



Full wwPDB EM Validation Report ⓘ

Dec 12, 2022 – 05:12 PM EST

PDB ID : 3J8G
EMDB ID : EMD-6149
Title : Electron cryo-microscopy structure of EngA bound with the 50S ribosomal subunit
Authors : Zhang, X.; Yan, K.; Zhang, Y.; Li, N.; Ma, C.; Li, Z.; Zhang, Y.; Feng, B.; Liu, J.; Sun, Y.; Xu, Y.; Lei, J.; Gao, N.
Deposited on : 2014-10-24
Resolution : 5.00 Å (reported)
Based on initial models : 2HJG, 2WWQ

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

EMDB validation analysis : 0.0.1.dev43
MolProbity : 4.02b-467
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ : 1.9.9
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.31.2

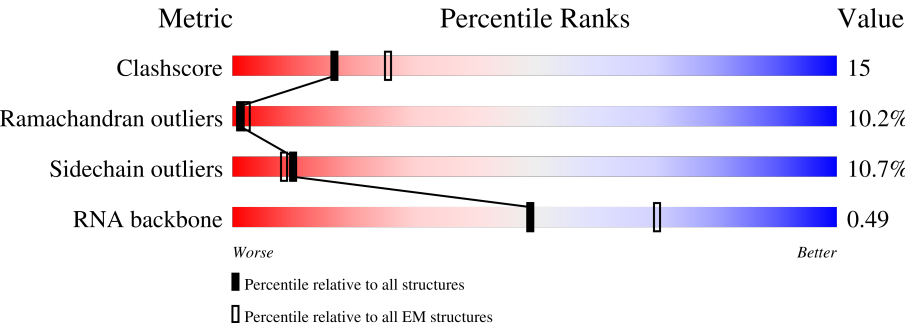
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 5.00 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)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion $< 40\%$). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	117	
2	B	2903	
3	0	78	
4	K	123	
5	L	144	
6	1	63	
7	M	136	

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Mol	Chain	Length	Quality of chain
8	N	127	
9	O	117	
10	P	115	
11	Q	118	
12	R	103	
13	S	110	
14	D	209	
15	T	100	
16	2	59	
17	U	104	
18	W	94	
19	X	490	
20	E	201	
21	Y	85	
22	3	57	
23	5	234	
24	6	46	
25	7	65	
26	8	38	
27	C	273	
28	F	179	
29	G	177	
30	H	149	
31	I	142	
32	J	142	

2 Entry composition

There are 32 unique types of molecules in this entry. The entry contains 94855 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 5S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	115	Total	C	N	O	P	0	0
			2455	1097	451	795	112		

- Molecule 2 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	2874	Total	C	N	O	P	0	0
			61689	27523	11353	19941	2872		

- Molecule 3 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	0	77	Total	C	N	O	S	0	0
			625	388	129	106	2		

- Molecule 4 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	K	121	Total	C	N	O	S	0	0
			931	582	179	164	6		

- Molecule 5 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	L	143	Total	C	N	O	S	0	0
			1045	649	206	189	1		

- Molecule 6 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	1	63	Total	C	N	O	S	0	0
			509	313	99	95	2		

- Molecule 7 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	M	136	Total	C	N	O	S	0	0
			1074	686	205	177	6		

- Molecule 8 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	N	120	Total	C	N	O	S	0	0
			960	593	196	166	5		

- Molecule 9 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				AltConf	Trace
9	O	116	Total	C	N	O	0	0
			892	552	178	162		

- Molecule 10 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	P	114	Total	C	N	O	S	0	0
			917	574	179	163	1		

- Molecule 11 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	Q	117	Total	C	N	O	0	0
			947	604	192	151		

- Molecule 12 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	R	103	Total	C	N	O	S	0	0
			816	516	153	145	2		

- Molecule 13 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	S	110	Total	C	N	O	S	0	0
			857	532	166	156	3		

- Molecule 14 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	D	209	Total	C	N	O	S	0	0
			1565	979	288	294	4		

- Molecule 15 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	T	93	Total	C	N	O	S	0	0
			738	466	139	131	2		

- Molecule 16 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	2	58	Total	C	N	O	S	0	0
			449	281	87	79	2		

- Molecule 17 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	U	99	Total	C	N	O		0	0
			755	479	140	136			

- Molecule 18 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	W	94	Total	C	N	O	S	0	0
			753	479	137	134	3		

- Molecule 19 is a protein called GTPase Der.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	X	418	Total	C	N	O	S	0	0
			3280	2074	582	610	14		

- Molecule 20 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	E	201	Total	C	N	O	S	0	0
			1552	974	283	290	5		

- Molecule 21 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	Y	79	Total	C	N	O	S	0	0
			596	367	120	108	1		

- Molecule 22 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	3	56	Total	C	N	O	S	0	0
			444	269	94	80	1		

- Molecule 23 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	5	234	Total	C	N	O	S	0	0
			1733	1081	315	330	7		

- Molecule 24 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	6	46	Total	C	N	O	S	0	0
			377	228	90	57	2		

- Molecule 25 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	7	64	Total	C	N	O	S	0	0
			504	323	105	74	2		

- Molecule 26 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	8	38	Total	C	N	O	S	0	0
			302	185	65	48	4		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
27	C	271	Total	C	N	O	S	0	0
			2082	1288	423	364	7		

- Molecule 28 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	F	178	Total	C	N	O	S	0	0
			1420	905	251	258	6		

- Molecule 29 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	G	175	Total	C	N	O	S	0	0
			1316	827	242	245	2		

- Molecule 30 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	H	149	Total	C	N	O	S	0	0
			1111	699	197	214	1		

- Molecule 31 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	I	141	Total	C	N	O	S	0	0
			1032	651	179	196	6		

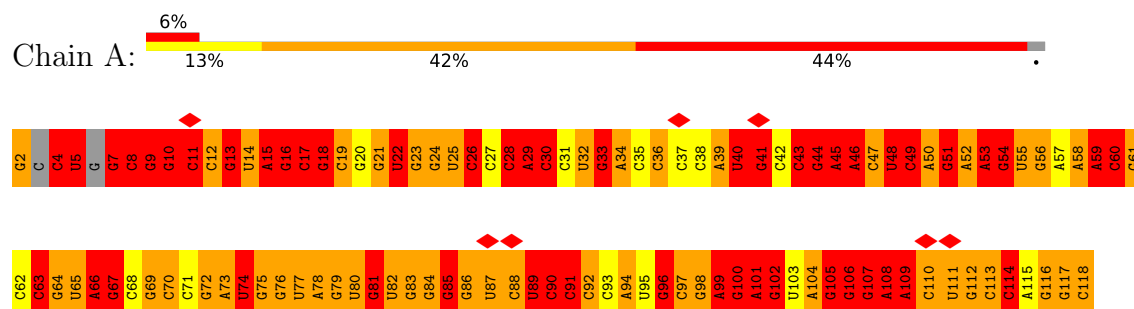
- Molecule 32 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	J	142	Total	C	N	O	S	0	0
			1129	714	212	199	4		

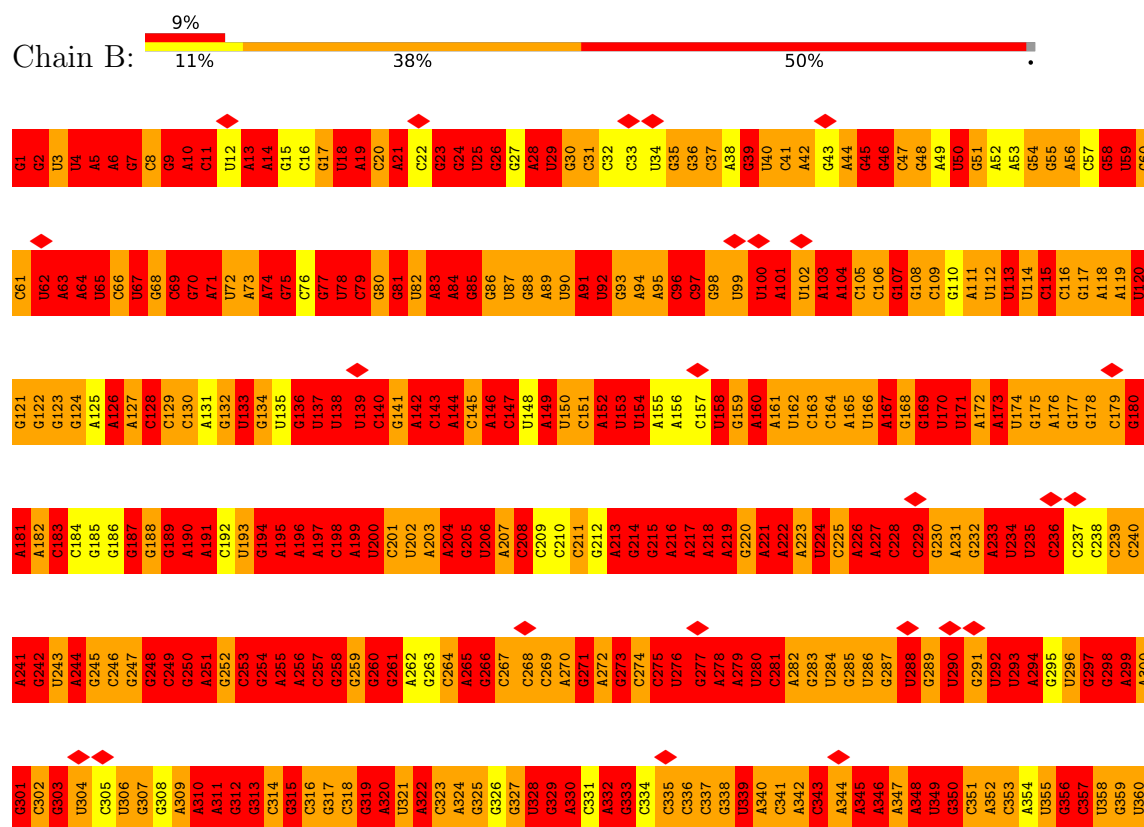
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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: 5S rRNA



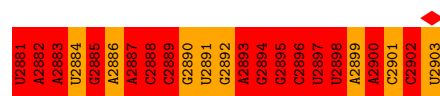
• Molecule 2: 23S rRNA



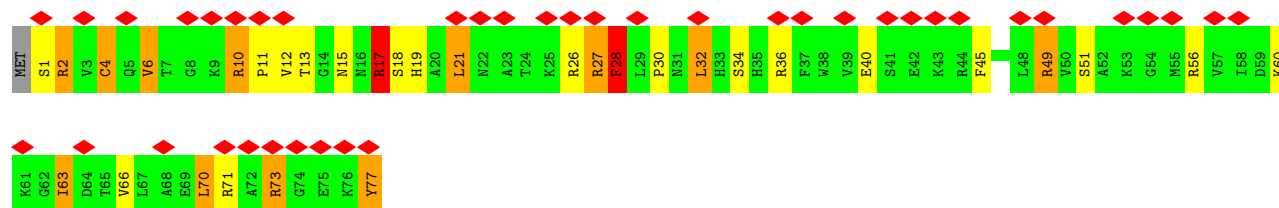
U1141	A1021	G981	C901	G841	A781	A721	A661	C601	A541	G481	C421	G361
A1142	G1022	G962	C902	U942	A782	A722	G662	A602	C542	A482	A422	A362
A1143	U1023	U963	C903	G843	A783	A723	G663	A603	G543	A483	A423	G363
A1144	G1023	G964	C904	A844	A784	U724	G664	G604	C544	A424	G424	C364
C1145	A1025	C965	A905	A845	G785	G725	U665	G605	U545	C485	G425	U365
C1146	G1026	G966	U906	U946	G786	G726	A666	U606	U546	C486	C426	C366
A1147	A1027	U967	G907	U947	G787	A727	U667	U607	A547	G487	U427	G367
U1148	A1028	C968	C908	C948	A788	G728	A668	A608	A548	A488	A428	A368
G1149	A1029	G969	A909	A949	A789	G729	G669	A609	G549	A489	A429	U369
C1150	C1030	U970	A910	U850	U790	A730	C670	C510	G549	A430	A430	G370
A1151	G1031	G971	A911	U851	G791	A731	C671	C511	C550	G491	U431	A371
C1152	A1032	A972	C912	U852	A792	G732	C672	G612	C551	A492	A432	G372
G1153	U1033	G973	U913	C853	A793	G733	C673	A613	U552	G493	C433	U373
G1154	G1034	G974	G914	C854	A794	A734	G674	A614	G553	A494	U434	A374
A1155	U1035	A975	C915	G855	G795	A735	A675	U615	U554	G495	C435	G375
A1156	G1036	G976	G916	G856	G796	G736	A676	A616	G555	G496	C436	G376
C1157	U1037	G977	A917	G857	G797	G737	A677	G617	A556	A497	U437	G377
A1158	A1038	G978	A918	G858	G798	G738	C678	G618	C557	G498	G438	C378
U1159	A1039	A979	U919	G859	G799	A739	C679	G619	U558	U499	G439	G379
G1160	A1040	A980	A920	U860	A800	G740	C680	G620	G559	G500	C440	G380
A1161	G1041	A981	C921	A861	G801	U741	G681	A621	C560	A501	U441	G381
G1162	U1042	C982	C922	G862	A802	A742	G682	G622	U561	A502	G442	C382
C1163	C1043	A983	G923	A863	U803	A743	U683	C623	U562	A503	A443	C383
C1164	U1044	A984	G924	G864	A804	U744	G684	C524	C564	A504	C444	C384
A1165	A1045	C985	A925	C865	G805	G745	A685	G625	C565	A505	C445	C385
G1166	U1046	G986	G926	A866	C806	U746	U686	A626	C566	G506	G446	G386
C1167	A1047	C987	A927	G867	U807	U747	C687	G627	U567	A507	A447	G387
G1168	A1048	A988	A928	U868	G808	G748	U688	G628	U568	A508	G448	G388
A1169	C1049	G989	U929	G869	G809	A749	A689	G629	U569	C509	U449	G389
C1170	U1050	A990	G930	U870	U810	A750	G690	G630	C510	A510	U450	U390
G1171	G1051	C991	U931	U871	U811	A751	C691	A631	G570	A449	A450	A391
U1108	C1052	C992	U932	U872	C812	A752	C692	A632	U571	G450	U451	U392
C1172	U1053	G993	A933	C873	A813	A753	A693	A633	A512	U452	C452	C393
U1173	G1054	C994	U934	G874	C814	U754	U694	C534	A513	A453	C394	C394
U1174	A1055	G995	C935	G875	C815	U755	G695	C535	A514	A454	G454	U395
A1175	G1056	A996	A936	C876	C816	A756	A696	G636	A515	G396	C455	G396
U1176	U1057	G997	C937	U877	C817	G757	G697	A637	U576	U397	C456	U397
G1177	A1058	C998	U938	A878	G818	C758	C698	G638	C517	A457	C457	C398
C1178	U1059	U999	G939	G879	A819	G759	C699	U639	U519	U399	U459	U399
U1180	A1060	A1000	G940	G880	A820	G760	G700	C540	U580	G400	A460	A401
U1181	U1061	G1002	A941	G881	A821	A761	G701	U641	C581	A402	A461	A402
G1182	G1062	G1003	G942	G882	C822	U762	U702	U642	A582	U403	C462	U403
U1183	U1063	C1005	A943	G883	U824	A764	G704	A644	G583	A404	G463	A404
U1184	C1064	C1006	C945	U884	A825	C765	A705	C645	C584	U405	U464	U405
G1186	A1065	C1007	C946	C885	U826	U766	G707	U646	G585	G406	G465	G406
G1187	U1066	A1008	A947	A886	U827	U767	G708	G647	A586	G407	A466	G407
U1188	A1067	A1009	C948	U887	A829	G768	U709	G648	C587	G408	G467	G408
A1189	G1068	U1010	G949	C888	G830	G770	U710	G649	C588	G409	G468	G409
G1190	A1069	G1011	C951	C889	G831	G771	G711	C650	A529	G410	A470	G410
G1191	U1070	U1012	G952	G890	U832	C772	G712	U652	A530	G411	A471	A412
G1192	U1071	C1013	G953	G891	A833	U773	G713	U653	A532	C413	A472	C413
G1193	G1071	A1014	G954	A892	G834	G774	U714	U654	U593	C414	G473	C414
A1194	C1072	U1015	U955	C893	C835	G775	A715	A655	U594	G415	G474	A415
G1195	U1073	G1016	G956	U894	G836	G776	G716	G656	C595	C416	G475	C416
C1196	A1074	G1017	C957	U895	C837	G777	C717	U657	U596	G417	G476	G417
G1197	U1075	U1018	U958	A896	U838	G778	A718	U658	G597	C418	A477	C418
U1198	C1076	U1019	A959	A897	C839	G779	C719	U659	A599	U419	A478	U419
G1199	A1077	A1020	A960	C897	C940	G780	U720	C660	G600	G540	A479	C420
C1200	U1078			A898								
	U1079			A900								

A1981	G1982	G1983	G1984	C1985	C1986	A1987	G1988	G1989	C1990	U1991	G1992	U1993	C1994	U1995	C1996	C1997	A1998	C1999	C2000	C2001	C2002	A2003	G2004	C2005	C2006	U2007	C2008	A2009	C2010	U2011	C2012	A2013	A2014	A2015	U2016	G2017	G2018	A2019	A2020	C2021	U2022	C2023	C2024	C2025	G2026	U2027	U2028	C2029	A2030	A2031	G2032	U2033	U2034	C2035	A2036	A2037	G2038	U2039	G2040
G1921	G1922	U1923	U1924	C1925	C1926	U1927	C1928	C1929	C1930	A1931	G1932	U1933	C1934	U1935	C1936	A1937	A1938	G1939	U1940	U1941	C1942	U1943	U1944	G1945	U1946	C1947	G1948	G1949	U1950	U1951	U1952	A1953	G1954	U1955	U1956	C1957	C1958	G1959	A1960	C1961	C1962	U1963	G1964	C1965	A1966	C1967	G1968	A1969	U1970	U1971	G1972	C1973	U1974	G1975	U1976	A1977	U1978	C1979	U1980
A1801	A1802	A1803	C1804	A1805	A1806	G1807	A1808	C1809	A1810	G1811	A1812	G1813	A1814	A1815	C1816	G1817	A1818	A1819	U1820	A1821	C1822	G1823	G1824	U1825	G1826	U1827	G1828	A1829	C1830	C1831	C1832	C1833	U1834	G1835	C1836	C1837	C1838	C1839	G1840	U1841	G1842	C1843	C1844	G1845	G1846	A1847	A1848	G1849	G1850	U1851	A1852	U1853	A1854	U1855	U	G	A	U	G
G	G	G	U	U	A	G	C	C	C	A	A	C	C	G	A	A	C	C	C	C	U	U	G	A1885	U1886	C1887	G1888	A1889	C1890	A1891	C1892	C1893	C1894	C1895	C1896	G1897	U1898	A1899	A1900	A1901	C1902	G1903	G1904	C1905	G1906	G1907	C1908	C1909	G1910	U1911	A1912	A1913	C1914	U1915	A1916	U1917	A1918	A1919	C1920
G1921	G1922	U1923	U1924	C1925	C1926	U1927	C1928	C1929	C1930	A1931	G1932	U1933	C1934	U1935	C1936	A1937	A1938	G1939	U1940	U1941	C1942	U1943	U1944	G1945	U1946	C1947	G1948	G1949	U1950	U1951	U1952	A1953	G1954	U1955	U1956	C1957	C1958	G1959	A1960	C1961	C1962	U1963	G1964	C1965	A1966	C1967	G1968	A1969	U1970	U1971	G1972	C1973	U1974	G1975	U1976	A1977	U1978	C1979	U1980
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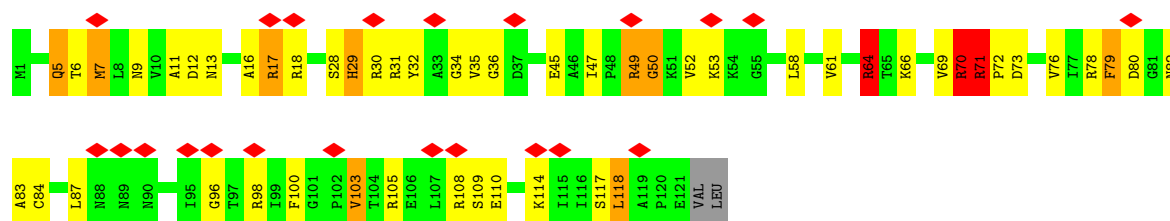
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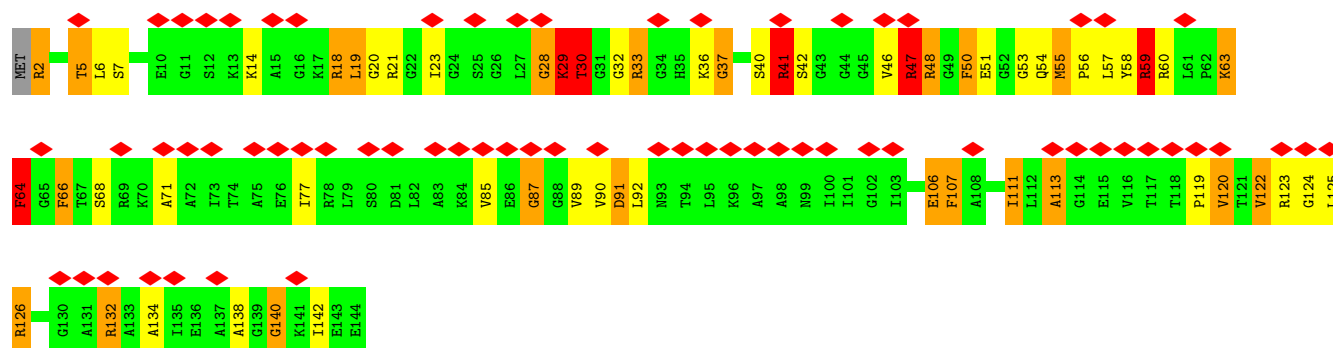
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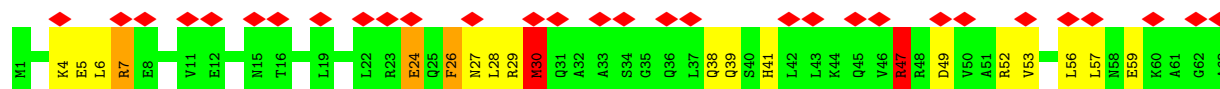
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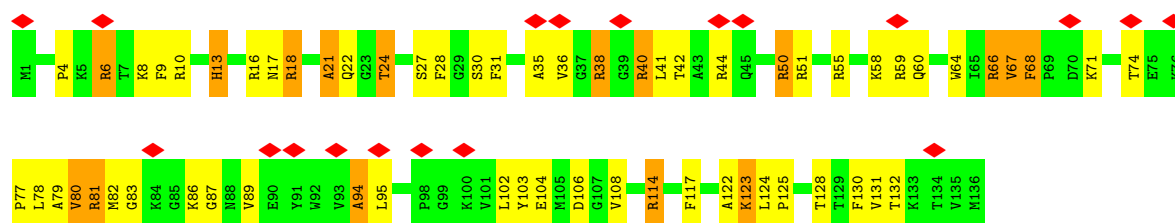
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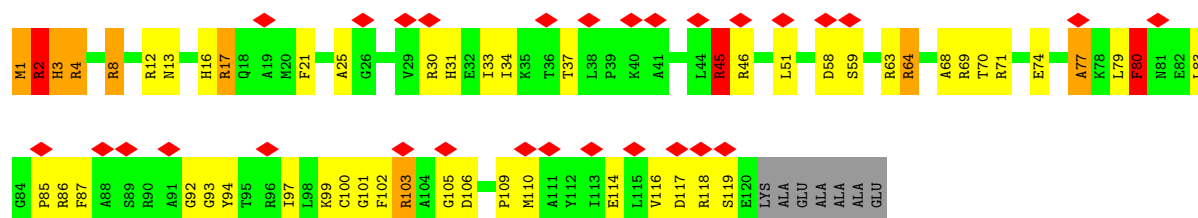
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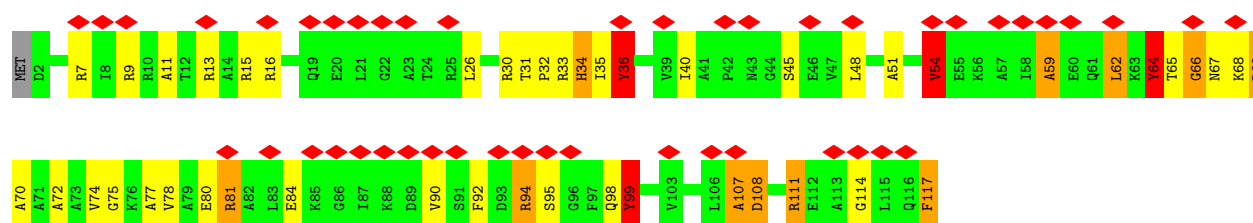
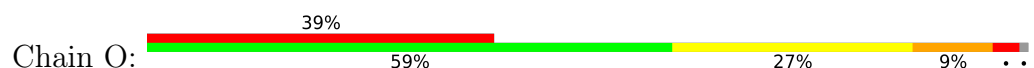
• Molecule 7: 50S ribosomal protein L16



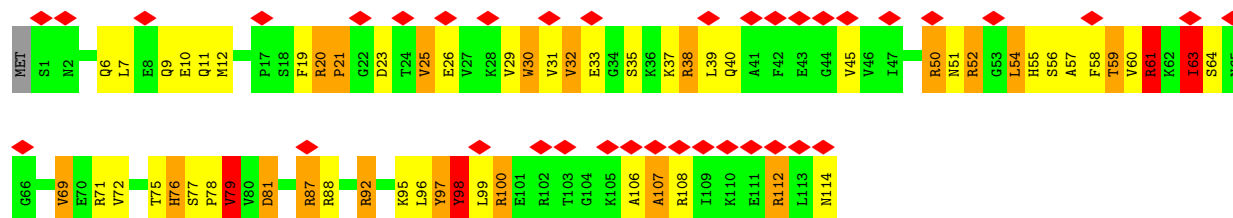
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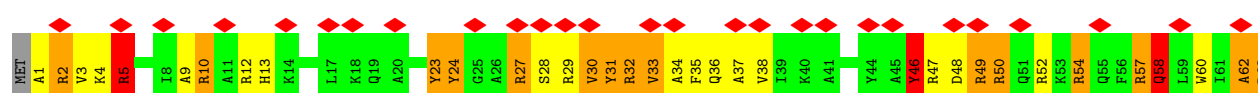
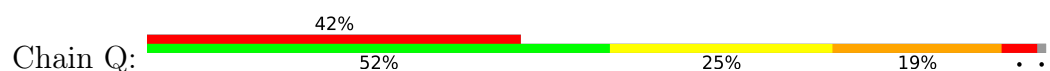
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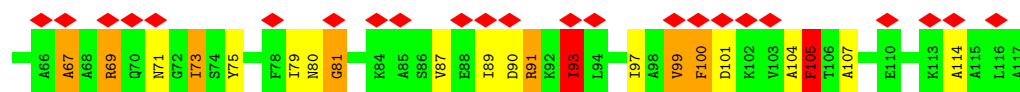


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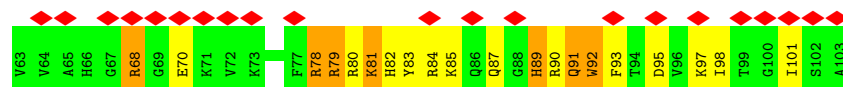
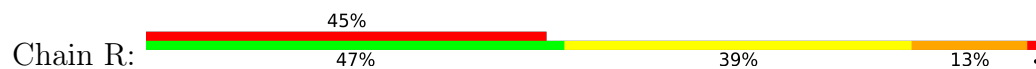


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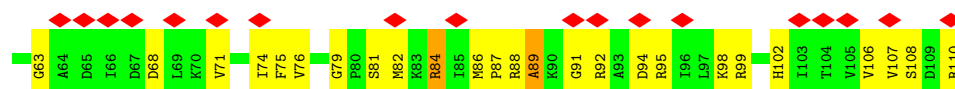
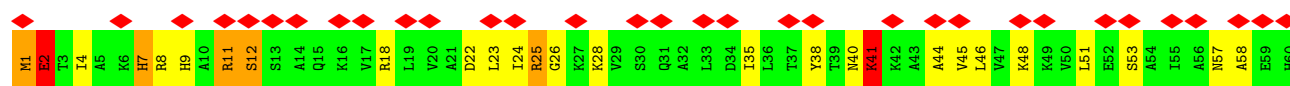




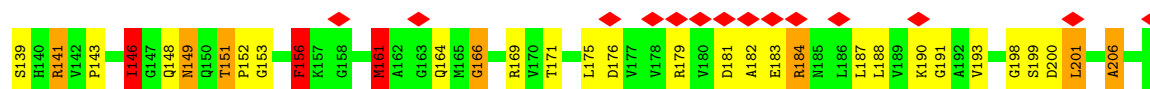
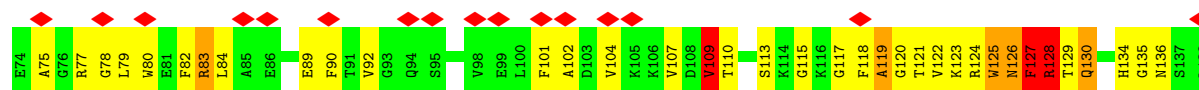
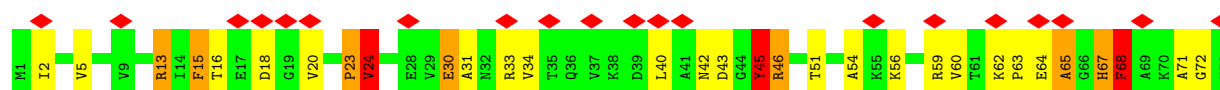
• Molecule 12: 50S ribosomal protein L21



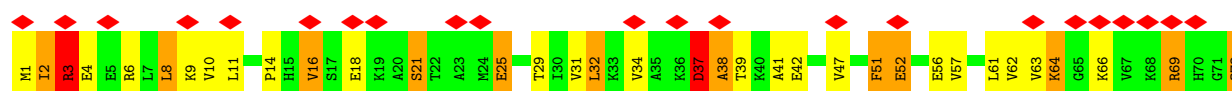
• Molecule 13: 50S ribosomal protein L22

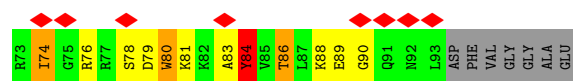


• Molecule 14: 50S ribosomal protein L3

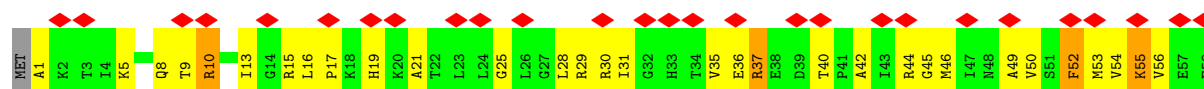


• Molecule 15: 50S ribosomal protein L23

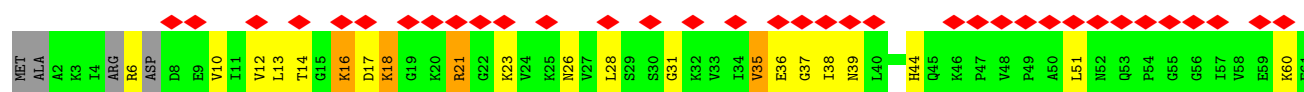




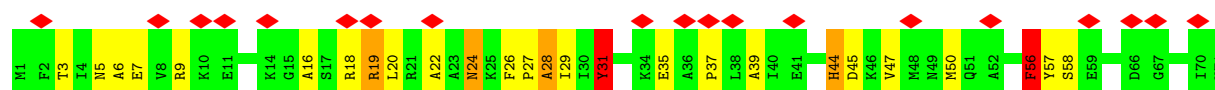
• Molecule 16: 50S ribosomal protein L30



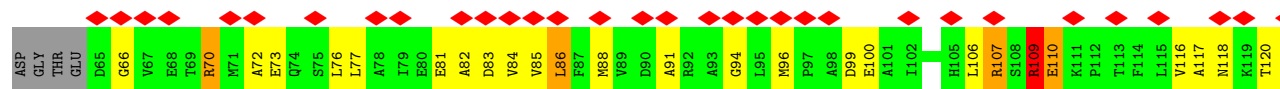
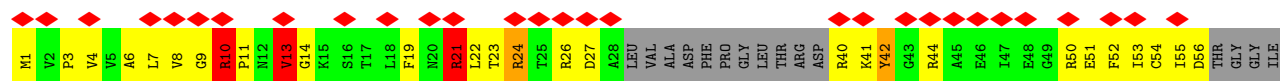
• Molecule 17: 50S ribosomal protein L24

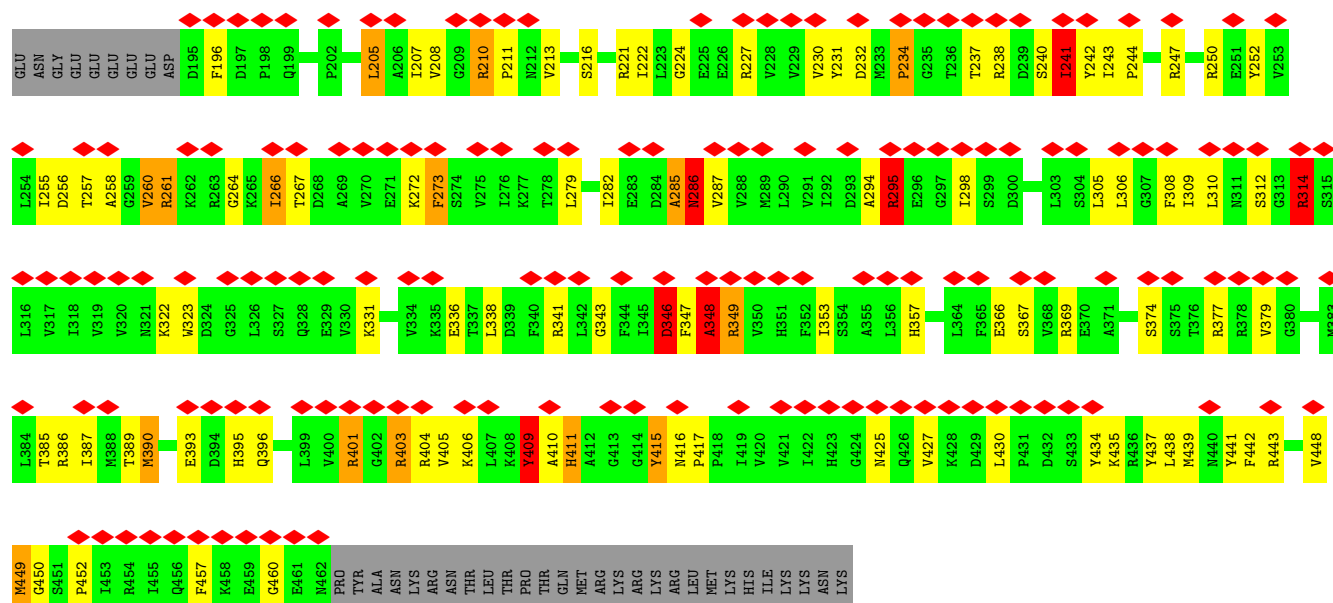


• Molecule 18: 50S ribosomal protein L25

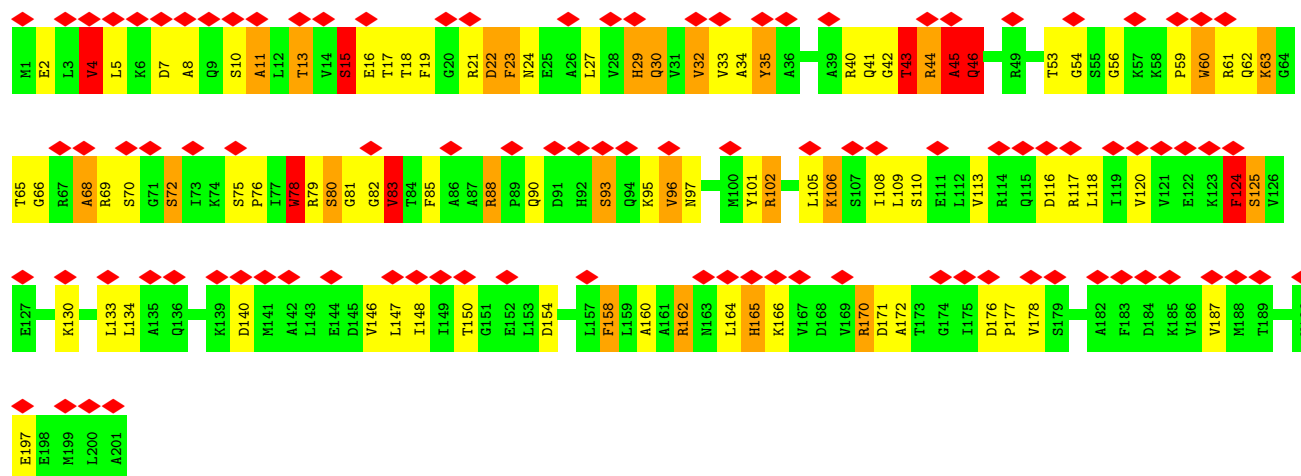


• Molecule 19: GTPase Der

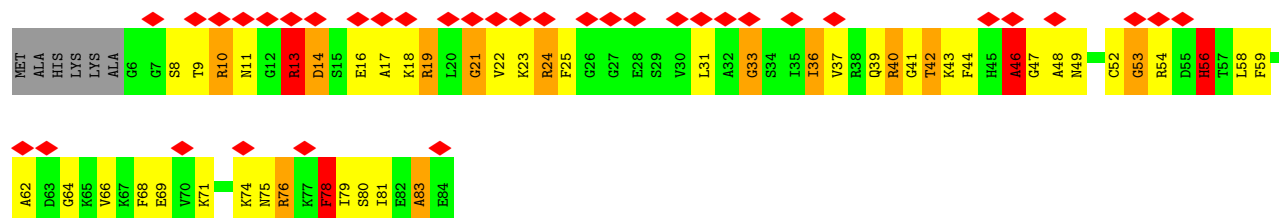




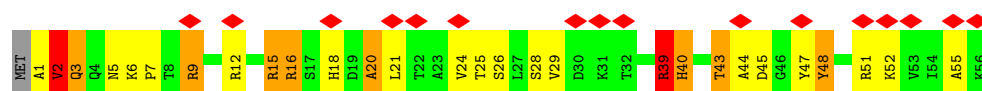
• Molecule 20: 50S ribosomal protein L4



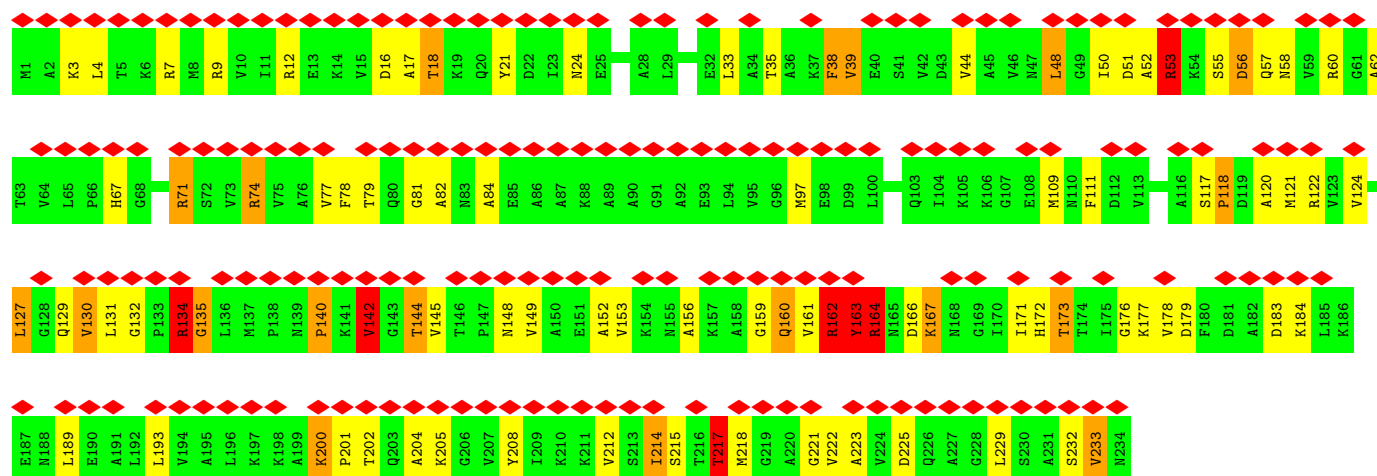
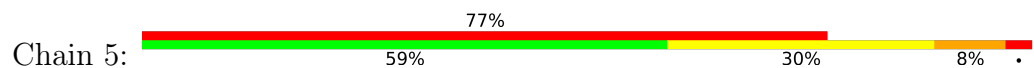
• Molecule 21: 50S ribosomal protein L27



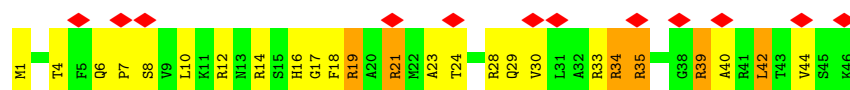
• Molecule 22: 50S ribosomal protein L32



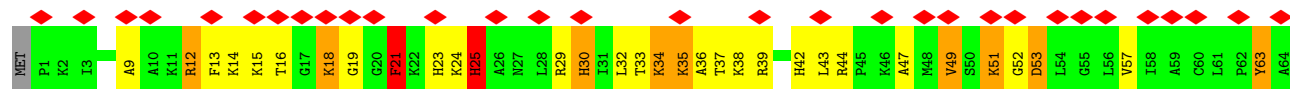
• Molecule 23: 50S ribosomal protein L1



• Molecule 24: 50S ribosomal protein L34



• Molecule 25: 50S ribosomal protein L35

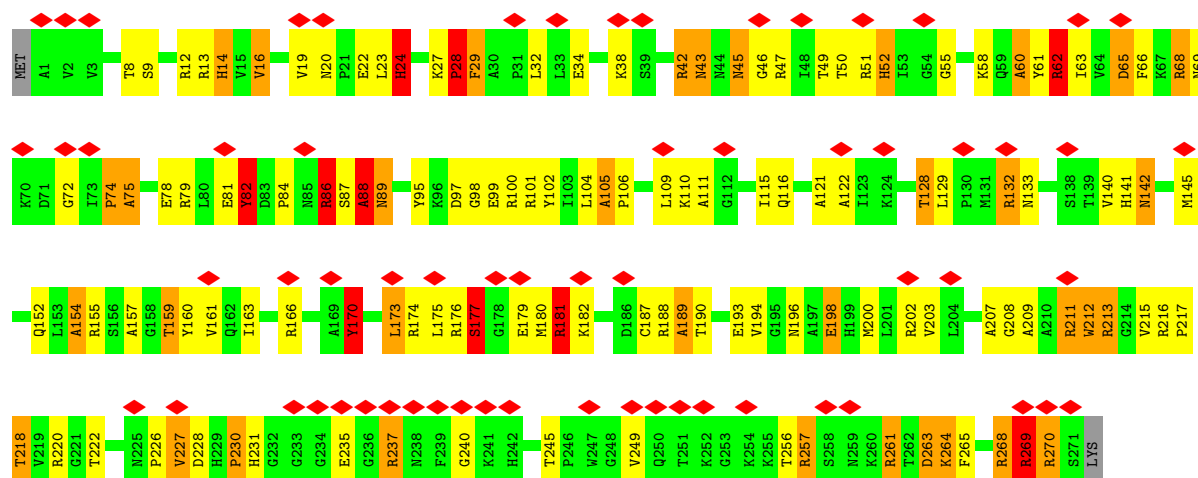


• Molecule 26: 50S ribosomal protein L36

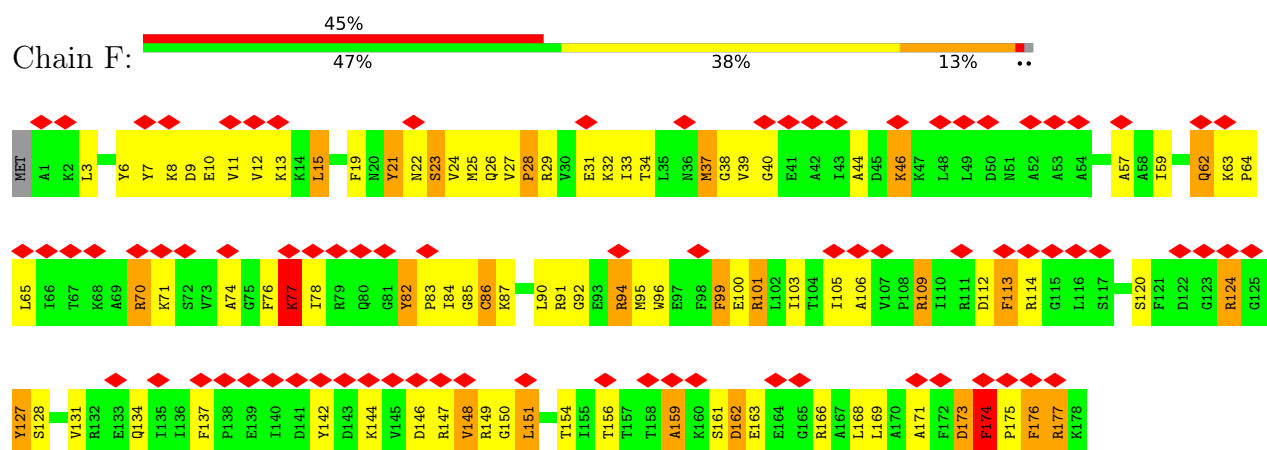


• Molecule 27: 50S ribosomal protein L2

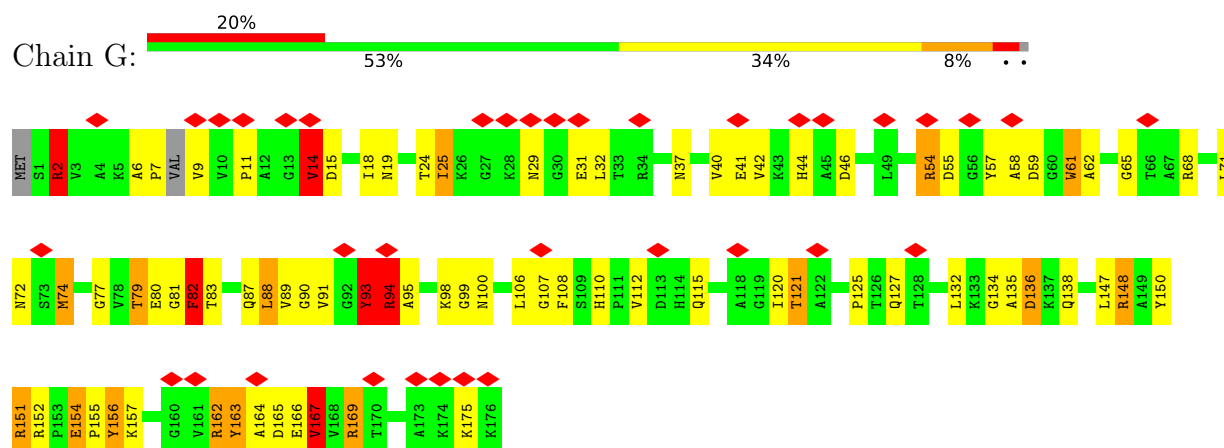




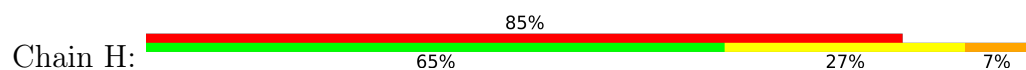
• Molecule 28: 50S ribosomal protein L5

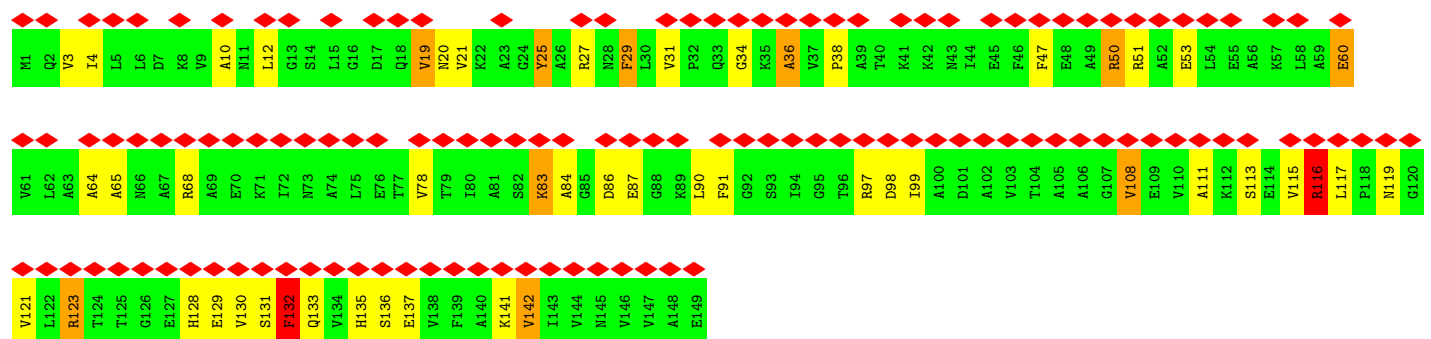


• Molecule 29: 50S ribosomal protein L6

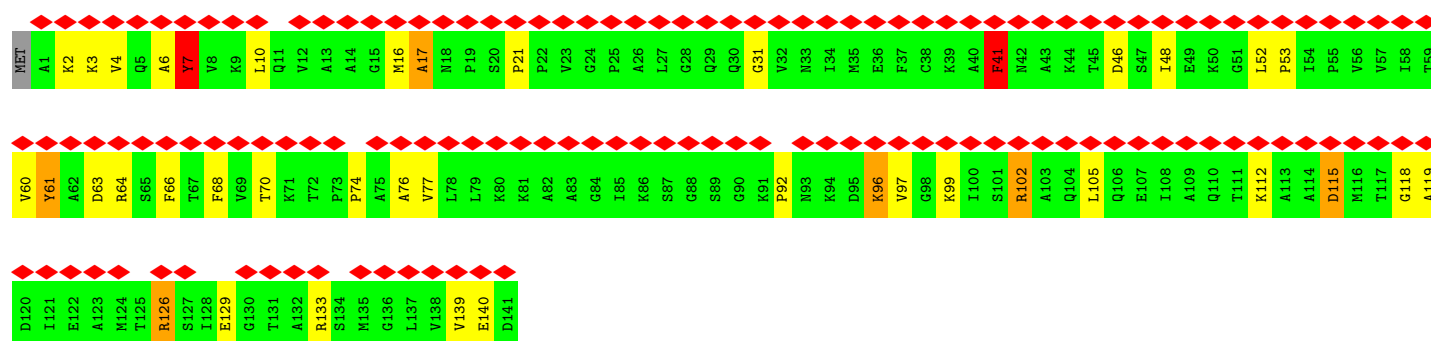
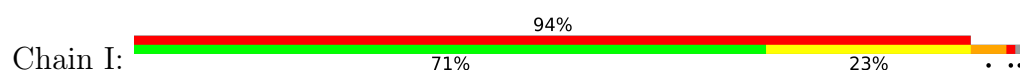


• Molecule 30: 50S ribosomal protein L9

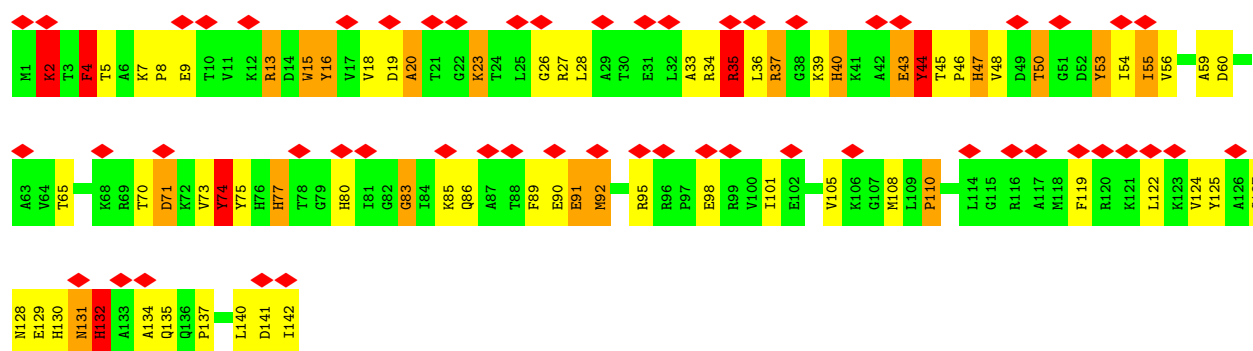
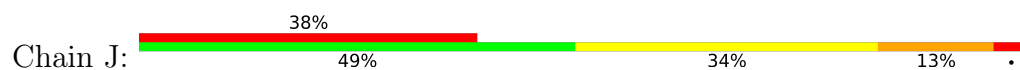




• Molecule 31: 50S ribosomal protein L11



• Molecule 32: 50S ribosomal protein L13



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	189614	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	Not provided	
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	Not provided	
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI EAGLE (4k x 4k)	Depositor
Maximum map value	0.232	Depositor
Minimum map value	-0.093	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.013	Depositor
Recommended contour level	0.045	Depositor
Map size (\AA)	373.088, 373.088, 373.088	wwPDB
Map dimensions	320, 320, 320	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.1659, 1.1659, 1.1659	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	A	3.57	414/2744 (15.1%)	3.75	637/4276 (14.9%)
2	B	3.66	11120/69092 (16.1%)	3.80	17069/107787 (15.8%)
3	O	1.89	7/635 (1.1%)	2.19	18/848 (2.1%)
4	K	1.72	6/940 (0.6%)	2.04	23/1258 (1.8%)
5	L	1.89	18/1054 (1.7%)	2.13	35/1403 (2.5%)
6	1	1.66	2/510 (0.4%)	1.81	4/677 (0.6%)
7	M	1.78	7/1093 (0.6%)	2.07	34/1460 (2.3%)
8	N	1.83	10/973 (1.0%)	2.11	35/1301 (2.7%)
9	O	1.84	12/902 (1.3%)	2.08	26/1209 (2.2%)
10	P	1.83	13/929 (1.4%)	2.13	26/1242 (2.1%)
11	Q	1.81	9/960 (0.9%)	2.35	47/1278 (3.7%)
12	R	1.75	4/829 (0.5%)	2.09	26/1107 (2.3%)
13	S	1.83	9/864 (1.0%)	2.06	22/1156 (1.9%)
14	D	1.81	19/1586 (1.2%)	2.12	48/2134 (2.2%)
15	T	1.88	7/744 (0.9%)	2.05	24/994 (2.4%)
16	2	1.84	8/453 (1.8%)	2.15	14/605 (2.3%)
17	U	1.71	2/761 (0.3%)	1.94	13/1013 (1.3%)
18	W	1.74	5/766 (0.7%)	2.12	22/1025 (2.1%)
19	X	1.73	26/3334 (0.8%)	2.01	98/4502 (2.2%)
20	E	1.83	25/1571 (1.6%)	2.01	44/2113 (2.1%)
21	Y	1.84	8/603 (1.3%)	2.19	20/797 (2.5%)
22	3	1.85	2/450 (0.4%)	2.17	18/599 (3.0%)
23	5	1.68	18/1748 (1.0%)	1.99	52/2355 (2.2%)
24	6	1.97	5/380 (1.3%)	2.15	17/498 (3.4%)
25	7	1.82	6/513 (1.2%)	2.15	14/676 (2.1%)
26	8	1.72	3/303 (1.0%)	2.04	3/397 (0.8%)
27	C	1.87	34/2121 (1.6%)	2.07	66/2852 (2.3%)
28	F	1.75	16/1444 (1.1%)	2.21	59/1937 (3.0%)
29	G	1.77	12/1335 (0.9%)	2.13	40/1803 (2.2%)
30	H	1.71	8/1122 (0.7%)	1.87	17/1515 (1.1%)
31	I	1.65	5/1046 (0.5%)	1.92	28/1410 (2.0%)
32	J	1.79	12/1152 (1.0%)	2.02	36/1551 (2.3%)
All	All	3.21	11852/102957 (11.5%)	3.42	18635/153778 (12.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	69
2	B	0	1764
3	O	0	5
4	K	0	4
5	L	0	10
6	1	0	6
7	M	0	9
8	N	0	4
9	O	0	5
10	P	0	7
11	Q	0	11
12	R	0	8
13	S	0	3
14	D	0	11
15	T	0	3
16	2	0	4
17	U	0	4
18	W	0	2
19	X	0	25
20	E	0	7
21	Y	0	6
22	3	0	4
23	5	0	7
24	6	0	3
25	7	0	3
26	8	0	1
27	C	0	11
28	F	0	6
29	G	0	9
30	H	0	9
31	I	0	3
32	J	0	9
All	All	0	2032

All (11852) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	159	G	N7-C5	-23.28	1.25	1.39
2	B	1674	G	N7-C5	-21.28	1.26	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	770	G	N7-C5	-20.77	1.26	1.39
2	B	1626	A	N7-C5	-20.30	1.27	1.39
2	B	1641	A	N7-C5	-19.84	1.27	1.39
2	B	46	G	N7-C5	-19.54	1.27	1.39
1	A	66	A	N7-C5	-19.47	1.27	1.39
2	B	1641	A	N9-C4	-18.69	1.26	1.37
2	B	1754	A	N9-C4	-18.69	1.26	1.37
2	B	2093	G	N7-C5	-18.66	1.28	1.39
2	B	313	G	N7-C5	-18.62	1.28	1.39
2	B	1322	A	N9-C4	-18.56	1.26	1.37
2	B	2005	A	N7-C5	-18.42	1.28	1.39
2	B	1010	A	N9-C4	-17.99	1.27	1.37
2	B	2639	A	N7-C5	-17.91	1.28	1.39
2	B	962	G	N7-C5	-17.86	1.28	1.39
2	B	2821	A	N7-C5	-17.85	1.28	1.39
2	B	1983	G	N7-C5	-17.49	1.28	1.39
2	B	1571	A	N3-C4	-17.28	1.24	1.34
2	B	1226	A	N7-C5	-17.24	1.28	1.39
2	B	49	A	N7-C5	-17.23	1.28	1.39
2	B	2186	G	C2-N3	17.14	1.46	1.32
2	B	1125	G	N7-C5	-17.05	1.29	1.39
2	B	203	A	N7-C5	-17.04	1.29	1.39
2	B	160	A	N7-C5	-16.97	1.29	1.39
2	B	374	A	N3-C4	-16.96	1.24	1.34
2	B	1677	A	N7-C5	-16.92	1.29	1.39
2	B	529	A	N9-C4	-16.91	1.27	1.37
2	B	2826	A	N9-C4	-16.78	1.27	1.37
2	B	2578	G	N7-C5	-16.78	1.29	1.39
2	B	1601	G	N7-C5	-16.62	1.29	1.39
2	B	1301	A	N7-C5	-16.61	1.29	1.39
2	B	2495	G	N7-C5	-16.60	1.29	1.39
2	B	2040	G	C6-N1	16.40	1.51	1.39
2	B	118	A	N9-C4	-16.37	1.28	1.37
2	B	2753	A	N9-C4	-16.30	1.28	1.37
2	B	1068	G	C6-N1	16.27	1.50	1.39
2	B	1463	C	N1-C6	16.21	1.46	1.37
2	B	2274	A	N7-C5	-16.20	1.29	1.39
2	B	221	A	N7-C5	-16.17	1.29	1.39
2	B	1662	U	P-O5'	-16.07	1.43	1.59
2	B	449	A	N7-C5	-16.00	1.29	1.39
2	B	874	G	N7-C5	-15.88	1.29	1.39
2	B	217	A	N7-C5	-15.75	1.29	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1978	A	N3-C4	-15.75	1.25	1.34
2	B	2766	A	N7-C5	-15.66	1.29	1.39
2	B	2061	G	N7-C5	-15.62	1.29	1.39
2	B	2861	U	C2-N3	15.60	1.48	1.37
2	B	723	C	N3-C4	15.59	1.44	1.33
2	B	2276	G	N7-C5	-15.54	1.29	1.39
2	B	2566	A	N7-C5	-15.54	1.29	1.39
2	B	2657	A	N9-C4	-15.53	1.28	1.37
2	B	1378	A	N7-C5	-15.49	1.29	1.39
2	B	1678	A	N7-C5	-15.36	1.30	1.39
2	B	1495	A	N9-C4	-15.32	1.28	1.37
2	B	529	A	N7-C5	-15.25	1.30	1.39
2	B	2225	A	N7-C5	-15.24	1.30	1.39
2	B	401	A	N7-C5	-15.23	1.30	1.39
2	B	44	A	N3-C4	-15.22	1.25	1.34
2	B	1059	G	C8-N7	-15.20	1.21	1.30
2	B	1431	A	N7-C5	15.16	1.48	1.39
2	B	1515	A	N7-C5	-15.15	1.30	1.39
2	B	889	C	N1-C6	15.13	1.46	1.37
2	B	1142	A	N9-C4	-15.08	1.28	1.37
2	B	1385	A	N9-C4	-15.05	1.28	1.37
2	B	1084	A	N7-C5	-15.03	1.30	1.39
2	B	910	A	N9-C4	-15.02	1.28	1.37
2	B	609	A	N7-C5	-15.01	1.30	1.39
2	B	1943	U	C2-N3	15.01	1.48	1.37
2	B	2542	A	N7-C5	-14.92	1.30	1.39
2	B	1491	G	N7-C5	-14.92	1.30	1.39
2	B	2377	A	N7-C5	-14.90	1.30	1.39
2	B	650	C	P-O5'	-14.87	1.44	1.59
2	B	2851	A	N3-C4	-14.86	1.25	1.34
2	B	1961	C	N1-C6	14.86	1.46	1.37
2	B	149	A	N7-C5	-14.84	1.30	1.39
2	B	1118	C	C4-C5	-14.81	1.31	1.43
2	B	2385	C	N1-C6	14.80	1.46	1.37
2	B	1596	A	C6-N1	14.74	1.45	1.35
2	B	749	A	N7-C5	-14.72	1.30	1.39
2	B	2013	A	N9-C4	-14.72	1.29	1.37
2	B	1936	A	N7-C5	-14.67	1.30	1.39
2	B	1001	A	N9-C4	-14.64	1.29	1.37
2	B	117	G	N7-C5	-14.63	1.30	1.39
2	B	482	A	N9-C4	-14.58	1.29	1.37
2	B	2376	A	N9-C4	-14.54	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1477	A	N7-C5	-14.53	1.30	1.39
2	B	1697	G	N7-C5	-14.51	1.30	1.39
1	A	72	G	N7-C5	-14.50	1.30	1.39
2	B	1602	U	C2-N3	14.48	1.47	1.37
2	B	2621	G	N7-C5	-14.48	1.30	1.39
2	B	530	G	N9-C8	-14.46	1.27	1.37
2	B	861	A	N7-C5	-14.42	1.30	1.39
2	B	789	A	N9-C4	-14.38	1.29	1.37
2	B	778	G	N7-C5	-14.35	1.30	1.39
2	B	756	A	N7-C5	-14.33	1.30	1.39
2	B	1274	A	N7-C5	-14.33	1.30	1.39
2	B	969	G	C2'-C1'	-14.32	1.37	1.53
2	B	2513	A	N9-C4	-14.32	1.29	1.37
2	B	2037	A	N7-C5	-14.29	1.30	1.39
2	B	223	A	N3-C4	-14.26	1.26	1.34
2	B	2336	A	C6-N6	14.21	1.45	1.33
2	B	1321	A	C6-N6	14.17	1.45	1.33
2	B	914	G	C2-N3	14.15	1.44	1.32
2	B	1473	G	N7-C5	-14.14	1.30	1.39
2	B	2135	A	N3-C4	14.12	1.43	1.34
2	B	503	A	N7-C5	-14.11	1.30	1.39
1	A	8	C	N1-C6	-14.10	1.28	1.37
2	B	198	C	P-O5'	-14.10	1.45	1.59
2	B	599	A	C8-N7	-14.10	1.21	1.31
2	B	1978	A	N9-C8	-14.09	1.26	1.37
2	B	945	A	N7-C5	-14.07	1.30	1.39
2	B	2892	G	C6-N1	14.05	1.49	1.39
2	B	1170	C	C4-C5	14.02	1.54	1.43
2	B	2597	G	N7-C5	-13.99	1.30	1.39
2	B	465	G	N7-C5	-13.99	1.30	1.39
2	B	2642	G	N7-C5	-13.97	1.30	1.39
2	B	1182	G	C8-N7	-13.96	1.22	1.30
2	B	825	A	N9-C4	-13.92	1.29	1.37
2	B	2336	A	P-O5'	-13.91	1.45	1.59
2	B	1961	C	N3-C4	13.89	1.43	1.33
2	B	103	A	N9-C4	-13.89	1.29	1.37
2	B	181	A	N7-C5	-13.87	1.30	1.39
2	B	2516	A	C2'-C1'	-13.87	1.38	1.53
2	B	633	A	N9-C4	-13.86	1.29	1.37
2	B	1591	A	N9-C4	-13.86	1.29	1.37
2	B	1322	A	N3-C4	-13.83	1.26	1.34
2	B	2502	G	N9-C8	-13.83	1.28	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2763	G	N7-C5	-13.82	1.30	1.39
2	B	1960	A	C6-N6	13.82	1.45	1.33
2	B	2701	U	C2-N3	13.81	1.47	1.37
2	B	469	G	N7-C5	-13.79	1.30	1.39
2	B	2430	A	N7-C5	-13.76	1.30	1.39
2	B	345	A	C2'-C1'	-13.73	1.38	1.53
2	B	947	A	N7-C5	-13.72	1.31	1.39
2	B	2264	C	N1-C6	13.70	1.45	1.37
1	A	20	G	N7-C5	-13.70	1.31	1.39
2	B	833	A	N9-C4	-13.68	1.29	1.37
2	B	309	A	N7-C5	-13.67	1.31	1.39
2	B	1008	A	C8-N7	-13.66	1.22	1.31
2	B	1144	A	N7-C5	-13.65	1.31	1.39
2	B	617	G	N9-C8	-13.63	1.28	1.37
2	B	1698	A	N7-C5	-13.63	1.31	1.39
2	B	643	A	N7-C5	-13.62	1.31	1.39
2	B	1201	U	C2-N3	13.61	1.47	1.37
2	B	1654	A	N9-C4	-13.59	1.29	1.37
2	B	1328	A	N3-C4	-13.56	1.26	1.34
2	B	2082	A	N3-C4	-13.56	1.26	1.34
2	B	828	U	O3'-P	-13.55	1.44	1.61
2	B	1781	U	C4'-C3'	-13.54	1.38	1.53
2	B	684	G	N7-C5	-13.53	1.31	1.39
2	B	2679	A	N9-C4	-13.53	1.29	1.37
2	B	2655	G	C6-N1	13.52	1.49	1.39
2	B	1016	G	N7-C5	-13.51	1.31	1.39
2	B	761	A	N9-C4	-13.48	1.29	1.37
2	B	1366	A	N7-C5	-13.47	1.31	1.39
2	B	2253	G	N7-C5	-13.47	1.31	1.39
2	B	2288	A	N9-C4	-13.45	1.29	1.37
2	B	2727	A	N3-C4	-13.43	1.26	1.34
2	B	1418	G	N7-C5	-13.42	1.31	1.39
2	B	492	A	N7-C5	-13.42	1.31	1.39
2	B	2408	U	P-O5'	-13.42	1.46	1.59
2	B	600	G	C2-N3	13.41	1.43	1.32
2	B	625	G	C2-N3	13.39	1.43	1.32
1	A	35	C	N3-C4	13.38	1.43	1.33
2	B	496	G	C2'-C1'	-13.38	1.38	1.53
2	B	1427	A	N7-C5	-13.37	1.31	1.39
2	B	2894	G	P-O5'	-13.37	1.46	1.59
2	B	317	G	N7-C5	-13.35	1.31	1.39
2	B	1245	G	N7-C5	-13.35	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	899	A	N7-C5	-13.34	1.31	1.39
2	B	2055	C	O3'-P	-13.33	1.45	1.61
2	B	400	G	N7-C5	-13.32	1.31	1.39
2	B	1725	U	P-O5'	-13.32	1.46	1.59
2	B	2042	A	C2'-C1'	-13.31	1.38	1.53
2	B	1051	G	N7-C5	-13.30	1.31	1.39
2	B	1419	A	N7-C5	-13.29	1.31	1.39
2	B	226	A	N9-C4	-13.28	1.29	1.37
2	B	1115	G	N7-C5	-13.28	1.31	1.39
2	B	2685	G	N9-C8	-13.26	1.28	1.37
2	B	1410	G	C5-C4	-13.24	1.29	1.38
2	B	2176	A	N7-C5	-13.24	1.31	1.39
2	B	2792	A	N7-C5	-13.24	1.31	1.39
2	B	495	G	N3-C4	-13.23	1.26	1.35
2	B	1198	U	C2'-C1'	-13.22	1.38	1.53
2	B	315	G	P-O5'	-13.22	1.46	1.59
2	B	2466	C	N1-C6	13.20	1.45	1.37
2	B	2873	A	N7-C5	-13.20	1.31	1.39
2	B	126	A	N7-C5	-13.19	1.31	1.39
2	B	1652	A	N7-C5	-13.19	1.31	1.39
2	B	1906	G	C2-N3	13.19	1.43	1.32
2	B	439	A	N7-C5	-13.19	1.31	1.39
2	B	1368	G	N7-C5	-13.18	1.31	1.39
2	B	2693	G	N7-C5	-13.17	1.31	1.39
2	B	1308	A	N9-C8	-13.16	1.27	1.37
2	B	2444	G	P-O5'	-13.16	1.46	1.59
2	B	753	A	C8-N7	-13.14	1.22	1.31
2	B	1235	G	N3-C4	-13.13	1.26	1.35
2	B	2315	G	N3-C4	13.12	1.44	1.35
2	B	2813	A	N7-C5	-13.11	1.31	1.39
2	B	1524	G	N7-C5	-13.11	1.31	1.39
2	B	1569	A	N3-C4	-13.10	1.26	1.34
2	B	2612	C	O3'-P	-13.06	1.45	1.61
2	B	270	A	N7-C5	-13.06	1.31	1.39
2	B	1569	A	N7-C5	-13.05	1.31	1.39
2	B	272	A	C6-N6	13.03	1.44	1.33
2	B	1645	G	N7-C5	-13.02	1.31	1.39
1	A	101	A	P-O5'	-13.02	1.46	1.59
2	B	98	G	N7-C5	-13.01	1.31	1.39
2	B	2860	A	C8-N7	-13.01	1.22	1.31
2	B	1921	G	C8-N7	-13.01	1.23	1.30
2	B	2848	G	C6-N1	12.99	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	168	G	C6-N1	-12.97	1.30	1.39
2	B	1040	A	N3-C4	-12.96	1.27	1.34
2	B	2336	A	N7-C5	-12.96	1.31	1.39
2	B	2409	G	N7-C5	-12.95	1.31	1.39
2	B	2899	A	N7-C5	-12.95	1.31	1.39
2	B	2641	G	N3-C4	-12.94	1.26	1.35
2	B	1137	G	O3'-P	-12.94	1.45	1.61
2	B	690	G	N7-C5	-12.93	1.31	1.39
2	B	1360	G	N9-C4	-12.93	1.27	1.38
2	B	2304	G	N7-C5	-12.93	1.31	1.39
2	B	2693	G	C5-C4	12.93	1.47	1.38
2	B	380	G	N7-C5	-12.91	1.31	1.39
2	B	1336	A	N7-C5	-12.90	1.31	1.39
2	B	218	A	N3-C4	-12.89	1.27	1.34
2	B	2335	A	N9-C4	-12.88	1.30	1.37
2	B	2439	A	N9-C4	12.87	1.45	1.37
2	B	2762	C	N1-C6	12.85	1.44	1.37
2	B	409	G	C2-N3	12.85	1.43	1.32
2	B	2434	A	N7-C5	-12.84	1.31	1.39
2	B	1996	C	C2-N3	12.82	1.46	1.35
2	B	974	G	N7-C5	-12.81	1.31	1.39
2	B	2876	G	N9-C8	-12.81	1.28	1.37
2	B	1100	C	N3-C4	12.80	1.43	1.33
2	B	28	A	N9-C8	-12.80	1.27	1.37
2	B	975	A	N7-C5	-12.80	1.31	1.39
2	B	501	A	N9-C4	-12.79	1.30	1.37
2	B	1529	G	C2-N3	12.78	1.43	1.32
2	B	2159	G	C2-N3	12.78	1.43	1.32
2	B	1058	U	C2-N3	12.78	1.46	1.37
1	A	93	C	C4-C5	-12.77	1.32	1.43
2	B	927	A	O3'-P	-12.77	1.45	1.61
2	B	2060	A	O3'-P	-12.77	1.45	1.61
2	B	1353	A	C8-N7	-12.76	1.22	1.31
2	B	481	G	N7-C5	-12.75	1.31	1.39
2	B	2162	G	N7-C5	-12.75	1.31	1.39
2	B	1994	C	N3-C4	12.74	1.42	1.33
2	B	2004	G	N9-C8	12.72	1.46	1.37
2	B	2087	G	C8-N7	-12.71	1.23	1.30
2	B	1660	G	C8-N7	-12.70	1.23	1.30
2	B	2566	A	C6-N1	12.70	1.44	1.35
2	B	2366	A	N9-C8	-12.69	1.27	1.37
2	B	1580	A	C8-N7	-12.68	1.22	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	697	G	N7-C5	-12.68	1.31	1.39
2	B	941	A	N7-C5	-12.68	1.31	1.39
2	B	1293	C	O3'-P	-12.66	1.46	1.61
2	B	2140	G	N3-C4	-12.65	1.26	1.35
2	B	2600	A	N9-C8	-12.65	1.27	1.37
2	B	1689	A	C6-N6	12.64	1.44	1.33
2	B	1237	A	N7-C5	-12.63	1.31	1.39
2	B	1385	A	O3'-P	-12.63	1.46	1.61
1	A	104	A	N7-C5	-12.62	1.31	1.39
2	B	1610	A	N3-C4	-12.61	1.27	1.34
2	B	730	A	N9-C4	12.60	1.45	1.37
2	B	1308	A	N7-C5	-12.60	1.31	1.39
2	B	277	G	C2-N3	12.60	1.42	1.32
2	B	621	A	N7-C5	-12.57	1.31	1.39
2	B	757	G	C8-N7	-12.56	1.23	1.30
2	B	959	A	N3-C4	-12.55	1.27	1.34
2	B	1829	A	N7-C5	-12.55	1.31	1.39
2	B	2009	A	C5-C4	-12.55	1.29	1.38
2	B	2251	G	N7-C5	-12.55	1.31	1.39
2	B	1436	G	N9-C4	-12.54	1.27	1.38
2	B	187	G	N7-C5	-12.53	1.31	1.39
2	B	377	G	N7-C5	-12.52	1.31	1.39
2	B	2583	G	N7-C5	-12.49	1.31	1.39
2	B	2186	G	C8-N7	-12.48	1.23	1.30
2	B	842	U	C2-N3	12.47	1.46	1.37
2	B	2447	G	N3-C4	-12.47	1.26	1.35
2	B	2093	G	C2'-C1'	-12.46	1.39	1.53
2	B	847	U	C2'-C1'	-12.46	1.39	1.53
2	B	633	A	N7-C5	-12.45	1.31	1.39
2	B	858	G	C6-N1	-12.44	1.30	1.39
2	B	2003	A	C8-N7	-12.43	1.22	1.31
2	B	2599	G	C2-N3	12.42	1.42	1.32
2	B	52	A	N7-C5	-12.38	1.31	1.39
2	B	2777	G	N7-C5	-12.37	1.31	1.39
2	B	988	A	N3-C4	-12.36	1.27	1.34
2	B	2521	C	N1-C6	-12.35	1.29	1.37
2	B	1900	A	N3-C4	-12.34	1.27	1.34
2	B	2379	G	C2-N3	12.34	1.42	1.32
2	B	835	C	N3-C4	12.34	1.42	1.33
2	B	2592	G	N7-C5	-12.33	1.31	1.39
2	B	1442	U	P-O5'	-12.33	1.47	1.59
2	B	2764	A	N7-C5	-12.33	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	11	C	N1-C6	-12.32	1.29	1.37
2	B	1213	A	N7-C5	-12.31	1.31	1.39
2	B	448	U	P-O5'	-12.30	1.47	1.59
2	B	2715	C	P-O5'	-12.30	1.47	1.59
2	B	783	A	N7-C5	-12.29	1.31	1.39
1	A	100	G	N7-C5	-12.29	1.31	1.39
2	B	447	A	N3-C4	-12.29	1.27	1.34
2	B	2062	A	N7-C5	-12.29	1.31	1.39
2	B	793	A	N7-C5	-12.27	1.31	1.39
2	B	2286	G	N7-C5	-12.27	1.31	1.39
2	B	385	C	P-O5'	-12.25	1.47	1.59
2	B	1908	C	N3-C4	12.24	1.42	1.33
2	B	2204	G	N3-C4	-12.24	1.26	1.35
2	B	2391	G	C2-N3	12.24	1.42	1.32
2	B	2366	A	C6-N1	-12.22	1.26	1.35
2	B	670	A	N7-C5	-12.22	1.31	1.39
2	B	477	A	N9-C4	-12.20	1.30	1.37
2	B	1360	G	N7-C5	-12.19	1.31	1.39
2	B	2314	A	N7-C5	-12.19	1.31	1.39
2	B	1760	C	N1-C6	12.17	1.44	1.37
2	B	725	G	N3-C4	-12.16	1.26	1.35
2	B	1188	U	P-O5'	-12.16	1.47	1.59
2	B	1593	A	C6-N6	12.16	1.43	1.33
2	B	2379	G	N7-C5	-12.15	1.31	1.39
2	B	748	G	N7-C5	-12.15	1.31	1.39
2	B	801	G	C5-C4	-12.13	1.29	1.38
2	B	386	G	N7-C5	-12.13	1.31	1.39
2	B	373	U	C2-N3	12.12	1.46	1.37
2	B	2327	A	N9-C4	-12.12	1.30	1.37
2	B	2298	A	N7-C5	-12.12	1.31	1.39
2	B	2694	G	O3'-P	-12.12	1.46	1.61
2	B	2776	A	O3'-P	-12.12	1.46	1.61
2	B	1459	G	C4'-C3'	-12.11	1.39	1.53
2	B	1032	A	O3'-P	-12.10	1.46	1.61
2	B	5	A	N9-C4	-12.09	1.30	1.37
2	B	2899	A	P-O5'	-12.09	1.47	1.59
2	B	2677	G	C8-N7	-12.08	1.23	1.30
2	B	227	A	N9-C4	-12.07	1.30	1.37
2	B	2856	A	N7-C5	-12.07	1.32	1.39
2	B	923	G	N9-C8	12.07	1.46	1.37
2	B	863	A	C6-N1	12.06	1.44	1.35
2	B	442	G	N7-C5	-12.06	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	398	C	C2'-C1'	-12.04	1.40	1.53
2	B	2400	G	N3-C4	-12.04	1.27	1.35
2	B	1137	G	C2'-C1'	-12.04	1.40	1.53
2	B	2732	G	P-O5'	-12.04	1.47	1.59
2	B	966	G	C2'-C1'	-12.03	1.40	1.53
2	B	1063	G	N7-C5	-12.03	1.32	1.39
2	B	2740	A	N7-C5	-12.03	1.32	1.39
2	B	1610	A	N9-C4	-12.03	1.30	1.37
2	B	1791	A	N3-C4	-12.03	1.27	1.34
2	B	1807	G	C2'-C1'	-12.02	1.40	1.53
2	B	752	A	P-O5'	-12.01	1.47	1.59
2	B	6	A	N7-C5	-12.00	1.32	1.39
2	B	506	G	N7-C5	-12.00	1.32	1.39
2	B	1031	G	C2-N3	12.00	1.42	1.32
2	B	1381	G	P-O5'	-12.00	1.47	1.59
2	B	680	C	N1-C6	-12.00	1.29	1.37
2	B	2501	C	N3-C4	12.00	1.42	1.33
2	B	1669	A	N7-C5	-12.00	1.32	1.39
2	B	460	A	N7-C5	-11.99	1.32	1.39
2	B	1571	A	N7-C5	-11.99	1.32	1.39
2	B	1336	A	C8-N7	-11.99	1.23	1.31
2	B	1493	C	C4-N4	11.99	1.44	1.33
2	B	301	G	N7-C5	-11.98	1.32	1.39
2	B	536	G	N9-C4	-11.97	1.28	1.38
2	B	452	G	N7-C5	-11.96	1.32	1.39
2	B	2821	A	C8-N7	-11.96	1.23	1.31
2	B	1854	A	N9-C4	-11.95	1.30	1.37
2	B	1784	A	N7-C5	-11.95	1.32	1.39
2	B	1846	G	C2-N3	11.93	1.42	1.32
2	B	2140	G	C2'-C1'	-11.93	1.40	1.53
2	B	2323	G	N3-C4	-11.93	1.27	1.35
2	B	55	G	N9-C8	-11.92	1.29	1.37
2	B	1015	U	C2-N3	-11.92	1.29	1.37
2	B	1127	A	O3'-P	-11.91	1.46	1.61
2	B	319	G	N9-C4	-11.90	1.28	1.38
2	B	1885	A	N7-C5	-11.90	1.32	1.39
2	B	1522	A	P-O5'	-11.90	1.47	1.59
2	B	1184	U	P-O5'	-11.89	1.47	1.59
2	B	2279	G	N9-C4	-11.88	1.28	1.38
2	B	436	C	P-O5'	-11.88	1.47	1.59
2	B	1843	C	N1-C6	11.88	1.44	1.37
2	B	2255	G	C6-N1	11.87	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	859	G	C6-N1	11.86	1.47	1.39
2	B	1954	G	N7-C5	-11.85	1.32	1.39
2	B	1252	G	N9-C8	-11.84	1.29	1.37
2	B	2472	G	N7-C5	-11.81	1.32	1.39
2	B	2803	G	C6-N1	11.81	1.47	1.39
2	B	265	A	N7-C5	-11.81	1.32	1.39
2	B	2492	U	C2-N3	11.80	1.46	1.37
2	B	156	A	C5-C4	-11.80	1.30	1.38
2	B	167	A	N7-C5	-11.80	1.32	1.39
2	B	1113	U	P-O5'	-11.80	1.48	1.59
2	B	1289	C	C4'-C3'	-11.79	1.40	1.53
2	B	2664	G	N7-C5	-11.79	1.32	1.39
2	B	2516	A	N7-C5	-11.79	1.32	1.39
2	B	1324	G	N7-C5	-11.79	1.32	1.39
2	B	1358	G	C8-N7	-11.78	1.23	1.30
2	B	1045	C	N1-C6	-11.77	1.30	1.37
2	B	796	C	P-O5'	-11.77	1.48	1.59
2	B	2211	A	N9-C4	11.76	1.45	1.37
2	B	2686	G	N3-C4	-11.76	1.27	1.35
2	B	221	A	N9-C8	-11.76	1.28	1.37
2	B	617	G	N9-C4	-11.75	1.28	1.38
2	B	1927	A	N7-C5	-11.75	1.32	1.39
2	B	385	C	N3-C4	11.74	1.42	1.33
2	B	1807	G	N9-C4	-11.74	1.28	1.38
2	B	2879	A	N7-C5	-11.73	1.32	1.39
2	B	2003	A	N9-C4	-11.73	1.30	1.37
2	B	570	G	N7-C5	-11.72	1.32	1.39
2	B	2840	C	C4-N4	11.71	1.44	1.33
1	A	113	C	P-O5'	-11.71	1.48	1.59
2	B	1820	U	C2-N3	11.70	1.46	1.37
2	B	2434	A	N9-C4	-11.69	1.30	1.37
2	B	2685	G	C8-N7	-11.69	1.24	1.30
2	B	928	A	N9-C4	-11.69	1.30	1.37
2	B	2259	U	O3'-P	-11.68	1.47	1.61
2	B	2432	A	N3-C4	11.67	1.41	1.34
2	B	414	C	P-O5'	-11.66	1.48	1.59
2	B	1781	U	C4-C5	11.66	1.54	1.43
2	B	556	A	N7-C5	-11.66	1.32	1.39
2	B	1189	A	C8-N7	-11.65	1.23	1.31
2	B	2616	C	C2'-C1'	-11.65	1.40	1.53
2	B	2770	G	C8-N7	-11.64	1.24	1.30
2	B	1989	G	C2-N3	11.64	1.42	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2391	G	C2'-C1'	-11.64	1.40	1.53
2	B	2460	U	C4-C5	11.64	1.54	1.43
1	A	46	A	N9-C4	-11.62	1.30	1.37
2	B	2444	G	C8-N7	-11.62	1.24	1.30
2	B	2700	A	N7-C5	-11.62	1.32	1.39
2	B	2164	C	C4'-C3'	11.61	1.66	1.53
2	B	2525	G	N3-C4	-11.61	1.27	1.35
2	B	266	G	N7-C5	-11.61	1.32	1.39
2	B	1785	A	C8-N7	-11.61	1.23	1.31
2	B	1668	A	N7-C5	-11.60	1.32	1.39
2	B	752	A	N3-C4	-11.60	1.27	1.34
2	B	1847	A	N7-C5	-11.60	1.32	1.39
2	B	831	G	N7-C5	-11.60	1.32	1.39
2	B	2624	G	P-O5'	-11.60	1.48	1.59
2	B	1930	G	N7-C5	-11.59	1.32	1.39
2	B	2405	G	N1-C2	11.59	1.47	1.37
2	B	2128	G	N3-C4	-11.59	1.27	1.35
2	B	489	G	O3'-P	-11.59	1.47	1.61
2	B	579	G	N7-C5	-11.59	1.32	1.39
2	B	2632	A	C8-N7	-11.59	1.23	1.31
2	B	1839	G	C2-N3	11.58	1.42	1.32
2	B	2105	U	C2'-C1'	-11.58	1.40	1.53
2	B	271	G	C2-N3	11.58	1.42	1.32
2	B	939	G	P-O5'	-11.57	1.48	1.59
2	B	2487	G	N3-C4	-11.57	1.27	1.35
2	B	1482	G	C2-N3	11.56	1.42	1.32
2	B	1382	G	N3-C4	-11.56	1.27	1.35
2	B	585	G	P-O5'	-11.56	1.48	1.59
2	B	1734	G	N9-C4	-11.53	1.28	1.38
2	B	541	A	N7-C5	-11.53	1.32	1.39
1	A	59	A	C2'-C1'	-11.53	1.40	1.53
2	B	381	G	C8-N7	11.52	1.37	1.30
2	B	508	A	C6-N6	11.52	1.43	1.33
1	A	45	A	C8-N7	-11.51	1.23	1.31
2	B	2078	C	C2'-C1'	-11.50	1.40	1.53
2	B	2010	G	C1'-N9	-11.49	1.30	1.46
2	B	2154	A	C6-N1	11.49	1.43	1.35
2	B	2388	A	N3-C4	-11.49	1.27	1.34
2	B	770	G	N9-C8	-11.48	1.29	1.37
2	B	916	G	C8-N7	-11.48	1.24	1.30
2	B	1113	U	O3'-P	-11.48	1.47	1.61
2	B	2162	G	C2-N3	11.47	1.42	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2601	C	C4-N4	11.47	1.44	1.33
2	B	1346	G	C2-N3	11.47	1.42	1.32
2	B	522	A	N7-C5	-11.45	1.32	1.39
2	B	712	G	C8-N7	-11.44	1.24	1.30
2	B	1889	A	C6-N1	11.44	1.43	1.35
2	B	1544	A	C5-C4	-11.43	1.30	1.38
2	B	1480	C	N3-C4	11.43	1.42	1.33
2	B	2138	G	C6-N1	11.42	1.47	1.39
2	B	1175	A	N7-C5	-11.41	1.32	1.39
2	B	2302	U	P-O5'	-11.41	1.48	1.59
2	B	17	G	N7-C5	-11.41	1.32	1.39
2	B	2117	A	N7-C5	-11.40	1.32	1.39
2	B	2676	C	O3'-P	-11.40	1.47	1.61
1	A	37	C	N3-C4	11.39	1.42	1.33
2	B	2036	C	O3'-P	-11.39	1.47	1.61
1	A	88	C	N1-C6	11.38	1.44	1.37
2	B	1684	G	P-O5'	-11.38	1.48	1.59
2	B	54	G	N9-C4	11.38	1.47	1.38
2	B	1254	A	N7-C5	-11.37	1.32	1.39
2	B	206	U	N3-C4	11.37	1.48	1.38
2	B	2553	G	C6-N1	11.37	1.47	1.39
1	A	57	A	N7-C5	-11.37	1.32	1.39
2	B	1549	A	N3-C4	-11.37	1.28	1.34
2	B	418	C	C2'-C1'	-11.37	1.40	1.53
2	B	643	A	C6-N1	11.36	1.43	1.35
2	B	769	U	P-O5'	-11.36	1.48	1.59
2	B	244	A	C6-N6	11.36	1.43	1.33
2	B	2691	C	C2'-C1'	-11.35	1.40	1.53
2	B	2799	A	C2'-C1'	-11.35	1.40	1.53
2	B	791	C	N3-C4	11.35	1.41	1.33
2	B	515	A	N9-C4	-11.35	1.31	1.37
2	B	325	G	N1-C2	11.34	1.46	1.37
2	B	1528	A	N7-C5	-11.34	1.32	1.39
2	B	2268	A	N9-C4	-11.34	1.31	1.37
2	B	1823	G	C2'-C1'	-11.34	1.40	1.53
2	B	491	G	C8-N7	-11.33	1.24	1.30
2	B	2004	G	C2-N3	11.33	1.41	1.32
2	B	315	G	N1-C2	11.32	1.46	1.37
2	B	764	A	N3-C4	-11.32	1.28	1.34
1	A	117	G	N1-C2	11.31	1.46	1.37
2	B	466	A	N7-C5	-11.30	1.32	1.39
2	B	1410	G	C6-N1	11.30	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1450	G	C2-N3	11.30	1.41	1.32
2	B	2040	G	N7-C5	-11.30	1.32	1.39
2	B	548	G	C5-C4	11.30	1.46	1.38
1	A	39	A	N7-C5	-11.30	1.32	1.39
2	B	1607	C	C3'-C2'	-11.30	1.40	1.52
2	B	2801	G	C6-N1	11.29	1.47	1.39
1	A	117	G	N7-C5	-11.29	1.32	1.39
2	B	2009	A	N7-C5	-11.29	1.32	1.39
2	B	735	A	N7-C5	-11.28	1.32	1.39
1	A	85	G	C3'-C2'	-11.28	1.40	1.52
2	B	1217	U	N3-C4	11.26	1.48	1.38
2	B	628	G	C2'-C1'	-11.26	1.41	1.53
2	B	1701	A	N7-C5	-11.26	1.32	1.39
2	B	1632	A	O3'-P	-11.25	1.47	1.61
2	B	382	A	N7-C5	-11.25	1.32	1.39
2	B	669	G	N7-C5	-11.25	1.32	1.39
2	B	2758	A	N7-C5	-11.25	1.32	1.39
2	B	996	A	N3-C4	11.24	1.41	1.34
2	B	495	G	O3'-P	-11.24	1.47	1.61
2	B	743	A	C1'-N9	-11.24	1.31	1.46
1	A	92	C	O3'-P	-11.23	1.47	1.61
2	B	2824	C	C2-N3	-11.23	1.26	1.35
2	B	851	C	N1-C6	-11.23	1.30	1.37
2	B	1051	G	N1-C2	11.23	1.46	1.37
2	B	1392	A	N9-C8	-11.23	1.28	1.37
2	B	2565	A	N7-C5	-11.22	1.32	1.39
2	B	1055	G	C8-N7	11.22	1.37	1.30
2	B	1387	A	N9-C4	-11.21	1.31	1.37
2	B	2327	A	N7-C5	-11.21	1.32	1.39
2	B	1331	G	N7-C5	-11.21	1.32	1.39
2	B	1937	A	C5-C4	11.20	1.46	1.38
2	B	2676	C	N1-C6	-11.19	1.30	1.37
2	B	669	G	C5-C4	11.19	1.46	1.38
2	B	391	A	P-O5'	-11.18	1.48	1.59
2	B	2305	U	P-O5'	-11.18	1.48	1.59
2	B	748	G	O3'-P	-11.18	1.47	1.61
2	B	1741	C	P-O5'	-11.17	1.48	1.59
2	B	1822	C	P-O5'	-11.17	1.48	1.59
2	B	2369	A	P-O5'	-11.17	1.48	1.59
2	B	2250	G	N7-C5	-11.16	1.32	1.39
2	B	1808	A	C2'-C1'	-11.16	1.41	1.53
2	B	1224	U	N1-C2	11.16	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1163	G	C2'-C1'	-11.15	1.41	1.53
2	B	1617	C	O3'-P	-11.15	1.47	1.61
2	B	1024	G	N7-C5	-11.14	1.32	1.39
2	B	1356	G	N3-C4	-11.14	1.27	1.35
2	B	2180	U	C2-N3	11.14	1.45	1.37
2	B	476	G	P-O5'	-11.13	1.48	1.59
2	B	304	U	C3'-C2'	-11.13	1.40	1.52
2	B	1791	A	N9-C4	-11.13	1.31	1.37
2	B	2226	C	N1-C6	11.13	1.43	1.37
2	B	734	A	C6-N1	11.12	1.43	1.35
2	B	2012	G	N1-C2	11.11	1.46	1.37
2	B	627	A	O3'-P	-11.11	1.47	1.61
2	B	778	G	N9-C4	-11.10	1.29	1.38
2	B	538	A	N7-C5	-11.10	1.32	1.39
2	B	1200	C	C2'-C1'	-11.10	1.41	1.53
2	B	1992	G	P-O5'	-11.09	1.48	1.59
2	B	125	A	O3'-P	-11.09	1.47	1.61
2	B	788	A	C6-N6	11.09	1.42	1.33
2	B	2781	A	O3'-P	-11.09	1.47	1.61
2	B	212	G	C6-N1	11.08	1.47	1.39
2	B	2637	U	O3'-P	-11.08	1.47	1.61
2	B	2824	C	P-O5'	-11.06	1.48	1.59
2	B	1263	U	C2'-C1'	-11.05	1.41	1.53
2	B	1289	C	C2'-C1'	-11.05	1.41	1.53
2	B	56	A	P-O5'	-11.05	1.48	1.59
2	B	942	G	N7-C5	-11.05	1.32	1.39
2	B	2277	G	N9-C8	-11.05	1.30	1.37
2	B	1588	G	C8-N7	11.04	1.37	1.30
2	B	801	G	N3-C4	-11.03	1.27	1.35
2	B	978	G	C5-C6	-11.03	1.31	1.42
2	B	1654	A	O3'-P	-11.03	1.48	1.61
2	B	565	C	N3-C4	11.02	1.41	1.33
2	B	2530	A	N3-C4	-11.01	1.28	1.34
2	B	619	G	N7-C5	-11.01	1.32	1.39
2	B	2809	A	C6-N6	11.01	1.42	1.33
2	B	2632	A	C5-C4	-11.00	1.31	1.38
2	B	1814	G	O3'-P	-10.99	1.48	1.61
2	B	1920	C	N1-C6	10.99	1.43	1.37
2	B	2883	A	C8-N7	-10.98	1.23	1.31
2	B	2249	U	O3'-P	-10.98	1.48	1.61
1	A	75	G	N3-C4	-10.98	1.27	1.35
2	B	372	G	C8-N7	-10.98	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1403	A	C5-C4	-10.98	1.31	1.38
2	B	600	G	N7-C5	-10.97	1.32	1.39
2	B	2212	A	N9-C8	-10.97	1.28	1.37
2	B	194	G	P-O5'	-10.97	1.48	1.59
2	B	345	A	N3-C4	-10.97	1.28	1.34
2	B	2697	G	N9-C8	-10.97	1.30	1.37
2	B	2174	C	N1-C6	10.96	1.43	1.37
2	B	372	G	N7-C5	-10.96	1.32	1.39
2	B	1307	A	N9-C4	10.96	1.44	1.37
2	B	1843	C	C5-C6	-10.96	1.25	1.34
1	A	36	C	C4-N4	10.96	1.43	1.33
2	B	2850	A	N3-C4	10.96	1.41	1.34
2	B	2839	G	C8-N7	-10.95	1.24	1.30
2	B	1936	A	C6-N6	10.95	1.42	1.33
2	B	56	A	N3-C4	-10.95	1.28	1.34
2	B	215	G	N9-C4	-10.94	1.29	1.38
2	B	2581	G	C4'-C3'	-10.95	1.41	1.53
2	B	311	A	N7-C5	-10.94	1.32	1.39
2	B	2450	A	C2'-C1'	-10.94	1.41	1.53
2	B	282	A	N7-C5	-10.94	1.32	1.39
2	B	2199	A	C5'-C4'	10.93	1.64	1.51
2	B	1355	G	N9-C8	-10.93	1.30	1.37
2	B	1956	U	C2-N3	10.93	1.45	1.37
2	B	2481	G	C2-N3	10.93	1.41	1.32
2	B	472	A	P-O5'	-10.93	1.48	1.59
2	B	1463	C	C3'-C2'	-10.91	1.40	1.52
2	B	640	C	O3'-P	-10.91	1.48	1.61
2	B	2262	U	P-O5'	-10.89	1.48	1.59
2	B	1546	G	C2-N3	10.89	1.41	1.32
2	B	2062	A	C3'-C2'	-10.89	1.40	1.52
2	B	1017	G	N9-C8	-10.89	1.30	1.37
2	B	1210	G	C2'-C1'	-10.89	1.41	1.53
2	B	839	U	P-O5'	-10.88	1.48	1.59
2	B	1131	G	N3-C4	-10.88	1.27	1.35
2	B	1327	A	C5'-C4'	10.88	1.64	1.51
2	B	1799	G	C2'-C1'	-10.87	1.41	1.53
2	B	1191	G	C5-C4	-10.87	1.30	1.38
2	B	51	G	P-O5'	-10.87	1.48	1.59
2	B	649	G	N9-C4	-10.86	1.29	1.38
2	B	667	U	C2-N3	10.86	1.45	1.37
2	B	688	U	C2-N3	10.85	1.45	1.37
2	B	1752	C	O3'-P	-10.85	1.48	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	227	A	N7-C5	-10.85	1.32	1.39
2	B	1756	G	N3-C4	-10.85	1.27	1.35
2	B	1854	A	N7-C5	-10.85	1.32	1.39
2	B	1286	A	N7-C5	-10.85	1.32	1.39
2	B	2892	G	P-O5'	-10.84	1.49	1.59
2	B	1654	A	C5-C4	-10.84	1.31	1.38
2	B	621	A	C6-N1	10.83	1.43	1.35
2	B	496	G	C5-C4	-10.83	1.30	1.38
2	B	307	G	N7-C5	-10.82	1.32	1.39
2	B	1039	A	O3'-P	-10.82	1.48	1.61
2	B	478	A	C8-N7	-10.82	1.24	1.31
2	B	2318	G	N3-C4	-10.82	1.27	1.35
2	B	472	A	N9-C4	-10.81	1.31	1.37
2	B	1399	C	C2'-C1'	-10.81	1.41	1.53
2	B	1609	A	O3'-P	-10.81	1.48	1.61
2	B	1641	A	N3-C4	-10.80	1.28	1.34
2	B	2623	G	N7-C5	-10.81	1.32	1.39
2	B	215	G	N9-C8	-10.80	1.30	1.37
2	B	496	G	C4'-C3'	-10.80	1.41	1.53
2	B	1025	G	N7-C5	-10.80	1.32	1.39
2	B	1506	U	P-O5'	-10.80	1.49	1.59
1	A	100	G	N9-C8	-10.79	1.30	1.37
2	B	66	C	C5'-C4'	10.79	1.64	1.51
2	B	191	A	N9-C4	-10.78	1.31	1.37
2	B	1891	G	N1-C2	10.78	1.46	1.37
2	B	2373	G	N3-C4	-10.78	1.27	1.35
2	B	1560	G	N7-C5	-10.78	1.32	1.39
2	B	2407	A	N9-C4	-10.78	1.31	1.37
2	B	1948	G	N9-C8	-10.77	1.30	1.37
2	B	639	U	P-O5'	-10.77	1.49	1.59
2	B	1387	A	C4'-C3'	10.76	1.65	1.53
2	B	2607	G	C2-N3	10.76	1.41	1.32
2	B	1438	U	N3-C4	10.76	1.48	1.38
2	B	1721	G	N3-C4	-10.76	1.27	1.35
2	B	1151	A	C2'-C1'	-10.76	1.41	1.53
2	B	2239	G	N7-C5	-10.76	1.32	1.39
2	B	2290	G	C6-N1	-10.76	1.32	1.39
2	B	563	A	C6-N6	10.75	1.42	1.33
2	B	2625	G	N7-C5	-10.75	1.32	1.39
2	B	2494	G	C2'-C1'	-10.75	1.41	1.53
2	B	1050	A	N7-C5	-10.73	1.32	1.39
2	B	705	A	C1'-N9	-10.72	1.31	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	372	G	C3'-C2'	-10.72	1.41	1.52
2	B	1514	G	N7-C5	-10.72	1.32	1.39
2	B	2061	G	C2-N3	10.71	1.41	1.32
2	B	471	A	N7-C5	-10.71	1.32	1.39
2	B	764	A	C6-N1	10.71	1.43	1.35
2	B	1327	A	N7-C5	-10.71	1.32	1.39
2	B	1760	C	N3-C4	10.70	1.41	1.33
2	B	974	G	C2'-C1'	-10.70	1.41	1.53
2	B	156	A	N7-C5	-10.69	1.32	1.39
2	B	2090	A	C6-N1	10.69	1.43	1.35
2	B	2462	C	P-O5'	-10.69	1.49	1.59
2	B	639	U	C2'-C1'	-10.68	1.41	1.53
2	B	1590	A	N7-C5	-10.68	1.32	1.39
2	B	2572	A	N7-C5	-10.68	1.32	1.39
2	B	2354	C	C3'-C2'	-10.68	1.41	1.52
2	B	57	C	P-O5'	-10.68	1.49	1.59
2	B	1036	G	N7-C5	-10.67	1.32	1.39
2	B	219	A	N7-C5	-10.67	1.32	1.39
2	B	455	C	C4-N4	10.67	1.43	1.33
2	B	1427	A	N3-C4	-10.67	1.28	1.34
2	B	1425	G	N7-C5	-10.67	1.32	1.39
2	B	389	G	C6-N1	10.67	1.47	1.39
2	B	980	A	N7-C5	-10.67	1.32	1.39
2	B	2247	A	N9-C4	-10.67	1.31	1.37
2	B	976	G	N3-C4	-10.66	1.27	1.35
2	B	1469	A	C6-N6	10.66	1.42	1.33
2	B	599	A	N9-C4	-10.66	1.31	1.37
2	B	832	U	C5'-C4'	10.66	1.64	1.51
2	B	1642	G	N9-C8	10.66	1.45	1.37
2	B	2508	G	C2'-C1'	-10.65	1.41	1.53
2	B	2015	A	N7-C5	-10.65	1.32	1.39
2	B	2868	A	N7-C5	-10.65	1.32	1.39
2	B	2531	A	N7-C5	-10.65	1.32	1.39
2	B	91	A	C2'-C1'	-10.64	1.41	1.53
2	B	2811	G	N7-C5	-10.64	1.32	1.39
2	B	1359	A	N7-C5	-10.64	1.32	1.39
2	B	2403	C	C2'-C1'	-10.64	1.41	1.53
2	B	2471	A	N3-C4	-10.64	1.28	1.34
2	B	2810	A	C8-N7	-10.64	1.24	1.31
2	B	1983	G	N9-C8	-10.63	1.30	1.37
2	B	548	G	C8-N7	-10.63	1.24	1.30
2	B	2513	A	N7-C5	-10.62	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1336	A	N9-C4	-10.62	1.31	1.37
2	B	2035	G	P-O5'	-10.62	1.49	1.59
2	B	2846	G	N9-C8	-10.62	1.30	1.37
2	B	2260	C	P-O5'	-10.62	1.49	1.59
2	B	672	C	P-O5'	-10.61	1.49	1.59
2	B	28	A	N7-C5	-10.61	1.32	1.39
2	B	990	A	C2'-C1'	-10.61	1.41	1.53
2	B	1473	G	C6-N1	10.60	1.47	1.39
2	B	2574	G	C5-C4	10.60	1.45	1.38
2	B	256	A	N7-C5	-10.60	1.32	1.39
2	B	1136	G	N3-C4	-10.60	1.28	1.35
2	B	829	A	N9-C8	-10.60	1.29	1.37
2	B	1407	G	N7-C5	-10.60	1.32	1.39
2	B	2069	G	C4'-C3'	-10.60	1.41	1.53
2	B	2410	G	N7-C5	-10.59	1.32	1.39
2	B	2450	A	N7-C5	-10.59	1.32	1.39
2	B	693	A	C2'-C1'	-10.59	1.41	1.53
2	B	938	G	N7-C5	-10.59	1.32	1.39
2	B	1074	G	C5-C4	10.59	1.45	1.38
2	B	2480	C	C4'-C3'	-10.59	1.41	1.53
2	B	726	G	N9-C8	-10.58	1.30	1.37
2	B	1781	U	C5-C6	10.58	1.43	1.34
2	B	2185	U	C2'-C1'	-10.58	1.41	1.53
2	B	2015	A	N9-C8	-10.58	1.29	1.37
2	B	821	A	N7-C5	-10.58	1.32	1.39
2	B	1184	U	O3'-P	-10.58	1.48	1.61
2	B	918	A	C8-N7	-10.57	1.24	1.31
2	B	274	C	N1-C6	10.57	1.43	1.37
2	B	450	G	C2-N3	10.57	1.41	1.32
2	B	463	G	N3-C4	-10.57	1.28	1.35
2	B	1623	G	P-O5'	-10.57	1.49	1.59
2	B	2697	G	N7-C5	-10.56	1.32	1.39
2	B	574	A	N7-C5	-10.56	1.32	1.39
2	B	626	A	N7-C5	-10.55	1.32	1.39
2	B	782	A	C6-N6	10.55	1.42	1.33
2	B	612	G	N9-C8	-10.55	1.30	1.37
2	B	761	A	C6-N6	10.55	1.42	1.33
2	B	1106	G	N3-C4	-10.54	1.28	1.35
2	B	1628	G	C2'-C1'	-10.54	1.41	1.53
2	B	21	A	C8-N7	-10.54	1.24	1.31
2	B	38	A	N7-C5	-10.54	1.32	1.39
2	B	2703	C	N3-C4	10.53	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	203	A	N9-C8	-10.52	1.29	1.37
2	B	1826	G	C2'-C1'	-10.52	1.41	1.53
2	B	2241	A	N7-C5	-10.52	1.32	1.39
2	B	2442	C	P-O5'	-10.52	1.49	1.59
1	A	86	G	C5-C4	-10.52	1.30	1.38
2	B	2352	A	C4'-C3'	-10.52	1.41	1.53
2	B	2614	A	N9-C4	-10.52	1.31	1.37
2	B	81	G	N7-C5	10.52	1.45	1.39
2	B	219	A	C6-N1	10.52	1.43	1.35
2	B	1008	A	C3'-C2'	10.51	1.64	1.52
2	B	54	G	C6-N1	-10.51	1.32	1.39
2	B	782	A	N3-C4	-10.51	1.28	1.34
2	B	1284	A	N9-C4	10.51	1.44	1.37
2	B	1441	G	P-O5'	-10.50	1.49	1.59
2	B	2100	G	N9-C4	10.50	1.46	1.38
2	B	242	G	N9-C4	-10.50	1.29	1.38
2	B	989	G	C2-N3	10.50	1.41	1.32
2	B	1189	A	N9-C4	-10.50	1.31	1.37
2	B	2227	A	C2'-C1'	-10.50	1.41	1.53
2	B	1069	A	C5-C4	10.49	1.46	1.38
2	B	2655	G	N7-C5	-10.48	1.32	1.39
2	B	556	A	C8-N7	-10.48	1.24	1.31
2	B	586	A	C3'-C2'	-10.48	1.41	1.52
2	B	1604	C	C4-N4	10.48	1.43	1.33
2	B	78	U	C2'-C1'	-10.47	1.41	1.53
2	B	2505	G	C5-C4	10.47	1.45	1.38
2	B	2031	A	N7-C5	-10.47	1.32	1.39
2	B	2498	C	P-O5'	-10.47	1.49	1.59
2	B	1752	C	C2'-C1'	-10.46	1.41	1.53
2	B	447	A	N7-C5	-10.46	1.32	1.39
2	B	1830	C	C2'-C1'	-10.46	1.41	1.53
2	B	1531	C	C2'-C1'	-10.46	1.41	1.53
2	B	1588	G	P-O5'	-10.46	1.49	1.59
2	B	1721	G	C6-N1	10.45	1.46	1.39
2	B	1840	G	C6-N1	10.45	1.46	1.39
2	B	1842	G	C6-N1	10.45	1.46	1.39
2	B	2002	G	O4'-C1'	-10.45	1.28	1.41
2	B	1655	A	C6-N1	10.44	1.42	1.35
2	B	404	A	N9-C4	-10.44	1.31	1.37
2	B	1183	U	C2'-C1'	-10.42	1.41	1.53
2	B	1354	A	O3'-P	-10.42	1.48	1.61
2	B	2746	U	N3-C4	10.42	1.47	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	216	A	P-O5'	-10.42	1.49	1.59
2	B	971	G	N7-C5	-10.42	1.32	1.39
2	B	2162	G	N9-C8	-10.41	1.30	1.37
1	A	41	G	C2-N3	10.41	1.41	1.32
2	B	559	G	N7-C5	-10.41	1.33	1.39
2	B	2858	C	N1-C6	10.41	1.43	1.37
2	B	2496	C	O3'-P	-10.41	1.48	1.61
2	B	2843	G	C2-N3	10.40	1.41	1.32
2	B	2366	A	N7-C5	-10.40	1.33	1.39
2	B	461	C	C2'-C1'	-10.39	1.42	1.53
2	B	891	G	N3-C4	-10.39	1.28	1.35
2	B	555	G	N3-C4	-10.39	1.28	1.35
2	B	2057	G	N7-C5	-10.39	1.33	1.39
1	A	26	C	N3-C4	10.38	1.41	1.33
2	B	1214	A	N9-C4	-10.38	1.31	1.37
2	B	2834	G	N7-C5	-10.38	1.33	1.39
2	B	1679	A	N3-C4	-10.38	1.28	1.34
2	B	2104	C	N3-C4	10.37	1.41	1.33
2	B	1112	G	N7-C5	-10.36	1.33	1.39
2	B	1216	G	C8-N7	-10.36	1.24	1.30
2	B	797	G	C2'-C1'	-10.36	1.42	1.53
2	B	833	A	P-O5'	-10.36	1.49	1.59
2	B	2059	A	N9-C8	-10.36	1.29	1.37
2	B	177	G	N7-C5	-10.34	1.33	1.39
2	B	1373	A	N9-C4	10.34	1.44	1.37
2	B	2876	G	C2'-C1'	-10.34	1.42	1.53
2	B	279	A	C2'-C1'	-10.34	1.42	1.53
2	B	991	C	N1-C6	10.34	1.43	1.37
2	B	1301	A	N9-C8	-10.34	1.29	1.37
2	B	200	U	C2'-C1'	-10.34	1.42	1.53
2	B	1104	C	N1-C6	10.34	1.43	1.37
2	B	1699	G	O3'-P	-10.34	1.48	1.61
2	B	45	G	N7-C5	-10.34	1.33	1.39
2	B	73	A	P-O5'	-10.34	1.49	1.59
2	B	96	C	N3-C4	10.33	1.41	1.33
2	B	2282	G	N9-C4	-10.33	1.29	1.38
2	B	1977	A	C2'-C1'	-10.33	1.42	1.53
2	B	1310	G	C3'-C2'	-10.32	1.41	1.52
2	B	616	A	C6-N6	10.32	1.42	1.33
2	B	2219	U	C4'-C3'	10.32	1.64	1.53
2	B	1308	A	N3-C4	-10.32	1.28	1.34
2	B	2433	A	N3-C4	-10.32	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	158	U	C2-N3	10.31	1.45	1.37
2	B	2445	G	C5-C4	-10.31	1.31	1.38
2	B	893	C	C2-N3	10.30	1.44	1.35
2	B	792	A	N9-C4	-10.30	1.31	1.37
2	B	2347	C	C4'-C3'	-10.30	1.41	1.53
2	B	136	G	N7-C5	-10.30	1.33	1.39
2	B	201	C	C3'-C2'	-10.30	1.41	1.52
2	B	320	A	N9-C4	-10.30	1.31	1.37
2	B	498	G	C8-N7	-10.29	1.24	1.30
2	B	2819	G	C2'-C1'	-10.29	1.42	1.53
1	A	50	A	N9-C4	10.29	1.44	1.37
2	B	1336	A	N3-C4	-10.29	1.28	1.34
2	B	1677	A	N3-C4	-10.29	1.28	1.34
2	B	1978	A	C8-N7	-10.29	1.24	1.31
2	B	1689	A	N7-C5	-10.28	1.33	1.39
2	B	1723	G	N7-C5	-10.28	1.33	1.39
1	A	54	G	C5-C4	-10.28	1.31	1.38
2	B	240	C	O3'-P	-10.28	1.48	1.61
2	B	1057	A	N9-C4	10.28	1.44	1.37
2	B	1649	G	C8-N7	-10.28	1.24	1.30
2	B	1753	G	C2-N3	10.28	1.41	1.32
2	B	2156	G	N1-C2	10.27	1.46	1.37
2	B	251	A	O3'-P	-10.27	1.48	1.61
2	B	1269	A	N7-C5	-10.27	1.33	1.39
2	B	2057	G	P-O5'	-10.27	1.49	1.59
2	B	2896	C	C4-C5	10.26	1.51	1.43
2	B	2564	A	N9-C4	-10.26	1.31	1.37
2	B	545	U	C4'-C3'	-10.26	1.41	1.53
2	B	796	C	C2'-C1'	-10.25	1.42	1.53
2	B	700	G	C2-N3	10.24	1.41	1.32
2	B	499	U	C2'-C1'	-10.24	1.42	1.53
2	B	762	U	O3'-P	-10.24	1.48	1.61
2	B	785	G	C1'-N9	-10.24	1.32	1.46
2	B	2878	U	C2'-C1'	-10.24	1.42	1.53
2	B	2631	G	C6-N1	-10.24	1.32	1.39
2	B	2228	G	N7-C5	-10.24	1.33	1.39
2	B	1074	G	N3-C4	-10.23	1.28	1.35
2	B	2478	A	C8-N7	-10.23	1.24	1.31
2	B	575	A	C5-C4	-10.23	1.31	1.38
2	B	774	G	N7-C5	-10.23	1.33	1.39
2	B	178	G	N7-C5	-10.22	1.33	1.39
2	B	457	A	N9-C4	-10.22	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	216	A	N7-C5	-10.22	1.33	1.39
2	B	1365	A	C8-N7	-10.22	1.24	1.31
2	B	1948	G	P-O5'	-10.22	1.49	1.59
2	B	507	A	N9-C8	-10.22	1.29	1.37
2	B	2019	A	C2'-C1'	-10.22	1.42	1.53
2	B	749	A	P-O5'	-10.21	1.49	1.59
2	B	2169	A	N9-C4	10.21	1.44	1.37
2	B	953	G	C6-N1	10.21	1.46	1.39
2	B	1084	A	N9-C4	10.21	1.44	1.37
2	B	1569	A	N9-C4	-10.21	1.31	1.37
2	B	254	G	O3'-P	-10.21	1.48	1.61
2	B	652	U	C4-C5	10.21	1.52	1.43
2	B	1914	C	C4-N4	10.21	1.43	1.33
2	B	191	A	N3-C4	-10.20	1.28	1.34
2	B	2639	A	C8-N7	-10.20	1.24	1.31
2	B	672	C	C4-C5	10.20	1.51	1.43
2	B	1541	C	N3-C4	10.19	1.41	1.33
2	B	2759	G	N7-C5	-10.19	1.33	1.39
2	B	2347	C	P-O5'	-10.19	1.49	1.59
2	B	2857	G	N9-C8	-10.19	1.30	1.37
2	B	1570	A	N9-C4	-10.18	1.31	1.37
2	B	2598	A	N3-C4	-10.17	1.28	1.34
2	B	675	A	C5-C6	-10.17	1.31	1.41
2	B	2322	A	C8-N7	-10.17	1.24	1.31
2	B	878	A	C8-N7	-10.16	1.24	1.31
2	B	296	U	C2-N3	10.16	1.44	1.37
2	B	625	G	N9-C4	10.16	1.46	1.38
2	B	1426	G	C5'-C4'	10.16	1.63	1.51
2	B	1533	C	P-O5'	-10.16	1.49	1.59
2	B	1673	G	C2'-C1'	-10.16	1.42	1.53
2	B	312	G	N3-C4	-10.15	1.28	1.35
2	B	1215	G	N7-C5	-10.15	1.33	1.39
2	B	1668	A	C8-N7	-10.15	1.24	1.31
2	B	384	A	N7-C5	-10.15	1.33	1.39
2	B	445	C	N1-C6	10.15	1.43	1.37
2	B	1286	A	N3-C4	-10.15	1.28	1.34
2	B	1162	G	C2'-C1'	-10.14	1.42	1.53
2	B	2709	G	N9-C8	10.14	1.45	1.37
2	B	2581	G	N7-C5	-10.14	1.33	1.39
2	B	1699	G	P-O5'	-10.14	1.49	1.59
2	B	1195	G	N7-C5	-10.13	1.33	1.39
2	B	1903	G	C4'-C3'	-10.13	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	333	G	C5-C4	-10.13	1.31	1.38
2	B	1111	A	C6-N1	10.13	1.42	1.35
2	B	881	G	N1-C2	10.12	1.45	1.37
2	B	1037	G	C2'-C1'	-10.12	1.42	1.53
2	B	1260	A	N9-C4	-10.12	1.31	1.37
2	B	2543	G	N7-C5	-10.12	1.33	1.39
2	B	1658	C	N3-C4	10.12	1.41	1.33
2	B	2512	C	N3-C4	10.12	1.41	1.33
2	B	700	G	N1-C2	10.12	1.45	1.37
2	B	511	U	N3-C4	10.11	1.47	1.38
2	B	1226	A	N3-C4	-10.11	1.28	1.34
2	B	2071	A	C8-N7	-10.11	1.24	1.31
2	B	2449	U	C2'-C1'	-10.11	1.42	1.53
2	B	1374	G	N3-C4	-10.11	1.28	1.35
2	B	2239	G	O3'-P	-10.11	1.49	1.61
2	B	2487	G	N7-C5	-10.11	1.33	1.39
2	B	1218	G	N7-C5	-10.10	1.33	1.39
2	B	1553	A	N9-C8	-10.10	1.29	1.37
2	B	935	C	C4-C5	-10.10	1.34	1.43
2	B	1000	A	C5-C4	10.10	1.45	1.38
2	B	196	A	C6-N6	10.09	1.42	1.33
2	B	869	G	N3-C4	-10.09	1.28	1.35
2	B	2248	C	C2'-C1'	-10.09	1.42	1.53
2	B	930	G	C6-N1	10.09	1.46	1.39
2	B	2407	A	C6-N6	10.08	1.42	1.33
2	B	1429	G	C5-C4	-10.08	1.31	1.38
2	B	2595	G	C2'-C1'	-10.08	1.42	1.53
2	B	2595	G	N1-C2	10.08	1.45	1.37
2	B	857	G	N7-C5	-10.07	1.33	1.39
2	B	561	G	C6-N1	-10.07	1.32	1.39
2	B	2275	C	N1-C6	10.07	1.43	1.37
2	B	15	G	N7-C5	-10.07	1.33	1.39
2	B	212	G	C2'-C1'	-10.06	1.42	1.53
2	B	2751	G	N7-C5	-10.06	1.33	1.39
1	A	90	C	C2'-C1'	-10.06	1.42	1.53
2	B	662	G	C2-N3	10.06	1.40	1.32
2	B	2686	G	C3'-C2'	-10.06	1.41	1.52
2	B	159	G	N1-C2	10.06	1.45	1.37
1	A	53	A	C6-N6	10.05	1.42	1.33
2	B	58	G	P-O5'	-10.05	1.49	1.59
2	B	971	G	C5-C4	-10.05	1.31	1.38
2	B	340	A	N7-C5	-10.04	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2293	G	C2'-C1'	-10.04	1.42	1.53
2	B	2287	A	N7-C5	-10.04	1.33	1.39
1	A	52	A	N9-C4	-10.04	1.31	1.37
2	B	973	A	N9-C4	-10.03	1.31	1.37
2	B	831	G	P-O5'	-10.03	1.49	1.59
2	B	827	U	O3'-P	-10.03	1.49	1.61
2	B	2778	A	N7-C5	-10.03	1.33	1.39
2	B	345	A	N9-C4	-10.02	1.31	1.37
2	B	194	G	N3-C4	-10.02	1.28	1.35
2	B	2734	A	C6-N1	10.02	1.42	1.35
2	B	632	A	N7-C5	-10.02	1.33	1.39
2	B	821	A	C1'-N9	-10.01	1.32	1.46
2	B	1455	G	C2'-C1'	-10.01	1.42	1.53
2	B	2377	A	C6-N6	10.01	1.42	1.33
2	B	2428	G	C2-N3	10.01	1.40	1.32
2	B	2503	A	O3'-P	-10.01	1.49	1.61
2	B	853	C	N1-C6	10.00	1.43	1.37
2	B	1479	G	N9-C8	-10.00	1.30	1.37
2	B	1265	A	N7-C5	-10.00	1.33	1.39
2	B	2269	G	N9-C4	-10.00	1.29	1.38
2	B	554	U	N3-C4	10.00	1.47	1.38
2	B	518	G	C2'-C1'	9.99	1.64	1.53
2	B	2415	G	N7-C5	-9.99	1.33	1.39
2	B	227	A	N3-C4	-9.99	1.28	1.34
2	B	2384	U	P-O5'	-9.99	1.49	1.59
2	B	298	G	P-O5'	9.99	1.69	1.59
2	B	1127	A	N7-C5	-9.99	1.33	1.39
2	B	2109	U	C2-N3	9.98	1.44	1.37
2	B	2671	G	N7-C5	-9.98	1.33	1.39
2	B	297	G	C3'-C2'	-9.98	1.41	1.52
2	B	1660	G	C5'-C4'	9.98	1.63	1.51
2	B	2616	C	N1-C6	-9.98	1.31	1.37
2	B	2518	A	C2'-C1'	-9.97	1.42	1.53
2	B	687	C	N3-C4	9.97	1.41	1.33
2	B	1120	G	C2'-C1'	-9.97	1.42	1.53
2	B	2082	A	C2'-C1'	-9.97	1.42	1.53
2	B	2532	G	N7-C5	-9.97	1.33	1.39
2	B	2764	A	N9-C4	-9.97	1.31	1.37
2	B	2699	C	P-O5'	-9.96	1.49	1.59
2	B	729	G	N9-C4	9.96	1.46	1.38
2	B	279	A	C8-N7	-9.96	1.24	1.31
2	B	820	A	N7-C5	-9.96	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1634	A	N9-C4	-9.96	1.31	1.37
2	B	1654	A	N7-C5	-9.96	1.33	1.39
2	B	16	C	N1-C6	-9.96	1.31	1.37
2	B	1806	C	P-O5'	-9.95	1.49	1.59
2	B	289	G	C6-N1	-9.95	1.32	1.39
2	B	713	G	N7-C5	-9.95	1.33	1.39
2	B	35	G	C2'-C1'	-9.95	1.42	1.53
2	B	1717	A	C2'-C1'	-9.95	1.42	1.53
2	B	2518	A	C8-N7	-9.95	1.24	1.31
2	B	911	A	N9-C4	-9.94	1.31	1.37
1	A	59	A	C1'-N9	-9.94	1.32	1.46
2	B	1699	G	N7-C5	-9.94	1.33	1.39
2	B	964	C	P-O5'	-9.94	1.49	1.59
2	B	1649	G	C2-N3	9.94	1.40	1.32
2	B	1309	G	N3-C4	9.93	1.42	1.35
2	B	1327	A	C3'-C2'	-9.93	1.41	1.52
2	B	1393	A	C4'-O4'	-9.93	1.32	1.45
2	B	1754	A	N7-C5	-9.93	1.33	1.39
2	B	2366	A	C1'-N9	-9.93	1.32	1.46
2	B	2595	G	C2-N3	9.93	1.40	1.32
2	B	244	A	N7-C5	-9.93	1.33	1.39
2	B	453	A	N7-C5	-9.92	1.33	1.39
2	B	794	A	C2'-C1'	-9.92	1.42	1.53
2	B	2772	C	N1-C6	-9.92	1.31	1.37
2	B	2505	G	C2-N3	9.92	1.40	1.32
2	B	475	C	C2'-C1'	-9.92	1.42	1.53
2	B	2469	A	N7-C5	-9.91	1.33	1.39
2	B	1483	G	N9-C4	9.91	1.45	1.38
2	B	1337	G	N7-C5	-9.91	1.33	1.39
2	B	1659	G	N9-C8	9.91	1.44	1.37
2	B	2157	G	C6-N1	9.90	1.46	1.39
2	B	2644	G	C8-N7	-9.90	1.25	1.30
2	B	2871	U	C3'-C2'	-9.90	1.41	1.52
2	B	254	G	C6-N1	9.90	1.46	1.39
2	B	2389	G	C2-N2	9.90	1.44	1.34
2	B	789	A	N3-C4	-9.90	1.28	1.34
2	B	1845	G	C5-C6	-9.89	1.32	1.42
2	B	2662	A	C6-N1	9.89	1.42	1.35
2	B	2556	C	N3-C4	9.89	1.40	1.33
2	B	2803	G	P-O5'	-9.89	1.49	1.59
2	B	767	U	C2'-C1'	-9.89	1.42	1.53
2	B	118	A	O3'-P	-9.89	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2815	C	P-O5'	-9.89	1.49	1.59
2	B	202	U	O3'-P	-9.89	1.49	1.61
2	B	2135	A	N7-C5	-9.88	1.33	1.39
2	B	1380	G	C5-C4	9.88	1.45	1.38
2	B	2719	G	C4'-C3'	-9.88	1.42	1.53
2	B	2900	A	N7-C5	-9.88	1.33	1.39
2	B	2125	G	N9-C4	-9.88	1.30	1.38
2	B	205	G	N9-C8	-9.88	1.30	1.37
2	B	805	G	C3'-C2'	-9.88	1.41	1.52
2	B	2531	A	P-O5'	-9.88	1.49	1.59
2	B	463	G	N9-C8	-9.88	1.30	1.37
2	B	504	A	C6-N6	9.88	1.41	1.33
2	B	2083	G	C2'-C1'	-9.88	1.42	1.53
2	B	1196	C	N3-C4	9.87	1.40	1.33
2	B	1472	C	O3'-P	-9.87	1.49	1.61
2	B	2032	G	N9-C8	-9.87	1.30	1.37
2	B	196	A	C5'-C4'	9.87	1.63	1.51
2	B	333	G	O3'-P	-9.87	1.49	1.61
2	B	579	G	N1-C2	9.87	1.45	1.37
2	B	2025	C	P-O5'	-9.87	1.49	1.59
2	B	639	U	O3'-P	-9.87	1.49	1.61
2	B	2060	A	N3-C4	-9.86	1.28	1.34
2	B	880	G	C8-N7	9.86	1.36	1.30
2	B	979	A	N3-C4	-9.86	1.28	1.34
2	B	2373	G	C2-N3	9.86	1.40	1.32
2	B	2602	A	N7-C5	-9.86	1.33	1.39
2	B	278	A	C8-N7	-9.86	1.24	1.31
2	B	820	A	N9-C8	-9.86	1.29	1.37
2	B	1598	A	C2-N3	9.86	1.42	1.33
2	B	1519	G	C5-C4	-9.85	1.31	1.38
2	B	2323	G	N7-C5	-9.85	1.33	1.39
2	B	2566	A	O3'-P	-9.85	1.49	1.61
1	A	94	A	N3-C4	-9.85	1.28	1.34
2	B	1311	G	P-O5'	-9.84	1.50	1.59
2	B	972	A	N7-C5	-9.84	1.33	1.39
2	B	26	G	O3'-P	-9.84	1.49	1.61
2	B	212	G	P-O5'	-9.84	1.50	1.59
2	B	325	G	N7-C5	-9.84	1.33	1.39
2	B	608	A	C8-N7	-9.84	1.24	1.31
2	B	936	A	C8-N7	-9.84	1.24	1.31
2	B	1553	A	N7-C5	-9.84	1.33	1.39
2	B	1186	G	O3'-P	-9.83	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	131	A	C5-C4	-9.83	1.31	1.38
2	B	127	A	O3'-P	-9.83	1.49	1.61
2	B	735	A	C2'-C1'	-9.83	1.42	1.53
2	B	1389	G	P-O5'	-9.83	1.50	1.59
2	B	2791	G	C2-N3	9.83	1.40	1.32
2	B	2063	C	C2'-C1'	-9.83	1.42	1.53
2	B	2335	A	C5-C4	9.82	1.45	1.38
2	B	2238	G	O3'-P	-9.81	1.49	1.61
2	B	617	G	C8-N7	-9.81	1.25	1.30
2	B	343	C	C5-C6	-9.80	1.26	1.34
2	B	281	C	N1-C6	9.80	1.43	1.37
2	B	1952	A	N7-C5	-9.80	1.33	1.39
2	B	2886	A	N3-C4	9.80	1.40	1.34
2	B	1266	G	N7-C5	-9.80	1.33	1.39
2	B	2720	U	N3-C4	9.79	1.47	1.38
2	B	1464	G	C5-C6	-9.79	1.32	1.42
2	B	2440	C	N3-C4	9.79	1.40	1.33
2	B	424	G	O3'-P	-9.79	1.49	1.61
2	B	891	G	N1-C2	9.79	1.45	1.37
2	B	2032	G	N9-C4	-9.79	1.30	1.38
2	B	2083	G	O3'-P	-9.79	1.49	1.61
2	B	863	A	N7-C5	-9.79	1.33	1.39
2	B	2371	G	N9-C4	-9.78	1.30	1.38
2	B	68	G	N7-C5	-9.77	1.33	1.39
1	A	54	G	C2'-C1'	-9.77	1.42	1.53
2	B	48	G	N7-C5	-9.77	1.33	1.39
2	B	1135	C	P-O5'	-9.77	1.50	1.59
2	B	2729	G	N9-C8	-9.77	1.31	1.37
2	B	78	U	P-O5'	-9.77	1.50	1.59
2	B	865	C	N1-C6	-9.77	1.31	1.37
2	B	1759	A	N7-C5	-9.77	1.33	1.39
2	B	336	C	N1-C6	9.77	1.43	1.37
2	B	2402	U	C5'-C4'	9.77	1.63	1.51
2	B	375	G	N9-C4	-9.76	1.30	1.38
2	B	2290	G	N7-C5	-9.76	1.33	1.39
2	B	554	U	P-O5'	-9.76	1.50	1.59
2	B	783	A	N9-C4	9.76	1.43	1.37
2	B	1331	G	C4'-C3'	9.76	1.63	1.53
2	B	2440	C	N1-C6	9.76	1.43	1.37
2	B	1516	G	C8-N7	-9.76	1.25	1.30
2	B	2606	C	C3'-C2'	-9.76	1.42	1.52
2	B	1773	A	P-O5'	-9.76	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1782	U	N3-C4	9.76	1.47	1.38
2	B	2009	A	C8-N7	-9.75	1.24	1.31
2	B	2062	A	C2'-C1'	-9.75	1.42	1.53
2	B	533	G	N7-C5	-9.74	1.33	1.39
2	B	2633	G	P-O5'	-9.74	1.50	1.59
2	B	1299	G	P-O5'	-9.74	1.50	1.59
2	B	2640	G	O3'-P	-9.74	1.49	1.61
2	B	681	G	C2-N3	9.73	1.40	1.32
2	B	1670	C	N3-C4	9.73	1.40	1.33
2	B	675	A	C6-N6	9.72	1.41	1.33
2	B	2124	G	C4'-C3'	9.72	1.63	1.53
2	B	586	A	N9-C8	-9.72	1.29	1.37
2	B	1120	G	N3-C4	-9.72	1.28	1.35
2	B	75	G	C8-N7	-9.72	1.25	1.30
2	B	623	C	C2-N3	-9.72	1.27	1.35
2	B	2030	A	O3'-P	-9.72	1.49	1.61
2	B	942	G	N3-C4	-9.71	1.28	1.35
2	B	2028	U	N1-C2	9.71	1.47	1.38
2	B	635	C	C3'-C2'	-9.71	1.42	1.52
2	B	750	A	C6-N6	-9.71	1.26	1.33
2	B	995	C	C2'-C1'	-9.71	1.42	1.53
2	B	2849	U	C5'-C4'	9.71	1.63	1.51
2	B	1938	A	N7-C5	-9.71	1.33	1.39
2	B	1232	G	N7-C5	-9.71	1.33	1.39
2	B	1613	G	C8-N7	-9.71	1.25	1.30
2	B	2355	G	N7-C5	-9.71	1.33	1.39
2	B	2718	G	C5-C4	-9.71	1.31	1.38
2	B	582	A	N3-C4	-9.71	1.29	1.34
2	B	917	A	N7-C5	-9.70	1.33	1.39
2	B	2610	C	N1-C6	-9.70	1.31	1.37
2	B	616	A	N7-C5	-9.70	1.33	1.39
2	B	654	A	N7-C5	-9.70	1.33	1.39
2	B	2508	G	P-O5'	-9.70	1.50	1.59
2	B	84	A	C6-N1	9.70	1.42	1.35
2	B	1921	G	N9-C4	9.70	1.45	1.38
2	B	222	A	P-O5'	-9.70	1.50	1.59
2	B	2454	G	N7-C5	-9.69	1.33	1.39
2	B	2749	A	N7-C5	-9.70	1.33	1.39
2	B	91	A	N7-C5	-9.69	1.33	1.39
2	B	918	A	C6-N6	9.69	1.41	1.33
2	B	990	A	C6-N6	9.69	1.41	1.33
2	B	1272	A	N7-C5	-9.69	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1841	U	C2-N3	9.69	1.44	1.37
2	B	2056	G	N9-C4	-9.69	1.30	1.38
2	B	2461	A	N9-C4	-9.69	1.32	1.37
2	B	1126	A	N9-C8	-9.69	1.30	1.37
2	B	1977	A	N7-C5	-9.68	1.33	1.39
2	B	2375	G	C2-N3	9.68	1.40	1.32
1	A	99	A	C6-N1	-9.68	1.28	1.35
2	B	172	A	C8-N7	-9.68	1.24	1.31
2	B	1052	C	C2'-C1'	-9.68	1.42	1.53
2	B	594	U	C2-N3	-9.68	1.30	1.37
2	B	1425	G	P-O5'	-9.68	1.50	1.59
2	B	2356	U	C2-N3	9.68	1.44	1.37
2	B	2604	U	C4'-O4'	-9.68	1.32	1.45
2	B	927	A	N7-C5	-9.67	1.33	1.39
2	B	1480	C	C5-C6	9.67	1.42	1.34
2	B	1344	U	P-O5'	-9.67	1.50	1.59
2	B	861	A	N9-C4	-9.67	1.32	1.37
2	B	916	G	N7-C5	-9.67	1.33	1.39
2	B	596	U	P-O5'	-9.67	1.50	1.59
2	B	2056	G	O3'-P	-9.67	1.49	1.61
2	B	1141	U	C4'-C3'	-9.66	1.42	1.53
2	B	479	A	C8-N7	-9.66	1.24	1.31
2	B	2078	C	C4'-C3'	-9.66	1.42	1.53
2	B	998	C	C3'-C2'	-9.65	1.42	1.52
2	B	1593	A	N7-C5	-9.65	1.33	1.39
1	A	72	G	N9-C4	-9.64	1.30	1.38
2	B	254	G	P-O5'	-9.64	1.50	1.59
2	B	973	A	C6-N6	9.64	1.41	1.33
2	B	392	U	C2-N3	9.64	1.44	1.37
2	B	676	A	N9-C4	-9.64	1.32	1.37
1	A	28	C	C4-C5	9.63	1.50	1.43
2	B	1496	A	N9-C8	-9.63	1.30	1.37
2	B	1657	U	C2-N3	9.63	1.44	1.37
2	B	2750	A	C8-N7	9.63	1.38	1.31
2	B	187	G	C8-N7	-9.63	1.25	1.30
2	B	2362	C	N1-C6	-9.63	1.31	1.37
2	B	247	G	N7-C5	-9.63	1.33	1.39
2	B	1185	G	C2'-C1'	-9.63	1.42	1.53
2	B	1527	G	P-O5'	-9.63	1.50	1.59
2	B	38	A	N9-C4	-9.62	1.32	1.37
2	B	953	G	C2'-C1'	-9.63	1.42	1.53
2	B	1009	A	N9-C4	-9.62	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1171	G	N7-C5	-9.62	1.33	1.39
2	B	2114	A	N9-C8	9.62	1.45	1.37
2	B	13	A	N7-C5	-9.62	1.33	1.39
2	B	481	G	O3'-P	-9.62	1.49	1.61
2	B	849	A	C4'-C3'	-9.61	1.42	1.53
2	B	1358	G	N3-C4	-9.61	1.28	1.35
2	B	123	G	C2'-C1'	-9.61	1.42	1.53
2	B	484	C	N1-C6	9.61	1.43	1.37
2	B	2589	A	N9-C4	-9.61	1.32	1.37
2	B	764	A	N9-C4	-9.61	1.32	1.37
2	B	2357	G	N7-C5	-9.61	1.33	1.39
1	A	79	G	N7-C5	-9.60	1.33	1.39
2	B	626	A	N3-C4	-9.60	1.29	1.34
2	B	285	G	N9-C8	-9.59	1.31	1.37
2	B	1568	G	C4'-C3'	-9.59	1.42	1.53
2	B	2859	G	C5'-C4'	9.59	1.62	1.51
2	B	959	A	N7-C5	-9.58	1.33	1.39
2	B	26	G	C5'-C4'	9.58	1.62	1.51
2	B	58	G	N7-C5	-9.57	1.33	1.39
2	B	268	C	N1-C6	9.57	1.42	1.37
2	B	1099	G	N3-C4	-9.57	1.28	1.35
2	B	1436	G	C5-C4	9.57	1.45	1.38
2	B	59	U	N3-C4	9.57	1.47	1.38
2	B	1388	G	N7-C5	-9.57	1.33	1.39
2	B	2430	A	N9-C8	-9.57	1.30	1.37
2	B	218	A	N7-C5	-9.57	1.33	1.39
2	B	1302	A	C8-N7	-9.57	1.24	1.31
2	B	2688	G	N7-C5	-9.57	1.33	1.39
2	B	1888	G	C2-N2	9.56	1.44	1.34
2	B	2056	G	N9-C8	-9.56	1.31	1.37
2	B	467	G	P-O5'	-9.56	1.50	1.59
2	B	978	G	O3'-P	-9.56	1.49	1.61
2	B	1988	G	C3'-C2'	-9.56	1.42	1.52
2	B	2205	A	N7-C5	-9.56	1.33	1.39
2	B	519	U	O3'-P	-9.56	1.49	1.61
2	B	1459	G	C5-C6	-9.56	1.32	1.42
2	B	1997	C	C4'-C3'	-9.55	1.42	1.53
2	B	2776	A	N3-C4	-9.55	1.29	1.34
2	B	2012	G	C8-N7	-9.54	1.25	1.30
2	B	819	A	C3'-C2'	-9.54	1.42	1.52
2	B	1443	U	C2'-C1'	-9.54	1.42	1.53
2	B	1038	G	C5-C4	-9.54	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2634	A	N7-C5	-9.54	1.33	1.39
1	A	83	G	N9-C4	-9.54	1.30	1.38
2	B	1436	G	N9-C8	-9.53	1.31	1.37
2	B	387	U	C3'-C2'	-9.53	1.42	1.52
2	B	2069	G	N9-C8	-9.53	1.31	1.37
2	B	704	G	N9-C4	-9.53	1.30	1.38
2	B	2383	G	P-O5'	-9.53	1.50	1.59
2	B	1544	A	N7-C5	-9.52	1.33	1.39
2	B	1934	C	C4-N4	9.52	1.42	1.33
2	B	2281	A	N9-C8	-9.52	1.30	1.37
2	B	2635	A	N9-C4	-9.52	1.32	1.37
2	B	272	A	N7-C5	-9.52	1.33	1.39
2	B	680	C	C4-N4	9.52	1.42	1.33
2	B	1190	G	N9-C4	-9.52	1.30	1.38
2	B	1901	A	N9-C4	9.52	1.43	1.37
2	B	482	A	C5-C4	9.51	1.45	1.38
2	B	2013	A	N7-C5	-9.51	1.33	1.39
2	B	2020	A	N9-C4	-9.51	1.32	1.37
2	B	1199	U	C2'-C1'	-9.51	1.42	1.53
2	B	10	A	N9-C4	-9.51	1.32	1.37
2	B	402	A	N7-C5	-9.51	1.33	1.39
2	B	610	C	C4-C5	9.51	1.50	1.43
2	B	1089	A	N7-C5	-9.51	1.33	1.39
2	B	367	G	C6-N1	9.51	1.46	1.39
2	B	780	G	N7-C5	-9.50	1.33	1.39
2	B	1067	A	C8-N7	-9.50	1.24	1.31
2	B	1256	G	P-O5'	-9.50	1.50	1.59
2	B	2373	G	C4'-C3'	-9.50	1.42	1.53
2	B	1529	G	N9-C4	-9.50	1.30	1.38
2	B	1811	G	C8-N7	-9.50	1.25	1.30
2	B	397	U	C2-N3	9.49	1.44	1.37
2	B	468	G	C2-N3	9.49	1.40	1.32
2	B	1323	C	N1-C6	-9.49	1.31	1.37
2	B	1612	C	P-O5'	-9.49	1.50	1.59
1	A	50	A	N3-C4	-9.48	1.29	1.34
2	B	2512	C	C3'-C2'	-9.48	1.42	1.52
2	B	491	G	N1-C2	9.48	1.45	1.37
2	B	818	G	C2'-C1'	-9.48	1.43	1.53
2	B	2145	C	N3-C4	9.48	1.40	1.33
2	B	2504	U	O3'-P	-9.48	1.49	1.61
2	B	1109	C	P-O5'	-9.48	1.50	1.59
2	B	2535	G	N7-C5	-9.48	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1353	A	C6-N6	9.47	1.41	1.33
1	A	2	G	C5-C6	-9.47	1.32	1.42
2	B	281	C	N3-C4	9.47	1.40	1.33
2	B	541	A	N9-C4	9.47	1.43	1.37
2	B	1427	A	C2'-C1'	-9.47	1.43	1.53
2	B	2544	G	N9-C8	-9.47	1.31	1.37
1	A	15	A	C2-N3	9.47	1.42	1.33
2	B	745	G	P-O5'	-9.47	1.50	1.59
2	B	1540	G	C6-N1	9.47	1.46	1.39
1	A	97	C	P-O5'	-9.46	1.50	1.59
2	B	1634	A	N7-C5	-9.46	1.33	1.39
2	B	344	A	C8-N7	-9.46	1.25	1.31
2	B	1113	U	C2-N3	9.46	1.44	1.37
2	B	1287	A	C4'-C3'	-9.46	1.42	1.53
2	B	35	G	N9-C8	-9.46	1.31	1.37
2	B	191	A	O3'-P	-9.46	1.49	1.61
2	B	2733	A	N9-C4	9.46	1.43	1.37
2	B	2811	G	C2'-C1'	-9.46	1.43	1.53
2	B	217	A	N9-C4	9.45	1.43	1.37
2	B	581	C	C4-N4	9.45	1.42	1.33
2	B	1849	G	N7-C5	-9.45	1.33	1.39
2	B	1951	U	C2-N3	9.45	1.44	1.37
2	B	428	A	N3-C4	-9.45	1.29	1.34
2	B	1824	G	C2'-C1'	-9.44	1.43	1.53
2	B	2424	C	P-O5'	-9.44	1.50	1.59
2	B	23	G	N9-C8	9.43	1.44	1.37
2	B	1653	G	C1'-N9	-9.43	1.33	1.46
2	B	1777	U	P-O5'	-9.43	1.50	1.59
1	A	96	G	N1-C2	9.43	1.45	1.37
2	B	253	C	C4-C5	9.43	1.50	1.43
2	B	1032	A	C2'-C1'	-9.43	1.43	1.53
2	B	1341	G	N7-C5	-9.43	1.33	1.39
2	B	1408	G	N9-C4	-9.43	1.30	1.38
2	B	123	G	N3-C4	-9.43	1.28	1.35
2	B	2886	A	N9-C8	-9.43	1.30	1.37
2	B	449	A	N9-C8	-9.42	1.30	1.37
2	B	1142	A	C2'-C1'	-9.42	1.43	1.53
2	B	676	A	C8-N7	-9.42	1.25	1.31
2	B	2663	G	C6-N1	-9.42	1.32	1.39
2	B	2690	U	C2'-C1'	-9.42	1.43	1.53
2	B	570	G	C2'-C1'	-9.42	1.43	1.53
2	B	295	G	P-O5'	-9.41	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	636	G	C8-N7	-9.41	1.25	1.30
2	B	768	G	C2'-C1'	-9.41	1.43	1.53
2	B	2597	G	N9-C4	-9.41	1.30	1.38
2	B	918	A	C5-C6	-9.41	1.32	1.41
2	B	2581	G	C5-C4	9.41	1.45	1.38
2	B	518	G	N7-C5	-9.41	1.33	1.39
2	B	629	G	N3-C4	-9.41	1.28	1.35
2	B	2678	C	C4-N4	9.41	1.42	1.33
2	B	1002	G	P-O5'	-9.40	1.50	1.59
2	B	442	G	C2-N3	9.40	1.40	1.32
2	B	902	C	N3-C4	-9.40	1.27	1.33
2	B	1628	G	N3-C4	-9.40	1.28	1.35
2	B	1278	C	N1-C6	-9.40	1.31	1.37
2	B	1619	G	N1-C2	9.40	1.45	1.37
2	B	1695	G	C2-N3	9.40	1.40	1.32
2	B	1889	A	N9-C4	-9.40	1.32	1.37
2	B	2717	C	C3'-C2'	-9.40	1.42	1.52
2	B	1651	G	O3'-P	-9.39	1.49	1.61
2	B	1002	G	N7-C5	-9.39	1.33	1.39
2	B	93	G	C6-N1	9.39	1.46	1.39
2	B	329	G	C5-C6	-9.39	1.32	1.42
2	B	2058	A	N7-C5	-9.38	1.33	1.39
2	B	117	G	C8-N7	-9.38	1.25	1.30
2	B	1326	U	C2'-C1'	-9.38	1.43	1.53
2	B	1610	A	C2'-C1'	-9.38	1.43	1.53
2	B	2765	A	N7-C5	-9.38	1.33	1.39
2	B	1610	A	N7-C5	-9.38	1.33	1.39
2	B	136	G	C8-N7	-9.37	1.25	1.30
2	B	404	A	N3-C4	-9.37	1.29	1.34
2	B	2090	A	N3-C4	9.37	1.40	1.34
2	B	1253	A	C6-N6	9.37	1.41	1.33
2	B	1666	G	C5-C4	-9.37	1.31	1.38
2	B	188	G	N7-C5	-9.36	1.33	1.39
2	B	376	G	C5-C4	-9.36	1.31	1.38
2	B	2255	G	C2-N3	-9.35	1.25	1.32
2	B	100	U	C5'-C4'	9.35	1.62	1.51
2	B	116	C	N1-C6	-9.35	1.31	1.37
2	B	1301	A	O3'-P	-9.35	1.50	1.61
2	B	1350	C	O3'-P	-9.35	1.50	1.61
2	B	94	A	N9-C8	9.35	1.45	1.37
1	A	7	G	C2-N3	9.35	1.40	1.32
2	B	698	C	P-O5'	-9.35	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2774	C	P-O5'	-9.35	1.50	1.59
2	B	2059	A	N7-C5	-9.34	1.33	1.39
2	B	2124	G	O3'-P	-9.34	1.50	1.61
2	B	330	A	N9-C4	-9.34	1.32	1.37
2	B	551	G	N1-C2	9.34	1.45	1.37
2	B	311	A	C6-N1	-9.34	1.29	1.35
2	B	1892	C	C5'-C4'	9.34	1.62	1.51
2	B	24	G	C6-N1	-9.33	1.33	1.39
2	B	2202	U	O3'-P	-9.33	1.50	1.61
2	B	371	A	C6-N6	9.33	1.41	1.33
2	B	1171	G	C6-N1	9.33	1.46	1.39
2	B	1687	G	C4'-C3'	-9.33	1.42	1.53
2	B	1718	G	C1'-N9	-9.33	1.33	1.46
2	B	2479	U	P-O5'	-9.33	1.50	1.59
2	B	2518	A	C5-C4	-9.33	1.32	1.38
2	B	729	G	N1-C2	9.33	1.45	1.37
2	B	1666	G	C6-N1	9.33	1.46	1.39
2	B	2448	A	N3-C4	-9.32	1.29	1.34
2	B	1545	A	C5-C4	9.32	1.45	1.38
2	B	267	C	P-O5'	-9.32	1.50	1.59
2	B	962	G	N9-C4	-9.32	1.30	1.38
2	B	776	G	C5'-C4'	9.32	1.62	1.51
2	B	802	A	C8-N7	-9.32	1.25	1.31
2	B	1435	G	N3-C4	-9.32	1.28	1.35
2	B	1578	U	C4-C5	-9.32	1.35	1.43
1	A	109	A	C6-N1	-9.32	1.29	1.35
2	B	54	G	C2-N3	9.32	1.40	1.32
2	B	861	A	C8-N7	-9.32	1.25	1.31
2	B	1276	A	C2'-C1'	-9.32	1.43	1.53
2	B	1702	G	C8-N7	9.32	1.36	1.30
2	B	1772	A	C6-N6	9.31	1.41	1.33
2	B	1782	U	C4-C5	9.31	1.51	1.43
2	B	2173	A	N3-C4	-9.31	1.29	1.34
2	B	2452	C	C4'-C3'	9.31	1.63	1.53
2	B	180	G	N7-C5	-9.31	1.33	1.39
2	B	1144	A	C6-N6	9.31	1.41	1.33
2	B	1616	A	C1'-N9	-9.31	1.33	1.46
2	B	1814	G	N1-C2	9.31	1.45	1.37
2	B	2852	G	C1'-N9	-9.31	1.33	1.46
2	B	2750	A	P-O5'	-9.30	1.50	1.59
2	B	159	G	C8-N7	-9.30	1.25	1.30
2	B	793	A	P-O5'	9.30	1.69	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1997	C	N1-C6	9.30	1.42	1.37
2	B	2040	G	C2-N3	9.30	1.40	1.32
2	B	2495	G	C2'-C1'	-9.30	1.43	1.53
2	B	292	U	N1-C2	9.30	1.47	1.38
2	B	2069	G	N3-C4	-9.30	1.28	1.35
2	B	2766	A	N9-C4	-9.30	1.32	1.37
2	B	45	G	N3-C4	-9.29	1.28	1.35
2	B	159	G	C2'-C1'	-9.29	1.43	1.53
2	B	1043	C	N1-C6	9.30	1.42	1.37
2	B	2424	C	N3-C4	9.29	1.40	1.33
2	B	30	G	P-O5'	-9.29	1.50	1.59
2	B	245	G	N1-C2	9.29	1.45	1.37
2	B	10	A	N3-C4	-9.29	1.29	1.34
2	B	14	A	O3'-P	-9.29	1.50	1.61
2	B	945	A	P-O5'	-9.29	1.50	1.59
2	B	749	A	N3-C4	-9.28	1.29	1.34
2	B	2009	A	C6-N6	9.28	1.41	1.33
2	B	1016	G	N9-C4	-9.28	1.30	1.38
2	B	332	A	N7-C5	-9.28	1.33	1.39
2	B	1240	U	O3'-P	-9.28	1.50	1.61
2	B	2262	U	C3'-C2'	-9.28	1.42	1.52
2	B	2495	G	N9-C8	-9.28	1.31	1.37
2	B	388	G	C2-N3	9.28	1.40	1.32
2	B	1080	A	N7-C5	-9.28	1.33	1.39
2	B	394	C	N1-C6	9.28	1.42	1.37
2	B	1382	G	C5-C6	-9.28	1.33	1.42
2	B	1973	G	C8-N7	9.28	1.36	1.30
2	B	2576	G	C4'-O4'	-9.28	1.33	1.45
2	B	2510	C	C4-N4	9.27	1.42	1.33
2	B	372	G	C6-N1	9.27	1.46	1.39
2	B	1128	G	C8-N7	-9.27	1.25	1.30
2	B	1299	G	C8-N7	-9.27	1.25	1.30
2	B	2062	A	C2-N3	9.27	1.41	1.33
2	B	2425	A	O3'-P	-9.27	1.50	1.61
2	B	820	A	O4'-C1'	-9.26	1.29	1.41
2	B	1730	C	C4-N4	9.26	1.42	1.33
2	B	2345	G	C4'-C3'	9.26	1.63	1.53
2	B	1752	C	C2-N3	9.26	1.43	1.35
2	B	2192	U	C4-C5	9.26	1.51	1.43
2	B	50	U	C2-N3	9.26	1.44	1.37
2	B	1471	G	C2-N3	9.26	1.40	1.32
2	B	2511	U	C2'-C1'	-9.26	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2683	C	C2-N3	-9.26	1.28	1.35
2	B	677	A	N3-C4	-9.25	1.29	1.34
2	B	1372	U	C3'-C2'	-9.25	1.42	1.52
1	A	95	U	C4-C5	9.25	1.51	1.43
2	B	1755	A	N3-C4	-9.24	1.29	1.34
2	B	470	A	N3-C4	-9.24	1.29	1.34
2	B	70	G	C5-C4	-9.24	1.31	1.38
2	B	861	A	N3-C4	-9.24	1.29	1.34
2	B	1822	C	C2'-C1'	-9.24	1.43	1.53
2	B	2186	G	N9-C8	9.24	1.44	1.37
2	B	586	A	N3-C4	-9.24	1.29	1.34
2	B	2187	U	C2'-C1'	-9.24	1.43	1.53
2	B	332	A	C8-N7	-9.23	1.25	1.31
2	B	1160	G	C5-C4	-9.23	1.31	1.38
2	B	908	C	N3-C4	9.23	1.40	1.33
2	B	1789	A	C5'-C4'	9.23	1.62	1.51
2	B	2436	G	C2-N3	9.23	1.40	1.32
2	B	1247	A	C6-N6	9.23	1.41	1.33
2	B	2169	A	C6-N6	9.23	1.41	1.33
2	B	185	G	N9-C8	-9.22	1.31	1.37
2	B	1251	C	N1-C6	-9.22	1.31	1.37
2	B	563	A	C2'-C1'	-9.22	1.43	1.53
2	B	2653	U	C2'-C1'	-9.22	1.43	1.53
1	A	53	A	N3-C4	-9.21	1.29	1.34
2	B	556	A	N9-C4	-9.21	1.32	1.37
2	B	1438	U	C2-N3	9.21	1.44	1.37
2	B	1681	G	P-O5'	-9.21	1.50	1.59
2	B	347	A	C5-C4	-9.21	1.32	1.38
2	B	1021	A	C6-N1	9.21	1.42	1.35
1	A	11	C	N3-C4	9.21	1.40	1.33
1	A	106	G	N3-C4	-9.21	1.29	1.35
2	B	260	G	N9-C4	-9.20	1.30	1.38
2	B	390	U	C2-N3	9.21	1.44	1.37
2	B	2494	G	N7-C5	-9.21	1.33	1.39
2	B	1946	U	C2-N3	9.20	1.44	1.37
2	B	2022	U	C2-N3	9.20	1.44	1.37
2	B	676	A	N7-C5	-9.20	1.33	1.39
2	B	2831	G	C2-N3	9.20	1.40	1.32
2	B	406	G	P-O5'	-9.19	1.50	1.59
2	B	2128	G	N1-C2	9.19	1.45	1.37
2	B	2750	A	N3-C4	-9.19	1.29	1.34
2	B	1242	U	O3'-P	-9.19	1.50	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	514	A	C8-N7	-9.19	1.25	1.31
2	B	2832	U	O4'-C1'	-9.19	1.29	1.41
2	B	2301	C	O3'-P	-9.19	1.50	1.61
2	B	2622	U	O4'-C1'	-9.19	1.29	1.41
2	B	1425	G	C8-N7	-9.19	1.25	1.30
2	B	703	U	O3'-P	-9.19	1.50	1.61
2	B	627	A	C5-C4	-9.18	1.32	1.38
2	B	1837	C	C2-O2	9.18	1.32	1.24
2	B	2392	A	P-O5'	-9.18	1.50	1.59
2	B	572	A	O3'-P	-9.18	1.50	1.61
2	B	1126	A	C2'-C1'	-9.18	1.43	1.53
2	B	1174	U	C5'-C4'	9.18	1.62	1.51
2	B	1408	G	O3'-P	-9.18	1.50	1.61
2	B	650	C	O3'-P	-9.18	1.50	1.61
2	B	1256	G	N9-C8	9.18	1.44	1.37
2	B	572	A	C5-C4	-9.17	1.32	1.38
2	B	2605	U	C3'-C2'	-9.17	1.42	1.52
2	B	1131	G	N7-C5	-9.17	1.33	1.39
2	B	1803	A	C5-C4	-9.17	1.32	1.38
2	B	2077	A	C6-N6	9.17	1.41	1.33
2	B	2809	A	N3-C4	-9.17	1.29	1.34
2	B	2896	C	N3-C4	9.17	1.40	1.33
2	B	18	U	C3'-C2'	-9.16	1.42	1.52
2	B	2765	A	C8-N7	-9.16	1.25	1.31
2	B	2816	G	C2-N3	-9.16	1.25	1.32
2	B	981	A	P-O5'	-9.16	1.50	1.59
2	B	2480	C	O3'-P	-9.16	1.50	1.61
1	A	108	A	C6-N1	9.15	1.42	1.35
2	B	2856	A	C5-C4	9.15	1.45	1.38
2	B	1989	G	O3'-P	-9.15	1.50	1.61
2	B	38	A	C6-N1	9.15	1.42	1.35
2	B	2895	G	C5-C6	-9.15	1.33	1.42
1	A	23	G	N9-C8	9.15	1.44	1.37
2	B	1463	C	N3-C4	9.15	1.40	1.33
2	B	1654	A	N3-C4	-9.15	1.29	1.34
2	B	1574	C	C2-N3	-9.15	1.28	1.35
2	B	2048	G	N1-C2	9.15	1.45	1.37
2	B	2223	G	N9-C8	-9.15	1.31	1.37
2	B	2560	A	C3'-C2'	-9.14	1.42	1.52
2	B	1699	G	N3-C4	-9.14	1.29	1.35
2	B	1169	A	P-O5'	-9.14	1.50	1.59
2	B	655	A	N7-C5	-9.13	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	822	G	N7-C5	-9.13	1.33	1.39
2	B	2081	U	P-O5'	-9.13	1.50	1.59
2	B	2378	A	N7-C5	-9.13	1.33	1.39
1	A	13	G	C5-C6	-9.13	1.33	1.42
2	B	1850	G	N1-C2	9.13	1.45	1.37
2	B	839	U	O3'-P	-9.13	1.50	1.61
2	B	1327	A	C6-N1	9.12	1.42	1.35
2	B	1517	G	N7-C5	-9.12	1.33	1.39
2	B	2256	G	N7-C5	-9.12	1.33	1.39
2	B	370	G	C6-N1	-9.12	1.33	1.39
2	B	556	A	N3-C4	-9.12	1.29	1.34
2	B	64	A	N9-C4	9.12	1.43	1.37
2	B	71	A	N7-C5	-9.12	1.33	1.39
2	B	646	U	C4'-C3'	-9.12	1.43	1.53
2	B	1373	A	N3-C4	-9.12	1.29	1.34
2	B	2489	U	C4'-C3'	9.12	1.63	1.53
2	B	2625	G	P-O5'	-9.12	1.50	1.59
2	B	2851	A	O3'-P	-9.12	1.50	1.61
2	B	2025	C	N3-C4	9.11	1.40	1.33
2	B	2618	G	C4'-O4'	-9.11	1.33	1.45
2	B	1038	G	C6-N1	-9.11	1.33	1.39
2	B	2204	G	N9-C8	9.11	1.44	1.37
2	B	621	A	C4'-O4'	-9.11	1.33	1.45
2	B	2749	A	N3-C4	9.11	1.40	1.34
2	B	2767	C	P-O5'	-9.11	1.50	1.59
2	B	1196	C	C2'-C1'	-9.11	1.43	1.53
2	B	2425	A	C6-N6	9.10	1.41	1.33
2	B	2086	U	P-O5'	-9.10	1.50	1.59
2	B	2409	G	C5-C4	9.10	1.44	1.38
2	B	302	C	C3'-C2'	-9.10	1.42	1.52
2	B	878	A	N3-C4	-9.10	1.29	1.34
2	B	2358	A	N9-C4	-9.10	1.32	1.37
2	B	1611	C	N1-C6	9.10	1.42	1.37
2	B	2671	G	C2'-C1'	-9.10	1.43	1.53
2	B	144	A	N3-C4	-9.10	1.29	1.34
2	B	474	G	P-O5'	-9.10	1.50	1.59
2	B	481	G	N3-C4	-9.09	1.29	1.35
2	B	2547	A	C5-C4	-9.09	1.32	1.38
2	B	2692	G	C2'-C1'	-9.09	1.43	1.53
2	B	743	A	C2'-C1'	-9.09	1.43	1.53
2	B	1307	A	N9-C8	9.09	1.45	1.37
2	B	2145	C	N1-C6	9.09	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	973	A	N7-C5	-9.09	1.33	1.39
2	B	2774	C	N3-C4	9.09	1.40	1.33
1	A	75	G	C8-N7	-9.09	1.25	1.30
2	B	157	C	N3-C4	9.09	1.40	1.33
2	B	253	C	P-O5'	-9.09	1.50	1.59
2	B	1813	G	C2'-C1'	-9.09	1.43	1.53
2	B	285	G	N9-C4	9.09	1.45	1.38
2	B	1611	C	O3'-P	-9.09	1.50	1.61
2	B	1125	G	N9-C8	-9.09	1.31	1.37
2	B	1801	A	P-O5'	-9.09	1.50	1.59
2	B	555	G	C4'-C3'	-9.08	1.43	1.53
2	B	2101	A	C5-C4	9.08	1.45	1.38
2	B	2115	G	C2'-C1'	-9.08	1.43	1.53
2	B	1618	A	N7-C5	-9.08	1.33	1.39
2	B	2402	U	C2-N3	9.08	1.44	1.37
2	B	2510	C	N3-C4	9.08	1.40	1.33
2	B	2056	G	C5-C6	-9.08	1.33	1.42
2	B	121	G	C2-N3	9.08	1.40	1.32
2	B	2481	G	N7-C5	-9.08	1.33	1.39
2	B	54	G	N3-C4	-9.07	1.29	1.35
2	B	224	U	P-O5'	-9.07	1.50	1.59
2	B	2027	G	C2-N3	9.07	1.40	1.32
2	B	2184	A	P-O5'	-9.07	1.50	1.59
2	B	371	A	N1-C2	9.07	1.42	1.34
2	B	1191	G	C2-N3	9.07	1.40	1.32
2	B	2656	U	C2'-C1'	-9.07	1.43	1.53
2	B	1185	G	P-O5'	-9.07	1.50	1.59
2	B	1981	A	N9-C8	-9.07	1.30	1.37
2	B	2781	A	N9-C4	9.07	1.43	1.37
2	B	2311	A	C6-N1	9.07	1.41	1.35
2	B	945	A	C2'-C1'	-9.06	1.43	1.53
2	B	1330	C	N1-C6	9.06	1.42	1.37
2	B	1542	U	C2'-C1'	-9.06	1.43	1.53
2	B	642	U	N1-C6	9.06	1.46	1.38
2	B	737	C	N1-C6	-9.06	1.31	1.37
2	B	1359	A	C5-C4	-9.06	1.32	1.38
2	B	1618	A	C5'-C4'	9.06	1.62	1.51
2	B	1673	G	C8-N7	9.06	1.36	1.30
2	B	1691	C	C2-N3	-9.06	1.28	1.35
2	B	2843	G	C8-N7	9.06	1.36	1.30
2	B	1087	G	C8-N7	-9.06	1.25	1.30
2	B	1493	C	O3'-P	-9.05	1.50	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1904	G	N1-C2	9.06	1.45	1.37
1	A	40	U	N3-C4	9.05	1.46	1.38
2	B	789	A	C6-N6	9.05	1.41	1.33
2	B	1012	U	O3'-P	-9.04	1.50	1.61
2	B	1573	G	N1-C2	9.04	1.45	1.37
2	B	763	G	C4'-C3'	-9.04	1.43	1.53
2	B	179	C	N3-C4	9.04	1.40	1.33
2	B	187	G	C2'-C1'	-9.04	1.43	1.53
2	B	527	C	P-O5'	-9.04	1.50	1.59
2	B	1264	A	N3-C4	-9.04	1.29	1.34
2	B	227	A	C4'-C3'	-9.04	1.43	1.53
2	B	995	C	C4'-O4'	-9.03	1.33	1.45
2	B	1155	A	N7-C5	-9.03	1.33	1.39
2	B	2576	G	C8-N7	-9.03	1.25	1.30
1	A	101	A	C3'-C2'	-9.03	1.42	1.52
2	B	278	A	C3'-C2'	-9.03	1.42	1.52
2	B	2814	A	N3-C4	-9.03	1.29	1.34
2	B	1675	C	N1-C6	9.02	1.42	1.37
2	B	1122	G	N9-C4	-9.02	1.30	1.38
2	B	1740	G	N3-C4	9.02	1.41	1.35
2	B	342	A	C6-N6	9.02	1.41	1.33
2	B	1852	U	C2-N3	9.02	1.44	1.37
2	B	2798	U	C2-N3	9.02	1.44	1.37
1	A	88	C	N3-C4	9.02	1.40	1.33
2	B	414	C	C4-C5	9.01	1.50	1.43
2	B	1937	A	C6-N1	9.01	1.41	1.35
2	B	2596	U	C2-N3	9.01	1.44	1.37
2	B	28	A	C5'-C4'	9.01	1.62	1.51
2	B	547	A	C5-C4	9.01	1.45	1.38
2	B	1630	A	C8-N7	9.01	1.37	1.31
2	B	763	G	O3'-P	-9.00	1.50	1.61
2	B	1310	G	N3-C4	-9.00	1.29	1.35
2	B	563	A	C4'-C3'	-9.00	1.43	1.53
2	B	1913	A	N7-C5	-9.00	1.33	1.39
2	B	818	G	O3'-P	-9.00	1.50	1.61
2	B	1926	U	C4'-C3'	-9.00	1.43	1.53
2	B	2637	U	P-O5'	-9.00	1.50	1.59
2	B	69	C	C2-N3	-9.00	1.28	1.35
2	B	771	G	C5-C6	-9.00	1.33	1.42
2	B	1384	A	N7-C5	-9.00	1.33	1.39
2	B	2844	G	C6-N1	-9.00	1.33	1.39
2	B	1299	G	C2-N3	8.99	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	142	A	N7-C5	-8.99	1.33	1.39
2	B	1533	C	C4-N4	8.99	1.42	1.33
2	B	2220	U	C2-N3	-8.99	1.31	1.37
2	B	2429	G	N3-C4	-8.99	1.29	1.35
2	B	2593	U	C2'-C1'	-8.99	1.43	1.53
2	B	556	A	O4'-C1'	-8.99	1.29	1.41
2	B	739	A	N7-C5	-8.99	1.33	1.39
2	B	922	C	O3'-P	-8.99	1.50	1.61
2	B	1726	C	N1-C6	-8.99	1.31	1.37
2	B	1745	A	N7-C5	-8.99	1.33	1.39
2	B	2521	C	C3'-C2'	-8.99	1.42	1.52
2	B	2151	U	P-O5'	-8.98	1.50	1.59
2	B	1695	G	N9-C4	8.98	1.45	1.38
2	B	2678	C	P-O5'	-8.98	1.50	1.59
2	B	531	C	C3'-C2'	-8.98	1.42	1.52
2	B	2223	G	C6-N1	-8.98	1.33	1.39
2	B	403	U	C2-N3	8.97	1.44	1.37
2	B	2187	U	O3'-P	-8.97	1.50	1.61
2	B	2626	C	C2'-C1'	-8.97	1.43	1.53
2	B	2763	G	N9-C4	-8.97	1.30	1.38
2	B	1287	A	O3'-P	-8.97	1.50	1.61
2	B	1948	G	C8-N7	-8.97	1.25	1.30
2	B	2640	G	N9-C8	-8.97	1.31	1.37
2	B	2294	G	O3'-P	-8.97	1.50	1.61
2	B	502	A	N9-C8	-8.97	1.30	1.37
2	B	950	G	C5-C6	-8.96	1.33	1.42
2	B	1336	A	P-O5'	-8.97	1.50	1.59
2	B	1151	A	N3-C4	8.96	1.40	1.34
2	B	772	C	N3-C4	8.96	1.40	1.33
2	B	2037	A	C8-N7	-8.96	1.25	1.31
2	B	701	G	C8-N7	-8.96	1.25	1.30
2	B	748	G	C5-C4	-8.96	1.32	1.38
2	B	2391	G	O3'-P	-8.96	1.50	1.61
2	B	2682	A	C6-N6	8.96	1.41	1.33
2	B	464	U	C2'-C1'	-8.96	1.43	1.53
2	B	242	G	C8-N7	-8.96	1.25	1.30
2	B	1284	A	N7-C5	-8.96	1.33	1.39
1	A	79	G	C2-N3	-8.96	1.25	1.32
2	B	2872	A	N7-C5	-8.95	1.33	1.39
2	B	144	A	C5'-C4'	8.95	1.62	1.51
2	B	822	G	C2'-C1'	-8.95	1.43	1.53
2	B	1009	A	N7-C5	-8.95	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2787	C	C3'-C2'	-8.95	1.43	1.52
2	B	511	U	P-O5'	-8.95	1.50	1.59
2	B	2382	G	N9-C4	8.94	1.45	1.38
2	B	1325	U	C2'-C1'	-8.94	1.43	1.53
2	B	1354	A	O4'-C1'	-8.94	1.30	1.41
2	B	1681	G	C8-N7	8.94	1.36	1.30
2	B	117	G	C5-C6	-8.94	1.33	1.42
2	B	1309	G	C5-C4	-8.94	1.32	1.38
2	B	1385	A	N7-C5	-8.94	1.33	1.39
2	B	2065	C	C2'-C1'	-8.94	1.43	1.53
2	B	756	A	C6-N6	8.94	1.41	1.33
2	B	915	C	N1-C6	8.94	1.42	1.37
2	B	1198	U	C4'-C3'	-8.94	1.43	1.53
2	B	1975	G	N1-C2	8.94	1.44	1.37
2	B	2411	A	C2'-C1'	-8.94	1.43	1.53
2	B	2861	U	P-O5'	8.94	1.68	1.59
2	B	651	G	N7-C5	-8.93	1.33	1.39
2	B	1779	U	C4'-C3'	-8.93	1.43	1.53
2	B	292	U	C2-N3	8.93	1.44	1.37
2	B	2518	A	N9-C4	-8.93	1.32	1.37
2	B	1416	G	C2'-C1'	-8.93	1.43	1.53
2	B	2892	G	C8-N7	-8.93	1.25	1.30
2	B	1739	A	N3-C4	-8.93	1.29	1.34
2	B	2172	U	C2-N3	8.93	1.44	1.37
2	B	2119	A	N3-C4	-8.92	1.29	1.34
2	B	990	A	N9-C4	-8.92	1.32	1.37
2	B	1447	C	C2'-C1'	-8.92	1.43	1.53
2	B	1798	U	C3'-C2'	-8.92	1.43	1.52
2	B	2057	G	O3'-P	-8.92	1.50	1.61
2	B	2870	C	C2'-C1'	-8.92	1.43	1.53
2	B	587	C	C4'-C3'	-8.91	1.43	1.53
2	B	787	C	C2'-C1'	-8.91	1.43	1.53
2	B	2214	C	N3-C4	8.91	1.40	1.33
2	B	42	A	N9-C4	-8.91	1.32	1.37
2	B	1626	A	N9-C4	-8.91	1.32	1.37
2	B	943	A	C4'-C3'	-8.90	1.43	1.53
2	B	1254	A	C8-N7	-8.90	1.25	1.31
2	B	2828	G	N1-C2	8.90	1.44	1.37
23	5	164	ARG	CD-NE	8.90	1.61	1.46
2	B	147	C	P-O5'	-8.90	1.50	1.59
2	B	263	G	C6-N1	8.90	1.45	1.39
2	B	629	G	C2'-C1'	-8.90	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	780	G	P-O5'	-8.90	1.50	1.59
2	B	1359	A	C6-N6	8.90	1.41	1.33
2	B	1775	U	C3'-C2'	-8.90	1.43	1.52
2	B	761	A	O3'-P	-8.90	1.50	1.61
2	B	972	A	N9-C4	-8.90	1.32	1.37
2	B	2270	A	C3'-C2'	-8.90	1.43	1.52
1	A	99	A	N3-C4	-8.89	1.29	1.34
2	B	51	G	C6-N1	8.89	1.45	1.39
2	B	1030	C	C2'-C1'	-8.89	1.43	1.53
2	B	1275	A	C5'-C4'	8.89	1.62	1.51
2	B	2383	G	C2-N3	8.89	1.39	1.32
2	B	2394	C	N1-C6	8.89	1.42	1.37
2	B	2236	U	C3'-C2'	-8.89	1.43	1.52
2	B	58	G	C4'-C3'	-8.89	1.43	1.53
2	B	2460	U	C3'-C2'	-8.89	1.43	1.52
2	B	352	A	C6-N1	8.88	1.41	1.35
2	B	1915	U	C2-N3	8.88	1.44	1.37
2	B	2247	A	C5-C4	-8.88	1.32	1.38
2	B	548	G	N7-C5	-8.88	1.33	1.39
2	B	953	G	C6-O6	-8.88	1.16	1.24
2	B	1525	A	N9-C4	-8.88	1.32	1.37
2	B	2680	U	C5'-C4'	-8.88	1.40	1.51
2	B	1543	G	N7-C5	-8.88	1.33	1.39
2	B	2275	C	C5'-C4'	8.88	1.62	1.51
2	B	722	A	C6-N1	8.88	1.41	1.35
2	B	997	G	C2-N3	8.88	1.39	1.32
2	B	2453	A	N7-C5	-8.88	1.33	1.39
2	B	466	A	N3-C4	-8.88	1.29	1.34
2	B	2515	C	C2'-C1'	-8.88	1.43	1.53
2	B	2614	A	N7-C5	-8.88	1.33	1.39
2	B	916	G	C5-C4	-8.87	1.32	1.38
2	B	1770	G	N7-C5	-8.87	1.33	1.39
2	B	1902	C	C4'-C3'	8.87	1.62	1.53
2	B	2669	G	N3-C4	-8.87	1.29	1.35
2	B	784	G	N3-C4	-8.86	1.29	1.35
2	B	123	G	C3'-C2'	-8.86	1.43	1.52
2	B	368	A	N3-C4	-8.86	1.29	1.34
2	B	1914	C	P-O5'	8.86	1.68	1.59
2	B	2352	A	C5-C6	-8.86	1.33	1.41
2	B	820	A	P-O5'	-8.86	1.50	1.59
2	B	2392	A	N7-C5	-8.86	1.33	1.39
2	B	1175	A	C6-N6	8.86	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	376	G	C2-N3	8.85	1.39	1.32
2	B	2636	C	N3-C4	8.85	1.40	1.33
2	B	2173	A	N7-C5	-8.85	1.33	1.39
2	B	2780	G	N1-C2	8.85	1.44	1.37
2	B	304	U	C2'-C1'	-8.85	1.43	1.53
2	B	914	G	C6-N1	8.85	1.45	1.39
2	B	1722	A	O3'-P	-8.85	1.50	1.61
2	B	2741	A	N3-C4	-8.85	1.29	1.34
2	B	2723	C	O3'-P	-8.85	1.50	1.61
2	B	1622	G	C5-C4	-8.85	1.32	1.38
2	B	2277	G	C5'-C4'	-8.85	1.40	1.51
2	B	488	G	N1-C2	8.84	1.44	1.37
2	B	516	C	P-O5'	-8.84	1.50	1.59
2	B	1893	C	C5'-C4'	8.84	1.61	1.51
2	B	1475	G	P-O5'	-8.84	1.50	1.59
2	B	1546	G	O3'-P	-8.84	1.50	1.61
2	B	1701	A	C2'-C1'	-8.84	1.43	1.53
2	B	1892	C	N3-C4	8.84	1.40	1.33
2	B	516	C	C2'-C1'	-8.84	1.43	1.53
2	B	1248	G	N3-C4	-8.84	1.29	1.35
2	B	1667	G	C8-N7	8.84	1.36	1.30
2	B	2223	G	C5-C4	-8.84	1.32	1.38
2	B	202	U	C2-N3	-8.84	1.31	1.37
2	B	507	A	P-O5'	-8.84	1.50	1.59
2	B	375	G	N9-C8	8.84	1.44	1.37
2	B	1682	G	O3'-P	-8.84	1.50	1.61
2	B	195	A	N7-C5	-8.83	1.33	1.39
2	B	787	C	N1-C6	8.83	1.42	1.37
2	B	867	C	C4-C5	8.83	1.50	1.43
2	B	1587	G	N7-C5	-8.83	1.33	1.39
2	B	85	G	N7-C5	-8.83	1.33	1.39
2	B	831	G	N3-C4	-8.83	1.29	1.35
2	B	1585	C	C2'-C1'	8.83	1.63	1.53
2	B	2414	G	C2-N3	8.83	1.39	1.32
2	B	2715	C	O3'-P	-8.83	1.50	1.61
2	B	2864	G	C2'-C1'	-8.83	1.43	1.53
2	B	2809	A	P-O5'	-8.82	1.50	1.59
2	B	2640	G	N7-C5	-8.82	1.33	1.39
2	B	768	G	N7-C5	-8.82	1.33	1.39
2	B	943	A	C3'-C2'	-8.82	1.43	1.52
2	B	1826	G	P-O5'	-8.82	1.50	1.59
2	B	2602	A	C3'-C2'	-8.82	1.43	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	972	A	O3'-P	-8.82	1.50	1.61
2	B	138	U	P-O5'	-8.82	1.50	1.59
2	B	488	G	C2'-C1'	-8.82	1.43	1.53
2	B	904	G	C8-N7	-8.82	1.25	1.30
2	B	2642	G	N1-C2	8.82	1.44	1.37
2	B	1123	C	N3-C4	8.81	1.40	1.33
2	B	1505	A	N9-C4	-8.81	1.32	1.37
1	A	115	A	N1-C2	8.81	1.42	1.34
2	B	858	G	C5-C4	-8.81	1.32	1.38
2	B	2182	U	C5-C6	8.81	1.42	1.34
2	B	572	A	N7-C5	-8.81	1.33	1.39
2	B	1238	G	C6-N1	8.80	1.45	1.39
2	B	206	U	C2'-C1'	-8.80	1.43	1.53
2	B	246	C	O3'-P	-8.80	1.50	1.61
2	B	1949	G	C2-N3	8.80	1.39	1.32
2	B	2453	A	N3-C4	-8.80	1.29	1.34
2	B	219	A	C5-C4	-8.80	1.32	1.38
2	B	1483	G	C5-C4	-8.80	1.32	1.38
2	B	2299	U	N1-C6	-8.80	1.30	1.38
2	B	1031	G	C2'-C1'	-8.79	1.43	1.53
2	B	1551	A	C5-C4	-8.79	1.32	1.38
2	B	1931	U	C2-N3	8.79	1.44	1.37
2	B	1052	C	C4-C5	8.79	1.50	1.43
2	B	1651	G	N9-C4	8.79	1.45	1.38
2	B	2318	G	C4'-C3'	-8.79	1.43	1.53
2	B	504	A	N9-C4	8.79	1.43	1.37
2	B	1850	G	N7-C5	-8.79	1.33	1.39
2	B	1492	G	N3-C4	-8.79	1.29	1.35
2	B	2822	G	O3'-P	-8.79	1.50	1.61
2	B	662	G	C6-O6	-8.78	1.16	1.24
2	B	2217	G	C5-C6	-8.78	1.33	1.42
2	B	552	U	P-O5'	-8.78	1.50	1.59
2	B	2301	C	C4-N4	8.78	1.41	1.33
2	B	2784	U	O3'-P	-8.78	1.50	1.61
2	B	2670	A	C5-C4	-8.78	1.32	1.38
2	B	1365	A	C6-N1	8.78	1.41	1.35
2	B	1566	A	C2'-C1'	-8.78	1.43	1.53
2	B	1649	G	N9-C8	-8.78	1.31	1.37
2	B	2083	G	N1-C2	8.78	1.44	1.37
2	B	2467	C	O3'-P	-8.78	1.50	1.61
2	B	1237	A	C5-C4	-8.78	1.32	1.38
2	B	1528	A	C1'-N9	8.78	1.61	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	964	C	C4-C5	8.77	1.50	1.43
2	B	1362	C	N3-C4	8.77	1.40	1.33
2	B	1469	A	C5-C4	-8.77	1.32	1.38
2	B	2448	A	N7-C5	-8.77	1.33	1.39
2	B	331	C	C2'-C1'	-8.77	1.43	1.53
2	B	1152	C	C4-N4	8.77	1.41	1.33
2	B	2019	A	N7-C5	-8.77	1.33	1.39
2	B	2437	G	N1-C2	8.77	1.44	1.37
2	B	1772	A	C8-N7	-8.77	1.25	1.31
1	A	15	A	C8-N7	-8.77	1.25	1.31
2	B	27	G	P-O5'	-8.77	1.50	1.59
2	B	1072	C	N3-C4	8.77	1.40	1.33
2	B	1383	A	C5-C6	-8.77	1.33	1.41
2	B	2080	A	C3'-C2'	-8.77	1.43	1.52
2	B	2670	A	N7-C5	-8.77	1.33	1.39
2	B	2573	C	N1-C6	-8.76	1.31	1.37
2	B	2642	G	C3'-C2'	-8.76	1.43	1.52
1	A	7	G	N9-C8	-8.76	1.31	1.37
2	B	1032	A	C6-N1	8.76	1.41	1.35
2	B	1381	G	C8-N7	8.76	1.36	1.30
2	B	88	G	N3-C4	-8.75	1.29	1.35
2	B	529	A	C5-C6	-8.75	1.33	1.41
2	B	1529	G	P-O5'	-8.75	1.50	1.59
2	B	1201	U	C3'-C2'	-8.75	1.43	1.52
2	B	2793	C	C4-N4	8.75	1.41	1.33
2	B	2319	G	O3'-P	-8.75	1.50	1.61
2	B	645	C	C5'-C4'	8.75	1.61	1.51
2	B	1140	C	C4'-O4'	-8.75	1.34	1.45
2	B	2249	U	P-O5'	-8.75	1.51	1.59
2	B	2373	G	C5-C4	-8.75	1.32	1.38
2	B	421	C	N3-C4	8.74	1.40	1.33
2	B	498	G	N9-C8	8.74	1.44	1.37
2	B	575	A	N3-C4	-8.74	1.29	1.34
2	B	2658	C	C5-C6	-8.74	1.27	1.34
2	B	2582	G	P-O5'	-8.74	1.51	1.59
2	B	2704	C	C2'-C1'	-8.74	1.43	1.53
1	A	97	C	O3'-P	-8.74	1.50	1.61
2	B	479	A	C2'-C1'	-8.74	1.43	1.53
2	B	1944	U	N1-C6	8.74	1.45	1.38
2	B	2283	C	P-O5'	-8.74	1.51	1.59
2	B	2310	C	P-O5'	-8.74	1.51	1.59
2	B	307	G	N1-C2	8.74	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	432	A	N9-C4	-8.74	1.32	1.37
2	B	1782	U	N1-C2	8.74	1.46	1.38
2	B	2040	G	C2'-C1'	-8.74	1.43	1.53
2	B	2608	G	N9-C4	-8.74	1.30	1.38
2	B	2112	G	C6-N1	8.73	1.45	1.39
2	B	2474	U	C2'-C1'	-8.73	1.43	1.53
1	A	58	A	C8-N7	-8.73	1.25	1.31
2	B	402	A	C4'-O4'	-8.73	1.34	1.45
2	B	2021	C	O3'-P	-8.73	1.50	1.61
2	B	1039	A	N7-C5	-8.73	1.34	1.39
2	B	2527	C	N1-C2	-8.73	1.31	1.40
2	B	1933	G	N7-C5	-8.73	1.34	1.39
2	B	1922	G	N7-C5	-8.72	1.34	1.39
2	B	2873	A	C2-N3	-8.72	1.25	1.33
2	B	1946	U	C5-C6	8.72	1.42	1.34
2	B	430	A	C8-N7	-8.72	1.25	1.31
2	B	2865	U	O3'-P	-8.72	1.50	1.61
2	B	440	C	C4'-C3'	-8.72	1.43	1.53
2	B	114	U	P-O5'	-8.71	1.51	1.59
2	B	118	A	C4'-C3'	-8.71	1.43	1.53
2	B	924	G	C5-C6	-8.71	1.33	1.42
2	B	197	A	N9-C8	-8.71	1.30	1.37
2	B	366	C	O3'-P	-8.71	1.50	1.61
2	B	1409	U	C5-C6	8.71	1.42	1.34
2	B	1630	A	P-O5'	-8.71	1.51	1.59
2	B	2553	G	N3-C4	8.71	1.41	1.35
2	B	2837	A	O3'-P	-8.71	1.50	1.61
2	B	2875	C	C3'-C2'	-8.71	1.43	1.52
2	B	376	G	C2'-C1'	-8.71	1.43	1.53
2	B	1340	U	C5'-C4'	8.71	1.61	1.51
2	B	2665	A	N7-C5	-8.71	1.34	1.39
2	B	189	G	C2'-C1'	-8.70	1.43	1.53
2	B	508	A	C5'-C4'	8.70	1.61	1.51
2	B	1169	A	C4'-C3'	-8.70	1.43	1.53
2	B	1510	G	N1-C2	8.70	1.44	1.37
2	B	1647	U	O4'-C1'	-8.70	1.30	1.41
2	B	2699	C	O3'-P	-8.70	1.50	1.61
2	B	60	G	N7-C5	-8.70	1.34	1.39
2	B	1962	C	N1-C6	8.69	1.42	1.37
2	B	2540	C	O3'-P	-8.69	1.50	1.61
2	B	347	A	C2'-C1'	-8.69	1.43	1.53
2	B	782	A	N7-C5	-8.69	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2524	G	N7-C5	-8.69	1.34	1.39
2	B	1700	A	N7-C5	-8.69	1.34	1.39
2	B	1805	A	C6-N6	8.69	1.40	1.33
1	A	51	G	C5-C4	-8.68	1.32	1.38
2	B	410	G	P-O5'	-8.68	1.51	1.59
2	B	986	C	P-O5'	-8.68	1.51	1.59
2	B	1729	U	O3'-P	-8.68	1.50	1.61
1	A	98	G	O3'-P	-8.68	1.50	1.61
2	B	621	A	N9-C4	-8.68	1.32	1.37
2	B	981	A	N9-C8	-8.68	1.30	1.37
2	B	2223	G	N7-C5	-8.68	1.34	1.39
2	B	2743	U	N1-C6	-8.68	1.30	1.38
2	B	1245	G	N3-C4	-8.68	1.29	1.35
2	B	1336	A	C3'-C2'	-8.68	1.43	1.52
2	B	1512	C	C4-N4	8.68	1.41	1.33
2	B	2369	A	O3'-P	-8.68	1.50	1.61
2	B	2485	G	P-O5'	-8.68	1.51	1.59
2	B	181	A	C2-N3	-8.67	1.25	1.33
2	B	487	C	C2'-C1'	-8.67	1.43	1.53
2	B	1912	A	C6-N6	8.67	1.40	1.33
2	B	1930	G	C6-N1	8.67	1.45	1.39
2	B	653	U	C2-N3	8.67	1.43	1.37
2	B	1775	U	P-O5'	-8.67	1.51	1.59
2	B	135	U	P-O5'	-8.67	1.51	1.59
2	B	232	G	C2-N2	8.67	1.43	1.34
2	B	558	U	O4'-C1'	-8.67	1.30	1.41
2	B	1001	A	C5-C4	-8.67	1.32	1.38
2	B	599	A	N3-C4	-8.67	1.29	1.34
2	B	1399	C	C4'-C3'	-8.67	1.43	1.53
2	B	1937	A	N7-C5	-8.67	1.34	1.39
2	B	2409	G	N9-C8	8.67	1.44	1.37
2	B	715	A	C6-N6	8.66	1.40	1.33
2	B	2309	A	P-O5'	8.66	1.68	1.59
2	B	593	U	C2-N3	-8.66	1.31	1.37
2	B	1123	C	C2'-C1'	-8.66	1.43	1.53
2	B	2081	U	N3-C4	8.66	1.46	1.38
2	B	2239	G	N3-C4	-8.66	1.29	1.35
2	B	1024	G	C8-N7	-8.66	1.25	1.30
2	B	1246	A	C6-N6	8.66	1.40	1.33
2	B	2468	A	N7-C5	-8.66	1.34	1.39
2	B	1251	C	C4-C5	8.65	1.49	1.43
2	B	983	A	N7-C5	-8.65	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1914	C	N3-C4	8.65	1.40	1.33
2	B	2008	C	C4'-O4'	-8.65	1.34	1.45
2	B	475	C	C3'-C2'	-8.65	1.43	1.52
2	B	1022	G	C5-C6	-8.65	1.33	1.42
2	B	1900	A	C6-N1	8.65	1.41	1.35
2	B	136	G	C2-N2	8.65	1.43	1.34
2	B	2317	A	N3-C4	8.65	1.40	1.34
25	7	19	GLY	CA-C	-8.65	1.38	1.51
18	W	18	ARG	NE-CZ	8.65	1.44	1.33
2	B	1055	G	N9-C4	8.64	1.44	1.38
2	B	1205	A	C6-N6	8.64	1.40	1.33
2	B	1828	G	C8-N7	-8.64	1.25	1.30
1	A	94	A	P-O5'	-8.64	1.51	1.59
2	B	575	A	C2'-C1'	-8.64	1.43	1.53
2	B	1803	A	P-O5'	-8.64	1.51	1.59
2	B	2286	G	C8-N7	-8.64	1.25	1.30
2	B	308	G	N7-C5	-8.64	1.34	1.39
2	B	892	A	C6-N6	8.64	1.40	1.33
2	B	1444	G	P-O5'	-8.64	1.51	1.59
2	B	1930	G	C2-N3	8.64	1.39	1.32
2	B	1579	A	C2'-C1'	-8.64	1.43	1.53
2	B	1614	A	N9-C4	-8.64	1.32	1.37
2	B	2054	A	C2'-C1'	-8.64	1.43	1.53
2	B	1465	G	C8-N7	-8.63	1.25	1.30
1	A	4	C	N3-C4	8.63	1.40	1.33
2	B	2700	A	N3-C4	-8.63	1.29	1.34
1	A	93	C	N1-C6	-8.63	1.31	1.37
2	B	1069	A	N3-C4	-8.63	1.29	1.34
2	B	1978	A	C2'-C1'	-8.63	1.43	1.53
2	B	2619	C	N1-C6	8.63	1.42	1.37
2	B	735	A	P-O5'	-8.63	1.51	1.59
2	B	973	A	O4'-C1'	-8.63	1.30	1.41
2	B	1787	A	N9-C4	-8.63	1.32	1.37
2	B	1828	G	P-O5'	-8.63	1.51	1.59
2	B	1327	A	C5-C6	-8.62	1.33	1.41
2	B	1928	A	N7-C5	-8.62	1.34	1.39
2	B	2147	A	N9-C4	8.63	1.43	1.37
2	B	2271	G	C6-N1	8.63	1.45	1.39
2	B	1615	C	C5-C6	8.62	1.41	1.34
1	A	13	G	P-O5'	-8.62	1.51	1.59
2	B	879	G	C6-N1	8.62	1.45	1.39
2	B	1393	A	O4'-C1'	-8.62	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2541	A	C4'-C3'	-8.62	1.43	1.53
2	B	348	A	C1'-N9	-8.62	1.34	1.46
2	B	448	U	O3'-P	-8.62	1.50	1.61
2	B	640	C	C3'-C2'	-8.62	1.43	1.52
2	B	736	C	C2'-C1'	-8.62	1.43	1.53
2	B	822	G	C2'-O2'	-8.62	1.30	1.41
1	A	67	G	C8-N7	-8.62	1.25	1.30
2	B	554	U	O3'-P	-8.62	1.50	1.61
2	B	753	A	P-O5'	-8.62	1.51	1.59
2	B	1420	A	C2'-C1'	-8.61	1.43	1.53
2	B	2360	G	N7-C5	-8.61	1.34	1.39
2	B	2823	A	N3-C4	-8.61	1.29	1.34
2	B	587	C	C2'-C1'	-8.61	1.43	1.53
2	B	1050	A	P-O5'	-8.61	1.51	1.59
2	B	2352	A	C8-N7	-8.61	1.25	1.31
2	B	1841	U	O3'-P	-8.61	1.50	1.61
2	B	1154	G	N9-C4	-8.61	1.31	1.38
2	B	1810	A	N7-C5	-8.60	1.34	1.39
2	B	2196	C	C4-N4	8.60	1.41	1.33
2	B	2394	C	O3'-P	-8.60	1.50	1.61
2	B	1124	G	C8-N7	-8.60	1.25	1.30
2	B	1712	U	C3'-C2'	-8.60	1.43	1.52
2	B	2004	G	P-O5'	-8.60	1.51	1.59
2	B	293	U	C4-C5	8.60	1.51	1.43
2	B	758	C	N1-C6	-8.60	1.31	1.37
2	B	1791	A	C2'-C1'	-8.60	1.43	1.53
2	B	1823	G	N9-C8	-8.60	1.31	1.37
1	A	70	C	N1-C6	8.59	1.42	1.37
2	B	1637	A	N7-C5	-8.59	1.34	1.39
2	B	1717	A	N9-C4	8.59	1.43	1.37
2	B	863	A	C5-C6	-8.59	1.33	1.41
2	B	217	A	P-O5'	-8.59	1.51	1.59
2	B	126	A	C8-N7	-8.58	1.25	1.31
2	B	645	C	C4-C5	8.58	1.49	1.43
2	B	1322	A	N7-C5	-8.58	1.34	1.39
2	B	2136	G	N7-C5	-8.58	1.34	1.39
2	B	2148	G	C2-N3	8.58	1.39	1.32
2	B	600	G	N3-C4	8.58	1.41	1.35
2	B	831	G	N9-C4	-8.58	1.31	1.38
2	B	2070	A	C8-N7	-8.58	1.25	1.31
2	B	186	G	C2'-C1'	-8.58	1.44	1.53
2	B	608	A	P-O5'	-8.58	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1523	U	C2'-C1'	-8.58	1.44	1.53
2	B	2372	U	C5'-C4'	-8.58	1.41	1.51
2	B	1850	G	C6-N1	-8.57	1.33	1.39
1	A	16	G	C5-C4	-8.57	1.32	1.38
2	B	208	C	C4'-C3'	-8.57	1.43	1.53
2	B	249	C	N3-C4	8.57	1.40	1.33
2	B	917	A	P-O5'	-8.57	1.51	1.59
2	B	2031	A	P-O5'	-8.57	1.51	1.59
2	B	836	G	C6-N1	-8.57	1.33	1.39
1	A	84	G	P-O5'	-8.57	1.51	1.59
2	B	903	C	N3-C4	8.57	1.40	1.33
2	B	1904	G	N7-C5	-8.57	1.34	1.39
2	B	2452	C	O3'-P	-8.57	1.50	1.61
2	B	2248	C	O3'-P	-8.56	1.50	1.61
2	B	2526	G	C4'-C3'	8.56	1.62	1.53
2	B	2555	U	C5'-C4'	8.56	1.61	1.51
2	B	270	A	C4'-C3'	-8.56	1.43	1.53
2	B	1330	C	P-O5'	-8.56	1.51	1.59
2	B	2811	G	N9-C8	-8.56	1.31	1.37
2	B	462	C	C5'-C4'	-8.56	1.41	1.51
2	B	2545	G	N7-C5	-8.56	1.34	1.39
2	B	621	A	C6-N6	8.55	1.40	1.33
2	B	101	A	N3-C4	-8.55	1.29	1.34
2	B	2383	G	O3'-P	-8.55	1.50	1.61
2	B	1424	G	N9-C8	-8.55	1.31	1.37
2	B	590	A	N7-C5	-8.55	1.34	1.39
2	B	2732	G	N9-C8	-8.55	1.31	1.37
2	B	2743	U	C2-N3	8.55	1.43	1.37
2	B	2417	C	C3'-C2'	-8.54	1.43	1.52
2	B	2595	G	C8-N7	-8.54	1.25	1.30
2	B	478	A	N3-C4	-8.54	1.29	1.34
2	B	1303	G	C2'-C1'	-8.54	1.44	1.53
2	B	1238	G	N9-C8	-8.54	1.31	1.37
2	B	2502	G	C6-N1	-8.54	1.33	1.39
2	B	265	A	N3-C4	-8.54	1.29	1.34
2	B	618	G	N9-C4	-8.54	1.31	1.38
2	B	1283	G	C8-N7	-8.54	1.25	1.30
2	B	570	G	P-O5'	-8.54	1.51	1.59
2	B	840	C	P-O5'	8.54	1.68	1.59
2	B	1788	C	N3-C4	8.54	1.40	1.33
2	B	1175	A	N3-C4	-8.53	1.29	1.34
2	B	1187	G	N3-C4	-8.53	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1562	U	O3'-P	-8.53	1.50	1.61
2	B	1713	A	C8-N7	-8.53	1.25	1.31
2	B	1665	A	P-O5'	-8.53	1.51	1.59
2	B	2011	U	C2-N3	8.53	1.43	1.37
2	B	1152	C	C2'-C1'	-8.53	1.44	1.53
2	B	2103	C	N1-C6	8.53	1.42	1.37
2	B	2397	G	C2'-C1'	-8.53	1.44	1.53
2	B	807	U	C2'-C1'	-8.52	1.44	1.53
2	B	2678	C	N1-C6	8.52	1.42	1.37
2	B	2751	G	N9-C8	-8.52	1.31	1.37
2	B	2805	C	O3'-P	-8.52	1.50	1.61
2	B	117	G	C5-C4	-8.52	1.32	1.38
2	B	1151	A	N7-C5	-8.52	1.34	1.39
2	B	1218	G	C8-N7	-8.52	1.25	1.30
2	B	1192	G	P-O5'	-8.52	1.51	1.59
2	B	1706	C	N1-C6	-8.52	1.32	1.37
2	B	2529	G	C4'-C3'	-8.52	1.43	1.53
1	A	15	A	C2'-C1'	-8.52	1.44	1.53
2	B	1498	C	C5-C6	-8.52	1.27	1.34
2	B	2008	C	C2'-C1'	-8.52	1.44	1.53
2	B	1620	G	N1-C2	8.52	1.44	1.37
2	B	828	U	C2'-C1'	-8.51	1.44	1.53
2	B	181	A	C2'-C1'	-8.51	1.44	1.53
2	B	215	G	C8-N7	-8.51	1.25	1.30
2	B	535	G	N3-C4	-8.51	1.29	1.35
2	B	1242	U	C4'-C3'	-8.51	1.43	1.53
2	B	1569	A	O3'-P	-8.51	1.50	1.61
2	B	2164	C	N3-C4	8.51	1.40	1.33
2	B	1482	G	N3-C4	8.51	1.41	1.35
2	B	1987	A	N7-C5	-8.51	1.34	1.39
2	B	405	U	C5'-C4'	8.51	1.61	1.51
2	B	1056	G	N1-C2	8.51	1.44	1.37
2	B	1372	U	C2'-C1'	-8.51	1.44	1.53
2	B	2532	G	C8-N7	-8.50	1.25	1.30
2	B	1333	G	N7-C5	-8.50	1.34	1.39
2	B	1571	A	C5-C4	8.50	1.44	1.38
2	B	1654	A	C8-N7	-8.50	1.25	1.31
1	A	51	G	C2'-C1'	-8.50	1.44	1.53
2	B	1659	G	N7-C5	-8.50	1.34	1.39
2	B	1950	G	N9-C8	8.50	1.43	1.37
2	B	2189	U	C2'-C1'	-8.50	1.44	1.53
2	B	2353	G	N3-C4	-8.50	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	559	G	N9-C4	-8.49	1.31	1.38
2	B	1301	A	C2'-C1'	-8.49	1.44	1.53
2	B	1259	G	C8-N7	8.49	1.36	1.30
2	B	2388	A	C5'-C4'	8.49	1.61	1.51
2	B	1267	U	O3'-P	-8.49	1.50	1.61
2	B	1414	C	N3-C4	8.49	1.39	1.33
2	B	1667	G	N9-C8	-8.49	1.31	1.37
2	B	564	C	N3-C4	8.49	1.39	1.33
2	B	2043	C	C3'-C2'	-8.49	1.43	1.52
2	B	823	C	C4-N4	8.49	1.41	1.33
2	B	1050	A	C8-N7	-8.49	1.25	1.31
2	B	1305	C	C5'-C4'	8.49	1.61	1.51
2	B	1478	G	C8-N7	-8.49	1.25	1.30
2	B	2284	A	N7-C5	-8.49	1.34	1.39
2	B	457	A	N7-C5	-8.48	1.34	1.39
2	B	1494	A	C5'-C4'	8.48	1.61	1.51
2	B	1705	A	N7-C5	-8.48	1.34	1.39
2	B	1918	A	N3-C4	8.48	1.40	1.34
2	B	2060	A	N1-C2	8.48	1.42	1.34
2	B	2468	A	C6-N6	8.48	1.40	1.33
2	B	254	G	C5-C6	-8.48	1.33	1.42
2	B	558	U	P-O5'	-8.48	1.51	1.59
2	B	1169	A	N9-C4	-8.48	1.32	1.37
2	B	2877	G	C2'-C1'	-8.48	1.44	1.53
2	B	1185	G	N9-C4	8.47	1.44	1.38
2	B	1041	G	N3-C4	-8.47	1.29	1.35
2	B	1984	G	O3'-P	-8.47	1.50	1.61
2	B	2395	C	C2'-C1'	-8.47	1.44	1.53
2	B	2461	A	C5-C4	-8.47	1.32	1.38
2	B	218	A	C4'-C3'	-8.47	1.43	1.53
2	B	1802	A	N7-C5	-8.47	1.34	1.39
2	B	117	G	N9-C4	-8.47	1.31	1.38
2	B	1210	G	C6-N1	8.47	1.45	1.39
2	B	1820	U	C3'-C2'	-8.47	1.43	1.52
2	B	311	A	P-O5'	-8.47	1.51	1.59
2	B	368	A	N7-C5	-8.47	1.34	1.39
2	B	504	A	C6-N1	8.47	1.41	1.35
2	B	1543	G	C8-N7	-8.47	1.25	1.30
2	B	2575	C	P-O5'	-8.47	1.51	1.59
2	B	2763	G	C8-N7	-8.47	1.25	1.30
2	B	572	A	C2'-C1'	-8.47	1.44	1.53
2	B	823	C	C4'-O4'	-8.47	1.34	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	529	A	C2'-C1'	-8.46	1.44	1.53
2	B	1163	G	C4'-C3'	-8.46	1.43	1.53
2	B	97	C	C2'-O2'	-8.46	1.30	1.41
2	B	673	C	C1'-N1	-8.46	1.35	1.46
2	B	961	C	N1-C6	8.46	1.42	1.37
2	B	2100	G	N7-C5	-8.46	1.34	1.39
2	B	2821	A	C5-C4	-8.46	1.32	1.38
2	B	832	U	C2'-C1'	-8.46	1.44	1.53
2	B	2109	U	C5'-C4'	8.46	1.61	1.51
2	B	2227	A	C3'-C2'	-8.46	1.43	1.52
2	B	2433	A	C2'-C1'	-8.46	1.44	1.53
2	B	2476	A	C8-N7	-8.46	1.25	1.31
2	B	267	C	O3'-P	-8.46	1.51	1.61
2	B	2806	C	C4-N4	8.46	1.41	1.33
2	B	194	G	N9-C8	-8.45	1.31	1.37
2	B	216	A	N9-C4	-8.46	1.32	1.37
2	B	982	C	C5'-C4'	8.46	1.61	1.51
2	B	2053	G	O3'-P	-8.45	1.51	1.61
2	B	885	C	N3-C4	8.45	1.39	1.33
2	B	749	A	C2'-C1'	-8.45	1.44	1.53
2	B	2358	A	C8-N7	-8.45	1.25	1.31
2	B	2564	A	N7-C5	-8.45	1.34	1.39
2	B	617	G	N1-C2	8.45	1.44	1.37
2	B	925	A	P-O5'	-8.45	1.51	1.59
2	B	2346	A	N9-C4	-8.44	1.32	1.37
2	B	2888	C	C4-N4	8.44	1.41	1.33
2	B	1568	G	P-O5'	-8.44	1.51	1.59
2	B	1301	A	N3-C4	-8.44	1.29	1.34
2	B	291	G	N9-C4	-8.44	1.31	1.38
2	B	1824	G	C6-N1	8.44	1.45	1.39
2	B	1535	A	C6-N1	8.44	1.41	1.35
2	B	2178	C	C5'-C4'	8.44	1.61	1.51
2	B	207	A	C5-C4	-8.44	1.32	1.38
2	B	1262	A	O3'-P	-8.44	1.51	1.61
2	B	1504	A	P-O5'	-8.44	1.51	1.59
2	B	1888	G	C5-C4	-8.44	1.32	1.38
2	B	2051	A	C8-N7	-8.44	1.25	1.31
2	B	2621	G	C6-N1	-8.44	1.33	1.39
2	B	779	U	C2'-C1'	-8.43	1.44	1.53
2	B	981	A	C6-N6	8.43	1.40	1.33
2	B	2639	A	N9-C4	-8.43	1.32	1.37
2	B	2761	A	C2'-C1'	-8.43	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	990	A	C4'-O4'	-8.43	1.34	1.45
2	B	2379	G	O3'-P	-8.43	1.51	1.61
2	B	2641	G	N9-C8	-8.43	1.31	1.37
2	B	895	U	N1-C2	8.43	1.46	1.38
2	B	2430	A	C6-N1	-8.43	1.29	1.35
2	B	899	A	C5'-C4'	8.43	1.61	1.51
2	B	1377	G	C8-N7	-8.43	1.25	1.30
2	B	1532	A	C5-C4	8.43	1.44	1.38
2	B	1384	A	C6-N6	8.43	1.40	1.33
2	B	1977	A	N9-C8	-8.43	1.31	1.37
2	B	2142	A	P-O5'	-8.43	1.51	1.59
2	B	1114	C	C2'-C1'	-8.42	1.44	1.53
2	B	1246	A	C5-C4	-8.42	1.32	1.38
2	B	2481	G	N9-C4	-8.42	1.31	1.38
2	B	2620	C	O3'-P	-8.42	1.51	1.61
2	B	335	C	O3'-P	-8.42	1.51	1.61
2	B	2659	G	N9-C8	8.42	1.43	1.37
2	B	83	A	C8-N7	-8.42	1.25	1.31
2	B	1034	G	N9-C8	-8.42	1.31	1.37
2	B	1501	G	N7-C5	-8.42	1.34	1.39
2	B	685	A	C8-N7	-8.41	1.25	1.31
2	B	2799	A	P-O5'	-8.41	1.51	1.59
1	A	102	G	C8-N7	-8.41	1.25	1.30
2	B	1429	G	N7-C5	-8.41	1.34	1.39
2	B	2101	A	C2'-C1'	-8.41	1.44	1.53
2	B	2469	A	N3-C4	-8.41	1.29	1.34
2	B	2746	U	P-O5'	-8.41	1.51	1.59
2	B	198	C	N1-C6	8.41	1.42	1.37
2	B	2641	G	N1-C2	8.41	1.44	1.37
2	B	1787	A	C6-N1	8.40	1.41	1.35
2	B	31	C	C5-C6	8.40	1.41	1.34
2	B	1778	U	O3'-P	-8.40	1.51	1.61
2	B	2616	C	C4'-C3'	8.40	1.62	1.53
2	B	2733	A	N9-C8	-8.40	1.31	1.37
2	B	79	C	C2'-C1'	-8.40	1.44	1.53
2	B	1169	A	C2-N3	-8.40	1.25	1.33
2	B	1803	A	O3'-P	-8.40	1.51	1.61
2	B	336	C	C3'-C2'	-8.40	1.43	1.52
2	B	1370	C	N1-C6	8.40	1.42	1.37
2	B	2173	A	C2'-C1'	-8.40	1.44	1.53
2	B	1907	G	N7-C5	8.40	1.44	1.39
2	B	2473	U	C2-N3	-8.40	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	567	U	N1-C2	-8.39	1.30	1.38
2	B	330	A	N7-C5	-8.39	1.34	1.39
2	B	2714	G	N9-C4	-8.39	1.31	1.38
2	B	805	G	C6-N1	8.39	1.45	1.39
2	B	1264	A	N9-C4	-8.39	1.32	1.37
2	B	2677	G	P-O5'	8.39	1.68	1.59
2	B	2764	A	C4'-O4'	-8.39	1.34	1.45
1	A	45	A	N7-C5	-8.39	1.34	1.39
2	B	415	A	N7-C5	-8.39	1.34	1.39
2	B	1483	G	C2'-C1'	-8.39	1.44	1.53
2	B	2260	C	C4-C5	8.39	1.49	1.43
2	B	2385	C	C2'-C1'	-8.39	1.44	1.53
2	B	169	G	N9-C8	-8.39	1.31	1.37
2	B	1408	G	C5-C6	-8.39	1.33	1.42
2	B	1447	C	C3'-C2'	-8.39	1.43	1.52
2	B	466	A	C2'-C1'	-8.38	1.44	1.53
2	B	1804	C	P-O5'	-8.38	1.51	1.59
2	B	2708	G	C3'-C2'	-8.38	1.43	1.52
2	B	1408	G	N1-C2	8.38	1.44	1.37
2	B	643	A	C8-N7	-8.38	1.25	1.31
2	B	2160	C	C3'-C2'	-8.38	1.43	1.52
1	A	117	G	N3-C4	-8.38	1.29	1.35
2	B	92	U	O4'-C1'	-8.38	1.30	1.41
2	B	977	G	P-O5'	-8.38	1.51	1.59
2	B	1703	G	N9-C4	-8.38	1.31	1.38
2	B	145	C	N1-C6	-8.37	1.32	1.37
2	B	590	A	C2'-C1'	-8.38	1.44	1.53
2	B	2326	C	N1-C6	-8.37	1.32	1.37
1	A	41	G	C8-N7	-8.37	1.25	1.30
2	B	2372	U	O4'-C1'	-8.37	1.30	1.41
2	B	214	G	C2'-C1'	-8.37	1.44	1.53
2	B	2704	C	N1-C6	8.37	1.42	1.37
2	B	768	G	C5-C4	-8.37	1.32	1.38
2	B	860	U	P-O5'	-8.37	1.51	1.59
2	B	1121	C	N3-C4	8.37	1.39	1.33
2	B	15	G	C5'-C4'	8.37	1.61	1.51
2	B	1583	A	N7-C5	-8.36	1.34	1.39
2	B	2375	G	C8-N7	-8.37	1.25	1.30
2	B	2525	G	C4'-C3'	8.36	1.62	1.53
10	P	78	PRO	N-CD	-8.36	1.36	1.47
2	B	1186	G	C2-N3	8.36	1.39	1.32
2	B	401	A	N3-C4	-8.36	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1253	A	C3'-C2'	-8.36	1.43	1.52
2	B	2198	A	N3-C4	8.36	1.39	1.34
2	B	2514	U	C2-N3	8.36	1.43	1.37
2	B	52	A	P-O5'	-8.36	1.51	1.59
2	B	2361	G	C2'-C1'	-8.36	1.44	1.53
2	B	2721	A	P-O5'	-8.36	1.51	1.59
2	B	832	U	O3'-P	-8.36	1.51	1.61
2	B	951	C	C4-N4	8.36	1.41	1.33
2	B	1220	G	C5'-C4'	8.36	1.61	1.51
2	B	1460	U	C5'-C4'	8.36	1.61	1.51
2	B	1489	C	O3'-P	-8.36	1.51	1.61
2	B	127	A	O4'-C1'	-8.35	1.30	1.41
2	B	1023	U	O3'-P	-8.35	1.51	1.61
2	B	1081	U	C2-N3	8.35	1.43	1.37
2	B	2341	G	N1-C2	8.35	1.44	1.37
2	B	2352	A	C2'-C1'	-8.35	1.44	1.53
2	B	2842	G	C1'-N9	-8.35	1.35	1.46
2	B	1215	G	C8-N7	-8.35	1.25	1.30
2	B	378	C	N3-C4	8.35	1.39	1.33
2	B	980	A	N9-C8	8.35	1.44	1.37
2	B	1418	G	C2-N3	8.35	1.39	1.32
2	B	1778	U	C2'-C1'	-8.35	1.44	1.53
2	B	196	A	N7-C5	-8.34	1.34	1.39
2	B	750	A	O3'-P	-8.34	1.51	1.61
2	B	856	G	P-O5'	-8.34	1.51	1.59
2	B	2219	U	N1-C2	-8.34	1.31	1.38
2	B	752	A	C5-C6	-8.34	1.33	1.41
2	B	2892	G	N9-C4	-8.34	1.31	1.38
2	B	541	A	N3-C4	-8.34	1.29	1.34
2	B	620	G	N3-C4	-8.34	1.29	1.35
2	B	438	G	O3'-P	-8.34	1.51	1.61
2	B	808	G	P-O5'	-8.34	1.51	1.59
2	B	947	A	O3'-P	-8.34	1.51	1.61
2	B	1032	A	C5-C6	-8.34	1.33	1.41
2	B	1544	A	C8-N7	-8.34	1.25	1.31
1	A	80	U	C4'-C3'	-8.33	1.44	1.53
2	B	1665	A	O3'-P	-8.33	1.51	1.61
2	B	2174	C	P-O5'	-8.33	1.51	1.59
2	B	2385	C	C4-C5	8.33	1.49	1.43
2	B	68	G	N9-C4	-8.33	1.31	1.38
2	B	1531	C	O3'-P	-8.33	1.51	1.61
2	B	2680	U	C2'-C1'	-8.33	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2802	G	C5'-C4'	8.33	1.61	1.51
2	B	346	A	N3-C4	8.33	1.39	1.34
2	B	532	A	C6-N1	8.33	1.41	1.35
2	B	604	G	N7-C5	-8.33	1.34	1.39
2	B	892	A	N3-C4	-8.33	1.29	1.34
2	B	1123	C	C4'-C3'	-8.33	1.44	1.53
2	B	2477	U	O3'-P	-8.33	1.51	1.61
2	B	1000	A	C5-C6	-8.32	1.33	1.41
2	B	1629	U	C3'-C2'	-8.32	1.43	1.52
2	B	2576	G	C6-N1	8.32	1.45	1.39
2	B	159	G	N9-C4	-8.32	1.31	1.38
2	B	1493	C	C1'-N1	8.32	1.61	1.48
2	B	854	C	C5'-C4'	8.32	1.61	1.51
2	B	1179	G	O3'-P	-8.32	1.51	1.61
2	B	2661	G	N9-C4	-8.32	1.31	1.38
2	B	1355	G	O3'-P	-8.32	1.51	1.61
2	B	2481	G	N1-C2	8.32	1.44	1.37
2	B	917	A	C4'-C3'	-8.32	1.44	1.53
2	B	1713	A	C2'-C1'	-8.32	1.44	1.53
2	B	2792	A	C3'-C2'	-8.32	1.43	1.52
2	B	2895	G	N1-C2	8.32	1.44	1.37
2	B	1360	G	C1'-N9	-8.31	1.35	1.46
2	B	2630	G	N9-C8	-8.31	1.32	1.37
2	B	1567	G	N7-C5	-8.31	1.34	1.39
2	B	2429	G	C2-N3	8.31	1.39	1.32
2	B	2588	G	N7-C5	-8.31	1.34	1.39
2	B	2653	U	C4'-C3'	-8.31	1.44	1.53
2	B	512	G	N7-C5	-8.31	1.34	1.39
2	B	2509	G	O3'-P	-8.31	1.51	1.61
2	B	687	C	C2'-C1'	-8.31	1.44	1.53
2	B	943	A	N9-C4	-8.31	1.32	1.37
2	B	2522	U	C4-O4	-8.31	1.17	1.23
2	B	615	U	C2-N3	8.31	1.43	1.37
2	B	685	A	P-O5'	-8.31	1.51	1.59
2	B	791	C	C4-N4	8.31	1.41	1.33
2	B	2286	G	C2'-C1'	-8.31	1.44	1.53
2	B	2054	A	C5-C4	-8.31	1.32	1.38
2	B	2392	A	N9-C4	-8.31	1.32	1.37
2	B	1227	G	C2'-C1'	-8.31	1.44	1.53
2	B	1528	A	C6-N6	8.30	1.40	1.33
2	B	1533	C	C2'-C1'	-8.30	1.44	1.53
2	B	1921	G	C5-C4	-8.30	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2303	G	N7-C5	-8.30	1.34	1.39
2	B	576	U	N1-C6	-8.30	1.30	1.38
1	A	10	G	O3'-P	-8.30	1.51	1.61
2	B	4	U	C2'-C1'	8.30	1.62	1.53
2	B	1797	G	C3'-C2'	-8.30	1.43	1.52
2	B	109	C	C4-N4	8.30	1.41	1.33
2	B	664	G	N7-C5	-8.30	1.34	1.39
2	B	1028	A	C2'-C1'	-8.30	1.44	1.53
2	B	1887	C	O4'-C1'	8.30	1.52	1.41
2	B	2051	A	N7-C5	-8.30	1.34	1.39
2	B	268	C	O3'-P	-8.29	1.51	1.61
2	B	260	G	N7-C5	-8.29	1.34	1.39
2	B	770	G	N3-C4	-8.29	1.29	1.35
2	B	1350	C	C4'-O4'	-8.29	1.34	1.45
2	B	1571	A	N9-C8	-8.29	1.31	1.37
2	B	2686	G	O3'-P	-8.29	1.51	1.61
2	B	468	G	C5'-C4'	8.29	1.61	1.51
27	C	51	ARG	NE-CZ	8.29	1.43	1.33
2	B	775	G	C2'-C1'	-8.29	1.44	1.53
2	B	1471	G	N3-C4	-8.29	1.29	1.35
2	B	98	G	C2'-C1'	-8.29	1.44	1.53
2	B	742	A	O3'-P	-8.29	1.51	1.61
2	B	735	A	C8-N7	-8.28	1.25	1.31
2	B	1470	A	C4'-C3'	-8.28	1.44	1.53
2	B	2819	G	C5-C4	-8.28	1.32	1.38
2	B	683	U	N3-C4	8.28	1.46	1.38
2	B	1551	A	C4'-C3'	-8.28	1.44	1.53
2	B	14	A	N9-C4	-8.28	1.32	1.37
2	B	1202	G	C6-N1	8.28	1.45	1.39
2	B	1236	G	N9-C4	-8.28	1.31	1.38
2	B	480	A	C4'-C3'	-8.28	1.44	1.53
2	B	738	G	N7-C5	-8.28	1.34	1.39
2	B	1323	C	C4-C5	8.28	1.49	1.43
2	B	1982	U	C2-N3	8.28	1.43	1.37
2	B	33	C	O3'-P	-8.27	1.51	1.61
2	B	515	A	C8-N7	-8.27	1.25	1.31
2	B	1740	G	N9-C4	-8.27	1.31	1.38
2	B	1942	C	N1-C6	8.27	1.42	1.37
13	S	12	SER	CA-CB	8.27	1.65	1.52
2	B	372	G	C5'-C4'	8.27	1.61	1.51
2	B	743	A	C6-N1	8.27	1.41	1.35
2	B	1110	G	P-O5'	-8.27	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1234	U	O3'-P	-8.27	1.51	1.61
2	B	1272	A	C6-N6	8.27	1.40	1.33
2	B	1389	G	N7-C5	-8.27	1.34	1.39
2	B	1573	G	N9-C4	-8.27	1.31	1.38
2	B	2019	A	N3-C4	8.27	1.39	1.34
2	B	1423	G	N9-C8	-8.27	1.32	1.37
2	B	2346	A	C6-N1	8.27	1.41	1.35
2	B	2756	U	C2'-C1'	-8.27	1.44	1.53
2	B	64	A	C1'-N9	-8.26	1.35	1.46
2	B	1485	U	C2'-C1'	-8.26	1.44	1.53
2	B	517	C	O3'-P	-8.26	1.51	1.61
2	B	869	G	C8-N7	-8.26	1.25	1.30
2	B	1186	G	C6-N1	8.26	1.45	1.39
2	B	2705	A	P-O5'	-8.26	1.51	1.59
2	B	2786	U	O3'-P	-8.26	1.51	1.61
2	B	488	G	C5-C6	-8.26	1.34	1.42
2	B	1038	G	N7-C5	-8.26	1.34	1.39
2	B	272	A	C6-N1	8.26	1.41	1.35
2	B	1321	A	C8-N7	-8.26	1.25	1.31
2	B	2334	U	C4-C5	8.26	1.50	1.43
2	B	58	G	C2-N3	8.26	1.39	1.32
2	B	1590	A	N3-C4	-8.26	1.29	1.34
2	B	232	G	P-O5'	-8.25	1.51	1.59
2	B	575	A	C8-N7	-8.25	1.25	1.31
2	B	628	G	N7-C5	-8.25	1.34	1.39
2	B	752	A	C2'-C1'	-8.25	1.44	1.53
2	B	948	C	N3-C4	8.25	1.39	1.33
2	B	1615	C	P-O5'	-8.25	1.51	1.59
2	B	2581	G	C8-N7	8.25	1.35	1.30
2	B	2759	G	C4'-C3'	-8.25	1.44	1.53
1	A	62	C	N1-C6	-8.25	1.32	1.37
2	B	2071	A	C5-C4	8.25	1.44	1.38
2	B	2698	U	C2-N3	8.25	1.43	1.37
1	A	54	G	C2-N3	8.25	1.39	1.32
2	B	442	G	N1-C2	8.25	1.44	1.37
2	B	2242	G	C1'-N9	-8.25	1.35	1.46
2	B	2054	A	C8-N7	-8.25	1.25	1.31
2	B	684	G	C5-C6	-8.24	1.34	1.42
2	B	1491	G	O3'-P	-8.24	1.51	1.61
2	B	560	C	N1-C6	-8.24	1.32	1.37
2	B	1522	A	N7-C5	-8.24	1.34	1.39
1	A	7	G	O4'-C1'	-8.24	1.30	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1664	A	C2-N3	8.24	1.41	1.33
2	B	223	A	C6-N6	8.24	1.40	1.33
2	B	409	G	C3'-C2'	-8.24	1.43	1.52
2	B	2589	A	O3'-P	-8.24	1.51	1.61
2	B	2732	G	C2'-C1'	8.24	1.62	1.53
2	B	2812	G	C2-N3	8.24	1.39	1.32
2	B	1211	C	C4-N4	8.23	1.41	1.33
2	B	26	G	N3-C4	-8.23	1.29	1.35
2	B	1436	G	O3'-P	-8.23	1.51	1.61
1	A	5	U	O4'-C1'	-8.23	1.30	1.41
2	B	796	C	O3'-P	-8.23	1.51	1.61
2	B	1220	G	C6-N1	8.23	1.45	1.39
2	B	2354	C	P-O5'	-8.23	1.51	1.59
2	B	2618	G	C8-N7	-8.23	1.26	1.30
2	B	323	C	N1-C6	-8.23	1.32	1.37
2	B	59	U	C4'-O4'	-8.23	1.34	1.45
1	A	60	C	P-O5'	-8.22	1.51	1.59
2	B	2198	A	C8-N7	-8.22	1.25	1.31
2	B	2534	A	N7-C5	-8.22	1.34	1.39
2	B	195	A	N9-C8	-8.22	1.31	1.37
2	B	776	G	N1-C2	8.22	1.44	1.37
2	B	1118	C	C3'-C2'	-8.22	1.43	1.52
1	A	34	A	N9-C8	-8.22	1.31	1.37
2	B	212	G	N7-C5	-8.22	1.34	1.39
2	B	2887	A	N3-C4	-8.22	1.29	1.34
2	B	546	U	C5'-C4'	8.22	1.61	1.51
2	B	784	G	C2'-C1'	-8.22	1.44	1.53
2	B	2358	A	C2'-C1'	-8.22	1.44	1.53
2	B	787	C	O3'-P	-8.22	1.51	1.61
2	B	753	A	N3-C4	8.22	1.39	1.34
2	B	795	C	N1-C6	-8.22	1.32	1.37
2	B	500	G	N9-C8	-8.21	1.32	1.37
2	B	706	A	N7-C5	-8.21	1.34	1.39
2	B	251	A	N9-C8	-8.21	1.31	1.37
2	B	337	C	N1-C6	8.21	1.42	1.37
2	B	1182	G	C5-C4	-8.21	1.32	1.38
2	B	1377	G	N7-C5	-8.21	1.34	1.39
2	B	2499	C	C1'-N1	-8.21	1.35	1.46
2	B	728	G	N1-C2	8.21	1.44	1.37
2	B	1616	A	C2'-C1'	-8.21	1.44	1.53
1	A	100	G	N9-C4	-8.21	1.31	1.38
2	B	276	U	C2-N3	8.21	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	439	A	C6-N1	8.21	1.41	1.35
2	B	2435	A	N3-C4	8.21	1.39	1.34
2	B	2298	A	C6-N6	8.21	1.40	1.33
2	B	2404	U	C2'-C1'	-8.21	1.44	1.53
2	B	2739	U	C4'-C3'	-8.21	1.44	1.53
2	B	2851	A	C5'-C4'	8.21	1.61	1.51
2	B	1784	A	C8-N7	-8.21	1.25	1.31
2	B	2670	A	N9-C8	-8.20	1.31	1.37
2	B	40	U	C4-C5	8.20	1.50	1.43
2	B	207	A	N7-C5	-8.20	1.34	1.39
2	B	158	U	C4'-C3'	-8.20	1.44	1.53
2	B	1963	U	C3'-C2'	8.20	1.61	1.52
2	B	2162	G	N9-C4	8.20	1.44	1.38
2	B	2228	G	C5-C6	-8.20	1.34	1.42
2	B	2502	G	N1-C2	8.20	1.44	1.37
2	B	2541	A	O3'-P	-8.20	1.51	1.61
2	B	2806	C	C5-C6	-8.20	1.27	1.34
2	B	246	C	N3-C4	8.20	1.39	1.33
2	B	885	C	C2-N3	8.20	1.42	1.35
2	B	1138	G	P-O5'	-8.20	1.51	1.59
2	B	2719	G	C5-C4	-8.20	1.32	1.38
2	B	535	G	O3'-P	-8.20	1.51	1.61
2	B	227	A	P-O5'	-8.19	1.51	1.59
2	B	1499	C	C4-C5	-8.19	1.36	1.43
2	B	1803	A	C4'-O4'	-8.19	1.34	1.45
2	B	774	G	C5-C6	-8.19	1.34	1.42
2	B	1787	A	N7-C5	-8.19	1.34	1.39
2	B	539	G	N3-C4	-8.19	1.29	1.35
2	B	886	A	N7-C5	-8.19	1.34	1.39
2	B	1831	G	C2-N3	8.19	1.39	1.32
2	B	1518	C	N1-C6	8.19	1.42	1.37
2	B	797	G	C2-N3	8.18	1.39	1.32
2	B	804	A	C6-N6	8.18	1.40	1.33
2	B	386	G	O3'-P	-8.18	1.51	1.61
2	B	1950	G	C5-C4	8.18	1.44	1.38
2	B	2250	G	C2'-C1'	-8.18	1.44	1.53
2	B	2388	A	C2'-C1'	-8.18	1.44	1.53
2	B	666	A	N9-C8	-8.18	1.31	1.37
2	B	2163	A	C6-N6	8.18	1.40	1.33
2	B	2431	U	O3'-P	-8.18	1.51	1.61
2	B	2551	C	P-O5'	-8.18	1.51	1.59
2	B	2618	G	O4'-C1'	-8.18	1.31	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2729	G	N7-C5	-8.18	1.34	1.39
2	B	1129	A	N3-C4	-8.18	1.29	1.34
2	B	2278	A	N3-C4	-8.18	1.29	1.34
2	B	1125	G	C6-N1	8.18	1.45	1.39
2	B	505	A	N3-C4	-8.18	1.29	1.34
2	B	821	A	O4'-C1'	-8.18	1.31	1.41
2	B	2243	U	O4'-C1'	-8.18	1.31	1.41
2	B	1210	G	C5-C6	-8.18	1.34	1.42
2	B	1517	G	C2'-C1'	-8.18	1.44	1.53
2	B	2434	A	C5-C4	8.18	1.44	1.38
2	B	1549	A	C1'-N9	-8.17	1.35	1.46
2	B	2286	G	N1-C2	8.17	1.44	1.37
1	A	10	G	N7-C5	-8.17	1.34	1.39
2	B	1304	A	N9-C4	8.17	1.42	1.37
2	B	2186	G	C6-N1	8.17	1.45	1.39
2	B	760	G	N7-C5	-8.17	1.34	1.39
2	B	1096	A	N3-C4	-8.17	1.29	1.34
1	A	98	G	C3'-C2'	-8.17	1.43	1.52
2	B	263	G	N7-C5	-8.16	1.34	1.39
1	A	93	C	P-O5'	-8.16	1.51	1.59
2	B	292	U	C5'-C4'	8.16	1.61	1.51
2	B	611	C	C2-N3	8.16	1.42	1.35
2	B	997	G	N7-C5	-8.16	1.34	1.39
2	B	2167	U	C4-C5	8.16	1.50	1.43
2	B	1104	C	O4'-C1'	-8.16	1.31	1.41
2	B	977	G	O3'-P	-8.16	1.51	1.61
2	B	2139	U	C4'-C3'	8.16	1.62	1.53
2	B	1619	G	O3'-P	-8.16	1.51	1.61
2	B	2098	U	P-O5'	-8.16	1.51	1.59
2	B	2126	A	N9-C8	-8.16	1.31	1.37
2	B	2298	A	O3'-P	-8.16	1.51	1.61
2	B	1225	G	C2'-C1'	-8.16	1.44	1.53
2	B	1352	U	O3'-P	-8.16	1.51	1.61
2	B	276	U	C4-O4	8.16	1.30	1.23
2	B	1423	G	C3'-C2'	-8.16	1.43	1.52
2	B	1653	G	N3-C4	-8.16	1.29	1.35
2	B	2601	C	C2'-C1'	-8.16	1.44	1.53
2	B	2714	G	C5-C6	-8.16	1.34	1.42
2	B	672	C	C2'-C1'	-8.15	1.44	1.53
2	B	1025	G	C2-N3	8.15	1.39	1.32
2	B	1127	A	N9-C4	-8.15	1.32	1.37
2	B	2891	U	C2-N3	8.15	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2094	A	P-O5'	-8.15	1.51	1.59
2	B	2447	G	O3'-P	-8.15	1.51	1.61
2	B	2620	C	P-O5'	-8.15	1.51	1.59
2	B	775	G	N9-C4	-8.15	1.31	1.38
2	B	1747	U	C5-C6	-8.15	1.26	1.34
2	B	2675	A	C1'-N9	-8.15	1.35	1.46
2	B	1131	G	O3'-P	-8.15	1.51	1.61
2	B	2428	G	C2'-C1'	-8.15	1.44	1.53
2	B	301	G	C2'-C1'	-8.15	1.44	1.53
2	B	1525	A	N7-C5	-8.15	1.34	1.39
2	B	984	A	N3-C4	8.15	1.39	1.34
2	B	1003	G	C5-C4	-8.15	1.32	1.38
2	B	2002	G	C8-N7	-8.15	1.26	1.30
2	B	142	A	C6-N6	8.14	1.40	1.33
2	B	332	A	C3'-C2'	-8.14	1.43	1.52
2	B	379	G	C8-N7	-8.14	1.26	1.30
2	B	443	A	C6-N6	8.14	1.40	1.33
2	B	1891	G	C6-N1	8.14	1.45	1.39
2	B	1338	G	N7-C5	-8.14	1.34	1.39
2	B	299	A	C2'-C1'	-8.14	1.44	1.53
2	B	489	G	C8-N7	8.14	1.35	1.30
2	B	505	A	N1-C2	-8.14	1.27	1.34
2	B	637	A	C8-N7	-8.14	1.25	1.31
2	B	1619	G	C4'-C3'	-8.14	1.44	1.53
2	B	1620	G	N7-C5	-8.14	1.34	1.39
2	B	2724	U	C4-C5	8.14	1.50	1.43
2	B	755	U	C2'-C1'	-8.14	1.44	1.53
2	B	1885	A	C6-N1	8.14	1.41	1.35
2	B	2049	G	C2'-C1'	-8.14	1.44	1.53
2	B	2289	G	N7-C5	-8.14	1.34	1.39
2	B	996	A	O3'-P	-8.14	1.51	1.61
2	B	121	G	C8-N7	-8.13	1.26	1.30
2	B	972	A	N3-C4	-8.13	1.29	1.34
2	B	1179	G	C4'-C3'	-8.13	1.44	1.53
2	B	1343	G	N9-C8	-8.13	1.32	1.37
2	B	1587	G	C5'-C4'	8.13	1.61	1.51
2	B	1551	A	P-O5'	-8.13	1.51	1.59
2	B	1627	G	C4'-C3'	-8.13	1.44	1.53
2	B	2809	A	N7-C5	-8.13	1.34	1.39
2	B	2063	C	N3-C4	8.13	1.39	1.33
2	B	345	A	N9-C8	-8.13	1.31	1.37
2	B	245	G	C2-N3	8.12	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	673	C	C4'-C3'	-8.12	1.44	1.53
2	B	50	U	C2'-C1'	-8.12	1.44	1.53
2	B	872	U	C4'-C3'	-8.12	1.44	1.53
2	B	1369	G	P-O5'	-8.12	1.51	1.59
2	B	1589	U	C2-N3	8.12	1.43	1.37
2	B	2488	G	C4'-O4'	-8.12	1.34	1.45
2	B	1047	G	C5'-C4'	8.12	1.61	1.51
2	B	2743	U	O3'-P	-8.12	1.51	1.61
2	B	2143	C	N3-C4	8.12	1.39	1.33
2	B	289	G	N9-C8	-8.12	1.32	1.37
2	B	385	C	C3'-C2'	-8.12	1.43	1.52
2	B	764	A	C3'-O3'	8.11	1.53	1.42
2	B	1581	G	N3-C4	-8.11	1.29	1.35
2	B	1627	G	C2-N3	8.11	1.39	1.32
2	B	1137	G	N9-C8	-8.11	1.32	1.37
2	B	1467	U	C2'-C1'	-8.11	1.44	1.53
2	B	1916	A	C6-N1	8.11	1.41	1.35
2	B	2710	C	C4-C5	-8.11	1.36	1.43
2	B	1698	A	C2-N3	8.11	1.40	1.33
1	A	95	U	N1-C2	8.11	1.45	1.38
2	B	407	G	C2-N2	8.11	1.42	1.34
2	B	1136	G	O3'-P	-8.11	1.51	1.61
2	B	1281	G	C8-N7	-8.11	1.26	1.30
2	B	2099	U	C3'-O3'	8.11	1.53	1.42
2	B	2843	G	C4'-C3'	-8.11	1.44	1.53
2	B	1345	C	C4-C5	-8.11	1.36	1.43
2	B	1715	G	N1-C2	8.11	1.44	1.37
2	B	1264	A	C6-N6	8.11	1.40	1.33
2	B	1272	A	C4'-C3'	8.11	1.62	1.53
2	B	1381	G	N7-C5	-8.11	1.34	1.39
2	B	2812	G	O3'-P	-8.11	1.51	1.61
2	B	2443	C	P-O5'	-8.10	1.51	1.59
2	B	1229	C	N1-C6	8.10	1.42	1.37
2	B	1345	C	O3'-P	-8.10	1.51	1.61
2	B	617	G	C2'-C1'	-8.10	1.44	1.53
2	B	646	U	O3'-P	-8.10	1.51	1.61
2	B	2663	G	N7-C5	-8.10	1.34	1.39
2	B	1674	G	C5-C4	-8.10	1.32	1.38
2	B	1812	U	O3'-P	-8.10	1.51	1.61
2	B	823	C	N1-C6	8.10	1.42	1.37
2	B	1808	A	C5'-C4'	8.09	1.61	1.51
2	B	370	G	N7-C5	-8.09	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1819	A	C5-C4	-8.09	1.33	1.38
2	B	2275	C	C2'-C1'	-8.09	1.44	1.53
2	B	2388	A	N9-C4	-8.09	1.32	1.37
2	B	2421	G	C3'-C2'	-8.09	1.43	1.52
2	B	36	G	C2'-C1'	-8.09	1.44	1.53
2	B	1182	G	N9-C8	-8.09	1.32	1.37
2	B	222	A	N7-C5	-8.09	1.34	1.39
2	B	963	U	C2'-C1'	-8.09	1.44	1.53
2	B	2165	C	C4-N4	8.09	1.41	1.33
2	B	2610	C	C3'-C2'	-8.09	1.43	1.52
2	B	409	G	C6-N1	-8.08	1.33	1.39
2	B	761	A	N7-C5	-8.08	1.34	1.39
2	B	1254	A	C5'-C4'	8.08	1.61	1.51
2	B	1282	U	O3'-P	-8.08	1.51	1.61
2	B	2104	C	P-O5'	-8.08	1.51	1.59
2	B	2661	G	C8-N7	-8.08	1.26	1.30
2	B	1536	C	C2-N3	8.08	1.42	1.35
2	B	1619	G	C6-N1	8.08	1.45	1.39
2	B	1710	G	C5-C6	-8.08	1.34	1.42
2	B	250	G	O3'-P	-8.08	1.51	1.61
2	B	2102	G	N7-C5	-8.08	1.34	1.39
2	B	491	G	O3'-P	-8.08	1.51	1.61
2	B	1479	G	C2'-C1'	-8.08	1.44	1.53
2	B	1597	A	C5-C4	-8.08	1.33	1.38
2	B	1659	G	C4'-C3'	-8.08	1.44	1.53
1	A	25	U	O3'-P	-8.07	1.51	1.61
2	B	2727	A	N7-C5	-8.07	1.34	1.39
2	B	215	G	C5'-C4'	8.07	1.61	1.51
2	B	766	U	N1-C6	-8.07	1.30	1.38
2	B	910	A	O3'-P	-8.07	1.51	1.61
2	B	1068	G	N7-C5	-8.07	1.34	1.39
2	B	2735	G	N7-C5	8.07	1.44	1.39
1	A	96	G	N9-C4	-8.07	1.31	1.38
2	B	644	A	N7-C5	-8.07	1.34	1.39
2	B	674	G	N7-C5	-8.07	1.34	1.39
2	B	438	G	C2'-C1'	-8.06	1.44	1.53
2	B	1377	G	N1-C2	8.06	1.44	1.37
2	B	2065	C	C4'-O4'	-8.06	1.35	1.45
2	B	2455	G	C8-N7	8.06	1.35	1.30
2	B	1805	A	C4'-C3'	-8.06	1.44	1.53
2	B	60	G	P-O5'	-8.06	1.51	1.59
2	B	2579	C	C4'-C3'	-8.06	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1173	U	C2'-C1'	-8.06	1.44	1.53
1	A	76	G	C5-C6	-8.05	1.34	1.42
2	B	95	A	C2'-C1'	-8.05	1.44	1.53
2	B	307	G	N3-C4	-8.05	1.29	1.35
2	B	514	A	N3-C4	-8.05	1.30	1.34
2	B	1085	A	C6-N6	8.05	1.40	1.33
2	B	2307	G	N3-C4	-8.06	1.29	1.35
2	B	2604	U	C2'-C1'	-8.06	1.44	1.53
2	B	30	G	C2'-C1'	-8.05	1.44	1.53
2	B	257	C	C2-N3	8.05	1.42	1.35
2	B	762	U	C2-N3	8.05	1.43	1.37
2	B	1797	G	N1-C2	8.05	1.44	1.37
2	B	2320	U	O3'-P	-8.05	1.51	1.61
2	B	252	G	C2'-C1'	-8.05	1.44	1.53
2	B	713	G	O3'-P	-8.05	1.51	1.61
2	B	1383	A	C2'-C1'	-8.05	1.44	1.53
2	B	86	G	C4'-O4'	-8.05	1.35	1.45
2	B	2412	A	C5-C6	-8.05	1.33	1.41
2	B	530	G	O3'-P	-8.04	1.51	1.61
2	B	1454	C	C4-N4	8.04	1.41	1.33
2	B	1275	A	O3'-P	-8.04	1.51	1.61
2	B	1497	U	C2-N3	-8.04	1.32	1.37
2	B	1663	G	C2-N2	8.04	1.42	1.34
2	B	1010	A	C5-C4	-8.04	1.33	1.38
2	B	1790	C	C3'-C2'	-8.04	1.44	1.52
2	B	335	C	C2'-C1'	-8.04	1.44	1.53
2	B	2821	A	N9-C4	-8.04	1.33	1.37
2	B	1451	C	C2'-C1'	-8.04	1.44	1.53
2	B	1804	C	C2'-C1'	-8.04	1.44	1.53
1	A	102	G	N3-C4	8.04	1.41	1.35
2	B	1912	A	N3-C4	-8.04	1.30	1.34
2	B	2019	A	O3'-P	-8.04	1.51	1.61
2	B	2335	A	N9-C8	8.04	1.44	1.37
2	B	1999	C	C4-C5	8.03	1.49	1.43
2	B	2199	A	N9-C4	8.04	1.42	1.37
2	B	2445	G	N1-C2	8.04	1.44	1.37
2	B	86	G	C5-C4	-8.03	1.32	1.38
2	B	993	G	N7-C5	-8.03	1.34	1.39
2	B	2748	A	C2'-C1'	-8.03	1.44	1.53
2	B	325	G	C2'-C1'	-8.03	1.44	1.53
2	B	639	U	C2-N3	-8.03	1.32	1.37
2	B	755	U	P-O5'	-8.03	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1042	G	N9-C4	-8.03	1.31	1.38
2	B	1424	G	N7-C5	-8.03	1.34	1.39
2	B	2489	U	N3-C4	-8.03	1.31	1.38
2	B	2679	A	C5-C4	-8.03	1.33	1.38
2	B	566	U	C2'-C1'	-8.03	1.44	1.53
2	B	1327	A	C8-N7	-8.03	1.25	1.31
2	B	1532	A	O3'-P	-8.03	1.51	1.61
2	B	1821	A	P-O5'	-8.03	1.51	1.59
2	B	1998	A	P-O5'	-8.03	1.51	1.59
2	B	2583	G	C5-C4	-8.03	1.32	1.38
2	B	2744	G	C2'-C1'	-8.03	1.44	1.53
2	B	2386	A	P-O5'	-8.03	1.51	1.59
2	B	362	A	C2'-C1'	-8.02	1.44	1.53
2	B	478	A	N7-C5	-8.02	1.34	1.39
2	B	1163	G	C1'-N9	-8.02	1.35	1.46
2	B	1999	C	O3'-P	-8.02	1.51	1.61
2	B	916	G	N9-C4	-8.02	1.31	1.38
2	B	1189	A	C2'-C1'	-8.02	1.44	1.53
2	B	1589	U	C2'-C1'	-8.02	1.44	1.53
2	B	2435	A	N7-C5	-8.02	1.34	1.39
2	B	2867	G	C2'-C1'	-8.02	1.44	1.53
2	B	1675	C	C4-C5	-8.02	1.36	1.43
2	B	2587	A	O3'-P	-8.02	1.51	1.61
2	B	1853	A	C2'-C1'	-8.02	1.44	1.53
2	B	1989	G	P-O5'	-8.02	1.51	1.59
2	B	2134	A	N7-C5	-8.02	1.34	1.39
1	A	100	G	O3'-P	-8.02	1.51	1.61
2	B	254	G	C3'-C2'	-8.02	1.44	1.52
2	B	1913	A	C6-N1	8.02	1.41	1.35
2	B	2143	C	P-O5'	-8.02	1.51	1.59
2	B	2680	U	C4-O4	-8.02	1.17	1.23
2	B	2755	C	O3'-P	-8.02	1.51	1.61
2	B	984	A	C6-N1	8.01	1.41	1.35
2	B	1959	G	C2'-C1'	-8.01	1.44	1.53
2	B	1005	C	C5'-C4'	8.01	1.60	1.51
1	A	44	G	N1-C2	8.01	1.44	1.37
2	B	1631	G	C8-N7	-8.01	1.26	1.30
2	B	581	C	N1-C6	-8.01	1.32	1.37
2	B	688	U	N1-C2	8.01	1.45	1.38
2	B	1913	A	C3'-C2'	8.01	1.61	1.52
2	B	2200	C	C2-N3	-8.01	1.29	1.35
1	A	86	G	O3'-P	-8.01	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1130	U	C2'-C1'	-8.01	1.44	1.53
2	B	1733	G	C6-O6	8.01	1.31	1.24
2	B	376	G	P-O5'	-8.01	1.51	1.59
2	B	2833	U	N3-C4	8.01	1.45	1.38
2	B	2015	A	P-O5'	-8.00	1.51	1.59
2	B	2215	C	N3-C4	8.00	1.39	1.33
2	B	2613	U	C2'-C1'	-8.00	1.44	1.53
2	B	142	A	P-O5'	-8.00	1.51	1.59
2	B	1245	G	C6-O6	-8.00	1.17	1.24
2	B	1723	G	N9-C8	-8.00	1.32	1.37
2	B	1807	G	C5-C6	-8.00	1.34	1.42
2	B	2478	A	C2'-C1'	-8.00	1.44	1.53
2	B	2479	U	C2'-C1'	-8.00	1.44	1.53
2	B	359	G	N7-C5	-8.00	1.34	1.39
2	B	503	A	O3'-P	-8.00	1.51	1.61
2	B	1773	A	N9-C4	-8.00	1.33	1.37
2	B	2224	G	C8-N7	-8.00	1.26	1.30
2	B	2279	G	N3-C4	-8.00	1.29	1.35
2	B	2322	A	N7-C5	-8.00	1.34	1.39
2	B	1154	G	C5-C4	-8.00	1.32	1.38
2	B	1693	U	N3-C4	8.00	1.45	1.38
2	B	2311	A	O3'-P	-8.00	1.51	1.61
2	B	2456	C	C4-N4	8.00	1.41	1.33
2	B	760	G	N9-C8	-8.00	1.32	1.37
2	B	2636	C	C2'-C1'	-8.00	1.44	1.53
2	B	2232	C	N1-C6	-7.99	1.32	1.37
2	B	1089	A	C5-C4	7.99	1.44	1.38
2	B	273	G	C5-C6	-7.99	1.34	1.42
2	B	1309	G	C2-N3	7.99	1.39	1.32
2	B	1572	A	C6-N6	7.99	1.40	1.33
1	A	113	C	N3-C4	7.99	1.39	1.33
2	B	454	A	P-O5'	-7.99	1.51	1.59
2	B	2732	G	C4'-O4'	-7.99	1.35	1.45
2	B	2843	G	N9-C4	7.99	1.44	1.38
2	B	482	A	N7-C5	-7.99	1.34	1.39
2	B	491	G	C5-C4	-7.99	1.32	1.38
2	B	767	U	O3'-P	-7.99	1.51	1.61
2	B	973	A	C8-N7	-7.99	1.25	1.31
2	B	1287	A	N9-C8	7.99	1.44	1.37
2	B	1744	A	C6-N6	7.99	1.40	1.33
2	B	2114	A	N9-C4	7.99	1.42	1.37
2	B	1080	A	C6-N6	7.98	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1537	G	N7-C5	-7.98	1.34	1.39
2	B	2067	G	C4'-C3'	7.98	1.61	1.53
2	B	210	C	N1-C6	-7.98	1.32	1.37
2	B	1065	U	P-O5'	-7.98	1.51	1.59
2	B	1601	G	N1-C2	7.98	1.44	1.37
2	B	2497	A	N3-C4	-7.98	1.30	1.34
1	A	115	A	C3'-C2'	7.98	1.61	1.52
2	B	226	A	N7-C5	-7.98	1.34	1.39
2	B	783	A	N9-C8	-7.98	1.31	1.37
2	B	939	G	N3-C4	-7.98	1.29	1.35
2	B	1218	G	O3'-P	-7.98	1.51	1.61
2	B	1604	C	N3-C4	7.98	1.39	1.33
2	B	1756	G	N7-C5	-7.98	1.34	1.39
2	B	709	U	C2'-C1'	-7.98	1.44	1.53
2	B	1001	A	C8-N7	-7.98	1.25	1.31
2	B	1674	G	C2-N3	7.98	1.39	1.32
2	B	2331	G	C6-N1	-7.98	1.33	1.39
2	B	101	A	N9-C4	7.97	1.42	1.37
2	B	120	U	C2-N3	7.97	1.43	1.37
2	B	121	G	C2'-C1'	-7.97	1.44	1.53
2	B	270	A	N9-C4	-7.97	1.33	1.37
2	B	1795	C	N1-C6	-7.97	1.32	1.37
2	B	2703	C	C4'-O4'	-7.97	1.35	1.45
2	B	954	G	C5-C4	-7.97	1.32	1.38
2	B	2757	A	C6-N1	-7.97	1.29	1.35
2	B	2421	G	C4'-O4'	-7.97	1.35	1.45
18	W	9	ARG	NE-CZ	7.97	1.43	1.33
2	B	685	A	O3'-P	-7.97	1.51	1.61
2	B	2220	U	C4-O4	-7.97	1.17	1.23
2	B	818	G	N7-C5	-7.97	1.34	1.39
2	B	1753	G	C3'-C2'	-7.97	1.44	1.52
2	B	204	A	C2'-C1'	-7.97	1.44	1.53
2	B	1949	G	C5'-C4'	7.97	1.60	1.51
2	B	1006	C	N1-C6	7.96	1.42	1.37
2	B	2461	A	P-O5'	-7.96	1.51	1.59
2	B	454	A	N9-C4	-7.96	1.33	1.37
2	B	1407	G	P-O5'	-7.96	1.51	1.59
2	B	1254	A	C6-N1	-7.96	1.29	1.35
2	B	1715	G	N9-C4	-7.96	1.31	1.38
2	B	807	U	C4'-O4'	-7.96	1.35	1.45
2	B	988	A	N9-C4	7.96	1.42	1.37
2	B	1804	C	O3'-P	-7.96	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	244	A	P-O5'	-7.96	1.51	1.59
2	B	19	A	N3-C4	-7.96	1.30	1.34
2	B	819	A	N7-C5	-7.95	1.34	1.39
2	B	2061	G	O3'-P	-7.95	1.51	1.61
2	B	1300	G	C5-C4	-7.95	1.32	1.38
2	B	241	A	N3-C4	-7.95	1.30	1.34
2	B	278	A	N7-C5	-7.95	1.34	1.39
2	B	2186	G	C5-C4	7.95	1.44	1.38
2	B	2447	G	C2-N3	7.95	1.39	1.32
2	B	6	A	N9-C4	-7.95	1.33	1.37
2	B	48	G	N9-C8	-7.95	1.32	1.37
2	B	360	U	C4-O4	-7.95	1.17	1.23
2	B	697	G	C4'-C3'	-7.95	1.44	1.53
2	B	1144	A	C2'-C1'	-7.95	1.44	1.53
2	B	1389	G	C5-C4	-7.95	1.32	1.38
2	B	2319	G	C2-N3	7.95	1.39	1.32
2	B	2764	A	C6-N6	-7.95	1.27	1.33
1	A	80	U	O3'-P	-7.95	1.51	1.61
2	B	170	U	P-O5'	-7.95	1.51	1.59
2	B	2140	G	C2-N3	7.94	1.39	1.32
2	B	446	G	C2-N3	7.94	1.39	1.32
2	B	891	G	C5-C4	7.94	1.44	1.38
2	B	1406	U	C4'-C3'	-7.94	1.44	1.53
2	B	1999	C	C4'-C3'	-7.94	1.44	1.53
2	B	67	U	C3'-C2'	-7.94	1.44	1.52
2	B	1286	A	C8-N7	7.94	1.37	1.31
2	B	1977	A	C6-N6	7.94	1.40	1.33
2	B	1509	A	C4'-C3'	7.94	1.61	1.53
2	B	1511	G	O3'-P	-7.94	1.51	1.61
2	B	2171	A	C8-N7	7.94	1.37	1.31
2	B	855	G	C6-N1	-7.94	1.33	1.39
2	B	1093	G	C6-N1	7.94	1.45	1.39
2	B	1491	G	C4'-O4'	7.94	1.55	1.45
2	B	2800	A	C8-N7	-7.94	1.25	1.31
2	B	318	C	C1'-N1	7.94	1.60	1.48
2	B	815	C	P-O5'	-7.94	1.51	1.59
2	B	1890	A	N3-C4	-7.94	1.30	1.34
2	B	2009	A	N9-C8	-7.94	1.31	1.37
2	B	1130	U	N3-C4	7.93	1.45	1.38
2	B	1712	U	C5'-C4'	7.93	1.60	1.51
2	B	2042	A	N9-C8	7.93	1.44	1.37
2	B	2829	A	C2'-C1'	-7.93	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	513	A	C8-N7	-7.93	1.25	1.31
2	B	1807	G	C6-N1	7.93	1.45	1.39
2	B	136	G	C2-N3	7.93	1.39	1.32
2	B	1267	U	C4'-C3'	-7.93	1.44	1.53
2	B	1322	A	C2'-C1'	-7.93	1.44	1.53
2	B	676	A	P-O5'	-7.93	1.51	1.59
2	B	2255	G	N7-C5	-7.93	1.34	1.39
2	B	2496	C	N1-C6	7.93	1.42	1.37
2	B	2877	G	N7-C5	-7.93	1.34	1.39
2	B	1162	G	C5-C4	-7.92	1.32	1.38
2	B	2466	C	C2'-C1'	-7.92	1.44	1.53
2	B	94	A	C5-C4	7.92	1.44	1.38
2	B	119	A	C2'-C1'	-7.92	1.44	1.53
2	B	1186	G	N1-C2	7.92	1.44	1.37
2	B	286	U	C3'-C2'	-7.92	1.44	1.52
2	B	655	A	C2-N3	7.92	1.40	1.33
2	B	2168	G	C2'-C1'	-7.92	1.44	1.53
2	B	2583	G	C2-N2	7.92	1.42	1.34
2	B	173	A	N9-C4	-7.92	1.33	1.37
2	B	297	G	N3-C4	-7.92	1.29	1.35
2	B	299	A	N9-C4	-7.92	1.33	1.37
2	B	2032	G	C2-N3	7.92	1.39	1.32
2	B	1572	A	N9-C4	7.91	1.42	1.37
2	B	1275	A	C6-N6	7.91	1.40	1.33
2	B	1831	G	N3-C4	-7.91	1.29	1.35
2	B	2811	G	N3-C4	7.91	1.41	1.35
2	B	993	G	C2-N3	7.91	1.39	1.32
2	B	1609	A	N9-C4	-7.91	1.33	1.37
2	B	1630	A	C5-C4	-7.91	1.33	1.38
2	B	2602	A	C2'-C1'	-7.91	1.44	1.53
2	B	172	A	C2'-C1'	-7.91	1.44	1.53
2	B	2278	A	O3'-P	-7.91	1.51	1.61
2	B	2575	C	N3-C4	7.91	1.39	1.33
2	B	2017	U	O3'-P	-7.91	1.51	1.61
2	B	2090	A	N9-C4	-7.91	1.33	1.37
2	B	966	G	C5-C4	-7.91	1.32	1.38
2	B	500	G	O3'-P	-7.90	1.51	1.61
2	B	639	U	C4'-C3'	-7.90	1.44	1.53
2	B	952	G	C4'-C3'	-7.90	1.44	1.53
2	B	1171	G	C3'-C2'	7.90	1.61	1.52
2	B	2876	G	N7-C5	-7.90	1.34	1.39
2	B	190	A	N1-C2	7.90	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1851	U	C2-N3	7.90	1.43	1.37
2	B	942	G	C2-N2	7.90	1.42	1.34
2	B	2672	U	C4'-C3'	-7.90	1.44	1.53
2	B	270	A	C6-N6	7.90	1.40	1.33
2	B	307	G	C6-N1	7.90	1.45	1.39
2	B	1476	U	P-O5'	-7.90	1.51	1.59
2	B	1560	G	C2-N3	7.90	1.39	1.32
2	B	878	A	O3'-P	-7.90	1.51	1.61
2	B	2322	A	C5-C6	-7.90	1.33	1.41
2	B	2710	C	C2'-C1'	-7.90	1.44	1.53
2	B	492	A	C5-C4	-7.89	1.33	1.38
2	B	791	C	N1-C6	7.89	1.41	1.37
2	B	925	A	C3'-C2'	-7.89	1.44	1.52
2	B	1327	A	N9-C8	-7.89	1.31	1.37
2	B	1497	U	N3-C4	7.89	1.45	1.38
2	B	1995	U	O3'-P	-7.89	1.51	1.61
2	B	471	A	C6-N6	7.89	1.40	1.33
2	B	947	A	C2'-C1'	-7.89	1.44	1.53
2	B	1969	A	C6-N6	7.89	1.40	1.33
2	B	412	A	C5-C6	-7.89	1.33	1.41
2	B	762	U	C2'-C1'	-7.89	1.44	1.53
2	B	2813	A	C8-N7	-7.89	1.26	1.31
1	A	14	U	P-O5'	-7.89	1.51	1.59
1	A	83	G	C2'-C1'	-7.89	1.44	1.53
2	B	375	G	N3-C4	7.89	1.41	1.35
2	B	1042	G	C5-C6	-7.89	1.34	1.42
2	B	2350	C	N1-C6	7.89	1.41	1.37
2	B	2478	A	C4'-C3'	-7.89	1.44	1.53
1	A	109	A	N9-C4	-7.88	1.33	1.37
2	B	597	G	C5-C4	-7.88	1.32	1.38
2	B	1263	U	N1-C2	-7.88	1.31	1.38
2	B	1968	G	C3'-C2'	-7.88	1.44	1.52
2	B	2873	A	C2'-C1'	-7.88	1.44	1.53
2	B	473	G	N7-C5	-7.88	1.34	1.39
2	B	2660	A	C5-C4	7.88	1.44	1.38
2	B	1772	A	C2'-C1'	-7.88	1.44	1.53
2	B	2455	G	N9-C4	7.88	1.44	1.38
2	B	84	A	O3'-P	-7.88	1.51	1.61
2	B	266	G	N9-C8	-7.88	1.32	1.37
2	B	1780	A	N9-C4	-7.88	1.33	1.37
2	B	1204	A	C5-C6	-7.88	1.33	1.41
2	B	1358	G	N7-C5	-7.88	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	473	G	C2-N2	-7.88	1.26	1.34
2	B	936	A	N7-C5	-7.88	1.34	1.39
2	B	2410	G	C2'-C1'	-7.88	1.44	1.53
2	B	455	C	C3'-C2'	-7.87	1.44	1.52
2	B	684	G	N9-C4	-7.87	1.31	1.38
2	B	1903	G	N1-C2	7.87	1.44	1.37
30	H	34	GLY	CA-C	-7.87	1.39	1.51
2	B	2305	U	C2-N3	7.87	1.43	1.37
2	B	2389	G	C4'-C3'	-7.87	1.44	1.53
2	B	605	G	C5-C4	-7.87	1.32	1.38
2	B	660	C	O3'-P	-7.87	1.51	1.61
2	B	830	G	C5-C6	-7.87	1.34	1.42
2	B	1252	G	N7-C5	-7.87	1.34	1.39
2	B	2782	G	C2-N3	7.87	1.39	1.32
2	B	923	G	C8-N7	7.87	1.35	1.30
2	B	1570	A	C3'-C2'	-7.87	1.44	1.52
2	B	1840	G	N1-C2	7.87	1.44	1.37
2	B	869	G	N9-C8	-7.86	1.32	1.37
2	B	1705	A	C8-N7	-7.86	1.26	1.31
2	B	1925	C	N3-C4	7.86	1.39	1.33
2	B	2839	G	O3'-P	-7.86	1.51	1.61
2	B	104	A	C4'-C3'	7.86	1.61	1.53
2	B	633	A	P-O5'	-7.86	1.51	1.59
2	B	812	C	N3-C4	7.86	1.39	1.33
2	B	562	U	C1'-N1	-7.86	1.35	1.46
2	B	1449	G	N7-C5	-7.86	1.34	1.39
2	B	490	C	C2'-C1'	-7.86	1.44	1.53
2	B	2417	C	N3-C4	7.86	1.39	1.33
2	B	734	A	N3-C4	-7.85	1.30	1.34
2	B	971	G	C2'-C1'	-7.85	1.44	1.53
2	B	1546	G	C5-C6	-7.85	1.34	1.42
2	B	606	U	N3-C4	7.85	1.45	1.38
2	B	672	C	C1'-N1	-7.85	1.35	1.46
2	B	1830	C	N1-C6	-7.85	1.32	1.37
2	B	1110	G	C2'-C1'	-7.85	1.44	1.53
2	B	1223	G	N9-C4	-7.85	1.31	1.38
2	B	613	A	N7-C5	-7.84	1.34	1.39
2	B	1784	A	N3-C4	-7.84	1.30	1.34
2	B	2230	G	O3'-P	-7.84	1.51	1.61
2	B	2576	G	P-O5'	-7.84	1.51	1.59
2	B	261	G	N7-C5	-7.84	1.34	1.39
2	B	367	G	P-O5'	-7.84	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1585	C	O3'-P	-7.84	1.51	1.61
2	B	488	G	O3'-P	-7.84	1.51	1.61
2	B	1036	G	N3-C4	-7.84	1.29	1.35
2	B	1773	A	N7-C5	-7.84	1.34	1.39
2	B	380	G	O3'-P	-7.84	1.51	1.61
2	B	860	U	O3'-P	-7.84	1.51	1.61
2	B	917	A	C6-N6	7.84	1.40	1.33
2	B	1170	C	C2'-C1'	-7.84	1.44	1.53
2	B	1290	C	P-O5'	7.84	1.67	1.59
2	B	984	A	C1'-N9	-7.83	1.35	1.46
2	B	226	A	N3-C4	-7.83	1.30	1.34
2	B	411	G	N9-C4	7.83	1.44	1.38
2	B	956	G	C2-N3	7.83	1.39	1.32
2	B	1493	C	N1-C6	7.83	1.41	1.37
2	B	2378	A	O3'-P	-7.83	1.51	1.61
2	B	2597	G	P-O5'	-7.83	1.51	1.59
4	K	49	ARG	NE-CZ	7.83	1.43	1.33
1	A	21	G	C5-C6	-7.83	1.34	1.42
2	B	369	U	O3'-P	-7.83	1.51	1.61
2	B	1716	U	N3-C4	-7.83	1.31	1.38
2	B	2242	G	N9-C4	-7.83	1.31	1.38
2	B	1257	C	O3'-P	-7.83	1.51	1.61
2	B	2476	A	C6-N6	7.83	1.40	1.33
2	B	218	A	O3'-P	-7.83	1.51	1.61
2	B	1528	A	N3-C4	-7.83	1.30	1.34
2	B	1739	A	C2'-C1'	-7.83	1.44	1.53
2	B	386	G	C3'-C2'	-7.82	1.44	1.52
2	B	784	G	P-O5'	-7.82	1.51	1.59
2	B	2341	G	C2'-C1'	-7.82	1.44	1.53
2	B	257	C	C3'-C2'	-7.82	1.44	1.52
2	B	1502	A	N9-C4	-7.82	1.33	1.37
2	B	2309	A	N7-C5	7.82	1.44	1.39
1	A	71	C	C2-N3	-7.82	1.29	1.35
2	B	614	A	C8-N7	-7.82	1.26	1.31
2	B	1055	G	N1-C2	7.82	1.44	1.37
2	B	1616	A	N9-C4	-7.82	1.33	1.37
2	B	2349	G	C5-C6	-7.82	1.34	1.42
2	B	2351	G	C6-N1	7.82	1.45	1.39
2	B	458	G	N9-C4	-7.82	1.31	1.38
2	B	2294	G	N3-C4	-7.82	1.29	1.35
2	B	275	C	C2'-C1'	-7.81	1.44	1.53
2	B	480	A	C5'-C4'	7.81	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1017	G	C8-N7	7.81	1.35	1.30
2	B	1067	A	C5-C4	7.81	1.44	1.38
2	B	2855	C	C5-C6	-7.81	1.28	1.34
2	B	219	A	C1'-N9	-7.81	1.35	1.46
2	B	668	A	C8-N7	-7.81	1.26	1.31
2	B	1296	G	N7-C5	-7.81	1.34	1.39
2	B	1710	G	N1-C2	7.81	1.44	1.37
2	B	2164	C	N1-C6	7.81	1.41	1.37
2	B	1042	G	N7-C5	-7.81	1.34	1.39
2	B	2095	A	N9-C4	-7.81	1.33	1.37
2	B	759	G	C2'-C1'	-7.80	1.44	1.53
2	B	1166	G	C3'-C2'	-7.80	1.44	1.52
2	B	1741	C	N1-C6	-7.80	1.32	1.37
2	B	400	G	N1-C2	-7.80	1.31	1.37
2	B	725	G	P-O5'	-7.80	1.51	1.59
2	B	942	G	C5-C6	-7.80	1.34	1.42
2	B	1234	U	C2'-C1'	-7.80	1.44	1.53
2	B	733	G	P-O5'	-7.80	1.51	1.59
2	B	790	U	C4'-C3'	-7.80	1.44	1.53
2	B	1493	C	C4'-C3'	-7.80	1.44	1.53
2	B	540	C	C3'-C2'	-7.80	1.44	1.52
2	B	739	A	N9-C4	-7.80	1.33	1.37
2	B	788	A	N3-C4	-7.80	1.30	1.34
2	B	2699	C	N1-C6	-7.80	1.32	1.37
2	B	470	A	N7-C5	-7.79	1.34	1.39
2	B	836	G	N7-C5	-7.79	1.34	1.39
2	B	1474	U	N3-C4	7.79	1.45	1.38
2	B	2002	G	N7-C5	-7.79	1.34	1.39
2	B	89	A	N9-C4	-7.79	1.33	1.37
2	B	834	G	C5-C6	-7.79	1.34	1.42
2	B	863	A	P-O5'	-7.79	1.51	1.59
2	B	1402	U	P-O5'	-7.79	1.51	1.59
2	B	1656	C	N3-C4	7.79	1.39	1.33
2	B	1830	C	O3'-P	-7.79	1.51	1.61
2	B	2499	C	N1-C6	7.79	1.41	1.37
2	B	1845	G	N7-C5	-7.79	1.34	1.39
2	B	2819	G	P-O5'	-7.79	1.51	1.59
2	B	251	A	N9-C4	-7.79	1.33	1.37
2	B	1440	U	C2'-C1'	-7.79	1.44	1.53
2	B	413	C	N3-C4	7.79	1.39	1.33
2	B	428	A	C5-C4	7.79	1.44	1.38
2	B	518	G	N9-C4	7.79	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1637	A	N3-C4	-7.79	1.30	1.34
2	B	2666	C	C2-N3	7.79	1.42	1.35
2	B	2803	G	N7-C5	-7.79	1.34	1.39
2	B	204	A	C6-N1	-7.79	1.30	1.35
2	B	469	G	C5-C4	-7.79	1.32	1.38
2	B	627	A	C2'-C1'	-7.79	1.44	1.53
2	B	1650	A	P-O5'	-7.79	1.51	1.59
2	B	2067	G	N9-C4	7.79	1.44	1.38
2	B	2710	C	O3'-P	-7.79	1.51	1.61
1	A	29	A	C4'-O4'	-7.78	1.35	1.45
2	B	318	C	P-O5'	-7.78	1.51	1.59
2	B	1062	G	C2'-C1'	-7.78	1.44	1.53
2	B	1288	G	C8-N7	-7.78	1.26	1.30
2	B	2785	C	N1-C6	7.78	1.41	1.37
1	A	86	G	C2'-C1'	-7.78	1.44	1.53
2	B	219	A	N9-C8	-7.78	1.31	1.37
2	B	1293	C	C3'-C2'	-7.78	1.44	1.52
2	B	2736	A	N7-C5	7.78	1.44	1.39
2	B	2868	A	O3'-P	-7.78	1.51	1.61
2	B	522	A	C2'-C1'	-7.78	1.44	1.53
2	B	567	U	C5'-C4'	7.78	1.60	1.51
2	B	801	G	C2'-C1'	-7.78	1.44	1.53
2	B	1190	G	N1-C2	7.78	1.44	1.37
2	B	2033	A	N9-C4	-7.78	1.33	1.37
2	B	731	C	C2'-C1'	-7.78	1.44	1.53
2	B	1807	G	C2-N2	7.78	1.42	1.34
2	B	2819	G	O3'-P	-7.77	1.51	1.61
2	B	170	U	C2'-C1'	7.77	1.61	1.53
2	B	1037	G	C6-N1	7.77	1.45	1.39
2	B	1573	G	C2'-C1'	-7.77	1.44	1.53
2	B	1732	C	C4-C5	7.77	1.49	1.43
2	B	2546	U	C2-N3	7.77	1.43	1.37
2	B	1046	A	C6-N1	7.77	1.41	1.35
2	B	660	C	C4-C5	7.77	1.49	1.43
2	B	1385	A	C2'-C1'	-7.77	1.44	1.53
2	B	1539	U	O4'-C1'	7.77	1.51	1.41
2	B	1645	G	N1-C2	-7.77	1.31	1.37
2	B	2796	U	C2-N3	7.77	1.43	1.37
2	B	290	U	C4'-C3'	-7.77	1.44	1.53
2	B	554	U	C4'-C3'	-7.77	1.44	1.53
2	B	2300	C	P-O5'	-7.77	1.51	1.59
2	B	479	A	N3-C4	-7.76	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1020	A	C6-N6	7.76	1.40	1.33
5	L	47	ARG	NE-CZ	7.76	1.43	1.33
2	B	245	G	C3'-C2'	-7.76	1.44	1.52
2	B	391	A	C5-C4	7.76	1.44	1.38
2	B	1271	G	P-O5'	-7.76	1.51	1.59
2	B	863	A	N9-C8	-7.76	1.31	1.37
2	B	1505	A	C8-N7	-7.76	1.26	1.31
2	B	185	G	N3-C4	-7.76	1.30	1.35
2	B	1001	A	C6-N1	7.76	1.41	1.35
2	B	2603	G	C2-N3	7.76	1.39	1.32
2	B	670	A	O3'-P	-7.75	1.51	1.61
2	B	1831	G	C8-N7	-7.75	1.26	1.30
2	B	921	C	C2'-C1'	-7.75	1.44	1.53
2	B	184	C	P-O5'	-7.75	1.51	1.59
2	B	391	A	C4'-C3'	-7.75	1.44	1.53
2	B	416	U	N1-C6	7.75	1.45	1.38
2	B	2347	C	C2'-C1'	-7.75	1.44	1.53
2	B	463	G	P-O5'	-7.75	1.51	1.59
2	B	1056	G	N7-C5	-7.75	1.34	1.39
2	B	1	G	N9-C8	-7.75	1.32	1.37
2	B	1300	G	N7-C5	-7.75	1.34	1.39
2	B	1471	G	N1-C2	7.75	1.44	1.37
2	B	1214	A	C6-N6	-7.75	1.27	1.33
2	B	2254	C	N3-C4	7.75	1.39	1.33
2	B	2654	A	C2'-C1'	-7.75	1.44	1.53
2	B	1556	C	N1-C6	-7.74	1.32	1.37
2	B	1790	C	C4-C5	-7.74	1.36	1.43
2	B	2573	C	O3'-P	-7.74	1.51	1.61
2	B	579	G	C8-N7	-7.74	1.26	1.30
2	B	2516	A	N3-C4	-7.74	1.30	1.34
2	B	508	A	P-O5'	7.74	1.67	1.59
2	B	1112	G	O4'-C1'	-7.74	1.31	1.41
2	B	1146	C	P-O5'	-7.74	1.52	1.59
2	B	1451	C	C2-O2	-7.74	1.17	1.24
2	B	798	G	N3-C4	-7.74	1.30	1.35
2	B	104	A	N9-C8	-7.74	1.31	1.37
2	B	2596	U	N1-C2	7.74	1.45	1.38
2	B	2652	C	N1-C6	7.74	1.41	1.37
2	B	1477	A	C5-C4	-7.73	1.33	1.38
1	A	24	G	O3'-P	-7.73	1.51	1.61
2	B	1501	G	C2'-C1'	-7.73	1.44	1.53
2	B	12	U	C5'-C4'	7.73	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	66	C	C3'-C2'	-7.73	1.44	1.52
2	B	292	U	C2'-C1'	-7.73	1.44	1.53
2	B	1454	C	C4-C5	7.73	1.49	1.43
2	B	1120	G	C6-N1	7.73	1.45	1.39
2	B	1167	C	N3-C4	7.73	1.39	1.33
2	B	1768	C	C4'-C3'	7.73	1.61	1.53
2	B	459	U	N1-C2	-7.73	1.31	1.38
2	B	1359	A	C2'-C1'	-7.73	1.44	1.53
2	B	1597	A	P-O5'	-7.73	1.52	1.59
2	B	2178	C	C4'-C3'	7.73	1.61	1.53
2	B	531	C	N1-C2	7.73	1.47	1.40
2	B	2200	C	N1-C6	7.73	1.41	1.37
2	B	2464	G	O3'-P	-7.73	1.51	1.61
2	B	44	A	C3'-C2'	-7.72	1.44	1.52
2	B	192	C	C2-O2	-7.72	1.17	1.24
2	B	431	U	C2'-C1'	-7.72	1.44	1.53
2	B	1969	A	C2'-C1'	-7.72	1.44	1.53
2	B	1792	G	C2'-C1'	-7.72	1.44	1.53
11	Q	75	TYR	CZ-OH	7.72	1.50	1.37
2	B	429	A	C6-N6	7.72	1.40	1.33
2	B	2343	U	C2'-C1'	-7.72	1.44	1.53
2	B	2426	A	N9-C4	-7.72	1.33	1.37
2	B	337	C	C2'-C1'	-7.72	1.44	1.53
2	B	540	C	C4-N4	7.72	1.40	1.33
2	B	838	C	C5-C6	-7.72	1.28	1.34
2	B	1999	C	C2'-C1'	-7.72	1.44	1.53
2	B	2269	G	C4'-C3'	-7.72	1.44	1.53
2	B	2434	A	C5-C6	-7.72	1.34	1.41
2	B	2065	C	O3'-P	-7.71	1.51	1.61
2	B	2576	G	C1'-N9	-7.71	1.36	1.46
2	B	2581	G	C5-C6	-7.71	1.34	1.42
2	B	914	G	N1-C2	7.71	1.44	1.37
2	B	2715	C	N3-C4	7.71	1.39	1.33
2	B	306	U	C3'-C2'	-7.71	1.44	1.52
2	B	1324	G	C4'-C3'	-7.71	1.44	1.53
2	B	1549	A	N7-C5	-7.71	1.34	1.39
2	B	1697	G	N1-C2	7.71	1.44	1.37
2	B	2467	C	C2'-C1'	-7.71	1.44	1.53
2	B	2490	G	C8-N7	7.71	1.35	1.30
2	B	701	G	N7-C5	-7.71	1.34	1.39
2	B	408	G	C3'-C2'	-7.71	1.44	1.52
2	B	565	C	C2'-C1'	-7.71	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1206	G	N7-C5	-7.71	1.34	1.39
2	B	1263	U	P-O5'	-7.71	1.52	1.59
2	B	1833	C	N1-C6	7.71	1.41	1.37
2	B	2120	G	N9-C8	-7.71	1.32	1.37
2	B	2844	G	C5-C6	-7.71	1.34	1.42
20	E	21	ARG	NE-CZ	7.71	1.43	1.33
2	B	44	A	N7-C5	-7.71	1.34	1.39
2	B	370	G	N9-C8	-7.71	1.32	1.37
2	B	1445	G	N9-C8	-7.71	1.32	1.37
2	B	2739	U	C3'-C2'	-7.71	1.44	1.52
11	Q	12	ARG	CZ-NH2	7.71	1.43	1.33
2	B	673	C	C5'-C4'	-7.70	1.42	1.51
2	B	2524	G	O3'-P	-7.70	1.51	1.61
2	B	1091	G	C6-N1	7.70	1.45	1.39
2	B	836	G	C2'-C1'	-7.70	1.44	1.53
2	B	1721	G	N7-C5	7.70	1.43	1.39
2	B	205	G	C5-C6	-7.70	1.34	1.42
2	B	217	A	N3-C4	-7.70	1.30	1.34
2	B	659	G	O3'-P	-7.70	1.51	1.61
2	B	2033	A	N1-C2	-7.70	1.27	1.34
2	B	2873	A	N9-C4	7.70	1.42	1.37
2	B	65	U	N1-C2	7.70	1.45	1.38
2	B	926	G	C2-N3	7.70	1.39	1.32
2	B	1134	A	C5-C4	-7.70	1.33	1.38
2	B	1929	G	C5'-C4'	7.70	1.60	1.51
2	B	2311	A	C8-N7	-7.70	1.26	1.31
2	B	408	G	N3-C4	-7.69	1.30	1.35
2	B	196	A	C8-N7	-7.69	1.26	1.31
2	B	205	G	P-O5'	-7.69	1.52	1.59
2	B	277	G	C5-C4	7.69	1.43	1.38
2	B	745	G	C4'-C3'	-7.69	1.44	1.53
2	B	872	U	O3'-P	-7.69	1.51	1.61
2	B	1605	C	N3-C4	7.69	1.39	1.33
2	B	1813	G	C4'-C3'	7.69	1.61	1.53
2	B	1983	G	C2'-C1'	-7.69	1.44	1.53
1	A	20	G	P-O5'	-7.69	1.52	1.59
2	B	75	G	N7-C5	-7.69	1.34	1.39
2	B	849	A	C1'-N9	-7.69	1.36	1.46
2	B	2072	C	N1-C6	7.69	1.41	1.37
2	B	2672	U	P-O5'	-7.69	1.52	1.59
1	A	73	A	N7-C5	-7.69	1.34	1.39
2	B	1832	C	N3-C4	7.69	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2319	G	P-O5'	-7.69	1.52	1.59
2	B	2588	G	N9-C4	7.69	1.44	1.38
2	B	1018	U	O3'-P	-7.69	1.51	1.61
2	B	1849	G	P-O5'	-7.69	1.52	1.59
2	B	2833	U	O3'-P	-7.69	1.51	1.61
2	B	769	U	O4'-C1'	-7.68	1.31	1.41
2	B	2529	G	C6-N1	7.68	1.45	1.39
2	B	2729	G	C2'-C1'	-7.68	1.45	1.53
2	B	614	A	C3'-C2'	-7.68	1.44	1.52
2	B	948	C	C2'-C1'	-7.68	1.45	1.53
2	B	1240	U	C5'-C4'	7.68	1.60	1.51
2	B	1800	C	O3'-P	-7.68	1.51	1.61
2	B	2650	U	C4-O4	-7.68	1.17	1.23
2	B	1110	G	N9-C8	7.68	1.43	1.37
2	B	1714	U	N3-C4	7.68	1.45	1.38
20	E	93	SER	CA-CB	7.68	1.64	1.52
2	B	231	A	N3-C4	-7.67	1.30	1.34
2	B	585	G	C2-N3	7.67	1.38	1.32
2	B	1770	G	N9-C8	-7.67	1.32	1.37
2	B	1773	A	C3'-O3'	7.67	1.52	1.42
2	B	2734	A	N3-C4	-7.67	1.30	1.34
2	B	2838	G	C8-N7	-7.67	1.26	1.30
1	A	66	A	C3'-C2'	7.67	1.61	1.52
2	B	1838	C	C5'-C4'	7.67	1.60	1.51
2	B	199	A	N9-C8	-7.67	1.31	1.37
2	B	1007	C	O3'-P	-7.67	1.51	1.61
2	B	1157	G	N3-C4	-7.67	1.30	1.35
2	B	1294	U	C4-C5	7.67	1.50	1.43
2	B	2197	U	C4'-O4'	-7.67	1.35	1.45
2	B	2251	G	N9-C8	-7.67	1.32	1.37
2	B	495	G	C2-N2	-7.67	1.26	1.34
2	B	877	A	C6-N1	7.67	1.41	1.35
2	B	1042	G	N9-C8	7.67	1.43	1.37
2	B	2673	G	C2-N3	7.67	1.38	1.32
2	B	396	G	N1-C2	7.67	1.43	1.37
2	B	2764	A	N3-C4	-7.67	1.30	1.34
2	B	268	C	C5'-C4'	-7.66	1.42	1.51
2	B	2693	G	C3'-C2'	-7.66	1.44	1.52
2	B	916	G	N9-C8	-7.66	1.32	1.37
2	B	2247	A	P-O5'	-7.66	1.52	1.59
2	B	2333	A	C5-C4	-7.66	1.33	1.38
2	B	172	A	C6-N1	7.66	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	852	U	C5-C6	-7.66	1.27	1.34
2	B	986	C	C4-C5	7.66	1.49	1.43
2	B	2077	A	P-O5'	-7.66	1.52	1.59
2	B	479	A	P-O5'	-7.66	1.52	1.59
2	B	838	C	N3-C4	7.66	1.39	1.33
2	B	1446	C	C2'-C1'	-7.66	1.45	1.53
2	B	1505	A	N7-C5	-7.66	1.34	1.39
2	B	1763	G	P-O5'	-7.66	1.52	1.59
2	B	1894	C	N3-C4	7.66	1.39	1.33
2	B	1963	U	O3'-P	-7.66	1.51	1.61
2	B	2627	G	N3-C4	-7.66	1.30	1.35
2	B	2714	G	C8-N7	-7.66	1.26	1.30
2	B	2719	G	P-O5'	-7.66	1.52	1.59
2	B	520	G	C2'-C1'	-7.66	1.45	1.53
2	B	2782	G	C2-N2	7.66	1.42	1.34
2	B	1310	G	P-O5'	-7.65	1.52	1.59
2	B	2770	G	O3'-P	-7.65	1.51	1.61
2	B	270	A	N9-C8	-7.65	1.31	1.37
2	B	495	G	C6-N1	-7.65	1.34	1.39
2	B	455	C	C4'-C3'	-7.65	1.44	1.53
2	B	558	U	C2'-O2'	-7.65	1.31	1.41
2	B	663	G	O3'-P	-7.65	1.51	1.61
2	B	1511	G	N9-C4	-7.65	1.31	1.38
2	B	1603	A	N3-C4	-7.65	1.30	1.34
2	B	2120	G	O3'-P	-7.65	1.51	1.61
2	B	77	G	C2'-C1'	-7.65	1.45	1.53
2	B	869	G	C2'-C1'	-7.65	1.45	1.53
2	B	1439	A	N3-C4	-7.65	1.30	1.34
2	B	1692	U	C3'-O3'	7.65	1.52	1.42
2	B	2696	U	O3'-P	-7.65	1.51	1.61
2	B	329	G	C8-N7	-7.65	1.26	1.30
2	B	431	U	P-O5'	-7.65	1.52	1.59
2	B	1586	A	N7-C5	-7.65	1.34	1.39
2	B	2456	C	C3'-C2'	-7.65	1.44	1.52
2	B	2464	G	N1-C2	7.65	1.43	1.37
1	A	64	G	C5-C4	7.65	1.43	1.38
2	B	974	G	N9-C4	-7.65	1.31	1.38
2	B	1460	U	C4'-C3'	7.65	1.61	1.53
2	B	2050	C	N1-C6	-7.65	1.32	1.37
2	B	2822	G	C3'-C2'	-7.64	1.44	1.52
2	B	41	C	O4'-C1'	-7.64	1.31	1.41
2	B	144	A	C5-C4	-7.64	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2697	G	C2'-C1'	-7.64	1.45	1.53
2	B	2735	G	C6-N1	7.64	1.44	1.39
2	B	134	G	N3-C4	-7.64	1.30	1.35
2	B	2059	A	N3-C4	-7.64	1.30	1.34
2	B	502	A	C5-C6	-7.64	1.34	1.41
2	B	1306	C	C4-C5	7.64	1.49	1.43
2	B	1610	A	C4'-C3'	-7.64	1.44	1.53
2	B	1162	G	N3-C4	-7.64	1.30	1.35
2	B	1620	G	P-O5'	-7.64	1.52	1.59
2	B	2121	G	O3'-P	-7.64	1.51	1.61
2	B	2280	G	P-O5'	-7.64	1.52	1.59
2	B	1092	C	C2-N3	-7.63	1.29	1.35
2	B	1640	A	N9-C4	7.63	1.42	1.37
2	B	2289	G	C8-N7	-7.63	1.26	1.30
2	B	543	G	C6-N1	7.63	1.44	1.39
2	B	2307	G	O3'-P	-7.63	1.51	1.61
2	B	215	G	P-O5'	-7.63	1.52	1.59
2	B	655	A	O3'-P	-7.63	1.51	1.61
2	B	1579	A	N7-C5	-7.63	1.34	1.39
2	B	1448	G	C5-C6	-7.63	1.34	1.42
2	B	1828	G	C5'-C4'	7.63	1.60	1.51
2	B	1922	G	C5'-C4'	7.63	1.60	1.51
1	A	111	U	C4'-C3'	7.62	1.61	1.53
2	B	60	G	C5-C6	-7.62	1.34	1.42
2	B	1910	G	C2-N3	7.62	1.38	1.32
2	B	743	A	P-O5'	-7.62	1.52	1.59
2	B	841	G	C2'-C1'	-7.62	1.45	1.53
2	B	2171	A	N7-C5	-7.62	1.34	1.39
2	B	2054	A	N9-C4	7.62	1.42	1.37
2	B	2541	A	N9-C4	-7.62	1.33	1.37
2	B	2607	G	C6-N1	7.62	1.44	1.39
2	B	422	A	O3'-P	-7.62	1.52	1.61
2	B	1103	A	C5-C6	-7.62	1.34	1.41
2	B	2508	G	O3'-P	-7.62	1.52	1.61
2	B	431	U	N3-C4	7.62	1.45	1.38
2	B	1540	G	C2-N3	7.62	1.38	1.32
2	B	2336	A	N9-C4	-7.62	1.33	1.37
2	B	460	A	C5-C4	-7.62	1.33	1.38
2	B	1048	A	O3'-P	-7.62	1.52	1.61
21	Y	10	ARG	CD-NE	7.62	1.59	1.46
2	B	450	G	N7-C5	-7.62	1.34	1.39
2	B	746	U	P-O5'	-7.62	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1655	A	C8-N7	-7.62	1.26	1.31
2	B	2544	G	N7-C5	-7.62	1.34	1.39
2	B	106	C	C2-N3	-7.61	1.29	1.35
2	B	894	U	O3'-P	-7.61	1.52	1.61
2	B	1339	G	C8-N7	7.61	1.35	1.30
2	B	2095	A	N7-C5	-7.61	1.34	1.39
2	B	2393	U	P-O5'	-7.61	1.52	1.59
2	B	2600	A	C5-C4	-7.61	1.33	1.38
4	K	84	CYS	CB-SG	-7.61	1.69	1.82
1	A	54	G	C8-N7	-7.61	1.26	1.30
2	B	612	G	N7-C5	-7.61	1.34	1.39
2	B	906	U	C5-C6	7.61	1.41	1.34
2	B	1096	A	C5-C4	7.61	1.44	1.38
2	B	439	A	C6-N6	7.61	1.40	1.33
2	B	987	C	P-O5'	-7.61	1.52	1.59
2	B	1641	A	C6-N6	7.61	1.40	1.33
2	B	161	A	N3-C4	-7.61	1.30	1.34
2	B	629	G	O3'-P	-7.61	1.52	1.61
2	B	1047	G	C8-N7	-7.61	1.26	1.30
2	B	113	U	C4'-C3'	-7.60	1.44	1.53
2	B	579	G	N3-C4	-7.60	1.30	1.35
2	B	2851	A	N7-C5	-7.60	1.34	1.39
2	B	1191	G	P-O5'	-7.60	1.52	1.59
2	B	1205	A	P-O5'	-7.60	1.52	1.59
2	B	2143	C	N1-C6	7.60	1.41	1.37
2	B	2567	G	N3-C4	-7.60	1.30	1.35
2	B	132	G	O3'-P	-7.60	1.52	1.61
2	B	2306	C	N1-C6	7.60	1.41	1.37
2	B	2621	G	C4'-C3'	-7.60	1.44	1.53
2	B	522	A	C6-N6	7.60	1.40	1.33
2	B	1341	G	C5-C6	-7.60	1.34	1.42
2	B	1482	G	C2'-C1'	-7.60	1.45	1.53
2	B	2397	G	N7-C5	-7.60	1.34	1.39
2	B	1631	G	N1-C2	7.60	1.43	1.37
2	B	449	A	C6-N1	7.59	1.40	1.35
2	B	708	G	C2-N3	7.59	1.38	1.32
2	B	1776	G	C2-N3	7.59	1.38	1.32
2	B	667	U	O3'-P	-7.59	1.52	1.61
2	B	1601	G	C8-N7	-7.59	1.26	1.30
2	B	1965	C	N3-C4	7.59	1.39	1.33
2	B	556	A	P-O5'	-7.59	1.52	1.59
2	B	2666	C	C4-N4	7.59	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1062	G	N1-C2	7.59	1.43	1.37
2	B	1552	A	N7-C5	-7.59	1.34	1.39
2	B	1620	G	C2-N3	7.59	1.38	1.32
2	B	12	U	C2-N3	7.58	1.43	1.37
2	B	2407	A	P-O5'	-7.58	1.52	1.59
2	B	778	G	C2-N3	7.58	1.38	1.32
2	B	916	G	O3'-P	-7.58	1.52	1.61
2	B	954	G	N7-C5	-7.58	1.34	1.39
2	B	1785	A	N3-C4	-7.58	1.30	1.34
1	A	18	G	P-O5'	-7.58	1.52	1.59
1	A	83	G	C6-N1	-7.58	1.34	1.39
2	B	289	G	N7-C5	-7.58	1.34	1.39
2	B	1163	G	C5-C6	-7.58	1.34	1.42
2	B	1173	U	C4-C5	7.58	1.50	1.43
2	B	2718	G	C5'-C4'	7.58	1.60	1.51
2	B	2896	C	C1'-N1	-7.58	1.36	1.46
2	B	243	U	C4'-C3'	-7.58	1.44	1.53
2	B	1419	A	C2'-C1'	-7.58	1.45	1.53
2	B	1990	C	C2'-C1'	-7.58	1.45	1.53
2	B	2399	G	N7-C5	-7.58	1.34	1.39
2	B	2756	U	P-O5'	-7.58	1.52	1.59
2	B	201	C	N3-C4	7.58	1.39	1.33
2	B	512	G	C1'-N9	-7.58	1.36	1.46
2	B	2083	G	N9-C4	-7.58	1.31	1.38
1	A	23	G	N7-C5	-7.57	1.34	1.39
2	B	114	U	C4-C5	-7.57	1.36	1.43
2	B	825	A	C6-N1	7.57	1.40	1.35
2	B	1039	A	N3-C4	-7.57	1.30	1.34
2	B	2292	U	N3-C4	7.57	1.45	1.38
2	B	681	G	N3-C4	-7.57	1.30	1.35
2	B	960	A	C5-C6	-7.57	1.34	1.41
2	B	1024	G	N3-C4	-7.57	1.30	1.35
2	B	1371	G	C2-N2	7.57	1.42	1.34
2	B	1659	G	C6-O6	-7.57	1.17	1.24
1	A	61	G	C1'-N9	-7.57	1.36	1.46
2	B	13	A	O3'-P	-7.57	1.52	1.61
2	B	1372	U	P-O5'	-7.57	1.52	1.59
2	B	2726	A	N7-C5	-7.57	1.34	1.39
1	A	60	C	C2-N3	7.57	1.41	1.35
2	B	1982	U	C2'-C1'	-7.57	1.45	1.53
2	B	2227	A	C4'-O4'	-7.57	1.35	1.45
2	B	2604	U	N3-C4	7.57	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1036	G	C8-N7	-7.57	1.26	1.30
2	B	1729	U	P-O5'	-7.57	1.52	1.59
2	B	682	G	C5-C4	-7.56	1.33	1.38
2	B	1401	G	O3'-P	-7.56	1.52	1.61
2	B	2627	G	C2'-C1'	-7.56	1.45	1.53
2	B	1510	G	C3'-C2'	-7.56	1.44	1.52
2	B	1658	C	C2'-C1'	-7.56	1.45	1.53
2	B	1315	C	P-O5'	-7.56	1.52	1.59
2	B	6	A	C2'-C1'	-7.56	1.45	1.53
2	B	43	G	N3-C4	-7.56	1.30	1.35
2	B	705	A	N3-C4	-7.56	1.30	1.34
2	B	2555	U	N1-C6	7.56	1.44	1.38
2	B	1175	A	C5-C4	-7.56	1.33	1.38
2	B	2265	U	C2'-C1'	-7.56	1.45	1.53
2	B	2301	C	C4-C5	-7.56	1.36	1.43
2	B	178	G	O3'-P	-7.56	1.52	1.61
2	B	1389	G	C4'-C3'	-7.55	1.44	1.53
28	F	137	PHE	CG-CD1	7.55	1.50	1.38
2	B	1707	G	C5-C6	-7.55	1.34	1.42
2	B	2064	C	N1-C2	7.55	1.47	1.40
2	B	2407	A	N9-C8	-7.55	1.31	1.37
2	B	469	G	C4'-O4'	-7.55	1.35	1.45
2	B	585	G	C5-C4	-7.55	1.33	1.38
2	B	2411	A	P-O5'	-7.55	1.52	1.59
2	B	2689	U	N1-C2	-7.55	1.31	1.38
2	B	485	C	C2-N3	-7.55	1.29	1.35
2	B	1032	A	N7-C5	-7.55	1.34	1.39
2	B	1356	G	C6-N1	7.55	1.44	1.39
2	B	2878	U	C4'-C3'	-7.55	1.44	1.53
2	B	2329	U	O3'-P	-7.55	1.52	1.61
2	B	2386	A	C6-N6	7.55	1.40	1.33
2	B	785	G	N9-C8	7.54	1.43	1.37
2	B	1762	A	N3-C4	-7.54	1.30	1.34
2	B	1787	A	C4'-C3'	-7.54	1.44	1.53
2	B	883	G	C6-N1	7.54	1.44	1.39
2	B	822	G	C2-N3	7.54	1.38	1.32
2	B	1091	G	N3-C4	-7.54	1.30	1.35
2	B	1133	A	C4'-O4'	-7.54	1.35	1.45
2	B	2418	A	N7-C5	-7.54	1.34	1.39
2	B	1097	U	C2'-C1'	-7.54	1.45	1.53
2	B	1299	G	N9-C4	-7.54	1.31	1.38
1	A	69	G	P-O5'	-7.54	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1260	A	N7-C5	-7.54	1.34	1.39
2	B	1430	G	P-O5'	-7.54	1.52	1.59
2	B	1623	G	C3'-C2'	-7.54	1.44	1.52
2	B	772	C	C2'-C1'	-7.54	1.45	1.53
2	B	903	C	C4-N4	7.54	1.40	1.33
2	B	1970	A	C5-C4	7.54	1.44	1.38
2	B	315	G	C6-N1	7.54	1.44	1.39
2	B	1390	U	O3'-P	-7.54	1.52	1.61
2	B	222	A	C1'-N9	-7.53	1.36	1.46
2	B	1281	G	O3'-P	-7.53	1.52	1.61
2	B	1794	A	C4'-C3'	-7.53	1.44	1.53
2	B	1964	G	C2'-C1'	-7.53	1.45	1.53
2	B	1759	A	C1'-N9	-7.53	1.36	1.46
2	B	2187	U	C5'-C4'	7.53	1.60	1.51
2	B	75	G	N9-C4	-7.53	1.31	1.38
2	B	554	U	O4'-C1'	-7.53	1.31	1.41
2	B	1173	U	C2-N3	7.53	1.43	1.37
2	B	2088	A	C8-N7	-7.53	1.26	1.31
2	B	2449	U	P-O5'	-7.53	1.52	1.59
2	B	1568	G	C8-N7	7.53	1.35	1.30
1	A	85	G	N9-C4	-7.53	1.31	1.38
2	B	1163	G	P-O5'	-7.53	1.52	1.59
2	B	1627	G	C8-N7	7.53	1.35	1.30
2	B	1281	G	C2-N3	7.52	1.38	1.32
2	B	1354	A	C4'-O4'	-7.52	1.35	1.45
2	B	2193	G	C6-N1	7.52	1.44	1.39
2	B	2370	G	C4'-C3'	-7.52	1.44	1.53
2	B	54	G	P-O5'	-7.52	1.52	1.59
2	B	2685	G	C5-C4	-7.52	1.33	1.38
2	B	1701	A	N9-C4	-7.52	1.33	1.37
2	B	87	U	O3'-P	-7.52	1.52	1.61
2	B	551	G	C2'-C1'	-7.52	1.45	1.53
2	B	1158	C	O3'-P	-7.52	1.52	1.61
2	B	1656	C	C2'-C1'	-7.52	1.45	1.53
2	B	367	G	N1-C2	7.52	1.43	1.37
2	B	370	G	P-O5'	-7.52	1.52	1.59
2	B	1384	A	C6-N1	7.52	1.40	1.35
2	B	1826	G	C4'-C3'	-7.52	1.44	1.53
2	B	2454	G	C3'-C2'	-7.52	1.44	1.52
1	A	56	G	N7-C5	-7.51	1.34	1.39
2	B	1790	C	O3'-P	-7.51	1.52	1.61
2	B	507	A	O4'-C1'	7.51	1.51	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	572	A	C1'-N9	-7.51	1.36	1.46
2	B	751	A	C8-N7	-7.51	1.26	1.31
2	B	950	G	N7-C5	-7.51	1.34	1.39
2	B	1452	G	N9-C4	-7.51	1.31	1.38
2	B	2780	G	O3'-P	-7.51	1.52	1.61
2	B	39	G	C2-N3	7.51	1.38	1.32
2	B	239	C	N3-C4	7.51	1.39	1.33
2	B	1333	G	C6-N1	-7.51	1.34	1.39
2	B	1356	G	N9-C8	7.51	1.43	1.37
2	B	1688	U	C5'-C4'	7.51	1.60	1.51
2	B	1929	G	N9-C4	-7.51	1.31	1.38
2	B	2162	G	C2-N2	7.51	1.42	1.34
2	B	612	G	C3'-C2'	-7.51	1.44	1.52
2	B	1262	A	N9-C4	-7.51	1.33	1.37
2	B	1687	G	N9-C8	7.51	1.43	1.37
2	B	576	U	P-O5'	-7.50	1.52	1.59
2	B	2117	A	C3'-C2'	7.50	1.61	1.52
2	B	2395	C	N3-C4	7.50	1.39	1.33
2	B	250	G	N7-C5	-7.50	1.34	1.39
2	B	1637	A	P-O5'	-7.50	1.52	1.59
2	B	2032	G	C6-N1	-7.50	1.34	1.39
2	B	2086	U	C3'-C2'	-7.50	1.44	1.52
2	B	67	U	N1-C2	-7.50	1.31	1.38
2	B	9	G	N3-C4	7.50	1.40	1.35
2	B	727	A	C8-N7	-7.50	1.26	1.31
2	B	2814	A	C6-N1	7.50	1.40	1.35
2	B	514	A	N7-C5	-7.50	1.34	1.39
2	B	756	A	C5-C4	-7.50	1.33	1.38
2	B	1388	G	N3-C4	-7.50	1.30	1.35
2	B	1842	G	C2-N3	7.50	1.38	1.32
1	A	114	C	C4'-C3'	-7.50	1.45	1.53
2	B	2706	A	C3'-C2'	-7.50	1.44	1.52
2	B	1651	G	C8-N7	-7.49	1.26	1.30
2	B	2627	G	C8-N7	-7.49	1.26	1.30
2	B	1332	G	C8-N7	-7.49	1.26	1.30
2	B	377	G	C1'-N9	-7.49	1.36	1.46
2	B	1197	G	N7-C5	-7.49	1.34	1.39
2	B	1724	G	N9-C8	-7.49	1.32	1.37
2	B	2769	U	P-O5'	-7.49	1.52	1.59
1	A	112	G	N1-C2	7.49	1.43	1.37
2	B	162	U	P-O5'	-7.49	1.52	1.59
2	B	321	U	N3-C4	7.49	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	324	A	C6-N6	7.49	1.40	1.33
2	B	515	A	N7-C5	-7.49	1.34	1.39
2	B	1281	G	C6-N1	7.49	1.44	1.39
2	B	2451	A	C5-C4	-7.49	1.33	1.38
2	B	1414	C	C3'-C2'	-7.49	1.44	1.52
2	B	1585	C	N3-C4	7.49	1.39	1.33
2	B	2718	G	C8-N7	-7.48	1.26	1.30
2	B	223	A	C5-C4	-7.48	1.33	1.38
2	B	633	A	C8-N7	-7.48	1.26	1.31
2	B	715	A	N1-C2	7.48	1.41	1.34
2	B	2185	U	C3'-C2'	7.48	1.61	1.52
2	B	2255	G	N1-C2	7.48	1.43	1.37
2	B	1059	G	N7-C5	-7.48	1.34	1.39
2	B	265	A	C2'-C1'	-7.48	1.45	1.53
2	B	504	A	C4'-C3'	7.48	1.61	1.53
2	B	123	G	C2-N3	7.48	1.38	1.32
2	B	761	A	N3-C4	-7.48	1.30	1.34
2	B	1329	U	C4'-C3'	-7.48	1.45	1.53
2	B	1818	U	O3'-P	-7.48	1.52	1.61
2	B	2162	G	C2'-C1'	-7.48	1.45	1.53
2	B	2046	G	N7-C5	-7.47	1.34	1.39
2	B	2070	A	N7-C5	-7.47	1.34	1.39
2	B	2242	G	C2-N2	7.47	1.42	1.34
2	B	2434	A	C6-N6	7.47	1.40	1.33
2	B	1342	A	N9-C4	-7.47	1.33	1.37
2	B	24	G	O3'-P	-7.47	1.52	1.61
2	B	2870	C	N1-C2	7.47	1.47	1.40
20	E	197	GLU	N-CA	-7.47	1.31	1.46
2	B	171	U	N1-C6	-7.47	1.31	1.38
2	B	443	A	N9-C4	-7.47	1.33	1.37
2	B	1380	G	C2-N3	7.47	1.38	1.32
2	B	2541	A	C6-N6	-7.47	1.27	1.33
2	B	2618	G	N1-C2	7.47	1.43	1.37
2	B	2749	A	O3'-P	-7.47	1.52	1.61
2	B	567	U	C2-N3	7.47	1.43	1.37
2	B	314	C	C2'-C1'	-7.47	1.45	1.53
2	B	692	C	P-O5'	-7.46	1.52	1.59
2	B	2201	G	C2-N3	7.46	1.38	1.32
2	B	713	G	C2-N3	7.46	1.38	1.32
2	B	2729	G	C4'-C3'	-7.46	1.45	1.53
2	B	592	A	C8-N7	-7.46	1.26	1.31
2	B	759	G	N9-C4	7.46	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1774	C	N1-C2	-7.46	1.32	1.40
2	B	1754	A	N3-C4	-7.46	1.30	1.34
2	B	32	C	N1-C6	-7.46	1.32	1.37
2	B	37	C	C2'-C1'	-7.46	1.45	1.53
2	B	344	A	C5-C6	7.46	1.47	1.41
2	B	690	G	O3'-P	-7.46	1.52	1.61
2	B	1020	A	C8-N7	-7.46	1.26	1.31
2	B	1200	C	C4-C5	-7.46	1.36	1.43
2	B	1920	C	C4-N4	7.46	1.40	1.33
2	B	899	A	C4'-O4'	7.46	1.55	1.45
2	B	1244	A	N9-C4	-7.46	1.33	1.37
2	B	1825	U	C4-C5	7.46	1.50	1.43
2	B	2273	A	N7-C5	-7.46	1.34	1.39
2	B	141	G	P-O5'	-7.45	1.52	1.59
2	B	784	G	N1-C2	7.45	1.43	1.37
2	B	794	A	N3-C4	-7.45	1.30	1.34
2	B	1390	U	C4'-O4'	-7.45	1.35	1.45
2	B	1895	C	N1-C6	7.45	1.41	1.37
2	B	2565	A	O3'-P	-7.45	1.52	1.61
2	B	212	G	C4'-C3'	-7.45	1.45	1.53
2	B	387	U	O3'-P	-7.45	1.52	1.61
2	B	396	G	C8-N7	-7.45	1.26	1.30
2	B	966	G	N9-C8	-7.45	1.32	1.37
2	B	1986	C	O3'-P	-7.45	1.52	1.61
2	B	2541	A	N3-C4	-7.45	1.30	1.34
2	B	756	A	N9-C4	-7.45	1.33	1.37
2	B	984	A	N9-C4	-7.45	1.33	1.37
2	B	1215	G	C3'-C2'	-7.45	1.44	1.52
2	B	809	G	N3-C4	-7.45	1.30	1.35
2	B	2840	C	C2'-C1'	-7.45	1.45	1.53
2	B	9	G	C2-N3	7.45	1.38	1.32
2	B	118	A	C3'-C2'	-7.45	1.44	1.52
2	B	853	C	C2'-C1'	-7.44	1.45	1.53
2	B	2261	C	P-O5'	-7.44	1.52	1.59
1	A	83	G	C4'-C3'	-7.44	1.45	1.53
2	B	750	A	N3-C4	7.44	1.39	1.34
2	B	1343	G	N3-C4	-7.44	1.30	1.35
2	B	1854	A	C6-N1	7.44	1.40	1.35
2	B	1955	U	C2'-C1'	-7.44	1.45	1.53
2	B	2393	U	C4-C5	7.44	1.50	1.43
2	B	2612	C	C4-N4	7.44	1.40	1.33
2	B	2631	G	P-O5'	-7.44	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	785	G	C5'-C4'	7.44	1.60	1.51
2	B	2069	G	C5-C4	-7.44	1.33	1.38
2	B	2146	C	C4'-C3'	7.44	1.61	1.53
2	B	785	G	C2-N2	7.44	1.42	1.34
2	B	619	G	N3-C4	-7.43	1.30	1.35
2	B	1489	C	C5'-C4'	7.43	1.60	1.51
2	B	2550	G	C2'-C1'	-7.43	1.45	1.53
2	B	128	C	O3'-P	-7.43	1.52	1.61
2	B	1116	G	N1-C2	7.43	1.43	1.37
2	B	1499	C	N1-C6	-7.43	1.32	1.37
2	B	1602	U	C2'-C1'	-7.43	1.45	1.53
2	B	740	C	C3'-O3'	7.43	1.52	1.42
2	B	1379	U	P-O5'	-7.43	1.52	1.59
2	B	1607	C	O4'-C1'	7.43	1.51	1.41
2	B	200	U	C3'-C2'	-7.43	1.44	1.52
2	B	785	G	C2'-C1'	-7.43	1.45	1.53
2	B	1268	A	C5'-C4'	7.43	1.60	1.51
1	A	105	G	N3-C4	-7.43	1.30	1.35
2	B	966	G	N3-C4	-7.43	1.30	1.35
2	B	2800	A	P-O5'	-7.43	1.52	1.59
2	B	706	A	P-O5'	-7.43	1.52	1.59
2	B	1532	A	C5-C6	7.43	1.47	1.41
2	B	1652	A	C6-N6	7.43	1.39	1.33
2	B	2021	C	C4'-O4'	-7.43	1.35	1.45
2	B	2841	C	C2'-C1'	-7.43	1.45	1.53
1	A	107	G	P-O5'	-7.42	1.52	1.59
2	B	1034	G	N3-C4	7.42	1.40	1.35
2	B	2038	G	C2'-C1'	-7.42	1.45	1.53
2	B	2097	A	C6-N6	7.42	1.39	1.33
2	B	2371	G	C5-C4	-7.42	1.33	1.38
2	B	2783	U	C3'-C2'	7.42	1.61	1.52
1	A	41	G	C5-C6	7.42	1.49	1.42
2	B	1937	A	N3-C4	-7.42	1.30	1.34
2	B	1721	G	C5-C4	7.42	1.43	1.38
2	B	2220	U	O3'-P	-7.42	1.52	1.61
2	B	2531	A	N9-C8	7.42	1.43	1.37
2	B	768	G	C5-C6	-7.42	1.34	1.42
2	B	209	C	C4-C5	7.42	1.48	1.43
2	B	792	A	C5-C4	7.42	1.44	1.38
2	B	1006	C	C2'-C1'	-7.42	1.45	1.53
2	B	2882	A	N7-C5	7.42	1.43	1.39
2	B	1714	U	P-O5'	-7.42	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	186	G	C6-N1	7.42	1.44	1.39
2	B	2162	G	N3-C4	-7.42	1.30	1.35
2	B	96	C	C5-C6	7.41	1.40	1.34
2	B	480	A	N7-C5	-7.41	1.34	1.39
2	B	795	C	C2-N3	-7.41	1.29	1.35
2	B	2720	U	C2-N3	7.41	1.43	1.37
25	7	25	HIS	CB-CG	-7.41	1.36	1.50
2	B	395	U	C2'-C1'	-7.41	1.45	1.53
2	B	453	A	N3-C4	-7.41	1.30	1.34
2	B	1288	G	C6-N1	7.41	1.44	1.39
2	B	1387	A	N3-C4	-7.41	1.30	1.34
2	B	1407	G	C4'-C3'	-7.41	1.45	1.53
2	B	1080	A	C8-N7	-7.41	1.26	1.31
2	B	1980	G	C2-N3	7.41	1.38	1.32
2	B	2026	U	C2-N3	7.41	1.43	1.37
2	B	2216	G	C5'-C4'	7.41	1.60	1.51
2	B	549	G	N7-C5	-7.41	1.34	1.39
2	B	1820	U	C2'-C1'	-7.41	1.45	1.53
2	B	602	A	C5-C4	-7.41	1.33	1.38
2	B	978	G	C2-N3	7.41	1.38	1.32
2	B	647	G	C4'-C3'	-7.40	1.45	1.53
2	B	561	G	P-O5'	-7.40	1.52	1.59
2	B	2528	U	P-O5'	-7.40	1.52	1.59
2	B	311	A	N3-C4	-7.40	1.30	1.34
2	B	1162	G	C4'-C3'	-7.40	1.45	1.53
2	B	1622	G	C2-N2	7.40	1.42	1.34
2	B	533	G	N3-C4	-7.40	1.30	1.35
1	A	81	G	C5'-C4'	7.40	1.60	1.51
2	B	890	C	N1-C6	7.40	1.41	1.37
2	B	2520	C	C4-C5	7.40	1.48	1.43
1	A	28	C	C4'-C3'	-7.39	1.45	1.53
2	B	630	G	O3'-P	-7.39	1.52	1.61
2	B	1266	G	N9-C8	-7.39	1.32	1.37
2	B	1779	U	C2-N3	7.39	1.43	1.37
2	B	2741	A	C2'-C1'	-7.39	1.45	1.53
2	B	1553	A	P-O5'	7.39	1.67	1.59
2	B	1779	U	C2'-C1'	-7.39	1.45	1.53
2	B	2706	A	C4'-C3'	7.39	1.61	1.53
2	B	1998	A	C3'-C2'	-7.39	1.44	1.52
2	B	2691	C	N3-C4	7.39	1.39	1.33
2	B	2867	G	C5-C6	-7.39	1.34	1.42
1	A	2	G	N3-C4	7.39	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1399	C	C4'-O4'	-7.39	1.35	1.45
2	B	2099	U	N3-C4	7.39	1.45	1.38
2	B	2405	G	C4'-C3'	-7.39	1.45	1.53
2	B	2444	G	O3'-P	-7.39	1.52	1.61
1	A	84	G	N3-C4	-7.39	1.30	1.35
2	B	77	G	C4'-O4'	-7.39	1.35	1.45
2	B	499	U	P-O5'	-7.39	1.52	1.59
2	B	1723	G	N3-C4	-7.39	1.30	1.35
2	B	2774	C	C4-N4	7.39	1.40	1.33
2	B	1497	U	C5'-C4'	7.38	1.60	1.51
2	B	1931	U	C4'-C3'	-7.38	1.45	1.53
2	B	2598	A	C6-N6	7.38	1.39	1.33
2	B	2122	U	C5'-C4'	7.38	1.60	1.51
2	B	2669	G	C5-C6	-7.38	1.34	1.42
2	B	214	G	N3-C4	-7.38	1.30	1.35
2	B	506	G	C2'-C1'	-7.38	1.45	1.53
2	B	1082	U	N3-C4	7.38	1.45	1.38
2	B	2742	G	N3-C4	-7.38	1.30	1.35
2	B	16	C	C2-N3	-7.38	1.29	1.35
2	B	79	C	P-O5'	-7.38	1.52	1.59
2	B	538	A	N3-C4	-7.38	1.30	1.34
2	B	1950	G	C6-N1	7.38	1.44	1.39
2	B	2466	C	C4-N4	7.38	1.40	1.33
2	B	1995	U	C4-O4	-7.38	1.17	1.23
2	B	551	G	C2-N3	-7.38	1.26	1.32
2	B	1544	A	C2'-C1'	-7.38	1.45	1.53
2	B	1821	A	C6-N6	7.38	1.39	1.33
1	A	57	A	C6-N1	7.37	1.40	1.35
2	B	1244	A	C6-N1	7.37	1.40	1.35
2	B	2455	G	C2'-C1'	-7.37	1.45	1.53
2	B	2625	G	O3'-P	-7.37	1.52	1.61
2	B	2694	G	C8-N7	-7.37	1.26	1.30
2	B	628	G	C2-N2	-7.37	1.27	1.34
2	B	1551	A	C6-N6	7.37	1.39	1.33
2	B	2276	G	C2'-C1'	-7.37	1.45	1.53
2	B	261	G	C8-N7	-7.37	1.26	1.30
2	B	2872	A	C6-N6	7.37	1.39	1.33
2	B	2493	U	C3'-C2'	-7.37	1.44	1.52
2	B	2743	U	C5'-C4'	7.37	1.60	1.51
1	A	43	C	C4-N4	7.37	1.40	1.33
2	B	892	A	N9-C4	-7.37	1.33	1.37
2	B	1220	G	C8-N7	-7.37	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1552	A	C5-C4	-7.37	1.33	1.38
2	B	1688	U	C4-O4	-7.37	1.17	1.23
2	B	2644	G	C4'-C3'	-7.37	1.45	1.53
2	B	905	A	C2'-C1'	-7.36	1.45	1.53
2	B	1024	G	C2-N3	7.36	1.38	1.32
2	B	2348	U	C4'-C3'	-7.36	1.45	1.53
2	B	2219	U	C2-N3	-7.36	1.32	1.37
2	B	2309	A	N3-C4	-7.36	1.30	1.34
2	B	49	A	N3-C4	-7.36	1.30	1.34
2	B	1428	C	C5'-C4'	7.36	1.60	1.51
2	B	350	G	N9-C4	-7.36	1.32	1.38
2	B	487	C	O3'-P	-7.36	1.52	1.61
2	B	656	G	C2'-C1'	-7.36	1.45	1.53
2	B	1163	G	N3-C4	-7.36	1.30	1.35
2	B	2054	A	N9-C8	-7.36	1.31	1.37
2	B	641	U	C3'-C2'	-7.36	1.44	1.52
2	B	1042	G	P-O5'	-7.36	1.52	1.59
2	B	2679	A	O3'-P	-7.36	1.52	1.61
2	B	2862	G	C2-N3	7.35	1.38	1.32
2	B	760	G	C5-C6	-7.35	1.34	1.42
2	B	1074	G	C2-N3	7.35	1.38	1.32
2	B	1103	A	N9-C8	-7.35	1.31	1.37
2	B	1584	U	C5'-C4'	7.35	1.60	1.51
2	B	1964	G	N9-C4	-7.35	1.32	1.38
2	B	2780	G	C2-N2	7.35	1.42	1.34
2	B	2032	G	O3'-P	-7.35	1.52	1.61
2	B	943	A	N3-C4	-7.35	1.30	1.34
2	B	971	G	N9-C8	-7.35	1.32	1.37
2	B	2617	U	O3'-P	-7.35	1.52	1.61
2	B	2710	C	P-O5'	-7.35	1.52	1.59
2	B	497	A	N3-C4	-7.35	1.30	1.34
2	B	408	G	O3'-P	-7.34	1.52	1.61
2	B	2427	C	C4'-C3'	-7.34	1.45	1.53
2	B	726	G	C2-N3	7.34	1.38	1.32
2	B	1271	G	C2-N3	7.34	1.38	1.32
7	M	50	ARG	NE-CZ	7.34	1.42	1.33
2	B	252	G	C6-N1	7.34	1.44	1.39
2	B	765	C	O3'-P	-7.34	1.52	1.61
2	B	1307	A	C5'-C4'	7.34	1.60	1.51
29	G	7	PRO	N-CD	-7.34	1.37	1.47
2	B	266	G	N3-C4	-7.34	1.30	1.35
2	B	830	G	C6-N1	7.34	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	588	U	P-O5'	-7.34	1.52	1.59
2	B	1224	U	N1-C6	7.34	1.44	1.38
2	B	1795	C	C5-C6	-7.34	1.28	1.34
2	B	2007	U	C4'-C3'	-7.34	1.45	1.53
2	B	2711	A	C4'-O4'	-7.33	1.36	1.45
2	B	1631	G	N9-C8	-7.33	1.32	1.37
2	B	1975	G	C5-C6	-7.33	1.35	1.42
2	B	2181	U	N1-C6	-7.33	1.31	1.38
2	B	2747	G	N9-C8	-7.33	1.32	1.37
2	B	471	A	N9-C8	-7.33	1.31	1.37
2	B	701	G	N3-C4	-7.33	1.30	1.35
2	B	778	G	C8-N7	-7.33	1.26	1.30
2	B	1443	U	C2-N3	-7.33	1.32	1.37
2	B	2453	A	C6-N6	7.33	1.39	1.33
2	B	2836	U	O3'-P	-7.33	1.52	1.61
1	A	106	G	C6-N1	7.33	1.44	1.39
2	B	2495	G	C5-C4	-7.33	1.33	1.38
2	B	133	U	C2'-C1'	-7.33	1.45	1.53
2	B	589	U	N1-C6	-7.33	1.31	1.38
2	B	1328	A	C4'-O4'	-7.33	1.36	1.45
2	B	1404	C	C2'-C1'	-7.33	1.45	1.53
2	B	2530	A	C2'-C1'	-7.33	1.45	1.53
2	B	1177	G	N1-C2	-7.33	1.31	1.37
2	B	1485	U	N3-C4	7.33	1.45	1.38
2	B	2707	U	C3'-C2'	-7.33	1.44	1.52
2	B	633	A	C6-N6	7.33	1.39	1.33
2	B	1283	G	O3'-P	-7.33	1.52	1.61
2	B	1749	A	N3-C4	7.33	1.39	1.34
2	B	460	A	N3-C4	-7.32	1.30	1.34
2	B	1372	U	C2-N3	-7.32	1.32	1.37
2	B	1393	A	N3-C4	-7.32	1.30	1.34
2	B	2627	G	N7-C5	7.32	1.43	1.39
2	B	2882	A	C1'-N9	-7.32	1.36	1.46
2	B	753	A	N7-C5	-7.32	1.34	1.39
2	B	1444	G	C2-N3	7.32	1.38	1.32
2	B	1064	C	N1-C6	7.32	1.41	1.37
2	B	1067	A	N3-C4	-7.32	1.30	1.34
2	B	1286	A	C6-N1	-7.32	1.30	1.35
2	B	1044	C	N3-C4	7.32	1.39	1.33
2	B	1401	G	N9-C4	-7.32	1.32	1.38
2	B	1774	C	C4-C5	-7.32	1.37	1.43
2	B	2591	C	N3-C4	7.32	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	104	A	O3'-P	-7.32	1.52	1.61
2	B	158	U	C2'-C1'	-7.32	1.45	1.53
2	B	251	A	C6-N6	7.32	1.39	1.33
2	B	396	G	N9-C8	-7.32	1.32	1.37
2	B	1227	G	C2-N3	7.32	1.38	1.32
2	B	1275	A	C4'-C3'	-7.32	1.45	1.53
2	B	1608	A	C4'-O4'	7.32	1.55	1.45
2	B	1817	G	C2'-C1'	-7.32	1.45	1.53
2	B	2476	A	N7-C5	-7.32	1.34	1.39
2	B	2572	A	C6-N6	7.32	1.39	1.33
2	B	2840	C	N3-C4	7.31	1.39	1.33
2	B	95	A	N7-C5	-7.31	1.34	1.39
2	B	102	U	C4-C5	7.31	1.50	1.43
2	B	108	G	N9-C4	-7.31	1.32	1.38
2	B	2464	G	N7-C5	-7.31	1.34	1.39
2	B	2503	A	C6-N1	7.31	1.40	1.35
2	B	2622	U	C2'-C1'	-7.31	1.45	1.53
2	B	686	U	C3'-C2'	-7.31	1.44	1.52
2	B	1124	G	C2-N3	7.31	1.38	1.32
2	B	2645	G	C5-C4	-7.31	1.33	1.38
1	A	50	A	C5-C6	-7.31	1.34	1.41
2	B	843	G	O3'-P	-7.31	1.52	1.61
2	B	1585	C	C4-N4	7.31	1.40	1.33
2	B	2468	A	C2'-C1'	-7.31	1.45	1.53
2	B	2767	C	N1-C2	-7.31	1.32	1.40
2	B	1377	G	N9-C4	-7.31	1.32	1.38
2	B	1814	G	C2'-C1'	-7.31	1.45	1.53
2	B	7	G	N9-C8	-7.31	1.32	1.37
2	B	1397	U	P-O5'	-7.31	1.52	1.59
2	B	2284	A	C2'-C1'	-7.31	1.45	1.53
2	B	2780	G	C5-C4	-7.31	1.33	1.38
2	B	803	U	N3-C4	7.30	1.45	1.38
2	B	1155	A	P-O5'	-7.30	1.52	1.59
2	B	1698	A	C5-C6	-7.30	1.34	1.41
2	B	2403	C	C4'-C3'	-7.30	1.45	1.53
28	F	7	TYR	CG-CD1	7.30	1.48	1.39
2	B	914	G	C5'-C4'	7.30	1.60	1.51
2	B	1421	G	P-O5'	-7.30	1.52	1.59
2	B	2500	U	P-O5'	-7.30	1.52	1.59
2	B	2777	G	C6-N1	7.30	1.44	1.39
2	B	134	G	C5-C6	-7.30	1.35	1.42
2	B	340	A	O3'-P	-7.30	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	946	C	C2-N3	7.30	1.41	1.35
2	B	1334	G	C2-N2	-7.30	1.27	1.34
2	B	1668	A	N9-C4	-7.30	1.33	1.37
2	B	2110	G	N7-C5	-7.30	1.34	1.39
2	B	2127	G	N1-C2	7.30	1.43	1.37
2	B	453	A	O3'-P	-7.30	1.52	1.61
2	B	901	C	N1-C6	7.30	1.41	1.37
2	B	1073	A	N7-C5	-7.30	1.34	1.39
2	B	1157	G	C1'-N9	-7.30	1.36	1.46
2	B	1629	U	C4-C5	7.30	1.50	1.43
2	B	2093	G	C6-N1	-7.30	1.34	1.39
2	B	2142	A	C5'-C4'	7.30	1.60	1.51
2	B	829	A	N3-C4	7.29	1.39	1.34
1	A	98	G	C2-N3	7.29	1.38	1.32
2	B	822	G	C1'-N9	-7.29	1.36	1.46
2	B	2349	G	N9-C4	-7.29	1.32	1.38
2	B	768	G	P-O5'	-7.29	1.52	1.59
2	B	1061	U	C2'-C1'	-7.29	1.45	1.53
2	B	1093	G	C5-C4	-7.29	1.33	1.38
2	B	1104	C	C4'-C3'	-7.29	1.45	1.53
2	B	1975	G	C2-N3	7.29	1.38	1.32
2	B	2193	G	C8-N7	7.29	1.35	1.30
2	B	2495	G	C1'-N9	-7.29	1.36	1.46
2	B	2864	G	C5-C4	-7.29	1.33	1.38
1	A	15	A	C3'-C2'	-7.29	1.44	1.52
2	B	559	G	C6-N1	7.29	1.44	1.39
1	A	23	G	C5-C4	7.29	1.43	1.38
2	B	23	G	C8-N7	-7.29	1.26	1.30
2	B	950	G	C2'-C1'	-7.29	1.45	1.53
2	B	2880	C	N3-C4	7.29	1.39	1.33
1	A	66	A	C5-C4	7.29	1.43	1.38
2	B	197	A	P-O5'	-7.29	1.52	1.59
2	B	1456	G	C4'-C3'	-7.29	1.45	1.53
2	B	636	G	N7-C5	-7.28	1.34	1.39
2	B	1061	U	C5'-C4'	7.28	1.60	1.51
2	B	1329	U	P-O5'	-7.28	1.52	1.59
2	B	561	G	N1-C2	7.28	1.43	1.37
2	B	2198	A	C2'-C1'	-7.28	1.45	1.53
17	U	6	ARG	NE-CZ	7.28	1.42	1.33
2	B	1277	G	C6-N1	-7.28	1.34	1.39
2	B	1518	C	C5-C6	-7.28	1.28	1.34
2	B	483	A	C6-N1	-7.28	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2871	U	O3'-P	-7.28	1.52	1.61
2	B	7	G	C2-N3	7.28	1.38	1.32
2	B	432	A	C6-N1	7.28	1.40	1.35
2	B	1025	G	C6-N1	-7.28	1.34	1.39
2	B	1501	G	N3-C4	7.28	1.40	1.35
2	B	529	A	N9-C8	-7.28	1.31	1.37
2	B	664	G	N9-C8	-7.28	1.32	1.37
2	B	2853	C	N1-C6	7.28	1.41	1.37
2	B	775	G	C4'-C3'	7.27	1.61	1.53
2	B	735	A	O3'-P	-7.27	1.52	1.61
2	B	760	G	P-O5'	-7.27	1.52	1.59
2	B	925	A	N3-C4	-7.27	1.30	1.34
2	B	1269	A	O3'-P	-7.27	1.52	1.61
2	B	1448	G	N9-C4	-7.27	1.32	1.38
2	B	283	G	C8-N7	7.27	1.35	1.30
2	B	431	U	O3'-P	-7.27	1.52	1.61
2	B	1154	G	C5-C6	-7.27	1.35	1.42
2	B	1952	A	N3-C4	-7.27	1.30	1.34
2	B	2378	A	N9-C8	-7.27	1.31	1.37
2	B	2417	C	N1-C6	7.27	1.41	1.37
2	B	807	U	C4'-C3'	-7.27	1.45	1.53
2	B	1707	G	C3'-C2'	-7.27	1.44	1.52
2	B	1810	A	C5-C6	-7.27	1.34	1.41
2	B	2123	G	C2-N3	7.27	1.38	1.32
2	B	2521	C	O3'-P	-7.27	1.52	1.61
2	B	2882	A	N9-C4	-7.27	1.33	1.37
2	B	331	C	O3'-P	-7.27	1.52	1.61
2	B	2760	C	N1-C2	7.27	1.47	1.40
2	B	222	A	C6-N6	7.27	1.39	1.33
2	B	759	G	N3-C4	-7.27	1.30	1.35
2	B	934	U	O4'-C1'	7.27	1.51	1.41
2	B	1421	G	N1-C2	7.27	1.43	1.37
2	B	1614	A	P-O5'	-7.27	1.52	1.59
2	B	2768	U	C3'-C2'	-7.26	1.44	1.52
2	B	604	G	N9-C8	-7.26	1.32	1.37
2	B	792	A	N7-C5	-7.26	1.34	1.39
2	B	1123	C	O3'-P	-7.26	1.52	1.61
2	B	1765	U	C2-N3	7.26	1.42	1.37
2	B	1950	G	N7-C5	7.26	1.43	1.39
2	B	2716	C	C2'-C1'	-7.26	1.45	1.53
2	B	663	G	N9-C4	-7.26	1.32	1.38
2	B	1265	A	C2'-C1'	-7.26	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2066	C	C5'-C4'	7.26	1.60	1.51
2	B	2323	G	C2'-C1'	-7.26	1.45	1.53
2	B	603	A	C3'-C2'	-7.26	1.44	1.52
2	B	2487	G	O3'-P	-7.26	1.52	1.61
2	B	119	A	N3-C4	-7.26	1.30	1.34
2	B	347	A	N9-C4	-7.26	1.33	1.37
2	B	1813	G	P-O5'	-7.26	1.52	1.59
2	B	2276	G	C2-N3	7.26	1.38	1.32
2	B	2765	A	N9-C4	-7.26	1.33	1.37
2	B	2781	A	P-O5'	-7.26	1.52	1.59
2	B	783	A	C8-N7	-7.25	1.26	1.31
2	B	1332	G	N9-C8	-7.25	1.32	1.37
2	B	2095	A	N9-C8	-7.25	1.31	1.37
2	B	326	G	C2'-C1'	-7.25	1.45	1.53
2	B	1258	U	O3'-P	-7.25	1.52	1.61
2	B	1426	G	O3'-P	-7.25	1.52	1.61
2	B	2379	G	N3-C4	-7.25	1.30	1.35
2	B	90	U	C4-O4	7.25	1.29	1.23
2	B	772	C	C4-N4	7.25	1.40	1.33
2	B	1421	G	C8-N7	-7.25	1.26	1.30
2	B	2277	G	C4'-C3'	-7.25	1.45	1.53
2	B	2285	C	C2'-C1'	-7.25	1.45	1.53
2	B	2470	G	C2'-C1'	-7.25	1.45	1.53
2	B	2803	G	C2'-C1'	-7.25	1.45	1.53
2	B	767	U	N3-C4	7.25	1.45	1.38
2	B	1700	A	C3'-C2'	-7.25	1.44	1.52
2	B	2088	A	N9-C4	-7.25	1.33	1.37
2	B	48	G	C5'-C4'	-7.25	1.42	1.51
2	B	777	G	C5-C4	-7.25	1.33	1.38
2	B	1780	A	C6-N1	7.25	1.40	1.35
2	B	1989	G	N3-C4	-7.25	1.30	1.35
2	B	2497	A	C5-C4	7.25	1.43	1.38
2	B	2005	A	C5'-C4'	7.25	1.60	1.51
2	B	2475	C	C4-N4	7.25	1.40	1.33
2	B	2712	C	C5'-C4'	7.25	1.60	1.51
2	B	189	G	C5-C4	-7.24	1.33	1.38
2	B	226	A	C2'-C1'	-7.24	1.45	1.53
2	B	461	C	P-O5'	-7.24	1.52	1.59
2	B	572	A	C4'-O4'	-7.24	1.36	1.45
2	B	757	G	C3'-C2'	-7.24	1.44	1.52
2	B	1259	G	C2-N3	7.24	1.38	1.32
2	B	2417	C	P-O5'	-7.24	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2493	U	C2-N3	7.24	1.42	1.37
2	B	224	U	C4-C5	7.24	1.50	1.43
2	B	2087	G	C4'-C3'	-7.24	1.45	1.53
2	B	2279	G	N7-C5	-7.24	1.34	1.39
2	B	502	A	N7-C5	-7.24	1.34	1.39
2	B	846	U	C2-N3	7.24	1.42	1.37
2	B	1303	G	C2-N3	7.24	1.38	1.32
2	B	48	G	N1-C2	7.24	1.43	1.37
2	B	119	A	C5'-C4'	7.24	1.60	1.51
2	B	921	C	C5-C6	-7.24	1.28	1.34
2	B	1785	A	N7-C5	7.24	1.43	1.39
1	A	92	C	C2-N3	-7.24	1.29	1.35
2	B	1733	G	O3'-P	-7.24	1.52	1.61
2	B	1773	A	C5-C6	-7.24	1.34	1.41
2	B	2056	G	N3-C4	-7.24	1.30	1.35
2	B	2801	G	C5-C4	7.24	1.43	1.38
2	B	1427	A	O3'-P	-7.23	1.52	1.61
2	B	1346	G	C6-N1	-7.23	1.34	1.39
2	B	1536	C	C5'-C4'	7.23	1.60	1.51
2	B	1894	C	C2-N3	7.23	1.41	1.35
1	A	93	C	O4'-C1'	-7.23	1.32	1.41
2	B	872	U	C2'-C1'	-7.23	1.45	1.53
2	B	2872	A	C8-N7	-7.23	1.26	1.31
2	B	912	C	O3'-P	-7.23	1.52	1.61
2	B	1642	G	N7-C5	7.23	1.43	1.39
2	B	1805	A	C6-N1	7.23	1.40	1.35
2	B	1902	C	N1-C6	7.23	1.41	1.37
2	B	1890	A	C5-C4	7.23	1.43	1.38
2	B	169	G	N3-C4	-7.22	1.30	1.35
2	B	750	A	C6-N1	7.22	1.40	1.35
2	B	1010	A	N7-C5	-7.22	1.34	1.39
2	B	1517	G	O3'-P	-7.22	1.52	1.61
2	B	2018	G	C2-N2	7.22	1.41	1.34
2	B	2096	C	C5'-C4'	-7.22	1.42	1.51
2	B	2168	G	N7-C5	-7.22	1.34	1.39
2	B	2198	A	N9-C4	-7.22	1.33	1.37
2	B	2367	G	C2-N3	7.22	1.38	1.32
2	B	402	A	C2'-C1'	-7.22	1.45	1.53
2	B	2494	G	N9-C8	-7.22	1.32	1.37
2	B	2542	A	O4'-C1'	-7.22	1.32	1.41
2	B	2728	U	C2'-C1'	-7.22	1.45	1.53
2	B	2814	A	N7-C5	-7.22	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1954	G	N1-C2	7.22	1.43	1.37
2	B	2777	G	C3'-C2'	-7.22	1.44	1.52
2	B	352	A	C2'-C1'	-7.22	1.45	1.53
2	B	640	C	P-O5'	-7.22	1.52	1.59
2	B	1461	C	C4'-C3'	7.22	1.61	1.53
2	B	1477	A	C8-N7	-7.22	1.26	1.31
2	B	185	G	P-O5'	-7.22	1.52	1.59
2	B	1589	U	P-O5'	-7.22	1.52	1.59
2	B	115	C	P-O5'	-7.22	1.52	1.59
2	B	2648	G	N1-C2	7.22	1.43	1.37
2	B	76	C	N3-C4	7.21	1.39	1.33
2	B	984	A	C8-N7	-7.21	1.26	1.31
2	B	1770	G	C5-C4	-7.21	1.33	1.38
2	B	1824	G	O3'-P	-7.21	1.52	1.61
2	B	2499	C	O4'-C1'	-7.21	1.32	1.41
2	B	629	G	N9-C8	7.21	1.42	1.37
2	B	2350	C	C2'-C1'	-7.21	1.45	1.53
2	B	1046	A	N9-C8	7.21	1.43	1.37
2	B	1341	G	C5-C4	-7.21	1.33	1.38
2	B	1993	U	C2-N3	7.21	1.42	1.37
2	B	2381	A	N9-C4	7.21	1.42	1.37
1	A	103	U	C5'-C4'	7.21	1.60	1.51
2	B	2535	G	C2-N2	7.21	1.41	1.34
2	B	1174	U	O4'-C1'	-7.21	1.32	1.41
2	B	1390	U	P-O5'	-7.21	1.52	1.59
2	B	2234	G	N1-C2	7.21	1.43	1.37
2	B	2481	G	N9-C8	-7.21	1.32	1.37
2	B	2725	A	C6-N6	-7.21	1.28	1.33
2	B	188	G	N9-C8	-7.21	1.32	1.37
2	B	213	A	N7-C5	-7.21	1.34	1.39
2	B	489	G	N1-C2	7.21	1.43	1.37
2	B	2473	U	P-O5'	-7.21	1.52	1.59
2	B	2780	G	C8-N7	7.21	1.35	1.30
2	B	922	C	C2-N3	-7.21	1.29	1.35
2	B	1286	A	C2'-C1'	-7.21	1.45	1.53
2	B	1566	A	O3'-P	-7.21	1.52	1.61
2	B	140	C	P-O5'	-7.20	1.52	1.59
2	B	356	G	N9-C4	-7.20	1.32	1.38
2	B	976	G	P-O5'	7.20	1.67	1.59
2	B	2239	G	N1-C2	7.20	1.43	1.37
2	B	2523	G	N9-C4	-7.20	1.32	1.38
2	B	248	G	C5'-C4'	7.20	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	146	A	N7-C5	-7.20	1.34	1.39
2	B	213	A	C2'-C1'	-7.20	1.45	1.53
2	B	819	A	N9-C8	-7.20	1.31	1.37
2	B	1544	A	C3'-C2'	-7.20	1.44	1.52
2	B	2315	G	C2'-C1'	-7.20	1.45	1.53
2	B	128	C	N3-C4	7.20	1.39	1.33
2	B	530	G	N9-C4	7.20	1.43	1.38
2	B	859	G	N3-C4	-7.20	1.30	1.35
2	B	1516	G	P-O5'	-7.20	1.52	1.59
2	B	111	A	P-O5'	-7.20	1.52	1.59
2	B	2156	G	N9-C8	7.20	1.42	1.37
2	B	319	G	C4'-C3'	7.20	1.61	1.53
2	B	1848	A	C4'-C3'	7.20	1.61	1.53
2	B	1921	G	C5'-C4'	7.20	1.59	1.51
2	B	2052	A	N7-C5	-7.19	1.34	1.39
2	B	747	U	C3'-C2'	-7.19	1.44	1.52
2	B	1056	G	C5-C4	7.19	1.43	1.38
2	B	1771	C	C4-N4	7.19	1.40	1.33
2	B	1791	A	O3'-P	-7.19	1.52	1.61
2	B	461	C	C4-N4	7.19	1.40	1.33
2	B	1679	A	N7-C5	-7.19	1.34	1.39
2	B	2098	U	C2'-C1'	-7.19	1.45	1.53
2	B	2881	U	C2-N3	-7.19	1.32	1.37
1	A	46	A	O4'-C1'	-7.19	1.32	1.41
2	B	244	A	N3-C4	-7.19	1.30	1.34
2	B	2408	U	C3'-C2'	-7.19	1.44	1.52
2	B	1787	A	C6-N6	7.19	1.39	1.33
2	B	105	C	C4-C5	-7.18	1.37	1.43
2	B	362	A	N7-C5	-7.18	1.34	1.39
2	B	867	C	N1-C6	7.18	1.41	1.37
2	B	1016	G	C8-N7	7.18	1.35	1.30
2	B	2464	G	C2'-C1'	-7.18	1.45	1.53
2	B	682	G	C2'-C1'	-7.18	1.45	1.53
2	B	856	G	C3'-C2'	-7.18	1.44	1.52
2	B	920	A	C5-C4	-7.18	1.33	1.38
2	B	1538	G	C2-N3	7.18	1.38	1.32
2	B	1577	C	C4-C5	7.18	1.48	1.43
2	B	2298	A	C2'-C1'	-7.18	1.45	1.53
2	B	2817	U	C2'-C1'	-7.18	1.45	1.53
20	E	165	HIS	N-CA	-7.18	1.31	1.46
1	A	53	A	N7-C5	-7.18	1.34	1.39
2	B	895	U	O4'-C1'	-7.18	1.32	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	42	A	C6-N6	7.18	1.39	1.33
2	B	1897	G	C2-N3	7.18	1.38	1.32
2	B	1900	A	C3'-C2'	7.18	1.60	1.52
2	B	2043	C	C2'-C1'	-7.18	1.45	1.53
2	B	2147	A	C6-N6	7.18	1.39	1.33
2	B	2178	C	C4-N4	7.18	1.40	1.33
2	B	2384	U	O3'-P	-7.18	1.52	1.61
2	B	2409	G	C3'-C2'	-7.18	1.44	1.52
2	B	1551	A	C2'-C1'	-7.18	1.45	1.53
2	B	1659	G	C5-C4	7.18	1.43	1.38
2	B	1003	G	N7-C5	-7.17	1.34	1.39
2	B	1702	G	N7-C5	7.17	1.43	1.39
2	B	1808	A	C6-N6	7.17	1.39	1.33
2	B	2541	A	C2'-C1'	-7.17	1.45	1.53
2	B	2879	A	O3'-P	-7.17	1.52	1.61
2	B	1582	C	O3'-P	-7.17	1.52	1.61
2	B	1814	G	N7-C5	-7.17	1.34	1.39
2	B	1324	G	C2-N3	7.17	1.38	1.32
2	B	1986	C	N3-C4	7.17	1.39	1.33
2	B	2372	U	O3'-P	-7.17	1.52	1.61
2	B	30	G	C5-C6	-7.17	1.35	1.42
2	B	1389	G	N9-C4	-7.17	1.32	1.38
2	B	2332	C	N1-C6	7.17	1.41	1.37
2	B	2383	G	C4'-C3'	-7.17	1.45	1.53
1	A	19	C	P-O5'	-7.17	1.52	1.59
2	B	431	U	N1-C2	7.17	1.45	1.38
2	B	2063	C	C2-N3	-7.17	1.30	1.35
2	B	2107	G	C2'-C1'	-7.17	1.45	1.53
2	B	2184	A	O3'-P	7.17	1.69	1.61
2	B	2733	A	C4'-C3'	-7.17	1.45	1.53
2	B	16	C	C4'-C3'	-7.17	1.45	1.53
2	B	465	G	N3-C4	-7.17	1.30	1.35
2	B	658	U	C2-N3	7.17	1.42	1.37
2	B	1225	G	C5-C6	-7.17	1.35	1.42
2	B	2217	G	C2-N2	7.17	1.41	1.34
2	B	934	U	C5-C6	7.17	1.40	1.34
2	B	295	G	C2'-C1'	-7.16	1.45	1.53
2	B	1220	G	C4'-C3'	-7.16	1.45	1.53
2	B	1674	G	N1-C2	7.16	1.43	1.37
2	B	2040	G	C5-C6	-7.16	1.35	1.42
2	B	2565	A	C8-N7	-7.16	1.26	1.31
2	B	1439	A	N7-C5	-7.16	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	92	U	C5'-C4'	7.16	1.59	1.51
2	B	1465	G	N1-C2	7.16	1.43	1.37
2	B	849	A	N9-C4	-7.16	1.33	1.37
2	B	1501	G	C8-N7	-7.16	1.26	1.30
2	B	1707	G	N7-C5	-7.16	1.34	1.39
2	B	2247	A	C8-N7	-7.16	1.26	1.31
2	B	309	A	N9-C4	-7.16	1.33	1.37
2	B	402	A	C5-C4	7.16	1.43	1.38
2	B	1959	G	C2-N2	7.16	1.41	1.34
2	B	2020	A	C6-N6	7.16	1.39	1.33
2	B	821	A	C2'-C1'	-7.15	1.45	1.53
2	B	1204	A	C2'-C1'	-7.15	1.45	1.53
2	B	1835	G	C4'-C3'	7.15	1.61	1.53
2	B	2869	G	N3-C4	-7.15	1.30	1.35
2	B	1503	A	C6-N1	7.15	1.40	1.35
2	B	54	G	N1-C2	7.15	1.43	1.37
2	B	695	G	C5'-C4'	7.15	1.59	1.51
2	B	713	G	P-O5'	-7.15	1.52	1.59
2	B	2341	G	N9-C8	7.15	1.42	1.37
2	B	1346	G	N9-C8	-7.15	1.32	1.37
2	B	34	U	C2-N3	7.15	1.42	1.37
2	B	407	G	C5-C4	7.15	1.43	1.38
2	B	463	G	C5-C6	-7.15	1.35	1.42
2	B	490	C	O3'-P	-7.15	1.52	1.61
2	B	797	G	N9-C8	-7.15	1.32	1.37
2	B	870	U	C4'-C3'	-7.15	1.45	1.53
2	B	1383	A	C6-N6	7.15	1.39	1.33
2	B	2887	A	N9-C4	-7.15	1.33	1.37
2	B	1244	A	C5-C4	-7.15	1.33	1.38
2	B	1583	A	C6-N6	7.15	1.39	1.33
2	B	407	G	P-O5'	-7.14	1.52	1.59
2	B	584	C	N1-C2	-7.14	1.33	1.40
2	B	806	C	P-O5'	-7.14	1.52	1.59
2	B	1336	A	O3'-P	-7.14	1.52	1.61
2	B	2590	A	N7-C5	-7.14	1.34	1.39
2	B	1989	G	N9-C4	-7.14	1.32	1.38
2	B	2691	C	C2-N3	-7.14	1.30	1.35
2	B	223	A	C8-N7	-7.14	1.26	1.31
2	B	285	G	N7-C5	-7.14	1.34	1.39
2	B	435	C	C4'-C3'	7.14	1.61	1.53
2	B	622	G	O3'-P	-7.14	1.52	1.61
2	B	862	G	N3-C4	-7.14	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1212	G	O3'-P	-7.14	1.52	1.61
2	B	2626	C	C4-C5	7.14	1.48	1.43
1	A	79	G	C5-C6	-7.14	1.35	1.42
2	B	346	A	C6-N6	7.14	1.39	1.33
2	B	2428	G	C8-N7	-7.14	1.26	1.30
2	B	289	G	C2-N3	7.14	1.38	1.32
2	B	515	A	O3'-P	-7.14	1.52	1.61
2	B	2007	U	C4-C5	-7.14	1.37	1.43
2	B	2217	G	C2-N3	7.14	1.38	1.32
2	B	2258	C	C3'-C2'	-7.14	1.44	1.52
2	B	8	C	C2-N3	-7.13	1.30	1.35
2	B	460	A	P-O5'	-7.13	1.52	1.59
2	B	1589	U	O3'-P	-7.13	1.52	1.61
2	B	2600	A	C8-N7	-7.13	1.26	1.31
2	B	320	A	C2'-C1'	-7.13	1.45	1.53
2	B	1936	A	C5-C6	7.13	1.47	1.41
2	B	19	A	N9-C4	-7.13	1.33	1.37
2	B	78	U	C3'-C2'	-7.13	1.45	1.52
2	B	1190	G	C2'-C1'	-7.13	1.45	1.53
2	B	1296	G	N9-C8	7.13	1.42	1.37
2	B	2424	C	N1-C6	7.13	1.41	1.37
2	B	2814	A	C6-N6	7.13	1.39	1.33
2	B	525	U	C3'-C2'	-7.13	1.45	1.52
2	B	1934	C	N3-C4	7.13	1.39	1.33
2	B	1935	G	N9-C8	7.13	1.42	1.37
2	B	2013	A	C2-N3	-7.13	1.27	1.33
2	B	2427	C	C5'-C4'	7.13	1.59	1.51
2	B	2497	A	N7-C5	-7.13	1.34	1.39
2	B	355	U	C5-C6	7.13	1.40	1.34
2	B	361	G	N7-C5	-7.13	1.34	1.39
2	B	715	A	C5'-C4'	7.13	1.59	1.51
2	B	941	A	O3'-P	-7.13	1.52	1.61
2	B	1913	A	C5'-C4'	7.13	1.59	1.51
2	B	2400	G	C5'-C4'	7.13	1.59	1.51
2	B	70	G	C2'-C1'	-7.12	1.45	1.53
2	B	509	C	C5-C6	-7.12	1.28	1.34
2	B	533	G	C8-N7	-7.12	1.26	1.30
2	B	2831	G	C5-C4	-7.12	1.33	1.38
2	B	1418	G	C5-C6	-7.12	1.35	1.42
2	B	2811	G	C1'-N9	-7.12	1.36	1.46
2	B	1502	A	C6-N6	7.12	1.39	1.33
2	B	1551	A	C6-N1	-7.12	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2887	A	C5-C4	-7.12	1.33	1.38
2	B	496	G	N7-C5	-7.12	1.34	1.39
2	B	722	A	N7-C5	-7.12	1.34	1.39
2	B	1538	G	N7-C5	-7.12	1.34	1.39
2	B	2378	A	C2'-C1'	-7.12	1.45	1.53
2	B	362	A	C5'-C4'	7.12	1.59	1.51
2	B	645	C	C4-N4	7.12	1.40	1.33
2	B	782	A	N9-C8	-7.12	1.32	1.37
2	B	1596	A	C6-N6	7.12	1.39	1.33
2	B	2339	C	N3-C4	7.12	1.39	1.33
2	B	2439	A	C3'-C2'	7.12	1.60	1.52
2	B	258	G	N7-C5	-7.11	1.34	1.39
2	B	426	C	N3-C4	7.11	1.39	1.33
2	B	543	G	N7-C5	-7.11	1.34	1.39
2	B	1700	A	O3'-P	-7.11	1.52	1.61
2	B	1988	G	C5-C4	-7.11	1.33	1.38
2	B	2027	G	N7-C5	-7.11	1.34	1.39
2	B	2740	A	C4'-C3'	-7.11	1.45	1.53
2	B	868	U	P-O5'	-7.11	1.52	1.59
2	B	940	G	C8-N7	7.11	1.35	1.30
2	B	1182	G	C2'-C1'	-7.11	1.45	1.53
2	B	1767	G	N7-C5	7.11	1.43	1.39
2	B	1909	C	C5'-C4'	7.11	1.59	1.51
2	B	2553	G	C5'-C4'	7.11	1.59	1.51
2	B	2707	U	C4'-C3'	7.11	1.60	1.53
1	A	64	G	N9-C8	7.11	1.42	1.37
1	A	109	A	C8-N7	-7.11	1.26	1.31
2	B	210	C	O3'-P	-7.11	1.52	1.61
2	B	1302	A	P-O5'	-7.11	1.52	1.59
2	B	1803	A	N9-C4	-7.11	1.33	1.37
2	B	11	C	C2'-C1'	7.11	1.61	1.53
2	B	1946	U	C2'-C1'	-7.11	1.45	1.53
2	B	871	U	O3'-P	-7.10	1.52	1.61
2	B	1019	U	O3'-P	-7.10	1.52	1.61
2	B	1174	U	N3-C4	7.10	1.44	1.38
2	B	1981	A	P-O5'	-7.10	1.52	1.59
2	B	648	G	C2-N3	7.10	1.38	1.32
2	B	741	U	N1-C2	-7.10	1.32	1.38
2	B	2177	C	N1-C6	7.10	1.41	1.37
2	B	2382	G	C2-N3	7.10	1.38	1.32
2	B	2429	G	N7-C5	-7.10	1.34	1.39
2	B	2510	C	C4-C5	7.10	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1277	G	C3'-C2'	-7.10	1.45	1.52
2	B	2214	C	P-O5'	-7.10	1.52	1.59
2	B	2505	G	C4'-C3'	-7.10	1.45	1.53
2	B	555	G	P-O5'	-7.10	1.52	1.59
2	B	1624	U	N1-C2	7.10	1.45	1.38
1	A	100	G	C4'-C3'	-7.10	1.45	1.53
2	B	190	A	N7-C5	-7.10	1.34	1.39
2	B	784	G	C5-C4	7.10	1.43	1.38
2	B	1391	U	C2-N3	7.10	1.42	1.37
2	B	1665	A	C2'-C1'	-7.10	1.45	1.53
2	B	1727	C	P-O5'	-7.10	1.52	1.59
2	B	2523	G	N7-C5	-7.10	1.34	1.39
2	B	2743	U	C4'-C3'	7.10	1.60	1.53
2	B	188	G	C4'-C3'	-7.10	1.45	1.53
2	B	1525	A	P-O5'	-7.10	1.52	1.59
2	B	208	C	P-O5'	-7.09	1.52	1.59
2	B	1500	G	C2'-C1'	-7.09	1.45	1.53
2	B	2172	U	O3'-P	-7.09	1.52	1.61
2	B	2852	G	N1-C2	-7.09	1.32	1.37
2	B	143	C	N1-C6	-7.09	1.32	1.37
2	B	1425	G	N9-C4	-7.09	1.32	1.38
2	B	19	A	C2-N3	7.09	1.40	1.33
2	B	295	G	N3-C4	-7.09	1.30	1.35
2	B	2037	A	O3'-P	-7.09	1.52	1.61
2	B	2261	C	C2-N3	7.09	1.41	1.35
2	B	2461	A	N7-C5	-7.09	1.34	1.39
2	B	2718	G	N9-C4	-7.09	1.32	1.38
2	B	2159	G	N9-C8	-7.09	1.32	1.37
2	B	617	G	C5-C6	-7.09	1.35	1.42
2	B	901	C	O3'-P	-7.09	1.52	1.61
2	B	373	U	N1-C6	7.09	1.44	1.38
2	B	990	A	C8-N7	-7.09	1.26	1.31
2	B	1277	G	P-O5'	-7.09	1.52	1.59
2	B	1379	U	C4'-C3'	7.09	1.60	1.53
2	B	1599	U	C2-N3	-7.09	1.32	1.37
2	B	408	G	C2-N2	7.08	1.41	1.34
2	B	901	C	C4'-C3'	7.08	1.60	1.53
2	B	1745	A	C2'-C1'	-7.08	1.45	1.53
2	B	1842	G	N7-C5	-7.08	1.34	1.39
2	B	2221	G	C6-N1	-7.08	1.34	1.39
2	B	2849	U	O3'-P	-7.08	1.52	1.61
2	B	979	A	O3'-P	-7.08	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1177	G	N7-C5	-7.08	1.35	1.39
2	B	1360	G	P-O5'	-7.08	1.52	1.59
2	B	2368	C	C3'-O3'	7.08	1.52	1.42
2	B	52	A	C6-N6	7.08	1.39	1.33
2	B	103	A	N7-C5	-7.08	1.35	1.39
2	B	1020	A	N9-C8	7.08	1.43	1.37
2	B	1124	G	N9-C4	7.08	1.43	1.38
2	B	1332	G	C5-C6	-7.08	1.35	1.42
2	B	2658	C	C2-N3	-7.08	1.30	1.35
2	B	200	U	O3'-P	-7.08	1.52	1.61
2	B	241	A	C4'-O4'	-7.08	1.36	1.45
2	B	1078	U	C5'-C4'	7.08	1.59	1.51
2	B	1347	A	C2'-C1'	-7.08	1.45	1.53
2	B	1377	G	C2-N3	7.08	1.38	1.32
2	B	1440	U	N1-C2	-7.08	1.32	1.38
2	B	1573	G	C4'-C3'	-7.08	1.45	1.53
2	B	1668	A	N3-C4	7.08	1.39	1.34
1	A	67	G	N7-C5	-7.08	1.35	1.39
2	B	663	G	N3-C4	-7.08	1.30	1.35
2	B	1069	A	C2'-O2'	-7.08	1.32	1.41
2	B	2373	G	N9-C8	-7.08	1.32	1.37
2	B	2623	G	O3'-P	-7.08	1.52	1.61
2	B	815	C	C4-N4	7.07	1.40	1.33
2	B	1909	C	C4-C5	7.07	1.48	1.43
2	B	2192	U	N3-C4	7.07	1.44	1.38
20	E	110	SER	CA-CB	7.07	1.63	1.52
2	B	721	A	C6-N6	-7.07	1.28	1.33
2	B	2437	G	C4'-O4'	-7.07	1.36	1.45
2	B	2659	G	C2'-C1'	-7.07	1.45	1.53
2	B	446	G	C8-N7	-7.07	1.26	1.30
2	B	502	A	N1-C2	7.07	1.40	1.34
2	B	1278	C	N1-C2	-7.07	1.33	1.40
2	B	1732	C	C2'-C1'	-7.07	1.45	1.53
2	B	1855	U	N3-C4	7.07	1.44	1.38
2	B	2030	A	N1-C2	-7.07	1.27	1.34
2	B	2183	A	C4'-C3'	-7.07	1.45	1.53
16	2	31	ILE	CA-CB	-7.07	1.38	1.54
2	B	707	G	C2'-C1'	-7.07	1.45	1.53
2	B	744	U	N1-C6	-7.07	1.31	1.38
2	B	2142	A	N3-C4	-7.07	1.30	1.34
2	B	2428	G	N9-C8	-7.07	1.32	1.37
2	B	643	A	C5-C4	-7.07	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	707	G	C6-N1	-7.07	1.34	1.39
2	B	758	C	O3'-P	-7.07	1.52	1.61
2	B	1568	G	N7-C5	-7.07	1.35	1.39
2	B	1789	A	N9-C4	-7.07	1.33	1.37
2	B	2437	G	C2-N3	7.07	1.38	1.32
14	D	45	TYR	CG-CD1	7.07	1.48	1.39
2	B	84	A	N9-C8	7.06	1.43	1.37
2	B	659	G	N9-C4	-7.06	1.32	1.38
2	B	879	G	N9-C4	7.06	1.43	1.38
2	B	81	G	N1-C2	7.06	1.43	1.37
2	B	269	C	N1-C6	-7.06	1.32	1.37
2	B	561	G	N9-C4	7.06	1.43	1.38
2	B	1021	A	N7-C5	-7.06	1.35	1.39
2	B	1848	A	N7-C5	-7.06	1.35	1.39
2	B	1739	A	N7-C5	-7.06	1.35	1.39
2	B	1777	U	C3'-C2'	-7.06	1.45	1.52
2	B	463	G	C5-C4	7.06	1.43	1.38
2	B	1054	A	N9-C4	7.06	1.42	1.37
2	B	1967	C	N1-C2	7.06	1.47	1.40
2	B	2191	A	P-O5'	-7.06	1.52	1.59
2	B	2319	G	N7-C5	-7.06	1.35	1.39
2	B	2442	C	C4'-O4'	-7.06	1.36	1.45
2	B	203	A	C2'-C1'	-7.06	1.45	1.53
2	B	271	G	C5-C4	7.06	1.43	1.38
2	B	408	G	N7-C5	-7.06	1.35	1.39
2	B	471	A	O3'-P	-7.06	1.52	1.61
2	B	682	G	N7-C5	-7.06	1.35	1.39
2	B	1054	A	C3'-C2'	-7.06	1.45	1.52
2	B	1261	C	C4-C5	7.06	1.48	1.43
2	B	938	G	C5-C6	-7.06	1.35	1.42
2	B	1752	C	P-O5'	-7.06	1.52	1.59
2	B	1822	C	C4'-C3'	-7.06	1.45	1.53
2	B	143	C	O3'-P	-7.05	1.52	1.61
2	B	1062	G	N3-C4	7.05	1.40	1.35
2	B	1359	A	N9-C4	7.05	1.42	1.37
2	B	2600	A	C5'-C4'	7.05	1.59	1.51
2	B	267	C	C5-C6	-7.05	1.28	1.34
2	B	1104	C	N3-C4	7.05	1.38	1.33
2	B	2846	G	C6-N1	7.05	1.44	1.39
1	A	76	G	N7-C5	-7.05	1.35	1.39
2	B	2188	U	C2-N3	7.05	1.42	1.37
2	B	2326	C	C4-N4	7.05	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2818	U	C4-C5	7.05	1.49	1.43
2	B	1095	A	O3'-P	-7.05	1.52	1.61
2	B	2236	U	N1-C2	7.05	1.44	1.38
2	B	2321	U	C2-N3	7.05	1.42	1.37
2	B	1124	G	C2'-C1'	-7.05	1.45	1.53
2	B	2074	U	N1-C2	7.05	1.44	1.38
2	B	312	G	C2-N3	7.04	1.38	1.32
2	B	637	A	C2'-O2'	-7.04	1.32	1.41
2	B	766	U	C4'-C3'	-7.04	1.45	1.53
2	B	944	C	C3'-C2'	-7.04	1.45	1.52
2	B	2091	C	O3'-P	-7.04	1.52	1.61
2	B	2529	G	N1-C2	7.04	1.43	1.37
2	B	29	U	P-O5'	-7.04	1.52	1.59
2	B	954	G	C2'-C1'	-7.04	1.45	1.53
2	B	2462	C	C5-C6	-7.04	1.28	1.34
2	B	2507	C	C4-C5	-7.04	1.37	1.43
2	B	63	A	N7-C5	-7.04	1.35	1.39
2	B	332	A	P-O5'	-7.04	1.52	1.59
2	B	341	C	C2-N3	7.04	1.41	1.35
2	B	646	U	C2'-C1'	-7.04	1.45	1.53
2	B	1377	G	O3'-P	-7.04	1.52	1.61
2	B	1605	C	C2'-C1'	-7.04	1.45	1.53
2	B	1804	C	O4'-C1'	-7.04	1.32	1.41
2	B	2773	C	N3-C4	7.04	1.38	1.33
2	B	494	G	C8-N7	-7.04	1.26	1.30
2	B	1448	G	C5-C4	7.04	1.43	1.38
2	B	362	A	N3-C4	-7.03	1.30	1.34
2	B	875	G	N9-C4	7.03	1.43	1.38
2	B	2572	A	N9-C4	-7.03	1.33	1.37
2	B	1323	C	C2-O2	7.03	1.30	1.24
2	B	539	G	N7-C5	-7.03	1.35	1.39
2	B	2060	A	N7-C5	-7.03	1.35	1.39
2	B	2618	G	N9-C8	-7.03	1.32	1.37
2	B	1099	G	N7-C5	-7.03	1.35	1.39
2	B	1887	C	C2-N3	-7.03	1.30	1.35
2	B	494	G	C5-C6	-7.03	1.35	1.42
2	B	2179	C	C5'-C4'	7.03	1.59	1.51
2	B	2521	C	N3-C4	7.03	1.38	1.33
2	B	2854	G	N9-C4	-7.03	1.32	1.38
2	B	2	G	C5-C4	-7.03	1.33	1.38
2	B	720	U	N1-C6	-7.03	1.31	1.38
2	B	1622	G	N9-C4	-7.03	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2156	G	C5'-C4'	7.03	1.59	1.51
2	B	2294	G	C8-N7	-7.03	1.26	1.30
2	B	346	A	C2'-C1'	-7.02	1.45	1.53
2	B	553	G	N9-C8	7.02	1.42	1.37
2	B	210	C	C3'-O3'	7.02	1.51	1.42
2	B	879	G	C2-N3	7.02	1.38	1.32
2	B	1127	A	C8-N7	-7.02	1.26	1.31
2	B	1444	G	N3-C4	-7.02	1.30	1.35
2	B	1108	U	C4-C5	7.02	1.49	1.43
2	B	62	U	C4-O4	7.02	1.29	1.23
2	B	513	A	C5-C4	-7.02	1.33	1.38
2	B	1504	A	C8-N7	-7.02	1.26	1.31
2	B	2025	C	C2'-C1'	-7.02	1.45	1.53
2	B	436	C	C2'-C1'	-7.02	1.45	1.53
2	B	568	U	C2'-C1'	-7.01	1.45	1.53
2	B	1026	G	C4'-C3'	7.01	1.60	1.53
2	B	2674	G	N9-C4	-7.01	1.32	1.38
2	B	14	A	N7-C5	-7.01	1.35	1.39
2	B	141	G	C6-N1	7.01	1.44	1.39
2	B	1731	G	C5'-C4'	-7.01	1.43	1.51
2	B	2046	G	O4'-C1'	-7.01	1.32	1.41
1	A	7	G	C6-N1	7.01	1.44	1.39
2	B	126	A	P-O5'	-7.01	1.52	1.59
2	B	1226	A	C6-N1	7.01	1.40	1.35
2	B	2108	A	C6-N1	7.01	1.40	1.35
2	B	2110	G	C8-N7	-7.01	1.26	1.30
2	B	2179	C	N1-C6	7.01	1.41	1.37
2	B	2307	G	C6-N1	7.01	1.44	1.39
2	B	2515	C	C4-N4	7.01	1.40	1.33
2	B	389	G	N1-C2	7.01	1.43	1.37
2	B	997	G	N3-C4	-7.01	1.30	1.35
2	B	2015	A	C6-N1	7.01	1.40	1.35
2	B	127	A	C6-N6	7.01	1.39	1.33
2	B	1296	G	C8-N7	-7.01	1.26	1.30
2	B	1642	G	P-O5'	-7.01	1.52	1.59
2	B	1917	U	P-O5'	-7.01	1.52	1.59
2	B	594	U	C5-C6	-7.00	1.27	1.34
2	B	615	U	O3'-P	-7.00	1.52	1.61
2	B	642	U	P-O5'	-7.00	1.52	1.59
2	B	1157	G	C3'-C2'	-7.00	1.45	1.52
2	B	1333	G	N3-C4	-7.00	1.30	1.35
2	B	1373	A	C5-C4	7.00	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2033	A	C1'-N9	-7.00	1.37	1.46
2	B	2430	A	N3-C4	-7.00	1.30	1.34
2	B	2135	A	C3'-C2'	7.00	1.60	1.52
2	B	2467	C	C4-N4	7.00	1.40	1.33
2	B	440	C	C2-N3	-7.00	1.30	1.35
2	B	632	A	C3'-C2'	-7.00	1.45	1.52
2	B	1165	A	C6-N6	-7.00	1.28	1.33
2	B	2224	G	N9-C4	-7.00	1.32	1.38
2	B	2513	A	O3'-P	-7.00	1.52	1.61
2	B	2701	U	C3'-C2'	-7.00	1.45	1.52
1	A	21	G	N9-C8	-7.00	1.32	1.37
2	B	333	G	P-O5'	-7.00	1.52	1.59
2	B	796	C	N1-C6	-7.00	1.32	1.37
2	B	1684	G	N3-C4	7.00	1.40	1.35
2	B	1924	C	N3-C4	7.00	1.38	1.33
2	B	1048	A	N7-C5	-7.00	1.35	1.39
2	B	2237	G	C2'-C1'	7.00	1.61	1.53
2	B	24	G	C4'-C3'	-7.00	1.45	1.53
2	B	202	U	P-O5'	-6.99	1.52	1.59
2	B	273	G	N1-C2	6.99	1.43	1.37
2	B	1115	G	P-O5'	-6.99	1.52	1.59
2	B	2382	G	N9-C8	-6.99	1.32	1.37
2	B	335	C	P-O5'	-6.99	1.52	1.59
2	B	497	A	O3'-P	-6.99	1.52	1.61
2	B	810	U	O4'-C1'	-6.99	1.32	1.41
1	A	90	C	C5'-C4'	6.99	1.59	1.51
2	B	1082	U	C2-N3	6.99	1.42	1.37
2	B	1365	A	N9-C4	-6.99	1.33	1.37
2	B	1394	U	C2-N3	6.99	1.42	1.37
2	B	670	A	C2'-C1'	-6.99	1.45	1.53
2	B	705	A	N7-C5	-6.99	1.35	1.39
2	B	1347	A	N3-C4	-6.99	1.30	1.34
2	B	1639	C	P-O5'	-6.99	1.52	1.59
2	B	1694	C	C4'-O4'	-6.99	1.36	1.45
2	B	2256	G	O4'-C1'	-6.99	1.32	1.41
2	B	2657	A	N7-C5	-6.99	1.35	1.39
2	B	2818	U	C4'-C3'	-6.99	1.45	1.53
2	B	2845	U	O3'-P	-6.99	1.52	1.61
2	B	1317	G	N9-C8	-6.99	1.32	1.37
2	B	557	C	C3'-C2'	-6.99	1.45	1.52
2	B	815	C	C4-C5	6.99	1.48	1.43
2	B	1141	U	N1-C2	-6.99	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1433	A	N7-C5	6.99	1.43	1.39
2	B	2009	A	P-O5'	-6.99	1.52	1.59
2	B	2020	A	N9-C8	6.99	1.43	1.37
2	B	2031	A	O3'-P	-6.99	1.52	1.61
2	B	221	A	N9-C4	-6.98	1.33	1.37
2	B	1043	C	C3'-C2'	-6.98	1.45	1.52
2	B	2859	G	N7-C5	-6.98	1.35	1.39
2	B	26	G	C2-N2	6.98	1.41	1.34
2	B	190	A	C4'-C3'	-6.98	1.45	1.53
2	B	1453	A	C6-N6	6.98	1.39	1.33
2	B	1574	C	P-O5'	-6.98	1.52	1.59
2	B	2038	G	C2-N3	6.98	1.38	1.32
2	B	2102	G	P-O5'	-6.98	1.52	1.59
2	B	2868	A	N3-C4	-6.98	1.30	1.34
2	B	262	A	O4'-C1'	-6.98	1.32	1.41
2	B	628	G	N3-C4	-6.98	1.30	1.35
2	B	774	G	C4'-C3'	6.98	1.60	1.53
2	B	308	G	C2'-O2'	-6.98	1.32	1.41
2	B	458	G	C4'-O4'	6.98	1.54	1.45
2	B	728	G	C1'-N9	-6.98	1.37	1.46
2	B	960	A	C6-N1	6.98	1.40	1.35
2	B	1050	A	C5-C6	-6.98	1.34	1.41
2	B	1315	C	O3'-P	-6.98	1.52	1.61
2	B	1694	C	N1-C6	-6.98	1.32	1.37
2	B	2097	A	N9-C8	-6.98	1.32	1.37
2	B	2267	A	C5-C4	6.98	1.43	1.38
2	B	74	A	C8-N7	-6.97	1.26	1.31
2	B	2362	C	N3-C4	6.97	1.38	1.33
2	B	446	G	C1'-N9	-6.97	1.37	1.46
2	B	1182	G	C6-N1	-6.97	1.34	1.39
2	B	2448	A	C5'-C4'	6.97	1.59	1.51
2	B	2463	C	C1'-N1	-6.97	1.37	1.46
1	A	29	A	N3-C4	-6.97	1.30	1.34
1	A	29	A	O4'-C1'	-6.97	1.32	1.41
2	B	2631	G	C8-N7	-6.97	1.26	1.30
2	B	476	G	N7-C5	-6.97	1.35	1.39
2	B	794	A	N7-C5	-6.97	1.35	1.39
2	B	2417	C	C5-C6	6.97	1.40	1.34
2	B	2723	C	C4-C5	6.97	1.48	1.43
2	B	652	U	P-O5'	-6.97	1.52	1.59
2	B	2501	C	C4'-O4'	-6.97	1.36	1.45
2	B	2269	G	N7-C5	-6.97	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2587	A	C6-N6	6.97	1.39	1.33
2	B	2771	C	C4-C5	6.97	1.48	1.43
1	A	59	A	N9-C8	6.96	1.43	1.37
2	B	392	U	N3-C4	6.96	1.44	1.38
2	B	869	G	P-O5'	-6.96	1.52	1.59
2	B	1186	G	C2'-C1'	-6.96	1.45	1.53
2	B	2719	G	C5-C6	6.96	1.49	1.42
1	A	58	A	N9-C4	-6.96	1.33	1.37
2	B	312	G	C5'-C4'	6.96	1.59	1.51
2	B	408	G	P-O5'	-6.96	1.52	1.59
2	B	1345	C	P-O5'	-6.96	1.52	1.59
2	B	2837	A	C5-C6	-6.96	1.34	1.41
20	E	10	SER	CA-CB	6.96	1.63	1.52
2	B	2705	A	N7-C5	-6.96	1.35	1.39
1	A	96	G	C5'-C4'	6.96	1.59	1.51
2	B	579	G	N9-C8	-6.96	1.32	1.37
2	B	629	G	C5'-C4'	-6.96	1.43	1.51
2	B	1606	C	C2-N3	6.96	1.41	1.35
2	B	1984	G	C8-N7	-6.96	1.26	1.30
2	B	2835	A	N1-C2	-6.96	1.28	1.34
2	B	310	A	C6-N1	6.96	1.40	1.35
2	B	721	A	P-O5'	-6.96	1.52	1.59
2	B	1555	G	C2-N2	6.96	1.41	1.34
2	B	1763	G	N9-C4	-6.96	1.32	1.38
2	B	2701	U	N1-C2	6.96	1.44	1.38
2	B	2785	C	C2'-C1'	-6.96	1.45	1.53
2	B	1168	G	C2'-C1'	-6.95	1.45	1.53
2	B	2198	A	C1'-N9	-6.95	1.37	1.46
2	B	617	G	C2-N2	-6.95	1.27	1.34
2	B	2087	G	C3'-C2'	6.95	1.60	1.52
2	B	648	G	C2-N2	6.95	1.41	1.34
2	B	707	G	C2-N3	6.95	1.38	1.32
2	B	1162	G	N1-C2	6.95	1.43	1.37
2	B	1181	U	N3-C4	6.95	1.44	1.38
2	B	1196	C	C2-N3	-6.95	1.30	1.35
2	B	1367	A	N9-C4	6.95	1.42	1.37
5	L	33	ARG	NE-CZ	6.95	1.42	1.33
2	B	7	G	N9-C4	6.95	1.43	1.38
2	B	382	A	N3-C4	-6.95	1.30	1.34
2	B	644	A	C2'-C1'	-6.95	1.45	1.53
2	B	2452	C	C5'-C4'	6.95	1.59	1.51
2	B	2471	A	P-O5'	-6.95	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2896	C	C4'-C3'	-6.95	1.45	1.53
2	B	1275	A	C2'-C1'	-6.95	1.45	1.53
2	B	2051	A	C1'-N9	-6.95	1.37	1.46
2	B	2173	A	C5-C6	6.95	1.47	1.41
2	B	70	G	C2-N3	6.95	1.38	1.32
2	B	211	C	C2'-C1'	-6.95	1.45	1.53
2	B	2101	A	C4'-C3'	6.95	1.60	1.53
2	B	54	G	C2-N2	6.94	1.41	1.34
2	B	1211	C	N3-C4	6.94	1.38	1.33
2	B	2282	G	N1-C2	6.94	1.43	1.37
2	B	264	C	C5'-C4'	6.94	1.59	1.51
2	B	339	U	C3'-C2'	-6.94	1.45	1.52
2	B	1420	A	C5-C6	-6.94	1.34	1.41
2	B	85	G	N9-C4	-6.94	1.32	1.38
2	B	195	A	C8-N7	-6.94	1.26	1.31
2	B	455	C	N1-C6	6.94	1.41	1.37
2	B	535	G	P-O5'	-6.94	1.52	1.59
2	B	934	U	N1-C6	6.94	1.44	1.38
2	B	2158	A	C6-N1	6.94	1.40	1.35
3	0	73	ARG	NE-CZ	6.94	1.42	1.33
2	B	1527	G	N9-C4	-6.94	1.32	1.38
2	B	1838	C	N1-C2	6.94	1.47	1.40
2	B	2517	C	N3-C4	6.94	1.38	1.33
2	B	2833	U	C2'-C1'	-6.94	1.45	1.53
2	B	105	C	C4'-C3'	-6.94	1.45	1.53
2	B	473	G	P-O5'	-6.94	1.52	1.59
2	B	662	G	C5'-C4'	6.94	1.59	1.51
2	B	2778	A	N9-C4	-6.94	1.33	1.37
2	B	452	G	C8-N7	-6.94	1.26	1.30
2	B	543	G	C5'-C4'	6.94	1.59	1.51
2	B	1538	G	C8-N7	6.94	1.35	1.30
2	B	2573	C	C4'-O4'	-6.94	1.36	1.45
2	B	849	A	C5-C6	-6.93	1.34	1.41
2	B	1317	G	C6-N1	6.93	1.44	1.39
2	B	2100	G	C5'-C4'	6.93	1.59	1.51
2	B	2482	A	N9-C4	-6.93	1.33	1.37
2	B	429	A	C8-N7	-6.93	1.26	1.31
2	B	555	G	C5-C6	-6.93	1.35	1.42
2	B	660	C	C4-N4	6.93	1.40	1.33
2	B	1014	A	N3-C4	6.93	1.39	1.34
2	B	1179	G	N1-C2	6.93	1.43	1.37
2	B	1526	C	P-O5'	-6.93	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1532	A	N7-C5	-6.93	1.35	1.39
2	B	2801	G	C5'-C4'	6.93	1.59	1.51
2	B	540	C	N1-C6	6.93	1.41	1.37
2	B	1461	C	C4-C5	-6.93	1.37	1.43
2	B	1975	G	N3-C4	-6.93	1.30	1.35
2	B	2780	G	N9-C8	-6.93	1.32	1.37
2	B	2241	A	N9-C8	-6.93	1.32	1.37
2	B	2461	A	C8-N7	-6.93	1.26	1.31
1	A	61	G	P-O5'	-6.93	1.52	1.59
2	B	351	C	O4'-C1'	-6.93	1.32	1.41
2	B	530	G	C5-C6	-6.93	1.35	1.42
2	B	981	A	C2'-C1'	-6.93	1.45	1.53
2	B	1288	G	C2-N3	6.93	1.38	1.32
2	B	1795	C	C4'-O4'	-6.93	1.36	1.45
2	B	2772	C	P-O5'	-6.93	1.52	1.59
2	B	59	U	C2-O2	6.92	1.28	1.22
2	B	576	U	O4'-C1'	-6.92	1.32	1.41
2	B	1339	G	O3'-P	6.92	1.69	1.61
2	B	1605	C	O3'-P	-6.92	1.52	1.61
2	B	1957	C	C4-N4	6.92	1.40	1.33
2	B	2076	U	C3'-C2'	-6.92	1.45	1.52
2	B	457	A	N9-C8	-6.92	1.32	1.37
2	B	1615	C	C2'-C1'	-6.92	1.45	1.53
2	B	2399	G	C1'-N9	-6.92	1.37	1.46
2	B	1227	G	N7-C5	-6.92	1.35	1.39
2	B	1691	C	C5-C6	6.92	1.39	1.34
2	B	2166	U	C1'-N1	6.92	1.59	1.48
2	B	2183	A	N7-C5	-6.92	1.35	1.39
2	B	2895	G	C2'-C1'	-6.92	1.45	1.53
11	Q	81	GLY	CA-C	-6.92	1.40	1.51
2	B	28	A	N3-C4	-6.92	1.30	1.34
2	B	1619	G	C4'-O4'	-6.92	1.36	1.45
2	B	2512	C	P-O5'	-6.92	1.52	1.59
2	B	60	G	C4'-O4'	-6.92	1.36	1.45
2	B	495	G	C2-N3	6.92	1.38	1.32
2	B	632	A	N9-C8	6.92	1.43	1.37
2	B	2835	A	P-O5'	-6.92	1.52	1.59
1	A	31	C	C3'-C2'	-6.92	1.45	1.52
2	B	145	C	C4'-O4'	6.92	1.54	1.45
2	B	1116	G	C2-N3	6.92	1.38	1.32
2	B	1364	G	O4'-C1'	-6.92	1.32	1.41
2	B	1640	A	C5-C6	-6.92	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2381	A	C5-C6	-6.92	1.34	1.41
2	B	2577	A	N9-C8	6.92	1.43	1.37
2	B	2066	C	P-O5'	-6.92	1.52	1.59
2	B	2358	A	N7-C5	-6.92	1.35	1.39
2	B	2448	A	N9-C4	-6.92	1.33	1.37
2	B	1250	G	P-O5'	-6.91	1.52	1.59
2	B	1616	A	P-O5'	-6.91	1.52	1.59
2	B	1843	C	N3-C4	6.91	1.38	1.33
2	B	1966	A	C5-C4	6.91	1.43	1.38
2	B	375	G	C5-C6	-6.91	1.35	1.42
2	B	747	U	C2-O2	6.91	1.28	1.22
1	A	52	A	C3'-O3'	6.91	1.51	1.42
2	B	452	G	N3-C4	-6.91	1.30	1.35
2	B	1116	G	C8-N7	-6.91	1.26	1.30
2	B	1500	G	N7-C5	-6.91	1.35	1.39
2	B	1637	A	N9-C4	-6.91	1.33	1.37
2	B	1819	A	O3'-P	-6.91	1.52	1.61
2	B	2053	G	P-O5'	-6.91	1.52	1.59
2	B	571	U	C3'-O3'	-6.91	1.32	1.42
2	B	839	U	C2'-C1'	-6.91	1.45	1.53
2	B	1653	G	O3'-P	-6.91	1.52	1.61
2	B	2345	G	C5-C4	-6.91	1.33	1.38
2	B	2869	G	N9-C4	-6.91	1.32	1.38
2	B	1158	C	C4-C5	6.91	1.48	1.43
2	B	1402	U	C4'-C3'	6.91	1.60	1.53
2	B	1603	A	N9-C4	-6.91	1.33	1.37
2	B	2040	G	C5-C4	-6.91	1.33	1.38
2	B	2169	A	N9-C8	-6.91	1.32	1.37
2	B	2707	U	P-O5'	-6.91	1.52	1.59
2	B	461	C	O3'-P	-6.90	1.52	1.61
1	A	56	G	N3-C4	-6.90	1.30	1.35
2	B	143	C	C4'-C3'	-6.90	1.45	1.53
2	B	1208	C	N1-C6	6.90	1.41	1.37
2	B	1347	A	O4'-C1'	-6.90	1.32	1.41
2	B	1539	U	O3'-P	6.90	1.69	1.61
2	B	2045	C	N3-C4	6.90	1.38	1.33
2	B	2525	G	C2'-C1'	-6.90	1.45	1.53
2	B	2552	U	C2-N3	6.90	1.42	1.37
2	B	2553	G	C8-N7	-6.90	1.26	1.30
2	B	2833	U	C4-C5	-6.90	1.37	1.43
2	B	878	A	N9-C4	6.90	1.42	1.37
2	B	1226	A	C1'-N9	-6.90	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2385	C	N3-C4	6.90	1.38	1.33
2	B	1075	C	C4'-C3'	6.90	1.60	1.53
2	B	2897	U	C4'-C3'	6.90	1.60	1.53
2	B	124	G	C2-N3	6.89	1.38	1.32
2	B	541	A	C3'-C2'	-6.89	1.45	1.52
2	B	968	C	N3-C4	6.89	1.38	1.33
2	B	1700	A	N3-C4	-6.89	1.30	1.34
2	B	1586	A	C8-N7	6.89	1.36	1.31
2	B	1889	A	C6-N6	6.89	1.39	1.33
2	B	1154	G	C2-N3	-6.89	1.27	1.32
2	B	81	G	C6-N1	-6.89	1.34	1.39
2	B	1143	A	O3'-P	-6.89	1.52	1.61
2	B	1512	C	C3'-C2'	-6.89	1.45	1.52
2	B	2278	A	N7-C5	-6.89	1.35	1.39
2	B	2572	A	C3'-C2'	6.89	1.60	1.52
2	B	2664	G	C2-N2	6.89	1.41	1.34
2	B	2707	U	C2-N3	6.89	1.42	1.37
1	A	79	G	C5-C4	-6.89	1.33	1.38
2	B	118	A	P-O5'	-6.89	1.52	1.59
2	B	182	A	P-O5'	-6.89	1.52	1.59
2	B	534	U	N1-C2	-6.89	1.32	1.38
2	B	1569	A	N1-C2	-6.89	1.28	1.34
2	B	1641	A	C2-N3	-6.89	1.27	1.33
2	B	1839	G	N7-C5	6.89	1.43	1.39
1	A	81	G	C3'-C2'	-6.88	1.45	1.52
2	B	1029	A	N7-C5	-6.88	1.35	1.39
2	B	2295	C	N1-C6	6.88	1.41	1.37
2	B	2624	G	C1'-N9	-6.88	1.37	1.46
2	B	2644	G	C2-N2	6.88	1.41	1.34
2	B	1084	A	N9-C8	6.88	1.43	1.37
2	B	1324	G	C8-N7	-6.88	1.26	1.30
2	B	1820	U	C4'-C3'	-6.88	1.45	1.53
2	B	2077	A	C6-N1	-6.88	1.30	1.35
2	B	2445	G	O3'-P	-6.88	1.52	1.61
2	B	601	C	N3-C4	6.88	1.38	1.33
2	B	820	A	C6-N6	6.88	1.39	1.33
2	B	830	G	N3-C4	-6.88	1.30	1.35
2	B	960	A	O3'-P	-6.88	1.52	1.61
2	B	1112	G	C6-N1	-6.88	1.34	1.39
2	B	1682	G	P-O5'	-6.88	1.52	1.59
2	B	2671	G	C2-N3	6.88	1.38	1.32
2	B	438	G	C6-O6	-6.88	1.18	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	880	G	P-O5'	-6.88	1.52	1.59
2	B	1614	A	N7-C5	-6.88	1.35	1.39
2	B	1304	A	P-O5'	-6.88	1.52	1.59
2	B	1747	U	N3-C4	6.88	1.44	1.38
2	B	2295	C	O4'-C1'	6.88	1.50	1.41
2	B	2650	U	C3'-C2'	-6.88	1.45	1.52
2	B	1231	U	C3'-C2'	-6.88	1.45	1.52
2	B	701	G	O3'-P	-6.88	1.52	1.61
2	B	1161	C	P-O5'	-6.88	1.52	1.59
2	B	1636	U	C4'-C3'	6.88	1.60	1.53
2	B	1694	C	C4-C5	6.88	1.48	1.43
2	B	2292	U	C5'-C4'	6.88	1.59	1.51
2	B	1703	G	C3'-C2'	-6.87	1.45	1.52
2	B	2664	G	P-O5'	-6.87	1.52	1.59
2	B	193	U	C4'-O4'	-6.87	1.36	1.45
2	B	661	A	N7-C5	-6.87	1.35	1.39
2	B	1068	G	C5-C4	6.87	1.43	1.38
2	B	1076	C	C4-N4	6.87	1.40	1.33
2	B	1317	G	N1-C2	6.87	1.43	1.37
2	B	2315	G	P-O5'	-6.87	1.52	1.59
2	B	2640	G	C5-C4	6.87	1.43	1.38
2	B	2702	G	O3'-P	-6.87	1.52	1.61
2	B	1466	U	C4-C5	-6.87	1.37	1.43
2	B	2547	A	N9-C4	6.87	1.42	1.37
2	B	15	G	C6-N1	-6.87	1.34	1.39
2	B	620	G	P-O5'	-6.87	1.52	1.59
2	B	499	U	C1'-N1	-6.87	1.37	1.46
2	B	631	A	C3'-C2'	-6.87	1.45	1.52
2	B	767	U	C3'-C2'	-6.87	1.45	1.52
2	B	1248	G	N9-C4	-6.87	1.32	1.38
2	B	1382	G	C5-C4	6.87	1.43	1.38
2	B	1668	A	C5'-C4'	6.87	1.59	1.51
2	B	1855	U	C4-C5	6.87	1.49	1.43
2	B	2384	U	C5-C6	6.87	1.40	1.34
2	B	497	A	C5-C4	-6.86	1.33	1.38
2	B	1491	G	C8-N7	6.86	1.35	1.30
2	B	1772	A	N9-C4	-6.86	1.33	1.37
2	B	2205	A	N1-C2	-6.86	1.28	1.34
2	B	2453	A	C3'-C2'	-6.86	1.45	1.52
2	B	2655	G	N3-C4	-6.86	1.30	1.35
2	B	1455	G	C2-N3	6.86	1.38	1.32
1	A	89	U	C5'-C4'	6.86	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1137	G	C8-N7	-6.86	1.26	1.30
2	B	1159	U	C3'-C2'	-6.86	1.45	1.52
2	B	1453	A	C5'-C4'	6.86	1.59	1.51
2	B	659	G	N7-C5	-6.86	1.35	1.39
2	B	1909	C	N3-C4	6.86	1.38	1.33
2	B	2371	G	C2-N2	-6.86	1.27	1.34
2	B	1199	U	C2-N3	6.86	1.42	1.37
2	B	1573	G	N7-C5	-6.86	1.35	1.39
2	B	2142	A	C6-N1	6.86	1.40	1.35
2	B	516	C	C5-C6	-6.86	1.28	1.34
2	B	2094	A	C8-N7	-6.86	1.26	1.31
2	B	208	C	C4'-O4'	-6.85	1.36	1.45
2	B	1292	G	C2'-C1'	-6.85	1.45	1.53
2	B	638	G	C4'-C3'	-6.85	1.45	1.53
2	B	1558	C	C4'-O4'	-6.85	1.36	1.45
2	B	2038	G	C6-O6	-6.85	1.18	1.24
2	B	2462	C	C4-C5	-6.85	1.37	1.43
2	B	391	A	N9-C8	-6.85	1.32	1.37
2	B	415	A	N3-C4	-6.85	1.30	1.34
2	B	455	C	O3'-P	-6.85	1.52	1.61
2	B	742	A	N3-C4	6.85	1.39	1.34
2	B	1517	G	C6-N1	-6.85	1.34	1.39
2	B	1730	C	N1-C6	-6.85	1.33	1.37
2	B	2144	G	N3-C4	6.85	1.40	1.35
2	B	199	A	N3-C4	-6.85	1.30	1.34
2	B	686	U	P-O5'	-6.85	1.52	1.59
2	B	1122	G	N9-C8	-6.85	1.33	1.37
2	B	1247	A	C8-N7	-6.85	1.26	1.31
2	B	1411	U	N3-C4	6.85	1.44	1.38
2	B	1532	A	C6-N1	6.85	1.40	1.35
2	B	1645	G	N3-C4	-6.85	1.30	1.35
2	B	2246	G	N9-C4	-6.85	1.32	1.38
2	B	2340	A	N7-C5	-6.85	1.35	1.39
2	B	2475	C	N1-C2	-6.85	1.33	1.40
2	B	263	G	N9-C8	-6.85	1.33	1.37
2	B	2135	A	N9-C4	6.85	1.42	1.37
2	B	627	A	C1'-N9	-6.84	1.37	1.46
2	B	1287	A	C4'-O4'	-6.84	1.36	1.45
2	B	2475	C	N3-C4	6.84	1.38	1.33
2	B	2642	G	C5-C4	6.84	1.43	1.38
2	B	811	U	C4-C5	6.84	1.49	1.43
2	B	23	G	C2'-C1'	-6.84	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	252	G	N3-C4	-6.84	1.30	1.35
2	B	499	U	C3'-C2'	-6.84	1.45	1.52
2	B	759	G	C2'-O2'	-6.84	1.32	1.41
2	B	932	U	N3-C4	6.84	1.44	1.38
2	B	1795	C	O4'-C1'	-6.84	1.32	1.41
2	B	2069	G	O3'-P	-6.84	1.52	1.61
2	B	2135	A	C6-N1	-6.84	1.30	1.35
2	B	313	G	C2'-C1'	-6.84	1.45	1.53
2	B	1247	A	O3'-P	-6.84	1.52	1.61
2	B	1600	C	O3'-P	-6.84	1.52	1.61
2	B	197	A	C8-N7	-6.84	1.26	1.31
2	B	2155	U	N3-C4	-6.84	1.32	1.38
1	A	9	G	C2-N3	6.84	1.38	1.32
2	B	56	A	C1'-N9	-6.84	1.37	1.46
2	B	77	G	N7-C5	-6.84	1.35	1.39
2	B	103	A	O3'-P	-6.84	1.52	1.61
2	B	572	A	C4'-C3'	-6.84	1.45	1.53
2	B	622	G	N3-C4	-6.84	1.30	1.35
2	B	655	A	C2'-C1'	-6.84	1.45	1.53
2	B	1103	A	P-O5'	-6.84	1.52	1.59
2	B	1434	A	P-O5'	-6.84	1.52	1.59
2	B	2303	G	C3'-C2'	-6.84	1.45	1.52
2	B	2643	G	N3-C4	-6.84	1.30	1.35
2	B	1192	G	C3'-O3'	6.83	1.51	1.42
2	B	1783	A	N7-C5	-6.83	1.35	1.39
2	B	634	C	P-O5'	-6.83	1.52	1.59
2	B	1954	G	C2-N3	6.83	1.38	1.32
2	B	537	G	N9-C8	-6.83	1.33	1.37
2	B	964	C	C5-C6	-6.83	1.28	1.34
2	B	1339	G	P-O5'	-6.83	1.52	1.59
20	E	70	SER	CA-CB	6.83	1.63	1.52
2	B	2417	C	C4'-C3'	-6.83	1.45	1.53
2	B	2613	U	C5'-C4'	6.83	1.59	1.51
2	B	985	C	P-O5'	-6.83	1.52	1.59
2	B	1980	G	C6-N1	-6.83	1.34	1.39
2	B	543	G	C2-N3	6.82	1.38	1.32
2	B	993	G	N1-C2	6.82	1.43	1.37
2	B	1140	C	C3'-C2'	-6.82	1.45	1.52
2	B	1771	C	C2'-C1'	-6.82	1.45	1.53
2	B	2006	C	N1-C6	6.82	1.41	1.37
2	B	2887	A	N7-C5	-6.82	1.35	1.39
2	B	2220	U	C3'-C2'	-6.82	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	557	C	C4-N4	-6.82	1.27	1.33
2	B	875	G	N3-C4	6.82	1.40	1.35
2	B	1101	U	N3-C4	6.82	1.44	1.38
2	B	1179	G	N7-C5	-6.82	1.35	1.39
2	B	1286	A	C3'-C2'	-6.82	1.45	1.52
2	B	2085	U	C2-N3	6.82	1.42	1.37
2	B	2751	G	P-O5'	-6.82	1.52	1.59
2	B	1228	G	N9-C8	-6.82	1.33	1.37
2	B	35	G	C6-N1	6.82	1.44	1.39
2	B	133	U	C3'-C2'	-6.82	1.45	1.52
2	B	508	A	N9-C8	-6.82	1.32	1.37
2	B	731	C	C3'-C2'	-6.82	1.45	1.52
2	B	1332	G	C5'-C4'	6.82	1.59	1.51
2	B	242	G	C2'-C1'	-6.82	1.45	1.53
2	B	933	A	O3'-P	-6.82	1.52	1.61
2	B	1300	G	N1-C2	6.82	1.43	1.37
2	B	2370	G	C6-N1	6.82	1.44	1.39
2	B	953	G	O3'-P	-6.81	1.52	1.61
2	B	2846	G	P-O5'	-6.81	1.52	1.59
2	B	2200	C	C4-N4	6.81	1.40	1.33
2	B	2531	A	C2'-C1'	-6.81	1.45	1.53
2	B	2651	C	P-O5'	-6.81	1.52	1.59
2	B	2750	A	N7-C5	-6.81	1.35	1.39
2	B	1973	G	C2'-C1'	-6.81	1.45	1.53
2	B	2187	U	N3-C4	6.81	1.44	1.38
2	B	389	G	C5-C6	-6.81	1.35	1.42
2	B	1178	C	C1'-N1	6.81	1.58	1.48
2	B	2461	A	N9-C8	-6.81	1.32	1.37
2	B	2705	A	N1-C2	-6.81	1.28	1.34
2	B	173	A	C1'-N9	-6.81	1.37	1.46
2	B	429	A	N7-C5	-6.81	1.35	1.39
2	B	880	G	C5-C6	-6.81	1.35	1.42
2	B	1274	A	C5'-C4'	-6.81	1.43	1.51
2	B	1371	G	P-O5'	-6.81	1.52	1.59
2	B	1663	G	N9-C4	6.81	1.43	1.38
2	B	1792	G	N1-C2	6.81	1.43	1.37
2	B	1808	A	N7-C5	-6.81	1.35	1.39
2	B	2080	A	P-O5'	-6.81	1.52	1.59
2	B	2478	A	C3'-C2'	-6.81	1.45	1.52
2	B	2511	U	N3-C4	6.81	1.44	1.38
2	B	388	G	N7-C5	-6.80	1.35	1.39
2	B	872	U	O4'-C1'	6.80	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1195	G	N3-C4	-6.80	1.30	1.35
2	B	2722	G	N7-C5	-6.80	1.35	1.39
2	B	1253	A	N9-C4	-6.80	1.33	1.37
2	B	1821	A	C3'-C2'	-6.80	1.45	1.52
2	B	207	A	C2'-C1'	-6.80	1.45	1.53
2	B	465	G	C1'-N9	6.80	1.58	1.48
2	B	648	G	C8-N7	-6.80	1.26	1.30
2	B	843	G	C2-N3	6.80	1.38	1.32
2	B	1378	A	C6-N6	6.80	1.39	1.33
2	B	1669	A	P-O5'	-6.80	1.52	1.59
2	B	1546	G	N9-C4	-6.80	1.32	1.38
2	B	1613	G	N7-C5	-6.80	1.35	1.39
2	B	953	G	C4'-C3'	-6.80	1.45	1.53
2	B	1221	C	C5'-C4'	6.80	1.59	1.51
2	B	1238	G	C2-N3	6.80	1.38	1.32
2	B	1477	A	C2'-C1'	-6.80	1.45	1.53
2	B	1912	A	C5'-C4'	6.80	1.59	1.51
2	B	2812	G	N3-C4	-6.80	1.30	1.35
2	B	1701	A	P-O5'	-6.79	1.52	1.59
2	B	2372	U	N1-C2	6.79	1.44	1.38
2	B	728	G	N9-C8	-6.79	1.33	1.37
2	B	1339	G	C6-O6	-6.79	1.18	1.24
2	B	1964	G	C2-N3	6.79	1.38	1.32
2	B	2523	G	C2-N2	6.79	1.41	1.34
2	B	2723	C	C4'-C3'	6.79	1.60	1.53
2	B	2823	A	N9-C8	-6.79	1.32	1.37
2	B	60	G	O3'-P	-6.79	1.53	1.61
2	B	150	U	N1-C2	-6.79	1.32	1.38
2	B	610	C	P-O5'	-6.79	1.52	1.59
2	B	324	A	C3'-C2'	-6.79	1.45	1.52
2	B	1371	G	N7-C5	-6.79	1.35	1.39
2	B	1449	G	N1-C2	-6.79	1.32	1.37
2	B	1548	A	N7-C5	-6.79	1.35	1.39
2	B	2351	G	C5-C4	-6.79	1.33	1.38
2	B	2608	G	O3'-P	-6.79	1.53	1.61
2	B	2790	U	O3'-P	-6.79	1.53	1.61
2	B	2848	G	O3'-P	-6.79	1.53	1.61
2	B	2901	C	C5'-C4'	6.79	1.59	1.51
1	A	33	G	C2'-C1'	-6.79	1.45	1.53
2	B	18	U	C4-O4	-6.79	1.18	1.23
2	B	1581	G	C5'-C4'	6.79	1.59	1.51
2	B	1854	A	C6-N6	6.79	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	116	G	C6-N1	6.79	1.44	1.39
2	B	378	C	O3'-P	-6.79	1.53	1.61
2	B	524	G	O3'-P	-6.79	1.53	1.61
2	B	873	C	C2'-C1'	-6.79	1.45	1.53
2	B	897	C	C2'-C1'	-6.79	1.45	1.53
2	B	1214	A	C2'-C1'	-6.79	1.45	1.53
2	B	1623	G	C5-C4	-6.79	1.33	1.38
2	B	2115	G	O3'-P	-6.79	1.53	1.61
2	B	2658	C	O3'-P	-6.79	1.53	1.61
2	B	2741	A	N9-C4	-6.79	1.33	1.37
15	T	90	GLY	N-CA	-6.79	1.35	1.46
2	B	118	A	C8-N7	-6.78	1.26	1.31
2	B	505	A	P-O5'	-6.78	1.52	1.59
2	B	1268	A	N7-C5	-6.78	1.35	1.39
2	B	1679	A	C6-N6	6.78	1.39	1.33
2	B	1829	A	C4'-C3'	-6.78	1.45	1.53
2	B	2231	U	C2'-C1'	-6.78	1.45	1.53
2	B	821	A	C4'-C3'	-6.78	1.45	1.53
2	B	1140	C	C5-C6	6.78	1.39	1.34
2	B	1424	G	O3'-P	-6.78	1.53	1.61
2	B	1713	A	C5'-C4'	6.78	1.59	1.51
2	B	145	C	P-O5'	-6.78	1.52	1.59
2	B	1815	A	C5'-C4'	6.78	1.59	1.51
2	B	257	C	C2'-C1'	-6.78	1.45	1.53
2	B	366	C	C5'-C4'	6.78	1.59	1.51
2	B	1563	U	C2'-O2'	-6.78	1.32	1.41
2	B	2811	G	C4'-C3'	-6.78	1.45	1.53
2	B	914	G	O3'-P	-6.78	1.53	1.61
2	B	1528	A	N9-C4	6.78	1.42	1.37
2	B	1535	A	O3'-P	-6.78	1.53	1.61
2	B	2844	G	N3-C4	6.78	1.40	1.35
2	B	2627	G	O3'-P	-6.77	1.53	1.61
2	B	276	U	C4'-C3'	6.77	1.60	1.53
2	B	689	A	C3'-C2'	-6.77	1.45	1.52
2	B	898	C	O3'-P	-6.77	1.53	1.61
2	B	951	C	O3'-P	-6.77	1.53	1.61
2	B	1470	A	N7-C5	-6.77	1.35	1.39
2	B	1925	C	N1-C6	6.77	1.41	1.37
2	B	2242	G	N9-C8	-6.77	1.33	1.37
2	B	994	C	P-O5'	-6.77	1.52	1.59
2	B	1768	C	N1-C6	6.77	1.41	1.37
1	A	22	U	C2'-C1'	-6.77	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	283	G	N1-C2	6.77	1.43	1.37
2	B	877	A	N3-C4	6.77	1.39	1.34
2	B	1383	A	N7-C5	-6.77	1.35	1.39
2	B	20	C	O4'-C1'	-6.77	1.32	1.41
2	B	743	A	N9-C4	-6.77	1.33	1.37
2	B	937	C	P-O5'	-6.77	1.52	1.59
2	B	1357	C	C3'-C2'	-6.77	1.45	1.52
2	B	1799	G	N7-C5	-6.77	1.35	1.39
20	E	78	TRP	CB-CG	6.77	1.62	1.50
2	B	582	A	C8-N7	-6.77	1.26	1.31
2	B	254	G	C8-N7	-6.76	1.26	1.30
2	B	970	U	P-O5'	-6.76	1.52	1.59
2	B	1011	G	C2'-O2'	-6.76	1.32	1.41
2	B	1787	A	C8-N7	-6.76	1.26	1.31
2	B	1950	G	O3'-P	-6.76	1.53	1.61
2	B	2512	C	C2-N3	6.76	1.41	1.35
2	B	2660	A	C2'-C1'	-6.76	1.46	1.53
2	B	1537	G	N1-C2	6.76	1.43	1.37
1	A	91	C	N1-C6	-6.76	1.33	1.37
2	B	1944	U	C4'-C3'	6.76	1.60	1.53
2	B	2515	C	C2-N3	-6.76	1.30	1.35
2	B	2648	G	P-O5'	-6.76	1.52	1.59
2	B	1572	A	N9-C8	-6.76	1.32	1.37
2	B	1838	C	C1'-N1	-6.76	1.37	1.46
2	B	2288	A	N7-C5	-6.76	1.35	1.39
2	B	905	A	N7-C5	-6.76	1.35	1.39
2	B	2391	G	N9-C4	-6.76	1.32	1.38
2	B	2770	G	N7-C5	-6.76	1.35	1.39
1	A	26	C	N1-C6	-6.76	1.33	1.37
2	B	110	G	C4'-C3'	6.76	1.60	1.53
2	B	486	C	N1-C6	-6.76	1.33	1.37
2	B	2866	U	C2-N3	6.76	1.42	1.37
2	B	75	G	P-O5'	-6.75	1.52	1.59
2	B	330	A	N9-C8	-6.75	1.32	1.37
2	B	860	U	N3-C4	6.75	1.44	1.38
2	B	949	G	C4'-C3'	-6.75	1.45	1.53
2	B	1194	A	O3'-P	-6.75	1.53	1.61
2	B	1813	G	C5-C4	-6.75	1.33	1.38
2	B	2058	A	O3'-P	-6.75	1.53	1.61
2	B	2079	U	O3'-P	-6.75	1.53	1.61
2	B	2632	A	C4'-C3'	-6.75	1.45	1.53
2	B	2773	C	N1-C6	6.75	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	35	G	C8-N7	-6.75	1.26	1.30
2	B	402	A	C5'-C4'	6.75	1.59	1.51
2	B	681	G	N1-C2	6.75	1.43	1.37
2	B	1134	A	N9-C8	-6.75	1.32	1.37
2	B	1135	C	C2-N3	6.75	1.41	1.35
2	B	1151	A	C6-N1	6.75	1.40	1.35
2	B	2391	G	C4'-C3'	-6.75	1.45	1.53
2	B	598	U	P-O5'	-6.75	1.52	1.59
2	B	882	G	N9-C8	-6.75	1.33	1.37
2	B	1193	G	C6-N1	6.75	1.44	1.39
2	B	1470	A	C6-N6	6.75	1.39	1.33
2	B	2122	U	C4'-C3'	-6.75	1.45	1.53
2	B	1755	A	N9-C4	6.75	1.41	1.37
2	B	1772	A	N7-C5	-6.75	1.35	1.39
2	B	1998	A	C1'-N9	-6.75	1.37	1.46
2	B	2143	C	C4-N4	6.75	1.40	1.33
2	B	614	A	N7-C5	-6.75	1.35	1.39
2	B	907	G	N1-C2	6.75	1.43	1.37
2	B	926	G	P-O5'	-6.75	1.53	1.59
2	B	2262	U	C2'-C1'	-6.75	1.46	1.53
2	B	2482	A	C6-N6	6.75	1.39	1.33
2	B	2810	A	C5-C6	-6.75	1.34	1.41
2	B	1365	A	C6-N6	6.75	1.39	1.33
2	B	1786	A	C6-N1	6.75	1.40	1.35
2	B	2133	G	C2-N3	6.75	1.38	1.32
2	B	374	A	O3'-P	-6.74	1.53	1.61
2	B	602	A	C8-N7	-6.74	1.26	1.31
2	B	2113	U	C4-C5	6.74	1.49	1.43
2	B	763	G	N9-C4	-6.74	1.32	1.38
2	B	547	A	N7-C5	-6.74	1.35	1.39
2	B	765	C	N3-C4	6.74	1.38	1.33
2	B	962	G	N3-C4	-6.74	1.30	1.35
2	B	1279	G	C2'-C1'	-6.74	1.46	1.53
2	B	1751	U	C2'-C1'	-6.74	1.46	1.53
2	B	2141	G	C8-N7	6.74	1.34	1.30
2	B	2396	G	C4'-C3'	-6.74	1.45	1.53
2	B	20	C	C3'-C2'	-6.74	1.45	1.52
2	B	245	G	C6-N1	-6.74	1.34	1.39
2	B	433	C	O3'-P	-6.74	1.53	1.61
2	B	839	U	N3-C4	6.74	1.44	1.38
2	B	900	A	N3-C4	-6.74	1.30	1.34
2	B	1072	C	C3'-O3'	6.74	1.51	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1533	C	N1-C6	-6.74	1.33	1.37
2	B	2573	C	N3-C4	6.74	1.38	1.33
2	B	754	U	C3'-O3'	-6.74	1.32	1.42
2	B	1164	C	N3-C4	6.74	1.38	1.33
2	B	1647	U	O3'-P	-6.74	1.53	1.61
2	B	1835	G	O3'-P	-6.74	1.53	1.61
2	B	1978	A	N7-C5	-6.74	1.35	1.39
2	B	2343	U	C4-C5	6.74	1.49	1.43
2	B	321	U	C2-N3	6.73	1.42	1.37
2	B	543	G	N1-C2	6.73	1.43	1.37
2	B	723	C	O3'-P	-6.73	1.53	1.61
1	A	13	G	C8-N7	-6.73	1.26	1.30
2	B	330	A	N3-C4	-6.73	1.30	1.34
2	B	994	C	N1-C6	6.73	1.41	1.37
2	B	1604	C	N1-C2	6.73	1.46	1.40
2	B	1632	A	N9-C8	6.73	1.43	1.37
2	B	1936	A	N1-C2	6.73	1.40	1.34
2	B	2014	A	N7-C5	-6.73	1.35	1.39
2	B	2589	A	C2-N3	6.73	1.39	1.33
2	B	2689	U	O3'-P	-6.73	1.53	1.61
1	A	52	A	C6-N1	6.73	1.40	1.35
2	B	283	G	N7-C5	-6.73	1.35	1.39
2	B	344	A	N3-C4	-6.73	1.30	1.34
2	B	613	A	C6-N6	6.73	1.39	1.33
1	A	46	A	C1'-N9	-6.73	1.37	1.46
2	B	45	G	C5-C4	-6.73	1.33	1.38
2	B	151	C	O3'-P	-6.73	1.53	1.61
2	B	1735	A	N7-C5	-6.73	1.35	1.39
1	A	23	G	N9-C4	6.72	1.43	1.38
2	B	669	G	C8-N7	6.72	1.34	1.30
2	B	1715	G	C2-N3	6.72	1.38	1.32
2	B	2116	G	N9-C4	6.72	1.43	1.38
2	B	2525	G	O3'-P	-6.72	1.53	1.61
2	B	572	A	N3-C4	-6.72	1.30	1.34
2	B	1145	C	C3'-C2'	-6.72	1.45	1.52
2	B	1257	C	P-O5'	-6.72	1.53	1.59
2	B	2882	A	C4'-O4'	-6.72	1.36	1.45
2	B	245	G	C2'-C1'	-6.72	1.46	1.53
2	B	932	U	C2'-C1'	-6.72	1.46	1.53
2	B	1269	A	N9-C8	-6.72	1.32	1.37
2	B	2468	A	P-O5'	-6.72	1.53	1.59
2	B	855	G	C8-N7	-6.72	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	954	G	C4'-C3'	6.72	1.60	1.53
2	B	962	G	C5-C4	-6.72	1.33	1.38
2	B	1160	G	C2-N3	6.72	1.38	1.32
2	B	1214	A	C4'-C3'	-6.72	1.45	1.53
2	B	2193	G	C5-C4	6.72	1.43	1.38
2	B	136	G	C6-N1	6.72	1.44	1.39
2	B	1262	A	C3'-C2'	-6.72	1.45	1.52
2	B	1344	U	C4'-C3'	6.72	1.60	1.53
2	B	1756	G	P-O5'	-6.72	1.53	1.59
2	B	2608	G	C8-N7	-6.72	1.26	1.30
2	B	4	U	P-O5'	-6.71	1.53	1.59
2	B	91	A	N3-C4	-6.71	1.30	1.34
2	B	1016	G	N9-C8	6.71	1.42	1.37
1	A	25	U	N3-C4	6.71	1.44	1.38
2	B	106	C	C5-C6	-6.71	1.28	1.34
2	B	1305	C	C2-N3	-6.71	1.30	1.35
2	B	213	A	C6-N6	6.71	1.39	1.33
2	B	694	U	C4'-C3'	-6.71	1.45	1.53
2	B	987	C	C2-N3	-6.71	1.30	1.35
2	B	1848	A	C6-N1	6.71	1.40	1.35
2	B	2671	G	P-O5'	-6.71	1.53	1.59
2	B	1185	G	N1-C2	-6.71	1.32	1.37
15	T	74	ILE	C-N	6.71	1.45	1.33
2	B	5	A	N7-C5	-6.71	1.35	1.39
2	B	108	G	O3'-P	-6.71	1.53	1.61
2	B	277	G	C4'-O4'	-6.71	1.36	1.45
2	B	913	U	O4'-C1'	-6.71	1.32	1.41
2	B	1262	A	N7-C5	-6.71	1.35	1.39
2	B	2181	U	C4'-O4'	-6.71	1.36	1.45
2	B	2142	A	N7-C5	-6.71	1.35	1.39
16	2	8	GLN	CG-CD	6.71	1.66	1.51
2	B	1517	G	C2-N3	6.71	1.38	1.32
2	B	2463	C	C2'-C1'	-6.71	1.46	1.53
2	B	2585	U	C4'-C3'	-6.71	1.45	1.53
2	B	1079	C	N1-C2	6.70	1.46	1.40
2	B	1463	C	P-O5'	-6.70	1.53	1.59
2	B	2127	G	C5-C4	6.70	1.43	1.38
2	B	2611	C	C4'-C3'	6.70	1.60	1.53
2	B	1216	G	C4'-O4'	-6.70	1.36	1.45
2	B	408	G	C2'-C1'	-6.70	1.46	1.53
2	B	1259	G	P-O5'	6.70	1.66	1.59
2	B	199	A	N7-C5	-6.70	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1722	A	P-O5'	-6.70	1.53	1.59
2	B	2355	G	C2'-C1'	-6.70	1.46	1.53
29	G	154	GLU	CD-OE1	6.70	1.33	1.25
2	B	85	G	C1'-N9	-6.70	1.37	1.46
2	B	563	A	C1'-N9	-6.70	1.37	1.46
2	B	502	A	C2'-C1'	-6.70	1.46	1.53
2	B	1887	C	C5'-C4'	6.70	1.59	1.51
2	B	2204	G	C8-N7	-6.70	1.26	1.30
2	B	2639	A	O3'-P	-6.70	1.53	1.61
27	C	257	ARG	NE-CZ	6.70	1.41	1.33
2	B	363	G	C2'-C1'	-6.69	1.46	1.53
2	B	1697	G	C4'-C3'	-6.69	1.45	1.53
2	B	16	C	O3'-P	-6.69	1.53	1.61
1	A	59	A	C6-N6	6.69	1.39	1.33
2	B	7	G	C8-N7	6.69	1.34	1.30
2	B	241	A	O4'-C1'	-6.69	1.32	1.41
2	B	400	G	C8-N7	-6.69	1.26	1.30
2	B	479	A	C4'-C3'	-6.69	1.45	1.53
2	B	1310	G	O3'-P	-6.69	1.53	1.61
2	B	2301	C	C5'-C4'	6.69	1.59	1.51
2	B	2627	G	C2-N3	6.69	1.38	1.32
2	B	2789	C	C4'-C3'	-6.69	1.45	1.53
8	N	2	ARG	CZ-NH2	6.69	1.41	1.33
2	B	1348	C	C2'-C1'	-6.69	1.46	1.53
2	B	2442	C	C3'-C2'	-6.69	1.45	1.52
20	E	61	ARG	CD-NE	6.69	1.57	1.46
2	B	499	U	C2-N3	-6.69	1.33	1.37
2	B	577	G	C2'-C1'	-6.69	1.46	1.53
2	B	638	G	O4'-C1'	-6.69	1.32	1.41
2	B	1412	U	C3'-C2'	-6.69	1.45	1.52
2	B	2049	G	N9-C4	-6.69	1.32	1.38
2	B	2308	G	N3-C4	-6.69	1.30	1.35
2	B	637	A	C6-N1	-6.69	1.30	1.35
2	B	891	G	P-O5'	-6.69	1.53	1.59
2	B	1272	A	C8-N7	-6.69	1.26	1.31
2	B	2634	A	C2-N3	6.69	1.39	1.33
2	B	2659	G	C4'-C3'	-6.69	1.45	1.53
2	B	47	C	N3-C4	6.68	1.38	1.33
2	B	381	G	C5-C6	-6.68	1.35	1.42
2	B	831	G	C6-N1	6.68	1.44	1.39
2	B	1836	C	N3-C4	6.68	1.38	1.33
2	B	374	A	C5-C6	-6.68	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1136	G	C5-C4	-6.68	1.33	1.38
2	B	1239	G	C5-C4	-6.68	1.33	1.38
2	B	2318	G	C2'-C1'	-6.68	1.46	1.53
2	B	484	C	C3'-C2'	-6.68	1.45	1.52
2	B	820	A	C2'-C1'	-6.68	1.46	1.53
2	B	2339	C	C2'-C1'	-6.68	1.46	1.53
2	B	2351	G	P-O5'	-6.68	1.53	1.59
1	A	78	A	N3-C4	-6.68	1.30	1.34
2	B	234	U	C5-C6	-6.68	1.28	1.34
2	B	333	G	N3-C4	6.68	1.40	1.35
2	B	356	G	C5-C4	6.68	1.43	1.38
2	B	387	U	C5-C6	6.68	1.40	1.34
2	B	1259	G	N9-C8	6.68	1.42	1.37
2	B	1637	A	C3'-C2'	-6.68	1.45	1.52
2	B	1907	G	C2-N2	6.68	1.41	1.34
2	B	2335	A	C2-N3	6.68	1.39	1.33
2	B	1228	G	C3'-C2'	-6.68	1.45	1.52
2	B	1535	A	C3'-C2'	6.68	1.60	1.52
2	B	2077	A	N7-C5	-6.68	1.35	1.39
2	B	2408	U	N1-C2	6.68	1.44	1.38
2	B	187	G	O3'-P	-6.68	1.53	1.61
2	B	198	C	N1-C2	-6.68	1.33	1.40
2	B	863	A	C3'-C2'	-6.68	1.45	1.52
2	B	2357	G	N1-C2	6.68	1.43	1.37
2	B	2566	A	C6-N6	6.67	1.39	1.33
2	B	872	U	N3-C4	6.67	1.44	1.38
2	B	1543	G	N9-C8	-6.67	1.33	1.37
2	B	298	G	N9-C4	-6.67	1.32	1.38
2	B	425	G	C5-C4	-6.67	1.33	1.38
2	B	528	A	C3'-C2'	-6.67	1.45	1.52
2	B	1896	G	O4'-C1'	-6.67	1.32	1.41
2	B	2090	A	P-O5'	-6.67	1.53	1.59
2	B	2714	G	N7-C5	-6.67	1.35	1.39
2	B	162	U	C2'-C1'	-6.67	1.46	1.53
2	B	2240	U	C4-C5	6.67	1.49	1.43
2	B	233	A	O3'-P	-6.67	1.53	1.61
2	B	295	G	C2-N3	6.67	1.38	1.32
2	B	893	C	C5'-C4'	6.67	1.59	1.51
2	B	2054	A	C5-C6	-6.67	1.35	1.41
1	A	106	G	N7-C5	-6.67	1.35	1.39
2	B	876	C	P-O5'	6.67	1.66	1.59
2	B	2309	A	C2-N3	6.67	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2484	G	N1-C2	-6.67	1.32	1.37
2	B	2529	G	C2-N3	6.67	1.38	1.32
2	B	859	G	N7-C5	-6.67	1.35	1.39
2	B	2505	G	C5-C6	-6.67	1.35	1.42
2	B	2546	U	O3'-P	-6.67	1.53	1.61
2	B	209	C	N1-C6	-6.66	1.33	1.37
2	B	2027	G	C2'-C1'	-6.66	1.46	1.53
2	B	1740	G	C6-N1	6.66	1.44	1.39
5	L	58	TYR	CG-CD1	-6.66	1.30	1.39
2	B	172	A	N9-C8	-6.66	1.32	1.37
2	B	205	G	C4'-C3'	6.66	1.60	1.53
2	B	689	A	C2'-C1'	-6.66	1.46	1.53
2	B	1103	A	N9-C4	-6.66	1.33	1.37
2	B	2388	A	C2-N3	6.66	1.39	1.33
2	B	2419	U	C4'-O4'	-6.66	1.36	1.45
2	B	1083	U	C4'-C3'	-6.66	1.45	1.53
2	B	1732	C	C1'-N1	6.66	1.58	1.48
2	B	2021	C	N1-C6	6.66	1.41	1.37
2	B	2193	G	P-O5'	-6.66	1.53	1.59
2	B	21	A	N3-C4	-6.66	1.30	1.34
2	B	75	G	N3-C4	-6.66	1.30	1.35
2	B	99	U	C3'-C2'	-6.66	1.45	1.52
2	B	272	A	P-O5'	-6.66	1.53	1.59
2	B	735	A	N9-C8	-6.66	1.32	1.37
2	B	1249	U	N1-C6	-6.66	1.31	1.38
2	B	1310	G	C8-N7	6.66	1.34	1.30
2	B	1822	C	N3-C4	6.66	1.38	1.33
2	B	2197	U	P-O5'	-6.66	1.53	1.59
2	B	2396	G	N3-C4	-6.66	1.30	1.35
27	C	268	ARG	CZ-NH1	6.66	1.41	1.33
1	A	83	G	O3'-P	-6.65	1.53	1.61
2	B	1230	A	N7-C5	-6.65	1.35	1.39
2	B	68	G	C2'-C1'	-6.65	1.46	1.53
2	B	104	A	C6-N6	6.65	1.39	1.33
2	B	814	C	C5'-C4'	6.65	1.59	1.51
2	B	2095	A	C3'-C2'	-6.65	1.45	1.52
2	B	2395	C	O3'-P	-6.65	1.53	1.61
2	B	2691	C	N1-C6	6.65	1.41	1.37
32	J	89	PHE	CB-CG	-6.65	1.40	1.51
1	A	31	C	O3'-P	-6.65	1.53	1.61
2	B	142	A	N9-C8	-6.65	1.32	1.37
2	B	581	C	C2'-C1'	-6.65	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1311	G	C5-C4	-6.65	1.33	1.38
2	B	1834	U	O3'-P	-6.65	1.53	1.61
2	B	2019	A	C6-N6	6.65	1.39	1.33
2	B	2279	G	C3'-C2'	-6.65	1.45	1.52
2	B	284	U	C5'-C4'	6.65	1.59	1.51
2	B	521	U	O3'-P	-6.65	1.53	1.61
2	B	548	G	N3-C4	-6.65	1.30	1.35
2	B	1104	C	P-O5'	-6.65	1.53	1.59
2	B	1718	G	C3'-C2'	-6.65	1.45	1.52
2	B	1996	C	C4-N4	6.65	1.40	1.33
27	C	101	ARG	CD-NE	6.65	1.57	1.46
2	B	982	C	N1-C6	6.65	1.41	1.37
2	B	1303	G	C4'-C3'	-6.65	1.45	1.53
2	B	1364	G	N7-C5	-6.65	1.35	1.39
2	B	1460	U	C4-O4	6.65	1.28	1.23
2	B	2042	A	N9-C4	6.65	1.41	1.37
2	B	2058	A	C6-N6	6.65	1.39	1.33
2	B	642	U	C3'-C2'	-6.65	1.45	1.52
2	B	133	U	C4'-O4'	-6.64	1.36	1.45
2	B	476	G	O3'-P	-6.64	1.53	1.61
2	B	1303	G	O3'-P	-6.64	1.53	1.61
2	B	1344	U	C2'-C1'	-6.64	1.46	1.53
2	B	1538	G	C1'-N9	6.64	1.58	1.48
2	B	1722	A	C4'-O4'	-6.64	1.36	1.45
2	B	1797	G	P-O5'	-6.64	1.53	1.59
2	B	2058	A	N3-C4	-6.64	1.30	1.34
2	B	2623	G	C1'-N9	-6.64	1.37	1.46
2	B	367	G	C3'-O3'	6.64	1.51	1.42
5	L	21	ARG	NE-CZ	6.64	1.41	1.33
2	B	338	G	N1-C2	6.64	1.43	1.37
2	B	861	A	N9-C8	-6.64	1.32	1.37
2	B	1013	C	O3'-P	-6.64	1.53	1.61
2	B	1108	U	C5-C6	6.64	1.40	1.34
2	B	1230	A	C2'-C1'	-6.64	1.46	1.53
2	B	1435	G	O3'-P	-6.64	1.53	1.61
2	B	2320	U	P-O5'	-6.64	1.53	1.59
2	B	2155	U	O4'-C1'	6.64	1.50	1.41
2	B	80	G	C1'-N9	-6.64	1.37	1.46
2	B	783	A	P-O5'	-6.64	1.53	1.59
2	B	1148	U	O3'-P	-6.64	1.53	1.61
2	B	2093	G	N9-C8	-6.64	1.33	1.37
2	B	2497	A	C6-N1	-6.64	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2742	G	N7-C5	-6.64	1.35	1.39
2	B	1743	G	C2-N3	6.63	1.38	1.32
2	B	2059	A	C4'-C3'	6.63	1.60	1.53
3	0	2	ARG	NE-CZ	6.63	1.41	1.33
2	B	1509	A	N7-C5	-6.63	1.35	1.39
1	A	75	G	N9-C8	-6.63	1.33	1.37
2	B	1380	G	N3-C4	6.63	1.40	1.35
2	B	1422	G	C2'-C1'	-6.63	1.46	1.53
2	B	1295	C	C2'-C1'	-6.63	1.46	1.53
2	B	1797	G	N9-C4	-6.63	1.32	1.38
2	B	388	G	N9-C4	-6.63	1.32	1.38
2	B	697	G	C5-C4	-6.63	1.33	1.38
2	B	913	U	C5'-C4'	-6.63	1.43	1.51
2	B	2494	G	N9-C4	-6.63	1.32	1.38
2	B	2862	G	C5'-C4'	6.63	1.59	1.51
20	E	40	ARG	CD-NE	6.63	1.57	1.46
2	B	380	G	C2-N3	6.63	1.38	1.32
2	B	953	G	N9-C8	-6.63	1.33	1.37
2	B	1495	A	N7-C5	-6.63	1.35	1.39
2	B	461	C	C2-N3	6.62	1.41	1.35
2	B	789	A	C2'-C1'	-6.62	1.46	1.53
2	B	1289	C	C4'-O4'	-6.62	1.36	1.45
2	B	1663	G	N7-C5	-6.62	1.35	1.39
14	D	83	ARG	CD-NE	6.62	1.57	1.46
2	B	809	G	C2-N3	6.62	1.38	1.32
2	B	850	U	C4'-O4'	-6.62	1.36	1.45
2	B	992	C	C5'-C4'	6.62	1.59	1.51
2	B	1152	C	C5-C6	-6.62	1.29	1.34
2	B	2038	G	C1'-N9	-6.62	1.37	1.46
2	B	2244	U	O4'-C1'	-6.62	1.33	1.41
2	B	2434	A	C5'-C4'	6.62	1.59	1.51
2	B	2680	U	C3'-C2'	-6.62	1.45	1.52
2	B	1032	A	N3-C4	-6.62	1.30	1.34
2	B	1145	C	N3-C4	6.62	1.38	1.33
2	B	1461	C	C2'-C1'	-6.62	1.46	1.53
2	B	1958	C	C4-C5	6.62	1.48	1.43
2	B	2243	U	P-O5'	-6.62	1.53	1.59
2	B	2502	G	O4'-C1'	-6.62	1.33	1.41
2	B	779	U	P-O5'	-6.62	1.53	1.59
2	B	799	G	N9-C4	-6.62	1.32	1.38
2	B	2086	U	N3-C4	6.62	1.44	1.38
2	B	2352	A	N9-C8	-6.62	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2802	G	C4'-O4'	-6.62	1.36	1.45
2	B	819	A	N9-C4	-6.62	1.33	1.37
2	B	1246	A	N7-C5	-6.62	1.35	1.39
2	B	1623	G	C1'-N9	-6.62	1.37	1.46
2	B	1641	A	N9-C8	-6.62	1.32	1.37
2	B	1886	U	C5-C6	6.62	1.40	1.34
2	B	244	A	C8-N7	-6.61	1.26	1.31
2	B	795	C	P-O5'	-6.61	1.53	1.59
2	B	1209	U	C2-N3	6.61	1.42	1.37
2	B	1557	C	N3-C4	-6.61	1.29	1.33
2	B	1800	C	N3-C4	6.61	1.38	1.33
2	B	2134	A	C6-N6	6.61	1.39	1.33
2	B	2361	G	C4'-C3'	-6.61	1.45	1.53
2	B	2396	G	N9-C4	-6.61	1.32	1.38
2	B	2459	A	N9-C8	-6.61	1.32	1.37
2	B	2821	A	O3'-P	-6.61	1.53	1.61
2	B	2830	C	C4-C5	6.61	1.48	1.43
2	B	1673	G	O4'-C1'	-6.61	1.33	1.41
2	B	1821	A	O3'-P	-6.61	1.53	1.61
2	B	2068	U	C2-N3	6.61	1.42	1.37
2	B	2638	G	N9-C4	-6.61	1.32	1.38
2	B	2726	A	P-O5'	-6.61	1.53	1.59
2	B	2842	G	N7-C5	6.61	1.43	1.39
1	A	88	C	C4'-C3'	6.61	1.60	1.53
2	B	306	U	C2-O2	6.61	1.28	1.22
1	A	14	U	N3-C4	6.61	1.44	1.38
2	B	788	A	C1'-N9	-6.61	1.37	1.46
2	B	1061	U	C4'-O4'	-6.61	1.36	1.45
2	B	1429	G	C5'-C4'	6.61	1.59	1.51
2	B	1956	U	P-O5'	-6.61	1.53	1.59
2	B	2045	C	C2'-C1'	-6.61	1.46	1.53
2	B	2110	G	O4'-C1'	-6.61	1.33	1.41
2	B	2706	A	C8-N7	-6.61	1.26	1.31
2	B	2792	A	C2'-C1'	-6.61	1.46	1.53
1	A	77	U	N1-C6	-6.61	1.32	1.38
2	B	150	U	N3-C4	6.61	1.44	1.38
2	B	878	A	N9-C8	-6.61	1.32	1.37
2	B	1850	G	C2-N3	6.61	1.38	1.32
2	B	2135	A	C5'-C4'	6.61	1.59	1.51
2	B	231	A	N7-C5	6.60	1.43	1.39
2	B	262	A	C5-C4	-6.60	1.34	1.38
2	B	773	U	C4'-O4'	-6.60	1.36	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1330	C	N3-C4	6.60	1.38	1.33
2	B	1388	G	C3'-O3'	6.60	1.51	1.42
2	B	1904	G	N3-C4	-6.60	1.30	1.35
2	B	2361	G	N7-C5	-6.60	1.35	1.39
2	B	219	A	P-O5'	6.60	1.66	1.59
2	B	672	C	O3'-P	-6.60	1.53	1.61
2	B	1124	G	P-O5'	-6.60	1.53	1.59
2	B	1287	A	N7-C5	-6.60	1.35	1.39
2	B	1600	C	C2-N3	6.60	1.41	1.35
2	B	2747	G	O3'-P	-6.60	1.53	1.61
20	E	125	SER	CA-CB	6.60	1.62	1.52
1	A	7	G	O3'-P	-6.60	1.53	1.61
2	B	347	A	C8-N7	-6.60	1.26	1.31
2	B	2234	G	C5'-C4'	6.60	1.59	1.51
2	B	52	A	O3'-P	-6.60	1.53	1.61
2	B	92	U	N1-C2	-6.60	1.32	1.38
2	B	147	C	C5-C6	-6.60	1.29	1.34
2	B	775	G	O3'-P	-6.60	1.53	1.61
2	B	1128	G	N9-C4	-6.60	1.32	1.38
2	B	1563	U	C4-O4	-6.60	1.18	1.23
2	B	1508	A	C5-C4	-6.60	1.34	1.38
2	B	2114	A	N7-C5	-6.60	1.35	1.39
2	B	2503	A	N7-C5	-6.60	1.35	1.39
2	B	2121	G	C6-N1	6.60	1.44	1.39
2	B	70	G	C4'-C3'	6.59	1.60	1.53
2	B	824	U	C2-N3	6.59	1.42	1.37
2	B	1568	G	C1'-N9	-6.59	1.37	1.46
2	B	1128	G	C2-N3	6.59	1.38	1.32
2	B	1191	G	O3'-P	-6.59	1.53	1.61
2	B	2352	A	O3'-P	-6.59	1.53	1.61
27	C	102	TYR	CE1-CZ	6.59	1.47	1.38
2	B	441	U	C4-C5	-6.59	1.37	1.43
2	B	1060	U	C4'-O4'	-6.59	1.36	1.45
2	B	1166	G	C6-O6	-6.59	1.18	1.24
2	B	1933	G	C6-N1	-6.59	1.34	1.39
2	B	2605	U	C2-N3	-6.59	1.33	1.37
2	B	1642	G	C2-N3	6.59	1.38	1.32
2	B	1204	A	C8-N7	-6.59	1.26	1.31
2	B	1641	A	N1-C2	-6.59	1.28	1.34
2	B	2901	C	N3-C4	6.59	1.38	1.33
2	B	1495	A	C8-N7	-6.58	1.26	1.31
2	B	1743	G	C3'-C2'	-6.58	1.45	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2516	A	C4'-C3'	-6.58	1.46	1.53
2	B	11	C	C4-N4	6.58	1.39	1.33
2	B	62	U	P-O5'	-6.58	1.53	1.59
2	B	536	G	C5-C6	-6.58	1.35	1.42
2	B	540	C	N1-C2	-6.58	1.33	1.40
2	B	2133	G	N1-C2	6.58	1.43	1.37
2	B	2315	G	N7-C5	-6.58	1.35	1.39
2	B	2386	A	C2-N3	6.58	1.39	1.33
2	B	1027	A	C6-N6	6.58	1.39	1.33
2	B	2368	C	O3'-P	-6.58	1.53	1.61
2	B	1696	G	C2-N2	6.58	1.41	1.34
2	B	381	G	C6-O6	-6.58	1.18	1.24
2	B	1172	C	N1-C6	6.58	1.41	1.37
2	B	2125	G	N1-C2	6.58	1.43	1.37
2	B	2215	C	C5'-C4'	6.58	1.59	1.51
2	B	2768	U	N3-C4	6.58	1.44	1.38
2	B	1545	A	O3'-P	-6.58	1.53	1.61
2	B	2506	U	N1-C2	6.58	1.44	1.38
2	B	2593	U	C4'-C3'	-6.58	1.46	1.53
2	B	106	C	C4-C5	6.58	1.48	1.43
2	B	440	C	C4-N4	6.58	1.39	1.33
2	B	1139	G	C6-O6	-6.58	1.18	1.24
2	B	1376	C	C2-N3	-6.58	1.30	1.35
2	B	2048	G	C2-N3	6.58	1.38	1.32
2	B	2384	U	C2'-C1'	-6.58	1.46	1.53
2	B	728	G	C4'-O4'	6.57	1.54	1.45
2	B	765	C	C4-C5	6.57	1.48	1.43
2	B	1239	G	C3'-C2'	6.57	1.60	1.52
2	B	2132	U	C4-C5	-6.57	1.37	1.43
2	B	2587	A	C2'-C1'	-6.57	1.46	1.53
2	B	2805	C	N3-C4	6.57	1.38	1.33
2	B	1115	G	N9-C4	-6.57	1.32	1.38
2	B	2232	C	C4'-C3'	6.57	1.60	1.53
2	B	2283	C	C4-C5	6.57	1.48	1.43
2	B	127	A	C4'-C3'	-6.57	1.46	1.53
2	B	715	A	C8-N7	-6.57	1.26	1.31
2	B	963	U	C2-N3	-6.57	1.33	1.37
2	B	1521	G	C2'-C1'	-6.57	1.46	1.53
2	B	1572	A	N3-C4	-6.57	1.30	1.34
2	B	1631	G	C2'-C1'	-6.57	1.46	1.53
2	B	2618	G	C1'-N9	-6.57	1.37	1.46
2	B	2728	U	C5-C6	6.57	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2644	G	O3'-P	-6.57	1.53	1.61
1	A	47	C	N3-C4	6.57	1.38	1.33
2	B	53	A	C6-N1	-6.57	1.30	1.35
2	B	1183	U	C2-N3	6.57	1.42	1.37
2	B	2063	C	P-O5'	-6.57	1.53	1.59
2	B	2493	U	O3'-P	-6.57	1.53	1.61
2	B	2854	G	C6-O6	-6.57	1.18	1.24
2	B	1597	A	N3-C4	-6.57	1.30	1.34
2	B	2020	A	C1'-N9	-6.57	1.37	1.46
2	B	2050	C	N3-C4	6.57	1.38	1.33
2	B	2092	U	O4'-C1'	6.57	1.50	1.41
2	B	53	A	C3'-O3'	-6.56	1.32	1.42
2	B	130	C	O3'-P	-6.56	1.53	1.61
2	B	2391	G	C6-N1	6.56	1.44	1.39
2	B	118	A	N7-C5	-6.56	1.35	1.39
2	B	790	U	N3-C4	6.56	1.44	1.38
2	B	2406	A	P-O5'	-6.56	1.53	1.59
2	B	2373	G	C2'-C1'	-6.56	1.46	1.53
2	B	277	G	N1-C2	6.56	1.43	1.37
2	B	469	G	C6-N1	6.56	1.44	1.39
2	B	586	A	C4'-C3'	-6.56	1.46	1.53
2	B	1045	C	C2-N3	6.56	1.41	1.35
2	B	1047	G	N7-C5	-6.56	1.35	1.39
2	B	1800	C	C2-N3	-6.56	1.30	1.35
2	B	1803	A	N9-C8	6.56	1.43	1.37
2	B	1844	C	C3'-O3'	6.56	1.51	1.42
2	B	1931	U	C2'-C1'	6.56	1.60	1.53
2	B	2188	U	C4'-O4'	6.56	1.54	1.45
2	B	2297	A	O3'-P	-6.56	1.53	1.61
2	B	2351	G	N7-C5	-6.56	1.35	1.39
2	B	2692	G	N9-C4	-6.56	1.32	1.38
2	B	258	G	P-O5'	-6.56	1.53	1.59
2	B	629	G	N7-C5	-6.56	1.35	1.39
2	B	2661	G	C5-C6	-6.56	1.35	1.42
2	B	2678	C	O3'-P	-6.56	1.53	1.61
2	B	2868	A	C6-N6	6.56	1.39	1.33
2	B	311	A	C1'-N9	6.55	1.58	1.48
2	B	649	G	C2'-C1'	-6.55	1.46	1.53
2	B	1849	G	C2'-C1'	-6.55	1.46	1.53
2	B	2211	A	C6-N6	6.55	1.39	1.33
2	B	2677	G	C5-C4	-6.55	1.33	1.38
2	B	2889	C	C2'-C1'	-6.55	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2517	C	C4-C5	-6.55	1.37	1.43
1	A	110	C	C5'-C4'	6.55	1.59	1.51
2	B	486	C	C2'-C1'	-6.55	1.46	1.53
2	B	515	A	N9-C8	-6.55	1.32	1.37
2	B	1107	G	C2-N3	6.55	1.38	1.32
2	B	2128	G	N7-C5	-6.55	1.35	1.39
2	B	2419	U	C2-N3	6.55	1.42	1.37
2	B	2540	C	C5'-C4'	6.55	1.59	1.51
1	A	107	G	C6-N1	6.55	1.44	1.39
2	B	518	G	N3-C4	-6.55	1.30	1.35
2	B	2500	U	C4-C5	6.55	1.49	1.43
2	B	894	U	C5'-C4'	6.55	1.59	1.51
2	B	1423	G	N9-C4	-6.55	1.32	1.38
2	B	2144	G	C2-N3	6.55	1.38	1.32
2	B	2148	G	N9-C4	-6.55	1.32	1.38
2	B	2374	C	C2'-C1'	-6.55	1.46	1.53
2	B	396	G	N7-C5	-6.55	1.35	1.39
2	B	718	A	C2'-C1'	-6.55	1.46	1.53
2	B	1260	A	C8-N7	-6.55	1.26	1.31
2	B	1582	C	N3-C4	6.55	1.38	1.33
14	D	78	GLY	CA-C	-6.55	1.41	1.51
2	B	167	A	C5'-C4'	6.54	1.59	1.51
2	B	1122	G	C5'-C4'	6.54	1.59	1.51
2	B	2544	G	C8-N7	-6.54	1.27	1.30
2	B	326	G	C6-O6	-6.54	1.18	1.24
2	B	536	G	C8-N7	-6.54	1.27	1.30
2	B	740	C	N3-C4	6.54	1.38	1.33
2	B	2502	G	P-O5'	-6.54	1.53	1.59
2	B	2841	C	C4-N4	6.54	1.39	1.33
1	A	20	G	C6-O6	-6.54	1.18	1.24
2	B	535	G	C2-N3	6.54	1.38	1.32
2	B	814	C	C4-N4	6.54	1.39	1.33
2	B	2127	G	N9-C8	6.54	1.42	1.37
2	B	2495	G	C4'-C3'	-6.54	1.46	1.53
2	B	650	C	C2'-C1'	-6.54	1.46	1.53
2	B	2637	U	N3-C4	6.54	1.44	1.38
2	B	42	A	C4'-C3'	6.54	1.60	1.53
2	B	810	U	C5'-C4'	-6.54	1.43	1.51
2	B	970	U	C2'-C1'	-6.54	1.46	1.53
2	B	1305	C	C2'-C1'	-6.54	1.46	1.53
2	B	1094	U	C2-N3	6.54	1.42	1.37
2	B	1357	C	C4-N4	6.54	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1430	G	C6-N1	6.54	1.44	1.39
1	A	46	A	C3'-C2'	-6.54	1.45	1.52
2	B	879	G	C2'-C1'	-6.54	1.46	1.53
2	B	1104	C	C4-C5	6.54	1.48	1.43
2	B	1794	A	P-O5'	-6.54	1.53	1.59
2	B	2785	C	N3-C4	6.54	1.38	1.33
2	B	1232	G	C2-N3	6.53	1.38	1.32
2	B	1500	G	C3'-C2'	-6.53	1.45	1.52
2	B	1734	G	C2'-C1'	-6.53	1.46	1.53
2	B	2307	G	N7-C5	-6.53	1.35	1.39
2	B	273	G	N7-C5	-6.53	1.35	1.39
2	B	689	A	C5-C4	-6.53	1.34	1.38
2	B	807	U	C2-N3	6.53	1.42	1.37
2	B	1723	G	C2-N2	-6.53	1.28	1.34
2	B	2125	G	C2-N3	6.53	1.38	1.32
2	B	2241	A	C6-N1	6.53	1.40	1.35
2	B	226	A	O3'-P	-6.53	1.53	1.61
2	B	945	A	N3-C4	-6.53	1.30	1.34
2	B	1051	G	C4'-C3'	-6.53	1.46	1.53
2	B	1423	G	N7-C5	-6.53	1.35	1.39
2	B	2738	A	C6-N1	6.53	1.40	1.35
2	B	400	G	P-O5'	-6.53	1.53	1.59
2	B	439	A	N9-C4	-6.53	1.33	1.37
2	B	2228	G	N1-C2	6.53	1.43	1.37
2	B	2602	A	C6-N1	6.53	1.40	1.35
2	B	778	G	C5-C6	-6.53	1.35	1.42
2	B	418	C	C4-C5	-6.53	1.37	1.43
2	B	834	G	N1-C2	6.53	1.43	1.37
2	B	1077	A	C6-N6	6.53	1.39	1.33
2	B	1099	G	C3'-C2'	6.53	1.60	1.52
2	B	1243	C	O3'-P	-6.53	1.53	1.61
2	B	1309	G	N7-C5	-6.53	1.35	1.39
2	B	1833	C	C4-C5	-6.53	1.37	1.43
2	B	2446	G	C2-N3	6.53	1.38	1.32
2	B	2608	G	C5'-C4'	6.53	1.59	1.51
2	B	2843	G	N3-C4	-6.53	1.30	1.35
1	A	19	C	C2-N3	-6.52	1.30	1.35
2	B	469	G	C8-N7	-6.52	1.27	1.30
2	B	1171	G	P-O5'	-6.52	1.53	1.59
2	B	1841	U	N1-C2	-6.52	1.32	1.38
2	B	2901	C	C4-N4	6.52	1.39	1.33
2	B	1241	A	N3-C4	-6.52	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1363	C	O3'-P	-6.52	1.53	1.61
2	B	2197	U	N3-C4	6.52	1.44	1.38
2	B	2382	G	N7-C5	-6.52	1.35	1.39
2	B	2521	C	C5-C6	-6.52	1.29	1.34
1	A	15	A	N3-C4	-6.52	1.30	1.34
2	B	2884	U	C4-C5	6.52	1.49	1.43
2	B	15	G	N1-C2	6.52	1.43	1.37
2	B	356	G	C3'-C2'	-6.52	1.45	1.52
2	B	1789	A	C2'-C1'	-6.52	1.46	1.53
2	B	2235	G	C4'-O4'	-6.52	1.37	1.45
2	B	25	U	N1-C2	-6.52	1.32	1.38
2	B	480	A	C3'-O3'	-6.52	1.33	1.42
2	B	2749	A	C5-C4	-6.52	1.34	1.38
1	A	112	G	C6-N1	6.51	1.44	1.39
2	B	1530	G	C4'-C3'	-6.51	1.46	1.53
2	B	2053	G	C4'-C3'	-6.51	1.46	1.53
2	B	2838	G	N3-C4	-6.51	1.30	1.35
2	B	70	G	C6-N1	6.51	1.44	1.39
2	B	1717	A	C8-N7	-6.51	1.26	1.31
2	B	1837	C	O3'-P	-6.51	1.53	1.61
2	B	1933	G	N1-C2	6.51	1.43	1.37
2	B	400	G	N9-C4	-6.51	1.32	1.38
2	B	1519	G	C2-N3	6.51	1.38	1.32
2	B	1587	G	C2-N2	6.51	1.41	1.34
2	B	1854	A	C5-C4	6.51	1.43	1.38
2	B	2255	G	N9-C8	-6.51	1.33	1.37
2	B	2777	G	C2'-C1'	6.51	1.60	1.53
2	B	339	U	N1-C2	6.51	1.44	1.38
2	B	493	G	N7-C5	6.51	1.43	1.39
2	B	1228	G	N1-C2	6.51	1.43	1.37
2	B	1618	A	C6-N6	6.51	1.39	1.33
2	B	1762	A	C4'-C3'	-6.51	1.46	1.53
2	B	1927	A	N9-C8	-6.51	1.32	1.37
2	B	2152	G	O3'-P	-6.51	1.53	1.61
2	B	696	G	N7-C5	-6.51	1.35	1.39
2	B	1793	C	C4'-O4'	6.51	1.54	1.45
2	B	2845	U	C3'-C2'	-6.51	1.45	1.52
1	A	110	C	P-O5'	-6.51	1.53	1.59
2	B	114	U	C3'-C2'	-6.51	1.45	1.52
2	B	1406	U	O4'-C1'	-6.51	1.33	1.41
2	B	2533	U	C3'-C2'	-6.51	1.45	1.52
19	X	401	ARG	CD-NE	6.51	1.57	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	739	A	N3-C4	6.50	1.38	1.34
2	B	959	A	N9-C4	-6.50	1.33	1.37
2	B	1582	C	C5'-C4'	-6.50	1.43	1.51
2	B	1845	G	C2'-C1'	-6.50	1.46	1.53
2	B	2659	G	N1-C2	6.50	1.43	1.37
2	B	905	A	P-O5'	-6.50	1.53	1.59
2	B	984	A	C6-N6	6.50	1.39	1.33
2	B	1419	A	N3-C4	-6.50	1.30	1.34
2	B	2459	A	O4'-C1'	6.50	1.50	1.41
2	B	2485	G	N7-C5	6.50	1.43	1.39
1	A	85	G	C8-N7	-6.50	1.27	1.30
2	B	453	A	N9-C4	-6.50	1.33	1.37
2	B	907	G	O3'-P	-6.50	1.53	1.61
2	B	1239	G	N1-C2	-6.50	1.32	1.37
2	B	2205	A	N3-C4	-6.50	1.30	1.34
2	B	1829	A	N9-C4	-6.50	1.33	1.37
2	B	1989	G	C3'-C2'	-6.50	1.45	1.52
2	B	2566	A	N3-C4	-6.50	1.30	1.34
2	B	2881	U	C3'-C2'	-6.50	1.45	1.52
2	B	2014	A	O3'-P	-6.50	1.53	1.61
2	B	2029	G	N1-C2	6.50	1.43	1.37
2	B	2420	C	C2'-C1'	-6.50	1.46	1.53
2	B	301	G	C4'-C3'	-6.50	1.46	1.53
2	B	377	G	C2'-C1'	-6.50	1.46	1.53
2	B	1509	A	N1-C2	6.50	1.40	1.34
2	B	2071	A	C4'-C3'	6.50	1.60	1.53
2	B	2408	U	C4'-C3'	-6.50	1.46	1.53
19	X	168	PRO	N-CD	-6.50	1.38	1.47
2	B	436	C	N3-C4	6.49	1.38	1.33
2	B	537	G	N1-C2	6.49	1.43	1.37
2	B	732	C	C4-C5	6.49	1.48	1.43
2	B	1154	G	N1-C2	6.49	1.43	1.37
2	B	1198	U	N1-C6	6.49	1.43	1.38
2	B	1405	U	C4'-O4'	-6.49	1.37	1.45
2	B	1478	G	N9-C8	-6.49	1.33	1.37
2	B	1660	G	C6-O6	-6.49	1.18	1.24
2	B	2271	G	C5-C6	-6.49	1.35	1.42
2	B	566	U	C2-N3	6.49	1.42	1.37
2	B	726	G	P-O5'	-6.49	1.53	1.59
2	B	1451	C	C4-C5	6.49	1.48	1.43
2	B	1561	C	N1-C6	-6.49	1.33	1.37
2	B	1624	U	P-O5'	-6.49	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1888	G	C2-N3	6.49	1.38	1.32
2	B	2094	A	O3'-P	-6.49	1.53	1.61
2	B	411	G	N7-C5	-6.49	1.35	1.39
2	B	914	G	N9-C4	-6.49	1.32	1.38
2	B	918	A	C2'-C1'	-6.49	1.46	1.53
2	B	934	U	P-O5'	-6.49	1.53	1.59
2	B	2287	A	P-O5'	-6.49	1.53	1.59
2	B	2901	C	N1-C6	-6.49	1.33	1.37
2	B	10	A	C5'-C4'	6.49	1.59	1.51
2	B	70	G	N7-C5	-6.49	1.35	1.39
2	B	8	C	N1-C2	-6.49	1.33	1.40
2	B	186	G	N7-C5	-6.49	1.35	1.39
2	B	553	G	N7-C5	-6.49	1.35	1.39
2	B	790	U	P-O5'	-6.49	1.53	1.59
2	B	1099	G	C2-N3	6.49	1.38	1.32
2	B	1478	G	C2'-C1'	-6.49	1.46	1.53
2	B	1653	G	C2-N3	6.49	1.38	1.32
2	B	1933	G	C1'-N9	-6.49	1.37	1.46
2	B	1937	A	C6-N6	6.49	1.39	1.33
2	B	2111	U	N1-C2	6.49	1.44	1.38
2	B	785	G	N1-C2	6.48	1.43	1.37
1	A	49	C	O3'-P	-6.48	1.53	1.61
2	B	42	A	C5-C6	-6.48	1.35	1.41
2	B	136	G	C5-C4	-6.48	1.33	1.38
2	B	811	U	O3'-P	-6.48	1.53	1.61
2	B	1369	G	N1-C2	6.48	1.43	1.37
2	B	1436	G	N1-C2	6.48	1.43	1.37
2	B	1822	C	C4'-O4'	-6.48	1.37	1.45
1	A	23	G	P-O5'	-6.48	1.53	1.59
2	B	36	G	P-O5'	-6.48	1.53	1.59
2	B	150	U	C2-N3	6.48	1.42	1.37
2	B	421	C	C4-C5	6.48	1.48	1.43
2	B	428	A	C5'-C4'	-6.48	1.43	1.51
2	B	1473	G	C4'-C3'	-6.48	1.46	1.53
2	B	2082	A	C8-N7	6.48	1.36	1.31
2	B	2202	U	C4-C5	6.48	1.49	1.43
2	B	2615	U	C3'-C2'	-6.48	1.45	1.52
2	B	620	G	C6-N1	-6.48	1.35	1.39
2	B	1284	A	N9-C8	-6.48	1.32	1.37
2	B	1445	G	N7-C5	-6.48	1.35	1.39
2	B	2457	U	N1-C2	6.48	1.44	1.38
2	B	2536	G	C1'-N9	6.48	1.58	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	37	C	C4-N4	6.48	1.39	1.33
2	B	373	U	C4'-C3'	6.47	1.60	1.53
2	B	652	U	C5'-C4'	6.47	1.59	1.51
2	B	989	G	O3'-P	-6.47	1.53	1.61
2	B	2283	C	C4'-C3'	-6.47	1.46	1.53
2	B	348	A	N7-C5	-6.47	1.35	1.39
2	B	2242	G	O3'-P	-6.47	1.53	1.61
2	B	2254	C	C3'-C2'	-6.47	1.45	1.52
2	B	107	G	C2-N3	6.47	1.38	1.32
2	B	315	G	N9-C4	6.47	1.43	1.38
2	B	482	A	P-O5'	-6.47	1.53	1.59
2	B	1127	A	C3'-C2'	-6.47	1.45	1.52
2	B	1631	G	O4'-C1'	-6.47	1.33	1.41
2	B	2755	C	C2'-C1'	-6.47	1.46	1.53
2	B	189	G	N1-C2	-6.47	1.32	1.37
2	B	462	C	O3'-P	-6.47	1.53	1.61
2	B	546	U	C2-N3	6.47	1.42	1.37
2	B	2338	C	C3'-C2'	-6.47	1.45	1.52
2	B	374	A	P-O5'	-6.47	1.53	1.59
2	B	417	C	C2'-C1'	-6.47	1.46	1.53
2	B	715	A	C6-N1	6.47	1.40	1.35
2	B	1287	A	C8-N7	-6.47	1.27	1.31
2	B	2854	G	C2-N2	6.47	1.41	1.34
27	C	51	ARG	CD-NE	6.47	1.57	1.46
2	B	199	A	C2'-C1'	-6.46	1.46	1.53
2	B	290	U	N3-C4	6.46	1.44	1.38
2	B	561	G	C8-N7	-6.46	1.27	1.30
2	B	650	C	C3'-C2'	-6.46	1.45	1.52
2	B	2057	G	C6-N1	6.46	1.44	1.39
2	B	2357	G	C4'-C3'	-6.46	1.46	1.53
2	B	2468	A	N9-C4	6.46	1.41	1.37
2	B	835	C	C2'-C1'	-6.46	1.46	1.53
2	B	1387	A	C6-N6	6.46	1.39	1.33
2	B	1890	A	N9-C4	6.46	1.41	1.37
2	B	2006	C	C3'-C2'	-6.46	1.45	1.52
2	B	2027	G	N1-C2	6.46	1.43	1.37
2	B	2364	C	C4-N4	6.46	1.39	1.33
2	B	2413	G	C5-C4	-6.46	1.33	1.38
2	B	103	A	C2'-C1'	-6.46	1.46	1.53
2	B	409	G	O3'-P	-6.46	1.53	1.61
2	B	1071	G	C6-N1	-6.46	1.35	1.39
2	B	1482	G	N1-C2	-6.46	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2088	A	C6-N6	6.46	1.39	1.33
2	B	2393	U	O5'-C5'	-6.46	1.32	1.42
2	B	2443	C	N3-C4	6.46	1.38	1.33
2	B	2602	A	C6-N6	6.46	1.39	1.33
2	B	2698	U	O4'-C1'	-6.46	1.33	1.41
2	B	2541	A	N7-C5	-6.46	1.35	1.39
2	B	2773	C	C2'-C1'	-6.46	1.46	1.53
1	A	46	A	C6-N1	6.46	1.40	1.35
2	B	722	A	P-O5'	-6.46	1.53	1.59
2	B	1904	G	C6-N1	6.46	1.44	1.39
2	B	2847	U	O4'-C1'	-6.46	1.33	1.41
2	B	2886	A	P-O5'	-6.46	1.53	1.59
2	B	498	G	O3'-P	-6.45	1.53	1.61
2	B	764	A	C5'-C4'	6.45	1.59	1.51
2	B	1694	C	C3'-C2'	-6.45	1.45	1.52
2	B	1718	G	C4'-O4'	-6.45	1.37	1.45
2	B	2452	C	C2'-C1'	-6.45	1.46	1.53
2	B	2706	A	N7-C5	-6.45	1.35	1.39
2	B	2778	A	C8-N7	-6.45	1.27	1.31
2	B	1504	A	C6-N6	6.45	1.39	1.33
2	B	580	U	C3'-C2'	-6.45	1.45	1.52
2	B	745	G	O4'-C1'	-6.45	1.33	1.41
2	B	2537	U	P-O5'	-6.45	1.53	1.59
2	B	2752	C	O3'-P	-6.45	1.53	1.61
2	B	1895	C	C3'-C2'	6.45	1.60	1.52
1	A	53	A	C2-N3	6.45	1.39	1.33
2	B	2329	U	C2'-C1'	-6.45	1.46	1.53
2	B	1581	G	P-O5'	-6.45	1.53	1.59
16	2	30	ARG	CD-NE	6.45	1.57	1.46
2	B	1299	G	O3'-P	-6.44	1.53	1.61
2	B	2058	A	C5-C6	6.44	1.46	1.41
1	A	118	C	N1-C6	6.44	1.41	1.37
2	B	1023	U	C4'-C3'	-6.44	1.46	1.53
2	B	1114	C	N3-C4	6.44	1.38	1.33
2	B	2737	G	C5-C4	6.44	1.42	1.38
2	B	2095	A	C4'-C3'	-6.44	1.46	1.53
2	B	2369	A	C6-N6	6.44	1.39	1.33
2	B	2491	U	C4'-C3'	-6.44	1.46	1.53
2	B	1361	G	C2'-C1'	-6.44	1.46	1.53
2	B	2018	G	O4'-C1'	-6.44	1.33	1.41
2	B	2542	A	C5'-C4'	6.44	1.59	1.51
2	B	373	U	C2-O2	6.44	1.28	1.22

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	565	C	C2-N3	-6.44	1.30	1.35
2	B	721	A	C2'-C1'	-6.44	1.46	1.53
2	B	1	G	N9-C4	6.43	1.43	1.38
2	B	279	A	C6-N6	6.43	1.39	1.33
2	B	1653	G	C8-N7	-6.43	1.27	1.30
2	B	1708	C	N1-C2	-6.43	1.33	1.40
2	B	1780	A	N7-C5	6.43	1.43	1.39
2	B	2273	A	C2'-C1'	-6.43	1.46	1.53
2	B	388	G	C8-N7	-6.43	1.27	1.30
2	B	841	G	C6-O6	-6.43	1.18	1.24
2	B	869	G	C2-N3	6.43	1.37	1.32
2	B	915	C	C4-C5	-6.43	1.37	1.43
2	B	1659	G	C5'-C4'	6.43	1.59	1.51
2	B	2273	A	C5-C6	-6.43	1.35	1.41
2	B	2645	G	C4'-C3'	6.43	1.60	1.53
2	B	2653	U	P-O5'	-6.43	1.53	1.59
2	B	611	C	N3-C4	6.43	1.38	1.33
2	B	905	A	N3-C4	-6.43	1.30	1.34
2	B	1354	A	C5-C6	-6.43	1.35	1.41
2	B	2205	A	C2'-C1'	-6.43	1.46	1.53
2	B	2353	G	N9-C4	-6.43	1.32	1.38
2	B	2624	G	C4'-C3'	-6.43	1.46	1.53
2	B	86	G	N3-C4	-6.43	1.30	1.35
2	B	407	G	N1-C2	6.43	1.42	1.37
2	B	1068	G	N9-C8	6.43	1.42	1.37
2	B	2467	C	C2-N3	-6.43	1.30	1.35
2	B	2795	C	C4'-C3'	-6.43	1.46	1.53
2	B	308	G	C8-N7	-6.43	1.27	1.30
2	B	383	C	C5'-C4'	-6.43	1.43	1.51
2	B	453	A	C5'-C4'	6.43	1.59	1.51
2	B	739	A	C4'-O4'	6.43	1.53	1.45
2	B	2009	A	C4'-C3'	-6.43	1.46	1.53
2	B	353	C	C2-N3	6.43	1.40	1.35
2	B	1041	G	C2-N3	6.43	1.37	1.32
2	B	1303	G	C1'-N9	-6.43	1.37	1.46
2	B	2034	U	C2-N3	6.43	1.42	1.37
2	B	2204	G	C5'-C4'	6.43	1.59	1.51
2	B	2225	A	N3-C4	-6.43	1.30	1.34
2	B	2242	G	C4'-O4'	-6.43	1.37	1.45
2	B	284	U	C4-O4	-6.42	1.18	1.23
2	B	637	A	N9-C4	-6.42	1.33	1.37
2	B	987	C	C4-C5	6.42	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1702	G	C3'-C2'	-6.42	1.45	1.52
2	B	2483	C	C2'-C1'	-6.42	1.46	1.53
2	B	2698	U	C3'-C2'	-6.42	1.45	1.52
2	B	2713	U	C2-N3	6.42	1.42	1.37
1	A	13	G	N7-C5	-6.42	1.35	1.39
2	B	2024	G	C6-O6	-6.42	1.18	1.24
2	B	2830	C	C4'-C3'	6.42	1.60	1.53
2	B	637	A	C5-C6	-6.42	1.35	1.41
2	B	885	C	P-O5'	-6.42	1.53	1.59
2	B	1060	U	N3-C4	6.42	1.44	1.38
2	B	1368	G	N1-C2	6.42	1.42	1.37
2	B	1478	G	C4'-C3'	-6.42	1.46	1.53
2	B	1479	G	C3'-C2'	-6.42	1.45	1.52
2	B	1590	A	N9-C4	-6.42	1.33	1.37
2	B	2072	C	O3'-P	-6.42	1.53	1.61
2	B	2853	C	C5'-C4'	6.42	1.59	1.51
8	N	86	ARG	CD-NE	6.42	1.57	1.46
2	B	1333	G	O3'-P	-6.42	1.53	1.61
2	B	2502	G	C2'-O2'	-6.42	1.33	1.41
2	B	2830	C	N3-C4	6.42	1.38	1.33
1	A	36	C	P-O5'	-6.42	1.53	1.59
2	B	141	G	O5'-C5'	6.42	1.54	1.44
2	B	826	U	O3'-P	-6.42	1.53	1.61
2	B	1597	A	C8-N7	-6.42	1.27	1.31
2	B	2205	A	O3'-P	-6.42	1.53	1.61
2	B	1558	C	N1-C6	-6.42	1.33	1.37
27	C	101	ARG	CZ-NH1	6.42	1.41	1.33
2	B	746	U	C4'-C3'	6.42	1.60	1.53
2	B	1001	A	C3'-C2'	-6.42	1.45	1.52
2	B	2363	G	C5-C4	-6.42	1.33	1.38
1	A	63	C	C4-C5	6.41	1.48	1.43
2	B	35	G	C4'-C3'	-6.41	1.46	1.53
2	B	1378	A	C8-N7	-6.41	1.27	1.31
2	B	2043	C	C4-N4	6.41	1.39	1.33
2	B	2046	G	N1-C2	6.41	1.42	1.37
2	B	2123	G	C5-C4	6.41	1.42	1.38
2	B	2574	G	N9-C4	-6.41	1.32	1.38
2	B	675	A	P-O5'	-6.41	1.53	1.59
2	B	765	C	C5'-C4'	6.41	1.59	1.51
2	B	2886	A	N1-C2	6.41	1.40	1.34
2	B	111	A	N3-C4	-6.41	1.31	1.34
2	B	655	A	C5-C4	6.41	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	664	G	C8-N7	-6.41	1.27	1.30
2	B	802	A	N9-C4	-6.41	1.34	1.37
2	B	1643	G	N9-C8	-6.41	1.33	1.37
2	B	2747	G	C3'-C2'	-6.41	1.45	1.52
2	B	746	U	C2-N3	6.41	1.42	1.37
2	B	1165	A	O3'-P	-6.41	1.53	1.61
2	B	2461	A	C1'-N9	-6.41	1.37	1.46
16	2	25	GLY	CA-C	-6.41	1.41	1.51
2	B	1612	C	O4'-C1'	-6.41	1.33	1.41
2	B	1656	C	P-O5'	-6.41	1.53	1.59
2	B	206	U	C5'-C4'	6.40	1.59	1.51
2	B	46	G	N9-C4	-6.40	1.32	1.38
2	B	1540	G	C2'-C1'	-6.40	1.46	1.53
2	B	2624	G	C6-N1	6.40	1.44	1.39
2	B	2884	U	C3'-C2'	-6.40	1.45	1.52
2	B	24	G	C2'-C1'	-6.40	1.46	1.53
2	B	308	G	N9-C4	-6.40	1.32	1.38
2	B	322	A	C3'-O3'	-6.40	1.33	1.42
2	B	372	G	C5-C6	-6.40	1.35	1.42
2	B	374	A	C5-C4	-6.40	1.34	1.38
2	B	597	G	C6-N1	-6.40	1.35	1.39
2	B	1615	C	O3'-P	-6.40	1.53	1.61
2	B	2314	A	C3'-C2'	-6.40	1.45	1.52
2	B	2568	U	C2'-C1'	-6.40	1.46	1.53
2	B	1573	G	C8-N7	-6.40	1.27	1.30
2	B	1728	C	P-O5'	-6.40	1.53	1.59
2	B	419	U	O3'-P	-6.40	1.53	1.61
2	B	1560	G	O3'-P	-6.40	1.53	1.61
2	B	2335	A	C2'-C1'	6.40	1.60	1.53
2	B	2571	U	C2-N3	6.40	1.42	1.37
2	B	2693	G	C8-N7	6.40	1.34	1.30
1	A	15	A	N7-C5	-6.40	1.35	1.39
2	B	1789	A	C8-N7	-6.40	1.27	1.31
2	B	424	G	C2'-C1'	-6.39	1.46	1.53
2	B	515	A	C1'-N9	-6.39	1.37	1.46
2	B	748	G	N9-C8	6.39	1.42	1.37
2	B	1181	U	C4'-C3'	-6.39	1.46	1.53
2	B	1381	G	C3'-C2'	-6.39	1.45	1.52
2	B	1435	G	C3'-C2'	-6.39	1.45	1.52
2	B	1464	G	N9-C8	6.39	1.42	1.37
2	B	1837	C	C2-N3	6.39	1.40	1.35
20	E	158	PHE	CG-CD2	6.39	1.48	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	294	A	C1'-N9	-6.39	1.38	1.46
2	B	382	A	C4'-C3'	-6.39	1.46	1.53
2	B	465	G	O3'-P	-6.39	1.53	1.61
2	B	699	A	C6-N1	6.39	1.40	1.35
2	B	1334	G	N9-C4	6.39	1.43	1.38
2	B	2277	G	C2'-C1'	-6.39	1.46	1.53
2	B	561	G	C5-C4	6.39	1.42	1.38
2	B	582	A	C6-N1	6.39	1.40	1.35
2	B	876	C	C4'-O4'	-6.39	1.37	1.45
2	B	2251	G	C8-N7	-6.39	1.27	1.30
2	B	1173	U	C3'-C2'	-6.39	1.45	1.52
2	B	1609	A	N3-C4	-6.39	1.31	1.34
2	B	2694	G	C2'-C1'	-6.39	1.46	1.53
2	B	2872	A	P-O5'	-6.39	1.53	1.59
2	B	292	U	C5-C6	-6.39	1.28	1.34
2	B	917	A	C5-C6	-6.39	1.35	1.41
2	B	996	A	N7-C5	-6.39	1.35	1.39
2	B	2158	A	N7-C5	-6.39	1.35	1.39
2	B	2694	G	C5-C4	-6.39	1.33	1.38
2	B	2880	C	O3'-P	-6.39	1.53	1.61
2	B	819	A	C4'-O4'	-6.38	1.37	1.45
2	B	921	C	O4'-C1'	6.38	1.50	1.41
2	B	1038	G	C2-N3	6.38	1.37	1.32
2	B	2685	G	C3'-O3'	6.38	1.51	1.42
2	B	211	C	N1-C6	-6.38	1.33	1.37
2	B	401	A	C3'-O3'	-6.38	1.33	1.42
2	B	1249	U	C2-N3	6.38	1.42	1.37
2	B	1796	U	C2'-C1'	-6.38	1.46	1.53
1	A	37	C	N1-C6	6.38	1.41	1.37
2	B	308	G	N3-C4	-6.38	1.30	1.35
2	B	1074	G	C8-N7	6.38	1.34	1.30
2	B	1107	G	N3-C4	-6.38	1.30	1.35
2	B	1559	U	C2'-C1'	-6.38	1.46	1.53
2	B	2042	A	N7-C5	-6.38	1.35	1.39
2	B	2570	G	O3'-P	-6.38	1.53	1.61
2	B	2650	U	C5-C6	6.38	1.39	1.34
2	B	674	G	N9-C4	6.38	1.43	1.38
2	B	1632	A	C2'-C1'	-6.38	1.46	1.53
2	B	2621	G	C2'-C1'	-6.38	1.46	1.53
2	B	2798	U	P-O5'	-6.38	1.53	1.59
1	A	102	G	C1'-N9	-6.38	1.38	1.46
2	B	518	G	O3'-P	-6.38	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1453	A	C6-N1	6.38	1.40	1.35
2	B	340	A	C2'-C1'	-6.38	1.46	1.53
2	B	1762	A	C5'-C4'	6.38	1.59	1.51
2	B	1983	G	C2-N3	6.38	1.37	1.32
2	B	2010	G	N3-C4	-6.38	1.30	1.35
2	B	2445	G	C3'-C2'	-6.38	1.45	1.52
2	B	975	A	O3'-P	-6.37	1.53	1.61
2	B	1157	G	N7-C5	-6.37	1.35	1.39
2	B	1257	C	C4-C5	-6.37	1.37	1.43
2	B	1964	G	C5-C6	-6.37	1.35	1.42
2	B	2437	G	N7-C5	6.37	1.43	1.39
2	B	64	A	C4'-O4'	-6.37	1.37	1.45
2	B	652	U	C2-N3	6.37	1.42	1.37
2	B	886	A	P-O5'	-6.37	1.53	1.59
2	B	1394	U	C5'-C4'	-6.37	1.43	1.51
2	B	1470	A	O3'-P	-6.37	1.53	1.61
9	O	13	ARG	CZ-NH1	6.37	1.41	1.33
1	A	57	A	C6-N6	6.37	1.39	1.33
2	B	85	G	O3'-P	-6.37	1.53	1.61
2	B	296	U	O3'-P	-6.37	1.53	1.61
2	B	2477	U	C2-N3	6.37	1.42	1.37
2	B	368	A	N9-C4	6.37	1.41	1.37
2	B	729	G	N7-C5	-6.37	1.35	1.39
2	B	1103	A	N3-C4	-6.37	1.31	1.34
2	B	1189	A	P-O5'	-6.37	1.53	1.59
2	B	2684	U	C4-O4	-6.37	1.18	1.23
1	A	29	A	C6-N1	6.37	1.40	1.35
2	B	959	A	C5-C6	-6.37	1.35	1.41
2	B	1005	C	N1-C6	-6.37	1.33	1.37
2	B	1376	C	O3'-P	-6.37	1.53	1.61
1	A	98	G	N9-C4	-6.36	1.32	1.38
2	B	152	A	C6-N6	6.36	1.39	1.33
2	B	793	A	C8-N7	-6.36	1.27	1.31
2	B	966	G	C2-N3	6.36	1.37	1.32
2	B	1063	G	C8-N7	-6.36	1.27	1.30
2	B	1439	A	O3'-P	-6.36	1.53	1.61
2	B	1901	A	P-O5'	-6.36	1.53	1.59
2	B	2026	U	P-O5'	-6.36	1.53	1.59
2	B	2757	A	C4'-C3'	-6.36	1.46	1.53
2	B	2835	A	C5-C4	6.36	1.43	1.38
2	B	492	A	N3-C4	-6.36	1.31	1.34
2	B	1456	G	O4'-C1'	6.36	1.50	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	857	G	N9-C8	-6.36	1.33	1.37
2	B	1524	G	N1-C2	6.36	1.42	1.37
2	B	1719	G	C8-N7	6.36	1.34	1.30
2	B	1914	C	C5'-C4'	6.36	1.58	1.51
2	B	2131	U	N3-C4	6.36	1.44	1.38
2	B	169	G	P-O5'	-6.36	1.53	1.59
2	B	910	A	C8-N7	-6.36	1.27	1.31
2	B	1431	A	O3'-P	-6.36	1.53	1.61
2	B	1691	C	C4'-C3'	6.36	1.60	1.53
2	B	1760	C	C4-N4	6.36	1.39	1.33
2	B	15	G	C2-N3	6.36	1.37	1.32
2	B	531	C	O4'-C1'	6.36	1.50	1.41
2	B	903	C	C4-C5	6.36	1.48	1.43
1	A	93	C	C2'-C1'	-6.36	1.46	1.53
2	B	244	A	C2'-C1'	-6.36	1.46	1.53
2	B	826	U	C4'-C3'	-6.36	1.46	1.53
2	B	828	U	C4'-O4'	-6.36	1.37	1.45
2	B	1690	A	C5'-C4'	6.36	1.58	1.51
2	B	1908	C	C2-N3	6.36	1.40	1.35
2	B	2369	A	C4'-C3'	-6.36	1.46	1.53
2	B	2795	C	C2'-C1'	-6.36	1.46	1.53
2	B	2169	A	C6-N1	6.35	1.40	1.35
1	A	110	C	N1-C6	-6.35	1.33	1.37
2	B	593	U	C5-C6	-6.35	1.28	1.34
2	B	1107	G	N7-C5	-6.35	1.35	1.39
2	B	1138	G	C2-N3	-6.35	1.27	1.32
2	B	1353	A	N7-C5	6.35	1.43	1.39
2	B	1599	U	O3'-P	-6.35	1.53	1.61
2	B	2154	A	C5-C4	6.35	1.43	1.38
2	B	583	G	O3'-P	-6.35	1.53	1.61
2	B	1351	C	O3'-P	-6.35	1.53	1.61
2	B	2443	C	N1-C6	6.35	1.41	1.37
2	B	2603	G	C2'-C1'	-6.35	1.46	1.53
5	L	66	PHE	CB-CG	-6.35	1.40	1.51
2	B	220	G	O3'-P	-6.35	1.53	1.61
2	B	341	C	C2'-C1'	-6.35	1.46	1.53
2	B	908	C	C4-N4	6.35	1.39	1.33
2	B	919	U	C2'-C1'	-6.35	1.46	1.53
2	B	971	G	C4'-C3'	-6.35	1.46	1.53
2	B	1033	U	C5'-C4'	-6.35	1.43	1.51
2	B	1376	C	N1-C6	-6.35	1.33	1.37
2	B	2482	A	C8-N7	-6.35	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	250	G	C5-C4	-6.35	1.33	1.38
2	B	1046	A	C4'-C3'	6.35	1.60	1.53
2	B	1586	A	N9-C8	-6.35	1.32	1.37
2	B	1839	G	C5'-C4'	6.35	1.58	1.51
2	B	2118	U	C4'-O4'	-6.35	1.37	1.45
2	B	2254	C	C4-N4	6.35	1.39	1.33
2	B	757	G	N9-C8	6.35	1.42	1.37
19	X	42	TYR	CE2-CZ	6.35	1.46	1.38
1	A	104	A	N3-C4	-6.34	1.31	1.34
2	B	172	A	C4'-O4'	6.34	1.53	1.45
2	B	195	A	N9-C4	-6.34	1.34	1.37
2	B	713	G	C2'-C1'	-6.34	1.46	1.53
2	B	1324	G	N3-C4	-6.34	1.31	1.35
2	B	1689	A	C5-C6	-6.34	1.35	1.41
2	B	625	G	N1-C2	6.34	1.42	1.37
2	B	1961	C	C5'-C4'	-6.34	1.43	1.51
1	A	4	C	C3'-C2'	6.34	1.59	1.52
2	B	1408	G	C1'-N9	-6.34	1.38	1.46
2	B	1666	G	P-O5'	-6.34	1.53	1.59
2	B	2823	A	P-O5'	-6.34	1.53	1.59
2	B	126	A	N9-C4	-6.34	1.34	1.37
2	B	302	C	C4-N4	6.34	1.39	1.33
2	B	1076	C	C5-C6	-6.34	1.29	1.34
2	B	1156	A	C1'-N9	-6.34	1.38	1.46
2	B	1220	G	C2-N3	6.34	1.37	1.32
2	B	1932	A	N3-C4	6.34	1.38	1.34
2	B	2133	G	C8-N7	6.34	1.34	1.30
2	B	2775	G	N9-C8	-6.34	1.33	1.37
2	B	530	G	C3'-C2'	-6.34	1.45	1.52
2	B	1551	A	N3-C4	-6.34	1.31	1.34
2	B	116	C	C4-N4	6.34	1.39	1.33
2	B	202	U	N1-C6	6.34	1.43	1.38
2	B	837	C	N3-C4	6.34	1.38	1.33
2	B	1471	G	C6-N1	6.34	1.44	1.39
2	B	1494	A	C4'-O4'	6.34	1.53	1.45
2	B	1671	U	C2'-C1'	-6.34	1.46	1.53
2	B	2363	G	N9-C4	-6.34	1.32	1.38
2	B	2364	C	C2'-C1'	-6.33	1.46	1.53
2	B	20	C	C2'-C1'	-6.33	1.46	1.53
2	B	268	C	C4-C5	6.33	1.48	1.43
2	B	292	U	C1'-N1	6.33	1.58	1.48
2	B	324	A	C5-C4	6.33	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	483	A	N7-C5	-6.33	1.35	1.39
2	B	1121	C	C4-N4	6.33	1.39	1.33
2	B	1521	G	O3'-P	-6.33	1.53	1.61
2	B	1813	G	O4'-C1'	6.33	1.49	1.41
2	B	2006	C	C4-C5	6.33	1.48	1.43
2	B	1357	C	C5'-C4'	6.33	1.58	1.51
2	B	1656	C	C4'-C3'	-6.33	1.46	1.53
2	B	1803	A	N7-C5	-6.33	1.35	1.39
2	B	1892	C	P-O5'	6.33	1.66	1.59
2	B	2142	A	C5-C6	-6.33	1.35	1.41
2	B	2145	C	C5'-C4'	6.33	1.58	1.51
2	B	2293	G	C2-N3	6.33	1.37	1.32
2	B	2412	A	C5-C4	6.33	1.43	1.38
2	B	2489	U	N1-C2	6.33	1.44	1.38
27	C	100	ARG	CD-NE	6.33	1.57	1.46
2	B	236	C	C5-C6	-6.33	1.29	1.34
2	B	174	U	C3'-C2'	-6.33	1.45	1.52
2	B	334	C	N3-C4	-6.33	1.29	1.33
2	B	1615	C	N3-C4	6.33	1.38	1.33
2	B	1956	U	C2'-C1'	-6.33	1.46	1.53
2	B	2118	U	C4-C5	6.33	1.49	1.43
2	B	2221	G	P-O5'	-6.33	1.53	1.59
2	B	2433	A	N9-C4	-6.33	1.34	1.37
2	B	2719	G	C8-N7	-6.33	1.27	1.30
2	B	170	U	C2-N3	-6.33	1.33	1.37
2	B	1541	C	C3'-C2'	-6.33	1.45	1.52
2	B	241	A	C2'-C1'	-6.33	1.46	1.53
2	B	529	A	C6-N1	6.33	1.40	1.35
2	B	922	C	N1-C6	6.33	1.41	1.37
2	B	1563	U	C4-C5	6.33	1.49	1.43
2	B	1736	U	C5'-C4'	-6.33	1.43	1.51
2	B	2283	C	C2'-C1'	-6.33	1.46	1.53
2	B	2331	G	C5'-C4'	6.33	1.58	1.51
2	B	2391	G	C3'-O3'	6.33	1.51	1.42
2	B	2557	G	N7-C5	-6.33	1.35	1.39
2	B	2675	A	C8-N7	-6.33	1.27	1.31
2	B	402	A	N3-C4	-6.32	1.31	1.34
2	B	472	A	O3'-P	-6.32	1.53	1.61
2	B	1084	A	P-O5'	-6.32	1.53	1.59
2	B	1952	A	O4'-C1'	-6.32	1.33	1.41
2	B	2135	A	C6-N6	6.32	1.39	1.33
2	B	2178	C	N3-C4	6.32	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2362	C	C3'-C2'	-6.32	1.45	1.52
2	B	106	C	O4'-C1'	6.32	1.49	1.41
2	B	797	G	C1'-N9	-6.32	1.38	1.46
2	B	1029	A	N9-C4	-6.32	1.34	1.37
2	B	2801	G	O3'-P	-6.32	1.53	1.61
2	B	191	A	N7-C5	-6.32	1.35	1.39
2	B	975	A	N9-C8	-6.32	1.32	1.37
2	B	1363	C	C5'-C4'	-6.32	1.43	1.51
2	B	2095	A	C5-C4	6.32	1.43	1.38
2	B	2121	G	C5-C4	6.32	1.42	1.38
2	B	2167	U	C4'-C3'	-6.32	1.46	1.53
2	B	2724	U	O3'-P	-6.32	1.53	1.61
20	E	16	GLU	CG-CD	6.32	1.61	1.51
2	B	916	G	C5-C6	-6.32	1.36	1.42
2	B	1378	A	C5-C6	-6.32	1.35	1.41
2	B	2180	U	C5'-C4'	6.32	1.58	1.51
32	J	125	TYR	CZ-OH	6.32	1.48	1.37
2	B	1059	G	N9-C8	-6.32	1.33	1.37
2	B	1121	C	N1-C6	-6.32	1.33	1.37
2	B	1241	A	N9-C4	-6.32	1.34	1.37
2	B	2269	G	C8-N7	-6.32	1.27	1.30
2	B	375	G	C8-N7	6.32	1.34	1.30
2	B	1030	C	P-O5'	-6.32	1.53	1.59
2	B	1643	G	C5-C4	-6.32	1.33	1.38
2	B	2152	G	N9-C4	6.32	1.43	1.38
2	B	2658	C	N3-C4	-6.32	1.29	1.33
2	B	2838	G	C2-N2	6.32	1.40	1.34
2	B	536	G	C5'-C4'	6.31	1.58	1.51
2	B	831	G	C1'-N9	-6.31	1.38	1.46
2	B	1191	G	C1'-N9	-6.31	1.38	1.46
2	B	1825	U	N1-C2	6.31	1.44	1.38
2	B	362	A	N9-C4	-6.31	1.34	1.37
2	B	2530	A	C8-N7	-6.31	1.27	1.31
2	B	2718	G	C5-C6	-6.31	1.36	1.42
2	B	2799	A	N9-C8	6.31	1.42	1.37
2	B	535	G	N1-C2	6.31	1.42	1.37
2	B	34	U	N3-C4	6.31	1.44	1.38
2	B	538	A	C6-N1	-6.31	1.31	1.35
2	B	544	C	C2'-C1'	-6.31	1.46	1.53
2	B	749	A	C4'-C3'	-6.31	1.46	1.53
2	B	1969	A	C6-N1	6.31	1.40	1.35
2	B	1995	U	C2'-C1'	-6.31	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	83	A	P-O5'	-6.31	1.53	1.59
2	B	1178	C	C5'-C4'	6.31	1.58	1.51
2	B	1275	A	N9-C8	-6.31	1.32	1.37
2	B	1515	A	C6-N6	6.31	1.39	1.33
2	B	1555	G	C2-N3	6.31	1.37	1.32
2	B	1616	A	N9-C8	-6.31	1.32	1.37
2	B	2724	U	C4'-O4'	-6.31	1.37	1.45
2	B	446	G	C5-C6	-6.31	1.36	1.42
2	B	524	G	P-O5'	-6.31	1.53	1.59
2	B	1257	C	C4-N4	6.31	1.39	1.33
2	B	750	A	C4'-O4'	-6.30	1.37	1.45
2	B	1114	C	O3'-P	-6.30	1.53	1.61
2	B	1559	U	C5'-C4'	6.30	1.58	1.51
2	B	1689	A	C4'-O4'	-6.30	1.37	1.45
2	B	2574	G	N1-C2	6.30	1.42	1.37
2	B	1806	C	N1-C6	6.30	1.41	1.37
2	B	2029	G	C6-N1	6.30	1.44	1.39
2	B	864	G	N1-C2	6.30	1.42	1.37
2	B	875	G	N7-C5	-6.30	1.35	1.39
2	B	894	U	O5'-C5'	-6.30	1.32	1.42
2	B	1544	A	O4'-C1'	6.30	1.49	1.41
2	B	1847	A	C6-N1	-6.30	1.31	1.35
2	B	1944	U	C2-N3	6.30	1.42	1.37
2	B	2121	G	C5-C6	-6.30	1.36	1.42
2	B	2633	G	C2-N3	-6.30	1.27	1.32
2	B	2692	G	C8-N7	-6.30	1.27	1.30
2	B	602	A	C6-N6	6.30	1.39	1.33
2	B	1487	U	C3'-C2'	6.30	1.59	1.52
2	B	1611	C	C3'-C2'	-6.30	1.45	1.52
2	B	892	A	O3'-P	-6.30	1.53	1.61
2	B	1204	A	N7-C5	-6.30	1.35	1.39
2	B	1725	U	C4-C5	-6.30	1.37	1.43
2	B	2527	C	C5-C6	-6.30	1.29	1.34
2	B	1287	A	C6-N1	6.30	1.40	1.35
2	B	1347	A	C8-N7	-6.30	1.27	1.31
2	B	1348	C	C3'-C2'	-6.30	1.45	1.52
2	B	1670	C	C2-N3	-6.30	1.30	1.35
2	B	1691	C	N1-C2	6.30	1.46	1.40
2	B	1921	G	P-O5'	-6.30	1.53	1.59
2	B	2344	U	C2-N3	6.30	1.42	1.37
2	B	2800	A	C6-N1	6.30	1.40	1.35
2	B	363	G	C4'-O4'	-6.29	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2545	G	C2'-C1'	-6.29	1.46	1.53
2	B	267	C	C5'-C4'	6.29	1.58	1.51
2	B	1107	G	C6-N1	6.29	1.44	1.39
2	B	1347	A	C5-C6	-6.29	1.35	1.41
2	B	1551	A	N9-C4	-6.29	1.34	1.37
2	B	1666	G	C2-N2	6.29	1.40	1.34
2	B	1965	C	C5'-C4'	6.29	1.58	1.51
2	B	2769	U	O3'-P	-6.29	1.53	1.61
1	A	54	G	O3'-P	-6.29	1.53	1.61
2	B	331	C	C4'-C3'	6.29	1.60	1.53
2	B	586	A	C6-N6	6.29	1.39	1.33
2	B	634	C	N3-C4	6.29	1.38	1.33
2	B	1412	U	C2'-C1'	-6.29	1.46	1.53
2	B	2077	A	C2'-C1'	-6.29	1.46	1.53
2	B	2009	A	N9-C4	-6.29	1.34	1.37
2	B	2431	U	C2-N3	6.29	1.42	1.37
1	A	100	G	C3'-C2'	-6.29	1.45	1.52
2	B	720	U	C2'-C1'	-6.29	1.46	1.53
2	B	1225	G	C6-N1	6.29	1.44	1.39
2	B	1974	C	C4-C5	6.29	1.48	1.43
2	B	2337	G	C2-N3	6.29	1.37	1.32
20	E	29	HIS	CB-CG	6.29	1.61	1.50
2	B	138	U	O3'-P	-6.29	1.53	1.61
2	B	247	G	N1-C2	6.29	1.42	1.37
2	B	720	U	C2-N3	6.29	1.42	1.37
2	B	1704	C	N3-C4	6.29	1.38	1.33
2	B	2296	U	N1-C2	-6.29	1.32	1.38
2	B	2473	U	N3-C4	6.29	1.44	1.38
25	7	44	ARG	CZ-NH2	6.29	1.41	1.33
1	A	44	G	C6-N1	6.29	1.44	1.39
2	B	654	A	C6-N1	6.29	1.40	1.35
2	B	1063	G	C2-N3	6.29	1.37	1.32
2	B	1623	G	C8-N7	-6.29	1.27	1.30
2	B	2024	G	N1-C2	6.29	1.42	1.37
2	B	2620	C	C2-N3	-6.29	1.30	1.35
2	B	2650	U	O3'-P	-6.29	1.53	1.61
2	B	2707	U	N1-C2	6.29	1.44	1.38
2	B	704	G	N7-C5	-6.28	1.35	1.39
2	B	1060	U	O3'-P	-6.28	1.53	1.61
2	B	1162	G	N9-C8	-6.28	1.33	1.37
2	B	1337	G	C3'-C2'	-6.28	1.45	1.52
2	B	1802	A	C4'-C3'	-6.28	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1902	C	C4-C5	6.28	1.48	1.43
2	B	2249	U	C3'-C2'	-6.28	1.45	1.52
2	B	2349	G	C6-N1	6.28	1.44	1.39
2	B	2576	G	C5'-C4'	-6.28	1.43	1.51
2	B	2774	C	C5-C6	-6.28	1.29	1.34
2	B	383	C	C4-C5	-6.28	1.38	1.43
2	B	623	C	C5'-C4'	6.28	1.58	1.51
2	B	729	G	C2-N3	6.28	1.37	1.32
2	B	1443	U	C5'-C4'	6.28	1.58	1.51
2	B	1664	A	O3'-P	-6.28	1.53	1.61
2	B	1914	C	C2-N3	-6.28	1.30	1.35
2	B	2705	A	O3'-P	-6.28	1.53	1.61
2	B	302	C	C2-N3	6.28	1.40	1.35
2	B	474	G	C1'-N9	-6.28	1.38	1.46
2	B	1686	C	C2-N3	-6.28	1.30	1.35
2	B	2083	G	C1'-N9	-6.28	1.38	1.46
2	B	2212	A	N3-C4	6.28	1.38	1.34
2	B	2224	G	N7-C5	6.28	1.43	1.39
2	B	2270	A	C4'-C3'	-6.28	1.46	1.53
11	Q	54	ARG	CA-C	-6.28	1.36	1.52
2	B	848	C	C5-C6	-6.28	1.29	1.34
2	B	920	A	C1'-N9	-6.28	1.38	1.46
2	B	1914	C	O4'-C1'	6.28	1.49	1.41
2	B	199	A	C5-C4	-6.28	1.34	1.38
2	B	634	C	C2'-C1'	-6.28	1.46	1.53
2	B	882	G	C5-C6	-6.28	1.36	1.42
2	B	1521	G	N9-C8	-6.28	1.33	1.37
2	B	1659	G	C8-N7	6.28	1.34	1.30
2	B	1824	G	C1'-N9	-6.28	1.38	1.46
2	B	2230	G	C2'-C1'	-6.28	1.46	1.53
2	B	2668	G	N9-C4	-6.28	1.32	1.38
2	B	2885	G	N9-C4	6.28	1.43	1.38
2	B	1197	G	N9-C8	-6.28	1.33	1.37
2	B	1283	G	C5'-C4'	-6.28	1.43	1.51
2	B	1500	G	C2'-O2'	-6.28	1.33	1.41
2	B	1504	A	N9-C8	6.28	1.42	1.37
2	B	1710	G	C3'-C2'	-6.28	1.45	1.52
2	B	2242	G	O4'-C1'	-6.28	1.33	1.41
2	B	2746	U	C2'-C1'	-6.28	1.46	1.53
2	B	899	A	N3-C4	6.27	1.38	1.34
2	B	1750	G	C5-C6	-6.27	1.36	1.42
2	B	2147	A	C6-N1	-6.27	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	473	G	O3'-P	-6.27	1.53	1.61
2	B	1225	G	N7-C5	-6.27	1.35	1.39
2	B	1332	G	N7-C5	-6.27	1.35	1.39
2	B	1978	A	C5-C4	-6.27	1.34	1.38
2	B	2572	A	C5'-C4'	6.27	1.58	1.51
2	B	2869	G	C2'-C1'	-6.27	1.46	1.53
2	B	739	A	C2'-C1'	-6.27	1.46	1.53
2	B	856	G	N9-C4	-6.27	1.32	1.38
2	B	1369	G	C5'-C4'	-6.27	1.43	1.51
2	B	2772	C	C2'-C1'	-6.27	1.46	1.53
2	B	408	G	C5'-C4'	-6.27	1.43	1.51
2	B	516	C	N3-C4	6.27	1.38	1.33
2	B	1569	A	N9-C8	-6.27	1.32	1.37
2	B	1791	A	C6-N6	6.27	1.39	1.33
2	B	2535	G	C2-N3	-6.27	1.27	1.32
2	B	339	U	N3-C4	6.27	1.44	1.38
2	B	411	G	N1-C2	6.27	1.42	1.37
2	B	739	A	C8-N7	-6.27	1.27	1.31
2	B	909	A	C1'-N9	-6.27	1.38	1.46
2	B	1020	A	C5'-C4'	6.27	1.58	1.51
2	B	1788	C	C5-C6	-6.27	1.29	1.34
2	B	2817	U	O3'-P	-6.27	1.53	1.61
2	B	344	A	N7-C5	-6.27	1.35	1.39
2	B	979	A	C2-N3	-6.27	1.27	1.33
2	B	1515	A	C6-N1	6.27	1.40	1.35
2	B	1785	A	O3'-P	-6.27	1.53	1.61
2	B	2573	C	P-O5'	-6.27	1.53	1.59
2	B	2863	C	C2-N3	-6.27	1.30	1.35
1	A	61	G	C2-N3	6.26	1.37	1.32
2	B	526	A	N9-C8	-6.26	1.32	1.37
2	B	1011	G	P-O5'	-6.26	1.53	1.59
2	B	1190	G	O3'-P	-6.26	1.53	1.61
2	B	2024	G	C1'-N9	-6.26	1.38	1.46
2	B	2823	A	C5-C4	-6.26	1.34	1.38
2	B	2877	G	C3'-C2'	-6.26	1.45	1.52
1	A	75	G	N1-C2	6.26	1.42	1.37
2	B	343	C	O3'-P	-6.26	1.53	1.61
2	B	706	A	C6-N6	6.26	1.39	1.33
2	B	780	G	C8-N7	-6.26	1.27	1.30
2	B	1471	G	C3'-C2'	-6.26	1.45	1.52
2	B	2057	G	C2-N3	6.26	1.37	1.32
2	B	2335	A	C4'-C3'	-6.26	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	29	A	C3'-C2'	-6.26	1.45	1.52
2	B	1096	A	C5'-C4'	6.26	1.58	1.51
2	B	2094	A	N3-C4	-6.26	1.31	1.34
2	B	2413	G	C6-O6	6.26	1.29	1.24
2	B	2678	C	C2'-C1'	-6.26	1.46	1.53
2	B	147	C	C3'-C2'	-6.26	1.45	1.52
2	B	680	C	C5'-C4'	6.26	1.58	1.51
2	B	2542	A	N9-C8	-6.26	1.32	1.37
2	B	2819	G	N7-C5	-6.26	1.35	1.39
2	B	2899	A	C6-N1	-6.26	1.31	1.35
2	B	35	G	C5-C4	-6.26	1.33	1.38
2	B	129	C	O4'-C1'	6.26	1.49	1.41
2	B	550	C	C3'-C2'	-6.26	1.45	1.52
2	B	739	A	C6-N6	6.26	1.39	1.33
2	B	837	C	C4'-C3'	-6.25	1.46	1.53
2	B	2695	U	N3-C4	6.25	1.44	1.38
2	B	636	G	C2-N3	6.25	1.37	1.32
2	B	1117	C	C5-C6	-6.25	1.29	1.34
2	B	1690	A	N9-C8	-6.25	1.32	1.37
2	B	1913	A	C8-N7	-6.25	1.27	1.31
2	B	2198	A	C5'-C4'	6.25	1.58	1.51
2	B	2371	G	C4'-C3'	-6.25	1.46	1.53
2	B	2438	U	C2'-C1'	-6.25	1.46	1.53
2	B	551	G	C2'-O2'	-6.25	1.33	1.41
2	B	840	C	C5-C6	-6.25	1.29	1.34
2	B	959	A	C2-N3	-6.25	1.27	1.33
2	B	1464	G	N3-C4	-6.25	1.31	1.35
2	B	2382	G	O3'-P	-6.25	1.53	1.61
2	B	2491	U	O3'-P	-6.25	1.53	1.61
2	B	116	C	C2'-C1'	-6.25	1.46	1.53
2	B	900	A	C6-N6	6.25	1.39	1.33
2	B	1303	G	N9-C8	-6.25	1.33	1.37
2	B	468	G	C2-N2	-6.25	1.28	1.34
2	B	537	G	N9-C4	-6.25	1.32	1.38
2	B	1374	G	P-O5'	-6.25	1.53	1.59
2	B	1685	C	C4'-C3'	-6.25	1.46	1.53
2	B	2217	G	P-O5'	6.25	1.66	1.59
2	B	2687	U	C5'-C4'	-6.25	1.43	1.51
2	B	332	A	C6-N1	6.25	1.40	1.35
2	B	389	G	N9-C4	6.25	1.43	1.38
2	B	771	G	C6-N1	-6.25	1.35	1.39
2	B	2189	U	C3'-O3'	6.25	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2462	C	C2'-C1'	-6.25	1.46	1.53
2	B	312	G	P-O5'	6.25	1.66	1.59
2	B	354	A	C2'-C1'	-6.25	1.46	1.53
2	B	674	G	P-O5'	-6.25	1.53	1.59
2	B	2068	U	C5'-C4'	6.25	1.58	1.51
2	B	2853	C	N3-C4	6.25	1.38	1.33
1	A	69	G	C6-N1	6.24	1.44	1.39
2	B	1298	C	C2'-C1'	-6.24	1.46	1.53
2	B	1364	G	C5'-C4'	6.24	1.58	1.51
2	B	1444	G	C4'-C3'	6.24	1.60	1.53
2	B	2829	A	C4'-C3'	-6.24	1.46	1.53
2	B	1216	G	P-O5'	-6.24	1.53	1.59
2	B	1239	G	P-O5'	6.24	1.66	1.59
2	B	1260	A	C3'-C2'	-6.24	1.45	1.52
2	B	1670	C	C3'-C2'	-6.24	1.45	1.52
2	B	2174	C	C2'-C1'	-6.24	1.46	1.53
2	B	162	U	C4'-C3'	-6.24	1.46	1.53
2	B	185	G	O3'-P	-6.24	1.53	1.61
2	B	797	G	N3-C4	-6.24	1.31	1.35
2	B	1167	C	C5-C6	-6.24	1.29	1.34
2	B	2100	G	C3'-O3'	6.24	1.50	1.42
2	B	2747	G	P-O5'	-6.24	1.53	1.59
2	B	2766	A	C4'-C3'	-6.24	1.46	1.53
2	B	445	C	O3'-P	-6.24	1.53	1.61
2	B	601	C	C5-C6	-6.24	1.29	1.34
2	B	785	G	C2-N3	6.24	1.37	1.32
2	B	1081	U	C4'-O4'	6.24	1.53	1.45
2	B	1238	G	C5-C6	-6.24	1.36	1.42
2	B	1468	U	C4-C5	-6.24	1.38	1.43
2	B	1927	A	C5'-C4'	6.24	1.58	1.51
2	B	2040	G	O3'-P	-6.24	1.53	1.61
2	B	2302	U	N3-C4	6.24	1.44	1.38
2	B	2753	A	N3-C4	6.24	1.38	1.34
2	B	2855	C	C2-N3	-6.24	1.30	1.35
2	B	1077	A	C8-N7	-6.24	1.27	1.31
2	B	2643	G	C5'-C4'	6.24	1.58	1.51
2	B	2693	G	P-O5'	-6.24	1.53	1.59
2	B	532	A	C1'-N9	-6.24	1.38	1.46
2	B	741	U	C4-C5	-6.24	1.38	1.43
2	B	1034	G	N7-C5	-6.24	1.35	1.39
2	B	1847	A	C5-C4	6.23	1.43	1.38
2	B	2438	U	C5-C6	-6.23	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	899	A	C2'-C1'	-6.23	1.46	1.53
2	B	1494	A	N9-C4	6.23	1.41	1.37
2	B	1693	U	C2'-C1'	-6.23	1.46	1.53
2	B	1837	C	C4'-C3'	6.23	1.60	1.53
2	B	2129	C	N3-C4	6.23	1.38	1.33
2	B	810	U	N1-C2	-6.23	1.32	1.38
2	B	1824	G	N3-C4	6.23	1.39	1.35
2	B	1967	C	C2-O2	6.23	1.30	1.24
2	B	2823	A	C3'-C2'	-6.23	1.45	1.52
2	B	1641	A	C8-N7	-6.23	1.27	1.31
2	B	2523	G	N9-C8	-6.23	1.33	1.37
2	B	325	G	P-O5'	-6.23	1.53	1.59
2	B	514	A	N9-C4	-6.23	1.34	1.37
2	B	578	G	P-O5'	-6.23	1.53	1.59
2	B	1526	C	C4-C5	6.23	1.48	1.43
2	B	1703	G	C4'-O4'	-6.23	1.37	1.45
2	B	1713	A	O4'-C1'	6.23	1.49	1.41
2	B	2005	A	C3'-C2'	6.23	1.59	1.52
2	B	2171	A	C5'-C4'	6.23	1.58	1.51
2	B	2585	U	C2-N3	6.23	1.42	1.37
2	B	2885	G	C4'-O4'	-6.23	1.37	1.45
2	B	419	U	C1'-N1	-6.23	1.38	1.46
2	B	632	A	C2-N3	-6.23	1.27	1.33
2	B	1984	G	N3-C4	-6.23	1.31	1.35
2	B	553	G	O3'-P	-6.22	1.53	1.61
2	B	1662	U	N1-C6	6.22	1.43	1.38
2	B	2234	G	O3'-P	-6.22	1.53	1.61
2	B	2657	A	C6-N6	6.22	1.39	1.33
2	B	1571	A	C1'-N9	-6.22	1.38	1.46
2	B	2313	C	C2-O2	6.22	1.30	1.24
2	B	2383	G	C5'-C4'	-6.22	1.43	1.51
2	B	2400	G	N9-C4	-6.22	1.32	1.38
2	B	562	U	C4-O4	-6.22	1.18	1.23
2	B	1144	A	N3-C4	-6.22	1.31	1.34
2	B	2107	G	C2-N3	6.22	1.37	1.32
2	B	2602	A	C2'-O2'	6.22	1.49	1.41
2	B	2617	U	P-O5'	-6.22	1.53	1.59
2	B	1411	U	C2'-C1'	-6.22	1.46	1.53
2	B	1537	G	C5-C6	-6.22	1.36	1.42
2	B	1890	A	C6-N6	6.22	1.39	1.33
2	B	1968	G	N7-C5	-6.22	1.35	1.39
2	B	2327	A	C5'-C4'	6.22	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2531	A	C3'-C2'	-6.22	1.46	1.52
2	B	2599	G	N3-C4	6.22	1.39	1.35
2	B	2639	A	C6-N6	-6.22	1.28	1.33
2	B	2787	C	P-O5'	-6.22	1.53	1.59
2	B	2841	C	N1-C6	6.22	1.40	1.37
2	B	1015	U	N3-C4	6.22	1.44	1.38
2	B	1648	U	C4-O4	-6.22	1.18	1.23
2	B	1154	G	N9-C8	-6.21	1.33	1.37
2	B	1410	G	C5-C6	-6.21	1.36	1.42
2	B	2147	A	N7-C5	-6.21	1.35	1.39
2	B	2351	G	C4'-C3'	-6.21	1.46	1.53
2	B	2394	C	C2'-C1'	-6.21	1.46	1.53
2	B	2076	U	C4'-C3'	-6.21	1.46	1.53
2	B	2284	A	C6-N6	6.21	1.39	1.33
2	B	185	G	N7-C5	-6.21	1.35	1.39
2	B	1056	G	N9-C8	-6.21	1.33	1.37
2	B	1106	G	O3'-P	-6.21	1.53	1.61
2	B	1408	G	C6-N1	6.21	1.43	1.39
2	B	1832	C	C4-C5	6.21	1.48	1.43
2	B	1840	G	N9-C4	6.21	1.43	1.38
2	B	2277	G	O3'-P	-6.21	1.53	1.61
2	B	2740	A	C2'-C1'	-6.21	1.46	1.53
2	B	1729	U	C1'-N1	6.21	1.58	1.48
2	B	46	G	C6-N1	-6.21	1.35	1.39
2	B	1429	G	N1-C2	-6.21	1.32	1.37
2	B	2256	G	N3-C4	-6.21	1.31	1.35
2	B	982	C	C4'-C3'	-6.21	1.46	1.53
2	B	113	U	N1-C6	-6.20	1.32	1.38
2	B	309	A	C3'-O3'	6.20	1.50	1.42
2	B	669	G	P-O5'	6.20	1.66	1.59
2	B	699	A	N9-C4	-6.20	1.34	1.37
2	B	1208	C	N3-C4	6.20	1.38	1.33
2	B	1289	C	O3'-P	-6.20	1.53	1.61
2	B	1509	A	C5-C4	6.20	1.43	1.38
2	B	1960	A	C2'-C1'	-6.20	1.46	1.53
2	B	2032	G	C4'-C3'	6.20	1.59	1.53
2	B	2066	C	O3'-P	-6.20	1.53	1.61
2	B	2107	G	N7-C5	-6.20	1.35	1.39
2	B	2156	G	N3-C4	6.20	1.39	1.35
2	B	2168	G	C8-N7	-6.20	1.27	1.30
2	B	2476	A	C1'-N9	-6.20	1.38	1.46
2	B	2760	C	O3'-P	-6.20	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1144	A	C4'-O4'	-6.20	1.37	1.45
2	B	1168	G	N7-C5	-6.20	1.35	1.39
2	B	2442	C	C5-C6	6.20	1.39	1.34
19	X	377	ARG	NE-CZ	6.20	1.41	1.33
2	B	669	G	C5-C6	-6.20	1.36	1.42
2	B	794	A	N9-C8	-6.20	1.32	1.37
2	B	1297	C	N3-C4	6.20	1.38	1.33
2	B	1983	G	C1'-N9	-6.20	1.38	1.46
2	B	2041	U	C5'-C4'	6.20	1.58	1.51
2	B	2542	A	N3-C4	-6.20	1.31	1.34
1	A	67	G	C3'-C2'	-6.20	1.46	1.52
2	B	1245	G	O3'-P	-6.20	1.53	1.61
2	B	1477	A	C5'-C4'	6.20	1.58	1.51
2	B	2157	G	P-O5'	6.20	1.66	1.59
2	B	556	A	C5-C4	-6.20	1.34	1.38
2	B	566	U	O3'-P	-6.20	1.53	1.61
2	B	1127	A	C6-N6	-6.20	1.28	1.33
2	B	1803	A	N3-C4	-6.20	1.31	1.34
13	S	79	GLY	CA-C	-6.20	1.42	1.51
2	B	454	A	C8-N7	-6.20	1.27	1.31
2	B	619	G	C2-N3	6.20	1.37	1.32
2	B	727	A	N9-C4	-6.20	1.34	1.37
2	B	987	C	C2'-C1'	-6.20	1.46	1.53
2	B	1591	A	C8-N7	-6.20	1.27	1.31
2	B	1764	C	C4-N4	6.20	1.39	1.33
2	B	2324	U	C2-O2	6.20	1.27	1.22
2	B	2562	U	C5'-C4'	-6.20	1.44	1.51
2	B	2737	G	N1-C2	6.20	1.42	1.37
2	B	2831	G	N3-C4	6.20	1.39	1.35
2	B	843	G	C5'-C4'	6.19	1.58	1.51
1	A	75	G	C2-N3	6.19	1.37	1.32
2	B	500	G	N7-C5	-6.19	1.35	1.39
2	B	1211	C	N1-C6	6.19	1.40	1.37
2	B	1277	G	C2'-C1'	-6.19	1.46	1.53
2	B	1651	G	C6-N1	-6.19	1.35	1.39
2	B	1816	C	C2'-C1'	-6.19	1.46	1.53
2	B	2004	G	N1-C2	6.19	1.42	1.37
2	B	2526	G	C5-C4	-6.19	1.34	1.38
2	B	2602	A	C1'-N9	6.19	1.58	1.48
2	B	2726	A	N1-C2	-6.19	1.28	1.34
2	B	109	C	C3'-C2'	-6.19	1.46	1.52
2	B	205	G	C2-N2	6.19	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	368	A	C5-C4	-6.19	1.34	1.38
2	B	368	A	N1-C2	-6.19	1.28	1.34
2	B	1071	G	N3-C4	-6.19	1.31	1.35
2	B	1378	A	P-O5'	-6.19	1.53	1.59
2	B	1566	A	C6-N6	6.19	1.38	1.33
2	B	2640	G	N9-C4	-6.19	1.33	1.38
2	B	436	C	N1-C6	6.19	1.40	1.37
2	B	1697	G	C5'-C4'	6.19	1.58	1.51
2	B	2708	G	C6-N1	-6.19	1.35	1.39
2	B	976	G	O3'-P	-6.18	1.53	1.61
2	B	1264	A	C2'-C1'	-6.18	1.46	1.53
2	B	1312	U	C2'-O2'	-6.18	1.33	1.41
2	B	1801	A	C2'-C1'	-6.18	1.46	1.53
2	B	1979	U	C3'-C2'	-6.18	1.46	1.52
2	B	164	C	N1-C2	-6.18	1.33	1.40
2	B	225	C	N1-C6	6.18	1.40	1.37
2	B	283	G	N3-C4	-6.18	1.31	1.35
2	B	741	U	C2'-C1'	-6.18	1.46	1.53
2	B	868	U	C4-C5	6.18	1.49	1.43
2	B	1277	G	C4'-C3'	-6.18	1.46	1.53
2	B	1331	G	C2'-C1'	6.18	1.60	1.53
2	B	1348	C	N1-C6	6.18	1.40	1.37
5	L	59	ARG	CZ-NH2	6.18	1.41	1.33
2	B	1043	C	P-O5'	-6.18	1.53	1.59
2	B	1217	U	C1'-N1	-6.18	1.38	1.46
2	B	1617	C	C5-C6	6.18	1.39	1.34
2	B	1792	G	C1'-N9	-6.18	1.38	1.46
2	B	2654	A	N7-C5	-6.18	1.35	1.39
2	B	1017	G	C2-N2	-6.18	1.28	1.34
2	B	1572	A	C5'-C4'	6.18	1.58	1.51
2	B	1839	G	C3'-C2'	6.18	1.59	1.52
2	B	1991	U	N1-C6	6.18	1.43	1.38
2	B	2003	A	C6-N6	6.18	1.38	1.33
2	B	2422	C	N3-C4	6.18	1.38	1.33
2	B	2503	A	C6-N6	6.18	1.38	1.33
2	B	2822	G	C5-C6	-6.18	1.36	1.42
2	B	468	G	C5-C6	-6.18	1.36	1.42
2	B	570	G	C4'-O4'	-6.18	1.37	1.45
2	B	695	G	P-O5'	-6.18	1.53	1.59
2	B	1402	U	N3-C4	6.18	1.44	1.38
2	B	1620	G	N9-C4	6.18	1.42	1.38
1	A	9	G	C4'-C3'	6.18	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1063	G	C4'-C3'	-6.18	1.46	1.53
2	B	1406	U	N1-C2	6.18	1.44	1.38
2	B	1532	A	P-O5'	-6.18	1.53	1.59
2	B	1628	G	P-O5'	-6.18	1.53	1.59
2	B	1813	G	C5'-C4'	-6.18	1.44	1.51
2	B	2341	G	C5-C6	-6.18	1.36	1.42
2	B	672	C	N1-C6	6.17	1.40	1.37
2	B	677	A	C2'-C1'	-6.17	1.46	1.53
2	B	814	C	C5-C6	-6.17	1.29	1.34
2	B	1317	G	C3'-C2'	-6.17	1.46	1.52
2	B	1753	G	C4'-C3'	6.17	1.59	1.53
2	B	2278	A	N9-C8	-6.17	1.32	1.37
2	B	2383	G	C2'-C1'	-6.17	1.46	1.53
2	B	2498	C	N1-C6	-6.17	1.33	1.37
2	B	1448	G	N1-C2	6.17	1.42	1.37
2	B	417	C	C4-N4	6.17	1.39	1.33
2	B	838	C	O3'-P	-6.17	1.53	1.61
2	B	1076	C	N3-C4	6.17	1.38	1.33
2	B	1188	U	C4-C5	6.17	1.49	1.43
2	B	839	U	C4-C5	6.17	1.49	1.43
2	B	949	G	N7-C5	-6.17	1.35	1.39
2	B	1142	A	N3-C4	-6.17	1.31	1.34
2	B	1461	C	C3'-C2'	-6.17	1.46	1.52
2	B	137	U	C2'-C1'	-6.17	1.46	1.53
2	B	346	A	N7-C5	-6.17	1.35	1.39
2	B	632	A	C6-N6	6.17	1.38	1.33
2	B	943	A	C2'-C1'	-6.17	1.46	1.53
2	B	1010	A	N9-C8	-6.17	1.32	1.37
2	B	1419	A	P-O5'	-6.17	1.53	1.59
2	B	2014	A	C8-N7	-6.17	1.27	1.31
2	B	2400	G	O3'-P	-6.17	1.53	1.61
2	B	2625	G	N1-C2	6.17	1.42	1.37
1	A	36	C	C2-N3	6.17	1.40	1.35
2	B	204	A	C5-C6	-6.17	1.35	1.41
2	B	348	A	P-O5'	-6.17	1.53	1.59
2	B	1621	U	P-O5'	-6.17	1.53	1.59
2	B	1823	G	C2-N3	6.17	1.37	1.32
2	B	2429	G	C8-N7	-6.17	1.27	1.30
2	B	2742	G	C4'-C3'	6.17	1.59	1.53
2	B	1695	G	C2'-C1'	-6.17	1.46	1.53
2	B	2459	A	N7-C5	-6.17	1.35	1.39
2	B	2617	U	N1-C6	-6.17	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	156	A	C1'-N9	-6.16	1.38	1.46
2	B	975	A	C6-N6	6.16	1.38	1.33
2	B	1099	G	N9-C4	-6.16	1.33	1.38
2	B	1220	G	C2-N2	6.16	1.40	1.34
2	B	1789	A	C3'-C2'	-6.16	1.46	1.52
2	B	2138	G	O3'-P	-6.16	1.53	1.61
2	B	2397	G	N1-C2	6.16	1.42	1.37
2	B	574	A	N3-C4	6.16	1.38	1.34
2	B	1922	G	C2'-C1'	-6.16	1.46	1.53
2	B	2540	C	C4'-C3'	-6.16	1.46	1.53
2	B	355	U	C4-O4	-6.16	1.18	1.23
2	B	738	G	N9-C8	-6.16	1.33	1.37
2	B	1098	A	C5-C4	6.16	1.43	1.38
2	B	2510	C	O3'-P	-6.16	1.53	1.61
2	B	2703	C	N1-C6	-6.16	1.33	1.37
2	B	259	G	C6-N1	6.16	1.43	1.39
2	B	481	G	C1'-N9	-6.16	1.38	1.46
2	B	946	C	C4'-C3'	6.16	1.59	1.53
2	B	999	U	C2-N3	6.16	1.42	1.37
2	B	1252	G	C6-N1	6.16	1.43	1.39
2	B	2132	U	N3-C4	6.16	1.44	1.38
2	B	2569	G	C2-N2	-6.16	1.28	1.34
2	B	1268	A	N9-C8	-6.16	1.32	1.37
1	A	22	U	C5'-C4'	6.16	1.58	1.51
2	B	733	G	N3-C4	-6.16	1.31	1.35
2	B	859	G	C3'-O3'	6.16	1.50	1.42
2	B	1211	C	O4'-C1'	-6.16	1.33	1.41
2	B	1267	U	C2'-C1'	-6.16	1.46	1.53
2	B	1327	A	N9-C4	-6.16	1.34	1.37
2	B	2022	U	C2'-C1'	-6.16	1.46	1.53
2	B	2501	C	C2-N3	-6.16	1.30	1.35
16	2	9	THR	CA-C	-6.16	1.36	1.52
1	A	118	C	N3-C4	6.15	1.38	1.33
2	B	31	C	O4'-C1'	-6.15	1.33	1.41
2	B	204	A	N9-C4	-6.15	1.34	1.37
2	B	350	G	N3-C4	6.15	1.39	1.35
2	B	482	A	N9-C8	-6.15	1.32	1.37
2	B	743	A	C5'-C4'	-6.15	1.44	1.51
2	B	2170	A	C8-N7	-6.15	1.27	1.31
2	B	2622	U	C4'-O4'	-6.15	1.37	1.45
28	F	147	ARG	CZ-NH2	6.15	1.41	1.33
2	B	673	C	C4'-O4'	-6.15	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	892	A	C2-N3	6.15	1.39	1.33
2	B	1389	G	C5'-C4'	-6.15	1.44	1.51
2	B	1661	G	N9-C4	-6.15	1.33	1.38
2	B	504	A	C5-C4	6.15	1.43	1.38
2	B	1390	U	N1-C6	-6.15	1.32	1.38
2	B	1899	A	C6-N1	6.15	1.39	1.35
2	B	868	U	N1-C2	6.15	1.44	1.38
2	B	921	C	C4'-O4'	-6.15	1.37	1.45
2	B	1023	U	C4-C5	6.15	1.49	1.43
2	B	1121	C	C2-O2	-6.15	1.19	1.24
2	B	1391	U	C1'-N1	6.15	1.57	1.48
2	B	1443	U	N3-C4	6.15	1.44	1.38
2	B	1453	A	N1-C2	-6.15	1.28	1.34
2	B	1817	G	P-O5'	-6.15	1.53	1.59
2	B	1835	G	C6-N1	6.15	1.43	1.39
2	B	2122	U	C2-N3	6.15	1.42	1.37
2	B	990	A	O3'-P	-6.15	1.53	1.61
2	B	1156	A	C6-N6	6.15	1.38	1.33
2	B	1566	A	C3'-C2'	-6.14	1.46	1.52
2	B	2162	G	P-O5'	-6.14	1.53	1.59
1	A	49	C	C2'-C1'	-6.14	1.46	1.53
1	A	72	G	N9-C8	-6.14	1.33	1.37
2	B	736	C	N3-C4	6.14	1.38	1.33
2	B	843	G	C8-N7	-6.14	1.27	1.30
2	B	1805	A	O3'-P	-6.14	1.53	1.61
2	B	1893	C	P-O5'	6.14	1.65	1.59
2	B	2027	G	C4'-C3'	-6.14	1.46	1.53
2	B	9	G	N1-C2	6.14	1.42	1.37
2	B	1307	A	C3'-O3'	6.14	1.50	1.42
2	B	2641	G	C8-N7	-6.14	1.27	1.30
2	B	2882	A	C3'-C2'	-6.14	1.46	1.52
2	B	122	G	O3'-P	-6.14	1.53	1.61
2	B	599	A	C2'-C1'	-6.14	1.46	1.53
2	B	1507	C	C4-C5	-6.14	1.38	1.43
2	B	2677	G	C2'-C1'	-6.14	1.46	1.53
2	B	2741	A	N7-C5	-6.14	1.35	1.39
2	B	2365	G	N7-C5	-6.14	1.35	1.39
2	B	2449	U	O3'-P	-6.14	1.53	1.61
2	B	860	U	C4-C5	-6.14	1.38	1.43
2	B	1105	U	N3-C4	6.14	1.44	1.38
2	B	1723	G	P-O5'	-6.14	1.53	1.59
2	B	2631	G	C5'-C4'	6.14	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	28	C	C2'-C1'	-6.13	1.46	1.53
2	B	255	A	O3'-P	-6.13	1.53	1.61
2	B	677	A	O3'-P	-6.13	1.53	1.61
2	B	2620	C	C4'-O4'	-6.13	1.37	1.45
2	B	2816	G	C6-O6	-6.13	1.18	1.24
19	X	149	ARG	CZ-NH1	6.13	1.41	1.33
2	B	110	G	N7-C5	-6.13	1.35	1.39
2	B	2097	A	O3'-P	-6.13	1.53	1.61
2	B	2152	G	C2-N3	6.13	1.37	1.32
2	B	167	A	C8-N7	-6.13	1.27	1.31
2	B	988	A	O3'-P	-6.13	1.53	1.61
2	B	1489	C	C5-C6	-6.13	1.29	1.34
2	B	2735	G	C2'-C1'	-6.13	1.46	1.53
2	B	1074	G	N1-C2	6.13	1.42	1.37
2	B	1544	A	N9-C8	-6.13	1.32	1.37
2	B	1596	A	C5-C4	-6.13	1.34	1.38
2	B	168	G	P-O5'	-6.13	1.53	1.59
2	B	595	C	O3'-P	-6.13	1.53	1.61
2	B	2115	G	N3-C4	-6.13	1.31	1.35
2	B	2203	U	P-O5'	-6.13	1.53	1.59
2	B	2283	C	N1-C6	6.13	1.40	1.37
2	B	2582	G	C5'-C4'	-6.13	1.44	1.51
2	B	2654	A	C5-C4	-6.13	1.34	1.38
2	B	153	U	P-O5'	-6.13	1.53	1.59
2	B	164	C	C4-N4	6.13	1.39	1.33
2	B	519	U	C2'-C1'	-6.13	1.46	1.53
2	B	897	C	C4-N4	6.13	1.39	1.33
2	B	1014	A	O3'-P	-6.13	1.53	1.61
2	B	1744	A	C1'-N9	-6.13	1.38	1.46
2	B	2112	G	C2'-C1'	-6.13	1.46	1.53
2	B	2247	A	N3-C4	6.13	1.38	1.34
2	B	2520	C	N1-C6	6.13	1.40	1.37
2	B	2638	G	C6-O6	-6.13	1.18	1.24
2	B	2104	C	C4-N4	6.12	1.39	1.33
2	B	2492	U	C2'-C1'	-6.12	1.46	1.53
2	B	2791	G	C8-N7	-6.12	1.27	1.30
2	B	2900	A	C2-N3	-6.12	1.28	1.33
2	B	442	G	N3-C4	-6.12	1.31	1.35
2	B	708	G	C5'-C4'	6.12	1.58	1.51
2	B	1382	G	C6-O6	-6.12	1.18	1.24
2	B	2290	G	P-O5'	-6.12	1.53	1.59
2	B	2342	C	C2'-C1'	-6.12	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2681	C	O3'-P	-6.12	1.53	1.61
14	D	141	ARG	CZ-NH2	6.12	1.41	1.33
2	B	208	C	C2'-C1'	-6.12	1.46	1.53
2	B	293	U	N1-C2	6.12	1.44	1.38
2	B	1077	A	C3'-O3'	6.12	1.50	1.42
2	B	1702	G	O3'-P	-6.12	1.53	1.61
2	B	1770	G	C8-N7	6.12	1.34	1.30
2	B	1892	C	N1-C6	6.12	1.40	1.37
2	B	2117	A	C6-N1	6.12	1.39	1.35
2	B	2782	G	O4'-C1'	-6.12	1.33	1.41
2	B	509	C	N1-C6	-6.12	1.33	1.37
2	B	982	C	C2'-C1'	-6.12	1.46	1.53
2	B	1218	G	N3-C4	-6.12	1.31	1.35
2	B	212	G	O3'-P	-6.12	1.53	1.61
2	B	604	G	C2-N3	6.12	1.37	1.32
2	B	1073	A	C2'-C1'	-6.12	1.46	1.53
2	B	1961	C	C4-C5	6.12	1.47	1.43
2	B	2107	G	C5-C6	-6.12	1.36	1.42
2	B	537	G	C8-N7	-6.12	1.27	1.30
2	B	677	A	C8-N7	-6.12	1.27	1.31
2	B	1001	A	N9-C8	-6.12	1.32	1.37
2	B	1646	C	C3'-O3'	6.12	1.50	1.42
2	B	2140	G	C5-C4	-6.12	1.34	1.38
2	B	359	G	C3'-C2'	6.12	1.59	1.52
2	B	602	A	C3'-C2'	6.12	1.59	1.52
2	B	674	G	N1-C2	6.12	1.42	1.37
2	B	712	G	C1'-N9	-6.12	1.38	1.46
2	B	2030	A	N3-C4	-6.12	1.31	1.34
2	B	2128	G	C5-C6	-6.12	1.36	1.42
2	B	609	A	C1'-N9	-6.11	1.38	1.46
2	B	842	U	C5'-C4'	6.11	1.58	1.51
2	B	1432	G	C6-O6	-6.11	1.18	1.24
2	B	1661	G	C5-C4	-6.11	1.34	1.38
2	B	1769	U	C3'-C2'	-6.11	1.46	1.52
2	B	2487	G	C8-N7	6.11	1.34	1.30
2	B	2661	G	C5'-C4'	6.11	1.58	1.51
2	B	176	A	N9-C4	6.11	1.41	1.37
2	B	904	G	C2-N3	6.11	1.37	1.32
2	B	935	C	N1-C2	-6.11	1.34	1.40
2	B	1800	C	C3'-C2'	-6.11	1.46	1.52
2	B	2197	U	O3'-P	-6.11	1.53	1.61
2	B	2324	U	C4-O4	-6.11	1.18	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2616	C	P-O5'	-6.11	1.53	1.59
1	A	65	U	C5-C6	6.11	1.39	1.34
2	B	110	G	C6-N1	6.11	1.43	1.39
2	B	247	G	C2-N3	6.11	1.37	1.32
2	B	342	A	C4'-C3'	-6.11	1.46	1.53
2	B	517	C	C1'-N1	-6.11	1.38	1.46
2	B	698	C	C4'-O4'	-6.11	1.37	1.45
2	B	741	U	P-O5'	-6.11	1.53	1.59
2	B	815	C	N3-C4	6.11	1.38	1.33
2	B	1320	C	C2'-C1'	-6.11	1.46	1.53
2	B	1449	G	C2'-C1'	-6.11	1.46	1.53
2	B	1995	U	P-O5'	-6.11	1.53	1.59
2	B	2321	U	C4-C5	-6.11	1.38	1.43
2	B	2517	C	N1-C2	6.11	1.46	1.40
2	B	414	C	C5'-C4'	6.11	1.58	1.51
2	B	1833	C	N3-C4	6.11	1.38	1.33
2	B	2070	A	C5'-C4'	6.11	1.58	1.51
2	B	2505	G	N1-C2	-6.11	1.32	1.37
5	L	64	PHE	CG-CD1	6.11	1.48	1.38
2	B	43	G	C5-C4	-6.11	1.34	1.38
2	B	180	G	O3'-P	-6.11	1.53	1.61
2	B	307	G	C2'-C1'	-6.11	1.46	1.53
2	B	595	C	O4'-C1'	6.11	1.49	1.41
2	B	706	A	C2'-C1'	-6.11	1.46	1.53
2	B	941	A	C8-N7	-6.11	1.27	1.31
2	B	1277	G	C6-O6	-6.11	1.18	1.24
2	B	1579	A	C8-N7	-6.11	1.27	1.31
2	B	1665	A	N3-C4	-6.11	1.31	1.34
2	B	1715	G	C2-N2	-6.11	1.28	1.34
2	B	1809	A	O4'-C1'	-6.11	1.33	1.41
2	B	2392	A	C5-C4	6.11	1.43	1.38
2	B	2538	C	P-O5'	-6.11	1.53	1.59
2	B	2887	A	C6-N1	6.11	1.39	1.35
2	B	649	G	C4'-C3'	-6.11	1.46	1.53
2	B	998	C	C2'-C1'	-6.11	1.46	1.53
2	B	1290	C	C2'-C1'	-6.11	1.46	1.53
2	B	1890	A	C6-N1	6.11	1.39	1.35
2	B	2762	C	C4-N4	-6.11	1.28	1.33
2	B	2535	G	N9-C8	-6.10	1.33	1.37
2	B	2795	C	N3-C4	6.10	1.38	1.33
2	B	168	G	C4'-C3'	6.10	1.59	1.53
2	B	990	A	N7-C5	-6.10	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1078	U	C4'-C3'	6.10	1.59	1.53
2	B	1334	G	C3'-C2'	-6.10	1.46	1.52
2	B	1769	U	P-O5'	6.10	1.65	1.59
1	A	72	G	O3'-P	-6.10	1.53	1.61
2	B	245	G	C2-N2	-6.10	1.28	1.34
2	B	285	G	C2'-C1'	-6.10	1.46	1.53
2	B	329	G	C4'-C3'	6.10	1.59	1.53
2	B	1106	G	C8-N7	-6.10	1.27	1.30
2	B	1601	G	N9-C4	-6.10	1.33	1.38
2	B	1988	G	C2-N3	-6.10	1.27	1.32
31	I	133	ARG	NE-CZ	6.10	1.41	1.33
2	B	60	G	N9-C4	-6.10	1.33	1.38
2	B	291	G	C2'-C1'	-6.10	1.46	1.53
2	B	339	U	C4'-O4'	-6.10	1.37	1.45
2	B	571	U	N1-C2	-6.10	1.33	1.38
2	B	677	A	P-O5'	-6.10	1.53	1.59
2	B	1011	G	O3'-P	-6.10	1.53	1.61
2	B	1217	U	O3'-P	-6.10	1.53	1.61
2	B	2012	G	C4'-O4'	-6.10	1.37	1.45
2	B	2060	A	C4'-O4'	-6.10	1.37	1.45
2	B	2274	A	N3-C4	-6.10	1.31	1.34
2	B	517	C	C2-O2	6.10	1.29	1.24
2	B	1504	A	C6-N1	6.10	1.39	1.35
2	B	2449	U	C4-C5	-6.10	1.38	1.43
2	B	390	U	C4-O4	-6.09	1.18	1.23
2	B	407	G	O3'-P	-6.09	1.53	1.61
2	B	592	A	P-O5'	6.09	1.65	1.59
2	B	916	G	C2-N3	6.09	1.37	1.32
2	B	993	G	C8-N7	-6.09	1.27	1.30
2	B	1071	G	O3'-P	-6.09	1.53	1.61
2	B	1090	A	N9-C4	-6.09	1.34	1.37
2	B	1222	U	C3'-C2'	-6.09	1.46	1.52
2	B	1796	U	C5-C6	6.09	1.39	1.34
2	B	2635	A	C2'-C1'	-6.09	1.46	1.53
1	A	46	A	O3'-P	-6.09	1.53	1.61
2	B	657	U	C4'-O4'	-6.09	1.37	1.45
2	B	1039	A	C2'-C1'	-6.09	1.46	1.53
10	P	61	ARG	CD-NE	6.09	1.56	1.46
1	A	102	G	C5'-C4'	6.09	1.58	1.51
2	B	252	G	N7-C5	-6.09	1.35	1.39
2	B	346	A	C6-N1	-6.09	1.31	1.35
2	B	462	C	C4'-C3'	6.09	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	831	G	C2'-C1'	-6.09	1.46	1.53
2	B	1255	U	P-O5'	-6.09	1.53	1.59
2	B	1400	U	O3'-P	-6.09	1.53	1.61
2	B	2406	A	N7-C5	-6.09	1.35	1.39
2	B	2844	G	C5-C4	6.09	1.42	1.38
9	O	117	PHE	CB-CG	-6.09	1.41	1.51
2	B	182	A	C6-N6	-6.09	1.29	1.33
2	B	309	A	C6-N1	6.09	1.39	1.35
2	B	1415	U	C4-O4	-6.09	1.18	1.23
2	B	2293	G	P-O5'	-6.09	1.53	1.59
2	B	2553	G	P-O5'	-6.09	1.53	1.59
2	B	2792	A	C1'-N9	-6.09	1.38	1.46
2	B	411	G	O3'-P	-6.09	1.53	1.61
2	B	1138	G	N7-C5	-6.09	1.35	1.39
2	B	1334	G	O3'-P	-6.09	1.53	1.61
2	B	1430	G	C3'-C2'	-6.09	1.46	1.52
2	B	2343	U	N1-C6	6.09	1.43	1.38
2	B	2600	A	C2'-C1'	-6.09	1.46	1.53
2	B	2815	C	O3'-P	-6.09	1.53	1.61
2	B	128	C	C5-C6	6.09	1.39	1.34
2	B	244	A	C6-N1	-6.09	1.31	1.35
2	B	2182	U	O4'-C1'	6.09	1.49	1.41
2	B	2461	A	C6-N6	6.09	1.38	1.33
5	L	2	ARG	CZ-NH2	6.09	1.41	1.33
2	B	2746	U	C2-N3	6.08	1.42	1.37
2	B	957	C	C2'-C1'	-6.08	1.46	1.53
2	B	1473	G	C2'-C1'	-6.08	1.46	1.53
2	B	1564	C	C2'-C1'	-6.08	1.46	1.53
2	B	2234	G	C4'-C3'	6.08	1.59	1.53
32	J	71	ASP	N-CA	-6.08	1.34	1.46
1	A	56	G	C2'-C1'	-6.08	1.46	1.53
2	B	136	G	P-O5'	-6.08	1.53	1.59
2	B	2245	U	N1-C6	6.08	1.43	1.38
2	B	2363	G	N3-C4	-6.08	1.31	1.35
14	D	198	GLY	CA-C	-6.08	1.42	1.51
2	B	722	A	C5-C4	6.08	1.43	1.38
2	B	825	A	P-O5'	-6.08	1.53	1.59
2	B	833	A	C4'-C3'	-6.08	1.46	1.53
2	B	2858	C	N3-C4	6.08	1.38	1.33
1	A	9	G	C6-N1	6.08	1.43	1.39
1	A	117	G	C2-N2	6.08	1.40	1.34
2	B	7	G	O3'-P	-6.08	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	361	G	C5'-C4'	6.08	1.58	1.51
2	B	1353	A	N9-C4	-6.08	1.34	1.37
2	B	2440	C	C4-N4	6.08	1.39	1.33
2	B	1554	U	N1-C6	6.08	1.43	1.38
2	B	2668	G	C2-N3	6.08	1.37	1.32
17	U	83	GLY	CA-C	-6.08	1.42	1.51
2	B	1005	C	N3-C4	6.08	1.38	1.33
2	B	1777	U	C4-C5	-6.08	1.38	1.43
1	A	40	U	C2'-C1'	-6.07	1.46	1.53
27	C	269	ARG	CZ-NH2	6.07	1.41	1.33
2	B	1122	G	O3'-P	-6.07	1.53	1.61
2	B	1653	G	C2'-C1'	-6.07	1.46	1.53
2	B	95	A	N9-C4	-6.07	1.34	1.37
2	B	185	G	C8-N7	-6.07	1.27	1.30
2	B	643	A	N9-C4	6.07	1.41	1.37
2	B	702	U	O3'-P	-6.07	1.53	1.61
2	B	713	G	N3-C4	-6.07	1.31	1.35
2	B	804	A	C8-N7	-6.07	1.27	1.31
2	B	809	G	N9-C8	-6.07	1.33	1.37
2	B	1459	G	O3'-P	-6.07	1.53	1.61
2	B	1577	C	C2'-C1'	-6.07	1.46	1.53
2	B	1622	G	N7-C5	-6.07	1.35	1.39
2	B	2720	U	C2'-C1'	-6.07	1.46	1.53
1	A	109	A	C4'-O4'	-6.07	1.37	1.45
2	B	50	U	O4'-C1'	6.07	1.49	1.41
2	B	1096	A	C6-N6	6.07	1.38	1.33
2	B	1226	A	C5'-C4'	6.07	1.58	1.51
2	B	1628	G	O3'-P	-6.07	1.53	1.61
2	B	2288	A	C4'-O4'	-6.07	1.37	1.45
2	B	2405	G	N3-C4	-6.07	1.31	1.35
2	B	2570	G	N7-C5	6.07	1.42	1.39
23	5	78	PHE	CG-CD1	6.07	1.47	1.38
1	A	80	U	C5'-C4'	-6.07	1.44	1.51
2	B	624	C	C2-O2	6.07	1.29	1.24
2	B	825	A	C5-C6	-6.07	1.35	1.41
2	B	1202	G	C3'-C2'	-6.07	1.46	1.52
2	B	2084	C	O3'-P	-6.07	1.53	1.61
25	7	39	ARG	CZ-NH2	6.06	1.41	1.33
32	J	125	TYR	CB-CG	-6.06	1.42	1.51
2	B	169	G	C5-C4	-6.06	1.34	1.38
2	B	471	A	C2'-C1'	-6.06	1.46	1.53
2	B	647	G	P-O5'	-6.06	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1808	A	C6-N1	6.06	1.39	1.35
1	A	102	G	N1-C2	6.06	1.42	1.37
2	B	415	A	P-O5'	-6.06	1.53	1.59
2	B	1266	G	C5-C4	6.06	1.42	1.38
2	B	127	A	N9-C4	6.06	1.41	1.37
2	B	399	U	N3-C4	6.06	1.44	1.38
2	B	772	C	C1'-N1	-6.06	1.38	1.46
2	B	2242	G	C2-N3	6.06	1.37	1.32
2	B	2666	C	N3-C4	6.06	1.38	1.33
2	B	6	A	P-O5'	-6.06	1.53	1.59
2	B	81	G	N3-C4	-6.06	1.31	1.35
2	B	527	C	N3-C4	-6.06	1.29	1.33
2	B	784	G	N7-C5	-6.06	1.35	1.39
2	B	1673	G	N1-C2	6.06	1.42	1.37
2	B	2838	G	N9-C4	6.06	1.42	1.38
1	A	14	U	C4-C5	-6.06	1.38	1.43
2	B	1334	G	C2-N3	6.06	1.37	1.32
2	B	2053	G	C1'-N9	-6.06	1.38	1.46
2	B	2157	G	C5-C6	-6.06	1.36	1.42
2	B	2237	G	C8-N7	-6.06	1.27	1.30
2	B	294	A	C5-C4	-6.05	1.34	1.38
2	B	586	A	N9-C4	-6.05	1.34	1.37
2	B	1156	A	N3-C4	-6.05	1.31	1.34
2	B	1628	G	C2-N3	6.05	1.37	1.32
2	B	2660	A	N7-C5	-6.05	1.35	1.39
2	B	2705	A	C6-N1	6.05	1.39	1.35
2	B	336	C	C2'-C1'	-6.05	1.46	1.53
2	B	1432	G	C2-N3	6.05	1.37	1.32
2	B	294	A	N3-C4	-6.05	1.31	1.34
2	B	401	A	C5-C4	-6.05	1.34	1.38
2	B	1223	G	C5-C6	-6.05	1.36	1.42
2	B	1374	G	C2'-C1'	-6.05	1.46	1.53
2	B	1929	G	C3'-C2'	6.05	1.59	1.52
2	B	2592	G	C5'-C4'	6.05	1.58	1.51
2	B	536	G	C2-N2	6.05	1.40	1.34
2	B	657	U	C4-C5	-6.05	1.38	1.43
2	B	984	A	O3'-P	-6.05	1.53	1.61
2	B	1677	A	C1'-N9	-6.05	1.38	1.46
2	B	1932	A	C4'-C3'	-6.05	1.46	1.53
2	B	1986	C	C4'-C3'	-6.05	1.46	1.53
2	B	2269	G	C2-N2	6.05	1.40	1.34
2	B	2618	G	C2-N3	6.05	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1227	G	P-O5'	-6.05	1.53	1.59
1	A	10	G	N1-C2	6.05	1.42	1.37
2	B	5	A	O3'-P	-6.05	1.53	1.61
2	B	573	U	C4'-C3'	-6.05	1.46	1.53
2	B	1098	A	C6-N6	6.05	1.38	1.33
2	B	1241	A	C8-N7	-6.05	1.27	1.31
2	B	1285	A	N3-C4	-6.05	1.31	1.34
2	B	2108	A	N3-C4	-6.05	1.31	1.34
2	B	2509	G	C6-N1	6.05	1.43	1.39
2	B	2615	U	P-O5'	-6.05	1.53	1.59
2	B	1133	A	N9-C4	-6.04	1.34	1.37
2	B	2469	A	N9-C4	-6.04	1.34	1.37
1	A	116	G	C2'-C1'	-6.04	1.46	1.53
2	B	120	U	C5'-C4'	6.04	1.58	1.51
2	B	133	U	P-O5'	-6.04	1.53	1.59
2	B	318	C	O3'-P	-6.04	1.53	1.61
2	B	1135	C	C5-C6	-6.04	1.29	1.34
2	B	2062	A	N9-C4	-6.04	1.34	1.37
2	B	2653	U	C3'-C2'	-6.04	1.46	1.52
2	B	2802	G	N9-C4	-6.04	1.33	1.38
2	B	2841	C	N3-C4	6.04	1.38	1.33
2	B	2869	G	C8-N7	-6.04	1.27	1.30
28	F	6	TYR	CB-CG	-6.04	1.42	1.51
2	B	8	C	N1-C6	-6.04	1.33	1.37
2	B	233	A	C2'-C1'	-6.04	1.46	1.53
2	B	931	U	C5'-C4'	6.04	1.58	1.51
2	B	2010	G	C8-N7	-6.04	1.27	1.30
2	B	2080	A	O3'-P	-6.04	1.53	1.61
2	B	2240	U	C2'-C1'	-6.04	1.46	1.53
2	B	2259	U	C2-N3	6.04	1.42	1.37
2	B	2591	C	P-O5'	-6.04	1.53	1.59
2	B	608	A	C3'-C2'	-6.04	1.46	1.52
2	B	1033	U	C2-N3	6.04	1.42	1.37
2	B	1218	G	N9-C8	-6.04	1.33	1.37
2	B	2399	G	N9-C8	-6.04	1.33	1.37
2	B	2407	A	C5-C6	-6.04	1.35	1.41
2	B	23	G	N7-C5	-6.04	1.35	1.39
2	B	144	A	C8-N7	-6.04	1.27	1.31
2	B	194	G	O3'-P	-6.04	1.53	1.61
2	B	269	C	C4'-C3'	-6.04	1.46	1.53
2	B	1142	A	O3'-P	-6.04	1.53	1.61
2	B	1195	G	N9-C4	-6.04	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1580	A	O4'-C1'	6.04	1.49	1.41
2	B	2147	A	N1-C2	6.04	1.39	1.34
2	B	2233	U	C3'-C2'	-6.04	1.46	1.52
2	B	2773	C	P-O5'	-6.04	1.53	1.59
2	B	152	A	O3'-P	-6.04	1.53	1.61
2	B	272	A	C5'-C4'	6.04	1.58	1.51
2	B	662	G	C2'-C1'	-6.04	1.46	1.53
2	B	1134	A	C2'-C1'	-6.04	1.46	1.53
2	B	1278	C	O3'-P	-6.04	1.53	1.61
2	B	1676	A	C1'-N9	-6.04	1.38	1.46
2	B	1992	G	C2'-C1'	-6.04	1.46	1.53
2	B	2677	G	N3-C4	-6.04	1.31	1.35
2	B	494	G	C4'-C3'	-6.04	1.46	1.53
2	B	1345	C	O4'-C1'	6.04	1.49	1.41
2	B	1348	C	C4'-O4'	-6.04	1.37	1.45
2	B	2074	U	C5-C6	6.04	1.39	1.34
2	B	2177	C	C2-N3	6.04	1.40	1.35
2	B	2361	G	N3-C4	-6.04	1.31	1.35
2	B	2510	C	C2-N3	-6.04	1.30	1.35
2	B	2510	C	C2'-O2'	6.04	1.49	1.41
2	B	2624	G	C3'-C2'	-6.04	1.46	1.52
9	O	30	ARG	CZ-NH2	6.04	1.40	1.33
2	B	972	A	C6-N1	6.03	1.39	1.35
2	B	985	C	O3'-P	-6.03	1.53	1.61
2	B	1067	A	C5'-C4'	6.03	1.58	1.51
2	B	1492	G	C2-N3	6.03	1.37	1.32
2	B	2422	C	C4-N4	6.03	1.39	1.33
2	B	2434	A	N3-C4	-6.03	1.31	1.34
2	B	2471	A	C5'-C4'	6.03	1.58	1.51
2	B	2895	G	N7-C5	-6.03	1.35	1.39
27	C	226	PRO	N-CD	-6.03	1.39	1.47
1	A	23	G	C8-N7	-6.03	1.27	1.30
1	A	32	U	C3'-C2'	-6.03	1.46	1.52
2	B	356	G	O4'-C1'	-6.03	1.33	1.41
2	B	598	U	C3'-C2'	-6.03	1.46	1.52
2	B	1458	U	P-O5'	6.03	1.65	1.59
2	B	1650	A	N9-C8	6.03	1.42	1.37
2	B	2297	A	N9-C4	6.03	1.41	1.37
2	B	2383	G	C6-N1	-6.03	1.35	1.39
2	B	544	C	C3'-C2'	-6.03	1.46	1.52
2	B	1645	G	C6-N1	-6.03	1.35	1.39
2	B	536	G	N9-C8	-6.03	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	604	G	C2'-C1'	-6.03	1.46	1.53
2	B	664	G	C2-N3	6.03	1.37	1.32
2	B	1057	A	C4'-C3'	6.03	1.59	1.53
2	B	1165	A	N9-C8	-6.03	1.32	1.37
2	B	1438	U	N1-C2	-6.03	1.33	1.38
2	B	1595	C	P-O5'	-6.03	1.53	1.59
2	B	1626	A	C4'-C3'	-6.03	1.46	1.53
2	B	1776	G	C3'-O3'	6.03	1.50	1.42
2	B	2129	C	C2'-C1'	-6.03	1.46	1.53
2	B	2249	U	C2-N3	6.03	1.42	1.37
2	B	2626	C	O3'-P	-6.03	1.53	1.61
2	B	1351	C	P-O5'	-6.03	1.53	1.59
2	B	1448	G	C8-N7	6.03	1.34	1.30
2	B	1464	G	C2'-C1'	-6.03	1.46	1.53
2	B	1764	C	C2'-C1'	-6.03	1.46	1.53
2	B	480	A	C3'-C2'	6.02	1.59	1.52
4	K	18	ARG	CZ-NH2	6.02	1.40	1.33
1	A	40	U	O3'-P	-6.02	1.53	1.61
2	B	369	U	C4'-C3'	-6.02	1.46	1.53
2	B	380	G	P-O5'	6.02	1.65	1.59
2	B	664	G	O3'-P	-6.02	1.53	1.61
2	B	758	C	N3-C4	6.02	1.38	1.33
2	B	785	G	C8-N7	6.02	1.34	1.30
2	B	2434	A	C2'-C1'	-6.02	1.46	1.53
2	B	2753	A	C2'-C1'	-6.02	1.46	1.53
21	Y	21	GLY	CA-C	-6.02	1.42	1.51
2	B	203	A	C5-C4	-6.02	1.34	1.38
2	B	493	G	N9-C8	-6.02	1.33	1.37
2	B	649	G	C2-N2	6.02	1.40	1.34
2	B	771	G	C8-N7	-6.02	1.27	1.30
2	B	1555	G	C5-C4	-6.02	1.34	1.38
2	B	259	G	N7-C5	-6.02	1.35	1.39
2	B	277	G	C4'-C3'	6.02	1.59	1.53
2	B	580	U	C2-N3	6.02	1.42	1.37
2	B	776	G	C5-C4	6.02	1.42	1.38
2	B	953	G	P-O5'	-6.02	1.53	1.59
2	B	1002	G	O5'-C5'	-6.02	1.33	1.42
2	B	1283	G	C1'-N9	-6.02	1.38	1.46
2	B	2896	C	C2'-C1'	-6.02	1.46	1.53
2	B	60	G	C2-N2	6.02	1.40	1.34
2	B	662	G	C3'-O3'	6.02	1.50	1.42
2	B	980	A	C2'-C1'	-6.02	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1128	G	C5-C4	-6.02	1.34	1.38
2	B	1588	G	C5-C4	6.02	1.42	1.38
2	B	1270	C	P-O5'	-6.01	1.53	1.59
2	B	2878	U	C5-C6	6.01	1.39	1.34
2	B	454	A	C2-N3	6.01	1.39	1.33
2	B	1437	C	C4-C5	6.01	1.47	1.43
2	B	1802	A	N3-C4	-6.01	1.31	1.34
2	B	2900	A	N9-C8	-6.01	1.32	1.37
1	A	4	C	C3'-O3'	6.01	1.50	1.42
2	B	260	G	C2'-C1'	-6.01	1.46	1.53
2	B	299	A	O3'-P	-6.01	1.53	1.61
2	B	331	C	C4-N4	-6.01	1.28	1.33
2	B	836	G	O3'-P	-6.01	1.53	1.61
2	B	1235	G	C8-N7	6.01	1.34	1.30
2	B	1316	U	P-O5'	-6.01	1.53	1.59
2	B	1849	G	N1-C2	6.01	1.42	1.37
2	B	438	G	C4'-C3'	-6.01	1.46	1.53
2	B	588	U	C2-N3	-6.01	1.33	1.37
2	B	636	G	C5-C6	-6.01	1.36	1.42
2	B	1362	C	C2-N3	6.01	1.40	1.35
2	B	1830	C	P-O5'	-6.01	1.53	1.59
2	B	1854	A	O4'-C1'	-6.01	1.33	1.41
2	B	2033	A	O3'-P	-6.01	1.53	1.61
2	B	2133	G	N9-C8	6.01	1.42	1.37
2	B	2570	G	N9-C4	-6.01	1.33	1.38
2	B	2630	G	N7-C5	-6.01	1.35	1.39
2	B	2724	U	C2'-C1'	-6.01	1.46	1.53
31	I	66	PHE	CB-CG	6.01	1.61	1.51
2	B	1285	A	O3'-P	-6.01	1.53	1.61
2	B	1516	G	C4'-O4'	6.01	1.53	1.45
2	B	2692	G	N1-C2	6.01	1.42	1.37
2	B	55	G	N3-C4	-6.01	1.31	1.35
2	B	210	C	C4-N4	6.01	1.39	1.33
2	B	731	C	O3'-P	-6.01	1.53	1.61
2	B	751	A	C2'-C1'	-6.01	1.46	1.53
2	B	2513	A	C8-N7	-6.01	1.27	1.31
2	B	2748	A	P-O5'	-6.01	1.53	1.59
2	B	2874	C	C4'-O4'	-6.01	1.37	1.45
2	B	998	C	O3'-P	-6.00	1.53	1.61
2	B	1846	G	N7-C5	-6.00	1.35	1.39
2	B	1849	G	O3'-P	-6.00	1.53	1.61
2	B	2112	G	O5'-C5'	6.00	1.54	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2488	G	N7-C5	-6.00	1.35	1.39
2	B	130	C	N1-C2	6.00	1.46	1.40
2	B	488	G	C2-N2	-6.00	1.28	1.34
2	B	1205	A	N9-C4	6.00	1.41	1.37
2	B	1498	C	C4-N4	6.00	1.39	1.33
2	B	1801	A	N3-C4	-6.00	1.31	1.34
2	B	1829	A	C5-C6	-6.00	1.35	1.41
2	B	2816	G	C3'-C2'	-6.00	1.46	1.52
2	B	191	A	C5'-C4'	6.00	1.58	1.51
2	B	1622	G	N3-C4	6.00	1.39	1.35
2	B	1713	A	O3'-P	-6.00	1.53	1.61
2	B	1904	G	O3'-P	-6.00	1.53	1.61
2	B	2208	C	P-O5'	-6.00	1.53	1.59
2	B	2407	A	C2'-C1'	-6.00	1.46	1.53
1	A	47	C	C3'-O3'	-6.00	1.33	1.42
2	B	577	G	N7-C5	-6.00	1.35	1.39
2	B	771	G	N1-C2	-6.00	1.32	1.37
2	B	884	U	C2-N3	6.00	1.42	1.37
2	B	2341	G	C6-N1	-6.00	1.35	1.39
14	D	72	GLY	CA-C	-6.00	1.42	1.51
2	B	174	U	C2'-C1'	-6.00	1.46	1.53
2	B	206	U	O3'-P	-6.00	1.53	1.61
2	B	816	C	C2'-C1'	-6.00	1.46	1.53
2	B	859	G	C5-C4	6.00	1.42	1.38
2	B	956	G	C4'-C3'	-6.00	1.46	1.52
2	B	1099	G	N9-C8	-6.00	1.33	1.37
2	B	2244	U	P-O5'	-6.00	1.53	1.59
2	B	2674	G	C5-C4	-6.00	1.34	1.38
2	B	2814	A	C2-N3	-6.00	1.28	1.33
2	B	567	U	O4'-C1'	-6.00	1.33	1.41
2	B	577	G	N9-C8	-6.00	1.33	1.37
2	B	586	A	C4'-O4'	-6.00	1.37	1.45
2	B	795	C	C5-C6	-6.00	1.29	1.34
2	B	864	G	P-O5'	-6.00	1.53	1.59
2	B	1410	G	N9-C8	-6.00	1.33	1.37
2	B	1510	G	N7-C5	-6.00	1.35	1.39
2	B	1522	A	C5-C4	6.00	1.43	1.38
2	B	2578	G	N9-C4	-6.00	1.33	1.38
2	B	839	U	C5-C6	-6.00	1.28	1.34
2	B	1722	A	C2-N3	6.00	1.39	1.33
2	B	1961	C	O3'-P	-6.00	1.53	1.61
2	B	2270	A	P-O5'	-6.00	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2818	U	O3'-P	-6.00	1.53	1.61
2	B	121	G	C4'-O4'	-5.99	1.37	1.45
2	B	990	A	P-O5'	-5.99	1.53	1.59
2	B	2039	U	C4-C5	5.99	1.49	1.43
2	B	2523	G	O4'-C1'	-5.99	1.33	1.41
2	B	2543	G	C2-N2	5.99	1.40	1.34
2	B	2750	A	O3'-P	-5.99	1.53	1.61
2	B	2183	A	C2'-C1'	-5.99	1.46	1.53
2	B	2568	U	N1-C6	-5.99	1.32	1.38
2	B	2861	U	N1-C6	-5.99	1.32	1.38
2	B	23	G	P-O5'	-5.99	1.53	1.59
2	B	121	G	C3'-C2'	-5.99	1.46	1.52
2	B	949	G	C2-N3	5.99	1.37	1.32
2	B	1245	G	P-O5'	-5.99	1.53	1.59
2	B	1266	G	C2'-C1'	5.99	1.59	1.53
2	B	1435	G	C2-N3	5.99	1.37	1.32
2	B	1998	A	N7-C5	-5.99	1.35	1.39
2	B	2897	U	P-O5'	-5.99	1.53	1.59
1	A	52	A	N7-C5	-5.99	1.35	1.39
1	A	66	A	C5-C6	-5.99	1.35	1.41
2	B	539	G	O3'-P	-5.99	1.53	1.61
2	B	566	U	C4'-C3'	-5.99	1.46	1.52
2	B	1378	A	C4'-O4'	-5.99	1.37	1.45
2	B	1432	G	C5-C6	-5.99	1.36	1.42
2	B	2416	C	N1-C6	-5.99	1.33	1.37
2	B	870	U	O3'-P	-5.99	1.53	1.61
2	B	1568	G	C4'-O4'	-5.99	1.37	1.45
2	B	2601	C	O3'-P	-5.99	1.53	1.61
2	B	1160	G	C3'-C2'	-5.99	1.46	1.52
2	B	1283	G	N7-C5	-5.99	1.35	1.39
2	B	1632	A	N7-C5	-5.99	1.35	1.39
2	B	1808	A	C4'-O4'	-5.99	1.37	1.45
19	X	435	LYS	CA-C	-5.99	1.37	1.52
2	B	100	U	O3'-P	-5.98	1.53	1.61
2	B	630	G	N7-C5	-5.98	1.35	1.39
2	B	885	C	C4'-O4'	5.98	1.53	1.45
2	B	1520	U	C3'-C2'	-5.98	1.46	1.52
2	B	94	A	O4'-C1'	-5.98	1.33	1.41
2	B	583	G	C3'-C2'	-5.98	1.46	1.52
2	B	707	G	N9-C8	5.98	1.42	1.37
2	B	946	C	N1-C6	5.98	1.40	1.37
2	B	2557	G	C6-N1	5.98	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2767	C	C4'-O4'	5.98	1.53	1.45
2	B	2864	G	O3'-P	-5.98	1.53	1.61
5	L	124	GLY	N-CA	-5.98	1.37	1.46
2	B	305	C	P-O5'	-5.98	1.53	1.59
2	B	368	A	C2'-C1'	-5.98	1.46	1.53
2	B	909	A	C8-N7	-5.98	1.27	1.31
2	B	1459	G	C2-N2	-5.98	1.28	1.34
2	B	1591	A	C5-C6	-5.98	1.35	1.41
2	B	269	C	C4-N4	5.98	1.39	1.33
2	B	455	C	C3'-O3'	-5.98	1.33	1.42
2	B	1380	G	N1-C2	5.98	1.42	1.37
2	B	2302	U	C2-N3	5.98	1.42	1.37
1	A	85	G	N3-C4	5.98	1.39	1.35
2	B	49	A	O3'-P	-5.98	1.53	1.61
2	B	311	A	C5'-C4'	5.98	1.58	1.51
2	B	487	C	C5-C6	-5.98	1.29	1.34
2	B	805	G	N1-C2	5.98	1.42	1.37
2	B	2392	A	N9-C8	-5.98	1.32	1.37
2	B	2478	A	C4'-O4'	-5.98	1.37	1.45
2	B	840	C	C1'-N1	-5.98	1.38	1.46
2	B	1129	A	C4'-O4'	-5.98	1.37	1.45
2	B	1646	C	C5-C6	-5.98	1.29	1.34
2	B	2367	G	N3-C4	-5.98	1.31	1.35
2	B	2599	G	O4'-C1'	5.98	1.49	1.41
2	B	2664	G	N3-C4	-5.98	1.31	1.35
2	B	166	U	N1-C2	-5.97	1.33	1.38
2	B	550	C	N3-C4	5.97	1.38	1.33
2	B	625	G	C5-C6	-5.97	1.36	1.42
2	B	809	G	P-O5'	-5.97	1.53	1.59
2	B	2295	C	C3'-C2'	-5.97	1.46	1.52
2	B	2301	C	C2'-C1'	-5.97	1.46	1.53
2	B	2644	G	P-O5'	-5.97	1.53	1.59
2	B	2815	C	C5'-C4'	-5.97	1.44	1.51
2	B	16	C	P-O5'	-5.97	1.53	1.59
2	B	268	C	C4'-C3'	-5.97	1.46	1.52
2	B	997	G	C2'-C1'	-5.97	1.46	1.53
2	B	1036	G	P-O5'	-5.97	1.53	1.59
2	B	1138	G	N3-C4	5.97	1.39	1.35
2	B	1371	G	C8-N7	5.97	1.34	1.30
2	B	2526	G	P-O5'	-5.97	1.53	1.59
2	B	2547	A	C2'-C1'	-5.97	1.46	1.53
2	B	472	A	C5-C6	-5.97	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1111	A	C6-N6	5.97	1.38	1.33
2	B	2034	U	C4'-C3'	-5.97	1.46	1.52
2	B	2127	G	C5'-C4'	5.97	1.58	1.51
2	B	2313	C	N1-C6	5.97	1.40	1.37
2	B	399	U	C4'-O4'	-5.97	1.37	1.45
2	B	1832	C	C2'-C1'	-5.97	1.46	1.53
2	B	2235	G	N7-C5	-5.97	1.35	1.39
2	B	2611	C	N3-C4	5.97	1.38	1.33
2	B	1240	U	P-O5'	-5.97	1.53	1.59
2	B	1360	G	C4'-C3'	5.97	1.59	1.53
2	B	1756	G	C2-N3	5.97	1.37	1.32
2	B	2727	A	O3'-P	-5.97	1.53	1.61
2	B	2862	G	N9-C4	5.97	1.42	1.38
2	B	446	G	C6-N1	5.97	1.43	1.39
2	B	862	G	N9-C4	-5.97	1.33	1.38
2	B	1639	C	N1-C6	-5.97	1.33	1.37
2	B	1722	A	C5'-C4'	5.97	1.58	1.51
2	B	1831	G	C5-C4	5.97	1.42	1.38
2	B	1836	C	N1-C2	5.97	1.46	1.40
2	B	2077	A	O3'-P	-5.96	1.53	1.61
2	B	2145	C	C3'-O3'	-5.96	1.33	1.42
2	B	2317	A	O3'-P	-5.96	1.53	1.61
28	F	142	TYR	CE2-CZ	5.96	1.46	1.38
2	B	406	G	C2-N3	5.96	1.37	1.32
2	B	877	A	C8-N7	-5.96	1.27	1.31
2	B	1142	A	C6-N1	5.96	1.39	1.35
2	B	1546	G	N9-C8	-5.96	1.33	1.37
2	B	2368	C	C2-N3	5.96	1.40	1.35
2	B	2587	A	C6-N1	-5.96	1.31	1.35
2	B	2697	G	C1'-N9	-5.96	1.38	1.46
2	B	254	G	C2-N2	5.96	1.40	1.34
2	B	628	G	C2'-O2'	-5.96	1.33	1.41
2	B	1113	U	N3-C4	5.96	1.43	1.38
2	B	1427	A	C4'-O4'	-5.96	1.37	1.45
2	B	2162	G	C5'-C4'	5.96	1.58	1.51
2	B	2194	U	N1-C2	5.96	1.44	1.38
2	B	2243	U	C4-O4	-5.96	1.18	1.23
2	B	2338	C	C4-N4	5.96	1.39	1.33
2	B	2496	C	N3-C4	5.96	1.38	1.33
19	X	50	ARG	NE-CZ	5.96	1.40	1.33
2	B	17	G	C2-N2	5.96	1.40	1.34
2	B	701	G	C2-N2	-5.96	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1332	G	C4'-C3'	5.96	1.59	1.53
2	B	1927	A	N3-C4	-5.96	1.31	1.34
2	B	2123	G	N9-C4	5.96	1.42	1.38
2	B	2379	G	C8-N7	-5.96	1.27	1.30
14	D	166	GLY	CA-C	-5.96	1.42	1.51
1	A	114	C	C2-N3	5.96	1.40	1.35
2	B	569	U	C2'-C1'	-5.96	1.46	1.53
2	B	655	A	C4'-C3'	-5.96	1.46	1.52
2	B	1243	C	C2'-C1'	-5.96	1.46	1.53
2	B	1296	G	C6-O6	-5.96	1.18	1.24
2	B	1373	A	O3'-P	-5.96	1.54	1.61
2	B	1420	A	C6-N6	5.96	1.38	1.33
2	B	1629	U	C4'-O4'	-5.96	1.37	1.45
2	B	2238	G	C5-C6	-5.96	1.36	1.42
2	B	2565	A	P-O5'	-5.96	1.53	1.59
2	B	1540	G	N1-C2	5.96	1.42	1.37
2	B	1758	U	C2'-C1'	-5.96	1.46	1.53
2	B	2445	G	P-O5'	-5.96	1.53	1.59
5	L	106	GLU	CA-C	-5.96	1.37	1.52
19	X	51	GLU	CB-CG	5.96	1.63	1.52
2	B	333	G	C8-N7	-5.95	1.27	1.30
2	B	1843	C	C2-N3	-5.95	1.30	1.35
2	B	2023	C	N1-C6	5.95	1.40	1.37
2	B	2051	A	C5'-C4'	-5.95	1.44	1.51
2	B	2437	G	N9-C8	-5.95	1.33	1.37
2	B	2581	G	N3-C4	-5.95	1.31	1.35
22	3	3	GLN	N-CA	-5.95	1.34	1.46
1	A	75	G	C6-N1	5.95	1.43	1.39
1	A	28	C	O3'-P	-5.95	1.54	1.61
2	B	188	G	C8-N7	-5.95	1.27	1.30
2	B	477	A	C2-N3	-5.95	1.28	1.33
2	B	2381	A	C5-C4	5.95	1.43	1.38
2	B	2398	U	C4-C5	5.95	1.49	1.43
2	B	42	A	C5'-C4'	5.95	1.58	1.51
2	B	1115	G	C2-N3	5.95	1.37	1.32
2	B	1469	A	O3'-P	-5.95	1.54	1.61
2	B	1635	A	O3'-P	-5.95	1.54	1.61
2	B	1936	A	C6-N1	5.95	1.39	1.35
2	B	2668	G	O3'-P	-5.95	1.54	1.61
2	B	248	G	N3-C4	-5.95	1.31	1.35
2	B	513	A	N9-C8	-5.95	1.32	1.37
2	B	2251	G	C2-N3	5.95	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2420	C	C3'-C2'	-5.95	1.46	1.52
13	S	25	ARG	CZ-NH2	5.95	1.40	1.33
2	B	234	U	O3'-P	-5.95	1.54	1.61
2	B	501	A	C8-N7	-5.95	1.27	1.31
2	B	600	G	C2'-C1'	-5.95	1.46	1.53
2	B	1471	G	C5-C6	-5.95	1.36	1.42
2	B	2045	C	C3'-C2'	-5.95	1.46	1.52
2	B	2529	G	C1'-N9	-5.95	1.38	1.46
2	B	2536	G	C4'-C3'	-5.95	1.46	1.52
2	B	1333	G	P-O5'	-5.94	1.53	1.59
2	B	1403	A	N3-C4	-5.94	1.31	1.34
2	B	1822	C	O4'-C1'	-5.94	1.33	1.41
2	B	801	G	C3'-C2'	-5.94	1.46	1.52
2	B	891	G	C4'-C3'	-5.94	1.46	1.52
2	B	1358	G	N9-C4	-5.94	1.33	1.38
2	B	1655	A	C2'-C1'	-5.94	1.46	1.53
2	B	1805	A	C8-N7	-5.94	1.27	1.31
2	B	1955	U	O3'-P	-5.94	1.54	1.61
2	B	2330	G	N7-C5	-5.94	1.35	1.39
2	B	2367	G	C2-N2	-5.94	1.28	1.34
2	B	2704	C	N3-C4	5.94	1.38	1.33
2	B	24	G	N3-C4	-5.94	1.31	1.35
2	B	160	A	C2'-C1'	-5.94	1.46	1.53
2	B	244	A	N9-C8	-5.94	1.32	1.37
2	B	1543	G	N9-C4	-5.94	1.33	1.38
2	B	1708	C	C5'-C4'	-5.94	1.44	1.51
2	B	2211	A	O3'-P	-5.94	1.54	1.61
2	B	87	U	P-O5'	-5.94	1.53	1.59
2	B	1411	U	N1-C2	-5.94	1.33	1.38
2	B	830	G	C2'-C1'	-5.94	1.46	1.53
2	B	929	U	O3'-P	-5.94	1.54	1.61
2	B	1131	G	C8-N7	-5.94	1.27	1.30
2	B	1786	A	P-O5'	-5.94	1.53	1.59
2	B	2338	C	N3-C4	5.94	1.38	1.33
2	B	2776	A	N7-C5	-5.94	1.35	1.39
2	B	1449	G	C4'-C3'	5.94	1.59	1.53
2	B	1643	G	C2'-C1'	-5.94	1.46	1.53
2	B	1685	C	C4-N4	-5.94	1.28	1.33
2	B	1973	G	C2-N3	5.94	1.37	1.32
19	X	21	ARG	CZ-NH2	5.94	1.40	1.33
1	A	96	G	N7-C5	-5.93	1.35	1.39
1	A	97	C	N3-C4	5.93	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	271	G	C5-C6	-5.93	1.36	1.42
2	B	1297	C	C5'-C4'	5.93	1.58	1.51
2	B	1540	G	C5-C4	-5.93	1.34	1.38
2	B	1555	G	N1-C2	5.93	1.42	1.37
2	B	1708	C	C2'-C1'	-5.93	1.46	1.53
2	B	2332	C	C4'-C3'	-5.93	1.46	1.52
2	B	2425	A	C3'-C2'	5.93	1.59	1.52
2	B	2518	A	N7-C5	-5.93	1.35	1.39
1	A	87	U	C1'-N1	5.93	1.57	1.48
2	B	1070	A	N9-C4	5.93	1.41	1.37
2	B	1802	A	N1-C2	5.93	1.39	1.34
2	B	2666	C	C3'-C2'	-5.93	1.46	1.52
2	B	2769	U	C2'-C1'	-5.93	1.46	1.53
2	B	2855	C	N3-C4	5.93	1.38	1.33
1	A	32	U	O4'-C1'	-5.93	1.33	1.41
2	B	141	G	N7-C5	-5.93	1.35	1.39
2	B	891	G	C2'-C1'	-5.93	1.46	1.53
2	B	2735	G	C2-N2	5.93	1.40	1.34
1	A	112	G	C1'-N9	-5.93	1.38	1.46
2	B	447	A	C5-C4	5.93	1.43	1.38
2	B	1287	A	C2'-C1'	-5.93	1.46	1.53
2	B	1436	G	C4'-C3'	-5.93	1.46	1.52
2	B	420	C	C3'-C2'	-5.93	1.46	1.52
2	B	584	C	C2-N3	5.93	1.40	1.35
2	B	621	A	C5-C4	-5.93	1.34	1.38
2	B	1984	G	N7-C5	-5.93	1.35	1.39
27	C	211	ARG	NE-CZ	5.93	1.40	1.33
2	B	130	C	C2'-C1'	-5.93	1.46	1.53
2	B	623	C	C4'-O4'	5.93	1.53	1.45
2	B	650	C	N1-C6	-5.93	1.33	1.37
2	B	1098	A	N7-C5	-5.93	1.35	1.39
2	B	1229	C	C2-N3	5.93	1.40	1.35
2	B	1465	G	C2'-C1'	-5.93	1.46	1.53
2	B	2104	C	O3'-P	-5.93	1.54	1.61
2	B	1321	A	C6-N1	5.92	1.39	1.35
2	B	1715	G	C5-C4	5.92	1.42	1.38
2	B	2067	G	O3'-P	-5.92	1.54	1.61
2	B	2073	C	O3'-P	-5.92	1.54	1.61
2	B	1445	G	C8-N7	-5.92	1.27	1.30
2	B	2398	U	N3-C4	5.92	1.43	1.38
27	C	202	ARG	CD-NE	5.92	1.56	1.46
30	H	27	ARG	CZ-NH1	5.92	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	56	A	N7-C5	-5.92	1.35	1.39
2	B	632	A	C4'-C3'	5.92	1.59	1.53
2	B	1042	G	C2-N3	5.92	1.37	1.32
2	B	2012	G	N3-C4	-5.92	1.31	1.35
2	B	2161	C	C2-N3	5.92	1.40	1.35
2	B	2216	G	N9-C4	-5.92	1.33	1.38
2	B	2879	A	O4'-C1'	-5.92	1.33	1.41
2	B	411	G	C2-N2	5.92	1.40	1.34
2	B	878	A	C2'-C1'	-5.92	1.46	1.53
2	B	1486	U	C2'-C1'	-5.92	1.46	1.53
2	B	1579	A	C6-N1	5.92	1.39	1.35
2	B	2029	G	N7-C5	-5.92	1.35	1.39
2	B	2318	G	N7-C5	-5.92	1.35	1.39
2	B	2631	G	N9-C4	-5.92	1.33	1.38
2	B	132	G	N7-C5	5.92	1.42	1.39
2	B	219	A	O3'-P	-5.92	1.54	1.61
2	B	798	G	C2'-C1'	-5.92	1.46	1.53
2	B	931	U	N1-C2	5.92	1.43	1.38
2	B	1595	C	C2'-C1'	-5.92	1.46	1.53
2	B	1896	G	O3'-P	-5.92	1.54	1.61
2	B	2093	G	O3'-P	-5.92	1.54	1.61
2	B	2169	A	C4'-C3'	-5.92	1.46	1.52
3	0	36	ARG	NE-CZ	5.92	1.40	1.33
2	B	1315	C	C2'-O2'	-5.92	1.33	1.41
2	B	1330	C	C4'-C3'	5.92	1.59	1.53
2	B	2027	G	C3'-C2'	-5.92	1.46	1.52
2	B	2550	G	O3'-P	-5.92	1.54	1.61
2	B	2679	A	P-O5'	-5.92	1.53	1.59
2	B	21	A	C5-C4	-5.92	1.34	1.38
2	B	1005	C	C4-C5	-5.92	1.38	1.43
2	B	1143	A	P-O5'	-5.92	1.53	1.59
2	B	1308	A	N9-C4	-5.92	1.34	1.37
2	B	1387	A	C5-C4	-5.92	1.34	1.38
1	A	92	C	N1-C6	5.91	1.40	1.37
2	B	752	A	O3'-P	-5.91	1.54	1.61
2	B	1232	G	C3'-C2'	-5.91	1.46	1.52
2	B	1328	A	C2'-C1'	-5.91	1.46	1.53
2	B	1687	G	C2-N3	5.91	1.37	1.32
2	B	1926	U	C1'-N1	5.91	1.57	1.48
2	B	2060	A	C2'-C1'	-5.91	1.46	1.53
2	B	2667	C	O3'-P	-5.91	1.54	1.61
2	B	609	A	N9-C8	5.91	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1510	G	N9-C4	-5.91	1.33	1.38
2	B	2722	G	C2-N2	5.91	1.40	1.34
2	B	2754	U	O3'-P	-5.91	1.54	1.61
2	B	2872	A	N3-C4	-5.91	1.31	1.34
2	B	957	C	C5'-C4'	5.91	1.58	1.51
2	B	1492	G	C2'-C1'	-5.91	1.46	1.53
2	B	2086	U	C4'-O4'	-5.91	1.37	1.45
2	B	2641	G	C6-O6	-5.91	1.18	1.24
2	B	191	A	O4'-C1'	-5.91	1.33	1.41
2	B	570	G	N3-C4	-5.91	1.31	1.35
2	B	643	A	C2'-C1'	-5.91	1.46	1.53
2	B	750	A	C8-N7	-5.91	1.27	1.31
2	B	2483	C	O3'-P	-5.91	1.54	1.61
1	A	28	C	O4'-C1'	-5.91	1.33	1.41
2	B	1009	A	P-O5'	-5.91	1.53	1.59
2	B	1603	A	C5-C4	-5.91	1.34	1.38
2	B	2086	U	C2-N3	5.91	1.41	1.37
2	B	2682	A	N9-C4	-5.91	1.34	1.37
2	B	747	U	C4'-C3'	5.91	1.59	1.53
2	B	1305	C	N1-C6	5.91	1.40	1.37
2	B	1331	G	N1-C2	5.91	1.42	1.37
2	B	1522	A	C2'-C1'	-5.91	1.46	1.53
2	B	1583	A	N9-C4	-5.91	1.34	1.37
2	B	1737	G	C8-N7	-5.91	1.27	1.30
2	B	2247	A	N9-C8	-5.91	1.33	1.37
2	B	2458	G	C8-N7	-5.91	1.27	1.30
2	B	1210	G	N7-C5	-5.90	1.35	1.39
2	B	1797	G	N7-C5	-5.90	1.35	1.39
2	B	1960	A	N9-C4	5.90	1.41	1.37
2	B	2004	G	C6-N1	-5.90	1.35	1.39
2	B	487	C	C4'-C3'	-5.90	1.46	1.52
2	B	780	G	O3'-P	-5.90	1.54	1.61
2	B	842	U	C4-C5	-5.90	1.38	1.43
2	B	1210	G	O3'-P	-5.90	1.54	1.61
2	B	1536	C	C4-N4	5.90	1.39	1.33
2	B	2453	A	C4'-O4'	-5.90	1.37	1.45
2	B	2775	G	C5'-C4'	5.90	1.58	1.51
2	B	2782	G	N3-C4	-5.90	1.31	1.35
19	X	306	LEU	C-N	5.90	1.43	1.33
2	B	6	A	C5-C6	-5.90	1.35	1.41
2	B	497	A	C6-N6	5.90	1.38	1.33
2	B	2420	C	C2-O2	-5.90	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2549	G	N1-C2	5.90	1.42	1.37
2	B	2600	A	C4'-C3'	-5.90	1.46	1.52
2	B	1074	G	N9-C8	5.90	1.42	1.37
2	B	1683	U	O4'-C1'	5.90	1.49	1.41
2	B	2115	G	C6-N1	5.90	1.43	1.39
2	B	2243	U	C2-O2	-5.90	1.17	1.22
2	B	2860	A	P-O5'	-5.90	1.53	1.59
2	B	51	G	C2-N2	5.90	1.40	1.34
2	B	163	C	N1-C6	5.90	1.40	1.37
2	B	471	A	C5-C6	-5.90	1.35	1.41
2	B	538	A	C8-N7	-5.90	1.27	1.31
2	B	852	U	C4-C5	5.90	1.48	1.43
2	B	914	G	N9-C8	5.90	1.42	1.37
2	B	1021	A	C6-N6	5.90	1.38	1.33
2	B	2791	G	N7-C5	5.90	1.42	1.39
2	B	2825	G	N1-C2	5.90	1.42	1.37
1	A	101	A	C2-N3	5.90	1.38	1.33
2	B	1300	G	C2-N3	5.90	1.37	1.32
2	B	2271	G	N1-C2	5.90	1.42	1.37
2	B	2514	U	C5-C6	5.90	1.39	1.34
2	B	2557	G	N1-C2	5.90	1.42	1.37
2	B	2869	G	N9-C8	-5.90	1.33	1.37
27	C	98	GLY	N-CA	-5.90	1.37	1.46
2	B	443	A	N9-C8	5.89	1.42	1.37
2	B	1067	A	O3'-P	-5.89	1.54	1.61
2	B	1721	G	O5'-C5'	-5.89	1.33	1.42
2	B	1787	A	P-O5'	-5.89	1.53	1.59
2	B	2033	A	C8-N7	-5.89	1.27	1.31
2	B	2187	U	N1-C6	5.89	1.43	1.38
2	B	2850	A	C5-C6	-5.89	1.35	1.41
2	B	160	A	C6-N1	5.89	1.39	1.35
2	B	518	G	N1-C2	5.89	1.42	1.37
2	B	584	C	O3'-P	-5.89	1.54	1.61
2	B	738	G	N9-C4	5.89	1.42	1.38
2	B	801	G	O3'-P	-5.89	1.54	1.61
2	B	2674	G	C2'-C1'	-5.89	1.46	1.53
2	B	2686	G	P-O5'	-5.89	1.53	1.59
27	C	268	ARG	NE-CZ	5.89	1.40	1.33
2	B	2010	G	C2'-C1'	-5.89	1.46	1.53
2	B	2816	G	N7-C5	-5.89	1.35	1.39
2	B	144	A	N9-C4	5.89	1.41	1.37
2	B	422	A	C5-C4	5.89	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	476	G	N9-C4	-5.89	1.33	1.38
2	B	608	A	C5-C4	5.89	1.42	1.38
2	B	676	A	C4'-O4'	5.89	1.53	1.45
2	B	1023	U	C2'-C1'	-5.89	1.46	1.53
2	B	1192	G	C6-O6	-5.89	1.18	1.24
2	B	1710	G	C2'-C1'	-5.89	1.46	1.53
2	B	2176	A	C3'-C2'	-5.89	1.46	1.52
2	B	2340	A	C6-N6	5.89	1.38	1.33
2	B	2602	A	C8-N7	-5.89	1.27	1.31
2	B	2621	G	P-O5'	-5.89	1.53	1.59
2	B	483	A	C2-N3	5.89	1.38	1.33
2	B	506	G	N1-C2	5.89	1.42	1.37
2	B	960	A	C1'-N9	5.89	1.57	1.48
2	B	1923	U	C4'-C3'	-5.89	1.46	1.52
29	G	107	GLY	N-CA	-5.89	1.37	1.46
1	A	75	G	C4'-C3'	-5.89	1.46	1.52
2	B	412	A	N9-C8	-5.89	1.33	1.37
2	B	423	A	C2'-C1'	-5.89	1.46	1.53
2	B	1630	A	N9-C8	-5.89	1.33	1.37
2	B	2271	G	C6-O6	-5.89	1.18	1.24
2	B	2432	A	C2'-C1'	-5.89	1.46	1.53
2	B	2642	G	C6-N1	5.89	1.43	1.39
2	B	570	G	C4'-C3'	-5.88	1.46	1.52
2	B	588	U	C2'-C1'	-5.88	1.46	1.53
2	B	742	A	C3'-C2'	-5.88	1.46	1.52
2	B	784	G	C8-N7	-5.88	1.27	1.30
2	B	918	A	O3'-P	-5.88	1.54	1.61
2	B	2797	U	C3'-O3'	5.88	1.50	1.42
2	B	461	C	C5'-C4'	5.88	1.58	1.51
2	B	1590	A	C1'-N9	-5.88	1.38	1.46
2	B	1851	U	N3-C4	5.88	1.43	1.38
2	B	2358	A	N3-C4	5.88	1.38	1.34
2	B	2886	A	N9-C4	5.88	1.41	1.37
2	B	465	G	C5-C4	5.88	1.42	1.38
2	B	506	G	C2-N2	5.88	1.40	1.34
2	B	716	A	C2'-C1'	5.88	1.59	1.53
2	B	1249	U	C2-O2	5.88	1.27	1.22
2	B	1288	G	N7-C5	5.88	1.42	1.39
2	B	1314	C	C4'-O4'	-5.88	1.38	1.45
2	B	1571	A	N9-C4	-5.88	1.34	1.37
2	B	1721	G	N1-C2	5.88	1.42	1.37
2	B	2274	A	C6-N6	5.88	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	285	G	C6-N1	5.88	1.43	1.39
2	B	772	C	O3'-P	-5.88	1.54	1.61
2	B	2450	A	C4'-C3'	-5.88	1.46	1.52
2	B	167	A	N9-C8	-5.88	1.33	1.37
2	B	409	G	N1-C2	5.88	1.42	1.37
2	B	890	C	N3-C4	5.88	1.38	1.33
2	B	1844	C	C5'-C4'	5.88	1.58	1.51
2	B	2379	G	C6-O6	-5.88	1.18	1.24
2	B	2744	G	O3'-P	-5.88	1.54	1.61
2	B	2902	C	C5-C6	5.88	1.39	1.34
2	B	684	G	C5-C4	-5.88	1.34	1.38
2	B	796	C	C4'-C3'	-5.88	1.46	1.52
2	B	861	A	C5-C6	-5.88	1.35	1.41
2	B	1089	A	C4'-O4'	-5.88	1.38	1.45
2	B	2170	A	C6-N6	5.88	1.38	1.33
2	B	2388	A	N7-C5	-5.88	1.35	1.39
21	Y	68	PHE	CE2-CZ	5.88	1.48	1.37
2	B	458	G	N7-C5	-5.88	1.35	1.39
2	B	1378	A	N9-C4	-5.88	1.34	1.37
2	B	2574	G	N9-C8	5.88	1.42	1.37
2	B	2871	U	C2-N3	-5.88	1.33	1.37
2	B	1078	U	C2-N3	5.87	1.41	1.37
2	B	1146	C	C3'-C2'	-5.87	1.46	1.52
2	B	1169	A	C8-N7	-5.87	1.27	1.31
2	B	1434	A	C4'-O4'	-5.87	1.38	1.45
2	B	1587	G	O3'-P	-5.87	1.54	1.61
2	B	2005	A	C5-C4	5.87	1.42	1.38
2	B	2231	U	O3'-P	-5.87	1.54	1.61
2	B	2256	G	C2-N3	5.87	1.37	1.32
2	B	30	G	O3'-P	-5.87	1.54	1.61
2	B	160	A	N3-C4	-5.87	1.31	1.34
2	B	1306	C	O3'-P	-5.87	1.54	1.61
2	B	1331	G	C5-C6	-5.87	1.36	1.42
2	B	1549	A	P-O5'	-5.87	1.53	1.59
2	B	2264	C	C2-O2	5.87	1.29	1.24
2	B	2450	A	C8-N7	-5.87	1.27	1.31
2	B	2737	G	C4'-C3'	-5.87	1.46	1.52
2	B	409	G	N3-C4	-5.87	1.31	1.35
2	B	2087	G	O3'-P	-5.87	1.54	1.61
2	B	2577	A	C6-N1	-5.87	1.31	1.35
1	A	54	G	N7-C5	-5.87	1.35	1.39
2	B	35	G	C2-N3	5.87	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	82	U	P-O5'	5.87	1.65	1.59
2	B	448	U	N3-C4	5.87	1.43	1.38
2	B	589	U	N1-C2	5.87	1.43	1.38
2	B	598	U	C2-N3	-5.87	1.33	1.37
2	B	644	A	N9-C4	-5.87	1.34	1.37
2	B	1159	U	O3'-P	-5.87	1.54	1.61
2	B	2608	G	N7-C5	-5.87	1.35	1.39
2	B	762	U	C5'-C4'	5.87	1.58	1.51
2	B	1953	A	C5-C4	-5.87	1.34	1.38
2	B	2013	A	C5-C4	-5.87	1.34	1.38
19	X	404	ARG	NE-CZ	5.87	1.40	1.33
2	B	187	G	C6-N1	5.87	1.43	1.39
2	B	289	G	C5'-C4'	5.87	1.58	1.51
2	B	625	G	C5-C4	5.87	1.42	1.38
2	B	1145	C	C4-N4	5.87	1.39	1.33
2	B	1201	U	N1-C6	-5.87	1.32	1.38
2	B	1252	G	O3'-P	-5.87	1.54	1.61
2	B	1254	A	C2'-C1'	-5.87	1.46	1.53
2	B	1358	G	C5-C4	-5.87	1.34	1.38
2	B	2106	U	C5-C6	-5.87	1.28	1.34
2	B	2110	G	C3'-C2'	5.87	1.59	1.52
2	B	2559	C	N3-C4	5.87	1.38	1.33
2	B	535	G	C6-O6	-5.86	1.18	1.24
2	B	574	A	P-O5'	-5.86	1.53	1.59
2	B	909	A	C6-N6	5.86	1.38	1.33
2	B	2011	U	C3'-C2'	-5.86	1.46	1.52
2	B	2661	G	C6-N1	5.86	1.43	1.39
19	X	336	GLU	CB-CG	5.86	1.63	1.52
2	B	38	A	C8-N7	-5.86	1.27	1.31
2	B	783	A	C6-N6	5.86	1.38	1.33
2	B	2685	G	N7-C5	-5.86	1.35	1.39
2	B	2765	A	O3'-P	-5.86	1.54	1.61
2	B	652	U	N1-C2	5.86	1.43	1.38
2	B	790	U	C2-N3	-5.86	1.33	1.37
2	B	917	A	C3'-C2'	-5.86	1.46	1.52
2	B	970	U	N3-C4	5.86	1.43	1.38
2	B	1379	U	C2-O2	5.86	1.27	1.22
2	B	1914	C	N1-C6	5.86	1.40	1.37
2	B	2462	C	C5'-C4'	5.86	1.58	1.51
2	B	2812	G	N9-C4	-5.86	1.33	1.38
2	B	453	A	C5-C4	5.86	1.42	1.38
2	B	501	A	O4'-C1'	-5.86	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	45	G	O3'-P	-5.86	1.54	1.61
2	B	402	A	P-O5'	5.86	1.65	1.59
2	B	424	G	N9-C8	-5.86	1.33	1.37
2	B	776	G	C2'-C1'	-5.86	1.47	1.53
2	B	1106	G	C6-N1	5.86	1.43	1.39
2	B	1627	G	C6-N1	5.86	1.43	1.39
2	B	2331	G	N7-C5	-5.86	1.35	1.39
1	A	96	G	C2-N3	5.86	1.37	1.32
2	B	48	G	C2-N2	5.86	1.40	1.34
2	B	393	C	C4-N4	5.86	1.39	1.33
2	B	471	A	N3-C4	-5.86	1.31	1.34
2	B	519	U	N1-C6	-5.86	1.32	1.38
2	B	718	A	N9-C4	5.86	1.41	1.37
2	B	759	G	O3'-P	-5.86	1.54	1.61
2	B	846	U	C2-O2	5.86	1.27	1.22
2	B	1057	A	N9-C8	-5.86	1.33	1.37
2	B	262	A	C6-N6	5.85	1.38	1.33
2	B	316	C	C4-N4	5.85	1.39	1.33
2	B	1241	A	C4'-O4'	-5.85	1.38	1.45
2	B	2230	G	C8-N7	-5.85	1.27	1.30
2	B	2884	U	N3-C4	-5.85	1.33	1.38
1	A	26	C	C4'-C3'	5.85	1.59	1.53
1	A	102	G	C5-C6	-5.85	1.36	1.42
2	B	433	C	N3-C4	5.85	1.38	1.33
2	B	510	C	C5-C6	-5.85	1.29	1.34
2	B	759	G	C8-N7	-5.85	1.27	1.30
2	B	1219	U	O3'-P	-5.85	1.54	1.61
2	B	2196	C	C4-C5	5.85	1.47	1.43
8	N	101	GLY	CA-C	-5.85	1.42	1.51
2	B	509	C	C4-N4	-5.85	1.28	1.33
2	B	524	G	C6-N1	-5.85	1.35	1.39
2	B	1023	U	C5'-C4'	5.85	1.58	1.51
2	B	1227	G	C5-C4	5.85	1.42	1.38
2	B	1909	C	C3'-O3'	5.85	1.50	1.42
2	B	9	G	C6-N1	-5.85	1.35	1.39
2	B	250	G	N1-C2	5.85	1.42	1.37
2	B	326	G	C8-N7	5.85	1.34	1.30
2	B	338	G	C6-N1	5.85	1.43	1.39
2	B	1081	U	C5'-C4'	5.85	1.58	1.51
2	B	1273	U	C3'-O3'	5.85	1.50	1.42
2	B	1314	C	N3-C4	5.85	1.38	1.33
2	B	1380	G	O3'-P	-5.85	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1463	C	C2'-C1'	-5.85	1.47	1.53
2	B	1478	G	C3'-C2'	-5.85	1.46	1.52
2	B	1660	G	N9-C4	-5.85	1.33	1.38
2	B	2022	U	N3-C4	5.85	1.43	1.38
2	B	1752	C	C4-N4	5.85	1.39	1.33
2	B	2050	C	O4'-C1'	-5.85	1.34	1.41
2	B	2058	A	C6-N1	5.85	1.39	1.35
2	B	2267	A	N9-C8	5.85	1.42	1.37
2	B	128	C	C4'-C3'	-5.85	1.46	1.52
2	B	2358	A	C5-C4	-5.85	1.34	1.38
2	B	2744	G	N1-C2	5.85	1.42	1.37
2	B	754	U	P-O5'	-5.84	1.53	1.59
2	B	856	G	C2-N3	-5.84	1.28	1.32
2	B	1202	G	C4'-C3'	5.84	1.59	1.53
2	B	1206	G	C2-N3	5.84	1.37	1.32
2	B	1223	G	N7-C5	-5.84	1.35	1.39
2	B	1461	C	C4-N4	5.84	1.39	1.33
2	B	1961	C	C4'-O4'	-5.84	1.38	1.45
2	B	2112	G	O3'-P	-5.84	1.54	1.61
2	B	2270	A	N7-C5	-5.84	1.35	1.39
2	B	2283	C	N3-C4	5.84	1.38	1.33
2	B	2531	A	N9-C4	5.84	1.41	1.37
2	B	1468	U	N1-C6	5.84	1.43	1.38
2	B	2511	U	O3'-P	-5.84	1.54	1.61
22	3	6	LYS	C-N	-5.84	1.23	1.34
1	A	55	U	O3'-P	-5.84	1.54	1.61
2	B	697	G	O3'-P	-5.84	1.54	1.61
2	B	918	A	N9-C8	-5.84	1.33	1.37
2	B	1009	A	N9-C8	-5.84	1.33	1.37
2	B	1057	A	P-O5'	5.84	1.65	1.59
2	B	1638	C	C4'-C3'	-5.84	1.46	1.52
2	B	2013	A	N3-C4	5.84	1.38	1.34
2	B	2360	G	C6-N1	-5.84	1.35	1.39
2	B	1051	G	O3'-P	-5.84	1.54	1.61
2	B	1223	G	C6-N1	-5.84	1.35	1.39
2	B	2000	C	C5'-C4'	-5.84	1.44	1.51
2	B	2540	C	N1-C6	-5.84	1.33	1.37
2	B	2764	A	C5-C4	5.84	1.42	1.38
2	B	918	A	N7-C5	-5.84	1.35	1.39
2	B	1635	A	N9-C8	-5.84	1.33	1.37
2	B	2827	C	O3'-P	-5.84	1.54	1.61
1	A	102	G	C6-N1	5.84	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	849	A	O3'-P	-5.84	1.54	1.61
2	B	1824	G	C5-C4	5.84	1.42	1.38
2	B	1903	G	C5'-C4'	5.84	1.58	1.51
2	B	2491	U	C2'-C1'	-5.84	1.47	1.53
2	B	2644	G	C2-N3	5.84	1.37	1.32
2	B	2421	G	P-O5'	5.83	1.65	1.59
2	B	80	G	O3'-P	-5.83	1.54	1.61
2	B	175	G	C2-N3	5.83	1.37	1.32
2	B	954	G	C6-O6	-5.83	1.19	1.24
2	B	966	G	N1-C2	5.83	1.42	1.37
2	B	1966	A	C5'-C4'	5.83	1.58	1.51
2	B	2199	A	P-O5'	5.83	1.65	1.59
2	B	2546	U	C3'-C2'	5.83	1.59	1.52
24	6	14	ARG	CZ-NH1	5.83	1.40	1.33
2	B	333	G	N7-C5	-5.83	1.35	1.39
2	B	605	G	C2'-O2'	-5.83	1.34	1.41
2	B	1667	G	O3'-P	-5.83	1.54	1.61
2	B	2021	C	C2-N3	-5.83	1.31	1.35
2	B	2763	G	C2-N3	5.83	1.37	1.32
2	B	2770	G	N3-C4	5.83	1.39	1.35
2	B	1109	C	N1-C6	-5.83	1.33	1.37
2	B	1263	U	C5'-C4'	-5.83	1.44	1.51
2	B	2	G	C5-C6	5.83	1.48	1.42
2	B	64	A	C8-N7	-5.83	1.27	1.31
2	B	435	C	C5'-C4'	5.83	1.58	1.51
2	B	737	C	O4'-C1'	5.83	1.49	1.41
2	B	1581	G	O3'-P	-5.83	1.54	1.61
2	B	1820	U	C5-C6	5.83	1.39	1.34
2	B	2797	U	C5'-C4'	5.83	1.58	1.51
2	B	1905	C	C2-N3	5.83	1.40	1.35
2	B	2002	G	C2-N3	5.83	1.37	1.32
2	B	535	G	C2'-C1'	-5.83	1.47	1.53
2	B	847	U	O4'-C1'	-5.83	1.34	1.41
2	B	901	C	N1-C2	5.83	1.46	1.40
2	B	1651	G	C2'-C1'	-5.83	1.47	1.53
2	B	432	A	N3-C4	-5.82	1.31	1.34
2	B	1266	G	P-O5'	-5.82	1.53	1.59
2	B	1326	U	C2-N3	-5.82	1.33	1.37
2	B	1435	G	N7-C5	-5.82	1.35	1.39
2	B	2643	G	C5-C6	-5.82	1.36	1.42
27	C	99	GLU	CB-CG	5.82	1.63	1.52
2	B	87	U	C4-C5	5.82	1.48	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1778	U	N1-C6	-5.82	1.32	1.38
2	B	2225	A	C1'-N9	-5.82	1.38	1.46
2	B	454	A	C6-N6	5.82	1.38	1.33
2	B	470	A	N9-C4	5.82	1.41	1.37
2	B	661	A	C2'-C1'	-5.82	1.47	1.53
2	B	1707	G	C8-N7	-5.82	1.27	1.30
2	B	1887	C	C4'-C3'	5.82	1.59	1.53
2	B	2168	G	N1-C2	5.82	1.42	1.37
2	B	2194	U	P-O5'	-5.82	1.53	1.59
2	B	2337	G	N7-C5	-5.82	1.35	1.39
2	B	2555	U	C5-C6	-5.82	1.28	1.34
2	B	2878	U	C2-N3	-5.82	1.33	1.37
29	G	2	ARG	CD-NE	5.82	1.56	1.46
2	B	142	A	C5'-C4'	5.82	1.58	1.51
2	B	920	A	N3-C4	-5.82	1.31	1.34
2	B	1062	G	N9-C4	5.82	1.42	1.38
2	B	1319	C	N1-C6	5.82	1.40	1.37
2	B	1392	A	C5-C4	-5.82	1.34	1.38
2	B	2733	A	C2-N3	5.82	1.38	1.33
2	B	2879	A	C6-N6	-5.82	1.29	1.33
2	B	2890	G	N1-C2	5.82	1.42	1.37
2	B	327	G	N7-C5	-5.82	1.35	1.39
2	B	365	U	P-O5'	-5.82	1.53	1.59
2	B	579	G	C5'-C4'	5.82	1.58	1.51
2	B	738	G	C6-N1	5.82	1.43	1.39
2	B	910	A	C6-N1	-5.82	1.31	1.35
2	B	1135	C	C4'-C3'	-5.82	1.46	1.52
2	B	1515	A	P-O5'	-5.82	1.53	1.59
2	B	1639	C	O3'-P	-5.82	1.54	1.61
2	B	2741	A	C5-C6	-5.82	1.35	1.41
2	B	2775	G	C4'-C3'	-5.82	1.46	1.52
2	B	196	A	C1'-N9	-5.81	1.38	1.46
2	B	666	A	C3'-C2'	-5.81	1.46	1.52
2	B	1311	G	C5-C6	-5.81	1.36	1.42
2	B	1481	U	C4-C5	5.81	1.48	1.43
2	B	1642	G	N9-C4	-5.81	1.33	1.38
2	B	1746	A	N9-C4	5.81	1.41	1.37
2	B	2429	G	O3'-P	-5.81	1.54	1.61
10	P	52	ARG	CD-NE	5.81	1.56	1.46
1	A	10	G	N9-C4	-5.81	1.33	1.38
2	B	386	G	C1'-N9	-5.81	1.38	1.46
2	B	824	U	O4'-C1'	5.81	1.49	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	989	G	C8-N7	-5.81	1.27	1.30
2	B	1022	G	N9-C4	-5.81	1.33	1.38
2	B	1303	G	C5-C6	-5.81	1.36	1.42
2	B	1799	G	C5-C6	-5.81	1.36	1.42
2	B	2259	U	C2'-C1'	-5.81	1.47	1.53
2	B	2367	G	O3'-P	-5.81	1.54	1.61
2	B	115	C	C2'-C1'	-5.81	1.47	1.53
2	B	469	G	C2-N3	-5.81	1.28	1.32
2	B	640	C	N1-C2	-5.81	1.34	1.40
2	B	274	C	O3'-P	5.81	1.68	1.61
2	B	875	G	N9-C8	-5.81	1.33	1.37
2	B	1490	A	N7-C5	-5.81	1.35	1.39
2	B	1514	G	N1-C2	5.81	1.42	1.37
2	B	1713	A	N1-C2	5.81	1.39	1.34
2	B	2022	U	N1-C6	5.81	1.43	1.38
2	B	2535	G	C6-N1	5.81	1.43	1.39
2	B	2750	A	C4'-O4'	-5.81	1.38	1.45
2	B	545	U	C1'-N1	5.81	1.57	1.48
2	B	1039	A	N9-C4	-5.81	1.34	1.37
2	B	1910	G	C3'-C2'	5.81	1.59	1.52
2	B	2022	U	P-O5'	-5.81	1.53	1.59
2	B	2222	C	N3-C4	5.81	1.38	1.33
2	B	2363	G	N7-C5	-5.81	1.35	1.39
2	B	2698	U	C4'-C3'	-5.81	1.46	1.52
2	B	2782	G	N1-C2	5.81	1.42	1.37
2	B	708	G	N1-C2	5.81	1.42	1.37
2	B	764	A	C1'-N9	-5.81	1.38	1.46
2	B	1291	C	C2-N3	-5.81	1.31	1.35
2	B	1537	G	C2-N3	5.81	1.37	1.32
2	B	1887	C	C1'-N1	5.81	1.57	1.48
2	B	1903	G	C5-C6	-5.81	1.36	1.42
2	B	2721	A	O4'-C1'	5.81	1.49	1.41
2	B	2899	A	O4'-C1'	-5.81	1.34	1.41
19	X	26	ARG	CZ-NH2	5.81	1.40	1.33
2	B	566	U	C2'-O2'	-5.80	1.34	1.41
2	B	2825	G	C8-N7	-5.80	1.27	1.30
2	B	326	G	C5-C6	-5.80	1.36	1.42
2	B	2497	A	O4'-C1'	-5.80	1.34	1.41
1	A	40	U	O4'-C1'	-5.80	1.34	1.41
2	B	93	G	C2-N2	5.80	1.40	1.34
2	B	642	U	C2'-C1'	-5.80	1.47	1.53
2	B	1107	G	C5-C4	5.80	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1246	A	C3'-O3'	-5.80	1.34	1.42
2	B	1612	C	C4'-O4'	-5.80	1.38	1.45
2	B	2224	G	N9-C8	5.80	1.42	1.37
1	A	16	G	P-O5'	-5.80	1.53	1.59
2	B	707	G	N9-C4	5.80	1.42	1.38
2	B	784	G	N9-C8	5.80	1.42	1.37
2	B	883	G	N1-C2	5.80	1.42	1.37
2	B	1048	A	N1-C2	5.80	1.39	1.34
2	B	2035	G	N9-C4	-5.80	1.33	1.38
2	B	2310	C	C5'-C4'	5.80	1.58	1.51
2	B	2589	A	C5'-C4'	5.80	1.58	1.51
2	B	2843	G	C1'-N9	-5.80	1.38	1.46
2	B	2885	G	C2-N2	5.80	1.40	1.34
2	B	263	G	C2'-C1'	-5.80	1.47	1.53
2	B	665	U	C5-C6	-5.80	1.28	1.34
2	B	1610	A	O4'-C1'	-5.80	1.34	1.41
2	B	2079	U	C4'-O4'	-5.80	1.38	1.45
2	B	2842	G	C3'-O3'	5.80	1.50	1.42
1	A	67	G	C5-C4	5.80	1.42	1.38
2	B	524	G	C2'-C1'	-5.80	1.47	1.53
2	B	1338	G	N1-C2	5.80	1.42	1.37
2	B	1715	G	N3-C4	5.80	1.39	1.35
2	B	2386	A	C4'-O4'	-5.80	1.38	1.45
2	B	2697	G	O4'-C1'	-5.80	1.34	1.41
2	B	2701	U	C4'-C3'	5.80	1.59	1.53
2	B	2808	G	O3'-P	-5.80	1.54	1.61
1	A	51	G	P-O5'	-5.79	1.53	1.59
2	B	673	C	O4'-C1'	-5.79	1.34	1.41
2	B	1304	A	C2'-C1'	-5.79	1.47	1.53
2	B	1307	A	N7-C5	-5.79	1.35	1.39
2	B	1382	G	N1-C2	5.79	1.42	1.37
2	B	2141	G	C3'-C2'	5.79	1.59	1.52
2	B	2144	G	P-O5'	5.79	1.65	1.59
2	B	2517	C	C2'-C1'	-5.79	1.47	1.53
2	B	35	G	C3'-O3'	5.79	1.50	1.42
2	B	613	A	P-O5'	5.79	1.65	1.59
2	B	714	U	P-O5'	-5.79	1.53	1.59
2	B	905	A	N9-C8	5.79	1.42	1.37
2	B	1054	A	C4'-C3'	5.79	1.59	1.53
2	B	1110	G	C4'-O4'	-5.79	1.38	1.45
2	B	1345	C	C5'-C4'	-5.79	1.44	1.51
2	B	1393	A	C5-C6	5.79	1.46	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	65	U	P-O5'	-5.79	1.53	1.59
2	B	874	G	C6-N1	-5.79	1.35	1.39
2	B	1384	A	N9-C4	-5.79	1.34	1.37
2	B	2228	G	C1'-N9	-5.79	1.38	1.46
2	B	2353	G	N7-C5	-5.79	1.35	1.39
2	B	2429	G	C5'-C4'	5.79	1.58	1.51
2	B	2458	G	C5-C6	-5.79	1.36	1.42
2	B	2633	G	C5-C4	-5.79	1.34	1.38
2	B	2888	C	O3'-P	-5.79	1.54	1.61
2	B	271	G	N1-C2	5.79	1.42	1.37
2	B	1616	A	N7-C5	-5.79	1.35	1.39
2	B	1625	C	C4'-C3'	-5.79	1.46	1.52
2	B	2293	G	N1-C2	5.79	1.42	1.37
29	G	169	ARG	CD-NE	5.79	1.56	1.46
2	B	16	C	C4-N4	5.79	1.39	1.33
2	B	863	A	C3'-O3'	5.79	1.50	1.42
2	B	1010	A	C6-N6	5.79	1.38	1.33
2	B	1361	G	C5-C4	-5.79	1.34	1.38
2	B	1626	A	N9-C8	5.79	1.42	1.37
2	B	1631	G	C5-C6	-5.79	1.36	1.42
2	B	250	G	C2-N2	5.79	1.40	1.34
2	B	701	G	C5-C4	-5.79	1.34	1.38
2	B	2341	G	O4'-C1'	5.79	1.49	1.41
2	B	2539	C	C4-C5	5.79	1.47	1.43
13	S	110	ARG	NE-CZ	5.79	1.40	1.33
2	B	432	A	P-O5'	-5.78	1.53	1.59
2	B	437	U	C5'-C4'	5.78	1.58	1.51
2	B	862	G	C4'-O4'	5.78	1.53	1.45
2	B	1246	A	N9-C4	5.78	1.41	1.37
2	B	1558	C	C2'-C1'	-5.78	1.47	1.53
1	A	67	G	N3-C4	-5.78	1.31	1.35
2	B	102	U	C2-N3	5.78	1.41	1.37
2	B	841	G	N9-C8	-5.78	1.33	1.37
2	B	1040	A	C6-N6	5.78	1.38	1.33
2	B	1498	C	C3'-O3'	5.78	1.50	1.42
2	B	2135	A	C5-C6	5.78	1.46	1.41
2	B	2407	A	C8-N7	-5.78	1.27	1.31
7	M	55	ARG	CZ-NH1	5.78	1.40	1.33
2	B	991	C	C2-N3	-5.78	1.31	1.35
2	B	1216	G	C2'-C1'	-5.78	1.47	1.53
2	B	1363	C	N3-C4	5.78	1.38	1.33
2	B	1401	G	N9-C8	5.78	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1783	A	P-O5'	-5.78	1.53	1.59
2	B	2012	G	C1'-N9	-5.78	1.38	1.46
2	B	2134	A	C5-C6	-5.78	1.35	1.41
2	B	605	G	N1-C2	5.78	1.42	1.37
2	B	765	C	C3'-C2'	-5.78	1.46	1.52
2	B	1320	C	N3-C4	5.78	1.38	1.33
2	B	1726	C	P-O5'	-5.78	1.53	1.59
2	B	58	G	C5-C4	-5.78	1.34	1.38
2	B	194	G	O4'-C1'	5.78	1.49	1.41
2	B	844	A	P-O5'	-5.78	1.53	1.59
2	B	897	C	C3'-C2'	5.78	1.59	1.52
2	B	1479	G	P-O5'	-5.78	1.53	1.59
2	B	1627	G	C6-O6	5.78	1.29	1.24
2	B	2246	G	C4'-C3'	-5.78	1.46	1.52
2	B	2594	C	C4-C5	5.78	1.47	1.43
2	B	136	G	O4'-C1'	-5.78	1.34	1.41
2	B	215	G	C2'-C1'	-5.78	1.47	1.53
2	B	591	U	N1-C2	-5.78	1.33	1.38
2	B	626	A	C3'-C2'	5.78	1.59	1.52
2	B	684	G	C5'-C4'	5.78	1.58	1.51
2	B	1023	U	C3'-C2'	-5.78	1.46	1.52
2	B	1146	C	C5-C6	5.78	1.39	1.34
2	B	1282	U	O4'-C1'	-5.78	1.34	1.41
2	B	1835	G	C5-C4	5.78	1.42	1.38
2	B	2111	U	N3-C4	5.78	1.43	1.38
2	B	2571	U	C3'-C2'	-5.78	1.46	1.52
1	A	75	G	C2'-C1'	-5.77	1.47	1.53
2	B	145	C	N3-C4	5.77	1.38	1.33
2	B	308	G	C5-C6	-5.77	1.36	1.42
2	B	340	A	C8-N7	5.77	1.35	1.31
2	B	746	U	C3'-C2'	5.77	1.59	1.52
2	B	76	C	C4-N4	5.77	1.39	1.33
2	B	338	G	N7-C5	-5.77	1.35	1.39
2	B	479	A	C5-C4	-5.77	1.34	1.38
2	B	1402	U	C2-N3	5.77	1.41	1.37
2	B	1525	A	N9-C8	-5.77	1.33	1.37
2	B	2305	U	C4-O4	-5.77	1.19	1.23
2	B	582	A	C6-N6	5.77	1.38	1.33
2	B	684	G	N3-C4	-5.77	1.31	1.35
2	B	736	C	P-O5'	-5.77	1.53	1.59
2	B	784	G	C2-N3	5.77	1.37	1.32
2	B	2028	U	C2-N3	5.77	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2694	G	C3'-C2'	-5.77	1.46	1.52
2	B	584	C	P-O5'	-5.77	1.53	1.59
2	B	846	U	C4-C5	-5.77	1.38	1.43
2	B	904	G	C5-C4	-5.77	1.34	1.38
2	B	1078	U	C4-O4	5.77	1.28	1.23
2	B	1189	A	C4'-C3'	-5.77	1.46	1.52
2	B	1198	U	O3'-P	-5.77	1.54	1.61
2	B	1210	G	C8-N7	5.77	1.34	1.30
2	B	1604	C	N1-C6	5.77	1.40	1.37
2	B	2007	U	C4-O4	-5.77	1.19	1.23
2	B	2290	G	C6-O6	-5.77	1.19	1.24
2	B	2644	G	N1-C2	5.77	1.42	1.37
2	B	2857	G	C5-C4	-5.77	1.34	1.38
30	H	50	ARG	NE-CZ	5.77	1.40	1.33
1	A	11	C	C3'-O3'	5.77	1.50	1.42
1	A	64	G	N9-C4	-5.77	1.33	1.38
1	A	79	G	C2-N2	5.77	1.40	1.34
2	B	1561	C	C4'-O4'	-5.77	1.38	1.45
2	B	1672	A	O3'-P	-5.77	1.54	1.61
2	B	2005	A	C5-C6	-5.77	1.35	1.41
2	B	2024	G	C5-C4	-5.77	1.34	1.38
2	B	2095	A	O3'-P	-5.77	1.54	1.61
2	B	2532	G	C2-N3	5.77	1.37	1.32
2	B	2652	C	C4'-C3'	5.77	1.59	1.53
2	B	2656	U	N3-C4	-5.77	1.33	1.38
2	B	2727	A	P-O5'	-5.77	1.53	1.59
2	B	36	G	C6-O6	-5.77	1.19	1.24
2	B	1153	C	C4-N4	5.77	1.39	1.33
2	B	1606	C	C2'-C1'	-5.77	1.47	1.53
2	B	2087	G	C5'-C4'	5.77	1.58	1.51
2	B	2659	G	N7-C5	-5.77	1.35	1.39
10	P	30	TRP	NE1-CE2	-5.77	1.30	1.37
2	B	203	A	C6-N1	5.76	1.39	1.35
2	B	627	A	C6-N1	-5.76	1.31	1.35
2	B	1091	G	C5-C6	-5.76	1.36	1.42
2	B	1259	G	O3'-P	-5.76	1.54	1.61
2	B	1508	A	C6-N6	5.76	1.38	1.33
2	B	1631	G	C2-N2	5.76	1.40	1.34
2	B	1635	A	C2'-C1'	-5.76	1.47	1.53
2	B	1678	A	C2'-C1'	-5.76	1.47	1.53
2	B	2342	C	N3-C4	5.76	1.38	1.33
2	B	2584	U	P-O5'	-5.76	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2716	C	C2-N3	-5.76	1.31	1.35
2	B	1410	G	C8-N7	-5.76	1.27	1.30
2	B	1717	A	N3-C4	-5.76	1.31	1.34
1	A	45	A	O3'-P	-5.76	1.54	1.61
2	B	352	A	O5'-C5'	-5.76	1.33	1.42
2	B	495	G	O4'-C1'	5.76	1.49	1.41
2	B	1156	A	C4'-O4'	-5.76	1.38	1.45
2	B	1320	C	C3'-C2'	-5.76	1.46	1.52
2	B	1963	U	P-O5'	-5.76	1.53	1.59
7	M	38	ARG	CD-NE	5.76	1.56	1.46
1	A	82	U	P-O5'	-5.76	1.53	1.59
2	B	181	A	C5'-C4'	5.76	1.58	1.51
2	B	742	A	C2'-C1'	-5.76	1.47	1.53
2	B	1108	U	C4'-C3'	5.76	1.59	1.53
2	B	1414	C	N1-C2	-5.76	1.34	1.40
2	B	2133	G	P-O5'	-5.76	1.53	1.59
2	B	2366	A	C5-C4	5.76	1.42	1.38
2	B	378	C	C3'-C2'	-5.76	1.46	1.52
2	B	574	A	C5'-C4'	5.76	1.58	1.51
2	B	692	C	C1'-N1	5.76	1.57	1.48
2	B	1303	G	C8-N7	-5.76	1.27	1.30
2	B	2828	G	N7-C5	5.76	1.42	1.39
2	B	2880	C	C4-C5	5.76	1.47	1.43
2	B	18	U	N3-C4	-5.76	1.33	1.38
2	B	28	A	C5-C4	-5.76	1.34	1.38
2	B	66	C	C1'-N1	5.76	1.57	1.48
2	B	563	A	N7-C5	-5.76	1.35	1.39
2	B	849	A	C2'-O2'	-5.76	1.34	1.41
2	B	1059	G	N9-C4	-5.76	1.33	1.38
2	B	1062	G	C5'-C4'	5.76	1.58	1.51
2	B	1266	G	O4'-C1'	-5.76	1.34	1.41
2	B	2357	G	C5'-C4'	-5.76	1.44	1.51
2	B	2686	G	C1'-N9	-5.76	1.38	1.46
2	B	2769	U	C2-N3	-5.76	1.33	1.37
2	B	522	A	C5'-C4'	5.75	1.58	1.51
2	B	732	C	C5'-C4'	5.75	1.58	1.51
2	B	2253	G	O3'-P	-5.75	1.54	1.61
9	O	45	SER	CA-C	-5.75	1.38	1.52
2	B	559	G	O4'-C1'	-5.75	1.34	1.41
2	B	1012	U	C2'-C1'	-5.75	1.47	1.53
2	B	1607	C	O5'-C5'	5.75	1.53	1.44
2	B	1783	A	C6-N6	5.75	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2490	G	N7-C5	-5.75	1.35	1.39
2	B	2639	A	N3-C4	-5.75	1.31	1.34
1	A	68	C	P-O5'	-5.75	1.53	1.59
2	B	861	A	O3'-P	-5.75	1.54	1.61
2	B	1095	A	C2'-C1'	-5.75	1.47	1.53
2	B	1185	G	C2-N3	5.75	1.37	1.32
2	B	1349	C	C2-N3	5.75	1.40	1.35
2	B	1555	G	N9-C4	5.75	1.42	1.38
2	B	1809	A	C8-N7	-5.75	1.27	1.31
2	B	2738	A	C1'-N9	-5.75	1.38	1.46
29	G	99	GLY	N-CA	-5.75	1.37	1.46
1	A	59	A	N7-C5	-5.75	1.35	1.39
2	B	787	C	C1'-N1	-5.75	1.38	1.46
2	B	793	A	C5-C4	5.75	1.42	1.38
2	B	840	C	C4-N4	5.75	1.39	1.33
2	B	1086	A	C5'-C4'	5.75	1.58	1.51
20	E	82	GLY	CA-C	-5.75	1.42	1.51
2	B	94	A	C6-N1	5.75	1.39	1.35
2	B	587	C	O3'-P	-5.75	1.54	1.61
2	B	1558	C	C3'-C2'	-5.75	1.46	1.52
2	B	1938	A	C6-N1	5.75	1.39	1.35
2	B	2115	G	C2-N3	5.75	1.37	1.32
2	B	2208	C	C3'-C2'	-5.75	1.46	1.52
2	B	2286	G	C2-N2	5.75	1.40	1.34
2	B	321	U	C4-C5	5.75	1.48	1.43
2	B	764	A	C4'-C3'	-5.75	1.46	1.52
2	B	1249	U	C4'-C3'	-5.75	1.46	1.52
2	B	1295	C	C4'-C3'	5.75	1.59	1.53
2	B	2377	A	N9-C8	-5.75	1.33	1.37
2	B	68	G	N3-C4	-5.75	1.31	1.35
2	B	176	A	C2'-C1'	-5.75	1.47	1.53
2	B	688	U	C4-C5	5.75	1.48	1.43
2	B	1691	C	P-O5'	-5.75	1.54	1.59
2	B	2671	G	N1-C2	5.75	1.42	1.37
2	B	2850	A	C1'-N9	-5.75	1.38	1.46
2	B	492	A	C5'-C4'	5.74	1.58	1.51
2	B	878	A	C6-N1	5.74	1.39	1.35
2	B	1564	C	N3-C4	5.74	1.38	1.33
2	B	2417	C	O3'-P	-5.74	1.54	1.61
2	B	2541	A	C4'-O4'	-5.74	1.38	1.45
2	B	210	C	P-O5'	-5.74	1.54	1.59
2	B	749	A	C5-C6	-5.74	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1771	C	C5'-C4'	5.74	1.58	1.51
2	B	289	G	P-O5'	-5.74	1.54	1.59
2	B	878	A	P-O5'	-5.74	1.54	1.59
2	B	942	G	C4'-O4'	-5.74	1.38	1.45
2	B	1050	A	O3'-P	-5.74	1.54	1.61
2	B	1157	G	C8-N7	-5.74	1.27	1.30
2	B	1824	G	N7-C5	-5.74	1.35	1.39
2	B	2296	U	N1-C6	5.74	1.43	1.38
9	O	9	ARG	CD-NE	5.74	1.56	1.46
26	8	4	ARG	CZ-NH2	5.74	1.40	1.33
30	H	25	TYR	CZ-OH	5.74	1.47	1.37
1	A	24	G	N9-C8	-5.74	1.33	1.37
1	A	34	A	C6-N1	5.74	1.39	1.35
1	A	95	U	C2-N3	5.74	1.41	1.37
2	B	183	C	P-O5'	-5.74	1.54	1.59
2	B	673	C	C2'-O2'	-5.74	1.34	1.41
2	B	944	C	C2'-O2'	-5.74	1.34	1.41
2	B	1918	A	C6-N6	5.74	1.38	1.33
2	B	2393	U	C3'-C2'	-5.74	1.46	1.52
2	B	41	C	N1-C6	-5.74	1.33	1.37
2	B	210	C	C2'-C1'	-5.74	1.47	1.53
2	B	1279	G	C5-C4	5.74	1.42	1.38
2	B	1655	A	O3'-P	-5.74	1.54	1.61
1	A	58	A	C2-N3	-5.74	1.28	1.33
2	B	348	A	C8-N7	5.74	1.35	1.31
2	B	505	A	N7-C5	-5.74	1.35	1.39
2	B	883	G	C3'-C2'	5.74	1.59	1.52
2	B	992	C	N3-C4	5.74	1.38	1.33
2	B	1129	A	P-O5'	-5.74	1.54	1.59
2	B	1131	G	C4'-C3'	5.74	1.59	1.53
2	B	1817	G	O3'-P	-5.74	1.54	1.61
2	B	2037	A	N1-C2	5.74	1.39	1.34
2	B	2251	G	P-O5'	5.74	1.65	1.59
29	G	65	GLY	CA-C	-5.74	1.42	1.51
2	B	1033	U	C3'-C2'	5.73	1.59	1.52
2	B	1270	C	O4'-C1'	-5.73	1.34	1.41
2	B	1424	G	C5-C6	-5.73	1.36	1.42
2	B	2464	G	C2-N3	5.73	1.37	1.32
2	B	2563	U	N1-C2	5.73	1.43	1.38
14	D	128	ARG	CZ-NH1	5.73	1.40	1.33
1	A	83	G	O4'-C1'	5.73	1.49	1.41
2	B	681	G	P-O5'	-5.73	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	707	G	C5-C6	-5.73	1.36	1.42
2	B	1034	G	C6-N1	5.73	1.43	1.39
2	B	1124	G	N3-C4	-5.73	1.31	1.35
2	B	1887	C	N1-C2	5.73	1.45	1.40
2	B	1888	G	C6-O6	5.73	1.29	1.24
2	B	2757	A	P-O5'	-5.73	1.54	1.59
2	B	232	G	C6-N1	-5.73	1.35	1.39
2	B	315	G	O3'-P	-5.73	1.54	1.61
2	B	483	A	N9-C4	-5.73	1.34	1.37
2	B	589	U	O4'-C1'	-5.73	1.34	1.41
2	B	638	G	C2-N3	5.73	1.37	1.32
2	B	644	A	C6-N1	5.73	1.39	1.35
2	B	1146	C	C2'-C1'	-5.73	1.47	1.53
2	B	1385	A	C2'-O2'	-5.73	1.34	1.41
2	B	2391	G	N9-C8	-5.73	1.33	1.37
2	B	2398	U	C5-C6	-5.73	1.28	1.34
2	B	2603	G	C5'-C4'	5.73	1.58	1.51
10	P	79	VAL	N-CA	-5.73	1.34	1.46
2	B	214	G	C6-O6	-5.73	1.19	1.24
2	B	1370	C	C5-C6	-5.73	1.29	1.34
2	B	2068	U	N1-C6	5.73	1.43	1.38
2	B	678	C	C2-O2	-5.73	1.19	1.24
2	B	1155	A	N1-C2	-5.73	1.29	1.34
2	B	1315	C	C5-C6	5.73	1.39	1.34
2	B	1384	A	N3-C4	5.73	1.38	1.34
2	B	1758	U	C2-N3	5.73	1.41	1.37
2	B	1999	C	O4'-C1'	-5.73	1.34	1.41
1	A	20	G	C2'-C1'	-5.73	1.47	1.53
2	B	1565	C	O3'-P	-5.72	1.54	1.61
2	B	1744	A	C3'-C2'	-5.72	1.46	1.52
5	L	53	GLY	N-CA	-5.72	1.37	1.46
1	A	16	G	O4'-C1'	5.72	1.49	1.41
2	B	394	C	C5'-C4'	5.72	1.58	1.51
2	B	1711	A	C6-N6	5.72	1.38	1.33
2	B	1768	C	C2-N3	5.72	1.40	1.35
2	B	2241	A	P-O5'	5.72	1.65	1.59
2	B	2888	C	C2'-C1'	-5.72	1.47	1.53
2	B	957	C	P-O5'	-5.72	1.54	1.59
1	A	84	G	C2'-O2'	-5.72	1.34	1.41
2	B	7	G	C2'-C1'	-5.72	1.47	1.53
2	B	48	G	N3-C4	-5.72	1.31	1.35
2	B	361	G	O3'-P	-5.72	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	607	U	C2-N3	5.72	1.41	1.37
2	B	677	A	N9-C4	-5.72	1.34	1.37
2	B	740	C	C2-O2	5.72	1.29	1.24
2	B	1221	C	C2-O2	-5.72	1.19	1.24
2	B	1796	U	C4-O4	5.72	1.28	1.23
2	B	2334	U	O3'-P	-5.72	1.54	1.61
2	B	2046	G	C6-N1	-5.72	1.35	1.39
2	B	2393	U	C2-O2	5.72	1.27	1.22
2	B	2530	A	O3'-P	-5.72	1.54	1.61
1	A	116	G	P-O5'	-5.72	1.54	1.59
2	B	303	G	C1'-N9	-5.72	1.38	1.46
2	B	389	G	P-O5'	-5.72	1.54	1.59
2	B	662	G	N7-C5	-5.72	1.35	1.39
2	B	704	G	C2-N3	5.72	1.37	1.32
2	B	754	U	O3'-P	-5.72	1.54	1.61
2	B	950	G	P-O5'	-5.72	1.54	1.59
2	B	1186	G	C8-N7	-5.72	1.27	1.30
2	B	1820	U	C4-C5	5.72	1.48	1.43
2	B	2021	C	P-O5'	5.72	1.65	1.59
2	B	2494	G	C4'-C3'	-5.72	1.46	1.52
2	B	2876	G	C5-C4	-5.72	1.34	1.38
16	2	15	ARG	CD-NE	5.72	1.56	1.46
18	W	79	ARG	NE-CZ	5.72	1.40	1.33
32	J	92	MET	CA-CB	5.72	1.66	1.53
2	B	828	U	O4'-C1'	-5.71	1.34	1.41
2	B	1212	G	N9-C8	-5.71	1.33	1.37
2	B	1335	C	O3'-P	-5.71	1.54	1.61
2	B	1819	A	C6-N6	5.71	1.38	1.33
2	B	2848	G	C8-N7	-5.71	1.27	1.30
1	A	101	A	C6-N1	5.71	1.39	1.35
2	B	971	G	C1'-N9	-5.71	1.38	1.46
2	B	1546	G	C2-N2	5.71	1.40	1.34
2	B	2043	C	O3'-P	-5.71	1.54	1.61
2	B	2692	G	C3'-O3'	5.71	1.50	1.42
2	B	2796	U	C4-C5	5.71	1.48	1.43
2	B	776	G	N9-C8	-5.71	1.33	1.37
2	B	1271	G	C4'-C3'	-5.71	1.46	1.52
2	B	1606	C	N3-C4	5.71	1.38	1.33
2	B	2501	C	N1-C6	5.71	1.40	1.37
2	B	2676	C	P-O5'	-5.71	1.54	1.59
14	D	135	GLY	CA-C	-5.71	1.42	1.51
1	A	10	G	C8-N7	-5.71	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	661	A	C6-N1	5.71	1.39	1.35
2	B	819	A	C8-N7	-5.71	1.27	1.31
2	B	2517	C	P-O5'	-5.71	1.54	1.59
9	O	7	ARG	NE-CZ	5.71	1.40	1.33
2	B	442	G	C8-N7	-5.71	1.27	1.30
2	B	497	A	C1'-N9	-5.71	1.38	1.46
2	B	548	G	C6-N1	-5.71	1.35	1.39
2	B	597	G	C2'-C1'	-5.71	1.47	1.53
2	B	1031	G	C8-N7	5.71	1.34	1.30
2	B	1224	U	C1'-N1	5.71	1.57	1.48
2	B	1843	C	C4-N4	5.71	1.39	1.33
2	B	2345	G	N7-C5	-5.71	1.35	1.39
2	B	2471	A	N7-C5	-5.71	1.35	1.39
2	B	2572	A	C2'-C1'	-5.71	1.47	1.53
2	B	2742	G	C8-N7	-5.71	1.27	1.30
28	F	76	PHE	CG-CD2	5.71	1.47	1.38
2	B	27	G	C2-N2	-5.71	1.28	1.34
2	B	728	G	C2-N3	5.71	1.37	1.32
2	B	1815	A	P-O5'	-5.71	1.54	1.59
2	B	2891	U	O3'-P	-5.71	1.54	1.61
2	B	2894	G	C4'-C3'	-5.71	1.46	1.52
2	B	1767	G	N1-C2	5.71	1.42	1.37
2	B	2198	A	N9-C8	-5.71	1.33	1.37
2	B	2845	U	O4'-C1'	-5.71	1.34	1.41
2	B	501	A	P-O5'	-5.70	1.54	1.59
2	B	565	C	N1-C6	-5.70	1.33	1.37
2	B	1089	A	N1-C2	5.70	1.39	1.34
2	B	1163	G	N7-C5	-5.70	1.35	1.39
2	B	2115	G	O4'-C1'	5.70	1.49	1.41
2	B	2233	U	C2'-C1'	-5.70	1.47	1.53
2	B	2422	C	N1-C6	-5.70	1.33	1.37
2	B	2049	G	C8-N7	-5.70	1.27	1.30
2	B	2261	C	C3'-C2'	-5.70	1.46	1.52
2	B	809	G	C5-C4	-5.70	1.34	1.38
2	B	941	A	C2'-C1'	-5.70	1.47	1.53
2	B	1646	C	C3'-C2'	-5.70	1.46	1.52
2	B	1838	C	C2-N3	5.70	1.40	1.35
2	B	2212	A	C5-C4	5.70	1.42	1.38
2	B	2341	G	C5-C4	-5.70	1.34	1.38
2	B	2503	A	C3'-C2'	-5.70	1.46	1.52
2	B	2828	G	C8-N7	-5.70	1.27	1.30
2	B	98	G	C5'-C4'	-5.70	1.44	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	410	G	C1'-N9	-5.70	1.38	1.46
2	B	1139	G	C2'-C1'	-5.70	1.47	1.53
2	B	1595	C	N3-C4	5.70	1.38	1.33
2	B	1661	G	N7-C5	-5.70	1.35	1.39
2	B	1702	G	C2-N3	5.70	1.37	1.32
2	B	2124	G	N9-C8	5.70	1.41	1.37
2	B	2219	U	N3-C4	-5.70	1.33	1.38
2	B	2330	G	C8-N7	-5.70	1.27	1.30
2	B	2901	C	C4'-C3'	5.70	1.59	1.53
2	B	659	G	C2-N3	5.70	1.37	1.32
2	B	812	C	O3'-P	-5.70	1.54	1.61
2	B	2150	C	O3'-P	-5.70	1.54	1.61
28	F	124	ARG	NE-CZ	5.70	1.40	1.33
1	A	95	U	C2'-C1'	-5.70	1.47	1.53
2	B	374	A	N9-C4	-5.70	1.34	1.37
2	B	635	C	C5'-C4'	-5.70	1.44	1.51
2	B	956	G	N1-C2	5.70	1.42	1.37
2	B	1026	G	C1'-N9	-5.70	1.38	1.46
2	B	1268	A	C5-C6	-5.70	1.35	1.41
2	B	1667	G	P-O5'	-5.70	1.54	1.59
2	B	2328	A	C4'-O4'	-5.70	1.38	1.45
2	B	2627	G	N9-C4	-5.70	1.33	1.38
2	B	609	A	C8-N7	-5.69	1.27	1.31
2	B	1029	A	O4'-C1'	-5.69	1.34	1.41
2	B	1988	G	C2-N2	-5.69	1.28	1.34
2	B	2802	G	C2'-C1'	-5.69	1.47	1.53
2	B	371	A	O3'-P	-5.69	1.54	1.61
2	B	713	G	C6-N1	5.69	1.43	1.39
2	B	1040	A	C3'-C2'	-5.69	1.46	1.52
2	B	1440	U	N1-C6	-5.69	1.32	1.38
2	B	1466	U	C2-N3	-5.69	1.33	1.37
2	B	2184	A	N9-C8	5.69	1.42	1.37
2	B	2415	G	C5-C6	-5.69	1.36	1.42
9	O	32	PRO	N-CA	-5.69	1.37	1.47
2	B	176	A	C6-N1	5.69	1.39	1.35
2	B	632	A	N3-C4	-5.69	1.31	1.34
2	B	665	U	O3'-P	-5.69	1.54	1.61
2	B	769	U	C4'-C3'	-5.69	1.46	1.52
2	B	834	G	C2-N3	5.69	1.37	1.32
2	B	841	G	C2-N3	5.69	1.37	1.32
2	B	869	G	C6-O6	-5.69	1.19	1.24
2	B	1396	U	C4-O4	5.69	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1509	A	N9-C4	5.69	1.41	1.37
2	B	1563	U	P-O5'	5.69	1.65	1.59
2	B	1821	A	C8-N7	-5.69	1.27	1.31
2	B	1993	U	C4'-O4'	-5.69	1.38	1.45
2	B	2019	A	C1'-N9	-5.69	1.38	1.46
2	B	2559	C	C4'-O4'	5.69	1.52	1.45
2	B	248	G	C8-N7	-5.69	1.27	1.30
2	B	791	C	N1-C2	-5.69	1.34	1.40
2	B	1491	G	N3-C4	-5.69	1.31	1.35
2	B	1508	A	N7-C5	5.69	1.42	1.39
6	1	7	ARG	CZ-NH1	5.69	1.40	1.33
1	A	102	G	N7-C5	-5.69	1.35	1.39
2	B	557	C	P-O5'	-5.69	1.54	1.59
2	B	777	G	C5'-C4'	5.69	1.58	1.51
2	B	1188	U	C4'-O4'	-5.69	1.38	1.45
2	B	2208	C	C4-C5	-5.69	1.38	1.43
32	J	65	THR	C-N	5.69	1.43	1.33
2	B	1030	C	N3-C4	5.69	1.38	1.33
2	B	2031	A	C4'-O4'	-5.69	1.38	1.45
2	B	2856	A	C5'-C4'	5.69	1.58	1.51
2	B	144	A	C2'-O2'	5.68	1.49	1.41
2	B	784	G	C4'-O4'	5.68	1.52	1.45
2	B	1930	G	C5-C4	-5.68	1.34	1.38
15	T	21	SER	N-CA	-5.68	1.34	1.46
2	B	68	G	N1-C2	5.68	1.42	1.37
2	B	520	G	C2-N2	-5.68	1.28	1.34
2	B	1057	A	C6-N1	5.68	1.39	1.35
2	B	1452	G	N7-C5	-5.68	1.35	1.39
2	B	1568	G	N9-C4	-5.68	1.33	1.38
2	B	2497	A	O3'-P	-5.68	1.54	1.61
2	B	2686	G	C5'-C4'	-5.68	1.44	1.51
2	B	2829	A	C8-N7	5.68	1.35	1.31
2	B	2007	U	N3-C4	5.68	1.43	1.38
2	B	509	C	C4'-C3'	5.68	1.59	1.53
2	B	981	A	O4'-C1'	-5.68	1.34	1.41
2	B	1468	U	P-O5'	-5.68	1.54	1.59
2	B	1651	G	C2-N3	5.68	1.37	1.32
2	B	2020	A	N3-C4	-5.68	1.31	1.34
2	B	2271	G	C1'-N9	-5.68	1.38	1.46
2	B	2524	G	C2'-C1'	-5.68	1.47	1.53
2	B	2830	C	C4-N4	5.68	1.39	1.33
2	B	1845	G	C5'-C4'	5.68	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1940	U	C3'-C2'	5.68	1.59	1.52
2	B	2221	G	C8-N7	5.68	1.34	1.30
2	B	2686	G	C2-N3	5.68	1.37	1.32
2	B	641	U	C4-C5	5.68	1.48	1.43
2	B	1666	G	N3-C4	5.68	1.39	1.35
2	B	1888	G	P-O5'	5.68	1.65	1.59
2	B	2421	G	C5'-C4'	5.68	1.58	1.51
2	B	2587	A	N7-C5	-5.68	1.35	1.39
2	B	2618	G	N3-C4	-5.68	1.31	1.35
2	B	2834	G	N1-C2	5.68	1.42	1.37
1	A	48	U	C2'-C1'	-5.67	1.47	1.53
2	B	613	A	N9-C4	5.67	1.41	1.37
2	B	1014	A	N9-C4	-5.67	1.34	1.37
2	B	1651	G	C4'-O4'	5.67	1.52	1.45
2	B	2359	C	C2-N3	-5.67	1.31	1.35
2	B	2418	A	O3'-P	-5.67	1.54	1.61
2	B	2553	G	N7-C5	-5.67	1.35	1.39
2	B	2658	C	P-O5'	-5.67	1.54	1.59
2	B	2719	G	N9-C4	5.67	1.42	1.38
2	B	2745	C	P-O5'	-5.67	1.54	1.59
2	B	2893	A	O3'-P	-5.67	1.54	1.61
9	O	48	LEU	N-CA	-5.67	1.35	1.46
1	A	39	A	C6-N6	5.67	1.38	1.33
2	B	1070	A	C6-N1	5.67	1.39	1.35
2	B	1234	U	N1-C2	-5.67	1.33	1.38
2	B	2718	G	N9-C8	-5.67	1.33	1.37
2	B	624	C	N1-C2	-5.67	1.34	1.40
2	B	965	C	C4'-C3'	-5.67	1.46	1.52
2	B	1172	C	C4-C5	5.67	1.47	1.43
2	B	1328	A	N7-C5	-5.67	1.35	1.39
2	B	2183	A	N9-C8	-5.67	1.33	1.37
2	B	2476	A	C5-C6	-5.67	1.35	1.41
2	B	962	G	N1-C2	5.67	1.42	1.37
2	B	1711	A	N3-C4	-5.67	1.31	1.34
2	B	1953	A	C6-N1	5.67	1.39	1.35
1	A	5	U	N1-C6	-5.67	1.32	1.38
1	A	53	A	C2'-C1'	-5.67	1.47	1.53
2	B	374	A	C4'-C3'	-5.67	1.46	1.52
2	B	711	G	C3'-O3'	5.67	1.50	1.42
2	B	1597	A	O4'-C1'	5.67	1.49	1.41
2	B	2527	C	N3-C4	5.67	1.38	1.33
2	B	2685	G	C1'-N9	-5.67	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	907	G	P-O5'	-5.67	1.54	1.59
2	B	1618	A	N3-C4	-5.67	1.31	1.34
2	B	1763	G	N1-C2	5.67	1.42	1.37
2	B	2409	G	C2-N2	5.67	1.40	1.34
24	6	30	VAL	CB-CG1	5.67	1.64	1.52
2	B	879	G	O4'-C1'	5.67	1.49	1.41
2	B	1743	G	C6-N1	-5.67	1.35	1.39
2	B	2399	G	C2-N3	5.67	1.37	1.32
2	B	271	G	O3'-P	-5.66	1.54	1.61
2	B	332	A	C2'-C1'	-5.66	1.47	1.53
2	B	475	C	O3'-P	-5.66	1.54	1.61
2	B	582	A	N9-C8	-5.66	1.33	1.37
2	B	884	U	O4'-C1'	5.66	1.49	1.41
2	B	1997	C	P-O5'	-5.66	1.54	1.59
27	C	155	ARG	NE-CZ	5.66	1.40	1.33
2	B	994	C	C4-N4	-5.66	1.28	1.33
2	B	1638	C	C4-N4	-5.66	1.28	1.33
2	B	2730	C	C4-C5	5.66	1.47	1.43
2	B	2831	G	O3'-P	-5.66	1.54	1.61
2	B	254	G	N7-C5	-5.66	1.35	1.39
2	B	1095	A	C5-C6	5.66	1.46	1.41
2	B	1738	G	O3'-P	-5.66	1.54	1.61
2	B	2547	A	N9-C8	-5.66	1.33	1.37
2	B	2712	C	O3'-P	-5.66	1.54	1.61
2	B	103	A	C4'-O4'	-5.66	1.38	1.45
2	B	124	G	C5'-C4'	5.66	1.58	1.51
2	B	536	G	N7-C5	-5.66	1.35	1.39
2	B	916	G	N1-C2	5.66	1.42	1.37
2	B	1648	U	N1-C6	-5.66	1.32	1.38
2	B	2194	U	N3-C4	5.66	1.43	1.38
2	B	2218	G	C2-N3	5.66	1.37	1.32
10	P	61	ARG	NE-CZ	5.66	1.40	1.33
1	A	61	G	C2'-O2'	-5.66	1.34	1.41
2	B	242	G	C2-N3	5.66	1.37	1.32
2	B	514	A	C3'-C2'	-5.66	1.46	1.52
2	B	726	G	O4'-C1'	-5.66	1.34	1.41
2	B	926	G	C3'-C2'	-5.66	1.46	1.52
2	B	1262	A	C6-N6	5.66	1.38	1.33
2	B	1579	A	N9-C4	-5.66	1.34	1.37
2	B	1833	C	C3'-C2'	-5.66	1.46	1.52
2	B	2435	A	C3'-C2'	-5.66	1.46	1.52
2	B	255	A	C5-C6	-5.66	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	264	C	P-O5'	-5.66	1.54	1.59
2	B	709	U	P-O5'	-5.66	1.54	1.59
2	B	2301	C	C2-N3	5.66	1.40	1.35
2	B	75	G	C2'-C1'	-5.65	1.47	1.53
2	B	578	G	C6-N1	5.65	1.43	1.39
21	Y	13	ARG	NE-CZ	5.65	1.40	1.33
2	B	132	G	C5-C4	-5.65	1.34	1.38
2	B	535	G	N9-C8	-5.65	1.33	1.37
2	B	1464	G	C4'-O4'	-5.65	1.38	1.45
2	B	2087	G	N3-C4	5.65	1.39	1.35
2	B	2129	C	N1-C6	5.65	1.40	1.37
2	B	241	A	N9-C8	-5.65	1.33	1.37
2	B	578	G	C5-C6	-5.65	1.36	1.42
2	B	805	G	N9-C4	-5.65	1.33	1.38
2	B	1037	G	C2-N3	5.65	1.37	1.32
2	B	1497	U	P-O5'	-5.65	1.54	1.59
2	B	2049	G	C5-C4	-5.65	1.34	1.38
2	B	2152	G	N9-C8	5.65	1.41	1.37
2	B	2612	C	C5'-C4'	-5.65	1.44	1.51
2	B	2638	G	N1-C2	5.65	1.42	1.37
2	B	2104	C	N1-C2	-5.65	1.34	1.40
2	B	2380	C	C2-N3	5.65	1.40	1.35
2	B	2648	G	C5-C6	-5.65	1.36	1.42
2	B	334	C	C4-C5	5.65	1.47	1.43
2	B	617	G	C3'-O3'	5.65	1.50	1.42
2	B	832	U	N3-C4	5.65	1.43	1.38
2	B	899	A	P-O5'	5.65	1.65	1.59
2	B	944	C	C5-C6	-5.65	1.29	1.34
2	B	1259	G	C2'-C1'	-5.65	1.47	1.53
2	B	1464	G	C4'-C3'	-5.65	1.47	1.52
2	B	1775	U	C1'-N1	5.65	1.57	1.48
2	B	2571	U	C5'-C4'	5.65	1.58	1.51
2	B	81	G	C5-C4	-5.65	1.34	1.38
2	B	377	G	N9-C4	-5.65	1.33	1.38
2	B	679	C	N3-C4	-5.65	1.29	1.33
2	B	1361	G	C2-N2	5.65	1.40	1.34
2	B	1431	A	C5-C6	-5.65	1.35	1.41
2	B	1813	G	O3'-P	-5.65	1.54	1.61
1	A	106	G	C5-C6	-5.64	1.36	1.42
2	B	483	A	C6-N6	-5.64	1.29	1.33
2	B	627	A	N9-C8	-5.64	1.33	1.37
2	B	1153	C	C2'-C1'	-5.64	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1159	U	C4-O4	-5.64	1.19	1.23
2	B	2059	A	C5-C4	-5.64	1.34	1.38
2	B	2253	G	C5'-C4'	5.64	1.58	1.51
2	B	2592	G	O3'-P	-5.64	1.54	1.61
2	B	2685	G	C2'-O2'	-5.64	1.34	1.41
10	P	26	GLU	CG-CD	5.64	1.60	1.51
1	A	11	C	O4'-C1'	-5.64	1.34	1.41
2	B	4	U	C2-N3	5.64	1.41	1.37
2	B	319	G	P-O5'	-5.64	1.54	1.59
2	B	357	C	N3-C4	5.64	1.37	1.33
2	B	708	G	C6-O6	-5.64	1.19	1.24
2	B	826	U	C4'-O4'	-5.64	1.38	1.45
2	B	842	U	N1-C6	-5.64	1.32	1.38
2	B	852	U	C3'-O3'	5.64	1.50	1.42
2	B	1635	A	C2-N3	5.64	1.38	1.33
2	B	1765	U	O4'-C1'	-5.64	1.34	1.41
2	B	1789	A	N7-C5	-5.64	1.35	1.39
2	B	2193	G	N7-C5	-5.64	1.35	1.39
2	B	202	U	C5-C6	5.64	1.39	1.34
2	B	350	G	P-O5'	-5.64	1.54	1.59
2	B	509	C	C4-C5	5.64	1.47	1.43
2	B	909	A	N9-C4	5.64	1.41	1.37
2	B	1335	C	C2'-C1'	-5.64	1.47	1.53
2	B	2257	U	C2'-C1'	-5.64	1.47	1.53
2	B	472	A	N1-C2	5.64	1.39	1.34
2	B	630	G	C4'-C3'	-5.64	1.47	1.52
2	B	649	G	C5'-C4'	5.64	1.58	1.51
2	B	970	U	C2-N3	5.64	1.41	1.37
2	B	972	A	N9-C8	-5.64	1.33	1.37
2	B	984	A	O4'-C1'	-5.64	1.34	1.41
2	B	1401	G	N3-C4	-5.64	1.31	1.35
2	B	1459	G	C6-O6	-5.64	1.19	1.24
2	B	1908	C	P-O5'	-5.64	1.54	1.59
2	B	2346	A	C3'-C2'	5.64	1.59	1.52
2	B	2669	G	C2-N3	5.64	1.37	1.32
2	B	2767	C	O4'-C1'	-5.64	1.34	1.41
20	E	75	SER	CA-CB	5.64	1.61	1.52
21	Y	54	ARG	NE-CZ	5.64	1.40	1.33
2	B	738	G	O3'-P	-5.64	1.54	1.61
2	B	1299	G	N7-C5	-5.64	1.35	1.39
2	B	1317	G	C4'-C3'	-5.64	1.47	1.52
2	B	2424	C	C5-C6	5.64	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2538	C	C4-C5	5.64	1.47	1.43
1	A	42	C	N3-C4	5.64	1.37	1.33
2	B	691	C	C2'-C1'	-5.64	1.47	1.53
2	B	1397	U	C2-N3	5.64	1.41	1.37
2	B	1563	U	C2'-C1'	-5.64	1.47	1.53
2	B	2279	G	C1'-N9	-5.64	1.39	1.46
2	B	2524	G	N9-C4	5.64	1.42	1.38
2	B	2752	C	C5-C6	-5.64	1.29	1.34
2	B	312	G	C2'-C1'	-5.63	1.47	1.53
2	B	991	C	C5-C6	-5.63	1.29	1.34
2	B	1420	A	C2-N3	-5.63	1.28	1.33
2	B	1475	G	C2'-C1'	-5.63	1.47	1.53
2	B	1566	A	P-O5'	-5.63	1.54	1.59
2	B	1642	G	O3'-P	-5.63	1.54	1.61
2	B	1887	C	C5-C6	5.63	1.38	1.34
2	B	1888	G	O3'-P	-5.63	1.54	1.61
2	B	1954	G	C2-N2	5.63	1.40	1.34
2	B	2350	C	C5'-C4'	5.63	1.58	1.51
2	B	2480	C	C5'-C4'	5.63	1.58	1.51
2	B	2528	U	C2-N3	5.63	1.41	1.37
2	B	2622	U	O3'-P	-5.63	1.54	1.61
2	B	2894	G	C2-N3	5.63	1.37	1.32
2	B	1423	G	C4'-C3'	-5.63	1.47	1.52
2	B	2278	A	C8-N7	-5.63	1.27	1.31
2	B	1524	G	C2-N2	5.63	1.40	1.34
2	B	1887	C	N1-C6	5.63	1.40	1.37
2	B	1946	U	C3'-C2'	5.63	1.59	1.52
2	B	2217	G	O3'-P	-5.63	1.54	1.61
2	B	2261	C	C1'-N1	-5.63	1.39	1.46
2	B	2584	U	C2'-C1'	-5.63	1.47	1.53
2	B	2682	A	P-O5'	-5.63	1.54	1.59
2	B	2775	G	C2-N2	-5.63	1.28	1.34
2	B	1163	G	C4'-O4'	-5.63	1.38	1.45
2	B	1789	A	C5-C4	-5.63	1.34	1.38
2	B	2228	G	C8-N7	-5.63	1.27	1.30
2	B	2735	G	C3'-O3'	5.63	1.50	1.42
12	R	80	ARG	CA-C	-5.63	1.38	1.52
24	6	12	ARG	CZ-NH2	5.63	1.40	1.33
28	F	70	ARG	NE-CZ	5.63	1.40	1.33
1	A	66	A	C1'-N9	-5.63	1.39	1.46
1	A	75	G	O3'-P	-5.63	1.54	1.61
2	B	241	A	C5-C6	-5.63	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	359	G	N9-C8	5.63	1.41	1.37
2	B	704	G	N3-C4	-5.63	1.31	1.35
2	B	909	A	N3-C4	-5.63	1.31	1.34
2	B	1286	A	C4'-C3'	-5.63	1.47	1.52
2	B	1288	G	N9-C4	-5.63	1.33	1.38
2	B	1502	A	C6-N1	5.63	1.39	1.35
2	B	1600	C	C4-C5	5.63	1.47	1.43
2	B	1608	A	C4'-C3'	-5.63	1.47	1.52
2	B	2102	G	C2'-C1'	-5.63	1.47	1.53
2	B	2573	C	C2-O2	5.63	1.29	1.24
2	B	2844	G	N9-C4	5.63	1.42	1.38
2	B	54	G	C8-N7	-5.63	1.27	1.30
2	B	377	G	P-O5'	-5.63	1.54	1.59
2	B	856	G	O3'-P	-5.63	1.54	1.61
2	B	1556	C	C2-O2	-5.63	1.19	1.24
2	B	1732	C	O3'-P	-5.63	1.54	1.61
2	B	2064	C	C3'-C2'	5.63	1.59	1.52
8	N	2	ARG	NE-CZ	5.63	1.40	1.33
19	X	252	TYR	CG-CD1	-5.63	1.31	1.39
2	B	350	G	C8-N7	-5.62	1.27	1.30
2	B	1272	A	C1'-N9	-5.62	1.39	1.46
2	B	2061	G	O4'-C1'	-5.62	1.34	1.41
1	A	46	A	N7-C5	-5.62	1.35	1.39
2	B	626	A	N9-C4	-5.62	1.34	1.37
2	B	1680	U	C4'-O4'	-5.62	1.38	1.45
2	B	1704	C	C5-C6	-5.62	1.29	1.34
2	B	1913	A	C4'-O4'	-5.62	1.38	1.45
2	B	2053	G	C5-C4	-5.62	1.34	1.38
2	B	2124	G	C2-N2	-5.62	1.28	1.34
2	B	2413	G	C4'-C3'	5.62	1.59	1.53
1	A	16	G	C3'-C2'	-5.62	1.46	1.52
2	B	663	G	C5-C4	-5.62	1.34	1.38
2	B	824	U	C5-C6	-5.62	1.29	1.34
2	B	2420	C	N3-C4	5.62	1.37	1.33
2	B	2502	G	C8-N7	5.62	1.34	1.30
2	B	2617	U	C2'-O2'	-5.62	1.34	1.41
2	B	2850	A	C6-N1	5.62	1.39	1.35
2	B	631	A	O3'-P	-5.62	1.54	1.61
2	B	2372	U	C4'-C3'	-5.62	1.47	1.52
2	B	2720	U	C4'-O4'	-5.62	1.38	1.45
2	B	2730	C	C3'-C2'	-5.62	1.46	1.52
1	A	9	G	O3'-P	-5.62	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	7	G	N7-C5	-5.62	1.35	1.39
2	B	388	G	C2'-C1'	-5.62	1.47	1.53
2	B	692	C	N1-C2	5.62	1.45	1.40
2	B	1281	G	N3-C4	-5.62	1.31	1.35
2	B	1329	U	C2-O2	-5.62	1.17	1.22
2	B	1614	A	C6-N1	5.62	1.39	1.35
2	B	2256	G	C4'-C3'	-5.62	1.47	1.52
2	B	2617	U	C2'-C1'	-5.62	1.47	1.53
2	B	211	C	N1-C2	5.62	1.45	1.40
2	B	528	A	C2-N3	5.62	1.38	1.33
2	B	535	G	C1'-N9	-5.62	1.39	1.46
2	B	820	A	C2-N3	-5.62	1.28	1.33
2	B	1220	G	C4'-O4'	5.62	1.52	1.45
2	B	1756	G	C2'-C1'	-5.62	1.47	1.53
32	J	26	GLY	CA-C	-5.62	1.42	1.51
2	B	322	A	C3'-C2'	-5.62	1.46	1.52
2	B	336	C	C3'-O3'	-5.62	1.34	1.42
2	B	486	C	O3'-P	-5.62	1.54	1.61
2	B	1129	A	O3'-P	-5.62	1.54	1.61
2	B	1510	G	C2-N2	5.62	1.40	1.34
2	B	2146	C	P-O5'	-5.62	1.54	1.59
2	B	2277	G	C6-O6	-5.62	1.19	1.24
2	B	2547	A	C6-N1	5.62	1.39	1.35
2	B	2754	U	C4-C5	5.62	1.48	1.43
2	B	2795	C	C3'-C2'	-5.62	1.46	1.52
19	X	250	ARG	CZ-NH2	5.62	1.40	1.33
2	B	51	G	C8-N7	-5.61	1.27	1.30
2	B	122	G	N7-C5	5.61	1.42	1.39
2	B	535	G	C5-C6	-5.61	1.36	1.42
2	B	895	U	C2-N3	5.61	1.41	1.37
2	B	1037	G	C2-N2	5.61	1.40	1.34
2	B	1304	A	N3-C4	-5.61	1.31	1.34
2	B	1595	C	C5-C6	-5.61	1.29	1.34
2	B	1608	A	N7-C5	-5.61	1.35	1.39
2	B	1613	G	C2-N3	5.61	1.37	1.32
2	B	2435	A	N1-C2	-5.61	1.29	1.34
2	B	494	G	O4'-C1'	-5.61	1.34	1.41
2	B	2757	A	N3-C4	-5.61	1.31	1.34
2	B	59	U	C4'-C3'	-5.61	1.47	1.52
2	B	193	U	C2'-C1'	-5.61	1.47	1.53
2	B	608	A	N9-C4	-5.61	1.34	1.37
2	B	723	C	N1-C6	-5.61	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	793	A	O4'-C1'	-5.61	1.34	1.41
2	B	940	G	C2'-O2'	-5.61	1.34	1.41
2	B	972	A	C4'-O4'	-5.61	1.38	1.45
2	B	1068	G	C5-C6	-5.61	1.36	1.42
2	B	1239	G	C2'-C1'	-5.61	1.47	1.53
2	B	1669	A	N9-C8	-5.61	1.33	1.37
2	B	1697	G	C6-N1	5.61	1.43	1.39
2	B	2229	U	C2-N3	5.61	1.41	1.37
2	B	2668	G	N7-C5	-5.61	1.35	1.39
2	B	2794	C	C4'-O4'	-5.61	1.38	1.45
32	J	91	GLU	CG-CD	5.61	1.60	1.51
2	B	352	A	N3-C4	-5.61	1.31	1.34
2	B	1377	G	P-O5'	-5.61	1.54	1.59
2	B	1575	C	C5-C6	-5.61	1.29	1.34
2	B	2090	A	O3'-P	-5.61	1.54	1.61
2	B	2805	C	N1-C6	5.61	1.40	1.37
2	B	272	A	C3'-C2'	-5.61	1.46	1.52
2	B	420	C	C4'-O4'	-5.61	1.38	1.45
2	B	777	G	O3'-P	-5.61	1.54	1.61
2	B	1206	G	C2'-C1'	-5.61	1.47	1.53
2	B	1334	G	C4'-O4'	-5.61	1.38	1.45
2	B	2543	G	C5-C6	-5.61	1.36	1.42
2	B	2873	A	C6-N6	5.61	1.38	1.33
1	A	21	G	C4'-O4'	-5.61	1.38	1.45
2	B	357	C	N1-C6	5.61	1.40	1.37
2	B	363	G	C5-C6	-5.61	1.36	1.42
2	B	704	G	C6-N1	5.61	1.43	1.39
2	B	747	U	N1-C6	-5.61	1.32	1.38
2	B	925	A	C6-N6	5.61	1.38	1.33
2	B	1098	A	C1'-N9	5.61	1.57	1.48
2	B	1180	U	P-O5'	-5.61	1.54	1.59
2	B	1187	G	C8-N7	5.61	1.34	1.30
2	B	1430	G	N3-C4	5.61	1.39	1.35
2	B	1564	C	P-O5'	-5.61	1.54	1.59
2	B	2062	A	P-O5'	-5.61	1.54	1.59
2	B	2321	U	C4'-O4'	-5.61	1.38	1.45
2	B	2383	G	N9-C8	5.61	1.41	1.37
2	B	2554	U	C2-N3	5.61	1.41	1.37
2	B	294	A	N9-C8	-5.60	1.33	1.37
2	B	1716	U	O3'-P	5.60	1.67	1.61
2	B	2010	G	C4'-O4'	-5.60	1.38	1.45
2	B	2549	G	P-O5'	-5.60	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2681	C	O4'-C1'	-5.60	1.34	1.41
2	B	122	G	C2-N3	5.60	1.37	1.32
2	B	297	G	C5'-C4'	5.60	1.58	1.51
2	B	363	G	C6-N1	5.60	1.43	1.39
2	B	728	G	C5'-C4'	-5.60	1.44	1.51
2	B	1334	G	P-O5'	-5.60	1.54	1.59
2	B	2244	U	C4'-C3'	5.60	1.59	1.53
2	B	2313	C	O3'-P	-5.60	1.54	1.61
2	B	2346	A	C8-N7	-5.60	1.27	1.31
2	B	2824	C	C2-O2	-5.60	1.19	1.24
8	N	86	ARG	CZ-NH1	5.60	1.40	1.33
28	F	21	TYR	CB-CG	-5.60	1.43	1.51
2	B	459	U	C4-C5	5.60	1.48	1.43
2	B	776	G	N9-C4	-5.60	1.33	1.38
2	B	2090	A	C2'-C1'	5.60	1.59	1.53
2	B	108	G	C3'-C2'	-5.60	1.46	1.52
2	B	741	U	C3'-C2'	-5.60	1.46	1.52
2	B	781	A	C5-C6	-5.60	1.36	1.41
2	B	915	C	N3-C4	5.60	1.37	1.33
2	B	1390	U	C4-C5	5.60	1.48	1.43
2	B	1612	C	O3'-P	-5.60	1.54	1.61
2	B	1979	U	O3'-P	-5.60	1.54	1.61
2	B	2475	C	C1'-N1	5.60	1.57	1.48
2	B	2704	C	C2-N3	-5.60	1.31	1.35
10	P	114	ASN	CB-CG	5.60	1.64	1.51
2	B	236	C	C4-N4	5.60	1.39	1.33
2	B	513	A	N3-C4	-5.60	1.31	1.34
2	B	666	A	N9-C4	-5.60	1.34	1.37
2	B	990	A	C1'-N9	-5.60	1.39	1.46
2	B	1570	A	C1'-N9	-5.60	1.39	1.46
5	L	41	ARG	CD-NE	5.60	1.55	1.46
2	B	12	U	C3'-C2'	5.60	1.59	1.52
2	B	1430	G	N9-C4	-5.60	1.33	1.38
2	B	2882	A	C5-C4	-5.60	1.34	1.38
23	5	221	GLY	N-CA	-5.60	1.37	1.46
2	B	125	A	N9-C4	-5.59	1.34	1.37
2	B	635	C	N1-C6	-5.59	1.33	1.37
2	B	699	A	C6-N6	5.59	1.38	1.33
2	B	844	A	C8-N7	-5.59	1.27	1.31
2	B	1221	C	P-O5'	-5.59	1.54	1.59
2	B	1696	G	C6-N1	-5.59	1.35	1.39
2	B	45	G	O5'-C5'	-5.59	1.33	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	130	C	C4-C5	5.59	1.47	1.43
2	B	254	G	C2'-C1'	-5.59	1.47	1.53
2	B	272	A	O3'-P	-5.59	1.54	1.61
2	B	436	C	O3'-P	-5.59	1.54	1.61
2	B	689	A	O4'-C1'	-5.59	1.34	1.41
2	B	1724	G	C4'-O4'	-5.59	1.38	1.45
2	B	1770	G	C2'-C1'	-5.59	1.47	1.53
2	B	1777	U	N1-C2	5.59	1.43	1.38
2	B	10	A	C1'-N9	-5.59	1.39	1.46
2	B	510	C	C4'-C3'	-5.59	1.47	1.52
2	B	814	C	N1-C2	-5.59	1.34	1.40
2	B	1510	G	O3'-P	5.59	1.67	1.61
2	B	2576	G	C2'-C1'	-5.59	1.47	1.53
2	B	61	C	C4-C5	5.59	1.47	1.43
2	B	956	G	C2'-C1'	-5.59	1.47	1.53
2	B	1794	A	N3-C4	-5.59	1.31	1.34
2	B	1899	A	O3'-P	-5.59	1.54	1.61
2	B	2074	U	C3'-C2'	-5.59	1.46	1.52
2	B	2350	C	C5-C6	-5.59	1.29	1.34
2	B	2441	U	N1-C6	5.59	1.43	1.38
2	B	2457	U	C3'-C2'	-5.59	1.46	1.52
2	B	2557	G	N9-C4	-5.59	1.33	1.38
2	B	542	C	C4'-C3'	-5.59	1.47	1.52
2	B	690	G	C1'-N9	-5.59	1.39	1.46
2	B	870	U	C4-C5	-5.59	1.38	1.43
2	B	2052	A	N9-C8	-5.59	1.33	1.37
1	A	78	A	C5-C4	5.59	1.42	1.38
1	A	101	A	C8-N7	-5.59	1.27	1.31
2	B	346	A	N9-C4	-5.59	1.34	1.37
2	B	500	G	C8-N7	5.59	1.34	1.30
2	B	997	G	P-O5'	-5.59	1.54	1.59
2	B	1444	G	C8-N7	-5.59	1.27	1.30
2	B	2338	C	C4-C5	5.59	1.47	1.43
2	B	2375	G	N7-C5	-5.59	1.35	1.39
2	B	2388	A	P-O5'	5.59	1.65	1.59
2	B	1145	C	O3'-P	-5.58	1.54	1.61
2	B	2590	A	C2'-C1'	-5.58	1.47	1.53
14	D	77	ARG	NE-CZ	5.58	1.40	1.33
2	B	52	A	C4'-O4'	-5.58	1.38	1.45
2	B	294	A	C4'-C3'	5.58	1.59	1.53
2	B	467	G	N3-C4	-5.58	1.31	1.35
2	B	543	G	N9-C8	-5.58	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	585	G	N9-C4	-5.58	1.33	1.38
2	B	789	A	C5'-C4'	5.58	1.58	1.51
2	B	918	A	N1-C2	-5.58	1.29	1.34
2	B	1373	A	N7-C5	-5.58	1.35	1.39
2	B	1606	C	N1-C6	-5.58	1.33	1.37
2	B	1846	G	C6-N1	5.58	1.43	1.39
2	B	2305	U	N1-C6	5.58	1.43	1.38
2	B	2607	G	C5-C6	-5.58	1.36	1.42
2	B	2860	A	N7-C5	-5.58	1.35	1.39
2	B	2877	G	C2-N2	5.58	1.40	1.34
19	X	122	GLY	CA-C	-5.58	1.43	1.51
27	C	122	ALA	CA-CB	-5.58	1.40	1.52
2	B	477	A	O3'-P	-5.58	1.54	1.61
2	B	502	A	O3'-P	-5.58	1.54	1.61
2	B	639	U	C1'-N1	-5.58	1.39	1.46
2	B	1107	G	N9-C8	-5.58	1.33	1.37
2	B	1510	G	C2-N3	5.58	1.37	1.32
2	B	2246	G	C8-N7	-5.58	1.27	1.30
2	B	2782	G	N7-C5	-5.58	1.35	1.39
2	B	2875	C	N1-C6	5.58	1.40	1.37
2	B	735	A	C1'-N9	-5.58	1.39	1.46
2	B	2286	G	N9-C4	-5.58	1.33	1.38
2	B	2643	G	C2-N3	-5.58	1.28	1.32
4	K	32	TYR	CB-CG	-5.58	1.43	1.51
1	A	2	G	N9-C4	5.58	1.42	1.38
2	B	727	A	C3'-C2'	-5.58	1.46	1.52
2	B	885	C	O3'-P	-5.58	1.54	1.61
2	B	1335	C	N3-C4	5.58	1.37	1.33
2	B	1695	G	C5-C4	5.58	1.42	1.38
2	B	2800	A	N9-C4	5.58	1.41	1.37
1	A	58	A	N3-C4	-5.58	1.31	1.34
2	B	524	G	N9-C8	-5.58	1.33	1.37
2	B	603	A	O3'-P	-5.58	1.54	1.61
2	B	633	A	O3'-P	-5.58	1.54	1.61
2	B	762	U	N1-C2	-5.58	1.33	1.38
2	B	216	A	N9-C8	-5.58	1.33	1.37
2	B	366	C	N1-C6	-5.58	1.33	1.37
2	B	409	G	C2'-C1'	-5.58	1.47	1.53
2	B	668	A	N9-C8	-5.58	1.33	1.37
2	B	953	G	C5'-C4'	5.58	1.58	1.51
2	B	1815	A	C5-C4	-5.58	1.34	1.38
2	B	1963	U	N3-C4	5.58	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2049	G	N7-C5	-5.58	1.35	1.39
2	B	2080	A	N3-C4	5.58	1.38	1.34
2	B	2737	G	C2-N2	5.58	1.40	1.34
2	B	2753	A	C5'-C4'	5.58	1.58	1.51
2	B	2755	C	C5-C6	5.58	1.38	1.34
2	B	2881	U	P-O5'	-5.58	1.54	1.59
1	A	43	C	N1-C6	5.57	1.40	1.37
2	B	492	A	N9-C4	5.57	1.41	1.37
2	B	1427	A	C3'-C2'	-5.57	1.46	1.52
2	B	1441	G	C6-N1	5.57	1.43	1.39
2	B	1468	U	C5'-C4'	-5.57	1.44	1.51
2	B	1938	A	C6-N6	5.57	1.38	1.33
2	B	2117	A	P-O5'	-5.57	1.54	1.59
2	B	2264	C	C3'-C2'	-5.57	1.46	1.52
2	B	2298	A	N1-C2	5.57	1.39	1.34
2	B	2737	G	C5'-C4'	5.57	1.58	1.51
2	B	2849	U	N1-C2	-5.57	1.33	1.38
2	B	566	U	N1-C6	-5.57	1.32	1.38
2	B	572	A	C3'-C2'	-5.57	1.46	1.52
2	B	805	G	C8-N7	-5.57	1.27	1.30
2	B	2230	G	C2-N3	-5.57	1.28	1.32
2	B	2870	C	O4'-C1'	-5.57	1.34	1.41
9	O	64	TYR	CG-CD1	5.57	1.46	1.39
1	A	101	A	C6-N6	5.57	1.38	1.33
2	B	657	U	C3'-C2'	-5.57	1.46	1.52
2	B	1172	C	C5'-C4'	5.57	1.58	1.51
2	B	1213	A	C2'-C1'	-5.57	1.47	1.53
2	B	1550	C	O3'-P	-5.57	1.54	1.61
2	B	1622	G	C8-N7	5.57	1.34	1.30
2	B	1998	A	C5-C6	-5.57	1.36	1.41
2	B	2157	G	C2-N2	5.57	1.40	1.34
2	B	2436	G	C4'-O4'	-5.57	1.38	1.45
2	B	1166	G	O3'-P	-5.57	1.54	1.61
2	B	1300	G	C6-O6	-5.57	1.19	1.24
2	B	1845	G	N1-C2	5.57	1.42	1.37
2	B	2032	G	N1-C2	5.57	1.42	1.37
2	B	171	U	C2'-C1'	-5.57	1.47	1.53
2	B	390	U	N1-C6	-5.57	1.32	1.38
2	B	974	G	C6-O6	-5.57	1.19	1.24
2	B	1283	G	P-O5'	-5.57	1.54	1.59
2	B	1319	C	C4-N4	-5.57	1.28	1.33
2	B	1775	U	C4'-O4'	-5.57	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2083	G	N3-C4	-5.57	1.31	1.35
2	B	2159	G	C6-N1	5.57	1.43	1.39
2	B	2293	G	C6-N1	5.57	1.43	1.39
2	B	27	G	N1-C2	-5.57	1.33	1.37
2	B	466	A	C5-C4	-5.57	1.34	1.38
2	B	573	U	C5-C6	5.57	1.39	1.34
2	B	1085	A	C6-N1	5.57	1.39	1.35
2	B	1085	A	N1-C2	5.57	1.39	1.34
2	B	1241	A	C5-C4	-5.57	1.34	1.38
2	B	1500	G	N9-C4	-5.57	1.33	1.38
2	B	1573	G	C2-N2	5.57	1.40	1.34
2	B	2333	A	N9-C8	-5.57	1.33	1.37
32	J	75	TYR	CG-CD1	5.57	1.46	1.39
2	B	761	A	C8-N7	-5.56	1.27	1.31
2	B	1397	U	C4'-C3'	-5.56	1.47	1.52
2	B	179	C	P-O5'	-5.56	1.54	1.59
2	B	457	A	C5-C6	5.56	1.46	1.41
2	B	1065	U	C4'-C3'	5.56	1.59	1.53
2	B	1085	A	C4'-C3'	5.56	1.59	1.53
2	B	1633	G	C4'-O4'	-5.56	1.38	1.45
2	B	2218	G	C6-N1	-5.56	1.35	1.39
2	B	2404	U	O3'-P	-5.56	1.54	1.61
2	B	2462	C	C4'-C3'	-5.56	1.47	1.52
2	B	1643	G	N9-C4	-5.56	1.33	1.38
2	B	1946	U	P-O5'	-5.56	1.54	1.59
2	B	1973	G	C4'-C3'	5.56	1.59	1.53
2	B	2049	G	C4'-C3'	-5.56	1.47	1.52
2	B	429	A	C2'-C1'	-5.56	1.47	1.53
2	B	655	A	C8-N7	-5.56	1.27	1.31
2	B	1269	A	C5-C6	-5.56	1.36	1.41
2	B	2459	A	C2'-C1'	-5.56	1.47	1.53
2	B	2680	U	N3-C4	5.56	1.43	1.38
3	0	51	SER	CA-CB	5.56	1.61	1.52
2	B	108	G	N1-C2	5.56	1.42	1.37
2	B	651	G	C5-C6	-5.56	1.36	1.42
2	B	654	A	C5'-C4'	5.56	1.58	1.51
2	B	768	G	N9-C8	-5.56	1.33	1.37
2	B	1093	G	C2-N2	5.56	1.40	1.34
2	B	1520	U	O5'-C5'	-5.56	1.33	1.42
2	B	1575	C	O3'-P	-5.56	1.54	1.61
2	B	1620	G	C4'-C3'	5.56	1.59	1.53
2	B	1790	C	P-O5'	-5.56	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1938	A	O4'-C1'	-5.56	1.34	1.41
2	B	2516	A	C5-C4	-5.56	1.34	1.38
2	B	2591	C	C2'-C1'	-5.56	1.47	1.53
2	B	2591	C	N1-C6	5.56	1.40	1.37
2	B	2736	A	C2'-C1'	-5.56	1.47	1.53
30	H	87	GLU	CD-OE2	5.56	1.31	1.25
1	A	79	G	O3'-P	-5.56	1.54	1.61
2	B	143	C	C4-N4	5.56	1.39	1.33
2	B	1120	G	C5-C6	-5.56	1.36	1.42
2	B	1256	G	N3-C4	-5.56	1.31	1.35
2	B	1440	U	C4-C5	5.56	1.48	1.43
2	B	2603	G	C6-N1	-5.56	1.35	1.39
1	A	72	G	C2-N3	5.55	1.37	1.32
2	B	745	G	O3'-P	-5.55	1.54	1.61
2	B	801	G	N9-C4	5.55	1.42	1.38
2	B	858	G	C2'-C1'	-5.55	1.47	1.53
2	B	1442	U	C2-N3	5.55	1.41	1.37
2	B	1936	A	C2'-C1'	-5.55	1.47	1.53
2	B	2660	A	C8-N7	-5.55	1.27	1.31
2	B	1684	G	C5-C6	-5.55	1.36	1.42
1	A	28	C	P-O5'	-5.55	1.54	1.59
2	B	83	A	N9-C4	-5.55	1.34	1.37
2	B	294	A	C2'-C1'	-5.55	1.47	1.53
2	B	412	A	O3'-P	-5.55	1.54	1.61
2	B	451	U	C4'-C3'	5.55	1.59	1.53
2	B	656	G	C8-N7	5.55	1.34	1.30
2	B	983	A	C5'-C4'	5.55	1.58	1.51
2	B	1695	G	P-O5'	-5.55	1.54	1.59
2	B	1721	G	C4'-C3'	5.55	1.59	1.53
2	B	2081	U	O3'-P	-5.55	1.54	1.61
2	B	2522	U	P-O5'	-5.55	1.54	1.59
2	B	163	C	C4-N4	5.55	1.39	1.33
2	B	445	C	P-O5'	-5.55	1.54	1.59
2	B	927	A	C8-N7	-5.55	1.27	1.31
2	B	1186	G	N9-C4	-5.55	1.33	1.38
2	B	2002	G	C1'-N9	-5.55	1.39	1.46
2	B	2034	U	N3-C4	5.55	1.43	1.38
2	B	2807	U	C2-N3	5.55	1.41	1.37
2	B	1579	A	C5-C6	5.55	1.46	1.41
2	B	2546	U	N1-C2	5.55	1.43	1.38
1	A	67	G	C2-N3	5.55	1.37	1.32
2	B	140	C	C5-C6	-5.55	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	281	C	C4-N4	5.55	1.39	1.33
2	B	491	G	N3-C4	-5.55	1.31	1.35
2	B	1152	C	N1-C6	-5.55	1.33	1.37
2	B	1345	C	C2-O2	5.55	1.29	1.24
2	B	1762	A	O3'-P	-5.55	1.54	1.61
2	B	2490	G	C6-N1	5.55	1.43	1.39
2	B	2547	A	C4'-C3'	5.55	1.59	1.53
2	B	2713	U	C4-C5	5.55	1.48	1.43
1	A	8	C	C3'-C2'	-5.54	1.46	1.52
1	A	107	G	N9-C4	-5.54	1.33	1.38
2	B	1431	A	C4'-O4'	-5.54	1.38	1.45
2	B	2383	G	N1-C2	5.54	1.42	1.37
2	B	2764	A	N1-C2	5.54	1.39	1.34
2	B	2	G	N3-C4	-5.54	1.31	1.35
2	B	610	C	C4-N4	5.54	1.39	1.33
2	B	937	C	C4-C5	-5.54	1.38	1.43
2	B	978	G	N3-C4	-5.54	1.31	1.35
2	B	2103	C	P-O5'	5.54	1.65	1.59
2	B	2147	A	N3-C4	-5.54	1.31	1.34
2	B	2184	A	C8-N7	-5.54	1.27	1.31
2	B	2251	G	N3-C4	-5.54	1.31	1.35
2	B	2404	U	P-O5'	-5.54	1.54	1.59
2	B	2898	U	C2'-C1'	-5.54	1.47	1.53
8	N	45	ARG	CZ-NH2	5.54	1.40	1.33
1	A	52	A	C2'-C1'	-5.54	1.47	1.53
2	B	249	C	C4-N4	5.54	1.39	1.33
2	B	950	G	O4'-C1'	5.54	1.48	1.41
2	B	1582	C	C4'-C3'	-5.54	1.47	1.52
2	B	1826	G	C5-C4	5.54	1.42	1.38
2	B	2142	A	O3'-P	5.54	1.67	1.61
2	B	2225	A	C5'-C4'	5.54	1.57	1.51
2	B	806	C	C4-C5	5.54	1.47	1.43
2	B	1044	C	C2'-C1'	-5.54	1.47	1.53
2	B	1341	G	P-O5'	-5.54	1.54	1.59
2	B	2059	A	C2'-C1'	-5.54	1.47	1.53
2	B	169	G	C3'-C2'	-5.54	1.46	1.52
2	B	209	C	C5'-C4'	5.54	1.57	1.51
2	B	226	A	C5-C4	-5.54	1.34	1.38
2	B	971	G	P-O5'	-5.54	1.54	1.59
2	B	1393	A	C6-N6	-5.54	1.29	1.33
2	B	2205	A	P-O5'	-5.54	1.54	1.59
2	B	2365	G	C5-C4	-5.54	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2822	G	N9-C4	-5.54	1.33	1.38
2	B	261	G	N9-C4	5.54	1.42	1.38
2	B	522	A	N9-C8	-5.54	1.33	1.37
2	B	780	G	C5-C4	-5.54	1.34	1.38
2	B	818	G	C3'-C2'	-5.54	1.46	1.52
2	B	1492	G	N9-C4	-5.54	1.33	1.38
2	B	2209	G	N9-C8	-5.54	1.33	1.37
2	B	2458	G	C5'-C4'	5.54	1.57	1.51
2	B	2615	U	C4-C5	5.54	1.48	1.43
2	B	2880	C	C4-N4	5.54	1.39	1.33
2	B	2900	A	C5-C6	-5.54	1.36	1.41
2	B	277	G	C2'-C1'	-5.54	1.47	1.53
2	B	383	C	O3'-P	-5.54	1.54	1.61
2	B	448	U	O4'-C1'	-5.54	1.34	1.41
2	B	718	A	C6-N6	5.54	1.38	1.33
2	B	1047	G	C5-C4	5.54	1.42	1.38
2	B	2052	A	N9-C4	-5.54	1.34	1.37
2	B	2366	A	C5'-C4'	5.54	1.57	1.51
2	B	412	A	N3-C4	5.53	1.38	1.34
2	B	716	A	C6-N1	-5.53	1.31	1.35
2	B	1147	A	C6-N1	5.53	1.39	1.35
2	B	1765	U	C3'-C2'	-5.53	1.46	1.52
2	B	2073	C	N1-C6	-5.53	1.33	1.37
2	B	2293	G	N9-C4	-5.53	1.33	1.38
2	B	2575	C	C4'-C3'	-5.53	1.47	1.52
2	B	469	G	C3'-C2'	-5.53	1.46	1.52
2	B	763	G	N9-C8	-5.53	1.33	1.37
2	B	831	G	C3'-O3'	5.53	1.49	1.42
2	B	1805	A	C3'-O3'	5.53	1.49	1.42
2	B	703	U	C2-N3	-5.53	1.33	1.37
2	B	960	A	N3-C4	-5.53	1.31	1.34
2	B	1140	C	C2'-C1'	-5.53	1.47	1.53
2	B	1478	G	C5'-C4'	5.53	1.57	1.51
2	B	1500	G	O3'-P	-5.53	1.54	1.61
2	B	2049	G	O3'-P	-5.53	1.54	1.61
2	B	2427	C	C4-C5	-5.53	1.38	1.43
2	B	2573	C	C4-N4	5.53	1.39	1.33
2	B	478	A	N1-C2	-5.53	1.29	1.34
2	B	748	G	C6-O6	-5.53	1.19	1.24
2	B	1118	C	O3'-P	-5.53	1.54	1.61
2	B	1173	U	C4'-C3'	-5.53	1.47	1.52
2	B	2516	A	C8-N7	-5.53	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2640	G	N1-C2	5.53	1.42	1.37
2	B	403	U	C4-C5	-5.53	1.38	1.43
2	B	1639	C	O4'-C1'	-5.53	1.34	1.41
2	B	1738	G	N9-C8	5.53	1.41	1.37
2	B	2560	A	N9-C4	5.53	1.41	1.37
21	Y	41	GLY	N-CA	-5.53	1.37	1.46
28	F	147	ARG	CD-NE	5.53	1.55	1.46
2	B	144	A	O3'-P	-5.53	1.54	1.61
2	B	1612	C	C4-C5	5.53	1.47	1.43
2	B	1775	U	O3'-P	-5.53	1.54	1.61
2	B	1888	G	C8-N7	-5.53	1.27	1.30
2	B	1892	C	C4'-C3'	5.53	1.59	1.53
2	B	2061	G	C6-N1	5.53	1.43	1.39
2	B	2878	U	C4-O4	-5.53	1.19	1.23
2	B	48	G	O3'-P	-5.52	1.54	1.61
2	B	686	U	N1-C2	5.52	1.43	1.38
2	B	808	G	C3'-C2'	-5.52	1.46	1.52
2	B	1197	G	N9-C4	-5.52	1.33	1.38
2	B	1846	G	C2'-C1'	-5.52	1.47	1.53
2	B	149	A	C5'-C4'	5.52	1.57	1.51
2	B	404	A	C2-N3	5.52	1.38	1.33
2	B	682	G	C3'-C2'	-5.52	1.46	1.52
2	B	2455	G	C1'-N9	5.52	1.57	1.48
2	B	2592	G	C3'-C2'	-5.52	1.46	1.52
2	B	1049	C	C3'-C2'	-5.52	1.46	1.52
2	B	1343	G	P-O5'	-5.52	1.54	1.59
2	B	2119	A	C2'-O2'	-5.52	1.34	1.41
14	D	23	PRO	CA-C	-5.52	1.41	1.52
1	A	11	C	O3'-P	-5.52	1.54	1.61
2	B	311	A	C2'-C1'	-5.52	1.47	1.53
23	5	131	LEU	N-CA	-5.52	1.35	1.46
2	B	713	G	C5-C6	-5.52	1.36	1.42
2	B	976	G	C5'-C4'	5.52	1.57	1.51
2	B	1264	A	C6-N1	-5.52	1.31	1.35
2	B	1810	A	O3'-P	-5.52	1.54	1.61
2	B	2292	U	C4-C5	-5.52	1.38	1.43
2	B	2360	G	O3'-P	-5.52	1.54	1.61
2	B	2519	U	C3'-O3'	5.52	1.49	1.42
7	M	64	TRP	CD2-CE3	-5.52	1.32	1.40
2	B	755	U	C4'-O4'	-5.52	1.38	1.45
2	B	2650	U	N1-C2	5.52	1.43	1.38
2	B	73	A	C1'-N9	-5.51	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	157	C	N1-C6	-5.51	1.33	1.37
2	B	642	U	C4-O4	-5.51	1.19	1.23
2	B	1295	C	C4-C5	-5.51	1.38	1.43
2	B	1669	A	C6-N1	-5.51	1.31	1.35
2	B	2190	G	C2'-C1'	-5.51	1.47	1.53
2	B	2240	U	C1'-N1	5.51	1.57	1.48
2	B	2394	C	C4'-C3'	-5.51	1.47	1.52
2	B	2631	G	C4'-C3'	-5.51	1.47	1.52
2	B	2683	C	N1-C6	5.51	1.40	1.37
2	B	2727	A	C6-N1	5.51	1.39	1.35
2	B	220	G	C2-N3	5.51	1.37	1.32
2	B	1625	C	P-O5'	-5.51	1.54	1.59
20	E	40	ARG	CZ-NH1	5.51	1.40	1.33
2	B	72	U	O4'-C1'	-5.51	1.34	1.41
2	B	91	A	C6-N6	5.51	1.38	1.33
2	B	92	U	N1-C6	5.51	1.43	1.38
2	B	224	U	C5'-C4'	5.51	1.57	1.51
2	B	682	G	C5'-C4'	5.51	1.57	1.51
2	B	1009	A	N3-C4	-5.51	1.31	1.34
2	B	1705	A	C3'-C2'	-5.51	1.46	1.52
2	B	1921	G	C6-N1	5.51	1.43	1.39
2	B	1929	G	P-O5'	-5.51	1.54	1.59
2	B	1934	C	C4'-C3'	-5.51	1.47	1.52
2	B	2026	U	O3'-P	-5.51	1.54	1.61
2	B	2052	A	C6-N1	5.51	1.39	1.35
2	B	2178	C	C2-O2	-5.51	1.19	1.24
2	B	2438	U	C4'-O4'	-5.51	1.38	1.45
3	0	63	ILE	C-N	5.51	1.46	1.34
5	L	106	GLU	CD-OE1	5.51	1.31	1.25
2	B	43	G	C8-N7	-5.51	1.27	1.30
2	B	1810	A	P-O5'	5.51	1.65	1.59
2	B	1933	G	C3'-C2'	-5.51	1.46	1.52
2	B	2010	G	P-O5'	-5.51	1.54	1.59
2	B	2392	A	N3-C4	-5.51	1.31	1.34
2	B	2677	G	C3'-C2'	-5.51	1.46	1.52
2	B	2835	A	C2-N3	5.51	1.38	1.33
2	B	349	U	P-O5'	-5.51	1.54	1.59
2	B	377	G	O3'-P	-5.51	1.54	1.61
2	B	736	C	C4'-C3'	5.51	1.59	1.53
2	B	1023	U	N1-C2	-5.51	1.33	1.38
2	B	1316	U	N1-C2	-5.51	1.33	1.38
2	B	2062	A	N3-C4	-5.51	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2814	A	C5-C6	-5.51	1.36	1.41
2	B	1464	G	C5'-C4'	5.51	1.57	1.51
2	B	1483	G	C6-O6	-5.51	1.19	1.24
2	B	1831	G	P-O5'	-5.51	1.54	1.59
2	B	2006	C	C4-N4	5.51	1.39	1.33
2	B	2289	G	C4'-C3'	-5.51	1.47	1.52
2	B	2453	A	P-O5'	-5.51	1.54	1.59
29	G	9	VAL	CB-CG1	5.51	1.64	1.52
2	B	67	U	P-O5'	-5.50	1.54	1.59
2	B	468	G	C2'-C1'	-5.50	1.47	1.53
2	B	2372	U	C3'-C2'	-5.50	1.46	1.52
2	B	2751	G	C6-N1	5.50	1.43	1.39
2	B	285	G	P-O5'	-5.50	1.54	1.59
2	B	347	A	P-O5'	-5.50	1.54	1.59
2	B	428	A	C2'-C1'	-5.50	1.47	1.53
2	B	586	A	C8-N7	-5.50	1.27	1.31
2	B	1527	G	C5'-C4'	-5.50	1.44	1.51
2	B	1903	G	C3'-O3'	5.50	1.49	1.42
2	B	2403	C	N3-C4	5.50	1.37	1.33
2	B	2594	C	N1-C6	5.50	1.40	1.37
2	B	300	A	C3'-C2'	-5.50	1.46	1.52
2	B	439	A	C5-C6	-5.50	1.36	1.41
2	B	468	G	O3'-P	-5.50	1.54	1.61
2	B	512	G	C5-C6	-5.50	1.36	1.42
2	B	1156	A	C2'-C1'	-5.50	1.47	1.53
2	B	1839	G	C5-C4	5.50	1.42	1.38
2	B	2249	U	C5'-C4'	-5.50	1.44	1.51
2	B	2448	A	C8-N7	5.50	1.35	1.31
2	B	2475	C	O3'-P	-5.50	1.54	1.61
2	B	2575	C	C3'-O3'	5.50	1.49	1.42
19	X	437	TYR	CE2-CZ	5.50	1.45	1.38
2	B	2186	G	O3'-P	-5.50	1.54	1.61
2	B	2560	A	N7-C5	5.50	1.42	1.39
2	B	2822	G	C5-C4	-5.50	1.34	1.38
1	A	64	G	C5'-C4'	5.50	1.57	1.51
2	B	326	G	N7-C5	-5.50	1.35	1.39
2	B	1158	C	N1-C6	5.50	1.40	1.37
2	B	1708	C	N3-C4	5.50	1.37	1.33
2	B	2549	G	C5-C4	-5.50	1.34	1.38
2	B	2896	C	O4'-C1'	-5.50	1.34	1.41
1	A	105	G	C4'-C3'	-5.50	1.47	1.52
2	B	283	G	C5-C4	5.50	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	348	A	N3-C4	5.50	1.38	1.34
2	B	444	C	C5-C6	-5.50	1.29	1.34
2	B	863	A	O3'-P	-5.50	1.54	1.61
2	B	1272	A	N9-C4	-5.50	1.34	1.37
2	B	1361	G	N9-C4	-5.50	1.33	1.38
2	B	1725	U	C2'-O2'	-5.50	1.34	1.41
2	B	1913	A	C2'-C1'	-5.50	1.47	1.53
2	B	136	G	C6-O6	-5.50	1.19	1.24
2	B	1539	U	N3-C4	5.50	1.43	1.38
2	B	2002	G	C3'-C2'	-5.50	1.46	1.52
2	B	97	C	N3-C4	5.49	1.37	1.33
2	B	204	A	N7-C5	-5.49	1.35	1.39
2	B	268	C	P-O5'	-5.49	1.54	1.59
2	B	451	U	C4-O4	-5.49	1.19	1.23
2	B	512	G	C2'-C1'	-5.49	1.47	1.53
2	B	705	A	C2'-C1'	-5.49	1.47	1.53
2	B	756	A	N3-C4	-5.49	1.31	1.34
2	B	981	A	N9-C4	-5.49	1.34	1.37
2	B	1813	G	C8-N7	5.49	1.34	1.30
2	B	2047	C	C2'-C1'	-5.49	1.47	1.53
2	B	2304	G	C3'-O3'	5.49	1.49	1.42
2	B	2656	U	C5'-C4'	5.49	1.57	1.51
2	B	2756	U	C2-N3	5.49	1.41	1.37
14	D	143	PRO	N-CD	-5.49	1.40	1.47
2	B	61	C	C2'-C1'	-5.49	1.47	1.53
2	B	310	A	C2'-C1'	-5.49	1.47	1.53
2	B	357	C	O3'-P	-5.49	1.54	1.61
2	B	509	C	O4'-C1'	5.49	1.48	1.41
2	B	731	C	N1-C6	5.49	1.40	1.37
2	B	1305	C	C4-N4	5.49	1.38	1.33
2	B	1637	A	C6-N1	5.49	1.39	1.35
2	B	170	U	C1'-N1	-5.49	1.39	1.46
2	B	274	C	C2-O2	5.49	1.29	1.24
2	B	564	C	C5'-C4'	-5.49	1.44	1.51
2	B	781	A	N9-C8	-5.49	1.33	1.37
2	B	2739	U	C2'-C1'	-5.49	1.47	1.53
2	B	1041	G	N9-C8	5.49	1.41	1.37
2	B	1243	C	O4'-C1'	-5.49	1.34	1.41
2	B	2081	U	O4'-C1'	-5.49	1.34	1.41
2	B	2402	U	C4'-O4'	5.49	1.52	1.45
2	B	2508	G	C4'-O4'	-5.49	1.38	1.45
2	B	2575	C	O3'-P	-5.49	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	G	68	ARG	CZ-NH2	5.49	1.40	1.33
2	B	2472	G	N3-C4	5.49	1.39	1.35
2	B	754	U	C2-N3	-5.49	1.33	1.37
2	B	1274	A	C5-C4	-5.49	1.34	1.38
2	B	1432	G	C6-N1	5.49	1.43	1.39
2	B	1545	A	C6-N1	5.49	1.39	1.35
2	B	1687	G	O4'-C1'	-5.49	1.34	1.41
2	B	2446	G	C4'-C3'	-5.49	1.47	1.52
2	B	1127	A	C4'-O4'	-5.48	1.38	1.45
2	B	1838	C	C3'-C2'	-5.48	1.46	1.52
2	B	1888	G	N1-C2	5.48	1.42	1.37
2	B	2641	G	O3'-P	-5.48	1.54	1.61
2	B	2900	A	O3'-P	-5.48	1.54	1.61
2	B	623	C	N3-C4	-5.48	1.30	1.33
2	B	707	G	C5-C4	5.48	1.42	1.38
2	B	1134	A	N3-C4	5.48	1.38	1.34
2	B	2642	G	O4'-C1'	5.48	1.48	1.41
2	B	2654	A	N9-C8	-5.48	1.33	1.37
2	B	2741	A	C8-N7	-5.48	1.27	1.31
2	B	261	G	C5-C6	-5.48	1.36	1.42
2	B	622	G	N9-C4	-5.48	1.33	1.38
2	B	705	A	C8-N7	-5.48	1.27	1.31
2	B	1150	C	N3-C4	5.48	1.37	1.33
2	B	1189	A	C1'-N9	-5.48	1.39	1.46
2	B	1775	U	C2'-C1'	-5.48	1.47	1.53
2	B	2005	A	C6-N6	5.48	1.38	1.33
2	B	2017	U	P-O5'	-5.48	1.54	1.59
2	B	2436	G	N7-C5	-5.48	1.35	1.39
2	B	2517	C	O4'-C1'	-5.48	1.34	1.41
2	B	2764	A	C2'-C1'	-5.48	1.47	1.53
2	B	2889	C	C3'-O3'	-5.48	1.34	1.42
11	Q	24	TYR	CG-CD2	5.48	1.46	1.39
1	A	11	C	C4-C5	-5.48	1.38	1.43
1	A	104	A	N9-C4	5.48	1.41	1.37
1	A	115	A	O3'-P	-5.48	1.54	1.61
2	B	1192	G	N3-C4	-5.48	1.31	1.35
2	B	1695	G	N1-C2	5.48	1.42	1.37
2	B	1793	C	C5'-C4'	5.48	1.57	1.51
2	B	1893	C	C4'-O4'	5.48	1.52	1.45
2	B	136	G	C5-C6	-5.48	1.36	1.42
2	B	374	A	C1'-N9	-5.48	1.39	1.46
2	B	576	U	C4'-C3'	-5.48	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	963	U	O3'-P	-5.48	1.54	1.61
2	B	1247	A	C3'-O3'	-5.48	1.34	1.42
2	B	1662	U	C4'-O4'	-5.48	1.38	1.45
2	B	1726	C	O3'-P	-5.48	1.54	1.61
2	B	1746	A	C4'-O4'	5.48	1.52	1.45
2	B	2064	C	C2'-C1'	-5.48	1.47	1.53
2	B	2602	A	C4'-C3'	5.48	1.59	1.53
20	E	101	TYR	CG-CD1	5.48	1.46	1.39
28	F	28	PRO	N-CA	-5.48	1.38	1.47
2	B	81	G	P-O5'	-5.48	1.54	1.59
2	B	891	G	C6-N1	5.48	1.43	1.39
2	B	1419	A	N9-C4	-5.48	1.34	1.37
2	B	1709	U	N1-C2	-5.48	1.33	1.38
2	B	2014	A	C1'-N9	-5.48	1.39	1.46
1	A	106	G	C5'-C4'	5.47	1.57	1.51
2	B	97	C	C4'-C3'	-5.47	1.47	1.52
2	B	226	A	C3'-C2'	-5.47	1.46	1.52
2	B	322	A	C5'-C4'	5.47	1.57	1.51
2	B	1527	G	N9-C8	5.47	1.41	1.37
2	B	2184	A	N9-C4	-5.47	1.34	1.37
2	B	2707	U	C4-C5	5.47	1.48	1.43
2	B	1692	U	O4'-C1'	5.47	1.48	1.41
2	B	1793	C	C4-C5	5.47	1.47	1.43
2	B	1935	G	C2-N3	5.47	1.37	1.32
2	B	2528	U	C4'-O4'	-5.47	1.38	1.45
27	C	269	ARG	CD-NE	5.47	1.55	1.46
2	B	317	G	C2'-C1'	-5.47	1.47	1.53
2	B	398	C	C4-C5	5.47	1.47	1.43
2	B	84	A	N7-C5	-5.47	1.35	1.39
2	B	316	C	N1-C6	-5.47	1.33	1.37
2	B	558	U	O3'-P	-5.47	1.54	1.61
2	B	1204	A	P-O5'	-5.47	1.54	1.59
2	B	1238	G	P-O5'	5.47	1.65	1.59
2	B	1524	G	O3'-P	-5.47	1.54	1.61
2	B	1525	A	O3'-P	-5.47	1.54	1.61
2	B	2078	C	P-O5'	-5.47	1.54	1.59
2	B	88	G	N7-C5	-5.47	1.35	1.39
2	B	581	C	P-O5'	-5.47	1.54	1.59
2	B	1545	A	N7-C5	-5.47	1.35	1.39
2	B	2291	U	C4-C5	-5.47	1.38	1.43
2	B	2480	C	C4-C5	5.47	1.47	1.43
1	A	112	G	N9-C8	5.47	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	18	U	P-O5'	-5.47	1.54	1.59
2	B	173	A	N1-C2	5.47	1.39	1.34
2	B	393	C	O3'-P	-5.47	1.54	1.61
2	B	1611	C	C2'-C1'	-5.47	1.47	1.53
2	B	1966	A	C2'-C1'	-5.47	1.47	1.53
29	G	94	ARG	CD-NE	5.47	1.55	1.46
1	A	57	A	C2'-O2'	-5.46	1.34	1.41
1	A	70	C	O3'-P	-5.46	1.54	1.61
2	B	533	G	O3'-P	-5.46	1.54	1.61
2	B	1342	A	C4'-C3'	5.46	1.59	1.53
11	Q	10	ARG	CZ-NH1	5.46	1.40	1.33
2	B	1114	C	C4-C5	5.46	1.47	1.43
2	B	1130	U	N1-C2	-5.46	1.33	1.38
2	B	2656	U	C2'-O2'	-5.46	1.34	1.41
2	B	252	G	N9-C8	-5.46	1.34	1.37
2	B	975	A	C5-C4	-5.46	1.34	1.38
2	B	1295	C	C3'-C2'	-5.46	1.46	1.52
2	B	1385	A	C8-N7	-5.46	1.27	1.31
2	B	2306	C	C4-C5	5.46	1.47	1.43
23	5	21	TYR	CG-CD2	5.46	1.46	1.39
23	5	56	ASP	CB-CG	5.46	1.63	1.51
27	C	161	VAL	N-CA	-5.46	1.35	1.46
2	B	773	U	C5'-C4'	-5.46	1.44	1.51
2	B	939	G	C4'-C3'	-5.46	1.47	1.52
2	B	2146	C	O3'-P	-5.46	1.54	1.61
2	B	2404	U	O4'-C1'	-5.46	1.34	1.41
2	B	1184	U	N1-C2	5.46	1.43	1.38
2	B	1335	C	C1'-N1	-5.46	1.39	1.46
2	B	1522	A	N3-C4	-5.46	1.31	1.34
2	B	1748	C	N3-C4	5.46	1.37	1.33
2	B	1813	G	C5-C6	-5.46	1.36	1.42
2	B	2016	U	P-O5'	-5.46	1.54	1.59
2	B	2086	U	C4-O4	-5.46	1.19	1.23
2	B	2106	U	P-O5'	5.46	1.65	1.59
2	B	2340	A	C8-N7	-5.46	1.27	1.31
2	B	2454	G	N3-C4	5.46	1.39	1.35
2	B	2714	G	C5'-C4'	5.46	1.57	1.51
2	B	308	G	C6-N1	5.46	1.43	1.39
2	B	934	U	C2'-C1'	-5.46	1.47	1.53
2	B	1602	U	C4'-C3'	-5.46	1.47	1.52
2	B	1696	G	O3'-P	-5.46	1.54	1.61
2	B	1749	A	C2'-C1'	-5.46	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2271	G	C4'-C3'	5.46	1.59	1.53
8	N	69	ARG	CZ-NH2	5.46	1.40	1.33
1	A	51	G	O4'-C1'	-5.46	1.34	1.41
1	A	99	A	N9-C4	5.46	1.41	1.37
2	B	614	A	N3-C4	-5.46	1.31	1.34
2	B	683	U	N1-C2	5.46	1.43	1.38
2	B	794	A	C4'-C3'	-5.46	1.47	1.52
2	B	1669	A	O3'-P	-5.46	1.54	1.61
2	B	2692	G	C4'-C3'	-5.46	1.47	1.52
13	S	95	ARG	CD-NE	5.46	1.55	1.46
1	A	31	C	N3-C4	5.45	1.37	1.33
2	B	362	A	C2'-O2'	-5.45	1.34	1.41
2	B	1001	A	C5'-C4'	5.45	1.57	1.51
2	B	1230	A	C6-N1	5.45	1.39	1.35
2	B	1292	G	N9-C8	-5.45	1.34	1.37
2	B	1432	G	C5'-C4'	5.45	1.57	1.51
2	B	1598	A	N9-C8	-5.45	1.33	1.37
2	B	1745	A	P-O5'	-5.45	1.54	1.59
2	B	1788	C	N1-C2	5.45	1.45	1.40
2	B	2067	G	C3'-O3'	5.45	1.49	1.42
2	B	2346	A	C6-N6	5.45	1.38	1.33
2	B	2467	C	C5'-C4'	-5.45	1.44	1.51
2	B	278	A	C5-C4	5.45	1.42	1.38
2	B	2578	G	N3-C4	5.45	1.39	1.35
2	B	319	G	C5-C4	-5.45	1.34	1.38
2	B	571	U	N1-C6	-5.45	1.33	1.38
2	B	788	A	C2'-C1'	-5.45	1.47	1.53
2	B	992	C	C3'-C2'	-5.45	1.46	1.52
2	B	1264	A	C4'-O4'	-5.45	1.38	1.45
2	B	1753	G	C3'-O3'	-5.45	1.34	1.42
2	B	1983	G	N9-C4	-5.45	1.33	1.38
2	B	2596	U	C4-C5	5.45	1.48	1.43
2	B	2721	A	C8-N7	-5.45	1.27	1.31
2	B	2734	A	O3'-P	-5.45	1.54	1.61
32	J	83	GLY	N-CA	-5.45	1.37	1.46
2	B	59	U	N1-C2	5.45	1.43	1.38
2	B	266	G	O3'-P	-5.45	1.54	1.61
2	B	851	C	C2'-C1'	-5.45	1.47	1.53
2	B	899	A	C5-C4	-5.45	1.34	1.38
2	B	1018	U	C2'-C1'	-5.45	1.47	1.53
2	B	1388	G	C5-C6	-5.45	1.36	1.42
2	B	1604	C	C4'-C3'	-5.45	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	32	C	C4'-O4'	-5.45	1.38	1.45
2	B	1448	G	C4'-C3'	-5.45	1.47	1.52
2	B	1684	G	O3'-P	-5.45	1.54	1.61
2	B	412	A	C8-N7	5.45	1.35	1.31
2	B	764	A	C3'-C2'	-5.45	1.46	1.52
2	B	1227	G	N3-C4	-5.45	1.31	1.35
2	B	1303	G	C3'-C2'	-5.45	1.46	1.52
2	B	1631	G	C6-N1	5.45	1.43	1.39
2	B	1716	U	N1-C2	-5.45	1.33	1.38
2	B	1734	G	N7-C5	-5.45	1.35	1.39
2	B	2012	G	C5'-C4'	5.45	1.57	1.51
2	B	2019	A	C5-C4	-5.45	1.34	1.38
2	B	2216	G	C4'-C3'	-5.45	1.47	1.52
2	B	2300	C	C3'-C2'	-5.45	1.46	1.52
2	B	2387	U	C5'-C4'	5.45	1.57	1.51
2	B	2772	C	O3'-P	-5.45	1.54	1.61
2	B	386	G	C2'-C1'	-5.44	1.47	1.53
2	B	715	A	N9-C4	5.44	1.41	1.37
2	B	1772	A	C5-C6	5.44	1.46	1.41
2	B	2594	C	N3-C4	5.44	1.37	1.33
2	B	2631	G	C2-N3	5.44	1.37	1.32
2	B	730	A	N9-C8	-5.44	1.33	1.37
2	B	1232	G	C5'-C4'	5.44	1.57	1.51
2	B	1348	C	N3-C4	5.44	1.37	1.33
2	B	1570	A	O3'-P	-5.44	1.54	1.61
2	B	2225	A	C2'-C1'	-5.44	1.47	1.53
2	B	2687	U	O3'-P	-5.44	1.54	1.61
2	B	2777	G	O3'-P	-5.44	1.54	1.61
1	A	90	C	O3'-P	-5.44	1.54	1.61
2	B	31	C	O3'-P	-5.44	1.54	1.61
2	B	119	A	C6-N1	-5.44	1.31	1.35
2	B	795	C	N3-C4	5.44	1.37	1.33
2	B	818	G	N3-C4	-5.44	1.31	1.35
2	B	1580	A	N3-C4	5.44	1.38	1.34
2	B	1762	A	C2-N3	5.44	1.38	1.33
2	B	1773	A	O3'-P	-5.44	1.54	1.61
2	B	2487	G	N9-C8	-5.44	1.34	1.37
2	B	2723	C	C3'-O3'	-5.44	1.34	1.42
2	B	183	C	O3'-P	-5.44	1.54	1.61
2	B	1282	U	C4'-C3'	-5.44	1.47	1.52
2	B	1302	A	N1-C2	-5.44	1.29	1.34
2	B	1581	G	C2-N2	5.44	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1608	A	C2'-C1'	-5.44	1.47	1.53
2	B	2069	G	P-O5'	-5.44	1.54	1.59
2	B	2445	G	N9-C8	-5.44	1.34	1.37
2	B	2761	A	N9-C4	5.44	1.41	1.37
2	B	2776	A	C5'-C4'	-5.44	1.44	1.51
27	C	24	HIS	CB-CG	-5.44	1.40	1.50
2	B	197	A	O3'-P	-5.44	1.54	1.61
2	B	384	A	O3'-P	-5.44	1.54	1.61
2	B	1497	U	C3'-C2'	5.44	1.58	1.52
2	B	1089	A	C5'-C4'	5.43	1.57	1.51
2	B	1358	G	C2-N2	5.43	1.40	1.34
2	B	2727	A	C8-N7	-5.43	1.27	1.31
27	C	122	ALA	N-CA	-5.43	1.35	1.46
2	B	629	G	C1'-N9	-5.43	1.39	1.46
2	B	1124	G	C3'-C2'	-5.43	1.46	1.52
2	B	1456	G	N9-C8	5.43	1.41	1.37
2	B	1520	U	C1'-N1	-5.43	1.39	1.46
2	B	1672	A	C6-N6	5.43	1.38	1.33
2	B	2287	A	O3'-P	-5.43	1.54	1.61
2	B	2816	G	N1-C2	5.43	1.42	1.37
1	A	89	U	C5-C6	5.43	1.39	1.34
2	B	871	U	C4'-C3'	-5.43	1.47	1.52
2	B	267	C	C4'-O4'	5.43	1.52	1.45
2	B	562	U	C2-N3	-5.43	1.33	1.37
2	B	706	A	N1-C2	5.43	1.39	1.34
2	B	1014	A	C8-N7	5.43	1.35	1.31
2	B	1122	G	C4'-O4'	-5.43	1.38	1.45
2	B	1606	C	O3'-P	-5.43	1.54	1.61
2	B	1638	C	C4-C5	5.43	1.47	1.43
2	B	1699	G	C6-N1	5.43	1.43	1.39
2	B	2132	U	N1-C2	5.43	1.43	1.38
2	B	2184	A	C6-N1	5.43	1.39	1.35
2	B	2849	U	C2'-C1'	-5.43	1.47	1.53
13	S	74	ILE	CA-C	-5.43	1.38	1.52
2	B	242	G	O3'-P	-5.43	1.54	1.61
2	B	1561	C	O4'-C1'	-5.43	1.34	1.41
2	B	2431	U	N3-C4	5.43	1.43	1.38
2	B	751	A	N3-C4	-5.43	1.31	1.34
2	B	811	U	C3'-C2'	-5.43	1.46	1.52
2	B	837	C	P-O5'	-5.43	1.54	1.59
2	B	1109	C	O3'-P	-5.43	1.54	1.61
2	B	1212	G	P-O5'	-5.43	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1479	G	N9-C4	-5.43	1.33	1.38
2	B	2450	A	C6-N1	5.43	1.39	1.35
15	T	52	GLU	CD-OE2	5.43	1.31	1.25
23	5	53	ARG	CZ-NH1	5.43	1.40	1.33
2	B	974	G	C2-N2	-5.42	1.29	1.34
2	B	1056	G	N3-C4	-5.42	1.31	1.35
2	B	1082	U	C2'-C1'	-5.42	1.47	1.53
2	B	1313	U	C5'-C4'	-5.42	1.44	1.51
2	B	1936	A	N9-C8	-5.42	1.33	1.37
2	B	2436	G	C5'-C4'	5.42	1.57	1.51
2	B	2614	A	C5-C4	-5.42	1.34	1.38
2	B	2735	G	C5'-C4'	5.42	1.57	1.51
2	B	108	G	C4'-O4'	-5.42	1.38	1.45
2	B	200	U	N3-C4	5.42	1.43	1.38
2	B	1229	C	P-O5'	-5.42	1.54	1.59
2	B	1230	A	C3'-C2'	-5.42	1.46	1.52
2	B	1396	U	C4'-C3'	5.42	1.59	1.53
2	B	1556	C	P-O5'	5.42	1.65	1.59
2	B	2154	A	N9-C8	5.42	1.42	1.37
2	B	2527	C	C2'-C1'	-5.42	1.47	1.53
2	B	2596	U	O4'-C1'	5.42	1.48	1.41
2	B	2774	C	C4'-C3'	-5.42	1.47	1.52
23	5	44	VAL	CB-CG1	5.42	1.64	1.52
2	B	897	C	C2'-O2'	-5.42	1.34	1.41
2	B	2124	G	N7-C5	-5.42	1.35	1.39
2	B	2316	G	N7-C5	-5.42	1.35	1.39
2	B	2517	C	C4-N4	5.42	1.38	1.33
2	B	2548	U	O3'-P	-5.42	1.54	1.61
2	B	2851	A	C6-N1	-5.42	1.31	1.35
1	A	60	C	C4-C5	5.42	1.47	1.43
2	B	471	A	C3'-C2'	-5.42	1.46	1.52
2	B	952	G	N7-C5	-5.42	1.35	1.39
2	B	2213	U	P-O5'	-5.42	1.54	1.59
2	B	2367	G	N9-C4	5.42	1.42	1.38
2	B	2547	A	P-O5'	-5.42	1.54	1.59
2	B	2717	C	C4'-C3'	5.42	1.59	1.53
2	B	2789	C	O3'-P	-5.42	1.54	1.61
15	T	52	GLU	N-CA	-5.42	1.35	1.46
2	B	81	G	C2-N3	-5.42	1.28	1.32
2	B	542	C	P-O5'	-5.42	1.54	1.59
2	B	683	U	C4-C5	-5.42	1.38	1.43
2	B	2544	G	C2-N2	5.42	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2624	G	O3'-P	-5.42	1.54	1.61
26	8	13	ASN	N-CA	-5.42	1.35	1.46
2	B	1116	G	C6-N1	-5.42	1.35	1.39
2	B	2000	C	C2'-C1'	-5.42	1.47	1.53
2	B	2182	U	P-O5'	-5.42	1.54	1.59
2	B	2429	G	C3'-C2'	-5.42	1.46	1.52
2	B	2628	C	O3'-P	-5.42	1.54	1.61
14	D	153	GLY	CA-C	-5.42	1.43	1.51
23	5	215	SER	CA-CB	5.42	1.61	1.52
1	A	85	G	C4'-C3'	-5.42	1.47	1.52
2	B	625	G	C6-N1	-5.42	1.35	1.39
2	B	749	A	C3'-C2'	-5.42	1.46	1.52
2	B	1268	A	O4'-C1'	5.42	1.48	1.41
2	B	1824	G	C2-N3	5.42	1.37	1.32
2	B	2384	U	C2-N3	-5.42	1.33	1.37
2	B	2428	G	N9-C4	5.42	1.42	1.38
2	B	2505	G	O4'-C1'	5.42	1.48	1.41
3	0	1	SER	CA-CB	5.42	1.61	1.52
2	B	483	A	N3-C4	-5.41	1.31	1.34
2	B	861	A	C5-C4	-5.41	1.34	1.38
2	B	1797	G	C2'-C1'	-5.41	1.47	1.53
2	B	2029	G	C3'-O3'	5.41	1.49	1.42
2	B	2237	G	O4'-C1'	-5.41	1.34	1.41
20	E	88	ARG	NE-CZ	5.41	1.40	1.33
1	A	45	A	C3'-C2'	-5.41	1.46	1.52
2	B	85	G	C6-O6	5.41	1.29	1.24
2	B	450	G	C8-N7	-5.41	1.27	1.30
2	B	506	G	N3-C4	-5.41	1.31	1.35
2	B	1218	G	C5-C4	-5.41	1.34	1.38
2	B	1737	G	N7-C5	-5.41	1.36	1.39
2	B	2777	G	N9-C8	-5.41	1.34	1.37
23	5	223	ALA	N-CA	-5.41	1.35	1.46
2	B	328	U	P-O5'	-5.41	1.54	1.59
2	B	384	A	C3'-C2'	-5.41	1.46	1.52
2	B	528	A	C6-N6	5.41	1.38	1.33
2	B	602	A	N3-C4	-5.41	1.31	1.34
2	B	1561	C	O3'-P	-5.41	1.54	1.61
2	B	1572	A	N1-C2	5.41	1.39	1.34
2	B	1623	G	C4'-O4'	-5.41	1.38	1.45
2	B	1730	C	C5-C6	5.41	1.38	1.34
2	B	2297	A	C8-N7	-5.41	1.27	1.31
2	B	2557	G	N3-C4	5.41	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2824	C	C2'-C1'	-5.41	1.47	1.53
2	B	655	A	P-O5'	-5.41	1.54	1.59
2	B	862	G	N1-C2	5.41	1.42	1.37
2	B	1455	G	N7-C5	-5.41	1.36	1.39
2	B	1694	C	C2'-C1'	-5.41	1.47	1.53
2	B	2023	C	P-O5'	-5.41	1.54	1.59
2	B	2331	G	N9-C8	5.41	1.41	1.37
2	B	2445	G	C2-N2	5.41	1.40	1.34
2	B	2641	G	C4'-C3'	-5.41	1.47	1.52
19	X	73	GLU	CD-OE1	5.41	1.31	1.25
21	Y	76	ARG	NE-CZ	5.41	1.40	1.33
27	C	181	ARG	CZ-NH2	5.41	1.40	1.33
2	B	73	A	C5-C4	-5.41	1.34	1.38
2	B	282	A	C5-C6	-5.41	1.36	1.41
2	B	301	G	N1-C2	5.41	1.42	1.37
2	B	591	U	N1-C6	-5.41	1.33	1.38
2	B	900	A	C2'-C1'	5.41	1.59	1.53
2	B	1312	U	P-O5'	5.41	1.65	1.59
2	B	1524	G	N9-C8	-5.41	1.34	1.37
2	B	1998	A	C6-N1	5.41	1.39	1.35
2	B	2147	A	C4'-C3'	-5.41	1.47	1.52
2	B	2391	G	C5-C4	5.41	1.42	1.38
2	B	2463	C	C5-C6	-5.41	1.30	1.34
2	B	2663	G	C2'-C1'	-5.41	1.47	1.53
1	A	30	C	N1-C2	5.41	1.45	1.40
2	B	28	A	C3'-O3'	5.41	1.49	1.42
2	B	609	A	N9-C4	-5.41	1.34	1.37
2	B	666	A	C5-C4	-5.41	1.34	1.38
2	B	743	A	O3'-P	-5.41	1.54	1.61
2	B	1022	G	N9-C8	-5.41	1.34	1.37
2	B	1945	G	C2-N3	5.41	1.37	1.32
2	B	2476	A	C5'-C4'	-5.41	1.44	1.51
2	B	459	U	C5-C6	5.40	1.39	1.34
2	B	1098	A	N3-C4	-5.40	1.31	1.34
2	B	2551	C	C5-C6	-5.40	1.30	1.34
1	A	79	G	O4'-C1'	-5.40	1.34	1.41
2	B	11	C	C4-C5	5.40	1.47	1.43
2	B	1422	G	C2-N2	5.40	1.40	1.34
2	B	1504	A	C5-C4	5.40	1.42	1.38
2	B	1706	C	C2-N3	-5.40	1.31	1.35
2	B	1957	C	C4'-C3'	5.40	1.59	1.53
2	B	2376	A	N7-C5	-5.40	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2606	C	C2'-C1'	-5.40	1.47	1.53
2	B	2688	G	N9-C4	-5.40	1.33	1.38
1	A	55	U	C4-C5	-5.40	1.38	1.43
1	A	68	C	C2'-C1'	-5.40	1.47	1.53
2	B	379	G	O4'-C1'	5.40	1.48	1.41
2	B	395	U	C2-O2	5.40	1.27	1.22
2	B	696	G	C4'-C3'	-5.40	1.47	1.52
2	B	928	A	C3'-C2'	-5.40	1.46	1.52
2	B	1107	G	C1'-N9	-5.40	1.39	1.46
2	B	1298	C	C5-C6	5.40	1.38	1.34
2	B	1482	G	N9-C8	-5.40	1.34	1.37
2	B	2468	A	O3'-P	-5.40	1.54	1.61
2	B	2592	G	P-O5'	-5.40	1.54	1.59
2	B	26	G	C5-C6	-5.40	1.36	1.42
2	B	1664	A	N1-C2	-5.40	1.29	1.34
2	B	2024	G	O4'-C1'	-5.40	1.34	1.41
2	B	2058	A	C2'-C1'	-5.40	1.47	1.53
1	A	52	A	C5-C4	5.40	1.42	1.38
2	B	939	G	O3'-P	-5.40	1.54	1.61
2	B	948	C	C5'-C4'	5.40	1.57	1.51
2	B	2262	U	N3-C4	5.40	1.43	1.38
2	B	2460	U	C2-N3	5.40	1.41	1.37
2	B	78	U	C4-C5	-5.40	1.38	1.43
2	B	1915	U	C5'-C4'	5.40	1.57	1.51
4	K	45	GLU	N-CA	-5.40	1.35	1.46
2	B	566	U	C4-O4	-5.39	1.19	1.23
2	B	637	A	C4'-C3'	-5.39	1.47	1.52
2	B	935	C	C1'-N1	-5.39	1.39	1.46
2	B	1171	G	N1-C2	5.39	1.42	1.37
2	B	1911	U	C4'-C3'	-5.39	1.47	1.52
2	B	2299	U	C1'-N1	-5.39	1.39	1.46
19	X	441	TYR	CZ-OH	5.39	1.47	1.37
2	B	1547	C	N3-C4	5.39	1.37	1.33
2	B	1586	A	C3'-C2'	-5.39	1.46	1.52
2	B	2601	C	N3-C4	5.39	1.37	1.33
2	B	1060	U	C3'-C2'	5.39	1.58	1.52
2	B	1674	G	C5-C6	-5.39	1.36	1.42
2	B	2242	G	C2'-C1'	-5.39	1.47	1.53
2	B	501	A	C6-N6	5.39	1.38	1.33
2	B	669	G	O3'-P	-5.39	1.54	1.61
2	B	1085	A	C5-C4	-5.39	1.34	1.38
2	B	1362	C	O3'-P	-5.39	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1368	G	C2-N3	5.39	1.37	1.32
2	B	2019	A	C5-C6	-5.39	1.36	1.41
2	B	2032	G	N3-C4	5.39	1.39	1.35
2	B	2141	G	C5'-C4'	5.39	1.57	1.51
2	B	2179	C	C5-C6	-5.39	1.30	1.34
2	B	2495	G	N1-C2	5.39	1.42	1.37
2	B	2766	A	C8-N7	-5.39	1.27	1.31
2	B	2797	U	N1-C2	5.39	1.43	1.38
1	A	55	U	C5'-C4'	5.39	1.57	1.51
2	B	507	A	N7-C5	-5.39	1.36	1.39
2	B	566	U	N1-C2	-5.39	1.33	1.38
2	B	1547	C	N1-C6	5.39	1.40	1.37
2	B	2467	C	C3'-C2'	-5.39	1.46	1.52
2	B	55	G	C6-N1	5.39	1.43	1.39
2	B	177	G	C5-C6	-5.39	1.36	1.42
2	B	623	C	O3'-P	-5.39	1.54	1.61
2	B	689	A	C6-N1	5.39	1.39	1.35
2	B	700	G	C8-N7	5.39	1.34	1.30
2	B	798	G	O4'-C1'	-5.39	1.34	1.41
2	B	992	C	P-O5'	-5.39	1.54	1.59
2	B	1024	G	C2-N2	-5.39	1.29	1.34
2	B	1494	A	C2'-C1'	-5.39	1.47	1.53
2	B	1594	U	P-O5'	-5.39	1.54	1.59
2	B	1718	G	O3'-P	-5.39	1.54	1.61
2	B	2099	U	C4'-C3'	5.39	1.59	1.53
2	B	2232	C	C4-N4	5.39	1.38	1.33
2	B	2318	G	N9-C4	-5.39	1.33	1.38
2	B	2346	A	C2'-C1'	-5.39	1.47	1.53
2	B	608	A	N1-C2	5.38	1.39	1.34
2	B	802	A	N3-C4	-5.38	1.31	1.34
2	B	940	G	P-O5'	-5.38	1.54	1.59
2	B	1626	A	C2'-C1'	-5.38	1.47	1.53
2	B	1651	G	C2-N2	5.38	1.40	1.34
2	B	2132	U	P-O5'	-5.38	1.54	1.59
2	B	2506	U	O3'-P	-5.38	1.54	1.61
2	B	2576	G	N9-C8	-5.38	1.34	1.37
1	A	104	A	C6-N6	5.38	1.38	1.33
2	B	84	A	C6-N6	5.38	1.38	1.33
2	B	207	A	N9-C8	-5.38	1.33	1.37
2	B	326	G	C1'-N9	-5.38	1.39	1.46
2	B	136	G	C4'-C3'	-5.38	1.47	1.52
2	B	1053	C	P-O5'	-5.38	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2169	A	P-O5'	-5.38	1.54	1.59
2	B	2308	G	C2-N2	-5.38	1.29	1.34
2	B	2828	G	C6-O6	-5.38	1.19	1.24
23	5	9	ARG	CZ-NH2	5.38	1.40	1.33
2	B	471	A	C8-N7	-5.38	1.27	1.31
2	B	2052	A	C1'-N9	-5.38	1.39	1.46
2	B	2330	G	C1'-N9	-5.38	1.39	1.46
2	B	2509	G	C5-C4	-5.38	1.34	1.38
1	A	63	C	P-O5'	-5.38	1.54	1.59
2	B	55	G	O4'-C1'	-5.38	1.34	1.41
2	B	1505	A	C2'-O2'	-5.38	1.34	1.41
2	B	1631	G	N3-C4	-5.38	1.31	1.35
2	B	1703	G	P-O5'	-5.38	1.54	1.59
2	B	1797	G	C5-C6	-5.38	1.36	1.42
2	B	2143	C	C2'-C1'	-5.38	1.47	1.53
2	B	2284	A	N9-C8	-5.38	1.33	1.37
2	B	2346	A	N9-C8	-5.38	1.33	1.37
2	B	2623	G	N1-C2	5.38	1.42	1.37
2	B	2768	U	O3'-P	-5.38	1.54	1.61
2	B	68	G	C2-N2	5.38	1.40	1.34
2	B	564	C	O3'-P	-5.38	1.54	1.61
2	B	866	A	C8-N7	-5.38	1.27	1.31
2	B	892	A	C2'-C1'	-5.38	1.47	1.53
2	B	1269	A	C4'-O4'	-5.38	1.38	1.45
2	B	1425	G	O3'-P	-5.38	1.54	1.61
2	B	1506	U	C2-N3	5.38	1.41	1.37
2	B	1718	G	C2'-C1'	-5.38	1.47	1.53
2	B	1980	G	N1-C2	5.38	1.42	1.37
2	B	2053	G	C2-N3	5.38	1.37	1.32
2	B	2201	G	N9-C8	5.38	1.41	1.37
2	B	2840	C	N1-C6	-5.38	1.33	1.37
28	F	99	PHE	CG-CD1	5.38	1.46	1.38
2	B	87	U	C4'-C3'	-5.38	1.47	1.52
2	B	88	G	N9-C4	-5.38	1.33	1.38
2	B	485	C	C4'-C3'	5.38	1.59	1.53
2	B	655	A	C6-N1	5.38	1.39	1.35
2	B	2227	A	C6-N6	5.38	1.38	1.33
13	S	2	GLU	CA-C	-5.38	1.39	1.52
1	A	68	C	C4-C5	-5.37	1.38	1.43
2	B	280	U	P-O5'	-5.37	1.54	1.59
2	B	493	G	C5-C6	-5.37	1.36	1.42
2	B	1080	A	C6-N1	5.37	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1257	C	C5-C6	-5.37	1.30	1.34
2	B	1261	C	C5-C6	-5.37	1.30	1.34
2	B	1570	A	N7-C5	-5.37	1.36	1.39
2	B	1927	A	O3'-P	-5.37	1.54	1.61
1	A	117	G	C5'-C4'	5.37	1.57	1.51
2	B	102	U	C3'-C2'	-5.37	1.46	1.52
2	B	836	G	C2-N3	5.37	1.37	1.32
2	B	1093	G	C2-N3	5.37	1.37	1.32
2	B	1272	A	P-O5'	-5.37	1.54	1.59
2	B	1405	U	C4-O4	5.37	1.27	1.23
2	B	1733	G	N7-C5	5.37	1.42	1.39
2	B	1739	A	C8-N7	-5.37	1.27	1.31
2	B	2044	C	C4-C5	-5.37	1.38	1.43
2	B	2204	G	C2-N2	5.37	1.40	1.34
2	B	2508	G	C5-C4	-5.37	1.34	1.38
2	B	2828	G	C2-N3	5.37	1.37	1.32
2	B	2872	A	C5-C4	5.37	1.42	1.38
1	A	45	A	C6-N1	-5.37	1.31	1.35
2	B	222	A	N3-C4	5.37	1.38	1.34
2	B	1430	G	C4'-C3'	-5.37	1.47	1.52
2	B	1842	G	N3-C4	-5.37	1.31	1.35
1	A	34	A	C2'-C1'	-5.37	1.47	1.53
2	B	304	U	P-O5'	-5.37	1.54	1.59
2	B	407	G	N7-C5	-5.37	1.36	1.39
2	B	1063	G	P-O5'	5.37	1.65	1.59
2	B	1131	G	C6-N1	5.37	1.43	1.39
2	B	1985	C	O3'-P	5.37	1.67	1.61
2	B	2484	G	C2-N3	5.37	1.37	1.32
2	B	2890	G	C2-N3	5.37	1.37	1.32
2	B	1138	G	N9-C8	-5.37	1.34	1.37
2	B	1362	C	C4-N4	5.37	1.38	1.33
2	B	1730	C	C4-C5	5.37	1.47	1.43
2	B	2222	C	C3'-C2'	-5.37	1.46	1.52
2	B	2228	G	N9-C8	-5.37	1.34	1.37
2	B	2839	G	C2'-C1'	-5.37	1.47	1.53
2	B	618	G	O3'-P	-5.37	1.54	1.61
2	B	775	G	N9-C8	5.37	1.41	1.37
2	B	905	A	C1'-N9	-5.37	1.39	1.46
2	B	976	G	C2'-C1'	-5.37	1.47	1.53
2	B	1008	A	N3-C4	-5.37	1.31	1.34
2	B	1178	C	C2'-C1'	-5.37	1.47	1.53
2	B	1285	A	C6-N1	5.37	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1287	A	P-O5'	5.37	1.65	1.59
2	B	1434	A	C3'-O3'	5.37	1.49	1.42
2	B	1640	A	C1'-N9	5.37	1.56	1.48
2	B	2369	A	C6-N1	-5.37	1.31	1.35
2	B	2834	G	N9-C8	-5.37	1.34	1.37
2	B	2866	U	C5-C6	5.37	1.39	1.34
16	2	44	ARG	CZ-NH1	5.37	1.40	1.33
2	B	255	A	P-O5'	-5.36	1.54	1.59
2	B	1252	G	N9-C4	-5.36	1.33	1.38
2	B	1264	A	C1'-N9	-5.36	1.39	1.46
2	B	1292	G	N7-C5	-5.36	1.36	1.39
2	B	1728	C	N3-C4	5.36	1.37	1.33
2	B	1733	G	C8-N7	-5.36	1.27	1.30
2	B	2199	A	C4'-O4'	-5.36	1.38	1.45
2	B	2446	G	C6-O6	-5.36	1.19	1.24
2	B	2654	A	O3'-P	-5.36	1.54	1.61
2	B	2865	U	P-O5'	5.36	1.65	1.59
10	P	107	ALA	N-CA	-5.36	1.35	1.46
19	X	308	PHE	CE2-CZ	5.36	1.47	1.37
2	B	491	G	C5'-C4'	5.36	1.57	1.51
2	B	1906	G	C5'-C4'	5.36	1.57	1.51
2	B	2020	A	O3'-P	-5.36	1.54	1.61
2	B	2383	G	N3-C4	-5.36	1.31	1.35
2	B	2589	A	N3-C4	-5.36	1.31	1.34
2	B	2624	G	C5-C6	5.36	1.47	1.42
12	R	20	VAL	CA-C	-5.36	1.39	1.52
1	A	77	U	N3-C4	5.36	1.43	1.38
2	B	91	A	C3'-C2'	5.36	1.58	1.52
2	B	284	U	N3-C4	-5.36	1.33	1.38
2	B	707	G	C3'-C2'	-5.36	1.46	1.52
2	B	769	U	O3'-P	-5.36	1.54	1.61
2	B	771	G	C1'-N9	-5.36	1.39	1.46
2	B	1047	G	O3'-P	-5.36	1.54	1.61
2	B	1074	G	P-O5'	-5.36	1.54	1.59
2	B	1133	A	C8-N7	-5.36	1.27	1.31
2	B	1283	G	C6-O6	-5.36	1.19	1.24
2	B	1337	G	C5-C6	-5.36	1.36	1.42
2	B	1347	A	P-O5'	-5.36	1.54	1.59
2	B	1740	G	C2-N3	5.36	1.37	1.32
2	B	2084	C	C2'-C1'	-5.36	1.47	1.53
2	B	2180	U	N3-C4	5.36	1.43	1.38
2	B	2749	A	C4'-C3'	5.36	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2792	A	O4'-C1'	5.36	1.48	1.41
2	B	226	A	C6-N6	5.36	1.38	1.33
2	B	1343	G	C3'-C2'	-5.36	1.46	1.52
2	B	2229	U	C2'-C1'	-5.36	1.47	1.53
2	B	2367	G	C4'-C3'	-5.36	1.47	1.52
2	B	2764	A	N9-C8	5.36	1.42	1.37
2	B	2870	C	O3'-P	-5.36	1.54	1.61
27	C	160	TYR	CE1-CZ	5.36	1.45	1.38
1	A	110	C	C2-O2	-5.36	1.19	1.24
2	B	508	A	C2'-C1'	-5.36	1.47	1.53
2	B	1027	A	C3'-O3'	5.36	1.49	1.42
2	B	1236	G	C2-N2	-5.36	1.29	1.34
2	B	1337	G	P-O5'	-5.36	1.54	1.59
2	B	1610	A	P-O5'	-5.36	1.54	1.59
2	B	1815	A	C3'-C2'	-5.36	1.46	1.52
2	B	2705	A	C2'-C1'	-5.36	1.47	1.53
2	B	2885	G	N1-C2	5.36	1.42	1.37
24	6	33	ARG	CD-NE	5.36	1.55	1.46
2	B	359	G	C2-N3	-5.36	1.28	1.32
2	B	947	A	C2-N3	5.36	1.38	1.33
2	B	969	G	C5'-C4'	5.36	1.57	1.51
2	B	1133	A	C2'-C1'	-5.36	1.47	1.53
2	B	1840	G	N9-C8	5.36	1.41	1.37
2	B	1908	C	N1-C6	5.36	1.40	1.37
2	B	2239	G	P-O5'	-5.36	1.54	1.59
2	B	2204	G	C2-N3	5.35	1.37	1.32
2	B	69	C	C3'-C2'	5.35	1.58	1.52
2	B	572	A	N9-C8	-5.35	1.33	1.37
2	B	1810	A	N9-C4	-5.35	1.34	1.37
2	B	2589	A	N1-C2	-5.35	1.29	1.34
2	B	2600	A	O4'-C1'	-5.35	1.34	1.41
2	B	2633	G	O4'-C1'	-5.35	1.34	1.41
3	0	66	VAL	CA-CB	-5.35	1.43	1.54
2	B	1019	U	N3-C4	-5.35	1.33	1.38
2	B	1138	G	C4'-C3'	-5.35	1.47	1.52
2	B	2157	G	C8-N7	5.35	1.34	1.30
23	5	134	ARG	CZ-NH2	5.35	1.40	1.33
2	B	311	A	N1-C2	5.35	1.39	1.34
2	B	381	G	C2'-O2'	-5.35	1.34	1.41
2	B	403	U	N1-C2	-5.35	1.33	1.38
2	B	833	A	N7-C5	5.35	1.42	1.39
2	B	888	C	C3'-C2'	5.35	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1350	C	C3'-C2'	-5.35	1.46	1.52
2	B	2852	G	N7-C5	-5.35	1.36	1.39
2	B	583	G	O4'-C1'	-5.35	1.34	1.41
2	B	681	G	C5-C6	-5.35	1.37	1.42
2	B	857	G	C4'-O4'	-5.35	1.38	1.45
2	B	1087	G	C2-N2	5.35	1.39	1.34
2	B	1248	G	C4'-C3'	-5.35	1.47	1.52
2	B	1416	G	N9-C8	-5.35	1.34	1.37
2	B	2106	U	O4'-C1'	5.35	1.48	1.41
2	B	2140	G	C6-N1	5.35	1.43	1.39
2	B	377	G	C5-C6	-5.35	1.37	1.42
2	B	510	C	N1-C6	5.35	1.40	1.37
2	B	943	A	C1'-N9	-5.35	1.39	1.46
2	B	2202	U	C5'-C4'	5.35	1.57	1.51
1	A	15	A	C5-C4	-5.34	1.35	1.38
1	A	37	C	C5-C6	-5.34	1.30	1.34
1	A	87	U	C5-C6	5.34	1.39	1.34
2	B	389	G	C8-N7	5.34	1.34	1.30
2	B	745	G	N7-C5	-5.34	1.36	1.39
2	B	862	G	C5-C6	-5.34	1.37	1.42
2	B	1370	C	C4'-C3'	5.34	1.59	1.53
2	B	1496	A	N7-C5	-5.34	1.36	1.39
2	B	2382	G	P-O5'	-5.34	1.54	1.59
2	B	2540	C	C2-N3	5.34	1.40	1.35
2	B	2720	U	N1-C2	-5.34	1.33	1.38
2	B	2740	A	N9-C4	-5.34	1.34	1.37
27	C	170	TYR	CE1-CZ	5.34	1.45	1.38
2	B	2618	G	C3'-C2'	-5.34	1.46	1.52
2	B	2659	G	N3-C4	-5.34	1.31	1.35
2	B	2803	G	C4'-C3'	5.34	1.59	1.53
2	B	617	G	C3'-C2'	-5.34	1.46	1.52
2	B	806	C	C5'-C4'	-5.34	1.45	1.51
2	B	1093	G	N9-C4	-5.34	1.33	1.38
2	B	1293	C	P-O5'	-5.34	1.54	1.59
2	B	1942	C	C2-N3	5.34	1.40	1.35
2	B	2333	A	N3-C4	-5.34	1.31	1.34
2	B	2658	C	O4'-C1'	-5.34	1.34	1.41
2	B	2675	A	C3'-C2'	-5.34	1.46	1.52
2	B	2831	G	C5'-C4'	-5.34	1.45	1.51
2	B	2880	C	N1-C2	5.34	1.45	1.40
2	B	40	U	C2-N3	5.34	1.41	1.37
2	B	221	A	C5-C6	-5.34	1.36	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	618	G	C2-N3	5.34	1.37	1.32
2	B	621	A	C3'-O3'	5.34	1.49	1.42
2	B	1296	G	C3'-O3'	5.34	1.49	1.42
2	B	1642	G	C8-N7	-5.34	1.27	1.30
2	B	1692	U	N1-C6	-5.34	1.33	1.38
2	B	2472	G	C6-N1	5.34	1.43	1.39
18	W	58	SER	CA-CB	-5.34	1.45	1.52
2	B	328	U	C3'-C2'	5.34	1.58	1.52
2	B	603	A	C5-C4	-5.34	1.35	1.38
2	B	1688	U	O3'-P	-5.34	1.54	1.61
2	B	1773	A	N3-C4	-5.34	1.31	1.34
2	B	1807	G	P-OP2	-5.34	1.39	1.49
1	A	22	U	P-O5'	5.34	1.65	1.59
2	B	582	A	O3'-P	-5.34	1.54	1.61
2	B	649	G	C4'-O4'	5.34	1.52	1.45
2	B	960	A	N9-C4	5.34	1.41	1.37
2	B	1746	A	C3'-C2'	-5.34	1.46	1.52
2	B	2421	G	N7-C5	5.34	1.42	1.39
2	B	2649	C	N1-C6	5.34	1.40	1.37
2	B	165	A	C6-N6	5.33	1.38	1.33
2	B	1825	U	P-O5'	-5.33	1.54	1.59
2	B	2515	C	C4'-O4'	-5.33	1.38	1.45
2	B	2658	C	C2'-C1'	-5.33	1.47	1.53
2	B	911	A	N9-C8	-5.33	1.33	1.37
2	B	1381	G	C6-N1	-5.33	1.35	1.39
2	B	1545	A	C2'-C1'	-5.33	1.47	1.53
2	B	1971	U	C3'-C2'	-5.33	1.46	1.52
2	B	2624	G	N7-C5	-5.33	1.36	1.39
2	B	354	A	C6-N6	5.33	1.38	1.33
2	B	545	U	N3-C4	-5.33	1.33	1.38
2	B	973	A	C2'-C1'	-5.33	1.47	1.53
2	B	1673	G	N3-C4	-5.33	1.31	1.35
2	B	1781	U	N3-C4	5.33	1.43	1.38
2	B	2279	G	O4'-C1'	-5.33	1.34	1.41
2	B	2623	G	N3-C4	-5.33	1.31	1.35
2	B	2725	A	C2'-C1'	-5.33	1.47	1.53
2	B	2813	A	C5-C4	-5.33	1.35	1.38
23	5	122	ARG	NE-CZ	5.33	1.40	1.33
1	A	93	C	C3'-C2'	-5.33	1.46	1.52
1	A	94	A	C5-C4	-5.33	1.35	1.38
1	A	106	G	C2'-C1'	-5.33	1.47	1.53
2	B	871	U	C3'-C2'	-5.33	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1787	A	O4'-C1'	-5.33	1.34	1.41
1	A	62	C	C5-C6	5.33	1.38	1.34
2	B	656	G	C4'-C3'	-5.33	1.47	1.52
2	B	1183	U	C3'-C2'	-5.33	1.46	1.52
2	B	1842	G	C5-C4	5.33	1.42	1.38
2	B	1931	U	C4-C5	5.33	1.48	1.43
2	B	2167	U	N1-C2	5.33	1.43	1.38
2	B	2900	A	C5-C4	5.33	1.42	1.38
2	B	1230	A	C8-N7	5.33	1.35	1.31
2	B	1576	U	O3'-P	-5.33	1.54	1.61
2	B	1909	C	C2-O2	5.33	1.29	1.24
2	B	2540	C	N1-C2	5.33	1.45	1.40
2	B	693	A	C4'-O4'	-5.33	1.38	1.45
2	B	830	G	C4'-O4'	5.33	1.52	1.45
2	B	883	G	N3-C4	5.33	1.39	1.35
2	B	944	C	C4'-O4'	-5.33	1.38	1.45
2	B	959	A	C6-N1	5.33	1.39	1.35
2	B	1078	U	C2'-C1'	-5.33	1.47	1.53
2	B	1349	C	C1'-N1	-5.33	1.39	1.46
2	B	1372	U	N1-C6	-5.33	1.33	1.38
2	B	1486	U	N1-C2	-5.33	1.33	1.38
2	B	1773	A	C8-N7	-5.33	1.27	1.31
2	B	2039	U	C2'-C1'	-5.33	1.47	1.53
2	B	2198	A	N7-C5	-5.33	1.36	1.39
2	B	2383	G	N9-C4	-5.33	1.33	1.38
2	B	2393	U	C2'-C1'	-5.33	1.47	1.53
2	B	2417	C	C4-C5	5.33	1.47	1.43
2	B	2446	G	N9-C8	5.33	1.41	1.37
2	B	2477	U	C4'-O4'	-5.33	1.38	1.45
8	N	17	ARG	NE-CZ	5.33	1.40	1.33
1	A	107	G	N7-C5	-5.32	1.36	1.39
2	B	969	G	C5-C4	5.32	1.42	1.38
2	B	1431	A	P-O5'	-5.32	1.54	1.59
2	B	1687	G	P-O5'	-5.32	1.54	1.59
2	B	1705	A	C6-N1	5.32	1.39	1.35
2	B	2407	A	C4'-O4'	-5.32	1.38	1.45
1	A	38	C	C4-N4	5.32	1.38	1.33
1	A	100	G	N1-C2	5.32	1.42	1.37
2	B	112	U	C5'-C4'	-5.32	1.45	1.51
2	B	1498	C	O3'-P	-5.32	1.54	1.61
2	B	1749	A	O3'-P	-5.32	1.54	1.61
2	B	2215	C	C3'-C2'	-5.32	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2228	G	C6-N1	5.32	1.43	1.39
2	B	2475	C	C2'-C1'	-5.32	1.47	1.53
2	B	685	A	N7-C5	-5.32	1.36	1.39
2	B	1219	U	C4'-C3'	-5.32	1.47	1.52
2	B	247	G	C6-N1	-5.32	1.35	1.39
2	B	461	C	N3-C4	5.32	1.37	1.33
2	B	718	A	N1-C2	5.32	1.39	1.34
2	B	789	A	N1-C2	5.32	1.39	1.34
2	B	797	G	C2'-O2'	-5.32	1.34	1.41
2	B	1353	A	C5-C4	-5.32	1.35	1.38
2	B	1746	A	C5'-C4'	5.32	1.57	1.51
2	B	1953	A	C8-N7	-5.32	1.27	1.31
2	B	2630	G	C1'-N9	-5.32	1.39	1.46
2	B	2755	C	N1-C2	-5.32	1.34	1.40
1	A	60	C	C4'-O4'	5.32	1.52	1.45
1	A	78	A	N7-C5	-5.32	1.36	1.39
2	B	557	C	O3'-P	-5.32	1.54	1.61
2	B	1024	G	C2'-O2'	-5.32	1.34	1.41
2	B	1098	A	O3'-P	-5.32	1.54	1.61
2	B	1404	C	C4-N4	5.32	1.38	1.33
2	B	1534	U	C2-N3	5.32	1.41	1.37
2	B	1980	G	C2'-C1'	-5.32	1.47	1.53
2	B	2596	U	O3'-P	-5.32	1.54	1.61
2	B	2643	G	C8-N7	-5.32	1.27	1.30
2	B	2694	G	C2-N3	5.32	1.37	1.32
2	B	2874	C	O3'-P	-5.32	1.54	1.61
2	B	371	A	N7-C5	-5.31	1.36	1.39
2	B	716	A	N7-C5	-5.31	1.36	1.39
2	B	823	C	C2'-C1'	-5.31	1.47	1.53
2	B	854	C	C5-C6	-5.31	1.30	1.34
2	B	2529	G	C4'-O4'	-5.31	1.38	1.45
2	B	54	G	C5-C4	-5.31	1.34	1.38
2	B	1162	G	C5-C6	-5.31	1.37	1.42
2	B	1357	C	C2-N3	5.31	1.40	1.35
2	B	1384	A	C1'-N9	-5.31	1.39	1.46
2	B	1452	G	C2-N2	5.31	1.39	1.34
2	B	11	C	C3'-C2'	-5.31	1.47	1.52
2	B	353	C	N3-C4	5.31	1.37	1.33
2	B	993	G	C3'-C2'	-5.31	1.47	1.52
2	B	2010	G	O3'-P	-5.31	1.54	1.61
16	2	45	GLY	N-CA	-5.31	1.38	1.46
2	B	76	C	C3'-C2'	-5.31	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	196	A	C6-N1	5.31	1.39	1.35
2	B	991	C	C4'-C3'	-5.31	1.47	1.52
2	B	1035	U	C3'-C2'	-5.31	1.47	1.52
2	B	1107	G	C4'-C3'	5.31	1.58	1.53
2	B	1220	G	N1-C2	5.31	1.42	1.37
2	B	1236	G	C3'-O3'	5.31	1.49	1.42
2	B	1431	A	C2-N3	5.31	1.38	1.33
2	B	1441	G	C2-N3	5.31	1.36	1.32
2	B	1698	A	C6-N6	5.31	1.38	1.33
2	B	2227	A	C6-N1	5.31	1.39	1.35
2	B	2395	C	C2-N3	-5.31	1.31	1.35
2	B	221	A	O3'-P	-5.31	1.54	1.61
2	B	300	A	C5-C4	5.31	1.42	1.38
2	B	355	U	C3'-C2'	-5.31	1.47	1.52
2	B	446	G	N9-C8	-5.31	1.34	1.37
2	B	999	U	N1-C2	-5.31	1.33	1.38
2	B	1770	G	N1-C2	5.31	1.42	1.37
2	B	1374	G	C2-N3	5.31	1.36	1.32
2	B	2194	U	O3'-P	-5.31	1.54	1.61
2	B	2290	G	C2'-C1'	-5.31	1.47	1.53
2	B	2677	G	C1'-N9	-5.31	1.39	1.46
2	B	2902	C	C5'-C4'	5.31	1.57	1.51
2	B	502	A	N9-C4	-5.30	1.34	1.37
2	B	591	U	C4'-O4'	-5.30	1.38	1.45
2	B	645	C	C4'-O4'	-5.30	1.38	1.45
2	B	1149	G	C3'-C2'	5.30	1.58	1.52
2	B	1424	G	C1'-N9	-5.30	1.39	1.46
2	B	1565	C	C3'-C2'	5.30	1.58	1.52
2	B	1607	C	P-O5'	-5.30	1.54	1.59
2	B	2026	U	C2'-C1'	-5.30	1.47	1.53
2	B	2135	A	C5-C4	-5.30	1.35	1.38
2	B	2212	A	N9-C4	-5.30	1.34	1.37
2	B	2437	G	C2-N2	5.30	1.39	1.34
2	B	2556	C	C4'-O4'	-5.30	1.38	1.45
2	B	2620	C	C4-N4	5.30	1.38	1.33
2	B	2883	A	C6-N6	5.30	1.38	1.33
12	R	84	ARG	CD-NE	5.30	1.55	1.46
2	B	779	U	N1-C6	-5.30	1.33	1.38
2	B	1387	A	P-O5'	5.30	1.65	1.59
2	B	2297	A	N7-C5	-5.30	1.36	1.39
2	B	2350	C	C2-O2	5.30	1.29	1.24
20	E	60	TRP	NE1-CE2	-5.30	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	786	C	C3'-O3'	5.30	1.49	1.42
2	B	866	A	C2'-C1'	-5.30	1.47	1.53
2	B	981	A	N3-C4	-5.30	1.31	1.34
2	B	1175	A	C2'-C1'	-5.30	1.47	1.53
2	B	1309	G	N1-C2	5.30	1.42	1.37
2	B	2286	G	C5-C6	-5.30	1.37	1.42
2	B	2327	A	P-O5'	-5.30	1.54	1.59
2	B	229	C	C2-O2	5.30	1.29	1.24
2	B	258	G	N1-C2	5.30	1.42	1.37
2	B	347	A	N1-C2	5.30	1.39	1.34
2	B	708	G	N9-C8	5.30	1.41	1.37
2	B	920	A	C4'-C3'	5.30	1.58	1.53
2	B	1299	G	C6-N1	-5.30	1.35	1.39
2	B	1413	A	P-O5'	-5.30	1.54	1.59
2	B	1699	G	C4'-C3'	5.30	1.58	1.53
2	B	1794	A	C6-N6	5.30	1.38	1.33
2	B	2187	U	C2-N3	5.30	1.41	1.37
2	B	2266	A	O4'-C1'	-5.30	1.34	1.41
2	B	2278	A	C5'-C4'	5.30	1.57	1.51
2	B	2478	A	N9-C4	5.30	1.41	1.37
2	B	2610	C	C5'-C4'	5.30	1.57	1.51
2	B	2615	U	C5'-C4'	5.30	1.57	1.51
2	B	2851	A	C2-N3	5.30	1.38	1.33
1	A	58	A	N7-C5	-5.30	1.36	1.39
2	B	529	A	C8-N7	-5.30	1.27	1.31
2	B	1500	G	C2-N3	5.30	1.36	1.32
2	B	1930	G	C1'-N9	5.30	1.56	1.48
2	B	2850	A	N1-C2	-5.30	1.29	1.34
2	B	942	G	C2-N3	5.29	1.36	1.32
2	B	2560	A	C2'-C1'	-5.29	1.47	1.53
10	P	92	ARG	CD-NE	5.29	1.55	1.46
1	A	51	G	N3-C4	-5.29	1.31	1.35
2	B	706	A	N9-C4	5.29	1.41	1.37
2	B	764	A	N1-C2	-5.29	1.29	1.34
2	B	901	C	C5'-C4'	5.29	1.57	1.51
2	B	1152	C	N1-C2	-5.29	1.34	1.40
2	B	1987	A	O3'-P	-5.29	1.54	1.61
2	B	2111	U	P-O5'	5.29	1.65	1.59
2	B	2310	C	N3-C4	5.29	1.37	1.33
2	B	2371	G	C2'-C1'	-5.29	1.47	1.53
2	B	2576	G	O3'-P	-5.29	1.54	1.61
2	B	2693	G	C6-O6	-5.29	1.19	1.24

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2807	U	C3'-C2'	-5.29	1.47	1.52
2	B	189	G	N9-C4	5.29	1.42	1.38
2	B	243	U	O4'-C1'	5.29	1.48	1.41
2	B	267	C	C2'-C1'	-5.29	1.47	1.53
2	B	664	G	C2'-C1'	-5.29	1.47	1.53
2	B	834	G	C2'-C1'	-5.29	1.47	1.53
2	B	940	G	N3-C4	5.29	1.39	1.35
2	B	1027	A	P-O5'	-5.29	1.54	1.59
2	B	2293	G	C5-C4	-5.29	1.34	1.38
2	B	2709	G	N7-C5	-5.29	1.36	1.39
2	B	2722	G	N9-C8	-5.29	1.34	1.37
12	R	87	GLN	CG-CD	5.29	1.63	1.51
2	B	647	G	C2'-C1'	-5.29	1.47	1.53
2	B	661	A	C5-C4	-5.29	1.35	1.38
2	B	1327	A	C6-N6	5.29	1.38	1.33
5	L	140	GLY	CA-C	-5.29	1.43	1.51
2	B	44	A	C6-N6	5.29	1.38	1.33
2	B	209	C	C4-N4	5.29	1.38	1.33
2	B	234	U	C3'-C2'	-5.29	1.47	1.52
2	B	788	A	C3'-O3'	-5.29	1.34	1.42
2	B	1399	C	C5'-C4'	5.29	1.57	1.51
2	B	1910	G	N1-C2	5.29	1.42	1.37
2	B	2349	G	N3-C4	5.29	1.39	1.35
2	B	2489	U	P-O5'	-5.29	1.54	1.59
2	B	1666	G	C1'-N9	-5.29	1.39	1.46
2	B	2660	A	C6-N6	5.29	1.38	1.33
15	T	56	GLU	CD-OE2	5.29	1.31	1.25
2	B	38	A	C2'-C1'	-5.29	1.47	1.53
2	B	364	C	C4'-O4'	-5.29	1.38	1.45
2	B	383	C	N3-C4	5.29	1.37	1.33
2	B	691	C	C5'-C4'	5.29	1.57	1.51
2	B	1478	G	C4'-O4'	5.29	1.52	1.45
2	B	1609	A	N7-C5	-5.29	1.36	1.39
2	B	1721	G	C2-N2	-5.29	1.29	1.34
2	B	2039	U	N1-C2	5.29	1.43	1.38
2	B	2541	A	P-O5'	5.29	1.65	1.59
2	B	490	C	P-O5'	-5.28	1.54	1.59
2	B	571	U	C2-N3	5.28	1.41	1.37
2	B	1604	C	P-O5'	-5.28	1.54	1.59
2	B	1620	G	O3'-P	-5.28	1.54	1.61
2	B	1625	C	C5'-C4'	5.28	1.57	1.51
2	B	2283	C	C5'-C4'	5.28	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	X	244	PRO	N-CD	-5.28	1.40	1.47
2	B	788	A	N9-C8	-5.28	1.33	1.37
2	B	1135	C	C4'-O4'	-5.28	1.38	1.45
2	B	1203	U	O3'-P	-5.28	1.54	1.61
2	B	1285	A	C5-C4	5.28	1.42	1.38
2	B	1561	C	C3'-C2'	-5.28	1.47	1.52
2	B	1726	C	C4'-C3'	-5.28	1.47	1.52
2	B	2176	A	N9-C4	-5.28	1.34	1.37
2	B	2472	G	O3'-P	-5.28	1.54	1.61
2	B	10	A	C3'-O3'	5.28	1.49	1.42
2	B	91	A	C6-N1	5.28	1.39	1.35
2	B	701	G	C2-N3	5.28	1.36	1.32
2	B	734	A	N7-C5	-5.28	1.36	1.39
2	B	825	A	O3'-P	-5.28	1.54	1.61
2	B	1447	C	N1-C6	-5.28	1.33	1.37
2	B	2543	G	C2'-C1'	-5.28	1.47	1.53
2	B	2669	G	C5'-C4'	5.28	1.57	1.51
11	Q	47	ARG	CZ-NH1	5.28	1.40	1.33
1	A	68	C	C2-O2	-5.28	1.19	1.24
2	B	817	C	P-O5'	-5.28	1.54	1.59
2	B	980	A	N3-C4	-5.28	1.31	1.34
2	B	1488	C	C4-C5	-5.28	1.38	1.43
2	B	1705	A	C2'-C1'	-5.28	1.47	1.53
2	B	1843	C	P-O5'	5.28	1.65	1.59
2	B	2272	U	O3'-P	-5.28	1.54	1.61
2	B	2898	U	C4-C5	5.28	1.48	1.43
2	B	70	G	P-O5'	-5.27	1.54	1.59
2	B	231	A	O4'-C1'	-5.27	1.34	1.41
2	B	209	C	N1-C2	5.27	1.45	1.40
2	B	989	G	C6-N1	5.27	1.43	1.39
2	B	1262	A	C8-N7	-5.27	1.27	1.31
2	B	1405	U	N3-C4	5.27	1.43	1.38
2	B	2280	G	C3'-C2'	5.27	1.58	1.52
2	B	2582	G	C8-N7	5.27	1.34	1.30
2	B	2661	G	P-O5'	-5.27	1.54	1.59
2	B	1759	A	P-O5'	-5.27	1.54	1.59
2	B	2673	G	C2-N2	5.27	1.39	1.34
1	A	89	U	C4-O4	5.27	1.27	1.23
2	B	335	C	C5'-C4'	-5.27	1.45	1.51
2	B	599	A	N9-C8	-5.27	1.33	1.37
2	B	640	C	N1-C6	5.27	1.40	1.37
2	B	916	G	C2-N2	5.27	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	980	A	N9-C4	-5.27	1.34	1.37
2	B	1091	G	C2-N3	5.27	1.36	1.32
2	B	1431	A	C1'-N9	-5.27	1.39	1.46
2	B	1616	A	C5'-C4'	5.27	1.57	1.51
2	B	2101	A	C3'-C2'	-5.27	1.47	1.52
2	B	2433	A	N1-C2	-5.27	1.29	1.34
2	B	2734	A	N9-C4	-5.27	1.34	1.37
2	B	530	G	N3-C4	-5.27	1.31	1.35
2	B	1432	G	C2-N2	5.27	1.39	1.34
2	B	1510	G	C3'-O3'	5.27	1.49	1.42
2	B	2036	C	C4'-C3'	-5.27	1.47	1.52
2	B	2110	G	C1'-N9	5.27	1.56	1.48
2	B	2199	A	N1-C2	-5.27	1.29	1.34
2	B	2553	G	N1-C2	5.27	1.42	1.37
2	B	1635	A	C3'-O3'	5.27	1.49	1.42
2	B	2095	A	N1-C2	-5.27	1.29	1.34
2	B	2424	C	C3'-C2'	-5.27	1.47	1.52
1	A	105	G	C2'-C1'	-5.26	1.47	1.53
2	B	109	C	N3-C4	5.26	1.37	1.33
2	B	138	U	C2-O2	5.26	1.27	1.22
2	B	313	G	O3'-P	-5.26	1.54	1.61
2	B	530	G	C2-N3	5.26	1.36	1.32
2	B	834	G	C6-O6	-5.26	1.19	1.24
2	B	1220	G	C5-C6	-5.26	1.37	1.42
2	B	1407	G	C2'-C1'	-5.26	1.47	1.53
2	B	1446	C	N1-C6	5.26	1.40	1.37
2	B	2197	U	N1-C6	-5.26	1.33	1.38
10	P	45	VAL	CB-CG2	5.26	1.64	1.52
2	B	676	A	C5'-C4'	5.26	1.57	1.51
2	B	828	U	C3'-C2'	-5.26	1.47	1.52
2	B	599	A	C2'-O2'	-5.26	1.34	1.41
2	B	1016	G	C2'-C1'	-5.26	1.47	1.53
2	B	1249	U	C4'-O4'	-5.26	1.38	1.45
2	B	1527	G	O4'-C1'	-5.26	1.34	1.41
2	B	1674	G	O3'-P	-5.26	1.54	1.61
2	B	2045	C	N1-C2	5.26	1.45	1.40
2	B	2061	G	N9-C4	5.26	1.42	1.38
2	B	2753	A	C6-N1	5.26	1.39	1.35
2	B	376	G	N7-C5	-5.26	1.36	1.39
2	B	426	C	C4-N4	5.26	1.38	1.33
2	B	495	G	N1-C2	5.26	1.42	1.37
2	B	698	C	O4'-C1'	-5.26	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1012	U	N1-C2	-5.26	1.33	1.38
2	B	1594	U	O3'-P	-5.26	1.54	1.61
2	B	1668	A	O3'-P	-5.26	1.54	1.61
2	B	1711	A	C8-N7	-5.26	1.27	1.31
2	B	2186	G	C2'-C1'	-5.26	1.47	1.53
2	B	2827	C	P-O5'	-5.26	1.54	1.59
2	B	1531	C	C4'-C3'	-5.26	1.47	1.52
2	B	2040	G	P-O5'	-5.26	1.54	1.59
2	B	2234	G	C6-N1	-5.26	1.35	1.39
2	B	2773	C	C4'-C3'	-5.26	1.47	1.52
2	B	27	G	C4'-O4'	-5.26	1.38	1.45
2	B	987	C	C4-N4	5.26	1.38	1.33
2	B	1272	A	C2'-O2'	-5.26	1.34	1.41
2	B	1738	G	C2'-C1'	5.26	1.59	1.53
2	B	1756	G	N1-C2	5.26	1.42	1.37
2	B	2055	C	C3'-C2'	-5.26	1.47	1.52
2	B	64	A	N3-C4	-5.25	1.31	1.34
2	B	262	A	N9-C4	-5.25	1.34	1.37
2	B	508	A	C3'-C2'	5.25	1.58	1.52
2	B	2134	A	C8-N7	-5.25	1.27	1.31
2	B	2144	G	C5'-C4'	5.25	1.57	1.51
2	B	2673	G	O3'-P	-5.25	1.54	1.61
2	B	170	U	C3'-C2'	-5.25	1.47	1.52
2	B	568	U	O3'-P	-5.25	1.54	1.61
2	B	626	A	C6-N6	5.25	1.38	1.33
2	B	1282	U	C2-N3	-5.25	1.34	1.37
2	B	1432	G	N9-C8	-5.25	1.34	1.37
2	B	1468	U	C2-N3	-5.25	1.34	1.37
2	B	1546	G	C5-C4	-5.25	1.34	1.38
2	B	1838	C	O3'-P	-5.25	1.54	1.61
2	B	2005	A	N3-C4	-5.25	1.31	1.34
2	B	2224	G	C2'-C1'	-5.25	1.47	1.53
2	B	2515	C	O3'-P	-5.25	1.54	1.61
2	B	2571	U	C3'-O3'	5.25	1.49	1.42
2	B	2737	G	N9-C8	5.25	1.41	1.37
30	H	64	ALA	N-CA	-5.25	1.35	1.46
2	B	388	G	C4'-O4'	-5.25	1.38	1.45
2	B	622	G	C5-C4	-5.25	1.34	1.38
2	B	666	A	N3-C4	-5.25	1.31	1.34
2	B	1152	C	O4'-C1'	-5.25	1.34	1.41
2	B	1853	A	N7-C5	-5.25	1.36	1.39
2	B	2253	G	C2-N2	5.25	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	D	40	LEU	N-CA	-5.25	1.35	1.46
2	B	328	U	N1-C2	-5.25	1.33	1.38
2	B	1112	G	N9-C4	-5.25	1.33	1.38
2	B	1311	G	N3-C4	-5.25	1.31	1.35
2	B	1633	G	N7-C5	-5.25	1.36	1.39
2	B	2389	G	O3'-P	-5.25	1.54	1.61
2	B	2599	G	C2'-C1'	-5.25	1.47	1.53
2	B	2633	G	N9-C4	-5.25	1.33	1.38
2	B	2871	U	C4-C5	5.25	1.48	1.43
1	A	68	C	C2-N3	-5.25	1.31	1.35
2	B	94	A	N7-C5	5.25	1.42	1.39
2	B	1040	A	O3'-P	-5.25	1.54	1.61
2	B	1154	G	O3'-P	-5.25	1.54	1.61
2	B	1248	G	O4'-C1'	-5.25	1.34	1.41
2	B	1672	A	N9-C4	5.25	1.41	1.37
2	B	2165	C	C4-C5	-5.25	1.38	1.43
2	B	19	A	C6-N6	5.25	1.38	1.33
2	B	332	A	N9-C4	5.25	1.41	1.37
2	B	342	A	P-O5'	5.25	1.65	1.59
2	B	960	A	C4'-C3'	5.25	1.58	1.53
2	B	1653	G	P-O5'	-5.25	1.54	1.59
2	B	1774	C	C4'-C3'	5.25	1.58	1.53
2	B	2041	U	C2-N3	5.25	1.41	1.37
2	B	283	G	C6-O6	-5.25	1.19	1.24
2	B	293	U	O3'-P	-5.25	1.54	1.61
2	B	431	U	C2-N3	-5.25	1.34	1.37
2	B	1139	G	C4'-C3'	-5.25	1.47	1.52
2	B	2605	U	C4-C5	5.25	1.48	1.43
2	B	2698	U	C2'-C1'	-5.25	1.47	1.53
2	B	107	G	C2'-C1'	-5.24	1.47	1.53
2	B	213	A	C6-N1	5.24	1.39	1.35
2	B	373	U	O3'-P	-5.24	1.54	1.61
2	B	422	A	C2'-C1'	-5.24	1.47	1.53
2	B	500	G	C6-N1	5.24	1.43	1.39
2	B	919	U	C2-N3	5.24	1.41	1.37
2	B	1050	A	N3-C4	-5.24	1.31	1.34
2	B	1554	U	C3'-C2'	5.24	1.58	1.52
2	B	2238	G	C3'-O3'	5.24	1.49	1.42
2	B	2289	G	C4'-O4'	-5.24	1.38	1.45
2	B	2303	G	C8-N7	5.24	1.34	1.30
2	B	2621	G	N9-C4	-5.24	1.33	1.38
2	B	2685	G	O3'-P	-5.24	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2783	U	C4-C5	5.24	1.48	1.43
27	C	14	HIS	N-CA	-5.24	1.35	1.46
2	B	712	G	C5-C6	-5.24	1.37	1.42
2	B	1024	G	C4'-C3'	-5.24	1.47	1.52
2	B	1375	U	N1-C6	-5.24	1.33	1.38
2	B	2654	A	C6-N1	5.24	1.39	1.35
2	B	2687	U	C3'-C2'	-5.24	1.47	1.52
11	Q	5	ARG	NE-CZ	5.24	1.39	1.33
2	B	248	G	C5-C4	-5.24	1.34	1.38
2	B	898	C	C2-N3	5.24	1.40	1.35
2	B	1092	C	C2'-C1'	-5.24	1.47	1.53
2	B	1210	G	N1-C2	-5.24	1.33	1.37
2	B	1666	G	N7-C5	-5.24	1.36	1.39
2	B	1915	U	N1-C2	5.24	1.43	1.38
2	B	1959	G	N9-C4	5.24	1.42	1.38
2	B	2195	U	C4'-O4'	-5.24	1.38	1.45
2	B	2478	A	C6-N6	5.24	1.38	1.33
2	B	2492	U	O3'-P	-5.24	1.54	1.61
2	B	2567	G	C2-N3	5.24	1.36	1.32
2	B	2871	U	C4-O4	-5.24	1.19	1.23
28	F	109	ARG	CZ-NH2	5.24	1.39	1.33
2	B	172	A	N3-C4	-5.24	1.31	1.34
2	B	748	G	N3-C4	-5.24	1.31	1.35
2	B	1016	G	O3'-P	-5.24	1.54	1.61
2	B	1221	C	N1-C6	-5.24	1.34	1.37
2	B	1239	G	N7-C5	-5.24	1.36	1.39
2	B	1619	G	C5-C6	-5.24	1.37	1.42
2	B	1666	G	C2'-C1'	-5.24	1.47	1.53
2	B	1700	A	C8-N7	-5.24	1.27	1.31
2	B	2097	A	C3'-O3'	5.24	1.49	1.42
2	B	2266	A	C1'-N9	-5.24	1.39	1.46
2	B	2628	C	C3'-O3'	-5.24	1.34	1.42
2	B	2863	C	C3'-C2'	-5.24	1.47	1.52
14	D	125	TRP	CE2-CZ2	-5.24	1.30	1.39
20	E	146	VAL	N-CA	-5.24	1.35	1.46
2	B	186	G	C5-C4	-5.24	1.34	1.38
2	B	677	A	C6-N6	-5.24	1.29	1.33
1	A	37	C	C5'-C4'	5.24	1.57	1.51
2	B	60	G	N1-C2	5.24	1.42	1.37
2	B	458	G	C2'-C1'	-5.24	1.47	1.53
2	B	629	G	C4'-C3'	-5.24	1.47	1.52
2	B	1334	G	N9-C8	5.24	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1918	A	N9-C4	5.24	1.41	1.37
2	B	2046	G	N3-C4	-5.24	1.31	1.35
2	B	1266	G	N1-C2	5.23	1.42	1.37
2	B	1319	C	C5-C6	-5.23	1.30	1.34
2	B	1705	A	C2-N3	-5.23	1.28	1.33
2	B	1720	U	N1-C6	5.23	1.42	1.38
2	B	1831	G	C2-N2	-5.23	1.29	1.34
2	B	2273	A	N9-C4	-5.23	1.34	1.37
2	B	15	G	C5-C4	5.23	1.42	1.38
2	B	85	G	N1-C2	-5.23	1.33	1.37
2	B	106	C	C4-N4	-5.23	1.29	1.33
2	B	403	U	C2'-C1'	-5.23	1.47	1.53
2	B	904	G	N1-C2	5.23	1.42	1.37
2	B	950	G	N9-C8	-5.23	1.34	1.37
2	B	1608	A	N1-C2	5.23	1.39	1.34
2	B	1648	U	C4'-C3'	5.23	1.58	1.53
2	B	1780	A	O3'-P	-5.23	1.54	1.61
2	B	1452	G	O4'-C1'	-5.23	1.34	1.41
2	B	1478	G	C6-O6	-5.23	1.19	1.24
2	B	2085	U	P-O5'	-5.23	1.54	1.59
2	B	2284	A	C4'-C3'	-5.23	1.47	1.52
2	B	2392	A	C2'-C1'	-5.23	1.47	1.53
2	B	2873	A	O3'-P	-5.23	1.54	1.61
2	B	2193	G	N3-C4	-5.23	1.31	1.35
1	A	33	G	N9-C4	-5.23	1.33	1.38
2	B	643	A	O3'-P	-5.23	1.54	1.61
2	B	1538	G	C3'-O3'	5.23	1.49	1.42
2	B	1964	G	C6-O6	5.23	1.28	1.24
2	B	2419	U	C1'-N1	-5.23	1.39	1.46
2	B	2729	G	C3'-O3'	5.23	1.49	1.42
14	D	169	ARG	NE-CZ	5.23	1.39	1.33
2	B	1492	G	N7-C5	-5.23	1.36	1.39
2	B	366	C	C2'-C1'	-5.22	1.47	1.53
2	B	425	G	C2-N3	-5.22	1.28	1.32
2	B	605	G	N9-C4	-5.22	1.33	1.38
2	B	638	G	N7-C5	-5.22	1.36	1.39
2	B	645	C	C3'-O3'	5.22	1.49	1.42
2	B	735	A	C6-N6	-5.22	1.29	1.33
2	B	1580	A	N7-C5	-5.22	1.36	1.39
2	B	1681	G	N7-C5	-5.22	1.36	1.39
2	B	1853	A	C3'-C2'	5.22	1.58	1.52
2	B	1926	U	C5-C6	5.22	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2087	G	P-O5'	-5.22	1.54	1.59
2	B	2146	C	N3-C4	5.22	1.37	1.33
2	B	2319	G	N3-C4	5.22	1.39	1.35
2	B	2363	G	C8-N7	-5.22	1.27	1.30
5	L	37	GLY	CA-C	-5.22	1.43	1.51
1	A	61	G	O3'-P	-5.22	1.54	1.61
2	B	503	A	N3-C4	-5.22	1.31	1.34
2	B	928	A	N7-C5	-5.22	1.36	1.39
2	B	1017	G	N9-C4	5.22	1.42	1.38
2	B	1078	U	C4'-O4'	-5.22	1.38	1.45
2	B	1251	C	C4'-O4'	5.22	1.52	1.45
2	B	1536	C	N1-C6	5.22	1.40	1.37
2	B	2239	G	C8-N7	5.22	1.34	1.30
2	B	2593	U	C2'-O2'	-5.22	1.34	1.41
2	B	2607	G	N3-C4	-5.22	1.31	1.35
2	B	2691	C	C4-N4	5.22	1.38	1.33
2	B	2800	A	C6-N6	5.22	1.38	1.33
2	B	939	G	N9-C8	-5.22	1.34	1.37
2	B	2043	C	P-O5'	-5.22	1.54	1.59
2	B	2322	A	O3'-P	-5.22	1.54	1.61
2	B	2691	C	C3'-O3'	5.22	1.49	1.42
2	B	2716	C	N1-C6	-5.22	1.34	1.37
1	A	67	G	C5'-C4'	5.22	1.57	1.51
2	B	18	U	C4'-O4'	-5.22	1.38	1.45
2	B	433	C	C5'-C4'	-5.22	1.45	1.51
2	B	443	A	C8-N7	-5.22	1.27	1.31
2	B	952	G	N3-C4	5.22	1.39	1.35
2	B	1367	A	O3'-P	-5.22	1.54	1.61
2	B	1382	G	C5'-C4'	5.22	1.57	1.51
2	B	1394	U	P-O5'	-5.22	1.54	1.59
2	B	1490	A	N3-C4	-5.22	1.31	1.34
2	B	1527	G	C3'-O3'	-5.22	1.34	1.42
2	B	1735	A	C3'-C2'	-5.22	1.47	1.52
2	B	1738	G	N3-C4	5.22	1.39	1.35
2	B	2561	U	O3'-P	-5.22	1.54	1.61
2	B	2731	G	C1'-N9	-5.22	1.39	1.46
2	B	2800	A	C5-C6	5.22	1.45	1.41
2	B	2844	G	O4'-C1'	-5.22	1.34	1.41
2	B	569	U	C4'-O4'	-5.22	1.38	1.45
2	B	666	A	P-O5'	5.22	1.65	1.59
2	B	958	U	C2'-C1'	-5.22	1.47	1.53
2	B	1410	G	N1-C2	5.22	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1537	G	O5'-C5'	5.22	1.52	1.44
2	B	1542	U	C4-C5	5.22	1.48	1.43
2	B	2832	U	N1-C6	-5.22	1.33	1.38
2	B	357	C	C2'-C1'	-5.22	1.47	1.53
2	B	567	U	C2'-C1'	-5.22	1.47	1.53
2	B	786	C	C3'-C2'	-5.22	1.47	1.52
2	B	902	C	C2-O2	5.22	1.29	1.24
2	B	1159	U	P-O5'	-5.22	1.54	1.59
2	B	1798	U	C5-C6	-5.22	1.29	1.34
2	B	2087	G	N7-C5	-5.22	1.36	1.39
2	B	2325	G	O3'-P	-5.22	1.54	1.61
2	B	2544	G	C3'-C2'	-5.22	1.47	1.52
2	B	2623	G	C5-C4	-5.22	1.34	1.38
2	B	2851	A	C4'-O4'	5.22	1.52	1.45
8	N	105	GLY	CA-C	-5.22	1.43	1.51
1	A	34	A	N1-C2	-5.21	1.29	1.34
2	B	44	A	O3'-P	-5.21	1.54	1.61
2	B	144	A	C2'-C1'	-5.21	1.47	1.53
2	B	397	U	O3'-P	-5.21	1.54	1.61
2	B	478	A	C2'-C1'	5.21	1.59	1.53
2	B	819	A	C5'-C4'	5.21	1.57	1.51
2	B	1466	U	C4'-O4'	-5.21	1.38	1.45
2	B	1593	A	N9-C4	5.21	1.41	1.37
2	B	2795	C	C1'-N1	5.21	1.56	1.48
20	E	83	VAL	CB-CG1	5.21	1.63	1.52
2	B	447	A	C1'-N9	5.21	1.56	1.48
2	B	1187	G	C6-N1	5.21	1.43	1.39
2	B	2776	A	N9-C8	-5.21	1.33	1.37
2	B	2796	U	P-O5'	-5.21	1.54	1.59
2	B	340	A	C3'-C2'	-5.21	1.47	1.52
2	B	867	C	C5-C6	-5.21	1.30	1.34
2	B	886	A	C5'-C4'	5.21	1.57	1.51
2	B	1319	C	C3'-O3'	5.21	1.49	1.42
2	B	1387	A	C1'-N9	5.21	1.56	1.48
2	B	1416	G	C5-C4	5.21	1.42	1.38
2	B	1918	A	N7-C5	-5.21	1.36	1.39
9	O	114	GLY	N-CA	-5.21	1.38	1.46
2	B	125	A	N3-C4	-5.21	1.31	1.34
2	B	2699	C	C3'-C2'	-5.21	1.47	1.52
2	B	2744	G	N9-C8	-5.21	1.34	1.37
2	B	669	G	O4'-C1'	5.21	1.48	1.41
2	B	796	C	C2'-O2'	-5.21	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	825	A	C3'-C2'	5.21	1.58	1.52
2	B	1218	G	N1-C2	5.21	1.42	1.37
2	B	1296	G	N3-C4	-5.21	1.31	1.35
2	B	1952	A	C5-C4	5.21	1.42	1.38
2	B	1971	U	C4-O4	-5.21	1.19	1.23
2	B	2053	G	N1-C2	5.21	1.42	1.37
2	B	2278	A	C4'-C3'	-5.21	1.47	1.52
2	B	2316	G	C4'-C3'	5.21	1.58	1.53
2	B	2361	G	C1'-N9	-5.21	1.39	1.46
2	B	2470	G	C5-C4	5.21	1.42	1.38
2	B	2802	G	N3-C4	-5.21	1.31	1.35
1	A	53	A	O4'-C1'	5.21	1.48	1.41
2	B	86	G	C8-N7	5.21	1.34	1.30
2	B	158	U	P-O5'	-5.21	1.54	1.59
2	B	310	A	N9-C8	-5.21	1.33	1.37
2	B	1223	G	C2-N3	5.21	1.36	1.32
2	B	2064	C	C4-C5	5.21	1.47	1.43
2	B	2825	G	C4'-C3'	-5.21	1.47	1.52
2	B	164	C	P-O5'	-5.21	1.54	1.59
2	B	1598	A	C5-C4	-5.21	1.35	1.38
2	B	2834	G	C6-O6	-5.21	1.19	1.24
1	A	27	C	C4'-C3'	-5.20	1.47	1.52
2	B	66	C	O3'-P	-5.20	1.54	1.61
2	B	292	U	N3-C4	5.20	1.43	1.38
2	B	508	A	C8-N7	-5.20	1.27	1.31
2	B	536	G	C2'-C1'	-5.20	1.47	1.53
2	B	662	G	C4'-O4'	-5.20	1.38	1.45
2	B	999	U	C5-C6	-5.20	1.29	1.34
2	B	1003	G	P-O5'	-5.20	1.54	1.59
2	B	1183	U	O3'-P	-5.20	1.54	1.61
2	B	1228	G	C6-N1	-5.20	1.35	1.39
2	B	1542	U	O3'-P	-5.20	1.54	1.61
2	B	2034	U	C4-C5	5.20	1.48	1.43
2	B	2336	A	C5-C4	5.20	1.42	1.38
2	B	2467	C	N3-C4	5.20	1.37	1.33
2	B	2881	U	C4'-C3'	-5.20	1.47	1.52
2	B	72	U	C4'-C3'	5.20	1.58	1.53
2	B	103	A	C2-N3	-5.20	1.28	1.33
2	B	113	U	C2-N3	5.20	1.41	1.37
2	B	698	C	N3-C4	5.20	1.37	1.33
2	B	2670	A	N1-C2	-5.20	1.29	1.34
2	B	2900	A	C1'-N9	-5.20	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	208	C	C2-N3	-5.20	1.31	1.35
2	B	1049	C	C4'-C3'	-5.20	1.47	1.52
2	B	1071	G	P-O5'	-5.20	1.54	1.59
2	B	1118	C	N1-C6	-5.20	1.34	1.37
2	B	1223	G	C2'-C1'	-5.20	1.47	1.53
2	B	1438	U	C2'-C1'	-5.20	1.47	1.53
2	B	1683	U	C3'-C2'	-5.20	1.47	1.52
2	B	1886	U	C3'-C2'	-5.20	1.47	1.52
2	B	2032	G	N7-C5	5.20	1.42	1.39
2	B	2107	G	N9-C4	-5.20	1.33	1.38
2	B	2175	C	N1-C6	5.20	1.40	1.37
2	B	2483	C	C3'-C2'	-5.20	1.47	1.52
2	B	2818	U	C3'-C2'	-5.20	1.47	1.52
2	B	2821	A	C5'-C4'	5.20	1.57	1.51
2	B	35	G	C3'-C2'	-5.20	1.47	1.52
2	B	85	G	N9-C8	5.20	1.41	1.37
2	B	293	U	O4'-C1'	5.20	1.48	1.41
2	B	586	A	N7-C5	-5.20	1.36	1.39
2	B	834	G	O3'-P	-5.20	1.54	1.61
2	B	940	G	C4'-C3'	-5.20	1.47	1.52
2	B	1181	U	C3'-O3'	5.20	1.49	1.42
2	B	1208	C	C2-N3	-5.20	1.31	1.35
2	B	1368	G	C5-C4	-5.20	1.34	1.38
2	B	1624	U	C3'-C2'	-5.20	1.47	1.52
2	B	2618	G	C2'-C1'	-5.20	1.47	1.53
2	B	2708	G	C1'-N9	-5.20	1.39	1.46
2	B	2749	A	N9-C4	5.20	1.41	1.37
2	B	2892	G	N1-C2	5.20	1.42	1.37
2	B	2903	U	P-O5'	-5.20	1.54	1.59
2	B	484	C	P-O5'	-5.20	1.54	1.59
1	A	82	U	C2'-C1'	-5.20	1.47	1.53
2	B	224	U	O3'-P	-5.20	1.54	1.61
2	B	829	A	C4'-C3'	-5.20	1.47	1.52
2	B	2297	A	C5'-C4'	-5.20	1.45	1.51
2	B	2311	A	C5-C4	-5.20	1.35	1.38
2	B	2895	G	C5'-C4'	5.20	1.57	1.51
2	B	73	A	C2'-O2'	-5.19	1.34	1.41
2	B	1215	G	N9-C8	-5.19	1.34	1.37
2	B	1581	G	C6-N1	5.19	1.43	1.39
2	B	1743	G	C4'-O4'	-5.19	1.38	1.45
2	B	2439	A	P-O5'	-5.19	1.54	1.59
2	B	256	A	N3-C4	-5.19	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	579	G	P-O5'	-5.19	1.54	1.59
2	B	803	U	C2-O2	-5.19	1.17	1.22
2	B	1317	G	N9-C4	5.19	1.42	1.38
2	B	1541	C	C2-O2	5.19	1.29	1.24
2	B	1611	C	C4'-O4'	-5.19	1.38	1.45
2	B	1628	G	C5'-C4'	5.19	1.57	1.51
2	B	1713	A	C3'-O3'	5.19	1.49	1.42
2	B	2048	G	C1'-N9	-5.19	1.39	1.46
2	B	1164	C	C2-O2	5.19	1.29	1.24
2	B	1682	G	N9-C4	5.19	1.42	1.38
2	B	1694	C	O3'-P	-5.19	1.54	1.61
2	B	70	G	N9-C4	-5.19	1.33	1.38
2	B	80	G	N7-C5	-5.19	1.36	1.39
2	B	264	C	C4'-C3'	-5.19	1.47	1.52
2	B	282	A	N3-C4	-5.19	1.31	1.34
2	B	343	C	C2'-O2'	-5.19	1.34	1.41
2	B	752	A	N1-C2	5.19	1.39	1.34
2	B	896	A	C2-N3	5.19	1.38	1.33
2	B	1186	G	C5-C6	-5.19	1.37	1.42
2	B	1364	G	N3-C4	5.19	1.39	1.35
2	B	1603	A	N7-C5	-5.19	1.36	1.39
2	B	2281	A	C2'-C1'	-5.19	1.47	1.53
2	B	2637	U	C2'-C1'	-5.19	1.47	1.53
2	B	692	C	C4-N4	5.18	1.38	1.33
2	B	797	G	C3'-O3'	-5.18	1.34	1.42
2	B	901	C	C1'-N1	-5.18	1.39	1.46
2	B	938	G	C2-N2	-5.18	1.29	1.34
2	B	2352	A	N7-C5	-5.18	1.36	1.39
2	B	2433	A	O3'-P	-5.18	1.54	1.61
2	B	2836	U	O4'-C1'	-5.18	1.34	1.41
2	B	82	U	C4-C5	5.18	1.48	1.43
2	B	269	C	P-O5'	-5.18	1.54	1.59
2	B	378	C	O4'-C1'	-5.18	1.34	1.41
2	B	615	U	C3'-C2'	-5.18	1.47	1.52
2	B	1207	C	C1'-N1	5.18	1.56	1.48
2	B	1887	C	C2'-C1'	5.18	1.59	1.53
2	B	2090	A	C1'-N9	-5.18	1.39	1.46
2	B	2109	U	N3-C4	-5.18	1.33	1.38
2	B	2138	G	N7-C5	-5.18	1.36	1.39
2	B	2231	U	C3'-C2'	-5.18	1.47	1.52
2	B	2413	G	C2'-C1'	-5.18	1.47	1.53
2	B	2676	C	N1-C2	5.18	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2837	A	C8-N7	-5.18	1.27	1.31
19	X	40	ARG	NE-CZ	5.18	1.39	1.33
2	B	126	A	C5'-C4'	-5.18	1.45	1.51
11	Q	52	ARG	CZ-NH1	5.18	1.39	1.33
2	B	114	U	N1-C6	5.18	1.42	1.38
2	B	402	A	N9-C4	-5.18	1.34	1.37
2	B	479	A	C1'-N9	-5.18	1.39	1.46
2	B	559	G	C6-O6	-5.18	1.19	1.24
2	B	685	A	C5-C6	-5.18	1.36	1.41
2	B	1011	G	C4'-O4'	-5.18	1.38	1.45
2	B	1661	G	C2-N3	5.18	1.36	1.32
2	B	1949	G	C4'-O4'	5.18	1.52	1.45
2	B	1964	G	P-O5'	5.18	1.65	1.59
2	B	2252	G	N9-C4	-5.18	1.33	1.38
2	B	2264	C	O3'-P	-5.18	1.54	1.61
2	B	2285	C	C3'-C2'	-5.18	1.47	1.52
2	B	2348	U	O3'-P	-5.18	1.54	1.61
2	B	2518	A	N1-C2	5.18	1.39	1.34
2	B	2677	G	C2-N3	5.18	1.36	1.32
2	B	2780	G	N7-C5	5.18	1.42	1.39
9	O	111	ARG	CZ-NH2	5.18	1.39	1.33
28	F	6	TYR	CG-CD1	5.18	1.45	1.39
2	B	449	A	C4'-O4'	-5.18	1.38	1.45
2	B	808	G	C5'-C4'	-5.18	1.45	1.51
2	B	1234	U	O5'-C5'	-5.18	1.34	1.42
2	B	1457	U	O3'-P	-5.18	1.54	1.61
2	B	1462	C	C2-N3	-5.18	1.31	1.35
2	B	2074	U	N1-C6	-5.18	1.33	1.38
8	N	64	ARG	CD-NE	5.18	1.55	1.46
2	B	270	A	C8-N7	-5.18	1.27	1.31
2	B	544	C	N3-C4	5.18	1.37	1.33
2	B	825	A	N7-C5	-5.18	1.36	1.39
2	B	876	C	C2'-C1'	-5.18	1.47	1.53
2	B	1854	A	C1'-N9	5.18	1.56	1.48
25	7	39	ARG	CD-NE	5.18	1.55	1.46
2	B	707	G	O4'-C1'	-5.17	1.34	1.41
2	B	783	A	C2'-C1'	-5.17	1.47	1.53
2	B	1120	G	N9-C4	-5.17	1.33	1.38
2	B	1233	C	N3-C4	5.17	1.37	1.33
2	B	1661	G	P-O5'	-5.17	1.54	1.59
2	B	1668	A	C6-N6	-5.17	1.29	1.33
2	B	1895	C	O5'-C5'	-5.17	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	619	G	P-O5'	-5.17	1.54	1.59
2	B	1359	A	N9-C8	-5.17	1.33	1.37
2	B	1424	G	C2-N3	5.17	1.36	1.32
2	B	1455	G	C8-N7	-5.17	1.27	1.30
2	B	1978	A	C5'-C4'	-5.17	1.45	1.51
2	B	2001	C	C4-C5	-5.17	1.38	1.43
2	B	168	G	C5-C4	5.17	1.42	1.38
2	B	241	A	N1-C2	5.17	1.39	1.34
2	B	1817	G	N9-C4	-5.17	1.33	1.38
2	B	2750	A	C2'-C1'	-5.17	1.47	1.53
20	E	19	PHE	CG-CD2	-5.17	1.30	1.38
1	A	67	G	C5-C6	-5.17	1.37	1.42
2	B	53	A	N7-C5	5.17	1.42	1.39
2	B	563	A	C6-N1	5.17	1.39	1.35
2	B	1220	G	N9-C8	5.17	1.41	1.37
2	B	1808	A	O4'-C1'	5.17	1.48	1.41
2	B	2152	G	C2-N2	5.17	1.39	1.34
2	B	789	A	N7-C5	-5.17	1.36	1.39
2	B	1030	C	C4-N4	5.17	1.38	1.33
2	B	1196	C	C4'-O4'	-5.17	1.38	1.45
2	B	1374	G	N7-C5	-5.17	1.36	1.39
2	B	1810	A	C6-N1	5.17	1.39	1.35
2	B	2029	G	O3'-P	-5.17	1.54	1.61
24	6	12	ARG	CZ-NH1	5.17	1.39	1.33
27	C	42	ARG	CZ-NH2	5.17	1.39	1.33
1	A	108	A	C2'-C1'	-5.17	1.47	1.53
2	B	301	G	N9-C4	-5.17	1.33	1.38
2	B	772	C	C4'-O4'	-5.17	1.38	1.45
2	B	1058	U	C3'-O3'	5.17	1.49	1.42
2	B	1088	A	C3'-C2'	5.17	1.58	1.52
2	B	1176	U	O3'-P	-5.17	1.54	1.61
2	B	1427	A	C6-N1	5.17	1.39	1.35
2	B	2290	G	C3'-C2'	-5.17	1.47	1.52
2	B	2293	G	N9-C8	5.17	1.41	1.37
2	B	2628	C	C4-N4	5.17	1.38	1.33
2	B	2761	A	N9-C8	-5.17	1.33	1.37
2	B	2838	G	C2-N3	5.17	1.36	1.32
2	B	2886	A	C6-N1	-5.17	1.31	1.35
2	B	171	U	C2-N3	-5.17	1.34	1.37
2	B	289	G	N9-C4	5.17	1.42	1.38
2	B	933	A	N7-C5	-5.17	1.36	1.39
2	B	2545	G	P-O5'	-5.17	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	264	C	O3'-P	-5.16	1.54	1.61
2	B	435	C	N1-C2	-5.16	1.34	1.40
2	B	815	C	N1-C6	5.16	1.40	1.37
2	B	1595	C	C4-C5	5.16	1.47	1.43
2	B	1902	C	C4-N4	5.16	1.38	1.33
2	B	2026	U	N3-C4	-5.16	1.33	1.38
2	B	2376	A	P-O5'	-5.16	1.54	1.59
2	B	2442	C	O3'-P	-5.16	1.54	1.61
2	B	2674	G	C8-N7	-5.16	1.27	1.30
2	B	882	G	N3-C4	5.16	1.39	1.35
2	B	2163	A	N9-C4	-5.16	1.34	1.37
2	B	2505	G	N3-C4	-5.16	1.31	1.35
2	B	2514	U	N1-C2	5.16	1.43	1.38
2	B	340	A	N3-C4	5.16	1.38	1.34
2	B	626	A	C5-C6	-5.16	1.36	1.41
2	B	661	A	C8-N7	-5.16	1.27	1.31
2	B	975	A	N9-C4	5.16	1.41	1.37
2	B	999	U	C1'-N1	-5.16	1.39	1.46
2	B	1810	A	C5'-C4'	5.16	1.57	1.51
2	B	1854	A	N3-C4	-5.16	1.31	1.34
2	B	2191	A	C8-N7	-5.16	1.27	1.31
27	C	230	PRO	N-CD	5.16	1.55	1.47
2	B	518	G	N9-C8	-5.16	1.34	1.37
2	B	632	A	O3'-P	-5.16	1.54	1.61
2	B	1264	A	O3'-P	-5.16	1.54	1.61
2	B	1406	U	C2'-C1'	-5.16	1.47	1.53
2	B	1544	A	C6-N6	5.16	1.38	1.33
2	B	1571	A	P-O5'	-5.16	1.54	1.59
2	B	2643	G	C3'-C2'	-5.16	1.47	1.52
2	B	2700	A	C8-N7	-5.16	1.27	1.31
2	B	2711	A	P-O5'	-5.16	1.54	1.59
2	B	2807	U	C2'-C1'	-5.16	1.47	1.53
2	B	47	C	C3'-O3'	5.16	1.49	1.42
2	B	693	A	C5-C4	-5.16	1.35	1.38
2	B	823	C	N3-C4	5.16	1.37	1.33
2	B	1345	C	C2'-C1'	-5.16	1.47	1.53
2	B	2375	G	O3'-P	-5.16	1.54	1.61
2	B	2633	G	N1-C2	5.16	1.41	1.37
1	A	102	G	P-O5'	5.16	1.65	1.59
2	B	609	A	O3'-P	-5.16	1.54	1.61
2	B	997	G	C5'-C4'	5.16	1.57	1.51
2	B	1640	A	N7-C5	-5.16	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1916	A	C2'-C1'	-5.16	1.47	1.53
2	B	2020	A	C5-C4	5.16	1.42	1.38
2	B	2235	G	C5'-C4'	5.16	1.57	1.51
2	B	2635	A	C6-N6	5.16	1.38	1.33
19	X	434	TYR	CZ-OH	5.16	1.46	1.37
2	B	455	C	C2'-C1'	-5.15	1.47	1.53
2	B	2247	A	O4'-C1'	-5.15	1.34	1.41
2	B	2520	C	C4-N4	5.15	1.38	1.33
2	B	2665	A	C2'-C1'	-5.15	1.47	1.53
2	B	2687	U	O4'-C1'	-5.15	1.34	1.41
2	B	2862	G	C6-N1	5.15	1.43	1.39
2	B	1029	A	C5-C4	-5.15	1.35	1.38
2	B	1430	G	C5'-C4'	-5.15	1.45	1.51
2	B	1448	G	C3'-C2'	-5.15	1.47	1.52
2	B	2160	C	C2'-C1'	-5.15	1.47	1.53
2	B	2388	A	C4'-C3'	-5.15	1.47	1.52
2	B	2532	G	C3'-C2'	-5.15	1.47	1.52
2	B	384	A	C2'-C1'	-5.15	1.47	1.53
2	B	609	A	C2'-C1'	-5.15	1.47	1.53
2	B	775	G	N3-C4	-5.15	1.31	1.35
2	B	1253	A	O4'-C1'	-5.15	1.34	1.41
2	B	1254	A	N9-C4	-5.15	1.34	1.37
2	B	1271	G	C8-N7	-5.15	1.27	1.30
2	B	1394	U	N1-C6	-5.15	1.33	1.38
2	B	1761	C	P-O5'	-5.15	1.54	1.59
2	B	2377	A	C2'-C1'	-5.15	1.47	1.53
2	B	2546	U	C4-C5	-5.15	1.39	1.43
2	B	2654	A	N3-C4	-5.15	1.31	1.34
2	B	249	C	C3'-C2'	-5.15	1.47	1.52
2	B	386	G	N1-C2	5.15	1.41	1.37
2	B	514	A	C5-C6	-5.15	1.36	1.41
2	B	1147	A	N9-C8	-5.15	1.33	1.37
2	B	2089	C	O3'-P	-5.15	1.54	1.61
2	B	2788	C	C4-N4	5.15	1.38	1.33
1	A	50	A	N7-C5	-5.15	1.36	1.39
2	B	8	C	O3'-P	-5.15	1.54	1.61
2	B	361	G	N9-C4	-5.15	1.33	1.38
2	B	590	A	N9-C4	-5.15	1.34	1.37
2	B	671	C	C5-C6	-5.15	1.30	1.34
2	B	1089	A	N9-C8	-5.15	1.33	1.37
2	B	2300	C	N3-C4	5.15	1.37	1.33
2	B	2821	A	C2'-C1'	-5.15	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	187	G	N9-C8	5.15	1.41	1.37
2	B	1147	A	O4'-C1'	5.15	1.48	1.41
2	B	2459	A	P-O5'	-5.15	1.54	1.59
2	B	2490	G	P-O5'	-5.15	1.54	1.59
2	B	2704	C	P-O5'	5.15	1.64	1.59
2	B	43	G	N7-C5	-5.14	1.36	1.39
2	B	840	C	O3'-P	-5.14	1.54	1.61
2	B	1117	C	N1-C6	-5.14	1.34	1.37
2	B	1267	U	C4'-O4'	-5.14	1.38	1.45
2	B	1501	G	C2-N3	5.14	1.36	1.32
2	B	1940	U	C2-N3	5.14	1.41	1.37
2	B	1949	G	C5-C6	-5.14	1.37	1.42
2	B	2053	G	C8-N7	-5.14	1.27	1.30
2	B	2543	G	O3'-P	-5.14	1.54	1.61
2	B	2681	C	C2-N3	5.14	1.39	1.35
2	B	2721	A	N9-C4	-5.14	1.34	1.37
2	B	2829	A	O3'-P	-5.14	1.54	1.61
2	B	1901	A	C5-C4	5.14	1.42	1.38
2	B	2172	U	C4-C5	5.14	1.48	1.43
2	B	2184	A	C4'-C3'	-5.14	1.47	1.52
27	C	240	GLY	N-CA	-5.14	1.38	1.46
2	B	815	C	O4'-C1'	-5.14	1.34	1.41
2	B	1446	C	C3'-C2'	-5.14	1.47	1.52
2	B	391	A	N7-C5	5.14	1.42	1.39
2	B	749	A	N9-C4	-5.14	1.34	1.37
2	B	788	A	P-O5'	-5.14	1.54	1.59
2	B	862	G	C6-O6	-5.14	1.19	1.24
2	B	1122	G	C3'-O3'	5.14	1.49	1.42
2	B	1137	G	N7-C5	-5.14	1.36	1.39
2	B	1257	C	O4'-C1'	5.14	1.48	1.41
2	B	1325	U	P-O5'	-5.14	1.54	1.59
2	B	1617	C	C3'-C2'	-5.14	1.47	1.52
2	B	1680	U	C2'-C1'	-5.14	1.47	1.53
2	B	2052	A	C5-C6	-5.14	1.36	1.41
2	B	2076	U	N3-C4	5.14	1.43	1.38
2	B	2467	C	C4'-O4'	-5.14	1.38	1.45
5	L	41	ARG	CZ-NH1	5.14	1.39	1.33
2	B	259	G	N1-C2	5.14	1.41	1.37
2	B	630	G	C2-N3	5.14	1.36	1.32
2	B	663	G	C2-N3	5.14	1.36	1.32
2	B	964	C	C2'-C1'	5.14	1.59	1.53
2	B	1031	G	C6-N1	5.14	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2495	G	C3'-O3'	-5.14	1.34	1.42
2	B	2825	G	N9-C4	-5.14	1.33	1.38
31	I	64	ARG	CZ-NH2	5.14	1.39	1.33
2	B	228	C	C2-O2	5.14	1.29	1.24
2	B	231	A	N9-C4	-5.14	1.34	1.37
2	B	662	G	P-O5'	-5.14	1.54	1.59
2	B	1008	A	O3'-P	-5.14	1.54	1.61
2	B	1222	U	N1-C2	5.14	1.43	1.38
2	B	1591	A	C5'-C4'	5.14	1.57	1.51
2	B	1843	C	O3'-P	-5.14	1.54	1.61
2	B	2308	G	N7-C5	-5.14	1.36	1.39
2	B	2833	U	C5-C6	5.14	1.38	1.34
23	5	97	MET	CG-SD	5.14	1.94	1.81
2	B	326	G	P-O5'	-5.13	1.54	1.59
2	B	399	U	N1-C6	5.13	1.42	1.38
2	B	781	A	C3'-C2'	-5.13	1.47	1.52
2	B	1160	G	O3'-P	-5.13	1.54	1.61
2	B	1251	C	C2'-C1'	-5.13	1.47	1.53
2	B	2250	G	C5-C4	5.13	1.42	1.38
2	B	2255	G	C3'-C2'	-5.13	1.47	1.52
2	B	2290	G	O4'-C1'	5.13	1.48	1.41
2	B	2418	A	C6-N6	5.13	1.38	1.33
2	B	2671	G	C5-C4	-5.13	1.34	1.38
2	B	649	G	P-O5'	5.13	1.64	1.59
2	B	1202	G	P-O5'	-5.13	1.54	1.59
2	B	1293	C	C4'-O4'	-5.13	1.38	1.45
2	B	2386	A	O5'-C5'	-5.13	1.34	1.42
23	5	3	LYS	CA-C	-5.13	1.39	1.52
2	B	107	G	N1-C2	-5.13	1.33	1.37
2	B	336	C	C2-O2	-5.13	1.19	1.24
2	B	798	G	C2-N2	-5.13	1.29	1.34
2	B	945	A	C8-N7	5.13	1.35	1.31
2	B	1108	U	C2-O2	5.13	1.26	1.22
2	B	1378	A	C2'-C1'	-5.13	1.47	1.53
2	B	1697	G	N9-C4	-5.13	1.33	1.38
2	B	1728	C	C3'-C2'	-5.13	1.47	1.52
2	B	2002	G	C5-C4	-5.13	1.34	1.38
2	B	2089	C	C2'-C1'	-5.13	1.47	1.53
2	B	2253	G	P-O5'	-5.13	1.54	1.59
2	B	2365	G	N9-C4	-5.13	1.33	1.38
2	B	2493	U	C2-O2	-5.13	1.17	1.22
2	B	65	U	C2-N3	-5.13	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	712	G	N1-C2	-5.13	1.33	1.37
2	B	1002	G	O4'-C1'	-5.13	1.34	1.41
2	B	2492	U	P-O5'	-5.13	1.54	1.59
2	B	2749	A	C6-N6	-5.13	1.29	1.33
9	O	9	ARG	NE-CZ	5.13	1.39	1.33
2	B	417	C	C4-C5	5.13	1.47	1.43
2	B	783	A	C6-N1	5.13	1.39	1.35
2	B	850	U	O3'-P	-5.13	1.54	1.61
2	B	1234	U	C2-N3	-5.13	1.34	1.37
2	B	1485	U	O3'-P	-5.13	1.54	1.61
2	B	1763	G	O3'-P	-5.13	1.54	1.61
2	B	1920	C	O3'-P	-5.13	1.54	1.61
2	B	1974	C	C2-N3	-5.13	1.31	1.35
1	A	53	A	C3'-C2'	-5.13	1.47	1.52
2	B	155	A	N9-C4	5.13	1.41	1.37
2	B	297	G	C2'-O2'	-5.13	1.34	1.41
2	B	1113	U	C4'-C3'	-5.13	1.47	1.52
2	B	1375	U	C5-C6	-5.13	1.29	1.34
2	B	1418	G	O3'-P	-5.13	1.54	1.61
2	B	1489	C	N1-C6	-5.13	1.34	1.37
2	B	1547	C	P-O5'	-5.13	1.54	1.59
2	B	1743	G	N7-C5	-5.13	1.36	1.39
2	B	2753	A	C4'-C3'	-5.13	1.47	1.52
2	B	1153	C	C4'-O4'	-5.12	1.38	1.45
2	B	1756	G	N9-C8	-5.12	1.34	1.37
2	B	1888	G	C4'-C3'	5.12	1.58	1.53
2	B	2176	A	P-O5'	-5.12	1.54	1.59
2	B	2327	A	C4'-O4'	-5.12	1.38	1.45
2	B	2646	C	O3'-P	-5.12	1.54	1.61
2	B	82	U	C3'-C2'	-5.12	1.47	1.52
2	B	122	G	N9-C8	5.12	1.41	1.37
2	B	501	A	C6-N1	5.12	1.39	1.35
2	B	707	G	C5'-C4'	-5.12	1.45	1.51
2	B	811	U	C4-O4	5.12	1.27	1.23
2	B	1420	A	N3-C4	-5.12	1.31	1.34
2	B	1569	A	C2'-C1'	-5.12	1.47	1.53
2	B	1701	A	C6-N1	5.12	1.39	1.35
2	B	1727	C	C4'-O4'	-5.12	1.38	1.45
2	B	2014	A	C3'-O3'	5.12	1.49	1.42
1	A	35	C	C1'-N1	5.12	1.56	1.48
2	B	1154	G	N7-C5	-5.12	1.36	1.39
2	B	1616	A	O3'-P	-5.12	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2017	U	N1-C2	-5.12	1.33	1.38
2	B	2082	A	N7-C5	-5.12	1.36	1.39
2	B	2337	G	C5'-C4'	5.12	1.57	1.51
2	B	2368	C	C2'-C1'	-5.12	1.47	1.53
5	L	132	ARG	NE-CZ	5.12	1.39	1.33
2	B	1254	A	C2'-O2'	-5.12	1.34	1.41
2	B	1818	U	C2-N3	5.12	1.41	1.37
2	B	2051	A	N9-C8	5.12	1.41	1.37
2	B	2410	G	C4'-C3'	-5.12	1.47	1.52
27	C	166	ARG	CZ-NH2	5.12	1.39	1.33
1	A	111	U	C5'-C4'	5.12	1.57	1.51
2	B	228	C	O3'-P	-5.12	1.55	1.61
2	B	595	C	P-O5'	-5.12	1.54	1.59
2	B	679	C	O4'-C1'	-5.12	1.34	1.41
2	B	1196	C	C4'-C3'	-5.12	1.47	1.52
2	B	1305	C	C4-C5	5.12	1.47	1.43
2	B	1810	A	C8-N7	-5.12	1.27	1.31
2	B	1836	C	C2-N3	5.12	1.39	1.35
2	B	1959	G	C6-O6	5.12	1.28	1.24
2	B	1966	A	C2-N3	5.12	1.38	1.33
2	B	2056	G	C8-N7	-5.12	1.27	1.30
2	B	2138	G	N9-C4	-5.12	1.33	1.38
2	B	2844	G	C3'-C2'	-5.12	1.47	1.52
1	A	19	C	N3-C4	5.12	1.37	1.33
2	B	871	U	P-O5'	5.12	1.64	1.59
2	B	956	G	C5-C4	5.12	1.42	1.38
2	B	1941	C	N3-C4	5.12	1.37	1.33
2	B	177	G	C5-C4	-5.12	1.34	1.38
2	B	408	G	C1'-N9	-5.12	1.39	1.46
2	B	599	A	C1'-N9	-5.12	1.39	1.46
2	B	1089	A	N3-C4	-5.12	1.31	1.34
2	B	1383	A	C5'-C4'	5.12	1.57	1.51
2	B	1415	U	N1-C6	-5.12	1.33	1.38
2	B	1593	A	N9-C8	5.12	1.41	1.37
2	B	1677	A	N1-C2	5.12	1.39	1.34
2	B	1785	A	C3'-C2'	-5.12	1.47	1.52
2	B	1964	G	O3'-P	-5.12	1.55	1.61
2	B	2102	G	C2-N3	5.12	1.36	1.32
2	B	2153	C	N1-C6	5.12	1.40	1.37
23	5	163	TYR	CG-CD1	5.12	1.45	1.39
30	H	116	ARG	NE-CZ	5.12	1.39	1.33
2	B	173	A	C3'-C2'	-5.11	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	478	A	N9-C4	5.11	1.41	1.37
2	B	629	G	N9-C4	-5.11	1.33	1.38
2	B	904	G	C2'-C1'	-5.11	1.47	1.53
2	B	1095	A	N9-C8	-5.11	1.33	1.37
2	B	1888	G	C6-N1	5.11	1.43	1.39
2	B	2031	A	N9-C4	-5.11	1.34	1.37
2	B	2226	C	C4'-O4'	-5.11	1.39	1.45
2	B	2257	U	C4-C5	5.11	1.48	1.43
2	B	2445	G	C3'-O3'	-5.11	1.34	1.42
2	B	2569	G	C5-C4	-5.11	1.34	1.38
2	B	2821	A	N9-C8	-5.11	1.33	1.37
5	L	47	ARG	CZ-NH1	5.11	1.39	1.33
2	B	541	A	N9-C8	-5.11	1.33	1.37
2	B	1104	C	C2-N3	5.11	1.39	1.35
2	B	65	U	P-O5'	-5.11	1.54	1.59
2	B	142	A	C3'-C2'	-5.11	1.47	1.52
2	B	589	U	C3'-O3'	5.11	1.49	1.42
2	B	1039	A	N1-C2	-5.11	1.29	1.34
2	B	1171	G	C5-C6	-5.11	1.37	1.42
2	B	2253	G	N9-C8	-5.11	1.34	1.37
26	8	19	ARG	N-CA	-5.11	1.36	1.46
2	B	169	G	C2'-C1'	-5.11	1.47	1.53
2	B	515	A	C6-N1	5.11	1.39	1.35
2	B	1294	U	C3'-C2'	-5.11	1.47	1.52
2	B	19	A	N9-C8	-5.11	1.33	1.37
2	B	161	A	C2'-O2'	5.11	1.48	1.41
2	B	497	A	C6-N1	5.11	1.39	1.35
2	B	1126	A	C4'-O4'	-5.11	1.39	1.45
2	B	1309	G	P-O5'	-5.11	1.54	1.59
2	B	1653	G	C6-N1	5.11	1.43	1.39
2	B	2201	G	N7-C5	-5.11	1.36	1.39
2	B	2699	C	O4'-C1'	-5.11	1.35	1.41
1	A	67	G	O3'-P	-5.11	1.55	1.61
2	B	60	G	N9-C8	5.11	1.41	1.37
2	B	204	A	O3'-P	-5.11	1.55	1.61
2	B	1165	A	C1'-N9	-5.11	1.39	1.46
2	B	1355	G	C6-N1	5.11	1.43	1.39
2	B	2174	C	C3'-C2'	5.11	1.58	1.52
2	B	2282	G	N7-C5	-5.11	1.36	1.39
2	B	2502	G	N3-C4	-5.11	1.31	1.35
2	B	2739	U	O3'-P	-5.11	1.55	1.61
2	B	2807	U	O3'-P	-5.11	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2830	C	C2-N3	-5.11	1.31	1.35
2	B	625	G	C2-N2	5.10	1.39	1.34
2	B	1154	G	C2'-C1'	-5.10	1.47	1.53
2	B	1311	G	O3'-P	-5.10	1.55	1.61
2	B	1479	G	C4'-C3'	-5.10	1.47	1.52
2	B	1771	C	P-O5'	-5.10	1.54	1.59
2	B	2009	A	C2'-C1'	-5.10	1.47	1.53
1	A	18	G	N9-C4	-5.10	1.33	1.38
2	B	134	G	C6-N1	5.10	1.43	1.39
2	B	1039	A	C8-N7	-5.10	1.27	1.31
2	B	1579	A	N9-C8	-5.10	1.33	1.37
2	B	1622	G	C2-N3	5.10	1.36	1.32
2	B	2378	A	C4'-O4'	-5.10	1.39	1.45
2	B	2467	C	C3'-O3'	-5.10	1.35	1.42
2	B	2754	U	C1'-N1	-5.10	1.39	1.46
7	M	13	HIS	CB-CG	-5.10	1.40	1.50
2	B	1147	A	N9-C4	-5.10	1.34	1.37
2	B	1396	U	C5'-C4'	5.10	1.57	1.51
2	B	1791	A	C3'-C2'	-5.10	1.47	1.52
2	B	2329	U	O4'-C1'	-5.10	1.35	1.41
2	B	260	G	C3'-C2'	5.10	1.58	1.52
2	B	609	A	C5-C4	5.10	1.42	1.38
2	B	614	A	C5-C4	5.10	1.42	1.38
2	B	751	A	C4'-C3'	-5.10	1.47	1.52
2	B	1189	A	O3'-P	-5.10	1.55	1.61
2	B	1803	A	C6-N1	5.10	1.39	1.35
2	B	1842	G	N9-C8	-5.10	1.34	1.37
2	B	2173	A	N9-C4	5.10	1.41	1.37
2	B	2810	A	N3-C4	5.10	1.38	1.34
2	B	2812	G	C2-N2	5.10	1.39	1.34
20	E	170	ARG	CZ-NH2	5.10	1.39	1.33
2	B	354	A	C5-C4	5.10	1.42	1.38
2	B	379	G	C5-C4	-5.10	1.34	1.38
2	B	420	C	P-O5'	-5.10	1.54	1.59
2	B	494	G	C2'-C1'	-5.10	1.47	1.53
2	B	523	C	C5'-C4'	-5.10	1.45	1.51
2	B	653	U	C3'-O3'	5.10	1.49	1.42
2	B	697	G	N3-C4	5.10	1.39	1.35
2	B	1059	G	C6-O6	-5.10	1.19	1.24
2	B	1204	A	N9-C8	5.10	1.41	1.37
2	B	1589	U	C3'-C2'	-5.10	1.47	1.52
2	B	2068	U	C3'-O3'	5.10	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2652	C	O4'-C1'	5.10	1.48	1.41
2	B	2787	C	N3-C4	-5.10	1.30	1.33
2	B	2846	G	N1-C2	5.10	1.41	1.37
14	D	184	ARG	CZ-NH1	5.10	1.39	1.33
19	X	238	ARG	CZ-NH1	5.10	1.39	1.33
28	F	46	LYS	CA-CB	5.10	1.65	1.53
2	B	247	G	N9-C4	-5.10	1.33	1.38
2	B	442	G	C2'-C1'	-5.10	1.47	1.53
2	B	933	A	N3-C4	-5.10	1.31	1.34
2	B	2311	A	C3'-O3'	-5.10	1.35	1.42
2	B	2772	C	C4'-C3'	-5.10	1.47	1.52
14	D	109	VAL	CB-CG2	5.10	1.63	1.52
2	B	17	G	O3'-P	-5.09	1.55	1.61
2	B	314	C	C4'-O4'	-5.09	1.39	1.45
2	B	367	G	C3'-C2'	-5.09	1.47	1.52
2	B	592	A	N3-C4	5.09	1.38	1.34
2	B	1046	A	C6-N6	5.09	1.38	1.33
2	B	1251	C	P-O5'	-5.09	1.54	1.59
2	B	1303	G	N1-C2	5.09	1.41	1.37
2	B	1758	U	P-O5'	-5.09	1.54	1.59
2	B	2188	U	N1-C2	-5.09	1.33	1.38
2	B	2737	G	O4'-C1'	5.09	1.48	1.41
2	B	2790	U	C2'-C1'	-5.09	1.47	1.53
6	1	24	GLU	N-CA	-5.09	1.36	1.46
15	T	6	ARG	CZ-NH1	5.09	1.39	1.33
2	B	215	G	C2-N3	5.09	1.36	1.32
2	B	673	C	C2'-C1'	-5.09	1.47	1.53
2	B	844	A	N3-C4	5.09	1.38	1.34
2	B	1773	A	C6-N6	-5.09	1.29	1.33
2	B	1986	C	C2'-C1'	-5.09	1.47	1.53
2	B	2324	U	O3'-P	-5.09	1.55	1.61
2	B	104	A	C2'-C1'	-5.09	1.47	1.53
2	B	262	A	C5-C6	5.09	1.45	1.41
2	B	335	C	N1-C2	5.09	1.45	1.40
2	B	408	G	N1-C2	5.09	1.41	1.37
2	B	1041	G	C5-C6	-5.09	1.37	1.42
2	B	1363	C	C4-N4	5.09	1.38	1.33
2	B	1650	A	C8-N7	-5.09	1.27	1.31
2	B	2480	C	C3'-C2'	-5.09	1.47	1.52
2	B	2599	G	N9-C8	-5.09	1.34	1.37
1	A	51	G	C3'-C2'	-5.09	1.47	1.52
2	B	56	A	C6-N1	5.09	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	145	C	C4-N4	5.09	1.38	1.33
2	B	245	G	C4'-C3'	-5.09	1.47	1.52
2	B	428	A	N7-C5	-5.09	1.36	1.39
2	B	1168	G	C5-C4	-5.09	1.34	1.38
2	B	1421	G	C4'-O4'	5.09	1.52	1.45
2	B	1471	G	C4'-C3'	-5.09	1.47	1.52
2	B	1747	U	N1-C2	5.09	1.43	1.38
2	B	2503	A	N9-C4	-5.09	1.34	1.37
2	B	2697	G	C4'-O4'	-5.09	1.39	1.45
27	C	28	PRO	CA-C	-5.09	1.42	1.52
2	B	213	A	C1'-N9	-5.09	1.39	1.46
2	B	333	G	C6-O6	-5.09	1.19	1.24
2	B	2508	G	C6-N1	5.09	1.43	1.39
2	B	466	A	C4'-C3'	-5.09	1.47	1.52
2	B	521	U	C4'-O4'	-5.09	1.39	1.45
2	B	895	U	C5-C6	5.09	1.38	1.34
2	B	1054	A	N1-C2	5.09	1.39	1.34
2	B	1130	U	O3'-P	-5.09	1.55	1.61
2	B	1413	A	N9-C4	5.09	1.41	1.37
2	B	1432	G	C3'-C2'	-5.09	1.47	1.52
2	B	1512	C	C2-N3	5.09	1.39	1.35
2	B	2066	C	N1-C6	5.09	1.40	1.37
2	B	2251	G	C2-N2	5.09	1.39	1.34
2	B	2568	U	N1-C2	-5.09	1.33	1.38
4	K	100	PHE	CG-CD2	5.09	1.46	1.38
2	B	438	G	C2-N3	5.08	1.36	1.32
2	B	674	G	O3'-P	-5.08	1.55	1.61
2	B	690	G	C2'-C1'	-5.08	1.47	1.53
2	B	897	C	C2-O2	5.08	1.29	1.24
2	B	2578	G	C2-N3	5.08	1.36	1.32
2	B	370	G	O4'-C1'	-5.08	1.35	1.41
2	B	630	G	C6-O6	-5.08	1.19	1.24
2	B	672	C	C2-N3	-5.08	1.31	1.35
2	B	988	A	C8-N7	-5.08	1.27	1.31
2	B	1387	A	O3'-P	-5.08	1.55	1.61
2	B	1486	U	C4'-C3'	-5.08	1.47	1.52
2	B	1756	G	C1'-N9	-5.08	1.39	1.46
2	B	2274	A	C3'-C2'	-5.08	1.47	1.52
2	B	860	U	C3'-O3'	5.08	1.49	1.42
2	B	923	G	N9-C4	5.08	1.42	1.38
2	B	1175	A	N9-C4	5.08	1.40	1.37
2	B	1478	G	N3-C4	-5.08	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1492	G	O3'-P	5.08	1.67	1.61
2	B	1784	A	O3'-P	-5.08	1.55	1.61
2	B	2464	G	C5-C6	-5.08	1.37	1.42
13	S	24	ILE	CA-CB	-5.08	1.43	1.54
2	B	1740	G	C1'-N9	-5.08	1.39	1.46
2	B	1821	A	C4'-C3'	-5.08	1.47	1.52
2	B	1927	A	N9-C4	5.08	1.40	1.37
2	B	2297	A	N9-C8	-5.08	1.33	1.37
2	B	230	G	C2-N2	-5.08	1.29	1.34
2	B	675	A	C4'-C3'	-5.08	1.47	1.52
2	B	680	C	C4'-C3'	5.08	1.58	1.53
2	B	760	G	C2-N2	5.08	1.39	1.34
2	B	818	G	C6-O6	-5.08	1.19	1.24
2	B	953	G	C2-N3	5.08	1.36	1.32
2	B	1044	C	C5'-C4'	5.08	1.57	1.51
2	B	1048	A	C6-N6	5.08	1.38	1.33
2	B	1516	G	N3-C4	5.08	1.39	1.35
2	B	1694	C	C2-N3	-5.08	1.31	1.35
2	B	2156	G	O4'-C1'	-5.08	1.35	1.41
2	B	2235	G	C3'-O3'	5.08	1.49	1.42
2	B	2356	U	P-O5'	-5.08	1.54	1.59
2	B	2429	G	C2-N2	5.08	1.39	1.34
2	B	2598	A	C5'-C4'	5.08	1.57	1.51
2	B	2651	C	O3'-P	-5.08	1.55	1.61
2	B	2657	A	O3'-P	-5.08	1.55	1.61
2	B	2804	U	C4'-C3'	-5.08	1.47	1.52
2	B	2809	A	C6-N1	5.08	1.39	1.35
7	M	40	ARG	CZ-NH1	5.08	1.39	1.33
27	C	237	ARG	CZ-NH2	5.08	1.39	1.33
2	B	1120	G	C4'-O4'	5.08	1.52	1.45
2	B	1385	A	C5-C6	5.08	1.45	1.41
2	B	1743	G	P-O5'	-5.08	1.54	1.59
2	B	1855	U	N1-C2	-5.08	1.33	1.38
2	B	2054	A	P-O5'	-5.08	1.54	1.59
2	B	519	U	C4-O4	5.08	1.27	1.23
2	B	747	U	C2'-O2'	-5.08	1.35	1.41
2	B	1059	G	N1-C2	5.08	1.41	1.37
2	B	1551	A	N9-C8	5.08	1.41	1.37
2	B	1793	C	C3'-C2'	-5.08	1.47	1.52
2	B	2215	C	O3'-P	-5.08	1.55	1.61
2	B	2223	G	C4'-O4'	5.08	1.52	1.45
18	W	56	PHE	CG-CD1	5.08	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	J	44	TYR	CE2-CZ	-5.08	1.31	1.38
1	A	27	C	O3'-P	-5.07	1.55	1.61
2	B	187	G	P-O5'	-5.07	1.54	1.59
2	B	446	G	P-O5'	-5.07	1.54	1.59
2	B	588	U	O3'-P	-5.07	1.55	1.61
2	B	718	A	O3'-P	-5.07	1.55	1.61
2	B	1254	A	O3'-P	-5.07	1.55	1.61
2	B	2711	A	O4'-C1'	-5.07	1.35	1.41
2	B	1345	C	C3'-C2'	-5.07	1.47	1.52
2	B	1569	A	C5-C6	-5.07	1.36	1.41
2	B	2263	C	O3'-P	-5.07	1.55	1.61
2	B	2617	U	N1-C2	5.07	1.43	1.38
2	B	10	A	C3'-C2'	-5.07	1.47	1.52
2	B	290	U	O3'-P	-5.07	1.55	1.61
2	B	725	G	N1-C2	5.07	1.41	1.37
2	B	946	C	C5-C6	-5.07	1.30	1.34
2	B	1018	U	C4-C5	-5.07	1.39	1.43
2	B	1237	A	C4'-C3'	5.07	1.58	1.53
2	B	1506	U	N1-C6	5.07	1.42	1.38
2	B	1912	A	N7-C5	-5.07	1.36	1.39
2	B	1917	U	N3-C4	5.07	1.43	1.38
2	B	2004	G	N3-C4	-5.07	1.31	1.35
2	B	2711	A	N3-C4	-5.07	1.31	1.34
2	B	2876	G	C3'-C2'	-5.07	1.47	1.52
29	G	57	TYR	CG-CD1	5.07	1.45	1.39
1	A	74	U	C4'-C3'	5.07	1.58	1.53
2	B	221	A	C8-N7	-5.07	1.28	1.31
2	B	349	U	C5-C6	-5.07	1.29	1.34
2	B	696	G	C3'-O3'	5.07	1.49	1.42
2	B	1474	U	O3'-P	-5.07	1.55	1.61
2	B	538	A	C2'-C1'	-5.07	1.47	1.53
2	B	1026	G	P-O5'	-5.07	1.54	1.59
2	B	1237	A	C5'-C4'	5.07	1.57	1.51
2	B	1508	A	C2'-C1'	-5.07	1.47	1.53
2	B	1543	G	C2'-C1'	-5.07	1.47	1.53
2	B	1591	A	C6-N6	5.07	1.38	1.33
2	B	2160	C	P-O5'	-5.07	1.54	1.59
2	B	2369	A	C5-C6	5.07	1.45	1.41
2	B	2621	G	N3-C4	-5.07	1.31	1.35
2	B	194	G	N7-C5	-5.07	1.36	1.39
2	B	843	G	C6-O6	-5.07	1.19	1.24
2	B	928	A	C2-N3	5.07	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1250	G	O5'-C5'	-5.07	1.34	1.42
2	B	1343	G	O3'-P	-5.07	1.55	1.61
2	B	1552	A	C2-N3	-5.07	1.28	1.33
2	B	1749	A	P-O5'	-5.07	1.54	1.59
2	B	2078	C	O3'-P	-5.07	1.55	1.61
2	B	2126	A	N3-C4	-5.07	1.31	1.34
2	B	2625	G	C2'-C1'	-5.07	1.47	1.53
19	X	314	ARG	NE-CZ	5.07	1.39	1.33
1	A	117	G	C6-N1	5.06	1.43	1.39
2	B	219	A	C8-N7	-5.06	1.28	1.31
2	B	903	C	C5-C6	5.06	1.38	1.34
2	B	137	U	O3'-P	-5.06	1.55	1.61
2	B	756	A	N9-C8	-5.06	1.33	1.37
2	B	1076	C	C4-C5	-5.06	1.38	1.43
2	B	1278	C	O4'-C1'	-5.06	1.35	1.41
2	B	1419	A	C3'-O3'	5.06	1.49	1.42
2	B	2228	G	C4'-C3'	5.06	1.58	1.53
2	B	2242	G	C4'-C3'	-5.06	1.47	1.52
23	5	12	ARG	CZ-NH1	5.06	1.39	1.33
27	C	86	ARG	CD-NE	5.06	1.55	1.46
2	B	453	A	N9-C8	5.06	1.41	1.37
2	B	1923	U	C1'-N1	5.06	1.56	1.48
2	B	2058	A	C5-C4	-5.06	1.35	1.38
2	B	2096	C	C2-N3	5.06	1.39	1.35
2	B	2495	G	C6-N1	5.06	1.43	1.39
29	G	25	ILE	N-CA	-5.06	1.36	1.46
2	B	458	G	O3'-P	-5.06	1.55	1.61
2	B	609	A	C4'-C3'	-5.06	1.47	1.52
2	B	655	A	O4'-C1'	-5.06	1.35	1.41
2	B	1029	A	C5-C6	-5.06	1.36	1.41
2	B	1273	U	C2-N3	5.06	1.41	1.37
2	B	1341	G	C2-N3	5.06	1.36	1.32
2	B	1459	G	C3'-C2'	-5.06	1.47	1.52
2	B	1821	A	C2'-O2'	-5.06	1.35	1.41
2	B	2691	C	C2-O2	-5.06	1.19	1.24
7	M	59	ARG	CD-NE	5.06	1.55	1.46
31	I	74	PRO	N-CD	-5.06	1.40	1.47
2	B	248	G	O3'-P	-5.06	1.55	1.61
2	B	790	U	C5'-C4'	5.06	1.57	1.51
2	B	1325	U	N1-C2	-5.06	1.33	1.38
2	B	1433	A	C4'-C3'	-5.06	1.47	1.52
2	B	1977	A	C8-N7	-5.06	1.28	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2122	U	N3-C4	5.06	1.43	1.38
2	B	2418	A	N3-C4	-5.06	1.31	1.34
2	B	60	G	C3'-C2'	-5.06	1.47	1.52
2	B	488	G	C8-N7	-5.06	1.27	1.30
2	B	778	G	C5-C4	5.06	1.41	1.38
2	B	1124	G	O4'-C1'	-5.06	1.35	1.41
2	B	2328	A	C1'-N9	-5.06	1.39	1.46
2	B	2493	U	C4'-O4'	-5.06	1.39	1.45
27	C	128	THR	N-CA	-5.06	1.36	1.46
2	B	41	C	C4-C5	-5.05	1.39	1.43
2	B	517	C	C3'-O3'	5.05	1.49	1.42
2	B	841	G	P-O5'	5.05	1.64	1.59
2	B	1250	G	C6-N1	-5.05	1.36	1.39
2	B	1418	G	C3'-O3'	5.05	1.49	1.42
2	B	1445	G	N1-C2	5.05	1.41	1.37
2	B	1853	A	N3-C4	-5.05	1.31	1.34
2	B	2016	U	C4-C5	5.05	1.48	1.43
2	B	2067	G	C8-N7	5.05	1.33	1.30
2	B	2105	U	C4'-C3'	-5.05	1.47	1.52
2	B	253	C	C4'-C3'	-5.05	1.47	1.52
2	B	448	U	C2-N3	5.05	1.41	1.37
2	B	523	C	P-O5'	-5.05	1.54	1.59
2	B	1001	A	N7-C5	-5.05	1.36	1.39
2	B	1338	G	O3'-P	-5.05	1.55	1.61
2	B	2634	A	N9-C4	-5.05	1.34	1.37
2	B	2818	U	C4'-O4'	-5.05	1.39	1.45
2	B	26	G	N1-C2	5.05	1.41	1.37
2	B	602	A	O3'-P	-5.05	1.55	1.61
2	B	656	G	C6-N1	-5.05	1.36	1.39
2	B	693	A	C6-N6	5.05	1.38	1.33
2	B	697	G	C2-N3	5.05	1.36	1.32
2	B	843	G	N9-C4	-5.05	1.33	1.38
2	B	874	G	C1'-N9	-5.05	1.39	1.46
2	B	894	U	P-O5'	-5.05	1.54	1.59
2	B	1392	A	P-O5'	-5.05	1.54	1.59
2	B	1557	C	C4-C5	5.05	1.47	1.43
2	B	1593	A	C2-N3	-5.05	1.29	1.33
2	B	1613	G	N3-C4	-5.05	1.31	1.35
2	B	1849	G	N3-C4	-5.05	1.31	1.35
2	B	1990	C	O4'-C1'	-5.05	1.35	1.41
2	B	2006	C	C2'-C1'	-5.05	1.47	1.53
2	B	2118	U	O4'-C1'	-5.05	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	2376	A	C6-N6	5.05	1.38	1.33
2	B	2899	A	C4'-O4'	5.05	1.52	1.45
2	B	597	G	O4'-C1'	-5.05	1.35	1.41
2	B	771	G	O4'-C1'	-5.05	1.35	1.41
2	B	1158	C	C4'-O4'	-5.05	1.39	1.45
2	B	1394	U	C5-C6	-5.05	1.29	1.34
2	B	1406	U	C5-C6	-5.05	1.29	1.34
2	B	1782	U	C3'-C2'	5.05	1.58	1.52
2	B	1926	U	C4'-O4'	-5.05	1.39	1.45
2	B	2158	A	C6-N6	5.05	1.38	1.33
2	B	2391	G	N7-C5	-5.05	1.36	1.39
2	B	2435	A	C5'-C4'	5.05	1.57	1.51
2	B	2599	G	C5-C6	-5.05	1.37	1.42
2	B	2781	A	C2'-C1'	-5.05	1.47	1.53
1	A	82	U	C5'-C4'	5.05	1.57	1.51
2	B	278	A	C4'-C3'	5.05	1.58	1.53
2	B	409	G	N7-C5	-5.05	1.36	1.39
2	B	2823	A	N7-C5	-5.05	1.36	1.39
2	B	2893	A	N7-C5	-5.05	1.36	1.39
10	P	32	VAL	N-CA	-5.05	1.36	1.46
25	7	43	LEU	N-CA	-5.05	1.36	1.46
2	B	260	G	C5-C6	-5.05	1.37	1.42
2	B	741	U	C4-O4	-5.05	1.19	1.23
2	B	1025	G	C2'-C1'	-5.05	1.47	1.53
2	B	1141	U	N1-C6	-5.05	1.33	1.38
2	B	1184	U	C2'-C1'	-5.05	1.47	1.53
2	B	1302	A	C6-N6	-5.05	1.29	1.33
2	B	1821	A	N3-C4	-5.05	1.31	1.34
2	B	1976	U	O3'-P	-5.05	1.55	1.61
2	B	2044	C	O4'-C1'	5.05	1.48	1.41
2	B	2366	A	C4'-C3'	-5.05	1.47	1.52
2	B	2370	G	O4'-C1'	-5.05	1.35	1.41
2	B	2705	A	N3-C4	5.05	1.37	1.34
2	B	2797	U	C4'-C3'	-5.05	1.47	1.52
2	B	47	C	C3'-C2'	-5.04	1.47	1.52
2	B	624	C	N1-C6	5.04	1.40	1.37
2	B	1209	U	C4-C5	-5.04	1.39	1.43
2	B	1527	G	C2-N3	5.04	1.36	1.32
2	B	2045	C	C4'-O4'	5.04	1.52	1.45
2	B	589	U	C4-C5	5.04	1.48	1.43
2	B	926	G	N9-C8	-5.04	1.34	1.37
2	B	1193	G	C3'-C2'	5.04	1.58	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1353	A	O3'-P	-5.04	1.55	1.61
2	B	1615	C	N1-C2	5.04	1.45	1.40
2	B	1740	G	N7-C5	-5.04	1.36	1.39
2	B	2409	G	N1-C2	5.04	1.41	1.37
31	I	126	ARG	CD-NE	5.04	1.55	1.46
2	B	441	U	N1-C2	5.04	1.43	1.38
2	B	670	A	C3'-C2'	5.04	1.58	1.52
2	B	1109	C	C4'-O4'	-5.04	1.39	1.45
2	B	1840	G	C2-N3	5.04	1.36	1.32
2	B	2123	G	O4'-C1'	-5.04	1.35	1.41
2	B	2192	U	C5'-C4'	5.04	1.57	1.51
2	B	2266	A	N9-C8	5.04	1.41	1.37
10	P	69	VAL	CB-CG1	5.04	1.63	1.52
1	A	99	A	C2'-O2'	-5.04	1.35	1.41
2	B	671	C	C2-N3	5.04	1.39	1.35
2	B	1711	A	C6-N1	5.04	1.39	1.35
2	B	1745	A	O3'-P	-5.04	1.55	1.61
2	B	2184	A	N7-C5	-5.04	1.36	1.39
2	B	2216	G	N9-C8	-5.04	1.34	1.37
2	B	2748	A	N7-C5	-5.04	1.36	1.39
21	Y	24	ARG	CZ-NH2	5.04	1.39	1.33
1	A	67	G	N1-C2	5.04	1.41	1.37
2	B	265	A	C2-N3	-5.04	1.29	1.33
2	B	528	A	C2'-C1'	-5.04	1.47	1.53
2	B	660	C	P-O5'	-5.04	1.54	1.59
2	B	1234	U	P-O5'	-5.04	1.54	1.59
2	B	1914	C	C2'-C1'	-5.04	1.47	1.53
2	B	2456	C	C5-C6	5.04	1.38	1.34
2	B	2557	G	C4'-C3'	5.04	1.58	1.53
2	B	243	U	C4-O4	-5.04	1.19	1.23
2	B	847	U	C4-O4	-5.04	1.19	1.23
2	B	1034	G	C6-O6	5.04	1.28	1.24
2	B	1952	A	C8-N7	5.04	1.35	1.31
2	B	500	G	C2'-C1'	-5.04	1.47	1.53
2	B	651	G	C6-O6	-5.04	1.19	1.24
2	B	673	C	C2-N3	-5.04	1.31	1.35
2	B	2008	C	O3'-P	-5.04	1.55	1.61
2	B	2108	A	C5-C6	5.04	1.45	1.41
2	B	2195	U	C3'-C2'	-5.04	1.47	1.52
2	B	2872	A	C4'-C3'	5.04	1.58	1.53
1	A	61	G	N9-C4	-5.03	1.33	1.38
1	A	86	G	N3-C4	-5.03	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	31	C	N1-C6	5.03	1.40	1.37
2	B	36	G	C6-N1	5.03	1.43	1.39
2	B	416	U	C2'-C1'	-5.03	1.47	1.53
2	B	537	G	C4'-O4'	-5.03	1.39	1.45
2	B	774	G	N3-C4	-5.03	1.31	1.35
2	B	984	A	C3'-C2'	5.03	1.58	1.52
2	B	1324	G	N1-C2	5.03	1.41	1.37
2	B	1572	A	P-O5'	-5.03	1.54	1.59
2	B	1749	A	C5-C4	5.03	1.42	1.38
2	B	1778	U	C4-C5	-5.03	1.39	1.43
2	B	2097	A	P-O5'	-5.03	1.54	1.59
2	B	2200	C	C4'-O4'	-5.03	1.39	1.45
2	B	2562	U	C4-O4	-5.03	1.19	1.23
2	B	266	G	P-O5'	5.03	1.64	1.59
2	B	1757	A	N1-C2	5.03	1.38	1.34
2	B	1775	U	C2-N3	5.03	1.41	1.37
2	B	104	A	C8-N7	-5.03	1.28	1.31
2	B	263	G	C4'-C3'	-5.03	1.47	1.52
2	B	305	C	C5'-C4'	5.03	1.57	1.51
2	B	1269	A	C8-N7	-5.03	1.28	1.31
2	B	1690	A	N3-C4	-5.03	1.31	1.34
2	B	1783	A	C3'-O3'	5.03	1.49	1.42
2	B	1905	C	C4'-C3'	5.03	1.58	1.53
2	B	1907	G	C6-N1	5.03	1.43	1.39
2	B	2132	U	C2'-C1'	-5.03	1.47	1.53
2	B	2342	C	C4'-C3'	-5.03	1.47	1.52
2	B	2717	C	C4'-O4'	-5.03	1.39	1.45
2	B	2776	A	C3'-O3'	-5.03	1.35	1.42
2	B	2838	G	C3'-C2'	5.03	1.58	1.52
20	E	158	PHE	CB-CG	-5.03	1.42	1.51
1	A	10	G	C3'-C2'	5.03	1.58	1.52
1	A	42	C	C2'-O2'	-5.03	1.35	1.41
1	A	108	A	O3'-P	-5.03	1.55	1.61
2	B	917	A	C2'-C1'	-5.03	1.47	1.53
2	B	1006	C	P-O5'	-5.03	1.54	1.59
2	B	1729	U	N1-C2	5.03	1.43	1.38
2	B	2226	C	C4'-C3'	-5.03	1.47	1.52
2	B	170	U	C4-O4	-5.03	1.19	1.23
2	B	292	U	P-O5'	5.03	1.64	1.59
2	B	461	C	C3'-C2'	-5.03	1.47	1.52
2	B	687	C	C2'-O2'	-5.03	1.35	1.41
2	B	1377	G	C3'-O3'	-5.03	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1719	G	C2-N2	5.03	1.39	1.34
2	B	1826	G	C4'-O4'	-5.03	1.39	1.45
2	B	1927	A	C6-N6	5.03	1.38	1.33
2	B	2536	G	C2-N3	5.03	1.36	1.32
23	5	152	ALA	N-CA	-5.03	1.36	1.46
2	B	206	U	P-O5'	5.03	1.64	1.59
2	B	687	C	C3'-C2'	-5.03	1.47	1.52
2	B	1231	U	C2-N3	-5.03	1.34	1.37
2	B	1546	G	C3'-C2'	-5.03	1.47	1.52
2	B	1668	A	C2'-C1'	-5.03	1.47	1.53
2	B	1747	U	C2'-C1'	-5.03	1.47	1.53
2	B	1957	C	C5-C6	5.03	1.38	1.34
2	B	2109	U	C2'-O2'	-5.03	1.35	1.41
2	B	2163	A	C2'-C1'	-5.03	1.47	1.53
2	B	2487	G	C2-N3	5.03	1.36	1.32
2	B	2503	A	C8-N7	-5.03	1.28	1.31
2	B	2527	C	C5'-C4'	-5.03	1.45	1.51
2	B	2590	A	C6-N6	5.03	1.38	1.33
2	B	307	G	C2-N2	-5.02	1.29	1.34
2	B	1726	C	C4-N4	5.02	1.38	1.33
2	B	2159	G	C2'-C1'	-5.02	1.47	1.53
19	X	147	HIS	CB-CG	5.02	1.59	1.50
2	B	68	G	C8-N7	-5.02	1.27	1.30
2	B	144	A	C5-C6	5.02	1.45	1.41
2	B	499	U	C4'-O4'	-5.02	1.39	1.45
2	B	612	G	P-O5'	-5.02	1.54	1.59
2	B	1599	U	N3-C4	5.02	1.43	1.38
2	B	2038	G	O3'-P	-5.02	1.55	1.61
1	A	91	C	C3'-C2'	-5.02	1.47	1.52
2	B	839	U	O4'-C1'	-5.02	1.35	1.41
2	B	1315	C	C4-N4	5.02	1.38	1.33
2	B	1436	G	P-O5'	-5.02	1.54	1.59
2	B	1992	G	C6-N1	5.02	1.43	1.39
2	B	2418	A	C3'-C2'	-5.02	1.47	1.52
2	B	283	G	C3'-C2'	5.02	1.58	1.52
2	B	356	G	C2-N3	5.02	1.36	1.32
2	B	1289	C	C2-N3	-5.02	1.31	1.35
2	B	2271	G	P-O5'	5.02	1.64	1.59
2	B	2357	G	C2'-C1'	-5.02	1.47	1.53
28	F	23	SER	CA-CB	5.02	1.60	1.52
2	B	73	A	N9-C8	-5.02	1.33	1.37
2	B	328	U	O3'-P	-5.02	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	1805	A	N7-C5	-5.02	1.36	1.39
2	B	1831	G	C5-C6	-5.02	1.37	1.42
2	B	1891	G	C2-N3	-5.02	1.28	1.32
2	B	1945	G	C4'-C3'	5.02	1.58	1.53
2	B	2122	U	O3'-P	-5.02	1.55	1.61
2	B	2263	C	N1-C2	-5.02	1.35	1.40
2	B	2589	A	P-O5'	-5.02	1.54	1.59
2	B	2679	A	N7-C5	-5.02	1.36	1.39
2	B	2793	C	C5-C6	5.02	1.38	1.34
2	B	2834	G	C5-C6	-5.02	1.37	1.42
2	B	908	C	C2'-C1'	5.02	1.58	1.53
2	B	1138	G	N1-C2	5.02	1.41	1.37
2	B	1141	U	O3'-P	-5.02	1.55	1.61
2	B	2040	G	C8-N7	-5.02	1.27	1.30
2	B	2491	U	C2-N3	5.02	1.41	1.37
2	B	2889	C	O3'-P	-5.02	1.55	1.61
27	C	182	LYS	CA-CB	5.02	1.65	1.53
2	B	805	G	C5'-C4'	5.01	1.57	1.51
2	B	898	C	N1-C2	5.01	1.45	1.40
2	B	1943	U	C4'-C3'	5.01	1.58	1.53
2	B	2343	U	C1'-N1	-5.01	1.39	1.46
2	B	2688	G	C4'-C3'	-5.01	1.47	1.52
2	B	2896	C	N1-C6	-5.01	1.34	1.37
2	B	759	G	C1'-N9	-5.01	1.39	1.46
2	B	967	U	C2'-C1'	-5.01	1.47	1.53
2	B	1113	U	C4-O4	5.01	1.27	1.23
2	B	1115	G	O3'-P	-5.01	1.55	1.61
2	B	1499	C	C2-N3	-5.01	1.31	1.35
2	B	37	C	C3'-C2'	-5.01	1.47	1.52
2	B	42	A	C8-N7	-5.01	1.28	1.31
2	B	306	U	N1-C6	5.01	1.42	1.38
2	B	549	G	C5'-C4'	5.01	1.57	1.51
2	B	767	U	C4-O4	5.01	1.27	1.23
2	B	898	C	C5-C6	5.01	1.38	1.34
2	B	1519	G	C8-N7	-5.01	1.27	1.30
2	B	1549	A	O3'-P	-5.01	1.55	1.61
2	B	1672	A	O4'-C1'	-5.01	1.35	1.41
2	B	1737	G	C3'-C2'	5.01	1.58	1.52
2	B	2565	A	N3-C4	-5.01	1.31	1.34
2	B	2629	U	C2-N3	5.01	1.41	1.37
2	B	2713	U	N3-C4	5.01	1.43	1.38
32	J	56	VAL	CA-C	-5.01	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	182	A	N9-C4	5.01	1.40	1.37
2	B	221	A	C3'-O3'	5.01	1.49	1.42
2	B	355	U	N3-C4	5.01	1.43	1.38
2	B	563	A	C5-C6	5.01	1.45	1.41
2	B	1321	A	N9-C8	5.01	1.41	1.37
2	B	1689	A	C2-N3	5.01	1.38	1.33
2	B	1735	A	C2'-C1'	-5.01	1.47	1.53
2	B	1895	C	N3-C4	5.01	1.37	1.33
2	B	1939	U	N3-C4	5.01	1.43	1.38
2	B	2059	A	C3'-C2'	-5.01	1.47	1.52
2	B	2191	A	O3'-P	-5.01	1.55	1.61
2	B	2577	A	O3'-P	-5.01	1.55	1.61
2	B	2632	A	C1'-N9	-5.01	1.39	1.46
2	B	2705	A	O4'-C1'	-5.01	1.35	1.41
2	B	2813	A	C2-N3	-5.01	1.29	1.33
13	S	18	ARG	N-CA	-5.01	1.36	1.46
14	D	191	GLY	N-CA	-5.01	1.38	1.46
30	H	53	GLU	CD-OE1	5.01	1.31	1.25
2	B	435	C	P-O5'	-5.01	1.54	1.59
2	B	958	U	C5'-C4'	5.01	1.57	1.51
2	B	1233	C	C2-O2	-5.01	1.20	1.24
2	B	2869	G	P-O5'	-5.01	1.54	1.59
2	B	205	G	C5'-C4'	5.01	1.57	1.51
2	B	397	U	C3'-C2'	-5.01	1.47	1.52
2	B	534	U	C5'-C4'	-5.01	1.45	1.51
2	B	1328	A	C6-N6	5.01	1.38	1.33
2	B	1517	G	P-O5'	-5.01	1.54	1.59
2	B	1586	A	C6-N6	5.01	1.38	1.33
2	B	2322	A	N9-C4	-5.01	1.34	1.37
2	B	822	G	O3'-P	-5.00	1.55	1.61
2	B	1395	A	P-O5'	-5.00	1.54	1.59
2	B	2311	A	N9-C8	-5.00	1.33	1.37
2	B	2764	A	O3'-P	-5.00	1.55	1.61
2	B	325	G	C2-N3	5.00	1.36	1.32
2	B	1431	A	O4'-C1'	-5.00	1.35	1.41
2	B	1591	A	C1'-N9	-5.00	1.39	1.46
2	B	1746	A	O3'-P	-5.00	1.55	1.61
2	B	2172	U	C5-C6	5.00	1.38	1.34
2	B	2330	G	C2'-C1'	-5.00	1.47	1.53
2	B	2732	G	C2-N3	5.00	1.36	1.32
2	B	31	C	C4-N4	5.00	1.38	1.33
2	B	77	G	C5'-C4'	5.00	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	621	A	C2'-O2'	-5.00	1.35	1.41
2	B	684	G	P-O5'	-5.00	1.54	1.59
2	B	847	U	N3-C4	-5.00	1.33	1.38
2	B	889	C	C2-O2	5.00	1.28	1.24
2	B	1964	G	N7-C5	-5.00	1.36	1.39
2	B	2509	G	N3-C4	-5.00	1.31	1.35

All (18635) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1784	A	N1-C6-N6	27.35	135.01	118.60
2	B	319	G	N1-C6-O6	25.96	135.47	119.90
2	B	332	A	N1-C6-N6	25.93	134.16	118.60
2	B	909	A	N1-C6-N6	25.56	133.93	118.60
2	B	2270	A	N1-C6-N6	25.05	133.63	118.60
2	B	2808	G	N1-C6-O6	24.23	134.44	119.90
2	B	662	G	N1-C6-O6	24.07	134.34	119.90
2	B	662	G	C5-C6-O6	-24.01	114.20	128.60
2	B	299	A	N1-C6-N6	23.64	132.78	118.60
2	B	2163	A	N1-C6-N6	23.56	132.73	118.60
2	B	2758	A	N1-C6-N6	23.04	132.43	118.60
2	B	2608	G	C5-C6-O6	-23.00	114.80	128.60
2	B	748	G	C5-C6-O6	-22.99	114.81	128.60
2	B	165	A	N1-C6-N6	22.96	132.38	118.60
2	B	2088	A	N1-C6-N6	22.94	132.37	118.60
2	B	1773	A	N1-C6-N6	22.93	132.36	118.60
2	B	19	A	N1-C6-N6	22.70	132.22	118.60
2	B	2700	A	N1-C6-N6	22.50	132.10	118.60
2	B	845	A	N1-C6-N6	22.47	132.08	118.60
2	B	892	A	N1-C6-N6	22.40	132.04	118.60
2	B	319	G	C5-C6-O6	-22.34	115.19	128.60
2	B	690	G	C5-C6-O6	-22.34	115.20	128.60
2	B	251	A	N1-C6-N6	22.32	131.99	118.60
2	B	447	A	N1-C6-N6	22.20	131.92	118.60
2	B	1701	A	N1-C6-N6	21.82	131.69	118.60
2	B	748	G	N1-C6-O6	21.77	132.96	119.90
2	B	1050	A	N1-C6-N6	21.77	131.66	118.60
2	B	825	A	N1-C6-N6	21.76	131.66	118.60
2	B	1014	A	N1-C6-N6	21.73	131.64	118.60
2	B	1913	A	N1-C6-N6	21.48	131.49	118.60
2	B	2812	G	N1-C6-O6	21.47	132.78	119.90
1	A	58	A	N1-C6-N6	21.39	131.44	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2503	A	N1-C6-N6	21.37	131.42	118.60
2	B	354	A	N1-C6-N6	21.30	131.38	118.60
2	B	690	G	N1-C6-O6	21.12	132.57	119.90
2	B	2293	G	C5-C6-O6	-21.06	115.96	128.60
2	B	1579	A	N1-C6-N6	21.04	131.23	118.60
2	B	52	A	N1-C6-N6	21.04	131.22	118.60
2	B	1331	G	N1-C6-O6	20.98	132.49	119.90
2	B	2882	A	N1-C6-N6	20.94	131.17	118.60
2	B	471	A	P-O3'-C3'	20.94	144.82	119.70
2	B	2341	G	N1-C6-O6	20.94	132.46	119.90
2	B	2144	G	N1-C6-O6	20.90	132.44	119.90
2	B	2778	A	N1-C6-N6	20.79	131.07	118.60
2	B	1134	A	N1-C6-N6	20.73	131.03	118.60
2	B	685	A	N1-C6-N6	20.67	131.00	118.60
2	B	1067	A	N1-C6-N6	20.53	130.92	118.60
2	B	30	G	C5-C6-O6	-20.48	116.31	128.60
2	B	1494	A	N1-C6-N6	20.47	130.88	118.60
2	B	1080	A	N1-C6-N6	20.43	130.86	118.60
2	B	2566	A	N1-C6-N6	20.29	130.78	118.60
2	B	745	G	C5-C6-O6	-20.26	116.44	128.60
2	B	1936	A	N1-C6-N6	20.19	130.72	118.60
2	B	472	A	N1-C6-N6	20.19	130.71	118.60
2	B	2094	A	N1-C6-N6	20.16	130.69	118.60
2	B	2140	G	N1-C6-O6	20.10	131.96	119.90
2	B	1490	A	N1-C6-N6	20.08	130.65	118.60
2	B	2425	A	N1-C6-N6	19.98	130.59	118.60
2	B	21	A	N1-C6-N6	19.97	130.58	118.60
2	B	745	G	N1-C6-O6	19.96	131.88	119.90
2	B	693	A	N1-C6-N6	19.91	130.54	118.60
2	B	146	A	N1-C6-N6	19.86	130.51	118.60
1	A	50	A	N1-C6-N6	19.69	130.42	118.60
2	B	1401	G	C5-C6-O6	-19.68	116.79	128.60
2	B	432	A	N1-C6-N6	19.66	130.40	118.60
2	B	1601	G	N1-C6-O6	19.63	131.68	119.90
2	B	172	A	N1-C6-N6	19.62	130.37	118.60
2	B	599	A	N1-C6-N6	19.61	130.36	118.60
2	B	2024	G	C5-C6-O6	-19.60	116.84	128.60
2	B	2341	G	C5-C6-O6	-19.58	116.85	128.60
2	B	1393	A	N1-C6-N6	19.53	130.32	118.60
2	B	1614	A	N1-C6-N6	19.53	130.32	118.60
2	B	2434	A	C4-C5-C6	19.50	126.75	117.00
2	B	2688	G	C5-C6-O6	-19.43	116.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1927	A	N1-C6-N6	19.38	130.23	118.60
2	B	5	A	N1-C6-N6	19.35	130.21	118.60
2	B	1916	A	N1-C6-N6	19.29	130.17	118.60
2	B	900	A	N1-C6-N6	19.28	130.17	118.60
2	B	2140	G	C5-C6-O6	-19.28	117.03	128.60
2	B	1151	A	N1-C6-N6	19.26	130.15	118.60
2	B	497	A	N1-C6-N6	19.23	130.14	118.60
2	B	2607	G	N1-C6-O6	19.23	131.44	119.90
2	B	515	A	N1-C6-N6	19.13	130.08	118.60
2	B	2247	A	C4-C5-C6	19.11	126.55	117.00
2	B	898	C	C6-N1-C2	-19.05	112.68	120.30
2	B	64	A	N1-C6-N6	19.05	130.03	118.60
2	B	561	G	C5-C6-O6	-19.04	117.18	128.60
2	B	1784	A	C5-C6-N6	-18.98	108.51	123.70
2	B	712	G	N1-C6-O6	18.92	131.25	119.90
2	B	1095	A	N1-C6-N6	18.89	129.94	118.60
2	B	2430	A	N1-C6-N6	18.89	129.93	118.60
2	B	526	A	N1-C6-N6	18.84	129.90	118.60
2	B	2671	G	N1-C6-O6	18.82	131.19	119.90
2	B	1052	C	N3-C4-C5	-18.78	114.39	121.90
29	G	163	TYR	CB-CG-CD1	-18.76	109.75	121.00
2	B	834	G	C5-C6-O6	-18.72	117.37	128.60
2	B	84	A	N1-C6-N6	18.70	129.82	118.60
2	B	1133	A	N1-C6-N6	18.68	129.81	118.60
2	B	14	A	N1-C6-N6	18.66	129.80	118.60
2	B	590	A	N1-C6-N6	18.66	129.79	118.60
2	B	332	A	C5-C6-N6	-18.53	108.88	123.70
2	B	379	G	N1-C6-O6	18.52	131.01	119.90
2	B	1166	G	N1-C6-O6	18.52	131.01	119.90
2	B	1435	G	N1-C6-O6	18.49	131.00	119.90
2	B	942	G	C5-C6-O6	-18.49	117.50	128.60
2	B	488	G	N1-C6-O6	18.46	130.98	119.90
2	B	2033	A	N1-C6-N6	18.45	129.67	118.60
2	B	1387	A	N1-C6-N6	18.44	129.66	118.60
2	B	404	A	N1-C6-N6	18.43	129.66	118.60
2	B	1705	A	N1-C6-N6	18.42	129.65	118.60
2	B	586	A	N1-C6-N6	18.39	129.64	118.60
2	B	905	A	N1-C6-N6	18.36	129.62	118.60
2	B	10	A	N1-C6-N6	18.35	129.61	118.60
2	B	1580	A	N1-C6-N6	18.34	129.60	118.60
2	B	891	G	N1-C6-O6	18.28	130.87	119.90
2	B	2418	A	N1-C6-N6	18.22	129.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1845	G	C5-C6-O6	-18.21	117.67	128.60
2	B	1791	A	C8-N9-C4	18.20	113.08	105.80
2	B	804	A	N1-C6-N6	18.16	129.50	118.60
2	B	1571	A	N1-C6-N6	18.12	129.47	118.60
2	B	706	A	N1-C6-N6	18.12	129.47	118.60
2	B	219	A	N1-C6-N6	18.09	129.46	118.60
2	B	687	C	N3-C4-C5	-17.98	114.71	121.90
2	B	140	C	N3-C4-C5	-17.93	114.73	121.90
2	B	670	A	N1-C6-N6	17.93	129.36	118.60
2	B	1111	A	N1-C6-N6	17.92	129.35	118.60
2	B	1551	A	N1-C6-N6	17.90	129.34	118.60
2	B	449	A	N1-C6-N6	17.89	129.33	118.60
2	B	1421	G	N1-C6-O6	17.87	130.62	119.90
2	B	2770	G	C5-C6-O6	-17.82	117.91	128.60
2	B	1062	G	N1-C6-O6	17.82	130.59	119.90
2	B	86	G	C5-C6-O6	-17.80	117.92	128.60
2	B	707	G	C5-C6-O6	-17.79	117.93	128.60
2	B	2422	C	O4'-C1'-N1	17.78	122.42	108.20
2	B	520	G	C5-C6-O6	-17.75	117.95	128.60
2	B	101	A	N1-C6-N6	17.74	129.25	118.60
2	B	1291	C	C6-N1-C2	-17.72	113.21	120.30
2	B	1124	G	C2-N3-C4	17.72	120.76	111.90
2	B	477	A	N1-C6-N6	17.70	129.22	118.60
2	B	455	C	P-O3'-C3'	17.69	140.93	119.70
2	B	1649	G	N1-C6-O6	17.64	130.49	119.90
2	B	24	G	C5-C6-O6	-17.64	118.02	128.60
2	B	2082	A	N1-C6-N6	17.60	129.16	118.60
2	B	318	C	C6-N1-C2	-17.59	113.26	120.30
2	B	2694	G	C5-C6-O6	-17.53	118.08	128.60
2	B	1225	G	N1-C6-O6	17.52	130.41	119.90
2	B	7	G	C5-C6-O6	-17.51	118.09	128.60
1	A	108	A	N1-C6-N6	17.50	129.10	118.60
2	B	1149	G	N1-C6-O6	17.49	130.39	119.90
2	B	2003	A	N1-C6-N6	17.48	129.09	118.60
2	B	2361	G	O4'-C1'-N9	17.46	122.17	108.20
2	B	647	G	C5-C6-O6	-17.45	118.13	128.60
2	B	322	A	P-O3'-C3'	17.45	140.63	119.70
2	B	862	G	N1-C6-O6	17.45	130.37	119.90
2	B	2750	A	N1-C6-N6	17.44	129.06	118.60
2	B	2603	G	N1-C6-O6	17.44	130.36	119.90
18	W	18	ARG	NE-CZ-NH2	-17.43	111.58	120.30
2	B	2734	A	N1-C6-N6	17.43	129.06	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2502	G	N1-C6-O6	17.41	130.35	119.90
2	B	1564	C	N3-C4-N4	17.41	130.19	118.00
2	B	1640	A	N1-C6-N6	17.37	129.02	118.60
2	B	861	A	N1-C2-N3	-17.37	120.62	129.30
2	B	474	G	N1-C6-O6	17.36	130.32	119.90
2	B	1124	G	C5-C6-O6	-17.36	118.19	128.60
2	B	488	G	C5-C6-O6	-17.34	118.20	128.60
1	A	78	A	N1-C6-N6	17.34	129.00	118.60
2	B	2159	G	C5-C6-O6	-17.33	118.20	128.60
2	B	798	G	N1-C6-O6	17.32	130.29	119.90
2	B	2145	C	P-O3'-C3'	17.31	140.47	119.70
2	B	890	C	P-O3'-C3'	17.29	140.45	119.70
2	B	712	G	C5-C6-O6	-17.25	118.25	128.60
2	B	2843	G	N1-C6-O6	17.24	130.24	119.90
2	B	2	G	C5-C6-O6	-17.22	118.27	128.60
2	B	2583	G	C5-C6-O6	-17.19	118.29	128.60
1	A	115	A	N1-C6-N6	17.18	128.91	118.60
2	B	1585	C	N3-C4-C5	-17.14	115.04	121.90
2	B	757	G	N1-C6-O6	17.13	130.18	119.90
2	B	81	G	C5-C6-O6	-17.13	118.32	128.60
2	B	259	G	C5-C6-O6	-17.09	118.35	128.60
2	B	496	G	N9-C4-C5	16.97	112.19	105.40
2	B	1975	G	N1-C6-O6	16.97	130.08	119.90
2	B	1401	G	N1-C6-O6	16.97	130.08	119.90
1	A	46	A	N1-C6-N6	16.96	128.78	118.60
2	B	2812	G	C5-C6-O6	-16.95	118.43	128.60
2	B	506	G	N1-C6-O6	16.95	130.07	119.90
2	B	1327	A	N1-C6-N6	16.93	128.76	118.60
2	B	181	A	C8-N9-C4	-16.92	99.03	105.80
2	B	2886	A	N1-C6-N6	16.87	128.72	118.60
2	B	668	A	N1-C6-N6	16.87	128.72	118.60
2	B	2021	C	C2-N3-C4	16.87	128.33	119.90
2	B	2358	A	N1-C6-N6	16.86	128.71	118.60
2	B	1086	A	N1-C6-N6	16.85	128.71	118.60
2	B	2159	G	N1-C6-O6	16.83	130.00	119.90
1	A	104	A	N1-C6-N6	16.81	128.69	118.60
2	B	2212	A	P-O3'-C3'	16.80	139.86	119.70
2	B	1850	G	C8-N9-C4	-16.79	99.69	106.40
2	B	204	A	N1-C6-N6	16.78	128.66	118.60
2	B	530	G	C5-C6-O6	-16.77	118.53	128.60
2	B	2835	A	N1-C6-N6	16.77	128.66	118.60
2	B	2873	A	N1-C6-N6	16.77	128.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	362	A	N1-C6-N6	16.75	128.65	118.60
2	B	1651	G	C5-C6-O6	-16.72	118.57	128.60
2	B	1552	A	N1-C6-N6	16.71	128.63	118.60
2	B	2902	C	C6-N1-C2	-16.71	113.62	120.30
1	A	30	C	O4'-C1'-N1	16.67	121.54	108.20
2	B	2281	A	N1-C6-N6	16.66	128.60	118.60
2	B	983	A	N1-C6-N6	16.62	128.57	118.60
2	B	1510	G	C5-C6-O6	-16.62	118.63	128.60
2	B	2852	G	N1-C6-O6	16.61	129.87	119.90
1	A	4	C	O4'-C1'-N1	16.61	121.48	108.20
2	B	1166	G	C5-C6-O6	-16.60	118.64	128.60
2	B	2820	A	N1-C6-N6	16.59	128.56	118.60
2	B	539	G	N1-C6-O6	16.59	129.85	119.90
2	B	1783	A	N1-C6-N6	16.57	128.54	118.60
2	B	2311	A	P-O3'-C3'	16.57	139.58	119.70
2	B	2671	G	C5-C6-O6	-16.54	118.67	128.60
2	B	2608	G	N1-C6-O6	16.53	129.82	119.90
2	B	968	C	N3-C4-N4	16.51	129.56	118.00
2	B	1972	G	C5-C6-O6	-16.51	118.69	128.60
2	B	1899	A	P-O3'-C3'	16.51	139.51	119.70
2	B	1392	A	N1-C6-N6	16.48	128.49	118.60
2	B	2029	G	N1-C6-O6	16.44	129.77	119.90
2	B	8	C	N3-C4-C5	-16.43	115.33	121.90
2	B	1149	G	C5-C6-O6	-16.41	118.75	128.60
2	B	1937	A	N1-C6-N6	16.41	128.45	118.60
2	B	401	A	O4'-C1'-N9	16.41	121.33	108.20
2	B	666	A	N1-C6-N6	16.40	128.44	118.60
1	A	115	A	C4-C5-C6	16.40	125.20	117.00
2	B	1845	G	N1-C6-O6	16.40	129.74	119.90
2	B	1766	G	N1-C6-O6	16.39	129.74	119.90
2	B	838	C	N3-C4-N4	16.38	129.47	118.00
2	B	19	A	C5-C6-N1	-16.34	109.53	117.70
2	B	1323	C	N3-C4-C5	-16.34	115.37	121.90
2	B	2024	G	N1-C6-O6	16.33	129.70	119.90
2	B	281	C	N3-C4-C5	-16.31	115.38	121.90
2	B	2416	C	N3-C4-C5	-16.29	115.38	121.90
4	K	71	ARG	NE-CZ-NH2	-16.28	112.16	120.30
2	B	858	G	N1-C6-O6	16.27	129.66	119.90
2	B	1127	A	N1-C6-N6	16.27	128.36	118.60
2	B	756	A	N1-C6-N6	16.24	128.35	118.60
2	B	1247	A	N9-C4-C5	-16.23	99.31	105.80
2	B	265	A	O4'-C1'-N9	16.22	121.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1050	A	C5-C6-N6	-16.22	110.73	123.70
2	B	1930	G	P-O3'-C3'	16.20	139.15	119.70
2	B	898	C	P-O3'-C3'	16.17	139.11	119.70
2	B	2809	A	N1-C6-N6	16.17	128.30	118.60
2	B	2	G	N1-C6-O6	16.16	129.60	119.90
2	B	1504	A	N1-C6-N6	16.16	128.30	118.60
2	B	2541	A	N1-C6-N6	16.16	128.30	118.60
2	B	2639	A	N1-C6-N6	16.16	128.29	118.60
2	B	1331	G	C5-C6-O6	-16.15	118.91	128.60
2	B	2013	A	N1-C6-N6	16.15	128.29	118.60
2	B	1649	G	C5-C6-O6	-16.14	118.92	128.60
2	B	1053	C	C6-N1-C2	-16.12	113.85	120.30
2	B	2721	A	N1-C6-N6	16.11	128.26	118.60
2	B	910	A	N1-C6-N6	16.09	128.26	118.60
2	B	1441	G	N1-C6-O6	16.08	129.55	119.90
28	F	7	TYR	CB-CG-CD2	16.08	130.65	121.00
2	B	1165	A	N1-C6-N6	16.08	128.25	118.60
2	B	2469	A	N1-C6-N6	16.05	128.23	118.60
2	B	2856	A	N1-C6-N6	16.02	128.21	118.60
2	B	1843	C	C6-N1-C2	-15.99	113.90	120.30
2	B	141	G	C5-C6-O6	-15.99	119.01	128.60
2	B	939	G	C5-C6-O6	-15.99	119.01	128.60
2	B	2607	G	C5-C6-O6	-15.99	119.01	128.60
1	A	15	A	N1-C6-N6	15.98	128.19	118.60
2	B	2762	C	C6-N1-C2	-15.97	113.91	120.30
2	B	1598	A	N1-C6-N6	15.97	128.18	118.60
2	B	2803	G	N1-C6-O6	15.96	129.47	119.90
2	B	294	A	N1-C6-N6	15.96	128.17	118.60
1	A	39	A	N1-C6-N6	15.93	128.16	118.60
2	B	1998	A	C4-C5-C6	15.92	124.96	117.00
2	B	1620	G	N1-C6-O6	15.91	129.45	119.90
2	B	272	A	C5-C6-N1	-15.89	109.75	117.70
2	B	1714	U	P-O3'-C3'	15.89	138.77	119.70
2	B	14	A	C4-C5-C6	15.88	124.94	117.00
2	B	650	C	N3-C4-C5	-15.88	115.55	121.90
2	B	514	A	N1-C6-N6	15.87	128.12	118.60
2	B	692	C	O4'-C1'-N1	15.87	120.90	108.20
2	B	1717	A	N9-C4-C5	-15.87	99.45	105.80
2	B	2062	A	C5-C6-N1	-15.87	109.77	117.70
2	B	572	A	N1-C6-N6	15.86	128.12	118.60
2	B	2614	A	N1-C6-N6	15.86	128.12	118.60
2	B	310	A	N1-C6-N6	15.86	128.11	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	391	A	N1-C6-N6	15.79	128.08	118.60
2	B	1321	A	C4-C5-C6	15.79	124.89	117.00
2	B	1090	A	N1-C6-N6	15.79	128.07	118.60
2	B	2382	G	N1-C6-O6	15.78	129.37	119.90
2	B	1265	A	C8-N9-C4	-15.78	99.49	105.80
2	B	680	C	C5'-C4'-C3'	15.76	141.22	116.00
2	B	381	G	N1-C6-O6	15.76	129.35	119.90
2	B	155	A	N1-C6-N6	15.75	128.05	118.60
2	B	2860	A	N1-C6-N6	15.73	128.04	118.60
2	B	1220	G	N1-C6-O6	15.72	129.34	119.90
2	B	1738	G	C5-C6-O6	-15.72	119.17	128.60
2	B	506	G	C5-C6-O6	-15.71	119.18	128.60
2	B	663	G	N1-C6-O6	15.69	129.31	119.90
2	B	1328	A	C5-C6-N1	-15.69	109.86	117.70
2	B	561	G	N1-C6-O6	15.68	129.31	119.90
2	B	2411	A	N1-C2-N3	15.67	137.14	129.30
2	B	945	A	N1-C6-N6	15.67	128.00	118.60
28	F	94	ARG	NE-CZ-NH1	15.67	128.13	120.30
2	B	2741	A	N1-C6-N6	15.67	128.00	118.60
2	B	30	G	N1-C6-O6	15.63	129.28	119.90
2	B	823	C	C6-N1-C2	-15.61	114.06	120.30
2	B	1894	C	N3-C4-C5	-15.60	115.66	121.90
2	B	1510	G	N1-C6-O6	15.59	129.26	119.90
2	B	1306	C	N3-C4-C5	-15.59	115.67	121.90
2	B	216	A	N1-C6-N6	15.57	127.94	118.60
2	B	58	G	C5-C6-O6	-15.57	119.26	128.60
2	B	2843	G	C5-C6-O6	-15.55	119.27	128.60
2	B	900	A	C5-C6-N6	-15.54	111.27	123.70
2	B	613	A	N1-C6-N6	15.53	127.92	118.60
2	B	859	G	N1-C6-O6	15.53	129.22	119.90
2	B	1676	A	N1-C6-N6	15.53	127.92	118.60
2	B	2439	A	C4-C5-C6	15.52	124.76	117.00
2	B	2688	G	N1-C6-O6	15.52	129.21	119.90
2	B	1601	G	C5-C6-O6	-15.51	119.29	128.60
2	B	1564	C	N3-C4-C5	-15.50	115.70	121.90
2	B	1762	A	C4-C5-C6	15.50	124.75	117.00
2	B	2071	A	C4-C5-C6	15.49	124.75	117.00
2	B	2731	G	N1-C6-O6	15.49	129.19	119.90
2	B	1668	A	C2-N3-C4	-15.47	102.87	110.60
2	B	1511	G	N1-C6-O6	15.46	129.18	119.90
2	B	904	G	C5-C6-O6	-15.44	119.34	128.60
2	B	2287	A	C4-C5-C6	15.44	124.72	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2753	A	N1-C6-N6	15.43	127.86	118.60
2	B	1657	U	O4'-C1'-N1	15.41	120.53	108.20
2	B	430	A	N1-C6-N6	15.41	127.84	118.60
2	B	2064	C	C6-N1-C2	-15.40	114.14	120.30
2	B	682	G	N1-C6-O6	15.39	129.13	119.90
2	B	2749	A	N1-C6-N6	15.38	127.83	118.60
2	B	2440	C	N3-C4-N4	15.38	128.76	118.00
2	B	379	G	N3-C2-N2	15.37	130.66	119.90
2	B	1328	A	N1-C6-N6	15.36	127.81	118.60
2	B	2732	G	N3-C2-N2	15.35	130.65	119.90
2	B	1566	A	N1-C6-N6	15.35	127.81	118.60
2	B	2396	G	N1-C6-O6	15.34	129.10	119.90
2	B	1817	G	N1-C6-O6	15.33	129.10	119.90
2	B	1473	G	N1-C6-O6	15.31	129.09	119.90
2	B	737	C	N3-C4-N4	15.31	128.72	118.00
2	B	38	A	N1-C6-N6	15.30	127.78	118.60
2	B	1596	A	N1-C6-N6	15.29	127.77	118.60
2	B	2093	G	N1-C6-O6	15.29	129.07	119.90
2	B	923	G	N1-C6-O6	15.28	129.07	119.90
2	B	2616	C	C6-N1-C2	15.28	126.41	120.30
2	B	265	A	N1-C6-N6	15.27	127.76	118.60
2	B	2785	C	O4'-C1'-N1	15.27	120.41	108.20
2	B	2562	U	O4'-C1'-N1	15.25	120.40	108.20
2	B	508	A	N1-C6-N6	15.25	127.75	118.60
2	B	480	A	N1-C6-N6	15.24	127.75	118.60
2	B	1659	G	O4'-C1'-N9	15.24	120.39	108.20
2	B	2199	A	N1-C6-N6	15.24	127.75	118.60
2	B	2705	A	N1-C6-N6	15.24	127.74	118.60
2	B	1975	G	C5-C6-O6	-15.22	119.47	128.60
2	B	2144	G	C5-C6-O6	-15.22	119.47	128.60
2	B	2685	G	N1-C6-O6	15.21	129.03	119.90
2	B	2208	C	N3-C4-N4	15.21	128.64	118.00
2	B	585	G	C5-C6-O6	-15.20	119.48	128.60
2	B	1928	A	N1-C6-N6	15.20	127.72	118.60
2	B	2108	A	N1-C6-N6	15.20	127.72	118.60
2	B	663	G	C5-C6-O6	-15.19	119.48	128.60
2	B	2808	G	C5-C6-O6	-15.18	119.49	128.60
2	B	2433	A	N1-C6-N6	15.15	127.69	118.60
2	B	794	A	N1-C6-N6	15.14	127.69	118.60
2	B	1099	G	N1-C6-O6	15.13	128.98	119.90
2	B	2788	C	N3-C4-C5	-15.13	115.85	121.90
2	B	833	A	N1-C6-N6	15.11	127.67	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	107	G	N3-C4-C5	-15.11	121.05	128.60
2	B	445	C	N3-C4-N4	15.10	128.57	118.00
2	B	2295	C	O4'-C1'-N1	15.10	120.28	108.20
2	B	2065	C	C6-N1-C2	-15.09	114.26	120.30
2	B	730	A	N1-C6-N6	15.09	127.65	118.60
2	B	24	G	N1-C6-O6	15.08	128.95	119.90
2	B	503	A	N1-C6-N6	15.08	127.65	118.60
2	B	858	G	C5-C6-O6	-15.08	119.55	128.60
2	B	846	U	O4'-C1'-N1	15.08	120.26	108.20
2	B	1835	G	N1-C6-O6	15.06	128.93	119.90
3	0	26	ARG	NE-CZ-NH1	15.06	127.83	120.30
2	B	1025	G	C8-N9-C4	-15.05	100.38	106.40
2	B	86	G	N1-C6-O6	15.05	128.93	119.90
2	B	1823	G	C5-C6-O6	-15.04	119.57	128.60
2	B	625	G	C5-C6-O6	-15.04	119.58	128.60
2	B	1385	A	N1-C6-N6	15.04	127.62	118.60
2	B	1470	A	N1-C6-N6	15.04	127.62	118.60
2	B	2063	C	N3-C4-N4	15.03	128.52	118.00
2	B	526	A	C5-C6-N6	-15.03	111.68	123.70
2	B	141	G	N1-C6-O6	15.03	128.91	119.90
2	B	1212	G	N1-C6-O6	15.03	128.91	119.90
2	B	232	G	C5-C6-O6	-15.02	119.59	128.60
2	B	44	A	N1-C6-N6	15.02	127.61	118.60
1	A	115	A	N9-C4-C5	15.01	111.81	105.80
2	B	2052	A	N1-C6-N6	15.01	127.61	118.60
2	B	530	G	N1-C6-O6	15.00	128.90	119.90
2	B	2280	G	C2-N3-C4	15.00	119.40	111.90
2	B	2588	G	C8-N9-C4	-14.98	100.41	106.40
2	B	1672	A	N1-C6-N6	14.98	127.59	118.60
2	B	1964	G	C5-C6-O6	-14.98	119.61	128.60
2	B	844	A	N1-C6-N6	14.97	127.58	118.60
2	B	107	G	C2-N3-C4	14.93	119.36	111.90
2	B	535	G	C5-C6-O6	-14.92	119.65	128.60
2	B	585	G	N1-C6-O6	14.91	128.85	119.90
2	B	2030	A	N1-C6-N6	14.91	127.54	118.60
2	B	405	U	O4'-C1'-N1	14.89	120.11	108.20
2	B	2446	G	C5-C6-O6	-14.88	119.67	128.60
10	P	112	ARG	NE-CZ-NH2	-14.89	112.86	120.30
2	B	753	A	N1-C6-N6	14.85	127.51	118.60
2	B	2577	A	N1-C6-N6	14.84	127.51	118.60
2	B	2868	A	C4-C5-C6	14.84	124.42	117.00
2	B	2300	C	C6-N1-C2	-14.83	114.37	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	269	ARG	NE-CZ-NH1	14.83	127.71	120.30
2	B	757	G	C5-C6-O6	-14.81	119.72	128.60
2	B	304	U	C5-C4-O4	-14.80	117.02	125.90
2	B	2600	A	N1-C6-N6	14.80	127.48	118.60
2	B	2029	G	C5-C6-O6	-14.79	119.73	128.60
2	B	2852	G	C5-C6-O6	-14.78	119.73	128.60
2	B	2830	C	O4'-C1'-N1	14.77	120.02	108.20
2	B	1353	A	N1-C6-N6	14.77	127.46	118.60
2	B	129	C	N3-C4-C5	-14.76	116.00	121.90
2	B	760	G	C5-C6-O6	-14.76	119.74	128.60
2	B	925	A	N1-C6-N6	14.75	127.45	118.60
12	R	13	ARG	NE-CZ-NH1	14.75	127.67	120.30
2	B	1749	A	N1-C6-N6	14.73	127.44	118.60
2	B	2272	U	P-O5'-C5'	14.73	144.47	120.90
2	B	181	A	N1-C6-N6	14.73	127.44	118.60
2	B	1202	G	C5-C6-O6	-14.73	119.76	128.60
2	B	295	G	N1-C6-O6	14.72	128.74	119.90
2	B	329	G	C5-C6-O6	-14.72	119.77	128.60
2	B	1214	A	N1-C6-N6	14.72	127.43	118.60
2	B	304	U	N3-C4-O4	14.71	129.70	119.40
11	Q	57	ARG	NE-CZ-NH1	14.71	127.66	120.30
2	B	1489	C	N3-C4-N4	14.70	128.29	118.00
1	A	20	G	N1-C6-O6	14.70	128.72	119.90
2	B	772	C	N3-C4-C5	-14.70	116.02	121.90
2	B	582	A	N1-C6-N6	14.69	127.42	118.60
2	B	746	U	O4'-C1'-N1	14.68	119.95	108.20
2	B	1496	A	C5-C6-N1	-14.68	110.36	117.70
2	B	447	A	C5-C6-N6	-14.68	111.96	123.70
1	A	115	A	O4'-C1'-N9	14.68	119.94	108.20
2	B	753	A	C4-C5-C6	14.68	124.34	117.00
2	B	260	G	C5-C6-O6	-14.67	119.80	128.60
2	B	1903	G	C6-C5-N7	-14.67	121.60	130.40
2	B	1049	C	N3-C4-C5	-14.66	116.04	121.90
2	B	1023	U	O4'-C1'-N1	14.65	119.92	108.20
2	B	2447	G	C5-C6-O6	-14.63	119.82	128.60
2	B	677	A	N1-C6-N6	14.63	127.38	118.60
2	B	2464	G	N3-C2-N2	14.63	130.14	119.90
2	B	501	A	N1-C6-N6	14.62	127.37	118.60
2	B	1549	A	N1-C6-N6	14.62	127.37	118.60
2	B	2209	G	C5-C6-O6	-14.62	119.83	128.60
2	B	1247	A	N1-C6-N6	14.61	127.37	118.60
10	P	98	TYR	CB-CG-CD1	14.61	129.77	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1403	A	N1-C2-N3	14.61	136.61	129.30
2	B	2320	U	P-O3'-C3'	14.61	137.23	119.70
2	B	22	C	N3-C4-C5	-14.60	116.06	121.90
2	B	446	G	C5-C6-O6	-14.60	119.84	128.60
2	B	856	G	C5-C6-O6	-14.59	119.84	128.60
2	B	1847	A	N1-C6-N6	14.59	127.35	118.60
2	B	2461	A	N1-C6-N6	14.59	127.35	118.60
2	B	579	G	C8-N9-C4	-14.59	100.57	106.40
2	B	724	U	O4'-C1'-N1	14.58	119.86	108.20
2	B	814	C	C5-C6-N1	14.58	128.29	121.00
2	B	1581	G	N1-C6-O6	14.58	128.65	119.90
2	B	1135	C	O4'-C1'-N1	14.57	119.86	108.20
2	B	271	G	N1-C6-O6	14.55	128.63	119.90
2	B	2042	A	N1-C6-N6	14.55	127.33	118.60
2	B	1684	G	C5-C6-O6	-14.54	119.87	128.60
2	B	2297	A	C5-N7-C8	14.54	111.17	103.90
2	B	1522	A	N1-C6-N6	14.53	127.32	118.60
2	B	1687	G	C5-C6-O6	-14.53	119.89	128.60
2	B	1817	G	C5-C6-O6	-14.52	119.89	128.60
2	B	882	G	N9-C4-C5	14.52	111.21	105.40
2	B	121	G	C5-C6-O6	-14.51	119.89	128.60
2	B	1307	A	N1-C6-N6	14.51	127.31	118.60
2	B	344	A	C5-C6-N1	-14.51	110.45	117.70
2	B	55	G	N1-C6-O6	14.50	128.60	119.90
2	B	1670	C	O4'-C1'-N1	14.49	119.79	108.20
2	B	1494	A	C4-C5-C6	14.48	124.24	117.00
2	B	2766	A	N1-C6-N6	14.48	127.29	118.60
2	B	85	G	N1-C6-O6	14.48	128.59	119.90
2	B	1517	G	C8-N9-C4	-14.47	100.61	106.40
2	B	2385	C	O4'-C1'-N1	14.47	119.78	108.20
2	B	915	C	C4-C5-C6	14.47	124.63	117.40
2	B	771	G	C5-C6-O6	-14.44	119.94	128.60
2	B	2636	C	O4'-C1'-N1	14.44	119.75	108.20
2	B	1421	G	C5-C6-O6	-14.43	119.94	128.60
2	B	804	A	O4'-C1'-N9	14.40	119.72	108.20
2	B	834	G	N1-C6-O6	14.40	128.54	119.90
2	B	2874	C	C6-N1-C2	-14.40	114.54	120.30
2	B	1197	G	O4'-C1'-N9	14.39	119.72	108.20
2	B	1271	G	N1-C6-O6	14.39	128.53	119.90
2	B	2336	A	C5-C6-N1	-14.38	110.51	117.70
2	B	2727	A	C5-C6-N1	-14.38	110.51	117.70
2	B	2801	G	N1-C6-O6	14.37	128.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1848	A	N1-C6-N6	14.36	127.22	118.60
2	B	599	A	C5-C6-N1	-14.35	110.53	117.70
29	G	93	TYR	CB-CG-CD1	-14.35	112.39	121.00
2	B	1268	A	N1-C6-N6	14.34	127.21	118.60
2	B	7	G	N1-C6-O6	14.34	128.50	119.90
2	B	274	C	N3-C4-C5	-14.32	116.17	121.90
2	B	2457	U	O4'-C1'-N1	14.32	119.66	108.20
2	B	1547	C	N3-C4-N4	14.31	128.02	118.00
2	B	501	A	C4-C5-C6	14.31	124.16	117.00
2	B	1651	G	N1-C6-O6	14.31	128.49	119.90
2	B	1803	A	N1-C6-N6	14.31	127.19	118.60
2	B	1738	G	N1-C6-O6	14.30	128.48	119.90
2	B	916	G	C5-C6-O6	-14.29	120.03	128.60
2	B	2242	G	C5-C6-O6	-14.29	120.03	128.60
2	B	729	G	C5-C6-O6	-14.28	120.03	128.60
2	B	2800	A	N1-C6-N6	14.28	127.17	118.60
2	B	1849	G	N1-C6-O6	14.28	128.47	119.90
2	B	2618	G	N1-C6-O6	14.27	128.46	119.90
1	A	107	G	N1-C6-O6	14.26	128.46	119.90
2	B	2761	A	N1-C6-N6	14.26	127.16	118.60
2	B	973	A	N1-C6-N6	14.26	127.15	118.60
2	B	606	U	P-O3'-C3'	14.25	136.80	119.70
1	A	83	G	N1-C6-O6	14.25	128.45	119.90
2	B	1011	G	N1-C6-O6	14.25	128.45	119.90
2	B	2282	G	N1-C6-O6	14.24	128.44	119.90
2	B	1728	C	O4'-C1'-N1	14.24	119.59	108.20
2	B	1202	G	N1-C6-O6	14.23	128.44	119.90
2	B	1304	A	N1-C6-N6	14.23	127.14	118.60
2	B	2349	G	C5-C6-O6	-14.23	120.06	128.60
2	B	892	A	C5-C6-N6	-14.22	112.32	123.70
2	B	251	A	C5-C6-N6	-14.22	112.33	123.70
2	B	1951	U	C5-C6-N1	14.22	129.81	122.70
2	B	196	A	N1-C6-N6	14.21	127.13	118.60
2	B	299	A	C5-C6-N6	-14.21	112.33	123.70
2	B	1899	A	N1-C6-N6	14.21	127.13	118.60
2	B	2583	G	N1-C6-O6	14.21	128.43	119.90
2	B	2093	G	C5-C6-O6	-14.21	120.08	128.60
2	B	2165	C	N3-C4-C5	-14.20	116.22	121.90
2	B	1435	G	C5-C6-O6	-14.20	120.08	128.60
2	B	1684	G	N1-C6-O6	14.20	128.42	119.90
2	B	2587	A	N1-C6-N6	14.20	127.12	118.60
2	B	231	A	N1-C6-N6	14.19	127.11	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1534	U	O4'-C1'-N1	14.19	119.55	108.20
2	B	2035	G	O4'-C1'-N9	14.19	119.55	108.20
2	B	805	G	N1-C6-O6	14.18	128.41	119.90
2	B	2875	C	C6-N1-C2	-14.18	114.63	120.30
29	G	68	ARG	NE-CZ-NH2	-14.18	113.21	120.30
2	B	1321	A	C5-C6-N1	-14.17	110.61	117.70
2	B	2780	G	N1-C6-O6	14.17	128.40	119.90
2	B	1213	A	C8-N9-C4	-14.17	100.13	105.80
2	B	738	G	C8-N9-C4	-14.16	100.73	106.40
2	B	1690	A	N1-C6-N6	14.16	127.10	118.60
2	B	689	A	N1-C6-N6	14.16	127.09	118.60
2	B	2365	G	N3-C2-N2	14.15	129.80	119.90
2	B	2517	C	C6-N1-C2	-14.14	114.64	120.30
2	B	1452	G	C5-C6-O6	-14.14	120.12	128.60
2	B	2847	U	C2-N3-C4	-14.14	118.52	127.00
2	B	2883	A	N1-C2-N3	14.14	136.37	129.30
2	B	2294	G	C5-C6-O6	-14.13	120.12	128.60
2	B	194	G	N1-C6-O6	14.13	128.38	119.90
2	B	2015	A	N1-C6-N6	14.13	127.08	118.60
2	B	59	U	C5-C4-O4	-14.12	117.42	125.90
2	B	879	G	N3-C4-C5	-14.12	121.54	128.60
2	B	1974	C	O4'-C1'-N1	14.12	119.50	108.20
1	A	21	G	N1-C6-O6	14.12	128.37	119.90
2	B	1553	A	N1-C6-N6	14.11	127.06	118.60
2	B	472	A	C4-C5-C6	14.11	124.05	117.00
2	B	827	U	P-O3'-C3'	14.11	136.63	119.70
2	B	2003	A	C5-C6-N6	-14.10	112.42	123.70
2	B	41	C	N3-C4-N4	14.09	127.86	118.00
2	B	1220	G	C5-C6-O6	-14.09	120.14	128.60
2	B	1518	C	C5-C4-N4	-14.09	110.34	120.20
2	B	951	C	C6-N1-C2	-14.08	114.67	120.30
2	B	1321	A	N1-C6-N6	14.07	127.04	118.60
2	B	2308	G	N1-C6-O6	14.06	128.34	119.90
2	B	1504	A	C5-C6-N6	-14.06	112.45	123.70
2	B	1557	C	N3-C4-N4	14.06	127.84	118.00
2	B	237	C	O4'-C1'-N1	14.05	119.44	108.20
2	B	300	A	N1-C6-N6	14.05	127.03	118.60
2	B	1050	A	C8-N9-C4	-14.05	100.18	105.80
9	O	117	PHE	CB-CG-CD2	14.03	130.62	120.80
1	A	39	A	C8-N9-C4	-14.03	100.19	105.80
2	B	378	C	N3-C4-C5	-14.03	116.29	121.90
2	B	491	G	C5-C6-O6	-14.02	120.19	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1271	G	C4-C5-N7	-14.02	105.19	110.80
2	B	361	G	N1-C6-O6	14.02	128.31	119.90
2	B	2247	A	N1-C6-N6	14.01	127.01	118.60
2	B	627	A	N1-C6-N6	14.01	127.00	118.60
2	B	9	G	C5-C6-O6	-14.00	120.20	128.60
2	B	996	A	C8-N9-C4	-13.99	100.20	105.80
2	B	1286	A	N1-C6-N6	13.99	127.00	118.60
2	B	2093	G	P-O3'-C3'	13.99	136.49	119.70
2	B	105	C	O4'-C1'-N1	13.99	119.39	108.20
2	B	2133	G	C5-C6-O6	-13.99	120.21	128.60
2	B	1635	A	N1-C6-N6	13.98	126.99	118.60
2	B	2425	A	P-O3'-C3'	13.98	136.48	119.70
2	B	902	C	O4'-C1'-N1	13.98	119.39	108.20
2	B	1171	G	N1-C6-O6	13.98	128.29	119.90
2	B	2657	A	N1-C6-N6	13.98	126.99	118.60
2	B	368	A	N1-C6-N6	13.97	126.98	118.60
2	B	2679	A	N1-C6-N6	13.97	126.98	118.60
2	B	1223	G	C5-C6-O6	-13.97	120.22	128.60
2	B	1501	G	C8-N9-C4	-13.97	100.81	106.40
2	B	2269	G	N1-C6-O6	13.96	128.28	119.90
2	B	1912	A	C5-C6-N1	-13.96	110.72	117.70
2	B	1837	C	N3-C4-N4	13.96	127.77	118.00
2	B	2513	A	N1-C6-N6	13.95	126.97	118.60
7	M	66	ARG	NE-CZ-NH1	13.95	127.28	120.30
2	B	1841	U	O4'-C1'-N1	13.95	119.36	108.20
2	B	1165	A	C5-C6-N1	-13.95	110.72	117.70
2	B	2185	U	O4'-C1'-N1	13.95	119.36	108.20
2	B	2033	A	C5-C6-N1	-13.94	110.73	117.70
2	B	1797	G	N1-C6-O6	13.94	128.26	119.90
2	B	132	G	N1-C6-O6	13.93	128.26	119.90
2	B	2393	U	O4'-C1'-N1	13.93	119.34	108.20
2	B	1477	A	N1-C6-N6	13.92	126.95	118.60
2	B	329	G	N7-C8-N9	-13.91	106.14	113.10
2	B	2062	A	N1-C6-N6	13.91	126.94	118.60
2	B	2071	A	N1-C6-N6	13.90	126.94	118.60
2	B	2726	A	N1-C6-N6	13.90	126.94	118.60
2	B	1532	A	C2-N3-C4	-13.90	103.65	110.60
2	B	1259	G	N9-C4-C5	13.90	110.96	105.40
2	B	2198	A	N1-C6-N6	13.90	126.94	118.60
1	A	7	G	C5-C6-O6	-13.89	120.27	128.60
2	B	1480	C	C5-C6-N1	-13.89	114.06	121.00
2	B	774	G	N1-C6-O6	13.89	128.23	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2173	A	P-O3'-C3'	13.88	136.35	119.70
2	B	2338	C	C6-N1-C2	-13.88	114.75	120.30
2	B	2750	A	N9-C4-C5	13.87	111.35	105.80
2	B	157	C	O4'-C1'-N1	13.87	119.30	108.20
2	B	532	A	N1-C6-N6	13.86	126.92	118.60
11	Q	23	TYR	CB-CG-CD1	-13.86	112.68	121.00
2	B	1826	G	N1-C6-O6	13.86	128.22	119.90
2	B	2731	G	C5-C6-O6	-13.86	120.28	128.60
2	B	1227	G	N9-C4-C5	-13.85	99.86	105.40
2	B	2603	G	C5-C6-O6	-13.85	120.29	128.60
2	B	2694	G	N1-C6-O6	13.85	128.21	119.90
2	B	684	G	C5-C6-O6	-13.85	120.29	128.60
2	B	950	G	C5-C6-O6	-13.85	120.29	128.60
2	B	536	G	C5-C6-O6	-13.84	120.30	128.60
2	B	1492	G	N1-C6-O6	13.84	128.20	119.90
2	B	2770	G	N1-C6-O6	13.83	128.20	119.90
2	B	2851	A	N1-C6-N6	13.82	126.89	118.60
2	B	1964	G	C4-C5-N7	13.81	116.33	110.80
2	B	2832	U	O4'-C1'-N1	13.81	119.25	108.20
2	B	2319	G	C8-N9-C4	-13.81	100.88	106.40
2	B	679	C	C6-N1-C2	-13.80	114.78	120.30
2	B	892	A	N1-C2-N3	-13.80	122.40	129.30
1	A	38	C	O4'-C1'-N1	13.80	119.24	108.20
2	B	1540	G	C4-C5-N7	13.79	116.31	110.80
2	B	2325	G	N7-C8-N9	-13.79	106.21	113.10
2	B	2284	A	C4-C5-C6	13.78	123.89	117.00
2	B	2551	C	O4'-C1'-N1	13.78	119.22	108.20
2	B	2481	G	N1-C6-O6	13.78	128.17	119.90
2	B	2121	G	P-O3'-C3'	13.77	136.22	119.70
2	B	2169	A	N1-C6-N6	13.77	126.86	118.60
2	B	2540	C	O4'-C1'-N1	13.77	119.21	108.20
2	B	35	G	O4'-C1'-N9	13.76	119.21	108.20
2	B	2776	A	C2-N3-C4	13.75	117.47	110.60
2	B	1604	C	C6-N1-C2	-13.73	114.81	120.30
2	B	2577	A	C5-C6-N6	-13.72	112.72	123.70
2	B	541	A	C8-N9-C4	-13.72	100.31	105.80
2	B	1298	C	O4'-C1'-N1	13.72	119.18	108.20
2	B	21	A	C5-C6-N6	-13.72	112.73	123.70
2	B	1481	U	O4'-C1'-N1	13.72	119.17	108.20
1	A	59	A	N1-C6-N6	13.71	126.83	118.60
2	B	2835	A	C5-C6-N1	-13.71	110.84	117.70
1	A	34	A	N1-C6-N6	13.70	126.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2077	A	N1-C6-N6	13.70	126.82	118.60
2	B	1976	U	O4'-C1'-N1	13.68	119.14	108.20
2	B	2376	A	N1-C6-N6	13.68	126.81	118.60
2	B	705	A	N1-C6-N6	13.67	126.80	118.60
2	B	978	G	N3-C2-N2	13.67	129.47	119.90
2	B	1387	A	C5-C6-N6	-13.67	112.77	123.70
2	B	956	G	N1-C6-O6	13.66	128.10	119.90
1	A	68	C	N3-C4-C5	-13.66	116.44	121.90
2	B	155	A	C4-C5-C6	13.66	123.83	117.00
2	B	1711	A	N1-C6-N6	13.66	126.80	118.60
2	B	1225	G	C5-C6-O6	-13.66	120.40	128.60
2	B	608	A	N1-C6-N6	13.66	126.79	118.60
2	B	2882	A	C5-C6-N6	-13.65	112.78	123.70
2	B	1293	C	C6-N1-C2	-13.65	114.84	120.30
2	B	2631	G	C5-C6-O6	-13.65	120.41	128.60
2	B	2163	A	C5-C6-N6	-13.64	112.78	123.70
2	B	546	U	C5-C6-N1	13.64	129.52	122.70
2	B	674	G	N1-C6-O6	13.63	128.08	119.90
14	D	59	ARG	NE-CZ-NH1	-13.62	113.49	120.30
2	B	1226	A	N1-C6-N6	13.61	126.77	118.60
2	B	2487	G	C5-C6-O6	-13.61	120.44	128.60
2	B	809	G	O4'-C1'-N9	13.60	119.08	108.20
2	B	901	C	C6-N1-C2	-13.60	114.86	120.30
2	B	1067	A	C5-C6-N6	-13.60	112.82	123.70
2	B	2071	A	C5-C6-N1	-13.60	110.90	117.70
2	B	956	G	C5-C6-O6	-13.59	120.44	128.60
2	B	843	G	N1-C6-O6	13.59	128.05	119.90
16	2	37	ARG	NE-CZ-NH1	13.58	127.09	120.30
1	A	114	C	O4'-C1'-N1	13.57	119.06	108.20
2	B	318	C	N3-C4-C5	-13.57	116.47	121.90
2	B	874	G	O4'-C1'-N9	13.57	119.06	108.20
2	B	204	A	C5-C6-N6	-13.57	112.84	123.70
2	B	1752	C	O4'-C1'-N1	13.57	119.06	108.20
2	B	2293	G	N1-C6-O6	13.57	128.04	119.90
2	B	788	A	N1-C6-N6	13.56	126.73	118.60
2	B	233	A	N1-C6-N6	13.55	126.73	118.60
2	B	219	A	C5-C6-N1	-13.55	110.92	117.70
2	B	987	C	O4'-C1'-N1	13.55	119.04	108.20
2	B	1772	A	N1-C6-N6	13.55	126.73	118.60
2	B	1275	A	N1-C6-N6	13.54	126.73	118.60
2	B	1361	G	N1-C6-O6	13.54	128.03	119.90
2	B	64	A	C8-N9-C4	-13.54	100.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1416	G	N1-C6-O6	13.53	128.02	119.90
2	B	2436	G	C5-C6-O6	-13.53	120.48	128.60
2	B	172	A	C5-C6-N6	-13.53	112.88	123.70
2	B	637	A	C4-C5-N7	-13.53	103.94	110.70
2	B	169	G	C5-C6-O6	-13.52	120.49	128.60
2	B	174	U	C5-C4-O4	-13.52	117.79	125.90
2	B	378	C	C2-N3-C4	13.52	126.66	119.90
1	A	94	A	N1-C6-N6	13.52	126.71	118.60
2	B	648	G	N1-C6-O6	13.52	128.01	119.90
2	B	1073	A	N9-C4-C5	-13.51	100.39	105.80
2	B	2295	C	N3-C4-N4	13.51	127.45	118.00
2	B	2652	C	O4'-C1'-N1	13.50	119.00	108.20
2	B	307	G	C8-N9-C4	-13.49	101.00	106.40
2	B	880	G	N1-C6-O6	13.49	128.00	119.90
2	B	491	G	N1-C6-O6	13.49	127.99	119.90
2	B	260	G	N1-C6-O6	13.48	127.99	119.90
2	B	805	G	C5-C6-O6	-13.48	120.51	128.60
2	B	1528	A	N1-C6-N6	13.48	126.69	118.60
2	B	206	U	O4'-C1'-N1	13.48	118.98	108.20
2	B	2879	A	N7-C8-N9	-13.47	107.06	113.80
21	Y	25	PHE	CB-CG-CD2	-13.47	111.37	120.80
2	B	2270	A	C5-C6-N6	-13.46	112.93	123.70
2	B	246	C	N3-C4-N4	13.45	127.42	118.00
2	B	480	A	C4-C5-C6	13.45	123.73	117.00
2	B	2005	A	C8-N9-C4	-13.45	100.42	105.80
2	B	1821	A	C4-C5-C6	13.44	123.72	117.00
2	B	1306	C	N3-C4-N4	13.43	127.40	118.00
2	B	1520	U	O4'-C1'-N1	13.43	118.94	108.20
2	B	1687	G	N1-C6-O6	13.43	127.96	119.90
2	B	1272	A	O4'-C1'-N9	13.43	118.94	108.20
2	B	352	A	N1-C6-N6	13.42	126.65	118.60
2	B	1138	G	N3-C2-N2	13.42	129.29	119.90
2	B	474	G	C5-C6-O6	-13.42	120.55	128.60
2	B	1499	C	C6-N1-C2	-13.41	114.94	120.30
2	B	1850	G	N1-C6-O6	13.40	127.94	119.90
2	B	467	G	O4'-C1'-N9	13.40	118.92	108.20
2	B	14	A	C5-C6-N1	-13.40	111.00	117.70
2	B	80	G	N1-C6-O6	13.40	127.94	119.90
2	B	1273	U	P-O3'-C3'	-13.40	103.62	119.70
2	B	1472	C	N3-C4-C5	-13.39	116.54	121.90
2	B	2153	C	C6-N1-C2	-13.39	114.94	120.30
2	B	55	G	C5-C6-O6	-13.39	120.57	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1131	G	N1-C6-O6	13.39	127.93	119.90
2	B	1767	G	N1-C6-O6	13.39	127.93	119.90
2	B	1375	U	O4'-C1'-N1	13.38	118.91	108.20
2	B	561	G	N9-C4-C5	-13.38	100.05	105.40
1	A	7	G	N1-C6-O6	13.37	127.92	119.90
2	B	1424	G	O4'-C1'-N9	13.37	118.90	108.20
2	B	2056	G	N1-C6-O6	13.37	127.92	119.90
11	Q	47	ARG	NE-CZ-NH1	-13.37	113.61	120.30
2	B	2615	U	P-O5'-C5'	13.36	142.28	120.90
2	B	2247	A	C5-C6-N1	-13.36	111.02	117.70
2	B	468	G	C5-C6-O6	-13.36	120.59	128.60
2	B	505	A	N1-C6-N6	13.36	126.61	118.60
2	B	820	A	N1-C6-N6	13.35	126.61	118.60
2	B	382	A	N9-C4-C5	13.35	111.14	105.80
2	B	774	G	C5-C6-O6	-13.35	120.59	128.60
2	B	939	G	N1-C6-O6	13.34	127.90	119.90
1	A	113	C	N3-C4-C5	-13.34	116.57	121.90
2	B	711	G	N1-C6-O6	13.33	127.90	119.90
1	A	61	G	O4'-C1'-N9	13.32	118.86	108.20
2	B	1900	A	N1-C6-N6	13.32	126.59	118.60
2	B	594	U	C5-C4-O4	-13.32	117.91	125.90
2	B	2568	U	O4'-C1'-N1	13.32	118.86	108.20
2	B	996	A	N9-C4-C5	13.31	111.12	105.80
2	B	1350	C	C6-N1-C2	-13.30	114.98	120.30
2	B	520	G	N1-C6-O6	13.30	127.88	119.90
2	B	329	G	N1-C6-O6	13.30	127.88	119.90
2	B	1441	G	C5-C6-O6	-13.30	120.62	128.60
2	B	2051	A	N1-C6-N6	13.30	126.58	118.60
3	0	49	ARG	NE-CZ-NH1	-13.29	113.65	120.30
2	B	1038	G	C8-N9-C4	-13.29	101.08	106.40
2	B	2271	G	N1-C6-O6	13.29	127.87	119.90
2	B	536	G	N1-C6-O6	13.28	127.87	119.90
2	B	2478	A	N1-C2-N3	13.26	135.93	129.30
28	F	114	ARG	NE-CZ-NH2	13.26	126.93	120.30
2	B	2270	A	N9-C4-C5	13.25	111.10	105.80
2	B	1634	A	C5'-C4'-C3'	-13.24	94.82	116.00
2	B	1011	G	C5-C6-O6	-13.23	120.66	128.60
2	B	2801	G	C5-C6-O6	-13.23	120.66	128.60
2	B	1206	G	C5-C6-O6	-13.23	120.66	128.60
2	B	965	C	O4'-C1'-N1	13.23	118.78	108.20
2	B	2860	A	C5-C6-N1	-13.22	111.09	117.70
2	B	2027	G	C5-C6-O6	-13.21	120.67	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	83	G	C5-C6-O6	-13.21	120.68	128.60
2	B	635	C	N3-C4-C5	-13.20	116.62	121.90
2	B	922	C	N3-C4-C5	-13.20	116.62	121.90
2	B	1366	A	C4-C5-C6	13.19	123.60	117.00
2	B	1753	G	O4'-C1'-N9	13.19	118.75	108.20
2	B	1803	A	N7-C8-N9	-13.19	107.21	113.80
2	B	1501	G	N1-C6-O6	13.18	127.81	119.90
2	B	1963	U	O4'-C1'-N1	13.18	118.75	108.20
2	B	70	G	C5-C6-O6	-13.18	120.69	128.60
2	B	121	G	N1-C6-O6	13.18	127.81	119.90
25	7	12	ARG	NE-CZ-NH2	13.18	126.89	120.30
2	B	2215	C	N3-C4-N4	13.17	127.22	118.00
2	B	591	U	C2-N3-C4	-13.17	119.10	127.00
2	B	90	U	O4'-C1'-N1	13.16	118.73	108.20
2	B	1200	C	N3-C4-C5	-13.16	116.64	121.90
2	B	635	C	O4'-C1'-N1	13.16	118.73	108.20
2	B	1478	G	N3-C2-N2	13.16	129.11	119.90
2	B	1523	U	O4'-C1'-N1	13.16	118.72	108.20
2	B	736	C	N3-C4-N4	13.15	127.20	118.00
2	B	2740	A	N1-C6-N6	13.15	126.49	118.60
1	A	50	A	C5-C6-N6	-13.14	113.18	123.70
2	B	2472	G	N3-C2-N2	13.14	129.10	119.90
2	B	2519	U	C5-C4-O4	13.14	133.79	125.90
2	B	94	A	C5-C6-N1	-13.14	111.13	117.70
2	B	324	A	N1-C6-N6	13.14	126.48	118.60
2	B	1111	A	C5-C6-N1	-13.13	111.13	117.70
2	B	1062	G	C5-C6-O6	-13.13	120.72	128.60
2	B	1191	G	N3-C2-N2	13.13	129.09	119.90
2	B	1077	A	N1-C6-N6	13.13	126.48	118.60
2	B	539	G	C5-C6-O6	-13.12	120.73	128.60
2	B	128	C	O4'-C1'-N1	13.12	118.69	108.20
2	B	2437	G	N1-C6-O6	13.12	127.77	119.90
2	B	2703	C	N3-C4-C5	-13.11	116.66	121.90
2	B	1366	A	C5-C6-N1	-13.10	111.15	117.70
2	B	2747	G	C4-C5-N7	-13.10	105.56	110.80
2	B	819	A	N1-C6-N6	13.09	126.45	118.60
2	B	1681	G	C5-C6-O6	-13.09	120.75	128.60
2	B	1596	A	C5-C6-N1	-13.09	111.16	117.70
2	B	800	A	N1-C6-N6	-13.09	110.75	118.60
2	B	2882	A	C8-N9-C4	13.08	111.03	105.80
2	B	605	G	C5-C6-O6	-13.07	120.75	128.60
2	B	1053	C	N3-C4-C5	-13.07	116.67	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1403	A	C2-N3-C4	-13.07	104.07	110.60
2	B	1583	A	N9-C4-C5	13.07	111.03	105.80
2	B	382	A	C8-N9-C4	-13.06	100.57	105.80
2	B	518	G	N1-C6-O6	13.06	127.74	119.90
2	B	2227	A	C4-C5-C6	13.06	123.53	117.00
2	B	605	G	N1-C6-O6	13.06	127.74	119.90
2	B	531	C	O4'-C1'-N1	13.06	118.65	108.20
2	B	2675	A	C5-N7-C8	13.06	110.43	103.90
2	B	1769	U	O4'-C1'-N1	13.06	118.64	108.20
2	B	2033	A	C6-N1-C2	13.05	126.43	118.60
2	B	1000	A	O4'-C1'-N9	13.05	118.64	108.20
1	A	113	C	O4'-C1'-N1	13.04	118.63	108.20
2	B	1780	A	N1-C6-N6	13.04	126.42	118.60
2	B	259	G	N1-C6-O6	13.03	127.72	119.90
2	B	330	A	N1-C6-N6	13.03	126.42	118.60
13	S	92	ARG	NE-CZ-NH2	-13.02	113.79	120.30
2	B	2505	G	O4'-C1'-N9	13.02	118.61	108.20
2	B	2733	A	N1-C6-N6	13.02	126.41	118.60
2	B	547	A	N1-C6-N6	13.01	126.41	118.60
2	B	160	A	N1-C2-N3	13.01	135.81	129.30
2	B	943	A	N1-C6-N6	13.01	126.41	118.60
1	A	76	G	C5-C6-O6	-13.01	120.80	128.60
2	B	1783	A	C5-C6-N1	-13.01	111.20	117.70
2	B	2835	A	C4-C5-C6	13.01	123.50	117.00
2	B	2572	A	P-O5'-C5'	13.00	141.70	120.90
2	B	1378	A	N1-C6-N6	13.00	126.40	118.60
2	B	1767	G	C5-C6-O6	-13.00	120.80	128.60
2	B	2696	U	O4'-C1'-N1	12.99	118.59	108.20
2	B	1545	A	N1-C6-N6	12.99	126.39	118.60
2	B	198	C	C5-C4-N4	-12.99	111.11	120.20
2	B	2578	G	O4'-C1'-N9	12.99	118.59	108.20
2	B	2410	G	C5-C6-O6	-12.98	120.81	128.60
2	B	917	A	N1-C6-N6	12.97	126.38	118.60
2	B	974	G	P-O3'-C3'	12.96	135.26	119.70
2	B	2623	G	C2-N3-C4	12.96	118.38	111.90
2	B	2647	U	O4'-C1'-N1	12.96	118.57	108.20
2	B	280	U	O4'-C1'-N1	12.96	118.57	108.20
2	B	1509	A	N1-C6-N6	12.96	126.38	118.60
1	A	81	G	N1-C6-O6	12.95	127.67	119.90
2	B	804	A	C4-C5-C6	12.94	123.47	117.00
2	B	104	A	N1-C6-N6	12.94	126.36	118.60
2	B	507	A	N9-C4-C5	-12.94	100.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1131	G	C5-C6-O6	-12.94	120.84	128.60
1	A	102	G	N3-C2-N2	12.93	128.95	119.90
19	X	149	ARG	NE-CZ-NH2	-12.92	113.84	120.30
2	B	2505	G	N1-C6-O6	12.92	127.65	119.90
21	Y	19	ARG	NE-CZ-NH2	-12.91	113.84	120.30
2	B	1948	G	N1-C6-O6	12.91	127.64	119.90
2	B	446	G	N1-C6-O6	12.90	127.64	119.90
2	B	272	A	N1-C6-N6	12.90	126.34	118.60
2	B	207	A	N9-C4-C5	12.89	110.96	105.80
2	B	1337	G	C5-C6-O6	-12.89	120.87	128.60
1	A	67	G	N1-C6-O6	12.88	127.63	119.90
2	B	781	A	C4-C5-C6	12.89	123.44	117.00
2	B	537	G	N3-C2-N2	12.88	128.92	119.90
2	B	329	G	C5-N7-C8	12.88	110.74	104.30
2	B	1606	C	O4'-C1'-N1	12.88	118.50	108.20
2	B	344	A	N1-C6-N6	12.88	126.33	118.60
2	B	382	A	C5-N7-C8	12.88	110.34	103.90
2	B	611	C	C5-C6-N1	12.87	127.44	121.00
2	B	619	G	C8-N9-C4	-12.87	101.25	106.40
2	B	1252	G	N1-C6-O6	12.86	127.62	119.90
2	B	181	A	N9-C4-C5	12.86	110.94	105.80
2	B	2012	G	C8-N9-C4	-12.86	101.25	106.40
2	B	496	G	C8-N9-C4	-12.86	101.26	106.40
2	B	1541	C	N3-C4-C5	-12.86	116.76	121.90
2	B	1371	G	C5-C6-O6	-12.86	120.89	128.60
2	B	1532	A	C5'-C4'-C3'	-12.85	95.43	116.00
2	B	161	A	N1-C6-N6	12.85	126.31	118.60
2	B	1355	G	O4'-C1'-N9	12.85	118.48	108.20
2	B	1408	G	C5-C6-O6	-12.85	120.89	128.60
2	B	1057	A	O4'-C1'-N9	12.84	118.47	108.20
2	B	2091	C	N3-C4-C5	-12.83	116.77	121.90
2	B	2282	G	P-O3'-C3'	12.83	135.09	119.70
2	B	750	A	N1-C6-N6	12.83	126.30	118.60
2	B	2284	A	N1-C6-N6	12.83	126.30	118.60
2	B	916	G	N1-C6-O6	12.82	127.59	119.90
2	B	81	G	N1-C6-O6	12.81	127.59	119.90
2	B	730	A	C5-C6-N6	-12.81	113.45	123.70
2	B	489	G	N1-C6-O6	12.81	127.59	119.90
1	A	68	C	O4'-C1'-N1	12.81	118.45	108.20
2	B	692	C	C6-N1-C2	-12.81	115.18	120.30
2	B	1788	C	C6-N1-C2	-12.81	115.18	120.30
2	B	1557	C	N3-C4-C5	-12.80	116.78	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	170	U	O4'-C1'-N1	12.80	118.44	108.20
2	B	647	G	N1-C6-O6	12.80	127.58	119.90
2	B	2040	G	C6-C5-N7	-12.80	122.72	130.40
2	B	1645	G	N1-C6-O6	12.79	127.58	119.90
2	B	28	A	N1-C6-N6	12.79	126.27	118.60
2	B	1475	G	N3-C2-N2	12.79	128.85	119.90
2	B	1985	C	N3-C4-C5	-12.79	116.79	121.90
2	B	2247	A	N9-C4-C5	12.79	110.91	105.80
1	A	10	G	N1-C6-O6	12.78	127.57	119.90
2	B	1309	G	C5-C6-O6	-12.78	120.93	128.60
2	B	1429	G	N3-C4-C5	-12.78	122.21	128.60
2	B	457	A	N1-C6-N6	12.78	126.27	118.60
2	B	1103	A	C4-C5-C6	12.77	123.39	117.00
2	B	337	C	O4'-C1'-N1	12.76	118.41	108.20
2	B	752	A	C6-C5-N7	-12.75	123.37	132.30
2	B	1531	C	P-O3'-C3'	12.75	135.00	119.70
2	B	753	A	C8-N9-C4	-12.74	100.70	105.80
2	B	1121	C	C6-N1-C2	12.74	125.40	120.30
2	B	1964	G	P-O3'-C3'	12.74	134.99	119.70
2	B	188	G	C5-C6-O6	-12.74	120.96	128.60
2	B	2771	C	N3-C4-C5	-12.74	116.80	121.90
2	B	721	A	N1-C6-N6	12.73	126.24	118.60
2	B	1698	A	C5-N7-C8	12.73	110.26	103.90
2	B	2308	G	C5-C6-O6	-12.73	120.96	128.60
2	B	1096	A	N1-C6-N6	12.72	126.23	118.60
2	B	1464	G	C5-C6-O6	-12.72	120.97	128.60
2	B	764	A	N1-C6-N6	12.72	126.23	118.60
2	B	883	G	C8-N9-C4	-12.71	101.31	106.40
2	B	1493	C	O4'-C1'-N1	12.71	118.37	108.20
1	A	115	A	C8-N9-C4	-12.71	100.72	105.80
2	B	60	G	C2-N3-C4	-12.71	105.55	111.90
2	B	782	A	N1-C6-N6	12.70	126.22	118.60
2	B	1547	C	C5-C4-N4	-12.70	111.31	120.20
2	B	2704	C	P-O3'-C3'	12.70	134.94	119.70
2	B	2123	G	C5-C6-O6	-12.70	120.98	128.60
2	B	2738	A	C8-N9-C4	12.70	110.88	105.80
2	B	1126	A	N1-C6-N6	12.70	126.22	118.60
2	B	404	A	C5-C6-N6	-12.69	113.54	123.70
2	B	1309	G	N1-C6-O6	12.70	127.52	119.90
2	B	2789	C	N3-C4-N4	12.70	126.89	118.00
1	A	21	G	C5-C6-O6	-12.69	120.98	128.60
2	B	513	A	N1-C6-N6	12.69	126.22	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2186	G	C6-N1-C2	12.69	132.72	125.10
2	B	1759	A	N1-C6-N6	12.69	126.22	118.60
2	B	2717	C	O4'-C1'-N1	12.69	118.35	108.20
2	B	785	G	C8-N9-C4	-12.69	101.33	106.40
2	B	2758	A	C4-C5-C6	12.69	123.34	117.00
2	B	1237	A	C5-N7-C8	12.68	110.24	103.90
2	B	2147	A	N1-C6-N6	12.68	126.21	118.60
2	B	1797	G	N9-C4-C5	12.68	110.47	105.40
2	B	1136	G	N1-C6-O6	12.67	127.50	119.90
5	L	21	ARG	NE-CZ-NH2	-12.67	113.97	120.30
2	B	2294	G	C6-N1-C2	-12.66	117.50	125.10
2	B	2655	G	N3-C2-N2	12.66	128.76	119.90
2	B	1958	C	N3-C4-C5	-12.66	116.84	121.90
29	G	163	TYR	CB-CG-CD2	12.65	128.59	121.00
2	B	2082	A	C5-C6-N6	-12.65	113.58	123.70
2	B	2582	G	N1-C6-O6	12.64	127.48	119.90
2	B	1256	G	P-O5'-C5'	12.63	141.10	120.90
2	B	1104	C	N3-C4-C5	-12.62	116.85	121.90
2	B	2860	A	C4-C5-C6	12.62	123.31	117.00
2	B	2340	A	N9-C4-C5	12.62	110.85	105.80
2	B	2114	A	C4-C5-C6	12.62	123.31	117.00
2	B	680	C	O4'-C1'-N1	12.61	118.29	108.20
2	B	2158	A	N1-C6-N6	12.61	126.17	118.60
1	A	99	A	N1-C6-N6	12.61	126.17	118.60
2	B	1766	G	C5-C6-O6	-12.61	121.03	128.60
2	B	904	G	N1-C6-O6	12.61	127.46	119.90
2	B	1533	C	N3-C4-C5	-12.60	116.86	121.90
2	B	8	C	N3-C4-N4	12.60	126.82	118.00
2	B	2794	C	O4'-C1'-N1	12.60	118.28	108.20
2	B	2459	A	N1-C6-N6	12.60	126.16	118.60
2	B	1832	C	C5-C6-N1	12.59	127.30	121.00
2	B	1654	A	N1-C6-N6	12.59	126.16	118.60
2	B	897	C	N3-C4-N4	12.59	126.81	118.00
2	B	2623	G	N1-C6-O6	12.59	127.45	119.90
2	B	2053	G	N1-C6-O6	12.57	127.44	119.90
2	B	2506	U	N1-C2-O2	12.57	131.60	122.80
2	B	825	A	O4'-C1'-N9	12.56	118.25	108.20
2	B	1281	G	C8-N9-C4	12.56	111.42	106.40
2	B	1730	C	P-O3'-C3'	12.56	134.78	119.70
10	P	98	TYR	CB-CG-CD2	-12.56	113.46	121.00
2	B	1999	C	N3-C4-C5	-12.56	116.88	121.90
2	B	336	C	O4'-C1'-N1	12.56	118.25	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	841	G	N1-C6-O6	12.55	127.43	119.90
2	B	1753	G	C5-C6-O6	-12.55	121.07	128.60
2	B	266	G	C2-N3-C4	12.55	118.17	111.90
2	B	402	A	N1-C6-N6	12.55	126.13	118.60
2	B	1661	G	N1-C6-O6	12.55	127.43	119.90
2	B	2319	G	N7-C8-N9	12.55	119.37	113.10
2	B	2439	A	C5-C6-N1	-12.55	111.43	117.70
2	B	2040	G	N3-C2-N2	12.54	128.68	119.90
2	B	2883	A	C2-N3-C4	-12.54	104.33	110.60
2	B	1463	C	C6-N1-C2	-12.54	115.28	120.30
2	B	1786	A	N1-C6-N6	12.54	126.12	118.60
2	B	2453	A	N1-C6-N6	12.54	126.12	118.60
2	B	2660	A	N1-C6-N6	12.53	126.12	118.60
2	B	472	A	N9-C4-C5	12.53	110.81	105.80
2	B	578	G	N1-C6-O6	12.53	127.42	119.90
2	B	1640	A	C8-N9-C4	-12.52	100.79	105.80
2	B	16	C	C6-N1-C2	-12.52	115.29	120.30
2	B	1434	A	N1-C6-N6	12.51	126.10	118.60
2	B	2094	A	C5-C6-N6	-12.51	113.70	123.70
1	A	54	G	C5-C6-O6	-12.49	121.10	128.60
2	B	1245	G	N1-C6-O6	12.49	127.40	119.90
2	B	1514	G	N1-C6-O6	12.49	127.39	119.90
2	B	1308	A	N1-C6-N6	12.49	126.09	118.60
2	B	307	G	N1-C6-O6	12.49	127.39	119.90
2	B	1230	A	N7-C8-N9	-12.49	107.56	113.80
2	B	2411	A	N1-C6-N6	12.48	126.09	118.60
2	B	657	U	N3-C4-C5	12.48	122.09	114.60
2	B	2183	A	N1-C6-N6	12.48	126.09	118.60
2	B	992	C	O4'-C1'-N1	12.48	118.18	108.20
2	B	354	A	C5-C6-N6	-12.48	113.72	123.70
2	B	2582	G	C5-C6-O6	-12.47	121.12	128.60
1	A	44	G	C8-N9-C4	12.47	111.39	106.40
2	B	1009	A	N1-C6-N6	12.47	126.08	118.60
2	B	1494	A	C8-N9-C4	-12.47	100.81	105.80
2	B	36	G	C5-C6-O6	-12.47	121.12	128.60
2	B	144	A	N1-C6-N6	12.47	126.08	118.60
2	B	1850	G	C5-C6-O6	-12.46	121.12	128.60
2	B	280	U	P-O3'-C3'	12.46	134.65	119.70
2	B	263	G	C5-C6-O6	-12.46	121.13	128.60
1	A	58	A	O4'-C1'-N9	12.46	118.16	108.20
2	B	1925	C	C6-N1-C2	-12.45	115.32	120.30
2	B	1707	G	C6-C5-N7	-12.45	122.93	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2708	G	N3-C2-N2	12.45	128.61	119.90
2	B	704	G	N1-C6-O6	12.44	127.37	119.90
2	B	1376	C	N3-C4-C5	-12.44	116.92	121.90
2	B	1702	G	C5-C6-O6	-12.44	121.14	128.60
2	B	2331	G	C5-C6-O6	-12.44	121.14	128.60
24	6	18	PHE	CB-CG-CD2	12.44	129.51	120.80
2	B	2822	G	C5-C6-O6	-12.44	121.14	128.60
2	B	868	U	C2-N3-C4	12.43	134.46	127.00
2	B	1941	C	N3-C4-N4	12.43	126.70	118.00
2	B	1557	C	C2-N3-C4	12.43	126.11	119.90
2	B	85	G	C5-C6-O6	-12.43	121.14	128.60
2	B	682	G	C5-C6-O6	-12.43	121.14	128.60
2	B	1478	G	N1-C6-O6	12.43	127.36	119.90
2	B	2443	C	N3-C4-N4	12.43	126.70	118.00
2	B	985	C	N3-C4-N4	12.42	126.70	118.00
2	B	2826	A	N1-C6-N6	12.42	126.05	118.60
2	B	2564	A	N1-C6-N6	12.42	126.05	118.60
2	B	944	C	C6-N1-C2	-12.42	115.33	120.30
2	B	560	C	C5-C6-N1	12.41	127.21	121.00
2	B	831	G	O4'-C1'-N9	12.41	118.13	108.20
2	B	1637	A	P-O5'-C5'	12.41	140.76	120.90
2	B	2665	A	N1-C6-N6	12.41	126.05	118.60
2	B	1730	C	N3-C4-N4	12.41	126.69	118.00
2	B	281	C	N3-C4-N4	12.41	126.69	118.00
2	B	2780	G	C5-C6-O6	-12.41	121.15	128.60
2	B	199	A	N1-C6-N6	12.40	126.04	118.60
2	B	1365	A	N1-C6-N6	12.39	126.04	118.60
2	B	2396	G	C5-C6-O6	-12.39	121.17	128.60
2	B	407	G	O4'-C1'-N9	12.39	118.11	108.20
2	B	548	G	P-O3'-C3'	12.39	134.57	119.70
2	B	2760	C	C5'-C4'-C3'	-12.39	96.18	116.00
2	B	2219	U	C5-C6-N1	-12.38	116.51	122.70
2	B	1425	G	N3-C2-N2	12.38	128.57	119.90
2	B	1998	A	N1-C6-N6	12.38	126.03	118.60
1	A	24	G	N1-C6-O6	12.38	127.33	119.90
2	B	1098	A	N1-C6-N6	12.37	126.02	118.60
2	B	2241	A	N1-C6-N6	12.37	126.02	118.60
2	B	1694	C	N3-C4-C5	-12.37	116.95	121.90
19	X	247	ARG	NE-CZ-NH1	12.37	126.48	120.30
2	B	2495	G	C6-N1-C2	-12.36	117.69	125.10
2	B	2164	C	N3-C4-N4	12.36	126.65	118.00
2	B	2201	G	C6-C5-N7	-12.36	122.99	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	111	A	C4-C5-C6	12.35	123.18	117.00
2	B	797	G	C8-N9-C4	12.35	111.34	106.40
2	B	726	G	N1-C6-O6	12.35	127.31	119.90
2	B	320	A	N1-C6-N6	12.35	126.01	118.60
2	B	2808	G	C5-C6-N1	-12.35	105.33	111.50
2	B	5	A	C4-C5-C6	12.34	123.17	117.00
2	B	1887	C	O4'-C1'-N1	12.34	118.07	108.20
2	B	2369	A	N7-C8-N9	-12.34	107.63	113.80
2	B	2782	G	C5-C6-O6	-12.34	121.19	128.60
2	B	12	U	O4'-C1'-N1	12.34	118.07	108.20
2	B	2387	U	O4'-C1'-N1	12.34	118.07	108.20
2	B	248	G	C5-C6-O6	-12.34	121.20	128.60
2	B	2013	A	N7-C8-N9	-12.33	107.64	113.80
2	B	590	A	C5-C6-N6	-12.33	113.84	123.70
2	B	329	G	C8-N9-C4	12.33	111.33	106.40
2	B	1527	G	N9-C4-C5	12.33	110.33	105.40
2	B	2211	A	N1-C6-N6	12.32	125.99	118.60
1	A	16	G	C5-C6-O6	-12.32	121.21	128.60
2	B	739	A	N1-C6-N6	12.32	125.99	118.60
2	B	1598	A	C5-C6-N6	-12.32	113.85	123.70
2	B	221	A	N1-C6-N6	12.31	125.99	118.60
2	B	930	G	P-O3'-C3'	12.31	134.47	119.70
2	B	674	G	C5-C6-O6	-12.30	121.22	128.60
2	B	2823	A	N1-C6-N6	12.30	125.98	118.60
2	B	1156	A	C5-C6-N1	-12.30	111.55	117.70
2	B	2212	A	N7-C8-N9	12.30	119.95	113.80
2	B	1163	G	N1-C6-O6	12.29	127.28	119.90
2	B	348	A	N9-C4-C5	12.29	110.72	105.80
2	B	1348	C	O4'-C1'-N1	12.29	118.03	108.20
2	B	7	G	N3-C2-N2	12.29	128.50	119.90
2	B	923	G	C5-C6-O6	-12.29	121.23	128.60
2	B	936	A	C5-N7-C8	12.29	110.04	103.90
2	B	560	C	C6-N1-C2	-12.28	115.39	120.30
2	B	609	A	N1-C6-N6	12.27	125.96	118.60
2	B	693	A	C5-C6-N6	-12.27	113.88	123.70
2	B	2844	G	O4'-C1'-N9	12.27	118.02	108.20
2	B	2435	A	N1-C2-N3	12.27	135.44	129.30
2	B	163	C	C6-N1-C2	-12.27	115.39	120.30
2	B	1271	G	O4'-C1'-N9	12.27	118.01	108.20
2	B	1365	A	C5-C6-N1	-12.27	111.57	117.70
2	B	1220	G	N7-C8-N9	-12.26	106.97	113.10
2	B	2824	C	C6-N1-C2	-12.26	115.40	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1957	C	C6-N1-C2	-12.26	115.40	120.30
2	B	2743	U	P-O3'-C3'	12.25	134.41	119.70
2	B	2434	A	C4-C5-N7	-12.25	104.57	110.70
2	B	579	G	N7-C8-N9	12.25	119.22	113.10
2	B	2382	G	N3-C2-N2	12.25	128.47	119.90
1	A	23	G	C8-N9-C4	-12.25	101.50	106.40
2	B	2366	A	C6-N1-C2	12.25	125.95	118.60
2	B	43	G	C2-N3-C4	12.24	118.02	111.90
2	B	625	G	N1-C6-O6	12.24	127.24	119.90
2	B	728	G	C8-N9-C4	12.24	111.29	106.40
2	B	1288	G	N1-C6-O6	12.23	127.24	119.90
2	B	2480	C	O4'-C1'-N1	12.23	117.99	108.20
2	B	883	G	C4-C5-C6	12.23	126.14	118.80
2	B	1583	A	N1-C6-N6	12.23	125.94	118.60
2	B	1757	A	N1-C6-N6	12.23	125.94	118.60
2	B	909	A	C5-C6-N6	-12.23	113.92	123.70
13	S	8	ARG	NE-CZ-NH2	-12.22	114.19	120.30
2	B	620	G	C5-C6-O6	-12.22	121.27	128.60
2	B	1701	A	N1-C2-N3	12.22	135.41	129.30
2	B	1823	G	N7-C8-N9	12.22	119.21	113.10
2	B	2309	A	N1-C6-N6	12.21	125.93	118.60
18	W	31	TYR	CB-CG-CD2	-12.21	113.67	121.00
2	B	332	A	C5-N7-C8	12.21	110.01	103.90
2	B	1145	C	O4'-C1'-N1	12.21	117.97	108.20
2	B	980	A	C8-N9-C4	-12.20	100.92	105.80
2	B	1304	A	C5-C6-N1	-12.20	111.60	117.70
2	B	2152	G	N1-C6-O6	12.20	127.22	119.90
2	B	307	G	C5-C6-O6	-12.20	121.28	128.60
2	B	2437	G	C4-C5-N7	-12.20	105.92	110.80
2	B	963	U	O4'-C1'-N1	12.20	117.96	108.20
2	B	1610	A	C5'-C4'-C3'	-12.20	96.49	116.00
2	B	2403	C	O4'-C1'-N1	12.19	117.95	108.20
2	B	1905	C	C6-N1-C2	-12.19	115.42	120.30
2	B	138	U	N3-C2-O2	12.19	130.73	122.20
2	B	736	C	O4'-C1'-N1	12.19	117.95	108.20
2	B	1420	A	N1-C2-N3	12.18	135.39	129.30
2	B	1653	G	N1-C6-O6	12.18	127.21	119.90
2	B	449	A	C5-C6-N6	-12.17	113.96	123.70
2	B	1132	U	C5-C4-O4	-12.17	118.60	125.90
2	B	1379	U	P-O3'-C3'	12.17	134.31	119.70
2	B	2009	A	O4'-C1'-N9	12.17	117.93	108.20
2	B	2386	A	N1-C6-N6	12.17	125.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	811	U	O4'-C1'-N1	12.16	117.93	108.20
2	B	2060	A	N1-C6-N6	12.16	125.90	118.60
2	B	2691	C	C6-N1-C2	-12.16	115.44	120.30
2	B	1426	G	N1-C6-O6	12.16	127.19	119.90
2	B	2176	A	N1-C6-N6	12.15	125.89	118.60
2	B	561	G	N3-C4-N9	12.15	133.29	126.00
2	B	2471	A	O4'-C1'-N9	12.15	117.92	108.20
2	B	880	G	C5-C6-O6	-12.15	121.31	128.60
2	B	1559	U	O4'-C1'-N1	12.15	117.92	108.20
2	B	1676	A	C4-C5-C6	12.15	123.07	117.00
2	B	2025	C	C5-C4-N4	-12.15	111.70	120.20
2	B	2357	G	C5-C6-O6	-12.15	121.31	128.60
2	B	2471	A	P-O5'-C5'	12.15	140.34	120.90
2	B	2415	G	C6-C5-N7	-12.14	123.12	130.40
1	A	86	G	N1-C6-O6	12.13	127.18	119.90
2	B	165	A	C5-C6-N6	-12.13	113.99	123.70
16	2	37	ARG	NE-CZ-NH2	-12.13	114.23	120.30
2	B	729	G	C8-N9-C4	-12.13	101.55	106.40
2	B	603	A	N1-C2-N3	12.13	135.37	129.30
2	B	908	C	N3-C4-C5	-12.13	117.05	121.90
2	B	1303	G	N3-C2-N2	12.13	128.39	119.90
2	B	2366	A	O4'-C1'-N9	12.13	117.90	108.20
2	B	2819	G	N1-C6-O6	12.13	127.18	119.90
2	B	2165	C	C4-C5-C6	12.13	123.46	117.40
2	B	882	G	N1-C6-O6	12.12	127.17	119.90
2	B	1543	G	N1-C6-O6	12.12	127.17	119.90
2	B	1246	A	N1-C6-N6	12.12	125.87	118.60
2	B	2808	G	C4-C5-C6	12.12	126.07	118.80
2	B	1081	U	O4'-C1'-N1	12.12	117.89	108.20
2	B	2128	G	N1-C6-O6	12.11	127.17	119.90
2	B	670	A	P-O3'-C3'	12.11	134.23	119.70
2	B	2293	G	C6-N1-C2	-12.11	117.83	125.10
2	B	1910	G	N1-C6-O6	12.11	127.16	119.90
2	B	2505	G	C2-N3-C4	-12.11	105.85	111.90
2	B	1793	C	O4'-C1'-N1	12.10	117.88	108.20
2	B	1211	C	O4'-C1'-N1	12.10	117.88	108.20
2	B	97	C	C6-N1-C2	-12.10	115.46	120.30
2	B	1151	A	C5-C6-N6	-12.10	114.02	123.70
2	B	2123	G	N1-C6-O6	12.10	127.16	119.90
2	B	524	G	O4'-C1'-N9	12.10	117.88	108.20
2	B	2848	G	C5-C6-O6	-12.10	121.34	128.60
2	B	707	G	N1-C6-O6	12.09	127.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	861	A	N1-C6-N6	12.09	125.86	118.60
2	B	975	A	C5-N7-C8	12.08	109.94	103.90
1	A	98	G	C5-C6-O6	-12.08	121.35	128.60
2	B	2549	G	C5-C6-O6	-12.07	121.36	128.60
2	B	223	A	N1-C6-N6	12.07	125.84	118.60
2	B	893	C	N3-C4-N4	12.07	126.45	118.00
2	B	2773	C	N3-C4-C5	-12.07	117.07	121.90
2	B	978	G	C5-C6-O6	-12.07	121.36	128.60
2	B	1168	G	O4'-C1'-N9	12.07	117.85	108.20
2	B	1427	A	N1-C6-N6	12.06	125.84	118.60
2	B	1969	A	C5-C6-N1	-12.06	111.67	117.70
2	B	947	A	C8-N9-C4	-12.06	100.97	105.80
2	B	2014	A	N1-C6-N6	12.06	125.84	118.60
2	B	245	G	N1-C6-O6	12.06	127.14	119.90
2	B	1964	G	N1-C6-O6	12.06	127.14	119.90
2	B	2745	C	O4'-C1'-N1	12.06	117.85	108.20
2	B	2331	G	C8-N9-C4	-12.05	101.58	106.40
2	B	1719	G	C5-C6-N1	-12.04	105.48	111.50
2	B	2022	U	P-O3'-C3'	12.04	134.14	119.70
2	B	1375	U	C5-C4-O4	-12.04	118.68	125.90
2	B	2582	G	N9-C4-C5	12.03	110.21	105.40
2	B	683	U	C2-N3-C4	-12.03	119.78	127.00
2	B	1676	A	P-O3'-C3'	12.03	134.13	119.70
2	B	1093	G	N1-C2-N3	-12.02	116.69	123.90
2	B	614	A	N1-C6-N6	12.02	125.81	118.60
2	B	2403	C	N3-C4-N4	12.02	126.41	118.00
2	B	2090	A	N9-C4-C5	12.02	110.61	105.80
2	B	1031	G	O4'-C1'-N9	12.01	117.81	108.20
2	B	2413	G	C5-C6-O6	-12.01	121.39	128.60
2	B	2001	C	C4-C5-C6	12.01	123.40	117.40
2	B	2875	C	O4'-C1'-N1	12.01	117.81	108.20
2	B	851	C	C5-C4-N4	-12.01	111.80	120.20
2	B	817	C	O4'-C1'-N1	12.00	117.80	108.20
2	B	2733	A	C4-C5-C6	12.00	123.00	117.00
2	B	1371	G	N9-C4-C5	11.99	110.20	105.40
2	B	2062	A	C4-C5-C6	11.99	123.00	117.00
2	B	302	C	N3-C4-C5	-11.99	117.11	121.90
2	B	344	A	N1-C2-N3	11.99	135.29	129.30
2	B	511	U	O4'-C1'-N1	11.98	117.79	108.20
2	B	566	U	O4'-C1'-N1	11.98	117.78	108.20
2	B	1212	G	C8-N9-C4	-11.98	101.61	106.40
2	B	825	A	C8-N9-C4	11.98	110.59	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	305	C	N3-C4-N4	11.97	126.38	118.00
2	B	794	A	C5-C6-N6	-11.97	114.12	123.70
2	B	2337	G	C5-C6-O6	-11.97	121.42	128.60
2	B	2860	A	N9-C4-C5	-11.97	101.01	105.80
2	B	844	A	C5-C6-N6	-11.97	114.13	123.70
2	B	1095	A	P-O3'-C3'	11.96	134.06	119.70
2	B	1371	G	C2-N3-C4	11.96	117.88	111.90
2	B	2133	G	N1-C6-O6	11.96	127.08	119.90
2	B	903	C	N3-C4-C5	-11.95	117.12	121.90
2	B	379	G	C5-C6-O6	-11.95	121.43	128.60
2	B	2376	A	C5-C6-N1	-11.95	111.72	117.70
2	B	1319	C	N3-C4-C5	-11.95	117.12	121.90
2	B	2410	G	N1-C6-O6	11.95	127.07	119.90
2	B	242	G	N1-C6-O6	11.95	127.07	119.90
2	B	1093	G	N1-C6-O6	11.95	127.07	119.90
2	B	84	A	C5-C6-N6	-11.94	114.15	123.70
2	B	2872	A	N1-C6-N6	11.94	125.77	118.60
2	B	2618	G	C5-C6-O6	-11.94	121.44	128.60
2	B	111	A	O4'-C1'-N9	11.94	117.75	108.20
2	B	1705	A	N1-C2-N3	11.94	135.27	129.30
2	B	2685	G	C5-C6-O6	-11.94	121.44	128.60
2	B	2215	C	N3-C4-C5	-11.94	117.13	121.90
2	B	457	A	O4'-C1'-N9	11.93	117.75	108.20
2	B	400	G	N1-C6-O6	11.93	127.06	119.90
2	B	1613	G	N1-C6-O6	11.93	127.06	119.90
2	B	1928	A	C5-C6-N1	-11.93	111.74	117.70
2	B	1361	G	C5-C6-O6	-11.93	121.44	128.60
2	B	1016	G	N7-C8-N9	-11.92	107.14	113.10
2	B	2338	C	O4'-C1'-N1	11.92	117.74	108.20
2	B	1391	U	P-O3'-C3'	-11.92	105.40	119.70
2	B	2295	C	C5-C4-N4	-11.92	111.86	120.20
2	B	2388	A	N1-C6-N6	11.92	125.75	118.60
2	B	2441	U	O4'-C1'-N1	11.92	117.73	108.20
2	B	249	C	O4'-C1'-N1	11.91	117.73	108.20
9	O	117	PHE	CB-CG-CD1	-11.91	112.46	120.80
2	B	738	G	N7-C8-N9	11.91	119.06	113.10
2	B	1813	G	O4'-C1'-N9	11.90	117.72	108.20
2	B	1208	C	C6-N1-C2	-11.90	115.54	120.30
2	B	513	A	C5-C6-N1	-11.89	111.75	117.70
2	B	925	A	C5-C6-N1	-11.89	111.75	117.70
2	B	1223	G	N1-C6-O6	11.89	127.03	119.90
27	C	170	TYR	CB-CG-CD1	-11.89	113.87	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	55	G	C8-N9-C4	11.89	111.16	106.40
2	B	110	G	N1-C6-O6	11.88	127.03	119.90
2	B	1072	C	O4'-C1'-N1	11.88	117.70	108.20
2	B	457	A	C8-N9-C4	11.88	110.55	105.80
2	B	2427	C	O4'-C1'-N1	11.88	117.70	108.20
2	B	1540	G	C5-N7-C8	-11.88	98.36	104.30
2	B	2177	C	O4'-C1'-N1	11.88	117.70	108.20
2	B	2615	U	O4'-C1'-N1	11.88	117.70	108.20
2	B	2080	A	N1-C6-N6	11.87	125.72	118.60
2	B	686	U	N3-C4-O4	11.87	127.71	119.40
2	B	684	G	P-O3'-C3'	11.87	133.94	119.70
2	B	2034	U	O4'-C1'-N1	11.87	117.69	108.20
2	B	1029	A	N1-C6-N6	11.87	125.72	118.60
2	B	1515	A	O4'-C1'-N9	11.87	117.69	108.20
2	B	1597	A	C8-N9-C4	-11.86	101.06	105.80
2	B	1849	G	C5-C6-O6	-11.86	121.48	128.60
2	B	2430	A	C4-C5-C6	11.86	122.93	117.00
2	B	726	G	C5-C6-N1	-11.86	105.57	111.50
2	B	997	G	C8-N9-C4	-11.86	101.66	106.40
2	B	2172	U	C5-C6-N1	11.86	128.63	122.70
1	A	89	U	O4'-C1'-N1	11.86	117.69	108.20
2	B	196	A	C5-C6-N6	-11.85	114.22	123.70
2	B	2887	A	N1-C6-N6	11.85	125.71	118.60
2	B	1473	G	C8-N9-C4	-11.84	101.66	106.40
2	B	982	C	C6-N1-C2	-11.84	115.57	120.30
2	B	1003	G	C5-C6-O6	-11.83	121.50	128.60
2	B	1191	G	N1-C2-N3	-11.83	116.80	123.90
2	B	1194	A	N1-C6-N6	11.83	125.70	118.60
2	B	2897	U	N3-C4-O4	11.83	127.68	119.40
2	B	309	A	O4'-C1'-N9	11.83	117.67	108.20
2	B	675	A	N9-C4-C5	-11.83	101.07	105.80
2	B	1545	A	C5-C6-N1	-11.83	111.78	117.70
2	B	2502	G	N3-C2-N2	11.83	128.18	119.90
2	B	1655	A	N9-C4-C5	-11.82	101.07	105.80
2	B	208	C	C5-C6-N1	11.82	126.91	121.00
2	B	1167	C	C5-C4-N4	-11.82	111.92	120.20
2	B	1010	A	N9-C4-C5	11.82	110.53	105.80
1	A	92	C	C3'-C2'-C1'	-11.82	92.04	101.50
2	B	1848	A	C5-C6-N6	-11.82	114.24	123.70
2	B	1891	G	C5-C6-N1	-11.82	105.59	111.50
2	B	2283	C	P-O5'-C5'	11.82	139.81	120.90
2	B	322	A	N1-C6-N6	11.82	125.69	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2641	G	N1-C6-O6	11.82	126.99	119.90
2	B	2736	A	N1-C6-N6	11.82	125.69	118.60
2	B	1397	U	C2-N3-C4	-11.81	119.91	127.00
2	B	2440	C	N3-C4-C5	-11.81	117.17	121.90
2	B	515	A	C5-C6-N6	-11.81	114.25	123.70
1	A	41	G	N7-C8-N9	11.81	119.00	113.10
2	B	429	A	N1-C6-N6	11.81	125.69	118.60
2	B	760	G	N1-C6-O6	11.81	126.98	119.90
2	B	1325	U	C2-N3-C4	-11.81	119.92	127.00
2	B	2413	G	N1-C6-O6	11.81	126.98	119.90
2	B	1211	C	C6-N1-C2	-11.80	115.58	120.30
2	B	1833	C	C6-N1-C2	-11.80	115.58	120.30
2	B	2789	C	O4'-C1'-N1	11.80	117.64	108.20
2	B	993	G	O4'-C1'-N9	11.79	117.64	108.20
2	B	208	C	C4-C5-C6	-11.79	111.50	117.40
5	L	2	ARG	NE-CZ-NH1	11.79	126.20	120.30
2	B	367	G	C5-C6-O6	-11.79	121.53	128.60
2	B	704	G	O4'-C1'-N9	11.78	117.63	108.20
2	B	2584	U	O4'-C1'-N1	11.78	117.63	108.20
2	B	2678	C	N1-C2-O2	11.78	125.97	118.90
2	B	947	A	N1-C6-N6	11.78	125.67	118.60
2	B	66	C	N3-C2-O2	-11.77	113.66	121.90
2	B	752	A	C4-C5-N7	11.77	116.59	110.70
2	B	2889	C	O4'-C1'-N1	11.77	117.62	108.20
2	B	707	G	N3-C2-N2	11.77	128.14	119.90
2	B	2725	A	N1-C6-N6	11.77	125.66	118.60
2	B	36	G	N1-C6-O6	11.77	126.96	119.90
14	D	141	ARG	NE-CZ-NH2	-11.77	114.42	120.30
2	B	1776	G	C5-C6-O6	-11.76	121.54	128.60
2	B	2524	G	C2-N3-C4	-11.76	106.02	111.90
2	B	1078	U	N3-C4-C5	-11.75	107.55	114.60
2	B	1773	A	C5-C6-N6	-11.75	114.30	123.70
2	B	285	G	N1-C6-O6	11.75	126.95	119.90
2	B	1220	G	C5-N7-C8	11.75	110.17	104.30
2	B	422	A	N1-C6-N6	11.74	125.64	118.60
18	W	56	PHE	CB-CG-CD2	-11.74	112.58	120.80
2	B	1054	A	N1-C6-N6	11.74	125.64	118.60
2	B	2057	G	C8-N9-C4	-11.74	101.70	106.40
2	B	16	C	O4'-C1'-N1	11.74	117.59	108.20
2	B	2285	C	O4'-C1'-N1	11.73	117.59	108.20
2	B	267	C	O4'-C1'-N1	11.73	117.59	108.20
2	B	2430	A	P-O3'-C3'	11.73	133.78	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	783	A	C5-N7-C8	11.73	109.77	103.90
2	B	911	A	N1-C6-N6	11.73	125.64	118.60
2	B	279	A	C8-N9-C4	-11.73	101.11	105.80
2	B	1096	A	O4'-C1'-N9	11.73	117.58	108.20
2	B	2284	A	C5-C6-N1	-11.73	111.83	117.70
2	B	2583	G	C8-N9-C4	-11.73	101.71	106.40
2	B	2758	A	C5-C6-N1	-11.73	111.83	117.70
2	B	2848	G	P-O3'-C3'	11.73	133.78	119.70
2	B	478	A	N1-C6-N6	11.73	125.64	118.60
2	B	1274	A	C5-C6-N6	-11.73	114.32	123.70
2	B	2464	G	N1-C2-N3	-11.73	116.86	123.90
2	B	381	G	C5-C6-O6	-11.73	121.56	128.60
2	B	882	G	C4-C5-N7	-11.72	106.11	110.80
2	B	1538	G	N1-C6-O6	11.72	126.93	119.90
2	B	2196	C	O4'-C1'-N1	11.72	117.58	108.20
2	B	266	G	C5-C6-N1	-11.72	105.64	111.50
25	7	63	TYR	CB-CG-CD2	11.72	128.03	121.00
2	B	704	G	C5-C6-O6	-11.72	121.57	128.60
2	B	1850	G	N9-C4-C5	11.72	110.09	105.40
2	B	909	A	C5-C6-N1	-11.71	111.84	117.70
1	A	96	G	C5-C6-O6	11.71	135.63	128.60
1	A	19	C	O4'-C1'-N1	11.71	117.57	108.20
2	B	1605	C	O4'-C1'-N1	11.71	117.57	108.20
2	B	1306	C	O4'-C1'-N1	11.71	117.56	108.20
2	B	2505	G	C5-C6-O6	-11.71	121.58	128.60
32	J	95	ARG	NE-CZ-NH1	11.70	126.15	120.30
1	A	46	A	C5-C6-N6	-11.69	114.34	123.70
2	B	188	G	N1-C6-O6	11.69	126.92	119.90
2	B	713	G	N1-C6-O6	11.70	126.92	119.90
2	B	274	C	O4'-C1'-N1	11.69	117.55	108.20
2	B	1494	A	C5-C6-N1	-11.69	111.86	117.70
2	B	1161	C	O4'-C1'-N1	11.69	117.55	108.20
2	B	1210	G	N1-C6-O6	11.69	126.91	119.90
2	B	1259	G	C8-N9-C4	-11.68	101.73	106.40
2	B	1293	C	C5-C6-N1	11.68	126.84	121.00
2	B	2022	U	O4'-C1'-N1	11.68	117.54	108.20
2	B	2651	C	O4'-C1'-N1	11.68	117.54	108.20
2	B	2458	G	O4'-C1'-N9	11.68	117.54	108.20
27	C	174	ARG	NE-CZ-NH1	11.67	126.14	120.30
2	B	1140	C	O4'-C1'-N1	11.67	117.53	108.20
2	B	1448	G	N1-C6-O6	11.67	126.90	119.90
2	B	2403	C	C5-C4-N4	-11.67	112.03	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	338	G	N1-C6-O6	11.67	126.90	119.90
1	A	71	C	O4'-C1'-N1	11.66	117.53	108.20
2	B	899	A	C5-C6-N6	-11.66	114.37	123.70
2	B	2275	C	C6-N1-C2	-11.66	115.63	120.30
2	B	2083	G	C4-C5-N7	-11.66	106.14	110.80
2	B	107	G	C4-C5-N7	-11.66	106.14	110.80
2	B	411	G	C5-C6-O6	-11.66	121.60	128.60
2	B	744	U	C2-N3-C4	-11.66	120.00	127.00
2	B	1269	A	C4-C5-C6	11.66	122.83	117.00
2	B	1014	A	C5-C6-N6	-11.66	114.38	123.70
2	B	2322	A	N1-C6-N6	11.66	125.59	118.60
2	B	2443	C	O4'-C1'-N1	11.65	117.52	108.20
1	A	65	U	O4'-C1'-N1	11.65	117.52	108.20
2	B	711	G	C5-C6-O6	-11.65	121.61	128.60
2	B	2238	G	P-O5'-C5'	11.65	139.54	120.90
2	B	248	G	N1-C6-O6	11.64	126.89	119.90
2	B	2060	A	C2-N3-C4	11.64	116.42	110.60
2	B	2516	A	N1-C6-N6	11.64	125.58	118.60
2	B	891	G	C5-C6-N1	-11.63	105.68	111.50
2	B	190	A	N1-C6-N6	11.63	125.58	118.60
2	B	1087	G	N1-C6-O6	11.63	126.88	119.90
2	B	1249	U	N3-C2-O2	11.63	130.34	122.20
2	B	507	A	N3-C4-N9	11.63	136.70	127.40
2	B	722	A	C8-N9-C4	-11.63	101.15	105.80
2	B	2405	G	C2-N3-C4	11.63	117.71	111.90
2	B	2088	A	C5-C6-N6	-11.63	114.40	123.70
2	B	1538	G	C5-C6-O6	-11.62	121.63	128.60
2	B	1991	U	O4'-C1'-N1	11.62	117.50	108.20
2	B	546	U	C6-N1-C2	-11.62	114.03	121.00
2	B	942	G	N1-C6-O6	11.61	126.87	119.90
2	B	168	G	N3-C2-N2	11.61	128.03	119.90
2	B	1545	A	C4-C5-C6	11.61	122.81	117.00
2	B	1204	A	N1-C6-N6	11.61	125.56	118.60
2	B	2186	G	N1-C2-N3	-11.61	116.94	123.90
2	B	410	G	O4'-C1'-N9	11.60	117.48	108.20
1	A	95	U	C5-C4-O4	11.60	132.86	125.90
2	B	236	C	N3-C4-N4	11.60	126.12	118.00
2	B	1008	A	N1-C6-N6	11.60	125.56	118.60
2	B	2090	A	C4-C5-C6	11.60	122.80	117.00
2	B	2347	C	N3-C4-N4	11.60	126.12	118.00
2	B	2534	A	C8-N9-C4	-11.60	101.16	105.80
2	B	611	C	C6-N1-C2	-11.60	115.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2193	G	C5-C6-O6	-11.60	121.64	128.60
2	B	878	A	N1-C6-N6	11.59	125.56	118.60
2	B	1917	U	O4'-C1'-N1	11.59	117.47	108.20
2	B	2521	C	N3-C4-N4	11.59	126.11	118.00
2	B	1746	A	C5-C6-N1	-11.59	111.91	117.70
10	P	100	ARG	NE-CZ-NH2	11.59	126.09	120.30
2	B	2113	U	O4'-C1'-N1	11.59	117.47	108.20
2	B	15	G	C5-C6-O6	-11.59	121.65	128.60
2	B	180	G	N1-C6-O6	11.59	126.85	119.90
2	B	428	A	C5-C6-N1	-11.58	111.91	117.70
2	B	2127	G	O4'-C1'-N9	11.58	117.47	108.20
2	B	984	A	O4'-C1'-N9	11.58	117.47	108.20
2	B	1077	A	O4'-C1'-N9	11.58	117.46	108.20
2	B	616	A	O4'-C1'-N9	11.58	117.46	108.20
2	B	796	C	O4'-C1'-N1	11.58	117.46	108.20
2	B	357	C	O4'-C1'-N1	11.57	117.46	108.20
2	B	630	G	N1-C6-O6	11.57	126.84	119.90
1	A	76	G	N1-C6-O6	11.57	126.84	119.90
2	B	2631	G	N1-C6-O6	11.56	126.84	119.90
2	B	1726	C	C6-N1-C2	-11.56	115.68	120.30
2	B	2885	G	N1-C6-O6	11.56	126.84	119.90
2	B	975	A	N7-C8-N9	-11.56	108.02	113.80
2	B	31	C	N3-C4-C5	-11.55	117.28	121.90
2	B	414	C	O4'-C1'-N1	11.55	117.44	108.20
2	B	628	G	O4'-C1'-N9	11.55	117.44	108.20
2	B	309	A	N1-C6-N6	11.55	125.53	118.60
2	B	339	U	C5-C4-O4	-11.55	118.97	125.90
2	B	2766	A	C5-C6-N6	-11.55	114.46	123.70
2	B	2778	A	C5-C6-N1	-11.55	111.92	117.70
1	A	68	C	C4-C5-C6	11.55	123.17	117.40
2	B	265	A	C5-N7-C8	11.55	109.67	103.90
2	B	934	U	C2-N3-C4	11.55	133.93	127.00
2	B	627	A	P-O3'-C3'	11.54	133.55	119.70
2	B	793	A	N1-C6-N6	11.54	125.53	118.60
2	B	2409	G	C8-N9-C4	-11.54	101.78	106.40
2	B	2521	C	N3-C4-C5	-11.54	117.28	121.90
2	B	90	U	N3-C4-O4	11.54	127.48	119.40
2	B	104	A	C5-C6-N6	-11.54	114.47	123.70
2	B	677	A	C5-C6-N6	-11.54	114.47	123.70
2	B	540	C	N3-C4-C5	-11.54	117.28	121.90
2	B	636	G	N1-C2-N3	-11.54	116.98	123.90
2	B	1392	A	C5-C6-N6	-11.54	114.47	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2243	U	O4'-C1'-N1	11.54	117.43	108.20
2	B	1897	G	N1-C6-O6	11.53	126.82	119.90
2	B	366	C	C6-N1-C2	11.53	124.91	120.30
2	B	402	A	C5-C6-N6	-11.53	114.48	123.70
2	B	1579	A	C5-C6-N6	-11.53	114.48	123.70
2	B	2335	A	C8-N9-C4	11.53	110.41	105.80
2	B	2439	A	C6-C5-N7	-11.52	124.23	132.30
2	B	604	G	N1-C6-O6	11.52	126.81	119.90
2	B	1234	U	P-O5'-C5'	11.52	139.33	120.90
2	B	713	G	C5-C6-O6	-11.52	121.69	128.60
2	B	2407	A	N1-C6-N6	11.52	125.51	118.60
2	B	1295	C	O4'-C1'-N1	11.51	117.41	108.20
2	B	1314	C	C4-C5-C6	-11.51	111.64	117.40
2	B	2267	A	N1-C6-N6	11.51	125.51	118.60
2	B	2669	G	C4-C5-N7	11.51	115.41	110.80
2	B	831	G	N1-C6-O6	11.51	126.81	119.90
2	B	1790	C	C6-N1-C2	-11.51	115.70	120.30
2	B	1249	U	C5-C4-O4	-11.51	118.99	125.90
1	A	36	C	O4'-C1'-N1	11.51	117.41	108.20
2	B	155	A	O4'-C1'-N9	11.51	117.41	108.20
2	B	1791	A	N1-C6-N6	11.51	125.50	118.60
2	B	2716	C	O4'-C1'-N1	11.51	117.40	108.20
2	B	27	G	N1-C6-O6	11.50	126.80	119.90
2	B	1480	C	N3-C2-O2	-11.50	113.85	121.90
1	A	37	C	O4'-C1'-N1	11.50	117.40	108.20
2	B	63	A	C4-C5-C6	11.50	122.75	117.00
2	B	565	C	C6-N1-C2	11.50	124.90	120.30
2	B	961	C	N3-C4-C5	-11.50	117.30	121.90
2	B	2829	A	N1-C6-N6	11.50	125.50	118.60
2	B	439	A	N1-C6-N6	11.49	125.50	118.60
2	B	1489	C	C5-C4-N4	-11.49	112.16	120.20
2	B	1654	A	O4'-C1'-N9	11.49	117.39	108.20
1	A	80	U	O4'-C1'-N1	11.49	117.39	108.20
2	B	74	A	C2-N3-C4	-11.49	104.86	110.60
2	B	1960	A	C4-C5-C6	11.49	122.74	117.00
2	B	2788	C	O4'-C1'-N1	11.49	117.39	108.20
2	B	1638	C	O4'-C1'-N1	11.48	117.39	108.20
2	B	2161	C	N3-C4-N4	11.48	126.04	118.00
28	F	7	TYR	CB-CG-CD1	-11.48	114.11	121.00
2	B	1337	G	N1-C6-O6	11.48	126.78	119.90
2	B	498	G	N9-C4-C5	-11.47	100.81	105.40
2	B	1930	G	C8-N9-C4	-11.47	101.81	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2166	U	C3'-C2'-C1'	11.47	110.68	101.50
2	B	2440	C	C2-N3-C4	11.47	125.64	119.90
2	B	1432	G	O4'-C1'-N9	11.47	117.37	108.20
2	B	1906	G	C5-C6-O6	-11.46	121.72	128.60
2	B	1467	U	O4'-C1'-N1	11.46	117.37	108.20
2	B	2319	G	C5-C6-O6	-11.46	121.72	128.60
2	B	23	G	N1-C6-O6	11.46	126.77	119.90
2	B	89	A	N1-C6-N6	11.46	125.47	118.60
2	B	905	A	O4'-C1'-N9	11.46	117.36	108.20
2	B	2809	A	P-O3'-C3'	-11.45	105.95	119.70
2	B	424	G	N9-C4-C5	11.45	109.98	105.40
2	B	155	A	N3-C4-C5	-11.45	118.78	126.80
2	B	1610	A	C8-N9-C4	11.45	110.38	105.80
2	B	2867	G	C5-C6-O6	-11.45	121.73	128.60
2	B	2036	C	O4'-C1'-N1	11.45	117.36	108.20
2	B	2212	A	O4'-C1'-N9	11.45	117.36	108.20
2	B	1280	G	C8-N9-C4	-11.45	101.82	106.40
2	B	2422	C	C2-N3-C4	-11.45	114.18	119.90
2	B	1846	G	N1-C6-O6	11.44	126.76	119.90
2	B	1937	A	C5-C6-N1	-11.44	111.98	117.70
2	B	667	U	O4'-C1'-N1	11.43	117.35	108.20
2	B	1085	A	C4-C5-C6	11.43	122.72	117.00
2	B	1305	C	O4'-C1'-N1	11.43	117.35	108.20
2	B	915	C	N3-C4-C5	-11.43	117.33	121.90
2	B	725	G	P-O3'-C3'	11.43	133.41	119.70
2	B	877	A	N1-C6-N6	11.43	125.46	118.60
2	B	1908	C	O4'-C1'-N1	11.43	117.34	108.20
2	B	9	G	N1-C6-O6	11.42	126.75	119.90
2	B	1079	C	C6-N1-C2	-11.42	115.73	120.30
2	B	1532	A	C5-C6-N1	-11.42	111.99	117.70
1	A	12	C	C6-N1-C2	11.42	124.87	120.30
2	B	1694	C	C6-N1-C2	11.42	124.87	120.30
4	K	98	ARG	NE-CZ-NH2	-11.42	114.59	120.30
2	B	2009	A	C4-C5-C6	11.42	122.71	117.00
2	B	1838	C	P-O3'-C3'	11.42	133.40	119.70
2	B	2116	G	C5-C6-O6	-11.42	121.75	128.60
2	B	649	G	O4'-C1'-N9	11.41	117.33	108.20
2	B	1571	A	C5-C6-N1	-11.41	111.99	117.70
2	B	2359	C	O4'-C1'-N1	11.41	117.33	108.20
5	L	21	ARG	NE-CZ-NH1	11.41	126.01	120.30
2	B	1233	C	N3-C4-C5	-11.41	117.34	121.90
2	B	2381	A	C8-N9-C4	-11.41	101.24	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	R	13	ARG	NE-CZ-NH2	-11.41	114.59	120.30
2	B	798	G	C5-C6-O6	-11.40	121.76	128.60
2	B	2053	G	C6-C5-N7	-11.40	123.56	130.40
2	B	2044	C	C6-N1-C2	-11.40	115.74	120.30
2	B	48	G	N1-C6-O6	11.39	126.74	119.90
2	B	1807	G	N1-C6-O6	11.39	126.74	119.90
2	B	2336	A	C4-C5-C6	11.39	122.70	117.00
2	B	261	G	C5-N7-C8	11.39	109.99	104.30
2	B	266	G	N1-C2-N3	-11.39	117.07	123.90
2	B	869	G	C4-C5-C6	11.38	125.63	118.80
2	B	1583	A	N1-C2-N3	11.38	134.99	129.30
2	B	1596	A	C4-C5-C6	11.38	122.69	117.00
2	B	1902	C	N3-C4-C5	-11.38	117.35	121.90
2	B	2282	G	C5-C6-O6	-11.38	121.77	128.60
27	C	102	TYR	CB-CG-CD1	-11.38	114.17	121.00
28	F	149	ARG	NE-CZ-NH2	-11.38	114.61	120.30
2	B	2903	U	C2-N1-C1'	11.37	131.35	117.70
2	B	1491	G	O4'-C1'-N9	11.37	117.30	108.20
1	A	27	C	C2-N3-C4	11.37	125.58	119.90
2	B	70	G	N3-C2-N2	11.37	127.86	119.90
2	B	1672	A	C5-C6-N1	-11.37	112.02	117.70
28	F	124	ARG	NE-CZ-NH2	-11.37	114.62	120.30
2	B	497	A	C5-C6-N6	-11.36	114.61	123.70
2	B	1580	A	C5-C6-N6	-11.36	114.61	123.70
2	B	307	G	N3-C2-N2	11.36	127.85	119.90
2	B	2335	A	N1-C6-N6	11.36	125.41	118.60
2	B	2796	U	P-O3'-C3'	11.36	133.33	119.70
2	B	2083	G	N1-C6-O6	11.35	126.71	119.90
2	B	2134	A	N1-C6-N6	11.35	125.41	118.60
2	B	83	A	C4-C5-C6	11.35	122.67	117.00
2	B	1186	G	N3-C4-C5	11.35	134.27	128.60
2	B	1617	C	O4'-C1'-N1	11.35	117.28	108.20
2	B	2523	G	N3-C2-N2	11.35	127.84	119.90
2	B	2661	G	C5-C6-O6	-11.35	121.79	128.60
2	B	741	U	C5-C6-N1	11.34	128.37	122.70
2	B	988	A	N1-C6-N6	11.34	125.40	118.60
2	B	2239	G	N1-C6-O6	11.34	126.70	119.90
2	B	1953	A	C8-N9-C4	-11.33	101.27	105.80
2	B	2877	G	C5-C6-N1	-11.33	105.83	111.50
1	A	109	A	N1-C6-N6	11.33	125.40	118.60
2	B	1806	C	N3-C4-N4	11.33	125.93	118.00
2	B	41	C	C5-C4-N4	-11.33	112.27	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1410	G	O4'-C1'-N9	11.33	117.26	108.20
2	B	2250	G	C5-C6-O6	-11.33	121.80	128.60
2	B	470	A	N1-C6-N6	11.32	125.39	118.60
2	B	231	A	C4-C5-N7	-11.32	105.04	110.70
2	B	603	A	C2-N3-C4	-11.32	104.94	110.60
2	B	1633	G	P-O3'-C3'	11.32	133.28	119.70
2	B	2165	C	O4'-C1'-N1	11.32	117.26	108.20
2	B	2469	A	C5-C6-N6	-11.32	114.64	123.70
2	B	2683	C	C2-N3-C4	11.32	125.56	119.90
2	B	2902	C	C5-C6-N1	11.32	126.66	121.00
2	B	1248	G	N1-C6-O6	11.32	126.69	119.90
2	B	1634	A	N1-C6-N6	11.32	125.39	118.60
2	B	2345	G	N1-C6-O6	11.32	126.69	119.90
2	B	998	C	O4'-C1'-N1	11.31	117.25	108.20
2	B	2765	A	C4-C5-C6	11.31	122.66	117.00
2	B	1823	G	N1-C6-O6	11.31	126.69	119.90
2	B	2213	U	O4'-C1'-N1	11.31	117.25	108.20
2	B	265	A	C5-C6-N6	-11.31	114.65	123.70
2	B	668	A	C4-C5-C6	11.31	122.65	117.00
2	B	1371	G	O4'-C1'-N9	11.31	117.25	108.20
2	B	289	G	N3-C2-N2	11.31	127.81	119.90
2	B	589	U	P-O3'-C3'	-11.30	106.14	119.70
2	B	1051	G	N1-C6-O6	11.30	126.68	119.90
2	B	2087	G	O4'-C1'-N9	11.31	117.25	108.20
2	B	1964	G	C6-C5-N7	-11.30	123.62	130.40
2	B	1010	A	N1-C6-N6	11.30	125.38	118.60
2	B	2349	G	N1-C6-O6	11.30	126.68	119.90
2	B	2357	G	N1-C6-O6	11.30	126.68	119.90
2	B	1187	G	N9-C4-C5	11.29	109.92	105.40
2	B	1518	C	C6-N1-C2	-11.29	115.78	120.30
2	B	2777	G	N1-C6-O6	11.30	126.68	119.90
2	B	837	C	N3-C4-N4	11.29	125.90	118.00
2	B	1602	U	O4'-C1'-N1	11.29	117.23	108.20
2	B	181	A	C5-C6-N6	-11.29	114.67	123.70
2	B	1483	G	C6-C5-N7	-11.29	123.63	130.40
2	B	2330	G	C2-N3-C4	11.29	117.54	111.90
2	B	2894	G	O4'-C1'-N9	11.29	117.23	108.20
2	B	820	A	C8-N9-C4	11.28	110.31	105.80
2	B	1314	C	C5-C6-N1	11.28	126.64	121.00
2	B	2493	U	O4'-C1'-N1	11.29	117.23	108.20
2	B	453	A	C5-C6-N1	-11.28	112.06	117.70
2	B	1046	A	N1-C6-N6	11.28	125.37	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1837	C	C5-C4-N4	-11.28	112.31	120.20
2	B	1506	U	O4'-C1'-N1	11.28	117.22	108.20
2	B	1561	C	N3-C4-N4	11.27	125.89	118.00
2	B	2705	A	O4'-C4'-C3'	-11.27	92.73	104.00
1	A	41	G	C8-N9-C4	-11.27	101.89	106.40
2	B	123	G	C5-C6-O6	-11.27	121.84	128.60
2	B	810	U	N1-C2-N3	11.27	121.66	114.90
2	B	831	G	C5-C6-O6	-11.27	121.84	128.60
1	A	38	C	N3-C4-C5	-11.26	117.39	121.90
2	B	1737	G	N3-C2-N2	11.26	127.78	119.90
2	B	791	C	N3-C4-C5	-11.26	117.40	121.90
2	B	1171	G	C5-C6-O6	-11.25	121.85	128.60
2	B	879	G	N1-C6-O6	11.25	126.65	119.90
2	B	1610	A	N1-C2-N3	11.25	134.93	129.30
2	B	2332	C	O4'-C1'-N1	11.25	117.20	108.20
2	B	2731	G	C8-N9-C4	-11.25	101.90	106.40
2	B	2751	G	C5-C6-O6	-11.25	121.85	128.60
2	B	858	G	C8-N9-C4	-11.24	101.90	106.40
2	B	734	A	N1-C2-N3	11.24	134.92	129.30
2	B	2314	A	N1-C2-N3	11.24	134.92	129.30
2	B	763	G	P-O3'-C3'	-11.24	106.21	119.70
2	B	2381	A	N9-C4-C5	11.24	110.30	105.80
11	Q	35	PHE	CB-CG-CD2	11.24	128.67	120.80
2	B	748	G	C4-C5-N7	11.24	115.30	110.80
2	B	2390	U	C2-N3-C4	-11.24	120.25	127.00
2	B	1691	C	O4'-C1'-N1	11.24	117.19	108.20
2	B	499	U	O4'-C1'-N1	11.24	117.19	108.20
2	B	1628	G	N1-C6-O6	11.24	126.64	119.90
2	B	1307	A	O4'-C1'-N9	11.23	117.19	108.20
2	B	2764	A	P-O3'-C3'	11.23	133.18	119.70
2	B	458	G	C5-C6-O6	-11.23	121.86	128.60
2	B	2672	U	O4'-C1'-N1	11.23	117.19	108.20
2	B	2251	G	N3-C2-N2	11.23	127.76	119.90
2	B	2260	C	O4'-C1'-N1	11.23	117.18	108.20
2	B	2434	A	C5-N7-C8	11.23	109.51	103.90
2	B	2867	G	N1-C6-O6	11.23	126.64	119.90
2	B	1524	G	P-O5'-C5'	11.22	138.86	120.90
2	B	2661	G	N1-C6-O6	11.22	126.63	119.90
2	B	846	U	C1'-O4'-C4'	-11.22	100.92	109.90
2	B	1620	G	C5-C6-O6	-11.22	121.87	128.60
2	B	1548	A	N1-C6-N6	11.22	125.33	118.60
2	B	14	A	N9-C4-C5	11.21	110.28	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1910	G	C5-C6-O6	-11.21	121.87	128.60
2	B	2275	C	N3-C4-N4	11.21	125.85	118.00
2	B	372	G	N1-C6-O6	11.21	126.63	119.90
2	B	2826	A	C2-N3-C4	-11.21	105.00	110.60
4	K	71	ARG	NE-CZ-NH1	11.21	125.90	120.30
2	B	687	C	C4-C5-C6	11.20	123.00	117.40
2	B	1272	A	C4-C5-N7	-11.20	105.10	110.70
2	B	1664	A	C5-C6-N6	-11.20	114.74	123.70
2	B	1754	A	C8-N9-C4	11.20	110.28	105.80
2	B	11	C	C6-N1-C1'	-11.20	107.36	120.80
2	B	528	A	O4'-C1'-N9	11.20	117.16	108.20
2	B	986	C	N3-C4-N4	11.20	125.84	118.00
2	B	2004	G	C6-C5-N7	-11.20	123.68	130.40
2	B	2060	A	N1-C2-N3	-11.20	123.70	129.30
2	B	167	A	N1-C6-N6	11.19	125.31	118.60
2	B	1101	U	O4'-C1'-N1	11.19	117.15	108.20
2	B	2193	G	N1-C6-O6	11.19	126.61	119.90
2	B	364	C	C6-N1-C2	-11.19	115.83	120.30
2	B	1355	G	N1-C6-O6	11.19	126.61	119.90
2	B	123	G	N9-C4-C5	-11.19	100.92	105.40
2	B	778	G	N1-C6-O6	11.19	126.61	119.90
2	B	1274	A	N1-C6-N6	11.19	125.31	118.60
2	B	786	C	P-O3'-C3'	-11.18	106.28	119.70
2	B	736	C	C5-C4-N4	-11.18	112.37	120.20
3	0	27	ARG	NE-CZ-NH2	-11.18	114.71	120.30
2	B	2173	A	C8-N9-C4	-11.18	101.33	105.80
1	A	50	A	C4-C5-N7	-11.18	105.11	110.70
2	B	1753	G	N1-C6-O6	11.18	126.61	119.90
2	B	1842	G	N1-C6-O6	11.18	126.61	119.90
2	B	436	C	C6-N1-C2	-11.17	115.83	120.30
2	B	1349	C	O4'-C1'-N1	11.17	117.14	108.20
2	B	266	G	C4-C5-C6	11.17	125.50	118.80
2	B	1828	G	P-O3'-C3'	11.17	133.11	119.70
2	B	1029	A	C4-C5-C6	11.17	122.58	117.00
2	B	1311	G	N1-C6-O6	-11.17	113.20	119.90
2	B	479	A	N1-C6-N6	11.17	125.30	118.60
1	A	102	G	N9-C4-C5	11.16	109.87	105.40
2	B	247	G	N1-C6-O6	11.16	126.60	119.90
2	B	2027	G	N1-C6-O6	11.16	126.60	119.90
2	B	2523	G	N1-C6-O6	11.16	126.60	119.90
2	B	679	C	O4'-C1'-N1	11.16	117.13	108.20
2	B	236	C	C5-C4-N4	-11.16	112.39	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	899	A	N1-C6-N6	11.16	125.30	118.60
2	B	1551	A	N7-C8-N9	-11.16	108.22	113.80
2	B	2294	G	C5-C6-N1	11.16	117.08	111.50
2	B	2267	A	C4-C5-C6	11.16	122.58	117.00
2	B	841	G	O4'-C1'-N9	11.15	117.12	108.20
2	B	2634	A	N1-C6-N6	11.15	125.29	118.60
2	B	2063	C	C1'-O4'-C4'	-11.15	100.98	109.90
2	B	1092	C	O4'-C1'-N1	11.15	117.12	108.20
2	B	778	G	P-O3'-C3'	11.15	133.08	119.70
2	B	1123	C	N3-C4-N4	11.15	125.80	118.00
2	B	1502	A	C5-C6-N1	-11.15	112.13	117.70
2	B	2185	U	C2-N3-C4	-11.15	120.31	127.00
2	B	859	G	C5-C6-O6	-11.15	121.91	128.60
2	B	2170	A	C8-N9-C4	11.15	110.26	105.80
19	X	250	ARG	NE-CZ-NH2	-11.14	114.73	120.30
1	A	43	C	N3-C4-C5	-11.14	117.44	121.90
2	B	1038	G	N9-C4-C5	11.14	109.86	105.40
2	B	1664	A	N1-C6-N6	11.14	125.28	118.60
2	B	1725	U	O4'-C1'-N1	11.14	117.11	108.20
2	B	1764	C	N3-C4-N4	11.13	125.79	118.00
2	B	2286	G	N1-C2-N3	-11.14	117.22	123.90
2	B	251	A	N1-C2-N3	11.13	134.87	129.30
1	A	41	G	N1-C6-O6	11.13	126.58	119.90
2	B	1164	C	N3-C4-C5	-11.13	117.45	121.90
2	B	2093	G	C4'-C3'-C2'	-11.13	91.47	102.60
2	B	2550	G	N1-C2-N3	-11.13	117.22	123.90
2	B	140	C	C4-C5-C6	11.13	122.97	117.40
2	B	636	G	N9-C4-C5	-11.13	100.95	105.40
2	B	785	G	C5-C6-O6	-11.13	121.92	128.60
2	B	1087	G	C5-C6-O6	-11.13	121.92	128.60
2	B	820	A	N7-C8-N9	-11.12	108.24	113.80
2	B	1181	U	O4'-C1'-N1	11.12	117.10	108.20
2	B	1470	A	C5-C6-N1	-11.12	112.14	117.70
2	B	1623	G	C2-N3-C4	11.12	117.46	111.90
2	B	1763	G	N9-C4-C5	-11.12	100.95	105.40
2	B	2170	A	N7-C8-N9	-11.12	108.24	113.80
2	B	324	A	C5-C6-N6	-11.12	114.81	123.70
2	B	2337	G	N1-C6-O6	11.12	126.57	119.90
2	B	868	U	N3-C2-O2	11.11	129.98	122.20
2	B	1526	C	N3-C4-C5	-11.11	117.46	121.90
2	B	1998	A	C6-C5-N7	-11.11	124.52	132.30
2	B	152	A	N1-C6-N6	11.11	125.26	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2893	A	N1-C6-N6	11.10	125.26	118.60
2	B	771	G	N1-C6-O6	11.09	126.56	119.90
2	B	812	C	C6-N1-C2	-11.09	115.86	120.30
2	B	1954	G	C6-C5-N7	-11.09	123.74	130.40
2	B	2570	G	C4-C5-N7	-11.09	106.36	110.80
2	B	989	G	C2-N3-C4	-11.09	106.36	111.90
2	B	1900	A	C5-C6-N1	-11.09	112.16	117.70
2	B	311	A	O4'-C1'-N9	11.09	117.07	108.20
2	B	543	G	N1-C6-O6	11.09	126.55	119.90
2	B	1512	C	O4'-C1'-N1	11.09	117.07	108.20
22	3	48	TYR	CB-CG-CD1	11.09	127.65	121.00
16	2	30	ARG	NE-CZ-NH2	-11.08	114.76	120.30
1	A	13	G	C6-C5-N7	-11.08	123.75	130.40
2	B	279	A	N7-C8-N9	11.08	119.34	113.80
2	B	1426	G	C5-C6-O6	-11.08	121.95	128.60
2	B	893	C	C5-C4-N4	-11.08	112.45	120.20
2	B	1330	C	O4'-C1'-N1	11.08	117.06	108.20
2	B	1683	U	O4'-C1'-N1	11.08	117.06	108.20
2	B	2517	C	C5-C6-N1	11.07	126.54	121.00
2	B	1503	A	N1-C6-N6	11.07	125.24	118.60
2	B	1803	A	C5-C6-N6	-11.07	114.84	123.70
2	B	2733	A	C5-C6-N1	-11.07	112.16	117.70
2	B	2775	G	N1-C6-O6	11.07	126.54	119.90
2	B	1155	A	N1-C6-N6	11.07	125.24	118.60
2	B	2217	G	O4'-C1'-N9	11.07	117.06	108.20
2	B	825	A	C5-C6-N6	-11.07	114.85	123.70
2	B	1456	G	C5-C6-O6	-11.07	121.96	128.60
2	B	1202	G	N1-C2-N3	-11.06	117.26	123.90
2	B	1355	G	C8-N9-C4	11.06	110.83	106.40
2	B	2062	A	O4'-C1'-N9	11.06	117.05	108.20
2	B	453	A	N1-C6-N6	11.06	125.24	118.60
2	B	495	G	N3-C2-N2	11.06	127.64	119.90
2	B	1721	G	C8-N9-C4	11.06	110.83	106.40
2	B	1498	C	N3-C4-C5	-11.06	117.48	121.90
2	B	2181	U	C5-C6-N1	11.06	128.23	122.70
2	B	2702	G	C8-N9-C4	-11.06	101.98	106.40
2	B	1923	U	P-O5'-C5'	11.05	138.59	120.90
2	B	905	A	C5-C6-N6	-11.05	114.86	123.70
2	B	2533	U	C2-N3-C4	-11.05	120.37	127.00
2	B	129	C	C2-N3-C4	11.05	125.43	119.90
2	B	386	G	C5-C6-O6	-11.05	121.97	128.60
10	P	87	ARG	NE-CZ-NH2	-11.05	114.78	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1192	G	O4'-C1'-N9	11.05	117.04	108.20
2	B	2512	C	N3-C4-C5	-11.05	117.48	121.90
2	B	2565	A	N1-C6-N6	11.05	125.23	118.60
2	B	2699	C	C6-N1-C2	-11.05	115.88	120.30
2	B	98	G	N1-C6-O6	11.04	126.53	119.90
2	B	1413	A	N1-C6-N6	11.04	125.22	118.60
1	A	57	A	O4'-C1'-N9	11.04	117.03	108.20
2	B	586	A	C4-C5-N7	-11.04	105.18	110.70
2	B	1350	C	O4'-C1'-N1	11.04	117.03	108.20
2	B	2605	U	O4'-C1'-N1	11.04	117.03	108.20
2	B	2362	C	N3-C4-N4	11.04	125.73	118.00
2	B	361	G	C5-C6-O6	-11.04	121.98	128.60
2	B	838	C	O4'-C1'-N1	11.03	117.03	108.20
2	B	472	A	C5-C6-N6	-11.03	114.87	123.70
2	B	1564	C	O4'-C1'-N1	11.03	117.03	108.20
2	B	780	G	C6-C5-N7	-11.03	123.78	130.40
2	B	90	U	C5-C4-O4	-11.03	119.28	125.90
2	B	592	A	O4'-C1'-N9	11.03	117.02	108.20
2	B	1705	A	C5-C6-N6	-11.03	114.88	123.70
2	B	505	A	O4'-C1'-N9	11.02	117.02	108.20
2	B	996	A	C4-C5-C6	11.02	122.51	117.00
2	B	2709	G	N3-C2-N2	11.02	127.61	119.90
2	B	1847	A	O4'-C1'-N9	11.02	117.02	108.20
2	B	938	G	C5-C6-O6	-11.02	121.99	128.60
2	B	686	U	O4'-C1'-N1	11.02	117.01	108.20
2	B	1347	A	N1-C6-N6	11.02	125.21	118.60
2	B	1480	C	C4-C5-C6	11.02	122.91	117.40
2	B	2414	G	C5-C6-O6	-11.02	121.99	128.60
2	B	548	G	N1-C6-O6	11.01	126.51	119.90
2	B	2020	A	N1-C6-N6	11.01	125.21	118.60
2	B	1306	C	C6-N1-C2	-11.01	115.89	120.30
2	B	1792	G	N1-C6-O6	11.01	126.51	119.90
2	B	1800	C	C5-C6-N1	11.01	126.51	121.00
2	B	1104	C	O4'-C1'-N1	11.01	117.01	108.20
2	B	2826	A	C8-N9-C4	11.01	110.20	105.80
2	B	2608	G	O4'-C1'-N9	11.01	117.01	108.20
2	B	432	A	C5-C6-N6	-11.01	114.90	123.70
2	B	582	A	C5-C6-N1	-11.01	112.20	117.70
2	B	2711	A	C4-C5-C6	11.01	122.50	117.00
2	B	1	G	N1-C6-O6	11.00	126.50	119.90
2	B	357	C	N3-C4-C5	-11.00	117.50	121.90
2	B	1987	A	C4-C5-C6	11.00	122.50	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2295	C	C6-N1-C2	-11.00	115.90	120.30
2	B	1904	G	O4'-C1'-N9	11.00	117.00	108.20
1	A	95	U	N3-C4-O4	-11.00	111.70	119.40
2	B	479	A	O4'-C1'-N9	11.00	117.00	108.20
2	B	1157	G	C4-C5-C6	11.00	125.40	118.80
2	B	622	G	N1-C6-O6	11.00	126.50	119.90
2	B	661	A	N7-C8-N9	-11.00	108.30	113.80
2	B	1169	A	O4'-C1'-N9	11.00	117.00	108.20
2	B	1677	A	P-O3'-C3'	11.00	132.90	119.70
2	B	28	A	C4-C5-C6	10.99	122.50	117.00
2	B	2165	C	C2-N3-C4	10.99	125.40	119.90
2	B	95	A	C4-C5-N7	-10.99	105.20	110.70
2	B	528	A	N1-C6-N6	10.99	125.20	118.60
1	A	81	G	C5-C6-O6	-10.99	122.00	128.60
2	B	980	A	N1-C6-N6	10.99	125.19	118.60
2	B	1762	A	C8-N9-C4	-10.99	101.41	105.80
2	B	2315	G	C5-C6-O6	-10.99	122.01	128.60
2	B	1953	A	N9-C4-C5	10.98	110.19	105.80
2	B	1929	G	C8-N9-C1'	-10.98	112.72	127.00
2	B	2434	A	N1-C6-N6	10.98	125.19	118.60
2	B	2750	A	C5-C6-N6	-10.98	114.92	123.70
1	A	102	G	C8-N9-C4	-10.98	102.01	106.40
2	B	74	A	C5-C6-N1	-10.97	112.21	117.70
2	B	1333	G	N1-C6-O6	10.97	126.48	119.90
2	B	1814	G	N1-C2-N3	-10.97	117.31	123.90
2	B	1644	C	N3-C4-N4	10.97	125.68	118.00
2	B	2554	U	O4'-C1'-N1	10.97	116.98	108.20
2	B	1893	C	C6-N1-C2	-10.97	115.91	120.30
2	B	765	C	N3-C4-N4	10.97	125.68	118.00
2	B	1118	C	C6-N1-C2	-10.97	115.91	120.30
2	B	2897	U	C5-C4-O4	-10.97	119.32	125.90
2	B	776	G	O4'-C1'-N9	10.96	116.97	108.20
2	B	329	G	N1-C2-N3	-10.96	117.32	123.90
2	B	604	G	O4'-C1'-N9	10.96	116.97	108.20
2	B	815	C	N3-C4-N4	10.96	125.67	118.00
2	B	1329	U	N3-C4-O4	10.96	127.07	119.40
2	B	2552	U	O4'-C1'-N1	10.96	116.97	108.20
2	B	739	A	C4-C5-C6	10.96	122.48	117.00
2	B	983	A	C4-C5-C6	10.96	122.48	117.00
2	B	1441	G	O4'-C1'-N9	10.96	116.97	108.20
2	B	1729	U	C5-C4-O4	-10.96	119.33	125.90
2	B	202	U	N3-C2-O2	-10.96	114.53	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1046	A	C5-C6-N1	-10.96	112.22	117.70
2	B	1686	C	O4'-C1'-N1	10.95	116.96	108.20
2	B	2338	C	C5-C6-N1	10.95	126.48	121.00
2	B	1972	G	N3-C2-N2	10.95	127.57	119.90
2	B	2874	C	N3-C4-C5	-10.95	117.52	121.90
2	B	231	A	N9-C4-C5	10.95	110.18	105.80
2	B	1280	G	N1-C6-O6	10.95	126.47	119.90
1	A	97	C	N3-C4-C5	-10.95	117.52	121.90
2	B	231	A	C4-C5-C6	10.95	122.47	117.00
2	B	1535	A	O4'-C1'-N9	10.95	116.96	108.20
2	B	1627	G	C5-C6-O6	-10.95	122.03	128.60
2	B	2172	U	O4'-C1'-N1	10.95	116.96	108.20
2	B	1360	G	O4'-C1'-N9	10.94	116.95	108.20
2	B	2434	A	N3-C4-C5	-10.94	119.14	126.80
1	A	61	G	N1-C6-O6	10.94	126.46	119.90
2	B	756	A	N9-C4-C5	10.94	110.18	105.80
2	B	2820	A	O4'-C1'-N9	10.94	116.95	108.20
2	B	256	A	C4-C5-C6	10.94	122.47	117.00
2	B	1436	G	N7-C8-N9	10.94	118.57	113.10
2	B	1764	C	C5-C4-N4	-10.94	112.54	120.20
2	B	1477	A	C5-C6-N6	-10.94	114.95	123.70
2	B	2499	C	N3-C4-C5	10.94	126.27	121.90
2	B	195	A	O4'-C1'-N9	10.93	116.95	108.20
2	B	1941	C	C6-N1-C2	-10.93	115.93	120.30
3	0	2	ARG	NE-CZ-NH1	-10.93	114.83	120.30
2	B	2467	C	O4'-C1'-N1	10.93	116.94	108.20
1	A	23	G	N1-C6-O6	10.93	126.45	119.90
2	B	1936	A	C5-C6-N6	-10.93	114.96	123.70
2	B	2444	G	N3-C2-N2	10.93	127.55	119.90
2	B	51	G	C5-C6-O6	-10.92	122.05	128.60
2	B	23	G	C5-C6-O6	-10.92	122.05	128.60
2	B	156	A	C5-N7-C8	10.92	109.36	103.90
2	B	398	C	O4'-C1'-N1	10.92	116.94	108.20
2	B	869	G	C5-C6-N1	-10.92	106.04	111.50
2	B	1604	C	N3-C4-C5	-10.92	117.53	121.90
2	B	2109	U	C5'-C4'-C3'	10.92	133.47	116.00
2	B	637	A	C5-N7-C8	10.92	109.36	103.90
2	B	735	A	C8-N9-C4	-10.92	101.43	105.80
2	B	1611	C	C5-C4-N4	-10.92	112.56	120.20
2	B	2415	G	N1-C6-O6	10.92	126.45	119.90
2	B	1777	U	O4'-C1'-N1	10.92	116.93	108.20
2	B	2021	C	N3-C4-C5	-10.92	117.53	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	189	G	N9-C4-C5	10.91	109.77	105.40
2	B	1055	G	C6-N1-C2	-10.91	118.55	125.10
2	B	1768	C	C2-N3-C4	10.91	125.36	119.90
2	B	1907	G	N9-C4-C5	-10.91	101.03	105.40
2	B	911	A	N9-C4-C5	10.91	110.17	105.80
1	A	73	A	N1-C6-N6	10.91	125.14	118.60
2	B	1366	A	C6-C5-N7	-10.91	124.66	132.30
2	B	2484	G	C4-C5-N7	-10.91	106.44	110.80
24	6	18	PHE	CB-CG-CD1	-10.91	113.16	120.80
2	B	1444	G	C5-C6-N1	-10.91	106.05	111.50
2	B	2101	A	N1-C6-N6	10.91	125.14	118.60
2	B	131	A	N1-C6-N6	10.90	125.14	118.60
2	B	916	G	N9-C4-C5	-10.90	101.04	105.40
2	B	1228	G	N3-C2-N2	10.90	127.53	119.90
2	B	2170	A	C2-N3-C4	-10.90	105.15	110.60
2	B	2468	A	C8-N9-C4	-10.90	101.44	105.80
2	B	1178	C	N3-C4-C5	-10.90	117.54	121.90
2	B	2288	A	N1-C2-N3	10.90	134.75	129.30
2	B	2483	C	C2-N3-C4	-10.89	114.45	119.90
2	B	458	G	C2-N3-C4	10.89	117.34	111.90
2	B	770	G	O4'-C1'-N9	10.89	116.91	108.20
2	B	2325	G	C5-N7-C8	10.89	109.74	104.30
2	B	2678	C	N3-C4-N4	10.88	125.62	118.00
2	B	838	C	C5-C4-N4	-10.88	112.58	120.20
2	B	1959	G	C8-N9-C4	-10.88	102.05	106.40
2	B	2018	G	C5-C6-O6	-10.88	122.07	128.60
2	B	2713	U	N3-C4-C5	-10.88	108.07	114.60
2	B	248	G	C8-N9-C4	-10.88	102.05	106.40
2	B	481	G	C6-C5-N7	-10.88	123.87	130.40
2	B	927	A	C8-N9-C4	-10.88	101.45	105.80
2	B	2700	A	C5-C6-N6	-10.87	115.00	123.70
2	B	1510	G	C6-C5-N7	-10.87	123.88	130.40
2	B	2773	C	C2-N3-C4	10.87	125.34	119.90
2	B	2069	G	C5-C6-O6	-10.87	122.08	128.60
2	B	2850	A	O4'-C1'-N9	10.87	116.90	108.20
2	B	457	A	C5-C6-N1	-10.87	112.27	117.70
2	B	1230	A	C5-N7-C8	10.87	109.33	103.90
2	B	1134	A	C5-C6-N1	-10.86	112.27	117.70
2	B	1319	C	C2-N3-C4	10.86	125.33	119.90
2	B	1630	A	N1-C6-N6	10.86	125.12	118.60
2	B	2422	C	C6-N1-C2	-10.86	115.95	120.30
2	B	2434	A	P-O3'-C3'	-10.86	106.67	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	108	G	C4-C5-N7	10.86	115.14	110.80
2	B	2162	G	N3-C2-N2	10.86	127.50	119.90
2	B	2168	G	C5'-C4'-C3'	-10.86	98.62	116.00
2	B	1511	G	C5-C6-O6	-10.86	122.09	128.60
2	B	2069	G	N1-C6-O6	10.86	126.41	119.90
2	B	2435	A	N1-C6-N6	10.86	125.11	118.60
2	B	821	A	C5-C6-N1	-10.85	112.27	117.70
2	B	1052	C	O4'-C1'-N1	10.85	116.88	108.20
2	B	2787	C	C2-N3-C4	10.85	125.33	119.90
2	B	2899	A	N1-C6-N6	10.85	125.11	118.60
2	B	123	G	C8-N9-C4	10.85	110.74	106.40
2	B	415	A	N1-C6-N6	10.85	125.11	118.60
2	B	812	C	O4'-C1'-N1	10.85	116.88	108.20
2	B	2457	U	C5-C4-O4	10.85	132.41	125.90
2	B	2876	G	N1-C6-O6	10.85	126.41	119.90
2	B	1358	G	P-O3'-C3'	10.85	132.72	119.70
2	B	2340	A	N1-C6-N6	10.85	125.11	118.60
2	B	968	C	C5-C4-N4	-10.84	112.61	120.20
2	B	1604	C	O4'-C1'-N1	10.84	116.88	108.20
2	B	2833	U	O4'-C1'-N1	10.84	116.87	108.20
2	B	168	G	N1-C6-O6	10.84	126.40	119.90
2	B	1581	G	C5-C6-O6	-10.84	122.10	128.60
2	B	1706	C	C5-C4-N4	-10.84	112.61	120.20
2	B	2134	A	C5-C6-N6	-10.84	115.03	123.70
2	B	1371	G	N1-C6-O6	10.83	126.40	119.90
2	B	2566	A	C5-C6-N6	-10.83	115.03	123.70
2	B	624	C	C2-N3-C4	10.83	125.32	119.90
2	B	2593	U	O4'-C1'-N1	10.83	116.87	108.20
2	B	602	A	N1-C6-N6	10.83	125.10	118.60
2	B	2159	G	N3-C2-N2	10.83	127.48	119.90
2	B	2251	G	N1-C6-O6	10.83	126.40	119.90
2	B	160	A	C5-N7-C8	10.83	109.31	103.90
2	B	2864	G	N1-C6-O6	10.83	126.40	119.90
2	B	1513	U	P-O3'-C3'	10.83	132.69	119.70
2	B	1723	G	N3-C2-N2	10.83	127.48	119.90
2	B	1679	A	N1-C6-N6	10.82	125.09	118.60
2	B	1505	A	N9-C4-C5	-10.82	101.47	105.80
2	B	2003	A	P-O3'-C3'	10.82	132.68	119.70
2	B	1355	G	C5-C6-O6	-10.82	122.11	128.60
2	B	1832	C	C6-N1-C2	-10.82	115.97	120.30
2	B	1167	C	N3-C4-N4	10.81	125.57	118.00
2	B	1312	U	O4'-C1'-N1	10.81	116.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2447	G	C4-C5-N7	10.81	115.12	110.80
2	B	743	A	N1-C6-N6	10.81	125.09	118.60
2	B	1371	G	C8-N9-C4	-10.81	102.08	106.40
2	B	2180	U	O4'-C1'-N1	10.81	116.85	108.20
2	B	312	G	C5-C6-O6	-10.81	122.12	128.60
2	B	1943	U	C2-N1-C1'	10.80	130.67	117.70
2	B	2002	G	N1-C6-O6	10.81	126.38	119.90
2	B	2084	C	N3-C4-N4	10.80	125.56	118.00
2	B	2280	G	N1-C2-N3	-10.80	117.42	123.90
11	Q	63	ARG	NE-CZ-NH1	10.80	125.70	120.30
28	F	29	ARG	NE-CZ-NH2	-10.80	114.90	120.30
2	B	1318	U	O4'-C1'-N1	10.80	116.84	108.20
2	B	1570	A	N1-C6-N6	10.80	125.08	118.60
1	A	26	C	N3-C4-N4	10.80	125.56	118.00
2	B	472	A	C4-C5-N7	-10.80	105.30	110.70
2	B	2809	A	N1-C2-N3	-10.80	123.90	129.30
2	B	146	A	C5-C6-N1	-10.80	112.30	117.70
2	B	1413	A	C5-C6-N6	-10.80	115.06	123.70
2	B	1437	C	O4'-C1'-N1	10.80	116.84	108.20
2	B	1303	G	N1-C2-N3	-10.79	117.42	123.90
2	B	2234	G	N3-C2-N2	10.79	127.45	119.90
2	B	2860	A	C6-C5-N7	-10.79	124.75	132.30
1	A	33	G	N9-C4-C5	10.79	109.72	105.40
2	B	261	G	C5-C6-O6	-10.79	122.13	128.60
2	B	706	A	C2-N3-C4	-10.79	105.21	110.60
2	B	917	A	C8-N9-C4	-10.79	101.48	105.80
2	B	1120	G	N1-C6-O6	10.79	126.37	119.90
2	B	1952	A	N1-C6-N6	10.79	125.07	118.60
2	B	2031	A	N1-C6-N6	10.79	125.07	118.60
2	B	2366	A	N1-C6-N6	10.79	125.07	118.60
2	B	2486	C	O4'-C1'-N1	10.78	116.83	108.20
2	B	2733	A	C8-N9-C4	-10.78	101.49	105.80
2	B	2670	A	N1-C6-N6	10.78	125.07	118.60
2	B	2002	G	C5-C6-O6	-10.78	122.13	128.60
2	B	2056	G	C5-C6-O6	-10.78	122.13	128.60
2	B	1493	C	C2-N1-C1'	10.78	130.66	118.80
2	B	51	G	N1-C6-O6	10.78	126.36	119.90
2	B	1362	C	N3-C4-C5	-10.78	117.59	121.90
2	B	1465	G	C5-C6-O6	-10.78	122.14	128.60
2	B	1806	C	N3-C4-C5	-10.78	117.59	121.90
2	B	1533	C	C6-N1-C2	-10.77	115.99	120.30
2	B	1622	G	N9-C4-C5	10.77	109.71	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1165	A	C4-C5-N7	-10.77	105.32	110.70
2	B	2339	C	O4'-C1'-N1	10.77	116.81	108.20
2	B	445	C	C5-C4-N4	-10.76	112.67	120.20
2	B	1582	C	C5-C6-N1	10.76	126.38	121.00
2	B	2340	A	C8-N9-C4	-10.76	101.50	105.80
1	A	13	G	N1-C6-O6	10.76	126.35	119.90
2	B	687	C	C6-N1-C2	-10.76	116.00	120.30
2	B	1288	G	C5-C6-O6	-10.76	122.15	128.60
2	B	2430	A	C5-C6-N1	-10.76	112.32	117.70
2	B	1502	A	N1-C6-N6	10.75	125.05	118.60
2	B	1068	G	N7-C8-N9	-10.75	107.73	113.10
2	B	768	G	C5-C6-O6	-10.75	122.15	128.60
2	B	1608	A	N1-C6-N6	10.75	125.05	118.60
2	B	1628	G	C5-C6-O6	-10.75	122.15	128.60
7	M	55	ARG	NE-CZ-NH2	10.75	125.67	120.30
2	B	572	A	C5-C6-N6	-10.74	115.10	123.70
2	B	986	C	N3-C4-C5	-10.74	117.60	121.90
2	B	482	A	C4-C5-C6	10.74	122.37	117.00
2	B	2208	C	N3-C4-C5	-10.74	117.60	121.90
2	B	285	G	C5-C6-O6	-10.74	122.16	128.60
2	B	2100	G	N1-C6-O6	10.74	126.34	119.90
2	B	2835	A	C4-C5-N7	-10.74	105.33	110.70
2	B	931	U	O4'-C1'-N1	10.73	116.79	108.20
1	A	58	A	C5-C6-N6	-10.73	115.11	123.70
2	B	1821	A	O4'-C1'-N9	10.73	116.79	108.20
2	B	932	U	O4'-C1'-N1	10.73	116.78	108.20
2	B	845	A	C5-C6-N6	-10.73	115.12	123.70
2	B	2227	A	O4'-C1'-N9	10.73	116.78	108.20
2	B	54	G	C8-N9-C4	-10.72	102.11	106.40
2	B	112	U	C5-C4-O4	-10.72	119.47	125.90
2	B	216	A	N1-C2-N3	-10.72	123.94	129.30
2	B	2252	G	C8-N9-C4	-10.72	102.11	106.40
2	B	302	C	C6-N1-C2	-10.72	116.01	120.30
2	B	2358	A	C5-C6-N6	-10.72	115.12	123.70
2	B	135	U	O4'-C1'-N1	10.72	116.78	108.20
2	B	1490	A	C8-N9-C4	-10.72	101.51	105.80
2	B	2068	U	C5-C4-O4	-10.72	119.47	125.90
2	B	1189	A	N1-C6-N6	10.71	125.03	118.60
2	B	2119	A	C5-C6-N1	-10.71	112.34	117.70
2	B	2673	G	C5-C6-O6	-10.72	122.17	128.60
2	B	410	G	P-O3'-C3'	10.71	132.56	119.70
2	B	1017	G	N1-C6-O6	10.71	126.33	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1807	G	C5-C6-O6	-10.71	122.17	128.60
2	B	2287	A	N3-C4-C5	-10.71	119.30	126.80
2	B	1702	G	C2-N3-C4	10.71	117.25	111.90
2	B	108	G	C5-C6-O6	-10.71	122.17	128.60
2	B	177	G	O4'-C1'-N9	10.71	116.77	108.20
2	B	864	G	P-O5'-C5'	10.71	138.03	120.90
2	B	1840	G	N3-C2-N2	10.71	127.39	119.90
2	B	2193	G	C2-N3-C4	10.71	117.25	111.90
1	A	86	G	C5-C6-O6	-10.70	122.18	128.60
2	B	594	U	N3-C4-O4	10.70	126.89	119.40
2	B	2218	G	C5-C6-O6	-10.70	122.18	128.60
2	B	905	A	N1-C2-N3	10.69	134.65	129.30
2	B	2534	A	N1-C6-N6	10.69	125.02	118.60
2	B	684	G	N3-C4-C5	-10.69	123.25	128.60
2	B	2808	G	N3-C4-C5	-10.69	123.26	128.60
2	B	1324	G	C4'-C3'-C2'	10.69	113.28	102.60
2	B	1652	A	O4'-C1'-N9	10.69	116.75	108.20
2	B	2432	A	N1-C6-N6	10.69	125.01	118.60
2	B	2820	A	C5-C6-N6	-10.68	115.15	123.70
2	B	1762	A	C6-C5-N7	-10.68	124.82	132.30
2	B	2208	C	C5-C4-N4	-10.68	112.72	120.20
1	A	27	C	O4'-C1'-N1	10.68	116.74	108.20
2	B	1672	A	C4-C5-C6	10.67	122.34	117.00
2	B	2035	G	C5-C6-O6	-10.67	122.20	128.60
2	B	2061	G	C8-N9-C4	-10.67	102.13	106.40
2	B	2832	U	O4'-C1'-C2'	-10.67	95.13	105.80
2	B	592	A	N1-C6-N6	10.67	125.00	118.60
2	B	1800	C	C6-N1-C2	-10.67	116.03	120.30
1	A	55	U	C5-C4-O4	-10.67	119.50	125.90
2	B	1051	G	C5-C6-O6	-10.67	122.20	128.60
2	B	1311	G	C5-C6-O6	10.66	135.00	128.60
1	A	84	G	N1-C6-O6	10.66	126.30	119.90
2	B	487	C	O4'-C1'-N1	10.66	116.73	108.20
2	B	1717	A	N1-C6-N6	10.66	125.00	118.60
2	B	994	C	N3-C4-C5	-10.66	117.64	121.90
2	B	1510	G	C5-N7-C8	-10.66	98.97	104.30
2	B	1708	C	O4'-C1'-N1	10.66	116.73	108.20
2	B	232	G	N1-C6-O6	10.66	126.29	119.90
2	B	1528	A	O4'-C1'-N9	10.66	116.73	108.20
2	B	2290	G	O4'-C1'-N9	10.66	116.72	108.20
2	B	1517	G	C5-C6-O6	-10.65	122.21	128.60
2	B	883	G	N3-C4-C5	-10.65	123.27	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	112	G	N1-C6-O6	10.65	126.29	119.90
2	B	199	A	C5-C6-N6	-10.65	115.18	123.70
2	B	954	G	N1-C2-N3	-10.65	117.51	123.90
2	B	1195	G	C5-C6-O6	-10.65	122.21	128.60
2	B	2052	A	C5-C6-N6	-10.65	115.18	123.70
2	B	2181	U	P-O3'-C3'	10.65	132.48	119.70
2	B	1282	U	P-O3'-C3'	10.65	132.48	119.70
2	B	2112	G	N1-C6-O6	10.65	126.29	119.90
2	B	628	G	C5-C6-N1	-10.64	106.18	111.50
2	B	2570	G	C4-C5-C6	10.64	125.19	118.80
2	B	725	G	N3-C2-N2	10.64	127.35	119.90
2	B	752	A	N9-C4-C5	-10.64	101.55	105.80
2	B	1200	C	C4-C5-C6	10.64	122.72	117.40
2	B	183	C	C5-C4-N4	-10.63	112.76	120.20
2	B	1114	C	O4'-C1'-N1	10.63	116.71	108.20
1	A	50	A	N9-C4-C5	10.63	110.05	105.80
2	B	1611	C	N3-C4-N4	10.63	125.44	118.00
2	B	1713	A	N1-C6-N6	10.63	124.98	118.60
2	B	198	C	P-O5'-C5'	10.63	137.91	120.90
2	B	2063	C	C5-C4-N4	-10.63	112.76	120.20
2	B	2610	C	P-O3'-C3'	10.63	132.46	119.70
1	A	107	G	C5-C6-N1	-10.63	106.19	111.50
2	B	1701	A	C5-C6-N1	-10.63	112.39	117.70
2	B	2381	A	C4-C5-N7	-10.62	105.39	110.70
2	B	2445	G	C6-N1-C2	-10.62	118.73	125.10
2	B	1566	A	C5-C6-N1	-10.62	112.39	117.70
2	B	2182	U	N3-C4-O4	10.62	126.83	119.40
2	B	83	A	N1-C6-N6	10.62	124.97	118.60
2	B	925	A	O4'-C1'-N9	10.61	116.69	108.20
2	B	1272	A	N9-C4-C5	10.62	110.05	105.80
2	B	1715	G	N1-C6-O6	10.62	126.27	119.90
2	B	45	G	C8-N9-C4	-10.61	102.16	106.40
2	B	318	C	N3-C4-N4	10.61	125.43	118.00
2	B	1943	U	C6-N1-C1'	-10.61	106.35	121.20
2	B	2120	G	N1-C6-O6	10.61	126.26	119.90
1	A	40	U	C2-N3-C4	-10.60	120.64	127.00
2	B	729	G	N7-C8-N9	10.60	118.40	113.10
2	B	1779	U	O4'-C1'-N1	10.60	116.68	108.20
1	A	59	A	C5-C6-N1	-10.60	112.40	117.70
1	A	43	C	C6-N1-C2	-10.60	116.06	120.30
2	B	119	A	C8-N9-C4	10.60	110.04	105.80
2	B	2688	G	C2-N3-C4	-10.60	106.60	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1136	G	C5-C6-O6	-10.59	122.25	128.60
2	B	1518	C	N3-C4-N4	10.59	125.41	118.00
2	B	2049	G	N3-C2-N2	10.59	127.31	119.90
2	B	868	U	N3-C4-O4	10.58	126.81	119.40
2	B	2266	A	C5'-C4'-O4'	10.58	121.80	109.10
2	B	2651	C	N3-C4-N4	10.58	125.41	118.00
2	B	1086	A	N7-C8-N9	10.58	119.09	113.80
2	B	428	A	N1-C6-N6	10.58	124.95	118.60
2	B	868	U	N1-C2-N3	-10.58	108.55	114.90
2	B	1095	A	O4'-C1'-N9	10.58	116.66	108.20
11	Q	47	ARG	NE-CZ-NH2	10.58	125.59	120.30
2	B	248	G	O4'-C1'-N9	10.58	116.66	108.20
2	B	479	A	C5-C6-N6	-10.57	115.24	123.70
2	B	1689	A	N1-C6-N6	10.57	124.94	118.60
2	B	2172	U	C4-C5-C6	-10.57	113.36	119.70
2	B	125	A	O4'-C1'-N9	10.57	116.66	108.20
2	B	2283	C	O4'-C1'-N1	10.57	116.66	108.20
2	B	1124	G	N1-C2-N3	-10.57	117.56	123.90
2	B	631	A	N1-C6-N6	10.57	124.94	118.60
2	B	680	C	N3-C4-N4	10.57	125.40	118.00
2	B	553	G	N1-C6-O6	10.57	126.24	119.90
2	B	2676	C	N3-C4-C5	-10.57	117.67	121.90
11	Q	63	ARG	NE-CZ-NH2	-10.57	115.02	120.30
2	B	555	G	N3-C2-N2	10.56	127.30	119.90
2	B	1773	A	C5-C6-N1	-10.56	112.42	117.70
2	B	1959	G	N7-C8-N9	10.56	118.38	113.10
2	B	2481	G	C4-C5-N7	-10.56	106.57	110.80
1	A	52	A	P-O5'-C5'	10.56	137.80	120.90
1	A	104	A	C8-N9-C4	-10.56	101.58	105.80
2	B	331	C	C5-C6-N1	-10.56	115.72	121.00
2	B	2302	U	C2-N3-C4	-10.56	120.66	127.00
2	B	2634	A	C5-N7-C8	10.56	109.18	103.90
2	B	110	G	O4'-C1'-N9	10.56	116.65	108.20
2	B	613	A	C5-C6-N6	-10.55	115.26	123.70
2	B	2813	A	N1-C6-N6	10.56	124.93	118.60
2	B	2300	C	O4'-C1'-N1	10.55	116.64	108.20
2	B	899	A	C5'-C4'-C3'	10.55	132.88	116.00
2	B	985	C	O4'-C1'-N1	10.55	116.64	108.20
2	B	2723	C	N3-C4-N4	10.55	125.39	118.00
2	B	179	C	O4'-C1'-N1	10.55	116.64	108.20
2	B	444	C	O4'-C1'-N1	10.55	116.64	108.20
2	B	1913	A	C8-N9-C4	-10.55	101.58	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	312	G	N1-C6-O6	10.55	126.23	119.90
11	Q	38	VAL	CA-CB-CG2	-10.54	95.08	110.90
2	B	2645	G	C5-C6-O6	-10.54	122.28	128.60
2	B	424	G	C4-C5-N7	-10.54	106.58	110.80
2	B	912	C	N3-C4-N4	10.54	125.38	118.00
2	B	1707	G	C5-C6-N1	-10.54	106.23	111.50
2	B	794	A	C6-N1-C2	-10.54	112.28	118.60
2	B	795	C	O4'-C1'-N1	10.54	116.63	108.20
2	B	1136	G	O4'-C1'-N9	10.54	116.63	108.20
2	B	1671	U	O4'-C1'-N1	10.54	116.63	108.20
2	B	783	A	C8-N9-C4	-10.53	101.59	105.80
17	U	85	ARG	NE-CZ-NH2	-10.54	115.03	120.30
2	B	230	G	N1-C6-O6	10.53	126.22	119.90
2	B	323	C	N3-C4-C5	-10.53	117.69	121.90
2	B	1401	G	C2-N3-C4	10.53	117.17	111.90
2	B	2127	G	C5-C6-O6	-10.53	122.28	128.60
2	B	414	C	C6-N1-C2	10.53	124.51	120.30
2	B	936	A	O4'-C1'-N9	10.53	116.62	108.20
1	A	15	A	C5-C6-N6	-10.53	115.28	123.70
2	B	751	A	C2-N3-C4	-10.53	105.34	110.60
1	A	84	G	C5-C6-O6	-10.52	122.29	128.60
2	B	127	A	C5-C6-N6	-10.52	115.28	123.70
2	B	1357	C	O4'-C1'-N1	10.52	116.62	108.20
2	B	1773	A	C4-C5-C6	10.52	122.26	117.00
2	B	1594	U	C5-C4-O4	-10.52	119.59	125.90
2	B	1802	A	N1-C6-N6	10.52	124.91	118.60
2	B	2095	A	N1-C6-N6	10.52	124.91	118.60
2	B	2765	A	N1-C6-N6	10.52	124.91	118.60
2	B	169	G	N1-C6-O6	10.51	126.21	119.90
2	B	2226	C	C6-N1-C2	-10.51	116.09	120.30
2	B	713	G	C6-C5-N7	-10.51	124.09	130.40
2	B	2648	G	N1-C6-O6	10.51	126.21	119.90
2	B	1228	G	N1-C2-N3	-10.51	117.59	123.90
2	B	2891	U	O4'-C1'-N1	10.51	116.61	108.20
2	B	2582	G	C4-C5-N7	-10.51	106.60	110.80
2	B	1052	C	N3-C4-N4	10.51	125.35	118.00
2	B	1166	G	C2-N3-C4	10.51	117.15	111.90
2	B	2373	G	N1-C2-N3	-10.51	117.60	123.90
2	B	1555	G	N1-C6-O6	-10.50	113.60	119.90
2	B	684	G	N1-C6-O6	10.50	126.20	119.90
2	B	1243	C	O4'-C1'-N1	10.50	116.60	108.20
2	B	2545	G	C4-C5-C6	10.50	125.10	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2872	A	N1-C2-N3	10.50	134.55	129.30
2	B	1690	A	C5-C6-N6	-10.50	115.30	123.70
2	B	2537	U	N3-C4-C5	10.50	120.90	114.60
2	B	1454	C	N3-C4-C5	-10.50	117.70	121.90
2	B	1519	G	N1-C2-N3	-10.49	117.60	123.90
1	A	26	C	O4'-C1'-N1	10.49	116.59	108.20
2	B	2545	G	C4-C5-N7	-10.49	106.60	110.80
2	B	2487	G	N1-C6-O6	10.49	126.19	119.90
2	B	52	A	C8-N9-C4	-10.49	101.61	105.80
2	B	631	A	C4-C5-C6	10.49	122.24	117.00
2	B	1585	C	C2-N3-C4	10.49	125.14	119.90
2	B	289	G	C8-N9-C4	-10.48	102.21	106.40
2	B	1487	U	C4-C5-C6	-10.48	113.41	119.70
2	B	2723	C	C5'-C4'-C3'	10.48	132.78	116.00
2	B	1495	A	N1-C6-N6	10.48	124.89	118.60
2	B	1913	A	N1-C2-N3	10.48	134.54	129.30
2	B	2775	G	C8-N9-C4	10.48	110.59	106.40
2	B	1958	C	C4-C5-C6	10.48	122.64	117.40
2	B	2040	G	C4-C5-N7	10.48	114.99	110.80
2	B	2418	A	C5-C6-N1	-10.48	112.46	117.70
2	B	2825	G	N1-C6-O6	10.48	126.19	119.90
2	B	282	A	C2-N3-C4	10.48	115.84	110.60
2	B	2383	G	N9-C4-C5	10.48	109.59	105.40
2	B	467	G	C8-N9-C4	-10.47	102.21	106.40
2	B	1461	C	N3-C4-N4	10.47	125.33	118.00
2	B	302	C	N3-C4-N4	10.47	125.33	118.00
2	B	342	A	N1-C6-N6	10.47	124.88	118.60
2	B	2033	A	N1-C2-N3	-10.47	124.06	129.30
2	B	783	A	N1-C6-N6	10.47	124.88	118.60
2	B	1483	G	N3-C2-N2	10.47	127.23	119.90
2	B	2226	C	O4'-C1'-N1	10.47	116.58	108.20
2	B	2122	U	N3-C4-O4	10.47	126.73	119.40
2	B	126	A	O4'-C1'-N9	10.46	116.57	108.20
21	Y	68	PHE	CB-CG-CD2	10.46	128.12	120.80
2	B	2659	G	N1-C6-O6	10.46	126.18	119.90
1	A	50	A	C8-N9-C4	-10.46	101.62	105.80
2	B	313	G	O4'-C1'-N9	10.46	116.57	108.20
2	B	841	G	C5-C6-O6	-10.46	122.32	128.60
2	B	2287	A	N1-C6-N6	10.46	124.88	118.60
1	A	42	C	O4'-C1'-N1	10.45	116.56	108.20
2	B	604	G	C5-C6-O6	-10.45	122.33	128.60
2	B	1013	C	N3-C4-N4	10.45	125.32	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1588	G	O4'-C1'-N9	10.45	116.56	108.20
2	B	1444	G	C4-C5-C6	10.44	125.07	118.80
2	B	1417	C	O4'-C1'-N1	10.44	116.55	108.20
2	B	1631	G	N9-C4-C5	-10.44	101.22	105.40
2	B	2086	U	O4'-C1'-N1	10.44	116.55	108.20
2	B	2141	G	N1-C6-O6	10.44	126.16	119.90
18	W	56	PHE	CB-CG-CD1	10.44	128.11	120.80
2	B	15	G	N1-C6-O6	10.44	126.16	119.90
2	B	294	A	N1-C2-N3	10.44	134.52	129.30
2	B	541	A	N1-C6-N6	10.44	124.86	118.60
2	B	2381	A	C5-C6-N6	-10.43	115.35	123.70
2	B	2730	C	O4'-C1'-N1	10.43	116.55	108.20
2	B	421	C	N3-C4-N4	10.43	125.30	118.00
2	B	1367	A	N1-C2-N3	10.43	134.51	129.30
2	B	2015	A	C5-C6-N1	-10.43	112.48	117.70
2	B	496	G	N1-C6-O6	10.43	126.16	119.90
2	B	2430	A	O4'-C1'-N9	10.43	116.54	108.20
2	B	691	C	C2-N3-C4	-10.42	114.69	119.90
2	B	716	A	O4'-C1'-N9	10.42	116.54	108.20
2	B	868	U	O4'-C1'-N1	10.42	116.54	108.20
2	B	1912	A	N1-C6-N6	10.42	124.85	118.60
2	B	424	G	O4'-C1'-N9	10.42	116.54	108.20
2	B	156	A	N7-C8-N9	-10.42	108.59	113.80
2	B	2215	C	O4'-C1'-N1	10.42	116.53	108.20
23	5	162	ARG	NE-CZ-NH1	10.42	125.51	120.30
2	B	899	A	O4'-C1'-N9	10.42	116.53	108.20
2	B	1041	G	C6-C5-N7	-10.42	124.15	130.40
2	B	2467	C	C5-C4-N4	-10.42	112.91	120.20
2	B	502	A	N1-C6-N6	10.42	124.85	118.60
2	B	1641	A	C5-C6-N1	-10.42	112.49	117.70
2	B	1699	G	N9-C4-C5	-10.42	101.23	105.40
2	B	2270	A	C4-C5-C6	10.42	122.21	117.00
2	B	412	A	N9-C4-C5	10.41	109.97	105.80
2	B	1278	C	N3-C4-C5	-10.41	117.73	121.90
2	B	2266	A	N1-C6-N6	10.41	124.85	118.60
2	B	1374	G	N3-C2-N2	10.41	127.19	119.90
2	B	2886	A	C4-C5-C6	10.41	122.21	117.00
2	B	2009	A	N1-C6-N6	10.41	124.85	118.60
2	B	2031	A	C5-C6-N6	-10.41	115.37	123.70
2	B	2412	A	C4-C5-N7	-10.41	105.50	110.70
17	U	21	ARG	NE-CZ-NH2	10.41	125.51	120.30
2	B	203	A	C8-N9-C4	-10.41	101.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	901	C	C4-C5-C6	10.41	122.60	117.40
8	N	21	PHE	CB-CG-CD1	-10.41	113.51	120.80
2	B	509	C	O4'-C1'-N1	10.41	116.53	108.20
2	B	2056	G	N3-C2-N2	10.41	127.18	119.90
1	A	59	A	C5-N7-C8	10.40	109.10	103.90
2	B	484	C	C2-N3-C4	10.40	125.10	119.90
2	B	1172	C	C6-N1-C2	-10.40	116.14	120.30
2	B	1507	C	C6-N1-C2	-10.40	116.14	120.30
2	B	1930	G	N1-C6-O6	10.40	126.14	119.90
2	B	2701	U	C5-C6-N1	10.40	127.90	122.70
2	B	513	A	C4-C5-C6	10.40	122.20	117.00
2	B	2263	C	O4'-C1'-N1	10.40	116.52	108.20
1	A	68	C	C5-C6-N1	-10.40	115.80	121.00
2	B	830	G	C5-C6-O6	10.40	134.84	128.60
2	B	2660	A	C5-C6-N1	-10.40	112.50	117.70
2	B	903	C	N3-C4-N4	10.39	125.28	118.00
2	B	972	A	N9-C4-C5	10.39	109.96	105.80
2	B	1322	A	C5'-C4'-C3'	10.39	132.63	116.00
2	B	1488	C	N3-C4-C5	-10.39	117.74	121.90
2	B	2229	U	O4'-C1'-N1	10.39	116.52	108.20
2	B	2236	U	O4'-C1'-N1	10.39	116.52	108.20
2	B	212	G	N1-C2-N3	-10.39	117.67	123.90
2	B	527	C	C2-N3-C4	10.39	125.10	119.90
2	B	644	A	C4-C5-C6	10.39	122.20	117.00
2	B	818	G	N1-C6-O6	10.39	126.13	119.90
2	B	2498	C	C6-N1-C2	-10.39	116.14	120.30
2	B	1743	G	N1-C6-O6	10.39	126.13	119.90
2	B	515	A	O4'-C1'-N9	10.38	116.51	108.20
2	B	518	G	C5-C6-O6	-10.38	122.37	128.60
2	B	1061	U	O4'-C1'-N1	10.38	116.51	108.20
2	B	2126	A	N1-C6-N6	10.39	124.83	118.60
2	B	2270	A	C4-C5-N7	-10.39	105.51	110.70
2	B	2678	C	C5-C4-N4	-10.39	112.93	120.20
2	B	89	A	C5-C6-N6	-10.38	115.39	123.70
2	B	1107	G	P-O3'-C3'	10.38	132.16	119.70
2	B	272	A	C6-C5-N7	-10.38	125.03	132.30
2	B	849	A	N1-C6-N6	10.38	124.83	118.60
2	B	2724	U	N3-C4-O4	10.38	126.67	119.40
2	B	1341	G	N7-C8-N9	-10.38	107.91	113.10
2	B	2583	G	O4'-C1'-N9	10.38	116.50	108.20
2	B	2762	C	O4'-C1'-N1	10.38	116.50	108.20
2	B	1165	A	O4'-C1'-N9	10.38	116.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2326	C	C6-N1-C2	10.38	124.45	120.30
2	B	2751	G	N1-C6-O6	10.38	126.12	119.90
2	B	1706	C	N1-C2-O2	-10.37	112.68	118.90
2	B	2792	A	C8-N9-C4	-10.37	101.65	105.80
2	B	2330	G	N1-C2-N3	-10.37	117.68	123.90
2	B	113	U	O4'-C1'-N1	10.37	116.50	108.20
2	B	138	U	N1-C2-N3	-10.37	108.68	114.90
2	B	1980	G	N3-C2-N2	10.37	127.16	119.90
2	B	202	U	N1-C2-O2	10.37	130.06	122.80
2	B	229	C	C6-N1-C2	-10.37	116.15	120.30
2	B	477	A	C5-C6-N6	-10.36	115.41	123.70
2	B	682	G	C8-N9-C4	-10.36	102.26	106.40
2	B	2596	U	C2-N3-C4	-10.36	120.78	127.00
1	A	20	G	C5-C6-O6	-10.36	122.39	128.60
2	B	382	A	C4-C5-N7	-10.36	105.52	110.70
2	B	968	C	P-O3'-C3'	-10.36	107.28	119.70
2	B	537	G	C8-N9-C4	10.35	110.54	106.40
2	B	784	G	O4'-C1'-N9	10.35	116.48	108.20
2	B	2644	G	N9-C4-C5	-10.35	101.26	105.40
2	B	1216	G	P-O3'-C3'	-10.35	107.28	119.70
2	B	1653	G	P-O3'-C3'	10.35	132.12	119.70
2	B	2512	C	O4'-C1'-N1	10.35	116.48	108.20
2	B	58	G	N1-C6-O6	10.35	126.11	119.90
2	B	910	A	N3-C4-N9	-10.35	119.12	127.40
2	B	1288	G	C8-N9-C4	10.35	110.54	106.40
2	B	1321	A	C5-N7-C8	10.35	109.07	103.90
2	B	903	C	C5-C6-N1	10.35	126.17	121.00
2	B	2157	G	C5-C6-O6	-10.35	122.39	128.60
2	B	2639	A	C5-N7-C8	10.35	109.07	103.90
2	B	1119	U	O4'-C1'-N1	10.35	116.48	108.20
2	B	1990	C	N3-C4-N4	10.35	125.24	118.00
1	A	49	C	O4'-C1'-N1	10.34	116.47	108.20
2	B	1799	G	N1-C6-O6	10.34	126.10	119.90
2	B	2579	C	N3-C4-N4	10.34	125.24	118.00
1	A	112	G	N3-C2-N2	10.34	127.13	119.90
2	B	77	G	N1-C6-O6	10.34	126.10	119.90
2	B	192	C	O4'-C1'-N1	10.34	116.47	108.20
2	B	288	U	O4'-C1'-N1	10.34	116.47	108.20
2	B	1449	G	C5-C6-O6	-10.34	122.40	128.60
2	B	1821	A	N1-C6-N6	10.34	124.80	118.60
2	B	2587	A	C5-C6-N1	-10.34	112.53	117.70
2	B	996	A	N1-C6-N6	10.34	124.80	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1439	A	C5-C6-N6	-10.34	115.43	123.70
2	B	2071	A	C4-C5-N7	-10.34	105.53	110.70
2	B	2247	A	C4-C5-N7	-10.34	105.53	110.70
2	B	974	G	C5-N7-C8	-10.33	99.13	104.30
2	B	1249	U	N1-C2-O2	-10.33	115.57	122.80
2	B	1924	C	N3-C4-N4	10.33	125.23	118.00
2	B	625	G	N9-C4-C5	-10.33	101.27	105.40
2	B	880	G	N3-C4-C5	-10.33	123.44	128.60
2	B	250	G	C5-C6-O6	-10.33	122.40	128.60
2	B	706	A	C5-C6-N1	-10.33	112.54	117.70
2	B	2502	G	C5-C6-O6	-10.33	122.40	128.60
2	B	1527	G	C5-C6-N1	-10.32	106.34	111.50
2	B	1586	A	C5'-C4'-C3'	10.32	132.52	116.00
2	B	2482	A	C4-C5-C6	10.32	122.16	117.00
2	B	2670	A	C5-C6-N6	-10.32	115.44	123.70
2	B	1609	A	O4'-C1'-N9	10.32	116.46	108.20
2	B	271	G	C5-C6-O6	-10.32	122.41	128.60
2	B	393	C	N3-C4-N4	10.32	125.22	118.00
2	B	2446	G	N1-C6-O6	10.32	126.09	119.90
2	B	1792	G	C5-C6-N1	-10.31	106.34	111.50
2	B	1984	G	N3-C4-C5	-10.31	123.44	128.60
2	B	1149	G	N9-C4-C5	10.31	109.52	105.40
2	B	2316	G	C5-C6-O6	-10.30	122.42	128.60
14	D	179	ARG	NE-CZ-NH1	10.30	125.45	120.30
2	B	844	A	O4'-C1'-N9	10.30	116.44	108.20
2	B	1763	G	C4-C5-N7	10.30	114.92	110.80
2	B	2277	G	N1-C2-N3	-10.30	117.72	123.90
2	B	11	C	C2-N1-C1'	10.30	130.13	118.80
2	B	2632	A	P-O3'-C3'	10.30	132.06	119.70
2	B	946	C	O4'-C1'-N1	10.29	116.44	108.20
2	B	800	A	O4'-C1'-N9	10.29	116.43	108.20
2	B	57	C	C2-N3-C4	10.29	125.05	119.90
2	B	160	A	C2-N3-C4	-10.29	105.45	110.60
2	B	1435	G	O4'-C1'-N9	10.29	116.43	108.20
2	B	2896	C	O4'-C1'-N1	10.28	116.42	108.20
2	B	968	C	N3-C4-C5	-10.28	117.79	121.90
2	B	2450	A	N1-C2-N3	10.28	134.44	129.30
2	B	2145	C	C4-C5-C6	10.28	122.54	117.40
2	B	2345	G	C5-C6-O6	-10.28	122.43	128.60
2	B	2706	A	C8-N9-C4	-10.28	101.69	105.80
2	B	2839	G	C5-C6-O6	-10.28	122.43	128.60
2	B	1111	A	C4-C5-C6	10.28	122.14	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1156	A	N1-C6-N6	10.28	124.77	118.60
2	B	1172	C	N3-C4-N4	10.28	125.19	118.00
2	B	1324	G	O4'-C1'-N9	10.28	116.42	108.20
2	B	1368	G	N1-C6-O6	10.28	126.07	119.90
2	B	1590	A	N1-C6-N6	10.28	124.77	118.60
2	B	2484	G	N3-C4-C5	-10.28	123.46	128.60
2	B	2534	A	C6-C5-N7	-10.28	125.11	132.30
18	W	91	PHE	CB-CG-CD2	10.28	127.99	120.80
2	B	1539	U	C2-N3-C4	-10.27	120.84	127.00
2	B	2383	G	N3-C4-C5	-10.27	123.46	128.60
2	B	1241	A	O4'-C1'-N9	10.27	116.42	108.20
2	B	531	C	C2-N3-C4	-10.27	114.77	119.90
2	B	2379	G	C4-C5-C6	10.27	124.96	118.80
1	A	66	A	C2-N3-C4	-10.26	105.47	110.60
1	A	78	A	C5-C6-N6	-10.26	115.49	123.70
2	B	218	A	P-O3'-C3'	10.26	132.01	119.70
2	B	910	A	C5-C6-N1	-10.26	112.57	117.70
2	B	949	G	N3-C2-N2	10.26	127.08	119.90
2	B	61	C	N3-C4-N4	10.26	125.18	118.00
2	B	1254	A	C5-C6-N6	-10.26	115.50	123.70
2	B	2499	C	O4'-C1'-N1	10.26	116.40	108.20
2	B	511	U	P-O5'-C5'	10.25	137.30	120.90
2	B	1764	C	O4'-C1'-N1	10.25	116.40	108.20
2	B	2713	U	O4'-C1'-N1	10.25	116.40	108.20
2	B	926	G	N3-C2-N2	10.25	127.08	119.90
2	B	2449	U	C3'-C2'-C1'	10.25	109.70	101.50
2	B	1536	C	P-O3'-C3'	10.25	132.00	119.70
2	B	1786	A	C4-C5-C6	10.25	122.12	117.00
2	B	59	U	O4'-C1'-N1	10.24	116.40	108.20
2	B	216	A	C8-N9-C4	10.24	109.90	105.80
2	B	2331	G	N9-C4-C5	10.24	109.50	105.40
2	B	992	C	N3-C4-N4	10.24	125.17	118.00
2	B	1113	U	O4'-C1'-N1	10.24	116.39	108.20
2	B	2872	A	C5-C6-N6	-10.24	115.51	123.70
2	B	1292	G	C5-C6-O6	-10.24	122.46	128.60
2	B	1913	A	C5-C6-N6	-10.24	115.51	123.70
2	B	1894	C	N3-C4-N4	10.23	125.16	118.00
2	B	2437	G	C5-C6-O6	-10.23	122.46	128.60
2	B	27	G	C8-N9-C4	-10.23	102.31	106.40
2	B	639	U	O4'-C1'-N1	10.23	116.39	108.20
2	B	1102	C	C6-N1-C2	-10.23	116.21	120.30
2	B	1762	A	C5-C6-N1	-10.23	112.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2330	G	N1-C6-O6	10.23	126.04	119.90
2	B	2120	G	C2-N3-C4	-10.23	106.78	111.90
2	B	2456	C	C3'-C2'-C1'	-10.23	93.32	101.50
2	B	2503	A	C5-C6-N6	-10.23	115.52	123.70
2	B	2649	C	O4'-C1'-N1	10.23	116.39	108.20
23	5	53	ARG	NE-CZ-NH1	10.23	125.42	120.30
2	B	2666	C	C5-C4-N4	-10.23	113.04	120.20
2	B	2745	C	N3-C4-C5	-10.23	117.81	121.90
2	B	891	G	C1'-O4'-C4'	-10.23	101.72	109.90
2	B	1393	A	C5'-C4'-C3'	10.23	132.37	116.00
2	B	272	A	C4-C5-C6	10.23	122.11	117.00
2	B	374	A	N1-C6-N6	10.23	124.74	118.60
2	B	1906	G	N1-C6-O6	10.23	126.04	119.90
2	B	2872	A	C5-N7-C8	10.23	109.01	103.90
11	Q	23	TYR	CB-CG-CD2	10.23	127.14	121.00
2	B	1490	A	C5-C6-N6	-10.22	115.52	123.70
1	A	20	G	N7-C8-N9	-10.22	107.99	113.10
2	B	624	C	N3-C4-C5	-10.22	117.81	121.90
2	B	882	G	N3-C4-C5	-10.22	123.49	128.60
2	B	985	C	C6-N1-C2	-10.22	116.21	120.30
2	B	1362	C	O4'-C1'-N1	10.22	116.38	108.20
2	B	1057	A	C8-N9-C4	-10.22	101.71	105.80
2	B	2574	G	P-O3'-C3'	10.22	131.96	119.70
2	B	2627	G	C2-N3-C4	10.22	117.01	111.90
1	A	33	G	N1-C6-O6	10.21	126.03	119.90
2	B	119	A	N1-C6-N6	10.21	124.73	118.60
2	B	2472	G	N1-C2-N2	-10.22	107.01	116.20
2	B	338	G	C5-C6-N1	-10.21	106.39	111.50
2	B	1532	A	N1-C2-N3	10.21	134.41	129.30
2	B	2773	C	C5-C4-N4	10.21	127.35	120.20
2	B	531	C	N3-C4-C5	10.21	125.98	121.90
2	B	1615	C	C6-N1-C2	10.21	124.39	120.30
2	B	2269	G	C5-C6-O6	-10.21	122.47	128.60
21	Y	25	PHE	CB-CG-CD1	10.21	127.95	120.80
2	B	1490	A	C4-C5-C6	10.21	122.11	117.00
2	B	2819	G	N3-C4-N9	-10.21	119.87	126.00
1	A	44	G	N7-C8-N9	-10.21	108.00	113.10
2	B	95	A	N9-C4-C5	10.21	109.88	105.80
2	B	123	G	N7-C8-N9	-10.21	108.00	113.10
2	B	1265	A	N9-C4-C5	10.21	109.88	105.80
2	B	1300	G	N7-C8-N9	-10.21	108.00	113.10
2	B	1086	A	C5-C6-N1	-10.20	112.60	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	128	C	N3-C4-N4	10.20	125.14	118.00
2	B	2754	U	C6-N1-C2	10.20	127.12	121.00
2	B	1353	A	C5-C6-N6	-10.19	115.55	123.70
2	B	1366	A	N1-C6-N6	10.20	124.72	118.60
2	B	217	A	O4'-C1'-N9	10.19	116.35	108.20
2	B	367	G	N1-C6-O6	10.19	126.02	119.90
2	B	1024	G	N1-C6-O6	10.19	126.02	119.90
2	B	1623	G	O4'-C1'-N9	10.19	116.35	108.20
2	B	2693	G	C5-C6-O6	-10.19	122.49	128.60
11	Q	37	ALA	N-CA-CB	10.19	124.37	110.10
2	B	2334	U	C2-N1-C1'	10.19	129.92	117.70
2	B	310	A	C5-C6-N6	-10.18	115.55	123.70
2	B	2623	G	C5-C6-O6	-10.18	122.49	128.60
2	B	763	G	C8-N9-C4	10.18	110.47	106.40
2	B	1346	G	P-O5'-C5'	10.18	137.19	120.90
2	B	1788	C	C5-C6-N1	10.18	126.09	121.00
2	B	749	A	C5-C6-N1	-10.18	112.61	117.70
2	B	2128	G	O4'-C1'-N9	10.18	116.34	108.20
2	B	2331	G	O4'-C1'-N9	10.17	116.34	108.20
2	B	2579	C	C5-C4-N4	-10.17	113.08	120.20
2	B	236	C	C6-N1-C2	-10.17	116.23	120.30
2	B	658	U	C2-N3-C4	-10.17	120.90	127.00
2	B	2793	C	C5-C4-N4	-10.17	113.08	120.20
2	B	1994	C	C5-C4-N4	-10.17	113.08	120.20
2	B	937	C	O4'-C1'-N1	10.16	116.33	108.20
2	B	973	A	N3-C4-C5	-10.16	119.69	126.80
2	B	1041	G	P-O3'-C3'	-10.16	107.50	119.70
2	B	1508	A	O4'-C1'-N9	10.16	116.33	108.20
2	B	923	G	O4'-C1'-N9	10.16	116.33	108.20
2	B	85	G	N7-C8-N9	-10.16	108.02	113.10
2	B	2184	A	C4-C5-C6	10.16	122.08	117.00
1	A	86	G	N1-C2-N3	-10.16	117.81	123.90
2	B	1097	U	O4'-C1'-N1	10.16	116.33	108.20
2	B	1583	A	C8-N9-C4	-10.16	101.74	105.80
2	B	2286	G	C5-C6-O6	-10.16	122.50	128.60
2	B	2289	G	C4-C5-N7	10.16	114.86	110.80
2	B	1454	C	C6-N1-C1'	-10.15	108.61	120.80
2	B	440	C	N3-C4-C5	-10.15	117.84	121.90
2	B	1953	A	N1-C6-N6	10.15	124.69	118.60
2	B	1914	C	O4'-C1'-N1	10.15	116.32	108.20
2	B	2373	G	C5-C6-O6	-10.15	122.51	128.60
1	A	13	G	O4'-C1'-N9	10.15	116.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2271	G	O4'-C1'-N9	10.15	116.32	108.20
2	B	2726	A	O4'-C1'-N9	10.15	116.32	108.20
2	B	783	A	C4-C5-N7	-10.15	105.63	110.70
2	B	1147	A	C4-C5-C6	10.14	122.07	117.00
2	B	2455	G	C5-C6-O6	-10.14	122.51	128.60
2	B	2613	U	P-O3'-C3'	10.14	131.87	119.70
2	B	599	A	C4-C5-C6	10.14	122.07	117.00
2	B	2849	U	C1'-O4'-C4'	10.14	118.01	109.90
2	B	95	A	C5-N7-C8	10.14	108.97	103.90
2	B	1626	A	N1-C6-N6	10.14	124.68	118.60
5	L	18	ARG	NE-CZ-NH2	10.14	125.37	120.30
2	B	223	A	N9-C4-C5	10.13	109.85	105.80
2	B	756	A	C5-N7-C8	10.13	108.97	103.90
2	B	804	A	C5-C6-N6	-10.13	115.59	123.70
2	B	2095	A	N1-C2-N3	10.13	134.37	129.30
2	B	2178	C	P-O3'-C3'	10.13	131.86	119.70
2	B	2604	U	O4'-C1'-N1	10.13	116.31	108.20
13	S	38	TYR	CB-CG-CD2	10.13	127.08	121.00
2	B	111	A	C5-C6-N1	-10.13	112.64	117.70
2	B	628	G	N1-C6-O6	10.13	125.98	119.90
2	B	652	U	N1-C2-O2	10.13	129.89	122.80
2	B	348	A	N1-C6-N6	10.13	124.68	118.60
2	B	608	A	O4'-C1'-N9	10.13	116.30	108.20
2	B	1668	A	N1-C2-N3	10.12	134.36	129.30
2	B	1682	G	N3-C2-N2	10.12	126.99	119.90
2	B	885	C	N3-C4-C5	-10.12	117.85	121.90
2	B	2472	G	C8-N9-C4	-10.12	102.35	106.40
2	B	107	G	O4'-C1'-N9	10.12	116.30	108.20
2	B	1578	U	O4'-C1'-N1	10.12	116.30	108.20
2	B	2009	A	C5-C6-N1	-10.12	112.64	117.70
2	B	2183	A	C4-C5-C6	10.12	122.06	117.00
2	B	2033	A	C4-C5-C6	10.12	122.06	117.00
2	B	2382	G	C5-C6-O6	-10.12	122.53	128.60
2	B	2482	A	C8-N9-C4	10.12	109.85	105.80
2	B	2612	C	O4'-C1'-N1	10.12	116.29	108.20
2	B	1007	C	O4'-C1'-N1	10.12	116.29	108.20
2	B	1265	A	N1-C2-N3	10.12	134.36	129.30
2	B	1611	C	C2-N3-C4	10.12	124.96	119.90
2	B	2570	G	N9-C4-C5	10.12	109.45	105.40
2	B	1808	A	N1-C6-N6	10.11	124.67	118.60
2	B	671	C	C6-N1-C2	-10.11	116.25	120.30
2	B	1218	G	N3-C2-N2	10.11	126.98	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2758	A	C5-C6-N6	-10.11	115.61	123.70
2	B	1919	A	C6-N1-C2	-10.11	112.53	118.60
2	B	2749	A	C2-N3-C4	-10.11	105.55	110.60
2	B	882	G	C4-C5-C6	10.11	124.86	118.80
2	B	914	G	N3-C4-C5	10.11	133.65	128.60
2	B	1382	G	O4'-C1'-N9	10.11	116.28	108.20
2	B	1676	A	C5-C6-N1	-10.11	112.65	117.70
2	B	305	C	C5-C4-N4	-10.10	113.13	120.20
2	B	1631	G	O4'-C1'-N9	10.10	116.28	108.20
2	B	1730	C	C6-N1-C2	-10.10	116.26	120.30
25	7	13	PHE	CB-CG-CD1	-10.10	113.73	120.80
2	B	46	G	C8-N9-C4	-10.10	102.36	106.40
2	B	768	G	N1-C6-O6	10.10	125.96	119.90
2	B	1678	A	P-O3'-C3'	10.10	131.82	119.70
2	B	1027	A	N1-C6-N6	10.10	124.66	118.60
2	B	2056	G	C4-C5-C6	10.10	124.86	118.80
2	B	2267	A	C8-N9-C4	-10.10	101.76	105.80
2	B	737	C	N3-C4-C5	-10.09	117.86	121.90
2	B	2384	U	P-O3'-C3'	10.09	131.81	119.70
2	B	1299	G	C5-C6-O6	-10.09	122.55	128.60
2	B	23	G	N3-C2-N2	10.08	126.96	119.90
2	B	658	U	O4'-C1'-N1	10.08	116.27	108.20
2	B	974	G	C6-C5-N7	-10.08	124.35	130.40
2	B	1042	G	N1-C6-O6	10.08	125.95	119.90
2	B	2093	G	O4'-C1'-N9	10.08	116.26	108.20
2	B	2285	C	C4-C5-C6	10.08	122.44	117.40
2	B	1163	G	C5-C6-O6	-10.08	122.55	128.60
2	B	47	C	C5-C4-N4	-10.08	113.15	120.20
2	B	96	C	O4'-C1'-N1	10.08	116.26	108.20
2	B	2381	A	N1-C6-N6	10.08	124.65	118.60
2	B	82	U	P-O3'-C3'	10.07	131.79	119.70
2	B	722	A	C5-C6-N1	-10.07	112.66	117.70
2	B	1193	G	O4'-C1'-N9	10.07	116.26	108.20
2	B	388	G	O4'-C1'-N9	10.07	116.25	108.20
2	B	831	G	N7-C8-N9	-10.07	108.07	113.10
2	B	901	C	N3-C4-C5	-10.07	117.87	121.90
2	B	1329	U	N3-C4-C5	-10.07	108.56	114.60
2	B	1561	C	C5-C4-N4	-10.07	113.15	120.20
2	B	229	C	O4'-C1'-N1	10.06	116.25	108.20
2	B	1353	A	C8-N9-C4	10.06	109.83	105.80
2	B	1692	U	O4'-C1'-N1	10.06	116.25	108.20
2	B	722	A	C4-C5-C6	10.06	122.03	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1713	A	O4'-C1'-N9	10.06	116.25	108.20
2	B	2074	U	O4'-C1'-N1	10.06	116.25	108.20
2	B	2267	A	C5-C6-N1	-10.06	112.67	117.70
2	B	2886	A	C5-C6-N6	-10.06	115.65	123.70
2	B	1124	G	N3-C4-C5	-10.06	123.57	128.60
2	B	670	A	C5-C6-N6	-10.06	115.65	123.70
2	B	2266	A	C5-C6-N6	-10.06	115.65	123.70
2	B	2348	U	C2-N3-C4	-10.06	120.97	127.00
2	B	52	A	C5-C6-N6	-10.06	115.66	123.70
2	B	753	A	C5-C6-N1	-10.06	112.67	117.70
1	A	9	G	N1-C2-N3	-10.05	117.87	123.90
2	B	479	A	N9-C4-C5	10.05	109.82	105.80
2	B	1420	A	O4'-C1'-N9	10.05	116.24	108.20
2	B	1807	G	C6-C5-N7	-10.05	124.37	130.40
2	B	818	G	C5-C6-O6	-10.05	122.57	128.60
2	B	1576	U	C5-C4-O4	10.05	131.93	125.90
2	B	1994	C	O4'-C1'-N1	10.05	116.24	108.20
15	T	84	TYR	CB-CG-CD2	-10.05	114.97	121.00
2	B	1423	G	N3-C2-N2	10.04	126.93	119.90
2	B	1525	A	N1-C6-N6	10.04	124.63	118.60
2	B	211	C	N3-C4-C5	-10.04	117.88	121.90
2	B	70	G	C2-N3-C4	10.04	116.92	111.90
2	B	2199	A	C2-N3-C4	-10.04	105.58	110.60
2	B	592	A	C5-C6-N6	-10.04	115.67	123.70
2	B	1570	A	C5-C6-N1	-10.04	112.68	117.70
2	B	417	C	N3-C4-N4	10.03	125.02	118.00
2	B	637	A	C4-C5-C6	10.03	122.02	117.00
2	B	885	C	O4'-C1'-N1	10.03	116.22	108.20
2	B	1322	A	N1-C6-N6	10.03	124.62	118.60
2	B	1681	G	O4'-C1'-N9	10.03	116.22	108.20
2	B	1794	A	C5-C6-N6	-10.03	115.68	123.70
2	B	2682	A	O4'-C1'-N9	10.02	116.22	108.20
2	B	77	G	C5-C6-O6	-10.02	122.59	128.60
2	B	246	C	O4'-C1'-N1	10.02	116.22	108.20
2	B	1580	A	C8-N9-C4	-10.02	101.79	105.80
2	B	2729	G	N1-C6-O6	10.02	125.91	119.90
2	B	2280	G	N3-C2-N2	10.02	126.91	119.90
2	B	2381	A	N3-C4-C5	-10.02	119.79	126.80
6	1	30	MET	CG-SD-CE	-10.01	84.19	100.20
2	B	11	C	N3-C4-N4	10.01	125.00	118.00
2	B	1281	G	C4-C5-C6	10.01	124.81	118.80
2	B	205	G	C6-C5-N7	-10.01	124.40	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	845	A	C5-C6-N1	-10.01	112.70	117.70
2	B	2236	U	P-O3'-C3'	10.01	131.71	119.70
13	S	8	ARG	NE-CZ-NH1	10.01	125.30	120.30
2	B	983	A	C5-C6-N1	-10.00	112.70	117.70
2	B	1791	A	N9-C4-C5	-10.00	101.80	105.80
2	B	2862	G	N3-C2-N2	10.00	126.90	119.90
2	B	2247	A	N3-C4-C5	-10.00	119.80	126.80
2	B	2549	G	N1-C6-O6	10.00	125.90	119.90
2	B	433	C	O4'-C1'-N1	10.00	116.20	108.20
2	B	1447	C	N3-C4-C5	-10.00	117.90	121.90
2	B	1642	G	C5-C6-O6	-10.00	122.60	128.60
2	B	1783	A	C6-N1-C2	10.00	124.60	118.60
2	B	2576	G	P-O3'-C3'	-10.00	107.70	119.70
2	B	2482	A	C6-C5-N7	-9.99	125.30	132.30
2	B	250	G	N1-C6-O6	9.99	125.90	119.90
1	A	15	A	C1'-O4'-C4'	-9.99	101.91	109.90
2	B	862	G	C5-C6-N1	-9.99	106.50	111.50
2	B	1649	G	N9-C4-C5	-9.99	101.41	105.40
2	B	1934	C	O4'-C1'-N1	9.99	116.19	108.20
1	A	12	C	C2-N3-C4	9.98	124.89	119.90
2	B	2321	U	C5-C4-O4	-9.98	119.91	125.90
7	M	122	ALA	N-CA-CB	9.98	124.08	110.10
2	B	404	A	C4-C5-C6	9.98	121.99	117.00
2	B	2350	C	N3-C4-N4	9.98	124.99	118.00
2	B	716	A	N1-C6-N6	9.98	124.59	118.60
2	B	1144	A	O4'-C1'-N9	9.98	116.18	108.20
2	B	2569	G	C8-N9-C4	-9.98	102.41	106.40
2	B	643	A	C5-N7-C8	9.98	108.89	103.90
2	B	1562	U	O4'-C1'-N1	9.98	116.18	108.20
2	B	2789	C	C5-C4-N4	-9.98	113.22	120.20
2	B	1374	G	C5-C6-O6	-9.97	122.61	128.60
2	B	2004	G	O4'-C1'-N9	9.97	116.18	108.20
32	J	75	TYR	CB-CG-CD1	9.97	126.98	121.00
2	B	914	G	O4'-C1'-N9	9.97	116.18	108.20
2	B	2122	U	O4'-C1'-N1	9.97	116.18	108.20
2	B	881	G	O4'-C1'-N9	9.97	116.17	108.20
2	B	1649	G	O4'-C1'-N9	9.97	116.17	108.20
2	B	1810	A	N1-C6-N6	9.97	124.58	118.60
19	X	295	ARG	NE-CZ-NH2	9.96	125.28	120.30
2	B	2351	G	N3-C2-N2	9.96	126.87	119.90
2	B	2382	G	O4'-C1'-N9	9.96	116.17	108.20
2	B	338	G	C8-N9-C4	-9.96	102.42	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2679	A	C4-C5-C6	9.96	121.98	117.00
2	B	1142	A	N1-C6-N6	9.96	124.58	118.60
2	B	693	A	C2-N3-C4	-9.96	105.62	110.60
2	B	620	G	N1-C6-O6	9.95	125.87	119.90
2	B	1377	G	N1-C6-O6	9.95	125.87	119.90
2	B	1483	G	N1-C2-N2	-9.95	107.24	116.20
2	B	2586	U	O4'-C1'-N1	9.95	116.16	108.20
2	B	1016	G	C6-C5-N7	-9.95	124.43	130.40
2	B	1599	U	C2-N3-C4	-9.95	121.03	127.00
2	B	348	A	C4-C5-C6	9.95	121.97	117.00
2	B	1758	U	P-O3'-C3'	-9.95	107.76	119.70
2	B	2032	G	C8-N9-C4	9.95	110.38	106.40
2	B	2277	G	N7-C8-N9	9.95	118.07	113.10
2	B	348	A	C4-C5-N7	-9.94	105.73	110.70
2	B	735	A	N7-C8-N9	9.94	118.77	113.80
2	B	1799	G	C8-N9-C4	-9.94	102.42	106.40
26	8	36	ARG	NE-CZ-NH1	9.94	125.27	120.30
2	B	2439	A	P-O5'-C5'	9.94	136.80	120.90
2	B	796	C	C5-C6-N1	-9.94	116.03	121.00
2	B	856	G	C8-N9-C4	9.94	110.38	106.40
2	B	882	G	C8-N9-C4	-9.94	102.43	106.40
2	B	1186	G	C8-N9-C4	9.94	110.38	106.40
2	B	1498	C	C5'-C4'-C3'	9.94	131.90	116.00
2	B	1889	A	N1-C6-N6	9.94	124.56	118.60
2	B	2455	G	O4'-C1'-N9	9.94	116.15	108.20
2	B	2498	C	O4'-C1'-N1	9.94	116.15	108.20
2	B	2539	C	N3-C4-C5	-9.94	117.92	121.90
2	B	153	U	C5-C4-O4	-9.93	119.94	125.90
2	B	2802	G	N1-C6-O6	9.93	125.86	119.90
2	B	1057	A	N1-C2-N3	9.93	134.26	129.30
2	B	1402	U	C6-N1-C2	-9.93	115.04	121.00
2	B	2509	G	O4'-C1'-N9	9.93	116.14	108.20
2	B	2754	U	N1-C2-N3	-9.93	108.94	114.90
2	B	275	C	O4'-C1'-N1	9.93	116.14	108.20
2	B	685	A	O4'-C1'-N9	9.93	116.14	108.20
2	B	686	U	N1-C2-N3	-9.92	108.95	114.90
2	B	820	A	C5-N7-C8	9.92	108.86	103.90
2	B	1070	A	N1-C6-N6	9.92	124.55	118.60
2	B	1247	A	C4-C5-N7	9.92	115.66	110.70
2	B	2301	C	C5-C4-N4	-9.92	113.25	120.20
2	B	2871	U	C5-C6-N1	-9.92	117.74	122.70
2	B	1665	A	C4'-C3'-C2'	-9.92	92.68	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	14	A	C8-N9-C4	-9.92	101.83	105.80
2	B	570	G	C8-N9-C4	-9.92	102.43	106.40
2	B	2102	G	O4'-C1'-N9	9.92	116.14	108.20
2	B	371	A	C5-C6-N1	-9.92	112.74	117.70
2	B	832	U	C5'-C4'-C3'	9.92	131.87	116.00
2	B	1049	C	O4'-C1'-N1	9.92	116.14	108.20
2	B	1266	G	N1-C6-O6	9.92	125.85	119.90
2	B	1276	A	N1-C2-N3	9.92	134.26	129.30
2	B	1369	G	C5-C6-O6	-9.92	122.65	128.60
2	B	2869	G	N1-C2-N3	-9.92	117.95	123.90
2	B	260	G	O4'-C1'-N9	9.91	116.13	108.20
2	B	2380	C	O4'-C1'-N1	9.91	116.13	108.20
2	B	836	G	C4-C5-N7	9.91	114.77	110.80
2	B	2014	A	C5-C6-N1	-9.91	112.74	117.70
2	B	1093	G	N9-C4-C5	9.91	109.36	105.40
2	B	1535	A	C6-N1-C2	-9.91	112.66	118.60
2	B	2025	C	C2-N3-C4	-9.91	114.95	119.90
2	B	2816	G	P-O5'-C5'	-9.91	105.05	120.90
2	B	1465	G	N1-C6-O6	9.90	125.84	119.90
2	B	2062	A	C6-N1-C2	9.90	124.54	118.60
2	B	2093	G	C4-C5-N7	9.90	114.76	110.80
2	B	64	A	C5-C6-N6	-9.90	115.78	123.70
2	B	386	G	N1-C6-O6	9.90	125.84	119.90
2	B	781	A	C4-C5-N7	-9.90	105.75	110.70
2	B	586	A	C5-C6-N6	-9.90	115.78	123.70
2	B	2129	C	N3-C4-C5	-9.90	117.94	121.90
2	B	185	G	O4'-C1'-N9	9.90	116.12	108.20
2	B	647	G	O4'-C1'-N9	9.90	116.12	108.20
2	B	716	A	N9-C4-C5	9.90	109.76	105.80
2	B	784	G	N1-C6-O6	9.90	125.84	119.90
2	B	865	C	C5-C6-N1	-9.90	116.05	121.00
2	B	2128	G	C5-C6-O6	-9.90	122.66	128.60
2	B	2570	G	O4'-C1'-N9	9.90	116.12	108.20
1	A	92	C	P-O3'-C3'	9.89	131.57	119.70
2	B	266	G	N3-C4-C5	-9.89	123.65	128.60
2	B	1542	U	O4'-C1'-N1	9.89	116.12	108.20
2	B	2131	U	N3-C4-C5	-9.89	108.66	114.60
2	B	548	G	N9-C4-C5	-9.89	101.44	105.40
2	B	666	A	C4-C5-N7	-9.89	105.76	110.70
2	B	1334	G	C8-N9-C4	-9.89	102.44	106.40
2	B	2130	U	O4'-C1'-N1	9.89	116.11	108.20
2	B	111	A	N1-C6-N6	9.88	124.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1261	C	O4'-C1'-N1	9.88	116.11	108.20
2	B	2317	A	N1-C6-N6	9.89	124.53	118.60
2	B	648	G	C5-C6-O6	-9.88	122.67	128.60
5	L	18	ARG	NE-CZ-NH1	-9.88	115.36	120.30
2	B	1162	G	C5-C6-O6	-9.88	122.67	128.60
2	B	1294	U	C5-C6-N1	9.88	127.64	122.70
2	B	2252	G	C5-C6-O6	-9.88	122.67	128.60
2	B	838	C	N3-C4-C5	-9.88	117.95	121.90
2	B	2532	G	C5-C6-O6	-9.87	122.68	128.60
2	B	2599	G	C5-C6-O6	-9.88	122.67	128.60
2	B	637	A	N9-C4-C5	9.87	109.75	105.80
2	B	982	C	P-O3'-C3'	9.87	131.55	119.70
2	B	2478	A	C2-N3-C4	-9.87	105.66	110.60
2	B	2042	A	O4'-C1'-N9	9.87	116.10	108.20
2	B	114	U	C6-N1-C2	-9.87	115.08	121.00
2	B	498	G	C5-C6-O6	-9.87	122.68	128.60
22	3	48	TYR	CB-CG-CD2	-9.87	115.08	121.00
2	B	1523	U	C2-N1-C1'	9.86	129.54	117.70
2	B	1841	U	C2-N3-C4	-9.87	121.08	127.00
2	B	322	A	C4-C5-C6	9.86	121.93	117.00
2	B	2836	U	O4'-C1'-N1	9.86	116.09	108.20
2	B	1045	C	N3-C4-C5	-9.86	117.96	121.90
2	B	1056	G	P-O5'-C5'	9.86	136.68	120.90
2	B	1396	U	N1-C2-O2	-9.86	115.90	122.80
2	B	2523	G	C5-C6-O6	-9.86	122.68	128.60
2	B	1444	G	C5-C6-O6	9.86	134.51	128.60
2	B	2155	U	C5'-C4'-O4'	9.86	120.93	109.10
2	B	2822	G	N1-C6-O6	9.86	125.81	119.90
2	B	1787	A	N1-C6-N6	9.85	124.51	118.60
2	B	2816	G	C5-C6-O6	-9.85	122.69	128.60
2	B	362	A	C5-C6-N6	-9.85	115.82	123.70
2	B	698	C	N3-C4-C5	-9.85	117.96	121.90
2	B	507	A	C8-N9-C4	9.85	109.74	105.80
2	B	335	C	C6-N1-C2	9.85	124.24	120.30
2	B	483	A	C2-N3-C4	-9.85	105.68	110.60
2	B	1831	G	C5-C6-O6	-9.85	122.69	128.60
2	B	2895	G	C5-C6-O6	-9.85	122.69	128.60
2	B	299	A	C4-C5-C6	9.84	121.92	117.00
2	B	410	G	N1-C6-O6	9.84	125.81	119.90
2	B	1363	C	N3-C4-C5	-9.84	117.96	121.90
2	B	1985	C	O4'-C1'-N1	9.84	116.07	108.20
2	B	2331	G	N1-C6-O6	9.84	125.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1040	A	C6-N1-C2	-9.84	112.70	118.60
27	C	65	ASP	CB-CG-OD1	-9.84	109.45	118.30
2	B	1600	C	N3-C4-N4	9.84	124.89	118.00
2	B	2254	C	N3-C4-N4	9.83	124.88	118.00
2	B	97	C	C5-C4-N4	-9.83	113.32	120.20
2	B	795	C	C2-N3-C4	-9.83	114.98	119.90
2	B	2114	A	C6-C5-N7	-9.83	125.42	132.30
2	B	2191	A	N1-C6-N6	9.83	124.50	118.60
2	B	2566	A	P-O3'-C3'	9.83	131.50	119.70
2	B	2788	C	C2-N3-C4	9.83	124.81	119.90
2	B	206	U	N1-C2-N3	-9.83	109.00	114.90
2	B	924	G	O4'-C1'-N9	9.83	116.06	108.20
2	B	1071	G	O4'-C1'-N9	9.83	116.06	108.20
2	B	2011	U	C3'-C2'-C1'	9.83	109.36	101.50
29	G	93	TYR	CB-CG-CD2	9.83	126.90	121.00
2	B	901	C	O4'-C1'-N1	9.82	116.06	108.20
2	B	2379	G	C8-N9-C1'	9.82	139.77	127.00
2	B	2646	C	O4'-C1'-N1	9.82	116.06	108.20
2	B	664	G	N3-C4-C5	-9.82	123.69	128.60
2	B	1972	G	N1-C6-O6	9.82	125.79	119.90
2	B	2319	G	C5-N7-C8	-9.82	99.39	104.30
2	B	250	G	N7-C8-N9	-9.81	108.19	113.10
2	B	331	C	C4-C5-C6	9.81	122.31	117.40
2	B	1272	A	N1-C6-N6	9.81	124.49	118.60
2	B	726	G	C8-N9-C4	-9.81	102.47	106.40
2	B	1801	A	N9-C4-C5	9.81	109.72	105.80
2	B	853	C	C6-N1-C2	-9.81	116.38	120.30
2	B	879	G	C4-C5-C6	9.81	124.69	118.80
2	B	1701	A	C5-C6-N6	-9.81	115.85	123.70
2	B	150	U	O4'-C1'-N1	9.81	116.05	108.20
2	B	786	C	O4'-C1'-N1	9.81	116.05	108.20
2	B	235	U	C5-C4-O4	-9.81	120.02	125.90
2	B	1789	A	C2-N3-C4	9.81	115.50	110.60
2	B	1835	G	C5-C6-O6	-9.81	122.72	128.60
2	B	635	C	N3-C4-N4	9.80	124.86	118.00
2	B	2870	C	C6-N1-C2	-9.80	116.38	120.30
2	B	31	C	O4'-C1'-N1	9.80	116.04	108.20
2	B	1361	G	C5'-C4'-O4'	9.80	120.86	109.10
2	B	1603	A	N1-C6-N6	9.80	124.48	118.60
2	B	2581	G	N1-C6-O6	9.80	125.78	119.90
2	B	706	A	C5-N7-C8	9.80	108.80	103.90
2	B	2523	G	N3-C4-N9	9.80	131.88	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	5	38	PHE	CB-CG-CD2	9.80	127.66	120.80
2	B	2051	A	C5-C6-N1	-9.80	112.80	117.70
2	B	2559	C	C6-N1-C2	-9.80	116.38	120.30
2	B	1296	G	P-O3'-C3'	-9.80	107.94	119.70
2	B	1441	G	C4-C5-C6	9.80	124.68	118.80
2	B	473	G	C4-C5-N7	9.79	114.72	110.80
2	B	2877	G	N1-C6-O6	9.79	125.78	119.90
2	B	1460	U	P-O3'-C3'	9.79	131.45	119.70
2	B	1641	A	N7-C8-N9	-9.79	108.90	113.80
2	B	2801	G	O4'-C1'-N9	9.79	116.03	108.20
1	A	33	G	C8-N9-C4	-9.79	102.48	106.40
2	B	1299	G	N1-C6-O6	9.79	125.77	119.90
2	B	2313	C	C5-C6-N1	9.79	125.89	121.00
2	B	743	A	C6-C5-N7	-9.78	125.45	132.30
2	B	2813	A	C8-N9-C4	-9.78	101.89	105.80
2	B	89	A	N1-C2-N3	-9.78	124.41	129.30
2	B	183	C	N3-C4-N4	9.78	124.85	118.00
2	B	1430	G	O4'-C1'-N9	9.78	116.03	108.20
2	B	2107	G	N1-C2-N3	-9.78	118.03	123.90
2	B	2815	C	O4'-C1'-N1	9.78	116.02	108.20
8	N	12	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	A	39	A	C5-C6-N6	-9.78	115.88	123.70
2	B	1411	U	C5-C4-O4	-9.78	120.03	125.90
2	B	1093	G	C5-C6-O6	-9.77	122.73	128.60
2	B	371	A	C4-C5-C6	9.77	121.89	117.00
2	B	1645	G	C5-C6-O6	-9.77	122.74	128.60
2	B	2675	A	N7-C8-N9	-9.77	108.91	113.80
2	B	2679	A	N7-C8-N9	-9.77	108.91	113.80
2	B	2831	G	C5-C6-O6	-9.77	122.74	128.60
2	B	110	G	N3-C2-N2	9.77	126.74	119.90
2	B	1730	C	C5-C4-N4	-9.77	113.36	120.20
2	B	836	G	N9-C4-C5	-9.77	101.49	105.40
2	B	439	A	N9-C4-C5	-9.76	101.89	105.80
2	B	1231	U	O4'-C1'-N1	9.76	116.01	108.20
2	B	181	A	N1-C2-N3	9.76	134.18	129.30
2	B	692	C	C2-N1-C1'	9.76	129.54	118.80
2	B	1131	G	C6-C5-N7	-9.76	124.54	130.40
2	B	2071	A	C5-N7-C8	9.76	108.78	103.90
2	B	861	A	C5-C6-N1	-9.76	112.82	117.70
2	B	1529	G	N1-C6-O6	9.76	125.75	119.90
2	B	2484	G	C5-N7-C8	9.76	109.18	104.30
2	B	2604	U	N3-C4-O4	9.75	126.23	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2061	G	O4'-C1'-N9	9.75	116.00	108.20
2	B	198	C	N3-C4-N4	9.75	124.83	118.00
2	B	502	A	C4-C5-C6	9.75	121.87	117.00
2	B	981	A	O4'-C4'-C3'	-9.75	94.25	104.00
2	B	1032	A	N9-C4-C5	-9.75	101.90	105.80
2	B	1185	G	C5-C6-O6	-9.75	122.75	128.60
2	B	1200	C	O4'-C1'-N1	9.75	116.00	108.20
2	B	1592	C	O4'-C1'-N1	9.75	116.00	108.20
2	B	2735	G	C5-C6-O6	-9.74	122.75	128.60
2	B	1791	A	N7-C8-N9	-9.74	108.93	113.80
2	B	393	C	O4'-C1'-N1	9.74	115.99	108.20
2	B	1673	G	N3-C4-C5	-9.74	123.73	128.60
2	B	2127	G	N1-C6-O6	9.74	125.74	119.90
2	B	2729	G	C5-C6-O6	-9.74	122.75	128.60
2	B	2373	G	C8-N9-C4	9.74	110.30	106.40
2	B	2700	A	C5-C6-N1	-9.74	112.83	117.70
2	B	1706	C	C2-N3-C4	-9.74	115.03	119.90
2	B	2484	G	O4'-C1'-N9	9.74	115.99	108.20
15	T	69	ARG	NE-CZ-NH2	-9.74	115.43	120.30
1	A	116	G	N1-C6-O6	9.73	125.74	119.90
2	B	382	A	N1-C6-N6	9.73	124.44	118.60
2	B	851	C	N3-C4-N4	9.73	124.81	118.00
19	X	314	ARG	NE-CZ-NH2	9.73	125.17	120.30
2	B	1529	G	C6-C5-N7	-9.73	124.56	130.40
2	B	107	G	N1-C2-N3	-9.73	118.06	123.90
2	B	657	U	C2-N3-C4	-9.73	121.16	127.00
2	B	2106	U	C2-N3-C4	-9.73	121.16	127.00
2	B	2128	G	C6-C5-N7	-9.73	124.56	130.40
2	B	925	A	N1-C2-N3	9.73	134.16	129.30
2	B	28	A	C8-N9-C4	9.72	109.69	105.80
2	B	211	C	O4'-C1'-N1	9.72	115.98	108.20
2	B	955	U	O4'-C1'-N1	9.72	115.98	108.20
2	B	1797	G	C8-N9-C4	-9.72	102.51	106.40
2	B	1568	G	N9-C4-C5	9.72	109.29	105.40
2	B	2421	G	N3-C2-N2	9.72	126.71	119.90
1	A	20	G	C5-N7-C8	9.72	109.16	104.30
2	B	71	A	C2-N3-C4	-9.72	105.74	110.60
2	B	494	G	C5-C6-O6	-9.72	122.77	128.60
2	B	2494	G	N1-C6-O6	9.72	125.73	119.90
2	B	1753	G	C5-N7-C8	-9.72	99.44	104.30
2	B	2045	C	N3-C4-N4	9.72	124.80	118.00
2	B	2247	A	O4'-C1'-N9	9.72	115.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2686	G	N1-C6-O6	9.72	125.73	119.90
2	B	2777	G	C5-C6-O6	-9.72	122.77	128.60
2	B	571	U	C5-C6-N1	9.72	127.56	122.70
2	B	1376	C	O4'-C1'-N1	9.72	115.97	108.20
2	B	1516	G	C6-C5-N7	-9.72	124.57	130.40
2	B	1815	A	N1-C6-N6	9.72	124.43	118.60
2	B	2456	C	C1'-O4'-C4'	-9.72	102.13	109.90
2	B	2474	U	C2-N1-C1'	9.72	129.36	117.70
2	B	2578	G	C5'-C4'-C3'	-9.72	100.45	116.00
2	B	737	C	C5-C4-N4	-9.71	113.40	120.20
2	B	1251	C	N3-C4-N4	9.71	124.80	118.00
2	B	1616	A	P-O3'-C3'	9.71	131.36	119.70
2	B	1779	U	C1'-O4'-C4'	-9.71	102.13	109.90
2	B	575	A	C8-N9-C4	-9.71	101.92	105.80
2	B	681	G	C5-C6-O6	-9.71	122.77	128.60
2	B	1008	A	C4-C5-C6	9.71	121.86	117.00
2	B	1405	U	O4'-C1'-N1	9.71	115.97	108.20
2	B	2749	A	C8-N9-C4	-9.71	101.92	105.80
2	B	632	A	C8-N9-C4	-9.71	101.92	105.80
2	B	2532	G	N1-C6-O6	9.71	125.72	119.90
2	B	2152	G	C5-C6-O6	-9.70	122.78	128.60
2	B	2571	U	O4'-C1'-N1	9.70	115.96	108.20
2	B	231	A	N1-C2-N3	9.70	134.15	129.30
2	B	644	A	P-O3'-C3'	-9.70	108.06	119.70
2	B	2795	C	O4'-C1'-N1	9.70	115.96	108.20
2	B	855	G	N3-C2-N2	9.70	126.69	119.90
2	B	818	G	C4-C5-N7	9.70	114.68	110.80
2	B	2083	G	N7-C8-N9	-9.70	108.25	113.10
2	B	1573	G	C5-C6-O6	-9.70	122.78	128.60
2	B	1707	G	N9-C4-C5	-9.70	101.52	105.40
2	B	2815	C	N3-C4-C5	-9.70	118.02	121.90
2	B	937	C	P-O3'-C3'	-9.69	108.07	119.70
19	X	26	ARG	NE-CZ-NH1	9.69	125.14	120.30
2	B	2033	A	O4'-C1'-N9	9.69	115.95	108.20
2	B	112	U	O4'-C1'-N1	9.69	115.95	108.20
2	B	1463	C	N3-C4-C5	-9.69	118.03	121.90
2	B	2546	U	O4'-C1'-N1	9.69	115.95	108.20
2	B	2713	U	C2-N1-C1'	9.69	129.32	117.70
2	B	2799	A	P-O3'-C3'	9.69	131.32	119.70
1	A	67	G	C5-C6-O6	-9.68	122.79	128.60
2	B	784	G	N1-C2-N3	-9.68	118.09	123.90
2	B	1953	A	C4-C5-N7	-9.68	105.86	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	O	99	TYR	CB-CG-CD1	-9.68	115.19	121.00
2	B	846	U	C2-N3-C4	-9.68	121.19	127.00
2	B	2012	G	N7-C8-N9	9.68	117.94	113.10
2	B	2753	A	C5-C6-N6	-9.68	115.95	123.70
2	B	613	A	P-O5'-C5'	-9.68	105.41	120.90
2	B	1281	G	N7-C8-N9	-9.68	108.26	113.10
2	B	1494	A	C6-C5-N7	-9.68	125.52	132.30
2	B	752	A	C5-N7-C8	-9.68	99.06	103.90
2	B	1581	G	C2-N3-C4	9.68	116.74	111.90
2	B	1927	A	C5-C6-N6	-9.68	115.96	123.70
2	B	2037	A	C4-C5-C6	9.68	121.84	117.00
2	B	2251	G	N1-C2-N3	-9.68	118.09	123.90
2	B	2759	G	N1-C6-O6	9.68	125.71	119.90
1	A	39	A	N9-C4-C5	9.68	109.67	105.80
2	B	1593	A	N1-C6-N6	9.68	124.41	118.60
2	B	1616	A	N1-C6-N6	9.68	124.41	118.60
2	B	2114	A	C5-C6-N1	-9.68	112.86	117.70
2	B	856	G	N7-C8-N9	-9.67	108.26	113.10
2	B	912	C	P-O5'-C5'	9.67	136.38	120.90
2	B	1038	G	C5-C6-O6	-9.67	122.80	128.60
2	B	1124	G	N1-C6-O6	9.67	125.70	119.90
2	B	1327	A	C4-C5-C6	9.67	121.84	117.00
2	B	1349	C	N3-C4-C5	-9.67	118.03	121.90
2	B	2730	C	N3-C4-N4	9.67	124.77	118.00
14	D	77	ARG	NE-CZ-NH2	9.67	125.14	120.30
2	B	772	C	C5'-C4'-C3'	9.67	131.47	116.00
2	B	786	C	N3-C4-N4	9.67	124.77	118.00
2	B	2870	C	O4'-C1'-N1	9.67	115.94	108.20
2	B	899	A	N9-C1'-C2'	-9.67	101.36	112.00
2	B	1380	G	C4-C5-N7	-9.67	106.93	110.80
2	B	2868	A	N1-C6-N6	9.66	124.40	118.60
1	A	23	G	C5-C6-O6	-9.66	122.80	128.60
2	B	205	G	O4'-C1'-C2'	-9.66	96.14	105.80
2	B	532	A	C5-C6-N6	-9.66	115.97	123.70
2	B	1083	U	O4'-C1'-N1	9.66	115.93	108.20
2	B	1496	A	N1-C6-N6	9.66	124.40	118.60
2	B	1891	G	C4-C5-C6	9.66	124.60	118.80
2	B	2465	C	O4'-C1'-N1	9.66	115.93	108.20
2	B	2547	A	C5'-C4'-C3'	9.66	131.46	116.00
2	B	1849	G	N1-C2-N3	-9.66	118.10	123.90
2	B	2173	A	C5'-C4'-C3'	9.66	131.46	116.00
2	B	2278	A	C5'-C4'-O4'	9.66	120.69	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2428	G	C4-C5-N7	-9.66	106.94	110.80
2	B	1080	A	C5-C6-N6	-9.66	115.97	123.70
2	B	1177	G	P-O5'-C5'	9.66	136.35	120.90
2	B	1551	A	C5-C6-N6	-9.66	115.97	123.70
2	B	2001	C	C5-C6-N1	-9.65	116.17	121.00
2	B	2467	C	N3-C4-N4	9.65	124.76	118.00
2	B	2775	G	C5-C6-O6	-9.65	122.81	128.60
2	B	1665	A	C1'-O4'-C4'	-9.65	102.18	109.90
2	B	2026	U	O4'-C1'-N1	9.65	115.92	108.20
2	B	793	A	C5-N7-C8	9.65	108.72	103.90
2	B	1248	G	O4'-C1'-N9	9.65	115.92	108.20
2	B	1503	A	O4'-C1'-N9	9.65	115.92	108.20
2	B	2220	U	C2-N3-C4	9.65	132.79	127.00
2	B	2260	C	N3-C4-N4	9.65	124.75	118.00
2	B	10	A	C5-C6-N6	-9.65	115.98	123.70
2	B	698	C	C2-N3-C4	9.65	124.72	119.90
2	B	2010	G	N1-C6-O6	9.65	125.69	119.90
2	B	1802	A	C5-C6-N6	-9.65	115.98	123.70
2	B	2873	A	C5-N7-C8	9.65	108.72	103.90
22	3	12	ARG	NE-CZ-NH2	-9.64	115.48	120.30
2	B	1378	A	C5-N7-C8	9.64	108.72	103.90
2	B	1672	A	C5-N7-C8	9.64	108.72	103.90
2	B	2312	U	N3-C4-C5	-9.64	108.81	114.60
2	B	1913	A	C4-C5-C6	9.64	121.82	117.00
2	B	2748	A	N1-C6-N6	9.64	124.38	118.60
2	B	105	C	C6-N1-C2	-9.64	116.44	120.30
2	B	1186	G	O4'-C1'-N9	9.64	115.91	108.20
2	B	1048	A	N1-C6-N6	9.64	124.38	118.60
2	B	1540	G	C6-C5-N7	-9.64	124.62	130.40
2	B	1727	C	C4-C5-C6	9.64	122.22	117.40
2	B	2459	A	C4-C5-C6	9.64	121.82	117.00
2	B	1133	A	C5-C6-N6	-9.63	115.99	123.70
2	B	1698	A	N7-C8-N9	-9.63	108.98	113.80
2	B	2482	A	N9-C4-C5	-9.63	101.95	105.80
8	N	106	ASP	CB-CG-OD1	-9.63	109.63	118.30
1	A	4	C	N1-C2-O2	9.63	124.68	118.90
2	B	1093	G	N3-C2-N2	9.63	126.64	119.90
2	B	1574	C	O4'-C1'-N1	9.63	115.91	108.20
2	B	188	G	N9-C4-C5	-9.63	101.55	105.40
2	B	19	A	C4-C5-C6	9.63	121.81	117.00
2	B	1799	G	O4'-C1'-N9	9.63	115.90	108.20
31	I	7	TYR	CB-CG-CD1	-9.63	115.22	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	60	C	N3-C4-C5	-9.63	118.05	121.90
2	B	248	G	N1-C2-N3	-9.63	118.12	123.90
2	B	1106	G	O4'-C1'-N9	9.63	115.90	108.20
2	B	147	C	C4-C5-C6	9.62	122.21	117.40
2	B	2447	G	C5-N7-C8	-9.62	99.49	104.30
1	A	16	G	N1-C6-O6	9.62	125.67	119.90
2	B	66	C	N1-C2-O2	9.62	124.67	118.90
2	B	1953	A	C4-C5-C6	9.62	121.81	117.00
2	B	2903	U	C6-N1-C1'	-9.62	107.73	121.20
2	B	80	G	C6-C5-N7	-9.62	124.63	130.40
2	B	2337	G	N3-C2-N2	9.62	126.63	119.90
2	B	216	A	C2-N3-C4	9.62	115.41	110.60
2	B	1969	A	C6-N1-C2	9.62	124.37	118.60
2	B	2800	A	O4'-C1'-N9	9.62	115.89	108.20
2	B	364	C	N3-C4-C5	-9.61	118.06	121.90
2	B	1005	C	O4'-C1'-N1	9.62	115.89	108.20
2	B	1913	A	C5-C6-N1	-9.62	112.89	117.70
2	B	2635	A	C4-C5-C6	9.62	121.81	117.00
2	B	2666	C	N3-C4-N4	9.61	124.73	118.00
2	B	876	C	O4'-C1'-N1	9.61	115.89	108.20
2	B	246	C	N3-C4-C5	-9.61	118.06	121.90
2	B	602	A	C5-C6-N6	-9.61	116.01	123.70
2	B	1057	A	C4-C5-N7	-9.61	105.90	110.70
2	B	1553	A	C5-C6-N6	-9.61	116.01	123.70
2	B	1696	G	C5-C6-N1	9.61	116.30	111.50
2	B	1832	C	O4'-C1'-N1	9.61	115.89	108.20
2	B	2369	A	C5-N7-C8	9.61	108.70	103.90
2	B	2529	G	N1-C6-O6	9.61	125.67	119.90
2	B	986	C	O4'-C1'-N1	9.61	115.88	108.20
2	B	1965	C	N3-C4-N4	9.61	124.72	118.00
11	Q	69	ARG	NE-CZ-NH1	9.61	125.10	120.30
2	B	708	G	C8-N9-C4	-9.60	102.56	106.40
2	B	1187	G	N3-C2-N2	9.60	126.62	119.90
2	B	1191	G	N7-C8-N9	-9.60	108.30	113.10
2	B	1304	A	C8-N9-C4	-9.60	101.96	105.80
2	B	1331	G	C4-C5-C6	9.60	124.56	118.80
2	B	1695	G	C4-C5-C6	9.60	124.56	118.80
11	Q	105	PHE	CB-CG-CD1	-9.60	114.08	120.80
1	A	108	A	C5-C6-N6	-9.60	116.02	123.70
2	B	1302	A	N1-C2-N3	9.60	134.10	129.30
1	A	61	G	C5-C6-O6	-9.60	122.84	128.60
2	B	1385	A	P-O3'-C3'	9.60	131.22	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2503	A	C5-C6-N1	-9.60	112.90	117.70
2	B	1271	G	N3-C4-C5	-9.59	123.80	128.60
2	B	1701	A	C4-C5-C6	9.59	121.80	117.00
2	B	1157	G	N3-C4-C5	-9.59	123.81	128.60
2	B	2826	A	N1-C2-N3	9.59	134.09	129.30
2	B	2040	G	N9-C4-C5	-9.59	101.56	105.40
2	B	1657	U	C3'-C2'-C1'	-9.59	93.83	101.50
2	B	1726	C	C5-C6-N1	9.59	125.79	121.00
2	B	2451	A	C4-C5-C6	9.59	121.79	117.00
2	B	359	G	C8-N9-C4	-9.58	102.57	106.40
2	B	378	C	C6-N1-C2	9.58	124.13	120.30
2	B	717	C	N1-C2-O2	9.58	124.65	118.90
2	B	743	A	P-O3'-C3'	-9.58	108.20	119.70
2	B	1151	A	N7-C8-N9	-9.58	109.01	113.80
2	B	1344	U	O4'-C1'-C2'	9.58	116.22	107.60
2	B	1992	G	C5-C6-O6	9.58	134.35	128.60
2	B	2534	A	O4'-C1'-N9	9.58	115.86	108.20
2	B	207	A	C4-C5-N7	-9.58	105.91	110.70
2	B	2558	C	O4'-C1'-N1	9.58	115.86	108.20
2	B	2678	C	O4'-C1'-N1	9.58	115.86	108.20
2	B	2719	G	C2-N3-C4	9.58	116.69	111.90
2	B	2700	A	C4-C5-C6	9.58	121.79	117.00
2	B	631	A	O4'-C1'-N9	9.58	115.86	108.20
2	B	785	G	N1-C6-O6	9.58	125.65	119.90
2	B	1271	G	C5'-C4'-O4'	9.58	120.59	109.10
2	B	1663	G	C6-C5-N7	-9.58	124.65	130.40
2	B	2089	C	C5-C4-N4	-9.58	113.50	120.20
2	B	729	G	O4'-C1'-N9	9.57	115.86	108.20
2	B	1640	A	C5-C6-N6	-9.57	116.04	123.70
2	B	496	G	N3-C4-C5	-9.57	123.81	128.60
2	B	543	G	O4'-C1'-N9	9.57	115.86	108.20
2	B	909	A	C4-C5-C6	9.57	121.78	117.00
2	B	978	G	N1-C2-N3	-9.57	118.16	123.90
2	B	1593	A	C8-N9-C4	-9.57	101.97	105.80
2	B	2802	G	C4-C5-N7	9.57	114.63	110.80
26	8	4	ARG	NE-CZ-NH2	-9.57	115.51	120.30
2	B	1952	A	N1-C2-N3	9.57	134.09	129.30
2	B	2684	U	O4'-C1'-N1	9.57	115.86	108.20
2	B	2778	A	C4-C5-C6	9.57	121.78	117.00
1	A	50	A	C5-N7-C8	9.57	108.68	103.90
2	B	2697	G	C4-N9-C1'	-9.57	114.06	126.50
1	A	36	C	N3-C4-N4	9.56	124.69	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	67	G	C4-C5-C6	9.56	124.54	118.80
2	B	936	A	C5-C6-N6	-9.56	116.05	123.70
2	B	1710	G	C6-C5-N7	-9.56	124.66	130.40
2	B	2618	G	N1-C2-N3	-9.56	118.16	123.90
2	B	2662	A	N1-C6-N6	9.56	124.34	118.60
2	B	398	C	N3-C4-N4	9.56	124.69	118.00
2	B	883	G	C6-C5-N7	-9.56	124.66	130.40
2	B	1633	G	N3-C2-N2	9.56	126.59	119.90
2	B	1806	C	C5'-C4'-C3'	9.56	131.30	116.00
2	B	2428	G	C8-N9-C4	-9.56	102.58	106.40
2	B	2901	C	O4'-C1'-N1	9.56	115.85	108.20
2	B	866	A	N1-C6-N6	9.56	124.33	118.60
2	B	1831	G	N1-C6-O6	9.56	125.63	119.90
2	B	2157	G	C5'-C4'-C3'	9.56	131.29	116.00
2	B	2485	G	C5-C6-O6	-9.56	122.87	128.60
2	B	2761	A	C2-N3-C4	-9.56	105.82	110.60
2	B	207	A	O4'-C1'-N9	9.56	115.84	108.20
2	B	2004	G	N1-C6-O6	9.56	125.63	119.90
2	B	543	G	C5-C6-N1	-9.55	106.72	111.50
2	B	685	A	C5-C6-N1	-9.55	112.92	117.70
2	B	1311	G	O4'-C1'-N9	9.55	115.84	108.20
2	B	1426	G	N9-C4-C5	-9.55	101.58	105.40
2	B	2693	G	P-O5'-C5'	9.55	136.18	120.90
2	B	2806	C	O4'-C1'-N1	9.55	115.84	108.20
2	B	8	C	C2-N3-C4	9.55	124.67	119.90
2	B	1644	C	N3-C4-C5	-9.55	118.08	121.90
2	B	308	G	N3-C2-N2	9.55	126.58	119.90
1	A	102	G	C4-C5-C6	9.54	124.53	118.80
2	B	685	A	C5-C6-N6	-9.54	116.06	123.70
2	B	1540	G	N3-C4-C5	9.55	133.37	128.60
2	B	1614	A	C8-N9-C4	9.54	109.62	105.80
2	B	2162	G	C8-N9-C1'	-9.54	114.59	127.00
2	B	2677	G	N9-C4-C5	-9.55	101.58	105.40
2	B	2763	G	N3-C2-N2	9.54	126.58	119.90
1	A	101	A	N1-C6-N6	9.54	124.33	118.60
1	A	113	C	N3-C4-N4	9.54	124.68	118.00
2	B	1266	G	C5-C6-O6	-9.54	122.88	128.60
2	B	2425	A	C5-C6-N6	-9.54	116.07	123.70
2	B	2120	G	C5-C6-N1	-9.54	106.73	111.50
2	B	2158	A	C5-C6-N1	-9.54	112.93	117.70
2	B	1377	G	C5-C6-O6	-9.54	122.88	128.60
2	B	573	U	C5-C6-N1	-9.54	117.93	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	637	A	N1-C2-N3	9.54	134.07	129.30
2	B	2678	C	N1-C2-N3	-9.54	112.52	119.20
2	B	264	C	O4'-C1'-N1	9.54	115.83	108.20
2	B	2679	A	C5-C6-N1	-9.53	112.93	117.70
27	C	45	ASN	N-CA-C	-9.54	85.26	111.00
2	B	1450	G	N3-C2-N2	9.53	126.57	119.90
2	B	2365	G	N1-C2-N2	-9.53	107.62	116.20
2	B	2759	G	C5-C6-N1	-9.53	106.73	111.50
2	B	585	G	C2-N3-C4	9.53	116.66	111.90
2	B	2803	G	C5-C6-O6	-9.53	122.88	128.60
2	B	558	U	C5'-C4'-C3'	9.53	131.24	116.00
2	B	1213	A	N9-C4-C5	9.53	109.61	105.80
2	B	2383	G	C4-C5-C6	9.53	124.52	118.80
2	B	2651	C	C5-C4-N4	-9.53	113.53	120.20
32	J	35	ARG	NE-CZ-NH2	-9.53	115.54	120.30
2	B	461	C	N3-C4-C5	-9.52	118.09	121.90
2	B	484	C	N3-C4-C5	-9.52	118.09	121.90
2	B	1794	A	N1-C6-N6	9.52	124.31	118.60
2	B	840	C	O4'-C1'-N1	9.52	115.82	108.20
2	B	1583	A	C4-C5-C6	9.52	121.76	117.00
2	B	2067	G	P-O5'-C5'	9.52	136.13	120.90
1	A	97	C	N3-C4-N4	9.52	124.66	118.00
2	B	340	A	O4'-C1'-N9	9.52	115.82	108.20
2	B	194	G	C5-C6-O6	-9.52	122.89	128.60
2	B	1710	G	N3-C2-N2	9.52	126.56	119.90
2	B	2622	U	C5-C4-O4	9.52	131.61	125.90
2	B	149	A	N1-C2-N3	9.52	134.06	129.30
2	B	305	C	O4'-C1'-N1	9.52	115.81	108.20
2	B	1271	G	C4-C5-C6	9.52	124.51	118.80
2	B	573	U	C5'-C4'-C3'	-9.52	100.78	116.00
2	B	1608	A	C4-C5-C6	9.52	121.76	117.00
2	B	295	G	N1-C2-N3	-9.51	118.19	123.90
2	B	609	A	C5'-C4'-C3'	9.51	131.22	116.00
2	B	651	G	C5-C6-O6	-9.51	122.89	128.60
2	B	725	G	O4'-C1'-N9	9.51	115.81	108.20
2	B	1921	G	N1-C6-O6	9.51	125.61	119.90
7	M	50	ARG	NE-CZ-NH1	-9.51	115.55	120.30
2	B	412	A	C4-C5-N7	-9.51	105.95	110.70
2	B	563	A	C8-N9-C4	-9.51	102.00	105.80
2	B	889	C	O4'-C1'-N1	9.51	115.81	108.20
2	B	896	A	N7-C8-N9	9.51	118.55	113.80
2	B	1636	U	N3-C4-O4	9.51	126.05	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1771	C	N3-C4-C5	-9.51	118.10	121.90
2	B	1996	C	C6-N1-C2	-9.51	116.50	120.30
2	B	2748	A	C5'-C4'-O4'	9.50	120.50	109.10
2	B	922	C	N3-C4-N4	9.50	124.65	118.00
2	B	2119	A	P-O3'-C3'	9.50	131.10	119.70
2	B	2345	G	C8-N9-C4	-9.50	102.60	106.40
2	B	134	G	C4-C5-C6	9.50	124.50	118.80
2	B	1442	U	C5-C6-N1	9.50	127.45	122.70
2	B	158	U	O4'-C1'-N1	9.49	115.80	108.20
2	B	374	A	C5'-C4'-C3'	-9.49	100.81	116.00
2	B	2497	A	C2-N3-C4	-9.49	105.85	110.60
2	B	146	A	C5-N7-C8	9.49	108.65	103.90
2	B	1496	A	C4-C5-C6	9.49	121.75	117.00
2	B	2067	G	C8-N9-C4	-9.49	102.60	106.40
2	B	448	U	P-O3'-C3'	9.49	131.09	119.70
2	B	1541	C	O4'-C1'-N1	9.49	115.79	108.20
2	B	1548	A	O4'-C1'-N9	9.49	115.79	108.20
23	5	78	PHE	CB-CG-CD1	-9.49	114.16	120.80
4	K	18	ARG	NE-CZ-NH1	9.49	125.04	120.30
2	B	911	A	C4-C5-C6	9.48	121.74	117.00
2	B	2165	C	N3-C4-N4	9.48	124.64	118.00
2	B	2379	G	C6-C5-N7	-9.48	124.71	130.40
2	B	2362	C	N3-C4-C5	-9.48	118.11	121.90
2	B	786	C	C5-C4-N4	-9.48	113.56	120.20
2	B	940	G	C8-N9-C4	9.48	110.19	106.40
2	B	1247	A	O4'-C1'-N9	9.48	115.78	108.20
2	B	1411	U	N3-C4-O4	9.48	126.03	119.40
2	B	121	G	N3-C2-N2	9.48	126.53	119.90
2	B	400	G	O4'-C1'-N9	9.48	115.78	108.20
2	B	780	G	N9-C4-C5	-9.48	101.61	105.40
2	B	796	C	C1'-O4'-C4'	-9.48	102.32	109.90
2	B	1137	G	N1-C6-O6	9.48	125.59	119.90
2	B	1212	G	P-O5'-C5'	9.48	136.06	120.90
2	B	1450	G	N1-C6-O6	9.48	125.59	119.90
2	B	2895	G	O4'-C1'-N9	9.48	115.78	108.20
2	B	1202	G	C2-N3-C4	9.47	116.64	111.90
2	B	1371	G	P-O3'-C3'	-9.47	108.33	119.70
2	B	1523	U	C6-N1-C1'	-9.47	107.94	121.20
2	B	2873	A	C5-C6-N6	-9.47	116.12	123.70
2	B	2316	G	C8-N9-C4	-9.47	102.61	106.40
2	B	2623	G	N1-C2-N3	-9.47	118.22	123.90
2	B	278	A	N1-C2-N3	9.47	134.03	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	783	A	C3'-C2'-C1'	9.47	109.08	101.50
2	B	1104	C	C6-N1-C2	-9.47	116.51	120.30
2	B	1821	A	N3-C4-C5	-9.47	120.17	126.80
19	X	227	ARG	NE-CZ-NH2	9.47	125.03	120.30
2	B	2347	C	C5-C4-N4	-9.47	113.57	120.20
2	B	1975	G	C4-C5-C6	9.47	124.48	118.80
2	B	1996	C	N3-C4-C5	-9.46	118.11	121.90
2	B	2550	G	P-O5'-C5'	9.46	136.04	120.90
2	B	56	A	O4'-C1'-N9	9.46	115.77	108.20
2	B	959	A	N1-C2-N3	9.46	134.03	129.30
2	B	1041	G	O4'-C1'-N9	9.46	115.77	108.20
2	B	1402	U	O4'-C1'-N1	9.46	115.77	108.20
30	H	25	TYR	CB-CG-CD1	9.46	126.68	121.00
1	A	36	C	C5-C4-N4	-9.46	113.58	120.20
2	B	43	G	C6-C5-N7	-9.46	124.72	130.40
2	B	189	G	C8-N9-C4	-9.46	102.62	106.40
2	B	1919	A	N1-C2-N3	9.46	134.03	129.30
1	A	95	U	O4'-C1'-N1	9.46	115.76	108.20
2	B	2250	G	N1-C6-O6	9.45	125.57	119.90
1	A	43	C	O4'-C1'-N1	9.45	115.76	108.20
2	B	5	A	C5-C6-N1	-9.45	112.97	117.70
2	B	89	A	C2-N3-C4	9.45	115.33	110.60
2	B	445	C	C2-N3-C4	9.45	124.62	119.90
2	B	446	G	N3-C4-C5	-9.45	123.87	128.60
2	B	1820	U	C1'-O4'-C4'	-9.45	102.34	109.90
2	B	1903	G	N3-C2-N2	-9.45	113.28	119.90
2	B	560	C	C5-C4-N4	-9.45	113.58	120.20
2	B	1106	G	C5-C6-O6	-9.45	122.93	128.60
2	B	289	G	O4'-C1'-N9	9.45	115.76	108.20
2	B	449	A	O4'-C1'-N9	9.45	115.76	108.20
2	B	1482	G	O4'-C1'-N9	9.45	115.76	108.20
2	B	1599	U	N1-C2-N3	9.45	120.57	114.90
2	B	672	C	O4'-C1'-C2'	9.45	116.10	107.60
2	B	1768	C	N1-C2-N3	-9.45	112.59	119.20
2	B	2388	A	N9-C4-C5	9.45	109.58	105.80
2	B	28	A	C5-C6-N1	-9.45	112.98	117.70
2	B	16	C	C5-C6-N1	9.44	125.72	121.00
2	B	163	C	O4'-C1'-N1	9.44	115.75	108.20
2	B	569	U	N1-C2-O2	-9.44	116.19	122.80
2	B	869	G	N3-C2-N2	9.44	126.51	119.90
2	B	921	C	O4'-C1'-N1	9.44	115.75	108.20
2	B	1000	A	C5-N7-C8	-9.44	99.18	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1280	G	N9-C4-C5	9.44	109.18	105.40
2	B	1731	G	C6-C5-N7	-9.44	124.73	130.40
2	B	569	U	C4-C5-C6	9.44	125.36	119.70
2	B	680	C	C5-C4-N4	-9.44	113.59	120.20
2	B	772	C	C4-C5-C6	9.44	122.12	117.40
2	B	1768	C	C6-N1-C2	9.44	124.08	120.30
2	B	2004	G	N7-C8-N9	-9.44	108.38	113.10
2	B	2375	G	P-O3'-C3'	9.44	131.03	119.70
2	B	1288	G	O4'-C1'-N9	9.43	115.75	108.20
2	B	1680	U	P-O5'-C5'	-9.43	105.81	120.90
2	B	2267	A	C6-C5-N7	-9.43	125.70	132.30
2	B	1772	A	C5-C6-N1	-9.43	112.98	117.70
2	B	306	U	O4'-C1'-N1	9.43	115.74	108.20
2	B	636	G	C5-C6-O6	-9.43	122.94	128.60
2	B	1320	C	P-O3'-C3'	9.43	131.01	119.70
2	B	2281	A	C8-N9-C4	9.43	109.57	105.80
2	B	848	C	O4'-C1'-N1	9.43	115.74	108.20
2	B	179	C	N3-C4-C5	-9.43	118.13	121.90
2	B	1521	G	C5-C6-O6	-9.43	122.94	128.60
2	B	2162	G	C4-N9-C1'	9.43	138.75	126.50
2	B	1106	G	N1-C6-O6	9.42	125.55	119.90
2	B	1269	A	C8-N9-C4	-9.42	102.03	105.80
2	B	1558	C	C6-N1-C2	9.42	124.07	120.30
2	B	1751	U	O4'-C1'-N1	9.42	115.74	108.20
2	B	1847	A	C5-C6-N1	-9.42	112.99	117.70
2	B	1929	G	C4-N9-C1'	9.42	138.75	126.50
2	B	2027	G	N3-C2-N2	9.42	126.50	119.90
2	B	2313	C	C2-N3-C4	9.42	124.61	119.90
2	B	2604	U	C6-N1-C2	-9.42	115.35	121.00
2	B	295	G	C5-C6-O6	-9.42	122.95	128.60
2	B	189	G	N3-C2-N2	9.42	126.49	119.90
2	B	1197	G	N3-C2-N2	9.42	126.49	119.90
2	B	1803	A	P-O3'-C3'	9.42	131.00	119.70
2	B	274	C	C2-N3-C4	9.41	124.61	119.90
2	B	469	G	C5-N7-C8	9.41	109.01	104.30
2	B	1123	C	C5-C4-N4	-9.41	113.61	120.20
2	B	1639	C	O4'-C1'-N1	9.41	115.73	108.20
2	B	1690	A	C5-N7-C8	9.41	108.61	103.90
2	B	1822	C	N3-C4-N4	9.41	124.59	118.00
1	A	66	A	P-O3'-C3'	9.41	130.99	119.70
2	B	2816	G	N1-C6-O6	9.41	125.55	119.90
2	B	244	A	N1-C2-N3	9.41	134.00	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	300	A	C5-C6-N1	-9.41	113.00	117.70
2	B	1514	G	C6-C5-N7	-9.41	124.75	130.40
2	B	2112	G	C6-C5-N7	-9.41	124.75	130.40
2	B	113	U	C2-N1-C1'	9.41	128.99	117.70
2	B	480	A	C5-C6-N1	-9.41	113.00	117.70
2	B	1700	A	N1-C6-N6	9.41	124.24	118.60
1	A	29	A	N9-C4-C5	-9.40	102.04	105.80
2	B	1048	A	O4'-C1'-N9	9.40	115.72	108.20
2	B	1393	A	C5-C6-N1	-9.40	113.00	117.70
2	B	1594	U	C5-C6-N1	9.40	127.40	122.70
30	H	50	ARG	NE-CZ-NH1	9.40	125.00	120.30
2	B	2598	A	C6-N1-C2	-9.40	112.96	118.60
2	B	1281	G	P-O3'-C3'	9.40	130.98	119.70
2	B	1304	A	C4-C5-C6	9.40	121.70	117.00
2	B	1757	A	C5-C6-N6	-9.40	116.18	123.70
1	A	102	G	C5-C6-O6	-9.39	122.96	128.60
2	B	675	A	C5'-C4'-C3'	-9.39	100.97	116.00
2	B	961	C	C2-N3-C4	9.39	124.60	119.90
2	B	2255	G	O4'-C1'-N9	9.39	115.72	108.20
2	B	2290	G	C5-C6-O6	-9.39	122.96	128.60
22	3	39	ARG	NE-CZ-NH2	9.39	125.00	120.30
2	B	1179	G	C5'-C4'-C3'	-9.39	100.97	116.00
2	B	2644	G	C8-N9-C4	9.39	110.16	106.40
2	B	514	A	C5-C6-N6	-9.39	116.19	123.70
2	B	1798	U	N3-C4-C5	-9.39	108.97	114.60
2	B	2682	A	N1-C6-N6	9.39	124.23	118.60
2	B	2805	C	O4'-C1'-N1	9.39	115.71	108.20
2	B	294	A	C5-C6-N6	-9.39	116.19	123.70
2	B	327	G	N1-C6-O6	9.39	125.53	119.90
1	A	4	C	C6-N1-C1'	-9.38	109.54	120.80
2	B	1175	A	C5-N7-C8	9.38	108.59	103.90
2	B	1552	A	C5-C6-N6	-9.39	116.19	123.70
2	B	2740	A	C5-C6-N6	-9.39	116.19	123.70
2	B	2161	C	O4'-C1'-N1	9.38	115.71	108.20
2	B	327	G	O4'-C1'-N9	9.38	115.70	108.20
2	B	745	G	C2-N3-C4	9.38	116.59	111.90
2	B	1656	C	C5-C4-N4	-9.38	113.63	120.20
2	B	1753	G	N7-C8-N9	9.38	117.79	113.10
2	B	2648	G	C6-C5-N7	-9.38	124.77	130.40
2	B	393	C	C5-C4-N4	-9.38	113.63	120.20
2	B	1323	C	O4'-C1'-N1	9.38	115.70	108.20
2	B	1801	A	C4-C5-N7	-9.38	106.01	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2030	A	C5-C6-N1	-9.38	113.01	117.70
2	B	706	A	C4-C5-C6	9.38	121.69	117.00
2	B	1494	A	C5-C6-N6	-9.38	116.20	123.70
2	B	1048	A	C8-N9-C4	-9.37	102.05	105.80
2	B	1369	G	P-O5'-C5'	9.38	135.90	120.90
2	B	1661	G	N1-C2-N3	-9.38	118.27	123.90
2	B	1928	A	C5-N7-C8	9.38	108.59	103.90
2	B	2758	A	N7-C8-N9	-9.38	109.11	113.80
2	B	2760	C	O4'-C1'-N1	9.37	115.70	108.20
2	B	27	G	N9-C4-C5	9.37	109.15	105.40
2	B	100	U	P-O3'-C3'	9.37	130.95	119.70
2	B	668	A	C5-C6-N6	-9.37	116.20	123.70
2	B	1036	G	C8-N9-C4	-9.37	102.65	106.40
2	B	1451	C	N3-C4-C5	-9.37	118.15	121.90
2	B	1799	G	N9-C4-C5	9.37	109.15	105.40
2	B	3	U	N3-C2-O2	-9.37	115.64	122.20
2	B	2275	C	N3-C4-C5	-9.37	118.15	121.90
2	B	2481	G	C5-C6-O6	-9.37	122.98	128.60
2	B	1792	G	N3-C2-N2	9.37	126.46	119.90
2	B	320	A	C5-C6-N1	-9.37	113.02	117.70
2	B	439	A	C5-C6-N6	-9.37	116.21	123.70
2	B	516	C	N3-C4-C5	-9.37	118.15	121.90
2	B	541	A	C4-C5-C6	9.37	121.68	117.00
2	B	912	C	N3-C4-C5	-9.37	118.15	121.90
2	B	1821	A	C5-N7-C8	9.37	108.58	103.90
2	B	168	G	C5-C6-O6	-9.36	122.98	128.60
2	B	1278	C	O4'-C1'-N1	9.36	115.69	108.20
2	B	1699	G	C6-C5-N7	-9.36	124.78	130.40
2	B	1373	A	N1-C6-N6	9.36	124.22	118.60
2	B	2560	A	N1-C6-N6	9.36	124.22	118.60
2	B	273	G	C6-C5-N7	-9.36	124.78	130.40
2	B	863	A	C4-C5-C6	9.36	121.68	117.00
2	B	2425	A	C4-C5-C6	9.36	121.68	117.00
2	B	2466	C	O4'-C1'-N1	9.36	115.69	108.20
2	B	2478	A	N1-C6-N6	9.36	124.22	118.60
2	B	1079	C	O4'-C1'-N1	9.36	115.69	108.20
2	B	2118	U	O4'-C1'-N1	9.36	115.69	108.20
2	B	1768	C	N3-C4-C5	-9.35	118.16	121.90
2	B	145	C	C6-N1-C2	-9.35	116.56	120.30
2	B	2735	G	N1-C6-O6	9.35	125.51	119.90
2	B	590	A	C4-C5-C6	9.35	121.67	117.00
2	B	1910	G	O4'-C1'-N9	9.34	115.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2340	A	C4-C5-N7	-9.34	106.03	110.70
2	B	278	A	C1'-O4'-C4'	-9.34	102.43	109.90
2	B	816	C	N3-C4-C5	-9.34	118.16	121.90
2	B	1516	G	C2-N3-C4	-9.34	107.23	111.90
2	B	1749	A	N3-C4-C5	-9.34	120.26	126.80
2	B	1798	U	C5'-C4'-C3'	9.34	130.94	116.00
2	B	2248	C	O4'-C1'-N1	9.34	115.67	108.20
2	B	410	G	P-O5'-C5'	9.34	135.84	120.90
2	B	1427	A	O4'-C1'-N9	9.34	115.67	108.20
2	B	52	A	C5-C6-N1	-9.34	113.03	117.70
2	B	1166	G	O4'-C1'-N9	9.34	115.67	108.20
2	B	1207	C	C4-C5-C6	9.34	122.07	117.40
2	B	2403	C	C5-C6-N1	9.33	125.67	121.00
2	B	2789	C	C6-N1-C2	-9.33	116.57	120.30
2	B	2066	C	O4'-C1'-N1	9.33	115.66	108.20
2	B	2176	A	C8-N9-C4	-9.33	102.07	105.80
2	B	2502	G	O4'-C1'-N9	9.33	115.66	108.20
30	H	25	TYR	CB-CG-CD2	-9.33	115.40	121.00
2	B	2569	G	N3-C2-N2	9.32	126.43	119.90
2	B	2590	A	O4'-C1'-N9	9.32	115.66	108.20
2	B	1457	U	P-O3'-C3'	9.32	130.89	119.70
2	B	1734	G	C6-C5-N7	-9.32	124.81	130.40
2	B	2278	A	C4-C5-C6	9.32	121.66	117.00
2	B	2541	A	C5-C6-N6	-9.32	116.24	123.70
2	B	2620	C	O4'-C1'-N1	9.32	115.66	108.20
1	A	109	A	C2-N3-C4	-9.32	105.94	110.60
2	B	2358	A	C2-N3-C4	-9.32	105.94	110.60
2	B	219	A	O4'-C1'-N9	9.32	115.65	108.20
2	B	1048	A	C4-C5-C6	9.32	121.66	117.00
2	B	1351	C	O4'-C1'-N1	9.32	115.65	108.20
2	B	2273	A	N7-C8-N9	-9.32	109.14	113.80
2	B	686	U	P-O5'-C5'	9.31	135.80	120.90
2	B	1730	C	O4'-C1'-N1	9.31	115.65	108.20
2	B	1473	G	P-O3'-C3'	-9.31	108.52	119.70
2	B	1495	A	C5-C6-N6	-9.31	116.25	123.70
2	B	2793	C	C6-N1-C2	-9.31	116.58	120.30
2	B	502	A	C1'-O4'-C4'	9.31	117.35	109.90
2	B	1759	A	N9-C4-C5	9.31	109.52	105.80
2	B	1916	A	C5-C6-N6	-9.31	116.25	123.70
2	B	2848	G	N1-C6-O6	9.31	125.49	119.90
2	B	490	C	O4'-C1'-N1	9.31	115.64	108.20
2	B	535	G	C6-N1-C2	-9.31	119.52	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1430	G	C5-C6-O6	-9.31	123.02	128.60
2	B	115	C	O4'-C1'-N1	9.30	115.64	108.20
2	B	676	A	N1-C6-N6	9.30	124.18	118.60
2	B	1115	G	N1-C2-N3	-9.31	118.32	123.90
2	B	2100	G	C5-C6-O6	-9.30	123.02	128.60
2	B	1974	C	N3-C4-C5	-9.30	118.18	121.90
2	B	2842	G	C4-C5-N7	-9.30	107.08	110.80
2	B	36	G	N3-C2-N2	9.30	126.41	119.90
2	B	942	G	C8-N9-C4	-9.30	102.68	106.40
2	B	1765	U	P-O3'-C3'	-9.30	108.54	119.70
2	B	2277	G	C2-N3-C4	9.30	116.55	111.90
2	B	392	U	C2-N3-C4	-9.30	121.42	127.00
2	B	2278	A	O4'-C1'-N9	9.30	115.64	108.20
2	B	362	A	C2-N3-C4	9.30	115.25	110.60
2	B	535	G	N1-C6-O6	9.29	125.48	119.90
2	B	1941	C	C5-C4-N4	-9.29	113.69	120.20
2	B	2145	C	C2-N1-C1'	9.29	129.02	118.80
2	B	2503	A	O4'-C1'-N9	9.29	115.64	108.20
2	B	265	A	N7-C8-N9	-9.29	109.15	113.80
2	B	395	U	O4'-C1'-N1	9.29	115.63	108.20
2	B	2270	A	C5-C6-N1	-9.29	113.06	117.70
2	B	2312	U	N3-C4-O4	9.29	125.90	119.40
2	B	726	G	C4-C5-C6	9.29	124.37	118.80
2	B	1095	A	C5-C6-N6	-9.29	116.27	123.70
2	B	2054	A	C4-C5-C6	9.29	121.64	117.00
2	B	2261	C	O4'-C1'-N1	9.29	115.63	108.20
2	B	2475	C	C2-N3-C4	-9.29	115.25	119.90
2	B	1981	A	N1-C2-N3	9.29	133.94	129.30
2	B	492	A	N7-C8-N9	-9.29	109.16	113.80
2	B	2570	G	C5'-C4'-C3'	-9.29	101.14	116.00
2	B	2440	C	C5'-C4'-C3'	9.28	130.85	116.00
1	A	87	U	O4'-C1'-N1	9.28	115.63	108.20
2	B	1459	G	P-O3'-C3'	9.28	130.84	119.70
2	B	831	G	C8-N9-C4	9.28	110.11	106.40
2	B	1886	U	C1'-O4'-C4'	-9.28	102.47	109.90
2	B	1706	C	C5'-C4'-C3'	-9.28	101.15	116.00
2	B	223	A	C2-N3-C4	9.28	115.24	110.60
2	B	229	C	C2-N3-C4	-9.28	115.26	119.90
2	B	1396	U	C2-N1-C1'	9.28	128.83	117.70
2	B	289	G	N1-C2-N3	-9.28	118.33	123.90
2	B	2547	A	N7-C8-N9	-9.28	109.16	113.80
1	A	24	G	C5-C6-N1	-9.28	106.86	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	524	G	C8-N9-C4	9.28	110.11	106.40
2	B	44	A	C5-C6-N6	-9.27	116.28	123.70
2	B	650	C	C2-N3-C4	9.27	124.54	119.90
2	B	1130	U	C2-N3-C4	-9.27	121.44	127.00
2	B	1300	G	C5-N7-C8	9.27	108.94	104.30
2	B	2745	C	N3-C4-N4	9.27	124.49	118.00
1	A	38	C	C6-N1-C2	9.27	124.01	120.30
2	B	951	C	C5-C6-N1	9.27	125.64	121.00
2	B	216	A	N7-C8-N9	-9.27	109.17	113.80
2	B	1700	A	C5-C6-N1	-9.27	113.07	117.70
2	B	1703	G	C2-N3-C4	-9.27	107.27	111.90
2	B	319	G	C6-C5-N7	-9.27	124.84	130.40
2	B	352	A	C5-C6-N6	-9.27	116.29	123.70
2	B	1143	A	N1-C6-N6	9.27	124.16	118.60
2	B	1658	C	N1-C2-O2	9.27	124.46	118.90
2	B	2125	G	C5-N7-C8	-9.27	99.67	104.30
2	B	1024	G	N3-C2-N2	9.26	126.39	119.90
2	B	2053	G	P-O3'-C3'	-9.26	108.58	119.70
11	Q	35	PHE	CB-CG-CD1	-9.26	114.31	120.80
2	B	1125	G	P-O3'-C3'	9.26	130.81	119.70
2	B	1343	G	N1-C6-O6	9.26	125.46	119.90
2	B	1634	A	C5-C6-N6	-9.26	116.29	123.70
2	B	2076	U	O4'-C1'-N1	9.26	115.61	108.20
2	B	2090	A	N3-C4-C5	-9.26	120.32	126.80
2	B	2649	C	P-O3'-C3'	-9.26	108.59	119.70
2	B	92	U	O4'-C1'-N1	9.26	115.61	108.20
2	B	528	A	C5-C6-N6	-9.26	116.29	123.70
2	B	1359	A	C8-N9-C4	-9.26	102.10	105.80
2	B	216	A	C5-C6-N6	-9.26	116.30	123.70
2	B	2804	U	N1-C2-N3	9.26	120.45	114.90
2	B	2834	G	C6-C5-N7	-9.26	124.85	130.40
2	B	1294	U	C4-C5-C6	-9.25	114.15	119.70
2	B	2061	G	C3'-C2'-C1'	9.25	108.90	101.50
2	B	556	A	N1-C6-N6	9.25	124.15	118.60
2	B	2370	G	N1-C6-O6	9.25	125.45	119.90
2	B	1102	C	O4'-C1'-N1	9.25	115.60	108.20
2	B	1186	G	C5-C6-O6	-9.25	123.05	128.60
2	B	1237	A	N7-C8-N9	-9.25	109.17	113.80
2	B	1419	A	C4'-C3'-C2'	9.25	111.85	102.60
2	B	2472	G	N1-C6-O6	9.25	125.45	119.90
2	B	337	C	C6-N1-C2	-9.25	116.60	120.30
2	B	666	A	C5-C6-N6	-9.25	116.30	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1813	G	C4-C5-N7	9.25	114.50	110.80
2	B	402	A	C6-N1-C2	-9.24	113.05	118.60
2	B	554	U	C2-N3-C4	-9.24	121.45	127.00
2	B	1186	G	C2-N3-C4	-9.24	107.28	111.90
2	B	1493	C	C6-N1-C1'	-9.24	109.71	120.80
2	B	2601	C	C5-C6-N1	9.24	125.62	121.00
2	B	1208	C	C5-C6-N1	9.24	125.62	121.00
2	B	1333	G	N3-C4-C5	-9.24	123.98	128.60
2	B	1661	G	N7-C8-N9	-9.24	108.48	113.10
2	B	2426	A	C8-N9-C4	9.24	109.50	105.80
2	B	2627	G	C5-C6-O6	-9.24	123.05	128.60
2	B	2868	A	C5-C6-N1	-9.24	113.08	117.70
2	B	2539	C	N3-C4-N4	9.24	124.47	118.00
1	A	102	G	N1-C6-O6	9.24	125.44	119.90
2	B	2036	C	N3-C4-N4	9.24	124.47	118.00
2	B	2270	A	C8-N9-C4	-9.24	102.10	105.80
2	B	2369	A	C6-N1-C2	-9.24	113.06	118.60
2	B	990	A	N1-C6-N6	9.24	124.14	118.60
2	B	1951	U	C6-N1-C2	-9.24	115.46	121.00
2	B	2077	A	C5-C6-N6	-9.24	116.31	123.70
2	B	2792	A	C5-C6-N1	-9.24	113.08	117.70
2	B	457	A	C5'-C4'-O4'	9.23	120.18	109.10
2	B	671	C	O4'-C1'-N1	9.23	115.59	108.20
2	B	1032	A	C8-N9-C4	9.23	109.49	105.80
2	B	1160	G	C5-C6-O6	-9.23	123.06	128.60
2	B	1957	C	C5-C6-N1	9.23	125.62	121.00
2	B	2445	G	C5-C6-N1	9.23	116.11	111.50
2	B	1902	C	N3-C4-N4	9.23	124.46	118.00
2	B	1952	A	C4-C5-C6	9.23	121.61	117.00
2	B	2426	A	N1-C6-N6	9.23	124.14	118.60
2	B	2509	G	N3-C2-N2	9.23	126.36	119.90
5	L	59	ARG	NE-CZ-NH1	9.23	124.91	120.30
2	B	14	A	C6-C5-N7	-9.23	125.84	132.30
2	B	498	G	C4-C5-N7	9.23	114.49	110.80
2	B	833	A	C5-C6-N6	-9.23	116.32	123.70
2	B	992	C	N3-C4-C5	-9.23	118.21	121.90
2	B	1333	G	C8-N9-C4	-9.23	102.71	106.40
2	B	2614	A	O3'-P-O5'	-9.23	86.47	104.00
1	A	15	A	C2-N3-C4	-9.22	105.99	110.60
2	B	321	U	O4'-C1'-N1	9.22	115.58	108.20
2	B	507	A	N1-C6-N6	9.22	124.13	118.60
2	B	1656	C	C5'-C4'-C3'	-9.22	101.24	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2506	U	O4'-C1'-N1	9.22	115.58	108.20
2	B	943	A	C5'-C4'-C3'	-9.22	101.24	116.00
2	B	2756	U	P-O5'-C5'	9.22	135.65	120.90
31	I	102	ARG	NE-CZ-NH2	-9.22	115.69	120.30
2	B	468	G	N1-C6-O6	9.22	125.43	119.90
2	B	2231	U	O4'-C1'-N1	9.22	115.58	108.20
1	A	32	U	C5-C4-O4	-9.22	120.37	125.90
2	B	45	G	N1-C6-O6	9.22	125.43	119.90
2	B	587	C	N3-C4-N4	9.22	124.45	118.00
2	B	1034	G	O4'-C1'-N9	9.22	115.57	108.20
2	B	1727	C	N3-C4-N4	9.22	124.45	118.00
2	B	2053	G	C5-C6-O6	-9.22	123.07	128.60
2	B	276	U	O4'-C1'-N1	9.21	115.57	108.20
2	B	751	A	P-O3'-C3'	-9.21	108.64	119.70
2	B	920	A	C5'-C4'-C3'	9.22	130.75	116.00
2	B	1749	A	C4-C5-C6	9.22	121.61	117.00
2	B	1376	C	N3-C4-N4	9.21	124.45	118.00
2	B	2272	U	N1-C2-O2	-9.21	116.35	122.80
2	B	2761	A	N1-C2-N3	9.21	133.91	129.30
2	B	1345	C	N1-C2-O2	9.21	124.43	118.90
2	B	102	U	O4'-C1'-N1	9.21	115.57	108.20
2	B	128	C	C5-C4-N4	-9.21	113.75	120.20
2	B	1248	G	C5-C6-O6	-9.21	123.07	128.60
2	B	1984	G	N1-C6-O6	9.21	125.43	119.90
2	B	2018	G	C5-C6-N1	9.21	116.11	111.50
2	B	2281	A	C5-C6-N6	-9.21	116.33	123.70
2	B	1332	G	C5'-C4'-C3'	9.21	130.73	116.00
2	B	1165	A	C2-N3-C4	-9.21	106.00	110.60
2	B	1227	G	C5-C6-O6	-9.21	123.08	128.60
2	B	1706	C	N3-C4-N4	9.21	124.44	118.00
2	B	83	A	P-O3'-C3'	9.21	130.75	119.70
2	B	165	A	N7-C8-N9	-9.21	109.20	113.80
2	B	382	A	C4-C5-C6	9.21	121.60	117.00
2	B	579	G	N1-C6-O6	9.20	125.42	119.90
2	B	935	C	O4'-C1'-N1	9.21	115.56	108.20
2	B	1124	G	C5-C6-N1	9.20	116.10	111.50
2	B	1489	C	C4-C5-C6	9.21	122.00	117.40
2	B	640	C	C5-C6-N1	9.20	125.60	121.00
2	B	1994	C	C6-N1-C2	9.20	123.98	120.30
2	B	2120	G	C4-C5-C6	9.20	124.32	118.80
2	B	2246	G	C6-C5-N7	-9.20	124.88	130.40
2	B	1744	A	C4-C5-C6	9.20	121.60	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2325	G	N9-C4-C5	-9.20	101.72	105.40
2	B	563	A	N1-C2-N3	9.19	133.90	129.30
2	B	705	A	C5-C6-N1	-9.20	113.10	117.70
2	B	1488	C	C2-N3-C4	9.20	124.50	119.90
2	B	1983	G	C5-C6-O6	-9.20	123.08	128.60
2	B	2037	A	C5-N7-C8	9.19	108.50	103.90
2	B	2531	A	C5-N7-C8	9.19	108.50	103.90
2	B	484	C	O4'-C1'-N1	9.19	115.55	108.20
2	B	1333	G	C4-C5-C6	9.19	124.32	118.80
2	B	2219	U	N1-C2-N3	9.19	120.42	114.90
2	B	2436	G	O4'-C1'-N9	9.19	115.55	108.20
2	B	381	G	N9-C4-C5	9.19	109.08	105.40
2	B	1129	A	N1-C2-N3	9.19	133.89	129.30
2	B	2207	C	O4'-C1'-N1	9.19	115.55	108.20
2	B	882	G	N1-C2-N3	-9.19	118.39	123.90
2	B	1478	G	C5-C6-O6	-9.19	123.09	128.60
2	B	1756	G	C5-C6-N1	-9.19	106.91	111.50
2	B	974	G	N7-C8-N9	9.19	117.69	113.10
2	B	548	G	C5-C6-O6	-9.18	123.09	128.60
2	B	2186	G	C5-C6-N1	-9.18	106.91	111.50
2	B	2455	G	N3-C4-C5	-9.18	124.01	128.60
2	B	66	C	O4'-C1'-N1	9.18	115.54	108.20
2	B	867	C	O4'-C1'-N1	9.18	115.54	108.20
2	B	1085	A	N1-C6-N6	9.18	124.11	118.60
2	B	1555	G	C4-C5-N7	9.18	114.47	110.80
2	B	1906	G	C3'-C2'-C1'	9.18	108.84	101.50
2	B	2657	A	N1-C2-N3	9.18	133.89	129.30
2	B	57	C	N1-C2-O2	9.18	124.41	118.90
2	B	964	C	N3-C4-N4	9.18	124.42	118.00
2	B	1433	A	N9-C4-C5	9.18	109.47	105.80
2	B	1632	A	C2-N3-C4	-9.17	106.01	110.60
2	B	1977	A	C5-C6-N1	-9.17	113.11	117.70
2	B	1591	A	N1-C6-N6	9.17	124.10	118.60
2	B	2157	G	N3-C2-N2	9.17	126.32	119.90
2	B	1379	U	C2-N3-C4	-9.17	121.50	127.00
1	A	45	A	C5-N7-C8	9.17	108.48	103.90
2	B	117	G	N3-C2-N2	9.17	126.32	119.90
2	B	1306	C	C4-C5-C6	9.17	121.98	117.40
2	B	631	A	C5-N7-C8	9.17	108.48	103.90
2	B	1025	G	N7-C8-N9	9.17	117.68	113.10
2	B	1036	G	C5-C6-N1	-9.17	106.92	111.50
2	B	1235	G	N3-C4-N9	-9.17	120.50	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2364	C	C4-C5-C6	-9.17	112.81	117.40
2	B	950	G	N3-C2-N2	9.17	126.32	119.90
2	B	2741	A	C5-C6-N6	-9.17	116.37	123.70
2	B	700	G	N9-C1'-C2'	-9.16	101.92	112.00
2	B	1195	G	C4-C5-N7	9.16	114.47	110.80
2	B	1338	G	N1-C2-N3	-9.16	118.40	123.90
2	B	1969	A	N1-C6-N6	9.16	124.10	118.60
2	B	765	C	C5-C4-N4	-9.16	113.79	120.20
2	B	884	U	C5-C6-N1	9.16	127.28	122.70
2	B	2246	G	C5-C6-N1	-9.16	106.92	111.50
2	B	2369	A	O4'-C1'-N9	9.16	115.53	108.20
2	B	219	A	C4-C5-C6	9.16	121.58	117.00
2	B	1088	A	O4'-C1'-N9	9.16	115.53	108.20
2	B	2063	C	P-O3'-C3'	-9.16	108.71	119.70
2	B	2710	C	O4'-C1'-N1	9.16	115.52	108.20
2	B	1210	G	C6-C5-N7	-9.15	124.91	130.40
2	B	2032	G	N1-C2-N3	-9.15	118.41	123.90
2	B	199	A	P-O3'-C3'	-9.15	108.72	119.70
2	B	1325	U	C5-C6-N1	-9.15	118.12	122.70
2	B	2622	U	N3-C2-O2	-9.15	115.79	122.20
2	B	478	A	C8-N9-C4	-9.15	102.14	105.80
2	B	566	U	N3-C4-O4	9.15	125.81	119.40
2	B	772	C	N3-C4-N4	9.15	124.41	118.00
2	B	1172	C	N3-C4-C5	-9.15	118.24	121.90
2	B	1911	U	O4'-C1'-N1	9.15	115.52	108.20
2	B	2456	C	C2-N3-C4	9.15	124.48	119.90
2	B	2709	G	N1-C6-O6	9.15	125.39	119.90
2	B	1553	A	O4'-C1'-N9	9.15	115.52	108.20
2	B	1564	C	C5-C4-N4	-9.15	113.80	120.20
2	B	1986	C	O4'-C1'-N1	9.15	115.52	108.20
2	B	2114	A	C5-N7-C8	9.15	108.47	103.90
2	B	2297	A	C4-C5-C6	9.15	121.57	117.00
2	B	2425	A	C5-C6-N1	-9.15	113.13	117.70
2	B	121	G	N9-C4-C5	-9.14	101.74	105.40
2	B	319	G	O4'-C4'-C3'	-9.14	94.86	104.00
2	B	418	C	O4'-C1'-N1	9.14	115.52	108.20
2	B	1060	U	N3-C4-O4	9.14	125.80	119.40
2	B	1630	A	C5-C6-N6	-9.14	116.38	123.70
7	M	81	ARG	NE-CZ-NH2	-9.14	115.73	120.30
2	B	2502	G	C5-C6-N1	-9.14	106.93	111.50
2	B	22	C	C4-C5-C6	9.14	121.97	117.40
2	B	441	U	C5-C4-O4	-9.14	120.42	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	954	G	C2-N3-C4	9.14	116.47	111.90
2	B	1440	U	O4'-C1'-N1	9.14	115.51	108.20
2	B	1996	C	C5-C6-N1	9.14	125.57	121.00
2	B	2030	A	O4'-C1'-N9	9.14	115.51	108.20
2	B	2184	A	C6-C5-N7	-9.14	125.90	132.30
2	B	2590	A	N1-C6-N6	9.14	124.08	118.60
2	B	2734	A	C5-C6-N6	-9.14	116.39	123.70
2	B	2807	U	O4'-C1'-N1	9.14	115.51	108.20
2	B	211	C	N3-C4-N4	9.14	124.40	118.00
2	B	1157	G	C6-C5-N7	-9.14	124.92	130.40
2	B	1549	A	C2-N3-C4	9.14	115.17	110.60
2	B	1591	A	C5-C6-N6	-9.14	116.39	123.70
2	B	2258	C	N3-C4-N4	9.14	124.40	118.00
2	B	2323	G	C5-C6-O6	-9.14	123.12	128.60
2	B	252	G	N1-C6-O6	9.14	125.38	119.90
2	B	1268	A	C5-C6-N6	-9.13	116.39	123.70
2	B	1371	G	N3-C4-C5	-9.13	124.03	128.60
2	B	1854	A	C4-C5-N7	-9.13	106.13	110.70
2	B	2231	U	N3-C2-O2	9.13	128.59	122.20
1	A	18	G	C8-N9-C4	9.13	110.05	106.40
2	B	793	A	C4-C5-N7	-9.13	106.13	110.70
2	B	1002	G	C5-C6-O6	9.13	134.08	128.60
2	B	2153	C	N3-C4-N4	9.13	124.39	118.00
2	B	1473	G	C5-C6-N1	-9.13	106.93	111.50
2	B	1917	U	N1-C2-O2	-9.13	116.41	122.80
2	B	197	A	O4'-C1'-N9	9.13	115.50	108.20
2	B	1260	A	O4'-C1'-N9	9.13	115.50	108.20
2	B	2079	U	P-O3'-C3'	9.13	130.65	119.70
2	B	627	A	C5-C6-N6	-9.13	116.40	123.70
2	B	175	G	C2-N3-C4	-9.12	107.34	111.90
2	B	728	G	P-O3'-C3'	9.12	130.65	119.70
2	B	756	A	N7-C8-N9	-9.12	109.24	113.80
2	B	862	G	C5-C6-O6	-9.12	123.12	128.60
2	B	1055	G	P-O3'-C3'	9.12	130.65	119.70
2	B	1386	C	N3-C4-N4	9.12	124.39	118.00
2	B	572	A	O4'-C1'-N9	9.12	115.50	108.20
2	B	2631	G	N1-C2-N3	-9.12	118.43	123.90
2	B	2764	A	C8-N9-C4	-9.12	102.15	105.80
2	B	1655	A	C8-N9-C4	9.12	109.45	105.80
2	B	1948	G	C5-C6-O6	-9.12	123.13	128.60
2	B	458	G	N1-C2-N3	-9.12	118.43	123.90
2	B	2829	A	C2-N3-C4	-9.12	106.04	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	58	A	C6-C5-N7	-9.11	125.92	132.30
2	B	173	A	O4'-C1'-N9	9.11	115.49	108.20
2	B	187	G	N3-C2-N2	9.12	126.28	119.90
2	B	1655	A	O4'-C1'-N9	9.12	115.49	108.20
2	B	2797	U	C2-N1-C1'	9.12	128.64	117.70
2	B	208	C	C2-N3-C4	9.11	124.46	119.90
2	B	2062	A	N1-C2-N3	-9.11	124.74	129.30
2	B	2199	A	C5-C6-N6	-9.11	116.41	123.70
2	B	2828	G	C4-C5-C6	9.11	124.27	118.80
2	B	2828	G	O4'-C1'-N9	9.11	115.49	108.20
2	B	642	U	O4'-C1'-N1	9.11	115.49	108.20
2	B	1296	G	C2-N3-C4	9.11	116.46	111.90
2	B	1966	A	N1-C6-N6	9.11	124.07	118.60
2	B	2859	G	C4-C5-N7	9.11	114.44	110.80
29	G	108	PHE	CB-CG-CD1	-9.11	114.42	120.80
2	B	1389	G	C1'-O4'-C4'	-9.11	102.61	109.90
2	B	1914	C	N3-C4-N4	9.11	124.38	118.00
2	B	339	U	N3-C2-O2	9.11	128.57	122.20
2	B	1069	A	C5-C6-N1	-9.11	113.15	117.70
2	B	1147	A	O4'-C1'-N9	9.11	115.48	108.20
2	B	1529	G	C5-C6-O6	-9.11	123.14	128.60
2	B	2445	G	C2-N3-C4	9.11	116.45	111.90
2	B	2621	G	C6-C5-N7	-9.11	124.94	130.40
2	B	2677	G	C5'-C4'-C3'	9.11	130.57	116.00
2	B	2693	G	N1-C6-O6	9.11	125.36	119.90
1	A	58	A	C5-C6-N1	-9.10	113.15	117.70
2	B	2188	U	O4'-C1'-N1	9.10	115.48	108.20
2	B	630	G	N3-C2-N2	9.10	126.27	119.90
2	B	911	A	C4-C5-N7	-9.10	106.15	110.70
2	B	446	G	C4-C5-N7	-9.10	107.16	110.80
2	B	1120	G	C5-C6-O6	-9.10	123.14	128.60
2	B	1269	A	N1-C6-N6	9.10	124.06	118.60
2	B	1058	U	O4'-C1'-N1	9.10	115.48	108.20
2	B	1216	G	O4'-C1'-N9	9.10	115.48	108.20
2	B	1445	G	O4'-C1'-N9	9.10	115.48	108.20
2	B	2704	C	N3-C4-C5	-9.10	118.26	121.90
2	B	1085	A	C5-C6-N1	-9.10	113.15	117.70
2	B	1124	G	C8-N9-C4	-9.10	102.76	106.40
2	B	2822	G	C6-C5-N7	-9.10	124.94	130.40
2	B	2657	A	C8-N9-C4	9.09	109.44	105.80
2	B	48	G	C5-C6-O6	-9.09	123.14	128.60
2	B	315	G	N1-C6-O6	9.09	125.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	609	A	C6-N1-C2	9.09	124.06	118.60
24	6	12	ARG	NE-CZ-NH2	9.09	124.85	120.30
2	B	241	A	C4-C5-C6	9.09	121.55	117.00
2	B	571	U	P-O3'-C3'	9.09	130.61	119.70
2	B	709	U	N3-C2-O2	-9.09	115.84	122.20
2	B	1177	G	N1-C6-O6	9.09	125.35	119.90
2	B	2478	A	C5-C6-N6	-9.09	116.43	123.70
2	B	2542	A	N1-C2-N3	-9.09	124.76	129.30
1	A	102	G	N3-C4-C5	-9.09	124.06	128.60
2	B	1017	G	C3'-C2'-C1'	9.09	108.77	101.50
2	B	1272	A	C5'-C4'-O4'	9.09	120.00	109.10
2	B	1501	G	C4-C5-N7	-9.09	107.17	110.80
2	B	2545	G	N9-C4-C5	9.09	109.03	105.40
2	B	2598	A	C5-C6-N6	-9.09	116.43	123.70
29	G	163	TYR	CG-CD1-CE1	-9.09	114.03	121.30
1	A	92	C	C2-N3-C4	9.09	124.44	119.90
2	B	692	C	C5-C6-N1	9.09	125.54	121.00
2	B	1614	A	C5-C6-N1	-9.09	113.16	117.70
2	B	2481	G	C4-C5-C6	9.09	124.25	118.80
2	B	2709	G	C6-C5-N7	-9.09	124.95	130.40
2	B	377	G	C6-C5-N7	-9.08	124.95	130.40
2	B	565	C	C2-N3-C4	-9.08	115.36	119.90
2	B	8	C	N1-C2-O2	9.08	124.35	118.90
2	B	348	A	C5-N7-C8	9.08	108.44	103.90
2	B	402	A	C8-N9-C4	-9.08	102.17	105.80
2	B	675	A	N1-C6-N6	9.08	124.05	118.60
2	B	969	G	N1-C6-O6	9.08	125.35	119.90
2	B	585	G	N1-C2-N3	-9.08	118.45	123.90
2	B	1634	A	O4'-C1'-N9	9.08	115.46	108.20
2	B	2293	G	N3-C2-N2	9.08	126.25	119.90
2	B	132	G	C5-C6-O6	-9.08	123.15	128.60
2	B	1144	A	C8-N9-C4	-9.08	102.17	105.80
2	B	1763	G	C8-N9-C4	9.08	110.03	106.40
2	B	2406	A	P-O3'-C3'	9.08	130.59	119.70
2	B	2887	A	C4-C5-C6	9.08	121.54	117.00
2	B	2634	A	C4-C5-C6	9.07	121.54	117.00
2	B	129	C	O4'-C1'-N1	9.07	115.46	108.20
2	B	996	A	C5-C6-N1	-9.07	113.16	117.70
2	B	1359	A	O4'-C1'-N9	9.07	115.46	108.20
2	B	1960	A	N3-C4-C5	-9.07	120.45	126.80
2	B	2428	G	C4-C5-C6	9.07	124.24	118.80
2	B	783	A	C4-C5-C6	9.07	121.53	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1080	A	C5-C6-N1	-9.07	113.17	117.70
2	B	814	C	C4-C5-C6	-9.07	112.87	117.40
2	B	2009	A	C5-N7-C8	9.07	108.44	103.90
2	B	2273	A	C5-N7-C8	9.07	108.44	103.90
2	B	2621	G	N1-C6-O6	9.07	125.34	119.90
2	B	886	A	N1-C2-N3	9.07	133.83	129.30
2	B	2223	G	N1-C6-O6	9.07	125.34	119.90
2	B	2747	G	C4-C5-C6	9.07	124.24	118.80
11	Q	27	ARG	NE-CZ-NH1	9.07	124.83	120.30
28	F	149	ARG	NE-CZ-NH1	9.07	124.83	120.30
2	B	187	G	C6-C5-N7	-9.06	124.96	130.40
2	B	1798	U	N3-C4-O4	9.06	125.75	119.40
2	B	1320	C	N3-C4-C5	-9.06	118.28	121.90
2	B	2811	G	O4'-C1'-N9	9.06	115.45	108.20
2	B	1314	C	C5-C4-N4	-9.06	113.86	120.20
2	B	1496	A	C2-N3-C4	-9.06	106.07	110.60
2	B	1613	G	C2-N3-C4	-9.06	107.37	111.90
2	B	2773	C	N1-C2-N3	-9.06	112.86	119.20
2	B	323	C	C2-N3-C4	9.05	124.43	119.90
2	B	614	A	C5-C6-N1	-9.05	113.17	117.70
2	B	1078	U	C2-N3-C4	9.06	132.43	127.00
2	B	1903	G	C4-C5-C6	9.05	124.23	118.80
1	A	44	G	N9-C4-C5	-9.05	101.78	105.40
2	B	566	U	C1'-O4'-C4'	-9.05	102.66	109.90
2	B	2172	U	N1-C2-O2	-9.05	116.47	122.80
2	B	98	G	C5-C6-O6	-9.05	123.17	128.60
2	B	675	A	C2-N3-C4	-9.05	106.08	110.60
2	B	705	A	C8-N9-C4	-9.05	102.18	105.80
2	B	2047	C	P-O3'-C3'	-9.05	108.84	119.70
2	B	2374	C	O4'-C1'-N1	9.05	115.44	108.20
2	B	2719	G	C5-N7-C8	9.05	108.82	104.30
2	B	1593	A	N1-C2-N3	9.05	133.82	129.30
2	B	2804	U	C6-N1-C2	-9.05	115.57	121.00
2	B	24	G	P-O5'-C5'	-9.04	106.43	120.90
2	B	806	C	O4'-C1'-N1	9.04	115.44	108.20
2	B	1245	G	C5-C6-O6	-9.05	123.17	128.60
2	B	2047	C	C6-N1-C2	-9.05	116.68	120.30
2	B	1410	G	N1-C6-O6	9.04	125.33	119.90
2	B	2272	U	C4'-C3'-C2'	9.04	111.64	102.60
2	B	2522	U	C2-N3-C4	-9.04	121.57	127.00
2	B	2733	A	C4-C5-N7	-9.04	106.18	110.70
2	B	2739	U	C5-C4-O4	-9.04	120.47	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	102	G	C4-C5-N7	-9.04	107.18	110.80
2	B	430	A	C5-C6-N6	-9.04	116.47	123.70
2	B	1528	A	C5-C6-N1	-9.04	113.18	117.70
2	B	737	C	C5'-C4'-C3'	9.04	130.47	116.00
2	B	2576	G	O5'-C5'-C4'	-9.04	94.52	111.70
2	B	2775	G	N9-C4-C5	-9.04	101.78	105.40
2	B	2791	G	N1-C6-O6	9.04	125.32	119.90
2	B	1218	G	C5-N7-C8	9.04	108.82	104.30
2	B	1326	U	O4'-C4'-C3'	-9.04	94.96	104.00
2	B	2492	U	O4'-C1'-N1	9.04	115.43	108.20
2	B	2013	A	C5-C6-N6	-9.04	116.47	123.70
2	B	725	G	C6-C5-N7	-9.03	124.98	130.40
2	B	854	C	C6-N1-C2	-9.03	116.69	120.30
2	B	1110	G	N1-C6-O6	9.03	125.32	119.90
2	B	1398	C	N3-C4-N4	9.03	124.32	118.00
2	B	2062	A	C6-C5-N7	-9.03	125.98	132.30
2	B	2096	C	C6-N1-C2	-9.03	116.69	120.30
2	B	2211	A	O4'-C1'-N9	9.03	115.42	108.20
2	B	2297	A	C4-C5-N7	-9.03	106.18	110.70
2	B	2878	U	N3-C4-O4	9.03	125.72	119.40
2	B	1106	G	C4-C5-N7	-9.03	107.19	110.80
2	B	2212	A	N1-C6-N6	9.03	124.02	118.60
2	B	190	A	C5-C6-N6	-9.03	116.48	123.70
2	B	267	C	C5'-C4'-C3'	-9.03	101.56	116.00
2	B	2058	A	N1-C6-N6	9.03	124.02	118.60
2	B	2550	G	N1-C6-O6	9.03	125.32	119.90
2	B	1134	A	C4-C5-C6	9.02	121.51	117.00
2	B	1275	A	C8-N9-C1'	-9.02	111.46	127.70
2	B	1527	G	C5-C6-O6	9.02	134.01	128.60
2	B	1854	A	N3-C4-N9	-9.02	120.18	127.40
2	B	2884	U	C2-N1-C1'	9.02	128.53	117.70
2	B	1614	A	N7-C8-N9	-9.02	109.29	113.80
2	B	2019	A	C8-N9-C4	-9.02	102.19	105.80
2	B	886	A	C6-N1-C2	-9.02	113.19	118.60
2	B	1291	C	N3-C4-N4	9.02	124.31	118.00
2	B	2039	U	C5'-C4'-C3'	9.02	130.43	116.00
2	B	2307	G	C5-C6-N1	-9.02	106.99	111.50
2	B	2330	G	C5-C6-O6	-9.02	123.19	128.60
2	B	270	A	C4-C5-C6	9.02	121.51	117.00
2	B	1572	A	N1-C6-N6	9.02	124.01	118.60
2	B	2221	G	C5-C6-O6	-9.02	123.19	128.60
2	B	2242	G	N1-C6-O6	9.02	125.31	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2355	G	C5-C6-O6	-9.02	123.19	128.60
2	B	2371	G	C5-C6-O6	-9.02	123.19	128.60
2	B	107	G	N3-C2-N2	9.01	126.21	119.90
2	B	897	C	C5-C6-N1	9.01	125.51	121.00
2	B	2453	A	C6-C5-N7	-9.01	125.99	132.30
2	B	2682	A	C5-C6-N6	-9.01	116.49	123.70
2	B	2146	C	O4'-C1'-N1	9.01	115.41	108.20
2	B	835	C	O4'-C1'-N1	9.01	115.41	108.20
22	3	15	ARG	NE-CZ-NH2	9.01	124.81	120.30
2	B	1230	A	N1-C6-N6	9.01	124.00	118.60
2	B	1631	G	N3-C4-C5	9.01	133.10	128.60
2	B	936	A	C5-C6-N1	9.01	122.20	117.70
2	B	950	G	N1-C6-O6	9.01	125.30	119.90
2	B	1969	A	N9-C4-C5	-9.01	102.20	105.80
2	B	556	A	C8-N9-C4	-9.01	102.20	105.80
2	B	1305	C	N3-C4-C5	-9.01	118.30	121.90
2	B	1459	G	N1-C2-N3	-9.01	118.50	123.90
2	B	2025	C	N3-C4-N4	9.01	124.30	118.00
2	B	212	G	C4-C5-N7	9.00	114.40	110.80
2	B	359	G	C2-N3-C4	9.00	116.40	111.90
2	B	593	U	C5-C4-O4	-9.00	120.50	125.90
2	B	950	G	N7-C8-N9	9.00	117.60	113.10
2	B	2198	A	C5-C6-N1	-9.00	113.20	117.70
2	B	655	A	N1-C6-N6	9.00	124.00	118.60
2	B	1320	C	N3-C4-N4	9.00	124.30	118.00
2	B	2251	G	C3'-C2'-C1'	-9.00	94.30	101.50
27	C	101	ARG	NE-CZ-NH1	-9.00	115.80	120.30
2	B	320	A	P-O3'-C3'	9.00	130.50	119.70
2	B	678	C	N3-C4-N4	9.00	124.30	118.00
2	B	1191	G	N1-C6-O6	9.00	125.30	119.90
2	B	1913	A	C5-N7-C8	9.00	108.40	103.90
2	B	2012	G	N3-C2-N2	9.00	126.20	119.90
2	B	2328	A	N9-C4-C5	9.00	109.40	105.80
2	B	739	A	C2-N3-C4	-9.00	106.10	110.60
20	E	117	ARG	NE-CZ-NH1	9.00	124.80	120.30
2	B	922	C	C6-N1-C2	-9.00	116.70	120.30
2	B	1683	U	C5-C4-O4	-9.00	120.50	125.90
2	B	2287	A	C5-N7-C8	9.00	108.40	103.90
2	B	489	G	O4'-C1'-N9	8.99	115.39	108.20
2	B	1755	A	N1-C6-N6	8.99	124.00	118.60
2	B	1792	G	C4-C5-C6	8.99	124.20	118.80
2	B	1848	A	O4'-C1'-N9	8.99	115.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	488	G	N1-C2-N3	-8.99	118.50	123.90
2	B	527	C	N1-C2-O2	8.99	124.29	118.90
2	B	330	A	C4-C5-C6	8.99	121.49	117.00
2	B	531	C	P-O3'-C3'	-8.99	108.91	119.70
2	B	1216	G	C4-C5-N7	-8.99	107.20	110.80
2	B	1435	G	N1-C2-N3	-8.99	118.50	123.90
2	B	2293	G	C5-C6-N1	8.99	116.00	111.50
2	B	1722	A	C5'-C4'-C3'	-8.99	101.62	116.00
2	B	1990	C	C5-C4-N4	-8.99	113.91	120.20
2	B	391	A	C5-C6-N6	-8.99	116.51	123.70
2	B	1040	A	O4'-C1'-N9	8.99	115.39	108.20
2	B	1474	U	C2-N3-C4	-8.99	121.61	127.00
2	B	1511	G	O4'-C1'-N9	8.99	115.39	108.20
2	B	2135	A	C2-N3-C4	-8.98	106.11	110.60
2	B	1274	A	O4'-C1'-N9	8.98	115.39	108.20
2	B	2507	C	N3-C4-N4	8.98	124.29	118.00
2	B	2851	A	C5-C6-N6	-8.98	116.51	123.70
2	B	882	G	N3-C2-N2	8.98	126.19	119.90
2	B	975	A	P-O5'-C5'	-8.98	106.53	120.90
2	B	1984	G	C4-C5-C6	8.98	124.19	118.80
1	A	54	G	C6-C5-N7	-8.98	125.01	130.40
2	B	833	A	C5'-C4'-C3'	-8.98	101.63	116.00
2	B	1487	U	N3-C4-C5	8.98	119.99	114.60
2	B	893	C	O4'-C1'-N1	8.98	115.38	108.20
2	B	1120	G	O4'-C1'-N9	8.98	115.38	108.20
2	B	2435	A	C2-N3-C4	-8.98	106.11	110.60
2	B	81	G	C5-N7-C8	-8.97	99.81	104.30
2	B	429	A	N3-C4-C5	-8.97	120.52	126.80
2	B	1614	A	C5-C6-N6	-8.97	116.52	123.70
2	B	1646	C	P-O3'-C3'	-8.97	108.93	119.70
2	B	2218	G	O4'-C1'-N9	8.97	115.38	108.20
2	B	57	C	N1-C2-N3	-8.97	112.92	119.20
2	B	926	G	N1-C2-N3	-8.97	118.52	123.90
2	B	1964	G	C2-N3-C4	-8.97	107.42	111.90
2	B	592	A	C5-N7-C8	8.97	108.39	103.90
2	B	450	G	C4-C5-C6	8.97	124.18	118.80
2	B	821	A	C1'-O4'-C4'	-8.97	102.72	109.90
2	B	2193	G	N1-C2-N3	-8.97	118.52	123.90
2	B	2446	G	N1-C2-N3	-8.97	118.52	123.90
2	B	2484	G	N9-C4-C5	8.97	108.99	105.40
2	B	2485	G	O4'-C1'-N9	8.97	115.37	108.20
2	B	2630	G	N1-C6-O6	8.97	125.28	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1140	C	C3'-C2'-C1'	-8.96	94.33	101.50
1	A	46	A	N1-C2-N3	8.96	133.78	129.30
1	A	47	C	C6-N1-C2	-8.96	116.72	120.30
2	B	1287	A	O4'-C1'-N9	8.96	115.37	108.20
2	B	499	U	C5-C4-O4	-8.96	120.52	125.90
2	B	718	A	O4'-C1'-N9	8.96	115.37	108.20
2	B	1204	A	C4-C5-C6	8.96	121.48	117.00
2	B	1445	G	C5-C6-O6	-8.96	123.22	128.60
2	B	1768	C	O4'-C1'-N1	8.96	115.37	108.20
2	B	2145	C	N3-C4-C5	-8.96	118.31	121.90
2	B	1789	A	O4'-C1'-N9	8.96	115.37	108.20
2	B	2114	A	N1-C6-N6	8.96	123.98	118.60
1	A	63	C	O4'-C1'-N1	8.96	115.37	108.20
2	B	1449	G	N9-C4-C5	-8.96	101.82	105.40
2	B	254	G	C2-N3-C4	-8.96	107.42	111.90
2	B	926	G	N1-C6-O6	8.96	125.27	119.90
2	B	1825	U	N3-C4-O4	8.96	125.67	119.40
2	B	2037	A	C6-N1-C2	-8.96	113.23	118.60
2	B	2088	A	C5-C6-N1	-8.96	113.22	117.70
2	B	973	A	C5-C6-N6	-8.96	116.53	123.70
2	B	1216	G	N1-C6-O6	8.96	125.27	119.90
2	B	1998	A	O4'-C1'-N9	8.95	115.36	108.20
2	B	2057	G	P-O3'-C3'	-8.96	108.95	119.70
2	B	1658	C	O4'-C1'-N1	8.95	115.36	108.20
2	B	219	A	C6-C5-N7	-8.95	126.03	132.30
2	B	540	C	N3-C4-N4	8.95	124.27	118.00
2	B	2205	A	N7-C8-N9	-8.95	109.32	113.80
2	B	2334	U	C6-N1-C1'	-8.95	108.67	121.20
2	B	2899	A	C6-C5-N7	-8.95	126.03	132.30
2	B	1007	C	P-O5'-C5'	-8.95	106.58	120.90
2	B	223	A	C4-C5-C6	8.95	121.47	117.00
1	A	93	C	C4-C5-C6	8.95	121.87	117.40
2	B	879	G	C5-C6-O6	-8.95	123.23	128.60
2	B	2742	G	N3-C2-N2	8.95	126.16	119.90
14	D	77	ARG	NE-CZ-NH1	-8.95	115.83	120.30
2	B	547	A	C5-C6-N6	-8.95	116.54	123.70
2	B	1255	U	C1'-O4'-C4'	-8.95	102.74	109.90
2	B	1924	C	C5-C4-N4	-8.94	113.94	120.20
2	B	2251	G	P-O3'-C3'	8.95	130.43	119.70
2	B	2029	G	C8-N9-C4	-8.94	102.82	106.40
2	B	2525	G	C3'-C2'-C1'	8.94	108.66	101.50
8	N	80	PHE	N-CA-CB	8.94	126.70	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1134	A	C5-C6-N6	-8.94	116.55	123.70
2	B	1249	U	N3-C4-O4	8.94	125.66	119.40
2	B	412	A	C4-C5-C6	8.94	121.47	117.00
2	B	1396	U	C6-N1-C2	-8.94	115.64	121.00
2	B	1445	G	N1-C6-O6	8.94	125.26	119.90
2	B	1677	A	N1-C6-N6	8.94	123.96	118.60
2	B	2216	G	C5-C6-O6	-8.94	123.24	128.60
2	B	849	A	C6-C5-N7	-8.94	126.05	132.30
2	B	2738	A	N1-C6-N6	8.94	123.96	118.60
2	B	47	C	N3-C4-N4	8.93	124.25	118.00
2	B	1326	U	O4'-C1'-N1	8.93	115.35	108.20
2	B	1634	A	N9-C4-C5	8.93	109.37	105.80
2	B	1803	A	C6-N1-C2	-8.93	113.24	118.60
1	A	102	G	N1-C2-N2	-8.93	108.16	116.20
2	B	50	U	O4'-C1'-N1	8.93	115.34	108.20
2	B	485	C	C2-N3-C4	8.93	124.36	119.90
2	B	2543	G	P-O3'-C3'	8.93	130.42	119.70
2	B	2128	G	N3-C2-N2	8.93	126.15	119.90
2	B	2570	G	N3-C4-C5	-8.93	124.14	128.60
2	B	2655	G	N1-C6-O6	8.93	125.26	119.90
2	B	681	G	N1-C6-O6	8.93	125.25	119.90
2	B	1646	C	O4'-C1'-N1	8.93	115.34	108.20
2	B	2345	G	N9-C4-C5	8.93	108.97	105.40
2	B	1363	C	C6-N1-C2	-8.92	116.73	120.30
2	B	2284	A	N3-C4-C5	-8.92	120.55	126.80
2	B	2525	G	N1-C6-O6	8.92	125.25	119.90
2	B	1342	A	N1-C6-N6	8.92	123.95	118.60
2	B	1620	G	C5-N7-C8	8.92	108.76	104.30
2	B	2753	A	N1-C2-N3	8.92	133.76	129.30
2	B	27	G	C5-C6-O6	-8.92	123.25	128.60
2	B	1167	C	C6-N1-C2	8.92	123.87	120.30
2	B	1254	A	N1-C6-N6	8.92	123.95	118.60
2	B	2206	C	N3-C4-C5	-8.92	118.33	121.90
30	H	50	ARG	NE-CZ-NH2	-8.92	115.84	120.30
2	B	244	A	C5-N7-C8	8.91	108.36	103.90
2	B	409	G	C5-C6-O6	-8.91	123.25	128.60
2	B	555	G	C5-C6-O6	-8.91	123.25	128.60
2	B	595	C	C4-C5-C6	8.91	121.86	117.40
2	B	983	A	P-O3'-C3'	8.91	130.40	119.70
2	B	1067	A	N3-C4-C5	-8.91	120.56	126.80
2	B	1019	U	N3-C2-O2	8.91	128.44	122.20
2	B	1247	A	C6-C5-N7	-8.91	126.06	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1275	A	C5-C6-N6	-8.91	116.57	123.70
2	B	2128	G	P-O3'-C3'	-8.91	109.00	119.70
2	B	2434	A	N9-C4-C5	8.91	109.36	105.80
2	B	2662	A	N1-C2-N3	8.91	133.76	129.30
2	B	176	A	N1-C6-N6	8.91	123.95	118.60
1	A	101	A	C5-N7-C8	8.91	108.35	103.90
2	B	323	C	O4'-C1'-N1	8.91	115.33	108.20
2	B	930	G	N1-C6-O6	8.91	125.24	119.90
2	B	1324	G	C8-N9-C1'	-8.91	115.42	127.00
2	B	1964	G	C5-N7-C8	-8.91	99.85	104.30
2	B	144	A	C5-N7-C8	8.90	108.35	103.90
2	B	439	A	O4'-C1'-N9	8.90	115.32	108.20
2	B	1040	A	C5-C6-N1	8.90	122.15	117.70
2	B	2861	U	C2-N3-C4	-8.90	121.66	127.00
2	B	565	C	O4'-C1'-N1	8.90	115.32	108.20
2	B	2325	G	O4'-C1'-N9	8.90	115.32	108.20
2	B	2748	A	C5-C6-N6	-8.90	116.58	123.70
2	B	752	A	O4'-C1'-N9	8.90	115.32	108.20
2	B	892	A	C2-N3-C4	8.90	115.05	110.60
2	B	2669	G	N9-C4-C5	-8.90	101.84	105.40
1	A	14	U	C2-N1-C1'	8.90	128.38	117.70
2	B	1	G	O4'-C1'-N9	8.90	115.32	108.20
2	B	74	A	N1-C6-N6	8.90	123.94	118.60
2	B	484	C	N3-C4-N4	8.90	124.23	118.00
2	B	2178	C	N3-C4-C5	-8.90	118.34	121.90
2	B	2825	G	O4'-C1'-N9	8.90	115.32	108.20
2	B	2844	G	C5-C6-O6	-8.90	123.26	128.60
2	B	901	C	C5-C4-N4	8.89	126.42	120.20
2	B	2253	G	C2-N3-C4	8.89	116.35	111.90
2	B	1455	G	N7-C8-N9	-8.89	108.65	113.10
2	B	2425	A	O4'-C1'-N9	8.89	115.31	108.20
2	B	2278	A	C5-N7-C8	8.89	108.34	103.90
1	A	17	C	O4'-C1'-N1	8.89	115.31	108.20
2	B	649	G	C5-C6-O6	8.89	133.93	128.60
2	B	1492	G	C4-C5-C6	8.89	124.13	118.80
2	B	1943	U	C2-N3-C4	-8.89	121.67	127.00
2	B	2202	U	P-O3'-C3'	8.89	130.36	119.70
1	A	7	G	N3-C4-C5	-8.89	124.16	128.60
2	B	2632	A	N1-C6-N6	8.89	123.93	118.60
2	B	609	A	C8-N9-C4	-8.88	102.25	105.80
2	B	1122	G	P-O3'-C3'	-8.88	109.04	119.70
2	B	2165	C	C6-N1-C1'	-8.88	110.14	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	116	C	O4'-C1'-N1	8.88	115.31	108.20
2	B	261	G	N1-C6-O6	8.88	125.23	119.90
2	B	830	G	C6-C5-N7	-8.88	125.07	130.40
2	B	1251	C	N3-C4-C5	-8.88	118.35	121.90
2	B	1968	G	C6-C5-N7	-8.88	125.07	130.40
2	B	2547	A	N1-C6-N6	8.88	123.93	118.60
1	A	20	G	C4'-C3'-C2'	-8.88	93.72	102.60
2	B	220	G	N1-C2-N3	-8.88	118.57	123.90
2	B	419	U	C5-C6-N1	-8.88	118.26	122.70
2	B	819	A	C5-C6-N6	-8.88	116.60	123.70
2	B	907	G	N3-C4-C5	-8.88	124.16	128.60
2	B	976	G	C1'-O4'-C4'	-8.88	102.80	109.90
2	B	1339	G	N1-C2-N3	-8.88	118.57	123.90
2	B	1821	A	C2-N3-C4	8.88	115.04	110.60
2	B	226	A	N1-C6-N6	8.87	123.92	118.60
2	B	282	A	C4-C5-C6	8.88	121.44	117.00
2	B	756	A	C5-C6-N6	-8.88	116.60	123.70
2	B	1460	U	P-O5'-C5'	8.87	135.10	120.90
2	B	1529	G	C5'-C4'-C3'	-8.88	101.80	116.00
2	B	2151	U	N3-C4-O4	8.87	125.61	119.40
2	B	196	A	N9-C4-C5	-8.87	102.25	105.80
2	B	796	C	P-O3'-C3'	8.87	130.35	119.70
2	B	1276	A	C6-N1-C2	-8.87	113.28	118.60
2	B	1730	C	C5-C6-N1	8.87	125.44	121.00
2	B	1975	G	N1-C2-N3	-8.87	118.58	123.90
2	B	1779	U	C2-N3-C4	-8.87	121.68	127.00
2	B	1784	A	C8-N9-C4	-8.87	102.25	105.80
2	B	2719	G	C4-C5-N7	-8.87	107.25	110.80
2	B	1179	G	C5-N7-C8	8.87	108.73	104.30
2	B	2285	C	N3-C4-N4	8.87	124.21	118.00
2	B	1198	U	C4'-C3'-C2'	8.87	111.47	102.60
2	B	1421	G	O4'-C1'-N9	8.87	115.29	108.20
2	B	2512	C	C3'-C2'-C1'	-8.87	94.41	101.50
2	B	2660	A	C4-C5-C6	8.87	121.43	117.00
2	B	162	U	O4'-C1'-N1	8.87	115.29	108.20
2	B	2100	G	N3-C2-N2	8.86	126.11	119.90
2	B	117	G	C4-C5-C6	8.86	124.12	118.80
2	B	1272	A	C5-N7-C8	8.86	108.33	103.90
2	B	1507	C	N3-C4-N4	8.86	124.20	118.00
2	B	223	A	C5-C6-N1	-8.86	113.27	117.70
2	B	2333	A	C5-C6-N1	-8.86	113.27	117.70
2	B	2782	G	N1-C6-O6	8.86	125.22	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1300	G	O4'-C1'-N9	8.86	115.29	108.20
2	B	2766	A	C2-N3-C4	8.86	115.03	110.60
2	B	2818	U	O4'-C1'-N1	8.86	115.29	108.20
2	B	84	A	N1-C2-N3	8.85	133.73	129.30
2	B	134	G	C4-C5-N7	-8.85	107.26	110.80
2	B	330	A	C4-C5-N7	-8.85	106.27	110.70
2	B	412	A	N1-C6-N6	8.85	123.91	118.60
2	B	554	U	O4'-C1'-N1	8.85	115.28	108.20
2	B	673	C	C6-N1-C2	-8.85	116.76	120.30
2	B	1773	A	C2-N3-C4	-8.85	106.17	110.60
2	B	2206	C	C2-N3-C4	8.85	124.33	119.90
2	B	1086	A	C8-N9-C4	-8.85	102.26	105.80
2	B	1778	U	P-O5'-C5'	8.85	135.06	120.90
2	B	107	G	N9-C4-C5	8.85	108.94	105.40
2	B	2876	G	C5-C6-O6	-8.85	123.29	128.60
2	B	995	C	N3-C4-C5	-8.85	118.36	121.90
2	B	2173	A	C5-C6-N1	-8.85	113.28	117.70
2	B	2383	G	C6-C5-N7	-8.85	125.09	130.40
2	B	1152	C	N3-C4-N4	8.84	124.19	118.00
2	B	1550	C	C4-C5-C6	-8.84	112.98	117.40
2	B	1593	A	O4'-C1'-N9	8.84	115.27	108.20
2	B	2175	C	O4'-C1'-N1	8.84	115.28	108.20
2	B	415	A	C5'-C4'-C3'	8.84	130.15	116.00
2	B	2092	U	N1-C2-N3	-8.84	109.60	114.90
2	B	101	A	N7-C8-N9	-8.84	109.38	113.80
2	B	377	G	C4-C5-N7	8.84	114.34	110.80
2	B	1111	A	C6-C5-N7	-8.84	126.11	132.30
2	B	1461	C	C5-C4-N4	-8.84	114.01	120.20
2	B	1732	C	O4'-C1'-N1	8.84	115.27	108.20
2	B	172	A	C4-C5-C6	8.84	121.42	117.00
2	B	120	U	O4'-C1'-N1	8.84	115.27	108.20
2	B	206	U	C6-N1-C2	8.84	126.30	121.00
2	B	2813	A	O4'-C1'-N9	8.84	115.27	108.20
2	B	1902	C	C6-N1-C2	-8.83	116.77	120.30
2	B	572	A	N9-C1'-C2'	-8.83	102.28	112.00
2	B	2273	A	C4-C5-C6	8.83	121.42	117.00
2	B	2792	A	N1-C6-N6	8.83	123.90	118.60
2	B	209	C	O4'-C1'-N1	8.83	115.27	108.20
2	B	1025	G	O4'-C1'-N9	8.83	115.27	108.20
2	B	1410	G	C6-C5-N7	-8.83	125.10	130.40
2	B	1737	G	C1'-O4'-C4'	8.83	116.96	109.90
2	B	628	G	C6-C5-N7	-8.83	125.10	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1421	G	N3-C2-N2	8.83	126.08	119.90
2	B	359	G	N9-C4-C5	8.83	108.93	105.40
2	B	1498	C	N3-C4-N4	8.83	124.18	118.00
2	B	917	A	N7-C8-N9	8.83	118.21	113.80
2	B	1974	C	C6-N1-C2	8.83	123.83	120.30
28	F	142	TYR	CG-CD2-CE2	-8.83	114.24	121.30
2	B	1895	C	P-O5'-C5'	8.82	135.02	120.90
2	B	2049	G	N1-C2-N3	-8.82	118.61	123.90
2	B	2431	U	O4'-C1'-N1	8.82	115.26	108.20
2	B	2703	C	O4'-C1'-N1	8.82	115.26	108.20
2	B	163	C	C2-N1-C1'	8.82	128.50	118.80
2	B	330	A	C5-N7-C8	8.82	108.31	103.90
2	B	478	A	C5-C6-N6	-8.82	116.64	123.70
2	B	1386	C	N3-C4-C5	-8.82	118.37	121.90
1	A	88	C	C5-C4-N4	-8.82	114.03	120.20
2	B	421	C	N3-C4-C5	-8.82	118.37	121.90
2	B	1516	G	O4'-C1'-N9	8.82	115.25	108.20
2	B	1811	G	N1-C6-O6	8.82	125.19	119.90
2	B	2043	C	N3-C4-C5	-8.82	118.37	121.90
2	B	2051	A	C4-C5-C6	8.82	121.41	117.00
2	B	2348	U	O4'-C1'-N1	8.82	115.25	108.20
2	B	2195	U	O4'-C1'-N1	8.81	115.25	108.20
2	B	184	C	O4'-C1'-N1	8.81	115.25	108.20
2	B	760	G	N3-C2-N2	8.81	126.07	119.90
2	B	1054	A	N9-C4-C5	-8.81	102.28	105.80
2	B	2394	C	N1-C2-O2	8.81	124.19	118.90
1	A	61	G	N1-C2-N3	-8.81	118.61	123.90
2	B	244	A	C6-N1-C2	-8.81	113.31	118.60
2	B	651	G	N3-C2-N2	8.81	126.07	119.90
2	B	1307	A	C5-C6-N1	-8.81	113.29	117.70
2	B	879	G	N3-C4-N9	8.81	131.29	126.00
2	B	1895	C	O4'-C1'-N1	8.81	115.25	108.20
2	B	2309	A	P-O3'-C3'	-8.81	109.13	119.70
2	B	2659	G	C5-C6-O6	-8.81	123.31	128.60
2	B	183	C	O4'-C1'-N1	8.80	115.24	108.20
2	B	1212	G	C5-C6-O6	-8.81	123.32	128.60
2	B	1341	G	C6-C5-N7	-8.80	125.12	130.40
2	B	1417	C	P-O5'-C5'	8.80	134.99	120.90
2	B	1445	G	P-O3'-C3'	-8.80	109.14	119.70
2	B	2369	A	C5-C6-N1	8.80	122.10	117.70
2	B	56	A	N7-C8-N9	8.80	118.20	113.80
2	B	533	G	N1-C6-O6	8.80	125.18	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	654	A	P-O3'-C3'	8.80	130.26	119.70
2	B	738	G	N1-C6-O6	8.80	125.18	119.90
2	B	1192	G	C8-N9-C4	-8.80	102.88	106.40
2	B	131	A	C5-C6-N6	-8.80	116.66	123.70
2	B	226	A	N7-C8-N9	-8.80	109.40	113.80
2	B	958	U	O4'-C1'-N1	8.80	115.24	108.20
2	B	1258	U	O4'-C1'-N1	8.80	115.24	108.20
2	B	1136	G	P-O5'-C5'	-8.80	106.83	120.90
2	B	1452	G	N1-C6-O6	8.80	125.18	119.90
2	B	1940	U	O4'-C1'-N1	8.80	115.24	108.20
2	B	2340	A	O4'-C1'-N9	8.80	115.24	108.20
2	B	2490	G	N1-C6-O6	8.80	125.18	119.90
2	B	745	G	N3-C2-N2	8.80	126.06	119.90
2	B	2294	G	O4'-C1'-N9	8.80	115.24	108.20
2	B	2875	C	N3-C2-O2	-8.80	115.74	121.90
2	B	1077	A	C5-C6-N6	-8.79	116.66	123.70
2	B	2572	A	C6-N1-C2	-8.79	113.32	118.60
2	B	433	C	N3-C4-N4	8.79	124.16	118.00
2	B	944	C	C5-C6-N1	8.79	125.40	121.00
2	B	1403	A	C6-N1-C2	-8.79	113.32	118.60
2	B	165	A	C5-C6-N1	-8.79	113.30	117.70
2	B	1818	U	N3-C4-C5	-8.79	109.33	114.60
2	B	2519	U	C2-N3-C4	8.79	132.28	127.00
2	B	2848	G	C3'-C2'-C1'	-8.79	94.47	101.50
2	B	2001	C	O4'-C1'-N1	8.79	115.23	108.20
2	B	589	U	O4'-C1'-N1	8.79	115.23	108.20
2	B	778	G	C5-C6-O6	-8.79	123.33	128.60
2	B	1382	G	N3-C4-C5	8.79	132.99	128.60
2	B	1383	A	C4'-C3'-C2'	-8.79	93.81	102.60
2	B	1585	C	N3-C4-N4	8.79	124.15	118.00
1	A	52	A	O4'-C1'-N9	8.79	115.23	108.20
2	B	220	G	C4-C5-N7	-8.79	107.29	110.80
2	B	268	C	C2-N3-C4	8.79	124.29	119.90
2	B	1265	A	N1-C6-N6	8.79	123.87	118.60
2	B	1654	A	C4-C5-C6	8.79	121.39	117.00
2	B	1897	G	C6-C5-N7	-8.79	125.13	130.40
2	B	2600	A	N9-C4-C5	-8.79	102.29	105.80
2	B	1449	G	N1-C6-O6	8.78	125.17	119.90
30	H	132	PHE	CB-CG-CD2	-8.78	114.65	120.80
2	B	845	A	C4-C5-C6	8.78	121.39	117.00
2	B	1053	C	C2-N1-C1'	8.78	128.46	118.80
2	B	2100	G	C8-N9-C4	-8.78	102.89	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	J	74	TYR	CB-CG-CD2	-8.78	115.73	121.00
2	B	13	A	N1-C2-N3	8.78	133.69	129.30
2	B	813	U	N3-C4-C5	-8.78	109.33	114.60
2	B	1057	A	C5-C6-N1	-8.78	113.31	117.70
2	B	1353	A	C2-N3-C4	8.78	114.99	110.60
2	B	1393	A	C5-C6-N6	-8.78	116.68	123.70
2	B	2468	A	O4'-C1'-N9	8.78	115.22	108.20
2	B	542	C	O4'-C1'-N1	8.77	115.22	108.20
2	B	1223	G	C2-N3-C4	-8.77	107.51	111.90
2	B	1234	U	N1-C2-N3	8.77	120.16	114.90
2	B	1823	G	C5-N7-C8	-8.77	99.91	104.30
2	B	1937	A	C4-C5-C6	8.77	121.39	117.00
2	B	2162	G	N1-C6-O6	8.77	125.16	119.90
2	B	2227	A	C5'-C4'-C3'	8.77	130.04	116.00
2	B	2440	C	C5-C4-N4	-8.77	114.06	120.20
2	B	2589	A	N1-C6-N6	8.77	123.86	118.60
2	B	2693	G	O4'-C1'-N9	8.77	115.22	108.20
1	A	95	U	C5-C6-N1	8.77	127.08	122.70
2	B	479	A	C8-N9-C4	-8.77	102.29	105.80
2	B	503	A	C5-C6-N6	-8.77	116.68	123.70
2	B	1435	G	C4-C5-N7	-8.77	107.29	110.80
2	B	1952	A	C8-N9-C4	-8.77	102.29	105.80
2	B	251	A	C8-N9-C4	8.77	109.31	105.80
2	B	1677	A	C5-C6-N1	-8.77	113.32	117.70
2	B	1759	A	C8-N9-C4	-8.77	102.29	105.80
2	B	2239	G	C5-C6-O6	-8.77	123.34	128.60
2	B	12	U	N3-C2-O2	8.76	128.33	122.20
2	B	186	G	N1-C6-O6	8.76	125.16	119.90
2	B	1610	A	N7-C8-N9	-8.76	109.42	113.80
2	B	2050	C	N3-C4-N4	8.76	124.14	118.00
2	B	2742	G	C8-N9-C4	-8.76	102.89	106.40
2	B	2316	G	N3-C2-N2	8.76	126.03	119.90
2	B	2555	U	C5-C4-O4	-8.76	120.64	125.90
2	B	311	A	N1-C2-N3	-8.76	124.92	129.30
2	B	875	G	N1-C6-O6	8.76	125.16	119.90
2	B	974	G	C8-N9-C4	-8.76	102.90	106.40
2	B	2312	U	O4'-C1'-N1	8.76	115.21	108.20
2	B	728	G	N9-C4-C5	-8.76	101.90	105.40
2	B	2675	A	N1-C6-N6	8.76	123.85	118.60
2	B	2747	G	C5'-C4'-C3'	-8.76	101.99	116.00
2	B	1364	G	O4'-C1'-N9	8.76	115.20	108.20
2	B	1949	G	N1-C2-N3	-8.76	118.65	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2313	C	C4-C5-C6	-8.76	113.02	117.40
2	B	2655	G	C5-C6-O6	-8.76	123.35	128.60
2	B	566	U	C5-C4-O4	-8.75	120.65	125.90
2	B	1399	C	N3-C4-C5	-8.75	118.40	121.90
2	B	1150	C	O4'-C1'-N1	8.75	115.20	108.20
2	B	1690	A	N7-C8-N9	-8.75	109.42	113.80
2	B	2398	U	N3-C4-C5	-8.75	109.35	114.60
2	B	2578	G	N7-C8-N9	-8.75	108.72	113.10
2	B	2792	A	N9-C4-C5	8.75	109.30	105.80
2	B	101	A	C5-C6-N6	-8.75	116.70	123.70
2	B	527	C	N1-C2-N3	-8.75	113.08	119.20
2	B	777	G	N3-C2-N2	8.75	126.03	119.90
2	B	792	A	N1-C2-N3	8.75	133.68	129.30
2	B	833	A	C4-C5-C6	8.75	121.38	117.00
2	B	2172	U	N3-C2-O2	8.75	128.32	122.20
2	B	2339	C	C5-C4-N4	-8.75	114.08	120.20
2	B	2574	G	N7-C8-N9	8.75	117.47	113.10
2	B	1067	A	C2-N3-C4	8.75	114.97	110.60
2	B	1468	U	C6-N1-C2	-8.75	115.75	121.00
2	B	1851	U	N1-C2-O2	-8.75	116.68	122.80
2	B	2145	C	C6-N1-C1'	-8.75	110.31	120.80
2	B	2148	G	O4'-C1'-N9	8.75	115.20	108.20
2	B	2287	A	N3-C4-N9	8.75	134.40	127.40
2	B	2734	A	C5-C6-N1	-8.74	113.33	117.70
1	A	106	G	C6-N1-C2	-8.74	119.85	125.10
2	B	413	C	C5'-C4'-C3'	-8.74	102.01	116.00
2	B	879	G	C5'-C4'-C3'	-8.74	102.01	116.00
2	B	1074	G	C8-N9-C4	-8.74	102.90	106.40
2	B	1460	U	C1'-O4'-C4'	-8.74	102.91	109.90
2	B	2083	G	C5-C6-O6	-8.74	123.36	128.60
2	B	2335	A	N9-C4-C5	-8.74	102.30	105.80
2	B	1271	G	N9-C4-C5	8.74	108.90	105.40
2	B	1983	G	O4'-C1'-N9	8.74	115.19	108.20
2	B	37	C	O4'-C1'-N1	8.74	115.19	108.20
2	B	291	G	O4'-C1'-N9	8.74	115.19	108.20
2	B	2499	C	C5-C4-N4	-8.74	114.08	120.20
2	B	597	G	N3-C2-N2	8.73	126.01	119.90
1	A	106	G	C4-C5-C6	8.73	124.04	118.80
2	B	125	A	P-O3'-C3'	8.73	130.18	119.70
2	B	969	G	C5-C6-O6	-8.73	123.36	128.60
2	B	1010	A	C5-C6-N6	-8.73	116.71	123.70
2	B	1121	C	N3-C4-C5	-8.73	118.41	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1144	A	N1-C2-N3	8.73	133.67	129.30
2	B	2544	G	C4-C5-N7	-8.73	107.31	110.80
2	B	1843	C	C5-C6-N1	8.73	125.37	121.00
2	B	1389	G	N9-C4-C5	8.73	108.89	105.40
2	B	2006	C	C5'-C4'-C3'	8.73	129.97	116.00
2	B	78	U	O4'-C1'-N1	8.73	115.18	108.20
2	B	1090	A	C5-C6-N6	-8.73	116.72	123.70
2	B	1592	C	N3-C4-C5	-8.73	118.41	121.90
2	B	549	G	C8-N9-C4	-8.72	102.91	106.40
2	B	781	A	C5-N7-C8	8.72	108.26	103.90
2	B	850	U	O4'-C1'-N1	8.72	115.18	108.20
2	B	2335	A	C6-C5-N7	-8.72	126.19	132.30
2	B	1501	G	C5-C6-N1	-8.72	107.14	111.50
2	B	2443	C	C5-C4-N4	-8.72	114.09	120.20
1	A	67	G	C6-C5-N7	-8.72	125.17	130.40
2	B	83	A	C5-C6-N1	-8.72	113.34	117.70
2	B	697	G	C8-N9-C4	-8.72	102.91	106.40
2	B	838	C	C5-C6-N1	8.72	125.36	121.00
2	B	891	G	C5-C6-O6	-8.72	123.37	128.60
2	B	1099	G	C5-C6-N1	-8.72	107.14	111.50
2	B	1296	G	N3-C4-C5	-8.72	124.24	128.60
2	B	1516	G	C5-C6-N1	-8.72	107.14	111.50
2	B	1716	U	C6-N1-C2	-8.72	115.77	121.00
2	B	2201	G	N3-C4-C5	-8.72	124.24	128.60
2	B	2461	A	C8-N9-C4	8.72	109.29	105.80
2	B	2754	U	C5-C6-N1	-8.72	118.34	122.70
2	B	450	G	C8-N9-C4	-8.72	102.91	106.40
2	B	1634	A	C6-N1-C2	-8.72	113.37	118.60
2	B	16	C	N3-C4-N4	8.72	124.10	118.00
2	B	71	A	N1-C2-N3	8.72	133.66	129.30
2	B	198	C	O4'-C1'-N1	8.72	115.17	108.20
2	B	496	G	C4-C5-C6	8.72	124.03	118.80
2	B	675	A	N3-C4-C5	8.72	132.90	126.80
2	B	2293	G	N1-C2-N2	-8.72	108.35	116.20
2	B	2657	A	C4-C5-C6	8.72	121.36	117.00
2	B	94	A	C6-N1-C2	8.71	123.83	118.60
2	B	231	A	C5-C6-N6	-8.71	116.73	123.70
2	B	233	A	C5-C6-N1	-8.71	113.34	117.70
2	B	278	A	N1-C6-N6	8.71	123.83	118.60
2	B	845	A	N7-C8-N9	-8.71	109.44	113.80
2	B	2307	G	O4'-C1'-N9	8.71	115.17	108.20
2	B	2654	A	N3-C4-N9	-8.71	120.43	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	41	C	C5'-C4'-C3'	8.71	129.94	116.00
2	B	531	C	C5-C4-N4	-8.71	114.10	120.20
2	B	840	C	C5-C4-N4	-8.71	114.10	120.20
2	B	1310	G	C4'-C3'-C2'	8.71	111.31	102.60
2	B	1326	U	C4-C5-C6	-8.71	114.47	119.70
2	B	712	G	C8-N9-C4	-8.71	102.92	106.40
2	B	1452	G	C4-C5-N7	8.71	114.28	110.80
2	B	1525	A	N9-C4-C5	8.71	109.28	105.80
2	B	1572	A	C5-C6-N1	-8.71	113.34	117.70
2	B	1937	A	O4'-C1'-N9	8.71	115.17	108.20
2	B	2038	G	O4'-C1'-N9	8.71	115.17	108.20
2	B	2219	U	N1-C2-O2	-8.71	116.70	122.80
2	B	8	C	C6-N1-C2	8.71	123.78	120.30
2	B	274	C	C4-C5-C6	8.71	121.75	117.40
2	B	985	C	C5-C4-N4	-8.71	114.10	120.20
2	B	1283	G	O4'-C1'-N9	8.71	115.17	108.20
2	B	1454	C	N3-C4-N4	8.71	124.10	118.00
2	B	1916	A	C5-C6-N1	-8.71	113.35	117.70
2	B	2303	G	N1-C6-O6	8.71	125.12	119.90
2	B	2327	A	C8-N9-C4	-8.71	102.32	105.80
2	B	2338	C	N3-C4-N4	8.71	124.09	118.00
2	B	2366	A	C5-C6-N1	-8.71	113.35	117.70
2	B	36	G	O4'-C1'-N9	8.71	115.16	108.20
2	B	134	G	O4'-C1'-N9	8.71	115.17	108.20
2	B	884	U	O4'-C1'-N1	8.70	115.16	108.20
2	B	993	G	C5-C6-O6	-8.70	123.38	128.60
2	B	1585	C	O4'-C1'-N1	8.70	115.16	108.20
2	B	2362	C	O4'-C1'-N1	8.70	115.16	108.20
2	B	368	A	O4'-C1'-N9	8.70	115.16	108.20
2	B	1933	G	O4'-C1'-N9	8.70	115.16	108.20
2	B	400	G	C4-C5-C6	8.70	124.02	118.80
2	B	735	A	C5-C6-N6	-8.70	116.74	123.70
2	B	974	G	N3-C2-N2	8.70	125.99	119.90
2	B	1349	C	C4'-C3'-C2'	8.70	111.30	102.60
2	B	2168	G	C8-N9-C4	-8.70	102.92	106.40
2	B	2096	C	C6-N1-C1'	8.70	131.24	120.80
2	B	2676	C	N3-C4-N4	8.70	124.09	118.00
1	A	14	U	C2-N3-C4	-8.70	121.78	127.00
1	A	53	A	N7-C8-N9	8.70	118.15	113.80
1	A	104	A	C5-C6-N6	-8.70	116.74	123.70
2	B	651	G	O4'-C1'-N9	8.70	115.16	108.20
2	B	2119	A	C2-N3-C4	-8.70	106.25	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2444	G	N1-C6-O6	8.70	125.12	119.90
2	B	551	G	C2-N3-C4	8.70	116.25	111.90
2	B	1062	G	O4'-C1'-N9	8.70	115.16	108.20
2	B	1469	A	N9-C4-C5	8.70	109.28	105.80
2	B	2561	U	O4'-C1'-N1	8.70	115.16	108.20
2	B	2766	A	P-O3'-C3'	-8.70	109.26	119.70
2	B	35	G	C5-C6-O6	-8.69	123.38	128.60
2	B	610	C	C5-C6-N1	8.69	125.35	121.00
2	B	2068	U	N3-C4-C5	8.69	119.82	114.60
2	B	2385	C	N3-C4-N4	8.69	124.09	118.00
2	B	257	C	O4'-C1'-N1	8.69	115.15	108.20
2	B	780	G	N3-C4-N9	8.69	131.22	126.00
2	B	2166	U	O4'-C1'-N1	8.69	115.16	108.20
2	B	342	A	O4'-C1'-N9	8.69	115.15	108.20
2	B	1759	A	C5-C6-N6	-8.69	116.75	123.70
2	B	1995	U	C5'-C4'-C3'	8.69	129.91	116.00
2	B	458	G	N7-C8-N9	-8.69	108.75	113.10
2	B	2669	G	C5-C6-N1	8.69	115.84	111.50
2	B	727	A	N1-C6-N6	8.69	123.81	118.60
2	B	1165	A	C4-C5-C6	8.69	121.34	117.00
2	B	2211	A	N1-C2-N3	8.69	133.64	129.30
2	B	471	A	N1-C6-N6	8.69	123.81	118.60
2	B	495	G	C5-C6-O6	-8.69	123.39	128.60
2	B	987	C	N3-C4-C5	-8.69	118.43	121.90
2	B	2836	U	C5-C4-O4	-8.69	120.69	125.90
2	B	2896	C	N3-C4-N4	8.69	124.08	118.00
2	B	317	G	N3-C2-N2	8.68	125.98	119.90
2	B	617	G	C8-N9-C4	8.68	109.87	106.40
2	B	938	G	N1-C6-O6	8.68	125.11	119.90
2	B	1211	C	N3-C4-N4	8.68	124.08	118.00
2	B	28	A	N7-C8-N9	-8.68	109.46	113.80
2	B	788	A	C4-C5-N7	-8.68	106.36	110.70
2	B	1759	A	O4'-C1'-N9	8.68	115.14	108.20
2	B	1818	U	C1'-O4'-C4'	-8.68	102.96	109.90
2	B	1929	G	N3-C4-C5	-8.68	124.26	128.60
2	B	2795	C	N3-C4-C5	-8.68	118.43	121.90
2	B	234	U	N3-C4-O4	8.68	125.47	119.40
2	B	489	G	C5-C6-O6	-8.68	123.39	128.60
2	B	557	C	N3-C4-N4	8.68	124.08	118.00
2	B	1723	G	C4-C5-N7	8.68	114.27	110.80
1	A	27	C	C5-C6-N1	8.68	125.34	121.00
2	B	5	A	C5-C6-N6	-8.68	116.76	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	163	C	C5-C6-N1	8.68	125.34	121.00
2	B	575	A	N9-C4-C5	8.68	109.27	105.80
2	B	654	A	C5-N7-C8	8.68	108.24	103.90
2	B	1198	U	C5-C4-O4	-8.68	120.69	125.90
2	B	1801	A	C5-N7-C8	8.68	108.24	103.90
2	B	2238	G	N1-C2-N3	-8.68	118.69	123.90
2	B	400	G	C5-C6-N1	-8.67	107.16	111.50
2	B	1373	A	C4-C5-C6	8.67	121.34	117.00
2	B	1699	G	C4-C5-N7	8.67	114.27	110.80
1	A	42	C	C2-N3-C4	-8.67	115.56	119.90
2	B	492	A	C5-N7-C8	8.67	108.24	103.90
8	N	12	ARG	NE-CZ-NH2	-8.67	115.96	120.30
2	B	175	G	N3-C2-N2	8.67	125.97	119.90
2	B	1459	G	N1-C6-O6	8.67	125.10	119.90
2	B	1503	A	C5-C6-N1	-8.67	113.36	117.70
2	B	1788	C	O4'-C1'-N1	8.67	115.14	108.20
2	B	7	G	N1-C2-N2	-8.67	108.40	116.20
2	B	114	U	N1-C2-N3	8.67	120.10	114.90
2	B	145	C	N3-C4-N4	8.67	124.07	118.00
2	B	1853	A	C4-C5-C6	8.67	121.33	117.00
2	B	2734	A	O4'-C1'-N9	8.67	115.14	108.20
2	B	1755	A	C5-C6-N6	-8.67	116.77	123.70
2	B	2179	C	N1-C2-N3	-8.67	113.13	119.20
2	B	2706	A	N1-C6-N6	8.67	123.80	118.60
2	B	486	C	N3-C4-C5	-8.66	118.44	121.90
2	B	1290	C	C2-N3-C4	8.66	124.23	119.90
2	B	1477	A	N9-C4-C5	-8.66	102.33	105.80
2	B	2019	A	N1-C2-N3	8.66	133.63	129.30
2	B	2379	G	N1-C6-O6	8.66	125.10	119.90
2	B	2738	A	C4-C5-C6	8.66	121.33	117.00
2	B	521	U	O4'-C1'-N1	8.66	115.13	108.20
2	B	2721	A	C5-C6-N6	-8.66	116.77	123.70
2	B	835	C	N3-C4-N4	8.66	124.06	118.00
2	B	1543	G	N9-C4-C5	-8.66	101.94	105.40
2	B	307	G	N7-C8-N9	8.66	117.43	113.10
2	B	654	A	C4-C5-C6	8.66	121.33	117.00
2	B	684	G	C8-N9-C4	-8.66	102.94	106.40
2	B	1166	G	N1-C2-N3	-8.66	118.71	123.90
2	B	1604	C	C2-N1-C1'	8.66	128.32	118.80
2	B	2051	A	C5-N7-C8	8.66	108.23	103.90
2	B	2516	A	C5-C6-N6	-8.66	116.78	123.70
2	B	331	C	N3-C4-C5	-8.65	118.44	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1291	C	C5-C4-N4	-8.65	114.14	120.20
2	B	1280	G	C5-C6-N1	-8.65	107.17	111.50
2	B	1638	C	C6-N1-C2	8.65	123.76	120.30
2	B	2485	G	N1-C6-O6	8.65	125.09	119.90
2	B	2584	U	C5'-C4'-O4'	8.65	119.48	109.10
2	B	333	G	O3'-P-O5'	-8.65	87.56	104.00
2	B	978	G	N1-C6-O6	8.65	125.09	119.90
2	B	1075	C	N3-C4-N4	8.65	124.06	118.00
2	B	202	U	C6-N1-C2	-8.65	115.81	121.00
2	B	536	G	N1-C2-N3	-8.65	118.71	123.90
2	B	1137	G	N9-C4-C5	-8.65	101.94	105.40
2	B	2161	C	N3-C4-C5	-8.65	118.44	121.90
2	B	2336	A	C6-N1-C2	8.65	123.79	118.60
2	B	500	G	C5-C6-O6	-8.64	123.41	128.60
2	B	631	A	C5-C6-N1	-8.64	113.38	117.70
2	B	1241	A	C4-C5-C6	8.64	121.32	117.00
2	B	1501	G	N9-C4-C5	8.64	108.86	105.40
2	B	1367	A	O4'-C1'-N9	8.64	115.11	108.20
2	B	2569	G	P-O5'-C5'	-8.64	107.07	120.90
2	B	2799	A	N1-C6-N6	8.64	123.78	118.60
2	B	914	G	C2-N3-C4	-8.64	107.58	111.90
2	B	2709	G	N7-C8-N9	-8.64	108.78	113.10
1	A	68	C	C2-N3-C4	8.64	124.22	119.90
2	B	945	A	C5-C6-N1	-8.64	113.38	117.70
2	B	1418	G	C5-C6-O6	-8.64	123.42	128.60
2	B	2186	G	C6-C5-N7	-8.64	125.22	130.40
2	B	2470	G	N7-C8-N9	8.64	117.42	113.10
2	B	2741	A	C4-C5-C6	8.64	121.32	117.00
2	B	74	A	O4'-C1'-N9	8.63	115.11	108.20
2	B	1272	A	C8-N9-C4	-8.64	102.35	105.80
2	B	421	C	P-O3'-C3'	8.63	130.06	119.70
2	B	839	U	O4'-C1'-N1	8.63	115.11	108.20
2	B	1926	U	O4'-C1'-N1	8.63	115.11	108.20
2	B	2054	A	C5-N7-C8	8.64	108.22	103.90
2	B	2354	C	N3-C4-C5	-8.64	118.44	121.90
2	B	1419	A	N1-C6-N6	8.63	123.78	118.60
2	B	840	C	N3-C4-N4	8.63	124.04	118.00
2	B	1727	C	O4'-C1'-N1	8.63	115.11	108.20
2	B	2258	C	O4'-C1'-N1	8.63	115.11	108.20
2	B	2734	A	C2-N3-C4	8.63	114.92	110.60
2	B	2135	A	C8-N9-C4	-8.63	102.35	105.80
2	B	1063	G	N1-C6-O6	8.63	125.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1555	G	C6-N1-C2	-8.63	119.92	125.10
2	B	1684	G	O4'-C1'-N9	8.63	115.10	108.20
1	A	75	G	N3-C2-N2	-8.63	113.86	119.90
2	B	74	A	C5-N7-C8	8.63	108.21	103.90
2	B	1003	G	N1-C6-O6	8.63	125.08	119.90
2	B	1306	C	C5-C4-N4	-8.63	114.16	120.20
2	B	1741	C	C1'-O4'-C4'	-8.63	103.00	109.90
2	B	400	G	N3-C4-C5	-8.62	124.29	128.60
2	B	1259	G	N3-C4-C5	-8.62	124.29	128.60
2	B	1765	U	O4'-C1'-N1	8.63	115.10	108.20
2	B	2032	G	C5-N7-C8	-8.62	99.99	104.30
2	B	1008	A	N9-C4-C5	-8.62	102.35	105.80
2	B	1158	C	N3-C4-C5	-8.62	118.45	121.90
2	B	2738	A	N9-C4-C5	-8.62	102.35	105.80
2	B	1648	U	O4'-C1'-N1	8.62	115.10	108.20
2	B	508	A	C5-C6-N1	-8.62	113.39	117.70
2	B	2778	A	C5-C6-N6	-8.62	116.81	123.70
2	B	808	G	O4'-C1'-N9	8.62	115.09	108.20
31	I	41	PHE	CB-CG-CD2	-8.62	114.77	120.80
2	B	1334	G	N3-C2-N2	8.61	125.93	119.90
2	B	155	A	C5-C6-N6	-8.61	116.81	123.70
2	B	238	C	P-O3'-C3'	-8.61	109.37	119.70
2	B	315	G	C5-C6-O6	-8.61	123.43	128.60
2	B	561	G	O4'-C1'-N9	8.61	115.09	108.20
2	B	961	C	C4-C5-C6	8.61	121.71	117.40
2	B	1787	A	C4-C5-C6	8.61	121.31	117.00
2	B	1807	G	C4-C5-C6	8.61	123.97	118.80
2	B	2173	A	N1-C6-N6	8.61	123.77	118.60
2	B	728	G	N3-C4-N9	8.61	131.17	126.00
2	B	957	C	C5'-C4'-O4'	8.61	119.43	109.10
2	B	2668	G	N3-C4-C5	-8.61	124.29	128.60
2	B	887	U	N1-C2-N3	-8.61	109.73	114.90
2	B	954	G	C5-C6-O6	-8.61	123.43	128.60
2	B	989	G	P-O5'-C5'	-8.61	107.12	120.90
2	B	1007	C	C2-N3-C4	8.61	124.20	119.90
2	B	1391	U	N1-C2-N3	8.61	120.06	114.90
2	B	2227	A	N9-C4-C5	8.61	109.24	105.80
2	B	2411	A	C2-N3-C4	-8.61	106.30	110.60
2	B	146	A	C5-C6-N6	-8.61	116.81	123.70
9	O	26	LEU	CB-CG-CD1	8.61	125.63	111.00
2	B	1337	G	N3-C2-N2	8.61	125.92	119.90
2	B	1757	A	C1'-O4'-C4'	-8.61	103.02	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2315	G	N1-C6-O6	8.61	125.06	119.90
8	N	21	PHE	CB-CG-CD2	8.61	126.82	120.80
2	B	27	G	C4-C5-N7	-8.60	107.36	110.80
2	B	1338	G	C5-C6-O6	-8.60	123.44	128.60
2	B	2449	U	P-O3'-C3'	8.60	130.03	119.70
2	B	1598	A	N9-C4-C5	-8.60	102.36	105.80
2	B	1818	U	C3'-C2'-C1'	-8.60	94.62	101.50
2	B	2442	C	C5'-C4'-C3'	-8.60	102.24	116.00
1	A	28	C	O4'-C1'-N1	8.60	115.08	108.20
2	B	490	C	C2-N1-C1'	8.60	128.26	118.80
2	B	925	A	C8-N9-C4	8.60	109.24	105.80
2	B	1458	U	P-O3'-C3'	8.60	130.02	119.70
2	B	2806	C	C4-C5-C6	8.60	121.70	117.40
7	M	55	ARG	NE-CZ-NH1	-8.60	116.00	120.30
1	A	5	U	C2-N3-C4	-8.60	121.84	127.00
2	B	2154	A	N1-C6-N6	8.60	123.76	118.60
2	B	233	A	C6-N1-C2	8.60	123.76	118.60
2	B	1594	U	N3-C4-O4	8.60	125.42	119.40
2	B	326	G	C2-N3-C4	8.59	116.20	111.90
2	B	878	A	C4-C5-C6	8.59	121.30	117.00
2	B	1341	G	O4'-C1'-N9	8.59	115.08	108.20
2	B	324	A	O4'-C1'-N9	8.59	115.07	108.20
2	B	717	C	O4'-C1'-N1	8.59	115.07	108.20
2	B	1050	A	N7-C8-N9	8.59	118.09	113.80
2	B	737	C	C4-C5-C6	8.59	121.69	117.40
2	B	773	U	O4'-C4'-C3'	8.59	112.97	106.10
2	B	2103	C	O4'-C1'-N1	8.59	115.07	108.20
2	B	2185	U	N1-C2-N3	8.59	120.05	114.90
2	B	2437	G	N1-C2-N3	-8.59	118.75	123.90
2	B	1326	U	C5-C4-O4	-8.59	120.75	125.90
2	B	1440	U	N3-C4-C5	-8.59	109.45	114.60
2	B	2367	G	N9-C4-C5	-8.59	101.97	105.40
2	B	2501	C	C6-N1-C2	-8.59	116.87	120.30
2	B	144	A	C5-C6-N1	-8.58	113.41	117.70
2	B	291	G	N3-C4-C5	-8.58	124.31	128.60
2	B	1099	G	C5-C6-O6	-8.58	123.45	128.60
2	B	2573	C	O4'-C1'-N1	8.58	115.07	108.20
2	B	419	U	O4'-C1'-N1	8.58	115.06	108.20
2	B	1334	G	C3'-C2'-C1'	-8.58	94.63	101.50
2	B	2028	U	O4'-C1'-N1	8.58	115.07	108.20
2	B	59	U	P-O3'-C3'	8.58	130.00	119.70
2	B	2089	C	N3-C4-N4	8.58	124.01	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2735	G	O4'-C1'-N9	8.58	115.06	108.20
2	B	928	A	C8-N9-C4	8.58	109.23	105.80
2	B	1552	A	N7-C8-N9	-8.57	109.51	113.80
2	B	2426	A	O4'-C1'-N9	8.57	115.06	108.20
2	B	2410	G	C5-N7-C8	8.57	108.59	104.30
2	B	2497	A	C5-N7-C8	8.57	108.19	103.90
2	B	283	G	C5-C6-O6	-8.57	123.46	128.60
2	B	419	U	P-O3'-C3'	-8.57	109.41	119.70
2	B	909	A	C6-C5-N7	-8.57	126.30	132.30
2	B	2321	U	C6-N1-C2	-8.57	115.86	121.00
2	B	2423	U	O4'-C1'-N1	8.57	115.06	108.20
1	A	26	C	N3-C4-C5	-8.57	118.47	121.90
2	B	61	C	C5-C4-N4	-8.57	114.20	120.20
2	B	614	A	N9-C4-C5	-8.57	102.37	105.80
2	B	454	A	O4'-C1'-N9	8.57	115.06	108.20
15	T	41	ALA	N-CA-CB	8.57	122.10	110.10
1	A	115	A	C5-C6-N1	-8.57	113.42	117.70
2	B	707	G	N1-C2-N3	-8.57	118.76	123.90
2	B	1068	G	N9-C4-C5	-8.57	101.97	105.40
2	B	1799	G	C5-C6-O6	-8.57	123.46	128.60
2	B	2146	C	C6-N1-C2	8.57	123.73	120.30
2	B	2384	U	O4'-C1'-N1	8.57	115.05	108.20
2	B	1968	G	C6-N1-C2	8.56	130.24	125.10
2	B	2690	U	O4'-C1'-N1	8.56	115.05	108.20
2	B	45	G	C6-C5-N7	-8.56	125.26	130.40
2	B	1508	A	C3'-C2'-C1'	-8.56	94.65	101.50
2	B	1910	G	N1-C2-N3	-8.56	118.76	123.90
2	B	2207	C	N3-C4-C5	-8.56	118.47	121.90
1	A	71	C	C6-N1-C2	-8.56	116.88	120.30
2	B	644	A	C5'-C4'-C3'	8.56	129.70	116.00
2	B	1026	G	O4'-C1'-N9	8.56	115.05	108.20
2	B	1660	G	O4'-C1'-N9	8.56	115.05	108.20
2	B	1800	C	N3-C4-C5	-8.56	118.47	121.90
2	B	2342	C	N3-C4-C5	-8.56	118.47	121.90
2	B	2354	C	C5'-C4'-C3'	-8.56	102.30	116.00
2	B	810	U	C2-N3-C4	-8.56	121.86	127.00
2	B	2035	G	N1-C6-O6	8.56	125.03	119.90
2	B	2168	G	O4'-C1'-N9	8.55	115.04	108.20
2	B	2615	U	C5'-C4'-C3'	8.56	129.69	116.00
2	B	870	U	P-O3'-C3'	8.55	129.96	119.70
2	B	1305	C	N3-C4-N4	8.55	123.99	118.00
2	B	1568	G	N1-C6-O6	8.55	125.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1826	G	C1'-O4'-C4'	-8.55	103.06	109.90
2	B	1920	C	C6-N1-C2	-8.55	116.88	120.30
2	B	30	G	N1-C2-N3	-8.55	118.77	123.90
2	B	1064	C	O4'-C1'-N1	8.55	115.04	108.20
2	B	11	C	N3-C4-C5	-8.55	118.48	121.90
2	B	864	G	N1-C6-O6	8.55	125.03	119.90
2	B	1544	A	N7-C8-N9	-8.55	109.53	113.80
2	B	1983	G	N1-C6-O6	8.55	125.03	119.90
2	B	2019	A	C2-N3-C4	-8.55	106.33	110.60
2	B	2885	G	C6-N1-C2	8.55	130.23	125.10
2	B	234	U	O4'-C1'-N1	8.54	115.04	108.20
2	B	485	C	N3-C4-N4	8.54	123.98	118.00
2	B	1521	G	N1-C6-O6	8.54	125.03	119.90
2	B	1729	U	N3-C4-O4	8.54	125.38	119.40
22	3	16	ARG	NE-CZ-NH1	8.55	124.57	120.30
2	B	993	G	N3-C2-N2	8.54	125.88	119.90
2	B	1543	G	O4'-C1'-N9	8.54	115.03	108.20
2	B	1776	G	C4-C5-N7	-8.54	107.38	110.80
2	B	2812	G	C8-N9-C4	8.54	109.82	106.40
2	B	1800	C	O4'-C1'-N1	8.54	115.03	108.20
2	B	1806	C	O4'-C1'-N1	8.54	115.03	108.20
2	B	619	G	N9-C4-C5	8.54	108.81	105.40
2	B	1533	C	C5-C6-N1	8.54	125.27	121.00
3	0	77	TYR	CB-CG-CD1	-8.54	115.88	121.00
2	B	425	G	C8-N9-C1'	8.54	138.09	127.00
2	B	2108	A	C5-N7-C8	8.54	108.17	103.90
2	B	2425	A	P-O5'-C5'	-8.54	107.24	120.90
2	B	2524	G	N1-C2-N3	8.54	129.02	123.90
2	B	1452	G	N9-C4-C5	-8.53	101.99	105.40
2	B	2608	G	N3-C2-N2	8.53	125.87	119.90
1	A	58	A	C4-C5-N7	8.53	114.97	110.70
2	B	38	A	C5-C6-N6	-8.53	116.88	123.70
2	B	599	A	C6-C5-N7	-8.53	126.33	132.30
2	B	698	C	C5-C4-N4	-8.53	114.23	120.20
2	B	858	G	N9-C4-C5	8.53	108.81	105.40
2	B	2246	G	N1-C6-O6	8.53	125.02	119.90
2	B	2705	A	C5-N7-C8	8.53	108.17	103.90
2	B	637	A	C3'-C2'-C1'	-8.53	94.68	101.50
2	B	702	U	N3-C4-C5	8.53	119.72	114.60
2	B	947	A	C5-C6-N6	-8.53	116.88	123.70
2	B	2103	C	N3-C4-C5	-8.53	118.49	121.90
2	B	10	A	C8-N9-C4	8.53	109.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	734	A	C4-C5-C6	8.53	121.26	117.00
2	B	1485	U	O4'-C1'-N1	8.53	115.02	108.20
2	B	2604	U	N1-C2-N3	8.53	120.02	114.90
2	B	740	C	C2-N3-C4	-8.53	115.64	119.90
2	B	516	C	O4'-C1'-N1	8.53	115.02	108.20
2	B	1904	G	N1-C6-O6	8.53	125.02	119.90
2	B	2190	G	O4'-C1'-N9	8.53	115.02	108.20
2	B	2330	G	N3-C4-N9	8.53	131.12	126.00
2	B	664	G	N3-C4-N9	8.52	131.11	126.00
2	B	2040	G	N1-C2-N2	-8.52	108.53	116.20
2	B	2274	A	C8-N9-C4	-8.52	102.39	105.80
2	B	640	C	O4'-C1'-N1	8.52	115.02	108.20
2	B	1142	A	N7-C8-N9	-8.52	109.54	113.80
2	B	1968	G	C5-C6-N1	-8.52	107.24	111.50
1	A	51	G	N7-C8-N9	-8.52	108.84	113.10
2	B	332	A	C8-N9-C4	-8.52	102.39	105.80
2	B	870	U	O4'-C1'-N1	8.52	115.01	108.20
2	B	1550	C	C5-C6-N1	8.52	125.26	121.00
2	B	2702	G	N7-C8-N9	8.52	117.36	113.10
2	B	781	A	N3-C4-C5	-8.51	120.84	126.80
2	B	877	A	C5-N7-C8	8.51	108.16	103.90
2	B	2564	A	C5-C6-N6	-8.51	116.89	123.70
2	B	2868	A	C6-C5-N7	-8.51	126.34	132.30
2	B	148	U	C2-N3-C4	-8.51	121.89	127.00
2	B	289	G	C2-N3-C4	8.51	116.16	111.90
2	B	327	G	C5-C6-O6	-8.51	123.49	128.60
2	B	996	A	N1-C2-N3	8.51	133.56	129.30
14	D	68	PHE	CB-CG-CD1	-8.51	114.84	120.80
2	B	834	G	C8-N9-C1'	8.51	138.06	127.00
2	B	1977	A	N1-C6-N6	8.51	123.71	118.60
2	B	1980	G	C4-C5-C6	8.51	123.91	118.80
2	B	861	A	C5-N7-C8	8.51	108.15	103.90
2	B	914	G	C8-N9-C4	8.51	109.80	106.40
2	B	1719	G	C6-N1-C2	8.51	130.20	125.10
2	B	2008	C	N3-C4-N4	8.51	123.95	118.00
2	B	684	G	C6-C5-N7	-8.51	125.30	130.40
2	B	992	C	C6-N1-C2	-8.51	116.90	120.30
2	B	1090	A	O4'-C1'-N9	8.51	115.00	108.20
2	B	1721	G	N1-C6-O6	8.51	125.00	119.90
2	B	2143	C	C5-C4-N4	-8.51	114.24	120.20
2	B	2453	A	C5-C6-N1	-8.51	113.45	117.70
2	B	10	A	C2-N3-C4	-8.50	106.35	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	98	G	N3-C4-C5	-8.50	124.35	128.60
2	B	1212	G	N7-C8-N9	8.50	117.35	113.10
2	B	2645	G	O4'-C1'-N9	8.50	115.00	108.20
2	B	2853	C	O4'-C1'-N1	8.50	115.00	108.20
2	B	2524	G	N1-C2-N2	-8.50	108.55	116.20
2	B	735	A	N1-C6-N6	8.50	123.70	118.60
2	B	1118	C	C1'-O4'-C4'	-8.50	103.10	109.90
2	B	2267	A	N7-C8-N9	8.50	118.05	113.80
2	B	2703	C	N3-C4-N4	8.50	123.95	118.00
2	B	1209	U	O4'-C1'-N1	8.50	115.00	108.20
2	B	1471	G	C8-N9-C4	8.50	109.80	106.40
2	B	1685	C	C6-N1-C2	-8.50	116.90	120.30
2	B	521	U	N3-C4-O4	8.50	125.35	119.40
2	B	217	A	C5-N7-C8	8.49	108.15	103.90
2	B	616	A	N1-C6-N6	8.49	123.70	118.60
2	B	860	U	N3-C4-O4	8.49	125.34	119.40
2	B	990	A	C5-C6-N6	-8.49	116.91	123.70
2	B	994	C	O4'-C1'-N1	8.49	114.99	108.20
2	B	2619	C	C5-C4-N4	-8.49	114.25	120.20
2	B	2850	A	N1-C6-N6	8.49	123.70	118.60
32	J	89	PHE	CB-CG-CD1	8.49	126.75	120.80
2	B	365	U	N3-C4-C5	-8.49	109.51	114.60
9	O	107	ALA	N-CA-CB	8.49	121.99	110.10
2	B	1110	G	N9-C4-C5	8.49	108.80	105.40
2	B	1492	G	C5-C6-O6	-8.49	123.51	128.60
2	B	1776	G	N3-C4-C5	-8.49	124.36	128.60
2	B	2120	G	C6-C5-N7	-8.49	125.31	130.40
2	B	2733	A	N7-C8-N9	8.49	118.05	113.80
20	E	170	ARG	NE-CZ-NH1	8.49	124.54	120.30
2	B	537	G	N1-C2-N3	-8.49	118.81	123.90
2	B	1737	G	C5-C6-N1	-8.49	107.26	111.50
2	B	667	U	N3-C2-O2	8.49	128.14	122.20
2	B	818	G	C5-N7-C8	-8.49	100.06	104.30
2	B	907	G	C4-C5-C6	8.49	123.89	118.80
2	B	1123	C	C5'-C4'-C3'	8.49	129.58	116.00
2	B	52	A	C4-C5-C6	8.48	121.24	117.00
2	B	696	G	N3-C2-N2	8.48	125.84	119.90
2	B	1251	C	P-O3'-C3'	-8.48	109.52	119.70
2	B	2373	G	N1-C6-O6	8.48	124.99	119.90
2	B	1390	U	O4'-C1'-N1	8.48	114.99	108.20
2	B	1723	G	N9-C4-C5	-8.48	102.01	105.40
2	B	2248	C	C5'-C4'-C3'	-8.48	102.43	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	661	A	C5-N7-C8	8.48	108.14	103.90
2	B	925	A	C4-C5-C6	8.48	121.24	117.00
2	B	1087	G	O4'-C1'-N9	8.48	114.98	108.20
1	A	29	A	O4'-C1'-N9	8.48	114.98	108.20
2	B	372	G	C5-N7-C8	8.48	108.54	104.30
2	B	1324	G	C6-C5-N7	-8.48	125.31	130.40
2	B	2326	C	O4'-C1'-N1	8.48	114.98	108.20
2	B	2662	A	O4'-C1'-N9	8.48	114.98	108.20
2	B	564	C	O4'-C1'-N1	8.48	114.98	108.20
2	B	1271	G	C5-C6-O6	-8.48	123.51	128.60
2	B	1809	A	O4'-C1'-N9	8.48	114.98	108.20
2	B	2817	U	O4'-C1'-N1	8.48	114.98	108.20
9	O	111	ARG	NE-CZ-NH1	-8.48	116.06	120.30
2	B	2811	G	C5-N7-C8	8.47	108.54	104.30
2	B	1280	G	C4-C5-C6	8.47	123.88	118.80
2	B	2040	G	O5'-C5'-C4'	-8.47	95.60	111.70
2	B	2434	A	C5-C6-N1	-8.47	113.46	117.70
2	B	2602	A	C4-C5-C6	8.47	121.24	117.00
2	B	959	A	C4-C5-C6	8.47	121.24	117.00
2	B	1777	U	C5'-C4'-C3'	-8.47	102.44	116.00
2	B	189	G	C4-C5-N7	-8.47	107.41	110.80
2	B	2065	C	C5-C4-N4	-8.47	114.27	120.20
2	B	856	G	N1-C6-O6	8.47	124.98	119.90
2	B	1510	G	C4-C5-N7	8.47	114.19	110.80
2	B	1974	C	C2-N3-C4	8.47	124.13	119.90
2	B	2198	A	C5'-C4'-C3'	-8.47	102.45	116.00
2	B	2087	G	C5-N7-C8	8.47	108.53	104.30
2	B	918	A	O4'-C1'-N9	8.46	114.97	108.20
2	B	1008	A	O4'-C1'-N9	8.46	114.97	108.20
2	B	2563	U	O4'-C1'-N1	8.46	114.97	108.20
2	B	175	G	N1-C6-O6	8.46	124.98	119.90
2	B	1420	A	C6-N1-C2	-8.46	113.52	118.60
2	B	880	G	N9-C4-C5	8.46	108.78	105.40
2	B	2135	A	N1-C2-N3	8.46	133.53	129.30
2	B	2519	U	N3-C4-C5	-8.46	109.52	114.60
2	B	2642	G	O4'-C1'-N9	8.46	114.97	108.20
2	B	110	G	C5-C6-O6	-8.46	123.53	128.60
2	B	565	C	C4'-C3'-C2'	8.46	111.06	102.60
2	B	1328	A	C6-N1-C2	8.46	123.67	118.60
2	B	1987	A	O4'-C1'-N9	8.46	114.97	108.20
2	B	2159	G	C8-N9-C1'	-8.46	116.00	127.00
2	B	2463	C	N3-C4-C5	-8.46	118.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2793	C	N3-C4-N4	8.46	123.92	118.00
2	B	154	U	O4'-C1'-N1	8.46	114.97	108.20
2	B	932	U	C2-N1-C1'	8.46	127.85	117.70
2	B	1627	G	N1-C6-O6	8.46	124.97	119.90
2	B	182	A	O4'-C1'-N9	8.45	114.96	108.20
2	B	235	U	O4'-C1'-N1	8.45	114.96	108.20
2	B	308	G	N7-C8-N9	-8.45	108.87	113.10
2	B	1192	G	N9-C4-C5	8.45	108.78	105.40
8	N	102	PHE	CB-CG-CD2	8.45	126.72	120.80
2	B	1637	A	P-O3'-C3'	-8.45	109.56	119.70
2	B	1736	U	P-O3'-C3'	-8.45	109.56	119.70
2	B	216	A	C5-N7-C8	8.45	108.12	103.90
2	B	451	U	C4-C5-C6	8.45	124.77	119.70
2	B	856	G	C2-N3-C4	8.45	116.12	111.90
2	B	1598	A	C8-N9-C4	8.45	109.18	105.80
2	B	1663	G	C5-C6-N1	-8.45	107.28	111.50
2	B	785	G	N7-C8-N9	8.44	117.32	113.10
2	B	2900	A	O4'-C1'-N9	8.44	114.95	108.20
2	B	494	G	N1-C6-O6	8.44	124.97	119.90
2	B	1490	A	C5-C6-N1	-8.44	113.48	117.70
2	B	1645	G	C4'-C3'-C2'	8.44	111.04	102.60
2	B	2388	A	O4'-C1'-C2'	-8.44	97.36	105.80
2	B	825	A	C5-C6-N1	-8.44	113.48	117.70
2	B	2149	U	O4'-C1'-N1	8.44	114.95	108.20
2	B	2170	A	C5-N7-C8	8.44	108.12	103.90
2	B	2645	G	N1-C2-N3	-8.44	118.84	123.90
2	B	2064	C	O4'-C1'-N1	8.44	114.95	108.20
2	B	127	A	N1-C6-N6	8.44	123.66	118.60
2	B	233	A	N1-C2-N3	-8.44	125.08	129.30
2	B	1175	A	C4-C5-C6	8.44	121.22	117.00
2	B	1327	A	C5-C6-N6	-8.44	116.95	123.70
2	B	2125	G	N3-C4-C5	8.44	132.82	128.60
8	N	118	ARG	NE-CZ-NH1	8.44	124.52	120.30
20	E	172	ALA	N-CA-CB	-8.44	98.29	110.10
2	B	382	A	O4'-C1'-N9	8.43	114.95	108.20
2	B	1527	G	N3-C2-N2	8.43	125.80	119.90
2	B	217	A	C8-N9-C4	-8.43	102.43	105.80
2	B	456	C	N3-C4-N4	8.43	123.90	118.00
2	B	569	U	N3-C2-O2	8.43	128.10	122.20
2	B	794	A	C4-C5-C6	8.43	121.22	117.00
2	B	1721	G	C5-C6-N1	-8.43	107.28	111.50
2	B	2428	G	C5-C6-N1	-8.43	107.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	F	29	ARG	NE-CZ-NH1	8.43	124.52	120.30
2	B	116	C	N3-C4-C5	-8.43	118.53	121.90
2	B	401	A	N1-C6-N6	8.43	123.66	118.60
2	B	2065	C	N3-C4-N4	8.43	123.90	118.00
2	B	1007	C	N3-C4-N4	8.43	123.90	118.00
2	B	1695	G	C6-C5-N7	-8.43	125.34	130.40
2	B	2740	A	C5-N7-C8	8.43	108.11	103.90
2	B	2836	U	N1-C2-O2	8.43	128.70	122.80
2	B	2202	U	O4'-C1'-N1	8.43	114.94	108.20
2	B	1806	C	C5-C6-N1	-8.43	116.79	121.00
2	B	2164	C	N3-C4-C5	-8.43	118.53	121.90
2	B	2335	A	C5-C6-N1	-8.43	113.49	117.70
2	B	659	G	C5-C6-O6	-8.43	123.55	128.60
2	B	2036	C	C5-C4-N4	-8.43	114.30	120.20
2	B	2115	G	N1-C6-O6	8.43	124.96	119.90
2	B	2269	G	C3'-C2'-C1'	-8.43	94.76	101.50
2	B	105	C	C4-C5-C6	8.42	121.61	117.40
2	B	591	U	N1-C2-N3	8.42	119.95	114.90
2	B	1666	G	N7-C8-N9	-8.42	108.89	113.10
2	B	2428	G	C2-N3-C4	-8.42	107.69	111.90
1	A	4	C	P-O3'-C3'	-8.42	109.59	119.70
2	B	498	G	N3-C4-N9	8.42	131.05	126.00
2	B	675	A	C4-C5-N7	8.42	114.91	110.70
2	B	1021	A	C4-C5-C6	8.42	121.21	117.00
2	B	609	A	O4'-C1'-N9	8.42	114.94	108.20
2	B	1002	G	N9-C1'-C2'	-8.42	102.74	112.00
2	B	1718	G	O4'-C1'-N9	8.42	114.94	108.20
2	B	1889	A	C5-N7-C8	-8.42	99.69	103.90
2	B	2158	A	P-O3'-C3'	8.42	129.81	119.70
2	B	41	C	O4'-C1'-N1	8.42	114.93	108.20
2	B	1432	G	C4-C5-C6	8.42	123.85	118.80
2	B	2246	G	C2-N3-C4	-8.42	107.69	111.90
2	B	1434	A	O4'-C1'-N9	8.42	114.93	108.20
2	B	2278	A	N1-C6-N6	8.42	123.65	118.60
2	B	2856	A	C6-N1-C2	8.42	123.65	118.60
2	B	2869	G	N1-C6-O6	8.42	124.95	119.90
14	D	68	PHE	CB-CG-CD2	8.42	126.69	120.80
2	B	55	G	N9-C4-C5	-8.41	102.03	105.40
2	B	715	A	N1-C6-N6	8.41	123.65	118.60
2	B	777	G	C6-C5-N7	-8.41	125.35	130.40
2	B	1190	G	N3-C2-N2	8.41	125.79	119.90
2	B	1595	C	O4'-C1'-N1	8.41	114.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2122	U	C5-C4-O4	-8.41	120.85	125.90
2	B	2447	G	N1-C6-O6	8.41	124.95	119.90
2	B	1158	C	C6-N1-C2	-8.41	116.94	120.30
2	B	2151	U	C4-C5-C6	8.41	124.75	119.70
2	B	751	A	N1-C2-N3	8.41	133.50	129.30
2	B	2807	U	C5-C6-N1	8.41	126.91	122.70
2	B	277	G	O4'-C1'-N9	8.41	114.93	108.20
2	B	332	A	C4-C5-N7	-8.41	106.50	110.70
2	B	1821	A	C5-C6-N6	-8.41	116.97	123.70
2	B	2430	A	C5'-C4'-O4'	-8.41	99.01	109.10
2	B	527	C	C4-C5-C6	-8.41	113.20	117.40
2	B	1380	G	N3-C4-C5	-8.41	124.40	128.60
2	B	969	G	N3-C2-N2	8.41	125.78	119.90
2	B	1480	C	C2-N3-C4	-8.41	115.70	119.90
2	B	2811	G	C5-C6-O6	-8.41	123.56	128.60
2	B	68	G	N1-C6-O6	8.40	124.94	119.90
2	B	175	G	N7-C8-N9	-8.40	108.90	113.10
2	B	1512	C	N1-C2-O2	8.40	123.94	118.90
2	B	1949	G	O5'-C5'-C4'	-8.40	95.73	111.70
2	B	2151	U	N3-C4-C5	-8.40	109.56	114.60
2	B	774	G	C5-N7-C8	8.40	108.50	104.30
2	B	2042	A	C5-C6-N6	-8.40	116.98	123.70
2	B	2081	U	C2-N3-C4	-8.40	121.96	127.00
2	B	291	G	C6-C5-N7	-8.40	125.36	130.40
2	B	1444	G	C6-C5-N7	-8.40	125.36	130.40
2	B	1604	C	N3-C4-N4	8.40	123.88	118.00
2	B	2196	C	P-O3'-C3'	8.40	129.78	119.70
2	B	2833	U	C3'-C2'-C1'	8.40	108.22	101.50
2	B	2750	A	C4-C5-N7	-8.40	106.50	110.70
2	B	62	U	N1-C2-N3	-8.40	109.86	114.90
2	B	413	C	C5'-C4'-O4'	8.40	119.18	109.10
2	B	657	U	N3-C4-O4	-8.40	113.52	119.40
2	B	221	A	N7-C8-N9	8.40	118.00	113.80
2	B	2042	A	C5-N7-C8	8.40	108.10	103.90
2	B	2351	G	N1-C2-N2	-8.40	108.64	116.20
2	B	2440	C	O4'-C1'-N1	8.40	114.92	108.20
2	B	1554	U	C5-C6-N1	-8.40	118.50	122.70
2	B	2479	U	P-O3'-C3'	-8.40	109.62	119.70
2	B	2834	G	C4-C5-C6	8.40	123.84	118.80
2	B	739	A	C5-C6-N1	-8.39	113.50	117.70
2	B	816	C	C3'-C2'-C1'	-8.39	94.78	101.50
2	B	1669	A	C2-N3-C4	-8.39	106.40	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1954	G	P-O3'-C3'	8.39	129.77	119.70
2	B	2277	G	C8-N9-C4	-8.39	103.04	106.40
2	B	1252	G	C5-C6-O6	-8.39	123.56	128.60
2	B	2650	U	C5-C6-N1	8.39	126.90	122.70
2	B	845	A	C2-N3-C4	-8.39	106.40	110.60
2	B	223	A	C8-N9-C4	-8.39	102.44	105.80
2	B	1415	U	N1-C2-N3	8.39	119.94	114.90
2	B	1894	C	P-O5'-C5'	8.39	134.32	120.90
2	B	1963	U	P-O5'-C5'	8.39	134.32	120.90
2	B	2537	U	C2-N3-C4	-8.39	121.97	127.00
2	B	2553	G	N1-C2-N3	-8.39	118.87	123.90
1	A	31	C	N3-C4-N4	8.39	123.87	118.00
2	B	910	A	N9-C4-C5	8.39	109.16	105.80
2	B	2541	A	C4-C5-C6	8.39	121.19	117.00
2	B	943	A	N7-C8-N9	-8.39	109.61	113.80
2	B	1623	G	N3-C2-N2	8.39	125.77	119.90
2	B	2330	G	N9-C4-C5	-8.39	102.05	105.40
2	B	2752	C	C2-N3-C4	-8.39	115.71	119.90
2	B	2792	A	O4'-C1'-N9	8.39	114.91	108.20
1	A	30	C	C4-C5-C6	8.39	121.59	117.40
2	B	943	A	C5-C6-N6	-8.39	116.99	123.70
2	B	1518	C	C3'-C2'-C1'	-8.39	94.79	101.50
1	A	99	A	C5-C6-N6	-8.38	116.99	123.70
2	B	1241	A	N1-C6-N6	8.38	123.63	118.60
2	B	1840	G	O4'-C1'-N9	8.38	114.91	108.20
2	B	2109	U	C2-N3-C4	-8.38	121.97	127.00
2	B	2556	C	P-O3'-C3'	-8.39	109.64	119.70
1	A	88	C	N3-C4-N4	8.38	123.87	118.00
2	B	457	A	C6-N1-C2	8.38	123.63	118.60
2	B	2852	G	O4'-C1'-N9	8.38	114.91	108.20
2	B	479	A	C4-C5-C6	8.38	121.19	117.00
2	B	995	C	C6-N1-C2	-8.38	116.95	120.30
2	B	2208	C	C4-C5-C6	8.38	121.59	117.40
2	B	446	G	C4-C5-C6	8.38	123.83	118.80
2	B	848	C	N3-C4-N4	8.38	123.86	118.00
2	B	1143	A	C5-C6-N6	-8.38	117.00	123.70
2	B	1252	G	P-O3'-C3'	-8.38	109.65	119.70
2	B	1308	A	O4'-C1'-N9	8.38	114.90	108.20
2	B	1682	G	C5-C6-N1	-8.38	107.31	111.50
2	B	2224	G	N7-C8-N9	8.38	117.29	113.10
2	B	345	A	C2-N3-C4	8.38	114.79	110.60
2	B	502	A	C5-C6-N1	-8.38	113.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2801	G	N3-C2-N2	8.38	125.76	119.90
2	B	527	C	O4'-C1'-N1	8.37	114.90	108.20
2	B	810	U	O4'-C1'-N1	8.37	114.90	108.20
2	B	1292	G	N1-C6-O6	8.38	124.92	119.90
2	B	659	G	N3-C2-N2	8.37	125.76	119.90
2	B	2061	G	N3-C2-N2	8.37	125.76	119.90
2	B	2668	G	C4-C5-C6	8.37	123.82	118.80
2	B	2704	C	P-O5'-C5'	-8.37	107.50	120.90
8	N	86	ARG	NE-CZ-NH1	8.37	124.49	120.30
2	B	2126	A	C4-C5-N7	-8.37	106.52	110.70
2	B	2509	G	C2-N3-C4	8.37	116.08	111.90
2	B	2510	C	O4'-C1'-N1	8.37	114.90	108.20
2	B	486	C	C5-C6-N1	8.37	125.18	121.00
2	B	1057	A	C4-C5-C6	8.37	121.18	117.00
2	B	1626	A	C4-C5-N7	8.37	114.88	110.70
2	B	2090	A	C4-C5-N7	-8.37	106.52	110.70
2	B	101	A	C5-C6-N1	-8.37	113.52	117.70
2	B	2063	C	N3-C4-C5	-8.37	118.55	121.90
2	B	192	C	C2-N3-C4	8.36	124.08	119.90
2	B	738	G	C5'-C4'-O4'	8.36	119.14	109.10
2	B	779	U	O4'-C1'-N1	8.37	114.89	108.20
2	B	1453	A	P-O3'-C3'	-8.37	109.66	119.70
2	B	882	G	C5-C6-O6	-8.36	123.58	128.60
2	B	927	A	N9-C4-C5	8.36	109.15	105.80
2	B	2029	G	N7-C8-N9	8.37	117.28	113.10
2	B	2860	A	C5-N7-C8	8.36	108.08	103.90
2	B	796	C	C2'-C3'-O3'	8.36	127.90	109.50
2	B	1440	U	C6-N1-C2	8.36	126.02	121.00
2	B	1622	G	C2-N3-C4	-8.36	107.72	111.90
2	B	1912	A	C8-N9-C4	-8.36	102.46	105.80
2	B	2307	G	C6-C5-N7	-8.36	125.38	130.40
8	N	87	PHE	CB-CG-CD1	8.36	126.65	120.80
2	B	2333	A	C5'-C4'-O4'	8.36	119.13	109.10
2	B	256	A	C5-C6-N1	-8.36	113.52	117.70
2	B	938	G	O4'-C1'-N9	8.36	114.89	108.20
2	B	989	G	O4'-C1'-C2'	-8.36	97.44	105.80
2	B	1771	C	C4-C5-C6	8.36	121.58	117.40
2	B	785	G	N3-C4-N9	-8.36	120.98	126.00
2	B	1590	A	C5-C6-N1	-8.36	113.52	117.70
2	B	2223	G	C5-C6-O6	-8.36	123.58	128.60
32	J	75	TYR	CB-CG-CD2	-8.36	115.98	121.00
2	B	666	A	C4-C5-C6	8.36	121.18	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	974	G	C5-C6-N1	-8.36	107.32	111.50
2	B	1044	C	O4'-C1'-N1	8.36	114.88	108.20
2	B	2629	U	C5-C4-O4	-8.36	120.89	125.90
2	B	130	C	O4'-C1'-N1	8.35	114.88	108.20
2	B	124	G	C5-N7-C8	8.35	108.48	104.30
2	B	1250	G	C6-C5-N7	-8.35	125.39	130.40
2	B	1772	A	N1-C2-N3	8.35	133.48	129.30
2	B	1358	G	C5-C6-N1	-8.35	107.32	111.50
2	B	1528	A	C4-C5-C6	8.35	121.17	117.00
1	A	101	A	C4-C5-C6	8.35	121.17	117.00
1	A	112	G	C5-C6-O6	-8.35	123.59	128.60
2	B	188	G	C2-N3-C4	-8.35	107.72	111.90
2	B	388	G	N1-C6-O6	8.35	124.91	119.90
2	B	1191	G	C5-C6-O6	-8.35	123.59	128.60
2	B	2160	C	O4'-C1'-N1	8.35	114.88	108.20
2	B	2170	A	N9-C4-C5	-8.35	102.46	105.80
3	0	45	PHE	CB-CG-CD1	-8.35	114.95	120.80
2	B	2809	A	C5-C6-N1	-8.35	113.53	117.70
2	B	502	A	C5'-C4'-C3'	-8.35	102.64	116.00
2	B	262	A	N7-C8-N9	-8.35	109.63	113.80
2	B	291	G	C4-C5-C6	8.35	123.81	118.80
2	B	307	G	N9-C1'-C2'	-8.34	102.82	112.00
2	B	1040	A	N9-C4-C5	8.34	109.14	105.80
2	B	2168	G	P-O3'-C3'	-8.34	109.69	119.70
2	B	2709	G	N3-C4-C5	-8.34	124.43	128.60
1	A	107	G	C5-N7-C8	8.34	108.47	104.30
2	B	1325	U	P-O3'-C3'	-8.34	109.69	119.70
2	B	1978	A	C5-N7-C8	8.34	108.07	103.90
2	B	2642	G	C6-C5-N7	-8.34	125.40	130.40
2	B	806	C	C5'-C4'-C3'	-8.34	102.66	116.00
2	B	1432	G	C6-C5-N7	-8.34	125.40	130.40
2	B	1492	G	C6-C5-N7	-8.34	125.40	130.40
2	B	1943	U	N3-C2-O2	8.34	128.04	122.20
2	B	386	G	C6-C5-N7	-8.34	125.40	130.40
2	B	1403	A	C6-C5-N7	-8.34	126.47	132.30
2	B	1803	A	N1-C2-N3	8.34	133.47	129.30
2	B	2287	A	C6-C5-N7	-8.34	126.47	132.30
12	R	68	ARG	NE-CZ-NH1	-8.34	116.13	120.30
19	X	107	ARG	NE-CZ-NH2	-8.34	116.13	120.30
2	B	652	U	C5'-C4'-C3'	-8.33	102.67	116.00
2	B	635	C	C5-C6-N1	8.33	125.17	121.00
2	B	684	G	N9-C4-C5	8.33	108.73	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	961	C	O4'-C1'-N1	8.33	114.87	108.20
2	B	1227	G	C4-C5-N7	8.33	114.13	110.80
2	B	1906	G	C6-C5-N7	-8.33	125.40	130.40
2	B	2633	G	P-O3'-C3'	8.33	129.70	119.70
27	C	79	ARG	NE-CZ-NH1	8.33	124.47	120.30
2	B	671	C	N3-C4-N4	8.33	123.83	118.00
2	B	934	U	N1-C2-N3	-8.33	109.90	114.90
2	B	2763	G	N1-C6-O6	8.33	124.90	119.90
2	B	843	G	N3-C2-N2	8.33	125.73	119.90
2	B	1078	U	O4'-C1'-N1	8.33	114.86	108.20
2	B	2316	G	N1-C6-O6	8.33	124.90	119.90
2	B	498	G	O4'-C1'-N9	8.33	114.86	108.20
2	B	1335	C	N1-C2-O2	8.33	123.90	118.90
2	B	2162	G	C5-C6-O6	-8.33	123.60	128.60
2	B	2369	A	N1-C2-N3	8.33	133.46	129.30
2	B	914	G	C5-C6-O6	-8.33	123.60	128.60
2	B	1598	A	C6-C5-N7	-8.33	126.47	132.30
2	B	2182	U	O4'-C1'-N1	8.33	114.86	108.20
2	B	73	A	O4'-C1'-N9	8.32	114.86	108.20
2	B	84	A	C6-C5-N7	-8.32	126.47	132.30
2	B	676	A	C5-C6-N6	-8.32	117.04	123.70
2	B	1051	G	P-O5'-C5'	-8.32	107.58	120.90
2	B	329	G	N9-C4-C5	-8.32	102.07	105.40
2	B	505	A	C5-C6-N6	-8.32	117.04	123.70
2	B	2380	C	N3-C4-N4	8.32	123.83	118.00
2	B	2498	C	C5-C6-N1	8.32	125.16	121.00
2	B	2257	U	O4'-C1'-N1	8.32	114.86	108.20
2	B	2611	C	C2-N3-C4	8.32	124.06	119.90
2	B	186	G	C2-N3-C4	8.32	116.06	111.90
2	B	2766	A	O4'-C1'-N9	8.32	114.85	108.20
2	B	2802	G	C5-N7-C8	-8.32	100.14	104.30
1	A	15	A	C4-C5-C6	8.31	121.16	117.00
2	B	417	C	C5-C4-N4	-8.31	114.38	120.20
2	B	456	C	C5'-C4'-C3'	-8.31	102.70	116.00
2	B	655	A	O4'-C1'-N9	8.31	114.85	108.20
2	B	1755	A	C6-N1-C2	-8.31	113.61	118.60
2	B	2271	G	C5-C6-O6	-8.31	123.61	128.60
2	B	913	U	O4'-C1'-N1	8.31	114.85	108.20
2	B	2856	A	C5-C6-N6	-8.31	117.05	123.70
2	B	593	U	N3-C4-O4	8.31	125.22	119.40
2	B	2311	A	N1-C6-N6	8.31	123.59	118.60
2	B	2330	G	O4'-C1'-N9	8.31	114.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	16	G	N9-C4-C5	8.31	108.72	105.40
2	B	692	C	N3-C4-N4	8.31	123.82	118.00
2	B	1191	G	O4'-C1'-N9	8.31	114.84	108.20
2	B	1498	C	O4'-C1'-N1	8.31	114.85	108.20
6	1	26	PHE	CB-CG-CD2	-8.31	114.98	120.80
1	A	12	C	O4'-C1'-N1	8.30	114.84	108.20
2	B	63	A	N3-C4-C5	-8.30	120.99	126.80
2	B	2740	A	C4-C5-C6	8.30	121.15	117.00
2	B	1146	C	C6-N1-C1'	8.30	130.76	120.80
2	B	1831	G	C8-N9-C4	-8.30	103.08	106.40
2	B	2000	C	O4'-C1'-N1	8.30	114.84	108.20
2	B	2081	U	O4'-C1'-N1	8.30	114.84	108.20
2	B	2104	C	O4'-C1'-N1	8.30	114.84	108.20
2	B	2108	A	C5-C6-N6	-8.30	117.06	123.70
2	B	2831	G	C5-C6-N1	8.30	115.65	111.50
2	B	117	G	N1-C6-O6	8.30	124.88	119.90
2	B	1435	G	N3-C2-N2	8.30	125.71	119.90
2	B	1754	A	C6-N1-C2	-8.30	113.62	118.60
2	B	1941	C	C2-N3-C4	-8.30	115.75	119.90
2	B	2215	C	C5-C4-N4	-8.30	114.39	120.20
2	B	2630	G	O4'-C1'-N9	8.30	114.84	108.20
2	B	2704	C	C6-N1-C2	-8.30	116.98	120.30
2	B	495	G	O4'-C1'-N9	8.30	114.84	108.20
2	B	1182	G	N9-C4-C5	-8.30	102.08	105.40
2	B	1468	U	O4'-C1'-N1	8.30	114.84	108.20
2	B	1719	G	C4-N9-C1'	-8.30	115.72	126.50
2	B	1848	A	C8-N9-C4	-8.30	102.48	105.80
2	B	2158	A	C4-C5-C6	8.30	121.15	117.00
2	B	1826	G	C5-C6-N1	-8.29	107.35	111.50
2	B	2269	G	C8-N9-C4	8.29	109.72	106.40
2	B	2899	A	C4-C5-C6	8.29	121.15	117.00
2	B	1653	G	O4'-C1'-N9	8.29	114.83	108.20
2	B	960	A	N1-C6-N6	8.29	123.58	118.60
2	B	1019	U	C5-C4-O4	-8.29	120.92	125.90
2	B	1972	G	P-O5'-C5'	8.29	134.16	120.90
2	B	2105	U	O4'-C1'-N1	8.29	114.83	108.20
2	B	2711	A	N1-C6-N6	8.29	123.58	118.60
2	B	2874	C	P-O5'-C5'	-8.29	107.63	120.90
2	B	1099	G	N9-C4-C5	8.29	108.72	105.40
2	B	2327	A	C4-C5-C6	8.29	121.14	117.00
2	B	758	C	N3-C4-C5	-8.29	118.58	121.90
2	B	974	G	C4-C5-N7	8.29	114.11	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1545	A	C1'-O4'-C4'	-8.29	103.27	109.90
2	B	1324	G	N9-C4-C5	-8.29	102.08	105.40
2	B	1622	G	C5-C6-O6	-8.29	123.63	128.60
2	B	1973	G	N9-C4-C5	8.29	108.72	105.40
2	B	2319	G	N3-C2-N2	8.29	125.70	119.90
2	B	2666	C	O4'-C1'-N1	8.29	114.83	108.20
2	B	2498	C	N3-C4-C5	-8.29	118.58	121.90
2	B	2879	A	C5-N7-C8	8.29	108.04	103.90
2	B	1164	C	O4'-C1'-N1	8.28	114.83	108.20
2	B	2162	G	C5-N7-C8	8.29	108.44	104.30
2	B	817	C	C6-N1-C2	-8.28	116.99	120.30
2	B	2646	C	C5-C6-N1	8.28	125.14	121.00
2	B	722	A	N1-C6-N6	8.28	123.57	118.60
2	B	751	A	N9-C4-C5	-8.28	102.49	105.80
2	B	1006	C	C6-N1-C2	-8.28	116.99	120.30
2	B	1701	A	C2-N3-C4	-8.28	106.46	110.60
2	B	2206	C	O4'-C1'-N1	8.28	114.83	108.20
2	B	2800	A	C5-N7-C8	8.28	108.04	103.90
1	A	98	G	N1-C2-N3	-8.28	118.93	123.90
2	B	2826	A	N7-C8-N9	-8.28	109.66	113.80
2	B	409	G	C5-C6-N1	8.28	115.64	111.50
2	B	698	C	N3-C4-N4	8.28	123.80	118.00
2	B	743	A	C4-C5-C6	8.28	121.14	117.00
2	B	785	G	C5-N7-C8	-8.28	100.16	104.30
2	B	1582	C	O4'-C4'-C3'	-8.28	95.72	104.00
2	B	2322	A	O4'-C1'-N9	8.28	114.82	108.20
2	B	2224	G	C5-N7-C8	-8.28	100.16	104.30
2	B	639	U	C4-C5-C6	-8.28	114.73	119.70
2	B	147	C	N3-C4-C5	-8.28	118.59	121.90
2	B	1757	A	N9-C4-C5	8.28	109.11	105.80
18	W	18	ARG	NE-CZ-NH1	8.27	124.44	120.30
2	B	9	G	C4-C5-C6	8.27	123.76	118.80
2	B	621	A	C6-N1-C2	-8.27	113.64	118.60
2	B	1501	G	O4'-C1'-N9	8.27	114.82	108.20
2	B	502	A	C6-C5-N7	-8.27	126.51	132.30
2	B	1321	A	C6-C5-N7	-8.27	126.51	132.30
2	B	1895	C	C1'-O4'-C4'	8.27	116.52	109.90
2	B	578	G	C5-C6-N1	-8.27	107.37	111.50
2	B	779	U	C3'-C2'-C1'	8.27	108.11	101.50
2	B	866	A	C5-C6-N6	-8.27	117.09	123.70
2	B	1124	G	C5-N7-C8	8.27	108.44	104.30
2	B	1464	G	C5-C6-N1	8.27	115.63	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1610	A	C5'-C4'-O4'	8.27	119.02	109.10
2	B	2116	G	C6-C5-N7	-8.27	125.44	130.40
2	B	2849	U	C2-N3-C4	-8.27	122.04	127.00
2	B	43	G	C4-C5-N7	8.27	114.11	110.80
2	B	213	A	C5-C6-N6	-8.27	117.09	123.70
2	B	1459	G	C6-C5-N7	-8.27	125.44	130.40
2	B	1734	G	N1-C6-O6	8.27	124.86	119.90
2	B	2634	A	C4-C5-N7	-8.27	106.57	110.70
2	B	47	C	O4'-C1'-N1	8.26	114.81	108.20
2	B	72	U	P-O3'-C3'	-8.26	109.78	119.70
2	B	2251	G	C5-C6-O6	-8.26	123.64	128.60
2	B	190	A	C6-N1-C2	-8.26	113.64	118.60
2	B	569	U	N3-C4-O4	8.26	125.18	119.40
2	B	617	G	O4'-C1'-N9	8.26	114.81	108.20
2	B	2072	C	C6-N1-C2	-8.26	117.00	120.30
2	B	2760	C	C5-C4-N4	-8.26	114.42	120.20
2	B	874	G	N9-C4-C5	8.26	108.70	105.40
2	B	1331	G	C6-C5-N7	-8.26	125.44	130.40
2	B	1921	G	N9-C4-C5	-8.26	102.10	105.40
2	B	1936	A	C5-C6-N1	-8.26	113.57	117.70
31	I	133	ARG	NE-CZ-NH2	-8.26	116.17	120.30
2	B	39	G	N1-C2-N3	-8.26	118.95	123.90
2	B	415	A	P-O3'-C3'	8.26	129.61	119.70
2	B	843	G	C5-C6-O6	-8.26	123.65	128.60
2	B	1491	G	C5-C6-O6	-8.26	123.64	128.60
20	E	53	THR	CA-CB-CG2	-8.26	100.84	112.40
1	A	5	U	C5-C6-N1	-8.26	118.57	122.70
2	B	560	C	N3-C4-N4	8.26	123.78	118.00
2	B	2492	U	C2-N3-C4	-8.26	122.05	127.00
2	B	45	G	O4'-C1'-N9	8.25	114.80	108.20
2	B	942	G	C5-C6-N1	8.25	115.63	111.50
2	B	1165	A	C6-N1-C2	8.25	123.55	118.60
2	B	2437	G	N3-C2-N2	8.25	125.68	119.90
2	B	2535	G	N1-C6-O6	8.25	124.85	119.90
2	B	2550	G	N3-C2-N2	8.25	125.68	119.90
2	B	331	C	C6-N1-C2	8.25	123.60	120.30
2	B	933	A	O4'-C1'-N9	8.25	114.80	108.20
2	B	1298	C	N3-C4-C5	-8.25	118.60	121.90
2	B	2096	C	C4'-C3'-C2'	-8.25	94.35	102.60
32	J	60	ASP	CB-CG-OD2	8.25	125.72	118.30
2	B	144	A	C4-C5-C6	8.25	121.12	117.00
2	B	1124	G	P-O3'-C3'	-8.25	109.80	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1685	C	C5-C6-N1	8.25	125.12	121.00
2	B	2429	G	O4'-C1'-N9	8.25	114.80	108.20
2	B	230	G	C5-C6-O6	-8.25	123.65	128.60
2	B	2209	G	N1-C6-O6	8.25	124.85	119.90
2	B	2313	C	O4'-C1'-N1	8.25	114.80	108.20
2	B	2529	G	C5-C6-O6	-8.25	123.65	128.60
2	B	63	A	C6-C5-N7	-8.24	126.53	132.30
25	7	21	PHE	CB-CG-CD1	8.24	126.57	120.80
1	A	42	C	N1-C2-N3	8.24	124.97	119.20
2	B	2240	U	N1-C2-N3	8.24	119.84	114.90
2	B	2677	G	C4'-C3'-C2'	8.24	110.84	102.60
2	B	43	G	C6-N1-C2	-8.24	120.16	125.10
2	B	67	U	O5'-C5'-C4'	-8.24	96.04	111.70
2	B	759	G	C8-N9-C4	-8.24	103.10	106.40
2	B	1965	C	N3-C4-C5	-8.24	118.60	121.90
2	B	2635	A	N1-C2-N3	8.24	133.42	129.30
2	B	2769	U	O4'-C1'-N1	8.24	114.79	108.20
2	B	2849	U	O4'-C4'-C3'	-8.24	95.76	104.00
2	B	652	U	O4'-C1'-N1	8.24	114.79	108.20
2	B	1846	G	C4-C5-C6	8.24	123.74	118.80
2	B	2432	A	P-O3'-C3'	-8.24	109.81	119.70
2	B	2319	G	N1-C6-O6	8.23	124.84	119.90
2	B	160	A	N7-C8-N9	-8.23	109.68	113.80
2	B	281	C	C2-N3-C4	8.23	124.02	119.90
2	B	367	G	N3-C2-N2	8.23	125.66	119.90
2	B	415	A	C5-C6-N6	-8.23	117.11	123.70
2	B	543	G	O4'-C1'-C2'	8.23	115.01	107.60
2	B	826	U	N3-C4-O4	8.23	125.16	119.40
2	B	1017	G	O4'-C1'-N9	8.23	114.78	108.20
2	B	1073	A	C5-C6-N6	-8.23	117.11	123.70
2	B	1985	C	N3-C4-N4	8.23	123.76	118.00
28	F	120	SER	N-CA-CB	8.23	122.85	110.50
2	B	1620	G	N9-C4-C5	-8.23	102.11	105.40
2	B	1095	A	C5'-C4'-O4'	8.23	118.97	109.10
2	B	1652	A	C5-C6-N1	-8.23	113.58	117.70
2	B	1698	A	P-O5'-C5'	-8.23	107.73	120.90
2	B	1722	A	C4-C5-C6	8.23	121.11	117.00
1	A	115	A	C4-C5-N7	-8.23	106.59	110.70
2	B	117	G	N3-C4-C5	-8.23	124.49	128.60
2	B	1494	A	C5'-C4'-C3'	8.23	129.16	116.00
2	B	2464	G	C2-N3-C4	8.23	116.01	111.90
2	B	2833	U	N3-C4-O4	8.23	125.16	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	664	G	C4-C5-C6	8.22	123.73	118.80
2	B	1408	G	N1-C6-O6	8.22	124.83	119.90
2	B	2225	A	N1-C2-N3	8.22	133.41	129.30
2	B	2647	U	C2-N3-C4	8.22	131.93	127.00
2	B	756	A	C4-C5-N7	-8.22	106.59	110.70
2	B	1756	G	P-O3'-C3'	-8.22	109.83	119.70
2	B	2581	G	C5-C6-O6	-8.22	123.67	128.60
2	B	106	C	N3-C4-C5	-8.22	118.61	121.90
2	B	155	A	C3'-C2'-C1'	-8.22	94.92	101.50
2	B	180	G	C5-C6-O6	-8.22	123.67	128.60
2	B	1478	G	N7-C8-N9	8.22	117.21	113.10
2	B	1942	C	N3-C4-C5	-8.22	118.61	121.90
2	B	2645	G	N1-C6-O6	8.22	124.83	119.90
2	B	1128	G	O4'-C1'-C2'	-8.22	97.58	105.80
2	B	2053	G	N3-C2-N2	8.22	125.65	119.90
2	B	573	U	C4-C5-C6	8.22	124.63	119.70
2	B	1004	U	P-O3'-C3'	-8.22	109.84	119.70
2	B	1681	G	C6-N1-C2	-8.22	120.17	125.10
2	B	1908	C	N3-C4-N4	8.22	123.75	118.00
2	B	2057	G	O4'-C1'-N9	8.22	114.77	108.20
2	B	19	A	C6-N1-C2	8.22	123.53	118.60
2	B	363	G	C5-C6-N1	-8.22	107.39	111.50
2	B	916	G	N3-C2-N2	8.22	125.65	119.90
1	A	57	A	N1-C2-N3	-8.21	125.19	129.30
2	B	132	G	N1-C2-N3	-8.21	118.97	123.90
2	B	411	G	C8-N9-C4	-8.22	103.11	106.40
2	B	735	A	O4'-C1'-C2'	8.21	114.99	107.60
2	B	800	A	C8-N9-C4	-8.21	102.51	105.80
2	B	1037	G	C8-N9-C4	8.22	109.69	106.40
2	B	2131	U	C4-C5-C6	8.21	124.63	119.70
2	B	2398	U	C5-C4-O4	8.21	130.83	125.90
2	B	2829	A	N7-C8-N9	-8.21	109.69	113.80
2	B	1745	A	N1-C6-N6	8.21	123.53	118.60
2	B	2197	U	P-O5'-C5'	8.21	134.04	120.90
2	B	1455	G	C5-N7-C8	8.21	108.41	104.30
2	B	2538	C	C5-C4-N4	-8.21	114.45	120.20
2	B	2761	A	C5-C6-N6	-8.21	117.13	123.70
2	B	2633	G	C5-C6-O6	-8.21	123.67	128.60
1	A	53	A	C8-N9-C4	-8.21	102.52	105.80
2	B	180	G	P-O5'-C5'	-8.21	107.77	120.90
2	B	1711	A	O4'-C1'-N9	8.21	114.77	108.20
2	B	2406	A	N1-C6-N6	8.21	123.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1907	G	N1-C6-O6	8.21	124.82	119.90
2	B	2376	A	N7-C8-N9	-8.21	109.70	113.80
2	B	1112	G	O4'-C1'-N9	8.21	114.77	108.20
2	B	1535	A	N1-C2-N3	8.21	133.40	129.30
2	B	2212	A	C8-N9-C4	-8.21	102.52	105.80
2	B	2264	C	O4'-C1'-N1	8.20	114.76	108.20
2	B	2281	A	O4'-C1'-N9	8.21	114.76	108.20
2	B	2328	A	C4-C5-C6	8.21	121.10	117.00
2	B	151	C	C4-C5-C6	8.20	121.50	117.40
2	B	323	C	P-O3'-C3'	-8.20	109.86	119.70
2	B	445	C	N3-C4-C5	-8.20	118.62	121.90
2	B	1635	A	C2-N3-C4	-8.20	106.50	110.60
2	B	1656	C	C4'-C3'-C2'	-8.20	94.40	102.60
2	B	2004	G	N1-C2-N3	-8.20	118.98	123.90
2	B	1806	C	C4-C5-C6	8.20	121.50	117.40
2	B	2601	C	C2-N3-C4	8.20	124.00	119.90
2	B	166	U	N3-C2-O2	8.20	127.94	122.20
2	B	507	A	C5-C6-N1	-8.20	113.60	117.70
2	B	753	A	C6-C5-N7	-8.20	126.56	132.30
2	B	623	C	O4'-C1'-N1	8.19	114.75	108.20
2	B	2328	A	C2-N3-C4	8.20	114.70	110.60
2	B	2383	G	O4'-C1'-N9	8.20	114.76	108.20
2	B	2435	A	P-O3'-C3'	8.20	129.53	119.70
2	B	40	U	C1'-O4'-C4'	8.19	116.45	109.90
2	B	271	G	C3'-C2'-C1'	-8.19	94.95	101.50
2	B	353	C	C5-C6-N1	8.19	125.09	121.00
2	B	734	A	C5-C6-N1	-8.19	113.60	117.70
2	B	1333	G	C6-C5-N7	-8.19	125.48	130.40
2	B	2341	G	C6-C5-N7	-8.19	125.48	130.40
2	B	2456	C	N1-C2-N3	-8.19	113.47	119.20
2	B	2619	C	O4'-C1'-N1	8.19	114.75	108.20
2	B	288	U	C4'-C3'-C2'	-8.19	94.41	102.60
2	B	320	A	C4-C5-C6	8.19	121.09	117.00
2	B	1465	G	N9-C1'-C2'	-8.19	102.99	112.00
2	B	2316	G	C6-C5-N7	-8.19	125.49	130.40
2	B	2425	A	C5'-C4'-C3'	-8.19	102.90	116.00
2	B	2791	G	C5-C6-O6	-8.19	123.69	128.60
21	Y	56	HIS	CA-CB-CG	-8.19	99.68	113.60
2	B	1226	A	C5-C6-N6	-8.19	117.15	123.70
2	B	1365	A	C4-C5-C6	8.19	121.09	117.00
2	B	2622	U	N3-C4-O4	-8.19	113.67	119.40
2	B	2803	G	C5-C6-N1	-8.19	107.41	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1269	A	N7-C8-N9	8.19	117.89	113.80
2	B	2705	A	N9-C4-C5	8.18	109.07	105.80
2	B	1000	A	N7-C8-N9	8.18	117.89	113.80
2	B	1041	G	C4-C5-C6	8.18	123.71	118.80
2	B	1203	U	N1-C2-N3	-8.18	109.99	114.90
2	B	1776	G	N1-C6-O6	8.18	124.81	119.90
2	B	2623	G	C6-C5-N7	-8.18	125.49	130.40
2	B	2732	G	O4'-C1'-N9	8.18	114.75	108.20
2	B	2842	G	N1-C6-O6	8.18	124.81	119.90
24	6	19	ARG	NE-CZ-NH2	8.18	124.39	120.30
2	B	74	A	P-O5'-C5'	-8.18	107.81	120.90
2	B	622	G	C5'-C4'-O4'	8.18	118.92	109.10
2	B	862	G	C4-C5-C6	8.18	123.71	118.80
2	B	885	C	N3-C4-N4	8.18	123.73	118.00
2	B	1967	C	N1-C2-O2	8.18	123.81	118.90
2	B	2483	C	O4'-C1'-N1	8.18	114.74	108.20
2	B	951	C	O4'-C1'-N1	8.18	114.74	108.20
2	B	1034	G	N1-C2-N3	-8.18	118.99	123.90
2	B	2179	C	C2-N3-C4	8.18	123.99	119.90
2	B	2828	G	N1-C6-O6	8.18	124.81	119.90
2	B	887	U	N3-C2-O2	8.18	127.92	122.20
2	B	2445	G	C5-C6-O6	-8.18	123.69	128.60
2	B	223	A	C4-C5-N7	-8.18	106.61	110.70
2	B	495	G	N1-C2-N3	-8.18	119.00	123.90
2	B	1312	U	C2-N3-C4	-8.18	122.09	127.00
2	B	1988	G	C5-C6-O6	-8.18	123.69	128.60
2	B	2553	G	C1'-O4'-C4'	-8.18	103.36	109.90
2	B	343	C	C4-C5-C6	8.17	121.49	117.40
2	B	407	G	C5-C6-O6	-8.17	123.69	128.60
2	B	408	G	N7-C8-N9	-8.17	109.01	113.10
2	B	720	U	N3-C4-C5	-8.17	109.70	114.60
2	B	2366	A	C4-C5-N7	-8.17	106.61	110.70
2	B	891	G	C8-N9-C4	-8.17	103.13	106.40
2	B	957	C	N3-C4-C5	8.17	125.17	121.90
2	B	1456	G	N1-C6-O6	8.17	124.81	119.90
2	B	2130	U	C5-C4-O4	-8.17	121.00	125.90
9	O	33	ARG	NE-CZ-NH2	8.17	124.39	120.30
1	A	97	C	O4'-C1'-N1	8.17	114.74	108.20
2	B	45	G	N3-C2-N2	8.17	125.62	119.90
2	B	80	G	C6-N1-C2	8.17	130.00	125.10
2	B	220	G	N3-C2-N2	8.17	125.62	119.90
2	B	1506	U	P-O5'-C5'	8.17	133.97	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	286	U	O4'-C1'-N1	8.17	114.73	108.20
2	B	367	G	C4-C5-N7	8.17	114.07	110.80
2	B	370	G	C4-C5-C6	8.17	123.70	118.80
2	B	2353	G	N1-C2-N2	8.17	123.55	116.20
2	B	2397	G	O4'-C4'-C3'	-8.17	95.83	104.00
2	B	331	C	C1'-O4'-C4'	-8.17	103.37	109.90
2	B	1272	A	C1'-O4'-C4'	-8.17	103.37	109.90
2	B	1428	C	N3-C4-C5	-8.17	118.63	121.90
2	B	2537	U	C4-C5-C6	-8.17	114.80	119.70
2	B	104	A	O4'-C1'-N9	8.16	114.73	108.20
2	B	1048	A	N3-C4-C5	-8.16	121.08	126.80
2	B	1998	A	C4'-C3'-C2'	8.16	110.76	102.60
2	B	2528	U	N1-C2-N3	-8.16	110.00	114.90
2	B	1912	A	C4-C5-C6	8.16	121.08	117.00
2	B	2116	G	N9-C4-C5	-8.16	102.14	105.40
1	A	29	A	N1-C6-N6	8.16	123.50	118.60
2	B	1356	G	N1-C6-O6	8.16	124.80	119.90
2	B	1459	G	C4-N9-C1'	8.16	137.11	126.50
2	B	1206	G	C4-C5-N7	8.16	114.06	110.80
2	B	1436	G	N1-C6-O6	8.16	124.79	119.90
2	B	2073	C	O4'-C1'-N1	8.16	114.73	108.20
2	B	2654	A	N1-C6-N6	8.16	123.50	118.60
2	B	2150	C	C5-C4-N4	-8.16	114.49	120.20
2	B	2718	G	N1-C6-O6	8.16	124.79	119.90
2	B	825	A	N7-C8-N9	-8.15	109.72	113.80
2	B	897	C	C5-C4-N4	-8.15	114.49	120.20
2	B	1797	G	C5-C6-N1	-8.15	107.42	111.50
2	B	2425	A	C5'-C4'-O4'	8.15	118.88	109.10
19	X	295	ARG	NE-CZ-NH1	-8.15	116.22	120.30
2	B	2775	G	O4'-C1'-N9	8.15	114.72	108.20
2	B	2842	G	N7-C8-N9	-8.15	109.02	113.10
2	B	2872	A	C6-N1-C2	-8.15	113.71	118.60
2	B	323	C	C6-N1-C2	8.15	123.56	120.30
2	B	1767	G	N3-C2-N2	8.15	125.61	119.90
2	B	2887	A	C6-C5-N7	-8.15	126.59	132.30
2	B	1630	A	N9-C4-C5	8.15	109.06	105.80
2	B	2895	G	N1-C2-N3	-8.15	119.01	123.90
2	B	271	G	C4-C5-C6	8.15	123.69	118.80
2	B	379	G	N1-C2-N2	-8.15	108.87	116.20
2	B	602	A	O4'-C1'-N9	8.15	114.72	108.20
2	B	2833	U	C4-C5-C6	8.15	124.59	119.70
2	B	17	G	N3-C2-N2	8.14	125.60	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	622	G	O4'-C1'-N9	8.14	114.71	108.20
2	B	972	A	C4-C5-C6	8.14	121.07	117.00
2	B	1038	G	P-O3'-C3'	-8.14	109.93	119.70
2	B	1373	A	C5-C6-N1	-8.14	113.63	117.70
2	B	2010	G	C5-C6-O6	-8.14	123.71	128.60
2	B	2379	G	C4-N9-C1'	-8.14	115.91	126.50
2	B	2098	U	O4'-C1'-N1	8.14	114.72	108.20
2	B	2465	C	N3-C4-C5	-8.14	118.64	121.90
2	B	603	A	C6-N1-C2	-8.14	113.72	118.60
2	B	98	G	C8-N9-C4	-8.14	103.14	106.40
2	B	319	G	C8-N9-C4	8.14	109.66	106.40
2	B	750	A	C5-C6-N6	-8.14	117.19	123.70
2	B	852	U	O4'-C1'-N1	8.14	114.71	108.20
2	B	1021	A	C6-N1-C2	-8.14	113.72	118.60
2	B	2528	U	O4'-C1'-N1	8.14	114.71	108.20
2	B	331	C	N3-C4-N4	8.14	123.70	118.00
2	B	852	U	N3-C4-C5	-8.14	109.72	114.60
2	B	900	A	C5-N7-C8	8.14	107.97	103.90
2	B	1401	G	N1-C2-N3	-8.14	119.02	123.90
2	B	1950	G	C5-N7-C8	-8.14	100.23	104.30
21	Y	40	ARG	NE-CZ-NH1	-8.14	116.23	120.30
2	B	94	A	C6-C5-N7	-8.14	126.61	132.30
2	B	75	G	N1-C6-O6	8.13	124.78	119.90
2	B	98	G	N3-C2-N2	8.13	125.59	119.90
2	B	486	C	C6-N1-C2	-8.13	117.05	120.30
2	B	574	A	C5'-C4'-O4'	8.13	118.86	109.10
2	B	737	C	C6-N1-C2	-8.13	117.05	120.30
2	B	2451	A	O4'-C1'-N9	8.13	114.71	108.20
2	B	362	A	C4-C5-C6	8.13	121.07	117.00
2	B	2247	A	C6-N1-C2	8.13	123.48	118.60
2	B	2798	U	O4'-C1'-N1	8.13	114.71	108.20
27	C	180	MET	CG-SD-CE	-8.13	87.19	100.20
2	B	457	A	N7-C8-N9	-8.13	109.73	113.80
2	B	2647	U	N3-C4-C5	-8.13	109.72	114.60
2	B	270	A	N1-C2-N3	8.13	133.36	129.30
2	B	537	G	N1-C6-O6	8.13	124.78	119.90
2	B	1564	C	C2-N3-C4	8.13	123.96	119.90
2	B	2260	C	C5-C4-N4	-8.13	114.51	120.20
2	B	2564	A	C4-C5-C6	8.13	121.06	117.00
1	A	91	C	C5-C6-N1	8.12	125.06	121.00
2	B	2041	U	P-O3'-C3'	8.13	129.45	119.70
2	B	2250	G	P-O5'-C5'	-8.13	107.90	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2751	G	O4'-C1'-N9	8.13	114.70	108.20
2	B	123	G	N1-C6-O6	8.12	124.78	119.90
2	B	219	A	C2-N3-C4	-8.12	106.54	110.60
2	B	344	A	C2-N3-C4	-8.12	106.54	110.60
1	A	27	C	N3-C4-C5	-8.12	118.65	121.90
2	B	599	A	N9-C4-C5	-8.12	102.55	105.80
2	B	1489	C	C6-N1-C2	-8.12	117.05	120.30
2	B	2346	A	N1-C6-N6	8.12	123.47	118.60
2	B	1426	G	N3-C4-C5	8.12	132.66	128.60
2	B	2444	G	C6-C5-N7	-8.12	125.53	130.40
2	B	2903	U	C4-C5-C6	-8.12	114.83	119.70
2	B	521	U	C5-C4-O4	-8.12	121.03	125.90
2	B	1241	A	C3'-C2'-C1'	-8.12	95.01	101.50
2	B	1670	C	C6-N1-C2	-8.12	117.05	120.30
2	B	2289	G	N1-C6-O6	8.12	124.77	119.90
2	B	2573	C	N3-C4-C5	-8.12	118.65	121.90
2	B	468	G	N3-C2-N2	8.12	125.58	119.90
2	B	94	A	N1-C6-N6	8.11	123.47	118.60
2	B	218	A	O4'-C1'-N9	8.11	114.69	108.20
2	B	368	A	C5-C6-N6	-8.11	117.21	123.70
2	B	962	G	P-O3'-C3'	-8.11	109.96	119.70
2	B	1074	G	N3-C4-C5	-8.12	124.54	128.60
2	B	1188	U	N3-C4-O4	8.12	125.08	119.40
2	B	1767	G	O4'-C1'-N9	8.12	114.69	108.20
2	B	2464	G	O4'-C1'-N9	8.12	114.69	108.20
2	B	42	A	N1-C6-N6	8.11	123.47	118.60
2	B	78	U	C5-C4-O4	-8.11	121.03	125.90
2	B	694	U	C5-C4-O4	8.11	130.77	125.90
2	B	823	C	N3-C4-C5	-8.11	118.66	121.90
2	B	1583	A	C4-C5-N7	-8.11	106.64	110.70
2	B	788	A	C4-C5-C6	8.11	121.06	117.00
2	B	879	G	C8-N9-C4	-8.11	103.16	106.40
2	B	1196	C	O4'-C1'-N1	8.11	114.69	108.20
2	B	1504	A	C5-N7-C8	8.11	107.95	103.90
2	B	1799	G	N3-C4-N9	-8.11	121.13	126.00
2	B	1908	C	C4-C5-C6	8.11	121.45	117.40
2	B	661	A	C5-C6-N6	-8.11	117.22	123.70
2	B	669	G	O3'-P-O5'	-8.11	88.60	104.00
2	B	1487	U	O4'-C1'-N1	8.11	114.69	108.20
2	B	1562	U	C4-C5-C6	-8.11	114.84	119.70
2	B	1970	A	C4-C5-C6	8.11	121.05	117.00
2	B	246	C	C5-C4-N4	-8.10	114.53	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	310	A	C4-C5-N7	-8.10	106.65	110.70
2	B	385	C	C5-C4-N4	-8.10	114.53	120.20
2	B	421	C	C5'-C4'-C3'	-8.10	103.03	116.00
2	B	776	G	N3-C2-N2	8.10	125.57	119.90
2	B	881	G	N1-C6-O6	8.10	124.76	119.90
2	B	1697	G	N3-C2-N2	8.10	125.57	119.90
2	B	1822	C	C5-C4-N4	-8.10	114.53	120.20
2	B	2028	U	C1'-O4'-C4'	-8.10	103.42	109.90
1	A	8	C	P-O3'-C3'	8.10	129.42	119.70
2	B	98	G	C4-C5-N7	-8.10	107.56	110.80
2	B	1581	G	N3-C2-N2	8.10	125.57	119.90
2	B	279	A	C6-C5-N7	-8.10	126.63	132.30
2	B	377	G	C5-C6-O6	-8.10	123.74	128.60
2	B	492	A	N1-C6-N6	8.10	123.46	118.60
2	B	1054	A	C4-C5-N7	8.10	114.75	110.70
2	B	1369	G	N1-C6-O6	8.10	124.76	119.90
2	B	2427	C	N3-C4-N4	8.10	123.67	118.00
2	B	1645	G	C8-N9-C4	-8.10	103.16	106.40
2	B	2495	G	N3-C4-C5	-8.10	124.55	128.60
1	A	55	U	O4'-C1'-N1	8.10	114.68	108.20
2	B	27	G	C1'-O4'-C4'	8.10	116.38	109.90
2	B	491	G	N3-C4-C5	8.10	132.65	128.60
2	B	1211	C	C2-N1-C1'	8.10	127.71	118.80
2	B	70	G	C3'-C2'-C1'	-8.10	95.02	101.50
2	B	1977	A	O5'-P-OP1	8.10	120.41	110.70
2	B	2156	G	N1-C6-O6	8.10	124.76	119.90
2	B	142	A	N1-C2-N3	8.09	133.35	129.30
2	B	227	A	N1-C6-N6	8.09	123.46	118.60
2	B	1044	C	C5-C4-N4	-8.09	114.53	120.20
2	B	1999	C	C4-C5-C6	8.09	121.45	117.40
2	B	472	A	O4'-C1'-N9	8.09	114.67	108.20
2	B	2425	A	C4-C5-N7	-8.09	106.65	110.70
2	B	2449	U	O4'-C1'-N1	8.09	114.67	108.20
1	A	25	U	O4'-C1'-N1	8.09	114.67	108.20
2	B	136	G	C5-C6-O6	-8.09	123.75	128.60
2	B	94	A	C4-C5-C6	8.09	121.05	117.00
2	B	201	C	N3-C4-C5	-8.09	118.66	121.90
2	B	1324	G	N1-C2-N3	-8.09	119.05	123.90
2	B	1459	G	C4-C5-C6	8.09	123.66	118.80
2	B	1587	G	C5-C6-O6	-8.09	123.75	128.60
2	B	2748	A	C6-N1-C2	-8.09	113.75	118.60
2	B	1814	G	N9-C4-C5	-8.09	102.17	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2444	G	C8-N9-C1'	8.09	137.52	127.00
2	B	53	A	N1-C6-N6	8.09	123.45	118.60
2	B	1091	G	C2-N3-C4	8.09	115.94	111.90
2	B	1283	G	C8-N9-C4	-8.09	103.17	106.40
2	B	1297	C	O4'-C1'-N1	8.09	114.67	108.20
2	B	1557	C	C5-C4-N4	-8.09	114.54	120.20
2	B	1772	A	C4-C5-C6	8.09	121.04	117.00
2	B	2574	G	C5-C6-O6	-8.09	123.75	128.60
2	B	2618	G	C4-C5-N7	-8.09	107.56	110.80
2	B	2869	G	O4'-C1'-N9	8.09	114.67	108.20
2	B	119	A	C5-C6-N6	-8.08	117.23	123.70
2	B	291	G	N9-C4-C5	8.08	108.63	105.40
2	B	869	G	C4-C5-N7	-8.08	107.57	110.80
2	B	936	A	C6-N1-C2	-8.08	113.75	118.60
2	B	1060	U	C5-C4-O4	-8.08	121.05	125.90
2	B	1214	A	C4-C5-C6	8.08	121.04	117.00
2	B	1927	A	C5-C6-N1	-8.08	113.66	117.70
2	B	2381	A	C4-C5-C6	8.08	121.04	117.00
2	B	67	U	C4-C5-C6	-8.08	114.85	119.70
2	B	665	U	C2-N1-C1'	-8.08	108.00	117.70
2	B	808	G	C5-C6-O6	-8.08	123.75	128.60
2	B	1345	C	C6-N1-C2	8.08	123.53	120.30
2	B	785	G	N9-C4-C5	8.08	108.63	105.40
2	B	140	C	C2-N3-C4	8.08	123.94	119.90
2	B	1702	G	N1-C6-O6	8.08	124.75	119.90
2	B	2219	U	N3-C4-C5	-8.08	109.75	114.60
2	B	2635	A	N7-C8-N9	-8.08	109.76	113.80
2	B	803	U	C6-N1-C2	-8.07	116.16	121.00
2	B	1449	G	C4-C5-N7	8.07	114.03	110.80
2	B	2408	U	C5-C4-O4	-8.07	121.06	125.90
2	B	1538	G	O4'-C1'-N9	8.07	114.66	108.20
2	B	1691	C	C5-C4-N4	-8.07	114.55	120.20
2	B	2432	A	C5-C6-N6	-8.07	117.24	123.70
2	B	2553	G	N3-C2-N2	8.07	125.55	119.90
2	B	2743	U	C6-N1-C2	8.07	125.84	121.00
2	B	2796	U	C3'-C2'-C1'	8.07	107.96	101.50
2	B	23	G	O4'-C1'-N9	8.07	114.66	108.20
2	B	777	G	N1-C6-O6	8.07	124.74	119.90
2	B	1101	U	C6-N1-C2	-8.07	116.16	121.00
2	B	1452	G	N3-C2-N2	8.07	125.55	119.90
2	B	2738	A	C6-C5-N7	-8.07	126.65	132.30
2	B	891	G	C4-C5-N7	-8.07	107.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1426	G	N3-C2-N2	8.07	125.55	119.90
2	B	1483	G	C4-C5-N7	8.07	114.03	110.80
1	A	34	A	C5-C6-N1	-8.07	113.67	117.70
2	B	1095	A	C5-C6-N1	-8.07	113.67	117.70
2	B	2143	C	N3-C4-N4	8.07	123.65	118.00
2	B	9	G	N3-C4-C5	-8.06	124.57	128.60
2	B	1234	U	O4'-C1'-N1	8.06	114.65	108.20
2	B	1331	G	P-O3'-C3'	8.06	129.38	119.70
2	B	1852	U	P-O5'-C5'	-8.06	108.00	120.90
2	B	2168	G	C4-C5-C6	8.06	123.64	118.80
2	B	2192	U	C5-C4-O4	8.06	130.74	125.90
2	B	2520	C	C6-N1-C2	-8.06	117.07	120.30
2	B	2601	C	N3-C4-N4	8.06	123.64	118.00
2	B	2675	A	C4-C5-N7	-8.06	106.67	110.70
2	B	625	G	O4'-C1'-N9	8.06	114.65	108.20
2	B	1060	U	C2-N3-C4	-8.06	122.16	127.00
2	B	1736	U	C5-C4-O4	-8.06	121.06	125.90
2	B	135	U	C5'-C4'-C3'	-8.06	103.11	116.00
2	B	897	C	N3-C4-C5	-8.06	118.68	121.90
2	B	2618	G	C2-N3-C4	8.06	115.93	111.90
2	B	1843	C	N3-C4-N4	8.06	123.64	118.00
2	B	2168	G	P-O5'-C5'	8.06	133.79	120.90
2	B	2776	A	C5-C6-N1	-8.06	113.67	117.70
2	B	429	A	N3-C4-N9	8.05	133.84	127.40
2	B	837	C	N3-C4-C5	-8.05	118.68	121.90
2	B	1213	A	N3-C4-N9	-8.06	120.95	127.40
2	B	1620	G	N7-C8-N9	-8.05	109.07	113.10
2	B	1296	G	C5-C6-O6	-8.05	123.77	128.60
2	B	1354	A	C5'-C4'-C3'	8.05	128.89	116.00
2	B	1768	C	N3-C4-N4	8.05	123.64	118.00
2	B	2188	U	C5-C6-N1	-8.05	118.67	122.70
2	B	2585	U	N1-C2-N3	8.05	119.73	114.90
2	B	247	G	C6-C5-N7	-8.05	125.57	130.40
2	B	590	A	N3-C4-C5	-8.05	121.16	126.80
1	A	114	C	C4-C5-C6	8.05	121.42	117.40
2	B	503	A	C8-N9-C4	-8.05	102.58	105.80
2	B	548	G	N3-C4-N9	8.05	130.83	126.00
2	B	864	G	C8-N9-C4	-8.05	103.18	106.40
2	B	1282	U	C5-C4-O4	8.05	130.73	125.90
2	B	1960	A	C5-C6-N1	-8.05	113.67	117.70
2	B	1969	A	C3'-C2'-C1'	-8.05	95.06	101.50
27	C	12	ARG	NE-CZ-NH1	8.05	124.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	587	C	O4'-C1'-N1	8.05	114.64	108.20
2	B	2783	U	C1'-O4'-C4'	8.05	116.34	109.90
2	B	138	U	C2-N3-C4	8.05	131.83	127.00
2	B	406	G	O4'-C1'-N9	8.05	114.64	108.20
2	B	2749	A	C5-C6-N6	-8.05	117.26	123.70
1	A	12	C	N3-C4-C5	-8.05	118.68	121.90
2	B	20	C	C6-N1-C2	8.05	123.52	120.30
2	B	473	G	N9-C4-C5	-8.05	102.18	105.40
2	B	702	U	C5-C4-O4	-8.05	121.07	125.90
2	B	2553	G	C2-N3-C4	8.05	115.92	111.90
30	H	116	ARG	NE-CZ-NH2	-8.05	116.28	120.30
2	B	1673	G	N3-C4-N9	8.04	130.83	126.00
2	B	1816	C	C6-N1-C1'	-8.04	111.15	120.80
2	B	2382	G	C5-C6-N1	-8.04	107.48	111.50
2	B	269	C	O4'-C1'-N1	8.04	114.63	108.20
2	B	1213	A	C2-N3-C4	-8.04	106.58	110.60
2	B	989	G	C4-C5-N7	-8.04	107.58	110.80
2	B	1168	G	N1-C6-O6	8.04	124.72	119.90
2	B	1766	G	O4'-C1'-N9	8.04	114.63	108.20
2	B	2597	G	P-O5'-C5'	8.04	133.77	120.90
2	B	2757	A	N3-C4-N9	8.04	133.83	127.40
1	A	94	A	C5-C6-N6	-8.04	117.27	123.70
2	B	321	U	N3-C4-O4	8.04	125.03	119.40
2	B	391	A	C4-C5-N7	-8.04	106.68	110.70
2	B	792	A	O4'-C1'-N9	8.04	114.63	108.20
2	B	903	C	P-O3'-C3'	-8.04	110.06	119.70
2	B	916	G	C8-N9-C4	8.04	109.61	106.40
2	B	1108	U	N1-C2-N3	8.04	119.72	114.90
2	B	1382	G	N9-C4-C5	-8.04	102.19	105.40
2	B	1704	C	C3'-C2'-C1'	-8.04	95.07	101.50
2	B	2371	G	N1-C6-O6	8.04	124.72	119.90
2	B	1851	U	O4'-C1'-N1	8.04	114.63	108.20
2	B	2186	G	N1-C6-O6	8.04	124.72	119.90
2	B	2776	A	N3-C4-C5	-8.04	121.17	126.80
2	B	2666	C	C5-C6-N1	8.04	125.02	121.00
8	N	102	PHE	CB-CG-CD1	-8.04	115.17	120.80
1	A	34	A	O4'-C1'-N9	8.04	114.63	108.20
2	B	179	C	N3-C4-N4	8.04	123.62	118.00
2	B	422	A	C5-C6-N6	-8.04	117.27	123.70
2	B	518	G	C6-C5-N7	-8.04	125.58	130.40
2	B	1100	C	C5-C4-N4	-8.04	114.58	120.20
2	B	2084	C	C5-C4-N4	-8.04	114.58	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	507	A	C6-C5-N7	-8.03	126.68	132.30
2	B	1356	G	N3-C4-C5	8.03	132.62	128.60
2	B	1771	C	O4'-C1'-N1	8.04	114.63	108.20
2	B	2253	G	C5-C6-O6	-8.04	123.78	128.60
2	B	2309	A	C4-C5-C6	8.03	121.02	117.00
2	B	124	G	P-O3'-C3'	8.03	129.34	119.70
2	B	1195	G	N9-C4-C5	-8.03	102.19	105.40
2	B	1455	G	C8-N9-C4	8.03	109.61	106.40
2	B	1954	G	N3-C2-N2	8.03	125.52	119.90
1	A	22	U	C3'-C2'-C1'	-8.03	95.08	101.50
2	B	414	C	P-O5'-C5'	8.03	133.75	120.90
2	B	696	G	N9-C4-C5	-8.03	102.19	105.40
2	B	1811	G	O4'-C1'-N9	8.03	114.62	108.20
2	B	1974	C	N3-C4-N4	8.03	123.62	118.00
23	5	179	ASP	CB-CG-OD2	-8.03	111.07	118.30
2	B	915	C	N3-C4-N4	8.03	123.62	118.00
2	B	1357	C	C3'-C2'-C1'	8.03	107.92	101.50
2	B	1854	A	O4'-C4'-C3'	-8.03	95.97	104.00
2	B	1968	G	N3-C2-N2	8.03	125.52	119.90
2	B	2174	C	C4'-C3'-C2'	-8.03	94.57	102.60
7	M	117	PHE	CB-CG-CD2	-8.03	115.18	120.80
2	B	126	A	N1-C6-N6	8.03	123.42	118.60
2	B	2674	G	C2-N3-C4	8.03	115.91	111.90
2	B	797	G	O4'-C1'-N9	8.03	114.62	108.20
2	B	1549	A	C5-C6-N6	-8.03	117.28	123.70
2	B	2375	G	C2-N3-C4	-8.03	107.89	111.90
2	B	1402	U	C4'-C3'-C2'	-8.02	94.58	102.60
2	B	1641	A	C5-N7-C8	8.02	107.91	103.90
2	B	1972	G	C5-C6-N1	8.02	115.51	111.50
2	B	2398	U	C1'-O4'-C4'	-8.02	103.48	109.90
2	B	268	C	N3-C4-N4	8.02	123.61	118.00
2	B	1749	A	C5-C6-N6	-8.02	117.28	123.70
2	B	1953	A	C5-N7-C8	8.02	107.91	103.90
2	B	2797	U	C6-N1-C1'	-8.02	109.97	121.20
2	B	339	U	O4'-C1'-N1	8.02	114.61	108.20
2	B	2844	G	N1-C6-O6	8.02	124.71	119.90
1	A	41	G	O4'-C1'-N9	8.02	114.61	108.20
2	B	452	G	C4-C5-N7	8.02	114.01	110.80
2	B	1143	A	C4-C5-N7	-8.02	106.69	110.70
2	B	140	C	N3-C4-N4	8.01	123.61	118.00
2	B	1763	G	N3-C4-C5	8.01	132.61	128.60
2	B	424	G	C8-N9-C4	-8.01	103.19	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1581	G	P-O3'-C3'	-8.01	110.08	119.70
2	B	1814	G	N3-C2-N2	8.01	125.51	119.90
2	B	625	G	P-O3'-C3'	8.01	129.31	119.70
2	B	878	A	C5'-C4'-O4'	8.01	118.71	109.10
2	B	907	G	N1-C6-O6	8.01	124.71	119.90
2	B	1663	G	C4-C5-N7	8.01	114.00	110.80
2	B	1852	U	O4'-C1'-N1	8.01	114.61	108.20
2	B	2083	G	C4-C5-C6	8.01	123.61	118.80
2	B	2182	U	C2-N3-C4	8.01	131.81	127.00
2	B	2504	U	C5-C6-N1	-8.01	118.69	122.70
2	B	2628	C	N3-C2-O2	8.01	127.51	121.90
2	B	2763	G	N1-C2-N3	-8.01	119.09	123.90
2	B	777	G	N1-C2-N2	-8.01	108.99	116.20
2	B	798	G	C4-C5-C6	8.01	123.61	118.80
2	B	2115	G	N3-C2-N2	8.01	125.50	119.90
2	B	2688	G	N3-C4-C5	8.01	132.60	128.60
2	B	616	A	N7-C8-N9	8.01	117.80	113.80
2	B	632	A	C2-N3-C4	8.01	114.60	110.60
2	B	891	G	O4'-C1'-N9	8.01	114.60	108.20
2	B	1661	G	C4-C5-N7	-8.01	107.60	110.80
2	B	2252	G	N1-C6-O6	8.01	124.70	119.90
2	B	2353	G	O4'-C1'-N9	8.01	114.60	108.20
2	B	2657	A	C5-C6-N1	-8.01	113.70	117.70
2	B	17	G	C5-C6-N1	8.00	115.50	111.50
2	B	485	C	N3-C4-C5	-8.00	118.70	121.90
2	B	748	G	N3-C4-C5	8.00	132.60	128.60
2	B	2015	A	C4-C5-C6	8.00	121.00	117.00
2	B	2587	A	C5'-C4'-C3'	8.00	128.80	116.00
1	A	110	C	O4'-C1'-N1	8.00	114.60	108.20
2	B	295	G	N3-C2-N2	8.00	125.50	119.90
2	B	530	G	N3-C2-N2	8.00	125.50	119.90
2	B	1651	G	C5-N7-C8	8.00	108.30	104.30
13	S	110	ARG	NE-CZ-NH1	-8.00	116.30	120.30
2	B	470	A	N1-C2-N3	8.00	133.30	129.30
2	B	945	A	O4'-C1'-N9	8.00	114.60	108.20
2	B	1635	A	C5-C6-N1	-8.00	113.70	117.70
2	B	1259	G	C5-C6-O6	-8.00	123.80	128.60
2	B	1464	G	P-O3'-C3'	-8.00	110.10	119.70
2	B	1666	G	C5-C6-N1	-8.00	107.50	111.50
2	B	2430	A	C6-C5-N7	-8.00	126.70	132.30
2	B	2553	G	N1-C6-O6	8.00	124.70	119.90
2	B	2774	C	C5-C4-N4	-8.00	114.60	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	20	G	C3'-C2'-C1'	8.00	107.90	101.50
2	B	1588	G	C8-N9-C4	-8.00	103.20	106.40
2	B	1847	A	C6-N1-C2	7.99	123.40	118.60
2	B	1914	C	P-O3'-C3'	7.99	129.29	119.70
2	B	2547	A	O4'-C4'-C3'	-7.99	96.01	104.00
2	B	570	G	O4'-C1'-N9	7.99	114.59	108.20
2	B	933	A	C8-N9-C4	-7.99	102.60	105.80
1	A	75	G	C5-C6-N1	-7.99	107.50	111.50
2	B	875	G	C5-C6-O6	-7.99	123.81	128.60
2	B	943	A	C8-N9-C4	7.99	109.00	105.80
2	B	1623	G	N1-C2-N3	-7.99	119.11	123.90
2	B	1713	A	N9-C4-C5	-7.99	102.60	105.80
2	B	2370	G	C5-C6-O6	-7.99	123.81	128.60
2	B	2605	U	P-O3'-C3'	-7.99	110.11	119.70
2	B	729	G	C5-C6-N1	7.99	115.49	111.50
2	B	1452	G	C8-N9-C4	7.99	109.60	106.40
2	B	1008	A	C5-C6-N1	-7.99	113.71	117.70
2	B	1024	G	C5-C6-O6	-7.99	123.81	128.60
2	B	1278	C	C4-C5-C6	7.99	121.39	117.40
2	B	2381	A	O4'-C1'-N9	7.99	114.59	108.20
2	B	193	U	O4'-C1'-N1	7.99	114.59	108.20
2	B	411	G	N1-C6-O6	7.99	124.69	119.90
2	B	974	G	C4-N9-C1'	7.99	136.88	126.50
2	B	2509	G	N1-C6-O6	7.99	124.69	119.90
20	E	102	ARG	NE-CZ-NH2	7.99	124.29	120.30
2	B	783	A	P-O3'-C3'	7.98	129.28	119.70
2	B	1354	A	C1'-O4'-C4'	7.98	116.29	109.90
2	B	504	A	N1-C2-N3	7.98	133.29	129.30
2	B	1836	C	N3-C4-C5	-7.98	118.71	121.90
2	B	1003	G	C8-N9-C4	-7.98	103.21	106.40
2	B	845	A	C5-N7-C8	7.98	107.89	103.90
2	B	952	G	O4'-C1'-N9	7.98	114.58	108.20
2	B	1020	A	N1-C6-N6	7.98	123.39	118.60
2	B	1601	G	C5-N7-C8	7.98	108.29	104.30
2	B	2342	C	N3-C4-N4	7.98	123.58	118.00
2	B	74	A	N1-C2-N3	7.98	133.29	129.30
2	B	2229	U	C5-C6-N1	7.98	126.69	122.70
2	B	2481	G	C2-N3-C4	-7.98	107.91	111.90
2	B	1887	C	C5-C6-N1	-7.97	117.01	121.00
2	B	2450	A	C3'-C2'-C1'	-7.97	95.12	101.50
2	B	2532	G	C8-N9-C4	-7.97	103.21	106.40
2	B	1494	A	N3-C4-C5	-7.97	121.22	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	680	C	C5-C6-N1	7.97	124.98	121.00
2	B	1075	C	O4'-C1'-N1	7.97	114.58	108.20
2	B	1206	G	C5-C6-N1	7.97	115.48	111.50
2	B	2429	G	N9-C4-C5	-7.97	102.21	105.40
2	B	186	G	C6-C5-N7	-7.97	125.62	130.40
2	B	970	U	C5-C6-N1	7.97	126.68	122.70
2	B	1433	A	C4-C5-N7	-7.97	106.72	110.70
2	B	220	G	C6-N1-C2	7.97	129.88	125.10
2	B	1718	G	N1-C2-N3	-7.97	119.12	123.90
2	B	1732	C	N3-C4-C5	-7.97	118.71	121.90
2	B	1997	C	O4'-C1'-N1	7.97	114.57	108.20
2	B	2250	G	C2-N3-C4	7.97	115.88	111.90
2	B	2522	U	C5-C4-O4	-7.97	121.12	125.90
2	B	1191	G	C2-N3-C4	7.96	115.88	111.90
2	B	1657	U	P-O3'-C3'	7.96	129.26	119.70
2	B	2287	A	C5-C6-N1	-7.96	113.72	117.70
2	B	2592	G	O4'-C1'-N9	7.96	114.57	108.20
2	B	874	G	C8-N9-C4	-7.96	103.22	106.40
2	B	62	U	C2-N3-C4	7.96	131.78	127.00
2	B	885	C	C5-C6-N1	7.96	124.98	121.00
2	B	1637	A	O4'-C1'-N9	7.96	114.57	108.20
2	B	2330	G	N3-C2-N2	7.96	125.47	119.90
2	B	242	G	P-O3'-C3'	7.96	129.25	119.70
2	B	1335	C	N3-C2-O2	-7.96	116.33	121.90
2	B	1653	G	C5-C6-O6	-7.96	123.82	128.60
2	B	2391	G	C2-N3-C4	-7.96	107.92	111.90
2	B	2654	A	N9-C4-C5	7.96	108.98	105.80
2	B	2300	C	N1-C2-N3	7.96	124.77	119.20
2	B	2550	G	C4-C5-C6	7.96	123.58	118.80
1	A	12	C	C5-C6-N1	-7.96	117.02	121.00
2	B	2812	G	C4-C5-C6	7.96	123.57	118.80
2	B	2854	G	C2-N3-C4	7.96	115.88	111.90
2	B	839	U	P-O5'-C5'	7.96	133.63	120.90
2	B	1391	U	C2-N3-C4	-7.96	122.23	127.00
2	B	231	A	O4'-C1'-N9	7.95	114.56	108.20
2	B	511	U	N3-C4-O4	7.95	124.97	119.40
2	B	2240	U	O4'-C1'-N1	7.95	114.56	108.20
2	B	2644	G	O4'-C1'-N9	7.95	114.56	108.20
2	B	2747	G	C5-C6-N1	-7.95	107.52	111.50
2	B	2320	U	O4'-C1'-N1	7.95	114.56	108.20
2	B	893	C	C5'-C4'-C3'	-7.95	103.28	116.00
2	B	909	A	N9-C4-C5	-7.95	102.62	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1163	G	C5-N7-C8	7.95	108.28	104.30
2	B	2455	G	C8-N9-C4	-7.95	103.22	106.40
2	B	616	A	C8-N9-C4	-7.95	102.62	105.80
2	B	848	C	N3-C4-C5	-7.95	118.72	121.90
2	B	2534	A	C4-C5-C6	7.95	120.97	117.00
2	B	2549	G	N3-C2-N2	7.95	125.46	119.90
2	B	2587	A	C4-C5-C6	7.95	120.97	117.00
2	B	2730	C	N3-C4-C5	-7.95	118.72	121.90
2	B	2877	G	O4'-C1'-N9	7.95	114.56	108.20
2	B	1473	G	C5-C6-O6	-7.95	123.83	128.60
2	B	2759	G	C6-C5-N7	-7.95	125.63	130.40
2	B	57	C	C6-N1-C2	7.95	123.48	120.30
2	B	261	G	P-O5'-C5'	7.95	133.61	120.90
2	B	1760	C	N3-C4-C5	-7.95	118.72	121.90
2	B	2767	C	O4'-C1'-N1	7.95	114.56	108.20
2	B	2811	G	N3-C4-C5	-7.95	124.63	128.60
2	B	2829	A	O4'-C1'-N9	7.95	114.56	108.20
2	B	482	A	C8-N9-C4	7.94	108.98	105.80
2	B	715	A	O4'-C1'-N9	7.94	114.56	108.20
2	B	1655	A	N1-C6-N6	7.94	123.37	118.60
2	B	493	G	N7-C8-N9	7.94	117.07	113.10
2	B	609	A	C5-C6-N1	-7.94	113.73	117.70
2	B	1086	A	P-O3'-C3'	-7.94	110.17	119.70
2	B	1222	U	O5'-P-OP2	-7.94	98.55	105.70
2	B	2455	G	C1'-O4'-C4'	-7.94	103.55	109.90
2	B	2600	A	C2-N3-C4	-7.94	106.63	110.60
2	B	413	C	O4'-C1'-N1	7.94	114.55	108.20
2	B	433	C	C5-C4-N4	-7.94	114.64	120.20
2	B	541	A	C5-C6-N1	-7.94	113.73	117.70
2	B	1082	U	O4'-C1'-N1	7.94	114.55	108.20
2	B	1947	C	C5-C4-N4	-7.94	114.64	120.20
2	B	2280	G	N1-C6-O6	7.94	124.67	119.90
2	B	335	C	O4'-C1'-N1	7.94	114.55	108.20
2	B	9	G	N9-C4-C5	7.94	108.58	105.40
2	B	49	A	C5'-C4'-C3'	-7.94	103.30	116.00
2	B	630	G	C5-C6-O6	-7.94	123.84	128.60
2	B	928	A	C5-C6-N6	-7.94	117.35	123.70
2	B	1743	G	C5-C6-O6	-7.94	123.84	128.60
2	B	1956	U	N1-C2-O2	7.94	128.36	122.80
2	B	2812	G	C6-C5-N7	-7.94	125.64	130.40
2	B	757	G	N3-C4-C5	-7.94	124.63	128.60
2	B	814	C	N3-C4-N4	7.94	123.56	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2804	U	N3-C4-O4	7.94	124.95	119.40
8	N	64	ARG	NE-CZ-NH1	7.94	124.27	120.30
2	B	1151	A	C8-N9-C4	7.93	108.97	105.80
2	B	1250	G	P-O3'-C3'	-7.93	110.18	119.70
2	B	1924	C	C6-N1-C1'	-7.93	111.28	120.80
2	B	2351	G	C6-C5-N7	-7.93	125.64	130.40
2	B	2454	G	O4'-C1'-N9	7.93	114.55	108.20
2	B	974	G	C4'-C3'-C2'	-7.93	94.67	102.60
2	B	1400	U	N1-C2-N3	-7.93	110.14	114.90
2	B	1546	G	N3-C2-N2	7.93	125.45	119.90
14	D	206	ALA	N-CA-CB	7.93	121.21	110.10
2	B	391	A	O4'-C1'-N9	7.93	114.55	108.20
2	B	1575	C	N3-C4-N4	7.93	123.55	118.00
2	B	28	A	C5-N7-C8	7.93	107.86	103.90
2	B	728	G	O4'-C1'-N9	7.93	114.54	108.20
2	B	1067	A	C4-C5-N7	-7.93	106.73	110.70
2	B	2071	A	N3-C4-C5	-7.93	121.25	126.80
2	B	2547	A	O4'-C1'-N9	7.93	114.54	108.20
2	B	2776	A	N1-C2-N3	-7.93	125.34	129.30
1	A	53	A	N1-C6-N6	7.93	123.36	118.60
2	B	578	G	C2-N3-C4	-7.93	107.94	111.90
2	B	2723	C	N3-C2-O2	-7.93	116.35	121.90
2	B	861	A	C6-N1-C2	7.93	123.36	118.60
2	B	972	A	P-O3'-C3'	7.93	129.21	119.70
2	B	1169	A	C5-C6-N6	-7.93	117.36	123.70
2	B	2414	G	N1-C6-O6	7.93	124.66	119.90
1	A	13	G	N1-C2-N3	-7.92	119.14	123.90
2	B	500	G	N1-C6-O6	7.92	124.66	119.90
2	B	596	U	P-O5'-C5'	7.92	133.58	120.90
2	B	1416	G	C5-C6-N1	-7.92	107.54	111.50
2	B	2099	U	C5-C4-O4	7.92	130.65	125.90
2	B	2481	G	N9-C1'-C2'	-7.92	103.28	112.00
2	B	2063	C	P-O5'-C5'	7.92	133.58	120.90
2	B	2267	A	O3'-P-O5'	-7.92	88.95	104.00
2	B	878	A	O4'-C1'-N9	7.92	114.54	108.20
2	B	1530	G	C3'-C2'-C1'	-7.92	95.16	101.50
2	B	1701	A	C6-C5-N7	-7.92	126.75	132.30
2	B	1831	G	N7-C8-N9	7.92	117.06	113.10
2	B	2603	G	N7-C8-N9	7.92	117.06	113.10
2	B	2619	C	N3-C4-C5	7.92	125.07	121.90
2	B	1998	A	N3-C4-C5	-7.92	121.26	126.80
2	B	2039	U	C5-C4-O4	7.92	130.65	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	30	C	N3-C4-C5	-7.92	118.73	121.90
2	B	36	G	C5-N7-C8	7.92	108.26	104.30
2	B	145	C	O4'-C4'-C3'	-7.92	96.08	104.00
2	B	199	A	P-O5'-C5'	7.92	133.57	120.90
2	B	644	A	O4'-C4'-C3'	-7.92	96.08	104.00
2	B	1810	A	C5-C6-N1	-7.92	113.74	117.70
2	B	2835	A	C5-N7-C8	7.92	107.86	103.90
2	B	97	C	C1'-O4'-C4'	-7.92	103.57	109.90
2	B	345	A	O4'-C1'-N9	7.92	114.53	108.20
2	B	1205	A	C5-C6-N1	-7.92	113.74	117.70
2	B	1984	G	C5-C6-N1	-7.92	107.54	111.50
2	B	2500	U	N3-C4-O4	7.92	124.94	119.40
2	B	2878	U	C5-C4-O4	-7.92	121.15	125.90
2	B	996	A	C3'-C2'-C1'	-7.92	95.17	101.50
2	B	371	A	N1-C2-N3	-7.91	125.34	129.30
2	B	912	C	C6-N1-C2	-7.91	117.14	120.30
2	B	1099	G	C5'-C4'-C3'	-7.91	103.34	116.00
2	B	1193	G	C6-C5-N7	-7.91	125.65	130.40
2	B	1606	C	C6-N1-C2	7.91	123.47	120.30
2	B	2639	A	C5-C6-N6	-7.91	117.37	123.70
2	B	1155	A	C5'-C4'-O4'	7.91	118.59	109.10
2	B	1380	G	N7-C8-N9	7.91	117.06	113.10
2	B	1613	G	C4-C5-C6	7.91	123.55	118.80
2	B	2382	G	C4-C5-C6	7.91	123.55	118.80
2	B	2388	A	C5'-C4'-C3'	7.91	128.66	116.00
2	B	379	G	C5-C6-N1	-7.91	107.55	111.50
2	B	1099	G	C4-C5-C6	7.91	123.55	118.80
2	B	1315	C	O4'-C1'-N1	7.91	114.53	108.20
2	B	1558	C	O4'-C1'-N1	7.91	114.53	108.20
2	B	2305	U	C5-C4-O4	7.91	130.65	125.90
1	A	18	G	N3-C2-N2	7.91	125.44	119.90
1	A	113	C	C4-C5-C6	7.91	121.35	117.40
2	B	726	G	O4'-C1'-N9	7.91	114.53	108.20
2	B	932	U	C5-C6-N1	7.91	126.65	122.70
2	B	1454	C	C2-N1-C1'	7.91	127.50	118.80
2	B	688	U	C4'-C3'-C2'	7.91	110.50	102.60
2	B	2116	G	P-O3'-C3'	7.91	129.19	119.70
2	B	2409	G	C5-C6-N1	-7.91	107.55	111.50
2	B	131	A	O4'-C4'-C3'	-7.90	96.10	104.00
2	B	222	A	N1-C2-N3	7.90	133.25	129.30
2	B	776	G	C1'-O4'-C4'	-7.90	103.58	109.90
2	B	1018	U	N1-C2-N3	-7.90	110.16	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2232	C	N3-C4-N4	7.90	123.53	118.00
2	B	2777	G	C8-N9-C4	-7.90	103.24	106.40
19	X	227	ARG	NE-CZ-NH1	-7.90	116.35	120.30
2	B	62	U	N3-C2-O2	7.90	127.73	122.20
2	B	1764	C	C5-C6-N1	-7.90	117.05	121.00
2	B	1788	C	N3-C4-N4	7.90	123.53	118.00
2	B	424	G	P-O3'-C3'	7.90	129.18	119.70
2	B	1722	A	C5'-C4'-O4'	7.90	118.58	109.10
2	B	117	G	C6-C5-N7	-7.90	125.66	130.40
2	B	402	A	N3-C4-C5	-7.90	121.27	126.80
2	B	728	G	N3-C2-N2	7.90	125.43	119.90
2	B	1450	G	C5-C6-O6	-7.90	123.86	128.60
2	B	2611	C	N3-C4-N4	7.90	123.53	118.00
20	E	162	ARG	NE-CZ-NH2	-7.90	116.35	120.30
2	B	2286	G	C2-N3-C4	7.90	115.85	111.90
2	B	97	C	P-O3'-C3'	-7.90	110.22	119.70
5	L	132	ARG	NE-CZ-NH1	7.90	124.25	120.30
2	B	539	G	C6-C5-N7	-7.89	125.66	130.40
2	B	1115	G	C5-C6-N1	7.89	115.45	111.50
2	B	1285	A	N1-C6-N6	7.89	123.34	118.60
2	B	2543	G	C8-N9-C4	-7.89	103.24	106.40
2	B	2690	U	C1'-O4'-C4'	-7.89	103.59	109.90
2	B	2705	A	O4'-C1'-N9	7.89	114.51	108.20
2	B	2718	G	N9-C4-C5	7.89	108.56	105.40
2	B	137	U	O4'-C1'-N1	7.89	114.51	108.20
1	A	61	G	N3-C2-N2	7.89	125.42	119.90
2	B	1236	G	N9-C4-C5	7.89	108.56	105.40
2	B	1657	U	O4'-C4'-C3'	-7.89	96.11	104.00
2	B	1725	U	C6-N1-C2	-7.89	116.27	121.00
19	X	91	ALA	N-CA-CB	7.89	121.14	110.10
2	B	817	C	N3-C4-C5	-7.89	118.75	121.90
2	B	1232	G	N1-C6-O6	7.89	124.63	119.90
2	B	1289	C	C5-C4-N4	-7.89	114.68	120.20
2	B	1970	A	N1-C6-N6	7.89	123.33	118.60
20	E	15	SER	N-CA-CB	7.89	122.33	110.50
2	B	582	A	C4-C5-C6	7.88	120.94	117.00
2	B	1889	A	C6-C5-N7	-7.88	126.78	132.30
2	B	334	C	O4'-C1'-N1	7.88	114.51	108.20
2	B	716	A	C4-C5-C6	7.88	120.94	117.00
2	B	2254	C	C5-C4-N4	-7.88	114.68	120.20
2	B	1905	C	P-O3'-C3'	7.88	129.16	119.70
2	B	1952	A	N9-C4-C5	7.88	108.95	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2883	A	N9-C4-C5	-7.88	102.65	105.80
2	B	174	U	N3-C4-C5	7.88	119.33	114.60
2	B	212	G	C1'-O4'-C4'	-7.88	103.60	109.90
2	B	1125	G	C8-N9-C4	-7.88	103.25	106.40
2	B	1695	G	C5-C6-N1	-7.88	107.56	111.50
2	B	1775	U	O5'-C5'-C4'	-7.88	96.73	111.70
2	B	2294	G	C1'-O4'-C4'	-7.88	103.60	109.90
2	B	2511	U	O4'-C1'-N1	7.88	114.50	108.20
2	B	803	U	N3-C4-O4	7.88	124.91	119.40
1	A	59	A	C4-C5-C6	7.87	120.94	117.00
2	B	174	U	C4-C5-C6	-7.87	114.97	119.70
2	B	782	A	O4'-C1'-N9	7.87	114.50	108.20
2	B	1317	G	O4'-C1'-N9	7.87	114.50	108.20
2	B	2172	U	N3-C4-O4	-7.87	113.89	119.40
2	B	1591	A	N9-C4-C5	7.87	108.95	105.80
2	B	2893	A	C4-C5-C6	7.87	120.94	117.00
2	B	2024	G	N7-C8-N9	-7.87	109.17	113.10
2	B	385	C	O4'-C1'-N1	7.87	114.50	108.20
2	B	1280	G	C4-C5-N7	-7.87	107.65	110.80
2	B	2196	C	C5-C4-N4	-7.87	114.69	120.20
2	B	2252	G	N7-C8-N9	7.87	117.03	113.10
2	B	2458	G	C6-C5-N7	-7.87	125.68	130.40
2	B	2802	G	C6-C5-N7	-7.87	125.68	130.40
2	B	26	G	C2-N3-C4	7.87	115.83	111.90
2	B	559	G	O4'-C1'-N9	7.87	114.49	108.20
2	B	901	C	C2-N1-C1'	7.87	127.45	118.80
2	B	1287	A	C5-N7-C8	7.87	107.83	103.90
2	B	1505	A	P-O3'-C3'	7.87	129.14	119.70
2	B	352	A	O4'-C1'-N9	7.87	114.49	108.20
2	B	363	G	C5'-C4'-C3'	-7.87	103.41	116.00
2	B	1829	A	C4-C5-C6	7.87	120.93	117.00
2	B	1840	G	C6-C5-N7	-7.87	125.68	130.40
2	B	1989	G	O4'-C1'-N9	7.87	114.49	108.20
2	B	2297	A	O4'-C1'-N9	7.87	114.49	108.20
2	B	2747	G	C5-N7-C8	7.87	108.23	104.30
2	B	328	U	O4'-C1'-N1	7.86	114.49	108.20
2	B	477	A	O4'-C1'-N9	7.86	114.49	108.20
2	B	700	G	C8-N9-C4	7.86	109.55	106.40
2	B	1136	G	C3'-C2'-C1'	-7.86	95.21	101.50
2	B	1581	G	N1-C2-N3	-7.86	119.18	123.90
2	B	2430	A	C5-C6-N6	-7.86	117.41	123.70
2	B	2749	A	N1-C2-N3	7.86	133.23	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	7	29	ARG	NE-CZ-NH2	7.86	124.23	120.30
2	B	142	A	P-O3'-C3'	-7.86	110.27	119.70
2	B	145	C	OP1-P-OP2	-7.86	107.81	119.60
2	B	717	C	N3-C4-C5	-7.86	118.76	121.90
2	B	1385	A	C5-C6-N6	-7.86	117.41	123.70
2	B	1619	G	C6-C5-N7	-7.86	125.68	130.40
2	B	1916	A	C4-C5-C6	7.86	120.93	117.00
2	B	2116	G	N1-C6-O6	7.86	124.62	119.90
2	B	2613	U	O4'-C1'-N1	7.86	114.49	108.20
2	B	425	G	C5-C6-O6	-7.86	123.89	128.60
2	B	894	U	P-O5'-C5'	7.86	133.47	120.90
2	B	1605	C	N1-C2-O2	7.86	123.61	118.90
2	B	296	U	P-O3'-C3'	7.86	129.13	119.70
2	B	551	G	N1-C2-N3	-7.86	119.19	123.90
2	B	740	C	O4'-C1'-N1	7.86	114.48	108.20
2	B	121	G	N1-C2-N2	-7.85	109.13	116.20
2	B	165	A	C2-N3-C4	-7.85	106.67	110.60
2	B	835	C	N3-C4-C5	-7.85	118.76	121.90
2	B	1622	G	N3-C4-N9	-7.85	121.29	126.00
2	B	2835	A	C6-N1-C2	7.85	123.31	118.60
2	B	836	G	N1-C6-O6	7.85	124.61	119.90
2	B	1281	G	C6-C5-N7	-7.85	125.69	130.40
2	B	1850	G	N7-C8-N9	7.85	117.03	113.10
2	B	2068	U	C2-N1-C1'	-7.85	108.28	117.70
2	B	2574	G	C5-N7-C8	-7.85	100.37	104.30
2	B	2621	G	P-O3'-C3'	-7.85	110.28	119.70
2	B	303	G	O4'-C1'-N9	7.85	114.48	108.20
2	B	362	A	N3-C4-C5	-7.85	121.31	126.80
2	B	1116	G	C5-C6-N1	7.85	115.42	111.50
2	B	1633	G	N3-C4-N9	7.85	130.71	126.00
2	B	1787	A	C5-C6-N1	-7.85	113.78	117.70
1	A	46	A	C1'-O4'-C4'	-7.85	103.62	109.90
2	B	656	G	N7-C8-N9	-7.85	109.18	113.10
2	B	1127	A	C5-C6-N1	-7.85	113.78	117.70
2	B	1185	G	C5'-C4'-C3'	7.85	128.56	116.00
2	B	1186	G	N1-C6-O6	7.85	124.61	119.90
2	B	1345	C	C4-C5-C6	7.85	121.32	117.40
2	B	502	A	O4'-C1'-N9	7.85	114.48	108.20
2	B	2640	G	N3-C2-N2	-7.85	114.41	119.90
1	A	107	G	N7-C8-N9	-7.84	109.18	113.10
2	B	439	A	C8-N9-C4	7.84	108.94	105.80
2	B	1150	C	C6-N1-C2	-7.84	117.16	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1160	G	C6-C5-N7	-7.84	125.69	130.40
2	B	2231	U	P-O3'-C3'	7.84	129.11	119.70
2	B	532	A	C4-C5-C6	7.84	120.92	117.00
2	B	1386	C	C4'-C3'-C2'	-7.84	94.76	102.60
2	B	1928	A	C6-N1-C2	7.84	123.31	118.60
2	B	46	G	C2-N3-C4	7.84	115.82	111.90
2	B	197	A	N1-C6-N6	7.84	123.30	118.60
2	B	1187	G	C6-C5-N7	-7.84	125.70	130.40
2	B	1630	A	P-O5'-C5'	7.84	133.44	120.90
2	B	2665	A	C4-C5-C6	7.84	120.92	117.00
2	B	1491	G	N1-C6-O6	7.83	124.60	119.90
2	B	1925	C	O4'-C1'-N1	7.83	114.47	108.20
2	B	1637	A	C5-C6-N1	-7.83	113.78	117.70
2	B	1820	U	C2-N1-C1'	7.83	127.10	117.70
2	B	2141	G	C5-C6-O6	-7.83	123.90	128.60
2	B	2891	U	C2-N3-C4	-7.83	122.30	127.00
5	L	123	ARG	NE-CZ-NH1	-7.83	116.38	120.30
2	B	135	U	N3-C4-O4	7.83	124.88	119.40
2	B	1130	U	N1-C2-O2	-7.83	117.32	122.80
2	B	1941	C	N3-C2-O2	-7.83	116.42	121.90
2	B	1450	G	C4'-C3'-C2'	7.83	110.43	102.60
2	B	1941	C	N1-C2-N3	7.83	124.68	119.20
2	B	2713	U	C6-N1-C2	-7.83	116.30	121.00
2	B	1	G	C4'-C3'-C2'	-7.83	94.77	102.60
2	B	209	C	C3'-C2'-C1'	-7.83	95.24	101.50
2	B	2405	G	C4-C5-N7	-7.83	107.67	110.80
2	B	2325	G	C4-C5-C6	7.83	123.50	118.80
2	B	2357	G	C8-N9-C4	-7.83	103.27	106.40
2	B	2393	U	N1-C2-O2	-7.83	117.32	122.80
9	O	81	ARG	NE-CZ-NH1	7.83	124.21	120.30
2	B	1919	A	C5-C6-N6	-7.83	117.44	123.70
2	B	366	C	N3-C4-N4	7.82	123.48	118.00
2	B	458	G	N9-C4-C5	7.82	108.53	105.40
2	B	797	G	C2-N3-C4	-7.82	107.99	111.90
2	B	842	U	C5'-C4'-C3'	7.82	128.52	116.00
2	B	1947	C	O4'-C1'-N1	7.82	114.46	108.20
2	B	2249	U	C5-C6-N1	-7.82	118.79	122.70
2	B	600	G	C6-C5-N7	-7.82	125.71	130.40
2	B	909	A	N3-C4-N9	7.82	133.66	127.40
2	B	2147	A	C5-C6-N6	-7.82	117.44	123.70
2	B	1844	C	O4'-C1'-N1	7.82	114.46	108.20
2	B	106	C	O4'-C1'-N1	7.82	114.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	320	A	O4'-C1'-N9	7.82	114.45	108.20
2	B	1277	G	C8-N9-C1'	7.82	137.16	127.00
2	B	1745	A	C4-C5-C6	7.82	120.91	117.00
17	U	81	ARG	NE-CZ-NH2	-7.82	116.39	120.30
2	B	388	G	N3-C4-C5	-7.82	124.69	128.60
2	B	1621	U	C2-N1-C1'	7.82	127.08	117.70
2	B	2186	G	P-O3'-C3'	7.82	129.08	119.70
2	B	916	G	C6-C5-N7	-7.81	125.71	130.40
2	B	2012	G	N1-C6-O6	7.81	124.59	119.90
2	B	2734	A	C4-C5-C6	7.81	120.91	117.00
2	B	247	G	C5-C6-O6	-7.81	123.91	128.60
2	B	1895	C	N3-C4-N4	7.81	123.47	118.00
1	A	91	C	C6-N1-C2	-7.81	117.18	120.30
2	B	1396	U	N1-C2-N3	7.81	119.58	114.90
1	A	36	C	P-O5'-C5'	7.81	133.39	120.90
1	A	45	A	N1-C6-N6	7.81	123.28	118.60
2	B	173	A	N1-C6-N6	7.81	123.28	118.60
2	B	1291	C	O4'-C1'-N1	7.81	114.44	108.20
2	B	1479	G	N3-C4-N9	-7.81	121.31	126.00
2	B	2205	A	C5-N7-C8	7.81	107.80	103.90
2	B	2450	A	O5'-P-OP2	-7.81	98.67	105.70
2	B	1038	G	C8-N9-C1'	7.81	137.15	127.00
2	B	1125	G	C5-C6-N1	-7.81	107.60	111.50
2	B	1602	U	C4-C5-C6	7.81	124.38	119.70
2	B	1773	A	O5'-C5'-C4'	-7.81	96.87	111.70
2	B	64	A	N1-C2-N3	7.80	133.20	129.30
2	B	2141	G	C4'-C3'-C2'	-7.80	94.80	102.60
2	B	852	U	N1-C2-N3	-7.80	110.22	114.90
2	B	2776	A	C4-C5-C6	7.80	120.90	117.00
2	B	2860	A	N7-C8-N9	-7.80	109.90	113.80
2	B	355	U	C4-C5-C6	-7.80	115.02	119.70
2	B	496	G	O4'-C1'-N9	7.80	114.44	108.20
2	B	1397	U	C5-C4-O4	-7.80	121.22	125.90
1	A	8	C	O4'-C1'-N1	7.80	114.44	108.20
2	B	834	G	C4-N9-C1'	-7.80	116.36	126.50
2	B	1445	G	C5-N7-C8	7.80	108.20	104.30
2	B	1488	C	C4-C5-C6	7.80	121.30	117.40
2	B	1534	U	N3-C4-O4	7.80	124.86	119.40
5	L	19	LEU	CB-CG-CD2	7.80	124.26	111.00
2	B	31	C	N3-C4-N4	7.80	123.46	118.00
2	B	612	G	C5'-C4'-C3'	-7.80	103.52	116.00
2	B	2477	U	C4-C5-C6	7.80	124.38	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2736	A	C5-C6-N6	-7.80	117.46	123.70
2	B	579	G	C4-C5-C6	7.80	123.48	118.80
2	B	2230	G	N1-C6-O6	7.80	124.58	119.90
2	B	2755	C	N3-C2-O2	-7.79	116.44	121.90
2	B	39	G	N1-C6-O6	7.79	124.58	119.90
2	B	308	G	C8-N9-C4	7.79	109.52	106.40
2	B	1984	G	C2-N3-C4	7.79	115.80	111.90
2	B	2186	G	N9-C4-C5	-7.79	102.28	105.40
2	B	688	U	N3-C4-C5	-7.79	109.93	114.60
2	B	966	G	N1-C6-O6	7.79	124.57	119.90
2	B	1525	A	C4-C5-N7	-7.79	106.81	110.70
2	B	912	C	O4'-C1'-N1	7.79	114.43	108.20
2	B	1733	G	O4'-C1'-N9	7.79	114.43	108.20
2	B	1887	C	N1-C2-N3	7.79	124.65	119.20
2	B	2350	C	C4-C5-C6	7.79	121.29	117.40
2	B	2781	A	N1-C6-N6	7.79	123.27	118.60
2	B	205	G	N9-C4-C5	-7.79	102.28	105.40
2	B	239	C	C5-C4-N4	-7.79	114.75	120.20
2	B	339	U	N3-C4-C5	7.79	119.27	114.60
2	B	2178	C	N3-C4-N4	7.79	123.45	118.00
2	B	2309	A	O4'-C1'-N9	7.79	114.43	108.20
2	B	2558	C	C2-N3-C4	7.79	123.79	119.90
2	B	773	U	C5'-C4'-C3'	-7.79	103.54	116.00
2	B	976	G	C8-N9-C4	-7.79	103.28	106.40
2	B	1639	C	C3'-C2'-C1'	-7.79	95.27	101.50
2	B	1896	G	P-O5'-C5'	7.79	133.36	120.90
2	B	2572	A	O4'-C1'-N9	7.79	114.43	108.20
2	B	2727	A	C6-C5-N7	-7.79	126.85	132.30
2	B	2860	A	C8-N9-C4	7.79	108.91	105.80
2	B	524	G	N9-C4-C5	-7.78	102.29	105.40
2	B	749	A	C4-C5-C6	7.78	120.89	117.00
2	B	997	G	C1'-O4'-C4'	-7.78	103.67	109.90
2	B	1029	A	N1-C2-N3	7.78	133.19	129.30
2	B	1825	U	O5'-C5'-C4'	-7.78	96.91	111.70
2	B	2060	A	C4-C5-N7	-7.78	106.81	110.70
2	B	644	A	C6-C5-N7	-7.78	126.85	132.30
2	B	2868	A	C8-N9-C4	-7.78	102.69	105.80
23	5	111	PHE	CB-CG-CD2	-7.78	115.35	120.80
2	B	59	U	C2-N3-C4	-7.78	122.33	127.00
2	B	1575	C	N3-C4-C5	-7.78	118.79	121.90
2	B	1737	G	C6-N1-C2	7.78	129.77	125.10
2	B	1949	G	N3-C2-N2	7.78	125.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1721	G	C2-N3-C4	7.78	115.79	111.90
2	B	363	G	P-O5'-C5'	7.78	133.34	120.90
2	B	1792	G	N1-C2-N3	-7.78	119.23	123.90
2	B	63	A	C8-N9-C4	-7.78	102.69	105.80
2	B	347	A	C5-C6-N1	7.77	121.59	117.70
2	B	1008	A	C6-C5-N7	-7.77	126.86	132.30
2	B	1471	G	N1-C2-N3	-7.77	119.23	123.90
2	B	2800	A	C5-C6-N1	-7.77	113.81	117.70
2	B	122	G	N7-C8-N9	-7.77	109.21	113.10
2	B	407	G	C4-C5-C6	-7.77	114.14	118.80
2	B	2085	U	N1-C2-O2	-7.77	117.36	122.80
2	B	2269	G	N7-C8-N9	-7.77	109.21	113.10
2	B	2894	G	C5-C6-O6	-7.77	123.94	128.60
1	A	115	A	C5-C6-N6	-7.77	117.48	123.70
2	B	298	G	C6-C5-N7	-7.77	125.74	130.40
2	B	1126	A	C5-C6-N6	-7.77	117.48	123.70
2	B	1692	U	C2-N3-C4	-7.77	122.34	127.00
2	B	2055	C	O4'-C1'-N1	7.77	114.42	108.20
2	B	2232	C	N3-C4-C5	-7.77	118.79	121.90
20	E	176	ASP	CB-CG-OD1	-7.77	111.31	118.30
2	B	178	G	C8-N9-C4	-7.77	103.29	106.40
2	B	212	G	C2-N3-C4	7.77	115.78	111.90
2	B	545	U	N1-C2-N3	7.77	119.56	114.90
2	B	1280	G	C5'-C4'-O4'	7.77	118.42	109.10
2	B	1480	C	N3-C4-N4	7.77	123.44	118.00
2	B	2171	A	N1-C6-N6	7.77	123.26	118.60
3	0	49	ARG	NE-CZ-NH2	7.77	124.18	120.30
2	B	860	U	N3-C2-O2	7.77	127.64	122.20
2	B	1618	A	N1-C6-N6	7.77	123.26	118.60
2	B	2594	C	N3-C2-O2	-7.77	116.46	121.90
11	Q	52	ARG	NE-CZ-NH1	7.77	124.18	120.30
2	B	823	C	C5-C6-N1	7.76	124.88	121.00
2	B	1823	G	O4'-C4'-C3'	-7.76	96.24	104.00
2	B	518	G	N9-C4-C5	-7.76	102.30	105.40
2	B	2099	U	C5-C6-N1	-7.76	118.82	122.70
2	B	2132	U	O4'-C1'-N1	7.76	114.41	108.20
2	B	56	A	C8-N9-C4	-7.76	102.69	105.80
2	B	74	A	C6-C5-N7	-7.76	126.87	132.30
2	B	804	A	C3'-C2'-C1'	7.76	107.71	101.50
2	B	1710	G	C4-C5-C6	7.76	123.46	118.80
2	B	2040	G	O4'-C1'-C2'	7.76	114.59	107.60
2	B	2386	A	C4-C5-C6	7.76	120.88	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2521	C	C1'-O4'-C4'	-7.76	103.69	109.90
2	B	2603	G	C5-N7-C8	-7.76	100.42	104.30
2	B	40	U	O4'-C1'-N1	7.76	114.41	108.20
2	B	716	A	N1-C2-N3	7.76	133.18	129.30
2	B	1387	A	P-O3'-C3'	7.76	129.01	119.70
1	A	115	A	C8-N9-C1'	7.76	141.66	127.70
2	B	5	A	N9-C4-C5	7.76	108.90	105.80
2	B	278	A	C5-N7-C8	7.76	107.78	103.90
2	B	410	G	O3'-P-O5'	-7.76	89.26	104.00
2	B	733	G	N9-C1'-C2'	-7.76	103.47	112.00
2	B	2555	U	O4'-C1'-N1	7.76	114.41	108.20
2	B	101	A	C5-N7-C8	7.75	107.78	103.90
2	B	1208	C	C4-C5-C6	-7.75	113.52	117.40
2	B	1681	G	N1-C6-O6	7.75	124.55	119.90
2	B	68	G	O4'-C1'-N9	7.75	114.40	108.20
2	B	124	G	N7-C8-N9	-7.75	109.22	113.10
2	B	1129	A	N1-C6-N6	7.75	123.25	118.60
2	B	1494	A	O4'-C1'-N9	7.75	114.40	108.20
2	B	2298	A	N1-C6-N6	7.75	123.25	118.60
2	B	2709	G	N1-C2-N3	-7.75	119.25	123.90
23	5	183	ASP	CB-CG-OD1	7.75	125.28	118.30
1	A	53	A	C4-C5-C6	7.75	120.88	117.00
2	B	993	G	N1-C2-N2	-7.75	109.22	116.20
2	B	1854	A	N1-C6-N6	7.75	123.25	118.60
2	B	2051	A	C5'-C4'-C3'	-7.75	103.60	116.00
2	B	2705	A	C4-C5-N7	-7.75	106.82	110.70
2	B	1027	A	N1-C2-N3	7.75	133.17	129.30
2	B	1853	A	C6-C5-N7	-7.75	126.88	132.30
2	B	2462	C	O4'-C1'-N1	7.75	114.40	108.20
2	B	429	A	C2-N3-C4	7.75	114.47	110.60
2	B	1422	G	O4'-C1'-N9	7.75	114.40	108.20
2	B	1447	C	P-O3'-C3'	7.75	129.00	119.70
2	B	1899	A	C5-C6-N6	-7.75	117.50	123.70
2	B	2182	U	C5-C4-O4	-7.75	121.25	125.90
2	B	2421	G	C8-N9-C4	7.75	109.50	106.40
2	B	2579	C	O4'-C1'-N1	7.75	114.40	108.20
2	B	2886	A	C5-N7-C8	7.75	107.77	103.90
14	D	141	ARG	NE-CZ-NH1	7.75	124.17	120.30
2	B	493	G	C5-N7-C8	-7.74	100.43	104.30
2	B	659	G	C2-N3-C4	-7.74	108.03	111.90
2	B	1368	G	C5-C6-O6	-7.74	123.95	128.60
2	B	1543	G	C6-N1-C2	7.74	129.75	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	908	C	O4'-C1'-N1	7.74	114.39	108.20
2	B	2780	G	N3-C4-N9	-7.74	121.36	126.00
2	B	208	C	C6-N1-C2	-7.74	117.20	120.30
2	B	228	C	N3-C4-N4	7.74	123.42	118.00
2	B	414	C	N3-C4-C5	-7.74	118.80	121.90
2	B	563	A	N1-C6-N6	7.74	123.25	118.60
2	B	1168	G	C5-C6-O6	-7.74	123.95	128.60
2	B	1308	A	P-O5'-C5'	-7.74	108.52	120.90
2	B	2382	G	C5-N7-C8	7.74	108.17	104.30
2	B	611	C	N3-C4-C5	-7.74	118.80	121.90
2	B	832	U	N3-C4-O4	7.74	124.82	119.40
2	B	1124	G	C4-C5-N7	-7.74	107.70	110.80
2	B	1593	A	C2-N3-C4	-7.74	106.73	110.60
2	B	1700	A	C6-C5-N7	-7.74	126.88	132.30
2	B	207	A	C5-N7-C8	7.74	107.77	103.90
2	B	307	G	N1-C2-N2	-7.74	109.24	116.20
2	B	503	A	N9-C4-C5	7.74	108.89	105.80
2	B	700	G	N7-C8-N9	-7.74	109.23	113.10
2	B	1286	A	C5-C6-N6	-7.74	117.51	123.70
1	A	7	G	O4'-C1'-N9	7.74	114.39	108.20
2	B	297	G	C4-C5-C6	7.74	123.44	118.80
2	B	1889	A	C4-C5-N7	7.74	114.57	110.70
2	B	1950	G	N1-C6-O6	7.74	124.54	119.90
2	B	1950	G	N3-C4-C5	7.74	132.47	128.60
2	B	2435	A	C8-N9-C4	-7.74	102.71	105.80
1	A	50	A	C4-C5-C6	7.73	120.87	117.00
2	B	835	C	C4-C5-C6	7.73	121.27	117.40
2	B	1846	G	C5-C6-O6	-7.73	123.96	128.60
2	B	384	A	C6-N1-C2	-7.73	113.96	118.60
2	B	583	G	C5'-C4'-C3'	7.73	128.37	116.00
2	B	820	A	O4'-C1'-N9	7.73	114.39	108.20
2	B	2332	C	C5-C6-N1	-7.73	117.13	121.00
2	B	2758	A	C6-C5-N7	-7.73	126.89	132.30
2	B	1055	G	O4'-C1'-N9	7.73	114.39	108.20
2	B	1066	U	O4'-C1'-N1	7.73	114.38	108.20
2	B	1702	G	N3-C4-C5	-7.73	124.73	128.60
2	B	2721	A	C5-C6-N1	-7.73	113.83	117.70
2	B	1552	A	C4-C5-C6	7.73	120.86	117.00
2	B	2722	G	C4-C5-N7	-7.73	107.71	110.80
2	B	425	G	O4'-C1'-N9	7.73	114.38	108.20
2	B	543	G	N7-C8-N9	7.73	116.96	113.10
2	B	1979	U	C2-N3-C4	-7.73	122.36	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2760	C	C6-N1-C2	-7.73	117.21	120.30
2	B	1195	G	N1-C6-O6	7.73	124.54	119.90
2	B	847	U	C6-N1-C2	-7.72	116.36	121.00
2	B	975	A	N1-C6-N6	7.72	123.23	118.60
2	B	1184	U	O4'-C1'-N1	7.72	114.38	108.20
2	B	2833	U	N3-C4-C5	-7.72	109.97	114.60
2	B	168	G	C6-N1-C2	7.72	129.73	125.10
2	B	438	G	O4'-C1'-N9	7.72	114.38	108.20
2	B	664	G	C2-N3-C4	7.72	115.76	111.90
2	B	1233	C	C6-N1-C2	-7.72	117.21	120.30
2	B	367	G	C5-N7-C8	-7.72	100.44	104.30
2	B	884	U	C4-C5-C6	-7.72	115.07	119.70
2	B	1689	A	C4-C5-C6	7.72	120.86	117.00
2	B	2699	C	N3-C4-N4	7.72	123.40	118.00
2	B	2882	A	O4'-C1'-N9	7.72	114.38	108.20
29	G	68	ARG	NE-CZ-NH1	7.72	124.16	120.30
2	B	1103	A	P-O5'-C5'	7.72	133.25	120.90
2	B	1643	G	C5-C6-O6	-7.72	123.97	128.60
2	B	2251	G	N9-C4-C5	-7.72	102.31	105.40
2	B	2617	U	N1-C2-O2	-7.72	117.40	122.80
2	B	756	A	C4-C5-C6	7.72	120.86	117.00
2	B	2616	C	N3-C4-C5	-7.72	118.81	121.90
2	B	1258	U	C4-C5-C6	-7.71	115.07	119.70
2	B	1277	G	C5-C6-O6	-7.71	123.97	128.60
2	B	2765	A	C8-N9-C4	-7.71	102.71	105.80
2	B	409	G	N3-C2-N2	7.71	125.30	119.90
2	B	696	G	C5'-C4'-C3'	7.71	128.34	116.00
2	B	1002	G	N9-C4-C5	-7.71	102.31	105.40
2	B	2034	U	N1-C2-N3	-7.71	110.27	114.90
2	B	2461	A	C6-C5-N7	-7.71	126.90	132.30
2	B	2882	A	N7-C8-N9	-7.71	109.94	113.80
2	B	69	C	C5-C4-N4	-7.71	114.80	120.20
2	B	705	A	O4'-C1'-N9	7.71	114.37	108.20
2	B	781	A	P-O3'-C3'	-7.71	110.45	119.70
2	B	2045	C	N3-C4-C5	-7.71	118.82	121.90
2	B	22	C	N3-C4-N4	7.71	123.39	118.00
2	B	507	A	C4-C5-C6	7.71	120.85	117.00
2	B	611	C	N3-C4-N4	7.71	123.39	118.00
2	B	1975	G	C5-N7-C8	7.71	108.15	104.30
2	B	797	G	C1'-O4'-C4'	-7.71	103.74	109.90
2	B	1658	C	N3-C4-N4	7.71	123.39	118.00
2	B	2162	G	N1-C2-N3	-7.71	119.28	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2254	C	O4'-C1'-N1	7.71	114.36	108.20
2	B	2608	G	C5-C6-N1	7.71	115.35	111.50
2	B	2738	A	C5-C6-N1	-7.71	113.85	117.70
2	B	80	G	C5-C6-N1	-7.70	107.65	111.50
2	B	205	G	C2-N3-C4	-7.70	108.05	111.90
2	B	211	C	C4-C5-C6	7.70	121.25	117.40
2	B	2645	G	C2-N3-C4	7.70	115.75	111.90
2	B	2872	A	C8-N9-C4	-7.70	102.72	105.80
2	B	71	A	C8-N9-C4	-7.70	102.72	105.80
2	B	1043	C	O4'-C1'-N1	7.70	114.36	108.20
2	B	1179	G	N7-C8-N9	-7.70	109.25	113.10
2	B	60	G	N3-C4-C5	7.70	132.45	128.60
2	B	205	G	C4'-C3'-C2'	-7.70	94.90	102.60
2	B	223	A	N1-C2-N3	-7.70	125.45	129.30
2	B	1602	U	C3'-C2'-C1'	-7.70	95.34	101.50
2	B	1941	C	P-O3'-C3'	7.70	128.94	119.70
2	B	2214	C	N1-C2-O2	7.70	123.52	118.90
2	B	70	G	N1-C2-N3	-7.70	119.28	123.90
2	B	207	A	N1-C6-N6	7.70	123.22	118.60
2	B	543	G	N1-C2-N3	-7.70	119.28	123.90
2	B	553	G	O4'-C1'-N9	7.70	114.36	108.20
2	B	1269	A	C5'-C4'-O4'	7.70	118.34	109.10
2	B	2061	G	C5-C6-N1	7.70	115.35	111.50
2	B	990	A	C2-N3-C4	7.70	114.45	110.60
2	B	1212	G	C5-C6-N1	-7.70	107.65	111.50
2	B	2290	G	N1-C6-O6	7.70	124.52	119.90
31	I	68	PHE	CB-CG-CD1	7.70	126.19	120.80
2	B	638	G	C5-C6-O6	-7.70	123.98	128.60
2	B	1908	C	C5-C4-N4	-7.70	114.81	120.20
2	B	2611	C	C4'-C3'-C2'	-7.70	94.91	102.60
2	B	294	A	C5'-C4'-C3'	7.69	128.31	116.00
2	B	1944	U	C5-C4-O4	-7.69	121.28	125.90
2	B	1167	C	O4'-C1'-N1	7.69	114.36	108.20
1	A	55	U	N3-C4-O4	7.69	124.78	119.40
2	B	463	G	C6-N1-C2	-7.69	120.49	125.10
2	B	1068	G	C5-N7-C8	7.69	108.14	104.30
2	B	1938	A	C8-N9-C4	-7.69	102.72	105.80
2	B	2867	G	C3'-C2'-C1'	-7.69	95.35	101.50
2	B	1661	G	C5-N7-C8	7.69	108.14	104.30
2	B	247	G	C4-C5-C6	7.69	123.41	118.80
2	B	749	A	O4'-C1'-N9	7.69	114.35	108.20
2	B	2718	G	C4-C5-C6	7.69	123.41	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2618	G	P-O5'-C5'	-7.69	108.60	120.90
2	B	1014	A	N9-C4-C5	7.68	108.87	105.80
2	B	2317	A	C6-C5-N7	-7.68	126.92	132.30
2	B	2371	G	C5-N7-C8	-7.68	100.46	104.30
2	B	2407	A	C4-C5-C6	7.68	120.84	117.00
2	B	319	G	O4'-C1'-N9	7.68	114.35	108.20
2	B	1825	U	P-O3'-C3'	7.68	128.92	119.70
2	B	2164	C	C5-C4-N4	-7.68	114.82	120.20
2	B	2821	A	C5-N7-C8	7.68	107.74	103.90
2	B	68	G	C8-N9-C4	-7.68	103.33	106.40
2	B	35	G	N3-C2-N2	7.68	125.28	119.90
2	B	188	G	N3-C2-N2	7.68	125.28	119.90
2	B	682	G	N9-C4-C5	7.68	108.47	105.40
2	B	923	G	C4-C5-N7	7.68	113.87	110.80
2	B	1855	U	C1'-O4'-C4'	7.68	116.04	109.90
2	B	1947	C	N3-C4-N4	7.68	123.38	118.00
2	B	2162	G	N9-C4-C5	-7.68	102.33	105.40
2	B	2234	G	N1-C2-N2	-7.68	109.29	116.20
2	B	2494	G	C5-C6-N1	-7.68	107.66	111.50
2	B	982	C	O4'-C1'-N1	7.68	114.34	108.20
2	B	1834	U	O4'-C4'-C3'	-7.68	96.32	104.00
1	A	11	C	N3-C4-N4	7.68	123.37	118.00
2	B	74	A	P-O3'-C3'	-7.68	110.49	119.70
2	B	1127	A	C5-C6-N6	-7.68	117.56	123.70
2	B	1176	U	C5'-C4'-C3'	-7.68	103.72	116.00
2	B	1574	C	P-O3'-C3'	-7.68	110.49	119.70
2	B	1626	A	C5-C6-N6	-7.68	117.56	123.70
2	B	1797	G	N3-C4-N9	-7.68	121.39	126.00
2	B	1804	C	O4'-C1'-N1	7.68	114.34	108.20
2	B	2141	G	N1-C2-N3	-7.68	119.29	123.90
2	B	2694	G	C2-N3-C4	7.68	115.74	111.90
2	B	2824	C	C5'-C4'-C3'	-7.68	103.72	116.00
1	A	105	G	O4'-C1'-N9	7.67	114.34	108.20
2	B	982	C	P-O5'-C5'	-7.67	108.62	120.90
2	B	1900	A	C4-C5-C6	7.67	120.84	117.00
2	B	1988	G	C6-N1-C2	-7.67	120.50	125.10
2	B	941	A	C2-N3-C4	-7.67	106.76	110.60
2	B	2000	C	N3-C4-C5	-7.67	118.83	121.90
2	B	2655	G	N1-C2-N2	-7.67	109.29	116.20
2	B	411	G	C6-N1-C2	-7.67	120.50	125.10
2	B	587	C	C5-C4-N4	-7.67	114.83	120.20
2	B	1768	C	N3-C2-O2	7.67	127.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2005	A	N7-C8-N9	7.67	117.64	113.80
2	B	1627	G	N3-C4-N9	7.67	130.60	126.00
2	B	194	G	N1-C2-N3	-7.67	119.30	123.90
2	B	1841	U	N1-C2-N3	7.67	119.50	114.90
2	B	2364	C	P-O3'-C3'	-7.67	110.50	119.70
2	B	2416	C	N3-C4-N4	7.67	123.37	118.00
2	B	2429	G	N3-C4-C5	7.67	132.43	128.60
2	B	562	U	C4'-C3'-C2'	7.67	110.27	102.60
2	B	1365	A	N9-C4-C5	-7.67	102.73	105.80
2	B	1511	G	N7-C8-N9	-7.67	109.27	113.10
2	B	2102	G	C5-C6-O6	-7.67	124.00	128.60
2	B	2860	A	N3-C4-N9	7.67	133.53	127.40
27	C	111	ALA	N-CA-CB	7.67	120.83	110.10
2	B	820	A	C5-C6-N6	-7.67	117.57	123.70
2	B	845	A	N1-C2-N3	7.67	133.13	129.30
2	B	330	A	C5-C6-N1	-7.66	113.87	117.70
2	B	804	A	C5-C6-N1	-7.66	113.87	117.70
2	B	823	C	P-O5'-C5'	-7.66	108.64	120.90
2	B	2187	U	O4'-C1'-N1	7.66	114.33	108.20
2	B	2659	G	C3'-C2'-C1'	-7.66	95.37	101.50
2	B	1076	C	O4'-C1'-N1	7.66	114.33	108.20
2	B	1159	U	N3-C4-O4	7.66	124.76	119.40
2	B	1000	A	P-O3'-C3'	-7.66	110.51	119.70
2	B	1978	A	C8-N9-C4	7.66	108.86	105.80
2	B	2355	G	N1-C6-O6	7.66	124.50	119.90
2	B	2404	U	C5-C6-N1	-7.66	118.87	122.70
2	B	2529	G	O4'-C4'-C3'	7.66	112.23	106.10
2	B	270	A	C1'-O4'-C4'	-7.66	103.77	109.90
2	B	590	A	N3-C4-N9	7.66	133.53	127.40
2	B	2758	A	C4'-C3'-C2'	-7.66	94.94	102.60
2	B	1582	C	O4'-C1'-N1	7.66	114.33	108.20
2	B	2049	G	N1-C6-O6	7.66	124.49	119.90
2	B	130	C	C6-N1-C2	-7.66	117.24	120.30
2	B	356	G	O4'-C1'-N9	7.66	114.32	108.20
2	B	490	C	C6-N1-C1'	-7.66	111.61	120.80
2	B	1224	U	O4'-C1'-N1	7.66	114.33	108.20
2	B	2461	A	N9-C4-C5	-7.66	102.74	105.80
2	B	2678	C	C2-N3-C4	7.66	123.73	119.90
2	B	2899	A	C5-C6-N1	-7.66	113.87	117.70
2	B	2591	C	O4'-C1'-N1	7.65	114.32	108.20
2	B	220	G	C5-N7-C8	7.65	108.13	104.30
2	B	1622	G	N7-C8-N9	-7.65	109.27	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1704	C	O4'-C1'-N1	7.65	114.32	108.20
2	B	1933	G	C1'-O4'-C4'	-7.65	103.78	109.90
2	B	2159	G	N9-C4-C5	-7.65	102.34	105.40
2	B	2602	A	C5-N7-C8	7.65	107.73	103.90
27	C	82	TYR	CB-CG-CD1	-7.65	116.41	121.00
2	B	880	G	P-O3'-C3'	7.65	128.88	119.70
2	B	1494	A	N9-C4-C5	7.65	108.86	105.80
2	B	2046	G	N3-C2-N2	7.65	125.25	119.90
1	A	73	A	C4-C5-C6	7.65	120.82	117.00
2	B	70	G	N1-C6-O6	7.65	124.49	119.90
2	B	1320	C	C6-N1-C2	-7.65	117.24	120.30
2	B	1826	G	C6-C5-N7	-7.65	125.81	130.40
2	B	2797	U	O4'-C1'-N1	7.65	114.32	108.20
2	B	2883	A	C6-N1-C2	-7.65	114.01	118.60
2	B	371	A	N1-C6-N6	7.65	123.19	118.60
2	B	1305	C	C5'-C4'-C3'	7.65	128.24	116.00
2	B	1887	C	C6-N1-C2	-7.65	117.24	120.30
2	B	2665	A	C5-C6-N1	-7.65	113.88	117.70
2	B	2780	G	N1-C2-N3	-7.65	119.31	123.90
2	B	678	C	N1-C2-O2	7.65	123.49	118.90
2	B	1244	A	O4'-C1'-N9	7.65	114.32	108.20
2	B	1682	G	N1-C2-N2	-7.65	109.32	116.20
2	B	2242	G	C4-C5-N7	-7.65	107.74	110.80
2	B	2306	C	N1-C2-O2	-7.65	114.31	118.90
2	B	821	A	N1-C6-N6	7.64	123.19	118.60
2	B	927	A	N1-C6-N6	7.64	123.19	118.60
2	B	1215	G	N9-C4-C5	-7.64	102.34	105.40
2	B	1436	G	C4-C5-N7	-7.64	107.74	110.80
2	B	2035	G	C4-C5-N7	-7.64	107.74	110.80
2	B	2486	C	C5-C4-N4	-7.64	114.85	120.20
2	B	2629	U	N3-C4-O4	7.64	124.75	119.40
2	B	71	A	N1-C6-N6	7.64	123.19	118.60
2	B	442	G	C5-C6-O6	-7.64	124.02	128.60
2	B	2513	A	C5-C6-N6	-7.64	117.59	123.70
2	B	979	A	C5'-C4'-O4'	7.64	118.27	109.10
2	B	1038	G	N1-C2-N3	-7.64	119.31	123.90
2	B	2296	U	C2-N3-C4	7.64	131.59	127.00
2	B	186	G	N3-C4-C5	-7.64	124.78	128.60
2	B	1471	G	N9-C4-C5	-7.64	102.34	105.40
2	B	2216	G	N1-C6-O6	7.64	124.48	119.90
2	B	2405	G	N1-C6-O6	7.64	124.48	119.90
2	B	2433	A	C5-C6-N6	-7.64	117.59	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2690	U	N3-C2-O2	7.64	127.55	122.20
2	B	2859	G	N1-C6-O6	7.64	124.48	119.90
2	B	746	U	C1'-O4'-C4'	-7.64	103.79	109.90
2	B	1973	G	P-O3'-C3'	-7.64	110.54	119.70
2	B	1997	C	N3-C4-N4	7.64	123.34	118.00
2	B	2141	G	C5-N7-C8	7.64	108.12	104.30
2	B	634	C	C4-C5-C6	-7.63	113.58	117.40
2	B	938	G	N3-C4-N9	7.63	130.58	126.00
2	B	413	C	N3-C4-C5	-7.63	118.85	121.90
2	B	469	G	N3-C2-N2	7.63	125.24	119.90
2	B	847	U	O4'-C1'-N1	7.63	114.31	108.20
2	B	1093	G	C2-N3-C4	7.63	115.72	111.90
2	B	12	U	C1'-O4'-C4'	7.63	116.00	109.90
2	B	1194	A	C5-C6-N6	-7.63	117.59	123.70
2	B	2031	A	P-O3'-C3'	7.63	128.86	119.70
2	B	2154	A	O4'-C1'-N9	7.63	114.31	108.20
2	B	2862	G	C5-N7-C8	7.63	108.12	104.30
2	B	2126	A	N9-C4-C5	7.63	108.85	105.80
2	B	2134	A	O4'-C1'-N9	7.63	114.30	108.20
2	B	2555	U	N3-C4-C5	7.63	119.18	114.60
2	B	822	G	C5-C6-O6	-7.63	124.02	128.60
2	B	844	A	C2-N3-C4	7.63	114.41	110.60
2	B	1031	G	C5-C6-O6	-7.63	124.02	128.60
2	B	1175	A	O4'-C1'-N9	7.63	114.30	108.20
2	B	1920	C	O4'-C1'-N1	7.63	114.30	108.20
2	B	1047	G	N9-C4-C5	-7.63	102.35	105.40
2	B	1268	A	C5'-C4'-C3'	7.63	128.20	116.00
2	B	1498	C	C2-N3-C4	7.63	123.71	119.90
2	B	2290	G	N3-C2-N2	7.63	125.24	119.90
2	B	1677	A	C8-N9-C4	-7.62	102.75	105.80
2	B	1950	G	C5-C6-O6	-7.62	124.03	128.60
2	B	242	G	C5'-C4'-O4'	7.62	118.25	109.10
2	B	344	A	O4'-C1'-N9	7.62	114.30	108.20
2	B	425	G	C4-N9-C1'	-7.62	116.59	126.50
2	B	983	A	C3'-C2'-C1'	7.62	107.60	101.50
2	B	2543	G	C6-N1-C2	-7.62	120.53	125.10
2	B	178	G	C8-N9-C1'	7.62	136.91	127.00
2	B	1410	G	C5-C6-O6	-7.62	124.03	128.60
2	B	1502	A	O4'-C1'-N9	7.62	114.30	108.20
2	B	1630	A	N1-C2-N3	-7.62	125.49	129.30
2	B	1964	G	N9-C4-C5	-7.62	102.35	105.40
2	B	2713	U	C5-C4-O4	7.62	130.47	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1002	G	O4'-C1'-N9	7.62	114.30	108.20
2	B	1676	A	C6-C5-N7	-7.62	126.97	132.30
2	B	134	G	C5-C6-N1	-7.62	107.69	111.50
2	B	240	C	O5'-P-OP1	-7.62	98.84	105.70
2	B	1027	A	P-O3'-C3'	-7.62	110.56	119.70
2	B	1339	G	O4'-C1'-N9	7.62	114.30	108.20
2	B	1556	C	C6-N1-C2	-7.62	117.25	120.30
2	B	1662	U	C1'-O4'-C4'	-7.62	103.81	109.90
2	B	2015	A	P-O3'-C3'	7.62	128.84	119.70
2	B	637	A	C2-N3-C4	-7.62	106.79	110.60
2	B	1043	C	C6-N1-C2	-7.62	117.25	120.30
2	B	1247	A	C8-N9-C4	7.62	108.85	105.80
2	B	185	G	C5-C6-O6	-7.62	124.03	128.60
2	B	375	G	C5'-C4'-C3'	-7.62	103.82	116.00
2	B	916	G	N9-C1'-C2'	-7.62	103.62	112.00
2	B	664	G	N1-C2-N3	-7.61	119.33	123.90
2	B	2623	G	N3-C4-N9	7.61	130.57	126.00
2	B	2727	A	N1-C6-N6	7.61	123.17	118.60
2	B	483	A	C8-N9-C4	7.61	108.84	105.80
2	B	527	C	C5-C4-N4	-7.61	114.87	120.20
2	B	879	G	C2-N3-C4	7.61	115.70	111.90
2	B	1139	G	N1-C2-N2	-7.61	109.35	116.20
2	B	2211	A	C2-N3-C4	-7.61	106.79	110.60
1	A	71	C	P-O3'-C3'	-7.61	110.57	119.70
2	B	964	C	P-O3'-C3'	7.61	128.83	119.70
2	B	197	A	C5-N7-C8	7.61	107.70	103.90
2	B	2222	C	O4'-C1'-N1	7.61	114.28	108.20
2	B	2329	U	C2-N3-C4	-7.61	122.44	127.00
2	B	2785	C	C2-N3-C4	-7.61	116.10	119.90
2	B	743	A	C6-N1-C2	-7.61	114.04	118.60
2	B	854	C	C5-C6-N1	7.61	124.80	121.00
2	B	1664	A	N9-C4-C5	-7.61	102.76	105.80
2	B	1842	G	C5-C6-N1	-7.61	107.70	111.50
2	B	2545	G	C5-C6-N1	-7.61	107.70	111.50
2	B	1106	G	C2-N3-C4	7.60	115.70	111.90
2	B	2002	G	C8-N9-C4	-7.60	103.36	106.40
2	B	1078	U	C6-N1-C2	-7.60	116.44	121.00
2	B	1158	C	O4'-C1'-N1	7.60	114.28	108.20
2	B	1266	G	N7-C8-N9	7.60	116.90	113.10
2	B	1443	U	C2-N3-C4	-7.60	122.44	127.00
2	B	1448	G	C5-C6-O6	-7.60	124.04	128.60
2	B	2859	G	O4'-C1'-N9	7.60	114.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2544	G	N3-C2-N2	7.60	125.22	119.90
1	A	46	A	C4'-C3'-C2'	-7.60	95.00	102.60
2	B	132	G	C4-C5-C6	7.60	123.36	118.80
2	B	329	G	C4-C5-N7	-7.60	107.76	110.80
2	B	440	C	C6-N1-C2	-7.60	117.26	120.30
2	B	1837	C	O4'-C1'-N1	7.60	114.28	108.20
2	B	2243	U	C5-C4-O4	-7.60	121.34	125.90
2	B	363	G	N1-C6-O6	7.60	124.46	119.90
2	B	514	A	N1-C2-N3	7.60	133.10	129.30
2	B	800	A	N9-C4-C5	7.60	108.84	105.80
2	B	899	A	C6-N1-C2	-7.60	114.04	118.60
2	B	1153	C	N3-C4-N4	7.60	123.32	118.00
2	B	1609	A	O5'-P-OP2	7.60	119.81	110.70
2	B	1633	G	OP1-P-OP2	-7.60	108.21	119.60
2	B	1746	A	N1-C6-N6	7.60	123.16	118.60
1	A	92	C	O4'-C1'-N1	7.59	114.28	108.20
2	B	617	G	C4-C5-C6	7.59	123.36	118.80
2	B	1289	C	C2-N1-C1'	7.59	127.15	118.80
2	B	1477	A	C4-C5-N7	7.59	114.50	110.70
2	B	1717	A	C4-C5-N7	7.59	114.50	110.70
2	B	2053	G	N9-C4-C5	-7.59	102.36	105.40
2	B	2657	A	N7-C8-N9	-7.59	110.00	113.80
2	B	2840	C	N3-C4-C5	-7.59	118.86	121.90
2	B	532	A	N1-C2-N3	7.59	133.10	129.30
2	B	572	A	C6-N1-C2	-7.59	114.04	118.60
2	B	1439	A	N1-C6-N6	7.59	123.16	118.60
2	B	659	G	N1-C2-N2	-7.59	109.37	116.20
2	B	1783	A	C4-C5-C6	7.59	120.80	117.00
2	B	2438	U	C5-C4-O4	-7.59	121.34	125.90
2	B	2806	C	N3-C4-N4	7.59	123.31	118.00
2	B	1319	C	N3-C4-N4	7.59	123.31	118.00
2	B	1885	A	C5-N7-C8	7.59	107.69	103.90
2	B	2211	A	C5-N7-C8	7.59	107.69	103.90
2	B	2772	C	C6-N1-C2	-7.59	117.26	120.30
2	B	131	A	O4'-C1'-N9	7.59	114.27	108.20
2	B	315	G	C4-C5-N7	-7.59	107.77	110.80
2	B	402	A	P-O5'-C5'	-7.59	108.76	120.90
2	B	1539	U	P-O3'-C3'	-7.59	110.59	119.70
2	B	1809	A	C3'-C2'-C1'	7.59	107.57	101.50
2	B	190	A	N7-C8-N9	-7.59	110.01	113.80
2	B	1014	A	C5-C6-N1	-7.59	113.91	117.70
2	B	2811	G	N1-C6-O6	7.59	124.45	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	26	C	C4'-C3'-C2'	-7.58	95.02	102.60
2	B	2785	C	P-O5'-C5'	7.58	133.04	120.90
2	B	1370	C	C2-N3-C4	7.58	123.69	119.90
2	B	1410	G	C6-N1-C2	-7.58	120.55	125.10
2	B	1710	G	P-O5'-C5'	-7.58	108.77	120.90
2	B	2121	G	N1-C6-O6	7.58	124.45	119.90
2	B	1717	A	C5-C6-N6	-7.58	117.64	123.70
2	B	2749	A	N9-C4-C5	7.58	108.83	105.80
2	B	359	G	C5-C6-N1	-7.58	107.71	111.50
2	B	541	A	N1-C2-N3	7.58	133.09	129.30
2	B	855	G	N3-C4-N9	7.58	130.55	126.00
2	B	1509	A	C4'-C3'-C2'	-7.58	95.02	102.60
2	B	1813	G	N3-C2-N2	7.58	125.20	119.90
2	B	1984	G	N3-C4-N9	7.58	130.55	126.00
2	B	2641	G	O4'-C1'-N9	7.58	114.26	108.20
2	B	2834	G	O4'-C1'-N9	7.58	114.26	108.20
2	B	2853	C	C5-C6-N1	-7.58	117.21	121.00
27	C	215	VAL	CA-CB-CG1	-7.58	99.53	110.90
2	B	108	G	C5-N7-C8	-7.58	100.51	104.30
2	B	1287	A	C3'-C2'-C1'	-7.58	95.44	101.50
2	B	2895	G	C4'-C3'-C2'	-7.58	95.02	102.60
2	B	242	G	C5-C6-N1	-7.58	107.71	111.50
2	B	451	U	C5-C6-N1	-7.58	118.91	122.70
2	B	1052	C	C4-C5-C6	7.58	121.19	117.40
2	B	2201	G	O4'-C1'-N9	7.58	114.26	108.20
2	B	151	C	N3-C4-C5	-7.57	118.87	121.90
2	B	185	G	N1-C6-O6	7.57	124.44	119.90
2	B	547	A	N9-C4-C5	-7.57	102.77	105.80
2	B	778	G	C5'-C4'-C3'	7.57	128.12	116.00
2	B	832	U	C3'-C2'-C1'	7.57	107.56	101.50
1	A	7	G	N3-C4-N9	7.57	130.54	126.00
2	B	710	U	C5-C4-O4	-7.57	121.36	125.90
2	B	810	U	C6-N1-C2	-7.57	116.46	121.00
2	B	1510	G	C5'-C4'-C3'	7.57	128.12	116.00
2	B	53	A	C5-C6-N6	-7.57	117.64	123.70
2	B	425	G	C2-N3-C4	7.57	115.69	111.90
2	B	1654	A	N9-C1'-C2'	-7.57	103.67	112.00
2	B	1942	C	C4-C5-C6	7.57	121.19	117.40
2	B	2141	G	C4-C5-N7	-7.57	107.77	110.80
2	B	2422	C	O4'-C4'-C3'	-7.57	96.43	104.00
2	B	2494	G	C8-N9-C4	7.57	109.43	106.40
2	B	1420	A	C4-C5-C6	7.57	120.78	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	26	G	N3-C2-N2	7.57	125.20	119.90
2	B	142	A	O4'-C1'-N9	7.57	114.25	108.20
2	B	402	A	N1-C2-N3	7.57	133.08	129.30
2	B	480	A	C1'-O4'-C4'	7.57	115.95	109.90
2	B	938	G	C5-N7-C8	7.57	108.08	104.30
2	B	1075	C	N3-C4-C5	-7.57	118.87	121.90
2	B	1672	A	N1-C2-N3	7.57	133.08	129.30
2	B	2851	A	N7-C8-N9	-7.57	110.02	113.80
19	X	141	TYR	CB-CG-CD1	7.57	125.54	121.00
2	B	117	G	N1-C2-N3	-7.57	119.36	123.90
2	B	378	C	N1-C2-N3	-7.57	113.90	119.20
2	B	626	A	O4'-C1'-N9	7.57	114.25	108.20
2	B	669	G	C5-C6-O6	-7.57	124.06	128.60
2	B	723	C	N3-C4-N4	7.57	123.30	118.00
2	B	838	C	C6-N1-C2	-7.57	117.27	120.30
2	B	2092	U	C5-C6-N1	7.57	126.48	122.70
2	B	2695	U	C5-C4-O4	7.57	130.44	125.90
2	B	273	G	C5-N7-C8	7.56	108.08	104.30
2	B	1333	G	P-O5'-C5'	7.56	133.00	120.90
2	B	1762	A	N1-C6-N6	7.56	123.14	118.60
2	B	2083	G	C5-N7-C8	7.56	108.08	104.30
2	B	2299	U	O4'-C1'-N1	7.56	114.25	108.20
2	B	442	G	C8-N9-C4	-7.56	103.38	106.40
2	B	575	A	O4'-C1'-N9	7.56	114.25	108.20
2	B	592	A	C5'-C4'-C3'	7.56	128.09	116.00
2	B	2284	A	C8-N9-C4	-7.56	102.78	105.80
9	O	81	ARG	NE-CZ-NH2	-7.56	116.52	120.30
1	A	10	G	C5-C6-O6	-7.56	124.07	128.60
2	B	850	U	N3-C4-O4	7.56	124.69	119.40
2	B	1131	G	P-O3'-C3'	7.56	128.77	119.70
2	B	1832	C	N3-C4-C5	-7.56	118.88	121.90
2	B	27	G	N1-C2-N2	-7.56	109.40	116.20
2	B	501	A	C5-C6-N1	-7.56	113.92	117.70
2	B	672	C	P-O5'-C5'	7.55	132.99	120.90
2	B	787	C	O4'-C1'-N1	7.55	114.24	108.20
2	B	1104	C	N3-C4-N4	7.55	123.29	118.00
2	B	1115	G	C4-C5-N7	7.55	113.82	110.80
1	A	93	C	N3-C4-C5	-7.55	118.88	121.90
2	B	228	C	O4'-C1'-N1	7.55	114.24	108.20
2	B	2607	G	O4'-C1'-N9	7.55	114.24	108.20
2	B	597	G	N1-C2-N2	-7.55	109.40	116.20
2	B	1714	U	N1-C2-O2	7.55	128.09	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2148	G	C4-C5-C6	7.55	123.33	118.80
2	B	2307	G	P-O3'-C3'	7.55	128.76	119.70
2	B	237	C	N3-C4-N4	7.55	123.28	118.00
2	B	308	G	C5-N7-C8	7.55	108.08	104.30
2	B	622	G	C4-C5-C6	7.55	123.33	118.80
2	B	1300	G	P-O3'-C3'	7.55	128.76	119.70
2	B	1630	A	C2-N3-C4	7.55	114.38	110.60
2	B	997	G	N1-C6-O6	7.55	124.43	119.90
2	B	1381	G	C8-N9-C4	-7.55	103.38	106.40
2	B	2810	A	N1-C6-N6	7.55	123.13	118.60
2	B	2822	G	O4'-C1'-N9	7.55	114.24	108.20
2	B	80	G	C5-N7-C8	-7.55	100.53	104.30
2	B	405	U	C4'-C3'-C2'	-7.55	95.05	102.60
2	B	520	G	C5'-C4'-O4'	7.55	118.16	109.10
2	B	806	C	P-O5'-C5'	7.55	132.97	120.90
2	B	1404	C	N3-C4-N4	7.55	123.28	118.00
2	B	2292	U	C5'-C4'-C3'	7.55	128.08	116.00
2	B	2540	C	C4-C5-C6	7.55	121.17	117.40
2	B	2802	G	C5-C6-N1	-7.55	107.73	111.50
2	B	1098	A	C5-C6-N1	-7.54	113.93	117.70
2	B	238	C	O4'-C1'-N1	7.54	114.23	108.20
2	B	401	A	N7-C8-N9	-7.54	110.03	113.80
2	B	554	U	P-O3'-C3'	7.54	128.75	119.70
2	B	973	A	C2-N3-C4	7.54	114.37	110.60
2	B	1930	G	N3-C2-N2	7.54	125.18	119.90
2	B	2576	G	N1-C6-O6	7.54	124.43	119.90
2	B	606	U	P-O5'-C5'	-7.54	108.83	120.90
2	B	1128	G	C4-C5-C6	7.54	123.33	118.80
2	B	1529	G	C5-N7-C8	-7.54	100.53	104.30
2	B	1546	G	O4'-C4'-C3'	-7.54	96.46	104.00
2	B	2014	A	C4-C5-C6	7.54	120.77	117.00
2	B	2173	A	N1-C2-N3	7.54	133.07	129.30
2	B	12	U	N1-C2-O2	-7.54	117.52	122.80
2	B	1068	G	C8-N9-C4	7.54	109.42	106.40
2	B	1369	G	N3-C4-N9	-7.54	121.48	126.00
2	B	2634	A	C5-C6-N6	-7.54	117.67	123.70
1	A	108	A	N9-C4-C5	7.54	108.81	105.80
2	B	29	U	N3-C4-O4	7.54	124.68	119.40
2	B	239	C	N3-C4-N4	7.54	123.28	118.00
2	B	1907	G	C8-N9-C4	7.54	109.42	106.40
2	B	2214	C	N3-C4-N4	7.54	123.28	118.00
2	B	2382	G	N1-C2-N2	-7.54	109.42	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1127	A	C6-C5-N7	-7.54	127.02	132.30
2	B	1664	A	N3-C4-N9	7.54	133.43	127.40
2	B	2444	G	C4-N9-C1'	-7.54	116.70	126.50
2	B	2594	C	N1-C2-O2	7.54	123.42	118.90
2	B	203	A	N1-C6-N6	7.54	123.12	118.60
2	B	420	C	N3-C4-C5	-7.54	118.89	121.90
2	B	729	G	N1-C6-O6	7.54	124.42	119.90
2	B	1617	C	C2-N3-C4	7.54	123.67	119.90
2	B	2163	A	C1'-O4'-C4'	-7.54	103.87	109.90
2	B	2619	C	C5'-C4'-O4'	7.54	118.14	109.10
16	2	15	ARG	NE-CZ-NH1	7.54	124.07	120.30
2	B	157	C	C6-N1-C2	7.53	123.31	120.30
2	B	406	G	N3-C4-C5	-7.53	124.83	128.60
2	B	618	G	C6-C5-N7	-7.53	125.88	130.40
2	B	957	C	C2-N3-C4	-7.53	116.13	119.90
2	B	1416	G	C5-C6-O6	-7.53	124.08	128.60
2	B	1492	G	O4'-C1'-N9	7.53	114.23	108.20
2	B	2086	U	N3-C2-O2	-7.53	116.93	122.20
2	B	2798	U	P-O5'-C5'	7.53	132.95	120.90
2	B	2864	G	C5-C6-N1	-7.53	107.73	111.50
2	B	1682	G	C4-C5-C6	7.53	123.32	118.80
2	B	1032	A	N1-C6-N6	7.53	123.12	118.60
2	B	2211	A	C4-C5-C6	7.53	120.77	117.00
2	B	2753	A	C2-N3-C4	-7.53	106.83	110.60
2	B	1	G	N3-C4-C5	-7.53	124.84	128.60
2	B	98	G	N1-C2-N3	-7.53	119.38	123.90
2	B	133	U	O4'-C1'-N1	7.53	114.22	108.20
2	B	851	C	O4'-C1'-N1	7.53	114.22	108.20
2	B	1103	A	C4-C5-N7	-7.53	106.94	110.70
2	B	1745	A	C6-C5-N7	-7.53	127.03	132.30
2	B	1956	U	P-O5'-C5'	7.53	132.95	120.90
2	B	1990	C	O4'-C1'-N1	7.53	114.22	108.20
31	I	7	TYR	CB-CG-CD2	7.53	125.52	121.00
2	B	488	G	C6-C5-N7	-7.53	125.88	130.40
2	B	1427	A	C5-C6-N6	-7.53	117.68	123.70
2	B	1636	U	O4'-C1'-N1	7.53	114.22	108.20
2	B	2256	G	C1'-O4'-C4'	7.53	115.92	109.90
2	B	1229	C	P-O3'-C3'	-7.53	110.67	119.70
2	B	1415	U	O4'-C1'-N1	7.53	114.22	108.20
2	B	2166	U	C6-N1-C2	-7.53	116.48	121.00
2	B	378	C	O4'-C1'-N1	7.52	114.22	108.20
2	B	815	C	C5-C4-N4	-7.52	114.93	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1198	U	N3-C4-O4	7.52	124.67	119.40
2	B	2034	U	P-O5'-C5'	7.52	132.94	120.90
2	B	2114	A	O4'-C1'-N9	7.52	114.22	108.20
2	B	451	U	N3-C4-O4	7.52	124.67	119.40
2	B	919	U	O4'-C1'-N1	7.52	114.22	108.20
2	B	1539	U	O4'-C1'-N1	7.52	114.22	108.20
2	B	1727	C	C6-N1-C2	-7.52	117.29	120.30
2	B	1794	A	P-O3'-C3'	-7.52	110.67	119.70
2	B	2165	C	C2-N1-C1'	7.52	127.08	118.80
2	B	2221	G	N1-C6-O6	7.52	124.41	119.90
2	B	2504	U	O4'-C1'-N1	7.52	114.22	108.20
2	B	2732	G	C1'-O4'-C4'	7.52	115.92	109.90
2	B	860	U	C5-C4-O4	-7.52	121.39	125.90
2	B	151	C	O4'-C1'-N1	7.52	114.21	108.20
2	B	575	A	C3'-C2'-C1'	7.52	107.51	101.50
2	B	2170	A	C6-N1-C2	-7.52	114.09	118.60
2	B	2694	G	C4-C5-N7	-7.52	107.79	110.80
29	G	108	PHE	CB-CG-CD2	7.52	126.06	120.80
2	B	2119	A	C3'-C2'-C1'	7.52	107.51	101.50
2	B	2614	A	C4-C5-C6	7.52	120.76	117.00
2	B	295	G	P-O3'-C3'	-7.51	110.68	119.70
2	B	333	G	O4'-C1'-N9	7.51	114.21	108.20
2	B	1425	G	N1-C2-N2	-7.51	109.44	116.20
2	B	2268	A	C8-N9-C4	7.51	108.81	105.80
2	B	1773	A	C4'-C3'-C2'	-7.51	95.09	102.60
2	B	1840	G	C8-N9-C4	-7.51	103.39	106.40
2	B	2281	A	C5-C6-N1	-7.51	113.94	117.70
2	B	729	G	C4-N9-C1'	7.51	136.26	126.50
2	B	2060	A	C4-C5-C6	7.51	120.76	117.00
2	B	2254	C	C5'-C4'-O4'	7.51	118.11	109.10
2	B	2289	G	C5-C6-O6	-7.51	124.09	128.60
2	B	2327	A	N9-C4-C5	7.51	108.81	105.80
2	B	428	A	C8-N9-C4	-7.51	102.80	105.80
2	B	1749	A	C8-N9-C4	7.51	108.80	105.80
2	B	1763	G	N3-C2-N2	7.51	125.16	119.90
2	B	2478	A	C5-N7-C8	7.51	107.66	103.90
2	B	2563	U	N3-C4-O4	7.51	124.66	119.40
2	B	839	U	C6-N1-C2	7.51	125.50	121.00
2	B	1429	G	P-O5'-C5'	7.51	132.91	120.90
2	B	2115	G	C5-C6-O6	-7.51	124.10	128.60
2	B	1117	C	C6-N1-C2	7.50	123.30	120.30
2	B	1343	G	C5-C6-N1	-7.50	107.75	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2066	C	N3-C4-C5	-7.50	118.90	121.90
2	B	2484	G	C5-C6-O6	-7.50	124.10	128.60
2	B	938	G	N9-C4-C5	-7.50	102.40	105.40
2	B	1074	G	N9-C4-C5	7.50	108.40	105.40
2	B	1510	G	C8-N9-C4	-7.50	103.40	106.40
2	B	2019	A	N9-C4-C5	7.50	108.80	105.80
2	B	2211	A	C1'-O4'-C4'	7.50	115.90	109.90
2	B	2727	A	N1-C2-N3	7.50	133.05	129.30
2	B	1202	G	O4'-C1'-N9	7.50	114.20	108.20
2	B	1816	C	C4'-C3'-C2'	7.50	110.10	102.60
2	B	2129	C	C2-N1-C1'	7.50	127.05	118.80
4	K	108	ARG	NE-CZ-NH2	-7.50	116.55	120.30
2	B	822	G	N7-C8-N9	-7.50	109.35	113.10
2	B	1285	A	O4'-C1'-N9	7.50	114.20	108.20
2	B	1887	C	N1-C2-O2	-7.50	114.40	118.90
2	B	2430	A	O3'-P-O5'	7.50	118.25	104.00
2	B	2527	C	C6-N1-C2	7.50	123.30	120.30
2	B	2569	G	O4'-C1'-N9	7.50	114.20	108.20
2	B	2626	C	N3-C4-N4	7.50	123.25	118.00
1	A	52	A	N1-C6-N6	7.50	123.10	118.60
2	B	1210	G	C5-C6-O6	-7.50	124.10	128.60
2	B	1470	A	C4-C5-C6	7.50	120.75	117.00
2	B	1958	C	O4'-C1'-N1	7.50	114.20	108.20
2	B	2209	G	C5-C6-N1	7.50	115.25	111.50
2	B	643	A	O4'-C1'-N9	7.50	114.20	108.20
2	B	2615	U	C4'-C3'-C2'	7.50	110.10	102.60
2	B	654	A	N3-C4-C5	-7.50	121.55	126.80
2	B	1469	A	C6-N1-C2	-7.50	114.10	118.60
2	B	971	G	N1-C2-N3	-7.49	119.40	123.90
2	B	1552	A	O4'-C1'-N9	7.49	114.19	108.20
2	B	2790	U	C1'-O4'-C4'	-7.49	103.91	109.90
2	B	2848	G	C4-N9-C1'	-7.49	116.76	126.50
2	B	2877	G	C6-C5-N7	-7.49	125.90	130.40
2	B	389	G	N1-C6-O6	7.49	124.39	119.90
2	B	617	G	C2-N3-C4	-7.49	108.16	111.90
2	B	1303	G	C5-C6-O6	-7.49	124.11	128.60
2	B	1308	A	C5-C6-N6	-7.49	117.71	123.70
2	B	1419	A	O4'-C4'-C3'	-7.49	96.51	104.00
2	B	2046	G	O4'-C1'-N9	7.49	114.19	108.20
2	B	2316	G	O4'-C1'-N9	7.49	114.19	108.20
2	B	2401	U	O4'-C1'-N1	7.49	114.19	108.20
1	A	106	G	C6-C5-N7	-7.49	125.91	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	748	G	N9-C4-C5	-7.49	102.41	105.40
2	B	919	U	N3-C4-O4	7.49	124.64	119.40
2	B	1608	A	O3'-P-O5'	-7.49	89.77	104.00
2	B	2739	U	C2-N3-C4	-7.49	122.51	127.00
2	B	825	A	C3'-C2'-C1'	7.49	107.49	101.50
2	B	1597	A	N7-C8-N9	7.49	117.54	113.80
2	B	1723	G	N1-C2-N3	-7.49	119.41	123.90
2	B	2101	A	C5'-C4'-C3'	7.49	127.98	116.00
2	B	891	G	C4-C5-C6	7.48	123.29	118.80
2	B	2618	G	C4-C5-C6	7.48	123.29	118.80
2	B	602	A	C4'-C3'-C2'	-7.48	95.12	102.60
2	B	784	G	N9-C1'-C2'	-7.48	103.77	112.00
2	B	1501	G	C6-N1-C2	7.48	129.59	125.10
22	3	9	ARG	NE-CZ-NH1	-7.48	116.56	120.30
2	B	251	A	O4'-C1'-N9	7.48	114.18	108.20
2	B	581	C	O4'-C1'-N1	7.48	114.18	108.20
2	B	1206	G	C8-N9-C4	-7.48	103.41	106.40
2	B	1586	A	C4-C5-C6	7.48	120.74	117.00
2	B	1904	G	C5-C6-O6	-7.48	124.11	128.60
27	C	170	TYR	CB-CG-CD2	7.48	125.49	121.00
32	J	95	ARG	NE-CZ-NH2	-7.48	116.56	120.30
2	B	117	G	C8-N9-C4	-7.48	103.41	106.40
2	B	946	C	N3-C4-N4	7.48	123.24	118.00
2	B	1836	C	C4-C5-C6	7.48	121.14	117.40
2	B	938	G	N7-C8-N9	-7.48	109.36	113.10
2	B	1659	G	P-O3'-C3'	-7.48	110.73	119.70
2	B	1833	C	C1'-O4'-C4'	-7.48	103.92	109.90
2	B	1897	G	C5-C6-O6	-7.48	124.11	128.60
2	B	2095	A	C2-N3-C4	-7.48	106.86	110.60
2	B	1324	G	N1-C6-O6	7.48	124.39	119.90
2	B	288	U	C5-C6-N1	7.47	126.44	122.70
2	B	1144	A	C6-N1-C2	-7.47	114.11	118.60
2	B	1633	G	O4'-C1'-N9	7.47	114.18	108.20
2	B	1997	C	C5'-C4'-C3'	-7.47	104.04	116.00
2	B	2422	C	N1-C2-N3	7.47	124.43	119.20
2	B	613	A	O4'-C1'-N9	7.47	114.18	108.20
2	B	1427	A	C3'-C2'-C1'	-7.47	95.52	101.50
2	B	1830	C	C5-C6-N1	7.47	124.74	121.00
2	B	2168	G	C6-C5-N7	-7.47	125.92	130.40
2	B	517	C	O4'-C1'-N1	7.47	114.18	108.20
2	B	567	U	O4'-C1'-N1	7.47	114.18	108.20
2	B	784	G	N9-C4-C5	-7.47	102.41	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1324	G	C4-N9-C1'	7.47	136.21	126.50
2	B	1727	C	N3-C4-C5	-7.47	118.91	121.90
2	B	385	C	N3-C4-N4	7.47	123.23	118.00
2	B	1132	U	N3-C2-O2	7.47	127.43	122.20
2	B	1253	A	P-O3'-C3'	-7.47	110.74	119.70
2	B	2490	G	C8-N9-C4	-7.47	103.41	106.40
2	B	2813	A	C5-C6-N6	-7.47	117.72	123.70
2	B	297	G	C5-C6-N1	-7.47	107.77	111.50
2	B	1770	G	N7-C8-N9	-7.47	109.37	113.10
2	B	2874	C	C3'-C2'-C1'	-7.47	95.53	101.50
2	B	240	C	N1-C2-N3	-7.47	113.97	119.20
2	B	510	C	C6-N1-C2	-7.47	117.31	120.30
2	B	996	A	C4-C5-N7	-7.47	106.97	110.70
2	B	1544	A	O4'-C1'-N9	7.47	114.17	108.20
2	B	2810	A	C2-N3-C4	-7.47	106.87	110.60
2	B	629	G	O4'-C1'-C2'	7.46	114.32	107.60
2	B	903	C	O4'-C1'-N1	7.46	114.17	108.20
2	B	994	C	N3-C4-N4	7.46	123.22	118.00
2	B	1155	A	C5-C6-N6	-7.46	117.73	123.70
2	B	1830	C	O4'-C1'-N1	7.46	114.17	108.20
2	B	2206	C	N3-C4-N4	7.46	123.23	118.00
2	B	2525	G	C5-C6-O6	-7.46	124.12	128.60
2	B	2109	U	C6-N1-C2	-7.46	116.52	121.00
2	B	24	G	N3-C4-C5	-7.46	124.87	128.60
2	B	1464	G	O4'-C1'-N9	7.46	114.17	108.20
2	B	2239	G	P-O3'-C3'	7.46	128.65	119.70
2	B	2484	G	N7-C8-N9	-7.46	109.37	113.10
2	B	2495	G	C5-C6-O6	-7.46	124.12	128.60
2	B	1543	G	C5-C6-O6	-7.46	124.12	128.60
2	B	1844	C	P-O3'-C3'	-7.46	110.75	119.70
2	B	2616	C	N3-C4-N4	7.46	123.22	118.00
2	B	2724	U	N3-C4-C5	-7.46	110.12	114.60
2	B	2778	A	C2-N3-C4	-7.46	106.87	110.60
2	B	149	A	C6-C5-N7	-7.46	127.08	132.30
2	B	178	G	N9-C1'-C2'	-7.46	103.80	112.00
2	B	205	G	N1-C6-O6	7.46	124.37	119.90
2	B	720	U	C4-C5-C6	7.46	124.17	119.70
2	B	1418	G	C8-N9-C4	-7.46	103.42	106.40
2	B	2823	A	N1-C2-N3	-7.46	125.57	129.30
11	Q	35	PHE	N-CA-C	-7.46	90.87	111.00
28	F	70	ARG	NE-CZ-NH2	-7.46	116.57	120.30
2	B	597	G	C5-N7-C8	7.46	108.03	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1488	C	O4'-C1'-N1	7.46	114.16	108.20
2	B	2542	A	C5-N7-C8	7.46	107.63	103.90
2	B	2559	C	O4'-C1'-N1	7.46	114.16	108.20
2	B	691	C	O4'-C1'-N1	7.45	114.16	108.20
2	B	1390	U	C1'-O4'-C4'	7.45	115.86	109.90
2	B	1462	C	C4-C5-C6	-7.45	113.67	117.40
2	B	1805	A	C5-C6-N1	-7.45	113.97	117.70
2	B	159	G	N9-C4-C5	-7.45	102.42	105.40
2	B	1014	A	C4-C5-C6	7.45	120.73	117.00
2	B	345	A	N1-C2-N3	-7.45	125.58	129.30
2	B	440	C	O4'-C1'-N1	7.45	114.16	108.20
2	B	738	G	O4'-C1'-N9	7.45	114.16	108.20
2	B	758	C	C5-C6-N1	7.45	124.72	121.00
2	B	1014	A	O4'-C1'-N9	7.45	114.16	108.20
2	B	292	U	C2-N3-C4	-7.45	122.53	127.00
2	B	316	C	C5-C6-N1	7.45	124.72	121.00
2	B	429	A	C5-C6-N6	-7.45	117.74	123.70
2	B	878	A	C5-C6-N1	-7.45	113.98	117.70
2	B	1165	A	N9-C4-C5	7.45	108.78	105.80
2	B	1256	G	O5'-C5'-C4'	-7.45	97.55	111.70
2	B	1431	A	N1-C6-N6	7.45	123.07	118.60
2	B	1805	A	N1-C6-N6	7.45	123.07	118.60
2	B	1929	G	N1-C2-N3	-7.45	119.43	123.90
2	B	1984	G	C5-N7-C8	7.45	108.02	104.30
2	B	2010	G	C4-C5-C6	7.45	123.27	118.80
2	B	2272	U	N1-C2-N3	7.45	119.37	114.90
19	X	196	PHE	CB-CG-CD2	-7.45	115.59	120.80
2	B	1440	U	C5-C6-N1	-7.45	118.98	122.70
2	B	2537	U	N3-C4-O4	-7.45	114.19	119.40
2	B	575	A	N1-C6-N6	7.45	123.07	118.60
2	B	697	G	N1-C2-N3	-7.45	119.43	123.90
2	B	1505	A	O4'-C1'-N9	7.45	114.16	108.20
1	A	54	G	N1-C6-O6	7.44	124.37	119.90
2	B	2112	G	C5-C6-N1	-7.44	107.78	111.50
2	B	2171	A	N7-C8-N9	-7.44	110.08	113.80
2	B	593	U	O4'-C1'-N1	7.44	114.15	108.20
2	B	723	C	O4'-C1'-N1	7.44	114.15	108.20
2	B	850	U	C5-C4-O4	-7.44	121.44	125.90
2	B	1011	G	N9-C4-C5	7.44	108.38	105.40
2	B	1580	A	O4'-C1'-N9	7.44	114.15	108.20
2	B	1621	U	O4'-C1'-N1	7.44	114.15	108.20
2	B	1815	A	N7-C8-N9	-7.44	110.08	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2502	G	C4-C5-C6	7.44	123.27	118.80
2	B	2691	C	N3-C4-C5	-7.44	118.92	121.90
2	B	2892	G	N1-C6-O6	7.44	124.36	119.90
2	B	1710	G	N1-C6-O6	7.44	124.36	119.90
2	B	2253	G	N1-C2-N3	-7.44	119.44	123.90
2	B	315	G	C8-N9-C4	-7.44	103.42	106.40
2	B	482	A	N3-C4-N9	7.44	133.35	127.40
2	B	1885	A	C5-C6-N6	-7.44	117.75	123.70
2	B	123	G	C4-C5-N7	7.44	113.78	110.80
2	B	588	U	O4'-C1'-N1	7.44	114.15	108.20
2	B	722	A	N7-C8-N9	7.44	117.52	113.80
2	B	1411	U	N3-C2-O2	-7.44	116.99	122.20
2	B	1665	A	C5'-C4'-C3'	-7.44	104.10	116.00
2	B	2614	A	C5-C6-N1	-7.44	113.98	117.70
2	B	2808	G	C6-C5-N7	-7.44	125.94	130.40
1	A	50	A	P-O3'-C3'	-7.44	110.78	119.70
2	B	2704	C	C2-N3-C4	7.44	123.62	119.90
2	B	480	A	P-O3'-C3'	7.43	128.62	119.70
2	B	2058	A	C5-N7-C8	7.43	107.62	103.90
2	B	2151	U	C5'-C4'-C3'	-7.43	104.11	116.00
2	B	2600	A	C5-C6-N6	-7.43	117.75	123.70
2	B	2847	U	N3-C4-C5	7.43	119.06	114.60
2	B	49	A	O4'-C1'-C2'	-7.43	98.37	105.80
2	B	1514	G	C5-C6-O6	-7.43	124.14	128.60
2	B	1748	C	O4'-C1'-N1	7.43	114.15	108.20
2	B	2454	G	N3-C2-N2	7.43	125.10	119.90
2	B	651	G	N1-C6-O6	7.43	124.36	119.90
2	B	1355	G	N9-C1'-C2'	-7.43	103.83	112.00
2	B	1534	U	C5-C4-O4	-7.43	121.44	125.90
14	D	101	PHE	CB-CG-CD1	-7.43	115.60	120.80
2	B	251	A	P-O5'-C5'	7.43	132.79	120.90
2	B	323	C	N1-C2-N3	-7.43	114.00	119.20
2	B	810	U	N3-C2-O2	-7.43	117.00	122.20
2	B	1942	C	O4'-C1'-N1	7.43	114.14	108.20
2	B	2024	G	N1-C2-N3	-7.43	119.44	123.90
2	B	2814	A	C5-C6-N1	-7.43	113.98	117.70
2	B	628	G	C1'-O4'-C4'	-7.43	103.96	109.90
2	B	1104	C	C4-C5-C6	7.43	121.11	117.40
2	B	1641	A	C8-N9-C4	7.43	108.77	105.80
2	B	2439	A	O4'-C1'-N9	7.43	114.14	108.20
2	B	10	A	O4'-C1'-N9	7.43	114.14	108.20
2	B	1011	G	C8-N9-C4	-7.43	103.43	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2505	G	N9-C1'-C2'	-7.43	103.83	112.00
2	B	2745	C	C4-C5-C6	7.43	121.11	117.40
2	B	661	A	N1-C6-N6	7.42	123.06	118.60
2	B	1266	G	N9-C4-C5	-7.42	102.43	105.40
2	B	1935	G	O4'-C1'-N9	7.42	114.14	108.20
2	B	2479	U	N1-C1'-C2'	-7.42	103.83	112.00
2	B	202	U	O4'-C1'-N1	7.42	114.14	108.20
2	B	285	G	C1'-O4'-C4'	-7.42	103.96	109.90
2	B	439	A	N7-C8-N9	-7.42	110.09	113.80
2	B	553	G	N9-C1'-C2'	-7.42	103.83	112.00
2	B	809	G	C5-C6-O6	-7.42	124.15	128.60
2	B	1960	A	O4'-C1'-N9	7.42	114.14	108.20
2	B	2067	G	N1-C6-O6	7.42	124.35	119.90
2	B	2350	C	C5-C4-N4	-7.42	115.00	120.20
2	B	438	G	C5-C6-O6	-7.42	124.15	128.60
2	B	610	C	O4'-C1'-N1	7.42	114.14	108.20
2	B	1036	G	N3-C2-N2	7.42	125.10	119.90
2	B	1139	G	N3-C2-N2	7.42	125.09	119.90
2	B	68	G	C5-C6-O6	-7.42	124.15	128.60
2	B	650	C	N1-C2-O2	7.42	123.35	118.90
2	B	959	A	N1-C6-N6	7.42	123.05	118.60
2	B	1016	G	C4-C5-C6	7.42	123.25	118.80
2	B	2429	G	C2-N3-C4	-7.42	108.19	111.90
2	B	2490	G	C5-C6-N1	-7.42	107.79	111.50
2	B	647	G	N3-C2-N2	7.42	125.09	119.90
2	B	2370	G	O4'-C1'-N9	7.42	114.14	108.20
2	B	2650	U	P-O3'-C3'	-7.42	110.80	119.70
2	B	572	A	C4-C5-C6	7.42	120.71	117.00
2	B	1103	A	C5-C6-N1	-7.42	113.99	117.70
2	B	2207	C	N3-C4-N4	7.42	123.19	118.00
2	B	2451	A	N1-C6-N6	7.42	123.05	118.60
2	B	2664	G	C6-C5-N7	-7.42	125.95	130.40
28	F	127	TYR	CB-CG-CD1	-7.42	116.55	121.00
2	B	356	G	C5-N7-C8	-7.42	100.59	104.30
2	B	1500	G	C5-C6-O6	-7.42	124.15	128.60
2	B	2444	G	N1-C2-N2	-7.42	109.53	116.20
2	B	2638	G	O4'-C1'-N9	7.42	114.13	108.20
2	B	671	C	C5-C6-N1	7.41	124.71	121.00
2	B	900	A	N3-C4-C5	-7.41	121.61	126.80
2	B	2668	G	C5-N7-C8	7.41	108.01	104.30
2	B	2732	G	N1-C2-N2	-7.41	109.53	116.20
14	D	45	TYR	CB-CG-CD2	-7.41	116.55	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	266	G	N1-C2-N2	7.41	122.87	116.20
2	B	321	U	N3-C4-C5	-7.41	110.15	114.60
2	B	948	C	N3-C4-C5	-7.41	118.94	121.90
2	B	1471	G	N3-C4-C5	7.41	132.31	128.60
2	B	1583	A	O4'-C1'-N9	7.41	114.13	108.20
2	B	1939	U	O4'-C1'-N1	7.41	114.13	108.20
2	B	2495	G	N7-C8-N9	-7.41	109.39	113.10
2	B	988	A	C8-N9-C4	-7.41	102.84	105.80
2	B	1623	G	N3-C4-C5	-7.41	124.89	128.60
2	B	2306	C	N3-C4-C5	-7.41	118.94	121.90
2	B	878	A	C5-C6-N6	-7.41	117.77	123.70
2	B	1244	A	C3'-C2'-C1'	7.41	107.43	101.50
2	B	1528	A	C8-N9-C4	-7.41	102.84	105.80
2	B	1784	A	O4'-C1'-N9	7.41	114.13	108.20
2	B	2634	A	N7-C8-N9	-7.41	110.10	113.80
2	B	2791	G	P-O5'-C5'	-7.41	109.05	120.90
2	B	1839	G	N1-C2-N3	-7.41	119.46	123.90
2	B	719	C	N3-C4-N4	7.41	123.18	118.00
2	B	869	G	N1-C6-O6	7.41	124.34	119.90
2	B	947	A	C4-C5-C6	7.41	120.70	117.00
2	B	1001	A	O5'-P-OP2	7.41	119.59	110.70
2	B	2317	A	C2-N3-C4	-7.41	106.90	110.60
2	B	622	G	N9-C4-C5	7.40	108.36	105.40
2	B	1128	G	N3-C4-C5	-7.40	124.90	128.60
2	B	24	G	O4'-C1'-N9	7.40	114.12	108.20
2	B	285	G	N3-C4-N9	7.40	130.44	126.00
2	B	364	C	C5'-C4'-O4'	7.40	117.98	109.10
2	B	510	C	N3-C4-N4	7.40	123.18	118.00
2	B	741	U	C6-N1-C2	-7.40	116.56	121.00
2	B	771	G	C4-C5-N7	-7.40	107.84	110.80
2	B	1909	C	O4'-C1'-N1	7.40	114.12	108.20
2	B	2004	G	C5-C6-O6	-7.40	124.16	128.60
2	B	2037	A	N3-C4-C5	-7.40	121.62	126.80
2	B	2742	G	N1-C2-N2	-7.40	109.54	116.20
2	B	404	A	C6-N1-C2	-7.40	114.16	118.60
2	B	1015	U	N3-C2-O2	-7.40	117.02	122.20
2	B	1107	G	N9-C4-C5	-7.40	102.44	105.40
2	B	1532	A	N3-C4-C5	7.40	131.98	126.80
2	B	1608	A	C6-C5-N7	-7.40	127.12	132.30
2	B	1992	G	P-O5'-C5'	7.40	132.74	120.90
2	B	2617	U	N3-C2-O2	7.40	127.38	122.20
1	A	21	G	N9-C1'-C2'	-7.40	103.86	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	263	G	C6-N1-C2	-7.40	120.66	125.10
2	B	935	C	N1-C2-O2	7.40	123.34	118.90
2	B	1633	G	C6-C5-N7	-7.40	125.96	130.40
2	B	726	G	C4-C5-N7	-7.40	107.84	110.80
2	B	1371	G	C8-N9-C1'	7.40	136.62	127.00
2	B	1981	A	C2-N3-C4	-7.40	106.90	110.60
2	B	2307	G	C5'-C4'-C3'	-7.40	104.17	116.00
14	D	206	ALA	CB-CA-C	-7.40	99.00	110.10
2	B	612	G	O3'-P-O5'	-7.39	89.95	104.00
2	B	1314	C	N3-C4-N4	7.39	123.18	118.00
2	B	2368	C	O4'-C4'-C3'	-7.39	96.61	104.00
2	B	2635	A	O4'-C4'-C3'	-7.39	96.61	104.00
1	A	24	G	C4-C5-C6	7.39	123.23	118.80
2	B	713	G	C8-N9-C4	-7.39	103.44	106.40
2	B	748	G	N7-C8-N9	-7.39	109.40	113.10
2	B	883	G	N1-C6-O6	7.39	124.33	119.90
2	B	907	G	C5-C6-O6	-7.39	124.17	128.60
2	B	1661	G	C5-C6-N1	-7.39	107.80	111.50
2	B	2048	G	N3-C4-N9	7.39	130.44	126.00
2	B	2138	G	N3-C2-N2	7.39	125.08	119.90
1	A	100	G	C4'-C3'-C2'	7.39	109.99	102.60
2	B	172	A	O4'-C4'-C3'	-7.39	96.61	104.00
2	B	326	G	N1-C2-N3	-7.39	119.47	123.90
2	B	407	G	N1-C2-N3	-7.39	119.47	123.90
2	B	780	G	N7-C8-N9	-7.39	109.41	113.10
2	B	985	C	N3-C4-C5	-7.39	118.94	121.90
2	B	1046	A	O4'-C1'-N9	7.39	114.11	108.20
2	B	2472	G	O4'-C1'-N9	7.39	114.11	108.20
3	0	26	ARG	NE-CZ-NH2	-7.39	116.61	120.30
2	B	1436	G	C8-N9-C1'	7.39	136.60	127.00
1	A	24	G	P-O3'-C3'	7.39	128.56	119.70
2	B	43	G	N3-C4-C5	-7.39	124.91	128.60
2	B	873	C	N3-C4-N4	7.39	123.17	118.00
2	B	2508	G	C6-C5-N7	-7.39	125.97	130.40
2	B	2660	A	C2-N3-C4	-7.39	106.91	110.60
2	B	1040	A	C4-C5-N7	-7.38	107.01	110.70
2	B	1053	C	C5-C6-N1	7.38	124.69	121.00
2	B	1662	U	C5-C4-O4	-7.38	121.47	125.90
2	B	1748	C	C5-C4-N4	-7.38	115.03	120.20
2	B	2314	A	C5-N7-C8	7.38	107.59	103.90
2	B	2839	G	N1-C6-O6	7.38	124.33	119.90
2	B	599	A	C6-N1-C2	7.38	123.03	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1445	G	C4-C5-N7	-7.38	107.85	110.80
2	B	645	C	N3-C4-C5	-7.38	118.95	121.90
2	B	1350	C	P-O5'-C5'	-7.38	109.09	120.90
2	B	1462	C	O4'-C1'-N1	7.38	114.11	108.20
2	B	1939	U	C1'-O4'-C4'	-7.38	103.99	109.90
2	B	2332	C	C5-C4-N4	-7.38	115.03	120.20
4	K	78	ARG	NE-CZ-NH1	7.38	123.99	120.30
2	B	910	A	O5'-P-OP2	-7.38	99.06	105.70
2	B	1937	A	C5'-C4'-O4'	7.38	117.95	109.10
2	B	161	A	O4'-C1'-N9	7.38	114.10	108.20
2	B	622	G	C4-C5-N7	-7.38	107.85	110.80
2	B	1220	G	C8-N9-C4	7.38	109.35	106.40
2	B	1324	G	N3-C2-N2	7.38	125.06	119.90
2	B	1519	G	N9-C4-C5	7.38	108.35	105.40
2	B	2153	C	C5-C6-N1	7.38	124.69	121.00
1	A	106	G	C8-N9-C4	-7.38	103.45	106.40
2	B	295	G	C6-N1-C2	7.38	129.53	125.10
2	B	843	G	C6-N1-C2	7.38	129.53	125.10
2	B	1218	G	N1-C2-N3	-7.38	119.47	123.90
2	B	1302	A	C5-C6-N1	-7.38	114.01	117.70
2	B	1699	G	O4'-C1'-C2'	-7.38	98.42	105.80
2	B	2089	C	O4'-C1'-N1	7.38	114.10	108.20
2	B	2723	C	C5-C4-N4	-7.38	115.04	120.20
2	B	843	G	C2-N3-C4	-7.38	108.21	111.90
2	B	1126	A	C5'-C4'-C3'	-7.38	104.20	116.00
2	B	6	A	C5-C6-N1	7.37	121.39	117.70
2	B	874	G	N1-C2-N3	-7.37	119.48	123.90
2	B	1246	A	C5-C6-N1	-7.37	114.01	117.70
2	B	2348	U	N3-C4-O4	-7.37	114.24	119.40
2	B	1517	G	N1-C6-O6	7.37	124.32	119.90
2	B	2562	U	C2-N1-C1'	7.37	126.55	117.70
2	B	2043	C	N3-C4-N4	7.37	123.16	118.00
2	B	2874	C	N3-C4-N4	7.37	123.16	118.00
2	B	129	C	N3-C4-N4	7.37	123.16	118.00
2	B	2402	U	C2-N1-C1'	7.37	126.54	117.70
2	B	2476	A	N1-C2-N3	-7.37	125.61	129.30
2	B	2497	A	O5'-P-OP1	-7.37	99.07	105.70
2	B	2584	U	C4'-C3'-C2'	7.37	109.97	102.60
2	B	7	G	O4'-C1'-N9	7.37	114.09	108.20
2	B	1370	C	N3-C2-O2	7.37	127.06	121.90
2	B	1795	C	O4'-C1'-N1	7.37	114.09	108.20
2	B	287	G	C6-C5-N7	-7.37	125.98	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	326	G	N3-C4-C5	-7.37	124.92	128.60
2	B	688	U	N1-C2-N3	-7.37	110.48	114.90
2	B	780	G	O4'-C1'-N9	7.37	114.09	108.20
2	B	2098	U	C1'-O4'-C4'	-7.37	104.01	109.90
2	B	2218	G	N3-C2-N2	7.37	125.06	119.90
2	B	292	U	N3-C2-O2	7.36	127.35	122.20
2	B	730	A	O4'-C1'-N9	7.36	114.09	108.20
2	B	1085	A	N9-C4-C5	7.36	108.75	105.80
2	B	1138	G	C4-C5-N7	-7.36	107.86	110.80
2	B	1447	C	O4'-C1'-N1	7.36	114.09	108.20
2	B	855	G	N7-C8-N9	7.36	116.78	113.10
2	B	937	C	C2-N3-C4	7.36	123.58	119.90
2	B	2767	C	N1-C2-O2	-7.36	114.48	118.90
2	B	45	G	C5-C6-O6	-7.36	124.18	128.60
2	B	869	G	C8-N9-C4	-7.36	103.46	106.40
2	B	1156	A	O4'-C1'-N9	7.36	114.09	108.20
2	B	1271	G	O4'-C4'-C3'	-7.36	96.64	104.00
2	B	1517	G	N9-C4-C5	7.36	108.34	105.40
2	B	1747	U	O4'-C1'-N1	7.36	114.09	108.20
2	B	1896	G	C5-C6-O6	-7.36	124.18	128.60
2	B	1925	C	P-O3'-C3'	7.36	128.53	119.70
2	B	1929	G	N9-C4-C5	7.36	108.34	105.40
2	B	2007	U	P-O5'-C5'	-7.36	109.12	120.90
32	J	4	PHE	CB-CG-CD1	-7.36	115.65	120.80
1	A	35	C	O4'-C1'-N1	7.36	114.09	108.20
2	B	2624	G	C4-C5-N7	-7.36	107.86	110.80
2	B	299	A	O4'-C4'-C3'	-7.36	96.64	104.00
2	B	718	A	N1-C6-N6	7.36	123.01	118.60
2	B	963	U	C4-C5-C6	-7.36	115.28	119.70
2	B	1369	G	N7-C8-N9	-7.36	109.42	113.10
2	B	1960	A	C8-N9-C4	-7.36	102.86	105.80
2	B	2033	A	N3-C4-C5	-7.36	121.65	126.80
2	B	2571	U	C5'-C4'-C3'	7.36	127.77	116.00
2	B	2894	G	N3-C4-C5	-7.36	124.92	128.60
2	B	590	A	P-O3'-C3'	7.36	128.53	119.70
2	B	723	C	C5-C6-N1	7.36	124.68	121.00
2	B	945	A	C4-C5-C6	7.36	120.68	117.00
2	B	1089	A	N1-C2-N3	7.36	132.98	129.30
2	B	1383	A	O4'-C1'-N9	7.36	114.08	108.20
2	B	1408	G	P-O3'-C3'	7.36	128.53	119.70
2	B	2058	A	C2-N3-C4	7.36	114.28	110.60
2	B	2227	A	C5-C6-N1	-7.36	114.02	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2543	G	C6-C5-N7	-7.36	125.99	130.40
2	B	2699	C	N1-C2-O2	-7.36	114.49	118.90
2	B	214	G	N1-C2-N3	-7.35	119.49	123.90
2	B	356	G	N7-C8-N9	7.35	116.78	113.10
2	B	844	A	P-O5'-C5'	7.35	132.67	120.90
2	B	2902	C	O4'-C1'-N1	7.35	114.08	108.20
2	B	8	C	O4'-C1'-N1	7.35	114.08	108.20
2	B	404	A	C6-C5-N7	-7.35	127.15	132.30
2	B	586	A	C5-N7-C8	7.35	107.58	103.90
2	B	1191	G	C8-N9-C4	7.35	109.34	106.40
2	B	1342	A	N1-C2-N3	7.35	132.98	129.30
2	B	2123	G	P-O5'-C5'	-7.35	109.14	120.90
2	B	2707	U	C6-N1-C2	-7.35	116.59	121.00
2	B	1689	A	C5-C6-N6	-7.35	117.82	123.70
2	B	1903	G	P-O5'-C5'	7.35	132.66	120.90
2	B	558	U	C5'-C4'-O4'	-7.35	100.28	109.10
2	B	1613	G	C5-C6-N1	-7.35	107.83	111.50
2	B	1718	G	C2-N3-C4	7.35	115.58	111.90
2	B	1972	G	O4'-C1'-N9	7.35	114.08	108.20
2	B	2754	U	C2-N3-C4	7.35	131.41	127.00
1	A	11	C	C5-C4-N4	-7.35	115.06	120.20
2	B	285	G	N9-C4-C5	-7.35	102.46	105.40
2	B	1723	G	N1-C6-O6	7.35	124.31	119.90
2	B	2246	G	C8-N9-C4	7.35	109.34	106.40
2	B	2823	A	C5-C6-N6	-7.35	117.82	123.70
2	B	2319	G	C4-C5-N7	7.35	113.74	110.80
2	B	275	C	P-O5'-C5'	-7.34	109.15	120.90
2	B	1238	G	O4'-C1'-N9	7.34	114.08	108.20
2	B	1554	U	C2-N3-C4	-7.34	122.59	127.00
2	B	1797	G	C5-C6-O6	-7.34	124.19	128.60
2	B	2191	A	P-O3'-C3'	7.34	128.51	119.70
1	A	75	G	C6-C5-N7	-7.34	125.99	130.40
2	B	1854	A	C1'-O4'-C4'	7.34	115.78	109.90
2	B	2590	A	OP1-P-OP2	-7.34	108.59	119.60
2	B	872	U	C5-C4-O4	-7.34	121.50	125.90
2	B	1233	C	N3-C4-N4	7.34	123.14	118.00
2	B	2096	C	O4'-C1'-N1	7.34	114.07	108.20
2	B	2641	G	C5-C6-N1	-7.34	107.83	111.50
19	X	165	ASP	CB-CG-OD2	7.34	124.91	118.30
31	I	68	PHE	CB-CG-CD2	-7.34	115.66	120.80
2	B	256	A	C6-C5-N7	-7.34	127.16	132.30
2	B	726	G	N7-C8-N9	7.34	116.77	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1271	G	C1'-O4'-C4'	-7.34	104.03	109.90
2	B	1775	U	O4'-C1'-N1	7.34	114.07	108.20
2	B	2598	A	C5-C6-N1	7.34	121.37	117.70
2	B	2723	C	N3-C4-C5	-7.34	118.96	121.90
2	B	86	G	N7-C8-N9	-7.34	109.43	113.10
2	B	187	G	O4'-C1'-N9	7.34	114.07	108.20
2	B	1054	A	C6-C5-N7	-7.34	127.16	132.30
2	B	1349	C	P-O5'-C5'	7.34	132.64	120.90
2	B	1942	C	N3-C4-N4	7.34	123.14	118.00
2	B	514	A	N7-C8-N9	-7.34	110.13	113.80
2	B	567	U	C1'-O4'-C4'	7.34	115.77	109.90
2	B	592	A	C8-N9-C4	-7.34	102.87	105.80
2	B	664	G	N1-C6-O6	7.34	124.30	119.90
2	B	1534	U	P-O5'-C5'	-7.34	109.16	120.90
2	B	1644	C	C2-N3-C4	7.34	123.57	119.90
2	B	2707	U	N3-C4-O4	7.34	124.54	119.40
2	B	801	G	C2-N3-C4	7.33	115.57	111.90
2	B	2331	G	N3-C4-C5	-7.33	124.93	128.60
2	B	1009	A	C5-C6-N1	-7.33	114.03	117.70
2	B	1357	C	C6-N1-C2	-7.33	117.37	120.30
2	B	1668	A	P-O3'-C3'	7.33	128.50	119.70
2	B	1850	G	N3-C4-N9	-7.33	121.60	126.00
2	B	2292	U	C5-C6-N1	7.33	126.37	122.70
2	B	2893	A	N7-C8-N9	-7.33	110.13	113.80
2	B	108	G	N3-C4-C5	7.33	132.27	128.60
2	B	118	A	N1-C6-N6	7.33	123.00	118.60
2	B	141	G	N3-C2-N2	7.33	125.03	119.90
2	B	269	C	P-O3'-C3'	-7.33	110.90	119.70
2	B	559	G	C5-C6-N1	-7.33	107.83	111.50
2	B	631	A	C1'-O4'-C4'	-7.33	104.03	109.90
2	B	751	A	C5-C6-N1	-7.33	114.03	117.70
2	B	1088	A	C5-C6-N1	-7.33	114.03	117.70
2	B	1601	G	N1-C2-N3	-7.33	119.50	123.90
2	B	1826	G	C5-C6-O6	-7.33	124.20	128.60
2	B	2015	A	C6-N1-C2	7.33	123.00	118.60
2	B	2083	G	N9-C4-C5	7.33	108.33	105.40
2	B	2476	A	C5-C6-N1	-7.33	114.03	117.70
2	B	69	C	O4'-C1'-N1	7.33	114.06	108.20
2	B	567	U	N3-C4-O4	7.33	124.53	119.40
2	B	975	A	C5-C6-N1	-7.33	114.03	117.70
2	B	1423	G	N1-C2-N2	-7.33	109.60	116.20
2	B	1824	G	C8-N9-C4	-7.33	103.47	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2623	G	N3-C4-C5	-7.33	124.94	128.60
2	B	191	A	N1-C6-N6	7.33	123.00	118.60
2	B	1405	U	N1-C2-N3	-7.33	110.50	114.90
2	B	2629	U	C4'-C3'-C2'	7.33	109.93	102.60
2	B	298	G	N3-C2-N2	7.33	125.03	119.90
2	B	359	G	N3-C4-C5	-7.33	124.94	128.60
2	B	506	G	N1-C2-N3	-7.33	119.50	123.90
2	B	1313	U	C6-N1-C1'	-7.33	110.94	121.20
2	B	1542	U	N3-C2-O2	-7.33	117.07	122.20
2	B	1636	U	C5-C6-N1	7.33	126.36	122.70
2	B	1830	C	C5'-C4'-C3'	-7.33	104.28	116.00
2	B	2231	U	C5'-C4'-C3'	7.33	127.72	116.00
2	B	2443	C	N3-C4-C5	-7.33	118.97	121.90
2	B	2495	G	C5-N7-C8	7.33	107.96	104.30
2	B	2633	G	N1-C6-O6	7.33	124.30	119.90
5	L	41	ARG	NE-CZ-NH1	7.33	123.96	120.30
2	B	464	U	C3'-C2'-C1'	7.32	107.36	101.50
2	B	579	G	C6-C5-N7	-7.32	126.01	130.40
2	B	1522	A	C5-C6-N6	-7.32	117.84	123.70
2	B	1568	G	C2-N3-C4	7.32	115.56	111.90
2	B	2525	G	C4'-C3'-C2'	-7.32	95.28	102.60
2	B	2753	A	C4-C5-C6	7.32	120.66	117.00
2	B	213	A	N1-C6-N6	7.32	122.99	118.60
2	B	1717	A	C1'-O4'-C4'	-7.32	104.04	109.90
2	B	1718	G	C6-C5-N7	-7.32	126.01	130.40
2	B	1950	G	O4'-C1'-N9	7.32	114.06	108.20
2	B	1980	G	N3-C4-C5	-7.32	124.94	128.60
2	B	2691	C	O4'-C1'-N1	7.32	114.06	108.20
29	G	94	ARG	NE-CZ-NH2	-7.32	116.64	120.30
2	B	45	G	C8-N9-C1'	7.32	136.52	127.00
2	B	451	U	O4'-C1'-N1	7.32	114.06	108.20
2	B	887	U	C6-N1-C1'	-7.32	110.95	121.20
2	B	1142	A	C8-N9-C4	7.32	108.73	105.80
2	B	2447	G	C5'-C4'-C3'	-7.32	104.29	116.00
2	B	2675	A	O4'-C1'-N9	7.32	114.06	108.20
2	B	365	U	C4-C5-C6	7.32	124.09	119.70
2	B	407	G	O5'-P-OP1	-7.32	99.11	105.70
2	B	634	C	O4'-C1'-N1	7.32	114.06	108.20
2	B	1253	A	C4-C5-C6	7.32	120.66	117.00
2	B	1432	G	N1-C6-O6	7.32	124.29	119.90
2	B	1751	U	P-O3'-C3'	-7.32	110.92	119.70
2	B	493	G	O4'-C4'-C3'	-7.32	96.68	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	697	G	C5-C6-O6	-7.32	124.21	128.60
2	B	1947	C	C2-N3-C4	-7.32	116.24	119.90
2	B	2201	G	N1-C2-N3	-7.32	119.51	123.90
2	B	2309	A	C6-C5-N7	-7.32	127.18	132.30
2	B	155	A	N3-C4-N9	7.32	133.25	127.40
2	B	693	A	N9-C4-C5	-7.32	102.87	105.80
2	B	2060	A	C5-C6-N6	-7.32	117.85	123.70
2	B	2103	C	C6-N1-C2	-7.32	117.37	120.30
2	B	2450	A	C6-N1-C2	-7.32	114.21	118.60
2	B	1030	C	P-O5'-C5'	7.31	132.60	120.90
2	B	1420	A	C1'-O4'-C4'	-7.31	104.05	109.90
2	B	1570	A	C4-C5-C6	7.31	120.66	117.00
2	B	2463	C	N1-C2-O2	7.31	123.29	118.90
27	C	22	GLU	CB-CA-C	-7.31	95.77	110.40
2	B	354	A	O4'-C1'-N9	7.31	114.05	108.20
2	B	1224	U	C5-C6-N1	-7.31	119.04	122.70
2	B	1634	A	C4-C5-N7	-7.31	107.04	110.70
2	B	2138	G	O4'-C1'-N9	7.31	114.05	108.20
2	B	2603	G	C2-N3-C4	-7.31	108.24	111.90
2	B	1492	G	C5-C6-N1	-7.31	107.84	111.50
2	B	2077	A	C5-N7-C8	7.31	107.56	103.90
2	B	2791	G	C2-N3-C4	-7.31	108.25	111.90
2	B	425	G	C5'-C4'-C3'	7.31	127.70	116.00
2	B	705	A	C2-N3-C4	-7.31	106.94	110.60
2	B	781	A	C5'-C4'-O4'	7.31	117.87	109.10
2	B	857	G	C3'-C2'-C1'	-7.31	95.65	101.50
2	B	2116	G	C5'-C4'-O4'	7.31	117.87	109.10
1	A	34	A	OP1-P-OP2	-7.31	108.64	119.60
2	B	308	G	O4'-C1'-N9	7.31	114.05	108.20
2	B	820	A	P-O3'-C3'	-7.31	110.93	119.70
2	B	950	G	N3-C4-C5	-7.31	124.95	128.60
2	B	989	G	C4'-C3'-C2'	-7.31	95.29	102.60
2	B	955	U	C5-C4-O4	-7.31	121.52	125.90
2	B	1076	C	N3-C4-N4	7.31	123.11	118.00
11	Q	32	ARG	NE-CZ-NH1	-7.31	116.65	120.30
2	B	695	G	C5-C6-O6	-7.30	124.22	128.60
2	B	809	G	C6-N1-C2	-7.30	120.72	125.10
2	B	874	G	N3-C4-C5	-7.30	124.95	128.60
2	B	879	G	C6-C5-N7	-7.30	126.02	130.40
2	B	1265	A	C5-C6-N6	-7.30	117.86	123.70
2	B	1671	U	C4'-C3'-C2'	-7.30	95.30	102.60
2	B	2079	U	O4'-C1'-N1	7.30	114.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2604	U	C5-C6-N1	7.30	126.35	122.70
1	A	110	C	N3-C4-C5	-7.30	118.98	121.90
2	B	1627	G	N3-C4-C5	-7.30	124.95	128.60
2	B	2197	U	C4-C5-C6	7.30	124.08	119.70
2	B	2558	C	C6-N1-C2	7.30	123.22	120.30
2	B	2875	C	N3-C4-N4	7.30	123.11	118.00
2	B	726	G	N9-C4-C5	7.30	108.32	105.40
2	B	1980	G	N9-C4-C5	7.30	108.32	105.40
2	B	2234	G	C4-C5-N7	-7.30	107.88	110.80
2	B	2575	C	N3-C4-N4	7.30	123.11	118.00
32	J	132	HIS	N-CA-CB	7.30	123.74	110.60
2	B	1146	C	C6-N1-C2	-7.30	117.38	120.30
2	B	1588	G	C1'-O4'-C4'	-7.30	104.06	109.90
2	B	2731	G	N3-C2-N2	7.30	125.01	119.90
1	A	64	G	C5-C6-O6	-7.30	124.22	128.60
2	B	2453	A	C4-C5-C6	7.30	120.65	117.00
2	B	2697	G	C8-N9-C1'	7.30	136.49	127.00
2	B	231	A	C6-N1-C2	-7.30	114.22	118.60
2	B	342	A	C5-C6-N6	-7.30	117.86	123.70
2	B	376	G	C8-N9-C4	-7.30	103.48	106.40
2	B	715	A	C5-N7-C8	7.30	107.55	103.90
2	B	966	G	C5'-C4'-O4'	7.30	117.86	109.10
2	B	1660	G	N1-C6-O6	7.30	124.28	119.90
2	B	2502	G	N7-C8-N9	7.30	116.75	113.10
2	B	2715	C	C6-N1-C2	-7.30	117.38	120.30
2	B	379	G	O4'-C1'-N9	7.29	114.04	108.20
2	B	2093	G	N9-C4-C5	-7.29	102.48	105.40
2	B	234	U	N3-C4-C5	-7.29	110.22	114.60
2	B	545	U	C2-N3-C4	-7.29	122.62	127.00
2	B	1042	G	N3-C2-N2	7.29	125.00	119.90
2	B	1116	G	N1-C2-N3	-7.29	119.52	123.90
2	B	1654	A	C5-C6-N1	-7.29	114.05	117.70
2	B	1786	A	C5-C6-N1	-7.29	114.05	117.70
2	B	2336	A	N1-C6-N6	7.29	122.98	118.60
1	A	33	G	C4-C5-C6	7.29	123.17	118.80
2	B	1463	C	O4'-C1'-N1	7.29	114.03	108.20
2	B	1721	G	P-O5'-C5'	7.29	132.57	120.90
2	B	1775	U	P-O3'-C3'	-7.29	110.95	119.70
2	B	2059	A	N1-C2-N3	-7.29	125.65	129.30
2	B	2379	G	C5-N7-C8	7.29	107.95	104.30
2	B	2405	G	N1-C2-N3	-7.29	119.53	123.90
2	B	2894	G	C5-C6-N1	7.29	115.15	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	791	C	P-O3'-C3'	-7.29	110.95	119.70
2	B	2614	A	C5-C6-N6	-7.29	117.87	123.70
2	B	1099	G	O4'-C1'-N9	7.29	114.03	108.20
2	B	1989	G	C8-N9-C4	7.29	109.32	106.40
2	B	378	C	C2-N1-C1'	-7.29	110.78	118.80
23	5	156	ALA	CB-CA-C	-7.29	99.17	110.10
2	B	9	G	O4'-C1'-N9	7.29	114.03	108.20
2	B	492	A	O4'-C1'-N9	7.29	114.03	108.20
2	B	1291	C	C5-C6-N1	7.29	124.64	121.00
2	B	2084	C	O4'-C1'-N1	7.29	114.03	108.20
2	B	2347	C	P-O5'-C5'	7.29	132.56	120.90
2	B	280	U	C6-N1-C2	-7.28	116.63	121.00
2	B	1672	A	C4-C5-N7	-7.28	107.06	110.70
2	B	1700	A	N7-C8-N9	-7.28	110.16	113.80
2	B	2164	C	P-O3'-C3'	7.28	128.44	119.70
2	B	2191	A	C5-C6-N6	-7.28	117.87	123.70
2	B	2602	A	C5-C6-N1	-7.28	114.06	117.70
2	B	2875	C	C5-C6-N1	7.28	124.64	121.00
2	B	482	A	N3-C4-C5	-7.28	121.70	126.80
2	B	1200	C	N3-C4-N4	7.28	123.10	118.00
7	M	66	ARG	NH1-CZ-NH2	-7.28	111.39	119.40
9	O	36	TYR	CB-CG-CD2	7.28	125.37	121.00
27	C	86	ARG	NE-CZ-NH2	7.28	123.94	120.30
2	B	600	G	C2-N3-C4	-7.28	108.26	111.90
2	B	1314	C	N1-C2-O2	7.28	123.27	118.90
2	B	2360	G	O4'-C1'-N9	7.28	114.02	108.20
2	B	836	G	C5-C6-O6	-7.28	124.23	128.60
2	B	988	A	C5-N7-C8	7.28	107.54	103.90
2	B	1353	A	N7-C8-N9	-7.28	110.16	113.80
2	B	1394	U	C2-N3-C4	-7.28	122.63	127.00
2	B	1525	A	C1'-O4'-C4'	7.28	115.72	109.90
2	B	1700	A	C4-C5-C6	7.28	120.64	117.00
2	B	2078	C	N3-C4-N4	7.28	123.09	118.00
2	B	2614	A	N9-C4-C5	7.28	108.71	105.80
2	B	196	A	C4'-C3'-C2'	7.28	109.88	102.60
2	B	559	G	N1-C2-N3	-7.28	119.53	123.90
2	B	1847	A	C3'-C2'-C1'	-7.28	95.68	101.50
2	B	2163	A	C4-C5-C6	7.28	120.64	117.00
2	B	2709	G	C4-C5-C6	7.28	123.17	118.80
2	B	64	A	C4-C5-C6	7.27	120.64	117.00
2	B	1392	A	C2'-C3'-O3'	7.27	125.50	109.50
2	B	2601	C	C4-C5-C6	-7.27	113.76	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	21	G	C4-N9-C1'	-7.27	117.05	126.50
2	B	668	A	N3-C4-C5	-7.27	121.71	126.80
2	B	1386	C	O4'-C1'-N1	7.27	114.02	108.20
2	B	1777	U	C1'-O4'-C4'	-7.27	104.08	109.90
2	B	2623	G	N7-C8-N9	-7.27	109.46	113.10
1	A	66	A	N1-C6-N6	7.27	122.96	118.60
2	B	390	U	P-O5'-C5'	-7.27	109.27	120.90
2	B	1170	C	C2-N1-C1'	-7.27	110.80	118.80
2	B	1288	G	N1-C2-N3	-7.27	119.54	123.90
2	B	534	U	O4'-C1'-N1	7.27	114.02	108.20
2	B	882	G	C2-N3-C4	7.27	115.53	111.90
2	B	1507	C	N3-C4-C5	-7.27	118.99	121.90
2	B	1659	G	C4-N9-C1'	7.27	135.95	126.50
1	A	115	A	C3'-C2'-C1'	-7.27	95.69	101.50
2	B	39	G	N9-C4-C5	7.27	108.31	105.40
2	B	353	C	O4'-C1'-N1	7.27	114.01	108.20
2	B	556	A	C5-C6-N1	-7.27	114.07	117.70
2	B	606	U	C5-C4-O4	-7.27	121.54	125.90
2	B	631	A	N7-C8-N9	-7.27	110.17	113.80
2	B	904	G	N3-C4-N9	-7.27	121.64	126.00
2	B	1902	C	C5'-C4'-C3'	-7.27	104.37	116.00
2	B	1059	G	C5-N7-C8	7.27	107.93	104.30
2	B	1247	A	C5-C6-N6	-7.27	117.89	123.70
2	B	2400	G	N3-C2-N2	7.27	124.99	119.90
2	B	1509	A	C5-C6-N6	-7.26	117.89	123.70
2	B	2297	A	N7-C8-N9	-7.26	110.17	113.80
2	B	1187	G	C4-C5-C6	7.26	123.16	118.80
2	B	1700	A	C5-N7-C8	7.26	107.53	103.90
2	B	1744	A	C5-C6-N1	-7.26	114.07	117.70
2	B	2633	G	C2-N3-C4	7.26	115.53	111.90
2	B	472	A	N7-C8-N9	-7.26	110.17	113.80
2	B	2280	G	N3-C4-C5	-7.26	124.97	128.60
2	B	2679	A	C6-C5-N7	-7.26	127.22	132.30
2	B	375	G	C2-N3-C4	-7.26	108.27	111.90
2	B	920	A	O4'-C1'-N9	7.26	114.01	108.20
2	B	1560	G	N3-C2-N2	7.26	124.98	119.90
2	B	1828	G	C4-C5-C6	7.26	123.16	118.80
2	B	2147	A	O4'-C1'-N9	7.26	114.01	108.20
2	B	2383	G	N1-C2-N3	-7.26	119.54	123.90
2	B	2395	C	P-O3'-C3'	7.26	128.41	119.70
2	B	2430	A	N3-C4-C5	-7.26	121.72	126.80
2	B	2037	A	C5-C6-N6	-7.26	117.89	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2144	G	C6-N1-C2	7.26	129.45	125.10
2	B	2419	U	C2-N3-C4	-7.26	122.65	127.00
2	B	2544	G	N1-C2-N3	-7.26	119.55	123.90
2	B	2671	G	C6-C5-N7	-7.26	126.05	130.40
2	B	240	C	C2-N3-C4	7.25	123.53	119.90
2	B	700	G	N3-C2-N2	7.25	124.98	119.90
2	B	954	G	N7-C8-N9	-7.25	109.47	113.10
2	B	1197	G	N1-C2-N2	-7.25	109.67	116.20
2	B	45	G	C4'-C3'-C2'	7.25	109.85	102.60
2	B	910	A	C6-N1-C2	7.25	122.95	118.60
2	B	929	U	P-O3'-C3'	-7.25	111.00	119.70
2	B	941	A	O4'-C1'-N9	7.25	114.00	108.20
2	B	1135	C	C5-C4-N4	-7.25	115.12	120.20
2	B	1689	A	O4'-C1'-N9	7.25	114.00	108.20
2	B	2070	A	C5-N7-C8	7.25	107.53	103.90
2	B	2508	G	N3-C2-N2	7.25	124.98	119.90
2	B	379	G	C5-N7-C8	7.25	107.92	104.30
2	B	451	U	C1'-O4'-C4'	-7.25	104.10	109.90
2	B	542	C	C5'-C4'-C3'	-7.25	104.40	116.00
2	B	991	C	N3-C4-N4	7.25	123.08	118.00
2	B	1001	A	O4'-C1'-N9	7.25	114.00	108.20
2	B	2314	A	C8-N9-C4	-7.25	102.90	105.80
2	B	574	A	O5'-P-OP2	7.25	119.40	110.70
1	A	47	C	O4'-C1'-N1	7.25	114.00	108.20
1	A	53	A	C5-C6-N1	-7.25	114.08	117.70
2	B	26	G	N1-C2-N3	-7.25	119.55	123.90
2	B	114	U	C4-C5-C6	7.25	124.05	119.70
2	B	350	G	N1-C6-O6	7.25	124.25	119.90
2	B	629	G	C1'-O4'-C4'	-7.25	104.10	109.90
2	B	2235	G	C1'-O4'-C4'	7.25	115.70	109.90
2	B	2323	G	C6-N1-C2	-7.25	120.75	125.10
2	B	2729	G	C5-N7-C8	7.25	107.92	104.30
2	B	2896	C	C5-C4-N4	-7.25	115.13	120.20
2	B	300	A	C4-C5-C6	7.25	120.62	117.00
2	B	1567	G	N1-C6-O6	7.25	124.25	119.90
2	B	2359	C	C6-N1-C2	-7.25	117.40	120.30
2	B	2700	A	N1-C2-N3	7.25	132.92	129.30
2	B	2892	G	C5-C6-O6	-7.25	124.25	128.60
2	B	2894	G	P-O5'-C5'	7.25	132.49	120.90
19	X	210	ARG	NE-CZ-NH1	7.25	123.92	120.30
2	B	136	G	N1-C6-O6	7.25	124.25	119.90
2	B	176	A	C8-N9-C4	-7.25	102.90	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2547	A	C5-N7-C8	7.25	107.52	103.90
2	B	788	A	C5-C6-N6	-7.24	117.91	123.70
2	B	1125	G	C4-C5-C6	7.24	123.15	118.80
2	B	1453	A	C2-N3-C4	7.24	114.22	110.60
2	B	1642	G	C5-C6-N1	7.24	115.12	111.50
2	B	1974	C	N1-C1'-C2'	-7.24	104.03	112.00
2	B	1091	G	N1-C2-N3	-7.24	119.56	123.90
2	B	1412	U	N3-C2-O2	-7.24	117.13	122.20
2	B	1807	G	N3-C4-C5	-7.24	124.98	128.60
2	B	2585	U	C6-N1-C2	-7.24	116.66	121.00
2	B	2611	C	C5-C4-N4	-7.24	115.13	120.20
7	M	128	THR	CA-CB-CG2	-7.24	102.26	112.40
1	A	109	A	O4'-C1'-N9	7.24	113.99	108.20
2	B	2683	C	N3-C4-C5	-7.24	119.00	121.90
1	A	22	U	C5-C4-O4	7.24	130.24	125.90
1	A	81	G	C3'-C2'-C1'	-7.24	95.71	101.50
2	B	608	A	C5-C6-N6	-7.24	117.91	123.70
2	B	1097	U	C4-C5-C6	7.24	124.04	119.70
2	B	2761	A	O4'-C1'-N9	7.24	113.99	108.20
2	B	2614	A	P-O5'-C5'	-7.23	109.33	120.90
1	A	27	C	N3-C4-N4	7.23	123.06	118.00
2	B	188	G	N3-C4-C5	7.23	132.22	128.60
2	B	2855	C	N3-C4-C5	-7.23	119.01	121.90
2	B	462	C	N3-C4-C5	-7.23	119.01	121.90
2	B	481	G	P-O3'-C3'	7.23	128.38	119.70
2	B	746	U	P-O5'-C5'	7.23	132.47	120.90
2	B	1663	G	C8-N9-C4	-7.23	103.51	106.40
2	B	1841	U	C5-C6-N1	7.23	126.31	122.70
2	B	2214	C	O4'-C1'-N1	7.23	113.98	108.20
2	B	2901	C	N3-C4-N4	7.23	123.06	118.00
2	B	1219	U	O4'-C1'-N1	7.23	113.98	108.20
2	B	1407	G	C8-N9-C4	-7.23	103.51	106.40
2	B	2715	C	C5'-C4'-C3'	-7.23	104.43	116.00
2	B	96	C	C5'-C4'-O4'	7.23	117.77	109.10
2	B	739	A	C6-C5-N7	-7.23	127.24	132.30
2	B	831	G	C6-C5-N7	-7.23	126.06	130.40
2	B	857	G	P-O5'-C5'	7.23	132.47	120.90
2	B	1328	A	C6-C5-N7	-7.23	127.24	132.30
2	B	663	G	C5-N7-C8	-7.23	100.69	104.30
2	B	702	U	O4'-C1'-N1	7.23	113.98	108.20
2	B	1027	A	C4-C5-C6	7.23	120.61	117.00
2	B	529	A	N1-C2-N3	-7.22	125.69	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	935	C	C6-N1-C2	7.22	123.19	120.30
2	B	942	G	C6-N1-C2	-7.22	120.77	125.10
2	B	1095	A	C1'-O4'-C4'	-7.22	104.12	109.90
2	B	1929	G	C2-N3-C4	7.22	115.51	111.90
2	B	2548	U	N1-C2-O2	-7.22	117.74	122.80
2	B	2566	A	O4'-C1'-N9	7.22	113.98	108.20
1	A	46	A	C5-N7-C8	-7.22	100.29	103.90
2	B	145	C	C5-C6-N1	7.22	124.61	121.00
2	B	930	G	C5-C6-O6	-7.22	124.27	128.60
2	B	1069	A	O4'-C1'-N9	7.22	113.98	108.20
2	B	1239	G	C5-C6-O6	-7.22	124.27	128.60
2	B	372	G	C3'-C2'-C1'	-7.22	95.72	101.50
2	B	478	A	C5-N7-C8	7.22	107.51	103.90
2	B	632	A	C5-C6-N1	-7.22	114.09	117.70
2	B	1928	A	N7-C8-N9	-7.22	110.19	113.80
2	B	2180	U	C5-C4-O4	-7.22	121.57	125.90
2	B	2473	U	O4'-C1'-N1	7.22	113.98	108.20
2	B	2476	A	C4-C5-C6	7.22	120.61	117.00
2	B	388	G	C5-C6-O6	-7.22	124.27	128.60
2	B	452	G	N3-C2-N2	7.22	124.95	119.90
2	B	503	A	C5-N7-C8	7.22	107.51	103.90
2	B	611	C	C6-N1-C1'	7.22	129.46	120.80
2	B	747	U	C6-N1-C2	-7.22	116.67	121.00
2	B	956	G	N3-C2-N2	7.22	124.95	119.90
2	B	1163	G	C4-C5-C6	7.22	123.13	118.80
2	B	1944	U	O4'-C1'-N1	7.22	113.98	108.20
2	B	1975	G	C4-C5-N7	-7.22	107.91	110.80
2	B	369	U	N3-C4-O4	7.22	124.45	119.40
2	B	2099	U	O4'-C4'-C3'	-7.22	96.78	104.00
2	B	2150	C	C5'-C4'-O4'	7.22	117.76	109.10
2	B	2347	C	O4'-C1'-N1	7.22	113.97	108.20
2	B	450	G	N1-C2-N3	-7.22	119.57	123.90
2	B	614	A	C5-N7-C8	7.22	107.51	103.90
2	B	837	C	C5-C4-N4	-7.22	115.15	120.20
2	B	1123	C	N1-C2-N3	-7.22	114.15	119.20
2	B	1632	A	C4-C5-C6	7.22	120.61	117.00
2	B	1809	A	N1-C6-N6	7.22	122.93	118.60
2	B	2335	A	C5'-C4'-C3'	-7.22	104.45	116.00
1	A	25	U	C5-C4-O4	-7.21	121.57	125.90
1	A	85	G	C5-C6-O6	-7.21	124.27	128.60
2	B	686	U	C5-C4-O4	-7.21	121.57	125.90
2	B	759	G	C2-N3-C4	7.21	115.51	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	940	G	N7-C8-N9	-7.21	109.49	113.10
2	B	2705	A	C5-C6-N6	-7.21	117.93	123.70
15	T	1	MET	CG-SD-CE	-7.21	88.66	100.20
19	X	442	PHE	CB-CG-CD1	-7.21	115.75	120.80
2	B	2340	A	C1'-O4'-C4'	-7.21	104.13	109.90
2	B	301	G	C4-C5-N7	-7.21	107.92	110.80
2	B	681	G	C6-C5-N7	-7.21	126.07	130.40
2	B	849	A	C4-C5-C6	7.21	120.61	117.00
2	B	1055	G	P-O5'-C5'	7.21	132.44	120.90
2	B	1404	C	C2-N3-C4	7.21	123.51	119.90
2	B	1579	A	C5-C6-N1	-7.21	114.09	117.70
2	B	1893	C	C5'-C4'-C3'	7.21	127.54	116.00
2	B	2179	C	O4'-C1'-C2'	7.21	114.09	107.60
2	B	2507	C	C4-C5-C6	7.21	121.01	117.40
2	B	2681	C	C4'-C3'-C2'	-7.21	95.39	102.60
2	B	2836	U	P-O3'-C3'	-7.21	111.05	119.70
2	B	689	A	C5-C6-N6	-7.21	117.93	123.70
2	B	97	C	N3-C4-N4	7.21	123.05	118.00
2	B	165	A	N9-C1'-C2'	-7.21	104.07	112.00
2	B	880	G	C4-C5-C6	7.21	123.12	118.80
2	B	1399	C	N3-C4-N4	7.21	123.05	118.00
2	B	2549	G	N1-C2-N3	-7.21	119.58	123.90
2	B	111	A	C6-C5-N7	-7.21	127.25	132.30
2	B	402	A	O4'-C1'-N9	7.21	113.97	108.20
2	B	1074	G	C4-C5-C6	7.21	123.12	118.80
2	B	1212	G	C4-C5-C6	7.21	123.12	118.80
2	B	2278	A	C4'-C3'-C2'	7.21	109.81	102.60
2	B	2588	G	C4-C5-C6	7.21	123.12	118.80
2	B	697	G	C5-C6-N1	7.21	115.10	111.50
2	B	700	G	P-O5'-C5'	-7.21	109.37	120.90
2	B	1760	C	C2-N3-C4	7.21	123.50	119.90
2	B	2549	G	C4-C5-N7	7.21	113.68	110.80
2	B	136	G	C6-C5-N7	-7.20	126.08	130.40
2	B	244	A	C4-C5-N7	-7.20	107.10	110.70
2	B	1049	C	C6-N1-C2	-7.20	117.42	120.30
2	B	1620	G	C5-C6-N1	-7.20	107.90	111.50
2	B	1721	G	C4-C5-N7	-7.20	107.92	110.80
2	B	2459	A	C5-C6-N6	-7.20	117.94	123.70
2	B	2648	G	C5-C6-O6	-7.20	124.28	128.60
2	B	2675	A	C5-C6-N6	-7.20	117.94	123.70
2	B	585	G	N3-C4-C5	-7.20	125.00	128.60
2	B	884	U	C4'-C3'-C2'	-7.20	95.40	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2477	U	O4'-C1'-N1	7.20	113.96	108.20
2	B	641	U	N3-C4-O4	7.20	124.44	119.40
2	B	843	G	C4-C5-N7	7.20	113.68	110.80
2	B	1507	C	C3'-C2'-C1'	-7.20	95.74	101.50
2	B	2016	U	N1-C2-N3	7.20	119.22	114.90
2	B	2589	A	N1-C2-N3	7.20	132.90	129.30
2	B	2641	G	C6-C5-N7	-7.20	126.08	130.40
2	B	2834	G	N1-C6-O6	7.20	124.22	119.90
2	B	2884	U	C6-N1-C1'	-7.20	111.12	121.20
2	B	465	G	C8-N9-C4	-7.20	103.52	106.40
2	B	1690	A	C8-N9-C4	7.20	108.68	105.80
2	B	1770	G	P-O3'-C3'	-7.20	111.06	119.70
2	B	1971	U	P-O3'-C3'	-7.20	111.06	119.70
2	B	30	G	C2-N3-C4	7.20	115.50	111.90
2	B	180	G	C6-C5-N7	-7.20	126.08	130.40
2	B	206	U	C4-C5-C6	-7.20	115.38	119.70
2	B	660	C	O4'-C1'-N1	7.20	113.96	108.20
2	B	667	U	N3-C4-C5	-7.20	110.28	114.60
2	B	734	A	C6-C5-N7	-7.20	127.26	132.30
2	B	1610	A	O4'-C1'-N9	7.20	113.96	108.20
2	B	2128	G	C2-N3-C4	7.20	115.50	111.90
2	B	289	G	N3-C4-C5	-7.19	125.00	128.60
2	B	1116	G	C5-N7-C8	7.19	107.90	104.30
2	B	2288	A	C2-N3-C4	-7.19	107.00	110.60
2	B	165	A	C5-N7-C8	7.19	107.50	103.90
2	B	266	G	C4-C5-N7	-7.19	107.92	110.80
2	B	833	A	C3'-C2'-C1'	-7.19	95.75	101.50
2	B	836	G	N3-C2-N2	7.19	124.94	119.90
2	B	997	G	N7-C8-N9	7.19	116.70	113.10
2	B	1152	C	C5-C4-N4	-7.19	115.17	120.20
2	B	1270	C	O4'-C1'-N1	7.19	113.95	108.20
2	B	1525	A	O4'-C1'-N9	7.19	113.95	108.20
2	B	1661	G	C4-C5-C6	7.19	123.12	118.80
2	B	1843	C	N3-C2-O2	-7.19	116.87	121.90
2	B	2318	G	N1-C6-O6	7.19	124.22	119.90
2	B	2477	U	C5-C6-N1	-7.19	119.10	122.70
2	B	2876	G	P-O3'-C3'	-7.19	111.07	119.70
2	B	831	G	N9-C4-C5	-7.19	102.52	105.40
2	B	1191	G	C4-N9-C1'	-7.19	117.15	126.50
2	B	1353	A	P-O5'-C5'	-7.19	109.39	120.90
2	B	1549	A	C5-N7-C8	7.19	107.50	103.90
2	B	1774	C	C5-C4-N4	-7.19	115.17	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1997	C	P-O3'-C3'	-7.19	111.07	119.70
2	B	2192	U	N3-C2-O2	-7.19	117.17	122.20
8	N	17	ARG	NE-CZ-NH2	7.19	123.89	120.30
2	B	552	U	O4'-C1'-N1	7.19	113.95	108.20
2	B	603	A	O4'-C1'-N9	7.19	113.95	108.20
2	B	1746	A	O4'-C1'-N9	7.19	113.95	108.20
2	B	1775	U	C4-C5-C6	7.19	124.01	119.70
2	B	265	A	O4'-C4'-C3'	-7.19	96.81	104.00
2	B	613	A	C5-N7-C8	7.19	107.49	103.90
2	B	1623	G	C5-C6-O6	-7.19	124.29	128.60
2	B	1670	C	N3-C4-N4	7.19	123.03	118.00
2	B	1814	G	C4-C5-N7	7.19	113.67	110.80
2	B	2650	U	C4-C5-C6	-7.19	115.39	119.70
2	B	376	G	O4'-C1'-N9	7.19	113.95	108.20
2	B	801	G	C5'-C4'-O4'	7.19	117.72	109.10
2	B	1821	A	C4-C5-N7	-7.19	107.11	110.70
2	B	432	A	C8-N9-C4	7.18	108.67	105.80
2	B	1280	G	N3-C4-C5	-7.18	125.01	128.60
2	B	1423	G	C6-C5-N7	-7.18	126.09	130.40
2	B	1651	G	N1-C2-N2	-7.18	109.73	116.20
1	A	85	G	N1-C6-O6	7.18	124.21	119.90
2	B	248	G	P-O3'-C3'	7.18	128.32	119.70
2	B	907	G	O4'-C1'-N9	7.18	113.95	108.20
2	B	1395	A	N3-C4-C5	-7.18	121.77	126.80
2	B	1414	C	C6-N1-C2	7.18	123.17	120.30
2	B	1484	U	P-O3'-C3'	-7.18	111.08	119.70
2	B	196	A	N1-C2-N3	7.18	132.89	129.30
2	B	388	G	C2-N3-C4	7.18	115.49	111.90
2	B	959	A	C6-N1-C2	-7.18	114.29	118.60
2	B	2354	C	N3-C4-N4	7.18	123.03	118.00
2	B	2714	G	C5-N7-C8	7.18	107.89	104.30
2	B	269	C	N3-C4-C5	-7.18	119.03	121.90
2	B	472	A	C5-N7-C8	7.18	107.49	103.90
2	B	1013	C	C5-C4-N4	-7.18	115.17	120.20
2	B	1220	G	O4'-C1'-N9	7.18	113.94	108.20
2	B	1271	G	C5-C6-N1	-7.18	107.91	111.50
2	B	2251	G	C8-N9-C1'	-7.18	117.67	127.00
2	B	2553	G	C5-C6-O6	-7.18	124.29	128.60
29	G	169	ARG	NE-CZ-NH1	-7.18	116.71	120.30
2	B	577	G	P-O5'-C5'	-7.18	109.42	120.90
2	B	2437	G	C4-C5-C6	7.18	123.11	118.80
2	B	2535	G	C8-N9-C4	-7.18	103.53	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2662	A	C3'-C2'-C1'	-7.18	95.76	101.50
2	B	2886	A	C8-N9-C4	7.18	108.67	105.80
2	B	10	A	C5-C6-N1	-7.18	114.11	117.70
2	B	208	C	N3-C4-N4	7.18	123.02	118.00
2	B	1791	A	C4'-C3'-C2'	7.18	109.78	102.60
2	B	1809	A	P-O3'-C3'	-7.18	111.09	119.70
2	B	2648	G	C4-C5-C6	7.18	123.11	118.80
1	A	28	C	N3-C4-C5	-7.17	119.03	121.90
2	B	460	A	C4-C5-C6	7.17	120.59	117.00
2	B	514	A	C5-N7-C8	7.17	107.49	103.90
2	B	1138	G	N7-C8-N9	-7.17	109.51	113.10
2	B	1543	G	P-O3'-C3'	-7.17	111.09	119.70
2	B	1968	G	N1-C2-N3	-7.17	119.59	123.90
1	A	14	U	P-O5'-C5'	7.17	132.38	120.90
2	B	1822	C	P-O3'-C3'	-7.17	111.09	119.70
2	B	754	U	N1-C2-O2	-7.17	117.78	122.80
2	B	1099	G	P-O5'-C5'	7.17	132.38	120.90
2	B	64	A	N7-C8-N9	7.17	117.39	113.80
2	B	1149	G	C4-C5-N7	-7.17	107.93	110.80
2	B	375	G	C5-C6-O6	-7.17	124.30	128.60
2	B	379	G	N1-C2-N3	-7.17	119.60	123.90
2	B	1315	C	C6-N1-C2	-7.17	117.43	120.30
2	B	1829	A	P-O3'-C3'	-7.17	111.10	119.70
2	B	2446	G	C2-N3-C4	7.17	115.48	111.90
2	B	2808	G	C4-C5-N7	-7.17	107.93	110.80
2	B	1044	C	N3-C4-N4	7.17	123.02	118.00
2	B	1466	U	N3-C4-O4	-7.17	114.38	119.40
2	B	2270	A	C5'-C4'-O4'	7.17	117.70	109.10
2	B	2668	G	C4-C5-N7	-7.17	107.93	110.80
2	B	2846	G	C5-C6-O6	-7.17	124.30	128.60
2	B	880	G	O4'-C1'-N9	7.17	113.93	108.20
2	B	970	U	C6-N1-C2	-7.17	116.70	121.00
2	B	1227	G	C5-C6-N1	7.17	115.08	111.50
2	B	2802	G	P-O3'-C3'	-7.17	111.10	119.70
2	B	2888	C	N3-C4-C5	-7.17	119.03	121.90
2	B	846	U	P-O5'-C5'	7.16	132.36	120.90
2	B	1842	G	N1-C2-N3	-7.16	119.60	123.90
2	B	1902	C	C2-N3-C4	7.16	123.48	119.90
2	B	2232	C	O4'-C1'-N1	7.16	113.93	108.20
2	B	1808	A	C5-C6-N6	-7.16	117.97	123.70
2	B	2266	A	P-O3'-C3'	7.16	128.29	119.70
1	A	92	C	C4-C5-C6	-7.16	113.82	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	20	C	C2-N1-C1'	-7.16	110.92	118.80
2	B	338	G	N9-C4-C5	7.16	108.26	105.40
2	B	1205	A	C6-N1-C2	7.16	122.90	118.60
1	A	57	A	N1-C6-N6	7.16	122.89	118.60
2	B	266	G	C6-N1-C2	7.16	129.40	125.10
2	B	416	U	O4'-C1'-N1	7.16	113.93	108.20
2	B	706	A	C5-C6-N6	-7.16	117.97	123.70
2	B	828	U	C4-C5-C6	7.16	124.00	119.70
2	B	1265	A	P-O3'-C3'	7.16	128.29	119.70
2	B	1621	U	C5-C4-O4	-7.16	121.61	125.90
2	B	1699	G	C8-N9-C4	7.16	109.26	106.40
2	B	2755	C	P-O3'-C3'	7.16	128.29	119.70
2	B	2839	G	C4-C5-N7	-7.16	107.94	110.80
2	B	242	G	C4-C5-N7	-7.16	107.94	110.80
2	B	1748	C	N3-C4-N4	7.16	123.01	118.00
2	B	263	G	C2-N3-C4	7.16	115.48	111.90
2	B	1759	A	C4-C5-N7	-7.16	107.12	110.70
2	B	1378	A	C4-C5-C6	7.15	120.58	117.00
2	B	2409	G	O4'-C1'-N9	7.15	113.92	108.20
2	B	2445	G	N9-C4-C5	7.15	108.26	105.40
2	B	2637	U	O4'-C1'-N1	7.15	113.92	108.20
2	B	139	U	N3-C4-O4	7.15	124.41	119.40
2	B	245	G	C5-C6-O6	-7.15	124.31	128.60
2	B	408	G	O5'-P-OP2	-7.15	99.26	105.70
2	B	666	A	N9-C4-C5	7.15	108.66	105.80
2	B	1586	A	C5-N7-C8	7.15	107.48	103.90
2	B	1713	A	C5-C6-N6	-7.15	117.98	123.70
19	X	273	PHE	CB-CG-CD1	7.15	125.81	120.80
2	B	1425	G	C5-C6-O6	-7.15	124.31	128.60
2	B	253	C	N3-C2-O2	-7.15	116.90	121.90
2	B	263	G	N3-C4-N9	7.15	130.29	126.00
2	B	368	A	C8-N9-C4	-7.15	102.94	105.80
2	B	790	U	C1'-O4'-C4'	-7.15	104.18	109.90
2	B	1722	A	C6-C5-N7	-7.15	127.30	132.30
2	B	2392	A	O4'-C1'-N9	7.15	113.92	108.20
10	P	35	SER	N-CA-CB	7.15	121.22	110.50
2	B	316	C	C6-N1-C2	-7.15	117.44	120.30
2	B	701	G	N3-C2-N2	7.15	124.90	119.90
2	B	2281	A	N1-C2-N3	-7.15	125.73	129.30
2	B	2482	A	O4'-C1'-N9	7.15	113.92	108.20
2	B	121	G	C6-C5-N7	-7.14	126.11	130.40
2	B	839	U	O5'-C5'-C4'	-7.14	98.13	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1221	C	C5-C6-N1	7.14	124.57	121.00
2	B	1892	C	N3-C4-N4	7.14	123.00	118.00
2	B	1987	A	N9-C4-C5	7.14	108.66	105.80
2	B	2329	U	P-O3'-C3'	7.14	128.27	119.70
2	B	2418	A	C5-C6-N6	-7.14	117.98	123.70
2	B	2478	A	C6-N1-C2	-7.14	114.31	118.60
2	B	36	G	C2-N3-C4	7.14	115.47	111.90
2	B	235	U	C5-C6-N1	-7.14	119.13	122.70
2	B	945	A	C6-C5-N7	-7.14	127.30	132.30
2	B	1567	G	O4'-C1'-N9	7.14	113.91	108.20
2	B	1801	A	N3-C4-N9	-7.14	121.69	127.40
2	B	2447	G	C5-C6-N1	7.14	115.07	111.50
2	B	2742	G	N3-C4-C5	-7.14	125.03	128.60
2	B	2885	G	N1-C2-N3	-7.14	119.61	123.90
1	A	29	A	C5-C6-N6	-7.14	117.99	123.70
1	A	77	U	N3-C4-C5	-7.14	110.31	114.60
2	B	548	G	C8-N9-C1'	-7.14	117.72	127.00
2	B	1268	A	C4-C5-N7	-7.14	107.13	110.70
1	A	17	C	P-O5'-C5'	-7.14	109.48	120.90
2	B	54	G	N7-C8-N9	7.14	116.67	113.10
2	B	485	C	O4'-C1'-N1	7.14	113.91	108.20
2	B	514	A	C2-N3-C4	-7.14	107.03	110.60
2	B	1091	G	O4'-C1'-N9	7.14	113.91	108.20
2	B	1572	A	C4-C5-C6	7.14	120.57	117.00
2	B	2632	A	C5-N7-C8	7.14	107.47	103.90
2	B	95	A	C4-C5-C6	7.14	120.57	117.00
2	B	602	A	C5-N7-C8	7.14	107.47	103.90
2	B	767	U	P-O3'-C3'	7.14	128.27	119.70
2	B	2048	G	C6-C5-N7	-7.14	126.12	130.40
23	5	208	TYR	CB-CG-CD2	-7.14	116.72	121.00
2	B	83	A	N7-C8-N9	7.14	117.37	113.80
2	B	326	G	O4'-C1'-N9	7.14	113.91	108.20
2	B	407	G	N3-C4-N9	-7.14	121.72	126.00
2	B	1453	A	C5-C6-N1	-7.14	114.13	117.70
2	B	1906	G	N1-C2-N3	-7.14	119.62	123.90
2	B	2077	A	C1'-O4'-C4'	-7.14	104.19	109.90
2	B	418	C	C4-C5-C6	7.13	120.97	117.40
2	B	897	C	C2-N3-C4	7.13	123.47	119.90
2	B	2005	A	C2-N3-C4	-7.13	107.03	110.60
2	B	2862	G	N7-C8-N9	-7.13	109.53	113.10
2	B	2871	U	O4'-C1'-N1	7.13	113.91	108.20
1	A	85	G	C8-N9-C4	7.13	109.25	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1160	G	O4'-C4'-C3'	-7.13	96.87	104.00
2	B	1187	G	N3-C4-C5	-7.13	125.03	128.60
2	B	1541	C	C6-N1-C2	-7.13	117.45	120.30
2	B	2686	G	C5-C6-O6	-7.13	124.32	128.60
2	B	2737	G	O4'-C1'-N9	7.13	113.91	108.20
2	B	2889	C	C4-C5-C6	-7.13	113.83	117.40
2	B	1107	G	C6-N1-C2	-7.13	120.82	125.10
2	B	1115	G	C5-C6-O6	-7.13	124.32	128.60
2	B	2096	C	C5-C6-N1	7.13	124.56	121.00
2	B	125	A	N1-C2-N3	7.13	132.86	129.30
2	B	125	A	N1-C6-N6	7.13	122.88	118.60
2	B	610	C	C6-N1-C2	-7.13	117.45	120.30
2	B	900	A	C2-N3-C4	7.13	114.16	110.60
2	B	1003	G	C6-C5-N7	-7.13	126.12	130.40
2	B	1921	G	C4-C5-N7	7.13	113.65	110.80
2	B	50	U	N3-C2-O2	-7.13	117.21	122.20
2	B	266	G	C6-C5-N7	-7.13	126.12	130.40
2	B	439	A	P-O5'-C5'	7.13	132.30	120.90
2	B	595	C	O4'-C1'-N1	7.13	113.90	108.20
2	B	874	G	C5-N7-C8	7.13	107.86	104.30
2	B	2032	G	O4'-C1'-N9	7.13	113.90	108.20
2	B	50	U	P-O3'-C3'	7.12	128.25	119.70
2	B	537	G	C4-C5-C6	7.12	123.07	118.80
2	B	743	A	C5-C6-N6	-7.12	118.00	123.70
2	B	1594	U	C6-N1-C2	-7.12	116.73	121.00
2	B	2838	G	N3-C2-N2	7.12	124.89	119.90
2	B	2848	G	N3-C4-C5	7.12	132.16	128.60
19	X	141	TYR	CB-CG-CD2	-7.12	116.73	121.00
21	Y	79	ILE	N-CA-C	-7.12	91.77	111.00
1	A	58	A	C5-N7-C8	-7.12	100.34	103.90
2	B	58	G	C6-N1-C2	-7.12	120.83	125.10
2	B	126	A	C4-C5-C6	7.12	120.56	117.00
2	B	536	G	O4'-C1'-N9	7.12	113.90	108.20
2	B	632	A	O4'-C1'-N9	7.12	113.90	108.20
2	B	1289	C	C6-N1-C2	-7.12	117.45	120.30
2	B	1527	G	C4-C5-C6	7.12	123.07	118.80
2	B	2046	G	C4-C5-N7	7.12	113.65	110.80
2	B	2146	C	N3-C2-O2	7.12	126.88	121.90
2	B	2265	U	C5'-C4'-C3'	7.12	127.39	116.00
2	B	1266	G	C8-N9-C1'	7.12	136.26	127.00
2	B	1297	C	C2-N1-C1'	7.12	126.63	118.80
2	B	2304	G	N1-C6-O6	7.12	124.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	450	G	N3-C2-N2	7.12	124.88	119.90
2	B	475	C	N3-C4-N4	7.12	122.98	118.00
2	B	1516	G	N9-C1'-C2'	-7.12	104.17	112.00
2	B	1819	A	N1-C6-N6	7.12	122.87	118.60
2	B	1893	C	O4'-C1'-N1	7.12	113.89	108.20
2	B	80	G	C5-C6-O6	-7.12	124.33	128.60
2	B	284	U	O4'-C1'-N1	7.12	113.89	108.20
2	B	2317	A	C5-C6-N1	-7.12	114.14	117.70
6	1	28	LEU	CB-CG-CD2	7.12	123.10	111.00
2	B	7	G	C6-C5-N7	-7.12	126.13	130.40
2	B	40	U	N3-C4-O4	7.12	124.38	119.40
2	B	656	G	C8-N9-C4	7.12	109.25	106.40
2	B	725	G	C4-C5-N7	7.12	113.65	110.80
2	B	1615	C	C2-N3-C4	7.12	123.46	119.90
2	B	1698	A	C4-C5-N7	-7.12	107.14	110.70
2	B	1769	U	N1-C2-O2	-7.12	117.82	122.80
7	M	68	PHE	CB-CG-CD2	7.12	125.78	120.80
2	B	410	G	C4-N9-C1'	7.11	135.75	126.50
2	B	683	U	C4-C5-C6	7.11	123.97	119.70
2	B	1163	G	C4'-C3'-C2'	7.11	109.71	102.60
2	B	1210	G	C4-C5-C6	7.11	123.07	118.80
2	B	1401	G	P-O3'-C3'	-7.11	111.16	119.70
2	B	2454	G	N1-C6-O6	7.11	124.17	119.90
2	B	2721	A	N9-C4-C5	-7.11	102.95	105.80
2	B	53	A	N3-C4-C5	-7.11	121.82	126.80
2	B	1439	A	C3'-C2'-C1'	-7.11	95.81	101.50
2	B	1798	U	P-O3'-C3'	-7.11	111.17	119.70
16	2	30	ARG	NE-CZ-NH1	7.11	123.86	120.30
2	B	93	G	C2-N3-C4	7.11	115.46	111.90
2	B	1175	A	N1-C6-N6	7.11	122.87	118.60
2	B	1440	U	C5'-C4'-O4'	7.11	117.63	109.10
2	B	1849	G	N3-C2-N2	7.11	124.88	119.90
2	B	2166	U	C4'-C3'-C2'	-7.11	95.49	102.60
2	B	2245	U	C5-C4-O4	7.11	130.17	125.90
2	B	2413	G	C6-C5-N7	-7.11	126.13	130.40
32	J	119	PHE	CB-CG-CD2	-7.11	115.82	120.80
2	B	417	C	O4'-C1'-N1	7.11	113.89	108.20
2	B	703	U	C5-C6-N1	-7.11	119.14	122.70
2	B	1097	U	P-O5'-C5'	7.11	132.27	120.90
2	B	2140	G	O4'-C1'-N9	7.11	113.89	108.20
2	B	2254	C	C6-N1-C2	7.11	123.14	120.30
2	B	2296	U	C3'-C2'-C1'	-7.11	95.81	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2496	C	C1'-O4'-C4'	-7.11	104.21	109.90
2	B	187	G	N1-C6-O6	7.11	124.16	119.90
2	B	1977	A	C4-C5-C6	7.11	120.55	117.00
2	B	27	G	N3-C2-N2	7.11	124.87	119.90
2	B	262	A	N1-C6-N6	7.11	122.86	118.60
2	B	374	A	C5-C6-N6	-7.11	118.02	123.70
2	B	575	A	C4'-C3'-C2'	-7.11	95.50	102.60
2	B	613	A	C4'-C3'-C2'	-7.11	95.50	102.60
2	B	798	G	C5-C6-N1	-7.11	107.95	111.50
2	B	1096	A	C5-C6-N6	-7.11	118.02	123.70
2	B	1405	U	N1-C2-O2	7.11	127.77	122.80
2	B	2642	G	C4-C5-N7	7.11	113.64	110.80
2	B	2708	G	N1-C2-N2	-7.11	109.81	116.20
2	B	2566	A	C5-C6-N1	-7.10	114.15	117.70
2	B	2588	G	N1-C6-O6	7.10	124.16	119.90
2	B	2806	C	N3-C4-C5	-7.10	119.06	121.90
2	B	886	A	N1-C6-N6	7.10	122.86	118.60
2	B	925	A	C2-N3-C4	-7.10	107.05	110.60
2	B	1094	U	O4'-C1'-N1	7.10	113.88	108.20
2	B	2038	G	P-O5'-C5'	-7.10	109.54	120.90
2	B	2047	C	O4'-C1'-N1	7.10	113.88	108.20
2	B	2470	G	C8-N9-C4	-7.10	103.56	106.40
2	B	2640	G	C4-C5-C6	7.10	123.06	118.80
2	B	2731	G	N9-C4-C5	7.10	108.24	105.40
2	B	15	G	N9-C4-C5	-7.10	102.56	105.40
2	B	770	G	C8-N9-C4	-7.10	103.56	106.40
2	B	914	G	O5'-P-OP1	7.10	119.22	110.70
2	B	2097	A	O4'-C1'-N9	7.10	113.88	108.20
2	B	2635	A	C8-N9-C4	7.10	108.64	105.80
2	B	16	C	N3-C2-O2	-7.10	116.93	121.90
2	B	64	A	C5-C6-N1	-7.10	114.15	117.70
2	B	152	A	C5-C6-N1	-7.10	114.15	117.70
2	B	1122	G	C8-N9-C4	7.10	109.24	106.40
2	B	2332	C	C6-N1-C2	7.10	123.14	120.30
2	B	2838	G	N9-C4-C5	-7.10	102.56	105.40
2	B	1158	C	C2-N3-C4	7.10	123.45	119.90
2	B	1665	A	O4'-C4'-C3'	7.10	111.78	106.10
2	B	1987	A	N3-C4-C5	-7.10	121.83	126.80
2	B	2553	G	C5-N7-C8	7.10	107.85	104.30
2	B	752	A	N7-C8-N9	7.10	117.35	113.80
2	B	1436	G	C5-N7-C8	-7.10	100.75	104.30
2	B	1661	G	C6-N1-C2	7.10	129.36	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1905	C	C5-C6-N1	7.10	124.55	121.00
2	B	2346	A	C5-C6-N6	-7.10	118.02	123.70
2	B	2837	A	C5-C6-N6	-7.10	118.02	123.70
2	B	2853	C	C2-N3-C4	-7.10	116.35	119.90
2	B	805	G	N3-C2-N2	-7.09	114.93	119.90
2	B	1195	G	P-O3'-C3'	-7.09	111.19	119.70
2	B	1930	G	N1-C2-N3	-7.09	119.64	123.90
2	B	2449	U	O3'-P-O5'	-7.09	90.52	104.00
2	B	649	G	C5-C6-N1	-7.09	107.95	111.50
2	B	672	C	C1'-O4'-C4'	-7.09	104.23	109.90
2	B	1898	U	C5-C4-O4	-7.09	121.64	125.90
2	B	2347	C	C2-N3-C4	7.09	123.45	119.90
11	Q	49	ARG	NE-CZ-NH2	-7.09	116.75	120.30
2	B	39	G	C4-C5-C6	7.09	123.06	118.80
2	B	479	A	C4-C5-N7	-7.09	107.15	110.70
2	B	958	U	P-O5'-C5'	7.09	132.25	120.90
2	B	963	U	C5-C4-O4	-7.09	121.64	125.90
2	B	1217	U	N1-C2-N3	-7.09	110.64	114.90
2	B	1633	G	N9-C4-C5	-7.09	102.56	105.40
2	B	2616	C	C5-C6-N1	-7.09	117.45	121.00
19	X	443	ARG	NE-CZ-NH2	-7.09	116.75	120.30
2	B	595	C	P-O3'-C3'	7.09	128.21	119.70
2	B	797	G	N3-C4-C5	7.09	132.15	128.60
2	B	2120	G	C8-N9-C1'	-7.09	117.78	127.00
10	P	108	ARG	NE-CZ-NH2	-7.09	116.75	120.30
2	B	879	G	N3-C2-N2	7.09	124.86	119.90
2	B	2001	C	N3-C4-C5	-7.09	119.06	121.90
2	B	297	G	C5-N7-C8	7.09	107.84	104.30
2	B	421	C	O4'-C1'-N1	7.09	113.87	108.20
2	B	668	A	C8-N9-C4	-7.09	102.97	105.80
2	B	802	A	C4-C5-C6	7.09	120.54	117.00
2	B	1137	G	P-O3'-C3'	7.09	128.21	119.70
2	B	1404	C	C5-C4-N4	-7.09	115.24	120.20
2	B	1655	A	O4'-C4'-C3'	-7.08	96.92	104.00
2	B	2101	A	C5-C6-N1	-7.08	114.16	117.70
2	B	181	A	O4'-C1'-N9	7.08	113.87	108.20
2	B	366	C	N1-C2-N3	-7.08	114.24	119.20
2	B	670	A	N3-C4-C5	-7.08	121.84	126.80
2	B	991	C	C5-C4-N4	-7.08	115.24	120.20
2	B	1707	G	C4-C5-C6	7.08	123.05	118.80
2	B	1797	G	C4-C5-C6	7.08	123.05	118.80
2	B	1910	G	N3-C4-C5	-7.08	125.06	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1981	A	O4'-C1'-N9	7.08	113.87	108.20
2	B	2402	U	C5-C4-O4	-7.08	121.65	125.90
2	B	2416	C	C6-N1-C2	-7.08	117.47	120.30
2	B	427	U	N1-C2-O2	-7.08	117.84	122.80
2	B	2302	U	P-O5'-C5'	7.08	132.23	120.90
2	B	2353	G	N1-C6-O6	7.08	124.15	119.90
2	B	2472	G	C5-C6-N1	-7.08	107.96	111.50
2	B	2660	A	C5-N7-C8	7.08	107.44	103.90
21	Y	68	PHE	CB-CG-CD1	-7.08	115.84	120.80
2	B	371	A	C8-N9-C4	-7.08	102.97	105.80
2	B	588	U	C4-C5-C6	-7.08	115.45	119.70
2	B	731	C	O4'-C1'-N1	7.08	113.86	108.20
2	B	758	C	N3-C4-N4	7.08	122.95	118.00
2	B	764	A	C5-C6-N1	-7.08	114.16	117.70
2	B	836	G	N3-C4-C5	7.08	132.14	128.60
2	B	1101	U	P-O5'-C5'	-7.08	109.58	120.90
2	B	1182	G	C8-N9-C4	7.08	109.23	106.40
2	B	1389	G	C2-N3-C4	7.08	115.44	111.90
2	B	1504	A	C6-N1-C2	-7.08	114.35	118.60
2	B	2019	A	C6-N1-C2	-7.08	114.35	118.60
2	B	2204	G	N1-C2-N3	-7.08	119.65	123.90
2	B	2268	A	P-O5'-C5'	-7.08	109.57	120.90
2	B	2402	U	N3-C4-O4	7.08	124.36	119.40
2	B	143	C	N3-C4-C5	-7.08	119.07	121.90
2	B	155	A	C5-N7-C8	7.08	107.44	103.90
2	B	1634	A	C5-N7-C8	7.08	107.44	103.90
2	B	98	G	N9-C4-C5	7.08	108.23	105.40
2	B	606	U	C5'-C4'-C3'	-7.08	104.68	116.00
2	B	1083	U	C2-N3-C4	-7.08	122.75	127.00
2	B	1100	C	C4'-C3'-C2'	-7.08	95.52	102.60
2	B	2080	A	C5-C6-N6	-7.08	118.04	123.70
2	B	2199	A	N1-C2-N3	7.08	132.84	129.30
2	B	2462	C	N3-C4-N4	7.08	122.95	118.00
2	B	2881	U	O4'-C1'-N1	7.08	113.86	108.20
2	B	1395	A	C2-N3-C4	7.07	114.14	110.60
2	B	1409	U	C5-C4-O4	-7.07	121.66	125.90
2	B	409	G	N7-C8-N9	-7.07	109.56	113.10
2	B	747	U	C5-C6-N1	7.07	126.24	122.70
2	B	21	A	O4'-C1'-N9	7.07	113.86	108.20
2	B	270	A	C2-N3-C4	-7.07	107.06	110.60
2	B	1685	C	O4'-C1'-N1	7.07	113.86	108.20
2	B	2305	U	O4'-C1'-N1	7.07	113.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1952	A	C4-C5-N7	-7.07	107.17	110.70
2	B	2857	G	N1-C6-O6	7.07	124.14	119.90
1	A	22	U	C5-C6-N1	-7.07	119.17	122.70
2	B	2748	A	C5'-C4'-C3'	-7.07	104.69	116.00
1	A	15	A	C5'-C4'-O4'	7.07	117.58	109.10
2	B	122	G	C4-C5-N7	-7.07	107.97	110.80
2	B	717	C	N3-C2-O2	-7.07	116.95	121.90
2	B	2444	G	N9-C4-C5	-7.07	102.57	105.40
2	B	952	G	C6-C5-N7	-7.06	126.16	130.40
2	B	241	A	C4-C5-N7	-7.06	107.17	110.70
2	B	553	G	C5-C6-N1	-7.06	107.97	111.50
2	B	789	A	O4'-C1'-N9	7.06	113.85	108.20
2	B	2242	G	C5'-C4'-C3'	7.06	127.30	116.00
23	5	67	HIS	CA-CB-CG	-7.06	101.59	113.60
2	B	1678	A	C8-N9-C4	-7.06	102.98	105.80
2	B	2512	C	C4-C5-C6	7.06	120.93	117.40
2	B	364	C	N3-C4-N4	7.06	122.94	118.00
2	B	396	G	C5-C6-O6	-7.06	124.36	128.60
2	B	623	C	C6-N1-C2	-7.06	117.48	120.30
2	B	1651	G	C4-C5-N7	-7.06	107.98	110.80
2	B	2411	A	C5-C6-N6	-7.06	118.05	123.70
2	B	2482	A	C5-C6-N1	-7.06	114.17	117.70
2	B	238	C	N3-C4-N4	7.06	122.94	118.00
2	B	945	A	C5-C6-N6	-7.06	118.05	123.70
2	B	1516	G	C4-C5-C6	7.06	123.03	118.80
2	B	2439	A	N1-C2-N3	7.06	132.83	129.30
28	F	154	THR	N-CA-C	-7.06	91.94	111.00
2	B	288	U	N1-C2-N3	-7.06	110.67	114.90
2	B	2493	U	C5-C4-O4	-7.06	121.67	125.90
2	B	2627	G	C5-C6-N1	7.06	115.03	111.50
1	A	14	U	C6-N1-C1'	-7.05	111.33	121.20
2	B	1008	A	N1-C2-N3	7.05	132.83	129.30
2	B	2875	C	C5-C4-N4	-7.05	115.26	120.20
2	B	2878	U	O4'-C1'-N1	7.05	113.84	108.20
2	B	198	C	C5-C6-N1	-7.05	117.47	121.00
2	B	501	A	N3-C4-C5	-7.05	121.86	126.80
2	B	926	G	C5-C6-O6	-7.05	124.37	128.60
2	B	1410	G	C4-C5-C6	7.05	123.03	118.80
2	B	1560	G	O4'-C1'-N9	7.05	113.84	108.20
2	B	1954	G	C5-C6-N1	-7.05	107.97	111.50
2	B	2660	A	C4-C5-N7	-7.05	107.17	110.70
2	B	43	G	O4'-C1'-N9	7.05	113.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	348	A	C5-C6-N1	-7.05	114.17	117.70
2	B	360	U	C2-N1-C1'	-7.05	109.24	117.70
2	B	630	G	P-O5'-C5'	-7.05	109.62	120.90
2	B	714	U	C3'-C2'-C1'	7.05	107.14	101.50
2	B	1020	A	P-O5'-C5'	-7.05	109.62	120.90
2	B	1653	G	N1-C2-N3	-7.05	119.67	123.90
2	B	2066	C	N3-C4-N4	7.05	122.93	118.00
2	B	2280	G	P-O5'-C5'	7.05	132.18	120.90
2	B	2343	U	N1-C2-O2	-7.05	117.86	122.80
2	B	2598	A	O4'-C1'-N9	7.05	113.84	108.20
2	B	2799	A	C5-C6-N6	-7.05	118.06	123.70
2	B	1133	A	C5-C6-N1	-7.05	114.18	117.70
2	B	2051	A	C6-C5-N7	-7.05	127.37	132.30
2	B	200	U	C5-C6-N1	7.05	126.22	122.70
2	B	400	G	C6-C5-N7	-7.05	126.17	130.40
2	B	447	A	C5-N7-C8	7.05	107.42	103.90
2	B	670	A	C4-C5-C6	7.05	120.52	117.00
2	B	873	C	O4'-C1'-N1	7.05	113.84	108.20
2	B	1336	A	N1-C6-N6	7.05	122.83	118.60
2	B	1652	A	C2-N3-C4	-7.05	107.08	110.60
2	B	2031	A	C8-N9-C4	7.05	108.62	105.80
2	B	141	G	N1-C2-N2	-7.04	109.86	116.20
2	B	536	G	C4-C5-N7	-7.04	107.98	110.80
2	B	1929	G	C3'-C2'-C1'	-7.04	95.86	101.50
2	B	173	A	C5'-C4'-O4'	7.04	117.55	109.10
2	B	1131	G	C4-C5-N7	7.04	113.62	110.80
2	B	1375	U	N3-C4-O4	7.04	124.33	119.40
2	B	1656	C	C6-N1-C2	7.04	123.12	120.30
2	B	2626	C	N3-C4-C5	-7.04	119.08	121.90
2	B	274	C	C6-N1-C2	-7.04	117.48	120.30
2	B	1994	C	N3-C4-N4	7.04	122.93	118.00
2	B	212	G	N9-C4-C5	-7.04	102.58	105.40
2	B	290	U	C2-N3-C4	-7.04	122.78	127.00
2	B	642	U	O4'-C4'-C3'	-7.04	96.96	104.00
2	B	847	U	C5-C6-N1	7.04	126.22	122.70
2	B	928	A	N1-C6-N6	7.04	122.82	118.60
2	B	1659	G	C5-C6-O6	-7.04	124.38	128.60
2	B	2251	G	C4-N9-C1'	7.04	135.65	126.50
2	B	828	U	C5'-C4'-O4'	7.04	117.55	109.10
2	B	1358	G	N3-C2-N2	7.04	124.83	119.90
2	B	2509	G	C5-C6-O6	-7.04	124.38	128.60
2	B	114	U	N1-C2-O2	-7.04	117.88	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	471	A	OP1-P-OP2	-7.04	109.05	119.60
2	B	878	A	C5'-C4'-C3'	-7.04	104.74	116.00
1	A	9	G	N1-C6-O6	7.03	124.12	119.90
1	A	72	G	C8-N9-C4	-7.03	103.59	106.40
2	B	74	A	C4-C5-C6	7.03	120.52	117.00
2	B	1365	A	C8-N9-C4	7.03	108.61	105.80
2	B	1418	G	C4-C5-N7	7.03	113.61	110.80
2	B	271	G	P-O3'-C3'	7.03	128.14	119.70
19	X	295	ARG	N-CA-CB	7.03	123.26	110.60
2	B	2531	A	C5-C6-N1	-7.03	114.19	117.70
2	B	2685	G	N9-C4-C5	-7.03	102.59	105.40
12	R	53	PHE	CB-CG-CD1	-7.03	115.88	120.80
2	B	592	A	C4-C5-N7	-7.03	107.19	110.70
2	B	1805	A	C2-N3-C4	-7.03	107.08	110.60
2	B	42	A	O4'-C1'-N9	7.03	113.82	108.20
2	B	268	C	C5'-C4'-C3'	-7.03	104.76	116.00
2	B	586	A	O4'-C1'-N9	7.03	113.82	108.20
2	B	1073	A	N3-C4-N9	7.03	133.02	127.40
2	B	2502	G	N9-C4-C5	7.03	108.21	105.40
2	B	2544	G	C6-N1-C2	7.03	129.32	125.10
2	B	2605	U	N3-C2-O2	-7.03	117.28	122.20
24	6	14	ARG	NE-CZ-NH1	-7.03	116.79	120.30
31	I	64	ARG	NE-CZ-NH1	7.03	123.81	120.30
2	B	608	A	O4'-C4'-C3'	-7.03	96.97	104.00
2	B	801	G	O4'-C1'-N9	7.03	113.82	108.20
2	B	1310	G	P-O5'-C5'	7.03	132.14	120.90
2	B	1322	A	O4'-C4'-C3'	-7.03	96.97	104.00
2	B	2700	A	C6-C5-N7	-7.03	127.38	132.30
2	B	2819	G	C5-C6-O6	-7.03	124.38	128.60
2	B	444	C	C6-N1-C2	-7.02	117.49	120.30
2	B	543	G	C8-N9-C4	-7.02	103.59	106.40
2	B	1389	G	O4'-C1'-N9	7.02	113.82	108.20
1	A	82	U	N3-C4-C5	-7.02	110.39	114.60
2	B	93	G	C8-N9-C4	-7.02	103.59	106.40
2	B	176	A	C4-C5-C6	7.02	120.51	117.00
2	B	621	A	P-O3'-C3'	-7.02	111.27	119.70
2	B	622	G	C5-C6-O6	-7.02	124.39	128.60
2	B	1530	G	N7-C8-N9	-7.02	109.59	113.10
2	B	410	G	C8-N9-C4	-7.02	103.59	106.40
2	B	1002	G	C4'-C3'-C2'	-7.02	95.58	102.60
2	B	240	C	N3-C2-O2	7.02	126.81	121.90
2	B	1150	C	N3-C4-C5	-7.02	119.09	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1524	G	C6-C5-N7	-7.02	126.19	130.40
2	B	198	C	C6-N1-C2	7.02	123.11	120.30
2	B	365	U	O4'-C1'-N1	7.02	113.81	108.20
2	B	1161	C	N3-C4-C5	-7.02	119.09	121.90
2	B	1304	A	C6-N1-C2	7.02	122.81	118.60
2	B	2328	A	C5'-C4'-C3'	7.02	127.23	116.00
2	B	2400	G	C4-N9-C1'	-7.02	117.38	126.50
2	B	2648	G	N7-C8-N9	-7.02	109.59	113.10
2	B	2841	C	O4'-C1'-N1	7.02	113.81	108.20
25	7	44	ARG	NE-CZ-NH2	-7.02	116.79	120.30
2	B	508	A	C4-C5-C6	7.02	120.51	117.00
2	B	858	G	N1-C2-N3	-7.02	119.69	123.90
2	B	1627	G	O4'-C1'-N9	7.02	113.81	108.20
2	B	2388	A	C4-C5-C6	7.02	120.51	117.00
2	B	2875	C	N1-C2-N3	7.02	124.11	119.20
2	B	559	G	C6-C5-N7	-7.01	126.19	130.40
2	B	693	A	C4'-C3'-C2'	-7.01	95.58	102.60
2	B	880	G	C2-N3-C4	7.01	115.41	111.90
2	B	928	A	O4'-C1'-N9	7.01	113.81	108.20
2	B	1605	C	N3-C2-O2	-7.01	116.99	121.90
2	B	1625	C	O4'-C1'-N1	7.01	113.81	108.20
2	B	1648	U	N1-C1'-C2'	-7.01	104.28	112.00
2	B	2020	A	O4'-C1'-N9	7.01	113.81	108.20
2	B	2125	G	C4-C5-N7	7.01	113.61	110.80
2	B	2279	G	C8-N9-C4	7.01	109.21	106.40
2	B	2576	G	C6-C5-N7	-7.01	126.19	130.40
2	B	2752	C	O4'-C1'-N1	7.01	113.81	108.20
2	B	2892	G	C4-N9-C1'	-7.01	117.38	126.50
2	B	1407	G	O4'-C1'-N9	7.01	113.81	108.20
2	B	1519	G	C5'-C4'-C3'	-7.01	104.78	116.00
2	B	91	A	O4'-C1'-N9	7.01	113.81	108.20
2	B	460	A	N1-C2-N3	-7.01	125.79	129.30
2	B	511	U	C5-C4-O4	-7.01	121.69	125.90
2	B	600	G	C3'-C2'-C1'	-7.01	95.89	101.50
2	B	2048	G	C4-C5-C6	7.01	123.01	118.80
2	B	2248	C	C1'-O4'-C4'	-7.01	104.29	109.90
2	B	2681	C	N3-C2-O2	7.01	126.81	121.90
2	B	2848	G	C8-N9-C1'	7.01	136.12	127.00
2	B	728	G	C6-C5-N7	-7.01	126.19	130.40
32	J	34	ARG	NE-CZ-NH1	-7.01	116.80	120.30
2	B	1038	G	C5-C6-N1	7.01	115.00	111.50
2	B	2843	G	C6-C5-N7	-7.01	126.19	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	271	G	C2-N3-C4	-7.01	108.40	111.90
2	B	2273	A	N1-C6-N6	7.01	122.80	118.60
2	B	2509	G	N1-C2-N3	-7.01	119.70	123.90
2	B	1462	C	P-O5'-C5'	-7.00	109.69	120.90
2	B	1805	A	O4'-C1'-N9	7.00	113.80	108.20
2	B	138	U	O4'-C1'-N1	7.00	113.80	108.20
2	B	706	A	N7-C8-N9	-7.00	110.30	113.80
2	B	868	U	C5-C4-O4	-7.00	121.70	125.90
2	B	1086	A	C5-N7-C8	-7.00	100.40	103.90
2	B	1137	G	C6-C5-N7	-7.00	126.20	130.40
2	B	1289	C	O4'-C1'-N1	7.00	113.80	108.20
2	B	1419	A	C1'-O4'-C4'	-7.00	104.30	109.90
2	B	1677	A	C2'-C3'-O3'	7.00	124.91	109.50
14	D	33	ARG	NE-CZ-NH1	-7.00	116.80	120.30
29	G	59	ASP	CB-CG-OD1	-7.00	112.00	118.30
2	B	682	G	C4-C5-C6	7.00	123.00	118.80
2	B	1302	A	O4'-C1'-C2'	-7.00	98.80	105.80
2	B	1632	A	N1-C2-N3	7.00	132.80	129.30
2	B	1953	A	C5-C6-N1	-7.00	114.20	117.70
2	B	2034	U	C5-C4-O4	7.00	130.10	125.90
18	W	26	PHE	CB-CG-CD2	7.00	125.70	120.80
2	B	2864	G	O4'-C4'-C3'	-7.00	97.00	104.00
2	B	388	G	C4-C5-C6	7.00	123.00	118.80
2	B	1121	C	O4'-C1'-N1	7.00	113.80	108.20
2	B	1846	G	O4'-C1'-N9	7.00	113.80	108.20
2	B	2075	U	O4'-C1'-N1	7.00	113.80	108.20
2	B	2349	G	P-O5'-C5'	7.00	132.10	120.90
2	B	2611	C	O4'-C1'-N1	7.00	113.80	108.20
2	B	2683	C	C6-N1-C2	7.00	123.10	120.30
2	B	991	C	C6-N1-C2	-7.00	117.50	120.30
2	B	1143	A	C5-N7-C8	7.00	107.40	103.90
2	B	1232	G	C5-C6-O6	-7.00	124.40	128.60
2	B	1332	G	N3-C4-C5	-7.00	125.10	128.60
2	B	1364	G	C8-N9-C4	-7.00	103.60	106.40
2	B	1796	U	C2-N3-C4	7.00	131.20	127.00
1	A	18	G	N7-C8-N9	-7.00	109.60	113.10
2	B	603	A	N1-C6-N6	7.00	122.80	118.60
2	B	723	C	C5-C4-N4	-7.00	115.30	120.20
2	B	876	C	N3-C4-N4	7.00	122.90	118.00
2	B	2533	U	O4'-C1'-N1	7.00	113.80	108.20
2	B	347	A	C5-C6-N6	-6.99	118.11	123.70
2	B	960	A	C3'-C2'-C1'	6.99	107.09	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2860	A	N1-C2-N3	6.99	132.80	129.30
2	B	962	G	C6-C5-N7	-6.99	126.20	130.40
2	B	1241	A	C5-C6-N1	-6.99	114.20	117.70
2	B	1518	C	C1'-O4'-C4'	-6.99	104.31	109.90
2	B	837	C	C5-C6-N1	6.99	124.50	121.00
2	B	866	A	N7-C8-N9	-6.99	110.31	113.80
2	B	1510	G	N7-C8-N9	6.99	116.60	113.10
2	B	2506	U	N3-C2-O2	-6.99	117.31	122.20
2	B	2809	A	C6-N1-C2	6.99	122.79	118.60
11	Q	52	ARG	NE-CZ-NH2	-6.99	116.81	120.30
2	B	338	G	C4-C5-C6	6.99	122.99	118.80
2	B	1281	G	C5-N7-C8	6.99	107.79	104.30
2	B	1290	C	N3-C2-O2	6.99	126.79	121.90
15	T	69	ARG	NE-CZ-NH1	6.99	123.80	120.30
2	B	569	U	N3-C4-C5	-6.99	110.41	114.60
2	B	1635	A	O4'-C1'-N9	6.99	113.79	108.20
2	B	1771	C	N3-C4-N4	6.99	122.89	118.00
2	B	2579	C	P-O3'-C3'	6.99	128.09	119.70
2	B	163	C	N3-C4-N4	6.99	122.89	118.00
2	B	706	A	O4'-C1'-N9	6.99	113.79	108.20
2	B	814	C	C5-C4-N4	-6.99	115.31	120.20
2	B	1070	A	C5-N7-C8	6.99	107.39	103.90
2	B	1073	A	C4-C5-N7	6.99	114.19	110.70
2	B	1163	G	O4'-C1'-N9	6.99	113.79	108.20
2	B	1402	U	C4-C5-C6	6.99	123.89	119.70
2	B	2016	U	C6-N1-C2	-6.99	116.81	121.00
2	B	2144	G	C5-C6-N1	-6.99	108.01	111.50
1	A	46	A	C6-N1-C2	-6.98	114.41	118.60
1	A	66	A	O4'-C1'-N9	6.98	113.79	108.20
2	B	222	A	C6-C5-N7	-6.98	127.41	132.30
2	B	1099	G	C4-C5-N7	-6.98	108.01	110.80
2	B	1250	G	C4-C5-C6	6.98	122.99	118.80
2	B	2456	C	N3-C4-N4	6.98	122.89	118.00
27	C	237	ARG	NE-CZ-NH2	-6.98	116.81	120.30
2	B	57	C	C2-N1-C1'	-6.98	111.12	118.80
2	B	1184	U	P-O5'-C5'	6.98	132.07	120.90
2	B	2633	G	N9-C4-C5	6.98	108.19	105.40
2	B	2701	U	O4'-C1'-N1	6.98	113.78	108.20
2	B	2718	G	C5'-C4'-C3'	6.98	127.17	116.00
2	B	2864	G	C5'-C4'-C3'	6.98	127.17	116.00
23	5	144	THR	CA-CB-CG2	-6.98	102.63	112.40
1	A	13	G	C5-C6-O6	-6.98	124.41	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1353	A	C4-C5-C6	6.98	120.49	117.00
2	B	2206	C	C5'-C4'-C3'	6.98	127.17	116.00
2	B	2229	U	C2-N3-C4	-6.98	122.81	127.00
2	B	197	A	C4-C5-N7	-6.98	107.21	110.70
2	B	522	A	N1-C2-N3	6.98	132.79	129.30
2	B	2170	A	O4'-C1'-C2'	-6.98	98.82	105.80
2	B	133	U	C5-C6-N1	-6.98	119.21	122.70
2	B	221	A	C5-C6-N6	-6.98	118.12	123.70
2	B	257	C	C4-C5-C6	6.98	120.89	117.40
2	B	503	A	C4-C5-N7	-6.98	107.21	110.70
2	B	691	C	C5-C4-N4	-6.98	115.32	120.20
2	B	782	A	C5'-C4'-O4'	6.98	117.47	109.10
2	B	1166	G	C6-C5-N7	-6.98	126.21	130.40
2	B	354	A	C6-N1-C2	6.97	122.78	118.60
2	B	949	G	N1-C2-N3	-6.97	119.72	123.90
2	B	974	G	N1-C2-N2	-6.97	109.92	116.20
2	B	1482	G	C5'-C4'-C3'	-6.97	104.84	116.00
2	B	1563	U	O4'-C1'-N1	6.97	113.78	108.20
2	B	2418	A	C6-N1-C2	6.97	122.78	118.60
9	O	64	TYR	CD1-CE1-CZ	-6.97	113.52	119.80
12	R	53	PHE	CB-CG-CD2	6.97	125.68	120.80
2	B	161	A	C4-C5-C6	6.97	120.49	117.00
2	B	550	C	O4'-C1'-N1	6.97	113.78	108.20
2	B	1010	A	N1-C2-N3	6.97	132.79	129.30
2	B	1501	G	C5-N7-C8	6.97	107.79	104.30
2	B	1504	A	C3'-C2'-C1'	-6.97	95.92	101.50
2	B	2464	G	C5'-C4'-C3'	6.97	127.16	116.00
2	B	2814	A	O4'-C1'-N9	6.97	113.78	108.20
15	T	83	ALA	N-CA-CB	6.97	119.86	110.10
2	B	557	C	C5-C4-N4	-6.97	115.32	120.20
2	B	2795	C	C2-N3-C4	6.97	123.39	119.90
2	B	2809	A	C5-C6-N6	-6.97	118.12	123.70
1	A	7	G	N9-C1'-C2'	-6.97	104.33	112.00
2	B	604	G	N3-C2-N2	6.97	124.78	119.90
2	B	640	C	N3-C4-C5	-6.97	119.11	121.90
2	B	1030	C	C5-C4-N4	-6.97	115.32	120.20
2	B	1898	U	C5-C6-N1	6.97	126.18	122.70
2	B	1922	G	C4-N9-C1'	-6.97	117.44	126.50
2	B	2183	A	N3-C4-C5	-6.97	121.92	126.80
2	B	2732	G	N1-C2-N3	-6.97	119.72	123.90
2	B	854	C	O4'-C1'-N1	6.97	113.78	108.20
2	B	1959	G	O4'-C1'-N9	6.97	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2276	G	C8-N9-C4	-6.97	103.61	106.40
19	X	121	ASP	CB-CG-OD1	6.97	124.57	118.30
1	A	39	A	C5-N7-C8	6.97	107.38	103.90
1	A	98	G	C5-N7-C8	-6.97	100.82	104.30
2	B	107	G	C5-N7-C8	6.97	107.78	104.30
2	B	976	G	N1-C2-N3	-6.97	119.72	123.90
2	B	984	A	N1-C2-N3	6.97	132.78	129.30
2	B	1247	A	N3-C4-N9	6.97	132.97	127.40
2	B	1693	U	N1-C2-N3	6.97	119.08	114.90
2	B	1698	A	C4-C5-C6	6.97	120.48	117.00
2	B	2599	G	N1-C6-O6	6.97	124.08	119.90
2	B	2855	C	O4'-C1'-N1	6.97	113.77	108.20
2	B	793	A	C8-N9-C4	-6.96	103.01	105.80
2	B	798	G	N3-C4-C5	-6.96	125.12	128.60
2	B	1067	A	C5-N7-C8	6.96	107.38	103.90
2	B	1160	G	C4-C5-N7	6.96	113.59	110.80
2	B	1659	G	N1-C6-O6	6.96	124.08	119.90
2	B	1791	A	C5-C6-N6	-6.96	118.13	123.70
2	B	2376	A	C8-N9-C4	6.96	108.59	105.80
2	B	2816	G	O4'-C1'-N9	6.96	113.77	108.20
2	B	2842	G	C8-N9-C4	6.96	109.19	106.40
14	D	18	ASP	CB-CG-OD2	6.96	124.57	118.30
1	A	33	G	C5-C6-N1	-6.96	108.02	111.50
2	B	588	U	P-O5'-C5'	6.96	132.04	120.90
2	B	1430	G	N1-C6-O6	6.96	124.08	119.90
29	G	2	ARG	NE-CZ-NH1	6.96	123.78	120.30
2	B	713	G	C4-C5-C6	6.96	122.98	118.80
2	B	1120	G	N3-C2-N2	-6.96	115.03	119.90
2	B	1431	A	C1'-O4'-C4'	6.96	115.47	109.90
2	B	1774	C	N3-C4-N4	6.96	122.87	118.00
2	B	2274	A	C4-C5-C6	6.96	120.48	117.00
2	B	2548	U	O4'-C1'-N1	6.96	113.77	108.20
2	B	177	G	C3'-C2'-C1'	6.96	107.07	101.50
2	B	554	U	N1-C2-N3	6.96	119.08	114.90
2	B	2867	G	P-O3'-C3'	6.96	128.05	119.70
2	B	307	G	N3-C4-N9	-6.96	121.83	126.00
2	B	392	U	O4'-C1'-N1	6.96	113.77	108.20
2	B	964	C	C5-C4-N4	-6.96	115.33	120.20
2	B	1084	A	O4'-C1'-N9	6.96	113.77	108.20
2	B	1408	G	C5-N7-C8	-6.96	100.82	104.30
2	B	1783	A	C5-N7-C8	6.96	107.38	103.90
2	B	2014	A	C8-N9-C4	-6.96	103.02	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2204	G	C2-N3-C4	6.96	115.38	111.90
2	B	2603	G	O5'-C5'-C4'	-6.96	98.48	111.70
2	B	2832	U	P-O5'-C5'	6.96	132.03	120.90
2	B	2843	G	C4-C5-C6	6.96	122.97	118.80
1	A	75	G	N9-C4-C5	-6.96	102.62	105.40
2	B	424	G	N1-C6-O6	6.96	124.07	119.90
2	B	513	A	C6-C5-N7	-6.96	127.43	132.30
2	B	710	U	C6-N1-C2	-6.96	116.83	121.00
2	B	1186	G	N9-C4-C5	-6.96	102.62	105.40
2	B	1491	G	C8-N9-C4	-6.96	103.62	106.40
2	B	2258	C	P-O5'-C5'	-6.96	109.77	120.90
2	B	2674	G	N1-C2-N3	-6.96	119.73	123.90
2	B	2704	C	O4'-C1'-N1	6.96	113.77	108.20
2	B	1052	C	C6-N1-C2	-6.96	117.52	120.30
2	B	1380	G	N1-C6-O6	6.96	124.07	119.90
2	B	2310	C	P-O3'-C3'	6.96	128.05	119.70
2	B	131	A	N9-C1'-C2'	-6.95	104.35	112.00
2	B	856	G	C5-C6-N1	6.95	114.98	111.50
2	B	2737	G	N7-C8-N9	6.95	116.58	113.10
2	B	1037	G	N7-C8-N9	-6.95	109.62	113.10
2	B	1393	A	P-O5'-C5'	-6.95	109.78	120.90
2	B	2546	U	N3-C4-O4	6.95	124.27	119.40
2	B	2859	G	C5-C6-O6	-6.95	124.43	128.60
2	B	6	A	C6-N1-C2	-6.95	114.43	118.60
2	B	322	A	C5-C6-N6	-6.95	118.14	123.70
2	B	1898	U	C4-C5-C6	-6.95	115.53	119.70
2	B	2447	G	C4-N9-C1'	6.95	135.54	126.50
2	B	10	A	N1-C2-N3	6.95	132.77	129.30
2	B	222	A	C3'-C2'-C1'	-6.95	95.94	101.50
2	B	585	G	O5'-C5'-C4'	-6.95	98.50	111.70
2	B	589	U	N3-C4-O4	6.95	124.26	119.40
2	B	651	G	N9-C4-C5	-6.95	102.62	105.40
2	B	860	U	N1-C2-O2	-6.95	117.94	122.80
2	B	2435	A	C5-C6-N6	-6.95	118.14	123.70
2	B	2646	C	C4-C5-C6	-6.95	113.93	117.40
2	B	1592	C	N3-C4-N4	6.95	122.86	118.00
2	B	2738	A	O4'-C1'-N9	6.95	113.76	108.20
2	B	1779	U	P-O3'-C3'	-6.95	111.37	119.70
2	B	2339	C	C4'-C3'-C2'	-6.95	95.65	102.60
2	B	2395	C	O4'-C1'-N1	6.95	113.76	108.20
2	B	2434	A	O4'-C1'-N9	6.95	113.76	108.20
2	B	1327	A	C5-C6-N1	-6.94	114.23	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	96	G	O4'-C1'-N9	6.94	113.75	108.20
2	B	701	G	N9-C4-C5	-6.94	102.62	105.40
2	B	1242	U	O4'-C1'-N1	6.94	113.75	108.20
2	B	1668	A	C3'-C2'-C1'	-6.94	95.94	101.50
2	B	1763	G	P-O3'-C3'	6.94	128.03	119.70
2	B	2390	U	N3-C4-O4	-6.94	114.54	119.40
2	B	2705	A	C5-C6-N1	-6.94	114.23	117.70
2	B	2887	A	C5-C6-N6	-6.94	118.15	123.70
2	B	2888	C	O4'-C1'-N1	6.94	113.75	108.20
2	B	505	A	N7-C8-N9	-6.94	110.33	113.80
2	B	742	A	C4-C5-N7	-6.94	107.23	110.70
2	B	989	G	N3-C2-N2	6.94	124.76	119.90
2	B	1717	A	O4'-C1'-N9	6.94	113.75	108.20
2	B	2475	C	C6-N1-C2	6.94	123.08	120.30
2	B	964	C	C3'-C2'-C1'	-6.94	95.95	101.50
2	B	1218	G	O4'-C1'-N9	6.94	113.75	108.20
2	B	2291	U	O4'-C1'-N1	6.94	113.75	108.20
2	B	2468	A	C4-C5-C6	6.94	120.47	117.00
2	B	2687	U	P-O5'-C5'	-6.94	109.80	120.90
2	B	2704	C	N3-C4-N4	6.94	122.86	118.00
2	B	2817	U	N1-C1'-C2'	-6.94	104.37	112.00
2	B	496	G	C5-C6-O6	-6.94	124.44	128.60
2	B	832	U	O4'-C1'-N1	6.94	113.75	108.20
2	B	843	G	C6-C5-N7	-6.94	126.24	130.40
2	B	1316	U	O4'-C1'-N1	6.94	113.75	108.20
2	B	1764	C	O5'-C5'-C4'	-6.94	98.52	111.70
2	B	2157	G	O5'-C5'-C4'	6.94	124.88	111.70
2	B	2270	A	N3-C4-C5	-6.94	121.94	126.80
2	B	462	C	O4'-C1'-N1	6.94	113.75	108.20
2	B	746	U	C5-C6-N1	6.93	126.17	122.70
2	B	2088	A	C2-N3-C4	-6.93	107.13	110.60
2	B	2192	U	N3-C4-C5	-6.93	110.44	114.60
2	B	52	A	N9-C4-C5	6.93	108.57	105.80
2	B	972	A	C3'-C2'-C1'	-6.93	95.95	101.50
2	B	172	A	C6-N1-C2	-6.93	114.44	118.60
2	B	1385	A	C5-C6-N1	-6.93	114.23	117.70
2	B	2728	U	O4'-C1'-N1	6.93	113.75	108.20
1	A	106	G	O4'-C1'-N9	6.93	113.74	108.20
1	A	108	A	C4-C5-C6	6.93	120.46	117.00
2	B	517	C	N3-C4-C5	-6.93	119.13	121.90
2	B	877	A	C5-C6-N6	-6.93	118.16	123.70
2	B	1449	G	O4'-C1'-N9	6.93	113.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2335	A	C6-N1-C2	6.93	122.76	118.60
9	O	13	ARG	NE-CZ-NH1	6.93	123.77	120.30
2	B	1935	G	N3-C2-N2	6.93	124.75	119.90
2	B	2754	U	O4'-C1'-N1	6.93	113.74	108.20
2	B	775	G	O4'-C1'-N9	6.93	113.74	108.20
2	B	1031	G	N1-C2-N3	-6.93	119.74	123.90
2	B	1286	A	O4'-C1'-N9	6.93	113.74	108.20
2	B	1923	U	P-O3'-C3'	-6.93	111.39	119.70
2	B	1138	G	N1-C2-N3	-6.92	119.75	123.90
2	B	1184	U	C5'-C4'-C3'	-6.92	104.92	116.00
2	B	1576	U	O4'-C1'-N1	6.92	113.74	108.20
2	B	1700	A	N9-C4-C5	-6.92	103.03	105.80
2	B	2384	U	N1-C2-O2	-6.92	117.95	122.80
2	B	1967	C	O4'-C1'-N1	6.92	113.74	108.20
2	B	643	A	C8-N9-C4	-6.92	103.03	105.80
2	B	893	C	C1'-O4'-C4'	-6.92	104.36	109.90
2	B	1029	A	C5-C6-N6	-6.92	118.16	123.70
2	B	1170	C	N3-C4-N4	6.92	122.84	118.00
2	B	1212	G	C6-C5-N7	-6.92	126.25	130.40
2	B	1567	G	C5-C6-O6	-6.92	124.45	128.60
2	B	1641	A	O4'-C1'-N9	6.92	113.74	108.20
2	B	1679	A	C1'-O4'-C4'	-6.92	104.36	109.90
2	B	1691	C	N3-C4-N4	6.92	122.85	118.00
2	B	2576	G	C3'-C2'-C1'	-6.92	95.96	101.50
2	B	2714	G	N7-C8-N9	-6.92	109.64	113.10
2	B	2863	C	N1-C2-O2	6.92	123.05	118.90
2	B	316	C	O4'-C1'-N1	6.92	113.74	108.20
2	B	584	C	C5-C6-N1	6.92	124.46	121.00
2	B	1468	U	C2-N3-C4	6.92	131.15	127.00
2	B	2016	U	O4'-C1'-N1	6.92	113.74	108.20
1	A	46	A	P-O3'-C3'	-6.92	111.40	119.70
2	B	7	G	N9-C4-C5	-6.92	102.63	105.40
2	B	147	C	N3-C4-N4	6.92	122.84	118.00
2	B	1551	A	P-O3'-C3'	6.92	128.00	119.70
2	B	2170	A	C4'-C3'-C2'	-6.92	95.68	102.60
28	F	176	PHE	CB-CG-CD1	6.92	125.64	120.80
1	A	94	A	C5-C6-N1	-6.92	114.24	117.70
2	B	494	G	N3-C4-N9	6.92	130.15	126.00
2	B	519	U	C2-N3-C4	-6.92	122.85	127.00
2	B	527	C	C6-N1-C1'	-6.92	112.50	120.80
2	B	615	U	P-O3'-C3'	6.92	128.00	119.70
2	B	948	C	N3-C4-N4	6.92	122.84	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1574	C	N3-C4-N4	6.92	122.84	118.00
2	B	1734	G	C5'-C4'-C3'	6.92	127.06	116.00
2	B	1759	A	N1-C2-N3	6.92	132.76	129.30
2	B	1854	A	C5-C6-N1	-6.92	114.24	117.70
2	B	1885	A	N7-C8-N9	-6.92	110.34	113.80
2	B	2048	G	N3-C4-C5	-6.92	125.14	128.60
2	B	2101	A	C2-N3-C4	-6.92	107.14	110.60
2	B	2727	A	C2-N3-C4	-6.92	107.14	110.60
2	B	823	C	N3-C4-N4	6.92	122.84	118.00
2	B	1277	G	C4-N9-C1'	-6.92	117.51	126.50
2	B	1888	G	C5'-C4'-C3'	6.92	127.06	116.00
2	B	2427	C	N3-C4-C5	-6.92	119.13	121.90
2	B	753	A	N3-C4-C5	-6.91	121.96	126.80
2	B	793	A	C5-C6-N6	-6.91	118.17	123.70
2	B	1191	G	C5-N7-C8	6.91	107.76	104.30
2	B	1217	U	C2-N1-C1'	-6.91	109.40	117.70
2	B	1769	U	C4'-C3'-C2'	6.91	109.51	102.60
2	B	1777	U	C2-N3-C4	-6.91	122.85	127.00
2	B	1998	A	C8-N9-C4	-6.91	103.03	105.80
2	B	2360	G	N9-C4-C5	-6.91	102.64	105.40
2	B	467	G	N7-C8-N9	6.91	116.56	113.10
2	B	758	C	O4'-C1'-C2'	6.91	113.82	107.60
2	B	1659	G	C8-N9-C4	-6.91	103.64	106.40
2	B	1808	A	C6-N1-C2	-6.91	114.45	118.60
1	A	24	G	C2-N3-C4	-6.91	108.44	111.90
1	A	79	G	C2-N3-C4	6.91	115.36	111.90
1	A	96	G	N1-C6-O6	-6.91	115.75	119.90
2	B	161	A	C5-C6-N1	-6.91	114.25	117.70
2	B	796	C	C6-N1-C2	6.91	123.06	120.30
2	B	1383	A	C2-N3-C4	-6.91	107.14	110.60
2	B	2524	G	N3-C4-C5	6.91	132.06	128.60
2	B	2589	A	C2-N3-C4	-6.91	107.14	110.60
2	B	2699	C	C5-C6-N1	6.91	124.45	121.00
2	B	119	A	C2-N3-C4	-6.91	107.15	110.60
2	B	393	C	C6-N1-C2	-6.91	117.54	120.30
2	B	632	A	N1-C6-N6	6.91	122.75	118.60
2	B	737	C	O4'-C1'-N1	6.91	113.73	108.20
2	B	1260	A	C4-C5-C6	6.91	120.45	117.00
2	B	1431	A	N9-C4-C5	6.91	108.56	105.80
2	B	1436	G	N1-C2-N3	-6.91	119.75	123.90
2	B	1583	A	C5-C6-N6	-6.91	118.17	123.70
2	B	1662	U	C2-N3-C4	-6.91	122.86	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2317	A	C4-C5-C6	6.91	120.45	117.00
2	B	2799	A	N7-C8-N9	-6.91	110.35	113.80
2	B	93	G	N9-C4-C5	6.91	108.16	105.40
2	B	895	U	O4'-C4'-C3'	-6.91	97.09	104.00
2	B	1072	C	C4-C5-C6	6.91	120.85	117.40
2	B	1742	U	N3-C4-O4	6.91	124.23	119.40
2	B	2110	G	O4'-C1'-N9	6.91	113.73	108.20
1	A	58	A	N9-C4-C5	-6.91	103.04	105.80
2	B	424	G	C4-C5-C6	6.91	122.94	118.80
2	B	520	G	C6-N1-C2	-6.91	120.96	125.10
2	B	664	G	C6-C5-N7	-6.91	126.26	130.40
2	B	989	G	C8-N9-C4	-6.91	103.64	106.40
2	B	1577	C	C4'-C3'-C2'	-6.91	95.69	102.60
2	B	1728	C	N3-C4-N4	6.91	122.83	118.00
2	B	2141	G	N7-C8-N9	-6.91	109.65	113.10
2	B	2232	C	C4-C5-C6	6.91	120.85	117.40
2	B	2300	C	C5-C6-N1	6.91	124.45	121.00
2	B	220	G	N7-C8-N9	-6.90	109.65	113.10
2	B	1679	A	P-O3'-C3'	-6.90	111.42	119.70
2	B	251	A	C4-C5-N7	-6.90	107.25	110.70
2	B	309	A	C5-C6-N6	-6.90	118.18	123.70
2	B	1702	G	N1-C2-N3	-6.90	119.76	123.90
2	B	2747	G	N3-C4-C5	-6.90	125.15	128.60
2	B	816	C	P-O3'-C3'	-6.90	111.42	119.70
2	B	1198	U	O4'-C1'-N1	6.90	113.72	108.20
2	B	1594	U	P-O5'-C5'	6.90	131.94	120.90
2	B	2396	G	P-O3'-C3'	-6.90	111.42	119.70
1	A	42	C	C6-N1-C2	-6.90	117.54	120.30
2	B	1763	G	N1-C2-N3	-6.90	119.76	123.90
2	B	323	C	N1-C1'-C2'	-6.90	104.41	112.00
2	B	716	A	C8-N9-C4	-6.90	103.04	105.80
2	B	751	A	C5-C6-N6	6.90	129.22	123.70
2	B	1281	G	N9-C4-C5	-6.90	102.64	105.40
2	B	1436	G	C2-N3-C4	6.90	115.35	111.90
2	B	2583	G	P-O3'-C3'	-6.90	111.42	119.70
2	B	243	U	N1-C2-O2	-6.90	117.97	122.80
2	B	612	G	O4'-C1'-N9	6.90	113.72	108.20
7	M	82	MET	CG-SD-CE	6.90	111.23	100.20
1	A	98	G	P-O3'-C3'	6.89	127.97	119.70
2	B	357	C	N3-C4-N4	6.89	122.83	118.00
2	B	381	G	C4-C5-C6	6.89	122.94	118.80
2	B	769	U	O4'-C1'-N1	6.89	113.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2002	G	P-O5'-C5'	-6.89	109.87	120.90
2	B	2718	G	C4-C5-N7	-6.89	108.04	110.80
2	B	43	G	N3-C4-N9	6.89	130.13	126.00
2	B	2354	C	O5'-C5'-C4'	-6.89	98.60	111.70
2	B	2540	C	C2-N3-C4	-6.89	116.45	119.90
2	B	2542	A	C4-C5-C6	6.89	120.45	117.00
1	A	87	U	C5'-C4'-O4'	6.89	117.37	109.10
2	B	1824	G	O4'-C1'-N9	6.89	113.71	108.20
2	B	2117	A	N1-C6-N6	6.89	122.73	118.60
2	B	104	A	C6-N1-C2	-6.89	114.47	118.60
2	B	1123	C	O4'-C1'-N1	6.89	113.71	108.20
2	B	1500	G	C1'-O4'-C4'	-6.89	104.39	109.90
2	B	2040	G	N3-C4-N9	6.89	130.13	126.00
2	B	601	C	N3-C4-C5	-6.89	119.14	121.90
2	B	1311	G	C6-C5-N7	-6.89	126.27	130.40
1	A	67	G	N3-C4-N9	6.89	130.13	126.00
2	B	1220	G	N9-C4-C5	-6.89	102.65	105.40
2	B	1662	U	N3-C2-O2	-6.89	117.38	122.20
2	B	2029	G	C8-N9-C1'	6.89	135.95	127.00
2	B	2057	G	C1'-O4'-C4'	-6.89	104.39	109.90
2	B	2688	G	C6-N1-C2	-6.89	120.97	125.10
2	B	143	C	O4'-C1'-N1	6.88	113.71	108.20
2	B	188	G	N1-C2-N2	-6.88	110.00	116.20
2	B	311	A	C6-N1-C2	6.88	122.73	118.60
2	B	675	A	C5-C6-N6	-6.88	118.19	123.70
2	B	1829	A	C6-C5-N7	-6.88	127.48	132.30
2	B	2054	A	C6-N1-C2	-6.88	114.47	118.60
2	B	2555	U	C2-N3-C4	-6.88	122.87	127.00
2	B	2766	A	N3-C4-C5	-6.88	121.98	126.80
23	5	71	ARG	NE-CZ-NH2	6.88	123.74	120.30
2	B	260	G	C2-N3-C4	-6.88	108.46	111.90
2	B	2128	G	N1-C2-N3	-6.88	119.77	123.90
2	B	2274	A	N1-C6-N6	6.88	122.73	118.60
2	B	2872	A	C4-C5-C6	6.88	120.44	117.00
2	B	1200	C	N3-C2-O2	-6.88	117.08	121.90
2	B	1485	U	P-O3'-C3'	6.88	127.96	119.70
2	B	2737	G	C8-N9-C4	-6.88	103.65	106.40
29	G	148	ARG	NE-CZ-NH1	-6.88	116.86	120.30
2	B	1352	U	C4'-C3'-C2'	6.88	109.48	102.60
2	B	2461	A	C5-C6-N6	-6.88	118.20	123.70
2	B	2840	C	C6-N1-C2	-6.88	117.55	120.30
31	I	102	ARG	NE-CZ-NH1	6.88	123.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	65	U	N1-C2-N3	-6.88	110.77	114.90
2	B	564	C	N3-C4-C5	-6.88	119.15	121.90
2	B	606	U	O4'-C1'-N1	6.88	113.70	108.20
2	B	2221	G	O5'-C5'-C4'	-6.88	98.63	111.70
2	B	2801	G	N1-C2-N2	-6.88	110.01	116.20
2	B	2885	G	P-O3'-C3'	6.88	127.95	119.70
2	B	716	A	C4-C5-N7	-6.88	107.26	110.70
2	B	1374	G	N1-C2-N2	-6.88	110.01	116.20
2	B	2097	A	C4-C5-C6	6.88	120.44	117.00
2	B	2458	G	N3-C2-N2	6.88	124.71	119.90
2	B	2560	A	C5-C6-N6	-6.88	118.20	123.70
2	B	2561	U	C2-N3-C4	-6.88	122.87	127.00
2	B	1739	A	C4'-C3'-C2'	-6.88	95.72	102.60
2	B	2817	U	C4'-C3'-C2'	6.88	109.47	102.60
2	B	72	U	C2-N3-C4	-6.87	122.88	127.00
2	B	180	G	N1-C2-N2	6.87	122.39	116.20
2	B	615	U	O4'-C1'-N1	6.87	113.70	108.20
2	B	695	G	N1-C6-O6	6.87	124.02	119.90
2	B	815	C	O4'-C1'-N1	6.87	113.70	108.20
2	B	974	G	C2-N3-C4	-6.87	108.46	111.90
2	B	1097	U	N3-C4-C5	-6.87	110.48	114.60
2	B	1116	G	N3-C2-N2	6.87	124.71	119.90
2	B	1895	C	C5-C4-N4	-6.87	115.39	120.20
2	B	2043	C	C4'-C3'-C2'	6.87	109.47	102.60
2	B	2163	A	N9-C4-C5	6.87	108.55	105.80
2	B	2216	G	C8-N9-C4	6.87	109.15	106.40
2	B	2445	G	N3-C4-C5	-6.87	125.16	128.60
2	B	2773	C	O4'-C1'-N1	6.87	113.70	108.20
2	B	2810	A	N9-C4-C5	-6.87	103.05	105.80
2	B	9	G	C8-N9-C4	-6.87	103.65	106.40
2	B	586	A	C4-C5-C6	6.87	120.44	117.00
2	B	1033	U	C6-N1-C2	-6.87	116.88	121.00
2	B	1049	C	C4-C5-C6	6.87	120.83	117.40
2	B	1345	C	C2-N3-C4	6.87	123.33	119.90
2	B	2272	U	P-O3'-C3'	6.87	127.94	119.70
3	0	10	ARG	NE-CZ-NH1	-6.87	116.86	120.30
1	A	96	G	N1-C2-N3	-6.87	119.78	123.90
2	B	1132	U	O4'-C1'-N1	6.87	113.70	108.20
7	M	68	PHE	CB-CG-CD1	-6.87	115.99	120.80
2	B	306	U	N1-C2-N3	-6.87	110.78	114.90
2	B	481	G	C4-C5-C6	6.87	122.92	118.80
2	B	1770	G	C5-C6-N1	-6.87	108.07	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	L	113	ALA	N-CA-CB	6.87	119.72	110.10
2	B	1555	G	N9-C4-C5	-6.87	102.65	105.40
2	B	1558	C	N1-C2-O2	6.87	123.02	118.90
2	B	1962	C	C1'-O4'-C4'	-6.87	104.41	109.90
13	S	12	SER	N-CA-CB	6.87	120.80	110.50
28	F	142	TYR	CB-CG-CD2	-6.87	116.88	121.00
2	B	53	A	C4-C5-C6	6.87	120.43	117.00
2	B	490	C	N3-C4-C5	-6.87	119.15	121.90
2	B	559	G	C4-N9-C1'	6.87	135.43	126.50
2	B	1042	G	N1-C2-N3	-6.87	119.78	123.90
2	B	1083	U	C3'-C2'-C1'	-6.87	96.01	101.50
2	B	1214	A	C5-C6-N1	-6.87	114.27	117.70
2	B	2175	C	C3'-C2'-C1'	6.87	106.99	101.50
2	B	2570	G	N3-C2-N2	6.87	124.70	119.90
2	B	2852	G	N1-C2-N3	-6.87	119.78	123.90
2	B	2885	G	C5-C6-O6	-6.87	124.48	128.60
2	B	323	C	C6-N1-C1'	-6.86	112.56	120.80
2	B	337	C	C2-N1-C1'	6.86	126.35	118.80
2	B	630	G	N1-C2-N3	-6.86	119.78	123.90
2	B	763	G	C4-N9-C1'	-6.86	117.58	126.50
2	B	1281	G	N1-C6-O6	6.86	124.02	119.90
2	B	1455	G	N3-C4-N9	6.86	130.12	126.00
2	B	1769	U	C5-C4-O4	-6.86	121.78	125.90
2	B	419	U	C6-N1-C2	6.86	125.12	121.00
2	B	486	C	O4'-C1'-N1	6.86	113.69	108.20
2	B	904	G	C6-N1-C2	-6.86	120.98	125.10
2	B	1007	C	C6-N1-C2	6.86	123.05	120.30
2	B	1283	G	N1-C6-O6	6.86	124.02	119.90
2	B	1401	G	N3-C4-C5	-6.86	125.17	128.60
2	B	2120	G	O4'-C1'-N9	6.86	113.69	108.20
2	B	2436	G	N1-C6-O6	6.86	124.02	119.90
2	B	994	C	C4-C5-C6	6.86	120.83	117.40
2	B	1137	G	C4-N9-C1'	-6.86	117.58	126.50
2	B	2488	G	C2-N3-C4	-6.86	108.47	111.90
31	I	64	ARG	NE-CZ-NH2	-6.86	116.87	120.30
2	B	255	A	N1-C6-N6	6.86	122.72	118.60
2	B	2183	A	C8-N9-C4	-6.86	103.06	105.80
2	B	263	G	N1-C6-O6	6.86	124.01	119.90
2	B	370	G	C5'-C4'-C3'	-6.86	105.03	116.00
2	B	555	G	O4'-C1'-N9	6.86	113.69	108.20
2	B	950	G	C8-N9-C4	-6.86	103.66	106.40
2	B	1374	G	N1-C6-O6	6.86	124.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1615	C	O4'-C1'-N1	6.86	113.69	108.20
2	B	2446	G	C8-N9-C4	-6.86	103.66	106.40
2	B	2547	A	C4-C5-C6	6.86	120.43	117.00
2	B	2740	A	O4'-C1'-N9	6.86	113.69	108.20
2	B	48	G	O4'-C1'-N9	6.86	113.68	108.20
2	B	1235	G	N9-C4-C5	6.86	108.14	105.40
2	B	1318	U	C2-N3-C4	6.86	131.11	127.00
2	B	1324	G	C5'-C4'-C3'	-6.86	105.03	116.00
2	B	1718	G	N3-C2-N2	6.86	124.70	119.90
2	B	2825	G	N9-C1'-C2'	-6.86	104.46	112.00
2	B	217	A	C5-C6-N1	-6.85	114.27	117.70
2	B	855	G	C4'-C3'-C2'	6.85	109.45	102.60
2	B	983	A	C6-C5-N7	-6.85	127.50	132.30
2	B	2620	C	C5-C6-N1	6.85	124.43	121.00
14	D	43	ASP	CB-CG-OD2	-6.85	112.13	118.30
2	B	240	C	C6-N1-C2	6.85	123.04	120.30
2	B	334	C	P-O3'-C3'	-6.85	111.48	119.70
2	B	369	U	O4'-C1'-N1	6.85	113.68	108.20
2	B	809	G	N3-C2-N2	6.85	124.70	119.90
2	B	1162	G	N1-C6-O6	6.85	124.01	119.90
2	B	1823	G	N9-C4-C5	-6.85	102.66	105.40
2	B	1853	A	O4'-C1'-N9	6.85	113.68	108.20
2	B	1888	G	C6-C5-N7	-6.85	126.29	130.40
2	B	2130	U	C1'-O4'-C4'	6.85	115.38	109.90
2	B	2471	A	N9-C4-C5	6.85	108.54	105.80
7	M	22	GLN	N-CA-CB	6.85	122.94	110.60
2	B	1520	U	C2-N3-C4	-6.85	122.89	127.00
2	B	966	G	N3-C4-C5	6.85	132.03	128.60
2	B	968	C	O4'-C1'-N1	6.85	113.68	108.20
2	B	1372	U	O4'-C1'-N1	6.85	113.68	108.20
2	B	1443	U	C4-C5-C6	-6.85	115.59	119.70
2	B	2576	G	C5-C6-N1	-6.85	108.08	111.50
2	B	2609	U	O4'-C1'-N1	6.85	113.68	108.20
2	B	2811	G	C4-C5-N7	-6.85	108.06	110.80
22	3	9	ARG	NE-CZ-NH2	6.85	123.72	120.30
1	A	110	C	C4-C5-C6	6.85	120.82	117.40
2	B	311	A	C5-C6-N1	-6.85	114.28	117.70
2	B	349	U	P-O3'-C3'	-6.85	111.48	119.70
2	B	1163	G	C4-C5-N7	-6.85	108.06	110.80
2	B	1644	C	C4-C5-C6	6.85	120.82	117.40
2	B	1651	G	N3-C2-N2	6.85	124.69	119.90
2	B	1805	A	N1-C2-N3	6.85	132.72	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2159	G	C8-N9-C4	6.85	109.14	106.40
2	B	86	G	C8-N9-C4	6.85	109.14	106.40
2	B	311	A	N1-C6-N6	6.85	122.71	118.60
2	B	706	A	C6-C5-N7	-6.85	127.51	132.30
2	B	2071	A	N3-C4-N9	6.85	132.88	127.40
2	B	2822	G	C4-C5-N7	6.85	113.54	110.80
2	B	427	U	O4'-C1'-N1	6.84	113.67	108.20
2	B	1997	C	N3-C2-O2	6.84	126.69	121.90
2	B	2103	C	C2-N3-C4	6.84	123.32	119.90
2	B	2196	C	N3-C4-N4	6.84	122.79	118.00
2	B	973	A	C4-C5-C6	6.84	120.42	117.00
2	B	2129	C	C6-N1-C2	-6.84	117.56	120.30
2	B	489	G	P-O3'-C3'	6.84	127.91	119.70
2	B	1008	A	C2-N3-C4	-6.84	107.18	110.60
2	B	2474	U	C6-N1-C1'	-6.84	111.62	121.20
1	A	32	U	N3-C4-O4	6.84	124.19	119.40
2	B	72	U	C5-C6-N1	-6.84	119.28	122.70
2	B	460	A	C5-C6-N1	-6.84	114.28	117.70
2	B	2002	G	N3-C4-C5	-6.84	125.18	128.60
2	B	2069	G	C4-C5-N7	-6.84	108.06	110.80
2	B	2133	G	C4-C5-N7	6.84	113.54	110.80
2	B	2294	G	C8-N9-C1'	6.84	135.89	127.00
2	B	2346	A	N3-C4-C5	6.84	131.59	126.80
2	B	2737	G	C6-C5-N7	-6.84	126.30	130.40
2	B	2854	G	N3-C2-N2	6.84	124.69	119.90
2	B	657	U	C5-C6-N1	-6.84	119.28	122.70
2	B	689	A	C1'-O4'-C4'	-6.84	104.43	109.90
2	B	822	G	N3-C2-N2	6.84	124.69	119.90
2	B	1164	C	O4'-C1'-C2'	6.84	113.75	107.60
2	B	1340	U	O4'-C1'-C2'	-6.84	98.96	105.80
2	B	1632	A	C6-C5-N7	-6.84	127.52	132.30
2	B	1775	U	C4'-C3'-C2'	-6.84	95.76	102.60
2	B	2157	G	N1-C6-O6	6.84	124.00	119.90
11	Q	1	ALA	N-CA-CB	6.84	119.67	110.10
2	B	119	A	N1-C2-N3	6.83	132.72	129.30
2	B	2394	C	C6-N1-C2	6.83	123.03	120.30
2	B	101	A	N9-C4-C5	-6.83	103.07	105.80
2	B	246	C	C6-N1-C2	-6.83	117.57	120.30
2	B	416	U	C5-C4-O4	-6.83	121.80	125.90
2	B	1412	U	N1-C2-O2	6.83	127.58	122.80
2	B	2005	A	N1-C6-N6	6.83	122.70	118.60
2	B	2639	A	C5-C6-N1	-6.83	114.28	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2765	A	C4'-C3'-C2'	6.83	109.43	102.60
2	B	186	G	C4-C5-C6	6.83	122.90	118.80
2	B	213	A	C8-N9-C4	-6.83	103.07	105.80
2	B	444	C	C5-C4-N4	6.83	124.98	120.20
2	B	822	G	N9-C1'-C2'	-6.83	104.49	112.00
2	B	1217	U	C4'-C3'-C2'	6.83	109.43	102.60
2	B	1609	A	P-O3'-C3'	6.83	127.90	119.70
2	B	1620	G	N3-C4-C5	6.83	132.02	128.60
2	B	2050	C	N3-C4-C5	-6.83	119.17	121.90
2	B	2554	U	N3-C2-O2	-6.83	117.42	122.20
32	J	26	GLY	N-CA-C	-6.83	96.02	113.10
2	B	113	U	C6-N1-C1'	-6.83	111.64	121.20
2	B	193	U	C1'-O4'-C4'	6.83	115.36	109.90
2	B	234	U	C4-C5-C6	6.83	123.80	119.70
2	B	784	G	C5-C6-N1	-6.83	108.08	111.50
2	B	1120	G	C4-C5-C6	6.83	122.90	118.80
2	B	2070	A	C6-N1-C2	-6.83	114.50	118.60
2	B	165	A	P-O3'-C3'	-6.83	111.51	119.70
2	B	516	C	C5-C6-N1	6.83	124.41	121.00
2	B	975	A	C4'-C3'-C2'	-6.83	95.77	102.60
2	B	1179	G	N9-C4-C5	-6.83	102.67	105.40
2	B	341	C	C5-C4-N4	-6.83	115.42	120.20
2	B	496	G	N3-C2-N2	6.83	124.68	119.90
2	B	2478	A	P-O3'-C3'	-6.83	111.51	119.70
2	B	112	U	P-O3'-C3'	-6.83	111.51	119.70
2	B	126	A	C5-C6-N1	-6.83	114.29	117.70
2	B	340	A	C1'-O4'-C4'	-6.83	104.44	109.90
2	B	361	G	C8-N9-C1'	6.83	135.87	127.00
2	B	739	A	N1-C2-N3	6.83	132.71	129.30
2	B	809	G	N1-C2-N2	-6.83	110.06	116.20
2	B	1277	G	N1-C6-O6	6.83	124.00	119.90
2	B	2312	U	C2-N3-C4	6.83	131.09	127.00
2	B	2726	A	C5-C6-N6	-6.83	118.24	123.70
1	A	117	G	C8-N9-C4	-6.82	103.67	106.40
2	B	449	A	C8-N9-C4	-6.82	103.07	105.80
2	B	1586	A	C5-C6-N1	-6.82	114.29	117.70
2	B	2034	U	N1-C2-O2	6.82	127.58	122.80
2	B	2099	U	O4'-C1'-N1	6.82	113.66	108.20
2	B	2594	C	O4'-C1'-N1	6.82	113.66	108.20
2	B	2666	C	C2-N1-C1'	6.82	126.31	118.80
2	B	2735	G	N3-C2-N2	6.82	124.68	119.90
2	B	2847	U	N1-C2-N3	6.82	118.99	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	526	A	C8-N9-C4	6.82	108.53	105.80
2	B	764	A	C2-N3-C4	6.82	114.01	110.60
2	B	1778	U	C2-N1-C1'	6.82	125.89	117.70
2	B	2178	C	C4'-C3'-C2'	-6.82	95.78	102.60
2	B	2211	A	C5-C6-N1	-6.82	114.29	117.70
2	B	2388	A	C5-C6-N6	-6.82	118.24	123.70
2	B	2665	A	O4'-C1'-N9	6.82	113.66	108.20
2	B	19	A	C5-C6-N6	-6.82	118.24	123.70
2	B	735	A	C1'-O4'-C4'	-6.82	104.44	109.90
2	B	947	A	N3-C4-C5	-6.82	122.03	126.80
2	B	1010	A	C3'-C2'-C1'	6.82	106.96	101.50
2	B	1174	U	O4'-C1'-N1	6.82	113.66	108.20
2	B	1759	A	C5-N7-C8	6.82	107.31	103.90
2	B	2436	G	C5-C6-N1	6.82	114.91	111.50
2	B	108	G	N9-C4-C5	-6.82	102.67	105.40
2	B	731	C	N3-C2-O2	6.82	126.67	121.90
2	B	1315	C	N3-C4-C5	-6.82	119.17	121.90
2	B	1978	A	N9-C4-C5	-6.82	103.07	105.80
2	B	2343	U	N3-C4-O4	6.82	124.17	119.40
1	A	23	G	C6-N1-C2	6.82	129.19	125.10
2	B	279	A	C4-C5-C6	6.82	120.41	117.00
2	B	722	A	C3'-C2'-C1'	-6.82	96.05	101.50
2	B	729	G	C6-N1-C2	-6.82	121.01	125.10
2	B	1696	G	C8-N9-C4	6.82	109.13	106.40
2	B	1989	G	N9-C1'-C2'	-6.82	104.50	112.00
2	B	2532	G	C6-C5-N7	-6.82	126.31	130.40
2	B	2795	C	N3-C4-N4	6.82	122.77	118.00
2	B	866	A	C5-N7-C8	6.81	107.31	103.90
2	B	1146	C	C5-C6-N1	6.81	124.41	121.00
2	B	1927	A	O4'-C1'-N9	6.81	113.65	108.20
2	B	2277	G	N3-C2-N2	6.81	124.67	119.90
2	B	139	U	C5-C4-O4	-6.81	121.81	125.90
2	B	277	G	N3-C2-N2	6.81	124.67	119.90
2	B	346	A	C2-N3-C4	-6.81	107.19	110.60
2	B	1338	G	C2-N3-C4	6.81	115.31	111.90
2	B	1921	G	N1-C2-N3	-6.81	119.81	123.90
2	B	1977	A	C5-N7-C8	6.81	107.31	103.90
2	B	2169	A	C5-C6-N6	-6.81	118.25	123.70
2	B	2285	C	N3-C4-C5	-6.81	119.17	121.90
2	B	82	U	O4'-C1'-N1	6.81	113.65	108.20
32	J	16	TYR	CB-CG-CD2	6.81	125.09	121.00
2	B	368	A	P-O3'-C3'	-6.81	111.53	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	467	G	O4'-C4'-C3'	-6.81	97.19	104.00
2	B	472	A	C5-C6-N1	-6.81	114.30	117.70
2	B	689	A	C4-C5-C6	6.81	120.40	117.00
2	B	777	G	C5-C6-O6	-6.81	124.51	128.60
2	B	845	A	O4'-C1'-N9	6.81	113.65	108.20
2	B	1069	A	N1-C6-N6	6.81	122.69	118.60
2	B	2092	U	C6-N1-C1'	-6.81	111.67	121.20
2	B	2359	C	N3-C4-N4	6.81	122.77	118.00
1	A	102	G	O4'-C1'-N9	6.81	113.65	108.20
2	B	43	G	C5-N7-C8	-6.81	100.90	104.30
2	B	297	G	C4-C5-N7	-6.81	108.08	110.80
2	B	1521	G	O5'-P-OP2	-6.81	99.57	105.70
2	B	1634	A	N1-C2-N3	6.81	132.70	129.30
2	B	2282	G	N1-C2-N3	-6.81	119.81	123.90
2	B	2632	A	N1-C2-N3	6.81	132.70	129.30
2	B	543	G	C6-C5-N7	-6.81	126.32	130.40
2	B	2116	G	C4-C5-N7	6.81	113.52	110.80
2	B	2835	A	N3-C4-C5	-6.81	122.04	126.80
2	B	12	U	C5'-C4'-C3'	6.80	126.89	116.00
2	B	1754	A	N3-C4-N9	6.80	132.84	127.40
2	B	1798	U	C2-N1-C1'	-6.80	109.53	117.70
2	B	2004	G	C4-C5-C6	6.80	122.88	118.80
2	B	2344	U	C2-N3-C4	-6.80	122.92	127.00
2	B	2867	G	C4-C5-C6	6.80	122.88	118.80
2	B	268	C	P-O3'-C3'	6.80	127.86	119.70
2	B	1007	C	C5-C4-N4	-6.80	115.44	120.20
2	B	1269	A	C6-C5-N7	-6.80	127.54	132.30
2	B	1756	G	N3-C2-N2	6.80	124.66	119.90
18	W	79	ARG	NE-CZ-NH1	6.80	123.70	120.30
28	F	177	ARG	N-CA-C	-6.80	92.64	111.00
2	B	65	U	O4'-C1'-N1	6.80	113.64	108.20
2	B	383	C	N3-C2-O2	6.80	126.66	121.90
2	B	654	A	C2-N3-C4	6.80	114.00	110.60
2	B	831	G	O5'-C5'-C4'	-6.80	98.78	111.70
2	B	1074	G	C2-N3-C4	6.80	115.30	111.90
2	B	1479	G	C5-C6-O6	-6.80	124.52	128.60
2	B	2278	A	N9-C1'-C2'	-6.80	104.52	112.00
2	B	2501	C	N3-C4-N4	6.80	122.76	118.00
2	B	2723	C	P-O3'-C3'	6.80	127.86	119.70
2	B	146	A	C4-C5-C6	6.80	120.40	117.00
2	B	684	G	C6-N1-C2	-6.80	121.02	125.10
2	B	1143	A	P-O5'-C5'	6.80	131.77	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1576	U	N3-C4-O4	-6.80	114.64	119.40
2	B	1609	A	C4-C5-N7	-6.80	107.30	110.70
2	B	1827	U	N3-C2-O2	-6.80	117.44	122.20
2	B	2053	G	C4-N9-C1'	-6.80	117.67	126.50
2	B	2167	U	P-O3'-C3'	-6.80	111.54	119.70
1	A	31	C	O4'-C1'-N1	6.79	113.64	108.20
2	B	1240	U	P-O5'-C5'	6.79	131.77	120.90
2	B	1757	A	C4-C5-C6	6.79	120.40	117.00
2	B	2619	C	C5-C6-N1	-6.79	117.60	121.00
2	B	49	A	C5'-C4'-O4'	6.79	117.25	109.10
2	B	568	U	P-O5'-C5'	6.79	131.77	120.90
2	B	642	U	C5'-C4'-O4'	6.79	117.25	109.10
2	B	883	G	N3-C2-N2	6.79	124.66	119.90
2	B	1320	C	O4'-C1'-N1	6.79	113.63	108.20
2	B	1595	C	N3-C4-N4	6.79	122.75	118.00
2	B	2383	G	C2-N3-C4	6.79	115.30	111.90
2	B	2679	A	P-O3'-C3'	6.79	127.85	119.70
2	B	2840	C	C5-C6-N1	6.79	124.40	121.00
12	R	78	ARG	NE-CZ-NH2	6.79	123.70	120.30
2	B	456	C	P-O3'-C3'	-6.79	111.55	119.70
2	B	1668	A	N9-C4-C5	-6.79	103.08	105.80
2	B	2197	U	C2-N3-C4	-6.79	122.93	127.00
1	A	73	A	C5-C6-N6	-6.79	118.27	123.70
2	B	9	G	N3-C2-N2	6.79	124.65	119.90
2	B	289	G	C5-C6-N1	6.79	114.89	111.50
2	B	1361	G	N9-C4-C5	6.79	108.12	105.40
2	B	1496	A	O4'-C1'-N9	6.79	113.63	108.20
2	B	1709	U	N3-C4-C5	-6.79	110.53	114.60
2	B	1756	G	N1-C6-O6	6.79	123.97	119.90
2	B	1965	C	C3'-C2'-C1'	6.79	106.93	101.50
2	B	2003	A	C4'-C3'-C2'	6.79	109.39	102.60
2	B	2327	A	C6-C5-N7	-6.79	127.55	132.30
2	B	2407	A	N7-C8-N9	6.79	117.19	113.80
2	B	2633	G	O4'-C1'-C2'	6.79	113.71	107.60
2	B	2661	G	N3-C2-N2	6.79	124.65	119.90
2	B	370	G	C5'-C4'-O4'	6.79	117.24	109.10
2	B	516	C	O5'-C5'-C4'	-6.79	98.81	111.70
2	B	619	G	N3-C4-C5	-6.79	125.21	128.60
2	B	940	G	C4-N9-C1'	-6.79	117.68	126.50
2	B	1290	C	N1-C2-N3	-6.79	114.45	119.20
2	B	1402	U	N1-C2-N3	6.79	118.97	114.90
2	B	1594	U	N1-C2-N3	6.79	118.97	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1836	C	C6-N1-C2	-6.79	117.59	120.30
2	B	2523	G	N3-C4-C5	-6.79	125.21	128.60
2	B	2559	C	C5-C6-N1	6.79	124.39	121.00
2	B	533	G	N7-C8-N9	6.78	116.49	113.10
2	B	1334	G	C8-N9-C1'	6.78	135.82	127.00
2	B	2694	G	C5-N7-C8	6.78	107.69	104.30
9	O	94	ARG	NE-CZ-NH1	-6.78	116.91	120.30
2	B	880	G	C8-N9-C1'	6.78	135.82	127.00
2	B	2803	G	C6-C5-N7	-6.78	126.33	130.40
2	B	193	U	C6-N1-C1'	6.78	130.69	121.20
2	B	972	A	C5-C6-N1	-6.78	114.31	117.70
2	B	1776	G	C6-N1-C2	-6.78	121.03	125.10
4	K	98	ARG	NH1-CZ-NH2	6.78	126.86	119.40
2	B	480	A	C5-N7-C8	6.78	107.29	103.90
2	B	777	G	O4'-C1'-N9	6.78	113.62	108.20
2	B	1013	C	C6-N1-C2	6.78	123.01	120.30
2	B	2400	G	C2-N3-C4	6.78	115.29	111.90
2	B	142	A	C4-C5-C6	6.78	120.39	117.00
2	B	1053	C	O4'-C1'-N1	6.78	113.62	108.20
2	B	1074	G	N7-C8-N9	6.78	116.49	113.10
2	B	1982	U	P-O5'-C5'	6.78	131.75	120.90
2	B	2076	U	P-O3'-C3'	-6.78	111.57	119.70
2	B	2117	A	C4-C5-C6	6.78	120.39	117.00
2	B	2367	G	C6-C5-N7	-6.78	126.33	130.40
2	B	2621	G	O4'-C1'-N9	6.78	113.62	108.20
1	A	35	C	C4-C5-C6	6.78	120.79	117.40
2	B	81	G	O4'-C1'-N9	6.78	113.62	108.20
2	B	648	G	C4'-C3'-C2'	-6.78	95.82	102.60
2	B	1269	A	N3-C4-C5	-6.78	122.06	126.80
2	B	1293	C	O4'-C1'-N1	6.78	113.62	108.20
2	B	1307	A	P-O3'-C3'	-6.78	111.57	119.70
2	B	1460	U	C4-C5-C6	-6.78	115.64	119.70
2	B	2388	A	O4'-C1'-N9	6.78	113.62	108.20
2	B	2668	G	N7-C8-N9	-6.78	109.71	113.10
19	X	386	ARG	CD-NE-CZ	-6.78	114.11	123.60
30	H	10	ALA	N-CA-CB	6.78	119.59	110.10
2	B	313	G	C8-N9-C4	-6.77	103.69	106.40
2	B	1968	G	N1-C6-O6	6.77	123.96	119.90
2	B	103	A	C2-N3-C4	6.77	113.99	110.60
2	B	1035	U	O4'-C1'-N1	6.77	113.62	108.20
2	B	1250	G	C3'-C2'-C1'	-6.77	96.08	101.50
2	B	1441	G	C6-C5-N7	-6.77	126.34	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1687	G	O4'-C1'-N9	6.77	113.62	108.20
2	B	2391	G	N9-C4-C5	-6.77	102.69	105.40
2	B	202	U	C5-C6-N1	-6.77	119.31	122.70
2	B	1917	U	C5-C4-O4	-6.77	121.84	125.90
2	B	1923	U	O3'-P-O5'	6.77	116.86	104.00
2	B	1946	U	O4'-C1'-N1	6.77	113.62	108.20
1	A	88	C	P-O5'-C5'	6.77	131.73	120.90
2	B	676	A	P-O3'-C3'	6.77	127.82	119.70
2	B	1231	U	N3-C2-O2	-6.77	117.46	122.20
2	B	1345	C	N1-C2-N3	-6.77	114.46	119.20
2	B	1966	A	C5-C6-N6	-6.77	118.28	123.70
2	B	2064	C	C5-C6-N1	6.77	124.38	121.00
2	B	2176	A	N9-C4-C5	6.77	108.51	105.80
2	B	2499	C	P-O5'-C5'	6.77	131.73	120.90
2	B	2751	G	N3-C2-N2	6.77	124.64	119.90
2	B	227	A	C6-C5-N7	-6.77	127.56	132.30
2	B	549	G	N3-C4-C5	-6.77	125.22	128.60
2	B	1641	A	N9-C1'-C2'	-6.77	104.56	112.00
2	B	2043	C	N1-C2-O2	6.77	122.96	118.90
2	B	2523	G	N1-C2-N2	-6.77	110.11	116.20
2	B	2757	A	N3-C4-C5	-6.77	122.06	126.80
2	B	196	A	C6-N1-C2	-6.77	114.54	118.60
2	B	799	G	O4'-C1'-N9	6.77	113.61	108.20
2	B	1214	A	C5-C6-N6	-6.77	118.29	123.70
2	B	2382	G	C3'-C2'-C1'	6.77	106.91	101.50
2	B	2582	G	N3-C4-N9	-6.77	121.94	126.00
2	B	169	G	C5-N7-C8	-6.76	100.92	104.30
2	B	414	C	C5-C6-N1	-6.76	117.62	121.00
2	B	493	G	N3-C2-N2	6.76	124.64	119.90
2	B	649	G	N9-C4-C5	6.76	108.11	105.40
2	B	1358	G	C5'-C4'-O4'	-6.76	100.98	109.10
2	B	1625	C	N3-C4-N4	6.76	122.73	118.00
2	B	2153	C	O4'-C1'-N1	6.76	113.61	108.20
5	L	107	PHE	CB-CG-CD1	-6.76	116.06	120.80
24	6	28	ARG	NE-CZ-NH1	6.76	123.68	120.30
2	B	64	A	N9-C4-C5	6.76	108.50	105.80
2	B	605	G	P-O3'-C3'	-6.76	111.58	119.70
2	B	831	G	C4-C5-N7	6.76	113.50	110.80
2	B	2262	U	C2-N3-C4	-6.76	122.94	127.00
2	B	372	G	C5-C6-O6	-6.76	124.54	128.60
2	B	548	G	C4-N9-C1'	6.76	135.29	126.50
2	B	940	G	N9-C1'-C2'	-6.76	104.56	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2034	U	C6-N1-C2	6.76	125.06	121.00
2	B	2717	C	C5-C6-N1	6.76	124.38	121.00
8	N	30	ARG	NE-CZ-NH2	-6.76	116.92	120.30
2	B	287	G	P-O5'-C5'	-6.76	110.08	120.90
2	B	965	C	C6-N1-C2	-6.76	117.60	120.30
2	B	1008	A	P-O3'-C3'	6.76	127.81	119.70
2	B	2043	C	P-O5'-C5'	6.76	131.72	120.90
2	B	2829	A	C5-N7-C8	6.76	107.28	103.90
9	O	15	ARG	NE-CZ-NH2	-6.76	116.92	120.30
2	B	1161	C	N3-C4-N4	6.76	122.73	118.00
2	B	2856	A	C8-N9-C1'	6.76	139.86	127.70
2	B	27	G	N3-C4-C5	-6.76	125.22	128.60
2	B	166	U	C5-C4-O4	6.76	129.95	125.90
2	B	208	C	C5-C4-N4	-6.76	115.47	120.20
2	B	248	G	N7-C8-N9	6.76	116.48	113.10
2	B	717	C	C2-N3-C4	6.76	123.28	119.90
2	B	2485	G	N1-C2-N2	6.76	122.28	116.20
2	B	2733	A	N9-C4-C5	6.76	108.50	105.80
19	X	44	ARG	NE-CZ-NH1	6.76	123.68	120.30
2	B	31	C	C2-N3-C4	6.75	123.28	119.90
2	B	454	A	N1-C6-N6	6.75	122.65	118.60
2	B	1960	A	C2-N3-C4	6.75	113.98	110.60
2	B	2361	G	N1-C6-O6	6.75	123.95	119.90
2	B	2758	A	C5-N7-C8	6.75	107.28	103.90
2	B	1131	G	C1'-O4'-C4'	-6.75	104.50	109.90
2	B	2468	A	C5-N7-C8	6.75	107.28	103.90
2	B	2754	U	N3-C4-C5	-6.75	110.55	114.60
2	B	46	G	O4'-C1'-N9	6.75	113.60	108.20
2	B	527	C	O4'-C1'-C2'	-6.75	99.05	105.80
2	B	917	A	C5-C6-N6	-6.75	118.30	123.70
2	B	1184	U	C1'-O4'-C4'	-6.75	104.50	109.90
2	B	1855	U	P-O5'-C5'	6.75	131.70	120.90
2	B	2508	G	C8-N9-C4	-6.75	103.70	106.40
2	B	2545	G	C8-N9-C4	-6.75	103.70	106.40
2	B	738	G	C2-N3-C4	6.75	115.28	111.90
2	B	1047	G	N1-C6-O6	6.75	123.95	119.90
2	B	2110	G	C2'-C3'-O3'	6.75	124.50	113.70
1	A	35	C	N3-C4-C5	-6.75	119.20	121.90
2	B	145	C	N3-C4-C5	-6.75	119.20	121.90
2	B	642	U	N3-C2-O2	6.75	126.92	122.20
2	B	646	U	P-O3'-C3'	6.75	127.80	119.70
2	B	721	A	C5-C6-N6	-6.75	118.30	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	817	C	N1-C2-O2	-6.75	114.85	118.90
2	B	1133	A	C4-C5-C6	6.75	120.37	117.00
2	B	1327	A	C6-C5-N7	-6.75	127.58	132.30
2	B	1922	G	C8-N9-C1'	6.75	135.77	127.00
2	B	1970	A	C6-C5-N7	-6.75	127.58	132.30
2	B	2185	U	C6-N1-C2	-6.75	116.95	121.00
2	B	2245	U	P-O3'-C3'	6.75	127.80	119.70
2	B	2876	G	C8-N9-C4	6.75	109.10	106.40
1	A	59	A	N7-C8-N9	-6.75	110.43	113.80
2	B	610	C	C4-C5-C6	-6.75	114.03	117.40
2	B	878	A	P-O5'-C5'	6.75	131.69	120.90
2	B	897	C	C6-N1-C2	-6.75	117.60	120.30
2	B	1246	A	C8-N9-C4	-6.75	103.10	105.80
2	B	1813	G	C5-C6-O6	-6.75	124.55	128.60
2	B	2027	G	N1-C2-N2	-6.75	110.13	116.20
2	B	2101	A	N1-C2-N3	6.75	132.67	129.30
2	B	2209	G	C6-N1-C2	-6.75	121.05	125.10
2	B	2331	G	O4'-C4'-C3'	-6.75	97.25	104.00
2	B	2502	G	C1'-O4'-C4'	-6.75	104.50	109.90
2	B	2865	U	N1-C2-N3	6.75	118.95	114.90
28	F	127	TYR	CZ-CE2-CD2	6.75	125.87	119.80
1	A	50	A	O4'-C1'-N9	6.75	113.60	108.20
2	B	244	A	C3'-C2'-C1'	6.75	106.90	101.50
2	B	411	G	C6-C5-N7	-6.75	126.35	130.40
2	B	2071	A	C5'-C4'-C3'	6.75	126.79	116.00
2	B	2158	A	C2-N3-C4	6.75	113.97	110.60
2	B	2763	G	C2-N3-C4	6.75	115.27	111.90
2	B	132	G	C4-C5-N7	-6.74	108.10	110.80
2	B	649	G	C4-C5-N7	-6.74	108.10	110.80
2	B	849	A	C5-C6-N6	-6.74	118.31	123.70
2	B	883	G	C5-C6-N1	-6.74	108.13	111.50
2	B	1019	U	P-O3'-C3'	6.74	127.79	119.70
2	B	1987	A	C8-N9-C4	-6.74	103.10	105.80
2	B	2346	A	N1-C2-N3	-6.74	125.93	129.30
2	B	708	G	C2-N3-C4	-6.74	108.53	111.90
2	B	498	G	C6-C5-N7	-6.74	126.36	130.40
2	B	1183	U	C5-C6-N1	6.74	126.07	122.70
2	B	1388	G	C6-N1-C2	-6.74	121.06	125.10
2	B	1658	C	N3-C4-C5	-6.74	119.20	121.90
2	B	1887	C	C4-C5-C6	6.74	120.77	117.40
2	B	1912	A	O4'-C4'-C3'	-6.74	97.26	104.00
22	3	12	ARG	CD-NE-CZ	-6.74	114.16	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	177	SER	N-CA-CB	6.74	120.61	110.50
2	B	153	U	O4'-C1'-N1	6.74	113.59	108.20
2	B	320	A	C8-N9-C4	6.74	108.50	105.80
2	B	321	U	P-O5'-C5'	6.74	131.68	120.90
2	B	647	G	C5-N7-C8	6.74	107.67	104.30
2	B	1586	A	N7-C8-N9	-6.74	110.43	113.80
2	B	1952	A	C5-N7-C8	6.74	107.27	103.90
2	B	2306	C	N3-C2-O2	6.74	126.62	121.90
2	B	2482	A	P-O3'-C3'	-6.74	111.61	119.70
2	B	530	G	C4-C5-C6	6.74	122.84	118.80
2	B	1069	A	N1-C2-N3	6.74	132.67	129.30
2	B	2284	A	C6-C5-N7	-6.74	127.58	132.30
2	B	2676	C	O4'-C1'-N1	6.74	113.59	108.20
2	B	347	A	C6-N1-C2	-6.74	114.56	118.60
2	B	732	C	O4'-C1'-N1	6.74	113.59	108.20
2	B	2116	G	N7-C8-N9	-6.74	109.73	113.10
2	B	2274	A	C5'-C4'-C3'	6.74	126.78	116.00
2	B	2330	G	C5-N7-C8	6.74	107.67	104.30
2	B	2446	G	P-O5'-C5'	-6.74	110.12	120.90
2	B	2692	G	P-O5'-C5'	-6.74	110.12	120.90
1	A	74	U	O4'-C1'-N1	6.73	113.59	108.20
1	A	82	U	C6-N1-C2	-6.73	116.96	121.00
2	B	146	A	N7-C8-N9	-6.73	110.43	113.80
2	B	266	G	C5-C6-O6	6.73	132.64	128.60
2	B	1345	C	N3-C4-C5	-6.73	119.21	121.90
2	B	585	G	O3'-P-O5'	-6.73	91.21	104.00
2	B	794	A	N1-C2-N3	6.73	132.67	129.30
2	B	1192	G	N7-C8-N9	6.73	116.47	113.10
2	B	1492	G	N9-C4-C5	6.73	108.09	105.40
2	B	1652	A	N3-C4-N9	-6.73	122.02	127.40
2	B	1943	U	P-O3'-C3'	6.73	127.78	119.70
2	B	2149	U	C3'-C2'-C1'	-6.73	96.11	101.50
2	B	773	U	N3-C2-O2	-6.73	117.49	122.20
2	B	934	U	C5-C4-O4	6.73	129.94	125.90
2	B	975	A	C4-C5-C6	6.73	120.36	117.00
2	B	992	C	C5-C4-N4	-6.73	115.49	120.20
2	B	1427	A	N9-C4-C5	-6.73	103.11	105.80
2	B	2409	G	C5-C6-O6	6.73	132.64	128.60
2	B	2461	A	C5-C6-N1	-6.73	114.33	117.70
2	B	2648	G	C5-N7-C8	6.73	107.67	104.30
2	B	2757	A	N1-C6-N6	6.73	122.64	118.60
7	M	6	ARG	NE-CZ-NH1	6.73	123.67	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	2	52	PHE	CB-CG-CD2	-6.73	116.09	120.80
1	A	103	U	C5-C4-O4	-6.73	121.86	125.90
2	B	74	A	C4-C5-N7	-6.73	107.34	110.70
2	B	532	A	C6-N1-C2	-6.73	114.56	118.60
2	B	567	U	O4'-C4'-C3'	-6.73	97.27	104.00
2	B	677	A	C5'-C4'-C3'	6.73	126.76	116.00
2	B	973	A	C5'-C4'-C3'	-6.73	105.24	116.00
2	B	988	A	O4'-C1'-N9	6.73	113.58	108.20
2	B	1067	A	C4-C5-C6	6.73	120.36	117.00
2	B	1240	U	O4'-C1'-N1	6.73	113.58	108.20
2	B	1583	A	N3-C4-C5	-6.73	122.09	126.80
2	B	2063	C	O4'-C4'-C3'	-6.73	97.27	104.00
14	D	119	ALA	N-CA-CB	6.73	119.52	110.10
2	B	83	A	O4'-C1'-N9	6.73	113.58	108.20
2	B	2355	G	N3-C2-N2	6.73	124.61	119.90
2	B	2741	A	C1'-O4'-C4'	-6.73	104.52	109.90
2	B	401	A	C5-N7-C8	6.72	107.26	103.90
2	B	972	A	O4'-C1'-N9	6.72	113.58	108.20
2	B	1043	C	C6-N1-C1'	6.72	128.87	120.80
2	B	1176	U	N1-C2-O2	-6.72	118.09	122.80
2	B	1273	U	C5-C6-N1	-6.72	119.34	122.70
2	B	1615	C	N1-C2-N3	-6.72	114.49	119.20
2	B	1782	U	O4'-C1'-N1	6.72	113.58	108.20
2	B	2055	C	P-O3'-C3'	6.72	127.77	119.70
2	B	2339	C	C5'-C4'-O4'	6.72	117.17	109.10
2	B	2374	C	C6-N1-C2	-6.72	117.61	120.30
2	B	2534	A	C5-C6-N1	-6.72	114.34	117.70
1	A	54	G	C4-C5-N7	6.72	113.49	110.80
2	B	926	G	C5'-C4'-C3'	-6.72	105.24	116.00
2	B	1116	G	P-O5'-C5'	-6.72	110.14	120.90
2	B	2262	U	N3-C2-O2	-6.72	117.49	122.20
2	B	2743	U	C2-N3-C4	-6.72	122.97	127.00
7	M	123	LYS	N-CA-C	-6.72	92.85	111.00
2	B	1383	A	C5'-C4'-C3'	6.72	126.75	116.00
2	B	1752	C	N3-C4-C5	-6.72	119.21	121.90
2	B	327	G	C3'-C2'-C1'	6.72	106.88	101.50
2	B	595	C	C5-C6-N1	-6.72	117.64	121.00
2	B	1102	C	C5-C6-N1	6.72	124.36	121.00
2	B	1474	U	O4'-C1'-N1	6.72	113.58	108.20
2	B	1832	C	O4'-C4'-C3'	-6.72	97.28	104.00
2	B	435	C	C4-C5-C6	-6.72	114.04	117.40
2	B	249	C	C2-N3-C4	-6.72	116.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	268	C	N3-C4-C5	-6.72	119.21	121.90
2	B	288	U	C2-N3-C4	6.72	131.03	127.00
2	B	455	C	C6-N1-C2	-6.72	117.61	120.30
2	B	722	A	C5'-C4'-O4'	6.72	117.16	109.10
2	B	726	G	P-O3'-C3'	6.72	127.76	119.70
2	B	757	G	P-O3'-C3'	6.72	127.76	119.70
2	B	770	G	C5'-C4'-C3'	6.72	126.75	116.00
2	B	1151	A	C2-N3-C4	-6.72	107.24	110.60
2	B	1473	G	N3-C4-N9	-6.72	121.97	126.00
2	B	1537	G	C5-C6-O6	-6.72	124.57	128.60
2	B	1689	A	N9-C4-C5	6.72	108.49	105.80
2	B	2069	G	C2-N3-C4	6.72	115.26	111.90
2	B	2294	G	C8-N9-C4	-6.72	103.71	106.40
2	B	584	C	O4'-C1'-N1	6.71	113.57	108.20
2	B	773	U	N3-C4-O4	6.71	124.10	119.40
2	B	1012	U	O4'-C1'-N1	6.71	113.57	108.20
2	B	1213	A	N1-C6-N6	6.71	122.63	118.60
2	B	1239	G	C2-N3-C4	6.71	115.26	111.90
2	B	1253	A	N3-C4-C5	-6.71	122.10	126.80
2	B	1312	U	OP1-P-OP2	-6.71	109.53	119.60
2	B	1906	G	C4-C5-C6	6.71	122.83	118.80
2	B	1924	C	C2-N1-C1'	6.71	126.19	118.80
2	B	1930	G	C5-C6-N1	-6.71	108.14	111.50
2	B	2078	C	C5-C4-N4	-6.71	115.50	120.20
2	B	2116	G	O4'-C1'-N9	6.71	113.57	108.20
2	B	51	G	C2-N3-C4	6.71	115.26	111.90
2	B	1576	U	C5-C6-N1	6.71	126.06	122.70
2	B	2053	G	C4-C5-C6	6.71	122.83	118.80
2	B	2181	U	O4'-C1'-N1	6.71	113.57	108.20
2	B	2474	U	C5-C4-O4	-6.71	121.87	125.90
2	B	266	G	N9-C4-C5	6.71	108.08	105.40
2	B	473	G	C5-N7-C8	-6.71	100.94	104.30
2	B	812	C	N1-C2-N3	6.71	123.90	119.20
2	B	1292	G	N7-C8-N9	6.71	116.46	113.10
2	B	1300	G	N1-C2-N3	-6.71	119.87	123.90
2	B	1357	C	N3-C4-N4	6.71	122.70	118.00
2	B	796	C	C4-C5-C6	6.71	120.75	117.40
2	B	1323	C	C2-N3-C4	6.71	123.25	119.90
2	B	1423	G	C5-N7-C8	-6.71	100.94	104.30
2	B	2053	G	C4-C5-N7	6.71	113.48	110.80
2	B	2378	A	C4-C5-C6	6.71	120.36	117.00
1	A	22	U	N1-C2-N3	6.71	118.92	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	117	G	N9-C4-C5	6.71	108.08	105.40
2	B	1741	C	C6-N1-C2	-6.71	117.62	120.30
2	B	1777	U	N3-C4-O4	6.71	124.10	119.40
2	B	1805	A	N9-C4-C5	-6.71	103.12	105.80
2	B	298	G	N1-C6-O6	6.71	123.92	119.90
2	B	914	G	C6-C5-N7	-6.71	126.38	130.40
2	B	1717	A	N1-C2-N3	6.71	132.65	129.30
2	B	1029	A	N9-C4-C5	6.71	108.48	105.80
2	B	2702	G	C5-C6-O6	6.71	132.62	128.60
1	A	29	A	C8-N9-C4	6.70	108.48	105.80
2	B	371	A	C3'-C2'-C1'	-6.70	96.14	101.50
2	B	2042	A	N7-C8-N9	-6.70	110.45	113.80
2	B	2088	A	P-O5'-C5'	-6.70	110.18	120.90
2	B	2289	G	N3-C4-C5	6.70	131.95	128.60
2	B	755	U	P-O5'-C5'	6.70	131.62	120.90
2	B	812	C	N3-C4-C5	-6.70	119.22	121.90
2	B	1553	A	O5'-C5'-C4'	6.70	124.43	111.70
2	B	2538	C	C4-C5-C6	-6.70	114.05	117.40
2	B	10	A	N7-C8-N9	-6.70	110.45	113.80
2	B	533	G	C8-N9-C4	-6.70	103.72	106.40
2	B	998	C	C1'-O4'-C4'	-6.70	104.54	109.90
2	B	1139	G	P-O3'-C3'	-6.70	111.66	119.70
2	B	1821	A	C5'-C4'-C3'	6.70	126.72	116.00
2	B	2160	C	P-O5'-C5'	-6.70	110.18	120.90
23	5	130	VAL	CA-CB-CG2	6.70	120.95	110.90
1	A	37	C	N3-C4-N4	6.70	122.69	118.00
2	B	164	C	N3-C4-C5	-6.70	119.22	121.90
2	B	744	U	N1-C2-N3	6.70	118.92	114.90
2	B	934	U	P-O3'-C3'	-6.70	111.66	119.70
2	B	962	G	C1'-O4'-C4'	-6.70	104.54	109.90
2	B	1074	G	P-O5'-C5'	6.70	131.62	120.90
2	B	1815	A	C5-C6-N6	-6.70	118.34	123.70
2	B	2288	A	N1-C6-N6	6.70	122.62	118.60
2	B	2472	G	C4-C5-C6	6.70	122.82	118.80
2	B	2782	G	C6-N1-C2	-6.70	121.08	125.10
2	B	302	C	C1'-O4'-C4'	-6.70	104.54	109.90
2	B	2425	A	C8-N9-C4	-6.70	103.12	105.80
2	B	131	A	C5'-C4'-C3'	6.70	126.71	116.00
2	B	197	A	C5-C6-N1	-6.70	114.35	117.70
2	B	856	G	P-O3'-C3'	6.70	127.73	119.70
2	B	1272	A	N3-C4-N9	-6.70	122.04	127.40
2	B	1573	G	C6-N1-C2	-6.70	121.08	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1737	G	N1-C2-N3	-6.70	119.88	123.90
2	B	2125	G	O4'-C1'-N9	6.70	113.56	108.20
2	B	2598	A	N1-C2-N3	6.70	132.65	129.30
2	B	2604	U	C4'-C3'-C2'	-6.70	95.90	102.60
2	B	1436	G	C4-N9-C1'	-6.69	117.80	126.50
2	B	1581	G	O4'-C1'-N9	6.69	113.56	108.20
1	A	47	C	C5-C6-N1	6.69	124.35	121.00
1	A	75	G	N1-C2-N2	6.69	122.22	116.20
1	A	83	G	C1'-O4'-C4'	-6.69	104.55	109.90
2	B	327	G	C4'-C3'-C2'	-6.69	95.91	102.60
2	B	398	C	C5-C4-N4	-6.69	115.52	120.20
2	B	607	U	O4'-C1'-N1	6.69	113.56	108.20
2	B	810	U	C5-C6-N1	6.69	126.05	122.70
2	B	1679	A	C5-N7-C8	6.69	107.25	103.90
2	B	2243	U	C2-N1-C1'	6.69	125.73	117.70
2	B	2630	G	N3-C4-C5	-6.69	125.25	128.60
2	B	2732	G	P-O3'-C3'	6.69	127.73	119.70
2	B	1302	A	C2-N3-C4	-6.69	107.25	110.60
2	B	1821	A	C6-N1-C2	-6.69	114.59	118.60
21	Y	76	ARG	NE-CZ-NH1	6.69	123.65	120.30
23	5	212	VAL	CA-CB-CG2	-6.69	100.86	110.90
2	B	301	G	N9-C4-C5	6.69	108.08	105.40
2	B	432	A	C5-C6-N1	-6.69	114.36	117.70
2	B	1073	A	N1-C6-N6	6.69	122.61	118.60
2	B	1475	G	N1-C2-N2	-6.69	110.18	116.20
18	W	19	ARG	NE-CZ-NH1	-6.69	116.95	120.30
2	B	415	A	C5-N7-C8	6.69	107.24	103.90
2	B	441	U	N3-C4-O4	6.69	124.08	119.40
2	B	574	A	O5'-P-OP1	-6.69	99.68	105.70
2	B	687	C	C5-C4-N4	6.69	124.88	120.20
2	B	1656	C	N3-C4-N4	6.69	122.68	118.00
2	B	2161	C	C5-C4-N4	-6.69	115.52	120.20
2	B	2258	C	N3-C4-C5	-6.69	119.22	121.90
2	B	2677	G	N1-C6-O6	6.69	123.91	119.90
2	B	1382	G	N1-C6-O6	6.69	123.91	119.90
2	B	1988	G	O4'-C1'-N9	6.69	113.55	108.20
2	B	2159	G	N1-C2-N3	-6.69	119.89	123.90
2	B	2450	A	C4-C5-C6	6.69	120.34	117.00
2	B	2587	A	C2-N3-C4	-6.69	107.26	110.60
2	B	974	G	N1-C6-O6	6.68	123.91	119.90
2	B	1028	A	N1-C6-N6	6.68	122.61	118.60
2	B	1124	G	O4'-C1'-N9	6.68	113.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1310	G	N1-C2-N3	-6.68	119.89	123.90
2	B	1377	G	O4'-C1'-N9	-6.68	102.85	108.20
2	B	1554	U	P-O5'-C5'	-6.68	110.21	120.90
2	B	2469	A	C2-N3-C4	6.68	113.94	110.60
2	B	2523	G	N9-C4-C5	-6.68	102.73	105.40
29	G	6	ALA	N-CA-CB	6.68	119.46	110.10
2	B	1939	U	N3-C4-O4	6.68	124.08	119.40
2	B	2191	A	O4'-C1'-N9	6.68	113.55	108.20
2	B	427	U	C4-C5-C6	6.68	123.71	119.70
2	B	965	C	C2-N3-C4	6.68	123.24	119.90
2	B	1319	C	C4-C5-C6	6.68	120.74	117.40
2	B	2208	C	C2-N3-C4	6.68	123.24	119.90
2	B	2329	U	C5'-C4'-C3'	6.68	126.69	116.00
2	B	2590	A	C5-C6-N6	-6.68	118.36	123.70
1	A	115	A	N3-C4-C5	-6.68	122.12	126.80
2	B	21	A	C4-C5-C6	6.68	120.34	117.00
2	B	302	C	C2-N3-C4	6.68	123.24	119.90
2	B	1259	G	N3-C2-N2	6.68	124.58	119.90
2	B	1333	G	C5-C6-O6	-6.68	124.59	128.60
2	B	2013	A	C5'-C4'-O4'	6.68	117.11	109.10
2	B	2017	U	O4'-C1'-N1	6.68	113.54	108.20
7	M	80	VAL	N-CA-C	-6.68	92.97	111.00
10	P	100	ARG	N-CA-CB	6.68	122.62	110.60
2	B	107	G	N3-C4-N9	6.68	130.00	126.00
2	B	278	A	C2-N3-C4	-6.68	107.26	110.60
2	B	336	C	C2-N3-C4	-6.68	116.56	119.90
2	B	563	A	O4'-C1'-N9	6.68	113.54	108.20
2	B	1271	G	N1-C2-N3	-6.68	119.89	123.90
2	B	1731	G	N3-C4-C5	-6.68	125.26	128.60
2	B	2177	C	P-O5'-C5'	-6.68	110.22	120.90
2	B	1208	C	N1-C2-N3	6.67	123.87	119.20
2	B	2115	G	N1-C2-N3	-6.67	119.89	123.90
2	B	2457	U	C3'-C2'-C1'	-6.67	96.16	101.50
2	B	2565	A	C5-N7-C8	6.67	107.24	103.90
2	B	2808	G	N9-C4-C5	6.67	108.07	105.40
2	B	2858	C	O4'-C1'-N1	6.67	113.54	108.20
2	B	233	A	C4-C5-C6	6.67	120.34	117.00
2	B	468	G	O4'-C1'-N9	6.67	113.54	108.20
2	B	914	G	N1-C6-O6	6.67	123.90	119.90
2	B	1271	G	N3-C2-N2	6.67	124.57	119.90
2	B	1286	A	C5-C6-N1	-6.67	114.36	117.70
2	B	1964	G	O4'-C1'-N9	6.67	113.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	21	G	C4-C5-N7	-6.67	108.13	110.80
2	B	466	A	P-O5'-C5'	-6.67	110.22	120.90
2	B	663	G	C3'-C2'-C1'	6.67	106.84	101.50
2	B	1608	A	C5-C6-N6	-6.67	118.36	123.70
2	B	1776	G	C5-N7-C8	6.67	107.64	104.30
2	B	2128	G	C4-C5-C6	6.67	122.80	118.80
2	B	2207	C	C2-N3-C4	6.67	123.24	119.90
2	B	2660	A	N1-C2-N3	6.67	132.64	129.30
15	T	25	GLU	N-CA-C	-6.67	92.99	111.00
19	X	1	MET	CA-CB-CG	6.67	124.64	113.30
2	B	284	U	C5-C6-N1	-6.67	119.36	122.70
2	B	1066	U	N3-C4-O4	6.67	124.07	119.40
2	B	174	U	C5-C6-N1	6.67	126.03	122.70
2	B	225	C	O4'-C1'-N1	6.67	113.53	108.20
2	B	452	G	N7-C8-N9	6.67	116.43	113.10
2	B	464	U	P-O3'-C3'	6.67	127.70	119.70
2	B	1057	A	O4'-C4'-C3'	-6.67	97.33	104.00
2	B	1203	U	N1-C2-O2	6.67	127.47	122.80
2	B	1363	C	O4'-C1'-N1	6.67	113.53	108.20
2	B	1428	C	O4'-C1'-N1	-6.67	102.86	108.20
2	B	1571	A	C5-C6-N6	-6.67	118.36	123.70
2	B	1697	G	N1-C2-N2	-6.67	110.20	116.20
2	B	1751	U	C5-C4-O4	-6.67	121.90	125.90
2	B	1806	C	N3-C2-O2	-6.67	117.23	121.90
2	B	1975	G	C5'-C4'-C3'	-6.67	105.33	116.00
2	B	1989	G	N7-C8-N9	-6.67	109.77	113.10
2	B	2809	A	O4'-C1'-N9	6.67	113.53	108.20
2	B	2844	G	N9-C4-C5	-6.67	102.73	105.40
2	B	2864	G	C4-C5-C6	6.67	122.80	118.80
2	B	1006	C	C1'-O4'-C4'	-6.67	104.57	109.90
2	B	1060	U	O4'-C1'-N1	6.67	113.53	108.20
2	B	1384	A	P-O3'-C3'	6.67	127.70	119.70
2	B	2544	G	C8-N9-C4	-6.67	103.73	106.40
2	B	2599	G	N3-C4-C5	-6.67	125.27	128.60
2	B	2725	A	C5-C6-N6	-6.67	118.37	123.70
2	B	73	A	C5'-C4'-C3'	-6.67	105.34	116.00
2	B	701	G	P-O5'-C5'	-6.67	110.24	120.90
2	B	910	A	C4-C5-N7	-6.67	107.37	110.70
2	B	980	A	P-O3'-C3'	6.67	127.70	119.70
2	B	895	U	C2-N3-C4	-6.66	123.00	127.00
2	B	971	G	C3'-C2'-C1'	6.66	106.83	101.50
2	B	1228	G	N1-C6-O6	6.66	123.90	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2008	C	C5-C4-N4	-6.66	115.54	120.20
13	S	57	ASN	CB-CA-C	-6.66	97.07	110.40
17	U	94	PHE	N-CA-CB	6.66	122.59	110.60
2	B	222	A	N9-C4-C5	-6.66	103.14	105.80
2	B	367	G	O4'-C1'-N9	6.66	113.53	108.20
2	B	1302	A	O3'-P-O5'	-6.66	91.34	104.00
1	A	13	G	C4-C5-N7	6.66	113.46	110.80
2	B	178	G	C5'-C4'-C3'	6.66	126.66	116.00
2	B	527	C	P-O3'-C3'	-6.66	111.71	119.70
2	B	710	U	N1-C2-N3	6.66	118.90	114.90
2	B	938	G	C6-C5-N7	-6.66	126.40	130.40
2	B	1408	G	C6-N1-C2	-6.66	121.10	125.10
2	B	1636	U	C5-C4-O4	-6.66	121.90	125.90
2	B	1711	A	C5-C6-N1	-6.66	114.37	117.70
3	0	45	PHE	CB-CG-CD2	6.66	125.46	120.80
2	B	110	G	C4'-C3'-C2'	-6.66	95.94	102.60
2	B	110	G	N3-C4-C5	-6.66	125.27	128.60
2	B	299	A	N1-C2-N3	6.66	132.63	129.30
2	B	301	G	C8-N9-C4	-6.66	103.74	106.40
2	B	672	C	O4'-C1'-N1	6.66	113.53	108.20
2	B	681	G	O4'-C1'-N9	6.66	113.53	108.20
2	B	961	C	C6-N1-C2	-6.66	117.64	120.30
2	B	980	A	C5-C6-N1	-6.66	114.37	117.70
2	B	1125	G	C6-C5-N7	-6.66	126.41	130.40
2	B	1638	C	P-O3'-C3'	-6.66	111.71	119.70
2	B	1707	G	C6-N1-C2	6.66	129.09	125.10
2	B	1710	G	O4'-C1'-N9	6.66	113.53	108.20
2	B	1914	C	C5-C4-N4	-6.66	115.54	120.20
2	B	1923	U	O4'-C1'-N1	6.66	113.53	108.20
2	B	2850	A	C4-C5-C6	6.66	120.33	117.00
2	B	791	C	N3-C4-N4	6.66	122.66	118.00
2	B	1623	G	C4'-C3'-C2'	6.66	109.26	102.60
2	B	2844	G	C6-N1-C2	6.66	129.09	125.10
2	B	49	A	N1-C6-N6	6.66	122.59	118.60
2	B	70	G	C6-C5-N7	-6.66	126.41	130.40
2	B	335	C	N1-C2-N3	-6.66	114.54	119.20
2	B	359	G	N1-C6-O6	6.66	123.89	119.90
2	B	1086	A	O4'-C1'-N9	6.66	113.52	108.20
2	B	1002	G	P-O5'-C5'	6.65	131.55	120.90
2	B	2597	G	O4'-C1'-N9	6.65	113.52	108.20
16	2	21	ALA	N-CA-CB	6.65	119.42	110.10
2	B	123	G	N3-C4-C5	6.65	131.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	209	C	N3-C4-N4	6.65	122.66	118.00
2	B	563	A	C6-N1-C2	-6.65	114.61	118.60
2	B	1196	C	N1-C2-O2	-6.65	114.91	118.90
2	B	1762	A	N3-C4-C5	-6.65	122.14	126.80
2	B	1896	G	O4'-C1'-N9	6.65	113.52	108.20
2	B	2253	G	C1'-O4'-C4'	6.65	115.22	109.90
2	B	2569	G	N9-C4-C5	6.65	108.06	105.40
2	B	2708	G	O4'-C1'-N9	6.65	113.52	108.20
2	B	2727	A	C4-C5-C6	6.65	120.33	117.00
2	B	2795	C	C3'-C2'-C1'	-6.65	96.18	101.50
18	W	35	GLU	OE1-CD-OE2	6.65	131.28	123.30
2	B	232	G	C5-N7-C8	6.65	107.63	104.30
2	B	540	C	C6-N1-C2	-6.65	117.64	120.30
2	B	2183	A	O5'-C5'-C4'	-6.65	99.07	111.70
2	B	2688	G	N3-C4-N9	-6.65	122.01	126.00
2	B	2901	C	C5-C4-N4	-6.65	115.54	120.20
2	B	1059	G	C4-C5-C6	6.65	122.79	118.80
2	B	1221	C	C5'-C4'-C3'	6.65	126.64	116.00
2	B	1257	C	O4'-C1'-N1	6.65	113.52	108.20
2	B	1957	C	N3-C4-N4	6.65	122.66	118.00
2	B	2702	G	C6-C5-N7	-6.65	126.41	130.40
2	B	87	U	N3-C4-C5	6.65	118.59	114.60
2	B	1443	U	C5-C6-N1	6.65	126.02	122.70
2	B	1513	U	O4'-C1'-N1	6.65	113.52	108.20
2	B	1855	U	O4'-C1'-N1	6.65	113.52	108.20
2	B	2455	G	C6-N1-C2	-6.65	121.11	125.10
2	B	1763	G	C5-N7-C8	-6.65	100.98	104.30
2	B	2339	C	N3-C4-N4	6.64	122.65	118.00
2	B	2552	U	C2-N1-C1'	6.64	125.67	117.70
2	B	2682	A	C4-C5-N7	-6.64	107.38	110.70
2	B	2877	G	C6-N1-C2	6.64	129.09	125.10
2	B	951	C	P-O5'-C5'	-6.64	110.27	120.90
2	B	1171	G	O4'-C1'-N9	6.64	113.52	108.20
2	B	1278	C	C5-C4-N4	6.64	124.85	120.20
2	B	1650	A	C6-N1-C2	-6.64	114.61	118.60
2	B	2249	U	N3-C4-C5	-6.64	110.61	114.60
2	B	2415	G	C5-C6-N1	-6.64	108.18	111.50
2	B	2487	G	C6-C5-N7	-6.64	126.42	130.40
2	B	2545	G	C5-N7-C8	6.64	107.62	104.30
2	B	1359	A	C6-N1-C2	-6.64	114.61	118.60
2	B	1566	A	C4-C5-C6	6.64	120.32	117.00
2	B	1769	U	N3-C2-O2	6.64	126.85	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1803	A	C6-C5-N7	-6.64	127.65	132.30
2	B	2303	G	C6-C5-N7	-6.64	126.42	130.40
2	B	169	G	N7-C8-N9	6.64	116.42	113.10
2	B	303	G	P-O3'-C3'	6.64	127.67	119.70
2	B	917	A	P-O3'-C3'	-6.64	111.73	119.70
2	B	984	A	N1-C6-N6	6.64	122.58	118.60
2	B	1213	A	O5'-C5'-C4'	-6.64	99.08	111.70
2	B	1540	G	N1-C2-N3	-6.64	119.92	123.90
2	B	775	G	N1-C6-O6	6.64	123.88	119.90
2	B	1057	A	N9-C4-C5	6.64	108.45	105.80
2	B	1703	G	C5'-C4'-C3'	-6.64	105.38	116.00
2	B	1761	C	N3-C4-C5	-6.64	119.25	121.90
2	B	2543	G	C5-C6-N1	6.64	114.82	111.50
2	B	2634	A	N9-C4-C5	6.64	108.45	105.80
2	B	2782	G	C6-C5-N7	-6.64	126.42	130.40
1	A	7	G	P-O3'-C3'	-6.64	111.74	119.70
1	A	10	G	C6-N1-C2	6.64	129.08	125.10
2	B	320	A	C1'-O4'-C4'	6.64	115.21	109.90
2	B	1377	G	N1-C2-N2	6.64	122.17	116.20
2	B	1719	G	C8-N9-C4	6.64	109.05	106.40
2	B	1998	A	C5-C6-N1	-6.64	114.38	117.70
2	B	2009	A	C4-C5-N7	-6.64	107.38	110.70
2	B	2012	G	N3-C4-N9	-6.64	122.02	126.00
2	B	2740	A	N7-C8-N9	-6.64	110.48	113.80
2	B	187	G	C5-C6-N1	-6.63	108.18	111.50
2	B	878	A	C5-N7-C8	6.63	107.22	103.90
2	B	912	C	O4'-C4'-C3'	-6.63	97.37	104.00
2	B	1125	G	N1-C6-O6	6.63	123.88	119.90
2	B	1183	U	O4'-C1'-N1	6.63	113.51	108.20
2	B	1416	G	O4'-C1'-N9	6.63	113.51	108.20
2	B	1588	G	N7-C8-N9	6.63	116.42	113.10
2	B	1666	G	N1-C2-N3	-6.63	119.92	123.90
2	B	2096	C	N1-C2-O2	-6.63	114.92	118.90
2	B	2129	C	O4'-C1'-C2'	-6.63	99.17	105.80
2	B	2228	G	C6-C5-N7	-6.63	126.42	130.40
2	B	2280	G	C5-C6-O6	-6.63	124.62	128.60
2	B	2294	G	P-O3'-C3'	6.63	127.66	119.70
2	B	2559	C	C1'-O4'-C4'	-6.63	104.59	109.90
2	B	215	G	C4-C5-N7	-6.63	108.15	110.80
2	B	1464	G	C6-N1-C2	-6.63	121.12	125.10
2	B	1528	A	C1'-O4'-C4'	-6.63	104.59	109.90
2	B	1850	G	P-O5'-C5'	6.63	131.51	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1892	C	C5-C6-N1	6.63	124.32	121.00
2	B	1923	U	C5-C6-N1	-6.63	119.38	122.70
2	B	1941	C	C4-C5-C6	6.63	120.72	117.40
2	B	2671	G	N7-C8-N9	-6.63	109.78	113.10
13	S	84	ARG	NE-CZ-NH1	6.63	123.62	120.30
1	A	41	G	C5-C6-O6	-6.63	124.62	128.60
2	B	332	A	O5'-P-OP2	6.63	118.66	110.70
2	B	400	G	C5-N7-C8	6.63	107.62	104.30
2	B	644	A	O4'-C1'-N9	6.63	113.50	108.20
2	B	662	G	O4'-C1'-N9	6.63	113.50	108.20
2	B	1302	A	N9-C4-C5	-6.63	103.15	105.80
2	B	1832	C	N3-C2-O2	-6.63	117.26	121.90
2	B	214	G	C8-N9-C4	-6.63	103.75	106.40
2	B	679	C	C3'-C2'-C1'	6.63	106.80	101.50
2	B	991	C	P-O5'-C5'	-6.63	110.30	120.90
2	B	1418	G	C6-C5-N7	-6.63	126.42	130.40
2	B	2430	A	N3-C4-N9	6.63	132.70	127.40
2	B	2474	U	N1-C2-O2	-6.63	118.16	122.80
28	F	177	ARG	NE-CZ-NH2	-6.63	116.99	120.30
1	A	51	G	C3'-C2'-C1'	-6.63	96.20	101.50
2	B	232	G	C4-C5-N7	-6.63	108.15	110.80
2	B	501	A	C6-C5-N7	-6.63	127.66	132.30
2	B	1266	G	C4-N9-C1'	-6.63	117.89	126.50
2	B	2290	G	C5'-C4'-C3'	-6.63	105.40	116.00
2	B	2757	A	C6-C5-N7	-6.63	127.66	132.30
5	L	29	LYS	N-CA-CB	6.63	122.53	110.60
2	B	168	G	N9-C4-C5	-6.62	102.75	105.40
2	B	1022	G	C4-C5-C6	6.62	122.78	118.80
2	B	1171	G	C1'-O4'-C4'	6.62	115.20	109.90
2	B	2070	A	C5-C6-N6	-6.62	118.40	123.70
2	B	2224	G	C8-N9-C4	-6.62	103.75	106.40
2	B	98	G	C5-N7-C8	6.62	107.61	104.30
2	B	240	C	C5-C4-N4	-6.62	115.56	120.20
2	B	388	G	C4-N9-C1'	6.62	135.11	126.50
2	B	595	C	C2-N3-C4	-6.62	116.59	119.90
2	B	704	G	C6-C5-N7	-6.62	126.43	130.40
2	B	754	U	N3-C4-O4	6.62	124.04	119.40
2	B	1427	A	C5'-C4'-C3'	6.62	126.60	116.00
2	B	2167	U	O3'-P-O5'	6.62	116.58	104.00
2	B	2205	A	C8-N9-C4	6.62	108.45	105.80
2	B	2585	U	N3-C2-O2	-6.62	117.56	122.20
2	B	2692	G	N3-C2-N2	6.62	124.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2790	U	N3-C4-O4	6.62	124.04	119.40
2	B	2886	A	N7-C8-N9	-6.62	110.49	113.80
2	B	175	G	O3'-P-O5'	6.62	116.58	104.00
2	B	766	U	N3-C4-C5	-6.62	110.63	114.60
2	B	1370	C	O4'-C1'-N1	6.62	113.50	108.20
2	B	1461	C	O4'-C1'-N1	6.62	113.50	108.20
2	B	1792	G	C6-N1-C2	6.62	129.07	125.10
2	B	1885	A	O4'-C1'-N9	6.62	113.50	108.20
2	B	2267	A	N3-C4-C5	-6.62	122.17	126.80
20	E	40	ARG	NE-CZ-NH2	6.62	123.61	120.30
28	F	82	TYR	CG-CD1-CE1	6.62	126.60	121.30
2	B	376	G	N1-C6-O6	6.62	123.87	119.90
2	B	843	G	C5-C6-N1	-6.62	108.19	111.50
2	B	1405	U	P-O5'-C5'	-6.62	110.31	120.90
2	B	1515	A	C4-C5-C6	6.62	120.31	117.00
2	B	176	A	C4-C5-N7	-6.62	107.39	110.70
2	B	989	G	N1-C2-N2	-6.62	110.24	116.20
2	B	1218	G	C5-C6-N1	-6.62	108.19	111.50
2	B	1381	G	N3-C2-N2	6.62	124.53	119.90
2	B	1674	G	N1-C2-N3	-6.62	119.93	123.90
2	B	1826	G	C4-C5-N7	-6.62	108.15	110.80
2	B	2748	A	C2-N3-C4	6.62	113.91	110.60
2	B	2815	C	C2-N3-C4	6.62	123.21	119.90
2	B	930	G	N1-C2-N3	-6.62	119.93	123.90
2	B	1022	G	O5'-P-OP1	-6.62	99.75	105.70
2	B	1272	A	C5-C6-N1	-6.62	114.39	117.70
2	B	1748	C	C5'-C4'-C3'	-6.62	105.41	116.00
2	B	2336	A	P-O5'-C5'	6.62	131.48	120.90
2	B	2380	C	C5-C6-N1	6.62	124.31	121.00
2	B	2842	G	P-O3'-C3'	-6.62	111.76	119.70
2	B	504	A	C8-N9-C4	-6.61	103.16	105.80
2	B	507	A	N3-C4-C5	-6.61	122.17	126.80
2	B	709	U	C5-C4-O4	-6.61	121.93	125.90
2	B	996	A	N9-C1'-C2'	-6.61	104.72	112.00
2	B	1057	A	N1-C6-N6	6.61	122.57	118.60
2	B	1562	U	C2-N3-C4	-6.61	123.03	127.00
2	B	230	G	N3-C2-N2	6.61	124.53	119.90
2	B	894	U	O4'-C1'-N1	6.61	113.49	108.20
2	B	1324	G	C4-C5-N7	6.61	113.44	110.80
2	B	1406	U	C6-N1-C2	-6.61	117.03	121.00
2	B	1819	A	O4'-C1'-N9	6.61	113.49	108.20
2	B	186	G	O4'-C1'-N9	6.61	113.49	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1562	U	C5-C4-O4	-6.61	121.94	125.90
32	J	55	ILE	N-CA-C	-6.61	93.16	111.00
2	B	153	U	C4-C5-C6	-6.61	115.73	119.70
2	B	406	G	C4-C5-C6	6.61	122.76	118.80
2	B	533	G	P-O5'-C5'	-6.61	110.33	120.90
2	B	560	C	C4-C5-C6	-6.61	114.10	117.40
2	B	1204	A	C6-C5-N7	-6.61	127.67	132.30
2	B	1361	G	N1-C2-N3	-6.61	119.94	123.90
2	B	1889	A	C5-C6-N6	-6.61	118.41	123.70
2	B	135	U	C2'-C3'-O3'	6.61	124.27	113.70
2	B	232	G	N3-C2-N2	6.61	124.52	119.90
2	B	516	C	P-O3'-C3'	-6.61	111.77	119.70
2	B	1655	A	C5-C6-N6	-6.61	118.42	123.70
2	B	2587	A	C6-C5-N7	-6.61	127.68	132.30
2	B	2639	A	C4-C5-C6	6.61	120.30	117.00
2	B	1359	A	N1-C6-N6	6.60	122.56	118.60
2	B	1749	A	N3-C4-N9	6.60	132.68	127.40
1	A	12	C	N1-C2-N3	-6.60	114.58	119.20
2	B	166	U	O4'-C1'-N1	6.60	113.48	108.20
2	B	636	G	C4-C5-N7	6.60	113.44	110.80
2	B	810	U	O3'-P-O5'	6.60	116.54	104.00
2	B	875	G	P-O3'-C3'	6.60	127.62	119.70
2	B	1474	U	C5'-C4'-C3'	6.60	126.56	116.00
2	B	1902	C	C1'-O4'-C4'	-6.60	104.62	109.90
2	B	1979	U	N3-C4-C5	6.60	118.56	114.60
2	B	2204	G	C8-N9-C4	-6.60	103.76	106.40
2	B	2328	A	N3-C4-C5	-6.60	122.18	126.80
2	B	2375	G	N3-C4-C5	6.60	131.90	128.60
5	L	46	VAL	CG1-CB-CG2	-6.60	100.33	110.90
11	Q	10	ARG	NE-CZ-NH2	-6.60	117.00	120.30
1	A	28	C	C2-N3-C4	6.60	123.20	119.90
2	B	886	A	C5-C6-N6	-6.60	118.42	123.70
2	B	1688	U	O4'-C1'-N1	6.60	113.48	108.20
2	B	2038	G	C4-C5-C6	6.60	122.76	118.80
2	B	2811	G	N3-C4-N9	6.60	129.96	126.00
2	B	1331	G	C5'-C4'-C3'	-6.60	105.44	116.00
2	B	606	U	N3-C4-O4	6.60	124.02	119.40
2	B	656	G	N9-C4-C5	-6.60	102.76	105.40
2	B	1055	G	C5-C6-O6	-6.60	124.64	128.60
2	B	1989	G	OP1-P-OP2	-6.60	109.70	119.60
2	B	2163	A	C5-C6-N1	-6.60	114.40	117.70
28	F	166	ARG	NE-CZ-NH1	6.60	123.60	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	101	A	O5'-C5'-C4'	-6.60	99.17	111.70
2	B	240	C	O4'-C1'-N1	6.60	113.48	108.20
2	B	1700	A	O4'-C1'-N9	6.60	113.48	108.20
2	B	2406	A	N1-C2-N3	-6.60	126.00	129.30
2	B	2721	A	P-O3'-C3'	-6.60	111.78	119.70
2	B	782	A	C5'-C4'-C3'	-6.59	105.45	116.00
2	B	2152	G	N7-C8-N9	-6.59	109.80	113.10
2	B	2538	C	N3-C2-O2	-6.59	117.28	121.90
2	B	428	A	N7-C8-N9	6.59	117.10	113.80
2	B	830	G	OP1-P-OP2	-6.59	109.71	119.60
2	B	1226	A	C5-N7-C8	6.59	107.20	103.90
2	B	1455	G	C5-C6-O6	-6.59	124.64	128.60
2	B	2400	G	C8-N9-C4	6.59	109.04	106.40
2	B	2799	A	O4'-C1'-C2'	-6.59	99.21	105.80
2	B	189	G	C5-C6-O6	6.59	132.56	128.60
2	B	954	G	C5'-C4'-C3'	6.59	126.55	116.00
2	B	1248	G	P-O5'-C5'	6.59	131.45	120.90
2	B	1497	U	P-O5'-C5'	6.59	131.45	120.90
2	B	1675	C	C2-N3-C4	6.59	123.20	119.90
2	B	2639	A	P-O5'-C5'	-6.59	110.36	120.90
2	B	2664	G	N3-C2-N2	6.59	124.51	119.90
2	B	2689	U	C6-N1-C1'	-6.59	111.97	121.20
2	B	537	G	C5-C6-N1	-6.59	108.20	111.50
2	B	728	G	C6-N1-C2	-6.59	121.15	125.10
2	B	1067	A	N3-C4-N9	6.59	132.67	127.40
2	B	1207	C	C5-C6-N1	-6.59	117.70	121.00
2	B	1448	G	C4-C5-C6	6.59	122.75	118.80
2	B	2394	C	C2-N3-C4	6.59	123.19	119.90
2	B	2631	G	N3-C2-N2	6.59	124.51	119.90
2	B	2641	G	C4-C5-C6	6.59	122.75	118.80
2	B	2815	C	C4-C5-C6	6.59	120.69	117.40
2	B	238	C	C5-C4-N4	-6.59	115.59	120.20
2	B	468	G	C4-C5-N7	6.59	113.44	110.80
2	B	663	G	N9-C4-C5	-6.59	102.77	105.40
2	B	1477	A	N7-C8-N9	-6.59	110.51	113.80
2	B	1578	U	C6-N1-C2	-6.59	117.05	121.00
2	B	2032	G	C6-N1-C2	6.59	129.05	125.10
2	B	2743	U	O4'-C1'-N1	6.59	113.47	108.20
2	B	524	G	C5-C6-N1	6.59	114.79	111.50
2	B	1737	G	C6-C5-N7	-6.59	126.45	130.40
2	B	1783	A	C5'-C4'-O4'	6.59	117.00	109.10
2	B	1803	A	C5-N7-C8	6.59	107.19	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	647	G	N1-C2-N2	-6.58	110.27	116.20
2	B	710	U	P-O3'-C3'	-6.58	111.80	119.70
2	B	2233	U	O4'-C1'-C2'	6.58	113.53	107.60
2	B	172	A	C5-N7-C8	6.58	107.19	103.90
2	B	373	U	P-O5'-C5'	6.58	131.43	120.90
2	B	1265	A	C4-C5-C6	6.58	120.29	117.00
2	B	1457	U	C5'-C4'-C3'	-6.58	105.47	116.00
2	B	2446	G	P-O3'-C3'	6.58	127.60	119.70
2	B	2723	C	O4'-C1'-N1	6.58	113.47	108.20
1	A	85	G	N1-C2-N2	-6.58	110.28	116.20
2	B	329	G	O4'-C1'-N9	6.58	113.47	108.20
2	B	1014	A	N7-C8-N9	-6.58	110.51	113.80
2	B	1107	G	C2-N3-C4	-6.58	108.61	111.90
2	B	1504	A	C8-N9-C4	-6.58	103.17	105.80
2	B	2024	G	C2-N3-C4	6.58	115.19	111.90
2	B	2298	A	C5-C6-N6	-6.58	118.44	123.70
2	B	2671	G	C5'-C4'-C3'	6.58	126.53	116.00
2	B	2124	G	C4-N9-C1'	-6.58	117.95	126.50
1	A	39	A	C4-C5-N7	-6.58	107.41	110.70
2	B	175	G	O4'-C1'-N9	6.58	113.46	108.20
2	B	911	A	N1-C2-N3	6.58	132.59	129.30
2	B	967	U	C2-N3-C4	-6.58	123.05	127.00
2	B	1723	G	C6-C5-N7	-6.58	126.45	130.40
2	B	2168	G	N9-C1'-C2'	-6.58	104.76	112.00
2	B	2303	G	C8-N9-C1'	6.58	135.55	127.00
2	B	2407	A	C3'-C2'-C1'	-6.58	96.24	101.50
29	G	6	ALA	CB-CA-C	-6.58	100.23	110.10
2	B	148	U	P-O3'-C3'	6.58	127.59	119.70
2	B	830	G	N3-C2-N2	6.58	124.50	119.90
2	B	2110	G	C8-N9-C4	-6.58	103.77	106.40
2	B	2238	G	N9-C4-C5	-6.58	102.77	105.40
1	A	9	G	C5-C6-O6	-6.58	124.65	128.60
1	A	33	G	N3-C2-N2	6.58	124.50	119.90
1	A	48	U	O4'-C4'-C3'	-6.58	97.42	104.00
1	A	100	G	O4'-C1'-N9	6.58	113.46	108.20
2	B	245	G	C6-C5-N7	-6.58	126.45	130.40
2	B	363	G	C4-C5-C6	6.58	122.75	118.80
2	B	398	C	O4'-C4'-C3'	-6.58	97.42	104.00
2	B	1080	A	C8-N9-C1'	6.58	139.53	127.70
2	B	1503	A	C4-C5-C6	6.58	120.29	117.00
2	B	2772	C	C5-C6-N1	6.58	124.29	121.00
2	B	2903	U	N3-C4-C5	6.58	118.55	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	5	74	ARG	NE-CZ-NH1	-6.58	117.01	120.30
28	F	127	TYR	CB-CG-CD2	6.58	124.94	121.00
1	A	13	G	C4-C5-C6	6.57	122.74	118.80
2	B	473	G	C5'-C4'-C3'	6.57	126.52	116.00
2	B	1181	U	N1-C1'-C2'	-6.57	104.77	112.00
2	B	1364	G	C4'-C3'-C2'	6.57	109.17	102.60
2	B	1628	G	C6-N1-C2	-6.57	121.16	125.10
2	B	1653	G	C6-C5-N7	-6.57	126.46	130.40
2	B	1783	A	O4'-C4'-C3'	-6.57	97.43	104.00
2	B	1970	A	O4'-C1'-N9	6.57	113.46	108.20
2	B	2077	A	N7-C8-N9	-6.57	110.51	113.80
27	C	62	ARG	CD-NE-CZ	-6.57	114.40	123.60
1	A	12	C	N1-C2-O2	6.57	122.84	118.90
2	B	369	U	C2-N3-C4	-6.57	123.06	127.00
2	B	292	U	C5-C6-N1	6.57	125.98	122.70
2	B	420	C	O4'-C1'-N1	6.57	113.46	108.20
2	B	1002	G	C4-C5-N7	6.57	113.43	110.80
12	R	93	PHE	CB-CG-CD1	6.57	125.40	120.80
2	B	255	A	N1-C2-N3	-6.57	126.02	129.30
2	B	1224	U	C2-N3-C4	-6.57	123.06	127.00
2	B	1699	G	C5-C6-N1	-6.57	108.22	111.50
1	A	101	A	O4'-C1'-N9	6.57	113.45	108.20
2	B	83	A	C6-C5-N7	-6.57	127.70	132.30
2	B	626	A	P-O3'-C3'	-6.57	111.82	119.70
2	B	982	C	C2-N1-C1'	6.57	126.02	118.80
2	B	2691	C	C4-C5-C6	6.57	120.68	117.40
2	B	822	G	C4'-C3'-C2'	6.57	109.17	102.60
2	B	1262	A	N1-C2-N3	-6.57	126.02	129.30
2	B	1517	G	N7-C8-N9	6.57	116.38	113.10
2	B	1637	A	C5-C6-N6	6.57	128.95	123.70
2	B	1780	A	C5-C6-N1	-6.57	114.42	117.70
2	B	1890	A	N1-C6-N6	6.57	122.54	118.60
2	B	2115	G	C2-N3-C4	6.57	115.18	111.90
2	B	2419	U	C5-C4-O4	-6.57	121.96	125.90
1	A	51	G	N1-C6-O6	6.56	123.84	119.90
2	B	1142	A	C5-C6-N1	-6.56	114.42	117.70
2	B	1159	U	P-O3'-C3'	-6.56	111.82	119.70
2	B	1607	C	N3-C4-C5	-6.56	119.28	121.90
2	B	1650	A	C6-C5-N7	-6.56	127.71	132.30
2	B	1650	A	N1-C6-N6	6.56	122.54	118.60
2	B	1969	A	C8-N9-C4	6.56	108.42	105.80
2	B	2328	A	C4-C5-N7	-6.56	107.42	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2737	G	C5'-C4'-C3'	-6.56	105.50	116.00
2	B	2737	G	C5'-C4'-O4'	6.56	116.97	109.10
2	B	2869	G	C2-N3-C4	6.56	115.18	111.90
1	A	73	A	C6-C5-N7	-6.56	127.71	132.30
2	B	640	C	C6-N1-C2	-6.56	117.68	120.30
2	B	844	A	C3'-C2'-C1'	-6.56	96.25	101.50
2	B	892	A	N9-C1'-C2'	-6.56	104.78	112.00
2	B	1344	U	N3-C4-C5	-6.56	110.66	114.60
2	B	1529	G	C4-C5-C6	6.56	122.74	118.80
2	B	2061	G	P-O3'-C3'	-6.56	111.83	119.70
2	B	2746	U	C2-N3-C4	-6.56	123.06	127.00
1	A	42	C	C2-N1-C1'	6.56	126.02	118.80
2	B	542	C	C2-N3-C4	-6.56	116.62	119.90
2	B	1275	A	C4-C5-N7	-6.56	107.42	110.70
2	B	2161	C	N1-C2-O2	6.56	122.83	118.90
1	A	15	A	P-O5'-C5'	-6.56	110.41	120.90
2	B	73	A	C4-C5-C6	6.56	120.28	117.00
2	B	235	U	C2-N3-C4	-6.56	123.07	127.00
2	B	649	G	C4-C5-C6	6.56	122.73	118.80
2	B	824	U	N3-C2-O2	6.56	126.79	122.20
2	B	1104	C	C4'-C3'-C2'	-6.56	96.04	102.60
2	B	2309	A	N1-C2-N3	-6.56	126.02	129.30
2	B	835	C	N1-C2-O2	6.56	122.83	118.90
2	B	1423	G	C5-C6-N1	-6.56	108.22	111.50
2	B	2184	A	N1-C2-N3	-6.56	126.02	129.30
2	B	675	A	C5-N7-C8	-6.55	100.62	103.90
2	B	712	G	C5'-C4'-C3'	6.55	126.49	116.00
2	B	889	C	N1-C2-O2	6.55	122.83	118.90
2	B	1035	U	P-O3'-C3'	-6.55	111.84	119.70
2	B	1533	C	O4'-C1'-N1	6.55	113.44	108.20
2	B	2033	A	C2-N3-C4	6.55	113.88	110.60
2	B	2439	A	N9-C4-C5	-6.55	103.18	105.80
2	B	2716	C	N3-C4-C5	-6.55	119.28	121.90
2	B	2763	G	C5-C6-O6	-6.55	124.67	128.60
8	N	8	ARG	NE-CZ-NH2	-6.55	117.02	120.30
2	B	141	G	C8-N9-C1'	-6.55	118.48	127.00
2	B	1018	U	O4'-C1'-N1	6.55	113.44	108.20
2	B	1785	A	P-O5'-C5'	-6.55	110.42	120.90
2	B	1975	G	N7-C8-N9	-6.55	109.82	113.10
2	B	41	C	C5'-C4'-O4'	-6.55	101.24	109.10
2	B	187	G	C4-N9-C1'	6.55	135.02	126.50
2	B	885	C	N3-C2-O2	6.55	126.49	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1034	G	P-O3'-C3'	-6.55	111.84	119.70
2	B	1135	C	C2-N3-C4	-6.55	116.62	119.90
2	B	1250	G	C5-C6-N1	-6.55	108.22	111.50
2	B	1307	A	C8-N9-C4	-6.55	103.18	105.80
2	B	1741	C	N3-C4-C5	-6.55	119.28	121.90
2	B	1984	G	C4-C5-N7	-6.55	108.18	110.80
2	B	2473	U	C2-N1-C1'	6.55	125.56	117.70
1	A	59	A	P-O3'-C3'	6.55	127.56	119.70
1	A	107	G	N3-C2-N2	6.55	124.48	119.90
2	B	354	A	N7-C8-N9	6.55	117.07	113.80
2	B	418	C	N3-C2-O2	-6.55	117.31	121.90
2	B	556	A	C6-C5-N7	-6.55	127.72	132.30
2	B	700	G	C4-C5-N7	-6.55	108.18	110.80
2	B	1517	G	C6-N1-C2	-6.55	121.17	125.10
2	B	1600	C	N3-C4-C5	-6.55	119.28	121.90
2	B	1695	G	O4'-C1'-N9	6.55	113.44	108.20
2	B	2128	G	C8-N9-C4	-6.55	103.78	106.40
2	B	2711	A	N3-C4-C5	-6.55	122.22	126.80
2	B	2821	A	C4-C5-C6	6.55	120.28	117.00
2	B	443	A	N1-C6-N6	6.55	122.53	118.60
2	B	836	G	C6-N1-C2	6.55	129.03	125.10
2	B	1357	C	C1'-O4'-C4'	-6.55	104.66	109.90
2	B	1661	G	C5-C6-O6	-6.55	124.67	128.60
2	B	2137	U	C2-N3-C4	-6.55	123.07	127.00
2	B	149	A	C2-N3-C4	-6.55	107.33	110.60
2	B	1056	G	C4-C5-N7	-6.55	108.18	110.80
2	B	2108	A	C4-C5-N7	-6.55	107.43	110.70
2	B	2439	A	C5-N7-C8	6.55	107.17	103.90
2	B	2608	G	N1-C2-N2	-6.55	110.31	116.20
2	B	2720	U	P-O5'-C5'	-6.55	110.43	120.90
2	B	89	A	P-O3'-C3'	-6.54	111.85	119.70
2	B	523	C	C5-C6-N1	-6.54	117.73	121.00
2	B	1932	A	C1'-O4'-C4'	-6.54	104.66	109.90
2	B	2317	A	C1'-O4'-C4'	-6.54	104.66	109.90
2	B	355	U	O4'-C1'-N1	6.54	113.44	108.20
2	B	678	C	C5-C4-N4	-6.54	115.62	120.20
2	B	954	G	C5-C6-N1	6.54	114.77	111.50
2	B	1623	G	N1-C6-O6	6.54	123.83	119.90
2	B	1659	G	N1-C2-N2	-6.54	110.31	116.20
2	B	2405	G	C3'-C2'-C1'	6.54	106.73	101.50
2	B	2574	G	N1-C2-N2	-6.54	110.31	116.20
2	B	2599	G	C4-C5-N7	-6.54	108.18	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	87	PHE	CB-CG-CD2	-6.54	116.22	120.80
2	B	426	C	N3-C2-O2	-6.54	117.32	121.90
2	B	984	A	C6-C5-N7	-6.54	127.72	132.30
2	B	1016	G	N3-C4-C5	-6.54	125.33	128.60
2	B	1123	C	C6-N1-C2	6.54	122.92	120.30
2	B	1540	G	N3-C2-N2	6.54	124.48	119.90
2	B	2774	C	N3-C4-N4	6.54	122.58	118.00
2	B	473	G	N7-C8-N9	6.54	116.37	113.10
2	B	985	C	C5-C6-N1	6.54	124.27	121.00
2	B	1206	G	P-O3'-C3'	-6.54	111.85	119.70
2	B	1419	A	C6-C5-N7	-6.54	127.72	132.30
2	B	2126	A	C5-C6-N6	-6.54	118.47	123.70
2	B	2518	A	N9-C1'-C2'	6.54	122.50	114.00
2	B	276	U	N3-C4-C5	-6.54	110.68	114.60
2	B	628	G	N9-C4-C5	-6.54	102.78	105.40
2	B	1099	G	N3-C4-C5	-6.54	125.33	128.60
2	B	1280	G	C6-N1-C2	6.54	129.02	125.10
2	B	2434	A	N7-C8-N9	-6.54	110.53	113.80
2	B	2653	U	O4'-C4'-C3'	-6.54	97.46	104.00
2	B	2720	U	C5-C4-O4	-6.54	121.98	125.90
2	B	2738	A	N1-C2-N3	6.54	132.57	129.30
2	B	455	C	C5-C4-N4	-6.54	115.62	120.20
2	B	461	C	C4-C5-C6	6.54	120.67	117.40
31	I	60	VAL	CA-CB-CG1	6.54	120.70	110.90
2	B	176	A	C5-N7-C8	6.54	107.17	103.90
2	B	253	C	O4'-C1'-N1	6.54	113.43	108.20
2	B	408	G	N1-C6-O6	6.54	123.82	119.90
2	B	670	A	C5-C6-N1	-6.54	114.43	117.70
2	B	734	A	C6-N1-C2	-6.54	114.68	118.60
2	B	738	G	N3-C4-C5	-6.54	125.33	128.60
2	B	1341	G	N3-C4-N9	6.54	129.92	126.00
2	B	2183	A	C5-C6-N6	-6.54	118.47	123.70
2	B	2422	C	N3-C2-O2	-6.54	117.33	121.90
2	B	2665	A	C8-N9-C4	-6.54	103.19	105.80
2	B	2770	G	C8-N9-C4	-6.54	103.79	106.40
2	B	186	G	N3-C2-N2	6.53	124.47	119.90
2	B	282	A	N3-C4-C5	-6.53	122.23	126.80
2	B	297	G	N1-C6-O6	6.53	123.82	119.90
2	B	496	G	C6-C5-N7	-6.53	126.48	130.40
2	B	747	U	P-O3'-C3'	-6.53	111.86	119.70
2	B	828	U	C5-C6-N1	-6.53	119.43	122.70
2	B	1062	G	O4'-C4'-C3'	-6.53	97.47	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1347	A	C5-C6-N6	-6.53	118.47	123.70
2	B	2170	A	P-O5'-C5'	-6.53	110.45	120.90
2	B	2525	G	O4'-C1'-N9	6.53	113.43	108.20
2	B	2852	G	C8-N9-C1'	6.53	135.49	127.00
2	B	326	G	N9-C4-C5	6.53	108.01	105.40
2	B	2156	G	C5-C6-O6	-6.53	124.68	128.60
2	B	2466	C	C2-N3-C4	6.53	123.17	119.90
1	A	10	G	C5-C6-N1	-6.53	108.23	111.50
2	B	16	C	C5-C4-N4	-6.53	115.63	120.20
2	B	1111	A	C5'-C4'-C3'	-6.53	105.55	116.00
2	B	1622	G	N1-C6-O6	6.53	123.82	119.90
29	G	55	ASP	CB-CG-OD2	6.53	124.18	118.30
2	B	189	G	N1-C2-N2	-6.53	110.32	116.20
2	B	1671	U	C6-N1-C2	-6.53	117.08	121.00
2	B	1830	C	C5'-C4'-O4'	6.53	116.94	109.10
2	B	2023	C	P-O3'-C3'	-6.53	111.87	119.70
2	B	2558	C	N1-C2-N3	-6.53	114.63	119.20
1	A	23	G	N1-C2-N3	-6.53	119.98	123.90
2	B	524	G	N3-C4-N9	6.53	129.92	126.00
2	B	751	A	C1'-O4'-C4'	-6.53	104.68	109.90
2	B	1652	A	C8-N9-C4	-6.53	103.19	105.80
2	B	1901	A	N1-C6-N6	6.53	122.52	118.60
2	B	2540	C	N3-C4-N4	6.53	122.57	118.00
2	B	1323	C	C5-C4-N4	6.53	124.77	120.20
28	F	114	ARG	NE-CZ-NH1	-6.53	117.04	120.30
2	B	471	A	C5-C6-N6	-6.52	118.48	123.70
2	B	1721	G	N1-C2-N3	-6.52	119.99	123.90
2	B	2146	C	O4'-C4'-C3'	-6.52	97.48	104.00
1	A	27	C	P-O5'-C5'	6.52	131.34	120.90
2	B	132	G	N3-C4-C5	-6.52	125.34	128.60
2	B	463	G	C5-C6-N1	6.52	114.76	111.50
2	B	963	U	P-O3'-C3'	-6.52	111.87	119.70
2	B	1395	A	O4'-C1'-N9	6.52	113.42	108.20
2	B	2368	C	O4'-C1'-N1	6.52	113.42	108.20
2	B	2548	U	C5-C6-N1	-6.52	119.44	122.70
2	B	2697	G	P-O5'-C5'	-6.52	110.46	120.90
14	D	63	PRO	N-CA-CB	6.52	111.13	103.30
21	Y	10	ARG	CD-NE-CZ	-6.52	114.47	123.60
2	B	199	A	C5'-C4'-O4'	6.52	116.92	109.10
2	B	1353	A	N3-C4-C5	-6.52	122.23	126.80
1	A	53	A	C5'-C4'-C3'	6.52	126.43	116.00
2	B	158	U	C6-N1-C2	6.52	124.91	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	398	C	O4'-C1'-C2'	6.52	113.47	107.60
2	B	1133	A	P-O3'-C3'	6.52	127.52	119.70
2	B	2711	A	C5-C6-N1	-6.52	114.44	117.70
2	B	2778	A	N3-C4-N9	-6.52	122.19	127.40
2	B	59	U	N3-C4-O4	6.52	123.96	119.40
2	B	84	A	N3-C4-C5	-6.52	122.24	126.80
2	B	637	A	N1-C6-N6	6.52	122.51	118.60
2	B	940	G	C2-N3-C4	-6.52	108.64	111.90
2	B	1115	G	C8-N9-C1'	6.52	135.47	127.00
2	B	1283	G	C5-C6-N1	-6.52	108.24	111.50
2	B	1400	U	O4'-C1'-N1	6.52	113.42	108.20
2	B	1406	U	O4'-C1'-N1	6.52	113.41	108.20
2	B	2393	U	C1'-O4'-C4'	-6.52	104.69	109.90
2	B	2502	G	P-O3'-C3'	6.52	127.52	119.70
2	B	2640	G	N1-C6-O6	6.52	123.81	119.90
2	B	2893	A	C5-N7-C8	6.52	107.16	103.90
2	B	341	C	C6-N1-C2	6.52	122.91	120.30
2	B	864	G	P-O3'-C3'	-6.52	111.88	119.70
2	B	1356	G	C4-C5-N7	6.52	113.41	110.80
2	B	1524	G	C5-C6-N1	-6.52	108.24	111.50
2	B	2299	U	C5'-C4'-C3'	-6.52	105.57	116.00
2	B	52	A	C4-C5-N7	-6.51	107.44	110.70
2	B	1239	G	N3-C4-C5	-6.51	125.34	128.60
2	B	1728	C	N1-C1'-C2'	-6.51	104.83	112.00
2	B	2123	G	O4'-C1'-N9	6.51	113.41	108.20
2	B	2165	C	N1-C2-N3	-6.51	114.64	119.20
2	B	2521	C	C5-C6-N1	6.51	124.26	121.00
2	B	2550	G	N3-C4-C5	-6.51	125.34	128.60
2	B	2761	A	O4'-C4'-C3'	-6.51	97.49	104.00
2	B	2888	C	N3-C4-N4	6.51	122.56	118.00
2	B	299	A	O4'-C1'-N9	6.51	113.41	108.20
2	B	410	G	C5'-C4'-C3'	6.51	126.42	116.00
2	B	1665	A	C4-C5-C6	6.51	120.26	117.00
19	X	403	ARG	NE-CZ-NH1	-6.51	117.04	120.30
2	B	217	A	N1-C6-N6	6.51	122.51	118.60
2	B	1145	C	N3-C4-C5	-6.51	119.30	121.90
2	B	1684	G	N3-C4-C5	-6.51	125.34	128.60
2	B	2278	A	C5'-C4'-C3'	-6.51	105.58	116.00
2	B	2318	G	C6-N1-C2	-6.51	121.19	125.10
2	B	2354	C	O4'-C1'-N1	6.51	113.41	108.20
2	B	4	U	N3-C2-O2	6.51	126.76	122.20
2	B	63	A	N3-C4-N9	6.51	132.61	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	136	G	N1-C2-N3	-6.51	119.99	123.90
2	B	1655	A	P-O3'-C3'	-6.51	111.89	119.70
2	B	1695	G	N3-C4-C5	-6.51	125.35	128.60
2	B	2008	C	C2-N3-C4	6.51	123.16	119.90
2	B	2312	U	N3-C2-O2	6.51	126.76	122.20
2	B	2846	G	N1-C6-O6	6.51	123.81	119.90
2	B	2142	A	P-O3'-C3'	6.51	127.51	119.70
2	B	2247	A	C6-C5-N7	-6.51	127.74	132.30
2	B	666	A	C1'-O4'-C4'	-6.51	104.70	109.90
2	B	1304	A	N7-C8-N9	6.51	117.05	113.80
2	B	1516	G	C6-N1-C2	6.51	129.00	125.10
2	B	1782	U	N3-C4-C5	-6.51	110.70	114.60
2	B	2819	G	C5-C6-N1	-6.51	108.25	111.50
2	B	2883	A	N7-C8-N9	6.51	117.05	113.80
20	E	79	ARG	NE-CZ-NH2	-6.50	117.05	120.30
2	B	124	G	O4'-C1'-N9	6.50	113.40	108.20
2	B	194	G	C2-N3-C4	6.50	115.15	111.90
2	B	498	G	N1-C6-O6	6.50	123.80	119.90
2	B	2766	A	N1-C2-N3	-6.50	126.05	129.30
1	A	70	C	C6-N1-C2	-6.50	117.70	120.30
2	B	2673	G	C5-C6-N1	6.50	114.75	111.50
1	A	44	G	C5-C6-N1	-6.50	108.25	111.50
2	B	2027	G	C5'-C4'-C3'	-6.50	105.60	116.00
2	B	2892	G	C3'-C2'-C1'	-6.50	96.30	101.50
22	3	20	ALA	N-CA-CB	6.50	119.20	110.10
2	B	160	A	C6-N1-C2	-6.50	114.70	118.60
2	B	250	G	N3-C2-N2	6.50	124.45	119.90
2	B	257	C	O4'-C4'-C3'	-6.50	97.50	104.00
2	B	286	U	C5-C4-O4	-6.50	122.00	125.90
2	B	1378	A	N7-C8-N9	-6.50	110.55	113.80
2	B	1454	C	C2-N3-C4	6.50	123.15	119.90
2	B	1950	G	C4-C5-N7	6.50	113.40	110.80
2	B	2479	U	O4'-C1'-N1	6.50	113.40	108.20
2	B	2600	A	N3-C4-C5	6.50	131.35	126.80
18	W	3	THR	N-CA-C	-6.50	93.45	111.00
1	A	52	A	C2-N3-C4	6.50	113.85	110.60
2	B	367	G	N9-C4-C5	-6.50	102.80	105.40
2	B	752	A	P-O3'-C3'	6.50	127.50	119.70
2	B	773	U	N1-C2-N3	6.50	118.80	114.90
2	B	794	A	C8-N9-C4	-6.50	103.20	105.80
2	B	1398	C	O4'-C1'-N1	6.50	113.40	108.20
10	P	52	ARG	NE-CZ-NH1	-6.50	117.05	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
11	Q	27	ARG	NE-CZ-NH2	-6.50	117.05	120.30
2	B	1611	C	C5'-C4'-C3'	-6.50	105.61	116.00
2	B	1699	G	C3'-C2'-C1'	-6.50	96.30	101.50
2	B	2117	A	C2-N3-C4	6.50	113.85	110.60
2	B	2201	G	C4-C5-C6	6.50	122.70	118.80
2	B	1	G	C4-C5-N7	-6.49	108.20	110.80
2	B	97	C	C5'-C4'-C3'	-6.49	105.61	116.00
2	B	460	A	C6-C5-N7	-6.49	127.75	132.30
2	B	496	G	C4-C5-N7	-6.49	108.20	110.80
2	B	686	U	N3-C4-C5	-6.49	110.70	114.60
2	B	827	U	O4'-C1'-N1	6.49	113.39	108.20
2	B	1821	A	C3'-C2'-C1'	6.49	106.69	101.50
2	B	2612	C	C5-C4-N4	-6.49	115.65	120.20
2	B	409	G	C5-N7-C8	6.49	107.55	104.30
2	B	1203	U	O4'-C1'-N1	6.49	113.39	108.20
2	B	1346	G	O4'-C1'-N9	6.49	113.39	108.20
2	B	1454	C	N3-C2-O2	6.49	126.44	121.90
2	B	277	G	P-O3'-C3'	-6.49	111.91	119.70
2	B	319	G	N3-C2-N2	6.49	124.44	119.90
2	B	659	G	C4-C5-N7	6.49	113.40	110.80
2	B	1391	U	N1-C2-O2	-6.49	118.26	122.80
2	B	1566	A	C5-N7-C8	6.49	107.14	103.90
2	B	2115	G	O4'-C1'-N9	6.49	113.39	108.20
2	B	2580	U	P-O5'-C5'	6.49	131.29	120.90
2	B	121	G	C1'-O4'-C4'	-6.49	104.71	109.90
2	B	546	U	N1-C2-N3	6.49	118.79	114.90
2	B	682	G	N3-C4-C5	-6.49	125.36	128.60
2	B	1117	C	O4'-C1'-N1	6.49	113.39	108.20
2	B	2342	C	C5-C4-N4	-6.49	115.66	120.20
2	B	2794	C	C3'-C2'-C1'	-6.49	96.31	101.50
2	B	1288	G	C5'-C4'-C3'	-6.49	105.62	116.00
2	B	1618	A	O4'-C1'-N9	6.49	113.39	108.20
2	B	2121	G	P-O5'-C5'	6.49	131.28	120.90
2	B	2405	G	N3-C2-N2	6.49	124.44	119.90
2	B	1600	C	C5-C4-N4	-6.48	115.66	120.20
2	B	1909	C	N3-C4-C5	-6.48	119.31	121.90
2	B	6	A	C5-C6-N6	-6.48	118.51	123.70
2	B	165	A	O4'-C4'-C3'	-6.48	97.52	104.00
2	B	184	C	N3-C4-N4	6.48	122.54	118.00
2	B	625	G	C5-N7-C8	6.48	107.54	104.30
2	B	710	U	O4'-C1'-N1	6.48	113.39	108.20
2	B	953	G	C4-C5-N7	-6.48	108.21	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1358	G	C8-N9-C4	-6.48	103.81	106.40
2	B	1644	C	C5'-C4'-C3'	-6.48	105.63	116.00
2	B	2581	G	P-O3'-C3'	6.48	127.48	119.70
2	B	2842	G	C5-N7-C8	6.48	107.54	104.30
2	B	2879	A	C2-N3-C4	-6.48	107.36	110.60
2	B	1243	C	C4'-C3'-C2'	-6.48	96.12	102.60
2	B	1507	C	O4'-C1'-N1	6.48	113.38	108.20
2	B	2340	A	P-O5'-C5'	-6.48	110.53	120.90
2	B	2488	G	N3-C2-N2	6.48	124.44	119.90
1	A	102	G	C4'-C3'-C2'	-6.48	96.12	102.60
2	B	44	A	O4'-C1'-N9	6.48	113.38	108.20
2	B	537	G	C4-N9-C1'	-6.48	118.08	126.50
2	B	1405	U	C6-N1-C2	6.48	124.89	121.00
2	B	2541	A	C6-C5-N7	-6.48	127.76	132.30
2	B	2662	A	C5-C6-N1	-6.48	114.46	117.70
19	X	322	LYS	N-CA-CB	6.48	122.26	110.60
1	A	22	U	O4'-C1'-N1	6.48	113.38	108.20
1	A	83	G	N3-C4-C5	-6.48	125.36	128.60
2	B	134	G	N3-C2-N2	6.48	124.43	119.90
2	B	323	C	N3-C4-N4	6.48	122.53	118.00
2	B	673	C	O4'-C1'-N1	6.48	113.38	108.20
2	B	783	A	N1-C2-N3	6.48	132.54	129.30
2	B	825	A	C6-C5-N7	-6.48	127.77	132.30
2	B	1577	C	O4'-C1'-N1	6.48	113.38	108.20
2	B	1946	U	C6-N1-C2	-6.48	117.11	121.00
2	B	2238	G	C4-C5-N7	6.48	113.39	110.80
18	W	28	ALA	N-CA-CB	6.48	119.17	110.10
2	B	228	C	C5'-C4'-O4'	6.48	116.87	109.10
2	B	488	G	P-O3'-C3'	6.48	127.47	119.70
2	B	1187	G	C5-C6-N1	-6.48	108.26	111.50
2	B	1492	G	N9-C1'-C2'	-6.48	104.88	112.00
2	B	1916	A	C4-C5-N7	-6.48	107.46	110.70
2	B	2408	U	P-O5'-C5'	6.48	131.26	120.90
2	B	2713	U	C1'-O4'-C4'	-6.48	104.72	109.90
2	B	156	A	O4'-C1'-N9	6.47	113.38	108.20
2	B	1054	A	C5-C6-N6	-6.47	118.52	123.70
2	B	1469	A	N1-C6-N6	6.47	122.48	118.60
2	B	2009	A	N7-C8-N9	-6.47	110.56	113.80
2	B	2032	G	C5-C6-O6	-6.47	124.72	128.60
2	B	2269	G	P-O5'-C5'	-6.47	110.54	120.90
2	B	2303	G	C5-C6-O6	-6.47	124.72	128.60
2	B	326	G	C5-C6-N1	6.47	114.74	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	533	G	C5-C6-N1	-6.47	108.26	111.50
2	B	556	A	O4'-C1'-N9	6.47	113.38	108.20
2	B	713	G	O5'-C5'-C4'	-6.47	99.40	111.70
2	B	1417	C	C4'-C3'-C2'	-6.47	96.13	102.60
2	B	1437	C	N1-C2-O2	6.47	122.78	118.90
2	B	1809	A	N3-C4-N9	6.47	132.58	127.40
2	B	2283	C	C5-C4-N4	-6.47	115.67	120.20
2	B	2677	G	C8-N9-C4	6.47	108.99	106.40
2	B	2204	G	N3-C2-N2	6.47	124.43	119.90
2	B	2405	G	N9-C4-C5	6.47	107.99	105.40
2	B	2574	G	N3-C4-C5	-6.47	125.36	128.60
2	B	396	G	C5'-C4'-C3'	-6.47	105.65	116.00
2	B	1031	G	N1-C6-O6	6.47	123.78	119.90
2	B	1085	A	C6-C5-N7	-6.47	127.77	132.30
2	B	1108	U	C4'-C3'-C2'	-6.47	96.13	102.60
2	B	1381	G	C5-C6-O6	-6.47	124.72	128.60
2	B	1633	G	C4-C5-N7	6.47	113.39	110.80
2	B	2012	G	N9-C4-C5	6.47	107.99	105.40
2	B	1117	C	C4'-C3'-C2'	-6.47	96.13	102.60
2	B	2875	C	C2-N1-C1'	6.47	125.92	118.80
1	A	13	G	C5'-C4'-O4'	6.47	116.86	109.10
1	A	20	G	O4'-C1'-N9	6.47	113.37	108.20
1	A	31	C	C5-C4-N4	-6.47	115.67	120.20
1	A	57	A	C4-C5-N7	6.47	113.93	110.70
2	B	130	C	N1-C2-O2	-6.47	115.02	118.90
2	B	594	U	P-O5'-C5'	6.47	131.25	120.90
2	B	784	G	C6-N1-C2	6.47	128.98	125.10
2	B	1053	C	N3-C4-N4	6.47	122.53	118.00
2	B	1820	U	C6-N1-C1'	-6.47	112.15	121.20
2	B	2583	G	P-O5'-C5'	6.47	131.25	120.90
19	X	23	THR	CA-CB-CG2	-6.47	103.35	112.40
2	B	226	A	C8-N9-C4	6.46	108.39	105.80
2	B	635	C	C6-N1-C2	-6.46	117.71	120.30
2	B	645	C	OP1-P-OP2	-6.46	109.90	119.60
2	B	863	A	C8-N9-C4	-6.46	103.21	105.80
2	B	1222	U	N1-C2-N3	-6.46	111.02	114.90
2	B	1262	A	C4'-C3'-C2'	6.46	109.06	102.60
2	B	1610	A	O5'-C5'-C4'	-6.46	99.42	111.70
2	B	1675	C	P-O5'-C5'	-6.46	110.56	120.90
2	B	2374	C	N3-C4-C5	-6.46	119.31	121.90
2	B	2405	G	C5-C6-O6	-6.46	124.72	128.60
2	B	7	G	C4-C5-N7	6.46	113.39	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	456	C	C5-C4-N4	-6.46	115.68	120.20
2	B	468	G	C8-N9-C4	6.46	108.98	106.40
2	B	2363	G	P-O3'-C3'	6.46	127.46	119.70
2	B	2509	G	C8-N9-C4	6.46	108.98	106.40
2	B	153	U	N3-C4-O4	6.46	123.92	119.40
2	B	224	U	N1-C1'-C2'	-6.46	104.89	112.00
2	B	1387	A	C6-N1-C2	-6.46	114.72	118.60
2	B	1461	C	C5-C6-N1	6.46	124.23	121.00
2	B	2648	G	O4'-C1'-N9	6.46	113.37	108.20
2	B	738	G	N3-C2-N2	6.46	124.42	119.90
2	B	867	C	N3-C4-N4	6.46	122.52	118.00
2	B	1205	A	C5-N7-C8	6.46	107.13	103.90
2	B	1232	G	N3-C2-N2	6.46	124.42	119.90
2	B	2450	A	N9-C4-C5	-6.46	103.22	105.80
2	B	2839	G	O4'-C1'-N9	6.46	113.37	108.20
2	B	2902	C	C4-C5-C6	-6.46	114.17	117.40
8	N	45	ARG	NE-CZ-NH1	6.46	123.53	120.30
1	A	117	G	C5-C6-N1	-6.46	108.27	111.50
2	B	36	G	N1-C2-N3	-6.46	120.03	123.90
2	B	128	C	OP2-P-O3'	6.46	119.41	105.20
2	B	375	G	N1-C2-N2	-6.46	110.39	116.20
2	B	493	G	N1-C2-N3	-6.46	120.03	123.90
2	B	508	A	C5-C6-N6	-6.46	118.53	123.70
2	B	796	C	O5'-C5'-C4'	-6.46	99.43	111.70
2	B	1199	U	O4'-C1'-N1	6.46	113.37	108.20
2	B	1220	G	C6-C5-N7	-6.46	126.53	130.40
2	B	1568	G	N3-C4-C5	-6.46	125.37	128.60
2	B	1907	G	C4-C5-N7	6.46	113.38	110.80
2	B	2366	A	C5-N7-C8	6.46	107.13	103.90
2	B	2428	G	O4'-C1'-N9	6.46	113.37	108.20
2	B	1499	C	O4'-C1'-N1	6.46	113.37	108.20
2	B	1910	G	N7-C8-N9	-6.46	109.87	113.10
2	B	2631	G	C2-N3-C4	6.46	115.13	111.90
2	B	2678	C	C6-N1-C2	6.46	122.88	120.30
2	B	2793	C	C5'-C4'-C3'	-6.46	105.67	116.00
31	I	61	TYR	CB-CG-CD1	-6.46	117.13	121.00
2	B	111	A	P-O3'-C3'	-6.46	111.95	119.70
2	B	946	C	C5-C4-N4	-6.46	115.68	120.20
2	B	1525	A	O5'-C5'-C4'	-6.46	99.44	111.70
2	B	2508	G	O5'-P-OP1	-6.46	99.89	105.70
2	B	260	G	C3'-C2'-C1'	6.45	106.66	101.50
2	B	295	G	C5-C6-N1	-6.45	108.27	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	345	A	O5'-C5'-C4'	-6.45	99.44	111.70
2	B	1034	G	N3-C2-N2	6.45	124.42	119.90
2	B	1103	A	N1-C6-N6	6.45	122.47	118.60
2	B	1710	G	N1-C2-N3	-6.45	120.03	123.90
2	B	1761	C	C6-N1-C2	6.45	122.88	120.30
2	B	1785	A	C6-N1-C2	-6.45	114.73	118.60
2	B	2090	A	C2-N3-C4	6.45	113.83	110.60
2	B	2152	G	C5-N7-C8	6.45	107.53	104.30
2	B	2410	G	N1-C2-N3	-6.45	120.03	123.90
14	D	113	SER	N-CA-CB	6.45	120.18	110.50
2	B	875	G	C5-N7-C8	6.45	107.53	104.30
2	B	910	A	C2-N3-C4	-6.45	107.37	110.60
2	B	1920	C	N3-C4-N4	6.45	122.52	118.00
2	B	2235	G	N1-C6-O6	6.45	123.77	119.90
2	B	2709	G	C5-C6-N1	-6.45	108.27	111.50
1	A	15	A	C6-C5-N7	-6.45	127.78	132.30
2	B	139	U	N3-C2-O2	6.45	126.72	122.20
2	B	532	A	C6-C5-N7	-6.45	127.78	132.30
2	B	1190	G	O4'-C1'-N9	6.45	113.36	108.20
2	B	2619	C	C5'-C4'-C3'	-6.45	105.68	116.00
2	B	2668	G	O4'-C1'-N9	6.45	113.36	108.20
2	B	2828	G	N7-C8-N9	6.45	116.33	113.10
19	X	110	GLU	N-CA-CB	6.45	122.21	110.60
2	B	1187	G	C8-N9-C1'	6.45	135.38	127.00
2	B	1229	C	C6-N1-C2	-6.45	117.72	120.30
2	B	1353	A	N3-C4-N9	6.45	132.56	127.40
2	B	1539	U	N3-C4-C5	6.45	118.47	114.60
2	B	2083	G	C4-N9-C1'	-6.45	118.12	126.50
2	B	2237	G	N3-C2-N2	6.45	124.41	119.90
2	B	2353	G	N3-C2-N2	-6.45	115.39	119.90
2	B	2609	U	C5-C4-O4	6.45	129.77	125.90
2	B	2064	C	P-O5'-C5'	-6.45	110.58	120.90
2	B	2176	A	C5-C6-N6	-6.45	118.54	123.70
2	B	433	C	C5-C6-N1	-6.45	117.78	121.00
2	B	1166	G	N3-C4-C5	-6.45	125.38	128.60
2	B	1730	C	C2-N1-C1'	6.45	125.89	118.80
2	B	1755	A	C3'-C2'-C1'	6.45	106.66	101.50
2	B	1796	U	O4'-C1'-N1	6.45	113.36	108.20
2	B	1943	U	N1-C2-O2	-6.45	118.29	122.80
2	B	2689	U	C5-C6-N1	-6.45	119.48	122.70
2	B	169	G	C2-N3-C4	6.44	115.12	111.90
2	B	2722	G	C8-N9-C1'	6.44	135.38	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	925	A	N7-C8-N9	-6.44	110.58	113.80
2	B	1009	A	C2-N3-C4	-6.44	107.38	110.60
2	B	1814	G	C3'-C2'-C1'	6.44	106.65	101.50
2	B	2496	C	C2'-C3'-O3'	6.44	124.01	113.70
2	B	2706	A	C5'-C4'-C3'	6.44	126.31	116.00
21	Y	13	ARG	NE-CZ-NH1	6.44	123.52	120.30
2	B	598	U	C5'-C4'-O4'	6.44	116.83	109.10
2	B	747	U	O4'-C1'-N1	6.44	113.35	108.20
2	B	801	G	C4'-C3'-C2'	6.44	109.04	102.60
2	B	1350	C	C5'-C4'-C3'	6.44	126.31	116.00
2	B	1373	A	O4'-C1'-N9	6.44	113.35	108.20
2	B	1613	G	C5'-C4'-C3'	6.44	126.31	116.00
2	B	2630	G	P-O3'-C3'	-6.44	111.97	119.70
2	B	2895	G	N1-C6-O6	6.44	123.76	119.90
27	C	261	ARG	NE-CZ-NH1	6.44	123.52	120.30
2	B	195	A	C2-N3-C4	-6.44	107.38	110.60
2	B	861	A	C4-C5-N7	-6.44	107.48	110.70
2	B	1191	G	N3-C4-N9	6.44	129.86	126.00
2	B	1549	A	C5'-C4'-C3'	-6.44	105.70	116.00
1	A	18	G	C5-C6-N1	-6.44	108.28	111.50
2	B	740	C	N3-C4-C5	6.44	124.47	121.90
2	B	861	A	P-O3'-C3'	-6.44	111.98	119.70
2	B	1801	A	C2-N3-C4	-6.44	107.38	110.60
2	B	2685	G	P-O5'-C5'	-6.44	110.60	120.90
2	B	269	C	N3-C2-O2	-6.44	117.39	121.90
2	B	664	G	C3'-C2'-C1'	6.44	106.65	101.50
2	B	1624	U	C4-C5-C6	6.44	123.56	119.70
27	C	14	HIS	CA-CB-CG	-6.44	102.66	113.60
27	C	261	ARG	NE-CZ-NH2	-6.44	117.08	120.30
2	B	602	A	O4'-C4'-C3'	6.43	111.25	106.10
2	B	1069	A	C4-C5-N7	-6.43	107.48	110.70
2	B	1339	G	C5'-C4'-C3'	-6.43	105.71	116.00
2	B	1367	A	C5-C6-N1	-6.43	114.48	117.70
2	B	2006	C	N3-C4-N4	6.43	122.50	118.00
2	B	2318	G	C4-C5-C6	6.43	122.66	118.80
2	B	2396	G	C5'-C4'-C3'	-6.43	105.70	116.00
4	K	79	PHE	CB-CG-CD1	-6.43	116.30	120.80
19	X	366	GLU	N-CA-CB	-6.43	99.02	110.60
2	B	131	A	C4'-C3'-C2'	6.43	109.03	102.60
2	B	167	A	C5-C6-N6	-6.43	118.55	123.70
2	B	548	G	C6-C5-N7	-6.43	126.54	130.40
2	B	752	A	N1-C2-N3	-6.43	126.08	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1073	A	C8-N9-C4	6.43	108.37	105.80
2	B	1080	A	C4-N9-C1'	-6.43	114.72	126.30
2	B	1347	A	C5'-C4'-C3'	6.43	126.29	116.00
2	B	1400	U	C2-N3-C4	6.43	130.86	127.00
2	B	1418	G	O4'-C1'-N9	6.43	113.35	108.20
2	B	1733	G	P-O3'-C3'	-6.43	111.98	119.70
2	B	2119	A	N1-C6-N6	6.43	122.46	118.60
2	B	2224	G	O4'-C1'-N9	6.43	113.34	108.20
2	B	2300	C	N3-C4-C5	-6.43	119.33	121.90
2	B	2550	G	C6-C5-N7	-6.43	126.54	130.40
2	B	2564	A	P-O3'-C3'	6.43	127.42	119.70
2	B	2709	G	C5-C6-O6	-6.43	124.74	128.60
2	B	17	G	C4-C5-N7	6.43	113.37	110.80
2	B	517	C	C5'-C4'-C3'	6.43	126.29	116.00
2	B	621	A	C4-C5-N7	6.43	113.92	110.70
2	B	712	G	N3-C4-C5	-6.43	125.39	128.60
2	B	758	C	O4'-C1'-N1	6.43	113.34	108.20
2	B	1306	C	C5'-C4'-C3'	6.43	126.29	116.00
2	B	1835	G	C5-C6-N1	-6.43	108.28	111.50
2	B	880	G	C1'-O4'-C4'	6.43	115.04	109.90
2	B	1698	A	C5'-C4'-C3'	-6.43	105.71	116.00
2	B	2407	A	C5-C6-N6	-6.43	118.56	123.70
2	B	2432	A	O4'-C1'-N9	6.43	113.34	108.20
2	B	2501	C	N3-C4-C5	-6.43	119.33	121.90
2	B	2698	U	O5'-P-OP2	-6.43	99.91	105.70
2	B	2787	C	N3-C4-C5	-6.43	119.33	121.90
14	D	187	LEU	CB-CG-CD1	6.43	121.93	111.00
2	B	453	A	C2-N3-C4	-6.43	107.39	110.60
2	B	494	G	O4'-C1'-N9	6.43	113.34	108.20
2	B	609	A	N1-C2-N3	-6.43	126.09	129.30
2	B	924	G	C5-C6-O6	-6.43	124.74	128.60
2	B	1518	C	O4'-C1'-N1	6.43	113.34	108.20
2	B	1639	C	P-O3'-C3'	6.43	127.41	119.70
2	B	1827	U	O4'-C1'-N1	6.43	113.34	108.20
2	B	2035	G	N7-C8-N9	-6.43	109.89	113.10
2	B	2201	G	C6-N1-C2	6.43	128.96	125.10
2	B	2521	C	O4'-C1'-N1	6.43	113.34	108.20
21	Y	78	PHE	CB-CG-CD2	-6.43	116.30	120.80
2	B	89	A	N7-C8-N9	-6.43	110.59	113.80
2	B	1220	G	N3-C2-N2	6.43	124.40	119.90
2	B	1305	C	C5-C6-N1	-6.43	117.79	121.00
2	B	1610	A	N9-C4-C5	-6.43	103.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1910	G	C2-N3-C4	6.43	115.11	111.90
2	B	2410	G	C6-C5-N7	6.43	134.26	130.40
2	B	2418	A	C5-N7-C8	6.43	107.11	103.90
1	A	90	C	C1'-O4'-C4'	-6.42	104.76	109.90
2	B	595	C	C5-C4-N4	-6.42	115.70	120.20
2	B	2061	G	C4-N9-C1'	6.42	134.85	126.50
2	B	2655	G	P-O3'-C3'	6.42	127.41	119.70
2	B	174	U	O4'-C1'-N1	6.42	113.34	108.20
2	B	357	C	C2-N3-C4	6.42	123.11	119.90
2	B	1003	G	O4'-C1'-N9	6.42	113.34	108.20
14	D	75	ALA	N-CA-CB	6.42	119.09	110.10
1	A	96	G	C6-N1-C2	6.42	128.95	125.10
2	B	245	G	C5-C6-N1	-6.42	108.29	111.50
2	B	1449	G	N3-C2-N2	6.42	124.39	119.90
2	B	1478	G	N1-C2-N2	-6.42	110.42	116.20
2	B	1483	G	C2-N3-C4	-6.42	108.69	111.90
2	B	1600	C	O4'-C1'-N1	6.42	113.34	108.20
2	B	1603	A	C5'-C4'-C3'	6.42	126.27	116.00
2	B	1746	A	C2-N3-C4	-6.42	107.39	110.60
2	B	2630	G	C4-C5-C6	6.42	122.65	118.80
2	B	314	C	C6-N1-C2	-6.42	117.73	120.30
2	B	1422	G	C8-N9-C4	-6.42	103.83	106.40
2	B	2677	G	O4'-C1'-N9	6.42	113.34	108.20
2	B	63	A	C2-N3-C4	6.42	113.81	110.60
2	B	285	G	C5-N7-C8	6.42	107.51	104.30
2	B	699	A	C2-N3-C4	6.42	113.81	110.60
2	B	1191	G	C6-N1-C2	6.42	128.95	125.10
2	B	1502	A	C4-C5-C6	6.42	120.21	117.00
2	B	1972	G	N1-C2-N3	-6.42	120.05	123.90
2	B	1993	U	O4'-C1'-N1	6.42	113.33	108.20
2	B	2021	C	N1-C2-N3	-6.42	114.71	119.20
2	B	2067	G	N7-C8-N9	6.42	116.31	113.10
2	B	2153	C	N3-C4-C5	-6.42	119.33	121.90
2	B	2177	C	C6-N1-C2	-6.42	117.73	120.30
2	B	2198	A	C6-N1-C2	6.42	122.45	118.60
2	B	2420	C	C6-N1-C2	6.42	122.87	120.30
2	B	61	C	C6-N1-C2	6.42	122.87	120.30
2	B	396	G	N1-C6-O6	6.42	123.75	119.90
2	B	816	C	O4'-C1'-N1	6.42	113.33	108.20
2	B	1232	G	N9-C1'-C2'	-6.42	104.94	112.00
2	B	1490	A	C1'-O4'-C4'	6.42	115.03	109.90
2	B	1711	A	C5-N7-C8	6.42	107.11	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2586	U	C4'-C3'-C2'	-6.42	96.18	102.60
2	B	282	A	N1-C2-N3	-6.42	126.09	129.30
2	B	310	A	C6-N1-C2	-6.42	114.75	118.60
2	B	1153	C	C1'-O4'-C4'	6.42	115.03	109.90
2	B	1448	G	N3-C2-N2	6.42	124.39	119.90
2	B	2665	A	C6-C5-N7	-6.42	127.81	132.30
2	B	227	A	O4'-C1'-N9	6.41	113.33	108.20
2	B	731	C	N3-C4-C5	6.41	124.47	121.90
2	B	765	C	C1'-O4'-C4'	-6.41	104.77	109.90
2	B	1184	U	C4'-C3'-C2'	-6.41	96.19	102.60
2	B	1715	G	C4-C5-C6	6.41	122.65	118.80
2	B	2562	U	C6-N1-C1'	-6.41	112.22	121.20
2	B	2639	A	C5'-C4'-O4'	6.41	116.80	109.10
2	B	946	C	C4-C5-C6	6.41	120.61	117.40
2	B	2352	A	N9-C4-C5	-6.41	103.23	105.80
2	B	2718	G	O4'-C1'-N9	6.41	113.33	108.20
1	A	77	U	C5-C4-O4	6.41	129.75	125.90
2	B	97	C	N1-C2-O2	-6.41	115.05	118.90
2	B	149	A	O4'-C1'-N9	6.41	113.33	108.20
2	B	338	G	C4-C5-N7	-6.41	108.24	110.80
2	B	408	G	C5'-C4'-C3'	-6.41	105.74	116.00
2	B	410	G	C5-C6-O6	-6.41	124.75	128.60
2	B	734	A	N1-C6-N6	6.41	122.45	118.60
2	B	817	C	P-O3'-C3'	-6.41	112.01	119.70
2	B	1233	C	C5-C6-N1	6.41	124.20	121.00
2	B	1464	G	C4'-C3'-C2'	6.41	109.01	102.60
2	B	1479	G	N1-C6-O6	6.41	123.75	119.90
2	B	1810	A	C5-N7-C8	6.41	107.11	103.90
2	B	2595	G	C6-C5-N7	-6.41	126.55	130.40
2	B	2723	C	C5'-C4'-O4'	-6.41	101.41	109.10
2	B	2822	G	N3-C2-N2	6.41	124.39	119.90
2	B	2859	G	C6-C5-N7	-6.41	126.55	130.40
2	B	2877	G	C8-N9-C1'	6.41	135.33	127.00
2	B	2879	A	N3-C4-C5	6.41	131.29	126.80
1	A	76	G	C5-N7-C8	6.41	107.50	104.30
2	B	80	G	C4-C5-N7	6.41	113.36	110.80
2	B	618	G	C8-N9-C4	6.41	108.96	106.40
2	B	1786	A	O5'-C5'-C4'	-6.41	99.52	111.70
2	B	2404	U	O4'-C1'-N1	6.41	113.33	108.20
19	X	205	LEU	N-CA-CB	6.41	123.22	110.40
2	B	1	G	C5-C6-O6	-6.41	124.76	128.60
2	B	14	A	N3-C4-C5	-6.41	122.31	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1014	A	C4-C5-N7	-6.41	107.50	110.70
2	B	1649	G	C2-N3-C4	-6.41	108.70	111.90
2	B	1998	A	N1-C2-N3	6.41	132.50	129.30
2	B	2502	G	C6-N1-C2	6.41	128.94	125.10
19	X	261	ARG	N-CA-C	-6.41	93.70	111.00
2	B	481	G	C5-C6-N1	-6.41	108.30	111.50
2	B	996	A	N7-C8-N9	6.41	117.00	113.80
2	B	1381	G	C5-C6-N1	6.41	114.70	111.50
2	B	1544	A	C6-N1-C2	-6.41	114.76	118.60
2	B	1663	G	O4'-C1'-N9	6.41	113.32	108.20
2	B	2013	A	O4'-C1'-N9	6.41	113.33	108.20
2	B	2217	G	C6-C5-N7	-6.41	126.56	130.40
2	B	2258	C	C4-C5-C6	-6.41	114.20	117.40
23	5	97	MET	CG-SD-CE	-6.41	89.95	100.20
27	C	75	ALA	CB-CA-C	-6.41	100.49	110.10
2	B	101	A	C8-N9-C4	6.40	108.36	105.80
2	B	1640	A	N9-C4-C5	6.40	108.36	105.80
2	B	2506	U	N1-C2-N3	-6.40	111.06	114.90
2	B	1	G	C4-C5-C6	6.40	122.64	118.80
2	B	601	C	C5-C6-N1	6.40	124.20	121.00
2	B	959	A	C5-C6-N1	-6.40	114.50	117.70
2	B	1980	G	C6-C5-N7	-6.40	126.56	130.40
2	B	2066	C	C4-C5-C6	6.40	120.60	117.40
25	7	51	LYS	N-CA-CB	6.40	122.12	110.60
2	B	453	A	C8-N9-C4	-6.40	103.24	105.80
2	B	682	G	P-O3'-C3'	-6.40	112.02	119.70
2	B	692	C	C4'-C3'-C2'	-6.40	96.20	102.60
2	B	1009	A	C6-C5-N7	-6.40	127.82	132.30
2	B	1398	C	C5-C4-N4	-6.40	115.72	120.20
2	B	1484	U	O4'-C1'-N1	6.40	113.32	108.20
2	B	2314	A	C1'-O4'-C4'	-6.40	104.78	109.90
2	B	2559	C	N1-C1'-C2'	-6.40	104.96	112.00
2	B	1284	A	C5'-C4'-O4'	6.40	116.78	109.10
2	B	1415	U	N3-C2-O2	-6.40	117.72	122.20
2	B	2014	A	N1-C2-N3	6.40	132.50	129.30
5	L	30	THR	N-CA-C	-6.40	93.72	111.00
2	B	1071	G	C5-N7-C8	-6.40	101.10	104.30
2	B	1411	U	O4'-C1'-N1	6.40	113.32	108.20
2	B	1684	G	C6-C5-N7	-6.40	126.56	130.40
2	B	1737	G	P-O3'-C3'	6.40	127.38	119.70
2	B	2056	G	N3-C4-C5	-6.40	125.40	128.60
2	B	2061	G	C6-C5-N7	-6.40	126.56	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2277	G	C5-C6-O6	-6.40	124.76	128.60
2	B	2289	G	C6-C5-N7	-6.40	126.56	130.40
2	B	2738	A	N7-C8-N9	-6.40	110.60	113.80
1	A	94	A	P-O3'-C3'	-6.40	112.03	119.70
2	B	330	A	N7-C8-N9	-6.40	110.60	113.80
2	B	1680	U	C6-N1-C2	-6.40	117.16	121.00
2	B	2282	G	C4-C5-C6	6.40	122.64	118.80
2	B	2324	U	C4-C5-C6	6.40	123.54	119.70
2	B	177	G	N3-C2-N2	6.39	124.38	119.90
2	B	1277	G	N7-C8-N9	6.39	116.30	113.10
2	B	1977	A	N9-C1'-C2'	-6.39	104.97	112.00
2	B	2322	A	C5-C6-N6	-6.39	118.58	123.70
2	B	2549	G	C4'-C3'-C2'	6.39	109.00	102.60
2	B	122	G	C5-N7-C8	6.39	107.50	104.30
2	B	408	G	N3-C4-C5	6.39	131.80	128.60
2	B	626	A	C4-C5-C6	6.39	120.20	117.00
2	B	1192	G	C4-C5-C6	6.39	122.64	118.80
2	B	1439	A	C6-C5-N7	-6.39	127.83	132.30
2	B	2042	A	C4-C5-C6	6.39	120.20	117.00
2	B	481	G	O4'-C1'-C2'	-6.39	99.41	105.80
2	B	1603	A	C5-C6-N6	-6.39	118.59	123.70
2	B	2846	G	N3-C2-N2	6.39	124.37	119.90
25	7	29	ARG	NE-CZ-NH1	-6.39	117.11	120.30
1	A	69	G	C5-N7-C8	-6.39	101.11	104.30
2	B	329	G	N3-C2-N2	6.39	124.37	119.90
2	B	686	U	C2-N1-C1'	-6.39	110.03	117.70
2	B	1249	U	C2-N3-C4	-6.39	123.17	127.00
2	B	1731	G	C4-C5-C6	6.39	122.63	118.80
2	B	2157	G	C4-N9-C1'	-6.39	118.19	126.50
2	B	2346	A	N3-C4-N9	-6.39	122.29	127.40
2	B	2747	G	N1-C6-O6	6.39	123.73	119.90
2	B	716	A	C5-C6-N6	-6.39	118.59	123.70
2	B	1332	G	C4-N9-C1'	6.39	134.81	126.50
2	B	1537	G	N7-C8-N9	-6.39	109.91	113.10
2	B	333	G	N1-C2-N3	-6.39	120.07	123.90
2	B	523	C	C6-N1-C2	6.39	122.85	120.30
2	B	1235	G	P-O5'-C5'	6.39	131.12	120.90
2	B	1958	C	C5-C4-N4	6.39	124.67	120.20
2	B	2213	U	C2-N3-C4	-6.39	123.17	127.00
2	B	230	G	C6-N1-C2	6.38	128.93	125.10
2	B	1039	A	O4'-C1'-N9	6.38	113.31	108.20
2	B	1833	C	O4'-C1'-N1	6.38	113.31	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2002	G	C2-N3-C4	6.38	115.09	111.90
2	B	2005	A	N1-C2-N3	6.38	132.49	129.30
2	B	2682	A	O4'-C4'-C3'	-6.38	97.61	104.00
2	B	369	U	C5-C4-O4	-6.38	122.07	125.90
2	B	2031	A	O4'-C1'-N9	6.38	113.31	108.20
2	B	2092	U	C2-N1-C1'	6.38	125.36	117.70
2	B	2186	G	N3-C2-N2	6.38	124.37	119.90
2	B	2425	A	N9-C4-C5	6.38	108.35	105.80
2	B	2588	G	C3'-C2'-C1'	-6.38	96.39	101.50
1	A	21	G	C8-N9-C1'	6.38	135.29	127.00
2	B	651	G	C8-N9-C4	6.38	108.95	106.40
2	B	667	U	N1-C2-N3	-6.38	111.07	114.90
2	B	1081	U	C3'-C2'-C1'	-6.38	96.39	101.50
2	B	1109	C	C4'-C3'-C2'	6.38	108.98	102.60
2	B	1200	C	C5-C6-N1	-6.38	117.81	121.00
2	B	2048	G	N1-C2-N3	-6.38	120.07	123.90
2	B	2153	C	C5'-C4'-C3'	-6.38	105.79	116.00
2	B	1285	A	C5-C6-N1	-6.38	114.51	117.70
2	B	1331	G	C5-C6-N1	-6.38	108.31	111.50
2	B	1375	U	C2-N3-C4	-6.38	123.17	127.00
2	B	1733	G	N3-C4-C5	6.38	131.79	128.60
2	B	1910	G	C4-C5-N7	-6.38	108.25	110.80
2	B	2762	C	N3-C4-C5	-6.38	119.35	121.90
1	A	107	G	C4-C5-N7	-6.38	108.25	110.80
2	B	1250	G	N3-C2-N2	6.38	124.36	119.90
2	B	2125	G	C5'-C4'-C3'	6.38	126.20	116.00
2	B	2715	C	O4'-C1'-N1	6.38	113.30	108.20
2	B	2822	G	N3-C4-N9	6.38	129.83	126.00
2	B	1074	G	C5-C6-N1	-6.38	108.31	111.50
2	B	1124	G	N3-C2-N2	6.38	124.36	119.90
2	B	1368	G	C8-N9-C4	-6.38	103.85	106.40
2	B	1449	G	N1-C2-N3	-6.38	120.07	123.90
2	B	1950	G	N7-C8-N9	6.38	116.29	113.10
2	B	2107	G	C8-N9-C4	-6.38	103.85	106.40
2	B	2438	U	O4'-C1'-N1	6.38	113.30	108.20
2	B	2676	C	N1-C2-O2	6.38	122.72	118.90
2	B	59	U	N3-C4-C5	6.38	118.42	114.60
2	B	760	G	N3-C4-N9	6.38	129.82	126.00
2	B	1345	C	C5-C6-N1	-6.38	117.81	121.00
2	B	1384	A	N1-C6-N6	6.38	122.42	118.60
2	B	1634	A	P-O5'-C5'	-6.38	110.70	120.90
2	B	1703	G	C6-C5-N7	-6.38	126.58	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2112	G	C4-C5-C6	6.38	122.62	118.80
2	B	26	G	C5-C6-O6	-6.37	124.78	128.60
2	B	252	G	C5-C6-N1	-6.37	108.31	111.50
2	B	642	U	O5'-P-OP1	-6.37	99.97	105.70
2	B	1265	A	C5-C6-N1	-6.37	114.51	117.70
2	B	1289	C	C4-C5-C6	-6.37	114.21	117.40
2	B	1457	U	O4'-C1'-N1	6.37	113.30	108.20
2	B	1981	A	C4-C5-C6	6.37	120.19	117.00
2	B	2013	A	N1-C2-N3	-6.37	126.11	129.30
2	B	2567	G	C6-N1-C2	-6.37	121.28	125.10
2	B	282	A	C8-N9-C4	-6.37	103.25	105.80
2	B	335	C	C5-C6-N1	-6.37	117.81	121.00
2	B	614	A	O4'-C1'-N9	6.37	113.30	108.20
2	B	659	G	N1-C6-O6	6.37	123.72	119.90
2	B	1344	U	C4-C5-C6	6.37	123.52	119.70
2	B	1546	G	O4'-C1'-N9	6.37	113.30	108.20
2	B	1756	G	O4'-C1'-N9	6.37	113.30	108.20
2	B	2184	A	C5-C6-N1	-6.37	114.51	117.70
2	B	2233	U	C1'-O4'-C4'	-6.37	104.80	109.90
2	B	2871	U	C6-N1-C2	6.37	124.82	121.00
12	R	68	ARG	NE-CZ-NH2	6.37	123.49	120.30
2	B	90	U	C5'-C4'-C3'	6.37	126.19	116.00
2	B	535	G	C5-C6-N1	6.37	114.69	111.50
2	B	608	A	C4-C5-C6	6.37	120.19	117.00
2	B	1753	G	C4-C5-N7	6.37	113.35	110.80
2	B	1978	A	C6-N1-C2	-6.37	114.78	118.60
2	B	2326	C	N1-C2-N3	-6.37	114.74	119.20
2	B	2452	C	C5'-C4'-C3'	6.37	126.19	116.00
2	B	9	G	C6-C5-N7	-6.37	126.58	130.40
2	B	471	A	C3'-C2'-C1'	6.37	106.59	101.50
2	B	561	G	C5-N7-C8	6.37	107.48	104.30
2	B	1215	G	N3-C2-N2	6.37	124.36	119.90
2	B	1965	C	N3-C2-O2	6.37	126.36	121.90
2	B	2262	U	C1'-O4'-C4'	-6.37	104.81	109.90
2	B	2507	C	C5-C4-N4	-6.37	115.74	120.20
2	B	23	G	N1-C2-N2	-6.37	110.47	116.20
2	B	82	U	C5'-C4'-C3'	6.37	126.18	116.00
2	B	696	G	C8-N9-C4	6.37	108.95	106.40
2	B	1110	G	C8-N9-C4	-6.37	103.85	106.40
2	B	1764	C	C4-C5-C6	6.37	120.58	117.40
2	B	2115	G	C6-C5-N7	-6.37	126.58	130.40
2	B	2677	G	N3-C4-C5	6.37	131.78	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
10	P	38	ARG	NE-CZ-NH2	-6.37	117.12	120.30
11	Q	46	TYR	CG-CD1-CE1	-6.37	116.21	121.30
2	B	983	A	C5-C6-N6	-6.36	118.61	123.70
2	B	1552	A	C5-N7-C8	6.36	107.08	103.90
2	B	2168	G	N3-C4-C5	-6.36	125.42	128.60
2	B	2831	G	C5'-C4'-O4'	6.36	116.73	109.10
2	B	135	U	C2-N1-C1'	-6.36	110.07	117.70
2	B	1746	A	C4-C5-C6	6.36	120.18	117.00
2	B	2588	G	N9-C4-C5	6.36	107.94	105.40
2	B	2788	C	N3-C4-N4	6.36	122.45	118.00
2	B	1617	C	O4'-C1'-C2'	-6.36	99.44	105.80
2	B	1634	A	N7-C8-N9	-6.36	110.62	113.80
2	B	1681	G	C5-C6-N1	6.36	114.68	111.50
2	B	1831	G	C4-C5-N7	-6.36	108.25	110.80
2	B	2242	G	P-O3'-C3'	6.36	127.33	119.70
2	B	2275	C	C5-C4-N4	-6.36	115.75	120.20
2	B	2381	A	C5-N7-C8	6.36	107.08	103.90
2	B	2505	G	C5'-C4'-C3'	-6.36	105.82	116.00
2	B	2604	U	N3-C4-C5	-6.36	110.78	114.60
1	A	116	G	C5-N7-C8	6.36	107.48	104.30
2	B	408	G	C3'-C2'-C1'	-6.36	96.41	101.50
2	B	1200	C	C5'-C4'-C3'	6.36	126.17	116.00
2	B	1416	G	C6-N1-C2	6.36	128.91	125.10
2	B	1755	A	C1'-O4'-C4'	-6.36	104.81	109.90
2	B	2831	G	N9-C4-C5	6.36	107.94	105.40
2	B	143	C	C4-C5-C6	6.36	120.58	117.40
2	B	278	A	C4-C5-C6	6.36	120.18	117.00
2	B	555	G	O4'-C1'-C2'	-6.36	99.44	105.80
2	B	630	G	N3-C4-N9	-6.36	122.19	126.00
2	B	2178	C	N1-C1'-C2'	-6.36	105.01	112.00
2	B	2241	A	C5-N7-C8	6.36	107.08	103.90
2	B	2638	G	C8-N9-C1'	-6.36	118.73	127.00
2	B	2755	C	C6-N1-C2	-6.36	117.76	120.30
2	B	2887	A	C1'-O4'-C4'	-6.36	104.81	109.90
13	S	38	TYR	CB-CG-CD1	-6.36	117.19	121.00
2	B	54	G	C6-C5-N7	-6.36	126.59	130.40
2	B	286	U	N3-C4-O4	6.36	123.85	119.40
2	B	1187	G	C4-C5-N7	-6.36	108.26	110.80
2	B	2028	U	C4'-C3'-C2'	-6.36	96.24	102.60
2	B	2176	A	C5-N7-C8	6.36	107.08	103.90
2	B	2223	G	N9-C1'-C2'	-6.36	105.01	112.00
2	B	2333	A	N9-C1'-C2'	-6.36	105.01	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	239	C	C5-C6-N1	6.35	124.18	121.00
2	B	668	A	N1-C2-N3	-6.35	126.12	129.30
2	B	1230	A	C8-N9-C4	6.35	108.34	105.80
2	B	1681	G	N3-C4-N9	-6.35	122.19	126.00
2	B	2705	A	N7-C8-N9	-6.35	110.62	113.80
2	B	252	G	C6-C5-N7	-6.35	126.59	130.40
2	B	263	G	N3-C4-C5	-6.35	125.42	128.60
2	B	847	U	C4-C5-C6	-6.35	115.89	119.70
2	B	928	A	N3-C4-N9	6.35	132.48	127.40
2	B	1069	A	C4-C5-C6	6.35	120.18	117.00
2	B	1241	A	C6-C5-N7	-6.35	127.85	132.30
2	B	1528	A	N9-C1'-C2'	-6.35	105.01	112.00
2	B	2574	G	C6-C5-N7	-6.35	126.59	130.40
19	X	260	VAL	O-C-N	6.35	132.87	122.70
20	E	44	ARG	NE-CZ-NH1	-6.35	117.12	120.30
2	B	241	A	O4'-C1'-N9	6.35	113.28	108.20
2	B	470	A	C5-C6-N6	-6.35	118.62	123.70
2	B	1017	G	C5-C6-O6	-6.35	124.79	128.60
1	A	82	U	C5-C4-O4	6.35	129.71	125.90
2	B	774	G	C5'-C4'-O4'	-6.35	101.48	109.10
2	B	1387	A	N1-C2-N3	6.35	132.47	129.30
2	B	1910	G	C4-C5-C6	6.35	122.61	118.80
2	B	2065	C	O4'-C4'-C3'	-6.35	97.65	104.00
2	B	2075	U	C5-C4-O4	-6.35	122.09	125.90
2	B	127	A	O4'-C1'-C2'	6.35	113.31	107.60
2	B	2147	A	O4'-C4'-C3'	-6.35	97.65	104.00
2	B	2399	G	C5-C6-N1	6.35	114.67	111.50
2	B	2488	G	N1-C2-N2	-6.35	110.49	116.20
2	B	2528	U	C6-N1-C2	6.35	124.81	121.00
2	B	2816	G	N9-C4-C5	-6.35	102.86	105.40
2	B	2825	G	C5-C6-O6	-6.35	124.79	128.60
2	B	2890	G	N1-C6-O6	6.35	123.71	119.90
24	6	12	ARG	NE-CZ-NH1	-6.35	117.13	120.30
27	C	200	MET	CA-CB-CG	6.35	124.09	113.30
2	B	141	G	P-O3'-C3'	6.35	127.31	119.70
2	B	570	G	C2-N3-C4	6.35	115.07	111.90
2	B	660	C	N3-C4-N4	6.35	122.44	118.00
2	B	742	A	C5-N7-C8	6.35	107.07	103.90
2	B	981	A	N1-C2-N3	-6.35	126.13	129.30
2	B	2038	G	N1-C6-O6	6.35	123.71	119.90
2	B	2060	A	N9-C4-C5	6.35	108.34	105.80
2	B	2593	U	P-O3'-C3'	-6.35	112.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2892	G	C8-N9-C1'	6.35	135.25	127.00
2	B	952	G	C3'-C2'-C1'	-6.34	96.42	101.50
2	B	2492	U	N1-C2-O2	6.34	127.24	122.80
2	B	2695	U	O4'-C1'-N1	6.34	113.28	108.20
18	W	79	ARG	NE-CZ-NH2	-6.34	117.13	120.30
2	B	686	U	O3'-P-O5'	-6.34	91.95	104.00
2	B	1177	G	C8-N9-C4	-6.34	103.86	106.40
2	B	1409	U	N1-C2-O2	-6.34	118.36	122.80
2	B	1482	G	O5'-C5'-C4'	-6.34	99.65	111.70
2	B	1490	A	N9-C4-C5	6.34	108.34	105.80
2	B	1697	G	P-O3'-C3'	-6.34	112.09	119.70
2	B	1713	A	C8-N9-C4	6.34	108.34	105.80
2	B	659	G	N7-C8-N9	-6.34	109.93	113.10
2	B	709	U	N3-C4-C5	6.34	118.41	114.60
2	B	709	U	O4'-C4'-C3'	-6.34	97.66	104.00
2	B	1102	C	N1-C2-O2	-6.34	115.09	118.90
2	B	1587	G	N9-C4-C5	-6.34	102.86	105.40
2	B	1717	A	N3-C4-N9	6.34	132.47	127.40
2	B	2771	C	N3-C4-N4	6.34	122.44	118.00
2	B	2775	G	C2-N3-C4	-6.34	108.73	111.90
2	B	231	A	C5-N7-C8	6.34	107.07	103.90
2	B	307	G	O4'-C1'-N9	6.34	113.27	108.20
2	B	346	A	O5'-P-OP2	-6.34	100.00	105.70
2	B	893	C	C4'-C3'-C2'	-6.34	96.26	102.60
2	B	1084	A	C8-N9-C4	-6.34	103.26	105.80
2	B	2281	A	C6-N1-C2	6.34	122.40	118.60
2	B	2301	C	N3-C4-N4	6.34	122.44	118.00
2	B	2336	A	C6-C5-N7	-6.34	127.86	132.30
2	B	2360	G	N3-C4-N9	6.34	129.80	126.00
2	B	2694	G	N7-C8-N9	-6.34	109.93	113.10
2	B	2747	G	N1-C2-N3	-6.34	120.10	123.90
2	B	448	U	C5-C6-N1	6.34	125.87	122.70
2	B	1290	C	N3-C4-N4	6.34	122.44	118.00
2	B	1765	U	C2-N3-C4	-6.34	123.20	127.00
2	B	1789	A	N1-C2-N3	-6.34	126.13	129.30
2	B	2039	U	N3-C4-C5	-6.34	110.80	114.60
2	B	2813	A	N1-C2-N3	-6.34	126.13	129.30
2	B	117	G	C2-N3-C4	6.34	115.07	111.90
2	B	1475	G	C8-N9-C4	-6.34	103.87	106.40
2	B	1771	C	C1'-O4'-C4'	-6.34	104.83	109.90
2	B	1772	A	C5-N7-C8	6.34	107.07	103.90
2	B	1903	G	N7-C8-N9	6.34	116.27	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2011	U	O4'-C1'-N1	6.34	113.27	108.20
2	B	93	G	N1-C6-O6	6.33	123.70	119.90
2	B	433	C	C6-N1-C2	6.33	122.83	120.30
2	B	819	A	C4-C5-N7	-6.33	107.53	110.70
2	B	846	U	O4'-C1'-C2'	-6.33	99.47	105.80
2	B	1204	A	C5-C6-N1	-6.33	114.53	117.70
2	B	1279	G	N1-C2-N2	-6.33	110.50	116.20
2	B	1296	G	C8-N9-C1'	6.33	135.23	127.00
2	B	1696	G	N3-C2-N2	-6.33	115.47	119.90
2	B	2899	A	C6-N1-C2	6.33	122.40	118.60
19	X	272	LYS	N-CA-C	6.33	128.10	111.00
2	B	1024	G	C5-N7-C8	6.33	107.47	104.30
2	B	1479	G	O4'-C1'-N9	6.33	113.27	108.20
2	B	2108	A	N1-C2-N3	6.33	132.47	129.30
2	B	2749	A	C5-C6-N1	-6.33	114.53	117.70
29	G	79	THR	N-CA-C	-6.33	93.90	111.00
1	A	38	C	C5-C6-N1	-6.33	117.83	121.00
2	B	172	A	C4-C5-N7	-6.33	107.53	110.70
2	B	1185	G	N3-C4-N9	6.33	129.80	126.00
2	B	1719	G	C8-N9-C1'	6.33	135.23	127.00
2	B	1773	A	C6-N1-C2	6.33	122.40	118.60
2	B	2502	G	C4-C5-N7	-6.33	108.27	110.80
2	B	2747	G	N3-C2-N2	6.33	124.33	119.90
2	B	2844	G	N3-C4-N9	6.33	129.80	126.00
28	F	6	TYR	CG-CD2-CE2	6.33	126.36	121.30
2	B	334	C	N1-C2-O2	-6.33	115.10	118.90
2	B	748	G	C4'-C3'-C2'	6.33	108.93	102.60
2	B	815	C	N3-C4-C5	-6.33	119.37	121.90
2	B	1114	C	N3-C4-N4	6.33	122.43	118.00
2	B	2180	U	C2-N3-C4	-6.33	123.20	127.00
2	B	2834	G	N3-C4-N9	6.33	129.80	126.00
2	B	949	G	C8-N9-C4	-6.33	103.87	106.40
2	B	1444	G	C6-N1-C2	6.33	128.90	125.10
2	B	2063	C	N3-C2-O2	-6.33	117.47	121.90
2	B	2437	G	N9-C4-C5	6.33	107.93	105.40
17	U	76	THR	CA-CB-CG2	-6.33	103.54	112.40
1	A	31	C	N3-C4-C5	-6.33	119.37	121.90
2	B	122	G	C4'-C3'-C2'	6.33	108.92	102.60
2	B	452	G	C6-C5-N7	-6.33	126.60	130.40
2	B	893	C	C4-C5-C6	6.33	120.56	117.40
2	B	1271	G	C6-N1-C2	6.33	128.90	125.10
2	B	1413	A	OP1-P-OP2	-6.33	110.11	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1767	G	N1-C2-N2	-6.33	110.51	116.20
2	B	2096	C	C2-N1-C1'	-6.33	111.84	118.80
2	B	345	A	N3-C4-C5	-6.32	122.37	126.80
2	B	574	A	C1'-O4'-C4'	6.32	114.96	109.90
2	B	586	A	C5-C6-N1	-6.32	114.54	117.70
2	B	858	G	P-O5'-C5'	-6.32	110.78	120.90
2	B	1086	A	C5-C6-N6	-6.32	118.64	123.70
2	B	1378	A	C5-C6-N6	-6.32	118.64	123.70
2	B	1502	A	N9-C4-C5	6.32	108.33	105.80
2	B	2160	C	N3-C4-C5	6.32	124.43	121.90
2	B	2361	G	C2-N3-C4	-6.32	108.74	111.90
2	B	2547	A	C5'-C4'-O4'	-6.32	101.51	109.10
2	B	1146	C	C2-N1-C1'	-6.32	111.85	118.80
2	B	2000	C	C2-N3-C4	6.32	123.06	119.90
2	B	2100	G	O4'-C1'-N9	6.32	113.26	108.20
2	B	326	G	P-O3'-C3'	-6.32	112.12	119.70
2	B	762	U	N3-C2-O2	6.32	126.62	122.20
2	B	1260	A	C5-C6-N1	-6.32	114.54	117.70
2	B	2890	G	N3-C2-N2	6.32	124.33	119.90
11	Q	24	TYR	CB-CG-CD2	-6.32	117.21	121.00
13	S	68	ASP	N-CA-CB	6.32	121.98	110.60
29	G	134	GLY	N-CA-C	-6.32	97.30	113.10
1	A	103	U	C2-N3-C4	-6.32	123.21	127.00
2	B	430	A	C5-N7-C8	6.32	107.06	103.90
2	B	704	G	C4-C5-C6	6.32	122.59	118.80
2	B	1843	C	O4'-C1'-N1	6.32	113.25	108.20
2	B	2565	A	C8-N9-C4	-6.32	103.27	105.80
1	A	5	U	C5-C4-O4	-6.32	122.11	125.90
2	B	429	A	C4-C5-C6	6.32	120.16	117.00
2	B	669	G	N1-C6-O6	6.32	123.69	119.90
2	B	1274	A	C3'-C2'-C1'	6.32	106.55	101.50
2	B	1545	A	N3-C4-C5	-6.32	122.38	126.80
2	B	1675	C	N3-C4-N4	6.32	122.42	118.00
2	B	1762	A	N7-C8-N9	6.32	116.96	113.80
2	B	2401	U	C3'-C2'-C1'	6.32	106.55	101.50
2	B	2702	G	P-O3'-C3'	6.32	127.28	119.70
2	B	660	C	C1'-O4'-C4'	-6.32	104.85	109.90
2	B	1314	C	N1-C2-N3	-6.32	114.78	119.20
2	B	1320	C	C1'-O4'-C4'	-6.32	104.85	109.90
2	B	1788	C	N3-C2-O2	-6.32	117.48	121.90
2	B	2412	A	N9-C4-C5	6.32	108.33	105.80
2	B	2439	A	C2-N3-C4	-6.32	107.44	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2868	A	N3-C4-C5	-6.32	122.38	126.80
2	B	1032	A	P-O3'-C3'	6.31	127.28	119.70
2	B	1726	C	O4'-C1'-N1	6.31	113.25	108.20
2	B	2061	G	C5-C6-O6	-6.31	124.81	128.60
2	B	2142	A	C8-N9-C4	-6.31	103.28	105.80
1	A	63	C	C4-C5-C6	-6.31	114.24	117.40
2	B	438	G	C8-N9-C4	6.31	108.92	106.40
2	B	873	C	C2-N3-C4	6.31	123.06	119.90
2	B	988	A	C5-C6-N1	-6.31	114.54	117.70
2	B	1294	U	O4'-C1'-N1	6.31	113.25	108.20
2	B	1824	G	O4'-C4'-C3'	-6.31	97.69	104.00
2	B	1988	G	N1-C6-O6	6.31	123.69	119.90
2	B	2018	G	N3-C2-N2	6.31	124.32	119.90
2	B	2536	G	N1-C6-O6	6.31	123.69	119.90
19	X	257	THR	N-CA-C	6.31	128.04	111.00
2	B	2422	C	C5-C4-N4	-6.31	115.78	120.20
2	B	2732	G	N1-C6-O6	6.31	123.69	119.90
2	B	245	G	C4-C5-C6	6.31	122.59	118.80
2	B	951	C	C2-N1-C1'	6.31	125.74	118.80
2	B	968	C	C4-C5-C6	6.31	120.56	117.40
2	B	1121	C	C5-C6-N1	-6.31	117.84	121.00
2	B	1455	G	N9-C4-C5	-6.31	102.88	105.40
2	B	1682	G	C6-C5-N7	-6.31	126.61	130.40
2	B	2419	U	O4'-C1'-N1	6.31	113.25	108.20
2	B	2536	G	N3-C2-N2	6.31	124.32	119.90
2	B	2879	A	C8-N9-C4	6.31	108.32	105.80
9	O	65	THR	CA-CB-CG2	-6.31	103.57	112.40
28	F	9	ASP	CB-CG-OD2	6.31	123.98	118.30
2	B	367	G	N7-C8-N9	6.31	116.25	113.10
2	B	404	A	O4'-C1'-N9	6.31	113.25	108.20
2	B	595	C	OP1-P-OP2	-6.31	110.14	119.60
2	B	1244	A	C4-N9-C1'	-6.31	114.95	126.30
2	B	1380	G	C5'-C4'-O4'	6.31	116.67	109.10
2	B	1696	G	N7-C8-N9	-6.31	109.95	113.10
2	B	2010	G	N3-C4-C5	-6.31	125.45	128.60
2	B	2083	G	C6-N1-C2	-6.31	121.31	125.10
2	B	2282	G	C3'-C2'-C1'	6.31	106.55	101.50
2	B	2316	G	C8-N9-C1'	6.31	135.20	127.00
2	B	2487	G	C6-N1-C2	-6.31	121.32	125.10
2	B	2831	G	P-O5'-C5'	-6.31	110.81	120.90
19	X	238	ARG	NE-CZ-NH1	6.31	123.45	120.30
28	F	174	PHE	CB-CG-CD1	-6.31	116.39	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	340	A	N1-C6-N6	6.31	122.38	118.60
2	B	514	A	O4'-C1'-N9	6.31	113.25	108.20
2	B	1695	G	N3-C4-N9	6.31	129.78	126.00
2	B	2341	G	N1-C2-N3	-6.31	120.12	123.90
2	B	2462	C	C4-C5-C6	6.31	120.55	117.40
2	B	2601	C	O4'-C1'-N1	6.31	113.25	108.20
2	B	2609	U	C3'-C2'-C1'	6.31	106.54	101.50
1	A	41	G	N3-C2-N2	6.30	124.31	119.90
1	A	102	G	C5'-C4'-O4'	-6.30	101.54	109.10
2	B	421	C	C5-C6-N1	6.30	124.15	121.00
2	B	664	G	N3-C2-N2	6.30	124.31	119.90
2	B	708	G	C3'-C2'-C1'	-6.30	96.46	101.50
2	B	1692	U	N1-C2-N3	6.30	118.68	114.90
2	B	1843	C	N3-C4-C5	-6.30	119.38	121.90
2	B	1992	G	O4'-C1'-N9	6.30	113.24	108.20
2	B	2136	G	C8-N9-C4	-6.30	103.88	106.40
2	B	2541	A	N7-C8-N9	6.30	116.95	113.80
2	B	2765	A	O4'-C1'-C2'	6.30	113.28	107.60
10	P	64	SER	N-CA-CB	6.30	119.96	110.50
2	B	651	G	N1-C2-N3	-6.30	120.12	123.90
2	B	1220	G	C2-N3-C4	-6.30	108.75	111.90
2	B	1609	A	C5-C6-N1	-6.30	114.55	117.70
2	B	2856	A	C5-C6-N1	-6.30	114.55	117.70
1	A	105	G	C4-N9-C1'	-6.30	118.31	126.50
2	B	376	G	O3'-P-O5'	-6.30	92.03	104.00
2	B	571	U	O4'-C1'-C2'	-6.30	99.50	105.80
2	B	1356	G	O4'-C1'-N9	6.30	113.24	108.20
2	B	1528	A	C5-N7-C8	6.30	107.05	103.90
2	B	1855	U	C2-N3-C4	-6.30	123.22	127.00
2	B	2157	G	N1-C2-N3	-6.30	120.12	123.90
2	B	2441	U	C5-C6-N1	-6.30	119.55	122.70
14	D	201	LEU	N-CA-CB	6.30	123.00	110.40
15	T	80	TRP	CG-CD2-CE3	-6.30	128.23	133.90
2	B	83	A	C1'-O4'-C4'	6.30	114.94	109.90
2	B	676	A	O4'-C1'-N9	6.30	113.24	108.20
2	B	861	A	C4-C5-C6	6.30	120.15	117.00
2	B	1162	G	N3-C2-N2	6.30	124.31	119.90
2	B	2387	U	N3-C4-C5	-6.30	110.82	114.60
2	B	2409	G	C2-N3-C4	-6.30	108.75	111.90
2	B	2567	G	C6-C5-N7	-6.30	126.62	130.40
2	B	2806	C	C5'-C4'-C3'	6.30	126.08	116.00
2	B	2865	U	C6-N1-C2	-6.30	117.22	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	580	U	C2-N3-C4	-6.30	123.22	127.00
2	B	1573	G	N1-C6-O6	6.30	123.68	119.90
28	F	109	ARG	NE-CZ-NH2	6.30	123.45	120.30
32	J	20	ALA	N-CA-CB	6.30	118.92	110.10
2	B	714	U	C4'-C3'-C2'	-6.30	96.30	102.60
2	B	792	A	N1-C6-N6	6.30	122.38	118.60
2	B	1434	A	C6-C5-N7	-6.30	127.89	132.30
2	B	1555	G	C5-C6-O6	6.30	132.38	128.60
2	B	2428	G	N1-C6-O6	6.30	123.68	119.90
12	R	31	GLU	N-CA-CB	6.30	121.93	110.60
2	B	270	A	N1-C6-N6	6.29	122.38	118.60
2	B	719	C	C5-C4-N4	-6.29	115.79	120.20
2	B	1341	G	N1-C2-N3	-6.29	120.12	123.90
2	B	1828	G	N1-C2-N2	-6.29	110.53	116.20
2	B	2413	G	C4-C5-C6	6.29	122.58	118.80
18	W	50	MET	CG-SD-CE	-6.29	90.13	100.20
23	5	18	THR	N-CA-CB	6.29	122.26	110.30
1	A	90	C	P-O3'-C3'	-6.29	112.15	119.70
2	B	741	U	N3-C2-O2	-6.29	117.79	122.20
2	B	815	C	C2-N3-C4	6.29	123.05	119.90
2	B	1038	G	O4'-C1'-C2'	6.29	113.26	107.60
2	B	1952	A	C5-C6-N1	-6.29	114.55	117.70
2	B	2086	U	P-O3'-C3'	6.29	127.25	119.70
2	B	2442	C	N3-C4-C5	-6.29	119.38	121.90
2	B	2609	U	N3-C4-C5	-6.29	110.82	114.60
2	B	2639	A	N7-C8-N9	-6.29	110.65	113.80
13	S	94	ASP	CB-CG-OD2	-6.29	112.64	118.30
2	B	314	C	N1-C2-O2	6.29	122.67	118.90
2	B	797	G	N9-C1'-C2'	-6.29	105.08	112.00
2	B	981	A	OP2-P-O3'	6.29	119.04	105.20
2	B	1338	G	C5-C6-N1	6.29	114.64	111.50
2	B	1364	G	N9-C1'-C2'	-6.29	105.08	112.00
2	B	1402	U	N3-C4-C5	-6.29	110.83	114.60
2	B	1459	G	C8-N9-C4	-6.29	103.88	106.40
2	B	1650	A	C8-N9-C4	-6.29	103.28	105.80
2	B	2249	U	N3-C4-O4	6.29	123.80	119.40
2	B	2326	C	C2-N3-C4	6.29	123.05	119.90
2	B	2702	G	C5-N7-C8	-6.29	101.15	104.30
2	B	517	C	P-O5'-C5'	-6.29	110.83	120.90
2	B	742	A	C5-C6-N1	-6.29	114.56	117.70
2	B	2341	G	O4'-C1'-N9	6.29	113.23	108.20
16	2	53	MET	CG-SD-CE	-6.29	90.14	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	C	102	TYR	CG-CD1-CE1	-6.29	116.27	121.30
2	B	293	U	C5-C4-O4	6.29	129.67	125.90
2	B	496	G	N1-C2-N3	-6.29	120.13	123.90
2	B	559	G	C8-N9-C1'	-6.29	118.82	127.00
2	B	1505	A	N1-C6-N6	6.29	122.37	118.60
2	B	1722	A	O4'-C1'-N9	6.29	113.23	108.20
2	B	2410	G	C8-N9-C4	-6.29	103.88	106.40
2	B	2478	A	N9-C4-C5	-6.29	103.28	105.80
11	Q	91	ARG	NE-CZ-NH1	-6.29	117.16	120.30
28	F	19	PHE	CB-CG-CD2	-6.29	116.40	120.80
2	B	35	G	N1-C6-O6	6.29	123.67	119.90
2	B	220	G	P-O5'-C5'	6.29	130.96	120.90
2	B	972	A	O3'-P-O5'	-6.29	92.06	104.00
2	B	1230	A	C5-C6-N6	-6.29	118.67	123.70
2	B	1780	A	O4'-C1'-N9	6.29	113.23	108.20
2	B	2611	C	C5-C6-N1	6.29	124.14	121.00
2	B	450	G	C6-C5-N7	-6.29	126.63	130.40
2	B	811	U	N3-C4-O4	-6.29	115.00	119.40
2	B	1929	G	O4'-C1'-C2'	-6.29	99.52	105.80
2	B	2124	G	C8-N9-C1'	6.29	135.17	127.00
2	B	2250	G	C5'-C4'-C3'	-6.29	105.94	116.00
2	B	2279	G	C6-C5-N7	-6.29	126.63	130.40
18	W	26	PHE	CB-CG-CD1	-6.29	116.40	120.80
1	A	59	A	C4-C5-N7	-6.28	107.56	110.70
2	B	42	A	C2-N3-C4	-6.28	107.46	110.60
2	B	147	C	C2-N1-C1'	-6.28	111.89	118.80
2	B	534	U	P-O3'-C3'	6.28	127.24	119.70
2	B	672	C	C3'-C2'-C1'	-6.28	96.47	101.50
2	B	681	G	C4'-C3'-C2'	-6.28	96.32	102.60
2	B	2495	G	C4-C5-N7	-6.28	108.29	110.80
32	J	132	HIS	CB-CA-C	-6.28	97.83	110.40
2	B	1514	G	C4-C5-C6	6.28	122.57	118.80
2	B	2779	U	N3-C4-O4	6.28	123.80	119.40
2	B	492	A	C6-C5-N7	-6.28	127.90	132.30
2	B	1179	G	C4-C5-C6	6.28	122.57	118.80
2	B	1189	A	C4-C5-C6	6.28	120.14	117.00
2	B	2147	A	C6-C5-N7	-6.28	127.90	132.30
2	B	2642	G	C8-N9-C4	-6.28	103.89	106.40
28	F	113	PHE	CG-CD1-CE1	6.28	127.71	120.80
1	A	105	G	O4'-C1'-C2'	-6.28	99.52	105.80
2	B	1692	U	C2-N1-C1'	6.28	125.23	117.70
19	X	439	MET	CG-SD-CE	-6.28	90.15	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1004	U	C5-C6-N1	6.28	125.84	122.70
2	B	1451	C	C5'-C4'-C3'	-6.28	105.96	116.00
2	B	2819	G	C8-N9-C4	-6.28	103.89	106.40
2	B	94	A	N7-C8-N9	6.28	116.94	113.80
2	B	255	A	C5'-C4'-C3'	-6.28	105.96	116.00
2	B	321	U	P-O3'-C3'	6.28	127.23	119.70
2	B	849	A	C2-N3-C4	-6.28	107.46	110.60
2	B	1654	A	N9-C4-C5	6.28	108.31	105.80
2	B	2220	U	N1-C2-N3	-6.28	111.14	114.90
2	B	2824	C	C4-C5-C6	-6.28	114.26	117.40
2	B	2825	G	C4-C5-C6	6.28	122.57	118.80
2	B	23	G	C5'-C4'-O4'	6.27	116.63	109.10
2	B	1050	A	C4-C5-C6	6.27	120.14	117.00
2	B	1328	A	N1-C2-N3	-6.27	126.16	129.30
2	B	1372	U	C4'-C3'-C2'	-6.27	96.33	102.60
2	B	1640	A	P-O5'-C5'	-6.27	110.86	120.90
2	B	1939	U	N3-C2-O2	6.27	126.59	122.20
2	B	1960	A	C5-N7-C8	6.27	107.04	103.90
2	B	2082	A	C5-C6-N1	-6.27	114.56	117.70
2	B	353	C	C6-N1-C2	-6.27	117.79	120.30
2	B	373	U	N3-C4-O4	6.27	123.79	119.40
2	B	629	G	C3'-C2'-C1'	-6.27	96.48	101.50
2	B	900	A	N7-C8-N9	-6.27	110.66	113.80
2	B	1021	A	C8-N9-C4	-6.27	103.29	105.80
2	B	1223	G	N3-C4-C5	6.27	131.74	128.60
2	B	1578	U	C1'-O4'-C4'	-6.27	104.88	109.90
2	B	2012	G	N1-C2-N2	-6.27	110.56	116.20
2	B	2321	U	N3-C4-O4	6.27	123.79	119.40
2	B	594	U	O5'-P-OP2	6.27	118.22	110.70
2	B	1347	A	C4-C5-C6	6.27	120.14	117.00
2	B	2315	G	N3-C2-N2	6.27	124.29	119.90
2	B	2735	G	C5'-C4'-C3'	6.27	126.03	116.00
11	Q	58	GLN	N-CA-C	-6.27	94.07	111.00
1	A	7	G	C4-C5-C6	6.27	122.56	118.80
2	B	888	C	C2-N1-C1'	6.27	125.70	118.80
2	B	1132	U	N3-C4-C5	6.27	118.36	114.60
2	B	1534	U	C3'-C2'-C1'	-6.27	96.48	101.50
2	B	1567	G	C5'-C4'-O4'	6.27	116.62	109.10
2	B	2503	A	O4'-C1'-C2'	-6.27	99.53	105.80
2	B	2654	A	C4-C5-N7	-6.27	107.56	110.70
19	X	132	PHE	CB-CG-CD2	-6.27	116.41	120.80
24	6	4	THR	CA-CB-CG2	-6.27	103.62	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	344	A	N9-C4-C5	-6.27	103.29	105.80
2	B	606	U	C5'-C4'-O4'	-6.27	101.58	109.10
2	B	1046	A	C4-C5-C6	6.27	120.13	117.00
2	B	1071	G	N7-C8-N9	6.27	116.23	113.10
2	B	1302	A	O4'-C1'-N9	6.27	113.21	108.20
2	B	2218	G	P-O5'-C5'	-6.27	110.87	120.90
2	B	2314	A	O4'-C1'-N9	6.27	113.21	108.20
2	B	2406	A	C5-C6-N6	-6.27	118.69	123.70
2	B	2448	A	N1-C6-N6	6.27	122.36	118.60
2	B	2691	C	P-O3'-C3'	-6.27	112.18	119.70
2	B	2771	C	C4-C5-C6	6.27	120.53	117.40
28	F	65	LEU	CB-CG-CD1	6.27	121.65	111.00
31	I	21	PRO	CA-C-N	6.27	134.65	117.10
2	B	469	G	N7-C8-N9	-6.27	109.97	113.10
2	B	617	G	C4-C5-N7	-6.27	108.29	110.80
2	B	1172	C	N1-C2-N3	6.27	123.59	119.20
2	B	2022	U	N3-C4-O4	6.27	123.79	119.40
2	B	2212	A	N9-C4-C5	6.27	108.31	105.80
2	B	825	A	N1-C2-N3	-6.26	126.17	129.30
2	B	1035	U	N3-C2-O2	-6.26	117.81	122.20
2	B	1231	U	C5-C4-O4	6.26	129.66	125.90
2	B	1401	G	N1-C2-N2	6.26	121.84	116.20
2	B	1510	G	N1-C2-N3	-6.26	120.14	123.90
2	B	1634	A	C4-C5-C6	6.26	120.13	117.00
2	B	1706	C	O4'-C1'-N1	6.26	113.21	108.20
2	B	2228	G	N1-C2-N3	-6.26	120.14	123.90
2	B	2318	G	N9-C4-C5	6.26	107.91	105.40
2	B	2369	A	C5-C6-N6	-6.26	118.69	123.70
2	B	2886	A	N3-C4-C5	-6.26	122.42	126.80
1	A	104	A	C5-C6-N1	-6.26	114.57	117.70
2	B	1052	C	N1-C2-N3	6.26	123.58	119.20
2	B	2325	G	C2-N3-C4	-6.26	108.77	111.90
2	B	2889	C	N1-C2-O2	6.26	122.66	118.90
1	A	94	A	C4-C5-C6	6.26	120.13	117.00
2	B	391	A	C8-N9-C4	6.26	108.30	105.80
2	B	572	A	C6-C5-N7	-6.26	127.92	132.30
2	B	822	G	O4'-C4'-C3'	-6.26	97.74	104.00
2	B	1030	C	N3-C4-N4	6.26	122.38	118.00
2	B	1234	U	N3-C4-C5	-6.26	110.84	114.60
2	B	1620	G	C6-N1-C2	6.26	128.86	125.10
2	B	1848	A	N9-C4-C5	6.26	108.30	105.80
2	B	1890	A	O4'-C1'-N9	6.26	113.21	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2564	A	C4-C5-N7	-6.26	107.57	110.70
2	B	1	G	C5-C6-N1	-6.26	108.37	111.50
2	B	42	A	N1-C2-N3	6.26	132.43	129.30
2	B	139	U	O4'-C1'-N1	6.26	113.21	108.20
2	B	1048	A	C2-N3-C4	6.26	113.73	110.60
2	B	1053	C	N1-C2-N3	6.26	123.58	119.20
2	B	1236	G	N1-C6-O6	6.26	123.66	119.90
2	B	1525	A	C5-C6-N1	-6.26	114.57	117.70
2	B	1652	A	N1-C6-N6	6.26	122.36	118.60
2	B	1925	C	N3-C4-N4	6.26	122.38	118.00
2	B	2147	A	N7-C8-N9	6.26	116.93	113.80
2	B	2159	G	C4-N9-C1'	6.26	134.64	126.50
2	B	2184	A	P-O3'-C3'	-6.26	112.19	119.70
2	B	2203	U	C5-C4-O4	6.26	129.66	125.90
2	B	2304	G	C5-N7-C8	6.26	107.43	104.30
2	B	2685	G	N3-C2-N2	6.26	124.28	119.90
2	B	2826	A	C5-C6-N6	-6.26	118.69	123.70
2	B	1363	C	P-O5'-C5'	-6.26	110.89	120.90
2	B	1606	C	N1-C1'-C2'	-6.26	105.12	112.00
2	B	1672	A	N9-C4-C5	6.26	108.30	105.80
2	B	1784	A	C5'-C4'-O4'	6.26	116.61	109.10
2	B	2893	A	P-O3'-C3'	6.26	127.21	119.70
2	B	106	C	C5-C4-N4	6.26	124.58	120.20
2	B	925	A	C6-C5-N7	-6.26	127.92	132.30
2	B	1000	A	C4-C5-N7	6.26	113.83	110.70
2	B	1080	A	C5-N7-C8	6.26	107.03	103.90
2	B	1353	A	C5-N7-C8	6.26	107.03	103.90
2	B	1532	A	N3-C4-N9	-6.26	122.39	127.40
2	B	1577	C	N1-C1'-C2'	-6.26	105.12	112.00
2	B	1684	G	C4-C5-C6	6.26	122.55	118.80
2	B	376	G	C4-C5-C6	6.25	122.55	118.80
2	B	927	A	C4-C5-C6	6.25	120.13	117.00
2	B	1794	A	C1'-O4'-C4'	-6.25	104.90	109.90
2	B	2422	C	C5'-C4'-O4'	6.25	116.61	109.10
2	B	122	G	C5-C6-O6	-6.25	124.85	128.60
2	B	282	A	O4'-C1'-N9	6.25	113.20	108.20
2	B	517	C	N3-C4-N4	6.25	122.38	118.00
2	B	655	A	C5-C6-N1	-6.25	114.57	117.70
2	B	883	G	N7-C8-N9	6.25	116.23	113.10
2	B	1169	A	N9-C1'-C2'	-6.25	105.12	112.00
2	B	2069	G	C6-N1-C2	-6.25	121.35	125.10
2	B	2392	A	O4'-C4'-C3'	-6.25	97.75	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2617	U	O5'-C5'-C4'	-6.25	99.82	111.70
2	B	2746	U	O4'-C1'-N1	6.25	113.20	108.20
2	B	2860	A	C4'-C3'-C2'	-6.25	96.35	102.60
2	B	112	U	C3'-C2'-C1'	-6.25	96.50	101.50
2	B	276	U	N3-C4-O4	6.25	123.78	119.40
2	B	1009	A	C5-N7-C8	-6.25	100.77	103.90
2	B	1067	A	P-O3'-C3'	6.25	127.20	119.70
2	B	2056	G	C4-C5-N7	-6.25	108.30	110.80
2	B	2442	C	N3-C4-N4	6.25	122.38	118.00
2	B	2615	U	C6-N1-C2	6.25	124.75	121.00
2	B	2659	G	C6-C5-N7	-6.25	126.65	130.40
2	B	339	U	P-O3'-C3'	6.25	127.20	119.70
2	B	1438	U	C2-N3-C4	-6.25	123.25	127.00
14	D	146	ILE	CA-CB-CG1	6.25	122.88	111.00
2	B	75	G	C6-C5-N7	-6.25	126.65	130.40
2	B	460	A	O4'-C1'-N9	6.25	113.20	108.20
2	B	501	A	C5-C6-N6	-6.25	118.70	123.70
2	B	729	G	P-O3'-C3'	6.25	127.20	119.70
2	B	1098	A	OP1-P-OP2	-6.25	110.23	119.60
2	B	1130	U	N1-C2-N3	6.25	118.65	114.90
2	B	1301	A	C5-C6-N1	-6.25	114.58	117.70
2	B	1479	G	C4-C5-N7	-6.25	108.30	110.80
2	B	2095	A	C3'-C2'-C1'	-6.25	96.50	101.50
2	B	2133	G	N1-C2-N2	6.25	121.82	116.20
2	B	2645	G	P-O3'-C3'	-6.25	112.20	119.70
2	B	2671	G	N1-C2-N3	-6.25	120.15	123.90
1	A	62	C	O4'-C1'-N1	6.25	113.20	108.20
2	B	784	G	O4'-C4'-C3'	-6.25	97.75	104.00
2	B	1258	U	N3-C2-O2	6.25	126.57	122.20
2	B	1844	C	N3-C4-C5	-6.25	119.40	121.90
2	B	1992	G	N1-C6-O6	-6.25	116.15	119.90
2	B	2138	G	C2-N3-C4	6.25	115.02	111.90
2	B	2304	G	N3-C2-N2	6.25	124.27	119.90
1	A	26	C	C5-C4-N4	-6.25	115.83	120.20
2	B	359	G	N3-C2-N2	6.25	124.27	119.90
2	B	2309	A	C5-C6-N6	-6.25	118.70	123.70
2	B	2495	G	N9-C4-C5	6.25	107.90	105.40
2	B	471	A	N1-C2-N3	6.24	132.42	129.30
2	B	636	G	C6-N1-C2	6.24	128.85	125.10
2	B	1156	A	C4-C5-C6	6.24	120.12	117.00
2	B	1342	A	P-O3'-C3'	-6.24	112.21	119.70
2	B	1480	C	N1-C2-N3	6.24	123.57	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1562	U	N3-C4-C5	6.24	118.35	114.60
2	B	1902	C	C4'-C3'-C2'	-6.24	96.36	102.60
2	B	2200	C	N3-C4-N4	6.24	122.37	118.00
2	B	2338	C	C2-N1-C1'	6.24	125.67	118.80
2	B	1044	C	C4-C5-C6	-6.24	114.28	117.40
2	B	1167	C	N1-C2-O2	6.24	122.64	118.90
2	B	1501	G	C4-C5-C6	6.24	122.55	118.80
2	B	1689	A	C5-N7-C8	6.24	107.02	103.90
2	B	2493	U	N3-C4-O4	6.24	123.77	119.40
4	K	70	ARG	CD-NE-CZ	-6.24	114.86	123.60
1	A	34	A	C4-C5-C6	6.24	120.12	117.00
2	B	1177	G	C5-C6-O6	-6.24	124.86	128.60
2	B	1534	U	C6-N1-C2	-6.24	117.25	121.00
2	B	1583	A	C5-N7-C8	6.24	107.02	103.90
2	B	2339	C	C2-N3-C4	-6.24	116.78	119.90
2	B	2574	G	N1-C6-O6	6.24	123.64	119.90
2	B	245	G	C2-N3-C4	-6.24	108.78	111.90
2	B	821	A	O5'-P-OP2	6.24	118.19	110.70
2	B	1042	G	C5-C6-O6	-6.24	124.86	128.60
2	B	1188	U	N3-C4-C5	-6.24	110.86	114.60
2	B	1596	A	C6-C5-N7	-6.24	127.93	132.30
2	B	1667	G	C5-C6-O6	-6.24	124.86	128.60
2	B	1742	U	C2-N3-C4	6.24	130.74	127.00
2	B	1937	A	C6-C5-N7	-6.24	127.93	132.30
2	B	2309	A	C8-N9-C4	6.24	108.30	105.80
2	B	2590	A	C5-N7-C8	6.24	107.02	103.90
2	B	2682	A	C6-N1-C2	-6.24	114.86	118.60
2	B	2824	C	C5-C6-N1	6.24	124.12	121.00
2	B	2061	G	C2-N3-C4	6.24	115.02	111.90
2	B	190	A	N9-C1'-C2'	-6.24	105.14	112.00
2	B	276	U	C5'-C4'-C3'	-6.24	106.02	116.00
2	B	425	G	N1-C6-O6	6.24	123.64	119.90
2	B	574	A	C8-N9-C4	-6.24	103.31	105.80
2	B	1702	G	N9-C4-C5	6.24	107.89	105.40
2	B	1713	A	C4-C5-C6	6.24	120.12	117.00
2	B	1938	A	N3-C4-C5	-6.24	122.44	126.80
2	B	2575	C	C5-C4-N4	-6.24	115.84	120.20
2	B	2582	G	C8-N9-C4	-6.24	103.91	106.40
32	J	35	ARG	NE-CZ-NH1	6.24	123.42	120.30
2	B	780	G	N1-C6-O6	6.23	123.64	119.90
2	B	1320	C	C5'-C4'-C3'	6.23	125.97	116.00
2	B	1721	G	O4'-C1'-N9	6.23	113.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1918	A	C8-N9-C4	-6.23	103.31	105.80
2	B	2589	A	C5-C6-N6	-6.23	118.71	123.70
1	A	5	U	N3-C4-C5	6.23	118.34	114.60
1	A	93	C	O4'-C1'-N1	6.23	113.19	108.20
2	B	383	C	N1-C2-O2	-6.23	115.16	118.90
2	B	450	G	N9-C4-C5	6.23	107.89	105.40
2	B	922	C	C2-N3-C4	6.23	123.02	119.90
2	B	1754	A	O4'-C1'-N9	6.23	113.19	108.20
2	B	2338	C	C5-C4-N4	-6.23	115.84	120.20
2	B	2351	G	C4-C5-C6	6.23	122.54	118.80
2	B	2570	G	N1-C2-N2	-6.23	110.59	116.20
8	N	83	LEU	CB-CG-CD2	6.23	121.60	111.00
31	I	61	TYR	CB-CG-CD2	6.23	124.74	121.00
2	B	266	G	C8-N9-C4	-6.23	103.91	106.40
2	B	388	G	N1-C2-N3	-6.23	120.16	123.90
2	B	693	A	N3-C4-C5	6.23	131.16	126.80
2	B	1155	A	C8-N9-C4	-6.23	103.31	105.80
2	B	1459	G	C8-N9-C1'	-6.23	118.90	127.00
2	B	1504	A	O4'-C1'-N9	6.23	113.19	108.20
2	B	1619	G	C4-C5-C6	6.23	122.54	118.80
2	B	1817	G	C5'-C4'-O4'	6.23	116.58	109.10
2	B	2046	G	N9-C4-C5	-6.23	102.91	105.40
2	B	2145	C	C5-C6-N1	-6.23	117.88	121.00
2	B	2239	G	O4'-C1'-N9	6.23	113.19	108.20
2	B	2350	C	O4'-C1'-N1	6.23	113.18	108.20
2	B	2366	A	C2-N3-C4	-6.23	107.48	110.60
2	B	2419	U	P-O5'-C5'	6.23	130.87	120.90
2	B	2534	A	C4-C5-N7	6.23	113.82	110.70
27	C	245	THR	CA-CB-CG2	-6.23	103.68	112.40
2	B	408	G	C5-N7-C8	6.23	107.41	104.30
2	B	648	G	N3-C2-N2	6.23	124.26	119.90
2	B	748	G	C5'-C4'-O4'	6.23	116.58	109.10
2	B	957	C	O4'-C1'-N1	6.23	113.18	108.20
2	B	1218	G	N1-C6-O6	6.23	123.64	119.90
2	B	2825	G	C5-C6-N1	-6.23	108.39	111.50
3	0	2	ARG	NE-CZ-NH2	6.23	123.41	120.30
27	C	142	ASN	N-CA-CB	6.23	121.81	110.60
2	B	166	U	N3-C4-O4	-6.23	115.04	119.40
2	B	227	A	C2-N3-C4	-6.23	107.49	110.60
2	B	450	G	C5-C6-N1	-6.23	108.39	111.50
2	B	1338	G	N7-C8-N9	-6.23	109.99	113.10
2	B	2137	U	O4'-C1'-N1	6.23	113.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2153	C	O5'-C5'-C4'	6.23	123.53	111.70
2	B	2165	C	C1'-O4'-C4'	6.23	114.88	109.90
2	B	2251	G	O4'-C1'-N9	6.23	113.18	108.20
2	B	2586	U	C5'-C4'-C3'	-6.23	106.04	116.00
2	B	2634	A	C1'-O4'-C4'	-6.23	104.92	109.90
2	B	2761	A	C5'-C4'-C3'	6.23	125.96	116.00
2	B	241	A	N1-C6-N6	6.23	122.34	118.60
2	B	459	U	N3-C4-C5	-6.23	110.86	114.60
2	B	560	C	P-O5'-C5'	-6.23	110.94	120.90
2	B	1309	G	C5-N7-C8	6.23	107.41	104.30
2	B	2304	G	C2-N3-C4	6.23	115.01	111.90
2	B	2325	G	N1-C6-O6	6.23	123.64	119.90
2	B	2545	G	N3-C2-N2	6.23	124.26	119.90
9	O	54	VAL	CA-CB-CG1	-6.23	101.56	110.90
22	3	18	HIS	CA-CB-CG	-6.23	103.02	113.60
2	B	29	U	N3-C4-C5	-6.22	110.86	114.60
2	B	225	C	N3-C2-O2	-6.22	117.54	121.90
2	B	937	C	N3-C4-N4	6.22	122.36	118.00
2	B	1274	A	C2-N3-C4	6.22	113.71	110.60
2	B	1680	U	C5-C6-N1	6.22	125.81	122.70
2	B	2167	U	C5'-C4'-C3'	-6.22	106.04	116.00
2	B	2337	G	O4'-C1'-N9	6.22	113.18	108.20
2	B	2688	G	P-O3'-C3'	-6.22	112.23	119.70
2	B	2714	G	C4-C5-C6	6.22	122.53	118.80
1	A	104	A	C1'-O4'-C4'	-6.22	104.92	109.90
2	B	161	A	C5'-C4'-C3'	6.22	125.96	116.00
2	B	335	C	C5-C4-N4	-6.22	115.84	120.20
2	B	543	G	C6-N1-C2	6.22	128.83	125.10
2	B	1711	A	C5-C6-N6	-6.22	118.72	123.70
2	B	1903	G	N1-C6-O6	6.22	123.63	119.90
2	B	2068	U	N1-C2-N3	-6.22	111.17	114.90
2	B	2218	G	N1-C6-O6	6.22	123.63	119.90
2	B	178	G	N9-C4-C5	6.22	107.89	105.40
2	B	197	A	P-O5'-C5'	6.22	130.85	120.90
2	B	480	A	C5'-C4'-O4'	6.22	116.56	109.10
2	B	1930	G	C6-C5-N7	-6.22	126.67	130.40
2	B	2561	U	OP1-P-OP2	-6.22	110.27	119.60
1	A	71	C	N3-C4-C5	-6.22	119.41	121.90
2	B	386	G	N3-C4-C5	-6.22	125.49	128.60
2	B	396	G	O4'-C1'-N9	6.22	113.17	108.20
2	B	464	U	O4'-C1'-N1	6.22	113.18	108.20
2	B	709	U	C2-N3-C4	-6.22	123.27	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1009	A	N9-C4-C5	-6.22	103.31	105.80
2	B	2360	G	N3-C2-N2	6.22	124.25	119.90
2	B	2459	A	C6-C5-N7	-6.22	127.95	132.30
2	B	2180	U	N3-C4-O4	6.22	123.75	119.40
2	B	1061	U	P-O5'-C5'	-6.22	110.95	120.90
2	B	2003	A	C5'-C4'-C3'	6.22	125.95	116.00
2	B	2056	G	N7-C8-N9	6.22	116.21	113.10
2	B	2503	A	C6-C5-N7	-6.22	127.95	132.30
2	B	2535	G	N3-C4-C5	-6.22	125.49	128.60
2	B	467	G	N9-C1'-C2'	-6.21	105.17	112.00
2	B	896	A	C5-N7-C8	-6.21	100.79	103.90
2	B	1006	C	O4'-C1'-N1	6.21	113.17	108.20
2	B	1739	A	C6-C5-N7	-6.21	127.95	132.30
2	B	2318	G	N1-C2-N2	-6.21	110.61	116.20
2	B	2776	A	C8-N9-C4	-6.21	103.31	105.80
10	P	112	ARG	NH1-CZ-NH2	6.21	126.24	119.40
2	B	615	U	N3-C2-O2	6.21	126.55	122.20
2	B	972	A	C8-N9-C4	-6.21	103.31	105.80
2	B	989	G	N9-C4-C5	6.21	107.89	105.40
2	B	1732	C	P-O3'-C3'	6.21	127.16	119.70
2	B	20	C	C5-C4-N4	-6.21	115.85	120.20
2	B	278	A	C8-N9-C4	-6.21	103.31	105.80
2	B	285	G	C4'-C3'-C2'	-6.21	96.39	102.60
2	B	346	A	O4'-C4'-C3'	-6.21	97.79	104.00
2	B	725	G	C5-C6-O6	-6.21	124.87	128.60
2	B	922	C	N3-C2-O2	-6.21	117.55	121.90
2	B	1530	G	P-O5'-C5'	-6.21	110.96	120.90
2	B	2152	G	O4'-C1'-N9	6.21	113.17	108.20
2	B	2876	G	N7-C8-N9	-6.21	109.99	113.10
27	C	109	LEU	CB-CG-CD2	6.21	121.56	111.00
2	B	5	A	N7-C8-N9	-6.21	110.69	113.80
2	B	125	A	C8-N9-C4	6.21	108.28	105.80
2	B	420	C	P-O3'-C3'	6.21	127.15	119.70
2	B	642	U	C3'-C2'-C1'	6.21	106.47	101.50
2	B	973	A	C5'-C4'-O4'	6.21	116.55	109.10
2	B	1517	G	C2-N3-C4	-6.21	108.80	111.90
1	A	59	A	C4'-C3'-C2'	-6.21	96.39	102.60
2	B	118	A	C4-C5-N7	-6.21	107.60	110.70
2	B	1663	G	N1-C6-O6	6.21	123.62	119.90
2	B	2057	G	C6-N1-C2	-6.21	121.38	125.10
2	B	2452	C	C6-N1-C2	-6.21	117.82	120.30
1	A	51	G	O4'-C1'-N9	6.21	113.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	252	G	N3-C2-N2	6.21	124.24	119.90
2	B	306	U	O4'-C4'-C3'	-6.21	97.79	104.00
2	B	468	G	C6-C5-N7	-6.21	126.68	130.40
2	B	535	G	N9-C1'-C2'	-6.21	105.17	112.00
2	B	663	G	C4-C5-N7	6.21	113.28	110.80
2	B	929	U	N3-C4-C5	-6.21	110.88	114.60
2	B	1487	U	C5-C4-O4	-6.21	122.18	125.90
2	B	2108	A	C2'-C3'-O3'	6.21	123.63	113.70
2	B	2293	G	O4'-C1'-N9	6.21	113.17	108.20
2	B	132	G	N9-C4-C5	6.21	107.88	105.40
2	B	381	G	C6-C5-N7	-6.20	126.68	130.40
2	B	410	G	N9-C4-C5	6.20	107.88	105.40
2	B	785	G	O4'-C1'-N9	6.20	113.16	108.20
2	B	1546	G	C5-N7-C8	-6.20	101.20	104.30
2	B	2648	G	N3-C2-N2	6.20	124.24	119.90
2	B	2748	A	N3-C4-C5	-6.20	122.46	126.80
2	B	2872	A	C4-C5-N7	-6.20	107.60	110.70
8	N	25	ALA	N-CA-CB	6.20	118.78	110.10
1	A	98	G	C5-C6-N1	6.20	114.60	111.50
2	B	1492	G	P-O3'-C3'	-6.20	112.26	119.70
2	B	54	G	C4-C5-C6	6.20	122.52	118.80
2	B	386	G	C8-N9-C4	-6.20	103.92	106.40
2	B	494	G	N9-C4-C5	-6.20	102.92	105.40
2	B	686	U	C2-N3-C4	6.20	130.72	127.00
2	B	1030	C	O4'-C1'-N1	6.20	113.16	108.20
2	B	1918	A	C5-C6-N1	-6.20	114.60	117.70
2	B	2047	C	N3-C4-N4	6.20	122.34	118.00
2	B	2345	G	C5'-C4'-O4'	6.20	116.54	109.10
2	B	2421	G	N1-C2-N2	-6.20	110.62	116.20
2	B	374	A	N7-C8-N9	-6.20	110.70	113.80
2	B	417	C	C2-N1-C1'	6.20	125.62	118.80
2	B	782	A	C5-C6-N6	-6.20	118.74	123.70
2	B	1101	U	N1-C1'-C2'	-6.20	105.18	112.00
2	B	1136	G	P-O3'-C3'	-6.20	112.26	119.70
2	B	1233	C	C3'-C2'-C1'	-6.20	96.54	101.50
2	B	1367	A	C4-C5-C6	6.20	120.10	117.00
2	B	1783	A	N1-C2-N3	-6.20	126.20	129.30
2	B	2020	A	C5-C6-N6	-6.20	118.74	123.70
2	B	2365	G	N9-C4-C5	6.20	107.88	105.40
2	B	2368	C	C5-C6-N1	6.20	124.10	121.00
2	B	2636	C	O4'-C4'-C3'	-6.20	97.80	104.00
2	B	2674	G	O4'-C1'-N9	6.20	113.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2853	C	N1-C2-O2	-6.20	115.18	118.90
2	B	2885	G	C5-C6-N1	-6.20	108.40	111.50
2	B	679	C	C1'-O4'-C4'	6.20	114.86	109.90
2	B	1094	U	C5-C6-N1	6.20	125.80	122.70
2	B	1527	G	C5'-C4'-C3'	-6.20	106.08	116.00
2	B	1814	G	N7-C8-N9	-6.20	110.00	113.10
2	B	2304	G	N1-C2-N3	-6.20	120.18	123.90
2	B	90	U	N1-C2-O2	-6.20	118.46	122.80
2	B	207	A	C8-N9-C4	-6.20	103.32	105.80
2	B	240	C	N3-C4-N4	6.20	122.34	118.00
2	B	433	C	C4-C5-C6	6.20	120.50	117.40
2	B	481	G	N1-C2-N3	-6.20	120.18	123.90
2	B	1120	G	C6-N1-C2	-6.20	121.38	125.10
2	B	1246	A	O4'-C1'-N9	6.20	113.16	108.20
2	B	1463	C	C2-N1-C1'	6.20	125.61	118.80
2	B	1555	G	C6-C5-N7	-6.20	126.68	130.40
2	B	1895	C	C5-C6-N1	-6.20	117.90	121.00
2	B	1989	G	N3-C2-N2	6.20	124.24	119.90
2	B	2899	A	N1-C2-N3	-6.20	126.20	129.30
2	B	70	G	C5-C6-N1	6.19	114.60	111.50
2	B	93	G	C6-C5-N7	-6.19	126.68	130.40
2	B	1026	G	C4-N9-C1'	-6.19	118.45	126.50
2	B	1896	G	N7-C8-N9	6.19	116.20	113.10
1	A	118	C	C3'-C2'-C1'	6.19	106.45	101.50
2	B	19	A	C2-N3-C4	-6.19	107.50	110.60
2	B	189	G	N3-C4-N9	-6.19	122.28	126.00
2	B	551	G	C5-C6-O6	-6.19	124.89	128.60
2	B	1609	A	N9-C4-C5	6.19	108.28	105.80
2	B	2252	G	C5-N7-C8	-6.19	101.20	104.30
2	B	2723	C	N1-C2-N3	6.19	123.53	119.20
2	B	362	A	P-O5'-C5'	6.19	130.81	120.90
2	B	377	G	C5-N7-C8	-6.19	101.20	104.30
2	B	756	A	P-O3'-C3'	6.19	127.13	119.70
2	B	1398	C	C2-N3-C4	6.19	123.00	119.90
2	B	1453	A	N1-C6-N6	6.19	122.31	118.60
2	B	1500	G	N1-C6-O6	6.19	123.61	119.90
2	B	1717	A	OP1-P-OP2	-6.19	110.31	119.60
2	B	1993	U	P-O5'-C5'	6.19	130.81	120.90
2	B	2705	A	N1-C2-N3	6.19	132.40	129.30
2	B	2777	G	P-O3'-C3'	6.19	127.13	119.70
2	B	1236	G	C5-C6-O6	-6.19	124.89	128.60
2	B	1380	G	C8-N9-C4	-6.19	103.92	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2474	U	C5-C6-N1	6.19	125.80	122.70
2	B	2812	G	N1-C2-N3	-6.19	120.19	123.90
2	B	2834	G	N9-C4-C5	-6.19	102.92	105.40
14	D	84	LEU	CB-CG-CD2	6.19	121.52	111.00
2	B	361	G	C4-N9-C1'	-6.19	118.46	126.50
2	B	577	G	C4'-C3'-C2'	-6.19	96.41	102.60
2	B	1647	U	P-O3'-C3'	-6.19	112.28	119.70
2	B	1920	C	O4'-C4'-C3'	6.19	111.05	106.10
2	B	1925	C	N3-C4-C5	-6.19	119.42	121.90
2	B	2173	A	O5'-C5'-C4'	6.19	123.45	111.70
23	5	167	LYS	N-CA-C	6.19	127.71	111.00
2	B	227	A	C4-C5-N7	6.18	113.79	110.70
2	B	263	G	C5-C6-N1	6.18	114.59	111.50
2	B	383	C	N3-C4-N4	6.18	122.33	118.00
2	B	613	A	C1'-O4'-C4'	-6.18	104.95	109.90
2	B	1032	A	N7-C8-N9	-6.18	110.71	113.80
2	B	1202	G	C5'-C4'-O4'	-6.18	101.68	109.10
2	B	1343	G	O5'-P-OP1	-6.18	100.13	105.70
2	B	1689	A	C4'-C3'-C2'	-6.18	96.42	102.60
2	B	1753	G	C2-N3-C4	-6.18	108.81	111.90
1	A	117	G	N3-C4-N9	-6.18	122.29	126.00
2	B	34	U	N3-C4-C5	-6.18	110.89	114.60
2	B	177	G	N9-C4-C5	6.18	107.87	105.40
2	B	193	U	C6-N1-C2	-6.18	117.29	121.00
2	B	808	G	C4-C5-N7	6.18	113.27	110.80
2	B	986	C	O5'-C5'-C4'	-6.18	99.95	111.70
2	B	1130	U	C5-C6-N1	-6.18	119.61	122.70
2	B	2082	A	C4-C5-C6	6.18	120.09	117.00
2	B	2188	U	C2-N3-C4	-6.18	123.29	127.00
2	B	708	G	C6-C5-N7	-6.18	126.69	130.40
2	B	773	U	O4'-C1'-N1	6.18	113.14	108.20
2	B	989	G	N3-C4-N9	-6.18	122.29	126.00
2	B	1197	G	N3-C4-C5	-6.18	125.51	128.60
2	B	2393	U	N1-C2-N3	6.18	118.61	114.90
2	B	2766	A	C8-N9-C4	-6.18	103.33	105.80
2	B	628	G	C4-C5-N7	6.18	113.27	110.80
2	B	954	G	O4'-C1'-C2'	6.18	113.16	107.60
2	B	2755	C	N1-C2-O2	6.18	122.61	118.90
2	B	528	A	C4'-C3'-C2'	6.18	108.78	102.60
2	B	880	G	C4-N9-C1'	-6.18	118.47	126.50
2	B	1434	A	C5-C6-N6	-6.18	118.76	123.70
2	B	2719	G	N9-C4-C5	6.18	107.87	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1098	A	P-O5'-C5'	-6.18	111.02	120.90
2	B	1218	G	C4-C5-C6	6.18	122.51	118.80
2	B	1382	G	C4-C5-N7	6.18	113.27	110.80
2	B	1480	C	C6-N1-C2	6.18	122.77	120.30
2	B	1626	A	C8-N9-C4	-6.18	103.33	105.80
2	B	1744	A	N1-C6-N6	6.18	122.31	118.60
2	B	1913	A	O4'-C1'-N9	6.18	113.14	108.20
2	B	2072	C	N1-C2-N3	6.18	123.52	119.20
2	B	701	G	C5-C6-O6	-6.17	124.89	128.60
2	B	820	A	C3'-C2'-C1'	6.17	106.44	101.50
2	B	855	G	N3-C4-C5	-6.17	125.51	128.60
23	5	71	ARG	N-CA-CB	6.17	121.71	110.60
2	B	141	G	N3-C4-N9	6.17	129.70	126.00
2	B	1972	G	C4-C5-C6	-6.17	115.10	118.80
2	B	2800	A	C5-C6-N6	-6.17	118.76	123.70
2	B	553	G	N7-C8-N9	-6.17	110.01	113.10
2	B	1034	G	C6-N1-C2	6.17	128.80	125.10
2	B	1110	G	O4'-C1'-C2'	6.17	113.15	107.60
2	B	2067	G	C5-C6-O6	-6.17	124.90	128.60
18	W	91	PHE	CB-CG-CD1	-6.17	116.48	120.80
2	B	197	A	C5'-C4'-O4'	6.17	116.50	109.10
2	B	325	G	P-O5'-C5'	6.17	130.77	120.90
2	B	715	A	C4-C5-C6	6.17	120.08	117.00
2	B	1347	A	O4'-C1'-N9	6.17	113.14	108.20
2	B	1748	C	C4-C5-C6	-6.17	114.32	117.40
2	B	2006	C	C4'-C3'-C2'	6.17	108.77	102.60
2	B	2322	A	N9-C4-C5	-6.17	103.33	105.80
2	B	2582	G	C1'-O4'-C4'	6.17	114.83	109.90
2	B	2598	A	P-O3'-C3'	6.17	127.10	119.70
2	B	2733	A	O4'-C1'-N9	6.17	113.13	108.20
2	B	2822	G	N1-C2-N3	-6.17	120.20	123.90
2	B	330	A	C5-C6-N6	-6.17	118.77	123.70
2	B	506	G	C6-C5-N7	-6.17	126.70	130.40
2	B	653	U	C2-N1-C1'	6.17	125.10	117.70
2	B	766	U	O4'-C1'-N1	6.17	113.13	108.20
2	B	1541	C	O5'-P-OP2	-6.17	100.15	105.70
2	B	1742	U	N1-C2-O2	6.17	127.12	122.80
2	B	1907	G	C5'-C4'-C3'	-6.17	106.14	116.00
2	B	2131	U	N3-C4-O4	6.17	123.72	119.40
2	B	2417	C	C1'-O4'-C4'	-6.17	104.97	109.90
2	B	458	G	N3-C2-N2	6.17	124.22	119.90
2	B	1885	A	N1-C6-N6	6.17	122.30	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2865	U	C2-N3-C4	-6.17	123.30	127.00
2	B	174	U	C2-N3-C4	-6.16	123.30	127.00
2	B	452	G	O4'-C1'-N9	6.16	113.13	108.20
2	B	689	A	C5-C6-N1	-6.16	114.62	117.70
2	B	1078	U	C4-C5-C6	6.16	123.40	119.70
2	B	1115	G	O4'-C1'-N9	6.16	113.13	108.20
2	B	1596	A	O4'-C1'-N9	6.16	113.13	108.20
2	B	1936	A	C5-N7-C8	6.16	106.98	103.90
2	B	2301	C	O4'-C1'-N1	6.16	113.13	108.20
2	B	2376	A	C6-N1-C2	6.16	122.30	118.60
2	B	749	A	N7-C8-N9	-6.16	110.72	113.80
2	B	846	U	C5-C4-O4	-6.16	122.20	125.90
7	M	94	ALA	N-CA-CB	6.16	118.73	110.10
2	B	56	A	C2-N3-C4	6.16	113.68	110.60
2	B	1586	A	N1-C6-N6	6.16	122.30	118.60
2	B	1797	G	P-O5'-C5'	6.16	130.76	120.90
2	B	2112	G	C8-N9-C4	-6.16	103.94	106.40
2	B	2164	C	C4-C5-C6	6.16	120.48	117.40
2	B	2549	G	O4'-C4'-C3'	-6.16	97.84	104.00
2	B	2613	U	N1-C2-O2	-6.16	118.49	122.80
2	B	2874	C	N3-C2-O2	-6.16	117.59	121.90
2	B	656	G	N3-C2-N2	6.16	124.21	119.90
2	B	694	U	O4'-C1'-N1	6.16	113.13	108.20
2	B	1038	G	N3-C2-N2	6.16	124.21	119.90
2	B	1139	G	C5-N7-C8	-6.16	101.22	104.30
2	B	1266	G	C2-N3-C4	-6.16	108.82	111.90
2	B	1269	A	O4'-C4'-C3'	6.16	111.03	106.10
2	B	1481	U	C5'-C4'-C3'	-6.16	106.15	116.00
2	B	1811	G	C4'-C3'-C2'	-6.16	96.44	102.60
2	B	1919	A	C1'-O4'-C4'	6.16	114.83	109.90
2	B	2226	C	C2-N1-C1'	6.16	125.58	118.80
2	B	2402	U	C5'-C4'-C3'	6.16	125.86	116.00
2	B	2879	A	N9-C4-C5	-6.16	103.34	105.80
27	C	154	ALA	N-CA-CB	6.16	118.72	110.10
1	A	108	A	C8-N9-C4	-6.16	103.34	105.80
2	B	1643	G	C4'-C3'-C2'	-6.16	96.44	102.60
2	B	1754	A	N7-C8-N9	-6.16	110.72	113.80
2	B	1817	G	N3-C2-N2	6.16	124.21	119.90
2	B	2194	U	O4'-C1'-N1	6.16	113.12	108.20
2	B	2442	C	P-O3'-C3'	-6.16	112.31	119.70
8	N	4	ARG	CD-NE-CZ	-6.16	114.98	123.60
11	Q	100	PHE	CB-CG-CD1	6.16	125.11	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	41	G	N1-C2-N3	-6.16	120.21	123.90
2	B	149	A	C8-N9-C4	-6.16	103.34	105.80
2	B	236	C	N1-C2-O2	-6.16	115.21	118.90
2	B	663	G	C6-C5-N7	-6.16	126.71	130.40
2	B	873	C	C5-C4-N4	-6.16	115.89	120.20
2	B	1100	C	C2-N3-C4	-6.16	116.82	119.90
2	B	1234	U	C6-N1-C2	-6.16	117.31	121.00
2	B	1515	A	C1'-O4'-C4'	-6.16	104.97	109.90
2	B	1710	G	C5-C6-N1	-6.16	108.42	111.50
2	B	2010	G	C2-N3-C4	6.16	114.98	111.90
2	B	2867	G	N9-C4-C5	6.16	107.86	105.40
2	B	520	G	C2-N3-C4	-6.15	108.82	111.90
2	B	725	G	N1-C6-O6	6.15	123.59	119.90
2	B	857	G	C8-N9-C4	-6.15	103.94	106.40
2	B	861	A	C2-N3-C4	6.15	113.68	110.60
2	B	877	A	O4'-C1'-N9	6.15	113.12	108.20
2	B	1569	A	C4-C5-N7	-6.15	107.62	110.70
2	B	1635	A	C4-C5-C6	6.15	120.08	117.00
2	B	1829	A	O4'-C1'-N9	6.15	113.12	108.20
30	H	31	VAL	CA-CB-CG1	-6.15	101.67	110.90
2	B	167	A	C4-C5-C6	6.15	120.08	117.00
2	B	240	C	C2-N1-C1'	-6.15	112.03	118.80
2	B	467	G	C5-C6-O6	-6.15	124.91	128.60
2	B	621	A	C5-N7-C8	-6.15	100.82	103.90
2	B	992	C	N1-C1'-C2'	-6.15	105.23	112.00
2	B	992	C	O5'-P-OP2	6.15	118.08	110.70
2	B	1157	G	N3-C4-N9	6.15	129.69	126.00
2	B	1297	C	C6-N1-C1'	-6.15	113.42	120.80
2	B	1621	U	C4-C5-C6	-6.15	116.01	119.70
2	B	1654	A	N7-C8-N9	-6.15	110.72	113.80
2	B	1702	G	O4'-C1'-N9	6.15	113.12	108.20
2	B	1945	G	C4'-C3'-C2'	-6.15	96.45	102.60
2	B	1970	A	C4'-C3'-C2'	-6.15	96.45	102.60
1	A	49	C	C2-N3-C4	-6.15	116.82	119.90
2	B	479	A	P-O5'-C5'	6.15	130.74	120.90
2	B	578	G	C4-C5-N7	-6.15	108.34	110.80
2	B	1098	A	N9-C4-C5	-6.15	103.34	105.80
2	B	1246	A	C6-C5-N7	-6.15	128.00	132.30
2	B	2364	C	O4'-C1'-N1	6.15	113.12	108.20
2	B	2838	G	C5'-C4'-O4'	6.15	116.48	109.10
2	B	252	G	C4-C5-C6	6.15	122.49	118.80
2	B	1362	C	P-O3'-C3'	6.15	127.08	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
9	O	68	LYS	N-CA-CB	6.15	121.67	110.60
29	G	150	TYR	CA-CB-CG	-6.15	101.72	113.40
2	B	98	G	C2-N3-C4	6.15	114.97	111.90
2	B	464	U	C5-C6-N1	-6.15	119.63	122.70
2	B	830	G	C4-C5-C6	6.15	122.49	118.80
2	B	875	G	N3-C2-N2	6.15	124.20	119.90
2	B	1092	C	P-O3'-C3'	6.15	127.08	119.70
2	B	1292	G	O4'-C1'-N9	6.15	113.12	108.20
2	B	1935	G	N1-C2-N3	-6.15	120.21	123.90
2	B	2147	A	C8-N9-C4	-6.15	103.34	105.80
2	B	2224	G	O5'-C5'-C4'	-6.15	100.02	111.70
2	B	2636	C	C3'-C2'-C1'	6.15	106.42	101.50
14	D	128	ARG	C-N-CA	6.15	137.07	121.70
2	B	541	A	C6-C5-N7	-6.15	128.00	132.30
2	B	727	A	C6-C5-N7	-6.15	128.00	132.30
2	B	1422	G	N3-C4-C5	6.15	131.67	128.60
2	B	2447	G	C8-N9-C1'	-6.15	119.01	127.00
2	B	49	A	C8-N9-C4	-6.14	103.34	105.80
2	B	294	A	C2-N3-C4	-6.14	107.53	110.60
2	B	452	G	N1-C2-N2	-6.14	110.67	116.20
2	B	574	A	C5-C6-N1	-6.14	114.63	117.70
2	B	1350	C	C5-C6-N1	6.14	124.07	121.00
2	B	1470	A	C6-N1-C2	6.14	122.29	118.60
2	B	1517	G	N1-C2-N3	6.14	127.59	123.90
2	B	1900	A	C6-C5-N7	-6.14	128.00	132.30
2	B	2111	U	O4'-C1'-N1	6.14	113.11	108.20
2	B	2545	G	C3'-C2'-C1'	6.14	106.42	101.50
2	B	2832	U	N3-C4-C5	-6.14	110.91	114.60
1	A	113	C	P-O5'-C5'	6.14	130.73	120.90
2	B	367	G	C6-C5-N7	-6.14	126.71	130.40
2	B	441	U	O4'-C1'-N1	6.14	113.11	108.20
2	B	979	A	C5-C6-N1	-6.14	114.63	117.70
2	B	1543	G	N1-C2-N3	-6.14	120.22	123.90
2	B	1545	A	C4'-C3'-C2'	-6.14	96.46	102.60
2	B	1819	A	N1-C2-N3	6.14	132.37	129.30
2	B	1824	G	C1'-O4'-C4'	6.14	114.81	109.90
2	B	2090	A	N1-C6-N6	6.14	122.28	118.60
2	B	830	G	C5-C6-N1	-6.14	108.43	111.50
2	B	908	C	N3-C4-N4	6.14	122.30	118.00
2	B	2625	G	C5-C6-O6	-6.14	124.92	128.60
1	A	64	G	C5'-C4'-C3'	6.14	125.82	116.00
2	B	1295	C	N3-C4-N4	6.14	122.30	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1307	A	O5'-C5'-C4'	-6.14	100.04	111.70
2	B	1504	A	N1-C2-N3	6.14	132.37	129.30
2	B	1670	C	O5'-P-OP2	6.14	118.07	110.70
2	B	1963	U	C4'-C3'-C2'	-6.14	96.46	102.60
2	B	2057	G	P-O5'-C5'	6.14	130.72	120.90
2	B	2523	G	C6-C5-N7	-6.14	126.72	130.40
2	B	2853	C	C4-C5-C6	6.14	120.47	117.40
12	R	5	PHE	CG-CD2-CE2	6.14	127.55	120.80
1	A	19	C	N3-C2-O2	-6.14	117.60	121.90
2	B	1385	A	C5'-C4'-O4'	6.14	116.47	109.10
2	B	2040	G	C3'-C2'-C1'	-6.14	96.59	101.50
1	A	116	G	C5-C6-N1	-6.14	108.43	111.50
2	B	22	C	C6-N1-C2	-6.14	117.84	120.30
2	B	488	G	N7-C8-N9	6.14	116.17	113.10
2	B	572	A	C8-N9-C4	-6.14	103.34	105.80
2	B	585	G	N9-C4-C5	6.14	107.85	105.40
2	B	807	U	P-O3'-C3'	-6.14	112.34	119.70
2	B	995	C	N1-C2-O2	-6.14	115.22	118.90
2	B	1078	U	N3-C4-O4	6.14	123.69	119.40
2	B	1220	G	C4-C5-C6	6.14	122.48	118.80
2	B	1461	C	C6-N1-C2	-6.14	117.85	120.30
2	B	1595	C	C5-C4-N4	-6.14	115.90	120.20
2	B	2709	G	N3-C4-N9	6.14	129.68	126.00
2	B	2755	C	C5'-C4'-O4'	6.14	116.46	109.10
16	2	49	ALA	CB-CA-C	-6.14	100.90	110.10
2	B	59	U	C2-N1-C1'	-6.13	110.34	117.70
2	B	1377	G	N3-C4-N9	-6.13	122.32	126.00
2	B	1564	C	C4-C5-C6	6.13	120.47	117.40
2	B	1588	G	N9-C4-C5	6.13	107.85	105.40
2	B	1912	A	N9-C4-C5	6.13	108.25	105.80
2	B	1997	C	C2-N3-C4	6.13	122.97	119.90
2	B	2012	G	C4-C5-N7	-6.13	108.35	110.80
2	B	2247	A	C5'-C4'-C3'	-6.13	106.19	116.00
2	B	2382	G	C6-N1-C2	6.13	128.78	125.10
2	B	2669	G	N1-C2-N3	-6.13	120.22	123.90
2	B	2697	G	C8-N9-C4	6.13	108.85	106.40
2	B	2892	G	C6-N1-C2	-6.13	121.42	125.10
2	B	2903	U	O4'-C1'-N1	6.13	113.11	108.20
2	B	411	G	C4-C5-N7	6.13	113.25	110.80
2	B	899	A	N7-C8-N9	-6.13	110.73	113.80
2	B	1737	G	N1-C6-O6	6.13	123.58	119.90
2	B	1902	C	C3'-C2'-C1'	6.13	106.41	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2253	G	N3-C2-N2	6.13	124.19	119.90
2	B	2294	G	N3-C4-C5	-6.13	125.53	128.60
2	B	2702	G	N3-C2-N2	6.13	124.19	119.90
2	B	2754	U	C5-C4-O4	6.13	129.58	125.90
2	B	228	C	C6-N1-C2	-6.13	117.85	120.30
2	B	529	A	C4-C5-C6	6.13	120.07	117.00
2	B	700	G	N3-C4-N9	-6.13	122.32	126.00
2	B	1275	A	P-O5'-C5'	6.13	130.71	120.90
2	B	1287	A	N1-C6-N6	6.13	122.28	118.60
2	B	1290	C	O4'-C1'-N1	6.13	113.11	108.20
2	B	1480	C	N1-C2-O2	6.13	122.58	118.90
2	B	2557	G	C8-N9-C1'	6.13	134.97	127.00
2	B	2707	U	C5-C6-N1	6.13	125.77	122.70
32	J	125	TYR	CG-CD1-CE1	-6.13	116.39	121.30
1	A	100	G	C5-C6-O6	-6.13	124.92	128.60
2	B	1439	A	C8-N9-C4	-6.13	103.35	105.80
2	B	2431	U	C6-N1-C2	6.13	124.68	121.00
2	B	947	A	N9-C4-C5	6.13	108.25	105.80
2	B	1013	C	N3-C4-C5	-6.13	119.45	121.90
2	B	1973	G	C8-N9-C1'	6.13	134.97	127.00
2	B	103	A	C5'-C4'-C3'	-6.13	106.20	116.00
2	B	159	G	N3-C4-C5	6.13	131.66	128.60
2	B	553	G	C6-C5-N7	-6.13	126.72	130.40
2	B	735	A	O4'-C1'-N9	6.13	113.10	108.20
2	B	1022	G	O3'-P-O5'	-6.13	92.36	104.00
2	B	1115	G	C2-N3-C4	6.13	114.96	111.90
2	B	1163	G	C5'-C4'-C3'	6.13	125.80	116.00
2	B	1613	G	C5-C6-O6	-6.13	124.92	128.60
2	B	1700	A	N1-C2-N3	6.13	132.36	129.30
2	B	1892	C	C6-N1-C2	-6.13	117.85	120.30
2	B	2024	G	C5'-C4'-C3'	-6.13	106.20	116.00
2	B	2893	A	C5-C6-N6	-6.13	118.80	123.70
20	E	68	ALA	N-CA-CB	6.13	118.68	110.10
1	A	103	U	C6-N1-C1'	6.12	129.78	121.20
2	B	230	G	O4'-C1'-C2'	6.12	113.11	107.60
2	B	468	G	N9-C4-C5	-6.12	102.95	105.40
2	B	2348	U	C5-C4-O4	6.12	129.57	125.90
1	A	13	G	N3-C4-N9	6.12	129.67	126.00
2	B	177	G	P-O5'-C5'	-6.12	111.10	120.90
2	B	1501	G	C5-C6-O6	-6.12	124.93	128.60
2	B	1549	A	O4'-C1'-N9	6.12	113.10	108.20
2	B	2081	U	N3-C2-O2	-6.12	117.91	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2762	C	N3-C4-N4	6.12	122.29	118.00
20	E	17	THR	CA-CB-CG2	-6.12	103.83	112.40
1	A	57	A	C6-C5-N7	-6.12	128.01	132.30
2	B	363	G	C6-C5-N7	-6.12	126.73	130.40
2	B	865	C	P-O3'-C3'	-6.12	112.36	119.70
2	B	950	G	C5'-C4'-C3'	6.12	125.80	116.00
2	B	1217	U	O3'-P-O5'	6.12	115.63	104.00
2	B	1527	G	O4'-C1'-N9	6.12	113.10	108.20
2	B	1888	G	O3'-P-O5'	-6.12	92.37	104.00
2	B	2446	G	O4'-C4'-C3'	6.12	111.00	106.10
5	L	66	PHE	CB-CG-CD2	6.12	125.08	120.80
1	A	48	U	O4'-C1'-N1	6.12	113.10	108.20
2	B	729	G	N3-C2-N2	6.12	124.18	119.90
29	G	95	ALA	N-CA-CB	6.12	118.67	110.10
1	A	104	A	C4-C5-C6	6.12	120.06	117.00
2	B	127	A	C5-C6-N1	6.12	120.76	117.70
2	B	159	G	C6-C5-N7	-6.12	126.73	130.40
2	B	684	G	C4-C5-C6	6.12	122.47	118.80
2	B	1138	G	C5-N7-C8	6.12	107.36	104.30
2	B	1209	U	N1-C2-O2	6.12	127.08	122.80
2	B	1565	C	N1-C2-O2	6.12	122.57	118.90
2	B	2124	G	P-O3'-C3'	6.12	127.04	119.70
2	B	2177	C	P-O3'-C3'	6.12	127.04	119.70
2	B	2271	G	C5-C6-N1	-6.12	108.44	111.50
2	B	454	A	P-O3'-C3'	-6.12	112.36	119.70
2	B	579	G	C5-C6-O6	-6.12	124.93	128.60
2	B	911	A	C4'-C3'-C2'	6.12	108.72	102.60
2	B	1056	G	C1'-O4'-C4'	-6.12	105.01	109.90
2	B	1168	G	O4'-C4'-C3'	-6.12	97.88	104.00
2	B	1612	C	C2-N1-C1'	-6.12	112.07	118.80
2	B	2447	G	N7-C8-N9	6.12	116.16	113.10
2	B	2790	U	C3'-C2'-C1'	-6.12	96.61	101.50
2	B	2805	C	N3-C4-N4	6.12	122.28	118.00
27	C	16	VAL	N-CA-C	-6.12	94.48	111.00
1	A	57	A	C4'-C3'-C2'	-6.12	96.48	102.60
2	B	191	A	O4'-C1'-N9	6.12	113.09	108.20
2	B	543	G	C3'-C2'-C1'	-6.12	96.61	101.50
2	B	1010	A	C4-C5-C6	6.12	120.06	117.00
2	B	1134	A	C2-N3-C4	-6.12	107.54	110.60
2	B	2120	G	C4-N9-C1'	6.12	134.45	126.50
2	B	2442	C	C4'-C3'-O3'	-6.12	96.56	109.40
11	Q	37	ALA	N-CA-C	-6.12	94.49	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	E	35	TYR	CB-CG-CD1	-6.12	117.33	121.00
2	B	1	G	N3-C2-N2	6.11	124.18	119.90
2	B	55	G	C4-N9-C1'	-6.11	118.55	126.50
2	B	108	G	C5'-C4'-C3'	6.11	125.78	116.00
2	B	117	G	C5-C6-O6	-6.11	124.93	128.60
2	B	304	U	C5-C6-N1	6.11	125.76	122.70
2	B	710	U	N3-C4-O4	6.11	123.68	119.40
2	B	770	G	C6-C5-N7	-6.11	126.73	130.40
2	B	800	A	C5-C6-N6	6.11	128.59	123.70
2	B	946	C	C2-N3-C4	-6.11	116.84	119.90
2	B	2053	G	C8-N9-C1'	6.11	134.95	127.00
2	B	2161	C	C5'-C4'-C3'	6.11	125.78	116.00
2	B	2568	U	C2-N3-C4	-6.11	123.33	127.00
2	B	2710	C	N3-C4-N4	6.11	122.28	118.00
2	B	2714	G	N3-C4-C5	-6.11	125.54	128.60
2	B	110	G	N1-C2-N2	-6.11	110.70	116.20
2	B	639	U	N3-C4-C5	6.11	118.27	114.60
2	B	1930	G	C5-C6-O6	-6.11	124.93	128.60
1	A	69	G	C5'-C4'-C3'	-6.11	106.22	116.00
2	B	207	A	C4-C5-C6	6.11	120.06	117.00
2	B	364	C	C3'-C2'-C1'	-6.11	96.61	101.50
2	B	516	C	C5'-C4'-C3'	-6.11	106.22	116.00
2	B	757	G	C2-N3-C4	6.11	114.95	111.90
2	B	1421	G	N1-C2-N3	-6.11	120.23	123.90
2	B	2114	A	C8-N9-C4	-6.11	103.36	105.80
2	B	1009	A	C8-N9-C4	6.11	108.24	105.80
2	B	2298	A	C8-N9-C4	-6.11	103.36	105.80
2	B	1053	C	C3'-C2'-C1'	-6.11	96.61	101.50
2	B	2495	G	C4-C5-C6	6.11	122.47	118.80
2	B	2512	C	O3'-P-O5'	6.11	115.61	104.00
2	B	2603	G	O4'-C1'-N9	6.11	113.09	108.20
20	E	22	ASP	CB-CG-OD1	-6.11	112.80	118.30
1	A	97	C	C5'-C4'-C3'	6.11	125.77	116.00
2	B	69	C	P-O3'-C3'	-6.11	112.38	119.70
2	B	281	C	O4'-C1'-N1	6.11	113.08	108.20
2	B	289	G	N7-C8-N9	6.11	116.15	113.10
2	B	486	C	N3-C4-N4	6.11	122.27	118.00
2	B	487	C	C4-C5-C6	6.11	120.45	117.40
2	B	943	A	C5'-C4'-O4'	6.11	116.43	109.10
2	B	946	C	C6-N1-C2	-6.11	117.86	120.30
2	B	1026	G	C8-N9-C4	6.11	108.84	106.40
2	B	1187	G	C2-N3-C4	6.11	114.95	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1257	C	C1'-O4'-C4'	-6.11	105.02	109.90
2	B	1761	C	C5-C6-N1	-6.11	117.95	121.00
2	B	2087	G	P-O3'-C3'	-6.11	112.37	119.70
2	B	2172	U	P-O3'-C3'	6.11	127.03	119.70
2	B	2769	U	P-O3'-C3'	-6.11	112.37	119.70
12	R	79	ARG	NE-CZ-NH2	-6.11	117.25	120.30
2	B	231	A	N9-C1'-C2'	-6.10	105.28	112.00
2	B	467	G	C6-N1-C2	-6.10	121.44	125.10
2	B	724	U	C5-C4-O4	6.10	129.56	125.90
2	B	734	A	C5-N7-C8	6.10	106.95	103.90
2	B	1716	U	C5'-C4'-O4'	6.10	116.42	109.10
2	B	2250	G	O4'-C1'-N9	6.10	113.08	108.20
2	B	1348	C	C5-C4-N4	-6.10	115.93	120.20
2	B	2526	G	C6-C5-N7	-6.10	126.74	130.40
2	B	2828	G	N9-C4-C5	6.10	107.84	105.40
17	U	18	LYS	CA-CB-CG	6.10	126.82	113.40
2	B	248	G	C2-N3-C4	6.10	114.95	111.90
2	B	312	G	N3-C2-N2	6.10	124.17	119.90
2	B	761	A	O4'-C4'-C3'	6.10	110.98	106.10
2	B	801	G	P-O3'-C3'	6.10	127.02	119.70
2	B	1321	A	O4'-C1'-N9	6.10	113.08	108.20
27	C	42	ARG	C-N-CA	6.10	136.95	121.70
2	B	39	G	N3-C2-N2	6.10	124.17	119.90
2	B	1249	U	O4'-C1'-N1	6.10	113.08	108.20
2	B	1268	A	C5-N7-C8	6.10	106.95	103.90
2	B	1472	C	O4'-C1'-N1	6.10	113.08	108.20
2	B	1749	A	N7-C8-N9	-6.10	110.75	113.80
2	B	1769	U	C2-N3-C4	-6.10	123.34	127.00
2	B	1828	G	O4'-C1'-N9	6.10	113.08	108.20
2	B	2589	A	C4-C5-N7	-6.10	107.65	110.70
2	B	2762	C	C5'-C4'-C3'	-6.10	106.24	116.00
2	B	144	A	P-O3'-C3'	6.10	127.02	119.70
2	B	1026	G	C1'-O4'-C4'	-6.10	105.02	109.90
2	B	1309	G	N7-C8-N9	-6.10	110.05	113.10
2	B	1607	C	N3-C2-O2	6.10	126.17	121.90
2	B	2331	G	C2-N3-C4	6.10	114.95	111.90
2	B	2550	G	C6-N1-C2	6.10	128.76	125.10
2	B	2574	G	C8-N9-C4	-6.10	103.96	106.40
5	L	126	ARG	NE-CZ-NH1	6.10	123.35	120.30
2	B	479	A	P-O3'-C3'	6.10	127.02	119.70
2	B	988	A	C5'-C4'-C3'	-6.10	106.25	116.00
2	B	1343	G	N1-C2-N3	-6.10	120.24	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2059	A	C4'-C3'-C2'	-6.10	96.50	102.60
2	B	2603	G	C6-N1-C2	6.10	128.76	125.10
2	B	2804	U	C5-C4-O4	-6.10	122.24	125.90
2	B	4	U	O5'-P-OP2	-6.09	100.22	105.70
2	B	290	U	O4'-C1'-N1	6.09	113.08	108.20
2	B	473	G	C5'-C4'-O4'	-6.09	101.79	109.10
2	B	652	U	N1-C2-N3	-6.09	111.24	114.90
2	B	1776	G	O4'-C1'-N9	6.09	113.08	108.20
2	B	2070	A	N1-C2-N3	6.09	132.35	129.30
2	B	2265	U	N3-C4-O4	6.09	123.67	119.40
2	B	2275	C	N1-C2-O2	-6.09	115.24	118.90
2	B	2512	C	C5-C4-N4	6.09	124.47	120.20
2	B	2600	A	C6-C5-N7	-6.09	128.03	132.30
2	B	318	C	C5-C6-N1	6.09	124.05	121.00
2	B	1019	U	N1-C2-N3	-6.09	111.24	114.90
2	B	1272	A	C3'-C2'-C1'	-6.09	96.62	101.50
2	B	1914	C	C6-N1-C2	-6.09	117.86	120.30
2	B	2006	C	C5-C4-N4	-6.09	115.94	120.20
2	B	2377	A	N1-C6-N6	6.09	122.26	118.60
2	B	2677	G	O4'-C4'-C3'	-6.09	97.91	104.00
2	B	57	C	O4'-C1'-N1	6.09	113.07	108.20
2	B	267	C	C1'-O4'-C4'	-6.09	105.03	109.90
2	B	720	U	N1-C2-O2	-6.09	118.54	122.80
2	B	724	U	N3-C4-C5	-6.09	110.94	114.60
2	B	919	U	C5'-C4'-O4'	6.09	116.41	109.10
2	B	1474	U	C5-C4-O4	-6.09	122.25	125.90
2	B	1511	G	P-O3'-C3'	-6.09	112.39	119.70
2	B	1692	U	C6-N1-C2	-6.09	117.34	121.00
2	B	2057	G	N9-C4-C5	6.09	107.84	105.40
2	B	314	C	N3-C2-O2	-6.09	117.64	121.90
2	B	378	C	N3-C4-N4	6.09	122.26	118.00
2	B	588	U	O4'-C4'-C3'	-6.09	97.91	104.00
2	B	1010	A	C2-N3-C4	-6.09	107.56	110.60
2	B	1499	C	N3-C4-N4	6.09	122.26	118.00
2	B	1514	G	C5-C6-N1	-6.09	108.45	111.50
2	B	2000	C	P-O3'-C3'	-6.09	112.39	119.70
2	B	2568	U	P-O5'-C5'	-6.09	111.16	120.90
2	B	232	G	O4'-C1'-N9	6.09	113.07	108.20
2	B	502	A	P-O3'-C3'	6.09	127.00	119.70
2	B	821	A	C6-N1-C2	6.09	122.25	118.60
2	B	1230	A	C6-C5-N7	6.09	136.56	132.30
2	B	1379	U	N1-C2-O2	-6.09	118.54	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1509	A	P-O5'-C5'	-6.09	111.16	120.90
2	B	13	A	C5-C6-N6	-6.09	118.83	123.70
2	B	683	U	O4'-C1'-N1	6.09	113.07	108.20
2	B	1282	U	N3-C4-O4	-6.09	115.14	119.40
2	B	1407	G	P-O3'-C3'	-6.09	112.40	119.70
2	B	2110	G	C4'-C3'-C2'	-6.09	96.51	102.60
10	P	69	VAL	N-CA-C	-6.09	94.57	111.00
2	B	791	C	O4'-C1'-N1	6.08	113.07	108.20
2	B	867	C	P-O3'-C3'	-6.08	112.40	119.70
2	B	1153	C	C5-C4-N4	-6.08	115.94	120.20
2	B	1330	C	C4'-C3'-C2'	-6.08	96.52	102.60
2	B	1792	G	C2-N3-C4	6.08	114.94	111.90
2	B	742	A	C4-C5-C6	6.08	120.04	117.00
2	B	869	G	C6-C5-N7	-6.08	126.75	130.40
2	B	1551	A	C5-N7-C8	6.08	106.94	103.90
2	B	1674	G	C3'-C2'-C1'	-6.08	96.63	101.50
2	B	1716	U	C1'-O4'-C4'	6.08	114.77	109.90
2	B	1789	A	O5'-C5'-C4'	-6.08	100.14	111.70
2	B	1890	A	C8-N9-C4	-6.08	103.37	105.80
2	B	2314	A	C6-N1-C2	-6.08	114.95	118.60
2	B	2367	G	N3-C4-N9	6.08	129.65	126.00
2	B	2817	U	C2-N3-C4	-6.08	123.35	127.00
14	D	104	VAL	CA-CB-CG2	-6.08	101.77	110.90
1	A	54	G	C8-N9-C4	-6.08	103.97	106.40
2	B	13	A	C4'-C3'-C2'	-6.08	96.52	102.60
2	B	13	A	N1-C6-N6	6.08	122.25	118.60
2	B	519	U	C1'-O4'-C4'	-6.08	105.03	109.90
2	B	2252	G	C4-N9-C1'	6.08	134.41	126.50
2	B	2354	C	OP1-P-OP2	-6.08	110.48	119.60
2	B	2481	G	C5-C6-N1	-6.08	108.46	111.50
2	B	2600	A	O4'-C1'-N9	6.08	113.07	108.20
2	B	2658	C	O4'-C1'-N1	6.08	113.07	108.20
2	B	2863	C	O4'-C1'-N1	6.08	113.06	108.20
12	R	5	PHE	CB-CG-CD1	6.08	125.06	120.80
2	B	574	A	O4'-C4'-C3'	-6.08	97.92	104.00
2	B	1088	A	C8-N9-C1'	-6.08	116.76	127.70
2	B	1479	G	N9-C4-C5	6.08	107.83	105.40
2	B	1519	G	C8-N9-C4	-6.08	103.97	106.40
2	B	2401	U	N3-C2-O2	6.08	126.46	122.20
2	B	2574	G	C5'-C4'-C3'	6.08	125.73	116.00
2	B	209	C	C1'-O4'-C4'	-6.08	105.04	109.90
2	B	209	C	C5'-C4'-C3'	6.08	125.72	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1926	U	C3'-C2'-C1'	6.08	106.36	101.50
2	B	2040	G	N1-C2-N3	-6.08	120.25	123.90
2	B	2183	A	O4'-C4'-C3'	-6.08	97.92	104.00
2	B	2243	U	C6-N1-C1'	-6.08	112.69	121.20
2	B	2253	G	P-O3'-C3'	-6.08	112.41	119.70
2	B	2732	G	C8-N9-C1'	-6.08	119.10	127.00
2	B	792	A	C6-C5-N7	-6.08	128.05	132.30
2	B	1175	A	C8-N9-C4	-6.08	103.37	105.80
2	B	2600	A	C5-C6-N1	-6.08	114.66	117.70
2	B	1589	U	C5-C6-N1	6.08	125.74	122.70
2	B	1649	G	C8-N9-C1'	-6.08	119.10	127.00
2	B	2239	G	N7-C8-N9	-6.08	110.06	113.10
2	B	2632	A	C4-C5-C6	6.08	120.04	117.00
2	B	2739	U	N3-C4-O4	6.08	123.65	119.40
2	B	2773	C	C5-C6-N1	-6.08	117.96	121.00
2	B	672	C	C2-N3-C4	6.07	122.94	119.90
2	B	983	A	C5'-C4'-O4'	6.07	116.39	109.10
2	B	1561	C	O4'-C1'-N1	6.07	113.06	108.20
2	B	2713	U	N1-C2-N3	6.07	118.55	114.90
25	7	63	TYR	CA-CB-CG	-6.07	101.86	113.40
2	B	359	G	O4'-C1'-N9	6.07	113.06	108.20
2	B	1121	C	P-O3'-C3'	6.07	126.99	119.70
2	B	1891	G	C6-C5-N7	-6.07	126.76	130.40
2	B	398	C	N3-C4-C5	-6.07	119.47	121.90
2	B	504	A	O4'-C1'-N9	6.07	113.06	108.20
2	B	562	U	C1'-O4'-C4'	-6.07	105.04	109.90
2	B	765	C	C4'-C3'-C2'	-6.07	96.53	102.60
2	B	1323	C	P-O3'-C3'	-6.07	112.42	119.70
2	B	1382	G	C2-N3-C4	-6.07	108.86	111.90
2	B	1553	A	C4-C5-N7	-6.07	107.67	110.70
2	B	2379	G	O4'-C1'-N9	6.07	113.06	108.20
2	B	2874	C	C4-C5-C6	6.07	120.44	117.40
2	B	2181	U	N3-C4-C5	-6.07	110.96	114.60
2	B	39	G	N7-C8-N9	-6.07	110.07	113.10
2	B	229	C	N1-C2-N3	6.07	123.45	119.20
2	B	657	U	C5'-C4'-C3'	6.07	125.71	116.00
2	B	686	U	O5'-C5'-C4'	-6.07	100.17	111.70
2	B	797	G	N7-C8-N9	-6.07	110.07	113.10
2	B	830	G	P-O3'-C3'	6.07	126.98	119.70
2	B	926	G	C1'-O4'-C4'	-6.07	105.05	109.90
2	B	1826	G	O3'-P-O5'	6.07	115.53	104.00
2	B	2169	A	C5-C6-N1	-6.07	114.67	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2279	G	O4'-C1'-N9	6.07	113.05	108.20
2	B	2689	U	O4'-C1'-N1	6.07	113.05	108.20
19	X	231	TYR	CB-CG-CD2	-6.07	117.36	121.00
20	E	23	PHE	N-CA-C	-6.07	94.62	111.00
1	A	15	A	C5-N7-C8	6.07	106.93	103.90
2	B	1169	A	C6-N1-C2	-6.07	114.96	118.60
2	B	1753	G	C6-C5-N7	-6.07	126.76	130.40
2	B	2389	G	C5-N7-C8	6.07	107.33	104.30
2	B	2402	U	C6-N1-C1'	-6.07	112.71	121.20
2	B	2483	C	C5-C6-N1	-6.07	117.97	121.00
2	B	192	C	N3-C4-N4	6.06	122.25	118.00
2	B	214	G	C2-N3-C4	6.06	114.93	111.90
2	B	301	G	C2-N3-C4	6.06	114.93	111.90
2	B	624	C	N3-C4-N4	6.06	122.25	118.00
2	B	703	U	P-O3'-C3'	6.06	126.98	119.70
2	B	1964	G	P-O5'-C5'	-6.06	111.20	120.90
2	B	2607	G	N7-C8-N9	-6.06	110.07	113.10
29	G	112	VAL	CA-CB-CG1	6.06	120.00	110.90
2	B	24	G	C5-N7-C8	6.06	107.33	104.30
2	B	442	G	C4-C5-C6	6.06	122.44	118.80
2	B	469	G	N1-C2-N2	-6.06	110.75	116.20
2	B	954	G	C4-C5-N7	6.06	113.22	110.80
2	B	1488	C	C6-N1-C2	-6.06	117.88	120.30
2	B	1514	G	N3-C2-N2	6.06	124.14	119.90
2	B	1534	U	N3-C2-O2	-6.06	117.96	122.20
2	B	2782	G	C4-C5-N7	6.06	113.22	110.80
2	B	2828	G	C4-C5-N7	-6.06	108.38	110.80
2	B	2892	G	C4'-C3'-C2'	6.06	108.66	102.60
7	M	8	LYS	O-C-N	-6.06	113.00	122.70
2	B	1152	C	P-O5'-C5'	-6.06	111.20	120.90
2	B	1512	C	P-O3'-C3'	-6.06	112.43	119.70
2	B	1985	C	C2-N3-C4	6.06	122.93	119.90
2	B	2523	G	O4'-C1'-N9	6.06	113.05	108.20
2	B	197	A	C4-C5-C6	6.06	120.03	117.00
2	B	1015	U	N1-C2-N3	6.06	118.54	114.90
2	B	1642	G	C6-N1-C2	-6.06	121.46	125.10
2	B	2213	U	C5'-C4'-O4'	6.06	116.37	109.10
2	B	2300	C	N3-C2-O2	-6.06	117.66	121.90
2	B	2308	G	C8-N9-C4	-6.06	103.98	106.40
2	B	2386	A	C5-C6-N6	-6.06	118.85	123.70
2	B	262	A	C5-N7-C8	6.06	106.93	103.90
2	B	358	U	O4'-C1'-N1	6.06	113.05	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1289	C	N3-C4-N4	6.06	122.24	118.00
2	B	1948	G	N1-C2-N3	-6.06	120.27	123.90
1	A	44	G	N1-C6-O6	6.06	123.53	119.90
2	B	362	A	O4'-C1'-N9	6.06	113.05	108.20
2	B	947	A	C2-N3-C4	6.06	113.63	110.60
2	B	1029	A	O4'-C1'-N9	6.06	113.05	108.20
2	B	1178	C	N3-C2-O2	-6.06	117.66	121.90
2	B	1811	G	C4-C5-N7	-6.06	108.38	110.80
2	B	2728	U	N3-C2-O2	6.06	126.44	122.20
5	L	123	ARG	NE-CZ-NH2	6.06	123.33	120.30
2	B	97	C	C2-N3-C4	-6.05	116.87	119.90
2	B	467	G	N9-C4-C5	6.05	107.82	105.40
2	B	608	A	N9-C4-C5	-6.05	103.38	105.80
2	B	871	U	C3'-C2'-C1'	6.05	106.34	101.50
2	B	992	C	C5-C6-N1	6.05	124.03	121.00
2	B	1016	G	C1'-O4'-C4'	-6.05	105.06	109.90
2	B	1446	C	C5-C4-N4	-6.05	115.96	120.20
2	B	1542	U	C4'-C3'-C2'	-6.05	96.55	102.60
2	B	1680	U	C5'-C4'-C3'	6.05	125.69	116.00
2	B	1944	U	N1-C2-O2	-6.05	118.56	122.80
2	B	2241	A	C5-C6-N1	-6.05	114.67	117.70
2	B	2427	C	C4-C5-C6	6.05	120.43	117.40
2	B	2601	C	C1'-O4'-C4'	-6.05	105.06	109.90
8	N	70	THR	C-N-CA	6.05	136.84	121.70
17	U	99	SER	N-CA-CB	6.05	119.58	110.50
2	B	629	G	P-O5'-C5'	-6.05	111.22	120.90
2	B	1003	G	N3-C2-N2	6.05	124.14	119.90
2	B	1636	U	C6-N1-C2	-6.05	117.37	121.00
2	B	2117	A	N1-C2-N3	-6.05	126.27	129.30
2	B	2602	A	O4'-C1'-N9	6.05	113.04	108.20
1	A	109	A	P-O5'-C5'	-6.05	111.22	120.90
2	B	297	G	P-O5'-C5'	6.05	130.58	120.90
2	B	804	A	N9-C4-C5	6.05	108.22	105.80
2	B	1354	A	C8-N9-C4	-6.05	103.38	105.80
2	B	1778	U	C6-N1-C2	-6.05	117.37	121.00
2	B	2042	A	P-O3'-C3'	-6.05	112.44	119.70
2	B	2165	C	C5-C6-N1	-6.05	117.97	121.00
2	B	2682	A	N1-C2-N3	6.05	132.33	129.30
2	B	132	G	C5-C6-N1	-6.05	108.47	111.50
2	B	227	A	C5-C6-N1	-6.05	114.67	117.70
2	B	647	G	O4'-C4'-C3'	-6.05	97.95	104.00
2	B	1019	U	C1'-O4'-C4'	-6.05	105.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1937	A	N3-C4-N9	6.05	132.24	127.40
2	B	2433	A	C5-C6-N1	-6.05	114.67	117.70
2	B	2524	G	C8-N9-C4	-6.05	103.98	106.40
2	B	2581	G	O4'-C1'-N9	6.05	113.04	108.20
2	B	639	U	N3-C2-O2	-6.05	117.97	122.20
2	B	1391	U	C6-N1-C2	-6.05	117.37	121.00
2	B	1984	G	C6-C5-N7	-6.05	126.77	130.40
2	B	50	U	C5-C4-O4	6.05	129.53	125.90
2	B	157	C	N3-C4-N4	6.05	122.23	118.00
2	B	171	U	O4'-C1'-N1	6.05	113.04	108.20
2	B	484	C	P-O5'-C5'	6.05	130.57	120.90
2	B	567	U	N3-C2-O2	-6.05	117.97	122.20
2	B	1246	A	C4-C5-C6	6.05	120.02	117.00
2	B	1589	U	C6-N1-C2	-6.05	117.37	121.00
2	B	2225	A	C8-N9-C4	-6.05	103.38	105.80
2	B	2860	A	O5'-C5'-C4'	-6.05	100.21	111.70
2	B	1705	A	N9-C4-C5	-6.04	103.38	105.80
2	B	1750	G	C5'-C4'-O4'	6.04	116.35	109.10
2	B	1998	A	C6-N1-C2	-6.04	114.97	118.60
2	B	2220	U	C2-N1-C1'	-6.04	110.44	117.70
2	B	2848	G	C6-N1-C2	-6.04	121.47	125.10
19	X	19	PHE	N-CA-CB	6.04	121.48	110.60
19	X	415	TYR	CG-CD2-CE2	6.04	126.14	121.30
1	A	108	A	N3-C4-C5	-6.04	122.57	126.80
2	B	175	G	C5'-C4'-C3'	6.04	125.67	116.00
2	B	254	G	C5-C6-O6	-6.04	124.97	128.60
2	B	1228	G	C5-C6-O6	-6.04	124.97	128.60
2	B	1811	G	C5-C6-O6	-6.04	124.97	128.60
2	B	1850	G	C4-C5-C6	6.04	122.43	118.80
2	B	2877	G	C4-C5-C6	6.04	122.43	118.80
7	M	130	PHE	CB-CG-CD1	6.04	125.03	120.80
10	P	71	ARG	NE-CZ-NH2	-6.04	117.28	120.30
2	B	127	A	OP1-P-OP2	-6.04	110.54	119.60
2	B	255	A	C8-N9-C4	-6.04	103.38	105.80
2	B	1157	G	C2-N3-C4	6.04	114.92	111.90
2	B	1383	A	P-O3'-C3'	6.04	126.95	119.70
2	B	1592	C	P-O5'-C5'	-6.04	111.23	120.90
2	B	1956	U	N3-C4-C5	-6.04	110.97	114.60
2	B	2867	G	C6-N1-C2	-6.04	121.47	125.10
19	X	261	ARG	CB-CA-C	6.04	122.48	110.40
21	Y	41	GLY	N-CA-C	-6.04	98.00	113.10
2	B	1001	A	N7-C8-N9	-6.04	110.78	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1597	A	C4-C5-C6	6.04	120.02	117.00
2	B	2072	C	N3-C4-N4	6.04	122.23	118.00
2	B	2306	C	N3-C4-N4	6.04	122.23	118.00
2	B	11	C	C4'-C3'-C2'	6.04	108.64	102.60
2	B	543	G	P-O5'-C5'	-6.04	111.24	120.90
2	B	556	A	P-O3'-C3'	-6.04	112.45	119.70
2	B	583	G	C8-N9-C4	-6.04	103.98	106.40
2	B	763	G	N3-C4-C5	-6.04	125.58	128.60
2	B	901	C	P-O5'-C5'	6.04	130.56	120.90
2	B	1334	G	N1-C2-N3	-6.04	120.28	123.90
2	B	1444	G	N9-C1'-C2'	-6.04	105.36	112.00
2	B	1652	A	C1'-O4'-C4'	-6.04	105.07	109.90
2	B	2065	C	C5-C6-N1	6.04	124.02	121.00
2	B	336	C	N3-C4-C5	6.04	124.31	121.90
2	B	932	U	C6-N1-C1'	-6.04	112.75	121.20
2	B	1099	G	C8-N9-C4	-6.04	103.98	106.40
2	B	1267	U	C3'-C2'-C1'	6.04	106.33	101.50
2	B	1295	C	C3'-C2'-C1'	6.04	106.33	101.50
2	B	1641	A	C2-N3-C4	6.04	113.62	110.60
2	B	2166	U	C5'-C4'-O4'	6.04	116.34	109.10
2	B	329	G	C6-N1-C2	6.04	128.72	125.10
2	B	468	G	C4-N9-C1'	-6.04	118.66	126.50
2	B	660	C	N1-C2-N3	6.04	123.42	119.20
2	B	778	G	C8-N9-C4	-6.04	103.99	106.40
2	B	1174	U	N3-C2-O2	6.04	126.42	122.20
2	B	1394	U	C5'-C4'-O4'	6.04	116.34	109.10
2	B	1789	A	N1-C6-N6	6.04	122.22	118.60
2	B	1810	A	C4-C5-C6	6.04	120.02	117.00
2	B	2157	G	C2-N3-C4	6.04	114.92	111.90
2	B	2178	C	O4'-C1'-N1	6.04	113.03	108.20
2	B	121	G	C8-N9-C4	6.03	108.81	106.40
2	B	776	G	C4-C5-N7	-6.03	108.39	110.80
2	B	1470	A	O4'-C1'-N9	6.03	113.03	108.20
2	B	1551	A	C5-C6-N1	-6.03	114.68	117.70
2	B	1830	C	N3-C4-C5	-6.03	119.49	121.90
2	B	2711	A	C6-C5-N7	-6.03	128.08	132.30
2	B	1229	C	O4'-C1'-N1	6.03	113.03	108.20
2	B	1526	C	C2-N3-C4	6.03	122.92	119.90
2	B	2049	G	O5'-C5'-C4'	-6.03	100.24	111.70
2	B	2685	G	C4'-C3'-C2'	6.03	108.63	102.60
22	3	25	THR	CA-CB-CG2	-6.03	103.96	112.40
28	F	6	TYR	CB-CG-CD2	6.03	124.62	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	17	G	N1-C6-O6	-6.03	116.28	119.90
2	B	636	G	N3-C2-N2	6.03	124.12	119.90
2	B	1511	G	C5-C6-N1	-6.03	108.48	111.50
2	B	1556	C	O4'-C1'-N1	6.03	113.03	108.20
2	B	1655	A	C4-C5-N7	6.03	113.72	110.70
2	B	1753	G	C8-N9-C4	-6.03	103.99	106.40
2	B	1831	G	P-O5'-C5'	-6.03	111.25	120.90
2	B	1906	G	C4'-C3'-C2'	-6.03	96.57	102.60
2	B	2067	G	C2-N3-C4	6.03	114.92	111.90
2	B	2271	G	C6-C5-N7	-6.03	126.78	130.40
2	B	2374	C	C4-C5-C6	6.03	120.42	117.40
2	B	2443	C	C1'-O4'-C4'	-6.03	105.08	109.90
2	B	94	A	C5-N7-C8	-6.03	100.89	103.90
2	B	730	A	C1'-O4'-C4'	6.03	114.72	109.90
2	B	983	A	C5-N7-C8	6.03	106.91	103.90
2	B	1178	C	N1-C2-O2	6.03	122.52	118.90
2	B	2196	C	C6-N1-C1'	-6.03	113.57	120.80
2	B	2885	G	P-O5'-C5'	-6.03	111.25	120.90
5	L	48	ARG	NE-CZ-NH2	-6.03	117.29	120.30
1	A	48	U	C5-C6-N1	-6.03	119.69	122.70
2	B	1034	G	N7-C8-N9	6.03	116.11	113.10
2	B	1098	A	OP2-P-O3'	6.03	118.46	105.20
2	B	1107	G	C1'-O4'-C4'	-6.03	105.08	109.90
2	B	1142	A	P-O3'-C3'	-6.03	112.47	119.70
2	B	1164	C	N3-C4-N4	6.03	122.22	118.00
2	B	1435	G	C5-N7-C8	6.03	107.31	104.30
2	B	1819	A	C2-N3-C4	-6.03	107.59	110.60
2	B	2182	U	C5'-C4'-O4'	6.03	116.33	109.10
2	B	2684	U	N1-C2-N3	-6.03	111.28	114.90
2	B	212	G	N3-C2-N2	6.03	124.12	119.90
2	B	364	C	C5-C6-N1	6.03	124.01	121.00
2	B	494	G	C4-C5-N7	6.03	113.21	110.80
2	B	1242	U	N1-C2-O2	-6.03	118.58	122.80
2	B	1308	A	C2-N3-C4	-6.03	107.59	110.60
2	B	1651	G	C2-N3-C4	-6.03	108.89	111.90
2	B	2148	G	C5-C6-O6	6.03	132.22	128.60
2	B	2225	A	C3'-C2'-C1'	-6.03	96.68	101.50
2	B	2450	A	C5-N7-C8	6.03	106.91	103.90
2	B	2629	U	C3'-C2'-C1'	-6.03	96.68	101.50
1	A	24	G	C3'-C2'-C1'	-6.02	96.68	101.50
2	B	887	U	O4'-C1'-N1	6.02	113.02	108.20
2	B	969	G	N1-C2-N3	-6.02	120.29	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2144	G	C4-C5-C6	6.02	122.41	118.80
22	3	40	HIS	N-CA-CB	6.02	121.44	110.60
30	H	68	ARG	NE-CZ-NH1	6.02	123.31	120.30
2	B	259	G	C6-N1-C2	-6.02	121.49	125.10
2	B	613	A	C8-N9-C4	-6.02	103.39	105.80
2	B	972	A	C4-C5-N7	-6.02	107.69	110.70
2	B	1199	U	C3'-C2'-C1'	6.02	106.32	101.50
2	B	1850	G	C6-C5-N7	-6.02	126.79	130.40
2	B	1948	G	O4'-C1'-N9	6.02	113.02	108.20
2	B	2032	G	N3-C2-N2	6.02	124.11	119.90
2	B	2640	G	C5-C6-O6	-6.02	124.99	128.60
2	B	2676	C	C4-C5-C6	6.02	120.41	117.40
2	B	2812	G	C5'-C4'-C3'	6.02	125.64	116.00
1	A	22	U	C4-C5-C6	6.02	123.31	119.70
2	B	1611	C	C3'-C2'-C1'	-6.02	96.68	101.50
2	B	2667	C	C5-C6-N1	6.02	124.01	121.00
2	B	2896	C	C6-N1-C2	6.02	122.71	120.30
1	A	116	G	N3-C4-C5	6.02	131.61	128.60
2	B	952	G	C4-C5-N7	6.02	113.21	110.80
2	B	980	A	N1-C2-N3	-6.02	126.29	129.30
2	B	1397	U	C6-N1-C2	6.02	124.61	121.00
2	B	2028	U	O4'-C4'-C3'	6.02	110.92	106.10
2	B	2237	G	N1-C2-N3	-6.02	120.29	123.90
2	B	336	C	N3-C4-N4	-6.02	113.79	118.00
2	B	571	U	O4'-C1'-N1	6.02	113.01	108.20
2	B	760	G	N1-C2-N2	-6.02	110.78	116.20
2	B	809	G	C5-C6-N1	6.02	114.51	111.50
2	B	1776	G	N9-C4-C5	6.02	107.81	105.40
2	B	1888	G	C3'-C2'-C1'	6.02	106.31	101.50
2	B	1889	A	O4'-C1'-N9	6.02	113.01	108.20
2	B	1903	G	N1-C2-N2	6.02	121.62	116.20
2	B	1917	U	C5-C6-N1	6.02	125.71	122.70
2	B	1917	U	N1-C2-N3	6.02	118.51	114.90
2	B	2035	G	C8-N9-C4	6.02	108.81	106.40
2	B	2181	U	N3-C4-O4	6.02	123.61	119.40
2	B	2392	A	C5-C6-N1	-6.02	114.69	117.70
2	B	60	G	N3-C4-N9	-6.02	122.39	126.00
2	B	601	C	O4'-C1'-N1	6.02	113.01	108.20
2	B	797	G	C5'-C4'-C3'	6.02	125.62	116.00
2	B	1256	G	C5'-C4'-O4'	6.02	116.32	109.10
2	B	1262	A	O4'-C1'-N9	6.02	113.01	108.20
2	B	1797	G	C4-C5-N7	-6.02	108.39	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2070	A	C4-C5-N7	-6.02	107.69	110.70
2	B	2378	A	C4-C5-N7	-6.02	107.69	110.70
2	B	203	A	C5'-C4'-C3'	6.01	125.62	116.00
2	B	565	C	O4'-C4'-C3'	-6.01	97.99	104.00
2	B	729	G	C4-C5-N7	6.01	113.21	110.80
2	B	980	A	N9-C4-C5	6.01	108.21	105.80
2	B	1203	U	C4-C5-C6	-6.01	116.09	119.70
2	B	1491	G	N3-C2-N2	6.01	124.11	119.90
2	B	1754	A	N9-C4-C5	-6.01	103.39	105.80
2	B	1764	C	P-O3'-C3'	-6.01	112.48	119.70
2	B	1839	G	C6-N1-C2	6.01	128.71	125.10
2	B	1937	A	N3-C4-C5	-6.01	122.59	126.80
2	B	2301	C	N3-C4-C5	6.01	124.31	121.90
2	B	2319	G	C6-C5-N7	-6.01	126.79	130.40
1	A	108	A	C2-N3-C4	6.01	113.61	110.60
2	B	79	C	O4'-C1'-N1	6.01	113.01	108.20
2	B	442	G	C6-N1-C2	-6.01	121.49	125.10
2	B	714	U	N3-C4-C5	-6.01	110.99	114.60
2	B	2216	G	C2-N3-C4	6.01	114.91	111.90
2	B	92	U	P-O3'-C3'	6.01	126.91	119.70
2	B	575	A	N7-C8-N9	6.01	116.81	113.80
2	B	579	G	O4'-C1'-N9	6.01	113.01	108.20
2	B	695	G	O4'-C1'-N9	6.01	113.01	108.20
2	B	790	U	N1-C2-O2	-6.01	118.59	122.80
2	B	1065	U	C2-N3-C4	-6.01	123.39	127.00
2	B	1400	U	P-O3'-C3'	-6.01	112.49	119.70
2	B	1889	A	C2-N3-C4	6.01	113.61	110.60
2	B	1897	G	C8-N9-C4	-6.01	104.00	106.40
2	B	2336	A	C8-N9-C4	-6.01	103.40	105.80
2	B	2666	C	C6-N1-C1'	-6.01	113.59	120.80
19	X	82	ALA	N-CA-CB	6.01	118.52	110.10
1	A	67	G	C5'-C4'-O4'	6.01	116.31	109.10
2	B	1343	G	O4'-C1'-N9	6.01	113.01	108.20
2	B	1911	U	C5-C6-N1	-6.01	119.69	122.70
2	B	2048	G	N1-C6-O6	6.01	123.51	119.90
2	B	2063	C	C4-C5-C6	6.01	120.40	117.40
1	A	15	A	C4'-C3'-C2'	-6.01	96.59	102.60
2	B	682	G	N3-C2-N2	6.01	124.11	119.90
2	B	1830	C	N3-C4-N4	6.01	122.21	118.00
2	B	1908	C	C2-N3-C4	-6.01	116.90	119.90
2	B	2079	U	N1-C1'-C2'	-6.01	105.39	112.00
2	B	859	G	N3-C2-N2	6.01	124.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	969	G	O4'-C1'-N9	6.01	113.01	108.20
2	B	1179	G	C2-N3-C4	-6.01	108.90	111.90
2	B	1496	A	C6-C5-N7	-6.01	128.09	132.30
2	B	1615	C	O3'-P-O5'	-6.01	92.59	104.00
2	B	2037	A	N1-C6-N6	6.01	122.20	118.60
2	B	2456	C	C6-N1-C2	6.01	122.70	120.30
2	B	2633	G	C6-N1-C2	-6.01	121.50	125.10
23	5	51	ASP	C-N-CA	6.01	136.72	121.70
2	B	583	G	C6-C5-N7	-6.00	126.80	130.40
2	B	2162	G	C1'-O4'-C4'	-6.00	105.10	109.90
2	B	2178	C	C4-C5-C6	6.00	120.40	117.40
2	B	2429	G	C4-C5-N7	6.00	113.20	110.80
1	A	18	G	N1-C6-O6	6.00	123.50	119.90
2	B	31	C	C4-C5-C6	6.00	120.40	117.40
2	B	141	G	C4-N9-C1'	6.00	134.30	126.50
2	B	155	A	C2-N3-C4	6.00	113.60	110.60
2	B	336	C	P-O3'-C3'	6.00	126.90	119.70
2	B	654	A	C5-C6-N1	-6.00	114.70	117.70
2	B	682	G	C2-N3-C4	6.00	114.90	111.90
2	B	863	A	O4'-C1'-N9	6.00	113.00	108.20
2	B	1508	A	C4-C5-C6	6.00	120.00	117.00
2	B	1583	A	C6-N1-C2	-6.00	115.00	118.60
2	B	1828	G	O5'-P-OP2	-6.00	100.30	105.70
2	B	2555	U	P-O5'-C5'	-6.00	111.29	120.90
2	B	2693	G	C1'-O4'-C4'	-6.00	105.10	109.90
2	B	563	A	P-O3'-C3'	-6.00	112.50	119.70
2	B	1367	A	P-O3'-C3'	6.00	126.90	119.70
2	B	1425	G	C4-C5-N7	6.00	113.20	110.80
2	B	1614	A	N9-C4-C5	-6.00	103.40	105.80
2	B	1743	G	C8-N9-C4	-6.00	104.00	106.40
2	B	1937	A	N1-C2-N3	6.00	132.30	129.30
2	B	2325	G	N1-C2-N2	-6.00	110.80	116.20
2	B	2699	C	C5-C4-N4	-6.00	116.00	120.20
2	B	2869	G	C6-N1-C2	6.00	128.70	125.10
2	B	285	G	C3'-C2'-C1'	-6.00	96.70	101.50
2	B	392	U	O3'-P-O5'	-6.00	92.60	104.00
2	B	914	G	N7-C8-N9	-6.00	110.10	113.10
2	B	1000	A	O4'-C4'-C3'	-6.00	98.00	104.00
2	B	1256	G	C5'-C4'-C3'	-6.00	106.40	116.00
2	B	1343	G	OP1-P-O3'	6.00	118.40	105.20
2	B	1699	G	P-O5'-C5'	-6.00	111.30	120.90
2	B	181	A	O4'-C4'-C3'	-6.00	98.00	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	190	A	C5-N7-C8	6.00	106.90	103.90
2	B	1932	A	O4'-C1'-N9	6.00	113.00	108.20
2	B	2085	U	C2-N3-C4	-6.00	123.40	127.00
2	B	2212	A	C5-C6-N6	-6.00	118.90	123.70
2	B	2254	C	N1-C1'-C2'	-6.00	105.40	112.00
2	B	2290	G	C5-N7-C8	6.00	107.30	104.30
2	B	2412	A	O4'-C1'-N9	6.00	113.00	108.20
2	B	2460	U	O4'-C1'-N1	6.00	113.00	108.20
2	B	2575	C	O5'-C5'-C4'	-6.00	100.30	111.70
2	B	393	C	P-O5'-C5'	-6.00	111.31	120.90
2	B	1517	G	N3-C4-C5	-6.00	125.60	128.60
2	B	1627	G	N9-C4-C5	-6.00	103.00	105.40
2	B	2900	A	N1-C6-N6	6.00	122.20	118.60
2	B	71	A	N7-C8-N9	6.00	116.80	113.80
2	B	377	G	N1-C6-O6	6.00	123.50	119.90
2	B	1178	C	C2-N3-C4	6.00	122.90	119.90
2	B	2599	G	C4-C5-C6	6.00	122.40	118.80
2	B	2867	G	C5-N7-C8	6.00	107.30	104.30
8	N	1	MET	CG-SD-CE	-6.00	90.61	100.20
2	B	71	A	C5'-C4'-O4'	-5.99	101.91	109.10
2	B	148	U	N3-C4-C5	5.99	118.20	114.60
2	B	168	G	N1-C2-N2	-5.99	110.81	116.20
2	B	530	G	C4-C5-N7	-5.99	108.40	110.80
2	B	2385	C	C2-N1-C1'	5.99	125.39	118.80
2	B	2420	C	O3'-P-O5'	5.99	115.39	104.00
2	B	456	C	C2-N1-C1'	5.99	125.39	118.80
2	B	534	U	C4'-C3'-C2'	-5.99	96.61	102.60
2	B	595	C	C5'-C4'-C3'	5.99	125.59	116.00
2	B	1007	C	N1-C2-N3	-5.99	115.00	119.20
2	B	1121	C	C4-C5-C6	5.99	120.40	117.40
2	B	2117	A	C8-N9-C4	-5.99	103.40	105.80
2	B	2544	G	C5-C6-N1	-5.99	108.50	111.50
2	B	2851	A	P-O5'-C5'	-5.99	111.31	120.90
2	B	374	A	O4'-C1'-N9	5.99	112.99	108.20
2	B	423	A	C8-N9-C4	-5.99	103.40	105.80
2	B	490	C	N1-C1'-C2'	-5.99	105.41	112.00
2	B	934	U	C4'-C3'-C2'	5.99	108.59	102.60
2	B	1305	C	C6-N1-C1'	-5.99	113.61	120.80
2	B	1328	A	P-O3'-C3'	5.99	126.89	119.70
2	B	1422	G	C2-N3-C4	-5.99	108.90	111.90
2	B	1515	A	N1-C6-N6	5.99	122.19	118.60
2	B	1906	G	N1-C2-N2	5.99	121.59	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2284	A	O4'-C1'-N9	5.99	112.99	108.20
2	B	2450	A	P-O5'-C5'	-5.99	111.32	120.90
2	B	2823	A	C4'-C3'-C2'	5.99	108.59	102.60
10	P	71	ARG	NE-CZ-NH1	5.99	123.30	120.30
15	T	8	LEU	C-N-CA	5.99	136.68	121.70
2	B	304	U	C5'-C4'-C3'	5.99	125.58	116.00
2	B	362	A	C5'-C4'-C3'	-5.99	106.42	116.00
2	B	482	A	P-O3'-C3'	-5.99	112.51	119.70
2	B	614	A	C8-N9-C4	5.99	108.20	105.80
2	B	702	U	C1'-O4'-C4'	5.99	114.69	109.90
2	B	1529	G	P-O3'-C3'	-5.99	112.52	119.70
2	B	2083	G	C8-N9-C4	5.99	108.80	106.40
2	B	2523	G	C8-N9-C4	5.99	108.80	106.40
2	B	2544	G	O4'-C1'-N9	5.99	112.99	108.20
2	B	2751	G	C5'-C4'-C3'	-5.99	106.42	116.00
9	O	81	ARG	CB-CA-C	-5.99	98.42	110.40
2	B	727	A	C5-N7-C8	-5.99	100.91	103.90
2	B	1485	U	N1-C2-O2	5.99	126.99	122.80
2	B	1525	A	O4'-C4'-C3'	-5.99	98.01	104.00
2	B	1557	C	C3'-C2'-C1'	5.99	106.29	101.50
2	B	1699	G	N3-C4-N9	5.99	129.59	126.00
2	B	1759	A	C4-C5-C6	5.99	119.99	117.00
2	B	2227	A	C6-C5-N7	-5.99	128.11	132.30
2	B	2311	A	O4'-C1'-N9	-5.99	103.41	108.20
2	B	55	G	N3-C4-C5	5.99	131.59	128.60
2	B	319	G	N1-C2-N3	-5.99	120.31	123.90
2	B	563	A	C4-C5-N7	-5.99	107.71	110.70
2	B	720	U	N3-C4-O4	5.99	123.59	119.40
2	B	962	G	N7-C8-N9	-5.99	110.11	113.10
2	B	1149	G	C8-N9-C4	-5.99	104.01	106.40
2	B	1162	G	C8-N9-C4	5.99	108.79	106.40
2	B	1337	G	N1-C2-N2	-5.99	110.81	116.20
2	B	1746	A	C6-N1-C2	5.99	122.19	118.60
2	B	1823	G	C8-N9-C1'	5.99	134.78	127.00
2	B	2243	U	N3-C4-O4	5.99	123.59	119.40
2	B	2306	C	C5-C6-N1	-5.99	118.01	121.00
2	B	2566	A	C5'-C4'-C3'	-5.99	106.42	116.00
11	Q	63	ARG	CD-NE-CZ	-5.99	115.22	123.60
2	B	39	G	C5-C6-O6	-5.98	125.01	128.60
2	B	191	A	O4'-C1'-C2'	5.98	112.99	107.60
2	B	408	G	N3-C4-N9	-5.98	122.41	126.00
2	B	734	A	N7-C8-N9	-5.98	110.81	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1137	G	C8-N9-C4	5.98	108.79	106.40
2	B	1694	C	N3-C4-N4	5.98	122.19	118.00
2	B	2287	A	P-O3'-C3'	5.98	126.88	119.70
2	B	877	A	O4'-C4'-C3'	-5.98	98.02	104.00
2	B	1281	G	C6-N1-C2	-5.98	121.51	125.10
2	B	1572	A	C1'-O4'-C4'	-5.98	105.11	109.90
2	B	1601	G	O5'-C5'-C4'	-5.98	100.33	111.70
2	B	2103	C	N3-C4-N4	5.98	122.19	118.00
2	B	2319	G	N9-C1'-C2'	5.98	121.78	114.00
2	B	2813	A	O4'-C4'-C3'	-5.98	98.02	104.00
2	B	2856	A	N7-C8-N9	5.98	116.79	113.80
2	B	257	C	N3-C4-C5	-5.98	119.51	121.90
2	B	407	G	N3-C2-N2	5.98	124.09	119.90
2	B	1173	U	O4'-C1'-N1	5.98	112.98	108.20
2	B	1195	G	C6-C5-N7	-5.98	126.81	130.40
2	B	1197	G	C5-C6-O6	-5.98	125.01	128.60
2	B	1745	A	O4'-C1'-N9	5.98	112.98	108.20
2	B	1779	U	C5-C6-N1	-5.98	119.71	122.70
2	B	2223	G	N7-C8-N9	5.98	116.09	113.10
2	B	2277	G	N3-C4-C5	-5.98	125.61	128.60
23	5	163	TYR	CB-CG-CD1	-5.98	117.41	121.00
2	B	521	U	C3'-C2'-C1'	-5.98	96.72	101.50
2	B	664	G	O4'-C1'-N9	5.98	112.98	108.20
2	B	685	A	C8-N9-C4	-5.98	103.41	105.80
2	B	1296	G	N1-C6-O6	5.98	123.49	119.90
2	B	160	A	O4'-C1'-N9	5.98	112.98	108.20
2	B	297	G	N1-C2-N2	5.98	121.58	116.20
2	B	1160	G	C6-N1-C2	-5.98	121.51	125.10
2	B	2359	C	C5-C4-N4	-5.98	116.02	120.20
2	B	2392	A	N7-C8-N9	5.98	116.79	113.80
2	B	2473	U	C6-N1-C1'	-5.98	112.83	121.20
29	G	169	ARG	N-CA-CB	5.98	121.36	110.60
2	B	172	A	C8-N9-C4	5.98	108.19	105.80
2	B	1564	C	C1'-O4'-C4'	5.98	114.68	109.90
2	B	1814	G	C6-C5-N7	-5.98	126.81	130.40
2	B	489	G	N3-C2-N2	5.97	124.08	119.90
2	B	578	G	C5-C6-O6	-5.97	125.02	128.60
2	B	670	A	N3-C4-N9	5.97	132.18	127.40
2	B	673	C	C1'-O4'-C4'	5.97	114.68	109.90
2	B	1170	C	C4'-C3'-C2'	-5.97	96.63	102.60
2	B	1272	A	O4'-C1'-C2'	-5.97	99.83	105.80
2	B	1373	A	C2-N3-C4	5.97	113.59	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1544	A	C1'-O4'-C4'	-5.97	105.12	109.90
2	B	1792	G	C5-N7-C8	5.97	107.29	104.30
2	B	1901	A	C5-N7-C8	5.97	106.89	103.90
2	B	2093	G	C5'-C4'-C3'	-5.97	106.44	116.00
1	A	5	U	O5'-P-OP2	-5.97	100.32	105.70
2	B	120	U	C2-N3-C4	-5.97	123.42	127.00
2	B	768	G	O4'-C1'-N9	5.97	112.98	108.20
2	B	1010	A	N3-C4-N9	-5.97	122.62	127.40
2	B	1813	G	C6-C5-N7	-5.97	126.82	130.40
2	B	2278	A	C6-N1-C2	-5.97	115.02	118.60
2	B	2448	A	C1'-O4'-C4'	5.97	114.68	109.90
2	B	2861	U	C5-C6-N1	5.97	125.69	122.70
2	B	590	A	C6-C5-N7	-5.97	128.12	132.30
2	B	654	A	C4-C5-N7	-5.97	107.71	110.70
2	B	1292	G	C8-N9-C4	-5.97	104.01	106.40
2	B	1948	G	N7-C8-N9	5.97	116.09	113.10
2	B	2142	A	O4'-C1'-N9	5.97	112.98	108.20
2	B	1154	G	P-O3'-C3'	5.97	126.86	119.70
2	B	1280	G	N3-C2-N2	5.97	124.08	119.90
2	B	2056	G	C6-C5-N7	-5.97	126.82	130.40
2	B	2091	C	C4-C5-C6	5.97	120.39	117.40
2	B	2133	G	N1-C2-N3	-5.97	120.32	123.90
2	B	2252	G	P-O3'-C3'	5.97	126.86	119.70
2	B	2547	A	N1-C2-N3	5.97	132.28	129.30
2	B	61	C	N1-C2-O2	5.97	122.48	118.90
2	B	360	U	C4-C5-C6	-5.97	116.12	119.70
2	B	743	A	O4'-C1'-N9	5.97	112.97	108.20
2	B	920	A	C5'-C4'-O4'	-5.97	101.94	109.10
2	B	1328	A	C4-C5-C6	5.97	119.98	117.00
2	B	2104	C	C3'-C2'-C1'	5.97	106.27	101.50
2	B	2412	A	N3-C4-C5	-5.97	122.62	126.80
28	F	86	CYS	N-CA-CB	5.97	121.34	110.60
1	A	24	G	C4'-C3'-C2'	5.97	108.57	102.60
2	B	329	G	O4'-C1'-C2'	-5.97	99.83	105.80
2	B	488	G	O4'-C1'-C2'	5.97	112.97	107.60
2	B	1355	G	C1'-O4'-C4'	5.97	114.67	109.90
2	B	1919	A	C5-C6-N1	5.97	120.68	117.70
2	B	2136	G	C5-C6-O6	-5.97	125.02	128.60
2	B	2155	U	N1-C2-N3	-5.97	111.32	114.90
2	B	2196	C	C2-N1-C1'	5.97	125.36	118.80
2	B	2841	C	N3-C4-N4	5.97	122.18	118.00
2	B	50	U	N1-C2-O2	5.96	126.97	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	250	G	C8-N9-C4	5.96	108.79	106.40
2	B	555	G	O4'-C4'-C3'	-5.96	98.03	104.00
2	B	707	G	C5-C6-N1	5.96	114.48	111.50
2	B	799	G	N3-C4-C5	-5.96	125.62	128.60
2	B	1512	C	C5'-C4'-C3'	-5.96	106.46	116.00
2	B	1625	C	C5-C4-N4	-5.96	116.03	120.20
2	B	1688	U	C5'-C4'-O4'	5.96	116.26	109.10
2	B	2199	A	C3'-C2'-C1'	-5.96	96.73	101.50
2	B	2463	C	P-O3'-C3'	-5.96	112.54	119.70
2	B	2531	A	N7-C8-N9	-5.96	110.82	113.80
2	B	2828	G	C2-N3-C4	-5.96	108.92	111.90
2	B	52	A	C5-N7-C8	5.96	106.88	103.90
2	B	435	C	C5-C6-N1	5.96	123.98	121.00
2	B	1088	A	C2-N3-C4	-5.96	107.62	110.60
2	B	1504	A	C4-C5-N7	-5.96	107.72	110.70
2	B	1673	G	C2-N3-C4	5.96	114.88	111.90
2	B	2165	C	P-O3'-C3'	5.96	126.86	119.70
2	B	2336	A	P-O3'-C3'	5.96	126.86	119.70
2	B	2893	A	C4-C5-N7	-5.96	107.72	110.70
1	A	85	G	N3-C2-N2	5.96	124.07	119.90
2	B	205	G	C5-C6-N1	-5.96	108.52	111.50
2	B	224	U	C4'-C3'-C2'	5.96	108.56	102.60
2	B	555	G	N1-C6-O6	5.96	123.48	119.90
2	B	815	C	N1-C1'-C2'	-5.96	105.44	112.00
2	B	817	C	C3'-C2'-C1'	-5.96	96.73	101.50
2	B	885	C	N1-C2-N3	-5.96	115.03	119.20
2	B	1160	G	C3'-C2'-C1'	-5.96	96.73	101.50
2	B	1393	A	N1-C2-N3	5.96	132.28	129.30
2	B	2136	G	N1-C6-O6	5.96	123.48	119.90
2	B	2506	U	C5-C6-N1	-5.96	119.72	122.70
2	B	2530	A	C2-N3-C4	-5.96	107.62	110.60
2	B	2698	U	P-O5'-C5'	5.96	130.44	120.90
2	B	493	G	O4'-C1'-N9	5.96	112.97	108.20
2	B	831	G	C6-N1-C2	-5.96	121.52	125.10
2	B	1095	A	C4-C5-C6	5.96	119.98	117.00
2	B	414	C	C2-N1-C1'	-5.96	112.25	118.80
2	B	485	C	C5-C4-N4	-5.96	116.03	120.20
2	B	646	U	N3-C4-C5	-5.96	111.03	114.60
2	B	1475	G	O4'-C1'-N9	5.96	112.97	108.20
2	B	1622	G	C4-C5-N7	-5.96	108.42	110.80
2	B	1938	A	C2-N3-C4	5.96	113.58	110.60
2	B	2504	U	C4-C5-C6	5.96	123.28	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2588	G	C1'-O4'-C4'	-5.96	105.13	109.90
20	E	24	ASN	CB-CA-C	5.96	122.32	110.40
20	E	170	ARG	NE-CZ-NH2	-5.96	117.32	120.30
2	B	576	U	C2-N3-C4	-5.96	123.43	127.00
2	B	1278	C	C5-C6-N1	-5.96	118.02	121.00
2	B	1595	C	C5'-C4'-C3'	5.96	125.53	116.00
2	B	1703	G	P-O3'-C3'	-5.96	112.55	119.70
2	B	2362	C	C5-C4-N4	-5.96	116.03	120.20
2	B	2606	C	C5'-C4'-O4'	5.96	116.25	109.10
23	5	111	PHE	CG-CD1-CE1	-5.96	114.25	120.80
27	C	189	ALA	N-CA-C	-5.96	94.92	111.00
2	B	402	A	C2-N3-C4	5.96	113.58	110.60
2	B	776	G	N1-C2-N2	-5.96	110.84	116.20
2	B	2286	G	C5-C6-N1	5.96	114.48	111.50
2	B	2402	U	P-O3'-C3'	5.96	126.85	119.70
2	B	2403	C	P-O5'-C5'	-5.96	111.37	120.90
2	B	2405	G	N3-C4-C5	-5.96	125.62	128.60
2	B	2467	C	O4'-C4'-C3'	-5.96	98.05	104.00
2	B	2715	C	N3-C4-N4	5.96	122.17	118.00
2	B	879	G	O4'-C1'-N9	5.95	112.96	108.20
2	B	1792	G	C6-C5-N7	-5.95	126.83	130.40
2	B	1833	C	C4'-C3'-O3'	5.95	124.91	113.00
2	B	2039	U	O4'-C1'-N1	5.95	112.96	108.20
2	B	2503	A	N9-C4-C5	-5.95	103.42	105.80
2	B	2601	C	C5-C4-N4	-5.95	116.03	120.20
2	B	23	G	N3-C4-C5	-5.95	125.62	128.60
2	B	613	A	N9-C4-C5	5.95	108.18	105.80
2	B	658	U	P-O3'-C3'	-5.95	112.56	119.70
2	B	662	G	N3-C2-N2	5.95	124.07	119.90
2	B	982	C	N3-C4-N4	5.95	122.17	118.00
2	B	1084	A	C5-N7-C8	5.95	106.88	103.90
2	B	1247	A	C5-C6-N1	-5.95	114.72	117.70
2	B	1824	G	P-O5'-C5'	-5.95	111.38	120.90
2	B	2621	G	C4-C5-N7	5.95	113.18	110.80
2	B	22	C	C2-N3-C4	5.95	122.88	119.90
2	B	333	G	N7-C8-N9	-5.95	110.12	113.10
2	B	699	A	P-O3'-C3'	-5.95	112.56	119.70
2	B	718	A	C2-N3-C4	-5.95	107.62	110.60
2	B	839	U	C2-N3-C4	-5.95	123.43	127.00
2	B	1364	G	N3-C2-N2	-5.95	115.73	119.90
2	B	1461	C	C5'-C4'-C3'	5.95	125.52	116.00
2	B	1476	U	O4'-C1'-N1	5.95	112.96	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1509	A	O4'-C1'-N9	5.95	112.96	108.20
2	B	1594	U	C6-N1-C1'	5.95	129.53	121.20
2	B	1617	C	N3-C4-C5	-5.95	119.52	121.90
2	B	1697	G	C5'-C4'-C3'	5.95	125.52	116.00
2	B	1707	G	N3-C4-N9	5.95	129.57	126.00
2	B	2836	U	N3-C2-O2	-5.95	118.03	122.20
2	B	443	A	P-O3'-C3'	-5.95	112.56	119.70
2	B	891	G	C8-N9-C1'	5.95	134.73	127.00
2	B	1454	C	C5-C6-N1	-5.95	118.03	121.00
2	B	2396	G	O4'-C1'-N9	5.95	112.96	108.20
2	B	2800	A	C4-C5-N7	-5.95	107.72	110.70
2	B	316	C	C6-N1-C1'	5.95	127.94	120.80
2	B	803	U	N3-C4-C5	-5.95	111.03	114.60
2	B	888	C	C5'-C4'-O4'	5.95	116.24	109.10
2	B	1271	G	C2-N3-C4	5.95	114.87	111.90
2	B	1683	U	N3-C4-O4	5.95	123.56	119.40
2	B	2265	U	C2-N1-C1'	5.95	124.84	117.70
2	B	2272	U	C2'-C3'-O3'	5.95	123.22	113.70
2	B	2275	C	C2-N3-C4	5.95	122.87	119.90
2	B	2538	C	N3-C4-N4	5.95	122.16	118.00
2	B	2808	G	O4'-C1'-N9	5.95	112.96	108.20
1	A	48	U	N1-C2-O2	-5.95	118.64	122.80
2	B	189	G	O5'-C5'-C4'	-5.95	100.40	111.70
2	B	591	U	C5-C4-O4	-5.95	122.33	125.90
2	B	932	U	P-O3'-C3'	-5.95	112.56	119.70
2	B	1289	C	C6-N1-C1'	-5.95	113.67	120.80
2	B	1588	G	P-O3'-C3'	5.95	126.83	119.70
2	B	1814	G	P-O5'-C5'	-5.95	111.39	120.90
2	B	1997	C	N1-C2-O2	-5.95	115.33	118.90
2	B	2849	U	P-O3'-C3'	5.95	126.83	119.70
2	B	2884	U	OP1-P-OP2	-5.95	110.68	119.60
2	B	1580	A	N7-C8-N9	5.94	116.77	113.80
2	B	1741	C	N1-C2-O2	-5.94	115.33	118.90
2	B	2428	G	N1-C2-N2	-5.94	110.85	116.20
2	B	205	G	C4-C5-C6	5.94	122.36	118.80
2	B	657	U	O4'-C1'-N1	5.94	112.95	108.20
2	B	727	A	O4'-C1'-N9	5.94	112.95	108.20
2	B	1348	C	C5-C6-N1	5.94	123.97	121.00
2	B	1480	C	C5-C4-N4	-5.94	116.04	120.20
2	B	2237	G	C5-C6-O6	-5.94	125.03	128.60
2	B	2529	G	N7-C8-N9	5.94	116.07	113.10
2	B	2713	U	C3'-C2'-C1'	-5.94	96.75	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2832	U	C5-C4-O4	5.94	129.47	125.90
1	A	30	C	C5-C4-N4	5.94	124.36	120.20
1	A	115	A	C6-C5-N7	-5.94	128.14	132.30
2	B	220	G	N1-C6-O6	5.94	123.46	119.90
2	B	527	C	N3-C4-N4	5.94	122.16	118.00
2	B	850	U	P-O5'-C5'	-5.94	111.40	120.90
2	B	1677	A	C4-C5-C6	5.94	119.97	117.00
2	B	2223	G	C4-C5-N7	5.94	113.18	110.80
2	B	2390	U	N1-C2-N3	5.94	118.46	114.90
2	B	2667	C	C4-C5-C6	-5.94	114.43	117.40
19	X	196	PHE	CB-CG-CD1	5.94	124.96	120.80
19	X	386	ARG	NE-CZ-NH1	5.94	123.27	120.30
2	B	716	A	C5-N7-C8	5.94	106.87	103.90
2	B	1509	A	C4-C5-C6	5.94	119.97	117.00
2	B	2578	G	C5-N7-C8	5.94	107.27	104.30
1	A	54	G	C6-N1-C2	-5.94	121.54	125.10
2	B	16	C	N1-C2-N3	5.94	123.36	119.20
2	B	257	C	C6-N1-C2	-5.94	117.92	120.30
2	B	567	U	N1-C1'-C2'	-5.94	105.47	112.00
2	B	1325	U	P-O5'-C5'	5.94	130.40	120.90
2	B	1507	C	C5-C6-N1	5.94	123.97	121.00
2	B	1620	G	C5'-C4'-C3'	5.94	125.50	116.00
2	B	2151	U	C3'-C2'-C1'	-5.94	96.75	101.50
2	B	2213	U	C4'-C3'-C2'	-5.94	96.66	102.60
2	B	2376	A	C4-C5-C6	5.94	119.97	117.00
2	B	2566	A	C6-C5-N7	-5.94	128.14	132.30
2	B	2783	U	C2-N3-C4	-5.94	123.44	127.00
2	B	515	A	N1-C2-N3	-5.94	126.33	129.30
2	B	712	G	O4'-C1'-N9	5.94	112.95	108.20
2	B	1105	U	P-O5'-C5'	-5.94	111.40	120.90
2	B	1197	G	C1'-O4'-C4'	5.94	114.65	109.90
2	B	1489	C	P-O3'-C3'	5.94	126.82	119.70
2	B	1662	U	P-O3'-C3'	-5.94	112.58	119.70
2	B	2150	C	O4'-C1'-N1	5.94	112.95	108.20
2	B	2465	C	C2-N3-C4	5.94	122.87	119.90
2	B	2812	G	P-O3'-C3'	5.94	126.82	119.70
2	B	194	G	C5-C6-N1	-5.93	108.53	111.50
2	B	319	G	C2-N3-C4	5.93	114.87	111.90
2	B	577	G	N7-C8-N9	5.93	116.07	113.10
2	B	672	C	C6-N1-C2	5.93	122.67	120.30
2	B	1374	G	C3'-C2'-C1'	5.93	106.25	101.50
2	B	1670	C	C5-C6-N1	5.93	123.97	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2418	A	C5'-C4'-C3'	5.93	125.50	116.00
4	K	32	TYR	CG-CD1-CE1	-5.93	116.55	121.30
2	B	11	C	P-O3'-C3'	5.93	126.82	119.70
2	B	97	C	O4'-C1'-N1	5.93	112.95	108.20
2	B	262	A	C4-C5-C6	5.93	119.97	117.00
2	B	605	G	N7-C8-N9	-5.93	110.13	113.10
2	B	907	G	C6-C5-N7	-5.93	126.84	130.40
2	B	1129	A	O4'-C1'-N9	5.93	112.95	108.20
2	B	1206	G	N1-C6-O6	5.93	123.46	119.90
2	B	1258	U	C5-C6-N1	5.93	125.67	122.70
2	B	1451	C	P-O3'-C3'	-5.93	112.58	119.70
2	B	1801	A	N7-C8-N9	-5.93	110.83	113.80
2	B	1958	C	C5-C6-N1	-5.93	118.03	121.00
2	B	2148	G	C5'-C4'-O4'	5.93	116.22	109.10
2	B	2150	C	N3-C4-N4	5.93	122.15	118.00
2	B	2328	A	C8-N9-C4	-5.93	103.43	105.80
2	B	2359	C	P-O3'-C3'	-5.93	112.58	119.70
2	B	2617	U	N1-C1'-C2'	-5.93	105.47	112.00
2	B	253	C	C6-N1-C2	-5.93	117.93	120.30
2	B	394	C	C5'-C4'-C3'	5.93	125.49	116.00
2	B	881	G	C5'-C4'-O4'	5.93	116.22	109.10
2	B	1640	A	O4'-C1'-N9	5.93	112.94	108.20
2	B	1648	U	N3-C2-O2	-5.93	118.05	122.20
2	B	2460	U	C2-N1-C1'	-5.93	110.58	117.70
2	B	2599	G	C1'-O4'-C4'	-5.93	105.16	109.90
31	I	52	LEU	CB-CA-C	-5.93	98.93	110.20
32	J	2	LYS	N-CA-CB	5.93	121.28	110.60
1	A	53	A	C6-C5-N7	-5.93	128.15	132.30
2	B	26	G	N7-C8-N9	-5.93	110.14	113.10
2	B	390	U	C6-N1-C2	5.93	124.56	121.00
2	B	393	C	C4-C5-C6	5.93	120.36	117.40
2	B	774	G	C4-C5-C6	5.93	122.36	118.80
2	B	1489	C	N3-C4-C5	-5.93	119.53	121.90
2	B	2238	G	C5-C6-O6	-5.93	125.04	128.60
2	B	2620	C	O5'-C5'-C4'	-5.93	100.44	111.70
2	B	2730	C	C5-C4-N4	-5.93	116.05	120.20
2	B	2783	U	O4'-C1'-N1	5.93	112.94	108.20
2	B	410	G	C2-N3-C4	5.93	114.86	111.90
2	B	1168	G	C8-N9-C1'	5.93	134.71	127.00
2	B	1681	G	N9-C4-C5	5.93	107.77	105.40
2	B	2583	G	N3-C2-N2	5.93	124.05	119.90
1	A	24	G	O4'-C4'-C3'	-5.93	98.07	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	345	A	C4-C5-C6	5.93	119.96	117.00
2	B	429	A	C5-N7-C8	5.93	106.86	103.90
2	B	581	C	N3-C4-C5	-5.93	119.53	121.90
2	B	816	C	C4-C5-C6	5.93	120.36	117.40
2	B	2309	A	N9-C1'-C2'	-5.93	105.48	112.00
2	B	2524	G	C6-N1-C2	-5.93	121.54	125.10
2	B	2570	G	C4'-C3'-C2'	-5.93	96.67	102.60
1	A	72	G	N9-C4-C5	5.92	107.77	105.40
2	B	134	G	O3'-P-O5'	-5.92	92.74	104.00
2	B	379	G	C4-C5-N7	-5.92	108.43	110.80
2	B	388	G	O4'-C4'-C3'	-5.92	98.08	104.00
2	B	467	G	C4'-C3'-C2'	-5.92	96.68	102.60
2	B	553	G	C5-C6-O6	-5.92	125.05	128.60
2	B	633	A	C2-N3-C4	-5.92	107.64	110.60
2	B	834	G	N9-C1'-C2'	-5.92	105.48	112.00
2	B	910	A	C5-C6-N6	-5.92	118.96	123.70
2	B	1040	A	C5-N7-C8	5.92	106.86	103.90
2	B	1193	G	O4'-C1'-C2'	5.92	112.93	107.60
2	B	1277	G	C8-N9-C4	-5.92	104.03	106.40
2	B	1425	G	O4'-C1'-N9	5.92	112.94	108.20
2	B	1442	U	P-O5'-C5'	5.92	130.38	120.90
2	B	1475	G	N7-C8-N9	5.92	116.06	113.10
2	B	1745	A	C5-C6-N6	-5.92	118.96	123.70
2	B	1768	C	C4-C5-C6	5.92	120.36	117.40
2	B	1947	C	N1-C2-O2	-5.92	115.34	118.90
2	B	2221	G	C8-N9-C4	-5.92	104.03	106.40
7	M	94	ALA	CB-CA-C	-5.92	101.21	110.10
28	F	57	ALA	CB-CA-C	-5.92	101.21	110.10
2	B	39	G	N3-C4-C5	-5.92	125.64	128.60
2	B	537	G	N7-C8-N9	-5.92	110.14	113.10
2	B	798	G	C2-N3-C4	5.92	114.86	111.90
2	B	1571	A	C5'-C4'-O4'	5.92	116.21	109.10
2	B	177	G	O4'-C4'-C3'	5.92	110.84	106.10
2	B	290	U	C6-N1-C2	-5.92	117.45	121.00
2	B	407	G	C5-C6-N1	5.92	114.46	111.50
2	B	771	G	C8-N9-C4	-5.92	104.03	106.40
2	B	780	G	C4-C5-N7	5.92	113.17	110.80
2	B	1815	A	C2-N3-C4	5.92	113.56	110.60
2	B	2069	G	O4'-C1'-N9	5.92	112.94	108.20
2	B	2580	U	N1-C2-O2	5.92	126.94	122.80
2	B	898	C	C5-C6-N1	5.92	123.96	121.00
2	B	1514	G	C1'-O4'-C4'	-5.92	105.16	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	376	G	C4'-C3'-C2'	-5.92	96.68	102.60
2	B	712	G	C8-N9-C1'	5.92	134.69	127.00
2	B	812	C	C5-C6-N1	5.92	123.96	121.00
2	B	966	G	OP1-P-OP2	-5.92	110.72	119.60
2	B	1515	A	C5-N7-C8	5.92	106.86	103.90
2	B	1818	U	C4-C5-C6	5.92	123.25	119.70
2	B	1886	U	O5'-P-OP1	5.92	117.80	110.70
15	T	47	VAL	CA-CB-CG2	5.92	119.78	110.90
28	F	31	GLU	C-N-CA	5.92	136.50	121.70
1	A	44	G	C6-C5-N7	-5.92	126.85	130.40
2	B	36	G	C4-C5-N7	-5.92	108.43	110.80
2	B	886	A	P-O5'-C5'	5.92	130.37	120.90
2	B	1177	G	N7-C8-N9	-5.92	110.14	113.10
2	B	1182	G	C6-C5-N7	-5.92	126.85	130.40
2	B	1381	G	N9-C4-C5	5.92	107.77	105.40
2	B	1464	G	C4-N9-C1'	-5.92	118.81	126.50
2	B	1848	A	C4-C5-N7	-5.92	107.74	110.70
2	B	2055	C	C4'-C3'-C2'	5.92	108.52	102.60
2	B	2179	C	N1-C2-O2	5.92	122.45	118.90
2	B	2228	G	C1'-O4'-C4'	5.92	114.63	109.90
2	B	2337	G	N1-C2-N3	-5.92	120.35	123.90
5	L	5	THR	CA-CB-CG2	-5.92	104.12	112.40
12	R	54	VAL	CA-CB-CG1	-5.92	102.03	110.90
2	B	164	C	O4'-C1'-N1	5.91	112.93	108.20
2	B	286	U	P-O5'-C5'	5.91	130.36	120.90
2	B	458	G	C5-C6-N1	5.91	114.46	111.50
2	B	533	G	O4'-C1'-N9	5.91	112.93	108.20
2	B	802	A	C5'-C4'-C3'	5.91	125.46	116.00
2	B	986	C	C5-C4-N4	-5.91	116.06	120.20
2	B	1030	C	O4'-C1'-C2'	5.91	112.92	107.60
2	B	1247	A	O5'-C5'-C4'	-5.91	100.46	111.70
2	B	1584	U	O4'-C1'-N1	5.91	112.93	108.20
2	B	1715	G	C5-C6-O6	-5.91	125.05	128.60
1	A	4	C	N3-C2-O2	-5.91	117.76	121.90
1	A	41	G	C6-N1-C2	5.91	128.65	125.10
2	B	701	G	P-O3'-C3'	-5.91	112.61	119.70
2	B	775	G	C5-C6-O6	-5.91	125.05	128.60
2	B	1313	U	C6-N1-C2	5.91	124.55	121.00
2	B	1929	G	N3-C2-N2	5.91	124.04	119.90
2	B	58	G	C5-C6-N1	5.91	114.45	111.50
2	B	371	A	C6-N1-C2	5.91	122.15	118.60
2	B	480	A	C6-C5-N7	-5.91	128.16	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	555	G	N1-C2-N2	-5.91	110.88	116.20
2	B	581	C	P-O5'-C5'	5.91	130.36	120.90
2	B	927	A	C5-C6-N6	-5.91	118.97	123.70
2	B	977	G	N3-C2-N2	5.91	124.04	119.90
2	B	1716	U	N1-C2-N3	5.91	118.45	114.90
2	B	1719	G	O4'-C4'-C3'	-5.91	98.09	104.00
2	B	2095	A	N7-C8-N9	5.91	116.75	113.80
2	B	2767	C	C5'-C4'-C3'	-5.91	106.54	116.00
2	B	2886	A	N3-C4-N9	5.91	132.13	127.40
1	A	31	C	C2-N1-C1'	-5.91	112.30	118.80
1	A	111	U	O4'-C1'-N1	5.91	112.93	108.20
2	B	670	A	C6-C5-N7	-5.91	128.16	132.30
2	B	889	C	N3-C2-O2	-5.91	117.76	121.90
2	B	1536	C	C5-C4-N4	-5.91	116.06	120.20
2	B	1538	G	N3-C4-N9	-5.91	122.45	126.00
2	B	2235	G	C5-C6-O6	-5.91	125.06	128.60
2	B	2801	G	C5'-C4'-C3'	5.91	125.45	116.00
2	B	813	U	C5'-C4'-C3'	5.91	125.45	116.00
2	B	1610	A	C2-N3-C4	-5.91	107.65	110.60
2	B	2002	G	O4'-C1'-C2'	5.91	112.92	107.60
2	B	2757	A	C5-C6-N6	-5.91	118.97	123.70
2	B	282	A	C5-N7-C8	5.91	106.85	103.90
2	B	387	U	N3-C2-O2	5.91	126.33	122.20
2	B	1010	A	C6-N1-C2	-5.91	115.06	118.60
2	B	1056	G	N1-C2-N3	-5.91	120.36	123.90
2	B	1404	C	O4'-C1'-N1	5.91	112.92	108.20
2	B	1464	G	C8-N9-C1'	5.91	134.68	127.00
2	B	1901	A	O4'-C1'-N9	5.91	112.92	108.20
2	B	2222	C	N3-C4-C5	-5.91	119.54	121.90
2	B	2569	G	C2-N3-C4	5.91	114.85	111.90
2	B	2802	G	N9-C4-C5	-5.91	103.04	105.40
13	S	99	ARG	NE-CZ-NH2	-5.91	117.35	120.30
2	B	255	A	C4-C5-C6	5.90	119.95	117.00
2	B	344	A	C4-C5-C6	5.90	119.95	117.00
2	B	1303	G	C3'-C2'-C1'	5.90	106.22	101.50
2	B	483	A	N7-C8-N9	-5.90	110.85	113.80
2	B	701	G	C5'-C4'-C3'	-5.90	106.56	116.00
2	B	1145	C	N3-C2-O2	5.90	126.03	121.90
2	B	1466	U	N1-C2-O2	-5.90	118.67	122.80
2	B	1516	G	C5-C6-O6	5.90	132.14	128.60
2	B	1743	G	C4-C5-C6	5.90	122.34	118.80
2	B	2064	C	N1-C2-N3	5.90	123.33	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2299	U	C1'-O4'-C4'	-5.90	105.18	109.90
2	B	2695	U	C5'-C4'-C3'	5.90	125.44	116.00
7	M	131	VAL	CA-CB-CG2	-5.90	102.05	110.90
15	T	38	ALA	C-N-CA	5.90	136.45	121.70
27	C	157	ALA	CB-CA-C	-5.90	101.25	110.10
2	B	187	G	O4'-C4'-C3'	-5.90	98.10	104.00
2	B	209	C	C5-C4-N4	-5.90	116.07	120.20
2	B	520	G	P-O5'-C5'	-5.90	111.46	120.90
2	B	903	C	C2-N3-C4	5.90	122.85	119.90
2	B	921	C	N3-C4-C5	-5.90	119.54	121.90
2	B	939	G	OP1-P-OP2	-5.90	110.75	119.60
2	B	1179	G	O4'-C1'-N9	5.90	112.92	108.20
2	B	1186	G	N9-C1'-C2'	-5.90	105.51	112.00
2	B	1675	C	C1'-O4'-C4'	5.90	114.62	109.90
2	B	2211	A	O4'-C4'-C3'	-5.90	98.10	104.00
2	B	2392	A	C3'-C2'-C1'	-5.90	96.78	101.50
2	B	2602	A	O4'-C4'-C3'	-5.90	98.10	104.00
2	B	62	U	O4'-C1'-N1	5.90	112.92	108.20
2	B	1619	G	O4'-C4'-C3'	5.90	110.82	106.10
2	B	1896	G	N3-C2-N2	5.90	124.03	119.90
2	B	2756	U	C5-C6-N1	5.90	125.65	122.70
27	C	181	ARG	NE-CZ-NH1	5.90	123.25	120.30
2	B	53	A	N9-C4-C5	5.90	108.16	105.80
2	B	400	G	C6-N1-C2	5.90	128.64	125.10
2	B	637	A	C5-C6-N6	-5.90	118.98	123.70
2	B	1215	G	C5-C6-O6	-5.90	125.06	128.60
2	B	1222	U	N1-C1'-C2'	-5.90	105.51	112.00
2	B	1422	G	N3-C4-N9	-5.90	122.46	126.00
2	B	1606	C	O4'-C4'-C3'	-5.90	98.10	104.00
2	B	2264	C	N1-C2-O2	5.90	122.44	118.90
2	B	2359	C	C2-N1-C1'	5.90	125.29	118.80
2	B	2845	U	C5-C4-O4	-5.90	122.36	125.90
27	C	69	ASN	N-CA-CB	5.90	121.22	110.60
1	A	106	G	C5'-C4'-C3'	5.90	125.43	116.00
2	B	108	G	N1-C6-O6	5.90	123.44	119.90
2	B	726	G	C6-C5-N7	-5.90	126.86	130.40
2	B	864	G	O4'-C1'-N9	5.90	112.92	108.20
2	B	914	G	N3-C4-N9	-5.90	122.46	126.00
2	B	1592	C	C6-N1-C2	5.90	122.66	120.30
2	B	1842	G	O4'-C4'-C3'	-5.90	98.10	104.00
29	G	121	THR	CA-CB-CG2	-5.90	104.15	112.40
1	A	17	C	C6-N1-C1'	5.89	127.87	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	361	G	O4'-C1'-N9	5.89	112.92	108.20
2	B	495	G	N1-C6-O6	5.89	123.44	119.90
2	B	555	G	C5'-C4'-O4'	5.89	116.17	109.10
2	B	1254	A	O5'-P-OP1	-5.89	100.39	105.70
2	B	1740	G	C8-N9-C4	-5.89	104.04	106.40
2	B	1786	A	N3-C4-C5	-5.89	122.67	126.80
2	B	2059	A	C2-N3-C4	5.89	113.55	110.60
32	J	37	ARG	NE-CZ-NH2	5.89	123.25	120.30
2	B	108	G	C4-C5-C6	-5.89	115.26	118.80
2	B	167	A	C6-C5-N7	-5.89	128.18	132.30
2	B	1741	C	C4-C5-C6	5.89	120.35	117.40
2	B	1973	G	C4-C5-N7	-5.89	108.44	110.80
2	B	2064	C	C1'-O4'-C4'	-5.89	105.19	109.90
2	B	2587	A	P-O3'-C3'	5.89	126.77	119.70
2	B	2750	A	C8-N9-C4	-5.89	103.44	105.80
19	X	385	THR	CA-CB-CG2	-5.89	104.15	112.40
29	G	167	VAL	CG1-CB-CG2	5.89	120.33	110.90
2	B	446	G	N3-C4-N9	5.89	129.53	126.00
2	B	789	A	C2-N3-C4	5.89	113.55	110.60
2	B	1063	G	C5-N7-C8	5.89	107.25	104.30
2	B	2458	G	P-O3'-C3'	5.89	126.77	119.70
2	B	2858	C	C6-N1-C2	-5.89	117.94	120.30
2	B	24	G	N3-C4-N9	5.89	129.53	126.00
2	B	212	G	C5-N7-C8	-5.89	101.36	104.30
2	B	767	U	O4'-C1'-N1	5.89	112.91	108.20
2	B	892	A	P-O5'-C5'	5.89	130.32	120.90
2	B	1364	G	C5'-C4'-C3'	5.89	125.42	116.00
2	B	1696	G	N3-C4-N9	5.89	129.53	126.00
2	B	1840	G	N1-C2-N2	-5.89	110.90	116.20
2	B	2214	C	N3-C4-C5	-5.89	119.54	121.90
2	B	2307	G	O5'-C5'-C4'	-5.89	100.51	111.70
2	B	947	A	N1-C2-N3	-5.89	126.36	129.30
2	B	2792	A	C5-N7-C8	5.89	106.84	103.90
2	B	1234	U	N1-C2-O2	-5.89	118.68	122.80
2	B	1397	U	N3-C4-C5	5.89	118.13	114.60
2	B	1537	G	C5-C6-N1	5.89	114.44	111.50
2	B	1720	U	O4'-C1'-N1	5.89	112.91	108.20
2	B	1825	U	C6-N1-C2	-5.89	117.47	121.00
2	B	2306	C	O4'-C1'-N1	5.89	112.91	108.20
2	B	2311	A	C4-C5-C6	5.89	119.94	117.00
2	B	2474	U	O4'-C1'-N1	5.89	112.91	108.20
2	B	2685	G	C4-N9-C1'	-5.89	118.85	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	35	G	N1-C2-N2	-5.88	110.90	116.20
2	B	102	U	N3-C4-C5	-5.88	111.07	114.60
2	B	429	A	C4-C5-N7	-5.88	107.76	110.70
2	B	450	G	N7-C8-N9	5.88	116.04	113.10
2	B	900	A	C4-C5-C6	5.88	119.94	117.00
2	B	1287	A	N7-C8-N9	-5.88	110.86	113.80
2	B	1695	G	P-O3'-C3'	-5.88	112.64	119.70
2	B	2450	A	N3-C4-N9	5.88	132.11	127.40
2	B	2812	G	O4'-C1'-N9	5.88	112.91	108.20
3	0	1	SER	CB-CA-C	5.88	121.28	110.10
2	B	5	A	C6-C5-N7	-5.88	128.18	132.30
2	B	438	G	N9-C1'-C2'	-5.88	105.53	112.00
2	B	446	G	O5'-C5'-C4'	-5.88	100.52	111.70
2	B	1333	G	N3-C4-N9	5.88	129.53	126.00
1	A	46	A	C3'-C2'-C1'	5.88	106.20	101.50
2	B	119	A	N7-C8-N9	-5.88	110.86	113.80
2	B	290	U	O5'-P-OP1	5.88	117.76	110.70
2	B	654	A	C4'-C3'-C2'	5.88	108.48	102.60
2	B	747	U	N3-C4-O4	5.88	123.52	119.40
2	B	793	A	N3-C4-C5	-5.88	122.68	126.80
2	B	836	G	C5'-C4'-O4'	5.88	116.16	109.10
2	B	1082	U	C2-N1-C1'	-5.88	110.64	117.70
2	B	1443	U	C5'-C4'-O4'	5.88	116.16	109.10
2	B	1572	A	C6-C5-N7	-5.88	128.18	132.30
2	B	1617	C	C3'-C2'-C1'	-5.88	96.80	101.50
2	B	1989	G	C4-N9-C1'	-5.88	118.86	126.50
2	B	2171	A	N1-C2-N3	-5.88	126.36	129.30
2	B	2282	G	C6-C5-N7	-5.88	126.87	130.40
2	B	2895	G	N3-C2-N2	5.88	124.02	119.90
20	E	69	ARG	NE-CZ-NH2	-5.88	117.36	120.30
1	A	84	G	C8-N9-C4	5.88	108.75	106.40
1	A	96	G	C4-C5-N7	-5.88	108.45	110.80
2	B	1005	C	C5'-C4'-O4'	5.88	116.16	109.10
2	B	1091	G	C5-C6-O6	-5.88	125.07	128.60
2	B	1972	G	P-O3'-C3'	-5.88	112.64	119.70
2	B	2037	A	C1'-O4'-C4'	-5.88	105.20	109.90
2	B	2058	A	N7-C8-N9	-5.88	110.86	113.80
2	B	2852	G	C4-N9-C1'	-5.88	118.86	126.50
14	D	84	LEU	N-CA-CB	5.88	122.16	110.40
2	B	82	U	P-O5'-C5'	-5.88	111.50	120.90
2	B	155	A	C4-C5-N7	-5.88	107.76	110.70
2	B	478	A	C5'-C4'-C3'	-5.88	106.59	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1018	U	N3-C2-O2	5.88	126.31	122.20
2	B	2293	G	N9-C1'-C2'	-5.88	105.53	112.00
2	B	2762	C	N1-C2-N3	5.88	123.31	119.20
2	B	2836	U	N3-C4-O4	5.88	123.51	119.40
30	H	108	VAL	N-CA-C	-5.88	95.13	111.00
2	B	5	A	O4'-C1'-N9	5.88	112.90	108.20
2	B	111	A	N1-C2-N3	5.88	132.24	129.30
2	B	146	A	C6-N1-C2	5.88	122.13	118.60
2	B	333	G	C4'-C3'-C2'	-5.88	96.72	102.60
2	B	829	A	N7-C8-N9	5.88	116.74	113.80
2	B	1036	G	N1-C2-N2	-5.88	110.91	116.20
2	B	1155	A	C3'-C2'-C1'	5.88	106.20	101.50
2	B	1156	A	C6-N1-C2	5.88	122.13	118.60
2	B	1185	G	C4-C5-N7	5.88	113.15	110.80
2	B	1211	C	N3-C4-C5	-5.88	119.55	121.90
2	B	1328	A	C8-N9-C4	-5.88	103.45	105.80
2	B	1431	A	C4-C5-C6	5.88	119.94	117.00
2	B	1490	A	C3'-C2'-C1'	5.88	106.20	101.50
2	B	1599	U	C6-N1-C2	-5.88	117.47	121.00
2	B	1953	A	N3-C4-N9	-5.88	122.70	127.40
2	B	1971	U	N3-C4-O4	5.88	123.51	119.40
2	B	2217	G	N1-C2-N2	-5.88	110.91	116.20
2	B	2249	U	C4-C5-C6	5.88	123.23	119.70
2	B	2259	U	P-O5'-C5'	5.88	130.30	120.90
2	B	2517	C	C6-N1-C1'	5.88	127.85	120.80
2	B	2890	G	C5-C6-O6	-5.88	125.07	128.60
1	A	60	C	C4-C5-C6	5.88	120.34	117.40
2	B	974	G	N3-C4-N9	-5.88	122.47	126.00
2	B	1555	G	C5'-C4'-O4'	5.88	116.15	109.10
2	B	49	A	N9-C1'-C2'	-5.87	105.54	112.00
2	B	371	A	O5'-C5'-C4'	-5.87	100.54	111.70
2	B	759	G	N7-C8-N9	5.87	116.04	113.10
2	B	801	G	C4-C5-N7	5.87	113.15	110.80
2	B	1429	G	N9-C4-C5	5.87	107.75	105.40
2	B	1456	G	N7-C8-N9	-5.87	110.16	113.10
2	B	1475	G	C6-N1-C2	5.87	128.62	125.10
2	B	2759	G	P-O5'-C5'	-5.87	111.50	120.90
10	P	97	TYR	CG-CD2-CE2	-5.87	116.60	121.30
16	2	46	MET	N-CA-CB	5.87	121.17	110.60
1	A	90	C	N3-C4-N4	5.87	122.11	118.00
1	A	104	A	O4'-C1'-N9	5.87	112.90	108.20
2	B	322	A	C5-C6-N1	-5.87	114.76	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	375	G	N1-C6-O6	5.87	123.42	119.90
2	B	830	G	N3-C4-C5	5.87	131.53	128.60
2	B	1234	U	N3-C4-O4	5.87	123.51	119.40
2	B	1349	C	N3-C4-N4	5.87	122.11	118.00
2	B	1779	U	C4'-C3'-C2'	5.87	108.47	102.60
2	B	2077	A	C4-C5-C6	5.87	119.94	117.00
2	B	2835	A	P-O3'-C3'	-5.87	112.65	119.70
27	C	63	ILE	N-CA-C	-5.87	95.14	111.00
2	B	999	U	N3-C2-O2	5.87	126.31	122.20
2	B	1021	A	O5'-P-OP2	5.87	117.74	110.70
2	B	1555	G	O4'-C1'-N9	5.87	112.90	108.20
2	B	2328	A	P-O5'-C5'	-5.87	111.51	120.90
19	X	231	TYR	CB-CG-CD1	5.87	124.52	121.00
28	F	46	LYS	N-CA-CB	5.87	121.17	110.60
2	B	51	G	O5'-C5'-C4'	-5.87	100.55	111.70
2	B	460	A	P-O3'-C3'	-5.87	112.66	119.70
2	B	618	G	O4'-C1'-N9	5.87	112.89	108.20
2	B	758	C	C1'-O4'-C4'	-5.87	105.20	109.90
2	B	953	G	C3'-C2'-C1'	5.87	106.19	101.50
2	B	1205	A	P-O3'-C3'	5.87	126.74	119.70
2	B	1558	C	N1-C2-N3	-5.87	115.09	119.20
2	B	2253	G	C5-C6-N1	5.87	114.44	111.50
2	B	2268	A	N1-C6-N6	5.87	122.12	118.60
2	B	2895	G	P-O5'-C5'	-5.87	111.51	120.90
17	U	28	LEU	N-CA-CB	5.87	122.14	110.40
2	B	29	U	C1'-O4'-C4'	-5.87	105.21	109.90
2	B	431	U	C6-N1-C2	-5.87	117.48	121.00
2	B	481	G	C4-C5-N7	5.87	113.15	110.80
2	B	491	G	N3-C4-N9	-5.87	122.48	126.00
2	B	1015	U	C4-C5-C6	-5.87	116.18	119.70
2	B	1449	G	C4-C5-C6	-5.87	115.28	118.80
2	B	1702	G	N3-C2-N2	5.87	124.01	119.90
32	J	2	LYS	N-CA-C	-5.87	95.16	111.00
1	A	52	A	C4-C5-N7	-5.87	107.77	110.70
2	B	958	U	N1-C2-N3	5.87	118.42	114.90
2	B	1073	A	C6-C5-N7	-5.87	128.19	132.30
2	B	1138	G	N1-C2-N2	-5.87	110.92	116.20
2	B	1617	C	N3-C4-N4	5.87	122.11	118.00
2	B	1718	G	N1-C6-O6	5.87	123.42	119.90
2	B	2766	A	OP1-P-O3'	5.87	118.11	105.20
2	B	291	G	OP1-P-OP2	-5.86	110.80	119.60
2	B	564	C	C3'-C2'-C1'	-5.86	96.81	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1149	G	O4'-C1'-N9	5.86	112.89	108.20
2	B	1495	A	C6-N1-C2	-5.86	115.08	118.60
2	B	2223	G	C5-N7-C8	-5.86	101.37	104.30
2	B	2603	G	C5'-C4'-C3'	5.86	125.38	116.00
4	K	31	ARG	NE-CZ-NH2	-5.86	117.37	120.30
1	A	45	A	N1-C2-N3	-5.86	126.37	129.30
1	A	113	C	C6-N1-C2	-5.86	117.95	120.30
27	C	68	ARG	NE-CZ-NH1	5.86	123.23	120.30
1	A	77	U	O4'-C1'-N1	5.86	112.89	108.20
2	B	26	G	C5-N7-C8	5.86	107.23	104.30
2	B	195	A	C5'-C4'-O4'	5.86	116.13	109.10
2	B	210	C	P-O3'-C3'	-5.86	112.67	119.70
2	B	668	A	N7-C8-N9	5.86	116.73	113.80
2	B	753	A	O4'-C1'-N9	5.86	112.89	108.20
2	B	808	G	C6-C5-N7	-5.86	126.88	130.40
2	B	920	A	C3'-C2'-C1'	-5.86	96.81	101.50
2	B	1006	C	C5'-C4'-C3'	-5.86	106.62	116.00
2	B	1166	G	N3-C2-N2	5.86	124.00	119.90
2	B	1313	U	O4'-C1'-N1	5.86	112.89	108.20
2	B	1967	C	N3-C4-N4	5.86	122.10	118.00
2	B	2029	G	N3-C2-N2	5.86	124.00	119.90
2	B	2502	G	N1-C2-N3	-5.86	120.38	123.90
2	B	2507	C	O4'-C1'-N1	5.86	112.89	108.20
2	B	2545	G	O4'-C1'-N9	5.86	112.89	108.20
1	A	109	A	C5-C6-N1	-5.86	114.77	117.70
2	B	232	G	P-O3'-C3'	-5.86	112.67	119.70
2	B	274	C	N3-C4-N4	5.86	122.10	118.00
2	B	541	A	N7-C8-N9	5.86	116.73	113.80
2	B	2363	G	N7-C8-N9	-5.86	110.17	113.10
2	B	2585	U	C2-N1-C1'	5.86	124.73	117.70
2	B	583	G	C2-N3-C4	-5.86	108.97	111.90
2	B	778	G	N1-C2-N3	-5.86	120.39	123.90
2	B	864	G	C5-C6-O6	-5.86	125.08	128.60
2	B	1061	U	C5'-C4'-O4'	5.86	116.13	109.10
2	B	1787	A	C5-N7-C8	5.86	106.83	103.90
2	B	1805	A	O5'-C5'-C4'	-5.86	100.57	111.70
2	B	1998	A	C5-C6-N6	-5.86	119.01	123.70
2	B	2097	A	N3-C4-N9	5.86	132.09	127.40
2	B	2206	C	P-O3'-C3'	-5.86	112.67	119.70
2	B	2363	G	C6-N1-C2	-5.86	121.59	125.10
2	B	2400	G	O5'-P-OP1	-5.86	100.43	105.70
2	B	2693	G	C5'-C4'-C3'	-5.86	106.63	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	E	140	ASP	N-CA-CB	5.86	121.14	110.60
2	B	465	G	O4'-C1'-N9	5.86	112.88	108.20
2	B	950	G	C5-N7-C8	-5.86	101.37	104.30
2	B	1355	G	N7-C8-N9	-5.86	110.17	113.10
2	B	1477	A	C6-C5-N7	-5.86	128.20	132.30
2	B	1648	U	N1-C2-O2	5.86	126.90	122.80
2	B	1668	A	C4'-C3'-C2'	-5.86	96.74	102.60
2	B	1812	U	P-O3'-C3'	-5.86	112.67	119.70
2	B	2152	G	N9-C4-C5	-5.86	103.06	105.40
2	B	2378	A	N1-C6-N6	5.86	122.11	118.60
2	B	2780	G	N3-C4-C5	5.86	131.53	128.60
1	A	49	C	N1-C2-O2	-5.85	115.39	118.90
1	A	108	A	P-O5'-C5'	-5.85	111.53	120.90
2	B	1012	U	C2-N1-C1'	5.85	124.72	117.70
2	B	361	G	P-O5'-C5'	5.85	130.26	120.90
2	B	998	C	P-O5'-C5'	5.85	130.26	120.90
2	B	1133	A	C4-C5-N7	-5.85	107.77	110.70
2	B	1524	G	C6-N1-C2	5.85	128.61	125.10
2	B	1621	U	C5-C6-N1	5.85	125.63	122.70
2	B	2593	U	C6-N1-C2	5.85	124.51	121.00
2	B	2610	C	C5'-C4'-C3'	5.85	125.36	116.00
2	B	4	U	O4'-C1'-N1	5.85	112.88	108.20
2	B	521	U	C2-N1-C1'	-5.85	110.68	117.70
2	B	1775	U	N3-C4-O4	5.85	123.50	119.40
2	B	2338	C	C1'-O4'-C4'	-5.85	105.22	109.90
2	B	2670	A	C2-N3-C4	5.85	113.53	110.60
2	B	16	C	N1-C1'-C2'	-5.85	105.57	112.00
2	B	118	A	C5-C6-N6	-5.85	119.02	123.70
2	B	1609	A	N1-C6-N6	5.85	122.11	118.60
2	B	1612	C	N3-C2-O2	-5.85	117.81	121.90
2	B	1618	A	N9-C1'-C2'	5.85	121.61	114.00
2	B	2540	C	C5-C4-N4	-5.85	116.11	120.20
2	B	2745	C	C5'-C4'-O4'	5.85	116.12	109.10
1	A	106	G	O4'-C4'-C3'	-5.85	98.15	104.00
2	B	27	G	C5-C6-N1	-5.85	108.58	111.50
2	B	376	G	N1-C2-N3	-5.85	120.39	123.90
2	B	592	A	C6-C5-N7	5.85	136.39	132.30
2	B	633	A	N1-C6-N6	5.85	122.11	118.60
2	B	1084	A	C4-C5-N7	5.85	113.62	110.70
2	B	1351	C	N3-C4-N4	5.85	122.09	118.00
2	B	1453	A	N3-C4-C5	-5.85	122.71	126.80
2	B	1552	A	N9-C1'-C2'	-5.85	105.57	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1621	U	C6-N1-C2	-5.85	117.49	121.00
2	B	1976	U	O3'-P-O5'	-5.85	92.89	104.00
2	B	344	A	OP1-P-OP2	-5.84	110.83	119.60
2	B	508	A	C4-C5-N7	-5.84	107.78	110.70
2	B	996	A	N3-C4-C5	-5.84	122.71	126.80
2	B	1472	C	C4-C5-C6	5.84	120.32	117.40
2	B	1587	G	N7-C8-N9	-5.84	110.18	113.10
2	B	2042	A	C5-C6-N1	-5.84	114.78	117.70
2	B	2072	C	C5-C4-N4	-5.84	116.11	120.20
2	B	2420	C	O4'-C1'-C2'	5.84	112.86	107.60
2	B	2445	G	N1-C2-N3	-5.84	120.39	123.90
19	X	427	VAL	CA-CB-CG2	-5.84	102.13	110.90
2	B	176	A	C5-C6-N1	-5.84	114.78	117.70
2	B	690	G	C8-N9-C4	-5.84	104.06	106.40
2	B	1924	C	O4'-C1'-N1	5.84	112.87	108.20
2	B	1938	A	C6-N1-C2	-5.84	115.09	118.60
19	X	314	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
2	B	43	G	N3-C2-N2	5.84	123.99	119.90
2	B	322	A	C6-C5-N7	-5.84	128.21	132.30
2	B	982	C	C3'-C2'-C1'	-5.84	96.83	101.50
2	B	1500	G	N3-C4-N9	5.84	129.50	126.00
2	B	1583	A	C4'-C3'-C2'	-5.84	96.76	102.60
2	B	2223	G	C8-N9-C4	-5.84	104.06	106.40
2	B	2247	A	N1-C2-N3	-5.84	126.38	129.30
2	B	2409	G	P-O5'-C5'	-5.84	111.56	120.90
2	B	2646	C	C5-C4-N4	-5.84	116.11	120.20
2	B	2829	A	C5-C6-N6	-5.84	119.03	123.70
2	B	2830	C	C4'-C3'-C2'	-5.84	96.76	102.60
2	B	1	G	N3-C4-N9	5.84	129.50	126.00
2	B	230	G	O4'-C1'-N9	5.84	112.87	108.20
2	B	459	U	C5-C6-N1	5.84	125.62	122.70
2	B	528	A	O5'-P-OP1	5.84	117.71	110.70
2	B	569	U	O4'-C1'-N1	5.84	112.87	108.20
2	B	1366	A	C2-N3-C4	-5.84	107.68	110.60
2	B	1701	A	C3'-C2'-C1'	-5.84	96.83	101.50
2	B	1808	A	C6-C5-N7	-5.84	128.21	132.30
2	B	2150	C	O4'-C4'-C3'	-5.84	98.16	104.00
2	B	2508	G	C5'-C4'-C3'	-5.84	106.66	116.00
2	B	2669	G	C5-N7-C8	-5.84	101.38	104.30
2	B	1195	G	C5-N7-C8	-5.84	101.38	104.30
2	B	316	C	N3-C2-O2	-5.84	117.81	121.90
2	B	575	A	C4-C5-C6	5.84	119.92	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	665	U	C1'-O4'-C4'	-5.84	105.23	109.90
2	B	804	A	C6-C5-N7	-5.84	128.22	132.30
2	B	1072	C	N3-C4-N4	5.84	122.09	118.00
2	B	1158	C	C5-C6-N1	5.84	123.92	121.00
2	B	2425	A	N3-C4-C5	-5.84	122.71	126.80
2	B	2580	U	C4'-C3'-C2'	5.84	108.44	102.60
2	B	2618	G	O4'-C1'-C2'	5.84	112.85	107.60
2	B	176	A	N3-C4-C5	-5.83	122.72	126.80
2	B	647	G	C4-N9-C1'	-5.83	118.92	126.50
2	B	1428	C	C2-N1-C1'	-5.83	112.38	118.80
2	B	1517	G	C4-C5-C6	5.83	122.30	118.80
2	B	2343	U	C6-N1-C2	-5.83	117.50	121.00
2	B	2563	U	N3-C4-C5	-5.83	111.10	114.60
2	B	328	U	C5-C6-N1	-5.83	119.78	122.70
2	B	778	G	C6-C5-N7	-5.83	126.90	130.40
2	B	1317	G	C8-N9-C4	5.83	108.73	106.40
5	L	32	GLY	N-CA-C	-5.83	98.52	113.10
2	B	181	A	C4-C5-N7	-5.83	107.78	110.70
2	B	567	U	N3-C4-C5	-5.83	111.10	114.60
2	B	623	C	P-O3'-C3'	5.83	126.70	119.70
2	B	726	G	O4'-C4'-C3'	-5.83	98.17	104.00
2	B	848	C	C3'-C2'-C1'	5.83	106.16	101.50
2	B	920	A	N7-C8-N9	-5.83	110.88	113.80
2	B	1092	C	OP1-P-O3'	5.83	118.03	105.20
2	B	1239	G	N3-C4-N9	5.83	129.50	126.00
2	B	1996	C	P-O3'-C3'	5.83	126.70	119.70
20	E	46	GLN	N-CA-CB	5.83	121.09	110.60
2	B	185	G	C8-N9-C1'	5.83	134.58	127.00
2	B	2303	G	N9-C1'-C2'	-5.83	105.59	112.00
2	B	2314	A	N9-C4-C5	5.83	108.13	105.80
2	B	2760	C	N3-C4-N4	5.83	122.08	118.00
1	A	60	C	P-O3'-C3'	-5.83	112.71	119.70
2	B	192	C	N3-C4-C5	-5.83	119.57	121.90
2	B	1490	A	N7-C8-N9	5.83	116.71	113.80
2	B	1502	A	C6-N1-C2	5.83	122.10	118.60
2	B	1738	G	P-O5'-C5'	-5.83	111.57	120.90
2	B	1803	A	C4-C5-C6	5.83	119.91	117.00
2	B	1814	G	C2-N3-C4	5.83	114.81	111.90
2	B	1816	C	O4'-C4'-C3'	-5.83	98.17	104.00
2	B	2271	G	P-O3'-C3'	5.83	126.69	119.70
2	B	2365	G	N1-C6-O6	5.83	123.40	119.90
2	B	2399	G	C5'-C4'-C3'	5.83	125.33	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2471	A	C4-C5-C6	5.83	119.91	117.00
2	B	316	C	C2-N3-C4	-5.83	116.99	119.90
2	B	330	A	C8-N9-C4	5.83	108.13	105.80
2	B	939	G	O4'-C1'-N9	5.83	112.86	108.20
2	B	134	G	N9-C4-C5	5.83	107.73	105.40
2	B	287	G	C5-C6-N1	-5.83	108.59	111.50
2	B	294	A	C4-C5-C6	5.83	119.91	117.00
2	B	317	G	P-O3'-C3'	5.83	126.69	119.70
2	B	499	U	N3-C4-C5	5.83	118.09	114.60
2	B	611	C	O4'-C1'-N1	5.83	112.86	108.20
2	B	770	G	N3-C2-N2	-5.83	115.82	119.90
2	B	949	G	C6-C5-N7	-5.83	126.91	130.40
2	B	1522	A	C5-C6-N1	-5.83	114.79	117.70
2	B	1543	G	C4'-C3'-O3'	-5.83	97.17	109.40
2	B	1603	A	N7-C8-N9	-5.83	110.89	113.80
2	B	1691	C	C2-N3-C4	5.83	122.81	119.90
2	B	1808	A	N1-C2-N3	5.83	132.21	129.30
2	B	2176	A	O5'-C5'-C4'	-5.83	100.63	111.70
2	B	2508	G	C2-N3-C4	5.83	114.81	111.90
2	B	2632	A	C5'-C4'-C3'	-5.83	106.68	116.00
2	B	2654	A	C5-C6-N6	-5.83	119.04	123.70
2	B	2657	A	C2-N3-C4	-5.83	107.69	110.60
2	B	2740	A	N3-C4-C5	-5.83	122.72	126.80
2	B	539	G	P-O5'-C5'	5.82	130.22	120.90
2	B	550	C	P-O3'-C3'	-5.82	112.71	119.70
2	B	785	G	O4'-C1'-C2'	5.82	112.84	107.60
2	B	819	A	C4-C5-C6	5.82	119.91	117.00
2	B	1104	C	P-O5'-C5'	-5.82	111.58	120.90
2	B	1263	U	N3-C2-O2	-5.82	118.12	122.20
2	B	1964	G	C3'-C2'-C1'	-5.82	96.84	101.50
2	B	2371	G	C4-C5-N7	5.82	113.13	110.80
10	P	59	THR	CA-CB-CG2	-5.82	104.25	112.40
2	B	173	A	C4-C5-C6	5.82	119.91	117.00
2	B	1093	G	C8-N9-C4	-5.82	104.07	106.40
2	B	1670	C	N3-C4-C5	-5.82	119.57	121.90
2	B	1777	U	N1-C2-N3	-5.82	111.41	114.90
2	B	1834	U	C3'-C2'-C1'	-5.82	96.84	101.50
2	B	2177	C	C4-C5-C6	5.82	120.31	117.40
2	B	2504	U	P-O5'-C5'	-5.82	111.58	120.90
17	U	95	PHE	CB-CG-CD2	5.82	124.88	120.80
2	B	194	G	O4'-C1'-N9	5.82	112.86	108.20
2	B	656	G	C6-N1-C2	5.82	128.59	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	881	G	N7-C8-N9	5.82	116.01	113.10
2	B	1252	G	C5-C6-N1	-5.82	108.59	111.50
2	B	1280	G	C4-N9-C1'	5.82	134.07	126.50
2	B	1370	C	O4'-C4'-C3'	-5.82	98.18	104.00
2	B	1441	G	N9-C4-C5	5.82	107.73	105.40
2	B	1823	G	C4-N9-C1'	-5.82	118.93	126.50
2	B	1914	C	N1-C2-N3	5.82	123.28	119.20
2	B	1965	C	C2-N3-C4	5.82	122.81	119.90
2	B	2379	G	N3-C4-C5	-5.82	125.69	128.60
2	B	2848	G	C1'-O4'-C4'	-5.82	105.24	109.90
9	O	59	ALA	N-CA-CB	5.82	118.25	110.10
2	B	142	A	C4-C5-N7	-5.82	107.79	110.70
2	B	399	U	O4'-C1'-N1	5.82	112.86	108.20
2	B	417	C	C6-N1-C1'	-5.82	113.82	120.80
2	B	477	A	C5'-C4'-C3'	5.82	125.31	116.00
2	B	1076	C	N3-C2-O2	5.82	125.97	121.90
2	B	1295	C	N1-C2-O2	5.82	122.39	118.90
2	B	1418	G	C2-N3-C4	-5.82	108.99	111.90
2	B	1993	U	C5-C6-N1	-5.82	119.79	122.70
2	B	2428	G	C5-N7-C8	5.82	107.21	104.30
2	B	235	U	N1-C2-O2	5.82	126.87	122.80
2	B	1258	U	C3'-C2'-C1'	-5.82	96.84	101.50
2	B	1483	G	P-O5'-C5'	5.82	130.21	120.90
2	B	1641	A	C5'-C4'-C3'	5.82	125.31	116.00
2	B	1715	G	C5-C6-N1	-5.82	108.59	111.50
2	B	1969	A	C8-N9-C1'	-5.82	117.23	127.70
2	B	2070	A	N1-C6-N6	5.82	122.09	118.60
2	B	2732	G	C5-C6-O6	-5.82	125.11	128.60
19	X	409	TYR	CB-CG-CD1	-5.82	117.51	121.00
2	B	161	A	C3'-C2'-C1'	-5.82	96.85	101.50
2	B	187	G	C4-C5-N7	5.82	113.13	110.80
2	B	294	A	C6-N1-C2	-5.82	115.11	118.60
2	B	637	A	C6-N1-C2	-5.82	115.11	118.60
2	B	671	C	N3-C4-C5	-5.82	119.57	121.90
2	B	977	G	C5-C6-O6	5.82	132.09	128.60
2	B	1059	G	C4-C5-N7	-5.82	108.47	110.80
2	B	1303	G	P-O3'-C3'	-5.82	112.72	119.70
2	B	1376	C	C6-N1-C2	-5.82	117.97	120.30
2	B	1460	U	O4'-C1'-N1	5.82	112.85	108.20
2	B	1598	A	O4'-C1'-N9	5.82	112.85	108.20
2	B	1779	U	C4-C5-C6	5.82	123.19	119.70
2	B	2289	G	N9-C4-C5	-5.82	103.07	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2635	A	C6-C5-N7	-5.82	128.23	132.30
2	B	560	C	C2-N3-C4	-5.81	116.99	119.90
2	B	1054	A	C2-N3-C4	-5.81	107.69	110.60
2	B	2750	A	N3-C4-N9	-5.81	122.75	127.40
2	B	152	A	C4-C5-C6	5.81	119.91	117.00
2	B	446	G	C2-N3-C4	5.81	114.81	111.90
2	B	697	G	N3-C4-N9	-5.81	122.51	126.00
2	B	1160	G	O4'-C1'-N9	5.81	112.85	108.20
2	B	2394	C	P-O3'-C3'	5.81	126.67	119.70
2	B	2651	C	N1-C2-O2	5.81	122.39	118.90
2	B	2801	G	C3'-C2'-C1'	5.81	106.15	101.50
7	M	130	PHE	CB-CG-CD2	-5.81	116.73	120.80
2	B	98	G	C6-N1-C2	5.81	128.59	125.10
2	B	749	A	O4'-C4'-C3'	-5.81	98.19	104.00
2	B	1307	A	C5'-C4'-O4'	5.81	116.07	109.10
2	B	2248	C	C5-C4-N4	-5.81	116.13	120.20
2	B	2281	A	C4-C5-C6	5.81	119.91	117.00
2	B	2792	A	C6-N1-C2	5.81	122.09	118.60
1	A	14	U	C5-C4-O4	-5.81	122.41	125.90
2	B	1405	U	C5'-C4'-C3'	5.81	125.30	116.00
2	B	1929	G	O4'-C1'-N9	5.81	112.85	108.20
2	B	1990	C	C4'-C3'-C2'	-5.81	96.79	102.60
2	B	2002	G	C6-C5-N7	-5.81	126.91	130.40
2	B	2460	U	C1'-O4'-C4'	-5.81	105.25	109.90
2	B	2699	C	N1-C1'-C2'	-5.81	105.61	112.00
2	B	2825	G	C8-N9-C1'	-5.81	119.45	127.00
14	D	166	GLY	N-CA-C	5.81	127.62	113.10
2	B	175	G	N9-C4-C5	-5.81	103.08	105.40
2	B	271	G	C5-C6-N1	-5.81	108.60	111.50
2	B	1063	G	C8-N9-C4	-5.81	104.08	106.40
2	B	1265	A	O4'-C1'-N9	5.81	112.85	108.20
2	B	1452	G	C5-C6-N1	5.81	114.40	111.50
2	B	1658	C	C6-N1-C2	5.81	122.62	120.30
2	B	2454	G	O4'-C1'-C2'	-5.81	99.99	105.80
19	X	27	ASP	CB-CG-OD1	5.81	123.53	118.30
23	5	24	ASN	N-CA-CB	5.81	121.05	110.60
1	A	106	G	C8-N9-C1'	5.81	134.55	127.00
2	B	342	A	C2-N3-C4	-5.80	107.70	110.60
2	B	420	C	C2-N1-C1'	-5.80	112.42	118.80
2	B	1070	A	C5-C6-N6	-5.80	119.06	123.70
2	B	1080	A	C4'-C3'-C2'	-5.80	96.80	102.60
2	B	1252	G	N3-C2-N2	5.80	123.96	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1271	G	C8-N9-C4	-5.80	104.08	106.40
2	B	1414	C	O4'-C1'-N1	5.80	112.84	108.20
2	B	1564	C	O4'-C4'-C3'	-5.80	98.20	104.00
2	B	1819	A	C5-C6-N1	-5.80	114.80	117.70
2	B	1885	A	C2-N3-C4	5.80	113.50	110.60
2	B	2502	G	C5'-C4'-O4'	5.80	116.06	109.10
2	B	754	U	N1-C2-N3	5.80	118.38	114.90
2	B	261	G	N7-C8-N9	-5.80	110.20	113.10
2	B	609	A	P-O3'-C3'	5.80	126.66	119.70
2	B	682	G	C6-C5-N7	-5.80	126.92	130.40
2	B	713	G	C6-N1-C2	-5.80	121.62	125.10
2	B	825	A	N9-C4-C5	-5.80	103.48	105.80
2	B	923	G	C6-C5-N7	-5.80	126.92	130.40
2	B	1041	G	N1-C2-N3	-5.80	120.42	123.90
2	B	1329	U	N3-C2-O2	5.80	126.26	122.20
2	B	1448	G	P-O3'-C3'	-5.80	112.74	119.70
2	B	1846	G	C6-C5-N7	-5.80	126.92	130.40
2	B	1910	G	C4'-C3'-C2'	-5.80	96.80	102.60
2	B	1992	G	N3-C2-N2	5.80	123.96	119.90
2	B	2385	C	C5-C4-N4	-5.80	116.14	120.20
2	B	2512	C	P-O3'-C3'	-5.80	112.74	119.70
5	L	33	ARG	NE-CZ-NH1	-5.80	117.40	120.30
2	B	589	U	C2'-C3'-O3'	5.80	122.98	113.70
2	B	1296	G	C8-N9-C4	-5.80	104.08	106.40
2	B	1674	G	C5'-C4'-O4'	5.80	116.06	109.10
2	B	1781	U	N1-C2-N3	5.80	118.38	114.90
2	B	1892	C	C5'-C4'-C3'	5.80	125.28	116.00
2	B	2035	G	C5'-C4'-O4'	5.80	116.06	109.10
2	B	2071	A	C5-C6-N6	-5.80	119.06	123.70
2	B	2073	C	C1'-O4'-C4'	-5.80	105.26	109.90
2	B	2294	G	N7-C8-N9	5.80	116.00	113.10
2	B	2603	G	C6-C5-N7	-5.80	126.92	130.40
2	B	2832	U	C3'-C2'-C1'	-5.80	96.86	101.50
2	B	2867	G	C4-C5-N7	-5.80	108.48	110.80
2	B	600	G	C4-C5-C6	5.80	122.28	118.80
2	B	1527	G	O3'-P-O5'	-5.80	92.98	104.00
2	B	2204	G	P-O3'-C3'	-5.80	112.74	119.70
2	B	2509	G	C6-C5-N7	-5.80	126.92	130.40
1	A	97	C	C2-N3-C4	5.80	122.80	119.90
2	B	763	G	C1'-O4'-C4'	-5.80	105.26	109.90
2	B	1409	U	N3-C4-O4	5.80	123.46	119.40
2	B	2152	G	C3'-C2'-C1'	5.80	106.14	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2480	C	P-O5'-C5'	-5.80	111.63	120.90
2	B	2237	G	N1-C6-O6	5.79	123.38	119.90
2	B	2590	A	N1-C2-N3	5.79	132.20	129.30
2	B	2697	G	O4'-C1'-N9	5.79	112.84	108.20
2	B	535	G	O4'-C1'-N9	5.79	112.83	108.20
2	B	697	G	C2-N3-C4	5.79	114.80	111.90
2	B	788	A	C5-C6-N1	-5.79	114.80	117.70
2	B	1086	A	C6-N1-C2	5.79	122.08	118.60
2	B	1723	G	C5-C6-O6	-5.79	125.12	128.60
2	B	2022	U	C4'-C3'-C2'	-5.79	96.81	102.60
2	B	2433	A	C5'-C4'-O4'	5.79	116.05	109.10
2	B	2503	A	P-O3'-C3'	-5.79	112.75	119.70
2	B	2504	U	C6-N1-C1'	-5.79	113.09	121.20
2	B	119	A	C3'-C2'-C1'	-5.79	96.87	101.50
2	B	126	A	OP1-P-O3'	5.79	117.94	105.20
2	B	302	C	C5-C6-N1	5.79	123.89	121.00
2	B	335	C	C5'-C4'-C3'	-5.79	106.73	116.00
2	B	507	A	O3'-P-O5'	-5.79	93.00	104.00
2	B	1096	A	N1-C2-N3	-5.79	126.41	129.30
2	B	1284	A	O4'-C1'-N9	5.79	112.83	108.20
2	B	1321	A	N7-C8-N9	-5.79	110.90	113.80
2	B	1324	G	C5-C6-O6	-5.79	125.12	128.60
2	B	1536	C	N3-C4-N4	5.79	122.05	118.00
2	B	2013	A	C5-C6-N1	-5.79	114.80	117.70
2	B	2386	A	P-O3'-C3'	-5.79	112.75	119.70
2	B	2567	G	C4-C5-N7	5.79	113.12	110.80
2	B	2874	C	C5-C6-N1	5.79	123.90	121.00
23	5	21	TYR	CG-CD2-CE2	-5.79	116.67	121.30
2	B	194	G	P-O3'-C3'	-5.79	112.75	119.70
2	B	264	C	N3-C4-C5	-5.79	119.58	121.90
2	B	628	G	C4'-C3'-C2'	-5.79	96.81	102.60
2	B	675	A	O4'-C1'-N9	5.79	112.83	108.20
2	B	741	U	P-O3'-C3'	-5.79	112.75	119.70
2	B	967	U	P-O5'-C5'	-5.79	111.64	120.90
2	B	1036	G	C6-C5-N7	-5.79	126.93	130.40
2	B	1941	C	N3-C4-C5	-5.79	119.58	121.90
2	B	2035	G	N9-C4-C5	5.79	107.72	105.40
2	B	2544	G	N7-C8-N9	5.79	116.00	113.10
28	F	11	VAL	CG1-CB-CG2	-5.79	101.64	110.90
2	B	136	G	C1'-O4'-C4'	-5.79	105.27	109.90
2	B	337	C	C5-C4-N4	-5.79	116.15	120.20
2	B	722	A	N9-C4-C5	5.79	108.12	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1459	G	C6-N1-C2	5.79	128.57	125.10
2	B	1509	A	C8-N9-C4	-5.79	103.48	105.80
2	B	2375	G	C6-C5-N7	-5.79	126.93	130.40
2	B	2466	C	N3-C4-C5	-5.79	119.58	121.90
2	B	2564	A	C5-N7-C8	5.79	106.79	103.90
11	Q	67	ALA	CB-CA-C	-5.79	101.42	110.10
29	G	62	ALA	CB-CA-C	-5.79	101.42	110.10
2	B	787	C	N1-C1'-C2'	-5.79	105.63	112.00
2	B	953	G	C2-N3-C4	5.79	114.79	111.90
2	B	1524	G	C5'-C4'-C3'	-5.79	106.74	116.00
2	B	1973	G	O4'-C4'-C3'	-5.79	98.21	104.00
2	B	2670	A	P-O5'-C5'	-5.79	111.64	120.90
6	1	47	ARG	NE-CZ-NH1	5.79	123.19	120.30
2	B	276	U	C2-N3-C4	-5.79	123.53	127.00
2	B	296	U	C4-C5-C6	5.79	123.17	119.70
2	B	700	G	O5'-C5'-C4'	-5.79	100.71	111.70
2	B	1216	G	C5-C6-N1	-5.79	108.61	111.50
2	B	1253	A	N3-C4-N9	5.79	132.03	127.40
2	B	1890	A	C5-C6-N1	-5.79	114.81	117.70
2	B	1977	A	C1'-O4'-C4'	-5.79	105.27	109.90
2	B	2364	C	C5-C6-N1	5.79	123.89	121.00
2	B	2621	G	C4'-C3'-C2'	5.79	108.39	102.60
2	B	427	U	C6-N1-C2	-5.78	117.53	121.00
2	B	663	G	N3-C2-N2	5.78	123.95	119.90
2	B	872	U	C6-N1-C2	5.78	124.47	121.00
2	B	1622	G	C4-C5-C6	5.78	122.27	118.80
2	B	1842	G	N3-C2-N2	5.78	123.95	119.90
2	B	2463	C	C2-N3-C4	5.78	122.79	119.90
2	B	2819	G	P-O5'-C5'	-5.78	111.65	120.90
19	X	166	LEU	N-CA-CB	5.78	121.97	110.40
2	B	406	G	N9-C4-C5	5.78	107.71	105.40
2	B	1267	U	P-O3'-C3'	-5.78	112.76	119.70
2	B	2874	C	O4'-C1'-N1	5.78	112.83	108.20
2	B	175	G	C4-C5-N7	5.78	113.11	110.80
2	B	577	G	N1-C6-O6	5.78	123.37	119.90
2	B	1075	C	C5-C4-N4	-5.78	116.15	120.20
2	B	1587	G	C3'-C2'-C1'	-5.78	96.88	101.50
2	B	1712	U	O4'-C1'-N1	5.78	112.82	108.20
2	B	1992	G	N9-C1'-C2'	-5.78	105.64	112.00
2	B	2243	U	O5'-C5'-C4'	-5.78	100.72	111.70
2	B	2259	U	N1-C2-O2	-5.78	118.75	122.80
2	B	2426	A	N1-C2-N3	5.78	132.19	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2515	C	O4'-C1'-N1	5.78	112.82	108.20
2	B	2688	G	C4-C5-N7	5.78	113.11	110.80
2	B	493	G	C6-C5-N7	-5.78	126.93	130.40
2	B	644	A	N1-C6-N6	5.78	122.07	118.60
2	B	1707	G	C4-C5-N7	5.78	113.11	110.80
2	B	2135	A	O4'-C1'-N9	5.78	112.82	108.20
2	B	2541	A	N1-C2-N3	5.78	132.19	129.30
1	A	15	A	C8-N9-C1'	-5.78	117.30	127.70
1	A	15	A	N1-C2-N3	5.78	132.19	129.30
2	B	99	U	O4'-C1'-N1	5.78	112.82	108.20
2	B	654	A	C8-N9-C4	-5.78	103.49	105.80
2	B	919	U	C5-C4-O4	-5.78	122.43	125.90
2	B	1038	G	C4-C5-N7	-5.78	108.49	110.80
2	B	1205	A	C4-C5-C6	5.78	119.89	117.00
2	B	1325	U	C3'-C2'-C1'	-5.78	96.88	101.50
2	B	1358	G	C4-C5-C6	5.78	122.27	118.80
2	B	1386	C	C1'-O4'-C4'	-5.78	105.28	109.90
2	B	1632	A	C5-C6-N1	-5.78	114.81	117.70
2	B	1703	G	N1-C6-O6	5.78	123.37	119.90
2	B	2180	U	N1-C2-O2	-5.78	118.76	122.80
2	B	2212	A	C4-C5-N7	-5.78	107.81	110.70
2	B	2256	G	C3'-C2'-C1'	5.78	106.12	101.50
2	B	2465	C	P-O3'-C3'	-5.78	112.77	119.70
11	Q	81	GLY	N-CA-C	-5.78	98.66	113.10
31	I	99	LYS	N-CA-C	-5.78	95.40	111.00
2	B	216	A	N3-C4-N9	5.78	132.02	127.40
2	B	236	C	P-O5'-C5'	-5.78	111.66	120.90
2	B	713	G	P-O5'-C5'	5.78	130.14	120.90
2	B	808	G	C5-C6-N1	5.78	114.39	111.50
2	B	1027	A	C8-N9-C4	-5.78	103.49	105.80
2	B	1730	C	C4-C5-C6	-5.78	114.51	117.40
2	B	1907	G	C5-C6-O6	-5.78	125.14	128.60
2	B	1971	U	O4'-C1'-N1	5.78	112.82	108.20
2	B	2125	G	N9-C4-C5	-5.78	103.09	105.40
2	B	2208	C	C6-N1-C2	-5.78	117.99	120.30
2	B	2588	G	C4-C5-N7	-5.78	108.49	110.80
2	B	2798	U	P-O3'-C3'	-5.78	112.77	119.70
2	B	104	A	C4-C5-C6	5.77	119.89	117.00
2	B	567	U	C4'-C3'-C2'	5.77	108.37	102.60
2	B	745	G	O4'-C1'-N9	5.77	112.82	108.20
2	B	1242	U	C4-C5-C6	5.77	123.17	119.70
2	B	2030	A	C8-N9-C4	-5.77	103.49	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2620	C	C2-N3-C4	5.77	122.79	119.90
2	B	2810	A	C4-N9-C1'	-5.77	115.91	126.30
2	B	231	A	N7-C8-N9	-5.77	110.91	113.80
2	B	295	G	C5'-C4'-O4'	-5.77	102.17	109.10
2	B	584	C	N3-C4-N4	5.77	122.04	118.00
9	O	16	ARG	NE-CZ-NH2	5.77	123.19	120.30
10	P	58	PHE	CG-CD1-CE1	5.77	127.15	120.80
1	A	75	G	C4-C5-C6	5.77	122.26	118.80
2	B	124	G	C8-N9-C4	5.77	108.71	106.40
2	B	219	A	N3-C4-C5	5.77	130.84	126.80
2	B	957	C	N3-C2-O2	-5.77	117.86	121.90
2	B	1427	A	N7-C8-N9	-5.77	110.92	113.80
2	B	15	G	C1'-O4'-C4'	-5.77	105.28	109.90
2	B	69	C	N3-C4-N4	5.77	122.04	118.00
2	B	98	G	O4'-C1'-N9	5.77	112.82	108.20
2	B	154	U	C2-N3-C4	-5.77	123.54	127.00
2	B	646	U	C2-N3-C4	-5.77	123.54	127.00
2	B	1307	A	C5-C6-N6	-5.77	119.08	123.70
2	B	1613	G	C5-N7-C8	5.77	107.18	104.30
2	B	1983	G	C2-N3-C4	-5.77	109.02	111.90
2	B	2455	G	C5-C6-N1	5.77	114.38	111.50
2	B	2478	A	N9-C1'-C2'	-5.77	105.65	112.00
2	B	2809	A	C4'-C3'-C2'	-5.77	96.83	102.60
2	B	2827	C	O5'-C5'-C4'	-5.77	100.74	111.70
27	C	100	ARG	CB-CA-C	-5.77	98.86	110.40
31	I	96	LYS	N-CA-CB	5.77	120.99	110.60
32	J	13	ARG	N-CA-C	-5.77	95.42	111.00
2	B	3	U	P-O3'-C3'	-5.77	112.78	119.70
2	B	107	G	C4-C5-C6	5.77	122.26	118.80
2	B	330	A	O4'-C1'-N9	5.77	112.81	108.20
2	B	1185	G	C6-C5-N7	-5.77	126.94	130.40
2	B	1457	U	C3'-C2'-C1'	5.77	106.11	101.50
2	B	1896	G	C6-C5-N7	-5.77	126.94	130.40
2	B	2212	A	C5-N7-C8	-5.77	101.02	103.90
2	B	2394	C	N1-C2-N3	-5.77	115.16	119.20
2	B	2726	A	C5-C6-N1	-5.77	114.82	117.70
2	B	2775	G	N3-C4-C5	5.77	131.48	128.60
2	B	2864	G	N9-C4-C5	5.77	107.71	105.40
20	E	178	VAL	CA-CB-CG1	5.77	119.55	110.90
2	B	210	C	O4'-C1'-N1	5.77	112.81	108.20
2	B	1133	A	C5-N7-C8	5.77	106.78	103.90
2	B	1629	U	O4'-C1'-C2'	5.77	112.79	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2173	A	O4'-C1'-N9	5.77	112.81	108.20
2	B	2623	G	C4-C5-N7	5.77	113.11	110.80
2	B	2843	G	C8-N9-C4	-5.77	104.09	106.40
1	A	96	G	C5-C6-N1	-5.76	108.62	111.50
2	B	314	C	C1'-O4'-C4'	-5.76	105.29	109.90
2	B	531	C	N3-C2-O2	-5.76	117.86	121.90
2	B	533	G	C6-C5-N7	-5.76	126.94	130.40
2	B	668	A	C5-C6-N1	-5.76	114.82	117.70
2	B	1669	A	P-O3'-C3'	5.76	126.62	119.70
2	B	1716	U	O4'-C4'-C3'	-5.76	98.23	104.00
2	B	1931	U	O4'-C1'-N1	5.76	112.81	108.20
2	B	1973	G	C4-N9-C1'	-5.76	119.01	126.50
2	B	2125	G	C8-N9-C4	5.76	108.71	106.40
2	B	2565	A	C5-C6-N6	-5.76	119.09	123.70
1	A	10	G	N9-C1'-C2'	-5.76	105.66	112.00
2	B	53	A	O4'-C4'-C3'	-5.76	98.24	104.00
2	B	552	U	C5-C4-O4	-5.76	122.44	125.90
2	B	1478	G	N1-C2-N3	-5.76	120.44	123.90
2	B	2411	A	C1'-O4'-C4'	-5.76	105.29	109.90
2	B	2470	G	O4'-C4'-C3'	-5.76	98.24	104.00
1	A	24	G	C5'-C4'-O4'	5.76	116.01	109.10
2	B	97	C	O4'-C4'-C3'	5.76	110.71	106.10
2	B	137	U	N3-C2-O2	-5.76	118.17	122.20
2	B	304	U	N3-C2-O2	5.76	126.23	122.20
2	B	722	A	O3'-P-O5'	-5.76	93.05	104.00
2	B	1064	C	C5'-C4'-O4'	5.76	116.01	109.10
2	B	1143	A	N9-C4-C5	5.76	108.11	105.80
2	B	1653	G	O4'-C4'-C3'	-5.76	98.24	104.00
2	B	2316	G	C5-N7-C8	-5.76	101.42	104.30
2	B	2532	G	C4-C5-C6	5.76	122.26	118.80
2	B	2614	A	C3'-C2'-C1'	5.76	106.11	101.50
19	X	70	ARG	NE-CZ-NH1	5.76	123.18	120.30
1	A	98	G	N1-C6-O6	5.76	123.36	119.90
2	B	242	G	N1-C2-N3	-5.76	120.44	123.90
2	B	621	A	P-O5'-C5'	-5.76	111.68	120.90
2	B	1431	A	C4-C5-N7	-5.76	107.82	110.70
2	B	2470	G	C4'-C3'-C2'	5.76	108.36	102.60
2	B	2804	U	N1-C2-O2	-5.76	118.77	122.80
2	B	2821	A	C4'-C3'-C2'	-5.76	96.84	102.60
2	B	648	G	C6-C5-N7	-5.76	126.94	130.40
2	B	799	G	C5-C6-O6	-5.76	125.14	128.60
2	B	1021	A	C6-C5-N7	-5.76	128.27	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1527	G	N3-C4-N9	-5.76	122.55	126.00
2	B	2160	C	C4-C5-C6	-5.76	114.52	117.40
2	B	2254	C	O4'-C4'-C3'	-5.76	98.24	104.00
2	B	2894	G	C8-N9-C4	-5.76	104.10	106.40
2	B	177	G	C8-N9-C4	-5.76	104.10	106.40
2	B	320	A	O4'-C4'-C3'	-5.76	98.24	104.00
2	B	407	G	O5'-C5'-C4'	-5.76	100.76	111.70
2	B	482	A	O4'-C1'-N9	5.76	112.81	108.20
2	B	556	A	C4-C5-C6	5.76	119.88	117.00
2	B	599	A	C5-C6-N6	-5.76	119.09	123.70
2	B	1118	C	N3-C4-N4	5.76	122.03	118.00
2	B	1191	G	N9-C4-C5	-5.76	103.10	105.40
2	B	2447	G	N1-C2-N3	-5.76	120.45	123.90
2	B	190	A	C2-N3-C4	-5.75	107.72	110.60
2	B	283	G	C5-C6-N1	5.75	114.38	111.50
2	B	1838	C	C3'-C2'-C1'	-5.75	96.90	101.50
2	B	2178	C	O3'-P-O5'	5.75	114.94	104.00
2	B	2179	C	C1'-O4'-C4'	-5.75	105.30	109.90
2	B	2541	A	C8-N9-C4	-5.75	103.50	105.80
2	B	2547	A	C6-N1-C2	-5.75	115.15	118.60
14	D	51	THR	N-CA-CB	5.75	121.23	110.30
2	B	3	U	N1-C2-N3	5.75	118.35	114.90
2	B	65	U	N3-C4-O4	5.75	123.43	119.40
2	B	304	U	C1'-O4'-C4'	-5.75	105.30	109.90
2	B	352	A	C6-N1-C2	-5.75	115.15	118.60
2	B	887	U	C5-C6-N1	-5.75	119.82	122.70
2	B	1040	A	C6-C5-N7	5.75	136.33	132.30
2	B	1118	C	O4'-C1'-N1	5.75	112.80	108.20
2	B	1340	U	N1-C2-O2	5.75	126.83	122.80
2	B	1366	A	C5-N7-C8	5.75	106.78	103.90
2	B	1566	A	C6-N1-C2	5.75	122.05	118.60
2	B	1666	G	C8-N9-C4	5.75	108.70	106.40
2	B	1746	A	C5'-C4'-C3'	5.75	125.21	116.00
2	B	1796	U	P-O5'-C5'	-5.75	111.69	120.90
2	B	2007	U	O5'-C5'-C4'	-5.75	100.77	111.70
2	B	2080	A	C3'-C2'-C1'	-5.75	96.90	101.50
2	B	2637	U	C2-N1-C1'	-5.75	110.80	117.70
2	B	2892	G	O4'-C1'-C2'	5.75	112.78	107.60
1	A	99	A	N1-C2-N3	5.75	132.18	129.30
2	B	68	G	C6-C5-N7	-5.75	126.95	130.40
2	B	356	G	C8-N9-C1'	5.75	134.48	127.00
2	B	573	U	N3-C4-C5	-5.75	111.15	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	642	U	C2-N3-C4	5.75	130.45	127.00
2	B	879	G	C4-C5-N7	-5.75	108.50	110.80
2	B	1841	U	C4'-C3'-C2'	-5.75	96.85	102.60
2	B	2241	A	C4-C5-C6	5.75	119.88	117.00
2	B	2443	C	P-O5'-C5'	-5.75	111.70	120.90
2	B	408	G	C5'-C4'-O4'	5.75	116.00	109.10
2	B	428	A	P-O5'-C5'	5.75	130.10	120.90
2	B	572	A	P-O5'-C5'	-5.75	111.70	120.90
2	B	945	A	C8-N9-C4	-5.75	103.50	105.80
2	B	2317	A	N7-C8-N9	-5.75	110.92	113.80
2	B	2816	G	O5'-C5'-C4'	-5.75	100.78	111.70
2	B	5	A	N1-C2-N3	5.75	132.18	129.30
2	B	302	C	P-O5'-C5'	5.75	130.10	120.90
2	B	871	U	N3-C4-O4	5.75	123.42	119.40
2	B	1454	C	C6-N1-C2	5.75	122.60	120.30
2	B	1646	C	N1-C2-N3	-5.75	115.18	119.20
2	B	2155	U	O4'-C1'-N1	5.75	112.80	108.20
2	B	2397	G	N3-C4-N9	5.75	129.45	126.00
2	B	2400	G	N1-C2-N2	-5.75	111.03	116.20
2	B	2692	G	C6-C5-N7	-5.75	126.95	130.40
23	5	217	THR	CA-CB-CG2	-5.75	104.35	112.40
27	C	174	ARG	NH1-CZ-NH2	-5.75	113.08	119.40
1	A	15	A	N9-C4-C5	-5.75	103.50	105.80
2	B	642	U	N1-C2-N3	-5.75	111.45	114.90
2	B	1497	U	P-O3'-C3'	5.75	126.60	119.70
2	B	1770	G	O4'-C1'-N9	5.75	112.80	108.20
2	B	2337	G	C3'-C2'-C1'	5.75	106.10	101.50
2	B	2340	A	C5-N7-C8	5.75	106.77	103.90
2	B	403	U	C3'-C2'-C1'	-5.75	96.90	101.50
2	B	436	C	C5-C6-N1	5.75	123.87	121.00
2	B	993	G	N9-C4-C5	-5.75	103.10	105.40
2	B	1529	G	C5'-C4'-O4'	5.75	115.99	109.10
2	B	578	G	N3-C4-N9	-5.74	122.55	126.00
2	B	1162	G	C6-N1-C2	-5.74	121.65	125.10
2	B	1361	G	O4'-C1'-N9	5.74	112.80	108.20
2	B	1374	G	C4-C5-N7	5.74	113.10	110.80
2	B	1469	A	O4'-C1'-N9	5.74	112.80	108.20
2	B	1772	A	C4'-C3'-O3'	-5.74	97.34	109.40
2	B	1785	A	N3-C4-N9	5.74	132.00	127.40
2	B	2345	G	C4-C5-C6	5.74	122.25	118.80
2	B	2670	A	C5-N7-C8	5.74	106.77	103.90
1	A	108	A	C5-C6-N1	-5.74	114.83	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	105	C	P-O5'-C5'	-5.74	111.71	120.90
2	B	1086	A	C4-N9-C1'	5.74	136.64	126.30
2	B	1590	A	C6-N1-C2	5.74	122.05	118.60
2	B	2584	U	O4'-C4'-C3'	-5.74	98.26	104.00
11	Q	50	ARG	NE-CZ-NH2	-5.74	117.43	120.30
2	B	230	G	N1-C2-N3	-5.74	120.45	123.90
2	B	496	G	C2-N3-C4	5.74	114.77	111.90
2	B	1021	A	P-O3'-C3'	-5.74	112.81	119.70
2	B	1284	A	C8-N9-C4	-5.74	103.50	105.80
2	B	1397	U	C1'-O4'-C4'	5.74	114.49	109.90
2	B	1654	A	P-O3'-C3'	5.74	126.59	119.70
2	B	1848	A	C3'-C2'-C1'	5.74	106.09	101.50
2	B	1912	A	O4'-C1'-N9	5.74	112.79	108.20
2	B	2607	G	C8-N9-C4	5.74	108.70	106.40
2	B	2690	U	C4'-C3'-C2'	5.74	108.34	102.60
2	B	1173	U	C5-C4-O4	-5.74	122.46	125.90
2	B	1564	C	C5'-C4'-C3'	-5.74	106.82	116.00
2	B	1594	U	C2-N3-C4	-5.74	123.56	127.00
2	B	1677	A	C2-N3-C4	-5.74	107.73	110.60
2	B	2089	C	C6-N1-C2	5.74	122.59	120.30
2	B	2492	U	N3-C4-O4	5.74	123.42	119.40
2	B	2650	U	C5-C4-O4	-5.74	122.46	125.90
2	B	2824	C	O4'-C1'-N1	5.74	112.79	108.20
2	B	868	U	N3-C4-C5	-5.74	111.16	114.60
2	B	870	U	N1-C1'-C2'	-5.74	105.69	112.00
2	B	1296	G	N3-C4-N9	5.74	129.44	126.00
2	B	1582	C	C6-N1-C1'	5.74	127.69	120.80
2	B	1666	G	OP1-P-OP2	-5.74	110.99	119.60
19	X	238	ARG	NE-CZ-NH2	-5.74	117.43	120.30
19	X	438	LEU	CB-CG-CD1	-5.74	101.25	111.00
2	B	434	U	C3'-C2'-C1'	-5.74	96.91	101.50
2	B	646	U	C6-N1-C2	-5.74	117.56	121.00
2	B	782	A	C4'-C3'-C2'	-5.74	96.86	102.60
2	B	2138	G	N1-C6-O6	5.74	123.34	119.90
1	A	10	G	O4'-C1'-C2'	5.73	112.76	107.60
2	B	1081	U	P-O3'-C3'	5.73	126.58	119.70
2	B	2380	C	N1-C2-O2	-5.73	115.46	118.90
2	B	2522	U	C5-C6-N1	-5.73	119.83	122.70
1	A	72	G	N7-C8-N9	5.73	115.97	113.10
2	B	781	A	N9-C4-C5	5.73	108.09	105.80
2	B	866	A	N9-C4-C5	-5.73	103.51	105.80
2	B	1555	G	C5'-C4'-C3'	-5.73	106.83	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1984	G	O4'-C1'-N9	5.73	112.79	108.20
2	B	2040	G	C6-N1-C2	-5.73	121.66	125.10
2	B	2062	A	C5'-C4'-O4'	5.73	115.98	109.10
2	B	2064	C	C4'-C3'-C2'	-5.73	96.87	102.60
2	B	2087	G	C4-C5-N7	-5.73	108.51	110.80
2	B	2435	A	O4'-C1'-N9	5.73	112.79	108.20
2	B	2633	G	C5'-C4'-O4'	-5.73	102.22	109.10
2	B	2812	G	C5-C6-N1	-5.73	108.63	111.50
32	J	110	PRO	O-C-N	-5.73	113.53	122.70
1	A	61	G	C6-C5-N7	-5.73	126.96	130.40
1	A	75	G	N3-C4-C5	5.73	131.47	128.60
2	B	258	G	N3-C2-N2	5.73	123.91	119.90
2	B	507	A	P-O5'-C5'	5.73	130.07	120.90
2	B	916	G	N7-C8-N9	-5.73	110.23	113.10
2	B	931	U	C2-N3-C4	-5.73	123.56	127.00
2	B	1142	A	C5'-C4'-O4'	5.73	115.97	109.10
2	B	1350	C	C1'-O4'-C4'	5.73	114.48	109.90
2	B	1378	A	C5'-C4'-C3'	-5.73	106.83	116.00
2	B	1548	A	C5-C6-N1	-5.73	114.83	117.70
2	B	1594	U	C5'-C4'-C3'	-5.73	106.83	116.00
2	B	2668	G	N9-C1'-C2'	-5.73	105.70	112.00
2	B	2686	G	C5'-C4'-C3'	-5.73	106.83	116.00
2	B	2778	A	C5'-C4'-C3'	-5.73	106.83	116.00
11	Q	100	PHE	N-CA-CB	5.73	120.92	110.60
2	B	262	A	O4'-C1'-C2'	5.73	112.76	107.60
2	B	676	A	C6-N1-C2	-5.73	115.16	118.60
2	B	750	A	C4-C5-N7	5.73	113.56	110.70
2	B	1274	A	N7-C8-N9	-5.73	110.94	113.80
2	B	1495	A	C3'-C2'-C1'	-5.73	96.92	101.50
2	B	1807	G	N3-C4-N9	5.73	129.44	126.00
2	B	1854	A	N7-C8-N9	-5.73	110.94	113.80
2	B	2642	G	N9-C4-C5	-5.73	103.11	105.40
2	B	156	A	C6-N1-C2	-5.73	115.16	118.60
2	B	319	G	C4-N9-C1'	-5.73	119.05	126.50
2	B	492	A	C4-C5-C6	5.73	119.86	117.00
2	B	592	A	N9-C4-C5	5.73	108.09	105.80
2	B	1110	G	C4-C5-C6	5.73	122.24	118.80
2	B	1250	G	C5'-C4'-O4'	5.73	115.97	109.10
2	B	1251	C	O4'-C1'-N1	5.73	112.78	108.20
2	B	1550	C	C2-N3-C4	5.73	122.76	119.90
2	B	1627	G	C6-C5-N7	-5.73	126.96	130.40
2	B	2494	G	N7-C8-N9	-5.73	110.24	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2614	A	P-O3'-C3'	5.73	126.57	119.70
2	B	2641	G	N7-C8-N9	5.73	115.96	113.10
2	B	1631	G	C8-N9-C4	5.73	108.69	106.40
1	A	23	G	N7-C8-N9	5.72	115.96	113.10
2	B	11	C	N1-C2-O2	-5.72	115.47	118.90
2	B	129	C	P-O5'-C5'	5.72	130.06	120.90
2	B	273	G	N1-C2-N3	-5.72	120.47	123.90
2	B	380	G	C6-C5-N7	-5.72	126.97	130.40
2	B	927	A	C4-C5-N7	-5.72	107.84	110.70
2	B	1207	C	N3-C2-O2	-5.72	117.89	121.90
2	B	1809	A	P-O5'-C5'	5.72	130.06	120.90
2	B	2193	G	C5'-C4'-O4'	5.72	115.97	109.10
2	B	2497	A	C4-C5-N7	-5.72	107.84	110.70
2	B	29	U	O5'-C5'-C4'	-5.72	100.83	111.70
2	B	108	G	C5-C6-N1	5.72	114.36	111.50
2	B	357	C	C6-N1-C2	-5.72	118.01	120.30
2	B	499	U	C5'-C4'-C3'	5.72	125.16	116.00
2	B	607	U	C5-C6-N1	5.72	125.56	122.70
2	B	661	A	C8-N9-C4	5.72	108.09	105.80
2	B	770	G	C5-C6-O6	-5.72	125.17	128.60
2	B	1233	C	O4'-C1'-N1	5.72	112.78	108.20
2	B	1559	U	C2-N1-C1'	5.72	124.57	117.70
2	B	49	A	N1-C2-N3	-5.72	126.44	129.30
2	B	185	G	C4-N9-C1'	-5.72	119.06	126.50
2	B	1210	G	C5-C6-N1	-5.72	108.64	111.50
2	B	1442	U	O4'-C1'-N1	5.72	112.78	108.20
2	B	2694	G	P-O5'-C5'	-5.72	111.75	120.90
2	B	291	G	N7-C8-N9	-5.72	110.24	113.10
2	B	310	A	O5'-P-OP1	-5.72	100.55	105.70
2	B	458	G	N1-C6-O6	5.72	123.33	119.90
2	B	530	G	C4'-C3'-C2'	5.72	108.32	102.60
2	B	625	G	N1-C2-N3	-5.72	120.47	123.90
2	B	1897	G	C4-C5-C6	5.72	122.23	118.80
2	B	1976	U	C1'-O4'-C4'	-5.72	105.32	109.90
2	B	2825	G	C6-C5-N7	-5.72	126.97	130.40
4	K	9	ASN	N-CA-CB	5.72	120.89	110.60
2	B	228	C	C1'-O4'-C4'	-5.72	105.33	109.90
2	B	898	C	N1-C2-N3	5.72	123.20	119.20
2	B	2095	A	C5-C6-N6	-5.72	119.12	123.70
1	A	105	G	N3-C2-N2	5.72	123.90	119.90
2	B	92	U	O3'-P-O5'	-5.72	93.14	104.00
2	B	155	A	C6-C5-N7	-5.72	128.30	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	244	A	C5-C6-N6	-5.72	119.13	123.70
2	B	869	G	C4'-C3'-C2'	-5.72	96.88	102.60
2	B	1087	G	C4-C5-N7	-5.72	108.51	110.80
2	B	1530	G	O3'-P-O5'	-5.72	93.14	104.00
2	B	1741	C	O4'-C1'-N1	5.72	112.77	108.20
2	B	1954	G	C4-C5-C6	5.72	122.23	118.80
2	B	2093	G	N9-C1'-C2'	-5.72	105.71	112.00
2	B	2380	C	C5-C4-N4	-5.72	116.20	120.20
2	B	2618	G	O4'-C1'-N9	5.72	112.77	108.20
2	B	39	G	C5-N7-C8	5.71	107.16	104.30
2	B	135	U	C6-N1-C1'	5.71	129.20	121.20
2	B	549	G	C2-N3-C4	5.71	114.76	111.90
2	B	712	G	N3-C2-N2	5.71	123.90	119.90
2	B	813	U	C6-N1-C2	-5.71	117.57	121.00
2	B	974	G	C8-N9-C1'	-5.71	119.57	127.00
2	B	984	A	C4-C5-C6	5.71	119.86	117.00
2	B	1029	A	C6-C5-N7	-5.71	128.30	132.30
2	B	1127	A	C4-C5-C6	5.71	119.86	117.00
2	B	1368	G	O5'-P-OP1	5.71	117.56	110.70
2	B	1566	A	C4-C5-N7	-5.71	107.84	110.70
2	B	1728	C	C2-N1-C1'	-5.71	112.52	118.80
2	B	2152	G	C6-C5-N7	-5.71	126.97	130.40
2	B	2158	A	N3-C4-C5	-5.71	122.80	126.80
2	B	2641	G	C5-C6-O6	-5.71	125.17	128.60
2	B	192	C	C3'-C2'-C1'	5.71	106.07	101.50
2	B	1101	U	N1-C2-O2	-5.71	118.80	122.80
2	B	1425	G	C5'-C4'-C3'	-5.71	106.86	116.00
1	A	72	G	P-O3'-C3'	5.71	126.56	119.70
2	B	259	G	C8-N9-C4	-5.71	104.11	106.40
2	B	354	A	C5-C6-N1	-5.71	114.84	117.70
2	B	455	C	O4'-C1'-N1	5.71	112.77	108.20
2	B	463	G	N7-C8-N9	5.71	115.95	113.10
2	B	825	A	C4-C5-C6	5.71	119.86	117.00
2	B	826	U	C5-C4-O4	-5.71	122.47	125.90
2	B	1227	G	N3-C4-N9	5.71	129.43	126.00
2	B	1269	A	N1-C2-N3	5.71	132.16	129.30
2	B	1546	G	N1-C2-N3	-5.71	120.47	123.90
2	B	1594	U	O4'-C1'-N1	5.71	112.77	108.20
2	B	1619	G	N1-C6-O6	5.71	123.33	119.90
2	B	1992	G	P-O3'-C3'	-5.71	112.85	119.70
2	B	2804	U	C5-C6-N1	5.71	125.56	122.70
2	B	2238	G	O4'-C1'-N9	5.71	112.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2397	G	N9-C4-C5	-5.71	103.12	105.40
2	B	655	A	O4'-C1'-C2'	-5.71	100.09	105.80
2	B	1094	U	OP1-P-OP2	-5.71	111.04	119.60
2	B	1183	U	O4'-C1'-C2'	5.71	112.74	107.60
2	B	1247	A	C5'-C4'-C3'	-5.71	106.86	116.00
2	B	1307	A	C4-C5-N7	5.71	113.56	110.70
2	B	1374	G	C5'-C4'-C3'	-5.71	106.87	116.00
2	B	1473	G	C2-N3-C4	-5.71	109.05	111.90
2	B	1786	A	C6-C5-N7	-5.71	128.31	132.30
2	B	2271	G	C4-C5-C6	5.71	122.22	118.80
2	B	2721	A	C6-C5-N7	-5.71	128.30	132.30
13	S	40	ASN	O-C-N	5.71	131.83	122.70
15	T	84	TYR	N-CA-CB	5.71	120.88	110.60
19	X	94	GLY	C-N-CA	5.71	135.97	121.70
2	B	352	A	N7-C8-N9	-5.71	110.95	113.80
2	B	1216	G	C5'-C4'-C3'	-5.71	106.87	116.00
2	B	1942	C	N1-C2-O2	5.71	122.32	118.90
2	B	1962	C	C3'-C2'-C1'	-5.71	96.94	101.50
2	B	2248	C	N3-C4-N4	5.71	122.00	118.00
2	B	2550	G	C2-N3-C4	5.71	114.75	111.90
23	5	56	ASP	N-CA-CB	5.71	120.87	110.60
2	B	49	A	P-O3'-C3'	-5.71	112.85	119.70
2	B	365	U	OP1-P-O3'	5.71	117.75	105.20
2	B	411	G	N7-C8-N9	5.71	115.95	113.10
2	B	498	G	N3-C2-N2	5.71	123.89	119.90
2	B	739	A	O4'-C1'-N9	5.71	112.76	108.20
2	B	1024	G	N1-C2-N2	-5.71	111.07	116.20
2	B	2036	C	C2-N3-C4	5.71	122.75	119.90
2	B	2204	G	C6-C5-N7	-5.71	126.98	130.40
2	B	2782	G	N3-C2-N2	5.71	123.89	119.90
8	N	77	ALA	N-CA-CB	5.71	118.09	110.10
2	B	99	U	C2-N1-C1'	5.70	124.54	117.70
2	B	705	A	N3-C4-N9	-5.70	122.84	127.40
2	B	940	G	C4-C5-N7	5.70	113.08	110.80
2	B	2751	G	C4-N9-C1'	5.70	133.91	126.50
2	B	2828	G	N3-C4-N9	-5.70	122.58	126.00
2	B	2837	A	P-O3'-C3'	5.70	126.55	119.70
2	B	2875	C	P-O3'-C3'	-5.70	112.86	119.70
2	B	2898	U	C2-N3-C4	-5.70	123.58	127.00
2	B	740	C	N3-C4-N4	-5.70	114.01	118.00
2	B	1169	A	N1-C6-N6	5.70	122.02	118.60
2	B	1187	G	C8-N9-C4	-5.70	104.12	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1190	G	C8-N9-C4	5.70	108.68	106.40
2	B	1660	G	OP1-P-OP2	-5.70	111.05	119.60
2	B	2241	A	C5-C6-N6	-5.70	119.14	123.70
2	B	238	C	O5'-C5'-C4'	-5.70	100.87	111.70
2	B	406	G	C6-N1-C2	-5.70	121.68	125.10
2	B	567	U	N1-C2-N3	5.70	118.32	114.90
2	B	822	G	O4'-C1'-N9	5.70	112.76	108.20
2	B	1854	A	C6-C5-N7	5.70	136.29	132.30
2	B	1976	U	P-O3'-C3'	-5.70	112.86	119.70
2	B	2023	C	C3'-C2'-C1'	5.70	106.06	101.50
2	B	2221	G	N3-C4-C5	-5.70	125.75	128.60
2	B	2376	A	C4'-C3'-C2'	-5.70	96.90	102.60
2	B	2609	U	C4-C5-C6	5.70	123.12	119.70
11	Q	12	ARG	N-CA-CB	5.70	120.86	110.60
19	X	374	SER	N-CA-CB	5.70	119.05	110.50
31	I	63	ASP	CB-CG-OD1	-5.70	113.17	118.30
2	B	348	A	N7-C8-N9	-5.70	110.95	113.80
2	B	830	G	N1-C6-O6	-5.70	116.48	119.90
2	B	868	U	C5'-C4'-O4'	5.70	115.94	109.10
2	B	1325	U	C6-N1-C2	5.70	124.42	121.00
2	B	1425	G	C6-C5-N7	-5.70	126.98	130.40
2	B	2537	U	P-O5'-C5'	5.70	130.02	120.90
2	B	2582	G	P-O3'-C3'	5.70	126.54	119.70
19	X	410	ALA	CB-CA-C	-5.70	101.55	110.10
2	B	530	G	N3-C4-N9	5.70	129.42	126.00
32	J	60	ASP	CB-CG-OD1	-5.70	113.17	118.30
2	B	190	A	C4-C5-C6	5.70	119.85	117.00
2	B	565	C	C5-C6-N1	-5.70	118.15	121.00
2	B	784	G	C8-N9-C1'	-5.70	119.59	127.00
2	B	840	C	C6-N1-C2	-5.70	118.02	120.30
2	B	1259	G	C3'-C2'-C1'	5.70	106.06	101.50
2	B	1563	U	C3'-C2'-C1'	5.70	106.06	101.50
2	B	1675	C	O4'-C1'-N1	5.70	112.76	108.20
2	B	1726	C	C5'-C4'-C3'	-5.70	106.89	116.00
2	B	1826	G	C4-C5-C6	5.70	122.22	118.80
2	B	2060	A	N3-C4-C5	-5.70	122.81	126.80
2	B	2526	G	C4-C5-N7	5.70	113.08	110.80
2	B	2856	A	C4-N9-C1'	-5.70	116.05	126.30
12	R	92	TRP	CA-CB-CG	5.70	124.52	113.70
2	B	30	G	C5-C6-N1	5.69	114.35	111.50
2	B	73	A	N1-C6-N6	5.69	122.02	118.60
2	B	190	A	O4'-C1'-N9	5.69	112.75	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	480	A	C5-C6-N6	-5.69	119.14	123.70
2	B	515	A	C3'-C2'-C1'	5.69	106.06	101.50
2	B	898	C	N3-C2-O2	-5.69	117.91	121.90
2	B	2006	C	C5'-C4'-O4'	-5.69	102.27	109.10
2	B	2045	C	C4'-C3'-C2'	5.69	108.29	102.60
2	B	2273	A	C4-C5-N7	-5.69	107.85	110.70
2	B	2695	U	O5'-C5'-C4'	-5.69	100.88	111.70
2	B	2865	U	O4'-C1'-N1	5.69	112.75	108.20
2	B	252	G	N9-C4-C5	-5.69	103.12	105.40
2	B	353	C	C5'-C4'-C3'	-5.69	106.89	116.00
2	B	700	G	N3-C4-C5	5.69	131.45	128.60
2	B	714	U	N1-C2-O2	-5.69	118.82	122.80
2	B	1557	C	C5'-C4'-C3'	5.69	125.11	116.00
2	B	1607	C	O4'-C1'-C2'	-5.69	100.11	105.80
2	B	1732	C	N1-C2-O2	5.69	122.32	118.90
2	B	2005	A	C5-C6-N6	-5.69	119.15	123.70
2	B	2007	U	O4'-C1'-N1	5.69	112.75	108.20
2	B	2292	U	P-O5'-C5'	-5.69	111.79	120.90
2	B	2416	C	C2-N3-C4	5.69	122.75	119.90
2	B	2712	C	O4'-C1'-N1	5.69	112.75	108.20
2	B	2753	A	C6-N1-C2	-5.69	115.19	118.60
2	B	2829	A	N1-C2-N3	5.69	132.15	129.30
32	J	70	THR	CA-CB-OG1	5.69	120.95	109.00
2	B	132	G	O4'-C1'-N9	5.69	112.75	108.20
2	B	667	U	C5-C4-O4	5.69	129.31	125.90
2	B	1078	U	C2-N1-C1'	5.69	124.53	117.70
2	B	1325	U	N1-C2-O2	-5.69	118.82	122.80
2	B	1779	U	N1-C2-N3	5.69	118.31	114.90
2	B	2013	A	N9-C4-C5	5.69	108.08	105.80
2	B	2698	U	C5'-C4'-C3'	-5.69	106.90	116.00
2	B	2714	G	C4-C5-N7	-5.69	108.52	110.80
2	B	15	G	N9-C1'-C2'	-5.69	105.74	112.00
2	B	2263	C	C2-N3-C4	-5.69	117.06	119.90
2	B	410	G	C4-C5-N7	-5.69	108.53	110.80
2	B	620	G	C2'-C3'-O3'	5.69	122.80	113.70
2	B	688	U	C2-N3-C4	5.69	130.41	127.00
2	B	1040	A	N3-C4-N9	-5.69	122.85	127.40
2	B	1640	A	C5-C6-N1	-5.69	114.86	117.70
2	B	1652	A	N3-C4-C5	5.69	130.78	126.80
2	B	1795	C	N3-C4-C5	-5.69	119.62	121.90
2	B	1823	G	C4-C5-N7	5.69	113.08	110.80
2	B	2161	C	C3'-C2'-C1'	-5.69	96.95	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2228	G	P-O5'-C5'	-5.69	111.80	120.90
28	F	90	LEU	CB-CA-C	-5.69	99.39	110.20
28	F	113	PHE	CA-C-O	5.69	132.05	120.10
2	B	697	G	N9-C4-C5	5.69	107.67	105.40
2	B	956	G	C3'-C2'-C1'	5.69	106.05	101.50
2	B	1246	A	C5-C6-N6	-5.69	119.15	123.70
2	B	1654	A	C2-N3-C4	5.69	113.44	110.60
2	B	2016	U	N1-C2-O2	-5.69	118.82	122.80
2	B	2055	C	C6-N1-C2	-5.69	118.03	120.30
2	B	2721	A	O4'-C1'-N9	5.69	112.75	108.20
1	A	98	G	N7-C8-N9	5.68	115.94	113.10
2	B	354	A	C4'-C3'-C2'	-5.68	96.92	102.60
2	B	389	G	N7-C8-N9	5.68	115.94	113.10
2	B	1739	A	O4'-C1'-N9	5.68	112.75	108.20
2	B	1801	A	OP2-P-O3'	5.68	117.71	105.20
2	B	2731	G	P-O5'-C5'	5.68	130.00	120.90
19	X	22	LEU	CB-CG-CD2	5.68	120.66	111.00
2	B	226	A	P-O3'-C3'	5.68	126.52	119.70
2	B	338	G	N1-C2-N2	-5.68	111.09	116.20
2	B	666	A	P-O5'-C5'	-5.68	111.81	120.90
2	B	719	C	C1'-O4'-C4'	5.68	114.45	109.90
2	B	816	C	O4'-C4'-C3'	-5.68	98.32	104.00
2	B	1032	A	C5'-C4'-C3'	5.68	125.09	116.00
2	B	1122	G	C2'-C3'-O3'	5.68	122.79	113.70
2	B	1293	C	O4'-C1'-C2'	5.68	112.71	107.60
2	B	1612	C	C6-N1-C1'	5.68	127.62	120.80
2	B	1665	A	C6-C5-N7	-5.68	128.32	132.30
2	B	1925	C	C5-C6-N1	5.68	123.84	121.00
2	B	1925	C	C6-N1-C1'	5.68	127.62	120.80
10	P	107	ALA	N-CA-CB	5.68	118.05	110.10
27	C	207	ALA	CB-CA-C	-5.68	101.58	110.10
2	B	3	U	O4'-C1'-N1	5.68	112.75	108.20
2	B	785	G	C2-N3-C4	-5.68	109.06	111.90
2	B	1059	G	N9-C4-C5	-5.68	103.13	105.40
2	B	1960	A	N9-C4-C5	5.68	108.07	105.80
2	B	2051	A	C5'-C4'-O4'	5.68	115.92	109.10
2	B	2381	A	C2-N3-C4	5.68	113.44	110.60
2	B	1070	A	N3-C4-N9	5.68	131.94	127.40
2	B	1242	U	N3-C4-O4	5.68	123.38	119.40
2	B	1581	G	C5'-C4'-C3'	-5.68	106.91	116.00
2	B	1644	C	C6-N1-C2	-5.68	118.03	120.30
2	B	1714	U	N3-C4-C5	-5.68	111.19	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1813	G	O5'-C5'-C4'	-5.68	100.91	111.70
2	B	1966	A	O4'-C1'-N9	5.68	112.74	108.20
2	B	2379	G	C5-C6-N1	-5.68	108.66	111.50
2	B	2483	C	P-O3'-C3'	5.68	126.52	119.70
2	B	2503	A	C4-C5-N7	5.68	113.54	110.70
20	E	101	TYR	CB-CG-CD2	-5.68	117.59	121.00
2	B	537	G	C5'-C4'-C3'	5.68	125.08	116.00
2	B	577	G	C5-N7-C8	-5.68	101.46	104.30
2	B	145	C	C5-C4-N4	-5.68	116.23	120.20
2	B	157	C	N3-C2-O2	5.68	125.87	121.90
2	B	223	A	C5-N7-C8	5.68	106.74	103.90
2	B	777	G	N9-C4-C5	-5.68	103.13	105.40
2	B	1072	C	N3-C4-C5	-5.68	119.63	121.90
2	B	1090	A	C5-N7-C8	-5.68	101.06	103.90
2	B	1358	G	C8-N9-C1'	5.68	134.38	127.00
2	B	1379	U	N1-C2-N3	5.68	118.31	114.90
2	B	1622	G	P-O3'-C3'	-5.68	112.89	119.70
2	B	1780	A	C5-C6-N6	-5.68	119.16	123.70
2	B	1828	G	C2-N3-C4	-5.68	109.06	111.90
2	B	2517	C	C5-C4-N4	-5.68	116.23	120.20
2	B	2851	A	O4'-C4'-C3'	-5.68	98.32	104.00
19	X	109	ARG	NE-CZ-NH1	5.68	123.14	120.30
27	C	222	THR	CA-CB-CG2	5.68	120.35	112.40
1	A	4	C	C2-N1-C1'	5.67	125.04	118.80
2	B	49	A	C6-C5-N7	-5.67	128.33	132.30
2	B	637	A	N3-C4-C5	-5.67	122.83	126.80
2	B	874	G	C2-N3-C4	5.67	114.74	111.90
2	B	1037	G	C6-C5-N7	-5.67	127.00	130.40
2	B	1680	U	C4-C5-C6	-5.67	116.30	119.70
2	B	2058	A	O3'-P-O5'	-5.67	93.22	104.00
2	B	2150	C	C1'-O4'-C4'	-5.67	105.36	109.90
2	B	2351	G	N7-C8-N9	-5.67	110.26	113.10
2	B	72	U	C1'-O4'-C4'	-5.67	105.36	109.90
2	B	236	C	N3-C2-O2	5.67	125.87	121.90
2	B	424	G	OP1-P-OP2	-5.67	111.09	119.60
2	B	1305	C	P-O3'-C3'	5.67	126.51	119.70
2	B	1574	C	O5'-P-OP2	-5.67	100.59	105.70
2	B	2622	U	P-O5'-C5'	-5.67	111.82	120.90
2	B	104	A	N3-C4-C5	-5.67	122.83	126.80
2	B	412	A	C5-C6-N6	-5.67	119.16	123.70
2	B	629	G	C5-C6-O6	-5.67	125.20	128.60
2	B	933	A	O5'-P-OP2	-5.67	100.60	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1244	A	C2-N3-C4	5.67	113.44	110.60
2	B	1303	G	C4-C5-N7	-5.67	108.53	110.80
2	B	1714	U	N3-C4-O4	5.67	123.37	119.40
2	B	1891	G	N1-C6-O6	5.67	123.30	119.90
2	B	1953	A	N1-C2-N3	5.67	132.14	129.30
2	B	2087	G	C8-N9-C4	-5.67	104.13	106.40
2	B	2409	G	N1-C2-N2	-5.67	111.10	116.20
2	B	49	A	C5-C6-N1	-5.67	114.86	117.70
2	B	629	G	N7-C8-N9	-5.67	110.27	113.10
2	B	669	G	C4-C5-N7	5.67	113.07	110.80
2	B	1154	G	C4-C5-C6	5.67	122.20	118.80
2	B	1372	U	N1-C1'-C2'	-5.67	105.76	112.00
2	B	1374	G	C5'-C4'-O4'	5.67	115.90	109.10
2	B	1379	U	C3'-C2'-C1'	-5.67	96.96	101.50
2	B	1509	A	O4'-C1'-C2'	-5.67	100.13	105.80
2	B	1905	C	C6-N1-C1'	5.67	127.60	120.80
2	B	1999	C	P-O5'-C5'	-5.67	111.83	120.90
2	B	2116	G	O4'-C1'-C2'	-5.67	100.13	105.80
2	B	1036	G	C4-C5-C6	5.67	122.20	118.80
2	B	1120	G	C4-C5-N7	-5.67	108.53	110.80
2	B	1670	C	C5'-C4'-C3'	-5.67	106.93	116.00
2	B	1755	A	P-O5'-C5'	5.67	129.97	120.90
2	B	1848	A	C4'-C3'-C2'	-5.67	96.93	102.60
2	B	1965	C	C1'-O4'-C4'	5.67	114.44	109.90
2	B	2277	G	N1-C6-O6	5.67	123.30	119.90
2	B	2316	G	N1-C2-N3	-5.67	120.50	123.90
2	B	2450	A	N1-C6-N6	5.67	122.00	118.60
5	L	55	MET	CA-C-N	5.67	132.97	117.10
19	X	40	ARG	NE-CZ-NH1	5.67	123.13	120.30
19	X	81	GLU	CG-CD-OE1	5.67	129.64	118.30
1	A	35	C	C5-C6-N1	-5.67	118.17	121.00
1	A	62	C	N3-C4-N4	5.67	121.97	118.00
2	B	96	C	N3-C4-N4	5.67	121.97	118.00
2	B	253	C	C2-N3-C4	-5.67	117.07	119.90
2	B	550	C	N3-C4-C5	-5.67	119.63	121.90
2	B	794	A	C6-C5-N7	-5.67	128.33	132.30
2	B	1465	G	OP1-P-OP2	-5.67	111.10	119.60
14	D	102	ALA	N-CA-CB	5.67	118.03	110.10
21	Y	8	SER	O-C-N	5.67	131.77	122.70
2	B	299	A	C5-C6-N1	-5.67	114.87	117.70
2	B	1797	G	C8-N9-C1'	5.67	134.36	127.00
2	B	1960	A	C4-C5-N7	-5.67	107.87	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2397	G	C5'-C4'-C3'	5.67	125.06	116.00
2	B	2859	G	C8-N9-C1'	5.67	134.37	127.00
2	B	2903	U	C5'-C4'-O4'	5.67	115.90	109.10
2	B	220	G	C8-N9-C4	5.66	108.67	106.40
2	B	266	G	C5-N7-C8	5.66	107.13	104.30
2	B	350	G	C5-C6-O6	-5.66	125.20	128.60
2	B	468	G	C5-N7-C8	-5.66	101.47	104.30
2	B	710	U	N3-C2-O2	-5.66	118.24	122.20
2	B	1018	U	OP1-P-OP2	-5.66	111.11	119.60
2	B	1137	G	C4-C5-N7	5.66	113.07	110.80
2	B	1777	U	N3-C4-C5	-5.66	111.20	114.60
2	B	2452	C	N3-C4-C5	-5.66	119.64	121.90
2	B	2627	G	N3-C4-N9	5.66	129.40	126.00
2	B	2642	G	N1-C6-O6	5.66	123.30	119.90
2	B	2725	A	N9-C4-C5	-5.66	103.53	105.80
2	B	2818	U	P-O3'-C3'	-5.66	112.90	119.70
15	T	3	ARG	N-CA-CB	5.66	120.80	110.60
2	B	276	U	C4-C5-C6	5.66	123.10	119.70
2	B	876	C	C6-N1-C2	-5.66	118.03	120.30
2	B	1904	G	N1-C2-N3	-5.66	120.50	123.90
2	B	2681	C	N3-C4-C5	5.66	124.17	121.90
2	B	1363	C	C5-C4-N4	5.66	124.16	120.20
2	B	1616	A	C4'-C3'-C2'	-5.66	96.94	102.60
2	B	1644	C	C5-C4-N4	-5.66	116.24	120.20
2	B	1682	G	C4-C5-N7	-5.66	108.54	110.80
2	B	1714	U	C5-C6-N1	5.66	125.53	122.70
2	B	1821	A	N3-C4-N9	5.66	131.93	127.40
2	B	2106	U	N3-C2-O2	-5.66	118.24	122.20
2	B	2153	C	C5-C4-N4	-5.66	116.24	120.20
2	B	87	U	C2-N3-C4	-5.66	123.61	127.00
2	B	93	G	C4-C5-C6	5.66	122.19	118.80
2	B	1543	G	C5-C6-N1	-5.66	108.67	111.50
2	B	1776	G	C4-C5-C6	5.66	122.19	118.80
2	B	1840	G	C5-C6-O6	-5.66	125.20	128.60
2	B	1961	C	O4'-C1'-N1	5.66	112.73	108.20
2	B	2228	G	N3-C4-C5	5.66	131.43	128.60
2	B	2268	A	N7-C8-N9	-5.66	110.97	113.80
2	B	2357	G	P-O3'-C3'	5.66	126.49	119.70
2	B	2368	C	C5'-C4'-C3'	5.66	125.05	116.00
13	S	46	LEU	CB-CG-CD1	5.66	120.62	111.00
1	A	2	G	C8-N9-C4	-5.66	104.14	106.40
2	B	1002	G	C5-C6-N1	-5.66	108.67	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1496	A	N1-C2-N3	5.66	132.13	129.30
2	B	2354	C	C4-C5-C6	5.66	120.23	117.40
2	B	2574	G	P-O5'-C5'	5.66	129.95	120.90
19	X	10	ARG	NE-CZ-NH2	-5.66	117.47	120.30
20	E	124	PHE	CB-CG-CD1	-5.66	116.84	120.80
1	A	109	A	C3'-C2'-C1'	-5.66	96.98	101.50
2	B	248	G	N3-C2-N2	5.66	123.86	119.90
2	B	361	G	C6-N1-C2	5.66	128.49	125.10
2	B	637	A	P-O5'-C5'	5.66	129.95	120.90
2	B	1128	G	N1-C2-N3	-5.66	120.51	123.90
2	B	1359	A	C5-C6-N6	-5.66	119.18	123.70
2	B	1678	A	P-O5'-C5'	5.66	129.95	120.90
2	B	1795	C	C4-C5-C6	5.66	120.23	117.40
2	B	2133	G	C6-C5-N7	-5.66	127.01	130.40
2	B	2391	G	N1-C6-O6	5.66	123.29	119.90
2	B	273	G	N7-C8-N9	-5.65	110.27	113.10
2	B	1129	A	C6-N1-C2	-5.65	115.21	118.60
2	B	1227	G	N1-C2-N3	-5.65	120.51	123.90
2	B	1270	C	O3'-P-O5'	-5.65	93.26	104.00
2	B	2181	U	C5'-C4'-O4'	5.65	115.89	109.10
2	B	2472	G	C5'-C4'-C3'	5.65	125.05	116.00
2	B	2540	C	C5'-C4'-C3'	5.65	125.05	116.00
2	B	2717	C	OP1-P-OP2	-5.65	111.12	119.60
14	D	127	PHE	CB-CG-CD1	5.65	124.76	120.80
2	B	191	A	P-O5'-C5'	-5.65	111.86	120.90
2	B	608	A	C5-C6-N1	-5.65	114.87	117.70
2	B	677	A	P-O3'-C3'	5.65	126.48	119.70
2	B	1001	A	N1-C6-N6	5.65	121.99	118.60
2	B	1115	G	C6-C5-N7	-5.65	127.01	130.40
2	B	1348	C	C6-N1-C2	-5.65	118.04	120.30
2	B	1641	A	C4-C5-C6	5.65	119.83	117.00
2	B	2751	G	N7-C8-N9	5.65	115.93	113.10
14	D	34	VAL	CA-CB-CG1	5.65	119.38	110.90
20	E	40	ARG	NE-CZ-NH1	-5.65	117.47	120.30
1	A	38	C	C2-N3-C4	5.65	122.72	119.90
2	B	37	C	C6-N1-C2	5.65	122.56	120.30
2	B	198	C	C6-N1-C1'	-5.65	114.02	120.80
2	B	730	A	C5'-C4'-O4'	5.65	115.88	109.10
2	B	1201	U	C5'-C4'-C3'	-5.65	106.96	116.00
2	B	1295	C	C6-N1-C1'	-5.65	114.02	120.80
2	B	1543	G	C8-N9-C4	5.65	108.66	106.40
2	B	1826	G	O4'-C1'-N9	5.65	112.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2224	G	C5-C6-O6	-5.65	125.21	128.60
2	B	2514	U	C5-C4-O4	-5.65	122.51	125.90
2	B	2570	G	C5-C6-N1	-5.65	108.67	111.50
2	B	2585	U	C2-N3-C4	-5.65	123.61	127.00
2	B	2744	G	C4-C5-N7	-5.65	108.54	110.80
2	B	297	G	C1'-O4'-C4'	-5.65	105.38	109.90
2	B	1145	C	O4'-C4'-C3'	-5.65	98.35	104.00
2	B	1429	G	C8-N9-C4	-5.65	104.14	106.40
12	R	91	GLN	CB-CG-CD	-5.65	96.91	111.60
19	X	24	ARG	CG-CD-NE	-5.65	99.94	111.80
1	A	98	G	O5'-P-OP2	-5.65	100.62	105.70
2	B	71	A	O4'-C1'-N9	5.65	112.72	108.20
2	B	84	A	C4-C5-C6	5.65	119.82	117.00
2	B	569	U	C6-N1-C2	-5.65	117.61	121.00
2	B	769	U	O5'-P-OP1	-5.65	100.62	105.70
2	B	1297	C	P-O3'-C3'	-5.65	112.92	119.70
2	B	1314	C	C2-N3-C4	5.65	122.72	119.90
2	B	1598	A	C2-N3-C4	-5.65	107.78	110.60
2	B	1699	G	N3-C2-N2	5.65	123.85	119.90
2	B	1839	G	P-O5'-C5'	-5.65	111.86	120.90
2	B	1928	A	C5-C6-N6	-5.65	119.18	123.70
2	B	2004	G	C5-N7-C8	5.65	107.12	104.30
2	B	2103	C	C4'-C3'-C2'	-5.65	96.95	102.60
2	B	2336	A	N3-C4-C5	-5.65	122.85	126.80
2	B	2564	A	N7-C8-N9	-5.65	110.98	113.80
2	B	452	G	N9-C4-C5	-5.65	103.14	105.40
2	B	1015	U	C5'-C4'-O4'	5.65	115.88	109.10
2	B	1045	C	P-O5'-C5'	-5.65	111.87	120.90
2	B	1239	G	O4'-C1'-N9	5.65	112.72	108.20
2	B	212	G	O5'-C5'-C4'	-5.64	100.98	111.70
2	B	242	G	C5-C6-O6	-5.64	125.21	128.60
2	B	322	A	N7-C8-N9	5.64	116.62	113.80
2	B	457	A	C5-N7-C8	5.64	106.72	103.90
2	B	573	U	O4'-C1'-N1	5.64	112.72	108.20
2	B	741	U	O4'-C1'-N1	5.64	112.72	108.20
2	B	802	A	C5-C6-N1	-5.64	114.88	117.70
2	B	1597	A	O4'-C1'-N9	5.64	112.72	108.20
2	B	1721	G	C4-C5-C6	5.64	122.19	118.80
2	B	1894	C	C6-N1-C2	-5.64	118.04	120.30
2	B	1907	G	O4'-C1'-N9	5.64	112.72	108.20
2	B	2195	U	C4-C5-C6	-5.64	116.31	119.70
2	B	2481	G	C5-N7-C8	5.64	107.12	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	L	30	THR	N-CA-CB	5.64	121.02	110.30
1	A	105	G	C8-N9-C4	5.64	108.66	106.40
1	A	107	G	C5-C6-O6	-5.64	125.22	128.60
2	B	397	U	N3-C4-O4	-5.64	115.45	119.40
2	B	575	A	C5'-C4'-C3'	-5.64	106.97	116.00
2	B	1137	G	C2-N3-C4	-5.64	109.08	111.90
2	B	1218	G	C4-C5-N7	-5.64	108.54	110.80
2	B	1478	G	O4'-C1'-N9	5.64	112.72	108.20
2	B	1753	G	N3-C4-C5	5.64	131.42	128.60
2	B	2029	G	C4'-C3'-C2'	5.64	108.24	102.60
2	B	2461	A	C4-C5-C6	5.64	119.82	117.00
2	B	2752	C	N1-C2-N3	5.64	123.15	119.20
19	X	6	ALA	N-CA-CB	5.64	118.00	110.10
2	B	904	G	N3-C4-C5	5.64	131.42	128.60
2	B	986	C	P-O3'-C3'	-5.64	112.93	119.70
2	B	1339	G	P-O3'-C3'	-5.64	112.93	119.70
2	B	2247	A	C3'-C2'-C1'	-5.64	96.99	101.50
2	B	2274	A	C5-C6-N1	-5.64	114.88	117.70
2	B	40	U	C5-C4-O4	-5.64	122.52	125.90
2	B	774	G	O4'-C1'-N9	5.64	112.71	108.20
2	B	820	A	C4-C5-N7	-5.64	107.88	110.70
2	B	940	G	O5'-P-OP2	5.64	117.47	110.70
2	B	990	A	N7-C8-N9	-5.64	110.98	113.80
2	B	1134	A	N9-C4-C5	5.64	108.06	105.80
2	B	1719	G	O4'-C1'-N9	5.64	112.71	108.20
2	B	1736	U	N3-C4-O4	5.64	123.35	119.40
2	B	2119	A	N1-C2-N3	5.64	132.12	129.30
2	B	2168	G	C5-C6-N1	-5.64	108.68	111.50
2	B	2212	A	C4-C5-C6	5.64	119.82	117.00
2	B	2321	U	P-O3'-C3'	5.64	126.47	119.70
2	B	2431	U	O4'-C4'-C3'	-5.64	98.36	104.00
2	B	2736	A	C4-C5-C6	5.64	119.82	117.00
2	B	2809	A	C1'-O4'-C4'	-5.64	105.39	109.90
23	5	51	ASP	CB-CG-OD1	5.64	123.38	118.30
23	5	132	GLY	N-CA-C	-5.64	99.00	113.10
2	B	692	C	N3-C4-C5	-5.64	119.64	121.90
2	B	1372	U	P-O3'-C3'	-5.64	112.94	119.70
2	B	2038	G	C3'-C2'-C1'	5.64	106.01	101.50
2	B	2442	C	C4'-C3'-C2'	-5.64	96.96	102.60
2	B	2476	A	C6-C5-N7	-5.64	128.35	132.30
1	A	93	C	N1-C2-O2	5.64	122.28	118.90
2	B	595	C	N3-C4-N4	5.64	121.94	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	666	A	C5-C6-N1	-5.64	114.88	117.70
2	B	840	C	C2-N3-C4	-5.64	117.08	119.90
2	B	1766	G	C6-C5-N7	-5.64	127.02	130.40
2	B	1786	A	O4'-C1'-N9	5.64	112.71	108.20
2	B	2139	U	C2-N3-C4	-5.64	123.62	127.00
2	B	2468	A	P-O3'-C3'	-5.64	112.94	119.70
7	M	38	ARG	NE-CZ-NH2	5.64	123.12	120.30
2	B	20	C	C4-C5-C6	-5.63	114.58	117.40
2	B	148	U	C4-C5-C6	-5.63	116.32	119.70
2	B	169	G	C8-N9-C4	-5.63	104.15	106.40
2	B	187	G	P-O3'-C3'	-5.63	112.94	119.70
2	B	215	G	N7-C8-N9	5.63	115.92	113.10
2	B	372	G	C1'-O4'-C4'	-5.63	105.39	109.90
2	B	798	G	C6-C5-N7	-5.63	127.02	130.40
2	B	833	A	O4'-C4'-C3'	-5.63	98.37	104.00
2	B	904	G	C8-N9-C4	-5.63	104.15	106.40
2	B	992	C	P-O3'-C3'	5.63	126.46	119.70
2	B	1132	U	C4-C5-C6	-5.63	116.32	119.70
2	B	1181	U	P-O3'-C3'	-5.63	112.94	119.70
2	B	2034	U	N1-C1'-C2'	-5.63	105.80	112.00
2	B	2125	G	C3'-C2'-C1'	-5.63	96.99	101.50
2	B	388	G	N9-C4-C5	5.63	107.65	105.40
2	B	1154	G	C6-C5-N7	-5.63	127.02	130.40
2	B	1904	G	C1'-O4'-C4'	-5.63	105.39	109.90
2	B	2287	A	N7-C8-N9	-5.63	110.98	113.80
1	A	97	C	O4'-C4'-C3'	-5.63	98.37	104.00
2	B	325	G	C6-C5-N7	-5.63	127.02	130.40
2	B	842	U	P-O3'-C3'	-5.63	112.94	119.70
2	B	894	U	O5'-P-OP1	-5.63	100.63	105.70
2	B	922	C	OP1-P-OP2	-5.63	111.15	119.60
2	B	988	A	C3'-C2'-C1'	5.63	106.00	101.50
2	B	1034	G	N1-C6-O6	5.63	123.28	119.90
2	B	1062	G	C5-C6-N1	-5.63	108.69	111.50
2	B	1674	G	N7-C8-N9	-5.63	110.28	113.10
2	B	1725	U	O5'-C5'-C4'	-5.63	101.00	111.70
11	Q	31	TYR	CB-CG-CD2	5.63	124.38	121.00
17	U	66	VAL	CA-CB-CG1	5.63	119.35	110.90
2	B	191	A	C2'-C3'-O3'	5.63	122.71	113.70
2	B	1059	G	C8-N9-C4	5.63	108.65	106.40
2	B	1245	G	C8-N9-C4	-5.63	104.15	106.40
2	B	1650	A	C5-C6-N6	-5.63	119.20	123.70
2	B	1957	C	C5-C4-N4	-5.63	116.26	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1970	A	C8-N9-C4	-5.63	103.55	105.80
2	B	2038	G	N3-C2-N2	5.63	123.84	119.90
2	B	2630	G	N3-C2-N2	5.63	123.84	119.90
2	B	2674	G	C4-N9-C1'	-5.63	119.18	126.50
2	B	2819	G	O3'-P-O5'	-5.63	93.30	104.00
1	A	18	G	C4-C5-C6	5.63	122.18	118.80
2	B	665	U	C4'-C3'-C2'	-5.63	96.97	102.60
2	B	681	G	C8-N9-C4	-5.63	104.15	106.40
2	B	1313	U	C2-N1-C1'	5.63	124.45	117.70
2	B	1703	G	N3-C4-C5	5.63	131.41	128.60
2	B	1952	A	P-O3'-C3'	5.63	126.45	119.70
2	B	2674	G	C8-N9-C1'	5.63	134.32	127.00
2	B	2712	C	N1-C2-O2	5.63	122.28	118.90
2	B	2859	G	C8-N9-C4	-5.63	104.15	106.40
2	B	2863	C	C2-N3-C4	5.63	122.71	119.90
2	B	14	A	C5-C6-N6	-5.63	119.20	123.70
2	B	287	G	N1-C6-O6	5.63	123.28	119.90
2	B	354	A	O5'-C5'-C4'	-5.63	101.01	111.70
2	B	406	G	C6-C5-N7	-5.63	127.03	130.40
2	B	559	G	C5-N7-C8	-5.63	101.49	104.30
2	B	727	A	C4-C5-N7	5.63	113.51	110.70
2	B	737	C	N1-C2-N3	5.63	123.14	119.20
2	B	795	C	C5'-C4'-O4'	-5.63	102.35	109.10
2	B	1036	G	O4'-C1'-N9	5.63	112.70	108.20
2	B	1182	G	C4'-C3'-C2'	-5.63	96.97	102.60
2	B	1359	A	C4-C5-C6	5.63	119.81	117.00
2	B	1661	G	P-O3'-C3'	-5.63	112.95	119.70
2	B	1739	A	C4-C5-C6	5.63	119.81	117.00
2	B	1897	G	C5-C6-N1	-5.63	108.69	111.50
7	M	21	ALA	N-CA-CB	5.63	117.98	110.10
2	B	388	G	C1'-O4'-C4'	5.62	114.40	109.90
2	B	1084	A	N1-C6-N6	5.62	121.97	118.60
2	B	1499	C	N3-C4-C5	-5.62	119.65	121.90
2	B	1568	G	C5-C6-O6	-5.62	125.22	128.60
2	B	2119	A	N9-C4-C5	5.62	108.05	105.80
2	B	2228	G	C5'-C4'-C3'	5.62	125.00	116.00
2	B	2460	U	N3-C4-C5	-5.62	111.22	114.60
2	B	2517	C	P-O5'-C5'	-5.62	111.90	120.90
5	L	66	PHE	CB-CG-CD1	-5.62	116.86	120.80
20	E	88	ARG	NE-CZ-NH2	-5.62	117.49	120.30
2	B	949	G	C8-N9-C1'	5.62	134.31	127.00
2	B	1568	G	C4-C5-C6	5.62	122.17	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1908	C	C5-C6-N1	-5.62	118.19	121.00
2	B	2578	G	P-O5'-C5'	-5.62	111.90	120.90
2	B	2789	C	N3-C4-C5	-5.62	119.65	121.90
2	B	2852	G	N9-C1'-C2'	-5.62	105.81	112.00
2	B	2876	G	N9-C1'-C2'	-5.62	105.81	112.00
2	B	62	U	C5-C6-N1	-5.62	119.89	122.70
2	B	212	G	C4-C5-C6	-5.62	115.43	118.80
2	B	470	A	C2-N3-C4	-5.62	107.79	110.60
2	B	483	A	C3'-C2'-C1'	-5.62	97.00	101.50
2	B	652	U	C5'-C4'-O4'	5.62	115.84	109.10
2	B	678	C	N3-C2-O2	-5.62	117.97	121.90
2	B	779	U	C2-N3-C4	-5.62	123.63	127.00
2	B	799	G	C4-C5-C6	5.62	122.17	118.80
2	B	971	G	O4'-C1'-N9	5.62	112.70	108.20
2	B	1017	G	C5-C6-N1	-5.62	108.69	111.50
2	B	1110	G	P-O3'-C3'	-5.62	112.95	119.70
2	B	2210	U	N1-C1'-C2'	-5.62	105.82	112.00
7	M	79	ALA	N-CA-CB	5.62	117.97	110.10
2	B	162	U	P-O3'-C3'	5.62	126.44	119.70
2	B	605	G	O5'-C5'-C4'	-5.62	101.02	111.70
2	B	1086	A	N1-C2-N3	-5.62	126.49	129.30
2	B	1293	C	N3-C4-C5	-5.62	119.65	121.90
2	B	1380	G	N9-C4-C5	5.62	107.65	105.40
2	B	1509	A	C5-C6-N1	-5.62	114.89	117.70
2	B	1599	U	O4'-C1'-N1	5.62	112.70	108.20
2	B	2408	U	C2-N3-C4	-5.62	123.63	127.00
2	B	2690	U	N1-C2-O2	-5.62	118.87	122.80
2	B	2815	C	C4'-C3'-C2'	-5.62	96.98	102.60
2	B	363	G	O4'-C1'-N9	5.62	112.69	108.20
2	B	486	C	C4'-C3'-C2'	-5.62	96.98	102.60
2	B	820	A	O5'-C5'-C4'	-5.62	101.03	111.70
2	B	1029	A	C6-N1-C2	-5.62	115.23	118.60
2	B	1229	C	C5'-C4'-C3'	-5.62	107.01	116.00
2	B	1453	A	C6-C5-N7	-5.62	128.37	132.30
2	B	1559	U	C6-N1-C1'	-5.62	113.33	121.20
2	B	1922	G	C5-C6-O6	-5.62	125.23	128.60
2	B	1957	C	P-O3'-C3'	-5.62	112.96	119.70
2	B	2342	C	C4-C5-C6	5.62	120.21	117.40
2	B	2627	G	C1'-O4'-C4'	5.62	114.39	109.90
2	B	2697	G	N9-C4-C5	-5.62	103.15	105.40
27	C	97	ASP	CB-CG-OD2	-5.62	113.24	118.30
2	B	371	A	N9-C4-C5	5.62	108.05	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2198	A	P-O3'-C3'	5.62	126.44	119.70
7	M	128	THR	CA-CB-OG1	5.62	120.80	109.00
11	Q	114	ALA	CB-CA-C	-5.62	101.67	110.10
23	5	173	THR	N-CA-CB	5.62	120.97	110.30
2	B	304	U	P-O5'-C5'	5.62	129.88	120.90
2	B	595	C	C1'-O4'-C4'	-5.62	105.41	109.90
2	B	1142	A	C4-C5-C6	5.62	119.81	117.00
2	B	1235	G	C1'-O4'-C4'	5.62	114.39	109.90
2	B	1283	G	C4-C5-C6	5.62	122.17	118.80
2	B	1314	C	O4'-C1'-N1	5.62	112.69	108.20
2	B	1315	C	N3-C4-N4	5.62	121.93	118.00
2	B	1396	U	N3-C4-C5	-5.62	111.23	114.60
2	B	1478	G	OP1-P-OP2	-5.62	111.18	119.60
2	B	1765	U	C4'-C3'-C2'	-5.62	96.98	102.60
2	B	1765	U	O5'-C5'-C4'	-5.62	101.03	111.70
2	B	1791	A	O4'-C1'-C2'	5.62	112.65	107.60
2	B	1992	G	C6-C5-N7	-5.62	127.03	130.40
2	B	2501	C	P-O5'-C5'	5.62	129.88	120.90
20	E	85	PHE	CA-CB-CG	-5.62	100.42	113.90
2	B	281	C	C4-C5-C6	5.61	120.21	117.40
2	B	307	G	N3-C4-C5	5.61	131.41	128.60
2	B	840	C	N1-C2-O2	-5.61	115.53	118.90
2	B	1549	A	C5-C6-N1	-5.61	114.89	117.70
2	B	1744	A	C6-C5-N7	-5.61	128.37	132.30
2	B	1752	C	C4'-C3'-C2'	-5.61	96.99	102.60
2	B	2040	G	C4-C5-C6	5.61	122.17	118.80
2	B	2146	C	C5'-C4'-O4'	5.61	115.83	109.10
2	B	2815	C	O5'-C5'-C4'	-5.61	101.04	111.70
32	J	125	TYR	N-CA-C	-5.61	95.85	111.00
2	B	612	G	P-O3'-C3'	-5.61	112.97	119.70
2	B	1285	A	C1'-O4'-C4'	5.61	114.39	109.90
2	B	2156	G	P-O3'-C3'	-5.61	112.97	119.70
2	B	2373	G	C2-N3-C4	5.61	114.71	111.90
2	B	205	G	O5'-C5'-C4'	5.61	122.36	111.70
2	B	516	C	N3-C4-N4	5.61	121.93	118.00
2	B	1018	U	C1'-O4'-C4'	-5.61	105.41	109.90
2	B	1441	G	C8-N9-C4	-5.61	104.16	106.40
2	B	2303	G	C4-C5-C6	5.61	122.17	118.80
2	B	2439	A	N3-C4-N9	5.61	131.89	127.40
2	B	2818	U	N1-C2-O2	-5.61	118.87	122.80
2	B	2822	G	N9-C1'-C2'	-5.61	105.83	112.00
2	B	2870	C	C4-C5-C6	5.61	120.20	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2886	A	C4-C5-N7	-5.61	107.89	110.70
2	B	514	A	O4'-C4'-C3'	-5.61	98.39	104.00
2	B	955	U	P-O3'-C3'	-5.61	112.97	119.70
2	B	2013	A	C5-N7-C8	5.61	106.70	103.90
2	B	2576	G	C4'-C3'-C2'	5.61	108.21	102.60
2	B	1069	A	C5-N7-C8	5.61	106.70	103.90
2	B	1978	A	C4-C5-N7	-5.61	107.90	110.70
2	B	2206	C	N3-C2-O2	5.61	125.83	121.90
2	B	2309	A	C1'-O4'-C4'	-5.61	105.41	109.90
24	6	21	ARG	NE-CZ-NH1	5.61	123.10	120.30
1	A	34	A	C5-C6-N6	-5.61	119.22	123.70
2	B	709	U	C1'-O4'-C4'	5.61	114.38	109.90
2	B	979	A	C4-C5-C6	5.61	119.80	117.00
2	B	1340	U	P-O3'-C3'	5.61	126.43	119.70
2	B	1620	G	C8-N9-C4	5.61	108.64	106.40
2	B	1723	G	C2-N3-C4	5.61	114.70	111.90
2	B	2003	A	O4'-C1'-C2'	5.61	112.65	107.60
2	B	2522	U	N1-C2-O2	-5.61	118.88	122.80
2	B	163	C	C5-C4-N4	-5.60	116.28	120.20
2	B	1643	G	O4'-C1'-N9	5.60	112.68	108.20
2	B	2054	A	N1-C6-N6	5.60	121.96	118.60
2	B	2092	U	O4'-C1'-N1	5.60	112.68	108.20
2	B	2557	G	C4-N9-C1'	-5.60	119.21	126.50
2	B	2751	G	C4-C5-N7	-5.60	108.56	110.80
2	B	783	A	C5-C6-N6	-5.60	119.22	123.70
2	B	798	G	C8-N9-C4	-5.60	104.16	106.40
2	B	1239	G	N1-C6-O6	5.60	123.26	119.90
2	B	2167	U	C5'-C4'-O4'	5.60	115.82	109.10
2	B	2390	U	P-O5'-C5'	-5.60	111.94	120.90
2	B	2447	G	N9-C4-C5	-5.60	103.16	105.40
2	B	2560	A	C6-C5-N7	-5.60	128.38	132.30
32	J	13	ARG	NE-CZ-NH2	5.60	123.10	120.30
2	B	967	U	C6-N1-C2	5.60	124.36	121.00
2	B	1185	G	N1-C6-O6	5.60	123.26	119.90
2	B	1633	G	C8-N9-C1'	-5.60	119.72	127.00
31	I	46	ASP	CB-CG-OD2	5.60	123.34	118.30
2	B	45	G	P-O3'-C3'	5.60	126.42	119.70
2	B	83	A	N3-C4-C5	-5.60	122.88	126.80
2	B	113	U	C5-C6-N1	5.60	125.50	122.70
2	B	408	G	C5-C6-N1	-5.60	108.70	111.50
2	B	473	G	C6-C5-N7	-5.60	127.04	130.40
2	B	625	G	N3-C4-N9	5.60	129.36	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	733	G	N7-C8-N9	-5.60	110.30	113.10
2	B	799	G	C6-C5-N7	-5.60	127.04	130.40
2	B	881	G	C5-C6-O6	-5.60	125.24	128.60
2	B	889	C	C6-N1-C2	-5.60	118.06	120.30
2	B	988	A	C1'-O4'-C4'	5.60	114.38	109.90
2	B	1444	G	C8-N9-C4	-5.60	104.16	106.40
2	B	2770	G	C5-N7-C8	5.60	107.10	104.30
3	0	12	VAL	C-N-CA	5.60	135.70	121.70
21	Y	43	LYS	N-CA-C	-5.60	95.88	111.00
2	B	235	U	N3-C4-O4	5.60	123.32	119.40
2	B	242	G	C8-N9-C4	5.60	108.64	106.40
2	B	309	A	C8-N9-C4	-5.60	103.56	105.80
2	B	901	C	C5'-C4'-O4'	5.60	115.82	109.10
2	B	1197	G	C6-C5-N7	-5.60	127.04	130.40
2	B	1357	C	C5-C4-N4	-5.60	116.28	120.20
2	B	1756	G	C4-C5-N7	-5.60	108.56	110.80
2	B	1756	G	C8-N9-C4	-5.60	104.16	106.40
2	B	146	A	C4'-C3'-C2'	-5.60	97.00	102.60
2	B	763	G	N7-C8-N9	-5.60	110.30	113.10
2	B	2095	A	C5'-C4'-C3'	-5.60	107.05	116.00
2	B	2256	G	O4'-C1'-N9	5.60	112.68	108.20
2	B	376	G	N9-C4-C5	5.59	107.64	105.40
2	B	465	G	N1-C6-O6	5.59	123.26	119.90
2	B	520	G	N1-C2-N3	5.59	127.26	123.90
2	B	585	G	C5'-C4'-C3'	-5.59	107.05	116.00
2	B	604	G	C5'-C4'-O4'	5.59	115.81	109.10
2	B	710	U	C4'-C3'-C2'	-5.59	97.00	102.60
2	B	1269	A	O5'-C5'-C4'	-5.59	101.07	111.70
2	B	1659	G	N3-C2-N2	5.59	123.82	119.90
2	B	1679	A	O4'-C1'-N9	5.59	112.68	108.20
2	B	1694	C	C2-N3-C4	5.59	122.70	119.90
2	B	1842	G	C6-N1-C2	5.59	128.46	125.10
2	B	2739	U	C2-N1-C1'	-5.59	110.99	117.70
2	B	2827	C	C1'-O4'-C4'	-5.59	105.42	109.90
2	B	287	G	C4-C5-C6	5.59	122.16	118.80
2	B	682	G	N1-C2-N3	-5.59	120.54	123.90
2	B	870	U	C5-C6-N1	5.59	125.50	122.70
2	B	960	A	C4'-C3'-C2'	-5.59	97.01	102.60
2	B	1800	C	C2-N3-C4	5.59	122.70	119.90
2	B	2075	U	N3-C4-O4	5.59	123.31	119.40
2	B	2518	A	N1-C6-N6	5.59	121.96	118.60
2	B	2776	A	O4'-C1'-N9	5.59	112.67	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	551	G	C4-C5-N7	5.59	113.04	110.80
2	B	1220	G	N1-C2-N2	-5.59	111.17	116.20
2	B	1283	G	C5'-C4'-C3'	5.59	124.94	116.00
2	B	1312	U	N1-C2-N3	5.59	118.25	114.90
2	B	1854	A	N9-C4-C5	5.59	108.04	105.80
2	B	2605	U	C4-C5-C6	-5.59	116.35	119.70
2	B	2649	C	C4'-C3'-C2'	-5.59	97.01	102.60
2	B	2668	G	N1-C2-N3	-5.59	120.55	123.90
2	B	2828	G	C6-C5-N7	-5.59	127.05	130.40
8	N	71	ARG	NE-CZ-NH2	5.59	123.09	120.30
2	B	181	A	N3-C4-N9	-5.59	122.93	127.40
2	B	608	A	C2-N3-C4	-5.59	107.81	110.60
2	B	714	U	O4'-C1'-C2'	-5.59	100.21	105.80
2	B	755	U	C5-C4-O4	5.59	129.25	125.90
2	B	794	A	C3'-C2'-C1'	5.59	105.97	101.50
2	B	901	C	P-O3'-C3'	-5.59	112.99	119.70
2	B	1180	U	C2-N3-C4	-5.59	123.65	127.00
2	B	1475	G	C5'-C4'-C3'	-5.59	107.06	116.00
2	B	1944	U	C6-N1-C2	-5.59	117.65	121.00
2	B	2558	C	C3'-C2'-C1'	-5.59	97.03	101.50
23	5	208	TYR	CG-CD2-CE2	-5.59	116.83	121.30
2	B	84	A	C6-N1-C2	-5.59	115.25	118.60
2	B	226	A	C4-C5-C6	5.59	119.79	117.00
2	B	361	G	C2-N3-C4	-5.59	109.11	111.90
2	B	424	G	C5-C6-O6	-5.59	125.25	128.60
2	B	1354	A	N1-C6-N6	5.59	121.95	118.60
2	B	1382	G	N3-C4-N9	-5.59	122.65	126.00
2	B	1439	A	C4-C5-N7	5.59	113.49	110.70
2	B	2444	G	N3-C4-N9	5.59	129.35	126.00
5	L	132	ARG	NE-CZ-NH2	-5.59	117.51	120.30
2	B	468	G	C5'-C4'-C3'	5.59	124.94	116.00
2	B	748	G	OP1-P-O3'	5.59	117.49	105.20
2	B	1484	U	N3-C4-O4	5.59	123.31	119.40
2	B	1635	A	C6-N1-C2	5.59	121.95	118.60
2	B	2279	G	O5'-C5'-C4'	-5.59	101.08	111.70
2	B	2313	C	C1'-O4'-C4'	-5.59	105.43	109.90
2	B	2549	G	O4'-C1'-N9	5.59	112.67	108.20
2	B	2729	G	C4-C5-N7	-5.59	108.57	110.80
2	B	2852	G	C2-N3-C4	5.59	114.69	111.90
2	B	2893	A	P-O5'-C5'	5.59	129.84	120.90
28	F	15	LEU	CB-CG-CD1	5.59	120.50	111.00
2	B	505	A	P-O5'-C5'	5.58	129.84	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	577	G	C2-N3-C4	-5.58	109.11	111.90
2	B	644	A	C6-N1-C2	-5.58	115.25	118.60
2	B	1057	A	C6-N1-C2	-5.58	115.25	118.60
2	B	1356	G	C5-C6-N1	-5.58	108.71	111.50
2	B	1748	C	C5-C6-N1	5.58	123.79	121.00
2	B	1948	G	C5-C6-N1	-5.58	108.71	111.50
2	B	2375	G	C3'-C2'-C1'	-5.58	97.03	101.50
2	B	2566	A	C4-C5-C6	5.58	119.79	117.00
11	Q	48	ASP	CA-CB-CG	-5.58	101.11	113.40
12	R	78	ARG	NE-CZ-NH1	-5.58	117.51	120.30
1	A	71	C	N3-C4-N4	5.58	121.91	118.00
2	B	175	G	N1-C2-N2	-5.58	111.17	116.20
2	B	621	A	C6-C5-N7	-5.58	128.39	132.30
2	B	745	G	C8-N9-C4	-5.58	104.17	106.40
2	B	834	G	C3'-C2'-C1'	-5.58	97.03	101.50
2	B	1239	G	N1-C2-N3	-5.58	120.55	123.90
2	B	1597	A	C1'-O4'-C4'	-5.58	105.43	109.90
2	B	2581	G	P-O5'-C5'	-5.58	111.97	120.90
23	5	148	ASN	N-CA-C	-5.58	95.92	111.00
2	B	111	A	O4'-C4'-C3'	-5.58	98.42	104.00
2	B	299	A	N3-C4-C5	-5.58	122.89	126.80
2	B	455	C	OP1-P-OP2	-5.58	111.23	119.60
2	B	538	A	OP1-P-OP2	-5.58	111.23	119.60
2	B	771	G	O4'-C1'-N9	5.58	112.67	108.20
2	B	1097	U	C2-N3-C4	5.58	130.35	127.00
2	B	1123	C	N1-C2-O2	5.58	122.25	118.90
2	B	1273	U	N3-C2-O2	5.58	126.11	122.20
2	B	1618	A	C3'-C2'-C1'	-5.58	97.03	101.50
2	B	1652	A	O5'-C5'-C4'	-5.58	101.10	111.70
2	B	1829	A	C8-N9-C4	-5.58	103.57	105.80
2	B	2897	U	N1-C1'-C2'	-5.58	105.86	112.00
8	N	3	HIS	CA-C-N	-5.58	104.92	117.20
13	S	94	ASP	CB-CG-OD1	5.58	123.32	118.30
16	2	17	PRO	N-CA-CB	5.58	110.00	103.30
1	A	83	G	C4-C5-C6	5.58	122.15	118.80
2	B	255	A	O5'-C5'-C4'	-5.58	101.10	111.70
2	B	358	U	C6-N1-C2	-5.58	117.65	121.00
2	B	412	A	O4'-C1'-N9	5.58	112.66	108.20
2	B	555	G	C4-C5-N7	-5.58	108.57	110.80
2	B	733	G	C4'-C3'-C2'	-5.58	97.02	102.60
2	B	775	G	O3'-P-O5'	-5.58	93.40	104.00
2	B	2282	G	C2'-C3'-O3'	5.58	122.63	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2826	A	N3-C4-C5	5.58	130.71	126.80
2	B	2832	U	N1-C2-O2	-5.58	118.89	122.80
1	A	108	A	N1-C2-N3	5.58	132.09	129.30
2	B	11	C	C5-C4-N4	-5.58	116.30	120.20
2	B	196	A	OP1-P-OP2	-5.58	111.23	119.60
2	B	313	G	C6-C5-N7	-5.58	127.05	130.40
2	B	406	G	P-O3'-C3'	-5.58	113.01	119.70
2	B	471	A	N9-C4-C5	-5.58	103.57	105.80
2	B	1074	G	C6-C5-N7	-5.58	127.05	130.40
2	B	1463	C	C5-C6-N1	5.58	123.79	121.00
2	B	1638	C	N3-C4-C5	-5.58	119.67	121.90
2	B	1715	G	C6-C5-N7	-5.58	127.05	130.40
2	B	1778	U	C4-C5-C6	5.58	123.05	119.70
2	B	1825	U	C5'-C4'-C3'	5.58	124.93	116.00
2	B	2303	G	C1'-O4'-C4'	-5.58	105.44	109.90
2	B	2762	C	C2-N1-C1'	5.58	124.94	118.80
29	G	37	ASN	CB-CA-C	-5.58	99.25	110.40
2	B	381	G	O4'-C1'-N9	5.58	112.66	108.20
2	B	635	C	C2-N3-C4	5.58	122.69	119.90
2	B	1015	U	C5-C6-N1	5.58	125.49	122.70
2	B	2578	G	N1-C6-O6	5.58	123.25	119.90
2	B	2624	G	C5-C6-N1	-5.58	108.71	111.50
2	B	2861	U	O4'-C1'-N1	5.58	112.66	108.20
1	A	41	G	C5-C6-N1	-5.58	108.71	111.50
2	B	87	U	C4-C5-C6	-5.58	116.36	119.70
2	B	113	U	N3-C4-O4	5.58	123.30	119.40
2	B	1025	G	P-O3'-C3'	5.58	126.39	119.70
2	B	1510	G	O4'-C1'-N9	5.58	112.66	108.20
2	B	2585	U	C2'-C3'-O3'	5.58	122.62	113.70
2	B	2829	A	C4-C5-N7	-5.58	107.91	110.70
1	A	38	C	N3-C4-N4	5.57	121.90	118.00
2	B	182	A	P-O3'-C3'	-5.57	113.01	119.70
2	B	297	G	O4'-C1'-N9	5.57	112.66	108.20
2	B	774	G	N7-C8-N9	-5.57	110.31	113.10
2	B	1357	C	C5'-C4'-C3'	5.57	124.92	116.00
2	B	1541	C	N3-C4-N4	5.57	121.90	118.00
2	B	1785	A	N1-C6-N6	5.57	121.94	118.60
2	B	1921	G	C6-C5-N7	-5.57	127.06	130.40
2	B	2092	U	C4-C5-C6	-5.57	116.36	119.70
2	B	2106	U	P-O3'-C3'	-5.57	113.01	119.70
2	B	2126	A	C5'-C4'-O4'	5.57	115.79	109.10
2	B	2221	G	N9-C4-C5	5.57	107.63	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2618	G	N3-C4-C5	-5.57	125.81	128.60
2	B	530	G	C8-N9-C1'	-5.57	119.76	127.00
2	B	1545	A	O4'-C1'-N9	5.57	112.66	108.20
2	B	2748	A	C4-C5-C6	5.57	119.79	117.00
1	A	27	C	C6-N1-C2	-5.57	118.07	120.30
2	B	427	U	N1-C2-N3	5.57	118.24	114.90
2	B	539	G	C4-C5-C6	5.57	122.14	118.80
2	B	589	U	C2-N3-C4	-5.57	123.66	127.00
2	B	691	C	N3-C4-C5	5.57	124.13	121.90
2	B	807	U	O4'-C1'-N1	5.57	112.66	108.20
2	B	1783	A	O4'-C1'-C2'	5.57	112.61	107.60
2	B	2308	G	O4'-C1'-N9	5.57	112.66	108.20
2	B	2627	G	C6-N1-C2	-5.57	121.76	125.10
2	B	2661	G	C8-N9-C4	5.57	108.63	106.40
2	B	667	U	C2-N3-C4	5.57	130.34	127.00
2	B	727	A	N9-C4-C5	-5.57	103.57	105.80
2	B	956	G	C8-N9-C1'	-5.57	119.76	127.00
2	B	1437	C	C6-N1-C2	5.57	122.53	120.30
2	B	2744	G	N7-C8-N9	5.57	115.89	113.10
2	B	90	U	C4'-C3'-C2'	5.57	108.17	102.60
2	B	510	C	C5-C4-N4	-5.57	116.30	120.20
2	B	634	C	C5-C6-N1	5.57	123.78	121.00
2	B	692	C	C5-C4-N4	-5.57	116.30	120.20
2	B	730	A	N9-C4-C5	-5.57	103.57	105.80
2	B	1436	G	N1-C2-N2	5.57	121.21	116.20
2	B	1524	G	C4'-C3'-C2'	5.57	108.17	102.60
2	B	1549	A	C4-C5-C6	5.57	119.78	117.00
2	B	1634	A	C5'-C4'-O4'	5.57	115.78	109.10
2	B	2024	G	O4'-C4'-C3'	-5.57	98.43	104.00
10	P	98	TYR	CD1-CE1-CZ	5.57	124.81	119.80
20	E	106	LYS	N-CA-C	-5.57	95.97	111.00
22	3	44	ALA	N-CA-CB	5.57	117.89	110.10
2	B	19	A	O4'-C1'-N9	5.57	112.65	108.20
2	B	45	G	C1'-O4'-C4'	5.57	114.35	109.90
2	B	110	G	N9-C1'-C2'	-5.57	105.88	112.00
2	B	624	C	P-O3'-C3'	-5.57	113.02	119.70
2	B	2062	A	C1'-O4'-C4'	-5.57	105.45	109.90
2	B	2334	U	C5-C6-N1	5.57	125.48	122.70
2	B	2740	A	C4-C5-N7	-5.57	107.92	110.70
1	A	10	G	OP1-P-OP2	-5.56	111.25	119.60
2	B	60	G	C4-C5-N7	5.56	113.03	110.80
2	B	519	U	C5-C6-N1	-5.56	119.92	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1596	A	N9-C4-C5	5.56	108.03	105.80
2	B	2030	A	C6-N1-C2	5.56	121.94	118.60
2	B	2474	U	N3-C4-O4	5.56	123.30	119.40
1	A	17	C	C2-N1-C1'	-5.56	112.68	118.80
2	B	87	U	O4'-C1'-N1	5.56	112.65	108.20
2	B	110	G	C2-N3-C4	5.56	114.68	111.90
2	B	224	U	O4'-C1'-N1	5.56	112.65	108.20
2	B	1084	A	C4-C5-C6	-5.56	114.22	117.00
2	B	1126	A	O4'-C1'-N9	5.56	112.65	108.20
2	B	1673	G	N7-C8-N9	-5.56	110.32	113.10
2	B	1790	C	N3-C4-C5	-5.56	119.67	121.90
2	B	1840	G	N1-C6-O6	5.56	123.24	119.90
2	B	1963	U	N3-C4-C5	5.56	117.94	114.60
2	B	2425	A	C5-N7-C8	5.56	106.68	103.90
2	B	2607	G	C4-C5-N7	-5.56	108.58	110.80
2	B	2721	A	C2-N3-C4	-5.56	107.82	110.60
4	K	61	VAL	N-CA-C	-5.56	95.98	111.00
23	5	120	ALA	CB-CA-C	-5.56	101.76	110.10
2	B	249	C	N3-C4-C5	-5.56	119.68	121.90
2	B	843	G	N9-C4-C5	-5.56	103.18	105.40
2	B	1062	G	P-O3'-C3'	5.56	126.37	119.70
2	B	746	U	C2-N3-C4	-5.56	123.66	127.00
2	B	1403	A	C4-C5-C6	5.56	119.78	117.00
2	B	1524	G	N1-C2-N3	-5.56	120.56	123.90
2	B	2002	G	C4-C5-C6	5.56	122.14	118.80
2	B	2268	A	C1'-O4'-C4'	-5.56	105.45	109.90
2	B	2444	G	P-O3'-C3'	-5.56	113.03	119.70
1	A	44	G	N3-C4-N9	5.56	129.34	126.00
2	B	347	A	OP1-P-OP2	-5.56	111.26	119.60
2	B	349	U	C5'-C4'-C3'	-5.56	107.11	116.00
2	B	421	C	C5-C4-N4	-5.56	116.31	120.20
2	B	447	A	C2-N3-C4	-5.56	107.82	110.60
2	B	660	C	C6-N1-C2	-5.56	118.08	120.30
2	B	1030	C	P-O3'-C3'	-5.56	113.03	119.70
2	B	1382	G	C6-C5-N7	-5.56	127.06	130.40
2	B	1450	G	O4'-C1'-N9	5.56	112.65	108.20
2	B	1477	A	C5-N7-C8	5.56	106.68	103.90
2	B	1781	U	N3-C4-C5	-5.56	111.27	114.60
2	B	2501	C	O4'-C4'-C3'	-5.56	98.44	104.00
2	B	289	G	N1-C6-O6	-5.56	116.57	119.90
2	B	1334	G	O4'-C1'-N9	5.56	112.64	108.20
2	B	2536	G	C2-N3-C4	-5.56	109.12	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	126	A	N1-C2-N3	5.55	132.08	129.30
2	B	189	G	C5-N7-C8	5.55	107.08	104.30
2	B	401	A	P-O5'-C5'	-5.55	112.01	120.90
2	B	577	G	C5-C6-O6	-5.55	125.27	128.60
2	B	950	G	C5-C6-N1	5.55	114.28	111.50
2	B	1063	G	C5-C6-O6	-5.55	125.27	128.60
2	B	1346	G	C2-N3-C4	-5.55	109.12	111.90
2	B	1453	A	C4-C5-C6	5.55	119.78	117.00
2	B	2024	G	C8-N9-C4	5.55	108.62	106.40
2	B	2031	A	N9-C4-C5	-5.55	103.58	105.80
2	B	2575	C	C4-C5-C6	-5.55	114.62	117.40
2	B	17	G	C8-N9-C4	-5.55	104.18	106.40
2	B	618	G	C5'-C4'-C3'	-5.55	107.11	116.00
2	B	1848	A	C2-N3-C4	5.55	113.38	110.60
2	B	2426	A	N7-C8-N9	-5.55	111.02	113.80
2	B	2521	C	C5-C4-N4	-5.55	116.31	120.20
1	A	33	G	N3-C4-C5	-5.55	125.82	128.60
2	B	548	G	O4'-C1'-N9	5.55	112.64	108.20
2	B	612	G	N3-C2-N2	5.55	123.79	119.90
2	B	993	G	N1-C6-O6	5.55	123.23	119.90
2	B	1029	A	C5'-C4'-C3'	5.55	124.88	116.00
2	B	1588	G	C5-N7-C8	-5.55	101.52	104.30
2	B	2533	U	N1-C2-N3	5.55	118.23	114.90
2	B	2560	A	C8-N9-C4	-5.55	103.58	105.80
2	B	2869	G	N9-C1'-C2'	-5.55	105.89	112.00
2	B	2899	A	O4'-C4'-C3'	-5.55	98.45	104.00
1	A	73	A	N7-C8-N9	-5.55	111.03	113.80
2	B	333	G	C5-N7-C8	5.55	107.08	104.30
2	B	399	U	N1-C2-N3	5.55	118.23	114.90
2	B	618	G	C2-N3-C4	-5.55	109.12	111.90
2	B	622	G	C5-C6-N1	-5.55	108.72	111.50
2	B	1180	U	C2-N1-C1'	-5.55	111.04	117.70
2	B	1209	U	C5-C4-O4	-5.55	122.57	125.90
2	B	1361	G	N3-C2-N2	5.55	123.78	119.90
2	B	2444	G	C4-C5-N7	5.55	113.02	110.80
28	F	101	ARG	NE-CZ-NH1	-5.55	117.53	120.30
29	G	57	TYR	CG-CD2-CE2	-5.55	116.86	121.30
2	B	626	A	C4'-C3'-C2'	-5.55	97.05	102.60
2	B	957	C	O5'-P-OP1	-5.55	100.71	105.70
2	B	981	A	N1-C6-N6	5.55	121.93	118.60
2	B	1587	G	N1-C6-O6	5.55	123.23	119.90
2	B	1756	G	C4-C5-C6	5.55	122.13	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2466	C	C5-C6-N1	-5.55	118.23	121.00
2	B	2519	U	O4'-C1'-N1	5.55	112.64	108.20
2	B	162	U	N3-C2-O2	-5.55	118.32	122.20
2	B	479	A	O4'-C1'-C2'	-5.55	100.25	105.80
2	B	506	G	N7-C8-N9	-5.55	110.33	113.10
2	B	1368	G	O4'-C1'-N9	5.55	112.64	108.20
2	B	1666	G	C6-N1-C2	5.55	128.43	125.10
2	B	1984	G	P-O3'-C3'	-5.55	113.04	119.70
2	B	2518	A	P-O3'-C3'	-5.55	113.05	119.70
2	B	2590	A	N7-C8-N9	-5.55	111.03	113.80
2	B	2662	A	C5'-C4'-O4'	5.55	115.76	109.10
2	B	2764	A	O5'-P-OP2	5.55	117.36	110.70
2	B	64	A	OP1-P-OP2	-5.54	111.28	119.60
2	B	132	G	N7-C8-N9	-5.54	110.33	113.10
2	B	271	G	C4-C5-N7	-5.54	108.58	110.80
2	B	370	G	C5-N7-C8	5.54	107.07	104.30
2	B	1501	G	N3-C2-N2	5.54	123.78	119.90
2	B	1581	G	C6-C5-N7	-5.54	127.07	130.40
2	B	2231	U	N1-C2-N3	-5.54	111.57	114.90
2	B	2369	A	C8-N9-C4	5.54	108.02	105.80
2	B	2565	A	N1-C2-N3	5.54	132.07	129.30
2	B	2590	A	C1'-O4'-C4'	-5.54	105.46	109.90
2	B	2722	G	C8-N9-C4	-5.54	104.18	106.40
25	7	30	HIS	CA-CB-CG	-5.54	104.17	113.60
2	B	915	C	C6-N1-C2	-5.54	118.08	120.30
2	B	965	C	C5'-C4'-C3'	-5.54	107.13	116.00
2	B	1182	G	N9-C1'-C2'	-5.54	105.90	112.00
2	B	1304	A	N1-C2-N3	-5.54	126.53	129.30
2	B	1514	G	N1-C2-N3	-5.54	120.57	123.90
2	B	1886	U	C5'-C4'-O4'	5.54	115.75	109.10
2	B	2097	A	C6-C5-N7	-5.54	128.42	132.30
2	B	2240	U	C5-C4-O4	-5.54	122.57	125.90
2	B	2261	C	C2-N3-C4	-5.54	117.13	119.90
2	B	2378	A	N9-C1'-C2'	-5.54	105.90	112.00
2	B	2821	A	C2-N3-C4	5.54	113.37	110.60
13	S	41	LYS	N-CA-CB	5.54	120.58	110.60
19	X	247	ARG	NE-CZ-NH2	-5.54	117.53	120.30
1	A	107	G	C4-C5-C6	5.54	122.12	118.80
1	A	114	C	N3-C4-C5	-5.54	119.68	121.90
2	B	118	A	N7-C8-N9	-5.54	111.03	113.80
2	B	283	G	P-O3'-C3'	-5.54	113.05	119.70
2	B	881	G	C5-N7-C8	-5.54	101.53	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1001	A	C5'-C4'-C3'	5.54	124.87	116.00
2	B	1100	C	N3-C4-C5	5.54	124.12	121.90
2	B	1268	A	O4'-C1'-N9	5.54	112.63	108.20
2	B	2144	G	C6-C5-N7	-5.54	127.08	130.40
2	B	2227	A	C4-C5-N7	-5.54	107.93	110.70
2	B	2523	G	C1'-O4'-C4'	5.54	114.33	109.90
14	D	151	THR	N-CA-CB	5.54	120.83	110.30
2	B	1287	A	O4'-C4'-C3'	-5.54	98.46	104.00
2	B	1648	U	P-O3'-C3'	-5.54	113.05	119.70
2	B	2400	G	C4'-C3'-C2'	5.54	108.14	102.60
2	B	750	A	C6-C5-N7	-5.54	128.42	132.30
2	B	908	C	P-O5'-C5'	5.54	129.76	120.90
2	B	1039	A	C5-C6-N1	-5.54	114.93	117.70
2	B	1197	G	C8-N9-C4	5.54	108.61	106.40
2	B	1418	G	C3'-C2'-C1'	-5.54	97.07	101.50
2	B	1419	A	C4-C5-N7	5.54	113.47	110.70
2	B	1437	C	C4-C5-C6	-5.54	114.63	117.40
2	B	2118	U	C6-N1-C2	-5.54	117.68	121.00
2	B	2529	G	N3-C2-N2	5.54	123.78	119.90
2	B	2628	C	P-O3'-C3'	5.54	126.35	119.70
2	B	2781	A	C8-N9-C4	-5.54	103.58	105.80
9	O	11	ALA	CB-CA-C	-5.54	101.79	110.10
14	D	64	GLU	O-C-N	-5.54	113.84	122.70
2	B	166	U	N1-C2-N3	-5.54	111.58	114.90
2	B	972	A	N1-C6-N6	5.54	121.92	118.60
2	B	1179	G	C5-C6-O6	5.54	131.92	128.60
2	B	2532	G	C8-N9-C1'	5.54	134.20	127.00
1	A	56	G	O4'-C1'-N9	5.54	112.63	108.20
2	B	405	U	N3-C2-O2	-5.54	118.33	122.20
2	B	411	G	C3'-C2'-C1'	5.54	105.93	101.50
2	B	555	G	N3-C4-N9	-5.54	122.68	126.00
2	B	811	U	P-O5'-C5'	5.54	129.76	120.90
2	B	859	G	C5-C6-N1	-5.54	108.73	111.50
2	B	1552	A	P-O5'-C5'	5.54	129.76	120.90
2	B	2211	A	P-O5'-C5'	5.54	129.76	120.90
2	B	2352	A	N9-C1'-C2'	-5.54	105.91	112.00
2	B	2440	C	N1-C2-O2	5.54	122.22	118.90
2	B	2531	A	N1-C2-N3	5.54	132.07	129.30
2	B	2578	G	C5'-C4'-O4'	5.54	115.74	109.10
2	B	2632	A	C5'-C4'-O4'	5.54	115.74	109.10
2	B	2691	C	O4'-C4'-C3'	-5.54	98.46	104.00
2	B	2901	C	N1-C1'-C2'	-5.54	105.91	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
12	R	95	ASP	CB-CG-OD1	5.54	123.28	118.30
2	B	618	G	C4-C5-N7	5.53	113.01	110.80
2	B	737	C	C1'-O4'-C4'	5.53	114.33	109.90
2	B	1033	U	N3-C2-O2	-5.53	118.33	122.20
2	B	1162	G	O4'-C1'-N9	5.53	112.63	108.20
2	B	1231	U	N1-C2-O2	5.53	126.67	122.80
2	B	1671	U	C2-N3-C4	-5.53	123.68	127.00
2	B	2658	C	C1'-O4'-C4'	5.53	114.33	109.90
2	B	2731	G	N1-C2-N2	-5.53	111.22	116.20
2	B	2784	U	O4'-C1'-N1	5.53	112.63	108.20
2	B	1379	U	C6-N1-C2	-5.53	117.68	121.00
2	B	1695	G	N1-C6-O6	5.53	123.22	119.90
2	B	2294	G	C2-N3-C4	5.53	114.67	111.90
2	B	2848	G	N3-C2-N2	5.53	123.77	119.90
2	B	425	G	N3-C2-N2	5.53	123.77	119.90
2	B	543	G	N1-C2-N2	5.53	121.18	116.20
2	B	600	G	C6-N1-C2	5.53	128.42	125.10
2	B	755	U	O4'-C1'-N1	5.53	112.62	108.20
2	B	892	A	C6-N1-C2	5.53	121.92	118.60
2	B	900	A	C3'-C2'-C1'	-5.53	97.08	101.50
2	B	1135	C	C5-C6-N1	5.53	123.77	121.00
2	B	1149	G	C8-N9-C1'	5.53	134.19	127.00
2	B	1524	G	C5'-C4'-O4'	5.53	115.74	109.10
2	B	1963	U	C6-N1-C2	5.53	124.32	121.00
2	B	2074	U	N1-C2-N3	-5.53	111.58	114.90
2	B	2148	G	C4-C5-N7	-5.53	108.59	110.80
2	B	2379	G	C8-N9-C4	-5.53	104.19	106.40
27	C	88	ALA	C-N-CA	5.53	135.53	121.70
2	B	89	A	C5'-C4'-C3'	-5.53	107.15	116.00
2	B	793	A	C4-C5-C6	5.53	119.77	117.00
2	B	1550	C	C5-C4-N4	-5.53	116.33	120.20
28	F	162	ASP	CB-CG-OD1	5.53	123.28	118.30
2	B	279	A	O4'-C1'-N9	5.53	112.62	108.20
2	B	706	A	N1-C2-N3	5.53	132.06	129.30
2	B	1045	C	N3-C4-N4	5.53	121.87	118.00
2	B	1170	C	C5-C4-N4	-5.53	116.33	120.20
2	B	2001	C	C6-N1-C2	5.53	122.51	120.30
2	B	2012	G	C5-C6-O6	-5.53	125.28	128.60
2	B	2066	C	C2-N3-C4	5.53	122.66	119.90
2	B	2152	G	C1'-O4'-C4'	-5.53	105.48	109.90
2	B	2401	U	N1-C2-N3	-5.53	111.58	114.90
2	B	2772	C	O4'-C1'-N1	5.53	112.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	206	U	C5'-C4'-C3'	5.53	124.84	116.00
2	B	688	U	N1-C2-O2	5.53	126.67	122.80
2	B	1378	A	C5-C6-N1	-5.53	114.94	117.70
2	B	1404	C	N1-C2-N3	-5.53	115.33	119.20
2	B	1428	C	C2-N3-C4	5.53	122.66	119.90
2	B	1660	G	C5-C6-N1	-5.53	108.74	111.50
2	B	2086	U	N1-C2-O2	5.53	126.67	122.80
2	B	2389	G	C5-C6-N1	-5.53	108.74	111.50
2	B	2792	A	N3-C4-N9	-5.53	122.98	127.40
2	B	2846	G	O4'-C1'-N9	5.53	112.62	108.20
10	P	81	ASP	N-CA-CB	5.53	120.55	110.60
2	B	360	U	O4'-C1'-N1	5.52	112.62	108.20
2	B	367	G	N1-C2-N3	-5.52	120.59	123.90
2	B	1667	G	C6-N1-C2	-5.52	121.79	125.10
2	B	1806	C	P-O5'-C5'	5.52	129.74	120.90
2	B	2783	U	OP1-P-OP2	-5.52	111.31	119.60
14	D	149	ASN	C-N-CA	5.52	135.51	121.70
1	A	13	G	C2'-C3'-O3'	5.52	122.54	113.70
2	B	455	C	N3-C4-N4	5.52	121.86	118.00
2	B	824	U	N1-C2-N3	-5.52	111.59	114.90
2	B	1062	G	C4-C5-C6	5.52	122.11	118.80
2	B	1613	G	C4-C5-N7	-5.52	108.59	110.80
2	B	1772	A	P-O3'-C3'	5.52	126.33	119.70
2	B	2433	A	C2-N3-C4	5.52	113.36	110.60
2	B	2455	G	C3'-C2'-C1'	-5.52	97.08	101.50
1	A	84	G	C6-N1-C2	-5.52	121.79	125.10
2	B	81	G	C6-N1-C2	-5.52	121.79	125.10
2	B	179	C	C5'-C4'-O4'	5.52	115.73	109.10
2	B	58	G	C8-N9-C4	-5.52	104.19	106.40
2	B	1276	A	C2-N3-C4	-5.52	107.84	110.60
2	B	1319	C	N1-C2-N3	-5.52	115.34	119.20
2	B	1416	G	O3'-P-O5'	-5.52	93.51	104.00
2	B	1473	G	N3-C4-C5	5.52	131.36	128.60
2	B	1727	C	N3-C2-O2	-5.52	118.04	121.90
2	B	2240	U	N3-C4-O4	5.52	123.26	119.40
2	B	2427	C	C5-C6-N1	-5.52	118.24	121.00
2	B	2786	U	C5-C6-N1	-5.52	119.94	122.70
1	A	106	G	N3-C4-C5	-5.52	125.84	128.60
2	B	201	C	N3-C4-N4	5.52	121.86	118.00
2	B	270	A	O3'-P-O5'	-5.52	93.52	104.00
2	B	602	A	N7-C8-N9	-5.52	111.04	113.80
2	B	1332	G	OP1-P-OP2	-5.52	111.32	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1597	A	N9-C4-C5	5.52	108.01	105.80
2	B	2620	C	N3-C4-C5	-5.52	119.69	121.90
1	A	86	G	C2-N3-C4	5.52	114.66	111.90
2	B	188	G	P-O5'-C5'	-5.52	112.08	120.90
2	B	435	C	C5'-C4'-C3'	5.52	124.83	116.00
2	B	753	A	P-O5'-C5'	5.52	129.72	120.90
2	B	789	A	N1-C2-N3	-5.52	126.54	129.30
2	B	912	C	C5-C4-N4	-5.52	116.34	120.20
2	B	1673	G	C6-C5-N7	-5.52	127.09	130.40
2	B	1963	U	C2-N3-C4	-5.52	123.69	127.00
2	B	2446	G	N3-C4-C5	-5.52	125.84	128.60
2	B	2788	C	P-O5'-C5'	-5.52	112.08	120.90
2	B	2817	U	O4'-C1'-C2'	5.52	112.56	107.60
2	B	2851	A	OP1-P-OP2	-5.52	111.33	119.60
2	B	444	C	C3'-C2'-C1'	-5.51	97.09	101.50
2	B	473	G	P-O3'-C3'	5.51	126.32	119.70
2	B	1396	U	P-O3'-C3'	-5.51	113.08	119.70
2	B	2143	C	P-O5'-C5'	5.51	129.72	120.90
15	T	83	ALA	CB-CA-C	-5.51	101.83	110.10
28	F	94	ARG	NH1-CZ-NH2	-5.51	113.33	119.40
2	B	326	G	N3-C2-N2	5.51	123.76	119.90
2	B	1558	C	C6-N1-C1'	-5.51	114.18	120.80
2	B	2716	C	C5-C6-N1	-5.51	118.24	121.00
2	B	994	C	C6-N1-C2	-5.51	118.10	120.30
2	B	1592	C	C2-N3-C4	5.51	122.66	119.90
2	B	1670	C	C4'-C3'-C2'	5.51	108.11	102.60
2	B	1696	G	C5-N7-C8	5.51	107.06	104.30
2	B	1697	G	O4'-C1'-N9	5.51	112.61	108.20
2	B	2419	U	C5'-C4'-O4'	-5.51	102.49	109.10
24	6	40	ALA	CB-CA-C	-5.51	101.83	110.10
27	C	170	TYR	CG-CD1-CE1	-5.51	116.89	121.30
2	B	237	C	C5-C4-N4	-5.51	116.34	120.20
2	B	314	C	C6-N1-C1'	5.51	127.41	120.80
2	B	365	U	P-O5'-C5'	-5.51	112.08	120.90
2	B	494	G	C6-C5-N7	-5.51	127.09	130.40
2	B	589	U	N3-C4-C5	-5.51	111.30	114.60
2	B	1117	C	N3-C4-N4	5.51	121.86	118.00
2	B	1370	C	C5'-C4'-C3'	5.51	124.81	116.00
2	B	1417	C	N3-C4-N4	5.51	121.86	118.00
2	B	1694	C	N1-C2-O2	5.51	122.21	118.90
2	B	1955	U	O4'-C1'-N1	5.51	112.61	108.20
2	B	2856	A	C8-N9-C4	-5.51	103.60	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	X	346	ASP	N-CA-CB	5.51	120.52	110.60
1	A	94	A	N7-C8-N9	-5.51	111.05	113.80
2	B	738	G	C5-C6-N1	-5.51	108.75	111.50
2	B	789	A	O4'-C4'-C3'	-5.51	98.49	104.00
2	B	2053	G	N1-C2-N2	-5.51	111.24	116.20
2	B	2096	C	N3-C4-C5	-5.51	119.70	121.90
2	B	2383	G	C4-C5-N7	-5.51	108.60	110.80
2	B	2732	G	O4'-C1'-C2'	-5.51	100.29	105.80
2	B	199	A	N9-C4-C5	5.51	108.00	105.80
2	B	435	C	N3-C4-C5	-5.51	119.70	121.90
2	B	916	G	C4-C5-C6	5.51	122.10	118.80
2	B	982	C	OP1-P-OP2	-5.51	111.34	119.60
2	B	1161	C	N1-C2-O2	5.51	122.20	118.90
2	B	1400	U	C4'-C3'-C2'	-5.51	97.09	102.60
2	B	1422	G	C5-C6-N1	-5.51	108.75	111.50
2	B	2216	G	N3-C4-N9	5.51	129.30	126.00
2	B	2253	G	O4'-C4'-C3'	-5.51	98.49	104.00
2	B	2412	A	C5-N7-C8	5.51	106.65	103.90
2	B	2428	G	N9-C4-C5	5.51	107.60	105.40
2	B	2432	A	O4'-C4'-C3'	-5.51	98.49	104.00
2	B	2657	A	C5-C6-N6	-5.51	119.30	123.70
19	X	294	ALA	N-CA-CB	5.51	117.81	110.10
2	B	88	G	O5'-P-OP2	5.50	117.31	110.70
2	B	1700	A	C1'-O4'-C4'	5.50	114.30	109.90
2	B	1784	A	C5-C6-N1	-5.50	114.95	117.70
2	B	1937	A	C5-C6-N6	-5.50	119.30	123.70
2	B	2268	A	O4'-C1'-N9	5.50	112.60	108.20
19	X	457	PHE	CB-CG-CD2	-5.50	116.95	120.80
1	A	52	A	N9-C4-C5	5.50	108.00	105.80
2	B	269	C	N1-C2-O2	5.50	122.20	118.90
2	B	309	A	O3'-P-O5'	5.50	114.45	104.00
2	B	771	G	C1'-O4'-C4'	-5.50	105.50	109.90
2	B	830	G	N3-C4-N9	-5.50	122.70	126.00
2	B	1152	C	O4'-C1'-C2'	5.50	112.55	107.60
2	B	1211	C	C5-C4-N4	-5.50	116.35	120.20
2	B	1463	C	O4'-C4'-C3'	-5.50	98.50	104.00
2	B	1483	G	C4-C5-C6	5.50	122.10	118.80
2	B	1607	C	C5-C4-N4	5.50	124.05	120.20
2	B	1903	G	C2-N3-C4	-5.50	109.15	111.90
2	B	1982	U	N3-C2-O2	5.50	126.05	122.20
2	B	2405	G	O3'-P-O5'	-5.50	93.54	104.00
2	B	2457	U	N3-C4-O4	-5.50	115.55	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	34	ILE	CA-CB-CG1	-5.50	100.55	111.00
2	B	180	G	N1-C2-N3	-5.50	120.60	123.90
2	B	220	G	C5-C6-N1	-5.50	108.75	111.50
2	B	309	A	C2-N3-C4	5.50	113.35	110.60
2	B	524	G	C5-C6-O6	-5.50	125.30	128.60
2	B	773	U	C5-C4-O4	-5.50	122.60	125.90
2	B	1590	A	C2-N3-C4	-5.50	107.85	110.60
2	B	1797	G	O4'-C1'-N9	5.50	112.60	108.20
2	B	2262	U	O4'-C1'-N1	5.50	112.60	108.20
2	B	2599	G	N9-C4-C5	5.50	107.60	105.40
1	A	96	G	C4-C5-C6	5.50	122.10	118.80
2	B	37	C	C2-N3-C4	-5.50	117.15	119.90
2	B	172	A	N3-C4-C5	-5.50	122.95	126.80
2	B	634	C	C2-N3-C4	5.50	122.65	119.90
2	B	991	C	N1-C2-O2	-5.50	115.60	118.90
2	B	1580	A	C4-C5-N7	-5.50	107.95	110.70
2	B	1835	G	N1-C2-N2	-5.50	111.25	116.20
2	B	2259	U	O4'-C1'-N1	5.50	112.60	108.20
2	B	2845	U	C4-C5-C6	-5.50	116.40	119.70
2	B	686	U	N1-C2-O2	5.50	126.65	122.80
2	B	933	A	C5-C6-N1	-5.50	114.95	117.70
2	B	1261	C	N1-C2-O2	5.50	122.20	118.90
2	B	2610	C	OP1-P-OP2	-5.50	111.35	119.60
2	B	2705	A	OP1-P-OP2	-5.50	111.35	119.60
2	B	2822	G	N3-C4-C5	-5.50	125.85	128.60
12	R	21	ARG	N-CA-C	-5.50	96.15	111.00
2	B	606	U	O4'-C4'-C3'	-5.50	98.50	104.00
2	B	757	G	N3-C4-N9	5.50	129.30	126.00
2	B	962	G	N1-C6-O6	5.50	123.20	119.90
2	B	1213	A	N1-C2-N3	5.50	132.05	129.30
2	B	1373	A	N3-C4-C5	-5.50	122.95	126.80
2	B	1439	A	P-O3'-C3'	-5.50	113.10	119.70
2	B	1719	G	N1-C6-O6	5.50	123.20	119.90
2	B	1752	C	N1-C2-O2	5.50	122.20	118.90
2	B	1854	A	C5-N7-C8	5.50	106.65	103.90
2	B	1938	A	O4'-C1'-N9	5.50	112.60	108.20
2	B	2442	C	C6-N1-C1'	5.50	127.40	120.80
2	B	2628	C	O4'-C1'-N1	5.50	112.60	108.20
2	B	25	U	C2-N3-C4	-5.50	123.70	127.00
2	B	525	U	O4'-C1'-N1	5.50	112.60	108.20
2	B	727	A	C5-C6-N6	-5.50	119.30	123.70
2	B	1368	G	C5-N7-C8	5.50	107.05	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1896	G	N1-C6-O6	5.50	123.20	119.90
2	B	2792	A	C4-C5-C6	5.50	119.75	117.00
20	E	113	VAL	CA-CB-CG1	5.50	119.14	110.90
2	B	34	U	C6-N1-C2	-5.49	117.70	121.00
2	B	428	A	O4'-C1'-C2'	5.49	112.54	107.60
2	B	493	G	P-O3'-C3'	-5.49	113.11	119.70
2	B	796	C	N3-C4-N4	5.49	121.85	118.00
2	B	903	C	C6-N1-C2	-5.49	118.10	120.30
2	B	981	A	O3'-P-O5'	-5.49	93.56	104.00
2	B	1122	G	N9-C1'-C2'	-5.49	105.96	112.00
2	B	1145	C	N1-C2-O2	-5.49	115.60	118.90
2	B	1259	G	C5-C6-N1	5.49	114.25	111.50
2	B	1676	A	C5-C6-N6	-5.49	119.30	123.70
2	B	1676	A	P-O5'-C5'	-5.49	112.11	120.90
2	B	2663	G	C4'-C3'-C2'	-5.49	97.11	102.60
2	B	2728	U	C5-C6-N1	-5.49	119.95	122.70
4	K	7	MET	CG-SD-CE	-5.49	91.41	100.20
2	B	39	G	C4-C5-N7	-5.49	108.60	110.80
2	B	147	C	P-O3'-C3'	-5.49	113.11	119.70
2	B	170	U	C5-C6-N1	-5.49	119.95	122.70
2	B	345	A	C5-C6-N1	-5.49	114.95	117.70
2	B	510	C	C5'-C4'-O4'	5.49	115.69	109.10
2	B	997	G	N9-C4-C5	5.49	107.60	105.40
2	B	2082	A	O5'-P-OP1	-5.49	100.76	105.70
2	B	2439	A	N7-C8-N9	-5.49	111.05	113.80
2	B	57	C	C4-C5-C6	-5.49	114.66	117.40
2	B	390	U	C5'-C4'-O4'	5.49	115.69	109.10
2	B	507	A	C2-N3-C4	5.49	113.34	110.60
2	B	559	G	C6-N1-C2	5.49	128.39	125.10
2	B	642	U	C1'-O4'-C4'	-5.49	105.51	109.90
2	B	744	U	N1-C2-O2	-5.49	118.96	122.80
2	B	937	C	C5'-C4'-O4'	5.49	115.69	109.10
2	B	1279	G	N1-C6-O6	5.49	123.19	119.90
2	B	1635	A	C5-C6-N6	-5.49	119.31	123.70
2	B	1743	G	P-O3'-C3'	-5.49	113.11	119.70
2	B	2258	C	C5-C4-N4	-5.49	116.36	120.20
2	B	2602	A	N1-C6-N6	5.49	121.89	118.60
2	B	2702	G	C5-C6-N1	-5.49	108.75	111.50
13	S	22	ASP	CB-CG-OD2	5.49	123.24	118.30
24	6	23	ALA	C-N-CA	5.49	135.42	121.70
24	6	35	ARG	NE-CZ-NH2	-5.49	117.55	120.30
29	G	82	PHE	C-N-CA	5.49	135.42	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	58	A	N7-C8-N9	5.49	116.54	113.80
2	B	91	A	P-O5'-C5'	-5.49	112.12	120.90
2	B	143	C	C5'-C4'-C3'	5.49	124.78	116.00
2	B	818	G	C6-C5-N7	-5.49	127.11	130.40
2	B	1002	G	N7-C8-N9	-5.49	110.36	113.10
2	B	1616	A	C5-C6-N6	-5.49	119.31	123.70
2	B	2396	G	C8-N9-C4	5.49	108.59	106.40
2	B	149	A	OP1-P-OP2	-5.49	111.37	119.60
2	B	1179	G	C6-C5-N7	-5.49	127.11	130.40
2	B	1699	G	N1-C2-N2	-5.49	111.26	116.20
2	B	2278	A	N1-C2-N3	5.49	132.04	129.30
2	B	2437	G	C5-N7-C8	5.49	107.04	104.30
2	B	309	A	C4-C5-C6	5.49	119.74	117.00
2	B	712	G	C4-C5-N7	-5.49	108.61	110.80
2	B	713	G	C3'-C2'-C1'	5.49	105.89	101.50
2	B	1603	A	C6-C5-N7	-5.49	128.46	132.30
2	B	1796	U	O4'-C4'-C3'	-5.49	98.52	104.00
2	B	2045	C	C5-C4-N4	-5.49	116.36	120.20
2	B	2278	A	C5-C6-N6	-5.49	119.31	123.70
3	0	10	ARG	NE-CZ-NH2	5.49	123.04	120.30
2	B	413	C	P-O3'-C3'	5.48	126.28	119.70
2	B	505	A	C2-N3-C4	-5.48	107.86	110.60
1	A	64	G	N1-C6-O6	5.48	123.19	119.90
2	B	76	C	C5-C6-N1	5.48	123.74	121.00
2	B	224	U	N3-C4-O4	5.48	123.24	119.40
2	B	239	C	C6-N1-C2	-5.48	118.11	120.30
2	B	894	U	C5-C4-O4	-5.48	122.61	125.90
2	B	1337	G	N3-C4-N9	5.48	129.29	126.00
2	B	1661	G	N3-C2-N2	5.48	123.74	119.90
2	B	2144	G	N1-C2-N3	-5.48	120.61	123.90
2	B	2471	A	C4-C5-N7	-5.48	107.96	110.70
2	B	256	A	N3-C4-N9	5.48	131.78	127.40
2	B	755	U	C5-C6-N1	-5.48	119.96	122.70
2	B	845	A	N9-C1'-C2'	-5.48	105.97	112.00
2	B	988	A	P-O5'-C5'	-5.48	112.13	120.90
2	B	1342	A	C5'-C4'-O4'	5.48	115.68	109.10
2	B	1351	C	O5'-C5'-C4'	-5.48	101.29	111.70
2	B	1838	C	C6-N1-C2	-5.48	118.11	120.30
2	B	1984	G	N3-C2-N2	5.48	123.74	119.90
2	B	2061	G	C6-N1-C2	-5.48	121.81	125.10
2	B	2465	C	N3-C4-N4	5.48	121.84	118.00
2	B	2593	U	C3'-C2'-C1'	5.48	105.88	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2643	G	N3-C2-N2	5.48	123.74	119.90
2	B	534	U	O3'-P-O5'	-5.48	93.59	104.00
2	B	664	G	C5-N7-C8	5.48	107.04	104.30
2	B	1398	C	N3-C4-C5	-5.48	119.71	121.90
2	B	1931	U	P-O3'-C3'	5.48	126.28	119.70
2	B	2564	A	N9-C4-C5	5.48	107.99	105.80
2	B	2635	A	N1-C6-N6	5.48	121.89	118.60
2	B	238	C	C5'-C4'-C3'	5.48	124.76	116.00
2	B	284	U	C3'-C2'-C1'	-5.48	97.12	101.50
2	B	310	A	N9-C4-C5	5.48	107.99	105.80
2	B	865	C	C6-N1-C1'	-5.48	114.23	120.80
2	B	946	C	P-O3'-C3'	5.48	126.27	119.70
2	B	1107	G	N3-C4-C5	5.48	131.34	128.60
2	B	2014	A	O4'-C1'-N9	5.48	112.58	108.20
2	B	2241	A	N7-C8-N9	-5.48	111.06	113.80
28	F	37	MET	N-CA-C	-5.48	96.21	111.00
2	B	134	G	C5'-C4'-C3'	-5.48	107.24	116.00
2	B	263	G	C3'-C2'-C1'	5.48	105.88	101.50
2	B	1403	A	N3-C4-N9	-5.48	123.02	127.40
2	B	1969	A	C4-C5-C6	5.48	119.74	117.00
2	B	1077	A	O4'-C4'-C3'	-5.47	98.53	104.00
2	B	1490	A	C4-C5-N7	-5.47	107.96	110.70
2	B	1839	G	C4'-C3'-C2'	-5.47	97.13	102.60
2	B	1936	A	C4-C5-C6	5.47	119.74	117.00
2	B	2209	G	O4'-C1'-N9	5.47	112.58	108.20
2	B	2432	A	N1-C2-N3	-5.47	126.56	129.30
2	B	2718	G	C5-C6-N1	-5.47	108.76	111.50
2	B	2	G	N3-C4-C5	5.47	131.34	128.60
2	B	458	G	O4'-C1'-N9	5.47	112.58	108.20
2	B	679	C	C6-N1-C1'	-5.47	114.23	120.80
2	B	756	A	N3-C4-N9	-5.47	123.02	127.40
2	B	796	C	P-O5'-C5'	5.47	129.66	120.90
2	B	930	G	N3-C2-N2	5.47	123.73	119.90
2	B	997	G	C5-C6-O6	-5.47	125.32	128.60
2	B	1203	U	C2-N1-C1'	-5.47	111.13	117.70
2	B	1284	A	O4'-C4'-C3'	-5.47	98.53	104.00
2	B	1712	U	P-O5'-C5'	-5.47	112.14	120.90
2	B	2033	A	C6-C5-N7	-5.47	128.47	132.30
2	B	2221	G	C2-N3-C4	5.47	114.64	111.90
2	B	2340	A	C5-C6-N6	-5.47	119.32	123.70
2	B	2433	A	C4-C5-C6	5.47	119.74	117.00
2	B	2547	A	C5-C6-N6	-5.47	119.32	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2637	U	C3'-C2'-C1'	5.47	105.88	101.50
2	B	2864	G	O4'-C1'-N9	5.47	112.58	108.20
1	A	13	G	C6-N1-C2	5.47	128.38	125.10
2	B	559	G	N3-C2-N2	5.47	123.73	119.90
2	B	1303	G	O5'-P-OP1	5.47	117.27	110.70
2	B	1325	U	N3-C2-O2	5.47	126.03	122.20
2	B	1427	A	O3'-P-O5'	5.47	114.39	104.00
2	B	2169	A	C4'-C3'-C2'	5.47	108.07	102.60
2	B	2414	G	N1-C2-N3	-5.47	120.62	123.90
2	B	2817	U	N1-C2-N3	5.47	118.18	114.90
2	B	35	G	P-O5'-C5'	5.47	129.65	120.90
2	B	497	A	O4'-C1'-N9	5.47	112.58	108.20
2	B	660	C	O4'-C1'-C2'	5.47	112.52	107.60
2	B	878	A	C4-C5-N7	-5.47	107.97	110.70
2	B	1207	C	C2-N1-C1'	5.47	124.82	118.80
2	B	1525	A	N3-C4-N9	-5.47	123.02	127.40
2	B	1852	U	P-O3'-C3'	-5.47	113.14	119.70
2	B	2061	G	C4-C5-N7	5.47	112.99	110.80
2	B	2369	A	C4-N9-C1'	-5.47	116.46	126.30
2	B	2433	A	N9-C4-C5	5.47	107.99	105.80
2	B	2438	U	N1-C2-O2	5.47	126.63	122.80
2	B	2450	A	O4'-C1'-N9	5.47	112.58	108.20
2	B	2471	A	C5-N7-C8	5.47	106.63	103.90
2	B	2531	A	C1'-O4'-C4'	-5.47	105.53	109.90
2	B	2569	G	P-O3'-C3'	-5.47	113.14	119.70
2	B	2889	C	N1-C2-N3	-5.47	115.37	119.20
12	R	2	TYR	CB-CG-CD1	-5.47	117.72	121.00
19	X	348	ALA	CA-C-N	5.47	129.23	117.20
28	F	95	MET	CG-SD-CE	-5.47	91.45	100.20
2	B	671	C	C5-C4-N4	-5.47	116.37	120.20
2	B	1176	U	C6-N1-C2	-5.47	117.72	121.00
2	B	1202	G	N1-C2-N2	5.47	121.12	116.20
2	B	1356	G	C6-C5-N7	-5.47	127.12	130.40
2	B	1361	G	C6-C5-N7	-5.47	127.12	130.40
2	B	1799	G	C4-C5-C6	5.47	122.08	118.80
2	B	2125	G	C4-N9-C1'	-5.47	119.39	126.50
2	B	106	C	N3-C2-O2	-5.47	118.07	121.90
2	B	436	C	O5'-C5'-C4'	-5.47	101.31	111.70
2	B	564	C	N3-C4-N4	5.47	121.83	118.00
2	B	601	C	C1'-O4'-C4'	-5.47	105.53	109.90
2	B	722	A	C4-C5-N7	-5.47	107.97	110.70
2	B	1178	C	C1'-O4'-C4'	5.47	114.27	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1499	C	C5-C6-N1	5.47	123.73	121.00
2	B	1803	A	O4'-C1'-N9	5.47	112.57	108.20
2	B	2605	U	C4'-C3'-C2'	5.47	108.07	102.60
2	B	2858	C	N3-C4-N4	5.47	121.83	118.00
4	K	118	LEU	N-CA-CB	5.47	121.33	110.40
2	B	160	A	C2'-C3'-O3'	5.46	122.44	113.70
2	B	1257	C	C4-C5-C6	5.46	120.13	117.40
2	B	1459	G	C5-C6-N1	-5.46	108.77	111.50
2	B	1494	A	O4'-C4'-C3'	-5.46	98.53	104.00
2	B	1773	A	P-O5'-C5'	-5.46	112.16	120.90
2	B	2799	A	C4'-C3'-C2'	-5.46	97.14	102.60
5	L	120	VAL	O-C-N	-5.46	113.96	122.70
13	S	57	ASN	N-CA-CB	5.46	120.44	110.60
31	I	17	ALA	N-CA-CB	5.46	117.75	110.10
2	B	370	G	N3-C4-C5	-5.46	125.87	128.60
2	B	398	C	C3'-C2'-C1'	-5.46	97.13	101.50
2	B	724	U	C2-N3-C4	5.46	130.28	127.00
2	B	1058	U	C2-N1-C1'	5.46	124.26	117.70
2	B	1666	G	O4'-C4'-C3'	-5.46	98.54	104.00
2	B	2300	C	C2-N3-C4	-5.46	117.17	119.90
2	B	2586	U	C1'-O4'-C4'	-5.46	105.53	109.90
2	B	265	A	C3'-C2'-C1'	-5.46	97.13	101.50
2	B	346	A	C5-C6-N1	-5.46	114.97	117.70
2	B	392	U	C1'-O4'-C4'	-5.46	105.53	109.90
2	B	659	G	O4'-C1'-N9	5.46	112.57	108.20
2	B	823	C	C2'-C3'-O3'	5.46	122.44	113.70
2	B	940	G	N1-C6-O6	5.46	123.18	119.90
2	B	1048	A	C5-C6-N6	-5.46	119.33	123.70
2	B	1284	A	C6-C5-N7	-5.46	128.48	132.30
2	B	1320	C	C5'-C4'-O4'	-5.46	102.55	109.10
2	B	1408	G	O4'-C1'-N9	5.46	112.57	108.20
2	B	1494	A	N7-C8-N9	5.46	116.53	113.80
2	B	1511	G	C8-N9-C4	5.46	108.58	106.40
2	B	2077	A	C4-C5-N7	-5.46	107.97	110.70
2	B	2142	A	N1-C6-N6	5.46	121.88	118.60
2	B	2213	U	O4'-C4'-C3'	-5.46	98.54	104.00
2	B	2500	U	C5-C4-O4	-5.46	122.62	125.90
23	5	161	VAL	CA-CB-CG1	5.46	119.09	110.90
2	B	1798	U	C4'-C3'-C2'	5.46	108.06	102.60
2	B	2282	G	P-O5'-C5'	5.46	129.64	120.90
2	B	2410	G	P-O5'-C5'	-5.46	112.16	120.90
2	B	2826	A	C1'-O4'-C4'	5.46	114.27	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	25	U	P-O5'-C5'	5.46	129.63	120.90
2	B	29	U	C4'-C3'-C2'	-5.46	97.14	102.60
2	B	713	G	C5'-C4'-O4'	5.46	115.65	109.10
2	B	1138	G	N1-C6-O6	5.46	123.17	119.90
2	B	1451	C	C5'-C4'-O4'	5.46	115.65	109.10
2	B	1952	A	C6-C5-N7	-5.46	128.48	132.30
2	B	2827	C	C5-C4-N4	-5.46	116.38	120.20
1	A	33	G	C6-C5-N7	-5.46	127.13	130.40
2	B	4	U	N1-C2-N3	-5.46	111.63	114.90
2	B	46	G	N3-C4-C5	-5.46	125.87	128.60
2	B	458	G	C5-N7-C8	5.46	107.03	104.30
2	B	1000	A	C2-N3-C4	-5.46	107.87	110.60
2	B	1798	U	C6-N1-C1'	5.46	128.84	121.20
2	B	1949	G	O4'-C1'-N9	5.46	112.56	108.20
2	B	2435	A	N7-C8-N9	5.46	116.53	113.80
2	B	2786	U	C2-N1-C1'	-5.46	111.15	117.70
11	Q	34	ALA	N-CA-CB	5.46	117.74	110.10
11	Q	93	ILE	O-C-N	-5.46	113.97	122.70
2	B	1541	C	C4-C5-C6	5.46	120.13	117.40
2	B	2284	A	C4-C5-N7	-5.46	107.97	110.70
2	B	2401	U	C2-N3-C4	5.46	130.27	127.00
19	X	323	TRP	CB-CG-CD1	-5.46	119.91	127.00
1	A	94	A	C8-N9-C4	5.45	107.98	105.80
2	B	560	C	OP1-P-OP2	-5.45	111.42	119.60
2	B	799	G	N1-C6-O6	5.45	123.17	119.90
2	B	911	A	C5-C6-N1	-5.45	114.97	117.70
2	B	962	G	C4'-C3'-C2'	-5.45	97.15	102.60
2	B	1436	G	C6-N1-C2	5.45	128.37	125.10
2	B	1528	A	C3'-C2'-C1'	-5.45	97.14	101.50
2	B	1663	G	N3-C2-N2	5.45	123.72	119.90
2	B	1948	G	C6-N1-C2	5.45	128.37	125.10
2	B	2037	A	C8-N9-C4	-5.45	103.62	105.80
2	B	2485	G	N9-C1'-C2'	-5.45	106.00	112.00
2	B	2632	A	O5'-C5'-C4'	-5.45	101.34	111.70
2	B	2753	A	C5'-C4'-C3'	5.45	124.72	116.00
27	C	263	ASP	CB-CG-OD2	-5.45	113.39	118.30
2	B	426	C	C4'-C3'-C2'	-5.45	97.15	102.60
2	B	863	A	P-O3'-C3'	5.45	126.24	119.70
2	B	1302	A	N1-C6-N6	5.45	121.87	118.60
2	B	2414	G	O4'-C1'-N9	5.45	112.56	108.20
2	B	2638	G	C6-C5-N7	-5.45	127.13	130.40
15	T	63	VAL	CG1-CB-CG2	5.45	119.62	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	H	25	TYR	N-CA-CB	-5.45	100.79	110.60
2	B	431	U	O5'-C5'-C4'	-5.45	101.35	111.70
2	B	637	A	C5'-C4'-C3'	-5.45	107.28	116.00
2	B	658	U	C3'-C2'-C1'	5.45	105.86	101.50
2	B	728	G	N1-C2-N2	-5.45	111.29	116.20
2	B	793	A	P-O5'-C5'	-5.45	112.18	120.90
2	B	1038	G	C4-N9-C1'	-5.45	119.42	126.50
2	B	1269	A	C2-N3-C4	-5.45	107.88	110.60
2	B	1288	G	N9-C4-C5	-5.45	103.22	105.40
2	B	1430	G	P-O3'-C3'	5.45	126.24	119.70
2	B	2268	A	C5'-C4'-C3'	-5.45	107.28	116.00
2	B	2448	A	C4'-C3'-C2'	5.45	108.05	102.60
2	B	1448	G	C1'-O4'-C4'	-5.45	105.54	109.90
2	B	1597	A	O5'-C5'-C4'	-5.45	101.35	111.70
2	B	1666	G	C4-N9-C1'	-5.45	119.42	126.50
2	B	1980	G	N1-C2-N2	-5.45	111.30	116.20
2	B	2352	A	N7-C8-N9	5.45	116.53	113.80
2	B	2526	G	P-O5'-C5'	-5.45	112.18	120.90
2	B	2711	A	C5'-C4'-O4'	-5.45	102.56	109.10
2	B	2781	A	P-O3'-C3'	-5.45	113.16	119.70
2	B	332	A	O4'-C1'-N9	5.45	112.56	108.20
2	B	763	G	C5-C6-O6	-5.45	125.33	128.60
2	B	1284	A	C4-C5-C6	5.45	119.72	117.00
2	B	1611	C	O5'-C5'-C4'	5.45	122.05	111.70
2	B	1790	C	N3-C2-O2	-5.45	118.09	121.90
2	B	2412	A	N1-C6-N6	5.45	121.87	118.60
28	F	176	PHE	CB-CG-CD2	-5.45	116.99	120.80
2	B	340	A	C4'-C3'-C2'	-5.45	97.15	102.60
2	B	371	A	P-O5'-C5'	-5.45	112.19	120.90
2	B	381	G	N3-C4-N9	-5.45	122.73	126.00
2	B	386	G	P-O5'-C5'	-5.45	112.19	120.90
2	B	737	C	C2-N3-C4	-5.45	117.18	119.90
2	B	854	C	P-O3'-C3'	-5.45	113.17	119.70
2	B	1071	G	C8-N9-C4	-5.45	104.22	106.40
2	B	1103	A	N1-C2-N3	-5.45	126.58	129.30
2	B	1727	C	C5-C4-N4	-5.45	116.39	120.20
2	B	2341	G	O4'-C4'-C3'	-5.45	98.56	104.00
2	B	2718	G	N3-C4-N9	-5.45	122.73	126.00
2	B	2791	G	N7-C8-N9	5.45	115.82	113.10
27	C	68	ARG	NE-CZ-NH2	-5.45	117.58	120.30
2	B	1690	A	N9-C4-C5	-5.44	103.62	105.80
9	O	92	PHE	N-CA-C	-5.44	96.30	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	95	U	C6-N1-C2	-5.44	117.73	121.00
2	B	151	C	N3-C4-N4	5.44	121.81	118.00
2	B	377	G	N1-C2-N3	-5.44	120.64	123.90
2	B	569	U	C3'-C2'-C1'	5.44	105.85	101.50
2	B	761	A	N1-C2-N3	5.44	132.02	129.30
2	B	1370	C	C6-N1-C2	-5.44	118.12	120.30
2	B	1775	U	N3-C4-C5	-5.44	111.33	114.60
2	B	1832	C	P-O3'-C3'	5.44	126.23	119.70
2	B	1969	A	N1-C2-N3	-5.44	126.58	129.30
2	B	2410	G	C4-C5-N7	-5.44	108.62	110.80
2	B	2445	G	C5'-C4'-C3'	-5.44	107.29	116.00
2	B	2469	A	N7-C8-N9	-5.44	111.08	113.80
2	B	2663	G	N9-C4-C5	5.44	107.58	105.40
2	B	2835	A	P-O5'-C5'	-5.44	112.19	120.90
19	X	23	THR	N-CA-CB	5.44	120.64	110.30
2	B	198	C	C5'-C4'-C3'	-5.44	107.29	116.00
2	B	629	G	C5-N7-C8	5.44	107.02	104.30
2	B	675	A	C5'-C4'-O4'	5.44	115.63	109.10
2	B	759	G	N3-C2-N2	5.44	123.71	119.90
2	B	763	G	N3-C4-N9	5.44	129.26	126.00
2	B	1809	A	C5-C6-N6	-5.44	119.35	123.70
2	B	2073	C	C6-N1-C2	5.44	122.48	120.30
2	B	2235	G	P-O3'-C3'	-5.44	113.17	119.70
2	B	2812	G	C1'-O4'-C4'	5.44	114.25	109.90
2	B	65	U	N1-C2-O2	5.44	126.61	122.80
2	B	172	A	C5'-C4'-O4'	5.44	115.63	109.10
2	B	254	G	N7-C8-N9	5.44	115.82	113.10
2	B	868	U	C3'-C2'-C1'	-5.44	97.15	101.50
2	B	1290	C	C6-N1-C2	5.44	122.48	120.30
2	B	2163	A	C4-C5-N7	-5.44	107.98	110.70
2	B	2226	C	C5'-C4'-O4'	5.44	115.63	109.10
2	B	2385	C	C6-N1-C1'	-5.44	114.27	120.80
2	B	49	A	C4-C5-C6	5.44	119.72	117.00
2	B	430	A	C4-C5-N7	-5.44	107.98	110.70
2	B	453	A	N1-C2-N3	5.44	132.02	129.30
2	B	879	G	C5'-C4'-O4'	5.44	115.63	109.10
2	B	974	G	N3-C4-C5	5.44	131.32	128.60
2	B	1283	G	C8-N9-C1'	5.44	134.07	127.00
2	B	1482	G	C6-N1-C2	5.44	128.36	125.10
2	B	2173	A	C4-N9-C1'	5.44	136.09	126.30
2	B	2322	A	C6-C5-N7	-5.44	128.49	132.30
2	B	2504	U	N1-C2-O2	5.44	126.61	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2595	G	N1-C2-N3	-5.44	120.64	123.90
2	B	2617	U	C1'-O4'-C4'	-5.44	105.55	109.90
2	B	2882	A	C2-N3-C4	-5.44	107.88	110.60
32	J	85	LYS	N-CA-CB	5.44	120.39	110.60
1	A	101	A	N7-C8-N9	-5.44	111.08	113.80
2	B	68	G	C8-N9-C1'	5.44	134.07	127.00
2	B	1713	A	C6-C5-N7	-5.44	128.50	132.30
2	B	1805	A	C4-C5-N7	5.44	113.42	110.70
2	B	2102	G	C5'-C4'-C3'	-5.44	107.30	116.00
2	B	2742	G	N7-C8-N9	5.44	115.82	113.10
11	Q	28	SER	N-CA-CB	5.44	118.65	110.50
29	G	169	ARG	NE-CZ-NH2	5.44	123.02	120.30
1	A	13	G	N9-C4-C5	-5.43	103.23	105.40
2	B	372	G	P-O3'-C3'	5.43	126.22	119.70
2	B	749	A	C6-C5-N7	-5.43	128.50	132.30
2	B	932	U	C4-C5-C6	-5.43	116.44	119.70
2	B	1217	U	N3-C4-C5	-5.43	111.34	114.60
2	B	1585	C	C5-C6-N1	5.43	123.72	121.00
2	B	1609	A	N3-C4-C5	-5.43	123.00	126.80
2	B	1720	U	C4-C5-C6	-5.43	116.44	119.70
2	B	2417	C	C5-C4-N4	5.43	124.00	120.20
2	B	2544	G	C5'-C4'-C3'	5.43	124.69	116.00
2	B	2578	G	C5-C6-O6	-5.43	125.34	128.60
4	K	87	LEU	CB-CA-C	-5.43	99.87	110.20
23	5	38	PHE	CB-CG-CD1	-5.43	117.00	120.80
26	8	20	ASP	CB-CG-OD2	-5.43	113.41	118.30
2	B	643	A	O4'-C4'-C3'	-5.43	98.57	104.00
2	B	771	G	N9-C4-C5	5.43	107.57	105.40
2	B	1143	A	C4-C5-C6	5.43	119.72	117.00
2	B	2058	A	C5-C6-N6	-5.43	119.35	123.70
2	B	2578	G	O3'-P-O5'	-5.43	93.68	104.00
2	B	2878	U	N1-C2-O2	-5.43	119.00	122.80
1	A	109	A	C5'-C4'-C3'	-5.43	107.31	116.00
2	B	75	G	C6-N1-C2	-5.43	121.84	125.10
2	B	101	A	O4'-C1'-N9	5.43	112.55	108.20
2	B	1092	C	C1'-O4'-C4'	5.43	114.25	109.90
2	B	644	A	N9-C1'-C2'	-5.43	106.03	112.00
2	B	777	G	C5'-C4'-C3'	-5.43	107.31	116.00
2	B	1002	G	C6-C5-N7	-5.43	127.14	130.40
2	B	1554	U	C5'-C4'-C3'	-5.43	107.31	116.00
2	B	2080	A	C5-C6-N1	-5.43	114.99	117.70
2	B	2093	G	C6-C5-N7	-5.43	127.14	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2552	U	C6-N1-C1'	-5.43	113.60	121.20
2	B	2803	G	N1-C2-N3	-5.43	120.64	123.90
2	B	2882	A	O5'-P-OP2	5.43	117.22	110.70
2	B	1103	A	N9-C4-C5	5.43	107.97	105.80
2	B	1397	U	C5'-C4'-C3'	-5.43	107.32	116.00
2	B	1464	G	C3'-C2'-C1'	-5.43	97.16	101.50
2	B	2031	A	N7-C8-N9	-5.43	111.09	113.80
2	B	2480	C	O4'-C4'-C3'	-5.43	98.57	104.00
2	B	2612	C	C6-N1-C2	5.43	122.47	120.30
2	B	2649	C	N1-C2-N3	-5.43	115.40	119.20
2	B	2763	G	C5'-C4'-C3'	-5.43	107.31	116.00
2	B	918	A	N9-C4-C5	-5.43	103.63	105.80
2	B	1168	G	N3-C2-N2	5.43	123.70	119.90
2	B	1235	G	N3-C4-C5	5.43	131.31	128.60
2	B	1382	G	C5'-C4'-C3'	5.43	124.68	116.00
2	B	1468	U	C5-C6-N1	5.43	125.41	122.70
2	B	1679	A	C5-C6-N1	-5.43	114.99	117.70
2	B	1683	U	O5'-P-OP1	5.43	117.21	110.70
2	B	1690	A	C4-C5-N7	-5.43	107.99	110.70
2	B	1806	C	C5-C4-N4	-5.43	116.40	120.20
2	B	1854	A	OP1-P-OP2	-5.43	111.46	119.60
2	B	2265	U	O5'-C5'-C4'	-5.43	101.39	111.70
2	B	2415	G	C5-C6-O6	-5.43	125.34	128.60
2	B	2430	A	C6-N1-C2	5.43	121.86	118.60
2	B	2679	A	C1'-O4'-C4'	5.43	114.24	109.90
2	B	175	G	C8-N9-C4	5.42	108.57	106.40
2	B	375	G	N9-C4-C5	5.42	107.57	105.40
2	B	472	A	C6-C5-N7	-5.42	128.50	132.30
2	B	804	A	N3-C4-C5	-5.42	123.00	126.80
2	B	1277	G	C5'-C4'-C3'	-5.42	107.32	116.00
2	B	1773	A	C6-C5-N7	-5.42	128.50	132.30
2	B	1796	U	C3'-C2'-C1'	-5.42	97.16	101.50
2	B	1818	U	N1-C2-N3	5.42	118.15	114.90
2	B	1825	U	C5-C4-O4	-5.42	122.64	125.90
2	B	1917	U	C4-C5-C6	-5.42	116.44	119.70
2	B	2702	G	O4'-C1'-N9	5.42	112.54	108.20
23	5	118	PRO	N-CA-C	5.42	126.20	112.10
2	B	882	G	N7-C8-N9	5.42	115.81	113.10
2	B	1641	A	C6-N1-C2	5.42	121.85	118.60
2	B	194	G	C4-C5-N7	-5.42	108.63	110.80
2	B	911	A	C5-C6-N6	-5.42	119.36	123.70
2	B	1296	G	C4-N9-C1'	-5.42	119.45	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1431	A	C5-C6-N6	-5.42	119.36	123.70
2	B	1537	G	C5-N7-C8	5.42	107.01	104.30
2	B	1921	G	C5-C6-O6	-5.42	125.35	128.60
2	B	2296	U	N3-C4-C5	-5.42	111.35	114.60
2	B	2820	A	C5-N7-C8	5.42	106.61	103.90
22	3	2	VAL	N-CA-C	-5.42	96.36	111.00
27	C	19	VAL	CA-CB-CG1	-5.42	102.77	110.90
2	B	102	U	O4'-C4'-C3'	-5.42	98.58	104.00
2	B	149	A	C4-C5-N7	5.42	113.41	110.70
2	B	584	C	C3'-C2'-C1'	5.42	105.84	101.50
2	B	587	C	N1-C2-O2	-5.42	115.65	118.90
2	B	1016	G	C8-N9-C4	5.42	108.57	106.40
2	B	1281	G	O4'-C1'-N9	5.42	112.54	108.20
2	B	2505	G	N3-C4-C5	5.42	131.31	128.60
2	B	286	U	OP1-P-OP2	-5.42	111.47	119.60
2	B	467	G	C8-N9-C1'	5.42	134.04	127.00
2	B	532	A	C8-N9-C4	-5.42	103.63	105.80
2	B	1411	U	N1-C2-O2	5.42	126.59	122.80
2	B	1601	G	C8-N9-C1'	5.42	134.04	127.00
2	B	1613	G	C8-N9-C4	-5.42	104.23	106.40
2	B	1678	A	C4-C5-C6	5.42	119.71	117.00
2	B	1796	U	N1-C2-N3	-5.42	111.65	114.90
2	B	2035	G	C5'-C4'-C3'	-5.42	107.33	116.00
2	B	2097	A	N1-C6-N6	5.42	121.85	118.60
2	B	2574	G	C8-N9-C1'	5.42	134.04	127.00
2	B	2861	U	N1-C1'-C2'	-5.42	106.04	112.00
2	B	2871	U	N1-C1'-C2'	-5.42	106.04	112.00
2	B	235	U	N3-C2-O2	-5.42	118.41	122.20
2	B	268	C	O5'-C5'-C4'	-5.42	101.41	111.70
2	B	424	G	N7-C8-N9	5.42	115.81	113.10
2	B	700	G	O4'-C1'-N9	5.42	112.53	108.20
2	B	745	G	O5'-C5'-C4'	-5.42	101.41	111.70
2	B	1185	G	C6-N1-C2	-5.42	121.85	125.10
2	B	1489	C	C5'-C4'-C3'	5.42	124.67	116.00
2	B	1515	A	C2-N3-C4	5.42	113.31	110.60
2	B	1928	A	C2-N3-C4	-5.42	107.89	110.60
2	B	2035	G	C3'-C2'-C1'	-5.42	97.17	101.50
2	B	2259	U	C5-C6-N1	5.42	125.41	122.70
2	B	2426	A	P-O3'-C3'	5.42	126.20	119.70
2	B	2533	U	C4-C5-C6	-5.42	116.45	119.70
2	B	2740	A	C1'-O4'-C4'	-5.42	105.57	109.90
2	B	2801	G	C4-C5-N7	-5.42	108.63	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2849	U	C3'-C2'-C1'	-5.42	97.17	101.50
2	B	2882	A	C4'-C3'-C2'	5.42	108.02	102.60
2	B	374	A	C4-C5-C6	5.42	119.71	117.00
7	M	21	ALA	CB-CA-C	-5.42	101.98	110.10
1	A	84	G	C4-N9-C1'	-5.41	119.46	126.50
2	B	824	U	P-O3'-C3'	5.41	126.20	119.70
2	B	983	A	N3-C4-C5	-5.41	123.01	126.80
2	B	1275	A	O4'-C1'-N9	5.41	112.53	108.20
2	B	1426	G	N1-C2-N3	-5.41	120.65	123.90
2	B	1691	C	C6-N1-C2	-5.41	118.13	120.30
2	B	1975	G	O4'-C1'-N9	5.41	112.53	108.20
2	B	2091	C	C6-N1-C2	5.41	122.47	120.30
2	B	2162	G	O4'-C1'-N9	5.41	112.53	108.20
2	B	2622	U	N1-C2-O2	5.41	126.59	122.80
2	B	2669	G	C4-N9-C1'	-5.41	119.46	126.50
2	B	283	G	C4'-C3'-C2'	-5.41	97.19	102.60
2	B	2121	G	C5-C6-O6	-5.41	125.35	128.60
27	C	212	TRP	CA-CB-CG	5.41	123.98	113.70
2	B	388	G	C4-C5-N7	-5.41	108.64	110.80
2	B	460	A	C8-N9-C4	-5.41	103.64	105.80
2	B	694	U	N3-C4-O4	-5.41	115.61	119.40
2	B	904	G	C5-N7-C8	5.41	107.00	104.30
2	B	1187	G	N1-C2-N2	-5.41	111.33	116.20
2	B	1340	U	C2-N1-C1'	5.41	124.19	117.70
2	B	1672	A	C1'-O4'-C4'	-5.41	105.57	109.90
2	B	1906	G	C5'-C4'-C3'	5.41	124.66	116.00
2	B	2139	U	C3'-C2'-C1'	5.41	105.83	101.50
2	B	2451	A	C5-N7-C8	5.41	106.61	103.90
28	F	83	PRO	N-CA-CB	5.41	109.79	103.30
1	A	83	G	C6-C5-N7	-5.41	127.16	130.40
1	A	85	G	N7-C8-N9	-5.41	110.39	113.10
2	B	3	U	C5'-C4'-C3'	-5.41	107.35	116.00
2	B	74	A	N7-C8-N9	-5.41	111.10	113.80
2	B	156	A	P-O3'-C3'	-5.41	113.21	119.70
2	B	205	G	O3'-P-O5'	-5.41	93.72	104.00
2	B	333	G	N3-C2-N2	5.41	123.69	119.90
2	B	601	C	P-O3'-C3'	-5.41	113.21	119.70
2	B	773	U	C2-N3-C4	-5.41	123.75	127.00
2	B	959	A	C6-C5-N7	-5.41	128.51	132.30
2	B	1643	G	C8-N9-C4	5.41	108.56	106.40
2	B	2045	C	O4'-C4'-C3'	-5.41	98.59	104.00
1	A	14	U	O4'-C1'-N1	5.41	112.53	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	647	G	N9-C4-C5	-5.41	103.24	105.40
2	B	756	A	C5-C6-N1	-5.41	115.00	117.70
2	B	1985	C	C4'-C3'-C2'	-5.41	97.19	102.60
2	B	2484	G	C1'-O4'-C4'	-5.41	105.58	109.90
1	A	57	A	N9-C4-C5	-5.41	103.64	105.80
1	A	71	C	C5'-C4'-C3'	-5.41	107.35	116.00
1	A	92	C	C5-C6-N1	5.41	123.70	121.00
2	B	550	C	C5'-C4'-C3'	-5.41	107.35	116.00
2	B	634	C	N1-C2-N3	-5.41	115.42	119.20
2	B	764	A	C5-C6-N6	-5.41	119.38	123.70
2	B	777	G	N7-C8-N9	-5.41	110.40	113.10
2	B	1224	U	C5-C4-O4	-5.41	122.66	125.90
2	B	1264	A	C4-C5-C6	5.41	119.70	117.00
2	B	1452	G	C5-N7-C8	-5.41	101.60	104.30
2	B	1698	A	C6-N1-C2	-5.41	115.36	118.60
2	B	1700	A	C2-N3-C4	-5.41	107.90	110.60
2	B	1707	G	N1-C2-N3	-5.41	120.66	123.90
2	B	2030	A	C5-C6-N6	-5.41	119.38	123.70
2	B	2033	A	C5'-C4'-C3'	-5.41	107.35	116.00
2	B	2036	C	C2-N1-C1'	5.41	124.75	118.80
2	B	2167	U	C2-N3-C4	5.41	130.24	127.00
2	B	2189	U	C1'-O4'-C4'	5.41	114.22	109.90
2	B	2203	U	C6-N1-C2	-5.41	117.76	121.00
2	B	2273	A	C3'-C2'-C1'	5.41	105.83	101.50
2	B	2689	U	C6-N1-C2	5.41	124.24	121.00
2	B	1091	G	N3-C2-N2	5.40	123.68	119.90
2	B	1302	A	C4-C5-C6	5.40	119.70	117.00
2	B	1371	G	C4-C5-N7	-5.40	108.64	110.80
2	B	1379	U	C5'-C4'-O4'	5.40	115.58	109.10
2	B	1610	A	C6-N1-C2	-5.40	115.36	118.60
2	B	1676	A	N3-C4-C5	-5.40	123.02	126.80
2	B	2510	C	C2-N3-C4	-5.40	117.20	119.90
2	B	765	C	C5-C6-N1	5.40	123.70	121.00
2	B	1194	A	C3'-C2'-C1'	5.40	105.82	101.50
2	B	1429	G	C2-N3-C4	5.40	114.60	111.90
2	B	1716	U	C5-C6-N1	5.40	125.40	122.70
2	B	1752	C	C5-C4-N4	5.40	123.98	120.20
2	B	1760	C	N1-C2-N3	-5.40	115.42	119.20
2	B	2147	A	C2-N3-C4	-5.40	107.90	110.60
2	B	2227	A	N1-C2-N3	5.40	132.00	129.30
2	B	2268	A	C4-C5-C6	5.40	119.70	117.00
2	B	2392	A	O5'-C5'-C4'	-5.40	101.44	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2495	G	O4'-C1'-N9	5.40	112.52	108.20
2	B	2846	G	O4'-C1'-C2'	5.40	112.46	107.60
28	F	168	LEU	CB-CG-CD1	5.40	120.19	111.00
2	B	852	U	C2-N3-C4	5.40	130.24	127.00
2	B	1164	C	C6-N1-C2	5.40	122.46	120.30
2	B	1378	A	P-O5'-C5'	-5.40	112.26	120.90
2	B	1470	A	C3'-C2'-C1'	-5.40	97.18	101.50
2	B	1634	A	O4'-C1'-C2'	-5.40	100.40	105.80
2	B	1913	A	C4-C5-N7	-5.40	108.00	110.70
2	B	2237	G	C8-N9-C4	5.40	108.56	106.40
2	B	2240	U	P-O3'-C3'	-5.40	113.22	119.70
2	B	2773	C	C4-C5-C6	5.40	120.10	117.40
2	B	2837	A	C3'-C2'-C1'	-5.40	97.18	101.50
14	D	200	ASP	CB-CG-OD2	-5.40	113.44	118.30
25	7	49	VAL	CA-CB-CG1	-5.40	102.80	110.90
2	B	521	U	OP1-P-OP2	-5.40	111.50	119.60
2	B	1277	G	N3-C4-C5	-5.40	125.90	128.60
2	B	1886	U	C5-C6-N1	-5.40	120.00	122.70
2	B	2058	A	N1-C2-N3	-5.40	126.60	129.30
2	B	2340	A	N3-C4-N9	-5.40	123.08	127.40
2	B	2400	G	O4'-C4'-C3'	-5.40	98.60	104.00
2	B	2488	G	C3'-C2'-C1'	-5.40	97.18	101.50
2	B	2675	A	C8-N9-C4	5.40	107.96	105.80
2	B	249	C	N1-C2-N3	5.40	122.98	119.20
2	B	541	A	P-O3'-C3'	-5.40	113.22	119.70
2	B	709	U	N1-C2-N3	5.40	118.14	114.90
2	B	964	C	O5'-C5'-C4'	-5.40	101.44	111.70
2	B	1436	G	C5-C6-O6	-5.40	125.36	128.60
2	B	1788	C	C5-C4-N4	-5.40	116.42	120.20
2	B	1944	U	N1-C2-N3	5.40	118.14	114.90
2	B	2114	A	N7-C8-N9	-5.40	111.10	113.80
2	B	2151	U	O4'-C1'-N1	5.40	112.52	108.20
2	B	2364	C	N3-C4-C5	5.40	124.06	121.90
2	B	2476	A	P-O5'-C5'	-5.40	112.26	120.90
2	B	2576	G	O4'-C1'-N9	5.40	112.52	108.20
2	B	2797	U	P-O5'-C5'	5.40	129.54	120.90
28	F	144	LYS	C-N-CA	5.40	135.19	121.70
2	B	372	G	C5-C6-N1	-5.40	108.80	111.50
2	B	533	G	P-O3'-C3'	5.40	126.17	119.70
2	B	1045	C	C4-C5-C6	5.40	120.10	117.40
2	B	91	A	N9-C4-C5	-5.39	103.64	105.80
2	B	126	A	C2-N3-C4	-5.39	107.90	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	283	G	O4'-C1'-N9	5.39	112.52	108.20
2	B	300	A	C6-C5-N7	-5.39	128.52	132.30
2	B	333	G	C5-C6-N1	5.39	114.20	111.50
2	B	876	C	N3-C4-C5	-5.39	119.74	121.90
2	B	1033	U	C5-C4-O4	-5.39	122.66	125.90
2	B	1379	U	O4'-C4'-C3'	-5.39	98.61	104.00
2	B	1670	C	C5-C4-N4	-5.39	116.42	120.20
2	B	1891	G	C4-C5-N7	-5.39	108.64	110.80
2	B	2663	G	N3-C4-C5	-5.39	125.90	128.60
2	B	2760	C	C5-C6-N1	5.39	123.70	121.00
2	B	2799	A	C5-N7-C8	5.39	106.60	103.90
1	A	20	G	C5-C6-N1	-5.39	108.80	111.50
2	B	122	G	P-O5'-C5'	5.39	129.53	120.90
2	B	253	C	N1-C2-N3	5.39	122.97	119.20
2	B	502	A	C2-N3-C4	-5.39	107.90	110.60
2	B	821	A	N9-C1'-C2'	-5.39	106.07	112.00
2	B	918	A	C4'-C3'-C2'	-5.39	97.21	102.60
2	B	950	G	C2-N3-C4	5.39	114.60	111.90
2	B	1452	G	N3-C4-C5	5.39	131.30	128.60
2	B	1455	G	C5'-C4'-C3'	-5.39	107.37	116.00
2	B	1517	G	P-O5'-C5'	-5.39	112.27	120.90
2	B	2015	A	C6-C5-N7	-5.39	128.53	132.30
2	B	2067	G	C3'-C2'-C1'	-5.39	97.19	101.50
2	B	2101	A	C4-C5-N7	-5.39	108.00	110.70
2	B	2105	U	C6-N1-C2	5.39	124.24	121.00
2	B	2378	A	C5-N7-C8	5.39	106.60	103.90
2	B	818	G	N1-C2-N3	-5.39	120.67	123.90
2	B	2169	A	C1'-O4'-C4'	5.39	114.21	109.90
2	B	2486	C	N3-C4-N4	5.39	121.77	118.00
19	X	348	ALA	CB-CA-C	5.39	118.19	110.10
2	B	222	A	C2-N3-C4	-5.39	107.91	110.60
2	B	228	C	C5'-C4'-C3'	-5.39	107.38	116.00
2	B	558	U	C2-N3-C4	-5.39	123.77	127.00
2	B	1081	U	O4'-C4'-C3'	-5.39	98.61	104.00
2	B	1438	U	C4'-C3'-C2'	-5.39	97.21	102.60
2	B	1445	G	N9-C1'-C2'	-5.39	106.07	112.00
2	B	1459	G	O4'-C4'-C3'	-5.39	98.61	104.00
2	B	2658	C	C5-C4-N4	-5.39	116.43	120.20
27	C	60	ALA	N-CA-CB	5.39	117.65	110.10
2	B	1598	A	C4-C5-C6	5.39	119.69	117.00
2	B	2252	G	C4'-C3'-C2'	-5.39	97.21	102.60
2	B	2279	G	N3-C4-N9	5.39	129.23	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	35	G	P-O3'-C3'	-5.39	113.24	119.70
2	B	114	U	P-O3'-C3'	5.39	126.16	119.70
2	B	570	G	C5-N7-C8	5.39	106.99	104.30
2	B	571	U	N3-C4-O4	5.39	123.17	119.40
2	B	801	G	C6-N1-C2	-5.39	121.87	125.10
2	B	1300	G	N3-C2-N2	5.39	123.67	119.90
2	B	1357	C	C2-N3-C4	-5.39	117.21	119.90
2	B	1633	G	N9-C1'-C2'	5.39	121.00	114.00
2	B	1981	A	N1-C6-N6	5.39	121.83	118.60
2	B	2176	A	OP1-P-OP2	-5.39	111.52	119.60
2	B	2472	G	C5-N7-C8	5.39	106.99	104.30
2	B	2495	G	C5-C6-N1	5.39	114.19	111.50
2	B	2532	G	O4'-C1'-N9	5.39	112.51	108.20
2	B	2627	G	C5-N7-C8	-5.39	101.61	104.30
10	P	97	TYR	CZ-CE2-CD2	5.39	124.65	119.80
15	T	47	VAL	CA-CB-CG1	-5.39	102.82	110.90
2	B	74	A	C5'-C4'-C3'	-5.38	107.38	116.00
2	B	149	A	P-O3'-C3'	-5.38	113.24	119.70
2	B	302	C	C3'-C2'-C1'	-5.38	97.19	101.50
2	B	1021	A	N1-C2-N3	5.38	131.99	129.30
2	B	1239	G	N7-C8-N9	-5.38	110.41	113.10
2	B	1240	U	C5-C4-O4	-5.38	122.67	125.90
2	B	1568	G	C8-N9-C4	-5.38	104.25	106.40
2	B	1674	G	C5-N7-C8	5.38	106.99	104.30
2	B	1804	C	C2-N1-C1'	-5.38	112.88	118.80
2	B	1810	A	C2-N3-C4	-5.38	107.91	110.60
2	B	2444	G	O4'-C1'-C2'	5.38	112.45	107.60
2	B	2492	U	N1-C2-N3	-5.38	111.67	114.90
2	B	2671	G	N3-C2-N2	5.38	123.67	119.90
2	B	551	G	N9-C4-C5	-5.38	103.25	105.40
2	B	2079	U	C2-N3-C4	-5.38	123.77	127.00
10	P	19	PHE	CB-CA-C	-5.38	99.63	110.40
2	B	388	G	C8-N9-C1'	-5.38	120.00	127.00
2	B	483	A	O4'-C1'-N9	5.38	112.50	108.20
2	B	506	G	C5-N7-C8	5.38	106.99	104.30
2	B	599	A	C1'-O4'-C4'	-5.38	105.59	109.90
2	B	618	G	C5-N7-C8	-5.38	101.61	104.30
2	B	638	G	C5'-C4'-C3'	-5.38	107.39	116.00
2	B	1474	U	N1-C2-N3	5.38	118.13	114.90
2	B	1692	U	C5-C6-N1	5.38	125.39	122.70
2	B	1742	U	C5-C4-O4	-5.38	122.67	125.90
2	B	2302	U	OP1-P-OP2	-5.38	111.53	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2397	G	C6-C5-N7	-5.38	127.17	130.40
2	B	2449	U	C5-C4-O4	5.38	129.13	125.90
2	B	2615	U	O4'-C4'-C3'	-5.38	98.62	104.00
2	B	2627	G	N3-C4-C5	-5.38	125.91	128.60
2	B	2732	G	C6-C5-N7	-5.38	127.17	130.40
2	B	2785	C	N3-C4-C5	5.38	124.05	121.90
27	C	166	ARG	NE-CZ-NH2	5.38	122.99	120.30
31	I	16	MET	CG-SD-CE	-5.38	91.59	100.20
2	B	98	G	C4-C5-C6	5.38	122.03	118.80
2	B	265	A	N1-C2-N3	5.38	131.99	129.30
2	B	322	A	N3-C4-C5	-5.38	123.03	126.80
2	B	784	G	P-O3'-C3'	-5.38	113.24	119.70
2	B	877	A	C1'-O4'-C4'	5.38	114.20	109.90
2	B	1676	A	N3-C4-N9	5.38	131.70	127.40
2	B	2274	A	N1-C2-N3	5.38	131.99	129.30
2	B	2465	C	N1-C2-O2	5.38	122.13	118.90
2	B	2498	C	N1-C1'-C2'	-5.38	106.08	112.00
22	3	52	LYS	N-CA-C'	-5.38	96.47	111.00
2	B	366	C	C5-C4-N4	-5.38	116.44	120.20
2	B	576	U	P-O5'-C5'	-5.38	112.29	120.90
2	B	863	A	N7-C8-N9	5.38	116.49	113.80
2	B	929	U	O5'-P-OP2	5.38	117.15	110.70
2	B	1052	C	P-O3'-C3'	5.38	126.15	119.70
2	B	2065	C	C4-C5-C6	-5.38	114.71	117.40
2	B	2716	C	C6-N1-C2	5.38	122.45	120.30
2	B	2719	G	N7-C8-N9	-5.38	110.41	113.10
2	B	2761	A	OP1-P-O3'	5.38	117.03	105.20
2	B	2776	A	N3-C4-N9	5.38	131.70	127.40
1	A	108	A	P-O3'-C3'	-5.38	113.25	119.70
2	B	36	G	P-O5'-C5'	5.38	129.50	120.90
2	B	579	G	N9-C4-C5	5.38	107.55	105.40
2	B	633	A	N7-C8-N9	-5.38	111.11	113.80
2	B	890	C	O4'-C1'-N1	5.38	112.50	108.20
2	B	1099	G	N1-C2-N2	5.38	121.04	116.20
2	B	1109	C	C6-N1-C2	-5.38	118.15	120.30
2	B	1177	G	C4-N9-C1'	-5.38	119.51	126.50
2	B	1429	G	C6-N1-C2	-5.38	121.87	125.10
2	B	1477	A	O4'-C1'-C2'	5.38	112.44	107.60
2	B	1739	A	C6-N1-C2	-5.38	115.37	118.60
2	B	2038	G	C6-C5-N7	-5.38	127.17	130.40
2	B	2268	A	C5-C6-N1	-5.38	115.01	117.70
2	B	2424	C	P-O3'-C3'	-5.38	113.25	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2434	A	C6-C5-N7	-5.38	128.54	132.30
2	B	2600	A	C8-N9-C4	5.38	107.95	105.80
2	B	2607	G	C4-C5-C6	5.38	122.03	118.80
2	B	2862	G	N1-C2-N3	-5.38	120.67	123.90
2	B	346	A	C6-N1-C2	5.38	121.83	118.60
2	B	407	G	N3-C4-C5	5.38	131.29	128.60
2	B	646	U	C2-N1-C1'	5.38	124.15	117.70
2	B	896	A	N1-C2-N3	5.38	131.99	129.30
2	B	1131	G	N3-C2-N2	5.38	123.66	119.90
2	B	1956	U	C2-N3-C4	5.38	130.22	127.00
27	C	256	THR	N-CA-C	-5.38	96.49	111.00
1	A	16	G	N7-C8-N9	-5.37	110.41	113.10
2	B	1341	G	C5-N7-C8	5.37	106.99	104.30
2	B	1621	U	C6-N1-C1'	-5.37	113.68	121.20
2	B	1633	G	N1-C2-N2	-5.37	111.36	116.20
2	B	1646	C	N1-C2-O2	5.37	122.12	118.90
2	B	1752	C	C4-C5-C6	5.37	120.09	117.40
2	B	1790	C	N3-C4-N4	5.37	121.76	118.00
2	B	1835	G	O4'-C1'-N9	5.37	112.50	108.20
2	B	2076	U	C2-N1-C1'	5.37	124.15	117.70
2	B	2184	A	N3-C4-C5	-5.37	123.04	126.80
2	B	2231	U	C5-C4-O4	-5.37	122.68	125.90
2	B	2471	A	N1-C6-N6	5.37	121.82	118.60
2	B	2644	G	C5-C6-O6	5.37	131.82	128.60
7	M	108	VAL	N-CA-C	-5.37	96.49	111.00
2	B	270	A	C5-C6-N1	-5.37	115.01	117.70
2	B	784	G	C6-C5-N7	-5.37	127.18	130.40
2	B	1274	A	C5'-C4'-O4'	5.37	115.55	109.10
2	B	1384	A	O4'-C1'-N9	5.37	112.50	108.20
2	B	1653	G	C5-C6-N1	-5.37	108.81	111.50
2	B	2042	A	C6-C5-N7	-5.37	128.54	132.30
2	B	2107	G	C2-N3-C4	5.37	114.59	111.90
2	B	2617	U	O4'-C1'-N1	5.37	112.50	108.20
24	6	10	LEU	CB-CA-C	-5.37	100.00	110.20
30	H	60	GLU	N-CA-CB	5.37	120.27	110.60
2	B	598	U	C5'-C4'-C3'	-5.37	107.41	116.00
2	B	857	G	C5-N7-C8	5.37	106.98	104.30
2	B	1163	G	N9-C4-C5	5.37	107.55	105.40
2	B	2572	A	C5-C6-N1	5.37	120.39	117.70
4	K	64	ARG	N-CA-C	-5.37	96.50	111.00
31	I	46	ASP	CB-CG-OD1	-5.37	113.47	118.30
2	B	85	G	C8-N9-C4	5.37	108.55	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	110	G	C4-C5-C6	5.37	122.02	118.80
2	B	382	A	C5'-C4'-C3'	5.37	124.59	116.00
2	B	719	C	C4-C5-C6	5.37	120.08	117.40
2	B	924	G	C6-N1-C2	-5.37	121.88	125.10
2	B	1528	A	OP1-P-O3'	5.37	117.01	105.20
2	B	1696	G	C6-N1-C2	-5.37	121.88	125.10
2	B	1976	U	N3-C4-O4	5.37	123.16	119.40
2	B	2295	C	O5'-C5'-C4'	-5.37	101.50	111.70
2	B	2898	U	P-O5'-C5'	-5.37	112.31	120.90
14	D	24	VAL	CA-CB-CG2	-5.37	102.85	110.90
2	B	2200	C	C5-C4-N4	-5.37	116.44	120.20
15	T	61	LEU	N-CA-CB	5.37	121.14	110.40
2	B	427	U	C2-N1-C1'	5.37	124.14	117.70
2	B	544	C	N1-C2-O2	5.37	122.12	118.90
2	B	696	G	P-O5'-C5'	-5.37	112.32	120.90
2	B	968	C	C2-N3-C4	5.37	122.58	119.90
2	B	982	C	N3-C4-C5	-5.37	119.75	121.90
2	B	1037	G	N3-C2-N2	5.37	123.66	119.90
2	B	1286	A	C6-N1-C2	5.37	121.82	118.60
2	B	1368	G	C6-C5-N7	-5.37	127.18	130.40
2	B	1546	G	C6-C5-N7	-5.37	127.18	130.40
2	B	1591	A	C5'-C4'-O4'	-5.37	102.66	109.10
2	B	1640	A	N7-C8-N9	5.37	116.48	113.80
2	B	1654	A	C5-C6-N6	-5.37	119.41	123.70
2	B	1913	A	N9-C4-C5	5.37	107.95	105.80
2	B	1971	U	C2-N1-C1'	5.37	124.14	117.70
2	B	2148	G	C6-C5-N7	-5.37	127.18	130.40
2	B	2621	G	C5'-C4'-C3'	5.37	124.58	116.00
2	B	2681	C	O5'-C5'-C4'	-5.37	101.51	111.70
2	B	2699	C	O4'-C1'-N1	5.37	112.49	108.20
2	B	2893	A	N9-C4-C5	5.37	107.95	105.80
2	B	522	A	C5'-C4'-O4'	5.36	115.54	109.10
2	B	857	G	C4'-C3'-C2'	5.36	107.96	102.60
2	B	927	A	P-O3'-C3'	5.36	126.14	119.70
2	B	989	G	C5-C6-O6	5.36	131.82	128.60
2	B	1450	G	C4-N9-C1'	-5.36	119.53	126.50
2	B	1565	C	N3-C2-O2	-5.36	118.14	121.90
2	B	1648	U	C3'-C2'-C1'	5.36	105.79	101.50
2	B	2258	C	N3-C2-O2	5.36	125.65	121.90
2	B	2560	A	N7-C8-N9	5.36	116.48	113.80
19	X	298	ILE	CA-CB-CG1	5.36	121.19	111.00
31	I	76	ALA	CB-CA-C	-5.36	102.05	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	147	C	O4'-C1'-N1	5.36	112.49	108.20
2	B	406	G	C8-N9-C4	-5.36	104.25	106.40
2	B	1322	A	N3-C4-N9	-5.36	123.11	127.40
2	B	1517	G	C4-C5-N7	-5.36	108.66	110.80
2	B	2000	C	N3-C4-N4	5.36	121.75	118.00
2	B	2044	C	P-O3'-C3'	-5.36	113.27	119.70
2	B	2052	A	C5'-C4'-C3'	5.36	124.58	116.00
2	B	2121	G	N3-C4-C5	-5.36	125.92	128.60
2	B	967	U	O4'-C1'-N1	5.36	112.49	108.20
2	B	970	U	C1'-O4'-C4'	-5.36	105.61	109.90
2	B	1271	G	C5-N7-C8	5.36	106.98	104.30
2	B	1380	G	C4-C5-C6	5.36	122.02	118.80
2	B	1455	G	C5'-C4'-O4'	5.36	115.53	109.10
2	B	1459	G	O4'-C1'-N9	5.36	112.49	108.20
2	B	1546	G	C5-C6-N1	5.36	114.18	111.50
2	B	1606	C	N1-C2-N3	-5.36	115.45	119.20
2	B	2835	A	N9-C4-C5	5.36	107.94	105.80
2	B	2867	G	C8-N9-C4	-5.36	104.26	106.40
18	W	31	TYR	CG-CD1-CE1	-5.36	117.01	121.30
2	B	152	A	C6-C5-N7	-5.36	128.55	132.30
2	B	1778	U	N1-C2-N3	5.36	118.11	114.90
2	B	2637	U	C6-N1-C2	5.36	124.22	121.00
2	B	2665	A	C6-N1-C2	5.36	121.81	118.60
2	B	2703	C	C2-N3-C4	5.36	122.58	119.90
27	C	189	ALA	N-CA-CB	5.36	117.60	110.10
2	B	184	C	O3'-P-O5'	-5.36	93.82	104.00
2	B	389	G	C5'-C4'-C3'	-5.36	107.43	116.00
2	B	506	G	C8-N9-C4	-5.36	104.26	106.40
2	B	526	A	O5'-C5'-C4'	-5.36	101.52	111.70
2	B	1064	C	N3-C4-C5	5.36	124.04	121.90
2	B	1276	A	N7-C8-N9	-5.36	111.12	113.80
2	B	1450	G	N1-C2-N3	-5.36	120.69	123.90
2	B	1579	A	C5-N7-C8	5.36	106.58	103.90
2	B	1793	C	N1-C2-N3	5.36	122.95	119.20
2	B	1800	C	P-O5'-C5'	-5.36	112.33	120.90
2	B	1828	G	C5-C6-N1	-5.36	108.82	111.50
2	B	2258	C	C2-N3-C4	5.36	122.58	119.90
2	B	2866	U	C1'-O4'-C4'	5.36	114.19	109.90
2	B	2869	G	C3'-C2'-C1'	5.36	105.79	101.50
30	H	115	VAL	N-CA-C	-5.36	96.54	111.00
2	B	70	G	P-O5'-C5'	-5.36	112.33	120.90
2	B	709	U	C2-N1-C1'	-5.36	111.27	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	782	A	C5-C6-N1	-5.36	115.02	117.70
2	B	884	U	OP1-P-OP2	-5.36	111.57	119.60
2	B	1022	G	C1'-O4'-C4'	-5.36	105.61	109.90
2	B	1052	C	C2-N3-C4	5.36	122.58	119.90
2	B	1156	A	C5-N7-C8	5.36	106.58	103.90
2	B	1278	C	P-O3'-C3'	-5.36	113.27	119.70
2	B	1386	C	C6-N1-C2	-5.36	118.16	120.30
2	B	1400	U	C6-N1-C2	5.36	124.21	121.00
2	B	1755	A	N1-C2-N3	5.36	131.98	129.30
2	B	1893	C	C5-C4-N4	-5.36	116.45	120.20
18	W	6	ALA	N-CA-CB	5.36	117.60	110.10
2	B	292	U	N1-C2-O2	-5.35	119.05	122.80
2	B	1440	U	C5'-C4'-C3'	-5.35	107.43	116.00
2	B	1620	G	C2-N3-C4	-5.35	109.22	111.90
2	B	1620	G	N1-C2-N3	-5.35	120.69	123.90
2	B	1855	U	OP1-P-OP2	-5.35	111.57	119.60
2	B	1910	G	C5-N7-C8	5.35	106.98	104.30
2	B	2253	G	C8-N9-C4	-5.35	104.26	106.40
2	B	2560	A	C4-C5-C6	5.35	119.68	117.00
2	B	2805	C	C5'-C4'-C3'	-5.35	107.43	116.00
2	B	2831	G	C4'-C3'-C2'	-5.35	97.25	102.60
8	N	99	LYS	N-CA-CB	5.35	120.24	110.60
2	B	1242	U	C4'-C3'-C2'	5.35	107.95	102.60
2	B	1332	G	C6-N1-C2	-5.35	121.89	125.10
2	B	1818	U	O4'-C1'-N1	5.35	112.48	108.20
2	B	1901	A	P-O5'-C5'	5.35	129.47	120.90
2	B	2198	A	C4-C5-C6	5.35	119.68	117.00
2	B	2589	A	C4-C5-C6	5.35	119.68	117.00
11	Q	31	TYR	CB-CG-CD1	-5.35	117.79	121.00
23	5	39	VAL	CB-CA-C	5.35	121.57	111.40
2	B	277	G	N3-C4-N9	5.35	129.21	126.00
2	B	1278	C	C6-N1-C2	5.35	122.44	120.30
2	B	2106	U	C1'-O4'-C4'	-5.35	105.62	109.90
2	B	2218	G	C5-C6-N1	5.35	114.17	111.50
2	B	2426	A	P-O5'-C5'	-5.35	112.34	120.90
2	B	2607	G	C2-N3-C4	-5.35	109.22	111.90
1	A	68	C	O4'-C4'-C3'	-5.35	98.65	104.00
2	B	43	G	C8-N9-C4	-5.35	104.26	106.40
2	B	177	G	C4'-C3'-C2'	-5.35	97.25	102.60
2	B	256	A	N3-C4-C5	-5.35	123.06	126.80
2	B	960	A	C5-C6-N6	-5.35	119.42	123.70
2	B	1332	G	C8-N9-C1'	-5.35	120.05	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1402	U	N3-C2-O2	-5.35	118.46	122.20
2	B	1473	G	C6-C5-N7	-5.35	127.19	130.40
2	B	1569	A	C5-C6-N1	-5.35	115.03	117.70
2	B	2303	G	C4-N9-C1'	-5.35	119.55	126.50
2	B	2842	G	N3-C2-N2	5.35	123.64	119.90
19	X	286	ASN	O-C-N	-5.35	114.14	122.70
2	B	213	A	P-O3'-C3'	5.35	126.12	119.70
2	B	627	A	C8-N9-C4	5.35	107.94	105.80
2	B	1063	G	C6-C5-N7	-5.35	127.19	130.40
2	B	1305	C	C4-C5-C6	5.35	120.07	117.40
2	B	1599	U	N3-C2-O2	-5.35	118.46	122.20
2	B	2246	G	O5'-C5'-C4'	-5.35	101.54	111.70
2	B	2494	G	N3-C4-C5	5.35	131.27	128.60
2	B	2765	A	O4'-C1'-N9	5.35	112.48	108.20
2	B	2866	U	O4'-C1'-N1	5.35	112.48	108.20
2	B	188	G	C4-N9-C1'	-5.35	119.55	126.50
2	B	561	G	OP1-P-OP2	-5.35	111.58	119.60
2	B	806	C	C4'-C3'-C2'	-5.35	97.25	102.60
2	B	896	A	C8-N9-C4	-5.35	103.66	105.80
2	B	1097	U	C5-C6-N1	-5.35	120.03	122.70
2	B	1121	C	N3-C4-N4	5.35	121.74	118.00
2	B	1252	G	C2-N3-C4	5.35	114.57	111.90
2	B	1582	C	C6-N1-C2	-5.35	118.16	120.30
2	B	1827	U	P-O5'-C5'	-5.35	112.35	120.90
2	B	1833	C	C3'-C2'-C1'	-5.35	97.22	101.50
7	M	35	ALA	CB-CA-C	-5.35	102.08	110.10
23	5	38	PHE	N-CA-CB	5.35	120.22	110.60
2	B	159	G	C8-N9-C1'	5.34	133.95	127.00
2	B	305	C	N3-C4-C5	-5.34	119.76	121.90
2	B	588	U	N3-C4-O4	-5.34	115.66	119.40
2	B	763	G	C5'-C4'-C3'	-5.34	107.45	116.00
2	B	778	G	C6-N1-C2	5.34	128.31	125.10
2	B	1180	U	N1-C2-N3	5.34	118.11	114.90
2	B	1265	A	C6-N1-C2	-5.34	115.39	118.60
2	B	1368	G	N1-C2-N3	-5.34	120.69	123.90
2	B	1544	A	C5-C6-N6	-5.34	119.42	123.70
2	B	1915	U	C5'-C4'-C3'	5.34	124.55	116.00
2	B	2001	C	OP1-P-OP2	-5.34	111.58	119.60
2	B	2088	A	N9-C4-C5	-5.34	103.66	105.80
19	X	131	ASP	CB-CG-OD2	-5.34	113.49	118.30
23	5	152	ALA	N-CA-CB	5.34	117.58	110.10
2	B	161	A	C5-C6-N6	-5.34	119.42	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	480	A	N9-C4-C5	5.34	107.94	105.80
2	B	598	U	C2-N3-C4	5.34	130.21	127.00
2	B	770	G	O4'-C4'-C3'	-5.34	98.66	104.00
2	B	907	G	C6-N1-C2	-5.34	121.89	125.10
2	B	2188	U	O4'-C4'-C3'	-5.34	98.66	104.00
2	B	232	G	N3-C4-C5	-5.34	125.93	128.60
2	B	899	A	O4'-C4'-C3'	-5.34	98.66	104.00
2	B	1059	G	N1-C6-O6	5.34	123.11	119.90
2	B	1212	G	C4-N9-C1'	5.34	133.44	126.50
2	B	1271	G	O4'-C1'-C2'	-5.34	100.46	105.80
2	B	1574	C	C2-N3-C4	5.34	122.57	119.90
2	B	1991	U	C6-N1-C2	-5.34	117.80	121.00
2	B	2238	G	C8-N9-C4	5.34	108.54	106.40
2	B	2514	U	O5'-C5'-C4'	-5.34	101.55	111.70
2	B	2553	G	P-O3'-C3'	5.34	126.11	119.70
2	B	2624	G	N9-C4-C5	5.34	107.54	105.40
11	Q	30	VAL	CG1-CB-CG2	-5.34	102.35	110.90
2	B	128	C	C2-N1-C1'	5.34	124.67	118.80
2	B	315	G	C5-N7-C8	5.34	106.97	104.30
2	B	547	A	C2-N3-C4	-5.34	107.93	110.60
2	B	638	G	N9-C4-C5	5.34	107.53	105.40
2	B	640	C	C2-N3-C4	5.34	122.57	119.90
2	B	753	A	N3-C4-N9	5.34	131.67	127.40
2	B	1056	G	O5'-P-OP1	5.34	117.11	110.70
2	B	1083	U	N3-C4-C5	5.34	117.80	114.60
2	B	1153	C	O4'-C1'-N1	5.34	112.47	108.20
2	B	1376	C	C5'-C4'-C3'	5.34	124.54	116.00
2	B	1718	G	P-O5'-C5'	-5.34	112.36	120.90
2	B	1975	G	C6-C5-N7	-5.34	127.20	130.40
2	B	2099	U	C1'-O4'-C4'	5.34	114.17	109.90
2	B	2857	G	C6-C5-N7	-5.34	127.20	130.40
11	Q	62	ALA	CB-CA-C	-5.34	102.09	110.10
16	2	35	VAL	CA-CB-CG2	5.34	118.91	110.90
2	B	34	U	O4'-C1'-N1	5.34	112.47	108.20
2	B	147	C	C6-N1-C1'	5.34	127.21	120.80
2	B	1058	U	N3-C4-O4	5.34	123.14	119.40
2	B	1470	A	C5-C6-N6	-5.34	119.43	123.70
2	B	1728	C	N3-C4-C5	-5.34	119.77	121.90
2	B	2109	U	C5-C6-N1	5.34	125.37	122.70
2	B	2350	C	C3'-C2'-C1'	-5.34	97.23	101.50
2	B	63	A	C1'-O4'-C4'	-5.34	105.63	109.90
2	B	315	G	N9-C4-C5	5.34	107.53	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	482	A	C5-C6-N1	-5.34	115.03	117.70
2	B	822	G	C6-C5-N7	-5.34	127.20	130.40
2	B	1553	A	C5-N7-C8	5.34	106.57	103.90
2	B	2180	U	N3-C2-O2	5.34	125.94	122.20
2	B	2250	G	N3-C4-N9	5.34	129.20	126.00
2	B	2296	U	P-O5'-C5'	5.34	129.44	120.90
2	B	2738	A	C2-N3-C4	-5.34	107.93	110.60
2	B	2815	C	C1'-O4'-C4'	-5.34	105.63	109.90
2	B	1632	A	N7-C8-N9	-5.33	111.13	113.80
2	B	1720	U	C2-N1-C1'	-5.33	111.30	117.70
2	B	2456	C	N3-C4-C5	-5.33	119.77	121.90
2	B	2832	U	O4'-C4'-C3'	-5.33	98.67	104.00
2	B	1179	G	C5-C6-N1	-5.33	108.83	111.50
2	B	1243	C	C2-N3-C4	-5.33	117.23	119.90
2	B	1416	G	C1'-O4'-C4'	-5.33	105.63	109.90
2	B	1582	C	C4-C5-C6	-5.33	114.73	117.40
2	B	1623	G	N3-C4-N9	5.33	129.20	126.00
2	B	1778	U	N1-C1'-C2'	-5.33	106.13	112.00
2	B	1823	G	O4'-C1'-N9	5.33	112.47	108.20
2	B	2057	G	C4-C5-C6	5.33	122.00	118.80
2	B	2252	G	N9-C4-C5	5.33	107.53	105.40
2	B	2448	A	O5'-C5'-C4'	5.33	121.83	111.70
2	B	2681	C	C4-C5-C6	-5.33	114.73	117.40
2	B	2684	U	N3-C4-C5	-5.33	111.40	114.60
1	A	43	C	OP1-P-OP2	-5.33	111.60	119.60
2	B	402	A	C3'-C2'-C1'	-5.33	97.23	101.50
2	B	558	U	OP2-P-O3'	5.33	116.93	105.20
2	B	614	A	C2-N3-C4	-5.33	107.93	110.60
2	B	616	A	C5-C6-N1	-5.33	115.03	117.70
2	B	1322	A	C6-N1-C2	-5.33	115.40	118.60
2	B	1426	G	O5'-C5'-C4'	-5.33	101.57	111.70
2	B	2225	A	C4-N9-C1'	5.33	135.90	126.30
5	L	28	GLY	C-N-CA	5.33	135.03	121.70
13	S	7	HIS	CA-CB-CG	-5.33	104.53	113.60
29	G	95	ALA	CB-CA-C	-5.33	102.10	110.10
2	B	790	U	C5-C6-N1	5.33	125.36	122.70
2	B	1614	A	N9-C1'-C2'	-5.33	106.14	112.00
2	B	2129	C	C5-C6-N1	5.33	123.67	121.00
2	B	2167	U	N3-C4-C5	-5.33	111.40	114.60
8	N	3	HIS	O-C-N	5.33	131.23	122.70
20	E	40	ARG	CD-NE-CZ	-5.33	116.14	123.60
2	B	95	A	N3-C4-C5	-5.33	123.07	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	418	C	C5'-C4'-C3'	5.33	124.53	116.00
2	B	783	A	OP2-P-O3'	5.33	116.92	105.20
2	B	909	A	O5'-P-OP2	5.33	117.09	110.70
2	B	1108	U	C5'-C4'-C3'	-5.33	107.47	116.00
2	B	1142	A	C2-N3-C4	5.33	113.27	110.60
2	B	1160	G	C4'-C3'-C2'	5.33	107.93	102.60
2	B	1515	A	C8-N9-C4	-5.33	103.67	105.80
2	B	1973	G	C5'-C4'-O4'	5.33	115.49	109.10
2	B	2238	G	N1-C6-O6	5.33	123.10	119.90
2	B	2339	C	C5'-C4'-C3'	-5.33	107.47	116.00
2	B	2415	G	C4-C5-C6	5.33	122.00	118.80
2	B	2500	U	N3-C4-C5	-5.33	111.40	114.60
2	B	2516	A	P-O3'-C3'	-5.33	113.31	119.70
2	B	2551	C	N3-C4-C5	-5.33	119.77	121.90
30	H	86	ASP	CB-CG-OD1	5.33	123.10	118.30
1	A	68	C	C6-N1-C2	5.33	122.43	120.30
1	A	70	C	C3'-C2'-C1'	-5.33	97.24	101.50
2	B	185	G	C6-N1-C2	-5.33	121.90	125.10
2	B	304	U	O4'-C1'-N1	5.33	112.46	108.20
2	B	1579	A	C4-C5-N7	-5.33	108.04	110.70
2	B	1952	A	C1'-O4'-C4'	5.33	114.16	109.90
2	B	2884	U	N3-C4-C5	-5.33	111.40	114.60
1	A	116	G	O4'-C1'-N9	5.33	112.46	108.20
2	B	165	A	N3-C4-C5	5.33	130.53	126.80
2	B	255	A	O4'-C1'-N9	5.33	112.46	108.20
2	B	477	A	N3-C4-C5	-5.33	123.07	126.80
2	B	733	G	C1'-O4'-C4'	-5.33	105.64	109.90
2	B	754	U	C6-N1-C2	-5.33	117.80	121.00
2	B	975	A	C2-N3-C4	-5.33	107.94	110.60
2	B	1070	A	N9-C4-C5	-5.33	103.67	105.80
2	B	1161	C	C2-N3-C4	5.33	122.56	119.90
2	B	1377	G	N3-C2-N2	-5.33	116.17	119.90
2	B	1736	U	C2-N1-C1'	-5.33	111.31	117.70
2	B	1945	G	C5-C6-O6	-5.33	125.41	128.60
2	B	2058	A	O4'-C4'-C3'	-5.33	98.67	104.00
2	B	2289	G	C3'-C2'-C1'	-5.33	97.24	101.50
2	B	2337	G	O3'-P-O5'	-5.33	93.88	104.00
2	B	2788	C	C4-C5-C6	5.33	120.06	117.40
7	M	28	PHE	CG-CD1-CE1	-5.33	114.94	120.80
1	A	52	A	C5-C6-N6	-5.32	119.44	123.70
2	B	50	U	N3-C4-O4	-5.32	115.67	119.40
2	B	56	A	N1-C6-N6	5.32	121.79	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	851	C	C2-N3-C4	-5.32	117.24	119.90
2	B	972	A	C8-N9-C1'	5.32	137.28	127.70
2	B	990	A	N3-C4-C5	-5.32	123.07	126.80
2	B	1138	G	P-O5'-C5'	-5.32	112.38	120.90
2	B	1160	G	N9-C1'-C2'	-5.32	106.14	112.00
2	B	1320	C	C4'-C3'-C2'	-5.32	97.28	102.60
2	B	1650	A	C8-N9-C1'	5.32	137.28	127.70
2	B	1835	G	C4-N9-C1'	5.32	133.42	126.50
2	B	1888	G	C2'-C3'-O3'	5.32	122.22	113.70
2	B	2186	G	C5-N7-C8	5.32	106.96	104.30
2	B	2277	G	C4'-C3'-C2'	5.32	107.92	102.60
2	B	2305	U	C5'-C4'-O4'	5.32	115.49	109.10
2	B	2816	G	C4-C5-N7	5.32	112.93	110.80
12	R	93	PHE	CB-CG-CD2	-5.32	117.07	120.80
14	D	101	PHE	CB-CG-CD2	5.32	124.53	120.80
20	E	124	PHE	C-N-CA	5.32	135.01	121.70
2	B	11	C	C6-N1-C2	5.32	122.43	120.30
2	B	521	U	C6-N1-C1'	5.32	128.65	121.20
2	B	915	C	O4'-C1'-N1	5.32	112.46	108.20
2	B	2036	C	C6-N1-C1'	-5.32	114.41	120.80
2	B	2197	U	N3-C4-O4	5.32	123.12	119.40
2	B	2470	G	C6-N1-C2	5.32	128.29	125.10
2	B	2674	G	N3-C4-C5	-5.32	125.94	128.60
2	B	563	A	N7-C8-N9	5.32	116.46	113.80
2	B	566	U	O4'-C1'-C2'	5.32	112.39	107.60
2	B	805	G	N3-C4-C5	5.32	131.26	128.60
2	B	1025	G	C5'-C4'-C3'	-5.32	107.49	116.00
2	B	1358	G	N1-C2-N3	-5.32	120.71	123.90
2	B	1463	C	C2-N3-C4	5.32	122.56	119.90
2	B	1623	G	O4'-C4'-C3'	-5.32	98.68	104.00
2	B	1892	C	C5-C4-N4	-5.32	116.47	120.20
2	B	2233	U	O5'-C5'-C4'	-5.32	101.59	111.70
2	B	2319	G	C2-N3-C4	-5.32	109.24	111.90
2	B	2894	G	C4-N9-C1'	5.32	133.42	126.50
1	A	95	U	C5'-C4'-C3'	5.32	124.51	116.00
2	B	215	G	N3-C4-C5	-5.32	125.94	128.60
2	B	383	C	N3-C4-C5	-5.32	119.77	121.90
2	B	1020	A	C3'-C2'-C1'	-5.32	97.25	101.50
2	B	1155	A	C5'-C4'-C3'	-5.32	107.49	116.00
2	B	2490	G	P-O5'-C5'	-5.32	112.39	120.90
19	X	11	PRO	CA-C-O	-5.32	107.43	120.20
1	A	13	G	N3-C2-N2	5.32	123.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	60	C	O5'-C5'-C4'	-5.32	101.59	111.70
2	B	940	G	C5-C6-O6	-5.32	125.41	128.60
2	B	1027	A	C5-C6-N6	-5.32	119.45	123.70
2	B	1193	G	C4-C5-N7	5.32	112.93	110.80
2	B	1312	U	N3-C4-C5	5.32	117.79	114.60
2	B	1608	A	C3'-C2'-C1'	5.32	105.75	101.50
2	B	1624	U	C5'-C4'-O4'	-5.32	102.72	109.10
2	B	1689	A	C8-N9-C4	-5.32	103.67	105.80
2	B	2130	U	P-O3'-C3'	5.32	126.08	119.70
2	B	2526	G	O4'-C1'-N9	5.32	112.45	108.20
2	B	2545	G	N3-C4-N9	-5.32	122.81	126.00
2	B	2549	G	C1'-O4'-C4'	5.32	114.16	109.90
1	A	15	A	C3'-C2'-C1'	-5.32	97.25	101.50
2	B	906	U	C1'-O4'-C4'	-5.32	105.65	109.90
2	B	1264	A	P-O3'-C3'	5.32	126.08	119.70
2	B	1372	U	C1'-O4'-C4'	-5.32	105.65	109.90
2	B	1484	U	C5-C4-O4	-5.32	122.71	125.90
2	B	1840	G	C4-C5-C6	5.32	121.99	118.80
2	B	2102	G	C6-C5-N7	-5.32	127.21	130.40
2	B	2108	A	C5-C6-N1	-5.32	115.04	117.70
2	B	2206	C	N1-C1'-C2'	-5.32	106.15	112.00
2	B	2411	A	C6-N1-C2	-5.32	115.41	118.60
2	B	2467	C	N3-C2-O2	-5.32	118.18	121.90
2	B	2485	G	N3-C2-N2	-5.32	116.18	119.90
8	N	87	PHE	N-CA-C	-5.32	96.65	111.00
2	B	56	A	C5-C6-N6	-5.31	119.45	123.70
2	B	581	C	P-O3'-C3'	5.31	126.08	119.70
2	B	1237	A	N9-C4-C5	5.31	107.93	105.80
2	B	1323	C	O4'-C4'-C3'	-5.31	98.69	104.00
2	B	2225	A	C6-N1-C2	-5.31	115.41	118.60
2	B	2279	G	N9-C1'-C2'	-5.31	106.16	112.00
2	B	2385	C	N3-C4-C5	-5.31	119.78	121.90
2	B	2562	U	O4'-C4'-C3'	-5.31	98.69	104.00
2	B	2685	G	N3-C4-N9	5.31	129.19	126.00
2	B	2742	G	P-O5'-C5'	-5.31	112.40	120.90
2	B	2765	A	C5-C6-N1	-5.31	115.04	117.70
3	0	10	ARG	CD-NE-CZ	5.31	131.04	123.60
2	B	400	G	C5'-C4'-O4'	5.31	115.47	109.10
2	B	1564	C	N1-C2-N3	-5.31	115.48	119.20
2	B	1734	G	C5-N7-C8	-5.31	101.64	104.30
2	B	1754	A	P-O5'-C5'	-5.31	112.40	120.90
2	B	1785	A	C6-C5-N7	-5.31	128.58	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1967	C	N3-C4-C5	-5.31	119.78	121.90
2	B	2151	U	C6-N1-C2	-5.31	117.81	121.00
2	B	2267	A	P-O5'-C5'	-5.31	112.40	120.90
2	B	356	G	C4-N9-C1'	-5.31	119.59	126.50
2	B	362	A	C6-N1-C2	-5.31	115.41	118.60
2	B	926	G	C6-N1-C2	5.31	128.29	125.10
2	B	1225	G	C5-N7-C8	5.31	106.96	104.30
2	B	1722	A	P-O3'-C3'	5.31	126.07	119.70
2	B	2347	C	C4'-C3'-C2'	5.31	107.91	102.60
11	Q	5	ARG	CD-NE-CZ	-5.31	116.17	123.60
2	B	1002	G	N1-C6-O6	-5.31	116.71	119.90
2	B	1046	A	C3'-C2'-C1'	5.31	105.75	101.50
2	B	1252	G	C5'-C4'-C3'	-5.31	107.50	116.00
2	B	1404	C	C6-N1-C2	5.31	122.42	120.30
2	B	1609	A	C4'-C3'-C2'	-5.31	97.29	102.60
2	B	2383	G	C5'-C4'-C3'	-5.31	107.50	116.00
2	B	2643	G	C8-N9-C1'	5.31	133.90	127.00
2	B	2706	A	O4'-C1'-N9	5.31	112.45	108.20
24	6	42	LEU	CA-CB-CG	-5.31	103.09	115.30
2	B	264	C	C6-N1-C2	-5.31	118.18	120.30
2	B	428	A	N9-C1'-C2'	-5.31	106.16	112.00
2	B	489	G	C5-C6-N1	-5.31	108.85	111.50
2	B	875	G	O3'-P-O5'	5.31	114.08	104.00
2	B	944	C	O5'-C5'-C4'	-5.31	101.62	111.70
2	B	1789	A	C1'-O4'-C4'	-5.31	105.65	109.90
2	B	1804	C	N1-C2-O2	5.31	122.08	118.90
2	B	1917	U	C2-N3-C4	-5.31	123.81	127.00
23	5	62	ALA	N-CA-CB	5.31	117.53	110.10
1	A	48	U	N3-C2-O2	5.31	125.91	122.20
2	B	1	G	N1-C2-N2	-5.31	111.42	116.20
2	B	450	G	N3-C4-C5	-5.31	125.95	128.60
2	B	1432	G	C5-C6-O6	-5.31	125.42	128.60
2	B	1548	A	C8-N9-C4	-5.31	103.68	105.80
2	B	2243	U	O4'-C1'-C2'	5.31	112.38	107.60
2	B	6	A	O4'-C1'-N9	5.30	112.44	108.20
2	B	33	C	C4-C5-C6	-5.30	114.75	117.40
2	B	520	G	C5-C6-N1	5.30	114.15	111.50
2	B	544	C	C6-N1-C2	5.30	122.42	120.30
2	B	681	G	N1-C2-N3	-5.30	120.72	123.90
2	B	690	G	O4'-C1'-N9	5.30	112.44	108.20
2	B	780	G	C8-N9-C4	5.30	108.52	106.40
2	B	844	A	N3-C4-C5	-5.30	123.09	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	993	G	N3-C4-C5	5.30	131.25	128.60
2	B	1181	U	N3-C4-C5	-5.30	111.42	114.60
2	B	1415	U	C6-N1-C1'	5.30	128.63	121.20
2	B	1777	U	N1-C2-O2	5.30	126.51	122.80
2	B	1847	A	C4-N9-C1'	5.30	135.85	126.30
2	B	2075	U	C2-N3-C4	-5.30	123.82	127.00
2	B	2121	G	C6-C5-N7	-5.30	127.22	130.40
2	B	2344	U	C4-C5-C6	-5.30	116.52	119.70
2	B	2398	U	C3'-C2'-C1'	-5.30	97.26	101.50
2	B	2606	C	N1-C2-O2	5.30	122.08	118.90
14	D	16	THR	CA-CB-CG2	-5.30	104.97	112.40
2	B	377	G	C1'-O4'-C4'	-5.30	105.66	109.90
2	B	928	A	N3-C4-C5	-5.30	123.09	126.80
2	B	1160	G	N1-C6-O6	5.30	123.08	119.90
2	B	1203	U	C6-N1-C2	5.30	124.18	121.00
2	B	1711	A	C5'-C4'-C3'	-5.30	107.52	116.00
2	B	1848	A	O4'-C4'-C3'	-5.30	98.70	104.00
2	B	1956	U	N3-C4-O4	5.30	123.11	119.40
2	B	2193	G	N3-C2-N2	5.30	123.61	119.90
2	B	2201	G	C5-C6-N1	-5.30	108.85	111.50
2	B	2321	U	C2-N3-C4	-5.30	123.82	127.00
2	B	2812	G	N3-C2-N2	5.30	123.61	119.90
2	B	2817	U	C6-N1-C2	-5.30	117.82	121.00
2	B	2838	G	C8-N9-C1'	5.30	133.89	127.00
14	D	128	ARG	NE-CZ-NH2	-5.30	117.65	120.30
2	B	11	C	P-O5'-C5'	5.30	129.38	120.90
2	B	130	C	N3-C4-C5	-5.30	119.78	121.90
2	B	183	C	C3'-C2'-C1'	-5.30	97.26	101.50
2	B	476	G	C5-C6-N1	5.30	114.15	111.50
2	B	993	G	C2-N3-C4	-5.30	109.25	111.90
2	B	1174	U	N1-C2-O2	-5.30	119.09	122.80
2	B	1724	G	N7-C8-N9	5.30	115.75	113.10
2	B	2379	G	N3-C2-N2	5.30	123.61	119.90
1	A	82	U	O4'-C1'-N1	5.30	112.44	108.20
2	B	10	A	N9-C1'-C2'	-5.30	106.17	112.00
2	B	188	G	C8-N9-C4	5.30	108.52	106.40
2	B	346	A	O4'-C1'-N9	5.30	112.44	108.20
2	B	545	U	N3-C2-O2	-5.30	118.49	122.20
2	B	1276	A	C5-N7-C8	5.30	106.55	103.90
2	B	1557	C	O4'-C1'-N1	5.30	112.44	108.20
2	B	1582	C	N3-C4-C5	-5.30	119.78	121.90
2	B	1635	A	C5-N7-C8	5.30	106.55	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1650	A	C5-N7-C8	-5.30	101.25	103.90
2	B	2110	G	N3-C4-C5	-5.30	125.95	128.60
2	B	2149	U	N1-C2-O2	5.30	126.51	122.80
2	B	2397	G	N9-C1'-C2'	-5.30	106.17	112.00
4	K	50	GLY	C-N-CA	5.30	134.95	121.70
1	A	14	U	N1-C1'-C2'	-5.30	106.17	112.00
2	B	548	G	OP1-P-OP2	-5.30	111.65	119.60
2	B	611	C	N1-C2-O2	5.30	122.08	118.90
2	B	906	U	C6-N1-C2	-5.30	117.82	121.00
2	B	1469	A	C5-C6-N6	-5.30	119.46	123.70
2	B	1891	G	C5-N7-C8	5.30	106.95	104.30
2	B	2013	A	C5'-C4'-C3'	-5.30	107.52	116.00
2	B	2140	G	N3-C4-C5	5.30	131.25	128.60
2	B	2502	G	N1-C2-N2	-5.30	111.43	116.20
16	2	46	MET	CG-SD-CE	-5.30	91.72	100.20
2	B	424	G	P-O5'-C5'	5.30	129.38	120.90
2	B	585	G	N9-C1'-C2'	-5.30	106.17	112.00
2	B	720	U	N3-C2-O2	5.30	125.91	122.20
2	B	807	U	N1-C1'-C2'	-5.30	106.17	112.00
2	B	1761	C	C2-N1-C1'	-5.30	112.97	118.80
2	B	1788	C	C2-N1-C1'	5.30	124.63	118.80
2	B	1801	A	C4-C5-C6	5.30	119.65	117.00
2	B	1902	C	C5'-C4'-O4'	5.30	115.46	109.10
2	B	1996	C	C2-N1-C1'	5.30	124.63	118.80
2	B	2296	U	C5-C6-N1	5.30	125.35	122.70
2	B	2594	C	N3-C4-N4	5.30	121.71	118.00
2	B	2635	A	O4'-C1'-N9	5.30	112.44	108.20
2	B	2673	G	N1-C6-O6	5.30	123.08	119.90
10	P	106	ALA	C-N-CA	5.30	134.94	121.70
13	S	92	ARG	NE-CZ-NH1	5.30	122.95	120.30
2	B	49	A	O4'-C1'-N9	5.29	112.44	108.20
2	B	97	C	C5-C6-N1	5.29	123.65	121.00
2	B	329	G	O3'-P-O5'	-5.29	93.94	104.00
2	B	700	G	C5-C6-O6	-5.29	125.42	128.60
2	B	1215	G	C5-N7-C8	5.29	106.95	104.30
2	B	1228	G	C6-N1-C2	5.29	128.28	125.10
2	B	1828	G	C4-C5-N7	-5.29	108.68	110.80
2	B	122	G	N3-C4-N9	-5.29	122.82	126.00
2	B	123	G	C2-N3-C4	-5.29	109.25	111.90
2	B	758	C	P-O5'-C5'	5.29	129.37	120.90
2	B	1384	A	C1'-O4'-C4'	5.29	114.13	109.90
2	B	1545	A	C5-N7-C8	5.29	106.55	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1845	G	C5'-C4'-C3'	5.29	124.47	116.00
2	B	2321	U	C2-N1-C1'	5.29	124.05	117.70
2	B	2504	U	N3-C4-C5	-5.29	111.42	114.60
2	B	2805	C	C5-C4-N4	-5.29	116.49	120.20
7	M	104	GLU	N-CA-CB	5.29	120.13	110.60
2	B	14	A	C6-N1-C2	5.29	121.78	118.60
2	B	25	U	C6-N1-C1'	-5.29	113.79	121.20
2	B	1218	G	C2-N3-C4	5.29	114.55	111.90
2	B	1625	C	C2'-C3'-O3'	5.29	122.17	113.70
2	B	2026	U	N1-C2-N3	-5.29	111.73	114.90
2	B	2130	U	N3-C4-C5	5.29	117.77	114.60
2	B	2819	G	N9-C4-C5	5.29	107.52	105.40
21	Y	33	GLY	N-CA-C	-5.29	99.87	113.10
27	C	42	ARG	NE-CZ-NH1	5.29	122.95	120.30
27	C	87	SER	N-CA-C	-5.29	96.71	111.00
28	F	148	VAL	N-CA-CB	5.29	123.14	111.50
2	B	1230	A	O4'-C4'-C3'	-5.29	98.71	104.00
2	B	1694	C	C6-N1-C1'	-5.29	114.45	120.80
2	B	2644	G	C4'-C3'-C2'	5.29	107.89	102.60
2	B	177	G	C4-C5-N7	-5.29	108.68	110.80
2	B	1113	U	C5-C6-N1	5.29	125.34	122.70
2	B	1633	G	O4'-C4'-C3'	-5.29	98.71	104.00
2	B	1730	C	N1-C2-N3	5.29	122.90	119.20
2	B	1790	C	N1-C2-N3	5.29	122.90	119.20
2	B	1938	A	C4-C5-C6	5.29	119.64	117.00
2	B	2243	U	C4'-C3'-C2'	5.29	107.89	102.60
2	B	2384	U	O4'-C1'-C2'	-5.29	100.51	105.80
2	B	2401	U	P-O5'-C5'	-5.29	112.44	120.90
2	B	2798	U	C5'-C4'-O4'	5.29	115.45	109.10
4	K	16	ALA	C-N-CA	5.29	134.92	121.70
2	B	148	U	C1'-O4'-C4'	5.29	114.13	109.90
2	B	437	U	C5'-C4'-O4'	-5.29	102.76	109.10
2	B	543	G	C4-C5-C6	5.29	121.97	118.80
2	B	1394	U	O4'-C1'-N1	5.29	112.43	108.20
2	B	1485	U	C5-C6-N1	-5.29	120.06	122.70
2	B	1657	U	C2-N1-C1'	-5.29	111.36	117.70
1	A	67	G	N9-C4-C5	-5.29	103.29	105.40
2	B	41	C	C4-C5-C6	5.29	120.04	117.40
2	B	81	G	C6-C5-N7	-5.29	127.23	130.40
2	B	500	G	N3-C4-N9	5.29	129.17	126.00
2	B	677	A	N7-C8-N9	-5.29	111.16	113.80
2	B	866	A	O4'-C4'-C3'	-5.29	98.71	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	872	U	N3-C4-O4	5.29	123.10	119.40
2	B	893	C	N1-C1'-C2'	-5.29	106.19	112.00
2	B	1006	C	C5-C6-N1	5.29	123.64	121.00
2	B	1198	U	C5'-C4'-O4'	5.29	115.44	109.10
2	B	1338	G	C5-N7-C8	5.29	106.94	104.30
2	B	1514	G	C8-N9-C4	-5.29	104.29	106.40
2	B	1836	C	P-O3'-C3'	5.29	126.04	119.70
9	O	9	ARG	CB-CG-CD	5.29	125.34	111.60
14	D	156	PHE	CB-CG-CD2	5.29	124.50	120.80
17	U	81	ARG	NE-CZ-NH1	5.29	122.94	120.30
21	Y	41	GLY	C-N-CA	5.29	134.91	121.70
23	5	176	GLY	CA-C-O	5.29	130.12	120.60
1	A	116	G	N7-C8-N9	-5.28	110.46	113.10
2	B	28	A	C4-C5-N7	-5.28	108.06	110.70
2	B	518	G	O4'-C1'-N9	5.28	112.43	108.20
2	B	627	A	N7-C8-N9	-5.28	111.16	113.80
2	B	684	G	C4'-C3'-C2'	-5.28	97.32	102.60
2	B	702	U	C2-N3-C4	-5.28	123.83	127.00
2	B	745	G	C8-N9-C1'	5.28	133.87	127.00
2	B	789	A	C8-N9-C4	5.28	107.91	105.80
2	B	836	G	C4-C5-C6	-5.28	115.63	118.80
2	B	1337	G	C6-C5-N7	-5.28	127.23	130.40
2	B	1479	G	O5'-C5'-C4'	-5.28	101.66	111.70
2	B	1580	A	O5'-C5'-C4'	-5.28	101.66	111.70
2	B	2546	U	C5-C4-O4	-5.28	122.73	125.90
24	6	29	GLN	CG-CD-OE1	-5.28	111.03	121.60
2	B	825	A	C8-N9-C1'	-5.28	118.19	127.70
2	B	1	G	C2-N3-C4	5.28	114.54	111.90
2	B	90	U	O5'-C5'-C4'	-5.28	101.67	111.70
2	B	349	U	OP2-P-O3'	5.28	116.82	105.20
2	B	401	A	C4-C5-C6	5.28	119.64	117.00
2	B	620	G	N3-C2-N2	5.28	123.60	119.90
2	B	796	C	N3-C4-C5	-5.28	119.79	121.90
2	B	1406	U	N1-C2-O2	-5.28	119.10	122.80
2	B	2056	G	C5'-C4'-O4'	-5.28	102.76	109.10
2	B	2896	C	O5'-C5'-C4'	-5.28	101.67	111.70
2	B	2899	A	C8-N9-C4	-5.28	103.69	105.80
1	A	86	G	C6-C5-N7	-5.28	127.23	130.40
1	A	107	G	O4'-C1'-N9	5.28	112.42	108.20
2	B	1724	G	N1-C2-N2	5.28	120.95	116.20
2	B	1783	A	N7-C8-N9	-5.28	111.16	113.80
2	B	2157	G	C8-N9-C4	5.28	108.51	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2372	U	C6-N1-C2	-5.28	117.83	121.00
5	L	66	PHE	N-CA-CB	5.28	120.10	110.60
2	B	47	C	P-O3'-C3'	-5.28	113.37	119.70
2	B	105	C	C3'-C2'-C1'	5.28	105.72	101.50
2	B	159	G	C4-N9-C1'	-5.28	119.64	126.50
2	B	1265	A	N7-C8-N9	5.28	116.44	113.80
2	B	1820	U	C4-C5-C6	-5.28	116.53	119.70
2	B	2531	A	C2-N3-C4	-5.28	107.96	110.60
2	B	2646	C	N3-C4-N4	5.28	121.69	118.00
9	O	40	ILE	CA-CB-CG1	5.28	121.03	111.00
24	6	17	GLY	N-CA-C	-5.28	99.91	113.10
2	B	572	A	N1-C2-N3	5.28	131.94	129.30
2	B	776	G	C5'-C4'-O4'	5.28	115.43	109.10
2	B	940	G	O3'-P-O5'	5.28	114.02	104.00
2	B	967	U	C1'-O4'-C4'	5.28	114.12	109.90
2	B	981	A	C4-C5-N7	-5.28	108.06	110.70
2	B	1127	A	N7-C8-N9	5.28	116.44	113.80
2	B	1287	A	C2-N3-C4	5.28	113.24	110.60
2	B	1300	G	C6-C5-N7	-5.28	127.23	130.40
2	B	1604	C	C4-C5-C6	5.28	120.04	117.40
2	B	1969	A	O4'-C4'-C3'	-5.28	98.72	104.00
2	B	2287	A	C2-N3-C4	5.28	113.24	110.60
2	B	2307	G	N1-C6-O6	5.28	123.07	119.90
2	B	2492	U	C5-C4-O4	-5.28	122.73	125.90
2	B	2645	G	C4'-C3'-C2'	-5.28	97.33	102.60
2	B	2685	G	N1-C2-N3	-5.28	120.73	123.90
18	W	35	GLU	N-CA-C	-5.28	96.75	111.00
2	B	1285	A	C4-C5-C6	5.27	119.64	117.00
2	B	2277	G	C5-N7-C8	-5.27	101.66	104.30
10	P	100	ARG	NE-CZ-NH1	-5.27	117.66	120.30
2	B	501	A	C4-C5-N7	-5.27	108.06	110.70
2	B	1621	U	C4'-C3'-C2'	-5.27	97.33	102.60
2	B	1903	G	C5-C6-N1	-5.27	108.86	111.50
2	B	1975	G	P-O3'-C3'	5.27	126.03	119.70
2	B	813	U	P-O5'-C5'	-5.27	112.47	120.90
19	X	441	TYR	CZ-CE2-CD2	-5.27	115.06	119.80
2	B	61	C	C5'-C4'-C3'	-5.27	107.57	116.00
2	B	337	C	N3-C4-N4	5.27	121.69	118.00
2	B	477	A	N1-C2-N3	-5.27	126.67	129.30
2	B	535	G	C3'-C2'-C1'	5.27	105.72	101.50
2	B	657	U	C5'-C4'-O4'	-5.27	102.78	109.10
2	B	684	G	N1-C2-N3	-5.27	120.74	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1119	U	P-O3'-C3'	-5.27	113.38	119.70
2	B	1427	A	P-O5'-C5'	-5.27	112.47	120.90
2	B	1474	U	C4'-C3'-C2'	5.27	107.87	102.60
2	B	1713	A	P-O3'-C3'	5.27	126.02	119.70
2	B	2056	G	N1-C2-N2	-5.27	111.46	116.20
2	B	2132	U	C4-C5-C6	5.27	122.86	119.70
2	B	2230	G	C5-C6-O6	-5.27	125.44	128.60
2	B	2571	U	C2-N1-C1'	5.27	124.02	117.70
2	B	2575	C	C5'-C4'-O4'	5.27	115.42	109.10
2	B	2631	G	C6-N1-C2	5.27	128.26	125.10
2	B	2673	G	C2-N3-C4	-5.27	109.27	111.90
2	B	2814	A	P-O3'-C3'	-5.27	113.38	119.70
2	B	2822	G	C5'-C4'-O4'	5.27	115.42	109.10
19	X	158	VAL	CA-CB-CG2	5.27	118.80	110.90
27	C	89	ASN	N-CA-CB	5.27	120.08	110.60
1	A	26	C	P-O5'-C5'	-5.27	112.47	120.90
1	A	69	G	N7-C8-N9	5.27	115.73	113.10
2	B	158	U	C2-N3-C4	-5.27	123.84	127.00
2	B	399	U	C6-N1-C2	-5.27	117.84	121.00
2	B	607	U	C4'-C3'-C2'	-5.27	97.33	102.60
2	B	1142	A	C6-C5-N7	-5.27	128.61	132.30
2	B	1570	A	O4'-C1'-N9	5.27	112.42	108.20
2	B	1934	C	N3-C4-C5	-5.27	119.79	121.90
2	B	1982	U	C5-C6-N1	5.27	125.33	122.70
2	B	2585	U	N3-C4-O4	5.27	123.09	119.40
11	Q	57	ARG	NH1-CZ-NH2	-5.27	113.61	119.40
27	C	220	ARG	NE-CZ-NH2	-5.27	117.67	120.30
2	B	319	G	C4-C5-C6	5.27	121.96	118.80
2	B	663	G	N1-C2-N3	-5.27	120.74	123.90
2	B	1082	U	C5-C4-O4	5.27	129.06	125.90
2	B	1724	G	O4'-C1'-N9	5.27	112.41	108.20
2	B	1977	A	C6-N1-C2	5.27	121.76	118.60
2	B	2341	G	C4-C5-C6	5.27	121.96	118.80
15	T	72	GLN	N-CA-C	-5.27	96.78	111.00
2	B	251	A	N7-C8-N9	-5.26	111.17	113.80
2	B	307	G	P-O3'-C3'	5.26	126.02	119.70
2	B	1135	C	N3-C4-C5	5.26	124.00	121.90
2	B	1229	C	C1'-O4'-C4'	-5.26	105.69	109.90
2	B	1545	A	P-O3'-C3'	-5.26	113.38	119.70
2	B	1686	C	N1-C2-N3	5.26	122.89	119.20
2	B	2444	G	C5-C6-O6	-5.26	125.44	128.60
2	B	175	G	C5-C6-O6	-5.26	125.44	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	212	G	C4'-C3'-C2'	-5.26	97.34	102.60
2	B	862	G	P-O3'-C3'	5.26	126.02	119.70
2	B	1009	A	C5-C6-N6	-5.26	119.49	123.70
2	B	1425	G	N1-C6-O6	5.26	123.06	119.90
2	B	1556	C	P-O3'-C3'	5.26	126.02	119.70
2	B	1604	C	C2-N3-C4	5.26	122.53	119.90
2	B	1788	C	C5'-C4'-C3'	-5.26	107.58	116.00
2	B	57	C	O5'-P-OP1	-5.26	100.96	105.70
2	B	150	U	C5-C4-O4	5.26	129.06	125.90
2	B	162	U	N1-C2-O2	5.26	126.48	122.80
2	B	252	G	C5-C6-O6	-5.26	125.44	128.60
2	B	330	A	N9-C1'-C2'	5.26	120.84	114.00
2	B	452	G	C5-N7-C8	-5.26	101.67	104.30
2	B	570	G	C4-C5-N7	-5.26	108.70	110.80
2	B	725	G	C5-N7-C8	-5.26	101.67	104.30
2	B	787	C	N3-C4-C5	5.26	124.00	121.90
2	B	936	A	C8-N9-C4	-5.26	103.69	105.80
2	B	1153	C	C6-N1-C2	-5.26	118.19	120.30
2	B	1285	A	N9-C4-C5	-5.26	103.70	105.80
2	B	1561	C	C4'-C3'-O3'	-5.26	98.35	109.40
2	B	1741	C	C6-N1-C1'	5.26	127.11	120.80
2	B	1758	U	C6-N1-C1'	-5.26	113.83	121.20
2	B	1834	U	N3-C4-O4	5.26	123.08	119.40
2	B	1924	C	N3-C4-C5	-5.26	119.80	121.90
2	B	2694	G	C6-N1-C2	-5.26	121.94	125.10
2	B	2719	G	C8-N9-C1'	5.26	133.84	127.00
7	M	114	ARG	NE-CZ-NH2	5.26	122.93	120.30
19	X	216	SER	N-CA-CB	5.26	118.39	110.50
20	E	32	VAL	CG1-CB-CG2	5.26	119.32	110.90
20	E	176	ASP	CB-CG-OD2	5.26	123.03	118.30
2	B	42	A	P-O5'-C5'	5.26	129.31	120.90
2	B	116	C	C3'-C2'-C1'	5.26	105.71	101.50
2	B	142	A	C2-N3-C4	-5.26	107.97	110.60
2	B	161	A	N7-C8-N9	-5.26	111.17	113.80
2	B	221	A	C4-C5-C6	5.26	119.63	117.00
2	B	630	G	C6-C5-N7	-5.26	127.24	130.40
2	B	874	G	N9-C1'-C2'	-5.26	106.22	112.00
2	B	912	C	C4'-C3'-O3'	-5.26	98.36	109.40
2	B	955	U	C3'-C2'-C1'	5.26	105.71	101.50
2	B	1009	A	N1-C2-N3	5.26	131.93	129.30
2	B	1299	G	N3-C4-C5	-5.26	125.97	128.60
2	B	1463	C	N3-C4-N4	5.26	121.68	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1504	A	N3-C4-C5	-5.26	123.12	126.80
2	B	1579	A	O4'-C1'-N9	5.26	112.41	108.20
2	B	1704	C	C1'-O4'-C4'	-5.26	105.69	109.90
2	B	1809	A	N9-C4-C5	-5.26	103.70	105.80
2	B	2340	A	N9-C1'-C2'	-5.26	106.21	112.00
2	B	1157	G	C5-C6-N1	-5.26	108.87	111.50
2	B	1462	C	C3'-C2'-C1'	-5.26	97.29	101.50
2	B	1518	C	C5-C6-N1	5.26	123.63	121.00
2	B	2452	C	C6-N1-C1'	5.26	127.11	120.80
23	5	162	ARG	NH1-CZ-NH2	-5.26	113.62	119.40
2	B	1	G	C5'-C4'-O4'	5.26	115.41	109.10
2	B	218	A	O5'-P-OP1	-5.26	100.97	105.70
2	B	245	G	C6-N1-C2	5.26	128.25	125.10
2	B	494	G	N7-C8-N9	5.26	115.73	113.10
2	B	542	C	C5-C4-N4	-5.26	116.52	120.20
2	B	778	G	N3-C2-N2	5.26	123.58	119.90
2	B	1042	G	C2-N3-C4	-5.26	109.27	111.90
2	B	1172	C	O4'-C1'-N1	5.26	112.40	108.20
2	B	1229	C	P-O5'-C5'	5.26	129.31	120.90
2	B	1313	U	C5-C6-N1	-5.26	120.07	122.70
2	B	1525	A	C8-N9-C4	-5.26	103.70	105.80
2	B	2520	C	P-O3'-C3'	-5.26	113.39	119.70
2	B	2665	A	N1-C2-N3	-5.26	126.67	129.30
2	B	2736	A	N1-C2-N3	5.26	131.93	129.30
2	B	2818	U	C6-N1-C2	-5.26	117.85	121.00
19	X	10	ARG	N-CA-CB	5.26	120.06	110.60
23	5	9	ARG	NE-CZ-NH1	-5.26	117.67	120.30
2	B	1147	A	N3-C4-C5	-5.25	123.12	126.80
2	B	1645	G	C5'-C4'-C3'	-5.25	107.59	116.00
2	B	1678	A	O4'-C1'-N9	5.25	112.40	108.20
14	D	126	ASN	N-CA-CB	5.25	120.06	110.60
2	B	723	C	O5'-P-OP1	5.25	117.00	110.70
2	B	1057	A	C3'-C2'-C1'	-5.25	97.30	101.50
2	B	1450	G	C6-N1-C2	5.25	128.25	125.10
2	B	1702	G	C5-N7-C8	-5.25	101.67	104.30
2	B	1720	U	C6-N1-C1'	5.25	128.56	121.20
2	B	1778	U	O4'-C1'-N1	5.25	112.40	108.20
2	B	1789	A	P-O3'-C3'	5.25	126.00	119.70
2	B	1805	A	C6-C5-N7	-5.25	128.62	132.30
2	B	2318	G	C5-C6-O6	-5.25	125.45	128.60
2	B	2539	C	C2-N3-C4	5.25	122.53	119.90
2	B	2896	C	N1-C2-O2	5.25	122.05	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
8	N	46	ARG	NE-CZ-NH2	-5.25	117.67	120.30
8	N	58	ASP	CB-CG-OD2	-5.25	113.57	118.30
12	R	85	LYS	N-CA-CB	-5.25	101.14	110.60
15	T	84	TYR	CG-CD2-CE2	-5.25	117.10	121.30
1	A	60	C	N3-C4-N4	5.25	121.68	118.00
2	B	125	A	N7-C8-N9	-5.25	111.17	113.80
2	B	567	U	C5-C6-N1	5.25	125.33	122.70
2	B	641	U	C5-C4-O4	-5.25	122.75	125.90
2	B	1063	G	C4-C5-C6	5.25	121.95	118.80
2	B	1429	G	C5'-C4'-O4'	5.25	115.40	109.10
2	B	1567	G	P-O3'-C3'	-5.25	113.40	119.70
2	B	1750	G	C1'-O4'-C4'	-5.25	105.70	109.90
2	B	2243	U	O4'-C4'-C3'	-5.25	98.75	104.00
2	B	2644	G	C5-N7-C8	5.25	106.93	104.30
19	X	425	ASN	C-N-CA	5.25	134.83	121.70
20	E	97	ASN	N-CA-CB	5.25	120.05	110.60
24	6	16	HIS	N-CA-C	-5.25	96.82	111.00
2	B	410	G	N3-C4-C5	-5.25	125.97	128.60
2	B	866	A	N1-C2-N3	5.25	131.93	129.30
2	B	1008	A	O3'-P-O5'	-5.25	94.02	104.00
2	B	1574	C	C5-C4-N4	-5.25	116.53	120.20
2	B	1920	C	C5'-C4'-O4'	5.25	115.40	109.10
2	B	2506	U	C4-C5-C6	5.25	122.85	119.70
2	B	2855	C	P-O3'-C3'	-5.25	113.40	119.70
1	A	47	C	N1-C2-O2	-5.25	115.75	118.90
2	B	99	U	C6-N1-C1'	-5.25	113.85	121.20
2	B	621	A	C5'-C4'-O4'	5.25	115.40	109.10
2	B	685	A	C2-N3-C4	-5.25	107.97	110.60
2	B	714	U	N3-C2-O2	5.25	125.88	122.20
2	B	788	A	C5'-C4'-C3'	-5.25	107.60	116.00
2	B	1671	U	C5-C6-N1	5.25	125.32	122.70
2	B	2093	G	C2-N3-C4	-5.25	109.28	111.90
2	B	2121	G	C4-C5-C6	5.25	121.95	118.80
2	B	2499	C	C4-C5-C6	-5.25	114.78	117.40
2	B	2713	U	C6-N1-C1'	-5.25	113.85	121.20
2	B	2791	G	O5'-C5'-C4'	-5.25	101.73	111.70
10	P	58	PHE	O-C-N	-5.25	114.30	122.70
19	X	94	GLY	N-CA-C	-5.25	99.98	113.10
19	X	132	PHE	CB-CG-CD1	5.25	124.47	120.80
28	F	173	ASP	CB-CG-OD2	-5.25	113.58	118.30
1	A	7	G	N3-C2-N2	5.25	123.57	119.90
2	B	561	G	C8-N9-C4	5.25	108.50	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	648	G	C4-C5-C6	5.25	121.95	118.80
2	B	936	A	C2-N3-C4	5.25	113.22	110.60
2	B	943	A	C4'-C3'-C2'	5.25	107.85	102.60
2	B	944	C	C4'-C3'-C2'	5.25	107.85	102.60
2	B	1006	C	C2-N3-C4	5.25	122.52	119.90
2	B	1219	U	C3'-C2'-C1'	-5.25	97.30	101.50
2	B	1660	G	N9-C4-C5	-5.25	103.30	105.40
2	B	1663	G	OP1-P-O3'	5.25	116.74	105.20
2	B	1782	U	C5'-C4'-C3'	5.25	124.39	116.00
2	B	1838	C	C1'-O4'-C4'	-5.25	105.70	109.90
2	B	2030	A	P-O5'-C5'	-5.25	112.51	120.90
2	B	2112	G	O4'-C1'-N9	5.25	112.40	108.20
2	B	2765	A	C6-C5-N7	-5.25	128.63	132.30
2	B	2863	C	C5-C6-N1	-5.25	118.38	121.00
2	B	336	C	C2-N1-C1'	5.25	124.57	118.80
2	B	871	U	C1'-O4'-C4'	-5.25	105.70	109.90
2	B	888	C	C6-N1-C1'	-5.25	114.51	120.80
2	B	1454	C	C1'-O4'-C4'	-5.25	105.70	109.90
2	B	1696	G	N9-C4-C5	-5.25	103.30	105.40
2	B	1848	A	C6-N1-C2	-5.25	115.45	118.60
2	B	2054	A	C6-C5-N7	-5.25	128.63	132.30
2	B	2476	A	O4'-C1'-N9	5.25	112.40	108.20
2	B	2644	G	C5'-C4'-O4'	5.25	115.39	109.10
2	B	2754	U	N1-C2-O2	5.25	126.47	122.80
2	B	2823	A	N7-C8-N9	-5.25	111.18	113.80
2	B	328	U	C6-N1-C2	5.24	124.15	121.00
2	B	393	C	C5'-C4'-C3'	-5.24	107.61	116.00
2	B	725	G	N1-C2-N2	-5.24	111.48	116.20
2	B	727	A	C2-N3-C4	-5.24	107.98	110.60
2	B	1624	U	C3'-C2'-C1'	5.24	105.69	101.50
2	B	1965	C	C5-C6-N1	5.24	123.62	121.00
2	B	2294	G	N3-C4-N9	5.24	129.15	126.00
2	B	2654	A	N3-C4-C5	5.24	130.47	126.80
8	N	17	ARG	NE-CZ-NH1	-5.24	117.68	120.30
19	X	273	PHE	CB-CG-CD2	-5.24	117.13	120.80
2	B	278	A	C5-C6-N6	-5.24	119.51	123.70
2	B	282	A	C6-C5-N7	-5.24	128.63	132.30
2	B	335	C	N3-C4-N4	5.24	121.67	118.00
2	B	917	A	C6-N1-C2	5.24	121.75	118.60
2	B	1531	C	O4'-C1'-N1	5.24	112.39	108.20
2	B	2052	A	C4-C5-C6	5.24	119.62	117.00
2	B	2584	U	P-O5'-C5'	5.24	129.29	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	157	C	N1-C2-N3	-5.24	115.53	119.20
2	B	521	U	C5'-C4'-O4'	5.24	115.39	109.10
2	B	569	U	C4'-C3'-C2'	-5.24	97.36	102.60
2	B	1137	G	C5-C6-O6	-5.24	125.46	128.60
2	B	1217	U	P-O3'-C3'	5.24	125.99	119.70
2	B	1411	U	OP1-P-OP2	-5.24	111.74	119.60
2	B	1745	A	P-O5'-C5'	-5.24	112.52	120.90
2	B	2287	A	O5'-C5'-C4'	-5.24	101.74	111.70
2	B	2745	C	C6-N1-C1'	-5.24	114.51	120.80
5	L	14	LYS	N-CA-C	-5.24	96.85	111.00
1	A	62	C	C5-C4-N4	-5.24	116.53	120.20
1	A	68	C	N1-C2-O2	5.24	122.04	118.90
2	B	73	A	OP1-P-OP2	-5.24	111.74	119.60
2	B	122	G	N1-C2-N3	-5.24	120.76	123.90
2	B	626	A	N1-C6-N6	5.24	121.74	118.60
2	B	743	A	O4'-C1'-C2'	5.24	112.31	107.60
2	B	1111	A	C5-C6-N6	-5.24	119.51	123.70
2	B	1786	A	C5-C6-N6	-5.24	119.51	123.70
2	B	2485	G	C8-N9-C4	5.24	108.50	106.40
2	B	2759	G	C6-N1-C2	5.24	128.24	125.10
3	0	4	CYS	CB-CA-C	-5.24	99.92	110.40
29	G	136	ASP	N-CA-CB	5.24	120.03	110.60
32	J	56	VAL	CA-CB-CG2	-5.24	103.04	110.90
2	B	176	A	C2-N3-C4	5.24	113.22	110.60
2	B	241	A	C1'-O4'-C4'	5.24	114.09	109.90
2	B	1172	C	C5-C4-N4	-5.24	116.53	120.20
2	B	2112	G	C8-N9-C1'	5.24	133.81	127.00
2	B	2114	A	C3'-C2'-C1'	-5.24	97.31	101.50
2	B	2441	U	C5'-C4'-C3'	-5.24	107.62	116.00
2	B	2658	C	P-O5'-C5'	-5.24	112.52	120.90
1	A	30	C	C6-N1-C2	-5.24	118.21	120.30
2	B	751	A	C5'-C4'-O4'	5.24	115.38	109.10
2	B	770	G	C6-N1-C2	-5.24	121.96	125.10
2	B	843	G	C5-N7-C8	-5.24	101.68	104.30
2	B	869	G	N1-C2-N2	-5.24	111.49	116.20
2	B	1212	G	N9-C4-C5	5.24	107.49	105.40
2	B	1891	G	N3-C2-N2	5.24	123.56	119.90
2	B	2508	G	N1-C2-N3	-5.24	120.76	123.90
32	J	74	TYR	CB-CG-CD1	5.24	124.14	121.00
1	A	14	U	N3-C4-C5	5.23	117.74	114.60
2	B	222	A	C4-C5-C6	5.23	119.62	117.00
2	B	1237	A	C4-C5-C6	5.23	119.62	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	8	C	N3-C2-O2	-5.23	118.24	121.90
2	B	312	G	OP1-P-OP2	-5.23	111.75	119.60
2	B	384	A	N1-C2-N3	5.23	131.92	129.30
2	B	389	G	C1'-O4'-C4'	5.23	114.09	109.90
2	B	473	G	O5'-C5'-C4'	-5.23	101.76	111.70
2	B	760	G	C8-N9-C1'	-5.23	120.20	127.00
2	B	867	C	C5-C4-N4	-5.23	116.54	120.20
2	B	1012	U	C1'-O4'-C4'	-5.23	105.71	109.90
2	B	1184	U	O5'-P-OP1	-5.23	100.99	105.70
2	B	1318	U	P-O3'-C3'	5.23	125.98	119.70
2	B	1389	G	C5-C6-O6	-5.23	125.46	128.60
2	B	1783	A	C1'-O4'-C4'	-5.23	105.71	109.90
2	B	1970	A	N3-C4-C5	-5.23	123.14	126.80
2	B	2101	A	C5-C6-N6	-5.23	119.51	123.70
2	B	2349	G	C3'-C2'-C1'	5.23	105.69	101.50
2	B	2380	C	N3-C4-C5	-5.23	119.81	121.90
2	B	2535	G	C5-C6-O6	-5.23	125.46	128.60
2	B	2544	G	P-O5'-C5'	5.23	129.27	120.90
2	B	2607	G	C5-C6-N1	-5.23	108.88	111.50
1	A	28	C	C5'-C4'-C3'	5.23	124.37	116.00
1	A	97	C	C6-N1-C2	-5.23	118.21	120.30
2	B	12	U	C6-N1-C1'	-5.23	113.88	121.20
2	B	537	G	C4-C5-N7	-5.23	108.71	110.80
2	B	792	A	C8-N9-C4	5.23	107.89	105.80
2	B	1319	C	C2'-C3'-O3'	5.23	122.07	113.70
2	B	1707	G	N1-C6-O6	5.23	123.04	119.90
2	B	2274	A	N3-C4-C5	-5.23	123.14	126.80
2	B	2364	C	N3-C2-O2	5.23	125.56	121.90
2	B	2713	U	C5-C6-N1	5.23	125.31	122.70
2	B	2803	G	O4'-C4'-C3'	-5.23	98.77	104.00
2	B	20	C	N1-C2-N3	-5.23	115.54	119.20
2	B	2077	A	P-O3'-C3'	-5.23	113.43	119.70
2	B	2269	G	C5-C6-N1	-5.23	108.89	111.50
12	R	2	TYR	CZ-CE2-CD2	-5.23	115.09	119.80
19	X	117	ALA	O-C-N	5.23	131.07	122.70
28	F	156	THR	CB-CA-C	5.23	125.72	111.60
29	G	88	LEU	N-CA-CB	5.23	120.86	110.40
1	A	61	G	N9-C1'-C2'	-5.23	106.25	112.00
2	B	291	G	C2-N3-C4	5.23	114.51	111.90
2	B	343	C	C2-N3-C4	-5.23	117.29	119.90
2	B	350	G	C8-N9-C1'	5.23	133.80	127.00
2	B	708	G	C4-C5-C6	5.23	121.94	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	804	A	C4-C5-N7	-5.23	108.09	110.70
2	B	814	C	P-O3'-C3'	-5.23	113.43	119.70
2	B	1345	C	N3-C4-N4	5.23	121.66	118.00
2	B	1365	A	C5-N7-C8	5.23	106.51	103.90
2	B	1373	A	C8-N9-C4	-5.23	103.71	105.80
2	B	1638	C	C5-C6-N1	-5.23	118.39	121.00
2	B	2649	C	C5'-C4'-O4'	5.23	115.37	109.10
2	B	2786	U	N3-C4-O4	5.23	123.06	119.40
2	B	669	G	C4-N9-C1'	5.23	133.29	126.50
2	B	1083	U	C4'-C3'-C2'	5.23	107.83	102.60
2	B	1360	G	P-O5'-C5'	5.23	129.26	120.90
2	B	1634	A	N3-C4-C5	-5.23	123.14	126.80
2	B	1987	A	C5-N7-C8	5.23	106.51	103.90
2	B	2795	C	N1-C2-N3	-5.23	115.54	119.20
2	B	268	C	C6-N1-C2	-5.22	118.21	120.30
2	B	386	G	C5'-C4'-O4'	5.22	115.37	109.10
2	B	936	A	N1-C6-N6	5.22	121.73	118.60
2	B	1036	G	C5-N7-C8	5.22	106.91	104.30
2	B	1201	U	C5'-C4'-O4'	5.22	115.37	109.10
2	B	1660	G	N3-C4-C5	5.22	131.21	128.60
2	B	1792	G	O4'-C4'-C3'	-5.22	98.78	104.00
2	B	2017	U	C1'-O4'-C4'	5.22	114.08	109.90
2	B	2097	A	C1'-O4'-C4'	-5.22	105.72	109.90
2	B	2377	A	C8-N9-C4	-5.22	103.71	105.80
2	B	2403	C	N1-C1'-C2'	-5.22	106.25	112.00
2	B	2573	C	N3-C4-N4	5.22	121.66	118.00
2	B	2643	G	C4-N9-C1'	-5.22	119.71	126.50
2	B	2665	A	N9-C4-C5	5.22	107.89	105.80
2	B	2744	G	P-O3'-C3'	-5.22	113.43	119.70
2	B	2748	A	C6-C5-N7	-5.22	128.64	132.30
2	B	2840	C	O4'-C1'-N1	5.22	112.38	108.20
2	B	1014	A	P-O3'-C3'	-5.22	113.43	119.70
2	B	1020	A	C5-N7-C8	5.22	106.51	103.90
2	B	1037	G	N9-C4-C5	-5.22	103.31	105.40
2	B	1435	G	C5-C6-N1	-5.22	108.89	111.50
2	B	1505	A	OP1-P-OP2	-5.22	111.77	119.60
2	B	1734	G	N9-C4-C5	5.22	107.49	105.40
2	B	1965	C	O4'-C1'-N1	5.22	112.38	108.20
2	B	1971	U	N3-C2-O2	5.22	125.86	122.20
2	B	2699	C	O4'-C4'-C3'	-5.22	98.78	104.00
2	B	2709	G	C2-N3-C4	5.22	114.51	111.90
29	G	165	ASP	CB-CG-OD1	5.22	123.00	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	316	C	C5-C4-N4	-5.22	116.55	120.20
2	B	742	A	N1-C6-N6	5.22	121.73	118.60
2	B	2094	A	OP2-P-O3'	5.22	116.69	105.20
2	B	2662	A	C4-C5-C6	5.22	119.61	117.00
2	B	377	G	O4'-C4'-C3'	-5.22	98.78	104.00
2	B	396	G	C6-N1-C2	-5.22	121.97	125.10
2	B	1078	U	OP1-P-O3'	5.22	116.68	105.20
2	B	1309	G	O4'-C1'-N9	5.22	112.38	108.20
2	B	1486	U	OP1-P-OP2	-5.22	111.77	119.60
2	B	1591	A	C4-C5-C6	5.22	119.61	117.00
2	B	2246	G	C4-C5-C6	5.22	121.93	118.80
2	B	2266	A	C1'-O4'-C4'	5.22	114.08	109.90
2	B	2749	A	P-O3'-C3'	5.22	125.96	119.70
5	L	134	ALA	O-C-N	5.22	131.05	122.70
27	C	159	THR	CA-CB-CG2	-5.22	105.09	112.40
29	G	14	VAL	N-CA-C	-5.22	96.91	111.00
2	B	853	C	P-O5'-C5'	-5.22	112.55	120.90
2	B	1115	G	C4-C5-C6	-5.22	115.67	118.80
2	B	2241	A	C5'-C4'-C3'	-5.22	107.65	116.00
2	B	2494	G	C2-N3-C4	-5.22	109.29	111.90
2	B	2693	G	C4'-C3'-C2'	-5.22	97.38	102.60
2	B	641	U	OP1-P-O3'	5.22	116.68	105.20
2	B	757	G	OP1-P-OP2	-5.22	111.77	119.60
2	B	1601	G	C5-C6-N1	-5.22	108.89	111.50
2	B	1627	G	C1'-O4'-C4'	5.22	114.07	109.90
2	B	1740	G	N7-C8-N9	5.22	115.71	113.10
2	B	1968	G	C4'-C3'-C2'	5.22	107.82	102.60
2	B	2179	C	C3'-C2'-C1'	-5.22	97.33	101.50
2	B	2299	U	P-O3'-C3'	-5.22	113.44	119.70
18	W	24	ASN	N-CA-C	-5.22	96.92	111.00
2	B	94	A	C4'-C3'-C2'	-5.21	97.39	102.60
2	B	1718	G	C5-C6-O6	-5.21	125.47	128.60
2	B	1791	A	O4'-C1'-N9	5.21	112.37	108.20
14	D	161	MET	CG-SD-CE	5.21	108.55	100.20
19	X	165	ASP	CB-CG-OD1	-5.21	113.61	118.30
30	H	19	VAL	CA-CB-CG2	5.21	118.72	110.90
2	B	2455	G	N9-C4-C5	5.21	107.48	105.40
2	B	2532	G	P-O3'-C3'	-5.21	113.44	119.70
2	B	32	C	O4'-C1'-C2'	5.21	112.29	107.60
2	B	243	U	C6-N1-C2	-5.21	117.87	121.00
2	B	373	U	O4'-C1'-N1	5.21	112.37	108.20
2	B	540	C	P-O5'-C5'	-5.21	112.56	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	559	G	C1'-O4'-C4'	5.21	114.07	109.90
2	B	574	A	C4-C5-N7	5.21	113.31	110.70
2	B	601	C	C5'-C4'-O4'	-5.21	102.85	109.10
2	B	776	G	C3'-C2'-C1'	-5.21	97.33	101.50
2	B	953	G	C8-N9-C4	5.21	108.48	106.40
2	B	1136	G	C8-N9-C4	-5.21	104.32	106.40
2	B	1540	G	N9-C4-C5	-5.21	103.32	105.40
2	B	2060	A	P-O5'-C5'	5.21	129.24	120.90
2	B	2108	A	O4'-C1'-N9	5.21	112.37	108.20
2	B	2543	G	O4'-C1'-C2'	5.21	112.29	107.60
2	B	2648	G	C5-C6-N1	-5.21	108.89	111.50
2	B	2832	U	C4-C5-C6	5.21	122.83	119.70
17	U	26	ASN	N-CA-CB	5.21	119.98	110.60
1	A	12	C	C6-N1-C1'	-5.21	114.55	120.80
2	B	1306	C	N1-C1'-C2'	-5.21	106.27	112.00
2	B	186	G	C5-C6-O6	-5.21	125.47	128.60
2	B	326	G	P-O5'-C5'	5.21	129.23	120.90
2	B	477	A	C2-N3-C4	5.21	113.20	110.60
2	B	480	A	C4-C5-N7	-5.21	108.09	110.70
2	B	738	G	C4-C5-C6	5.21	121.92	118.80
2	B	1025	G	N9-C4-C5	5.21	107.48	105.40
2	B	1770	G	C8-N9-C4	5.21	108.48	106.40
2	B	1826	G	C2'-C3'-O3'	5.21	122.03	113.70
2	B	2024	G	N3-C2-N2	5.21	123.55	119.90
2	B	2356	U	N3-C4-C5	-5.21	111.47	114.60
2	B	2539	C	C2-N1-C1'	-5.21	113.07	118.80
2	B	2703	C	C5-C6-N1	5.21	123.60	121.00
2	B	2816	G	N3-C4-C5	5.21	131.21	128.60
15	T	16	VAL	O-C-N	-5.21	114.37	122.70
2	B	152	A	C4'-C3'-C2'	-5.21	97.39	102.60
2	B	517	C	C3'-C2'-C1'	5.21	105.67	101.50
2	B	550	C	N3-C4-N4	5.21	121.64	118.00
2	B	648	G	O4'-C1'-N9	5.21	112.36	108.20
2	B	801	G	N1-C2-N3	-5.21	120.78	123.90
2	B	956	G	O5'-P-OP1	-5.21	101.02	105.70
2	B	1178	C	N3-C4-N4	5.21	121.64	118.00
2	B	1425	G	N1-C2-N3	-5.21	120.78	123.90
2	B	2844	G	N7-C8-N9	5.21	115.70	113.10
2	B	2849	U	C5-C6-N1	-5.21	120.10	122.70
2	B	421	C	OP2-P-O3'	5.21	116.65	105.20
2	B	716	A	OP1-P-OP2	-5.21	111.79	119.60
2	B	1278	C	N3-C2-O2	-5.21	118.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2140	G	N7-C8-N9	-5.21	110.50	113.10
2	B	2429	G	C4'-C3'-C2'	-5.21	97.39	102.60
3	0	17	ARG	N-CA-C	5.21	125.06	111.00
25	7	9	ALA	CB-CA-C	-5.21	102.29	110.10
1	A	28	C	N1-C2-O2	5.20	122.02	118.90
2	B	266	G	O5'-P-OP1	-5.20	101.02	105.70
2	B	289	G	C8-N9-C1'	5.20	133.76	127.00
2	B	319	G	N7-C8-N9	-5.20	110.50	113.10
2	B	585	G	N3-C2-N2	5.20	123.54	119.90
2	B	689	A	P-O3'-C3'	-5.20	113.45	119.70
2	B	912	C	N1-C1'-C2'	5.20	120.77	114.00
2	B	1364	G	O4'-C4'-C3'	-5.20	98.80	104.00
2	B	1653	G	C4-C5-C6	5.20	121.92	118.80
2	B	1786	A	C5'-C4'-O4'	5.20	115.34	109.10
2	B	1848	A	N3-C4-C5	-5.20	123.16	126.80
2	B	2681	C	N1-C2-O2	-5.20	115.78	118.90
2	B	2888	C	O4'-C4'-C3'	-5.20	98.80	104.00
4	K	100	PHE	CB-CG-CD1	5.20	124.44	120.80
2	B	600	G	N3-C2-N2	5.20	123.54	119.90
2	B	1540	G	N7-C8-N9	5.20	115.70	113.10
2	B	1743	G	N3-C4-C5	-5.20	126.00	128.60
2	B	2813	A	C2-N3-C4	5.20	113.20	110.60
2	B	339	U	C6-N1-C2	5.20	124.12	121.00
2	B	653	U	O5'-P-OP2	5.20	116.94	110.70
2	B	749	A	C8-N9-C4	5.20	107.88	105.80
2	B	882	G	C3'-C2'-C1'	5.20	105.66	101.50
2	B	1119	U	N1-C1'-C2'	-5.20	106.28	112.00
2	B	1309	G	N1-C2-N3	-5.20	120.78	123.90
2	B	1705	A	C6-N1-C2	-5.20	115.48	118.60
2	B	2061	G	N1-C2-N3	-5.20	120.78	123.90
2	B	2459	A	N3-C4-C5	-5.20	123.16	126.80
2	B	2720	U	C5'-C4'-C3'	-5.20	107.68	116.00
2	B	141	G	O4'-C1'-N9	5.20	112.36	108.20
2	B	197	A	P-O3'-C3'	5.20	125.94	119.70
2	B	242	G	C4-N9-C1'	-5.20	119.74	126.50
2	B	488	G	C8-N9-C4	-5.20	104.32	106.40
2	B	875	G	C3'-C2'-C1'	-5.20	97.34	101.50
2	B	1159	U	C2-N3-C4	5.20	130.12	127.00
2	B	1844	C	C4'-C3'-C2'	-5.20	97.40	102.60
2	B	2171	A	P-O3'-C3'	5.20	125.94	119.70
2	B	2192	U	O4'-C1'-N1	5.20	112.36	108.20
2	B	2347	C	C5'-C4'-C3'	-5.20	107.68	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2539	C	C6-N1-C1'	5.20	127.04	120.80
2	B	2860	A	C2-N3-C4	-5.20	108.00	110.60
2	B	2862	G	C5'-C4'-C3'	5.20	124.32	116.00
2	B	2887	A	P-O5'-C5'	-5.20	112.58	120.90
2	B	1130	U	C6-N1-C2	5.20	124.12	121.00
2	B	1182	G	N3-C4-N9	5.20	129.12	126.00
2	B	1316	U	N3-C4-O4	5.20	123.04	119.40
2	B	1432	G	N1-C2-N3	-5.20	120.78	123.90
1	A	38	C	C4-C5-C6	5.20	120.00	117.40
2	B	1038	G	N3-C4-N9	-5.20	122.88	126.00
2	B	1113	U	C1'-O4'-C4'	-5.20	105.74	109.90
2	B	1139	G	C4-C5-N7	5.20	112.88	110.80
2	B	1171	G	C5'-C4'-C3'	-5.20	107.69	116.00
2	B	1268	A	C4-C5-C6	5.20	119.60	117.00
2	B	1444	G	C5'-C4'-C3'	5.20	124.31	116.00
2	B	1555	G	P-O3'-C3'	5.20	125.93	119.70
2	B	2268	A	N1-C2-N3	-5.20	126.70	129.30
2	B	2314	A	N9-C1'-C2'	-5.20	106.28	112.00
2	B	2332	C	O3'-P-O5'	-5.20	94.13	104.00
2	B	2505	G	N9-C4-C5	-5.20	103.32	105.40
2	B	2542	A	C5-C6-N1	-5.20	115.10	117.70
2	B	2793	C	C1'-O4'-C4'	-5.20	105.74	109.90
8	N	68	ALA	N-CA-CB	5.20	117.37	110.10
29	G	62	ALA	N-CA-CB	5.20	117.38	110.10
2	B	1180	U	C5-C4-O4	-5.19	122.78	125.90
2	B	1661	G	C2-N3-C4	5.19	114.50	111.90
2	B	1981	A	OP1-P-OP2	-5.19	111.81	119.60
2	B	249	C	C3'-C2'-C1'	-5.19	97.35	101.50
2	B	487	C	N1-C2-O2	5.19	122.02	118.90
2	B	497	A	C6-N1-C2	-5.19	115.48	118.60
2	B	555	G	N7-C8-N9	-5.19	110.50	113.10
2	B	664	G	C5'-C4'-C3'	5.19	124.31	116.00
2	B	762	U	P-O3'-C3'	-5.19	113.47	119.70
2	B	982	C	O4'-C4'-C3'	-5.19	98.81	104.00
2	B	1133	A	O3'-P-O5'	-5.19	94.13	104.00
2	B	1147	A	C6-C5-N7	-5.19	128.66	132.30
2	B	1170	C	O3'-P-O5'	-5.19	94.13	104.00
2	B	1996	C	N3-C4-N4	5.19	121.64	118.00
2	B	2040	G	O4'-C1'-N9	5.19	112.35	108.20
9	O	78	VAL	CA-CB-CG1	5.19	118.69	110.90
23	5	55	SER	N-CA-CB	5.19	118.29	110.50
1	A	43	C	C4-C5-C6	5.19	120.00	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	446	G	N3-C2-N2	5.19	123.53	119.90
2	B	877	A	C4-C5-N7	-5.19	108.10	110.70
2	B	998	C	OP1-P-OP2	-5.19	111.81	119.60
2	B	1280	G	N7-C8-N9	5.19	115.69	113.10
2	B	1835	G	C6-C5-N7	-5.19	127.28	130.40
2	B	1959	G	C4'-C3'-C2'	-5.19	97.41	102.60
2	B	2063	C	N1-C2-N3	5.19	122.83	119.20
2	B	2133	G	C5'-C4'-C3'	5.19	124.30	116.00
2	B	2288	A	C6-N1-C2	-5.19	115.49	118.60
2	B	2357	G	N9-C4-C5	5.19	107.48	105.40
2	B	2367	G	C4-C5-N7	5.19	112.88	110.80
2	B	2427	C	OP1-P-O3'	5.19	116.62	105.20
2	B	2535	G	N7-C8-N9	5.19	115.70	113.10
2	B	1256	G	N7-C8-N9	-5.19	110.50	113.10
2	B	1677	A	C5-N7-C8	5.19	106.50	103.90
2	B	1896	G	N9-C4-C5	-5.19	103.33	105.40
2	B	2098	U	C3'-C2'-C1'	-5.19	97.35	101.50
2	B	2251	G	C6-N1-C2	5.19	128.21	125.10
2	B	2424	C	O5'-P-OP1	5.19	116.93	110.70
2	B	2513	A	C8-N9-C4	5.19	107.88	105.80
2	B	2538	C	C2-N1-C1'	-5.19	113.09	118.80
2	B	2645	G	C1'-O4'-C4'	5.19	114.05	109.90
2	B	70	G	C4-C5-N7	5.19	112.88	110.80
2	B	589	U	C1'-O4'-C4'	5.19	114.05	109.90
2	B	1028	A	C4'-C3'-C2'	-5.19	97.41	102.60
2	B	1288	G	N7-C8-N9	-5.19	110.51	113.10
2	B	1389	G	C8-N9-C4	-5.19	104.33	106.40
2	B	1599	U	C4'-C3'-C2'	5.19	107.79	102.60
2	B	2136	G	P-O3'-C3'	-5.19	113.47	119.70
2	B	2322	A	C5-C6-N1	-5.19	115.11	117.70
2	B	2343	U	C3'-C2'-C1'	5.19	105.65	101.50
2	B	2470	G	N1-C2-N3	-5.19	120.79	123.90
2	B	2671	G	C5-N7-C8	5.19	106.89	104.30
2	B	2690	U	P-O3'-C3'	5.19	125.92	119.70
2	B	2715	C	C2-N3-C4	-5.19	117.31	119.90
2	B	2854	G	C5-N7-C8	-5.19	101.71	104.30
2	B	2856	A	C4'-C3'-C2'	-5.19	97.41	102.60
2	B	1152	C	N3-C2-O2	-5.19	118.27	121.90
2	B	1343	G	C6-C5-N7	-5.19	127.29	130.40
2	B	2542	A	N1-C6-N6	5.19	121.71	118.60
2	B	2758	A	N9-C4-C5	5.19	107.87	105.80
16	2	1	ALA	N-CA-CB	-5.19	102.84	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
18	W	20	LEU	O-C-N	5.19	131.00	122.70
28	F	113	PHE	CB-CG-CD1	5.19	124.43	120.80
2	B	388	G	C3'-C2'-C1'	5.18	105.65	101.50
2	B	412	A	P-O3'-C3'	-5.18	113.48	119.70
2	B	683	U	C5-C4-O4	5.18	129.01	125.90
2	B	771	G	C5'-C4'-O4'	5.18	115.32	109.10
2	B	951	C	O5'-C5'-C4'	-5.18	101.85	111.70
2	B	1112	G	C4'-C3'-C2'	-5.18	97.42	102.60
2	B	1209	U	C3'-C2'-C1'	-5.18	97.35	101.50
2	B	1285	A	C4'-C3'-C2'	5.18	107.78	102.60
2	B	1301	A	O3'-P-O5'	5.18	113.85	104.00
2	B	1607	C	O5'-P-OP2	5.18	116.92	110.70
2	B	1727	C	P-O3'-C3'	-5.18	113.48	119.70
2	B	2535	G	C5-N7-C8	-5.18	101.71	104.30
2	B	2590	A	C4-C5-C6	5.18	119.59	117.00
2	B	2777	G	N3-C2-N2	5.18	123.53	119.90
2	B	307	G	C5-N7-C8	-5.18	101.71	104.30
2	B	470	A	O4'-C1'-N9	5.18	112.35	108.20
2	B	803	U	C5'-C4'-C3'	5.18	124.29	116.00
2	B	1015	U	O5'-C5'-C4'	-5.18	101.86	111.70
2	B	1322	A	C5-C6-N6	-5.18	119.56	123.70
2	B	1770	G	N3-C4-C5	5.18	131.19	128.60
2	B	1955	U	C5'-C4'-O4'	5.18	115.32	109.10
2	B	2050	C	C4-C5-C6	5.18	119.99	117.40
2	B	2086	U	O5'-C5'-C4'	-5.18	101.85	111.70
2	B	2451	A	O3'-P-O5'	-5.18	94.15	104.00
2	B	2708	G	C5-C6-N1	-5.18	108.91	111.50
11	Q	2	ARG	C-N-CA	5.18	134.66	121.70
12	R	18	GLN	O-C-N	-5.18	114.41	122.70
2	B	747	U	N3-C4-C5	-5.18	111.49	114.60
2	B	1424	G	N9-C1'-C2'	-5.18	106.30	112.00
2	B	1444	G	O4'-C1'-N9	5.18	112.34	108.20
2	B	1474	U	N1-C2-O2	-5.18	119.17	122.80
2	B	1699	G	C1'-O4'-C4'	-5.18	105.75	109.90
2	B	1945	G	C8-N9-C4	-5.18	104.33	106.40
2	B	2679	A	O4'-C4'-C3'	-5.18	98.82	104.00
2	B	2815	C	OP1-P-O3'	5.18	116.60	105.20
15	T	66	LYS	CB-CA-C	-5.18	100.04	110.40
27	C	209	ALA	O-C-N	-5.18	114.41	122.70
1	A	73	A	C4'-C3'-C2'	5.18	107.78	102.60
2	B	138	U	C2-N1-C1'	5.18	123.92	117.70
2	B	239	C	C4-C5-C6	-5.18	114.81	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	273	G	C5'-C4'-C3'	5.18	124.29	116.00
2	B	340	A	N7-C8-N9	-5.18	111.21	113.80
2	B	785	G	C4'-C3'-C2'	5.18	107.78	102.60
2	B	1132	U	N3-C4-O4	5.18	123.03	119.40
2	B	1355	G	O4'-C4'-C3'	-5.18	98.82	104.00
2	B	1792	G	N3-C4-C5	-5.18	126.01	128.60
2	B	1847	A	C5-C6-N6	-5.18	119.56	123.70
17	U	35	VAL	N-CA-C	-5.18	97.02	111.00
2	B	221	A	N9-C4-C5	-5.18	103.73	105.80
2	B	842	U	C3'-C2'-C1'	-5.18	97.36	101.50
2	B	1465	G	C5'-C4'-C3'	5.18	124.28	116.00
2	B	1527	G	C8-N9-C4	-5.18	104.33	106.40
2	B	1598	A	C6-N1-C2	-5.18	115.49	118.60
2	B	2185	U	OP2-P-O3'	5.18	116.59	105.20
2	B	2407	A	C4'-C3'-C2'	5.18	107.78	102.60
2	B	2885	G	O4'-C1'-C2'	5.18	112.26	107.60
2	B	299	A	P-O5'-C5'	5.18	129.18	120.90
2	B	389	G	N3-C2-N2	5.18	123.52	119.90
2	B	622	G	P-O3'-C3'	5.18	125.91	119.70
2	B	882	G	C6-C5-N7	-5.18	127.29	130.40
2	B	890	C	C5-C6-N1	5.18	123.59	121.00
2	B	1565	C	C1'-O4'-C4'	-5.18	105.76	109.90
2	B	1835	G	N7-C8-N9	5.18	115.69	113.10
2	B	1940	U	C4-C5-C6	5.18	122.81	119.70
2	B	2033	A	C5-C6-N6	-5.18	119.56	123.70
2	B	2412	A	C4-C5-C6	5.18	119.59	117.00
2	B	2570	G	C5'-C4'-O4'	5.18	115.31	109.10
2	B	2575	C	C5'-C4'-C3'	-5.18	107.72	116.00
31	I	115	ASP	CB-CG-OD1	5.18	122.96	118.30
1	A	41	G	C2'-C3'-O3'	5.17	121.98	113.70
2	B	110	G	C4-C5-N7	-5.17	108.73	110.80
2	B	988	A	C4-C5-N7	-5.17	108.11	110.70
2	B	1840	G	C4'-C3'-C2'	-5.17	97.42	102.60
2	B	2114	A	C5'-C4'-O4'	5.17	115.31	109.10
2	B	2186	G	O4'-C1'-N9	5.17	112.34	108.20
2	B	2587	A	N1-C2-N3	5.17	131.89	129.30
2	B	2648	G	N1-C2-N3	-5.17	120.80	123.90
29	G	54	ARG	NE-CZ-NH1	-5.17	117.71	120.30
30	H	36	ALA	N-CA-CB	5.17	117.34	110.10
2	B	589	U	O5'-C5'-C4'	5.17	121.53	111.70
2	B	672	C	N3-C4-C5	-5.17	119.83	121.90
2	B	814	C	C6-N1-C2	-5.17	118.23	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1636	U	C2-N3-C4	5.17	130.10	127.00
2	B	1849	G	O4'-C1'-N9	5.17	112.34	108.20
2	B	2285	C	C5-C4-N4	-5.17	116.58	120.20
19	X	132	PHE	CA-CB-CG	-5.17	101.48	113.90
2	B	299	A	N7-C8-N9	-5.17	111.21	113.80
2	B	870	U	C5'-C4'-C3'	5.17	124.28	116.00
2	B	1462	C	C5-C4-N4	-5.17	116.58	120.20
2	B	1761	C	N3-C2-O2	-5.17	118.28	121.90
2	B	2096	C	N3-C4-N4	5.17	121.62	118.00
2	B	2231	U	C6-N1-C2	5.17	124.10	121.00
2	B	2441	U	P-O3'-C3'	-5.17	113.50	119.70
2	B	2622	U	O4'-C1'-N1	5.17	112.34	108.20
2	B	2711	A	O4'-C1'-N9	5.17	112.34	108.20
2	B	2737	G	N3-C2-N2	5.17	123.52	119.90
2	B	2774	C	C2-N1-C1'	-5.17	113.11	118.80
2	B	2886	A	O4'-C1'-N9	5.17	112.34	108.20
27	C	227	VAL	CA-CB-CG1	5.17	118.66	110.90
1	A	81	G	C6-C5-N7	-5.17	127.30	130.40
2	B	785	G	C4-N9-C1'	5.17	133.22	126.50
2	B	1019	U	O4'-C1'-C2'	5.17	112.25	107.60
2	B	1129	A	P-O3'-C3'	-5.17	113.50	119.70
2	B	1666	G	O4'-C1'-N9	5.17	112.34	108.20
2	B	1920	C	C2-N3-C4	5.17	122.48	119.90
2	B	2808	G	C5-N7-C8	5.17	106.89	104.30
1	A	31	C	C6-N1-C1'	5.17	127.00	120.80
2	B	72	U	C4'-C3'-C2'	-5.17	97.43	102.60
2	B	270	A	C8-N9-C4	-5.17	103.73	105.80
2	B	332	A	C5-C6-N1	-5.17	115.12	117.70
2	B	686	U	C5'-C4'-C3'	-5.17	107.73	116.00
2	B	860	U	N1-C1'-C2'	5.17	120.72	114.00
2	B	884	U	C5'-C4'-C3'	-5.17	107.73	116.00
2	B	1189	A	C5-C6-N6	-5.17	119.56	123.70
2	B	1308	A	C1'-O4'-C4'	-5.17	105.77	109.90
2	B	1354	A	C4-C5-C6	5.17	119.58	117.00
2	B	1404	C	C3'-C2'-C1'	5.17	105.63	101.50
2	B	1654	A	C5-N7-C8	5.17	106.48	103.90
2	B	1738	G	N3-C2-N2	5.17	123.52	119.90
2	B	2172	U	P-O5'-C5'	-5.17	112.63	120.90
2	B	2326	C	P-O3'-C3'	-5.17	113.50	119.70
2	B	2408	U	O4'-C1'-N1	5.17	112.33	108.20
2	B	2438	U	N3-C4-O4	5.17	123.02	119.40
2	B	2493	U	C4'-C3'-C2'	-5.17	97.43	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2553	G	P-O5'-C5'	5.17	129.17	120.90
2	B	2671	G	C4-C5-C6	5.17	121.90	118.80
2	B	2690	U	C3'-C2'-C1'	-5.17	97.36	101.50
2	B	2901	C	C5'-C4'-C3'	5.17	124.27	116.00
14	D	15	PHE	CB-CG-CD2	-5.17	117.18	120.80
2	B	23	G	C8-N9-C4	-5.17	104.33	106.40
2	B	176	A	C3'-C2'-C1'	5.17	105.63	101.50
2	B	273	G	P-O5'-C5'	5.17	129.17	120.90
2	B	382	A	P-O5'-C5'	-5.17	112.64	120.90
2	B	636	G	N1-C6-O6	5.17	123.00	119.90
2	B	1185	G	N9-C4-C5	-5.17	103.33	105.40
2	B	1370	C	P-O5'-C5'	-5.17	112.63	120.90
2	B	2155	U	C4-C5-C6	-5.17	116.60	119.70
2	B	2256	G	C5-C6-N1	-5.17	108.92	111.50
2	B	2538	C	C6-N1-C1'	5.17	127.00	120.80
2	B	2621	G	C5-C6-O6	-5.17	125.50	128.60
2	B	2812	G	N7-C8-N9	-5.17	110.52	113.10
2	B	2826	A	N3-C4-N9	-5.17	123.27	127.40
12	R	54	VAL	O-C-N	5.17	130.97	122.70
2	B	9	G	P-O5'-C5'	-5.17	112.64	120.90
2	B	73	A	C2'-C3'-O3'	5.17	121.96	113.70
2	B	738	G	C4-N9-C1'	5.17	133.22	126.50
2	B	749	A	C4'-C3'-C2'	5.17	107.77	102.60
2	B	1262	A	N1-C6-N6	5.17	121.70	118.60
2	B	1659	G	P-O5'-C5'	5.17	129.16	120.90
2	B	2719	G	N3-C2-N2	5.17	123.52	119.90
2	B	199	A	N3-C4-N9	-5.16	123.27	127.40
2	B	782	A	N9-C4-C5	-5.16	103.73	105.80
2	B	1272	A	P-O5'-C5'	-5.16	112.64	120.90
2	B	1593	A	C5-N7-C8	5.16	106.48	103.90
2	B	1632	A	O4'-C1'-N9	5.16	112.33	108.20
2	B	2355	G	O5'-C5'-C4'	-5.16	101.89	111.70
27	C	196	ASN	CB-CA-C	5.16	120.73	110.40
29	G	61	TRP	N-CA-C	-5.16	97.06	111.00
2	B	537	G	C6-N1-C2	5.16	128.20	125.10
2	B	540	C	O4'-C1'-N1	5.16	112.33	108.20
2	B	544	C	N3-C2-O2	-5.16	118.29	121.90
2	B	2420	C	C5'-C4'-C3'	5.16	124.26	116.00
2	B	2596	U	C6-N1-C2	-5.16	117.90	121.00
2	B	2780	G	P-O3'-C3'	5.16	125.89	119.70
2	B	95	A	O4'-C4'-C3'	-5.16	98.84	104.00
2	B	147	C	O4'-C1'-C2'	5.16	112.24	107.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	165	A	O4'-C1'-N9	5.16	112.33	108.20
2	B	232	G	C4-N9-C1'	-5.16	119.79	126.50
2	B	379	G	C4-C5-C6	5.16	121.90	118.80
2	B	570	G	C8-N9-C1'	5.16	133.71	127.00
2	B	632	A	N3-C4-C5	-5.16	123.19	126.80
2	B	977	G	C4-C5-C6	5.16	121.90	118.80
2	B	997	G	C6-C5-N7	-5.16	127.30	130.40
2	B	1268	A	C2-N3-C4	-5.16	108.02	110.60
2	B	1442	U	C5-C4-O4	-5.16	122.80	125.90
2	B	1483	G	C5-C6-O6	5.16	131.70	128.60
2	B	1532	A	C2'-C3'-O3'	5.16	121.96	113.70
2	B	1658	C	C2-N3-C4	5.16	122.48	119.90
2	B	1780	A	C1'-O4'-C4'	-5.16	105.77	109.90
2	B	2010	G	C6-C5-N7	-5.16	127.30	130.40
2	B	2325	G	C6-C5-N7	-5.16	127.30	130.40
2	B	2432	A	OP2-P-O3'	5.16	116.55	105.20
2	B	2489	U	C3'-C2'-C1'	5.16	105.63	101.50
2	B	2617	U	O4'-C1'-C2'	5.16	112.25	107.60
2	B	2695	U	N3-C4-O4	-5.16	115.79	119.40
2	B	2702	G	C5'-C4'-O4'	5.16	115.29	109.10
1	A	18	G	P-O3'-C3'	-5.16	113.51	119.70
2	B	435	C	C5'-C4'-O4'	-5.16	102.91	109.10
2	B	482	A	N1-C6-N6	5.16	121.70	118.60
2	B	669	G	C5-N7-C8	-5.16	101.72	104.30
2	B	1333	G	C5-C6-N1	-5.16	108.92	111.50
2	B	2101	A	C4-N9-C1'	-5.16	117.01	126.30
2	B	2252	G	C2'-C3'-O3'	5.16	121.95	113.70
2	B	2493	U	C2-N3-C4	-5.16	123.91	127.00
2	B	2527	C	N3-C4-C5	-5.16	119.84	121.90
2	B	2764	A	N9-C4-C5	5.16	107.86	105.80
1	A	70	C	O3'-P-O5'	-5.16	94.20	104.00
2	B	372	G	N3-C4-N9	-5.16	122.91	126.00
2	B	774	G	N3-C4-C5	-5.16	126.02	128.60
2	B	805	G	OP1-P-O3'	5.16	116.55	105.20
2	B	822	G	N1-C2-N3	-5.16	120.81	123.90
2	B	1297	C	P-O5'-C5'	-5.16	112.65	120.90
2	B	1632	A	C5-C6-N6	5.16	127.83	123.70
2	B	2472	G	C4-C5-N7	-5.16	108.74	110.80
2	B	178	G	C4-N9-C1'	-5.16	119.80	126.50
2	B	254	G	C6-N1-C2	-5.16	122.01	125.10
2	B	1528	A	C6-C5-N7	-5.16	128.69	132.30
2	B	1651	G	C8-N9-C4	-5.16	104.34	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2316	G	N7-C8-N9	5.16	115.68	113.10
2	B	2375	G	N3-C4-N9	-5.16	122.91	126.00
2	B	463	G	O4'-C1'-N9	5.15	112.32	108.20
2	B	475	C	N3-C4-C5	-5.15	119.84	121.90
2	B	1212	G	C3'-C2'-C1'	-5.15	97.38	101.50
2	B	2292	U	N1-C1'-C2'	-5.15	106.33	112.00
19	X	417	PRO	N-CD-CG	5.15	110.93	103.20
2	B	167	A	O4'-C1'-N9	5.15	112.32	108.20
2	B	203	A	C8-N9-C1'	5.15	136.98	127.70
2	B	228	C	C5-C4-N4	-5.15	116.59	120.20
2	B	418	C	N1-C2-O2	5.15	121.99	118.90
2	B	482	A	C4-C5-N7	-5.15	108.12	110.70
2	B	1117	C	N3-C2-O2	5.15	125.51	121.90
2	B	1187	G	C4-N9-C1'	-5.15	119.80	126.50
2	B	1283	G	C5'-C4'-O4'	-5.15	102.92	109.10
2	B	1295	C	N3-C4-C5	-5.15	119.84	121.90
2	B	2348	U	P-O5'-C5'	-5.15	112.66	120.90
2	B	2378	A	C1'-O4'-C4'	-5.15	105.78	109.90
2	B	2442	C	C2'-C3'-O3'	5.15	121.95	113.70
2	B	2442	C	C6-N1-C2	-5.15	118.24	120.30
2	B	2549	G	N3-C4-C5	5.15	131.18	128.60
2	B	2784	U	C1'-O4'-C4'	5.15	114.02	109.90
2	B	497	A	C4'-C3'-C2'	-5.15	97.45	102.60
2	B	938	G	OP1-P-OP2	-5.15	111.87	119.60
2	B	1342	A	C5-C6-N6	-5.15	119.58	123.70
2	B	1618	A	C5-N7-C8	5.15	106.47	103.90
2	B	1754	A	N1-C2-N3	5.15	131.88	129.30
2	B	1852	U	C4'-C3'-C2'	-5.15	97.45	102.60
2	B	2107	G	C5-N7-C8	-5.15	101.72	104.30
2	B	2239	G	C5-N7-C8	5.15	106.88	104.30
2	B	2391	G	C5'-C4'-O4'	5.15	115.28	109.10
2	B	2656	U	C4'-C3'-C2'	5.15	107.75	102.60
2	B	2701	U	P-O3'-C3'	5.15	125.88	119.70
2	B	2857	G	C1'-O4'-C4'	-5.15	105.78	109.90
4	K	49	ARG	N-CA-C	-5.15	97.09	111.00
14	D	156	PHE	CB-CG-CD1	-5.15	117.19	120.80
29	G	72	ASN	N-CA-CB	5.15	119.87	110.60
31	I	7	TYR	N-CA-C	-5.15	97.09	111.00
2	B	533	G	OP1-P-OP2	-5.15	111.88	119.60
2	B	1519	G	N3-C4-N9	-5.15	122.91	126.00
2	B	2374	C	C2-N1-C1'	5.15	124.46	118.80
2	B	2694	G	N3-C4-C5	-5.15	126.03	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	5	111	PHE	CD1-CG-CD2	5.15	124.99	118.30
1	A	16	G	O5'-C5'-C4'	-5.15	101.92	111.70
1	A	24	G	C6-C5-N7	-5.15	127.31	130.40
2	B	177	G	C5-C6-O6	-5.15	125.51	128.60
2	B	446	G	C6-N1-C2	-5.15	122.01	125.10
2	B	527	C	O3'-P-O5'	-5.15	94.22	104.00
2	B	808	G	C5-N7-C8	-5.15	101.73	104.30
2	B	942	G	N3-C2-N2	5.15	123.50	119.90
2	B	1174	U	O4'-C1'-C2'	-5.15	100.65	105.80
2	B	1182	G	P-O3'-C3'	-5.15	113.52	119.70
2	B	1210	G	C2-N3-C4	-5.15	109.33	111.90
2	B	2469	A	P-O3'-C3'	5.15	125.88	119.70
2	B	2564	A	C5'-C4'-C3'	-5.15	107.76	116.00
2	B	2726	A	C6-N1-C2	5.15	121.69	118.60
2	B	2852	G	C6-N1-C2	5.15	128.19	125.10
2	B	644	A	C5-C6-N1	-5.15	115.13	117.70
28	F	128	SER	N-CA-CB	5.15	118.22	110.50
2	B	155	A	C5-C6-N1	-5.14	115.13	117.70
2	B	286	U	C1'-O4'-C4'	-5.14	105.78	109.90
2	B	584	C	C6-N1-C2	-5.14	118.24	120.30
2	B	936	A	C4-C5-N7	-5.14	108.13	110.70
2	B	1551	A	C4-C5-C6	5.14	119.57	117.00
2	B	1813	G	C4-N9-C1'	-5.14	119.81	126.50
2	B	1896	G	C8-N9-C4	-5.14	104.34	106.40
2	B	1912	A	C3'-C2'-C1'	-5.14	97.38	101.50
2	B	2213	U	C1'-O4'-C4'	-5.14	105.78	109.90
2	B	2358	A	C1'-O4'-C4'	-5.14	105.78	109.90
30	H	65	ALA	N-CA-CB	5.14	117.30	110.10
2	B	99	U	N3-C4-C5	-5.14	111.52	114.60
2	B	501	A	C2-N3-C4	5.14	113.17	110.60
2	B	695	G	C2-N3-C4	-5.14	109.33	111.90
2	B	783	A	C5-C6-N1	-5.14	115.13	117.70
2	B	852	U	N3-C4-O4	5.14	123.00	119.40
2	B	895	U	N3-C4-C5	-5.14	111.51	114.60
2	B	960	A	O4'-C1'-N9	5.14	112.31	108.20
2	B	1025	G	N3-C2-N2	5.14	123.50	119.90
2	B	1343	G	C6-N1-C2	5.14	128.19	125.10
2	B	1588	G	N3-C2-N2	-5.14	116.30	119.90
2	B	1784	A	C3'-C2'-C1'	-5.14	97.39	101.50
2	B	2099	U	C6-N1-C2	5.14	124.08	121.00
2	B	2731	G	N3-C4-C5	-5.14	126.03	128.60
2	B	409	G	C1'-O4'-C4'	-5.14	105.79	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	645	C	C3'-C2'-C1'	-5.14	97.39	101.50
2	B	701	G	C6-C5-N7	-5.14	127.31	130.40
2	B	1014	A	C2-N3-C4	-5.14	108.03	110.60
2	B	1434	A	C5-C6-N1	-5.14	115.13	117.70
2	B	1531	C	O3'-P-O5'	-5.14	94.23	104.00
2	B	1736	U	C5'-C4'-O4'	5.14	115.27	109.10
2	B	1885	A	N9-C1'-C2'	-5.14	106.34	112.00
2	B	2682	A	N3-C4-C5	-5.14	123.20	126.80
2	B	2759	G	C4-C5-N7	5.14	112.86	110.80
2	B	176	A	C5-C6-N6	-5.14	119.59	123.70
2	B	644	A	N1-C2-N3	5.14	131.87	129.30
2	B	1083	U	C5-C4-O4	-5.14	122.82	125.90
2	B	1137	G	C5-C6-N1	-5.14	108.93	111.50
2	B	1377	G	C8-N9-C4	-5.14	104.34	106.40
2	B	1526	C	C4'-C3'-C2'	-5.14	97.46	102.60
2	B	1558	C	N3-C4-N4	5.14	121.60	118.00
2	B	1747	U	C2-N3-C4	-5.14	123.92	127.00
2	B	2233	U	C2-N1-C1'	-5.14	111.53	117.70
2	B	2437	G	P-O5'-C5'	-5.14	112.68	120.90
5	L	91	ASP	CB-CG-OD1	5.14	122.93	118.30
27	C	29	PHE	CG-CD2-CE2	-5.14	115.15	120.80
27	C	212	TRP	CD1-NE1-CE2	-5.14	104.37	109.00
1	A	112	G	N1-C2-N3	-5.14	120.82	123.90
2	B	248	G	C5'-C4'-C3'	-5.14	107.78	116.00
2	B	713	G	P-O3'-C3'	5.14	125.87	119.70
2	B	1171	G	O4'-C1'-C2'	-5.14	100.66	105.80
2	B	1985	C	C4-C5-C6	5.14	119.97	117.40
2	B	2494	G	C3'-C2'-C1'	5.14	105.61	101.50
2	B	2696	U	C2-N3-C4	-5.14	123.92	127.00
1	A	106	G	N1-C6-O6	5.14	122.98	119.90
2	B	65	U	C2-N3-C4	5.14	130.08	127.00
2	B	153	U	C5-C6-N1	5.14	125.27	122.70
2	B	278	A	C6-N1-C2	-5.14	115.52	118.60
2	B	585	G	O4'-C1'-N9	5.14	112.31	108.20
2	B	615	U	N1-C2-O2	-5.14	119.20	122.80
2	B	666	A	N3-C4-C5	-5.14	123.20	126.80
2	B	731	C	C4-C5-C6	-5.14	114.83	117.40
2	B	839	U	C3'-C2'-C1'	5.14	105.61	101.50
2	B	1176	U	N3-C2-O2	5.14	125.80	122.20
2	B	1329	U	C4-C5-C6	5.14	122.78	119.70
2	B	1329	U	N1-C2-O2	-5.14	119.20	122.80
2	B	1475	G	N1-C2-N3	-5.14	120.82	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1606	C	P-O3'-C3'	-5.14	113.53	119.70
2	B	1751	U	C5-C6-N1	5.14	125.27	122.70
2	B	1758	U	N1-C2-O2	5.14	126.39	122.80
2	B	1773	A	P-O3'-C3'	-5.14	113.54	119.70
2	B	2027	G	C8-N9-C4	-5.14	104.35	106.40
2	B	2456	C	N3-C2-O2	5.14	125.50	121.90
2	B	2457	U	N3-C2-O2	5.14	125.80	122.20
2	B	2712	C	C2-N1-C1'	-5.14	113.15	118.80
20	E	154	ASP	N-CA-C	-5.14	97.13	111.00
27	C	29	PHE	CZ-CE2-CD2	5.14	126.26	120.10
1	A	37	C	C4-C5-C6	5.13	119.97	117.40
2	B	193	U	C2-N1-C1'	-5.13	111.54	117.70
2	B	414	C	O5'-C5'-C4'	-5.13	101.94	111.70
2	B	488	G	C4-C5-C6	5.13	121.88	118.80
2	B	2214	C	N3-C2-O2	-5.13	118.31	121.90
15	T	32	LEU	CB-CA-C	-5.13	100.44	110.20
32	J	27	ARG	NE-CZ-NH2	5.13	122.87	120.30
2	B	76	C	C6-N1-C1'	5.13	126.96	120.80
2	B	590	A	O4'-C1'-C2'	5.13	112.22	107.60
2	B	1020	A	O4'-C1'-N9	5.13	112.31	108.20
2	B	2564	A	O3'-P-O5'	-5.13	94.25	104.00
19	X	7	LEU	C-N-CA	5.13	134.53	121.70
19	X	369	ARG	NE-CZ-NH1	5.13	122.87	120.30
2	B	293	U	C3'-C2'-C1'	-5.13	97.39	101.50
2	B	309	A	C5'-C4'-C3'	5.13	124.21	116.00
2	B	476	G	N3-C2-N2	5.13	123.49	119.90
2	B	983	A	C1'-O4'-C4'	5.13	114.00	109.90
2	B	1331	G	N1-C2-N3	-5.13	120.82	123.90
2	B	1672	A	N7-C8-N9	-5.13	111.23	113.80
2	B	2084	C	N3-C4-C5	-5.13	119.85	121.90
2	B	2387	U	C5-C4-O4	5.13	128.98	125.90
2	B	2438	U	C1'-O4'-C4'	5.13	114.01	109.90
2	B	2614	A	C1'-O4'-C4'	5.13	114.00	109.90
4	K	64	ARG	NE-CZ-NH2	5.13	122.87	120.30
2	B	485	C	N3-C2-O2	5.13	125.49	121.90
2	B	1784	A	OP1-P-OP2	-5.13	111.91	119.60
2	B	2659	G	N7-C8-N9	-5.13	110.53	113.10
20	E	11	ALA	N-CA-CB	5.13	117.28	110.10
2	B	416	U	C6-N1-C2	-5.13	117.92	121.00
2	B	417	C	OP1-P-OP2	-5.13	111.91	119.60
2	B	480	A	N3-C4-C5	-5.13	123.21	126.80
2	B	655	A	C5-N7-C8	5.13	106.46	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	732	C	C4'-C3'-C2'	-5.13	97.47	102.60
2	B	1110	G	C5-C6-N1	-5.13	108.94	111.50
2	B	1298	C	C2-N3-C4	5.13	122.46	119.90
2	B	1992	G	O4'-C4'-C3'	-5.13	98.87	104.00
2	B	2130	U	N1-C1'-C2'	5.13	120.67	114.00
2	B	2435	A	P-O5'-C5'	5.13	129.11	120.90
2	B	2509	G	P-O3'-C3'	5.13	125.85	119.70
2	B	2670	A	C6-N1-C2	-5.13	115.52	118.60
2	B	2713	U	C2-N3-C4	-5.13	123.92	127.00
2	B	177	G	C5'-C4'-C3'	-5.13	107.80	116.00
2	B	621	A	C8-N9-C4	-5.13	103.75	105.80
2	B	628	G	C2-N3-C4	-5.13	109.34	111.90
2	B	980	A	C5'-C4'-C3'	-5.13	107.80	116.00
2	B	1035	U	C4-C5-C6	5.13	122.78	119.70
2	B	1194	A	O5'-P-OP2	5.13	116.85	110.70
2	B	1238	G	N9-C1'-C2'	-5.13	106.36	112.00
2	B	1451	C	C6-N1-C2	-5.13	118.25	120.30
20	E	33	VAL	O-C-N	-5.13	114.50	122.70
21	Y	46	ALA	N-CA-CB	5.13	117.28	110.10
2	B	132	G	C3'-C2'-C1'	5.12	105.60	101.50
2	B	914	G	C5'-C4'-C3'	5.12	124.20	116.00
2	B	1216	G	C1'-O4'-C4'	5.12	114.00	109.90
2	B	1394	U	C1'-O4'-C4'	-5.12	105.80	109.90
2	B	1993	U	C1'-O4'-C4'	-5.12	105.80	109.90
2	B	2567	G	C5-C6-O6	-5.12	125.53	128.60
2	B	2722	G	O4'-C1'-N9	5.12	112.30	108.20
14	D	171	THR	O-C-N	-5.12	114.50	122.70
2	B	314	C	C4-C5-C6	5.12	119.96	117.40
2	B	736	C	C6-N1-C1'	-5.12	114.65	120.80
2	B	743	A	N1-C2-N3	5.12	131.86	129.30
2	B	976	G	C5'-C4'-O4'	5.12	115.25	109.10
2	B	1324	G	O4'-C4'-C3'	-5.12	98.88	104.00
2	B	1350	C	C2-N1-C1'	5.12	124.44	118.80
2	B	1609	A	C4-C5-C6	5.12	119.56	117.00
2	B	1787	A	N7-C8-N9	-5.12	111.24	113.80
2	B	1950	G	C6-N1-C2	5.12	128.17	125.10
2	B	1997	C	C3'-C2'-C1'	5.12	105.60	101.50
2	B	2048	G	C1'-O4'-C4'	5.12	114.00	109.90
2	B	2118	U	P-O5'-C5'	5.12	129.10	120.90
2	B	2423	U	C5'-C4'-O4'	5.12	115.25	109.10
2	B	2721	A	C8-N9-C4	5.12	107.85	105.80
20	E	116	ASP	CA-CB-CG	-5.12	102.13	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	29	A	N9-C1'-C2'	-5.12	106.37	112.00
1	A	99	A	C8-N9-C4	-5.12	103.75	105.80
2	B	243	U	P-O5'-C5'	-5.12	112.71	120.90
2	B	343	C	N3-C4-C5	-5.12	119.85	121.90
2	B	416	U	N1-C2-O2	-5.12	119.22	122.80
2	B	556	A	N3-C4-N9	-5.12	123.30	127.40
2	B	955	U	N3-C4-O4	5.12	122.99	119.40
2	B	2232	C	C3'-C2'-C1'	-5.12	97.40	101.50
2	B	2383	G	N7-C8-N9	-5.12	110.54	113.10
2	B	2485	G	C4-C5-N7	-5.12	108.75	110.80
2	B	471	A	C2-N3-C4	-5.12	108.04	110.60
2	B	652	U	N3-C4-C5	-5.12	111.53	114.60
2	B	939	G	N3-C2-N2	5.12	123.48	119.90
2	B	1046	A	C6-C5-N7	-5.12	128.72	132.30
2	B	1552	A	C8-N9-C1'	-5.12	118.48	127.70
2	B	1553	A	C4'-C3'-C2'	-5.12	97.48	102.60
2	B	2714	G	C4'-C3'-C2'	-5.12	97.48	102.60
2	B	2821	A	C1'-O4'-C4'	-5.12	105.80	109.90
20	E	60	TRP	CB-CG-CD1	5.12	133.66	127.00
2	B	75	G	C5-C6-O6	-5.12	125.53	128.60
2	B	448	U	C5-C4-O4	-5.12	122.83	125.90
2	B	710	U	C1'-O4'-C4'	-5.12	105.81	109.90
2	B	985	C	C2-N3-C4	5.12	122.46	119.90
2	B	1200	C	N1-C2-O2	5.12	121.97	118.90
2	B	1688	U	O5'-C5'-C4'	-5.12	101.97	111.70
2	B	2411	A	O3'-P-O5'	5.12	113.73	104.00
2	B	2446	G	C5'-C4'-O4'	-5.12	102.96	109.10
21	Y	54	ARG	NE-CZ-NH2	-5.12	117.74	120.30
25	7	36	ALA	CB-CA-C	5.12	117.78	110.10
31	I	48	ILE	N-CA-C	-5.12	97.18	111.00
2	B	159	G	C2-N3-C4	-5.12	109.34	111.90
2	B	292	U	N3-C4-O4	5.12	122.98	119.40
2	B	415	A	C1'-O4'-C4'	5.12	113.99	109.90
2	B	634	C	OP1-P-OP2	-5.12	111.92	119.60
2	B	861	A	N7-C8-N9	-5.12	111.24	113.80
2	B	1550	C	N1-C2-N3	-5.12	115.62	119.20
2	B	2488	G	N3-C4-C5	5.12	131.16	128.60
2	B	2770	G	N3-C2-N2	5.12	123.48	119.90
2	B	38	A	C5-C6-N1	-5.12	115.14	117.70
2	B	461	C	C2'-C3'-O3'	5.12	121.89	113.70
2	B	738	G	O4'-C4'-C3'	-5.12	98.89	104.00
2	B	951	C	N3-C2-O2	-5.12	118.32	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1074	G	O4'-C1'-N9	5.12	112.29	108.20
2	B	1611	C	C5'-C4'-O4'	5.12	115.24	109.10
2	B	2341	G	P-O5'-C5'	-5.12	112.72	120.90
2	B	2360	G	P-O3'-C3'	5.12	125.84	119.70
2	B	2361	G	C5'-C4'-C3'	-5.12	107.81	116.00
2	B	2390	U	O4'-C1'-N1	5.12	112.29	108.20
2	B	2679	A	C8-N9-C4	5.12	107.85	105.80
2	B	78	U	O4'-C4'-C3'	-5.11	98.89	104.00
2	B	318	C	O4'-C1'-N1	5.11	112.29	108.20
2	B	619	G	C4-C5-C6	5.11	121.87	118.80
2	B	1168	G	N1-C2-N2	-5.11	111.60	116.20
2	B	1341	G	P-O3'-C3'	5.11	125.83	119.70
2	B	1927	A	N9-C1'-C2'	5.11	120.65	114.00
2	B	2051	A	C8-N9-C4	-5.11	103.75	105.80
2	B	2625	G	N1-C6-O6	5.11	122.97	119.90
2	B	2656	U	O4'-C1'-C2'	5.11	112.20	107.60
2	B	2735	G	N3-C4-N9	-5.11	122.93	126.00
2	B	2792	A	C5'-C4'-O4'	5.11	115.24	109.10
2	B	2796	U	C5-C4-O4	-5.11	122.83	125.90
19	X	390	MET	CG-SD-CE	-5.11	92.02	100.20
2	B	2217	G	N3-C2-N2	5.11	123.48	119.90
2	B	2462	C	N3-C4-C5	-5.11	119.86	121.90
32	J	91	GLU	N-CA-CB	5.11	119.80	110.60
2	B	144	A	N7-C8-N9	-5.11	111.25	113.80
2	B	180	G	N9-C4-C5	5.11	107.44	105.40
2	B	291	G	C5-C6-N1	-5.11	108.94	111.50
2	B	865	C	C6-N1-C2	5.11	122.34	120.30
2	B	978	G	N1-C2-N2	-5.11	111.60	116.20
2	B	1041	G	N3-C4-C5	-5.11	126.04	128.60
2	B	1459	G	N3-C4-C5	-5.11	126.05	128.60
2	B	1979	U	C4-C5-C6	-5.11	116.63	119.70
2	B	2211	A	C5-C6-N6	-5.11	119.61	123.70
2	B	2267	A	C3'-C2'-C1'	-5.11	97.41	101.50
2	B	2837	A	N1-C6-N6	5.11	121.67	118.60
2	B	2865	U	C5-C6-N1	5.11	125.26	122.70
2	B	2894	G	C6-N1-C2	-5.11	122.03	125.10
2	B	2898	U	C5'-C4'-O4'	5.11	115.23	109.10
8	N	109	PRO	O-C-N	5.11	130.88	122.70
2	B	372	G	N3-C4-C5	5.11	131.15	128.60
2	B	390	U	OP1-P-OP2	-5.11	111.94	119.60
2	B	638	G	O4'-C1'-N9	5.11	112.29	108.20
2	B	1009	A	C4-C5-N7	5.11	113.25	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1456	G	O5'-C5'-C4'	-5.11	101.99	111.70
2	B	1796	U	C4'-C3'-C2'	5.11	107.71	102.60
2	B	2056	G	N9-C4-C5	5.11	107.44	105.40
1	A	80	U	P-O3'-C3'	-5.11	113.57	119.70
1	A	84	G	O4'-C1'-N9	5.11	112.29	108.20
2	B	13	A	C5'-C4'-O4'	5.11	115.23	109.10
2	B	159	G	C4-C5-N7	5.11	112.84	110.80
2	B	763	G	C4-C5-N7	-5.11	108.76	110.80
2	B	787	C	O4'-C4'-C3'	-5.11	98.89	104.00
2	B	811	U	C4-C5-C6	-5.11	116.64	119.70
2	B	903	C	C4'-C3'-C2'	-5.11	97.49	102.60
2	B	999	U	O4'-C1'-N1	5.11	112.29	108.20
2	B	1060	U	C1'-O4'-C4'	5.11	113.99	109.90
2	B	1163	G	O4'-C4'-C3'	-5.11	98.89	104.00
2	B	1370	C	C5-C6-N1	5.11	123.55	121.00
2	B	1438	U	C5'-C4'-O4'	-5.11	102.97	109.10
2	B	1649	G	C8-N9-C4	5.11	108.44	106.40
2	B	1783	A	C3'-C2'-C1'	-5.11	97.41	101.50
2	B	2240	U	C2-N3-C4	-5.11	123.94	127.00
2	B	2278	A	N7-C8-N9	-5.11	111.25	113.80
2	B	2640	G	C6-C5-N7	-5.11	127.34	130.40
2	B	6	A	N3-C4-C5	-5.11	123.23	126.80
2	B	165	A	N3-C4-N9	-5.11	123.32	127.40
2	B	339	U	N1-C2-N3	-5.11	111.84	114.90
2	B	586	A	OP2-P-O3'	5.11	116.43	105.20
2	B	1236	G	C4-C5-N7	-5.11	108.76	110.80
2	B	1272	A	C4-C5-C6	5.11	119.55	117.00
2	B	1399	C	C2-N1-C1'	-5.11	113.18	118.80
2	B	1610	A	P-O5'-C5'	5.11	129.07	120.90
2	B	2432	A	N3-C4-N9	5.11	131.49	127.40
2	B	2611	C	C4-C5-C6	-5.11	114.85	117.40
2	B	2722	G	C5-N7-C8	5.11	106.85	104.30
2	B	1242	U	N3-C4-C5	-5.10	111.54	114.60
2	B	1427	A	C5-N7-C8	5.10	106.45	103.90
2	B	1450	G	C8-N9-C1'	5.10	133.63	127.00
5	L	7	SER	N-CA-C	-5.10	97.22	111.00
23	5	38	PHE	N-CA-C	-5.10	97.22	111.00
27	C	19	VAL	CG1-CB-CG2	-5.10	102.73	110.90
1	A	32	U	O4'-C1'-N1	5.10	112.28	108.20
2	B	219	A	C5-C6-N6	-5.10	119.62	123.70
2	B	278	A	C4-C5-N7	-5.10	108.15	110.70
2	B	379	G	N7-C8-N9	-5.10	110.55	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	394	C	C4'-C3'-C2'	-5.10	97.50	102.60
2	B	396	G	C5'-C4'-O4'	5.10	115.22	109.10
2	B	425	G	N1-C2-N3	-5.10	120.84	123.90
2	B	795	C	N1-C2-O2	-5.10	115.84	118.90
2	B	1131	G	C2-N3-C4	5.10	114.45	111.90
2	B	1190	G	C1'-O4'-C4'	5.10	113.98	109.90
2	B	1224	U	C4-C5-C6	5.10	122.76	119.70
2	B	1385	A	N1-C2-N3	5.10	131.85	129.30
2	B	1537	G	C6-C5-N7	-5.10	127.34	130.40
2	B	2246	G	N1-C2-N2	-5.10	111.61	116.20
2	B	2530	A	N1-C2-N3	5.10	131.85	129.30
2	B	2697	G	P-O3'-C3'	-5.10	113.58	119.70
2	B	2759	G	C1'-O4'-C4'	-5.10	105.82	109.90
12	R	83	TYR	CG-CD2-CE2	5.10	125.38	121.30
13	S	68	ASP	N-CA-C	-5.10	97.23	111.00
2	B	3	U	C5'-C4'-O4'	5.10	115.22	109.10
2	B	196	A	N3-C4-N9	5.10	131.48	127.40
2	B	527	C	C6-N1-C2	5.10	122.34	120.30
2	B	1415	U	C2-N3-C4	-5.10	123.94	127.00
2	B	1592	C	N1-C2-O2	5.10	121.96	118.90
2	B	2353	G	P-O3'-C3'	5.10	125.82	119.70
2	B	2490	G	N9-C4-C5	5.10	107.44	105.40
2	B	2820	A	C1'-O4'-C4'	-5.10	105.82	109.90
2	B	2889	C	C5-C6-N1	5.10	123.55	121.00
19	X	260	VAL	C-N-CA	5.10	134.45	121.70
2	B	10	A	O4'-C4'-C3'	-5.10	98.90	104.00
2	B	136	G	O4'-C1'-N9	5.10	112.28	108.20
2	B	909	A	C1'-O4'-C4'	5.10	113.98	109.90
2	B	1516	G	N1-C2-N2	-5.10	111.61	116.20
2	B	1554	U	C5'-C4'-O4'	5.10	115.22	109.10
2	B	2027	G	C3'-C2'-C1'	5.10	105.58	101.50
2	B	2093	G	O4'-C4'-C3'	-5.10	98.90	104.00
2	B	2160	C	N1-C2-O2	5.10	121.96	118.90
2	B	2283	C	N3-C4-N4	5.10	121.57	118.00
2	B	2454	G	C5'-C4'-O4'	5.10	115.22	109.10
2	B	2647	U	C5-C4-O4	5.10	128.96	125.90
2	B	2841	C	N3-C4-C5	-5.10	119.86	121.90
23	5	71	ARG	NE-CZ-NH1	-5.10	117.75	120.30
1	A	55	U	OP1-P-OP2	-5.10	111.95	119.60
1	A	85	G	C4-N9-C1'	-5.10	119.87	126.50
1	A	98	G	C4-C5-C6	-5.10	115.74	118.80
2	B	13	A	O5'-P-OP2	-5.10	101.11	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	104	A	C4'-C3'-C2'	-5.10	97.50	102.60
2	B	466	A	C4-C5-C6	5.10	119.55	117.00
2	B	812	C	N1-C2-O2	-5.10	115.84	118.90
2	B	1310	G	C2-N3-C4	5.10	114.45	111.90
2	B	1608	A	P-O3'-C3'	-5.10	113.58	119.70
2	B	2179	C	O4'-C1'-N1	5.10	112.28	108.20
2	B	2574	G	O4'-C1'-N9	5.10	112.28	108.20
2	B	2609	U	O3'-P-O5'	5.10	113.68	104.00
2	B	2770	G	N3-C4-N9	5.10	129.06	126.00
2	B	2786	U	C2-N3-C4	-5.10	123.94	127.00
2	B	29	U	N1-C2-O2	-5.10	119.23	122.80
2	B	685	A	C4-C5-C6	5.10	119.55	117.00
2	B	1172	C	N1-C2-O2	-5.10	115.84	118.90
2	B	1846	G	O3'-P-O5'	-5.10	94.32	104.00
2	B	2335	A	C4-C5-C6	5.10	119.55	117.00
2	B	2419	U	C5-C6-N1	-5.10	120.15	122.70
2	B	2542	A	O5'-P-OP2	5.10	116.82	110.70
2	B	2684	U	C5'-C4'-O4'	5.10	115.22	109.10
2	B	82	U	C1'-O4'-C4'	-5.09	105.82	109.90
2	B	444	C	N3-C4-C5	-5.09	119.86	121.90
2	B	890	C	N1-C1'-C2'	-5.09	106.39	112.00
2	B	966	G	N3-C4-N9	-5.09	122.94	126.00
2	B	1033	U	C2-N3-C4	-5.09	123.94	127.00
2	B	1280	G	C5'-C4'-C3'	-5.09	107.85	116.00
2	B	1460	U	O5'-C5'-C4'	5.09	121.38	111.70
2	B	1841	U	C6-N1-C2	-5.09	117.94	121.00
2	B	2218	G	C4-C5-N7	-5.09	108.76	110.80
2	B	2333	A	C6-N1-C2	5.09	121.66	118.60
2	B	2448	A	O4'-C4'-C3'	-5.09	98.91	104.00
2	B	2516	A	C4'-C3'-C2'	5.09	107.69	102.60
2	B	2682	A	C5'-C4'-O4'	5.09	115.21	109.10
19	X	294	ALA	CB-CA-C	-5.09	102.46	110.10
19	X	305	LEU	N-CA-CB	5.09	120.59	110.40
2	B	680	C	C5'-C4'-O4'	-5.09	102.99	109.10
2	B	80	G	N7-C8-N9	5.09	115.65	113.10
2	B	193	U	N1-C2-N3	5.09	117.95	114.90
2	B	243	U	C5'-C4'-O4'	5.09	115.21	109.10
2	B	707	G	C5-N7-C8	5.09	106.85	104.30
2	B	812	C	N3-C4-N4	5.09	121.56	118.00
2	B	889	C	C5'-C4'-O4'	5.09	115.21	109.10
2	B	916	G	P-O5'-C5'	-5.09	112.75	120.90
2	B	1126	A	P-O5'-C5'	-5.09	112.75	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1137	G	C8-N9-C1'	5.09	133.62	127.00
2	B	1286	A	N3-C4-C5	-5.09	123.24	126.80
2	B	1579	A	C5'-C4'-O4'	5.09	115.21	109.10
2	B	2045	C	C6-N1-C1'	5.09	126.91	120.80
2	B	2454	G	C8-N9-C4	-5.09	104.36	106.40
2	B	2554	U	N1-C2-O2	5.09	126.36	122.80
1	A	44	G	C5'-C4'-O4'	-5.09	102.99	109.10
2	B	41	C	N3-C4-C5	-5.09	119.86	121.90
2	B	188	G	C5'-C4'-O4'	5.09	115.21	109.10
2	B	574	A	N1-C6-N6	5.09	121.65	118.60
2	B	715	A	C5-C6-N6	-5.09	119.63	123.70
2	B	741	U	N1-C2-N3	5.09	117.95	114.90
2	B	1528	A	P-O3'-C3'	-5.09	113.59	119.70
2	B	1727	C	P-O5'-C5'	5.09	129.04	120.90
2	B	1797	G	P-O3'-C3'	-5.09	113.59	119.70
2	B	1965	C	C5-C4-N4	-5.09	116.64	120.20
2	B	2684	U	N3-C4-O4	5.09	122.96	119.40
2	B	2829	A	C5-C6-N1	-5.09	115.16	117.70
2	B	2847	U	N3-C4-O4	-5.09	115.84	119.40
23	5	21	TYR	CB-CA-C	-5.09	100.22	110.40
2	B	895	U	P-O5'-C5'	-5.09	112.76	120.90
2	B	1365	A	N1-C2-N3	5.09	131.84	129.30
2	B	1649	G	C5-C6-N1	-5.09	108.96	111.50
2	B	2325	G	C8-N9-C4	5.09	108.44	106.40
2	B	2654	A	C6-N1-C2	-5.09	115.55	118.60
1	A	22	U	C2-N3-C4	-5.09	123.95	127.00
2	B	623	C	C5-C4-N4	-5.09	116.64	120.20
2	B	650	C	N3-C4-N4	5.09	121.56	118.00
2	B	1545	A	C4-C5-N7	-5.09	108.16	110.70
2	B	1659	G	C8-N9-C1'	-5.09	120.39	127.00
2	B	1817	G	C6-C5-N7	-5.09	127.35	130.40
2	B	2415	G	N7-C8-N9	-5.09	110.56	113.10
2	B	2864	G	N1-C2-N3	-5.09	120.85	123.90
2	B	803	U	C4-C5-C6	5.08	122.75	119.70
2	B	1327	A	C4-N9-C1'	5.08	135.45	126.30
2	B	1612	C	O4'-C1'-N1	5.08	112.27	108.20
2	B	1724	G	P-O5'-C5'	-5.08	112.77	120.90
2	B	2135	A	C5-N7-C8	5.08	106.44	103.90
2	B	2662	A	C2-N3-C4	-5.08	108.06	110.60
1	A	19	C	N3-C4-N4	5.08	121.56	118.00
1	A	51	G	C2-N3-C4	5.08	114.44	111.90
2	B	242	G	C6-N1-C2	5.08	128.15	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	678	C	C2-N3-C4	5.08	122.44	119.90
2	B	802	A	C5'-C4'-O4'	-5.08	103.00	109.10
2	B	929	U	C5-C6-N1	5.08	125.24	122.70
2	B	1205	A	N7-C8-N9	-5.08	111.26	113.80
2	B	1387	A	C5-N7-C8	-5.08	101.36	103.90
2	B	1417	C	O4'-C1'-C2'	-5.08	100.72	105.80
2	B	1478	G	C2-N3-C4	5.08	114.44	111.90
2	B	1928	A	O4'-C1'-N9	5.08	112.27	108.20
2	B	1957	C	C1'-O4'-C4'	-5.08	105.83	109.90
2	B	2261	C	N3-C2-O2	-5.08	118.34	121.90
5	L	138	ALA	N-CA-C	-5.08	97.28	111.00
1	A	79	G	O4'-C1'-N9	5.08	112.27	108.20
2	B	195	A	C1'-O4'-C4'	5.08	113.96	109.90
2	B	277	G	N7-C8-N9	5.08	115.64	113.10
2	B	405	U	N3-C4-C5	-5.08	111.55	114.60
2	B	613	A	C6-C5-N7	-5.08	128.74	132.30
2	B	643	A	C4-C5-C6	5.08	119.54	117.00
2	B	679	C	N3-C4-N4	5.08	121.56	118.00
2	B	1177	G	O4'-C1'-N9	5.08	112.27	108.20
2	B	1496	A	C6-N1-C2	5.08	121.65	118.60
2	B	2106	U	N1-C2-O2	5.08	126.36	122.80
2	B	2331	G	N3-C2-N2	5.08	123.46	119.90
2	B	2636	C	C2-N3-C4	-5.08	117.36	119.90
28	F	171	ALA	N-CA-C	-5.08	97.28	111.00
2	B	70	G	N3-C4-C5	-5.08	126.06	128.60
2	B	604	G	N1-C2-N3	-5.08	120.85	123.90
2	B	605	G	C4-N9-C1'	-5.08	119.90	126.50
2	B	650	C	O4'-C1'-N1	5.08	112.26	108.20
2	B	928	A	C1'-O4'-C4'	-5.08	105.84	109.90
2	B	1337	G	P-O3'-C3'	-5.08	113.60	119.70
2	B	1631	G	N3-C2-N2	5.08	123.46	119.90
2	B	1660	G	C4'-C3'-C2'	5.08	107.68	102.60
2	B	1824	G	OP1-P-OP2	-5.08	111.98	119.60
2	B	2692	G	N1-C2-N3	-5.08	120.85	123.90
2	B	2741	A	C4'-C3'-C2'	-5.08	97.52	102.60
2	B	383	C	C2-N3-C4	5.08	122.44	119.90
2	B	447	A	N1-C2-N3	5.08	131.84	129.30
2	B	1018	U	C5-C4-O4	-5.08	122.85	125.90
2	B	1077	A	C8-N9-C4	-5.08	103.77	105.80
2	B	1424	G	C2-N3-C4	-5.08	109.36	111.90
2	B	1441	G	C5-C6-N1	-5.08	108.96	111.50
2	B	1467	U	N3-C4-O4	5.08	122.95	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1476	U	C3'-C2'-C1'	-5.08	97.44	101.50
2	B	1592	C	C4'-C3'-C2'	-5.08	97.52	102.60
2	B	1807	G	C8-N9-C4	5.08	108.43	106.40
2	B	2019	A	C4-C5-C6	5.08	119.54	117.00
2	B	2065	C	O4'-C1'-N1	5.08	112.26	108.20
2	B	2457	U	N3-C4-C5	-5.08	111.55	114.60
2	B	2873	A	C5-C6-N1	-5.08	115.16	117.70
2	B	2884	U	O4'-C1'-N1	5.08	112.26	108.20
14	D	54	ALA	CB-CA-C	-5.08	102.48	110.10
1	A	15	A	C4-N9-C1'	5.08	135.44	126.30
2	B	458	G	C4-C5-N7	-5.08	108.77	110.80
2	B	748	G	C6-C5-N7	-5.08	127.35	130.40
2	B	873	C	N1-C2-N3	-5.08	115.65	119.20
2	B	1182	G	C4-N9-C1'	-5.08	119.90	126.50
2	B	1377	G	P-O5'-C5'	5.08	129.02	120.90
2	B	1650	A	N1-C2-N3	5.08	131.84	129.30
2	B	1737	G	C4-C5-C6	5.08	121.85	118.80
2	B	2480	C	P-O3'-C3'	-5.08	113.61	119.70
2	B	2594	C	C5'-C4'-C3'	5.08	124.12	116.00
2	B	2883	A	N1-C6-N6	5.08	121.65	118.60
15	T	63	VAL	CA-CB-CG2	-5.08	103.28	110.90
29	G	162	ARG	NE-CZ-NH1	-5.08	117.76	120.30
1	A	12	C	C4-C5-C6	5.08	119.94	117.40
1	A	53	A	O4'-C1'-N9	5.08	112.26	108.20
2	B	203	A	C5-C6-N1	-5.08	115.16	117.70
2	B	560	C	O4'-C1'-N1	5.08	112.26	108.20
2	B	1016	G	N3-C4-N9	5.08	129.04	126.00
2	B	1104	C	O3'-P-O5'	-5.08	94.36	104.00
2	B	1169	A	C5-C6-N1	5.08	120.24	117.70
2	B	1242	U	C2-N1-C1'	5.08	123.79	117.70
2	B	1360	G	N1-C2-N3	-5.08	120.86	123.90
2	B	1605	C	C1'-O4'-C4'	-5.08	105.84	109.90
2	B	1934	C	C4'-C3'-C2'	-5.08	97.53	102.60
2	B	1978	A	N1-C6-N6	5.08	121.64	118.60
2	B	2096	C	O3'-P-O5'	-5.08	94.36	104.00
2	B	2195	U	N3-C4-C5	5.08	117.64	114.60
2	B	2230	G	C8-N9-C1'	5.08	133.60	127.00
2	B	2285	C	O4'-C4'-C3'	-5.08	98.92	104.00
2	B	2330	G	C8-N9-C4	5.08	108.43	106.40
2	B	2340	A	C4-C5-C6	5.08	119.54	117.00
2	B	2357	G	O4'-C1'-N9	5.08	112.26	108.20
2	B	2488	G	C5-N7-C8	5.08	106.84	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	110	C	N3-C4-N4	5.07	121.55	118.00
2	B	179	C	N3-C2-O2	-5.07	118.35	121.90
2	B	268	C	C5-C4-N4	-5.07	116.65	120.20
2	B	470	A	OP1-P-O3'	5.07	116.36	105.20
2	B	636	G	N3-C4-N9	5.07	129.04	126.00
2	B	863	A	C6-C5-N7	-5.07	128.75	132.30
2	B	875	G	C1'-O4'-C4'	-5.07	105.84	109.90
2	B	984	A	O4'-C1'-C2'	5.07	112.17	107.60
2	B	1061	U	P-O3'-C3'	5.07	125.79	119.70
2	B	1108	U	C1'-O4'-C4'	-5.07	105.84	109.90
2	B	1112	G	C5-C6-O6	-5.07	125.56	128.60
2	B	1228	G	C2-N3-C4	5.07	114.44	111.90
2	B	1265	A	C4-C5-N7	-5.07	108.16	110.70
2	B	1527	G	N1-C2-N2	-5.07	111.63	116.20
2	B	1533	C	C4-C5-C6	5.07	119.94	117.40
2	B	1667	G	C3'-C2'-C1'	-5.07	97.44	101.50
2	B	1669	A	O4'-C1'-C2'	5.07	112.17	107.60
2	B	1684	G	N1-C2-N3	-5.07	120.86	123.90
2	B	1700	A	C4-N9-C1'	-5.07	117.17	126.30
2	B	2184	A	C2-N3-C4	5.07	113.14	110.60
2	B	2216	G	N1-C2-N3	-5.07	120.86	123.90
2	B	2217	G	C5-N7-C8	-5.07	101.76	104.30
2	B	2219	U	C4-C5-C6	5.07	122.74	119.70
2	B	2261	C	C5-C4-N4	-5.07	116.65	120.20
2	B	2463	C	C5'-C4'-C3'	5.07	124.12	116.00
2	B	2661	G	N1-C2-N2	-5.07	111.63	116.20
23	5	38	PHE	CZ-CE2-CD2	-5.07	114.01	120.10
28	F	169	LEU	CB-CA-C	-5.07	100.56	110.20
2	B	44	A	OP1-P-O3'	5.07	116.36	105.20
2	B	195	A	C3'-C2'-C1'	5.07	105.56	101.50
2	B	367	G	C2-N3-C4	5.07	114.44	111.90
2	B	414	C	N3-C4-N4	5.07	121.55	118.00
2	B	557	C	C3'-C2'-C1'	5.07	105.56	101.50
2	B	988	A	C8-N9-C1'	5.07	136.83	127.70
2	B	1051	G	C6-C5-N7	-5.07	127.36	130.40
2	B	1228	G	P-O3'-C3'	-5.07	113.61	119.70
2	B	2008	C	P-O5'-C5'	-5.07	112.78	120.90
2	B	2739	U	C5-C6-N1	-5.07	120.16	122.70
19	X	42	TYR	CB-CG-CD1	-5.07	117.96	121.00
1	A	44	G	C5-N7-C8	5.07	106.83	104.30
2	B	405	U	C2-N1-C1'	5.07	123.78	117.70
2	B	900	A	C6-N1-C2	-5.07	115.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	958	U	C4-C5-C6	5.07	122.74	119.70
2	B	1115	G	C4-N9-C1'	-5.07	119.91	126.50
2	B	1177	G	O5'-C5'-C4'	-5.07	102.07	111.70
2	B	1190	G	C4-C5-C6	5.07	121.84	118.80
2	B	1294	U	N1-C2-N3	-5.07	111.86	114.90
2	B	1469	A	N7-C8-N9	-5.07	111.27	113.80
2	B	1683	U	C4-C5-C6	-5.07	116.66	119.70
2	B	2101	A	O4'-C4'-C3'	-5.07	98.93	104.00
2	B	2149	U	C5-C4-O4	5.07	128.94	125.90
2	B	2217	G	C2-N3-C4	-5.07	109.36	111.90
2	B	2284	A	C6-N1-C2	5.07	121.64	118.60
2	B	2324	U	C5-C4-O4	5.07	128.94	125.90
2	B	2470	G	C5'-C4'-O4'	5.07	115.18	109.10
2	B	2624	G	N1-C6-O6	5.07	122.94	119.90
2	B	2774	C	P-O3'-C3'	-5.07	113.62	119.70
2	B	2893	A	O4'-C1'-N9	5.07	112.26	108.20
2	B	58	G	P-O3'-C3'	-5.07	113.62	119.70
2	B	259	G	C2-N3-C4	5.07	114.44	111.90
2	B	1749	A	O4'-C1'-N9	5.07	112.25	108.20
2	B	2826	A	C5-C6-N1	-5.07	115.17	117.70
2	B	287	G	N9-C4-C5	-5.07	103.37	105.40
2	B	533	G	C4-C5-N7	5.07	112.83	110.80
2	B	588	U	N3-C4-C5	5.07	117.64	114.60
2	B	603	A	C5-C6-N6	-5.07	119.65	123.70
2	B	692	C	O4'-C1'-C2'	-5.07	100.73	105.80
2	B	904	G	C2-N3-C4	-5.07	109.37	111.90
2	B	1044	C	N1-C2-O2	5.07	121.94	118.90
2	B	1332	G	C4-C5-C6	5.07	121.84	118.80
2	B	1368	G	C4-C5-C6	5.07	121.84	118.80
2	B	1629	U	N1-C2-N3	-5.07	111.86	114.90
2	B	1651	G	P-O5'-C5'	-5.07	112.79	120.90
2	B	1718	G	N3-C4-N9	5.07	129.04	126.00
2	B	2148	G	C5-C6-N1	-5.07	108.97	111.50
2	B	2393	U	C6-N1-C2	-5.07	117.96	121.00
2	B	2415	G	N1-C2-N3	-5.07	120.86	123.90
2	B	2508	G	C5'-C4'-O4'	5.07	115.18	109.10
2	B	2880	C	N3-C4-C5	-5.07	119.87	121.90
20	E	118	LEU	N-CA-C	-5.07	97.31	111.00
2	B	801	G	C6-C5-N7	-5.07	127.36	130.40
2	B	835	C	C5-C4-N4	-5.07	116.65	120.20
2	B	908	C	C6-N1-C2	5.07	122.33	120.30
2	B	1105	U	O5'-P-OP1	5.07	116.78	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1643	G	N1-C6-O6	5.07	122.94	119.90
2	B	1732	C	N3-C2-O2	-5.07	118.35	121.90
2	B	1745	A	O5'-P-OP2	-5.07	101.14	105.70
2	B	2526	G	O4'-C1'-C2'	5.07	112.16	107.60
2	B	144	A	O4'-C1'-N9	5.06	112.25	108.20
2	B	371	A	C5-N7-C8	5.06	106.43	103.90
2	B	432	A	C4-C5-C6	5.06	119.53	117.00
2	B	504	A	C5'-C4'-O4'	5.06	115.18	109.10
2	B	765	C	C4-C5-C6	-5.06	114.87	117.40
2	B	2683	C	N3-C4-N4	5.06	121.55	118.00
2	B	96	C	N3-C4-C5	-5.06	119.88	121.90
2	B	522	A	C2-N3-C4	-5.06	108.07	110.60
2	B	614	A	N1-C2-N3	5.06	131.83	129.30
2	B	1073	A	N7-C8-N9	-5.06	111.27	113.80
2	B	1289	C	C5-C6-N1	5.06	123.53	121.00
2	B	1500	G	C6-C5-N7	-5.06	127.36	130.40
2	B	1723	G	C5-N7-C8	-5.06	101.77	104.30
2	B	2039	U	P-O3'-C3'	-5.06	113.62	119.70
2	B	287	G	C3'-C2'-C1'	-5.06	97.45	101.50
2	B	609	A	C6-C5-N7	-5.06	128.76	132.30
2	B	788	A	O5'-C5'-C4'	-5.06	102.08	111.70
2	B	1105	U	O4'-C1'-N1	5.06	112.25	108.20
2	B	2220	U	O4'-C1'-N1	5.06	112.25	108.20
2	B	2267	A	N3-C4-N9	5.06	131.45	127.40
1	A	27	C	C4-C5-C6	-5.06	114.87	117.40
1	A	96	G	N3-C2-N2	5.06	123.44	119.90
1	A	99	A	C4-C5-C6	5.06	119.53	117.00
2	B	12	U	O4'-C4'-C3'	-5.06	98.94	104.00
2	B	175	G	C6-C5-N7	-5.06	127.36	130.40
2	B	329	G	N3-C4-N9	5.06	129.03	126.00
2	B	412	A	N3-C4-C5	-5.06	123.26	126.80
2	B	763	G	C6-N1-C2	-5.06	122.06	125.10
2	B	789	A	C6-N1-C2	-5.06	115.56	118.60
2	B	885	C	C6-N1-C2	-5.06	118.28	120.30
2	B	1085	A	O4'-C1'-N9	5.06	112.25	108.20
2	B	1109	C	C5-C4-N4	-5.06	116.66	120.20
2	B	1579	A	C4-C5-C6	5.06	119.53	117.00
2	B	1680	U	C5'-C4'-O4'	-5.06	103.03	109.10
2	B	1750	G	O4'-C1'-N9	5.06	112.25	108.20
2	B	1985	C	C5'-C4'-C3'	5.06	124.09	116.00
2	B	1999	C	N3-C4-N4	5.06	121.54	118.00
2	B	2203	U	N3-C4-C5	-5.06	111.56	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2318	G	C4-C5-N7	-5.06	108.78	110.80
2	B	2439	A	N1-C6-N6	5.06	121.64	118.60
2	B	2850	A	C5-C6-N1	-5.06	115.17	117.70
32	J	74	TYR	CA-CB-CG	-5.06	103.79	113.40
2	B	341	C	C2-N1-C1'	-5.06	113.24	118.80
2	B	509	C	C1'-O4'-C4'	-5.06	105.85	109.90
2	B	609	A	C5-C6-N6	-5.06	119.65	123.70
2	B	728	G	C4-C5-C6	5.06	121.83	118.80
2	B	1373	A	N3-C4-N9	5.06	131.44	127.40
2	B	1544	A	C2-N3-C4	5.06	113.13	110.60
2	B	1820	U	C5-C6-N1	5.06	125.23	122.70
2	B	2097	A	N9-C4-C5	-5.06	103.78	105.80
2	B	2220	U	N3-C4-O4	5.06	122.94	119.40
2	B	2275	C	C2-N1-C1'	5.06	124.36	118.80
2	B	2359	C	P-O5'-C5'	5.06	128.99	120.90
2	B	2549	G	N9-C4-C5	-5.06	103.38	105.40
2	B	2557	G	P-O3'-C3'	-5.06	113.63	119.70
2	B	2579	C	P-O5'-C5'	-5.06	112.81	120.90
2	B	2768	U	O4'-C1'-N1	5.06	112.25	108.20
14	D	82	PHE	N-CA-CB	5.06	119.70	110.60
1	A	16	G	C5'-C4'-C3'	5.06	124.09	116.00
1	A	117	G	C4-C5-C6	5.06	121.83	118.80
2	B	1391	U	C5-C4-O4	-5.06	122.87	125.90
2	B	2851	A	C5-N7-C8	5.06	106.43	103.90
2	B	2870	C	C2-N3-C4	-5.06	117.37	119.90
1	A	31	C	C5'-C4'-C3'	-5.05	107.91	116.00
2	B	226	A	C6-C5-N7	-5.05	128.76	132.30
2	B	538	A	N9-C4-C5	-5.05	103.78	105.80
2	B	563	A	N9-C4-C5	5.05	107.82	105.80
2	B	696	G	N7-C8-N9	-5.05	110.57	113.10
2	B	834	G	N1-C2-N3	-5.05	120.87	123.90
2	B	1319	C	O4'-C1'-N1	5.05	112.24	108.20
2	B	1378	A	C2-N3-C4	-5.05	108.07	110.60
2	B	1566	A	C5-C6-N6	-5.05	119.66	123.70
2	B	1952	A	C2-N3-C4	-5.05	108.07	110.60
2	B	2279	G	C5-N7-C8	-5.05	101.77	104.30
2	B	2379	G	N3-C4-N9	5.05	129.03	126.00
2	B	2595	G	N3-C2-N2	5.05	123.44	119.90
4	K	58	LEU	C-N-CA	5.05	134.34	121.70
7	M	102	LEU	N-CA-CB	5.05	120.51	110.40
11	Q	32	ARG	NE-CZ-NH2	5.05	122.83	120.30
2	B	574	A	C6-C5-N7	-5.05	128.76	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1368	G	N9-C4-C5	5.05	107.42	105.40
2	B	1484	U	C6-N1-C2	5.05	124.03	121.00
2	B	1526	C	O4'-C1'-N1	5.05	112.24	108.20
2	B	2432	A	N3-C4-C5	-5.05	123.26	126.80
2	B	2566	A	C5-N7-C8	5.05	106.43	103.90
1	A	76	G	O4'-C1'-N9	5.05	112.24	108.20
2	B	822	G	C5'-C4'-O4'	5.05	115.16	109.10
2	B	854	C	O3'-P-O5'	5.05	113.60	104.00
2	B	1197	G	N3-C4-N9	5.05	129.03	126.00
2	B	1441	G	C4-C5-N7	-5.05	108.78	110.80
2	B	1629	U	C2-N3-C4	5.05	130.03	127.00
2	B	1716	U	N3-C4-C5	-5.05	111.57	114.60
2	B	1964	G	O5'-P-OP2	5.05	116.76	110.70
2	B	2004	G	C4-C5-N7	5.05	112.82	110.80
2	B	2162	G	C5'-C4'-C3'	5.05	124.08	116.00
2	B	2171	A	C5-C6-N1	-5.05	115.17	117.70
2	B	2323	G	C8-N9-C1'	5.05	133.57	127.00
3	0	70	LEU	N-CA-CB	5.05	120.50	110.40
32	J	92	MET	CB-CA-C	-5.05	100.30	110.40
1	A	101	A	C5-C6-N6	-5.05	119.66	123.70
2	B	80	G	C8-N9-C4	-5.05	104.38	106.40
2	B	460	A	N9-C4-C5	5.05	107.82	105.80
2	B	715	A	OP1-P-O3'	5.05	116.31	105.20
2	B	846	U	O5'-C5'-C4'	-5.05	102.11	111.70
2	B	1052	C	C2-N1-C1'	5.05	124.35	118.80
2	B	1150	C	C6-N1-C1'	5.05	126.86	120.80
2	B	1160	G	C8-N9-C4	-5.05	104.38	106.40
2	B	1414	C	C2-N1-C1'	-5.05	113.25	118.80
2	B	1423	G	N3-C4-C5	5.05	131.12	128.60
2	B	1527	G	OP2-P-O3'	5.05	116.31	105.20
2	B	2284	A	N1-C2-N3	-5.05	126.78	129.30
2	B	2638	G	C4-N9-C1'	5.05	133.06	126.50
19	X	88	MET	CG-SD-CE	-5.05	92.12	100.20
25	7	43	LEU	CB-CA-C	-5.05	100.61	110.20
31	I	70	THR	C-N-CA	5.05	134.33	121.70
2	B	319	G	C1'-O4'-C4'	5.05	113.94	109.90
2	B	373	U	C6-N1-C2	-5.05	117.97	121.00
2	B	1387	A	O4'-C1'-N9	5.05	112.24	108.20
2	B	1545	A	C6-C5-N7	-5.05	128.77	132.30
2	B	2532	G	N3-C4-C5	-5.05	126.08	128.60
2	B	187	G	C4-C5-C6	5.05	121.83	118.80
2	B	193	U	N3-C2-O2	-5.05	118.67	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	218	A	N1-C6-N6	5.05	121.63	118.60
2	B	496	G	C8-N9-C1'	5.05	133.56	127.00
2	B	797	G	O4'-C1'-C2'	5.05	112.14	107.60
2	B	892	A	C5-C6-N1	-5.05	115.18	117.70
2	B	1049	C	C2-N1-C1'	5.05	124.35	118.80
2	B	1124	G	N3-C4-N9	5.05	129.03	126.00
2	B	1346	G	C4-C5-N7	-5.05	108.78	110.80
2	B	1706	C	C6-N1-C1'	-5.05	114.75	120.80
2	B	1706	C	N1-C2-N3	5.05	122.73	119.20
2	B	1757	A	O4'-C1'-C2'	5.05	112.14	107.60
2	B	1963	U	C4-C5-C6	-5.05	116.67	119.70
2	B	2043	C	C2-N3-C4	5.05	122.42	119.90
2	B	2145	C	O4'-C1'-N1	5.05	112.24	108.20
2	B	2334	U	C4-C5-C6	-5.05	116.67	119.70
2	B	2362	C	N3-C2-O2	5.05	125.43	121.90
2	B	2408	U	N3-C4-C5	5.05	117.63	114.60
2	B	2569	G	C8-N9-C1'	5.05	133.56	127.00
2	B	2620	C	P-O3'-C3'	5.05	125.75	119.70
2	B	2649	C	C1'-O4'-C4'	-5.05	105.86	109.90
2	B	2660	A	O4'-C1'-N9	5.05	112.24	108.20
2	B	2805	C	P-O5'-C5'	5.05	128.97	120.90
2	B	2889	C	C5-C4-N4	-5.05	116.67	120.20
28	F	176	PHE	CD1-CE1-CZ	-5.05	114.05	120.10
2	B	293	U	O4'-C4'-C3'	-5.04	98.95	104.00
2	B	2388	A	C8-N9-C4	-5.04	103.78	105.80
2	B	2465	C	C6-N1-C1'	-5.04	114.75	120.80
2	B	2471	A	C8-N9-C4	-5.04	103.78	105.80
2	B	157	C	C1'-O4'-C4'	5.04	113.93	109.90
2	B	1131	G	C5-N7-C8	-5.04	101.78	104.30
2	B	1837	C	C6-N1-C2	-5.04	118.28	120.30
2	B	2110	G	C5-N7-C8	5.04	106.82	104.30
2	B	2255	G	C6-N1-C2	-5.04	122.07	125.10
2	B	2423	U	N1-C2-O2	-5.04	119.27	122.80
2	B	2468	A	N9-C4-C5	5.04	107.82	105.80
2	B	2611	C	N3-C2-O2	5.04	125.43	121.90
2	B	2745	C	C5-C6-N1	-5.04	118.48	121.00
23	5	48	LEU	CB-CG-CD2	5.04	119.57	111.00
31	I	102	ARG	O-C-N	-5.04	114.63	122.70
2	B	213	A	C2-N3-C4	5.04	113.12	110.60
2	B	1697	G	C6-C5-N7	-5.04	127.38	130.40
2	B	2020	A	N1-C2-N3	-5.04	126.78	129.30
2	B	2211	A	O3'-P-O5'	-5.04	94.42	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2535	G	C6-C5-N7	-5.04	127.38	130.40
2	B	2621	G	C4-C5-C6	5.04	121.83	118.80
8	N	110	MET	C-N-CA	5.04	134.31	121.70
2	B	479	A	C6-N1-C2	-5.04	115.58	118.60
2	B	803	U	C3'-C2'-C1'	5.04	105.53	101.50
2	B	1219	U	C2-N3-C4	-5.04	123.98	127.00
2	B	1376	C	C3'-C2'-C1'	5.04	105.53	101.50
2	B	1949	G	C5-C6-O6	-5.04	125.58	128.60
9	O	35	ILE	N-CA-C	-5.04	97.39	111.00
22	3	39	ARG	NH1-CZ-NH2	-5.04	113.86	119.40
2	B	67	U	C2-N1-C1'	-5.04	111.65	117.70
2	B	85	G	C2-N3-C4	-5.04	109.38	111.90
2	B	104	A	N3-C4-N9	5.04	131.43	127.40
2	B	160	A	N1-C6-N6	5.04	121.62	118.60
2	B	301	G	N1-C2-N2	5.04	120.73	116.20
2	B	372	G	N7-C8-N9	-5.04	110.58	113.10
2	B	373	U	C5-C4-O4	-5.04	122.88	125.90
2	B	643	A	N9-C1'-C2'	-5.04	106.46	112.00
2	B	962	G	C4-C5-N7	5.04	112.82	110.80
2	B	1318	U	C3'-C2'-C1'	5.04	105.53	101.50
2	B	1505	A	C8-N9-C4	5.04	107.81	105.80
2	B	2561	U	P-O5'-C5'	5.04	128.96	120.90
2	B	2687	U	C2-N3-C4	-5.04	123.98	127.00
13	S	82	MET	N-CA-CB	5.04	119.67	110.60
2	B	1139	G	N9-C4-C5	-5.04	103.39	105.40
2	B	1472	C	N3-C4-N4	5.04	121.53	118.00
2	B	1934	C	P-O5'-C5'	5.04	128.96	120.90
2	B	2371	G	P-O3'-C3'	5.04	125.75	119.70
2	B	2425	A	C2'-C3'-O3'	5.04	121.76	113.70
2	B	2669	G	C6-C5-N7	-5.04	127.38	130.40
28	F	159	ALA	N-CA-CB	5.04	117.15	110.10
2	B	35	G	C5-N7-C8	-5.04	101.78	104.30
2	B	247	G	C8-N9-C1'	-5.04	120.45	127.00
2	B	869	G	N7-C8-N9	5.04	115.62	113.10
2	B	872	U	O4'-C1'-N1	5.04	112.23	108.20
2	B	976	G	N3-C2-N2	5.04	123.43	119.90
2	B	998	C	N3-C4-N4	5.04	121.53	118.00
2	B	1552	A	C5-C6-N1	-5.04	115.18	117.70
2	B	1570	A	N7-C8-N9	-5.04	111.28	113.80
2	B	1849	G	C6-N1-C2	5.04	128.12	125.10
2	B	2011	U	N3-C4-C5	-5.04	111.58	114.60
2	B	2412	A	C5-C6-N6	-5.04	119.67	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
20	E	34	ALA	N-CA-CB	5.04	117.15	110.10
1	A	114	C	C5-C6-N1	-5.03	118.48	121.00
2	B	187	G	N1-C2-N2	-5.03	111.67	116.20
2	B	1207	C	P-O3'-C3'	-5.03	113.66	119.70
2	B	1612	C	C5-C6-N1	5.03	123.52	121.00
2	B	2389	G	N7-C8-N9	-5.03	110.58	113.10
2	B	2867	G	C4-N9-C1'	5.03	133.04	126.50
2	B	2898	U	O4'-C1'-N1	5.03	112.23	108.20
2	B	2903	U	C4'-C3'-C2'	-5.03	97.57	102.60
2	B	742	A	C4'-C3'-C2'	5.03	107.63	102.60
2	B	1399	C	C2-N3-C4	5.03	122.42	119.90
2	B	1653	G	O5'-P-OP2	-5.03	101.17	105.70
2	B	1843	C	N1-C2-O2	5.03	121.92	118.90
2	B	1997	C	C5-C4-N4	-5.03	116.68	120.20
2	B	2242	G	C5-C6-N1	5.03	114.02	111.50
2	B	2310	C	C5-C4-N4	-5.03	116.68	120.20
2	B	2430	A	C5-N7-C8	5.03	106.42	103.90
2	B	2627	G	O4'-C1'-N9	5.03	112.23	108.20
28	F	62	GLN	C-N-CA	5.03	134.28	121.70
1	A	106	G	C1'-O4'-C4'	5.03	113.92	109.90
2	B	212	G	N9-C1'-C2'	-5.03	106.47	112.00
2	B	577	G	C8-N9-C4	-5.03	104.39	106.40
2	B	712	G	C5-N7-C8	5.03	106.81	104.30
2	B	1921	G	C2-N3-C4	5.03	114.42	111.90
2	B	1949	G	C2-N3-C4	5.03	114.42	111.90
2	B	2872	A	N3-C4-C5	-5.03	123.28	126.80
23	5	129	GLN	CB-CG-CD	5.03	124.68	111.60
2	B	256	A	C3'-C2'-C1'	5.03	105.52	101.50
2	B	786	C	C2-N3-C4	-5.03	117.39	119.90
2	B	1247	A	P-O3'-C3'	5.03	125.73	119.70
2	B	2061	G	O4'-C4'-C3'	5.03	110.12	106.10
2	B	2455	G	N1-C6-O6	5.03	122.92	119.90
2	B	2542	A	C6-N1-C2	5.03	121.62	118.60
2	B	2694	G	C4-N9-C1'	-5.03	119.96	126.50
2	B	150	U	P-O5'-C5'	5.03	128.94	120.90
2	B	226	A	C5-C6-N1	-5.03	115.19	117.70
2	B	274	C	C1'-O4'-C4'	-5.03	105.88	109.90
2	B	468	G	N1-C2-N3	-5.03	120.88	123.90
2	B	1106	G	N9-C1'-C2'	-5.03	106.47	112.00
2	B	1224	U	N3-C4-C5	5.03	117.62	114.60
2	B	1330	C	P-O5'-C5'	5.03	128.94	120.90
2	B	1933	G	C5-N7-C8	5.03	106.81	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	1979	U	C3'-C2'-C1'	-5.03	97.48	101.50
2	B	2760	C	C5'-C4'-O4'	5.03	115.13	109.10
14	D	130	GLN	N-CA-C	-5.03	97.43	111.00
21	Y	19	ARG	NE-CZ-NH1	5.03	122.81	120.30
2	B	150	U	P-O3'-C3'	-5.03	113.67	119.70
2	B	228	C	C5-C6-N1	5.03	123.51	121.00
2	B	760	G	N9-C4-C5	-5.03	103.39	105.40
2	B	824	U	C5'-C4'-C3'	5.03	124.04	116.00
2	B	1033	U	N1-C2-N3	5.03	117.92	114.90
2	B	1383	A	C5-N7-C8	5.03	106.41	103.90
2	B	1728	C	C5'-C4'-C3'	-5.03	107.96	116.00
2	B	1952	A	C6-N1-C2	-5.03	115.58	118.60
2	B	2248	C	O3'-P-O5'	5.03	113.55	104.00
2	B	2407	A	N3-C4-C5	-5.03	123.28	126.80
2	B	771	G	C2'-C3'-O3'	5.02	121.74	113.70
2	B	936	A	OP1-P-OP2	-5.02	112.06	119.60
2	B	1241	A	O3'-P-O5'	5.02	113.55	104.00
2	B	1440	U	C4-C5-C6	5.02	122.71	119.70
2	B	1531	C	C6-N1-C2	-5.02	118.29	120.30
2	B	1677	A	C6-C5-N7	-5.02	128.78	132.30
2	B	2016	U	C5-C6-N1	5.02	125.21	122.70
2	B	2158	A	C8-N9-C4	-5.02	103.79	105.80
1	A	94	A	C3'-C2'-C1'	-5.02	97.48	101.50
2	B	406	G	C4-C5-N7	-5.02	108.79	110.80
2	B	490	C	P-O3'-C3'	5.02	125.73	119.70
2	B	1248	G	C6-C5-N7	-5.02	127.39	130.40
2	B	1591	A	N7-C8-N9	-5.02	111.29	113.80
2	B	2050	C	C5-C4-N4	-5.02	116.68	120.20
2	B	2070	A	C5'-C4'-C3'	5.02	124.04	116.00
2	B	2117	A	N3-C4-C5	-5.02	123.28	126.80
2	B	2357	G	N3-C4-N9	-5.02	122.99	126.00
2	B	2613	U	C5'-C4'-O4'	5.02	115.13	109.10
2	B	2831	G	N3-C2-N2	5.02	123.42	119.90
2	B	2854	G	N3-C4-C5	-5.02	126.09	128.60
2	B	2897	U	O4'-C4'-C3'	-5.02	98.98	104.00
32	J	50	THR	CA-CB-CG2	-5.02	105.37	112.40
2	B	245	G	C5'-C4'-C3'	-5.02	107.97	116.00
2	B	1050	A	OP1-P-OP2	-5.02	112.07	119.60
2	B	1387	A	C4-C5-C6	5.02	119.51	117.00
2	B	1808	A	C8-N9-C4	-5.02	103.79	105.80
2	B	1909	C	P-O3'-C3'	-5.02	113.67	119.70
2	B	2139	U	O4'-C1'-N1	5.02	112.22	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2517	C	N3-C4-N4	5.02	121.52	118.00
2	B	2520	C	N1-C2-O2	-5.02	115.89	118.90
2	B	2588	G	O4'-C1'-N9	5.02	112.22	108.20
2	B	2756	U	C1'-O4'-C4'	5.02	113.92	109.90
7	M	102	LEU	CB-CG-CD1	5.02	119.54	111.00
1	A	69	G	P-O5'-C5'	-5.02	112.87	120.90
2	B	479	A	N9-C1'-C2'	5.02	120.53	114.00
2	B	1068	G	N3-C4-C5	5.02	131.11	128.60
2	B	1286	A	P-O5'-C5'	-5.02	112.87	120.90
2	B	1822	C	O4'-C4'-C3'	-5.02	98.98	104.00
2	B	1834	U	P-O3'-C3'	-5.02	113.67	119.70
2	B	2112	G	C4'-C3'-C2'	-5.02	97.58	102.60
2	B	2285	C	N3-C2-O2	-5.02	118.39	121.90
2	B	2488	G	N7-C8-N9	-5.02	110.59	113.10
2	B	2513	A	C5-C6-N1	-5.02	115.19	117.70
2	B	2635	A	C4'-C3'-C2'	5.02	107.62	102.60
2	B	2696	U	C5-C4-O4	-5.02	122.89	125.90
2	B	2831	G	O3'-P-O5'	-5.02	94.46	104.00
20	E	45	ALA	N-CA-CB	-5.02	103.07	110.10
2	B	105	C	N3-C4-C5	-5.02	119.89	121.90
2	B	127	A	P-O3'-C3'	-5.02	113.68	119.70
2	B	376	G	C5-C6-N1	-5.02	108.99	111.50
2	B	440	C	C5'-C4'-C3'	5.02	124.03	116.00
2	B	530	G	C4-N9-C1'	5.02	133.02	126.50
2	B	1204	A	C5-C6-N6	-5.02	119.69	123.70
2	B	1275	A	C4-N9-C1'	5.02	135.33	126.30
2	B	1315	C	C4-C5-C6	5.02	119.91	117.40
2	B	2045	C	C6-N1-C2	-5.02	118.29	120.30
2	B	2416	C	C4-C5-C6	5.02	119.91	117.40
2	B	2417	C	N1-C2-N3	5.02	122.71	119.20
2	B	2444	G	C5'-C4'-C3'	5.02	124.03	116.00
2	B	2554	U	C4'-C3'-C2'	-5.02	97.58	102.60
2	B	2658	C	C6-N1-C2	-5.02	118.29	120.30
2	B	2682	A	C3'-C2'-C1'	-5.02	97.49	101.50
2	B	2757	A	C5-N7-C8	-5.02	101.39	103.90
2	B	2851	A	C6-C5-N7	-5.02	128.79	132.30
5	L	6	LEU	CB-CG-CD1	-5.02	102.47	111.00
27	C	218	THR	N-CA-C	-5.02	97.45	111.00
1	A	104	A	C4'-C3'-C2'	-5.02	97.58	102.60
2	B	18	U	C5-C6-N1	-5.02	120.19	122.70
2	B	254	G	N1-C6-O6	5.02	122.91	119.90
2	B	352	A	C5-N7-C8	5.02	106.41	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	613	A	N1-C2-N3	5.02	131.81	129.30
2	B	647	G	C8-N9-C1'	5.02	133.52	127.00
2	B	1417	C	C5-C4-N4	-5.02	116.69	120.20
2	B	2436	G	C6-N1-C2	-5.02	122.09	125.10
2	B	2503	A	C4'-C3'-C2'	-5.02	97.58	102.60
2	B	2635	A	C2-N3-C4	-5.02	108.09	110.60
1	A	24	G	N1-C2-N2	-5.01	111.69	116.20
2	B	136	G	C4-C5-N7	5.01	112.81	110.80
2	B	472	A	C5'-C4'-O4'	5.01	115.12	109.10
2	B	868	U	C5'-C4'-C3'	-5.01	107.98	116.00
2	B	973	A	N3-C4-N9	5.01	131.41	127.40
2	B	1022	G	C6-C5-N7	-5.01	127.39	130.40
2	B	1097	U	C3'-C2'-C1'	-5.01	97.49	101.50
2	B	1435	G	OP1-P-O3'	5.01	116.23	105.20
2	B	1507	C	C5-C4-N4	-5.01	116.69	120.20
2	B	1547	C	N1-C2-O2	5.01	121.91	118.90
2	B	2169	A	N7-C8-N9	5.01	116.31	113.80
2	B	2518	A	C4-C5-C6	5.01	119.51	117.00
2	B	2544	G	C3'-C2'-C1'	5.01	105.51	101.50
2	B	2709	G	C5-N7-C8	5.01	106.81	104.30
19	X	252	TYR	CZ-CE2-CD2	-5.01	115.29	119.80
22	3	16	ARG	CD-NE-CZ	-5.01	116.58	123.60
1	A	113	C	P-O3'-C3'	-5.01	113.69	119.70
2	B	447	A	C8-N9-C4	-5.01	103.80	105.80
2	B	1079	C	O4'-C4'-C3'	-5.01	98.99	104.00
2	B	2135	A	C5'-C4'-C3'	5.01	124.02	116.00
2	B	2518	A	C2-N3-C4	-5.01	108.09	110.60
2	B	96	C	O5'-C5'-C4'	-5.01	102.18	111.70
2	B	121	G	P-O3'-C3'	5.01	125.71	119.70
2	B	432	A	C5'-C4'-O4'	5.01	115.11	109.10
2	B	580	U	N3-C4-O4	5.01	122.91	119.40
2	B	855	G	C8-N9-C4	-5.01	104.40	106.40
2	B	943	A	C5-N7-C8	5.01	106.41	103.90
2	B	1083	U	C5-C6-N1	-5.01	120.19	122.70
2	B	1252	G	O4'-C1'-N9	5.01	112.21	108.20
2	B	1391	U	C5-C6-N1	5.01	125.21	122.70
2	B	1582	C	C4'-C3'-C2'	5.01	107.61	102.60
2	B	1656	C	C2-N3-C4	-5.01	117.39	119.90
2	B	2154	A	C6-C5-N7	-5.01	128.79	132.30
2	B	2447	G	P-O3'-C3'	5.01	125.71	119.70
2	B	2623	G	N3-C2-N2	5.01	123.41	119.90
2	B	2742	G	C4-C5-C6	5.01	121.81	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	2774	C	C6-N1-C2	5.01	122.31	120.30
2	B	184	C	N3-C4-C5	-5.01	119.90	121.90
2	B	641	U	O4'-C1'-N1	5.01	112.21	108.20
2	B	951	C	N1-C2-N3	5.01	122.71	119.20
2	B	996	A	O4'-C4'-C3'	-5.01	98.99	104.00
2	B	1117	C	P-O5'-C5'	-5.01	112.88	120.90
2	B	1432	G	C3'-C2'-C1'	5.01	105.51	101.50
2	B	1651	G	O4'-C4'-C3'	-5.01	98.99	104.00
2	B	1652	A	C3'-C2'-C1'	5.01	105.51	101.50
2	B	1672	A	C4-N9-C1'	5.01	135.32	126.30
2	B	1769	U	O4'-C4'-C3'	-5.01	98.99	104.00
2	B	2842	G	C5-C6-O6	-5.01	125.59	128.60
20	E	120	VAL	CG1-CB-CG2	5.01	118.92	110.90
23	5	140	PRO	N-CD-CG	5.01	110.71	103.20
2	B	123	G	C4-N9-C1'	-5.01	119.99	126.50
2	B	207	A	N7-C8-N9	-5.01	111.30	113.80
2	B	297	G	P-O3'-C3'	-5.01	113.69	119.70
2	B	604	G	C5'-C4'-C3'	-5.01	107.99	116.00
2	B	897	C	O4'-C1'-N1	5.01	112.21	108.20
2	B	2040	G	C1'-O4'-C4'	-5.01	105.89	109.90
2	B	2363	G	N1-C2-N2	-5.01	111.69	116.20
23	5	167	LYS	O-C-N	-5.01	114.69	122.70
2	B	379	G	C6-N1-C2	5.01	128.10	125.10
2	B	480	A	C8-N9-C4	-5.01	103.80	105.80
2	B	644	A	N3-C4-C5	-5.01	123.30	126.80
2	B	701	G	O4'-C1'-N9	5.01	112.21	108.20
2	B	797	G	P-O5'-C5'	-5.01	112.89	120.90
2	B	1026	G	N7-C8-N9	-5.01	110.60	113.10
2	B	1175	A	C5-C6-N1	-5.01	115.20	117.70
2	B	1402	U	N3-C4-O4	5.01	122.91	119.40
2	B	1564	C	N1-C2-O2	5.01	121.90	118.90
2	B	1625	C	C2-N1-C1'	5.01	124.31	118.80
2	B	1739	A	O5'-C5'-C4'	-5.01	102.19	111.70
2	B	2018	G	N1-C2-N3	-5.01	120.90	123.90
2	B	2313	C	N3-C4-N4	5.01	121.50	118.00
2	B	2516	A	C5-N7-C8	5.01	106.40	103.90
2	B	2525	G	N3-C2-N2	5.01	123.40	119.90
12	R	42	ALA	CB-CA-C	-5.01	102.59	110.10
27	C	100	ARG	N-CA-CB	5.01	119.61	110.60
2	B	200	U	O5'-P-OP2	-5.00	101.20	105.70
2	B	446	G	C5-N7-C8	5.00	106.80	104.30
2	B	800	A	C2-N3-C4	5.00	113.10	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	B	867	C	P-O5'-C5'	5.00	128.91	120.90
2	B	958	U	C2-N3-C4	-5.00	124.00	127.00
2	B	1658	C	C1'-O4'-C4'	-5.00	105.90	109.90
2	B	1700	A	O4'-C4'-C3'	-5.00	99.00	104.00
2	B	1809	A	C8-N9-C4	5.00	107.80	105.80
2	B	2400	G	C1'-O4'-C4'	5.00	113.90	109.90
2	B	187	G	C8-N9-C4	-5.00	104.40	106.40
2	B	749	A	C5-N7-C8	5.00	106.40	103.90
2	B	767	U	C2-N1-C1'	-5.00	111.69	117.70
2	B	826	U	C5'-C4'-C3'	5.00	124.00	116.00
2	B	1101	U	N3-C4-C5	-5.00	111.60	114.60
2	B	1171	G	C2-N3-C4	-5.00	109.40	111.90
2	B	1275	A	C6-N1-C2	-5.00	115.60	118.60
2	B	1427	A	C8-N9-C4	5.00	107.80	105.80
2	B	1435	G	C6-N1-C2	5.00	128.10	125.10
2	B	2324	U	N3-C2-O2	-5.00	118.70	122.20
2	B	2426	A	C5-C6-N6	-5.00	119.70	123.70
2	B	2437	G	C5-C6-N1	-5.00	109.00	111.50
15	T	62	VAL	C-N-CA	5.00	134.21	121.70
18	W	31	TYR	CD1-CG-CD2	5.00	123.40	117.90
20	E	101	TYR	CG-CD1-CE1	-5.00	117.30	121.30
1	A	82	U	C5'-C4'-C3'	-5.00	108.00	116.00
2	B	188	G	O4'-C1'-N9	5.00	112.20	108.20
2	B	780	G	N3-C2-N2	5.00	123.40	119.90
2	B	937	C	C5-C4-N4	-5.00	116.70	120.20
2	B	995	C	C1'-O4'-C4'	-5.00	105.90	109.90
2	B	1154	G	N3-C4-N9	-5.00	123.00	126.00
2	B	1221	C	N3-C4-N4	5.00	121.50	118.00
2	B	1341	G	C4-C5-C6	5.00	121.80	118.80
2	B	1971	U	C5'-C4'-O4'	5.00	115.10	109.10
2	B	2209	G	N3-C4-N9	5.00	129.00	126.00
2	B	2401	U	C5-C4-O4	-5.00	122.90	125.90
2	B	2449	U	OP2-P-O3'	5.00	116.20	105.20
2	B	2619	C	C1'-O4'-C4'	5.00	113.90	109.90
2	B	2714	G	C5'-C4'-C3'	5.00	124.00	116.00
2	B	2787	C	N1-C2-N3	-5.00	115.70	119.20
2	B	2879	A	O4'-C1'-N9	5.00	112.20	108.20
19	X	131	ASP	CB-CG-OD1	5.00	122.80	118.30
28	F	82	TYR	CG-CD2-CE2	-5.00	117.30	121.30

There are no chirality outliers.

All (2032) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	0	17	ARG	Sidechain
3	0	30	PRO	Peptide
3	0	71	ARG	Sidechain
3	0	73	ARG	Sidechain
3	0	77	TYR	Sidechain
6	1	29	ARG	Sidechain
6	1	47	ARG	Sidechain
6	1	52	ARG	Sidechain
6	1	59	GLU	Peptide,Mainchain
6	1	7	ARG	Sidechain
16	2	10	ARG	Sidechain
16	2	29	ARG	Sidechain
16	2	37	ARG	Sidechain
16	2	52	PHE	Sidechain
22	3	16	ARG	Sidechain
22	3	39	ARG	Sidechain
22	3	47	TYR	Sidechain
22	3	9	ARG	Sidechain
23	5	124	VAL	Peptide
23	5	134	ARG	Sidechain
23	5	144	THR	Peptide
23	5	159	GLY	Peptide
23	5	162	ARG	Sidechain
23	5	163	TYR	Sidechain
23	5	172	HIS	Sidechain
24	6	19	ARG	Sidechain
24	6	34	ARG	Sidechain
24	6	39	ARG	Sidechain
25	7	21	PHE	Sidechain
25	7	25	HIS	Sidechain
25	7	63	TYR	Sidechain
26	8	12	ARG	Sidechain
1	A	10	G	Sidechain
1	A	100	G	Sidechain
1	A	101	A	Sidechain
1	A	102	G	Sidechain
1	A	105	G	Sidechain
1	A	106	G	Sidechain
1	A	107	G	Sidechain
1	A	108	A	Sidechain
1	A	109	A	Sidechain
1	A	11	C	Sidechain
1	A	112	G	Sidechain

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Mol	Chain	Res	Type	Group
1	A	113	C	Sidechain
1	A	114	C	Sidechain
1	A	116	G	Sidechain
1	A	117	G	Sidechain
1	A	13	G	Sidechain
1	A	15	A	Sidechain
1	A	16	G	Sidechain
1	A	17	C	Sidechain
1	A	18	G	Sidechain
1	A	2	G	Sidechain
1	A	22	U	Sidechain
1	A	23	G	Sidechain
1	A	25	U	Sidechain
1	A	26	C	Sidechain
1	A	28	C	Sidechain
1	A	29	A	Sidechain
1	A	32	U	Sidechain
1	A	33	G	Sidechain
1	A	36	C	Sidechain
1	A	4	C	Sidechain
1	A	40	U	Sidechain
1	A	41	G	Sidechain
1	A	43	C	Sidechain
1	A	44	G	Sidechain
1	A	45	A	Sidechain
1	A	46	A	Sidechain
1	A	48	U	Sidechain
1	A	49	C	Sidechain
1	A	5	U	Sidechain
1	A	51	G	Sidechain
1	A	54	G	Sidechain
1	A	58	A	Sidechain
1	A	59	A	Sidechain
1	A	60	C	Sidechain
1	A	61	G	Sidechain
1	A	63	C	Sidechain
1	A	65	U	Sidechain
1	A	7	G	Sidechain
1	A	72	G	Sidechain
1	A	74	U	Sidechain
1	A	75	G	Sidechain
1	A	78	A	Sidechain

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Mol	Chain	Res	Type	Group
1	A	79	G	Sidechain
1	A	8	C	Sidechain
1	A	80	U	Sidechain
1	A	81	G	Sidechain
1	A	82	U	Sidechain
1	A	85	G	Sidechain
1	A	87	U	Sidechain
1	A	88	C	Sidechain
1	A	89	U	Sidechain
1	A	9	G	Sidechain
1	A	90	C	Sidechain
1	A	94	A	Sidechain
1	A	96	G	Sidechain
1	A	97	C	Sidechain
1	A	98	G	Sidechain
1	A	99	A	Sidechain
2	B	1	G	Sidechain
2	B	10	A	Sidechain
2	B	1000	A	Sidechain
2	B	1002	G	Sidechain
2	B	1003	G	Sidechain
2	B	1004	U	Sidechain
2	B	1005	C	Sidechain
2	B	1006	C	Sidechain
2	B	1008	A	Sidechain
2	B	101	A	Sidechain
2	B	1015	U	Sidechain
2	B	1017	G	Sidechain
2	B	1018	U	Sidechain
2	B	1019	U	Sidechain
2	B	1020	A	Sidechain
2	B	1021	A	Sidechain
2	B	1023	U	Sidechain
2	B	1024	G	Sidechain
2	B	1025	G	Sidechain
2	B	1026	G	Sidechain
2	B	1027	A	Sidechain
2	B	1028	A	Sidechain
2	B	103	A	Sidechain
2	B	1031	G	Sidechain
2	B	1032	A	Sidechain
2	B	1033	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1035	U	Sidechain
2	B	1037	G	Sidechain
2	B	1038	G	Sidechain
2	B	1039	A	Sidechain
2	B	104	A	Sidechain
2	B	1041	G	Sidechain
2	B	1042	G	Sidechain
2	B	1046	A	Sidechain
2	B	1048	A	Sidechain
2	B	1055	G	Sidechain
2	B	1056	G	Sidechain
2	B	1057	A	Sidechain
2	B	1058	U	Sidechain
2	B	106	C	Sidechain
2	B	1060	U	Sidechain
2	B	1063	G	Sidechain
2	B	1064	C	Sidechain
2	B	1065	U	Sidechain
2	B	1068	G	Sidechain
2	B	107	G	Sidechain
2	B	1070	A	Sidechain
2	B	1071	G	Sidechain
2	B	1072	C	Sidechain
2	B	1073	A	Sidechain
2	B	1075	C	Sidechain
2	B	1076	C	Sidechain
2	B	1077	A	Sidechain
2	B	1078	U	Sidechain
2	B	1079	C	Sidechain
2	B	1080	A	Sidechain
2	B	1081	U	Sidechain
2	B	1082	U	Sidechain
2	B	1083	U	Sidechain
2	B	1084	A	Sidechain
2	B	1085	A	Sidechain
2	B	1086	A	Sidechain
2	B	1088	A	Sidechain
2	B	1089	A	Sidechain
2	B	109	C	Sidechain
2	B	1091	G	Sidechain
2	B	1093	G	Sidechain
2	B	1095	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1096	A	Sidechain
2	B	1098	A	Sidechain
2	B	1099	G	Sidechain
2	B	11	C	Sidechain
2	B	1100	C	Sidechain
2	B	1101	U	Sidechain
2	B	1104	C	Sidechain
2	B	1105	U	Sidechain
2	B	1106	G	Sidechain
2	B	1107	G	Sidechain
2	B	1108	U	Sidechain
2	B	1109	C	Sidechain
2	B	1110	G	Sidechain
2	B	1111	A	Sidechain
2	B	1112	G	Sidechain
2	B	1113	U	Sidechain
2	B	1115	G	Sidechain
2	B	1119	U	Sidechain
2	B	1120	G	Sidechain
2	B	1122	G	Sidechain
2	B	1123	C	Sidechain
2	B	1129	A	Sidechain
2	B	113	U	Sidechain
2	B	1130	U	Sidechain
2	B	1133	A	Sidechain
2	B	1134	A	Sidechain
2	B	1136	G	Sidechain
2	B	1137	G	Sidechain
2	B	1138	G	Sidechain
2	B	1139	G	Sidechain
2	B	1140	C	Sidechain
2	B	1141	U	Sidechain
2	B	1142	A	Sidechain
2	B	1144	A	Sidechain
2	B	1148	U	Sidechain
2	B	115	C	Sidechain
2	B	1150	C	Sidechain
2	B	1151	A	Sidechain
2	B	1152	C	Sidechain
2	B	1153	C	Sidechain
2	B	1154	G	Sidechain
2	B	1159	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1162	G	Sidechain
2	B	1163	G	Sidechain
2	B	1168	G	Sidechain
2	B	1169	A	Sidechain
2	B	1170	C	Sidechain
2	B	1171	G	Sidechain
2	B	1173	U	Sidechain
2	B	1175	A	Sidechain
2	B	1176	U	Sidechain
2	B	1177	G	Sidechain
2	B	1179	G	Sidechain
2	B	1181	U	Sidechain
2	B	1182	G	Sidechain
2	B	1184	U	Sidechain
2	B	1185	G	Sidechain
2	B	1187	G	Sidechain
2	B	1188	U	Sidechain
2	B	1189	A	Sidechain
2	B	1191	G	Sidechain
2	B	1193	G	Sidechain
2	B	1195	G	Sidechain
2	B	1204	A	Sidechain
2	B	1208	C	Sidechain
2	B	121	G	Sidechain
2	B	1210	G	Sidechain
2	B	1211	C	Sidechain
2	B	1212	G	Sidechain
2	B	1215	G	Sidechain
2	B	1216	G	Sidechain
2	B	1217	U	Sidechain
2	B	1219	U	Sidechain
2	B	122	G	Sidechain
2	B	1221	C	Sidechain
2	B	1223	G	Sidechain
2	B	1224	U	Sidechain
2	B	1225	G	Sidechain
2	B	1226	A	Sidechain
2	B	1228	G	Sidechain
2	B	123	G	Sidechain
2	B	1233	C	Sidechain
2	B	1236	G	Sidechain
2	B	1239	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	124	G	Sidechain
2	B	1240	U	Sidechain
2	B	1244	A	Sidechain
2	B	1245	G	Sidechain
2	B	1246	A	Sidechain
2	B	1249	U	Sidechain
2	B	1250	G	Sidechain
2	B	1252	G	Sidechain
2	B	1254	A	Sidechain
2	B	1255	U	Sidechain
2	B	1259	G	Sidechain
2	B	126	A	Sidechain
2	B	1261	C	Sidechain
2	B	1263	U	Sidechain
2	B	1264	A	Sidechain
2	B	1266	G	Sidechain
2	B	1269	A	Sidechain
2	B	127	A	Sidechain
2	B	1272	A	Sidechain
2	B	1273	U	Sidechain
2	B	1274	A	Sidechain
2	B	1275	A	Sidechain
2	B	1277	G	Sidechain
2	B	1278	C	Sidechain
2	B	1279	G	Sidechain
2	B	128	C	Sidechain
2	B	1280	G	Sidechain
2	B	1283	G	Sidechain
2	B	1284	A	Sidechain
2	B	1285	A	Sidechain
2	B	1287	A	Sidechain
2	B	1288	G	Sidechain
2	B	1289	C	Sidechain
2	B	1290	C	Sidechain
2	B	1291	C	Sidechain
2	B	1292	G	Sidechain
2	B	1293	C	Sidechain
2	B	1294	U	Sidechain
2	B	1295	C	Sidechain
2	B	1296	G	Sidechain
2	B	1297	C	Sidechain
2	B	1298	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1299	G	Sidechain
2	B	130	C	Sidechain
2	B	1300	G	Sidechain
2	B	1301	A	Sidechain
2	B	1302	A	Sidechain
2	B	1303	G	Sidechain
2	B	1305	C	Sidechain
2	B	1306	C	Sidechain
2	B	1307	A	Sidechain
2	B	1309	G	Sidechain
2	B	1310	G	Sidechain
2	B	1311	G	Sidechain
2	B	1314	C	Sidechain
2	B	1315	C	Sidechain
2	B	1316	U	Sidechain
2	B	1319	C	Sidechain
2	B	132	G	Sidechain
2	B	1320	C	Sidechain
2	B	1321	A	Sidechain
2	B	1322	A	Sidechain
2	B	1323	C	Sidechain
2	B	1325	U	Sidechain
2	B	1326	U	Sidechain
2	B	1328	A	Sidechain
2	B	1329	U	Sidechain
2	B	133	U	Sidechain
2	B	1330	C	Sidechain
2	B	1332	G	Sidechain
2	B	1333	G	Sidechain
2	B	1337	G	Sidechain
2	B	1339	G	Sidechain
2	B	1340	U	Sidechain
2	B	1341	G	Sidechain
2	B	1343	G	Sidechain
2	B	1344	U	Sidechain
2	B	1346	G	Sidechain
2	B	1348	C	Sidechain
2	B	1349	C	Sidechain
2	B	1350	C	Sidechain
2	B	1351	C	Sidechain
2	B	1353	A	Sidechain
2	B	1354	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1356	G	Sidechain
2	B	1357	C	Sidechain
2	B	1358	G	Sidechain
2	B	1359	A	Sidechain
2	B	136	G	Sidechain
2	B	1360	G	Sidechain
2	B	1364	G	Sidechain
2	B	1365	A	Sidechain
2	B	1367	A	Sidechain
2	B	1369	G	Sidechain
2	B	1372	U	Sidechain
2	B	1374	G	Sidechain
2	B	1376	C	Sidechain
2	B	1377	G	Sidechain
2	B	1378	A	Sidechain
2	B	1379	U	Sidechain
2	B	138	U	Sidechain
2	B	1380	G	Sidechain
2	B	1382	G	Sidechain
2	B	1386	C	Sidechain
2	B	1387	A	Sidechain
2	B	1388	G	Sidechain
2	B	1389	G	Sidechain
2	B	139	U	Sidechain
2	B	1392	A	Sidechain
2	B	1393	A	Sidechain
2	B	1395	A	Sidechain
2	B	1396	U	Sidechain
2	B	1397	U	Sidechain
2	B	1399	C	Sidechain
2	B	14	A	Sidechain
2	B	140	C	Sidechain
2	B	1400	U	Sidechain
2	B	1401	G	Sidechain
2	B	1402	U	Sidechain
2	B	1403	A	Sidechain
2	B	1405	U	Sidechain
2	B	1406	U	Sidechain
2	B	1407	G	Sidechain
2	B	1408	G	Sidechain
2	B	1410	G	Sidechain
2	B	1411	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1412	U	Sidechain
2	B	1416	G	Sidechain
2	B	1417	C	Sidechain
2	B	1418	G	Sidechain
2	B	1419	A	Sidechain
2	B	142	A	Sidechain
2	B	1420	A	Sidechain
2	B	1422	G	Sidechain
2	B	1424	G	Sidechain
2	B	1425	G	Sidechain
2	B	1426	G	Sidechain
2	B	1427	A	Sidechain
2	B	1429	G	Sidechain
2	B	143	C	Sidechain
2	B	1430	G	Sidechain
2	B	1432	G	Sidechain
2	B	1433	A	Sidechain
2	B	1434	A	Sidechain
2	B	1435	G	Sidechain
2	B	1436	G	Sidechain
2	B	1438	U	Sidechain
2	B	1439	A	Sidechain
2	B	1440	U	Sidechain
2	B	1442	U	Sidechain
2	B	1443	U	Sidechain
2	B	1445	G	Sidechain
2	B	1448	G	Sidechain
2	B	1449	G	Sidechain
2	B	145	C	Sidechain
2	B	1450	G	Sidechain
2	B	1452	G	Sidechain
2	B	1454	C	Sidechain
2	B	1456	G	Sidechain
2	B	1458	U	Sidechain
2	B	1459	G	Sidechain
2	B	146	A	Sidechain
2	B	1460	U	Sidechain
2	B	1461	C	Sidechain
2	B	1464	G	Sidechain
2	B	1466	U	Sidechain
2	B	1467	U	Sidechain
2	B	147	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1470	A	Sidechain
2	B	1471	G	Sidechain
2	B	1475	G	Sidechain
2	B	1476	U	Sidechain
2	B	1477	A	Sidechain
2	B	1479	G	Sidechain
2	B	1481	U	Sidechain
2	B	1482	G	Sidechain
2	B	1483	G	Sidechain
2	B	1484	U	Sidechain
2	B	1485	U	Sidechain
2	B	1486	U	Sidechain
2	B	1487	U	Sidechain
2	B	1489	C	Sidechain
2	B	149	A	Sidechain
2	B	1491	G	Sidechain
2	B	1492	G	Sidechain
2	B	1496	A	Sidechain
2	B	1498	C	Sidechain
2	B	1502	A	Sidechain
2	B	1505	A	Sidechain
2	B	1508	A	Sidechain
2	B	1510	G	Sidechain
2	B	1512	C	Sidechain
2	B	1514	G	Sidechain
2	B	1515	A	Sidechain
2	B	1516	G	Sidechain
2	B	1517	G	Sidechain
2	B	152	A	Sidechain
2	B	1520	U	Sidechain
2	B	1521	G	Sidechain
2	B	1522	A	Sidechain
2	B	1523	U	Sidechain
2	B	1524	G	Sidechain
2	B	1525	A	Sidechain
2	B	1526	C	Sidechain
2	B	1528	A	Sidechain
2	B	153	U	Sidechain
2	B	1530	G	Sidechain
2	B	1532	A	Sidechain
2	B	1536	C	Sidechain
2	B	1539	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	154	U	Sidechain
2	B	1542	U	Sidechain
2	B	1544	A	Sidechain
2	B	1545	A	Sidechain
2	B	1547	C	Sidechain
2	B	1548	A	Sidechain
2	B	1549	A	Sidechain
2	B	1551	A	Sidechain
2	B	1554	U	Sidechain
2	B	1555	G	Sidechain
2	B	1556	C	Sidechain
2	B	1557	C	Sidechain
2	B	1558	C	Sidechain
2	B	1562	U	Sidechain
2	B	1564	C	Sidechain
2	B	1565	C	Sidechain
2	B	1566	A	Sidechain
2	B	1569	A	Sidechain
2	B	1571	A	Sidechain
2	B	1572	A	Sidechain
2	B	1574	C	Sidechain
2	B	1578	U	Sidechain
2	B	158	U	Sidechain
2	B	1583	A	Sidechain
2	B	1584	U	Sidechain
2	B	1585	C	Sidechain
2	B	1588	G	Sidechain
2	B	1590	A	Sidechain
2	B	1592	C	Sidechain
2	B	1594	U	Sidechain
2	B	1596	A	Sidechain
2	B	1598	A	Sidechain
2	B	1599	U	Sidechain
2	B	160	A	Sidechain
2	B	1600	C	Sidechain
2	B	1604	C	Sidechain
2	B	1607	C	Sidechain
2	B	1611	C	Sidechain
2	B	1613	G	Sidechain
2	B	1615	C	Sidechain
2	B	1616	A	Sidechain
2	B	1618	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1619	G	Sidechain
2	B	1620	G	Sidechain
2	B	1621	U	Sidechain
2	B	1622	G	Sidechain
2	B	1624	U	Sidechain
2	B	1626	A	Sidechain
2	B	1627	G	Sidechain
2	B	1628	G	Sidechain
2	B	1629	U	Sidechain
2	B	1630	A	Sidechain
2	B	1631	G	Sidechain
2	B	1632	A	Sidechain
2	B	1634	A	Sidechain
2	B	1637	A	Sidechain
2	B	164	C	Sidechain
2	B	1640	A	Sidechain
2	B	1641	A	Sidechain
2	B	1642	G	Sidechain
2	B	1643	G	Sidechain
2	B	1645	G	Sidechain
2	B	1646	C	Sidechain
2	B	1647	U	Sidechain
2	B	1649	G	Sidechain
2	B	1650	A	Sidechain
2	B	1651	G	Sidechain
2	B	1652	A	Sidechain
2	B	1653	G	Sidechain
2	B	1657	U	Sidechain
2	B	1659	G	Sidechain
2	B	1660	G	Sidechain
2	B	1661	G	Sidechain
2	B	1662	U	Sidechain
2	B	1663	G	Sidechain
2	B	1664	A	Sidechain
2	B	1665	A	Sidechain
2	B	1669	A	Sidechain
2	B	167	A	Sidechain
2	B	1670	C	Sidechain
2	B	1671	U	Sidechain
2	B	1673	G	Sidechain
2	B	1674	G	Sidechain
2	B	1676	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1677	A	Sidechain
2	B	1678	A	Sidechain
2	B	1680	U	Sidechain
2	B	1681	G	Sidechain
2	B	1682	G	Sidechain
2	B	1683	U	Sidechain
2	B	1684	G	Sidechain
2	B	1685	C	Sidechain
2	B	1686	C	Sidechain
2	B	1687	G	Sidechain
2	B	169	G	Sidechain
2	B	1690	A	Sidechain
2	B	1695	G	Sidechain
2	B	1696	G	Sidechain
2	B	1697	G	Sidechain
2	B	1698	A	Sidechain
2	B	1699	G	Sidechain
2	B	170	U	Sidechain
2	B	1702	G	Sidechain
2	B	1703	G	Sidechain
2	B	1708	C	Sidechain
2	B	1709	U	Sidechain
2	B	171	U	Sidechain
2	B	1710	G	Sidechain
2	B	1712	U	Sidechain
2	B	1713	A	Sidechain
2	B	1714	U	Sidechain
2	B	1715	G	Sidechain
2	B	1717	A	Sidechain
2	B	1719	G	Sidechain
2	B	1720	U	Sidechain
2	B	1721	G	Sidechain
2	B	1722	A	Sidechain
2	B	1723	G	Sidechain
2	B	1725	U	Sidechain
2	B	1726	C	Sidechain
2	B	1727	C	Sidechain
2	B	1728	C	Sidechain
2	B	1729	U	Sidechain
2	B	173	A	Sidechain
2	B	1731	G	Sidechain
2	B	1734	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1737	G	Sidechain
2	B	1738	G	Sidechain
2	B	1739	A	Sidechain
2	B	1740	G	Sidechain
2	B	1742	U	Sidechain
2	B	1743	G	Sidechain
2	B	1749	A	Sidechain
2	B	175	G	Sidechain
2	B	1750	G	Sidechain
2	B	1751	U	Sidechain
2	B	1752	C	Sidechain
2	B	1753	G	Sidechain
2	B	1755	A	Sidechain
2	B	1756	G	Sidechain
2	B	1757	A	Sidechain
2	B	1758	U	Sidechain
2	B	1759	A	Sidechain
2	B	176	A	Sidechain
2	B	1760	C	Sidechain
2	B	1765	U	Sidechain
2	B	1766	G	Sidechain
2	B	1767	G	Sidechain
2	B	1769	U	Sidechain
2	B	177	G	Sidechain
2	B	1773	A	Sidechain
2	B	1774	C	Sidechain
2	B	1775	U	Sidechain
2	B	1776	G	Sidechain
2	B	1777	U	Sidechain
2	B	1778	U	Sidechain
2	B	1779	U	Sidechain
2	B	1781	U	Sidechain
2	B	1782	U	Sidechain
2	B	1784	A	Sidechain
2	B	1785	A	Sidechain
2	B	1787	A	Sidechain
2	B	1789	A	Sidechain
2	B	179	C	Sidechain
2	B	1790	C	Sidechain
2	B	1791	A	Sidechain
2	B	1795	C	Sidechain
2	B	1796	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1797	G	Sidechain
2	B	18	U	Sidechain
2	B	180	G	Sidechain
2	B	1802	A	Sidechain
2	B	1803	A	Sidechain
2	B	1804	C	Sidechain
2	B	1807	G	Sidechain
2	B	1808	A	Sidechain
2	B	1809	A	Sidechain
2	B	181	A	Sidechain
2	B	1811	G	Sidechain
2	B	1812	U	Sidechain
2	B	1813	G	Sidechain
2	B	1814	G	Sidechain
2	B	1815	A	Sidechain
2	B	1816	C	Sidechain
2	B	1818	U	Sidechain
2	B	1819	A	Sidechain
2	B	1820	U	Sidechain
2	B	1821	A	Sidechain
2	B	1823	G	Sidechain
2	B	1824	G	Sidechain
2	B	1825	U	Sidechain
2	B	1826	G	Sidechain
2	B	183	C	Sidechain
2	B	1831	G	Sidechain
2	B	1833	C	Sidechain
2	B	1835	G	Sidechain
2	B	1838	C	Sidechain
2	B	1839	G	Sidechain
2	B	1840	G	Sidechain
2	B	1842	G	Sidechain
2	B	1843	C	Sidechain
2	B	1844	C	Sidechain
2	B	1846	G	Sidechain
2	B	1847	A	Sidechain
2	B	1849	G	Sidechain
2	B	1850	G	Sidechain
2	B	1852	U	Sidechain
2	B	1853	A	Sidechain
2	B	1854	A	Sidechain
2	B	187	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1885	A	Sidechain
2	B	1888	G	Sidechain
2	B	189	G	Sidechain
2	B	1890	A	Sidechain
2	B	1893	C	Sidechain
2	B	1894	C	Sidechain
2	B	1895	C	Sidechain
2	B	1896	G	Sidechain
2	B	1897	G	Sidechain
2	B	1899	A	Sidechain
2	B	19	A	Sidechain
2	B	190	A	Sidechain
2	B	1902	C	Sidechain
2	B	1903	G	Sidechain
2	B	1905	C	Sidechain
2	B	1906	G	Sidechain
2	B	1907	G	Sidechain
2	B	1908	C	Sidechain
2	B	1909	C	Sidechain
2	B	191	A	Sidechain
2	B	1910	G	Sidechain
2	B	1911	U	Sidechain
2	B	1912	A	Sidechain
2	B	1915	U	Sidechain
2	B	1916	A	Sidechain
2	B	1918	A	Sidechain
2	B	1920	C	Sidechain
2	B	1923	U	Sidechain
2	B	1926	U	Sidechain
2	B	1927	A	Sidechain
2	B	1928	A	Sidechain
2	B	1929	G	Sidechain
2	B	193	U	Sidechain
2	B	1930	G	Sidechain
2	B	1932	A	Sidechain
2	B	1933	G	Sidechain
2	B	1936	A	Sidechain
2	B	1937	A	Sidechain
2	B	194	G	Sidechain
2	B	1940	U	Sidechain
2	B	1941	C	Sidechain
2	B	1942	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	1943	U	Sidechain
2	B	1944	U	Sidechain
2	B	1946	U	Sidechain
2	B	1947	C	Sidechain
2	B	1948	G	Sidechain
2	B	1949	G	Sidechain
2	B	195	A	Sidechain
2	B	1952	A	Sidechain
2	B	1954	G	Sidechain
2	B	1955	U	Sidechain
2	B	1958	C	Sidechain
2	B	196	A	Sidechain
2	B	1962	C	Sidechain
2	B	1963	U	Sidechain
2	B	1964	G	Sidechain
2	B	1967	C	Sidechain
2	B	1968	G	Sidechain
2	B	1969	A	Sidechain
2	B	197	A	Sidechain
2	B	1971	U	Sidechain
2	B	1972	G	Sidechain
2	B	1973	G	Sidechain
2	B	1975	G	Sidechain
2	B	1979	U	Sidechain
2	B	198	C	Sidechain
2	B	1981	A	Sidechain
2	B	1982	U	Sidechain
2	B	1984	G	Sidechain
2	B	1987	A	Sidechain
2	B	1991	U	Sidechain
2	B	1993	U	Sidechain
2	B	1995	U	Sidechain
2	B	1996	C	Sidechain
2	B	1998	A	Sidechain
2	B	1999	C	Sidechain
2	B	2	G	Sidechain
2	B	200	U	Sidechain
2	B	2000	C	Sidechain
2	B	2002	G	Sidechain
2	B	2005	A	Sidechain
2	B	2006	C	Sidechain
2	B	2007	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2008	C	Sidechain
2	B	201	C	Sidechain
2	B	2010	G	Sidechain
2	B	2011	U	Sidechain
2	B	2012	G	Sidechain
2	B	2015	A	Sidechain
2	B	2016	U	Sidechain
2	B	2017	U	Sidechain
2	B	2019	A	Sidechain
2	B	202	U	Sidechain
2	B	2021	C	Sidechain
2	B	2022	U	Sidechain
2	B	2023	C	Sidechain
2	B	2024	G	Sidechain
2	B	2025	C	Sidechain
2	B	2026	U	Sidechain
2	B	2028	U	Sidechain
2	B	2029	G	Sidechain
2	B	203	A	Sidechain
2	B	2030	A	Sidechain
2	B	2033	A	Sidechain
2	B	2035	G	Sidechain
2	B	2037	A	Sidechain
2	B	2038	G	Sidechain
2	B	204	A	Sidechain
2	B	2040	G	Sidechain
2	B	2042	A	Sidechain
2	B	2046	G	Sidechain
2	B	2047	C	Sidechain
2	B	2048	G	Sidechain
2	B	205	G	Sidechain
2	B	2051	A	Sidechain
2	B	2052	A	Sidechain
2	B	2053	G	Sidechain
2	B	2054	A	Sidechain
2	B	2055	C	Sidechain
2	B	2056	G	Sidechain
2	B	2057	G	Sidechain
2	B	2058	A	Sidechain
2	B	2059	A	Sidechain
2	B	206	U	Sidechain
2	B	2060	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2061	G	Sidechain
2	B	2062	A	Sidechain
2	B	2063	C	Sidechain
2	B	2065	C	Sidechain
2	B	2068	U	Sidechain
2	B	2070	A	Sidechain
2	B	2071	A	Sidechain
2	B	2072	C	Sidechain
2	B	2075	U	Sidechain
2	B	2078	C	Sidechain
2	B	208	C	Sidechain
2	B	2080	A	Sidechain
2	B	2082	A	Sidechain
2	B	2083	G	Sidechain
2	B	2084	C	Sidechain
2	B	2085	U	Sidechain
2	B	2087	G	Sidechain
2	B	2092	U	Sidechain
2	B	2094	A	Sidechain
2	B	2097	A	Sidechain
2	B	2098	U	Sidechain
2	B	2099	U	Sidechain
2	B	21	A	Sidechain
2	B	2100	G	Sidechain
2	B	2103	C	Sidechain
2	B	2106	U	Sidechain
2	B	2107	G	Sidechain
2	B	2109	U	Sidechain
2	B	211	C	Sidechain
2	B	2110	G	Sidechain
2	B	2112	G	Sidechain
2	B	2114	A	Sidechain
2	B	2115	G	Sidechain
2	B	2116	G	Sidechain
2	B	2117	A	Sidechain
2	B	2119	A	Sidechain
2	B	2120	G	Sidechain
2	B	2121	G	Sidechain
2	B	2122	U	Sidechain
2	B	2123	G	Sidechain
2	B	2124	G	Sidechain
2	B	2125	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2126	A	Sidechain
2	B	2128	G	Sidechain
2	B	2129	C	Sidechain
2	B	213	A	Sidechain
2	B	2131	U	Sidechain
2	B	2132	U	Sidechain
2	B	2133	G	Sidechain
2	B	2134	A	Sidechain
2	B	2136	G	Sidechain
2	B	2137	U	Sidechain
2	B	2138	G	Sidechain
2	B	2139	U	Sidechain
2	B	214	G	Sidechain
2	B	2140	G	Sidechain
2	B	2141	G	Sidechain
2	B	2144	G	Sidechain
2	B	2145	C	Sidechain
2	B	2148	G	Sidechain
2	B	2149	U	Sidechain
2	B	215	G	Sidechain
2	B	2150	C	Sidechain
2	B	2155	U	Sidechain
2	B	2156	G	Sidechain
2	B	2157	G	Sidechain
2	B	2158	A	Sidechain
2	B	2161	C	Sidechain
2	B	2162	G	Sidechain
2	B	2164	C	Sidechain
2	B	2166	U	Sidechain
2	B	2167	U	Sidechain
2	B	2169	A	Sidechain
2	B	217	A	Sidechain
2	B	2170	A	Sidechain
2	B	2171	A	Sidechain
2	B	2172	U	Sidechain
2	B	2173	A	Sidechain
2	B	2178	C	Sidechain
2	B	2179	C	Sidechain
2	B	218	A	Sidechain
2	B	2181	U	Sidechain
2	B	2184	A	Sidechain
2	B	2185	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2186	G	Sidechain
2	B	2187	U	Sidechain
2	B	2188	U	Sidechain
2	B	2189	U	Sidechain
2	B	2193	G	Sidechain
2	B	2195	U	Sidechain
2	B	2197	U	Sidechain
2	B	2198	A	Sidechain
2	B	2200	C	Sidechain
2	B	2201	G	Sidechain
2	B	2202	U	Sidechain
2	B	2203	U	Sidechain
2	B	2204	G	Sidechain
2	B	2205	A	Sidechain
2	B	2209	G	Sidechain
2	B	221	A	Sidechain
2	B	2210	U	Sidechain
2	B	2212	A	Sidechain
2	B	2213	U	Sidechain
2	B	2214	C	Sidechain
2	B	2215	C	Sidechain
2	B	2217	G	Sidechain
2	B	2218	G	Sidechain
2	B	2219	U	Sidechain
2	B	222	A	Sidechain
2	B	2221	G	Sidechain
2	B	2223	G	Sidechain
2	B	2224	G	Sidechain
2	B	2225	A	Sidechain
2	B	2226	C	Sidechain
2	B	2228	G	Sidechain
2	B	2231	U	Sidechain
2	B	2233	U	Sidechain
2	B	2234	G	Sidechain
2	B	2235	G	Sidechain
2	B	2238	G	Sidechain
2	B	2239	G	Sidechain
2	B	224	U	Sidechain
2	B	2242	G	Sidechain
2	B	2248	C	Sidechain
2	B	2249	U	Sidechain
2	B	2251	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2252	G	Sidechain
2	B	2253	G	Sidechain
2	B	2254	C	Sidechain
2	B	2255	G	Sidechain
2	B	2257	U	Sidechain
2	B	2258	C	Sidechain
2	B	2259	U	Sidechain
2	B	226	A	Sidechain
2	B	2260	C	Sidechain
2	B	2261	C	Sidechain
2	B	2264	C	Sidechain
2	B	2265	U	Sidechain
2	B	227	A	Sidechain
2	B	2271	G	Sidechain
2	B	2272	U	Sidechain
2	B	2273	A	Sidechain
2	B	2277	G	Sidechain
2	B	2278	A	Sidechain
2	B	2279	G	Sidechain
2	B	228	C	Sidechain
2	B	2280	G	Sidechain
2	B	2281	A	Sidechain
2	B	2282	G	Sidechain
2	B	2283	C	Sidechain
2	B	2284	A	Sidechain
2	B	2285	C	Sidechain
2	B	2288	A	Sidechain
2	B	229	C	Sidechain
2	B	2290	G	Sidechain
2	B	2291	U	Sidechain
2	B	2293	G	Sidechain
2	B	2298	A	Sidechain
2	B	23	G	Sidechain
2	B	230	G	Sidechain
2	B	2301	C	Sidechain
2	B	2302	U	Sidechain
2	B	2303	G	Sidechain
2	B	2306	C	Sidechain
2	B	2307	G	Sidechain
2	B	2308	G	Sidechain
2	B	231	A	Sidechain
2	B	2310	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2312	U	Sidechain
2	B	2313	C	Sidechain
2	B	2315	G	Sidechain
2	B	2316	G	Sidechain
2	B	2317	A	Sidechain
2	B	2318	G	Sidechain
2	B	2319	G	Sidechain
2	B	232	G	Sidechain
2	B	2320	U	Sidechain
2	B	2321	U	Sidechain
2	B	2322	A	Sidechain
2	B	2323	G	Sidechain
2	B	2325	G	Sidechain
2	B	2327	A	Sidechain
2	B	2328	A	Sidechain
2	B	2329	U	Sidechain
2	B	233	A	Sidechain
2	B	2330	G	Sidechain
2	B	2332	C	Sidechain
2	B	2333	A	Sidechain
2	B	2334	U	Sidechain
2	B	2335	A	Sidechain
2	B	2338	C	Sidechain
2	B	234	U	Sidechain
2	B	2341	G	Sidechain
2	B	2342	C	Sidechain
2	B	2343	U	Sidechain
2	B	2344	U	Sidechain
2	B	2345	G	Sidechain
2	B	2346	A	Sidechain
2	B	2348	U	Sidechain
2	B	2349	G	Sidechain
2	B	235	U	Sidechain
2	B	2351	G	Sidechain
2	B	2352	A	Sidechain
2	B	2356	U	Sidechain
2	B	2357	G	Sidechain
2	B	2358	A	Sidechain
2	B	236	C	Sidechain
2	B	2360	G	Sidechain
2	B	2362	C	Sidechain
2	B	2364	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2365	G	Sidechain
2	B	2367	G	Sidechain
2	B	2369	A	Sidechain
2	B	2371	G	Sidechain
2	B	2373	G	Sidechain
2	B	2374	C	Sidechain
2	B	2375	G	Sidechain
2	B	2376	A	Sidechain
2	B	2379	G	Sidechain
2	B	2382	G	Sidechain
2	B	2383	G	Sidechain
2	B	2386	A	Sidechain
2	B	239	C	Sidechain
2	B	2390	U	Sidechain
2	B	2391	G	Sidechain
2	B	2392	A	Sidechain
2	B	2393	U	Sidechain
2	B	2398	U	Sidechain
2	B	2399	G	Sidechain
2	B	24	G	Sidechain
2	B	240	C	Sidechain
2	B	2400	G	Sidechain
2	B	2404	U	Sidechain
2	B	2405	G	Sidechain
2	B	2406	A	Sidechain
2	B	2407	A	Sidechain
2	B	241	A	Sidechain
2	B	2410	G	Sidechain
2	B	2413	G	Sidechain
2	B	2414	G	Sidechain
2	B	2415	G	Sidechain
2	B	242	G	Sidechain
2	B	2425	A	Sidechain
2	B	2426	A	Sidechain
2	B	2428	G	Sidechain
2	B	2429	G	Sidechain
2	B	243	U	Sidechain
2	B	2430	A	Sidechain
2	B	2432	A	Sidechain
2	B	2433	A	Sidechain
2	B	2434	A	Sidechain
2	B	2436	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2437	G	Sidechain
2	B	244	A	Sidechain
2	B	2440	C	Sidechain
2	B	2441	U	Sidechain
2	B	2442	C	Sidechain
2	B	2444	G	Sidechain
2	B	2445	G	Sidechain
2	B	2446	G	Sidechain
2	B	2447	G	Sidechain
2	B	2450	A	Sidechain
2	B	2452	C	Sidechain
2	B	2453	A	Sidechain
2	B	2454	G	Sidechain
2	B	2455	G	Sidechain
2	B	2457	U	Sidechain
2	B	2458	G	Sidechain
2	B	246	C	Sidechain
2	B	2460	U	Sidechain
2	B	2463	C	Sidechain
2	B	2465	C	Sidechain
2	B	247	G	Sidechain
2	B	2471	A	Sidechain
2	B	2472	G	Sidechain
2	B	2475	C	Sidechain
2	B	2476	A	Sidechain
2	B	2479	U	Sidechain
2	B	248	G	Sidechain
2	B	2480	C	Sidechain
2	B	2481	G	Sidechain
2	B	2482	A	Sidechain
2	B	2483	C	Sidechain
2	B	2484	G	Sidechain
2	B	2485	G	Sidechain
2	B	2489	U	Sidechain
2	B	249	C	Sidechain
2	B	2490	G	Sidechain
2	B	2491	U	Sidechain
2	B	2492	U	Sidechain
2	B	2493	U	Sidechain
2	B	2494	G	Sidechain
2	B	2495	G	Sidechain
2	B	2497	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2498	C	Sidechain
2	B	25	U	Sidechain
2	B	250	G	Sidechain
2	B	2505	G	Sidechain
2	B	2506	U	Sidechain
2	B	2507	C	Sidechain
2	B	2509	G	Sidechain
2	B	251	A	Sidechain
2	B	2510	C	Sidechain
2	B	2511	U	Sidechain
2	B	2512	C	Sidechain
2	B	2513	A	Sidechain
2	B	2514	U	Sidechain
2	B	2515	C	Sidechain
2	B	2516	A	Sidechain
2	B	2518	A	Sidechain
2	B	2520	C	Sidechain
2	B	2521	C	Sidechain
2	B	2523	G	Sidechain
2	B	2524	G	Sidechain
2	B	2525	G	Sidechain
2	B	2527	C	Sidechain
2	B	2529	G	Sidechain
2	B	253	C	Sidechain
2	B	2530	A	Sidechain
2	B	2531	A	Sidechain
2	B	2533	U	Sidechain
2	B	2534	A	Sidechain
2	B	2535	G	Sidechain
2	B	2536	G	Sidechain
2	B	2537	U	Sidechain
2	B	254	G	Sidechain
2	B	2541	A	Sidechain
2	B	2543	G	Sidechain
2	B	2544	G	Sidechain
2	B	2545	G	Sidechain
2	B	2548	U	Sidechain
2	B	2549	G	Sidechain
2	B	2550	G	Sidechain
2	B	2554	U	Sidechain
2	B	2555	U	Sidechain
2	B	2557	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2558	C	Sidechain
2	B	256	A	Sidechain
2	B	2562	U	Sidechain
2	B	2563	U	Sidechain
2	B	2564	A	Sidechain
2	B	2566	A	Sidechain
2	B	2567	G	Sidechain
2	B	2568	U	Sidechain
2	B	2569	G	Sidechain
2	B	257	C	Sidechain
2	B	2570	G	Sidechain
2	B	2571	U	Sidechain
2	B	2572	A	Sidechain
2	B	2574	G	Sidechain
2	B	2576	G	Sidechain
2	B	258	G	Sidechain
2	B	2580	U	Sidechain
2	B	2581	G	Sidechain
2	B	2583	G	Sidechain
2	B	2584	U	Sidechain
2	B	2586	U	Sidechain
2	B	2588	G	Sidechain
2	B	259	G	Sidechain
2	B	2592	G	Sidechain
2	B	2595	G	Sidechain
2	B	2596	U	Sidechain
2	B	2597	G	Sidechain
2	B	2598	A	Sidechain
2	B	2599	G	Sidechain
2	B	26	G	Sidechain
2	B	260	G	Sidechain
2	B	2600	A	Sidechain
2	B	2601	C	Sidechain
2	B	2603	G	Sidechain
2	B	2605	U	Sidechain
2	B	2606	C	Sidechain
2	B	2609	U	Sidechain
2	B	261	G	Sidechain
2	B	2612	C	Sidechain
2	B	2613	U	Sidechain
2	B	2614	A	Sidechain
2	B	2615	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2620	C	Sidechain
2	B	2623	G	Sidechain
2	B	2624	G	Sidechain
2	B	2625	G	Sidechain
2	B	2628	C	Sidechain
2	B	2629	U	Sidechain
2	B	2633	G	Sidechain
2	B	2635	A	Sidechain
2	B	2636	C	Sidechain
2	B	2638	G	Sidechain
2	B	2640	G	Sidechain
2	B	2641	G	Sidechain
2	B	2643	G	Sidechain
2	B	2644	G	Sidechain
2	B	2645	G	Sidechain
2	B	2646	C	Sidechain
2	B	2648	G	Sidechain
2	B	265	A	Sidechain
2	B	2653	U	Sidechain
2	B	2655	G	Sidechain
2	B	2659	G	Sidechain
2	B	266	G	Sidechain
2	B	2660	A	Sidechain
2	B	2662	A	Sidechain
2	B	2663	G	Sidechain
2	B	2664	G	Sidechain
2	B	2665	A	Sidechain
2	B	2666	C	Sidechain
2	B	2668	G	Sidechain
2	B	2669	G	Sidechain
2	B	2670	A	Sidechain
2	B	2671	G	Sidechain
2	B	2674	G	Sidechain
2	B	2675	A	Sidechain
2	B	2677	G	Sidechain
2	B	2678	C	Sidechain
2	B	2680	U	Sidechain
2	B	2682	A	Sidechain
2	B	2683	C	Sidechain
2	B	2685	G	Sidechain
2	B	2688	G	Sidechain
2	B	2689	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2690	U	Sidechain
2	B	2691	C	Sidechain
2	B	2692	G	Sidechain
2	B	2693	G	Sidechain
2	B	2694	G	Sidechain
2	B	2695	U	Sidechain
2	B	2696	U	Sidechain
2	B	2697	G	Sidechain
2	B	2701	U	Sidechain
2	B	2702	G	Sidechain
2	B	2707	U	Sidechain
2	B	2708	G	Sidechain
2	B	2709	G	Sidechain
2	B	271	G	Sidechain
2	B	2710	C	Sidechain
2	B	2713	U	Sidechain
2	B	2715	C	Sidechain
2	B	2716	C	Sidechain
2	B	2718	G	Sidechain
2	B	272	A	Sidechain
2	B	2720	U	Sidechain
2	B	2722	G	Sidechain
2	B	2723	C	Sidechain
2	B	2724	U	Sidechain
2	B	2725	A	Sidechain
2	B	2727	A	Sidechain
2	B	2728	U	Sidechain
2	B	273	G	Sidechain
2	B	2732	G	Sidechain
2	B	2733	A	Sidechain
2	B	2734	A	Sidechain
2	B	2736	A	Sidechain
2	B	2739	U	Sidechain
2	B	2740	A	Sidechain
2	B	2741	A	Sidechain
2	B	2742	G	Sidechain
2	B	2743	U	Sidechain
2	B	2745	C	Sidechain
2	B	2747	G	Sidechain
2	B	2749	A	Sidechain
2	B	275	C	Sidechain
2	B	2751	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2752	C	Sidechain
2	B	2753	A	Sidechain
2	B	2754	U	Sidechain
2	B	2758	A	Sidechain
2	B	2759	G	Sidechain
2	B	276	U	Sidechain
2	B	2762	C	Sidechain
2	B	2763	G	Sidechain
2	B	2765	A	Sidechain
2	B	2766	A	Sidechain
2	B	2768	U	Sidechain
2	B	2769	U	Sidechain
2	B	277	G	Sidechain
2	B	2771	C	Sidechain
2	B	2773	C	Sidechain
2	B	2775	G	Sidechain
2	B	2776	A	Sidechain
2	B	2777	G	Sidechain
2	B	2778	A	Sidechain
2	B	2779	U	Sidechain
2	B	278	A	Sidechain
2	B	2781	A	Sidechain
2	B	2782	G	Sidechain
2	B	2783	U	Sidechain
2	B	2784	U	Sidechain
2	B	2786	U	Sidechain
2	B	2787	C	Sidechain
2	B	279	A	Sidechain
2	B	2790	U	Sidechain
2	B	2791	G	Sidechain
2	B	2792	A	Sidechain
2	B	2794	C	Sidechain
2	B	2797	U	Sidechain
2	B	28	A	Sidechain
2	B	280	U	Sidechain
2	B	2801	G	Sidechain
2	B	2802	G	Sidechain
2	B	2803	G	Sidechain
2	B	2804	U	Sidechain
2	B	2805	C	Sidechain
2	B	2806	C	Sidechain
2	B	2807	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2809	A	Sidechain
2	B	281	C	Sidechain
2	B	2810	A	Sidechain
2	B	2811	G	Sidechain
2	B	2812	G	Sidechain
2	B	2813	A	Sidechain
2	B	2816	G	Sidechain
2	B	2817	U	Sidechain
2	B	2818	U	Sidechain
2	B	2819	G	Sidechain
2	B	282	A	Sidechain
2	B	2821	A	Sidechain
2	B	2822	G	Sidechain
2	B	2826	A	Sidechain
2	B	2827	C	Sidechain
2	B	2829	A	Sidechain
2	B	2830	C	Sidechain
2	B	2832	U	Sidechain
2	B	2834	G	Sidechain
2	B	2836	U	Sidechain
2	B	2838	G	Sidechain
2	B	2839	G	Sidechain
2	B	284	U	Sidechain
2	B	2840	C	Sidechain
2	B	2841	C	Sidechain
2	B	2842	G	Sidechain
2	B	2843	G	Sidechain
2	B	2846	G	Sidechain
2	B	2847	U	Sidechain
2	B	2848	G	Sidechain
2	B	2849	U	Sidechain
2	B	285	G	Sidechain
2	B	2850	A	Sidechain
2	B	2852	G	Sidechain
2	B	2855	C	Sidechain
2	B	2857	G	Sidechain
2	B	2858	C	Sidechain
2	B	2859	G	Sidechain
2	B	2861	U	Sidechain
2	B	2862	G	Sidechain
2	B	2863	C	Sidechain
2	B	2865	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	2868	A	Sidechain
2	B	2871	U	Sidechain
2	B	2876	G	Sidechain
2	B	2879	A	Sidechain
2	B	288	U	Sidechain
2	B	2880	C	Sidechain
2	B	2881	U	Sidechain
2	B	2882	A	Sidechain
2	B	2883	A	Sidechain
2	B	2885	G	Sidechain
2	B	2887	A	Sidechain
2	B	2888	C	Sidechain
2	B	2889	C	Sidechain
2	B	2890	G	Sidechain
2	B	2891	U	Sidechain
2	B	2892	G	Sidechain
2	B	2894	G	Sidechain
2	B	2895	G	Sidechain
2	B	2896	C	Sidechain
2	B	2897	U	Sidechain
2	B	2898	U	Sidechain
2	B	29	U	Sidechain
2	B	290	U	Sidechain
2	B	2900	A	Sidechain
2	B	2902	C	Sidechain
2	B	292	U	Sidechain
2	B	293	U	Sidechain
2	B	294	A	Sidechain
2	B	296	U	Sidechain
2	B	297	G	Sidechain
2	B	298	G	Sidechain
2	B	299	A	Sidechain
2	B	300	A	Sidechain
2	B	301	G	Sidechain
2	B	303	G	Sidechain
2	B	304	U	Sidechain
2	B	306	U	Sidechain
2	B	307	G	Sidechain
2	B	310	A	Sidechain
2	B	311	A	Sidechain
2	B	312	G	Sidechain
2	B	313	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	315	G	Sidechain
2	B	318	C	Sidechain
2	B	319	G	Sidechain
2	B	322	A	Sidechain
2	B	328	U	Sidechain
2	B	329	G	Sidechain
2	B	332	A	Sidechain
2	B	336	C	Sidechain
2	B	337	C	Sidechain
2	B	339	U	Sidechain
2	B	344	A	Sidechain
2	B	345	A	Sidechain
2	B	346	A	Sidechain
2	B	348	A	Sidechain
2	B	349	U	Sidechain
2	B	350	G	Sidechain
2	B	355	U	Sidechain
2	B	356	G	Sidechain
2	B	357	C	Sidechain
2	B	359	G	Sidechain
2	B	360	U	Sidechain
2	B	361	G	Sidechain
2	B	362	A	Sidechain
2	B	363	G	Sidechain
2	B	364	C	Sidechain
2	B	368	A	Sidechain
2	B	369	U	Sidechain
2	B	37	C	Sidechain
2	B	372	G	Sidechain
2	B	373	U	Sidechain
2	B	376	G	Sidechain
2	B	377	G	Sidechain
2	B	380	G	Sidechain
2	B	382	A	Sidechain
2	B	386	G	Sidechain
2	B	387	U	Sidechain
2	B	388	G	Sidechain
2	B	389	G	Sidechain
2	B	39	G	Sidechain
2	B	390	U	Sidechain
2	B	392	U	Sidechain
2	B	393	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	394	C	Sidechain
2	B	395	U	Sidechain
2	B	398	C	Sidechain
2	B	399	U	Sidechain
2	B	4	U	Sidechain
2	B	400	G	Sidechain
2	B	401	A	Sidechain
2	B	402	A	Sidechain
2	B	403	U	Sidechain
2	B	404	A	Sidechain
2	B	407	G	Sidechain
2	B	408	G	Sidechain
2	B	409	G	Sidechain
2	B	411	G	Sidechain
2	B	412	A	Sidechain
2	B	414	C	Sidechain
2	B	416	U	Sidechain
2	B	42	A	Sidechain
2	B	422	A	Sidechain
2	B	428	A	Sidechain
2	B	429	A	Sidechain
2	B	430	A	Sidechain
2	B	431	U	Sidechain
2	B	433	C	Sidechain
2	B	436	C	Sidechain
2	B	437	U	Sidechain
2	B	438	G	Sidechain
2	B	441	U	Sidechain
2	B	442	G	Sidechain
2	B	443	A	Sidechain
2	B	445	C	Sidechain
2	B	446	G	Sidechain
2	B	447	A	Sidechain
2	B	449	A	Sidechain
2	B	45	G	Sidechain
2	B	452	G	Sidechain
2	B	453	A	Sidechain
2	B	454	A	Sidechain
2	B	455	C	Sidechain
2	B	457	A	Sidechain
2	B	458	G	Sidechain
2	B	459	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	46	G	Sidechain
2	B	463	G	Sidechain
2	B	464	U	Sidechain
2	B	465	G	Sidechain
2	B	467	G	Sidechain
2	B	469	G	Sidechain
2	B	47	C	Sidechain
2	B	471	A	Sidechain
2	B	472	A	Sidechain
2	B	473	G	Sidechain
2	B	474	G	Sidechain
2	B	475	C	Sidechain
2	B	476	G	Sidechain
2	B	477	A	Sidechain
2	B	479	A	Sidechain
2	B	480	A	Sidechain
2	B	481	G	Sidechain
2	B	483	A	Sidechain
2	B	485	C	Sidechain
2	B	486	C	Sidechain
2	B	488	G	Sidechain
2	B	489	G	Sidechain
2	B	492	A	Sidechain
2	B	493	G	Sidechain
2	B	494	G	Sidechain
2	B	495	G	Sidechain
2	B	496	G	Sidechain
2	B	497	A	Sidechain
2	B	499	U	Sidechain
2	B	5	A	Sidechain
2	B	50	U	Sidechain
2	B	500	G	Sidechain
2	B	502	A	Sidechain
2	B	505	A	Sidechain
2	B	507	A	Sidechain
2	B	510	C	Sidechain
2	B	514	A	Sidechain
2	B	515	A	Sidechain
2	B	516	C	Sidechain
2	B	517	C	Sidechain
2	B	518	G	Sidechain
2	B	519	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	520	G	Sidechain
2	B	522	A	Sidechain
2	B	524	G	Sidechain
2	B	525	U	Sidechain
2	B	526	A	Sidechain
2	B	528	A	Sidechain
2	B	529	A	Sidechain
2	B	530	G	Sidechain
2	B	533	G	Sidechain
2	B	534	U	Sidechain
2	B	535	G	Sidechain
2	B	536	G	Sidechain
2	B	539	G	Sidechain
2	B	540	C	Sidechain
2	B	543	G	Sidechain
2	B	544	C	Sidechain
2	B	545	U	Sidechain
2	B	547	A	Sidechain
2	B	548	G	Sidechain
2	B	549	G	Sidechain
2	B	550	C	Sidechain
2	B	552	U	Sidechain
2	B	554	U	Sidechain
2	B	555	G	Sidechain
2	B	556	A	Sidechain
2	B	557	C	Sidechain
2	B	558	U	Sidechain
2	B	56	A	Sidechain
2	B	560	C	Sidechain
2	B	561	G	Sidechain
2	B	563	A	Sidechain
2	B	565	C	Sidechain
2	B	566	U	Sidechain
2	B	567	U	Sidechain
2	B	568	U	Sidechain
2	B	569	U	Sidechain
2	B	572	A	Sidechain
2	B	573	U	Sidechain
2	B	574	A	Sidechain
2	B	576	U	Sidechain
2	B	577	G	Sidechain
2	B	578	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	579	G	Sidechain
2	B	58	G	Sidechain
2	B	580	U	Sidechain
2	B	581	C	Sidechain
2	B	582	A	Sidechain
2	B	583	G	Sidechain
2	B	585	G	Sidechain
2	B	586	A	Sidechain
2	B	588	U	Sidechain
2	B	589	U	Sidechain
2	B	59	U	Sidechain
2	B	590	A	Sidechain
2	B	593	U	Sidechain
2	B	594	U	Sidechain
2	B	596	U	Sidechain
2	B	6	A	Sidechain
2	B	60	G	Sidechain
2	B	601	C	Sidechain
2	B	604	G	Sidechain
2	B	605	G	Sidechain
2	B	606	U	Sidechain
2	B	607	U	Sidechain
2	B	608	A	Sidechain
2	B	609	A	Sidechain
2	B	610	C	Sidechain
2	B	612	G	Sidechain
2	B	613	A	Sidechain
2	B	615	U	Sidechain
2	B	616	A	Sidechain
2	B	617	G	Sidechain
2	B	619	G	Sidechain
2	B	62	U	Sidechain
2	B	620	G	Sidechain
2	B	621	A	Sidechain
2	B	622	G	Sidechain
2	B	623	C	Sidechain
2	B	625	G	Sidechain
2	B	626	A	Sidechain
2	B	627	A	Sidechain
2	B	628	G	Sidechain
2	B	63	A	Sidechain
2	B	630	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	632	A	Sidechain
2	B	633	A	Sidechain
2	B	635	C	Sidechain
2	B	636	G	Sidechain
2	B	637	A	Sidechain
2	B	638	G	Sidechain
2	B	639	U	Sidechain
2	B	64	A	Sidechain
2	B	641	U	Sidechain
2	B	644	A	Sidechain
2	B	645	C	Sidechain
2	B	646	U	Sidechain
2	B	649	G	Sidechain
2	B	65	U	Sidechain
2	B	651	G	Sidechain
2	B	652	U	Sidechain
2	B	653	U	Sidechain
2	B	655	A	Sidechain
2	B	656	G	Sidechain
2	B	657	U	Sidechain
2	B	658	U	Sidechain
2	B	660	C	Sidechain
2	B	661	A	Sidechain
2	B	663	G	Sidechain
2	B	664	G	Sidechain
2	B	665	U	Sidechain
2	B	666	A	Sidechain
2	B	67	U	Sidechain
2	B	671	C	Sidechain
2	B	672	C	Sidechain
2	B	673	C	Sidechain
2	B	674	G	Sidechain
2	B	675	A	Sidechain
2	B	677	A	Sidechain
2	B	679	C	Sidechain
2	B	680	C	Sidechain
2	B	681	G	Sidechain
2	B	682	G	Sidechain
2	B	683	U	Sidechain
2	B	684	G	Sidechain
2	B	685	A	Sidechain
2	B	686	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	687	C	Sidechain
2	B	688	U	Sidechain
2	B	689	A	Sidechain
2	B	69	C	Sidechain
2	B	690	G	Sidechain
2	B	691	C	Sidechain
2	B	694	U	Sidechain
2	B	697	G	Sidechain
2	B	698	C	Sidechain
2	B	699	A	Sidechain
2	B	7	G	Sidechain
2	B	70	G	Sidechain
2	B	700	G	Sidechain
2	B	701	G	Sidechain
2	B	702	U	Sidechain
2	B	703	U	Sidechain
2	B	705	A	Sidechain
2	B	707	G	Sidechain
2	B	708	G	Sidechain
2	B	71	A	Sidechain
2	B	711	G	Sidechain
2	B	712	G	Sidechain
2	B	713	G	Sidechain
2	B	714	U	Sidechain
2	B	72	U	Sidechain
2	B	720	U	Sidechain
2	B	721	A	Sidechain
2	B	722	A	Sidechain
2	B	724	U	Sidechain
2	B	725	G	Sidechain
2	B	727	A	Sidechain
2	B	728	G	Sidechain
2	B	729	G	Sidechain
2	B	731	C	Sidechain
2	B	732	C	Sidechain
2	B	733	G	Sidechain
2	B	736	C	Sidechain
2	B	739	A	Sidechain
2	B	74	A	Sidechain
2	B	740	C	Sidechain
2	B	743	A	Sidechain
2	B	744	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	748	G	Sidechain
2	B	75	G	Sidechain
2	B	750	A	Sidechain
2	B	751	A	Sidechain
2	B	752	A	Sidechain
2	B	753	A	Sidechain
2	B	755	U	Sidechain
2	B	756	A	Sidechain
2	B	757	G	Sidechain
2	B	758	C	Sidechain
2	B	760	G	Sidechain
2	B	761	A	Sidechain
2	B	762	U	Sidechain
2	B	763	G	Sidechain
2	B	766	U	Sidechain
2	B	767	U	Sidechain
2	B	768	G	Sidechain
2	B	769	U	Sidechain
2	B	77	G	Sidechain
2	B	772	C	Sidechain
2	B	773	U	Sidechain
2	B	774	G	Sidechain
2	B	775	G	Sidechain
2	B	776	G	Sidechain
2	B	777	G	Sidechain
2	B	778	G	Sidechain
2	B	779	U	Sidechain
2	B	78	U	Sidechain
2	B	780	G	Sidechain
2	B	781	A	Sidechain
2	B	784	G	Sidechain
2	B	785	G	Sidechain
2	B	788	A	Sidechain
2	B	789	A	Sidechain
2	B	79	C	Sidechain
2	B	791	C	Sidechain
2	B	792	A	Sidechain
2	B	793	A	Sidechain
2	B	794	A	Sidechain
2	B	795	C	Sidechain
2	B	796	C	Sidechain
2	B	798	G	Sidechain

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Mol	Chain	Res	Type	Group
2	B	800	A	Sidechain
2	B	801	G	Sidechain
2	B	802	A	Sidechain
2	B	803	U	Sidechain
2	B	804	A	Sidechain
2	B	805	G	Sidechain
2	B	807	U	Sidechain
2	B	808	G	Sidechain
2	B	81	G	Sidechain
2	B	813	U	Sidechain
2	B	814	C	Sidechain
2	B	816	C	Sidechain
2	B	818	G	Sidechain
2	B	819	A	Sidechain
2	B	82	U	Sidechain
2	B	820	A	Sidechain
2	B	821	A	Sidechain
2	B	822	G	Sidechain
2	B	823	C	Sidechain
2	B	824	U	Sidechain
2	B	825	A	Sidechain
2	B	83	A	Sidechain
2	B	830	G	Sidechain
2	B	831	G	Sidechain
2	B	832	U	Sidechain
2	B	833	A	Sidechain
2	B	834	G	Sidechain
2	B	835	C	Sidechain
2	B	836	G	Sidechain
2	B	837	C	Sidechain
2	B	839	U	Sidechain
2	B	84	A	Sidechain
2	B	840	C	Sidechain
2	B	841	G	Sidechain
2	B	845	A	Sidechain
2	B	846	U	Sidechain
2	B	847	U	Sidechain
2	B	848	C	Sidechain
2	B	849	A	Sidechain
2	B	85	G	Sidechain
2	B	850	U	Sidechain
2	B	852	U	Sidechain

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Mol	Chain	Res	Type	Group
2	B	853	C	Sidechain
2	B	855	G	Sidechain
2	B	858	G	Sidechain
2	B	859	G	Sidechain
2	B	861	A	Sidechain
2	B	862	G	Sidechain
2	B	864	G	Sidechain
2	B	865	C	Sidechain
2	B	867	C	Sidechain
2	B	871	U	Sidechain
2	B	873	C	Sidechain
2	B	875	G	Sidechain
2	B	876	C	Sidechain
2	B	877	A	Sidechain
2	B	878	A	Sidechain
2	B	879	G	Sidechain
2	B	88	G	Sidechain
2	B	880	G	Sidechain
2	B	881	G	Sidechain
2	B	882	G	Sidechain
2	B	884	U	Sidechain
2	B	885	C	Sidechain
2	B	886	A	Sidechain
2	B	887	U	Sidechain
2	B	888	C	Sidechain
2	B	89	A	Sidechain
2	B	891	G	Sidechain
2	B	892	A	Sidechain
2	B	894	U	Sidechain
2	B	895	U	Sidechain
2	B	898	C	Sidechain
2	B	899	A	Sidechain
2	B	9	G	Sidechain
2	B	902	C	Sidechain
2	B	904	G	Sidechain
2	B	905	A	Sidechain
2	B	908	C	Sidechain
2	B	909	A	Sidechain
2	B	91	A	Sidechain
2	B	910	A	Sidechain
2	B	911	A	Sidechain
2	B	912	C	Sidechain

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Mol	Chain	Res	Type	Group
2	B	913	U	Sidechain
2	B	914	G	Sidechain
2	B	916	G	Sidechain
2	B	918	A	Sidechain
2	B	919	U	Sidechain
2	B	92	U	Sidechain
2	B	920	A	Sidechain
2	B	921	C	Sidechain
2	B	922	C	Sidechain
2	B	923	G	Sidechain
2	B	929	U	Sidechain
2	B	932	U	Sidechain
2	B	933	A	Sidechain
2	B	934	U	Sidechain
2	B	935	C	Sidechain
2	B	938	G	Sidechain
2	B	940	G	Sidechain
2	B	941	A	Sidechain
2	B	942	G	Sidechain
2	B	943	A	Sidechain
2	B	946	C	Sidechain
2	B	947	A	Sidechain
2	B	948	C	Sidechain
2	B	949	G	Sidechain
2	B	950	G	Sidechain
2	B	952	G	Sidechain
2	B	955	U	Sidechain
2	B	956	G	Sidechain
2	B	957	C	Sidechain
2	B	958	U	Sidechain
2	B	959	A	Sidechain
2	B	96	C	Sidechain
2	B	960	A	Sidechain
2	B	961	C	Sidechain
2	B	964	C	Sidechain
2	B	969	G	Sidechain
2	B	97	C	Sidechain
2	B	970	U	Sidechain
2	B	971	G	Sidechain
2	B	972	A	Sidechain
2	B	973	A	Sidechain
2	B	975	A	Sidechain

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Mol	Chain	Res	Type	Group
2	B	977	G	Sidechain
2	B	979	A	Sidechain
2	B	980	A	Sidechain
2	B	981	A	Sidechain
2	B	982	C	Sidechain
2	B	983	A	Sidechain
2	B	984	A	Sidechain
2	B	985	C	Sidechain
2	B	987	C	Sidechain
2	B	988	A	Sidechain
2	B	989	G	Sidechain
2	B	99	U	Sidechain
2	B	990	A	Sidechain
2	B	991	C	Sidechain
2	B	995	C	Sidechain
2	B	999	U	Sidechain
27	C	170	TYR	Sidechain
27	C	181	ARG	Sidechain
27	C	211	ARG	Sidechain
27	C	213	ARG	Sidechain
27	C	216	ARG	Sidechain
27	C	237	ARG	Sidechain
27	C	261	ARG	Sidechain
27	C	62	ARG	Sidechain
27	C	66	PHE	Sidechain
27	C	82	TYR	Sidechain
27	C	9	SER	Peptide
14	D	127	PHE	Sidechain
14	D	13	ARG	Sidechain
14	D	141	ARG	Sidechain
14	D	184	ARG	Sidechain
14	D	199	SER	Peptide
14	D	24	VAL	Mainchain
14	D	42	ASN	Peptide
14	D	45	TYR	Sidechain
14	D	67	HIS	Sidechain
14	D	68	PHE	Sidechain
14	D	90	PHE	Peptide
20	E	158	PHE	Sidechain
20	E	162	ARG	Sidechain
20	E	170	ARG	Sidechain
20	E	23	PHE	Sidechain

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Mol	Chain	Res	Type	Group
20	E	35	TYR	Sidechain
20	E	44	ARG	Sidechain
20	E	88	ARG	Peptide
28	F	124	ARG	Sidechain
28	F	127	TYR	Sidechain
28	F	176	PHE	Sidechain
28	F	21	TYR	Sidechain
28	F	82	TYR	Sidechain
28	F	91	ARG	Sidechain
29	G	100	ASN	Mainchain
29	G	151	ARG	Sidechain
29	G	152	ARG	Sidechain
29	G	156	TYR	Sidechain
29	G	2	ARG	Sidechain
29	G	42	VAL	Peptide
29	G	77	GLY	Mainchain
29	G	93	TYR	Sidechain
29	G	94	ARG	Sidechain
30	H	123	ARG	Sidechain
30	H	132	PHE	Sidechain
30	H	25	TYR	Sidechain
30	H	47	PHE	Sidechain
30	H	50	ARG	Sidechain
30	H	51	ARG	Sidechain
30	H	83	LYS	Peptide
30	H	91	PHE	Sidechain
30	H	97	ARG	Sidechain
31	I	126	ARG	Sidechain
31	I	41	PHE	Sidechain
31	I	61	TYR	Sidechain
32	J	37	ARG	Sidechain
32	J	4	PHE	Sidechain
32	J	40	HIS	Sidechain
32	J	44	TYR	Sidechain
32	J	45	THR	Peptide
32	J	47	HIS	Sidechain
32	J	53	TYR	Sidechain
32	J	74	TYR	Sidechain
32	J	77	HIS	Sidechain
4	K	105	ARG	Sidechain
4	K	30	ARG	Sidechain
4	K	70	ARG	Peptide

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Mol	Chain	Res	Type	Group
4	K	71	ARG	Peptide
5	L	126	ARG	Sidechain
5	L	132	ARG	Sidechain
5	L	18	ARG	Sidechain
5	L	30	THR	Peptide
5	L	33	ARG	Sidechain
5	L	41	ARG	Sidechain
5	L	47	ARG	Sidechain
5	L	50	PHE	Sidechain
5	L	66	PHE	Sidechain
5	L	87	GLY	Mainchain
7	M	103	TYR	Sidechain
7	M	114	ARG	Sidechain
7	M	13	HIS	Sidechain
7	M	31	PHE	Sidechain
7	M	40	ARG	Sidechain
7	M	44	ARG	Sidechain
7	M	51	ARG	Sidechain
7	M	6	ARG	Sidechain
7	M	81	ARG	Sidechain
8	N	103	ARG	Sidechain
8	N	2	ARG	Sidechain
8	N	4	ARG	Sidechain
8	N	94	TYR	Sidechain
9	O	111	ARG	Sidechain
9	O	36	TYR	Sidechain
9	O	64	TYR	Sidechain
9	O	94	ARG	Sidechain
9	O	99	TYR	Sidechain
10	P	112	ARG	Sidechain
10	P	20	ARG	Sidechain
10	P	51	ASN	Peptide
10	P	52	ARG	Sidechain
10	P	60	VAL	Peptide
10	P	61	ARG	Sidechain
10	P	97	TYR	Sidechain
11	Q	10	ARG	Sidechain
11	Q	105	PHE	Sidechain
11	Q	13	HIS	Sidechain
11	Q	23	TYR	Sidechain
11	Q	24	TYR	Sidechain
11	Q	29	ARG	Sidechain

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Mol	Chain	Res	Type	Group
11	Q	32	ARG	Sidechain
11	Q	46	TYR	Sidechain
11	Q	54	ARG	Sidechain
11	Q	63	ARG	Sidechain
11	Q	69	ARG	Sidechain
12	R	2	TYR	Sidechain
12	R	21	ARG	Sidechain
12	R	33	VAL	Peptide
12	R	78	ARG	Sidechain
12	R	81	LYS	Mainchain
12	R	82	HIS	Peptide
12	R	89	HIS	Sidechain
12	R	90	ARG	Sidechain
13	S	11	ARG	Sidechain
13	S	25	ARG	Sidechain
13	S	75	PHE	Sidechain
15	T	51	PHE	Sidechain
15	T	76	ARG	Sidechain
15	T	84	TYR	Sidechain
17	U	21	ARG	Sidechain
17	U	72	PHE	Sidechain
17	U	93	ARG	Sidechain
17	U	95	PHE	Mainchain
18	W	31	TYR	Sidechain
18	W	82	TYR	Sidechain
19	X	109	ARG	Sidechain
19	X	141	TYR	Sidechain
19	X	147	HIS	Sidechain
19	X	149	ARG	Sidechain
19	X	157	HIS	Sidechain
19	X	21	ARG	Mainchain,Sidechain
19	X	221	ARG	Sidechain
19	X	224	GLY	Peptide
19	X	237	THR	Peptide
19	X	241	ILE	Peptide
19	X	243	ILE	Peptide
19	X	285	ALA	Peptide
19	X	314	ARG	Sidechain
19	X	331	LYS	Peptide
19	X	348	ALA	Peptide
19	X	349	ARG	Sidechain
19	X	379	VAL	Peptide

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Mol	Chain	Res	Type	Group
19	X	395	HIS	Peptide
19	X	401	ARG	Sidechain
19	X	409	TYR	Sidechain
19	X	415	TYR	Sidechain
19	X	416	ASN	Peptide
19	X	52	PHE	Sidechain
19	X	70	ARG	Sidechain
21	Y	10	ARG	Sidechain
21	Y	42	THR	Mainchain
21	Y	44	PHE	Sidechain
21	Y	56	HIS	Mainchain
21	Y	76	ARG	Sidechain
21	Y	78	PHE	Sidechain

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2455	0	1253	65	0
2	B	61689	0	30889	2037	0
3	O	625	0	655	7	0
4	K	931	0	1003	12	0
5	L	1045	0	1117	16	0
6	1	509	0	543	8	0
7	M	1074	0	1157	17	0
8	N	960	0	1000	14	0
9	O	892	0	923	10	0
10	P	917	0	965	26	0
11	Q	947	0	1022	16	0
12	R	816	0	839	13	0
13	S	857	0	922	18	0
14	D	1565	0	1616	24	0
15	T	738	0	807	9	0
16	2	449	0	491	4	0
17	U	755	0	807	6	0
18	W	753	0	780	11	0
19	X	3280	0	3334	47	0
20	E	1552	0	1619	27	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	Y	596	0	610	14	0
22	3	444	0	461	7	0
23	5	1733	0	1824	19	0
24	6	377	0	418	4	0
25	7	504	0	574	8	0
26	8	302	0	343	8	0
27	C	2082	0	2157	31	0
28	F	1420	0	1460	18	0
29	G	1316	0	1364	15	0
30	H	1111	0	1148	13	0
31	I	1032	0	1088	3	0
32	J	1129	0	1162	30	0
All	All	94855	0	64351	2462	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 15.

All (2462) 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)
19:X:347:PHE:CD2	19:X:449:MET:CG	2.00	1.45
19:X:347:PHE:CD2	19:X:449:MET:HG2	1.49	1.26
19:X:347:PHE:CD2	19:X:449:MET:HG3	1.84	0.97
19:X:449:MET:HA	19:X:449:MET:CE	1.97	0.94
19:X:347:PHE:HD2	19:X:449:MET:HG2	0.77	0.90
19:X:449:MET:HA	19:X:449:MET:HE1	1.51	0.89
28:F:105:ILE:HG23	28:F:109:ARG:HE	1.44	0.81
2:B:1065:U:H3	2:B:1069:A:H2'	1.49	0.76
2:B:864:G:C6	2:B:865:C:C4	2.72	0.76
19:X:347:PHE:HD2	19:X:449:MET:CG	1.62	0.76
21:Y:58:LEU:HD23	21:Y:81:ILE:HD11	1.67	0.75
2:B:664:G:C5	2:B:665:U:C5	2.75	0.74
23:5:149:VAL:O	23:5:153:VAL:HG23	1.87	0.74
2:B:630:G:H22	2:B:632:A:H3'	1.52	0.74
2:B:2749:A:H62	2:B:2753:A:H61	1.33	0.74
2:B:2452:C:H2'	2:B:2453:A:C8	2.24	0.73
2:B:514:A:C2	2:B:515:A:C4	2.77	0.73
2:B:508:A:C6	13:S:9:HIS:CE1	2.78	0.71
19:X:143:ILE:HG22	19:X:144:ALA:H	1.55	0.71
2:B:800:A:C2	2:B:802:A:C8	2.79	0.71
2:B:781:A:C6	2:B:1777:U:H4'	2.25	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2686:G:H2'	2:B:2687:U:C6	2.26	0.70
14:D:124:ARG:HH21	14:D:125:TRP:HE1	1.40	0.70
10:P:61:ARG:HH22	10:P:69:VAL:H	1.39	0.70
2:B:1313:U:C6	2:B:1610:A:C8	2.80	0.69
4:K:35:VAL:HG12	4:K:69:VAL:HG12	1.75	0.69
2:B:2230:G:C6	2:B:2231:U:C4	2.81	0.69
2:B:1128:G:C5	2:B:1129:A:C6	2.81	0.68
1:A:13:G:C6	1:A:70:C:H4'	2.29	0.68
2:B:572:A:C2	2:B:2033:A:C2	2.82	0.67
2:B:2028:U:H2'	2:B:2029:G:C8	2.30	0.67
2:B:771:G:C4	2:B:772:C:C5	2.83	0.67
2:B:1004:U:H1'	2:B:1010:A:C4	2.30	0.67
2:B:2839:G:H21	8:N:92:GLY:HA3	1.60	0.67
19:X:314:ARG:HA	19:X:314:ARG:HE	1.60	0.67
2:B:2106:U:C4	2:B:2183:A:C6	2.84	0.66
2:B:823:C:H2'	2:B:824:U:C6	2.30	0.66
2:B:2352:A:C2	2:B:2366:A:C2	2.84	0.66
2:B:1298:C:H42	2:B:1642:G:H1	1.42	0.66
2:B:695:G:C5	2:B:768:G:C6	2.84	0.66
2:B:2644:G:H2'	2:B:2645:G:C8	2.30	0.66
2:B:870:U:H2'	2:B:871:U:H5''	1.78	0.66
2:B:1041:G:H1	2:B:1114:C:H42	1.43	0.66
2:B:674:G:H2'	2:B:804:A:H61	1.61	0.66
2:B:669:G:C5	2:B:801:G:C6	2.84	0.66
2:B:688:U:H2'	2:B:689:A:C8	2.32	0.65
2:B:849:A:H2'	2:B:850:U:C6	2.31	0.65
2:B:1027:A:C6	2:B:1126:A:C4	2.84	0.65
2:B:1437:C:H2'	2:B:1438:U:C6	2.32	0.65
2:B:2284:A:C2	2:B:2285:C:C2	2.85	0.65
2:B:190:A:H2'	2:B:191:A:C8	2.32	0.65
2:B:530:G:H21	2:B:2035:G:H5'	1.61	0.65
2:B:2764:A:C6	2:B:2766:A:C5	2.84	0.65
1:A:39:A:H2'	1:A:40:U:C5	2.31	0.65
2:B:822:G:C5	2:B:836:G:C2	2.84	0.65
2:B:2243:U:H2'	2:B:2244:U:C6	2.31	0.65
2:B:527:C:C5	2:B:2779:U:H2'	2.32	0.65
2:B:1257:C:H4'	20:E:78:TRP:CZ2	2.32	0.65
19:X:107:ARG:HH21	23:5:130:VAL:HG22	1.62	0.65
32:J:130:HIS:CD2	32:J:131:ASN:OD1	2.50	0.65
1:A:73:A:C4	1:A:74:U:C6	2.85	0.65
2:B:768:G:C6	2:B:769:U:C4	2.85	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:891:G:H2'	2:B:892:A:C8	2.32	0.65
2:B:1785:A:C5	2:B:1787:A:C4	2.84	0.65
2:B:669:G:C5	2:B:801:G:C5	2.85	0.65
27:C:43:ASN:HB3	27:C:45:ASN:O	1.96	0.65
2:B:2358:A:C4	2:B:2359:C:C6	2.85	0.64
2:B:585:G:C6	2:B:1251:C:C2	2.85	0.64
2:B:1445:G:C5	2:B:1446:C:C5	2.86	0.64
2:B:1887:C:H3'	2:B:1888:G:H5'	1.80	0.64
2:B:2415:G:C6	2:B:2416:C:C4	2.86	0.64
2:B:2119:A:C2	2:B:2171:A:C2	2.85	0.64
12:R:12:HIS:CD2	12:R:20:VAL:HG11	2.33	0.64
30:H:135:HIS:CG	30:H:136:SER:H	2.16	0.64
2:B:36:G:H4'	2:B:451:U:C4	2.33	0.64
27:C:163:ILE:HG12	27:C:173:LEU:HD12	1.78	0.64
32:J:130:HIS:CG	32:J:131:ASN:H	2.15	0.64
26:8:10:LEU:O	26:8:33:HIS:CE1	2.50	0.64
2:B:749:A:C6	2:B:1618:A:C2	2.86	0.63
2:B:2487:G:C6	2:B:2488:G:C5	2.86	0.63
2:B:2358:A:C5	2:B:2359:C:C5	2.86	0.63
2:B:983:A:C6	2:B:984:A:C5	2.86	0.63
2:B:2335:A:C2	2:B:2337:G:H1'	2.34	0.63
2:B:818:G:H3'	2:B:1187:G:H1	1.63	0.63
2:B:2637:U:H1'	2:B:2782:G:H22	1.63	0.63
16:2:40:THR:HG22	16:2:42:ALA:H	1.64	0.63
2:B:701:G:C5	2:B:702:U:C5	2.86	0.63
2:B:2615:U:C2	22:3:3:GLN:HA	2.33	0.63
2:B:850:U:H2'	2:B:851:C:C6	2.34	0.62
2:B:2070:A:H2'	2:B:2071:A:H8	1.64	0.62
2:B:2452:C:C4	2:B:2453:A:C6	2.87	0.62
2:B:1995:U:H5''	14:D:128:ARG:HH12	1.64	0.62
2:B:2057:G:C5	2:B:2058:A:C5	2.88	0.62
9:O:34:HIS:CG	9:O:54:VAL:HG12	2.34	0.62
2:B:1279:G:C6	2:B:1292:G:C6	2.87	0.62
2:B:2543:G:C5	2:B:2765:A:C4	2.87	0.62
2:B:2056:G:C5	2:B:2577:A:C5	2.88	0.62
2:B:2536:G:C5	2:B:2537:U:C4	2.88	0.62
2:B:2640:G:C6	2:B:2641:G:C5	2.87	0.62
2:B:864:G:C5	2:B:865:C:C5	2.88	0.62
2:B:2696:U:H2'	2:B:2697:G:C8	2.36	0.61
2:B:2267:A:C8	2:B:2267:A:H3'	2.35	0.61
2:B:2516:A:C2	2:B:2517:C:C2	2.88	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:2:16:LEU:HB2	16:2:19:HIS:CE1	2.35	0.61
20:E:29:HIS:HA	20:E:32:VAL:HG22	1.82	0.61
2:B:855:G:C6	2:B:923:G:C6	2.88	0.61
2:B:1293:C:H2'	2:B:1294:U:C6	2.35	0.61
2:B:417:C:H2'	2:B:418:C:C6	2.35	0.61
2:B:527:C:C6	2:B:528:A:C6	2.88	0.61
2:B:2020:A:C5	2:B:2022:U:C5	2.88	0.61
2:B:146:A:C5	2:B:147:C:C4	2.89	0.61
2:B:452:G:C2	2:B:453:A:C2	2.88	0.61
2:B:580:U:H2'	2:B:581:C:C6	2.36	0.61
2:B:1672:A:C5	2:B:2582:G:H5'	2.35	0.61
2:B:2869:G:C5	2:B:2870:C:C5	2.88	0.61
2:B:310:A:C4	2:B:312:G:C5	2.88	0.61
2:B:587:C:C6	2:B:671:C:H1'	2.35	0.61
2:B:1315:C:H2'	2:B:1316:U:C6	2.35	0.61
2:B:2679:A:C6	2:B:2680:U:C4	2.88	0.61
1:A:59:A:H2'	1:A:60:C:C6	2.36	0.61
2:B:2057:G:H2'	2:B:2058:A:C8	2.35	0.61
2:B:832:U:H2'	2:B:833:A:C8	2.36	0.61
2:B:1296:G:C6	2:B:1645:G:C6	2.88	0.61
2:B:2482:A:C2	2:B:2483:C:H1'	2.36	0.61
29:G:40:VAL:HA	29:G:54:ARG:H	1.65	0.61
2:B:825:A:C2	2:B:826:U:C2	2.89	0.61
2:B:870:U:C2'	2:B:871:U:H5''	2.30	0.61
2:B:1153:C:H2'	2:B:1154:G:C8	2.35	0.61
32:J:47:HIS:CE1	32:J:48:VAL:HG22	2.36	0.61
1:A:11:C:H3'	1:A:12:C:C6	2.36	0.61
1:A:66:A:C2	1:A:108:A:C4	2.89	0.61
12:R:51:VAL:HB	12:R:52:PRO:HD2	1.83	0.61
2:B:590:A:H2'	2:B:591:U:C6	2.36	0.60
1:A:73:A:C5	1:A:74:U:C5	2.89	0.60
1:A:76:G:C6	1:A:77:U:C4	2.89	0.60
2:B:187:G:C5	2:B:188:G:C8	2.88	0.60
2:B:966:G:H2'	2:B:967:U:C6	2.36	0.60
2:B:1609:A:C8	2:B:1616:A:H1'	2.36	0.60
2:B:9:G:C2	2:B:2895:G:C5	2.90	0.60
10:P:54:LEU:HG	10:P:55:HIS:CD2	2.37	0.60
27:C:75:ALA:HA	27:C:95:TYR:HA	1.84	0.60
2:B:941:A:H2'	2:B:942:G:C8	2.36	0.60
2:B:1160:G:C5	2:B:1161:C:C5	2.89	0.60
2:B:1551:A:H3'	2:B:1552:A:H5''	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2183:A:H2'	2:B:2184:A:C8	2.37	0.60
2:B:2011:U:H2'	2:B:2012:G:C8	2.36	0.60
2:B:2829:A:C5	2:B:2830:C:C5	2.90	0.60
1:A:83:G:C6	1:A:84:G:C5	2.89	0.60
2:B:195:A:H61	2:B:198:C:H3'	1.66	0.60
2:B:1323:C:H5''	13:S:84:ARG:HH22	1.67	0.60
2:B:1680:U:C5	2:B:1681:G:C6	2.89	0.60
2:B:2638:G:C6	2:B:2775:G:C5	2.89	0.60
4:K:11:ALA:HB2	4:K:83:ALA:HB1	1.84	0.60
2:B:439:A:H2'	2:B:440:C:H6	1.67	0.60
2:B:457:A:C8	2:B:459:U:C2	2.90	0.60
2:B:699:A:H4'	2:B:1634:A:C6	2.36	0.60
2:B:1274:A:H3'	2:B:1646:C:H41	1.67	0.60
2:B:1598:A:C5	2:B:1599:U:C5	2.90	0.60
1:A:28:C:H2'	1:A:29:A:C8	2.37	0.60
2:B:449:A:C6	2:B:450:G:C4	2.90	0.60
29:G:110:HIS:CD2	29:G:110:HIS:H	2.19	0.60
2:B:19:A:H2'	2:B:20:C:C6	2.37	0.60
2:B:664:G:C6	2:B:665:U:C5	2.90	0.60
14:D:124:ARG:HH22	14:D:161:MET:H	1.49	0.60
2:B:1448:G:C4	2:B:1449:G:C8	2.90	0.59
2:B:1579:A:H2'	2:B:1580:A:C8	2.37	0.59
2:B:1659:G:C5	2:B:1660:G:C8	2.90	0.59
2:B:2048:G:C2	2:B:2049:G:H1'	2.37	0.59
2:B:2059:A:C5	2:B:2503:A:C2	2.89	0.59
2:B:2286:G:H1	2:B:2346:A:H2'	1.66	0.59
19:X:310:LEU:HD12	19:X:452:PRO:HG3	1.84	0.59
2:B:625:G:C2	2:B:626:A:H1'	2.37	0.59
2:B:1152:C:H2'	2:B:1153:C:C6	2.37	0.59
2:B:1661:G:C5	2:B:1662:U:C5	2.90	0.59
2:B:1998:A:H2'	2:B:1999:C:C6	2.38	0.59
2:B:2357:G:C5	2:B:2361:G:C6	2.91	0.59
2:B:1225:G:C2	2:B:1226:A:C2	2.91	0.59
2:B:1307:A:C5	2:B:1622:G:C6	2.90	0.59
18:W:56:PHE:CD2	18:W:57:TYR:CZ	2.91	0.59
2:B:367:G:C6	2:B:368:A:C4	2.91	0.59
2:B:972:A:C6	2:B:973:A:C6	2.90	0.59
2:B:1428:C:C6	2:B:1428:C:H5''	2.38	0.59
2:B:2822:G:H22	8:N:2:ARG:HH21	1.50	0.59
12:R:7:SER:H	12:R:11:GLN:HA	1.67	0.59
14:D:67:HIS:CE1	14:D:68:PHE:CZ	2.90	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:C:269:ARG:HG3	27:C:270:ARG:H	1.67	0.59
1:A:106:G:C6	1:A:107:G:C4	2.90	0.59
2:B:465:G:C6	2:B:466:A:C6	2.89	0.59
2:B:1153:C:C4	2:B:1154:G:C6	2.90	0.59
2:B:2141:G:H1	2:B:2146:C:H5''	1.67	0.59
2:B:809:G:C6	2:B:810:U:C4	2.90	0.59
2:B:983:A:C2	2:B:984:A:C4	2.90	0.59
2:B:1122:G:C2	2:B:1123:C:C6	2.91	0.59
2:B:1562:U:C4	2:B:1563:U:C4	2.91	0.59
30:H:113:SER:HB2	30:H:133:GLN:HE22	1.67	0.59
2:B:39:G:C4	2:B:40:U:C5	2.91	0.59
2:B:1778:U:H2'	2:B:1784:A:C6	2.37	0.59
2:B:2051:A:C6	2:B:2614:A:C5	2.91	0.59
1:A:13:G:C5	1:A:70:C:H4'	2.38	0.59
2:B:855:G:C5	2:B:923:G:C6	2.91	0.59
2:B:1560:G:C6	2:B:1561:C:C4	2.91	0.59
2:B:1659:G:C6	2:B:1660:G:C5	2.91	0.59
2:B:527:C:C4	2:B:2779:U:H2'	2.38	0.58
2:B:531:C:C4	2:B:2035:G:C6	2.91	0.58
2:B:823:C:H2'	2:B:824:U:C5	2.38	0.58
2:B:1797:G:H1	2:B:1822:C:H42	1.50	0.58
2:B:1896:G:C6	2:B:1897:G:C6	2.91	0.58
2:B:2252:G:H2'	2:B:2253:G:C8	2.37	0.58
5:L:85:VAL:HG23	5:L:90:VAL:HG22	1.84	0.58
2:B:252:G:H2'	2:B:253:C:C6	2.38	0.58
2:B:1403:A:C5	2:B:1404:C:C5	2.90	0.58
2:B:1454:C:C5	8:N:64:ARG:HG3	2.38	0.58
2:B:2056:G:C6	2:B:2577:A:C4	2.91	0.58
2:B:661:A:C4	2:B:662:G:C8	2.91	0.58
2:B:58:G:H2'	2:B:59:U:C6	2.38	0.58
2:B:877:A:C6	2:B:901:C:C4	2.92	0.58
2:B:1603:A:C4	2:B:1604:C:C6	2.91	0.58
2:B:2183:A:C2	2:B:2184:A:C4	2.91	0.58
2:B:2184:A:C2	2:B:2185:U:C2	2.90	0.58
2:B:569:U:O4	2:B:2498:C:H5''	2.03	0.58
2:B:1301:A:C8	2:B:1303:G:C8	2.91	0.58
28:F:39:VAL:HG13	28:F:40:GLY:H	1.68	0.58
1:A:30:C:N4	1:A:53:A:H61	2.02	0.58
2:B:270:A:C5	2:B:370:G:C6	2.91	0.58
2:B:1257:C:H4'	20:E:78:TRP:CE2	2.39	0.58
2:B:1331:G:C6	2:B:1333:G:C4	2.91	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1441:G:H2'	2:B:1442:U:C6	2.38	0.58
2:B:1586:A:H3'	2:B:1587:G:C8	2.38	0.58
2:B:2618:G:C6	2:B:2619:C:C4	2.92	0.58
10:P:61:ARG:HH11	10:P:63:ILE:N	2.01	0.58
21:Y:18:LYS:HE2	21:Y:37:VAL:H	1.68	0.58
2:B:291:G:C6	2:B:292:U:C4	2.91	0.58
2:B:1218:G:C6	2:B:1232:G:C6	2.92	0.58
2:B:1724:G:C5	2:B:1725:U:C4	2.92	0.58
28:F:131:VAL:HG22	28:F:151:LEU:H	1.68	0.58
2:B:2345:G:C5	2:B:2347:C:C5	2.91	0.58
9:O:64:TYR:H	9:O:67:ASN:HD21	1.52	0.58
2:B:58:G:C5	2:B:59:U:C4	2.92	0.58
2:B:2461:A:H1'	2:B:2492:U:C2	2.39	0.58
2:B:669:G:C6	2:B:801:G:C6	2.92	0.57
2:B:1770:G:C5	2:B:1983:G:C6	2.92	0.57
2:B:2126:A:H1'	2:B:2173:A:C8	2.38	0.57
9:O:34:HIS:CD2	9:O:54:VAL:HG12	2.39	0.57
2:B:1036:G:C5	2:B:1120:G:C6	2.93	0.57
2:B:583:G:C6	2:B:584:C:C4	2.92	0.57
2:B:962:G:H21	2:B:2250:G:H22	1.50	0.57
2:B:2404:U:C5	2:B:2405:G:C5	2.93	0.57
2:B:18:U:H2'	2:B:19:A:C8	2.39	0.57
2:B:514:A:C6	2:B:515:A:C5	2.92	0.57
2:B:899:A:C8	2:B:899:A:H3'	2.40	0.57
2:B:1131:G:C6	32:J:77:HIS:CD2	2.92	0.57
2:B:1132:U:H2'	2:B:1133:A:C8	2.38	0.57
2:B:1461:C:C4	2:B:1462:C:C5	2.92	0.57
1:A:99:A:C6	1:A:100:G:C5	2.92	0.57
2:B:294:A:C5	2:B:345:A:C5	2.93	0.57
2:B:2293:G:C6	2:B:2294:G:C5	2.93	0.57
2:B:2749:A:H62	2:B:2753:A:N6	2.02	0.57
2:B:194:G:C6	2:B:195:A:C5	2.92	0.57
2:B:1524:G:C4	2:B:1525:A:C8	2.93	0.57
2:B:152:A:H2'	2:B:153:U:C6	2.40	0.57
2:B:831:G:C5	2:B:832:U:C5	2.91	0.57
2:B:1699:G:C6	2:B:1763:G:C4	2.92	0.57
2:B:2087:G:H2'	2:B:2088:A:H8	1.70	0.57
2:B:2194:U:H2'	2:B:2195:U:C6	2.39	0.57
2:B:2346:A:C5	2:B:2383:G:C6	2.92	0.57
6:1:53:VAL:HG12	6:1:57:LEU:HD23	1.87	0.57
2:B:1672:A:C6	2:B:1673:G:C5	2.93	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:50:A:C2	1:A:51:G:H1'	2.40	0.57
2:B:764:A:H5''	27:C:208:GLY:HA2	1.87	0.57
2:B:1131:G:H21	2:B:1132:U:H5	1.52	0.57
2:B:2517:C:C6	2:B:2542:A:N7	2.73	0.57
5:L:56:PRO:HB2	5:L:59:ARG:HB2	1.87	0.57
27:C:60:ALA:HB3	27:C:62:ARG:HH21	1.69	0.57
2:B:579:G:C8	2:B:2017:U:C4	2.92	0.56
2:B:751:A:C8	2:B:789:A:C2	2.93	0.56
2:B:160:A:C6	2:B:161:A:C6	2.93	0.56
2:B:798:G:C6	2:B:799:G:C6	2.92	0.56
2:B:1034:G:C5	2:B:1035:U:C4	2.93	0.56
2:B:1182:G:C2	2:B:1183:U:C2	2.94	0.56
2:B:2516:A:H2'	2:B:2517:C:C6	2.40	0.56
14:D:109:VAL:HG11	14:D:193:VAL:HG12	1.86	0.56
2:B:242:G:N3	2:B:254:G:C6	2.73	0.56
2:B:971:G:C5	2:B:972:A:C4	2.94	0.56
2:B:1024:G:H3'	2:B:1025:G:H5''	1.86	0.56
2:B:1262:A:C5	2:B:1263:U:C4	2.93	0.56
2:B:1322:A:C5	2:B:1323:C:C6	2.94	0.56
2:B:1429:G:C5	2:B:1568:G:C6	2.93	0.56
2:B:1572:A:C2	2:B:1573:G:C4	2.94	0.56
2:B:1823:G:C4	2:B:1824:G:C8	2.93	0.56
2:B:2120:G:C5	2:B:2121:G:C5	2.93	0.56
2:B:2261:C:H2'	2:B:2262:U:C6	2.40	0.56
2:B:2858:C:C5	2:B:2859:G:C6	2.93	0.56
11:Q:30:VAL:HG12	11:Q:31:TYR:H	1.69	0.56
20:E:62:GLN:HG3	20:E:63:LYS:H	1.70	0.56
23:5:58:ASN:H	23:5:171:ILE:HD13	1.70	0.56
2:B:222:A:C2	2:B:233:A:H5''	2.41	0.56
2:B:617:G:C5'	20:E:102:ARG:HH12	2.18	0.56
2:B:1331:G:C5	2:B:1333:G:C5	2.94	0.56
2:B:2109:U:H2'	2:B:2110:G:C8	2.40	0.56
2:B:2383:G:C6	2:B:2384:U:C4	2.93	0.56
2:B:2700:A:C6	2:B:2701:U:C4	2.93	0.56
2:B:2800:A:C4	2:B:2801:G:H1'	2.39	0.56
2:B:2886:A:C4	2:B:2887:A:C8	2.94	0.56
1:A:30:C:H42	1:A:53:A:H61	1.53	0.56
2:B:302:C:H2'	2:B:303:G:H8	1.71	0.56
2:B:701:G:C6	2:B:702:U:C5	2.94	0.56
2:B:859:G:OP2	2:B:859:G:C8	2.58	0.56
2:B:943:A:C4	2:B:944:C:C5	2.94	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:991:C:H5''	2:B:1185:G:H2'	1.87	0.56
2:B:481:G:C5	2:B:507:A:C2	2.94	0.56
2:B:2472:G:H2'	2:B:2475:C:H42	1.69	0.56
2:B:4:U:C2	2:B:2900:A:C2	2.94	0.56
2:B:463:G:C4	2:B:467:G:C2	2.94	0.56
2:B:825:A:C6	2:B:826:U:C4	2.94	0.56
2:B:972:A:C5	2:B:973:A:C5	2.94	0.56
2:B:1405:U:H2'	2:B:1406:U:C6	2.40	0.56
2:B:1835:G:H4'	2:B:1969:A:C4	2.40	0.56
1:A:33:G:C2	1:A:50:A:C2	2.93	0.56
2:B:197:A:C5	2:B:2430:A:C5	2.94	0.56
2:B:774:G:H5''	27:C:47:ARG:HH21	1.70	0.56
2:B:2884:U:H3'	2:B:2885:G:C8	2.41	0.56
2:B:169:G:C4	2:B:170:U:C5	2.93	0.56
2:B:589:U:N3	2:B:670:A:C2	2.74	0.56
2:B:703:U:C5	2:B:704:G:C5	2.94	0.56
2:B:2198:A:C5	30:H:29:PHE:CD1	2.93	0.56
2:B:1198:U:H2'	2:B:1199:U:C6	2.41	0.56
2:B:1831:G:C2	2:B:1832:C:C2	2.94	0.56
2:B:1041:G:H1	2:B:1114:C:N4	2.04	0.55
2:B:1216:G:C2	2:B:1217:U:C2	2.94	0.55
2:B:1628:G:H2'	2:B:1629:U:C6	2.40	0.55
2:B:2250:G:C5	7:M:83:GLY:HA3	2.41	0.55
27:C:264:LYS:HD2	27:C:265:PHE:CZ	2.41	0.55
2:B:214:G:H2'	2:B:215:G:C8	2.40	0.55
2:B:471:A:H2'	2:B:472:A:C8	2.40	0.55
2:B:684:G:C6	2:B:774:G:C5	2.94	0.55
2:B:1162:G:C4	2:B:1163:G:C8	2.94	0.55
2:B:1677:A:H2'	2:B:1678:A:C8	2.41	0.55
2:B:1050:A:C2	2:B:2751:G:C5	2.95	0.55
2:B:1213:A:C2	2:B:1214:A:C4	2.93	0.55
2:B:1429:G:C6	2:B:1568:G:C6	2.94	0.55
2:B:1895:C:C4	2:B:1896:G:C6	2.94	0.55
2:B:2098:U:C4	2:B:2099:U:C4	2.95	0.55
2:B:2842:G:C6	2:B:2843:G:C5	2.94	0.55
15:T:37:ASP:H	15:T:81:LYS:HD3	1.69	0.55
2:B:303:G:C6	2:B:315:G:C6	2.95	0.55
2:B:656:G:H2'	2:B:657:U:C6	2.42	0.55
2:B:825:A:C5	2:B:826:U:C4	2.94	0.55
2:B:855:G:C6	2:B:923:G:C5	2.95	0.55
2:B:943:A:C5	2:B:944:C:C5	2.94	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1632:A:C5	2:B:1633:G:C6	2.94	0.55
2:B:1767:G:C6	2:B:1768:C:C5	2.95	0.55
2:B:2521:C:H2'	2:B:2522:U:C6	2.41	0.55
2:B:2543:G:H2'	2:B:2544:G:C8	2.42	0.55
2:B:2706:A:C5	2:B:2707:U:C5	2.94	0.55
2:B:530:G:H21	2:B:2035:G:C5'	2.19	0.55
2:B:792:A:C2	2:B:2440:C:C4	2.94	0.55
2:B:858:G:H22	2:B:919:U:H3	1.55	0.55
2:B:520:G:C6	2:B:521:U:C4	2.94	0.55
2:B:905:A:C6	2:B:906:U:C4	2.95	0.55
2:B:1128:G:H1'	2:B:1129:A:C4	2.41	0.55
2:B:1312:U:C4	2:B:1603:A:C5	2.95	0.55
2:B:1599:U:H2'	2:B:1600:C:C6	2.42	0.55
2:B:2692:G:H2'	2:B:2693:G:C8	2.42	0.55
2:B:2829:A:C6	2:B:2830:C:C4	2.95	0.55
2:B:2087:G:H2'	2:B:2088:A:C8	2.40	0.55
11:Q:67:ALA:HB1	11:Q:105:PHE:CZ	2.42	0.55
1:A:99:A:C4	1:A:100:G:C8	2.95	0.55
2:B:64:A:C6	2:B:65:U:C4	2.95	0.55
2:B:219:A:C6	2:B:220:G:C6	2.95	0.55
2:B:557:C:C4	2:B:558:U:C4	2.95	0.55
2:B:1560:G:C5	2:B:1561:C:C5	2.95	0.55
2:B:2053:G:C2	2:B:2054:A:C4	2.95	0.55
2:B:2471:A:C6	2:B:2472:G:C4	2.94	0.55
2:B:468:G:C5	2:B:469:G:C5	2.95	0.55
2:B:617:G:H5'	20:E:102:ARG:HH12	1.71	0.55
2:B:1672:A:C2	2:B:1673:G:C4	2.95	0.55
2:B:161:A:H2	2:B:2217:G:HO2'	1.54	0.55
2:B:590:A:H2'	2:B:591:U:H6	1.72	0.55
2:B:775:G:C6	2:B:794:A:C8	2.95	0.55
20:E:42:GLY:O	20:E:43:THR:HG23	2.06	0.55
23:5:39:VAL:HB	23:5:178:VAL:HG21	1.88	0.55
2:B:841:G:C5	2:B:842:U:C5	2.96	0.54
2:B:952:G:C2	2:B:966:G:C5	2.95	0.54
2:B:1182:G:C5	2:B:1183:U:C4	2.96	0.54
2:B:1485:U:C2	2:B:1505:A:C2	2.95	0.54
2:B:1722:A:C8	2:B:1739:A:C6	2.95	0.54
2:B:1817:G:C6	2:B:1818:U:C5	2.94	0.54
2:B:2052:A:H5'	14:D:146:ILE:H	1.72	0.54
2:B:2173:A:C6	2:B:2174:C:C2	2.95	0.54
2:B:2297:A:C4	2:B:2320:U:C2	2.95	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2445:G:H2'	2:B:2446:G:C8	2.42	0.54
2:B:464:U:C2	2:B:788:A:C6	2.96	0.54
2:B:1287:A:H2'	2:B:1288:G:H5'	1.88	0.54
2:B:2241:A:C2	2:B:2242:G:C5	2.95	0.54
2:B:2688:G:C8	2:B:2719:G:C6	2.95	0.54
4:K:76:VAL:H	10:P:72:VAL:HB	1.70	0.54
7:M:27:SER:H	7:M:66:ARG:HH22	1.55	0.54
19:X:282:ILE:HG23	19:X:312:SER:HB3	1.89	0.54
2:B:293:U:H3	2:B:347:A:H61	1.54	0.54
2:B:1205:A:C5	20:E:165:HIS:CE1	2.96	0.54
2:B:154:U:H3	2:B:172:A:H61	1.56	0.54
2:B:409:G:H2'	2:B:410:G:C8	2.42	0.54
2:B:1300:G:C6	2:B:1626:A:C8	2.96	0.54
13:S:9:HIS:H	13:S:102:HIS:CE1	2.26	0.54
2:B:695:G:C6	2:B:768:G:C6	2.95	0.54
2:B:1000:A:C2	2:B:1155:A:C2	2.95	0.54
2:B:1408:G:H2'	2:B:1409:U:C6	2.43	0.54
2:B:1623:G:H2'	2:B:1624:U:H6	1.73	0.54
2:B:2644:G:C5	2:B:2645:G:C6	2.96	0.54
18:W:80:HIS:CD2	18:W:82:TYR:H	2.26	0.54
23:5:163:TYR:CD2	23:5:173:THR:HG23	2.43	0.54
2:B:5:A:C6	2:B:6:A:C6	2.96	0.54
2:B:529:A:C8	2:B:2042:A:C6	2.95	0.54
2:B:1128:G:C4	2:B:1129:A:C6	2.95	0.54
2:B:2370:G:C6	2:B:2371:G:C5	2.96	0.54
2:B:2261:C:C2	2:B:2262:U:C5	2.95	0.54
2:B:687:C:H3'	2:B:688:U:C6	2.43	0.54
2:B:1712:U:C4	2:B:1713:A:C5	2.96	0.54
2:B:2162:G:C8	2:B:2173:A:H5''	2.43	0.54
2:B:2528:U:C4	2:B:2530:A:C4	2.96	0.54
2:B:13:A:C2	2:B:526:A:C5	2.96	0.54
2:B:464:U:C4	2:B:788:A:C5	2.95	0.54
2:B:557:C:H2'	2:B:558:U:C6	2.43	0.54
2:B:706:A:C6	2:B:707:G:C4	2.95	0.54
2:B:834:G:C5	2:B:835:C:C5	2.96	0.54
2:B:1322:A:C5	2:B:1323:C:C5	2.96	0.54
10:P:31:VAL:HG21	10:P:38:ARG:HE	1.73	0.54
20:E:18:THR:O	20:E:18:THR:HG22	2.08	0.54
2:B:518:G:C6	2:B:519:U:C4	2.95	0.53
2:B:695:G:C6	2:B:768:G:C5	2.96	0.53
2:B:845:A:C6	2:B:932:U:C5	2.96	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2343:U:H4'	2:B:2374:C:H5''	1.90	0.53
19:X:208:VAL:HA	19:X:255:ILE:HG22	1.90	0.53
2:B:728:G:C6	2:B:730:A:C5	2.96	0.53
2:B:748:G:C5	2:B:750:A:C5	2.96	0.53
2:B:819:A:C6	2:B:1189:A:H1'	2.43	0.53
2:B:1444:G:C6	2:B:1445:G:C5	2.97	0.53
2:B:1823:G:C6	2:B:1824:G:C5	2.96	0.53
2:B:2112:G:H1	23:5:130:VAL:CG2	2.21	0.53
2:B:2540:C:C4	2:B:2541:A:C5	2.97	0.53
19:X:3:PRO:HA	19:X:83:ASP:HB3	1.90	0.53
29:G:44:HIS:CE1	29:G:46:ASP:O	2.62	0.53
2:B:6:A:C2	2:B:7:G:C5	2.97	0.53
2:B:160:A:H2'	2:B:161:A:C8	2.43	0.53
2:B:452:G:C6	2:B:458:G:C6	2.95	0.53
2:B:1218:G:C5	2:B:1219:U:C5	2.96	0.53
2:B:1318:U:C2	2:B:1319:C:C5	2.97	0.53
2:B:2024:G:C2	2:B:2025:C:C2	2.97	0.53
2:B:503:A:C5	2:B:506:G:C6	2.97	0.53
2:B:795:C:C4	2:B:796:C:C5	2.97	0.53
2:B:1887:C:C3'	2:B:1888:G:H5'	2.37	0.53
2:B:2116:G:OP2	2:B:2116:G:C6	2.61	0.53
10:P:54:LEU:HG	10:P:55:HIS:CG	2.44	0.53
19:X:208:VAL:HA	19:X:255:ILE:CG2	2.39	0.53
1:A:76:G:C5	1:A:77:U:C5	2.97	0.53
2:B:659:G:C6	2:B:660:C:C4	2.97	0.53
2:B:802:A:H2'	2:B:803:U:C6	2.42	0.53
2:B:936:A:H2'	2:B:937:C:C6	2.44	0.53
2:B:1218:G:C6	2:B:1232:G:C5	2.97	0.53
2:B:1381:G:C2	2:B:1382:G:C4	2.96	0.53
2:B:2060:A:C2	2:B:2502:G:C5	2.96	0.53
2:B:2835:A:C4	2:B:2879:A:C6	2.96	0.53
2:B:26:G:H1'	2:B:515:A:H61	1.74	0.53
2:B:928:A:H2'	2:B:929:U:C6	2.44	0.53
2:B:966:G:H2'	2:B:967:U:H6	1.72	0.53
2:B:1000:A:C6	2:B:1155:A:C4	2.96	0.53
2:B:1675:C:C2	14:D:134:HIS:CE1	2.97	0.53
2:B:1747:U:H2'	2:B:1748:C:C6	2.43	0.53
2:B:1767:G:C2	2:B:1986:C:C2	2.97	0.53
2:B:2077:A:C8	2:B:2435:A:C4	2.97	0.53
2:B:2466:C:C2	2:B:2485:G:C2	2.97	0.53
2:B:2642:G:H5'	32:J:80:HIS:CD2	2.43	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2727:A:C4	2:B:2728:U:C5	2.96	0.53
5:L:57:LEU:HA	5:L:60:ARG:HB2	1.91	0.53
2:B:64:A:C5	2:B:65:U:C4	2.97	0.53
2:B:346:A:C8	2:B:347:A:H1'	2.43	0.53
2:B:943:A:C4	2:B:944:C:C6	2.97	0.53
2:B:983:A:C6	2:B:984:A:C6	2.97	0.53
2:B:1664:A:C4	2:B:1665:A:C8	2.97	0.53
2:B:1692:U:H2'	2:B:1694:C:C5	2.44	0.53
2:B:2274:A:C2	2:B:2276:G:H1'	2.43	0.53
19:X:207:ILE:HD13	19:X:222:ILE:HD12	1.90	0.53
2:B:66:C:C5	2:B:67:U:C5	2.97	0.53
2:B:625:G:C6	2:B:626:A:C4	2.96	0.53
2:B:670:A:H3'	5:L:42:SER:HB3	1.91	0.53
2:B:779:U:O2'	2:B:780:G:H5'	2.09	0.53
2:B:2816:G:C4	2:B:2817:U:C5	2.97	0.53
29:G:81:GLY:HA2	29:G:135:ALA:HB2	1.90	0.53
32:J:18:VAL:HG12	32:J:55:ILE:O	2.08	0.53
2:B:1387:A:C2	2:B:1388:G:C4	2.97	0.53
2:B:2617:U:H2'	2:B:2618:G:C8	2.44	0.53
2:B:195:A:C2	2:B:198:C:C4	2.97	0.53
2:B:954:G:C5	2:B:955:U:C5	2.96	0.53
2:B:1381:G:C6	2:B:1382:G:C2	2.97	0.53
2:B:1385:A:C2	2:B:1403:A:H1'	2.43	0.53
2:B:1596:A:C2	2:B:1597:A:C4	2.96	0.53
2:B:2342:C:H2'	2:B:2343:U:H6	1.74	0.53
2:B:800:A:H4'	2:B:801:G:OP1	2.08	0.52
2:B:941:A:C2	2:B:942:G:C4	2.97	0.52
2:B:2836:U:H2'	2:B:2837:A:C8	2.42	0.52
12:R:89:HIS:C	12:R:89:HIS:CD2	2.82	0.52
2:B:91:A:H61	15:T:69:ARG:HH22	1.55	0.52
2:B:435:C:C5	2:B:436:C:C5	2.97	0.52
2:B:607:U:H5	2:B:619:G:C5	2.27	0.52
2:B:849:A:H2'	2:B:850:U:C5	2.44	0.52
2:B:870:U:H2'	2:B:871:U:C5'	2.38	0.52
2:B:1244:A:H4'	20:E:29:HIS:CE1	2.43	0.52
2:B:1275:A:C6	2:B:1296:G:H4'	2.44	0.52
2:B:1641:A:C8	2:B:1642:G:C8	2.97	0.52
2:B:2231:U:C4	2:B:2232:C:C4	2.97	0.52
2:B:1389:G:H2'	2:B:1390:U:C6	2.44	0.52
2:B:1724:G:H2'	2:B:1725:U:C6	2.44	0.52
2:B:2198:A:C4	30:H:29:PHE:CD1	2.97	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2630:G:C8	2:B:2894:G:C5	2.97	0.52
2:B:2823:A:C5	2:B:2824:C:C4	2.98	0.52
2:B:96:C:H5'	6:1:41:HIS:CD2	2.43	0.52
2:B:217:A:C6	2:B:218:A:C5	2.97	0.52
2:B:471:A:C2	2:B:472:A:C4	2.97	0.52
2:B:664:G:C6	2:B:665:U:C4	2.97	0.52
2:B:911:A:C6	7:M:9:PHE:CG	2.97	0.52
2:B:1443:U:H3	2:B:1548:A:H61	1.58	0.52
2:B:1637:A:C6	2:B:1638:C:C4	2.97	0.52
2:B:2644:G:C6	2:B:2645:G:C6	2.98	0.52
1:A:54:G:C5	1:A:55:U:C5	2.98	0.52
2:B:972:A:H2'	2:B:973:A:C8	2.45	0.52
2:B:1190:G:C2	2:B:1191:G:C5	2.98	0.52
2:B:2236:U:C4	2:B:2237:G:C6	2.97	0.52
2:B:2376:A:C4	9:O:99:TYR:CZ	2.97	0.52
2:B:2599:G:C6	2:B:2600:A:C5	2.98	0.52
2:B:2599:G:C4	2:B:2600:A:C8	2.97	0.52
2:B:1827:U:C4	2:B:1828:G:C5	2.98	0.52
2:B:2162:G:C8	2:B:2173:A:H4'	2.45	0.52
2:B:2291:U:H2'	2:B:2292:U:C6	2.45	0.52
2:B:2834:G:C5	2:B:2879:A:C5	2.97	0.52
2:B:799:G:C5	2:B:800:A:C5	2.97	0.52
2:B:869:G:C6	2:B:870:U:C2	2.98	0.52
2:B:1633:G:C6	2:B:1635:A:C4	2.98	0.52
2:B:2782:G:C2	2:B:2783:U:C2	2.98	0.52
1:A:15:A:C4	1:A:109:A:C4	2.97	0.52
2:B:233:A:C5	2:B:234:U:C5	2.97	0.52
2:B:309:A:C6	2:B:330:A:C5	2.97	0.52
2:B:518:G:C5	2:B:519:U:C4	2.98	0.52
2:B:589:U:H2'	2:B:590:A:C8	2.45	0.52
2:B:926:G:C2	2:B:927:A:C5	2.98	0.52
2:B:235:U:H2'	2:B:236:C:C6	2.45	0.52
2:B:947:A:C5	2:B:971:G:N2	2.78	0.52
2:B:1680:U:C5	2:B:1681:G:C5	2.98	0.52
2:B:2052:A:C4	2:B:2053:G:C8	2.98	0.52
2:B:2493:U:C5	2:B:2494:G:C8	2.97	0.52
2:B:2677:G:C6	2:B:2731:G:C6	2.98	0.52
2:B:2758:A:C2	2:B:2759:G:H1'	2.45	0.52
31:I:129:GLU:HG3	31:I:139:VAL:HG11	1.92	0.52
1:A:18:G:C5	1:A:19:C:C5	2.97	0.52
2:B:762:U:O2	2:B:763:G:C5	2.62	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1296:G:C6	2:B:1645:G:C5	2.97	0.52
2:B:2018:G:C4	2:B:2019:A:C8	2.98	0.52
2:B:2261:C:H4'	2:B:2388:A:C5'	2.40	0.52
2:B:2273:A:C6	2:B:2274:A:C6	2.97	0.52
2:B:2418:A:C6	2:B:2419:U:C4	2.98	0.52
2:B:2806:C:H2'	2:B:2807:U:H6	1.75	0.52
2:B:2898:U:H2'	2:B:2899:A:C8	2.45	0.52
2:B:678:C:H2'	2:B:679:C:C6	2.45	0.51
2:B:716:A:C8	2:B:717:C:C6	2.98	0.51
2:B:2459:A:H3'	2:B:2460:U:H6	1.75	0.51
23:5:142:VAL:HG12	23:5:160:GLN:HE22	1.75	0.51
2:B:100:U:H2'	2:B:101:A:C2	2.46	0.51
2:B:191:A:H62	2:B:206:U:H3	1.57	0.51
2:B:439:A:H2'	2:B:440:C:C6	2.44	0.51
2:B:760:G:C5	2:B:761:A:C5	2.99	0.51
2:B:953:G:H2'	2:B:954:G:H8	1.75	0.51
11:Q:58:GLN:HE22	11:Q:62:ALA:HB2	1.75	0.51
23:5:77:VAL:HG21	23:5:153:VAL:HG22	1.93	0.51
2:B:420:C:H2'	2:B:421:C:C6	2.45	0.51
2:B:851:C:H2'	2:B:852:U:C6	2.45	0.51
2:B:1050:A:C2	2:B:1051:G:C4	2.99	0.51
2:B:1532:A:H2'	2:B:1533:C:C6	2.46	0.51
2:B:2471:A:HO2'	2:B:2472:G:H8	1.57	0.51
2:B:2720:U:C2	2:B:2872:A:C6	2.98	0.51
2:B:2838:G:C6	2:B:2839:G:C5	2.99	0.51
2:B:457:A:C4	2:B:459:U:C4	2.98	0.51
2:B:1034:G:C6	2:B:1122:G:C6	2.98	0.51
2:B:1168:G:C6	2:B:1169:A:C5	2.99	0.51
2:B:2218:G:C6	2:B:2219:U:C4	2.98	0.51
2:B:2588:G:C4	2:B:2589:A:C8	2.99	0.51
2:B:2623:G:H2'	2:B:2624:G:H8	1.75	0.51
2:B:2680:U:H2'	2:B:2681:C:C6	2.45	0.51
2:B:669:G:N7	2:B:801:G:C5	2.78	0.51
2:B:993:G:C6	2:B:994:C:C4	2.98	0.51
2:B:1059:G:C6	2:B:1060:U:C2	2.98	0.51
2:B:1216:G:C5	2:B:1217:U:C4	2.99	0.51
2:B:1332:G:C5	2:B:1609:A:C2	2.98	0.51
2:B:1708:C:C4	2:B:1709:U:C5	2.99	0.51
2:B:2377:A:C2	2:B:2378:A:C4	2.99	0.51
2:B:2829:A:C6	2:B:2830:C:C5	2.98	0.51
11:Q:60:TRP:CE2	11:Q:93:ILE:HD13	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:575:A:C2	2:B:576:U:C6	2.99	0.51
2:B:675:A:C5	2:B:676:A:C6	2.99	0.51
2:B:822:G:O6	2:B:836:G:C6	2.63	0.51
2:B:1009:A:H2'	2:B:1010:A:C4	2.45	0.51
2:B:1128:G:C8	2:B:1129:A:C5	2.98	0.51
2:B:1314:C:C2	2:B:1315:C:C5	2.99	0.51
2:B:2043:C:C4	2:B:2777:G:C4	2.99	0.51
2:B:2091:C:H3'	2:B:2092:U:H5''	1.93	0.51
2:B:2282:G:H1'	2:B:2390:U:O4	2.11	0.51
2:B:2325:G:C6	2:B:2326:C:C4	2.99	0.51
2:B:2516:A:C5	2:B:2569:G:C2	2.98	0.51
2:B:48:G:C2	2:B:178:G:C5	2.99	0.51
2:B:190:A:N7	2:B:207:A:C5	2.79	0.51
2:B:381:G:O2'	2:B:382:A:H5'	2.11	0.51
2:B:491:G:C5	2:B:492:A:C5	2.99	0.51
2:B:514:A:C6	2:B:515:A:C6	2.99	0.51
2:B:687:C:H5'	24:6:6:GLN:HG2	1.93	0.51
2:B:934:U:C2	2:B:935:C:C6	2.99	0.51
2:B:1017:G:C6	2:B:1018:U:C4	2.98	0.51
2:B:1024:G:C3'	2:B:1025:G:H5''	2.41	0.51
2:B:1586:A:H3'	2:B:1587:G:H8	1.74	0.51
2:B:1659:G:C6	2:B:2002:G:O6	2.64	0.51
2:B:1728:C:H1'	2:B:1729:U:C4	2.46	0.51
2:B:1742:U:H2'	2:B:1743:G:C8	2.45	0.51
2:B:2125:G:C6	23:5:135:GLY:HA3	2.46	0.51
2:B:2261:C:H2'	2:B:2262:U:H6	1.75	0.51
2:B:2408:U:H2'	2:B:2409:G:C8	2.45	0.51
2:B:2447:G:C5	2:B:2500:U:C6	2.98	0.51
2:B:2869:G:C4	2:B:2870:C:C6	2.99	0.51
2:B:23:G:C5	2:B:518:G:C6	2.98	0.51
2:B:250:G:C6	2:B:251:A:C4	2.99	0.51
2:B:545:U:H3	2:B:549:G:H5'	1.75	0.51
2:B:579:G:C4	2:B:580:U:C5	2.99	0.51
2:B:651:G:H5''	25:7:18:LYS:HD2	1.93	0.51
2:B:690:G:H2'	2:B:691:C:C6	2.46	0.51
2:B:1682:G:C6	2:B:1757:A:C4	2.99	0.51
2:B:2331:G:C5	2:B:2332:C:C5	2.99	0.51
2:B:2679:A:N1	2:B:2680:U:C4	2.79	0.51
2:B:2841:C:C2	2:B:2877:G:N2	2.79	0.51
18:W:16:ALA:HA	18:W:19:ARG:HD2	1.93	0.51
2:B:182:A:C2	2:B:183:C:C2	2.99	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:666:A:H2'	2:B:667:U:C6	2.45	0.51
2:B:2436:G:HO2'	2:B:2598:A:H2	1.57	0.51
2:B:2747:G:H1	2:B:2754:U:H2'	1.76	0.51
4:K:114:LYS:H	4:K:114:LYS:HD2	1.75	0.51
10:P:61:ARG:HH12	10:P:69:VAL:N	2.08	0.51
1:A:24:G:C4	1:A:56:G:C6	2.99	0.51
2:B:54:G:C6	2:B:55:G:C5	3.00	0.51
2:B:301:G:C5	2:B:317:G:C6	2.99	0.51
2:B:533:G:C5	2:B:534:U:C4	2.98	0.51
2:B:1054:A:C2	2:B:1106:G:C4	2.99	0.51
2:B:1230:A:C6	2:B:1231:U:C4	2.99	0.51
2:B:1831:G:C6	2:B:1832:C:C4	2.99	0.51
2:B:2064:C:H2'	2:B:2065:C:C6	2.46	0.51
2:B:2361:G:H2'	2:B:2362:C:C6	2.46	0.51
2:B:2638:G:C5	2:B:2775:G:C6	2.99	0.51
2:B:2761:A:H2'	2:B:2762:C:H6	1.75	0.51
2:B:2888:C:H2'	2:B:2889:C:H6	1.75	0.51
11:Q:2:ARG:O	11:Q:3:VAL:HG13	2.11	0.51
2:B:233:A:C6	2:B:234:U:C4	2.99	0.50
2:B:688:U:H2'	2:B:689:A:H8	1.73	0.50
2:B:762:U:C2	2:B:763:G:C6	2.99	0.50
2:B:817:C:C4	2:B:818:G:C5	2.99	0.50
2:B:934:U:C2	2:B:935:C:C5	3.00	0.50
2:B:961:C:C2	2:B:2031:A:C6	2.98	0.50
2:B:2052:A:H61	2:B:2617:U:H3	1.57	0.50
2:B:2417:C:C2	2:B:2418:A:C8	2.99	0.50
2:B:2445:G:C6	2:B:2446:G:C6	2.99	0.50
2:B:2700:A:C2	2:B:2701:U:C2	2.98	0.50
10:P:11:GLN:HE22	14:D:15:PHE:HB2	1.76	0.50
18:W:29:ILE:HG22	18:W:39:ALA:HA	1.93	0.50
19:X:42:TYR:CE2	19:X:234:PRO:HB3	2.46	0.50
32:J:140:LEU:HD11	32:J:142:ILE:OXT	2.10	0.50
1:A:110:C:C4	1:A:111:U:C4	2.99	0.50
2:B:120:U:C5	2:B:149:A:C6	3.00	0.50
2:B:297:G:C5	2:B:298:G:C8	2.99	0.50
2:B:542:C:C2	2:B:543:G:C8	3.00	0.50
2:B:622:G:C6	2:B:623:C:C4	2.99	0.50
2:B:749:A:C4	2:B:1618:A:C5	2.99	0.50
2:B:1050:A:C5	2:B:2751:G:C6	3.00	0.50
2:B:1488:C:N3	2:B:1502:A:C2	2.80	0.50
2:B:2091:C:H3'	2:B:2092:U:C5'	2.41	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2151:U:C5	2:B:2153:C:H2'	2.46	0.50
2:B:2246:G:C6	2:B:2247:A:C5	2.98	0.50
2:B:2792:A:C6	2:B:2793:C:C5	2.99	0.50
4:K:13:ASN:HD21	4:K:96:GLY:HA3	1.76	0.50
5:L:122:VAL:HG13	5:L:125:LEU:HB2	1.92	0.50
12:R:23:GLU:H	12:R:23:GLU:CD	2.14	0.50
2:B:2340:A:C2	2:B:2341:G:C5	2.99	0.50
2:B:2729:G:H2'	2:B:2730:C:C6	2.46	0.50
2:B:2761:A:H2'	2:B:2762:C:C6	2.45	0.50
3:0:4:CYS:SG	3:0:6:VAL:HB	2.51	0.50
5:L:37:GLY:O	5:L:40:SER:HB3	2.11	0.50
19:X:448:VAL:C	19:X:450:GLY:H	2.14	0.50
2:B:535:G:C5	2:B:559:G:C6	3.00	0.50
2:B:553:G:H2'	2:B:554:U:O4'	2.11	0.50
2:B:603:A:C5	2:B:655:A:C4	3.00	0.50
2:B:687:C:H2'	2:B:688:U:C6	2.46	0.50
2:B:763:G:C6	2:B:765:C:N3	2.79	0.50
2:B:780:G:C2	2:B:782:A:C2	3.00	0.50
2:B:1445:G:C6	2:B:1446:C:C4	2.99	0.50
2:B:1544:A:C5	2:B:1545:A:C5	3.00	0.50
2:B:1661:G:C4	2:B:1662:U:C6	3.00	0.50
2:B:2292:U:H2'	2:B:2293:G:C8	2.46	0.50
10:P:61:ARG:HH11	10:P:63:ILE:CA	2.25	0.50
19:X:387:ILE:HA	19:X:390:MET:SD	2.51	0.50
21:Y:23:LYS:HA	21:Y:66:VAL:HB	1.93	0.50
2:B:357:C:H2'	2:B:358:U:C6	2.47	0.50
2:B:945:A:C2	2:B:2448:A:C4	2.99	0.50
2:B:947:A:C5	2:B:971:G:C2	2.99	0.50
2:B:1151:A:H4'	11:Q:80:ASN:OD1	2.12	0.50
2:B:1435:G:C2	2:B:1436:G:C4	3.00	0.50
2:B:1596:A:C2	2:B:1597:A:N3	2.80	0.50
2:B:2407:A:C4	2:B:2408:U:C5	2.99	0.50
5:L:68:SER:HB2	5:L:71:ALA:HB2	1.93	0.50
10:P:61:ARG:NH2	10:P:69:VAL:H	2.08	0.50
18:W:47:VAL:HG11	18:W:86:LEU:HD12	1.93	0.50
26:8:12:ARG:HE	26:8:13:ASN:HD21	1.59	0.50
2:B:136:G:C6	2:B:144:A:C6	2.99	0.50
2:B:367:G:C2	2:B:368:A:H1'	2.47	0.50
2:B:371:A:C8	2:B:373:U:C2	3.00	0.50
2:B:647:G:C6	2:B:648:G:C5	2.99	0.50
2:B:2206:C:H2'	2:B:2207:C:C6	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:Y:64:GLY:HA2	21:Y:83:ALA:HA	1.94	0.50
2:B:190:A:C6	2:B:191:A:C6	3.00	0.50
2:B:346:A:C5	2:B:347:A:C4	3.00	0.50
2:B:518:G:C4	2:B:519:U:C5	2.99	0.50
2:B:536:G:H1	2:B:557:C:N4	2.09	0.50
2:B:879:G:OP2	2:B:894:U:C5	2.65	0.50
2:B:952:G:C6	2:B:953:G:C5	3.00	0.50
2:B:1237:A:N3	2:B:1237:A:H2'	2.27	0.50
2:B:1274:A:H3'	2:B:1646:C:N4	2.26	0.50
2:B:1659:G:C4	2:B:1660:G:C8	3.00	0.50
2:B:2027:G:C2	2:B:2037:A:C5	2.99	0.50
2:B:2227:A:C4	2:B:2228:G:C8	3.00	0.50
2:B:2231:U:H2'	2:B:2232:C:H6	1.77	0.50
2:B:2293:G:C4	2:B:2294:G:C8	2.98	0.50
22:3:43:THR:HB	22:3:45:ASP:H	1.76	0.50
28:F:174:PHE:CG	28:F:175:PRO:HD2	2.47	0.50
2:B:195:A:H2'	2:B:198:C:H41	1.76	0.50
2:B:216:A:C5	2:B:217:A:C8	2.99	0.50
2:B:539:G:H2'	2:B:540:C:H6	1.75	0.50
2:B:639:U:C2	2:B:640:C:C5	3.00	0.50
2:B:864:G:C2	2:B:865:C:C2	3.00	0.50
2:B:1055:G:H21	2:B:1086:A:H1'	1.76	0.50
2:B:1070:A:H2	2:B:1096:A:HO2'	1.58	0.50
2:B:1139:G:N2	2:B:1140:C:H1'	2.27	0.50
2:B:1418:G:O6	2:B:1578:U:C6	2.64	0.50
2:B:1426:G:C6	2:B:1427:A:N1	2.80	0.50
2:B:2346:A:C6	2:B:2383:G:C6	3.00	0.50
2:B:2607:G:C6	2:B:2608:G:C5	2.99	0.50
2:B:2680:U:H2'	2:B:2681:C:C5	2.47	0.50
2:B:2697:G:H2'	2:B:2698:U:C6	2.47	0.50
10:P:6:GLN:HA	10:P:9:GLN:HE21	1.76	0.50
10:P:50:ARG:HA	10:P:57:ALA:H	1.77	0.50
19:X:448:VAL:C	19:X:450:GLY:N	2.65	0.50
2:B:86:G:H2'	2:B:87:U:C6	2.47	0.50
2:B:755:U:C2	2:B:756:A:C8	3.00	0.50
2:B:1214:A:H2'	2:B:1215:G:O4'	2.12	0.50
2:B:1478:G:C4	2:B:1479:G:C8	3.00	0.50
2:B:1799:G:C6	2:B:1819:A:C4	3.00	0.50
2:B:2081:U:C4	2:B:2237:G:C2	2.99	0.50
2:B:2219:U:H2'	2:B:2220:U:C6	2.47	0.50
2:B:2447:G:C5	2:B:2500:U:C5	3.00	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2464:G:C6	2:B:2487:G:C6	3.00	0.50
2:B:2813:A:C5	2:B:2814:A:C5	2.99	0.50
11:Q:57:ARG:HA	11:Q:60:TRP:CE3	2.47	0.50
23:5:58:ASN:N	23:5:171:ILE:HD13	2.27	0.50
27:C:74:PRO:HB3	27:C:115:ILE:O	2.12	0.50
27:C:173:LEU:HD22	27:C:173:LEU:N	2.27	0.50
2:B:204:A:C5	2:B:206:U:O4	2.65	0.49
2:B:639:U:N3	2:B:640:C:C4	2.80	0.49
2:B:1026:G:C4	2:B:1134:A:C2	2.99	0.49
2:B:2485:G:C6	2:B:2486:C:C5	3.00	0.49
2:B:2831:G:H4'	2:B:2883:A:C6	2.47	0.49
20:E:164:LEU:HD12	20:E:165:HIS:H	1.77	0.49
2:B:533:G:C6	2:B:534:U:C4	3.00	0.49
2:B:576:U:H2'	2:B:577:G:C8	2.46	0.49
2:B:1603:A:C2	2:B:1604:C:H1'	2.47	0.49
2:B:2094:A:H2'	2:B:2095:A:C8	2.48	0.49
2:B:2230:G:C5	2:B:2231:U:C5	3.00	0.49
2:B:2526:G:H2'	2:B:2527:C:C6	2.47	0.49
2:B:2674:G:C4	2:B:2675:A:C8	2.99	0.49
2:B:2819:G:C6	2:B:2821:A:C2	3.00	0.49
18:W:72:VAL:HA	18:W:94:ALA:H	1.78	0.49
2:B:29:U:H2'	2:B:30:G:C8	2.47	0.49
2:B:36:G:H4'	2:B:451:U:C5	2.47	0.49
2:B:40:U:H2'	2:B:41:C:C6	2.47	0.49
2:B:275:C:C5	2:B:276:U:C6	3.00	0.49
2:B:845:A:C6	2:B:932:U:H5	2.30	0.49
2:B:1022:G:C6	2:B:1140:C:C4	2.99	0.49
2:B:1128:G:C6	2:B:2518:A:C6	3.00	0.49
2:B:1195:G:C2	2:B:1196:C:C5	3.00	0.49
2:B:1318:U:H2'	2:B:1319:C:C6	2.47	0.49
2:B:1374:G:C6	2:B:1375:U:C4	3.01	0.49
2:B:1754:A:C2	2:B:1755:A:C5	2.99	0.49
2:B:1776:G:N1	2:B:1789:A:C5	2.80	0.49
2:B:2267:A:C8	2:B:2267:A:C3'	2.93	0.49
2:B:2353:G:H1	2:B:2364:C:H42	1.59	0.49
14:D:149:ASN:HB3	14:D:151:THR:H	1.77	0.49
2:B:46:G:C6	2:B:180:G:C2	3.00	0.49
2:B:97:C:H2'	2:B:98:G:C8	2.47	0.49
2:B:350:G:C5	2:B:351:C:C4	3.00	0.49
2:B:784:G:C6	2:B:792:A:C4	3.00	0.49
2:B:1155:A:C5	2:B:1157:G:C5	3.00	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1214:A:C5	2:B:1215:G:C5	3.01	0.49
2:B:1307:A:C6	2:B:1308:A:C4	2.99	0.49
2:B:1516:G:C6	2:B:1517:G:C5	3.00	0.49
2:B:1527:G:N2	2:B:1544:A:C8	2.80	0.49
2:B:2630:G:C5	2:B:2894:G:C6	3.00	0.49
2:B:2:G:C2	2:B:3:U:C2	3.00	0.49
2:B:111:A:C5	2:B:112:U:C5	3.01	0.49
2:B:120:U:C4	2:B:149:A:C6	3.00	0.49
2:B:540:C:H2'	2:B:541:A:C8	2.47	0.49
2:B:711:G:C2	2:B:712:G:C4	3.00	0.49
2:B:794:A:H2'	2:B:795:C:C6	2.47	0.49
2:B:943:A:C2	2:B:944:C:C2	3.01	0.49
2:B:1257:C:C2	2:B:1258:U:C5	3.01	0.49
2:B:1336:A:C2	2:B:1337:G:C5	3.01	0.49
2:B:1717:A:C6	2:B:1744:A:C8	3.01	0.49
2:B:1801:A:C4	2:B:2203:U:C5	3.00	0.49
2:B:1844:C:H2'	2:B:1845:G:C8	2.48	0.49
2:B:1893:C:C5	2:B:1894:C:C4	3.01	0.49
2:B:2037:A:C2	2:B:2038:G:C5	3.01	0.49
2:B:2287:A:N3	2:B:2287:A:H5''	2.27	0.49
2:B:2521:C:C4	2:B:2522:U:C4	3.00	0.49
2:B:2806:C:H2'	2:B:2807:U:C6	2.47	0.49
13:S:1:MET:HB2	13:S:63:GLY:HA2	1.94	0.49
26:8:24:ARG:HB3	26:8:36:ARG:HA	1.93	0.49
32:J:98:GLU:CD	32:J:98:GLU:H	2.16	0.49
2:B:533:G:C5	2:B:534:U:C5	3.01	0.49
2:B:679:C:C2	2:B:680:C:C5	3.00	0.49
2:B:825:A:C4	2:B:826:U:C5	3.00	0.49
2:B:909:A:C4	2:B:912:C:C5	3.00	0.49
2:B:947:A:C6	2:B:971:G:C2	3.00	0.49
2:B:1014:A:H2'	2:B:1015:U:C6	2.47	0.49
2:B:1401:G:C6	2:B:1402:U:C4	3.01	0.49
2:B:2159:G:C6	2:B:2161:C:C5	3.00	0.49
2:B:2398:U:O5'	2:B:2398:U:H6	1.94	0.49
20:E:105:LEU:HD23	20:E:108:ILE:HD12	1.93	0.49
2:B:801:G:H3'	2:B:802:A:C5'	2.43	0.49
2:B:1277:G:C2	2:B:1278:C:C2	3.00	0.49
2:B:1353:A:C6	2:B:1354:A:C2	3.01	0.49
2:B:1376:C:C2	2:B:1377:G:C4	3.01	0.49
2:B:1742:U:C4	2:B:1743:G:C6	3.00	0.49
2:B:1797:G:H1	2:B:1822:C:N4	2.09	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2370:G:C2	2:B:2371:G:C4	3.01	0.49
2:B:2398:U:O5'	2:B:2398:U:C6	2.66	0.49
1:A:10:G:C5	1:A:11:C:C5	3.01	0.49
2:B:721:A:C6	2:B:722:A:C5	3.00	0.49
2:B:1059:G:C6	2:B:1080:A:N1	2.81	0.49
2:B:1142:A:C4	2:B:1144:A:C8	3.00	0.49
2:B:1171:G:C6	2:B:1172:C:C4	3.00	0.49
2:B:1364:G:C6	2:B:1368:G:C6	3.00	0.49
2:B:1383:A:C6	2:B:1384:A:C6	3.01	0.49
2:B:2374:C:H2'	2:B:2375:G:C8	2.48	0.49
2:B:2578:G:H2'	2:B:2579:C:C6	2.48	0.49
29:G:90:GLY:HA3	29:G:93:TYR:CZ	2.47	0.49
2:B:492:A:C2	13:S:7:HIS:CE1	3.01	0.49
2:B:583:G:C5	2:B:584:C:C5	3.01	0.49
2:B:687:C:H3'	2:B:688:U:H6	1.77	0.49
2:B:983:A:C5	2:B:984:A:C5	3.01	0.49
2:B:2091:C:C4	2:B:2092:U:N3	2.80	0.49
2:B:2278:A:H2'	2:B:2279:G:H5''	1.94	0.49
2:B:2621:G:C5	2:B:2622:U:C4	3.01	0.49
2:B:2630:G:C6	2:B:2631:G:C6	3.01	0.49
13:S:58:ALA:HA	13:S:63:GLY:HA3	1.95	0.49
14:D:67:HIS:CE1	14:D:68:PHE:CE1	3.01	0.49
2:B:80:G:H4'	2:B:346:A:O4'	2.12	0.49
2:B:115:C:H2'	2:B:116:C:H6	1.78	0.49
2:B:190:A:C8	2:B:207:A:C6	3.00	0.49
2:B:436:C:C2	2:B:437:U:C5	3.01	0.49
2:B:611:C:C4	2:B:612:G:C5	3.01	0.49
2:B:723:C:H2'	2:B:724:U:O4'	2.13	0.49
2:B:807:U:H2'	2:B:808:G:O4'	2.13	0.49
2:B:1006:C:C2	2:B:1138:G:C2	3.01	0.49
2:B:1389:G:C5	2:B:1390:U:C5	3.01	0.49
2:B:1672:A:C4	2:B:2582:G:H5'	2.48	0.49
2:B:1689:A:C5	2:B:1700:A:C4	3.01	0.49
2:B:1744:A:C4	2:B:1745:A:C8	3.01	0.49
2:B:2373:G:H2'	2:B:2374:C:C6	2.48	0.49
2:B:2383:G:C5	2:B:2384:U:C5	3.01	0.49
2:B:2429:G:C8	2:B:2429:G:H3'	2.47	0.49
2:B:2636:C:H2'	2:B:2637:U:H6	1.77	0.49
2:B:2718:G:C6	2:B:2719:G:C5	3.00	0.49
2:B:647:G:C6	2:B:648:G:C6	3.01	0.48
2:B:825:A:C6	2:B:833:A:N1	2.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:978:G:C2	2:B:979:A:C4	3.01	0.48
2:B:1607:C:H5''	2:B:1608:A:C8	2.48	0.48
2:B:2330:G:C6	2:B:2331:G:C4	3.01	0.48
2:B:2505:G:O6	2:B:2576:G:C8	2.66	0.48
2:B:2688:G:N7	2:B:2719:G:C5	2.81	0.48
2:B:2790:U:C4	2:B:2893:A:C2	3.01	0.48
2:B:2885:G:H1	22:3:39:ARG:HB3	1.78	0.48
20:E:2:GLU:HG3	20:E:4:VAL:H	1.77	0.48
2:B:465:G:C2	2:B:466:A:C2	3.01	0.48
2:B:482:A:H4'	17:U:44:HIS:HB2	1.94	0.48
2:B:616:A:C8	2:B:617:G:C8	3.01	0.48
2:B:831:G:C4	2:B:832:U:C6	3.01	0.48
2:B:954:G:C5	2:B:955:U:C6	3.01	0.48
2:B:1444:G:O6	2:B:1445:G:C6	2.66	0.48
2:B:1896:G:C6	2:B:1897:G:C5	3.01	0.48
2:B:2110:G:O6	2:B:2120:G:C8	2.65	0.48
2:B:2869:G:H2'	2:B:2870:C:H6	1.78	0.48
23:5:57:GLN:HA	23:5:171:ILE:HD13	1.95	0.48
32:J:130:HIS:CE1	32:J:132:HIS:O	2.67	0.48
1:A:18:G:C2	1:A:67:G:C6	3.01	0.48
2:B:589:U:H2'	2:B:590:A:H8	1.78	0.48
2:B:644:A:H3'	2:B:644:A:C8	2.48	0.48
2:B:801:G:H4'	2:B:802:A:OP2	2.13	0.48
2:B:1153:C:C2	2:B:1154:G:C4	3.01	0.48
2:B:1298:C:H2'	2:B:1299:G:C8	2.49	0.48
2:B:1659:G:C6	2:B:2002:G:C6	3.02	0.48
2:B:2264:C:H41	21:Y:13:ARG:HH12	1.61	0.48
27:C:68:ARG:NH2	27:C:128:THR:H	2.11	0.48
2:B:475:C:C5	2:B:476:G:C5	3.02	0.48
2:B:770:G:C6	2:B:771:G:N7	2.81	0.48
2:B:854:C:N3	2:B:924:G:C6	2.81	0.48
2:B:1029:A:H3'	2:B:1030:C:C6	2.48	0.48
2:B:2214:C:C5	2:B:2215:C:C5	3.02	0.48
2:B:2796:U:C4	2:B:2801:G:C6	3.01	0.48
2:B:2815:C:H2'	2:B:2816:G:C8	2.48	0.48
2:B:2822:G:H1	8:N:2:ARG:NH2	2.11	0.48
32:J:131:ASN:OD1	32:J:132:HIS:CE1	2.66	0.48
1:A:81:G:C5	1:A:96:G:C2	3.01	0.48
2:B:379:G:C6	2:B:380:G:C5	3.02	0.48
2:B:911:A:C2	7:M:9:PHE:CD1	3.02	0.48
2:B:2813:A:C6	2:B:2814:A:C4	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:638:G:C5	2:B:639:U:C4	3.01	0.48
2:B:1132:U:C5	2:B:1133:A:C6	3.01	0.48
2:B:1301:A:C5	2:B:1303:G:C5	3.01	0.48
2:B:1307:A:C6	2:B:1308:A:C5	3.01	0.48
2:B:1314:C:C2	2:B:1315:C:C6	3.02	0.48
2:B:1773:A:H2'	2:B:1774:C:O4'	2.13	0.48
2:B:2227:A:C5	2:B:2228:G:C5	3.02	0.48
2:B:2745:C:C4	2:B:2746:U:C4	3.02	0.48
2:B:2792:A:C2	2:B:2805:C:C2	3.02	0.48
20:E:27:LEU:O	20:E:30:GLN:HB3	2.14	0.48
32:J:23:LYS:HZ3	32:J:28:LEU:HD13	1.79	0.48
1:A:55:U:H2'	1:A:56:G:C8	2.49	0.48
1:A:73:A:C4	1:A:104:A:C2	3.02	0.48
2:B:656:G:C2	2:B:657:U:C2	3.02	0.48
2:B:768:G:C5	2:B:769:U:C5	3.02	0.48
2:B:973:A:H1'	2:B:1188:U:C6	2.49	0.48
2:B:1166:G:H2'	2:B:1167:C:H6	1.78	0.48
2:B:1239:G:C2	2:B:1240:U:C2	3.01	0.48
2:B:1426:G:C6	2:B:1427:A:C6	3.02	0.48
2:B:2134:A:C5	2:B:2135:A:C2	3.01	0.48
15:T:2:ILE:HG13	15:T:3:ARG:H	1.77	0.48
21:Y:46:ALA:O	21:Y:80:SER:HA	2.14	0.48
27:C:24:HIS:CE1	27:C:27:LYS:O	2.66	0.48
27:C:52:HIS:CE1	27:C:218:THR:HA	2.49	0.48
2:B:1007:C:C6	2:B:1008:A:C8	3.01	0.48
2:B:1016:G:C6	2:B:1017:G:C5	3.01	0.48
2:B:1279:G:H4'	8:N:31:HIS:CD2	2.49	0.48
2:B:2286:G:C5	2:B:2346:A:C6	3.00	0.48
2:B:2311:A:H4'	2:B:2312:U:OP2	2.13	0.48
32:J:16:TYR:O	32:J:54:ILE:HA	2.14	0.48
2:B:137:U:H2'	2:B:138:U:C6	2.49	0.48
2:B:194:G:C4	2:B:195:A:C8	3.02	0.48
2:B:409:G:C6	2:B:410:G:C6	3.02	0.48
2:B:442:G:C2	2:B:444:C:C4	3.02	0.48
2:B:1198:U:H2'	2:B:1199:U:C5	2.48	0.48
2:B:1275:A:O2'	8:N:16:HIS:CE1	2.67	0.48
2:B:1444:G:C6	2:B:1445:G:C6	3.02	0.48
2:B:1450:G:C2	2:B:1462:C:C2	3.02	0.48
2:B:1630:A:C5	2:B:1631:G:C4	3.02	0.48
2:B:2094:A:C2	2:B:2196:C:C2	3.01	0.48
2:B:2273:A:C5	2:B:2274:A:C5	3.02	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2412:A:H2'	2:B:2413:G:C8	2.48	0.48
2:B:2774:C:H2'	2:B:2775:G:O4'	2.13	0.48
27:C:106:PRO:HA	27:C:194:VAL:HA	1.96	0.48
2:B:253:C:H2'	2:B:254:G:O4'	2.14	0.48
2:B:391:A:C2	2:B:411:G:C5	3.02	0.48
2:B:460:A:C2	2:B:470:A:C4	3.02	0.48
2:B:816:C:C4	2:B:1192:G:O6	2.66	0.48
2:B:983:A:C4	2:B:984:A:C8	3.02	0.48
2:B:1022:G:H22	2:B:1142:A:H2	1.62	0.48
2:B:1459:G:H3'	2:B:1460:U:H5'	1.95	0.48
2:B:2335:A:C5	2:B:2337:G:C4	3.02	0.48
2:B:2622:U:C2	2:B:2623:G:C8	3.02	0.48
12:R:54:VAL:HB	12:R:56:GLY:H	1.79	0.48
30:H:130:VAL:HG12	30:H:131:SER:N	2.29	0.48
2:B:460:A:C8	2:B:461:C:C5	3.02	0.47
2:B:590:A:C2	2:B:591:U:C2	3.02	0.47
2:B:748:G:C6	2:B:750:A:C6	3.02	0.47
2:B:954:G:C4	2:B:955:U:C6	3.02	0.47
2:B:975:A:H2	2:B:1156:A:C2	2.32	0.47
2:B:1053:C:O5'	2:B:1053:C:C6	2.67	0.47
2:B:1403:A:C4	2:B:1404:C:C6	3.02	0.47
2:B:1844:C:C2	2:B:1897:G:N2	2.82	0.47
2:B:2086:U:H1'	2:B:2234:G:C2	2.49	0.47
2:B:2255:G:H2'	2:B:2256:G:O4'	2.13	0.47
2:B:2323:G:C6	2:B:2324:U:C4	3.02	0.47
2:B:2459:A:H3'	2:B:2460:U:C6	2.49	0.47
2:B:2789:C:C4	2:B:2893:A:C2	3.01	0.47
19:X:448:VAL:O	19:X:448:VAL:HG12	2.12	0.47
2:B:301:G:C6	2:B:317:G:C5	3.02	0.47
2:B:393:C:C2	2:B:394:C:C5	3.02	0.47
2:B:415:A:H2'	2:B:416:U:C6	2.50	0.47
2:B:436:C:H2'	2:B:437:U:C6	2.49	0.47
2:B:823:C:C2	2:B:824:U:C5	3.03	0.47
2:B:1445:G:C5	2:B:1446:C:C4	3.02	0.47
2:B:2484:G:C6	2:B:2485:G:C5	3.02	0.47
4:K:66:LYS:HA	4:K:79:PHE:O	2.14	0.47
23:5:214:ILE:HG22	23:5:222:VAL:HG23	1.96	0.47
1:A:81:G:C6	1:A:96:G:C6	3.01	0.47
2:B:183:C:N4	2:B:213:A:H61	2.12	0.47
2:B:538:A:C4	2:B:556:A:C2	3.03	0.47
2:B:734:A:C5	2:B:735:A:C8	3.02	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1021:A:C2	2:B:1023:U:C2	3.02	0.47
2:B:1257:C:H4'	20:E:78:TRP:CH2	2.49	0.47
2:B:1265:A:C4	2:B:1267:U:C4	3.03	0.47
2:B:2115:G:H3'	2:B:2116:G:H5''	1.95	0.47
2:B:2290:G:C6	2:B:2291:U:C4	3.02	0.47
2:B:2314:A:C2	2:B:2315:G:C5	3.02	0.47
2:B:2567:G:C5	2:B:2568:U:C4	3.01	0.47
2:B:2766:A:C4	2:B:2767:C:C6	3.01	0.47
2:B:2809:A:C5	2:B:2810:A:C5	3.02	0.47
2:B:2850:A:C4	2:B:2851:A:C8	3.02	0.47
30:H:117:LEU:HD13	30:H:121:VAL:HG13	1.97	0.47
2:B:491:G:C6	2:B:492:A:C4	3.02	0.47
2:B:661:A:C2	2:B:662:G:C4	3.02	0.47
2:B:735:A:C6	2:B:736:C:C2	3.02	0.47
2:B:1014:A:C6	2:B:1015:U:N3	2.82	0.47
2:B:1056:G:H21	2:B:1103:A:H62	1.62	0.47
2:B:1173:U:C4	2:B:1174:U:C2	3.02	0.47
2:B:1477:A:C8	2:B:1478:G:C8	3.02	0.47
2:B:1477:A:C2	2:B:1515:A:C4	3.02	0.47
2:B:2004:G:C6	2:B:2005:A:C4	3.02	0.47
26:8:10:LEU:O	26:8:33:HIS:HE1	1.97	0.47
2:B:13:A:N3	2:B:526:A:C6	2.83	0.47
2:B:48:G:C4	2:B:178:G:N1	2.83	0.47
2:B:96:C:H2'	2:B:97:C:H6	1.79	0.47
2:B:1026:G:C6	2:B:1134:A:C6	3.02	0.47
2:B:1034:G:C5	2:B:1035:U:C5	3.03	0.47
2:B:1254:A:C8	2:B:1256:G:C8	3.03	0.47
2:B:1359:A:C8	2:B:1373:A:C2	3.03	0.47
2:B:1591:A:C2	2:B:1592:C:C2	3.02	0.47
2:B:1720:U:C5	2:B:1721:G:C5	3.03	0.47
2:B:17:G:H2'	2:B:18:U:C6	2.50	0.47
2:B:256:A:C2	2:B:257:C:C2	3.03	0.47
2:B:467:G:C6	2:B:468:G:C4	3.03	0.47
2:B:527:C:O2	2:B:2779:U:C4	2.68	0.47
2:B:571:U:C5	2:B:575:A:C5	3.02	0.47
2:B:871:U:H3	2:B:906:U:H3	1.63	0.47
2:B:934:U:N3	2:B:935:C:C4	2.83	0.47
2:B:1106:G:C6	2:B:1107:G:C5	3.02	0.47
2:B:1359:A:C8	2:B:1360:G:C8	3.03	0.47
2:B:1590:A:C2	2:B:1591:A:C5	3.03	0.47
2:B:2014:A:C2	2:B:2015:A:C2	3.03	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2065:C:H2'	2:B:2066:C:C6	2.49	0.47
2:B:2189:U:H2'	2:B:2190:G:C8	2.50	0.47
9:O:74:VAL:HA	9:O:77:ALA:HB3	1.95	0.47
20:E:134:LEU:HB2	20:E:160:ALA:HB1	1.96	0.47
27:C:116:GLN:OE1	27:C:116:GLN:HA	2.14	0.47
1:A:34:A:C2	1:A:49:C:C2	3.03	0.47
2:B:197:A:C5	2:B:2430:A:C4	3.03	0.47
2:B:265:A:H2'	2:B:266:G:C4'	2.45	0.47
2:B:270:A:C2	2:B:370:G:C4	3.02	0.47
2:B:279:A:H3'	2:B:280:U:H6	1.79	0.47
2:B:346:A:C6	2:B:347:A:C4	3.03	0.47
2:B:418:C:C4	2:B:419:U:C4	3.03	0.47
2:B:519:U:H2'	2:B:520:G:C8	2.50	0.47
2:B:687:C:H2'	2:B:687:C:O2	2.15	0.47
2:B:1014:A:C2	2:B:1015:U:C2	3.03	0.47
2:B:1251:C:OP2	11:Q:5:ARG:HG2	2.15	0.47
2:B:1386:C:H2'	2:B:1387:A:C8	2.49	0.47
2:B:2038:G:H2'	2:B:2039:U:C6	2.49	0.47
2:B:2115:G:O2'	2:B:2119:A:C6	2.67	0.47
2:B:2221:G:C6	2:B:2222:C:C4	3.03	0.47
2:B:2325:G:C4	2:B:2326:C:C5	3.03	0.47
2:B:2325:G:C5	2:B:2326:C:C5	3.02	0.47
2:B:2407:A:C2	2:B:2408:U:C2	3.02	0.47
2:B:2452:C:C5	2:B:2453:A:N6	2.83	0.47
2:B:2485:G:C5	2:B:2486:C:C5	3.03	0.47
2:B:2547:A:C6	2:B:2562:U:C4	3.02	0.47
2:B:2623:G:H2'	2:B:2624:G:C8	2.49	0.47
2:B:2721:A:C2	2:B:2873:A:C2	3.03	0.47
2:B:2758:A:C5	2:B:2759:G:C8	3.03	0.47
14:D:23:PRO:C	14:D:24:VAL:HG23	2.34	0.47
19:X:409:TYR:OH	19:X:411:HIS:CE1	2.67	0.47
21:Y:19:ARG:H	21:Y:36:ILE:HG12	1.80	0.47
2:B:701:G:C4	2:B:702:U:C6	3.02	0.47
2:B:1445:G:C4	2:B:1446:C:C6	3.03	0.47
2:B:1613:G:C5	2:B:1617:C:C4	3.03	0.47
2:B:2070:A:H2'	2:B:2071:A:C8	2.46	0.47
2:B:2075:U:O4	2:B:2238:G:C5	2.68	0.47
2:B:2638:G:C6	2:B:2775:G:C4	3.02	0.47
2:B:2895:G:C2	2:B:2896:C:H1'	2.50	0.47
7:M:41:LEU:HB2	7:M:94:ALA:HB3	1.97	0.47
2:B:114:U:H2'	2:B:115:C:C6	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:152:A:H2'	2:B:153:U:H6	1.78	0.47
2:B:323:C:C4	2:B:333:G:C5	3.03	0.47
2:B:560:C:H3'	2:B:561:G:H8	1.78	0.47
2:B:701:G:C6	2:B:702:U:C4	3.03	0.47
2:B:735:A:C8	2:B:736:C:C5	3.03	0.47
2:B:923:G:C2	2:B:924:G:C8	3.03	0.47
2:B:1016:G:N1	2:B:1017:G:C5	2.82	0.47
2:B:1441:G:C6	2:B:1442:U:C4	3.03	0.47
2:B:1677:A:C2	2:B:1678:A:C4	3.03	0.47
2:B:1759:A:C4	2:B:2697:G:H1'	2.50	0.47
2:B:1776:G:C6	2:B:1789:A:C6	3.02	0.47
2:B:1797:G:C5	2:B:1798:U:C4	3.02	0.47
2:B:2104:C:C2	2:B:2186:G:C2	3.03	0.47
2:B:2209:G:C4	2:B:2210:U:C5	3.03	0.47
2:B:2273:A:H2'	2:B:2274:A:C8	2.50	0.47
2:B:2748:A:N6	2:B:2749:A:C6	2.83	0.47
19:X:279:LEU:HD23	19:X:282:ILE:HD12	1.95	0.47
27:C:104:LEU:O	27:C:105:ALA:HB3	2.14	0.47
2:B:5:A:H2'	2:B:6:A:C8	2.50	0.47
2:B:482:A:C2	2:B:506:G:C5	3.03	0.47
2:B:866:A:C6	2:B:914:G:C5	3.02	0.47
2:B:943:A:C6	2:B:944:C:C4	3.03	0.47
2:B:974:G:C4	2:B:1186:G:C2	3.03	0.47
2:B:1120:G:C5	2:B:1121:C:C5	3.02	0.47
2:B:1642:G:N1	2:B:1643:G:C5	2.83	0.47
2:B:2168:G:H3'	2:B:2168:G:C8	2.49	0.47
2:B:2346:A:C8	2:B:2383:G:C4	3.03	0.47
19:X:72:ALA:O	19:X:76:LEU:HG	2.15	0.47
19:X:165:ASP:O	19:X:166:LEU:HG	2.15	0.47
2:B:363:G:H2'	2:B:364:C:H6	1.80	0.46
2:B:519:U:H2'	2:B:520:G:H8	1.80	0.46
2:B:684:G:C2	2:B:774:G:C6	3.04	0.46
2:B:809:G:H2'	2:B:810:U:C6	2.49	0.46
2:B:971:G:N7	2:B:972:A:C5	2.83	0.46
2:B:1309:G:H21	2:B:1611:C:C4'	2.29	0.46
2:B:1473:G:C6	2:B:1519:G:C6	3.04	0.46
2:B:1676:A:C6	2:B:1677:A:C5	3.03	0.46
2:B:2080:A:C2	2:B:2241:A:C5	3.03	0.46
2:B:2374:C:H2'	2:B:2375:G:H8	1.79	0.46
2:B:2647:U:H2'	2:B:2648:G:H8	1.79	0.46
13:S:71:VAL:HA	13:S:107:VAL:HA	1.96	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:X:286:ASN:HD22	19:X:287:VAL:HG23	1.80	0.46
20:E:29:HIS:HA	20:E:32:VAL:CG2	2.45	0.46
25:7:15:LYS:HA	25:7:21:PHE:CD2	2.50	0.46
2:B:68:G:C5	2:B:69:C:C5	3.03	0.46
2:B:234:U:C2	2:B:235:U:C6	3.03	0.46
2:B:499:U:H2'	2:B:500:G:C8	2.50	0.46
2:B:1527:G:N2	2:B:1544:A:H8	2.14	0.46
2:B:1811:G:C5	2:B:1812:U:C5	3.03	0.46
2:B:1975:G:C6	2:B:1976:U:N3	2.83	0.46
2:B:2027:G:C2	2:B:2037:A:C6	3.03	0.46
2:B:2317:A:C2	2:B:2318:G:H1'	2.50	0.46
2:B:2327:A:H2'	2:B:2327:A:N3	2.30	0.46
2:B:2660:A:N6	2:B:2661:G:C2	2.83	0.46
2:B:2744:G:C2	2:B:2745:C:C6	3.03	0.46
2:B:2802:G:C2	2:B:2803:G:C4	3.03	0.46
14:D:109:VAL:HG11	14:D:193:VAL:CG1	2.45	0.46
19:X:285:ALA:O	19:X:314:ARG:HD3	2.15	0.46
2:B:194:G:C5	2:B:195:A:C5	3.03	0.46
2:B:244:A:C4	2:B:255:A:C5	3.04	0.46
2:B:464:U:C4	2:B:465:G:C6	3.04	0.46
2:B:465:G:C5	2:B:466:A:C6	3.04	0.46
2:B:569:U:C4	2:B:2498:C:H5''	2.51	0.46
2:B:675:A:C6	2:B:676:A:C6	3.03	0.46
2:B:1004:U:H1'	2:B:1010:A:C5	2.50	0.46
2:B:1050:A:C6	2:B:1051:G:C5	3.03	0.46
2:B:1346:G:C5	2:B:1347:A:C5	3.03	0.46
2:B:1643:G:C5	2:B:1644:C:C5	3.04	0.46
2:B:2265:U:H2'	2:B:2266:A:C8	2.51	0.46
2:B:2543:G:C6	2:B:2765:A:C5	3.04	0.46
2:B:2744:G:C5	2:B:2745:C:C5	3.03	0.46
25:7:23:HIS:CE1	25:7:25:HIS:CE1	3.04	0.46
32:J:35:ARG:HA	32:J:40:HIS:CD2	2.50	0.46
2:B:80:G:N1	2:B:107:G:C6	2.84	0.46
2:B:323:C:C5	2:B:333:G:C8	3.03	0.46
2:B:422:A:C6	2:B:423:A:C6	3.04	0.46
2:B:460:A:C5	2:B:461:C:C2	3.04	0.46
2:B:551:G:C6	2:B:552:U:C4	3.03	0.46
2:B:677:A:C5	2:B:678:C:C5	3.04	0.46
2:B:751:A:C2	13:S:91:GLY:HA3	2.50	0.46
2:B:822:G:C6	2:B:823:C:C4	3.03	0.46
2:B:1144:A:C5	2:B:1145:C:C4	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1292:G:H2'	2:B:1293:C:C6	2.50	0.46
2:B:1400:U:C4	2:B:1401:G:C6	3.04	0.46
2:B:1999:C:H2'	2:B:2000:C:O4'	2.15	0.46
2:B:2020:A:C4	2:B:2022:U:C5	3.04	0.46
2:B:2347:C:C2	2:B:2348:U:C6	3.03	0.46
12:R:49:ILE:HD13	12:R:51:VAL:O	2.15	0.46
19:X:338:LEU:HA	19:X:341:ARG:HH21	1.79	0.46
28:F:159:ALA:HB1	28:F:161:SER:H	1.80	0.46
2:B:83:A:H2'	2:B:84:A:C8	2.51	0.46
2:B:138:U:H2'	2:B:140:C:C5	2.50	0.46
2:B:257:C:C5	2:B:258:G:C8	3.04	0.46
2:B:483:A:C8	17:U:44:HIS:ND1	2.83	0.46
2:B:711:G:C2	2:B:721:A:C2	3.03	0.46
2:B:719:C:C4	2:B:720:U:C4	3.03	0.46
2:B:785:G:C5	2:B:786:C:C5	3.04	0.46
2:B:874:G:C6	2:B:904:G:C6	3.03	0.46
2:B:891:G:H2'	2:B:892:A:N7	2.29	0.46
2:B:1022:G:C5	2:B:1140:C:C4	3.03	0.46
2:B:1228:G:C6	2:B:1229:C:C4	3.04	0.46
2:B:1383:A:C2	2:B:1384:A:C5	3.04	0.46
2:B:1404:C:C2	2:B:1405:U:C5	3.02	0.46
2:B:1693:U:C4	2:B:1977:A:C4	3.03	0.46
2:B:1799:G:C6	2:B:1819:A:C2	3.04	0.46
2:B:2796:U:C4	2:B:2798:U:C6	3.03	0.46
2:B:2849:U:H5'	2:B:2868:A:C5	2.51	0.46
10:P:12:MET:HA	10:P:76:HIS:CE1	2.51	0.46
14:D:126:ASN:O	14:D:127:PHE:CD1	2.68	0.46
17:U:10:VAL:HA	17:U:71:ILE:HA	1.98	0.46
21:Y:53:GLY:O	21:Y:56:HIS:CE1	2.69	0.46
2:B:583:G:C5	2:B:584:C:C4	3.03	0.46
2:B:760:G:H2'	2:B:761:A:C8	2.51	0.46
2:B:941:A:C5	2:B:942:G:C5	3.03	0.46
2:B:952:G:C6	2:B:966:G:C6	3.03	0.46
2:B:1057:A:C2	2:B:1082:U:C2	3.04	0.46
2:B:1326:U:C4	2:B:1648:U:H1'	2.51	0.46
2:B:1545:A:C6	2:B:1546:G:C4	3.04	0.46
2:B:1630:A:C5	2:B:1631:G:C5	3.04	0.46
2:B:1895:C:H1'	19:X:357:HIS:CE1	2.51	0.46
2:B:2002:G:C2	2:B:2003:A:C8	3.04	0.46
2:B:2286:G:N7	19:X:147:HIS:CG	2.84	0.46
2:B:2727:A:C5	2:B:2728:U:C5	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:D:5:VAL:HG21	14:D:80:TRP:CD2	2.51	0.46
28:F:23:SER:HB2	28:F:26:GLN:HB2	1.97	0.46
31:I:53:PRO:HD2	31:I:77:VAL:HG13	1.98	0.46
2:B:39:G:H2'	2:B:40:U:C6	2.51	0.46
2:B:117:G:C6	2:B:119:A:C6	3.04	0.46
2:B:169:G:H2'	2:B:170:U:C6	2.51	0.46
2:B:289:G:H2'	2:B:290:U:C6	2.51	0.46
2:B:346:A:C2	2:B:347:A:C5	3.03	0.46
2:B:719:C:C5	2:B:720:U:C5	3.03	0.46
2:B:721:A:C6	2:B:722:A:C6	3.04	0.46
2:B:1014:A:C6	2:B:1149:G:C6	3.03	0.46
2:B:1025:G:C6	2:B:1135:C:C6	3.03	0.46
2:B:1295:C:C2	2:B:1296:G:C8	3.03	0.46
2:B:1358:G:O6	2:B:1371:G:C8	2.69	0.46
2:B:1569:A:C6	2:B:1570:A:C4	3.04	0.46
2:B:1633:G:C2	2:B:1635:A:H1'	2.51	0.46
2:B:1667:G:H22	2:B:1991:U:H3'	1.80	0.46
2:B:1799:G:C5	2:B:1819:A:C2	3.04	0.46
2:B:1802:A:H2'	2:B:1803:A:C8	2.50	0.46
2:B:2198:A:C2	30:H:29:PHE:HB2	2.51	0.46
2:B:2250:G:C6	7:M:83:GLY:HA3	2.51	0.46
2:B:2813:A:C5	2:B:2814:A:C4	3.03	0.46
20:E:13:THR:HG22	20:E:15:SER:H	1.81	0.46
23:5:60:ARG:HG2	23:5:164:ARG:HE	1.80	0.46
2:B:6:A:H2'	2:B:7:G:C8	2.50	0.46
2:B:149:A:C6	2:B:150:U:C4	3.04	0.46
2:B:260:G:C4	2:B:261:G:C8	3.04	0.46
2:B:379:G:N1	2:B:396:G:C6	2.84	0.46
2:B:391:A:C8	2:B:392:U:C5	3.04	0.46
2:B:518:G:H2'	2:B:519:U:C6	2.51	0.46
2:B:577:G:H2'	2:B:578:G:C8	2.51	0.46
2:B:609:A:H2'	2:B:610:C:O4'	2.15	0.46
2:B:629:G:H1	2:B:634:C:H42	1.63	0.46
2:B:921:C:C2	2:B:922:C:C6	3.04	0.46
2:B:952:G:C6	2:B:953:G:N7	2.84	0.46
2:B:959:A:H2'	2:B:960:A:C8	2.50	0.46
2:B:969:G:H2'	2:B:970:U:H6	1.79	0.46
2:B:1002:G:O6	2:B:1003:G:C6	2.68	0.46
2:B:1020:A:N1	2:B:1141:U:C2	2.84	0.46
2:B:1410:G:C6	2:B:1411:U:C4	3.03	0.46
2:B:1410:G:C5	2:B:1411:U:C4	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1544:A:H3'	2:B:1545:A:C8	2.51	0.46
2:B:1640:A:C5	2:B:1641:A:C4	3.03	0.46
2:B:1770:G:C6	2:B:1983:G:C6	3.03	0.46
2:B:2331:G:C6	2:B:2332:C:C4	3.03	0.46
2:B:2523:G:C5	2:B:2765:A:N6	2.84	0.46
10:P:56:SER:N	10:P:75:THR:HG23	2.31	0.46
18:W:88:HIS:CD2	18:W:89:ILE:N	2.83	0.46
2:B:138:U:H2'	2:B:140:C:C4	2.51	0.46
2:B:332:A:C2	2:B:335:C:C5	3.04	0.46
2:B:928:A:C6	2:B:929:U:C4	3.04	0.46
2:B:1147:A:C5	2:B:1148:U:C5	3.04	0.46
2:B:1286:A:C6	2:B:1329:U:C2	3.03	0.46
2:B:1401:G:C2	2:B:1402:U:C2	3.04	0.46
2:B:1426:G:C5	2:B:1427:A:C5	3.04	0.46
2:B:1519:G:C6	2:B:1520:U:C4	3.04	0.46
2:B:1549:A:H2'	2:B:1550:C:C6	2.51	0.46
2:B:2065:C:H2'	2:B:2066:C:H6	1.81	0.46
2:B:2164:C:C5'	2:B:2173:A:H5'	2.46	0.46
2:B:2231:U:H2'	2:B:2232:C:C6	2.51	0.46
2:B:2246:G:H2'	2:B:2247:A:C8	2.51	0.46
2:B:2269:G:C6	2:B:2270:A:H1'	2.51	0.46
2:B:2819:G:C2	2:B:2821:A:C4	3.04	0.46
8:N:33:ILE:HB	8:N:114:GLU:HB3	1.98	0.46
1:A:54:G:C6	1:A:55:U:C4	3.03	0.46
2:B:170:U:N3	2:B:171:U:C4	2.84	0.46
2:B:182:A:C5	2:B:183:C:C5	3.04	0.46
2:B:207:A:H2'	2:B:208:C:O4'	2.16	0.46
2:B:471:A:C5	2:B:472:A:C5	3.04	0.46
2:B:587:C:C5	2:B:671:C:C2	3.04	0.46
2:B:713:G:H2'	2:B:714:U:N1	2.31	0.46
2:B:721:A:C5	2:B:722:A:N7	2.84	0.46
2:B:822:G:H2'	2:B:823:C:C6	2.51	0.46
2:B:834:G:C6	2:B:835:C:C4	3.04	0.46
2:B:858:G:N3	2:B:2268:A:C2	2.84	0.46
2:B:911:A:H2'	7:M:9:PHE:CZ	2.51	0.46
2:B:939:G:C2	2:B:940:G:C4	3.04	0.46
2:B:1271:G:C2	2:B:1617:C:H4'	2.51	0.46
2:B:1286:A:C4	2:B:1289:C:C5	3.03	0.46
2:B:1388:G:H1	2:B:1399:C:H42	1.64	0.46
2:B:1797:G:C2	2:B:1823:G:C6	3.04	0.46
2:B:2243:U:N3	2:B:2244:U:C4	2.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2373:G:C4	2:B:2381:A:C2	3.04	0.46
26:8:17:VAL:HG12	26:8:18:LYS:N	2.31	0.46
28:F:92:GLY:O	28:F:96:TRP:CD2	2.68	0.46
2:B:149:A:C5	2:B:150:U:C5	3.03	0.45
2:B:520:G:C5	2:B:521:U:C5	3.04	0.45
2:B:579:G:C6	2:B:580:U:O4	2.69	0.45
2:B:587:C:C5	2:B:671:C:H1'	2.52	0.45
2:B:675:A:N6	2:B:804:A:C8	2.84	0.45
2:B:798:G:O2'	2:B:799:G:H5'	2.15	0.45
2:B:869:G:C2	2:B:909:A:C2	3.04	0.45
2:B:1160:G:H2'	2:B:1161:C:C6	2.50	0.45
2:B:1213:A:H2'	2:B:1214:A:C8	2.51	0.45
2:B:1496:A:H2'	2:B:1498:C:C4	2.51	0.45
2:B:2029:G:C2	2:B:2033:A:N7	2.84	0.45
2:B:2095:A:C2	2:B:2195:U:C2	3.04	0.45
2:B:2220:U:H2'	2:B:2221:G:C8	2.51	0.45
2:B:2415:G:C5	2:B:2416:C:C5	3.03	0.45
2:B:2575:C:H5'	14:D:149:ASN:HD22	1.81	0.45
32:J:77:HIS:CE1	32:J:83:GLY:C	2.89	0.45
2:B:44:A:C2	2:B:45:G:C4	3.04	0.45
2:B:54:G:H1'	24:6:35:ARG:HH11	1.82	0.45
2:B:96:C:H2'	2:B:97:C:C6	2.52	0.45
2:B:617:G:C6	2:B:618:G:C5	3.04	0.45
2:B:639:U:H2'	2:B:640:C:C6	2.51	0.45
2:B:647:G:H2'	2:B:648:G:C8	2.51	0.45
2:B:706:A:C2	2:B:707:G:H1'	2.51	0.45
2:B:841:G:C6	2:B:842:U:C4	3.04	0.45
2:B:841:G:C6	2:B:938:G:C6	3.04	0.45
2:B:1321:A:C8	2:B:1322:A:C8	3.03	0.45
2:B:1333:G:C4	2:B:1334:G:C8	3.04	0.45
2:B:2151:U:H2'	2:B:2153:C:C5	2.51	0.45
2:B:2314:A:H2'	2:B:2315:G:C8	2.51	0.45
2:B:2393:U:H2'	2:B:2394:C:O4'	2.16	0.45
9:O:72:ALA:HA	9:O:75:GLY:HA3	1.98	0.45
19:X:255:ILE:HG13	19:X:256:ASP:H	1.80	0.45
2:B:30:G:C5	2:B:31:C:C4	3.04	0.45
2:B:701:G:C4	2:B:702:U:C5	3.03	0.45
2:B:832:U:H2'	2:B:833:A:H8	1.81	0.45
2:B:975:A:C4	2:B:990:A:C5	3.04	0.45
2:B:1412:U:H2'	2:B:1413:A:C8	2.51	0.45
2:B:1434:A:C6	2:B:1435:G:C6	3.05	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1799:G:C2	2:B:1819:A:C5	3.04	0.45
2:B:2236:U:H2'	2:B:2237:G:H8	1.81	0.45
2:B:2392:A:C5	2:B:2393:U:C6	3.04	0.45
2:B:2636:C:C2	2:B:2637:U:C6	3.04	0.45
11:Q:60:TRP:CD2	11:Q:93:ILE:HB	2.51	0.45
24:6:39:ARG:HH11	24:6:39:ARG:HG3	1.81	0.45
2:B:160:A:C2	2:B:161:A:C2	3.05	0.45
2:B:222:A:C8	2:B:224:U:C6	3.05	0.45
2:B:575:A:C2	2:B:576:U:C5	3.04	0.45
2:B:617:G:C4	2:B:618:G:C8	3.05	0.45
2:B:795:C:C4	2:B:796:C:H5	2.34	0.45
2:B:939:G:C6	2:B:940:G:C5	3.05	0.45
2:B:983:A:H2'	2:B:984:A:C8	2.52	0.45
2:B:1214:A:H2'	2:B:1215:G:C8	2.51	0.45
2:B:1266:G:C4	2:B:2012:G:O6	2.70	0.45
2:B:1269:A:C5	2:B:1270:C:C5	3.04	0.45
2:B:2297:A:C5	2:B:2320:U:C2	3.04	0.45
2:B:2454:G:N2	2:B:2499:C:C6	2.84	0.45
2:B:2517:C:C5	2:B:2542:A:C5	3.04	0.45
2:B:2528:U:C5	2:B:2530:A:C5	3.04	0.45
2:B:2630:G:C6	2:B:2631:G:C5	3.05	0.45
2:B:2650:U:H2'	2:B:2651:C:C6	2.51	0.45
3:0:32:LEU:H	3:0:32:LEU:HG	1.55	0.45
18:W:19:ARG:O	18:W:22:ALA:HB3	2.17	0.45
28:F:100:GLU:HA	28:F:100:GLU:OE1	2.17	0.45
2:B:83:A:C5	2:B:101:A:OP1	2.69	0.45
2:B:950:G:C6	2:B:951:C:C4	3.05	0.45
2:B:1009:A:H2'	2:B:1010:A:C5	2.51	0.45
2:B:1029:A:H3'	2:B:1030:C:H6	1.81	0.45
2:B:1131:G:C2	32:J:77:HIS:CG	3.03	0.45
2:B:1160:G:H2'	2:B:1161:C:H6	1.81	0.45
2:B:1218:G:N1	2:B:1232:G:C5	2.85	0.45
2:B:1315:C:C2	2:B:1316:U:C5	3.04	0.45
2:B:1670:C:C4	2:B:1671:U:C2	3.05	0.45
2:B:2440:C:N3	2:B:2441:U:H1'	2.32	0.45
2:B:2568:U:H2'	2:B:2569:G:O4'	2.17	0.45
15:T:31:VAL:HG12	15:T:84:TYR:HA	1.97	0.45
2:B:96:C:H4'	6:1:41:HIS:CG	2.51	0.45
2:B:479:A:C2	2:B:480:A:C4	3.05	0.45
2:B:527:C:N3	2:B:2779:U:C6	2.84	0.45
2:B:822:G:C6	2:B:836:G:C5	3.04	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1284:A:C4	2:B:1285:A:C8	3.05	0.45
2:B:2084:C:C6	2:B:2085:U:C5	3.05	0.45
2:B:2327:A:C5	2:B:2328:A:C5	3.04	0.45
2:B:2500:U:O2	2:B:2504:U:C4	2.70	0.45
2:B:2511:U:O2	2:B:2578:G:C6	2.69	0.45
2:B:2607:G:O6	2:B:2608:G:C6	2.70	0.45
13:S:88:ARG:O	13:S:89:ALA:HB2	2.16	0.45
2:B:17:G:C6	2:B:18:U:C4	3.04	0.45
2:B:93:G:C6	2:B:94:A:C5	3.04	0.45
2:B:149:A:C4	2:B:150:U:C6	3.05	0.45
2:B:327:G:H2'	2:B:328:U:C6	2.52	0.45
2:B:612:G:C5	2:B:614:A:C6	3.05	0.45
2:B:749:A:C2	2:B:750:A:C8	3.05	0.45
2:B:809:G:C5	2:B:810:U:C4	3.05	0.45
2:B:816:C:N3	2:B:1192:G:C6	2.84	0.45
2:B:1432:G:H2'	2:B:1433:A:C8	2.52	0.45
2:B:1637:A:C5	2:B:1638:C:C5	3.05	0.45
2:B:2025:C:C4	2:B:2026:U:C4	3.05	0.45
2:B:2051:A:C6	2:B:2614:A:C4	3.03	0.45
2:B:2834:G:C6	2:B:2879:A:C8	3.05	0.45
28:F:105:ILE:HG23	28:F:109:ARG:NE	2.23	0.45
30:H:3:VAL:HB	30:H:36:ALA:HB1	1.99	0.45
32:J:33:ALA:HA	32:J:36:LEU:HB3	1.98	0.45
2:B:70:G:C2	2:B:114:U:C4	3.05	0.45
2:B:103:A:C5	2:B:104:A:C5	3.05	0.45
2:B:387:U:C2	2:B:388:G:C5	3.05	0.45
2:B:621:A:H3'	2:B:622:G:H8	1.82	0.45
2:B:684:G:C6	2:B:774:G:C8	3.05	0.45
2:B:1168:G:C6	2:B:1169:A:C6	3.05	0.45
2:B:1376:C:H2'	2:B:1377:G:C8	2.51	0.45
2:B:1778:U:H2'	2:B:1784:A:N6	2.32	0.45
2:B:1789:A:C2	2:B:1790:C:C2	3.04	0.45
2:B:1815:A:C5	2:B:1817:G:C6	3.05	0.45
2:B:2397:G:C6	2:B:2420:C:C2	3.05	0.45
2:B:2823:A:C5	2:B:2824:C:C5	3.05	0.45
5:L:106:GLU:HB2	5:L:107:PHE:CD2	2.52	0.45
15:T:29:THR:HA	15:T:86:THR:HA	1.99	0.45
28:F:15:LEU:HD13	28:F:28:PRO:HD2	1.98	0.45
28:F:74:ALA:HA	28:F:77:LYS:HD2	1.99	0.45
2:B:28:A:H1'	2:B:513:A:C2	2.52	0.45
2:B:151:C:H2'	2:B:152:A:H8	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:324:A:C6	2:B:325:G:C4	3.04	0.45
2:B:406:G:C6	2:B:407:G:C5	3.05	0.45
2:B:416:U:C2	2:B:417:C:C6	3.05	0.45
2:B:497:A:H2'	2:B:498:G:C8	2.51	0.45
2:B:565:C:C4	2:B:566:U:C5	3.05	0.45
2:B:748:G:C8	2:B:750:A:C8	3.04	0.45
2:B:748:G:C2	2:B:750:A:N6	2.85	0.45
2:B:1051:G:C6	2:B:1052:C:C4	3.05	0.45
2:B:1291:C:C2	2:B:1292:G:C8	3.05	0.45
2:B:1435:G:C6	2:B:1436:G:C6	3.05	0.45
2:B:1455:G:C6	2:B:1456:G:C5	3.05	0.45
2:B:2016:U:H2'	2:B:2017:U:C6	2.52	0.45
2:B:2353:G:C6	2:B:2354:C:C4	3.05	0.45
2:B:2373:G:C6	2:B:2381:A:C6	3.04	0.45
2:B:2702:G:C6	2:B:2703:C:C4	3.05	0.45
9:O:62:LEU:HD22	9:O:62:LEU:N	2.32	0.45
11:Q:46:TYR:HA	11:Q:49:ARG:HE	1.81	0.45
27:C:61:TYR:CG	27:C:62:ARG:N	2.85	0.45
32:J:77:HIS:CE1	32:J:83:GLY:CA	3.00	0.45
1:A:63:C:H2'	1:A:64:G:C8	2.52	0.45
2:B:402:A:C8	2:B:403:U:C5	3.05	0.45
2:B:545:U:O2	2:B:545:U:H2'	2.16	0.45
2:B:579:G:C6	2:B:1262:A:C5	3.04	0.45
2:B:865:C:H42	2:B:912:C:H42	1.65	0.45
2:B:875:G:H3'	2:B:876:C:C6	2.52	0.45
2:B:905:A:C6	2:B:906:U:C5	3.05	0.45
2:B:1136:G:C4	2:B:1137:G:C8	3.04	0.45
2:B:1785:A:C4	2:B:1787:A:C8	3.05	0.45
2:B:2290:G:C5	2:B:2291:U:C5	3.05	0.45
2:B:2367:G:C5	2:B:2368:C:C5	3.06	0.45
2:B:2468:A:H2'	2:B:2476:A:C6	2.52	0.45
2:B:2579:C:H2'	2:B:2580:U:C6	2.51	0.45
2:B:2748:A:C6	2:B:2749:A:C5	3.05	0.45
2:B:2765:A:C2'	2:B:2766:A:H5'	2.46	0.45
2:B:2825:G:N1	2:B:2826:A:C5	2.85	0.45
4:K:73:ASP:HB2	14:D:13:ARG:HH22	1.82	0.45
10:P:21:PRO:HA	10:P:23:ASP:OD1	2.17	0.45
11:Q:97:ILE:O	11:Q:97:ILE:HG22	2.16	0.45
15:T:29:THR:HG22	15:T:86:THR:HA	1.97	0.45
23:5:79:THR:HB	23:5:84:ALA:HB1	1.99	0.45
27:C:140:VAL:HA	27:C:190:THR:O	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:169:G:C5	2:B:170:U:C4	3.05	0.44
2:B:299:A:C2	2:B:322:A:C8	3.05	0.44
2:B:579:G:C5	2:B:580:U:C5	3.05	0.44
2:B:629:G:C4	2:B:630:G:C8	3.06	0.44
2:B:1034:G:C6	2:B:1035:U:C4	3.05	0.44
2:B:1085:A:C8	2:B:1086:A:C4	3.06	0.44
2:B:1133:A:C2	2:B:2038:G:N2	2.85	0.44
2:B:1401:G:H2'	2:B:1402:U:C6	2.52	0.44
2:B:1490:A:H62	2:B:1501:G:H21	1.65	0.44
2:B:1664:A:C5	2:B:2726:A:C6	3.05	0.44
2:B:1797:G:C2	2:B:1798:U:C2	3.05	0.44
2:B:1897:G:C6	2:B:1898:U:C4	3.05	0.44
2:B:2016:U:N3	2:B:2017:U:C4	2.85	0.44
2:B:2036:C:H2'	2:B:2037:A:H8	1.83	0.44
2:B:2236:U:H2'	2:B:2237:G:C8	2.52	0.44
2:B:2358:A:C4	2:B:2359:C:C5	3.04	0.44
2:B:2454:G:C2	2:B:2499:C:C5	3.05	0.44
2:B:2478:A:C6	2:B:2479:U:C2	3.05	0.44
2:B:2495:G:C5	2:B:2496:C:C5	3.05	0.44
2:B:2867:G:C6	10:P:20:ARG:CZ	3.00	0.44
13:S:4:ILE:HG22	13:S:106:VAL:HG22	1.99	0.44
1:A:15:A:H3'	1:A:16:G:C8	2.53	0.44
2:B:356:G:C2	2:B:357:C:C2	3.04	0.44
2:B:847:U:C5	2:B:848:C:C6	3.05	0.44
2:B:1031:G:C2	2:B:1032:A:C5	3.05	0.44
2:B:1256:G:C6	2:B:1257:C:C4	3.05	0.44
2:B:1394:U:O2'	2:B:1395:A:H5'	2.17	0.44
2:B:1473:G:C5	2:B:1474:U:C4	3.05	0.44
2:B:1661:G:C4	2:B:1662:U:C5	3.06	0.44
2:B:2084:C:H3'	2:B:2085:U:H6	1.82	0.44
2:B:2165:C:H5''	2:B:2172:U:OP2	2.17	0.44
2:B:2271:G:C5	2:B:2272:U:C5	3.04	0.44
2:B:2691:C:H2'	2:B:2692:G:C8	2.52	0.44
2:B:2869:G:H2'	2:B:2870:C:C6	2.53	0.44
2:B:2902:C:N4	2:B:2903:U:H3	2.15	0.44
11:Q:99:VAL:HG11	32:J:43:GLU:O	2.17	0.44
19:X:347:PHE:CD1	19:X:347:PHE:O	2.71	0.44
22:3:1:ALA:O	22:3:2:VAL:HG13	2.18	0.44
32:J:130:HIS:CD2	32:J:131:ASN:H	2.35	0.44
2:B:133:U:C2	2:B:134:G:C8	3.06	0.44
2:B:495:G:C4	2:B:496:G:C8	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:503:A:C5	2:B:506:G:C5	3.06	0.44
2:B:648:G:H4'	2:B:2352:A:OP1	2.16	0.44
2:B:771:G:H2'	2:B:772:C:H6	1.81	0.44
2:B:825:A:H2'	2:B:826:U:C6	2.52	0.44
2:B:875:G:C2	2:B:876:C:H1'	2.52	0.44
2:B:973:A:C4	2:B:1188:U:C4	3.06	0.44
2:B:974:G:C6	2:B:1186:G:C6	3.05	0.44
2:B:1284:A:N1	2:B:1285:A:C4	2.86	0.44
2:B:1336:A:C2	2:B:1337:G:C4	3.05	0.44
2:B:1566:A:C6	27:C:212:TRP:CZ3	3.05	0.44
2:B:1722:A:H2'	2:B:1723:G:C8	2.52	0.44
2:B:2312:U:C5	2:B:2313:C:C5	3.05	0.44
2:B:2322:A:C5	2:B:2323:G:C5	3.05	0.44
2:B:2578:G:H2'	2:B:2579:C:H6	1.82	0.44
2:B:2881:U:C2	2:B:2882:A:C8	3.05	0.44
19:X:349:ARG:HH21	19:X:367:SER:HA	1.82	0.44
28:F:12:VAL:HG13	28:F:13:LYS:HD2	2.00	0.44
29:G:19:ASN:HD21	29:G:24:THR:H	1.65	0.44
2:B:167:A:C6	2:B:168:G:C4	3.05	0.44
2:B:413:C:O5'	2:B:413:C:H6	2.01	0.44
2:B:607:U:C5	2:B:619:G:C5	3.05	0.44
2:B:753:A:C5	2:B:754:U:C4	3.06	0.44
2:B:755:U:H2'	2:B:756:A:C8	2.53	0.44
2:B:768:G:C5	2:B:769:U:C4	3.04	0.44
2:B:930:G:C4	2:B:933:A:C2	3.05	0.44
2:B:943:A:N3	2:B:944:C:C6	2.85	0.44
2:B:1454:C:OP1	2:B:1454:C:H4'	2.13	0.44
2:B:1528:A:C8	2:B:1529:G:C8	3.05	0.44
2:B:1563:U:H2'	2:B:1564:C:C6	2.51	0.44
2:B:1770:G:H2'	2:B:1771:C:O4'	2.16	0.44
2:B:2046:G:C6	2:B:2047:C:C4	3.05	0.44
2:B:2134:A:H61	2:B:2158:A:H3'	1.81	0.44
2:B:2355:G:H2'	2:B:2356:U:O4'	2.17	0.44
2:B:2464:G:C6	2:B:2465:C:C4	3.06	0.44
2:B:2835:A:C5	2:B:2878:U:C5	3.06	0.44
4:K:29:HIS:N	4:K:29:HIS:CD2	2.83	0.44
8:N:13:ASN:O	8:N:17:ARG:HB2	2.18	0.44
10:P:61:ARG:HH12	10:P:69:VAL:H	1.66	0.44
13:S:23:LEU:HD13	22:3:21:LEU:O	2.16	0.44
32:J:15:TRP:CZ3	32:J:53:TYR:HB3	2.53	0.44
2:B:322:A:H5'	2:B:340:A:H1'	2.00	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:357:C:C4	2:B:358:U:C4	3.06	0.44
2:B:424:G:C6	2:B:425:G:N7	2.86	0.44
2:B:733:G:O6	2:B:761:A:C8	2.70	0.44
2:B:847:U:O4	2:B:932:U:C6	2.70	0.44
2:B:1059:G:C8	2:B:1060:U:H2'	2.52	0.44
2:B:1665:A:H61	2:B:1995:U:H3	1.66	0.44
2:B:1681:G:C6	2:B:1762:A:C6	3.05	0.44
2:B:1712:U:C4	2:B:1713:A:C6	3.05	0.44
2:B:2005:A:H2'	2:B:2006:C:C6	2.52	0.44
2:B:2119:A:C5	2:B:2170:A:C5	3.05	0.44
2:B:2209:G:H2'	2:B:2210:U:C5	2.53	0.44
2:B:2544:G:C4	2:B:2545:G:C8	3.05	0.44
2:B:2642:G:C2	2:B:2643:G:C5	3.05	0.44
2:B:2694:G:C2	2:B:2695:U:C2	3.06	0.44
2:B:2898:U:H2'	2:B:2899:A:O4'	2.18	0.44
9:O:51:ALA:HB2	9:O:81:ARG:HE	1.81	0.44
21:Y:40:ARG:HD2	21:Y:56:HIS:CE1	2.53	0.44
32:J:130:HIS:CG	32:J:131:ASN:N	2.83	0.44
1:A:66:A:C4	1:A:108:A:C6	3.06	0.44
2:B:13:A:C2	2:B:526:A:C6	3.05	0.44
2:B:313:G:C2	2:B:314:C:C2	3.06	0.44
2:B:712:G:C2	2:B:720:U:C2	3.05	0.44
2:B:919:U:H2'	2:B:920:A:C8	2.53	0.44
2:B:1073:A:C6	2:B:1074:G:C4	3.06	0.44
2:B:1306:C:N3	2:B:1307:A:C8	2.85	0.44
2:B:1323:C:C5'	13:S:84:ARG:HH22	2.30	0.44
2:B:1491:G:C6	2:B:1492:G:C5	3.06	0.44
2:B:1651:G:C6	2:B:1652:A:C8	3.05	0.44
2:B:1754:A:C2	2:B:1755:A:C4	3.06	0.44
2:B:1802:A:C6	2:B:1803:A:C6	3.05	0.44
2:B:2198:A:C8	30:H:29:PHE:CE1	3.05	0.44
2:B:2276:G:C2	2:B:2277:G:C8	3.06	0.44
2:B:2383:G:C6	2:B:2384:U:O4	2.71	0.44
8:N:74:GLU:O	8:N:77:ALA:HB3	2.18	0.44
14:D:15:PHE:N	14:D:15:PHE:CD1	2.85	0.44
21:Y:71:LYS:HG2	21:Y:78:PHE:CD1	2.53	0.44
1:A:46:A:H2'	1:A:47:C:C6	2.53	0.44
2:B:319:G:C2	2:B:320:A:C4	3.06	0.44
2:B:562:U:C2	2:B:572:A:H1'	2.53	0.44
2:B:570:G:C6	2:B:2030:A:C2	3.05	0.44
2:B:725:G:C6	2:B:726:G:N1	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:778:G:H4'	27:C:47:ARG:CZ	2.47	0.44
2:B:778:G:H2'	2:B:779:U:O4'	2.18	0.44
2:B:786:C:H2'	2:B:787:C:H6	1.83	0.44
2:B:882:G:H22	2:B:893:C:H42	1.65	0.44
2:B:1799:G:C2	2:B:1819:A:N7	2.86	0.44
2:B:1975:G:C2	2:B:1976:U:H1'	2.53	0.44
2:B:2091:C:C6	2:B:2092:U:O2	2.71	0.44
2:B:2166:U:H3'	2:B:2167:U:C6	2.53	0.44
2:B:2201:G:H2'	2:B:2202:U:O4'	2.17	0.44
2:B:2493:U:C4	2:B:2494:G:C8	3.05	0.44
2:B:2666:C:H3'	2:B:2667:C:H6	1.83	0.44
2:B:2684:U:H1'	4:K:70:ARG:NH1	2.32	0.44
2:B:2722:G:H2'	2:B:2723:C:C6	2.52	0.44
2:B:2756:U:H1'	2:B:2757:A:H5''	2.00	0.44
12:R:5:PHE:CD2	12:R:35:PHE:CD1	3.05	0.44
25:7:53:ASP:O	25:7:57:VAL:HG23	2.18	0.44
2:B:20:C:H2'	2:B:21:A:H8	1.83	0.44
2:B:80:G:C2	2:B:107:G:C6	3.05	0.44
2:B:112:U:H2'	2:B:113:U:H5'	2.00	0.44
2:B:188:G:H1	2:B:208:C:H42	1.66	0.44
2:B:195:A:C6	2:B:198:C:C5	3.06	0.44
2:B:480:A:H3'	2:B:481:G:H5''	1.98	0.44
2:B:533:G:C6	2:B:561:G:C2	3.06	0.44
2:B:604:G:H2'	2:B:605:G:C8	2.53	0.44
2:B:612:G:C6	2:B:614:A:C5	3.06	0.44
2:B:1323:C:H5''	13:S:84:ARG:NH2	2.31	0.44
2:B:1476:U:C4	2:B:1514:G:C2	3.06	0.44
2:B:1596:A:N1	2:B:1597:A:C2	2.86	0.44
2:B:1638:C:C2	2:B:1639:C:C6	3.06	0.44
2:B:1710:G:C2	2:B:1711:A:C4	3.05	0.44
2:B:2123:G:H21	23:5:177:LYS:HA	1.83	0.44
2:B:2369:A:C6	2:B:2370:G:C5	3.06	0.44
2:B:2514:U:H4'	14:D:156:PHE:CE1	2.53	0.44
2:B:2691:C:H42	2:B:2718:G:H1	1.65	0.44
2:B:2836:U:C2	2:B:2883:A:C2	3.06	0.44
13:S:45:VAL:HA	13:S:48:LYS:HB2	2.00	0.44
2:B:273:G:C5	2:B:274:C:C4	3.06	0.44
2:B:274:C:H2'	2:B:275:C:C6	2.53	0.44
2:B:348:A:H2'	2:B:349:U:C6	2.53	0.44
2:B:485:C:C2	2:B:496:G:C2	3.06	0.44
2:B:698:C:C2	2:B:762:U:C4	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:773:U:H5'	2:B:774:G:OP2	2.18	0.44
2:B:831:G:C6	2:B:832:U:C4	3.06	0.44
2:B:855:G:C5	2:B:923:G:N1	2.86	0.44
2:B:927:A:H2'	2:B:928:A:C8	2.53	0.44
2:B:1002:G:C6	2:B:1003:G:C5	3.05	0.44
2:B:1304:A:C6	2:B:1305:C:C5	3.06	0.44
2:B:1522:A:H4'	2:B:1524:G:C8	2.52	0.44
2:B:1630:A:H2'	2:B:1631:G:O4'	2.18	0.44
2:B:1637:A:H2'	2:B:1638:C:C6	2.53	0.44
2:B:2329:U:H2'	2:B:2330:G:C8	2.53	0.44
2:B:2679:A:H2'	2:B:2680:U:C6	2.52	0.44
2:B:2682:A:C4	2:B:2683:C:C6	3.05	0.44
2:B:2816:G:C5	2:B:2817:U:C5	3.06	0.44
2:B:2835:A:C6	2:B:2878:U:C4	3.06	0.44
2:B:2887:A:O2'	2:B:2888:C:H5'	2.18	0.44
6:1:24:GLU:HA	6:1:27:ASN:HD21	1.82	0.44
8:N:51:LEU:HD21	8:N:79:LEU:HD11	2.00	0.44
9:O:66:GLY:H	9:O:70:ALA:HB3	1.81	0.44
26:8:15:LYS:HG3	26:8:26:ILE:HB	2.00	0.44
2:B:85:G:C6	2:B:86:G:C5	3.06	0.43
2:B:107:G:H2'	2:B:108:G:H8	1.82	0.43
2:B:651:G:C6	2:B:652:U:C4	3.06	0.43
2:B:705:A:C5	2:B:727:A:C4	3.06	0.43
2:B:905:A:C5	2:B:906:U:C5	3.06	0.43
2:B:983:A:N1	2:B:984:A:C4	2.86	0.43
2:B:1016:G:C2	2:B:1147:A:C4	3.06	0.43
2:B:1116:G:C6	2:B:1117:C:C4	3.06	0.43
2:B:1171:G:C6	2:B:1172:C:N3	2.85	0.43
2:B:1225:G:N1	2:B:1226:A:C2	2.86	0.43
2:B:1343:G:C5	2:B:1344:U:C4	3.06	0.43
2:B:1579:A:C2	2:B:1580:A:C4	3.06	0.43
2:B:1896:G:C2	2:B:1897:G:C4	3.06	0.43
2:B:2027:G:H2'	2:B:2028:U:C6	2.53	0.43
2:B:2458:G:C2'	2:B:2490:G:H1	2.30	0.43
17:U:14:THR:HG22	17:U:18:LYS:HA	1.99	0.43
25:7:38:LYS:HG3	25:7:42:HIS:CE1	2.53	0.43
29:G:15:ASP:O	29:G:25:ILE:HG13	2.18	0.43
2:B:1179:G:C2	2:B:1180:U:C2	3.06	0.43
2:B:1223:G:N2	2:B:1227:G:C4	2.86	0.43
2:B:1308:A:C6	2:B:1309:G:C4	3.06	0.43
2:B:1419:A:C2	2:B:1579:A:N3	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1794:A:C2	2:B:1795:C:C2	3.06	0.43
2:B:1832:C:N3	2:B:1833:C:C5	2.86	0.43
2:B:2102:G:C6	2:B:2103:C:C4	3.06	0.43
2:B:2682:A:C5	2:B:2683:C:C5	3.05	0.43
2:B:2748:A:C2	2:B:2757:A:C4	3.06	0.43
2:B:2761:A:C2	2:B:2762:C:C2	3.06	0.43
2:B:2799:A:OP1	2:B:2800:A:C4	2.71	0.43
10:P:21:PRO:HB2	10:P:96:LEU:HD13	1.99	0.43
11:Q:33:VAL:HA	11:Q:36:GLN:HG2	2.00	0.43
13:S:81:SER:HA	13:S:98:LYS:O	2.17	0.43
19:X:42:TYR:CD1	19:X:234:PRO:HG3	2.53	0.43
21:Y:21:GLY:O	21:Y:22:VAL:HG13	2.19	0.43
30:H:135:HIS:CG	30:H:136:SER:N	2.84	0.43
1:A:16:G:N1	1:A:69:G:C2	2.87	0.43
2:B:77:G:H4'	6:1:56:LEU:HD21	2.00	0.43
2:B:173:A:C2	2:B:174:U:C2	3.07	0.43
2:B:207:A:H2'	2:B:208:C:C6	2.54	0.43
2:B:346:A:N1	2:B:347:A:C6	2.86	0.43
2:B:711:G:H2'	2:B:712:G:C8	2.53	0.43
2:B:1338:G:C2	2:B:1339:G:C5	3.06	0.43
2:B:1349:C:H2'	2:B:1350:C:C6	2.53	0.43
2:B:1381:G:C5	2:B:1382:G:C2	3.06	0.43
2:B:1441:G:H2'	2:B:1442:U:H6	1.80	0.43
2:B:1635:A:C8	2:B:1636:U:C5	3.06	0.43
2:B:1672:A:N1	2:B:1673:G:C4	2.86	0.43
2:B:2429:G:C8	2:B:2429:G:C3'	3.02	0.43
2:B:2523:G:C4	2:B:2765:A:C6	3.07	0.43
2:B:2824:C:H2'	2:B:2825:G:O4'	2.18	0.43
1:A:53:A:C2	1:A:54:G:C4	3.06	0.43
2:B:80:G:C6	2:B:107:G:O6	2.71	0.43
2:B:194:G:C5	2:B:195:A:N7	2.87	0.43
2:B:418:C:H2'	2:B:419:U:C6	2.53	0.43
2:B:638:G:H2'	2:B:639:U:C6	2.53	0.43
2:B:669:G:C6	2:B:801:G:O6	2.71	0.43
2:B:721:A:C4	2:B:722:A:C8	3.07	0.43
2:B:795:C:C2	2:B:796:C:C6	3.07	0.43
2:B:1002:G:C5	2:B:1003:G:C8	3.05	0.43
2:B:1036:G:C6	2:B:1120:G:C6	3.07	0.43
2:B:1079:C:C5	2:B:1088:A:N3	2.86	0.43
2:B:1383:A:C2	2:B:1384:A:C4	3.07	0.43
2:B:1544:A:H3'	2:B:1545:A:H8	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1553:A:C5	2:B:1555:G:C5	3.07	0.43
2:B:1681:G:C2	2:B:1762:A:C8	3.05	0.43
2:B:1787:A:H2'	2:B:1788:C:H6	1.83	0.43
2:B:1805:A:C6	2:B:1813:G:C6	3.07	0.43
2:B:1990:C:H2'	2:B:1991:U:C1'	2.48	0.43
2:B:2053:G:C4	2:B:2054:A:C8	3.06	0.43
2:B:2327:A:C5	2:B:2328:A:C6	3.07	0.43
2:B:2764:A:N6	2:B:2766:A:C6	2.86	0.43
1:A:33:G:C2	1:A:50:A:N3	2.87	0.43
2:B:265:A:N6	2:B:428:A:C8	2.87	0.43
2:B:498:G:C2	2:B:499:U:C6	3.06	0.43
2:B:541:A:C6	2:B:542:C:C4	3.06	0.43
2:B:579:G:C6	2:B:1262:A:C6	3.06	0.43
2:B:585:G:C5	2:B:1251:C:C4	3.06	0.43
2:B:831:G:O2'	2:B:832:U:H5'	2.18	0.43
2:B:959:A:C5	2:B:960:A:C6	3.06	0.43
2:B:1026:G:C5	2:B:1134:A:C6	3.07	0.43
2:B:1131:G:N1	32:J:77:HIS:CD2	2.87	0.43
2:B:1591:A:H2'	2:B:1592:C:C6	2.53	0.43
2:B:2090:A:H61	2:B:2229:U:H3	1.65	0.43
2:B:2706:A:C6	2:B:2707:U:C5	3.06	0.43
2:B:2744:G:C6	2:B:2745:C:C5	3.06	0.43
2:B:2816:G:C6	2:B:2817:U:C4	3.06	0.43
26:8:22:VAL:HB	26:8:24:ARG:HE	1.83	0.43
2:B:66:C:C2	2:B:67:U:C6	3.07	0.43
2:B:216:A:C2	2:B:217:A:H1'	2.53	0.43
2:B:289:G:H2'	2:B:290:U:H6	1.83	0.43
2:B:350:G:H2'	2:B:351:C:C6	2.54	0.43
2:B:540:C:H2'	2:B:541:A:H8	1.82	0.43
2:B:684:G:H2'	2:B:774:G:O6	2.19	0.43
2:B:770:G:C4	2:B:771:G:C8	3.07	0.43
2:B:799:G:C6	2:B:800:A:C6	3.06	0.43
2:B:852:U:H2'	2:B:853:C:C6	2.54	0.43
2:B:861:A:H2'	2:B:862:G:O4'	2.18	0.43
2:B:1816:C:O2	27:C:61:TYR:CE1	2.71	0.43
2:B:1907:G:C6	2:B:1908:C:C4	3.06	0.43
2:B:2120:G:C6	2:B:2179:C:C2	3.07	0.43
2:B:2290:G:C5	2:B:2291:U:C4	3.06	0.43
2:B:2895:G:C5	2:B:2896:C:C6	3.06	0.43
7:M:18:ARG:CA	7:M:38:ARG:HH12	2.31	0.43
20:E:105:LEU:C	20:E:109:LEU:HD13	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:E:147:LEU:HB3	20:E:187:VAL:H	1.84	0.43
23:5:48:LEU:HG	23:5:171:ILE:HG22	2.00	0.43
28:F:33:ILE:HD11	28:F:99:PHE:CE2	2.53	0.43
2:B:73:A:H5'	2:B:75:G:H21	1.83	0.43
2:B:182:A:C6	2:B:183:C:C4	3.07	0.43
2:B:468:G:C6	2:B:469:G:C5	3.06	0.43
2:B:590:A:C4	2:B:591:U:C5	3.07	0.43
2:B:1051:G:C5	2:B:1052:C:C5	3.07	0.43
2:B:1325:U:C4	13:S:86:MET:SD	3.12	0.43
2:B:1387:A:C6	2:B:1388:G:C6	3.06	0.43
2:B:1429:G:C2	2:B:1568:G:N1	2.87	0.43
2:B:1451:C:C2	2:B:1458:U:C5	3.07	0.43
2:B:1607:C:H3'	2:B:1607:C:C6	2.53	0.43
2:B:2016:U:C4	2:B:2017:U:O4	2.71	0.43
2:B:2024:G:H2'	2:B:2025:C:C6	2.54	0.43
2:B:2269:G:C5	2:B:2270:A:H1'	2.54	0.43
2:B:2278:A:N1	2:B:2279:G:C4	2.86	0.43
2:B:2290:G:C4	2:B:2291:U:C6	3.07	0.43
2:B:2400:G:C5	2:B:2401:U:C5	3.07	0.43
2:B:2534:A:C6	2:B:2535:G:C4	3.07	0.43
2:B:2621:G:C6	2:B:2622:U:C4	3.06	0.43
2:B:2811:G:C6	2:B:2812:G:C5	3.06	0.43
2:B:2849:U:H5'	2:B:2868:A:C4	2.54	0.43
5:L:92:LEU:C	5:L:92:LEU:HD12	2.38	0.43
2:B:64:A:C5	2:B:65:U:C5	3.07	0.43
2:B:146:A:C6	2:B:147:C:C4	3.07	0.43
2:B:218:A:C4	2:B:219:A:C8	3.06	0.43
2:B:425:G:H2'	2:B:426:C:C6	2.54	0.43
2:B:464:U:C5	2:B:788:A:C4	3.07	0.43
2:B:517:C:C2	2:B:518:G:C8	3.07	0.43
2:B:709:U:H2'	2:B:710:U:H6	1.83	0.43
2:B:742:A:H2'	2:B:743:A:O4'	2.19	0.43
2:B:769:U:C2	2:B:770:G:C8	3.07	0.43
2:B:775:G:C4	2:B:777:G:C5	3.07	0.43
2:B:802:A:H2'	2:B:803:U:O4'	2.18	0.43
2:B:820:A:H2'	2:B:821:A:H8	1.84	0.43
2:B:971:G:C6	2:B:972:A:C2	3.06	0.43
2:B:1000:A:C5	2:B:1155:A:C5	3.06	0.43
2:B:1007:C:H3'	2:B:1008:A:H2'	2.00	0.43
2:B:1034:G:C6	2:B:1035:U:N3	2.87	0.43
2:B:1166:G:H2'	2:B:1167:C:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1337:G:C6	2:B:1338:G:C5	3.07	0.43
2:B:1590:A:C2	2:B:1591:A:C4	3.07	0.43
2:B:2043:C:C2	2:B:2044:C:C5	3.07	0.43
2:B:2057:G:C6	2:B:2612:C:C2	3.07	0.43
2:B:2204:G:C4	2:B:2205:A:C8	3.06	0.43
2:B:2599:G:C5	2:B:2600:A:N7	2.86	0.43
2:B:2662:A:C5	2:B:2663:G:H1'	2.54	0.43
2:B:2826:A:C5	2:B:2827:C:C4	3.06	0.43
3:O:11:PRO:HA	3:O:28:PHE:O	2.19	0.43
5:L:120:VAL:H	5:L:140:GLY:HA3	1.82	0.43
12:R:5:PHE:CD2	12:R:5:PHE:C	2.92	0.43
21:Y:31:LEU:O	21:Y:59:PHE:HA	2.19	0.43
22:3:1:ALA:HB1	22:3:2:VAL:H	1.61	0.43
27:C:20:ASN:HB3	27:C:23:LEU:HD12	2.00	0.43
1:A:91:C:H2'	1:A:92:C:H6	1.84	0.43
2:B:128:C:C2	2:B:129:C:C6	3.06	0.43
2:B:146:A:H2'	2:B:147:C:C6	2.53	0.43
2:B:338:G:C6	2:B:339:U:C4	3.06	0.43
2:B:514:A:C2	2:B:515:A:C5	3.06	0.43
2:B:1011:G:N1	2:B:1151:A:C5	2.87	0.43
2:B:1054:A:C4	2:B:1106:G:C2	3.07	0.43
2:B:1278:C:H2'	2:B:1279:G:C8	2.54	0.43
2:B:1426:G:C4	2:B:1427:A:C5	3.07	0.43
2:B:1467:U:C4	2:B:1468:U:C4	3.06	0.43
2:B:1688:U:N3	2:B:1698:A:C2	2.87	0.43
2:B:1740:G:C5	2:B:1741:C:C5	3.06	0.43
2:B:1988:G:C4	2:B:1989:G:C8	3.07	0.43
2:B:2131:U:C5	2:B:2131:U:OP2	2.72	0.43
2:B:2134:A:C6	2:B:2135:A:N1	2.86	0.43
2:B:2265:U:C5	2:B:2266:A:C4	3.07	0.43
2:B:2705:A:C5	2:B:2706:A:C4	3.06	0.43
2:B:2819:G:C2	2:B:2828:G:C4	3.07	0.43
4:K:64:ARG:HH12	4:K:103:VAL:HA	1.84	0.43
21:Y:23:LYS:HB3	21:Y:24:ARG:H	1.58	0.43
2:B:149:A:H2'	2:B:150:U:H6	1.84	0.43
2:B:158:U:C4	2:B:159:G:C6	3.07	0.43
2:B:255:A:C5	2:B:256:A:C8	3.07	0.43
2:B:475:C:H3'	2:B:476:G:C8	2.54	0.43
2:B:633:A:C8	2:B:634:C:C6	3.07	0.43
2:B:735:A:C4	2:B:736:C:C6	3.07	0.43
2:B:802:A:H3'	2:B:803:U:C6	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1727:C:C2	2:B:1734:G:C2	3.06	0.43
2:B:1758:U:C2	2:B:2696:U:H4'	2.54	0.43
2:B:1987:A:H2'	2:B:1988:G:C8	2.53	0.43
2:B:2248:C:C4	2:B:2249:U:O2	2.72	0.43
2:B:2545:G:C6	2:B:2546:U:C2	3.07	0.43
2:B:2661:G:C5	2:B:2662:A:C5	3.06	0.43
2:B:2731:G:C2	2:B:2732:G:N7	2.87	0.43
29:G:148:ARG:HH21	29:G:163:TYR:H	1.67	0.43
1:A:86:G:H1	1:A:90:C:H42	1.66	0.42
2:B:5:A:C2	2:B:6:A:C4	3.07	0.42
2:B:61:C:H2'	2:B:62:U:C2	2.54	0.42
2:B:65:U:C4	2:B:66:C:C5	3.07	0.42
2:B:189:G:O6	2:B:205:G:C4	2.72	0.42
2:B:535:G:C6	2:B:559:G:C6	3.07	0.42
2:B:740:C:H6	2:B:740:C:O5'	2.02	0.42
2:B:961:C:C6	2:B:2031:A:C2	3.07	0.42
2:B:1042:G:C2	2:B:1114:C:C2	3.07	0.42
2:B:1050:A:C4	2:B:2751:G:C6	3.07	0.42
2:B:1389:G:C2	2:B:1390:U:C2	3.07	0.42
2:B:1651:G:C6	2:B:1652:A:C5	3.07	0.42
2:B:1651:G:N1	2:B:1652:A:C4	2.87	0.42
2:B:1664:A:C4	2:B:2726:A:C6	3.06	0.42
2:B:1723:G:H2'	2:B:1724:G:C8	2.54	0.42
2:B:2358:A:C8	2:B:2359:C:C5	3.07	0.42
2:B:2373:G:C6	2:B:2374:C:C4	3.07	0.42
2:B:2452:C:C2	2:B:2453:A:C5	3.06	0.42
2:B:2531:A:H5''	29:G:156:TYR:CZ	2.54	0.42
2:B:2633:G:C2	2:B:2634:A:C4	3.07	0.42
7:M:71:LYS:HD3	7:M:95:LEU:HD13	2.01	0.42
15:T:8:LEU:HD21	15:T:42:GLU:HB3	2.00	0.42
29:G:14:VAL:HG23	29:G:15:ASP:H	1.84	0.42
29:G:106:LEU:HD13	29:G:151:ARG:HB2	2.01	0.42
29:G:147:LEU:HD12	29:G:147:LEU:HA	1.98	0.42
30:H:141:LYS:O	30:H:142:VAL:HG13	2.19	0.42
1:A:15:A:C8	1:A:109:A:C5	3.07	0.42
2:B:94:A:C6	2:B:95:A:C5	3.07	0.42
2:B:161:A:H62	2:B:165:A:N6	2.16	0.42
2:B:181:A:H1'	2:B:435:C:O4'	2.19	0.42
2:B:583:G:C2	2:B:584:C:C2	3.07	0.42
2:B:742:A:C2	2:B:756:A:C2	3.07	0.42
2:B:892:A:C2	2:B:893:C:H1'	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:899:A:C8	2:B:899:A:C3'	3.02	0.42
2:B:947:A:H2'	2:B:948:C:C6	2.54	0.42
2:B:1056:G:N2	2:B:1103:A:H62	2.16	0.42
2:B:1082:U:C5	2:B:1083:U:C5	3.07	0.42
2:B:1202:G:C6	2:B:1203:U:N3	2.87	0.42
2:B:1307:A:C5	2:B:1308:A:C8	3.06	0.42
2:B:1431:A:N6	2:B:1432:G:C6	2.87	0.42
2:B:1439:A:N6	2:B:1552:A:C8	2.87	0.42
2:B:1669:A:H5'	4:K:5:GLN:HE22	1.85	0.42
2:B:1746:A:C2	2:B:1747:U:C2	3.07	0.42
2:B:2061:G:C8	2:B:2503:A:C8	3.07	0.42
2:B:2119:A:H1'	2:B:2170:A:C2	2.55	0.42
2:B:2447:G:C4	2:B:2500:U:C5	3.07	0.42
2:B:2543:G:H2'	2:B:2544:G:H8	1.84	0.42
2:B:2697:G:C2	2:B:2711:A:C2	3.07	0.42
2:B:2749:A:C6	2:B:2750:A:C5	3.07	0.42
8:N:116:VAL:HG13	8:N:117:ASP:OD1	2.20	0.42
32:J:77:HIS:CE1	32:J:83:GLY:HA3	2.54	0.42
1:A:7:G:C6	1:A:114:C:C4	3.07	0.42
2:B:85:G:C6	2:B:86:G:C6	3.06	0.42
2:B:216:A:C6	2:B:217:A:C4	3.07	0.42
2:B:340:A:C8	2:B:341:C:C6	3.07	0.42
2:B:412:A:C8	2:B:413:C:C5	3.07	0.42
2:B:435:C:C5	2:B:436:C:C4	3.07	0.42
2:B:457:A:C8	2:B:459:U:O2	2.73	0.42
2:B:515:A:H3'	2:B:516:C:H6	1.84	0.42
2:B:764:A:C2	2:B:781:A:C2	3.07	0.42
2:B:807:U:C4	2:B:808:G:C5	3.07	0.42
2:B:945:A:C6	2:B:2448:A:C5	3.07	0.42
2:B:1193:G:C4	2:B:1194:A:C8	3.07	0.42
2:B:2056:G:C4	2:B:2577:A:C6	3.07	0.42
2:B:2246:G:H2'	2:B:2247:A:H8	1.84	0.42
2:B:2301:C:C2	2:B:2316:G:C2	3.07	0.42
2:B:2685:G:H2'	2:B:2686:G:H8	1.85	0.42
2:B:2885:G:H2'	2:B:2886:A:O4'	2.19	0.42
19:X:53:ILE:HG22	19:X:54:CYS:O	2.19	0.42
27:C:16:VAL:H	27:C:203:VAL:HG22	1.83	0.42
31:I:102:ARG:HA	31:I:105:LEU:HD12	2.01	0.42
2:B:48:G:H1'	2:B:178:G:N2	2.34	0.42
2:B:162:U:O4	2:B:2218:G:H4'	2.20	0.42
2:B:302:C:H2'	2:B:303:G:C8	2.52	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:419:U:H2'	2:B:420:C:H6	1.82	0.42
2:B:664:G:O2'	2:B:665:U:H5'	2.19	0.42
2:B:771:G:C5	2:B:772:C:C5	3.08	0.42
2:B:877:A:C6	2:B:878:A:H1'	2.55	0.42
2:B:952:G:C2	2:B:966:G:C4	3.08	0.42
2:B:965:C:N3	2:B:966:G:C8	2.88	0.42
2:B:1488:C:C2	2:B:1502:A:C2	3.07	0.42
2:B:1825:U:H2'	2:B:1826:G:O4'	2.19	0.42
2:B:1987:A:C2	2:B:1988:G:C4	3.07	0.42
2:B:2094:A:H2'	2:B:2095:A:H8	1.84	0.42
2:B:2327:A:C4	2:B:2328:A:C5	3.08	0.42
2:B:2471:A:O2'	2:B:2472:G:H8	2.02	0.42
15:T:14:PRO:HA	15:T:32:LEU:HA	2.01	0.42
1:A:16:G:H2'	1:A:17:C:H6	1.83	0.42
1:A:48:U:H2'	1:A:49:C:H6	1.84	0.42
2:B:25:U:C4	2:B:26:G:C2	3.08	0.42
2:B:310:A:C8	2:B:312:G:C6	3.08	0.42
2:B:436:C:C2	2:B:437:U:H5	2.37	0.42
2:B:706:A:C5	2:B:707:G:C8	3.07	0.42
2:B:710:U:H2'	2:B:711:G:C8	2.54	0.42
2:B:822:G:O6	2:B:836:G:C5	2.73	0.42
2:B:874:G:C2	2:B:904:G:C4	3.07	0.42
2:B:943:A:C2	2:B:944:C:C6	3.06	0.42
2:B:1062:G:C4	2:B:1077:A:C2	3.08	0.42
2:B:1105:U:H2'	2:B:1106:G:C8	2.54	0.42
2:B:1399:C:N3	2:B:1400:U:C5	2.87	0.42
2:B:1623:G:C5	2:B:1624:U:C5	3.07	0.42
2:B:1845:G:C2	2:B:1846:G:C4	3.08	0.42
2:B:2134:A:N6	2:B:2158:A:H3'	2.35	0.42
2:B:2148:G:N7	2:B:2149:U:C4	2.87	0.42
2:B:2282:G:H1'	2:B:2390:U:C4	2.54	0.42
2:B:2454:G:C6	2:B:2455:G:N7	2.88	0.42
2:B:2547:A:H5'	2:B:2566:A:C2	2.55	0.42
10:P:7:LEU:HD22	14:D:188:LEU:HD11	2.01	0.42
10:P:98:TYR:CD1	10:P:99:LEU:N	2.88	0.42
32:J:74:TYR:CD1	32:J:92:MET:SD	3.12	0.42
2:B:420:C:H2'	2:B:421:C:C5	2.55	0.42
2:B:608:A:C8	2:B:621:A:C6	3.07	0.42
2:B:744:U:O4	2:B:745:G:C6	2.73	0.42
2:B:768:G:C4	2:B:769:U:C5	3.07	0.42
2:B:843:G:C6	2:B:844:A:C5	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:941:A:C6	2:B:942:G:C6	3.08	0.42
2:B:1056:G:H21	2:B:1103:A:N6	2.16	0.42
2:B:1316:U:N3	2:B:1337:G:C2	2.87	0.42
2:B:1337:G:H2'	2:B:1338:G:C8	2.54	0.42
2:B:1893:C:C5	2:B:1894:C:N4	2.87	0.42
2:B:2094:A:C2	2:B:2095:A:C5	3.07	0.42
2:B:2168:G:H3'	2:B:2168:G:H8	1.84	0.42
2:B:2274:A:C6	2:B:2276:G:C8	3.08	0.42
2:B:2370:G:C6	2:B:2371:G:C6	3.07	0.42
2:B:2599:G:N1	2:B:2600:A:C5	2.88	0.42
2:B:2634:A:O2'	2:B:2635:A:H5'	2.20	0.42
2:B:2648:G:C4	2:B:2649:C:C6	3.07	0.42
2:B:2884:U:H3'	2:B:2885:G:H8	1.81	0.42
1:A:63:C:H2'	1:A:64:G:H8	1.84	0.42
2:B:107:G:C2	2:B:108:G:C5	3.08	0.42
2:B:165:A:H2'	2:B:166:U:C6	2.54	0.42
2:B:190:A:C5	2:B:191:A:C5	3.07	0.42
2:B:323:C:N4	2:B:333:G:C5	2.88	0.42
2:B:323:C:C2	2:B:333:G:H1'	2.54	0.42
2:B:468:G:C6	2:B:469:G:C4	3.08	0.42
2:B:675:A:C2	2:B:676:A:C2	3.08	0.42
2:B:743:A:O2'	2:B:744:U:H5'	2.19	0.42
2:B:820:A:N1	2:B:821:A:C5	2.88	0.42
2:B:882:G:H2'	2:B:883:G:C8	2.54	0.42
2:B:966:G:C6	2:B:967:U:C4	3.07	0.42
2:B:1218:G:C6	2:B:1219:U:C4	3.08	0.42
2:B:1218:G:C5	2:B:1232:G:C6	3.07	0.42
2:B:1598:A:C6	2:B:1599:U:C5	3.08	0.42
2:B:1733:G:C6	2:B:1734:G:C5	3.07	0.42
2:B:2116:G:OP2	2:B:2116:G:C5	2.72	0.42
2:B:2599:G:C2	2:B:2600:A:C4	3.08	0.42
2:B:2639:A:N6	2:B:2640:G:C4	2.87	0.42
4:K:28:SER:C	4:K:29:HIS:CG	2.92	0.42
10:P:79:VAL:O	10:P:79:VAL:HG12	2.18	0.42
19:X:160:LEU:HD13	19:X:160:LEU:C	2.40	0.42
20:E:150:THR:O	20:E:171:ASP:HA	2.19	0.42
23:5:53:ARG:HE	23:5:202:THR:HG21	1.84	0.42
32:J:105:VAL:HG21	32:J:122:LEU:HD22	2.02	0.42
1:A:4:C:H2'	1:A:5:U:C6	2.55	0.42
1:A:16:G:C6	1:A:69:G:C2	3.08	0.42
2:B:104:A:C5	2:B:105:C:C5	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:315:G:H2'	2:B:316:C:C6	2.55	0.42
2:B:379:G:C2	2:B:380:G:H1'	2.55	0.42
2:B:387:U:N1	2:B:388:G:C5	2.88	0.42
2:B:816:C:C4	2:B:1192:G:C6	3.07	0.42
2:B:1034:G:H2'	2:B:1035:U:C6	2.54	0.42
2:B:1469:A:H2'	2:B:1470:A:C8	2.55	0.42
2:B:1717:A:C2	2:B:1744:A:C4	3.07	0.42
2:B:1809:A:C5	2:B:1810:A:C6	3.08	0.42
2:B:2077:A:C5	2:B:2435:A:C5	3.08	0.42
2:B:2116:G:P	2:B:2171:A:H62	2.43	0.42
2:B:2261:C:H4'	2:B:2388:A:H5''	2.02	0.42
2:B:2416:C:C2	2:B:2417:C:C5	3.08	0.42
2:B:2468:A:C2	2:B:2481:G:C2	3.08	0.42
5:L:20:GLY:H	5:L:28:GLY:HA3	1.84	0.42
5:L:47:ARG:HB2	5:L:50:PHE:CG	2.55	0.42
6:1:38:GLN:HE21	6:1:39:GLN:HG2	1.84	0.42
7:M:27:SER:N	7:M:66:ARG:HH22	2.17	0.42
1:A:84:G:H2'	1:A:85:G:C8	2.55	0.42
2:B:23:G:C6	2:B:24:G:C6	3.08	0.42
2:B:608:A:C5	2:B:609:A:C5	3.07	0.42
2:B:628:G:C2	2:B:629:G:C4	3.07	0.42
2:B:721:A:C5	2:B:722:A:C5	3.08	0.42
2:B:825:A:C2	2:B:826:U:N3	2.88	0.42
2:B:947:A:C6	2:B:971:G:N1	2.88	0.42
2:B:997:G:H1	2:B:1158:C:N4	2.18	0.42
2:B:1000:A:C4	2:B:1155:A:C6	3.07	0.42
2:B:1007:C:H2'	2:B:1008:A:C8	2.55	0.42
2:B:1018:U:C2	2:B:1019:U:C5	3.08	0.42
2:B:1150:C:C2	2:B:1151:A:C8	3.08	0.42
2:B:1206:G:C5	2:B:1207:C:C5	3.08	0.42
2:B:1300:G:C6	2:B:1626:A:N7	2.87	0.42
2:B:1327:A:C6	2:B:1328:A:C4	3.08	0.42
2:B:1391:U:O2	2:B:1394:U:C5	2.73	0.42
2:B:1394:U:C5	2:B:1395:A:C6	3.08	0.42
2:B:1799:G:C4	2:B:1819:A:C6	3.08	0.42
2:B:1819:A:H1'	2:B:1821:A:C5	2.55	0.42
2:B:2500:U:O2	2:B:2504:U:C5	2.73	0.42
2:B:2538:C:C2	2:B:2539:C:C5	3.08	0.42
2:B:2588:G:C5	2:B:2589:A:C8	3.07	0.42
2:B:2615:U:H2'	2:B:2616:C:H6	1.83	0.42
2:B:2690:U:C4	2:B:2873:A:N1	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2745:C:H2'	2:B:2746:U:C6	2.55	0.42
2:B:2858:C:C4	2:B:2859:G:C6	3.08	0.42
19:X:348:ALA:HB3	19:X:349:ARG:HA	2.01	0.42
19:X:403:ARG:HH11	19:X:403:ARG:HD3	1.70	0.42
20:E:166:LYS:HD2	20:E:166:LYS:HA	1.88	0.42
1:A:7:G:N2	1:A:8:C:C2	2.88	0.42
2:B:9:G:C2	2:B:2895:G:C4	3.08	0.42
2:B:111:A:C6	2:B:112:U:C4	3.08	0.42
2:B:200:U:O4	2:B:248:G:C5	2.73	0.42
2:B:311:A:O4'	2:B:332:A:C2	2.73	0.42
2:B:460:A:C8	2:B:461:C:C6	3.08	0.42
2:B:471:A:C6	2:B:472:A:C5	3.08	0.42
2:B:693:A:N1	2:B:770:G:C6	2.88	0.42
2:B:775:G:C4	2:B:777:G:C6	3.08	0.42
2:B:781:A:C5	2:B:1777:U:H4'	2.54	0.42
2:B:853:C:H42	2:B:925:A:N6	2.18	0.42
2:B:991:C:C2	2:B:1185:G:C6	3.08	0.42
2:B:1082:U:C6	2:B:1083:U:C5	3.08	0.42
2:B:1157:G:C2	2:B:1158:C:C2	3.07	0.42
2:B:1176:U:H5''	2:B:1177:G:C5	2.55	0.42
2:B:2016:U:C2	2:B:2017:U:C5	3.08	0.42
2:B:2236:U:C4	2:B:2237:G:C5	3.08	0.42
2:B:2447:G:C6	2:B:2500:U:C5	3.08	0.42
2:B:2516:A:C2	2:B:2517:C:N3	2.88	0.42
2:B:2554:U:C5	2:B:2555:U:C4	3.08	0.42
2:B:2718:G:N1	2:B:2719:G:C4	2.88	0.42
2:B:2782:G:C5	2:B:2783:U:C4	3.08	0.42
2:B:2844:G:O2'	2:B:2845:U:H5'	2.20	0.42
2:B:2854:G:H2'	2:B:2855:C:C6	2.54	0.42
2:B:2885:G:H1	22:3:39:ARG:CB	2.32	0.42
29:G:71:LEU:O	29:G:74:MET:HB2	2.20	0.42
2:B:5:A:C4	2:B:6:A:C8	3.08	0.41
2:B:39:G:C5	2:B:40:U:C5	3.08	0.41
2:B:154:U:H3	2:B:172:A:N6	2.16	0.41
2:B:475:C:C4	2:B:476:G:C5	3.08	0.41
2:B:532:A:C8	2:B:2021:C:C5	3.08	0.41
2:B:661:A:H2'	2:B:662:G:O4'	2.20	0.41
2:B:1342:A:C6	2:B:1397:U:C4	3.09	0.41
2:B:1365:A:C4	2:B:1366:A:C8	3.08	0.41
2:B:1684:G:C6	2:B:1685:C:C4	3.08	0.41
2:B:1894:C:C4	2:B:1895:C:N4	2.87	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1895:C:H1'	19:X:357:HIS:HE1	1.83	0.41
2:B:2073:C:H5''	27:C:227:VAL:HG13	2.02	0.41
2:B:2209:G:C6	2:B:2216:G:C2	3.08	0.41
2:B:2330:G:C2	2:B:2331:G:H1'	2.55	0.41
2:B:2560:A:C6	2:B:2561:U:C4	3.08	0.41
2:B:2663:G:C6	2:B:2664:G:C4	3.09	0.41
2:B:2729:G:H4'	14:D:190:LYS:HE2	2.02	0.41
2:B:2794:C:N3	2:B:2795:C:C5	2.88	0.41
2:B:2804:U:C2	2:B:2805:C:C6	3.07	0.41
2:B:2882:A:H2'	2:B:2883:A:H5''	2.01	0.41
3:0:18:SER:O	3:0:21:LEU:HD23	2.20	0.41
11:Q:104:ALA:O	11:Q:107:ALA:HB3	2.20	0.41
19:X:389:THR:O	19:X:393:GLU:HG2	2.20	0.41
27:C:29:PHE:CD2	27:C:32:LEU:HD12	2.55	0.41
1:A:39:A:C6	1:A:44:G:C6	3.08	0.41
2:B:78:U:H2'	2:B:79:C:C6	2.55	0.41
2:B:372:G:C4	3:0:60:LYS:NZ	2.88	0.41
2:B:597:G:C6	2:B:661:A:C6	3.08	0.41
2:B:923:G:C6	2:B:924:G:N7	2.88	0.41
2:B:1307:A:C6	2:B:1622:G:C6	3.08	0.41
2:B:1613:G:C6	2:B:1619:G:O6	2.73	0.41
2:B:1642:G:N1	2:B:1643:G:C6	2.88	0.41
2:B:1785:A:C5	2:B:1787:A:C5	3.08	0.41
2:B:1809:A:C5	2:B:1810:A:C5	3.08	0.41
2:B:1821:A:C5	2:B:1822:C:C4	3.08	0.41
2:B:1834:U:O3'	2:B:1835:G:C8	2.73	0.41
2:B:2008:C:C2	2:B:2009:A:C8	3.08	0.41
2:B:2069:G:N3	2:B:2070:A:C8	2.89	0.41
2:B:2331:G:C4	2:B:2332:C:C6	3.08	0.41
2:B:2345:G:C4	2:B:2347:C:C5	3.08	0.41
2:B:2692:G:O2'	2:B:2693:G:H5'	2.20	0.41
20:E:78:TRP:C	20:E:80:SER:H	2.24	0.41
27:C:86:ARG:HD3	27:C:88:ALA:HB3	2.02	0.41
27:C:141:HIS:CE1	27:C:190:THR:HG22	2.55	0.41
32:J:40:HIS:CD2	32:J:40:HIS:N	2.87	0.41
1:A:40:U:H1'	1:A:43:C:C5	2.56	0.41
2:B:2:G:C6	2:B:3:U:C4	3.08	0.41
2:B:170:U:C2	2:B:171:U:C5	3.08	0.41
2:B:301:G:C2	2:B:302:C:C2	3.07	0.41
2:B:350:G:C5	2:B:351:C:C5	3.08	0.41
2:B:396:G:C5	2:B:397:U:C5	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:399:U:H5''	3:0:56:ARG:HH22	1.85	0.41
2:B:596:U:H2'	2:B:597:G:C8	2.55	0.41
2:B:662:G:C2	2:B:663:G:C5	3.08	0.41
2:B:945:A:C4	2:B:2448:A:C2	3.08	0.41
2:B:974:G:C4	2:B:989:G:C6	3.09	0.41
2:B:1182:G:C6	2:B:1183:U:C4	3.08	0.41
2:B:1242:U:H2'	2:B:1243:C:C6	2.55	0.41
2:B:1569:A:H2'	2:B:1570:A:O4'	2.20	0.41
2:B:1785:A:O2'	2:B:1786:A:H2'	2.21	0.41
2:B:1796:U:H2'	2:B:1797:G:C8	2.56	0.41
2:B:2323:G:C2	2:B:2324:U:C2	3.08	0.41
2:B:2373:G:C5	2:B:2374:C:C4	3.08	0.41
2:B:2458:G:C4	2:B:2490:G:C6	3.08	0.41
2:B:2697:G:C8	2:B:2698:U:C5	3.08	0.41
5:L:77:ILE:O	5:L:111:ILE:HG12	2.21	0.41
6:1:4:LYS:H	6:1:4:LYS:HE2	1.85	0.41
7:M:50:ARG:HG2	7:M:50:ARG:HH21	1.85	0.41
14:D:45:TYR:HA	14:D:83:ARG:HE	1.84	0.41
20:E:45:ALA:O	20:E:46:GLN:HB2	2.20	0.41
20:E:95:LYS:O	20:E:96:VAL:HG22	2.21	0.41
29:G:89:VAL:HG23	29:G:162:ARG:HE	1.86	0.41
30:H:90:LEU:HB2	30:H:128:HIS:CE1	2.55	0.41
2:B:68:G:C6	2:B:69:C:C4	3.08	0.41
2:B:169:G:C6	2:B:170:U:C4	3.08	0.41
2:B:227:A:C5	2:B:2407:A:O4'	2.73	0.41
2:B:455:C:H3'	2:B:455:C:C6	2.56	0.41
2:B:562:U:C4	2:B:572:A:C4	3.09	0.41
2:B:563:A:H2'	2:B:564:C:C6	2.55	0.41
2:B:851:C:C4	2:B:852:U:O4	2.73	0.41
2:B:959:A:C6	2:B:960:A:C6	3.08	0.41
2:B:1419:A:C2	2:B:1579:A:C2	3.08	0.41
2:B:1459:G:H2'	2:B:1461:C:C4	2.56	0.41
2:B:1682:G:C5	2:B:1683:U:C4	3.09	0.41
2:B:2052:A:C5	2:B:2053:G:N7	2.88	0.41
2:B:2230:G:C5	2:B:2231:U:C4	3.08	0.41
2:B:2341:G:C4	2:B:2342:C:C6	3.08	0.41
2:B:2358:A:N7	2:B:2359:C:C5	2.88	0.41
2:B:2453:A:C2	2:B:2504:U:N3	2.89	0.41
2:B:2487:G:C2	2:B:2488:G:C4	3.08	0.41
2:B:2588:G:C5	2:B:2589:A:N7	2.89	0.41
25:7:23:HIS:CD2	25:7:47:ALA:O	2.73	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:F:34:THR:HG21	28:F:87:LYS:HE3	2.02	0.41
1:A:66:A:N1	1:A:107:G:H2'	2.36	0.41
2:B:160:A:C5	2:B:161:A:C5	3.08	0.41
2:B:270:A:C2	2:B:370:G:C5	3.09	0.41
2:B:287:G:C2	2:B:288:U:C2	3.08	0.41
2:B:342:A:C5	2:B:343:C:C5	3.08	0.41
2:B:495:G:C2	2:B:496:G:C4	3.08	0.41
2:B:688:U:C2'	2:B:689:A:C8	3.03	0.41
2:B:1059:G:N7	2:B:1060:U:H2'	2.35	0.41
2:B:1395:A:C6	2:B:1398:C:C2	3.09	0.41
2:B:1428:C:H5''	2:B:1428:C:H6	1.85	0.41
2:B:1708:C:H42	2:B:1750:G:H1	1.69	0.41
2:B:1770:G:C2	2:B:1983:G:C4	3.08	0.41
2:B:2043:C:N4	2:B:2777:G:C5	2.89	0.41
2:B:2051:A:C4	2:B:2614:A:N6	2.88	0.41
2:B:2186:G:C2	2:B:2187:U:H1'	2.56	0.41
2:B:2464:G:N1	2:B:2487:G:C4	2.88	0.41
2:B:2601:C:H4'	2:B:2602:A:OP2	2.20	0.41
2:B:2773:C:H2'	2:B:2774:C:C6	2.55	0.41
2:B:2782:G:H2'	2:B:2783:U:C6	2.55	0.41
2:B:2833:U:H4'	2:B:2834:G:OP2	2.20	0.41
3:O:34:SER:HA	3:O:49:ARG:HA	2.03	0.41
17:U:23:LYS:O	17:U:35:VAL:HG13	2.20	0.41
18:W:44:HIS:CG	18:W:45:ASP:N	2.87	0.41
20:E:105:LEU:HD21	20:E:177:PRO:HG3	2.01	0.41
1:A:15:A:H3'	1:A:16:G:H8	1.83	0.41
2:B:112:U:C2'	2:B:113:U:H5'	2.51	0.41
2:B:396:G:C4	2:B:397:U:C5	3.08	0.41
2:B:522:A:C5	2:B:523:C:C5	3.09	0.41
2:B:684:G:N1	2:B:774:G:C5	2.88	0.41
2:B:684:G:O6	2:B:774:G:C8	2.74	0.41
2:B:802:A:C8	2:B:803:U:C4	3.08	0.41
2:B:1136:G:C2	2:B:1137:G:C4	3.09	0.41
2:B:1162:G:C2	2:B:1163:G:C4	3.08	0.41
2:B:1296:G:C5	2:B:1645:G:C6	3.08	0.41
2:B:1307:A:C6	2:B:1622:G:C5	3.08	0.41
2:B:1469:A:C2	2:B:1470:A:C5	3.09	0.41
2:B:1473:G:C2	2:B:1474:U:C2	3.08	0.41
2:B:1658:C:H6	2:B:1658:C:O5'	2.04	0.41
2:B:1817:G:C5	2:B:1818:U:C5	3.09	0.41
2:B:2069:G:C2	2:B:2070:A:C8	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2189:U:H2'	2:B:2190:G:H8	1.85	0.41
2:B:2204:G:O6	2:B:2221:G:C6	2.74	0.41
2:B:2312:U:H5	2:B:2313:C:C5	2.38	0.41
2:B:2668:G:N1	2:B:2669:G:C5	2.89	0.41
2:B:2737:G:C2	2:B:2768:U:C2	3.08	0.41
2:B:2901:C:N3	2:B:2902:C:C5	2.89	0.41
9:O:51:ALA:HB2	9:O:81:ARG:HG3	2.03	0.41
27:C:13:ARG:O	27:C:14:HIS:CG	2.73	0.41
28:F:62:GLN:HB3	28:F:94:ARG:HE	1.85	0.41
2:B:48:G:C4	2:B:178:G:C6	3.09	0.41
2:B:84:A:C6	2:B:103:A:C5	3.09	0.41
2:B:169:G:C5	2:B:170:U:C5	3.09	0.41
2:B:688:U:C2'	2:B:689:A:H8	2.33	0.41
2:B:719:C:C4	2:B:720:U:C5	3.08	0.41
2:B:862:G:C6	2:B:863:A:C4	3.08	0.41
2:B:1249:U:H4'	11:Q:3:VAL:HG21	2.03	0.41
2:B:1364:G:C2	2:B:1368:G:C5	3.09	0.41
2:B:1389:G:C5	2:B:1390:U:C4	3.08	0.41
2:B:1982:U:O2	2:B:1983:G:C8	2.74	0.41
2:B:2404:U:O2	2:B:2414:G:C2	2.74	0.41
2:B:2576:G:C8	2:B:2580:U:O4	2.74	0.41
2:B:2825:G:C2	2:B:2826:A:N7	2.88	0.41
5:L:63:LYS:HD2	5:L:63:LYS:N	2.36	0.41
11:Q:79:ILE:HG23	11:Q:80:ASN:N	2.35	0.41
19:X:449:MET:SD	19:X:449:MET:O	2.79	0.41
1:A:21:G:C5	1:A:22:U:C5	3.09	0.41
1:A:66:A:C2	1:A:108:A:C5	3.09	0.41
1:A:84:G:C2	1:A:85:G:C4	3.08	0.41
1:A:99:A:C6	1:A:100:G:C4	3.09	0.41
1:A:101:A:C4	1:A:102:G:C8	3.09	0.41
2:B:64:A:H61	2:B:90:U:H3	1.68	0.41
2:B:491:G:C6	2:B:492:A:C5	3.09	0.41
2:B:514:A:C4	2:B:515:A:C8	3.09	0.41
2:B:875:G:N1	2:B:876:C:H1'	2.36	0.41
2:B:1259:G:C6	2:B:1260:A:C6	3.08	0.41
2:B:1314:C:H5'	2:B:1610:A:N6	2.36	0.41
2:B:1317:G:C5	2:B:1318:U:C4	3.08	0.41
2:B:1361:G:C2	2:B:1362:C:C2	3.09	0.41
2:B:1415:U:H1'	2:B:1588:G:N2	2.35	0.41
2:B:2054:A:C2	2:B:2616:C:C2	3.08	0.41
2:B:2075:U:H4'	2:B:2596:U:H3	1.86	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2246:G:C5	2:B:2247:A:C5	3.08	0.41
2:B:2536:G:C6	2:B:2537:U:C4	3.09	0.41
2:B:2811:G:C6	2:B:2812:G:C4	3.08	0.41
2:B:2819:G:C6	2:B:2828:G:C6	3.09	0.41
27:C:175:LEU:HB2	27:C:179:GLU:HB3	2.03	0.41
28:F:24:VAL:O	28:F:27:VAL:HG22	2.21	0.41
32:J:101:ILE:O	32:J:105:VAL:HG22	2.20	0.41
1:A:11:C:C4	1:A:12:C:N3	2.89	0.41
1:A:24:G:N7	1:A:56:G:H2'	2.35	0.41
2:B:133:U:H2'	2:B:134:G:C8	2.56	0.41
2:B:218:A:N6	2:B:219:A:C6	2.88	0.41
2:B:225:C:C4	2:B:226:A:C5	3.09	0.41
2:B:266:G:C5	2:B:267:C:C5	3.09	0.41
2:B:266:G:C4	2:B:267:C:C6	3.09	0.41
2:B:332:A:C5	2:B:335:C:C4	3.09	0.41
2:B:541:A:C2	2:B:553:G:C2	3.08	0.41
2:B:701:G:H1	2:B:731:C:H42	1.67	0.41
2:B:847:U:N3	2:B:848:C:C5	2.89	0.41
2:B:920:A:C5	2:B:921:C:C5	3.09	0.41
2:B:936:A:C2	2:B:937:C:C2	3.08	0.41
2:B:998:C:H2'	2:B:999:U:C6	2.56	0.41
2:B:1002:G:C6	2:B:1003:G:C6	3.09	0.41
2:B:1006:C:O2'	2:B:1007:C:H5'	2.21	0.41
2:B:1041:G:C4	2:B:1042:G:C8	3.08	0.41
2:B:1116:G:C5	2:B:1117:C:C5	3.09	0.41
2:B:1228:G:C5	2:B:1229:C:C5	3.09	0.41
2:B:1280:G:N1	2:B:1281:G:C5	2.89	0.41
2:B:1309:G:H21	2:B:1611:C:H4'	1.86	0.41
2:B:1349:C:C2	2:B:1350:C:C5	3.09	0.41
2:B:1637:A:H2'	2:B:1638:C:H6	1.86	0.41
2:B:1659:G:C5	2:B:1660:G:N7	2.89	0.41
2:B:1710:G:C2	2:B:1749:A:C2	3.09	0.41
2:B:1975:G:C6	2:B:1976:U:C2	3.08	0.41
2:B:1980:G:C5	2:B:1982:U:O4	2.74	0.41
2:B:2044:C:N3	2:B:2625:G:C2	2.89	0.41
2:B:2083:G:O6	2:B:2237:G:C2	2.74	0.41
2:B:2148:G:C8	2:B:2149:U:C5	3.09	0.41
2:B:2168:G:C8	2:B:2168:G:C3'	3.03	0.41
2:B:2217:G:C6	2:B:2218:G:C5	3.09	0.41
2:B:2227:A:H2'	2:B:2228:G:C8	2.55	0.41
2:B:2228:G:H2'	2:B:2229:U:C6	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2279:G:C5	2:B:2280:G:C8	3.08	0.41
2:B:2357:G:C2	2:B:2361:G:C4	3.09	0.41
2:B:2370:G:C5	2:B:2371:G:C5	3.09	0.41
2:B:2464:G:C2	2:B:2487:G:C4	3.09	0.41
2:B:2513:A:H2'	2:B:2514:U:C6	2.55	0.41
2:B:2517:C:C5	2:B:2542:A:N7	2.89	0.41
2:B:2636:C:H2'	2:B:2637:U:C6	2.55	0.41
2:B:2675:A:C5	2:B:2676:C:C5	3.09	0.41
5:L:87:GLY:C	5:L:89:VAL:H	2.23	0.41
10:P:30:TRP:O	10:P:79:VAL:HG13	2.21	0.41
19:X:85:VAL:HG12	19:X:86:LEU:N	2.36	0.41
21:Y:52:CYS:HB2	21:Y:56:HIS:ND1	2.36	0.41
1:A:10:G:N7	1:A:11:C:C5	2.89	0.41
2:B:2:G:C6	2:B:3:U:N3	2.88	0.41
2:B:692:C:H5''	27:C:38:LYS:HB3	2.02	0.41
2:B:799:G:H2'	2:B:800:A:C8	2.56	0.41
2:B:856:G:H2'	2:B:857:G:C8	2.55	0.41
2:B:891:G:C2'	2:B:892:A:C8	3.02	0.41
2:B:1128:G:N1	2:B:2518:A:C5	2.89	0.41
2:B:1134:A:C8	2:B:1134:A:OP2	2.74	0.41
2:B:1186:G:H2'	2:B:1187:G:O4'	2.20	0.41
2:B:1269:A:C4	2:B:1270:C:C5	3.09	0.41
2:B:1401:G:C5	2:B:1402:U:C5	3.09	0.41
2:B:1794:A:C6	2:B:1795:C:C4	3.09	0.41
2:B:2070:A:C2	2:B:2071:A:C8	3.09	0.41
2:B:2126:A:H62	23:5:134:ARG:HE	1.68	0.41
2:B:2327:A:C2	2:B:2328:A:C4	3.08	0.41
2:B:2383:G:N1	2:B:2384:U:C4	2.89	0.41
2:B:2485:G:OP1	7:M:42:THR:HG21	2.20	0.41
2:B:2722:G:C6	2:B:2723:C:C4	3.08	0.41
2:B:2794:C:C2	2:B:2795:C:C6	3.09	0.41
2:B:2897:U:H2'	2:B:2898:U:O4'	2.21	0.41
14:D:62:LYS:O	14:D:65:ALA:HB3	2.21	0.41
16:2:50:VAL:O	16:2:54:VAL:HG22	2.21	0.41
28:F:38:GLY:CA	28:F:85:GLY:HA2	2.51	0.41
1:A:104:A:C6	1:A:105:G:H1'	2.56	0.40
2:B:14:A:C6	2:B:526:A:C2	3.09	0.40
2:B:77:G:H2'	2:B:78:U:C6	2.56	0.40
2:B:80:G:C6	2:B:81:G:C5	3.08	0.40
2:B:233:A:C6	2:B:234:U:C5	3.09	0.40
2:B:550:C:C2	2:B:551:G:C8	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:727:A:C2	27:C:8:THR:HG21	2.56	0.40
2:B:976:G:C5	2:B:977:G:N7	2.88	0.40
2:B:1031:G:N1	2:B:1032:A:C5	2.89	0.40
2:B:1165:A:C6	2:B:1185:G:C6	3.09	0.40
2:B:1252:G:C2	2:B:1253:A:C2	3.09	0.40
2:B:1268:A:C2	2:B:2013:A:C4	3.09	0.40
2:B:1335:C:H2'	2:B:1336:A:C8	2.56	0.40
2:B:1353:A:N1	2:B:1354:A:C2	2.89	0.40
2:B:1404:C:OP1	2:B:1472:C:H5'	2.20	0.40
2:B:1613:G:C5	2:B:1619:G:C6	3.09	0.40
2:B:1990:C:H2'	2:B:1991:U:H1'	2.03	0.40
2:B:2060:A:N1	2:B:2502:G:C6	2.89	0.40
2:B:2083:G:H2'	2:B:2084:C:C6	2.56	0.40
2:B:2377:A:C2	2:B:2378:A:C5	3.09	0.40
2:B:2472:G:H2'	2:B:2475:C:N4	2.35	0.40
2:B:2550:G:C2	2:B:2559:C:C2	3.10	0.40
2:B:2588:G:C6	2:B:2589:A:N7	2.89	0.40
12:R:68:ARG:HG2	12:R:92:TRP:CE2	2.57	0.40
14:D:46:ARG:HH11	14:D:46:ARG:HA	1.85	0.40
15:T:64:LYS:N	15:T:64:LYS:HZ2	2.19	0.40
19:X:13:VAL:HG12	19:X:14:GLY:H	1.85	0.40
25:7:34:LYS:HG2	25:7:35:LYS:H	1.86	0.40
2:B:244:A:N6	2:B:245:G:C4	2.89	0.40
2:B:379:G:N1	2:B:380:G:C5	2.90	0.40
2:B:401:A:H2'	2:B:402:A:C8	2.56	0.40
2:B:444:C:H2'	2:B:445:C:H6	1.87	0.40
2:B:522:A:H2'	2:B:523:C:C6	2.56	0.40
2:B:659:G:H2'	2:B:660:C:C6	2.56	0.40
2:B:785:G:C4	2:B:786:C:C6	3.09	0.40
2:B:822:G:C6	2:B:836:G:C6	3.09	0.40
2:B:823:C:H2'	2:B:824:U:H6	1.81	0.40
2:B:1039:A:C2	2:B:1040:A:C4	3.09	0.40
2:B:1306:C:N3	2:B:1623:G:C6	2.89	0.40
2:B:1471:G:H1	2:B:1521:G:H1'	1.85	0.40
2:B:1564:C:H2'	2:B:1565:C:C6	2.56	0.40
2:B:1565:C:C2	2:B:1567:G:C5	3.09	0.40
2:B:1591:A:C6	2:B:1592:C:C4	3.09	0.40
2:B:1668:A:C8	2:B:1674:G:O6	2.75	0.40
2:B:1677:A:C2	2:B:1678:A:N3	2.89	0.40
2:B:1767:G:C6	2:B:1986:C:C4	3.10	0.40
2:B:1817:G:C6	2:B:1818:U:C4	3.09	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2101:A:H2	2:B:2188:U:H3	1.67	0.40
2:B:2312:U:C6	2:B:2313:C:C6	3.09	0.40
2:B:2373:G:C6	2:B:2381:A:N1	2.89	0.40
2:B:2392:A:O5'	2:B:2392:A:C8	2.75	0.40
2:B:2402:U:H4'	2:B:2403:C:O5'	2.21	0.40
2:B:2482:A:C2	2:B:2483:C:C1'	3.02	0.40
2:B:2487:G:N1	2:B:2488:G:C4	2.89	0.40
2:B:2597:G:C6	2:B:2598:A:C6	3.10	0.40
2:B:2869:G:C6	2:B:2870:C:C4	3.09	0.40
8:N:45:ARG:HH11	8:N:97:ILE:HD11	1.86	0.40
19:X:53:ILE:HG21	19:X:53:ILE:HD13	1.85	0.40
20:E:59:PRO:HG3	20:E:72:SER:H	1.86	0.40
23:5:217:THR:HG22	23:5:218:MET:H	1.86	0.40
28:F:33:ILE:HD11	28:F:99:PHE:CZ	2.56	0.40
1:A:21:G:H2'	1:A:22:U:C6	2.56	0.40
2:B:7:G:C6	2:B:8:C:C4	3.09	0.40
2:B:19:A:C4	2:B:20:C:C5	3.09	0.40
2:B:270:A:C2	2:B:370:G:C8	3.09	0.40
2:B:424:G:C4	2:B:425:G:C8	3.10	0.40
2:B:498:G:N3	17:U:44:HIS:CE1	2.89	0.40
2:B:571:U:C4	2:B:575:A:C8	3.10	0.40
2:B:608:A:H1'	2:B:621:A:N1	2.37	0.40
2:B:724:U:H2'	2:B:725:G:O4'	2.22	0.40
2:B:1446:C:H2'	2:B:1447:C:C6	2.57	0.40
2:B:1544:A:C6	2:B:1545:A:C5	3.10	0.40
2:B:1560:G:C4	2:B:1561:C:C6	3.09	0.40
2:B:1613:G:C6	2:B:1619:G:C6	3.09	0.40
2:B:1661:G:C6	2:B:1662:U:C4	3.10	0.40
2:B:1670:C:C5	2:B:1671:U:C4	3.09	0.40
2:B:1995:U:C6	2:B:1996:C:C6	3.09	0.40
2:B:2108:A:H2'	2:B:2109:U:C6	2.57	0.40
2:B:2201:G:C2	2:B:2223:G:N3	2.90	0.40
2:B:2243:U:C2	2:B:2244:U:C5	3.09	0.40
2:B:2345:G:H4'	2:B:2346:A:H5''	2.04	0.40
2:B:2580:U:H5'	14:D:136:ASN:O	2.21	0.40
2:B:2700:A:C4	2:B:2708:G:C2	3.10	0.40
2:B:2727:A:C6	2:B:2728:U:O4	2.75	0.40
7:M:123:LYS:HD3	7:M:123:LYS:HA	1.94	0.40
10:P:30:TRP:CE2	10:P:37:LYS:HB3	2.57	0.40
12:R:37:GLU:HA	12:R:53:PHE:CD1	2.55	0.40
26:8:15:LYS:H	26:8:25:VAL:HG12	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:H:12:LEU:HD13	30:H:12:LEU:HA	2.02	0.40
32:J:5:THR:HA	32:J:44:TYR:CD1	2.56	0.40
1:A:106:G:C2	1:A:107:G:H1'	2.57	0.40
2:B:10:A:N7	2:B:11:C:C2	2.89	0.40
2:B:28:A:C4	2:B:29:U:C6	3.10	0.40
2:B:48:G:C2	2:B:178:G:C6	3.09	0.40
2:B:66:C:C6	2:B:67:U:C5	3.09	0.40
2:B:294:A:C2	2:B:345:A:N3	2.89	0.40
2:B:436:C:H2'	2:B:437:U:C5	2.56	0.40
2:B:501:A:H2'	2:B:502:A:C8	2.56	0.40
2:B:690:G:C4	2:B:691:C:C5	3.09	0.40
2:B:1177:G:OP2	2:B:1177:G:C8	2.75	0.40
2:B:1202:G:N1	2:B:1244:A:C6	2.89	0.40
2:B:1275:A:C2'	8:N:16:HIS:CE1	3.05	0.40
2:B:1279:G:N1	2:B:1292:G:C5	2.89	0.40
2:B:1321:A:N7	2:B:1322:A:C8	2.90	0.40
2:B:1410:G:C6	2:B:1411:U:O4	2.73	0.40
2:B:1448:G:H2'	2:B:1449:G:H8	1.86	0.40
2:B:1560:G:C5	2:B:1561:C:C4	3.08	0.40
2:B:1819:A:C8	2:B:1821:A:C2	3.09	0.40
2:B:2231:U:C2	2:B:2232:C:C6	3.09	0.40
2:B:2478:A:H1'	2:B:2528:U:H4'	2.04	0.40
2:B:2756:U:C4	2:B:2759:G:O6	2.74	0.40
5:L:64:PHE:CG	25:7:24:LYS:HE2	2.56	0.40
6:1:26:PHE:O	6:1:30:MET:SD	2.80	0.40
7:M:18:ARG:HA	7:M:38:ARG:HH12	1.85	0.40
12:R:19:THR:HG22	12:R:97:LYS:HA	2.03	0.40
13:S:41:LYS:O	13:S:44:ALA:HB3	2.22	0.40
16:2:55:LYS:HA	16:2:55:LYS:HZ3	1.87	0.40
18:W:31:TYR:CE1	18:W:92:VAL:HG22	2.57	0.40
29:G:132:LEU:HD12	29:G:132:LEU:H	1.87	0.40
2:B:199:A:C2	2:B:2433:A:C2	3.09	0.40
2:B:244:A:C2	2:B:255:A:C4	3.10	0.40
2:B:269:C:C2	2:B:270:A:C8	3.10	0.40
2:B:633:A:H1'	2:B:2403:C:H4'	2.04	0.40
2:B:911:A:C8	7:M:9:PHE:CE2	3.10	0.40
2:B:939:G:C6	2:B:940:G:C6	3.10	0.40
2:B:1003:G:C4	2:B:1004:U:C5	3.09	0.40
2:B:1138:G:H21	32:J:108:MET:HE2	1.86	0.40
2:B:1144:A:H2'	2:B:1145:C:C6	2.56	0.40
2:B:1284:A:C6	2:B:1285:A:C5	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:1287:A:H5'	8:N:103:ARG:HD2	2.03	0.40
2:B:1300:G:C5	2:B:1626:A:C8	3.09	0.40
2:B:1608:A:C4	2:B:1611:C:C5	3.09	0.40
2:B:1772:A:H4'	2:B:1786:A:H4'	2.03	0.40
2:B:1998:A:H2'	2:B:1999:C:H6	1.81	0.40
2:B:2344:U:H5''	2:B:2373:G:H4'	2.03	0.40
2:B:2494:G:C4	2:B:2495:G:C8	3.10	0.40
2:B:2625:G:H3'	2:B:2626:C:C6	2.57	0.40
2:B:2646:C:H2'	2:B:2647:U:C6	2.57	0.40
2:B:2692:G:C6	2:B:2718:G:C2	3.10	0.40
2:B:2848:G:C4	10:P:20:ARG:NH2	2.90	0.40
7:M:36:VAL:HG13	18:W:82:TYR:CE2	2.57	0.40
7:M:74:THR:HA	7:M:89:VAL:HA	2.03	0.40
10:P:29:VAL:H	10:P:40:GLN:H	1.70	0.40
10:P:38:ARG:HG3	10:P:40:GLN:HE22	1.87	0.40
12:R:91:GLN:HB2	12:R:92:TRP:H	1.60	0.40
13:S:1:MET:C	13:S:108:SER:HA	2.42	0.40
19:X:4:VAL:CG1	19:X:83:ASP:H	2.35	0.40
19:X:116:VAL:HG23	19:X:143:ILE:HD11	2.02	0.40
19:X:213:VAL:O	19:X:260:VAL:HA	2.21	0.40
24:6:42:LEU:HD23	24:6:42:LEU:HA	1.95	0.40
32:J:132:HIS:O	32:J:132:HIS:CD2	2.74	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 PDB entries followed by that with respect to all EM entries.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	0	75/78 (96%)	54 (72%)	11 (15%)	10 (13%)	0	4
4	K	119/123 (97%)	84 (71%)	21 (18%)	14 (12%)	0	6
5	L	141/144 (98%)	108 (77%)	23 (16%)	10 (7%)	1	16

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
6	1	61/63 (97%)	49 (80%)	12 (20%)	0	100	100
7	M	134/136 (98%)	97 (72%)	18 (13%)	19 (14%)	0	4
8	N	118/127 (93%)	91 (77%)	20 (17%)	7 (6%)	1	19
9	O	114/117 (97%)	96 (84%)	12 (10%)	6 (5%)	2	21
10	P	112/115 (97%)	81 (72%)	18 (16%)	13 (12%)	0	6
11	Q	115/118 (98%)	87 (76%)	17 (15%)	11 (10%)	0	10
12	R	101/103 (98%)	71 (70%)	23 (23%)	7 (7%)	1	16
13	S	108/110 (98%)	83 (77%)	16 (15%)	9 (8%)	1	13
14	D	207/209 (99%)	143 (69%)	42 (20%)	22 (11%)	0	8
15	T	91/100 (91%)	58 (64%)	17 (19%)	16 (18%)	0	3
16	2	56/59 (95%)	46 (82%)	7 (12%)	3 (5%)	2	21
17	U	94/104 (90%)	66 (70%)	16 (17%)	12 (13%)	0	5
18	W	92/94 (98%)	77 (84%)	10 (11%)	5 (5%)	2	21
19	X	410/490 (84%)	329 (80%)	46 (11%)	35 (8%)	1	12
20	E	199/201 (99%)	145 (73%)	28 (14%)	26 (13%)	0	4
21	Y	77/85 (91%)	43 (56%)	15 (20%)	19 (25%)	0	1
22	3	54/57 (95%)	36 (67%)	10 (18%)	8 (15%)	0	4
23	5	232/234 (99%)	185 (80%)	23 (10%)	24 (10%)	0	9
24	6	44/46 (96%)	33 (75%)	7 (16%)	4 (9%)	1	12
25	7	62/65 (95%)	44 (71%)	11 (18%)	7 (11%)	0	7
26	8	36/38 (95%)	26 (72%)	6 (17%)	4 (11%)	0	8
27	C	269/273 (98%)	201 (75%)	35 (13%)	33 (12%)	0	5
28	F	176/179 (98%)	119 (68%)	41 (23%)	16 (9%)	1	12
29	G	171/177 (97%)	128 (75%)	26 (15%)	17 (10%)	0	10
30	H	147/149 (99%)	109 (74%)	25 (17%)	13 (9%)	1	12
31	I	139/142 (98%)	114 (82%)	16 (12%)	9 (6%)	1	18
32	J	140/142 (99%)	102 (73%)	21 (15%)	17 (12%)	0	6
All	All	3894/4078 (96%)	2905 (75%)	593 (15%)	396 (10%)	1	9

All (396) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	0	15	ASN

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Mol	Chain	Res	Type
3	0	28	PHE
3	0	70	LEU
5	L	29	LYS
5	L	41	ARG
5	L	47	ARG
5	L	113	ALA
5	L	142	ILE
7	M	17	ASN
7	M	58	LYS
7	M	67	VAL
7	M	78	LEU
7	M	80	VAL
8	N	3	HIS
9	O	107	ALA
9	O	108	ASP
10	P	25	VAL
10	P	32	VAL
10	P	77	SER
10	P	98	TYR
10	P	107	ALA
11	Q	73	ILE
11	Q	87	VAL
12	R	27	ILE
13	S	12	SER
13	S	41	LYS
13	S	76	VAL
13	S	89	ALA
14	D	107	VAL
14	D	115	GLY
14	D	121	THR
14	D	129	THR
14	D	148	GLN
14	D	152	PRO
14	D	164	GLN
14	D	182	ALA
15	T	3	ARG
15	T	9	LYS
15	T	16	VAL
15	T	18	GLU
15	T	21	SER
15	T	38	ALA
15	T	39	THR

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Mol	Chain	Res	Type
15	T	57	VAL
15	T	78	SER
17	U	13	LEU
17	U	64	ILE
19	X	10	ARG
19	X	13	VAL
19	X	84	VAL
19	X	118	ASN
19	X	166	LEU
19	X	234	PRO
19	X	261	ARG
20	E	43	THR
20	E	76	PRO
21	Y	17	ALA
21	Y	36	ILE
21	Y	42	THR
21	Y	46	ALA
21	Y	49	ASN
21	Y	78	PHE
21	Y	83	ALA
22	3	2	VAL
22	3	20	ALA
22	3	26	SER
23	5	17	ALA
23	5	38	PHE
23	5	50	ILE
23	5	82	ALA
23	5	117	SER
23	5	127	LEU
23	5	140	PRO
23	5	205	LYS
24	6	24	THR
25	7	35	LYS
25	7	49	VAL
25	7	53	ASP
26	8	2	LYS
27	C	43	ASN
27	C	132	ARG
27	C	142	ASN
27	C	145	MET
27	C	154	ALA
27	C	177	SER

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Mol	Chain	Res	Type
27	C	187	CYS
27	C	257	ARG
29	G	2	ARG
29	G	14	VAL
29	G	58	ALA
29	G	125	PRO
30	H	78	VAL
30	H	84	ALA
30	H	142	VAL
31	I	17	ALA
32	J	23	LYS
32	J	73	VAL
32	J	128	ASN
3	0	13	THR
3	0	17	ARG
3	0	27	ARG
4	K	17	ARG
4	K	71	ARG
4	K	117	SER
5	L	30	THR
5	L	51	GLU
7	M	21	ALA
7	M	125	PRO
8	N	63	ARG
8	N	80	PHE
8	N	100	CYS
8	N	119	SER
9	O	59	ALA
10	P	54	LEU
10	P	63	ILE
10	P	79	VAL
11	Q	71	ASN
12	R	40	MET
12	R	98	ILE
13	S	53	SER
14	D	20	VAL
14	D	71	ALA
14	D	109	VAL
14	D	120	GLY
14	D	139	SER
14	D	175	LEU
14	D	206	ALA

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Mol	Chain	Res	Type
15	T	37	ASP
15	T	89	GLU
16	2	28	LEU
17	U	37	GLY
17	U	98	ASN
19	X	145	ALA
19	X	165	ASP
19	X	264	GLY
19	X	266	ILE
19	X	405	VAL
20	E	15	SER
20	E	30	GLN
20	E	54	GLY
20	E	66	GLY
20	E	68	ALA
20	E	72	SER
20	E	93	SER
20	E	96	VAL
20	E	148	ILE
21	Y	9	THR
21	Y	48	ALA
21	Y	53	GLY
23	5	56	ASP
23	5	81	GLY
23	5	229	LEU
24	6	7	PRO
25	7	32	LEU
26	8	7	VAL
27	C	49	THR
27	C	58	LYS
27	C	72	GLY
27	C	74	PRO
27	C	88	ALA
27	C	121	ALA
27	C	176	ARG
27	C	217	PRO
27	C	231	HIS
27	C	269	ARG
28	F	22	ASN
28	F	32	LYS
28	F	44	ALA
28	F	70	ARG

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Mol	Chain	Res	Type
28	F	71	LYS
28	F	84	ILE
28	F	101	ARG
28	F	112	ASP
28	F	146	ASP
28	F	150	GLY
29	G	11	PRO
29	G	136	ASP
29	G	167	VAL
30	H	98	ASP
30	H	116	ARG
30	H	123	ARG
31	I	7	TYR
32	J	2	LYS
32	J	8	PRO
32	J	43	GLU
32	J	59	ALA
32	J	134	ALA
3	0	21	LEU
4	K	64	ARG
4	K	118	LEU
5	L	64	PHE
7	M	16	ARG
7	M	60	GLN
7	M	86	LYS
7	M	87	GLY
8	N	59	SER
10	P	21	PRO
10	P	33	GLU
11	Q	5	ARG
11	Q	99	VAL
11	Q	101	ASP
12	R	81	LYS
14	D	30	GLU
14	D	65	ALA
15	T	2	ILE
15	T	72	GLN
15	T	86	THR
17	U	12	VAL
17	U	31	GLY
17	U	38	ILE
17	U	81	ARG

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Mol	Chain	Res	Type
18	W	24	ASN
18	W	28	ALA
18	W	56	PHE
19	X	9	GLY
19	X	148	GLY
19	X	210	ARG
19	X	211	PRO
19	X	258	ALA
19	X	267	THR
19	X	295	ARG
19	X	346	ASP
19	X	348	ALA
19	X	406	LYS
19	X	460	GLY
20	E	8	ALA
20	E	45	ALA
20	E	46	GLN
20	E	83	VAL
20	E	106	LYS
20	E	124	PHE
20	E	130	LYS
21	Y	56	HIS
21	Y	74	LYS
21	Y	75	ASN
22	3	40	HIS
22	3	51	ARG
22	3	55	ALA
23	5	33	LEU
23	5	35	THR
23	5	135	GLY
23	5	167	LYS
25	7	16	THR
25	7	51	LYS
25	7	52	GLY
26	8	8	LYS
27	C	28	PRO
27	C	42	ARG
27	C	55	GLY
27	C	65	ASP
27	C	86	ARG
27	C	89	ASN
27	C	133	ASN

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Mol	Chain	Res	Type
27	C	189	ALA
28	F	64	PRO
29	G	32	LEU
29	G	98	LYS
29	G	166	GLU
30	H	29	PHE
30	H	111	ALA
31	I	2	LYS
31	I	6	ALA
31	I	31	GLY
31	I	92	PRO
31	I	118	GLY
32	J	19	ASP
32	J	20	ALA
32	J	71	ASP
32	J	127	GLY
32	J	131	ASN
32	J	132	HIS
4	K	12	ASP
4	K	34	GLY
4	K	36	GLY
4	K	82	ASN
7	M	18	ARG
7	M	24	THR
7	M	77	PRO
7	M	132	THR
9	O	69	ASP
10	P	50	ARG
10	P	81	ASP
11	Q	9	ALA
12	R	25	LEU
13	S	2	GLU
14	D	31	ALA
15	T	51	PHE
15	T	74	ILE
16	2	10	ARG
17	U	16	LYS
19	X	24	ARG
19	X	96	MET
19	X	230	VAL
19	X	396	GLN
20	E	4	VAL

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Mol	Chain	Res	Type
20	E	11	ALA
20	E	13	THR
20	E	56	GLY
20	E	65	THR
20	E	81	GLY
20	E	125	SER
21	Y	62	ALA
23	5	160	GLN
23	5	200	LYS
23	5	232	SER
24	6	8	SER
27	C	105	ALA
27	C	198	GLU
28	F	77	LYS
28	F	106	ALA
28	F	148	VAL
29	G	29	ASN
29	G	82	PHE
29	G	157	LYS
29	G	164	ALA
30	H	60	GLU
30	H	83	LYS
30	H	137	GLU
3	0	10	ARG
8	N	93	GLY
9	O	90	VAL
10	P	95	LYS
11	Q	81	GLY
13	S	28	LYS
17	U	17	ASP
17	U	88	ASP
18	W	27	PRO
18	W	44	HIS
19	X	41	LYS
19	X	147	HIS
19	X	343	GLY
20	E	80	SER
21	Y	14	ASP
21	Y	16	GLU
22	3	24	VAL
23	5	52	ALA
23	5	118	PRO

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Mol	Chain	Res	Type
23	5	204	ALA
26	8	16	ILE
27	C	50	THR
28	F	59	ILE
28	F	78	ILE
29	G	155	PRO
29	G	175	LYS
31	I	3	LYS
32	J	137	PRO
4	K	6	THR
4	K	50	GLY
4	K	53	LYS
5	L	36	LYS
5	L	122	VAL
7	M	10	ARG
7	M	30	SER
11	Q	91	ARG
12	R	16	GLU
13	S	26	GLY
14	D	117	GLY
14	D	119	ALA
16	2	13	ILE
19	X	110	GLU
21	Y	69	GLU
23	5	201	PRO
27	C	52	HIS
27	C	84	PRO
29	G	79	THR
30	H	38	PRO
31	I	119	ALA
11	Q	89	ILE
12	R	101	ILE
17	U	69	VAL
19	X	66	GLY
19	X	168	PRO
23	5	233	VAL
27	C	230	PRO
32	J	46	PRO
9	O	66	GLY
11	Q	33	VAL
13	S	87	PRO
14	D	122	VAL

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Mol	Chain	Res	Type
19	X	124	ASP
3	0	6	VAL
4	K	52	VAL
4	K	103	VAL
21	Y	47	GLY
22	3	7	PRO
23	5	142	VAL
30	H	99	ILE
7	M	4	PRO
7	M	124	LEU
14	D	166	GLY
19	X	241	ILE
21	Y	33	GLY
24	6	44	VAL
3	0	63	ILE
27	C	46	GLY
32	J	110	PRO

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 PDB entries followed by that with respect to all EM entries.

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	
3	0	67/68 (98%)	62 (92%)	5 (8%)	13	39
4	K	102/104 (98%)	92 (90%)	10 (10%)	8	28
5	L	102/103 (99%)	89 (87%)	13 (13%)	4	20
6	1	55/55 (100%)	50 (91%)	5 (9%)	9	31
7	M	109/109 (100%)	105 (96%)	4 (4%)	34	58
8	N	100/103 (97%)	93 (93%)	7 (7%)	15	41
9	O	86/87 (99%)	73 (85%)	13 (15%)	3	16
10	P	99/100 (99%)	87 (88%)	12 (12%)	5	22
11	Q	89/90 (99%)	81 (91%)	8 (9%)	9	32
12	R	84/84 (100%)	69 (82%)	15 (18%)	2	11
13	S	93/93 (100%)	88 (95%)	5 (5%)	22	49

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
14	D	164/164 (100%)	143 (87%)	21 (13%)	4	20
15	T	80/84 (95%)	69 (86%)	11 (14%)	3	19
16	2	48/49 (98%)	44 (92%)	4 (8%)	11	36
17	U	81/85 (95%)	72 (89%)	9 (11%)	6	24
18	W	78/78 (100%)	71 (91%)	7 (9%)	9	32
19	X	357/419 (85%)	324 (91%)	33 (9%)	9	31
20	E	165/165 (100%)	152 (92%)	13 (8%)	12	38
21	Y	59/63 (94%)	55 (93%)	4 (7%)	16	42
22	3	47/48 (98%)	40 (85%)	7 (15%)	3	16
23	5	181/181 (100%)	158 (87%)	23 (13%)	4	20
24	6	38/38 (100%)	35 (92%)	3 (8%)	12	38
25	7	51/52 (98%)	44 (86%)	7 (14%)	3	19
26	8	34/34 (100%)	31 (91%)	3 (9%)	10	33
27	C	216/218 (99%)	190 (88%)	26 (12%)	5	22
28	F	149/150 (99%)	131 (88%)	18 (12%)	5	22
29	G	136/138 (99%)	115 (85%)	21 (15%)	2	15
30	H	114/114 (100%)	105 (92%)	9 (8%)	12	38
31	I	109/110 (99%)	100 (92%)	9 (8%)	11	36
32	J	116/116 (100%)	99 (85%)	17 (15%)	3	16
All	All	3209/3302 (97%)	2867 (89%)	342 (11%)	10	26

All (342) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
3	0	2	ARG
3	0	19	HIS
3	0	28	PHE
3	0	32	LEU
3	0	40	GLU
4	K	5	GLN
4	K	7	MET
4	K	17	ARG
4	K	29	HIS
4	K	47	ILE
4	K	49	ARG

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Mol	Chain	Res	Type
4	K	72	PRO
4	K	80	ASP
4	K	109	SER
4	K	110	GLU
5	L	2	ARG
5	L	5	THR
5	L	19	LEU
5	L	23	ILE
5	L	29	LYS
5	L	48	ARG
5	L	54	GLN
5	L	55	MET
5	L	59	ARG
5	L	63	LYS
5	L	91	ASP
5	L	111	ILE
5	L	119	PRO
6	1	5	GLU
6	1	6	LEU
6	1	30	MET
6	1	47	ARG
6	1	49	ASP
7	M	24	THR
7	M	67	VAL
7	M	68	PHE
7	M	106	ASP
8	N	1	MET
8	N	2	ARG
8	N	8	ARG
8	N	37	THR
8	N	45	ARG
8	N	80	PHE
8	N	85	PRO
9	O	31	THR
9	O	34	HIS
9	O	36	TYR
9	O	54	VAL
9	O	62	LEU
9	O	64	TYR
9	O	69	ASP
9	O	80	GLU
9	O	84	GLU

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Mol	Chain	Res	Type
9	O	95	SER
9	O	98	GLN
9	O	108	ASP
9	O	117	PHE
10	P	10	GLU
10	P	25	VAL
10	P	39	LEU
10	P	59	THR
10	P	61	ARG
10	P	63	ILE
10	P	76	HIS
10	P	87	ARG
10	P	88	ARG
10	P	92	ARG
10	P	98	TYR
10	P	100	ARG
11	Q	4	LYS
11	Q	27	ARG
11	Q	50	ARG
11	Q	58	GLN
11	Q	73	ILE
11	Q	90	ASP
11	Q	93	ILE
11	Q	100	PHE
12	R	1	MET
12	R	6	GLN
12	R	13	ARG
12	R	14	VAL
12	R	20	VAL
12	R	22	LEU
12	R	26	ASP
12	R	33	VAL
12	R	34	GLU
12	R	38	VAL
12	R	41	ILE
12	R	47	VAL
12	R	54	VAL
12	R	70	GLU
12	R	79	ARG
13	S	1	MET
13	S	2	GLU
13	S	11	ARG

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Mol	Chain	Res	Type
13	S	35	ILE
13	S	51	LEU
14	D	2	ILE
14	D	30	GLU
14	D	45	TYR
14	D	46	ARG
14	D	56	LYS
14	D	60	VAL
14	D	79	LEU
14	D	89	GLU
14	D	92	VAL
14	D	110	THR
14	D	118	PHE
14	D	123	LYS
14	D	128	ARG
14	D	130	GLN
14	D	146	ILE
14	D	156	PHE
14	D	161	MET
14	D	176	ASP
14	D	181	ASP
14	D	183	GLU
14	D	201	LEU
15	T	4	GLU
15	T	10	VAL
15	T	11	LEU
15	T	25	GLU
15	T	34	VAL
15	T	37	ASP
15	T	52	GLU
15	T	64	LYS
15	T	79	ASP
15	T	80	TRP
15	T	88	LYS
16	2	5	LYS
16	2	36	GLU
16	2	55	LYS
16	2	56	VAL
17	U	16	LYS
17	U	36	GLU
17	U	39	ASN
17	U	51	LEU

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Mol	Chain	Res	Type
17	U	60	LYS
17	U	64	ILE
17	U	81	ARG
17	U	99	SER
17	U	100	GLU
18	W	5	ASN
18	W	7	GLU
18	W	37	PRO
18	W	56	PHE
18	W	77	VAL
18	W	79	ARG
18	W	84	PRO
19	X	8	VAL
19	X	10	ARG
19	X	13	VAL
19	X	21	ARG
19	X	55	ILE
19	X	56	ASP
19	X	77	LEU
19	X	86	LEU
19	X	99	ASP
19	X	100	GLU
19	X	106	LEU
19	X	109	ARG
19	X	120	THR
19	X	133	TYR
19	X	135	LEU
19	X	143	ILE
19	X	205	LEU
19	X	232	ASP
19	X	240	SER
19	X	241	ILE
19	X	242	TYR
19	X	266	ILE
19	X	273	PHE
19	X	286	ASN
19	X	295	ARG
19	X	309	ILE
19	X	314	ARG
19	X	346	ASP
19	X	353	ILE
19	X	409	TYR

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Mol	Chain	Res	Type
19	X	411	HIS
19	X	430	LEU
19	X	449	MET
20	E	4	VAL
20	E	5	LEU
20	E	7	ASP
20	E	22	ASP
20	E	41	GLN
20	E	43	THR
20	E	60	TRP
20	E	63	LYS
20	E	78	TRP
20	E	83	VAL
20	E	90	GLN
20	E	124	PHE
20	E	133	LEU
21	Y	11	ASN
21	Y	13	ARG
21	Y	14	ASP
21	Y	39	GLN
22	3	2	VAL
22	3	5	ASN
22	3	15	ARG
22	3	28	SER
22	3	29	VAL
22	3	43	THR
22	3	48	TYR
23	5	4	LEU
23	5	7	ARG
23	5	16	ASP
23	5	18	THR
23	5	53	ARG
23	5	71	ARG
23	5	74	ARG
23	5	109	MET
23	5	121	MET
23	5	127	LEU
23	5	142	VAL
23	5	145	VAL
23	5	162	ARG
23	5	164	ARG
23	5	166	ASP

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Mol	Chain	Res	Type
23	5	184	LYS
23	5	189	LEU
23	5	193	LEU
23	5	200	LYS
23	5	214	ILE
23	5	217	THR
23	5	225	ASP
23	5	233	VAL
24	6	1	MET
24	6	21	ARG
24	6	34	ARG
25	7	12	ARG
25	7	14	LYS
25	7	18	LYS
25	7	30	HIS
25	7	33	THR
25	7	34	LYS
25	7	37	THR
26	8	11	CYS
26	8	12	ARG
26	8	22	VAL
27	C	24	HIS
27	C	28	PRO
27	C	34	GLU
27	C	78	GLU
27	C	81	GLU
27	C	82	TYR
27	C	110	LYS
27	C	129	LEU
27	C	132	ARG
27	C	152	GLN
27	C	159	THR
27	C	170	TYR
27	C	173	LEU
27	C	177	SER
27	C	181	ARG
27	C	188	ARG
27	C	193	GLU
27	C	198	GLU
27	C	213	ARG
27	C	228	ASP
27	C	235	GLU

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Mol	Chain	Res	Type
27	C	249	VAL
27	C	263	ASP
27	C	264	LYS
27	C	268	ARG
27	C	270	ARG
28	F	3	LEU
28	F	8	LYS
28	F	10	GLU
28	F	25	MET
28	F	37	MET
28	F	46	LYS
28	F	63	LYS
28	F	77	LYS
28	F	86	CYS
28	F	103	ILE
28	F	113	PHE
28	F	134	GLN
28	F	151	LEU
28	F	162	ASP
28	F	163	GLU
28	F	173	ASP
28	F	174	PHE
28	F	177	ARG
29	G	14	VAL
29	G	18	ILE
29	G	31	GLU
29	G	41	GLU
29	G	61	TRP
29	G	74	MET
29	G	80	GLU
29	G	82	PHE
29	G	83	THR
29	G	87	GLN
29	G	88	LEU
29	G	91	VAL
29	G	94	ARG
29	G	115	GLN
29	G	120	ILE
29	G	121	THR
29	G	127	GLN
29	G	138	GLN
29	G	154	GLU

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Mol	Chain	Res	Type
29	G	167	VAL
29	G	169	ARG
30	H	4	ILE
30	H	19	VAL
30	H	20	ASN
30	H	21	VAL
30	H	108	VAL
30	H	116	ARG
30	H	119	ASN
30	H	129	GLU
30	H	132	PHE
31	I	4	VAL
31	I	7	TYR
31	I	10	LEU
31	I	41	PHE
31	I	96	LYS
31	I	97	VAL
31	I	112	LYS
31	I	115	ASP
31	I	140	GLU
32	J	2	LYS
32	J	4	PHE
32	J	7	LYS
32	J	9	GLU
32	J	13	ARG
32	J	15	TRP
32	J	35	ARG
32	J	39	LYS
32	J	50	THR
32	J	86	GLN
32	J	90	GLU
32	J	91	GLU
32	J	124	VAL
32	J	129	GLU
32	J	132	HIS
32	J	135	GLN
32	J	141	ASP

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (68) such sidechains are listed below:

Mol	Chain	Res	Type
3	0	15	ASN

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Mol	Chain	Res	Type
3	0	35	HIS
4	K	5	GLN
6	1	38	GLN
7	M	13	HIS
7	M	45	GLN
8	N	16	HIS
8	N	62	ASN
9	O	61	GLN
9	O	67	ASN
10	P	9	GLN
10	P	11	GLN
10	P	74	GLN
11	Q	58	GLN
11	Q	70	GLN
12	R	12	HIS
12	R	86	GLN
12	R	87	GLN
12	R	89	HIS
13	S	7	HIS
13	S	9	HIS
13	S	57	ASN
14	D	126	ASN
14	D	134	HIS
14	D	136	ASN
14	D	173	GLN
16	2	8	GLN
17	U	39	ASN
18	W	12	GLN
18	W	44	HIS
18	W	51	GLN
19	X	147	HIS
19	X	169	GLN
19	X	286	ASN
19	X	357	HIS
19	X	411	HIS
19	X	423	HIS
20	E	163	ASN
21	Y	39	GLN
21	Y	45	HIS
21	Y	49	ASN
22	3	4	GLN
22	3	37	HIS

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Mol	Chain	Res	Type
22	3	40	HIS
23	5	58	ASN
23	5	160	GLN
24	6	6	GLN
24	6	13	ASN
24	6	16	HIS
25	7	23	HIS
26	8	13	ASN
27	C	24	HIS
27	C	44	ASN
27	C	57	HIS
27	C	196	ASN
29	G	19	ASN
29	G	44	HIS
29	G	110	HIS
30	H	33	GLN
30	H	128	HIS
30	H	133	GLN
31	I	110	GLN
32	J	40	HIS
32	J	76	HIS
32	J	77	HIS
32	J	86	GLN
32	J	130	HIS
32	J	132	HIS

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	A	112/117 (95%)	20 (17%)	4 (3%)
2	B	2873/2903 (98%)	580 (20%)	122 (4%)
All	All	2985/3020 (98%)	600 (20%)	126 (4%)

All (600) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	A	9	G
1	A	13	G
1	A	14	U
1	A	15	A
1	A	16	G

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Mol	Chain	Res	Type
1	A	26	C
1	A	29	A
1	A	30	C
1	A	41	G
1	A	45	A
1	A	52	A
1	A	53	A
1	A	66	A
1	A	67	G
1	A	89	U
1	A	90	C
1	A	91	C
1	A	99	A
1	A	109	A
1	A	118	C
2	B	13	A
2	B	23	G
2	B	35	G
2	B	46	G
2	B	50	U
2	B	51	G
2	B	63	A
2	B	71	A
2	B	74	A
2	B	75	G
2	B	84	A
2	B	91	A
2	B	92	U
2	B	100	U
2	B	101	A
2	B	102	U
2	B	103	A
2	B	118	A
2	B	120	U
2	B	126	A
2	B	128	C
2	B	136	G
2	B	137	U
2	B	139	U
2	B	140	C
2	B	141	G
2	B	142	A

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Mol	Chain	Res	Type
2	B	143	C
2	B	144	A
2	B	160	A
2	B	163	C
2	B	181	A
2	B	196	A
2	B	197	A
2	B	199	A
2	B	216	A
2	B	219	A
2	B	221	A
2	B	222	A
2	B	223	A
2	B	228	C
2	B	229	C
2	B	233	A
2	B	241	A
2	B	248	G
2	B	249	C
2	B	255	A
2	B	264	C
2	B	265	A
2	B	266	G
2	B	268	C
2	B	271	G
2	B	273	G
2	B	276	U
2	B	277	G
2	B	278	A
2	B	281	C
2	B	283	G
2	B	286	U
2	B	294	A
2	B	299	A
2	B	311	A
2	B	320	A
2	B	321	U
2	B	322	A
2	B	329	G
2	B	330	A
2	B	333	G
2	B	343	C

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Mol	Chain	Res	Type
2	B	346	A
2	B	352	A
2	B	353	C
2	B	361	G
2	B	362	A
2	B	363	G
2	B	369	U
2	B	371	A
2	B	372	G
2	B	386	G
2	B	389	G
2	B	405	U
2	B	406	G
2	B	411	G
2	B	412	A
2	B	424	G
2	B	451	U
2	B	454	A
2	B	455	C
2	B	456	C
2	B	457	A
2	B	479	A
2	B	481	G
2	B	490	C
2	B	491	G
2	B	498	G
2	B	504	A
2	B	505	A
2	B	508	A
2	B	509	C
2	B	512	G
2	B	531	C
2	B	532	A
2	B	533	G
2	B	544	C
2	B	546	U
2	B	547	A
2	B	548	G
2	B	549	G
2	B	550	C
2	B	563	A
2	B	571	U

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Mol	Chain	Res	Type
2	B	572	A
2	B	573	U
2	B	575	A
2	B	586	A
2	B	588	U
2	B	603	A
2	B	613	A
2	B	614	A
2	B	615	U
2	B	621	A
2	B	625	G
2	B	626	A
2	B	627	A
2	B	637	A
2	B	642	U
2	B	645	C
2	B	646	U
2	B	647	G
2	B	654	A
2	B	655	A
2	B	656	G
2	B	671	C
2	B	686	U
2	B	715	A
2	B	717	C
2	B	730	A
2	B	746	U
2	B	747	U
2	B	751	A
2	B	757	G
2	B	764	A
2	B	774	G
2	B	775	G
2	B	776	G
2	B	782	A
2	B	784	G
2	B	785	G
2	B	789	A
2	B	790	U
2	B	792	A
2	B	801	G
2	B	802	A

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Mol	Chain	Res	Type
2	B	804	A
2	B	805	G
2	B	812	C
2	B	819	A
2	B	827	U
2	B	828	U
2	B	829	A
2	B	830	G
2	B	846	U
2	B	847	U
2	B	859	G
2	B	871	U
2	B	875	G
2	B	876	C
2	B	878	A
2	B	881	G
2	B	887	U
2	B	889	C
2	B	890	C
2	B	891	G
2	B	896	A
2	B	897	C
2	B	900	A
2	B	901	C
2	B	910	A
2	B	912	C
2	B	919	U
2	B	931	U
2	B	932	U
2	B	933	A
2	B	941	A
2	B	943	A
2	B	945	A
2	B	946	C
2	B	961	C
2	B	973	A
2	B	974	G
2	B	980	A
2	B	981	A
2	B	983	A
2	B	984	A
2	B	985	C

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Mol	Chain	Res	Type
2	B	991	C
2	B	995	C
2	B	996	A
2	B	1012	U
2	B	1013	C
2	B	1022	G
2	B	1025	G
2	B	1026	G
2	B	1027	A
2	B	1033	U
2	B	1046	A
2	B	1047	G
2	B	1048	A
2	B	1054	A
2	B	1056	G
2	B	1057	A
2	B	1068	G
2	B	1069	A
2	B	1070	A
2	B	1071	G
2	B	1077	A
2	B	1078	U
2	B	1084	A
2	B	1085	A
2	B	1088	A
2	B	1090	A
2	B	1095	A
2	B	1096	A
2	B	1104	C
2	B	1112	G
2	B	1116	G
2	B	1129	A
2	B	1130	U
2	B	1132	U
2	B	1133	A
2	B	1134	A
2	B	1135	C
2	B	1136	G
2	B	1139	G
2	B	1142	A
2	B	1176	U
2	B	1205	A

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Mol	Chain	Res	Type
2	B	1206	G
2	B	1237	A
2	B	1238	G
2	B	1241	A
2	B	1242	U
2	B	1248	G
2	B	1250	G
2	B	1253	A
2	B	1255	U
2	B	1256	G
2	B	1266	G
2	B	1271	G
2	B	1272	A
2	B	1273	U
2	B	1275	A
2	B	1276	A
2	B	1284	A
2	B	1300	G
2	B	1301	A
2	B	1312	U
2	B	1313	U
2	B	1321	A
2	B	1325	U
2	B	1337	G
2	B	1340	U
2	B	1341	G
2	B	1352	U
2	B	1365	A
2	B	1368	G
2	B	1374	G
2	B	1379	U
2	B	1380	G
2	B	1383	A
2	B	1384	A
2	B	1394	U
2	B	1396	U
2	B	1416	G
2	B	1419	A
2	B	1421	G
2	B	1427	A
2	B	1428	C
2	B	1451	C

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Mol	Chain	Res	Type
2	B	1454	C
2	B	1458	U
2	B	1459	G
2	B	1460	U
2	B	1461	C
2	B	1469	A
2	B	1476	U
2	B	1477	A
2	B	1478	G
2	B	1482	G
2	B	1490	A
2	B	1497	U
2	B	1504	A
2	B	1507	C
2	B	1508	A
2	B	1509	A
2	B	1524	G
2	B	1532	A
2	B	1535	A
2	B	1536	C
2	B	1538	G
2	B	1552	A
2	B	1558	C
2	B	1566	A
2	B	1567	G
2	B	1569	A
2	B	1578	U
2	B	1584	U
2	B	1585	C
2	B	1607	C
2	B	1608	A
2	B	1609	A
2	B	1610	A
2	B	1616	A
2	B	1617	C
2	B	1618	A
2	B	1633	G
2	B	1634	A
2	B	1635	A
2	B	1640	A
2	B	1647	U
2	B	1648	U

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Mol	Chain	Res	Type
2	B	1653	G
2	B	1654	A
2	B	1670	C
2	B	1674	G
2	B	1677	A
2	B	1678	A
2	B	1679	A
2	B	1700	A
2	B	1714	U
2	B	1715	G
2	B	1729	U
2	B	1730	C
2	B	1731	G
2	B	1733	G
2	B	1738	G
2	B	1756	G
2	B	1757	A
2	B	1758	U
2	B	1761	C
2	B	1764	C
2	B	1773	A
2	B	1776	G
2	B	1784	A
2	B	1800	C
2	B	1801	A
2	B	1808	A
2	B	1816	C
2	B	1819	A
2	B	1820	U
2	B	1821	A
2	B	1829	A
2	B	1834	U
2	B	1836	C
2	B	1837	C
2	B	1848	A
2	B	1853	A
2	B	1886	U
2	B	1888	G
2	B	1896	G
2	B	1900	A
2	B	1905	C
2	B	1906	G

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Mol	Chain	Res	Type
2	B	1912	A
2	B	1914	C
2	B	1925	C
2	B	1926	U
2	B	1927	A
2	B	1928	A
2	B	1929	G
2	B	1930	G
2	B	1931	U
2	B	1935	G
2	B	1938	A
2	B	1939	U
2	B	1940	U
2	B	1951	U
2	B	1953	A
2	B	1954	G
2	B	1955	U
2	B	1964	G
2	B	1967	C
2	B	1969	A
2	B	1970	A
2	B	1971	U
2	B	1972	G
2	B	1991	U
2	B	1993	U
2	B	1997	C
2	B	2020	A
2	B	2022	U
2	B	2023	C
2	B	2031	A
2	B	2032	G
2	B	2033	A
2	B	2042	A
2	B	2043	C
2	B	2055	C
2	B	2056	G
2	B	2059	A
2	B	2060	A
2	B	2061	G
2	B	2062	A
2	B	2069	G
2	B	2077	A

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Mol	Chain	Res	Type
2	B	2094	A
2	B	2102	G
2	B	2106	U
2	B	2111	U
2	B	2116	G
2	B	2119	A
2	B	2120	G
2	B	2121	G
2	B	2122	U
2	B	2124	G
2	B	2126	A
2	B	2127	G
2	B	2128	G
2	B	2129	C
2	B	2130	U
2	B	2131	U
2	B	2132	U
2	B	2133	G
2	B	2134	A
2	B	2137	U
2	B	2138	G
2	B	2142	A
2	B	2144	G
2	B	2146	C
2	B	2147	A
2	B	2148	G
2	B	2149	U
2	B	2150	C
2	B	2151	U
2	B	2152	G
2	B	2153	C
2	B	2154	A
2	B	2155	U
2	B	2156	G
2	B	2157	G
2	B	2158	A
2	B	2163	A
2	B	2164	C
2	B	2165	C
2	B	2166	U
2	B	2167	U
2	B	2168	G

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Mol	Chain	Res	Type
2	B	2171	A
2	B	2173	A
2	B	2174	C
2	B	2175	C
2	B	2177	C
2	B	2178	C
2	B	2179	C
2	B	2181	U
2	B	2182	U
2	B	2192	U
2	B	2197	U
2	B	2198	A
2	B	2204	G
2	B	2211	A
2	B	2212	A
2	B	2213	U
2	B	2214	C
2	B	2225	A
2	B	2238	G
2	B	2239	G
2	B	2251	G
2	B	2252	G
2	B	2253	G
2	B	2266	A
2	B	2270	A
2	B	2278	A
2	B	2279	G
2	B	2283	C
2	B	2287	A
2	B	2288	A
2	B	2297	A
2	B	2304	G
2	B	2305	U
2	B	2307	G
2	B	2310	C
2	B	2311	A
2	B	2312	U
2	B	2320	U
2	B	2321	U
2	B	2322	A
2	B	2324	U
2	B	2325	G

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Mol	Chain	Res	Type
2	B	2327	A
2	B	2333	A
2	B	2335	A
2	B	2336	A
2	B	2337	G
2	B	2347	C
2	B	2372	U
2	B	2377	A
2	B	2383	G
2	B	2385	C
2	B	2388	A
2	B	2391	G
2	B	2396	G
2	B	2403	C
2	B	2406	A
2	B	2426	A
2	B	2427	C
2	B	2429	G
2	B	2430	A
2	B	2431	U
2	B	2432	A
2	B	2434	A
2	B	2439	A
2	B	2440	C
2	B	2441	U
2	B	2448	A
2	B	2449	U
2	B	2458	G
2	B	2472	G
2	B	2476	A
2	B	2478	A
2	B	2491	U
2	B	2498	C
2	B	2502	G
2	B	2503	A
2	B	2505	G
2	B	2506	U
2	B	2518	A
2	B	2529	G
2	B	2534	A
2	B	2535	G
2	B	2553	G

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Mol	Chain	Res	Type
2	B	2555	U
2	B	2565	A
2	B	2566	A
2	B	2567	G
2	B	2572	A
2	B	2573	C
2	B	2576	G
2	B	2577	A
2	B	2578	G
2	B	2582	G
2	B	2585	U
2	B	2586	U
2	B	2602	A
2	B	2609	U
2	B	2613	U
2	B	2629	U
2	B	2630	G
2	B	2682	A
2	B	2689	U
2	B	2690	U
2	B	2691	C
2	B	2714	G
2	B	2726	A
2	B	2733	A
2	B	2744	G
2	B	2748	A
2	B	2750	A
2	B	2757	A
2	B	2765	A
2	B	2778	A
2	B	2793	C
2	B	2798	U
2	B	2799	A
2	B	2800	A
2	B	2809	A
2	B	2820	A
2	B	2821	A
2	B	2832	U
2	B	2833	U
2	B	2834	G
2	B	2835	A
2	B	2836	U

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Mol	Chain	Res	Type
2	B	2849	U
2	B	2850	A
2	B	2867	G
2	B	2872	A
2	B	2873	A
2	B	2883	A
2	B	2893	A

All (126) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	A	13	G
1	A	14	U
1	A	66	A
1	A	89	U
2	B	1	G
2	B	50	U
2	B	92	U
2	B	100	U
2	B	197	A
2	B	218	A
2	B	228	C
2	B	320	A
2	B	321	U
2	B	329	G
2	B	390	U
2	B	451	U
2	B	455	C
2	B	489	G
2	B	548	G
2	B	571	U
2	B	620	G
2	B	631	A
2	B	642	U
2	B	654	A
2	B	670	A
2	B	748	G
2	B	773	U
2	B	780	G
2	B	796	C
2	B	801	G
2	B	805	G

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Mol	Chain	Res	Type
2	B	821	A
2	B	827	U
2	B	828	U
2	B	846	U
2	B	880	G
2	B	889	C
2	B	890	C
2	B	932	U
2	B	945	A
2	B	973	A
2	B	980	A
2	B	981	A
2	B	982	C
2	B	984	A
2	B	995	C
2	B	1046	A
2	B	1061	U
2	B	1084	A
2	B	1095	A
2	B	1129	A
2	B	1133	A
2	B	1134	A
2	B	1205	A
2	B	1211	C
2	B	1271	G
2	B	1272	A
2	B	1284	A
2	B	1312	U
2	B	1379	U
2	B	1383	A
2	B	1419	A
2	B	1420	A
2	B	1428	C
2	B	1497	U
2	B	1608	A
2	B	1653	G
2	B	1673	G
2	B	1676	A
2	B	1677	A
2	B	1714	U
2	B	1730	C
2	B	1782	U

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Mol	Chain	Res	Type
2	B	1819	A
2	B	1820	U
2	B	1836	C
2	B	1899	A
2	B	1900	A
2	B	1905	C
2	B	1930	G
2	B	1937	A
2	B	1939	U
2	B	1953	A
2	B	1969	A
2	B	2022	U
2	B	2031	A
2	B	2042	A
2	B	2055	C
2	B	2058	A
2	B	2060	A
2	B	2062	A
2	B	2076	U
2	B	2093	G
2	B	2118	U
2	B	2119	A
2	B	2128	G
2	B	2136	G
2	B	2145	C
2	B	2157	G
2	B	2163	A
2	B	2178	C
2	B	2213	U
2	B	2251	G
2	B	2254	C
2	B	2270	A
2	B	2272	U
2	B	2282	G
2	B	2311	A
2	B	2320	U
2	B	2336	A
2	B	2402	U
2	B	2425	A
2	B	2439	A
2	B	2501	C
2	B	2564	A

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Mol	Chain	Res	Type
2	B	2575	C
2	B	2576	G
2	B	2581	G
2	B	2601	C
2	B	2690	U
2	B	2756	U
2	B	2790	U
2	B	2809	A
2	B	2820	A
2	B	2833	U
2	B	2867	G

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

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

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

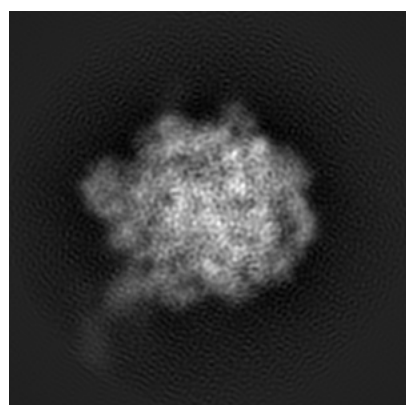
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-6149. These allow visual inspection of the internal detail of the map and identification of artifacts.

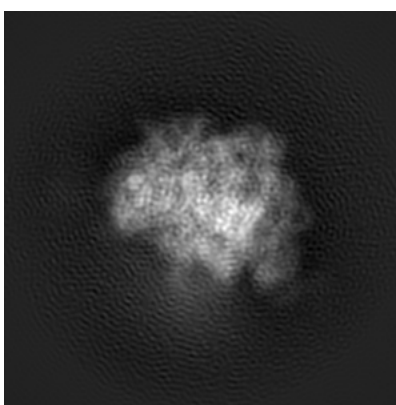
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

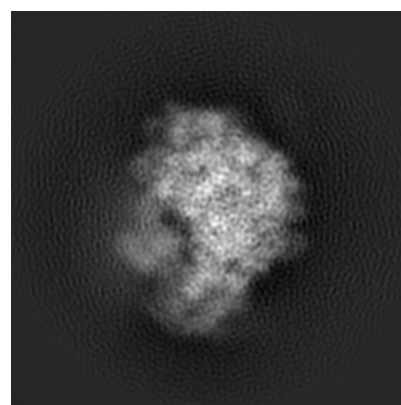
6.1.1 Primary map



X



Y

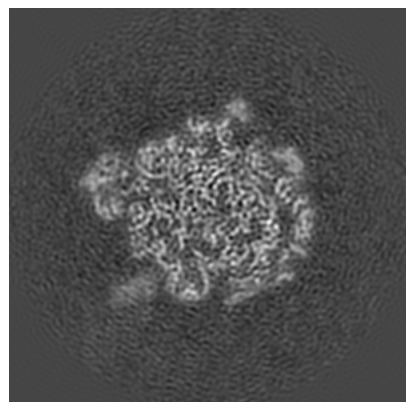


Z

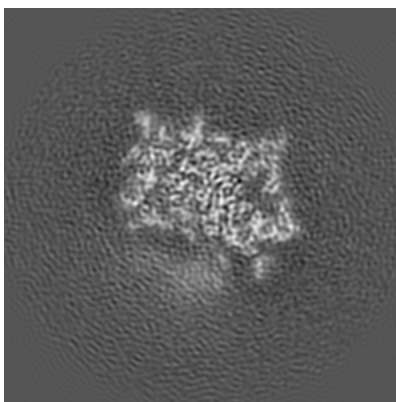
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

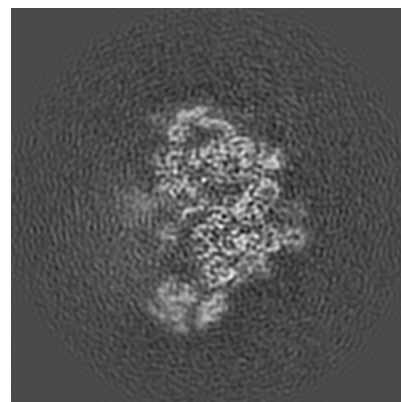
6.2.1 Primary map



X Index: 160



Y Index: 160

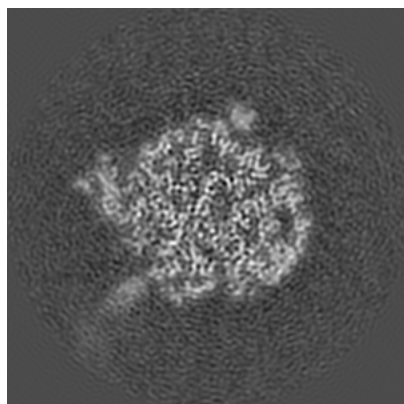


Z Index: 160

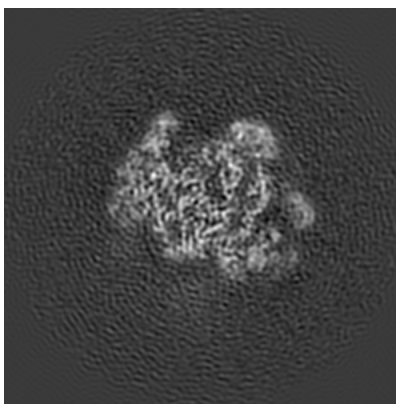
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

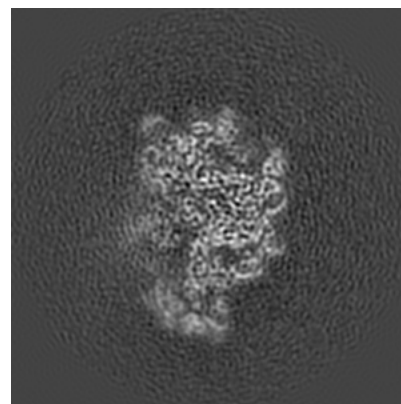
6.3.1 Primary map



X Index: 166



Y Index: 181



Z Index: 176

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views [i](#)

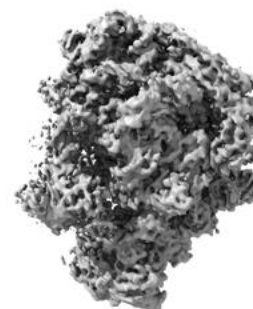
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.045. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

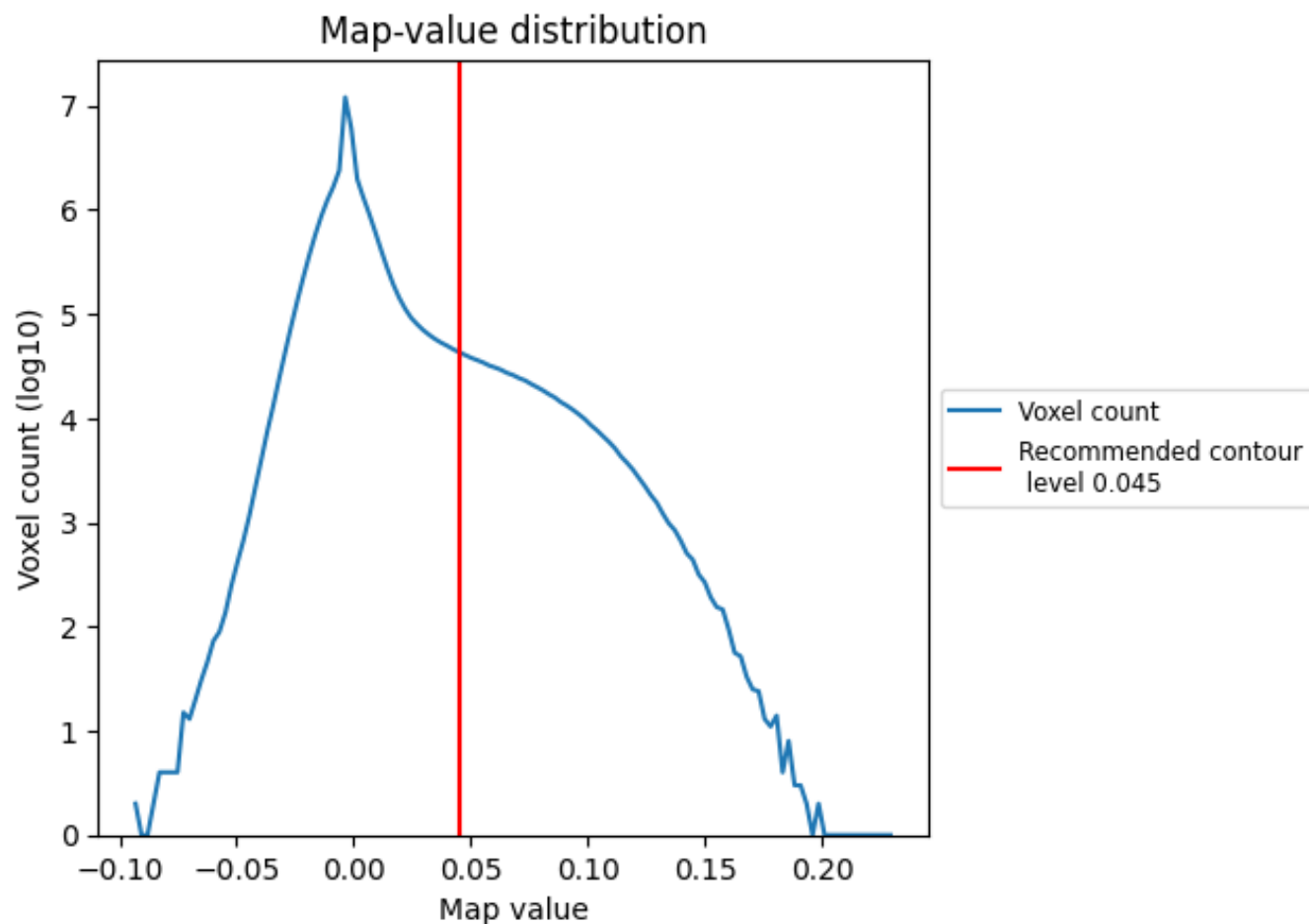
6.5 Mask visualisation

This section was not generated. No masks/segmentation were deposited.

7 Map analysis [i](#)

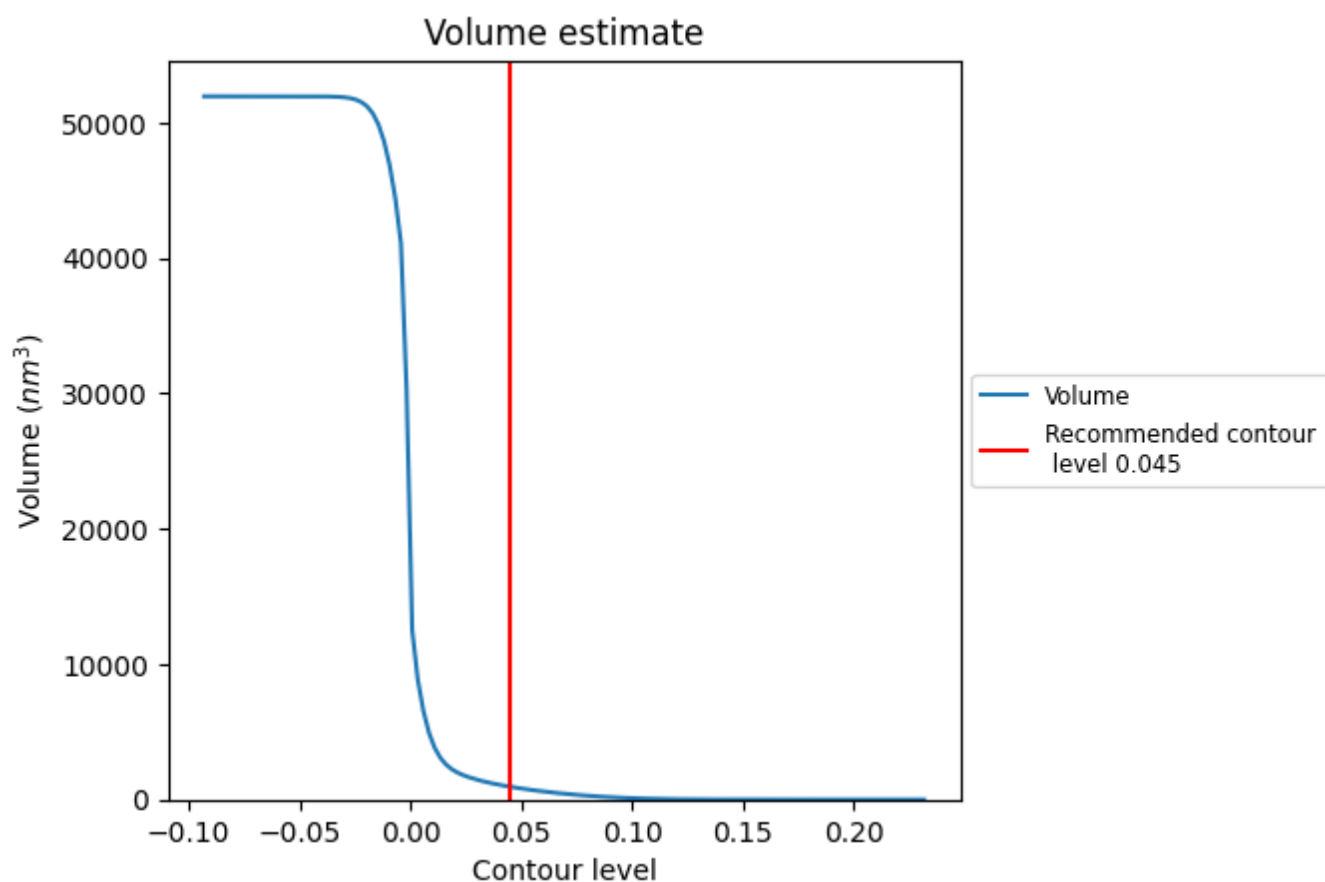
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

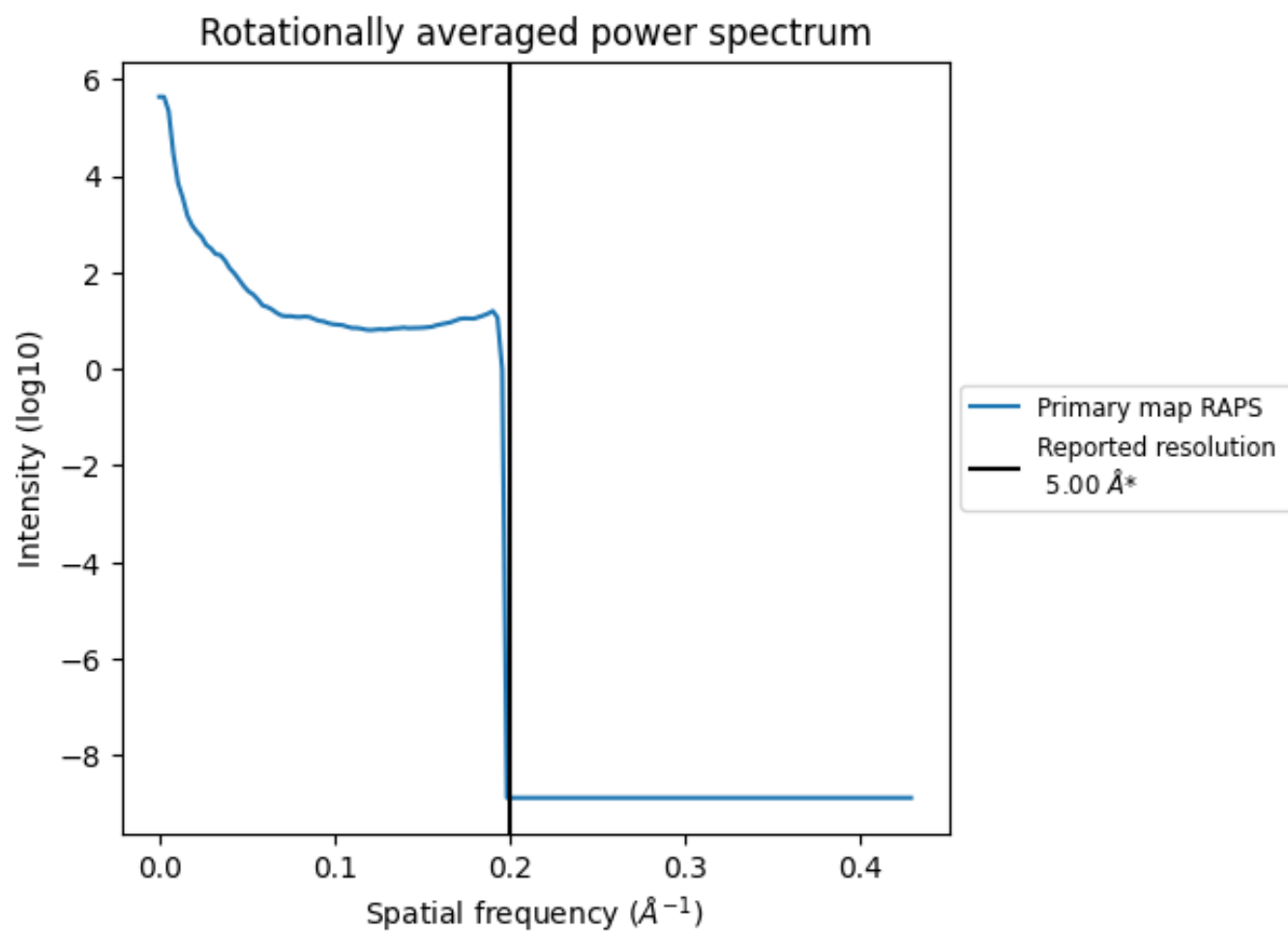
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 946 nm³; this corresponds to an approximate mass of 854 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum ⓘ

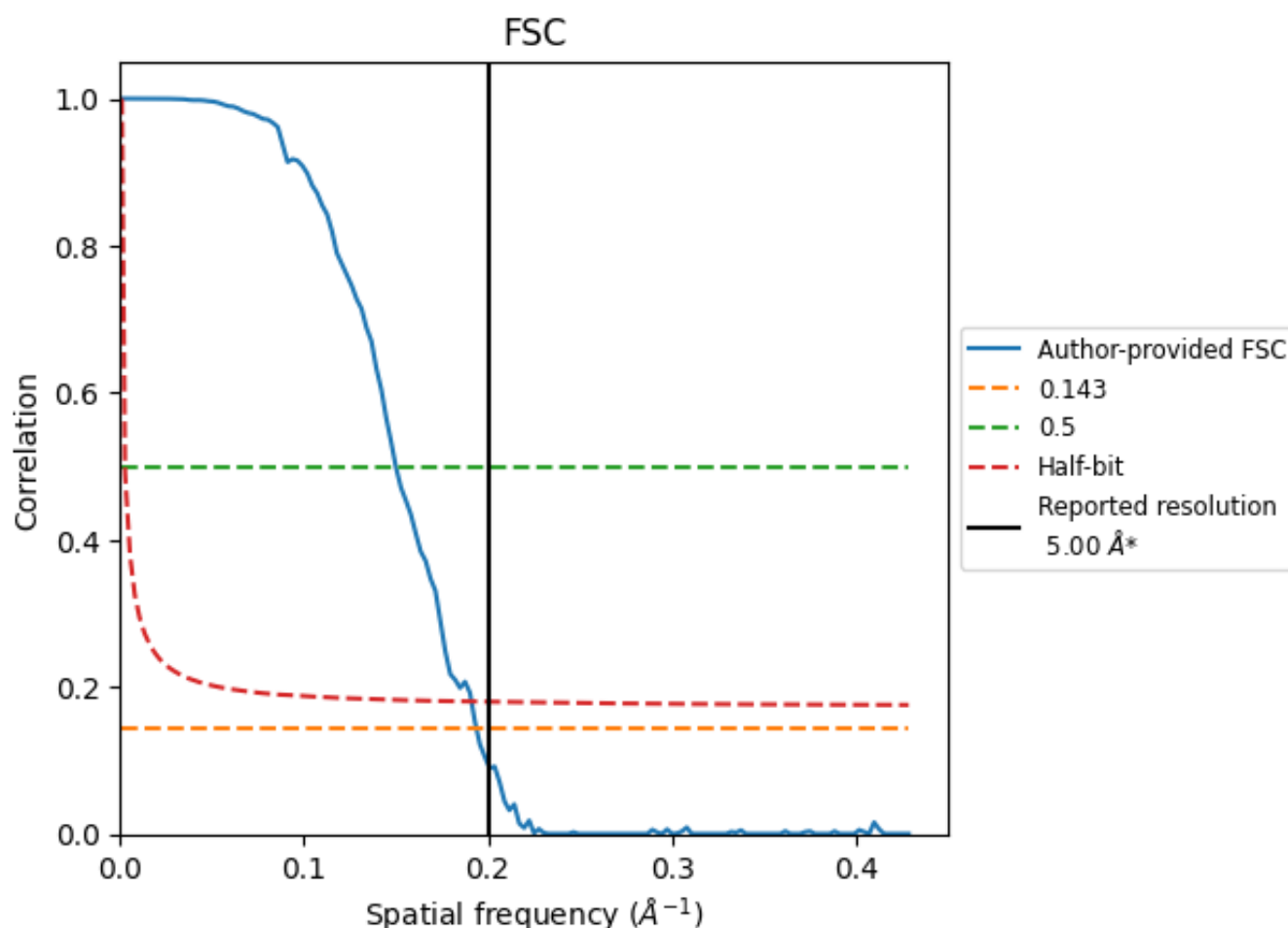


*Reported resolution corresponds to spatial frequency of 0.200 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.200 Å⁻¹

8.2 Resolution estimates [i](#)

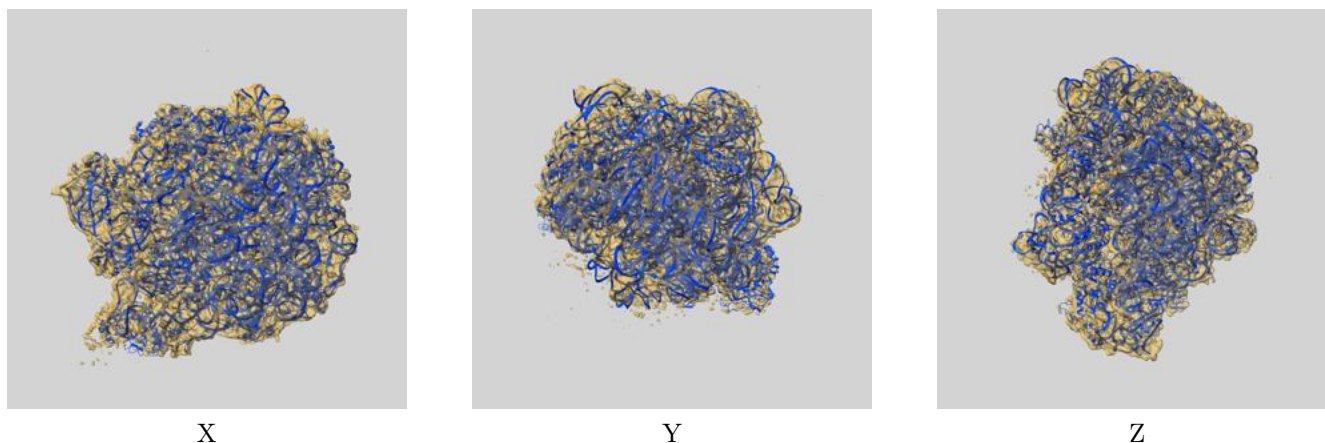
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	5.00	-	-
Author-provided FSC curve	5.16	6.67	5.23
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

9 Map-model fit [i](#)

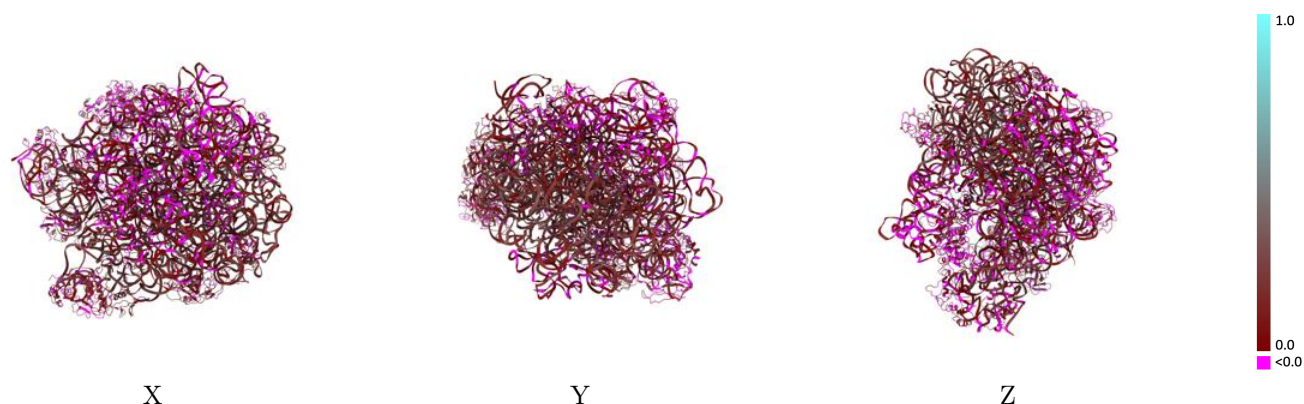
This section contains information regarding the fit between EMDB map EMD-6149 and PDB model 3J8G. Per-residue inclusion information can be found in [section 3](#) on [page 9](#).

9.1 Map-model overlay [i](#)



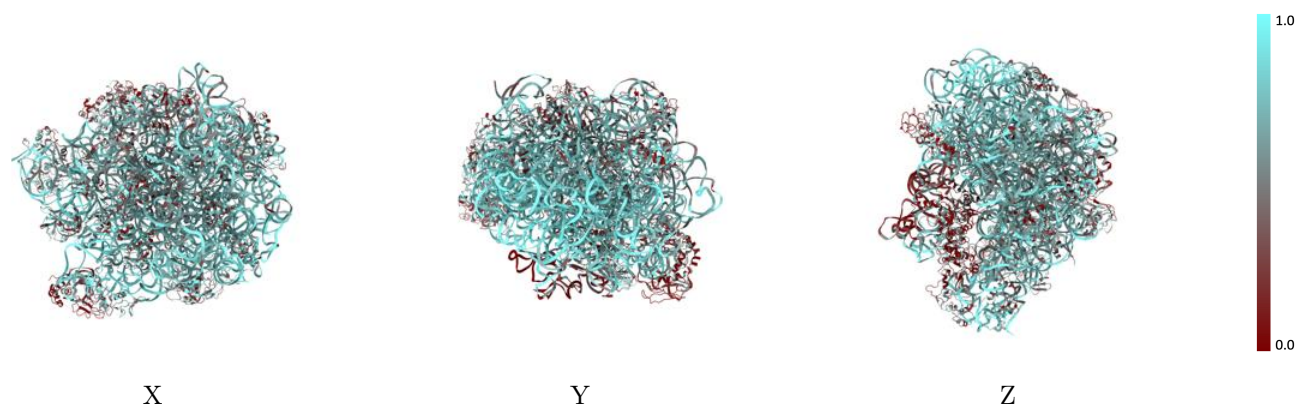
The images above show the 3D surface view of the map at the recommended contour level 0.045 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model [i](#)



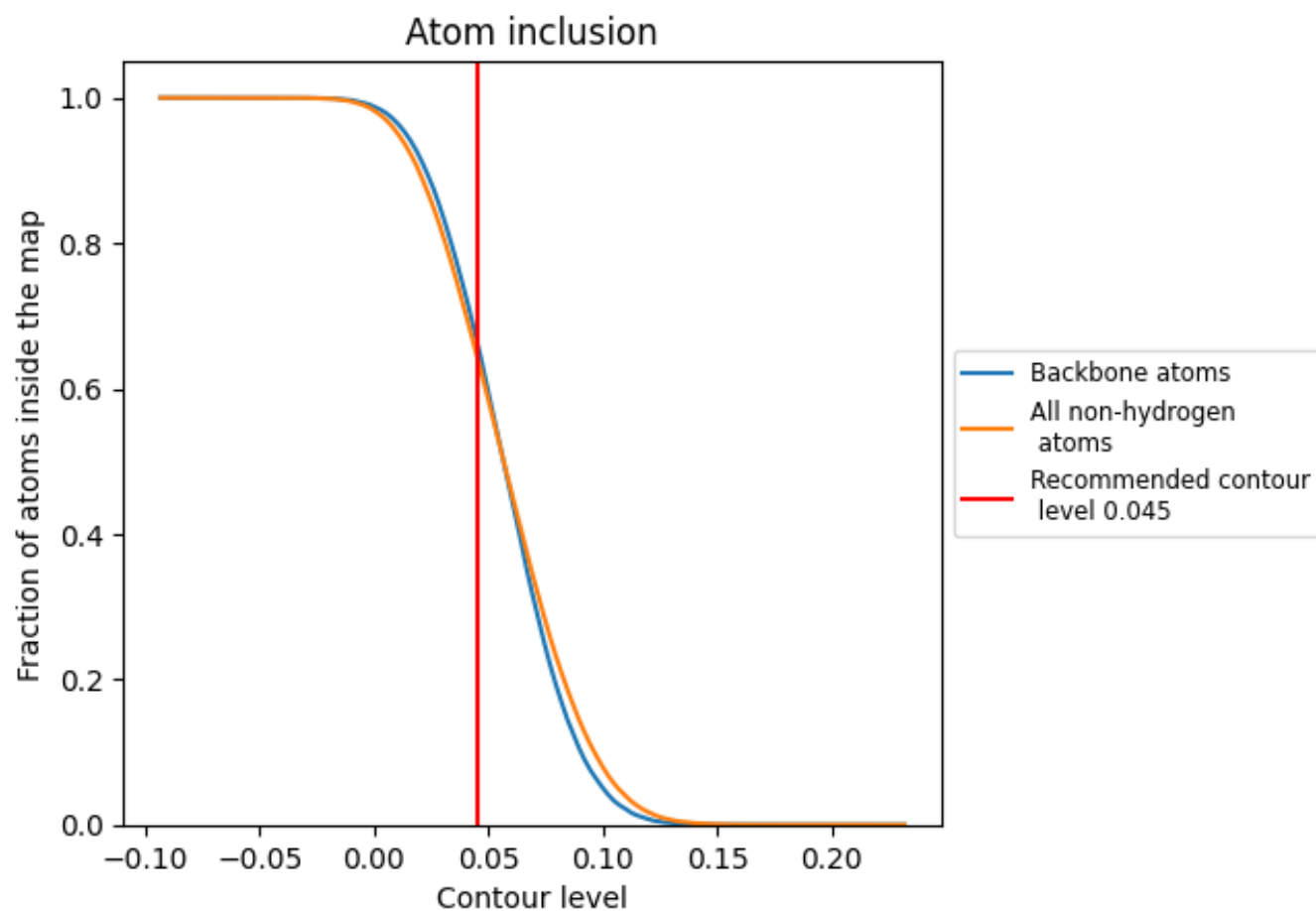
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.045).



































































9.4 Atom inclusion [i](#)



At the recommended contour level, 67% of all backbone atoms, 65% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.045) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.6458	 0.1310
0	 0.4326	 0.0960
1	 0.4366	 0.0650
2	 0.4600	 0.0490
3	 0.5187	 0.1010
5	 0.2172	 0.0350
6	 0.5324	 0.1150
7	 0.4440	 0.0540
8	 0.6370	 0.1510
A	 0.7772	 0.1370
B	 0.7329	 0.1480
C	 0.5888	 0.1510
D	 0.6001	 0.1610
E	 0.4217	 0.0490
F	 0.4555	 0.0680
G	 0.6016	 0.1610
H	 0.1651	 0.0600
I	 0.0460	 0.0270
J	 0.5009	 0.1070
K	 0.6060	 0.1510
L	 0.4459	 0.0560
M	 0.6142	 0.1780
N	 0.6193	 0.1280
O	 0.5284	 0.0920
P	 0.5608	 0.1610
Q	 0.5000	 0.0650
R	 0.4555	 0.0500
S	 0.4402	 0.0580
T	 0.5249	 0.1040
U	 0.4282	 0.0400
W	 0.5583	 0.1540
X	 0.3427	 0.0850
Y	 0.4845	 0.0580

