYR:HH	2.03	0.56
47:H8:60:GLU:O	47:H8:61:LEU:HB3	2.04	0.56
1:13:321:A:H62	1:13:328:C:H1'	1.69	0.56
26:14:1312:U:H4'	26:14:1313:U:O5'	2.06	0.56
1:1G:591:U:H2'	1:1G:592:G:C8	2.40	0.56
34:69:135:GLU:N	34:69:135:GLU:OE1	2.34	0.56
9:8E:91:ASP:OD1	9:8E:91:ASP:N	2.35	0.56
1:1G:1502:A:H2	1:1G:1505:G:N1	1.96	0.56
40:65:26:LEU:O	40:65:88:ASP:HB2	2.05	0.56
4:3E:83:SER:HA	4:3E:86:LYS:HD2	1.86	0.56
19:AI:5:LEU:HD13	19:AI:10:PHE:CD2	2.40	0.56
42:85:90:VAL:HG22	43:95:39:LEU:HB3	1.87	0.56
22:1K:26:A:H3'	22:1K:27:G:H8	1.71	0.56
26:1H:2562:U:H1'	36:68:23:ARG:HH11	1.69	0.56
20:BI:50:GLU:HG2	20:BI:100:ILE:HB	1.87	0.56
1:1G:1010:G:N2	1:1G:1020:U:H1'	2.21	0.56
1:13:74:C:H2'	1:13:96:G:H22	1.71	0.56
26:1H:118:A:H5'	26:1H:119:A:H8	1.71	0.56
1:13:158:G:H2'	1:13:159:G:H8	1.71	0.56
1:1G:87:A:H4'	1:1G:88:C:OP1	2.04	0.56
33:59:149:ARG:HB2	33:59:149:ARG:HH11	1.71	0.56
1:1G:998(A):C:H42	1:1G:1042:G:H1	1.53	0.56
26:14:2391:G:O6	26:14:2425:A:H8	1.89	0.56
26:1H:1568:G:OP2	29:11:63:ARG:NH2	2.38	0.56
1:13:1128:C:H4'	9:8E:16:ARG:HH12	1.71	0.56
26:1H:811:U:O2'	37:78:21:ARG:HG3	2.06	0.56
29:11:17:THR:CG2	29:11:204:ILE:HA	2.35	0.56
2:12:71:VAL:HG11	2:12:164:VAL:HG13	1.85	0.56
30:29:119:ARG:HA	30:29:160:TYR:CE2	2.40	0.56
13:4A:60:VAL:HA	13:4A:63:THR:HG22	1.88	0.56
26:14:2327:A:H2'	26:14:2328:A:C8	2.40	0.56
26:14:536:A:H2'	26:14:537:C:C6	2.40	0.56
15:6A:87:ILE:HG22	15:6A:88:ARG:H	1.69	0.56
24:3K:45:G:H4'	24:3K:46:G:OP1	2.05	0.56
1:1G:628:G:H2'	1:1G:629:G:C8	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:55:ASN:HD22	30:29:58:ARG:HD3	1.71	0.56
30:29:58:ARG:HD2	30:29:58:ARG:N	2.20	0.56
30:29:81:ILE:HG21	30:29:84:PHE:HD2	1.71	0.56
4:3E:7:PRO:HB2	4:3E:10:ARG:HD2	1.87	0.56
26:1H:2232:U:OP2	49:J8:40:ARG:NH2	2.37	0.56
26:14:1105:U:H2'	26:14:1106:G:H4'	1.87	0.56
26:14:2318:G:H5'	26:14:2319:G:OP2	2.05	0.56
6:52:15:ASP:OD1	6:52:17:SER:N	2.39	0.56
26:14:1914:C:H2'	26:14:1915:U:O4'	2.06	0.56
13:4A:49:THR:HB	13:4A:52:GLU:HG3	1.86	0.56
36:68:21:CYS:HB2	36:68:39:ILE:HD12	1.87	0.56
1:13:201:C:H42	1:13:216:G:H22	1.54	0.56
30:21:143:ASN:HD22	30:21:147:PRO:HD2	1.70	0.56
49:J8:81:LYS:HD2	49:J8:81:LYS:N	2.20	0.56
37:78:98:GLU:O	37:78:101:VAL:HG13	2.05	0.56
33:51:157:TYR:H	33:51:170:ARG:HA	1.69	0.56
26:1H:1021:A:C8	26:1H:1021:A:H3'	2.41	0.56
34:61:3:VAL:HG12	34:61:38:LEU:HA	1.87	0.56
26:1H:1532:C:N3	26:1H:1539:G:N2	2.47	0.56
42:C8:112:ARG:NH2	43:D8:45:THR:O	2.39	0.56
26:14:580:C:H2'	26:14:581:C:C6	2.40	0.56
2:12:30:ARG:HH22	2:12:194:PRO:HB2	1.71	0.56
45:B5:36:LYS:HG3	45:B5:56:THR:HG23	1.88	0.56
26:14:1836:C:H2'	26:14:1837:C:H6	1.70	0.56
26:1H:1543:A:H8	26:1H:1545:A:OP2	1.88	0.56
48:E5:21:LEU:HD11	48:E5:41:ARG:NH1	2.21	0.56
12:3A:34:ARG:HG3	12:3A:35:GLY:N	2.21	0.56
27:16:3:C:H2'	27:16:4:C:C6	2.41	0.56
26:1H:930:U:H4'	26:1H:931:G:O5'	2.06	0.56
20:BA:72:LEU:O	20:BA:73:HIS:HB2	2.05	0.56
26:1H:2801:A:H5'	26:1H:2895:U:O2'	2.06	0.56
1:13:971:G:N2	1:13:1363:A:OP2	2.25	0.56
29:11:60:ARG:HG2	29:11:86:PRO:HG2	1.87	0.56
50:K8:4:SER:HB3	50:K8:7:ARG:H	1.70	0.56
31:39:25:PRO:C	31:39:27:GLU:N	2.59	0.56
29:11:31:LYS:HB3	29:11:34:VAL:HG23	1.88	0.56
26:1H:2451:A:H5''	26:1H:2452:C:OP2	2.05	0.56
1:1G:429:U:H3'	4:32:9:CYS:SG	2.46	0.56
27:16:43:C:H5''	52:M8:1:MET:HG2	1.88	0.56
26:1H:602:G:N2	26:1H:655:A:C8	2.71	0.56
31:39:67:GLN:HG3	31:39:67:GLN:O	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1921:G:H2'	26:14:1922:G:C8	2.41	0.56
1:1G:186(F):C:H2'	1:1G:187:C:O4'	2.04	0.56
23:2L:50:G:H1	23:2L:66:C:H42	1.53	0.56
31:39:79:GLY:HA2	31:39:86:GLY:HA2	1.88	0.56
26:1H:566:U:OP1	37:78:29:LYS:HD2	2.04	0.56
36:68:68:GLU:HB3	36:68:78:ARG:HB3	1.87	0.56
4:32:98:GLU:OE2	4:32:103:ASN:ND2	2.37	0.56
33:51:74:ASN:HA	33:51:77:LYS:HG2	1.86	0.56
1:1G:507:C:H3'	1:1G:508:C:H2'	1.87	0.56
42:C8:95:LEU:HD22	43:D8:4:ILE:HD13	1.88	0.56
1:13:554:C:H2'	1:13:555:C:H6	1.71	0.56
1:1G:626:U:H2'	1:1G:627:G:H8	1.70	0.56
7:6E:62:PHE:HA	7:6E:124:LEU:HD22	1.87	0.56
19:AI:40:ILE:O	19:AI:41:VAL:HG22	2.05	0.56
28:71:216:THR:HB	28:71:218:MET:H	1.71	0.56
29:11:31:LYS:O	29:11:35:LYS:NZ	2.34	0.56
5:4E:63:ARG:HB2	5:4E:64:ARG:NH1	2.20	0.56
31:31:170:LEU:HD12	31:31:172:TRP:NE1	2.21	0.56
1:1G:1053:G:H5''	1:1G:1054:C:H3'	1.88	0.56
1:1G:1003:G:H2'	1:1G:1004:A:H5'	1.88	0.56
35:15:42:TRP:HA	35:15:48:MET:CE	2.36	0.56
27:16:73:A:C4	27:16:104:A:C2	2.94	0.56
24:3K:52:G:H2'	24:3K:53:G:C8	2.41	0.56
2:12:58:ILE:HG21	2:12:219:VAL:HG21	1.87	0.56
26:1H:2298:A:H62	26:1H:2318:G:H8	1.54	0.56
1:1G:81:G:N2	1:1G:88:C:N3	2.54	0.56
1:1G:1369:C:H2'	1:1G:1370:G:C8	2.41	0.56
48:I8:23:VAL:HA	48:I8:38:VAL:HG22	1.86	0.56
20:BA:50:GLU:HA	20:BA:100:ILE:HG21	1.87	0.56
15:6I:74:ASP:HB3	15:6I:77:ARG:HB3	1.87	0.56
26:1H:580:C:H2'	26:1H:581:C:H6	1.71	0.56
26:1H:2683:C:OP1	41:B8:53:ARG:NH2	2.35	0.56
29:11:182:LEU:O	29:11:271:ILE:HG13	2.06	0.56
26:1H:654(A):A:C2	26:1H:654(T):A:N1	2.73	0.56
50:G5:53:LEU:O	50:G5:57:ILE:HG13	2.05	0.56
48:E5:36:ILE:HG13	48:E5:58:THR:HG23	1.88	0.56
26:14:2475:C:H5''	26:14:2476:A:H5''	1.88	0.56
52:M8:34:GLU:HG3	52:M8:35:VAL:H	1.70	0.56
1:1G:1288:A:N3	1:1G:1352:C:O2'	2.35	0.56
3:22:16:ARG:HH22	3:22:181:ASN:ND2	2.03	0.56
1:1G:963:G:N2	10:1A:55:LYS:HZ2	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6A:24:SER:HB3	15:6A:27:VAL:HG23	1.87	0.56
26:14:2131:G:H5''	26:14:2133:G:H4'	1.88	0.56
35:58:67:LEU:HD23	35:58:87:LEU:HD12	1.87	0.56
3:22:150:LYS:HD2	3:22:152:ILE:HD11	1.87	0.56
26:14:1425:G:H2'	26:14:1426:G:C8	2.41	0.56
34:69:112:LYS:HA	34:69:114:LEU:H	1.69	0.56
1:1G:841:U:H3'	1:1G:841:U:H6	1.71	0.56
23:2K:48:U:O2'	23:2K:49:C:OP2	2.21	0.56
33:59:67:LEU:O	33:59:70:THR:OG1	2.19	0.56
35:15:21:LYS:O	35:15:60:ILE:HG13	2.05	0.56
26:1H:1635:G:OP1	61:1H:3563:HOH:O	2.18	0.55
50:K8:3:LEU:CA	50:K8:5:GLU:HB2	2.32	0.55
26:14:831:G:H5''	26:14:832:G:OP2	2.06	0.55
26:1H:1568:G:H5''	29:11:61:LEU:HD22	1.88	0.55
26:14:1594:G:H2'	26:14:1595:G:H8	1.71	0.55
1:1G:420:U:H1'	1:1G:424:G:N2	2.21	0.55
4:32:108:LEU:HD13	4:32:174:LEU:HD13	1.87	0.55
27:1J:42:C:O2'	32:49:67:LYS:O	2.16	0.55
26:14:1785:A:H2'	26:14:1787:A:N7	2.21	0.55
1:1G:129(A):G:C2	1:1G:191(A):G:C8	2.94	0.55
18:9A:66:LEU:O	18:9A:70:ILE:HG13	2.06	0.55
1:13:1117:G:H5''	9:8E:104:ARG:NH1	2.21	0.55
26:1H:2115:G:H4'	26:1H:2166:G:H1'	1.87	0.55
26:14:764:A:O4'	29:19:213:ARG:HG3	2.05	0.55
5:4E:35:GLY:HA3	5:4E:112:LEU:HB3	1.88	0.55
1:13:1041:A:H2'	1:13:1042:G:O4'	2.06	0.55
26:1H:957:A:N1	26:1H:2458:G:H4'	2.21	0.55
23:2K:9:G:N2	23:2K:47:G7M:OP2	2.30	0.55
26:14:2629:A:N3	26:14:2629:A:H2'	2.20	0.55
15:6A:33:THR:HG21	15:6A:85:LEU:HD22	1.88	0.55
1:13:828:A:H2'	1:13:829:G:O4'	2.05	0.55
26:14:831:G:N2	37:35:53:GLY:O	2.39	0.55
26:14:1288:U:C2	26:14:1327:C:O2	2.60	0.55
26:1H:2636:U:OP2	30:21:79:ARG:NH1	2.38	0.55
34:61:120:ILE:HG12	34:61:126:TYR:CE2	2.40	0.55
26:14:2461:C:H2'	26:14:2462:U:C6	2.41	0.55
26:14:1106:G:H3'	26:14:1107:G:C8	2.41	0.55
43:95:5:VAL:HB	43:95:37:VAL:HB	1.87	0.55
26:1H:2400:G:H2'	26:1H:2401:U:C6	2.40	0.55
31:31:155:LEU:HB2	31:31:189:THR:HG21	1.87	0.55
2:1E:17:PHE:HA	2:1E:42:ILE:HB	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1179:A:H4'	9:82:103:THR:HA	1.87	0.55
26:14:2520:C:H41	26:14:2542:A:H62	1.53	0.55
26:1H:67:U:H3	26:1H:74:A:H2	1.55	0.55
3:2E:18:TRP:H	3:2E:18:TRP:HE3	1.53	0.55
26:1H:1277:G:H5''	39:98:40:LYS:NZ	2.21	0.55
37:35:127:ALA:O	37:35:147:LEU:N	2.38	0.55
33:51:121:ILE:HG12	33:51:140:LYS:HE3	1.88	0.55
26:14:617:G:OP1	31:39:40:GLN:HG3	2.06	0.55
26:1H:2139:C:H42	26:1H:2152:G:N2	1.97	0.55
26:14:1022:G:N2	26:14:1142(A):A:H2	2.01	0.55
1:13:1149:C:H2'	1:13:1150:U:H6	1.71	0.55
2:1E:47:THR:HG22	2:1E:51:LEU:HD12	1.87	0.55
26:1H:2287:A:C2	26:1H:2346:A:C2	2.93	0.55
40:65:23:ARG:NH2	40:65:84:GLN:HB3	2.20	0.55
26:14:1379:A:H1'	26:14:1380:G:OP1	2.06	0.55
1:1G:446:G:H1	1:1G:488:C:H42	1.53	0.55
3:22:59:ARG:HG2	3:22:64:VAL:HG23	1.86	0.55
30:21:116:VAL:HG22	30:21:120:TRP:HD1	1.72	0.55
49:F5:91:LYS:HG3	49:F5:92:LYS:N	2.20	0.55
47:H8:61:LEU:O	47:H8:64:GLY:HA2	2.06	0.55
23:2L:6:G:N2	23:2L:69:C:H1'	2.20	0.55
26:1H:2836:U:H2'	26:1H:2837:G:C8	2.41	0.55
26:1H:30:G:OP2	42:C8:5:LYS:NZ	2.39	0.55
26:1H:1914:C:H2'	26:1H:1915:U:O4'	2.07	0.55
1:13:150:C:H2'	1:13:151:A:C8	2.41	0.55
48:E5:27:GLU:HG3	48:E5:68:GLU:HA	1.88	0.55
48:E5:64:ASP:OD1	48:E5:64:ASP:N	2.36	0.55
1:13:277:C:H2'	1:13:278:G:H8	1.72	0.55
46:G8:11:ASP:O	46:G8:26:LYS:HG3	2.06	0.55
1:1G:1298:C:H4'	1:1G:1299:A:C4	2.42	0.55
40:65:26:LEU:HD22	40:65:87:PHE:CD1	2.41	0.55
50:K8:47:ASN:H	50:K8:47:ASN:ND2	2.04	0.55
1:1G:108:G:H5'	1:1G:109:A:C5'	2.37	0.55
26:1H:2788:C:O2'	26:1H:2809:A:N3	2.39	0.55
26:1H:6:A:O2'	35:58:129:PRO:HB3	2.06	0.55
26:14:2275:C:H5'	26:14:2275:C:C6	2.41	0.55
49:F5:92:LYS:HA	49:F5:95:LEU:HB2	1.89	0.55
26:1H:2787:C:H1'	30:21:62:PRO:HG3	1.88	0.55
45:B5:65:ARG:HB3	45:B5:70:LEU:HB3	1.87	0.55
35:58:47:ALA:HB2	35:58:112:LEU:CD1	2.35	0.55
26:1H:270(R):G:H2'	26:1H:270(S):G:C8	2.42	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:88:ARG:HA	3:22:91:LEU:HD13	1.87	0.55
1:1G:681:C:H2'	1:1G:682:G:H8	1.71	0.55
11:2A:100:ALA:O	11:2A:102:GLY:N	2.39	0.55
42:C8:92:ARG:HD3	42:C8:94:ASN:HB3	1.88	0.55
26:1H:2392:A:C8	37:78:61:ARG:HD2	2.41	0.55
19:AI:51:VAL:O	19:AI:57:HIS:HA	2.06	0.55
20:BI:67:ALA:HA	20:BI:72:LEU:O	2.07	0.55
26:1H:1535:U:H3'	26:1H:1537:C:C4	2.42	0.55
32:49:91:ARG:C	32:49:91:ARG:HE	2.09	0.55
26:14:923:C:H2'	26:14:924:C:C6	2.42	0.55
26:14:2250:G:OP1	26:14:2275:C:H2'	2.06	0.55
57:3L:3:G:N2	57:3L:70:C:N3	2.44	0.55
26:1H:2855:C:H2'	26:1H:2856:C:C6	2.41	0.55
2:12:71:VAL:HG21	2:12:164:VAL:HA	1.88	0.55
23:2L:63:C:H2'	23:2L:64:G:H8	1.71	0.55
31:31:39:TRP:CH2	31:31:106:ARG:HD3	2.40	0.55
2:12:16:HIS:CD2	2:12:213:LEU:HD22	2.41	0.55
26:1H:708:C:H42	26:1H:723:G:H1	1.53	0.55
2:1E:106:LYS:O	2:1E:110:GLN:HG3	2.07	0.55
44:A5:13:SER:HB3	44:A5:16:LYS:HD2	1.88	0.55
2:1E:166:ASP:C	2:1E:168:THR:H	2.10	0.55
26:1H:1316:U:H2'	26:1H:1317:A:H8	1.71	0.55
26:1H:1316:U:H2'	26:1H:1317:A:C8	2.42	0.55
47:H8:151:HIS:O	47:H8:171:ILE:HG13	2.07	0.55
1:13:376:G:H5''	16:7I:5:ARG:HB2	1.89	0.55
33:51:125:VAL:HG22	33:51:131:VAL:HB	1.88	0.55
18:9I:37:VAL:O	18:9I:41:LYS:HB3	2.05	0.55
26:1H:1404:C:O2'	26:1H:1405:U:H5'	2.07	0.55
2:12:80:ILE:HD13	2:12:212:GLN:HA	1.89	0.55
1:13:1171:G:H2'	1:13:1172:C:C6	2.39	0.55
26:14:70:G:H21	26:14:71:A:H62	1.52	0.55
26:14:2062:A:H2	26:14:2503:A:H62	1.54	0.55
33:51:8:PRO:HG2	33:51:69:ARG:NH2	2.21	0.55
1:1G:406:G:H2'	1:1G:407:G:H8	1.70	0.55
26:14:2250:G:H2'	38:45:82:ARG:HG3	1.88	0.55
46:C5:52:SER:OG	46:C5:52:SER:O	2.21	0.55
52:M8:23:GLU:OE1	52:M8:24:THR:N	2.39	0.55
26:1H:1401:G:H2'	26:1H:1402:C:C6	2.42	0.55
41:B8:51:ARG:HB2	41:B8:98:LYS:CD	2.36	0.55
1:13:1228:C:OP1	13:4I:115:LYS:HD2	2.07	0.55
6:52:35:ALA:HB1	6:52:65:VAL:HG11	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:138:G:H1	1:1G:225:C:H42	1.53	0.55
32:49:15:VAL:HG22	32:49:175:LEU:HB3	1.88	0.55
18:9I:47:THR:O	18:9I:83:GLU:N	2.26	0.55
1:13:452:A:H2'	1:13:453:A:C8	2.41	0.55
29:19:31:LYS:HE3	29:19:33:LEU:CB	2.36	0.55
41:B8:55:ASN:N	41:B8:59:THR:HG22	2.20	0.55
9:8E:10:ARG:HG3	9:8E:75:ASP:HB3	1.88	0.55
46:G8:55:TYR:CZ	46:G8:61:ILE:HD11	2.42	0.55
1:1G:1142:G:H3'	1:1G:1143:G:H8	1.72	0.55
42:85:10:ARG:HG2	42:85:14:HIS:CD2	2.41	0.55
26:14:395:U:H2'	26:14:396:G:N7	2.21	0.55
26:1H:2679:A:H4'	30:21:165:VAL:HG11	1.88	0.55
49:F5:19:GLN:HB3	49:F5:35:THR:O	2.06	0.55
36:68:93:PRO:HG3	36:68:114:ILE:HG12	1.89	0.55
26:14:1887:C:H3'	26:14:1888:G:H5''	1.88	0.55
26:1H:1510:A:O2'	26:1H:1511:A:N7	2.38	0.55
31:31:116:ASP:OD2	37:78:1:MET:HB2	2.06	0.55
30:29:29:GLY:H	30:29:51:PHE:HE1	1.54	0.55
26:1H:259:G:HO2'	26:1H:621:A:HO2'	1.46	0.55
41:B8:107:ASP:OD2	41:B8:109:GLU:HG3	2.07	0.55
55:M5:14:VAL:CG1	55:M5:22:VAL:HG13	2.35	0.55
26:14:1729:A:H2'	26:14:1731:G:H22	1.72	0.55
26:1H:860:U:C5	26:1H:917:A:C2	2.94	0.55
26:14:511:U:C5	26:14:512:G:C5	2.94	0.55
32:41:11:TYR:HA	32:41:15:VAL:HB	1.89	0.55
1:13:345:C:O2'	1:13:346:G:N3	2.38	0.55
26:14:30:G:H2'	26:14:31:C:C6	2.41	0.55
17:8A:87:LYS:O	17:8A:91:ARG:HG3	2.07	0.55
1:13:1118:C:H1'	1:13:1179:A:C4	2.42	0.55
53:J5:20:ARG:HG2	53:J5:23:HIS:CD2	2.42	0.55
24:3K:59:A:H3'	24:3K:60:U:C6	2.42	0.55
26:1H:779:U:OP1	29:11:49:ILE:HG13	2.06	0.55
36:68:104:ARG:NH1	41:B8:36:GLU:OE1	2.40	0.55
1:1G:363:A:C5	12:3A:31:PRO:HD2	2.42	0.55
26:14:2795:G:HO2'	26:14:2798:C:H5	1.54	0.55
26:1H:2533:A:H2'	26:1H:2534:A:O4'	2.06	0.55
35:15:128:HIS:CE1	35:15:130:HIS:HA	2.42	0.55
26:1H:2392:A:H8	37:78:61:ARG:HD2	1.72	0.55
26:14:2364:C:H4'	48:E5:56:ASP:OD2	2.07	0.55
26:1H:1332:G:H21	26:1H:1610:A:H8	1.54	0.55
1:13:352:C:O2'	1:13:354:G:OP1	2.15	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1368:G:H4'	10:1A:46:ARG:HH22	1.72	0.55
18:9I:22:VAL:HG12	18:9I:56:THR:HA	1.88	0.55
37:78:87:ASP:O	37:78:90:ARG:HD3	2.06	0.55
3:22:8:ILE:HG21	14:5A:50:LYS:HD2	1.89	0.55
1:1G:1014:A:H4'	19:AA:14:HIS:CE1	2.42	0.55
1:13:1030:C:H2'	1:13:1031:G:H8	1.72	0.55
15:6I:36:ILE:HA	15:6I:59:MET:HE3	1.88	0.55
26:1H:2882:A:OP1	39:98:96:ARG:NH1	2.39	0.55
30:29:147:PRO:HB2	30:29:149:ARG:HG2	1.87	0.55
15:6A:55:GLY:HA2	15:6A:58:MET:HG3	1.88	0.55
26:14:806:C:OP2	37:35:41:ARG:NH2	2.39	0.55
26:14:660:G:H21	37:35:12:ALA:CB	2.15	0.55
26:1H:1479:G:O2'	26:1H:1558:A:H5'	2.07	0.55
31:39:155:LEU:HD23	31:39:186:ILE:HD13	1.89	0.55
26:1H:69:C:H2'	26:1H:70:G:H8	1.72	0.55
33:51:6:ARG:HD2	33:51:54:ARG:NH1	2.18	0.55
4:3E:18:LYS:HD3	4:3E:31:CYS:SG	2.46	0.55
26:1H:2849:U:H5'	26:1H:2867:G:N2	2.22	0.55
46:C5:48:ALA:HB1	46:C5:50:ARG:HD3	1.87	0.55
27:16:11:C:H3'	27:16:12:C:C6	2.41	0.55
1:13:345:C:H4'	1:13:346:G:N7	2.22	0.55
1:13:345:C:N4	36:68:116:SER:O	2.21	0.55
13:4I:27:LYS:HD3	13:4I:31:LYS:HZ3	1.72	0.55
3:22:6:HIS:ND1	14:5A:49:HIS:HB3	2.22	0.55
56:1L:33:U:HO2'	56:1L:34:U8U:HN1	1.53	0.55
26:1H:784:A:C5	29:11:229:VAL:HG21	2.42	0.55
37:35:125:VAL:HG13	37:35:144:GLU:HB3	1.89	0.55
1:13:1298:C:H2'	7:6E:114:ARG:HH21	1.72	0.55
26:1H:1783:A:H5'	26:1H:2608:G:H4'	1.89	0.55
1:13:4:U:O2'	1:13:5:U:OP1	2.21	0.55
37:78:71:VAL:HG13	37:78:72:PRO:HD3	1.89	0.55
26:14:2533:A:OP1	26:14:2665:A:O2'	2.15	0.55
41:75:18:ASP:N	41:75:18:ASP:OD1	2.40	0.55
38:45:79:LEU:HD23	38:45:79:LEU:O	2.05	0.55
36:25:98:VAL:HG12	36:25:117:LEU:HB3	1.89	0.55
1:1G:162:A:O5'	1:1G:162:A:H8	1.90	0.55
3:22:31:HIS:HA	3:22:34:LEU:HD22	1.88	0.55
26:14:1027:A:H2	26:14:2487:G:O2'	1.90	0.54
27:1J:116:G:H5'	40:65:55:ALA:HB1	1.89	0.54
24:3K:56:C:H2'	24:3K:57:G:O4'	2.07	0.54
2:1E:46:LYS:HA	2:1E:49:GLU:CD	2.28	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:48:ALA:HB3	46:C5:59:GLY:HA2	1.88	0.54
41:B8:90:GLN:OE1	41:B8:91:ARG:N	2.39	0.54
47:D5:94:GLU:O	47:D5:129:SER:HA	2.07	0.54
1:13:475:G:H3'	1:13:476:G:H8	1.71	0.54
37:35:29:LYS:HD3	37:35:30:THR:HG23	1.88	0.54
29:19:6:PHE:CE1	29:19:18:VAL:HG23	2.41	0.54
26:1H:764:A:H5'	29:11:210:GLY:HA2	1.89	0.54
26:1H:11:G:H21	26:1H:2802:G:H4'	1.72	0.54
26:14:1190:G:H2'	26:14:1191:G:H8	1.71	0.54
32:49:41:GLN:HG2	32:49:43:LEU:HD21	1.88	0.54
26:14:1945:G:H2'	26:14:1946:U:C6	2.43	0.54
41:B8:100:TYR:HB3	41:B8:103:ARG:NH1	2.21	0.54
3:22:156:ARG:NH2	3:22:159:GLY:O	2.39	0.54
26:14:2096:U:H3	26:14:2193:G:H1	1.55	0.54
26:14:2342:C:O2'	26:14:2374:C:H5''	2.07	0.54
26:1H:76:C:O2'	50:K8:62:THR:HG21	2.06	0.54
29:11:145:VAL:HG12	29:11:146:GLU:O	2.07	0.54
26:1H:141:A:H8	26:1H:1595:G:H21	1.54	0.54
26:14:2294:C:P	40:65:89:ARG:HH22	2.29	0.54
33:59:9:ILE:HB	33:59:51:ARG:HA	1.89	0.54
1:13:542:G:H5'	4:3E:41:GLY:HA3	1.89	0.54
26:14:1534:G:O2'	26:14:1537:C:N4	2.39	0.54
2:1E:28:PHE:CD2	2:1E:190:THR:HA	2.42	0.54
35:58:57:ALA:O	35:58:59:LYS:N	2.40	0.54
1:1G:1294:G:H2'	1:1G:1295:G:C8	2.42	0.54
31:39:68:LYS:HG3	31:39:69:HIS:CD2	2.42	0.54
7:62:106:GLN:O	7:62:110:GLN:HG2	2.07	0.54
34:61:33:ARG:HB3	34:61:35:LEU:CD1	2.38	0.54
4:32:13:ARG:C	4:32:15:GLU:H	2.11	0.54
8:7E:88:LYS:N	8:7E:91:ARG:O	2.36	0.54
26:1H:265:A:C8	26:1H:266:G:H1'	2.41	0.54
1:1G:1433:A:OP2	1:1G:1467:G:N1	2.38	0.54
39:98:81:ASP:O	39:98:85:PRO:HG2	2.07	0.54
26:1H:2590:A:OP2	29:11:237:GLU:HB3	2.06	0.54
43:95:7:THR:HG23	43:95:22:VAL:HG21	1.88	0.54
37:78:52:GLU:OE1	37:78:57:THR:HA	2.07	0.54
26:14:1260:G:H2'	26:14:1261:C:H6	1.72	0.54
46:G8:97:ARG:NH2	46:G8:103:GLY:O	2.40	0.54
35:58:96:GLU:O	35:58:98:VAL:HG12	2.06	0.54
33:59:54:ARG:HB2	33:59:65:HIS:CD2	2.43	0.54
26:14:459:U:H4'	54:L5:40:TRP:CZ3	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:52:G:H1	22:1K:62:C:H42	1.54	0.54
29:11:70:TRP:C	29:11:70:TRP:CD1	2.81	0.54
2:1E:211:ILE:HA	2:1E:214:ILE:HD11	1.89	0.54
47:H8:28:MET:O	47:H8:35:ARG:N	2.33	0.54
1:13:138:G:H1	1:13:225:C:H42	1.56	0.54
12:3A:84:LEU:HG	12:3A:105:TYR:HE2	1.71	0.54
26:14:1910:G:H1	26:14:1920:C:H42	1.56	0.54
9:82:48:GLU:HA	9:82:51:ARG:HD3	1.89	0.54
32:41:47:LYS:HG3	32:41:48:GLU:H	1.71	0.54
26:14:751:A:H5'	44:A5:90:ARG:HA	1.89	0.54
1:13:1221:G:O3'	19:AI:77:THR:HG21	2.06	0.54
1:1G:972:C:OP2	10:1A:57:LYS:NZ	2.34	0.54
4:32:201:GLN:O	4:32:205:GLU:HB2	2.07	0.54
3:2E:95:THR:HB	3:2E:97:LYS:H	1.71	0.54
49:F5:62:VAL:HG21	49:F5:70:VAL:HG21	1.88	0.54
26:1H:1512:G:H2'	26:1H:1513:C:C6	2.43	0.54
26:14:993:G:N3	43:95:89:GLN:NE2	2.51	0.54
26:1H:2392:A:H2	26:1H:2424:C:N4	1.98	0.54
3:2E:16:ARG:HD2	3:2E:54:ARG:NH2	2.19	0.54
29:11:33:LEU:HG	29:11:34:VAL:HG22	1.88	0.54
26:1H:2635:C:H5''	30:21:78:LEU:HA	1.90	0.54
1:13:1126:U:H2'	1:13:1127:G:C8	2.42	0.54
20:BI:71:THR:HG22	20:BI:72:LEU:N	2.22	0.54
29:11:70:TRP:O	29:11:73:VAL:HG23	2.08	0.54
26:1H:2023:G:H5'	26:1H:2617:C:H4'	1.88	0.54
26:14:228:A:H2'	26:14:230:U:O4'	2.07	0.54
26:14:897:C:C2	26:14:898:C:H5	2.26	0.54
31:39:129:PHE:HA	31:39:142:TRP:NE1	2.21	0.54
29:11:12:SER:O	29:11:16:MET:HB2	2.06	0.54
52:M8:14:ILE:HG22	52:M8:24:THR:HG22	1.89	0.54
12:3A:27:LEU:HB2	12:3A:33:ARG:HG2	1.88	0.54
26:1H:32:C:O2'	26:1H:33:U:H5'	2.08	0.54
1:1G:750:G:N3	15:6A:23:GLY:HA3	2.22	0.54
1:13:1044:A:C5	1:13:1045:C:H1'	2.43	0.54
26:1H:489:G:N7	44:E8:49:LYS:NZ	2.55	0.54
38:88:19:GLY:O	38:88:21:THR:OG1	2.21	0.54
26:1H:2552:U:H2'	26:1H:2554:U:OP2	2.07	0.54
1:1G:1239:A:H4'	1:1G:1240:U:H5'	1.88	0.54
26:14:1826:G:H2'	26:14:1827:C:C6	2.42	0.54
48:E5:53:MET:HG2	48:E5:59:LEU:HD23	1.89	0.54
26:14:849:A:N1	51:H5:25:ALA:HB2	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:270(W):G:O6	61:1H:3561:HOH:O	2.17	0.54
26:14:2469:A:H8	38:45:56:ARG:NH2	2.04	0.54
57:3L:63:U:H2'	57:3L:64:G:C8	2.41	0.54
1:13:1157:A:H61	1:13:1178:G:H21	1.56	0.54
41:75:55:ASN:H	41:75:59:THR:HG22	1.73	0.54
1:13:999:U:O2'	26:14:2137:C:H5'	2.07	0.54
12:3I:93:LEU:O	12:3I:96:VAL:HG13	2.08	0.54
29:19:10:THR:OG1	29:19:13:ARG:HB2	2.06	0.54
17:8A:7:THR:HG23	17:8A:58:GLU:HG2	1.90	0.54
2:1E:189:ASP:CG	2:1E:205:ASP:HB3	2.27	0.54
21:1F:12:LYS:HB3	21:1F:22:ARG:HD2	1.88	0.54
29:19:70:TRP:O	29:19:73:VAL:HG23	2.06	0.54
26:14:994:C:OP1	42:85:53:ARG:NH2	2.41	0.54
26:14:2720:U:N3	26:14:2873:A:H2	2.05	0.54
22:1K:7:U:H3	22:1K:66:A:N6	2.02	0.54
26:14:1442:G:H2'	26:14:1443:G:H8	1.71	0.54
40:65:54:LEU:HD23	40:65:55:ALA:HB2	1.89	0.54
39:55:21:TYR:OH	39:55:43:GLU:HG2	2.07	0.54
6:5E:39:LYS:HB2	6:5E:64:GLN:HB2	1.90	0.54
33:59:8:PRO:HG2	33:59:69:ARG:HE	1.72	0.54
26:1H:2127:G:H1	26:1H:2161:C:C2'	2.21	0.54
34:61:110:ASP:OD1	34:61:111:PRO:HA	2.07	0.54
27:1J:42:C:N3	32:49:91:ARG:NH2	2.54	0.54
26:14:1581:G:H2'	26:14:1582:C:O4'	2.08	0.54
27:16:11:C:H3'	27:16:12:C:H6	1.72	0.54
38:45:32:TYR:HE2	38:45:111:GLU:HA	1.71	0.54
14:5A:45:ARG:O	14:5A:49:HIS:HD2	1.90	0.54
1:13:110:C:H2'	1:13:111:G:O4'	2.06	0.54
26:14:302:C:H2'	26:14:303:U:H6	1.72	0.54
34:61:131:LYS:HB3	34:61:132:PRO:HA	1.89	0.54
26:14:2542:A:H5''	26:14:2542:A:N3	2.23	0.54
1:13:451:A:OP1	1:13:481:G:N1	2.38	0.54
26:14:2816:C:O2	26:14:2883:A:O2'	2.25	0.54
47:H8:4:ARG:HB3	47:H8:58:VAL:CG2	2.37	0.54
44:E8:17:VAL:HG13	44:E8:76:VAL:HG11	1.90	0.54
4:3E:112:VAL:HG12	4:3E:116:GLN:OE1	2.08	0.54
26:1H:1018:C:H2'	26:1H:1019:U:H6	1.73	0.54
44:A5:20:VAL:HG22	44:A5:47:VAL:HG21	1.90	0.54
32:41:76:SER:HB2	32:41:84:LYS:HB2	1.89	0.54
26:14:1444(A):A:N3	26:14:1444(A):A:H2'	2.23	0.54
56:1L:68:G:H2'	56:1L:69:A:C8	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:433:C:H2'	1:1G:434:U:H6	1.71	0.54
1:1G:1219:U:OP1	14:5A:19:ARG:NH1	2.32	0.54
26:1H:761:A:OP1	61:1H:3565:HOH:O	2.19	0.54
4:32:18:LYS:NZ	4:32:26:CYS:O	2.27	0.54
26:14:1021:A:H62	26:14:1141:U:H3	1.55	0.54
26:14:1111:A:H4'	33:59:3:ARG:NH1	2.22	0.54
9:8E:10:ARG:HE	9:8E:105:ASP:CG	2.10	0.54
26:1H:1386:C:H2'	26:1H:1387:C:C6	2.42	0.54
26:14:1728:G:H8	26:14:1732:A:H62	1.56	0.54
27:1J:15:A:H3'	27:1J:16:G:H5'	1.89	0.54
46:G8:29:GLU:HB3	46:G8:38:ILE:HG23	1.89	0.54
1:1G:1113:C:H2'	1:1G:1114:C:H6	1.72	0.54
47:H8:72:ARG:NH2	47:H8:97:GLU:O	2.40	0.54
26:1H:455:C:N3	26:1H:473:G:H5'	2.22	0.54
49:J8:18:ILE:HG12	49:J8:37:ILE:HG12	1.89	0.54
26:1H:2863:C:O2'	26:1H:2864:G:H5'	2.08	0.54
26:14:2074:U:H2'	26:14:2075:U:C6	2.42	0.54
26:1H:671:C:OP1	37:78:42:SER:O	2.26	0.54
7:62:46:ALA:HA	7:62:49:ILE:HD12	1.89	0.54
20:BI:49:ALA:O	20:BI:52:ALA:N	2.41	0.54
39:98:44:LEU:O	39:98:47:PHE:N	2.38	0.54
26:1H:426:C:H2'	26:1H:427:U:H6	1.73	0.54
26:1H:1510:A:N3	26:1H:1510:A:H2'	2.21	0.54
14:5A:17:LYS:HD2	14:5A:18:VAL:N	2.23	0.54
26:14:1109:C:H2'	26:14:1110:G:C1'	2.37	0.54
26:1H:2656:U:N3	26:1H:2665:A:H2	2.04	0.54
1:1G:1023:G:C5	1:1G:1024:G:H1'	2.43	0.54
28:71:22:ILE:HG13	28:71:190:ARG:HG3	1.89	0.54
26:1H:1799:G:O2'	26:1H:1800:C:OP2	2.17	0.54
26:14:866:A:H5''	26:14:867:C:OP2	2.07	0.54
13:4I:54:VAL:O	13:4I:58:GLU:HG2	2.08	0.54
13:4I:58:GLU:O	13:4I:62:ASN:ND2	2.35	0.54
29:11:124:PRO:HG2	29:11:129:ASN:ND2	2.23	0.54
39:55:72:ASP:HB3	39:55:75:LEU:HB3	1.90	0.54
19:AI:6:LYS:O	19:AI:7:LYS:HB3	2.06	0.54
1:13:1307:U:OP1	13:4I:101:GLN:NE2	2.37	0.54
1:13:128:G:H5'	17:8I:2:PRO:O	2.08	0.54
26:1H:1279:G:H4'	39:98:31:HIS:CD2	2.42	0.54
17:8I:8:GLY:O	17:8I:21:VAL:HG13	2.08	0.54
26:14:1071:G:N2	26:14:1090:U:O5'	2.40	0.54
1:1G:977:A:HO2'	1:1G:981:U:H3	1.55	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:25:ILE:HD11	13:4I:66:LEU:HD11	1.88	0.54
26:14:732:C:H3'	61:14:3503:HOH:O	2.08	0.54
46:G8:94:LYS:HA	46:G8:94:LYS:HZ3	1.73	0.54
38:45:35:VAL:HG12	38:45:36:ALA:H	1.72	0.54
1:13:963:G:H21	10:1I:55:LYS:CE	2.20	0.54
47:H8:165:VAL:HG22	47:H8:166:SER:HA	1.89	0.54
56:1L:49:G:H2'	56:1L:50:C:C6	2.43	0.54
27:1J:116:G:H5'	40:65:55:ALA:CB	2.38	0.54
26:1H:2019:A:C6	26:1H:2020:A:N7	2.76	0.54
28:71:59:ARG:HG2	28:71:60:GLY:H	1.72	0.54
1:1G:247:G:OP2	17:8A:100:LYS:N	2.39	0.54
26:14:1568:G:OP1	29:19:63:ARG:NH1	2.38	0.54
2:12:219:VAL:HG23	2:12:222:ILE:HD12	1.90	0.54
1:13:313:A:H2'	1:13:314:C:H6	1.73	0.54
1:13:69:G:N2	1:13:99:C:O2	2.39	0.54
3:22:90:GLU:O	3:22:93:LYS:NZ	2.41	0.54
1:13:1111:A:N1	3:2E:177:THR:OG1	2.34	0.54
52:M8:24:THR:OG1	52:M8:25:TYR:N	2.40	0.54
30:29:89:ASP:HB3	30:29:91:VAL:N	2.23	0.54
37:78:130:PHE:HE1	37:78:146:VAL:HG23	1.73	0.54
1:1G:280:C:H3'	1:1G:281:G:H5'	1.90	0.54
26:14:2784:C:H2'	26:14:2785:C:C6	2.42	0.54
26:14:96:G:H4'	50:G5:48:HIS:CD2	2.43	0.54
26:1H:2128:C:H5'	28:71:36:LYS:HG3	1.89	0.54
33:51:40:GLU:O	33:51:41:MET:HB2	2.07	0.54
38:45:10:ARG:HE	38:45:10:ARG:C	2.11	0.54
38:45:45:GLN:OE1	38:45:45:GLN:N	2.41	0.54
35:15:133:GLN:O	35:15:134:ARG:HG3	2.08	0.54
1:13:1299:A:H2'	1:13:1301:U:H1'	1.90	0.54
35:58:96:GLU:HG2	35:58:97:ARG:N	2.23	0.54
56:1L:2:G:H1	56:1L:71:C:H42	1.56	0.54
8:7E:120:THR:H	8:7E:123:GLU:HG3	1.72	0.54
50:K8:35:LEU:HD23	50:K8:53:LEU:HD12	1.90	0.54
12:3A:41:ARG:HB3	12:3A:41:ARG:HH11	1.73	0.54
26:1H:363:G:H2'	26:1H:363(A):A:H8	1.72	0.54
39:98:12:ARG:HG2	39:98:16:HIS:ND1	2.23	0.54
1:13:15:G:OP1	1:13:1396:A:O2'	2.21	0.54
20:BI:10:LEU:HG	20:BI:12:ALA:H	1.73	0.54
8:72:56:LYS:HE2	8:72:58:TYR:HE1	1.72	0.54
28:79:15:ASP:H	28:79:20:TYR:HH	1.56	0.54
26:14:2656:U:H3	26:14:2665:A:H2	1.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1630:G:H2'	26:1H:1630(A):C:H6	1.72	0.54
26:14:55:G:H2'	26:14:56:A:H8	1.73	0.54
32:41:41:GLN:HG2	32:41:155:MET:HB3	1.90	0.54
29:11:234:GLY:N	61:11:403:HOH:O	2.41	0.54
1:1G:834:C:H42	1:1G:852:G:H1	1.56	0.54
38:45:26:TYR:OH	47:D5:78:LYS:HD3	2.08	0.54
6:52:45:LEU:HD12	6:52:59:TYR:HD2	1.73	0.54
29:19:182:LEU:H	29:19:272:ALA:HB3	1.73	0.54
26:14:1329:U:H5''	26:14:1330:C:H5	1.74	0.54
1:1G:690:G:H2'	1:1G:691:G:O4'	2.08	0.54
31:31:27:GLU:H	31:31:27:GLU:CD	2.10	0.54
36:25:113:LYS:HE2	36:25:113:LYS:H	1.73	0.54
26:14:2745:C:H1'	33:59:143:GLN:HG2	1.88	0.54
26:1H:518:G:H2'	26:1H:519:U:C6	2.44	0.54
4:32:175:SER:HB2	4:32:186:LEU:HD11	1.89	0.54
1:1G:1281:U:H3'	1:1G:1282:C:C5	2.43	0.53
1:1G:1126:U:N3	1:1G:1281:U:O4'	2.41	0.53
1:13:232:G:H2'	1:13:233:C:H6	1.73	0.53
1:1G:1274:G:H2'	1:1G:1275:A:H8	1.73	0.53
26:14:634:C:H2'	26:14:635:C:C6	2.43	0.53
26:1H:2263:C:H2'	26:1H:2264:C:H6	1.73	0.53
2:12:218:ALA:O	2:12:219:VAL:HG22	2.07	0.53
50:G5:43:GLN:OE1	50:G5:43:GLN:N	2.41	0.53
16:7I:50:LYS:HE3	16:7I:51:VAL:H	1.72	0.53
26:14:828:U:H3	26:14:2247:A:H4'	1.72	0.53
6:5E:91:VAL:HG12	6:5E:92:LYS:O	2.07	0.53
1:13:390:C:O3'	16:7I:28:ARG:NH2	2.40	0.53
30:29:97:LYS:HG2	30:29:100:GLU:OE1	2.07	0.53
26:1H:942:G:OP2	37:78:39:LYS:HE2	2.09	0.53
1:13:652:U:O4	1:13:752:G:O2'	2.17	0.53
1:1G:201:C:H42	1:1G:216:G:H1	1.57	0.53
42:C8:58:ARG:HA	42:C8:61:TRP:CE3	2.43	0.53
26:1H:2257:U:O2'	26:1H:2258:C:H5'	2.07	0.53
26:14:2107:C:N3	26:14:2182:G:N1	2.56	0.53
12:3I:58:VAL:O	12:3I:65:GLU:HA	2.08	0.53
47:D5:124:ILE:HD11	47:D5:165:VAL:HG21	1.89	0.53
1:1G:1277:C:O2'	1:1G:1279:A:H1'	2.08	0.53
1:13:1127:G:H2'	1:13:1128:C:N1	2.21	0.53
47:H8:19:ARG:NH1	47:H8:84:GLU:HB2	2.23	0.53
22:1K:76:A:H8	26:1H:2583:G:N2	2.06	0.53
26:1H:1386:C:OP2	26:1H:1396:U:H5	1.92	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:32:TYR:CD2	38:45:114:ALA:HB3	2.42	0.53
11:2I:48:ILE:HD11	11:2I:64:ALA:HA	1.90	0.53
38:45:81:VAL:HG23	38:45:82:ARG:H	1.73	0.53
26:1H:1291:C:H2'	26:1H:1292:U:C6	2.42	0.53
26:1H:2107:C:O2	26:1H:2182:G:N2	2.39	0.53
26:14:1298:C:H5''	26:14:1299:G:OP2	2.08	0.53
1:1G:421:U:O4	3:22:127:ARG:NH1	2.41	0.53
26:1H:745:G:OP2	30:21:133:LYS:HE2	2.08	0.53
1:13:1188:A:N6	61:13:1813:HOH:O	2.40	0.53
44:E8:57:ASN:O	44:E8:61:ASN:HB2	2.07	0.53
26:1H:2712:U:H1'	26:1H:2712(A):A:C8	2.44	0.53
26:1H:1508:A:OP2	26:1H:1508:A:H8	1.91	0.53
26:1H:270(K):C:C4	26:1H:270(M):U:H5''	2.43	0.53
17:8I:66:SER:OG	17:8I:69:LYS:HB2	2.09	0.53
40:65:107:GLU:H	40:65:110:LEU:HD11	1.72	0.53
26:1H:2846:G:N7	61:1H:3613:HOH:O	2.32	0.53
26:1H:155:C:N4	26:1H:171:G:H1	2.03	0.53
46:C5:87:LYS:NZ	46:C5:88:LYS:O	2.34	0.53
26:1H:1899:G:H1	26:1H:1902:C:H41	1.57	0.53
1:1G:1001:G:H2'	1:1G:1002:G:C8	2.43	0.53
26:14:2611:U:C4	53:J5:3:LYS:HG3	2.43	0.53
43:D8:37:VAL:HG23	43:D8:51:VAL:HG21	1.90	0.53
3:2E:152:ILE:HG12	3:2E:167:TRP:HD1	1.74	0.53
1:1G:1326:C:H2'	1:1G:1327:C:C6	2.43	0.53
11:2I:50:TYR:CD2	11:2I:54:ARG:HB2	2.43	0.53
1:1G:666:G:H5'	1:1G:726:C:H1'	1.91	0.53
26:14:1198:U:H2'	26:14:1199:U:C6	2.44	0.53
17:8I:45:HIS:O	17:8I:73:VAL:HG23	2.08	0.53
49:J8:83:GLU:HG3	49:J8:85:LEU:HB2	1.90	0.53
26:14:2873:A:C8	39:55:5:LYS:HA	2.44	0.53
29:19:228:PRO:HD3	29:19:234:GLY:O	2.08	0.53
26:14:2164:C:H5	26:14:2165:G:H21	1.56	0.53
26:1H:1639:U:O2'	26:1H:1640:C:H5''	2.08	0.53
45:B5:29:TRP:CE3	45:B5:78:LYS:HB3	2.43	0.53
48:I8:14:ARG:NH1	61:I8:201:HOH:O	2.40	0.53
26:14:2306:C:H2'	26:14:2307:G:N2	2.23	0.53
30:29:9:VAL:HG23	30:29:26:ILE:O	2.09	0.53
47:D5:40:ASP:OD1	47:D5:42:VAL:N	2.39	0.53
6:52:15:ASP:OD1	6:52:16:GLN:N	2.42	0.53
37:78:124:LYS:HA	37:78:143:GLY:O	2.08	0.53
27:16:44:G:H1'	27:16:47:C:H42	1.74	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:134:ILE:O	30:21:137:HIS:HB2	2.09	0.53
1:1G:546:G:OP1	4:32:73:ARG:NH1	2.41	0.53
26:1H:2321:G:H5''	26:1H:2322:A:OP2	2.09	0.53
26:1H:301:G:C4	26:1H:302:C:C5	2.96	0.53
9:8E:25:LYS:O	9:8E:60:ASP:HA	2.08	0.53
38:88:116:GLU:O	38:88:120:ILE:HG12	2.07	0.53
35:58:96:GLU:C	35:58:98:VAL:H	2.09	0.53
30:21:105:THR:HG23	30:21:166:THR:OG1	2.08	0.53
26:1H:2450:A:C2	26:1H:2451:A:C4	2.96	0.53
8:7E:20:TYR:HE2	8:7E:75:ARG:HD2	1.73	0.53
38:45:85:LYS:HG2	38:45:86:GLY:H	1.74	0.53
1:13:445:G:H1	1:13:489:C:H42	1.57	0.53
26:14:1532:C:H42	26:14:1539:G:H1	1.56	0.53
26:14:1057:A:H8	26:14:1086:A:HO2'	1.57	0.53
1:1G:10:A:H2'	1:1G:11:G:C8	2.44	0.53
37:78:121:LYS:NZ	37:78:121:LYS:HB3	2.23	0.53
26:14:582:G:H2'	26:14:583:G:C8	2.44	0.53
4:32:94:LEU:HD11	4:32:200:GLU:OE1	2.08	0.53
1:13:312:C:H2'	1:13:313:A:H8	1.74	0.53
41:75:3:ARG:HG2	41:75:6:LEU:HB2	1.89	0.53
26:14:2275:C:O2'	38:45:83:MET:HA	2.09	0.53
26:1H:389:G:N1	37:78:71:VAL:HG12	2.24	0.53
44:E8:12:ILE:HG13	44:E8:42:ARG:HH11	1.73	0.53
26:14:1061:U:H4'	26:14:1071:G:H5'	1.91	0.53
1:1G:977:A:H2'	1:1G:978:A:H5'	1.90	0.53
1:13:1417:G:N2	1:13:1482:G:H2'	2.23	0.53
47:D5:91:LEU:HD12	47:D5:91:LEU:H	1.73	0.53
45:F8:57:LEU:HD21	45:F8:78:LYS:HG3	1.89	0.53
38:45:57:HIS:CE1	38:45:116:GLU:HG2	2.44	0.53
26:14:2716:U:H2'	26:14:2717:G:C8	2.44	0.53
41:75:27:THR:HB	41:75:89:VAL:HG22	1.90	0.53
7:6E:45:ASP:O	7:6E:49:ILE:HG13	2.09	0.53
32:49:14:GLU:O	32:49:17:PRO:HG2	2.09	0.53
22:1K:3:G:N2	22:1K:71:C:H1'	2.24	0.53
39:55:59:ASP:OD1	39:55:62:ALA:N	2.40	0.53
1:13:538:G:H5''	12:3I:114:LYS:HB2	1.90	0.53
30:29:68:ALA:C	30:29:70:ALA:H	2.11	0.53
26:14:597:U:H2'	26:14:598:G:H8	1.72	0.53
26:1H:2751:G:C1'	33:51:3:ARG:HD3	2.38	0.53
27:1J:80:U:H2'	27:1J:81:G:N2	2.19	0.53
1:1G:1322:C:O2	1:1G:1322:C:H2'	2.08	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:31:CYS:HB3	4:32:33:MET:HB2	1.89	0.53
26:1H:1373:A:H8	26:1H:1373:A:OP2	1.92	0.53
26:1H:1678:G:O5'	26:1H:1678:G:H8	1.92	0.53
26:1H:2286:A:H4'	26:1H:2287:A:O5'	2.09	0.53
7:62:26:PHE:O	7:62:30:ILE:HG13	2.09	0.53
26:14:70:G:H21	26:14:71:A:N6	2.06	0.53
21:1B:2:GLY:HA2	21:1B:10:ARG:NH1	2.24	0.53
26:1H:2393:A:O2'	26:1H:2394:C:H5'	2.09	0.53
1:13:346:G:N2	1:13:347:G:N3	2.57	0.53
1:13:1318:A:H2'	1:13:1319:A:H5''	1.90	0.53
31:39:63:LYS:HE3	31:39:67:GLN:HB2	1.91	0.53
2:1E:215:LEU:HD12	2:1E:218:ALA:HB3	1.89	0.53
1:13:271:C:H2'	1:13:272:C:H6	1.72	0.53
5:4E:15:ARG:NH1	25:4K:24:A:O3'	2.41	0.53
1:1G:1418:A:H2	26:14:1948:G:N3	2.06	0.53
26:14:1450:C:H2'	26:14:1451:C:C6	2.44	0.53
20:BA:50:GLU:HA	20:BA:100:ILE:HG12	1.90	0.53
4:32:177:ASP:HB2	4:32:182:LYS:HG3	1.91	0.53
3:22:147:LYS:HB2	3:22:203:PHE:CD2	2.44	0.53
1:13:868:C:H2'	1:13:869:G:O4'	2.08	0.53
4:3E:108:LEU:HD11	4:3E:174:LEU:HD22	1.89	0.53
54:L5:29:LYS:HA	54:L5:32:LYS:HB3	1.91	0.53
13:4A:61:GLU:CD	13:4A:61:GLU:H	2.04	0.53
26:1H:2098:U:H2'	26:1H:2099:U:O4'	2.09	0.53
26:1H:2712:U:H2'	26:1H:2714:G:H5''	1.90	0.53
16:7A:40:ASP:HB3	16:7A:48:TRP:CB	2.37	0.53
1:13:1292:U:H2'	1:13:1293:G:H8	1.73	0.53
23:2K:6:G:H1	23:2K:68:C:N4	2.04	0.53
8:7E:4:ASP:OD2	8:7E:85:ARG:NH1	2.42	0.53
8:7E:87:SER:CB	8:7E:93:VAL:H	2.21	0.53
29:11:30:GLU:CD	29:11:63:ARG:HE	2.12	0.53
32:41:67:LYS:HE2	32:41:67:LYS:H	1.74	0.53
26:14:997:G:H2'	26:14:998:C:H6	1.74	0.53
2:1E:192:SER:HG	2:1E:193:ASP:H	1.56	0.53
1:13:626:U:H5''	16:7I:38:TYR:CD2	2.42	0.53
26:1H:1211:U:H4'	26:1H:1212:G:OP2	2.07	0.53
12:3I:53:ARG:NH1	12:3I:92:ASP:OD1	2.38	0.53
2:12:219:VAL:HG23	2:12:221:LEU:H	1.72	0.53
2:12:189:ASP:HB3	2:12:203:GLY:O	2.09	0.53
7:6E:27:ILE:HD12	7:6E:40:ALA:HA	1.91	0.53
1:13:680:C:H2'	1:13:681:C:C6	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4A:49:THR:HG22	13:4A:51:ALA:H	1.73	0.53
26:14:1285:G:N2	26:14:1329:U:OP1	2.37	0.53
26:1H:2437:U:H2'	26:1H:2438:U:H6	1.73	0.53
26:1H:660:G:H21	37:78:12:ALA:CB	2.22	0.53
34:61:25:TYR:O	34:61:29:TYR:N	2.38	0.53
4:32:126:ILE:HG22	4:32:127:THR:H	1.73	0.53
49:F5:45:ASN:O	49:F5:63:ALA:HA	2.08	0.53
3:2E:3:ASN:OD1	3:2E:3:ASN:N	2.41	0.53
26:1H:323:G:C8	31:31:171:PRO:HG3	2.44	0.53
1:13:967:C:O5'	1:13:967:C:H6	1.92	0.53
26:1H:2320:A:H2'	26:1H:2320:A:N3	2.24	0.53
50:G5:50:ILE:HD12	50:G5:51:ARG:N	2.16	0.53
52:M8:37:SER:OG	52:M8:42:PHE:HB3	2.09	0.53
28:71:68:LEU:O	28:71:177:LYS:N	2.41	0.53
28:71:10:LEU:HD23	28:71:32:LEU:O	2.09	0.53
1:13:130:A:O2'	1:13:131:C:O5'	2.26	0.53
26:1H:1278:A:OP1	39:98:36:THR:HG22	2.09	0.53
26:1H:460:A:H5''	26:1H:461:C:OP2	2.09	0.53
2:12:40:HIS:HD2	2:12:190:THR:HG21	1.74	0.53
32:41:16:ARG:O	32:41:20:ILE:HG13	2.09	0.53
26:14:1784:A:OP1	61:14:3539:HOH:O	2.19	0.53
26:14:2016:U:H1'	53:J5:6:VAL:HG13	1.90	0.53
26:14:2494:G:H2'	26:14:2495:G:H8	1.72	0.53
1:1G:1067:A:H4'	1:1G:1068:G:O5'	2.09	0.53
26:14:2553:G:H2'	26:14:2554:U:O4'	2.08	0.53
40:A8:49:VAL:HG21	40:A8:77:ALA:HA	1.91	0.53
41:75:64:ARG:HB2	41:75:73:GLU:HG2	1.91	0.53
56:1L:11:C:H2'	56:1L:12:U:H6	1.73	0.53
26:14:1794:U:H2'	26:14:1795:C:H6	1.74	0.53
1:1G:198:G:H8	1:1G:198:G:OP2	1.91	0.53
35:15:58:ASP:N	35:15:58:ASP:OD1	2.35	0.53
34:69:132:PRO:HG2	34:69:134:PRO:HD2	1.89	0.53
32:41:165:THR:OG1	32:41:168:GLU:HG3	2.09	0.53
26:14:2064:C:H2'	26:14:2065:C:H6	1.74	0.53
26:1H:2105:C:H2'	26:1H:2106:G:C8	2.41	0.53
1:1G:446:G:H2'	1:1G:447:G:O4'	2.09	0.53
1:1G:1129:C:C4	1:1G:1139:G:N1	2.77	0.53
29:19:121:PRO:HB3	29:19:135:PHE:CE2	2.44	0.53
31:31:197:ASP:O	31:31:199:TRP:N	2.41	0.53
26:1H:639:U:O2'	26:1H:640:C:H5'	2.08	0.53
37:78:11:GLY:O	37:78:12:ALA:HB3	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:19:80:ALA:HB3	29:19:94:LEU:HB3	1.91	0.53
39:55:32:GLY:HA2	39:55:116:LEU:HD12	1.91	0.53
24:3K:5:C:O2	24:3K:68:G:N2	2.41	0.53
26:14:320:A:H4'	26:14:322:A:C8	2.44	0.53
32:49:72:ARG:HB3	32:49:85:GLY:HA2	1.91	0.53
26:14:872:A:OP1	38:45:5:ARG:NH2	2.40	0.53
30:29:11:MET:HA	30:29:24:THR:HA	1.91	0.53
26:14:234:C:H2'	26:14:235:U:H6	1.73	0.53
1:13:748:C:O5'	1:13:748:C:H6	1.92	0.53
26:1H:637:A:H2'	37:78:117:GLU:OE1	2.09	0.53
17:8I:66:SER:O	17:8I:70:ARG:NH1	2.42	0.53
26:14:1019:U:H2'	26:14:1020:A:H8	1.74	0.53
26:1H:587:C:OP2	37:78:21:ARG:NH2	2.41	0.53
10:1A:26:ALA:HB1	10:1A:84:GLN:HB3	1.91	0.53
26:1H:118:A:OP2	26:1H:119:A:H2'	2.09	0.53
56:1L:68:G:H2'	56:1L:69:A:N7	2.24	0.53
39:55:29:LEU:HB3	39:55:75:LEU:HD21	1.91	0.53
26:14:2867:G:N7	41:75:23:ARG:NH1	2.57	0.53
54:P8:10:ARG:HG2	54:P8:14:LYS:HD3	1.90	0.53
26:1H:543:C:H42	26:1H:550:G:H1	1.56	0.53
1:1G:355:C:O2'	1:1G:388:G:N3	2.31	0.53
32:41:107:LEU:HD11	32:41:178:PHE:CE1	2.44	0.53
1:1G:1442:G:C6	1:1G:1446:A:N6	2.77	0.53
1:1G:946:A:O2'	1:1G:1333:A:N3	2.35	0.53
26:14:1666:G:O6	61:14:3537:HOH:O	2.17	0.53
5:4E:65:ASN:OD1	5:4E:140:ARG:NH2	2.27	0.53
26:1H:49:A:N7	26:1H:120:U:C5	2.67	0.52
1:13:664:G:N2	1:13:741:G:H1	2.04	0.52
55:Q8:54:GLU:O	55:Q8:58:ILE:HG13	2.08	0.52
26:1H:674:G:H1'	31:31:74:ARG:HD3	1.89	0.52
7:6E:16:LEU:HD22	9:8E:44:VAL:HG22	1.90	0.52
26:14:996:A:N6	26:14:1160:G:C6	2.77	0.52
1:13:1164:G:C6	1:13:1165:C:C4	2.96	0.52
26:1H:1653:G:H8	26:1H:1653:G:O5'	1.92	0.52
6:52:7:ASN:HD21	18:9A:34:TYR:HE1	1.57	0.52
31:31:129:PHE:HA	31:31:142:TRP:NE1	2.24	0.52
26:14:1181:C:H2'	26:14:1182:A:C8	2.45	0.52
40:A8:36:TYR:N	40:A8:36:TYR:CD1	2.77	0.52
2:1E:215:LEU:O	2:1E:219:VAL:HG23	2.09	0.52
26:1H:1339:G:N2	26:1H:1603:A:H1'	2.24	0.52
27:1J:93:C:H2'	27:1J:94:C:H6	1.72	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2233:U:H2'	26:1H:2234:G:C8	2.44	0.52
19:AI:20:LEU:HD23	19:AI:23:ASN:HD22	1.74	0.52
26:1H:2473:U:H2'	26:1H:2474:C:H5'	1.90	0.52
2:12:93:VAL:HG22	2:12:152:PHE:HB2	1.90	0.52
29:19:166:GLN:HB3	29:19:174:ILE:HG22	1.90	0.52
1:1G:445:G:H1	1:1G:489:C:H42	1.56	0.52
1:1G:309:G:O2'	1:1G:607:A:N1	2.39	0.52
1:13:1374:A:O2'	7:6E:28:ASN:HB3	2.09	0.52
26:1H:2065:C:H2'	26:1H:2066:C:C6	2.44	0.52
26:14:2820:A:C6	39:55:4:LEU:HD11	2.43	0.52
26:14:2652:C:H42	26:14:2668:G:H1	1.57	0.52
47:D5:11:GLU:CD	47:D5:12:GLY:H	2.13	0.52
26:14:662:G:H5''	37:35:17:LYS:HG2	1.91	0.52
26:1H:248:G:H5'	26:1H:250:G:N7	2.23	0.52
4:32:24:GLU:HG2	4:32:25:ARG:H	1.74	0.52
29:11:35:LYS:HA	29:11:64:ILE:HG22	1.91	0.52
26:1H:2749:A:OP1	33:51:4:ILE:HG22	2.10	0.52
5:4E:147:ASP:OD1	5:4E:147:ASP:N	2.31	0.52
11:2A:57:THR:HG22	11:2A:58:PRO:HD2	1.90	0.52
26:1H:298:G:H5''	26:1H:299:A:OP1	2.09	0.52
34:61:98:ALA:HB2	34:61:111:PRO:HB3	1.91	0.52
1:1G:78:G:H1	1:1G:91:C:H42	1.57	0.52
2:12:50:GLU:HB2	2:12:199:TYR:HB3	1.91	0.52
46:C5:52:SER:HA	46:C5:55:TYR:O	2.08	0.52
28:71:49:ILE:HD13	28:71:204:ALA:HB2	1.90	0.52
26:14:2147:G:H2'	26:14:2148:G:O4'	2.10	0.52
33:59:146:ALA:O	33:59:149:ARG:HG2	2.09	0.52
26:14:320:A:OP1	31:39:135:LYS:NZ	2.43	0.52
39:55:26:LYS:HE2	39:55:70:LEU:O	2.09	0.52
34:69:14:ASP:O	34:69:17:GLN:HB2	2.10	0.52
1:1G:193:C:H2'	1:1G:194:C:H6	1.75	0.52
3:22:112:SER:HB3	3:22:115:LEU:HB2	1.90	0.52
49:J8:3:LYS:O	49:J8:12:PRO:HD3	2.09	0.52
26:1H:1486:A:H2'	26:1H:1487:G:H8	1.74	0.52
29:19:146:GLU:HB2	29:19:189:CYS:HB3	1.90	0.52
48:I8:83:PRO:O	48:I8:84:LEU:HB2	2.10	0.52
14:5A:9:LYS:HA	14:5A:12:ARG:HD3	1.92	0.52
43:95:85:LYS:HE3	43:95:88:ARG:H	1.73	0.52
3:2E:16:ARG:HB2	3:2E:16:ARG:NH1	2.23	0.52
26:1H:141(A):C:H2'	26:1H:142:G:O4'	2.10	0.52
48:E5:47:PRO:HA	48:E5:51:VAL:HG12	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1936:A:C8	26:14:1940:U:O2	2.62	0.52
26:1H:1535:U:OP2	26:1H:1538:G:N2	2.42	0.52
26:1H:527:C:OP2	26:1H:2779:U:H5	1.92	0.52
4:32:108:LEU:HD21	4:32:183:GLY:HA3	1.92	0.52
1:1G:963:G:H21	10:1A:55:LYS:HE3	1.74	0.52
26:14:2577:A:O4'	53:J5:3:LYS:HB2	2.08	0.52
35:58:128:HIS:ND1	35:58:129:PRO:O	2.34	0.52
40:A8:106:ARG:HH21	40:A8:107:GLU:HB2	1.73	0.52
2:12:155:LEU:HD22	2:12:159:PRO:HD3	1.91	0.52
26:1H:1683:C:H42	26:1H:1705:G:H1	1.58	0.52
31:39:57:VAL:HG11	31:39:79:GLY:HA3	1.91	0.52
26:1H:2862:G:H2'	26:1H:2863:C:H6	1.74	0.52
42:85:8:VAL:O	42:85:12:ARG:HG2	2.09	0.52
24:3K:72:C:C3'	24:3K:73:A:H5''	2.39	0.52
6:52:33:TYR:OH	6:52:78:GLU:HG3	2.08	0.52
27:1J:31:C:C2'	27:1J:32:C:H5'	2.40	0.52
28:71:192:PHE:CE2	28:71:196:LEU:HD13	2.45	0.52
9:8E:53:VAL:HG13	9:8E:92:TYR:CZ	2.45	0.52
20:BA:64:ASP:OD1	20:BA:64:ASP:N	2.42	0.52
26:1H:1140:C:OP1	35:58:23:LEU:HB3	2.09	0.52
30:29:73:GLU:HG2	30:29:73:GLU:O	2.09	0.52
38:45:25:ASP:HA	38:45:67:ARG:NH1	2.24	0.52
1:13:963:G:H21	10:1I:55:LYS:HE2	1.74	0.52
1:13:266:G:H5''	1:13:267:C:C5	2.44	0.52
26:1H:1778:U:H2'	26:1H:1784:A:H62	1.72	0.52
33:51:86:GLU:HG3	33:51:87:LEU:N	2.25	0.52
1:13:1014:A:H2	1:13:1219:U:H1'	1.73	0.52
18:9A:70:ILE:O	18:9A:74:ARG:HD2	2.10	0.52
26:14:2849:U:H4'	26:14:2868:A:C2	2.44	0.52
19:AI:58:VAL:HG11	19:AI:75:ALA:HB1	1.90	0.52
26:1H:363(B):G:H2'	26:1H:363(C):G:H8	1.74	0.52
53:N8:40:LYS:HG2	53:N8:46:CYS:HA	1.91	0.52
13:4I:80:ARG:NH1	19:AI:65:ASN:O	2.43	0.52
6:52:27:GLN:O	6:52:31:GLU:HG3	2.10	0.52
17:8I:29:HIS:CD2	17:8I:30:PRO:HD2	2.43	0.52
11:2I:34:ASP:HB3	11:2I:40:ILE:HD11	1.91	0.52
36:68:73:ASP:OD1	41:B8:32:TYR:OH	2.22	0.52
10:1I:26:ALA:C	10:1I:84:GLN:HE21	2.13	0.52
26:14:1264:G:OP1	53:J5:19:ARG:NH2	2.41	0.52
24:3K:39:U:H2'	24:3K:40:C:H5''	1.92	0.52
13:4I:23:TYR:HD2	13:4I:67:GLU:HA	1.74	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:25:ASP:HB3	38:45:102:VAL:N	2.17	0.52
16:7A:72:ARG:HD2	16:7A:73:LEU:HD23	1.91	0.52
26:1H:1727:U:H2'	26:1H:1728:G:O4'	2.10	0.52
40:65:13:ARG:HG2	40:65:14:VAL:N	2.24	0.52
40:65:88:ASP:O	40:65:89:ARG:HB3	2.09	0.52
1:13:1145:C:H5''	1:13:1146:A:OP1	2.08	0.52
26:1H:1607:C:H1'	61:1H:3539:HOH:O	2.07	0.52
27:1J:40:U:O2	27:1J:43:C:H5''	2.08	0.52
26:14:2210:G:H3'	26:14:2211:G:C5	2.43	0.52
7:6E:120:ILE:O	7:6E:124:LEU:HB2	2.10	0.52
43:95:22:VAL:O	43:95:92:THR:N	2.34	0.52
1:1G:503:C:OP2	12:3A:116:SER:HB3	2.10	0.52
26:1H:536:A:H2'	26:1H:537:C:C6	2.45	0.52
26:1H:2756:U:H4'	26:1H:2757:A:OP1	2.10	0.52
26:1H:376:C:OP2	61:1H:3566:HOH:O	2.19	0.52
1:13:682:G:H2'	1:13:683:G:H8	1.75	0.52
47:H8:6:LYS:HE3	47:H8:8:TYR:HE1	1.74	0.52
4:32:63:LYS:O	4:32:67:ILE:HG13	2.10	0.52
1:1G:1200:C:H5'	1:1G:1201:A:H5'	1.92	0.52
1:1G:1112:C:C4	3:22:178:LEU:HD12	2.44	0.52
54:L5:35:ARG:HG3	54:L5:42:LEU:HD11	1.91	0.52
34:61:48:GLU:HA	34:61:51:ILE:HB	1.91	0.52
22:1K:41:A:H2'	22:1K:42:A:H8	1.75	0.52
17:8I:83:ASP:OD1	17:8I:83:ASP:N	2.41	0.52
26:14:832:G:H5'	37:35:45:LEU:CD1	2.40	0.52
26:1H:2314:C:H2'	26:1H:2315:G:H8	1.74	0.52
29:11:35:LYS:HB2	29:11:63:ARG:HA	1.91	0.52
26:14:1594:G:H2'	26:14:1595:G:C8	2.44	0.52
19:AA:66:MET:N	19:AA:67:VAL:HB	2.24	0.52
1:13:1034:G:H2'	1:13:1034:G:N3	2.25	0.52
4:3E:62:GLN:O	4:3E:66:ARG:HB2	2.10	0.52
1:1G:546:G:P	4:32:72:GLU:HB3	2.49	0.52
30:21:55:ASN:OD1	30:21:58:ARG:HD2	2.09	0.52
57:3L:27:G:H1	57:3L:44:U:H3	1.56	0.52
26:1H:773:U:H5'	29:11:47:GLY:HA3	1.91	0.52
26:14:2068:U:N3	26:14:2430:A:C2	2.72	0.52
1:1G:1213:A:N6	1:1G:1215:G:N3	2.57	0.52
26:14:2082:A:H2'	26:14:2083:G:O4'	2.09	0.52
1:13:898:G:HO2'	1:13:900:A:H62	1.56	0.52
5:42:81:GLU:HB3	5:42:90:VAL:HG22	1.92	0.52
31:31:23:ASP:OD1	31:31:23:ASP:N	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2485:G:H5''	38:45:46:GLN:HE21	1.74	0.52
44:A5:58:ALA:HB1	44:A5:64:MET:HB2	1.89	0.52
26:1H:1108:U:C2	26:1H:1109:C:H5	2.28	0.52
26:1H:1021:A:H2'	26:1H:1023:U:H5'	1.90	0.52
8:7E:85:ARG:HD3	8:7E:86:ILE:O	2.10	0.52
28:71:10:LEU:HD21	28:71:34:THR:OG1	2.08	0.52
45:B5:63:LYS:HE3	45:B5:63:LYS:N	2.24	0.52
11:2I:124:LYS:HD2	11:2I:125:PHE:CE1	2.42	0.52
48:E5:32:ARG:HG2	48:E5:33:ALA:H	1.74	0.52
26:14:1568:G:P	29:19:63:ARG:HH12	2.32	0.52
2:12:222:ILE:H	2:12:222:ILE:HD12	1.75	0.52
1:1G:1325:C:H2'	1:1G:1326:C:C6	2.45	0.52
26:1H:2729:G:H2'	26:1H:2730:C:C6	2.45	0.52
26:14:270(E):G:H2'	26:14:270(F):U:C6	2.45	0.52
3:22:11:ARG:CZ	3:22:182:ILE:HD11	2.40	0.52
25:4L:13:A:C2	25:4L:14:A:H1'	2.44	0.52
1:13:150:C:H2'	1:13:151:A:H8	1.75	0.52
26:14:394:A:H5''	26:14:395:U:OP2	2.09	0.52
37:35:27:HIS:HB3	37:35:32:THR:HG23	1.91	0.52
50:K8:59:ARG:O	50:K8:62:THR:HG23	2.09	0.52
1:1G:690:G:H22	11:2A:55:LYS:HE2	1.75	0.52
26:1H:2437:U:H2'	26:1H:2438:U:C6	2.44	0.52
1:1G:922:G:N3	1:1G:1398:A:H2	2.08	0.52
2:12:77:ALA:O	2:12:81:VAL:HG23	2.10	0.52
5:4E:71:LEU:HD13	5:4E:114:GLY:HA3	1.92	0.52
45:F8:88:LYS:HD2	45:F8:90:GLU:HG2	1.92	0.52
27:16:90:C:H5'	38:88:18:LYS:HA	1.92	0.52
26:14:1384:A:N3	26:14:1405:U:H1'	2.24	0.52
26:1H:848:G:H2'	26:1H:849:A:C8	2.45	0.52
26:1H:1945:G:H2'	26:1H:1946:U:C6	2.45	0.52
47:H8:77:ASP:OD2	47:H8:80:ARG:HD2	2.10	0.52
26:1H:2171:A:H2'	26:1H:2172:U:H6	1.75	0.52
39:98:2:ARG:O	39:98:5:LYS:HB2	2.09	0.52
26:14:662:G:H5'	37:35:15:ARG:HA	1.90	0.52
29:11:145:VAL:HB	29:11:155:LEU:HB2	1.92	0.52
47:H8:108:PRO:HB3	47:H8:111:VAL:HG22	1.90	0.52
17:8A:66:SER:OG	17:8A:67:LYS:O	2.28	0.52
26:14:848:G:H2'	26:14:849:A:H8	1.71	0.52
26:14:2159:G:N2	26:14:2160:G:H1'	2.24	0.52
26:14:330:A:H2	26:14:1210:A:O2'	1.93	0.52
30:21:38:THR:HG23	30:21:40:GLU:HG2	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:777:A:C2	11:2A:119:CYS:HB3	2.44	0.52
26:1H:1047:G:H21	26:1H:1110:G:H2'	1.73	0.52
27:1J:15:A:OP2	27:1J:69:G:N2	2.36	0.52
27:1J:15:A:H5'	27:1J:16:G:H8	1.75	0.52
26:14:2877:G:OP1	41:75:2:ASN:ND2	2.42	0.52
26:1H:2336:A:H61	48:I8:43:THR:CG2	2.23	0.52
26:14:2417:C:H2'	26:14:2418:A:H8	1.75	0.52
26:14:1449(A):G:C2	26:14:1450:C:C2	2.97	0.52
24:3K:18:G:N3	24:3K:58:A:N6	2.58	0.52
1:13:127:G:H4'	17:8I:2:PRO:HD2	1.91	0.52
26:14:2600:A:H2'	26:14:2601:C:C6	2.45	0.52
32:49:36:LYS:HD3	32:49:160:VAL:HG21	1.92	0.52
26:14:2110:G:O2'	26:14:2120:G:H5'	2.10	0.52
42:C8:14:HIS:O	42:C8:18:LEU:HD12	2.09	0.52
53:J5:45:VAL:HG22	53:J5:51:TYR:CD1	2.45	0.52
1:1G:509:A:H5'	4:32:54:TYR:HD2	1.74	0.52
45:F8:25:LYS:HA	45:F8:81:VAL:O	2.10	0.52
1:1G:938:A:N3	1:1G:1376:U:O2'	2.33	0.52
23:2L:17:C:H3'	23:2L:18:U:H2'	1.92	0.52
2:12:171:ALA:HA	2:12:174:VAL:HG23	1.90	0.52
34:61:117:GLU:OE1	34:61:117:GLU:N	2.41	0.52
12:3I:54:LYS:N	12:3I:54:LYS:HD2	2.24	0.52
5:42:99:GLY:O	5:42:117:ASP:HA	2.10	0.52
7:6E:65:ALA:HB2	7:6E:128:ALA:HB2	1.92	0.52
43:95:85:LYS:HG3	43:95:87:HIS:H	1.73	0.52
43:95:71:LEU:H	43:95:86:GLY:HA2	1.72	0.52
19:AI:51:VAL:HG12	19:AI:52:TYR:H	1.75	0.52
5:4E:142:LEU:O	5:4E:143:ARG:NH1	2.36	0.52
2:1E:8:LYS:HG2	2:1E:9:GLU:N	2.24	0.52
26:1H:2444:G:OP1	31:31:67:GLN:NE2	2.43	0.52
1:1G:1246:C:H2'	1:1G:1247:U:O4'	2.10	0.52
26:1H:860:U:H5	26:1H:917:A:N1	2.07	0.52
1:1G:376:G:H1	1:1G:387:U:H3	1.58	0.52
26:14:1368:G:OP1	54:L5:28:ARG:NH2	2.38	0.52
23:2K:17:C:OP2	23:2K:18:U:O2'	2.26	0.52
45:B5:36:LYS:HG2	45:B5:54:VAL:HB	1.92	0.52
9:82:60:ASP:N	9:82:60:ASP:OD1	2.42	0.52
7:6E:86:GLN:HE22	24:3K:31:A:H2	1.57	0.52
19:AA:53:ASN:ND2	19:AA:56:GLN:O	2.43	0.52
26:1H:2209:C:O2	26:1H:2216:G:C2	2.63	0.52
26:1H:2688:U:H5	26:1H:2720:U:OP2	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:F8:89:ILE:HG22	45:F8:92:LEU:H	1.74	0.52
1:1G:73:G:H1	1:1G:97:U:H3	1.57	0.52
26:14:38:A:H1'	31:39:48:THR:HB	1.90	0.52
1:13:1002:G:O6	1:13:1038:C:N4	2.35	0.52
1:13:266:G:N2	1:13:269:C:C5	2.79	0.52
1:1G:1262:C:N4	1:1G:1273:G:H1	2.05	0.52
33:59:6:ARG:HB2	33:59:65:HIS:ND1	2.25	0.52
6:5E:97:PHE:HD2	18:9I:31:LEU:HD11	1.74	0.52
2:1E:55:PHE:HD1	2:1E:58:ILE:HD12	1.75	0.52
49:J8:14:VAL:HG22	49:J8:41:ARG:HD2	1.90	0.52
47:H8:15:PRO:HB2	47:H8:19:ARG:HH21	1.73	0.52
27:16:100:G:OP2	61:16:305:HOH:O	2.19	0.52
13:4I:3:ARG:HB3	13:4I:9:ILE:HG12	1.91	0.52
1:13:619:U:H3	4:3E:134:ASP:HB2	1.75	0.52
31:31:134:GLY:HA2	31:31:166:ALA:HB2	1.91	0.52
3:2E:150:LYS:HG3	3:2E:169:ALA:HB2	1.92	0.52
26:14:2250:G:N2	38:45:82:ARG:HB3	2.25	0.52
26:14:863:A:H2'	26:14:864:G:H8	1.75	0.52
1:13:417:C:H2'	1:13:418:C:C6	2.45	0.52
53:N8:46:CYS:HB2	53:N8:48:GLU:O	2.10	0.52
29:11:126:GLN:HG2	29:11:127:VAL:N	2.24	0.52
11:2A:87:THR:O	11:2A:87:THR:OG1	2.23	0.52
26:1H:1468:C:H2'	26:1H:1469:A:C8	2.45	0.52
26:1H:1127:A:O2'	26:1H:2518:A:OP1	2.17	0.52
26:14:1247:A:O2'	26:14:1248:G:H5''	2.10	0.52
26:14:278:A:H2'	26:14:278:A:OP2	2.10	0.52
1:1G:1238:A:N3	1:1G:1241:G:O2'	2.32	0.51
26:14:2392:A:C8	37:35:61:ARG:HD2	2.45	0.51
26:14:2126:A:N6	26:14:2163:C:O2	2.42	0.51
34:69:79:ILE:HG13	34:69:140:LEU:HD11	1.91	0.51
32:41:98:ARG:HE	52:M8:1:MET:HE1	1.75	0.51
26:14:2439:A:O2'	26:14:2440:C:OP2	2.26	0.51
47:H8:15:PRO:O	47:H8:19:ARG:HB2	2.09	0.51
26:14:654(C):G:N2	26:14:654(R):C:O2'	2.37	0.51
46:C5:43:ASN:HB2	46:C5:62:GLU:O	2.10	0.51
26:14:2657:A:O3'	33:59:160:LYS:NZ	2.43	0.51
29:11:3:VAL:HG12	29:11:17:THR:HG23	1.92	0.51
1:13:474:G:H5''	16:7I:81:ARG:NE	2.25	0.51
1:1G:176:C:OP1	20:BA:29:LYS:NZ	2.42	0.51
26:14:2210:G:OP1	29:19:68:LYS:NZ	2.43	0.51
33:51:38:SER:OG	33:51:40:GLU:OE2	2.27	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1452:C:H4'	1:1G:1453:G:H5'	1.92	0.51
26:14:2076:U:H5	26:14:2596:U:O2	1.93	0.51
44:A5:86:LEU:HD12	44:A5:87:PRO:HD2	1.91	0.51
26:1H:2588:G:P	61:1H:3596:HOH:O	2.68	0.51
48:I8:31:VAL:HG11	48:I8:37:LEU:HD21	1.91	0.51
1:1G:660:G:N7	61:1G:1712:HOH:O	2.34	0.51
40:A8:87:PHE:CE2	40:A8:102:ALA:HB2	2.45	0.51
4:3E:90:GLY:HA3	4:3E:204:ILE:HD11	1.91	0.51
13:4I:15:VAL:O	13:4I:19:LEU:HD23	2.09	0.51
26:14:1050:A:C2	26:14:2751:G:H2'	2.45	0.51
26:14:813:U:H2'	26:14:814:C:C6	2.44	0.51
52:M8:40:HIS:ND1	52:M8:43:TYR:O	2.43	0.51
1:13:234:C:H2'	1:13:235:C:H6	1.75	0.51
45:F8:36:LYS:HG2	45:F8:54:VAL:HB	1.91	0.51
26:14:2156:G:H2'	26:14:2157:G:H5'	1.91	0.51
5:4E:63:ARG:HB2	5:4E:64:ARG:HH12	1.75	0.51
26:1H:547:A:HO2'	26:1H:548:A:H8	1.56	0.51
9:8E:112:LYS:CA	9:8E:119:ALA:HB2	2.39	0.51
26:1H:530:G:C5	26:1H:2022:U:H5''	2.45	0.51
43:D8:15:GLU:HG3	43:D8:16:PRO:HD2	1.92	0.51
1:13:1028(B):C:H1'	1:13:1032:A:H62	1.75	0.51
7:6E:23:VAL:O	7:6E:27:ILE:HG12	2.10	0.51
48:I8:38:VAL:HG12	48:I8:40:GLN:HG2	1.91	0.51
26:14:1204:A:O2'	26:14:1205:U:OP2	2.28	0.51
1:1G:980:C:H5''	1:1G:981:U:C5	2.45	0.51
51:H5:9:VAL:HG22	51:H5:53:LEU:O	2.10	0.51
29:19:7:LYS:HG2	29:19:8:PRO:HD2	1.91	0.51
1:1G:828:A:H2'	1:1G:829:G:O4'	2.09	0.51
14:5I:4:LYS:HA	14:5I:7:ILE:HD11	1.92	0.51
1:13:491:G:H2'	1:13:492:G:H8	1.74	0.51
26:14:2413:G:H21	37:35:70:GLN:HE22	1.57	0.51
1:1G:474:G:H2'	1:1G:475:G:C8	2.45	0.51
1:1G:50:A:N1	1:1G:360:A:O2'	2.34	0.51
17:8A:10:VAL:HG21	17:8A:52:LYS:O	2.09	0.51
31:31:164:ARG:HG2	31:31:164:ARG:HH11	1.74	0.51
40:A8:74:ALA:HB1	40:A8:108:GLY:HA3	1.92	0.51
1:1G:600:C:H2'	1:1G:601:C:H6	1.74	0.51
26:14:960:A:C8	26:14:962:G:C8	2.99	0.51
48:I8:68:GLU:HG3	48:I8:80:HIS:HB2	1.90	0.51
37:35:79:ARG:O	37:35:110:TYR:HB3	2.09	0.51
55:M5:33:ASN:HA	55:M5:36:LYS:HD2	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:4E:41:VAL:HG22	5:4E:113:ALA:HB2	1.92	0.51
26:14:1266:G:O5'	44:A5:15:ARG:NH2	2.43	0.51
1:13:1194:U:H2'	1:13:1195:C:C6	2.45	0.51
34:61:128:LEU:HB2	34:61:138:ILE:HG22	1.93	0.51
26:1H:2061:G:OP2	26:1H:2502:G:H5'	2.11	0.51
30:21:182:LEU:HD12	30:21:183:LEU:N	2.25	0.51
33:59:56:SER:HB3	33:59:61:HIS:CD2	2.45	0.51
26:1H:1777:U:O2'	26:1H:1778:U:H5'	2.11	0.51
26:1H:1639:U:C2'	26:1H:1640:C:H5''	2.39	0.51
26:14:945:A:OP1	61:14:3541:HOH:O	2.19	0.51
2:12:58:ILE:HD13	2:12:219:VAL:CG2	2.40	0.51
1:13:1179:A:H2'	1:13:1180:A:O4'	2.09	0.51
1:13:859:A:H2'	1:13:860:A:C8	2.45	0.51
26:14:1444(A):A:O2'	26:14:1445:C:OP1	2.29	0.51
1:1G:433:C:H2'	1:1G:434:U:C6	2.45	0.51
1:13:147:G:H1	1:13:175:C:H42	1.58	0.51
12:3A:110:VAL:HG23	12:3A:120:TYR:HB3	1.92	0.51
1:13:994:A:H2'	1:13:994:A:N3	2.26	0.51
26:14:125:G:H5''	54:L5:19:ARG:HD3	1.92	0.51
1:13:580:U:OP1	15:6I:54:ARG:NH2	2.43	0.51
47:H8:109:ALA:HB3	47:H8:142:SER:O	2.11	0.51
1:1G:512:U:H3	1:1G:539:A:H61	1.58	0.51
17:8I:100:LYS:HG2	17:8I:101:ARG:HD3	1.91	0.51
1:1G:985:C:H2'	1:1G:986:A:C8	2.45	0.51
28:71:225:ASN:HB2	28:71:228:SER:H	1.76	0.51
15:6I:43:LEU:HD12	15:6I:56:LEU:HD13	1.92	0.51
34:69:78:THR:O	34:69:80:PRO:HD3	2.11	0.51
26:1H:1607:C:H4'	26:1H:1608:A:O5'	2.09	0.51
22:1K:18:G:N7	26:1H:881:G:N2	2.59	0.51
26:14:28:A:C5	26:14:29:U:C5	2.98	0.51
1:13:224:C:H2'	1:13:225:C:C6	2.45	0.51
1:13:1016:A:H2'	1:13:1017:G:O4'	2.10	0.51
26:14:302:C:P	46:C5:81:LYS:HZ2	2.33	0.51
1:13:814:A:N7	1:13:816:A:C4	2.78	0.51
26:14:2103:C:H2'	26:14:2104:G:C8	2.45	0.51
1:13:61:G:H1	1:13:106:C:H42	1.57	0.51
20:BA:72:LEU:HD11	20:BA:80:ARG:HH21	1.76	0.51
26:14:1444(A):A:HO2'	26:14:1445:C:P	2.33	0.51
26:1H:2199:A:H3'	26:1H:2205:C:H6	1.75	0.51
40:A8:42:ASP:O	40:A8:43:GLU:HB3	2.11	0.51
26:1H:833:U:O2	37:78:55:ARG:NH2	2.42	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1313:U:O4	19:AI:3:ARG:HA	2.11	0.51
10:1I:27:ALA:HB2	10:1I:85:LEU:HD21	1.93	0.51
26:1H:2162:G:H2'	26:1H:2163:C:O4'	2.10	0.51
27:1J:88:C:H5''	27:1J:89:G:C6	2.46	0.51
45:F8:50:LYS:HB3	45:F8:84:ALA:HB2	1.92	0.51
5:4E:145:LYS:O	5:4E:149:GLU:HG2	2.10	0.51
1:13:1330:U:H4'	13:4I:23:TYR:HE1	1.76	0.51
42:85:66:ASN:CB	42:85:76:TYR:HB2	2.40	0.51
22:1K:49:G:H8	22:1K:49:G:OP1	1.94	0.51
37:78:37:GLY:N	37:78:40:SER:OG	2.44	0.51
26:1H:695:G:OP1	26:1H:1380:G:O2'	2.28	0.51
26:14:71:A:C2	45:B5:31:HIS:CE1	2.94	0.51
18:9I:58:LEU:HD23	18:9I:62:GLU:HB3	1.91	0.51
54:L5:12:ARG:NH2	54:L5:44:PRO:HB3	2.24	0.51
26:14:1104:C:H2'	26:14:1105:U:C6	2.46	0.51
5:42:61:TYR:HA	5:42:64:ARG:HB2	1.93	0.51
1:1G:1132:C:H2'	1:1G:1133:G:C8	2.46	0.51
26:1H:882:G:O6	26:1H:893:C:N4	2.44	0.51
1:1G:229:U:H2'	1:1G:230:G:C8	2.46	0.51
2:12:19:HIS:NE2	2:12:204:ASN:HB3	2.26	0.51
4:32:59:ARG:HH21	4:32:66:ARG:NH1	2.07	0.51
26:1H:992:C:H2'	26:1H:993:G:H8	1.76	0.51
29:11:79:VAL:HG21	29:11:111:LEU:HD13	1.91	0.51
26:1H:907:U:O2'	38:88:101:ARG:NH2	2.41	0.51
1:1G:1468:A:H5''	1:1G:1469:G:OP2	2.10	0.51
26:14:749:C:OP2	61:14:3538:HOH:O	2.19	0.51
1:13:1137:C:H1'	1:13:1138:G:C2	2.46	0.51
26:14:587:C:O2	37:35:33:ARG:NH1	2.44	0.51
32:41:59:GLU:O	32:41:63:ILE:HG23	2.11	0.51
2:1E:21:ARG:HB2	2:1E:39:ILE:HD13	1.93	0.51
46:G8:89:PHE:HD1	46:G8:90:LEU:N	2.07	0.51
26:1H:2510:C:H2'	26:1H:2511:U:C6	2.46	0.51
49:J8:50:ARG:HB3	49:J8:59:THR:HG23	1.92	0.51
41:B8:13:ARG:HB3	41:B8:13:ARG:HH11	1.75	0.51
26:1H:1790:C:H5''	26:1H:1791:A:OP1	2.11	0.51
26:1H:1604:C:OP1	61:1H:3567:HOH:O	2.19	0.51
55:Q8:6:THR:HG23	55:Q8:64:TYR:HD2	1.75	0.51
26:1H:1052:C:H2'	26:1H:1108:U:H3	1.75	0.51
26:14:1826:G:H2'	26:14:1827:C:H6	1.75	0.51
26:14:1021:A:H8	26:14:1021:A:H3'	1.76	0.51
26:14:1678:G:N2	26:14:1989:G:N2	2.56	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:32:SER:HA	29:11:35:LYS:HZ3	1.75	0.51
26:14:636:G:O2'	26:14:638:G:O2'	2.22	0.51
22:1K:76:A:C8	26:1H:2507:C:H1'	2.46	0.51
4:32:108:LEU:HD13	4:32:174:LEU:HB3	1.92	0.51
46:C5:42:VAL:HG13	46:C5:65:ALA:HB3	1.93	0.51
26:14:1416:G:H2'	26:14:1417:C:C6	2.45	0.51
1:1G:371:G:H1	1:1G:390:C:H42	1.59	0.51
1:1G:370:C:C2	1:1G:392:G:N2	2.79	0.51
15:6A:70:LEU:HG	15:6A:78:TYR:HB2	1.93	0.51
30:29:23:VAL:HA	30:29:184:VAL:O	2.10	0.51
7:6E:22:LEU:HD13	7:6E:62:PHE:CE2	2.46	0.51
26:14:2734:A:H2'	26:14:2735:G:O4'	2.10	0.51
31:31:198:ALA:O	31:31:201:VAL:HG12	2.10	0.51
1:13:1025:U:H5'	1:13:1026:G:H5'	1.93	0.51
26:1H:192:C:P	61:1H:3615:HOH:O	2.67	0.51
36:68:7:TYR:CZ	36:68:44:LYS:HG3	2.46	0.51
26:14:1069:A:H3'	26:14:1073:A:H5''	1.93	0.51
26:1H:1000:A:N6	26:1H:1154:G:O2'	2.43	0.51
32:41:33:ARG:O	32:41:162:THR:HG23	2.11	0.51
1:13:454:C:H41	1:13:478:A:H2	1.57	0.51
38:45:102:VAL:O	38:45:102:VAL:HG12	2.11	0.51
26:1H:732:C:H3'	61:1H:3517:HOH:O	2.11	0.51
29:11:34:VAL:C	29:11:35:LYS:HZ2	2.13	0.51
26:14:141:A:OP2	26:14:141(A):C:N4	2.43	0.51
26:14:1593:G:H2'	26:14:1594:G:H8	1.72	0.51
1:13:1149:C:H2'	1:13:1150:U:C6	2.46	0.51
50:K8:47:ASN:C	50:K8:49:LYS:H	2.12	0.51
30:21:2:LYS:HD2	30:21:95:ILE:HG13	1.93	0.51
26:1H:2291:U:H5''	26:1H:2380:C:O2	2.11	0.51
26:14:2006:C:O2'	26:14:2823:A:N3	2.44	0.51
26:1H:1444:G:C2	26:1H:1548:C:N3	2.79	0.51
18:9A:22:VAL:C	18:9A:24:ALA:H	2.13	0.51
47:D5:48:PHE:O	47:D5:52:SER:HB3	2.09	0.51
26:14:2022:U:O2'	26:14:2617:C:H5'	2.10	0.51
36:68:98:VAL:HG11	36:68:114:ILE:HG23	1.93	0.51
49:J8:93:GLU:CD	49:J8:94:LEU:H	2.12	0.51
5:4E:10:MET:HE3	5:4E:13:ILE:HD13	1.93	0.51
31:39:114:VAL:HG11	31:39:202:PHE:CZ	2.44	0.51
47:H8:44:PHE:HE2	47:H8:86:VAL:HG11	1.75	0.51
26:1H:2306:C:H3'	26:1H:2307:G:C5'	2.41	0.51
41:75:91:ARG:HD2	41:75:124:ASP:OD2	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1636:C:H2'	26:14:1637:A:C8	2.46	0.51
26:1H:996:A:H4'	42:C8:92:ARG:NE	2.26	0.51
31:39:7:TYR:CD1	31:39:18:ARG:HB3	2.46	0.51
26:1H:1359:A:C2	26:1H:1372:U:N3	2.77	0.51
23:2L:24:C:H2'	23:2L:25:U:H6	1.76	0.51
4:32:168:ARG:HH11	4:32:169:LYS:H	1.56	0.51
57:3L:15:G:H2'	57:3L:59:A:N1	2.26	0.51
26:14:2480:C:H2'	26:14:2481:G:H5'	1.93	0.51
2:12:125:PRO:C	2:12:127:ILE:H	2.14	0.51
26:14:528:A:C2	26:14:2042:A:H2'	2.45	0.51
1:13:1226:C:H4'	19:AI:80:TYR:CZ	2.45	0.51
1:1G:1152:A:OP1	10:1A:68:HIS:NE2	2.44	0.51
34:61:11:ASN:O	34:61:12:LEU:HB2	2.10	0.51
26:14:2232:U:P	49:F5:40:ARG:HH22	2.33	0.51
52:M8:15:ILE:HD11	52:M8:32:TYR:CE1	2.46	0.51
41:B8:51:ARG:HB2	41:B8:98:LYS:HD3	1.92	0.51
26:14:1190:G:OP1	37:35:32:THR:HA	2.10	0.51
1:1G:1446:A:C2	41:75:118:ARG:HD2	2.46	0.51
1:1G:1446:A:N3	41:75:118:ARG:HD2	2.26	0.51
30:21:52:LEU:O	30:21:75:VAL:HG23	2.10	0.51
15:6A:16:ALA:HB1	15:6A:21:ASP:HB3	1.92	0.51
34:61:1:MET:HB3	34:61:21:VAL:O	2.11	0.51
4:32:117:ALA:O	4:32:121:VAL:HG23	2.10	0.51
8:7E:94:TYR:HE1	8:7E:132:GLU:HB2	1.76	0.51
26:1H:988:A:P	51:L8:11:SER:HB2	2.50	0.51
6:5E:70:ASP:N	6:5E:70:ASP:OD1	2.42	0.51
37:35:132:LYS:HE3	37:35:135:LEU:HD11	1.92	0.51
26:14:259:G:O2'	26:14:621:A:O2'	2.04	0.51
26:1H:2068:U:N3	26:1H:2430:A:C2	2.72	0.51
31:31:184:TYR:O	31:31:188:ARG:HG3	2.10	0.51
5:4E:100:VAL:HG22	5:4E:118:ILE:HG22	1.92	0.51
41:B8:50:ILE:O	41:B8:99:LEU:HD12	2.10	0.51
26:1H:2795:G:H2'	26:1H:2798:C:H5''	1.93	0.51
1:1G:486:U:H2'	1:1G:487:A:C8	2.45	0.51
22:1K:53:G:H1	22:1K:61:C:N4	2.07	0.51
1:13:339:C:OP2	36:68:97:ARG:HD3	2.11	0.51
2:12:71:VAL:HB	2:12:165:VAL:HG22	1.93	0.51
25:4L:13:A:N3	25:4L:14:A:H1'	2.25	0.51
26:1H:2683:C:O2	36:68:70:LYS:HE3	2.10	0.51
56:1L:5:C:H42	56:1L:68:G:H1	1.59	0.51
26:14:1665:A:H4'	36:25:67:LYS:HB2	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6A:8:LYS:O	15:6A:12:ILE:HG13	2.10	0.51
8:7E:51:VAL:HG11	8:7E:60:ARG:HD2	1.93	0.51
26:14:1796:U:H2'	26:14:1797:C:C6	2.46	0.51
32:49:116:ASP:HB3	32:49:118:ARG:HH12	1.76	0.51
48:I8:41:ARG:NE	48:I8:41:ARG:HA	2.26	0.51
26:14:2791:C:O2'	26:14:2792:G:O5'	2.27	0.51
26:14:2791:C:HO2'	26:14:2792:G:P	2.34	0.51
26:14:2791:C:N4	26:14:2802:G:O6	2.44	0.51
26:1H:1680:U:O2'	26:1H:1763:G:N7	2.31	0.51
26:1H:1859:A:N6	26:1H:1883:G:O2'	2.44	0.51
26:14:2393:A:H4'	37:35:62:LEU:O	2.10	0.51
25:4K:13:A:H2'	25:4K:14:A:O4'	2.11	0.51
34:69:92:VAL:HB	34:69:120:ILE:HB	1.92	0.51
1:1G:801:U:H2'	1:1G:802:A:H8	1.74	0.51
26:1H:616:A:C4	31:31:180:GLY:HA2	2.46	0.51
32:41:73:ALA:HA	32:41:88:ILE:HD11	1.93	0.51
26:14:918:A:H5''	27:1J:97:G:O2'	2.11	0.51
16:7I:72:ARG:O	16:7I:75:ARG:HB3	2.11	0.51
8:7E:7:ALA:HB2	8:7E:85:ARG:HH11	1.76	0.51
26:1H:2378:A:O2'	40:A8:21:THR:HG21	2.10	0.51
1:13:200:G:N2	1:13:218:C:C2	2.79	0.51
1:1G:688:G:H2'	1:1G:689:C:H6	1.76	0.51
46:G8:20:TYR:CE2	46:G8:43:ASN:HA	2.46	0.51
26:14:1204:A:C2	26:14:1241:A:N1	2.78	0.51
26:1H:660:G:H21	37:78:12:ALA:HB2	1.76	0.51
11:2A:85:ARG:HA	11:2A:112:THR:OG1	2.11	0.51
43:95:15:GLU:HG3	43:95:16:PRO:HD2	1.93	0.51
1:13:264:U:O2	17:8I:64:PRO:HG2	2.12	0.51
7:6E:91:VAL:O	7:6E:96:GLN:NE2	2.40	0.51
1:1G:1478:C:H2'	1:1G:1479:C:C6	2.46	0.51
13:4A:96:LEU:HD22	13:4A:97:PRO:HD2	1.93	0.51
27:1J:115:G:H8	27:1J:115:G:OP2	1.94	0.51
8:72:9:MET:HG3	8:72:26:VAL:HG21	1.93	0.51
48:I8:36:ILE:HD13	48:I8:36:ILE:O	2.11	0.51
4:32:4:TYR:HE2	4:32:11:LEU:HD21	1.75	0.51
11:2I:107:SER:O	11:2I:108:ILE:HG13	2.11	0.51
26:1H:585:G:H3'	61:1H:3512:HOH:O	2.11	0.50
29:19:242:ARG:HG2	29:19:242:ARG:HH11	1.76	0.50
9:8E:50:LEU:HD22	9:8E:55:ALA:HB3	1.93	0.50
29:11:40:THR:HG23	29:11:41:GLY:N	2.26	0.50
36:68:28:SER:OG	36:68:29:ASN:N	2.43	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:247:G:H4'	26:14:386:G:C5	2.46	0.50
26:14:909:A:O2'	26:14:910:A:H5''	2.11	0.50
23:2L:56:PSU:N3	23:2L:59:A:OP2	2.30	0.50
37:78:83:VAL:CG1	37:78:112:LEU:HD21	2.41	0.50
26:14:942:G:H4'	26:14:1190:G:H5'	1.93	0.50
30:29:11:MET:SD	30:29:24:THR:HG22	2.51	0.50
10:1I:27:ALA:HB2	10:1I:85:LEU:HD11	1.92	0.50
1:13:381:C:H2'	1:13:382:A:O4'	2.11	0.50
16:7I:13:HIS:C	16:7I:15:PRO:HD3	2.31	0.50
26:14:520:G:H2'	26:14:521:G:C8	2.46	0.50
26:1H:37:C:O2'	26:1H:38:A:H5'	2.12	0.50
12:3I:66:VAL:HG21	12:3I:98:TYR:HE1	1.76	0.50
26:1H:569:U:H5''	26:1H:821:A:C2	2.46	0.50
26:1H:2470:G:H5'	38:88:56:ARG:NH2	2.26	0.50
26:1H:2212:A:H1'	26:1H:2215:G:C5	2.46	0.50
1:1G:104:G:H2'	1:1G:105:G:H5''	1.91	0.50
26:14:123:G:O6	61:14:3542:HOH:O	2.19	0.50
30:29:167:VAL:HG11	30:29:189:PRO:HD3	1.92	0.50
26:1H:2054:A:H5''	26:1H:2055:C:O5'	2.11	0.50
26:14:2712:U:H1'	26:14:2712(A):A:C8	2.46	0.50
26:1H:736:C:O5'	26:1H:736:C:H6	1.94	0.50
15:6I:53:HIS:ND1	15:6I:53:HIS:O	2.43	0.50
51:H5:5:LYS:HD3	51:H5:34:GLU:OE2	2.11	0.50
1:13:46:G:H2'	1:13:366:C:C5	2.46	0.50
35:58:12:ARG:HG2	35:58:13:TRP:N	2.26	0.50
1:1G:1163:C:H2'	1:1G:1164:G:C8	2.46	0.50
1:1G:17:U:H2'	1:1G:18:C:C6	2.46	0.50
26:1H:1636:C:H2'	26:1H:1637:A:C8	2.46	0.50
1:1G:1346:A:N1	1:1G:1374:A:H5''	2.26	0.50
17:8I:65:ILE:HG21	17:8I:69:LYS:HE2	1.94	0.50
8:7E:87:SER:HB2	8:7E:93:VAL:CB	2.38	0.50
26:14:140:A:C8	26:14:1408:C:O2'	2.63	0.50
26:1H:674:G:C1'	31:31:74:ARG:HD3	2.42	0.50
5:42:76:ILE:HG23	5:42:142:LEU:HD13	1.92	0.50
46:C5:86:ARG:HG3	46:C5:87:LYS:N	2.26	0.50
26:14:1180:C:H2'	26:14:1181:C:C6	2.47	0.50
45:B5:51:VAL:HG13	45:B5:81:VAL:CG2	2.41	0.50
40:A8:33:LYS:HB3	40:A8:34:HIS:CD2	2.47	0.50
13:4A:11:ARG:HG2	13:4A:12:ASN:H	1.76	0.50
3:22:6:HIS:CD2	3:22:7:PRO:HD2	2.46	0.50
26:1H:2887:U:H2'	26:1H:2888:C:H6	1.75	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2864:G:H2'	26:1H:2865:U:C6	2.47	0.50
1:1G:980:C:H3'	1:1G:981:U:C6	2.46	0.50
4:3E:173:TRP:CE3	4:3E:193:ASP:HB3	2.47	0.50
26:14:920:G:H2'	26:14:921:G:C8	2.45	0.50
26:14:616:A:C8	31:39:176:LEU:HD11	2.46	0.50
32:49:173:LEU:HD22	32:49:178:PHE:CE2	2.46	0.50
26:14:118:A:N3	26:14:178:G:H1'	2.27	0.50
34:69:4:ILE:HD11	34:69:39:ALA:HA	1.94	0.50
26:1H:937:U:H2'	26:1H:938:G:O4'	2.11	0.50
5:4E:33:VAL:HG22	5:4E:43:LEU:HD12	1.93	0.50
26:14:223:A:O2'	26:14:420:C:O2	2.27	0.50
1:1G:1157:A:C8	1:1G:1158:C:H5	2.28	0.50
26:1H:1337:G:H2'	26:1H:1338:G:H8	1.76	0.50
26:14:831:G:OP1	61:14:3544:HOH:O	2.20	0.50
26:1H:259:G:H21	26:1H:621:A:H8	1.59	0.50
40:65:14:VAL:HG11	40:65:89:ARG:NH1	2.26	0.50
29:11:41:GLY:C	29:11:43:ARG:H	2.15	0.50
8:7E:95:VAL:HG22	8:7E:96:GLY:O	2.10	0.50
1:13:1145:C:H4'	1:13:1146:A:H8	1.75	0.50
26:14:2171:A:H8	26:14:2172:U:H5''	1.76	0.50
26:14:1010:A:N3	26:14:1153:C:H1'	2.26	0.50
13:4A:14:ARG:HA	13:4A:43:THR:O	2.12	0.50
26:1H:1899:G:N2	26:1H:1902:C:H41	2.09	0.50
26:14:654(B):C:H2'	26:14:654(C):G:C8	2.47	0.50
26:14:448:U:C4	26:14:583:G:H1'	2.46	0.50
1:1G:1325:C:H2'	1:1G:1326:C:H6	1.76	0.50
26:1H:722:A:H2'	26:1H:723:G:C8	2.45	0.50
1:1G:1084:G:H5'	1:1G:1102:A:OP2	2.11	0.50
31:31:198:ALA:O	31:31:201:VAL:N	2.45	0.50
15:6I:3:ILE:HD12	15:6I:34:LEU:HD23	1.93	0.50
26:1H:1638:C:O2	26:1H:2698:U:O2'	2.23	0.50
26:14:839:U:H2'	26:14:840:C:C6	2.46	0.50
26:14:2124:G:N2	26:14:2175:C:O2	2.44	0.50
26:14:2360:A:H2'	26:14:2361:A:O4'	2.12	0.50
41:B8:20:PRO:HG2	41:B8:86:ILE:O	2.12	0.50
1:13:1240:U:OP2	7:6E:116:ALA:N	2.38	0.50
6:5E:10:LEU:HD13	6:5E:61:LEU:HD13	1.94	0.50
26:1H:2367:G:H2'	26:1H:2368:C:H6	1.76	0.50
1:13:191(D):U:H2'	1:13:191(E):G:C8	2.46	0.50
1:1G:350:G:H5'	1:1G:351:G:OP2	2.11	0.50
26:1H:138:G:H5''	26:1H:139:G:OP2	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2287:A:H2	26:1H:2346:A:C2	2.27	0.50
26:1H:1652:A:C2'	26:1H:1653:G:H5'	2.41	0.50
1:13:1497:G:C2'	1:13:1498:U:H5'	2.40	0.50
30:29:105:THR:HG21	30:29:164:ARG:HH21	1.76	0.50
4:3E:153:ARG:O	4:3E:181:MET:HE1	2.12	0.50
2:12:166:ASP:OD2	2:12:169:LYS:HB2	2.12	0.50
23:2L:54:G:H2'	23:2L:55:5MU:H6	1.76	0.50
1:1G:229:U:H2'	1:1G:230:G:H8	1.76	0.50
3:22:11:ARG:HB3	3:22:15:THR:HB	1.93	0.50
42:C8:90:VAL:HB	43:D8:39:LEU:HB3	1.94	0.50
1:1G:166:G:H2'	1:1G:167:G:C8	2.46	0.50
22:1K:41:A:H2'	22:1K:42:A:C8	2.46	0.50
1:1G:757:U:O2'	1:1G:879:C:O2	2.24	0.50
1:1G:513:C:H2'	1:1G:514:C:H6	1.76	0.50
46:G8:34:LYS:HG2	46:G8:34:LYS:O	2.11	0.50
26:14:2862:G:H2'	26:14:2863:C:C6	2.46	0.50
26:14:1657:C:H2'	26:14:1658:C:C6	2.46	0.50
1:1G:464:G:H1'	1:1G:468:A:H61	1.76	0.50
40:A8:58:LEU:HD12	40:A8:68:GLN:OE1	2.11	0.50
1:1G:564:C:O2'	8:72:91:ARG:NH1	2.36	0.50
26:14:856:C:H2'	26:14:857:C:H6	1.77	0.50
3:2E:48:TYR:OH	3:2E:122:GLU:OE2	2.28	0.50
3:22:155:GLY:HA3	3:22:196:LEU:HD13	1.92	0.50
26:1H:1520:U:H2'	26:1H:1521:G:O4'	2.11	0.50
26:1H:2751:G:N3	33:51:3:ARG:HD3	2.26	0.50
26:1H:270(J):G:H1	26:1H:270(P):C:N4	2.00	0.50
26:1H:607:U:OP1	31:31:102:PRO:HA	2.12	0.50
26:1H:71:A:OP1	26:1H:72:U:H2'	2.12	0.50
18:9I:37:VAL:HG12	18:9I:41:LYS:HE3	1.92	0.50
1:1G:630:G:H5'	1:1G:631:G:OP2	2.11	0.50
29:11:30:GLU:OE1	29:11:63:ARG:NE	2.29	0.50
29:19:85:ASP:HB2	29:19:92:ILE:HD13	1.93	0.50
1:13:1128:C:H2'	1:13:1139:G:O6	2.12	0.50
26:14:2261:C:C5	48:E5:16:SER:HB3	2.46	0.50
11:2I:124:LYS:HB2	11:2I:125:PHE:CD1	2.47	0.50
46:G8:54:LYS:HE2	46:G8:55:TYR:CZ	2.46	0.50
3:2E:147:LYS:HB3	3:2E:203:PHE:HD2	1.76	0.50
1:13:324:G:N1	1:13:327:A:OP2	2.41	0.50
26:14:2383:G:O2'	26:14:2384:G:H5'	2.11	0.50
39:55:101:ALA:HA	53:J5:44:THR:HG21	1.94	0.50
26:1H:1799:G:H5'	26:1H:1819:A:H61	1.77	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:8E:114:TYR:CE2	10:1I:59:SER:HA	2.47	0.50
6:5E:22:GLU:O	6:5E:26:ILE:HG13	2.11	0.50
36:25:73:ASP:N	36:25:73:ASP:OD1	2.39	0.50
8:7E:45:ILE:HD12	8:7E:47:GLY:HA2	1.93	0.50
52:M8:15:ILE:HD11	52:M8:32:TYR:CD1	2.46	0.50
42:C8:58:ARG:HH11	42:C8:93:LYS:NZ	2.09	0.50
1:1G:359:U:H2'	1:1G:360:A:C8	2.46	0.50
26:1H:2199:A:H3'	26:1H:2205:C:C6	2.46	0.50
26:1H:2698:U:H2'	26:1H:2699:C:C6	2.47	0.50
26:1H:2017:U:O2	53:N8:10:LYS:HB2	2.12	0.50
7:6E:80:VAL:HG22	7:6E:85:TYR:HE1	1.76	0.50
26:14:2400:G:H2'	26:14:2401:U:H6	1.77	0.50
1:1G:49:U:C2	1:1G:361:G:N2	2.80	0.50
29:11:96:HIS:NE2	29:11:102:LYS:HE2	2.27	0.50
1:1G:8:A:N6	4:32:209:ARG:HB2	2.26	0.50
3:2E:64:VAL:HG12	3:2E:66:VAL:HG23	1.93	0.50
26:14:308:G:H5''	26:14:309:G:OP2	2.11	0.50
1:1G:297:G:N2	1:1G:300:A:OP2	2.39	0.50
26:1H:768:G:N2	26:1H:1379:A:O2'	2.45	0.50
38:88:109:VAL:HG13	38:88:113:GLN:HB3	1.93	0.50
26:14:2576:G:O2'	26:14:2579:C:OP2	2.23	0.50
15:6I:18:PHE:CZ	15:6I:21:ASP:HB2	2.47	0.50
26:14:329:G:O6	46:C5:19:LYS:HE2	2.11	0.50
32:41:46:ALA:HB1	32:41:49:ASP:O	2.12	0.50
26:1H:1570:A:H5'	29:11:37:LEU:CD2	2.41	0.50
40:A8:27:SER:HA	40:A8:88:ASP:CB	2.42	0.50
34:69:101:LEU:H	34:69:101:LEU:HD23	1.77	0.50
22:1K:75:C:O2	26:1H:2507:C:O2'	2.27	0.50
4:32:108:LEU:HA	4:32:170:VAL:HG11	1.93	0.50
37:78:115:LEU:HA	37:78:134:ALA:CB	2.41	0.50
49:J8:15:ALA:O	49:J8:40:ARG:HG2	2.11	0.50
26:1H:1210:A:H5''	26:1H:1212:G:O4'	2.11	0.50
1:1G:1132:C:H2'	1:1G:1133:G:H8	1.75	0.50
16:7I:45:THR:HG22	16:7I:46:PRO:HD2	1.94	0.50
1:1G:1113:C:H2'	1:1G:1114:C:C6	2.47	0.50
1:1G:651:C:H2'	1:1G:652:U:C6	2.47	0.50
33:59:149:ARG:NH1	33:59:162:ILE:O	2.45	0.50
18:9A:74:ARG:NH1	18:9A:81:PHE:HA	2.26	0.50
1:1G:977:A:O2'	1:1G:981:U:N3	2.44	0.50
17:8I:59:ILE:HG22	17:8I:73:VAL:HA	1.94	0.50
27:16:44:G:H1'	27:16:47:C:N4	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:302:C:H2'	26:1H:303:U:C6	2.46	0.50
1:1G:601:C:H2'	1:1G:602:A:C8	2.47	0.50
26:1H:1346:G:H2'	26:1H:1347:G:H8	1.76	0.50
26:1H:994:C:OP2	42:C8:54:LYS:NZ	2.44	0.50
39:98:87:TYR:HE1	39:98:117:VAL:HG12	1.75	0.50
26:1H:1170:G:H2'	26:1H:1171:G:H5'	1.94	0.50
38:45:98:LYS:HB3	38:45:99:PRO:HD2	1.93	0.50
26:14:110:G:C2	26:14:111:A:C8	2.99	0.50
16:7I:35:LYS:HE2	16:7I:37:GLY:O	2.11	0.50
42:C8:28:ARG:NH1	42:C8:38:THR:OG1	2.43	0.50
8:7E:82:HIS:O	8:7E:137:VAL:HA	2.11	0.50
26:1H:2693:A:H2'	26:1H:2694:G:H8	1.77	0.50
1:13:791:G:C6	1:13:792:A:C2	3.00	0.50
29:19:273:ARG:O	29:19:273:ARG:HG2	2.11	0.50
26:1H:1857:G:O2'	26:1H:1885:A:N6	2.37	0.50
29:19:71:ASP:OD1	29:19:71:ASP:N	2.43	0.50
26:1H:311:A:C6	26:1H:328:U:C4	2.99	0.50
37:35:121:LYS:HG2	37:35:123:LEU:HG	1.94	0.50
37:78:82:GLY:HA2	37:78:113:LYS:O	2.10	0.50
11:2I:19:ALA:O	11:2I:82:VAL:HA	2.11	0.50
1:13:477:G:H2'	1:13:478:A:C8	2.46	0.50
13:4A:84:ILE:HG23	19:AA:74:PHE:HE1	1.77	0.50
2:12:114:ARG:HG3	2:12:118:LEU:HD12	1.93	0.50
13:4I:3:ARG:NH2	13:4I:9:ILE:HD11	2.26	0.50
1:13:351:G:H4'	1:13:352:C:OP1	2.10	0.50
26:14:29:U:H2'	26:14:30:G:C8	2.47	0.50
40:A8:101:LEU:O	40:A8:101:LEU:HD12	2.12	0.50
2:1E:17:PHE:HB2	2:1E:41:ILE:HG22	1.94	0.50
38:88:35:VAL:HG13	38:88:130:LYS:HB3	1.94	0.50
1:13:1273:G:H3'	1:13:1274:G:C8	2.46	0.50
39:98:14:SER:OG	39:98:15:SER:N	2.44	0.50
26:1H:764:A:N3	29:11:213:ARG:HD3	2.26	0.50
26:1H:1889:A:H2'	26:1H:1890:A:C8	2.47	0.50
15:6A:87:ILE:HG22	15:6A:88:ARG:N	2.27	0.50
35:58:47:ALA:HB2	35:58:112:LEU:HD11	1.94	0.50
26:1H:265:A:H8	26:1H:266:G:H1'	1.76	0.50
26:1H:2564:A:C2	26:1H:2647:U:H4'	2.46	0.50
47:H8:30:ASN:OD1	47:H8:33:LEU:HD23	2.12	0.50
1:13:1449:C:O2'	1:13:1451:A:N6	2.45	0.50
8:7E:8:ASP:OD2	8:7E:12:ARG:HD2	2.11	0.50
26:1H:1322:A:N1	26:1H:1333:C:O2'	2.36	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:895:G:H2'	1:1G:896:C:C6	2.47	0.50
32:41:150:ASP:OD1	32:41:153:ARG:NH2	2.40	0.50
32:49:20:ILE:HA	32:49:25:TYR:HD2	1.77	0.50
19:AI:67:VAL:HG12	19:AI:68:GLY:N	2.26	0.50
26:1H:1729:A:O2'	26:1H:1730:U:O5'	2.21	0.50
16:7I:68:ASP:O	16:7I:71:ARG:HG2	2.11	0.50
14:5I:6:LEU:HD12	14:5I:23:ARG:HH22	1.76	0.50
26:14:2165:G:H3'	26:14:2166:G:H5'	1.93	0.50
26:1H:1188:U:C4'	43:D8:79:VAL:HG22	2.42	0.50
30:29:116:VAL:HG23	30:29:120:TRP:HB2	1.94	0.50
50:K8:37:PHE:O	50:K8:41:ILE:HG22	2.11	0.50
1:1G:1053:G:N7	1:1G:1199:U:H3'	2.26	0.50
26:14:2468:G:H3'	26:14:2476:A:N1	2.27	0.50
15:6I:82:ILE:HG22	15:6I:83:GLU:N	2.26	0.50
39:98:103:ARG:HH12	39:98:110:PRO:HD3	1.76	0.50
1:1G:998(A):C:H2'	1:1G:999:U:C6	2.47	0.50
3:2E:91:LEU:HB2	3:2E:99:VAL:HG21	1.93	0.50
26:14:55:G:H2'	26:14:56:A:C8	2.47	0.50
26:14:2107:C:H2'	26:14:2108:C:O4'	2.11	0.50
1:13:491:G:H2'	1:13:492:G:C8	2.47	0.50
26:14:2190:G:H2'	26:14:2191:G:O4'	2.12	0.50
20:BA:11:SER:HA	20:BA:13:LEU:H	1.75	0.50
46:C5:39:VAL:O	46:C5:40:GLU:HB2	2.12	0.50
22:1K:1:G:H2'	22:1K:2:G:O4'	2.12	0.50
1:13:405:U:OP2	4:3E:3:ARG:NH2	2.45	0.50
1:13:1412:C:H2'	1:13:1413:A:C8	2.46	0.50
26:1H:953:A:OP2	38:88:16:ARG:NH1	2.45	0.50
26:1H:770:G:OP2	61:1H:3560:HOH:O	2.17	0.50
26:14:1059:G:H2'	26:14:1060:U:C5	2.46	0.50
26:1H:2402:C:H5	26:1H:2415:G:H22	1.59	0.50
18:9A:29:PHE:CD1	18:9A:29:PHE:N	2.80	0.50
46:C5:82:PRO:HG3	46:C5:97:ARG:HE	1.77	0.50
26:14:2271:G:N7	61:14:3576:HOH:O	2.35	0.50
30:29:54:GLN:CG	30:29:55:ASN:H	2.24	0.50
26:14:2698:U:H2'	26:14:2699:C:C6	2.47	0.50
46:C5:87:LYS:HB3	46:C5:94:LYS:HA	1.93	0.50
1:13:736:C:H2'	1:13:737:A:H8	1.75	0.50
26:1H:1532:C:H42	26:1H:1539:G:H1	1.60	0.50
57:3L:59:A:H2'	57:3L:60:U:H5'	1.93	0.50
26:1H:1442:G:C2	26:1H:1550:C:O2	2.65	0.50
26:14:2306:C:C3'	26:14:2307:G:H5''	2.42	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:108:LEU:HD22	4:32:174:LEU:HD22	1.94	0.50
26:14:1054:A:N6	26:14:1104:C:H42	2.10	0.50
34:61:77:LEU:HD22	34:61:79:ILE:HD11	1.93	0.50
20:BA:87:LYS:O	20:BA:91:LEU:HG	2.11	0.50
26:14:864:G:C6	26:14:865:C:N4	2.79	0.50
1:1G:1041:A:H5''	1:1G:1042:G:OP2	2.12	0.50
26:14:2262:U:H4'	26:14:2328:A:C2	2.47	0.50
26:14:1260:G:H2'	26:14:1261:C:C6	2.47	0.50
26:14:2430:A:H8	26:14:2431:U:C5	2.28	0.50
1:1G:828:A:C8	1:1G:859:A:C4	3.00	0.50
47:H8:44:PHE:CE2	47:H8:86:VAL:HG11	2.47	0.50
31:39:53:THR:HG22	31:39:56:GLU:CD	2.32	0.50
26:1H:713:G:H2'	26:1H:714:U:C6	2.46	0.50
26:1H:1268:A:H2'	26:1H:1269:A:O4'	2.11	0.50
26:14:1448:G:H1'	26:14:1528:A:H62	1.77	0.50
49:F5:18:ILE:HG12	49:F5:37:ILE:HG13	1.94	0.50
6:5E:14:LEU:HD22	6:5E:18:GLN:HB3	1.93	0.50
38:45:4:PRO:HD3	38:45:70:PRO:O	2.11	0.50
17:8I:28:PRO:HA	17:8I:35:VAL:HA	1.94	0.50
26:14:590:A:H2'	26:14:591:C:C6	2.47	0.50
26:14:1421:G:C2	26:14:1422:G:C8	2.99	0.50
23:2K:20:G:C2	23:2K:58:A:N3	2.80	0.50
26:1H:127:A:H5''	26:1H:128:C:C6	2.46	0.50
26:14:2552:U:O5'	26:14:2552:U:H6	1.95	0.50
1:13:677:U:H3	1:13:713:G:H22	1.59	0.50
1:13:1464:G:H2'	1:13:1465:C:H6	1.77	0.50
37:35:97:PRO:HG3	37:35:112:LEU:HD12	1.92	0.50
26:14:661:C:H1'	37:35:12:ALA:HA	1.93	0.49
26:1H:1050:A:O2'	26:1H:2752:C:H1'	2.11	0.49
38:45:35:VAL:HG22	38:45:102:VAL:HG22	1.92	0.49
32:41:112:PRO:CB	52:M8:37:SER:H	2.22	0.49
26:1H:1359:A:H2'	26:1H:1360:A:H5'	1.93	0.49
26:1H:1026:U:H4'	26:1H:1027:A:OP1	2.12	0.49
13:4A:80:ARG:O	13:4A:84:ILE:HB	2.12	0.49
26:1H:1538:G:H2'	26:1H:1539:G:H8	1.77	0.49
26:14:71:A:H4'	26:14:72:U:H5''	1.92	0.49
43:D8:16:PRO:HA	43:D8:96:ILE:HG22	1.93	0.49
14:5A:59:ALA:HB1	14:5A:61:TRP:CZ3	2.46	0.49
1:1G:407:G:P	4:32:115:ARG:HH21	2.36	0.49
26:1H:2629:A:OP1	26:1H:2629:A:H4'	2.12	0.49
11:2I:63:LEU:H	11:2I:63:LEU:HD12	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:75:54:ARG:HG3	41:75:59:THR:HG21	1.93	0.49
26:14:2250:G:C5	38:45:82:ARG:HD2	2.47	0.49
30:29:171:GLU:O	30:29:184:VAL:HA	2.11	0.49
26:14:2395:C:H2'	26:14:2396:G:O4'	2.12	0.49
42:C8:88:ILE:O	42:C8:88:ILE:HG22	2.11	0.49
26:14:2117:A:H2'	26:14:2118:U:C6	2.47	0.49
35:15:61:ARG:HA	35:15:61:ARG:NH1	2.26	0.49
26:14:2745:C:O2'	33:59:143:GLN:HA	2.12	0.49
1:1G:1067:A:H1'	1:1G:1068:G:C8	2.47	0.49
19:AI:23:ASN:HD21	19:AI:43:GLU:HB2	1.77	0.49
26:14:2850:A:N7	26:14:2868:A:O2'	2.32	0.49
26:14:2400:G:H2'	26:14:2401:U:C6	2.47	0.49
26:1H:2002:G:N7	61:1H:3623:HOH:O	2.33	0.49
9:82:24:GLY:HA2	9:82:59:PHE:C	2.32	0.49
26:1H:631:A:OP1	37:78:65:ARG:NH2	2.33	0.49
26:14:698:C:O2'	26:14:734:A:N6	2.45	0.49
16:7A:4:ILE:HB	16:7A:66:PRO:HB3	1.92	0.49
26:1H:2335:A:C8	26:1H:2337:G:C5	3.00	0.49
7:6E:8:GLU:OE2	7:6E:8:GLU:N	2.45	0.49
32:41:81:LYS:NZ	32:41:81:LYS:H	2.10	0.49
26:1H:2175:C:O2'	28:71:219:GLY:N	2.44	0.49
1:13:622:A:C8	1:13:623:C:C6	3.00	0.49
1:1G:1316:G:N2	1:1G:1318:A:H3'	2.28	0.49
40:65:87:PHE:CZ	40:65:102:ALA:HB2	2.47	0.49
28:71:6:ARG:HG2	28:71:34:THR:OG1	2.12	0.49
5:42:144:THR:O	5:42:148:VAL:HG23	2.12	0.49
7:62:26:PHE:CD2	7:62:30:ILE:HD11	2.48	0.49
38:88:78:PRO:HB2	38:88:81:VAL:HG11	1.94	0.49
1:13:1034:G:N2	1:13:1035:A:N7	2.50	0.49
1:1G:1004:A:H3'	1:1G:1004:A:N3	2.26	0.49
24:3K:76:A:H8	26:1H:2394:C:N4	2.09	0.49
57:3L:51:A:H62	57:3L:63:U:H3	1.60	0.49
45:B5:40:LYS:HA	45:B5:51:VAL:HG11	1.93	0.49
43:D8:38:LEU:O	43:D8:51:VAL:HG23	2.12	0.49
23:2K:2:G:H2'	23:2K:3:C:H6	1.75	0.49
1:1G:1448:C:H2'	1:1G:1449:C:O4'	2.12	0.49
15:6A:77:ARG:HA	15:6A:80:ALA:HB3	1.94	0.49
26:14:1794:U:H2'	26:14:1795:C:C6	2.47	0.49
26:1H:363(B):G:H2'	26:1H:363(C):G:C8	2.47	0.49
1:1G:600:C:H2'	1:1G:601:C:C6	2.47	0.49
1:13:292:G:C5	1:13:293:G:H1'	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2841:C:H2'	26:1H:2842:G:H8	1.77	0.49
30:21:88:GLY:O	30:21:89:ASP:HB2	2.12	0.49
32:41:102:PHE:HA	32:41:105:LYS:HE2	1.94	0.49
26:1H:606:U:H4'	26:1H:658:C:H4'	1.95	0.49
1:13:872:A:C4	1:13:874:G:N7	2.80	0.49
26:14:1686:C:H2'	26:14:1687:G:O4'	2.12	0.49
1:1G:114:U:H2'	1:1G:115:G:C8	2.47	0.49
27:16:116:G:H2'	27:16:117:G:O4'	2.12	0.49
1:13:419:C:H5'	1:13:513:C:H1'	1.94	0.49
55:Q8:39:LYS:HA	55:Q8:42:ARG:NH2	2.27	0.49
1:13:429:U:H1'	1:13:430:A:H5''	1.92	0.49
32:49:181:ARG:NH1	32:49:181:ARG:HB3	2.27	0.49
26:1H:800:A:H8	26:1H:800:A:OP1	1.94	0.49
47:D5:157:LEU:HD21	47:D5:163:LEU:HD22	1.94	0.49
33:51:144:VAL:O	33:51:148:ILE:HG12	2.11	0.49
1:13:806:C:H2'	1:13:807:A:H8	1.77	0.49
45:F8:3:THR:C	45:F8:5:TYR:H	2.07	0.49
26:14:833:U:O4'	37:35:52:GLU:HA	2.13	0.49
27:1J:18:G:H2'	27:1J:19:G:C8	2.46	0.49
26:14:1434:A:H2'	26:14:1435:G:C8	2.47	0.49
46:C5:88:LYS:O	46:C5:89:PHE:HB3	2.10	0.49
17:8I:13:ASP:H	17:8I:14:LYS:HZ2	1.58	0.49
26:14:2378:A:H4'	40:65:23:ARG:HD2	1.94	0.49
26:14:879:G:N2	26:14:880:G:O6	2.45	0.49
40:A8:34:HIS:O	40:A8:97:ARG:NH2	2.46	0.49
1:13:1318:A:H5''	19:AI:10:PHE:CD2	2.48	0.49
46:G8:39:VAL:O	46:G8:42:VAL:HG22	2.11	0.49
1:1G:80:G:O2'	1:1G:81:G:OP1	2.28	0.49
1:1G:807:A:H2'	1:1G:808:C:C6	2.47	0.49
1:13:1240:U:O2'	7:6E:38:LEU:HG	2.11	0.49
1:1G:909:A:OP2	12:3A:21:LYS:NZ	2.41	0.49
47:H8:24:LEU:HB3	47:H8:39:VAL:HG23	1.93	0.49
1:1G:271:C:H2'	1:1G:272:C:H6	1.77	0.49
26:14:2647:U:H2'	26:14:2648:C:C6	2.47	0.49
7:62:141:VAL:HA	7:62:142:GLU:HG2	1.94	0.49
30:29:36:ARG:HH21	30:29:88:GLY:HA2	1.77	0.49
26:1H:1181:C:O2'	26:1H:1182:A:H5'	2.12	0.49
26:14:588:U:H2'	26:14:589:C:C6	2.47	0.49
31:39:139:PHE:HE2	31:39:173:VAL:HG21	1.77	0.49
31:39:23:ASP:OD1	31:39:23:ASP:N	2.45	0.49
26:1H:339:U:H6	26:1H:339:U:O5'	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:494:G:H4'	44:A5:6:ILE:HB	1.93	0.49
18:9A:53:ARG:HA	18:9A:56:THR:OG1	2.13	0.49
9:82:5:TYR:CE2	9:82:16:ARG:HG2	2.48	0.49
26:14:943:U:OP2	37:35:36:LYS:HG3	2.12	0.49
26:1H:1728:G:H2'	26:1H:1731:G:O6	2.12	0.49
29:11:28:GLU:N	29:11:29:PRO:HD3	2.27	0.49
1:1G:991:U:O2	1:1G:993:G:H8	1.95	0.49
26:14:34:C:O2'	26:14:35:G:C8	2.65	0.49
1:1G:1291:G:H2'	1:1G:1292:U:C6	2.48	0.49
1:1G:1076:C:H42	1:1G:1081:G:H1	1.61	0.49
26:1H:2262:U:O2'	26:1H:2263:C:H5'	2.12	0.49
26:14:2297:C:H2'	26:14:2298:A:H8	1.77	0.49
1:1G:1260:C:H6	1:1G:1260:C:H3'	1.77	0.49
41:75:99:LEU:HD22	41:75:101:PHE:CE1	2.45	0.49
43:D8:25:LEU:HD12	43:D8:92:THR:HG21	1.94	0.49
1:13:919:A:O2'	1:13:920:U:H5'	2.13	0.49
26:14:1797:C:H4'	29:19:257:LEU:O	2.12	0.49
15:6I:18:PHE:CE1	15:6I:21:ASP:HB2	2.47	0.49
26:1H:994:C:H5''	26:1H:995:C:P	2.52	0.49
26:1H:1453:A:O2'	26:1H:1454:U:H2'	2.12	0.49
1:13:939:G:H2'	1:13:940:C:C6	2.46	0.49
57:3L:65:C:H2'	57:3L:66:A:H8	1.77	0.49
8:7E:116:LYS:HG3	8:7E:129:VAL:HG11	1.94	0.49
9:8E:26:VAL:HG22	9:8E:61:ALA:HB3	1.92	0.49
46:C5:36:ALA:HA	46:C5:67:LEU:O	2.12	0.49
17:8A:11:VAL:HG12	17:8A:85:VAL:HG23	1.95	0.49
26:14:686:G:N2	26:14:788:A:H61	2.10	0.49
12:3I:8:ASN:O	12:3I:11:VAL:N	2.44	0.49
1:13:1234:C:H2'	1:13:1235:U:C6	2.48	0.49
5:42:33:VAL:HG13	5:42:112:LEU:HD12	1.94	0.49
21:1F:6:ARG:HH11	21:1F:15:ARG:NE	2.11	0.49
2:1E:71:VAL:HB	2:1E:164:VAL:HG13	1.94	0.49
26:14:861:A:N3	27:1J:79:C:O2'	2.46	0.49
1:13:1453:G:H4'	1:13:1453:G:OP2	2.11	0.49
15:6A:79:ARG:O	15:6A:83:GLU:HB2	2.12	0.49
33:51:96:ALA:HB1	33:51:103:LEU:HD11	1.94	0.49
29:11:101:GLU:OE1	29:11:103:ARG:NH1	2.45	0.49
1:1G:1521:G:H2'	1:1G:1522:U:H6	1.78	0.49
1:13:1460:A:H2'	1:13:1461:G:O4'	2.12	0.49
46:C5:29:GLU:HG3	46:C5:30:VAL:H	1.78	0.49
26:14:1542:G:O5'	26:14:1543:A:H5''	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:275:G:N2	26:14:276:A:N7	2.60	0.49
41:B8:108:ARG:HG3	41:B8:109:GLU:H	1.76	0.49
28:71:43:VAL:HG13	28:71:214:VAL:HA	1.94	0.49
34:69:7:GLU:C	34:69:15:VAL:HG22	2.32	0.49
30:29:112:GLY:O	30:29:159:HIS:HA	2.13	0.49
36:25:102:VAL:HB	36:25:106:LEU:HD12	1.94	0.49
9:8E:118:LYS:O	9:8E:119:ALA:HB3	2.13	0.49
13:4A:13:LYS:HA	13:4A:44:ARG:NH1	2.28	0.49
26:14:2461:C:H2'	26:14:2462:U:H6	1.75	0.49
38:88:140:ALA:HB3	38:88:141:GLN:HA	1.94	0.49
27:1J:88:C:H1'	27:1J:89:G:OP1	2.12	0.49
1:13:46:G:H2'	1:13:366:C:H5	1.76	0.49
18:9A:29:PHE:HD1	18:9A:29:PHE:N	2.09	0.49
18:9A:53:ARG:HA	18:9A:56:THR:HG1	1.78	0.49
29:19:89:SER:HB2	29:19:159:ALA:HB2	1.94	0.49
26:14:1436:G:O2'	26:14:1477:A:H4'	2.12	0.49
8:7E:66:GLY:O	8:7E:76:PRO:HB3	2.12	0.49
1:1G:328:C:H4'	1:1G:329:A:H5''	1.93	0.49
26:1H:1001:A:C8	26:1H:1002:G:C8	3.00	0.49
3:2E:113:ALA:HB3	3:2E:114:PRO:HD3	1.93	0.49
16:7I:79:VAL:HG12	16:7I:80:PHE:CD1	2.48	0.49
4:3E:92:VAL:HG12	4:3E:96:LEU:HD21	1.95	0.49
37:78:64:LYS:HA	55:Q8:13:ARG:HB3	1.94	0.49
1:1G:425:G:O3'	4:32:45:GLN:NE2	2.45	0.49
26:1H:2243:U:H2'	26:1H:2244:U:C6	2.48	0.49
26:1H:46:C:H5''	26:1H:215:G:H8	1.77	0.49
2:1E:11:LEU:O	2:1E:11:LEU:HG	2.13	0.49
31:31:77:ASP:OD1	31:31:77:ASP:N	2.33	0.49
1:13:544:G:OP1	4:3E:59:ARG:NH1	2.41	0.49
19:AA:17:GLU:HA	19:AA:20:LEU:HD22	1.94	0.49
46:G8:101:LYS:C	46:G8:102:CYS:SG	2.91	0.49
9:82:9:ARG:O	9:82:104:ARG:HD2	2.13	0.49
30:21:131:ALA:HB1	61:21:401:HOH:O	2.12	0.49
26:1H:270(L):U:H6	26:1H:270(L):U:H3'	1.78	0.49
8:72:20:TYR:OH	8:72:75:ARG:HB3	2.13	0.49
8:72:110:ALA:O	8:72:121:ASP:N	2.45	0.49
7:6E:111:ARG:HB3	7:6E:111:ARG:HH11	1.77	0.49
26:1H:818:G:H4'	26:1H:838:C:O3'	2.11	0.49
26:14:990:A:C8	26:14:990:A:H5'	2.42	0.49
4:3E:29:PRO:HA	4:3E:34:GLU:HG3	1.95	0.49
26:1H:1535:U:H6	26:1H:1535:U:OP2	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:201:THR:HG22	30:21:202:LYS:N	2.27	0.49
1:1G:45:U:H2'	1:1G:46:G:H8	1.76	0.49
1:1G:1106:G:H2'	1:1G:1107:C:H6	1.78	0.49
26:14:1871:A:H2'	26:14:1872:A:C8	2.47	0.49
30:29:25:VAL:O	30:29:26:ILE:HG12	2.12	0.49
16:7A:22:THR:HA	16:7A:33:ILE:HG13	1.94	0.49
27:1J:93:C:H2'	27:1J:94:C:C6	2.48	0.49
1:13:255:G:H1'	17:8I:16:GLN:OE1	2.12	0.49
1:1G:590:C:H2'	1:1G:591:U:H6	1.77	0.49
26:1H:2182:G:H2'	26:1H:2183:C:C6	2.48	0.49
53:N8:33:CYS:SG	53:N8:40:LYS:HD3	2.52	0.49
34:61:127:VAL:HA	34:61:138:ILE:O	2.12	0.49
26:14:1543:A:H4'	26:14:1543:A:OP1	2.13	0.49
26:1H:2243:U:O2'	26:1H:2244:U:H5'	2.12	0.49
26:1H:445:C:H5''	42:C8:3:ARG:HB3	1.93	0.49
26:14:1753:G:N1	26:14:1756:G:C2	2.81	0.49
3:2E:60:ALA:N	3:2E:63:ASN:OD1	2.44	0.49
38:45:58:PHE:HB3	38:45:113:GLN:NE2	2.27	0.49
1:1G:868:C:H2'	1:1G:869:G:O4'	2.13	0.49
26:1H:2173:A:H8	26:1H:2173:A:OP1	1.95	0.49
11:2A:79:SER:OG	11:2A:106:LYS:HG3	2.13	0.49
1:1G:1347:G:O2'	1:1G:1373:G:O6	2.27	0.49
26:1H:1142(A):A:H4'	35:58:25:ARG:HH22	1.78	0.49
52:M8:37:SER:OG	52:M8:42:PHE:O	2.20	0.49
27:1J:17:C:H2'	27:1J:18:G:O4'	2.12	0.49
26:14:1022:G:N2	26:14:1142(A):A:C2	2.80	0.49
34:61:4:ILE:HG12	34:61:18:VAL:HG22	1.94	0.49
26:14:483:A:H4'	46:C5:49:VAL:HA	1.95	0.49
1:1G:565:U:H3'	1:1G:566:G:H2'	1.94	0.49
38:45:22:LYS:N	38:45:23:GLY:HA3	2.28	0.49
1:1G:957:U:O2'	1:1G:959:A:N7	2.34	0.49
1:1G:1053:G:O2'	1:1G:1199:U:OP2	2.28	0.49
26:14:1107:G:H2'	26:14:1108:U:H5'	1.94	0.49
1:1G:963:G:H21	10:1A:55:LYS:CE	2.25	0.49
27:1J:7:G:H4'	40:65:29:PHE:CD2	2.47	0.49
4:3E:194:LEU:HD12	4:3E:195:ALA:N	2.28	0.49
26:14:1042:G:H2'	26:14:1043:C:O4'	2.11	0.49
26:14:2418:A:OP1	55:M5:29:LYS:NZ	2.46	0.49
1:13:61:G:H2'	1:13:62:U:O4'	2.11	0.49
1:1G:998(A):C:N3	1:1G:1042:G:N2	2.46	0.49
49:J8:80:LEU:C	49:J8:81:LYS:HD2	2.33	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:273(C):C:H42	26:1H:363(C):G:H1	1.59	0.49
26:14:520:G:H2'	26:14:521:G:H8	1.78	0.49
45:B5:67:GLY:C	45:B5:69:TYR:H	2.15	0.49
32:41:66:GLN:HA	52:M8:6:HIS:HE1	1.78	0.49
29:19:175:LEU:HD11	29:19:185:VAL:HG21	1.94	0.49
33:59:64:LEU:O	33:59:68:THR:OG1	2.30	0.49
26:1H:2323:G:H2'	26:1H:2324:C:O4'	2.12	0.49
26:1H:492:A:H2'	26:1H:493:G:O4'	2.13	0.49
26:1H:1955:U:OP2	61:1H:3568:HOH:O	2.19	0.49
48:E5:48:GLY:HA3	48:E5:80:HIS:ND1	2.27	0.49
32:49:117:PHE:CG	32:49:117:PHE:O	2.65	0.49
11:2A:109:VAL:HG12	18:9A:86:VAL:HG13	1.93	0.49
26:1H:775:G:C4	26:1H:794:G:C8	3.00	0.49
37:78:80:TYR:CE2	37:78:111:ARG:HD3	2.48	0.49
26:1H:511:U:C5	26:1H:512:G:C5	3.00	0.49
26:1H:511:U:H5''	26:1H:512:G:OP2	2.13	0.49
1:1G:1149:C:H2'	1:1G:1150:U:H6	1.78	0.49
26:1H:996:A:OP2	42:C8:92:ARG:NH2	2.46	0.49
26:1H:142:G:O3'	45:F8:35:THR:HG21	2.13	0.49
26:14:1021:A:C8	26:14:1021:A:H3'	2.48	0.49
26:1H:2210:G:H3'	26:1H:2211:G:C5	2.48	0.49
4:3E:155:LEU:O	4:3E:157:LEU:N	2.46	0.49
26:1H:1385:G:H4'	26:1H:1386:C:OP1	2.13	0.49
26:1H:860:U:C5	26:1H:917:A:H2	2.30	0.49
26:14:2177:C:H4'	28:79:44:HIS:HB2	1.95	0.49
4:3E:167:GLY:HA2	29:19:135:PHE:HZ	1.76	0.49
26:14:2212:A:H1'	26:14:2215:G:C6	2.48	0.49
1:13:375:U:C4	1:13:376:G:N7	2.81	0.49
1:13:481:G:O2'	1:13:483:C:N4	2.41	0.49
26:1H:242:G:H5''	55:Q8:64:TYR:CE2	2.48	0.49
46:G8:34:LYS:HD3	46:G8:36:ALA:HB2	1.95	0.49
26:14:1115:G:C6	26:14:1116:C:C4	3.01	0.49
1:1G:540:G:H2'	1:1G:541:G:O4'	2.12	0.49
1:13:1106:G:C4	1:13:1107:C:C5	3.01	0.49
26:14:527:C:OP2	26:14:2779:U:H5	1.96	0.49
42:85:110:VAL:O	42:85:113:ALA:HB3	2.13	0.49
26:14:1161:C:H1'	43:95:8:GLY:O	2.12	0.49
42:85:68:ALA:O	42:85:71:GLN:HB2	2.13	0.49
26:14:2272:U:H5''	26:14:2273:A:OP1	2.13	0.49
26:1H:2364:C:H4'	48:I8:56:ASP:OD1	2.13	0.49
46:C5:82:PRO:CB	46:C5:97:ARG:HB3	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:47:VAL:HG12	30:29:49:LEU:HG	1.95	0.49
26:1H:1249:U:P	61:1H:3515:HOH:O	2.67	0.49
1:13:265:G:N2	1:13:267:C:H5'	2.28	0.49
33:59:54:ARG:NE	33:59:56:SER:O	2.44	0.49
1:1G:1104:G:H4'	2:12:111:ARG:NE	2.25	0.49
1:13:1127:G:N7	1:13:1128:C:N4	2.61	0.49
46:C5:43:ASN:HB3	46:C5:64:GLU:HA	1.94	0.49
15:6A:26:GLU:OE2	15:6A:77:ARG:NH1	2.37	0.49
12:3A:49:ASN:ND2	12:3A:92:ASP:OD2	2.46	0.49
26:14:864:G:H8	26:14:864:G:O5'	1.96	0.49
26:14:1112:G:H2'	26:14:1113:U:C6	2.48	0.49
30:29:41:LYS:HG3	30:29:42:ASP:N	2.28	0.49
1:13:757:U:H2'	1:13:758:G:O4'	2.13	0.49
1:13:245:C:C2	1:13:284:G:C2	3.01	0.49
33:51:137:ASP:OD1	33:51:138:LYS:N	2.37	0.49
1:1G:681:C:H2'	1:1G:682:G:C8	2.47	0.49
1:1G:980:C:H3'	1:1G:981:U:H6	1.76	0.49
26:1H:2162:G:H3'	26:1H:2163:C:C6	2.48	0.49
1:1G:1177:G:OP2	1:1G:1177:G:H8	1.96	0.49
12:3I:76:ASN:ND2	12:3I:108:ALA:HB2	2.28	0.49
1:13:537:G:N7	61:13:1823:HOH:O	2.35	0.49
13:4A:29:ARG:HD3	13:4A:64:TRP:CZ2	2.48	0.49
26:14:1750:G:N3	26:14:2860:A:H2	2.11	0.49
10:1I:22:LYS:NZ	10:1I:90:LEU:HB2	2.27	0.49
12:3A:32:PHE:HE1	12:3A:86:ARG:HG3	1.78	0.49
14:5A:37:PHE:CE1	14:5A:53:LEU:HD13	2.48	0.49
38:88:20:ALA:HB1	38:88:99:PRO:HB2	1.94	0.49
47:H8:113:ALA:N	47:H8:114:GLY:HA2	2.28	0.49
5:42:94:ALA:HB2	5:42:119:LEU:HG	1.95	0.49
26:14:1607:C:H4'	26:14:1608:A:O5'	2.13	0.49
26:14:2654:A:OP1	26:14:2654:A:H8	1.96	0.49
26:14:2001:A:H2'	26:14:2002:G:C8	2.48	0.49
1:1G:1277:C:H1'	1:1G:1282:C:O2	2.13	0.49
4:32:162:LEU:HD21	4:32:181:MET:HG2	1.94	0.49
34:61:69:LYS:HG3	34:61:136:VAL:HB	1.95	0.49
40:65:27:SER:HA	40:65:88:ASP:HB2	1.94	0.49
1:13:452:A:N6	1:13:480:U:H3	2.05	0.49
8:7E:86:ILE:HG12	8:7E:135:CYS:HA	1.95	0.49
5:4E:106:PRO:O	5:4E:110:LEU:HG	2.12	0.49
36:25:63:VAL:HG11	36:25:85:VAL:HG23	1.95	0.49
13:4A:75:ALA:HA	13:4A:78:ILE:HG12	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1124:G:H8	1:1G:1124:G:OP2	1.96	0.49
26:14:2469:A:H2	26:14:2481:G:H21	1.61	0.49
32:41:139:LEU:HD13	32:41:146:TYR:HD1	1.77	0.49
31:31:28:ILE:HG22	31:31:112:MET:HE3	1.94	0.49
1:1G:373:A:H2'	1:1G:374:A:H8	1.78	0.49
46:C5:8:LYS:HZ3	46:C5:95:LYS:HD3	1.77	0.49
26:14:2016:U:OP1	61:14:3546:HOH:O	2.20	0.49
35:58:41:ASP:N	35:58:41:ASP:OD1	2.46	0.49
2:12:19:HIS:CE1	2:12:204:ASN:HB3	2.48	0.49
15:6A:81:LEU:O	15:6A:85:LEU:HB2	2.13	0.49
32:49:42:GLY:O	32:49:43:LEU:HD13	2.12	0.49
3:22:147:LYS:HB2	3:22:203:PHE:HD2	1.78	0.49
1:1G:1048:G:O4'	1:1G:1215:G:H4'	2.12	0.49
47:H8:44:PHE:CD1	47:H8:44:PHE:C	2.87	0.49
34:61:99:GLU:O	34:61:102:SER:N	2.44	0.49
36:68:16:ALA:HB2	36:68:52:VAL:HG21	1.93	0.49
26:14:2312:U:OP2	32:49:74:LYS:NZ	2.43	0.49
26:1H:1662:C:O2'	26:1H:2687:U:OP1	2.28	0.49
39:55:38:VAL:HG12	39:55:42:LYS:HD2	1.94	0.49
26:14:1808:U:H5''	26:14:1809:A:OP2	2.13	0.49
1:1G:1127:G:H1'	1:1G:1148:U:H3	1.78	0.48
1:1G:1237:C:O2'	1:1G:1300:G:N2	2.31	0.48
38:45:25:ASP:HA	38:45:67:ARG:HH12	1.76	0.48
1:1G:1321:C:H41	1:1G:1322:C:N4	2.04	0.48
46:C5:17:SER:HB2	46:C5:71:LYS:CE	2.43	0.48
26:14:2126:A:N1	26:14:2163:C:H1'	2.28	0.48
34:69:81:VAL:HG12	34:69:143:SER:HB2	1.94	0.48
29:11:29:PRO:HG2	29:11:30:GLU:OE2	2.13	0.48
26:1H:1417:C:N3	26:1H:1581:G:N2	2.53	0.48
26:14:94:G:N2	50:G5:47:ASN:HD22	2.11	0.48
23:2L:8:4SU:H6	23:2L:8:4SU:O5'	2.13	0.48
27:1J:118:G:C5	27:1J:119:A:N7	2.80	0.48
56:1L:42:A:H2'	56:1L:43:U:C6	2.48	0.48
26:14:482:A:H5''	26:14:483:A:OP1	2.13	0.48
46:C5:60:PHE:CD1	46:C5:60:PHE:N	2.81	0.48
26:1H:1442:G:H2'	26:1H:1443:G:C8	2.48	0.48
26:1H:528:A:C2	26:1H:2043:C:H4'	2.48	0.48
28:71:59:ARG:HA	28:71:163:PHE:O	2.11	0.48
26:1H:1688:U:H2'	26:1H:1698:A:N6	2.28	0.48
1:1G:1023:G:C4	1:1G:1024:G:H1'	2.48	0.48
26:1H:2788:C:H5'	30:21:61:ARG:NH1	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1031:G:N7	1:1G:1032(A):G:N2	2.61	0.48
57:3L:21:A:N3	57:3L:21:A:H2'	2.27	0.48
16:7A:2:VAL:HA	16:7A:23:ASP:HA	1.95	0.48
6:5E:23:LYS:O	6:5E:27:GLN:HG3	2.13	0.48
26:1H:1124:C:H2'	26:1H:1125:G:O4'	2.13	0.48
26:14:2820:A:C5	39:55:4:LEU:HD11	2.48	0.48
47:D5:24:LEU:HD12	47:D5:25:PRO:O	2.13	0.48
26:14:433:C:C4	26:14:434:U:O4	2.66	0.48
1:1G:669:U:H2'	1:1G:670:G:C8	2.48	0.48
48:I8:51:VAL:N	48:I8:62:LEU:HD12	2.28	0.48
1:13:1435:G:H2'	1:13:1436:U:C6	2.48	0.48
3:22:131:ARG:HH21	3:22:166:GLU:HG2	1.78	0.48
13:4A:37:THR:HG22	13:4A:55:ARG:HE	1.78	0.48
26:1H:1022:G:O6	35:58:66:LYS:NZ	2.45	0.48
1:13:963:G:N2	10:1I:55:LYS:NZ	2.60	0.48
32:49:125:PHE:HB3	32:49:166:ASP:CB	2.41	0.48
26:14:362:U:H5'	26:14:363:G:OP2	2.12	0.48
26:14:139:G:N2	26:14:1596:A:H4'	2.28	0.48
26:14:1788:C:H2'	26:14:1789:A:H8	1.78	0.48
27:16:78:A:C2	27:16:99:A:C4	3.01	0.48
1:1G:1145:C:H5''	1:1G:1146:A:OP1	2.12	0.48
26:1H:287:C:H2'	26:1H:288:C:C6	2.45	0.48
1:1G:1344:C:H5''	9:82:120:ARG:O	2.12	0.48
26:14:1106:G:C8	26:14:1107:G:C8	3.01	0.48
19:AI:5:LEU:HD12	19:AI:9:VAL:N	2.27	0.48
23:2K:32:G:H2'	23:2K:33:OMC:H6	1.78	0.48
37:78:91:PHE:O	37:78:123:LEU:HD11	2.13	0.48
26:14:2210:G:H5'	26:14:2211:G:C6	2.48	0.48
1:1G:588:G:H1	1:1G:651:C:H42	1.61	0.48
26:1H:1528:A:C6	26:1H:1545:A:N1	2.82	0.48
26:14:1945:G:H2'	26:14:1946:U:H6	1.78	0.48
1:1G:166:G:H2'	1:1G:167:G:H8	1.78	0.48
34:69:133:HIS:ND1	34:69:134:PRO:HD3	2.28	0.48
26:14:1665:A:H2'	26:14:1666:G:O4'	2.13	0.48
45:F8:26:TYR:O	45:F8:81:VAL:HG12	2.14	0.48
1:1G:801:U:H2'	1:1G:802:A:C8	2.48	0.48
19:AA:17:GLU:O	19:AA:20:LEU:HB2	2.13	0.48
26:14:823:G:H2'	26:14:824:A:C8	2.48	0.48
1:13:173:U:H5''	1:13:197:A:O4'	2.13	0.48
31:31:107:LYS:HD2	31:31:207:GLY:H	1.77	0.48
26:14:586:A:N1	26:14:809:G:O2'	2.40	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:19:67:PHE:HB3	29:19:153:ALA:H	1.77	0.48
1:13:1072:G:C5	1:13:1073:U:C4	3.01	0.48
1:1G:1254:C:H42	1:1G:1283:G:H1	1.61	0.48
6:52:97:PHE:HD1	18:9A:31:LEU:HD21	1.78	0.48
57:3L:37:A:H2'	57:3L:38:A:C8	2.48	0.48
26:1H:2152:G:N2	26:1H:2153:G:O6	2.47	0.48
28:71:47:LEU:HD11	28:71:171:ILE:HB	1.95	0.48
33:59:58:GLU:HB2	33:59:61:HIS:CD2	2.48	0.48
7:6E:77:SER:OG	7:6E:84:ASN:OD1	2.31	0.48
40:65:34:HIS:CG	40:65:54:LEU:HB2	2.48	0.48
26:1H:1533:C:H3'	26:1H:1534:G:C5'	2.43	0.48
1:1G:1342:C:H1'	9:82:124:GLN:OE1	2.13	0.48
1:1G:1015:A:H2'	1:1G:1016:A:C8	2.48	0.48
26:14:2877:G:H2'	26:14:2878:U:O4'	2.13	0.48
26:1H:1991:U:H2'	26:1H:1992:G:H5''	1.95	0.48
26:1H:870:A:OP1	38:88:6:ARG:NH2	2.46	0.48
2:12:159:PRO:HB2	2:12:161:ALA:O	2.13	0.48
1:13:147:G:N2	1:13:175:C:N3	2.49	0.48
5:4E:148:VAL:O	5:4E:151:LEU:HB2	2.12	0.48
1:1G:1478:C:H2'	1:1G:1479:C:H6	1.78	0.48
26:1H:493:G:H2'	26:1H:494:G:O4'	2.13	0.48
26:14:824:A:H1'	26:14:2358:G:N7	2.28	0.48
26:1H:433:C:H2'	26:1H:434:U:C6	2.48	0.48
4:3E:13:ARG:HD2	4:3E:38:TYR:O	2.13	0.48
26:1H:1176:G:C8	26:1H:1177:A:N6	2.81	0.48
27:16:29:A:H5''	27:16:30:C:OP2	2.14	0.48
8:7E:122:ARG:O	8:7E:126:LYS:HG2	2.13	0.48
1:1G:664:G:H22	1:1G:741:G:H1	1.61	0.48
31:31:12:LEU:HD13	31:31:124:LEU:HD11	1.95	0.48
11:2I:22:HIS:HB3	11:2I:29:ILE:HG23	1.96	0.48
29:19:184:LYS:HG3	29:19:269:PHE:O	2.13	0.48
26:1H:1665:A:N7	61:1H:3632:HOH:O	2.35	0.48
4:3E:70:ILE:HG23	4:3E:75:PHE:HB2	1.95	0.48
11:2I:73:MET:HE1	11:2I:102:GLY:HA3	1.95	0.48
30:29:4:ILE:HD12	30:29:28:ALA:HB1	1.95	0.48
30:29:54:GLN:N	30:29:74:PRO:HA	2.26	0.48
16:7I:71:ARG:HA	16:7I:74:LEU:HD12	1.95	0.48
7:6E:77:SER:HB2	24:3K:33:U:OP1	2.13	0.48
28:71:6:ARG:O	28:71:10:LEU:HD22	2.14	0.48
2:12:223:ILE:HA	2:12:224:GLN:CG	2.42	0.48
26:1H:2210:G:H4'	26:1H:2211:G:OP2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:634:C:H2'	26:14:635:C:H6	1.78	0.48
26:14:1159:U:H2'	26:14:1160:G:C8	2.46	0.48
2:12:21:ARG:HG2	2:12:22:LYS:H	1.79	0.48
26:14:2319:G:C2	26:14:2320:A:N6	2.82	0.48
28:71:22:ILE:HG23	28:71:189:ILE:HB	1.94	0.48
26:14:1567:A:O2'	29:19:63:ARG:NH2	2.45	0.48
1:1G:598:U:H2'	1:1G:599:C:H6	1.77	0.48
26:1H:1800:C:H5'	29:11:147:LEU:HD21	1.96	0.48
26:1H:754:C:H2'	26:1H:755:C:C6	2.46	0.48
32:49:139:LEU:HA	32:49:144:ILE:HG21	1.96	0.48
6:52:19:LEU:O	6:52:23:LYS:HG2	2.14	0.48
26:1H:721:C:H2'	26:1H:722:A:H8	1.78	0.48
1:1G:1085:U:H5'	1:1G:1094:G:N2	2.28	0.48
10:1I:26:ALA:O	10:1I:84:GLN:NE2	2.41	0.48
31:39:32:LEU:O	31:39:32:LEU:HD23	2.13	0.48
1:13:191(E):G:H2'	1:13:191(F):U:C6	2.48	0.48
1:1G:1521:G:H2'	1:1G:1522:U:C6	2.48	0.48
7:6E:66:VAL:O	7:6E:70:LYS:HG3	2.13	0.48
26:14:2129:C:H3'	26:14:2130:U:C6	2.47	0.48
26:1H:2785:C:H2'	26:1H:2786:U:O4'	2.13	0.48
26:1H:2505:G:O2'	26:1H:2506:U:H5'	2.13	0.48
6:5E:44:GLY:HA2	6:5E:59:TYR:CE2	2.48	0.48
3:22:175:LEU:H	3:22:175:LEU:HD12	1.79	0.48
35:58:60:ILE:HG12	35:58:60:ILE:H	1.43	0.48
26:1H:1797:C:O2'	29:11:259:THR:OG1	2.28	0.48
1:13:32:A:C2	1:13:33:A:C4	3.02	0.48
23:2K:53:G:C6	23:2K:54:G:N7	2.81	0.48
11:2I:109:VAL:HG11	18:9I:84:LYS:HD3	1.95	0.48
46:C5:82:PRO:HA	46:C5:99:CYS:HB2	1.96	0.48
9:82:46:ALA:HA	9:82:78:LYS:HB2	1.96	0.48
1:13:234:C:H2'	1:13:235:C:C6	2.48	0.48
41:B8:105:LEU:HB3	41:B8:110:ILE:HG22	1.95	0.48
41:B8:108:ARG:HA	41:B8:111:ARG:CZ	2.43	0.48
56:1L:9:A:H1'	56:1L:45:G:H1'	1.96	0.48
27:1J:44:G:OP1	32:49:98:ARG:NH2	2.47	0.48
50:K8:42:GLY:C	50:K8:44:LEU:N	2.67	0.48
26:1H:1443:G:C2	26:1H:1549:C:N3	2.82	0.48
26:1H:1551:C:C2	26:1H:1552:G:C8	3.02	0.48
20:BA:54:LYS:HA	20:BA:57:ARG:HH21	1.79	0.48
26:1H:1045:A:OP1	26:1H:1046:A:H3'	2.14	0.48
4:32:85:LYS:HD3	4:32:86:LYS:H	1.79	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2134:A:C8	26:1H:2158:A:H2	2.32	0.48
3:2E:150:LYS:HD2	3:2E:167:TRP:HE1	1.79	0.48
46:G8:30:VAL:O	46:G8:32:PRO:HD3	2.12	0.48
1:1G:1327:C:H2'	1:1G:1328:C:C6	2.49	0.48
26:14:2495:G:O3'	38:45:81:VAL:HG12	2.13	0.48
12:3A:84:LEU:HD12	12:3A:104:VAL:HB	1.96	0.48
2:12:16:HIS:C	2:12:17:PHE:HD1	2.17	0.48
6:52:44:GLY:HA2	6:52:59:TYR:CZ	2.48	0.48
11:2A:85:ARG:HD3	11:2A:113:PRO:HD3	1.95	0.48
26:14:524:U:H2'	26:14:525:U:C6	2.48	0.48
13:4I:87:TYR:O	13:4I:90:LEU:N	2.40	0.48
26:14:1008:C:H4'	42:85:59:ARG:HH12	1.79	0.48
2:12:150:SER:OG	2:12:151:GLY:N	2.46	0.48
26:14:338:G:O6	61:14:3543:HOH:O	2.20	0.48
1:1G:455:C:H6	1:1G:455:C:O5'	1.95	0.48
1:13:726:C:C2	1:13:727:G:C8	3.02	0.48
5:4E:87:SER:HB3	5:4E:125:SER:O	2.14	0.48
30:21:20:ALA:O	30:21:21:VAL:HG22	2.13	0.48
26:1H:2820:A:C5	39:98:4:LEU:HD11	2.48	0.48
1:1G:1240:U:OP2	7:62:116:ALA:N	2.45	0.48
1:13:1502:A:H2	1:13:1505:G:N1	2.05	0.48
1:1G:1320:C:H2'	1:1G:1321:C:H6	1.79	0.48
26:1H:1678:G:N2	26:1H:1989:G:N2	2.60	0.48
1:13:738:C:H2'	1:13:739:C:H6	1.78	0.48
13:4A:82:MET:HE2	13:4A:93:ARG:HD2	1.95	0.48
26:14:270(M):U:H5''	26:14:270(N):G:OP1	2.13	0.48
8:72:44:PHE:HA	8:72:79:VAL:CG1	2.43	0.48
1:13:1323:G:H2'	1:13:1324:A:H8	1.77	0.48
27:16:11:C:O5'	27:16:12:C:H5	1.97	0.48
26:1H:880:G:O2'	26:1H:881:G:OP1	2.29	0.48
37:78:121:LYS:O	37:78:123:LEU:N	2.46	0.48
13:4A:15:VAL:HG12	13:4A:45:VAL:HG22	1.95	0.48
2:12:127:ILE:HG12	2:12:130:ARG:NE	2.29	0.48
26:14:2275:C:O2	38:45:83:MET:HG3	2.14	0.48
38:88:12:GLN:HG2	38:88:73:PRO:HG2	1.96	0.48
39:98:10:LEU:O	39:98:12:ARG:N	2.45	0.48
1:13:1190:G:OP1	3:2E:5:ILE:HG23	2.14	0.48
26:14:2535:G:H2'	26:14:2536:G:H8	1.78	0.48
7:6E:150:ALA:HB2	11:2I:50:TYR:OH	2.12	0.48
26:14:1839:G:C8	26:14:1927:A:H1'	2.48	0.48
26:1H:2745:C:O2'	33:51:139:GLN:O	2.31	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:31:39:TRP:O	31:31:43:LYS:HG2	2.13	0.48
1:1G:1466:C:H2'	1:1G:1467:G:O4'	2.12	0.48
26:14:856:C:N4	26:14:857:C:H41	2.12	0.48
26:14:2779:U:H4'	26:14:2780:G:H5''	1.95	0.48
51:L8:50:VAL:HG23	51:L8:54:VAL:HB	1.95	0.48
1:13:942:G:C2	1:13:943:U:C6	3.02	0.48
29:11:75:ILE:HG21	29:11:99:ASP:OD2	2.13	0.48
26:14:492:A:H8	26:14:492:A:O5'	1.97	0.48
26:14:2257:U:O2'	26:14:2258:C:H5'	2.13	0.48
26:1H:2791:C:N4	26:1H:2792:G:O6	2.46	0.48
1:13:341:C:H42	1:13:348:G:H1	1.61	0.48
22:1K:9:A:H5''	22:1K:47:U:C6	2.49	0.48
31:39:164:ARG:O	31:39:167:ALA:HB3	2.13	0.48
26:14:151:C:O2'	26:14:152:G:H5'	2.14	0.48
1:1G:1354:C:H6	1:1G:1354:C:O5'	1.96	0.48
15:6A:6:GLU:OE1	15:6A:6:GLU:N	2.45	0.48
26:14:2832:U:H3'	26:14:2833:G:H8	1.78	0.48
8:7E:32:LYS:O	8:7E:36:LEU:HD12	2.13	0.48
1:13:498:A:H4'	1:13:500:G:OP1	2.14	0.48
26:14:546:C:H2'	26:14:547:A:C8	2.48	0.48
37:35:94:GLU:HB2	37:35:124:LYS:HB3	1.95	0.48
4:32:28:SER:HB2	4:32:29:PRO:HA	1.95	0.48
26:14:1771:C:H1'	26:14:1786:A:C8	2.48	0.48
57:3L:55:PSU:N3	57:3L:57:G:H3'	2.29	0.48
1:1G:452:A:O2'	1:1G:453:A:O4'	2.29	0.48
37:35:47:ASP:HB3	37:35:49:ARG:N	2.29	0.48
26:1H:250:G:H2'	26:1H:251:A:C8	2.49	0.48
1:1G:1322:C:O2'	1:1G:1323:G:H5'	2.13	0.48
1:13:976:G:H5'	1:13:1358:U:O2'	2.13	0.48
4:32:31:CYS:CB	4:32:33:MET:H	2.26	0.48
26:1H:1354:A:H2'	26:1H:1355:G:O4'	2.14	0.48
20:BI:75:ASN:O	20:BI:79:ARG:HB2	2.14	0.48
50:G5:21:LEU:O	50:G5:25:VAL:HG22	2.13	0.48
26:14:1538:G:H2'	26:14:1539:G:H8	1.78	0.48
4:32:173:TRP:HA	4:32:187:ARG:HG3	1.96	0.48
26:14:2101:G:H2'	26:14:2102:U:O4'	2.14	0.48
1:1G:1258:G:H2'	1:1G:1259:C:C6	2.48	0.48
49:F5:87:PRO:HA	49:F5:90:ILE:CG2	2.43	0.48
34:61:68:LEU:HA	34:61:71:ILE:CG2	2.43	0.48
26:14:565:C:H4'	26:14:1253:A:C6	2.49	0.48
26:14:1358:G:O2'	26:14:1359:A:H5''	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:164:ALA:O	4:3E:168:ARG:NE	2.46	0.48
1:1G:1068:G:N7	1:1G:1094:G:C8	2.82	0.48
40:A8:78:LEU:HD12	40:A8:108:GLY:HA2	1.96	0.48
1:13:42:G:O2'	1:13:622:A:N1	2.40	0.48
30:29:36:ARG:NH1	30:29:85:ASN:OD1	2.47	0.48
11:2I:69:ALA:HB1	11:2I:73:MET:HE2	1.95	0.48
23:2L:52:C:H2'	23:2L:53:G:H8	1.79	0.48
26:1H:1260:G:C6	26:1H:1261:C:C4	3.02	0.48
26:14:656:G:H2'	26:14:657:U:O4'	2.14	0.48
33:51:27:LYS:HA	33:51:32:GLU:HA	1.95	0.48
13:4I:11:ARG:HG3	13:4I:12:ASN:N	2.29	0.48
35:58:127:ASP:OD1	35:58:127:ASP:N	2.45	0.48
31:39:183:VAL:O	31:39:187:VAL:HG23	2.13	0.48
51:H5:12:PRO:HB2	51:H5:20:LYS:HD3	1.95	0.48
38:88:77:LYS:HE3	38:88:84:GLY:O	2.13	0.48
26:14:1366:A:H2'	26:14:1367:A:O4'	2.12	0.48
1:13:963:G:C2	10:1I:55:LYS:NZ	2.81	0.48
26:14:2786:U:O2	30:29:62:PRO:HB3	2.14	0.48
26:14:1789:A:H2'	26:14:1790:C:O4'	2.13	0.48
1:13:1128:C:H2'	1:13:1139:G:C6	2.49	0.48
4:32:168:ARG:CA	4:32:168:ARG:HH11	2.24	0.48
1:13:738:C:H5''	6:5E:69:GLU:HB2	1.96	0.48
26:1H:626:U:O4	37:78:107:LYS:HD3	2.13	0.48
1:1G:1349:A:H2'	1:1G:1350:A:O4'	2.13	0.48
1:1G:1198:G:H2'	1:1G:1199:U:O4'	2.13	0.48
26:1H:900:A:N3	26:1H:901:A:C8	2.81	0.48
20:BI:63:ILE:HG23	20:BI:77:ALA:HB1	1.96	0.48
41:75:8:LYS:HA	41:75:8:LYS:HZ2	1.77	0.48
7:62:65:ALA:HB3	7:62:124:LEU:HD23	1.94	0.48
1:1G:491:G:H2'	1:1G:492:G:O4'	2.14	0.48
47:H8:128:VAL:HB	47:H8:161:VAL:HG12	1.96	0.48
39:98:67:LEU:HD22	39:98:76:VAL:HG21	1.95	0.48
33:51:77:LYS:HE2	33:51:138:LYS:HD2	1.95	0.48
49:J8:12:PRO:HG3	49:J8:43:TYR:HD1	1.79	0.48
26:14:1657:C:H2'	26:14:1658:C:H6	1.78	0.48
1:13:1207:G:H2'	1:13:1208:C:H6	1.79	0.48
1:1G:41:G:H2'	1:1G:42:G:C8	2.48	0.48
29:19:11:PRO:O	29:19:12:SER:OG	2.29	0.48
26:1H:924:C:H2'	26:1H:925:C:C6	2.48	0.48
4:32:112:VAL:HG12	4:32:116:GLN:OE1	2.13	0.48
26:1H:2145:C:C3'	26:1H:2146:C:H5'	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:562:C:H1'	12:3A:15:ARG:HD2	1.95	0.48
50:K8:64:LEU:HD22	50:K8:68:ARG:HD2	1.96	0.48
19:AI:41:VAL:HG21	19:AI:67:VAL:HG13	1.96	0.48
26:14:259:G:N2	26:14:621:A:H8	2.03	0.48
9:8E:70:LYS:O	9:8E:74:ILE:HG13	2.14	0.48
14:5I:12:ARG:O	14:5I:12:ARG:HG3	2.14	0.48
23:2L:24:C:C2	23:2L:25:U:C5	3.02	0.48
26:1H:1250:G:OP2	37:78:21:ARG:HD3	2.13	0.48
19:AA:66:MET:HA	19:AA:67:VAL:O	2.14	0.48
26:1H:330:A:O2'	26:1H:331:A:C8	2.63	0.48
26:14:270(L):U:HO2'	26:14:270(N):G:N2	2.11	0.48
2:12:21:ARG:HG2	2:12:22:LYS:N	2.29	0.48
1:1G:1095:U:H2'	1:1G:1096:C:O4'	2.13	0.48
1:1G:1216:G:H5''	14:5A:5:ALA:HB3	1.96	0.48
1:13:403:C:H4'	4:3E:122:ARG:NH1	2.29	0.48
26:14:2878:U:O4	61:14:3545:HOH:O	2.20	0.48
41:75:8:LYS:O	41:75:11:GLU:HB2	2.13	0.48
49:F5:73:LEU:HB3	49:F5:90:ILE:HD11	1.96	0.48
3:22:87:LEU:HD12	3:22:88:ARG:NH2	2.29	0.48
26:14:2137:C:H2'	26:14:2138:C:H6	1.79	0.48
46:G8:89:PHE:CD1	46:G8:90:LEU:N	2.82	0.48
26:1H:2510:C:H2'	26:1H:2511:U:H6	1.78	0.48
29:19:267:SER:C	29:19:269:PHE:H	2.16	0.48
26:14:1751:C:O2'	26:14:1752:C:H5'	2.13	0.48
26:14:2693:A:H2'	26:14:2694:G:H8	1.79	0.48
26:14:1016:G:H2'	26:14:1017:G:C8	2.47	0.48
56:1L:15:G:N2	56:1L:48:C:N3	2.62	0.48
1:13:690:G:H22	11:2I:55:LYS:HE2	1.79	0.48
11:2I:91:ARG:NH2	11:2I:110:ASP:OD2	2.46	0.48
37:35:84:ASN:ND2	37:35:84:ASN:H	2.12	0.48
26:1H:2093:G:C6	26:1H:2225:A:C8	3.01	0.48
50:G5:22:GLU:HG2	50:G5:64:LEU:HD11	1.96	0.48
1:1G:1126:U:H1'	1:1G:1127:G:OP1	2.13	0.48
5:42:106:PRO:O	5:42:110:LEU:HG	2.14	0.48
26:14:607:U:OP1	31:39:102:PRO:HA	2.14	0.48
40:65:10:ARG:O	40:65:14:VAL:HG22	2.13	0.48
28:71:45:ALA:H	28:71:171:ILE:HG21	1.79	0.48
28:71:211:SER:HB2	28:71:223:ARG:HH12	1.79	0.48
26:1H:818:G:H5'	26:1H:839:U:OP1	2.13	0.48
26:1H:2062:A:O2'	26:1H:2063:C:O5'	2.26	0.48
34:69:75:LEU:O	34:69:105:HIS:NE2	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1443:G:N2	26:1H:1548:C:N3	2.48	0.48
26:1H:1550:C:H2'	26:1H:1551:C:C6	2.47	0.48
29:19:25:THR:CG2	29:19:82:ILE:H	2.27	0.48
26:1H:2334:G:H5'	40:A8:9:ARG:HG2	1.95	0.48
2:12:221:LEU:HD23	2:12:221:LEU:HA	1.61	0.48
1:13:123:C:OP1	1:13:312:C:H5'	2.13	0.48
39:98:78:LYS:HE2	39:98:83:ILE:HD11	1.95	0.48
26:1H:2685:G:OP2	41:B8:51:ARG:NH2	2.46	0.48
24:3K:58:A:H2'	24:3K:58:A:N3	2.29	0.48
26:1H:2599:G:C8	29:11:236:GLY:HA2	2.49	0.48
56:1L:69:A:H4'	56:1L:70:C:OP1	2.13	0.48
34:61:128:LEU:O	34:61:137:PRO:HA	2.14	0.48
27:1J:88:C:H4'	27:1J:89:G:OP2	2.12	0.48
45:F8:49:VAL:HG12	45:F8:50:LYS:N	2.29	0.48
36:68:7:TYR:CD1	36:68:20:MET:HE3	2.49	0.48
45:B5:67:GLY:O	45:B5:69:TYR:N	2.45	0.48
26:14:13:A:N1	26:14:525:U:H2'	2.29	0.48
1:13:666:G:H5'	1:13:726:C:H1'	1.95	0.48
26:1H:1930:G:O2'	26:1H:1931:U:OP2	2.32	0.48
44:A5:78:GLU:OE1	44:A5:99:ARG:HD2	2.13	0.48
5:42:51:VAL:HG23	5:42:52:PRO:HD3	1.96	0.48
16:7A:17:TYR:HE2	16:7A:41:PRO:HG3	1.79	0.48
1:1G:1051:C:C4	1:1G:1052:U:C4	3.02	0.48
4:32:88:VAL:HG13	5:42:97:GLY:HA2	1.95	0.48
31:39:158:THR:OG1	31:39:159:GLY:N	2.45	0.48
1:1G:1136:U:H5''	1:1G:1137:C:C4	2.49	0.48
1:1G:1060:C:H5	3:22:2:GLY:HA3	1.79	0.48
39:98:65:LEU:HA	39:98:65:LEU:HD12	1.72	0.48
1:13:676:A:H5''	11:2I:113:PRO:HB3	1.95	0.48
1:13:1002:G:C6	1:13:1003:G:C4	3.02	0.47
26:1H:1508:A:H4'	26:1H:1509:C:C1'	2.44	0.47
26:1H:2138:C:N4	26:1H:2139:C:H41	2.12	0.47
35:58:66:LYS:O	35:58:70:LYS:HB3	2.13	0.47
26:1H:1408:C:C2	26:1H:1595:G:N2	2.82	0.47
31:39:18:ARG:HG2	31:39:19:GLU:H	1.78	0.47
1:13:1320:C:O2	19:AI:36:ARG:NH2	2.47	0.47
30:21:78:LEU:HD13	30:21:78:LEU:O	2.14	0.47
20:BI:75:ASN:N	20:BI:75:ASN:OD1	2.46	0.47
2:12:80:ILE:HD11	2:12:215:LEU:HD12	1.95	0.47
26:14:2115:G:N2	26:14:2116:G:N7	2.62	0.47
26:14:996:A:H4'	42:85:92:ARG:CZ	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:559:A:H5''	1:1G:560:U:H3'	1.95	0.47
49:J8:41:ARG:HH11	49:J8:41:ARG:CG	2.25	0.47
26:1H:527:C:N4	26:1H:2777:G:O2'	2.47	0.47
1:13:553:A:H5''	12:3I:24:VAL:HG21	1.96	0.47
1:1G:1037:C:H2'	1:1G:1038:C:C6	2.47	0.47
26:14:2776:A:H4'	26:14:2777:G:H5''	1.95	0.47
10:1A:44:VAL:HG22	10:1A:66:ARG:HE	1.79	0.47
1:13:1178:G:N2	1:13:1181:G:H8	2.12	0.47
26:1H:1155:A:O2'	26:1H:1156:A:H2'	2.13	0.47
20:BI:63:ILE:HG21	20:BI:81:LYS:HG3	1.96	0.47
2:12:53:ARG:HG2	2:12:199:TYR:CE1	2.49	0.47
40:65:35:ILE:HB	40:65:97:ARG:NH2	2.29	0.47
3:22:93:LYS:HE2	3:22:93:LYS:HB2	1.69	0.47
34:61:9:LEU:O	34:61:10:GLU:HG3	2.14	0.47
1:1G:625:G:H2'	1:1G:626:U:C6	2.48	0.47
5:4E:35:GLY:H	5:4E:112:LEU:HD13	1.78	0.47
36:25:68:GLU:HA	36:25:78:ARG:HB3	1.96	0.47
1:13:1240:U:C5	7:6E:32:ARG:HD2	2.48	0.47
26:14:1116:C:H2'	26:14:1117:G:C8	2.49	0.47
37:78:59:LEU:HD11	55:Q8:10:ALA:HA	1.96	0.47
1:13:666:G:H5''	1:13:732:C:O2	2.14	0.47
50:G5:17:SER:HB3	50:G5:18:PRO:CD	2.44	0.47
14:5I:11:LYS:C	14:5I:13:THR:H	2.17	0.47
26:1H:765:G:H2'	26:1H:766:C:C6	2.49	0.47
42:C8:83:LEU:HD12	42:C8:113:ALA:HB2	1.96	0.47
1:13:11:G:C5	1:13:12:U:C5	3.02	0.47
26:14:2747:G:O6	26:14:2754:U:H3'	2.14	0.47
18:9I:66:LEU:O	18:9I:70:ILE:HG13	2.13	0.47
32:41:124:SER:HB2	32:41:131:TYR:CE2	2.48	0.47
26:14:1226:G:H5'	43:95:85:LYS:N	2.29	0.47
26:14:67:U:H2'	26:14:68:G:H8	1.79	0.47
17:8I:65:ILE:HB	17:8I:69:LYS:HB3	1.95	0.47
8:72:69:ARG:HB2	8:72:69:ARG:HH11	1.79	0.47
26:1H:2591:C:H2'	26:1H:2592:G:C8	2.49	0.47
26:14:2305:A:H2'	26:14:2306:C:O4'	2.14	0.47
26:14:1729:A:C2	26:14:1730:U:H5	2.32	0.47
1:1G:107:G:H2'	1:1G:108:G:O4'	2.13	0.47
26:14:925:C:H2'	26:14:926:A:C8	2.48	0.47
26:14:2611:U:O4	53:J5:3:LYS:HG3	2.14	0.47
26:14:265:A:H8	26:14:266:G:H1'	1.80	0.47
1:1G:1324:A:H2'	1:1G:1325:C:H6	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:81:VAL:O	38:45:82:ARG:NE	2.47	0.47
26:14:120:U:OP2	61:14:3540:HOH:O	2.19	0.47
26:1H:635:C:O2'	26:1H:639:U:OP1	2.28	0.47
51:L8:8:LEU:HD22	51:L8:31:LEU:HD22	1.96	0.47
34:61:9:LEU:HD21	34:61:35:LEU:HD23	1.95	0.47
52:M8:15:ILE:HD12	52:M8:16:CYS:O	2.14	0.47
30:29:65:GLY:O	30:29:68:ALA:HB2	2.14	0.47
26:14:234:C:H2'	26:14:235:U:C6	2.49	0.47
47:H8:6:LYS:HE3	47:H8:8:TYR:CE1	2.49	0.47
26:1H:1468:C:H2'	26:1H:1469:A:H8	1.79	0.47
26:1H:2470:G:H5'	38:88:56:ARG:HH22	1.79	0.47
37:35:93:GLY:H	37:35:123:LEU:HD22	1.78	0.47
1:13:37:U:H2'	1:13:38:G:H8	1.77	0.47
26:14:196:A:OP2	37:35:46:LYS:NZ	2.47	0.47
1:1G:1459:C:H2'	1:1G:1460:A:O4'	2.14	0.47
5:4E:11:ILE:HG12	5:4E:31:LEU:HB3	1.95	0.47
1:13:1203:C:H2'	1:13:1204:A:O4'	2.14	0.47
26:14:1570:A:H5'	29:19:37:LEU:HG	1.95	0.47
26:1H:1025:G:C4	26:1H:1135:C:H1'	2.48	0.47
26:14:17:G:H2'	26:14:18:C:H6	1.79	0.47
16:7A:9:PHE:HB2	16:7A:16:HIS:O	2.15	0.47
26:14:443:A:H1'	26:14:1201:C:O4'	2.13	0.47
23:2L:44:A:H2'	23:2L:45:A:C8	2.48	0.47
9:8E:28:VAL:HA	9:8E:63:ILE:O	2.14	0.47
26:14:732:C:OP2	61:14:3548:HOH:O	2.20	0.47
37:35:55:ARG:HG2	37:35:56:SER:N	2.27	0.47
26:1H:68:G:H2'	26:1H:69:C:C6	2.49	0.47
1:1G:353:A:H8	1:1G:353:A:H5'	1.79	0.47
14:5I:3:ARG:O	14:5I:6:LEU:N	2.47	0.47
16:7I:72:ARG:HD3	16:7I:73:LEU:HG	1.96	0.47
26:1H:1417:C:H2'	26:1H:1418:G:O4'	2.14	0.47
26:1H:2375:G:N7	61:1H:3633:HOH:O	2.35	0.47
24:3K:19:G:H1'	24:3K:57:G:N2	2.27	0.47
26:1H:56:A:C2	26:1H:57:C:C2	3.03	0.47
26:14:330:A:H2	26:14:1210:A:HO2'	1.63	0.47
26:1H:2040:C:H2'	26:1H:2041:U:O4'	2.15	0.47
3:22:119:ARG:NH1	3:22:140:ARG:HG2	2.28	0.47
26:1H:1324:G:N2	26:1H:1331:A:C4	2.81	0.47
35:58:128:HIS:HB2	35:58:129:PRO:HD2	1.96	0.47
44:E8:28:SER:OG	44:E8:31:GLU:HG2	2.14	0.47
1:13:221:C:H2'	1:13:222:U:C6	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:16:0:A:OP2	27:16:0:A:H8	1.97	0.47
13:4A:60:VAL:O	13:4A:63:THR:HG22	2.13	0.47
37:78:94:GLU:OE2	37:78:124:LYS:HD3	2.14	0.47
33:59:68:THR:O	33:59:71:LEU:HB2	2.14	0.47
26:1H:628:G:H2'	26:1H:629:G:C8	2.50	0.47
53:N8:37:LYS:HZ3	53:N8:38:ALA:N	2.11	0.47
12:3A:117:ARG:NH2	12:3A:124:LYS:HD2	2.29	0.47
32:49:51:ARG:HG2	32:49:54:GLU:OE2	2.15	0.47
27:1J:13:A:H2'	27:1J:70:C:O2'	2.14	0.47
26:1H:552:G:H2'	26:1H:553:U:O4'	2.14	0.47
5:42:67:VAL:HG21	5:42:140:ARG:HA	1.96	0.47
32:41:83:ARG:HD3	32:41:83:ARG:HA	1.54	0.47
4:3E:85:LYS:HB2	4:3E:85:LYS:HE3	1.59	0.47
29:11:272:ALA:HB1	29:11:273:ARG:H	1.49	0.47
29:11:39:LYS:HG3	29:11:40:THR:H	1.79	0.47
26:1H:686:G:H4'	26:1H:687:C:OP2	2.14	0.47
26:14:51:G:N3	26:14:119:A:C2	2.82	0.47
22:1K:56:C:N4	26:1H:897:C:O2'	2.48	0.47
12:3A:59:ARG:CG	12:3A:59:ARG:HH11	2.26	0.47
26:1H:50:U:H3'	26:1H:51:G:C5'	2.45	0.47
26:14:1257:C:H4'	31:39:83:PHE:CE1	2.48	0.47
1:1G:175:C:H4'	20:BA:25:ARG:NH1	2.29	0.47
1:1G:1154:G:H2'	1:1G:1155:G:H8	1.78	0.47
5:4E:15:ARG:NE	5:4E:26:PHE:CE2	2.80	0.47
10:1I:77:PRO:HB2	10:1I:79:ARG:NH1	2.29	0.47
38:45:26:TYR:O	38:45:28:ALA:N	2.48	0.47
26:14:2414:G:H1'	37:35:70:GLN:NE2	2.29	0.47
26:14:1060:U:O4'	26:14:1062:G:H5'	2.15	0.47
47:D5:28:MET:HG2	47:D5:35:ARG:O	2.13	0.47
1:13:103:C:C2	1:13:104:G:C8	3.02	0.47
32:41:145:THR:C	32:41:147:ASP:H	2.17	0.47
26:14:1488:G:C6	26:14:1489:U:N3	2.82	0.47
30:21:1:MET:N	30:21:83:ASP:O	2.36	0.47
26:14:2142:C:H2'	26:14:2143:C:C6	2.50	0.47
1:13:1177:G:H5'	9:8E:97:LYS:NZ	2.30	0.47
50:K8:55:ARG:O	50:K8:58:ALA:HB3	2.14	0.47
26:14:336:C:OP1	46:C5:83:THR:HG23	2.15	0.47
42:85:66:ASN:O	42:85:70:ARG:HB2	2.14	0.47
34:61:38:LEU:HD22	34:61:40:THR:HG23	1.95	0.47
15:6I:56:LEU:O	15:6I:60:VAL:HG23	2.13	0.47
1:1G:649:G:H2'	1:1G:650:G:C8	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:85:92:ARG:C	42:85:94:ASN:H	2.17	0.47
26:1H:950:G:C5	26:1H:951:C:C4	3.02	0.47
2:12:71:VAL:HG23	2:12:165:VAL:HG13	1.95	0.47
1:1G:518:C:H5''	1:1G:519:C:H6	1.78	0.47
47:H8:72:ARG:HD3	47:H8:72:ARG:HA	1.66	0.47
26:14:2716:U:H2'	26:14:2717:G:H8	1.79	0.47
8:72:95:VAL:O	8:72:131:GLY:N	2.46	0.47
26:1H:1918:A:O2'	26:1H:1920:C:N4	2.47	0.47
36:25:22:ILE:HB	36:25:41:ALA:HA	1.96	0.47
1:13:319:G:H2'	1:13:320:C:O4'	2.14	0.47
1:1G:581:G:OP1	15:6A:61:GLY:HA3	2.15	0.47
1:13:280:C:O2	17:8I:38:ARG:HG3	2.14	0.47
6:5E:67:MET:HB2	6:5E:68:PRO:HD2	1.96	0.47
17:8A:31:LEU:HB3	17:8A:32:TYR:CD1	2.48	0.47
24:3K:1:G:N3	24:3K:1:G:H2'	2.28	0.47
8:7E:34:GLU:OE2	8:7E:37:ARG:HD3	2.14	0.47
14:5A:13:THR:HB	14:5A:20:ALA:HB2	1.96	0.47
8:7E:42:GLU:HG3	8:7E:109:ILE:HD12	1.96	0.47
57:3L:31:A:H61	57:3L:39:PSU:HN3	1.63	0.47
31:39:15:SER:OG	31:39:16:GLY:N	2.48	0.47
26:14:2162:G:C8	26:14:2164:C:N4	2.83	0.47
26:1H:1355:G:P	29:11:39:LYS:HE3	2.55	0.47
26:14:2065:C:H2'	26:14:2066:C:C6	2.49	0.47
17:8A:67:LYS:O	17:8A:68:ARG:HB3	2.13	0.47
26:14:1047:G:N2	26:14:1110:G:N7	2.63	0.47
46:C5:87:LYS:CG	46:C5:88:LYS:H	2.25	0.47
1:13:345:C:H4'	1:13:346:G:C8	2.48	0.47
1:1G:447:G:O6	1:1G:485:G:H2'	2.14	0.47
2:12:50:GLU:HA	2:12:53:ARG:HE	1.80	0.47
31:39:83:PHE:C	31:39:85:GLY:H	2.18	0.47
3:2E:44:GLU:HA	3:2E:52:LEU:HD11	1.97	0.47
45:F8:57:LEU:HD23	45:F8:57:LEU:N	2.30	0.47
38:45:57:HIS:CD2	38:45:117:ALA:HB2	2.49	0.47
24:3K:72:C:H3'	24:3K:73:A:H5''	1.95	0.47
26:14:606:U:H4'	26:14:658:C:H4'	1.96	0.47
32:49:107:LEU:HD11	32:49:178:PHE:HE1	1.80	0.47
33:51:115:VAL:HG11	33:51:148:ILE:HD11	1.96	0.47
15:6A:42:HIS:O	15:6A:45:VAL:HG23	2.15	0.47
32:41:125:PHE:CD1	32:41:131:TYR:HB2	2.50	0.47
26:14:1488:G:N2	26:14:1502:C:C2	2.83	0.47
26:14:2869:G:H2'	26:14:2870:C:O4'	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:23:SER:HA	8:7E:61:VAL:O	2.14	0.47
1:13:1227:A:OP2	13:4I:111:LYS:HE3	2.15	0.47
26:14:1473:G:H1	26:14:1520:U:H3	1.62	0.47
26:1H:270(G):C:H2'	26:1H:270(H):C:C6	2.50	0.47
47:D5:44:PHE:HE2	47:D5:88:PHE:HZ	1.63	0.47
26:1H:2120:G:H2'	26:1H:2121:G:C8	2.50	0.47
1:1G:1513:A:H2'	1:1G:1514:C:C6	2.48	0.47
1:13:884:U:H4'	1:13:885:G:H5''	1.97	0.47
1:13:604:G:H2'	1:13:605:U:O4'	2.14	0.47
54:P8:31:LEU:HD22	54:P8:42:LEU:HD13	1.96	0.47
20:BI:82:SER:O	20:BI:86:ARG:HB2	2.14	0.47
35:15:1:MET:SD	42:85:95:LEU:HD21	2.54	0.47
1:1G:693:G:H2'	1:1G:694:A:C8	2.50	0.47
26:1H:185:U:H4'	26:1H:218:A:H4'	1.97	0.47
55:Q8:16:ILE:HD13	55:Q8:59:LYS:HG2	1.96	0.47
30:21:39:PRO:HD3	30:21:45:THR:HG23	1.97	0.47
32:49:32:PRO:HB2	32:49:172:LEU:HD22	1.96	0.47
26:1H:960:A:C8	26:1H:962:G:C8	3.02	0.47
1:1G:262:A:C6	1:1G:263:A:C6	3.03	0.47
1:1G:1256:A:H4'	1:1G:1257:U:OP1	2.14	0.47
9:82:16:ARG:O	9:82:63:ILE:HG23	2.14	0.47
26:1H:1050:A:C8	26:1H:2751:G:C4	3.02	0.47
1:13:265:G:O2'	17:8I:67:LYS:N	2.48	0.47
26:14:1019:U:HO2'	26:14:1021:A:H2	1.63	0.47
10:1I:49:VAL:HG23	14:5I:41:ARG:HB2	1.97	0.47
26:14:140:A:H8	26:14:1408:C:O2'	1.95	0.47
26:1H:1466:G:N3	26:1H:1547:C:N4	2.62	0.47
26:1H:1657:C:O2'	26:1H:1658:C:H5'	2.15	0.47
26:1H:2377:A:H2'	26:1H:2378:A:C8	2.50	0.47
39:55:47:PHE:O	39:55:51:LEU:HG	2.14	0.47
26:14:1154:G:OP2	42:85:58:ARG:NH1	2.46	0.47
26:14:760:G:OP1	61:14:3547:HOH:O	2.20	0.47
27:16:8:U:O3'	40:A8:25:ARG:NH2	2.48	0.47
26:14:1729:A:C6	26:14:1731:G:C6	3.02	0.47
26:1H:1332:G:N2	26:1H:1610:A:N7	2.62	0.47
1:1G:1288:A:H4'	21:1B:13:ILE:HD13	1.97	0.47
17:8A:63:ARG:HG2	17:8A:64:PRO:CD	2.45	0.47
26:1H:951:C:H2'	26:1H:952:G:H8	1.80	0.47
29:19:61:LEU:HB3	29:19:63:ARG:NH1	2.29	0.47
12:3I:57:LYS:NZ	12:3I:67:THR:HG22	2.30	0.47
1:13:1028(A):C:H2'	1:13:1028(B):C:C5	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2L:59:A:H2	23:2L:61:U:HO2'	1.60	0.47
1:1G:222:U:H2'	1:1G:223:U:H6	1.79	0.47
26:14:2018:G:H2'	26:14:2019:A:O4'	2.14	0.47
47:H8:128:VAL:HG12	47:H8:161:VAL:HB	1.96	0.47
26:14:1926:U:H2'	26:14:1928:A:OP2	2.15	0.47
1:13:157:G:H2'	1:13:158:G:C8	2.50	0.47
1:13:1179:A:H4'	9:8E:103:THR:HA	1.95	0.47
45:B5:70:LEU:H	45:B5:70:LEU:HD22	1.79	0.47
24:3K:59:A:H3'	24:3K:60:U:H6	1.79	0.47
26:14:96:G:H4'	50:G5:48:HIS:NE2	2.30	0.47
26:14:1062:G:N2	26:14:1089:G:OP2	2.47	0.47
9:82:19:LEU:HB3	9:82:59:PHE:HD2	1.80	0.47
37:78:59:LEU:O	55:Q8:13:ARG:HD2	2.14	0.47
26:14:2304:G:H22	26:14:2312:U:H3	1.63	0.47
13:4A:37:THR:O	13:4A:55:ARG:NH2	2.43	0.47
26:1H:2505:G:H2'	26:1H:2576:G:O6	2.14	0.47
26:1H:2791:C:H42	26:1H:2805:G:H1	1.62	0.47
26:14:492:A:H2'	26:14:493:G:O4'	2.14	0.47
32:41:166:ASP:O	32:41:170:ARG:N	2.42	0.47
26:1H:552:G:C6	26:1H:553:U:C4	3.02	0.47
42:85:95:LEU:HA	42:85:95:LEU:HD23	1.56	0.47
46:C5:35:TYR:CE2	46:C5:69:ALA:HB3	2.50	0.47
47:H8:10:ARG:HH21	47:H8:26:GLY:H	1.61	0.47
26:14:57:C:H2'	26:14:58:G:O4'	2.15	0.47
4:32:43:HIS:HA	4:32:46:LYS:HE3	1.96	0.47
26:1H:1825:A:O2'	26:1H:1826:G:H5'	2.14	0.47
40:A8:110:LEU:HA	40:A8:110:LEU:HD23	1.59	0.47
7:6E:12:LEU:HD12	7:6E:13:GLN:H	1.78	0.47
29:11:261:LYS:NZ	29:11:263:ARG:H	2.12	0.47
56:1L:23:A:H2'	56:1L:24:G:C8	2.49	0.47
1:13:986:A:H2'	1:13:987:G:O4'	2.15	0.47
49:J8:49:VAL:HG21	49:J8:67:ILE:HG23	1.97	0.47
1:1G:1226:C:H2'	13:4A:103:THR:HB	1.96	0.47
36:68:76:ALA:HB3	41:B8:75:ILE:HD12	1.96	0.47
26:14:2473:U:H2'	26:14:2473:U:O2	2.13	0.47
38:45:60:ARG:HE	38:45:60:ARG:HB3	1.49	0.47
29:11:78:LYS:HE3	29:11:78:LYS:HB2	1.51	0.47
18:9I:26:LEU:HD23	18:9I:26:LEU:H	1.80	0.47
1:1G:882:C:N4	12:3A:5:PRO:HB3	2.30	0.47
50:G5:4:SER:OG	50:G5:5:GLU:N	2.46	0.47
26:1H:2542:A:H4'	26:1H:2543:G:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:185:U:H4'	26:14:218:A:H4'	1.97	0.47
47:D5:16:SER:O	47:D5:20:ARG:HG3	2.14	0.47
27:16:26:A:H2'	27:16:27:C:O4'	2.15	0.47
26:14:2239:G:OP2	61:14:3549:HOH:O	2.20	0.47
7:62:51:GLN:HG2	7:62:56:GLN:O	2.14	0.47
1:13:685:G:O2'	1:13:686:U:H5'	2.15	0.47
26:1H:654(C):G:O6	26:1H:654(Q):C:N4	2.48	0.47
26:1H:673:C:H5''	31:31:81:PRO:HD2	1.97	0.47
26:1H:2781:A:H5''	26:1H:2782:G:H5'	1.97	0.47
16:7A:52:ASP:HB3	16:7A:55:ARG:HB2	1.97	0.47
16:7A:58:TYR:O	16:7A:62:VAL:HG23	2.14	0.47
36:68:71:ARG:NH2	36:68:77:ILE:HG21	2.29	0.47
39:98:70:LEU:HD13	39:98:75:LEU:HD13	1.97	0.47
26:14:1427:A:H4'	26:14:1428:C:O4'	2.15	0.47
3:22:23:TYR:CE2	10:1A:95:GLU:HB2	2.49	0.47
40:65:102:ALA:O	40:65:105:ALA:N	2.48	0.47
41:B8:102:ILE:HG21	41:B8:110:ILE:HD13	1.97	0.47
56:1L:9:A:H3'	56:1L:10:G:H8	1.77	0.47
1:1G:683:G:C6	1:1G:684:A:C6	3.03	0.47
7:62:36:LYS:O	7:62:40:ALA:N	2.48	0.47
2:1E:16:HIS:HE2	2:1E:214:ILE:HG12	1.80	0.47
34:69:75:LEU:HD23	34:69:76:THR:H	1.80	0.47
26:1H:459:U:H2'	26:1H:460:A:C8	2.50	0.47
18:9I:22:VAL:HA	18:9I:25:THR:OG1	2.15	0.47
1:13:313:A:H2'	1:13:314:C:C6	2.49	0.47
33:51:84:SER:O	33:51:85:LYS:HB2	2.14	0.47
26:14:481:G:O5'	46:C5:46:LYS:NZ	2.48	0.47
44:A5:50:VAL:HG22	44:A5:105:VAL:HG23	1.97	0.47
37:78:106:LEU:O	37:78:106:LEU:HD22	2.15	0.47
1:13:4:U:H3	8:7E:105:ARG:CZ	2.28	0.47
36:25:98:VAL:HG12	36:25:117:LEU:CB	2.44	0.47
13:4I:40:ASN:HB3	13:4I:43:THR:OG1	2.15	0.47
1:13:491:G:H2'	1:13:492:G:O4'	2.14	0.47
37:35:86:LYS:HB3	37:35:118:GLY:HA3	1.97	0.47
26:14:1588:C:H2'	26:14:1589:C:C6	2.50	0.47
26:14:777:A:O2'	29:19:48:ARG:NH2	2.48	0.47
26:1H:668:G:O2'	26:1H:669:G:OP1	2.22	0.47
3:2E:77:ILE:HA	3:2E:84:ILE:HB	1.96	0.47
7:62:99:LEU:HD22	7:62:103:TRP:CE2	2.50	0.47
26:1H:1505:C:H2'	26:1H:1506:C:C6	2.50	0.47
26:14:982:C:H6	26:14:982:C:O5'	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:734:G:C2	1:13:735:C:C2	3.03	0.47
1:1G:511:C:O2'	1:1G:534:U:H1'	2.15	0.47
45:F8:5:TYR:O	50:K8:36:ARG:NH2	2.47	0.47
26:1H:2751:G:C4	33:51:3:ARG:HB3	2.49	0.47
1:13:1346:A:C5'	9:8E:120:ARG:HH12	2.17	0.47
26:1H:1900:A:O2'	26:1H:1901:A:OP1	2.22	0.47
5:42:103:GLY:C	5:42:106:PRO:HD2	2.36	0.47
1:13:1292:U:C2	1:13:1293:G:C8	3.03	0.47
1:13:233:C:H2'	1:13:234:C:H6	1.79	0.47
37:78:34:GLY:O	37:78:36:LYS:HB2	2.14	0.47
29:11:31:LYS:HG3	29:11:33:LEU:HD23	1.97	0.47
26:1H:2783:G:H2'	26:1H:2784:C:C6	2.50	0.47
23:2L:25:U:H2'	23:2L:26:C:O4'	2.15	0.47
5:4E:63:ARG:HA	5:4E:66:MET:HE2	1.97	0.47
28:79:50:ASP:OD1	28:79:52:ARG:HG3	2.15	0.47
26:14:71:A:H5'	26:14:71:A:H8	1.78	0.47
22:1K:76:A:C8	26:1H:2583:G:N2	2.73	0.47
54:P8:27:GLY:HA2	54:P8:30:VAL:CG2	2.43	0.47
1:13:1285:A:H4'	1:13:1286:A:O5'	2.14	0.47
2:1E:67:THR:OG1	2:1E:157:ARG:NH2	2.48	0.47
27:1J:15:A:H5'	27:1J:16:G:C8	2.50	0.47
26:14:2443:C:H2'	26:14:2444:G:H8	1.79	0.47
2:1E:84:GLU:HB3	2:1E:219:VAL:HG21	1.95	0.47
2:12:127:ILE:HG12	2:12:130:ARG:HD3	1.97	0.47
2:12:88:ALA:HB2	2:12:218:ALA:HB1	1.97	0.47
21:1B:6:ARG:HD3	21:1B:15:ARG:CZ	2.44	0.47
4:3E:167:GLY:HA2	29:19:135:PHE:CE1	2.49	0.47
43:95:21:ARG:NH2	43:95:91:TYR:O	2.48	0.47
1:1G:522:C:H2'	1:1G:523:A:O4'	2.15	0.47
4:3E:106:TYR:HE1	4:3E:107:ARG:HH11	1.63	0.47
3:22:11:ARG:NH2	3:22:182:ILE:HD11	2.30	0.47
36:68:68:GLU:CD	36:68:68:GLU:H	2.17	0.47
1:1G:626:U:H2'	1:1G:627:G:C8	2.50	0.47
9:8E:53:VAL:HG22	9:8E:92:TYR:CD1	2.50	0.47
4:3E:89:THR:O	4:3E:92:VAL:HG23	2.14	0.47
23:2K:64:G:H2'	23:2K:65:G:H8	1.80	0.47
1:13:749:C:H2'	1:13:750:G:H8	1.79	0.47
13:4I:105:THR:OG1	13:4I:106:ASN:N	2.43	0.47
1:13:392:G:H5'	16:7I:12:LYS:HD2	1.96	0.47
4:32:190:ASP:OD1	4:32:191:ARG:N	2.48	0.47
1:13:673:G:H2'	1:13:674:G:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:84:ILE:CG2	13:4I:86:CYS:HB3	2.45	0.47
26:14:1399:C:H2'	26:14:1400:G:C8	2.50	0.47
26:14:1891:G:C6	26:14:1892:C:C4	3.02	0.47
23:2L:21:U:OP2	23:2L:21:U:H2'	2.15	0.47
10:1A:34:VAL:HG12	10:1A:74:ILE:HG23	1.97	0.47
26:14:801:G:OP2	31:39:55:GLY:HA2	2.15	0.47
1:1G:410:G:H21	1:1G:432:A:H62	1.63	0.47
10:1I:57:LYS:HE2	10:1I:60:ARG:HH22	1.79	0.47
45:F8:35:THR:N	45:F8:38:GLU:OE1	2.46	0.47
26:1H:2129:C:H5''	28:71:6:ARG:NH2	2.30	0.47
57:3L:60:U:H5''	57:3L:61:C:OP2	2.14	0.47
9:8E:3:GLN:HA	9:8E:20:ARG:HB3	1.97	0.47
1:1G:1280:A:H5''	10:1A:40:LEU:HG	1.96	0.47
26:1H:1971:A:C5	29:11:241:PRO:HD3	2.49	0.47
26:1H:2261:C:O2'	26:1H:2262:U:H5'	2.14	0.47
1:1G:1330:U:H4'	13:4A:23:TYR:CE1	2.49	0.47
2:1E:180:LEU:HB2	2:1E:182:ILE:HG13	1.97	0.47
3:22:173:VAL:HG13	3:22:182:ILE:HG21	1.96	0.47
1:1G:509:A:O2'	1:1G:510:A:OP1	2.28	0.47
1:1G:1451:A:OP2	1:1G:1452:C:N4	2.48	0.47
26:14:11:G:H1'	26:14:2802:G:P	2.55	0.47
1:1G:464:G:O6	1:1G:466:C:H4'	2.15	0.47
1:13:1438:G:OP1	20:BI:34:LYS:HE2	2.15	0.47
29:19:231:HIS:ND1	29:19:232:PRO:HD2	2.30	0.47
42:85:29:SER:OG	42:85:30:LYS:NZ	2.37	0.47
26:1H:724:U:H2'	26:1H:725:G:O4'	2.15	0.47
32:49:49:ASP:O	32:49:52:ILE:HG22	2.15	0.47
19:AA:61:TYR:CE2	19:AA:63:THR:HA	2.50	0.47
34:69:128:LEU:O	34:69:137:PRO:HA	2.15	0.47
47:H8:70:LEU:HB2	47:H8:91:LEU:HD11	1.96	0.47
8:72:19:VAL:HG21	8:72:21:LYS:NZ	2.30	0.47
5:42:143:ARG:HA	5:42:143:ARG:HD3	1.74	0.47
8:72:109:ILE:HG22	8:72:137:VAL:HB	1.97	0.47
1:1G:1347:G:H22	1:1G:1374:A:P	2.37	0.46
26:1H:449:A:O2'	26:1H:450:G:H5'	2.16	0.46
26:14:602:G:N2	26:14:655:A:C8	2.83	0.46
25:4L:8:A:H3'	25:4L:9:G:H8	1.80	0.46
31:39:3:GLU:O	31:39:19:GLU:HB2	2.14	0.46
1:13:453:A:H4'	16:7I:72:ARG:HB2	1.97	0.46
55:Q8:7:HIS:CD2	55:Q8:61:LEU:HD13	2.49	0.46
26:1H:2130:U:P	28:71:6:ARG:HH22	2.38	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:71:214:VAL:HG23	28:71:224:ILE:HG12	1.98	0.46
5:4E:6:PHE:CE1	5:4E:36:ASP:HB3	2.50	0.46
26:1H:2210:G:H3'	26:1H:2211:G:N7	2.30	0.46
39:55:8:ARG:NE	39:55:43:GLU:OE2	2.48	0.46
39:98:28:LEU:HD11	39:98:114:VAL:HG12	1.97	0.46
1:13:501:C:H1'	1:13:549:C:H1'	1.96	0.46
11:2I:85:ARG:NE	11:2I:111:ASP:HB3	2.28	0.46
26:1H:1550:C:O2'	26:1H:1551:C:H5'	2.16	0.46
26:14:2469:A:H2	26:14:2481:G:N2	2.12	0.46
1:1G:1002:G:C6	1:1G:1003:G:N7	2.83	0.46
26:1H:990:A:H1'	26:1H:1156:A:N3	2.30	0.46
26:14:1257:C:OP1	31:39:75:HIS:HE1	1.98	0.46
26:14:2212:A:H1'	26:14:2215:G:C5	2.49	0.46
26:1H:784:A:C8	26:1H:792:G:C5	3.03	0.46
1:1G:841:U:H3'	1:1G:841:U:C6	2.48	0.46
15:6I:21:ASP:OD2	15:6I:24:SER:HB2	2.15	0.46
26:14:2647:U:H2'	26:14:2648:C:H6	1.79	0.46
1:13:939:G:C6	1:13:940:C:N4	2.83	0.46
26:1H:1930:G:N2	26:1H:1968:G:H2'	2.29	0.46
31:31:152:GLU:OE1	31:31:191:ARG:NE	2.46	0.46
35:58:34:LEU:HD21	35:58:120:LEU:HB2	1.97	0.46
29:11:85:ASP:OD2	29:11:88:ARG:NH1	2.44	0.46
48:E5:12:ASN:HA	48:E5:14:ARG:HH21	1.80	0.46
26:1H:817:C:H4'	26:1H:932:G:C5	2.50	0.46
31:31:32:LEU:HD21	31:31:105:VAL:HG13	1.97	0.46
26:1H:462:C:C4	26:1H:463:G:N7	2.83	0.46
1:1G:236:G:OP1	17:8A:40:LYS:NZ	2.48	0.46
32:49:78:SER:HA	32:49:81:LYS:O	2.15	0.46
26:1H:2682:U:H5''	30:21:11:MET:HB2	1.97	0.46
44:E8:9:TYR:HA	44:E8:100:THR:HG23	1.97	0.46
1:1G:615:C:C2	1:1G:616:G:C8	3.03	0.46
55:M5:48:PHE:HA	55:M5:49:VAL:HG13	1.98	0.46
9:82:14:VAL:HG12	9:82:66:ARG:H	1.81	0.46
42:C8:92:ARG:HD2	43:D8:11:GLN:HB2	1.97	0.46
26:14:2688:U:H2'	26:14:2719:G:N2	2.30	0.46
30:29:54:GLN:HG2	30:29:73:GLU:OE2	2.14	0.46
46:C5:17:SER:OG	46:C5:18:GLY:O	2.32	0.46
29:11:37:LEU:CD1	29:11:37:LEU:H	2.21	0.46
33:59:61:HIS:H	33:59:61:HIS:CD2	2.33	0.46
1:13:1171:G:O2'	1:13:1172:C:H5'	2.14	0.46
4:32:19:LEU:HB2	4:32:21:LEU:HD11	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2584:U:H2'	26:1H:2585:U:H2'	1.97	0.46
42:85:98:LEU:HA	42:85:100:VAL:O	2.15	0.46
1:13:21:G:H2'	1:13:22:G:C8	2.50	0.46
26:14:2056:G:OP2	61:14:3550:HOH:O	2.21	0.46
26:1H:363:G:H2'	26:1H:363(A):A:C8	2.49	0.46
28:79:19:ILE:HA	28:79:223:ARG:HB3	1.97	0.46
2:1E:114:ARG:HE	2:1E:118:LEU:HD23	1.78	0.46
26:14:2052:G:H2'	26:14:2053:G:C8	2.50	0.46
42:C8:88:ILE:O	42:C8:90:VAL:HG13	2.16	0.46
20:BA:48:LYS:O	20:BA:50:GLU:N	2.48	0.46
1:13:828:A:N7	1:13:859:A:C8	2.84	0.46
1:13:376:G:OP2	16:7I:67:THR:HG21	2.14	0.46
26:14:1204:A:H2	26:14:1241:A:N1	2.13	0.46
39:55:75:LEU:O	39:55:75:LEU:HD22	2.16	0.46
38:45:57:HIS:NE2	38:45:116:GLU:HB3	2.31	0.46
48:I8:84:LEU:HD12	48:I8:84:LEU:HA	1.74	0.46
5:4E:33:VAL:HG11	5:4E:109:ILE:HA	1.97	0.46
34:69:128:LEU:HD13	34:69:128:LEU:HA	1.68	0.46
13:4I:108:ARG:NH1	13:4I:112:GLY:O	2.49	0.46
29:11:218:ARG:HB3	29:11:219:PRO:HD2	1.97	0.46
26:1H:2016:U:O2	53:N8:7:PRO:HG2	2.15	0.46
26:1H:752:A:OP1	54:P8:3:ARG:NH2	2.49	0.46
26:14:2749:A:O4'	33:59:63:SER:HA	2.16	0.46
26:1H:207:A:H2'	26:1H:208:C:O4'	2.15	0.46
26:14:601:C:O2	26:14:605:C:H4'	2.15	0.46
38:88:43:THR:HA	38:88:94:VAL:HG12	1.97	0.46
50:G5:31:GLU:O	50:G5:35:LEU:HD23	2.15	0.46
27:1J:76:G:H2'	27:1J:77:U:O4'	2.15	0.46
18:9A:47:THR:O	18:9A:83:GLU:N	2.45	0.46
3:2E:156:ARG:HB3	3:2E:160:ALA:O	2.14	0.46
11:2I:67:ASP:O	11:2I:71:LYS:HG2	2.15	0.46
39:98:53:HIS:ND1	39:98:94:TYR:OH	2.44	0.46
26:1H:2640:G:OP1	35:58:74:ARG:NH1	2.46	0.46
26:1H:1637:A:H4'	26:1H:2711:A:O2'	2.16	0.46
26:1H:1576:U:C2	26:1H:1577:C:C5	3.03	0.46
19:AI:39:THR:HG22	19:AI:40:ILE:H	1.80	0.46
1:13:1399:C:C2	1:13:1502:A:N6	2.84	0.46
26:1H:654:A:N3	26:1H:654(A):A:H5''	2.30	0.46
4:3E:88:VAL:HG12	5:4E:97:GLY:HA3	1.97	0.46
8:7E:86:ILE:HG22	8:7E:87:SER:H	1.81	0.46
8:7E:87:SER:HB2	8:7E:93:VAL:H	1.78	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:430:A:H2'	1:1G:431:A:H8	1.80	0.46
2:1E:149:LEU:O	2:1E:153:ARG:N	2.48	0.46
41:75:132:LYS:HB3	41:75:132:LYS:NZ	2.31	0.46
42:C8:19:LYS:O	42:C8:22:LYS:HG3	2.15	0.46
56:1L:42:A:H8	56:1L:42:A:O5'	1.98	0.46
1:1G:1054:C:H6	1:1G:1196:U:O2'	1.98	0.46
32:41:137:GLU:HG3	32:41:140:ILE:HG23	1.96	0.46
43:D8:49:THR:HG23	43:D8:51:VAL:N	2.31	0.46
20:BI:22:ARG:O	20:BI:26:ASN:ND2	2.48	0.46
26:14:2572:A:OP1	26:14:2574:G:O2'	2.33	0.46
57:3L:3:G:O5'	57:3L:3:G:H8	1.98	0.46
52:M8:22:ILE:O	52:M8:24:THR:HG23	2.15	0.46
1:1G:155:C:H2'	1:1G:156:G:C8	2.50	0.46
1:1G:197:A:H8	1:1G:198:G:N9	2.13	0.46
19:AI:65:ASN:OD1	19:AI:65:ASN:N	2.40	0.46
26:14:2734:A:C8	26:14:2735:G:C8	3.03	0.46
41:75:91:ARG:NH1	41:75:124:ASP:OD2	2.46	0.46
26:1H:2693:A:H2'	26:1H:2694:G:C8	2.51	0.46
37:78:59:LEU:HD12	37:78:59:LEU:O	2.15	0.46
26:14:1751:C:H2'	26:14:1752:C:C6	2.50	0.46
26:1H:2666:C:H5''	26:1H:2667:C:OP2	2.15	0.46
1:1G:1122:U:C4	1:1G:1123:A:N7	2.84	0.46
26:1H:2516:G:C6	26:1H:2517:C:C4	3.03	0.46
26:1H:2516:G:C6	26:1H:2517:C:N4	2.84	0.46
23:2L:2:G:H2'	23:2L:2:G:N3	2.30	0.46
7:62:137:LYS:HD3	7:62:137:LYS:O	2.16	0.46
15:6I:6:GLU:H	15:6I:6:GLU:HG2	1.45	0.46
2:1E:169:LYS:HE3	2:1E:169:LYS:HB2	1.54	0.46
5:4E:82:VAL:HG21	5:4E:138:ALA:HA	1.97	0.46
26:14:1268:A:H2'	26:14:1269:A:O4'	2.15	0.46
39:98:104:ARG:NH1	39:98:107:ASP:OD2	2.49	0.46
26:1H:2174:C:O2	28:71:218:MET:HG3	2.15	0.46
1:13:972:C:O3'	10:1I:57:LYS:HD3	2.15	0.46
28:71:46:LYS:HB3	28:71:210:ARG:HB2	1.96	0.46
47:H8:152:ALA:HB3	47:H8:167:PRO:O	2.15	0.46
26:1H:2213:U:H1'	49:J8:52:ARG:CZ	2.46	0.46
37:35:71:VAL:HG12	37:35:72:PRO:HD3	1.97	0.46
1:1G:942:G:N2	9:82:124:GLN:OE1	2.47	0.46
26:14:2582:G:C2	26:14:2583:G:C8	3.04	0.46
18:9I:59:SER:HB3	18:9I:62:GLU:HB2	1.97	0.46
41:B8:26:ASP:HB3	41:B8:120:ARG:HH22	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1004:A:H1'	1:1G:1026:G:N7	2.29	0.46
35:15:4:TYR:HB2	42:85:101:ARG:HH12	1.80	0.46
47:D5:77:ASP:CG	47:D5:80:ARG:HH11	2.19	0.46
1:1G:485:G:HO2'	1:1G:486:U:H6	1.61	0.46
1:1G:1080:A:H5''	1:1G:1081:G:OP2	2.15	0.46
7:62:65:ALA:HB1	7:62:127:ALA:HB3	1.97	0.46
1:1G:1061:G:H2'	1:1G:1062:U:C6	2.51	0.46
26:1H:2052:G:H4'	30:21:143:ASN:O	2.14	0.46
26:1H:1277:G:H5''	39:98:40:LYS:HZ3	1.81	0.46
35:15:128:HIS:HB2	35:15:129:PRO:HD2	1.97	0.46
29:19:182:LEU:N	29:19:272:ALA:HB3	2.30	0.46
26:1H:998:C:OP2	42:C8:58:ARG:NH1	2.49	0.46
26:1H:2065:C:H2'	26:1H:2066:C:H6	1.81	0.46
9:82:24:GLY:HA2	9:82:59:PHE:O	2.16	0.46
44:E8:71:VAL:HA	44:E8:107:LEU:HD12	1.97	0.46
29:11:44:ASN:O	29:11:46:GLN:N	2.49	0.46
26:14:1005:C:H2'	26:14:1006:C:C6	2.51	0.46
1:1G:345:C:O3'	41:75:41:ARG:NH2	2.49	0.46
1:1G:736:C:OP1	18:9A:72:ARG:NH2	2.41	0.46
26:1H:1696:G:C6	26:1H:1697:G:C4	3.03	0.46
26:1H:533:G:H5'	42:C8:24:TYR:CD1	2.50	0.46
1:13:1005:A:H1'	1:13:1036:G:N2	2.30	0.46
4:32:78:LEU:HD22	4:32:96:LEU:HB3	1.98	0.46
27:16:60:C:C2	27:16:61:G:C8	3.04	0.46
42:85:112:ARG:HE	43:95:47:VAL:HG21	1.80	0.46
1:13:1153:C:H2'	1:13:1154:G:O4'	2.16	0.46
26:1H:2642:G:N2	26:1H:2773:C:C2	2.84	0.46
38:88:118:LEU:HD23	38:88:118:LEU:HA	1.73	0.46
42:C8:81:HIS:CE1	42:C8:85:LYS:HE2	2.51	0.46
50:G5:52:ASP:O	50:G5:56:GLN:HG3	2.16	0.46
1:1G:1148:U:H2'	1:1G:1149:C:O4'	2.15	0.46
26:1H:1900:A:N1	26:1H:1970:A:C6	2.83	0.46
9:8E:36:TYR:OH	9:8E:73:GLN:NE2	2.39	0.46
1:1G:411:A:C5	1:1G:413:G:H1'	2.50	0.46
1:13:1134:G:C2	1:13:1135:U:H1'	2.50	0.46
1:13:1391:U:H2'	1:13:1392:G:H8	1.71	0.46
24:3K:56:C:H3'	24:3K:57:G:C8	2.50	0.46
29:11:70:TRP:CE2	29:11:150:LYS:HD3	2.51	0.46
26:14:2807:G:H22	26:14:2892:A:H62	1.62	0.46
3:22:26:LYS:HG3	3:22:27:LYS:H	1.79	0.46
26:1H:529:A:H8	26:1H:530:G:C6	2.34	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:654(C):G:H22	26:14:654(R):C:HO2'	1.58	0.46
32:41:113:ARG:HD3	32:41:140:ILE:O	2.16	0.46
1:1G:1291:G:O3'	9:82:39:GLY:HA3	2.15	0.46
26:14:897:C:H2'	26:14:898:C:H6	1.81	0.46
26:1H:1515:C:H2'	26:1H:1516:U:C6	2.46	0.46
26:1H:64:A:C2'	26:1H:65:C:H5'	2.46	0.46
1:13:116:A:H61	1:13:313:A:H1'	1.80	0.46
55:Q8:31:HIS:O	55:Q8:36:LYS:NZ	2.48	0.46
31:31:155:LEU:HD12	31:31:174:VAL:CG2	2.44	0.46
26:14:1167:U:C2	26:14:1183:G:N2	2.84	0.46
9:8E:108:VAL:HG22	9:8E:109:VAL:N	2.30	0.46
1:1G:438:G:H4'	4:32:123:HIS:CE1	2.51	0.46
26:14:2533:A:H2'	26:14:2534:A:O4'	2.14	0.46
26:1H:2864:G:H2'	26:1H:2865:U:H6	1.79	0.46
34:61:29:TYR:O	34:61:32:PRO:HD2	2.15	0.46
36:25:67:LYS:HD2	36:25:68:GLU:OE1	2.15	0.46
29:11:79:VAL:O	29:11:113:VAL:HG23	2.15	0.46
1:1G:1163:C:H2'	1:1G:1164:G:H8	1.79	0.46
50:G5:22:GLU:OE2	50:G5:68:ARG:NH2	2.49	0.46
46:G8:40:GLU:HA	46:G8:41:GLY:HA2	1.71	0.46
16:7I:19:ILE:HB	16:7I:36:ILE:O	2.16	0.46
26:14:836:G:H2'	26:14:837:C:C6	2.51	0.46
1:1G:1329:A:OP1	13:4A:28:ALA:HB3	2.15	0.46
8:7E:114:THR:HG22	8:7E:130:GLY:O	2.15	0.46
26:14:1525:G:H2'	26:14:1526:G:H8	1.79	0.46
1:1G:668:G:O2'	15:6A:46:HIS:HB3	2.14	0.46
40:65:11:LYS:HG3	40:65:91:PRO:HD3	1.98	0.46
43:95:29:PRO:HA	43:95:61:VAL:CG1	2.45	0.46
20:BA:30:LYS:HB3	20:BA:30:LYS:HE2	1.76	0.46
8:72:40:ALA:HA	8:72:45:ILE:HG13	1.97	0.46
18:9I:54:ARG:HG3	18:9I:55:ARG:HD2	1.97	0.46
29:19:200:ASP:OD1	29:19:203:ASN:ND2	2.48	0.46
1:1G:439:A:C8	1:1G:440:A:C8	3.04	0.46
26:14:2012:G:OP1	44:A5:11:ARG:NH2	2.49	0.46
1:13:1280:A:H3'	1:13:1281:U:H5'	1.97	0.46
37:35:11:GLY:C	37:35:13:ASN:H	2.19	0.46
30:29:55:ASN:HB2	30:29:58:ARG:HH21	1.79	0.46
30:29:49:LEU:HD11	30:29:81:ILE:HG12	1.98	0.46
1:13:232:G:C5	1:13:233:C:C5	3.03	0.46
37:78:49:ARG:HD2	55:Q8:60:LEU:HB3	1.96	0.46
37:78:49:ARG:HB2	55:Q8:61:LEU:HD21	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2L:9:G:O4'	23:2L:47:G7M:H1'	2.14	0.46
1:13:927:G:N2	1:13:1391:U:H1'	2.30	0.46
1:13:1098:C:C2	1:13:1099:G:C8	3.03	0.46
32:41:96:ARG:H	32:41:99:MET:CE	2.28	0.46
26:1H:1403:C:O2	26:1H:1403:C:H2'	2.15	0.46
1:1G:1039:C:H2'	1:1G:1040:U:C6	2.50	0.46
42:85:98:LEU:CB	42:85:102:GLU:HB2	2.46	0.46
1:1G:107:G:C2	1:1G:108:G:H1'	2.50	0.46
26:14:2320:A:C6	26:14:2333:A:C8	3.03	0.46
26:1H:2629:A:O2'	26:1H:2630:G:H5''	2.16	0.46
26:14:2577:A:OP2	53:J5:3:LYS:NZ	2.43	0.46
9:8E:125:TYR:HD1	9:8E:126:SER:H	1.63	0.46
1:13:68:G:C2	1:13:69:G:C8	3.03	0.46
26:14:270(H):C:H2'	26:14:270(I):G:C8	2.51	0.46
2:12:19:HIS:NE2	2:12:206:ASP:HB2	2.31	0.46
26:1H:573:G:O2'	26:1H:574:C:H3'	2.16	0.46
1:1G:625:G:H2'	1:1G:626:U:H6	1.81	0.46
26:1H:2811:G:OP1	30:21:60:ASN:HB2	2.15	0.46
26:1H:412:A:H5''	26:1H:413:C:OP2	2.16	0.46
26:14:1071:G:O6	26:14:1072:C:N4	2.49	0.46
11:2A:25:TYR:HE1	11:2A:87:THR:O	1.99	0.46
1:1G:735:C:H2'	1:1G:736:C:H6	1.80	0.46
26:1H:435:C:C2'	26:1H:436:C:H5'	2.45	0.46
15:6A:10:LYS:HA	15:6A:13:GLN:HG3	1.97	0.46
16:7I:3:LYS:O	16:7I:21:VAL:HA	2.16	0.46
26:14:1480:G:C6	26:14:1482:U:C4	3.03	0.46
29:19:244:ARG:HB2	29:19:245:PRO:HD2	1.98	0.46
44:E8:83:LYS:HB3	44:E8:95:ILE:HD13	1.97	0.46
8:72:87:SER:HA	8:72:93:VAL:HG23	1.97	0.46
1:1G:149:A:O5'	1:1G:149:A:H8	1.99	0.46
40:65:67:ARG:NH1	40:65:67:ARG:HB2	2.30	0.46
26:14:2518:A:O5'	26:14:2518:A:H8	1.99	0.46
26:14:1418:G:H8	26:14:1418:G:O5'	1.99	0.46
26:1H:2312:U:P	32:41:74:LYS:HD2	2.56	0.46
57:3L:56:C:H2'	57:3L:57:G:N7	2.30	0.46
26:1H:1729:A:H2'	26:1H:1731:G:N7	2.31	0.46
8:72:101:PRO:HB2	8:72:103:VAL:HG23	1.98	0.46
40:65:106:ARG:H	40:65:106:ARG:HG3	1.48	0.46
33:51:7:LEU:HD23	33:51:65:HIS:HE1	1.80	0.46
23:2L:47:G7M:H3'	23:2L:48:U:C2	2.51	0.46
28:71:20:TYR:H	28:71:224:ILE:HA	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:6:THR:OG1	2:1E:7:VAL:N	2.49	0.46
26:14:2115:G:N3	26:14:2115:G:H2'	2.30	0.46
42:85:91:ASP:C	42:85:93:LYS:N	2.68	0.46
13:4I:9:ILE:HG22	13:4I:10:PRO:O	2.16	0.46
48:E5:34:GLY:HA2	48:E5:61:ALA:O	2.16	0.46
31:31:104:LYS:O	31:31:108:LYS:HG3	2.16	0.46
17:8I:76:LEU:HD12	17:8I:77:VAL:N	2.30	0.46
26:1H:2261:C:C6	48:I8:16:SER:HB3	2.51	0.46
26:14:924:C:H2'	26:14:925:C:C6	2.51	0.46
26:1H:880:G:N1	26:1H:881:G:O6	2.49	0.46
34:61:77:LEU:HG	34:61:101:LEU:HD13	1.97	0.46
15:6A:76:GLU:OE1	15:6A:80:ALA:HB2	2.15	0.46
26:14:1358:G:N2	26:14:1372:U:C5	2.84	0.46
26:1H:1401:G:H2'	26:1H:1402:C:H6	1.80	0.46
26:14:1926:U:O2'	26:14:1928:A:N7	2.39	0.46
37:78:112:LEU:HB3	37:78:127:ALA:HB1	1.97	0.46
6:52:67:MET:HB2	6:52:68:PRO:HD2	1.97	0.46
24:3K:58:A:O2'	24:3K:59:A:OP1	2.29	0.46
1:1G:363:A:C6	12:3A:31:PRO:HD2	2.50	0.46
9:82:45:ALA:O	9:82:48:GLU:HB2	2.15	0.46
26:14:2431:U:O2'	26:14:2433:A:N7	2.46	0.46
26:1H:1170:G:C2'	26:1H:1171:G:H5'	2.46	0.46
26:14:1419:A:N6	26:14:1421:G:N3	2.64	0.46
1:13:779:C:H2'	1:13:780:A:O4'	2.16	0.46
19:AA:13:ASP:O	19:AA:16:LEU:N	2.45	0.46
26:1H:1491:G:O4'	29:11:99:ASP:HB3	2.16	0.46
26:14:547:A:H2'	26:14:548:A:C8	2.50	0.46
26:14:981:A:H8	26:14:982:C:C5	2.33	0.46
7:6E:73:MET:HG3	7:6E:89:MET:O	2.16	0.46
26:1H:2660:A:H2'	26:1H:2661:G:O4'	2.16	0.46
14:5A:29:ARG:HG3	14:5A:31:ARG:O	2.14	0.46
26:1H:270(E):G:C6	26:1H:270(F):U:C4	3.04	0.46
26:1H:1831:G:H2'	26:1H:1832:C:C6	2.50	0.46
29:11:232:PRO:HG2	29:11:248:SER:O	2.15	0.46
26:1H:1161:C:H1'	43:D8:8:GLY:O	2.16	0.46
26:1H:534:U:H5'	42:C8:42:ALA:HB1	1.98	0.46
26:1H:2695:C:H2'	26:1H:2696:U:C6	2.51	0.46
33:59:74:ASN:HA	33:59:77:LYS:HB2	1.96	0.46
26:14:412:A:H5''	26:14:413:C:OP2	2.15	0.46
26:1H:495:G:HO2'	44:E8:62:HIS:HE2	1.63	0.46
26:14:1858:G:O2'	26:14:1884:A:N6	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:593:G:H1	26:1H:664:C:H42	1.63	0.46
12:3A:111:LYS:HD2	12:3A:111:LYS:H	1.81	0.46
13:4I:32:GLU:O	13:4I:35:GLU:HG2	2.16	0.46
2:12:172:ILE:H	2:12:172:ILE:HD12	1.80	0.46
45:B5:35:THR:HG23	45:B5:38:GLU:HB3	1.98	0.46
3:22:118:GLN:HA	3:22:187:ALA:CB	2.45	0.46
1:1G:535:A:OP1	61:1G:1705:HOH:O	2.21	0.46
18:9A:32:ARG:HD3	18:9A:65:ILE:HD13	1.98	0.46
9:82:17:VAL:HG11	9:82:81:ILE:HA	1.98	0.46
28:71:218:MET:SD	28:71:218:MET:N	2.88	0.46
31:39:102:PRO:HB2	31:39:105:VAL:HG23	1.98	0.46
1:13:1305:G:H8	1:13:1305:G:OP2	1.99	0.46
27:16:42:C:O2'	32:41:67:LYS:HE3	2.16	0.46
28:71:29:VAL:HG21	28:71:214:VAL:HG12	1.97	0.46
1:13:1263:C:H2'	1:13:1264:C:C6	2.45	0.46
2:1E:74:LYS:HB2	2:1E:208:ILE:HD13	1.96	0.46
1:1G:422:C:O2'	1:1G:423:G:N2	2.49	0.46
32:41:110:ALA:HA	32:41:140:ILE:O	2.16	0.46
35:15:4:TYR:O	42:85:64:ARG:NH1	2.45	0.46
21:1B:2:GLY:HA2	21:1B:10:ARG:HH12	1.80	0.46
57:3L:51:A:N6	57:3L:63:U:H3	2.14	0.46
39:55:78:LYS:O	39:55:82:GLU:HG2	2.16	0.46
26:1H:806:C:C2	26:1H:807:U:C5	3.04	0.46
32:49:56:ALA:HB2	32:49:153:ARG:CZ	2.45	0.46
26:14:531:C:C5	26:14:2035:G:C2	3.04	0.46
26:14:1372:U:H2'	26:14:1373:A:O4'	2.15	0.46
26:1H:8:A:H2'	26:1H:9:U:C6	2.51	0.46
1:13:1180:A:OP1	9:8E:103:THR:OG1	2.30	0.46
7:62:47:CYS:HA	7:62:50:ILE:HD12	1.98	0.46
26:1H:1280:G:N2	26:1H:1291:C:C2	2.83	0.46
29:11:233:HIS:HA	61:11:403:HOH:O	2.15	0.46
1:13:1106:G:C5	1:13:1107:C:C5	3.04	0.46
3:22:131:ARG:NH2	3:22:166:GLU:HG2	2.31	0.46
10:1A:28:ARG:NH1	10:1A:34:VAL:HG22	2.31	0.46
1:13:953:G:N7	13:4I:104:ARG:NH2	2.61	0.46
1:1G:181:G:H4'	1:1G:182:U:H5'	1.98	0.46
1:1G:186(E):C:C2	1:1G:191(C):G:N2	2.83	0.46
26:14:563:G:C6	26:14:564:C:C4	3.03	0.46
20:BI:55:ILE:HD13	20:BI:55:ILE:HA	1.76	0.46
26:14:1999:C:H4'	26:14:2723:C:O2	2.16	0.46
6:52:60:PHE:O	6:52:61:LEU:HD12	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:A5:34:ASN:ND2	53:J5:39:MET:HG3	2.31	0.46
4:3E:47:ARG:NH1	4:3E:47:ARG:O	2.49	0.46
3:2E:127:ARG:HD2	3:2E:127:ARG:HA	1.76	0.46
29:19:72:LYS:HB3	29:19:75:ILE:HD12	1.98	0.46
42:C8:68:ALA:O	42:C8:71:GLN:HB2	2.15	0.46
26:14:631:A:OP2	55:M5:47:LYS:NZ	2.34	0.46
50:K8:4:SER:CB	50:K8:7:ARG:HG2	2.45	0.46
7:62:15:ASP:O	7:62:19:GLY:HA2	2.16	0.46
31:39:3:GLU:HA	31:39:24:LEU:HD12	1.98	0.46
24:3K:3:G:H2'	24:3K:4:U:O4'	2.15	0.46
38:45:86:GLY:O	38:45:88:GLY:N	2.49	0.46
46:C5:87:LYS:HG2	46:C5:88:LYS:N	2.28	0.46
34:69:101:LEU:HB2	34:69:105:HIS:HB2	1.97	0.46
42:C8:108:GLU:HG3	43:D8:44:LYS:NZ	2.31	0.46
26:1H:2018:G:H2'	26:1H:2019:A:C8	2.51	0.46
1:13:142:G:H2'	1:13:143:A:C8	2.50	0.46
1:13:1533:C:O2'	1:13:1534:A:OP1	2.31	0.46
47:D5:59:LEU:HB3	47:D5:60:GLU:H	1.46	0.46
22:1K:26:A:H62	22:1K:44:U:H3	1.64	0.46
32:41:5:VAL:H	52:M8:25:TYR:HE2	1.63	0.46
26:1H:1512:G:C5	26:1H:1513:C:C4	3.04	0.46
26:1H:2688:U:O2	26:1H:2688:U:H3'	2.16	0.46
35:58:13:TRP:O	35:58:135:PRO:HD2	2.15	0.46
26:14:2550:G:C5	26:14:2551:C:C5	3.03	0.46
33:51:12:PRO:HG2	33:51:13:LYS:HG2	1.96	0.46
5:4E:68:GLU:O	5:4E:70:PRO:HD3	2.16	0.46
27:16:40:U:H2'	52:M8:2:LYS:HE3	1.98	0.46
52:M8:9:LEU:HD12	52:M8:27:THR:N	2.31	0.46
26:1H:827:U:H5'	26:1H:828:U:O5'	2.15	0.46
40:65:80:LEU:HA	40:65:80:LEU:HD23	1.69	0.46
30:29:150:VAL:HG13	30:29:154:LYS:HD2	1.98	0.46
26:1H:2692:C:OP1	26:1H:2871:C:H5'	2.15	0.46
26:14:311:A:C6	26:14:328:U:C4	3.04	0.46
12:3A:6:THR:O	12:3A:10:LEU:HD12	2.16	0.46
4:3E:117:ALA:O	4:3E:120:LEU:HB2	2.15	0.46
9:82:27:THR:OG1	9:82:32:ASP:HA	2.16	0.46
26:1H:216:A:H2'	26:1H:217:G:H8	1.79	0.46
26:14:2351:G:O6	55:M5:39:LYS:HG3	2.16	0.46
26:1H:1647:G:P	26:1H:1647:G:H3'	2.56	0.46
13:4I:88:ARG:H	13:4I:88:ARG:HG3	1.53	0.46
7:6E:148:ASN:ND2	7:6E:148:ASN:N	2.64	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:111:G:H8	1:1G:111:G:O5'	1.98	0.46
29:19:58:HIS:O	29:19:60:ARG:HD2	2.16	0.46
39:55:45:ARG:HA	39:55:95:THR:HG21	1.97	0.46
30:29:81:ILE:HG22	30:29:82:ARG:N	2.27	0.46
1:13:1367:C:H5'	10:1I:60:ARG:NH1	2.31	0.46
28:71:47:LEU:HB2	28:71:169:GLY:O	2.16	0.46
26:1H:270(V):G:H2'	26:1H:270(W):G:C8	2.50	0.46
29:11:105:ILE:HA	29:11:105:ILE:HD13	1.65	0.46
26:14:1153:C:OP1	42:85:93:LYS:NZ	2.49	0.46
26:14:2197:U:H1'	26:14:2198:A:H8	1.78	0.46
26:1H:459:U:H2'	26:1H:460:A:H8	1.80	0.46
26:1H:2776:A:H4'	26:1H:2777:G:H5''	1.97	0.46
48:E5:56:ASP:OD1	48:E5:58:THR:OG1	2.26	0.46
2:12:144:ARG:O	2:12:147:LYS:HB3	2.16	0.46
26:1H:1689:A:N6	26:1H:1698:A:H2	2.10	0.46
26:1H:1689:A:C6	26:1H:1700:A:C2	3.04	0.46
26:14:2461:C:C2	26:14:2462:U:C5	3.04	0.46
18:9I:52:PRO:O	18:9I:56:THR:HG23	2.15	0.46
1:1G:1489:G:H2'	1:1G:1490:C:O4'	2.16	0.46
7:62:111:ARG:CZ	7:62:122:HIS:HB3	2.46	0.46
17:8A:21:VAL:HG11	17:8A:59:ILE:HG13	1.98	0.46
20:BA:87:LYS:HE3	20:BA:87:LYS:HB2	1.75	0.46
1:13:187:C:H2'	1:13:188:U:O4'	2.16	0.46
2:1E:220:ASP:O	2:1E:224:GLN:HB2	2.16	0.46
3:22:61:ALA:C	3:22:63:ASN:H	2.18	0.46
37:35:138:LEU:HD12	37:35:144:GLU:HG3	1.97	0.46
37:78:130:PHE:CE1	37:78:146:VAL:HG23	2.51	0.46
1:13:752:G:H4'	15:6I:69:TYR:OH	2.16	0.46
1:13:45:U:H2'	1:13:46:G:C8	2.51	0.46
29:11:75:ILE:HD13	29:11:99:ASP:OD2	2.16	0.46
47:D5:39:VAL:HG21	47:D5:44:PHE:CD2	2.51	0.46
33:59:60:ARG:O	33:59:63:SER:OG	2.33	0.46
31:31:41:LEU:HA	31:31:44:ARG:HD3	1.98	0.46
35:58:68:GLU:HG3	35:58:69:GLN:N	2.31	0.46
35:15:121:LYS:HB3	35:15:123:TYR:HE1	1.80	0.46
26:1H:2248:C:H2'	26:1H:2249:U:O4'	2.16	0.46
36:25:71:ARG:NH2	36:25:77:ILE:HG21	2.31	0.46
26:1H:1239:G:H2'	26:1H:1240:U:O4'	2.16	0.46
26:14:1716:U:H2'	26:14:1717:G:H8	1.80	0.46
34:69:88:ILE:HG22	34:69:90:GLY:N	2.30	0.46
15:6I:9:GLN:HA	15:6I:12:ILE:HD12	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:146:GLU:HB2	29:11:189:CYS:CB	2.34	0.45
31:31:6:VAL:HG12	31:31:7:TYR:N	2.30	0.45
26:1H:1728:G:O6	26:1H:1730:U:H5''	2.15	0.45
1:1G:1331:G:OP1	1:1G:1331:G:H4'	2.17	0.45
14:5I:3:ARG:O	14:5I:6:LEU:HB2	2.15	0.45
22:1K:66:A:N7	22:1K:67:C:C2	2.85	0.45
4:32:23:GLY:HA3	4:32:113:SER:HB3	1.99	0.45
5:4E:110:LEU:HD13	5:4E:118:ILE:HG21	1.98	0.45
31:31:64:ILE:HD12	31:31:64:ILE:HG23	1.67	0.45
26:1H:2130:U:OP2	28:71:6:ARG:CZ	2.64	0.45
56:1L:9:A:H3'	56:1L:10:G:N7	2.30	0.45
26:14:1997:G:P	61:14:3525:HOH:O	2.72	0.45
46:C5:59:GLY:O	46:C5:61:ILE:HG13	2.16	0.45
27:16:11:C:OP2	27:16:12:C:N4	2.33	0.45
1:1G:1129:C:N4	1:1G:1139:G:H22	2.14	0.45
47:H8:28:MET:HB2	47:H8:35:ARG:HB3	1.97	0.45
1:13:1028(A):C:H2'	1:13:1028(B):C:H5	1.80	0.45
5:4E:26:PHE:CD1	5:4E:26:PHE:N	2.84	0.45
26:1H:634:C:H2'	26:1H:635:C:C6	2.51	0.45
1:1G:652:U:H2'	1:1G:653:A:H5''	1.97	0.45
37:35:78:PRO:HA	37:35:110:TYR:CE1	2.51	0.45
45:F8:49:VAL:HG13	45:F8:87:GLN:HG2	1.98	0.45
41:75:91:ARG:HD3	41:75:120:ARG:HB3	1.97	0.45
26:1H:1638:C:H4'	26:1H:2710:C:O2	2.16	0.45
1:13:808:C:P	15:6I:48:LYS:HZ1	2.40	0.45
16:7I:80:PHE:O	16:7I:82:GLN:HG3	2.16	0.45
1:13:724:G:H2'	1:13:725:G:H8	1.81	0.45
1:1G:580:U:H2'	1:1G:581:G:O4'	2.16	0.45
26:1H:1676:A:C2	26:1H:1993:U:H5'	2.51	0.45
51:H5:46:ASN:O	51:H5:50:VAL:HG22	2.17	0.45
26:1H:163:U:P	26:1H:164:U:H5''	2.56	0.45
31:39:39:TRP:CH2	31:39:106:ARG:HD3	2.51	0.45
33:51:14:GLY:O	33:51:29:PRO:HD3	2.16	0.45
26:14:1388:G:O2'	26:14:1389:G:H5'	2.15	0.45
1:1G:654:G:H3'	1:1G:655:A:H8	1.81	0.45
26:14:681:G:H2'	26:14:682:G:O4'	2.16	0.45
1:1G:855:G:N2	1:1G:856:C:O2	2.48	0.45
28:71:180:PHE:N	28:71:180:PHE:CD1	2.84	0.45
26:1H:2427:C:H5''	26:1H:2428:G:OP1	2.16	0.45
35:58:15:LEU:C	35:58:16:ILE:HG12	2.35	0.45
26:14:1818:U:H2'	29:19:157:ARG:HG3	1.97	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:82:PRO:HB2	46:C5:83:THR:O	2.15	0.45
46:C5:74:PRO:O	46:C5:82:PRO:HD2	2.14	0.45
26:14:735:A:N7	26:14:761:A:H2	2.14	0.45
1:13:454:C:H3'	1:13:455:C:C6	2.51	0.45
30:29:52:LEU:HD13	30:29:52:LEU:HA	1.81	0.45
26:1H:69:C:H2'	26:1H:70:G:C8	2.51	0.45
28:71:45:ALA:HA	28:71:212:VAL:HA	1.98	0.45
4:32:26:CYS:HA	4:32:31:CYS:HG	1.81	0.45
26:1H:1027:A:C2	26:1H:2488:A:H5'	2.52	0.45
1:1G:1309:G:O3'	13:4A:77:ASN:ND2	2.50	0.45
26:14:1885:A:H3'	26:14:1886:C:C6	2.51	0.45
38:45:38:GLU:HG3	38:45:127:ILE:CG2	2.46	0.45
3:2E:123:GLN:O	3:2E:128:PHE:HB2	2.16	0.45
1:13:625:G:H2'	1:13:626:U:H6	1.80	0.45
26:1H:1045:A:H1'	26:1H:1047:G:C4	2.51	0.45
29:19:108:PRO:HB3	29:19:143:HIS:CE1	2.45	0.45
1:1G:46:G:O2'	1:1G:365:U:H1'	2.16	0.45
26:1H:2394:C:H2'	26:1H:2395:C:C6	2.48	0.45
26:14:2776:A:H4'	26:14:2777:G:C5'	2.46	0.45
1:1G:1029:G:N2	1:1G:1032:A:OP2	2.49	0.45
13:4I:16:ASP:N	13:4I:16:ASP:OD1	2.48	0.45
16:7A:74:LEU:HA	16:7A:74:LEU:HD13	1.68	0.45
26:14:642:G:H21	26:14:646:A:H2	1.63	0.45
19:AA:33:THR:OG1	19:AA:34:TRP:N	2.49	0.45
12:3A:60:LEU:HB2	12:3A:64:TYR:CB	2.46	0.45
26:14:270(R):G:H2'	26:14:270(S):G:C8	2.51	0.45
26:14:1188:U:C2'	26:14:1189:A:H5'	2.46	0.45
6:52:14:LEU:HD21	6:52:19:LEU:HG	1.98	0.45
1:1G:160:A:H1'	1:1G:344:A:C5	2.51	0.45
53:N8:40:LYS:HG3	53:N8:47:PRO:HD2	1.98	0.45
1:13:728:A:C5	15:6I:54:ARG:HD2	2.51	0.45
13:4A:97:PRO:N	13:4A:110:ARG:HG2	2.31	0.45
26:1H:1267:U:O2'	26:1H:1268:A:H5'	2.16	0.45
1:13:1207:G:H2'	1:13:1208:C:C6	2.51	0.45
12:3A:32:PHE:HD1	12:3A:86:ARG:HA	1.81	0.45
29:11:85:ASP:HB2	29:11:92:ILE:HG12	1.98	0.45
1:1G:181:G:O2'	1:1G:183:G:O6	2.32	0.45
1:13:1388:C:H2'	1:13:1389:C:H6	1.80	0.45
26:14:706:A:H2'	26:14:707:G:O4'	2.16	0.45
3:2E:55:VAL:HG22	3:2E:68:VAL:HG22	1.98	0.45
31:39:132:VAL:HG22	31:39:133:ASN:H	1.79	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7A:19:ILE:HB	16:7A:36:ILE:O	2.17	0.45
32:41:80:PHE:O	32:41:82:LEU:HB2	2.16	0.45
48:I8:69:PHE:CE1	48:I8:79:VAL:HG22	2.52	0.45
35:15:72:TYR:CD2	35:15:90:MET:HG3	2.51	0.45
47:D5:31:ARG:HB2	47:D5:31:ARG:HE	1.60	0.45
45:B5:80:ILE:HD13	45:B5:80:ILE:O	2.15	0.45
20:BA:86:ARG:CZ	20:BA:86:ARG:HB2	2.46	0.45
26:1H:2725:A:C4	26:1H:2727:G:C8	3.04	0.45
26:1H:2547:U:H2'	26:1H:2548:G:C8	2.51	0.45
1:13:1376:U:H2'	1:13:1377:A:C8	2.51	0.45
1:1G:1238:A:OP1	1:1G:1335:C:O2'	2.32	0.45
33:51:157:TYR:CE1	33:51:171:LEU:HB3	2.51	0.45
26:1H:270(L):U:H2'	34:61:50:ARG:HD2	1.97	0.45
9:82:46:ALA:HB2	9:82:74:ILE:HG23	1.99	0.45
26:1H:1726:G:H2'	26:1H:1727:U:O4'	2.15	0.45
26:1H:140:A:C8	26:1H:1408:C:O2'	2.65	0.45
45:F8:35:THR:HG22	45:F8:38:GLU:OE1	2.16	0.45
31:39:4:VAL:HG13	31:39:19:GLU:OE2	2.16	0.45
1:1G:1413:A:H2'	1:1G:1414:U:O4'	2.17	0.45
49:F5:80:LEU:HD13	49:F5:80:LEU:HA	1.66	0.45
34:61:40:THR:O	34:61:44:LEU:HB2	2.16	0.45
56:1L:6:G:O2'	56:1L:7:U:OP1	2.32	0.45
26:14:2127:G:H2'	26:14:2128:C:O4'	2.15	0.45
1:1G:1108:G:H5'	3:22:176:HIS:ND1	2.31	0.45
29:19:26:LYS:HA	29:19:26:LYS:HE2	1.98	0.45
26:14:675:A:OP1	31:39:63:LYS:HE2	2.16	0.45
3:22:6:HIS:HB3	14:5A:49:HIS:ND1	2.31	0.45
1:1G:1258:G:O2'	1:1G:1259:C:H5'	2.16	0.45
47:D5:59:LEU:HD12	47:D5:69:THR:HG21	1.97	0.45
49:F5:87:PRO:O	49:F5:88:LYS:C	2.53	0.45
26:1H:234:C:H2'	26:1H:235:U:C6	2.49	0.45
2:1E:111:ARG:HA	2:1E:111:ARG:HD3	1.75	0.45
41:75:106:SER:C	41:75:107:ASP:OD1	2.55	0.45
26:1H:7:G:H2'	26:1H:8:A:O4'	2.16	0.45
1:13:859:A:H2'	1:13:860:A:H8	1.81	0.45
43:95:22:VAL:HG22	43:95:23:GLU:H	1.82	0.45
27:16:44:G:O2'	27:16:45:A:O5'	2.33	0.45
26:14:872:A:P	38:45:5:ARG:HH22	2.39	0.45
26:1H:1487:G:H2'	26:1H:1488:G:H8	1.81	0.45
1:13:1048:G:OP1	14:5I:4:LYS:HB2	2.17	0.45
29:11:108:PRO:HD2	29:11:111:LEU:HG	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:613:U:H5'	26:1H:616:A:N6	2.31	0.45
26:1H:2324:C:H5''	26:1H:2325:G:H5'	1.98	0.45
22:1K:14:A:C5	22:1K:22:G:C2	3.04	0.45
26:14:17:G:H2'	26:14:18:C:C6	2.51	0.45
13:4I:82:MET:C	13:4I:84:ILE:H	2.19	0.45
26:1H:2772:C:H2'	26:1H:2773:C:C6	2.52	0.45
26:14:1525:G:H2'	26:14:1526:G:C8	2.51	0.45
26:1H:1344:G:H5'	26:1H:1384:A:N1	2.31	0.45
2:1E:72:GLY:HA2	2:1E:165:VAL:CG2	2.47	0.45
1:1G:56:U:H2'	1:1G:57:G:C8	2.51	0.45
26:1H:198:C:C2'	26:1H:199:A:H5''	2.46	0.45
32:41:51:ARG:H	32:41:51:ARG:HG3	1.41	0.45
10:1I:28:ARG:HB3	10:1I:28:ARG:CZ	2.46	0.45
26:14:1991:U:H2'	26:14:1992:G:H5''	1.97	0.45
26:1H:1296:G:O2'	26:1H:1297:C:H5'	2.15	0.45
27:16:54:G:H2'	27:16:55:U:H6	1.81	0.45
43:95:77:ALA:O	43:95:79:VAL:HG22	2.16	0.45
1:1G:604:G:H2'	1:1G:605:U:O4'	2.16	0.45
26:1H:396:G:O3'	49:J8:44:PRO:HA	2.17	0.45
26:1H:1765:C:H2'	26:1H:1766:U:H6	1.81	0.45
26:14:794:G:H2'	26:14:795:C:C6	2.50	0.45
17:8I:56:VAL:HB	17:8I:78:GLU:H	1.81	0.45
1:13:1277:C:O2'	1:13:1279:A:H1'	2.16	0.45
37:35:131:SER:HB3	37:35:134:ALA:HB2	1.98	0.45
43:95:71:LEU:H	43:95:86:GLY:CA	2.29	0.45
43:95:71:LEU:O	43:95:72:VAL:HG12	2.16	0.45
26:1H:2061:G:H3'	61:1H:3535:HOH:O	2.16	0.45
26:1H:577:G:OP1	26:1H:2502:G:O2'	2.33	0.45
19:AI:40:ILE:HG22	19:AI:69:HIS:O	2.17	0.45
46:G8:88:LYS:HA	46:G8:88:LYS:HD3	1.60	0.45
9:8E:70:LYS:O	9:8E:73:GLN:HB2	2.16	0.45
26:14:1019:U:H3	26:14:1142(A):A:H62	1.64	0.45
32:41:46:ALA:HB2	32:41:52:ILE:CB	2.41	0.45
26:14:1408:C:O2	26:14:1595:G:N2	2.49	0.45
29:11:149:PRO:O	29:11:150:LYS:HB2	2.17	0.45
13:4A:8:GLU:HB3	32:49:115:ARG:NH2	2.32	0.45
1:13:689:C:OP1	11:2I:27:ASN:ND2	2.47	0.45
40:65:23:ARG:NH2	40:65:84:GLN:OE1	2.49	0.45
3:22:111:LEU:HD11	3:22:144:SER:O	2.16	0.45
26:14:1278:A:O2'	39:55:34:ILE:HD11	2.17	0.45
26:14:90:U:HO2'	26:14:91:A:H8	1.60	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:95:37:VAL:HG21	43:95:57:VAL:HG13	1.98	0.45
26:14:265:A:H1'	26:14:266:G:O4'	2.16	0.45
3:2E:58:GLU:HB2	3:2E:65:ALA:CB	2.45	0.45
1:13:918:A:H2'	1:13:919:A:H8	1.78	0.45
26:14:957:A:N6	26:14:2459:A:C8	2.84	0.45
1:13:1218:C:H2'	1:13:1219:U:C6	2.51	0.45
26:1H:1464:C:O2'	26:1H:1528:A:H8	2.00	0.45
37:78:114:ILE:HG12	37:78:130:PHE:CD2	2.52	0.45
9:82:20:ARG:HG3	9:82:60:ASP:HB2	1.98	0.45
26:14:813:U:C2	26:14:1195:G:N2	2.85	0.45
5:4E:145:LYS:O	5:4E:148:VAL:HB	2.15	0.45
1:13:1137:C:H1'	1:13:1138:G:N1	2.31	0.45
26:14:111:A:C2	26:14:112:U:C2	3.04	0.45
26:14:456:C:C2	45:B5:69:TYR:HE2	2.35	0.45
26:1H:2145:C:H3'	26:1H:2146:C:H5'	1.98	0.45
35:58:68:GLU:HG3	35:58:69:GLN:H	1.81	0.45
2:1E:72:GLY:HA2	2:1E:165:VAL:HG22	1.98	0.45
32:41:171:ALA:O	32:41:174:GLU:HB2	2.17	0.45
4:32:32:ALA:HA	4:32:35:ARG:HB3	1.99	0.45
34:61:64:GLU:O	34:61:67:ARG:N	2.50	0.45
26:14:478:A:N1	26:14:500:G:H4'	2.31	0.45
26:1H:2027:G:C5	26:1H:2028:U:C5	3.04	0.45
26:1H:1375:C:H2'	26:1H:1376:C:H6	1.81	0.45
26:1H:1470:G:H5''	26:1H:1471:A:OP1	2.16	0.45
26:14:951:C:H2'	26:14:952:G:H8	1.82	0.45
3:2E:73:PRO:HA	3:2E:76:VAL:HG22	1.97	0.45
1:13:1053:G:N7	1:13:1199:U:H3'	2.32	0.45
26:1H:397:G:H2'	26:1H:398:G:H8	1.80	0.45
1:1G:1516:G:H2'	1:1G:1518:A:OP2	2.16	0.45
1:1G:332:G:C2	1:1G:333:G:C8	3.05	0.45
30:21:35:GLN:HG2	30:21:36:ARG:N	2.31	0.45
26:14:1331:A:H2'	26:14:1333:C:C5	2.51	0.45
18:9I:40:LEU:HA	18:9I:40:LEU:HD23	1.74	0.45
26:14:1708:C:O2'	26:14:1709:U:H5'	2.16	0.45
1:1G:1055:A:C2	1:1G:1056:U:H1'	2.51	0.45
26:1H:1635:G:C2	26:1H:1636:C:C2	3.05	0.45
26:1H:1578:U:H5	61:1H:3999:HOH:O	1.98	0.45
26:14:66:C:H2'	26:14:67:U:H6	1.80	0.45
26:1H:2311:A:O2'	32:41:88:ILE:HG21	2.17	0.45
1:13:1299:A:C2'	1:13:1301:U:H1'	2.45	0.45
1:13:963:G:H1	1:13:972:C:N4	2.11	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:5I:21:TYR:HE1	14:5I:23:ARG:NE	2.15	0.45
4:32:20:TYR:HD1	4:32:26:CYS:HB3	1.82	0.45
4:32:31:CYS:C	4:32:33:MET:N	2.69	0.45
37:78:37:GLY:O	37:78:40:SER:N	2.48	0.45
14:5I:43:CYS:HA	14:5I:46:GLU:HB2	1.99	0.45
26:14:955:C:OP1	38:45:85:LYS:NZ	2.48	0.45
26:1H:602:G:O2'	26:1H:604:G:O2'	2.10	0.45
26:14:2892:A:C5	26:14:2893:G:H1'	2.52	0.45
49:J8:58:ILE:HG12	49:J8:87:PRO:HD3	1.98	0.45
32:41:96:ARG:O	32:41:97:ASP:HB2	2.16	0.45
1:1G:1053:G:C6	1:1G:1199:U:H2'	2.52	0.45
20:BA:57:ARG:HA	20:BA:60:GLU:HB2	1.99	0.45
7:62:60:LYS:HG2	7:62:63:LYS:HE3	1.99	0.45
26:14:221:A:N1	26:14:265:A:O2'	2.44	0.45
26:1H:2680:C:OP2	30:21:111:ARG:NH2	2.47	0.45
30:29:26:ILE:HG23	30:29:26:ILE:HD12	1.70	0.45
41:75:8:LYS:HA	41:75:8:LYS:NZ	2.31	0.45
26:14:1338:G:N3	26:14:1393:A:H2	2.15	0.45
51:L8:31:LEU:HB3	51:L8:32:GLN:OE1	2.16	0.45
27:16:0:A:H2'	27:16:1:U:C6	2.51	0.45
1:1G:653:A:C8	8:72:56:LYS:HE3	2.52	0.45
56:1L:68:G:H2'	56:1L:69:A:C5	2.51	0.45
39:98:5:LYS:HB2	39:98:5:LYS:HE3	1.68	0.45
17:8A:10:VAL:HG22	17:8A:55:ASP:O	2.15	0.45
1:13:1137:C:O2'	1:13:1138:G:O5'	2.34	0.45
26:1H:1336:A:OP2	45:F8:64:LYS:NZ	2.39	0.45
1:1G:552:U:H1'	12:3A:32:PHE:CE1	2.51	0.45
1:13:657:G:N2	1:13:749:C:O2	2.25	0.45
26:1H:1296:G:H2'	26:1H:1297:C:H6	1.82	0.45
26:14:2467:C:H4'	38:45:123:HIS:CD2	2.51	0.45
26:14:2591:C:OP1	29:19:239:ARG:HG3	2.17	0.45
9:8E:48:GLU:N	9:8E:49:PRO:HD2	2.31	0.45
26:14:2884:U:H2'	26:14:2885:C:O4'	2.17	0.45
1:13:591:U:H2'	1:13:592:G:C8	2.52	0.45
27:1J:21:G:H2'	27:1J:22:U:O4'	2.16	0.45
1:1G:1109:C:H2'	1:1G:1110:A:O4'	2.16	0.45
24:3K:21:A:H2'	24:3K:22:G:H8	1.81	0.45
1:13:1333:A:H2'	1:13:1334:G:O4'	2.16	0.45
56:1L:18:G:O2'	56:1L:19:G:H5'	2.16	0.45
45:F8:12:VAL:HG13	45:F8:27:THR:O	2.16	0.45
37:78:100:LEU:HD13	37:78:100:LEU:HA	1.62	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:445:C:O2'	26:14:446:G:H5'	2.16	0.45
26:1H:1897:G:H2'	26:1H:1898:U:O4'	2.16	0.45
41:75:26:ASP:O	41:75:49:VAL:HG22	2.17	0.45
26:1H:734:A:O2'	26:1H:1635:G:H5'	2.16	0.45
26:1H:996:A:H4'	42:C8:92:ARG:HE	1.80	0.45
1:1G:1316:G:N2	1:1G:1319:A:OP2	2.42	0.45
26:14:1149:G:H2'	26:14:1150:C:C6	2.52	0.45
26:1H:1358:G:N2	26:1H:1372:U:C5	2.85	0.45
30:21:105:THR:HB	30:21:197:ILE:HG23	1.99	0.45
13:4I:13:LYS:HA	13:4I:13:LYS:HZ2	1.81	0.45
37:78:50:ARG:HD3	55:Q8:7:HIS:CD2	2.52	0.45
26:1H:839:U:H2'	26:1H:840:C:C6	2.51	0.45
1:13:509:A:H5''	4:3E:55:ALA:HB2	1.98	0.45
3:2E:131:ARG:HA	3:2E:134:ILE:HD12	1.99	0.45
26:14:330:A:HO2'	26:14:331:A:H8	1.61	0.45
31:31:129:PHE:HB2	31:31:132:VAL:HG13	1.99	0.45
32:41:106:LEU:HD12	32:41:110:ALA:HB3	1.97	0.45
31:31:108:LYS:O	31:31:112:MET:HG3	2.17	0.45
1:1G:113:G:O4'	1:1G:354:G:H4'	2.16	0.45
28:71:22:ILE:HD13	28:71:189:ILE:HG22	1.97	0.45
5:4E:126:ARG:HH11	5:4E:126:ARG:HG3	1.81	0.45
1:13:843:U:H5''	1:13:848:C:C5	2.52	0.45
23:2K:17:C:H5'	23:2K:62:C:OP1	2.16	0.45
2:1E:127:ILE:HD11	2:1E:139:LYS:NZ	2.32	0.45
26:1H:2336:A:H61	48:I8:43:THR:HG21	1.81	0.45
34:61:10:GLU:O	34:61:11:ASN:HB2	2.17	0.45
26:1H:2663:G:C2	26:1H:2664:G:H1'	2.51	0.45
26:14:1328:G:H2'	26:14:1330:C:C4	2.52	0.45
13:4A:96:LEU:CD2	13:4A:97:PRO:HD2	2.47	0.45
26:1H:1171:G:H3'	26:1H:1173:G:C5'	2.47	0.45
1:13:1412:C:H42	1:13:1488:G:H1	1.64	0.45
26:1H:775:G:C5	26:1H:794:G:C8	3.04	0.45
10:1A:28:ARG:HH12	10:1A:34:VAL:HG22	1.81	0.45
43:95:76:LYS:HD2	43:95:80:GLN:O	2.16	0.45
51:L8:6:VAL:HG12	51:L8:56:VAL:HG22	1.97	0.45
1:13:383:A:C5	1:13:384:G:H1'	2.52	0.45
40:65:68:GLN:O	40:65:72:ALA:N	2.42	0.45
8:72:81:HIS:HB2	8:72:138:TRP:HE3	1.82	0.45
47:D5:98:MET:O	47:D5:125:LEU:HA	2.17	0.45
2:12:98:LEU:O	2:12:101:MET:HG2	2.17	0.45
26:14:59:U:O2'	26:14:73:A:H2'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:582:U:H5''	15:6A:64:ARG:NH1	2.31	0.45
31:39:141:ALA:HA	31:39:144:LYS:HB2	1.99	0.45
11:2I:38:ASN:HA	11:2I:39:PRO:HD3	1.82	0.45
55:Q8:4:MET:HB2	55:Q8:4:MET:HE3	1.56	0.45
55:Q8:41:ILE:O	55:Q8:41:ILE:HG13	2.16	0.45
45:F8:41:ASN:OD1	45:F8:41:ASN:N	2.49	0.45
1:1G:397:A:N3	1:1G:397:A:H3'	2.32	0.45
49:J8:21:ARG:HB3	49:J8:21:ARG:HE	1.40	0.45
8:7E:10:LEU:HD23	8:7E:10:LEU:N	2.32	0.45
26:14:718:A:H3'	26:14:719:C:H6	1.82	0.45
25:4L:11:U:H2'	25:4L:12:A:H5''	1.98	0.45
55:M5:40:GLU:H	55:M5:43:GLN:HB2	1.82	0.45
1:1G:1298:C:H4'	1:1G:1299:A:C5	2.50	0.45
19:AI:41:VAL:CG1	19:AI:67:VAL:HA	2.47	0.45
26:1H:1113:U:H2'	26:1H:1114:G:C8	2.52	0.45
30:29:51:PHE:CE2	30:29:52:LEU:HD22	2.52	0.45
9:82:43:ALA:HA	9:82:74:ILE:HD13	1.99	0.45
26:14:2173:A:O2'	26:14:2174:C:OP1	2.32	0.45
26:1H:1380:G:N2	26:1H:1570:A:C2	2.85	0.45
1:1G:411:A:H61	1:1G:430:A:N6	2.15	0.45
26:1H:2845:G:H5''	41:B8:55:ASN:HA	1.98	0.45
30:21:78:LEU:O	30:21:79:ARG:HB2	2.16	0.45
37:78:46:LYS:O	37:78:47:ASP:HB3	2.16	0.45
5:4E:143:ARG:HB3	5:4E:147:ASP:HB2	1.98	0.45
26:1H:1409:C:N4	26:1H:1593:G:H1	2.14	0.45
24:3K:57:G:O5'	24:3K:57:G:H8	1.99	0.45
4:3E:157:LEU:HD12	4:3E:161:ASN:ND2	2.32	0.45
51:L8:26:LEU:HB2	51:L8:28:LEU:HD12	1.98	0.45
29:19:53:PHE:C	29:19:218:ARG:HB2	2.37	0.45
13:4A:15:VAL:HA	13:4A:18:ALA:HB3	1.99	0.45
38:45:34:LEU:HB2	38:45:118:LEU:HD13	1.98	0.45
8:7E:11:THR:HG23	8:7E:14:ARG:HH12	1.81	0.45
1:13:134:A:H61	16:7I:25:ARG:NH1	2.14	0.45
26:14:1356:G:H2'	26:14:1357:U:O4'	2.16	0.45
32:49:140:ILE:HG13	32:49:141:PHE:N	2.32	0.45
43:D8:85:LYS:HZ3	43:D8:85:LYS:HB2	1.82	0.45
6:5E:23:LYS:HB2	6:5E:23:LYS:NZ	2.32	0.45
44:A5:72:LYS:HG2	44:A5:106:ILE:HD11	1.98	0.45
1:13:718:G:C4	11:2I:116:HIS:CD2	3.05	0.45
26:1H:389:G:H1	37:78:71:VAL:HG12	1.81	0.45
29:11:122:ASP:CG	29:11:123:ALA:H	2.20	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2199:A:C4	26:1H:2205:C:C6	3.05	0.45
14:5A:11:LYS:O	14:5A:13:THR:HG23	2.17	0.45
57:3L:30:G:C4	57:3L:31:A:C8	3.05	0.45
47:D5:44:PHE:HE2	47:D5:88:PHE:CZ	2.34	0.45
1:1G:263:A:H2'	1:1G:264:U:C6	2.52	0.45
26:1H:1437:C:H2'	26:1H:1438:U:H6	1.82	0.45
26:14:41:C:H2'	26:14:43:G:H8	1.82	0.45
36:25:7:TYR:CE1	36:25:20:MET:HG3	2.51	0.45
26:1H:2496:C:C2'	26:1H:2497:A:H5'	2.47	0.45
31:39:168:ARG:HG3	31:39:175:THR:HG21	1.98	0.45
32:41:6:ALA:HB3	32:41:104:GLU:OE2	2.17	0.45
26:1H:91:A:H2'	26:1H:92:G:O4'	2.16	0.45
1:1G:1401:G:C2	1:1G:1402:C:H1'	2.51	0.45
33:51:124:GLU:HG2	33:51:126:PRO:HD3	1.98	0.45
1:1G:791:G:O6	1:1G:792:A:N6	2.48	0.45
5:4E:128:PRO:HA	5:4E:131:ILE:HB	1.98	0.45
31:39:178:PRO:HB3	31:39:198:ALA:HB1	1.99	0.45
26:14:2029:G:H2'	26:14:2031:A:OP1	2.17	0.45
26:14:1011:G:OP2	42:85:66:ASN:ND2	2.48	0.45
26:1H:1568:G:P	29:11:63:ARG:HH12	2.40	0.45
8:7E:77:GLU:HG2	8:7E:78:GLN:H	1.81	0.45
1:13:1148:U:H2'	1:13:1149:C:O4'	2.17	0.45
36:68:64:ARG:NH1	36:68:81:ASP:OD1	2.50	0.45
26:14:873:G:H1'	38:45:29:PHE:CE2	2.44	0.45
26:14:389:G:H1	37:35:71:VAL:HG12	1.82	0.45
6:5E:89:MET:HG3	18:9I:76:LEU:CD2	2.43	0.45
26:1H:1210:A:C8	26:1H:1210:A:H5'	2.46	0.45
1:1G:1141:C:H2'	1:1G:1142:G:C8	2.52	0.45
26:14:1138:G:C4	26:14:1139:G:H1'	2.51	0.45
2:12:185:ILE:HG23	2:12:199:TYR:O	2.17	0.45
32:49:59:GLU:CD	32:49:153:ARG:HH21	2.20	0.45
34:61:33:ARG:O	34:61:35:LEU:HD12	2.17	0.45
36:25:50:GLY:H	36:25:53:LYS:HE3	1.82	0.45
20:BI:53:LEU:O	20:BI:57:ARG:HB2	2.16	0.45
37:35:144:GLU:HA	37:35:145:PRO:HD3	1.72	0.45
26:1H:1018:C:O2'	26:1H:1019:U:H5'	2.16	0.45
6:5E:4:TYR:HA	6:5E:91:VAL:O	2.17	0.45
1:1G:771:G:H2'	1:1G:772:U:C6	2.52	0.45
26:14:2850:A:C2	26:14:2851:A:C4	3.04	0.45
45:F8:47:PHE:O	45:F8:49:VAL:HG23	2.17	0.45
32:41:55:LYS:NZ	32:41:59:GLU:OE2	2.38	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:40:GLU:OE2	46:C5:40:GLU:N	2.50	0.45
37:35:96:THR:OG1	37:35:97:PRO:O	2.34	0.45
1:13:38:G:C2	1:13:397:A:C2	3.05	0.45
28:71:180:PHE:HA	28:71:181:PRO:HD3	1.67	0.45
32:41:77:ILE:HG22	32:41:82:LEU:HD12	1.99	0.45
3:22:42:LEU:O	3:22:46:GLU:HG2	2.17	0.45
26:1H:2744:G:C8	26:1H:2755:C:C6	3.05	0.45
12:3A:109:GLY:HA3	12:3A:121:GLY:O	2.17	0.45
26:14:2092:U:H5	26:14:2226:C:OP2	2.00	0.45
48:E5:24:LYS:O	48:E5:25:ARG:HD3	2.17	0.45
49:F5:12:PRO:HB2	49:F5:41:ARG:HH21	1.82	0.45
26:14:300:A:H2'	26:14:334:C:H1'	1.99	0.45
1:13:965:A:C2	1:13:969:A:C2	3.05	0.45
26:14:1217:C:OP1	42:85:15:LYS:HE3	2.17	0.45
2:1E:91:PRO:HG3	2:1E:154:LEU:HB2	1.98	0.45
1:13:1058:G:C6	1:13:1059:C:N3	2.85	0.45
38:88:39:PRO:HA	38:88:97:VAL:O	2.17	0.45
26:14:608:A:H2'	26:14:609:A:O4'	2.17	0.45
26:14:1838:C:N4	26:14:1898:U:H2'	2.32	0.45
26:14:669:G:N3	26:14:669:G:H2'	2.31	0.45
9:82:95:LYS:NZ	9:82:95:LYS:HB3	2.32	0.45
26:1H:576:U:O5'	26:1H:576:U:O2	2.35	0.45
1:13:186(A):C:N3	20:BI:105:SER:HB3	2.31	0.45
26:1H:1264:G:H5'	53:N8:11:THR:CG2	2.47	0.45
26:1H:2732:G:H3'	26:1H:2733:A:O4'	2.17	0.45
1:1G:1346:A:C6	7:62:10:ARG:NH1	2.84	0.45
46:C5:82:PRO:HB3	46:C5:97:ARG:HB3	1.98	0.45
26:14:2873:A:H8	39:55:6:SER:N	2.02	0.45
30:29:55:ASN:O	30:29:57:LYS:NZ	2.49	0.45
38:45:35:VAL:HG12	38:45:36:ALA:N	2.32	0.45
52:M8:40:HIS:CE1	52:M8:43:TYR:O	2.69	0.45
4:3E:79:PHE:O	4:3E:83:SER:OG	2.32	0.45
26:1H:1591:G:H2'	26:1H:1592:C:C6	2.51	0.45
40:A8:18:ILE:O	40:A8:21:THR:HG22	2.17	0.45
1:13:625:G:H2'	1:13:626:U:C6	2.52	0.45
21:1B:8:THR:HG21	21:1B:10:ARG:NH2	2.32	0.45
13:4A:31:LYS:O	13:4A:34:LEU:HB2	2.16	0.45
26:14:2577:A:H2'	26:14:2614:A:N6	2.32	0.45
43:95:98:GLU:HG2	43:95:100:ARG:HG2	1.98	0.45
33:59:154:PRO:HB3	33:59:162:ILE:O	2.17	0.45
26:1H:580:C:H2'	26:1H:581:C:C6	2.50	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2655:G:N2	26:14:2665:A:OP2	2.50	0.45
31:31:27:GLU:N	31:31:27:GLU:OE1	2.47	0.45
38:45:117:ALA:HA	38:45:120:ILE:HB	1.99	0.45
24:3K:72:C:H2'	24:3K:73:A:H5''	1.98	0.45
30:21:75:VAL:C	30:21:76:ARG:HD2	2.38	0.45
26:14:519:U:H2'	26:14:520:G:C8	2.52	0.45
18:9A:53:ARG:HD2	18:9A:63:GLN:HB2	1.99	0.45
1:13:33:A:H8	1:13:33:A:O5'	1.99	0.45
50:K8:64:LEU:HD21	50:K8:68:ARG:NH1	2.32	0.45
1:13:603:U:H2'	1:13:604:G:C8	2.51	0.45
26:1H:2661:G:H8	26:1H:2661:G:OP2	2.00	0.45
26:1H:1264:G:H5'	53:N8:11:THR:HG23	1.99	0.45
26:14:843:G:H1	26:14:935:C:H42	1.65	0.45
26:14:1849:G:H2'	26:14:1850:G:H8	1.82	0.45
2:1E:59:GLU:HB2	2:1E:221:LEU:HD21	1.99	0.45
26:14:2897:U:H3'	26:14:2898:U:C6	2.52	0.45
35:58:104:LYS:HB2	35:58:117:PHE:CE1	2.52	0.45
26:1H:1668:A:OP1	36:68:5:GLN:HG3	2.16	0.45
22:1K:28:U:C4	22:1K:29:U:C4	3.05	0.45
1:13:990:C:N4	1:13:991:U:O4	2.49	0.45
26:14:1087:G:H2'	26:14:1087:G:N3	2.32	0.45
31:31:46:ARG:HA	31:31:46:ARG:HD2	1.77	0.45
50:G5:32:LEU:O	50:G5:32:LEU:HD12	2.17	0.45
30:21:47:VAL:O	30:21:80:GLU:HA	2.16	0.45
26:14:851:U:OP1	51:H5:49:LYS:HE2	2.17	0.45
26:14:2498:C:P	61:14:3507:HOH:O	2.72	0.45
41:B8:6:LEU:HA	41:B8:9:LEU:HB2	1.98	0.45
26:1H:731:C:C2	26:1H:732:C:C5	3.05	0.45
1:1G:452:A:C4'	16:7A:72:ARG:HH12	2.23	0.45
1:13:232:G:H2'	1:13:233:C:C6	2.51	0.45
26:14:666:G:H5''	37:35:47:ASP:O	2.16	0.45
26:14:1557:C:H5''	26:14:1558:A:OP2	2.17	0.45
33:59:3:ARG:HB3	33:59:4:ILE:H	1.29	0.45
26:14:2134:A:C5	26:14:2158:A:H8	2.35	0.45
29:11:9:TYR:CZ	29:11:13:ARG:HG2	2.52	0.45
34:69:77:LEU:HG	34:69:78:THR:OG1	2.17	0.45
26:1H:2127:G:N1	26:1H:2161:C:H2'	2.29	0.45
26:1H:686:G:N7	54:P8:5:TRP:CH2	2.85	0.45
1:1G:78:G:H1	1:1G:91:C:N4	2.15	0.45
2:12:59:GLU:OE2	2:12:221:LEU:HD13	2.16	0.45
41:75:5:ALA:O	41:75:8:LYS:HB2	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:642:G:H21	26:1H:646:A:H2	1.64	0.45
57:3L:76:A:C8	26:14:2394:C:N4	2.85	0.45
26:14:774:A:H2	26:14:787:U:O2'	1.99	0.45
26:14:2417:C:H2'	26:14:2418:A:C8	2.51	0.45
1:13:1212:U:H4'	1:13:1213:A:C8	2.51	0.45
1:13:243:A:H4'	1:13:244:U:H5''	1.99	0.45
26:1H:7:G:H1	26:1H:2896:C:H42	1.65	0.45
29:19:73:VAL:HG13	29:19:120:GLY:HA3	1.98	0.45
39:98:42:LYS:HA	39:98:45:ARG:HD2	1.98	0.45
1:1G:922:G:H1'	5:42:19:MET:HB3	1.98	0.45
26:1H:991:C:H2'	26:1H:992:C:H6	1.82	0.45
29:19:159:ALA:HB1	29:19:198:ASN:O	2.16	0.45
26:14:2273:A:H2'	26:14:2274:A:C8	2.52	0.45
12:3A:86:ARG:HB2	12:3A:101:VAL:CG2	2.46	0.45
26:14:337:C:H2'	26:14:338:G:O4'	2.18	0.45
1:13:19:C:OP1	5:4E:125:SER:OG	2.33	0.45
13:4A:22:ILE:HB	13:4A:25:ILE:HG13	1.98	0.45
26:14:2771:C:H4'	30:29:202:LYS:HD3	1.98	0.45
26:14:1833:U:O2	26:14:1969:A:H2	1.99	0.45
26:14:741:G:H2'	26:14:742:G:C8	2.52	0.45
26:1H:2674:G:H4'	36:68:30:ALA:HB2	1.99	0.45
38:88:11:LYS:NZ	38:88:88:GLY:O	2.49	0.45
47:D5:7:ALA:O	47:D5:8:TYR:CG	2.69	0.45
4:3E:192:GLU:OE1	4:3E:192:GLU:N	2.50	0.45
20:BA:8:ARG:O	20:BA:8:ARG:HG2	2.17	0.45
26:14:1225:C:H4'	43:95:85:LYS:CG	2.36	0.44
1:1G:1299:A:C6	1:1G:1301:U:C2	3.05	0.44
1:1G:975:A:C4'	1:1G:976:G:H5''	2.38	0.44
1:13:363:A:N7	12:3I:33:ARG:NH2	2.65	0.44
46:G8:93:GLY:O	46:G8:94:LYS:HB2	2.17	0.44
41:B8:6:LEU:HD23	41:B8:9:LEU:HD12	1.98	0.44
1:13:1367:C:H5'	10:1I:60:ARG:HH11	1.82	0.44
26:14:1824:G:OP1	29:19:52:ARG:NH1	2.50	0.44
1:1G:1321:C:H3'	1:1G:1322:C:H5''	1.99	0.44
3:22:47:LEU:HB2	3:22:52:LEU:HD13	1.99	0.44
26:1H:2314:C:H2'	26:1H:2315:G:C8	2.52	0.44
24:3K:35:U:H2'	24:3K:36:U:H6	1.82	0.44
46:C5:87:LYS:CB	46:C5:94:LYS:HA	2.47	0.44
1:13:739:C:O2'	15:6I:42:HIS:ND1	2.40	0.44
26:1H:783:A:C8	26:1H:783:A:H3'	2.52	0.44
26:1H:729:G:OP2	29:11:13:ARG:NH1	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:88:66:ILE:CD1	38:88:67:ARG:H	2.30	0.44
41:B8:26:ASP:CB	41:B8:92:GLY:H	2.26	0.44
26:1H:1331:A:O2'	26:1H:1332:G:H8	1.99	0.44
1:1G:1294:G:H2'	1:1G:1295:G:H8	1.81	0.44
32:49:124:SER:HB2	32:49:131:TYR:HE1	1.81	0.44
1:1G:78:G:H2'	1:1G:79:G:O4'	2.17	0.44
26:14:1106:G:H5'	26:14:1107:G:OP2	2.17	0.44
26:14:2299:G:C6	26:14:2318:G:H8	2.35	0.44
12:3A:59:ARG:HH11	12:3A:59:ARG:HG3	1.82	0.44
26:14:1257:C:H4'	31:39:83:PHE:CD1	2.52	0.44
19:AA:15:LEU:HD11	19:AA:33:THR:HB	1.99	0.44
26:1H:1819:A:O4'	26:1H:1821:A:C4	2.69	0.44
26:14:303:U:H2'	26:14:304:G:C8	2.52	0.44
2:1E:145:LEU:HD23	2:1E:145:LEU:HA	1.79	0.44
1:13:114:U:O2'	1:13:115:G:H5'	2.17	0.44
26:1H:764:A:H5'	29:11:210:GLY:CA	2.47	0.44
1:13:156:G:H2'	1:13:157:G:C8	2.53	0.44
26:14:2757:A:N1	33:59:67:LEU:HD22	2.32	0.44
1:13:859:A:H2'	1:13:860:A:O4'	2.16	0.44
2:12:16:HIS:HD2	2:12:213:LEU:HD22	1.80	0.44
1:1G:165:C:H2'	1:1G:166:G:C8	2.52	0.44
4:3E:108:LEU:HB3	4:3E:110:PHE:CE1	2.52	0.44
1:1G:601:C:H2'	1:1G:602:A:H8	1.82	0.44
26:14:753:C:H2'	26:14:754:C:H6	1.82	0.44
26:14:839:U:H2'	26:14:840:C:H6	1.82	0.44
26:14:1688:U:H1'	26:14:1701:A:C6	2.52	0.44
26:14:1542:G:O6	26:14:1543:A:N6	2.49	0.44
47:D5:25:PRO:O	47:D5:85:HIS:HA	2.17	0.44
5:42:41:VAL:O	5:42:67:VAL:HG12	2.18	0.44
16:7I:21:VAL:O	16:7I:33:ILE:N	2.45	0.44
1:13:1053:G:O5'	1:13:1054:C:H3'	2.18	0.44
26:1H:43:G:H1'	26:1H:438:G:N2	2.32	0.44
23:2L:1:C:O2	48:E5:7:LEU:N	2.50	0.44
26:1H:1044:G:O2'	26:1H:1111:A:N6	2.33	0.44
26:14:2774:C:H2'	26:14:2775:A:O4'	2.17	0.44
1:1G:570:G:H1'	1:1G:820:U:C4	2.52	0.44
1:13:947:G:C6	1:13:948:C:C4	3.05	0.44
26:1H:2851:A:H2'	26:1H:2852:G:O4'	2.17	0.44
26:14:2886:G:H2'	26:14:2887:U:H6	1.81	0.44
26:14:2788:C:O2'	26:14:2809:A:N3	2.43	0.44
26:1H:1686:C:H2'	26:1H:1687:G:O4'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:15:ASN:O	8:7E:19:VAL:HG23	2.17	0.44
26:1H:2705:A:H2'	26:1H:2706:G:O4'	2.17	0.44
26:1H:2084:C:H2'	26:1H:2085:C:H6	1.82	0.44
1:1G:995:C:O2'	1:1G:996:A:H5'	2.17	0.44
40:65:36:TYR:HA	40:65:52:SER:HB3	1.98	0.44
1:1G:15:G:H2'	1:1G:16:A:O4'	2.17	0.44
42:85:50:ARG:HH22	43:95:72:VAL:HG23	1.82	0.44
1:13:1002:G:C2	1:13:1003:G:H1'	2.52	0.44
13:4A:81:LEU:HD21	13:4A:88:ARG:HE	1.82	0.44
26:14:1012:U:C5	35:15:28:THR:HG21	2.52	0.44
40:65:61:ASN:O	40:65:65:VAL:HB	2.16	0.44
26:1H:1416:G:O2'	26:1H:1417:C:P	2.75	0.44
1:13:263:A:OP2	20:BI:79:ARG:NH1	2.50	0.44
26:14:389:G:N1	37:35:71:VAL:HG12	2.31	0.44
57:3L:61:C:O2'	28:79:52:ARG:NH2	2.49	0.44
26:1H:1278:A:H4'	39:98:34:ILE:HD11	1.98	0.44
26:14:2469:A:H4'	26:14:2469:A:OP1	2.17	0.44
32:41:109:VAL:HG11	32:41:142:PRO:HD3	1.98	0.44
39:55:34:ILE:HG22	39:55:114:VAL:HB	1.98	0.44
19:AI:5:LEU:HB2	19:AI:8:GLY:HA3	1.99	0.44
1:1G:963:G:HO2'	10:1A:54:PHE:HZ	1.63	0.44
43:95:35:LEU:HG	43:95:37:VAL:HG11	1.99	0.44
26:1H:1475:G:H1	26:1H:1518:C:N4	2.12	0.44
40:A8:35:ILE:HD11	40:A8:101:LEU:HD23	1.98	0.44
1:13:837:G:P	1:13:842:C:H42	2.35	0.44
23:2L:62:C:H2'	23:2L:63:C:H6	1.82	0.44
1:1G:587:G:N2	1:1G:755:G:C5	2.85	0.44
32:49:146:TYR:O	32:49:149:VAL:HG22	2.16	0.44
26:14:1291:C:H2'	26:14:1292:U:C6	2.52	0.44
26:1H:2886:G:H2'	26:1H:2887:U:C6	2.53	0.44
1:1G:999:U:H2'	1:1G:1000:A:H8	1.81	0.44
1:13:376:G:O3'	16:7I:5:ARG:NH1	2.50	0.44
1:13:994:A:N7	1:13:1216:G:H4'	2.32	0.44
26:14:600:G:H5'	31:39:32:LEU:HD12	1.98	0.44
26:1H:2329:G:H21	48:I8:41:ARG:HG3	1.82	0.44
1:1G:105:G:C5	1:1G:106:C:C4	3.05	0.44
26:1H:768:G:O2'	26:1H:1379:A:N6	2.47	0.44
21:1F:6:ARG:HH11	21:1F:15:ARG:CZ	2.30	0.44
26:1H:1796:U:H2'	26:1H:1797:C:C6	2.51	0.44
1:13:725:G:O2'	1:13:726:C:H5'	2.17	0.44
11:2I:84:VAL:HG13	11:2I:110:ASP:HA	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1136:U:H5''	1:1G:1137:C:C5	2.53	0.44
32:49:50:ALA:O	32:49:54:GLU:HG3	2.17	0.44
1:1G:236:G:H2'	1:1G:237:C:O4'	2.16	0.44
26:1H:2659:G:N2	26:1H:2661:G:H5''	2.32	0.44
2:12:96:ARG:O	2:12:98:LEU:HD12	2.16	0.44
26:14:2886:G:H2'	26:14:2887:U:C6	2.52	0.44
26:14:699:A:H2'	26:14:700:G:O4'	2.16	0.44
26:14:2635:C:OP1	30:29:77:ILE:HB	2.16	0.44
26:14:2038:G:H2'	26:14:2039:C:O4'	2.17	0.44
26:14:573:G:O2'	26:14:574:C:H3'	2.17	0.44
1:1G:255:G:H1'	17:8A:16:GLN:OE1	2.17	0.44
1:1G:6:G:P	4:32:84:LYS:HD3	2.57	0.44
31:31:17:ARG:HD3	31:31:17:ARG:O	2.17	0.44
26:14:1037:G:H2'	26:14:1037:G:N3	2.32	0.44
23:2K:37:U:H2'	23:2K:38:A:O4'	2.17	0.44
41:75:12:SER:HB3	41:75:15:VAL:HG13	1.99	0.44
1:13:646:U:H2'	1:13:647:C:C6	2.51	0.44
14:5A:21:TYR:HE1	14:5A:23:ARG:HE	1.65	0.44
26:14:761:A:C8	61:14:3590:HOH:O	2.57	0.44
26:1H:2430:A:H8	26:1H:2431:U:C5	2.35	0.44
40:65:103:GLU:O	40:65:106:ARG:NE	2.44	0.44
26:1H:312:G:H5'	26:1H:331:A:O2'	2.18	0.44
11:2I:85:ARG:HE	11:2I:111:ASP:CB	2.27	0.44
26:1H:1442:G:H2'	26:1H:1443:G:H8	1.81	0.44
26:1H:2020:A:C2	26:1H:2022:U:O4'	2.70	0.44
1:1G:1207:G:H2'	1:1G:1208:C:C6	2.52	0.44
3:22:140:ARG:O	3:22:144:SER:HB2	2.17	0.44
26:14:1055:G:N3	26:14:1055:G:H2'	2.30	0.44
13:4I:27:LYS:O	13:4I:31:LYS:HD2	2.17	0.44
1:1G:147:G:H1	1:1G:175:C:H42	1.65	0.44
26:14:480:A:OP2	46:C5:46:LYS:HE2	2.17	0.44
1:13:540:G:H2'	1:13:541:G:O4'	2.17	0.44
26:14:270(E):G:C6	26:14:270(F):U:C4	3.05	0.44
47:H8:63:ASP:OD1	47:H8:65:GLN:NE2	2.47	0.44
26:14:2795:G:N3	26:14:2795:G:H2'	2.32	0.44
1:1G:979:C:O2	14:5A:19:ARG:HG2	2.18	0.44
35:58:22:THR:OG1	35:58:23:LEU:N	2.49	0.44
26:1H:2367:G:H2'	26:1H:2368:C:C6	2.53	0.44
26:1H:1170:G:N2	26:1H:1180:C:C2	2.85	0.44
1:13:792:A:H4'	1:13:793:U:O5'	2.17	0.44
26:14:2647:U:H3	26:14:2673:G:H1	1.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:36:ARG:HB3	4:3E:38:TYR:CZ	2.53	0.44
1:1G:1051:C:H2'	1:1G:1052:U:C6	2.53	0.44
26:14:1519:G:C6	26:14:1520:U:C4	3.06	0.44
26:14:631:A:H2'	26:14:632:A:O4'	2.17	0.44
27:1J:23:G:C2	27:1J:24:G:O6	2.71	0.44
1:1G:596:C:H2'	1:1G:597:G:C8	2.52	0.44
45:F8:58:HIS:HA	45:F8:77:LYS:HA	1.99	0.44
1:13:297:G:H4'	1:13:557:G:H4'	1.99	0.44
36:68:19:ILE:HG22	36:68:43:VAL:HG22	2.00	0.44
1:1G:1191:A:OP1	3:22:4:LYS:HG3	2.18	0.44
1:1G:195:A:N7	1:1G:196:A:C6	2.85	0.44
43:95:19:LYS:HG2	43:95:95:LEU:HD23	1.98	0.44
26:1H:836:G:H2'	26:1H:837:C:C6	2.52	0.44
3:2E:120:VAL:O	3:2E:124:ILE:HG13	2.17	0.44
1:13:977:A:H1'	1:13:982:U:O4	2.18	0.44
14:5I:15:LYS:HG2	14:5I:16:PHE:CD2	2.52	0.44
1:13:1499:A:H1'	1:13:1520:G:O5'	2.18	0.44
26:1H:320:A:OP1	31:31:135:LYS:NZ	2.48	0.44
44:A5:30:GLU:HG3	44:A5:31:GLU:N	2.33	0.44
1:1G:414:A:H2'	1:1G:415:A:H8	1.82	0.44
1:1G:416:G:O5'	1:1G:416:G:H8	2.00	0.44
11:2A:95:ILE:H	11:2A:95:ILE:HG12	1.62	0.44
43:D8:35:LEU:HD23	43:D8:35:LEU:HA	1.78	0.44
33:51:119:GLU:HA	33:51:119:GLU:OE2	2.16	0.44
1:13:31:G:H2'	1:13:48:C:N4	2.32	0.44
1:1G:707:C:H2'	1:1G:708:C:C6	2.53	0.44
1:1G:1431:C:H2'	1:1G:1432:G:O4'	2.17	0.44
30:29:7:VAL:HG12	30:29:8:LYS:H	1.82	0.44
26:14:708:C:H42	26:14:723:G:H1	1.65	0.44
26:1H:2462:U:H1'	26:1H:2491:U:O4	2.18	0.44
43:95:87:HIS:NE2	43:95:89:GLN:HB2	2.33	0.44
1:13:511:C:OP2	4:3E:49:ARG:NH1	2.50	0.44
1:1G:1238:A:N7	1:1G:1303:C:H1'	2.32	0.44
24:3K:41:A:H2'	24:3K:42:A:H8	1.82	0.44
31:31:114:VAL:HG21	31:31:202:PHE:CZ	2.52	0.44
1:1G:1533:C:H4'	1:1G:1534:A:OP2	2.16	0.44
48:E5:51:VAL:N	48:E5:62:LEU:HD12	2.32	0.44
26:14:2165:G:H5''	26:14:2166:G:OP2	2.17	0.44
26:1H:1568:G:OP1	29:11:61:LEU:N	2.45	0.44
1:1G:411:A:N6	1:1G:430:A:H62	2.14	0.44
31:31:74:ARG:O	31:31:75:HIS:CD2	2.71	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6I:60:VAL:HG11	26:1H:715:G:H5'	1.98	0.44
1:13:129(A):G:H4'	1:13:130:A:H5''	1.98	0.44
26:1H:729:G:O6	29:11:209:ALA:N	2.47	0.44
26:14:997:G:H2'	26:14:998:C:C6	2.52	0.44
2:1E:16:HIS:NE2	2:1E:214:ILE:HG12	2.31	0.44
1:13:291:C:O2	1:13:310:G:C2	2.71	0.44
26:1H:527:C:H4'	26:1H:528:A:O5'	2.17	0.44
26:1H:287:C:H42	26:1H:354:G:H1	1.65	0.44
1:13:625:G:H4'	16:7I:16:HIS:ND1	2.32	0.44
26:14:2298:A:C2	26:14:2299:G:H1'	2.53	0.44
26:1H:2180:U:H2'	26:1H:2181:G:C8	2.52	0.44
26:14:28:A:O2'	26:14:583:G:H5'	2.18	0.44
1:13:50:A:H1'	1:13:52:G:C8	2.53	0.44
26:1H:1805:U:H5''	29:11:250:TRP:CD2	2.52	0.44
20:BA:29:LYS:O	20:BA:33:ILE:HG13	2.17	0.44
26:1H:2808:U:H5'	26:1H:2891:G:O6	2.17	0.44
23:2K:48:U:H6	23:2K:48:U:OP2	2.01	0.44
49:J8:50:ARG:HA	49:J8:59:THR:HA	1.98	0.44
26:1H:37:C:H2'	26:1H:38:A:C8	2.53	0.44
26:1H:2841:C:H2'	26:1H:2842:G:C8	2.52	0.44
2:1E:11:LEU:HA	2:1E:13:ALA:HB3	1.99	0.44
32:41:117:PHE:HE1	32:41:120:LEU:HD23	1.82	0.44
26:1H:1919:A:H5''	26:1H:1920:C:OP2	2.17	0.44
26:1H:1831:G:H2'	26:1H:1832:C:H6	1.82	0.44
26:14:2789:C:H2'	26:14:2790:A:C1'	2.47	0.44
5:4E:131:ILE:HA	5:4E:131:ILE:HD13	1.80	0.44
26:14:724:U:H2'	26:14:725:G:O4'	2.17	0.44
27:16:13:A:O2'	27:16:14:U:H3'	2.18	0.44
26:14:2762:G:OP2	61:14:3551:HOH:O	2.21	0.44
32:49:27:ASN:HB3	32:49:30:GLU:HG3	2.00	0.44
26:1H:2294:C:C4	26:1H:2295:C:C5	3.06	0.44
30:29:181:LEU:HD12	30:29:181:LEU:HA	1.80	0.44
1:13:300:A:H1'	1:13:565:U:O2	2.18	0.44
2:12:137:ARG:HG3	2:12:138:LEU:HD23	1.99	0.44
26:1H:1191:G:C2'	26:1H:1192:G:H5'	2.48	0.44
47:D5:3:TYR:O	47:D5:58:VAL:HG23	2.18	0.44
26:1H:386:G:H4'	26:1H:387:U:OP2	2.17	0.44
11:2A:18:ARG:NH2	11:2A:35:PRO:O	2.50	0.44
32:49:122:PRO:HB3	32:49:170:ARG:HH12	1.82	0.44
9:8E:19:LEU:HD12	9:8E:84:ALA:HB3	1.99	0.44
26:1H:1957:C:O2'	26:1H:1984:G:N2	2.49	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:519:C:H2'	1:13:520:A:C8	2.52	0.44
47:H8:103:ARG:HG3	47:H8:136:PHE:CD1	2.53	0.44
40:A8:26:LEU:HD12	40:A8:39:ILE:HD11	2.00	0.44
26:1H:1022:G:N2	26:1H:1023:U:O4	2.45	0.44
27:16:15:A:H1'	27:16:109:G:C4	2.53	0.44
31:39:124:LEU:HB3	31:39:193:VAL:HG23	1.99	0.44
26:14:1019:U:O2'	26:14:1021:A:C2	2.71	0.44
26:1H:1352:U:O2	26:1H:1570:A:H2	2.01	0.44
29:11:29:PRO:HB2	29:11:30:GLU:CA	2.42	0.44
29:19:85:ASP:OD2	29:19:88:ARG:NH1	2.43	0.44
26:14:1790:C:H2'	26:14:1791:A:C5	2.53	0.44
55:Q8:49:VAL:O	55:Q8:50:LEU:C	2.56	0.44
26:1H:1591:G:O2'	26:1H:1592:C:H5'	2.17	0.44
26:1H:57:C:H2'	26:1H:58:G:O4'	2.18	0.44
1:13:437:U:C5'	4:3E:155:LEU:HD21	2.48	0.44
26:14:2261:C:H1'	26:14:2388:A:N3	2.33	0.44
1:13:1098:C:H2'	1:13:1099:G:H8	1.82	0.44
1:13:1448:C:H42	1:13:1455:G:H1	1.64	0.44
1:1G:408:A:H2'	1:1G:409:G:O4'	2.17	0.44
13:4A:40:ASN:HA	13:4A:41:PRO:HD2	1.83	0.44
1:1G:963:G:H21	10:1A:55:LYS:NZ	2.15	0.44
26:14:2187:G:H2'	26:14:2188:C:O4'	2.17	0.44
33:59:159:GLU:HB3	33:59:160:LYS:H	1.52	0.44
1:13:222:U:C2	1:13:223:U:C5	3.05	0.44
1:13:545:C:H2'	1:13:546:G:O4'	2.17	0.44
33:51:86:GLU:OE2	33:51:165:ALA:HB2	2.18	0.44
1:1G:1153:C:N3	1:1G:1154:G:C5	2.85	0.44
5:4E:10:MET:CE	5:4E:13:ILE:HD13	2.47	0.44
1:1G:1479:C:H2'	1:1G:1480:G:C8	2.52	0.44
26:1H:2470:G:H8	26:1H:2470:G:O5'	2.01	0.44
26:1H:1337:G:C4	26:1H:1338:G:C8	3.05	0.44
22:1K:9:A:N1	22:1K:22:G:C5	2.85	0.44
31:31:122:LYS:HB3	31:31:191:ARG:HB3	1.99	0.44
1:13:296:U:H2'	1:13:297:G:C8	2.52	0.44
26:14:2855:C:H2'	26:14:2856:C:H6	1.82	0.44
53:N8:20:ARG:HG2	53:N8:23:HIS:ND1	2.31	0.44
26:1H:1711:C:H2'	26:1H:1712:C:H6	1.82	0.44
41:B8:33:LYS:HG3	41:B8:82:LEU:O	2.17	0.44
26:1H:85:G:OP2	46:G8:9:LYS:HB2	2.18	0.44
16:7I:22:THR:HG23	16:7I:23:ASP:O	2.17	0.44
26:1H:1827:C:C2'	26:1H:1828:G:H5'	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:J8:23:LYS:HG2	49:J8:29:GLY:HA3	1.98	0.44
16:7A:45:THR:OG1	16:7A:46:PRO:HD2	2.18	0.44
1:13:515:G:C5	1:13:516:U:C5	3.05	0.44
26:1H:183:C:N4	26:1H:213:A:H61	2.16	0.44
3:22:12:LEU:HA	3:22:12:LEU:HD23	1.83	0.44
13:4A:90:LEU:HA	13:4A:90:LEU:HD22	1.77	0.44
3:2E:22:TRP:CH2	3:2E:32:LEU:HB3	2.52	0.44
1:1G:1118:C:H5''	9:82:104:ARG:HB2	1.99	0.44
1:1G:1300:G:HO2'	1:1G:1301:U:P	2.41	0.44
26:1H:2598:A:H3'	26:1H:2598:A:H8	1.82	0.44
4:32:22:LYS:HB2	4:32:26:CYS:SG	2.58	0.44
35:15:29:LYS:O	35:15:33:LEU:HB2	2.17	0.44
2:1E:61:LEU:HD23	2:1E:68:ILE:HD11	2.00	0.44
26:1H:1188:U:O2'	26:1H:1189:A:H5'	2.17	0.44
27:1J:3:C:H1'	27:1J:118:G:N2	2.32	0.44
17:8I:10:VAL:HG13	17:8I:19:VAL:HB	1.99	0.44
49:J8:73:LEU:HA	49:J8:73:LEU:HD23	1.89	0.44
42:C8:108:GLU:O	42:C8:112:ARG:HG2	2.17	0.44
26:14:1171:G:O2'	26:14:1173:G:OP2	2.36	0.44
26:14:2364:C:H2'	26:14:2365:G:O4'	2.18	0.44
36:68:116:SER:OG	36:68:117:LEU:N	2.49	0.44
40:A8:36:TYR:HB3	40:A8:52:SER:HB3	2.00	0.44
26:14:2298:A:H1'	26:14:2321:G:N2	2.32	0.44
43:95:21:ARG:HH21	43:95:91:TYR:C	2.21	0.44
26:1H:801:G:OP2	61:1H:3570:HOH:O	2.21	0.44
2:12:97:TRP:HH2	2:12:176:GLU:CD	2.21	0.44
23:2L:63:C:H2'	23:2L:64:G:C8	2.51	0.44
51:L8:7:LYS:HB2	51:L8:34:GLU:HG2	2.00	0.44
26:14:1357:U:H2'	26:14:1358:G:O4'	2.18	0.44
26:14:2557:G:H2'	26:14:2558:C:H6	1.81	0.44
26:1H:2122:U:H2'	26:1H:2123:G:C8	2.52	0.44
1:13:1118:C:P	9:8E:104:ARG:HH11	2.40	0.44
26:1H:721:C:H2'	26:1H:722:A:C8	2.53	0.44
26:14:2290:G:H2'	26:14:2291:U:O4'	2.17	0.44
26:14:2851:A:O2'	39:55:64:ARG:NH2	2.51	0.44
1:1G:828:A:C2	1:1G:829:G:H1'	2.53	0.44
37:35:79:ARG:HD3	37:35:110:TYR:HD2	1.82	0.44
26:14:1266:G:O4'	44:A5:15:ARG:NH2	2.50	0.44
8:7E:51:VAL:HG21	8:7E:60:ARG:NH1	2.33	0.44
26:1H:1337:G:H2'	26:1H:1338:G:C8	2.51	0.44
1:13:397:A:N3	1:13:397:A:H5''	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:6E:12:LEU:HD21	7:6E:24:THR:HB	1.99	0.44
26:1H:495:G:HO2'	44:E8:62:HIS:CE1	2.36	0.44
20:BI:40:ALA:O	20:BI:44:ALA:N	2.51	0.44
56:1L:19:G:H4'	56:1L:20:U:OP2	2.17	0.44
19:AI:30:LEU:HD13	19:AI:48:THR:HB	2.00	0.44
26:14:1551:C:N4	26:14:1552:G:C6	2.86	0.44
11:2I:92:GLU:O	11:2I:96:ARG:HB2	2.17	0.44
26:1H:1654:A:H1'	26:1H:2823:A:H5'	2.00	0.44
55:M5:11:LYS:HE3	55:M5:65:GLU:OE2	2.18	0.44
26:1H:2418:A:OP2	55:Q8:29:LYS:NZ	2.47	0.44
11:2I:31:THR:HA	11:2I:42:TRP:HA	2.00	0.44
23:2K:26:C:H2'	23:2K:27:G:O4'	2.17	0.44
26:14:2180:U:H2'	26:14:2181:G:O4'	2.17	0.44
56:1L:1:G:N3	56:1L:1:G:H2'	2.32	0.44
30:29:63:LEU:HD13	30:29:63:LEU:HA	1.64	0.44
32:41:79:ASN:HD22	32:41:79:ASN:N	2.16	0.44
20:BI:16:HIS:O	20:BI:19:SER:HB2	2.18	0.44
26:14:1814:G:H2'	26:14:1815:A:C8	2.53	0.44
12:3I:28:LYS:HE3	12:3I:64:TYR:CZ	2.53	0.44
26:1H:2557:G:H2'	26:1H:2558:C:C6	2.52	0.44
7:62:10:ARG:HA	7:62:10:ARG:HD3	1.64	0.44
26:14:2031:A:C6	26:14:2498:C:H1'	2.53	0.44
42:C8:92:ARG:NH1	43:D8:11:GLN:O	2.50	0.44
26:1H:1510:A:OP1	26:1H:1511:A:H5'	2.18	0.44
5:42:104:ALA:HA	5:42:107:ARG:HH21	1.83	0.44
8:72:67:PRO:HG2	8:72:69:ARG:HD2	1.99	0.44
26:14:1109:C:H2'	26:14:1110:G:O4'	2.18	0.44
55:M5:58:ILE:O	55:M5:62:LEU:HD12	2.17	0.44
26:14:2157:G:O2'	26:14:2158:A:N7	2.49	0.44
19:AA:66:MET:HB3	19:AA:69:HIS:CE1	2.53	0.44
24:3K:11:C:H42	24:3K:24:G:H1	1.63	0.44
1:13:1182:G:H4'	1:13:1183:A:H5''	2.00	0.44
41:B8:26:ASP:CB	41:B8:91:ARG:HA	2.47	0.44
1:1G:1039:C:H2'	1:1G:1040:U:C5	2.53	0.44
13:4I:3:ARG:HD2	52:M8:34:GLU:OE1	2.17	0.44
26:14:49:A:H5''	26:14:51:G:O4'	2.18	0.44
26:1H:2261:C:H1'	26:1H:2388:A:N3	2.33	0.44
26:1H:97:C:H5''	50:K8:2:LYS:N	2.32	0.44
1:13:416:G:C5	1:13:417:C:C4	3.05	0.44
26:14:1359:A:H62	26:14:1372:U:H3	1.65	0.44
9:82:7:THR:OG1	9:82:83:ARG:NH1	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:D5:23:LYS:HB3	47:D5:38:TYR:CD1	2.52	0.44
26:14:1599:C:C5	26:14:1600:C:H5	2.36	0.44
26:1H:1400:G:H2'	26:1H:1401:G:H8	1.82	0.44
25:4L:13:A:C4	25:4L:14:A:H1'	2.53	0.44
26:1H:2562:U:H1'	36:68:23:ARG:NH1	2.33	0.44
37:78:101:VAL:HG12	37:78:106:LEU:HD12	2.00	0.44
20:BA:100:ILE:HD12	20:BA:100:ILE:HA	1.86	0.44
26:1H:515:A:H1'	26:1H:581:C:H1'	2.00	0.44
30:21:60:ASN:OD1	30:21:62:PRO:HD2	2.17	0.44
1:1G:138:G:C2	1:1G:226:G:C2	3.05	0.44
1:13:4:U:O2	1:13:4:U:O2'	2.35	0.44
26:14:2291:U:O2'	26:14:2374:C:O2	2.35	0.44
32:41:165:THR:OG1	32:41:167:GLU:HG2	2.18	0.44
26:1H:1346:G:C4	26:1H:1347:G:C8	3.06	0.44
5:42:34:VAL:O	5:42:41:VAL:HG12	2.17	0.44
4:32:78:LEU:HD21	4:32:139:ARG:HH12	1.82	0.44
26:1H:1668:A:H4'	26:1H:1669:A:O5'	2.18	0.44
26:14:2768:C:O2'	35:15:89:LYS:HE2	2.17	0.44
26:14:1461:G:H2'	26:14:1462:C:C6	2.52	0.44
26:1H:2250:G:C5	38:88:83:MET:HB3	2.52	0.44
1:1G:456:C:N4	1:1G:457:C:H41	2.16	0.44
29:11:24:ILE:HD11	29:11:91:ARG:HD2	2.00	0.44
26:14:1572:A:H2'	26:14:1573:G:O4'	2.18	0.44
34:61:8:PRO:HD3	34:61:15:VAL:HG22	2.00	0.44
1:1G:892:A:C2	1:1G:907:A:C4	3.06	0.44
26:14:2708:G:H5'	39:55:68:ARG:HG3	2.00	0.44
40:65:95:HIS:N	40:65:99:LYS:HB2	2.33	0.44
26:14:10:G:O2'	26:14:2801:A:OP1	2.19	0.44
26:14:2620:C:H2'	26:14:2621:A:O4'	2.18	0.44
37:78:76:LYS:HA	37:78:76:LYS:HD2	1.83	0.44
46:G8:44:ILE:HG13	46:G8:44:ILE:H	1.70	0.44
39:98:20:LEU:HA	39:98:20:LEU:HD12	1.68	0.44
26:1H:1776:G:N3	26:1H:1776:G:H2'	2.32	0.44
1:13:825:G:C2	1:13:826:C:C2	3.06	0.44
26:14:540:G:C6	26:14:541:C:C4	3.06	0.44
26:14:2403:C:N3	26:14:2415:G:C2	2.86	0.44
26:1H:1786:A:H1'	26:1H:1938:A:N6	2.33	0.44
26:1H:1479:G:H5''	26:1H:1560:G:H4'	2.00	0.44
30:29:57:LYS:HD3	30:29:57:LYS:HA	1.65	0.44
26:1H:731:C:H2'	26:1H:732:C:H6	1.83	0.44
26:1H:733:G:N7	61:1H:3638:HOH:O	2.37	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1399:C:C2	1:13:1401:G:C5	3.06	0.44
26:1H:71:A:H4'	26:1H:72:U:H5''	1.99	0.44
29:11:34:VAL:O	29:11:35:LYS:HB3	2.18	0.44
26:14:1408:C:C2	26:14:1595:G:N2	2.85	0.44
26:14:459:U:H2'	26:14:460:A:H8	1.83	0.44
1:13:444:C:H2'	1:13:445:G:O4'	2.17	0.44
46:C5:62:GLU:HG3	46:C5:62:GLU:H	1.53	0.44
26:14:1614:A:H2	61:14:3763:HOH:O	2.00	0.44
2:1E:67:THR:CG2	2:1E:155:LEU:HD13	2.47	0.44
26:1H:1436:G:H1	26:1H:1556:C:H42	1.66	0.44
1:13:1442:G:O6	1:13:1446:A:C5	2.71	0.44
2:1E:118:LEU:HD12	2:1E:142:LEU:HB2	1.99	0.44
2:12:59:GLU:CG	2:12:221:LEU:HB3	2.47	0.44
30:21:117:MET:O	30:21:118:LYS:HB3	2.18	0.44
1:13:223:U:H2'	1:13:224:C:C6	2.53	0.44
15:6A:70:LEU:HD11	15:6A:77:ARG:HG3	1.98	0.44
26:1H:2469:A:N6	26:1H:2481:G:O2'	2.49	0.44
1:13:1064:G:H1'	1:13:1190:G:H21	1.83	0.44
49:J8:91:LYS:HG2	49:J8:92:LYS:HE2	2.00	0.44
6:5E:19:LEU:O	6:5E:23:LYS:NZ	2.49	0.44
1:1G:1417:G:O5'	1:1G:1417:G:H8	2.00	0.44
9:8E:9:ARG:HG3	9:8E:104:ARG:NH1	2.32	0.44
1:1G:363:A:N7	12:3A:30:ALA:HB1	2.33	0.44
26:1H:489:G:H2'	26:1H:491:G:O4'	2.18	0.44
1:1G:690:G:C6	1:1G:691:G:C6	3.06	0.44
45:F8:57:LEU:CD2	45:F8:78:LYS:HG3	2.47	0.44
47:H8:40:ASP:HB3	47:H8:43:GLU:HB2	1.99	0.44
30:21:55:ASN:ND2	30:21:75:VAL:HG22	2.33	0.44
55:M5:33:ASN:O	55:M5:34:TRP:C	2.56	0.44
44:A5:15:ARG:O	44:A5:19:LEU:HD13	2.18	0.44
1:1G:985:C:H2'	1:1G:986:A:H8	1.83	0.44
26:1H:1680:U:O2	26:1H:1763:G:H3'	2.17	0.44
26:14:519:U:H2'	26:14:520:G:H8	1.83	0.44
26:1H:2212:A:H1'	26:1H:2215:G:C4	2.52	0.44
30:29:33:VAL:HG21	30:29:88:GLY:HA2	1.99	0.44
18:9A:56:THR:HB	18:9A:58:LEU:CD1	2.48	0.44
20:BI:36:LEU:HD13	20:BI:39:LYS:HD3	1.98	0.44
26:14:456:C:C2	45:B5:69:TYR:CE2	3.06	0.44
26:1H:794:G:H2'	26:1H:795:C:C6	2.53	0.44
1:13:397:A:N7	1:13:548:G:C8	2.86	0.44
9:8E:28:VAL:HG22	9:8E:63:ILE:HB	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:Q8:16:ILE:HD13	55:Q8:59:LYS:CG	2.48	0.44
40:A8:83:LYS:HE3	40:A8:83:LYS:HB3	1.80	0.44
43:95:28:GLU:CD	43:95:29:PRO:HD2	2.38	0.44
26:14:563:G:H5'	26:14:572:A:H4'	1.99	0.44
20:BI:40:ALA:HB2	20:BI:55:ILE:HG22	2.00	0.44
26:1H:195:A:H61	26:1H:198:C:H3'	1.83	0.44
20:BA:14:LYS:HA	20:BA:17:ARG:NE	2.33	0.44
26:14:1727:U:H3	26:14:1733:G:H1	1.66	0.44
1:13:9:G:OP2	5:4E:121:LYS:HE3	2.18	0.44
26:14:2300:G:H2'	26:14:2301:C:O4'	2.18	0.44
26:14:571:A:H5'	26:14:2030:A:N7	2.32	0.44
26:14:484:C:H2'	26:14:485:C:H6	1.82	0.44
26:14:1340:U:H4'	26:14:1341:U:OP2	2.17	0.44
2:1E:24:TRP:CZ3	2:1E:26:PRO:HA	2.53	0.44
26:1H:1672:C:H5''	26:1H:1673:U:OP2	2.18	0.44
56:1L:14:A:C5	56:1L:22:G:C2	3.05	0.44
36:68:118:ALA:HA	36:68:119:PRO:HD2	1.92	0.44
23:2L:15:G:H21	23:2L:22:A:H1'	1.83	0.44
55:M5:32:LEU:HA	55:M5:32:LEU:HD12	1.61	0.44
1:13:818:G:O2'	1:13:819:A:H5'	2.18	0.44
26:1H:1786:A:H2	26:1H:2606:C:H1'	1.82	0.44
52:M8:40:HIS:CG	52:M8:43:TYR:O	2.71	0.44
40:65:59:LYS:HZ3	40:65:61:ASN:HA	1.82	0.44
29:11:39:LYS:CG	29:11:40:THR:H	2.31	0.44
29:11:37:LEU:HD12	29:11:37:LEU:O	2.17	0.44
33:51:6:ARG:HB3	33:51:65:HIS:CG	2.53	0.44
6:5E:97:PHE:HB2	18:9I:32:ARG:NH1	2.26	0.44
26:1H:1493:C:N3	26:1H:2210:G:H1'	2.33	0.44
30:29:120:TRP:CG	30:29:155:LYS:HB3	2.53	0.44
42:85:61:TRP:HB3	42:85:93:LYS:O	2.17	0.44
26:1H:1833:U:C4	26:1H:1834:U:C5	3.06	0.44
26:14:71:A:H2	45:B5:31:HIS:HE1	1.62	0.44
1:1G:1145:C:H4'	1:1G:1146:A:O5'	2.18	0.44
26:1H:2296:U:P	40:A8:9:ARG:HH22	2.38	0.44
20:BI:30:LYS:NZ	20:BI:80:ARG:HH12	2.16	0.44
1:13:838:G:H1	1:13:848:C:N4	2.15	0.44
38:45:114:ALA:O	38:45:118:LEU:HB2	2.18	0.44
1:13:1190:G:H5''	3:2E:176:HIS:NE2	2.32	0.44
26:1H:2801:A:H2'	26:1H:2802:G:O4'	2.18	0.44
1:13:1298:C:H2'	7:6E:114:ARG:NH2	2.33	0.44
30:21:54:GLN:C	30:21:55:ASN:HD22	2.19	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AA:56:GLN:HG2	19:AA:57:HIS:H	1.83	0.44
55:M5:34:TRP:CG	55:M5:35:GLN:N	2.86	0.44
37:35:132:LYS:HD2	37:35:132:LYS:HA	1.81	0.44
26:1H:1638:C:H5'	26:1H:2710:C:O2'	2.18	0.44
26:1H:924:C:H2'	26:1H:925:C:H6	1.83	0.44
54:P8:35:ARG:NH1	54:P8:42:LEU:HD11	2.33	0.44
26:1H:185:U:H2'	26:1H:186:G:C8	2.53	0.44
26:1H:2773:C:H5'	30:21:164:ARG:HG2	1.99	0.44
35:58:65:LYS:HB3	35:58:69:GLN:HG3	2.00	0.44
10:1I:34:VAL:HG12	10:1I:74:ILE:HD11	2.00	0.44
26:14:717:G:H2'	26:14:718:A:O4'	2.17	0.44
1:13:968:A:H4'	1:13:969:A:OP2	2.18	0.44
33:51:107:VAL:HB	33:51:152:ARG:HG2	2.00	0.44
44:A5:112:GLY:C	44:A5:113:LYS:HD3	2.38	0.44
11:2A:20:TYR:CE1	11:2A:83:ILE:HD12	2.52	0.44
1:13:767:A:H2'	1:13:768:A:O4'	2.18	0.44
26:14:569:U:C4	26:14:570:G:C6	3.06	0.44
26:1H:699:A:H2'	26:1H:700:G:O4'	2.18	0.44
44:E8:92:ARG:NH2	44:E8:94:ASP:OD1	2.49	0.44
7:6E:94:ARG:O	7:6E:97:GLN:HB3	2.18	0.44
26:1H:479:A:H4'	26:1H:480:A:OP1	2.18	0.44
33:59:59:ARG:HD3	33:59:62:LYS:HD2	2.00	0.44
44:E8:11:ARG:CZ	44:E8:98:LYS:HB3	2.48	0.44
1:13:248:C:H2'	1:13:249:U:H6	1.82	0.44
51:L8:4:LEU:HD12	51:L8:4:LEU:H	1.82	0.44
35:58:107:LEU:HA	35:58:107:LEU:HD23	1.70	0.44
17:8A:5:VAL:HG22	17:8A:60:ILE:HG12	1.99	0.44
33:59:148:ILE:O	33:59:151:ILE:HG12	2.18	0.44
1:1G:250:A:H4'	1:1G:251:G:O5'	2.18	0.44
27:1J:52:A:H62	40:65:33:LYS:HG3	1.83	0.44
26:1H:1616:A:O2'	61:1H:3571:HOH:O	2.21	0.44
35:15:28:THR:HG22	35:15:29:LYS:N	2.32	0.43
33:51:6:ARG:HB2	33:51:7:LEU:HG	1.99	0.43
31:31:63:LYS:NZ	31:31:75:HIS:O	2.43	0.43
26:1H:1405:U:H2'	26:1H:1406:U:H6	1.78	0.43
55:M5:50:LEU:HB3	55:M5:51:ALA:H	1.65	0.43
26:14:848:G:C4	26:14:933:A:C8	3.04	0.43
1:13:1171:G:O5'	1:13:1171:G:H8	2.01	0.43
26:14:908:C:OP2	38:45:22:LYS:HD3	2.18	0.43
1:1G:1207:G:H2'	1:1G:1208:C:H6	1.82	0.43
26:1H:1388:G:H2'	26:1H:1389:G:H8	1.82	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:42:VAL:O	46:C5:64:GLU:HA	2.18	0.43
26:1H:2056:G:C2	26:1H:2057:A:C8	3.07	0.43
26:1H:1516:U:H2'	26:1H:1517:G:C8	2.53	0.43
57:3L:3:G:H2'	57:3L:4:U:O4'	2.18	0.43
8:72:123:GLU:O	8:72:127:LEU:HB2	2.18	0.43
26:14:2536:G:C6	26:14:2537:U:C4	3.06	0.43
26:1H:601:C:O2	26:1H:605:C:H4'	2.17	0.43
1:1G:1061:G:H2'	1:1G:1062:U:H6	1.83	0.43
6:52:1:MET:HA	6:52:68:PRO:HA	1.99	0.43
29:11:236:GLY:O	29:11:237:GLU:O	2.36	0.43
44:E8:12:ILE:HD13	44:E8:17:VAL:HB	2.00	0.43
47:D5:165:VAL:HG12	47:D5:166:SER:N	2.33	0.43
29:19:94:LEU:HD23	29:19:94:LEU:HA	1.85	0.43
32:49:107:LEU:HD11	32:49:178:PHE:CE1	2.53	0.43
26:14:686:G:H21	26:14:788:A:H61	1.64	0.43
1:1G:552:U:H4'	12:3A:86:ARG:HG2	2.00	0.43
32:41:117:PHE:HZ	32:41:179:PRO:HG2	1.83	0.43
26:14:2748:A:C4	26:14:2749:A:C8	3.06	0.43
33:59:77:LYS:N	33:59:77:LYS:HD2	2.33	0.43
26:14:2789:C:H2'	26:14:2790:A:O4'	2.17	0.43
1:1G:414:A:H2'	1:1G:415:A:C8	2.53	0.43
26:14:2768:C:H4'	35:15:89:LYS:NZ	2.32	0.43
44:E8:88:ARG:NH1	44:E8:94:ASP:OD2	2.51	0.43
26:14:2724:C:OP1	30:29:118:LYS:HE3	2.18	0.43
20:BI:29:LYS:O	20:BI:33:ILE:HG12	2.18	0.43
38:45:135:ASP:O	38:45:137:TYR:HD1	2.01	0.43
19:AI:63:THR:OG1	19:AI:66:MET:HG3	2.17	0.43
28:71:41:VAL:HB	28:71:175:VAL:HG21	2.00	0.43
46:G8:104:GLY:H	46:G8:105:ALA:HB3	1.83	0.43
26:14:1484:G:H2'	26:14:1485:G:H8	1.82	0.43
1:13:784:C:H2'	1:13:785:G:C8	2.52	0.43
1:1G:1494:G:C2	1:1G:1495:U:C5	3.05	0.43
41:B8:45:PHE:CZ	41:B8:65:LYS:HG2	2.53	0.43
36:68:22:ILE:HD13	36:68:22:ILE:HG21	1.69	0.43
40:A8:76:LYS:HB3	40:A8:76:LYS:HE2	1.55	0.43
5:42:146:ALA:HB1	5:42:150:ARG:NH2	2.33	0.43
47:H8:150:LEU:HG	47:H8:154:ASP:HB2	1.98	0.43
1:13:1191:A:H5''	3:2E:4:LYS:HE2	1.99	0.43
26:1H:1049:C:N3	26:1H:2751:G:O6	2.51	0.43
33:51:155:SER:OG	33:51:158:HIS:HB2	2.18	0.43
41:B8:7:ILE:O	41:B8:10:VAL:N	2.50	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:78:35:HIS:HB3	37:78:36:LYS:H	1.49	0.43
26:1H:1372:U:O2'	26:1H:1373:A:H5'	2.18	0.43
26:14:1287:A:C5	26:14:1288:U:C4	3.06	0.43
29:11:31:LYS:HB3	29:11:34:VAL:CG2	2.48	0.43
50:G5:47:ASN:N	50:G5:47:ASN:OD1	2.49	0.43
37:78:47:ASP:OD1	37:78:49:ARG:HG3	2.18	0.43
34:69:72:LEU:HD21	34:69:107:VAL:HG21	2.00	0.43
47:H8:163:LEU:HD13	47:H8:167:PRO:HA	2.00	0.43
30:21:2:LYS:HA	30:21:84:PHE:CD1	2.53	0.43
1:13:738:C:H2'	1:13:739:C:C6	2.53	0.43
26:1H:783:A:C3'	26:1H:783:A:C8	3.01	0.43
26:14:1441:G:H2'	26:14:1442:G:C8	2.53	0.43
9:8E:42:ARG:HE	9:8E:42:ARG:HB2	1.31	0.43
26:14:997:G:O2'	26:14:998:C:H5'	2.19	0.43
26:14:1885:A:H5'	26:14:1886:C:OP2	2.18	0.43
4:32:19:LEU:HB2	4:32:21:LEU:CD1	2.48	0.43
6:52:7:ASN:ND2	18:9A:34:TYR:HE1	2.16	0.43
31:31:129:PHE:O	31:31:130:ALA:HB3	2.18	0.43
4:3E:207:TYR:O	4:3E:209:ARG:HG2	2.18	0.43
41:B8:90:GLN:OE1	41:B8:121:ILE:HD11	2.18	0.43
26:14:225:A:N6	26:14:226:G:C2	2.87	0.43
26:1H:916:G:C2'	26:1H:917:A:H5''	2.48	0.43
1:1G:1216:G:H2'	1:1G:1217:C:C6	2.52	0.43
26:14:780:G:C2	26:14:782:A:C2	3.05	0.43
31:31:136:THR:HA	31:31:166:ALA:O	2.18	0.43
26:1H:1435:G:H2'	26:1H:1436:G:C8	2.53	0.43
2:12:58:ILE:HD13	2:12:219:VAL:HG21	2.00	0.43
26:14:6:A:N3	26:14:6:A:H2'	2.34	0.43
1:1G:1154:G:H2'	1:1G:1155:G:C8	2.53	0.43
1:13:1272:G:C6	1:13:1273:G:C5	3.06	0.43
26:14:2009:G:N3	39:55:107:ASP:HA	2.33	0.43
26:1H:1543:A:H1'	26:1H:1544:C:H5''	2.00	0.43
26:1H:931:G:C4	26:1H:933:A:C8	3.07	0.43
1:1G:626:U:C2	1:1G:627:G:C8	3.06	0.43
26:14:2533:A:H8	26:14:2533:A:O5'	2.01	0.43
20:BI:49:ALA:HB3	20:BI:99:LEU:HD22	2.00	0.43
1:1G:834:C:C4	1:1G:835:U:C4	3.06	0.43
1:1G:1100:C:H2'	1:1G:1102:A:O5'	2.18	0.43
26:1H:375:C:H2'	26:1H:376:C:C6	2.52	0.43
12:3A:110:VAL:CG2	12:3A:120:TYR:HB3	2.48	0.43
26:1H:1262:A:C6	26:1H:1263:U:C4	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1051:C:H2'	1:13:1052:U:C6	2.53	0.43
4:3E:92:VAL:O	4:3E:96:LEU:HD22	2.19	0.43
8:7E:30:ARG:O	8:7E:34:GLU:HB2	2.18	0.43
26:14:1475:G:C2	26:14:1519:G:C2	3.06	0.43
26:14:1484:G:H2'	26:14:1485:G:C8	2.54	0.43
26:1H:2342:C:O2	26:1H:2374:C:H4'	2.18	0.43
1:13:303:A:C5	1:13:304:U:C5	3.06	0.43
1:13:958:A:C6	1:13:959:A:N1	2.86	0.43
32:49:109:VAL:O	32:49:113:ARG:HG3	2.18	0.43
40:A8:51:ALA:HB3	40:A8:73:LEU:HG	2.00	0.43
26:1H:2045:C:H2'	26:1H:2046:G:O4'	2.18	0.43
1:13:1507:A:OP2	25:4K:12:A:H2	2.01	0.43
31:39:160:ASN:HB3	31:39:163:VAL:HB	1.99	0.43
10:1A:50:ILE:HG22	10:1A:52:GLY:H	1.83	0.43
26:1H:2081:C:O2'	26:1H:2082:A:H5'	2.17	0.43
34:61:75:LEU:HD23	34:61:105:HIS:HB3	2.00	0.43
50:K8:15:LYS:NZ	50:K8:15:LYS:N	2.63	0.43
1:13:1129:C:C2	1:13:1139:G:C6	3.06	0.43
26:1H:1465:G:H2'	26:1H:1466:G:H8	1.84	0.43
31:31:63:LYS:HG2	31:31:65:TRP:O	2.18	0.43
5:42:78:HIS:ND1	8:72:107:LEU:HD12	2.33	0.43
1:13:1308:U:H5''	13:4I:98:VAL:HG22	2.01	0.43
1:13:1308:U:OP1	13:4I:98:VAL:HG22	2.18	0.43
26:1H:2291:U:H2'	26:1H:2292:C:C6	2.53	0.43
26:14:636:G:HO2'	26:14:638:G:HO2'	1.59	0.43
19:AA:5:LEU:HA	19:AA:6:LYS:HA	1.67	0.43
43:D8:46:VAL:HG21	43:D8:52:VAL:HG21	2.00	0.43
39:98:88:ARG:NH2	39:98:89:ASP:OD1	2.50	0.43
26:14:1138:G:H21	35:15:106:MET:CE	2.31	0.43
26:14:2177:C:OP1	28:79:221:SER:OG	2.31	0.43
1:13:1442:G:O6	1:13:1446:A:C6	2.71	0.43
26:1H:807:U:C2	26:1H:808:G:C8	3.06	0.43
31:39:78:ILE:C	31:39:80:ALA:H	2.21	0.43
1:13:224:C:H2'	1:13:225:C:H6	1.82	0.43
26:14:1507:A:N3	26:14:1508:A:H1'	2.34	0.43
1:13:1396:A:H2	5:4E:19:MET:HG3	1.83	0.43
4:32:59:ARG:HH21	4:32:66:ARG:HH12	1.65	0.43
28:79:15:ASP:N	28:79:20:TYR:OH	2.45	0.43
26:1H:10:G:N2	26:1H:11:G:C4	2.86	0.43
26:1H:265:A:H1'	26:1H:266:G:O4'	2.19	0.43
26:1H:1019:U:N3	26:1H:1020:A:N7	2.67	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2601:C:H2'	26:14:2603:G:C8	2.53	0.43
47:D5:91:LEU:HB3	47:D5:96:VAL:HG21	2.01	0.43
39:55:57:ARG:HB3	39:55:59:ASP:OD2	2.17	0.43
4:32:127:THR:HG21	4:32:149:ALA:HB2	2.00	0.43
30:21:52:LEU:HA	30:21:53:PRO:HD3	1.72	0.43
38:45:69:PHE:HA	38:45:70:PRO:HD2	1.73	0.43
26:1H:1931:U:H5	26:1H:1969:A:N7	2.16	0.43
14:5I:11:LYS:HG2	14:5I:11:LYS:H	1.52	0.43
26:1H:628:G:H2'	26:1H:629:G:H8	1.81	0.43
26:1H:2772:C:H2'	26:1H:2773:C:H6	1.83	0.43
1:13:964:A:N3	1:13:969:A:O2'	2.42	0.43
26:14:1849:G:H2'	26:14:1850:G:C8	2.54	0.43
33:51:152:ARG:HA	33:51:152:ARG:HD3	1.67	0.43
33:59:148:ILE:H	33:59:148:ILE:HG12	1.53	0.43
26:14:370:G:H4'	26:14:371:A:OP2	2.18	0.43
26:14:2643:G:H2'	26:14:2644:G:O4'	2.18	0.43
26:14:2590:A:OP2	29:19:237:GLU:HB3	2.17	0.43
26:14:2607:G:H2'	26:14:2608:G:O4'	2.18	0.43
26:14:696:G:H2'	26:14:697:C:H6	1.83	0.43
1:1G:775:G:H2'	1:1G:776:G:O4'	2.17	0.43
29:11:171:ASP:OD1	29:11:171:ASP:N	2.51	0.43
26:1H:1600:C:H2'	26:1H:1601:G:C8	2.53	0.43
35:58:18:ALA:HA	35:58:21:LYS:HG3	2.00	0.43
46:G8:96:ILE:HD12	46:G8:101:LYS:NZ	2.33	0.43
1:13:1004:A:C2	1:13:1024:G:H2'	2.53	0.43
26:1H:1051:G:C6	26:1H:1052:C:H1'	2.54	0.43
30:29:81:ILE:HG21	30:29:84:PHE:CD2	2.52	0.43
13:4I:23:TYR:CD2	13:4I:67:GLU:HA	2.52	0.43
26:14:832:G:H5'	37:35:45:LEU:HD11	1.99	0.43
27:16:15:A:H1'	27:16:109:G:N9	2.33	0.43
43:D8:58:VAL:HG23	43:D8:98:GLU:HG3	2.00	0.43
26:14:1152:C:H5''	42:85:80:ILE:CG2	2.49	0.43
1:13:1249:C:O2'	9:8E:73:GLN:OE1	2.23	0.43
50:K8:14:ARG:HB3	50:K8:15:LYS:HZ3	1.83	0.43
40:65:87:PHE:CE1	40:65:102:ALA:HB2	2.54	0.43
40:65:106:ARG:O	40:65:106:ARG:NH1	2.50	0.43
29:19:31:LYS:HE2	29:19:102:LYS:HD2	2.00	0.43
1:1G:673:G:H5''	6:52:87:ARG:CZ	2.48	0.43
35:58:32:THR:HG22	35:58:37:LYS:HD3	1.98	0.43
26:1H:2290:G:H2'	26:1H:2291:U:O4'	2.18	0.43
39:55:21:TYR:HB3	39:55:47:PHE:CD2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:C8:15:LYS:HE2	42:C8:15:LYS:HB3	1.85	0.43
1:1G:1205:U:H2'	1:1G:1206:G:C8	2.53	0.43
30:21:169:ASN:OD1	30:21:201:THR:HG21	2.18	0.43
40:A8:85:VAL:HG23	40:A8:112:PHE:CZ	2.47	0.43
1:1G:983:A:N6	1:1G:1222:G:H22	2.13	0.43
1:1G:1352:C:H2'	1:1G:1353:G:C8	2.52	0.43
26:1H:1436:G:H1'	26:1H:1477:A:O2'	2.18	0.43
39:55:24:GLN:HE22	39:55:36:THR:HG21	1.83	0.43
26:14:2773:C:H5''	30:29:164:ARG:HG2	2.00	0.43
26:14:528:A:H2	26:14:2043:C:H4'	1.81	0.43
26:14:2493:U:C4	26:14:2494:G:C8	3.07	0.43
26:14:867:C:C5	26:14:868:U:C4	3.06	0.43
26:14:868:U:C4	26:14:869:G:N7	2.86	0.43
26:14:2558:C:H2'	26:14:2559:C:O4'	2.18	0.43
47:D5:29:TYR:HB3	47:D5:34:ASN:HB2	1.99	0.43
47:H8:60:GLU:HA	47:H8:65:GLN:O	2.18	0.43
26:1H:581:C:H2'	26:1H:582:G:C8	2.53	0.43
9:8E:9:ARG:HB3	9:8E:14:VAL:HG13	2.00	0.43
43:95:24:LYS:HA	43:95:92:THR:OG1	2.18	0.43
2:1E:189:ASP:OD1	2:1E:189:ASP:N	2.51	0.43
17:8I:81:ARG:NH1	17:8I:83:ASP:OD2	2.51	0.43
26:1H:2306:C:H3'	26:1H:2307:G:H5'	1.99	0.43
38:88:56:ARG:HA	38:88:56:ARG:HD2	1.77	0.43
37:78:113:LYS:HA	37:78:129:ALA:O	2.18	0.43
1:13:1234:C:O2'	1:13:1235:U:H5'	2.19	0.43
2:1E:11:LEU:C	2:1E:13:ALA:N	2.72	0.43
13:4I:11:ARG:HG3	13:4I:12:ASN:H	1.84	0.43
27:1J:70:C:H2'	27:1J:71:C:H6	1.84	0.43
6:5E:35:ALA:HA	6:5E:67:MET:HB3	2.00	0.43
26:1H:2121:G:O2'	28:71:167:LYS:HG2	2.18	0.43
6:52:91:VAL:HG11	18:9A:72:ARG:NH1	2.34	0.43
26:1H:826:U:H2'	26:1H:828:U:O4'	2.19	0.43
1:1G:1430:C:H2'	1:1G:1431:C:H6	1.83	0.43
23:2K:26:C:H5''	23:2K:27:G:OP2	2.19	0.43
39:98:55:ALA:HA	39:98:80:PHE:CE1	2.54	0.43
26:1H:873:G:H1'	38:88:29:PHE:HE2	1.84	0.43
26:14:1747:G:H5''	26:14:1748:G:OP2	2.17	0.43
26:14:455:C:N3	26:14:473:G:H5'	2.33	0.43
8:7E:103:VAL:HG21	8:7E:110:ALA:HB2	2.00	0.43
39:55:85:PRO:O	39:55:88:ARG:HB3	2.19	0.43
26:14:438:G:H2'	26:14:439:G:H8	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2A:17:GLY:HA3	11:2A:77:MET:SD	2.58	0.43
15:6I:67:LEU:O	15:6I:71:GLN:HB2	2.18	0.43
8:7E:97:VAL:HG12	8:7E:98:LYS:NZ	2.33	0.43
1:1G:1307:U:O5'	1:1G:1307:U:H6	2.01	0.43
33:51:56:SER:HB3	33:51:61:HIS:ND1	2.33	0.43
26:1H:2059:A:H5''	26:1H:2060:A:OP2	2.18	0.43
26:1H:5:A:N6	26:1H:2898:U:C4	2.87	0.43
1:13:335:C:O2'	1:13:1433:A:N3	2.48	0.43
38:45:30:GLY:CA	38:45:107:ALA:HB2	2.48	0.43
38:88:138:ASP:OD1	38:88:138:ASP:N	2.51	0.43
29:19:76:PRO:HA	29:19:118:VAL:HG23	2.00	0.43
1:13:1255:G:OP1	10:1I:45:ARG:NH2	2.51	0.43
55:M5:23:VAL:HA	55:M5:49:VAL:N	2.32	0.43
1:13:963:G:N2	10:1I:55:LYS:HZ1	2.16	0.43
27:16:15:A:H1'	27:16:109:G:C8	2.53	0.43
26:14:259:G:HO2'	26:14:621:A:HO2'	1.50	0.43
7:62:15:ASP:HB3	7:62:20:ASP:H	1.82	0.43
1:1G:1224:G:N2	1:1G:1322:C:H4'	2.33	0.43
40:65:70:GLY:O	40:65:105:ALA:HA	2.19	0.43
1:13:452:A:H1'	16:7I:72:ARG:NH1	2.34	0.43
26:14:141:A:C8	26:14:1595:G:N2	2.72	0.43
55:Q8:50:LEU:HD11	55:Q8:58:ILE:HD12	1.99	0.43
1:13:1432:G:OP1	41:B8:107:ASP:HB2	2.19	0.43
24:3K:49:G:H1'	24:3K:66:A:C2	2.53	0.43
28:71:225:ASN:HB3	28:71:227:HIS:CD2	2.54	0.43
26:14:1951:U:O2	26:14:1954:G:H8	2.01	0.43
1:13:670:G:C6	1:13:671:G:C5	3.07	0.43
26:1H:1138:G:H21	35:58:106:MET:CE	2.28	0.43
26:1H:2260:C:O2'	26:1H:2261:C:H5'	2.18	0.43
2:1E:219:VAL:O	2:1E:223:ILE:HG13	2.18	0.43
35:58:132:ALA:O	35:58:134:ARG:NH2	2.51	0.43
26:14:2176:A:O2'	26:14:2177:C:H5'	2.19	0.43
7:62:38:LEU:O	7:62:42:ILE:HG13	2.18	0.43
26:14:2346:A:H5'	26:14:2383:G:H1'	2.01	0.43
30:29:26:ILE:HB	30:29:182:LEU:HB3	2.01	0.43
53:J5:41:PRO:HA	53:J5:42:PRO:HD3	1.92	0.43
50:G5:63:VAL:HA	50:G5:66:GLU:OE1	2.19	0.43
1:13:200:G:H1	1:13:217:C:H42	1.66	0.43
3:22:93:LYS:H	3:22:93:LYS:CD	2.31	0.43
33:51:164:TYR:HB2	33:51:165:ALA:H	1.65	0.43
1:1G:1153:C:P	10:1A:13:HIS:HE1	2.41	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:97:TRP:HH2	2:1E:176:GLU:CD	2.21	0.43
26:1H:1705:G:H2'	26:1H:1706:U:H5'	2.00	0.43
1:13:1118:C:H1'	1:13:1179:A:C5	2.53	0.43
26:14:1260:G:C5	26:14:1261:C:C5	3.07	0.43
26:1H:53:A:H2'	26:1H:54:G:O4'	2.19	0.43
26:14:1203:G:OP2	26:14:1204:A:H2'	2.18	0.43
33:51:41:MET:HE2	33:51:55:PRO:HD3	1.99	0.43
1:1G:157:G:H1	1:1G:164:U:H3	1.65	0.43
26:14:1793:C:H2'	26:14:1794:U:C6	2.53	0.43
2:1E:21:ARG:C	2:1E:23:ARG:H	2.22	0.43
1:13:191(E):G:H2'	1:13:191(F):U:H6	1.82	0.43
6:5E:14:LEU:HD11	6:5E:84:ASN:ND2	2.33	0.43
1:1G:616:G:C2	1:1G:617:G:N7	2.87	0.43
11:2I:96:ARG:HE	11:2I:96:ARG:HB3	1.66	0.43
26:14:540:G:H2'	26:14:541:C:C6	2.53	0.43
1:13:1384:C:H2'	1:13:1385:G:H8	1.82	0.43
1:1G:127:G:OP1	1:1G:635:G:H1'	2.18	0.43
12:3I:89:ARG:HD2	12:3I:91:LYS:HA	2.01	0.43
9:82:26:VAL:HG13	9:82:61:ALA:O	2.18	0.43
26:14:2370:G:H2'	26:14:2371:G:O4'	2.19	0.43
1:1G:287:U:H2'	1:1G:288:A:C8	2.53	0.43
26:14:207:A:H2'	26:14:208:C:O4'	2.18	0.43
26:14:1118:C:H2'	26:14:1119:C:C6	2.54	0.43
26:14:1213:A:H2'	26:14:1214:A:C8	2.53	0.43
26:1H:295:G:C6	26:1H:344:G:N1	2.86	0.43
1:13:1349:A:OP1	9:8E:121:ARG:HB2	2.19	0.43
1:13:517:G:N3	1:13:531:U:H5'	2.33	0.43
27:1J:53:A:H2'	27:1J:54:G:O4'	2.17	0.43
36:68:66:LYS:HB3	36:68:66:LYS:HE3	1.80	0.43
48:E5:60:PHE:CD1	48:E5:60:PHE:N	2.86	0.43
26:14:2563:U:H1'	26:14:2566:A:N6	2.33	0.43
32:49:11:TYR:HE2	32:49:16:ARG:HH21	1.66	0.43
26:14:534:U:H5'	42:85:42:ALA:HB1	2.00	0.43
44:E8:7:ALA:HB2	44:E8:50:VAL:HG22	2.00	0.43
1:1G:1072:G:C6	1:1G:1073:U:N3	2.86	0.43
4:3E:135:LEU:HA	4:3E:136:PRO:HD2	1.80	0.43
26:14:39:C:O2	31:39:46:ARG:NH2	2.49	0.43
26:1H:1049:C:H1'	26:1H:1113:U:O2'	2.17	0.43
26:1H:2138:C:H2'	26:1H:2139:C:H6	1.83	0.43
26:1H:2136:C:N4	26:1H:2156:G:N3	2.66	0.43
30:29:31:CYS:HB3	30:29:49:LEU:HB2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:270(N):G:N3	34:61:50:ARG:NH2	2.66	0.43
31:39:22:ALA:O	31:39:24:LEU:N	2.52	0.43
1:1G:1317:C:O2	19:AA:37:ARG:NH1	2.51	0.43
46:C5:68:HIS:HB3	46:C5:71:LYS:HG2	2.00	0.43
5:4E:143:ARG:NE	8:7E:77:GLU:OE1	2.49	0.43
55:Q8:50:LEU:O	55:Q8:50:LEU:HD13	2.18	0.43
1:1G:1206:G:H2'	1:1G:1207:G:H8	1.84	0.43
1:1G:1001:G:H2'	1:1G:1002:G:H8	1.84	0.43
2:1E:28:PHE:HD1	2:1E:194:PRO:HD3	1.83	0.43
21:1B:5:ASP:O	21:1B:8:THR:HG22	2.18	0.43
31:31:108:LYS:HE2	31:31:108:LYS:HB3	1.87	0.43
27:16:12:C:H6	27:16:12:C:OP2	2.01	0.43
28:71:182:PRO:HA	28:71:185:LEU:HB2	2.00	0.43
26:1H:956:G:OP2	38:88:14:ARG:NH2	2.51	0.43
37:78:95:VAL:HA	37:78:99:LEU:HD23	2.00	0.43
26:14:642:G:H3'	26:14:642:G:C8	2.54	0.43
1:13:474:G:H2'	1:13:475:G:O4'	2.18	0.43
11:2I:59:TYR:O	11:2I:62:GLN:HB3	2.18	0.43
50:G5:33:MET:O	50:G5:37:PHE:HD1	2.01	0.43
26:14:2132:U:H1'	28:79:5:LYS:N	2.32	0.43
1:1G:317:G:H1	1:1G:336:C:N4	2.15	0.43
1:13:663:A:H5'	1:13:836:G:OP1	2.18	0.43
37:78:112:LEU:HD23	37:78:112:LEU:HA	1.55	0.43
35:15:15:LEU:HD23	35:15:134:ARG:HB2	2.01	0.43
4:3E:108:LEU:HB3	4:3E:110:PHE:HE1	1.84	0.43
26:1H:713:G:H2'	26:1H:714:U:H6	1.84	0.43
26:1H:774:A:HO2'	26:1H:775:G:H8	1.64	0.43
1:13:66:G:O4'	1:13:173:U:C4	2.71	0.43
22:1K:9:A:H5''	22:1K:47:U:H6	1.82	0.43
47:H8:70:LEU:HD11	47:H8:98:MET:HE3	2.00	0.43
26:1H:496:G:O5'	44:E8:62:HIS:HE1	2.02	0.43
4:3E:111:ALA:HB2	4:3E:120:LEU:CD1	2.48	0.43
26:14:194:G:H2'	26:14:195:A:O4'	2.18	0.43
26:1H:717:G:H2'	26:1H:718:A:O4'	2.18	0.43
3:2E:151:VAL:HA	3:2E:199:LYS:O	2.19	0.43
1:13:582:U:O2'	17:8I:94:ASN:ND2	2.31	0.43
1:13:228:A:H2'	1:13:229:U:O4'	2.19	0.43
40:65:92:TYR:HB2	40:65:98:VAL:HG11	2.01	0.43
38:88:25:ASP:HA	38:88:102:VAL:HG23	2.00	0.43
5:42:26:PHE:N	5:42:26:PHE:CD1	2.87	0.43
31:31:101:LEU:HA	31:31:101:LEU:HD23	1.59	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:49:136:ARG:HG3	32:49:136:ARG:H	1.58	0.43
23:2L:32:G:C5	23:2L:33:OMC:C5	3.06	0.43
37:78:97:PRO:HD3	37:78:126:VAL:O	2.17	0.43
18:9A:45:SER:OG	18:9A:46:GLU:N	2.52	0.43
29:19:2:ALA:HB3	29:19:20:ASP:HB2	2.00	0.43
26:14:2464:C:H42	26:14:2486:G:H1	1.67	0.43
12:3I:111:LYS:O	12:3I:112:ASP:HB2	2.18	0.43
26:14:2720:U:C2	26:14:2721:A:C8	3.07	0.43
30:29:56:PRO:HD2	30:29:58:ARG:CZ	2.48	0.43
45:F8:37:THR:O	45:F8:40:LYS:HB3	2.18	0.43
1:13:411:A:C5	1:13:413:G:H1'	2.54	0.43
31:39:14:PRO:O	31:39:15:SER:C	2.56	0.43
40:65:78:LEU:HD11	40:65:107:GLU:CB	2.45	0.43
23:2L:23:G:H2'	23:2L:24:C:H6	1.83	0.43
26:14:639:U:H2'	26:14:640:C:C6	2.53	0.43
26:14:2171:A:C8	26:14:2172:U:H5''	2.54	0.43
57:3L:15:G:C2	57:3L:59:A:C4	3.07	0.43
34:69:100:ALA:O	34:69:104:GLN:HB2	2.19	0.43
29:19:66:ASP:HB3	29:19:105:ILE:HD12	1.99	0.43
33:59:11:VAL:HG22	33:59:69:ARG:HH12	1.83	0.43
1:13:1266:G:N2	1:13:1270:C:C4	2.87	0.43
1:13:345:C:H5'	41:B8:41:ARG:CZ	2.48	0.43
26:14:971:C:H2'	26:14:972:G:H5'	2.01	0.43
34:61:144:VAL:HG22	34:61:145:VAL:CG2	2.46	0.43
26:14:1778:U:H2'	26:14:1784:A:H62	1.82	0.43
33:59:163:TYR:CE1	33:59:169:VAL:HG22	2.54	0.43
43:95:35:LEU:HD23	43:95:35:LEU:H	1.84	0.43
2:12:50:GLU:CD	2:12:50:GLU:H	2.22	0.43
1:13:323:U:H4'	20:BI:22:ARG:HB3	2.01	0.43
1:13:222:U:H2'	1:13:223:U:C6	2.49	0.43
41:75:3:ARG:HE	41:75:6:LEU:HB2	1.84	0.43
56:1L:33:U:C2	56:1L:35:U:OP2	2.72	0.43
2:12:187:LEU:HD21	2:12:204:ASN:N	2.33	0.43
1:13:1189:C:OP1	10:1I:51:ARG:NH2	2.51	0.43
26:1H:722:A:C2	26:1H:723:G:C4	3.07	0.43
26:1H:689:A:N3	26:1H:779:U:O2'	2.47	0.43
4:32:177:ASP:O	4:32:180:GLY:N	2.37	0.43
47:H8:6:LYS:NZ	47:H8:43:GLU:OE1	2.34	0.43
19:AA:57:HIS:N	19:AA:57:HIS:CD2	2.86	0.43
1:1G:757:U:H2'	1:1G:758:G:O4'	2.18	0.43
26:14:1115:G:C5	26:14:1116:C:C4	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2832:U:H3'	26:14:2833:G:C8	2.54	0.43
49:J8:64:ALA:HA	49:J8:67:ILE:HG13	2.01	0.43
7:62:51:GLN:NE2	7:62:51:GLN:O	2.52	0.43
1:1G:1329:A:H5''	13:4A:25:ILE:O	2.19	0.43
6:52:37:VAL:HG21	6:52:63:TYR:HD2	1.83	0.43
26:1H:2850:A:H3'	26:1H:2851:A:C8	2.53	0.43
39:98:63:ARG:HA	39:98:80:PHE:CZ	2.54	0.43
12:3I:111:LYS:HA	12:3I:111:LYS:HD3	1.71	0.43
26:14:374:A:C2	26:14:401:A:C4	3.06	0.43
53:J5:38:ALA:HB3	53:J5:48:GLU:HG3	1.99	0.43
26:1H:1381:G:H1'	26:1H:1571:A:N1	2.33	0.43
1:1G:67:C:H2'	1:1G:68:G:C8	2.53	0.43
1:13:693:G:H2'	1:13:694:A:C8	2.53	0.43
9:82:97:LYS:HB3	9:82:98:PRO:HD3	2.01	0.43
1:1G:1047:G:H1	1:1G:1210:C:H42	1.66	0.43
54:P8:12:ARG:NH2	54:P8:44:PRO:HB3	2.34	0.43
26:14:1972:A:H2'	26:14:1973:G:H8	1.82	0.43
27:1J:57:A:H2'	27:1J:58:A:O4'	2.19	0.43
1:13:522:C:H2'	1:13:523:A:O4'	2.19	0.43
14:5A:22:THR:HB	14:5A:33:VAL:HG21	2.01	0.43
9:82:14:VAL:O	9:82:65:VAL:HG23	2.18	0.43
9:82:5:TYR:CG	9:82:6:GLY:N	2.87	0.43
1:1G:1301:U:O2	1:1G:1301:U:H2'	2.18	0.43
26:14:2688:U:C5	26:14:2720:U:OP2	2.68	0.43
26:1H:2156:G:H2'	26:1H:2157:G:H21	1.84	0.43
9:82:70:LYS:O	9:82:74:ILE:HG13	2.19	0.43
33:51:4:ILE:O	33:51:6:ARG:HG3	2.18	0.43
34:69:102:SER:HA	34:69:107:VAL:O	2.19	0.43
26:14:635:C:H2'	26:14:636:G:O4'	2.18	0.43
26:14:997:G:OP1	42:85:93:LYS:HD2	2.19	0.43
26:14:34:C:O2	26:14:34:C:H2'	2.19	0.43
26:1H:1299:G:H3'	26:1H:1639:U:O4	2.19	0.43
26:14:944:G:H5''	26:14:945:A:O5'	2.18	0.43
42:85:98:LEU:HB2	42:85:102:GLU:HB2	1.99	0.43
7:62:21:VAL:O	7:62:24:THR:HB	2.17	0.43
26:14:27:G:C4	26:14:512:G:N2	2.87	0.43
1:1G:406:G:H5'	4:32:5:ILE:HD12	2.01	0.43
26:14:90:U:O2'	26:14:91:A:H8	2.01	0.43
13:4A:54:VAL:HA	13:4A:57:ARG:HG2	2.00	0.43
1:1G:1129:C:H5	1:1G:1141:C:N4	2.17	0.43
26:1H:1432:C:H2'	26:1H:1433:U:O4'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:120:TRP:CD2	30:21:155:LYS:HG2	2.53	0.43
19:AA:15:LEU:HD22	19:AA:18:LYS:HE3	1.99	0.43
26:14:2446:G:C2	26:14:2501:C:C5	3.07	0.43
26:14:480:A:H2'	26:14:480:A:N3	2.32	0.43
26:1H:1429:G:H2'	26:1H:1430:C:C6	2.54	0.43
36:25:47:ILE:O	36:25:53:LYS:HD2	2.18	0.43
1:13:62:U:O2'	1:13:379:C:O2	2.37	0.43
2:12:208:ILE:HA	2:12:211:ILE:HD12	2.01	0.43
9:82:51:ARG:HA	9:82:56:LEU:HB3	2.01	0.43
10:1I:80:LYS:NZ	10:1I:84:GLN:HB2	2.34	0.43
1:1G:300:A:O5'	1:1G:300:A:H8	2.02	0.43
26:14:590:A:OP1	31:39:95:ARG:NH1	2.52	0.43
4:32:112:VAL:HG12	4:32:116:GLN:CD	2.39	0.43
26:1H:185:U:H2'	26:1H:186:G:H8	1.83	0.43
9:82:27:THR:HG1	9:82:32:ASP:HA	1.84	0.43
30:29:176:ILE:HB	30:29:181:LEU:HB2	2.00	0.43
1:1G:103:C:OP2	20:BA:14:LYS:HD3	2.19	0.43
1:1G:32:A:H2'	1:1G:33:A:C8	2.54	0.43
14:5A:41:ARG:HG3	14:5A:42:ILE:N	2.32	0.43
10:1A:16:LEU:HD13	10:1A:94:VAL:HG11	2.00	0.43
8:7E:121:ASP:HB2	8:7E:125:ARG:NH2	2.34	0.43
26:1H:470:A:H2'	26:1H:471:A:O4'	2.18	0.43
1:13:957:U:N3	1:13:960:U:OP2	2.49	0.43
26:14:2704:C:H2'	26:14:2705:A:O4'	2.19	0.43
1:1G:76:G:H1	1:1G:93:U:H3	1.67	0.43
26:1H:1205:U:H4'	26:1H:1206:G:OP2	2.19	0.43
2:1E:12:GLU:HB3	2:1E:44:LEU:HD13	1.99	0.43
47:H8:140:ASP:N	47:H8:140:ASP:OD1	2.51	0.43
30:29:195:LEU:HD12	30:29:195:LEU:HA	1.84	0.43
23:2L:38:A:H2'	23:2L:39:A:O4'	2.18	0.43
27:1J:63:G:H2'	27:1J:64:C:C6	2.54	0.43
9:82:112:LYS:NZ	9:82:113:LYS:O	2.48	0.43
28:71:42:GLU:H	28:71:216:THR:HA	1.84	0.43
26:14:2697:G:H2'	26:14:2698:U:O4'	2.19	0.43
26:14:2292:C:H2'	26:14:2293:C:C6	2.53	0.43
26:14:1023:U:OP2	26:14:1024:G:N7	2.52	0.43
26:1H:1417:C:H42	26:1H:1581:G:H1	1.67	0.43
29:19:31:LYS:HG3	29:19:33:LEU:HB3	2.00	0.43
1:1G:428:G:C5	1:1G:430:A:C6	3.07	0.43
26:1H:1658:C:H2'	26:1H:1659:U:C6	2.53	0.43
33:59:9:ILE:HB	33:59:10:PRO:HD2	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1245:A:H2'	1:1G:1246:C:C6	2.54	0.43
40:A8:36:TYR:N	40:A8:36:TYR:HD1	2.16	0.43
26:14:972:G:H3'	26:14:973:A:H2'	2.00	0.43
1:1G:373:A:N3	1:1G:374:A:C8	2.86	0.43
37:78:123:LEU:HA	37:78:123:LEU:HD23	1.75	0.43
12:3A:58:VAL:O	12:3A:65:GLU:HA	2.19	0.43
1:13:475:G:C4	1:13:476:G:C8	3.07	0.43
26:1H:647:G:H8	26:1H:647:G:OP2	2.01	0.43
47:D5:37:VAL:HG23	47:D5:38:TYR:N	2.34	0.43
6:52:16:GLN:HG2	6:52:16:GLN:H	1.57	0.43
2:12:213:LEU:HG	2:12:214:ILE:N	2.33	0.43
26:1H:1317:A:H2'	26:1H:1318:C:C6	2.54	0.43
1:13:450:G:C8	1:13:481:G:O6	2.71	0.43
1:1G:513:C:H2'	1:1G:514:C:C6	2.54	0.43
37:35:112:LEU:HA	37:35:112:LEU:HD23	1.77	0.43
29:11:261:LYS:HZ2	29:11:263:ARG:H	1.65	0.43
1:13:658:G:H2'	1:13:659:U:C6	2.53	0.43
26:1H:2516:G:O2'	26:1H:2517:C:H5'	2.19	0.43
8:72:81:HIS:HB2	8:72:138:TRP:CE3	2.54	0.43
1:1G:707:C:H2'	1:1G:708:C:H6	1.82	0.43
30:29:181:LEU:HD11	41:75:7:ILE:HD13	2.00	0.43
35:58:40:PRO:O	42:C8:64:ARG:HG2	2.19	0.43
3:22:113:ALA:HB3	3:22:114:PRO:HD3	2.01	0.43
29:19:147:LEU:HD22	29:19:147:LEU:HA	1.92	0.43
7:6E:95:ARG:NH1	7:6E:99:LEU:HD11	2.34	0.43
4:3E:191:ARG:NE	4:3E:200:GLU:OE1	2.52	0.43
6:52:101:ALA:O	18:9A:28:GLU:HB2	2.19	0.43
1:13:1074:G:N3	1:13:1102:A:C2	2.87	0.43
34:69:113:ARG:O	34:69:131:LYS:NZ	2.48	0.43
1:13:906:G:O5'	1:13:906:G:H8	2.01	0.43
26:1H:2080:G:H5''	26:1H:2080:G:H8	1.84	0.43
11:2A:103:LEU:HD12	11:2A:103:LEU:HA	1.70	0.43
27:1J:98:G:O5'	27:1J:98:G:H8	2.02	0.43
1:1G:450:G:O5'	1:1G:450:G:H8	2.01	0.43
1:13:730:G:C5	1:13:731:G:H1'	2.54	0.43
1:1G:1058:G:H2'	1:1G:1059:C:C6	2.53	0.43
26:1H:701:G:C2'	26:1H:702:G:H5'	2.49	0.43
46:G8:82:PRO:HB3	46:G8:99:CYS:HB2	2.01	0.43
26:1H:2135:A:C5'	26:1H:2159:G:H21	2.32	0.43
31:31:78:ILE:H	31:31:78:ILE:HG23	1.60	0.43
5:42:68:GLU:OE2	5:42:70:PRO:HG3	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:5E:96:PRO:HB3	18:9I:30:ASP:CG	2.40	0.43
5:4E:6:PHE:HD2	5:4E:63:ARG:NH1	2.17	0.43
4:3E:31:CYS:HB2	59:3E:301:SF4:S3	2.58	0.43
22:1K:62:C:H2'	22:1K:63:U:O4'	2.19	0.43
26:14:1003:G:N2	26:14:1153:C:C2	2.87	0.43
32:41:137:GLU:HB2	32:41:139:LEU:HD23	2.01	0.43
1:13:671:G:C4	1:13:672:U:C6	3.07	0.43
26:14:2443:C:H2'	26:14:2444:G:C8	2.54	0.43
1:1G:1141:C:H2'	1:1G:1142:G:H8	1.84	0.43
1:1G:1032:A:H3'	1:1G:1032(A):G:C5'	2.48	0.43
2:12:127:ILE:HG12	2:12:130:ARG:CD	2.49	0.43
38:88:5:ARG:H	38:88:5:ARG:HG3	1.62	0.43
1:13:1032(A):G:H2'	1:13:1032(B):G:N7	2.34	0.43
1:13:1397:C:OP2	5:4E:24:ARG:NH2	2.52	0.43
49:J8:91:LYS:HA	49:J8:91:LYS:HZ3	1.83	0.43
29:11:16:MET:CE	29:11:211:ARG:HD2	2.49	0.43
2:12:28:PHE:CZ	2:12:189:ASP:HA	2.54	0.43
37:78:101:VAL:HA	37:78:105:LEU:O	2.19	0.43
1:13:147:G:C2	1:13:148:G:C5	3.06	0.43
26:1H:2107:C:H5''	26:1H:2108:C:P	2.59	0.43
30:21:52:LEU:HA	30:21:52:LEU:HD12	1.55	0.43
31:39:95:ARG:HG3	31:39:97:TYR:CE1	2.54	0.43
7:62:141:VAL:CA	7:62:142:GLU:HG2	2.49	0.43
39:55:38:VAL:O	39:55:41:ALA:HB3	2.19	0.43
5:4E:11:ILE:HD11	5:4E:31:LEU:HD13	2.01	0.43
1:1G:1225:A:H5''	1:1G:1226:C:OP2	2.19	0.43
1:1G:228:A:H4'	16:7A:62:VAL:HG11	2.01	0.43
34:69:128:LEU:O	34:69:138:ILE:N	2.43	0.43
44:E8:9:TYR:HA	44:E8:100:THR:CG2	2.49	0.43
16:7I:33:ILE:H	16:7I:33:ILE:HG13	1.70	0.43
26:1H:2695:C:H2'	26:1H:2696:U:H6	1.84	0.43
26:14:1551:C:C4	26:14:1552:G:C5	3.07	0.43
1:1G:892:A:O2'	1:1G:1415:G:H4'	2.19	0.43
23:2L:15:G:N2	23:2L:22:A:H1'	2.34	0.43
7:6E:95:ARG:HH12	7:6E:99:LEU:HD21	1.83	0.43
3:22:19:GLU:O	3:22:57:ILE:N	2.50	0.43
1:1G:184:G:C2'	1:1G:185:A:H5'	2.49	0.43
1:13:827:U:C5	1:13:870:U:C4	3.06	0.43
26:1H:1480:G:N1	26:1H:1482:U:O2	2.52	0.43
26:14:2628:C:H1'	26:14:2781:A:H2'	2.00	0.43
42:85:86:ALA:HB2	42:85:116:ALA:HB2	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:426:G:OP1	4:32:36:ARG:NH2	2.52	0.43
32:41:130:ASN:HB3	32:41:160:VAL:HA	2.01	0.43
17:8I:58:GLU:HB2	17:8I:74:LEU:HB3	2.00	0.43
39:55:54:LEU:HD12	39:55:54:LEU:HA	1.87	0.43
26:14:1830:C:O5'	26:14:1830:C:H6	2.02	0.43
3:2E:42:LEU:HD13	3:2E:42:LEU:HA	1.73	0.43
15:6I:32:LEU:HA	15:6I:32:LEU:HD23	1.87	0.43
28:71:64:LEU:HD22	28:71:65:PRO:HD2	2.01	0.43
26:14:2842:G:C4	26:14:2876:G:N2	2.87	0.43
1:13:1112:C:N3	3:2E:178:LEU:HB2	2.33	0.43
26:1H:2133:G:H2'	26:1H:2157:G:N2	2.34	0.42
1:13:1346:A:O3'	1:13:1347:G:H4'	2.19	0.42
26:1H:2598:A:C8	26:1H:2598:A:H3'	2.53	0.42
26:1H:142:G:H1'	45:F8:37:THR:CG2	2.40	0.42
1:1G:1320:C:OP1	19:AA:70:LYS:HE3	2.19	0.42
26:1H:1372:U:C2'	26:1H:1373:A:H5'	2.49	0.42
55:Q8:7:HIS:HB3	55:Q8:61:LEU:HB3	2.01	0.42
27:1J:1:U:H2'	27:1J:2:C:C6	2.54	0.42
26:1H:1538:G:H2'	26:1H:1539:G:C8	2.54	0.42
26:14:483:A:C4	46:C5:60:PHE:HZ	2.36	0.42
13:4A:78:ILE:CG2	13:4A:92:HIS:HB3	2.46	0.42
1:13:502:G:C6	1:13:503:C:C4	3.07	0.42
26:1H:1387:C:C2	26:1H:1388:G:C8	3.07	0.42
35:58:57:ALA:C	35:58:59:LYS:N	2.68	0.42
1:13:671:G:H2'	1:13:672:U:C6	2.48	0.42
26:1H:2262:U:H4'	26:1H:2328:A:C2	2.54	0.42
1:1G:192:U:C1'	20:BA:103:GLY:HA2	2.49	0.42
3:22:6:HIS:HD2	3:22:7:PRO:HD2	1.84	0.42
27:16:31:C:N4	40:A8:32:LEU:HD23	2.34	0.42
26:1H:1266:G:O5'	44:E8:15:ARG:NH2	2.52	0.42
26:1H:639:U:H2'	26:1H:640:C:C6	2.54	0.42
4:3E:104:VAL:O	4:3E:107:ARG:N	2.52	0.42
1:1G:516:U:O2'	1:1G:519:C:N3	2.52	0.42
30:29:37:ARG:HD2	30:29:80:GLU:OE2	2.19	0.42
1:13:105:G:H2'	1:13:106:C:C6	2.54	0.42
36:68:23:ARG:HG3	36:68:24:VAL:N	2.33	0.42
37:78:96:THR:C	37:78:98:GLU:H	2.22	0.42
26:1H:270(R):G:H2'	26:1H:270(S):G:H8	1.81	0.42
1:1G:224:C:H2'	1:1G:225:C:C6	2.54	0.42
39:55:29:LEU:HD12	39:55:29:LEU:HA	1.78	0.42
1:1G:1084:G:C6	1:1G:1085:U:C4	3.07	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:41:63:ILE:HG13	32:41:64:THR:N	2.34	0.42
1:1G:803:G:C5	1:1G:804:U:C4	3.06	0.42
1:1G:1371:G:OP2	9:82:11:LYS:HG2	2.19	0.42
4:3E:173:TRP:CZ3	4:3E:193:ASP:HB3	2.54	0.42
1:13:292:G:N7	1:13:293:G:H1'	2.34	0.42
1:1G:115:G:H1'	1:1G:116:A:N7	2.34	0.42
29:11:72:LYS:HG2	29:11:103:ARG:NH2	2.33	0.42
1:13:667:G:OP1	1:13:732:C:O2'	2.32	0.42
32:41:125:PHE:CE1	32:41:131:TYR:HB2	2.53	0.42
53:N8:36:CYS:HB2	53:N8:49:CYS:SG	2.59	0.42
26:14:185:U:H2'	26:14:186:G:O4'	2.19	0.42
26:14:1709:U:H2'	26:14:1710:C:C6	2.54	0.42
1:13:948:C:O2'	1:13:949:A:H5'	2.19	0.42
32:49:27:ASN:OD1	32:49:28:VAL:N	2.50	0.42
20:BA:26:ASN:HA	20:BA:71:THR:HG23	2.01	0.42
1:13:1414:U:H2'	1:13:1415:G:H8	1.84	0.42
3:2E:188:LEU:HD11	3:2E:195:VAL:HG13	2.01	0.42
34:69:23:PRO:O	34:69:27:ARG:HG2	2.19	0.42
1:1G:393:A:OP2	16:7A:12:LYS:HD3	2.18	0.42
26:14:1769:G:O2'	26:14:1958:C:OP1	2.30	0.42
26:14:2178:C:H5'	28:79:46:LYS:HE2	2.01	0.42
26:14:515:A:H2'	26:14:516:C:H5'	2.01	0.42
11:2I:106:LYS:HB2	11:2I:106:LYS:HE3	1.76	0.42
23:2K:45:A:H2'	23:2K:46:G:O4'	2.19	0.42
46:G8:4:LYS:HD3	46:G8:4:LYS:HA	1.75	0.42
12:3A:85:ILE:HA	12:3A:85:ILE:HD12	1.65	0.42
33:51:71:LEU:HD12	33:51:71:LEU:HA	1.83	0.42
3:2E:175:LEU:HD21	3:2E:201:TYR:CE1	2.54	0.42
26:14:2687:U:C4	26:14:2688:U:C5	3.07	0.42
26:14:2295:C:OP1	40:65:10:ARG:HD3	2.18	0.42
28:71:193:ILE:HD13	28:71:194:ARG:CZ	2.49	0.42
8:72:103:VAL:HG21	8:72:110:ALA:HB2	2.00	0.42
8:72:4:ASP:OD2	8:72:85:ARG:NE	2.49	0.42
26:14:2331:G:O2'	48:E5:43:THR:HB	2.18	0.42
26:14:1774:C:H6	26:14:1774:C:O5'	2.01	0.42
31:31:59:TYR:CD1	31:31:78:ILE:HD11	2.54	0.42
50:K8:47:ASN:O	50:K8:49:LYS:HG3	2.19	0.42
5:42:70:PRO:O	5:42:77:PRO:HD3	2.19	0.42
4:3E:155:LEU:HB3	4:3E:158:ILE:HG13	2.01	0.42
31:31:170:LEU:HB2	31:31:173:VAL:HB	2.00	0.42
26:14:2805:G:H2'	26:14:2807:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:983:A:H2	1:1G:984:C:C6	2.38	0.42
13:4I:3:ARG:CZ	13:4I:9:ILE:HD11	2.49	0.42
26:1H:1166:C:O2	26:1H:1184:G:C2	2.72	0.42
32:4I:12:TYR:HA	32:4I:16:ARG:HD3	2.01	0.42
13:4A:34:LEU:HD13	13:4A:41:PRO:HB3	2.01	0.42
26:14:2641:G:P	35:15:74:ARG:HH21	2.42	0.42
26:14:2572:A:N7	30:29:145:LYS:HB2	2.34	0.42
46:G8:42:VAL:HG23	46:G8:43:ASN:H	1.84	0.42
1:1G:520:A:N1	1:1G:536:C:H1'	2.33	0.42
26:14:1346:G:H2'	26:14:1347:G:H8	1.84	0.42
56:1L:3:G:H2'	56:1L:3:G:OP2	2.19	0.42
1:1G:1423:G:OP1	36:25:49:ARG:NH2	2.52	0.42
26:14:2636:U:H4'	30:29:80:GLU:OE2	2.19	0.42
8:7E:88:LYS:HB3	8:7E:89:PRO:HD2	2.00	0.42
26:14:1424:G:H2'	26:14:1425:G:C8	2.54	0.42
37:78:71:VAL:CG1	37:78:72:PRO:HD3	2.49	0.42
43:95:24:LYS:HB3	43:95:24:LYS:HE2	1.92	0.42
7:62:45:ASP:O	7:62:49:ILE:HG13	2.19	0.42
1:1G:980:C:H5'	1:1G:981:U:OP2	2.19	0.42
1:13:464:G:H2'	1:13:467:G:O6	2.19	0.42
17:8I:101:ARG:HB2	17:8I:101:ARG:CZ	2.49	0.42
26:1H:192:C:OP1	61:1H:3573:HOH:O	2.21	0.42
26:1H:38:A:H2'	26:1H:39:C:C6	2.54	0.42
1:1G:1157:A:N9	1:1G:1158:C:H5	2.17	0.42
26:1H:2820:A:O2'	26:1H:2821:A:OP1	2.31	0.42
16:7A:17:TYR:CE2	16:7A:41:PRO:HG3	2.54	0.42
26:14:1569:A:H2'	26:14:1570:A:C8	2.54	0.42
1:13:1177:G:H5'	9:8E:97:LYS:HZ1	1.84	0.42
23:2K:65:G:C2	23:2K:66:C:C2	3.07	0.42
26:14:1399:C:H2'	26:14:1400:G:H8	1.85	0.42
10:1I:33:GLN:O	10:1I:74:ILE:HG12	2.19	0.42
1:13:946:A:H2'	1:13:947:G:C8	2.54	0.42
53:N8:20:ARG:HG2	53:N8:23:HIS:CE1	2.54	0.42
26:1H:1711:C:H2'	26:1H:1712:C:O4'	2.19	0.42
26:14:2645:G:H3'	26:14:2646:C:H5'	2.01	0.42
26:14:2310:A:H5'	26:14:2311:A:OP2	2.18	0.42
15:6I:45:VAL:HG12	15:6I:46:HIS:HD2	1.83	0.42
26:1H:2029:G:H2'	26:1H:2031:A:OP1	2.19	0.42
2:12:132:LYS:HD2	2:12:135:GLN:NE2	2.34	0.42
26:14:1638:C:H5''	26:14:2710:C:O2'	2.19	0.42
39:55:12:ARG:HB3	39:55:16:HIS:HB3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:983:A:H1'	1:13:1049:U:O2	2.19	0.42
26:1H:2439:A:C8	26:1H:2439:A:H5'	2.54	0.42
26:1H:363(E):U:OP2	26:1H:363(E):U:H6	2.02	0.42
26:14:441:U:H2'	26:14:442:G:C8	2.54	0.42
31:39:29:ASN:HA	31:39:30:PRO:HD3	1.63	0.42
26:14:270(P):C:H2'	26:14:270(Q):C:C6	2.54	0.42
26:1H:1965:C:H3'	26:1H:1966:A:H2'	2.00	0.42
1:1G:1127:G:N3	1:1G:1127:G:H2'	2.34	0.42
26:14:1226:G:P	43:95:85:LYS:HA	2.59	0.42
26:1H:1423:G:C6	26:1H:1424:G:N7	2.87	0.42
26:1H:1042:G:C6	26:1H:1043:C:C4	3.07	0.42
26:1H:2531:A:H5'	33:51:157:TYR:CZ	2.53	0.42
1:13:1330:U:H4'	13:4I:23:TYR:CE1	2.52	0.42
1:13:664:G:P	18:9I:64:ARG:HH21	2.43	0.42
26:1H:1581:G:H2'	26:1H:1582:C:O4'	2.19	0.42
57:3L:58:A:N7	57:3L:61:C:C4	2.87	0.42
2:1E:16:HIS:HE1	2:1E:213:LEU:HD12	1.84	0.42
13:4A:78:ILE:O	13:4A:82:MET:N	2.52	0.42
26:1H:354:G:H2'	26:1H:355:G:C8	2.54	0.42
1:13:575:G:H4'	1:13:576:G:H5''	2.01	0.42
1:1G:1293:G:H2'	1:1G:1294:G:C8	2.55	0.42
26:1H:1435:G:H2'	26:1H:1436:G:H8	1.84	0.42
22:1K:18:G:C5	22:1K:57:G:N2	2.87	0.42
26:1H:805:G:H4'	26:1H:806:C:OP2	2.20	0.42
49:F5:92:LYS:O	49:F5:93:GLU:C	2.56	0.42
46:G8:29:GLU:HB3	46:G8:38:ILE:CG2	2.48	0.42
4:32:119:GLN:HG2	4:32:123:HIS:CD2	2.50	0.42
1:13:1536:C:H42	25:4K:9:G:H22	1.67	0.42
51:L8:7:LYS:HD2	51:L8:34:GLU:OE2	2.19	0.42
26:14:2132:U:H3	28:79:6:ARG:HE	1.66	0.42
31:31:161:GLU:O	31:31:165:ARG:HG2	2.20	0.42
1:13:1080:A:H5'	5:4E:14:ARG:NH2	2.35	0.42
1:13:255:G:C6	1:13:256:U:C4	3.06	0.42
1:1G:751:U:H2'	1:1G:752:G:O4'	2.19	0.42
1:1G:590:C:OP1	8:72:30:ARG:N	2.44	0.42
29:11:118:VAL:HG11	29:11:124:PRO:HD2	2.01	0.42
38:45:54:MET:O	38:45:57:HIS:N	2.47	0.42
26:14:2848:G:H1'	26:14:2867:G:N2	2.35	0.42
39:55:70:LEU:HD23	39:55:70:LEU:HA	1.86	0.42
53:N8:46:CYS:HA	53:N8:47:PRO:HD2	1.81	0.42
10:1I:83:GLU:HG2	10:1I:84:GLN:H	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:51:VAL:HG21	8:7E:60:ARG:HH11	1.83	0.42
26:14:856:C:C6	26:14:857:C:H5	2.37	0.42
26:14:1059:G:H2'	26:14:1060:U:C4	2.54	0.42
29:19:67:PHE:HE1	29:19:106:ILE:HD11	1.83	0.42
26:14:150:C:H2'	26:14:151:C:C6	2.55	0.42
1:13:659:U:H2'	1:13:660:G:C8	2.53	0.42
4:32:93:PHE:O	4:32:96:LEU:HB2	2.20	0.42
30:21:164:ARG:HH11	30:21:164:ARG:HD3	1.71	0.42
1:1G:1402:C:H2'	1:1G:1403:C:O4'	2.19	0.42
12:31:28:LYS:HE3	12:31:64:TYR:CE1	2.54	0.42
1:1G:171:A:H2'	1:1G:172:A:C8	2.54	0.42
31:31:8:GLN:OE1	31:31:21:ALA:HB2	2.18	0.42
35:15:5:VAL:HG23	35:15:43:THR:HG21	2.01	0.42
26:14:2512:C:H4'	30:29:122:PHE:CE2	2.54	0.42
26:1H:2408:U:H6	26:1H:2408:U:O5'	2.03	0.42
26:1H:2391:G:O6	26:1H:2425:A:H8	2.02	0.42
1:1G:967:C:H2'	1:1G:968:A:N7	2.34	0.42
55:M5:8:LYS:HA	55:M5:8:LYS:HD3	1.71	0.42
26:14:1803:A:H2	26:14:1822:G:N3	2.18	0.42
26:1H:315:G:C6	26:1H:316:C:C4	3.07	0.42
1:13:711:G:H2'	1:13:712:A:H8	1.84	0.42
26:14:162:U:H4'	26:14:171:G:O4'	2.19	0.42
42:C8:92:ARG:HH21	43:D8:10:LYS:HG2	1.84	0.42
26:1H:2159:G:C5	26:1H:2160:G:C8	3.08	0.42
26:1H:1021:A:C3'	26:1H:1021:A:C8	3.02	0.42
37:35:50:ARG:HD3	55:M5:61:LEU:HD11	2.00	0.42
26:14:2295:C:N3	26:14:2296:U:H5	2.17	0.42
26:1H:1359:A:N3	26:1H:1359:A:O4'	2.52	0.42
26:14:1022:G:C6	26:14:1140:C:C4	3.08	0.42
8:7E:20:TYR:HE1	8:7E:78:GLN:NE2	2.17	0.42
1:13:1128:C:C5	1:13:1139:G:C2	3.06	0.42
56:1L:66:A:H2'	56:1L:66:A:N3	2.33	0.42
26:14:1154:G:H8	26:14:1154:G:O5'	2.02	0.42
43:95:44:LYS:HG3	43:95:45:THR:OG1	2.19	0.42
11:2I:124:LYS:HB2	11:2I:125:PHE:HD1	1.83	0.42
13:4I:34:LEU:HD13	13:4I:41:PRO:HB3	2.01	0.42
26:1H:1047:G:C2	26:1H:1110:G:C8	3.07	0.42
26:1H:1388:G:H2'	26:1H:1389:G:C8	2.55	0.42
9:82:79:LEU:HD23	9:82:101:PHE:O	2.20	0.42
1:13:404:U:H5'	4:3E:122:ARG:HD2	2.00	0.42
26:14:26:G:C6	26:14:27:G:N1	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1784:A:H4'	26:14:1785:A:O5'	2.19	0.42
1:1G:1105:A:H2'	1:1G:1106:G:H8	1.85	0.42
41:75:54:ARG:HG3	41:75:59:THR:CG2	2.49	0.42
2:12:158:LEU:HA	2:12:159:PRO:HD2	1.83	0.42
22:1K:26:A:H5'	22:1K:27:G:OP2	2.20	0.42
26:1H:2477:C:H6	26:1H:2529:G:O6	2.02	0.42
52:M8:15:ILE:O	52:M8:33:VAL:HB	2.19	0.42
1:1G:129(A):G:C6	1:1G:188:U:H4'	2.54	0.42
41:B8:51:ARG:HB2	41:B8:98:LYS:HD2	2.00	0.42
1:1G:161:A:N6	1:1G:162:A:N1	2.67	0.42
26:14:2603:G:C6	26:14:2604:U:C4	3.07	0.42
4:32:126:ILE:HG22	4:32:127:THR:N	2.35	0.42
26:14:2081:C:O2'	26:14:2082:A:H5'	2.20	0.42
26:14:814:C:OP1	43:95:83:ARG:N	2.34	0.42
35:58:12:ARG:HB3	35:58:50:ASP:OD1	2.20	0.42
26:1H:1336:A:H2'	26:1H:1337:G:C8	2.55	0.42
1:1G:894:G:C6	1:1G:895:G:C5	3.08	0.42
26:1H:2415:G:O4'	37:78:67:MET:HG3	2.19	0.42
55:Q8:9:GLY:O	55:Q8:13:ARG:HG2	2.17	0.42
26:14:527:C:N4	26:14:2779:U:OP2	2.52	0.42
15:6A:10:LYS:HG2	15:6A:10:LYS:H	1.56	0.42
10:1I:33:GLN:OE1	10:1I:74:ILE:HG23	2.20	0.42
26:14:775:G:C5	26:14:794:G:C8	3.07	0.42
1:1G:20:U:H2'	1:1G:21:G:O4'	2.19	0.42
36:25:59:LYS:HB3	36:25:87:ILE:HG22	2.02	0.42
1:13:567:G:H2'	1:13:568:G:O4'	2.19	0.42
26:14:1464:C:C2	26:14:1465:G:C8	3.08	0.42
1:13:754:C:OP1	15:6I:72:ARG:NH2	2.51	0.42
26:14:911:A:C5	38:45:9:TYR:CD2	3.08	0.42
1:1G:142:G:H2'	1:1G:143:A:H8	1.84	0.42
26:1H:94:G:H2'	26:1H:95:G:O4'	2.19	0.42
32:49:37:VAL:O	32:49:94:LEU:HB2	2.19	0.42
1:1G:685:G:H5'	11:2A:39:PRO:O	2.18	0.42
30:21:181:LEU:HD13	30:21:181:LEU:HA	1.71	0.42
12:3A:54:LYS:HE3	12:3A:54:LYS:N	2.34	0.42
4:32:120:LEU:HA	4:32:120:LEU:HD23	1.81	0.42
39:98:18:LEU:HD23	39:98:18:LEU:HA	1.79	0.42
48:I8:64:ASP:OD1	48:I8:64:ASP:N	2.53	0.42
1:1G:718:G:H5'	11:2A:117:ASN:CG	2.40	0.42
55:M5:23:VAL:HA	55:M5:48:PHE:O	2.20	0.42
26:1H:1575:C:H2'	26:1H:1576:U:O4'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:963:G:H21	10:1I:55:LYS:HZ1	1.68	0.42
31:39:16:GLY:O	31:39:18:ARG:N	2.52	0.42
26:14:1012:U:O4	35:15:25:ARG:HA	2.20	0.42
26:1H:442:G:C4	26:1H:444:C:C5	3.07	0.42
6:5E:97:PHE:N	18:9I:30:ASP:OD1	2.49	0.42
2:1E:8:LYS:HZ3	2:1E:8:LYS:H	1.67	0.42
26:1H:2849:U:O4	41:B8:23:ARG:NH2	2.52	0.42
26:14:1728:G:N3	26:14:1728:G:H5''	2.34	0.42
26:1H:1156:A:N7	42:C8:51:LYS:HG2	2.35	0.42
43:95:35:LEU:C	43:95:37:VAL:HG13	2.39	0.42
26:14:581:C:H2'	26:14:582:G:H8	1.85	0.42
1:13:51:A:OP2	1:13:52:G:C8	2.69	0.42
57:3L:2:G:H2'	57:3L:3:G:C8	2.55	0.42
26:14:1507:A:O2'	26:14:1510:A:N1	2.40	0.42
1:13:1536:C:N4	25:4K:9:G:H22	2.17	0.42
57:3L:76:A:H8	26:14:2394:C:N4	2.18	0.42
26:14:774:A:C2	26:14:787:U:O2'	2.73	0.42
26:1H:2895:U:H2'	26:1H:2896:C:H6	1.84	0.42
26:1H:581:C:H2'	26:1H:582:G:H8	1.84	0.42
12:3A:27:LEU:HD23	12:3A:33:ARG:HG2	2.00	0.42
47:H8:4:ARG:HB3	47:H8:58:VAL:HG22	2.01	0.42
35:15:15:LEU:HB3	35:15:136:GLU:HA	2.00	0.42
1:1G:834:C:N4	1:1G:852:G:H1	2.16	0.42
39:55:57:ARG:NE	39:55:59:ASP:OD2	2.24	0.42
17:8I:29:HIS:N	17:8I:34:LYS:O	2.49	0.42
31:31:164:ARG:HG3	31:31:175:THR:HB	2.01	0.42
26:14:921:G:C6	26:14:922:U:C4	3.07	0.42
26:1H:2821:A:HO2'	26:1H:2826:A:H2	1.66	0.42
26:14:1475:G:H5'	26:14:1476:C:OP2	2.19	0.42
13:4I:82:MET:O	13:4I:83:ASP:HB2	2.19	0.42
26:1H:592:G:N3	55:Q8:4:MET:CE	2.83	0.42
26:1H:1711:C:H2'	26:1H:1712:C:C6	2.55	0.42
32:41:37:VAL:HG22	32:41:159:VAL:HG13	2.02	0.42
51:L8:2:PRO:HB2	51:L8:3:ARG:H	1.56	0.42
26:1H:346:A:H5''	26:1H:347:A:OP2	2.19	0.42
38:45:136:ALA:HB1	38:45:138:ASP:OD2	2.18	0.42
1:1G:1372:U:OP1	9:82:72:GLY:N	2.51	0.42
40:A8:5:THR:OG1	40:A8:8:GLU:HG2	2.19	0.42
31:39:120:GLU:HG3	31:39:122:LYS:HG2	2.01	0.42
3:22:120:VAL:HA	3:22:123:GLN:HB3	2.01	0.42
26:1H:665:C:H2'	26:1H:666:G:C8	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2I:32:ILE:HD12	11:2I:68:ALA:O	2.20	0.42
7:6E:104:LEU:HD13	7:6E:104:LEU:HA	1.90	0.42
1:1G:27:G:H8	1:1G:27:G:O5'	2.01	0.42
31:39:62:ARG:CG	31:39:62:ARG:HH11	2.32	0.42
46:G8:57:GLN:H	46:G8:57:GLN:HG3	1.56	0.42
1:13:1225:A:N3	1:13:1225:A:H2'	2.34	0.42
29:11:120:GLY:HA2	29:11:190:TYR:OH	2.20	0.42
26:1H:1204:A:C2	26:1H:1241:A:N1	2.87	0.42
1:13:715:A:H2'	1:13:716:A:C8	2.54	0.42
26:1H:1042:G:H1	26:1H:1113:U:H3	1.67	0.42
26:1H:730:C:H3'	61:1H:3511:HOH:O	2.19	0.42
29:19:49:ILE:HG12	29:19:49:ILE:O	2.18	0.42
26:1H:1265:A:OP1	26:1H:1265:A:H8	2.02	0.42
1:1G:826:C:H2'	1:1G:827:U:C6	2.54	0.42
24:3K:71:C:H1'	26:1H:1851:U:H1'	2.02	0.42
26:14:1142(A):A:C5	26:14:1144:G:C5	3.07	0.42
41:B8:111:ARG:O	41:B8:112:ARG:HB3	2.19	0.42
23:2L:8:4SU:C2	23:2L:14:A:H62	2.27	0.42
26:14:873:G:N2	26:14:905:U:O2	2.52	0.42
26:14:2127:G:C6	26:14:2128:C:C4	3.07	0.42
57:3L:48:C:H5''	57:3L:59:A:H4'	2.00	0.42
26:14:397:G:O2'	26:14:2231:C:H1'	2.19	0.42
29:19:69:ARG:HD3	29:19:105:ILE:HD11	2.00	0.42
12:3A:41:ARG:O	12:3A:55:VAL:HG12	2.19	0.42
4:32:170:VAL:HB	4:32:176:LEU:HD11	2.02	0.42
26:1H:289:A:H61	26:1H:351:G:H1'	1.85	0.42
26:14:510:C:H2'	26:14:511:U:O4'	2.19	0.42
26:1H:2261:C:C5	48:I8:16:SER:HB3	2.54	0.42
4:32:148:VAL:HG12	4:32:152:SER:CB	2.48	0.42
26:1H:870:A:H5''	38:88:6:ARG:HB3	2.01	0.42
33:51:87:LEU:HD23	33:51:87:LEU:HA	1.66	0.42
30:29:101:ARG:CZ	30:29:171:GLU:HB2	2.50	0.42
1:13:284:G:H2'	1:13:285:G:C8	2.54	0.42
1:13:158:G:C2	1:13:159:G:C8	3.08	0.42
1:13:554:C:H2'	1:13:555:C:C6	2.52	0.42
26:14:940:G:N3	26:14:1191:G:H4'	2.34	0.42
36:25:113:LYS:CE	36:25:113:LYS:H	2.32	0.42
19:AI:23:ASN:ND2	19:AI:43:GLU:HB2	2.34	0.42
45:F8:92:LEU:HD23	45:F8:92:LEU:HA	1.82	0.42
26:14:959:A:C6	26:14:960:A:C2	3.08	0.42
26:1H:1521:G:H8	26:1H:1521:G:H5''	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9A:56:THR:HB	18:9A:58:LEU:HD13	2.02	0.42
1:1G:669:U:H2'	1:1G:670:G:H8	1.84	0.42
5:42:51:VAL:HG23	5:42:52:PRO:CD	2.50	0.42
33:51:13:LYS:HB3	33:51:13:LYS:HE2	1.64	0.42
26:1H:1239:G:O5'	26:1H:1239:G:H8	2.02	0.42
1:1G:1072:G:H2'	1:1G:1073:U:O4'	2.20	0.42
38:45:37:LEU:HB2	38:45:128:LYS:O	2.20	0.42
13:4I:4:ILE:HG22	13:4I:5:ALA:H	1.83	0.42
26:14:552:G:H2'	26:14:553:U:O4'	2.19	0.42
1:13:294:U:O4	1:13:295:C:N4	2.52	0.42
20:BI:42:GLN:O	20:BI:46:GLU:N	2.53	0.42
53:N8:41:PRO:HA	53:N8:42:PRO:HD3	1.90	0.42
1:13:76:G:O4'	1:13:95:G:N1	2.36	0.42
9:8E:116:LYS:HE3	9:8E:122:ALA:HB2	2.02	0.42
26:1H:562:U:O4	26:1H:2036:C:H1'	2.19	0.42
26:1H:482:A:H5''	26:1H:483:A:OP1	2.19	0.42
6:52:41:GLU:HG3	6:52:62:TRP:CE3	2.55	0.42
26:14:2353:G:H2'	26:14:2354:G:O4'	2.19	0.42
26:1H:2070:G:C2	26:1H:2442:C:C2	3.08	0.42
40:A8:93:LYS:HG2	40:A8:95:HIS:HB2	2.01	0.42
23:2K:21:U:C2'	23:2K:22:A:H5'	2.50	0.42
31:39:38:ARG:HE	31:39:38:ARG:HB3	1.74	0.42
2:1E:196:LEU:HD23	2:1E:196:LEU:HA	1.83	0.42
41:B8:78:LEU:HD13	41:B8:78:LEU:O	2.19	0.42
48:I8:60:PHE:CD1	48:I8:60:PHE:N	2.87	0.42
44:A5:71:VAL:HA	44:A5:107:LEU:HD12	2.02	0.42
26:1H:1012:U:O4	35:58:25:ARG:HA	2.20	0.42
1:13:1127:G:C5	1:13:1128:C:N4	2.88	0.42
26:1H:674:G:O2'	31:31:74:ARG:HG3	2.20	0.42
26:1H:2638:G:P	30:21:82:ARG:NH2	2.93	0.42
46:C5:87:LYS:NZ	46:C5:89:PHE:HB3	2.35	0.42
26:1H:2376:A:C2	26:1H:2377:A:H1'	2.55	0.42
4:3E:31:CYS:SG	4:3E:34:GLU:HG2	2.59	0.42
26:1H:2062:A:HO2'	26:1H:2063:C:C5'	2.33	0.42
32:49:98:ARG:O	32:49:101:ILE:HG13	2.19	0.42
1:13:437:U:O2	1:13:437:U:H2'	2.19	0.42
1:13:488:C:O2'	1:13:489:C:H5'	2.20	0.42
16:7I:27:LYS:H	16:7I:27:LYS:HG2	1.64	0.42
1:1G:485:G:O2'	1:1G:486:U:H6	2.03	0.42
1:13:109:A:H5'	1:13:110:C:H5	1.85	0.42
26:14:2494:G:O2'	26:14:2495:G:H5'	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:46:LYS:HA	46:C5:46:LYS:HD2	1.85	0.42
26:14:2662:A:O5'	26:14:2662:A:H8	2.02	0.42
26:1H:2863:C:H2'	26:1H:2864:G:C8	2.55	0.42
4:32:63:LYS:HE3	4:32:63:LYS:HB2	1.63	0.42
41:B8:13:ARG:HB3	41:B8:13:ARG:NH1	2.34	0.42
26:1H:2212:A:O2'	26:1H:2215:G:C8	2.64	0.42
1:1G:105:G:C6	1:1G:106:C:C4	3.07	0.42
1:1G:464:G:O5'	1:1G:464:G:H8	2.03	0.42
26:14:734:A:O2'	26:14:1635:G:H5'	2.20	0.42
26:14:1685:C:H2'	26:14:1686:C:C6	2.54	0.42
1:13:11:G:C6	1:13:12:U:C4	3.07	0.42
26:14:1858:G:H2'	26:14:1883:G:H22	1.84	0.42
29:19:72:LYS:HE3	29:19:101:GLU:OE2	2.20	0.42
43:95:79:VAL:HG23	43:95:80:GLN:H	1.85	0.42
26:1H:479:A:N3	26:1H:481:G:H5''	2.34	0.42
26:1H:2408:U:H2'	26:1H:2409:G:C8	2.54	0.42
30:21:108:SER:OG	30:21:163:GLU:HG2	2.19	0.42
3:2E:34:LEU:HD22	3:2E:38:ARG:NH1	2.35	0.42
5:42:28:PHE:O	5:42:47:LYS:HA	2.20	0.42
26:1H:271(C):U:C4	26:1H:272:G:OP1	2.73	0.42
26:14:95:G:H4'	50:G5:46:GLN:HB2	2.02	0.42
4:32:61:LYS:HA	4:32:203:VAL:HG22	2.01	0.42
3:22:130:VAL:O	3:22:134:ILE:HG12	2.20	0.42
4:32:76:ARG:NH2	4:32:80:GLU:OE1	2.44	0.42
35:15:13:TRP:O	35:15:135:PRO:HD2	2.19	0.42
26:14:2366:A:H2'	26:14:2367:G:O4'	2.20	0.42
37:78:63:PRO:CB	55:Q8:30:ARG:HH21	2.32	0.42
5:42:93:PRO:O	8:72:105:ARG:NH1	2.53	0.42
3:2E:118:GLN:H	3:2E:118:GLN:HG2	1.63	0.42
38:88:17:LEU:HA	38:88:17:LEU:HD23	1.44	0.42
26:14:595:C:H5''	26:14:595:C:H6	1.84	0.42
26:1H:1843:C:H6	26:1H:1843:C:O5'	2.01	0.42
12:3I:6:THR:N	12:3I:9:GLN:OE1	2.52	0.42
20:BI:14:LYS:HG3	20:BI:17:ARG:HE	1.85	0.42
51:L8:40:THR:HG23	51:L8:43:ILE:HG13	2.02	0.42
11:2I:121:PRO:HG2	11:2I:126:ARG:HG2	2.02	0.42
9:82:73:GLN:O	9:82:76:ALA:N	2.51	0.42
37:35:36:LYS:HB3	37:35:37:GLY:H	1.55	0.42
41:B8:3:ARG:O	41:B8:6:LEU:N	2.52	0.42
1:13:1402:C:H2'	1:13:1403:C:O4'	2.20	0.42
1:13:232:G:C4	1:13:233:C:C5	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:266:G:O2'	17:8I:67:LYS:HB3	2.20	0.42
26:14:1152:C:H4'	42:85:77:SER:HA	2.02	0.42
34:69:79:ILE:O	34:69:143:SER:HA	2.20	0.42
31:31:64:ILE:HG22	31:31:65:TRP:CD1	2.54	0.42
27:16:42:C:O2	32:41:92:VAL:HA	2.20	0.42
5:42:76:ILE:HG23	5:42:77:PRO:HD2	2.02	0.42
7:62:28:ASN:OD1	7:62:36:LYS:NZ	2.53	0.42
26:1H:307:G:N2	26:1H:310:A:O5'	2.50	0.42
11:2I:125:PHE:CD1	11:2I:125:PHE:N	2.87	0.42
4:32:100:ARG:HG2	4:32:136:PRO:O	2.19	0.42
26:14:1728:G:C2	26:14:1730:U:OP2	2.72	0.42
1:13:317:G:H1	1:13:336:C:N4	2.18	0.42
26:14:2839:G:H21	39:55:92:GLY:HA2	1.85	0.42
26:14:1757:U:O2	26:14:1762:A:N1	2.53	0.42
19:AI:4:SER:O	19:AI:5:LEU:HD23	2.20	0.42
1:1G:1260:C:H3'	1:1G:1260:C:C6	2.55	0.42
1:13:323:U:H5'	20:BI:23:ARG:HB3	2.01	0.42
14:5A:3:ARG:HA	14:5A:4:LYS:HA	1.84	0.42
26:1H:1813:G:H1'	29:11:50:THR:OG1	2.19	0.42
2:1E:176:GLU:O	2:1E:180:LEU:HG	2.20	0.42
26:14:1392:A:N6	26:14:1393:A:N6	2.68	0.42
4:3E:194:LEU:HG	4:3E:196:LEU:HD23	2.01	0.42
11:2I:45:GLY:O	11:2I:50:TYR:HB2	2.20	0.42
1:1G:652:U:C4	1:1G:752:G:N3	2.88	0.42
1:1G:628:G:N2	1:1G:629:G:C2	2.87	0.42
23:2L:69:C:H2'	23:2L:70:C:C6	2.54	0.42
26:1H:2684:U:C4	26:1H:2685:G:N7	2.87	0.42
26:14:224:G:N7	26:14:420:C:H4'	2.35	0.42
26:1H:994:C:OP1	42:C8:53:ARG:NH2	2.50	0.42
1:13:807:A:H2'	1:13:808:C:C6	2.54	0.42
37:78:111:ARG:HG2	37:78:128:HIS:CD2	2.54	0.42
22:1K:14:A:N6	22:1K:22:G:C5	2.88	0.42
16:7A:39:TYR:CD2	16:7A:41:PRO:HD3	2.55	0.42
5:42:41:VAL:O	5:42:67:VAL:N	2.53	0.42
29:19:72:LYS:HD3	29:19:97:TYR:CE2	2.55	0.42
1:1G:654:G:H2'	1:1G:655:A:O4'	2.19	0.42
32:41:51:ARG:O	32:41:54:GLU:HG2	2.20	0.42
2:1E:91:PRO:HA	2:1E:154:LEU:HD12	2.01	0.42
3:2E:32:LEU:HD13	3:2E:59:ARG:HD3	2.01	0.42
3:2E:173:VAL:HG12	3:2E:175:LEU:HD12	2.01	0.42
23:2L:20:G:C2	23:2L:58:A:N3	2.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:55:100:LEU:HD12	39:55:111:LEU:HB2	2.02	0.42
26:1H:2657:A:O2'	33:51:160:LYS:NZ	2.40	0.42
35:15:39:ARG:NH1	35:15:41:ASP:HB3	2.35	0.42
13:4I:70:LEU:O	13:4I:74:VAL:HG23	2.19	0.42
26:1H:270(A):A:N3	26:1H:365:C:O2'	2.42	0.42
1:13:120:A:H2'	1:13:121:C:H4'	2.00	0.42
26:1H:1925:C:C2'	26:1H:1926:U:H5'	2.50	0.42
2:12:119:GLU:OE2	2:12:153:ARG:NH1	2.52	0.42
26:14:458:G:O2'	54:L5:39:ARG:HD3	2.19	0.42
26:14:2631:G:O2'	26:14:2810:A:N1	2.45	0.42
41:75:51:ARG:HG3	41:75:98:LYS:HD2	2.01	0.42
38:88:47:ILE:O	38:88:50:ALA:N	2.53	0.42
1:13:1033:G:H8	1:13:1033:G:OP2	2.03	0.42
57:3L:25:C:C4	57:3L:26:A:C8	3.07	0.42
26:1H:2645:G:H3'	26:1H:2646:C:H5'	2.01	0.42
35:58:28:THR:HG22	35:58:29:LYS:N	2.34	0.42
26:1H:1613:G:C6	26:1H:1619:G:O6	2.72	0.42
37:35:11:GLY:O	37:35:12:ALA:HB3	2.19	0.42
26:1H:1107:G:N2	26:1H:1108:U:C2	2.88	0.42
32:41:112:PRO:HA	52:M8:37:SER:HB2	2.00	0.42
31:39:25:PRO:HB2	31:39:27:GLU:O	2.20	0.42
30:21:105:THR:HG22	30:21:106:GLY:H	1.83	0.42
33:59:58:GLU:HB2	33:59:61:HIS:HD2	1.83	0.42
26:1H:1569:A:H5'	29:11:61:LEU:HD21	2.02	0.42
29:11:30:GLU:HG3	29:11:63:ARG:CZ	2.49	0.42
1:13:445:G:H1	1:13:489:C:N4	2.17	0.42
26:1H:719:C:C2	26:1H:720:C:C5	3.08	0.42
26:1H:1443:G:H1	26:1H:1548:C:N4	2.16	0.42
1:13:627:G:H2'	1:13:628:G:C8	2.55	0.42
1:1G:864:A:H2'	1:1G:865:A:C8	2.54	0.42
39:55:2:ARG:O	39:55:2:ARG:HG3	2.19	0.42
26:1H:2262:U:H4'	26:1H:2328:A:H2	1.85	0.42
43:D8:36:PRO:HA	43:D8:37:VAL:HA	1.74	0.42
1:13:254:G:N2	1:13:272:C:O2	2.41	0.42
1:1G:547:A:H4'	1:1G:548:G:O5'	2.19	0.42
12:3A:82:VAL:HG23	12:3A:106:ASP:OD2	2.20	0.42
30:29:171:GLU:HB3	30:29:185:LYS:HG3	2.02	0.42
49:F5:90:ILE:HD13	49:F5:90:ILE:HG21	1.76	0.42
20:BI:61:SER:O	20:BI:65:LYS:HB2	2.20	0.42
26:14:2145:C:C2	26:14:2147:G:N2	2.88	0.42
26:1H:1853:A:O2'	26:1H:2234:G:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2262:U:H4'	26:14:2328:A:H2	1.82	0.42
26:1H:1528:A:C2	26:1H:1543:A:N1	2.88	0.42
26:14:1198:U:H2'	26:14:1199:U:H6	1.84	0.42
17:8I:5:VAL:HA	17:8I:59:ILE:O	2.19	0.42
44:A5:62:HIS:HB2	44:A5:64:MET:HG3	2.02	0.42
1:1G:1157:A:H1'	1:1G:1158:C:OP2	2.20	0.42
1:13:792:A:O2'	1:13:794:A:N7	2.49	0.42
14:5A:53:LEU:HA	14:5A:53:LEU:HD23	1.75	0.42
1:13:724:G:O2'	1:13:725:G:H5'	2.20	0.42
26:1H:1930:G:O2'	26:1H:1931:U:P	2.78	0.42
26:1H:2543:G:C1'	26:1H:2766:G:H5'	2.49	0.42
23:2K:65:G:H2'	23:2K:66:C:O4'	2.19	0.42
26:14:1858:G:H2'	26:14:1883:G:N2	2.35	0.42
26:14:2897:U:H5'	26:14:2898:U:OP2	2.19	0.42
26:14:2037:G:H2'	26:14:2038:G:C8	2.55	0.42
1:13:711:G:O2'	1:13:712:A:H5'	2.20	0.42
44:A5:110:LYS:NZ	44:A5:111:HIS:HB3	2.35	0.42
1:13:1:U:C2	1:13:630:G:H1'	2.55	0.42
40:A8:41:ASP:OD2	40:A8:44:LYS:HB2	2.20	0.42
35:15:38:HIS:HE2	35:15:50:ASP:CG	2.23	0.42
27:16:113:C:H2'	27:16:114:G:O4'	2.19	0.42
42:C8:8:VAL:HG23	42:C8:11:ARG:HH21	1.84	0.42
12:3A:18:VAL:O	12:3A:19:ARG:HB2	2.20	0.42
26:14:1514:U:C2'	26:14:1515:C:H5'	2.49	0.42
48:I8:19:LYS:HD3	48:I8:19:LYS:HA	1.50	0.42
41:B8:42:ILE:HD12	41:B8:42:ILE:H	1.84	0.42
57:3L:22:G:C2	57:3L:23:A:N7	2.88	0.42
26:1H:981:A:H1'	26:1H:2037:G:O4'	2.19	0.42
26:1H:153:C:H2'	26:1H:154:G:C8	2.55	0.42
1:13:195:A:C5	1:13:196:A:N1	2.87	0.42
26:1H:2124:G:N2	28:71:217:THR:HG23	2.35	0.42
1:13:1401:G:H5''	1:13:1402:C:OP2	2.19	0.42
26:1H:248:G:C2	26:1H:2431:U:H4'	2.54	0.42
50:K8:32:LEU:HA	50:K8:32:LEU:HD23	1.83	0.42
4:32:26:CYS:HA	59:32:301:SF4:S2	2.60	0.42
1:13:974:A:OP1	14:5I:31:ARG:HD3	2.20	0.42
29:11:30:GLU:HB3	29:11:104:TYR:OH	2.20	0.42
1:1G:858:G:H8	1:1G:858:G:OP2	2.03	0.42
1:13:736:C:C2	1:13:737:A:N7	2.88	0.42
40:A8:88:ASP:O	40:A8:89:ARG:CB	2.68	0.42
5:4E:63:ARG:HA	5:4E:66:MET:CE	2.50	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2106:G:C6	26:1H:2184:G:C2	3.08	0.42
26:1H:459:U:H5''	54:P8:40:TRP:CE2	2.55	0.42
32:41:109:VAL:O	32:41:113:ARG:HG3	2.19	0.42
21:1B:8:THR:OG1	21:1B:9:ARG:N	2.52	0.42
43:D8:14:VAL:HB	43:D8:96:ILE:HG13	2.02	0.42
26:14:991:C:O2	26:14:1164:G:C2	2.73	0.42
26:1H:1477:A:C2	26:1H:1517:G:C2	3.08	0.42
5:42:60:TYR:HB3	5:42:64:ARG:NH2	2.35	0.42
1:1G:1080:A:OP1	5:42:14:ARG:NH2	2.53	0.42
43:95:38:LEU:HD12	43:95:57:VAL:HG12	2.01	0.42
26:1H:588:U:H1'	31:31:90:PHE:CD1	2.55	0.42
31:39:83:PHE:O	31:39:85:GLY:N	2.48	0.42
26:14:2875:C:O2'	41:75:5:ALA:HB3	2.20	0.42
30:29:9:VAL:HG12	41:75:8:LYS:HE2	2.01	0.42
26:1H:1864:U:H2'	26:1H:1869:G:H5''	2.01	0.42
45:B5:5:TYR:CE2	50:G5:30:ARG:HB2	2.55	0.42
1:1G:587:G:O5'	1:1G:587:G:H8	2.03	0.42
1:13:416:G:C6	1:13:417:C:C4	3.08	0.42
1:1G:222:U:C2	1:1G:223:U:C5	3.08	0.42
28:79:200:LYS:HE3	28:79:208:PHE:HB2	2.02	0.42
26:14:2053:G:N2	26:14:2054:A:C4	2.88	0.42
1:13:243:A:H5''	1:13:244:U:H3'	2.02	0.42
35:15:21:LYS:O	35:15:61:ARG:N	2.53	0.42
20:BI:49:ALA:HB3	20:BI:99:LEU:HB2	2.02	0.42
1:13:653:A:C8	8:7E:56:LYS:HG2	2.55	0.42
26:14:2716:U:O2'	26:14:2717:G:H5'	2.19	0.42
26:1H:2747:G:C2	26:1H:2756:U:C5	3.08	0.42
5:4E:149:GLU:H	5:4E:149:GLU:HG2	1.68	0.42
26:1H:1680:U:H2'	26:1H:1681:G:O4'	2.19	0.42
47:D5:157:LEU:HD12	47:D5:161:VAL:C	2.40	0.42
1:1G:667:G:H4'	15:6A:51:HIS:ND1	2.35	0.42
6:5E:44:GLY:HA2	6:5E:59:TYR:CZ	2.54	0.42
8:7E:33:GLU:HA	8:7E:36:LEU:HD12	2.01	0.42
36:25:22:ILE:HD13	36:25:22:ILE:HA	1.46	0.42
47:H8:70:LEU:HD11	47:H8:98:MET:CE	2.50	0.42
47:H8:98:MET:HB2	47:H8:98:MET:HE3	1.93	0.42
26:1H:216:A:H2'	26:1H:217:G:C8	2.54	0.42
3:22:38:ARG:HB2	3:22:42:LEU:HD23	2.02	0.42
30:29:179:GLU:HB2	30:29:181:LEU:HD22	2.02	0.42
26:1H:2556:C:H2'	26:1H:2557:G:O4'	2.19	0.42
26:14:1459:G:H2'	26:14:1461:G:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:270(U):C:C2	26:14:270(V):G:C8	3.08	0.42
1:13:719:C:H1'	18:9I:49:LYS:HG2	2.01	0.42
2:12:201:ILE:HA	2:12:202:PRO:HD2	1.89	0.42
26:14:1311:G:N2	45:B5:60:ARG:HH21	2.18	0.42
10:1I:16:LEU:HD23	10:1I:94:VAL:HG13	2.02	0.42
49:F5:5:CYS:SG	49:F5:8:SER:OG	2.61	0.42
39:55:37:THR:HB	39:55:39:PRO:HD2	2.02	0.42
14:5I:37:PHE:CE2	14:5I:53:LEU:HD13	2.55	0.42
57:3L:52:G:H3'	57:3L:53:G:H8	1.84	0.42
21:1F:2:GLY:O	21:1F:4:GLY:N	2.53	0.42
26:14:1091:G:H1	26:14:1100:C:H1'	1.84	0.42
3:22:43:LEU:HD11	3:22:68:VAL:HG21	2.02	0.42
8:72:14:ARG:O	8:72:18:ARG:HG2	2.19	0.42
47:D5:95:PRO:HA	47:D5:128:VAL:O	2.20	0.42
42:85:74:LEU:HD13	42:85:79:PHE:HB2	2.01	0.42
26:14:1895:C:C2	26:14:1896:G:C8	3.08	0.42
1:1G:1511:G:H8	1:1G:1511:G:O5'	2.03	0.42
12:3I:60:LEU:HD13	12:3I:60:LEU:HA	1.85	0.42
1:13:132:C:H6	1:13:132:C:O5'	2.03	0.42
15:6A:5:LYS:HE3	15:6A:5:LYS:HB2	1.63	0.42
39:98:11:ASN:OD1	39:98:11:ASN:N	2.53	0.42
56:1L:26:A:H4'	56:1L:26:A:OP1	2.19	0.42
29:11:38:LYS:H	29:11:38:LYS:NZ	2.17	0.42
26:14:270(X):G:C6	26:14:270(Y):G:N1	2.88	0.42
1:1G:1169:A:H2'	1:1G:1170:A:C8	2.55	0.42
26:1H:2712:U:O2'	26:1H:2713:A:H5'	2.20	0.41
19:AI:41:VAL:H	19:AI:44:MET:HG3	1.84	0.41
36:25:14:THR:HG22	36:25:16:ALA:H	1.85	0.41
30:29:58:ARG:HD2	30:29:58:ARG:H	1.85	0.41
12:3I:122:THR:HG22	12:3I:123:LYS:O	2.19	0.41
25:4L:10:G:OP2	25:4L:10:G:H8	2.03	0.41
41:B8:105:LEU:O	41:B8:107:ASP:OD1	2.38	0.41
34:61:18:VAL:HG21	34:61:44:LEU:HD11	2.02	0.41
26:1H:155:C:H5'	26:1H:161:U:OP2	2.19	0.41
26:1H:973:A:O4'	26:1H:1188:U:C6	2.72	0.41
1:13:509:A:H3'	61:13:1825:HOH:O	2.20	0.41
13:4A:80:ARG:HH21	19:AA:66:MET:HG3	1.85	0.41
26:1H:55:G:C2	26:1H:116:C:C2	3.08	0.41
54:P8:24:THR:O	54:P8:27:GLY:N	2.50	0.41
26:1H:1045:A:C8	26:1H:1047:G:C2	3.07	0.41
26:14:2472:G:C4	26:14:2475:C:N4	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2475:C:H3'	26:14:2476:A:H5''	2.02	0.41
42:85:98:LEU:C	42:85:100:VAL:N	2.72	0.41
1:13:576:G:P	61:13:1810:HOH:O	2.76	0.41
34:61:112:LYS:H	34:61:112:LYS:HG2	1.65	0.41
26:1H:176:G:C2'	26:1H:177:G:H5'	2.49	0.41
27:1J:15:A:H1'	27:1J:109:G:N9	2.34	0.41
26:14:1429:G:N3	26:14:1568:G:C2	2.88	0.41
43:D8:38:LEU:HD23	43:D8:57:VAL:HG12	2.02	0.41
1:13:270:A:C5	1:13:271:C:C4	3.07	0.41
2:12:129:GLU:HB3	2:12:130:ARG:H	1.54	0.41
2:12:24:TRP:C	2:12:24:TRP:CD1	2.93	0.41
39:98:51:LEU:HD23	39:98:51:LEU:HA	1.94	0.41
17:8A:59:ILE:HG22	17:8A:71:PHE:CD2	2.49	0.41
26:1H:1503:U:H2'	26:1H:1504:C:C6	2.49	0.41
1:13:954:G:H2'	1:13:955:U:H6	1.84	0.41
10:1A:26:ALA:HB1	10:1A:84:GLN:HG2	2.02	0.41
9:82:7:THR:O	9:82:80:GLY:HA2	2.20	0.41
26:14:1043:C:O2	26:14:1112:G:N2	2.33	0.41
26:1H:2886:G:N2	26:1H:2887:U:C2	2.88	0.41
1:1G:186(B):C:O2'	1:1G:186(C):G:H5'	2.20	0.41
1:1G:1007:C:H2'	1:1G:1008:C:O4'	2.19	0.41
26:14:1406:U:H6	26:14:1406:U:C5'	2.32	0.41
2:1E:187:LEU:HD11	2:1E:204:ASN:O	2.20	0.41
1:1G:652:U:C5	1:1G:752:G:C2	3.08	0.41
33:59:149:ARG:HH22	33:59:154:PRO:HB2	1.84	0.41
23:2L:5:G:H2'	23:2L:6:G:O4'	2.20	0.41
47:H8:151:HIS:HA	47:H8:170:THR:HA	2.02	0.41
7:62:46:ALA:O	7:62:50:ILE:HG13	2.20	0.41
4:32:65:ARG:HD2	4:32:72:GLU:HA	2.02	0.41
1:13:539:A:OP1	12:3I:114:LYS:HE2	2.20	0.41
26:1H:1857:G:C6	26:1H:1858:G:N1	2.88	0.41
1:13:1453:G:H2'	20:BI:39:LYS:NZ	2.35	0.41
1:13:37:U:O2'	1:13:500:G:H4'	2.20	0.41
43:95:29:PRO:HA	43:95:61:VAL:HG11	2.00	0.41
26:1H:1005:C:O2'	35:58:28:THR:HG21	2.19	0.41
1:1G:1071:C:H5''	5:42:49:PRO:HG3	2.02	0.41
1:13:1310:G:H5'	13:4I:77:ASN:ND2	2.35	0.41
2:1E:86:GLU:C	2:1E:89:GLY:H	2.24	0.41
48:I8:54:GLY:O	48:I8:57:PHE:N	2.48	0.41
42:C8:49:HIS:HA	42:C8:52:ARG:HG2	2.02	0.41
1:13:1513:A:H2'	1:13:1514:C:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:420:U:H2'	1:13:422:C:H5	1.85	0.41
17:8I:52:LYS:O	17:8I:55:ASP:HB2	2.20	0.41
26:1H:2615:U:H2'	26:1H:2616:C:H6	1.85	0.41
49:J8:82:LEU:HD22	49:J8:82:LEU:H	1.85	0.41
12:3I:75:HIS:ND1	12:3I:75:HIS:O	2.52	0.41
29:19:177:LEU:HA	29:19:177:LEU:HD23	1.80	0.41
12:3A:20:LYS:HB3	12:3A:20:LYS:HE3	1.93	0.41
12:3I:50:SER:O	12:3I:51:ALA:HB2	2.19	0.41
8:7E:39:LEU:O	8:7E:44:PHE:N	2.47	0.41
42:85:81:HIS:O	42:85:84:LYS:HB3	2.20	0.41
26:1H:1522:G:C8	26:1H:1523:U:C6	3.08	0.41
43:95:71:LEU:CA	43:95:86:GLY:HA2	2.49	0.41
26:1H:2159:G:C2	26:1H:2160:G:H1'	2.54	0.41
35:58:94:HIS:HB3	35:58:97:ARG:HG3	2.01	0.41
26:1H:139:G:N3	26:1H:141:A:N1	2.68	0.41
37:78:36:LYS:HB3	37:78:37:GLY:H	1.54	0.41
3:22:37:GLN:O	3:22:40:ARG:N	2.53	0.41
26:1H:674:G:P	61:1H:3654:HOH:O	2.78	0.41
1:13:1392:G:C5	1:13:1393:U:C5	3.08	0.41
26:14:2197:U:C5	26:14:2224:G:C6	3.09	0.41
39:98:28:LEU:HA	39:98:28:LEU:HD23	1.76	0.41
50:K8:31:GLU:O	50:K8:35:LEU:HB2	2.20	0.41
1:1G:1036:G:N7	1:1G:1037:C:C2	2.88	0.41
12:3A:102:ARG:HB3	12:3A:102:ARG:HE	1.49	0.41
1:13:346:G:H2'	1:13:346:G:N3	2.36	0.41
20:BI:89:ARG:NH2	20:BI:104:LEU:HD21	2.35	0.41
47:D5:52:SER:C	47:D5:54:HIS:H	2.24	0.41
43:D8:49:THR:HG23	43:D8:51:VAL:H	1.85	0.41
42:C8:101:ARG:O	42:C8:103:PRO:HD3	2.20	0.41
30:29:25:VAL:HG21	41:75:8:LYS:NZ	2.35	0.41
39:98:48:VAL:O	39:98:51:LEU:N	2.53	0.41
37:78:15:ARG:HB3	37:78:16:ARG:H	1.56	0.41
26:1H:753:C:O2'	26:1H:754:C:H5'	2.20	0.41
1:13:911:U:H2'	1:13:912:C:C6	2.55	0.41
33:59:146:ALA:O	33:59:149:ARG:N	2.46	0.41
26:14:2629:A:OP2	26:14:2629:A:H3'	2.20	0.41
1:13:1348:U:H3	1:13:1374:A:H2	1.64	0.41
10:1I:83:GLU:O	10:1I:86:MET:N	2.49	0.41
26:14:962:G:C2	26:14:963:U:C2	3.08	0.41
8:7E:8:ASP:O	8:7E:12:ARG:HG3	2.19	0.41
1:13:197:A:H4'	1:13:198:G:O5'	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1176:G:H3'	26:1H:1177:A:C5	2.55	0.41
1:1G:1447:G:C6	1:1G:1460:A:C2	3.08	0.41
13:4I:106:ASN:O	13:4I:106:ASN:ND2	2.51	0.41
42:C8:81:HIS:NE2	42:C8:85:LYS:HE2	2.34	0.41
26:1H:435:C:H2'	26:1H:436:C:H5'	2.01	0.41
32:41:51:ARG:NH1	32:41:51:ARG:HB2	2.35	0.41
26:14:1331:A:O2'	26:14:1332:G:C8	2.73	0.41
1:1G:643:C:H2'	1:1G:644:G:C8	2.54	0.41
1:13:31:G:N2	1:13:47:C:O5'	2.53	0.41
26:1H:343:C:O2'	26:1H:344:G:H5'	2.20	0.41
26:14:2865:U:C4	26:14:2866:U:C4	3.08	0.41
45:F8:67:GLY:O	45:F8:68:ARG:HB3	2.21	0.41
3:22:72:LYS:HA	3:22:73:PRO:HD3	1.79	0.41
26:14:946:G:H2'	26:14:947:G:C8	2.54	0.41
43:D8:18:LEU:HD22	43:D8:19:LYS:N	2.35	0.41
26:1H:484:C:H2'	26:1H:485:C:C6	2.55	0.41
26:14:142:G:H2'	26:14:143:C:H6	1.84	0.41
40:65:18:ILE:O	40:65:20:ARG:N	2.53	0.41
37:35:107:LYS:O	37:35:109:GLY:N	2.50	0.41
16:7A:68:ASP:HA	16:7A:71:ARG:HB3	2.02	0.41
2:12:48:MET:H	2:12:48:MET:HG2	1.71	0.41
1:1G:266:G:N3	1:1G:266:G:H2'	2.35	0.41
40:A8:67:ARG:HB2	40:A8:67:ARG:NH1	2.35	0.41
35:15:109:LYS:HA	35:15:109:LYS:HD3	1.56	0.41
26:14:761:A:C5	61:14:3521:HOH:O	2.64	0.41
26:14:2821:A:H2'	26:14:2822:G:O4'	2.20	0.41
47:H8:111:VAL:O	47:H8:111:VAL:HG23	2.19	0.41
50:K8:4:SER:HA	50:K8:5:GLU:HB2	2.02	0.41
1:1G:861:G:H2'	1:1G:862:C:C6	2.55	0.41
26:14:918:A:N3	27:1J:80:U:H4'	2.35	0.41
16:7I:43:LYS:HA	16:7I:48:TRP:CB	2.49	0.41
29:11:35:LYS:HB2	29:11:62:TYR:O	2.19	0.41
35:58:37:LYS:HB3	35:58:37:LYS:HE2	1.87	0.41
56:1L:41:A:H2'	56:1L:42:A:C8	2.55	0.41
1:13:1263:C:O2'	1:13:1264:C:H5'	2.20	0.41
26:1H:55:G:N2	26:1H:116:C:C2	2.88	0.41
1:13:436:C:C4	1:13:437:U:C5	3.08	0.41
34:69:97:ILE:O	34:69:101:LEU:HD23	2.20	0.41
26:14:1210:A:H5''	26:14:1211:U:H3'	2.02	0.41
26:1H:2582:G:C2	26:1H:2583:G:C8	3.08	0.41
33:59:72:ILE:HB	33:59:76:VAL:HG23	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1324:A:O4'	1:13:1362:C:H4'	2.20	0.41
27:1J:42:C:N4	27:1J:43:C:C4	2.88	0.41
13:4A:50:GLU:O	13:4A:54:VAL:HG23	2.20	0.41
1:1G:1325:C:P	21:1B:15:ARG:HH21	2.42	0.41
2:12:149:LEU:HA	2:12:149:LEU:HD23	1.71	0.41
1:1G:146:G:H2'	1:1G:147:G:H8	1.85	0.41
26:1H:638:G:C5	26:1H:651:G:C2	3.08	0.41
56:1L:33:U:H2'	56:1L:35:U:OP2	2.21	0.41
1:1G:229:U:O2'	16:7A:23:ASP:HB2	2.20	0.41
42:C8:109:LEU:HD21	43:D8:47:VAL:HG21	2.02	0.41
26:1H:1705:G:C6	26:1H:1706:U:C4	3.08	0.41
1:13:1189:C:H5''	1:13:1190:G:OP2	2.20	0.41
29:11:16:MET:HE2	29:11:211:ARG:HD2	2.03	0.41
26:1H:2886:G:O2'	53:N8:31:VAL:HG23	2.19	0.41
1:13:158:G:N3	1:13:159:G:C8	2.89	0.41
1:1G:999:U:H2'	1:1G:1000:A:C8	2.55	0.41
26:14:2542:A:C8	26:14:2544:G:O6	2.74	0.41
26:1H:426:C:H2'	26:1H:427:U:C6	2.54	0.41
32:41:43:LEU:HD23	32:41:53:LEU:HD12	2.01	0.41
1:1G:807:A:C5	1:1G:808:C:C4	3.08	0.41
49:J8:85:LEU:HA	49:J8:85:LEU:HD13	1.58	0.41
1:1G:1111:A:H2'	1:1G:1112:C:O4'	2.20	0.41
6:5E:61:LEU:HD23	6:5E:63:TYR:CE2	2.55	0.41
26:14:2100:G:C5	26:14:2190:G:C6	3.08	0.41
1:13:872:A:C8	1:13:874:G:C8	3.08	0.41
1:1G:115:G:H4'	1:1G:116:A:O5'	2.19	0.41
27:1J:11:C:OP2	27:1J:12:C:N4	2.43	0.41
26:14:1473:G:C6	26:14:1474:C:C4	3.08	0.41
1:1G:854:G:C2	1:1G:855:G:C8	3.08	0.41
1:1G:6:G:OP2	4:32:84:LYS:HD3	2.20	0.41
9:82:49:PRO:HG3	9:82:82:ALA:HB2	2.01	0.41
26:14:1829:A:N3	29:19:15:PHE:HE2	2.19	0.41
27:16:20:C:H2'	27:16:21:G:O4'	2.21	0.41
1:1G:1189:C:H5''	1:1G:1190:G:OP2	2.20	0.41
47:H8:48:PHE:HE1	47:H8:71:VAL:HG11	1.85	0.41
36:25:43:VAL:HG23	36:25:56:ASP:O	2.21	0.41
38:88:136:ALA:HB1	47:H8:52:SER:HB2	2.01	0.41
26:14:1038:C:H2'	26:14:1039:G:O4'	2.20	0.41
29:19:27:THR:HG22	29:19:29:PRO:O	2.21	0.41
26:1H:1754:C:OP1	41:B8:96:ARG:NH1	2.52	0.41
1:13:1237:C:H3'	1:13:1336:C:H41	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:607:A:C2	16:71:31:LYS:HE2	2.55	0.41
38:88:32:TYR:HD1	38:88:133:ARG:HA	1.86	0.41
1:1G:1314:C:H2'	1:1G:1315:U:C6	2.56	0.41
1:1G:781:A:C3'	1:1G:782:A:H5'	2.51	0.41
45:F8:80:ILE:HG13	45:F8:80:ILE:O	2.20	0.41
29:11:268:ARG:O	29:11:268:ARG:HG3	2.19	0.41
11:2A:69:ALA:O	11:2A:72:ALA:N	2.54	0.41
26:1H:2453:A:H2'	26:1H:2454:G:O4'	2.20	0.41
46:G8:97:ARG:HG2	46:G8:102:CYS:HB2	2.03	0.41
9:82:16:ARG:HH22	9:82:66:ARG:HH21	1.68	0.41
26:1H:1142(A):A:C4	26:1H:1144:G:C8	3.07	0.41
10:1I:50:ILE:HD11	10:1I:57:LYS:HD2	2.03	0.41
1:13:973:G:OP1	10:1I:57:LYS:HD3	2.20	0.41
5:42:102:ALA:HB3	5:42:107:ARG:HB2	2.02	0.41
1:13:1292:U:C4	1:13:1293:G:N7	2.88	0.41
28:71:212:VAL:CB	28:71:226:PRO:HD3	2.44	0.41
56:1L:66:A:N6	56:1L:67:C:N3	2.68	0.41
26:14:2439:A:H8	26:14:2439:A:C5'	2.33	0.41
26:14:2114:A:H5'	26:14:2115:G:OP2	2.20	0.41
28:79:52:ARG:C	28:79:53:ARG:HG2	2.39	0.41
26:1H:2579:C:H2'	26:1H:2580:U:O4'	2.20	0.41
28:71:215:THR:HG23	28:71:220:PRO:O	2.20	0.41
28:71:7:TYR:CE2	28:71:220:PRO:HG3	2.56	0.41
1:1G:875:C:H1'	8:72:15:ASN:ND2	2.32	0.41
46:G8:55:TYR:N	46:G8:56:PRO:HD3	2.35	0.41
27:16:12:C:O2	48:I8:74:ARG:NH1	2.40	0.41
26:1H:2263:C:H2'	26:1H:2264:C:C6	2.54	0.41
19:AI:5:LEU:HD13	19:AI:10:PHE:CE2	2.55	0.41
1:13:558:G:H5''	1:13:559:A:OP2	2.20	0.41
26:1H:880:G:C2	26:1H:881:G:O6	2.73	0.41
1:13:272:C:C2	1:13:273:A:C8	3.08	0.41
26:14:2615:U:C2	53:J5:7:PRO:HA	2.56	0.41
26:1H:34:C:O2'	26:1H:35:G:P	2.78	0.41
2:1E:130:ARG:HB3	2:1E:134:GLU:CG	2.49	0.41
26:14:2682:U:O2'	30:29:13:ARG:HG2	2.20	0.41
26:1H:1819:A:O4'	26:1H:1821:A:C5	2.74	0.41
57:3L:76:A:H61	26:14:2422:A:H5''	1.85	0.41
26:1H:638:G:H2'	26:1H:639:U:C6	2.55	0.41
26:14:1337:G:H2'	26:14:1338:G:C8	2.50	0.41
51:L8:31:LEU:O	51:L8:32:GLN:HB2	2.21	0.41
26:14:1048:A:N6	26:14:1112:G:O2'	2.37	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:147:PRO:HB2	30:29:149:ARG:CG	2.49	0.41
16:7I:28:ARG:HG3	16:7I:29:ASP:N	2.35	0.41
1:1G:198:G:C6	1:1G:220:G:C2	3.08	0.41
1:13:748:C:C6	1:13:748:C:O5'	2.72	0.41
3:22:71:ALA:HB2	3:22:115:LEU:CD1	2.51	0.41
10:1I:26:ALA:HA	10:1I:29:ARG:NE	2.36	0.41
53:J5:45:VAL:HG22	53:J5:51:TYR:HD1	1.83	0.41
32:41:33:ARG:HB2	32:41:162:THR:HG21	2.01	0.41
15:6A:18:PHE:O	15:6A:21:ASP:HB2	2.19	0.41
26:14:817:C:O2'	26:14:839:U:OP1	2.19	0.41
38:45:18:LYS:HA	38:45:18:LYS:HD2	1.61	0.41
37:78:113:LYS:HD2	37:78:129:ALA:HB1	2.02	0.41
6:52:61:LEU:HD23	6:52:63:TYR:OH	2.19	0.41
30:29:141:ILE:HD12	30:29:150:VAL:HG21	2.02	0.41
26:1H:836:G:C5	26:1H:837:C:C4	3.09	0.41
26:1H:873:G:C2	26:1H:905:U:O2	2.73	0.41
1:1G:765:G:N2	1:1G:813:U:OP2	2.53	0.41
26:14:2599:G:OP2	29:19:236:GLY:N	2.54	0.41
26:1H:1364:G:N7	49:J8:2:SER:OG	2.42	0.41
26:1H:1368:G:C2	26:1H:1369:G:C8	3.08	0.41
30:21:152:LYS:HG2	35:58:78:TYR:CE1	2.55	0.41
1:13:240:C:H2'	1:13:241:C:C6	2.55	0.41
15:6I:85:LEU:HD23	15:6I:85:LEU:HA	1.87	0.41
2:12:193:ASP:OD1	2:12:193:ASP:N	2.50	0.41
37:78:85:LEU:HA	37:78:85:LEU:HD23	1.81	0.41
26:14:471:A:O5'	26:14:471:A:H8	2.03	0.41
1:13:865:A:H8	1:13:865:A:O5'	2.04	0.41
54:L5:8:ASN:C	54:L5:8:ASN:OD1	2.58	0.41
8:72:49:GLU:HG2	8:72:50:ARG:O	2.19	0.41
1:13:1092:A:C6	1:13:1093:A:C6	3.08	0.41
26:14:451:C:H41	26:14:454:A:H5'	1.85	0.41
6:52:95:GLU:HA	6:52:96:PRO:HD3	1.92	0.41
1:1G:1126:U:C4	1:1G:1281:U:O4'	2.73	0.41
26:1H:2124:G:O2'	28:71:42:GLU:OE1	2.22	0.41
26:14:2786:U:H5''	30:29:66:HIS:CG	2.56	0.41
5:42:103:GLY:O	5:42:106:PRO:HD2	2.21	0.41
28:71:166:ASP:CG	28:71:170:ALA:H	2.23	0.41
46:C5:21:LYS:NZ	46:C5:21:LYS:HB3	2.35	0.41
23:2L:26:C:H2'	23:2L:27:G:C8	2.56	0.41
40:A8:11:LYS:O	40:A8:15:ARG:HB2	2.21	0.41
22:1K:76:A:O2'	26:1H:2585:U:O4	2.31	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2E:119:ARG:HD3	3:2E:140:ARG:NH2	2.34	0.41
1:13:353:A:C8	1:13:353:A:H5'	2.46	0.41
44:A5:88:ARG:HD2	44:A5:88:ARG:HA	1.80	0.41
32:41:139:LEU:HD13	32:41:146:TYR:CD1	2.55	0.41
26:14:2663:G:H3'	26:14:2664:G:H8	1.85	0.41
26:1H:273(F):C:H3'	26:1H:274:G:H5''	2.02	0.41
19:AA:41:VAL:HB	19:AA:43:GLU:OE2	2.19	0.41
26:14:30:G:C5	26:14:31:C:C4	3.08	0.41
30:21:111:ARG:HA	39:98:1:MET:HE3	2.02	0.41
41:75:50:ILE:HD11	41:75:102:ILE:CD1	2.49	0.41
1:13:546:G:P	4:3E:72:GLU:HB3	2.61	0.41
1:13:109:A:H5'	1:13:110:C:C5	2.56	0.41
26:1H:910:A:N1	26:1H:2277:G:H1'	2.36	0.41
1:13:187:C:O2	1:13:191(A):G:C6	2.74	0.41
1:13:1190:G:H5''	3:2E:176:HIS:CE1	2.55	0.41
42:C8:88:ILE:C	42:C8:90:VAL:H	2.24	0.41
26:1H:1853:A:N1	26:1H:2087:G:H1'	2.35	0.41
2:1E:189:ASP:HB3	2:1E:205:ASP:H	1.86	0.41
1:1G:164:U:H2'	1:1G:165:C:C6	2.55	0.41
17:8A:10:VAL:HG23	17:8A:54:GLY:N	2.35	0.41
54:L5:19:ARG:HG2	54:L5:19:ARG:HH11	1.85	0.41
29:19:184:LYS:HD3	29:19:269:PHE:HD1	1.85	0.41
32:41:120:LEU:HB3	32:41:131:TYR:OH	2.19	0.41
52:M8:9:LEU:HD12	52:M8:27:THR:H	1.85	0.41
2:1E:5:ILE:HB	2:1E:221:LEU:HD23	2.01	0.41
26:14:1485:G:H2'	26:14:1486:A:C8	2.55	0.41
1:13:582:U:H2'	1:13:583:A:C8	2.56	0.41
32:41:130:ASN:HB3	32:41:159:VAL:O	2.20	0.41
35:15:39:ARG:H	35:15:39:ARG:HG2	1.66	0.41
1:1G:904:C:C4	1:1G:905:U:C5	3.09	0.41
15:6A:7:GLU:O	15:6A:11:VAL:HG23	2.19	0.41
4:32:39:PRO:O	4:32:44:GLY:HA3	2.21	0.41
34:69:5:LEU:HD11	34:69:19:VAL:HG11	2.01	0.41
3:2E:21:ARG:NH2	3:2E:56:ASP:HB3	2.36	0.41
26:14:618:G:H2'	26:14:618(A):C:O4'	2.20	0.41
9:82:86:VAL:HA	9:82:89:ASN:O	2.20	0.41
26:14:1319:G:C6	26:14:1320:C:N4	2.88	0.41
1:1G:1425:U:H2'	1:1G:1426:C:C6	2.55	0.41
32:41:121:ASN:OD1	32:41:123:ASN:N	2.49	0.41
26:14:239:U:H2'	26:14:240:G:O4'	2.20	0.41
5:42:79:GLU:OE1	8:72:104:ARG:HA	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:111:U:H2'	27:1J:111:U:O2	2.20	0.41
46:G8:6:HIS:N	46:G8:6:HIS:ND1	2.69	0.41
26:1H:2114:A:N3	26:1H:2114:A:H2'	2.34	0.41
41:75:114:LEU:HD23	41:75:114:LEU:HA	1.81	0.41
31:39:148:LEU:HD23	31:39:148:LEU:HA	1.65	0.41
35:15:127:ASP:N	35:15:127:ASP:OD1	2.53	0.41
30:21:14:ILE:HD12	30:21:14:ILE:HA	1.66	0.41
30:29:35:GLN:O	30:29:48:GLN:HB2	2.21	0.41
37:35:113:LYS:HA	37:35:129:ALA:O	2.20	0.41
38:45:68:ILE:CG2	38:45:103:MET:HB3	2.50	0.41
45:B5:43:VAL:HA	45:B5:46:ALA:HB3	2.03	0.41
1:1G:1276:G:H2'	1:1G:1277:C:C6	2.56	0.41
26:14:820:A:N3	26:14:943:U:H4'	2.35	0.41
1:13:253:U:P	17:8I:67:LYS:HZ3	2.40	0.41
1:1G:1320:C:H2'	1:1G:1321:C:C6	2.55	0.41
26:14:2065:C:H1'	26:14:2449:U:N3	2.31	0.41
29:11:35:LYS:HB3	29:11:35:LYS:HE3	1.46	0.41
26:14:2286:A:H8	26:14:2287:A:N6	2.19	0.41
26:14:141:A:C8	26:14:1408:C:H1'	2.55	0.41
26:14:1788:C:C2	26:14:1789:A:C8	3.08	0.41
24:3K:65:C:H2'	24:3K:66:A:H8	1.83	0.41
2:1E:51:LEU:O	2:1E:55:PHE:HB2	2.20	0.41
40:65:54:LEU:HD23	40:65:55:ALA:N	2.35	0.41
26:14:35:G:H2'	26:14:36:G:O4'	2.20	0.41
7:62:27:ILE:HA	7:62:30:ILE:HD12	2.03	0.41
26:1H:285:C:H2'	26:1H:286:C:C6	2.55	0.41
1:1G:1026:G:H2'	1:1G:1027:C:H5'	2.01	0.41
24:3K:76:A:H5''	49:J8:30:VAL:HG11	2.03	0.41
26:14:91:A:H2'	26:14:92:G:H8	1.85	0.41
1:13:345:C:O2'	1:13:346:G:C4	2.71	0.41
9:8E:93:ARG:HG2	9:8E:102:LEU:HD11	2.02	0.41
2:12:127:ILE:O	2:12:130:ARG:HB3	2.20	0.41
8:7E:11:THR:HG23	8:7E:14:ARG:NH1	2.35	0.41
2:1E:114:ARG:O	2:1E:118:LEU:N	2.50	0.41
37:78:15:ARG:HA	37:78:15:ARG:HD3	1.73	0.41
1:1G:1326:C:H2'	1:1G:1327:C:H6	1.84	0.41
47:D5:67:LEU:HA	47:D5:68:PRO:HD3	1.95	0.41
26:1H:2729:G:H1'	30:21:187:ALA:HB2	2.02	0.41
7:6E:27:ILE:HA	7:6E:30:ILE:HD12	2.01	0.41
26:14:2117:A:C4	26:14:2118:U:H5	2.38	0.41
26:14:2543:G:H2'	26:14:2544:G:C8	2.56	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:277:C:H2'	1:13:278:G:C8	2.54	0.41
1:13:376:G:O3'	16:7I:5:ARG:HD2	2.21	0.41
1:1G:160:A:H2'	1:1G:161:A:O4'	2.20	0.41
1:1G:512:U:H2'	1:1G:513:C:C6	2.55	0.41
26:1H:1790:C:H6	26:1H:1790:C:O5'	2.03	0.41
38:45:110:THR:HG23	38:45:113:GLN:OE1	2.21	0.41
1:1G:1176:A:C2'	1:1G:1177:G:H5'	2.50	0.41
27:16:29:A:C2	27:16:56:G:C2	3.09	0.41
26:1H:533:G:H5'	42:C8:24:TYR:CE1	2.56	0.41
1:1G:855:G:C2	1:1G:856:C:C2	3.08	0.41
24:3K:22:G:N3	24:3K:22:G:H2'	2.35	0.41
26:1H:2496:C:OP2	38:88:82:ARG:HG2	2.20	0.41
46:G8:9:LYS:HA	46:G8:27:VAL:CG2	2.51	0.41
3:2E:178:LEU:HA	3:2E:178:LEU:HD12	1.76	0.41
41:B8:24:PRO:HD3	41:B8:52:ILE:HD13	2.03	0.41
26:1H:2389:G:H5''	26:1H:2390:U:H5'	2.01	0.41
26:1H:2100:G:H2'	26:1H:2101:G:C8	2.56	0.41
55:M5:15:LYS:HG2	55:M5:16:ILE:N	2.36	0.41
1:13:1424:C:H2'	1:13:1425:U:O4'	2.21	0.41
26:1H:1312:U:H4'	26:1H:1313:U:O5'	2.20	0.41
26:14:2666:C:O5'	26:14:2666:C:H6	2.03	0.41
26:1H:2830:G:H5''	26:1H:2830:G:C8	2.55	0.41
6:52:30:LEU:HD23	6:52:30:LEU:HA	1.88	0.41
30:29:152:LYS:HE2	30:29:152:LYS:HB3	1.69	0.41
35:58:99:LEU:HA	35:58:99:LEU:HD23	1.84	0.41
6:5E:55:ASP:HA	6:5E:56:PRO:HD2	1.87	0.41
26:1H:1985:G:C2	26:1H:1986:A:C8	3.09	0.41
32:41:88:ILE:HG22	32:41:88:ILE:O	2.19	0.41
30:29:57:LYS:HG2	30:29:57:LYS:HZ3	1.45	0.41
50:K8:3:LEU:CB	50:K8:5:GLU:HB2	2.50	0.41
52:M8:40:HIS:ND1	52:M8:45:GLY:C	2.74	0.41
26:1H:654:A:C4	26:1H:654(A):A:C8	3.08	0.41
1:1G:1321:C:C5	1:1G:1322:C:C5	3.07	0.41
26:1H:2032:G:N2	30:21:146:THR:HG23	2.24	0.41
4:3E:86:LYS:HA	4:3E:88:VAL:N	2.36	0.41
26:14:1047:G:N3	26:14:1047:G:H2'	2.36	0.41
26:1H:1988:C:H2'	26:1H:1989:G:O4'	2.21	0.41
26:14:141:A:H1'	26:14:1408:C:O4'	2.20	0.41
47:D5:82:ARG:HA	47:D5:83:PRO:HD3	1.78	0.41
1:1G:1095:U:OP1	1:1G:1108:G:N1	2.53	0.41
1:1G:994:A:C4	14:5A:5:ALA:HB2	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:286:C:H2'	26:14:287:C:C6	2.56	0.41
10:1A:46:ARG:NH2	14:5A:61:TRP:CZ2	2.89	0.41
1:1G:109:A:C6	1:1G:326:G:C6	3.09	0.41
26:14:2657:A:H62	26:14:2664:G:N2	2.17	0.41
26:14:565:C:H2'	26:14:566:U:O4'	2.20	0.41
38:88:140:ALA:HB3	38:88:141:GLN:CA	2.51	0.41
1:13:209:U:H4'	1:13:216:G:N2	2.36	0.41
33:51:139:GLN:HG3	33:51:140:LYS:N	2.36	0.41
39:98:44:LEU:O	39:98:45:ARG:C	2.59	0.41
1:1G:216:G:O2'	1:1G:217:C:O4'	2.30	0.41
1:1G:509:A:C8	1:1G:509:A:H3'	2.56	0.41
26:14:599:G:C2	26:14:600:G:C5	3.08	0.41
31:31:176:LEU:HD21	31:31:180:GLY:O	2.21	0.41
27:1J:5:C:H42	27:1J:115:G:H1	1.69	0.41
29:19:273:ARG:O	29:19:275:LYS:N	2.53	0.41
8:7E:9:MET:O	8:7E:12:ARG:N	2.53	0.41
32:41:101:ILE:HD13	32:41:102:PHE:N	2.36	0.41
1:13:939:G:H1	1:13:1344:C:H42	1.68	0.41
46:C5:67:LEU:HA	46:C5:67:LEU:HD12	1.68	0.41
37:78:59:LEU:HD21	55:Q8:10:ALA:HB2	2.02	0.41
2:1E:11:LEU:HD12	2:1E:11:LEU:HA	1.87	0.41
1:13:536:C:H2'	1:13:537:G:C8	2.55	0.41
27:1J:10:C:C4	27:1J:11:C:C5	3.08	0.41
1:1G:228:A:C4'	16:7A:62:VAL:HG11	2.50	0.41
26:14:311:A:C8	26:14:332:A:N7	2.89	0.41
26:1H:396:G:C8	49:J8:13:ILE:HD11	2.56	0.41
1:1G:996:A:H2'	1:1G:997:U:O4'	2.20	0.41
1:1G:1415:G:C6	1:1G:1486:G:C6	3.08	0.41
1:13:1486:G:C6	1:13:1487:G:C6	3.08	0.41
3:2E:56:ASP:OD1	3:2E:69:HIS:NE2	2.53	0.41
26:1H:2283:C:H2'	26:1H:2284:C:O4'	2.20	0.41
40:65:48:LEU:HD23	40:65:82:ILE:HD11	2.02	0.41
26:14:283:A:H4'	26:14:284:U:OP2	2.21	0.41
1:13:527:G:O2'	1:13:535:A:N1	2.42	0.41
1:13:1173:G:H2'	1:13:1174:G:O4'	2.20	0.41
45:B5:52:VAL:HG12	45:B5:82:GLN:HG3	2.01	0.41
26:1H:831:G:N2	37:78:53:GLY:O	2.54	0.41
1:13:823:G:C2	1:13:878:G:C2	3.09	0.41
22:1K:24:G:H8	22:1K:24:G:OP2	2.03	0.41
36:68:112:MET:HA	36:68:115:VAL:HG13	2.03	0.41
26:1H:2240:C:O2'	26:1H:2241:A:H5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:42:72:GLN:O	5:42:75:THR:HG22	2.20	0.41
4:3E:138:TYR:CD1	4:3E:138:TYR:C	2.93	0.41
6:5E:78:GLU:HG3	6:5E:78:GLU:O	2.20	0.41
17:8I:88:TYR:C	17:8I:88:TYR:CD1	2.94	0.41
53:J5:37:LYS:HD2	53:J5:37:LYS:HA	1.86	0.41
19:AI:81:ARG:HB2	19:AI:81:ARG:HE	1.74	0.41
1:13:1369:C:H2'	1:13:1370:G:C8	2.56	0.41
7:62:66:VAL:O	7:62:70:LYS:HD2	2.21	0.41
6:5E:33:TYR:CD2	6:5E:75:LEU:HD23	2.56	0.41
51:H5:43:ILE:O	51:H5:47:VAL:HG23	2.21	0.41
26:14:2028:U:H2'	26:14:2029:G:O4'	2.20	0.41
19:AI:47:HIS:O	19:AI:62:ILE:HG12	2.20	0.41
26:1H:2138:C:H2'	26:1H:2139:C:C6	2.55	0.41
30:29:81:ILE:HD12	30:29:81:ILE:HG23	1.86	0.41
30:29:31:CYS:O	30:29:90:THR:HA	2.21	0.41
26:14:362:U:H2'	26:14:362:U:H6	1.73	0.41
34:69:143:SER:O	34:69:144:VAL:HG22	2.21	0.41
26:1H:2303:G:O2'	26:1H:2304:G:H5'	2.21	0.41
29:19:34:VAL:O	29:19:35:LYS:HB3	2.21	0.41
32:41:98:ARG:HE	52:M8:1:MET:CE	2.33	0.41
28:71:19:ILE:HG22	28:71:225:ASN:ND2	2.35	0.41
19:AA:66:MET:H	19:AA:67:VAL:HB	1.85	0.41
26:14:2115:G:N2	26:14:2172:U:O4	2.54	0.41
2:1E:8:LYS:HZ3	2:1E:9:GLU:N	2.19	0.41
21:1B:2:GLY:O	21:1B:4:GLY:N	2.54	0.41
17:8A:63:ARG:HA	17:8A:64:PRO:HD3	1.95	0.41
26:1H:151:C:C2	26:1H:176:G:N2	2.89	0.41
26:14:2313:C:H4'	32:49:91:ARG:HG3	2.02	0.41
1:1G:1076:C:N4	1:1G:1081:G:H1	2.19	0.41
2:1E:163:PHE:CE2	2:1E:215:LEU:HD13	2.55	0.41
29:19:30:GLU:HG3	29:19:63:ARG:NH2	2.35	0.41
23:2K:3:C:H2'	23:2K:3:C:O2	2.21	0.41
2:12:91:PRO:HG3	2:12:154:LEU:HB2	2.03	0.41
31:31:125:LEU:HD21	31:31:199:TRP:CE3	2.56	0.41
26:14:302:C:C5'	46:C5:81:LYS:HZ2	2.33	0.41
27:1J:83:G:H4'	51:H5:52:HIS:CG	2.56	0.41
33:59:146:ALA:HB2	33:59:164:TYR:OH	2.20	0.41
26:14:2328:A:H2'	26:14:2329:G:O4'	2.21	0.41
37:78:29:LYS:HG2	37:78:30:THR:N	2.36	0.41
26:1H:2837:G:C6	26:1H:2838:G:N7	2.89	0.41
2:12:211:ILE:O	2:12:214:ILE:N	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:30:ALA:HB2	12:3A:33:ARG:NH1	2.35	0.41
29:19:70:TRP:C	29:19:70:TRP:CD1	2.94	0.41
16:7I:28:ARG:HG3	16:7I:29:ASP:OD1	2.21	0.41
30:29:97:LYS:O	30:29:100:GLU:HG3	2.21	0.41
39:55:59:ASP:OD1	39:55:61:HIS:HB3	2.20	0.41
26:14:2651:C:H2'	26:14:2652:C:H6	1.85	0.41
44:E8:38:TYR:OH	53:N8:47:PRO:HG3	2.21	0.41
30:21:55:ASN:HB3	30:21:58:ARG:HG3	2.03	0.41
1:1G:758:G:O2'	1:1G:759:A:H5'	2.21	0.41
13:4I:15:VAL:HG23	13:4I:43:THR:O	2.21	0.41
26:1H:193:U:H5	61:1H:3615:HOH:O	2.02	0.41
1:1G:104:G:C2	1:1G:105:G:C8	3.08	0.41
26:14:1606:G:H5''	26:14:1607:C:OP1	2.21	0.41
37:35:84:ASN:HB2	37:35:86:LYS:HG2	2.02	0.41
40:A8:83:LYS:NZ	40:A8:110:LEU:HD21	2.36	0.41
1:13:591:U:H2'	1:13:592:G:H8	1.86	0.41
26:14:723:G:H2'	26:14:724:U:O4'	2.21	0.41
1:13:767:A:O5'	1:13:767:A:H8	2.03	0.41
26:1H:2532:G:O2'	26:1H:2657:A:N1	2.53	0.41
38:45:68:ILE:HD13	38:45:103:MET:HE3	2.02	0.41
30:21:67:PHE:O	30:21:69:LYS:N	2.51	0.41
26:1H:649:G:C6	26:1H:650:C:C4	3.08	0.41
1:13:237:C:O3'	17:8I:25:ARG:NH2	2.53	0.41
1:13:574:A:N3	1:13:883:C:H1'	2.36	0.41
42:85:60:LEU:O	42:85:63:VAL:HG12	2.21	0.41
26:14:1322:A:O3'	44:A5:84:ARG:NH1	2.53	0.41
1:1G:310:G:OP2	16:7A:27:LYS:HD3	2.20	0.41
39:98:22:ARG:HG2	39:98:69:ASP:HB3	2.03	0.41
1:1G:9:G:H5'	5:42:122:GLU:OE2	2.21	0.41
1:1G:1504:G:OP1	1:1G:1507:A:H4'	2.21	0.41
26:1H:1963:U:H6	26:1H:1963:U:OP1	2.04	0.41
2:12:108:ILE:HA	2:12:108:ILE:HD13	1.87	0.41
32:41:45:GLU:H	32:41:45:GLU:HG2	1.60	0.41
27:1J:78:A:C2	27:1J:99:A:C4	3.08	0.41
11:2I:18:ARG:HA	11:2I:81:ASP:H	1.85	0.41
1:1G:1238:A:H62	1:1G:1301:U:H3	1.68	0.41
26:14:336:C:H1'	46:C5:70:SER:HB2	2.01	0.41
45:F8:9:LEU:O	50:K8:36:ARG:NE	2.47	0.41
42:C8:92:ARG:NH1	42:C8:94:ASN:OD1	2.54	0.41
26:1H:1557:C:OP2	26:1H:1558:A:O2'	2.35	0.41
29:11:273:ARG:O	29:11:273:ARG:HD2	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1304:G:C5	1:13:1305:G:C6	3.09	0.41
9:8E:65:VAL:HG21	9:8E:73:GLN:HB3	2.01	0.41
40:65:14:VAL:HG21	40:65:90:GLY:O	2.19	0.41
26:1H:2178:C:OP1	28:71:46:LYS:HB2	2.21	0.41
26:14:1019:U:O2'	26:14:1021:A:H2	2.03	0.41
26:1H:2302:G:O2'	26:1H:2303:G:H5'	2.20	0.41
26:14:139:G:N3	26:14:141:A:N1	2.69	0.41
29:19:83:GLU:HB2	29:19:92:ILE:HG13	2.01	0.41
20:BI:71:THR:CG2	20:BI:72:LEU:H	2.27	0.41
41:B8:99:LEU:HB3	41:B8:101:PHE:CE1	2.56	0.41
26:1H:1592:C:H2'	26:1H:1593:G:C8	2.56	0.41
1:13:431:A:H2'	1:13:432:A:O4'	2.21	0.41
26:14:1004:C:H1'	26:14:1010:A:C4	2.56	0.41
1:13:1164:G:C5	1:13:1165:C:C5	3.08	0.41
31:31:172:TRP:CE3	31:31:173:VAL:HG23	2.56	0.41
13:4A:78:ILE:HD12	13:4A:92:HIS:CE1	2.56	0.41
1:1G:422:C:HO2'	1:1G:423:G:N2	2.18	0.41
30:29:1:MET:SD	30:29:200:GLU:HG3	2.61	0.41
2:12:39:ILE:HG22	2:12:39:ILE:O	2.21	0.41
32:41:96:ARG:H	32:41:99:MET:HE3	1.85	0.41
13:4I:34:LEU:HD13	13:4I:41:PRO:HA	2.02	0.41
26:1H:1386:C:OP2	26:1H:1396:U:C5	2.72	0.41
26:1H:686:G:H22	54:P8:16:HIS:CE1	2.39	0.41
35:58:56:ASN:C	35:58:57:ALA:O	2.59	0.41
9:82:99:LEU:HB3	9:82:101:PHE:HD2	1.84	0.41
1:13:575:G:C4	1:13:881:G:C2	3.09	0.41
1:13:409:G:N2	1:13:434:U:C2	2.89	0.41
1:13:1324:A:C5	1:13:1325:C:C5	3.08	0.41
26:14:1057:A:H8	26:14:1086:A:O2'	2.04	0.41
1:1G:11:G:H2'	1:1G:12:U:H6	1.86	0.41
26:1H:274:G:N2	26:1H:276:A:H61	2.19	0.41
29:11:17:THR:HG22	29:11:205:VAL:N	2.34	0.41
1:13:51:A:N3	1:13:116:A:H1'	2.36	0.41
40:65:29:PHE:CD1	40:65:30:ARG:N	2.89	0.41
1:13:109:A:C6	1:13:326:G:C6	3.09	0.41
34:69:109:ILE:HB	34:69:130:TYR:CZ	2.56	0.41
19:AA:14:HIS:ND1	19:AA:15:LEU:HD23	2.35	0.41
26:1H:322:A:C5	26:1H:340:A:C2	3.09	0.41
2:1E:97:TRP:CZ3	2:1E:172:ILE:HB	2.56	0.41
26:14:2394:C:H2'	26:14:2395:C:H6	1.85	0.41
1:1G:501:C:H1'	1:1G:549:C:H1'	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:98:12:ARG:HG2	39:98:16:HIS:CG	2.56	0.41
26:1H:1705:G:O2'	26:1H:1706:U:H5'	2.21	0.41
26:1H:2298:A:H2'	26:1H:2299:G:O4'	2.21	0.41
26:14:1043:C:H6	26:14:1043:C:O5'	2.04	0.41
1:13:146:G:C2	1:13:177:C:N3	2.89	0.41
7:6E:51:GLN:HB2	7:6E:58:PRO:HD3	2.02	0.41
6:5E:24:GLU:O	6:5E:27:GLN:N	2.54	0.41
15:6A:27:VAL:O	15:6A:31:LEU:HB2	2.21	0.41
15:6A:31:LEU:HA	15:6A:31:LEU:HD12	1.89	0.41
34:69:112:LYS:HG2	34:69:112:LYS:H	1.74	0.41
23:2K:48:U:H1'	23:2K:49:C:O5'	2.20	0.41
12:3A:27:LEU:HB2	12:3A:33:ARG:CG	2.51	0.41
26:1H:389:G:H22	37:78:72:PRO:HD3	1.85	0.41
37:78:114:ILE:HG13	37:78:114:ILE:O	2.21	0.41
1:13:652:U:O2'	1:13:653:A:O5'	2.38	0.41
27:16:44:G:HO2'	27:16:45:A:P	2.42	0.41
27:16:44:G:O2'	27:16:45:A:P	2.79	0.41
27:16:46:A:H2'	27:16:47:C:C6	2.55	0.41
20:BA:64:ASP:OD1	20:BA:81:LYS:HE3	2.20	0.41
1:13:682:G:H1	1:13:708:C:N4	2.19	0.41
47:H8:7:ALA:C	47:H8:8:TYR:CD1	2.94	0.41
23:2L:16:C:H5''	23:2L:17:C:C5	2.55	0.41
34:61:128:LEU:O	34:61:138:ILE:N	2.43	0.41
4:32:4:TYR:CE2	4:32:11:LEU:HD21	2.55	0.41
40:A8:53:SER:HA	40:A8:58:LEU:HD21	2.03	0.41
38:45:18:LYS:H	38:45:98:LYS:NZ	2.19	0.41
26:14:2564:A:OP1	26:14:2648:C:O2'	2.38	0.41
26:14:2564:A:C2	26:14:2647:U:H4'	2.56	0.41
42:85:110:VAL:O	42:85:114:LYS:HG2	2.21	0.41
1:1G:1160:G:H1	1:1G:1176:A:H61	1.69	0.41
38:88:20:ALA:HB2	38:88:99:PRO:HD2	2.03	0.41
26:1H:1176:G:H4'	26:1H:1176:G:OP1	2.19	0.41
33:51:32:GLU:H	33:51:32:GLU:HG3	1.70	0.41
32:41:125:PHE:HB3	32:41:166:ASP:OD2	2.21	0.41
10:1A:34:VAL:HG12	10:1A:74:ILE:HA	2.03	0.41
26:14:2748:A:H2'	26:14:2749:A:H8	1.85	0.41
26:1H:2640:G:H5''	35:58:74:ARG:NH1	2.35	0.41
40:65:67:ARG:CZ	40:65:67:ARG:HB2	2.50	0.41
26:14:2723:C:H6	26:14:2723:C:O5'	2.04	0.41
10:1I:28:ARG:HD3	10:1I:34:VAL:HG22	2.03	0.41
26:14:1331:A:HO2'	26:14:1332:G:H8	1.65	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:22:U:H5'	27:1J:23:G:OP2	2.20	0.41
32:49:121:ASN:HA	32:49:122:PRO:HD2	1.73	0.41
1:13:9:G:C2	1:13:26:A:C6	3.09	0.41
39:55:84:ALA:HB3	39:55:85:PRO:HD3	2.03	0.41
1:1G:1306:A:C6	1:1G:1307:U:C2	3.08	0.41
26:14:2563:U:H4'	36:25:28:SER:HA	2.03	0.41
1:13:1384:C:H2'	1:13:1385:G:C8	2.56	0.41
1:13:827:U:H5	1:13:870:U:C5	2.38	0.41
26:14:2178:C:H4'	28:79:46:LYS:HG3	2.03	0.41
54:L5:34:ARG:NH1	54:L5:39:ARG:HG3	2.36	0.41
26:14:1894:C:N4	26:14:1895:C:H41	2.18	0.41
26:1H:1986:A:C2	26:1H:1987:G:C4	3.09	0.41
26:1H:803:U:C4	26:1H:804:A:N7	2.89	0.41
1:1G:647:C:H2'	1:1G:648:A:O4'	2.21	0.41
19:AA:9:VAL:HG13	19:AA:10:PHE:N	2.36	0.41
26:14:2683:C:OP1	41:75:53:ARG:NH2	2.54	0.41
47:H8:1:MET:HE3	47:H8:3:TYR:CE2	2.56	0.41
26:1H:1748:G:C2	26:1H:1749:A:C4	3.09	0.41
1:1G:394:G:H2'	1:1G:395:C:H6	1.86	0.41
29:19:264:LYS:HE2	29:19:266:SER:HB3	2.02	0.41
1:1G:608:A:H2'	1:1G:609:A:O4'	2.21	0.41
26:14:1505:C:H2'	26:14:1506:C:C6	2.56	0.41
1:1G:131:C:H2'	1:1G:132:C:C6	2.56	0.41
17:8I:48:GLU:O	17:8I:50:LYS:HD3	2.21	0.41
26:1H:405:U:H2'	26:1H:405:U:O2	2.21	0.41
1:13:447:G:O5'	1:13:447:G:H8	2.03	0.41
15:6A:43:LEU:HA	15:6A:43:LEU:HD23	1.84	0.41
26:1H:1839:G:H5''	26:1H:1839:G:C8	2.56	0.41
47:D5:137:ILE:HD12	47:D5:137:ILE:HA	1.89	0.41
55:Q8:23:VAL:HA	55:Q8:48:PHE:O	2.21	0.41
1:13:933:G:OP2	7:6E:3:ARG:HB2	2.20	0.41
27:16:38:C:H2'	27:16:39:A:O4'	2.21	0.41
26:14:812:C:H5''	26:14:1250:G:O2'	2.20	0.41
26:1H:922:U:H2'	26:1H:923:C:C6	2.55	0.41
1:1G:1389:C:H2'	1:1G:1390:U:O4'	2.21	0.41
26:14:1930:G:N2	26:14:1968:G:H2'	2.36	0.41
26:14:506:G:O3'	26:14:507:A:H8	2.04	0.41
26:1H:414:C:H4'	26:1H:1879:C:O2	2.20	0.41
26:14:189:G:O5'	26:14:189:G:H8	2.04	0.41
31:39:117:ARG:HD3	31:39:117:ARG:HA	1.92	0.41
26:1H:1394:U:H6	26:1H:1394:U:H3'	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7I:55:ARG:HB3	16:7I:55:ARG:HE	1.58	0.41
34:69:118:LYS:HB2	34:69:118:LYS:HE3	1.67	0.41
1:13:288:A:H2'	1:13:289:G:H4'	2.03	0.41
26:14:2271:G:H5''	48:E5:20:ARG:NE	2.36	0.41
31:31:116:ASP:O	31:31:119:ARG:HD3	2.21	0.41
31:31:24:LEU:HD21	31:31:114:VAL:HG12	2.03	0.41
47:H8:108:PRO:HB2	47:H8:112:ARG:HA	2.03	0.41
26:1H:120:U:P	61:1H:3541:HOH:O	2.77	0.41
26:1H:654(S):G:HO2'	26:1H:654(T):A:P	2.44	0.41
26:14:1011:G:H1	26:14:1150:C:H42	1.69	0.41
46:C5:17:SER:O	46:C5:21:LYS:HB2	2.21	0.41
34:69:81:VAL:HG12	34:69:143:SER:CB	2.51	0.41
5:4E:105:VAL:HB	5:4E:106:PRO:HD3	2.03	0.41
41:B8:102:ILE:O	41:B8:105:LEU:N	2.41	0.41
26:1H:1407:C:C2	26:1H:1596:A:C2	3.09	0.41
2:1E:149:LEU:HD23	2:1E:149:LEU:HA	1.85	0.41
26:14:1441:G:H2'	26:14:1442:G:H8	1.86	0.41
46:C5:45:VAL:HG12	46:C5:60:PHE:HD2	1.86	0.41
45:B5:63:LYS:H	45:B5:63:LYS:CE	2.28	0.41
27:16:99:A:C6	27:16:100:G:C5	3.09	0.41
19:AA:6:LYS:HA	19:AA:7:LYS:HA	1.84	0.41
11:2A:98:LEU:HA	11:2A:101:SER:HB3	2.03	0.41
26:1H:289:A:N6	26:1H:351:G:H1'	2.35	0.41
26:14:117:G:C6	26:14:119:A:C6	3.09	0.41
13:4A:54:VAL:HA	13:4A:57:ARG:CG	2.51	0.41
12:3I:53:ARG:HG3	12:3I:53:ARG:NH1	2.30	0.41
1:13:179:A:H2'	1:13:180:U:C6	2.49	0.41
26:14:2176:A:O2'	28:79:44:HIS:ND1	2.45	0.41
1:13:272:C:H2'	1:13:273:A:C8	2.56	0.41
26:1H:469:G:O6	54:P8:37:LYS:HE2	2.21	0.41
26:14:28:A:C2	26:14:513:A:C8	3.09	0.41
34:61:77:LEU:H	34:61:77:LEU:HD12	1.85	0.41
30:29:105:THR:CG2	30:29:164:ARG:HE	2.31	0.41
30:21:188:VAL:HA	30:21:189:PRO:HD3	1.85	0.41
26:14:910:A:H2	26:14:2264:C:O2	2.04	0.41
26:14:864:G:C2'	26:14:865:C:H5'	2.51	0.41
4:3E:165:MET:SD	4:3E:168:ARG:NH1	2.94	0.41
4:32:166:LYS:HE2	4:32:179:GLU:HB2	2.02	0.41
9:8E:9:ARG:HB3	9:8E:14:VAL:HG22	2.01	0.41
1:1G:159:G:H21	1:1G:162:A:H62	1.69	0.41
4:3E:23:GLY:HA2	4:3E:112:VAL:HG22	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:52:44:GLY:HA2	6:52:59:TYR:CE2	2.56	0.41
38:45:57:HIS:CG	38:45:117:ALA:HB2	2.56	0.41
29:11:106:ILE:O	29:11:108:PRO:HD3	2.21	0.41
26:1H:1263:U:H1'	53:N8:10:LYS:HG3	2.03	0.41
23:2K:56:PSU:O4	23:2K:58:A:C8	2.74	0.41
19:AA:16:LEU:O	19:AA:20:LEU:HD13	2.21	0.41
1:1G:739:C:HO2'	15:6A:42:HIS:CE1	2.32	0.41
42:C8:79:PHE:CE1	42:C8:83:LEU:HD13	2.56	0.41
36:68:71:ARG:HA	36:68:72:PRO:HD3	1.84	0.41
39:98:26:LYS:HE2	39:98:70:LEU:O	2.21	0.41
1:13:717:C:H5''	1:13:717:C:H6	1.86	0.41
26:1H:1675:C:H2'	26:1H:1676:A:O4'	2.20	0.41
1:13:1389:C:H2'	1:13:1390:U:O4'	2.21	0.41
26:14:541:C:H2'	26:14:542:C:C6	2.56	0.41
31:39:156:LEU:HD21	31:39:163:VAL:HG12	2.03	0.41
1:1G:1306:A:H2'	1:1G:1307:U:C6	2.55	0.41
26:14:1973:G:H2'	26:14:1974:C:C6	2.55	0.41
1:1G:968:A:H8	1:1G:968:A:O5'	2.03	0.41
3:22:73:PRO:O	3:22:76:VAL:HG22	2.21	0.41
26:1H:1368:G:N2	26:1H:1369:G:C4	2.89	0.41
1:13:535:A:H5''	61:13:1836:HOH:O	2.21	0.41
22:1K:12:U:O2	22:1K:24:G:N2	2.54	0.41
26:1H:257:A:H2'	26:1H:258:G:H5'	2.03	0.41
17:8I:6:LEU:HD22	17:8I:23:VAL:HG11	2.02	0.41
28:71:11:LEU:O	28:71:14:VAL:HG22	2.21	0.41
31:39:89:VAL:HG12	31:39:90:PHE:H	1.85	0.41
26:1H:1844:C:H5''	29:11:258:LYS:HG3	2.03	0.41
26:1H:106:C:H2'	26:1H:107:C:H6	1.85	0.41
48:I8:52:GLY:O	48:I8:59:LEU:HA	2.21	0.41
26:14:372:G:H5'	49:F5:66:HIS:NE2	2.36	0.41
1:1G:1312:G:C2'	1:1G:1313:U:H5'	2.51	0.41
20:BA:59:ALA:HB3	20:BA:84:LEU:HD11	2.02	0.41
2:1E:27:LYS:HB3	2:1E:27:LYS:HE2	1.80	0.41
20:BA:24:LEU:HD13	20:BA:24:LEU:HA	1.70	0.41
29:11:154:LYS:HE3	29:11:154:LYS:HB3	1.84	0.41
26:1H:1975:G:C6	26:1H:1976:U:N3	2.89	0.41
11:2I:78:GLN:O	11:2I:103:LEU:HA	2.21	0.41
10:1A:30:SER:HB3	10:1A:81:THR:HG22	2.03	0.41
26:1H:1786:A:C2	26:1H:2606:C:H1'	2.56	0.40
1:1G:872:A:C4	1:1G:874:G:N7	2.89	0.40
26:14:1141:U:P	35:15:25:ARG:HH21	2.44	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:59:3:ARG:O	33:59:6:ARG:NE	2.54	0.40
29:11:61:LEU:HA	29:11:61:LEU:HD13	1.83	0.40
33:51:6:ARG:HH11	33:51:54:ARG:HH22	1.67	0.40
55:Q8:7:HIS:CG	55:Q8:61:LEU:HD13	2.56	0.40
5:4E:147:ASP:HA	5:4E:150:ARG:NH1	2.35	0.40
26:1H:270(V):G:H2'	26:1H:270(W):G:H8	1.86	0.40
26:1H:2287:A:N3	26:1H:2289:G:C8	2.88	0.40
26:1H:55:G:N3	26:1H:56:A:C8	2.89	0.40
33:59:11:VAL:HG13	33:59:69:ARG:HH12	1.85	0.40
13:4I:34:LEU:HD23	13:4I:39:ILE:HB	2.02	0.40
1:1G:1038:C:C5	1:1G:1039:C:C4	3.09	0.40
13:4I:3:ARG:CB	13:4I:9:ILE:HG12	2.51	0.40
26:1H:1332:G:H2'	26:1H:1332:G:H8	1.78	0.40
26:14:780:G:H21	26:14:783:A:N6	2.17	0.40
26:14:1085:A:H4'	26:14:1086:A:OP1	2.21	0.40
26:1H:1516:U:H2'	26:1H:1517:G:H8	1.85	0.40
8:7E:43:GLY:O	8:7E:64:LYS:NZ	2.43	0.40
26:1H:274:G:N3	26:1H:276:A:N1	2.68	0.40
46:C5:8:LYS:HZ1	46:C5:95:LYS:HD3	1.85	0.40
26:14:221:A:C4	26:14:266:G:N7	2.89	0.40
43:95:58:VAL:HG12	43:95:98:GLU:HB2	2.03	0.40
47:D5:19:ARG:HH11	47:D5:84:GLU:HB2	1.86	0.40
28:79:5:LYS:CA	28:79:8:ARG:HG2	2.51	0.40
26:14:2106:G:C2	26:14:2184:G:C2	3.10	0.40
26:14:866:A:C6	26:14:914:C:C5	3.09	0.40
26:14:1948:G:C2'	26:14:1949:G:H5'	2.51	0.40
3:2E:7:PRO:HG2	3:2E:184:TYR:CD2	2.56	0.40
1:13:377:G:H5'	16:7I:5:ARG:HH12	1.85	0.40
37:35:27:HIS:HB3	37:35:32:THR:CG2	2.51	0.40
3:2E:91:LEU:O	3:2E:95:THR:OG1	2.36	0.40
38:88:21:THR:HB	38:88:22:LYS:HB2	2.02	0.40
1:13:451:A:N6	1:13:481:G:H5'	2.36	0.40
39:98:45:ARG:HB3	39:98:46:GLY:H	1.66	0.40
29:11:123:ALA:HA	29:11:124:PRO:HD2	1.83	0.40
1:1G:291:C:H42	1:1G:309:G:H1	1.69	0.40
24:3K:72:C:C2'	24:3K:73:A:H5''	2.51	0.40
1:1G:575:G:O2'	1:1G:821:G:H5'	2.20	0.40
45:F8:89:ILE:O	45:F8:93:GLU:HG2	2.21	0.40
26:1H:988:A:H3'	51:L8:11:SER:OG	2.21	0.40
8:7E:12:ARG:HD2	8:7E:12:ARG:HH11	1.76	0.40
26:1H:714:U:O2	26:1H:716:A:C8	2.73	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:263:ARG:HH11	29:11:263:ARG:HG3	1.84	0.40
56:1L:23:A:H2'	56:1L:24:G:H8	1.85	0.40
1:1G:227:G:H2'	1:1G:228:A:O4'	2.20	0.40
1:13:657:G:C2	1:13:658:G:C8	3.09	0.40
26:1H:2248:C:C5	26:1H:2249:U:C4	3.09	0.40
10:1I:45:ARG:HH11	14:5I:36:PHE:HE2	1.68	0.40
26:14:516:C:H6	26:14:516:C:O5'	2.04	0.40
26:1H:1523:U:C2	26:1H:1524:G:C8	3.08	0.40
23:2L:3:C:H5'	26:14:2255:G:O2'	2.21	0.40
26:14:1651:G:H2'	26:14:1652:A:O4'	2.21	0.40
54:L5:10:ARG:O	54:L5:14:LYS:HG3	2.21	0.40
26:14:2058:A:N7	61:14:3583:HOH:O	2.37	0.40
45:B5:84:ALA:O	45:B5:87:GLN:HB2	2.22	0.40
1:13:1521:G:H2'	1:13:1522:U:C6	2.56	0.40
40:65:19:LYS:HE2	40:65:19:LYS:HB2	1.92	0.40
17:8A:50:LYS:HD2	17:8A:50:LYS:HA	1.90	0.40
19:AI:37:ARG:H	19:AI:37:ARG:HG3	1.42	0.40
43:95:94:LEU:HA	43:95:94:LEU:HD23	1.73	0.40
34:61:95:LYS:HB3	34:61:95:LYS:HE3	1.46	0.40
45:B5:50:LYS:HD2	45:B5:50:LYS:HA	1.85	0.40
48:I8:21:LEU:HA	48:I8:21:LEU:HD23	1.72	0.40
8:7E:127:LEU:HD23	8:7E:127:LEU:N	2.36	0.40
27:1J:75:G:O3'	47:D5:10:ARG:NH1	2.46	0.40
26:14:1805:U:H2'	26:14:1806:C:H6	1.86	0.40
31:31:177:ALA:HB1	31:31:178:PRO:HD2	2.02	0.40
6:5E:45:LEU:HD21	6:5E:57:GLN:OE1	2.21	0.40
9:82:105:ASP:OD1	9:82:107:ARG:HD3	2.20	0.40
9:82:16:ARG:NH2	9:82:66:ARG:HH21	2.19	0.40
1:1G:976:G:H5'	1:1G:1358:U:O2'	2.21	0.40
26:1H:270(M):U:OP1	26:1H:270(N):G:N2	2.54	0.40
25:4L:7:G:H2'	25:4L:8:A:O4'	2.22	0.40
31:31:185:ASP:HA	31:31:188:ARG:CD	2.45	0.40
26:14:1144:G:C6	26:14:1145:C:N4	2.89	0.40
34:69:144:VAL:O	34:69:144:VAL:HG23	2.21	0.40
34:69:81:VAL:H	34:69:143:SER:CB	2.25	0.40
40:A8:18:ILE:CD1	40:A8:88:ASP:HA	2.50	0.40
5:4E:64:ARG:H	5:4E:64:ARG:HD2	1.86	0.40
13:4A:84:ILE:HG22	13:4A:84:ILE:O	2.21	0.40
26:14:1153:C:N4	26:14:1154:G:N1	2.68	0.40
43:95:46:VAL:HG23	43:95:52:VAL:HG11	2.02	0.40
33:59:8:PRO:O	33:59:52:VAL:HB	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:285:C:H2'	26:1H:286:C:H6	1.85	0.40
26:1H:760:G:H5''	61:1H:3776:HOH:O	2.20	0.40
1:1G:1207:G:C6	1:1G:1208:C:C4	3.10	0.40
1:13:627:G:H2'	1:13:628:G:H8	1.87	0.40
26:1H:1047:G:H2'	26:1H:1110:G:C6	2.56	0.40
26:14:2352:A:C2	48:E5:33:ALA:HB1	2.56	0.40
47:D5:52:SER:O	47:D5:53:ILE:HG12	2.20	0.40
13:4I:31:LYS:H	13:4I:31:LYS:HD2	1.86	0.40
1:13:1081:G:H2'	1:13:1082:G:C8	2.48	0.40
26:14:2228:G:C6	26:14:2229:C:C4	3.09	0.40
34:61:77:LEU:CD1	34:61:140:LEU:HB3	2.49	0.40
5:4E:26:PHE:N	5:4E:26:PHE:HD1	2.18	0.40
46:C5:54:LYS:C	46:C5:55:TYR:CG	2.93	0.40
3:22:14:ILE:HG12	3:22:15:THR:H	1.86	0.40
29:11:206:LEU:HA	29:11:211:ARG:HD3	2.03	0.40
11:2I:54:ARG:HA	11:2I:57:THR:HG23	2.03	0.40
26:1H:1276:A:C2	26:1H:1277:G:C5	3.10	0.40
26:14:2795:G:O2'	26:14:2798:C:N4	2.46	0.40
26:1H:389:G:H8	26:1H:389:G:O5'	2.04	0.40
1:13:389:A:H2'	1:13:390:C:C5'	2.50	0.40
49:J8:83:GLU:C	49:J8:85:LEU:H	2.24	0.40
32:41:103:LEU:CD2	32:41:178:PHE:HZ	2.34	0.40
1:1G:444:C:H2'	1:1G:445:G:C8	2.56	0.40
29:19:8:PRO:HB3	29:19:14:ARG:HB3	2.03	0.40
2:1E:21:ARG:O	2:1E:23:ARG:N	2.54	0.40
18:9A:29:PHE:HD1	18:9A:29:PHE:H	1.69	0.40
1:1G:739:C:O2'	15:6A:42:HIS:ND1	2.38	0.40
26:1H:432:A:C5	26:1H:433:C:C5	3.10	0.40
42:C8:110:VAL:O	42:C8:113:ALA:HB3	2.22	0.40
13:4I:84:ILE:HG23	13:4I:86:CYS:HB3	2.03	0.40
31:31:32:LEU:HA	31:31:32:LEU:HD22	1.81	0.40
26:14:1332:G:N2	26:14:1609:A:H2'	2.35	0.40
1:13:581:G:C2	1:13:582:U:C5	3.10	0.40
4:32:39:PRO:HA	4:32:40:PRO:HD3	1.90	0.40
1:1G:814:A:N7	1:1G:816:A:C4	2.89	0.40
6:5E:99:ALA:HB3	18:9I:29:PHE:CE1	2.55	0.40
4:32:58:LEU:HD13	4:32:62:GLN:HG3	2.03	0.40
26:14:2077:A:H2'	26:14:2078:C:H6	1.86	0.40
36:68:75:SER:OG	41:B8:74:ARG:NH2	2.54	0.40
29:11:65:ILE:HD13	29:11:65:ILE:HG21	1.69	0.40
9:82:42:ARG:HB2	9:82:42:ARG:HE	1.32	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1264:C:H6	1:1G:1264:C:O5'	2.04	0.40
23:2L:51:U:O5'	23:2L:51:U:H6	2.04	0.40
31:39:93:LYS:HD2	31:39:93:LYS:HA	1.85	0.40
29:11:174:ILE:HD12	29:11:174:ILE:N	2.35	0.40
1:1G:676:A:H1'	11:2A:115:PRO:HB3	2.03	0.40
26:1H:1496:A:O3'	26:1H:1497:U:H6	2.04	0.40
26:14:901:A:H2'	26:14:901:A:N3	2.37	0.40
37:35:52:GLU:CD	37:35:52:GLU:H	2.25	0.40
26:1H:270(M):U:C2'	26:1H:270(N):G:H5''	2.52	0.40
10:1I:54:PHE:HB3	10:1I:55:LYS:H	1.68	0.40
26:1H:654(S):G:OP2	26:1H:654(S):G:H2'	2.21	0.40
43:D8:33:VAL:O	43:D8:58:VAL:HA	2.21	0.40
25:4L:9:G:H2'	25:4L:10:G:C8	2.56	0.40
42:85:76:TYR:CE2	42:85:80:ILE:HG13	2.56	0.40
26:1H:252:G:O2'	26:1H:253:C:H5'	2.21	0.40
1:13:980:C:H2'	1:13:981:U:O4'	2.20	0.40
56:1L:7:U:O2'	56:1L:8:U:H5'	2.21	0.40
26:14:1003:G:O2'	26:14:1010:A:N1	2.35	0.40
49:J8:73:LEU:HD13	49:J8:90:ILE:HB	2.04	0.40
21:1B:9:ARG:O	21:1B:13:ILE:HG13	2.21	0.40
32:41:11:TYR:CE2	32:41:16:ARG:HD2	2.56	0.40
43:95:37:VAL:CG2	43:95:57:VAL:HG13	2.51	0.40
1:13:271:C:H2'	1:13:272:C:C6	2.54	0.40
1:13:457:C:C2	1:13:476:G:N2	2.89	0.40
41:75:50:ILE:HA	41:75:50:ILE:HD13	1.75	0.40
40:65:35:ILE:HG12	40:65:101:LEU:HD23	2.02	0.40
37:35:30:THR:HG21	37:35:35:HIS:H	1.87	0.40
47:D5:55:HIS:ND1	47:D5:56:VAL:HG12	2.37	0.40
26:14:986:C:C2'	26:14:987:G:H5'	2.51	0.40
4:32:15:GLU:OE1	4:32:59:ARG:NE	2.49	0.40
1:13:1219:U:H2'	1:13:1220:G:O4'	2.22	0.40
1:13:201:C:N4	1:13:216:G:H22	2.19	0.40
1:1G:625:G:C6	1:1G:626:U:C4	3.09	0.40
3:22:150:LYS:HE3	3:22:201:TYR:CD1	2.56	0.40
1:1G:802:A:H3'	1:1G:803:G:H8	1.87	0.40
48:I8:36:ILE:C	48:I8:36:ILE:HD13	2.42	0.40
26:1H:1321:A:H2'	26:1H:1322:A:O4'	2.21	0.40
26:14:1419:A:N7	26:14:1421:G:C6	2.90	0.40
26:1H:1797:C:H4'	29:11:257:LEU:O	2.21	0.40
1:1G:1123:A:H4'	10:1A:37:PRO:HD2	2.03	0.40
16:7I:36:ILE:HG13	16:7I:36:ILE:O	2.20	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:414:C:H4'	26:14:1879:C:O2	2.21	0.40
26:14:669:G:N3	26:14:669:G:C2'	2.84	0.40
30:29:7:VAL:HG12	30:29:193:GLY:HA2	2.04	0.40
38:45:135:ASP:HB2	47:D5:81:ARG:HH22	1.85	0.40
29:19:147:LEU:HD23	29:19:155:LEU:HD13	2.04	0.40
45:F8:68:ARG:O	45:F8:68:ARG:HG2	2.21	0.40
26:1H:456:C:H3'	45:F8:68:ARG:NH2	2.35	0.40
26:1H:106:C:H2'	26:1H:107:C:C6	2.57	0.40
3:22:151:VAL:HA	3:22:199:LYS:O	2.22	0.40
26:14:2506:U:H4'	26:14:2507:C:OP1	2.21	0.40
4:32:105:VAL:HG13	4:32:110:PHE:HB2	2.03	0.40
57:3L:72:C:H3'	57:3L:73:A:H5''	2.03	0.40
26:1H:1564:C:O2'	26:1H:1565:C:H5'	2.21	0.40
1:1G:947:G:C6	1:1G:948:C:C4	3.10	0.40
47:H8:93:ASP:HA	47:H8:130:PRO:HG2	2.03	0.40
26:14:241:A:H5'	26:14:243:U:O4'	2.22	0.40
37:35:76:LYS:NZ	37:35:76:LYS:HB3	2.36	0.40
26:14:800:A:OP1	26:14:800:A:H8	2.04	0.40
30:29:79:ARG:N	30:29:79:ARG:HD2	2.36	0.40
36:68:122:LEU:HD23	36:68:122:LEU:HA	1.86	0.40
26:14:805:G:H4'	37:35:38:GLN:HB2	2.02	0.40
22:1K:69:A:HO2'	22:1K:70:C:H6	1.65	0.40
1:1G:1251:A:H2'	1:1G:1252:A:C8	2.57	0.40
3:22:36:ASP:HA	3:22:39:ILE:CD1	2.51	0.40
26:14:993:G:C6	26:14:994:C:N4	2.90	0.40
1:1G:1298:C:H41	7:62:114:ARG:HB3	1.86	0.40
1:13:454:C:H3'	1:13:455:C:H6	1.87	0.40
26:1H:270(L):U:H3'	26:1H:270(L):U:C6	2.57	0.40
26:1H:71:A:H2	45:F8:31:HIS:NE2	2.05	0.40
31:39:6:VAL:HB	31:39:124:LEU:HA	2.03	0.40
1:13:1358:U:OP1	14:5I:35:ARG:HB2	2.22	0.40
26:14:329:G:P	46:C5:71:LYS:HE3	2.61	0.40
29:11:35:LYS:HB3	29:11:35:LYS:NZ	2.27	0.40
1:1G:998:G:N2	1:1G:1043:C:C2	2.90	0.40
1:13:1127:G:H1'	1:13:1148:U:H3	1.86	0.40
26:14:1654:A:H1'	26:14:2823:A:H5'	2.04	0.40
17:8I:13:ASP:OD2	17:8I:53:LEU:HD13	2.21	0.40
38:88:66:ILE:CG1	38:88:67:ARG:H	2.35	0.40
26:14:270(K):C:H2'	26:14:270(L):U:H2'	2.02	0.40
1:1G:1208:C:H2'	1:1G:1209:C:C6	2.55	0.40
33:51:69:ARG:HG3	33:51:70:THR:N	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:102:ARG:HB3	12:3A:108:ALA:O	2.21	0.40
1:13:403:C:OP2	4:3E:74:GLN:NE2	2.52	0.40
1:13:316:G:C2'	1:13:317:G:H5'	2.51	0.40
26:1H:2296:U:O2	26:1H:2333:A:N3	2.55	0.40
49:J8:78:LYS:HD3	49:J8:78:LYS:N	2.37	0.40
26:14:2321:G:H2'	26:14:2321:G:N3	2.36	0.40
28:71:22:ILE:CD1	28:71:189:ILE:HG22	2.52	0.40
26:14:2532:G:O2'	26:14:2657:A:N1	2.54	0.40
2:12:130:ARG:HE	2:12:130:ARG:HB3	1.53	0.40
49:F5:85:LEU:CA	49:F5:87:PRO:HD2	2.49	0.40
49:F5:87:PRO:O	49:F5:91:LYS:N	2.50	0.40
23:2L:59:A:H4'	23:2L:60:A:OP1	2.22	0.40
26:14:273(C):C:N4	26:14:363(C):G:H1	2.17	0.40
2:12:189:ASP:OD1	2:12:189:ASP:N	2.54	0.40
26:14:1411:C:H2'	26:14:1412:A:C8	2.56	0.40
26:14:1342:A:C2	26:14:1397:U:C2	3.09	0.40
30:29:37:ARG:HA	30:29:41:LYS:HE3	2.03	0.40
26:14:870:A:OP1	38:45:6:ARG:NE	2.36	0.40
20:BI:53:LEU:HG	20:BI:102:GLY:HA3	2.03	0.40
19:AI:6:LYS:HE2	19:AI:6:LYS:HB3	1.59	0.40
29:11:233:HIS:HB3	61:11:406:HOH:O	2.20	0.40
1:13:652:U:HO2'	1:13:653:A:P	2.44	0.40
31:39:135:LYS:HB3	31:39:138:GLU:HG3	2.03	0.40
26:1H:399:G:H2'	26:1H:400:G:O4'	2.21	0.40
55:M5:28:GLY:O	55:M5:36:LYS:NZ	2.42	0.40
26:14:1636:C:O2	26:14:1760:A:H2	2.04	0.40
1:13:598:U:H4'	8:7E:94:TYR:CD2	2.56	0.40
26:1H:613:U:O2	26:1H:613:U:O4'	2.38	0.40
26:14:1688:U:O2	26:14:1700:A:H5'	2.21	0.40
15:6A:79:ARG:HA	15:6A:82:ILE:HG12	2.03	0.40
37:78:78:PRO:HB3	37:78:111:ARG:NH2	2.36	0.40
53:N8:36:CYS:SG	53:N8:37:LYS:N	2.94	0.40
47:H8:26:GLY:HA2	47:H8:85:HIS:CD2	2.57	0.40
11:2I:33:THR:HG22	11:2I:39:PRO:HA	2.04	0.40
20:BI:46:GLU:HB3	20:BI:48:LYS:HZ3	1.86	0.40
15:6I:81:LEU:O	15:6I:85:LEU:HB2	2.21	0.40
45:B5:49:VAL:HG12	45:B5:87:GLN:HG2	2.03	0.40
6:5E:16:GLN:HG2	6:5E:17:SER:H	1.87	0.40
26:1H:850:C:O3'	51:L8:49:LYS:HE2	2.21	0.40
49:F5:4:VAL:HG11	49:F5:11:ARG:NH2	2.35	0.40
26:14:176:G:O2'	26:14:177:G:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:82:10:ARG:HA	9:82:104:ARG:NH1	2.37	0.40
1:1G:1300:G:C6	1:1G:1334:G:C5	3.09	0.40
26:1H:2135:A:N6	26:1H:2136:C:C2	2.89	0.40
38:45:25:ASP:HB3	38:45:102:VAL:CB	2.50	0.40
57:3L:18:G:H2'	57:3L:57:G:N2	2.23	0.40
31:39:24:LEU:HD22	31:39:25:PRO:HD3	2.03	0.40
31:39:7:TYR:HA	31:39:124:LEU:O	2.20	0.40
1:1G:1272:G:H2'	1:1G:1273:G:O4'	2.20	0.40
28:71:46:LYS:C	28:71:47:LEU:HD23	2.42	0.40
46:C5:17:SER:HB2	46:C5:71:LYS:HE2	2.03	0.40
17:8A:43:LEU:HD12	17:8A:68:ARG:HG2	2.03	0.40
29:11:30:GLU:HG3	29:11:63:ARG:NH2	2.37	0.40
26:1H:1465:G:C5	26:1H:1466:G:N7	2.90	0.40
31:31:64:ILE:HA	31:31:64:ILE:HD13	1.66	0.40
26:1H:2378:A:C5	26:1H:2379:G:H1'	2.56	0.40
13:4A:84:ILE:C	13:4A:86:CYS:H	2.25	0.40
26:14:2439:A:HO2'	26:14:2440:C:P	2.44	0.40
26:1H:1534:G:O2'	26:1H:1535:U:O4'	2.34	0.40
26:14:2115:G:N2	26:14:2172:U:H3	2.20	0.40
7:62:25:ALA:O	7:62:28:ASN:N	2.54	0.40
34:69:97:ILE:O	34:69:100:ALA:HB3	2.22	0.40
23:2K:35:C:H5"	23:2K:36:A:OP2	2.21	0.40
26:1H:1035:U:H2'	26:1H:1036:G:C8	2.56	0.40
1:13:1287:A:H2'	1:13:1288:A:C8	2.57	0.40
1:13:669:U:H2'	1:13:670:G:C8	2.57	0.40
1:13:575:G:C5	1:13:881:G:C2	3.09	0.40
35:58:103:VAL:O	35:58:106:MET:N	2.47	0.40
26:14:116:C:H2'	26:14:117:G:O4'	2.21	0.40
4:32:8:VAL:HG22	4:32:115:ARG:HH12	1.87	0.40
26:14:972:G:OP2	26:14:973:A:O2'	2.29	0.40
1:1G:1077:G:N1	1:1G:1081:G:C6	2.89	0.40
1:1G:391:G:C6	1:1G:392:G:C5	3.09	0.40
1:13:1440:C:O2'	1:13:1442:G:N2	2.55	0.40
23:2K:17:C:H4'	23:2K:18:U:OP2	2.21	0.40
26:1H:588:U:C2	31:31:90:PHE:CE1	3.10	0.40
4:32:200:GLU:O	4:32:204:ILE:HG23	2.22	0.40
3:22:172:ARG:HB3	3:22:172:ARG:NH1	2.37	0.40
1:1G:620:C:H2'	1:1G:621:A:O4'	2.21	0.40
26:14:2185:C:H2'	26:14:2186:G:H8	1.86	0.40
26:14:2019:A:C5	26:14:2020:A:C8	3.09	0.40
28:79:15:ASP:HA	28:79:16:PRO:HD2	1.88	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:B5:36:LYS:HG3	45:B5:56:THR:CG2	2.52	0.40
27:16:3:C:H2'	27:16:4:C:H6	1.86	0.40
33:51:74:ASN:O	33:51:77:LYS:HG3	2.22	0.40
7:6E:22:LEU:HA	7:6E:22:LEU:HD23	1.90	0.40
26:1H:67:U:H1'	26:1H:88:G:N2	2.37	0.40
1:13:377:G:H5'	16:7I:5:ARG:NH1	2.36	0.40
32:41:41:GLN:HB3	32:41:43:LEU:HD13	2.04	0.40
49:J8:85:LEU:HD12	49:J8:88:LYS:HB2	2.02	0.40
4:32:4:TYR:HD1	4:32:6:GLY:H	1.68	0.40
17:8A:11:VAL:HG23	17:8A:20:THR:HB	2.04	0.40
26:14:861:A:H1'	26:14:917:A:N6	2.37	0.40
1:1G:1177:G:O2'	1:1G:1178:G:C8	2.73	0.40
1:13:197:A:N3	1:13:198:G:H1'	2.36	0.40
11:2I:109:VAL:HA	18:9I:85:LEU:O	2.21	0.40
11:2I:109:VAL:HG12	18:9I:84:LYS:HB2	2.03	0.40
26:14:1488:G:C2	26:14:1502:C:C2	3.09	0.40
7:62:51:GLN:CG	7:62:58:PRO:HD3	2.52	0.40
32:49:52:ILE:HA	32:49:55:LYS:HE3	2.03	0.40
1:1G:535:A:H5''	61:1G:1705:HOH:O	2.22	0.40
40:65:77:ALA:O	40:65:80:LEU:N	2.50	0.40
26:14:1341:U:O4	45:B5:16:LYS:NZ	2.34	0.40
26:14:438:G:H2'	26:14:439:G:C8	2.56	0.40
26:14:39:C:H2'	26:14:40:C:C6	2.56	0.40
1:1G:76:G:C6	1:1G:77:C:C4	3.09	0.40
12:3I:6:THR:OG1	12:3I:9:GLN:HG3	2.21	0.40
38:45:97:VAL:HG21	38:45:103:MET:HE3	2.02	0.40
1:13:1250:A:C2	1:13:1370:G:H1'	2.57	0.40
46:C5:3:VAL:HG11	46:C5:32:PRO:O	2.21	0.40
26:1H:17:G:H2'	26:1H:18:C:C6	2.57	0.40
26:14:468:G:C2	26:14:469:G:H1'	2.56	0.40
14:5I:24:CYS:HB2	14:5I:40:CYS:HB3	2.04	0.40
23:2K:76:C:H3'	23:2K:77:A:H3'	2.04	0.40
26:14:704:G:O2'	26:14:726:G:N1	2.46	0.40
29:11:130:ALA:C	29:11:131:LEU:HD12	2.41	0.40
1:1G:35:G:C2	1:1G:550:G:N3	2.90	0.40
4:3E:43:HIS:ND1	4:3E:46:LYS:HE3	2.36	0.40
46:C5:77:PRO:O	46:C5:78:ALA:HB3	2.22	0.40
51:L8:17:LYS:O	51:L8:20:LYS:N	2.54	0.40
26:1H:1014:U:O2'	26:1H:1015:G:H5'	2.22	0.40
9:82:53:VAL:HG11	9:82:92:TYR:CE1	2.57	0.40
17:8A:29:HIS:HA	17:8A:30:PRO:HD2	1.83	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:337:C:H2'	1:13:338:A:C8	2.56	0.40
36:25:75:SER:OG	41:75:74:ARG:NH2	2.54	0.40
1:13:1342:C:O2'	9:8E:124:GLN:HG3	2.22	0.40
26:14:1339:G:H21	26:14:1603:A:H1'	1.87	0.40
11:2A:41:THR:OG1	11:2A:42:TRP:N	2.53	0.40
1:1G:1411:C:H2'	1:1G:1412:C:C6	2.56	0.40
18:9A:38:GLU:H	18:9A:38:GLU:CD	2.25	0.40
56:1L:73:A:N3	56:1L:73:A:H5''	2.37	0.40
47:D5:131:ARG:HG2	47:D5:131:ARG:H	1.60	0.40
37:78:79:ARG:HD2	37:78:110:TYR:CE1	2.57	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	12	206/256 (80%)	168 (82%)	31 (15%)	7 (3%)	5	31
2	1E	227/256 (89%)	185 (82%)	39 (17%)	3 (1%)	15	59
3	22	192/239 (80%)	169 (88%)	22 (12%)	1 (0%)	34	78
3	2E	203/239 (85%)	185 (91%)	18 (9%)	0	100	100
4	32	206/209 (99%)	183 (89%)	22 (11%)	1 (0%)	34	78
4	3E	205/209 (98%)	188 (92%)	14 (7%)	3 (2%)	13	55
5	42	146/162 (90%)	136 (93%)	9 (6%)	1 (1%)	26	72
5	4E	147/162 (91%)	139 (95%)	7 (5%)	1 (1%)	26	72
6	52	99/101 (98%)	95 (96%)	4 (4%)	0	100	100
6	5E	98/101 (97%)	91 (93%)	7 (7%)	0	100	100
7	62	134/156 (86%)	123 (92%)	10 (8%)	1 (1%)	26	72
7	6E	152/156 (97%)	144 (95%)	8 (5%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	72	135/138 (98%)	125 (93%)	9 (7%)	1 (1%)	26	72
8	7E	136/138 (99%)	126 (93%)	9 (7%)	1 (1%)	26	72
9	82	119/128 (93%)	107 (90%)	11 (9%)	1 (1%)	24	69
9	8E	124/128 (97%)	104 (84%)	19 (15%)	1 (1%)	24	69
10	1A	76/105 (72%)	70 (92%)	6 (8%)	0	100	100
10	1I	89/105 (85%)	83 (93%)	6 (7%)	0	100	100
11	2A	111/129 (86%)	102 (92%)	7 (6%)	2 (2%)	11	51
11	2I	109/129 (84%)	98 (90%)	10 (9%)	1 (1%)	21	67
12	3A	120/132 (91%)	102 (85%)	13 (11%)	5 (4%)	3	26
12	3I	120/132 (91%)	106 (88%)	13 (11%)	1 (1%)	24	69
13	4A	109/126 (86%)	95 (87%)	13 (12%)	1 (1%)	21	67
13	4I	117/126 (93%)	97 (83%)	19 (16%)	1 (1%)	21	67
14	5A	57/61 (93%)	48 (84%)	8 (14%)	1 (2%)	11	51
14	5I	58/61 (95%)	48 (83%)	8 (14%)	2 (3%)	5	31
15	6A	86/89 (97%)	76 (88%)	10 (12%)	0	100	100
15	6I	85/89 (96%)	80 (94%)	5 (6%)	0	100	100
16	7A	82/88 (93%)	74 (90%)	8 (10%)	0	100	100
16	7I	81/88 (92%)	78 (96%)	3 (4%)	0	100	100
17	8A	97/105 (92%)	90 (93%)	7 (7%)	0	100	100
17	8I	98/105 (93%)	91 (93%)	7 (7%)	0	100	100
18	9A	65/88 (74%)	62 (95%)	2 (3%)	1 (2%)	13	55
18	9I	66/88 (75%)	62 (94%)	3 (4%)	1 (2%)	13	55
19	AA	56/93 (60%)	49 (88%)	5 (9%)	2 (4%)	4	30
19	AI	79/93 (85%)	67 (85%)	10 (13%)	2 (2%)	7	41
20	BA	97/106 (92%)	80 (82%)	15 (16%)	2 (2%)	9	46
20	BI	95/106 (90%)	80 (84%)	15 (16%)	0	100	100
21	1B	20/27 (74%)	19 (95%)	1 (5%)	0	100	100
21	1F	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
28	71	129/229 (56%)	119 (92%)	10 (8%)	0	100	100
28	79	45/229 (20%)	41 (91%)	4 (9%)	0	100	100
29	11	271/276 (98%)	243 (90%)	17 (6%)	11 (4%)	3	27

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
29	19	272/276 (99%)	241 (89%)	25 (9%)	6 (2%)	8	45
30	21	201/206 (98%)	157 (78%)	36 (18%)	8 (4%)	4	27
30	29	202/206 (98%)	157 (78%)	37 (18%)	8 (4%)	4	27
31	31	200/210 (95%)	175 (88%)	25 (12%)	0	100	100
31	39	202/210 (96%)	157 (78%)	36 (18%)	9 (4%)	3	24
32	41	177/182 (97%)	155 (88%)	19 (11%)	3 (2%)	11	52
32	49	177/182 (97%)	153 (86%)	22 (12%)	2 (1%)	17	62
33	51	169/180 (94%)	135 (80%)	24 (14%)	10 (6%)	2	16
33	59	67/180 (37%)	50 (75%)	14 (21%)	3 (4%)	3	24
34	61	144/148 (97%)	122 (85%)	20 (14%)	2 (1%)	14	57
34	69	143/148 (97%)	116 (81%)	26 (18%)	1 (1%)	26	72
35	15	136/140 (97%)	119 (88%)	16 (12%)	1 (1%)	26	72
35	58	136/140 (97%)	114 (84%)	19 (14%)	3 (2%)	8	45
36	25	120/122 (98%)	111 (92%)	9 (8%)	0	100	100
36	68	120/122 (98%)	113 (94%)	7 (6%)	0	100	100
37	35	145/150 (97%)	114 (79%)	29 (20%)	2 (1%)	14	57
37	78	145/150 (97%)	115 (79%)	25 (17%)	5 (3%)	5	31
38	45	136/141 (96%)	112 (82%)	21 (15%)	3 (2%)	8	45
38	88	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	4	30
39	55	116/118 (98%)	109 (94%)	6 (5%)	1 (1%)	21	67
39	98	116/118 (98%)	101 (87%)	14 (12%)	1 (1%)	21	67
40	65	108/112 (96%)	86 (80%)	20 (18%)	2 (2%)	10	50
40	A8	109/112 (97%)	92 (84%)	14 (13%)	3 (3%)	6	37
41	75	131/146 (90%)	119 (91%)	12 (9%)	0	100	100
41	B8	131/146 (90%)	119 (91%)	12 (9%)	0	100	100
42	85	114/118 (97%)	101 (89%)	11 (10%)	2 (2%)	11	51
42	C8	113/118 (96%)	104 (92%)	6 (5%)	3 (3%)	6	39
43	95	98/101 (97%)	77 (79%)	14 (14%)	7 (7%)	1	10
43	D8	98/101 (97%)	87 (89%)	6 (6%)	5 (5%)	2	20
44	A5	111/113 (98%)	106 (96%)	4 (4%)	1 (1%)	21	67
44	E8	110/113 (97%)	101 (92%)	9 (8%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	B5	92/96 (96%)	85 (92%)	4 (4%)	3 (3%)	5	32
45	F8	93/96 (97%)	85 (91%)	7 (8%)	1 (1%)	17	62
46	C5	102/110 (93%)	75 (74%)	17 (17%)	10 (10%)	1	4
46	G8	103/110 (94%)	86 (84%)	13 (13%)	4 (4%)	4	28
47	D5	126/206 (61%)	100 (79%)	21 (17%)	5 (4%)	4	27
47	H8	169/206 (82%)	136 (80%)	25 (15%)	8 (5%)	3	22
48	E5	75/85 (88%)	66 (88%)	8 (11%)	1 (1%)	15	59
48	I8	74/85 (87%)	68 (92%)	6 (8%)	0	100	100
49	F5	92/98 (94%)	85 (92%)	6 (6%)	1 (1%)	17	62
49	J8	92/98 (94%)	83 (90%)	8 (9%)	1 (1%)	17	62
50	G5	64/72 (89%)	59 (92%)	3 (5%)	2 (3%)	5	34
50	K8	66/72 (92%)	58 (88%)	5 (8%)	3 (4%)	3	24
51	H5	56/60 (93%)	53 (95%)	3 (5%)	0	100	100
51	L8	56/60 (93%)	51 (91%)	5 (9%)	0	100	100
52	M8	45/71 (63%)	29 (64%)	15 (33%)	1 (2%)	8	45
53	J5	54/60 (90%)	50 (93%)	4 (7%)	0	100	100
53	N8	46/60 (77%)	43 (94%)	3 (6%)	0	100	100
54	L5	45/49 (92%)	43 (96%)	2 (4%)	0	100	100
54	P8	45/49 (92%)	39 (87%)	6 (13%)	0	100	100
55	M5	62/65 (95%)	52 (84%)	8 (13%)	2 (3%)	5	33
55	Q8	62/65 (95%)	50 (81%)	9 (14%)	3 (5%)	3	22
All	All	10973/12333 (89%)	9576 (87%)	1201 (11%)	196 (2%)	11	51

All (196) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
14	5I	13	THR
18	9I	22	VAL
29	11	28	GLU
29	11	40	THR
29	11	237	GLU
30	21	83	ASP
45	F8	4	ALA
46	G8	81	LYS
47	H8	165	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	K8	48	HIS
55	Q8	52	LYS
55	Q8	53	PRO
2	12	219	VAL
9	82	118	LYS
20	BA	73	HIS
29	19	273	ARG
30	29	25	VAL
31	39	28	ILE
31	39	84	VAL
38	45	27	VAL
39	55	107	ASP
43	95	44	LYS
43	95	45	THR
47	D5	53	ILE
48	E5	33	ALA
49	F5	30	VAL
50	G5	48	HIS
55	M5	49	VAL
2	1E	10	LEU
4	3E	90	GLY
8	7E	86	ILE
12	3I	48	PRO
29	11	273	ARG
30	21	78	LEU
33	51	10	PRO
33	51	157	TYR
37	78	25	SER
38	88	6	ARG
38	88	66	ILE
38	88	134	ARG
42	C8	89	GLU
46	G8	54	LYS
47	H8	60	GLU
11	2A	48	ILE
11	2A	101	SER
12	3A	18	VAL
12	3A	26	ALA
14	5A	29	ARG
19	AA	9	VAL
20	BA	49	ALA
29	19	46	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	19	237	GLU
30	29	59	VAL
30	29	81	ILE
31	39	124	LEU
31	39	132	VAL
37	35	15	ARG
42	85	96	ALA
43	95	80	GLN
46	C5	29	GLU
2	1E	238	LEU
14	5I	14	PRO
30	21	118	LYS
33	51	84	SER
38	88	7	MET
39	98	11	ASN
42	C8	93	LYS
43	D8	45	THR
43	D8	48	GLY
30	29	51	PHE
31	39	26	ALA
31	39	149	ASP
31	39	167	ALA
38	45	78	PRO
46	C5	17	SER
46	C5	99	CYS
47	D5	161	VAL
4	3E	89	THR
29	11	3	VAL
29	11	122	ASP
30	21	56	PRO
30	21	60	ASN
32	41	97	ASP
33	51	137	ASP
33	51	138	LYS
33	51	154	PRO
33	51	169	VAL
34	61	145	VAL
35	58	128	HIS
35	58	135	PRO
37	78	6	LEU
40	A8	3	ARG
43	D8	38	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	H8	6	LYS
47	H8	81	ARG
49	J8	93	GLU
52	M8	5	ILE
55	Q8	35	GLN
2	12	220	ASP
12	3A	19	ARG
29	19	274	ARG
30	29	9	VAL
31	39	25	PRO
32	49	47	LYS
33	59	73	ALA
34	69	111	PRO
37	35	35	HIS
40	65	87	PHE
40	65	111	GLU
44	A5	44	ALA
45	B5	22	ALA
46	C5	63	LYS
50	G5	47	ASN
55	M5	35	GLN
2	1E	237	ALA
4	3E	155	LEU
19	AI	7	LYS
19	AI	41	VAL
29	11	27	THR
30	21	55	ASN
32	41	5	VAL
32	41	96	ARG
33	51	83	TYR
33	51	85	LYS
34	61	133	HIS
35	58	97	ARG
40	A8	13	ARG
40	A8	88	ASP
42	C8	92	ARG
43	D8	49	THR
46	G8	76	CYS
47	H8	59	LEU
50	K8	43	GLN
50	K8	47	ASN
3	22	93	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	42	60	TYR
7	62	147	ALA
30	29	26	ILE
35	15	128	HIS
45	B5	68	ARG
46	C5	20	TYR
46	C5	92	ASN
46	C5	94	LYS
9	8E	94	ALA
29	11	123	ALA
47	H8	61	LEU
2	12	49	GLU
8	72	73	ASP
12	3A	47	LYS
13	4A	84	ILE
30	29	77	ILE
43	95	71	LEU
47	D5	60	GLU
29	11	29	PRO
2	12	39	ILE
2	12	71	VAL
2	12	223	ILE
29	19	3	VAL
31	39	24	LEU
38	45	81	VAL
42	85	90	VAL
43	95	72	VAL
46	C5	85	VAL
11	2I	82	VAL
30	21	21	VAL
33	51	12	PRO
37	78	95	VAL
43	D8	47	VAL
47	H8	53	ILE
19	AA	67	VAL
32	49	5	VAL
45	B5	51	VAL
47	D5	165	VAL
29	11	35	LYS
29	11	240	ALA
37	78	7	ARG
38	88	78	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	G8	53	PRO
47	H8	141	VAL
4	32	28	SER
18	9A	52	PRO
33	59	169	VAL
5	4E	115	VAL
37	78	47	ASP
2	12	81	VAL
12	3A	25	PRO
30	29	62	PRO
33	59	167	GLU
43	95	50	PRO
43	95	99	ILE
46	C5	3	VAL
46	C5	55	TYR
47	D5	158	PRO
13	4I	4	ILE
30	21	52	LEU
29	19	240	ALA

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	12	182/220 (83%)	154 (85%)	28 (15%)	3	16
2	1E	200/220 (91%)	143 (72%)	57 (28%)	0	1
3	22	154/188 (82%)	123 (80%)	31 (20%)	1	7
3	2E	159/188 (85%)	124 (78%)	35 (22%)	1	6
4	32	180/181 (99%)	143 (79%)	37 (21%)	1	7
4	3E	180/181 (99%)	137 (76%)	43 (24%)	1	3
5	42	114/123 (93%)	91 (80%)	23 (20%)	1	7
5	4E	115/123 (94%)	98 (85%)	17 (15%)	4	18
6	52	90/90 (100%)	72 (80%)	18 (20%)	1	8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
6	5E	90/90 (100%)	73 (81%)	17 (19%)	2	10
7	62	114/127 (90%)	95 (83%)	19 (17%)	3	13
7	6E	125/127 (98%)	101 (81%)	24 (19%)	2	10
8	72	118/119 (99%)	98 (83%)	20 (17%)	2	13
8	7E	119/119 (100%)	93 (78%)	26 (22%)	1	6
9	82	92/99 (93%)	71 (77%)	21 (23%)	1	5
9	8E	97/99 (98%)	77 (79%)	20 (21%)	1	7
10	1A	71/92 (77%)	51 (72%)	20 (28%)	0	1
10	1I	81/92 (88%)	65 (80%)	16 (20%)	1	8
11	2A	85/99 (86%)	70 (82%)	15 (18%)	2	11
11	2I	84/99 (85%)	61 (73%)	23 (27%)	0	1
12	3A	103/109 (94%)	81 (79%)	22 (21%)	1	6
12	3I	103/109 (94%)	87 (84%)	16 (16%)	3	15
13	4A	91/101 (90%)	70 (77%)	21 (23%)	1	4
13	4I	94/101 (93%)	75 (80%)	19 (20%)	1	7
14	5A	49/50 (98%)	41 (84%)	8 (16%)	3	14
14	5I	49/50 (98%)	38 (78%)	11 (22%)	1	5
15	6A	79/80 (99%)	67 (85%)	12 (15%)	3	17
15	6I	79/80 (99%)	62 (78%)	17 (22%)	1	6
16	7A	72/74 (97%)	52 (72%)	20 (28%)	0	1
16	7I	72/74 (97%)	51 (71%)	21 (29%)	0	1
17	8A	94/97 (97%)	79 (84%)	15 (16%)	3	14
17	8I	95/97 (98%)	79 (83%)	16 (17%)	2	13
18	9A	58/77 (75%)	42 (72%)	16 (28%)	0	1
18	9I	58/77 (75%)	44 (76%)	14 (24%)	1	3
19	AA	52/80 (65%)	40 (77%)	12 (23%)	1	4
19	AI	71/80 (89%)	58 (82%)	13 (18%)	2	10
20	BA	76/82 (93%)	63 (83%)	13 (17%)	2	12
20	BI	75/82 (92%)	59 (79%)	16 (21%)	1	7
21	1B	17/22 (77%)	16 (94%)	1 (6%)	24	65
21	1F	18/22 (82%)	17 (94%)	1 (6%)	26	68

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
28	71	109/181 (60%)	87 (80%)	22 (20%)	1	7
28	79	48/181 (26%)	38 (79%)	10 (21%)	1	7
29	11	214/218 (98%)	161 (75%)	53 (25%)	1	3
29	19	214/218 (98%)	169 (79%)	45 (21%)	1	7
30	21	165/166 (99%)	128 (78%)	37 (22%)	1	5
30	29	165/166 (99%)	126 (76%)	39 (24%)	1	4
31	31	161/166 (97%)	126 (78%)	35 (22%)	1	6
31	39	163/166 (98%)	130 (80%)	33 (20%)	1	7
32	41	153/156 (98%)	121 (79%)	32 (21%)	1	7
32	49	153/156 (98%)	125 (82%)	28 (18%)	2	10
33	51	142/148 (96%)	109 (77%)	33 (23%)	1	4
33	59	59/148 (40%)	50 (85%)	9 (15%)	3	17
34	61	122/124 (98%)	95 (78%)	27 (22%)	1	5
34	69	122/124 (98%)	88 (72%)	34 (28%)	0	1
35	15	117/119 (98%)	87 (74%)	30 (26%)	0	2
35	58	117/119 (98%)	90 (77%)	27 (23%)	1	4
36	25	100/100 (100%)	82 (82%)	18 (18%)	2	11
36	68	100/100 (100%)	85 (85%)	15 (15%)	3	17
37	35	114/116 (98%)	78 (68%)	36 (32%)	0	1
37	78	114/116 (98%)	80 (70%)	34 (30%)	0	1
38	45	109/111 (98%)	89 (82%)	20 (18%)	2	10
38	88	109/111 (98%)	87 (80%)	22 (20%)	1	7
39	55	101/101 (100%)	83 (82%)	18 (18%)	2	11
39	98	101/101 (100%)	76 (75%)	25 (25%)	1	3
40	65	87/88 (99%)	64 (74%)	23 (26%)	0	2
40	A8	87/88 (99%)	67 (77%)	20 (23%)	1	4
41	75	117/127 (92%)	91 (78%)	26 (22%)	1	5
41	B8	117/127 (92%)	87 (74%)	30 (26%)	0	2
42	85	93/94 (99%)	83 (89%)	10 (11%)	8	33
42	C8	92/94 (98%)	76 (83%)	16 (17%)	2	12
43	95	82/82 (100%)	61 (74%)	21 (26%)	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	D8	82/82 (100%)	59 (72%)	23 (28%)	0	1
44	A5	92/92 (100%)	73 (79%)	19 (21%)	1	7
44	E8	91/92 (99%)	65 (71%)	26 (29%)	0	1
45	B5	74/78 (95%)	52 (70%)	22 (30%)	0	1
45	F8	75/78 (96%)	64 (85%)	11 (15%)	4	18
46	C5	85/91 (93%)	60 (71%)	25 (29%)	0	1
46	G8	85/91 (93%)	70 (82%)	15 (18%)	2	11
47	D5	118/179 (66%)	93 (79%)	25 (21%)	1	7
47	H8	152/179 (85%)	113 (74%)	39 (26%)	0	2
48	E5	61/67 (91%)	53 (87%)	8 (13%)	5	24
48	I8	61/67 (91%)	51 (84%)	10 (16%)	3	13
49	F5	79/83 (95%)	61 (77%)	18 (23%)	1	5
49	J8	79/83 (95%)	60 (76%)	19 (24%)	1	3
50	G5	62/67 (92%)	47 (76%)	15 (24%)	1	3
50	K8	62/67 (92%)	44 (71%)	18 (29%)	0	1
51	H5	50/52 (96%)	40 (80%)	10 (20%)	1	8
51	L8	50/52 (96%)	38 (76%)	12 (24%)	1	3
52	M8	42/63 (67%)	31 (74%)	11 (26%)	0	2
53	J5	48/52 (92%)	39 (81%)	9 (19%)	2	10
53	N8	43/52 (83%)	34 (79%)	9 (21%)	1	7
54	L5	38/42 (90%)	33 (87%)	5 (13%)	5	23
54	P8	38/42 (90%)	34 (90%)	4 (10%)	8	35
55	M5	54/55 (98%)	44 (82%)	10 (18%)	2	10
55	Q8	54/55 (98%)	39 (72%)	15 (28%)	0	1
All	All	9277/10193 (91%)	7277 (78%)	2000 (22%)	1	6

All (2000) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	1E	8	LYS
2	1E	10	LEU
2	1E	17	PHE
2	1E	21	ARG
2	1E	23	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	1E	24	TRP
2	1E	28	PHE
2	1E	32	ILE
2	1E	35	GLU
2	1E	41	ILE
2	1E	49	GLU
2	1E	51	LEU
2	1E	52	GLU
2	1E	55	PHE
2	1E	67	THR
2	1E	69	LEU
2	1E	71	VAL
2	1E	79	ASP
2	1E	83	MET
2	1E	86	GLU
2	1E	87	ARG
2	1E	93	VAL
2	1E	95	GLN
2	1E	96	ARG
2	1E	108	ILE
2	1E	111	ARG
2	1E	115	LEU
2	1E	118	LEU
2	1E	122	PHE
2	1E	129	GLU
2	1E	143	GLU
2	1E	144	ARG
2	1E	155	LEU
2	1E	160	ASP
2	1E	162	ILE
2	1E	163	PHE
2	1E	172	ILE
2	1E	178	ARG
2	1E	184	VAL
2	1E	185	ILE
2	1E	190	THR
2	1E	195	ASP
2	1E	197	VAL
2	1E	198	ASP
2	1E	200	ILE
2	1E	208	ILE
2	1E	209	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	1E	210	SER
2	1E	212	GLN
2	1E	214	ILE
2	1E	217	ARG
2	1E	222	ILE
2	1E	224	GLN
2	1E	226	ARG
2	1E	230	VAL
2	1E	231	GLU
2	1E	236	TYR
3	2E	3	ASN
3	2E	5	ILE
3	2E	16	ARG
3	2E	18	TRP
3	2E	27	LYS
3	2E	29	TYR
3	2E	30	ARG
3	2E	32	LEU
3	2E	36	ASP
3	2E	42	LEU
3	2E	48	TYR
3	2E	52	LEU
3	2E	63	ASN
3	2E	70	VAL
3	2E	88	ARG
3	2E	95	THR
3	2E	104	GLN
3	2E	105	GLU
3	2E	107	GLN
3	2E	110	ASN
3	2E	111	LEU
3	2E	115	LEU
3	2E	118	GLN
3	2E	128	PHE
3	2E	136	GLN
3	2E	166	GLU
3	2E	172	ARG
3	2E	175	LEU
3	2E	178	LEU
3	2E	179	ARG
3	2E	188	LEU
3	2E	190	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	2E	192	THR
3	2E	202	ILE
3	2E	206	GLU
4	3E	3	ARG
4	3E	10	ARG
4	3E	15	GLU
4	3E	19	LEU
4	3E	28	SER
4	3E	31	CYS
4	3E	45	GLN
4	3E	46	LYS
4	3E	47	ARG
4	3E	50	ARG
4	3E	52	SER
4	3E	58	LEU
4	3E	61	LYS
4	3E	66	ARG
4	3E	84	LYS
4	3E	86	LYS
4	3E	88	VAL
4	3E	89	THR
4	3E	96	LEU
4	3E	106	TYR
4	3E	115	ARG
4	3E	122	ARG
4	3E	127	THR
4	3E	135	LEU
4	3E	138	TYR
4	3E	145	GLU
4	3E	146	ILE
4	3E	151	LYS
4	3E	154	ASN
4	3E	155	LEU
4	3E	158	ILE
4	3E	160	GLN
4	3E	168	ARG
4	3E	170	VAL
4	3E	175	SER
4	3E	177	ASP
4	3E	184	LYS
4	3E	187	ARG
4	3E	188	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	3E	190	ASP
4	3E	193	ASP
4	3E	200	GLU
4	3E	209	ARG
5	4E	10	MET
5	4E	11	ILE
5	4E	12	LEU
5	4E	15	ARG
5	4E	26	PHE
5	4E	41	VAL
5	4E	64	ARG
5	4E	68	GLU
5	4E	72	GLN
5	4E	79	GLU
5	4E	87	SER
5	4E	107	ARG
5	4E	112	LEU
5	4E	116	THR
5	4E	147	ASP
5	4E	149	GLU
5	4E	153	LYS
6	5E	15	ASP
6	5E	16	GLN
6	5E	19	LEU
6	5E	25	ILE
6	5E	31	GLU
6	5E	32	ASN
6	5E	36	ARG
6	5E	40	VAL
6	5E	43	LEU
6	5E	47	ARG
6	5E	55	ASP
6	5E	64	GLN
6	5E	70	ASP
6	5E	75	LEU
6	5E	78	GLU
6	5E	80	ARG
6	5E	89	MET
7	6E	3	ARG
7	6E	5	ARG
7	6E	8	GLU
7	6E	11	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	6E	15	ASP
7	6E	20	ASP
7	6E	21	VAL
7	6E	22	LEU
7	6E	24	THR
7	6E	32	ARG
7	6E	38	LEU
7	6E	52	GLU
7	6E	54	THR
7	6E	59	LEU
7	6E	63	LYS
7	6E	73	MET
7	6E	89	MET
7	6E	97	GLN
7	6E	104	LEU
7	6E	111	ARG
7	6E	118	VAL
7	6E	148	ASN
7	6E	149	ARG
7	6E	155	ARG
8	7E	1	MET
8	7E	3	THR
8	7E	25	ASP
8	7E	26	VAL
8	7E	31	PHE
8	7E	32	LYS
8	7E	33	GLU
8	7E	34	GLU
8	7E	35	ILE
8	7E	36	LEU
8	7E	39	LEU
8	7E	45	ILE
8	7E	51	VAL
8	7E	63	LEU
8	7E	65	TYR
8	7E	68	ARG
8	7E	85	ARG
8	7E	89	PRO
8	7E	97	VAL
8	7E	99	GLU
8	7E	102	ARG
8	7E	104	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	7E	112	LEU
8	7E	122	ARG
8	7E	125	ARG
8	7E	129	VAL
9	8E	7	THR
9	8E	9	ARG
9	8E	10	ARG
9	8E	20	ARG
9	8E	42	ARG
9	8E	47	LEU
9	8E	56	LEU
9	8E	75	ASP
9	8E	77	ILE
9	8E	79	LEU
9	8E	83	ARG
9	8E	88	TYR
9	8E	91	ASP
9	8E	95	LYS
9	8E	96	LEU
9	8E	99	LEU
9	8E	113	LYS
9	8E	117	HIS
9	8E	121	ARG
9	8E	125	TYR
10	1I	33	GLN
10	1I	38	ILE
10	1I	43	ARG
10	1I	54	PHE
10	1I	58	ASP
10	1I	61	GLU
10	1I	62	HIS
10	1I	67	THR
10	1I	70	ARG
10	1I	75	ILE
10	1I	83	GLU
10	1I	88	LEU
10	1I	89	ASP
10	1I	90	LEU
10	1I	95	GLU
10	1I	96	ILE
11	2I	18	ARG
11	2I	22	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	2I	25	TYR
11	2I	29	ILE
11	2I	30	VAL
11	2I	31	THR
11	2I	47	VAL
11	2I	51	LYS
11	2I	54	ARG
11	2I	63	LEU
11	2I	71	LYS
11	2I	75	TYR
11	2I	81	ASP
11	2I	87	THR
11	2I	96	ARG
11	2I	103	LEU
11	2I	105	VAL
11	2I	106	LYS
11	2I	109	VAL
11	2I	114	VAL
11	2I	116	HIS
11	2I	117	ASN
11	2I	126	ARG
12	3I	7	ILE
12	3I	16	GLU
12	3I	20	LYS
12	3I	33	ARG
12	3I	34	ARG
12	3I	47	LYS
12	3I	50	SER
12	3I	57	LYS
12	3I	60	LEU
12	3I	62	SER
12	3I	67	THR
12	3I	79	GLU
12	3I	89	ARG
12	3I	111	LYS
12	3I	114	LYS
12	3I	115	LYS
13	4I	11	ARG
13	4I	13	LYS
13	4I	17	VAL
13	4I	44	ARG
13	4I	45	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	4I	57	ARG
13	4I	64	TRP
13	4I	67	GLU
13	4I	70	LEU
13	4I	84	ILE
13	4I	86	CYS
13	4I	88	ARG
13	4I	93	ARG
13	4I	102	ARG
13	4I	105	THR
13	4I	106	ASN
13	4I	108	ARG
13	4I	109	THR
13	4I	117	VAL
14	5I	6	LEU
14	5I	7	ILE
14	5I	8	GLU
14	5I	22	THR
14	5I	23	ARG
14	5I	26	ARG
14	5I	29	ARG
14	5I	31	ARG
14	5I	33	VAL
14	5I	41	ARG
14	5I	46	GLU
15	6I	3	ILE
15	6I	6	GLU
15	6I	10	LYS
15	6I	17	ARG
15	6I	26	GLU
15	6I	31	LEU
15	6I	35	ARG
15	6I	38	ARG
15	6I	39	LEU
15	6I	59	MET
15	6I	65	ARG
15	6I	66	LEU
15	6I	71	GLN
15	6I	72	ARG
15	6I	79	ARG
15	6I	82	ILE
15	6I	84	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
16	7I	1	MET
16	7I	4	ILE
16	7I	6	LEU
16	7I	8	ARG
16	7I	11	SER
16	7I	18	ARG
16	7I	19	ILE
16	7I	20	VAL
16	7I	22	THR
16	7I	26	ARG
16	7I	27	LYS
16	7I	28	ARG
16	7I	44	THR
16	7I	45	THR
16	7I	50	LYS
16	7I	54	GLU
16	7I	65	GLN
16	7I	67	THR
16	7I	69	THR
16	7I	72	ARG
16	7I	83	GLU
17	8I	13	ASP
17	8I	14	LYS
17	8I	35	VAL
17	8I	38	ARG
17	8I	45	HIS
17	8I	50	LYS
17	8I	52	LYS
17	8I	60	ILE
17	8I	63	ARG
17	8I	68	ARG
17	8I	74	LEU
17	8I	78	GLU
17	8I	85	VAL
17	8I	89	LEU
17	8I	100	LYS
17	8I	101	ARG
18	9I	22	VAL
18	9I	23	LYS
18	9I	25	THR
18	9I	28	GLU
18	9I	31	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	9I	33	ASP
18	9I	36	ASN
18	9I	42	ARG
18	9I	54	ARG
18	9I	56	THR
18	9I	59	SER
18	9I	68	LYS
18	9I	85	LEU
18	9I	86	VAL
19	AI	5	LEU
19	AI	7	LYS
19	AI	11	VAL
19	AI	17	GLU
19	AI	21	GLU
19	AI	27	GLU
19	AI	29	ARG
19	AI	37	ARG
19	AI	48	THR
19	AI	58	VAL
19	AI	64	GLU
19	AI	65	ASN
19	AI	71	LEU
20	BI	9	ASN
20	BI	13	LEU
20	BI	34	LYS
20	BI	37	SER
20	BI	42	GLN
20	BI	53	LEU
20	BI	54	LYS
20	BI	55	ILE
20	BI	57	ARG
20	BI	72	LEU
20	BI	73	HIS
20	BI	75	ASN
20	BI	86	ARG
20	BI	87	LYS
20	BI	93	GLU
20	BI	104	LEU
21	1F	10	ARG
28	71	19	ILE
28	71	32	LEU
28	71	34	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	71	55	ASP
28	71	62	VAL
28	71	68	LEU
28	71	165	ASN
28	71	166	ASP
28	71	168	THR
28	71	171	ILE
28	71	172	HIS
28	71	175	VAL
28	71	180	PHE
28	71	185	LEU
28	71	190	ARG
28	71	202	GLU
28	71	212	VAL
28	71	216	THR
28	71	218	MET
28	71	224	ILE
28	71	225	ASN
28	71	227	HIS
29	11	3	VAL
29	11	4	LYS
29	11	6	PHE
29	11	13	ARG
29	11	17	THR
29	11	23	GLU
29	11	27	THR
29	11	28	GLU
29	11	30	GLU
29	11	31	LYS
29	11	33	LEU
29	11	34	VAL
29	11	35	LYS
29	11	37	LEU
29	11	38	LYS
29	11	39	LYS
29	11	40	THR
29	11	43	ARG
29	11	44	ASN
29	11	58	HIS
29	11	61	LEU
29	11	64	ILE
29	11	65	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	11	94	LEU
29	11	103	ARG
29	11	105	ILE
29	11	106	ILE
29	11	111	LEU
29	11	112	GLN
29	11	113	VAL
29	11	115	GLN
29	11	117	VAL
29	11	126	GLN
29	11	141	VAL
29	11	154	LYS
29	11	157	ARG
29	11	164	GLN
29	11	165	ILE
29	11	173	VAL
29	11	183	ARG
29	11	192	THR
29	11	193	VAL
29	11	212	SER
29	11	217	ARG
29	11	221	VAL
29	11	229	VAL
29	11	233	HIS
29	11	239	ARG
29	11	242	ARG
29	11	254	THR
29	11	261	LYS
29	11	268	ARG
29	11	271	ILE
30	21	4	ILE
30	21	5	LEU
30	21	7	VAL
30	21	12	THR
30	21	14	ILE
30	21	25	VAL
30	21	26	ILE
30	21	34	VAL
30	21	38	THR
30	21	40	GLU
30	21	42	ASP
30	21	45	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	21	48	GLN
30	21	54	GLN
30	21	63	LEU
30	21	67	PHE
30	21	78	LEU
30	21	79	ARG
30	21	101	ARG
30	21	102	VAL
30	21	111	ARG
30	21	113	PHE
30	21	118	LYS
30	21	119	ARG
30	21	138	PRO
30	21	144	ARG
30	21	146	THR
30	21	152	LYS
30	21	165	VAL
30	21	171	GLU
30	21	175	VAL
30	21	180	ASN
30	21	181	LEU
30	21	188	VAL
30	21	195	LEU
30	21	197	ILE
30	21	203	LYS
31	31	7	TYR
31	31	13	SER
31	31	15	SER
31	31	17	ARG
31	31	18	ARG
31	31	23	ASP
31	31	27	GLU
31	31	33	LEU
31	31	38	ARG
31	31	43	LYS
31	31	52	LYS
31	31	64	ILE
31	31	66	PRO
31	31	67	GLN
31	31	74	ARG
31	31	77	ASP
31	31	78	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	31	82	ILE
31	31	88	VAL
31	31	96	ASP
31	31	117	ARG
31	31	119	ARG
31	31	140	LEU
31	31	155	LEU
31	31	158	THR
31	31	162	LEU
31	31	164	ARG
31	31	174	VAL
31	31	181	LEU
31	31	183	VAL
31	31	188	ARG
31	31	191	ARG
31	31	196	LEU
31	31	197	ASP
31	31	203	GLN
32	41	4	ASP
32	41	13	GLU
32	41	19	LEU
32	41	21	ARG
32	41	22	ARG
32	41	28	VAL
32	41	45	GLU
32	41	48	GLU
32	41	51	ARG
32	41	58	GLN
32	41	60	LEU
32	41	63	ILE
32	41	67	LYS
32	41	76	SER
32	41	78	SER
32	41	80	PHE
32	41	82	LEU
32	41	88	ILE
32	41	90	LEU
32	41	94	LEU
32	41	96	ARG
32	41	101	ILE
32	41	116	ASP
32	41	118	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	41	130	ASN
32	41	132	ASN
32	41	136	ARG
32	41	139	LEU
32	41	147	ASP
32	41	155	MET
32	41	162	THR
32	41	167	GLU
33	51	7	LEU
33	51	9	ILE
33	51	13	LYS
33	51	15	VAL
33	51	23	ARG
33	51	32	GLU
33	51	40	GLU
33	51	41	MET
33	51	43	VAL
33	51	45	VAL
33	51	57	ASP
33	51	64	LEU
33	51	69	ARG
33	51	71	LEU
33	51	72	ILE
33	51	77	LYS
33	51	79	VAL
33	51	80	SER
33	51	83	TYR
33	51	98	LEU
33	51	104	GLU
33	51	116	GLU
33	51	119	GLU
33	51	122	THR
33	51	127	GLU
33	51	129	THR
33	51	131	VAL
33	51	132	ARG
33	51	136	ILE
33	51	149	ARG
33	51	152	ARG
33	51	167	GLU
33	51	171	LEU
34	61	2	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	61	7	GLU
34	61	9	LEU
34	61	25	TYR
34	61	38	LEU
34	61	41	GLU
34	61	48	GLU
34	61	75	LEU
34	61	77	LEU
34	61	81	VAL
34	61	82	ARG
34	61	85	GLU
34	61	86	THR
34	61	92	VAL
34	61	95	LYS
34	61	108	THR
34	61	110	ASP
34	61	112	LYS
34	61	117	GLU
34	61	118	LYS
34	61	122	GLU
34	61	127	VAL
34	61	135	GLU
34	61	140	LEU
34	61	141	LYS
34	61	142	VAL
34	61	145	VAL
35	58	5	VAL
35	58	7	LYS
35	58	9	VAL
35	58	10	GLU
35	58	16	ILE
35	58	32	THR
35	58	34	LEU
35	58	42	TRP
35	58	43	THR
35	58	46	VAL
35	58	48	MET
35	58	58	ASP
35	58	60	ILE
35	58	65	LYS
35	58	79	PRO
35	58	87	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	58	88	GLU
35	58	97	ARG
35	58	99	LEU
35	58	118	LYS
35	58	120	LEU
35	58	121	LYS
35	58	127	ASP
35	58	130	HIS
35	58	131	GLN
35	58	134	ARG
35	58	136	GLU
36	68	3	GLN
36	68	20	MET
36	68	21	CYS
36	68	23	ARG
36	68	24	VAL
36	68	28	SER
36	68	34	THR
36	68	35	VAL
36	68	39	ILE
36	68	47	ILE
36	68	53	LYS
36	68	65	THR
36	68	94	ARG
36	68	98	VAL
36	68	112	MET
37	78	1	MET
37	78	2	LYS
37	78	5	ASP
37	78	6	LEU
37	78	10	PRO
37	78	21	ARG
37	78	30	THR
37	78	32	THR
37	78	36	LYS
37	78	41	ARG
37	78	46	LYS
37	78	49	ARG
37	78	50	ARG
37	78	56	SER
37	78	59	LEU
37	78	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	78	67	MET
37	78	75	ILE
37	78	81	GLN
37	78	90	ARG
37	78	96	THR
37	78	98	GLU
37	78	99	LEU
37	78	100	LEU
37	78	101	VAL
37	78	106	LEU
37	78	112	LEU
37	78	114	ILE
37	78	121	LYS
37	78	126	VAL
37	78	133	SER
37	78	138	LEU
37	78	144	GLU
37	78	146	VAL
38	88	5	ARG
38	88	6	ARG
38	88	7	MET
38	88	10	ARG
38	88	12	GLN
38	88	18	LYS
38	88	21	THR
38	88	25	ASP
38	88	27	VAL
38	88	45	GLN
38	88	56	ARG
38	88	58	PHE
38	88	78	PRO
38	88	79	LEU
38	88	83	MET
38	88	103	MET
38	88	109	VAL
38	88	110	THR
38	88	112	GLU
38	88	129	THR
38	88	138	ASP
38	88	141	GLN
39	98	1	MET
39	98	2	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	98	9	LYS
39	98	10	LEU
39	98	18	LEU
39	98	24	GLN
39	98	28	LEU
39	98	29	LEU
39	98	33	ARG
39	98	34	ILE
39	98	35	THR
39	98	44	LEU
39	98	54	LEU
39	98	57	ARG
39	98	65	LEU
39	98	67	LEU
39	98	73	VAL
39	98	75	LEU
39	98	79	LEU
39	98	82	GLU
39	98	96	ARG
39	98	100	LEU
39	98	103	ARG
39	98	117	VAL
39	98	118	GLU
40	A8	4	LEU
40	A8	14	VAL
40	A8	17	ARG
40	A8	20	ARG
40	A8	35	ILE
40	A8	36	TYR
40	A8	41	ASP
40	A8	46	VAL
40	A8	58	LEU
40	A8	61	ASN
40	A8	64	GLU
40	A8	73	LEU
40	A8	78	LEU
40	A8	80	LEU
40	A8	85	VAL
40	A8	89	ARG
40	A8	97	ARG
40	A8	98	VAL
40	A8	101	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	A8	106	ARG
41	B8	1	MET
41	B8	11	GLU
41	B8	13	ARG
41	B8	15	VAL
41	B8	16	ARG
41	B8	21	GLU
41	B8	42	ILE
41	B8	50	ILE
41	B8	52	ILE
41	B8	55	ASN
41	B8	58	ASN
41	B8	62	THR
41	B8	64	ARG
41	B8	74	ARG
41	B8	85	LYS
41	B8	86	ILE
41	B8	87	ASP
41	B8	88	ILE
41	B8	90	GLN
41	B8	96	ARG
41	B8	98	LYS
41	B8	99	LEU
41	B8	102	ILE
41	B8	106	SER
41	B8	108	ARG
41	B8	110	ILE
41	B8	111	ARG
41	B8	115	ARG
41	B8	124	ASP
41	B8	129	ARG
42	C8	5	LYS
42	C8	11	ARG
42	C8	16	LYS
42	C8	18	LEU
42	C8	27	LEU
42	C8	51	LYS
42	C8	52	ARG
42	C8	70	ARG
42	C8	74	LEU
42	C8	83	LEU
42	C8	84	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	C8	89	GLU
42	C8	94	ASN
42	C8	97	ASP
42	C8	108	GLU
42	C8	112	ARG
43	D8	5	VAL
43	D8	7	THR
43	D8	15	GLU
43	D8	18	LEU
43	D8	19	LYS
43	D8	20	LEU
43	D8	21	ARG
43	D8	22	VAL
43	D8	24	LYS
43	D8	25	LEU
43	D8	37	VAL
43	D8	40	LEU
43	D8	47	VAL
43	D8	49	THR
43	D8	52	VAL
43	D8	57	VAL
43	D8	58	VAL
43	D8	64	HIS
43	D8	71	LEU
43	D8	73	SER
43	D8	79	VAL
43	D8	85	LYS
43	D8	94	LEU
44	E8	11	ARG
44	E8	12	ILE
44	E8	15	ARG
44	E8	23	LEU
44	E8	24	ILE
44	E8	51	LEU
44	E8	52	GLU
44	E8	60	ASN
44	E8	64	MET
44	E8	65	LEU
44	E8	66	GLU
44	E8	68	ARG
44	E8	76	VAL
44	E8	77	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	E8	78	GLU
44	E8	82	LEU
44	E8	83	LYS
44	E8	84	ARG
44	E8	88	ARG
44	E8	92	ARG
44	E8	95	ILE
44	E8	96	ILE
44	E8	97	LYS
44	E8	101	SER
44	E8	103	ILE
44	E8	107	LEU
45	F8	1	MET
45	F8	38	GLU
45	F8	41	ASN
45	F8	53	LYS
45	F8	65	ARG
45	F8	68	ARG
45	F8	72	LYS
45	F8	75	ASP
45	F8	80	ILE
45	F8	82	GLN
45	F8	87	GLN
46	G8	3	VAL
46	G8	4	LYS
46	G8	6	HIS
46	G8	27	VAL
46	G8	38	ILE
46	G8	40	GLU
46	G8	44	ILE
46	G8	45	VAL
46	G8	54	LYS
46	G8	55	TYR
46	G8	57	GLN
46	G8	82	PRO
46	G8	85	VAL
46	G8	86	ARG
46	G8	96	ILE
47	H8	1	MET
47	H8	2	GLU
47	H8	11	GLU
47	H8	19	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	H8	33	LEU
47	H8	34	ASN
47	H8	35	ARG
47	H8	41	LEU
47	H8	46	LYS
47	H8	59	LEU
47	H8	61	LEU
47	H8	70	LEU
47	H8	71	VAL
47	H8	72	ARG
47	H8	77	ASP
47	H8	78	LYS
47	H8	81	ARG
47	H8	82	ARG
47	H8	85	HIS
47	H8	86	VAL
47	H8	92	SER
47	H8	94	GLU
47	H8	96	VAL
47	H8	105	VAL
47	H8	107	THR
47	H8	111	VAL
47	H8	112	ARG
47	H8	121	HIS
47	H8	123	ASP
47	H8	126	VAL
47	H8	128	VAL
47	H8	131	ARG
47	H8	140	ASP
47	H8	154	ASP
47	H8	155	LEU
47	H8	161	VAL
47	H8	163	LEU
47	H8	165	VAL
47	H8	169	GLU
48	I8	11	ARG
48	I8	36	ILE
48	I8	41	ARG
48	I8	53	MET
48	I8	60	PHE
48	I8	64	ASP
48	I8	66	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	I8	67	VAL
48	I8	70	GLN
48	I8	81	VAL
49	J8	4	VAL
49	J8	11	ARG
49	J8	19	GLN
49	J8	21	ARG
49	J8	25	LYS
49	J8	33	LYS
49	J8	41	ARG
49	J8	50	ARG
49	J8	62	VAL
49	J8	65	SER
49	J8	73	LEU
49	J8	74	VAL
49	J8	78	LYS
49	J8	80	LEU
49	J8	81	LYS
49	J8	82	LEU
49	J8	90	ILE
49	J8	91	LYS
49	J8	92	LYS
50	K8	15	LYS
50	K8	16	LEU
50	K8	17	SER
50	K8	19	VAL
50	K8	20	GLU
50	K8	24	LEU
50	K8	32	LEU
50	K8	35	LEU
50	K8	40	SER
50	K8	44	LEU
50	K8	46	GLN
50	K8	47	ASN
50	K8	48	HIS
50	K8	51	ARG
50	K8	53	LEU
50	K8	62	THR
50	K8	64	LEU
50	K8	65	ASN
51	L8	4	LEU
51	L8	6	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	L8	8	LEU
51	L8	9	VAL
51	L8	11	SER
51	L8	23	LEU
51	L8	26	LEU
51	L8	31	LEU
51	L8	37	LEU
51	L8	40	THR
51	L8	58	VAL
51	L8	59	VAL
52	M8	8	LYS
52	M8	10	VAL
52	M8	16	CYS
52	M8	20	ASN
52	M8	23	GLU
52	M8	25	TYR
52	M8	30	GLU
52	M8	35	VAL
52	M8	42	PHE
52	M8	43	TYR
52	M8	47	GLN
53	N8	3	LYS
53	N8	11	THR
53	N8	16	ARG
53	N8	26	THR
53	N8	35	GLU
53	N8	37	LYS
53	N8	40	LYS
53	N8	44	THR
53	N8	46	CYS
54	P8	4	THR
54	P8	8	ASN
54	P8	14	LYS
54	P8	23	ARG
55	Q8	4	MET
55	Q8	8	LYS
55	Q8	14	VAL
55	Q8	17	THR
55	Q8	30	ARG
55	Q8	32	LEU
55	Q8	34	TRP
55	Q8	35	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
55	Q8	41	ILE
55	Q8	46	ARG
55	Q8	47	LYS
55	Q8	49	VAL
55	Q8	50	LEU
55	Q8	59	LYS
55	Q8	62	LEU
2	12	19	HIS
2	12	22	LYS
2	12	24	TRP
2	12	42	ILE
2	12	52	GLU
2	12	53	ARG
2	12	54	THR
2	12	74	LYS
2	12	80	ILE
2	12	83	MET
2	12	84	GLU
2	12	108	ILE
2	12	126	GLU
2	12	127	ILE
2	12	129	GLU
2	12	130	ARG
2	12	139	LYS
2	12	158	LEU
2	12	172	ILE
2	12	179	LYS
2	12	187	LEU
2	12	191	ASP
2	12	196	LEU
2	12	200	ILE
2	12	209	ARG
2	12	211	ILE
2	12	212	GLN
2	12	220	ASP
3	22	12	LEU
3	22	16	ARG
3	22	27	LYS
3	22	29	TYR
3	22	34	LEU
3	22	52	LEU
3	22	54	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	22	88	ARG
3	22	90	GLU
3	22	93	LYS
3	22	94	LEU
3	22	105	GLU
3	22	122	GLU
3	22	124	ILE
3	22	127	ARG
3	22	131	ARG
3	22	132	ARG
3	22	140	ARG
3	22	141	VAL
3	22	142	MET
3	22	166	GLU
3	22	167	TRP
3	22	176	HIS
3	22	179	ARG
3	22	182	ILE
3	22	188	LEU
3	22	192	THR
3	22	195	VAL
3	22	196	LEU
3	22	198	VAL
3	22	204	LEU
4	32	3	ARG
4	32	4	TYR
4	32	12	CYS
4	32	13	ARG
4	32	19	LEU
4	32	21	LEU
4	32	22	LYS
4	32	38	TYR
4	32	50	ARG
4	32	61	LYS
4	32	66	ARG
4	32	73	ARG
4	32	74	GLN
4	32	76	ARG
4	32	83	SER
4	32	86	LYS
4	32	89	THR
4	32	99	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	32	101	LEU
4	32	106	TYR
4	32	122	ARG
4	32	135	LEU
4	32	141	ARG
4	32	146	ILE
4	32	150	GLU
4	32	152	SER
4	32	162	LEU
4	32	165	MET
4	32	168	ARG
4	32	176	LEU
4	32	182	LYS
4	32	184	LYS
4	32	187	ARG
4	32	191	ARG
4	32	193	ASP
4	32	196	LEU
4	32	201	GLN
5	42	7	GLU
5	42	15	ARG
5	42	31	LEU
5	42	41	VAL
5	42	45	PHE
5	42	47	LYS
5	42	50	GLU
5	42	56	GLN
5	42	61	TYR
5	42	66	MET
5	42	68	GLU
5	42	73	ASN
5	42	78	HIS
5	42	79	GLU
5	42	83	GLU
5	42	98	THR
5	42	107	ARG
5	42	118	ILE
5	42	126	ARG
5	42	127	ASN
5	42	143	ARG
5	42	147	ASP
5	42	153	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	52	3	ARG
6	52	5	GLU
6	52	7	ASN
6	52	14	LEU
6	52	15	ASP
6	52	16	GLN
6	52	19	LEU
6	52	21	LEU
6	52	23	LYS
6	52	28	ARG
6	52	36	ARG
6	52	37	VAL
6	52	46	ARG
6	52	47	ARG
6	52	54	LYS
6	52	69	GLU
6	52	78	GLU
6	52	94	GLN
7	62	9	VAL
7	62	16	LEU
7	62	51	GLN
7	62	60	LYS
7	62	64	GLN
7	62	66	VAL
7	62	70	LYS
7	62	72	ARG
7	62	73	MET
7	62	87	VAL
7	62	94	ARG
7	62	101	LEU
7	62	104	LEU
7	62	118	VAL
7	62	131	LYS
7	62	138	LYS
7	62	142	GLU
7	62	143	ARG
7	62	144	MET
8	72	2	LEU
8	72	15	ASN
8	72	21	LYS
8	72	26	VAL
8	72	33	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	72	50	ARG
8	72	63	LEU
8	72	69	ARG
8	72	70	GLN
8	72	81	HIS
8	72	82	HIS
8	72	85	ARG
8	72	86	ILE
8	72	99	GLU
8	72	102	ARG
8	72	104	ARG
8	72	119	LEU
8	72	121	ASP
8	72	125	ARG
8	72	127	LEU
9	82	5	TYR
9	82	7	THR
9	82	10	ARG
9	82	14	VAL
9	82	18	PHE
9	82	20	ARG
9	82	25	LYS
9	82	27	THR
9	82	33	PHE
9	82	36	TYR
9	82	40	LEU
9	82	42	ARG
9	82	48	GLU
9	82	53	VAL
9	82	60	ASP
9	82	83	ARG
9	82	95	LYS
9	82	99	LEU
9	82	113	LYS
9	82	117	HIS
9	82	125	TYR
10	1A	13	HIS
10	1A	14	LYS
10	1A	16	LEU
10	1A	17	ASP
10	1A	24	VAL
10	1A	25	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	1A	28	ARG
10	1A	29	ARG
10	1A	38	ILE
10	1A	49	VAL
10	1A	55	LYS
10	1A	58	ASP
10	1A	62	HIS
10	1A	66	ARG
10	1A	70	ARG
10	1A	73	ASP
10	1A	79	ARG
10	1A	80	LYS
10	1A	84	GLN
10	1A	92	THR
11	2A	29	ILE
11	2A	44	SER
11	2A	57	THR
11	2A	63	LEU
11	2A	78	GLN
11	2A	81	ASP
11	2A	92	GLU
11	2A	93	GLN
11	2A	95	ILE
11	2A	98	LEU
11	2A	103	LEU
11	2A	105	VAL
11	2A	116	HIS
11	2A	119	CYS
11	2A	126	ARG
12	3A	13	LYS
12	3A	16	GLU
12	3A	17	LYS
12	3A	20	LYS
12	3A	23	LYS
12	3A	33	ARG
12	3A	34	ARG
12	3A	36	VAL
12	3A	39	VAL
12	3A	41	ARG
12	3A	42	THR
12	3A	54	LYS
12	3A	59	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	3A	64	TYR
12	3A	82	VAL
12	3A	83	VAL
12	3A	84	LEU
12	3A	85	ILE
12	3A	102	ARG
12	3A	111	LYS
12	3A	118	SER
12	3A	126	LYS
13	4A	8	GLU
13	4A	9	ILE
13	4A	13	LYS
13	4A	14	ARG
13	4A	39	ILE
13	4A	48	LEU
13	4A	54	VAL
13	4A	57	ARG
13	4A	61	GLU
13	4A	62	ASN
13	4A	66	LEU
13	4A	81	LEU
13	4A	82	MET
13	4A	86	CYS
13	4A	90	LEU
13	4A	91	ARG
13	4A	94	ARG
13	4A	103	THR
13	4A	105	THR
13	4A	108	ARG
13	4A	115	LYS
14	5A	3	ARG
14	5A	17	LYS
14	5A	18	VAL
14	5A	25	VAL
14	5A	26	ARG
14	5A	29	ARG
14	5A	32	SER
14	5A	44	LEU
15	6A	3	ILE
15	6A	14	GLU
15	6A	17	ARG
15	6A	22	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	6A	27	VAL
15	6A	31	LEU
15	6A	39	LEU
15	6A	41	GLU
15	6A	45	VAL
15	6A	47	LYS
15	6A	79	ARG
15	6A	88	ARG
16	7A	2	VAL
16	7A	5	ARG
16	7A	6	LEU
16	7A	8	ARG
16	7A	19	ILE
16	7A	21	VAL
16	7A	25	ARG
16	7A	27	LYS
16	7A	35	LYS
16	7A	43	LYS
16	7A	53	VAL
16	7A	54	GLU
16	7A	62	VAL
16	7A	65	GLN
16	7A	67	THR
16	7A	71	ARG
16	7A	74	LEU
16	7A	81	ARG
16	7A	82	GLN
16	7A	83	GLU
17	8A	7	THR
17	8A	10	VAL
17	8A	12	SER
17	8A	15	MET
17	8A	31	LEU
17	8A	38	ARG
17	8A	52	LYS
17	8A	60	ILE
17	8A	62	SER
17	8A	66	SER
17	8A	68	ARG
17	8A	74	LEU
17	8A	81	ARG
17	8A	96	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	8A	100	LYS
18	9A	23	LYS
18	9A	26	LEU
18	9A	29	PHE
18	9A	31	LEU
18	9A	35	ARG
18	9A	36	ASN
18	9A	38	GLU
18	9A	44	LEU
18	9A	46	GLU
18	9A	53	ARG
18	9A	54	ARG
18	9A	55	ARG
18	9A	65	ILE
18	9A	74	ARG
18	9A	82	THR
18	9A	84	LYS
19	AA	7	LYS
19	AA	13	ASP
19	AA	15	LEU
19	AA	21	GLU
19	AA	22	LEU
19	AA	23	ASN
19	AA	35	SER
19	AA	38	SER
19	AA	41	VAL
19	AA	48	THR
19	AA	57	HIS
19	AA	71	LEU
20	BA	8	ARG
20	BA	10	LEU
20	BA	11	SER
20	BA	23	ARG
20	BA	36	LEU
20	BA	56	MET
20	BA	60	GLU
20	BA	61	SER
20	BA	62	LEU
20	BA	64	ASP
20	BA	73	HIS
20	BA	75	ASN
20	BA	84	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	1B	14	TRP
28	79	5	LYS
28	79	8	ARG
28	79	14	VAL
28	79	52	ARG
28	79	55	ASP
28	79	167	LYS
28	79	202	GLU
28	79	207	THR
28	79	210	ARG
28	79	223	ARG
29	19	13	ARG
29	19	24	ILE
29	19	25	THR
29	19	26	LYS
29	19	27	THR
29	19	28	GLU
29	19	37	LEU
29	19	43	ARG
29	19	46	GLN
29	19	49	ILE
29	19	60	ARG
29	19	61	LEU
29	19	64	ILE
29	19	65	ILE
29	19	72	LYS
29	19	88	ARG
29	19	89	SER
29	19	94	LEU
29	19	103	ARG
29	19	105	ILE
29	19	111	LEU
29	19	116	GLN
29	19	118	VAL
29	19	125	ILE
29	19	147	LEU
29	19	157	ARG
29	19	169	GLU
29	19	173	VAL
29	19	175	LEU
29	19	176	ARG
29	19	182	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	19	184	LYS
29	19	192	THR
29	19	193	VAL
29	19	211	ARG
29	19	217	ARG
29	19	226	MET
29	19	239	ARG
29	19	242	ARG
29	19	244	ARG
29	19	255	LYS
29	19	257	LEU
29	19	260	ARG
29	19	268	ARG
29	19	271	ILE
30	29	1	MET
30	29	5	LEU
30	29	11	MET
30	29	12	THR
30	29	37	ARG
30	29	38	THR
30	29	44	TYR
30	29	48	GLN
30	29	49	LEU
30	29	52	LEU
30	29	54	GLN
30	29	57	LYS
30	29	63	LEU
30	29	66	HIS
30	29	72	VAL
30	29	76	ARG
30	29	77	ILE
30	29	79	ARG
30	29	82	ARG
30	29	87	GLU
30	29	89	ASP
30	29	90	THR
30	29	93	VAL
30	29	111	ARG
30	29	117	MET
30	29	118	LYS
30	29	135	HIS
30	29	144	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	29	146	THR
30	29	152	LYS
30	29	154	LYS
30	29	167	VAL
30	29	175	VAL
30	29	181	LEU
30	29	182	LEU
30	29	188	VAL
30	29	197	ILE
30	29	201	THR
30	29	202	LYS
31	39	7	TYR
31	39	11	VAL
31	39	13	SER
31	39	18	ARG
31	39	23	ASP
31	39	24	LEU
31	39	28	ILE
31	39	33	LEU
31	39	38	ARG
31	39	50	SER
31	39	57	VAL
31	39	62	ARG
31	39	70	THR
31	39	74	ARG
31	39	82	ILE
31	39	83	PHE
31	39	100	THR
31	39	110	LEU
31	39	114	VAL
31	39	123	LEU
31	39	125	LEU
31	39	127	GLU
31	39	140	LEU
31	39	145	GLU
31	39	152	GLU
31	39	158	THR
31	39	165	ARG
31	39	170	LEU
31	39	190	GLU
31	39	192	LEU
31	39	196	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	39	203	GLN
31	39	205	ARG
32	49	7	LEU
32	49	12	TYR
32	49	20	ILE
32	49	41	GLN
32	49	49	ASP
32	49	51	ARG
32	49	74	LYS
32	49	75	LYS
32	49	76	SER
32	49	80	PHE
32	49	83	ARG
32	49	91	ARG
32	49	104	GLU
32	49	106	LEU
32	49	109	VAL
32	49	116	ASP
32	49	117	PHE
32	49	118	ARG
32	49	128	ARG
32	49	132	ASN
32	49	136	ARG
32	49	139	LEU
32	49	144	ILE
32	49	152	LEU
32	49	153	ARG
32	49	157	ILE
32	49	159	VAL
32	49	162	THR
33	59	2	SER
33	59	6	ARG
33	59	68	THR
33	59	77	LYS
33	59	79	VAL
33	59	143	GLN
33	59	148	ILE
33	59	149	ARG
33	59	167	GLU
34	69	1	MET
34	69	2	LYS
34	69	4	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	69	7	GLU
34	69	18	VAL
34	69	27	ARG
34	69	37	VAL
34	69	47	LEU
34	69	50	ARG
34	69	60	GLU
34	69	61	ARG
34	69	62	LYS
34	69	67	ARG
34	69	75	LEU
34	69	76	THR
34	69	77	LEU
34	69	78	THR
34	69	81	VAL
34	69	85	GLU
34	69	86	THR
34	69	103	ARG
34	69	104	GLN
34	69	105	HIS
34	69	108	THR
34	69	109	ILE
34	69	112	LYS
34	69	116	LEU
34	69	117	GLU
34	69	125	GLU
34	69	128	LEU
34	69	131	LYS
34	69	133	HIS
34	69	136	VAL
34	69	142	VAL
35	15	1	MET
35	15	9	VAL
35	15	12	ARG
35	15	15	LEU
35	15	17	ASP
35	15	28	THR
35	15	32	THR
35	15	34	LEU
35	15	37	LYS
35	15	38	HIS
35	15	39	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
35	15	43	THR
35	15	46	VAL
35	15	48	MET
35	15	59	LYS
35	15	60	ILE
35	15	61	ARG
35	15	63	THR
35	15	68	GLU
35	15	69	GLN
35	15	71	ILE
35	15	85	ILE
35	15	90	MET
35	15	93	THR
35	15	94	HIS
35	15	99	LEU
35	15	130	HIS
35	15	131	GLN
35	15	134	ARG
35	15	136	GLU
36	25	1	MET
36	25	5	GLN
36	25	9	GLU
36	25	10	VAL
36	25	14	THR
36	25	19	ILE
36	25	22	ILE
36	25	35	VAL
36	25	38	VAL
36	25	47	ILE
36	25	49	ARG
36	25	52	VAL
36	25	53	LYS
36	25	87	ILE
36	25	94	ARG
36	25	96	THR
36	25	108	GLU
36	25	113	LYS
37	35	2	LYS
37	35	4	SER
37	35	5	ASP
37	35	6	LEU
37	35	10	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	35	15	ARG
37	35	18	ARG
37	35	21	ARG
37	35	27	HIS
37	35	36	LYS
37	35	41	ARG
37	35	52	GLU
37	35	62	LEU
37	35	67	MET
37	35	75	ILE
37	35	77	ARG
37	35	79	ARG
37	35	81	GLN
37	35	84	ASN
37	35	85	LEU
37	35	88	LEU
37	35	91	PHE
37	35	94	GLU
37	35	95	VAL
37	35	96	THR
37	35	98	GLU
37	35	105	LEU
37	35	106	LEU
37	35	111	ARG
37	35	112	LEU
37	35	117	GLU
37	35	132	LYS
37	35	133	SER
37	35	136	GLU
37	35	138	LEU
37	35	144	GLU
38	45	5	ARG
38	45	7	MET
38	45	10	ARG
38	45	18	LYS
38	45	45	GLN
38	45	56	ARG
38	45	60	ARG
38	45	63	LYS
38	45	76	LYS
38	45	77	LYS
38	45	83	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	45	85	LYS
38	45	89	ASN
38	45	90	VAL
38	45	96	VAL
38	45	103	MET
38	45	110	THR
38	45	118	LEU
38	45	134	ARG
38	45	139	GLU
39	55	9	LYS
39	55	15	SER
39	55	18	LEU
39	55	23	ASN
39	55	28	LEU
39	55	29	LEU
39	55	33	ARG
39	55	43	GLU
39	55	44	LEU
39	55	65	LEU
39	55	67	LEU
39	55	74	LYS
39	55	75	LEU
39	55	79	LEU
39	55	81	ASP
39	55	82	GLU
39	55	88	ARG
39	55	98	LEU
40	65	4	LEU
40	65	12	PHE
40	65	17	ARG
40	65	19	LYS
40	65	20	ARG
40	65	21	THR
40	65	23	ARG
40	65	24	LEU
40	65	36	TYR
40	65	39	ILE
40	65	40	ILE
40	65	43	GLU
40	65	44	LYS
40	65	64	GLU
40	65	65	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	65	68	GLN
40	65	69	VAL
40	65	78	LEU
40	65	83	LYS
40	65	89	ARG
40	65	98	VAL
40	65	101	LEU
40	65	106	ARG
41	75	1	MET
41	75	7	ILE
41	75	8	LYS
41	75	13	ARG
41	75	17	THR
41	75	19	LEU
41	75	30	VAL
41	75	34	VAL
41	75	36	GLU
41	75	39	ARG
41	75	40	THR
41	75	41	ARG
41	75	54	ARG
41	75	60	THR
41	75	62	THR
41	75	64	ARG
41	75	86	ILE
41	75	89	VAL
41	75	91	ARG
41	75	93	ARG
41	75	105	LEU
41	75	106	SER
41	75	107	ASP
41	75	112	ARG
41	75	118	ARG
41	75	133	GLU
42	85	3	ARG
42	85	15	LYS
42	85	17	ILE
42	85	52	ARG
42	85	55	ARG
42	85	60	LEU
42	85	74	LEU
42	85	78	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	85	105	VAL
42	85	114	LYS
43	95	13	ARG
43	95	15	GLU
43	95	18	LEU
43	95	35	LEU
43	95	38	LEU
43	95	39	LEU
43	95	45	THR
43	95	46	VAL
43	95	57	VAL
43	95	62	LEU
43	95	66	ARG
43	95	72	VAL
43	95	74	LYS
43	95	75	PHE
43	95	76	LYS
43	95	79	VAL
43	95	80	GLN
43	95	84	LYS
43	95	85	LYS
43	95	89	GLN
43	95	91	TYR
44	A5	11	ARG
44	A5	15	ARG
44	A5	19	LEU
44	A5	23	LEU
44	A5	39	THR
44	A5	40	ASN
44	A5	51	LEU
44	A5	52	GLU
44	A5	65	LEU
44	A5	68	ARG
44	A5	70	TYR
44	A5	76	VAL
44	A5	78	GLU
44	A5	84	ARG
44	A5	88	ARG
44	A5	96	ILE
44	A5	106	ILE
44	A5	107	LEU
44	A5	111	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	B5	12	VAL
45	B5	23	GLU
45	B5	27	THR
45	B5	30	VAL
45	B5	35	THR
45	B5	37	THR
45	B5	40	LYS
45	B5	43	VAL
45	B5	45	THR
45	B5	49	VAL
45	B5	52	VAL
45	B5	53	LYS
45	B5	54	VAL
45	B5	57	LEU
45	B5	63	LYS
45	B5	65	ARG
45	B5	69	TYR
45	B5	70	LEU
45	B5	78	LYS
45	B5	80	ILE
45	B5	81	VAL
45	B5	82	GLN
46	C5	2	ARG
46	C5	23	ARG
46	C5	24	VAL
46	C5	31	LEU
46	C5	38	ILE
46	C5	45	VAL
46	C5	46	LYS
46	C5	55	TYR
46	C5	60	PHE
46	C5	62	GLU
46	C5	63	LYS
46	C5	67	LEU
46	C5	71	LYS
46	C5	72	VAL
46	C5	76	CYS
46	C5	79	CYS
46	C5	84	ARG
46	C5	85	VAL
46	C5	86	ARG
46	C5	88	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	C5	89	PHE
46	C5	97	ARG
46	C5	98	VAL
46	C5	101	LYS
46	C5	102	CYS
47	D5	5	LEU
47	D5	9	TYR
47	D5	13	GLU
47	D5	19	ARG
47	D5	27	VAL
47	D5	28	MET
47	D5	34	ASN
47	D5	36	LYS
47	D5	37	VAL
47	D5	41	LEU
47	D5	54	HIS
47	D5	55	HIS
47	D5	58	VAL
47	D5	59	LEU
47	D5	63	ASP
47	D5	70	LEU
47	D5	74	VAL
47	D5	76	LEU
47	D5	84	GLU
47	D5	89	PHE
47	D5	91	LEU
47	D5	125	LEU
47	D5	126	VAL
47	D5	131	ARG
47	D5	161	VAL
48	E5	10	THR
48	E5	12	ASN
48	E5	36	ILE
48	E5	43	THR
48	E5	46	LYS
48	E5	53	MET
48	E5	64	ASP
48	E5	68	GLU
49	F5	4	VAL
49	F5	11	ARG
49	F5	17	SER
49	F5	23	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	F5	25	LYS
49	F5	34	THR
49	F5	35	THR
49	F5	38	SER
49	F5	40	ARG
49	F5	51	VAL
49	F5	67	ILE
49	F5	76	ARG
49	F5	78	LYS
49	F5	82	LEU
49	F5	83	GLU
49	F5	85	LEU
49	F5	91	LYS
49	F5	95	LEU
50	G5	7	ARG
50	G5	10	LEU
50	G5	16	LEU
50	G5	24	LEU
50	G5	25	VAL
50	G5	26	ARG
50	G5	30	ARG
50	G5	32	LEU
50	G5	43	GLN
50	G5	46	GLN
50	G5	47	ASN
50	G5	48	HIS
50	G5	50	ILE
50	G5	53	LEU
50	G5	54	LYS
51	H5	5	LYS
51	H5	8	LEU
51	H5	16	PRO
51	H5	24	LYS
51	H5	30	ARG
51	H5	33	GLN
51	H5	38	GLU
51	H5	40	THR
51	H5	55	ARG
51	H5	56	VAL
53	J5	6	VAL
53	J5	15	ARG
53	J5	16	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	J5	23	HIS
53	J5	25	LEU
53	J5	35	GLU
53	J5	48	GLU
53	J5	49	CYS
53	J5	55	ARG
54	L5	1	MET
54	L5	4	THR
54	L5	8	ASN
54	L5	9	ARG
54	L5	43	THR
55	M5	6	THR
55	M5	23	VAL
55	M5	31	HIS
55	M5	32	LEU
55	M5	41	ILE
55	M5	56	GLU
55	M5	57	ARG
55	M5	58	ILE
55	M5	60	LEU
55	M5	64	TYR

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (25) such sidechains are listed below:

Mol	Chain	Res	Type
7	6E	86	GLN
19	AI	23	ASN
28	71	56	GLN
28	71	225	ASN
31	31	75	HIS
50	K8	48	HIS
52	M8	40	HIS
3	22	181	ASN
4	32	123	HIS
4	32	125	HIS
7	62	51	GLN
8	72	15	ASN
9	82	87	GLN
10	1A	13	HIS
10	1A	84	GLN
12	3A	49	ASN
14	5A	49	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	9A	36	ASN
19	AA	57	HIS
33	59	61	HIS
33	59	65	HIS
37	35	70	GLN
38	45	89	ASN
41	75	2	ASN
44	A5	60	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1493/1522 (98%)	361 (24%)	29 (1%)
1	1G	1506/1522 (98%)	367 (24%)	27 (1%)
22	1K	67/75 (89%)	27 (40%)	2 (2%)
23	2K	76/77 (98%)	22 (28%)	1 (1%)
23	2L	76/77 (98%)	14 (18%)	2 (2%)
24	3K	75/76 (98%)	42 (56%)	4 (5%)
25	4K	18/27 (66%)	12 (66%)	2 (11%)
25	4L	17/27 (62%)	9 (52%)	0
26	14	2853/2917 (97%)	731 (25%)	38 (1%)
26	1H	2829/2917 (96%)	722 (25%)	50 (1%)
27	16	121/122 (99%)	24 (19%)	1 (0%)
27	1J	121/122 (99%)	35 (28%)	1 (0%)
56	1L	69/76 (90%)	27 (39%)	4 (5%)
57	3L	75/76 (98%)	35 (46%)	1 (1%)
All	All	9396/9633 (97%)	2428 (25%)	162 (1%)

All (2428) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	2	U
1	13	5	U
1	13	6	G
1	13	9	G
1	13	15	G
1	13	19	C
1	13	32	A
1	13	39	G
1	13	44	G
1	13	47	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	48	C
1	13	49	U
1	13	50	A
1	13	51	A
1	13	54	C
1	13	61	G
1	13	63	C
1	13	65	U
1	13	66	G
1	13	68	G
1	13	73	G
1	13	74	C
1	13	75	C
1	13	76	G
1	13	95	G
1	13	96	G
1	13	97	U
1	13	99	C
1	13	101	A
1	13	106	C
1	13	116	A
1	13	121	C
1	13	122	G
1	13	131	C
1	13	142	G
1	13	144	G
1	13	145	G
1	13	150	C
1	13	151	A
1	13	160	A
1	13	163	C
1	13	169	C
1	13	172	A
1	13	173	U
1	13	174	C
1	13	186(F)	C
1	13	189	U
1	13	190	G
1	13	191(A)	G
1	13	195	A
1	13	197	A
1	13	199	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	201	C
1	13	208	U
1	13	209	U
1	13	216	G
1	13	217	C
1	13	222	U
1	13	226	G
1	13	231	G
1	13	232	G
1	13	243	A
1	13	244	U
1	13	245	C
1	13	247	G
1	13	251	G
1	13	262	A
1	13	266	G
1	13	267	C
1	13	270	A
1	13	280	C
1	13	289	G
1	13	305	G
1	13	316	G
1	13	317	G
1	13	321	A
1	13	328	C
1	13	329	A
1	13	330	C
1	13	332	G
1	13	341	C
1	13	344	A
1	13	345	C
1	13	346	G
1	13	347	G
1	13	352	C
1	13	353	A
1	13	354	G
1	13	356	A
1	13	365	U
1	13	367	U
1	13	372	C
1	13	382	A
1	13	390	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	392	G
1	13	397	A
1	13	398	C
1	13	406	G
1	13	411	A
1	13	412	A
1	13	414	A
1	13	418	C
1	13	422	C
1	13	423	G
1	13	424	G
1	13	429	U
1	13	430	A
1	13	438	G
1	13	439	A
1	13	452	A
1	13	466	C
1	13	467	G
1	13	475	G
1	13	485	G
1	13	496	A
1	13	497	U
1	13	505	G
1	13	509	A
1	13	510	A
1	13	511	C
1	13	513	C
1	13	518	C
1	13	519	C
1	13	521	G
1	13	524	G
1	13	525	C
1	13	527	G
1	13	531	U
1	13	532	A
1	13	534	U
1	13	536	C
1	13	547	A
1	13	550	G
1	13	559	A
1	13	561	U
1	13	564	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	572	A
1	13	573	A
1	13	576	G
1	13	577	G
1	13	581	G
1	13	587	G
1	13	596	C
1	13	607	A
1	13	617	G
1	13	630	G
1	13	633	G
1	13	650	G
1	13	652	U
1	13	653	A
1	13	661	G
1	13	664	G
1	13	665	A
1	13	687	A
1	13	688	G
1	13	701	C
1	13	719	C
1	13	721	G
1	13	723	U
1	13	724	G
1	13	747	C
1	13	749	C
1	13	752	G
1	13	753	A
1	13	755	G
1	13	763	G
1	13	769	G
1	13	774	G
1	13	777	A
1	13	787	A
1	13	793	U
1	13	794	A
1	13	796	C
1	13	801	U
1	13	805	C
1	13	812	C
1	13	813	U
1	13	815	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	817	C
1	13	818	G
1	13	819	A
1	13	821	G
1	13	828	A
1	13	841	U
1	13	842	C
1	13	843	U
1	13	848	C
1	13	849	C
1	13	855	G
1	13	859	A
1	13	864	A
1	13	869	G
1	13	870	U
1	13	871	U
1	13	872	A
1	13	876	G
1	13	902	G
1	13	914	A
1	13	926	G
1	13	927	G
1	13	933	G
1	13	934	C
1	13	936	C
1	13	938	A
1	13	942	G
1	13	960	U
1	13	968	A
1	13	969	A
1	13	971	G
1	13	974	A
1	13	975	A
1	13	976	G
1	13	977	A
1	13	978	A
1	13	984	C
1	13	993	G
1	13	998	G
1	13	999	U
1	13	1004	A
1	13	1005	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1006	C
1	13	1008	C
1	13	1009	G
1	13	1012	U
1	13	1021	G
1	13	1022	G
1	13	1024	G
1	13	1025	U
1	13	1026	G
1	13	1028(A)	C
1	13	1029	G
1	13	1030	C
1	13	1031	G
1	13	1032	A
1	13	1032(A)	G
1	13	1032(B)	G
1	13	1035	A
1	13	1037	C
1	13	1042	G
1	13	1054	C
1	13	1055	A
1	13	1063	C
1	13	1064	G
1	13	1065	U
1	13	1066	C
1	13	1067	A
1	13	1081	G
1	13	1094	G
1	13	1095	U
1	13	1101	A
1	13	1108	G
1	13	1124	G
1	13	1125	U
1	13	1126	U
1	13	1127	G
1	13	1129	C
1	13	1130	A
1	13	1131	G
1	13	1132	C
1	13	1133	G
1	13	1134	G
1	13	1136	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1137	C
1	13	1138	G
1	13	1139	G
1	13	1141	C
1	13	1145	C
1	13	1146	A
1	13	1152	A
1	13	1154	G
1	13	1157	A
1	13	1158	C
1	13	1160	G
1	13	1161	C
1	13	1171	G
1	13	1177	G
1	13	1178	G
1	13	1179	A
1	13	1180	A
1	13	1181	G
1	13	1188	A
1	13	1189	C
1	13	1190	G
1	13	1196	U
1	13	1197	G
1	13	1201	A
1	13	1203	C
1	13	1213	A
1	13	1215	G
1	13	1220	G
1	13	1225	A
1	13	1226	C
1	13	1227	A
1	13	1238	A
1	13	1240	U
1	13	1241	G
1	13	1253	G
1	13	1256	A
1	13	1257	U
1	13	1258	G
1	13	1262	C
1	13	1268	A
1	13	1273	G
1	13	1275	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1278	U
1	13	1279	A
1	13	1280	A
1	13	1281	U
1	13	1286	A
1	13	1287	A
1	13	1288	A
1	13	1290	G
1	13	1299	A
1	13	1300	G
1	13	1301	U
1	13	1320	C
1	13	1323	G
1	13	1331	G
1	13	1336	C
1	13	1337	G
1	13	1338	G
1	13	1346	A
1	13	1347	G
1	13	1350	A
1	13	1352	C
1	13	1353	G
1	13	1362(A)	C
1	13	1363	A
1	13	1368	G
1	13	1370	G
1	13	1378	C
1	13	1381	U
1	13	1398	A
1	13	1401	G
1	13	1406	U
1	13	1419	G
1	13	1436	U
1	13	1442	G
1	13	1443	G
1	13	1446	A
1	13	1450	U
1	13	1451	A
1	13	1452	C
1	13	1453	G
1	13	1454	G
1	13	1475	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	1476	G
1	13	1487	G
1	13	1492	A
1	13	1497	G
1	13	1499	A
1	13	1502	A
1	13	1504	G
1	13	1506	U
1	13	1514	C
1	13	1517	G
1	13	1529	G
1	13	1530	G
1	13	1534	A
1	13	1535	C
1	13	1536	C
22	1K	2	G
22	1K	4	U
22	1K	9	A
22	1K	10	G
22	1K	11	C
22	1K	15	G
22	1K	18	G
22	1K	24	G
22	1K	25	C
22	1K	26	A
22	1K	30	G
22	1K	47	U
22	1K	48	C
22	1K	49	G
22	1K	50	C
22	1K	56	C
22	1K	60	U
22	1K	61	C
22	1K	63	U
22	1K	68	G
22	1K	69	A
22	1K	70	C
22	1K	71	C
22	1K	72	C
22	1K	73	A
22	1K	74	C
22	1K	75	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	2K	2	G
23	2K	8	4SU
23	2K	9	G
23	2K	13	C
23	2K	17	C
23	2K	18	U
23	2K	20	G
23	2K	21	U
23	2K	22	A
23	2K	26	C
23	2K	30	G
23	2K	35	C
23	2K	37	U
23	2K	42	C
23	2K	44	A
23	2K	47	G7M
23	2K	48	U
23	2K	49	C
23	2K	50	G
23	2K	53	G
23	2K	73	A
23	2K	77	A
24	3K	2	G
24	3K	3	G
24	3K	4	U
24	3K	8	U
24	3K	9	A
24	3K	10	G
24	3K	11	C
24	3K	15	G
24	3K	17	U
24	3K	18	G
24	3K	19	G
24	3K	20	U
24	3K	21	A
24	3K	22	G
24	3K	23	A
24	3K	25	C
24	3K	26	A
24	3K	27	G
24	3K	31	A
24	3K	32	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	3K	33	U
24	3K	34	U
24	3K	40	C
24	3K	44	U
24	3K	45	G
24	3K	46	G
24	3K	47	U
24	3K	48	C
24	3K	50	C
24	3K	51	A
24	3K	52	G
24	3K	53	G
24	3K	55	U
24	3K	56	C
24	3K	58	A
24	3K	59	A
24	3K	60	U
24	3K	62	C
24	3K	66	A
24	3K	73	A
24	3K	74	C
24	3K	76	A
25	4K	7	G
25	4K	9	G
25	4K	10	G
25	4K	11	U
25	4K	12	A
25	4K	13	A
25	4K	14	A
25	4K	15	A
25	4K	19	A
25	4K	22	A
25	4K	23	A
25	4K	24	A
26	1H	9	U
26	1H	12	U
26	1H	15	G
26	1H	26	G
26	1H	34	C
26	1H	35	G
26	1H	37	C
26	1H	39	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	44	A
26	1H	46	C
26	1H	51	G
26	1H	56	A
26	1H	59	U
26	1H	61	G
26	1H	63	U
26	1H	66	C
26	1H	71	A
26	1H	72	U
26	1H	74	A
26	1H	75	G
26	1H	85	G
26	1H	102	G
26	1H	114	U
26	1H	118	A
26	1H	119	A
26	1H	120	U
26	1H	123	G
26	1H	131	G
26	1H	138	G
26	1H	155	C
26	1H	162	U
26	1H	163	U
26	1H	164	U
26	1H	171	G
26	1H	172	C
26	1H	174	C
26	1H	181	A
26	1H	188	G
26	1H	196	A
26	1H	197	A
26	1H	199	A
26	1H	214	G
26	1H	215	G
26	1H	216	A
26	1H	217	G
26	1H	222	A
26	1H	223	A
26	1H	224	G
26	1H	227	A
26	1H	228	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	229	A
26	1H	233	A
26	1H	243	U
26	1H	244	A
26	1H	248	G
26	1H	250	G
26	1H	252	G
26	1H	261	G
26	1H	267	C
26	1H	269	U
26	1H	270(F)	U
26	1H	270(G)	C
26	1H	270(K)	C
26	1H	270(M)	U
26	1H	270(N)	G
26	1H	270(O)	U
26	1H	270(P)	C
26	1H	270(Q)	C
26	1H	270(R)	G
26	1H	271(C)	U
26	1H	271	G
26	1H	274	G
26	1H	275	G
26	1H	277	C
26	1H	278	A
26	1H	295	G
26	1H	299	A
26	1H	308	G
26	1H	311	A
26	1H	315	G
26	1H	323	G
26	1H	324	A
26	1H	329	G
26	1H	330	A
26	1H	331	A
26	1H	346	A
26	1H	352	G
26	1H	354	G
26	1H	357	A
26	1H	363	G
26	1H	363(A)	A
26	1H	363(C)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	363(E)	U
26	1H	364	C
26	1H	372	G
26	1H	375	C
26	1H	380	U
26	1H	382	G
26	1H	385	C
26	1H	386	G
26	1H	400	G
26	1H	404	C
26	1H	405	U
26	1H	411	G
26	1H	415	A
26	1H	416	C
26	1H	418	G
26	1H	428	A
26	1H	436	C
26	1H	443	A
26	1H	444	C
26	1H	447	A
26	1H	448	U
26	1H	454	A
26	1H	455	C
26	1H	457	A
26	1H	459	U
26	1H	460	A
26	1H	470	A
26	1H	471	A
26	1H	478	A
26	1H	481	G
26	1H	482	A
26	1H	483	A
26	1H	494	G
26	1H	501	A
26	1H	505	A
26	1H	508	G
26	1H	509	C
26	1H	528	A
26	1H	529	A
26	1H	531	C
26	1H	532	A
26	1H	533	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	548	A
26	1H	549	G
26	1H	556	G
26	1H	559	G
26	1H	563	G
26	1H	564	C
26	1H	570	G
26	1H	571	A
26	1H	573	G
26	1H	575	A
26	1H	586	A
26	1H	588	U
26	1H	595	C
26	1H	603	A
26	1H	607	U
26	1H	617	G
26	1H	621	A
26	1H	622	G
26	1H	627	A
26	1H	632	A
26	1H	637	A
26	1H	640	C
26	1H	645	C
26	1H	646	A
26	1H	647	G
26	1H	654	A
26	1H	654(A)	A
26	1H	654(C)	G
26	1H	654(D)	G
26	1H	654(Q)	C
26	1H	654(S)	G
26	1H	654(T)	A
26	1H	664	C
26	1H	665	C
26	1H	669	G
26	1H	676	A
26	1H	686	G
26	1H	702	G
26	1H	703	U
26	1H	715	G
26	1H	716	A
26	1H	730	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	739	G
26	1H	747	U
26	1H	748	G
26	1H	752	A
26	1H	753	C
26	1H	762	U
26	1H	764	A
26	1H	775	G
26	1H	776	G
26	1H	777	A
26	1H	779	U
26	1H	782	A
26	1H	784	A
26	1H	785	G
26	1H	790	C
26	1H	791	C
26	1H	792	G
26	1H	805	G
26	1H	810	U
26	1H	812	C
26	1H	827	U
26	1H	828	U
26	1H	835	A
26	1H	845	G
26	1H	846	C
26	1H	855	G
26	1H	859	G
26	1H	860	U
26	1H	866	A
26	1H	870	A
26	1H	879	G
26	1H	880	G
26	1H	881	G
26	1H	882	G
26	1H	894	C
26	1H	898	C
26	1H	899	A
26	1H	900	A
26	1H	901	A
26	1H	904	C
26	1H	910	A
26	1H	917	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	918	A
26	1H	932	G
26	1H	941	A
26	1H	945	A
26	1H	946	G
26	1H	953	A
26	1H	959	A
26	1H	961	C
26	1H	968	G
26	1H	972	G
26	1H	973	A
26	1H	974	G
26	1H	974(A)	C
26	1H	980	A
26	1H	983	A
26	1H	995	C
26	1H	996	A
26	1H	997	G
26	1H	998	C
26	1H	1005	C
26	1H	1010	A
26	1H	1011	G
26	1H	1012	U
26	1H	1013	C
26	1H	1017	G
26	1H	1020	A
26	1H	1022	G
26	1H	1023	U
26	1H	1024	G
26	1H	1025	G
26	1H	1026	U
26	1H	1027	A
26	1H	1033	U
26	1H	1037	G
26	1H	1045	A
26	1H	1046	A
26	1H	1047	G
26	1H	1052	C
26	1H	1053	C
26	1H	1107	G
26	1H	1108	U
26	1H	1109	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1110	G
26	1H	1111	A
26	1H	1112	G
26	1H	1117	G
26	1H	1126	A
26	1H	1128	A
26	1H	1129	A
26	1H	1130	U
26	1H	1135	C
26	1H	1136	G
26	1H	1138	G
26	1H	1139	G
26	1H	1142	U
26	1H	1142(A)	A
26	1H	1152	C
26	1H	1170	G
26	1H	1171	G
26	1H	1173	G
26	1H	1175	U
26	1H	1176	G
26	1H	1177	A
26	1H	1178	C
26	1H	1179	C
26	1H	1187	G
26	1H	1192	G
26	1H	1194	A
26	1H	1195	G
26	1H	1204	A
26	1H	1205	U
26	1H	1210	A
26	1H	1211	U
26	1H	1218	C
26	1H	1220	A
26	1H	1221	C
26	1H	1228	G
26	1H	1229(A)	G
26	1H	1244	G
26	1H	1245	G
26	1H	1249	U
26	1H	1250	G
26	1H	1253	A
26	1H	1256	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1265	A
26	1H	1271	G
26	1H	1272	A
26	1H	1273	U
26	1H	1287	A
26	1H	1298	C
26	1H	1300	U
26	1H	1301	A
26	1H	1302	A
26	1H	1305	C
26	1H	1321	A
26	1H	1329	U
26	1H	1332	G
26	1H	1338	G
26	1H	1345	C
26	1H	1348	G
26	1H	1349	A
26	1H	1352	U
26	1H	1358	G
26	1H	1359	A
26	1H	1360	A
26	1H	1365	A
26	1H	1370	C
26	1H	1373	A
26	1H	1374	G
26	1H	1379	A
26	1H	1380	G
26	1H	1384	A
26	1H	1385	G
26	1H	1386	C
26	1H	1388	G
26	1H	1395	A
26	1H	1396	U
26	1H	1397	U
26	1H	1403	C
26	1H	1404	C
26	1H	1407	C
26	1H	1416	G
26	1H	1417	C
26	1H	1420	U
26	1H	1421	G
26	1H	1427	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1428	C
26	1H	1429	G
26	1H	1437	C
26	1H	1441	G
26	1H	1444(A)	A
26	1H	1449(A)	G
26	1H	1455	G
26	1H	1459	G
26	1H	1460	A
26	1H	1461	G
26	1H	1467	C
26	1H	1471	A
26	1H	1482	U
26	1H	1490	A
26	1H	1493	C
26	1H	1494	A
26	1H	1495	A
26	1H	1497	U
26	1H	1507	A
26	1H	1508	A
26	1H	1509	C
26	1H	1510	A
26	1H	1511	A
26	1H	1520	U
26	1H	1522	G
26	1H	1526	G
26	1H	1534	G
26	1H	1535	U
26	1H	1537	C
26	1H	1538	G
26	1H	1540	G
26	1H	1543	A
26	1H	1544	C
26	1H	1545	A
26	1H	1548	C
26	1H	1554	A
26	1H	1558	A
26	1H	1559	G
26	1H	1565	C
26	1H	1566	A
26	1H	1569	A
26	1H	1576	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1577	C
26	1H	1578	U
26	1H	1580	A
26	1H	1585	C
26	1H	1586	A
26	1H	1594	G
26	1H	1606	G
26	1H	1608	A
26	1H	1609	A
26	1H	1610	A
26	1H	1617	C
26	1H	1618	A
26	1H	1625	C
26	1H	1628	G
26	1H	1635	G
26	1H	1639	U
26	1H	1640	C
26	1H	1641	A
26	1H	1644	C
26	1H	1646	C
26	1H	1647	G
26	1H	1648	C
26	1H	1651	G
26	1H	1654	A
26	1H	1658	C
26	1H	1672	C
26	1H	1674	G
26	1H	1678	G
26	1H	1682	G
26	1H	1683	C
26	1H	1684	C
26	1H	1695	G
26	1H	1699	G
26	1H	1703	G
26	1H	1706	U
26	1H	1707	G
26	1H	1728	G
26	1H	1729	A
26	1H	1730	U
26	1H	1731	G
26	1H	1732	A
26	1H	1735	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1741	C
26	1H	1756	G
26	1H	1758	G
26	1H	1760	A
26	1H	1762	A
26	1H	1763	G
26	1H	1764	G
26	1H	1773	A
26	1H	1774	C
26	1H	1777	U
26	1H	1782	C
26	1H	1791	A
26	1H	1799	G
26	1H	1800	C
26	1H	1801	G
26	1H	1802	A
26	1H	1805	U
26	1H	1806	C
26	1H	1811	G
26	1H	1816	G
26	1H	1819	A
26	1H	1827	C
26	1H	1828	G
26	1H	1829	A
26	1H	1830	C
26	1H	1834	U
26	1H	1835	G
26	1H	1839	G
26	1H	1847	A
26	1H	1858	G
26	1H	1869	G
26	1H	1870	C
26	1H	1878	G
26	1H	1882	C
26	1H	1889	A
26	1H	1895	C
26	1H	1896	G
26	1H	1900	A
26	1H	1901	A
26	1H	1906	G
26	1H	1913	A
26	1H	1914	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1915	U
26	1H	1919	A
26	1H	1926	U
26	1H	1929	G
26	1H	1930	G
26	1H	1931	U
26	1H	1938	A
26	1H	1945	G
26	1H	1955	U
26	1H	1963	U
26	1H	1967	C
26	1H	1968	G
26	1H	1969	A
26	1H	1970	A
26	1H	1971	A
26	1H	1972	A
26	1H	1981	A
26	1H	1982	C
26	1H	1983	C
26	1H	1993	U
26	1H	1994	C
26	1H	1999	C
26	1H	2020	A
26	1H	2023	G
26	1H	2031	A
26	1H	2032	G
26	1H	2033	A
26	1H	2036	C
26	1H	2039	C
26	1H	2043	C
26	1H	2052	G
26	1H	2054	A
26	1H	2055	C
26	1H	2056	G
26	1H	2060	A
26	1H	2061	G
26	1H	2062	A
26	1H	2063	C
26	1H	2066	C
26	1H	2069	G
26	1H	2078	C
26	1H	2080	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2095	C
26	1H	2099	U
26	1H	2108	C
26	1H	2110	G
26	1H	2111	C
26	1H	2113	U
26	1H	2114	A
26	1H	2115	G
26	1H	2116	G
26	1H	2117	A
26	1H	2124	G
26	1H	2125	G
26	1H	2126	A
26	1H	2127	G
26	1H	2128	C
26	1H	2131	G
26	1H	2132	U
26	1H	2133	G
26	1H	2134	A
26	1H	2135	A
26	1H	2136	C
26	1H	2137	C
26	1H	2138	C
26	1H	2139	C
26	1H	2147	G
26	1H	2148	G
26	1H	2151	G
26	1H	2153	G
26	1H	2156	G
26	1H	2157	G
26	1H	2158	A
26	1H	2159	G
26	1H	2161	C
26	1H	2166	G
26	1H	2168	G
26	1H	2170	A
26	1H	2171	A
26	1H	2173	A
26	1H	2175	C
26	1H	2176	A
26	1H	2180	U
26	1H	2186	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2189	U
26	1H	2190	G
26	1H	2192	G
26	1H	2193	G
26	1H	2198	A
26	1H	2207	C
26	1H	2210	G
26	1H	2211	G
26	1H	2212	A
26	1H	2215	G
26	1H	2225	A
26	1H	2226	C
26	1H	2238	G
26	1H	2240	C
26	1H	2271	G
26	1H	2273	A
26	1H	2275	C
26	1H	2280	G
26	1H	2283	C
26	1H	2287	A
26	1H	2291	U
26	1H	2305	A
26	1H	2307	G
26	1H	2308	G
26	1H	2310	A
26	1H	2314	C
26	1H	2320	A
26	1H	2321	G
26	1H	2325	G
26	1H	2327	A
26	1H	2334	G
26	1H	2336	A
26	1H	2337	G
26	1H	2346	A
26	1H	2347	C
26	1H	2350	C
26	1H	2354	G
26	1H	2360	A
26	1H	2364	C
26	1H	2372	G
26	1H	2376	A
26	1H	2377	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2379	G
26	1H	2383	G
26	1H	2385	C
26	1H	2395	C
26	1H	2396	G
26	1H	2402	C
26	1H	2403	C
26	1H	2406	U
26	1H	2410	G
26	1H	2418	A
26	1H	2422	A
26	1H	2423	U
26	1H	2424	C
26	1H	2425	A
26	1H	2428	G
26	1H	2429	G
26	1H	2430	A
26	1H	2431	U
26	1H	2434	A
26	1H	2435	A
26	1H	2439	A
26	1H	2440	C
26	1H	2441	C
26	1H	2445	G
26	1H	2448	A
26	1H	2450	A
26	1H	2451	A
26	1H	2452	C
26	1H	2458	G
26	1H	2468	G
26	1H	2474	C
26	1H	2476	A
26	1H	2477	C
26	1H	2478	A
26	1H	2481	G
26	1H	2487	G
26	1H	2494	G
26	1H	2497	A
26	1H	2502	G
26	1H	2505	G
26	1H	2506	U
26	1H	2507	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2518	A
26	1H	2529	G
26	1H	2531	A
26	1H	2554	U
26	1H	2566	A
26	1H	2567	G
26	1H	2573	C
26	1H	2582	G
26	1H	2599	G
26	1H	2601	C
26	1H	2602	A
26	1H	2609	U
26	1H	2610	C
26	1H	2611	U
26	1H	2612	C
26	1H	2629	A
26	1H	2632	A
26	1H	2636	U
26	1H	2654	A
26	1H	2665	A
26	1H	2666	C
26	1H	2673	G
26	1H	2676	C
26	1H	2679	A
26	1H	2681	C
26	1H	2682	U
26	1H	2683	C
26	1H	2689	U
26	1H	2691	C
26	1H	2702	U
26	1H	2703	C
26	1H	2705	A
26	1H	2707	G
26	1H	2712(A)	A
26	1H	2713	A
26	1H	2714	G
26	1H	2718	G
26	1H	2719	G
26	1H	2723	C
26	1H	2726	U
26	1H	2733	A
26	1H	2738	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	2739	U
26	1H	2742	C
26	1H	2744	G
26	1H	2749	A
26	1H	2755	C
26	1H	2756	U
26	1H	2757	A
26	1H	2764	A
26	1H	2765	A
26	1H	2766	G
26	1H	2777	G
26	1H	2778	A
26	1H	2779	U
26	1H	2789	C
26	1H	2790	A
26	1H	2791	C
26	1H	2792	G
26	1H	2793	G
26	1H	2795	G
26	1H	2797	U
26	1H	2798	C
26	1H	2801	A
26	1H	2803	C
26	1H	2808	U
26	1H	2816	C
26	1H	2818	G
26	1H	2820	A
26	1H	2821	A
26	1H	2833	G
26	1H	2834	G
26	1H	2835	A
26	1H	2848	G
26	1H	2849	U
26	1H	2850	A
26	1H	2864	G
26	1H	2871	C
26	1H	2872	G
26	1H	2886	G
26	1H	2892	A
26	1H	2894	G
26	1H	2895	U
26	1H	2898	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	16	0	A
27	16	3	C
27	16	8	U
27	16	12	C
27	16	13	A
27	16	15	A
27	16	16	G
27	16	29	A
27	16	33	G
27	16	39	A
27	16	45	A
27	16	47	C
27	16	51	G
27	16	56	G
27	16	65	C
27	16	66	A
27	16	72	G
27	16	73	A
27	16	82	G
27	16	89	G
27	16	92	G
27	16	105	G
27	16	109	G
27	16	115	G
1	1G	5	U
1	1G	7	G
1	1G	9	G
1	1G	24	U
1	1G	31	G
1	1G	32	A
1	1G	39	G
1	1G	41	G
1	1G	44	G
1	1G	47	C
1	1G	48	C
1	1G	50	A
1	1G	51	A
1	1G	54	C
1	1G	65	U
1	1G	76	G
1	1G	79	G
1	1G	81	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	82	U
1	1G	88	C
1	1G	90	C
1	1G	91	C
1	1G	92	G
1	1G	93	U
1	1G	101	A
1	1G	103	C
1	1G	105	G
1	1G	115	G
1	1G	116	A
1	1G	121	C
1	1G	127	G
1	1G	131	C
1	1G	144	G
1	1G	157	G
1	1G	161	A
1	1G	162	A
1	1G	163	C
1	1G	170	U
1	1G	182	U
1	1G	185	A
1	1G	188	U
1	1G	189	U
1	1G	190	G
1	1G	191(A)	G
1	1G	191(D)	U
1	1G	191(E)	G
1	1G	195	A
1	1G	196	A
1	1G	197	A
1	1G	198	G
1	1G	209	U
1	1G	210	U
1	1G	216	G
1	1G	240	C
1	1G	242	C
1	1G	247	G
1	1G	251	G
1	1G	256	U
1	1G	266	G
1	1G	267	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	281	G
1	1G	289	G
1	1G	295	C
1	1G	298	A
1	1G	316	G
1	1G	321	A
1	1G	324	G
1	1G	328	C
1	1G	329	A
1	1G	332	G
1	1G	346	G
1	1G	347	G
1	1G	350	G
1	1G	351	G
1	1G	352	C
1	1G	353	A
1	1G	354	G
1	1G	356	A
1	1G	363	A
1	1G	365	U
1	1G	366	C
1	1G	367	U
1	1G	372	C
1	1G	373	A
1	1G	384	G
1	1G	388	G
1	1G	397	A
1	1G	398	C
1	1G	406	G
1	1G	412	A
1	1G	413	G
1	1G	414	A
1	1G	421	U
1	1G	422	C
1	1G	423	G
1	1G	424	G
1	1G	429	U
1	1G	433	C
1	1G	439	A
1	1G	442	C
1	1G	452	A
1	1G	455	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	456	C
1	1G	465	A
1	1G	466	C
1	1G	467	G
1	1G	475	G
1	1G	484	G
1	1G	485	G
1	1G	486	U
1	1G	496	A
1	1G	497	U
1	1G	505	G
1	1G	508	C
1	1G	510	A
1	1G	511	C
1	1G	512	U
1	1G	518	C
1	1G	521	G
1	1G	527	G
1	1G	530	G
1	1G	531	U
1	1G	532	A
1	1G	536	C
1	1G	547	A
1	1G	559	A
1	1G	560	U
1	1G	561	U
1	1G	564	C
1	1G	566	G
1	1G	572	A
1	1G	573	A
1	1G	576	G
1	1G	577	G
1	1G	599	C
1	1G	607	A
1	1G	619	U
1	1G	630	G
1	1G	631	G
1	1G	633	G
1	1G	653	A
1	1G	661	G
1	1G	665	A
1	1G	677	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	687	A
1	1G	688	G
1	1G	701	C
1	1G	702	A
1	1G	706	A
1	1G	707	C
1	1G	723	U
1	1G	724	G
1	1G	731	G
1	1G	735	C
1	1G	749	C
1	1G	755	G
1	1G	759	A
1	1G	769	G
1	1G	777	A
1	1G	782	A
1	1G	783	C
1	1G	787	A
1	1G	792	A
1	1G	793	U
1	1G	794	A
1	1G	805	C
1	1G	811	C
1	1G	813	U
1	1G	816	A
1	1G	817	C
1	1G	818	G
1	1G	821	G
1	1G	828	A
1	1G	837	G
1	1G	842	C
1	1G	843	U
1	1G	848	C
1	1G	851	G
1	1G	858	G
1	1G	859	A
1	1G	874	G
1	1G	885	G
1	1G	914	A
1	1G	916	G
1	1G	923	A
1	1G	925	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	926	G
1	1G	927	G
1	1G	934	C
1	1G	935	A
1	1G	936	C
1	1G	937	A
1	1G	942	G
1	1G	947	G
1	1G	948	C
1	1G	953	G
1	1G	960	U
1	1G	961	U
1	1G	966	G
1	1G	968	A
1	1G	969	A
1	1G	971	G
1	1G	972	C
1	1G	974	A
1	1G	975	A
1	1G	976	G
1	1G	977	A
1	1G	978	A
1	1G	982	U
1	1G	991	U
1	1G	992	U
1	1G	993	G
1	1G	996	A
1	1G	1001	G
1	1G	1002	G
1	1G	1004	A
1	1G	1006	C
1	1G	1008	C
1	1G	1016	A
1	1G	1017	G
1	1G	1021	G
1	1G	1024	G
1	1G	1025	U
1	1G	1026	G
1	1G	1028	C
1	1G	1028(A)	C
1	1G	1028(B)	C
1	1G	1029	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1030	C
1	1G	1031	G
1	1G	1032(A)	G
1	1G	1033	G
1	1G	1036	G
1	1G	1037	C
1	1G	1040	U
1	1G	1042	G
1	1G	1050	G
1	1G	1053	G
1	1G	1055	A
1	1G	1056	U
1	1G	1064	G
1	1G	1066	C
1	1G	1073	U
1	1G	1081	G
1	1G	1084	G
1	1G	1092	A
1	1G	1094	G
1	1G	1095	U
1	1G	1096	C
1	1G	1101	A
1	1G	1113	C
1	1G	1118	C
1	1G	1124	G
1	1G	1125	U
1	1G	1126	U
1	1G	1127	G
1	1G	1128	C
1	1G	1129	C
1	1G	1133	G
1	1G	1135	U
1	1G	1138	G
1	1G	1139	G
1	1G	1140	C
1	1G	1141	C
1	1G	1144	G
1	1G	1146	A
1	1G	1147	C
1	1G	1154	G
1	1G	1157	A
1	1G	1158	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1159	U
1	1G	1160	G
1	1G	1171	G
1	1G	1172	C
1	1G	1177	G
1	1G	1178	G
1	1G	1181	G
1	1G	1183	A
1	1G	1184	G
1	1G	1188	A
1	1G	1189	C
1	1G	1193	G
1	1G	1196	U
1	1G	1197	G
1	1G	1201	A
1	1G	1202	G
1	1G	1203	C
1	1G	1204	A
1	1G	1211	U
1	1G	1212	U
1	1G	1213	A
1	1G	1214	C
1	1G	1218	C
1	1G	1225	A
1	1G	1227	A
1	1G	1238	A
1	1G	1240	U
1	1G	1241	G
1	1G	1243	C
1	1G	1250	A
1	1G	1256	A
1	1G	1257	U
1	1G	1258	G
1	1G	1268	A
1	1G	1278	U
1	1G	1279	A
1	1G	1280	A
1	1G	1282	C
1	1G	1286	A
1	1G	1287	A
1	1G	1289	A
1	1G	1293	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1294	G
1	1G	1299	A
1	1G	1300	G
1	1G	1301	U
1	1G	1305	G
1	1G	1313	U
1	1G	1320	C
1	1G	1322	C
1	1G	1323	G
1	1G	1331	G
1	1G	1335	C
1	1G	1336	C
1	1G	1338	G
1	1G	1346	A
1	1G	1347	G
1	1G	1353	G
1	1G	1358	U
1	1G	1362(A)	C
1	1G	1363	A
1	1G	1370	G
1	1G	1379	G
1	1G	1381	U
1	1G	1391	U
1	1G	1392	G
1	1G	1397	C
1	1G	1398	A
1	1G	1399	C
1	1G	1400	C
1	1G	1406	U
1	1G	1419	G
1	1G	1442	G
1	1G	1443	G
1	1G	1446	A
1	1G	1449	C
1	1G	1450	U
1	1G	1451	A
1	1G	1452	C
1	1G	1453	G
1	1G	1467	G
1	1G	1478	C
1	1G	1492	A
1	1G	1494	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	1499	A
1	1G	1503	A
1	1G	1504	G
1	1G	1506	U
1	1G	1517	G
1	1G	1520	G
1	1G	1525	G
1	1G	1529	G
1	1G	1530	G
1	1G	1531	A
1	1G	1532	U
1	1G	1533	C
1	1G	1534	A
56	1L	3	G
56	1L	4	U
56	1L	6	G
56	1L	7	U
56	1L	9	A
56	1L	10	G
56	1L	15	G
56	1L	16	U
56	1L	17	U
56	1L	18	G
56	1L	19	G
56	1L	20	U
56	1L	26	A
56	1L	30	G
56	1L	35	U
56	1L	41	A
56	1L	45	G
56	1L	49	G
56	1L	55	PSU
56	1L	62	C
56	1L	63	U
56	1L	66	A
56	1L	67	C
56	1L	69	A
56	1L	70	C
56	1L	74	C
56	1L	76	A
23	2L	6	G
23	2L	8	4SU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	2L	13	C
23	2L	16	C
23	2L	18	U
23	2L	21	U
23	2L	22	A
23	2L	23	G
23	2L	32	G
23	2L	45	A
23	2L	47	G7M
23	2L	48	U
23	2L	49	C
23	2L	50	G
57	3L	2	G
57	3L	5	C
57	3L	7	U
57	3L	9	A
57	3L	13	C
57	3L	16	U
57	3L	17	U
57	3L	18	G
57	3L	19	G
57	3L	20	U
57	3L	21	A
57	3L	22	G
57	3L	23	A
57	3L	25	C
57	3L	26	A
57	3L	31	A
57	3L	33	U
57	3L	36	U
57	3L	39	PSU
57	3L	40	C
57	3L	42	A
57	3L	43	U
57	3L	44	U
57	3L	45	G
57	3L	46	G
57	3L	47	U
57	3L	48	C
57	3L	56	C
57	3L	57	G
57	3L	58	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	3L	59	A
57	3L	61	C
57	3L	63	U
57	3L	73	A
57	3L	76	A
25	4L	8	A
25	4L	9	G
25	4L	10	G
25	4L	11	U
25	4L	12	A
25	4L	13	A
25	4L	15	A
25	4L	22	A
25	4L	23	A
26	14	2	G
26	14	3	U
26	14	4	C
26	14	5	A
26	14	6	A
26	14	9	U
26	14	11	G
26	14	15	G
26	14	26	G
26	14	35	G
26	14	46	C
26	14	49	A
26	14	50	U
26	14	51	G
26	14	58	G
26	14	60	G
26	14	61	G
26	14	71	A
26	14	72	U
26	14	74	A
26	14	75	G
26	14	83	G
26	14	90	U
26	14	93	C
26	14	95	G
26	14	102	G
26	14	118	A
26	14	119	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	120	U
26	14	125	G
26	14	129	C
26	14	154	G
26	14	155	C
26	14	161	U
26	14	162	U
26	14	172	C
26	14	173	G
26	14	174	C
26	14	175	G
26	14	196	A
26	14	199	A
26	14	205	G
26	14	212	G
26	14	215	G
26	14	216	A
26	14	221	A
26	14	222	A
26	14	225	A
26	14	228	A
26	14	229	A
26	14	233	A
26	14	240	G
26	14	248	G
26	14	249	C
26	14	250	G
26	14	252	G
26	14	270(K)	C
26	14	270(L)	U
26	14	270(N)	G
26	14	270(O)	U
26	14	270(Y)	G
26	14	271(B)	G
26	14	271(C)	U
26	14	271	G
26	14	273(D)	C
26	14	273(F)	C
26	14	274	G
26	14	275	G
26	14	276	A
26	14	278	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	279	C
26	14	283	A
26	14	289	A
26	14	290	G
26	14	298	G
26	14	308	G
26	14	311	A
26	14	324	A
26	14	329	G
26	14	330	A
26	14	331	A
26	14	335	C
26	14	342	G
26	14	345	A
26	14	352	G
26	14	354	G
26	14	355	G
26	14	362	U
26	14	363	G
26	14	371	A
26	14	375	C
26	14	386	G
26	14	394	A
26	14	395	U
26	14	396	G
26	14	405	U
26	14	406	G
26	14	411	G
26	14	412	A
26	14	428	A
26	14	443	A
26	14	444	C
26	14	448	U
26	14	454	A
26	14	455	C
26	14	457	A
26	14	459	U
26	14	470	A
26	14	480	A
26	14	481	G
26	14	483	A
26	14	504	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	505	A
26	14	508	G
26	14	509	C
26	14	527	C
26	14	528	A
26	14	529	A
26	14	530	G
26	14	531	C
26	14	532	A
26	14	533	G
26	14	537	C
26	14	547	A
26	14	549	G
26	14	556	G
26	14	560	C
26	14	563	G
26	14	570	G
26	14	573	G
26	14	575	A
26	14	598	G
26	14	603	A
26	14	607	U
26	14	613	U
26	14	614	U
26	14	615	G
26	14	617	G
26	14	620	G
26	14	621	A
26	14	622	G
26	14	623	G
26	14	627	A
26	14	637	A
26	14	645	C
26	14	646	A
26	14	650	C
26	14	651	G
26	14	654	A
26	14	654(A)	A
26	14	654(B)	C
26	14	654(C)	G
26	14	654(D)	G
26	14	654(S)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	654(T)	A
26	14	656	G
26	14	664	C
26	14	666	G
26	14	668	G
26	14	669	G
26	14	685	A
26	14	686	G
26	14	708	C
26	14	709	U
26	14	722	A
26	14	730	C
26	14	738	G
26	14	740	U
26	14	750	A
26	14	752	A
26	14	753	C
26	14	762	U
26	14	764	A
26	14	765	G
26	14	771	G
26	14	775	G
26	14	776	G
26	14	779	U
26	14	781	A
26	14	782	A
26	14	784	A
26	14	785	G
26	14	792	G
26	14	805	G
26	14	806	C
26	14	812	C
26	14	813	U
26	14	816	C
26	14	819	A
26	14	824	A
26	14	825	C
26	14	827	U
26	14	828	U
26	14	831	G
26	14	832	G
26	14	846	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	847	U
26	14	848	G
26	14	855	G
26	14	859	G
26	14	865	C
26	14	866	A
26	14	869	G
26	14	877	U
26	14	878	A
26	14	879	G
26	14	897	C
26	14	899	A
26	14	901	A
26	14	904	C
26	14	905	U
26	14	906	G
26	14	910	A
26	14	914	C
26	14	915	C
26	14	917	A
26	14	919	G
26	14	932	G
26	14	933	A
26	14	938	G
26	14	941	A
26	14	945	A
26	14	946	G
26	14	953	A
26	14	957	A
26	14	958	U
26	14	959	A
26	14	961	C
26	14	974	G
26	14	978	G
26	14	980	A
26	14	983	A
26	14	987	G
26	14	989	G
26	14	990	A
26	14	991	C
26	14	996	A
26	14	999	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1008	C
26	14	1009	A
26	14	1010	A
26	14	1012	U
26	14	1013	C
26	14	1017	G
26	14	1020	A
26	14	1022	G
26	14	1023	U
26	14	1025	G
26	14	1026	U
26	14	1028	A
26	14	1031	G
26	14	1034	G
26	14	1036	G
26	14	1037	G
26	14	1039	G
26	14	1044	G
26	14	1048	A
26	14	1049	C
26	14	1050	A
26	14	1052	C
26	14	1054	A
26	14	1055	G
26	14	1056	G
26	14	1057	A
26	14	1060	U
26	14	1061	U
26	14	1062	G
26	14	1070	A
26	14	1071	G
26	14	1072	C
26	14	1073	A
26	14	1074	G
26	14	1075	C
26	14	1086	A
26	14	1088	A
26	14	1090	U
26	14	1091	G
26	14	1093	G
26	14	1099	G
26	14	1100	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1105	U
26	14	1106	G
26	14	1107	G
26	14	1109	C
26	14	1110	G
26	14	1112	G
26	14	1113	U
26	14	1114	G
26	14	1118	C
26	14	1122	G
26	14	1129	A
26	14	1130	U
26	14	1131	G
26	14	1135	C
26	14	1136	G
26	14	1139	G
26	14	1142	U
26	14	1143	A
26	14	1151	G
26	14	1157	G
26	14	1170	G
26	14	1173	G
26	14	1175	U
26	14	1176	G
26	14	1177	A
26	14	1178	C
26	14	1182	A
26	14	1193	G
26	14	1204	A
26	14	1205	U
26	14	1212	G
26	14	1213	A
26	14	1220	A
26	14	1229(A)	G
26	14	1237	A
26	14	1247	A
26	14	1248	G
26	14	1250	G
26	14	1253	A
26	14	1256	G
26	14	1271	G
26	14	1272	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1275	A
26	14	1298	C
26	14	1300	U
26	14	1301	A
26	14	1303	G
26	14	1304	C
26	14	1307	A
26	14	1313	U
26	14	1319	G
26	14	1320	C
26	14	1325	G
26	14	1329	U
26	14	1332	G
26	14	1345	C
26	14	1348	G
26	14	1349	A
26	14	1359	A
26	14	1360	A
26	14	1365	A
26	14	1368	G
26	14	1370	C
26	14	1378	A
26	14	1379	A
26	14	1380	G
26	14	1385	G
26	14	1386	C
26	14	1390	U
26	14	1396	U
26	14	1406	U
26	14	1407	C
26	14	1408	C
26	14	1416	G
26	14	1417	C
26	14	1419	A
26	14	1421	G
26	14	1425	G
26	14	1428	C
26	14	1437	C
26	14	1444(A)	A
26	14	1445	C
26	14	1449	A
26	14	1449(A)	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1451	C
26	14	1453	A
26	14	1454	U
26	14	1458	C
26	14	1459	G
26	14	1460	A
26	14	1467	C
26	14	1471	A
26	14	1474	C
26	14	1475	G
26	14	1493	C
26	14	1506	C
26	14	1508	A
26	14	1509	C
26	14	1510	A
26	14	1515	C
26	14	1516	U
26	14	1522	G
26	14	1523	U
26	14	1528	A
26	14	1534	G
26	14	1535	U
26	14	1537	C
26	14	1540	G
26	14	1543	A
26	14	1554	A
26	14	1555	G
26	14	1558	A
26	14	1559	G
26	14	1560	G
26	14	1562	A
26	14	1566	A
26	14	1569	A
26	14	1577	C
26	14	1578	U
26	14	1585	C
26	14	1586	A
26	14	1593	G
26	14	1595	G
26	14	1608	A
26	14	1609	A
26	14	1610	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1614	A
26	14	1616	A
26	14	1617	C
26	14	1619	G
26	14	1635	G
26	14	1647	G
26	14	1648	C
26	14	1654	A
26	14	1669	A
26	14	1671	U
26	14	1672	C
26	14	1674	G
26	14	1691	C
26	14	1696	G
26	14	1700	A
26	14	1701	A
26	14	1703	G
26	14	1718	G
26	14	1725	G
26	14	1728	G
26	14	1729	A
26	14	1730	U
26	14	1735	C
26	14	1742	C
26	14	1743	G
26	14	1747	G
26	14	1756	G
26	14	1763	G
26	14	1764	G
26	14	1773	A
26	14	1777	U
26	14	1780	A
26	14	1781	C
26	14	1791	A
26	14	1800	C
26	14	1801	G
26	14	1802	A
26	14	1803	A
26	14	1808	U
26	14	1812	A
26	14	1816	G
26	14	1829	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1836	C
26	14	1839	G
26	14	1842	G
26	14	1847	A
26	14	1848	A
26	14	1858	G
26	14	1871	A
26	14	1872	A
26	14	1878	G
26	14	1888	G
26	14	1889	A
26	14	1894	C
26	14	1895	C
26	14	1896	G
26	14	1900	A
26	14	1906	G
26	14	1909	C
26	14	1929	G
26	14	1930	G
26	14	1931	U
26	14	1936	A
26	14	1937	A
26	14	1938	A
26	14	1949	G
26	14	1951	U
26	14	1952	A
26	14	1955	U
26	14	1963	U
26	14	1967	C
26	14	1970	A
26	14	1971	A
26	14	1972	A
26	14	1976	U
26	14	1983	C
26	14	1991	U
26	14	1993	U
26	14	1995	U
26	14	2005	A
26	14	2019	A
26	14	2023	G
26	14	2031	A
26	14	2032	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2033	A
26	14	2043	C
26	14	2049	G
26	14	2054	A
26	14	2055	C
26	14	2056	G
26	14	2060	A
26	14	2061	G
26	14	2062	A
26	14	2063	C
26	14	2066	C
26	14	2067	G
26	14	2069	G
26	14	2074	U
26	14	2077	A
26	14	2099	U
26	14	2100	G
26	14	2108	C
26	14	2114	A
26	14	2115	G
26	14	2116	G
26	14	2117	A
26	14	2118	U
26	14	2120	G
26	14	2122	U
26	14	2123	G
26	14	2125	G
26	14	2127	G
26	14	2128	C
26	14	2129	C
26	14	2130	U
26	14	2131	G
26	14	2132	U
26	14	2133	G
26	14	2134	A
26	14	2135	A
26	14	2136	C
26	14	2137	C
26	14	2139	C
26	14	2140	C
26	14	2144	U
26	14	2145	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2146	C
26	14	2147	G
26	14	2148	G
26	14	2153	G
26	14	2158	A
26	14	2159	G
26	14	2160	G
26	14	2161	C
26	14	2162	G
26	14	2164	C
26	14	2165	G
26	14	2166	G
26	14	2171	A
26	14	2172	U
26	14	2173	A
26	14	2174	C
26	14	2175	C
26	14	2176	A
26	14	2177	C
26	14	2188	C
26	14	2189	U
26	14	2191	G
26	14	2192	G
26	14	2198	A
26	14	2207	C
26	14	2210	G
26	14	2211	G
26	14	2212	A
26	14	2213	U
26	14	2215	G
26	14	2225	A
26	14	2231	C
26	14	2238	G
26	14	2239	G
26	14	2251	G
26	14	2259	G
26	14	2267	A
26	14	2268	A
26	14	2269	A
26	14	2273	A
26	14	2275	C
26	14	2276	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2278	A
26	14	2280	G
26	14	2282	G
26	14	2283	C
26	14	2284	C
26	14	2287	A
26	14	2288	A
26	14	2289	G
26	14	2297	C
26	14	2298	A
26	14	2305	A
26	14	2307	G
26	14	2308	G
26	14	2310	A
26	14	2311	A
26	14	2318	G
26	14	2319	G
26	14	2321	G
26	14	2325	G
26	14	2327	A
26	14	2336	A
26	14	2338	G
26	14	2343	C
26	14	2346	A
26	14	2347	C
26	14	2350	C
26	14	2354	G
26	14	2372	G
26	14	2383	G
26	14	2385	C
26	14	2388	A
26	14	2389	G
26	14	2392	A
26	14	2393	A
26	14	2396	G
26	14	2400	G
26	14	2402	C
26	14	2403	C
26	14	2406	U
26	14	2410	G
26	14	2411	A
26	14	2413	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2414	G
26	14	2418	A
26	14	2422	A
26	14	2423	U
26	14	2425	A
26	14	2429	G
26	14	2430	A
26	14	2431	U
26	14	2434	A
26	14	2435	A
26	14	2439	A
26	14	2440	C
26	14	2441	C
26	14	2445	G
26	14	2448	A
26	14	2449	U
26	14	2468	G
26	14	2469	A
26	14	2476	A
26	14	2477	C
26	14	2492	U
26	14	2496	C
26	14	2502	G
26	14	2505	G
26	14	2506	U
26	14	2518	A
26	14	2525	G
26	14	2542	A
26	14	2543	G
26	14	2552	U
26	14	2554	U
26	14	2564	A
26	14	2566	A
26	14	2567	G
26	14	2569	G
26	14	2573	C
26	14	2574	G
26	14	2575	C
26	14	2578	G
26	14	2585	U
26	14	2601	C
26	14	2602	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2608	G
26	14	2609	U
26	14	2611	U
26	14	2612	C
26	14	2630	G
26	14	2631	G
26	14	2634	G
26	14	2636	U
26	14	2646	C
26	14	2665	A
26	14	2667	C
26	14	2679	A
26	14	2689	U
26	14	2690	C
26	14	2702	U
26	14	2703	C
26	14	2707	G
26	14	2712(A)	A
26	14	2713	A
26	14	2714	G
26	14	2716	U
26	14	2726	U
26	14	2733	A
26	14	2739	U
26	14	2742	C
26	14	2744	G
26	14	2748	A
26	14	2750	A
26	14	2751	G
26	14	2752	C
26	14	2758	A
26	14	2764	A
26	14	2765	A
26	14	2766	G
26	14	2769	C
26	14	2777	G
26	14	2778	A
26	14	2779	U
26	14	2790	A
26	14	2791	C
26	14	2792	G
26	14	2793	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	2794	C
26	14	2795	G
26	14	2797	U
26	14	2798	C
26	14	2799	A
26	14	2801	A
26	14	2802	G
26	14	2804	C
26	14	2805	G
26	14	2808	U
26	14	2810	A
26	14	2820	A
26	14	2821	A
26	14	2833	G
26	14	2834	G
26	14	2838	G
26	14	2860	A
26	14	2872	G
26	14	2873	A
26	14	2874	C
26	14	2880	C
26	14	2886	G
26	14	2889	C
26	14	2891	G
26	14	2892	A
26	14	2893	G
26	14	2894	G
26	14	2895	U
26	14	2896	C
26	14	2897	U
26	14	2899	G
27	1J	0	A
27	1J	7	G
27	1J	8	U
27	1J	12	C
27	1J	13	A
27	1J	15	A
27	1J	16	G
27	1J	22	U
27	1J	26	A
27	1J	28	C
27	1J	30	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	1J	32	C
27	1J	33	G
27	1J	42	C
27	1J	45	A
27	1J	47	C
27	1J	53	A
27	1J	56	G
27	1J	58	A
27	1J	59	A
27	1J	67	G
27	1J	73	A
27	1J	75	G
27	1J	77	U
27	1J	81	G
27	1J	88	C
27	1J	89	G
27	1J	89(A)	A
27	1J	90	C
27	1J	94	C
27	1J	108	C
27	1J	109	G
27	1J	113	C
27	1J	115	G
27	1J	119	A

All (162) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	31	G
1	13	49	U
1	13	50	A
1	13	115	G
1	13	244	U
1	13	266	G
1	13	389	A
1	13	422	C
1	13	428	G
1	13	429	U
1	13	484	G
1	13	509	A
1	13	560	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	13	687	A
1	13	748	C
1	13	792	A
1	13	793	U
1	13	871	U
1	13	1054	C
1	13	1064	G
1	13	1065	U
1	13	1129	C
1	13	1137	C
1	13	1285	A
1	13	1397	C
1	13	1452	C
1	13	1498	U
1	13	1533	C
22	1K	48	C
22	1K	69	A
23	2K	48	U
24	3K	2	G
24	3K	18	G
24	3K	45	G
24	3K	58	A
25	4K	14	A
25	4K	18	G
26	1H	162	U
26	1H	196	A
26	1H	222	A
26	1H	249	C
26	1H	271(B)	G
26	1H	404	C
26	1H	508	G
26	1H	528	A
26	1H	587	C
26	1H	653	A
26	1H	668	G
26	1H	752	A
26	1H	845	G
26	1H	880	G
26	1H	893	C
26	1H	974	G
26	1H	1022	G
26	1H	1026	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	1H	1107	G
26	1H	1210	A
26	1H	1286	A
26	1H	1378	A
26	1H	1396	U
26	1H	1402	C
26	1H	1416	G
26	1H	1508	A
26	1H	1509	C
26	1H	1558	A
26	1H	1608	A
26	1H	1609	A
26	1H	1653	G
26	1H	1694	C
26	1H	1699	G
26	1H	1799	G
26	1H	1900	A
26	1H	1980	G
26	1H	1992	G
26	1H	2035	G
26	1H	2060	A
26	1H	2210	G
26	1H	2225	A
26	1H	2275	C
26	1H	2428	G
26	1H	2439	A
26	1H	2448	A
26	1H	2476	A
26	1H	2598	A
26	1H	2611	U
26	1H	2681	C
26	1H	2756	U
27	16	44	G
1	1G	64	G
1	1G	80	G
1	1G	87	A
1	1G	89	U
1	1G	115	G
1	1G	197	A
1	1G	250	A
1	1G	266	G
1	1G	345	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	1G	412	A
1	1G	413	G
1	1G	485	G
1	1G	509	A
1	1G	560	U
1	1G	687	A
1	1G	748	C
1	1G	812	C
1	1G	816	A
1	1G	913	A
1	1G	992	U
1	1G	1126	U
1	1G	1145	C
1	1G	1157	A
1	1G	1285	A
1	1G	1300	G
1	1G	1498	U
1	1G	1533	C
56	1L	3	G
56	1L	6	G
56	1L	18	G
56	1L	69	A
23	2L	20	G
23	2L	48	U
57	3L	58	A
26	14	34	C
26	14	49	A
26	14	71	A
26	14	128	C
26	14	155	C
26	14	278	A
26	14	503	A
26	14	528	A
26	14	685	A
26	14	752	A
26	14	764	A
26	14	791	C
26	14	1022	G
26	14	1085	A
26	14	1210	A
26	14	1379	A
26	14	1396	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	14	1416	G
26	14	1420	U
26	14	1444(A)	A
26	14	1558	A
26	14	1608	A
26	14	1609	A
26	14	1992	G
26	14	2048	G
26	14	2173	A
26	14	2238	G
26	14	2275	C
26	14	2335	A
26	14	2406	U
26	14	2425	A
26	14	2439	A
26	14	2611	U
26	14	2629	A
26	14	2689	U
26	14	2776	A
26	14	2791	C
26	14	2859	G
27	1J	88	C

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

23 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	U8U	1K	34	25,22	15,24,25	2.46	3 (20%)	17,34,37	2.18	2 (11%)
22	T6A	1K	37	22	23,34,35	2.35	5 (21%)	26,49,52	3.12	7 (26%)
22	PSU	1K	39	22	15,21,22	1.02	1 (6%)	16,30,33	1.87	3 (18%)
22	5MU	1K	54	22	13,22,23	1.66	2 (15%)	16,32,35	1.52	1 (6%)
22	PSU	1K	55	22	15,21,22	0.98	1 (6%)	16,30,33	2.42	2 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
56	U8U	1L	34	25,56	15,24,25	2.62	3 (20%)	17,34,37	2.07	2 (11%)
56	T6A	1L	37	56	23,34,35	2.46	4 (17%)	26,49,52	3.45	9 (34%)
56	PSU	1L	39	56	15,21,22	1.10	1 (6%)	16,30,33	1.94	3 (18%)
56	5MU	1L	54	56	13,22,23	1.69	2 (15%)	16,32,35	1.40	1 (6%)
56	PSU	1L	55	56	15,21,22	1.12	2 (13%)	16,30,33	2.07	4 (25%)
23	OMC	2K	33	23	15,22,23	2.19	4 (26%)	20,31,34	1.19	3 (15%)
23	G7M	2K	47	23	18,26,27	4.95	5 (27%)	21,39,42	2.25	4 (19%)
23	5MU	2K	55	23	13,22,23	1.71	2 (15%)	16,32,35	1.11	1 (6%)
23	PSU	2K	56	23	15,21,22	1.04	1 (6%)	16,30,33	1.77	4 (25%)
23	4SU	2K	8	23	12,21,22	3.13	2 (16%)	15,30,33	1.23	1 (6%)
23	OMC	2L	33	23	15,22,23	2.12	4 (26%)	20,31,34	1.40	3 (15%)
23	G7M	2L	47	23	18,26,27	5.04	5 (27%)	21,39,42	2.50	5 (23%)
23	5MU	2L	55	23	13,22,23	1.68	2 (15%)	16,32,35	1.21	1 (6%)
23	PSU	2L	56	23	15,21,22	1.14	1 (6%)	16,30,33	1.84	3 (18%)
23	4SU	2L	8	23	12,21,22	3.16	2 (16%)	15,30,33	0.64	0
57	PSU	3L	39	57	15,21,22	1.11	2 (13%)	16,30,33	1.99	2 (12%)
57	5MU	3L	54	57	13,22,23	1.75	2 (15%)	16,32,35	1.84	2 (12%)
57	PSU	3L	55	57	15,21,22	1.04	1 (6%)	16,30,33	2.05	4 (25%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	U8U	1K	34	25,22	-	0/5/28/29	0/2/2/2
22	T6A	1K	37	22	-	0/15/41/42	0/3/3/3
22	PSU	1K	39	22	-	0/7/25/26	0/2/2/2
22	5MU	1K	54	22	-	0/3/25/26	0/2/2/2
22	PSU	1K	55	22	-	0/7/25/26	0/2/2/2
56	U8U	1L	34	25,56	-	0/5/28/29	0/2/2/2
56	T6A	1L	37	56	-	0/15/41/42	0/3/3/3
56	PSU	1L	39	56	-	0/7/25/26	0/2/2/2
56	5MU	1L	54	56	-	0/3/25/26	0/2/2/2
56	PSU	1L	55	56	-	0/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	0/5/27/28	0/2/2/2
23	G7M	2K	47	23	-	0/3/25/26	0/3/3/3
23	5MU	2K	55	23	-	0/3/25/26	0/2/2/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/3/25/26	0/2/2/2
23	OMC	2L	33	23	-	0/5/27/28	0/2/2/2
23	G7M	2L	47	23	-	0/3/25/26	0/3/3/3
23	5MU	2L	55	23	-	0/3/25/26	0/2/2/2
23	PSU	2L	56	23	-	0/7/25/26	0/2/2/2
23	4SU	2L	8	23	-	0/3/25/26	0/2/2/2
57	PSU	3L	39	57	-	0/7/25/26	0/2/2/2
57	5MU	3L	54	57	-	0/3/25/26	0/2/2/2
57	PSU	3L	55	57	-	0/7/25/26	0/2/2/2

All (57) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
56	1L	34	U8U	C2-S2	-3.74	1.59	1.66
22	1K	34	U8U	C2-S2	-3.62	1.59	1.66
23	2L	55	5MU	C4-N3	-3.36	1.27	1.33
23	2K	55	5MU	C4-N3	-3.33	1.27	1.33
56	1L	54	5MU	C4-N3	-3.17	1.27	1.33
22	1K	37	T6A	C5-C4	-2.97	1.33	1.40
22	1K	54	5MU	C4-N3	-2.85	1.27	1.33
22	1K	37	T6A	C6-N1	-2.82	1.29	1.34
57	3L	54	5MU	C4-N3	-2.82	1.27	1.33
56	1L	37	T6A	C5-C4	-2.61	1.34	1.40
56	1L	55	PSU	C5-C1'	-2.10	1.50	1.52
57	3L	39	PSU	O4'-C1'	-2.04	1.41	1.44
23	2K	56	PSU	C4-N3	2.47	1.37	1.33
22	1K	39	PSU	C4-N3	2.91	1.38	1.33
23	2K	33	OMC	C4-N4	2.96	1.43	1.35
23	2L	33	OMC	C4-N4	2.98	1.43	1.35
57	3L	55	PSU	C4-N3	2.99	1.38	1.33
56	1L	55	PSU	C4-N3	3.16	1.38	1.33
22	1K	55	PSU	C4-N3	3.24	1.38	1.33
23	2L	56	PSU	C4-N3	3.31	1.39	1.33
23	2K	47	G7M	C6-C5	3.33	1.48	1.41
23	2K	33	OMC	C2-N3	3.35	1.45	1.38
56	1L	39	PSU	C4-N3	3.36	1.39	1.33
23	2L	47	G7M	C2-N2	3.38	1.41	1.34
57	3L	39	PSU	C4-N3	3.40	1.39	1.33
23	2L	47	G7M	C6-C5	3.57	1.48	1.41
23	2K	47	G7M	C2-N2	3.58	1.41	1.34
23	2L	33	OMC	C2-N3	3.70	1.45	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2L	33	OMC	C5-C4	3.91	1.50	1.41
23	2K	33	OMC	C5-C4	4.17	1.50	1.41
23	2L	55	5MU	C2-N3	4.59	1.47	1.38
56	1L	54	5MU	C2-N3	4.68	1.47	1.38
23	2K	55	5MU	C2-N3	4.68	1.47	1.38
22	1K	37	T6A	C10-N11	4.71	1.48	1.35
22	1K	54	5MU	C2-N3	4.71	1.48	1.38
23	2L	33	OMC	C6-N1	5.11	1.42	1.35
56	1L	37	T6A	C10-N11	5.14	1.49	1.35
22	1K	34	U8U	C6-C5	5.33	1.48	1.36
57	3L	54	5MU	C2-N3	5.34	1.49	1.38
23	2K	33	OMC	C6-N1	5.56	1.42	1.35
22	1K	37	T6A	C6-N6	5.72	1.47	1.36
56	1L	34	U8U	C6-C5	5.87	1.50	1.36
22	1K	37	T6A	C10-N6	6.19	1.49	1.37
56	1L	37	T6A	C10-N6	6.43	1.49	1.37
23	2K	8	4SU	C6-N1	6.52	1.44	1.35
22	1K	34	U8U	C4-N3	6.56	1.44	1.33
56	1L	37	T6A	C6-N6	6.77	1.49	1.36
23	2L	8	4SU	C6-N1	6.89	1.44	1.35
56	1L	34	U8U	C4-N3	6.94	1.45	1.33
23	2K	47	G7M	C4-N3	7.47	1.47	1.35
23	2K	47	G7M	C8-N9	7.59	1.47	1.33
23	2L	47	G7M	C8-N9	7.63	1.47	1.33
23	2L	47	G7M	C4-N3	8.02	1.48	1.35
23	2L	8	4SU	C5-C4	8.29	1.49	1.38
23	2K	8	4SU	C5-C4	8.44	1.49	1.38
23	2K	47	G7M	C8-N7	17.20	1.65	1.33
23	2L	47	G7M	C8-N7	17.41	1.65	1.33

All (67) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1L	37	T6A	N3-C2-N1	-11.02	120.22	128.87
22	1K	37	T6A	N3-C2-N1	-10.84	120.36	128.87
22	1K	34	U8U	C5-C4-N3	-7.44	118.51	125.19
56	1L	34	U8U	C5-C4-N3	-7.29	118.65	125.19
23	2L	47	G7M	N7-C8-N9	-6.75	98.70	108.67
56	1L	37	T6A	C13-C12-N11	-6.36	101.18	113.40
23	2K	47	G7M	N7-C8-N9	-6.29	99.38	108.67
23	2L	47	G7M	N3-C2-N1	-5.34	120.29	127.56
22	1K	37	T6A	C6-N6-C10	-5.31	123.16	130.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2L	47	G7M	C1'-N9-C4	-5.13	121.08	126.81
23	2K	47	G7M	N3-C2-N1	-5.03	120.72	127.56
56	1L	37	T6A	C6-N6-C10	-4.72	123.96	130.33
22	1K	55	PSU	C5-C1'-C2'	-4.56	107.70	115.44
56	1L	37	T6A	C1'-N9-C4	-4.41	121.88	126.81
23	2K	8	4SU	C5-C4-N3	-4.21	119.09	123.56
56	1L	37	T6A	O10-C10-N6	-4.21	117.15	123.59
23	2K	47	G7M	C5-C6-N1	-3.97	118.34	123.52
22	1K	37	T6A	O10-C10-N6	-3.34	118.47	123.59
56	1L	55	PSU	C5-C6-N1	-3.25	119.85	124.38
57	3L	55	PSU	C5-C1'-C2'	-3.11	110.16	115.44
22	1K	37	T6A	C1'-N9-C4	-3.11	123.34	126.81
57	3L	55	PSU	C5-C6-N1	-2.94	120.28	124.38
23	2L	47	G7M	C5-C6-N1	-2.92	119.71	123.52
23	2K	56	PSU	C5-C6-N1	-2.88	120.37	124.38
57	3L	54	5MU	C5-C4-N3	-2.83	122.97	125.35
56	1L	39	PSU	C5-C6-N1	-2.73	120.58	124.38
23	2L	56	PSU	C5-C6-N1	-2.68	120.64	124.38
23	2K	56	PSU	C5-C1'-C2'	-2.65	110.94	115.44
22	1K	39	PSU	C5-C6-N1	-2.51	120.88	124.38
23	2L	33	OMC	C5-C4-N4	-2.49	117.21	121.19
56	1L	55	PSU	C5-C1'-C2'	-2.33	111.48	115.44
23	2K	33	OMC	C5-C4-N4	-2.15	117.75	121.19
23	2L	56	PSU	O4'-C1'-C2'	2.25	107.12	104.69
57	3L	39	PSU	O4'-C1'-C2'	2.27	107.15	104.69
22	1K	39	PSU	O4'-C1'-C2'	2.58	107.48	104.69
23	2K	56	PSU	O4'-C1'-C2'	2.59	107.49	104.69
56	1L	37	T6A	C14-C12-N11	2.86	119.34	111.78
23	2K	33	OMC	C6-C5-C4	2.94	118.59	117.44
23	2K	33	OMC	N4-C4-N3	2.98	121.70	116.50
56	1L	39	PSU	O4'-C1'-C2'	3.01	107.95	104.69
57	3L	55	PSU	O4'-C1'-C2'	3.11	108.05	104.69
56	1L	55	PSU	O4'-C1'-C2'	3.18	108.13	104.69
23	2L	47	G7M	C6-N1-C2	3.34	119.80	115.88
23	2L	33	OMC	N4-C4-N3	3.35	122.36	116.50
23	2K	55	5MU	C4-N3-C2	3.62	118.18	115.16
22	1K	37	T6A	N6-C6-N1	3.65	122.02	118.82
56	1L	37	T6A	C12-N11-C10	3.66	128.33	120.82
23	2K	47	G7M	C6-N1-C2	3.79	120.33	115.88
56	1L	34	U8U	C2-N3-C4	3.83	120.15	115.89
23	2L	33	OMC	C6-C5-C4	3.99	119.00	117.44
23	2L	55	5MU	C4-N3-C2	4.12	118.60	115.16

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	34	U8U	C2-N3-C4	4.21	120.57	115.89
22	1K	37	T6A	N6-C10-N11	4.53	121.14	113.75
56	1L	54	5MU	C4-N3-C2	4.60	118.99	115.16
23	2K	56	PSU	C4-N3-C2	4.66	119.05	115.16
56	1L	37	T6A	N6-C10-N11	4.75	121.49	113.75
22	1K	54	5MU	C4-N3-C2	5.53	119.77	115.16
23	2L	56	PSU	C4-N3-C2	5.71	119.92	115.16
57	3L	55	PSU	C4-N3-C2	5.73	119.94	115.16
22	1K	39	PSU	C4-N3-C2	5.96	120.13	115.16
56	1L	55	PSU	C4-N3-C2	6.00	120.16	115.16
56	1L	37	T6A	C2-N1-C6	6.04	120.81	116.47
22	1K	37	T6A	C2-N1-C6	6.05	120.82	116.47
57	3L	54	5MU	C4-N3-C2	6.14	120.28	115.16
56	1L	39	PSU	C4-N3-C2	6.29	120.41	115.16
57	3L	39	PSU	C4-N3-C2	6.97	120.98	115.16
22	1K	55	PSU	C4-N3-C2	7.48	121.39	115.16

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

12 monomers are involved in 16 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
56	1L	34	U8U	2	0
56	1L	55	PSU	1	0
23	2K	33	OMC	2	0
23	2K	47	G7M	1	0
23	2K	56	PSU	1	0
23	2L	33	OMC	1	0
23	2L	47	G7M	2	0
23	2L	55	5MU	1	0
23	2L	56	PSU	1	0
23	2L	8	4SU	2	0
57	3L	39	PSU	1	0
57	3L	55	PSU	1	0

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry

Of 1144 ligands modelled in this entry, 1142 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
59	SF4	32	301	-	0,12,12	0.00	-	0,24,24	0.00	-
59	SF4	3E	301	4	0,12,12	0.00	-	0,24,24	0.00	-

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	SF4	32	301	-	-	0/0/48/48	0/6/5/5
59	SF4	3E	301	4	-	0/0/48/48	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	32	301	SF4	2	0
59	3E	301	SF4	1	0

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data i

6.1 Protein, DNA and RNA chains i

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	13	1496/1522 (98%)	-0.66	1 (0%) 95 95	62, 109, 164, 193	0
1	1G	1507/1522 (99%)	-0.64	2 (0%) 95 95	80, 127, 170, 197	0
2	12	210/256 (82%)	0.47	23 (10%) 7 4	127, 152, 162, 177	0
2	1E	231/256 (90%)	0.62	29 (12%) 5 3	117, 141, 159, 166	0
3	22	196/239 (82%)	1.21	47 (23%) 1 1	129, 143, 156, 164	0
3	2E	205/239 (85%)	0.92	35 (17%) 2 1	94, 114, 136, 145	0
4	32	208/209 (99%)	1.20	45 (21%) 1 1	108, 128, 145, 152	0
4	3E	207/209 (99%)	0.82	28 (13%) 4 2	92, 114, 134, 139	0
5	42	148/162 (91%)	0.60	9 (6%) 25 13	114, 129, 143, 152	0
5	4E	149/162 (91%)	0.53	9 (6%) 25 14	89, 108, 124, 140	0
6	52	101/101 (100%)	1.28	21 (20%) 1 1	95, 111, 129, 137	0
6	5E	100/101 (99%)	0.77	11 (11%) 7 4	87, 107, 126, 136	0
7	62	138/156 (88%)	-0.42	0 100 100	121, 134, 144, 148	0
7	6E	154/156 (98%)	-0.24	2 (1%) 79 67	109, 125, 148, 166	0
8	72	137/138 (99%)	0.07	4 (2%) 55 41	111, 133, 142, 145	0
8	7E	138/138 (100%)	-0.06	1 (0%) 89 83	97, 117, 128, 138	0
9	82	121/128 (94%)	-0.34	2 (1%) 73 60	117, 149, 158, 163	0
9	8E	126/128 (98%)	-0.44	0 100 100	96, 135, 152, 157	0
10	1A	80/105 (76%)	0.04	2 (2%) 61 47	129, 146, 156, 161	0
10	1I	91/105 (86%)	0.47	7 (7%) 16 9	87, 129, 159, 165	0
11	2A	113/129 (87%)	0.76	12 (10%) 8 4	94, 117, 130, 138	0
11	2I	111/129 (86%)	0.35	4 (3%) 46 31	85, 113, 127, 142	0
12	3A	122/132 (92%)	1.10	28 (22%) 1 1	89, 107, 130, 146	0
12	3I	122/132 (92%)	1.08	16 (13%) 5 3	73, 82, 106, 137	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	4A	111/126 (88%)	0.73	11 (9%) 9 5	125, 145, 156, 160	0
13	4I	119/126 (94%)	0.18	4 (3%) 49 34	93, 123, 136, 147	0
14	5A	59/61 (96%)	1.75	23 (38%) 0 0	134, 143, 153, 154	0
14	5I	60/61 (98%)	-0.15	0 100 100	92, 103, 118, 131	0
15	6A	88/89 (98%)	0.30	2 (2%) 64 49	96, 119, 135, 139	0
15	6I	87/89 (97%)	-0.07	0 100 100	88, 104, 122, 127	0
16	7A	84/88 (95%)	0.19	2 (2%) 62 47	102, 117, 135, 152	0
16	7I	83/88 (94%)	0.53	6 (7%) 18 10	110, 119, 143, 150	0
17	8A	99/105 (94%)	0.19	3 (3%) 54 39	105, 120, 132, 133	0
17	8I	100/105 (95%)	0.32	1 (1%) 84 75	98, 114, 124, 126	0
18	9A	67/88 (76%)	1.36	21 (31%) 1 0	106, 121, 135, 142	0
18	9I	68/88 (77%)	1.17	19 (27%) 1 0	94, 109, 133, 136	0
19	AA	62/93 (66%)	1.30	14 (22%) 1 1	134, 149, 156, 158	0
19	AI	81/93 (87%)	0.54	6 (7%) 17 10	102, 122, 138, 151	0
20	BA	99/106 (93%)	-0.20	1 (1%) 84 75	100, 118, 141, 152	0
20	BI	97/106 (91%)	-0.10	1 (1%) 84 75	112, 125, 148, 157	0
21	1B	22/27 (81%)	1.16	5 (22%) 1 1	129, 137, 145, 148	0
21	1F	23/27 (85%)	-0.32	0 100 100	94, 112, 118, 122	0
22	1K	66/75 (88%)	0.07	1 (1%) 76 63	85, 153, 177, 183	0
23	2K	72/77 (93%)	-0.44	0 100 100	77, 104, 132, 146	0
23	2L	72/77 (93%)	-0.30	0 100 100	85, 122, 151, 162	0
24	3K	76/76 (100%)	-0.28	1 (1%) 79 67	79, 178, 191, 196	0
25	4K	19/27 (70%)	-0.20	1 (5%) 30 17	79, 152, 184, 184	0
25	4L	18/27 (66%)	0.11	0 100 100	101, 161, 187, 187	0
26	14	2861/2917 (98%)	-0.36	35 (1%) 81 69	55, 92, 180, 204	0
26	1H	2833/2917 (97%)	-0.42	13 (0%) 91 87	49, 79, 168, 203	0
27	16	122/122 (100%)	-0.12	1 (0%) 87 80	74, 98, 119, 179	0
27	1J	122/122 (100%)	-0.73	0 100 100	93, 125, 145, 177	0
28	71	133/229 (58%)	1.29	35 (26%) 1 0	143, 174, 185, 189	0
28	79	57/229 (24%)	-0.24	1 (1%) 71 58	140, 165, 176, 179	0
29	11	273/276 (98%)	-0.20	0 100 100	48, 71, 89, 113	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
29	19	274/276 (99%)	0.53	12 (4%) 38 24	58, 82, 101, 117	0
30	21	203/206 (98%)	0.81	35 (17%) 2 1	55, 93, 139, 153	0
30	29	204/206 (99%)	0.63	38 (18%) 2 1	60, 99, 134, 144	0
31	31	202/210 (96%)	0.39	21 (10%) 8 5	54, 85, 118, 142	0
31	39	204/210 (97%)	0.79	33 (16%) 3 2	62, 111, 151, 168	0
32	41	179/182 (98%)	1.18	39 (21%) 1 1	85, 107, 140, 156	0
32	49	179/182 (98%)	0.96	41 (22%) 1 1	122, 139, 155, 171	0
33	51	171/180 (95%)	0.46	9 (5%) 30 17	89, 110, 127, 139	0
33	59	73/180 (40%)	0.25	8 (10%) 7 4	136, 154, 165, 177	0
34	61	146/148 (98%)	1.09	35 (23%) 1 1	83, 130, 143, 150	0
34	69	145/148 (97%)	1.35	43 (29%) 1 0	93, 129, 147, 152	0
35	15	138/140 (98%)	1.92	56 (40%) 0 0	86, 114, 139, 155	0
35	58	138/140 (98%)	0.27	6 (4%) 39 25	68, 97, 130, 145	0
36	25	122/122 (100%)	0.04	0 100 100	77, 94, 114, 120	0
36	68	122/122 (100%)	0.03	1 (0%) 87 80	64, 81, 99, 104	0
37	35	147/150 (98%)	0.30	8 (5%) 29 17	65, 111, 138, 144	0
37	78	147/150 (98%)	0.05	3 (2%) 68 54	53, 88, 113, 120	0
38	45	138/141 (97%)	2.27	69 (50%) 0 0	78, 108, 128, 142	0
38	88	141/141 (100%)	1.23	31 (21%) 1 1	63, 83, 108, 129	0
39	55	118/118 (100%)	-0.03	1 (0%) 87 80	69, 86, 108, 127	0
39	98	118/118 (100%)	0.49	10 (8%) 13 7	67, 90, 109, 122	0
40	65	110/112 (98%)	0.34	5 (4%) 37 23	92, 117, 135, 142	0
40	A8	111/112 (99%)	2.43	66 (59%) 0 0	71, 93, 115, 123	0
41	75	133/146 (91%)	-0.35	3 (2%) 64 49	87, 101, 129, 141	0
41	B8	133/146 (91%)	-0.43	2 (1%) 76 63	78, 98, 133, 149	0
42	85	116/118 (98%)	1.37	34 (29%) 1 0	73, 100, 132, 138	0
42	C8	115/118 (97%)	-0.16	3 (2%) 59 45	59, 86, 114, 118	0
43	95	100/101 (99%)	2.98	69 (69%) 0 0	69, 121, 139, 153	0
43	D8	100/101 (99%)	0.14	6 (6%) 25 14	62, 106, 126, 144	0
44	A5	113/113 (100%)	0.01	2 (1%) 71 58	68, 82, 112, 158	0
44	E8	112/113 (99%)	0.36	5 (4%) 37 23	63, 79, 106, 147	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	B5	94/96 (97%)	0.94	13 (13%) 4 2	77, 91, 118, 128	0
45	F8	95/96 (98%)	0.67	10 (10%) 8 5	60, 76, 104, 118	0
46	C5	104/110 (94%)	0.43	9 (8%) 13 7	91, 122, 149, 154	0
46	G8	105/110 (95%)	-0.23	0 100 100	75, 101, 131, 139	0
47	D5	132/206 (64%)	1.82	58 (43%) 0 0	115, 135, 150, 158	0
47	H8	171/206 (83%)	1.75	66 (38%) 0 0	90, 122, 167, 172	0
48	E5	77/85 (90%)	0.12	4 (5%) 31 18	72, 94, 111, 131	0
48	I8	76/85 (89%)	0.49	3 (3%) 43 28	61, 75, 90, 102	0
49	F5	94/98 (95%)	0.15	2 (2%) 67 52	67, 88, 121, 136	0
49	J8	94/98 (95%)	0.10	2 (2%) 67 52	62, 77, 120, 122	0
50	G5	66/72 (91%)	0.52	5 (7%) 17 9	87, 108, 126, 145	0
50	K8	68/72 (94%)	0.15	2 (2%) 55 41	68, 84, 102, 124	0
51	H5	58/60 (96%)	1.89	26 (44%) 0 0	81, 106, 128, 135	0
51	L8	58/60 (96%)	0.37	3 (5%) 31 18	63, 85, 115, 127	0
52	M8	47/71 (66%)	2.74	32 (68%) 0 0	109, 143, 158, 163	0
53	J5	56/60 (93%)	-0.11	0 100 100	66, 86, 141, 148	0
53	N8	48/60 (80%)	0.40	7 (14%) 3 2	56, 84, 140, 142	0
54	L5	47/49 (95%)	0.14	2 (4%) 39 25	58, 66, 85, 91	0
54	P8	47/49 (95%)	-0.44	0 100 100	52, 57, 77, 88	0
55	M5	64/65 (98%)	0.14	0 100 100	76, 85, 101, 117	0
55	Q8	64/65 (98%)	0.15	0 100 100	61, 71, 88, 99	0
56	1L	68/76 (89%)	1.09	16 (23%) 1 1	118, 173, 181, 188	0
57	3L	73/76 (96%)	-0.60	0 100 100	87, 172, 185, 190	0
All	All	20602/21966 (93%)	0.11	1499 (7%) 18 10	48, 107, 162, 204	0

All (1499) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
26	14	2899	G	12.6
26	14	2901	C	10.8
26	14	2799	A	10.5
26	14	2902	C	10.0
26	14	4	C	9.5
43	95	45	THR	9.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	16	1(M)	A	9.4
43	95	1	MET	9.2
26	14	2897	U	9.1
26	14	2900	A	8.7
26	14	2898	U	8.6
43	95	12	TYR	8.5
41	75	1	MET	8.5
26	14	2795	G	7.8
43	95	91	TYR	7.7
38	45	91	GLU	7.5
32	49	138	GLN	7.4
38	45	103	MET	7.4
26	14	5	A	7.3
12	3A	64	TYR	7.3
52	M8	3	GLU	7.3
34	61	65	ALA	7.3
52	M8	31	ILE	7.1
31	39	12	LEU	7.0
47	D5	68	PRO	7.0
30	21	89	ASP	6.9
38	45	104	PHE	6.9
26	14	2801	A	6.8
40	A8	112	PHE	6.8
14	5A	39	LEU	6.7
6	5E	46	ARG	6.7
41	B8	1	MET	6.6
14	5A	37	PHE	6.4
43	95	15	GLU	6.3
43	95	40	LEU	6.3
14	5A	38	GLY	6.2
34	69	125	GLU	6.2
38	45	105	GLU	6.2
30	21	67	PHE	6.2
26	14	3	U	6.2
26	14	2	G	6.1
38	45	25	ASP	6.0
47	H8	147	GLY	5.9
37	35	1	MET	5.8
43	95	93	GLU	5.8
40	A8	27	SER	5.8
6	52	38	GLU	5.7
3	22	53	ALA	5.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	A8	37	ALA	5.7
43	95	36	PRO	5.7
38	45	56	ARG	5.7
35	15	51	PHE	5.6
35	15	48	MET	5.6
26	14	2896	C	5.6
38	45	68	ILE	5.6
30	29	69	LYS	5.6
47	H8	148	ASP	5.6
43	95	94	LEU	5.6
42	85	72	HIS	5.6
38	45	33	GLY	5.6
35	15	9	VAL	5.6
35	15	1	MET	5.6
35	15	134	ARG	5.5
52	M8	13	ARG	5.5
4	32	108	LEU	5.5
43	95	16	PRO	5.5
38	45	93	TYR	5.5
15	6A	2	PRO	5.5
26	1H	2476	A	5.5
3	2E	166	GLU	5.5
34	61	107	VAL	5.5
26	14	1	G	5.5
34	61	116	LEU	5.4
52	M8	41	PRO	5.4
32	49	139	LEU	5.4
34	69	85	GLU	5.4
45	B5	92	LEU	5.4
32	49	155	MET	5.3
52	M8	5	ILE	5.3
28	71	9	ALA	5.3
28	71	27	HIS	5.3
3	2E	193	TYR	5.3
34	69	72	LEU	5.3
38	45	92	GLY	5.2
52	M8	30	GLU	5.2
30	21	88	GLY	5.2
40	A8	111	GLU	5.2
40	65	108	GLY	5.2
32	49	177	GLY	5.2
35	15	41	ASP	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	3A	28	LYS	5.2
3	22	146	ALA	5.2
43	95	26	ASP	5.1
47	H8	149	SER	5.1
35	15	43	THR	5.1
38	45	65	PHE	5.1
35	15	12	ARG	5.1
43	95	63	GLY	5.1
40	A8	36	TYR	5.1
42	85	69	CYS	5.1
40	A8	68	GLN	5.0
31	39	10	PRO	5.0
43	95	97	LYS	5.0
30	29	78	LEU	5.0
26	14	2797	U	5.0
35	15	131	GLN	5.0
30	21	90	THR	5.0
32	49	142	PRO	5.0
26	1H	2798	C	5.0
32	41	137	GLU	5.0
34	69	144	VAL	5.0
26	1H	2799	A	4.9
40	A8	52	SER	4.9
43	95	64	HIS	4.9
43	D8	37	VAL	4.9
31	39	22	ALA	4.9
34	61	146	ALA	4.9
38	45	102	VAL	4.9
32	49	137	GLU	4.9
47	D5	70	LEU	4.9
38	88	104	PHE	4.9
26	14	2802	G	4.9
35	15	136	GLU	4.9
34	69	76	THR	4.9
2	12	37	ASN	4.9
47	H8	1	MET	4.9
32	49	146	TYR	4.9
40	A8	43	GLU	4.8
28	71	11	LEU	4.8
2	12	102	LEU	4.8
52	M8	11	PRO	4.8
35	15	13	TRP	4.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	3A	68	ALA	4.8
30	29	49	LEU	4.8
34	69	123	LEU	4.8
42	85	74	LEU	4.8
14	5A	36	PHE	4.8
26	14	2794	C	4.8
40	A8	48	LEU	4.8
31	31	6	VAL	4.7
47	H8	166	SER	4.7
34	69	86	THR	4.7
26	14	2798	C	4.7
34	69	88	ILE	4.7
43	95	3	ALA	4.7
28	71	29	VAL	4.7
40	A8	28	VAL	4.7
40	A8	49	VAL	4.7
43	95	5	VAL	4.6
52	M8	34	GLU	4.6
32	49	34	LEU	4.6
6	5E	57	GLN	4.6
43	95	92	THR	4.6
38	45	34	LEU	4.6
34	61	113	ARG	4.6
3	22	101	LEU	4.6
12	3I	64	TYR	4.5
34	61	72	LEU	4.5
38	45	69	PHE	4.5
34	61	70	GLU	4.5
4	32	70	ILE	4.5
28	71	8	ARG	4.5
32	41	88	ILE	4.5
51	H5	2	PRO	4.5
2	12	197	VAL	4.5
47	D5	69	THR	4.4
38	88	33	GLY	4.4
42	85	56	ASP	4.4
4	32	5	ILE	4.4
31	39	9	ILE	4.4
43	95	27	ALA	4.4
14	5A	51	GLY	4.4
31	39	199	TRP	4.4
30	29	4	ILE	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	95	96	ILE	4.4
30	29	77	ILE	4.3
31	39	8	GLN	4.3
35	15	44	PRO	4.3
34	69	138	ILE	4.3
44	E8	111	HIS	4.3
43	95	61	VAL	4.3
19	AA	44	MET	4.3
3	22	198	VAL	4.3
30	21	55	ASN	4.3
49	F5	28	GLY	4.3
32	49	39	ILE	4.3
28	71	35	ALA	4.3
38	45	6	ARG	4.3
35	15	15	LEU	4.3
30	21	91	VAL	4.3
43	95	42	GLY	4.3
47	D5	54	HIS	4.3
43	95	39	LEU	4.3
10	1A	65	LEU	4.3
47	H8	70	LEU	4.3
30	29	73	GLU	4.2
35	15	11	PRO	4.2
47	D5	5	LEU	4.2
52	M8	25	TYR	4.2
47	H8	113	ALA	4.2
38	45	32	TYR	4.2
31	39	11	VAL	4.2
40	A8	87	PHE	4.2
33	51	171	LEU	4.2
18	9A	43	PHE	4.2
43	95	99	ILE	4.2
38	88	32	TYR	4.2
43	95	65	GLY	4.2
35	15	8	GLN	4.2
28	71	176	GLY	4.2
38	45	64	ILE	4.2
38	45	66	ILE	4.2
2	12	62	ALA	4.2
47	D5	83	PRO	4.2
4	3E	110	PHE	4.2
30	21	66	HIS	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	69	78	THR	4.2
3	22	102	ASN	4.1
43	95	35	LEU	4.1
4	32	68	TYR	4.1
51	H5	28	LEU	4.1
47	D5	126	VAL	4.1
32	49	140	ILE	4.1
38	45	130	LYS	4.1
18	9I	40	LEU	4.1
30	29	2	LYS	4.1
45	B5	26	TYR	4.1
35	15	50	ASP	4.1
30	21	32	PRO	4.1
35	15	133	GLN	4.1
42	85	59	ARG	4.1
47	H8	146	ILE	4.1
4	32	110	PHE	4.1
19	AA	62	ILE	4.1
47	H8	88	PHE	4.0
3	22	60	ALA	4.0
26	14	546	C	4.0
40	A8	109	GLY	4.0
38	45	61	GLY	4.0
42	85	117	GLN	4.0
43	95	2	PHE	4.0
38	45	59	ARG	4.0
42	85	67	ALA	4.0
43	95	44	LYS	4.0
32	41	146	TYR	4.0
30	21	72	VAL	4.0
6	52	89	MET	4.0
40	A8	101	LEU	4.0
52	M8	28	LYS	4.0
34	69	114	LEU	4.0
12	3A	69	TYR	3.9
19	AI	71	LEU	3.9
43	95	38	LEU	3.9
56	1L	71	C	3.9
34	61	109	ILE	3.9
38	88	105	GLU	3.9
35	15	46	VAL	3.9
2	1E	152	PHE	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	2E	200	ALA	3.9
35	58	133	GLN	3.9
3	2E	167	TRP	3.9
43	95	95	LEU	3.9
31	39	128	ALA	3.9
40	A8	102	ALA	3.9
43	D8	45	THR	3.9
52	M8	2	LYS	3.9
40	A8	105	ALA	3.9
18	9I	26	LEU	3.9
40	A8	29	PHE	3.9
12	3A	20	LYS	3.9
40	A8	35	ILE	3.9
30	21	5	LEU	3.8
4	32	185	PHE	3.8
12	3A	32	PHE	3.8
43	95	60	GLU	3.8
6	52	37	VAL	3.8
43	95	90	PRO	3.8
43	95	11	GLN	3.8
47	D5	56	VAL	3.8
43	95	34	GLU	3.8
43	95	4	ILE	3.8
43	95	17	GLY	3.8
35	15	39	ARG	3.8
47	D5	67	LEU	3.8
38	45	133	ARG	3.8
50	G5	44	LEU	3.8
32	49	89	GLY	3.8
38	45	90	VAL	3.8
32	41	41	GLN	3.8
47	H8	168	GLU	3.8
2	1E	96	ARG	3.8
14	5A	26	ARG	3.8
30	29	90	THR	3.8
43	95	18	LEU	3.8
34	69	80	PRO	3.7
18	9I	42	ARG	3.7
6	52	61	LEU	3.7
28	71	5	LYS	3.7
4	32	69	GLY	3.7
51	H5	26	LEU	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	H8	104	PHE	3.7
30	29	71	GLY	3.7
4	3E	144	ASP	3.7
47	D5	91	LEU	3.7
31	39	7	TYR	3.7
32	41	135	LEU	3.7
47	H8	51	ALA	3.7
47	H8	121	HIS	3.7
32	41	23	PHE	3.7
47	D5	159	PRO	3.7
34	69	141	LYS	3.7
43	95	14	VAL	3.7
6	52	36	ARG	3.7
33	59	153	LYS	3.7
47	D5	55	HIS	3.7
4	3E	145	GLU	3.7
31	39	14	PRO	3.7
30	21	33	VAL	3.7
4	32	34	GLU	3.7
43	95	41	GLY	3.6
30	29	96	PHE	3.6
34	61	75	LEU	3.6
40	A8	24	LEU	3.6
2	12	39	ILE	3.6
32	49	145	THR	3.6
47	H8	7	ALA	3.6
34	61	130	TYR	3.6
32	41	178	PHE	3.6
19	AA	63	THR	3.6
6	52	66	GLU	3.6
43	95	28	GLU	3.6
28	71	34	THR	3.6
51	H5	30	ARG	3.6
32	49	108	ASN	3.6
52	M8	20	ASN	3.6
3	22	7	PRO	3.6
38	45	7	MET	3.6
47	D5	88	PHE	3.6
26	14	2793	G	3.6
28	71	25	ALA	3.6
47	H8	171	ILE	3.6
38	45	67	ARG	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	21	49	LEU	3.6
35	15	37	LYS	3.6
42	85	73	GLY	3.6
41	75	2	ASN	3.6
47	H8	114	GLY	3.6
4	32	153	ARG	3.6
19	AI	60	VAL	3.6
30	21	34	VAL	3.6
38	45	112	GLU	3.6
52	M8	12	ALA	3.6
30	21	4	ILE	3.6
40	A8	41	ASP	3.6
28	71	28	LEU	3.6
31	39	147	GLY	3.6
12	3A	65	GLU	3.5
43	95	24	LYS	3.5
38	45	60	ARG	3.5
30	29	56	PRO	3.5
26	1H	1536	A	3.5
35	15	127	ASP	3.5
2	1E	148	TYR	3.5
40	A8	7	TYR	3.5
47	D5	46	LYS	3.5
30	21	50	GLY	3.5
40	A8	26	LEU	3.5
42	85	68	ALA	3.5
47	D5	9	TYR	3.5
18	9A	42	ARG	3.5
31	31	9	ILE	3.5
35	15	135	PRO	3.5
40	A8	58	LEU	3.5
4	3E	111	ALA	3.5
30	29	3	GLY	3.5
4	32	131	ARG	3.5
31	31	27	GLU	3.5
34	61	131	LYS	3.5
51	H5	58	VAL	3.5
40	A8	38	GLN	3.5
34	69	126	TYR	3.5
3	22	144	SER	3.5
32	41	150	ASP	3.5
45	B5	89	ILE	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	M8	22	ILE	3.5
30	21	69	LYS	3.5
30	29	70	ALA	3.5
51	H5	35	ARG	3.5
46	C5	59	GLY	3.5
52	M8	42	PHE	3.5
3	2E	168	ALA	3.5
31	39	172	TRP	3.4
35	15	126	PRO	3.4
43	95	20	LEU	3.4
34	61	128	LEU	3.4
30	29	48	GLN	3.4
30	29	32	PRO	3.4
31	31	24	LEU	3.4
47	D5	163	LEU	3.4
42	85	106	PHE	3.4
3	22	103	VAL	3.4
12	3A	84	LEU	3.4
47	D5	49	ARG	3.4
47	D5	51	ALA	3.4
33	59	169	VAL	3.4
26	1H	2790	A	3.4
53	N8	34	PRO	3.4
31	39	152	GLU	3.4
32	49	179	PRO	3.4
35	15	47	ALA	3.4
56	1L	44	U	3.4
40	A8	108	GLY	3.4
46	C5	29	GLU	3.4
37	35	13	ASN	3.4
35	15	55	VAL	3.4
28	71	208	PHE	3.4
38	45	63	LYS	3.4
6	52	4	TYR	3.4
11	2A	108	ILE	3.4
30	21	51	PHE	3.4
52	M8	32	TYR	3.4
35	15	53	VAL	3.4
3	22	147	LYS	3.4
46	C5	86	ARG	3.4
3	22	55	VAL	3.4
32	41	94	LEU	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	4A	26	GLY	3.3
13	4A	102	ARG	3.3
38	88	59	ARG	3.3
47	D5	65	GLN	3.3
31	39	148	LEU	3.3
4	3E	23	GLY	3.3
5	42	6	PHE	3.3
15	6A	15	PHE	3.3
47	H8	53	ILE	3.3
3	22	204	LEU	3.3
4	32	29	PRO	3.3
38	88	64	ILE	3.3
14	5A	52	GLN	3.3
14	5A	11	LYS	3.3
4	32	195	ALA	3.3
3	22	143	GLU	3.3
12	3I	122	THR	3.3
34	69	87	LYS	3.3
30	29	76	ARG	3.3
32	49	135	LEU	3.3
43	95	85	LYS	3.3
44	A5	113	LYS	3.3
35	15	14	VAL	3.3
32	49	178	PHE	3.3
11	2A	40	ILE	3.3
34	61	85	GLU	3.3
34	61	126	TYR	3.3
12	3A	27	LEU	3.3
30	29	74	PRO	3.3
47	H8	96	VAL	3.3
28	71	19	ILE	3.3
12	3I	33	ARG	3.3
31	39	191	ARG	3.3
45	F8	83	VAL	3.3
3	22	135	LYS	3.3
32	49	63	ILE	3.3
37	35	106	LEU	3.3
35	15	42	TRP	3.3
42	85	91	ASP	3.3
3	2E	201	TYR	3.3
31	39	125	LEU	3.3
2	1E	156	LYS	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	58	15	LEU	3.3
28	71	14	VAL	3.3
47	H8	127	LYS	3.3
16	7I	7	ALA	3.2
32	41	64	THR	3.2
47	H8	165	VAL	3.2
40	A8	23	ARG	3.2
30	21	48	GLN	3.2
34	61	80	PRO	3.2
9	82	115	GLY	3.2
45	B5	79	ALA	3.2
47	H8	164	ALA	3.2
28	71	13	LYS	3.2
43	95	58	VAL	3.2
3	22	44	GLU	3.2
35	15	10	GLU	3.2
3	22	180	ALA	3.2
38	45	22	LYS	3.2
18	9I	39	VAL	3.2
34	69	139	GLN	3.2
38	88	1	MET	3.2
47	H8	133	ILE	3.2
26	1H	2133	G	3.2
47	H8	99	TYR	3.2
35	15	58	ASP	3.2
38	45	132	VAL	3.2
6	52	55	ASP	3.2
3	22	170	GLN	3.2
13	4I	6	GLY	3.2
38	88	68	ILE	3.2
6	52	35	ALA	3.2
29	19	153	ALA	3.2
38	88	136	ALA	3.2
3	22	201	TYR	3.2
4	32	133	VAL	3.2
3	2E	122	GLU	3.2
13	4A	9	ILE	3.2
47	H8	25	PRO	3.2
47	D5	27	VAL	3.2
34	61	66	GLU	3.2
12	3I	62	SER	3.2
21	1B	6	ARG	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	D5	24	LEU	3.2
32	49	80	PHE	3.2
50	K8	43	GLN	3.2
19	AA	67	VAL	3.2
30	29	176	ILE	3.2
43	95	73	SER	3.2
38	88	130	LYS	3.2
6	52	6	VAL	3.2
40	A8	82	ILE	3.2
26	14	6	A	3.2
32	41	138	GLN	3.2
35	15	54	VAL	3.2
43	95	100	ARG	3.2
4	3E	138	TYR	3.2
10	1I	95	GLU	3.2
45	F8	90	GLU	3.2
14	5A	50	LYS	3.1
47	H8	98	MET	3.1
3	2E	189	ALA	3.1
40	A8	95	HIS	3.1
3	22	100	ALA	3.1
19	AA	45	VAL	3.1
6	52	39	LYS	3.1
31	31	19	GLU	3.1
19	AA	69	HIS	3.1
11	2I	107	SER	3.1
32	41	63	ILE	3.1
18	9A	46	GLU	3.1
3	22	189	ALA	3.1
8	72	44	PHE	3.1
32	49	150	ASP	3.1
47	D5	28	MET	3.1
32	49	141	PHE	3.1
35	15	45	ASN	3.1
49	J8	92	LYS	3.1
5	4E	33	VAL	3.1
12	3A	19	ARG	3.1
18	9I	28	GLU	3.1
3	2E	170	GLN	3.1
30	29	52	LEU	3.1
31	31	123	LEU	3.1
47	D5	50	GLN	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	1E	71	VAL	3.1
6	52	101	ALA	3.1
14	5A	44	LEU	3.1
34	69	140	LEU	3.1
37	78	106	LEU	3.1
22	1K	65	C	3.1
30	21	74	PRO	3.1
35	15	138	LEU	3.1
56	1L	57	G	3.1
12	3A	67	THR	3.1
42	85	71	GLN	3.1
43	95	70	ILE	3.1
43	95	86	GLY	3.1
34	69	127	VAL	3.1
47	H8	167	PRO	3.1
3	2E	128	PHE	3.1
30	21	31	CYS	3.1
47	H8	38	TYR	3.1
40	A8	54	LEU	3.1
32	41	65	GLY	3.0
35	15	72	TYR	3.0
42	85	104	GLN	3.0
56	1L	16	U	3.0
26	1H	5	A	3.0
34	69	124	GLY	3.0
26	1H	2797	U	3.0
38	45	5	ARG	3.0
2	1E	101	MET	3.0
4	32	23	GLY	3.0
6	5E	63	TYR	3.0
42	85	57	PHE	3.0
32	49	157	ILE	3.0
6	5E	47	ARG	3.0
18	9A	26	LEU	3.0
54	L5	1	MET	3.0
42	85	90	VAL	3.0
38	45	23	GLY	3.0
31	39	27	GLU	3.0
4	32	154	ASN	3.0
35	15	36	GLY	3.0
38	45	30	GLY	3.0
43	95	13	ARG	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	14	10	G	3.0
40	A8	84	GLN	3.0
43	95	25	LEU	3.0
52	M8	9	LEU	3.0
11	2I	81	ASP	3.0
28	71	4	GLY	3.0
28	71	31	GLU	3.0
40	A8	94	TYR	3.0
21	1B	2	GLY	3.0
38	88	25	ASP	3.0
38	45	129	THR	3.0
18	9I	43	PHE	3.0
26	14	2895	U	3.0
32	41	66	GLN	3.0
52	M8	29	PRO	3.0
2	1E	66	GLY	3.0
32	49	182	LYS	3.0
4	32	32	ALA	3.0
2	12	155	LEU	3.0
26	14	1177	A	3.0
4	32	64	LEU	3.0
35	15	116	LEU	3.0
12	3I	61	THR	3.0
18	9A	81	PHE	3.0
51	H5	19	GLN	3.0
26	1H	2132	U	3.0
4	32	14	ARG	3.0
18	9A	29	PHE	3.0
38	45	48	GLU	3.0
31	39	192	LEU	2.9
47	H8	90	VAL	2.9
12	3A	87	GLY	2.9
2	1E	80	ILE	2.9
14	5A	25	VAL	2.9
30	29	5	LEU	2.9
32	41	75	LYS	2.9
32	49	62	LEU	2.9
33	59	171	LEU	2.9
4	32	134	ASP	2.9
38	45	10	ARG	2.9
10	1I	22	LYS	2.9
3	22	43	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	32	4	TYR	2.9
31	31	199	TRP	2.9
40	A8	92	TYR	2.9
40	A8	76	LYS	2.9
35	15	122	VAL	2.9
38	45	70	PRO	2.9
4	3E	3	ARG	2.9
4	32	11	LEU	2.9
36	68	52	VAL	2.9
40	A8	86	ALA	2.9
47	H8	109	ALA	2.9
4	3E	150	GLU	2.9
47	D5	12	GLY	2.9
47	D5	96	VAL	2.9
4	32	19	LEU	2.9
14	5A	23	ARG	2.9
40	A8	25	ARG	2.9
47	D5	124	ILE	2.9
2	12	33	TYR	2.9
47	H8	8	TYR	2.9
52	M8	40	HIS	2.9
1	1G	1029	G	2.9
31	39	13	SER	2.9
2	1E	208	ILE	2.9
34	61	145	VAL	2.9
40	A8	103	GLU	2.9
33	51	16	SER	2.9
16	7A	49	LEU	2.9
26	1H	2795	G	2.9
40	A8	93	LYS	2.9
3	2E	151	VAL	2.9
4	32	126	ILE	2.9
18	9A	39	VAL	2.9
2	12	152	PHE	2.9
35	15	119	ARG	2.9
18	9I	80	PRO	2.9
40	A8	73	LEU	2.9
51	L8	59	VAL	2.9
47	H8	69	THR	2.9
30	29	79	ARG	2.9
3	22	199	LYS	2.9
12	3I	99	HIS	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
12	3A	31	PRO	2.9
32	41	82	LEU	2.9
33	51	168	PRO	2.9
34	69	134	PRO	2.9
43	95	87	HIS	2.9
56	1L	65	C	2.8
32	41	25	TYR	2.8
56	1L	76	A	2.8
13	4A	98	VAL	2.8
47	D5	133	ILE	2.8
2	1E	105	PHE	2.8
12	3A	21	LYS	2.8
38	88	63	LYS	2.8
47	H8	73	GLN	2.8
32	41	90	LEU	2.8
34	61	140	LEU	2.8
35	15	38	HIS	2.8
40	A8	91	PRO	2.8
34	69	83	ALA	2.8
38	45	113	GLN	2.8
51	H5	22	ALA	2.8
35	15	17	ASP	2.8
53	N8	46	CYS	2.8
42	85	25	TRP	2.8
47	H8	155	LEU	2.8
34	61	79	ILE	2.8
45	B5	33	LYS	2.8
4	3E	24	GLU	2.8
26	14	1509	C	2.8
47	H8	60	GLU	2.8
38	88	107	ALA	2.8
4	3E	169	LYS	2.8
4	3E	176	LEU	2.8
7	6E	81	GLY	2.8
18	9A	31	LEU	2.8
3	2E	202	ILE	2.8
4	3E	140	VAL	2.8
46	C5	44	ILE	2.8
40	A8	66	ALA	2.8
11	2A	109	VAL	2.8
40	A8	53	SER	2.8
47	D5	66	SER	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	21	76	ARG	2.8
47	H8	122	ARG	2.8
38	45	106	VAL	2.8
56	1L	61	C	2.8
4	3E	15	GLU	2.8
28	71	197	GLU	2.8
25	4K	24	A	2.8
28	71	195	ALA	2.8
38	45	47	ILE	2.8
50	K8	41	ILE	2.8
2	1E	62	ALA	2.8
6	5E	55	ASP	2.8
8	72	133	LEU	2.8
18	9I	79	LEU	2.8
4	3E	183	GLY	2.8
32	41	142	PRO	2.8
3	2E	153	VAL	2.8
12	3I	85	ILE	2.8
52	M8	26	SER	2.8
2	12	29	ALA	2.8
30	29	91	VAL	2.8
38	45	101	ARG	2.8
42	C8	90	VAL	2.8
34	61	122	GLU	2.8
41	75	6	LEU	2.8
35	58	14	VAL	2.8
35	58	130	HIS	2.8
43	95	19	LYS	2.8
51	H5	29	ARG	2.8
12	3A	85	ILE	2.7
31	39	23	ASP	2.8
3	2E	169	ALA	2.7
31	31	22	ALA	2.7
32	41	68	PRO	2.7
35	15	98	VAL	2.7
52	M8	6	HIS	2.7
52	M8	27	THR	2.7
34	69	122	GLU	2.7
38	88	41	TRP	2.7
18	9A	40	LEU	2.7
32	49	176	LEU	2.7
39	98	33	ARG	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
44	E8	69	LEU	2.7
40	A8	85	VAL	2.7
47	H8	141	VAL	2.7
4	32	35	ARG	2.7
32	41	136	ARG	2.7
33	51	170	ARG	2.7
40	A8	30	ARG	2.7
26	1H	2477	C	2.7
6	5E	6	VAL	2.7
12	3I	32	PHE	2.7
40	65	60	GLY	2.7
28	71	175	VAL	2.7
52	M8	10	VAL	2.7
2	1E	211	ILE	2.7
4	32	15	GLU	2.7
32	49	48	GLU	2.7
2	1E	158	LEU	2.7
2	12	115	LEU	2.7
3	22	56	ASP	2.7
43	95	32	THR	2.7
8	72	112	LEU	2.7
35	15	90	MET	2.7
2	12	163	PHE	2.7
3	2E	71	ALA	2.7
3	2E	186	PHE	2.7
42	85	62	ILE	2.7
4	32	194	LEU	2.7
5	42	130	ASN	2.7
18	9I	85	LEU	2.7
34	61	108	THR	2.7
35	15	26	LEU	2.7
47	H8	5	LEU	2.7
30	29	50	GLY	2.7
31	39	18	ARG	2.7
47	H8	49	ARG	2.7
31	39	124	LEU	2.7
43	95	62	LEU	2.7
51	H5	32	GLN	2.7
43	D8	1	MET	2.7
40	A8	46	VAL	2.7
53	N8	37	LYS	2.7
5	42	8	GLU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	5A	35	ARG	2.7
11	2A	21	ILE	2.7
29	19	181	GLU	2.7
47	H8	2	GLU	2.7
47	D5	82	ARG	2.7
18	9I	29	PHE	2.7
52	M8	7	PRO	2.7
11	2A	84	VAL	2.7
12	3I	101	VAL	2.7
30	21	199	ARG	2.7
56	1L	45	G	2.7
3	2E	182	ILE	2.7
18	9A	34	TYR	2.7
4	3E	185	PHE	2.7
46	C5	49	VAL	2.7
18	9A	76	LEU	2.7
40	65	58	LEU	2.7
43	95	23	GLU	2.7
16	7I	48	TRP	2.7
32	41	157	ILE	2.7
34	61	138	ILE	2.7
18	9A	85	LEU	2.7
38	45	11	LYS	2.7
30	21	40	GLU	2.7
12	3A	56	ALA	2.7
31	31	21	ALA	2.7
14	5A	56	VAL	2.6
18	9A	27	GLY	2.6
43	95	89	GLN	2.6
43	95	59	ALA	2.6
19	AA	38	SER	2.6
28	71	209	LEU	2.6
47	H8	85	HIS	2.6
17	8A	11	VAL	2.6
31	31	157	VAL	2.6
43	95	66	ARG	2.6
28	71	33	ALA	2.6
4	3E	130	GLY	2.6
29	19	26	LYS	2.6
45	F8	51	VAL	2.6
51	H5	5	LYS	2.6
34	61	139	GLN	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	M8	1	MET	2.6
19	AA	47	HIS	2.6
35	15	130	HIS	2.6
3	2E	150	LYS	2.6
33	51	85	LYS	2.6
11	2A	92	GLU	2.6
30	29	34	VAL	2.6
45	F8	87	GLN	2.6
2	1E	188	ALA	2.6
40	A8	40	ILE	2.6
35	15	40	PRO	2.6
4	32	179	GLU	2.6
12	3A	35	GLY	2.6
47	H8	162	GLU	2.6
28	71	21	THR	2.6
47	H8	150	LEU	2.6
47	D5	76	LEU	2.6
32	41	72	ARG	2.6
4	32	200	GLU	2.6
38	45	41	TRP	2.6
47	H8	160	GLY	2.6
56	1L	1	G	2.6
48	E5	9	SER	2.6
26	14	2790	A	2.6
31	31	156	LEU	2.6
47	D5	53	ILE	2.6
37	78	91	PHE	2.6
51	H5	44	ARG	2.6
56	1L	70	C	2.6
32	49	92	VAL	2.6
40	A8	81	GLY	2.6
6	52	62	TRP	2.6
6	52	67	MET	2.6
32	41	39	ILE	2.6
52	M8	46	GLN	2.6
26	14	2894	G	2.6
51	H5	39	ASP	2.6
30	29	7	VAL	2.6
38	45	73	PRO	2.6
43	95	46	VAL	2.6
4	32	101	LEU	2.6
11	2A	95	ILE	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	5A	47	LEU	2.6
16	7A	84	ALA	2.6
6	52	100	ASN	2.6
11	2A	31	THR	2.6
34	69	81	VAL	2.6
44	A5	112	GLY	2.6
33	59	170	ARG	2.6
34	61	120	ILE	2.6
47	H8	82	ARG	2.6
10	1A	47	PHE	2.6
12	3A	78	GLN	2.6
35	15	4	TYR	2.6
42	85	82	GLY	2.6
42	85	114	LYS	2.6
44	E8	109	GLU	2.6
5	42	43	LEU	2.6
18	9I	76	LEU	2.6
40	A8	71	ARG	2.6
34	69	92	VAL	2.6
12	3I	77	LEU	2.6
17	8A	59	ILE	2.6
3	22	10	PHE	2.5
29	19	135	PHE	2.5
38	45	29	PHE	2.5
30	21	54	GLN	2.5
34	61	69	LYS	2.5
40	A8	59	LYS	2.5
26	14	2803	C	2.5
45	B5	8	ILE	2.5
3	22	15	THR	2.5
18	9A	84	LYS	2.5
29	19	27	THR	2.5
38	88	48	GLU	2.5
38	45	45	GLN	2.5
47	D5	52	SER	2.5
38	45	57	HIS	2.5
34	69	90	GLY	2.5
40	A8	69	VAL	2.5
30	21	78	LEU	2.5
34	61	141	LYS	2.5
32	41	76	SER	2.5
34	61	143	SER	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
47	D5	63	ASP	2.5
4	32	119	GLN	2.5
28	71	7	TYR	2.5
47	D5	60	GLU	2.5
38	88	106	VAL	2.5
10	1I	71	LEU	2.5
45	B5	13	LEU	2.5
38	88	31	ASP	2.5
42	85	70	ARG	2.5
28	71	12	GLU	2.5
3	22	71	ALA	2.5
29	19	147	LEU	2.5
2	12	108	ILE	2.5
43	95	83	ARG	2.5
47	D5	4	ARG	2.5
3	22	142	MET	2.5
47	D5	89	PHE	2.5
28	71	181	PRO	2.5
28	71	228	SER	2.5
32	49	109	VAL	2.5
38	88	66	ILE	2.5
2	12	196	LEU	2.5
38	88	67	ARG	2.5
42	85	81	HIS	2.5
5	4E	6	PHE	2.5
3	2E	164	ARG	2.5
30	29	47	VAL	2.5
40	A8	51	ALA	2.5
49	J8	95	LEU	2.5
42	C8	106	PHE	2.5
34	61	135	GLU	2.5
39	98	95	THR	2.5
2	1E	230	VAL	2.5
3	2E	99	VAL	2.5
10	1I	8	LEU	2.5
38	45	99	PRO	2.5
39	98	116	LEU	2.5
18	9I	21	LYS	2.5
38	45	72	LYS	2.5
47	H8	145	GLU	2.5
26	14	1176	G	2.5
32	49	90	LEU	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	A8	110	LEU	2.5
48	E5	8	GLY	2.5
51	H5	25	ALA	2.5
2	12	198	ASP	2.5
30	29	51	PHE	2.5
30	29	53	PRO	2.5
3	22	39	ILE	2.5
47	H8	52	SER	2.5
6	5E	48	LEU	2.5
51	H5	59	VAL	2.5
28	71	26	ALA	2.5
3	22	182	ILE	2.5
26	14	2792	G	2.5
30	21	37	ARG	2.5
34	69	79	ILE	2.5
39	98	118	GLU	2.5
4	3E	167	GLY	2.4
31	31	124	LEU	2.4
32	41	139	LEU	2.4
34	69	145	VAL	2.4
35	15	7	LYS	2.4
40	A8	65	VAL	2.4
40	A8	70	GLY	2.4
43	95	74	LYS	2.4
45	F8	92	LEU	2.4
51	H5	4	LEU	2.4
34	61	86	THR	2.4
2	12	105	PHE	2.4
2	1E	68	ILE	2.4
47	H8	97	GLU	2.4
47	D5	57	ILE	2.4
47	D5	168	GLU	2.4
18	9I	23	LYS	2.4
30	29	1	MET	2.4
4	32	196	LEU	2.4
34	69	128	LEU	2.4
39	98	100	LEU	2.4
47	D5	38	TYR	2.4
18	9A	28	GLU	2.4
28	71	193	ILE	2.4
5	42	66	MET	2.4
46	C5	5	MET	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	3E	108	LEU	2.4
4	3E	170	VAL	2.4
52	M8	33	VAL	2.4
2	1E	163	PHE	2.4
45	F8	89	ILE	2.4
47	H8	170	THR	2.4
4	3E	182	LYS	2.4
47	D5	11	GLU	2.4
46	C5	53	PRO	2.4
32	49	136	ARG	2.4
39	98	92	GLY	2.4
45	B5	60	ARG	2.4
2	1E	70	PHE	2.4
38	88	137	TYR	2.4
30	29	41	LYS	2.4
31	39	19	GLU	2.4
32	41	35	GLU	2.4
53	N8	35	GLU	2.4
29	19	166	GLN	2.4
31	31	8	GLN	2.4
34	61	76	THR	2.4
3	22	40	ARG	2.4
12	3A	37	CYS	2.4
47	H8	95	PRO	2.4
51	H5	12	PRO	2.4
12	3A	60	LEU	2.4
14	5A	53	LEU	2.4
18	9A	72	ARG	2.4
49	F5	22	GLY	2.4
51	H5	27	GLY	2.4
31	39	146	ALA	2.4
2	1E	157	ARG	2.4
11	2I	98	LEU	2.4
28	71	174	PRO	2.4
32	41	34	LEU	2.4
42	85	112	ARG	2.4
43	D8	35	LEU	2.4
35	15	125	GLY	2.4
26	14	879	G	2.4
2	12	112	VAL	2.4
32	41	37	VAL	2.4
35	15	52	VAL	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	45	83	MET	2.4
47	H8	126	VAL	2.4
47	H8	163	LEU	2.4
51	H5	23	LEU	2.4
53	N8	45	VAL	2.4
3	22	65	ALA	2.4
21	1B	13	ILE	2.4
4	32	178	VAL	2.4
18	9I	78	LEU	2.4
32	41	176	LEU	2.4
51	L8	53	LEU	2.4
3	22	67	THR	2.4
32	41	93	THR	2.4
48	E5	12	ASN	2.4
3	22	131	ARG	2.4
19	AI	47	HIS	2.4
40	A8	10	ARG	2.4
28	71	49	ILE	2.4
52	M8	18	CYS	2.4
34	69	11	ASN	2.4
38	45	137	TYR	2.4
47	H8	107	THR	2.4
4	3E	97	LEU	2.4
19	AA	20	LEU	2.4
6	5E	88	VAL	2.4
40	65	109	GLY	2.4
3	2E	79	ARG	2.4
47	D5	62	PRO	2.4
47	D5	95	PRO	2.4
26	1H	2126	A	2.4
4	32	188	LEU	2.4
16	7I	49	LEU	2.4
47	H8	76	LEU	2.4
30	29	67	PHE	2.4
38	45	58	PHE	2.4
5	4E	8	GLU	2.4
3	22	184	TYR	2.4
34	61	71	ILE	2.4
38	88	20	ALA	2.4
47	D5	15	PRO	2.4
3	22	202	ILE	2.4
42	85	94	ASN	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
8	7E	119	LEU	2.4
31	39	155	LEU	2.4
33	51	61	HIS	2.4
38	88	65	PHE	2.3
38	88	133	ARG	2.3
38	45	31	ASP	2.3
38	45	35	VAL	2.3
38	45	94	VAL	2.3
33	59	159	GLU	2.3
39	98	115	GLU	2.3
31	31	10	PRO	2.3
2	1E	187	LEU	2.3
32	41	149	VAL	2.3
38	45	89	ASN	2.3
43	95	72	VAL	2.3
47	H8	86	VAL	2.3
47	D5	58	VAL	2.3
2	12	193	ASP	2.3
47	D5	98	MET	2.3
3	2E	124	ILE	2.3
29	19	270	ILE	2.3
18	9A	55	ARG	2.3
35	15	6	PRO	2.3
39	55	29	LEU	2.3
43	D8	40	LEU	2.3
29	19	67	PHE	2.3
30	21	47	VAL	2.3
12	3I	123	LYS	2.3
12	3A	126	LYS	2.3
13	4A	64	TRP	2.3
30	21	87	GLU	2.3
51	L8	57	GLU	2.3
19	AA	75	ALA	2.3
47	H8	144	LEU	2.3
47	D5	8	TYR	2.3
4	32	169	LYS	2.3
12	3A	57	LYS	2.3
30	29	80	GLU	2.3
47	D5	97	GLU	2.3
51	H5	3	ARG	2.3
3	2E	160	ALA	2.3
4	3E	11	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
6	52	63	TYR	2.3
33	59	162	ILE	2.3
40	A8	39	ILE	2.3
56	1L	5	C	2.3
56	1L	56	C	2.3
42	85	93	LYS	2.3
30	29	180	ASN	2.3
13	4I	48	LEU	2.3
38	45	121	ALA	2.3
51	H5	20	LYS	2.3
3	22	64	VAL	2.3
14	5A	18	VAL	2.3
38	88	99	PRO	2.3
3	2E	126	ARG	2.3
33	51	58	GLU	2.3
14	5A	49	HIS	2.3
42	85	55	ARG	2.3
56	1L	7	U	2.3
2	1E	102	LEU	2.3
29	19	184	LYS	2.3
30	29	181	LEU	2.3
34	61	77	LEU	2.3
35	15	124	ALA	2.3
40	A8	77	ALA	2.3
3	2E	68	VAL	2.3
40	A8	90	GLY	2.3
3	22	105	GLU	2.3
6	52	1	MET	2.3
43	95	69	LYS	2.3
14	5A	10	ALA	2.3
17	8I	36	ILE	2.3
47	D5	61	LEU	2.3
2	1E	227	GLY	2.3
45	B5	68	ARG	2.3
52	M8	17	GLY	2.3
47	H8	169	GLU	2.3
47	D5	25	PRO	2.3
53	N8	49	CYS	2.3
3	22	178	LEU	2.3
6	52	88	VAL	2.3
31	39	126	VAL	2.3
35	15	56	ASN	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	1H	2793	G	2.3
30	21	3	GLY	2.3
3	22	52	LEU	2.3
34	69	77	LEU	2.3
40	A8	56	LEU	2.3
43	D8	38	LEU	2.3
3	22	23	TYR	2.3
3	22	54	ARG	2.3
3	22	200	ALA	2.3
12	3I	102	ARG	2.3
19	AI	49	ILE	2.3
31	31	18	ARG	2.3
37	35	110	TYR	2.3
1	1G	1536	C	2.3
38	45	97	VAL	2.3
2	12	133	LYS	2.3
34	69	112	LYS	2.3
43	95	30	GLY	2.3
14	5A	46	GLU	2.3
38	45	71	ASP	2.3
40	A8	88	ASP	2.3
1	13	344	A	2.3
51	H5	55	ARG	2.3
12	3A	66	VAL	2.3
45	F8	88	LYS	2.3
34	69	60	GLU	2.3
26	14	877	U	2.3
3	2E	91	LEU	2.3
3	2E	101	LEU	2.3
32	49	113	ARG	2.3
47	D5	137	ILE	2.3
34	61	73	GLU	2.2
13	4A	48	LEU	2.2
31	39	20	LEU	2.2
47	D5	79	ARG	2.2
5	42	128	PRO	2.2
11	2A	83	ILE	2.2
3	2E	139	GLN	2.2
10	1I	72	VAL	2.2
45	B5	28	PHE	2.2
47	H8	106	GLY	2.2
47	D5	162	GLU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	A8	15	ARG	2.2
32	49	152	LEU	2.2
32	41	40	ASN	2.2
40	65	57	LYS	2.2
47	D5	134	PRO	2.2
10	1I	20	ALA	2.2
30	21	28	ALA	2.2
32	49	41	GLN	2.2
32	49	83	ARG	2.2
34	69	143	SER	2.2
13	4A	96	LEU	2.2
28	71	200	LYS	2.2
47	H8	41	LEU	2.2
5	4E	5	ASP	2.2
11	2I	108	ILE	2.2
19	AI	62	ILE	2.2
52	M8	21	VAL	2.2
40	A8	67	ARG	2.2
43	95	98	GLU	2.2
51	H5	10	LYS	2.2
3	22	186	PHE	2.2
18	9A	50	ILE	2.2
20	BI	55	ILE	2.2
30	29	81	ILE	2.2
31	39	139	PHE	2.2
12	3I	43	VAL	2.2
12	3A	98	TYR	2.2
16	7I	35	LYS	2.2
38	45	12	GLN	2.2
42	85	89	GLU	2.2
30	29	31	CYS	2.2
47	D5	78	LYS	2.2
11	2A	32	ILE	2.2
39	98	34	ILE	2.2
50	G5	37	PHE	2.2
12	3I	90	VAL	2.2
31	31	193	VAL	2.2
5	4E	9	LYS	2.2
37	78	92	GLU	2.2
43	95	6	LYS	2.2
17	8A	7	THR	2.2
19	AI	48	THR	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
31	39	133	ASN	2.2
45	B5	18	TYR	2.2
48	I8	26	TYR	2.2
18	9I	51	LEU	2.2
32	49	82	LEU	2.2
35	15	34	LEU	2.2
45	F8	1	MET	2.2
47	H8	28	MET	2.2
31	39	131	GLY	2.2
4	32	102	ASP	2.2
32	41	26	GLN	2.2
5	42	109	ILE	2.2
6	5E	89	MET	2.2
21	1B	22	ARG	2.2
32	41	102	PHE	2.2
43	95	43	GLU	2.2
3	2E	149	ALA	2.2
31	31	196	LEU	2.2
34	69	8	PRO	2.2
42	85	40	PHE	2.2
2	12	41	ILE	2.2
12	3A	55	VAL	2.2
31	39	154	VAL	2.2
47	H8	27	VAL	2.2
4	32	6	GLY	2.2
40	A8	50	SER	2.2
2	1E	88	ALA	2.2
13	4A	42	ALA	2.2
11	2A	85	ARG	2.2
18	9A	58	LEU	2.2
32	49	107	LEU	2.2
38	45	2	LEU	2.2
43	95	31	ALA	2.2
30	29	30	PRO	2.2
4	32	125	HIS	2.2
34	69	135	GLU	2.2
45	F8	49	VAL	2.2
3	2E	87	LEU	2.2
4	3E	135	LEU	2.2
30	21	44	TYR	2.2
32	41	56	ALA	2.2
34	61	118	LYS	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
35	15	33	LEU	2.2
37	35	14	LYS	2.2
37	35	123	LEU	2.2
43	95	68	LYS	2.2
50	G5	61	LEU	2.2
26	14	1536	A	2.2
26	14	2476	A	2.2
42	85	79	PHE	2.2
4	32	145	GLU	2.2
14	5A	42	ILE	2.2
47	H8	120	ILE	2.2
47	D5	3	TYR	2.2
48	I8	69	PHE	2.2
50	G5	9	GLN	2.2
4	3E	163	GLU	2.2
12	3A	70	ILE	2.2
18	9A	86	VAL	2.2
29	19	193	VAL	2.2
32	49	151	ALA	2.1
3	22	157	ILE	2.1
30	21	36	ARG	2.1
30	29	89	ASP	2.1
32	49	15	VAL	2.1
38	45	131	ILE	2.1
3	22	177	THR	2.1
42	85	109	LEU	2.1
3	22	66	VAL	2.1
16	7I	2	VAL	2.1
31	31	14	PRO	2.1
31	39	114	VAL	2.1
51	H5	24	LYS	2.1
30	21	71	GLY	2.1
34	69	1	MET	2.1
34	69	116	LEU	2.1
2	1E	67	THR	2.1
35	15	18	ALA	2.1
41	B8	38	ASN	2.1
47	H8	75	ASN	2.1
9	82	59	PHE	2.1
32	41	80	PHE	2.1
13	4A	65	LYS	2.1
33	51	124	GLU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	85	88	ILE	2.1
2	1E	159	PRO	2.1
31	39	123	LEU	2.1
47	D5	123	ASP	2.1
19	AA	61	TYR	2.1
4	32	49	ARG	2.1
7	6E	78	ARG	2.1
6	52	57	GLN	2.1
13	4I	7	VAL	2.1
42	85	65	ILE	2.1
47	D5	13	GLU	2.1
2	12	101	MET	2.1
31	31	125	LEU	2.1
35	58	138	LEU	2.1
48	I8	76	GLY	2.1
13	4I	5	ALA	2.1
28	71	170	ALA	2.1
37	35	2	LYS	2.1
46	C5	50	ARG	2.1
34	69	117	GLU	2.1
5	4E	42	GLY	2.1
10	1I	88	LEU	2.1
32	49	175	LEU	2.1
38	45	17	LEU	2.1
42	C8	83	LEU	2.1
3	2E	21	ARG	2.1
40	A8	83	LYS	2.1
52	M8	37	SER	2.1
54	L5	14	LYS	2.1
37	35	5	ASP	2.1
39	98	102	GLU	2.1
4	32	129	ASN	2.1
3	2E	132	ARG	2.1
4	3E	191	ARG	2.1
6	52	28	ARG	2.1
34	69	68	LEU	2.1
38	45	3	MET	2.1
51	H5	8	LEU	2.1
5	4E	70	PRO	2.1
18	9I	81	PHE	2.1
38	88	39	PRO	2.1
2	1E	160	ASP	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
19	AA	11	VAL	2.1
21	1B	14	TRP	2.1
24	3K	47	U	2.1
56	1L	58	A	2.1
4	32	162	LEU	2.1
19	AA	53	ASN	2.1
38	45	62	GLY	2.1
38	45	125	LEU	2.1
51	H5	15	TYR	2.1
40	A8	75	GLU	2.1
5	42	115	VAL	2.1
35	15	104	LYS	2.1
39	98	114	VAL	2.1
40	A8	44	LYS	2.1
3	2E	123	GLN	2.1
48	E5	75	LEU	2.1
4	32	122	ARG	2.1
5	4E	40	ARG	2.1
18	9A	71	LYS	2.1
38	88	132	VAL	2.1
2	1E	61	LEU	2.1
4	3E	157	LEU	2.1
3	22	37	GLN	2.1
38	88	129	THR	2.1
4	32	189	PRO	2.1
33	59	168	PRO	2.1
47	D5	99	TYR	2.1
53	N8	48	GLU	2.1
3	2E	138	VAL	2.1
32	49	149	VAL	2.1
43	95	22	VAL	2.1
47	H8	57	ILE	2.1
4	32	144	ASP	2.1
12	3A	88	GLY	2.1
28	71	32	LEU	2.1
29	19	111	LEU	2.1
31	31	181	LEU	2.1
32	49	133	LEU	2.1
32	41	54	GLU	2.1
38	88	112	GLU	2.1
42	85	52	ARG	2.1
34	61	142	VAL	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
2	1E	214	ILE	2.1
38	88	2	LEU	2.1
38	88	34	LEU	2.1
44	E8	112	GLY	2.1
13	4A	92	HIS	2.1
38	45	54	MET	2.1
38	45	115	MET	2.1
45	F8	82	GLN	2.0
4	32	66	ARG	2.0
14	5A	13	THR	2.0
20	BA	9	ASN	2.0
47	H8	161	VAL	2.0
33	51	105	LEU	2.0
12	3A	99	HIS	2.0
32	49	100	TRP	2.0
56	1L	51	A	2.0
34	69	10	GLU	2.0
6	5E	9	VAL	2.0
38	88	37	LEU	2.0
45	B5	31	HIS	2.0
12	3I	104	VAL	2.0
2	12	118	LEU	2.0
31	31	192	LEU	2.0
44	E8	23	LEU	2.0
47	H8	91	LEU	2.0
5	4E	75	THR	2.0
6	52	71	ARG	2.0
18	9I	54	ARG	2.0
19	AA	48	THR	2.0
32	41	59	GLU	2.0
34	69	104	GLN	2.0
34	69	20	ASP	2.0
45	B5	6	ASP	2.0
56	1L	10	G	2.0
2	12	164	VAL	2.0
16	7I	51	VAL	2.0
5	42	112	LEU	2.0
8	72	107	LEU	2.0
28	79	9	ALA	2.0
42	85	24	TYR	2.0
30	21	52	LEU	2.0
11	2A	49	GLY	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
52	M8	4	GLY	2.0
2	1E	149	LEU	2.0
2	12	160	ASP	2.0
6	5E	91	VAL	2.0
28	71	199	HIS	2.0
42	85	49	HIS	2.0
46	C5	87	LYS	2.0
4	3E	96	LEU	2.0
4	3E	168	ARG	2.0
35	58	134	ARG	2.0
40	A8	2	ALA	2.0
47	H8	3	TYR	2.0
14	5A	7	ILE	2.0
34	69	16	GLY	2.0
50	G5	41	ILE	2.0
12	3I	94	PRO	2.0
18	9I	83	GLU	2.0
38	45	98	LYS	2.0
3	2E	131	ARG	2.0
13	4A	60	VAL	2.0
18	9I	22	VAL	2.0
30	21	27	LEU	2.0
33	59	157	TYR	2.0

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

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
56	PSU	1L	39	20/21	0.88	0.18	-	105,127,133,134	0
56	T6A	1L	37	32/33	0.93	0.18	-	102,120,127,130	0
23	PSU	2K	56	20/21	0.94	0.14	-	104,113,121,127	0
23	OMC	2K	33	21/22	0.97	0.14	-	82,87,92,96	0
23	OMC	2L	33	21/22	0.96	0.15	-	109,114,117,125	0
23	4SU	2L	8	20/21	0.91	0.17	-	112,125,130,135	0
22	5MU	1K	54	21/22	0.94	0.22	-	114,122,134,142	0
57	5MU	3L	54	21/22	0.87	0.09	-	162,169,172,173	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
22	PSU	1K	39	20/21	0.95	0.15	-	79,98,105,108	0
23	G7M	2K	47	24/25	0.94	0.12	-	104,115,129,135	0
57	PSU	3L	39	20/21	0.91	0.13	-	153,162,166,168	0
22	T6A	1K	37	32/33	0.96	0.16	-	76,86,103,106	0
56	U8U	1L	34	23/24	0.91	0.18	-	110,126,134,138	0
22	PSU	1K	55	20/21	0.90	0.17	-	109,120,133,134	0
22	U8U	1K	34	23/24	0.96	0.15	-	78,88,93,105	0
23	5MU	2K	55	21/22	0.96	0.12	-	112,118,125,127	0
23	G7M	2L	47	24/25	0.93	0.12	-	129,137,150,151	0
56	PSU	1L	55	20/21	0.87	0.30	-	134,150,156,159	0
57	PSU	3L	55	20/21	0.83	0.08	-	166,169,175,175	0
23	5MU	2L	55	21/22	0.94	0.13	-	128,133,141,143	0
56	5MU	1L	54	21/22	0.95	0.25	-	138,147,154,155	0
23	PSU	2L	56	20/21	0.88	0.12	-	116,129,133,137	0
23	4SU	2K	8	20/21	0.92	0.17	-	93,98,102,106	0

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1667	1/1	0.97	0.48	60.64	71,71,71,71	0
58	MG	1H	3331	1/1	0.62	0.62	47.42	73,73,73,73	0
58	MG	1H	3075	1/1	0.97	0.48	38.69	43,43,43,43	0
58	MG	14	3235	1/1	0.96	0.66	36.80	72,72,72,72	0
58	MG	1H	3183	1/1	0.96	0.52	36.13	67,67,67,67	0
58	MG	14	3284	1/1	0.87	0.78	33.45	78,78,78,78	0
58	MG	14	3110	1/1	0.95	0.37	32.73	57,57,57,57	0
58	MG	14	3149	1/1	0.90	0.54	31.98	73,73,73,73	0
58	MG	1H	3279	1/1	0.59	0.49	31.96	67,67,67,67	0
58	MG	13	1645	1/1	0.93	0.42	31.09	64,64,64,64	0
58	MG	14	3155	1/1	0.73	0.71	29.25	64,64,64,64	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3303	1/1	0.86	0.78	28.64	78,78,78,78	0
58	MG	14	3006	1/1	0.97	0.64	25.64	56,56,56,56	0
58	MG	1H	3037	1/1	0.94	0.46	25.47	121,121,121,121	0
58	MG	14	3312	1/1	0.90	0.54	25.00	80,80,80,80	0
58	MG	14	3192	1/1	0.97	0.51	24.76	63,63,63,63	0
58	MG	1H	3176	1/1	0.87	0.46	24.66	76,76,76,76	0
58	MG	14	3088	1/1	0.97	0.45	24.41	52,52,52,52	0
58	MG	14	3082	1/1	0.94	0.47	24.36	61,61,61,61	0
58	MG	14	3020	1/1	0.94	0.47	24.30	75,75,75,75	0
58	MG	13	1648	1/1	0.97	0.50	24.25	95,95,95,95	0
58	MG	1H	3318	1/1	0.90	0.42	23.54	79,79,79,79	0
58	MG	1H	3091	1/1	0.94	0.46	23.28	65,65,65,65	0
58	MG	14	3158	1/1	0.95	0.41	22.43	75,75,75,75	0
58	MG	1H	3139	1/1	0.73	0.36	22.32	71,71,71,71	0
58	MG	1H	3058	1/1	0.95	0.43	22.26	46,46,46,46	0
58	MG	14	3223	1/1	0.91	0.34	22.13	86,86,86,86	0
58	MG	14	3397	1/1	0.91	0.50	20.41	73,73,73,73	0
58	MG	14	3021	1/1	0.84	0.46	20.34	52,52,52,52	0
58	MG	14	3251	1/1	0.74	0.50	19.97	69,69,69,69	0
58	MG	1H	3243	1/1	0.93	0.50	19.64	65,65,65,65	0
58	MG	13	1658	1/1	0.96	0.24	19.23	83,83,83,83	0
58	MG	14	3213	1/1	0.96	0.36	19.09	64,64,64,64	0
58	MG	14	3214	1/1	0.96	0.34	18.60	88,88,88,88	0
58	MG	1H	3056	1/1	0.93	0.50	17.83	56,56,56,56	0
58	MG	1H	3096	1/1	0.85	0.33	17.79	60,60,60,60	0
58	MG	14	3085	1/1	0.64	0.47	17.72	67,67,67,67	0
58	MG	1H	3285	1/1	0.65	0.47	17.27	68,68,68,68	0
58	MG	14	3004	1/1	0.97	0.37	17.11	67,67,67,67	0
58	MG	1H	3187	1/1	0.84	0.25	16.92	69,69,69,69	0
58	MG	14	3057	1/1	0.94	0.27	16.71	101,101,101,101	0
58	MG	1H	3095	1/1	0.91	0.33	16.70	65,65,65,65	0
58	MG	1H	3136	1/1	0.77	0.34	16.69	49,49,49,49	0
58	MG	14	3070	1/1	0.97	0.51	16.51	60,60,60,60	0
58	MG	14	3231	1/1	0.72	0.34	16.50	86,86,86,86	0
58	MG	14	3015	1/1	0.96	0.44	16.30	49,49,49,49	0
58	MG	14	3081	1/1	0.98	0.32	16.10	76,76,76,76	0
58	MG	14	3117	1/1	0.77	0.44	15.88	81,81,81,81	0
58	MG	14	3126	1/1	0.89	0.39	15.82	67,67,67,67	0
58	MG	13	1704	1/1	0.80	0.41	15.69	82,82,82,82	0
58	MG	1H	3191	1/1	0.98	0.50	15.62	90,90,90,90	0
58	MG	13	1655	1/1	0.90	0.47	15.58	87,87,87,87	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3195	1/1	0.89	0.37	15.52	68,68,68,68	0
58	MG	1H	3273	1/1	0.92	0.22	15.50	68,68,68,68	0
58	MG	1H	3255	1/1	0.98	0.39	15.35	73,73,73,73	0
58	MG	1H	3090	1/1	0.96	0.36	15.33	71,71,71,71	0
58	MG	14	3250	1/1	0.75	0.41	15.21	78,78,78,78	0
58	MG	14	3040	1/1	0.98	0.35	15.07	59,59,59,59	0
58	MG	1H	3110	1/1	0.94	0.51	14.72	55,55,55,55	0
58	MG	14	3065	1/1	0.97	0.32	14.67	67,67,67,67	0
58	MG	1H	3004	1/1	0.91	0.32	14.42	57,57,57,57	0
58	MG	14	3212	1/1	0.90	0.39	14.31	70,70,70,70	0
58	MG	1G	1602	1/1	0.91	0.42	14.19	79,79,79,79	0
58	MG	1H	3067	1/1	0.96	0.32	13.96	55,55,55,55	0
58	MG	14	3242	1/1	0.91	0.52	13.95	67,67,67,67	0
58	MG	13	1609	1/1	0.97	0.37	13.72	75,75,75,75	0
58	MG	13	1649	1/1	0.96	0.37	13.68	72,72,72,72	0
58	MG	1H	3260	1/1	0.96	0.37	13.34	72,72,72,72	0
58	MG	13	1628	1/1	0.95	0.41	13.18	65,65,65,65	0
58	MG	1H	3065	1/1	0.94	0.35	13.16	61,61,61,61	0
58	MG	14	3302	1/1	0.64	0.46	13.15	66,66,66,66	0
58	MG	14	3107	1/1	0.83	0.51	13.13	77,77,77,77	0
58	MG	2L	101	1/1	0.99	0.56	13.07	73,73,73,73	0
58	MG	1H	3166	1/1	0.92	0.27	13.02	71,71,71,71	0
58	MG	14	3230	1/1	0.83	0.41	12.91	64,64,64,64	0
58	MG	14	3093	1/1	0.96	0.42	12.80	42,42,42,42	0
58	MG	14	3215	1/1	0.91	0.22	12.73	72,72,72,72	0
58	MG	1H	3242	1/1	0.86	0.36	12.70	52,52,52,52	0
58	MG	1G	1628	1/1	0.88	0.44	12.62	95,95,95,95	0
58	MG	14	3010	1/1	0.98	0.48	12.55	41,41,41,41	0
58	MG	1H	3071	1/1	0.85	0.38	12.50	61,61,61,61	0
58	MG	13	1624	1/1	0.88	0.23	12.42	103,103,103,103	0
58	MG	14	3134	1/1	0.95	0.28	12.32	74,74,74,74	0
58	MG	14	3243	1/1	0.79	0.47	11.85	81,81,81,81	0
58	MG	1H	3265	1/1	0.91	0.40	11.68	78,78,78,78	0
58	MG	13	1636	1/1	0.92	0.28	11.67	64,64,64,64	0
58	MG	13	1637	1/1	0.81	0.38	10.93	56,56,56,56	0
58	MG	14	3124	1/1	0.95	0.40	10.84	54,54,54,54	0
58	MG	1H	3192	1/1	0.95	0.22	10.73	80,80,80,80	0
58	MG	1H	3217	1/1	0.71	0.34	10.71	71,71,71,71	0
58	MG	1H	3053	1/1	0.99	0.34	10.69	50,50,50,50	0
58	MG	1H	3074	1/1	0.98	0.29	10.66	64,64,64,64	0
58	MG	1H	3010	1/1	0.97	0.36	10.57	63,63,63,63	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1G	1641	1/1	0.86	0.34	10.49	113,113,113,113	0
58	MG	16	204	1/1	0.71	0.32	10.39	73,73,73,73	0
58	MG	14	3003	1/1	0.94	0.24	10.36	62,62,62,62	0
58	MG	14	3193	1/1	0.82	0.40	10.36	77,77,77,77	0
58	MG	14	3009	1/1	0.98	0.45	10.14	52,52,52,52	0
58	MG	1H	3163	1/1	0.97	0.35	10.01	50,50,50,50	0
58	MG	14	3290	1/1	0.77	0.22	9.94	92,92,92,92	0
58	MG	14	3016	1/1	0.95	0.40	9.94	61,61,61,61	0
58	MG	13	1696	1/1	0.55	0.32	9.92	92,92,92,92	0
58	MG	1H	3080	1/1	0.75	0.21	9.87	65,65,65,65	0
58	MG	13	1617	1/1	0.97	0.24	9.72	83,83,83,83	0
58	MG	13	1601	1/1	0.94	0.34	9.57	68,68,68,68	0
58	MG	1H	3006	1/1	0.98	0.36	9.51	46,46,46,46	0
58	MG	1G	1620	1/1	0.83	0.31	9.41	82,82,82,82	0
58	MG	14	3101	1/1	0.96	0.43	9.32	64,64,64,64	0
58	MG	1H	3072	1/1	0.85	0.30	9.10	77,77,77,77	0
58	MG	14	3145	1/1	0.98	0.32	8.95	65,65,65,65	0
58	MG	1H	3064	1/1	0.93	0.32	8.94	65,65,65,65	0
58	MG	1H	3124	1/1	0.98	0.36	8.92	46,46,46,46	0
58	MG	14	3216	1/1	0.93	0.31	8.91	77,77,77,77	0
58	MG	1G	1675	1/1	0.95	0.33	8.85	91,91,91,91	0
58	MG	1H	3321	1/1	0.86	0.25	8.79	67,67,67,67	0
58	MG	2K	101	1/1	0.96	0.36	8.67	68,68,68,68	0
58	MG	14	3153	1/1	0.66	0.44	8.61	89,89,89,89	0
58	MG	1H	3263	1/1	0.78	0.25	8.57	76,76,76,76	0
58	MG	13	1702	1/1	0.90	0.27	8.51	98,98,98,98	0
58	MG	1H	3199	1/1	0.76	0.25	8.49	69,69,69,69	0
58	MG	1H	3048	1/1	0.95	0.30	8.39	56,56,56,56	0
58	MG	1H	3020	1/1	0.85	0.32	8.13	66,66,66,66	0
58	MG	1G	1616	1/1	0.64	0.31	8.06	87,87,87,87	0
58	MG	1H	3102	1/1	0.98	0.39	8.05	35,35,35,35	0
58	MG	14	3122	1/1	0.91	0.28	8.02	88,88,88,88	0
58	MG	14	3046	1/1	0.98	0.28	7.88	66,66,66,66	0
58	MG	14	3076	1/1	0.92	0.34	7.87	62,62,62,62	0
58	MG	21	302	1/1	0.83	0.33	7.85	77,77,77,77	0
58	MG	14	3246	1/1	0.87	0.21	7.80	69,69,69,69	0
58	MG	1H	3109	1/1	0.98	0.30	7.78	47,47,47,47	0
58	MG	1G	1615	1/1	0.82	0.23	7.78	125,125,125,125	0
58	MG	14	3267	1/1	0.92	0.25	7.76	92,92,92,92	0
58	MG	14	3173	1/1	0.95	0.30	7.75	66,66,66,66	0
58	MG	1H	3066	1/1	0.87	0.33	7.73	59,59,59,59	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3291	1/1	0.76	0.31	7.65	73,73,73,73	0
58	MG	1H	3015	1/1	0.86	0.27	7.57	63,63,63,63	0
58	MG	1G	1601	1/1	0.97	0.29	7.51	91,91,91,91	0
58	MG	1H	3302	1/1	0.71	0.21	7.41	92,92,92,92	0
58	MG	1H	3375	1/1	0.95	0.29	7.27	60,60,60,60	0
58	MG	1H	3013	1/1	0.98	0.29	7.15	82,82,82,82	0
58	MG	29	301	1/1	0.74	0.34	6.94	77,77,77,77	0
58	MG	1H	3283	1/1	0.48	0.24	6.85	92,92,92,92	0
58	MG	13	1604	1/1	0.83	0.27	6.67	87,87,87,87	0
58	MG	14	3100	1/1	0.88	0.38	6.67	76,76,76,76	0
58	MG	1G	1625	1/1	0.96	0.32	6.64	93,93,93,93	0
58	MG	1H	3120	1/1	0.96	0.34	6.59	74,74,74,74	0
58	MG	1H	3147	1/1	0.99	0.31	6.55	64,64,64,64	0
58	MG	1H	3258	1/1	0.87	0.27	6.54	59,59,59,59	0
58	MG	13	1680	1/1	0.87	0.28	6.54	96,96,96,96	0
58	MG	1H	3347	1/1	0.97	0.28	6.49	51,51,51,51	0
58	MG	1H	3051	1/1	0.98	0.35	6.46	45,45,45,45	0
58	MG	14	3255	1/1	0.71	0.25	6.45	78,78,78,78	0
58	MG	1H	3101	1/1	0.73	0.26	6.44	59,59,59,59	0
58	MG	14	3184	1/1	0.59	0.24	6.36	98,98,98,98	0
58	MG	1H	3103	1/1	0.97	0.28	6.12	54,54,54,54	0
58	MG	1G	1634	1/1	0.86	0.29	5.89	112,112,112,112	0
58	MG	14	3026	1/1	0.66	0.34	5.79	89,89,89,89	0
58	MG	1H	3128	1/1	0.82	0.22	5.75	62,62,62,62	0
58	MG	14	3224	1/1	0.51	0.38	5.63	90,90,90,90	0
58	MG	1G	1655	1/1	0.92	0.25	5.61	100,100,100,100	0
58	MG	14	3254	1/1	0.97	0.19	5.49	111,111,111,111	0
58	MG	14	3105	1/1	0.93	0.31	5.41	67,67,67,67	0
58	MG	14	3144	1/1	0.75	0.40	5.35	71,71,71,71	0
58	MG	14	3248	1/1	0.84	0.21	5.27	79,79,79,79	0
58	MG	14	3201	1/1	0.83	0.27	5.21	59,59,59,59	0
58	MG	1H	3140	1/1	0.88	0.27	5.10	58,58,58,58	0
58	MG	14	3075	1/1	0.97	0.29	5.06	68,68,68,68	0
58	MG	1H	3177	1/1	0.92	0.23	5.06	74,74,74,74	0
58	MG	14	3233	1/1	0.92	0.15	5.02	86,86,86,86	0
58	MG	1H	3261	1/1	0.93	0.19	5.01	69,69,69,69	0
58	MG	1H	3148	1/1	0.97	0.24	4.94	50,50,50,50	0
58	MG	1G	1607	1/1	0.94	0.34	4.79	73,73,73,73	0
58	MG	14	3157	1/1	0.90	0.25	4.77	57,57,57,57	0
58	MG	1H	3290	1/1	0.86	0.22	4.72	70,70,70,70	0
58	MG	1H	3312	1/1	0.96	0.24	4.43	67,67,67,67	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3153	1/1	0.95	0.20	4.42	62,62,62,62	0
58	MG	14	3066	1/1	0.95	0.41	4.36	62,62,62,62	0
58	MG	1H	3247	1/1	0.76	0.21	4.31	81,81,81,81	0
58	MG	14	3031	1/1	0.91	0.42	4.27	68,68,68,68	0
58	MG	14	3220	1/1	0.89	0.43	4.24	76,76,76,76	0
58	MG	14	3127	1/1	0.98	0.27	4.24	69,69,69,69	0
58	MG	1H	3082	1/1	0.96	0.26	4.20	78,78,78,78	0
58	MG	1H	3077	1/1	0.98	0.23	3.93	60,60,60,60	0
58	MG	1G	1627	1/1	0.96	0.22	3.86	94,94,94,94	0
58	MG	14	3247	1/1	0.78	0.28	3.80	67,67,67,67	0
58	MG	1H	3211	1/1	0.93	0.24	3.75	83,83,83,83	0
58	MG	1G	1636	1/1	0.82	0.32	3.73	101,101,101,101	0
58	MG	35	201	1/1	0.78	0.26	3.53	74,74,74,74	0
58	MG	1G	1613	1/1	0.88	0.21	3.53	98,98,98,98	0
58	MG	14	3204	1/1	0.90	0.19	3.46	77,77,77,77	0
58	MG	1H	3088	1/1	0.91	0.34	3.45	68,68,68,68	0
58	MG	14	3249	1/1	0.90	0.24	3.41	80,80,80,80	0
58	MG	14	3058	1/1	0.72	0.18	3.40	84,84,84,84	0
58	MG	14	3287	1/1	0.89	0.22	3.34	82,82,82,82	0
58	MG	1H	3063	1/1	0.90	0.13	3.34	78,78,78,78	0
58	MG	14	3060	1/1	0.82	0.23	3.24	73,73,73,73	0
58	MG	1G	1609	1/1	0.83	0.18	3.20	94,94,94,94	0
58	MG	1H	3368	1/1	0.72	0.24	3.20	74,74,74,74	0
58	MG	1H	3117	1/1	0.94	0.23	3.15	48,48,48,48	0
58	MG	1H	3126	1/1	0.86	0.23	3.11	58,58,58,58	0
58	MG	1H	3115	1/1	0.94	0.26	3.07	43,43,43,43	0
58	MG	14	3202	1/1	0.98	0.31	3.03	63,63,63,63	0
58	MG	14	3299	1/1	0.88	0.21	2.99	98,98,98,98	0
58	MG	13	1623	1/1	0.92	0.23	2.86	108,108,108,108	0
58	MG	14	3061	1/1	0.85	0.12	2.78	81,81,81,81	0
58	MG	1H	3357	1/1	0.95	0.23	2.74	71,71,71,71	0
58	MG	1H	3430	1/1	0.96	0.18	2.73	49,49,49,49	0
58	MG	1H	3256	1/1	0.95	0.17	2.67	61,61,61,61	0
58	MG	1H	3239	1/1	0.92	0.21	2.50	75,75,75,75	0
58	MG	1G	1649	1/1	0.70	0.41	2.45	83,83,83,83	0
58	MG	14	3209	1/1	0.96	0.24	2.36	66,66,66,66	0
58	MG	1G	1668	1/1	0.82	0.36	2.31	116,116,116,116	0
58	MG	14	3053	1/1	0.94	0.24	2.28	61,61,61,61	0
58	MG	1H	3272	1/1	0.90	0.18	2.26	64,64,64,64	0
58	MG	14	3338	1/1	0.95	0.23	2.24	60,60,60,60	0
58	MG	14	3064	1/1	0.97	0.19	2.21	78,78,78,78	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1732	1/1	0.97	0.20	2.20	65,65,65,65	0
58	MG	13	1614	1/1	0.96	0.20	2.13	78,78,78,78	0
58	MG	13	1669	1/1	0.83	0.30	2.12	68,68,68,68	0
58	MG	14	3274	1/1	0.88	0.15	2.11	76,76,76,76	0
58	MG	1H	3119	1/1	0.90	0.20	2.10	69,69,69,69	0
58	MG	1H	3062	1/1	0.97	0.20	2.08	64,64,64,64	0
58	MG	1H	3394	1/1	0.95	0.20	2.05	53,53,53,53	0
58	MG	6A	101	1/1	0.83	0.26	1.97	93,93,93,93	0
58	MG	1G	1661	1/1	0.90	0.23	1.89	123,123,123,123	0
58	MG	14	3357	1/1	0.99	0.22	1.80	76,76,76,76	0
58	MG	14	3363	1/1	0.84	0.19	1.77	72,72,72,72	0
58	MG	1H	3231	1/1	0.96	0.21	1.70	58,58,58,58	0
58	MG	1H	3099	1/1	0.99	0.20	1.70	55,55,55,55	0
58	MG	1H	3385	1/1	0.98	0.20	1.68	47,47,47,47	0
58	MG	13	1613	1/1	0.97	0.22	1.60	81,81,81,81	0
58	MG	13	1670	1/1	0.81	0.19	1.60	97,97,97,97	0
58	MG	1H	3436	1/1	0.94	0.17	1.50	73,73,73,73	0
58	MG	55	201	1/1	0.86	0.30	1.36	74,74,74,74	0
58	MG	1H	3355	1/1	0.92	0.20	1.32	48,48,48,48	0
58	MG	13	1687	1/1	0.89	0.27	1.20	99,99,99,99	0
58	MG	14	3175	1/1	0.92	0.16	1.20	92,92,92,92	0
58	MG	1H	3370	1/1	0.93	0.16	1.08	71,71,71,71	0
58	MG	14	3166	1/1	0.93	0.20	1.08	60,60,60,60	0
58	MG	14	3049	1/1	0.90	0.21	1.07	70,70,70,70	0
58	MG	14	3097	1/1	0.99	0.22	1.03	65,65,65,65	0
58	MG	13	1730	1/1	0.96	0.17	0.99	86,86,86,86	0
58	MG	1H	3393	1/1	0.94	0.20	0.98	54,54,54,54	0
58	MG	1H	3443	1/1	0.94	0.19	0.97	76,76,76,76	0
58	MG	14	3364	1/1	0.88	0.16	0.96	85,85,85,85	0
58	MG	14	3179	1/1	0.80	0.24	0.95	60,60,60,60	0
58	MG	14	3318	1/1	0.97	0.24	0.95	64,64,64,64	0
58	MG	1H	3401	1/1	0.97	0.18	0.91	69,69,69,69	0
58	MG	13	1684	1/1	0.97	0.14	0.80	128,128,128,128	0
58	MG	1H	3378	1/1	0.99	0.16	0.75	53,53,53,53	0
58	MG	Q8	101	1/1	0.88	0.33	0.70	70,70,70,70	0
58	MG	1H	3264	1/1	0.62	0.18	0.69	76,76,76,76	0
58	MG	14	3116	1/1	0.97	0.20	0.64	64,64,64,64	0
58	MG	13	1619	1/1	0.94	0.13	0.57	91,91,91,91	0
58	MG	1H	3349	1/1	0.98	0.18	0.54	64,64,64,64	0
58	MG	1H	3365	1/1	0.98	0.14	0.43	74,74,74,74	0
58	MG	14	3072	1/1	0.96	0.22	0.33	45,45,45,45	0
58	MG	1G	1653	1/1	0.92	0.15	0.21	97,97,97,97	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3111	1/1	0.90	0.14	0.17	81,81,81,81	0
58	MG	1G	1651	1/1	0.93	0.20	0.17	104,104,104,104	0
58	MG	1H	3348	1/1	0.98	0.19	0.02	50,50,50,50	0
58	MG	J8	101	1/1	0.91	0.19	0.00	66,66,66,66	0
58	MG	1H	3369	1/1	0.98	0.18	-0.04	49,49,49,49	0
58	MG	14	3373	1/1	0.98	0.19	-0.12	61,61,61,61	0
58	MG	14	3240	1/1	0.92	0.21	-0.13	83,83,83,83	0
58	MG	13	1607	1/1	0.93	0.19	-0.15	116,116,116,116	0
58	MG	14	3348	1/1	0.94	0.17	-0.16	70,70,70,70	0
58	MG	14	3320	1/1	0.99	0.18	-0.16	64,64,64,64	0
58	MG	1G	1677	1/1	0.88	0.12	-0.19	96,96,96,96	0
58	MG	35	203	1/1	0.76	0.24	-0.20	75,75,75,75	0
58	MG	29	304	1/1	0.84	0.22	-0.24	81,81,81,81	0
58	MG	1E	301	1/1	0.66	0.20	-0.35	106,106,106,106	0
58	MG	1H	3238	1/1	0.90	0.14	-0.36	65,65,65,65	0
58	MG	14	3333	1/1	0.90	0.17	-0.38	74,74,74,74	0
58	MG	13	1656	1/1	0.72	0.15	-0.40	103,103,103,103	0
58	MG	13	1731	1/1	0.91	0.14	-0.44	84,84,84,84	0
58	MG	1G	1617	1/1	0.96	0.14	-0.45	135,135,135,135	0
58	MG	13	1677	1/1	0.88	0.16	-0.47	104,104,104,104	0
58	MG	14	3055	1/1	0.88	0.10	-0.51	81,81,81,81	0
58	MG	1H	3353	1/1	0.89	0.16	-0.53	57,57,57,57	0
58	MG	14	3210	1/1	0.97	0.17	-0.54	80,80,80,80	0
58	MG	1H	3433	1/1	0.96	0.17	-0.56	87,87,87,87	0
58	MG	16	203	1/1	0.81	0.14	-0.63	90,90,90,90	0
60	ZN	5I	101	1/1	0.99	0.13	-0.66	102,102,102,102	0
58	MG	1H	3274	1/1	0.93	0.18	-0.68	59,59,59,59	0
58	MG	13	1708	1/1	0.83	0.13	-0.75	89,89,89,89	0
58	MG	1H	3381	1/1	0.94	0.14	-0.76	63,63,63,63	0
58	MG	14	3336	1/1	0.95	0.17	-0.81	62,62,62,62	0
58	MG	1G	1690	1/1	0.97	0.16	-0.84	93,93,93,93	0
58	MG	13	1664	1/1	0.94	0.12	-0.88	89,89,89,89	0
58	MG	14	3228	1/1	0.81	0.17	-0.89	101,101,101,101	0
58	MG	1H	3343	1/1	0.93	0.15	-0.92	54,54,54,54	0
58	MG	45	201	1/1	0.90	0.16	-0.92	108,108,108,108	0
58	MG	1H	3425	1/1	0.98	0.12	-0.95	63,63,63,63	0
58	MG	1H	3356	1/1	0.97	0.17	-1.01	42,42,42,42	0
58	MG	16	205	1/1	0.81	0.11	-1.01	81,81,81,81	0
58	MG	1H	3392	1/1	0.92	0.11	-1.10	68,68,68,68	0
59	SF4	32	301	8/8	0.99	0.15	-1.11	115,123,133,136	0
58	MG	1H	3145	1/1	0.93	0.14	-1.13	73,73,73,73	0
58	MG	1G	1687	1/1	0.90	0.06	-1.14	139,139,139,139	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
59	SF4	3E	301	8/8	0.98	0.17	-1.16	86,99,103,105	0
58	MG	13	1715	1/1	0.83	0.10	-1.16	109,109,109,109	0
58	MG	14	3356	1/1	0.98	0.17	-1.17	58,58,58,58	0
58	MG	13	1722	1/1	0.96	0.08	-1.17	103,103,103,103	0
60	ZN	5A	101	1/1	0.98	0.08	-1.20	142,142,142,142	0
58	MG	14	3383	1/1	0.93	0.12	-1.21	86,86,86,86	0
58	MG	13	1666	1/1	0.96	0.13	-1.23	78,78,78,78	0
58	MG	13	1643	1/1	0.95	0.11	-1.31	99,99,99,99	0
58	MG	1H	3402	1/1	0.98	0.15	-1.32	51,51,51,51	0
58	MG	14	3329	1/1	0.99	0.17	-1.35	56,56,56,56	0
58	MG	1H	3374	1/1	0.98	0.16	-1.40	53,53,53,53	0
58	MG	1H	3437	1/1	0.98	0.09	-1.41	58,58,58,58	0
58	MG	14	3369	1/1	0.96	0.12	-1.50	59,59,59,59	0
58	MG	13	1716	1/1	0.98	0.07	-1.52	76,76,76,76	0
58	MG	1H	3410	1/1	0.93	0.10	-1.53	58,58,58,58	0
58	MG	1G	1679	1/1	0.81	0.11	-1.56	119,119,119,119	0
58	MG	1H	3127	1/1	0.93	0.14	-1.59	59,59,59,59	0
58	MG	13	1707	1/1	0.86	0.15	-1.71	76,76,76,76	0
58	MG	1H	3344	1/1	0.98	0.13	-1.71	58,58,58,58	0
58	MG	14	3351	1/1	0.95	0.12	-1.72	85,85,85,85	0
58	MG	1H	3411	1/1	0.99	0.12	-1.75	69,69,69,69	0
58	MG	1H	3467	1/1	0.88	0.10	-1.75	84,84,84,84	0
58	MG	1G	1663	1/1	0.81	0.10	-1.77	94,94,94,94	0
58	MG	14	3398	1/1	0.97	0.07	-1.80	108,108,108,108	0
58	MG	13	1709	1/1	0.99	0.07	-1.80	92,92,92,92	0
58	MG	88	201	1/1	0.97	0.21	-1.91	81,81,81,81	0
58	MG	1H	3453	1/1	0.98	0.10	-1.94	84,84,84,84	0
58	MG	14	3349	1/1	0.96	0.15	-1.95	83,83,83,83	0
58	MG	41	201	1/1	0.85	0.07	-1.97	78,78,78,78	0
58	MG	14	3372	1/1	0.98	0.09	-2.09	70,70,70,70	0
58	MG	13	1690	1/1	0.96	0.13	-2.10	74,74,74,74	0
58	MG	1H	3371	1/1	0.92	0.12	-2.14	59,59,59,59	0
58	MG	14	3330	1/1	0.96	0.14	-2.15	77,77,77,77	0
58	MG	16	201	1/1	0.92	0.11	-2.17	85,85,85,85	0
58	MG	14	3206	1/1	0.96	0.09	-2.28	80,80,80,80	0
58	MG	14	3339	1/1	0.99	0.11	-2.34	82,82,82,82	0
58	MG	13	1668	1/1	0.83	0.09	-2.38	90,90,90,90	0
58	MG	14	3394	1/1	0.92	0.05	-2.52	109,109,109,109	0
58	MG	1H	3380	1/1	0.97	0.11	-2.57	59,59,59,59	0
58	MG	14	3323	1/1	0.94	0.14	-2.64	64,64,64,64	0
58	MG	13	1710	1/1	0.91	0.09	-2.70	97,97,97,97	0
58	MG	14	3332	1/1	0.97	0.10	-2.77	53,53,53,53	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3137	1/1	0.95	0.09	-2.80	57,57,57,57	0
58	MG	14	3354	1/1	0.99	0.10	-2.92	70,70,70,70	0
58	MG	14	3325	1/1	0.90	0.14	-2.92	63,63,63,63	0
58	MG	1H	3373	1/1	0.98	0.12	-2.98	51,51,51,51	0
58	MG	1H	3346	1/1	0.95	0.14	-3.00	45,45,45,45	0
58	MG	14	3385	1/1	0.94	0.07	-3.01	116,116,116,116	0
58	MG	14	3361	1/1	0.98	0.15	-3.02	64,64,64,64	0
58	MG	1H	3405	1/1	0.96	0.09	-3.07	63,63,63,63	0
58	MG	1G	1676	1/1	0.93	0.11	-3.07	90,90,90,90	0
58	MG	14	3387	1/1	0.93	0.10	-3.16	96,96,96,96	0
58	MG	1H	3235	1/1	0.95	0.16	-3.22	53,53,53,53	0
58	MG	1H	3367	1/1	0.91	0.09	-3.29	71,71,71,71	0
58	MG	1H	3379	1/1	0.94	0.11	-3.30	73,73,73,73	0
58	MG	13	1729	1/1	0.92	0.07	-3.49	113,113,113,113	0
58	MG	1H	3351	1/1	0.99	0.08	-3.59	46,46,46,46	0
58	MG	1H	3427	1/1	0.98	0.07	-3.60	72,72,72,72	0
58	MG	14	3328	1/1	0.96	0.06	-3.70	74,74,74,74	0
58	MG	14	3326	1/1	0.93	0.09	-3.73	90,90,90,90	0
58	MG	1H	3404	1/1	0.97	0.13	-3.87	48,48,48,48	0
58	MG	1H	3134	1/1	0.98	0.08	-3.87	69,69,69,69	0
58	MG	1G	1681	1/1	0.92	0.10	-3.95	78,78,78,78	0
58	MG	1H	3362	1/1	0.90	0.11	-4.09	53,53,53,53	0
58	MG	1H	3435	1/1	0.99	0.13	-4.38	56,56,56,56	0
58	MG	1G	1621	1/1	0.97	0.12	-4.48	92,92,92,92	0
58	MG	13	1726	1/1	0.93	0.05	-4.49	126,126,126,126	0
58	MG	14	3358	1/1	0.95	0.09	-4.58	91,91,91,91	0
58	MG	1H	3358	1/1	0.97	0.14	-4.66	45,45,45,45	0
58	MG	1H	3363	1/1	0.99	0.06	-4.67	68,68,68,68	0
58	MG	1H	3387	1/1	0.92	0.07	-4.69	80,80,80,80	0
58	MG	14	3340	1/1	0.92	0.09	-4.74	79,79,79,79	0
58	MG	14	3337	1/1	0.98	0.06	-4.79	66,66,66,66	0
58	MG	1H	3360	1/1	0.98	0.10	-5.14	61,61,61,61	0
58	MG	1H	3389	1/1	0.96	0.10	-5.27	38,38,38,38	0
58	MG	13	1674	1/1	0.98	0.09	-5.44	91,91,91,91	0
58	MG	1H	3450	1/1	0.97	0.10	-5.66	54,54,54,54	0
58	MG	1H	3406	1/1	0.96	0.07	-6.07	76,76,76,76	0
58	MG	14	3350	1/1	0.94	0.11	-6.62	85,85,85,85	0
58	MG	14	3321	1/1	0.96	0.09	-6.75	78,78,78,78	0
58	MG	1H	3234	1/1	0.86	0.08	-7.01	66,66,66,66	0
58	MG	14	3334	1/1	0.97	0.05	-8.29	64,64,64,64	0
58	MG	14	3352	1/1	0.91	0.07	-8.57	97,97,97,97	0
58	MG	1H	3382	1/1	0.96	0.06	-8.91	77,77,77,77	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3341	1/1	0.97	0.08	-8.91	68,68,68,68	0
58	MG	1H	3384	1/1	0.97	0.06	-16.07	58,58,58,58	0
58	MG	14	3019	1/1	0.74	0.67	-	90,90,90,90	0
58	MG	1H	3209	1/1	0.81	0.42	-	90,90,90,90	0
58	MG	13	1705	1/1	0.71	0.35	-	90,90,90,90	0
58	MG	14	3131	1/1	0.87	0.33	-	95,95,95,95	0
58	MG	1H	3246	1/1	0.81	0.23	-	54,54,54,54	0
58	MG	1H	3464	1/1	0.90	0.14	-	107,107,107,107	0
58	MG	1H	3193	1/1	0.85	0.50	-	73,73,73,73	0
58	MG	1G	1654	1/1	0.85	0.53	-	83,83,83,83	0
58	MG	14	3109	1/1	0.82	0.38	-	73,73,73,73	0
58	MG	14	3376	1/1	0.96	0.07	-	94,94,94,94	0
58	MG	1G	1612	1/1	0.94	0.36	-	81,81,81,81	0
58	MG	14	3133	1/1	0.95	0.19	-	107,107,107,107	0
58	MG	14	3150	1/1	0.80	0.41	-	87,87,87,87	0
58	MG	14	3313	1/1	0.70	0.49	-	92,92,92,92	0
58	MG	1H	3327	1/1	0.78	0.79	-	82,82,82,82	0
58	MG	14	3047	1/1	0.92	0.18	-	74,74,74,74	0
58	MG	1H	3364	1/1	0.79	0.10	-	98,98,98,98	0
58	MG	1H	3174	1/1	0.96	0.35	-	88,88,88,88	0
58	MG	14	3396	1/1	0.93	0.06	-	108,108,108,108	0
58	MG	14	3091	1/1	0.99	0.43	-	86,86,86,86	0
58	MG	14	3044	1/1	0.98	0.51	-	64,64,64,64	0
58	MG	1H	3094	1/1	0.99	0.37	-	64,64,64,64	0
58	MG	14	3253	1/1	0.79	0.26	-	94,94,94,94	0
58	MG	14	3359	1/1	0.97	0.06	-	79,79,79,79	0
58	MG	1H	3060	1/1	0.98	0.40	-	61,61,61,61	0
58	MG	1H	3269	1/1	0.88	0.32	-	65,65,65,65	0
58	MG	1G	1644	1/1	0.93	0.67	-	92,92,92,92	0
58	MG	1H	3039	1/1	0.90	0.32	-	68,68,68,68	0
58	MG	14	3002	1/1	0.94	0.37	-	57,57,57,57	0
58	MG	14	3258	1/1	0.40	0.38	-	92,92,92,92	0
58	MG	1H	3259	1/1	0.97	0.48	-	79,79,79,79	0
58	MG	14	3062	1/1	0.97	0.17	-	68,68,68,68	0
58	MG	1H	3326	1/1	0.87	0.56	-	83,83,83,83	0
58	MG	1H	3125	1/1	0.84	0.50	-	69,69,69,69	0
58	MG	1H	3403	1/1	0.97	0.14	-	76,76,76,76	0
58	MG	1H	3181	1/1	0.94	0.25	-	61,61,61,61	0
58	MG	1H	3156	1/1	0.87	0.31	-	67,67,67,67	0
58	MG	14	3018	1/1	0.79	0.61	-	72,72,72,72	0
58	MG	1H	3240	1/1	0.94	0.30	-	74,74,74,74	0
58	MG	1H	3354	1/1	0.96	0.13	-	49,49,49,49	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3324	1/1	0.89	0.06	-	99,99,99,99	0
58	MG	1G	1622	1/1	0.89	1.19	-	92,92,92,92	0
58	MG	1H	3315	1/1	0.71	0.53	-	76,76,76,76	0
58	MG	1H	3158	1/1	0.87	0.49	-	74,74,74,74	0
58	MG	1H	3185	1/1	0.86	0.40	-	95,95,95,95	0
58	MG	14	3377	1/1	0.96	0.20	-	52,52,52,52	0
58	MG	1J	204	1/1	0.80	0.27	-	101,101,101,101	0
58	MG	1H	3340	1/1	0.86	0.51	-	78,78,78,78	0
58	MG	13	1626	1/1	0.92	0.37	-	69,69,69,69	0
58	MG	1H	3395	1/1	0.93	0.07	-	77,77,77,77	0
58	MG	14	3303	1/1	0.32	0.18	-	106,106,106,106	0
58	MG	14	3221	1/1	0.80	0.20	-	69,69,69,69	0
58	MG	1H	3229	1/1	0.94	0.27	-	48,48,48,48	0
60	ZN	C5	201	1/1	0.95	0.07	-	165,165,165,165	0
58	MG	14	3096	1/1	0.90	0.34	-	73,73,73,73	0
58	MG	13	1659	1/1	0.72	0.62	-	97,97,97,97	0
58	MG	14	3114	1/1	0.94	0.42	-	58,58,58,58	0
58	MG	14	3180	1/1	0.61	0.30	-	88,88,88,88	0
58	MG	14	3178	1/1	0.92	0.50	-	84,84,84,84	0
58	MG	1H	3251	1/1	0.71	0.39	-	71,71,71,71	0
58	MG	1H	3301	1/1	0.70	0.44	-	84,84,84,84	0
58	MG	1H	3184	1/1	0.84	0.26	-	82,82,82,82	0
58	MG	1H	3383	1/1	0.99	0.17	-	60,60,60,60	0
58	MG	14	3266	1/1	0.84	0.53	-	85,85,85,85	0
58	MG	13	1621	1/1	0.77	0.21	-	90,90,90,90	0
58	MG	1H	3079	1/1	0.69	0.38	-	79,79,79,79	0
58	MG	13	1672	1/1	0.54	0.45	-	109,109,109,109	0
58	MG	1H	3133	1/1	0.97	0.34	-	71,71,71,71	0
58	MG	13	1681	1/1	0.76	0.19	-	116,116,116,116	0
58	MG	1H	3286	1/1	0.88	0.32	-	94,94,94,94	0
58	MG	1H	3061	1/1	0.94	0.30	-	48,48,48,48	0
58	MG	1H	3173	1/1	0.80	0.47	-	84,84,84,84	0
58	MG	1H	3014	1/1	0.94	0.33	-	70,70,70,70	0
58	MG	1H	3107	1/1	0.93	0.28	-	71,71,71,71	0
58	MG	13	1699	1/1	0.28	0.31	-	94,94,94,94	0
58	MG	14	3071	1/1	0.98	0.58	-	68,68,68,68	0
58	MG	1H	3407	1/1	0.93	0.12	-	116,116,116,116	0
58	MG	13	1651	1/1	0.90	0.41	-	88,88,88,88	0
58	MG	1H	3112	1/1	0.94	0.41	-	56,56,56,56	0
58	MG	14	3308	1/1	0.69	0.70	-	106,106,106,106	0
58	MG	14	3102	1/1	0.98	0.26	-	61,61,61,61	0
58	MG	14	3275	1/1	0.67	0.37	-	91,91,91,91	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3013	1/1	0.86	0.23	-	78,78,78,78	0
58	MG	1H	3016	1/1	0.34	0.56	-	75,75,75,75	0
58	MG	14	3289	1/1	0.93	0.76	-	83,83,83,83	0
58	MG	14	3156	1/1	0.93	0.60	-	63,63,63,63	0
58	MG	14	3278	1/1	0.84	0.34	-	75,75,75,75	0
58	MG	1H	3262	1/1	0.83	0.37	-	94,94,94,94	0
58	MG	1H	3244	1/1	0.92	0.28	-	62,62,62,62	0
58	MG	1G	1640	1/1	0.89	0.48	-	87,87,87,87	0
58	MG	1H	3195	1/1	0.97	0.50	-	62,62,62,62	0
58	MG	13	1695	1/1	0.68	0.43	-	83,83,83,83	0
58	MG	1G	1671	1/1	0.86	0.37	-	88,88,88,88	0
58	MG	13	1641	1/1	0.73	0.44	-	93,93,93,93	0
58	MG	14	3014	1/1	0.94	0.47	-	57,57,57,57	0
58	MG	1G	1665	1/1	0.85	0.26	-	113,113,113,113	0
58	MG	14	3033	1/1	0.90	0.26	-	77,77,77,77	0
58	MG	1H	3444	1/1	0.95	0.16	-	69,69,69,69	0
58	MG	13	1712	1/1	0.94	0.12	-	83,83,83,83	0
58	MG	14	3187	1/1	0.80	0.45	-	80,80,80,80	0
58	MG	1H	3197	1/1	0.76	0.63	-	80,80,80,80	0
58	MG	L8	101	1/1	0.88	0.62	-	84,84,84,84	0
58	MG	14	3191	1/1	0.61	0.58	-	96,96,96,96	0
58	MG	14	3225	1/1	0.93	0.41	-	82,82,82,82	0
58	MG	14	3229	1/1	0.61	0.76	-	88,88,88,88	0
58	MG	1H	3426	1/1	0.86	0.13	-	58,58,58,58	0
58	MG	14	3176	1/1	0.90	0.47	-	79,79,79,79	0
58	MG	1J	201	1/1	0.72	0.30	-	94,94,94,94	0
58	MG	13	1720	1/1	0.91	0.10	-	90,90,90,90	0
58	MG	14	3080	1/1	0.80	0.46	-	82,82,82,82	0
58	MG	1H	3213	1/1	0.85	0.38	-	74,74,74,74	0
58	MG	1H	3219	1/1	0.43	0.37	-	103,103,103,103	0
58	MG	14	3241	1/1	0.91	0.35	-	56,56,56,56	0
58	MG	1G	1680	1/1	0.79	0.06	-	140,140,140,140	0
58	MG	14	3136	1/1	0.94	0.17	-	62,62,62,62	0
58	MG	1H	3451	1/1	0.94	0.13	-	114,114,114,114	0
58	MG	14	3294	1/1	0.57	0.26	-	87,87,87,87	0
58	MG	14	3168	1/1	0.90	0.53	-	106,106,106,106	0
58	MG	35	202	1/1	0.67	0.24	-	87,87,87,87	0
58	MG	14	3086	1/1	0.92	0.43	-	83,83,83,83	0
58	MG	14	3200	1/1	0.90	0.46	-	74,74,74,74	0
58	MG	1H	3314	1/1	0.70	0.30	-	85,85,85,85	0
58	MG	I8	102	1/1	0.88	0.24	-	70,70,70,70	0
58	MG	1H	3045	1/1	0.79	0.33	-	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3250	1/1	0.95	0.27	-	74,74,74,74	0
58	MG	1H	3093	1/1	0.98	0.36	-	72,72,72,72	0
58	MG	16	206	1/1	0.97	0.05	-	73,73,73,73	0
58	MG	1H	3366	1/1	0.98	0.14	-	76,76,76,76	0
58	MG	14	3089	1/1	0.64	0.88	-	79,79,79,79	0
58	MG	1H	3001	1/1	0.98	0.32	-	43,43,43,43	0
58	MG	1H	3105	1/1	0.92	0.33	-	66,66,66,66	0
58	MG	1H	3018	1/1	0.83	0.55	-	71,71,71,71	0
58	MG	1H	3419	1/1	0.89	0.06	-	101,101,101,101	0
58	MG	1H	3421	1/1	0.94	0.06	-	64,64,64,64	0
58	MG	1H	3083	1/1	0.79	0.33	-	67,67,67,67	0
58	MG	14	3132	1/1	0.94	0.27	-	68,68,68,68	0
58	MG	1G	1688	1/1	0.93	0.07	-	138,138,138,138	0
58	MG	14	3024	1/1	0.89	0.57	-	77,77,77,77	0
58	MG	1H	3196	1/1	0.80	0.44	-	83,83,83,83	0
58	MG	13	1698	1/1	0.08	0.21	-	138,138,138,138	0
58	MG	14	3259	1/1	0.71	0.75	-	98,98,98,98	0
58	MG	1G	1682	1/1	0.97	0.13	-	97,97,97,97	0
58	MG	14	3310	1/1	0.76	0.23	-	114,114,114,114	0
58	MG	1H	3035	1/1	0.59	0.45	-	83,83,83,83	0
58	MG	1H	3009	1/1	0.90	0.27	-	62,62,62,62	0
58	MG	1H	3459	1/1	0.69	0.06	-	106,106,106,106	0
58	MG	13	1682	1/1	0.82	0.45	-	88,88,88,88	0
58	MG	1H	3339	1/1	0.98	0.43	-	48,48,48,48	0
58	MG	14	3252	1/1	0.79	0.39	-	84,84,84,84	0
58	MG	13	1686	1/1	0.87	0.50	-	76,76,76,76	0
58	MG	13	1689	1/1	0.74	0.52	-	107,107,107,107	0
58	MG	1G	1647	1/1	0.89	0.80	-	83,83,83,83	0
58	MG	14	3232	1/1	0.88	0.21	-	81,81,81,81	0
58	MG	1H	3439	1/1	0.78	0.07	-	99,99,99,99	0
58	MG	1H	3104	1/1	0.91	0.58	-	69,69,69,69	0
58	MG	1H	3182	1/1	0.87	0.20	-	78,78,78,78	0
58	MG	1H	3230	1/1	0.95	0.41	-	43,43,43,43	0
58	MG	3K	101	1/1	0.82	0.34	-	162,162,162,162	0
58	MG	14	3160	1/1	0.89	0.37	-	72,72,72,72	0
58	MG	14	3147	1/1	0.76	0.23	-	95,95,95,95	0
58	MG	14	3169	1/1	0.87	0.40	-	58,58,58,58	0
58	MG	14	3008	1/1	0.96	0.36	-	65,65,65,65	0
58	MG	1H	3036	1/1	0.56	0.74	-	100,100,100,100	0
58	MG	13	1692	1/1	0.86	0.15	-	122,122,122,122	0
58	MG	1H	3452	1/1	0.87	0.13	-	104,104,104,104	0
58	MG	13	1635	1/1	0.97	0.52	-	74,74,74,74	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3216	1/1	0.86	0.40	-	67,67,67,67	0
58	MG	1H	3280	1/1	0.82	0.33	-	77,77,77,77	0
58	MG	1H	3336	1/1	0.60	0.24	-	104,104,104,104	0
58	MG	14	3042	1/1	0.99	0.54	-	70,70,70,70	0
58	MG	14	3203	1/1	0.89	0.34	-	56,56,56,56	0
58	MG	14	3141	1/1	0.93	0.21	-	93,93,93,93	0
58	MG	1H	3168	1/1	0.87	0.38	-	69,69,69,69	0
58	MG	1H	3011	1/1	0.95	0.38	-	51,51,51,51	0
58	MG	1H	3114	1/1	0.96	0.54	-	74,74,74,74	0
58	MG	14	3140	1/1	0.62	0.33	-	82,82,82,82	0
58	MG	1H	3021	1/1	0.80	0.30	-	83,83,83,83	0
58	MG	1H	3152	1/1	0.51	0.34	-	100,100,100,100	0
58	MG	1G	1642	1/1	0.97	0.48	-	91,91,91,91	0
58	MG	1H	3028	1/1	0.92	0.28	-	68,68,68,68	0
58	MG	14	3298	1/1	0.99	0.90	-	64,64,64,64	0
58	MG	14	3023	1/1	0.80	0.29	-	83,83,83,83	0
58	MG	1H	3428	1/1	0.95	0.19	-	51,51,51,51	0
58	MG	14	3078	1/1	0.96	0.38	-	64,64,64,64	0
58	MG	1G	1648	1/1	0.70	0.33	-	117,117,117,117	0
58	MG	1H	3333	1/1	0.88	0.34	-	100,100,100,100	0
58	MG	1H	3178	1/1	0.70	0.38	-	71,71,71,71	0
58	MG	14	3270	1/1	0.97	0.30	-	63,63,63,63	0
58	MG	1H	3423	1/1	0.96	0.10	-	66,66,66,66	0
58	MG	14	3382	1/1	0.96	0.07	-	87,87,87,87	0
58	MG	13	1642	1/1	0.97	0.27	-	74,74,74,74	0
58	MG	I8	103	1/1	0.96	0.04	-	73,73,73,73	0
58	MG	14	3067	1/1	0.84	0.31	-	87,87,87,87	0
58	MG	1H	3328	1/1	0.71	0.58	-	80,80,80,80	0
58	MG	1H	3248	1/1	0.99	0.50	-	74,74,74,74	0
58	MG	1G	1608	1/1	0.99	0.18	-	89,89,89,89	0
58	MG	1G	1606	1/1	0.79	0.22	-	88,88,88,88	0
58	MG	1G	1624	1/1	0.94	0.62	-	65,65,65,65	0
58	MG	14	3167	1/1	0.96	0.29	-	87,87,87,87	0
58	MG	14	3293	1/1	0.77	0.51	-	91,91,91,91	0
58	MG	1H	3249	1/1	0.54	0.37	-	80,80,80,80	0
58	MG	14	3194	1/1	0.74	0.34	-	81,81,81,81	0
58	MG	1H	3180	1/1	0.73	0.43	-	75,75,75,75	0
58	MG	14	3059	1/1	0.82	0.32	-	86,86,86,86	0
58	MG	1G	1660	1/1	0.93	0.45	-	85,85,85,85	0
58	MG	14	3087	1/1	0.95	0.35	-	40,40,40,40	0
58	MG	14	3063	1/1	0.94	0.28	-	58,58,58,58	0
58	MG	1H	3319	1/1	0.90	0.52	-	110,110,110,110	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3343	1/1	0.92	0.08	-	82,82,82,82	0
58	MG	1H	3413	1/1	0.82	0.08	-	102,102,102,102	0
58	MG	1H	3111	1/1	0.93	0.53	-	74,74,74,74	0
58	MG	13	1616	1/1	0.95	0.04	-	88,88,88,88	0
58	MG	1H	3400	1/1	0.98	0.11	-	72,72,72,72	0
58	MG	14	3311	1/1	0.42	0.36	-	100,100,100,100	0
58	MG	14	3032	1/1	0.88	0.45	-	75,75,75,75	0
58	MG	1H	3396	1/1	0.97	0.10	-	78,78,78,78	0
58	MG	14	3365	1/1	0.91	0.06	-	94,94,94,94	0
58	MG	14	3238	1/1	0.83	0.33	-	99,99,99,99	0
58	MG	14	3041	1/1	0.98	0.35	-	54,54,54,54	0
58	MG	1G	1684	1/1	0.82	0.11	-	109,109,109,109	0
58	MG	1H	3276	1/1	0.86	0.68	-	75,75,75,75	0
58	MG	1J	203	1/1	0.66	0.23	-	103,103,103,103	0
58	MG	1H	3113	1/1	0.95	0.44	-	51,51,51,51	0
58	MG	14	3022	1/1	0.83	0.38	-	64,64,64,64	0
58	MG	1G	1603	1/1	0.62	0.59	-	102,102,102,102	0
58	MG	14	3043	1/1	0.98	0.38	-	57,57,57,57	0
58	MG	1H	3225	1/1	0.93	0.35	-	78,78,78,78	0
58	MG	14	3264	1/1	0.67	0.57	-	85,85,85,85	0
58	MG	1H	3038	1/1	0.92	0.34	-	92,92,92,92	0
58	MG	1H	3033	1/1	0.80	0.58	-	88,88,88,88	0
58	MG	1G	1629	1/1	0.92	0.63	-	104,104,104,104	0
58	MG	1H	3172	1/1	0.93	0.41	-	87,87,87,87	0
58	MG	1G	1618	1/1	0.79	0.33	-	109,109,109,109	0
58	MG	14	3305	1/1	0.91	0.49	-	75,75,75,75	0
58	MG	14	3208	1/1	0.93	0.15	-	91,91,91,91	0
58	MG	1H	3334	1/1	0.89	0.30	-	76,76,76,76	0
58	MG	14	3286	1/1	0.88	0.38	-	80,80,80,80	0
58	MG	13	1728	1/1	0.71	0.11	-	118,118,118,118	0
58	MG	14	3174	1/1	0.95	0.27	-	101,101,101,101	0
58	MG	14	3386	1/1	0.88	0.16	-	90,90,90,90	0
58	MG	14	3142	1/1	0.93	0.41	-	76,76,76,76	0
58	MG	25	201	1/1	0.59	0.34	-	102,102,102,102	0
58	MG	1H	3308	1/1	0.85	0.51	-	90,90,90,90	0
58	MG	14	3374	1/1	0.92	0.07	-	76,76,76,76	0
58	MG	14	3129	1/1	0.62	0.69	-	73,73,73,73	0
58	MG	13	1633	1/1	0.95	0.63	-	62,62,62,62	0
58	MG	14	3084	1/1	0.87	0.56	-	80,80,80,80	0
58	MG	1H	3332	1/1	0.85	0.32	-	74,74,74,74	0
58	MG	1H	3171	1/1	0.56	0.43	-	83,83,83,83	0
58	MG	13	1634	1/1	0.83	1.02	-	93,93,93,93	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3233	1/1	0.84	0.59	-	62,62,62,62	0
58	MG	1H	3461	1/1	0.94	0.04	-	92,92,92,92	0
58	MG	14	3257	1/1	0.70	1.14	-	86,86,86,86	0
58	MG	14	3245	1/1	0.81	0.47	-	77,77,77,77	0
58	MG	1H	3431	1/1	0.94	0.13	-	70,70,70,70	0
58	MG	1G	1683	1/1	0.96	0.13	-	89,89,89,89	0
58	MG	1H	3284	1/1	0.56	0.48	-	81,81,81,81	0
58	MG	1H	3218	1/1	0.95	0.25	-	56,56,56,56	0
58	MG	1G	1638	1/1	0.44	0.30	-	93,93,93,93	0
58	MG	14	3185	1/1	0.61	0.51	-	82,82,82,82	0
58	MG	14	3092	1/1	0.98	0.32	-	76,76,76,76	0
58	MG	13	1647	1/1	0.86	0.23	-	89,89,89,89	0
58	MG	1H	3449	1/1	0.94	0.12	-	106,106,106,106	0
58	MG	14	3381	1/1	0.92	0.14	-	81,81,81,81	0
58	MG	13	1678	1/1	0.80	0.27	-	93,93,93,93	0
58	MG	14	3177	1/1	0.81	0.46	-	72,72,72,72	0
58	MG	13	1612	1/1	0.96	0.33	-	63,63,63,63	0
58	MG	1H	3359	1/1	0.97	0.12	-	59,59,59,59	0
58	MG	14	3236	1/1	0.83	0.52	-	89,89,89,89	0
58	MG	1H	3320	1/1	0.89	0.46	-	77,77,77,77	0
58	MG	14	3281	1/1	0.87	0.38	-	86,86,86,86	0
58	MG	1H	3078	1/1	0.92	0.51	-	67,67,67,67	0
58	MG	13	1644	1/1	0.78	0.43	-	96,96,96,96	0
58	MG	1H	3293	1/1	0.69	0.35	-	84,84,84,84	0
58	MG	14	3027	1/1	0.84	0.39	-	96,96,96,96	0
58	MG	1H	3032	1/1	0.73	0.49	-	79,79,79,79	0
58	MG	14	3074	1/1	0.82	0.81	-	79,79,79,79	0
58	MG	1H	3390	1/1	0.98	0.09	-	50,50,50,50	0
58	MG	14	3182	1/1	0.79	0.74	-	75,75,75,75	0
58	MG	1H	3372	1/1	0.99	0.11	-	62,62,62,62	0
58	MG	13	1654	1/1	0.91	0.38	-	74,74,74,74	0
58	MG	1H	3267	1/1	0.90	0.49	-	73,73,73,73	0
58	MG	14	3163	1/1	0.86	0.27	-	90,90,90,90	0
58	MG	14	3095	1/1	0.95	0.41	-	71,71,71,71	0
58	MG	1H	3322	1/1	0.86	0.65	-	81,81,81,81	0
58	MG	1H	3228	1/1	0.75	0.45	-	83,83,83,83	0
58	MG	1H	3398	1/1	0.97	0.16	-	66,66,66,66	0
58	MG	1H	3121	1/1	0.96	0.38	-	62,62,62,62	0
58	MG	1H	3081	1/1	0.96	0.39	-	87,87,87,87	0
58	MG	1H	3141	1/1	0.86	0.40	-	61,61,61,61	0
58	MG	14	3119	1/1	0.92	0.37	-	62,62,62,62	0
58	MG	13	1627	1/1	0.91	0.55	-	69,69,69,69	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1713	1/1	0.93	0.05	-	101,101,101,101	0
58	MG	1H	3232	1/1	0.89	0.17	-	52,52,52,52	0
58	MG	1H	3352	1/1	0.99	0.12	-	61,61,61,61	0
58	MG	1H	3049	1/1	0.95	0.50	-	52,52,52,52	0
58	MG	1H	3047	1/1	0.91	0.32	-	47,47,47,47	0
58	MG	1H	3441	1/1	0.81	0.13	-	89,89,89,89	0
58	MG	14	3090	1/1	0.89	0.29	-	74,74,74,74	0
58	MG	14	3170	1/1	0.81	0.37	-	83,83,83,83	0
58	MG	1H	3160	1/1	0.63	0.28	-	72,72,72,72	0
58	MG	1H	3068	1/1	0.97	0.28	-	86,86,86,86	0
58	MG	13	1693	1/1	0.93	0.21	-	55,55,55,55	0
58	MG	13	1714	1/1	0.96	0.10	-	73,73,73,73	0
58	MG	14	3130	1/1	0.98	0.53	-	86,86,86,86	0
58	MG	1H	3252	1/1	0.85	0.50	-	66,66,66,66	0
58	MG	14	3295	1/1	0.71	0.20	-	85,85,85,85	0
58	MG	14	3197	1/1	0.61	0.34	-	116,116,116,116	0
58	MG	1G	1669	1/1	0.98	0.36	-	107,107,107,107	0
58	MG	21	301	1/1	0.96	0.38	-	54,54,54,54	0
58	MG	1H	3271	1/1	0.78	0.39	-	76,76,76,76	0
58	MG	13	1724	1/1	0.93	0.09	-	102,102,102,102	0
58	MG	13	1631	1/1	0.90	0.37	-	93,93,93,93	0
58	MG	13	1625	1/1	0.92	0.33	-	86,86,86,86	0
58	MG	1H	3236	1/1	0.95	0.18	-	99,99,99,99	0
58	MG	1H	3409	1/1	0.97	0.07	-	85,85,85,85	0
58	MG	1G	1604	1/1	0.78	0.44	-	87,87,87,87	0
58	MG	14	3151	1/1	0.94	0.77	-	79,79,79,79	0
58	MG	14	3297	1/1	0.80	0.69	-	70,70,70,70	0
58	MG	1G	1631	1/1	0.89	0.25	-	96,96,96,96	0
58	MG	1H	3167	1/1	0.67	0.54	-	93,93,93,93	0
58	MG	1H	3137	1/1	0.83	0.61	-	88,88,88,88	0
58	MG	1H	3330	1/1	0.97	0.34	-	102,102,102,102	0
58	MG	2K	103	1/1	0.75	0.42	-	114,114,114,114	0
58	MG	14	3029	1/1	0.78	0.72	-	78,78,78,78	0
58	MG	1G	1645	1/1	0.91	0.52	-	74,74,74,74	0
58	MG	14	3218	1/1	0.98	0.56	-	62,62,62,62	0
58	MG	1H	3019	1/1	0.81	0.49	-	92,92,92,92	0
58	MG	5E	201	1/1	0.84	0.26	-	89,89,89,89	0
58	MG	1G	1650	1/1	0.83	0.30	-	114,114,114,114	0
58	MG	1H	3222	1/1	0.74	0.33	-	98,98,98,98	0
58	MG	1H	3179	1/1	0.81	0.35	-	83,83,83,83	0
58	MG	14	3123	1/1	0.96	0.30	-	64,64,64,64	0
58	MG	1H	3084	1/1	0.94	0.20	-	94,94,94,94	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3023	1/1	0.94	0.46	-	56,56,56,56	0
58	MG	14	3017	1/1	0.62	0.51	-	90,90,90,90	0
58	MG	1H	3059	1/1	0.99	0.24	-	49,49,49,49	0
58	MG	1H	3012	1/1	0.93	0.80	-	83,83,83,83	0
58	MG	1H	3282	1/1	0.80	0.60	-	88,88,88,88	0
58	MG	14	3198	1/1	0.94	0.18	-	107,107,107,107	0
58	MG	14	3317	1/1	0.95	0.70	-	89,89,89,89	0
58	MG	1H	3257	1/1	0.97	0.30	-	70,70,70,70	0
58	MG	1G	1633	1/1	0.85	0.31	-	98,98,98,98	0
58	MG	14	3128	1/1	0.99	0.45	-	58,58,58,58	0
58	MG	1H	3432	1/1	0.95	0.11	-	50,50,50,50	0
58	MG	1G	1656	1/1	0.92	0.41	-	78,78,78,78	0
58	MG	14	3159	1/1	0.94	0.47	-	63,63,63,63	0
58	MG	14	3285	1/1	0.89	0.25	-	68,68,68,68	0
58	MG	14	3367	1/1	0.97	0.09	-	65,65,65,65	0
58	MG	13	1701	1/1	0.97	0.14	-	114,114,114,114	0
58	MG	1G	1643	1/1	0.78	0.24	-	132,132,132,132	0
58	MG	13	1618	1/1	0.96	0.36	-	80,80,80,80	0
58	MG	14	3283	1/1	0.60	0.32	-	69,69,69,69	0
58	MG	14	3154	1/1	0.87	0.25	-	69,69,69,69	0
58	MG	14	3391	1/1	0.80	0.13	-	104,104,104,104	0
58	MG	14	3222	1/1	0.82	0.23	-	97,97,97,97	0
58	MG	16	208	1/1	0.95	0.16	-	86,86,86,86	0
58	MG	1H	3335	1/1	0.83	0.68	-	74,74,74,74	0
58	MG	1H	3337	1/1	0.81	0.22	-	89,89,89,89	0
58	MG	13	1603	1/1	0.33	0.47	-	92,92,92,92	0
58	MG	1H	3299	1/1	0.94	0.17	-	74,74,74,74	0
58	MG	1H	3448	1/1	0.97	0.08	-	82,82,82,82	0
58	MG	1H	3341	1/1	0.83	0.21	-	79,79,79,79	0
58	MG	1H	3417	1/1	0.89	0.22	-	94,94,94,94	0
58	MG	14	3379	1/1	0.97	0.12	-	60,60,60,60	0
58	MG	1H	3118	1/1	0.91	0.84	-	77,77,77,77	0
58	MG	14	3322	1/1	0.94	0.22	-	65,65,65,65	0
58	MG	1G	1672	1/1	0.77	0.43	-	99,99,99,99	0
58	MG	1H	3042	1/1	0.89	0.85	-	90,90,90,90	0
58	MG	13	1606	1/1	0.86	0.46	-	94,94,94,94	0
58	MG	1H	3087	1/1	0.77	0.57	-	70,70,70,70	0
58	MG	1H	3169	1/1	0.98	0.21	-	85,85,85,85	0
58	MG	1H	3122	1/1	0.68	0.63	-	79,79,79,79	0
58	MG	14	3327	1/1	0.98	0.16	-	59,59,59,59	0
58	MG	1H	3210	1/1	0.97	0.47	-	71,71,71,71	0
58	MG	13	1650	1/1	0.83	0.30	-	94,94,94,94	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3208	1/1	0.94	0.51	-	88,88,88,88	0
58	MG	1G	1686	1/1	0.81	0.08	-	125,125,125,125	0
58	MG	14	3380	1/1	0.95	0.10	-	96,96,96,96	0
58	MG	1H	3162	1/1	0.91	0.39	-	88,88,88,88	0
58	MG	14	3148	1/1	0.91	0.31	-	77,77,77,77	0
58	MG	1G	1664	1/1	0.51	0.30	-	100,100,100,100	0
58	MG	14	3239	1/1	0.91	0.17	-	80,80,80,80	0
58	MG	2L	102	1/1	0.68	0.64	-	83,83,83,83	0
58	MG	1H	3157	1/1	0.86	0.47	-	73,73,73,73	0
58	MG	14	3271	1/1	0.81	0.21	-	81,81,81,81	0
58	MG	1H	3161	1/1	0.92	0.30	-	84,84,84,84	0
58	MG	13	1661	1/1	0.81	0.48	-	103,103,103,103	0
58	MG	1H	3149	1/1	0.91	0.34	-	60,60,60,60	0
58	MG	1H	3296	1/1	0.77	0.22	-	57,57,57,57	0
58	MG	14	3217	1/1	0.91	0.43	-	83,83,83,83	0
58	MG	1H	3458	1/1	0.94	0.07	-	73,73,73,73	0
58	MG	1G	1673	1/1	0.92	0.33	-	93,93,93,93	0
58	MG	14	3276	1/1	0.93	0.37	-	92,92,92,92	0
58	MG	1H	3455	1/1	0.95	0.08	-	59,59,59,59	0
58	MG	14	3056	1/1	0.92	0.34	-	55,55,55,55	0
58	MG	14	3211	1/1	0.87	0.37	-	91,91,91,91	0
58	MG	14	3316	1/1	0.60	0.35	-	122,122,122,122	0
58	MG	1H	3317	1/1	0.91	0.38	-	68,68,68,68	0
58	MG	14	3034	1/1	0.52	0.97	-	88,88,88,88	0
58	MG	1H	3288	1/1	0.74	0.87	-	93,93,93,93	0
58	MG	14	3273	1/1	0.83	0.46	-	101,101,101,101	0
58	MG	14	3388	1/1	0.95	0.10	-	68,68,68,68	0
58	MG	1H	3345	1/1	0.95	0.18	-	61,61,61,61	0
58	MG	14	3079	1/1	0.98	0.46	-	70,70,70,70	0
58	MG	1H	3142	1/1	0.77	0.45	-	68,68,68,68	0
58	MG	1H	3446	1/1	0.90	0.09	-	84,84,84,84	0
58	MG	14	3282	1/1	0.32	0.42	-	109,109,109,109	0
58	MG	14	3162	1/1	0.94	0.54	-	70,70,70,70	0
58	MG	1H	3287	1/1	0.82	0.29	-	104,104,104,104	0
58	MG	14	3390	1/1	0.94	0.10	-	89,89,89,89	0
58	MG	1H	3397	1/1	0.96	0.07	-	71,71,71,71	0
58	MG	14	3125	1/1	0.82	0.75	-	72,72,72,72	0
58	MG	14	3234	1/1	0.73	0.89	-	70,70,70,70	0
58	MG	13	1608	1/1	0.88	0.75	-	90,90,90,90	0
58	MG	P8	101	1/1	0.81	0.58	-	77,77,77,77	0
58	MG	14	3331	1/1	0.98	0.14	-	63,63,63,63	0
58	MG	13	1610	1/1	0.96	0.25	-	80,80,80,80	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3159	1/1	0.83	0.42	-	67,67,67,67	0
58	MG	14	3108	1/1	0.46	0.73	-	92,92,92,92	0
58	MG	1H	3310	1/1	0.95	0.17	-	75,75,75,75	0
58	MG	1H	3007	1/1	0.95	0.34	-	54,54,54,54	0
58	MG	1G	1652	1/1	0.94	0.54	-	71,71,71,71	0
58	MG	1H	3245	1/1	0.97	0.69	-	62,62,62,62	0
58	MG	14	3227	1/1	0.68	0.44	-	76,76,76,76	0
58	MG	1H	3086	1/1	0.97	0.37	-	70,70,70,70	0
58	MG	14	3300	1/1	0.74	0.24	-	117,117,117,117	0
58	MG	1H	3440	1/1	0.97	0.05	-	58,58,58,58	0
58	MG	1H	3438	1/1	0.82	0.11	-	83,83,83,83	0
58	MG	14	3362	1/1	0.92	0.12	-	77,77,77,77	0
58	MG	1H	3005	1/1	0.95	0.34	-	54,54,54,54	0
58	MG	1H	3292	1/1	0.68	0.30	-	77,77,77,77	0
58	MG	14	3190	1/1	0.61	0.58	-	86,86,86,86	0
58	MG	1H	3030	1/1	0.97	0.22	-	67,67,67,67	0
58	MG	1H	3089	1/1	0.84	0.44	-	59,59,59,59	0
58	MG	1H	3342	1/1	0.74	0.63	-	92,92,92,92	0
58	MG	1H	3044	1/1	0.92	0.27	-	82,82,82,82	0
58	MG	16	209	1/1	0.79	0.10	-	100,100,100,100	0
58	MG	1H	3220	1/1	0.91	0.27	-	82,82,82,82	0
58	MG	13	1676	1/1	0.94	0.51	-	76,76,76,76	0
58	MG	13	1646	1/1	0.70	0.29	-	75,75,75,75	0
58	MG	13	1605	1/1	0.62	0.24	-	76,76,76,76	0
58	MG	14	3005	1/1	0.97	0.45	-	48,48,48,48	0
58	MG	1H	3306	1/1	0.70	0.31	-	91,91,91,91	0
58	MG	1H	3135	1/1	0.87	0.12	-	65,65,65,65	0
58	MG	1H	3055	1/1	0.94	0.34	-	49,49,49,49	0
58	MG	1H	3100	1/1	0.91	0.24	-	61,61,61,61	0
58	MG	1H	3466	1/1	0.93	0.30	-	56,56,56,56	0
58	MG	1H	3164	1/1	0.61	0.21	-	64,64,64,64	0
58	MG	1H	3054	1/1	0.99	0.24	-	52,52,52,52	0
58	MG	14	3083	1/1	0.96	0.63	-	72,72,72,72	0
58	MG	1G	1689	1/1	0.89	0.17	-	121,121,121,121	0
58	MG	1H	3386	1/1	0.98	0.11	-	57,57,57,57	0
58	MG	1H	3350	1/1	0.97	0.12	-	48,48,48,48	0
58	MG	1H	3266	1/1	0.94	0.25	-	81,81,81,81	0
58	MG	13	1725	1/1	0.93	0.08	-	94,94,94,94	0
58	MG	1H	3138	1/1	0.99	0.41	-	58,58,58,58	0
58	MG	14	3069	1/1	0.94	0.38	-	70,70,70,70	0
58	MG	14	3115	1/1	0.90	0.40	-	80,80,80,80	0
58	MG	1H	3275	1/1	0.94	0.36	-	75,75,75,75	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3183	1/1	0.78	0.77	-	79,79,79,79	0
58	MG	14	3112	1/1	0.94	0.48	-	65,65,65,65	0
58	MG	1H	3098	1/1	0.94	0.24	-	53,53,53,53	0
58	MG	1H	3154	1/1	0.76	0.54	-	84,84,84,84	0
58	MG	1G	1619	1/1	0.86	0.21	-	101,101,101,101	0
58	MG	14	3050	1/1	0.98	0.51	-	59,59,59,59	0
58	MG	1G	1610	1/1	0.96	0.31	-	98,98,98,98	0
58	MG	1H	3143	1/1	0.98	0.14	-	56,56,56,56	0
58	MG	1H	3186	1/1	0.87	0.34	-	75,75,75,75	0
58	MG	14	3152	1/1	0.97	0.33	-	92,92,92,92	0
58	MG	14	3268	1/1	0.77	0.41	-	94,94,94,94	0
58	MG	14	3028	1/1	0.90	0.24	-	69,69,69,69	0
58	MG	1H	3052	1/1	0.98	0.33	-	53,53,53,53	0
58	MG	1H	3025	1/1	0.96	0.40	-	64,64,64,64	0
58	MG	14	3011	1/1	0.98	0.59	-	48,48,48,48	0
58	MG	1H	3311	1/1	0.94	0.29	-	75,75,75,75	0
58	MG	1H	3070	1/1	0.93	0.47	-	58,58,58,58	0
58	MG	14	3103	1/1	0.97	0.28	-	51,51,51,51	0
58	MG	1H	3144	1/1	0.88	0.40	-	77,77,77,77	0
58	MG	16	202	1/1	0.87	0.25	-	64,64,64,64	0
58	MG	1H	3227	1/1	0.86	0.68	-	85,85,85,85	0
58	MG	14	3315	1/1	0.95	1.07	-	93,93,93,93	0
58	MG	1G	1626	1/1	0.94	0.29	-	82,82,82,82	0
58	MG	13	1652	1/1	0.89	0.24	-	99,99,99,99	0
58	MG	14	3304	1/1	0.58	0.71	-	92,92,92,92	0
58	MG	1H	3155	1/1	0.90	0.34	-	74,74,74,74	0
58	MG	14	3346	1/1	0.95	0.09	-	85,85,85,85	0
58	MG	1H	3289	1/1	0.98	0.17	-	49,49,49,49	0
58	MG	1H	3194	1/1	0.67	0.40	-	84,84,84,84	0
58	MG	13	1694	1/1	0.79	0.55	-	64,64,64,64	0
58	MG	14	3355	1/1	0.92	0.10	-	102,102,102,102	0
58	MG	14	3265	1/1	0.78	0.52	-	98,98,98,98	0
58	MG	1H	3017	1/1	0.94	0.44	-	71,71,71,71	0
58	MG	1J	205	1/1	0.87	0.09	-	101,101,101,101	0
58	MG	1H	3129	1/1	0.96	0.52	-	85,85,85,85	0
58	MG	14	3039	1/1	0.96	0.23	-	50,50,50,50	0
58	MG	1H	3465	1/1	0.97	0.15	-	71,71,71,71	0
58	MG	1H	3198	1/1	0.92	0.44	-	69,69,69,69	0
58	MG	1G	1658	1/1	0.93	0.23	-	92,92,92,92	0
58	MG	1H	3300	1/1	0.94	0.42	-	87,87,87,87	0
58	MG	1H	3297	1/1	0.39	0.24	-	99,99,99,99	0
58	MG	14	3161	1/1	0.97	0.52	-	70,70,70,70	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1622	1/1	0.97	0.37	-	74,74,74,74	0
58	MG	14	3335	1/1	0.97	0.10	-	61,61,61,61	0
58	MG	14	3196	1/1	0.97	0.55	-	75,75,75,75	0
58	MG	1H	3399	1/1	0.96	0.15	-	62,62,62,62	0
58	MG	1H	3223	1/1	0.95	0.52	-	78,78,78,78	0
58	MG	14	3307	1/1	0.88	0.48	-	101,101,101,101	0
58	MG	1K	101	1/1	0.87	0.09	-	145,145,145,145	0
58	MG	1G	1670	1/1	0.91	0.43	-	86,86,86,86	0
58	MG	13	1727	1/1	0.96	0.08	-	112,112,112,112	0
58	MG	14	3262	1/1	0.68	0.34	-	96,96,96,96	0
58	MG	14	3342	1/1	0.98	0.07	-	80,80,80,80	0
58	MG	14	3370	1/1	0.97	0.10	-	64,64,64,64	0
58	MG	1H	3092	1/1	0.99	0.26	-	49,49,49,49	0
58	MG	1H	3462	1/1	0.97	0.04	-	97,97,97,97	0
58	MG	14	3306	1/1	0.78	0.28	-	88,88,88,88	0
58	MG	14	3263	1/1	0.87	0.25	-	75,75,75,75	0
58	MG	1H	3414	1/1	0.80	0.19	-	80,80,80,80	0
58	MG	1H	3304	1/1	0.92	0.33	-	86,86,86,86	0
58	MG	14	3068	1/1	0.63	0.65	-	100,100,100,100	0
58	MG	14	3237	1/1	0.84	0.37	-	83,83,83,83	0
58	MG	14	3048	1/1	0.98	0.29	-	90,90,90,90	0
58	MG	1H	3270	1/1	0.91	0.86	-	80,80,80,80	0
58	MG	1G	1659	1/1	0.81	0.18	-	142,142,142,142	0
58	MG	1H	3151	1/1	0.82	0.20	-	55,55,55,55	0
58	MG	1H	3325	1/1	0.89	0.44	-	71,71,71,71	0
58	MG	1H	3253	1/1	0.68	0.37	-	66,66,66,66	0
58	MG	1G	1662	1/1	0.87	0.68	-	72,72,72,72	0
58	MG	14	3272	1/1	0.87	0.38	-	76,76,76,76	0
58	MG	1H	3076	1/1	0.98	0.41	-	65,65,65,65	0
58	MG	14	3375	1/1	0.98	0.07	-	97,97,97,97	0
58	MG	13	1700	1/1	0.52	0.33	-	94,94,94,94	0
58	MG	14	3269	1/1	0.63	0.50	-	88,88,88,88	0
58	MG	14	3094	1/1	0.95	0.64	-	60,60,60,60	0
58	MG	14	3073	1/1	0.78	1.32	-	83,83,83,83	0
58	MG	14	3188	1/1	0.76	0.56	-	88,88,88,88	0
58	MG	1H	3050	1/1	0.93	0.39	-	60,60,60,60	0
58	MG	14	3393	1/1	0.82	0.06	-	127,127,127,127	0
58	MG	1H	3132	1/1	0.90	0.65	-	85,85,85,85	0
58	MG	1H	3377	1/1	0.95	0.12	-	70,70,70,70	0
58	MG	14	3164	1/1	0.94	0.79	-	74,74,74,74	0
58	MG	1H	3415	1/1	0.94	0.06	-	73,73,73,73	0
58	MG	1G	1605	1/1	0.96	0.38	-	101,101,101,101	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3030	1/1	0.70	0.39	-	86,86,86,86	0
58	MG	14	3205	1/1	0.85	0.34	-	96,96,96,96	0
58	MG	1H	3175	1/1	0.78	0.53	-	65,65,65,65	0
58	MG	14	3138	1/1	0.99	0.32	-	45,45,45,45	0
58	MG	13	1639	1/1	0.87	0.56	-	82,82,82,82	0
58	MG	14	3037	1/1	0.56	0.46	-	106,106,106,106	0
58	MG	98	201	1/1	0.81	0.41	-	72,72,72,72	0
58	MG	1H	3408	1/1	0.97	0.12	-	82,82,82,82	0
58	MG	1H	3324	1/1	0.72	0.57	-	89,89,89,89	0
58	MG	1H	3429	1/1	0.96	0.12	-	71,71,71,71	0
58	MG	29	303	1/1	0.98	0.40	-	52,52,52,52	0
58	MG	14	3139	1/1	0.98	0.34	-	99,99,99,99	0
58	MG	1H	3457	1/1	0.75	0.06	-	141,141,141,141	0
58	MG	14	3288	1/1	0.76	0.73	-	86,86,86,86	0
58	MG	13	1673	1/1	0.95	0.53	-	70,70,70,70	0
58	MG	1H	3189	1/1	0.94	0.57	-	67,67,67,67	0
58	MG	1G	1674	1/1	0.91	0.44	-	102,102,102,102	0
58	MG	1H	3057	1/1	0.97	0.41	-	66,66,66,66	0
58	MG	1G	1635	1/1	0.63	0.28	-	107,107,107,107	0
58	MG	13	1703	1/1	0.85	0.78	-	77,77,77,77	0
58	MG	14	3384	1/1	0.91	0.14	-	83,83,83,83	0
58	MG	13	1638	1/1	0.99	0.26	-	59,59,59,59	0
58	MG	1G	1632	1/1	0.92	0.43	-	75,75,75,75	0
58	MG	1G	1657	1/1	0.81	0.36	-	92,92,92,92	0
58	MG	1H	3031	1/1	0.75	0.53	-	76,76,76,76	0
58	MG	14	3366	1/1	0.96	0.04	-	86,86,86,86	0
58	MG	14	3389	1/1	0.90	0.09	-	102,102,102,102	0
58	MG	14	3256	1/1	0.84	0.54	-	83,83,83,83	0
58	MG	13	1663	1/1	0.94	0.26	-	82,82,82,82	0
58	MG	1G	1637	1/1	0.85	0.55	-	87,87,87,87	0
58	MG	1G	1639	1/1	0.90	0.51	-	74,74,74,74	0
58	MG	14	3099	1/1	0.91	0.56	-	87,87,87,87	0
58	MG	1H	3277	1/1	0.70	0.32	-	68,68,68,68	0
58	MG	1H	3024	1/1	0.62	0.69	-	82,82,82,82	0
58	MG	1H	3027	1/1	0.90	0.32	-	81,81,81,81	0
58	MG	1H	3008	1/1	0.98	0.26	-	81,81,81,81	0
58	MG	1H	3073	1/1	0.94	0.50	-	81,81,81,81	0
58	MG	1H	3205	1/1	0.80	0.19	-	81,81,81,81	0
58	MG	1H	3424	1/1	0.98	0.10	-	48,48,48,48	0
58	MG	1H	3188	1/1	0.86	0.38	-	73,73,73,73	0
58	MG	2K	102	1/1	0.52	0.69	-	94,94,94,94	0
58	MG	1H	3447	1/1	0.93	0.04	-	86,86,86,86	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3121	1/1	0.95	0.48	-	78,78,78,78	0
58	MG	14	3171	1/1	0.91	0.32	-	99,99,99,99	0
58	MG	1H	3212	1/1	0.96	0.43	-	76,76,76,76	0
58	MG	14	3345	1/1	0.77	0.10	-	90,90,90,90	0
58	MG	1H	3422	1/1	0.85	0.16	-	112,112,112,112	0
58	MG	14	3045	1/1	0.99	0.33	-	58,58,58,58	0
58	MG	14	3007	1/1	0.89	0.48	-	54,54,54,54	0
58	MG	14	3392	1/1	0.68	0.06	-	128,128,128,128	0
58	MG	1H	3224	1/1	0.72	0.58	-	73,73,73,73	0
58	MG	14	3353	1/1	0.79	0.09	-	118,118,118,118	0
58	MG	14	3038	1/1	0.97	0.33	-	71,71,71,71	0
58	MG	1H	3416	1/1	0.97	0.08	-	69,69,69,69	0
58	MG	14	3051	1/1	0.95	0.11	-	81,81,81,81	0
58	MG	14	3309	1/1	0.85	0.44	-	110,110,110,110	0
58	MG	1G	1646	1/1	0.63	0.24	-	100,100,100,100	0
58	MG	1H	3165	1/1	0.94	0.52	-	78,78,78,78	0
58	MG	1H	3418	1/1	0.91	0.08	-	92,92,92,92	0
58	MG	1G	1630	1/1	0.83	0.41	-	103,103,103,103	0
58	MG	13	1679	1/1	0.80	0.28	-	100,100,100,100	0
58	MG	13	1660	1/1	0.94	0.24	-	103,103,103,103	0
58	MG	14	3189	1/1	0.94	0.33	-	82,82,82,82	0
58	MG	14	3399	1/1	0.53	0.28	-	107,107,107,107	0
58	MG	1H	3305	1/1	0.70	0.39	-	67,67,67,67	0
58	MG	1H	3460	1/1	0.91	0.09	-	104,104,104,104	0
58	MG	13	1653	1/1	0.54	0.41	-	72,72,72,72	0
58	MG	1H	3204	1/1	0.91	0.42	-	69,69,69,69	0
58	MG	13	1615	1/1	0.96	0.41	-	77,77,77,77	0
58	MG	1H	3281	1/1	0.87	0.20	-	88,88,88,88	0
58	MG	13	1611	1/1	0.98	0.24	-	72,72,72,72	0
58	MG	14	3378	1/1	0.90	0.07	-	100,100,100,100	0
58	MG	13	1602	1/1	0.98	0.28	-	86,86,86,86	0
58	MG	13	1683	1/1	0.94	0.23	-	94,94,94,94	0
58	MG	1H	3463	1/1	0.85	0.08	-	112,112,112,112	0
58	MG	13	1665	1/1	0.93	0.09	-	82,82,82,82	0
58	MG	13	1697	1/1	0.49	0.22	-	92,92,92,92	0
58	MG	14	3113	1/1	0.98	0.41	-	73,73,73,73	0
58	MG	14	3314	1/1	0.92	0.32	-	94,94,94,94	0
58	MG	1H	3108	1/1	0.85	0.32	-	74,74,74,74	0
58	MG	1H	3041	1/1	0.88	0.22	-	76,76,76,76	0
58	MG	1H	3106	1/1	0.93	0.41	-	63,63,63,63	0
58	MG	14	3226	1/1	0.97	0.41	-	73,73,73,73	0
58	MG	1G	1678	1/1	0.80	0.06	-	128,128,128,128	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3201	1/1	0.78	0.70	-	92,92,92,92	0
58	MG	1G	1685	1/1	0.97	0.09	-	87,87,87,87	0
58	MG	14	3301	1/1	0.77	0.21	-	109,109,109,109	0
58	MG	1H	3123	1/1	0.94	0.39	-	69,69,69,69	0
58	MG	14	3052	1/1	0.76	0.50	-	113,113,113,113	0
58	MG	13	1657	1/1	0.91	0.28	-	103,103,103,103	0
58	MG	13	1629	1/1	0.90	0.39	-	96,96,96,96	0
58	MG	1H	3207	1/1	0.67	0.48	-	84,84,84,84	0
58	MG	14	3279	1/1	0.91	0.09	-	104,104,104,104	0
58	MG	1H	3170	1/1	0.88	0.46	-	65,65,65,65	0
58	MG	14	3199	1/1	0.86	0.50	-	69,69,69,69	0
58	MG	1H	3316	1/1	0.84	0.88	-	92,92,92,92	0
58	MG	1H	3391	1/1	0.96	0.09	-	61,61,61,61	0
58	MG	13	1630	1/1	0.64	0.48	-	80,80,80,80	0
58	MG	14	3261	1/1	0.65	0.49	-	77,77,77,77	0
58	MG	16	207	1/1	0.90	0.07	-	80,80,80,80	0
58	MG	1H	3221	1/1	0.89	0.40	-	89,89,89,89	0
58	MG	14	3025	1/1	0.90	0.63	-	84,84,84,84	0
58	MG	1H	3190	1/1	0.83	0.32	-	73,73,73,73	0
58	MG	14	3395	1/1	0.81	0.10	-	103,103,103,103	0
58	MG	1H	3146	1/1	0.94	0.39	-	72,72,72,72	0
58	MG	14	3143	1/1	0.74	0.30	-	102,102,102,102	0
58	MG	E5	101	1/1	0.72	0.47	-	89,89,89,89	0
58	MG	1G	1666	1/1	0.76	0.50	-	84,84,84,84	0
58	MG	1G	1623	1/1	0.99	0.50	-	62,62,62,62	0
58	MG	14	3347	1/1	0.92	0.06	-	108,108,108,108	0
58	MG	14	3146	1/1	0.81	0.43	-	57,57,57,57	0
58	MG	1H	3454	1/1	0.96	0.07	-	96,96,96,96	0
58	MG	1G	1614	1/1	0.91	0.30	-	107,107,107,107	0
58	MG	1H	3150	1/1	0.92	0.23	-	72,72,72,72	0
58	MG	1H	3456	1/1	0.93	0.07	-	97,97,97,97	0
58	MG	1H	3442	1/1	0.96	0.08	-	69,69,69,69	0
58	MG	1H	3097	1/1	0.81	0.44	-	71,71,71,71	0
58	MG	14	3319	1/1	0.95	0.10	-	59,59,59,59	0
58	MG	14	3296	1/1	0.86	0.41	-	84,84,84,84	0
58	MG	1H	3434	1/1	0.96	0.08	-	51,51,51,51	0
58	MG	1H	3294	1/1	0.91	0.34	-	57,57,57,57	0
58	MG	1H	3029	1/1	0.98	0.35	-	42,42,42,42	0
58	MG	14	3244	1/1	0.89	0.59	-	70,70,70,70	0
58	MG	I8	101	1/1	0.75	0.32	-	73,73,73,73	0
58	MG	1H	3376	1/1	0.87	0.23	-	76,76,76,76	0
58	MG	1H	3116	1/1	0.93	0.44	-	55,55,55,55	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1706	1/1	0.78	0.39	-	109,109,109,109	0
60	ZN	G8	201	1/1	0.91	0.11	-	149,149,149,149	0
58	MG	1H	3203	1/1	0.86	0.37	-	79,79,79,79	0
58	MG	1H	3237	1/1	0.95	0.28	-	84,84,84,84	0
58	MG	14	3106	1/1	0.93	0.40	-	61,61,61,61	0
58	MG	13	1711	1/1	0.96	0.11	-	97,97,97,97	0
58	MG	1H	3069	1/1	0.97	0.42	-	90,90,90,90	0
58	MG	13	1685	1/1	0.83	0.24	-	121,121,121,121	0
58	MG	14	3280	1/1	0.79	0.91	-	86,86,86,86	0
58	MG	14	3012	1/1	0.83	0.81	-	80,80,80,80	0
58	MG	1H	3307	1/1	0.81	0.52	-	94,94,94,94	0
58	MG	1G	1667	1/1	0.80	0.28	-	109,109,109,109	0
58	MG	1H	3214	1/1	0.92	0.63	-	76,76,76,76	0
58	MG	1H	3130	1/1	0.85	0.32	-	74,74,74,74	0
58	MG	13	1662	1/1	0.76	0.36	-	118,118,118,118	0
58	MG	1H	3420	1/1	0.94	0.06	-	92,92,92,92	0
58	MG	13	1723	1/1	0.96	0.10	-	87,87,87,87	0
58	MG	39	301	1/1	0.52	0.21	-	96,96,96,96	0
58	MG	14	3036	1/1	0.97	0.74	-	96,96,96,96	0
58	MG	13	1691	1/1	0.89	0.48	-	90,90,90,90	0
58	MG	13	1632	1/1	0.69	0.40	-	107,107,107,107	0
58	MG	14	3371	1/1	0.95	0.12	-	53,53,53,53	0
58	MG	1H	3043	1/1	0.76	0.76	-	81,81,81,81	0
58	MG	1H	3338	1/1	0.83	0.38	-	65,65,65,65	0
58	MG	1H	3254	1/1	0.68	0.57	-	99,99,99,99	0
58	MG	1H	3034	1/1	0.91	0.44	-	80,80,80,80	0
58	MG	14	3165	1/1	0.90	0.51	-	77,77,77,77	0
58	MG	14	3360	1/1	0.96	0.06	-	83,83,83,83	0
58	MG	14	3344	1/1	0.97	0.15	-	81,81,81,81	0
58	MG	14	3186	1/1	0.69	0.45	-	82,82,82,82	0
58	MG	1H	3003	1/1	0.90	0.26	-	64,64,64,64	0
58	MG	1H	3298	1/1	0.80	0.35	-	74,74,74,74	0
58	MG	13	1719	1/1	0.94	0.13	-	71,71,71,71	0
58	MG	13	1688	1/1	0.58	0.34	-	101,101,101,101	0
58	MG	1H	3046	1/1	0.96	0.32	-	47,47,47,47	0
58	MG	13	1671	1/1	0.95	0.31	-	87,87,87,87	0
58	MG	1H	3313	1/1	0.76	0.26	-	98,98,98,98	0
58	MG	14	3172	1/1	0.90	0.70	-	70,70,70,70	0
58	MG	1H	3329	1/1	0.86	0.77	-	81,81,81,81	0
58	MG	14	3260	1/1	0.74	0.78	-	72,72,72,72	0
58	MG	1H	3445	1/1	0.87	0.07	-	110,110,110,110	0
58	MG	1H	3268	1/1	0.80	0.42	-	85,85,85,85	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1620	1/1	0.89	0.28	-	73,73,73,73	0
58	MG	78	201	1/1	0.82	0.36	-	70,70,70,70	0
58	MG	1H	3323	1/1	0.88	0.45	-	80,80,80,80	0
58	MG	14	3135	1/1	0.68	0.24	-	95,95,95,95	0
58	MG	1H	3295	1/1	0.96	0.46	-	93,93,93,93	0
58	MG	1H	3200	1/1	0.90	0.49	-	81,81,81,81	0
58	MG	1H	3085	1/1	0.90	0.42	-	63,63,63,63	0
58	MG	14	3120	1/1	0.96	0.38	-	82,82,82,82	0
58	MG	1H	3278	1/1	0.62	0.48	-	95,95,95,95	0
58	MG	1H	3226	1/1	0.84	0.38	-	85,85,85,85	0
58	MG	13	1675	1/1	0.80	0.30	-	73,73,73,73	0
58	MG	1H	3361	1/1	0.94	0.13	-	63,63,63,63	0
58	MG	14	3035	1/1	0.90	0.22	-	93,93,93,93	0
58	MG	29	302	1/1	0.77	0.45	-	65,65,65,65	0
58	MG	1H	3002	1/1	0.91	0.25	-	38,38,38,38	0
58	MG	14	3219	1/1	0.93	0.31	-	48,48,48,48	0
58	MG	1H	3388	1/1	0.89	0.07	-	77,77,77,77	0
58	MG	1H	3309	1/1	0.56	0.51	-	90,90,90,90	0
58	MG	13	1718	1/1	0.97	0.04	-	83,83,83,83	0
58	MG	14	3054	1/1	0.93	0.37	-	70,70,70,70	0
58	MG	14	3098	1/1	0.97	0.17	-	93,93,93,93	0
58	MG	1J	202	1/1	0.82	0.27	-	95,95,95,95	0
58	MG	14	3292	1/1	0.80	0.14	-	113,113,113,113	0
58	MG	13	1640	1/1	0.94	0.35	-	74,74,74,74	0
58	MG	1H	3412	1/1	0.96	0.10	-	78,78,78,78	0
58	MG	1H	3026	1/1	0.97	0.47	-	56,56,56,56	0
58	MG	14	3118	1/1	0.86	0.45	-	69,69,69,69	0
58	MG	13	1717	1/1	0.97	0.08	-	92,92,92,92	0
58	MG	14	3291	1/1	0.77	0.35	-	87,87,87,87	0
58	MG	1H	3241	1/1	0.98	0.35	-	66,66,66,66	0
58	MG	1G	1611	1/1	0.94	0.38	-	104,104,104,104	0
58	MG	1H	3131	1/1	0.89	0.56	-	73,73,73,73	0
58	MG	1H	3206	1/1	0.86	0.35	-	77,77,77,77	0
58	MG	14	3077	1/1	0.93	0.45	-	68,68,68,68	0
58	MG	14	3207	1/1	0.98	0.37	-	80,80,80,80	0
58	MG	1H	3202	1/1	0.97	0.82	-	70,70,70,70	0
58	MG	13	1721	1/1	0.98	0.12	-	66,66,66,66	0
58	MG	1H	3215	1/1	0.90	0.28	-	63,63,63,63	0
58	MG	14	3368	1/1	0.96	0.21	-	62,62,62,62	0
58	MG	14	3277	1/1	0.67	0.34	-	85,85,85,85	0
58	MG	1H	3040	1/1	0.93	0.44	-	70,70,70,70	0
58	MG	45	202	1/1	0.92	0.41	-	72,72,72,72	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3104	1/1	0.89	0.65	-	86,86,86,86	0
58	MG	14	3181	1/1	0.74	0.41	-	89,89,89,89	0
58	MG	14	3001	1/1	0.97	0.16	-	46,46,46,46	0
58	MG	1H	3022	1/1	0.78	0.39	-	62,62,62,62	0

6.5 Other polymers [i](#)

There are no such residues in this entry.