
```
BMRB 18239 1_1
  1-16   G C           -           -
  2-15   A U           -           -
  3-14   G U    mismatch           -
  4-13   G C           -           -
  5-12   A U           -   3prime-nc
  6-10   C G           -   5prime-nc
  7-0    A -        loop           -
  8-0    U -        loop           -
  9-0    A -        loop           -
 10-6    G C           -           -
 11-0    A -        loop           -
 12-5    U A           -           -
 13-4    C G           -           -
 14-3    U G    mismatch           -
 15-2    U A           -           -
 16-1    C G           -           -
```

Attribute Example:

5 Pp,GC,AU,CG,P-,-,-,-,-,-,3prime-nc
7 Pp,CG,A-,U-,P-,-,-,-,-,-,-

Figure S1. Attribute description. An example of the secondary structure of a small RNA along with the descriptive template that was automatically calculated, and the actual attributes descriptions that are used for residues 5 and 7. The terms mismatch and loop in the template file are only used to aid in human examination of the file. The existence of mismatches and loops is implicit in the base-pairing attributes. The first five (of the comma separated values) represent the sequence and base-pairing. The next five (which are all empty in this example) represent other attributes. For example, bases in tetraloops have specific positional attributes (gnra1, gnra2, …). The attribute description is converted into a representative pattern of 174 binary digits prior to being input into the SVR program.

Table S1 Outliers[1]

Atom	Base	ID	Measured	Predicted	Delta	Attributes
H8	A	4750.1.1.23	7.615	8.153	0.538	(P-,C-,A-,GC,pP,-,-,-,-,-,-)
H8	A	4780.1.1.12	8.633	8.103	-0.53	(p-,G-,AU,GC,p-,-,-,-,-,multiplet,-)
H8	A	4894.1.1.23	7.045	7.982	0.937	(Pp,CG,AU,GC,pP,-,-,-,-,-,-)
H8	A	5007.1.1.25	7.533	8.14	0.607	(p-,G-,A-,GC,pP,-,-,-,-,-,-)
H8	A	5919.1.1.36	7.393	8.045	0.652	(P-,A-,A-,U-,P-,-,-,-,-,-,-)
H8	A	15257.1.1.12	9.187	8.198	-0.989	(P-,G-,A-,U-,Pp,-,-,-,-,-,-)
H8	A	15417.1.1.22	8.53	7.994	-0.536	(Pp,CG,A-,A-,pP,-,-,-,-,-,-)
H8	A	16920.1.1.4	8.875	8.298	-0.577	(P-,G-,A-,A-,p-,-,-,-,-,-,protein)
H8	A	16952.1.1.7	7.494	8.137	0.643	(P-,G-,AU,GC,pP,-,-,-,-,-,-)
H8	A	17106.1.1.25	8.788	8.231	-0.557	(pP,UA,A-,U-,P-,-,-,-,-,-,-)
H8	A	17106.1.1.27	8.728	8.015	-0.713	(P-,U-,A-,A-,P-,-,-,-,-,-,-)
H8	A	17106.1.1.28	8.678	8.01	-0.668	(p-,A-,A-,A-,P-,-,-,-,-,-,-)
H8	A	17316.1.1.37	7.482	7.987	0.505	(pP,G-,A-,A-,p-,-,-,-,-,-,-)
H8	A	19534.1.1.10	8.986	8.348	-0.638	(P-,G-,A-,U-,P-,-,-,-,-,-,protein)
H8	A	19534.1.1.29	9.203	8.478	-0.725	(P-,G-,A-,C-,Pp,-,-,-,-,-,protein)
H8	A	19534.1.1.41	9.259	8.389	-0.87	(P-,G-,A-,C-,P-,-,-,-,-,-,protein)
H8	A	19534.1.1.51	9.06	8.305	-0.755	(P-,G-,A-,A-,Pp,-,-,-,-,-,protein)
H8	A	19534.1.1.66	9.115	8.478	-0.637	(P-,G-,A-,C-,Pp,-,-,-,-,-,protein)
H8	A	19544.1.1.13	8.999	8.151	-0.848	(P-,G-,A-,U-,P-,-,-,-,-,-,-)
H8	A	19546.1.1.13	9.18	8.316	-0.864	(P-,G-,A-,C-,Pp,-,-,-,-,-,-)
H8	A	19547.1.1.12	9.04	8.135	-0.905	(P-,G-,A-,A-,Pp,-,-,-,-,-,-)
H8	A	19548.1.1.12	9.091	8.316	-0.775	(P-,G-,A-,C-,Pp,-,-,-,-,-,-)
H8	A	19549.1.1.6	9.117	8.197	-0.92	(P-,G-,A-,C-,P-,-,-,-,-,-,-)
H8	G	4120.1.1.32	7.637	7.153	-0.484	(Pp,GC,GC,U-,p-,-,-,-,-,-,-)
H8	G	4346.1.1.24	7.208	7.694	0.486	(pP,A-,G-,A-,P-,-,-,-,-,-,protein)
H8	G	4750.1.1.8	7.255	7.746	0.491	(p-,A-,G-,GA,pP,-,-,-,-,-,-)
H8	G	5007.1.1.9	6.823	7.426	0.603	(P-,A-,GC,GC,Pp,-,-,-,-,-,-)
H8	G	5193.1.1.8	8.458	7.953	-0.505	(P-,U-,G-,G-,pP,-,-,-,-,-,-)
H8	G	5278.1.1.21	8.088	7.517	-0.571	(Pp,AU,G-,A-,P-,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H8	G	5553.1.1.5	8.191	7.448	-0.743	(pP,A-,GC,AU,Pp,-,-,-,-,-,-)
H8	G	5919.1.1.39	7.293	7.836	0.543	(p-,A-,G-,CG,pP,-,-,-,-,-,-)
H8	G	6076.1.1.28	8.056	7.357	-0.699	(pP,GC,GC,UA,pP,-,-,-,-,-,5prime-nc)
H8	G	6077.1.1.28	8.052	7.357	-0.695	(pP,GC,GC,UA,pP,-,-,-,-,-,5prime-nc)
H8	G	6094.1.1.49	7.965	7.315	-0.65	(pP,GC,GC,AU,Pp,-,-,-,-,-,5prime-nc)
H8	G	7230.1.1.7	6.837	7.458	0.621	(P-,A-,GC,CG,pP,-,-,-,-,-,-)
H8	G	7230.1.1.7	6.837	7.458	0.621	(P-,A-,GC,CG,pP,-,-,-,-,-,-)
H8	G	10014.1.1.1	7.659	8.137	0.478	(-,-,GC,GC,pP,-,-,-,-,-,-)

H8	G	11489.1.1.1	7.42	7.92	0.5	(-,-,G-,G-,P-,-,-,multiplet,multiplet,multiplet,-)
H8	G	15257.1.1.11	8.613	7.892	-0.721	(p-,G-,G-,A-,p-,-,-,-,-,-,-)
H8	G	15257.1.1.14	7.103	7.683	0.58	(P-,U-,GC,AU,Pp,-,-,-,-,-,-)
H8	G	15319.1.1.13	6.94	7.426	0.486	(P-,A-,GC,GC,Pp,-,-,-,-,-,-)
H8	G	15342.1.1.13	6.941	7.426	0.485	(P-,A-,GC,GC,Pp,-,-,-,-,-,-)
H8	G	15417.1.1.12	7.765	7.234	-0.531	(Pp,AU,G-,A-,P-,-,-,-,-,-,-)
H8	G	16953.1.1.6	7.14	7.651	0.511	(P-,G-,GU,CG,pP,-,-,-,-,-,-)
H8	G	17408.1.1.12	7.731	7.215	-0.516	(Pp,AU,GC,CG,p-,-,-,-,-,-,-)
H8	G	17504.1.1.25	7.113	7.681	0.568	(p-,G-,G-,G-,p-,-,multiplet,multiplet,multiplet,-,-)
H8	G	18034.1.1.17	7.171	7.765	0.594	(pP,UG,GC,GC,Pp,-,-,-,-,-,-)
H8	G	18034.1.1.18	7.86	7.226	-0.634	(pP,GC,GC,GC,pP,-,-,-,-,-,-)
H8	G	18035.1.1.17	7.211	7.765	0.554	(pP,UG,GC,GC,Pp,-,-,-,-,-,-)
H8	G	18035.1.1.18	7.894	7.226	-0.668	(pP,GC,GC,GC,pP,-,-,-,-,-,-)
H8	G	18035.1.1.19	7.676	7.177	-0.499	(Pp,GC,GC,UA,pP,-,-,-,-,-,-)
H8	G	18036.1.1.17	7.199	7.765	0.566	(pP,UG,GC,GC,Pp,-,-,-,-,-,-)
H8	G	18036.1.1.18	7.91	7.226	-0.684	(pP,GC,GC,GC,pP,-,-,-,-,-,-)
H8	G	18079.1.1.8	7.103	7.636	0.533	(pP,G-,GC,CG,p-,-,-,-,-,tetra1,-)
H8	G	18079.1.1.17	7.066	7.644	0.578	(pP,U-,GC,GC,Pp,-,-,-,-,-,-)
H8	G	19018.1.1.1	7.625	8.137	0.512	(-,-,GC,GC,pP,-,-,-,-,-,-)
H8	G	19290.1.1.9	6.888	8.05	1.162	(P-,U-,G-,A-,P-,-,-,-,-,-,protein)
H8	G	19534.1.1.9	8.628	8.019	-0.609	(p-,G-,G-,A-,p-,-,-,-,-,-,protein)
H8	G	19534.1.1.13	6.706	7.655	0.949	(p-,A-,GC,AU,pP,-,-,-,-,-,protein)
H8	G	19534.1.1.28	8.608	8.129	-0.479	(P-,G-,G-,A-,p-,-,-,-,-,-,protein)
H8	G	19534.1.1.31	7.068	7.572	0.504	(P-,C-,GC,AU,pP,-,-,-,-,-,protein)
H8	G	19534.1.1.68	6.989	7.572	0.583	(P-,C-,GC,AU,pP,-,-,-,-,-,protein)
H8	G	19544.1.1.12	8.638	7.892	-0.746	(p-,G-,G-,A-,p-,-,-,-,-,-,-)
H8	G	19544.1.1.16	6.691	7.587	0.896	(p-,A-,GC,AU,pP,-,-,-,-,-,-)
H8	G	19546.1.1.12	8.631	7.943	-0.688	(P-,G-,G-,A-,p-,-,-,-,-,-,-)
H8	G	19547.1.1.11	8.478	7.882	-0.596	(P-,G-,G-,A-,P-,-,-,-,-,-,-)
H8	G	19548.1.1.11	8.485	7.943	-0.542	(P-,G-,G-,A-,p-,-,-,-,-,-,-)
H8	G	19549.1.1.5	8.425	7.943	-0.482	(P-,G-,G-,A-,p-,-,-,-,-,-,-)
H2	A	4750.1.1.19	6.845	7.483	0.638	(Pp,GC,AU,AG,P-,gnra5,-,-,-,-,-)
H2	A	4750.1.1.23	6.685	7.949	1.264	(P-,C-,A-,GC,pP,-,-,-,-,-,-)
H2	A	4894.1.1.23	7.995	7.046	-0.949	(Pp,CG,AU,GC,pP,-,-,-,-,-,-)
H2	A	5256.1.1.11	7.204	7.861	0.657	(P-,A-,A-,AU,pP,-,-,-,-,-,-)
H2	A	5614.1.1.4	8.197	7.301	-0.896	(Pp,CG,A-,A-,Pp,-,-,-,-,-,-)
H2	A	5919.1.1.11	7.283	8.024	0.741	(P-,U-,A-,CG,pP,-,-,-,-,-,-)
H2	A	5919.1.1.38	7.203	7.903	0.7	(P-,U-,A-,G-,pP,-,-,-,-,-,-)
H2	A	6509.1.1.21	6.937	7.621	0.684	(p-,A-,A-,A-,Pp,-,-,pseudoknot,pseudoknot,-,-)
H2	A	6652.1.1.21	6.961	7.662	0.701	(Pp,G-,A-,A-,P-,-,multiplet,multiplet,gnra3,multiplet,-)
H2	A	6652.1.1.37	6.862	7.556	0.694	(pP,U-,A-,A-,P-,multiplet,multiplet,tetra2,tetra3,tetra4,-)

H2	A	11489.1.1.6	9.043	8.402	-0.641	(P-,G-,A-,G-,P-,multiplet,multiplet,multiplet,multiplet,multiplet,-)
H2	A	15113.1.1.49	7.234	7.995	0.761	(P-,U-,A-,G-,Pp,-,-,-,-,-,-)
H2	A	15417.1.1.22	8.652	7.451	-1.201	(Pp,CG,A-,A-,pP,-,-,-,-,-,-)
H2	A	16952.1.1.7	6.713	7.516	0.803	(P-,G-,AU,GC,pP,-,-,-,-,-,-)
H2	A	17106.1.1.25	8.478	7.562	-0.916	(pP,UA,A-,U-,P-,-,-,-,-,-,-)
H2	A	17316.1.1.23	7.052	7.993	0.941	(P-,U-,A-,GC,Pp,-,-,-,-,-,-)
H2	A	17504.1.1.14	7.407	8.167	0.76	(P-,A-,A-,G-,P-,multiplet,-,-,multiplet,multiplet,-)
H2	A	17941.1.1.23	7.206	7.839	0.633	(Pp,U-,A-,GC,Pp,-,-,-,-,-,-)
H2	A	17961.1.1.5	6.881	7.928	1.047	(pP,AU,A-,UA,Pp,-,-,-,-,-,-)
H2	A	18503.1.1.43	7.067	7.693	0.626	(pP,U-,A-,A-,Pp,-,-,-,-,-,-)
H2	A	19260.1.1.24	6.077	6.713	0.636	(pP,CG,AU,AU,Pp,multiplet,-,-,multiplet,-,5prime-nc)
H2	A	19534.1.1.48	8.406	7.773	-0.633	(Pp,CG,A-,G-,P-,-,-,-,-,-,protein)
H2	A	19547.1.1.9	8.39	7.668	-0.722	(Pp,CG,A-,G-,P-,-,-,-,-,-,-)
H2	A	19698.1.1.36	8.821	8.019	-0.802	(P-,C-,A-,C-,Pp,-,-,-,-,-,-)
H5	C	4120.1.1.19	5.917	5.46	-0.457	(pP,CG,CG,CG,p-,-,-,-,-,tetra1,-)
H5	C	4867.2.2.10	5.203	5.813	0.61	(P-,U-,C-,C-,p-,-,-,-,-,-,protein)
H5	C	4867.2.2.12	4.853	5.662	0.809	(p-,C-,C-,G-,P-,-,-,-,-,-,protein)
H5	C	4894.1.1.22	7.045	5.229	-1.816	(Pp,AU,CG,AU,Pp,-,-,-,-,-,-)
H5	C	5278.1.1.16	6.178	5.673	-0.505	(pP,U-,CG,CG,Pp,pseudoknot,-,pseudoknot,pseudoknot,pseudoknot,-)
H5	C	5278.1.1.25	4.928	5.373	0.445	(P-,A-,C-,A-,P-,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H5	C	5919.1.1.7	4.933	5.518	0.585	(P-,A-,C-,G-,P-,-,-,-,-,-,-)
H5	C	10018.1.1.8	5.955	5.47	-0.485	(pP,AU,C-,GC,p-,-,-,-,-,-,-)
H5	C	15342.1.1.5	6.48	5.481	-0.999	(pP,CG,CG,C-,p-,-,-,-,-,-,-)
H5	C	15417.1.1.17	6.133	5.584	-0.549	(Pp,CG,C-,C-,p-,-,-,-,-,-,-)
H5	C	15857.2.2.1	5.054	5.559	0.505	(-,-,CG,AU,Pp,-,-,kissing,kissing,kissing,-)
H5	C	17504.1.1.5	4.345	5.136	0.791	(pP,GC,CG,G-,Pp,-,-,-,multiplet,-,protein)
H5	C	17504.1.1.22	6.278	5.694	-0.584	(P-,G-,C-,U-,P-,multiplet,multiplet,-,-,multiplet,-)
H5	C	17504.1.1.30	4.53	5.394	0.864	(p-,GU,CG,GC,pP,-,-,-,-,-,protein)
H5	C	18079.1.1.13	5.171	5.652	0.481	(P-,A-,C-,GC,pP,tetra2,tetra3,tetra4,tetra5,-,-)
H5	C	18893.1.1.1	5.171	5.956	0.785	(-,-,CG,AU,Pp,-,-,-,-,-,5prime-nc)
H5	C	18893.1.1.1	5.171	5.956	0.785	(-,-,CG,AU,Pp,-,-,-,-,-,5prime-nc)
H5	C	18974.1.1.15	5.061	5.6	0.539	(P-,A-,CG,GC,Pp,-,-,-,-,-,-)
H5	C	19260.1.1.37	6.157	5.666	-0.491	(p-,GC,C-,AU,Pp,-,multiplet,-,multiplet,multiplet,-)
H5	C	19382.1.1.3	4.21	5.877	1.667	(P-,U-,C-,A-,P-,-,-,-,-,-,protein)
H5	C	19546.1.1.5	6.038	5.52	-0.518	(Pp,CG,CG,AU,pP,-,-,-,-,-,-)
H5	C	19726.1.1.4	6.625	5.782	-0.843	(p-,A-,C-,U-,p-,-,-,-,-,-,protein)
H5	U	4120.1.1.36	6.287	5.549	-0.738	(p-,A-,UA,CG,Pp,-,-,-,-,-,-)
H5	U	4345.1.1.28	4.92	5.609	0.689	(P-,A-,UG,GC,Pp,-,-,-,-,-,protein)
H5	U	4346.1.1.28	4.868	5.609	0.741	(P-,A-,UG,GC,Pp,-,-,-,-,-,protein)

H5	U	4894.1.1.14	7.785	5.726	-2.059	(pP,CG,U-,U-,p-,-,-,uncg1,uncg2,uncg3,-)
H5	U	5919.1.1.10	4.963	5.676	0.713	(P-,A-,U-,A-,pP,-,-,-,-,-,-)
H5	U	5919.1.1.37	4.863	5.595	0.732	(P-,A-,U-,A-,P-,-,-,-,-,-,-)
H5	U	6115.1.1.10	4.98	5.506	0.526	(Pp,UA,UG,G-,P-,-,multiplet,-,-,-,-)
H5	U	6477.1.1.13	5.342	5.846	0.504	(p-,C-,U-,C-,Pp,-,-,-,-,-,-)
H5	U	15113.1.1.39	6.381	5.619	-0.762	(Pp,A-,U-,G-,P-,-,tetra1,tetra2,tetra3,tetra4,protein)
H5	U	15745.1.1.14	5.936	5.432	-0.504	(P-,GC,U-,CG,pP,-,-,-,-,-,-)
H5	U	17106.1.1.14	6.138	5.385	-0.753	(Pp,GC,U-,U-,P-,-,-,-,-,-,-)
H5	U	17504.1.1.3	4.657	5.427	0.77	(Pp,CG,UA,GC,pP,-,-,-,-,-,protein)
H5	U	17504.1.1.8	4.345	5.2	0.855	(P-,GC,UG,G-,p-,multiplet,-,-,multiplet,-,-)
H5	U	19260.1.1.35	6.053	5.527	-0.526	(p-,GC,U-,GC,p-,multiplet,-,-,multiplet,-,-)
H5	U	19382.1.1.2	4.175	5.602	1.427	(-,A-,U-,C-,P-,-,-,-,-,-,protein)
H5	U	19662.1.1.8	4.814	5.461	0.647	(Pp,GC,U-,U-,Pp,-,-,-,-,-,-)
H5	U	19662.1.1.8	4.814	5.461	0.647	(Pp,GC,U-,U-,Pp,-,-,-,-,-,-)
H5	U	19698.1.1.11	4.991	5.639	0.648	(p-,U-,U-,A-,P-,-,-,-,-,-,-)
H5	U	19698.1.1.43	4.887	5.406	0.519	(Pp,A-,U-,A-,P-,-,tetra1,tetra2,tetra3,tetra4,-)
H6	C	4750.1.1.22	8.055	7.673	-0.382	(PP,G-,C-,A-,Pp,-,-,-,-,-,-)
H6	C	4867.2.2.4	7.163	7.525	0.362	(Pp,CG,CG,GA,Pp,-,-,-,-,multiplet,-)
H6	C	4867.2.2.10	5.653	7.712	2.059	(P-,U-,C-,C-,p-,-,-,-,-,-,protein)
H6	C	4867.2.2.12	6.953	7.571	0.618	(p-,C-,C-,G-,P-,-,-,-,-,-,protein)
H6	C	4894.1.1.22	7.995	7.396	-0.599	(Pp,AU,CG,AU,Pp,-,-,-,-,-,-)
H6	C	5278.1.1.16	8.208	7.86	-0.348	(pP,U-,CG,CG,Pp,pseudoknot,-,pseudoknot,pseudoknot,pseudoknot,-)
H6	C	5632.1.1.20	6.966	7.402	0.436	(Pp,AU,C-,U-,p-,-,-,tetra1,tetra2,tetra3,-)
H6	C	5919.1.1.7	7.053	7.511	0.458	(P-,A-,C-,G-,P-,-,-,-,-,-,-)
H6	C	6477.1.1.24	8.277	7.922	-0.355	(pP,UA,CG,AU,Pp,multiplet,multiplet,multiplet,multiplet,multiplet,5prime-nc)
H6	C	6477.1.1.27	7.181	7.667	0.486	(Pp,GC,CG,CG,pP,multiplet,multiplet,-,-,-,-)
H6	C	6509.1.1.17	8.068	7.709	-0.359	(pP,AU,CG,UA,p-,pseudoknot,pseudoknot,pseudoknot,-,-,-)
H6	C	15745.1.1.15	7.516	7.898	0.382	(Pp,U-,CG,UA,Pp,-,-,-,-,-,-)
H6	C	15857.2.2.1	7.416	7.773	0.357	(-,-,CG,AU,Pp,-,-,kissing,kissing,kissing,-)
H6	C	16654.1.1.12	7.07	7.684	0.614	(p-,A-,C-,CG,pP,-,-,-,-,-,-)
H6	C	16655.1.1.12	7.107	7.684	0.577	(p-,A-,C-,CG,pP,-,-,-,-,-,-)
H6	C	17106.1.1.10	8.408	8.052	-0.356	(p-,U-,C-,UA,Pp,-,-,-,-,-,-)
H6	C	17106.1.1.23	8.358	7.895	-0.463	(pP,UA,CG,UA,P-,-,-,-,-,-,-)
H6	C	17106.1.1.33	7.258	7.677	0.419	(P-,A-,CG,UA,Pp,-,-,-,-,-,-)
H6	C	17504.1.1.30	7.078	7.649	0.571	(p-,GU,CG,GC,pP,-,-,-,-,-,protein)
H6	C	18892.1.1.19	7.096	7.629	0.533	(Pp,A-,CG,UA,Pp,-,-,-,-,-,-)
H6	C	18893.1.1.1	7.533	7.999	0.466	(-,-,CG,AU,Pp,-,-,-,-,-,5prime-nc)
H6	C	18893.1.1.1	7.533	7.999	0.466	(-,-,CG,AU,Pp,-,-,-,-,-,5prime-nc)
H6	U	4120.1.1.36	7.347	7.817	0.47	(p-,A-,UA,CG,Pp,-,-,-,-,-,-)

H6	U	4750.1.1.10	7.405	7.779	0.374	(P-,GA,UA,CG,pP,-,-,-,-,-,-)
H6	U	4894.1.1.14	5.765	7.728	1.963	(pP,CG,U-,U-,p-,-,-,uncg1,uncg2,uncg3,-)
H6	U	5371.1.1.19	7.269	7.641	0.372	(Pp,A-,U-,GC,Pp,-,-,-,-,-,-)
H6	U	5919.1.1.10	7.163	7.633	0.47	(P-,A-,U-,A-,pP,-,-,-,-,-,-)
H6	U	6320.1.1.23	7.254	7.641	0.387	(Pp,A-,U-,GC,Pp,-,-,-,-,-,-)
H6	U	11014.2.2.6	8.461	7.89	-0.571	(Pp,GC,UA,CG,pP,-,-,kissing,kissing,kissing,-)
H6	U	17106.1.1.11	8.418	7.88	-0.538	(p-,C-,UA,AU,Pp,-,-,-,-,-,-)
H6	U	17106.1.1.24	8.208	7.786	-0.422	(pP,CG,UA,A-,p-,-,-,-,-,-,-)
H6	U	17106.1.1.26	6.818	7.509	0.691	(pP,A-,U-,A-,P-,-,-,-,-,-,-)
H6	U	17106.1.1.34	8.418	7.869	-0.549	(P-,CG,UA,AU,P-,-,-,-,-,-,-)
H6	U	17316.1.1.47	6.932	7.378	0.446	(pP,AU,U-,G-,P-,-,-,-,-,-,-)
H6	U	17504.1.1.3	7.35	7.736	0.386	(Pp,CG,UA,GC,pP,-,-,-,-,-,protein)
H6	U	18892.1.1.7	7.236	7.694	0.458	(Pp,A-,UA,CG,pP,-,-,-,-,-,-)
H6	U	19039.1.1.33	7.282	7.679	0.397	(Pp,A-,U-,CG,pP,-,-,-,-,-,-)
H6	U	19260.1.1.43	8.063	7.68	-0.383	(Pp,AU,UA,CG,Pp,multiplet,multiplet,-,-,-,-)
H6	U	19290.1.1.8	7.133	7.56	0.427	(P-,A-,U-,G-,P-,-,-,-,-,-,protein)
H6	U	19698.1.1.11	7.231	7.654	0.423	(p-,U-,U-,A-,P-,-,-,-,-,-,-)
H1'	A	0006.1.1.18	4.599	5.114	0.515	(P-,A-,AU,GC,Pp,gnra3,gnra4,gnra5,-,-,-)
H1'	A	5007.1.1.8	5.203	5.79	0.587	(P-,A-,A-,GC,Pp,-,-,-,-,-,-)
H1'	A	5278.1.1.22	6.698	5.904	-0.794	(Pp,G-,A-,A-,P- ,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudokn ot,-)
H1'	A	6485.1.1.17	5.025	5.556	0.531	(P-,A-,AU,UA,Pp,penta,penta,-,-,-,-)
H1'	A	6652.1.1.38	3.725	5.801	2.076	(p-,A-,A-,G-,pP,multiplet,tetra2,tetra3,tetra4,tetra5,-)
H1'	A	6756.1.1.16	4.534	5.046	0.512	(P-,A-,AU,CG,pP,gnra3,gnra4,gnra5,-,-,-)
H1'	A	7230.1.1.6	5.033	5.775	0.742	(P-,A-,A-,GC,pP,-,-,-,-,-,-)
H1'	A	7230.1.1.6	5.033	5.775	0.742	(P-,A-,A-,GC,pP,-,-,-,-,-,-)
H1'	A	7405.1.1.8	5.318	5.84	0.522	(Pp,G-,A-,G-,p-,-,-,-,-,-,-)
H1'	A	10018.1.1.22	4.993	5.808	0.815	(p-,A-,A-,AU,Pp,-,-,-,-,-,-)
H1'	A	17504.1.1.33	6.535	5.998	-0.537	(Pp,CG,AU,GC,pP,-,-,-,-,-,protein)
H1'	A	18892.1.1.15	5.165	5.841	0.676	(P-,U-,AU,GC,Pp,-,-,-,-,-,-)
H1'	A	19018.1.1.9	5.084	5.918	0.834	(P-,CG,AU,CG,pP,-,-,-,-,-,-)
H1'	A	19534.1.1.12	4.895	6.023	1.128	(P-,U-,A-,GC,Pp,-,-,-,-,-,protein)
H1'	A	19544.1.1.13	6.546	5.935	-0.611	(P-,G-,A-,U-,P-,-,-,-,-,-,-)
H1'	A	19544.1.1.15	4.849	5.874	1.025	(P-,U-,A-,GC,Pp,-,-,-,-,-,-)
H1'	A	19546.1.1.9	6.357	5.79	-0.567	(pP,CG,A-,A-,P-,-,-,-,-,-,-)
H1'	A	19547.1.1.12	6.472	5.889	-0.583	(P-,G-,A-,A-,Pp,-,-,-,-,-,-)
H1'	A	19698.1.1.51	6.703	5.895	-0.808	(pP,C-,A-,AU,Pp,-,-,-,-,-,-)
H1'	A	19698.1.1.52	7.049	5.776	-1.273	(p-,A-,AU,AU,Pp,-,-,-,-,-,-)
H1'	G	4345.1.1.9	6.75	5.841	-0.909	(P-,A-,GC,UG,Pp,-,-,-,-,-,protein)
H1'	G	4345.1.1.24	4.6	5.426	0.826	(pP,A-,G-,A-,P-,-,-,-,-,-,protein)
H1'	G	4346.1.1.24	4.858	5.426	0.568	(pP,A-,G-,A-,P-,-,-,-,-,-,protein)

H1'	G	4750.1.1.8	4.795	5.69	0.895	(p-,A-,G-,GA,pP,-,-,-,-,-,-)
H1'	G	4750.1.1.21	4.725	5.391	0.666	(Pp,AG,G-,C-,P-,-,-,-,-,-,-)
H1'	G	4750.1.1.24	4.635	5.547	0.912	(p-,A-,GC,CG,Pp,-,-,-,-,-,-)
H1'	G	4780.1.1.4	7.598	5.891	-1.707	(Pp,CG,GC,AA,pP,-,-,-,multiplet,-,-)
H1'	G	4781.2.2.4	7.596	5.849	-1.747	(Pp,CG,GC,AU,pP,-,-,multiplet,-,-,-)
H1'	G	4867.2.2.19	3.933	5.471	1.538	(pP,AG,GC,GC,pP,multiplet,-,-,-,-,-)
H1'	G	5007.1.1.26	4.153	5.467	1.314	(P-,A-,GC,CG,Pp,-,-,-,-,-,-)
H1'	G	5193.1.1.8	4.702	5.624	0.922	(P-,U-,G-,G-,pP,-,-,-,-,-,-)
H1'	G	5278.1.1.21	6.498	5.932	-0.566	(Pp,AU,G-,A-,P-,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H1'	G	5614.1.1.6	4.457	5.465	1.008	(P-,A-,GC,CG,pP,-,-,-,-,-,-)
H1'	G	5852.1.1.8	4.82	5.53	0.71	(P-,A-,GC,AU,pP,-,-,-,-,-,-)
H1'	G	5852.1.1.20	4.123	5.465	1.342	(P-,A-,GC,CG,pP,-,-,-,-,-,-)
H1'	G	5919.1.1.39	4.363	5.724	1.361	(p-,A-,G-,CG,pP,-,-,-,-,-,-)
H1'	G	5932.1.1.11	5.014	5.725	0.711	(P-,U-,GC,AU,Pp,-,-,-,-,-,-)
H1'	G	6652.1.1.39	4.967	5.735	0.768	(P-,A-,G-,UA,pP,tetra2,tetra3,tetra4,tetra5,-,-)
H1'	G	11489.1.1.11	5.425	5.993	0.568	(P-,G-,G-,A-,-,multiplet,multiplet,multiplet,-,-,protein)
H1'	G	15113.1.1.33	6.495	5.838	-0.657	(Pp,CG,GC,GC,Pp,-,-,-,-,-,3prime-nc)
H1'	G	17106.1.1.6	4.623	5.576	0.953	(Pp,AU,GC,GC,p-,-,-,-,-,-,-)
H1'	G	17316.1.1.24	4.242	5.607	1.365	(p-,A-,GC,GC,Pp,-,-,-,-,-,-)
H1'	G	18036.1.1.2	5.234	5.892	0.658	(-,GC,GC,AU,pP,-,-,-,-,-,-)
H1'	G	19018.1.1.16	5.927	4.595	-1.332	(p-,G-,GC,GC,pP,uncg3,uncg4,uncg5,-,-,-)
H1'	G	19018.1.1.17	4.454	5.555	1.101	(P-,GC,GC,UA,Pp,uncg4,uncg5,-,-,-,-)
H1'	G	19547.1.1.14	4.895	5.467	0.572	(P-,A-,GC,CG,Pp,-,-,-,-,-,-)
H1'	C	4867.2.2.10	5.203	5.746	0.543	(P-,U-,C-,C-,p-,-,-,-,-,-,protein)
H1'	C	5278.1.1.7	3.598	5.531	1.933	(pP,CG,CG,GC,Pp,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H1'	C	6076.1.1.23	3.919	4.61	0.691	(P-,A-,CG,CG,Pp,gnra3,gnra4,gnra5,-,-,-)
H1'	C	6077.1.1.23	3.935	4.61	0.675	(P-,A-,CG,CG,Pp,gnra3,gnra4,gnra5,-,-,-)
H1'	C	6477.1.1.4	3.724	5.44	1.716	(Pp,GC,CG,UA,Pp,-,-,multiplet,multiplet,multiplet,-)
H1'	C	6477.1.1.28	6.297	5.576	-0.721	(Pp,CG,CG,CG,p-,multiplet,-,-,-,-,-)
H1'	C	6477.1.1.29	6.119	5.466	-0.653	(pP,CG,CG,C-,P-,-,-,-,-,-,-)
H1'	C	6652.1.1.24	3.308	5.052	1.744	(P-,A-,CG,UG,pP,gnra3,multiplet,-,-,-,-)
H1'	C	15113.1.1.42	6.271	5.343	-0.928	(P-,A-,CG,CG,pP,tetra3,tetra4,tetra5,-,-,-)
H1'	C	17406.1.1.8	3.937	5.223	1.286	(P-,A-,CG,AU,pP,tetra3,tetra4,tetra5,-,-,-)
H1'	C	17406.1.1.8	3.937	5.223	1.286	(P-,A-,CG,AU,pP,tetra3,tetra4,tetra5,-,-,-)
H1'	C	19018.1.1.8	5.944	5.327	-0.617	(pP,A-,CG,AU,pP,-,-,-,-,-,-)
H1'	C	19698.1.1.21	3.442	5.517	2.075	(pP,U-,CG,AU,pP,-,-,-,-,-,-)
H1'	C	19698.1.1.46	5.823	5.313	-0.51	(P-,A-,CG,CG,Pp,tetra3,tetra4,tetra5,-,-,-)
H1'	U	5371.1.1.19	5.288	5.744	0.456	(Pp,A-,U-,GC,Pp,-,-,-,-,-,-)
H1'	U	5919.1.1.10	5.153	5.769	0.616	(P-,A-,U-,A-,pP,-,-,-,-,-,-)

H1'	U	6005.1.1.4	5.126	5.785	0.659	(p-,A-,U-,U-,p-,-,-,-,-,-,protein)
H1'	U	6320.1.1.23	5.27	5.744	0.474	(Pp,A-,U-,GC,Pp,-,-,-,-,-,-)
H1'	U	6509.1.1.5	5.048	5.493	0.445	(Pp,GC,UA,GC,Pp,- ,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H1'	U	15745.1.1.14	6.076	5.607	-0.469	(P-,GC,U-,CG,pP,-,-,-,-,-,-)
H1'	U	17106.1.1.22	4.723	5.525	0.802	(pP,CG,UA,CG,pP,-,-,-,-,-,-)
H1'	U	17106.1.1.24	6.423	5.628	-0.795	(pP,CG,UA,A-,p-,-,-,-,-,-,-)
H1'	U	17106.1.1.26	4.943	5.52	0.577	(pP,A-,U-,A-,P-,-,-,-,-,-,-)
H1'	U	17316.1.1.12	4.662	5.609	0.947	(P-,A-,U-,UA,Pp,-,-,-,-,-,-)
H1'	U	17316.1.1.22	5.452	5.912	0.46	(P-,G-,U-,A-,Pp,-,-,-,-,-,-)
H1'	U	17877.1.1.19	3.829	5.057	1.228	(P-,A-,UA,GU,pP,gnra3,gnra4,gnra5,-,-,-)
H1'	U	17972.1.1.16	3.876	5.11	1.234	(P-,A-,UA,GC,Pp,gnra3,gnra4,gnra5,-,-,-)
H1'	U	18035.1.1.20	5.098	5.578	0.48	(Pp,GC,UA,CG,pP,-,-,-,-,-,-)
H1'	U	18532.1.1.22	5.129	5.661	0.532	(p-,A-,U-,CG,P-,-,-,-,multiplet,multiplet,-)
H1'	U	18656.1.1.7	6.368	5.925	-0.443	(P-,G-,U-,GC,pP,-,-,-,-,-,-)
H1'	U	19018.1.1.13	5.57	6.106	0.536	(pP,U-,U-,C-,P-,-,uncg1,uncg2,uncg3,uncg4,-)
H1'	U	19260.1.1.35	6.156	5.71	-0.446	(p-,GC,U-,GC,p-,multiplet,-,-,multiplet,-,-)
H1'	U	19698.1.1.20	4.955	5.658	0.703	(pP,UA,U-,CG,Pp,-,-,-,-,-,-)
H1'	U	19726.1.1.8	4.843	5.752	0.909	(p-,A-,U-,A-,p-,-,-,-,-,-,protein)
H2'	A	4345.1.1.23	4	4.674	0.674	(Pp,CG,A-,G-,P-,-,-,-,-,-,protein)
H2'	A	4346.1.1.8	4.118	4.881	0.763	(Pp,G-,A-,GC,pP,-,-,-,-,-,protein)
H2'	A	5278.1.1.23	5.278	4.783	-0.495	(P-,A-,A-,A-,p- ,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudokn ot,-)
H2'	A	6509.1.1.23	3.577	4.59	1.013	(P-,A-,AU,A-,p-,pseudoknot,pseudoknot,-,pseudoknot,-,-)
H2'	A	7404.1.1.11	4.086	4.547	0.461	(p-,U-,A-,C-,p-,-,-,-,-,-,-)
H2'	A	11489.1.1.6	5.897	4.883	-1.014	(P-,G-,A-,G-,P- ,multiplet,multiplet,multiplet,multiplet,multiplet,-)
H2'	A	11489.1.1.9	4.344	4.926	0.582	(P-,G-,A-,G-,P- ,multiplet,multiplet,multiplet,multiplet,multiplet,protein)
H2'	A	16920.1.1.4	5.892	4.834	-1.058	(P-,G-,A-,A-,p-,-,-,-,-,-,protein)
H2'	A	17106.1.1.30	3.763	4.556	0.793	(P-,A-,A-,A-,P-,-,-,-,-,-,-)
H2'	A	17316.1.1.50	4.042	4.501	0.459	(P-,A-,AU,CG,pP,-,-,-,-,-,-)
H2'	A	17504.1.1.33	5.931	4.81	-1.121	(Pp,CG,AU,GC,pP,-,-,-,-,-,protein)
H2'	A	18336.1.1.22	4.036	4.548	0.512	(Pp,A-,A-,AU,Pp,-,-,-,-,-,-)
H2'	A	18549.1.1.16	3.893	4.521	0.628	(P-,A-,A-,AU,pP,-,-,-,-,-,-)
H2'	A	19040.1.1.48	5.401	4.516	-0.885	(pP,CG,A-,G-,P-,-,-,-,-,-,-)
H2'	A	19698.1.1.52	5.298	4.646	-0.652	(p-,A-,AU,AU,Pp,-,-,-,-,-,-)
H2'	G	0001.1.1.20	4.056	4.59	0.534	(pP,G-,G-,A-,P-,-,tetra1,tetra2,tetra3,tetra4,-)
H2'	G	4120.1.1.32	4.037	4.487	0.45	(Pp,GC,GC,U-,p-,-,-,-,-,-,-)
H2'	G	4345.1.1.6	3.4	4.447	1.047	(pP,CG,GU,G-,P-,-,-,-,-,-,protein)
H2'	G	4750.1.1.21	3.905	4.37	0.465	(Pp,AG,G-,C-,P-,-,-,-,-,-,-)
H2'	G	4781.2.2.8	3.906	4.363	0.457	(pP,UA,G-,G-,p-,-,-,-,-,-,protein)

H2'	G	4867.2.2.13	5.643	4.932	-0.711	(p-,C-,G-,A-,PP,-,-,-,-,-,protein)
H2'	G	5007.1.1.16	4.163	4.637	0.474	(p-,C-,G-,U-,p-,-,-,-,-,-,-)
H2'	G	5170.1.1.14	3.991	4.503	0.512	(Pp,GC,GC,CG,pP,-,-,-,-,-,-)
H2'	G	5632.1.1.15	3.9	4.608	0.708	(p-,C-,G-,C-,p-,-,-,-,-,-,-)
H2'	G	5919.1.1.39	4.273	4.771	0.498	(p-,A-,G-,CG,pP,-,-,-,-,-,-)
H2'	G	11489.1.1.4	5.536	4.816	-0.72	(P-,A-,G-,G-,P- ,multiplet,multiplet,multiplet,multiplet,multiplet,-)
H2'	G	16920.1.1.3	4.318	4.826	0.508	(P-,A-,G-,A-,P-,-,-,-,-,-,protein)
H2'	G	17106.1.1.7	3.913	4.487	0.574	(Pp,GC,GC,U-,p-,-,-,-,-,-,-)
H2'	G	17406.1.1.5	3.617	4.2	0.583	(Pp,A-,G-,G-,P-,-,tetra1,tetra2,tetra3,tetra4,-)
H2'	G	17406.1.1.5	3.617	4.2	0.583	(Pp,A-,G-,G-,P-,-,tetra1,tetra2,tetra3,tetra4,-)
H2'	G	17449.1.1.1	4.249	4.73	0.481	(-,-,GC,CG,Pp,-,-,-,-,-,-)
H2'	G	17504.1.1.6	5.35	4.736	-0.614	(Pp,CG,G-,GC,pP,-,-,multiplet,-,-,-)
H2'	G	17504.1.1.7	6.449	4.777	-1.672	(pP,G-,GC,UG,P-,-,multiplet,-,-,multiplet,protein)
H2'	G	17504.1.1.15	4.278	4.828	0.55	(P-,A-,G-,G-,P-,-,-,multiplet,multiplet,multiplet,-)
H2'	G	17504.1.1.21	4.94	4.486	-0.454	(p-,G-,G-,C-,p-,-,multiplet,multiplet,-,-,-)
H2'	G	17504.1.1.29	5.336	4.751	-0.585	(p-,U-,GU,CG,Pp,-,-,-,-,-,-)
H2'	G	17504.1.1.36	5.249	4.404	-0.845	(Pp,CG,G-,-,-,-,-,-,-,-,protein)
H2'	G	18035.1.1.1	4.471	4.924	0.453	(-,-,GC,GC,Pp,-,-,-,-,-,-)
H2'	G	18035.1.1.7	4.073	4.528	0.455	(pP,CG,GU,GC,pP,-,-,-,-,-,-)
H2'	G	18036.1.1.7	4.063	4.528	0.465	(pP,CG,GU,GC,pP,-,-,-,-,-,-)
H2'	G	18549.1.1.1	4.023	4.924	0.901	(-,-,GC,GC,Pp,-,-,-,-,-,-)
H2'	G	18656.1.1.4	5.061	4.452	-0.609	(Pp,CG,G-,A-,P-,-,-,-,-,-,-)
H2'	G	18656.1.1.6	6.279	4.864	-1.415	(P-,A-,G-,U-,Pp,-,-,-,-,-,-)
H2'	G	19018.1.1.1	3.88	4.936	1.056	(-,-,GC,GC,pP,-,-,-,-,-,-)
H2'	G	19290.1.1.9	5.684	4.889	-0.795	(P-,U-,G-,A-,P-,-,-,-,-,-,protein)
H2'	G	19544.1.1.8	4.956	4.49	-0.466	(pP,CG,G-,A-,p-,-,-,-,-,-,-)
H2'	G	19698.1.1.8	4.009	4.462	0.453	(Pp,UA,GC,C-,p-,-,-,-,-,-,-)
H2'	C	4120.1.1.18	4.927	4.373	-0.554	(pP,CG,CG,CG,pP,-,-,-,-,-,5prime-nc)
H2'	C	4120.1.1.20	4.107	4.529	0.422	(pP,CG,CG,C-,p-,-,-,-,tetra1,tetra2,-)
H2'	C	4750.1.1.6	4.025	4.388	0.363	(Pp,UA,C-,A-,P-,-,-,-,-,-,-)
H2'	C	4867.2.2.11	3.853	4.298	0.445	(p-,C-,C-,C-,P-,-,-,-,-,-,protein)
H2'	C	5007.1.1.20	4.013	4.419	0.406	(p-,GC,CG,CG,pP,-,-,-,-,-,-)
H2'	C	5007.1.1.30	4.433	4.007	-0.426	(Pp,CG,CG,-,-,-,-,-,-,-,-)
H2'	C	5023.1.1.5	4.727	4.367	-0.36	(pP,GC,CG,U-,p-,-,-,-,-,-,-)
H2'	C	5278.1.1.7	4.268	4.641	0.373	(pP,CG,CG,GC,Pp,pseudoknot,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H2'	C	5278.1.1.14	3.668	4.278	0.61	(Pp,AU,CG,U-,pP,-,-,pseudoknot,-,pseudoknot,-)
H2'	C	5632.1.1.30	4.623	4.049	-0.574	(pP,CG,C-,-,-,-,-,-,-,-,-)
H2'	C	6115.1.1.33	4.6	4.198	-0.402	(Pp,GU,CG,CG,-,-,-,-,-,-,-)
H2'	C	6477.1.1.46	3.99	4.38	0.39	(Pp,GC,CG,A-,-,-,-,-,-,-,-)
H2'	C	6509.1.1.15	5.03	4.664	-0.366	(P-,CG,CG,AU,pP,-

						,pseudoknot,pseudoknot,pseudoknot,pseudoknot,-)
H2'	C	6562.1.1.18	4.644	4.062	-0.582	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H2'	C	15417.1.1.21	3.893	4.414	0.521	(p-,GC,CG,A-,P-,-,-,-,-,-,-)
H2'	C	15745.1.1.22	4.666	4.062	-0.604	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H2'	C	15858.2.2.7	4.522	4.062	-0.46	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H2'	C	16431.1.1.28	4.682	4.062	-0.62	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H2'	C	16655.1.1.7	4.683	4.308	-0.375	(Pp,C-,C-,C-,P-,-,-,-,-,-,-)
H2'	C	17316.1.1.41	3.912	4.318	0.406	(p-,A-,C-,A-,pP,-,-,-,-,-,-)
H2'	C	17504.1.1.5	3.763	4.322	0.559	(pP,GC,CG,G-,Pp,-,-,-,multiplet,-,protein)
H2'	C	17682.1.1.31	4.545	3.993	-0.552	(pP,CG,CG,-,-,-,-,-,-,-,-)
H2'	C	17941.1.1.27	4.663	4.062	-0.601	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H2'	C	18036.1.1.5	3.941	4.387	0.446	(Pp,CG,CG,CG,Pp,-,-,-,-,-,-)
H2'	C	18036.1.1.6	4.061	4.499	0.438	(pP,CG,CG,GU,Pp,-,-,-,-,-,-)
H2'	C	18336.1.1.26	3.907	4.256	0.349	(Pp,UA,CG,CG,-,-,-,-,-,-,-)
H2'	C	19382.1.1.3	4.933	4.527	-0.406	(P-,U-,C-,A-,P-,-,-,-,-,-,protein)
H2'	C	19548.1.1.8	4.86	4.468	-0.392	(Pp,UA,CG,A-,P-,-,-,-,-,-,-)
H2'	C	19698.1.1.21	3.778	4.451	0.673	(pP,U-,CG,AU,pP,-,-,-,-,-,-)
H2'	U	4120.1.1.22	5.047	4.38	-0.667	(pP,C-,U-,U-,p-,-,tetra1,tetra2,tetra3,tetra4,-)
H2'	U	6115.1.1.6	4.63	4.126	-0.504	(pP,AU,UG,CG,Pp,-,-,-,-,-,-)
H2'	U	7090.1.1.11	4.848	4.3	-0.548	(P-,A-,U-,G-,Pp,-,-,-,-,-,-)
H2'	U	7404.1.1.10	4.695	4.302	-0.393	(pP,U-,U-,A-,p-,-,-,-,-,-,-)
H2'	U	15113.1.1.39	3.443	4.057	0.614	(Pp,A-,U-,G-,P-,-,tetra1,tetra2,tetra3,tetra4,protein)
H2'	U	16941.1.1.7	4.76	4.269	-0.491	(Pp,AU,U-,C-,p-,-,-,-,-,-,protein)
H2'	U	17106.1.1.26	2.663	4.198	1.535	(pP,A-,U-,A-,P-,-,-,-,-,-,-)
H2'	U	17309.1.1.8	3.973	4.395	0.422	(pP,U-,U-,GC,p-,-,-,-,-,-,-)
H2'	U	17316.1.1.47	3.762	4.184	0.422	(pP,AU,U-,G-,P-,-,-,-,-,-,-)
H2'	U	18035.1.1.20	4.069	4.514	0.445	(Pp,GC,UA,CG,pP,-,-,-,-,-,-)
H2'	U	19549.1.1.9	4.57	4.154	-0.416	(p-,A-,U-,-,-,-,-,-,-,-,-)
H2'	U	19662.1.1.13	4.766	4.357	-0.409	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
H2'	U	19662.1.1.13	4.766	4.357	-0.409	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
H2'	U	19698.1.1.10	4.701	4.274	-0.427	(Pp,C-,U-,U-,P-,-,-,-,-,-,-)
H2'	U	19726.1.1.5	3.834	4.274	0.44	(P-,C-,U-,C-,P-,-,-,-,-,-,protein)
H3'	A	0001.1.1.21	4.332	4.741	0.409	(P-,G-,A-,G-,Pp,tetra1,tetra2,tetra3,tetra4,tetra5,-)
H3'	A	4125.1.1.5	4.145	4.576	0.431	(pP,CG,AA,AU,P-,-,-,-,-,-,-)
H3'	A	5919.1.1.6	4.143	4.566	0.423	(p-,G-,A-,C-,P-,-,-,-,-,-,-)
H3'	A	6115.1.1.20	4.24	4.654	0.414	(p-,G-,A-,A-,P-,-,-,-,-,-,-)
H3'	A	15257.1.1.8	5	4.615	-0.385	(pP,CG,A-,C-,P-,-,-,-,-,-,-)
H3'	A	16920.1.1.4	5.349	4.727	-0.622	(P-,G-,A-,A-,p-,-,-,-,-,-,protein)
H3'	A	17316.1.1.46	4.272	4.679	0.407	(pP,CG,AU,U-,P-,-,-,-,-,-,-)
H3'	A	17682.1.1.17	4.489	5.248	0.759	(p-,A-,A-,GC,Pp,gnra2,gnra3,gnra4,gnra5,-,-)
H3'	A	18549.1.1.16	4.103	4.559	0.456	(P-,A-,A-,AU,pP,-,-,-,-,-,-)

H3'	A	19018.1.1.20	4.126	4.612	0.486	(pP,GC,A-,A-,Pp,-,-,-,-,-,-)
H3'	A	19040.1.1.48	5.171	4.695	-0.476	(pP,CG,A-,G-,P-,-,-,-,-,-,-)
H3'	A	19544.1.1.9	5.106	4.642	-0.464	(pP,G-,A-,C-,P-,-,-,-,-,-,-)
H3'	A	19544.1.1.13	5.184	4.714	-0.47	(P-,G-,A-,U-,P-,-,-,-,-,-,-)
H3'	A	19546.1.1.9	5.048	4.62	-0.428	(pP,CG,A-,A-,P-,-,-,-,-,-,-)
H3'	A	19546.1.1.13	5.145	4.737	-0.408	(P-,G-,A-,C-,Pp,-,-,-,-,-,-)
H3'	A	19549.1.1.8	4.143	4.62	0.477	(P-,C-,A-,U-,-,-,-,-,-,-,-)
H3'	A	19698.1.1.52	5.099	4.622	-0.477	(p-,A-,AU,AU,Pp,-,-,-,-,-,-)
H3'	A	19726.1.1.3	4.064	4.563	0.499	(p-,U-,A-,C-,p-,-,-,-,-,-,protein)
H3'	G	4120.1.1.1	4.117	4.684	0.567	(-,-,GC,GC,Pp,-,-,-,-,-,-)
H3'	G	4120.1.1.3	4.087	4.488	0.401	(Pp,GC,GC,AU,Pp,-,-,-,-,-,-)
H3'	G	4120.1.1.30	3.987	4.416	0.429	(Pp,AU,GC,GC,Pp,-,-,-,-,-,5prime-nc)
H3'	G	4125.1.1.23	4.095	4.491	0.396	(pP,CG,G-,G-,P-,-,-,-,-,-,-)
H3'	G	4250.1.1.2	4.194	4.583	0.389	(-,GC,GC,UA,pP,-,-,-,-,-,-)
H3'	G	4816.1.1.23	4.076	4.479	0.403	(pP,U-,GC,C-,pP,-,-,-,-,-,-)
H3'	G	4867.2.2.2	4.983	4.577	-0.406	(-,GC,GC,CG,pP,-,-,-,-,-,-)
H3'	G	5007.1.1.10	4.003	4.484	0.481	(P-,GC,GC,GC,pP,-,-,-,-,-,-)
H3'	G	5632.1.1.15	4.121	4.601	0.48	(p-,C-,G-,C-,p-,-,-,-,-,-,-)
H3'	G	5703.1.1.2	5.535	4.583	-0.952	(-,GC,GC,UA,pP,-,-,-,-,-,-)
H3'	G	5962.1.1.13	4.103	4.548	0.445	(Pp,CG,GC,AU,pP,-,-,-,-,-,-)
H3'	G	6115.1.1.19	4.31	4.713	0.403	(P-,C-,G-,A-,P-,-,-,-,-,-,-)
H3'	G	7230.1.1.4	5.005	4.606	-0.399	(pP,CG,G-,A-,P-,-,-,-,-,-,-)
H3'	G	7230.1.1.4	5.005	4.606	-0.399	(pP,CG,G-,A-,P-,-,-,-,-,-,-)
H3'	G	11489.1.1.1	4.962	4.511	-0.451	(-,-,G-,G-,P-,-,-,multiplet,multiplet,multiplet,-)
H3'	G	11489.1.1.7	5.083	4.609	-0.474	(P-,A-,G-,G-,P- ,multiplet,multiplet,multiplet,multiplet,multiplet,-)
H3'	G	15113.1.1.40	4.247	4.836	0.589	(P-,U-,G-,A-,pP,tetra1,tetra2,tetra3,tetra4,tetra5,protein)
H3'	G	15417.1.1.12	4.887	4.487	-0.4	(Pp,AU,G-,A-,P-,-,-,-,-,-,-)
H3'	G	15745.1.1.13	5.026	4.524	-0.502	(P-,G-,GC,U-,pP,-,-,-,-,-,-)
H3'	G	15856.1.1.19	4.418	4.807	0.389	(p-,U-,G-,A-,Pp,-,-,-,-,-,-)
H3'	G	17408.1.1.17	4.182	4.605	0.423	(p-,G-,G-,G-,P-,-,-,-,-,-,-)
H3'	G	17408.1.1.18	4.335	4.798	0.463	(P-,G-,G-,A-,Pp,-,-,-,-,-,-)
H3'	G	17504.1.1.16	5.163	4.762	-0.401	(P-,G-,G-,A-,P-,-,multiplet,multiplet,multiplet,multiplet,-)
H3'	G	17504.1.1.36	5.166	4.577	-0.589	(Pp,CG,G-,-,-,-,-,-,-,-,protein)
H3'	G	18035.1.1.1	4.194	4.684	0.49	(-,-,GC,GC,Pp,-,-,-,-,-,-)
H3'	G	18035.1.1.17	4.05	4.47	0.42	(pP,UG,GC,GC,Pp,-,-,-,-,-,-)
H3'	G	18036.1.1.14	4.764	4.366	-0.398	(P-,C-,GC,CG,pP,tetra3,tetra4,tetra5,-,-,-)
H3'	G	18549.1.1.1	4.253	4.684	0.431	(-,-,GC,GC,Pp,-,-,-,-,-,-)
H3'	G	18894.1.1.19	4.418	4.807	0.389	(p-,U-,G-,A-,Pp,-,-,-,-,-,-)
H3'	G	19018.1.1.1	4.088	4.711	0.623	(-,-,GC,GC,pP,-,-,-,-,-,-)
H3'	G	19290.1.1.3	4.407	4.826	0.419	(P-,U-,G-,U-,P-,-,-,-,-,-,protein)

H3'	C	4745.1.1.5	4.084	4.498	0.414	(Pp,GC,CG,AU,pP,-,-,-,-,-,-)
H3'	C	4745.1.1.11	4.064	4.417	0.353	(pP,GC,CG,CG,-,-,-,-,-,-,-)
H3'	C	4745.1.1.5	4.084	4.498	0.414	(Pp,GC,CG,AU,pP,-,-,-,-,-,-)
H3'	C	4745.1.1.11	4.064	4.417	0.353	(pP,GC,CG,CG,-,-,-,-,-,-,-)
H3'	C	5023.1.1.5	4.957	4.357	-0.6	(pP,GC,CG,U-,p-,-,-,-,-,-,-)
H3'	C	5528.1.1.6	4.083	4.516	0.433	(Pp,GU,CG,A-,Pp,-,-,-,-,-,-)
H3'	C	6115.1.1.4	4.22	4.566	0.346	(Pp,UG,CG,AU,pP,-,-,-,-,-,-)
H3'	C	6477.1.1.4	3.733	4.391	0.658	(Pp,GC,CG,UA,Pp,-,-,multiplet,multiplet,multiplet,-)
H3'	C	6477.1.1.30	4.107	4.509	0.402	(pP,CG,C-,A-,P-,-,-,-,-,-,-)
H3'	C	6562.1.1.18	4.979	4.238	-0.741	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H3'	C	15113.1.1.17	4.207	4.555	0.348	(pP,U-,CG,GC,pP,-,-,-,-,-,-)
H3'	C	15331.1.1.2	5.631	4.618	-1.013	(-,CG,CG,UA,pP,-,-,-,-,-,-)
H3'	C	15745.1.1.22	4.996	4.238	-0.758	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H3'	C	16431.1.1.28	5.022	4.238	-0.784	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H3'	C	16877.1.1.23	3.96	4.362	0.402	(pP,UA,CG,UA,pP,-,-,-,-,-,3prime-nc)
H3'	C	16941.1.1.23	3.952	4.362	0.41	(pP,UA,CG,UA,pP,-,-,-,-,-,3prime-nc)
H3'	C	17572.1.1.6	4.022	4.391	0.369	(Pp,AU,C-,U-,P-,-,-,-,-,-,-)
H3'	C	17941.1.1.27	5.012	4.238	-0.774	(Pp,UG,CG,-,-,-,-,-,-,-,-)
H3'	C	18336.1.1.26	4.127	4.478	0.351	(Pp,UA,CG,CG,-,-,-,-,-,-,-)
H3'	C	19698.1.1.21	4.243	4.625	0.382	(pP,U-,CG,AU,pP,-,-,-,-,-,-)
H3'	C	19698.1.1.35	4.856	4.408	-0.448	(p-,A-,C-,A-,p-,-,-,-,-,-,-)
H3'	C	19726.1.1.4	4.878	4.463	-0.415	(p-,A-,C-,U-,p-,-,-,-,-,-,protein)
H3'	C	19726.1.1.6	4.961	4.559	-0.402	(p-,U-,C-,A-,p-,-,-,-,-,-,protein)
H3'	U	4120.1.1.22	4.947	4.437	-0.51	(pP,C-,U-,U-,p-,-,tetra1,tetra2,tetra3,tetra4,-)
H3'	U	18336.1.1.5	7.842	4.523	-3.319	(Pp,CG,UA,U-,p-,-,-,-,-,-,-)
H3'	U	18656.1.1.7	5.267	4.694	-0.573	(P-,G-,U-,GC,pP,-,-,-,-,-,-)
H3'	U	19662.1.1.13	5.175	4.618	-0.557	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
H3'	U	19662.1.1.13	5.175	4.618	-0.557	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
H3'	U	19726.1.1.8	3.675	4.612	0.937	(p-,A-,U-,A-,p-,-,-,-,-,-,protein)
C2	A	6652.1.1.21	152.452	154.473	2.021	(Pp,G-,A-,A-,P-,-,multiplet,multiplet,gnra3,multiplet,-)
C2	A	6652.1.1.23	158.053	155.436	-2.617	(P-,A-,A-,CG,pP,multiplet,gnra3,multiplet,-,-,-)
C2	A	15417.1.1.22	157.322	154.143	-3.179	(Pp,CG,A-,A-,pP,-,-,-,-,-,-)
C2	A	17106.1.1.29	152.054	154.769	2.715	(P-,A-,A-,A-,P-,-,-,-,-,-,-)
C2	A	17565.1.1.12	150.054	154.514	4.46	(p-,A-,A-,GC,pP,-,-,-,-,-,-)
C2	A	17671.1.1.7	147.756	154.107	6.351	(pP,CG,A-,UA,pP,-,-,-,-,-,-)
C8	A	4226.1.1.25	142.762	140.729	-2.033	(Pp,G-,A-,GC,pP,-,-,-,-,-,-)
C8	A	5919.1.1.9	139.068	141.701	2.633	(p-,G-,A-,U-,P-,-,-,-,-,-,-)
C8	A	5919.1.1.34	138.768	141.039	2.271	(P-,A-,A-,A-,P-,-,-,-,-,-,-)
C8	A	17106.1.1.25	143.054	140.845	-2.209	(pP,UA,A-,U-,P-,-,-,-,-,-,-)
C8	A	17106.1.1.30	138.954	141.039	2.085	(P-,A-,A-,A-,P-,-,-,-,-,-,-)
C8	A	17671.1.1.7	142.546	140.299	-2.247	(pP,CG,A-,UA,pP,-,-,-,-,-,-)

C8	A	19040.1.1.48	142.698	140.681	-2.017	(pP,CG,A-,G-,P-,-,-,-,-,-,-)
C8	G	4345.1.1.24	141.78	139.172	-2.608	(pP,A-,G-,A-,P-,-,-,-,-,-,protein)
C8	G	5007.1.1.16	136.941	139.794	2.853	(p-,C-,G-,U-,p-,-,-,-,-,-,-)
C8	G	5919.1.1.39	135.868	139.07	3.202	(p-,A-,G-,CG,pP,-,-,-,-,-,-)
C8	G	5962.1.1.11	139.089	136.397	-2.692	(Pp,UA,GC,CG,Pp,-,-,-,-,-,-)
C8	G	11014.2.2.5	140.129	137.106	-3.023	(pP,GC,GC,UA,pP,-,-,-,kissing,kissing,-)
C8	G	15856.1.1.2	140.714	137.028	-3.686	(-,GC,GC,AU,Pp,-,-,-,-,-,-)
C8	G	15856.1.1.8	140.814	136.244	-4.57	(Pp,UA,GC,UG,P-,-,-,-,-,-,-)
C8	G	15857.1.2.13	140.779	138.229	-2.55	(pP,U-,GC,GC,pP,-,multiplet,kissing,kissing,kissing,-)
C8	G	15857.1.2.14	141.399	138.085	-3.314	(p-,GC,GC,CG,Pp,multiplet,kissing,kissing,kissing,kissing,-)
C8	G	15859.1.1.2	139.612	137.028	-2.584	(-,GC,GC,AU,Pp,-,-,-,-,-,-)
C8	G	18534.1.1.3	138.939	136.354	-2.585	(Pp,GU,GC,AU,pP,-,-,-,-,-,-)
C8	G	18549.1.1.1	143.838	139.028	-4.81	(-,-,GC,GC,Pp,-,-,-,-,-,-)
C8	G	18656.1.1.4	143.468	137.946	-5.522	(Pp,CG,G-,A-,P-,-,-,-,-,-,-)
C8	G	18891.1.1.2	139.659	136.825	-2.834	(-,GC,GC,CG,Pp,-,-,-,-,-,-)
C8	G	18894.1.1.8	140.938	136.244	-4.694	(Pp,UA,GC,UG,P-,-,-,-,-,-,-)
C8	G	19018.1.1.1	136.496	139.036	2.54	(-,-,GC,GC,pP,-,-,-,-,-,-)
C8	G	19040.1.1.34	139.498	137.022	-2.476	(Pp,AU,GC,A-,p-,tetra5,-,multiplet,multiplet,multiplet,-)
C8	G	19290.1.1.3	142.311	139.3	-3.011	(P-,U-,G-,U-,P-,-,-,-,-,-,protein)
C5	C	5278.1.1.14	100.247	97.974	-2.273	(Pp,AU,CG,U-,pP,-,-,pseudoknot,-,pseudoknot,-)
C5	C	6756.1.1.26	99.379	97.415	-1.964	(pP,UA,CG,CG,-,-,-,-,-,-,-)
C5	C	17572.1.1.17	96.04	98.023	1.983	(pP,CG,CG,-,-,-,-,-,-,-,-)
C5	C	18336.1.1.4	95.164	97.327	2.163	(Pp,AU,CG,UA,p-,-,-,-,-,-,-)
C5	C	18336.1.1.8	96.132	98.217	2.085	(p-,C-,C-,A-,p-,-,-,-,-,-,-)
C5	C	18336.1.1.13	95.224	97.357	2.133	(pP,GC,CG,U-,p-,-,-,-,uncg1,uncg2,-)
C5	C	18336.1.1.16	96.629	98.626	1.997	(p-,U-,C-,G-,Pp,uncg1,uncg2,uncg3,uncg4,uncg5,-)
C5	C	18336.1.1.19	95.075	97.101	2.026	(P-,GC,CG,AU,P-,uncg4,uncg5,-,-,-,-)
C5	C	18336.1.1.26	95.586	97.579	1.993	(Pp,UA,CG,CG,-,-,-,-,-,-,-)
C5	C	18534.1.1.8	96.179	98.059	1.88	(Pp,CG,CG,AU,pP,-,-,-,-,-,-)
C5	C	18534.1.1.30	95.939	97.806	1.867	(Pp,UA,CG,UG,pP,-,-,-,-,-,protein)
C5	C	19260.1.1.28	99.831	97.962	-1.869	(Pp,CG,CG,C-,p-,-,-,-,-,-,-)
C5	C	19260.1.1.29	100.281	97.896	-2.385	(pP,CG,C-,C-,p-,-,-,-,-,-,-)
C5	C	19260.1.1.37	100.081	98.064	-2.017	(p-,GC,C-,AU,Pp,-,multiplet,-,multiplet,multiplet,-)
C5	C	19698.1.1.2	94.672	97.426	2.754	(-,GC,CG,UA,pP,-,-,-,-,-,-)
C5	C	19698.1.1.17	95.618	97.489	1.871	(pP,UG,CG,UA,pP,-,-,-,-,-,-)
C5	C	19698.1.1.21	96.144	98.147	2.003	(pP,U-,CG,AU,pP,-,-,-,-,-,-)
C5	C	19698.1.1.23	94.586	97.001	2.415	(pP,AU,CG,CG,Pp,-,-,-,-,-,-)
C5	C	19698.1.1.24	95.337	98.069	2.732	(Pp,CG,CG,AU,Pp,-,-,-,-,-,-)
C5	C	19698.1.1.39	95.27	97.634	2.364	(p-,GC,CG,GC,Pp,-,-,-,-,-,-)
C5	C	19698.1.1.50	95.99	98.085	2.095	(Pp,CG,C-,A-,Pp,-,-,-,-,-,-)

C5	U	6652.1.1.5	101.489	104.272	2.783	(Pp,AU,U-,A-,p-,-,-,-,multiplet,-,-)
C5	U	17106.1.1.14	108.354	104.321	-4.033	(Pp,GC,U-,U-,P-,-,-,-,-,-,-)
C5	U	17106.1.1.15	107.354	104.792	-2.562	(Pp,U-,U-,A-,p-,-,-,-,-,-,-)
C5	U	17106.1.1.22	105.654	103.183	-2.471	(pP,CG,UA,CG,pP,-,-,-,-,-,-)
C5	U	17106.1.1.24	106.554	103.692	-2.862	(pP,CG,UA,A-,p-,-,-,-,-,-,-)
C5	U	17106.1.1.26	109.354	104.539	-4.815	(pP,A-,U-,A-,P-,-,-,-,-,-,-)
C5	U	19662.1.1.8	101.821	104.33	2.509	(Pp,GC,U-,U-,Pp,-,-,-,-,-,-)
C5	U	19662.1.1.8	101.821	104.33	2.509	(Pp,GC,U-,U-,Pp,-,-,-,-,-,-)
C5	U	19698.1.1.10	101.834	104.829	2.995	(Pp,C-,U-,U-,P-,-,-,-,-,-,-)
C5	U	19698.1.1.11	100.531	105.003	4.472	(p-,U-,U-,A-,P-,-,-,-,-,-,-)
C5	U	19698.1.1.15	101.193	103.736	2.543	(P-,CG,UA,UG,pP,-,-,-,-,-,-)
C5	U	19698.1.1.19	101.001	103.462	2.461	(pP,UA,UA,U-,pP,-,-,-,-,-,-)
C5	U	19698.1.1.43	99.301	104.815	5.514	(Pp,A-,U-,A-,P-,-,tetra1,tetra2,tetra3,tetra4,-)
C6	C	4867.2.2.12	144.445	142.341	-2.104	(p-,C-,C-,G-,P-,-,-,-,-,-,protein)
C6	C	4894.1.1.12	144.916	141.586	-3.33	(pP,CG,CG,CG,p-,-,-,-,-,uncg1,-)
C6	C	4894.1.1.30	145.316	141.865	-3.451	(pP,CG,CG,-,-,-,-,-,-,-,-)
C6	C	5919.1.1.7	139.668	142.359	2.691	(P-,A-,C-,G-,P-,-,-,-,-,-,-)
C6	C	7405.1.1.18	146.326	141.736	-4.59	(Pp,CG,CG,-,-,-,-,-,-,-,-)
C6	C	15417.1.1.19	145.016	142.251	-2.765	(p-,C-,C-,GC,pP,-,-,-,-,-,-)
C6	C	15856.1.1.26	137.014	140.89	3.876	(pP,AU,CG,UA,pP,-,-,-,-,-,-)
C6	C	17106.1.1.33	139.154	141.64	2.486	(P-,A-,CG,UA,Pp,-,-,-,-,-,-)
C6	C	17316.1.1.43	138.372	141.619	3.247	(p-,A-,CG,UA,pP,-,-,-,-,-,-)
C6	C	18336.1.1.7	140.246	142.593	2.347	(pP,U-,C-,C-,P-,-,-,-,-,-,-)
C6	C	18336.1.1.27	139.199	141.865	2.666	(pP,CG,CG,-,-,-,-,-,-,-,-)
C6	C	19260.1.1.29	144.431	142.367	-2.064	(pP,CG,C-,C-,p-,-,-,-,-,-,-)
C6	C	19260.1.1.37	145.031	142.657	-2.374	(p-,GC,C-,AU,Pp,-,multiplet,-,multiplet,multiplet,-)
C6	C	19534.1.1.21	143.555	141.238	-2.317	(Pp,CG,CG,AU,pP,-,-,-,-,-,protein)
C6	C	19534.1.1.47	143.309	141.119	-2.19	(pP,GC,CG,A-,P-,-,-,-,-,-,protein)
C6	U	5919.1.1.37	140.368	143.221	2.853	(P-,A-,U-,A-,P-,-,-,-,-,-,-)
C6	U	7403.1.1.9	143.622	141.065	-2.557	(pP,CG,UG,G-,P-,-,-,-,-,-,5prime-nc)
C6	U	7405.1.1.11	139.376	143.643	4.267	(P-,U-,U-,A-,pP,-,-,-,-,-,-)
C6	U	15856.1.1.9	137.414	140.906	3.492	(pP,GC,UG,A-,p-,-,-,-,-,-,-)
C6	U	15857.1.2.9	137.549	141.337	3.788	(pP,GC,UG,A-,pP,-,-,-,stacked,-,-)
C6	U	15859.1.1.9	137.202	140.535	3.333	(pP,GC,UG,G-,P-,-,-,-,gnra1,gnra2,-)
C6	U	17316.1.1.47	138.862	141.591	2.729	(pP,AU,U-,G-,P-,-,-,-,-,-,-)
C6	U	18549.1.1.11	140.398	143.13	2.732	(P-,U-,U-,G-,P-,-,-,-,-,-,-)
C6	U	18894.1.1.9	137.522	140.906	3.384	(pP,GC,UG,A-,p-,-,-,-,-,-,-)
C6	U	19698.1.1.11	140.345	143.749	3.404	(p-,U-,U-,A-,P-,-,-,-,-,-,-)
C1'	A	4345.1.1.17	97.28	92.061	-5.219	(p-,A-,A-,GC,Pp,gnra2,gnra3,gnra4,gnra5,-,-)
C1'	A	4345.1.1.27	94.08	90.732	-3.348	(P-,G-,A-,UG,Pp,-,-,-,-,-,protein)
C1'	A	5007.1.1.8	87.041	91.243	4.202	(P-,A-,A-,GC,Pp,-,-,-,-,-,-)

C1'	A	6652.1.1.6	86.836	91.448	4.612	(Pp,U-,A-,U-,Pp,-,-,multiplet,-,multiplet,-)
C1'	A	16230.1.1.5	86.93	90.304	3.374	(P-,G-,A-,U-,-,-,-,-,-,-,protein)
C1'	A	17106.1.1.27	86.991	90.756	3.765	(P-,U-,A-,A-,P-,-,-,-,-,-,-)
C1'	A	17106.1.1.29	94.551	90.968	-3.583	(P-,A-,A-,A-,P-,-,-,-,-,-,-)
C1'	A	19662.1.1.14	95.334	91.845	-3.489	(pP,U-,A-,CG,pP,-,-,-,-,-,-)
C1'	A	19662.1.1.14	95.334	91.845	-3.489	(pP,U-,A-,CG,pP,-,-,-,-,-,-)
C1'	A	19698.1.1.51	87.106	91.469	4.363	(pP,C-,A-,AU,Pp,-,-,-,-,-,-)
C1'	G	4345.1.1.26	85.58	89.971	4.391	(P-,A-,G-,A-,pP,-,-,-,-,-,protein)
C1'	G	4816.1.1.18	88.511	94.359	5.848	(p-,C-,G-,GC,pP,uncg2,uncg3,uncg4,uncg5,-,-)
C1'	G	4867.2.2.16	84.845	91.015	6.17	(P-,AA,G-,UA,PP,-,-,multiplet,multiplet,-,protein)
C1'	G	5962.1.1.27	85.683	91.963	6.28	(P-,C-,G-,UA,Pp,-,-,-,-,-,-)
C1'	G	6543.1.1.36	94.05	90.184	-3.866	(Pp,G-,G-,A-,Pp,-,-,-,-,-,-)
C1'	G	15417.1.1.20	87.037	93.179	6.142	(p-,C-,GC,CG,P-,-,-,-,-,-,-)
C1'	G	15538.1.1.14	88.258	91.626	3.368	(pP,UG,G-,U-,P-,-,-,gnra1,gnra2,gnra3,-)
C1'	G	16230.1.1.2	86.632	90.179	3.547	(-,A-,G-,A-,P-,-,-,-,-,-,protein)
C1'	G	17316.1.1.21	85.192	90.944	5.752	(P-,A-,G-,U-,P-,-,-,-,-,-,-)
C1'	G	19260.1.1.34	85.061	92.072	7.011	(p-,U-,GC,U-,Pp,-,multiplet,-,-,multiplet,-)
C1'	C	4816.1.1.17	91.569	89.175	-2.394	(p-,U-,C-,G-,Pp,uncg1,uncg2,uncg3,uncg4,uncg5,-)
C1'	C	4867.2.2.12	86.845	92.545	5.7	(p-,C-,C-,G-,P-,-,-,-,-,-,protein)
C1'	C	5007.1.1.21	98.241	94.265	-3.976	(Pp,CG,CG,CG,p-,-,-,-,-,-,-)
C1'	C	5007.1.1.23	95.141	92.46	-2.681	(pP,CG,C-,G-,P-,-,-,-,-,-,-)
C1'	C	6756.1.1.27	90.385	92.904	2.519	(pP,CG,CG,-,-,-,-,-,-,-,-)
C1'	C	15417.1.1.17	90.657	93.091	2.434	(Pp,CG,C-,C-,p-,-,-,-,-,-,-)
C1'	C	15417.1.1.19	87.158	92.743	5.585	(p-,C-,C-,GC,pP,-,-,-,-,-,-)
C1'	C	18336.1.1.4	91.269	93.914	2.645	(Pp,AU,CG,UA,p-,-,-,-,-,-,-)
C1'	C	18336.1.1.7	89.907	92.364	2.457	(pP,U-,C-,C-,P-,-,-,-,-,-,-)
C1'	C	18336.1.1.13	90.953	93.731	2.778	(pP,GC,CG,U-,p-,-,-,-,uncg1,uncg2,-)
C1'	C	18336.1.1.16	86.333	89.175	2.842	(p-,U-,C-,G-,Pp,uncg1,uncg2,uncg3,uncg4,uncg5,-)
C1'	C	18336.1.1.19	91.043	93.855	2.812	(P-,GC,CG,AU,P-,uncg4,uncg5,-,-,-,-)
C1'	C	18336.1.1.26	89.963	94.144	4.181	(Pp,UA,CG,CG,-,-,-,-,-,-,-)
C1'	C	19260.1.1.28	91.061	94.258	3.197	(Pp,CG,CG,C-,p-,-,-,-,-,-,-)
C1'	C	19260.1.1.29	90.001	92.808	2.807	(pP,CG,C-,C-,p-,-,-,-,-,-,-)
C1'	C	19546.1.1.4	90.261	93.797	3.536	(Pp,GU,CG,CG,Pp,-,-,-,-,-,-)
C1'	C	19634.1.1.38	89.614	92.062	2.448	(p-,U-,C-,G-,p-,-,-,-,-,-,-)
C1'	U	4816.1.1.25	89.777	93.118	3.341	(Pp,C-,UA,UA,pP,-,-,-,-,-,-)
C1'	U	4867.2.2.17	96.745	92.493	-4.252	(PP,G-,UA,AG,Pp,-,multiplet,multiplet,-,-,protein)
C1'	U	7405.1.1.15	90.156	93.593	3.437	(pP,GC,UA,GC,pP,-,-,-,-,-,-)
C1'	U	16230.1.1.6	87.374	91.096	3.722	(P-,A-,U-,-,-,-,-,-,-,-,protein)
C1'	U	16431.1.1.8	89.325	92.324	2.999	(Pp,AU,U-,U-,Pp,-,-,-,-,-,-)
C1'	U	17106.1.1.24	89.461	93.29	3.829	(pP,CG,UA,A-,p-,-,-,-,-,-,-)
C1'	U	17309.1.1.7	89.842	92.837	2.995	(pP,CG,U-,U-,Pp,-,-,-,-,-,-)

C1'	U	17309.1.1.8	88.922	91.963	3.041	(pP,U-,U-,GC,p-,-,-,-,-,-,-)
C1'	U	19260.1.1.35	88.591	92.227	3.636	(p-,GC,U-,GC,p-,multiplet,-,-,multiplet,-,-)
C1'	U	19290.1.1.4	87.766	90.953	3.187	(p-,G-,U-,G-,P-,-,-,-,-,-,protein)
C1'	U	19662.1.1.13	89.181	92.658	3.477	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
C1'	U	19662.1.1.13	89.181	92.658	3.477	(Pp,CG,U-,A-,pP,-,-,-,-,-,-)
C1'	U	19698.1.1.11	94.815	91.424	-3.391	(p-,U-,U-,A-,P-,-,-,-,-,-,-)
C2'	A	4345.1.1.8	79.18	75.83	-3.35	(Pp,G-,A-,GC,pP,-,-,-,-,-,protein)
C2'	A	4345.1.1.25	79.58	76.449	-3.131	(P-,G-,A-,G-,P-,-,-,-,-,-,protein)
C2'	A	6633.1.1.18	72.843	75.499	2.656	(pP,UG,A-,C-,P-,-,-,tetra1,tetra2,tetra3,-)
C2'	A	16230.1.1.1	79.436	76.466	-2.97	(-,-,A-,G-,P-,-,-,-,-,-,-)
C2'	A	16230.1.1.3	79.667	76.449	-3.218	(P-,G-,A-,G-,P-,-,-,-,-,-,protein)
C2'	A	17671.1.1.12	72.856	75.661	2.805	(pP,G-,A-,U-,p-,-,-,-,-,-,-)
C2'	A	17671.1.1.24	72.666	75.567	2.901	(Pp,GC,AU,UA,pP,-,-,-,-,-,-)
C2'	A	18534.1.1.20	72.281	75.377	3.096	(P-,GC,AU,AU,pP,tetra4,tetra5,-,-,-,protein)
C2'	A	18894.1.1.10	73.105	75.757	2.652	(Pp,UG,A-,U-,p-,-,-,-,-,-,-)
C2'	A	19040.1.1.48	83.398	76.488	-6.91	(pP,CG,A-,G-,P-,-,-,-,-,-,-)
C2'	A	19547.1.1.12	78.613	75.92	-2.693	(P-,G-,A-,A-,Pp,-,-,-,-,-,-)
C2'	G	4345.1.1.9	79.38	75.234	-4.146	(P-,A-,GC,UG,Pp,-,-,-,-,-,protein)
C2'	G	4345.1.1.24	70.98	76.027	5.047	(pP,A-,G-,A-,P-,-,-,-,-,-,protein)
C2'	G	4346.1.1.7	78.673	75.779	-2.894	(pP,GU,G-,A-,Pp,-,-,-,-,-,protein)
C2'	G	4867.2.2.13	71.445	75.47	4.025	(p-,C-,G-,A-,PP,-,-,-,-,-,protein)
C2'	G	15257.1.1.11	79.072	75.911	-3.161	(p-,G-,G-,A-,p-,-,-,-,-,-,-)
C2'	G	16230.1.1.2	80.164	76.069	-4.095	(-,A-,G-,A-,P-,-,-,-,-,-,protein)
C2'	G	16230.1.1.4	79.308	76.076	-3.232	(P-,A-,G-,A-,p-,-,-,-,-,-,protein)
C2'	G	17316.1.1.21	78.682	75.839	-2.843	(P-,A-,G-,U-,P-,-,-,-,-,-,-)
C2'	G	18549.1.1.1	77.788	75.157	-2.631	(-,-,GC,GC,Pp,-,-,-,-,-,-)
C2'	G	18894.1.1.4	72.573	75.275	2.702	(Pp,AU,GC,UA,Pp,-,-,-,-,-,-)
C2'	G	18894.1.1.8	72.415	75.287	2.872	(Pp,UA,GC,UG,P-,-,-,-,-,-,-)
C2'	G	19260.1.1.34	72.551	75.18	2.629	(p-,U-,GC,U-,Pp,-,multiplet,-,-,multiplet,-)
C2'	G	19290.1.1.9	72.632	75.73	3.098	(P-,U-,G-,A-,P-,-,-,-,-,-,protein)
C2'	G	19544.1.1.12	79.059	75.911	-3.148	(p-,G-,G-,A-,p-,-,-,-,-,-,-)
C2'	G	19546.1.1.12	79.059	76.088	-2.971	(P-,G-,G-,A-,p-,-,-,-,-,-,-)
C2'	G	19547.1.1.11	78.993	76.113	-2.88	(P-,G-,G-,A-,P-,-,-,-,-,-,-)
C2'	G	19548.1.1.11	79.056	76.088	-2.968	(P-,G-,G-,A-,p-,-,-,-,-,-,-)
C2'	G	19634.1.1.13	77.994	75.375	-2.619	(pP,GU,GC,U-,pP,-,-,-,-,-,-)
C2'	C	4867.2.2.10	72.045	75.666	3.621	(P-,U-,C-,C-,p-,-,-,-,-,-,protein)
C2'	C	5655.1.1.5	72.411	75.501	3.09	(pP,UA,CG,CG,pP,-,-,-,-,-,-)
C2'	C	5655.1.1.7	71.935	75.017	3.082	(pP,CG,CG,CG,p-,-,-,-,-,-,5prime-nc)
C2'	C	6562.1.1.18	84.701	77.467	-7.234	(Pp,UG,CG,-,-,-,-,-,-,-,-)
C2'	C	7098.1.1.25	72.009	75.354	3.345	(Pp,GC,CG,AU,Pp,-,-,-,-,-,-)
C2'	C	7403.1.1.7	72.288	75.417	3.129	(pP,GC,CG,CG,pP,-,-,-,-,-,-)

C2'	C	7403.1.1.19	71.985	75.311	3.326	(Pp,GC,CG,AU,pP,-,-,-,-,-,-)
C2'	C	7405.1.1.3	72.186	75.311	3.125	(Pp,GC,CG,AU,pP,-,-,-,-,-,-)
C2'	C	17941.1.1.27	85.054	77.467	-7.587	(Pp,UG,CG,-,-,-,-,-,-,-,-)
C2'	C	17972.1.1.3	72.85	75.374	2.524	(Pp,GC,CG,UA,p-,-,-,-,-,-,-)
C2'	C	18894.1.1.17	72.503	76.15	3.647	(p-,A-,C-,U-,P-,-,-,-,-,-,-)
C2'	C	19260.1.1.22	70.071	74.935	4.864	(pP,UA,CG,CG,Pp,multiplet,multiplet,multiplet,-,-,5prime-nc)
C2'	U	4867.2.2.17	72.545	74.751	2.206	(PP,G-,UA,AG,Pp,-,multiplet,multiplet,-,-,protein)
C2'	U	5655.1.1.9	72.314	75.845	3.531	(pP,CG,U-,G-,p-,-,-,-,-,-,-)
C2'	U	6633.1.1.17	72.643	75.269	2.626	(pP,CG,UG,A-,p-,-,-,-,tetra1,tetra2,-)
C2'	U	15417.1.1.24	73.281	75.304	2.023	(P-,A-,UA,UA,pP,-,-,-,-,-,-)
C2'	U	16431.1.1.8	73.675	75.747	2.072	(Pp,AU,U-,U-,Pp,-,-,-,-,-,-)
C2'	U	17106.1.1.26	73.371	75.608	2.237	(pP,A-,U-,A-,P-,-,-,-,-,-,-)
C2'	U	17671.1.1.8	82.096	75.232	-6.864	(pP,A-,UA,UA,pP,-,-,-,-,-,-)
C2'	U	18534.1.1.5	72.191	75.374	3.183	(Pp,AU,UA,AU,pP,-,-,-,-,-,-)
C2'	U	18894.1.1.27	72.433	75.276	2.843	(Pp,CG,UA,CG,pP,-,-,-,-,-,-)
C2'	U	19260.1.1.19	70.551	73.552	3.001	(pP,UA,UA,UA,pP,multiplet,multiplet,multiplet,multiplet,multiplet,-)
C3'	A	4867.2.2.7	79.445	74.811	-4.634	(PP,AU,AA,A-,p-,-,multiplet,-,-,-,protein)
C3'	A	4867.2.2.14	80.545	75.84	-4.705	(p-,G-,A-,AA,P-,-,-,-,-,multiplet,protein)
C3'	A	15745.1.1.11	79.247	74.002	-5.245	(Pp,CG,A-,G-,Pp,-,-,-,-,-,-)
C3'	A	17106.1.1.25	80.221	74.369	-5.852	(pP,UA,A-,U-,P-,-,-,-,-,-,-)
C3'	A	18549.1.1.16	69.738	74.747	5.009	(P-,A-,A-,AU,pP,-,-,-,-,-,-)
C3'	A	19040.1.1.48	79.998	74.261	-5.737	(pP,CG,A-,G-,P-,-,-,-,-,-,-)
C3'	A	19260.1.1.48	69.831	74.22	4.389	(p-,UA,A-,-,-,-,-,-,-,-,-)
C3'	A	19290.1.1.7	79.964	75.467	-4.497	(P-,A-,A-,U-,P-,-,-,-,-,-,protein)
C3'	G	4345.1.1.7	79.48	75.374	-4.106	(pP,GU,G-,A-,Pp,-,-,-,-,-,protein)
C3'	G	4345.1.1.26	81.58	75.636	-5.944	(P-,A-,G-,A-,pP,-,-,-,-,-,protein)
C3'	G	4780.1.1.9	80.366	76.077	-4.289	(pP,G-,G-,U-,P-,-,-,-,-,-,-)
C3'	G	4781.2.2.9	80.652	76.186	-4.466	(pP,G-,G-,U-,P-,-,-,-,-,-,protein)
C3'	G	4867.2.2.13	80.845	76.137	-4.708	(p-,C-,G-,A-,PP,-,-,-,-,-,protein)
C3'	G	4867.2.2.16	80.745	75.461	-5.284	(P-,AA,G-,UA,PP,-,-,multiplet,multiplet,-,protein)
C3'	G	15257.1.1.10	79.817	75.941	-3.876	(P-,C-,G-,G-,P-,-,-,-,-,-,-)
C3'	G	15745.1.1.12	79.267	74.999	-4.268	(pP,A-,G-,GC,p-,-,-,-,-,-,-)
C3'	G	16230.1.1.4	79.832	75.887	-3.945	(P-,A-,G-,A-,p-,-,-,-,-,-,protein)
C3'	G	18549.1.1.1	70.098	74.544	4.446	(-,-,GC,GC,Pp,-,-,-,-,-,-)
C3'	G	18838.1.1.10	72.128	76.275	4.147	(p-,U-,G-,G-,P-,-,-,-,-,-,-)
C3'	G	18838.1.1.11	71.938	76.351	4.413	(p-,G-,G-,A-,P-,-,-,-,-,-,-)
C3'	G	19018.1.1.1	69.936	74.552	4.616	(-,-,GC,GC,pP,-,-,-,-,-,-)
C3'	G	19546.1.1.11	79.809	75.783	-4.026	(P-,A-,G-,G-,P-,-,-,-,-,-,-)
C3'	C	4867.2.2.12	79.145	74.718	-4.427	(p-,C-,C-,G-,P-,-,-,-,-,-,protein)
C3'	C	6562.1.1.18	77.795	70.134	-7.661	(Pp,UG,CG,-,-,-,-,-,-,-,-)

C3'	C	7404.1.1.7	81.719	72.479	-9.24	(pP,GC,CG,CG,p-,-,-,-,-,-,-)
C3'	C	15417.1.1.18	82.141	73.89	-8.251	(pP,C-,C-,C-,Pp,-,-,-,-,-,-)
C3'	C	15745.1.1.10	77.997	72.654	-5.343	(Pp,GC,CG,A-,P-,-,-,-,-,-,5prime-nc)
C3'	C	16431.1.1.28	78.195	70.134	-8.061	(Pp,UG,CG,-,-,-,-,-,-,-,-)
C3'	C	17520.1.1.17	74.047	69.738	-4.309	(pP,CG,CG,-,-,-,-,-,-,-,-)
C3'	C	17564.1.1.9	69.493	74.764	5.271	(p-,U-,C-,C-,p-,-,-,-,-,-,-)
C3'	C	17565.1.1.10	70.334	74.617	4.283	(p-,C-,C-,A-,P-,-,-,-,-,-,-)
C3'	C	17941.1.1.27	77.662	70.134	-7.528	(Pp,UG,CG,-,-,-,-,-,-,-,-)
C3'	C	19634.1.1.38	79.724	75.164	-4.56	(p-,U-,C-,G-,p-,-,-,-,-,-,-)
C3'	U	7405.1.1.15	78.276	72.308	-5.968	(pP,GC,UA,GC,pP,-,-,-,-,-,-)

[1]This table lists the shift values that were automatically removed during the model training process. Values in the **Atom** column are the name of the atom that was predicted. The values in the **Base** column are the type of nucleotide. The value in the **ID** column represents the BMRB entry number, shift set, and residue number. The values in the **Measured** column represent experimentally measured chemical shifts (after re-referencing). The values in the **Predicted** column represent the predicted chemical shift. The values in the **Delta** column represent the deviation between measured and predicted values. The values in the **Attributes** column represent the attributes assigned to that atom.

Table S2 Data files[1]

BMRB	PDB	Mode	Used	Reason
xxx1	-	Manual	Yes	
xxx2	-	Manual	Yes	
xxx3	-	Manual	Yes	
xxx4	-	Manual	Yes	
xxx5	-	Manual	Yes	
xxx6	-	Manual	Yes	
4028	Missing	-	No	
4120	1A60	Auto	Yes	
4125	-	Manual	Yes	
4135	-	Manual	Yes	
4175	1BN0	Auto	Yes	
4226	1LDZ	Auto	Yes	
4247	missing	-	No	
4250	3PHP	Auto	Yes	
4253	missing	-	No	
4345	-	Manual	Yes	
4346	-	Manual	Yes	
4547	1C2Q	Auto	No	DNA-RNA hybrid
4614	1F5G	Auto	Yes	
4745	1K8S	Auto	Yes	
4750	-	Manual	Yes	
4780	-	Manual	Yes	
4781	-	Manual	Yes	
4816	1JO7	Auto	Yes	
4867	-	Manual	Yes	
4894	1EKZ	Auto	Yes	
5007	1HWQ	Auto	Yes	
5023	1I4C	Auto	Yes	
5046	-	Manual	Yes	
5170	1JU7	Auto	Yes	
5193	1JZC	Auto	Yes	
5256	1KKA	Auto	Yes	
5259	-	Manual	Yes	
5278	-	Manual	Yes	
5321	1L1W	Auto	Yes	
5371	1LC6	Auto	Yes	
5394	1LPW	Auto	Yes	
5395	1LMV	Auto	Yes	
5528	1M82	Auto	Yes	
5530	1LUX	Auto	Yes	
5531	1LUU	Auto	Yes	
5553	1MFY	Auto	Yes	
5559	-	Manual	Yes	
5586	1MV1	Auto	Yes	
5587	1MV2	Auto	Yes	
5588	-	Manual	Yes	
5614	1MUV	Auto	Yes	
5632	1NA2	Auto	Yes	

5655	1NC0	Auto	Yes	
5703	-	Manual	Yes	
5705	2KOC	Auto	Yes	
5773	1N8X	Auto	Yes	
5775	1NTQ	Auto	No	No Match
5776	1NTS	Auto	No	No Match
5777	1NTT	Auto	No	No Match
5781	1OO7	Auto	No	No Match
5834	1PJY	Auto	Yes	
5852	1OW9	Auto	Yes	
5919	1MNX	Auto	Yes	
5932	1Q75	Auto	Yes	
5962	-	Manual	Yes	
5980	-	Manual	Yes	
6005	1RGO	Auto	Yes	
6042	1RFR	Auto	No	No Match
6062	1S2F	Auto	Yes	
6076	1R7W	Auto	Yes	
6077	1R7Z	Auto	Yes	
6094	-	Manual	Yes	
6115	-	Manual	Yes	
6239	-	Manual	Yes	
6320	1XHP	Auto	Yes	
6477	1YMO	Auto	Yes	
6485	-	Manual	Yes	
6509	-	Manual	Yes	
6543	1Z2J	Auto	Yes	
6562	1Z30	Auto	Yes	
6633	1ZC5	Auto	Yes	
6652	2ADT	Auto	Yes	
6756	-	Manual	Yes	
6814	2AU4	Auto	No	No Match
6895	missing	-	No	
6922	missing	-	No	
6956	-	Manual	Yes	
6979	missing	-	No	
7090	-	Manual	Yes	
7098	2GM0	Auto	Yes	
7194	missing	-	No	
7230	2H49	Auto	Yes	
7307	missing	-	No	
7308	missing	-	No	
7314	2.00E+34	No DSSR	No	
7315	2.00E+35	No DSSR	No	
7403	2QH2	Auto	Yes	
7404	2QH3	Auto	Yes	
7405	2QH4	Auto	Yes	
10014	2F87	Auto	Yes	
10018	2FDT	Auto	Yes	
11014	-	Manual	Yes	
11374	2RNE	No DSSR	No	
11375	2RNE	No DSSR	No	
11406	2rq4	No DSSR	No	

11407	2rq4	No DSSR	No	
11408	2rq4	No DSSR	No	
11409	2rra	Auto	No	No Match
11410	2rra	Auto	No	No Match
11411	2rra	Auto	No	No Match
11412	2rra	Auto	No	No Match
11450	2RS2	Auto	No	No Match
11489	2RSK	Auto	Yes	
15080	-	Manual	Yes	
15081	2O32	Auto	No	Non-standard
15113	2IHX	Auto	Yes	
15117	1ns1	No DSSR	No	
15157	2OJ7	Auto	No	Small
15257	2JPP	Auto	Yes	
15319	2JR4	Auto	Yes	
15331	-	Manual	Yes	
15342	-	Manual	Yes	
15362	-	Manual	Yes	
15417	2JTP	Auto	Yes	
15538	-	Manual	Yes	
15543	2JX2	No DSSR	No	
15571	2JXQ	Auto	Yes	
15572	2JXS	Auto	Yes	
15656	-	Manual	Yes	
15697	missing	-	No	
15727	missing	-	No	
15745	2JYM	Auto	Yes	
15780	2K3Z	Auto	Yes	
15781	2K41	Auto	Yes	
15786	-	Manual	Yes	
15856	-	Manual	Yes	
15857	-	Manual	Yes	
15858	-	Manual	Yes	
15859	-	Manual	Yes	
15869	-	Manual	Yes	
15915	2K7E	Auto	Yes	
16192	2HGL	No DSSR	No	
16193	2HGM	No DSSR	No	
16194	2HGN	No DSSR	No	
16230	2KH9	Auto	Yes	
16244	2KH9	Auto	No	
16425	2KM8	Auto	No	
16431	2KMJ	Auto	Yes	
16479	-	Manual	Yes	
16604	missing	-	No	
16609	missing	-	No	
16654	-	Manual	Yes	
16655	2KRZ	Auto	Yes	
16714	2Y95	Auto	No	Multiple
16852	2KWG	Auto	No	Non-standard
16877	-	Manual	Yes	
16920	2KXN	Auto	Yes	
16941	-	Manual	Yes	

16950	2KXZ	Auto	No	Multiple
16951	2KY0	Auto	Yes	
16952	2KY1	Auto	Yes	
16953	2KY2	Auto	Yes	
16980	-	Manual	Yes	
17078	missing	-	No	
17083	2L1F	Auto	Yes	
17088	2kye	Auto	Yes	
17106	-	Manual	Yes	
17188	2L3E	Auto	Yes	
17273	-	Manual	No	
17292	2L5Z	Auto	Yes	
17309	2L6I	Auto	Yes	
17316	2KZL	Auto	Yes	
17326	missing	-	No	
17401	2L8U	Auto	Yes	
17406	2L8F	Auto	Yes	
17408	2L8H	Auto	Yes	
17436	1Z2J	Auto	Yes	
17449	-	Manual	Yes	
17504	2LA5	Auto	Yes	
17517	2LA9	Auto	Yes	
17520	2LAC	Auto	Yes	
17526	1EY1	No DSSR	No	
17535	2LAR	Auto	No	DNA/RNA hybrid
17559	missing	-	No	
17560	missing	-	No	
17563	2LBJ	Auto	Yes	
17564	2LBK	Auto	Yes	
17565	2LBL	Auto	Yes	
17566	missing	-	No	
17567	missing	-	No	
17568	missing	-	No	
17572	2LBQ	Auto	Yes	
17573	2LBR	Auto	Yes	
17601	2LC8	Auto	No	No Match
17623	2YH1	Auto	No	No Match
17671	-	Manual	Yes	
17682	2LDT	Auto	Yes	
17706	21ea	no URL	No	
17707	21eb	no URL	No	
17860	2LHP	Auto	Yes	
17861	missing	-	No	
17877	2LI4	Auto	Yes	
17883	2CQF	No DSSR	No	
17901	-	Manual	Yes	
17921	-	No DSSR	No	
17941	2LJJ	Auto	Yes	
17961	2LKR	Auto	Yes	
17972	2LK3	Auto	Yes	
18034	4A4T	Auto	Yes	
18035	4A4U	Auto	Yes	
18036	4A4S	Auto	Yes	

18079	4A4R	Auto	Yes	
18239	2LP9	Auto	Yes	
18240	2LPA	Auto	Yes	
18336	2LQZ	Auto	Yes	
18503	2LU0	Auto	Yes	
18515	2LUB	Auto	Yes	
18532	2LUN	Auto	Yes	
18534	2LUP	Auto	Yes	
18549	2LV0	Auto	Yes	
18593	2LVY	Auto	Yes	
18633	2LWK	Auto	Yes	
18656	2LX1	Auto	Yes	
18702	4B8T	Auto	No	No Match
18838	2M12	Auto	Yes	
18846	-	Auto	No	
18847	2M18	Auto	Yes	
18872	2M1O	Auto	Yes	
18881	2M1V	Auto	No	No Match
18891	2M21	Auto	Yes	
18892	2M22	Auto	Yes	
18893	2M23	Auto	Yes	
18894	2M24	Auto	Yes	
18950	2M39	Auto	No	Non-standard linkage
18974	2MER	Auto	Yes	
18975	2MEQ	Auto	Yes	
19018	2M4Q	Auto	Yes	
19024	2M4W	Auto	Yes	
19039	2M57	Auto	Yes	
19040	2M58	Auto	Yes	
19064	-	Auto	No	
19081	2M5U	Auto	Yes	
19248	2M8D	Auto	Yes	
19260	2M8K	Auto	Yes	
19290	4BS2	Auto	Yes	
19382	2MB0	Auto	Yes	
19400	4BY9	Auto	No	No Match
19534	2MF0	Auto	Yes	
19544	2MFC	Auto	Yes	
19546	2MFE	Auto	Yes	
19547	2MFF	Auto	Yes	
19548	2MFG	Auto	Yes	
19549	2MFH	Auto	Yes	
19634	2MHI	Auto	Yes	
19662	2MI0	Auto	Yes	
19692	2MIS	Auto	Yes	
19698	-	Manual	Yes	
19726	2MJH	Auto	Yes	

[1]Values in the **BMRB** column are BMRB entry numbers for entries with RNA. Entries prefixed with xxx are local datasets that have not yet been deposited. The values in the **PDB** column represent Protein Data Bank entries that were identified as corresponding to the BMRB entry in the same row. A dash indicates that we used a manual template and did not need to look for the PDB entry. A value of *missing* indicates that our scripts were unable to find a PDB entry in the STAR file. The **Template** column values are Auto where the attributes for that BMRB entry were generated automatically and manual where we created a manual template for the entry. Other entries indicate a reason why the entry was not used. *No DSSR* indicates

that DSSR program did not run successfully with the indicated PDB entry. The value in the **Used** column indicate whether shifts for that entry were actually used in the analysis. The value in the **Reason** column indicates a reason why an entry, despite having a valid PDB file identified was not used. *No Match* indicates that our scripts did not find an exact match between the NMR-STAR file sequence and the PDB file sequence. *Multiple* indicates that the STAR file had multiple shift sets and the one that was automatically matched did not have sufficient useful shifts. *Non-standard* indicates that the sequence was largely composed of non-standard nucleotides or nucleotide linkages.