

Supplementary Material

Supplementary Material contains:

A – Simulations with preliminary x-ray data

B – MM-GBSA calculations

C – Five PDB files of MD averaged structures with main conformations of bulges (i.e., closed, locked stacked, closed-like bulged-in, closed-like bulged-in/out and 3R-bulged-out conformations). Averaged MD structure with open conformation is not provided since it can be seen in PDB files 1XPF, 1XPE and many other x-ray structures (1).

A – Simulations with preliminary x-ray data

Refined x-ray HIV-1 subtype A and B DIS structures (PDB codes 1XPF and 1XPE) were simulated with preliminary ion distributions (in simulations S_MD_A and S_MD_B). Subtype A contained two extra Mg^{2+} ions and subtype B three extra Mg^{2+} ions (compare Figs. S1 and 7). These excessive ions were not properly assigned and were later removed from the final refined structures. Their inclusion, however, does not appear to substantially affect the simulations.

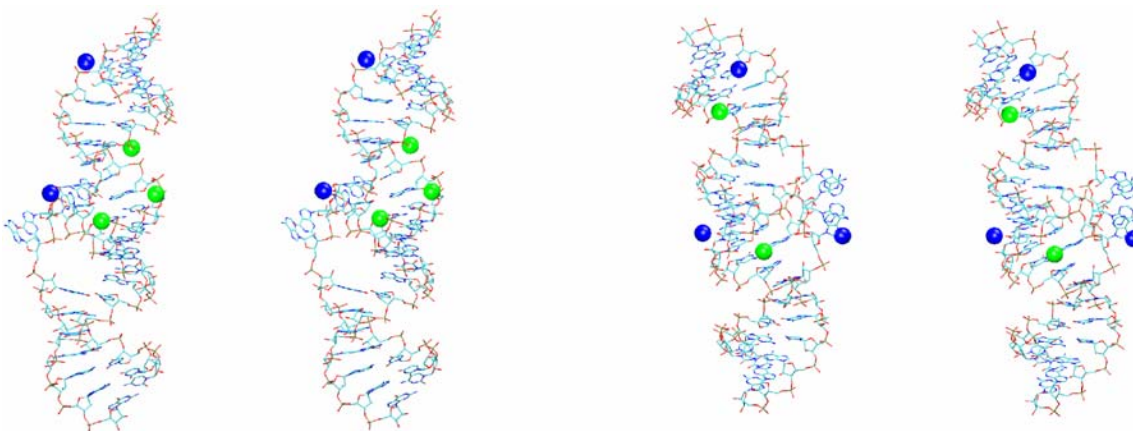


Figure S1 Stereo views of refined x-ray HIV-1 subtype A DIS (left) and subtype B DIS (right) structures with preliminary x-ray distributions of Mg^{2+} ions (in green and in blue). The incorrectly placed Mg^{2+} ions are those in blue.

For the 12 ns of the simulation S_MD_A we observed the initial open conformation. After that closed conformation formed and was stable till 20 ns. At 20 ns flanking base A_{272}^* moved toward the pocket interior where it formed H-bonds $A_{272}^*(N6)-A_{280}^*(N1)$ and $A_{272}^*(N1)-A_{280}^*(N6)$ with opposite A_{280}^* while the remaining three flanking bases stacked in 3R-bulged-out conformation. This architecture was maintained till the end of the simulation. In the closed conformation glycosidic torsions of bulges ranged from -60° to -100° . Movement of A_{272}^* toward interior of the pocket is coupled with change of glycosidic torsion to syn conformation ($\sim 50^\circ$). Time course of θ parameter is plotted in Fig. S2.

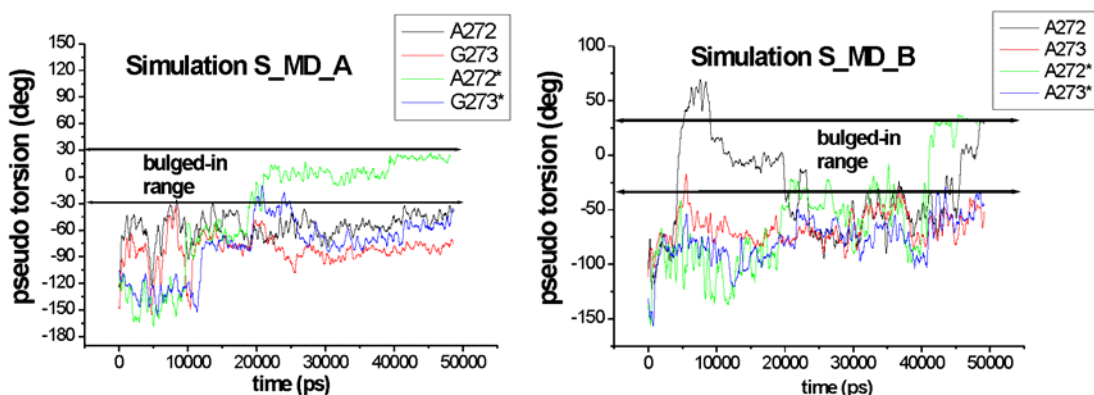


Figure S2 Time course of parameter θ calculated for flanking bases in simulations S_MD_A and S_MD_B.

At the beginning of the simulation S_MD_B the bulges formed the closed conformation. It was stable during the whole simulation except of several disruptions when A₂₇₂ and A₂₇₂* moved entirely inside the pocket (see time course of the θ parameter in Fig. S2). Bulges inside the cavity formed temporary H-bonds: A₂₇₂(N6)-A₂₈₀(N1), and A₂₇₂*(C2)-A₂₈₀*(N1) and A₂₇₂*(N1)-A₂₈₀*(N6). In the closed conformation glycosidic torsions of bulges ranged from -80° to -100° . Movement of A₂₇₂* toward inside the cavity is coupled with change of glycosidic torsion to syn conformation ($\sim 40^\circ$).

B – MM-GBSA calculations.

MM-GBSA (Molecular Mechanics, Generalised Born, and Surface Area) method is a common method that allows free energy analysis of the explicit solvent MD trajectories via postprocessing of the trajectories. It is based on a continuum solvent approach that replaces the explicit solvent and utilizes directly snapshots from the simulations (2). MM-GBSA method implemented in AMBER-8.0 package (3) was utilized to estimate total free energy (excluding entropic term) of the kissing loop complexes in the course of the simulations to capture energetic changes during bulged-out/bulged-in conversions and in formation of flanking conformations. Such calculations were carried out for simulations MD_A_1-2, MD_B_1-2, and MD_F_1-2 with newly refined kissing complexes (listed in Fig. S3). Every fifth snapshot was analyzed. The calculation of MM-GBSA energy included calculations of Molecular Mechanics energy (EMM) and solvation energy (EGBSA). EMM was calculated by Sander module of AMBER-8.0 (3,4) (explicit solvent and ions were not included) with parm99 (5). EGBSA is composed of two types of contributions, electrostatic (EGB) and van der Waals (ESA). The electrostatic part was derived with Generalized Born approximation using the Jayaram et al. model (6). The van der Waals part depends on solvent accessible surface area (SASA) and was calculated using sander module (SASA parameters were $A=0.00542$ kcal/Å² and $B=0.92$ kcal/mol (7)). A dielectric constant of 1.00 was used for the solute region.

The courses of MM-GBSA energy in six trajectories are plotted in Fig. S3. Decrease of free energy (by about 15 kcal/mol) is obvious at bulged-out \rightarrow bulged-in conversion in MD_B_2 simulation. However, correlation between observed flanking conformation in certain time periods and the total energy is not clear. Particularly, in

MD_B_1 simulation we noticed decrease of MM-GBSA energy by about several kcal/mol after the open conformation → 3R-bulged-out conformation conversion. Similar trend is seen in MD_F_2 simulation for the open conformation → closed conformation conversion. It may indicate that stacked 3R-bulged-out and closed conformations are more favorable than the initial x-ray open conformation. However, this conclusion is not supported by MD_A simulations. It seems that MM-GBSA approach is too crude to capture energetic changes of bulges in simulations. The inherent inaccuracy limits are too large and also the likely subtle real free energy changes accompanying the flanking base movements are entirely hidden in the overall fluctuations of the MM-GBSA energies.

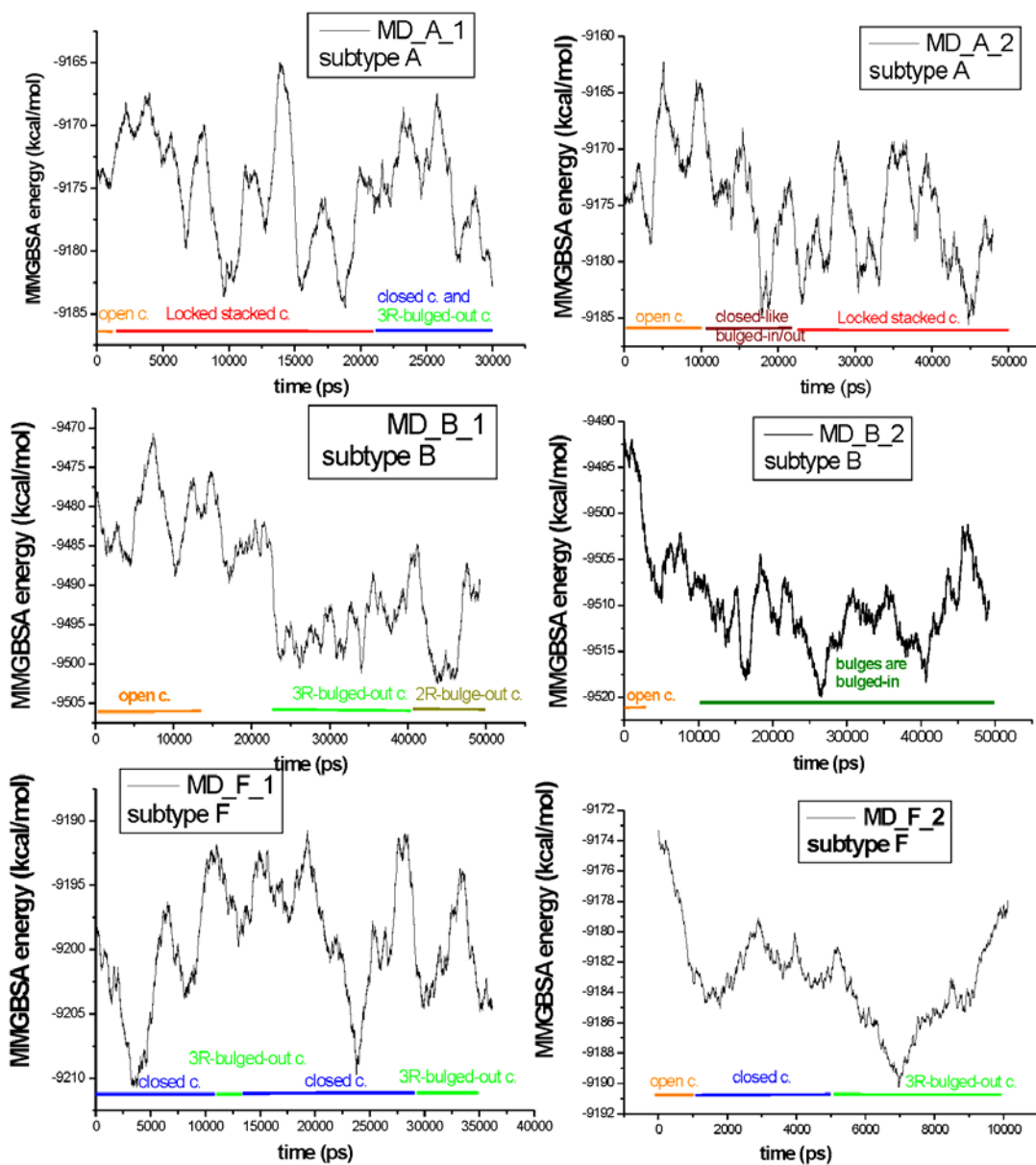


Figure S3 Time course of total MM-GBSA free energy calculated for subtype A, B and F in simulations MD_A_1-2, MD_B_1-2 and MD_F_1-2. The developments were

averaged over 300 steps. The horizontal line in each graph corresponds to time scale and indicates observed flanking base conformations in the given time periods.

REFERENCES

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locked stacked conformation - locked_stacked_c.pdb

REMARK MD average structure 3000 - 3100 ps

REMARK 1XPF (PDB database)

REMARK sequence chain I. residues 1-23 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK sequence chain II. residues 24-46 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK PDB format: output from Ptraj module of AMBER-8.0

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ATOM	161	2H5'	RU	6	8.902	14.404	3.929	0.00	0.00
ATOM	162	C4'	RU	6	7.154	15.059	4.949	0.00	0.00
ATOM	163	H4'	RU	6	7.723	15.311	5.827	0.00	0.00
ATOM	164	O4'	RU	6	6.091	15.986	4.835	0.00	0.00
ATOM	165	C1'	RU	6	4.939	15.436	5.447	0.00	0.00
ATOM	166	H1'	RU	6	4.626	16.090	6.245	0.00	0.00
ATOM	167	N1	RU	6	3.808	15.290	4.495	0.00	0.00
ATOM	168	C6	RU	6	4.001	15.197	3.145	0.00	0.00
ATOM	169	H6	RU	6	4.994	15.169	2.751	0.00	0.00
ATOM	170	C5	RU	6	2.956	15.155	2.303	0.00	0.00
ATOM	171	H5	RU	6	3.129	15.101	1.251	0.00	0.00
ATOM	172	C4	RU	6	1.602	15.188	2.781	0.00	0.00
ATOM	173	O4	RU	6	0.605	15.153	2.091	0.00	0.00
ATOM	174	N3	RU	6	1.487	15.252	4.131	0.00	0.00
ATOM	175	H3	RU	6	0.563	15.240	4.505	0.00	0.00
ATOM	176	C2	RU	6	2.518	15.272	5.023	0.00	0.00
ATOM	177	O2	RU	6	2.272	15.278	6.216	0.00	0.00
ATOM	178	C3'	RU	6	6.524	13.703	5.178	0.00	0.00
ATOM	179	H3'	RU	6	6.166	13.319	4.242	0.00	0.00
ATOM	180	C2'	RU	6	5.339	14.096	6.048	0.00	0.00
ATOM	181	1H2'	RU	6	4.547	13.370	5.981	0.00	0.00
ATOM	182	O2'	RU	6	5.707	14.316	7.390	0.00	0.00
ATOM	183	2HO'	RU	6	6.023	13.922	7.676	0.00	0.00
ATOM	184	O3'	RU	6	7.403	12.804	5.800	0.00	0.00
ATOM	185	P	RG	7	7.297	11.258	5.585	0.00	0.00
ATOM	186	O1P	RG	7	8.368	10.630	6.320	0.00	0.00
ATOM	187	O2P	RG	7	7.180	11.006	4.176	0.00	0.00
ATOM	188	O5'	RG	7	5.946	10.841	6.250	0.00	0.00
ATOM	189	C5'	RG	7	5.779	10.840	7.633	0.00	0.00
ATOM	190	1H5'	RG	7	5.968	11.816	8.013	0.00	0.00
ATOM	191	2H5'	RG	7	6.475	10.174	8.085	0.00	0.00
ATOM	192	C4'	RG	7	4.390	10.433	8.050	0.00	0.00
ATOM	193	H4'	RG	7	4.324	10.544	9.115	0.00	0.00
ATOM	194	O4'	RG	7	3.434	11.277	7.441	0.00	0.00
ATOM	195	C1'	RG	7	2.504	10.477	6.757	0.00	0.00
ATOM	196	H1'	RG	7	1.689	10.230	7.412	0.00	0.00
ATOM	197	N9	RG	7	1.970	11.142	5.559	0.00	0.00

ATOM	198	C8	RG	7	2.610	11.454	4.392	0.00	0.00
ATOM	199	H8	RG	7	3.666	11.354	4.281	0.00	0.00
ATOM	200	N7	RG	7	1.824	11.845	3.442	0.00	0.00
ATOM	201	C5	RG	7	0.557	11.807	4.021	0.00	0.00
ATOM	202	C6	RG	7	-0.747	12.057	3.487	0.00	0.00
ATOM	203	O6	RG	7	-1.076	12.384	2.360	0.00	0.00
ATOM	204	N1	RG	7	-1.750	11.865	4.392	0.00	0.00
ATOM	205	H1	RG	7	-2.687	12.006	4.090	0.00	0.00
ATOM	206	C2	RG	7	-1.542	11.510	5.668	0.00	0.00
ATOM	207	N2	RG	7	-2.583	11.401	6.414	0.00	0.00
ATOM	208	H21	RG	7	-3.493	11.549	6.055	0.00	0.00
ATOM	209	H22	RG	7	-2.438	11.149	7.347	0.00	0.00
ATOM	210	N3	RG	7	-0.360	11.265	6.212	0.00	0.00
ATOM	211	C4	RG	7	0.655	11.418	5.328	0.00	0.00
ATOM	212	C3'	RG	7	4.062	8.999	7.681	0.00	0.00
ATOM	213	H3'	RG	7	4.945	8.430	7.462	0.00	0.00
ATOM	214	C2'	RG	7	3.229	9.189	6.427	0.00	0.00
ATOM	215	1H2'	RG	7	3.883	9.348	5.593	0.00	0.00
ATOM	216	O2'	RG	7	2.355	8.123	6.192	0.00	0.00
ATOM	217	2HO'	RG	7	2.343	7.672	6.682	0.00	0.00
ATOM	218	O3'	RG	7	3.295	8.382	8.684	0.00	0.00
ATOM	219	P	RA	8	3.933	7.721	9.958	0.00	0.00
ATOM	220	O1P	RA	8	2.935	7.759	10.986	0.00	0.00
ATOM	221	O2P	RA	8	5.214	8.309	10.221	0.00	0.00
ATOM	222	O5'	RA	8	4.154	6.235	9.578	0.00	0.00
ATOM	223	C5'	RA	8	5.009	5.761	8.758	0.00	0.00
ATOM	224	1H5'	RA	8	5.799	6.179	8.929	0.00	0.00
ATOM	225	2H5'	RA	8	4.722	6.055	7.940	0.00	0.00
ATOM	226	C4'	RA	8	5.233	4.290	8.709	0.00	0.00
ATOM	227	H4'	RA	8	5.806	4.071	7.850	0.00	0.00
ATOM	228	O4'	RA	8	5.947	3.869	9.827	0.00	0.00
ATOM	229	C1'	RA	8	5.391	2.716	10.373	0.00	0.00
ATOM	230	H1'	RA	8	6.148	1.982	10.505	0.00	0.00
ATOM	231	N9	RA	8	4.867	3.036	11.687	0.00	0.00
ATOM	232	C8	RA	8	3.643	3.304	12.097	0.00	0.00
ATOM	233	H8	RA	8	2.854	3.332	11.443	0.00	0.00
ATOM	234	N7	RA	8	3.510	3.534	13.343	0.00	0.00
ATOM	235	C5	RA	8	4.757	3.381	13.799	0.00	0.00
ATOM	236	C6	RA	8	5.344	3.467	15.032	0.00	0.00
ATOM	237	N6	RA	8	4.761	3.764	16.133	0.00	0.00
ATOM	238	H61	RA	8	5.275	3.790	16.930	0.00	0.00
ATOM	239	H62	RA	8	3.845	3.960	16.136	0.00	0.00
ATOM	240	N1	RA	8	6.590	3.246	15.169	0.00	0.00
ATOM	241	C2	RA	8	7.273	2.953	14.106	0.00	0.00
ATOM	242	H2	RA	8	8.278	2.793	14.239	0.00	0.00
ATOM	243	N3	RA	8	6.872	2.839	12.887	0.00	0.00
ATOM	244	C4	RA	8	5.583	3.067	12.798	0.00	0.00
ATOM	245	C3'	RA	8	3.953	3.470	8.656	0.00	0.00
ATOM	246	H3'	RA	8	3.203	3.971	9.236	0.00	0.00
ATOM	247	C2'	RA	8	4.385	2.200	9.368	0.00	0.00
ATOM	248	1H2'	RA	8	3.556	1.730	9.851	0.00	0.00
ATOM	249	O2'	RA	8	5.048	1.290	8.543	0.00	0.00
ATOM	250	2HO'	RA	8	4.486	0.687	8.304	0.00	0.00
ATOM	251	O3'	RA	8	3.507	3.282	7.342	0.00	0.00
ATOM	252	P	RG	9	2.072	2.727	7.017	0.00	0.00
ATOM	253	O1P	RG	9	1.830	2.948	5.601	0.00	0.00
ATOM	254	O2P	RG	9	1.136	3.278	7.979	0.00	0.00
ATOM	255	O5'	RG	9	2.168	1.178	7.267	0.00	0.00
ATOM	256	C5'	RG	9	2.832	0.319	6.379	0.00	0.00
ATOM	257	1H5'	RG	9	3.831	0.666	6.213	0.00	0.00
ATOM	258	2H5'	RG	9	2.314	0.314	5.444	0.00	0.00
ATOM	259	C4'	RG	9	2.896	-1.110	6.898	0.00	0.00
ATOM	260	H4'	RG	9	3.451	-1.683	6.178	0.00	0.00
ATOM	261	O4'	RG	9	3.572	-1.141	8.134	0.00	0.00
ATOM	262	C1'	RG	9	2.728	-1.699	9.117	0.00	0.00
ATOM	263	H1'	RG	9	2.918	-2.756	9.168	0.00	0.00
ATOM	264	N9	RG	9	2.958	-1.115	10.447	0.00	0.00
ATOM	265	C8	RG	9	2.083	-0.630	11.332	0.00	0.00

ATOM	266	H8	RG	9	1.060	-0.560	11.119	0.00	0.00
ATOM	267	N7	RG	9	2.597	-0.270	12.462	0.00	0.00
ATOM	268	C5	RG	9	3.914	-0.557	12.331	0.00	0.00
ATOM	269	C6	RG	9	4.989	-0.420	13.230	0.00	0.00
ATOM	270	O6	RG	9	5.002	-0.022	14.361	0.00	0.00
ATOM	271	N1	RG	9	6.149	-0.807	12.716	0.00	0.00
ATOM	272	H1	RG	9	6.935	-0.730	13.287	0.00	0.00
ATOM	273	C2	RG	9	6.278	-1.288	11.489	0.00	0.00
ATOM	274	N2	RG	9	7.429	-1.591	11.128	0.00	0.00
ATOM	275	H21	RG	9	8.179	-1.476	11.750	0.00	0.00
ATOM	276	H22	RG	9	7.534	-1.887	10.212	0.00	0.00
ATOM	277	N3	RG	9	5.313	-1.451	10.625	0.00	0.00
ATOM	278	C4	RG	9	4.139	-1.065	11.102	0.00	0.00
ATOM	279	C3'	RG	9	1.532	-1.745	7.117	0.00	0.00
ATOM	280	H3'	RG	9	0.780	-1.251	6.534	0.00	0.00
ATOM	281	C2'	RG	9	1.316	-1.511	8.598	0.00	0.00
ATOM	282	1H2'	RG	9	0.988	-0.498	8.754	0.00	0.00
ATOM	283	O2'	RG	9	0.413	-2.450	9.121	0.00	0.00
ATOM	284	2HO'	RG	9	0.573	-3.234	8.654	0.00	0.00
ATOM	285	O3'	RG	9	1.505	-3.142	6.893	0.00	0.00
ATOM	286	P	RG	10	1.529	-3.766	5.445	0.00	0.00
ATOM	287	O1P	RG	10	0.911	-2.823	4.511	0.00	0.00
ATOM	288	O2P	RG	10	0.983	-5.118	5.541	0.00	0.00
ATOM	289	O5'	RG	10	3.055	-3.867	5.076	0.00	0.00
ATOM	290	C5'	RG	10	3.991	-4.507	5.910	0.00	0.00
ATOM	291	1H5'	RG	10	3.597	-5.444	6.259	0.00	0.00
ATOM	292	2H5'	RG	10	4.185	-3.895	6.768	0.00	0.00
ATOM	293	C4'	RG	10	5.308	-4.766	5.195	0.00	0.00
ATOM	294	H4'	RG	10	6.064	-4.927	5.949	0.00	0.00
ATOM	295	O4'	RG	10	5.264	-5.937	4.402	0.00	0.00
ATOM	296	C1'	RG	10	5.793	-5.663	3.120	0.00	0.00
ATOM	297	H1'	RG	10	6.454	-6.453	2.801	0.00	0.00
ATOM	298	N9	RG	10	4.697	-5.556	2.134	0.00	0.00
ATOM	299	C8	RG	10	3.350	-5.596	2.360	0.00	0.00
ATOM	300	H8	RG	10	2.933	-5.604	3.345	0.00	0.00
ATOM	301	N7	RG	10	2.627	-5.677	1.286	0.00	0.00
ATOM	302	C5	RG	10	3.569	-5.692	0.260	0.00	0.00
ATOM	303	C6	RG	10	3.419	-5.822	-1.155	0.00	0.00
ATOM	304	O6	RG	10	2.399	-5.977	-1.811	0.00	0.00
ATOM	305	N1	RG	10	4.604	-5.779	-1.841	0.00	0.00
ATOM	306	H1	RG	10	4.567	-5.875	-2.832	0.00	0.00
ATOM	307	C2	RG	10	5.801	-5.645	-1.245	0.00	0.00
ATOM	308	N2	RG	10	6.832	-5.614	-2.027	0.00	0.00
ATOM	309	H21	RG	10	6.705	-5.666	-3.014	0.00	0.00
ATOM	310	H22	RG	10	7.726	-5.514	-1.611	0.00	0.00
ATOM	311	N3	RG	10	5.995	-5.536	0.061	0.00	0.00
ATOM	312	C4	RG	10	4.835	-5.580	0.772	0.00	0.00
ATOM	313	C3'	RG	10	5.791	-3.619	4.321	0.00	0.00
ATOM	314	H3'	RG	10	4.950	-3.153	3.826	0.00	0.00
ATOM	315	C2'	RG	10	6.594	-4.376	3.273	0.00	0.00
ATOM	316	1H2'	RG	10	6.642	-3.840	2.341	0.00	0.00
ATOM	317	O2'	RG	10	7.885	-4.706	3.721	0.00	0.00
ATOM	318	2HO'	RG	10	8.235	-4.473	3.831	0.00	0.00
ATOM	319	O3'	RG	10	6.553	-2.681	5.047	0.00	0.00
ATOM	320	P	RU	11	6.608	-1.163	4.649	0.00	0.00
ATOM	321	O1P	RU	11	7.404	-0.473	5.658	0.00	0.00
ATOM	322	O2P	RU	11	5.253	-0.695	4.379	0.00	0.00
ATOM	323	O5'	RU	11	7.365	-1.112	3.279	0.00	0.00
ATOM	324	C5'	RU	11	8.750	-1.316	3.168	0.00	0.00
ATOM	325	1H5'	RU	11	9.019	-2.262	3.605	0.00	0.00
ATOM	326	2H5'	RU	11	9.275	-0.536	3.692	0.00	0.00
ATOM	327	C4'	RU	11	9.173	-1.304	1.700	0.00	0.00
ATOM	328	H4'	RU	11	10.249	-1.384	1.655	0.00	0.00
ATOM	329	O4'	RU	11	8.626	-2.383	0.963	0.00	0.00
ATOM	330	C1'	RU	11	8.296	-1.940	-0.344	0.00	0.00
ATOM	331	H1'	RU	11	8.793	-2.568	-1.066	0.00	0.00
ATOM	332	N1	RU	11	6.839	-2.004	-0.616	0.00	0.00
ATOM	333	C6	RU	11	5.909	-1.951	0.395	0.00	0.00

ATOM	334	H6	RU	11	6.238	-1.788	1.397	0.00	0.00
ATOM	335	C5	RU	11	4.598	-2.149	0.155	0.00	0.00
ATOM	336	H5	RU	11	3.888	-2.112	0.953	0.00	0.00
ATOM	337	C4	RU	11	4.115	-2.393	-1.166	0.00	0.00
ATOM	338	O4	RU	11	2.959	-2.629	-1.452	0.00	0.00
ATOM	339	N3	RU	11	5.072	-2.363	-2.135	0.00	0.00
ATOM	340	H3	RU	11	4.771	-2.489	-3.072	0.00	0.00
ATOM	341	C2	RU	11	6.410	-2.173	-1.925	0.00	0.00
ATOM	342	O2	RU	11	7.165	-2.135	-2.873	0.00	0.00
ATOM	343	C3'	RU	11	8.745	-0.043	0.961	0.00	0.00
ATOM	344	H3'	RU	11	7.718	0.192	1.188	0.00	0.00
ATOM	345	C2'	RU	11	8.838	-0.528	-0.481	0.00	0.00
ATOM	346	1H2'	RU	11	8.224	0.076	-1.125	0.00	0.00
ATOM	347	O2'	RU	11	10.160	-0.580	-0.959	0.00	0.00
ATOM	348	2HO'	RU	11	10.429	-0.220	-1.147	0.00	0.00
ATOM	349	O3'	RU	11	9.580	1.051	1.233	0.00	0.00
ATOM	350	P	RG	12	9.036	2.523	1.186	0.00	0.00
ATOM	351	O1P	RG	12	10.150	3.399	1.564	0.00	0.00
ATOM	352	O2P	RG	12	7.794	2.575	1.941	0.00	0.00
ATOM	353	O5'	RG	12	8.682	2.775	-0.324	0.00	0.00
ATOM	354	C5'	RG	12	9.692	3.020	-1.275	0.00	0.00
ATOM	355	1H5'	RG	12	10.427	2.238	-1.244	0.00	0.00
ATOM	356	2H5'	RG	12	10.178	3.952	-1.050	0.00	0.00
ATOM	357	C4'	RG	12	9.132	3.096	-2.687	0.00	0.00
ATOM	358	H4'	RG	12	9.945	3.329	-3.357	0.00	0.00
ATOM	359	O4'	RG	12	8.543	1.869	-3.091	0.00	0.00
ATOM	360	C1'	RG	12	7.436	2.151	-3.930	0.00	0.00
ATOM	361	H1'	RG	12	7.538	1.662	-4.883	0.00	0.00
ATOM	362	N9	RG	12	6.194	1.661	-3.306	0.00	0.00
ATOM	363	C8	RG	12	5.896	1.493	-1.984	0.00	0.00
ATOM	364	H8	RG	12	6.593	1.724	-1.210	0.00	0.00
ATOM	365	N7	RG	12	4.720	0.997	-1.757	0.00	0.00
ATOM	366	C5	RG	12	4.169	0.861	-3.027	0.00	0.00
ATOM	367	C6	RG	12	2.882	0.407	-3.449	0.00	0.00
ATOM	368	O6	RG	12	1.955	-0.020	-2.787	0.00	0.00
ATOM	369	N1	RG	12	2.700	0.490	-4.799	0.00	0.00
ATOM	370	H1	RG	12	1.821	0.198	-5.165	0.00	0.00
ATOM	371	C2	RG	12	3.636	0.931	-5.653	0.00	0.00
ATOM	372	N2	RG	12	3.307	0.949	-6.898	0.00	0.00
ATOM	373	H21	RG	12	2.402	0.652	-7.173	0.00	0.00
ATOM	374	H22	RG	12	3.979	1.245	-7.555	0.00	0.00
ATOM	375	N3	RG	12	4.853	1.338	-5.318	0.00	0.00
ATOM	376	C4	RG	12	5.061	1.288	-3.976	0.00	0.00
ATOM	377	C3'	RG	12	8.062	4.159	-2.873	0.00	0.00
ATOM	378	H3'	RG	12	7.353	4.114	-2.061	0.00	0.00
ATOM	379	C2'	RG	12	7.398	3.655	-4.144	0.00	0.00
ATOM	380	1H2'	RG	12	6.389	4.017	-4.233	0.00	0.00
ATOM	381	O2'	RG	12	8.145	3.968	-5.294	0.00	0.00
ATOM	382	2HO'	RG	12	8.555	4.681	-5.174	0.00	0.00
ATOM	383	O3'	RG	12	8.597	5.457	-3.006	0.00	0.00
ATOM	384	P	RC	13	7.791	6.719	-2.550	0.00	0.00
ATOM	385	O1P	RC	13	8.649	7.875	-2.783	0.00	0.00
ATOM	386	O2P	RC	13	7.269	6.470	-1.210	0.00	0.00
ATOM	387	O5'	RC	13	6.565	6.806	-3.533	0.00	0.00
ATOM	388	C5'	RC	13	6.713	7.238	-4.857	0.00	0.00
ATOM	389	1H5'	RC	13	7.549	6.742	-5.310	0.00	0.00
ATOM	390	2H5'	RC	13	6.906	8.295	-4.866	0.00	0.00
ATOM	391	C4'	RC	13	5.479	6.948	-5.699	0.00	0.00
ATOM	392	H4'	RC	13	5.688	7.261	-6.711	0.00	0.00
ATOM	393	O4'	RC	13	5.156	5.565	-5.720	0.00	0.00
ATOM	394	C1'	RC	13	3.751	5.419	-5.822	0.00	0.00
ATOM	395	H1'	RC	13	3.515	4.866	-6.716	0.00	0.00
ATOM	396	N1	RC	13	3.158	4.710	-4.656	0.00	0.00
ATOM	397	C6	RC	13	3.680	4.818	-3.402	0.00	0.00
ATOM	398	H6	RC	13	4.572	5.379	-3.238	0.00	0.00
ATOM	399	C5	RC	13	3.075	4.227	-2.355	0.00	0.00
ATOM	400	H5	RC	13	3.487	4.323	-1.377	0.00	0.00
ATOM	401	C4	RC	13	1.890	3.512	-2.606	0.00	0.00

ATOM	402	N4	RC	13	1.277	2.916	-1.649	0.00	0.00
ATOM	403	H41	RC	13	0.500	2.351	-1.878	0.00	0.00
ATOM	404	H42	RC	13	1.659	2.921	-0.746	0.00	0.00
ATOM	405	N3	RC	13	1.376	3.384	-3.798	0.00	0.00
ATOM	406	C2	RC	13	1.987	3.987	-4.835	0.00	0.00
ATOM	407	O2	RC	13	1.471	3.892	-5.927	0.00	0.00
ATOM	408	C3'	RC	13	4.231	7.669	-5.240	0.00	0.00
ATOM	409	H3'	RC	13	4.122	7.527	-4.176	0.00	0.00
ATOM	410	C2'	RC	13	3.188	6.825	-5.949	0.00	0.00
ATOM	411	1H2'	RC	13	2.228	6.910	-5.469	0.00	0.00
ATOM	412	O2'	RC	13	3.074	7.122	-7.308	0.00	0.00
ATOM	413	2HO'	RC	13	2.809	7.469	-7.499	0.00	0.00
ATOM	414	O3'	RC	13	4.194	9.047	-5.569	0.00	0.00
ATOM	415	P	RA	14	3.234	10.029	-4.808	0.00	0.00
ATOM	416	O1P	RA	14	3.510	11.380	-5.295	0.00	0.00
ATOM	417	O2P	RA	14	3.360	9.765	-3.380	0.00	0.00
ATOM	418	O5'	RA	14	1.770	9.625	-5.238	0.00	0.00
ATOM	419	C5'	RA	14	1.274	9.933	-6.516	0.00	0.00
ATOM	420	1H5'	RA	14	1.988	9.616	-7.252	0.00	0.00
ATOM	421	2H5'	RA	14	1.140	10.992	-6.608	0.00	0.00
ATOM	422	C4'	RA	14	-0.046	9.242	-6.801	0.00	0.00
ATOM	423	H4'	RA	14	-0.324	9.451	-7.816	0.00	0.00
ATOM	424	O4'	RA	14	0.060	7.844	-6.642	0.00	0.00
ATOM	425	C1'	RA	14	-1.158	7.345	-6.121	0.00	0.00
ATOM	426	H1'	RA	14	-1.553	6.569	-6.755	0.00	0.00
ATOM	427	N9	RA	14	-0.996	6.797	-4.762	0.00	0.00
ATOM	428	C8	RA	14	-0.048	7.057	-3.820	0.00	0.00
ATOM	429	H8	RA	14	0.746	7.750	-3.981	0.00	0.00
ATOM	430	N7	RA	14	-0.194	6.402	-2.710	0.00	0.00
ATOM	431	C5	RA	14	-1.351	5.660	-2.927	0.00	0.00
ATOM	432	C6	RA	14	-2.115	4.747	-2.174	0.00	0.00
ATOM	433	N6	RA	14	-1.830	4.321	-0.970	0.00	0.00
ATOM	434	H61	RA	14	-2.461	3.691	-0.540	0.00	0.00
ATOM	435	H62	RA	14	-1.017	4.654	-0.527	0.00	0.00
ATOM	436	N1	RA	14	-3.244	4.247	-2.649	0.00	0.00
ATOM	437	C2	RA	14	-3.623	4.611	-3.858	0.00	0.00
ATOM	438	H2	RA	14	-4.534	4.179	-4.206	0.00	0.00
ATOM	439	N3	RA	14	-3.006	5.426	-4.696	0.00	0.00
ATOM	440	C4	RA	14	-1.861	5.919	-4.162	0.00	0.00
ATOM	441	C3'	RA	14	-1.192	9.693	-5.917	0.00	0.00
ATOM	442	H3'	RA	14	-0.857	9.720	-4.897	0.00	0.00
ATOM	443	C2'	RA	14	-2.128	8.510	-6.111	0.00	0.00
ATOM	444	1H2'	RA	14	-2.832	8.441	-5.303	0.00	0.00
ATOM	445	O2'	RA	14	-2.804	8.542	-7.344	0.00	0.00
ATOM	446	2HO'	RA	14	-3.067	9.191	-7.493	0.00	0.00
ATOM	447	O3'	RA	14	-1.758	10.920	-6.295	0.00	0.00
ATOM	448	P	RC	15	-2.597	11.780	-5.284	0.00	0.00
ATOM	449	O1P	RC	15	-2.960	13.020	-5.951	0.00	0.00
ATOM	450	O2P	RC	15	-1.850	11.853	-4.045	0.00	0.00
ATOM	451	O5'	RC	15	-3.907	10.956	-5.008	0.00	0.00
ATOM	452	C5'	RC	15	-4.923	10.841	-5.971	0.00	0.00
ATOM	453	1H5'	RC	15	-4.504	10.482	-6.890	0.00	0.00
ATOM	454	2H5'	RC	15	-5.355	11.803	-6.159	0.00	0.00
ATOM	455	C4'	RC	15	-6.031	9.898	-5.540	0.00	0.00
ATOM	456	H4'	RC	15	-6.742	9.836	-6.346	0.00	0.00
ATOM	457	O4'	RC	15	-5.547	8.602	-5.246	0.00	0.00
ATOM	458	C1'	RC	15	-6.346	8.036	-4.219	0.00	0.00
ATOM	459	H1'	RC	15	-6.804	7.132	-4.586	0.00	0.00
ATOM	460	N1	RC	15	-5.572	7.705	-2.991	0.00	0.00
ATOM	461	C6	RC	15	-4.338	8.229	-2.740	0.00	0.00
ATOM	462	H6	RC	15	-3.897	8.914	-3.427	0.00	0.00
ATOM	463	C5	RC	15	-3.665	7.871	-1.625	0.00	0.00
ATOM	464	H5	RC	15	-2.692	8.270	-1.427	0.00	0.00
ATOM	465	C4	RC	15	-4.303	6.993	-0.723	0.00	0.00
ATOM	466	N4	RC	15	-3.738	6.660	0.391	0.00	0.00
ATOM	467	H41	RC	15	-4.217	6.060	1.019	0.00	0.00
ATOM	468	H42	RC	15	-2.844	7.014	0.596	0.00	0.00
ATOM	469	N3	RC	15	-5.497	6.513	-0.928	0.00	0.00

ATOM	470	C2	RC	15	-6.146	6.848	-2.057	0.00	0.00
ATOM	471	O2	RC	15	-7.262	6.392	-2.218	0.00	0.00
ATOM	472	C3'	RC	15	-6.783	10.357	-4.301	0.00	0.00
ATOM	473	H3'	RC	15	-6.076	10.644	-3.545	0.00	0.00
ATOM	474	C2'	RC	15	-7.446	9.048	-3.912	0.00	0.00
ATOM	475	1H2'	RC	15	-7.712	9.048	-2.868	0.00	0.00
ATOM	476	O2'	RC	15	-8.561	8.743	-4.711	0.00	0.00
ATOM	477	2HO'	RC	15	-8.952	9.047	-4.845	0.00	0.00
ATOM	478	O3'	RC	15	-7.711	11.377	-4.551	0.00	0.00
ATOM	479	P	RA	16	-8.076	12.428	-3.441	0.00	0.00
ATOM	480	O1P	RA	16	-9.088	13.322	-3.982	0.00	0.00
ATOM	481	O2P	RA	16	-6.835	13.001	-2.952	0.00	0.00
ATOM	482	O5'	RA	16	-8.709	11.615	-2.248	0.00	0.00
ATOM	483	C5'	RA	16	-9.993	11.054	-2.321	0.00	0.00
ATOM	484	1H5'	RA	16	-10.063	10.443	-3.198	0.00	0.00
ATOM	485	2H5'	RA	16	-10.714	11.844	-2.390	0.00	0.00
ATOM	486	C4'	RA	16	-10.310	10.216	-1.102	0.00	0.00
ATOM	487	H4'	RA	16	-11.306	9.829	-1.223	0.00	0.00
ATOM	488	O4'	RA	16	-9.429	9.120	-0.982	0.00	0.00
ATOM	489	C1'	RA	16	-9.161	8.903	0.381	0.00	0.00
ATOM	490	H1'	RA	16	-9.379	7.887	0.643	0.00	0.00
ATOM	491	N9	RA	16	-7.752	9.167	0.674	0.00	0.00
ATOM	492	C8	RA	16	-6.835	9.853	-0.048	0.00	0.00
ATOM	493	H8	RA	16	-7.079	10.316	-0.970	0.00	0.00
ATOM	494	N7	RA	16	-5.657	9.907	0.474	0.00	0.00
ATOM	495	C5	RA	16	-5.821	9.204	1.659	0.00	0.00
ATOM	496	C6	RA	16	-4.993	8.860	2.734	0.00	0.00
ATOM	497	N6	RA	16	-3.735	9.160	2.835	0.00	0.00
ATOM	498	H61	RA	16	-3.255	8.861	3.632	0.00	0.00
ATOM	499	H62	RA	16	-3.302	9.643	2.096	0.00	0.00
ATOM	500	N1	RA	16	-5.458	8.202	3.771	0.00	0.00
ATOM	501	C2	RA	16	-6.715	7.855	3.760	0.00	0.00
ATOM	502	H2	RA	16	-7.057	7.331	4.611	0.00	0.00
ATOM	503	N3	RA	16	-7.608	8.080	2.827	0.00	0.00
ATOM	504	C4	RA	16	-7.094	8.768	1.792	0.00	0.00
ATOM	505	C3'	RA	16	-10.256	10.979	0.201	0.00	0.00
ATOM	506	H3'	RA	16	-9.387	11.605	0.228	0.00	0.00
ATOM	507	C2'	RA	16	-10.059	9.835	1.174	0.00	0.00
ATOM	508	1H2'	RA	16	-9.591	10.163	2.081	0.00	0.00
ATOM	509	O2'	RA	16	-11.249	9.155	1.465	0.00	0.00
ATOM	510	2HO'	RA	16	-11.567	9.264	1.735	0.00	0.00
ATOM	511	O3'	RA	16	-11.427	11.703	0.471	0.00	0.00
ATOM	512	P	RC	17	-11.375	13.095	1.168	0.00	0.00
ATOM	513	O1P	RC	17	-12.734	13.469	1.491	0.00	0.00
ATOM	514	O2P	RC	17	-10.593	13.985	0.348	0.00	0.00
ATOM	515	O5'	RC	17	-10.592	12.893	2.502	0.00	0.00
ATOM	516	C5'	RC	17	-11.147	12.248	3.606	0.00	0.00
ATOM	517	1H5'	RC	17	-11.558	11.308	3.302	0.00	0.00
ATOM	518	2H5'	RC	17	-11.925	12.853	4.016	0.00	0.00
ATOM	519	C4'	RC	17	-10.132	11.993	4.697	0.00	0.00
ATOM	520	H4'	RC	17	-10.630	11.513	5.512	0.00	0.00
ATOM	521	O4'	RC	17	-9.075	11.170	4.260	0.00	0.00
ATOM	522	C1'	RC	17	-7.885	11.545	4.925	0.00	0.00
ATOM	523	H1'	RC	17	-7.509	10.704	5.482	0.00	0.00
ATOM	524	N1	RC	17	-6.834	11.997	3.978	0.00	0.00
ATOM	525	C6	RC	17	-7.134	12.519	2.757	0.00	0.00
ATOM	526	H6	RC	17	-8.149	12.609	2.454	0.00	0.00
ATOM	527	C5	RC	17	-6.152	12.925	1.938	0.00	0.00
ATOM	528	H5	RC	17	-6.398	13.328	0.986	0.00	0.00
ATOM	529	C4	RC	17	-4.825	12.787	2.382	0.00	0.00
ATOM	530	N4	RC	17	-3.832	13.104	1.619	0.00	0.00
ATOM	531	H41	RC	17	-2.912	12.953	1.955	0.00	0.00
ATOM	532	H42	RC	17	-4.011	13.405	0.695	0.00	0.00
ATOM	533	N3	RC	17	-4.514	12.290	3.549	0.00	0.00
ATOM	534	C2	RC	17	-5.507	11.918	4.373	0.00	0.00
ATOM	535	O2	RC	17	-5.203	11.521	5.482	0.00	0.00
ATOM	536	C3'	RC	17	-9.485	13.250	5.228	0.00	0.00
ATOM	537	H3'	RC	17	-9.172	13.853	4.399	0.00	0.00

ATOM	538	C2'	RC	17	-8.267	12.657	5.893	0.00	0.00
ATOM	539	1H2'	RC	17	-7.488	13.386	5.985	0.00	0.00
ATOM	540	O2'	RC	17	-8.558	12.088	7.129	0.00	0.00
ATOM	541	2HO'	RC	17	-8.951	12.575	7.541	0.00	0.00
ATOM	542	O3'	RC	17	-10.315	13.980	6.088	0.00	0.00
ATOM	543	P	RA	18	-10.125	15.530	6.280	0.00	0.00
ATOM	544	O1P	RA	18	-11.228	16.015	7.088	0.00	0.00
ATOM	545	O2P	RA	18	-9.889	16.130	4.981	0.00	0.00
ATOM	546	O5'	RA	18	-8.810	15.678	7.122	0.00	0.00
ATOM	547	C5'	RA	18	-8.764	15.384	8.483	0.00	0.00
ATOM	548	1H5'	RA	18	-9.208	14.428	8.662	0.00	0.00
ATOM	549	2H5'	RA	18	-9.316	16.117	9.029	0.00	0.00
ATOM	550	C4'	RA	18	-7.346	15.371	9.006	0.00	0.00
ATOM	551	H4'	RA	18	-7.376	15.104	10.043	0.00	0.00
ATOM	552	O4'	RA	18	-6.553	14.418	8.333	0.00	0.00
ATOM	553	C1'	RA	18	-5.236	14.914	8.255	0.00	0.00
ATOM	554	H1'	RA	18	-4.549	14.208	8.689	0.00	0.00
ATOM	555	N9	RA	18	-4.822	15.147	6.865	0.00	0.00
ATOM	556	C8	RA	18	-5.581	15.426	5.779	0.00	0.00
ATOM	557	H8	RA	18	-6.636	15.547	5.835	0.00	0.00
ATOM	558	N7	RA	18	-4.916	15.546	4.681	0.00	0.00
ATOM	559	C5	RA	18	-3.599	15.334	5.085	0.00	0.00
ATOM	560	C6	RA	18	-2.348	15.312	4.448	0.00	0.00
ATOM	561	N6	RA	18	-2.145	15.471	3.171	0.00	0.00
ATOM	562	H61	RA	18	-1.220	15.405	2.827	0.00	0.00
ATOM	563	H62	RA	18	-2.921	15.584	2.578	0.00	0.00
ATOM	564	N1	RA	18	-1.237	15.130	5.138	0.00	0.00
ATOM	565	C2	RA	18	-1.343	14.963	6.436	0.00	0.00
ATOM	566	H2	RA	18	-0.424	14.819	6.951	0.00	0.00
ATOM	567	N3	RA	18	-2.434	14.940	7.168	0.00	0.00
ATOM	568	C4	RA	18	-3.539	15.121	6.421	0.00	0.00
ATOM	569	C3'	RA	18	-6.625	16.699	8.893	0.00	0.00
ATOM	570	H3'	RA	18	-6.772	17.079	7.900	0.00	0.00
ATOM	571	C2'	RA	18	-5.195	16.214	9.040	0.00	0.00
ATOM	572	1H2'	RA	18	-4.504	16.913	8.608	0.00	0.00
ATOM	573	O2'	RA	18	-4.836	15.901	10.359	0.00	0.00
ATOM	574	2HO'	RA	18	-4.116	16.045	10.493	0.00	0.00
ATOM	575	O3'	RA	18	-7.009	17.652	9.857	0.00	0.00
ATOM	576	P	RG	19	-6.715	19.180	9.660	0.00	0.00
ATOM	577	O1P	RG	19	-7.262	19.889	10.811	0.00	0.00
ATOM	578	O2P	RG	19	-7.173	19.553	8.330	0.00	0.00
ATOM	579	O5'	RG	19	-5.155	19.333	9.687	0.00	0.00
ATOM	580	C5'	RG	19	-4.426	19.254	10.887	0.00	0.00
ATOM	581	1H5'	RG	19	-4.673	18.344	11.402	0.00	0.00
ATOM	582	2H5'	RG	19	-4.691	20.086	11.510	0.00	0.00
ATOM	583	C4'	RG	19	-2.931	19.285	10.642	0.00	0.00
ATOM	584	H4'	RG	19	-2.441	19.192	11.591	0.00	0.00
ATOM	585	O4'	RG	19	-2.498	18.233	9.806	0.00	0.00
ATOM	586	C1'	RG	19	-1.396	18.661	9.043	0.00	0.00
ATOM	587	H1'	RG	19	-0.551	18.023	9.216	0.00	0.00
ATOM	588	N9	RG	19	-1.694	18.650	7.606	0.00	0.00
ATOM	589	C8	RG	19	-2.899	18.707	6.973	0.00	0.00
ATOM	590	H8	RG	19	-3.824	18.780	7.498	0.00	0.00
ATOM	591	N7	RG	19	-2.829	18.676	5.677	0.00	0.00
ATOM	592	C5	RG	19	-1.459	18.614	5.430	0.00	0.00
ATOM	593	C6	RG	19	-0.707	18.589	4.212	0.00	0.00
ATOM	594	O6	RG	19	-1.098	18.571	3.058	0.00	0.00
ATOM	595	N1	RG	19	0.651	18.604	4.407	0.00	0.00
ATOM	596	H1	RG	19	1.230	18.618	3.601	0.00	0.00
ATOM	597	C2	RG	19	1.231	18.620	5.618	0.00	0.00
ATOM	598	N2	RG	19	2.518	18.674	5.645	0.00	0.00
ATOM	599	H21	RG	19	3.020	18.758	4.794	0.00	0.00
ATOM	600	H22	RG	19	2.978	18.717	6.517	0.00	0.00
ATOM	601	N3	RG	19	0.581	18.619	6.762	0.00	0.00
ATOM	602	C4	RG	19	-0.764	18.621	6.609	0.00	0.00
ATOM	603	C3'	RG	19	-2.426	20.554	9.996	0.00	0.00
ATOM	604	H3'	RG	19	-3.046	20.796	9.159	0.00	0.00
ATOM	605	C2'	RG	19	-1.078	20.070	9.502	0.00	0.00

ATOM	606	1H2'	RG	19	-0.707	20.673	8.695	0.00	0.00
ATOM	607	O2'	RG	19	-0.112	19.977	10.519	0.00	0.00
ATOM	608	2HO'	RG	19	0.410	20.249	10.466	0.00	0.00
ATOM	609	O3'	RG	19	-2.343	21.631	10.882	0.00	0.00
ATOM	610	P	RC	20	-2.331	23.099	10.375	0.00	0.00
ATOM	611	O1P	RC	20	-2.324	23.964	11.533	0.00	0.00
ATOM	612	O2P	RC	20	-3.410	23.244	9.431	0.00	0.00
ATOM	613	O5'	RC	20	-0.974	23.276	9.597	0.00	0.00
ATOM	614	C5'	RC	20	0.248	23.378	10.265	0.00	0.00
ATOM	615	1H5'	RC	20	0.369	22.554	10.926	0.00	0.00
ATOM	616	2H5'	RC	20	0.272	24.272	10.847	0.00	0.00
ATOM	617	C4'	RC	20	1.434	23.398	9.312	0.00	0.00
ATOM	618	H4'	RC	20	2.328	23.439	9.906	0.00	0.00
ATOM	619	O4'	RC	20	1.481	22.233	8.516	0.00	0.00
ATOM	620	C1'	RC	20	2.042	22.553	7.259	0.00	0.00
ATOM	621	H1'	RC	20	2.915	21.950	7.090	0.00	0.00
ATOM	622	N1	RC	20	1.085	22.327	6.142	0.00	0.00
ATOM	623	C6	RC	20	-0.260	22.330	6.328	0.00	0.00
ATOM	624	H6	RC	20	-0.661	22.483	7.301	0.00	0.00
ATOM	625	C5	RC	20	-1.090	22.165	5.288	0.00	0.00
ATOM	626	H5	RC	20	-2.140	22.174	5.441	0.00	0.00
ATOM	627	C4	RC	20	-0.518	22.002	4.023	0.00	0.00
ATOM	628	N4	RC	20	-1.259	21.869	2.983	0.00	0.00
ATOM	629	H41	RC	20	-0.814	21.739	2.106	0.00	0.00
ATOM	630	H42	RC	20	-2.239	21.859	3.075	0.00	0.00
ATOM	631	N3	RC	20	0.768	21.984	3.816	0.00	0.00
ATOM	632	C2	RC	20	1.593	22.160	4.863	0.00	0.00
ATOM	633	O2	RC	20	2.788	22.181	4.649	0.00	0.00
ATOM	634	C3'	RC	20	1.466	24.569	8.347	0.00	0.00
ATOM	635	H3'	RC	20	0.504	24.678	7.885	0.00	0.00
ATOM	636	C2'	RC	20	2.451	24.011	7.335	0.00	0.00
ATOM	637	1H2'	RC	20	2.349	24.498	6.388	0.00	0.00
ATOM	638	O2'	RC	20	3.778	24.058	7.775	0.00	0.00
ATOM	639	2HO'	RC	20	4.098	24.412	7.644	0.00	0.00
ATOM	640	O3'	RC	20	1.882	25.773	8.927	0.00	0.00
ATOM	641	P	RA	21	1.582	27.157	8.245	0.00	0.00
ATOM	642	O1P	RA	21	2.046	28.197	9.155	0.00	0.00
ATOM	643	O2P	RA	21	0.188	27.168	7.822	0.00	0.00
ATOM	644	O5'	RA	21	2.468	27.210	6.941	0.00	0.00
ATOM	645	C5'	RA	21	3.852	27.418	6.985	0.00	0.00
ATOM	646	1H5'	RA	21	4.312	26.695	7.629	0.00	0.00
ATOM	647	2H5'	RA	21	4.055	28.396	7.365	0.00	0.00
ATOM	648	C4'	RA	21	4.467	27.306	5.602	0.00	0.00
ATOM	649	H4'	RA	21	5.527	27.437	5.694	0.00	0.00
ATOM	650	O4'	RA	21	4.218	26.057	5.012	0.00	0.00
ATOM	651	C1'	RA	21	4.031	26.233	3.623	0.00	0.00
ATOM	652	H1'	RA	21	4.692	25.596	3.074	0.00	0.00
ATOM	653	N9	RA	21	2.647	25.911	3.235	0.00	0.00
ATOM	654	C8	RA	21	1.532	25.831	4.011	0.00	0.00
ATOM	655	H8	RA	21	1.543	26.047	5.054	0.00	0.00
ATOM	656	N7	RA	21	0.464	25.448	3.396	0.00	0.00
ATOM	657	C5	RA	21	0.903	25.286	2.089	0.00	0.00
ATOM	658	C6	RA	21	0.305	24.904	0.879	0.00	0.00
ATOM	659	N6	RA	21	-0.937	24.514	0.757	0.00	0.00
ATOM	660	H61	RA	21	-1.244	24.216	-0.135	0.00	0.00
ATOM	661	H62	RA	21	-1.510	24.470	1.557	0.00	0.00
ATOM	662	N1	RA	21	0.989	24.901	-0.257	0.00	0.00
ATOM	663	C2	RA	21	2.258	25.247	-0.206	0.00	0.00
ATOM	664	H2	RA	21	2.787	25.240	-1.131	0.00	0.00
ATOM	665	N3	RA	21	2.965	25.601	0.850	0.00	0.00
ATOM	666	C4	RA	21	2.221	25.602	1.977	0.00	0.00
ATOM	667	C3'	RA	21	3.964	28.337	4.621	0.00	0.00
ATOM	668	H3'	RA	21	2.897	28.380	4.679	0.00	0.00
ATOM	669	C2'	RA	21	4.348	27.675	3.315	0.00	0.00
ATOM	670	1H2'	RA	21	3.758	28.047	2.496	0.00	0.00
ATOM	671	O2'	RA	21	5.709	27.786	3.047	0.00	0.00
ATOM	672	2HO'	RA	21	5.986	28.177	2.936	0.00	0.00
ATOM	673	O3'	RA	21	4.526	29.597	4.790	0.00	0.00

ATOM	674	P	RA	22	3.781	30.881	4.326	0.00	0.00
ATOM	675	O1P	RA	22	4.597	32.013	4.710	0.00	0.00
ATOM	676	O2P	RA	22	2.431	30.785	4.814	0.00	0.00
ATOM	677	O5'	RA	22	3.704	30.820	2.770	0.00	0.00
ATOM	678	C5'	RA	22	4.828	31.040	1.979	0.00	0.00
ATOM	679	1H5'	RA	22	5.634	30.435	2.320	0.00	0.00
ATOM	680	2H5'	RA	22	5.130	32.058	2.058	0.00	0.00
ATOM	681	C4'	RA	22	4.574	30.732	0.510	0.00	0.00
ATOM	682	H4'	RA	22	5.487	30.890	-0.027	0.00	0.00
ATOM	683	O4'	RA	22	4.164	29.407	0.315	0.00	0.00
ATOM	684	C1'	RA	22	3.235	29.363	-0.752	0.00	0.00
ATOM	685	H1'	RA	22	3.564	28.680	-1.509	0.00	0.00
ATOM	686	N9	RA	22	1.916	28.943	-0.273	0.00	0.00
ATOM	687	C8	RA	22	1.403	28.971	0.987	0.00	0.00
ATOM	688	H8	RA	22	1.952	29.331	1.827	0.00	0.00
ATOM	689	N7	RA	22	0.201	28.523	1.087	0.00	0.00
ATOM	690	C5	RA	22	-0.121	28.195	-0.227	0.00	0.00
ATOM	691	C6	RA	22	-1.236	27.648	-0.865	0.00	0.00
ATOM	692	N6	RA	22	-2.333	27.288	-0.268	0.00	0.00
ATOM	693	H61	RA	22	-3.036	26.853	-0.808	0.00	0.00
ATOM	694	H62	RA	22	-2.398	27.352	0.712	0.00	0.00
ATOM	695	N1	RA	22	-1.252	27.459	-2.173	0.00	0.00
ATOM	696	C2	RA	22	-0.182	27.791	-2.848	0.00	0.00
ATOM	697	H2	RA	22	-0.232	27.633	-3.898	0.00	0.00
ATOM	698	N3	RA	22	0.943	28.292	-2.394	0.00	0.00
ATOM	699	C4	RA	22	0.914	28.463	-1.058	0.00	0.00
ATOM	700	C3'	RA	22	3.522	31.596	-0.136	0.00	0.00
ATOM	701	H3'	RA	22	2.686	31.667	0.520	0.00	0.00
ATOM	702	C2'	RA	22	3.165	30.757	-1.340	0.00	0.00
ATOM	703	1H2'	RA	22	2.187	30.983	-1.708	0.00	0.00
ATOM	704	O2'	RA	22	4.099	30.852	-2.375	0.00	0.00
ATOM	705	2HO'	RA	22	4.298	31.444	-2.530	0.00	0.00
ATOM	706	O3'	RA	22	3.986	32.860	-0.491	0.00	0.00
ATOM	707	P	RG3	23	3.022	34.068	-0.669	0.00	0.00
ATOM	708	O1P	RG3	23	3.831	35.214	-0.975	0.00	0.00
ATOM	709	O2P	RG3	23	2.152	34.113	0.476	0.00	0.00
ATOM	710	O5'	RG3	23	2.155	33.737	-1.934	0.00	0.00
ATOM	711	C5'	RG3	23	2.658	33.833	-3.238	0.00	0.00
ATOM	712	1H5'	RG3	23	3.539	33.255	-3.329	0.00	0.00
ATOM	713	2H5'	RG3	23	2.899	34.842	-3.464	0.00	0.00
ATOM	714	C4'	RG3	23	1.657	33.348	-4.254	0.00	0.00
ATOM	715	H4'	RG3	23	2.112	33.401	-5.217	0.00	0.00
ATOM	716	O4'	RG3	23	1.286	32.025	-4.040	0.00	0.00
ATOM	717	C1'	RG3	23	-0.048	31.853	-4.435	0.00	0.00
ATOM	718	H1'	RG3	23	-0.107	31.105	-5.194	0.00	0.00
ATOM	719	N9	RG3	23	-0.871	31.427	-3.301	0.00	0.00
ATOM	720	C8	RG3	23	-0.719	31.688	-1.975	0.00	0.00
ATOM	721	H8	RG3	23	0.119	32.206	-1.573	0.00	0.00
ATOM	722	N7	RG3	23	-1.681	31.246	-1.235	0.00	0.00
ATOM	723	C5	RG3	23	-2.542	30.646	-2.139	0.00	0.00
ATOM	724	C6	RG3	23	-3.791	29.978	-1.966	0.00	0.00
ATOM	725	O6	RG3	23	-4.414	29.754	-0.946	0.00	0.00
ATOM	726	N1	RG3	23	-4.348	29.555	-3.133	0.00	0.00
ATOM	727	H1	RG3	23	-5.226	29.097	-3.069	0.00	0.00
ATOM	728	C2	RG3	23	-3.784	29.728	-4.334	0.00	0.00
ATOM	729	N2	RG3	23	-4.458	29.326	-5.352	0.00	0.00
ATOM	730	H21	RG3	23	-5.364	28.959	-5.227	0.00	0.00
ATOM	731	H22	RG3	23	-4.085	29.510	-6.246	0.00	0.00
ATOM	732	N3	RG3	23	-2.628	30.318	-4.550	0.00	0.00
ATOM	733	C4	RG3	23	-2.047	30.758	-3.407	0.00	0.00
ATOM	734	C3'	RG3	23	0.388	34.140	-4.317	0.00	0.00
ATOM	735	H3'	RG3	23	0.035	34.321	-3.331	0.00	0.00
ATOM	736	C2'	RG3	23	-0.536	33.167	-4.986	0.00	0.00
ATOM	737	1H2'	RG3	23	-1.543	33.345	-4.712	0.00	0.00
ATOM	738	O2'	RG3	23	-0.404	33.164	-6.377	0.00	0.00
ATOM	739	2HO'	RG3	23	-0.370	33.793	-6.663	0.00	0.00
ATOM	740	O3'	RG3	23	0.486	35.329	-5.024	0.00	0.00
ATOM	741	H3T	RG3	23	0.038	35.705	-5.026	0.00	0.00

ATOM	742	H5T	RC5	24	12.401	-24.111	-10.251	0.00	0.00
ATOM	743	O5'	RC5	24	12.129	-24.000	-10.369	0.00	0.00
ATOM	744	C5'	RC5	24	10.880	-23.484	-10.225	0.00	0.00
ATOM	745	1H5'	RC5	24	10.788	-22.649	-10.800	0.00	0.00
ATOM	746	2H5'	RC5	24	10.751	-23.226	-9.268	0.00	0.00
ATOM	747	C4'	RC5	24	9.840	-24.414	-10.618	0.00	0.00
ATOM	748	H4'	RC5	24	10.030	-24.747	-11.570	0.00	0.00
ATOM	749	O4'	RC5	24	9.787	-25.474	-9.778	0.00	0.00
ATOM	750	C1'	RC5	24	8.483	-25.959	-9.743	0.00	0.00
ATOM	751	H1'	RC5	24	8.461	-26.902	-10.231	0.00	0.00
ATOM	752	N1	RC5	24	7.973	-26.128	-8.388	0.00	0.00
ATOM	753	C6	RC5	24	8.423	-25.422	-7.359	0.00	0.00
ATOM	754	H6	RC5	24	9.147	-24.691	-7.534	0.00	0.00
ATOM	755	C5	RC5	24	7.960	-25.649	-6.138	0.00	0.00
ATOM	756	H5	RC5	24	8.318	-25.093	-5.338	0.00	0.00
ATOM	757	C4	RC5	24	7.036	-26.640	-5.972	0.00	0.00
ATOM	758	N4	RC5	24	6.581	-26.928	-4.824	0.00	0.00
ATOM	759	H41	RC5	24	5.874	-27.579	-4.769	0.00	0.00
ATOM	760	H42	RC5	24	6.856	-26.422	-4.061	0.00	0.00
ATOM	761	N3	RC5	24	6.582	-27.325	-6.939	0.00	0.00
ATOM	762	C2	RC5	24	7.025	-27.070	-8.162	0.00	0.00
ATOM	763	O2	RC5	24	6.560	-27.691	-9.054	0.00	0.00
ATOM	764	C3'	RC5	24	8.475	-23.799	-10.604	0.00	0.00
ATOM	765	H3'	RC5	24	8.363	-23.255	-9.735	0.00	0.00
ATOM	766	C2'	RC5	24	7.645	-24.998	-10.528	0.00	0.00
ATOM	767	1H2'	RC5	24	6.751	-24.767	-10.059	0.00	0.00
ATOM	768	O2'	RC5	24	7.429	-25.542	-11.737	0.00	0.00
ATOM	769	2HO'	RC5	24	7.257	-25.028	-12.197	0.00	0.00
ATOM	770	O3'	RC5	24	8.197	-23.027	-11.701	0.00	0.00
ATOM	771	P	RU	25	7.084	-21.942	-11.682	0.00	0.00
ATOM	772	O1P	RU	25	7.172	-21.211	-12.891	0.00	0.00
ATOM	773	O2P	RU	25	7.171	-21.242	-10.452	0.00	0.00
ATOM	774	O5'	RU	25	5.737	-22.698	-11.668	0.00	0.00
ATOM	775	C5'	RU	25	5.192	-23.251	-12.810	0.00	0.00
ATOM	776	1H5'	RU	25	5.902	-23.910	-13.255	0.00	0.00
ATOM	777	2H5'	RU	25	4.960	-22.490	-13.504	0.00	0.00
ATOM	778	C4'	RU	25	3.931	-24.003	-12.519	0.00	0.00
ATOM	779	H4'	RU	25	3.569	-24.392	-13.431	0.00	0.00
ATOM	780	O4'	RU	25	4.148	-25.072	-11.646	0.00	0.00
ATOM	781	C1'	RU	25	2.985	-25.273	-10.888	0.00	0.00
ATOM	782	H1'	RU	25	2.602	-26.249	-11.094	0.00	0.00
ATOM	783	N1	RU	25	3.222	-25.162	-9.444	0.00	0.00
ATOM	784	C6	RU	25	4.225	-24.418	-8.923	0.00	0.00
ATOM	785	H6	RU	25	4.817	-23.830	-9.566	0.00	0.00
ATOM	786	C5	RU	25	4.479	-24.429	-7.614	0.00	0.00
ATOM	787	H5	RU	25	5.262	-23.846	-7.217	0.00	0.00
ATOM	788	C4	RU	25	3.702	-25.193	-6.712	0.00	0.00
ATOM	789	O4	RU	25	3.874	-25.275	-5.525	0.00	0.00
ATOM	790	N3	RU	25	2.681	-25.849	-7.286	0.00	0.00
ATOM	791	H3	RU	25	2.088	-26.353	-6.690	0.00	0.00
ATOM	792	C2	RU	25	2.382	-25.858	-8.608	0.00	0.00
ATOM	793	O2	RU	25	1.396	-26.431	-8.985	0.00	0.00
ATOM	794	C3'	RU	25	2.839	-23.160	-11.910	0.00	0.00
ATOM	795	H3'	RU	25	3.242	-22.581	-11.114	0.00	0.00
ATOM	796	C2'	RU	25	1.968	-24.245	-11.349	0.00	0.00
ATOM	797	1H2'	RU	25	1.368	-23.877	-10.547	0.00	0.00
ATOM	798	O2'	RU	25	1.160	-24.830	-12.325	0.00	0.00
ATOM	799	2HO'	RU	25	0.671	-24.500	-12.550	0.00	0.00
ATOM	800	O3'	RU	25	2.167	-22.357	-12.837	0.00	0.00
ATOM	801	P	RU	26	1.449	-21.048	-12.398	0.00	0.00
ATOM	802	O1P	RU	26	0.910	-20.443	-13.599	0.00	0.00
ATOM	803	O2P	RU	26	2.361	-20.290	-11.575	0.00	0.00
ATOM	804	O5'	RU	26	0.260	-21.503	-11.493	0.00	0.00
ATOM	805	C5'	RU	26	-0.898	-22.028	-12.042	0.00	0.00
ATOM	806	1H5'	RU	26	-0.655	-22.780	-12.750	0.00	0.00
ATOM	807	2H5'	RU	26	-1.423	-21.258	-12.546	0.00	0.00
ATOM	808	C4'	RU	26	-1.815	-22.613	-11.000	0.00	0.00
ATOM	809	H4'	RU	26	-2.655	-23.032	-11.499	0.00	0.00

ATOM	810	O4'	RU	26	-1.188	-23.645	-10.263	0.00	0.00
ATOM	811	C1'	RU	26	-1.770	-23.705	-8.982	0.00	0.00
ATOM	812	H1'	RU	26	-2.256	-24.651	-8.851	0.00	0.00
ATOM	813	N1	RU	26	-0.782	-23.539	-7.892	0.00	0.00
ATOM	814	C6	RU	26	0.331	-22.782	-8.030	0.00	0.00
ATOM	815	H6	RU	26	0.527	-22.319	-8.964	0.00	0.00
ATOM	816	C5	RU	26	1.173	-22.595	-6.998	0.00	0.00
ATOM	817	H5	RU	26	2.033	-21.990	-7.118	0.00	0.00
ATOM	818	C4	RU	26	0.933	-23.173	-5.720	0.00	0.00
ATOM	819	O4	RU	26	1.637	-23.051	-4.739	0.00	0.00
ATOM	820	N3	RU	26	-0.193	-23.919	-5.659	0.00	0.00
ATOM	821	H3	RU	26	-0.409	-24.303	-4.776	0.00	0.00
ATOM	822	C2	RU	26	-1.078	-24.105	-6.672	0.00	0.00
ATOM	823	O2	RU	26	-2.083	-24.743	-6.462	0.00	0.00
ATOM	824	C3'	RU	26	-2.339	-21.644	-9.974	0.00	0.00
ATOM	825	H3'	RU	26	-1.519	-21.092	-9.592	0.00	0.00
ATOM	826	C2'	RU	26	-2.817	-22.611	-8.927	0.00	0.00
ATOM	827	1H2'	RU	26	-2.833	-22.149	-7.977	0.00	0.00
ATOM	828	O2'	RU	26	-4.066	-23.147	-9.228	0.00	0.00
ATOM	829	2HO'	RU	26	-4.500	-22.927	-9.071	0.00	0.00
ATOM	830	O3'	RU	26	-3.339	-20.785	-10.453	0.00	0.00
ATOM	831	P	RG	27	-3.711	-19.478	-9.675	0.00	0.00
ATOM	832	O1P	RG	27	-4.639	-18.740	-10.514	0.00	0.00
ATOM	833	O2P	RG	27	-2.479	-18.843	-9.242	0.00	0.00
ATOM	834	O5'	RG	27	-4.468	-19.937	-8.378	0.00	0.00
ATOM	835	C5'	RG	27	-5.791	-20.384	-8.415	0.00	0.00
ATOM	836	1H5'	RG	27	-5.907	-21.156	-9.148	0.00	0.00
ATOM	837	2H5'	RG	27	-6.444	-19.576	-8.683	0.00	0.00
ATOM	838	C4'	RG	27	-6.242	-20.936	-7.074	0.00	0.00
ATOM	839	H4'	RG	27	-7.239	-21.324	-7.199	0.00	0.00
ATOM	840	O4'	RG	27	-5.417	-21.992	-6.637	0.00	0.00
ATOM	841	C1'	RG	27	-5.313	-21.951	-5.234	0.00	0.00
ATOM	842	H1'	RG	27	-5.597	-22.894	-4.804	0.00	0.00
ATOM	843	N9	RG	27	-3.939	-21.641	-4.798	0.00	0.00
ATOM	844	C8	RG	27	-2.931	-21.050	-5.500	0.00	0.00
ATOM	845	H8	RG	27	-3.068	-20.723	-6.503	0.00	0.00
ATOM	846	N7	RG	27	-1.816	-20.951	-4.863	0.00	0.00
ATOM	847	C5	RG	27	-2.114	-21.472	-3.607	0.00	0.00
ATOM	848	C6	RG	27	-1.327	-21.608	-2.426	0.00	0.00
ATOM	849	O6	RG	27	-0.152	-21.342	-2.253	0.00	0.00
ATOM	850	N1	RG	27	-2.026	-22.088	-1.356	0.00	0.00
ATOM	851	H1	RG	27	-1.554	-22.146	-0.481	0.00	0.00
ATOM	852	C2	RG	27	-3.322	-22.431	-1.409	0.00	0.00
ATOM	853	N2	RG	27	-3.869	-22.791	-0.303	0.00	0.00
ATOM	854	H21	RG	27	-3.352	-22.775	0.544	0.00	0.00
ATOM	855	H22	RG	27	-4.819	-23.061	-0.313	0.00	0.00
ATOM	856	N3	RG	27	-4.088	-22.358	-2.481	0.00	0.00
ATOM	857	C4	RG	27	-3.421	-21.864	-3.558	0.00	0.00
ATOM	858	C3'	RG	27	-6.258	-19.923	-5.950	0.00	0.00
ATOM	859	H3'	RG	27	-5.338	-19.362	-5.963	0.00	0.00
ATOM	860	C2'	RG	27	-6.264	-20.864	-4.761	0.00	0.00
ATOM	861	1H2'	RG	27	-5.901	-20.382	-3.873	0.00	0.00
ATOM	862	O2'	RG	27	-7.516	-21.454	-4.534	0.00	0.00
ATOM	863	2HO'	RG	27	-7.791	-21.490	-4.136	0.00	0.00
ATOM	864	O3'	RG	27	-7.365	-19.051	-5.986	0.00	0.00
ATOM	865	P	RC	28	-7.326	-17.640	-5.297	0.00	0.00
ATOM	866	O1P	RC	28	-8.604	-16.986	-5.574	0.00	0.00
ATOM	867	O2P	RC	28	-6.100	-16.975	-5.704	0.00	0.00
ATOM	868	O5'	RC	28	-7.233	-17.891	-3.749	0.00	0.00
ATOM	869	C5'	RC	28	-8.311	-18.423	-3.040	0.00	0.00
ATOM	870	1H5'	RC	28	-8.681	-19.294	-3.542	0.00	0.00
ATOM	871	2H5'	RC	28	-9.113	-17.719	-2.977	0.00	0.00
ATOM	872	C4'	RC	28	-7.912	-18.820	-1.627	0.00	0.00
ATOM	873	H4'	RC	28	-8.769	-19.265	-1.158	0.00	0.00
ATOM	874	O4'	RC	28	-6.862	-19.766	-1.606	0.00	0.00
ATOM	875	C1'	RC	28	-6.033	-19.522	-0.482	0.00	0.00
ATOM	876	H1'	RC	28	-5.958	-20.414	0.115	0.00	0.00
ATOM	877	N1	RC	28	-4.663	-19.101	-0.870	0.00	0.00

ATOM	878	C6	RC	28	-4.360	-18.619	-2.107	0.00	0.00
ATOM	879	H6	RC	28	-5.131	-18.528	-2.833	0.00	0.00
ATOM	880	C5	RC	28	-3.098	-18.293	-2.429	0.00	0.00
ATOM	881	H5	RC	28	-2.876	-17.930	-3.407	0.00	0.00
ATOM	882	C4	RC	28	-2.126	-18.455	-1.440	0.00	0.00
ATOM	883	N4	RC	28	-0.900	-18.177	-1.691	0.00	0.00
ATOM	884	H41	RC	28	-0.234	-18.377	-0.988	0.00	0.00
ATOM	885	H42	RC	28	-0.655	-17.889	-2.595	0.00	0.00
ATOM	886	N3	RC	28	-2.389	-18.888	-0.238	0.00	0.00
ATOM	887	C2	RC	28	-3.651	-19.215	0.068	0.00	0.00
ATOM	888	O2	RC	28	-3.877	-19.593	1.203	0.00	0.00
ATOM	889	C3'	RC	28	-7.463	-17.668	-0.739	0.00	0.00
ATOM	890	H3'	RC	28	-6.780	-17.049	-1.288	0.00	0.00
ATOM	891	C2'	RC	28	-6.718	-18.441	0.332	0.00	0.00
ATOM	892	1H2'	RC	28	-6.014	-17.815	0.848	0.00	0.00
ATOM	893	O2'	RC	28	-7.582	-19.072	1.243	0.00	0.00
ATOM	894	2HO'	RC	28	-8.309	-18.638	1.288	0.00	0.00
ATOM	895	O3'	RC	28	-8.527	-16.932	-0.201	0.00	0.00
ATOM	896	P	RU	29	-8.367	-15.428	0.229	0.00	0.00
ATOM	897	O1P	RU	29	-9.634	-14.983	0.776	0.00	0.00
ATOM	898	O2P	RU	29	-7.807	-14.709	-0.888	0.00	0.00
ATOM	899	O5'	RU	29	-7.307	-15.423	1.373	0.00	0.00
ATOM	900	C5'	RU	29	-7.598	-15.864	2.660	0.00	0.00
ATOM	901	1H5'	RU	29	-8.047	-16.830	2.609	0.00	0.00
ATOM	902	2H5'	RU	29	-8.289	-15.188	3.124	0.00	0.00
ATOM	903	C4'	RU	29	-6.372	-15.956	3.527	0.00	0.00
ATOM	904	H4'	RU	29	-6.656	-16.372	4.465	0.00	0.00
ATOM	905	O4'	RU	29	-5.373	-16.771	2.954	0.00	0.00
ATOM	906	C1'	RU	29	-4.113	-16.268	3.338	0.00	0.00
ATOM	907	H1'	RU	29	-3.606	-17.013	3.919	0.00	0.00
ATOM	908	N1	RU	29	-3.246	-15.931	2.196	0.00	0.00
ATOM	909	C6	RU	29	-3.730	-15.663	0.951	0.00	0.00
ATOM	910	H6	RU	29	-4.782	-15.683	0.789	0.00	0.00
ATOM	911	C5	RU	29	-2.897	-15.377	-0.066	0.00	0.00
ATOM	912	H5	RU	29	-3.283	-15.202	-1.037	0.00	0.00
ATOM	913	C4	RU	29	-1.481	-15.321	0.125	0.00	0.00
ATOM	914	O4	RU	29	-0.662	-15.052	-0.726	0.00	0.00
ATOM	915	N3	RU	29	-1.078	-15.584	1.387	0.00	0.00
ATOM	916	H3	RU	29	-0.105	-15.546	1.557	0.00	0.00
ATOM	917	C2	RU	29	-1.884	-15.871	2.437	0.00	0.00
ATOM	918	O2	RU	29	-1.387	-16.043	3.532	0.00	0.00
ATOM	919	C3'	RU	29	-5.752	-14.620	3.816	0.00	0.00
ATOM	920	H3'	RU	29	-5.710	-14.044	2.924	0.00	0.00
ATOM	921	C2'	RU	29	-4.364	-15.051	4.206	0.00	0.00
ATOM	922	1H2'	RU	29	-3.671	-14.287	4.001	0.00	0.00
ATOM	923	O2'	RU	29	-4.276	-15.445	5.519	0.00	0.00
ATOM	924	2HO'	RU	29	-4.503	-14.963	5.924	0.00	0.00
ATOM	925	O3'	RU	29	-6.420	-13.916	4.824	0.00	0.00
ATOM	926	P	RG	30	-6.208	-12.373	5.054	0.00	0.00
ATOM	927	O1P	RG	30	-7.239	-11.925	5.983	0.00	0.00
ATOM	928	O2P	RG	30	-6.095	-11.723	3.754	0.00	0.00
ATOM	929	O5'	RG	30	-4.813	-12.237	5.780	0.00	0.00
ATOM	930	C5'	RG	30	-4.620	-12.663	7.106	0.00	0.00
ATOM	931	1H5'	RG	30	-4.810	-13.714	7.188	0.00	0.00
ATOM	932	2H5'	RG	30	-5.299	-12.155	7.759	0.00	0.00
ATOM	933	C4'	RG	30	-3.199	-12.402	7.582	0.00	0.00
ATOM	934	H4'	RG	30	-3.071	-12.920	8.520	0.00	0.00
ATOM	935	O4'	RG	30	-2.260	-12.901	6.653	0.00	0.00
ATOM	936	C1'	RG	30	-1.486	-11.838	6.161	0.00	0.00
ATOM	937	H1'	RG	30	-0.554	-11.814	6.694	0.00	0.00
ATOM	938	N9	RG	30	-1.213	-12.015	4.728	0.00	0.00
ATOM	939	C8	RG	30	-2.082	-12.018	3.678	0.00	0.00
ATOM	940	H8	RG	30	-3.138	-11.935	3.819	0.00	0.00
ATOM	941	N7	RG	30	-1.521	-12.125	2.519	0.00	0.00
ATOM	942	C5	RG	30	-0.165	-12.189	2.817	0.00	0.00
ATOM	943	C6	RG	30	0.987	-12.278	1.981	0.00	0.00
ATOM	944	O6	RG	30	1.049	-12.323	0.767	0.00	0.00
ATOM	945	N1	RG	30	2.173	-12.290	2.664	0.00	0.00

ATOM	946	H1	RG	30	3.019	-12.324	2.136	0.00	0.00
ATOM	947	C2	RG	30	2.257	-12.214	3.998	0.00	0.00
ATOM	948	N2	RG	30	3.443	-12.207	4.506	0.00	0.00
ATOM	949	H21	RG	30	4.246	-12.226	3.919	0.00	0.00
ATOM	950	H22	RG	30	3.522	-12.176	5.488	0.00	0.00
ATOM	951	N3	RG	30	1.224	-12.121	4.818	0.00	0.00
ATOM	952	C4	RG	30	0.028	-12.117	4.166	0.00	0.00
ATOM	953	C3'	RG	30	-2.930	-10.910	7.786	0.00	0.00
ATOM	954	H3'	RG	30	-3.842	-10.350	7.915	0.00	0.00
ATOM	955	C2'	RG	30	-2.259	-10.566	6.470	0.00	0.00
ATOM	956	1H2'	RG	30	-3.023	-10.412	5.729	0.00	0.00
ATOM	957	O2'	RG	30	-1.439	-9.437	6.568	0.00	0.00
ATOM	958	2HO'	RG	30	-0.971	-9.498	7.332	0.00	0.00
ATOM	959	O3'	RG	30	-2.052	-10.697	8.861	0.00	0.00
ATOM	960	P	RA	31	-2.555	-10.643	10.354	0.00	0.00
ATOM	961	O1P	RA	31	-1.388	-10.689	11.181	0.00	0.00
ATOM	962	O2P	RA	31	-3.587	-11.621	10.558	0.00	0.00
ATOM	963	O5'	RA	31	-3.178	-9.229	10.506	0.00	0.00
ATOM	964	C5'	RA	31	-4.280	-8.999	11.271	0.00	0.00
ATOM	965	1H5'	RA	31	-4.198	-9.532	12.170	0.00	0.00
ATOM	966	2H5'	RA	31	-5.123	-9.330	10.774	0.00	0.00
ATOM	967	C4'	RA	31	-4.469	-7.533	11.573	0.00	0.00
ATOM	968	H4'	RA	31	-5.325	-7.439	12.202	0.00	0.00
ATOM	969	O4'	RA	31	-3.371	-7.025	12.273	0.00	0.00
ATOM	970	C1'	RA	31	-3.021	-5.770	11.771	0.00	0.00
ATOM	971	H1'	RA	31	-2.942	-5.070	12.574	0.00	0.00
ATOM	972	N9	RA	31	-1.694	-5.869	11.150	0.00	0.00
ATOM	973	C8	RA	31	-1.276	-6.571	10.094	0.00	0.00
ATOM	974	H8	RA	31	-1.921	-7.180	9.558	0.00	0.00
ATOM	975	N7	RA	31	-0.028	-6.446	9.813	0.00	0.00
ATOM	976	C5	RA	31	0.410	-5.585	10.763	0.00	0.00
ATOM	977	C6	RA	31	1.634	-5.008	11.062	0.00	0.00
ATOM	978	N6	RA	31	2.739	-5.197	10.429	0.00	0.00
ATOM	979	H61	RA	31	3.539	-4.748	10.740	0.00	0.00
ATOM	980	H62	RA	31	2.756	-5.819	9.690	0.00	0.00
ATOM	981	N1	RA	31	1.743	-4.197	12.057	0.00	0.00
ATOM	982	C2	RA	31	0.681	-3.948	12.758	0.00	0.00
ATOM	983	H2	RA	31	0.823	-3.276	13.534	0.00	0.00
ATOM	984	N3	RA	31	-0.521	-4.416	12.603	0.00	0.00
ATOM	985	C4	RA	31	-0.595	-5.233	11.576	0.00	0.00
ATOM	986	C3'	RA	31	-4.706	-6.646	10.354	0.00	0.00
ATOM	987	H3'	RA	31	-4.123	-7.033	9.541	0.00	0.00
ATOM	988	C2'	RA	31	-4.129	-5.329	10.834	0.00	0.00
ATOM	989	1H2'	RA	31	-3.771	-4.747	10.007	0.00	0.00
ATOM	990	O2'	RA	31	-5.034	-4.575	11.604	0.00	0.00
ATOM	991	2HO'	RA	31	-5.573	-4.083	11.045	0.00	0.00
ATOM	992	O3'	RA	31	-6.065	-6.591	9.989	0.00	0.00
ATOM	993	P	RG	32	-6.574	-5.793	8.731	0.00	0.00
ATOM	994	O1P	RG	32	-7.873	-6.350	8.370	0.00	0.00
ATOM	995	O2P	RG	32	-5.521	-5.795	7.705	0.00	0.00
ATOM	996	O5'	RG	32	-6.769	-4.315	9.252	0.00	0.00
ATOM	997	C5'	RG	32	-7.997	-3.876	9.749	0.00	0.00
ATOM	998	1H5'	RG	32	-8.376	-4.572	10.454	0.00	0.00
ATOM	999	2H5'	RG	32	-8.695	-3.838	8.954	0.00	0.00
ATOM	1000	C4'	RG	32	-7.941	-2.516	10.415	0.00	0.00
ATOM	1001	H4'	RG	32	-8.949	-2.246	10.681	0.00	0.00
ATOM	1002	O4'	RG	32	-7.155	-2.536	11.581	0.00	0.00
ATOM	1003	C1'	RG	32	-6.833	-1.201	11.914	0.00	0.00
ATOM	1004	H1'	RG	32	-7.507	-0.854	12.677	0.00	0.00
ATOM	1005	N9	RG	32	-5.444	-1.101	12.408	0.00	0.00
ATOM	1006	C8	RG	32	-5.048	-0.708	13.630	0.00	0.00
ATOM	1007	H8	RG	32	-5.737	-0.417	14.379	0.00	0.00
ATOM	1008	N7	RG	32	-3.768	-0.733	13.820	0.00	0.00
ATOM	1009	C5	RG	32	-3.265	-1.155	12.609	0.00	0.00
ATOM	1010	C6	RG	32	-1.930	-1.375	12.176	0.00	0.00
ATOM	1011	O6	RG	32	-0.895	-1.214	12.774	0.00	0.00
ATOM	1012	N1	RG	32	-1.842	-1.804	10.895	0.00	0.00
ATOM	1013	H1	RG	32	-0.941	-2.000	10.541	0.00	0.00

ATOM	1014	C2	RG	32	-2.901	-1.950	10.092	0.00	0.00
ATOM	1015	N2	RG	32	-2.668	-2.283	8.885	0.00	0.00
ATOM	1016	H21	RG	32	-1.748	-2.371	8.550	0.00	0.00
ATOM	1017	H22	RG	32	-3.441	-2.319	8.282	0.00	0.00
ATOM	1018	N3	RG	32	-4.150	-1.739	10.441	0.00	0.00
ATOM	1019	C4	RG	32	-4.282	-1.357	11.731	0.00	0.00
ATOM	1020	C3'	RG	32	-7.361	-1.396	9.573	0.00	0.00
ATOM	1021	H3'	RG	32	-6.443	-1.732	9.123	0.00	0.00
ATOM	1022	C2'	RG	32	-7.071	-0.360	10.661	0.00	0.00
ATOM	1023	1H2'	RG	32	-6.213	0.223	10.398	0.00	0.00
ATOM	1024	O2'	RG	32	-8.177	0.468	10.898	0.00	0.00
ATOM	1025	2HO'	RG	32	-8.393	0.860	10.083	0.00	0.00
ATOM	1026	O3'	RG	32	-8.241	-0.950	8.575	0.00	0.00
ATOM	1027	P	RG	33	-7.889	0.272	7.658	0.00	0.00
ATOM	1028	O1P	RG	33	-6.510	0.138	7.218	0.00	0.00
ATOM	1029	O2P	RG	33	-8.274	1.471	8.378	0.00	0.00
ATOM	1030	O5'	RG	33	-8.800	0.121	6.396	0.00	0.00
ATOM	1031	C5'	RG	33	-10.193	0.133	6.463	0.00	0.00
ATOM	1032	1H5'	RG	33	-10.524	0.580	7.368	0.00	0.00
ATOM	1033	2H5'	RG	33	-10.525	-0.872	6.450	0.00	0.00
ATOM	1034	C4'	RG	33	-10.828	0.859	5.305	0.00	0.00
ATOM	1035	H4'	RG	33	-11.884	0.675	5.334	0.00	0.00
ATOM	1036	O4'	RG	33	-10.642	2.243	5.415	0.00	0.00
ATOM	1037	C1'	RG	33	-10.397	2.791	4.134	0.00	0.00
ATOM	1038	H1'	RG	33	-11.052	3.621	3.942	0.00	0.00
ATOM	1039	N9	RG	33	-9.001	3.259	4.020	0.00	0.00
ATOM	1040	C8	RG	33	-7.980	3.131	4.912	0.00	0.00
ATOM	1041	H8	RG	33	-8.116	2.656	5.855	0.00	0.00
ATOM	1042	N7	RG	33	-6.848	3.618	4.506	0.00	0.00
ATOM	1043	C5	RG	33	-7.139	4.121	3.245	0.00	0.00
ATOM	1044	C6	RG	33	-6.324	4.765	2.261	0.00	0.00
ATOM	1045	O6	RG	33	-5.133	5.029	2.304	0.00	0.00
ATOM	1046	N1	RG	33	-7.001	5.127	1.129	0.00	0.00
ATOM	1047	H1	RG	33	-6.490	5.582	0.402	0.00	0.00
ATOM	1048	C2	RG	33	-8.314	4.914	0.951	0.00	0.00
ATOM	1049	N2	RG	33	-8.827	5.289	-0.177	0.00	0.00
ATOM	1050	H21	RG	33	-8.257	5.682	-0.887	0.00	0.00
ATOM	1051	H22	RG	33	-9.793	5.120	-0.310	0.00	0.00
ATOM	1052	N3	RG	33	-9.107	4.318	1.823	0.00	0.00
ATOM	1053	C4	RG	33	-8.463	3.934	2.958	0.00	0.00
ATOM	1054	C3'	RG	33	-10.309	0.454	3.938	0.00	0.00
ATOM	1055	H3'	RG	33	-9.236	0.372	3.970	0.00	0.00
ATOM	1056	C2'	RG	33	-10.688	1.684	3.139	0.00	0.00
ATOM	1057	1H2'	RG	33	-10.083	1.773	2.252	0.00	0.00
ATOM	1058	O2'	RG	33	-12.058	1.730	2.820	0.00	0.00
ATOM	1059	2HO'	RG	33	-12.288	1.577	2.498	0.00	0.00
ATOM	1060	O3'	RG	33	-10.893	-0.711	3.445	0.00	0.00
ATOM	1061	P	RU	34	-10.120	-1.629	2.440	0.00	0.00
ATOM	1062	O1P	RU	34	-11.001	-2.732	2.095	0.00	0.00
ATOM	1063	O2P	RU	34	-8.818	-1.927	3.014	0.00	0.00
ATOM	1064	O5'	RU	34	-9.883	-0.774	1.160	0.00	0.00
ATOM	1065	C5'	RU	34	-10.929	-0.432	0.295	0.00	0.00
ATOM	1066	1H5'	RU	34	-11.680	0.109	0.821	0.00	0.00
ATOM	1067	2H5'	RU	34	-11.365	-1.320	-0.102	0.00	0.00
ATOM	1068	C4'	RU	34	-10.442	0.389	-0.874	0.00	0.00
ATOM	1069	H4'	RU	34	-11.285	0.626	-1.483	0.00	0.00
ATOM	1070	O4'	RU	34	-9.824	1.582	-0.472	0.00	0.00
ATOM	1071	C1'	RU	34	-8.843	1.923	-1.442	0.00	0.00
ATOM	1072	H1'	RU	34	-9.103	2.860	-1.903	0.00	0.00
ATOM	1073	N1	RU	34	-7.483	2.058	-0.870	0.00	0.00
ATOM	1074	C6	RU	34	-7.141	1.492	0.325	0.00	0.00
ATOM	1075	H6	RU	34	-7.875	0.942	0.874	0.00	0.00
ATOM	1076	C5	RU	34	-5.888	1.622	0.814	0.00	0.00
ATOM	1077	H5	RU	34	-5.630	1.177	1.744	0.00	0.00
ATOM	1078	C4	RU	34	-4.873	2.348	0.110	0.00	0.00
ATOM	1079	O4	RU	34	-3.726	2.508	0.476	0.00	0.00
ATOM	1080	N3	RU	34	-5.281	2.873	-1.067	0.00	0.00
ATOM	1081	H3	RU	34	-4.598	3.364	-1.595	0.00	0.00

ATOM	1082	C2	RU	34	-6.528	2.749	-1.612	0.00	0.00
ATOM	1083	O2	RU	34	-6.740	3.219	-2.712	0.00	0.00
ATOM	1084	C3'	RU	34	-9.447	-0.330	-1.753	0.00	0.00
ATOM	1085	H3'	RU	34	-8.689	-0.767	-1.142	0.00	0.00
ATOM	1086	C2'	RU	34	-8.876	0.835	-2.507	0.00	0.00
ATOM	1087	1H2'	RU	34	-7.906	0.607	-2.877	0.00	0.00
ATOM	1088	O2'	RU	34	-9.694	1.255	-3.546	0.00	0.00
ATOM	1089	2HO'	RU	34	-9.932	0.648	-3.906	0.00	0.00
ATOM	1090	O3'	RU	34	-10.057	-1.272	-2.588	0.00	0.00
ATOM	1091	P	RG	35	-9.246	-2.457	-3.210	0.00	0.00
ATOM	1092	O1P	RG	35	-10.176	-3.310	-3.919	0.00	0.00
ATOM	1093	O2P	RG	35	-8.444	-3.027	-2.160	0.00	0.00
ATOM	1094	O5'	RG	35	-8.272	-1.817	-4.260	0.00	0.00
ATOM	1095	C5'	RG	35	-8.729	-1.343	-5.488	0.00	0.00
ATOM	1096	1H5'	RG	35	-9.545	-0.679	-5.316	0.00	0.00
ATOM	1097	2H5'	RG	35	-9.070	-2.150	-6.095	0.00	0.00
ATOM	1098	C4'	RG	35	-7.663	-0.596	-6.250	0.00	0.00
ATOM	1099	H4'	RG	35	-8.112	-0.179	-7.123	0.00	0.00
ATOM	1100	O4'	RG	35	-7.109	0.435	-5.483	0.00	0.00
ATOM	1101	C1'	RG	35	-5.774	0.622	-5.892	0.00	0.00
ATOM	1102	H1'	RG	35	-5.651	1.593	-6.337	0.00	0.00
ATOM	1103	N9	RG	35	-4.849	0.538	-4.746	0.00	0.00
ATOM	1104	C8	RG	35	-5.006	-0.090	-3.548	0.00	0.00
ATOM	1105	H8	RG	35	-5.876	-0.657	-3.302	0.00	0.00
ATOM	1106	N7	RG	35	-4.008	0.065	-2.726	0.00	0.00
ATOM	1107	C5	RG	35	-3.096	0.823	-3.462	0.00	0.00
ATOM	1108	C6	RG	35	-1.786	1.318	-3.147	0.00	0.00
ATOM	1109	O6	RG	35	-1.155	1.222	-2.104	0.00	0.00
ATOM	1110	N1	RG	35	-1.187	1.995	-4.183	0.00	0.00
ATOM	1111	H1	RG	35	-0.267	2.345	-4.037	0.00	0.00
ATOM	1112	C2	RG	35	-1.783	2.199	-5.377	0.00	0.00
ATOM	1113	N2	RG	35	-1.114	2.859	-6.257	0.00	0.00
ATOM	1114	H21	RG	35	-0.194	3.171	-6.058	0.00	0.00
ATOM	1115	H22	RG	35	-1.542	3.011	-7.137	0.00	0.00
ATOM	1116	N3	RG	35	-2.997	1.779	-5.713	0.00	0.00
ATOM	1117	C4	RG	35	-3.602	1.093	-4.709	0.00	0.00
ATOM	1118	C3'	RG	35	-6.525	-1.477	-6.705	0.00	0.00
ATOM	1119	H3'	RG	35	-6.239	-2.116	-5.897	0.00	0.00
ATOM	1120	C2'	RG	35	-5.451	-0.438	-6.931	0.00	0.00
ATOM	1121	1H2'	RG	35	-4.485	-0.859	-6.779	0.00	0.00
ATOM	1122	O2'	RG	35	-5.554	0.154	-8.184	0.00	0.00
ATOM	1123	2HO'	RG	35	-5.529	-0.389	-8.706	0.00	0.00
ATOM	1124	O3'	RG	35	-6.851	-2.219	-7.864	0.00	0.00
ATOM	1125	P	RC	36	-6.013	-3.467	-8.314	0.00	0.00
ATOM	1126	O1P	RC	36	-6.733	-4.118	-9.397	0.00	0.00
ATOM	1127	O2P	RC	36	-5.702	-4.237	-7.122	0.00	0.00
ATOM	1128	O5'	RC	36	-4.665	-2.900	-8.892	0.00	0.00
ATOM	1129	C5'	RC	36	-4.563	-2.314	-10.168	0.00	0.00
ATOM	1130	1H5'	RC	36	-5.298	-1.546	-10.264	0.00	0.00
ATOM	1131	2H5'	RC	36	-4.744	-3.053	-10.924	0.00	0.00
ATOM	1132	C4'	RC	36	-3.191	-1.711	-10.414	0.00	0.00
ATOM	1133	H4'	RC	36	-3.199	-1.242	-11.381	0.00	0.00
ATOM	1134	O4'	RC	36	-2.872	-0.736	-9.443	0.00	0.00
ATOM	1135	C1'	RC	36	-1.476	-0.763	-9.186	0.00	0.00
ATOM	1136	H1'	RC	36	-1.061	0.196	-9.434	0.00	0.00
ATOM	1137	N1	RC	36	-1.163	-1.050	-7.760	0.00	0.00
ATOM	1138	C6	RC	36	-1.947	-1.850	-6.996	0.00	0.00
ATOM	1139	H6	RC	36	-2.792	-2.324	-7.432	0.00	0.00
ATOM	1140	C5	RC	36	-1.679	-2.035	-5.692	0.00	0.00
ATOM	1141	H5	RC	36	-2.307	-2.655	-5.100	0.00	0.00
ATOM	1142	C4	RC	36	-0.571	-1.367	-5.165	0.00	0.00
ATOM	1143	N4	RC	36	-0.289	-1.478	-3.912	0.00	0.00
ATOM	1144	H41	RC	36	0.510	-1.004	-3.578	0.00	0.00
ATOM	1145	H42	RC	36	-0.860	-2.019	-3.320	0.00	0.00
ATOM	1146	N3	RC	36	0.231	-0.637	-5.887	0.00	0.00
ATOM	1147	C2	RC	36	-0.037	-0.474	-7.196	0.00	0.00
ATOM	1148	O2	RC	36	0.736	0.191	-7.858	0.00	0.00
ATOM	1149	C3'	RC	36	-2.057	-2.716	-10.389	0.00	0.00

ATOM	1150	H3'	RC	36	-2.201	-3.367	-9.551	0.00	0.00
ATOM	1151	C2'	RC	36	-0.883	-1.803	-10.114	0.00	0.00
ATOM	1152	1H2'	RC	36	-0.082	-2.330	-9.646	0.00	0.00
ATOM	1153	O2'	RC	36	-0.441	-1.163	-11.272	0.00	0.00
ATOM	1154	2HO'	RC	36	-0.173	-1.499	-11.659	0.00	0.00
ATOM	1155	O3'	RC	36	-1.941	-3.447	-11.581	0.00	0.00
ATOM	1156	P	RA	37	-1.208	-4.827	-11.623	0.00	0.00
ATOM	1157	O1P	RA	37	-1.384	-5.351	-12.960	0.00	0.00
ATOM	1158	O2P	RA	37	-1.660	-5.610	-10.500	0.00	0.00
ATOM	1159	O5'	RA	37	0.323	-4.537	-11.394	0.00	0.00
ATOM	1160	C5'	RA	37	1.151	-4.038	-12.402	0.00	0.00
ATOM	1161	1H5'	RA	37	0.707	-3.168	-12.829	0.00	0.00
ATOM	1162	2H5'	RA	37	1.245	-4.773	-13.164	0.00	0.00
ATOM	1163	C4'	RA	37	2.540	-3.688	-11.894	0.00	0.00
ATOM	1164	H4'	RA	37	3.103	-3.307	-12.725	0.00	0.00
ATOM	1165	O4'	RA	37	2.494	-2.695	-10.897	0.00	0.00
ATOM	1166	C1'	RA	37	3.481	-2.964	-9.922	0.00	0.00
ATOM	1167	H1'	RA	37	4.115	-2.104	-9.794	0.00	0.00
ATOM	1168	N9	RA	37	2.866	-3.286	-8.623	0.00	0.00
ATOM	1169	C8	RA	37	1.682	-3.888	-8.352	0.00	0.00
ATOM	1170	H8	RA	37	1.034	-4.253	-9.111	0.00	0.00
ATOM	1171	N7	RA	37	1.379	-3.940	-7.094	0.00	0.00
ATOM	1172	C5	RA	37	2.488	-3.381	-6.483	0.00	0.00
ATOM	1173	C6	RA	37	2.871	-3.138	-5.158	0.00	0.00
ATOM	1174	N6	RA	37	2.150	-3.395	-4.106	0.00	0.00
ATOM	1175	H61	RA	37	2.494	-3.147	-3.214	0.00	0.00
ATOM	1176	H62	RA	37	1.253	-3.756	-4.220	0.00	0.00
ATOM	1177	N1	RA	37	4.053	-2.618	-4.873	0.00	0.00
ATOM	1178	C2	RA	37	4.855	-2.337	-5.882	0.00	0.00
ATOM	1179	H2	RA	37	5.795	-1.915	-5.621	0.00	0.00
ATOM	1180	N3	RA	37	4.625	-2.486	-7.173	0.00	0.00
ATOM	1181	C4	RA	37	3.415	-3.021	-7.404	0.00	0.00
ATOM	1182	C3'	RA	37	3.317	-4.856	-11.308	0.00	0.00
ATOM	1183	H3'	RA	37	2.664	-5.433	-10.677	0.00	0.00
ATOM	1184	C2'	RA	37	4.313	-4.119	-10.436	0.00	0.00
ATOM	1185	1H2'	RA	37	4.653	-4.746	-9.635	0.00	0.00
ATOM	1186	O2'	RA	37	5.399	-3.601	-11.155	0.00	0.00
ATOM	1187	2HO'	RA	37	5.719	-3.871	-11.389	0.00	0.00
ATOM	1188	O3'	RA	37	3.944	-5.664	-12.275	0.00	0.00
ATOM	1189	P	RC	38	4.169	-7.186	-12.035	0.00	0.00
ATOM	1190	O1P	RC	38	4.813	-7.713	-13.233	0.00	0.00
ATOM	1191	O2P	RC	38	2.908	-7.763	-11.593	0.00	0.00
ATOM	1192	O5'	RC	38	5.193	-7.255	-10.845	0.00	0.00
ATOM	1193	C5'	RC	38	6.556	-6.969	-11.025	0.00	0.00
ATOM	1194	1H5'	RC	38	6.661	-6.031	-11.535	0.00	0.00
ATOM	1195	2H5'	RC	38	7.012	-7.730	-11.635	0.00	0.00
ATOM	1196	C4'	RC	38	7.298	-6.903	-9.694	0.00	0.00
ATOM	1197	H4'	RC	38	8.326	-6.664	-9.894	0.00	0.00
ATOM	1198	O4'	RC	38	6.757	-5.898	-8.861	0.00	0.00
ATOM	1199	C1'	RC	38	6.900	-6.278	-7.510	0.00	0.00
ATOM	1200	H1'	RC	38	7.536	-5.565	-7.009	0.00	0.00
ATOM	1201	N1	RC	38	5.597	-6.331	-6.802	0.00	0.00
ATOM	1202	C6	RC	38	4.454	-6.701	-7.439	0.00	0.00
ATOM	1203	H6	RC	38	4.468	-6.896	-8.485	0.00	0.00
ATOM	1204	C5	RC	38	3.306	-6.818	-6.750	0.00	0.00
ATOM	1205	H5	RC	38	2.418	-7.108	-7.254	0.00	0.00
ATOM	1206	C4	RC	38	3.345	-6.568	-5.370	0.00	0.00
ATOM	1207	N4	RC	38	2.283	-6.680	-4.660	0.00	0.00
ATOM	1208	H41	RC	38	2.358	-6.443	-3.704	0.00	0.00
ATOM	1209	H42	RC	38	1.426	-6.886	-5.083	0.00	0.00
ATOM	1210	N3	RC	38	4.433	-6.226	-4.740	0.00	0.00
ATOM	1211	C2	RC	38	5.572	-6.094	-5.435	0.00	0.00
ATOM	1212	O2	RC	38	6.582	-5.795	-4.822	0.00	0.00
ATOM	1213	C3'	RC	38	7.273	-8.180	-8.883	0.00	0.00
ATOM	1214	H3'	RC	38	6.275	-8.573	-8.887	0.00	0.00
ATOM	1215	C2'	RC	38	7.586	-7.625	-7.499	0.00	0.00
ATOM	1216	1H2'	RC	38	7.186	-8.275	-6.738	0.00	0.00
ATOM	1217	O2'	RC	38	8.961	-7.422	-7.294	0.00	0.00

ATOM	1218	2HO'	RC	38	9.328	-8.195	-7.216	0.00	0.00
ATOM	1219	O3'	RC	38	8.187	-9.146	-9.337	0.00	0.00
ATOM	1220	P	RA	39	8.268	-10.573	-8.681	0.00	0.00
ATOM	1221	O1P	RA	39	9.167	-11.370	-9.485	0.00	0.00
ATOM	1222	O2P	RA	39	6.918	-11.038	-8.458	0.00	0.00
ATOM	1223	O5'	RA	39	8.970	-10.307	-7.297	0.00	0.00
ATOM	1224	C5'	RA	39	8.731	-11.068	-6.168	0.00	0.00
ATOM	1225	1H5'	RA	39	9.195	-12.009	-6.282	0.00	0.00
ATOM	1226	2H5'	RA	39	7.700	-11.211	-6.021	0.00	0.00
ATOM	1227	C4'	RA	39	9.301	-10.361	-4.964	0.00	0.00
ATOM	1228	H4'	RA	39	10.288	-10.030	-5.196	0.00	0.00
ATOM	1229	O4'	RA	39	8.514	-9.257	-4.603	0.00	0.00
ATOM	1230	C1'	RA	39	8.541	-9.068	-3.211	0.00	0.00
ATOM	1231	H1'	RA	39	8.926	-8.095	-2.979	0.00	0.00
ATOM	1232	N9	RA	39	7.184	-9.171	-2.654	0.00	0.00
ATOM	1233	C8	RA	39	6.014	-9.364	-3.319	0.00	0.00
ATOM	1234	H8	RA	39	5.968	-9.496	-4.369	0.00	0.00
ATOM	1235	N7	RA	39	4.970	-9.385	-2.561	0.00	0.00
ATOM	1236	C5	RA	39	5.493	-9.163	-1.298	0.00	0.00
ATOM	1237	C6	RA	39	4.965	-9.070	-0.006	0.00	0.00
ATOM	1238	N6	RA	39	3.706	-9.188	0.292	0.00	0.00
ATOM	1239	H61	RA	39	3.445	-9.100	1.234	0.00	0.00
ATOM	1240	H62	RA	39	3.045	-9.373	-0.408	0.00	0.00
ATOM	1241	N1	RA	39	5.738	-8.852	1.031	0.00	0.00
ATOM	1242	C2	RA	39	7.020	-8.703	0.814	0.00	0.00
ATOM	1243	H2	RA	39	7.623	-8.512	1.665	0.00	0.00
ATOM	1244	N3	RA	39	7.661	-8.766	-0.324	0.00	0.00
ATOM	1245	C4	RA	39	6.836	-9.012	-1.362	0.00	0.00
ATOM	1246	C3'	RA	39	9.365	-11.226	-3.719	0.00	0.00
ATOM	1247	H3'	RA	39	8.442	-11.768	-3.613	0.00	0.00
ATOM	1248	C2'	RA	39	9.458	-10.150	-2.651	0.00	0.00
ATOM	1249	1H2'	RA	39	9.125	-10.513	-1.696	0.00	0.00
ATOM	1250	O2'	RA	39	10.757	-9.628	-2.560	0.00	0.00
ATOM	1251	2HO'	RA	39	11.164	-9.967	-2.485	0.00	0.00
ATOM	1252	O3'	RA	39	10.472	-12.096	-3.719	0.00	0.00
ATOM	1253	P	RC	40	10.424	-13.479	-2.985	0.00	0.00
ATOM	1254	O1P	RC	40	11.764	-14.046	-3.051	0.00	0.00
ATOM	1255	O2P	RC	40	9.306	-14.246	-3.516	0.00	0.00
ATOM	1256	O5'	RC	40	10.081	-13.168	-1.483	0.00	0.00
ATOM	1257	C5'	RC	40	11.013	-12.635	-0.580	0.00	0.00
ATOM	1258	1H5'	RC	40	11.365	-11.683	-0.931	0.00	0.00
ATOM	1259	2H5'	RC	40	11.850	-13.302	-0.490	0.00	0.00
ATOM	1260	C4'	RC	40	10.384	-12.454	0.801	0.00	0.00
ATOM	1261	H4'	RC	40	11.148	-12.109	1.477	0.00	0.00
ATOM	1262	O4'	RC	40	9.331	-11.513	0.803	0.00	0.00
ATOM	1263	C1'	RC	40	8.324	-11.939	1.710	0.00	0.00
ATOM	1264	H1'	RC	40	8.139	-11.175	2.447	0.00	0.00
ATOM	1265	N1	RC	40	7.046	-12.238	1.018	0.00	0.00
ATOM	1266	C6	RC	40	6.982	-12.462	-0.324	0.00	0.00
ATOM	1267	H6	RC	40	7.878	-12.478	-0.903	0.00	0.00
ATOM	1268	C5	RC	40	5.802	-12.633	-0.941	0.00	0.00
ATOM	1269	H5	RC	40	5.762	-12.789	-1.995	0.00	0.00
ATOM	1270	C4	RC	40	4.648	-12.590	-0.148	0.00	0.00
ATOM	1271	N4	RC	40	3.490	-12.705	-0.701	0.00	0.00
ATOM	1272	H41	RC	40	2.685	-12.664	-0.118	0.00	0.00
ATOM	1273	H42	RC	40	3.437	-12.791	-1.678	0.00	0.00
ATOM	1274	N3	RC	40	4.669	-12.397	1.146	0.00	0.00
ATOM	1275	C2	RC	40	5.861	-12.231	1.756	0.00	0.00
ATOM	1276	O2	RC	40	5.860	-12.061	2.964	0.00	0.00
ATOM	1277	C3'	RC	40	9.809	-13.730	1.377	0.00	0.00
ATOM	1278	H3'	RC	40	9.236	-14.230	0.614	0.00	0.00
ATOM	1279	C2'	RC	40	8.872	-13.164	2.420	0.00	0.00
ATOM	1280	1H2'	RC	40	8.101	-13.869	2.680	0.00	0.00
ATOM	1281	O2'	RC	40	9.527	-12.730	3.589	0.00	0.00
ATOM	1282	2HO'	RC	40	9.883	-13.081	3.851	0.00	0.00
ATOM	1283	O3'	RC	40	10.787	-14.579	1.919	0.00	0.00
ATOM	1284	P	RA	41	10.583	-16.137	1.982	0.00	0.00
ATOM	1285	O1P	RA	41	11.796	-16.719	2.532	0.00	0.00

ATOM	1286	O2P	RA	41	10.111	-16.587	0.679	0.00	0.00
ATOM	1287	O5'	RA	41	9.410	-16.363	3.007	0.00	0.00
ATOM	1288	C5'	RA	41	9.582	-16.201	4.387	0.00	0.00
ATOM	1289	1H5'	RA	41	10.071	-15.268	4.572	0.00	0.00
ATOM	1290	2H5'	RA	41	10.207	-16.982	4.764	0.00	0.00
ATOM	1291	C4'	RA	41	8.264	-16.214	5.139	0.00	0.00
ATOM	1292	H4'	RA	41	8.488	-16.068	6.179	0.00	0.00
ATOM	1293	O4'	RA	41	7.403	-15.177	4.708	0.00	0.00
ATOM	1294	C1'	RA	41	6.074	-15.634	4.758	0.00	0.00
ATOM	1295	H1'	RA	41	5.462	-14.960	5.326	0.00	0.00
ATOM	1296	N9	RA	41	5.513	-15.735	3.409	0.00	0.00
ATOM	1297	C8	RA	41	6.142	-15.845	2.209	0.00	0.00
ATOM	1298	H8	RA	41	7.203	-15.913	2.117	0.00	0.00
ATOM	1299	N7	RA	41	5.347	-15.852	1.186	0.00	0.00
ATOM	1300	C5	RA	41	4.084	-15.764	1.768	0.00	0.00
ATOM	1301	C6	RA	41	2.759	-15.735	1.299	0.00	0.00
ATOM	1302	N6	RA	41	2.409	-15.736	0.041	0.00	0.00
ATOM	1303	H61	RA	41	1.451	-15.646	-0.182	0.00	0.00
ATOM	1304	H62	RA	41	3.113	-15.753	-0.653	0.00	0.00
ATOM	1305	N1	RA	41	1.735	-15.668	2.126	0.00	0.00
ATOM	1306	C2	RA	41	1.988	-15.647	3.406	0.00	0.00
ATOM	1307	H2	RA	41	1.145	-15.596	4.055	0.00	0.00
ATOM	1308	N3	RA	41	3.165	-15.660	4.006	0.00	0.00
ATOM	1309	C4	RA	41	4.181	-15.724	3.119	0.00	0.00
ATOM	1310	C3'	RA	41	7.479	-17.499	5.038	0.00	0.00
ATOM	1311	H3'	RA	41	7.463	-17.795	4.009	0.00	0.00
ATOM	1312	C2'	RA	41	6.107	-16.990	5.443	0.00	0.00
ATOM	1313	1H2'	RA	41	5.331	-17.629	5.074	0.00	0.00
ATOM	1314	O2'	RA	41	5.981	-16.802	6.826	0.00	0.00
ATOM	1315	2HO'	RA	41	5.774	-17.168	7.131	0.00	0.00
ATOM	1316	O3'	RA	41	7.969	-18.539	5.854	0.00	0.00
ATOM	1317	P	RG	42	7.574	-20.029	5.579	0.00	0.00
ATOM	1318	O1P	RG	42	8.340	-20.868	6.489	0.00	0.00
ATOM	1319	O2P	RG	42	7.675	-20.264	4.151	0.00	0.00
ATOM	1320	O5'	RG	42	6.051	-20.163	5.960	0.00	0.00
ATOM	1321	C5'	RG	42	5.615	-20.163	7.293	0.00	0.00
ATOM	1322	1H5'	RG	42	6.031	-19.324	7.813	0.00	0.00
ATOM	1323	2H5'	RG	42	5.951	-21.056	7.772	0.00	0.00
ATOM	1324	C4'	RG	42	4.098	-20.101	7.396	0.00	0.00
ATOM	1325	H4'	RG	42	3.838	-20.024	8.436	0.00	0.00
ATOM	1326	O4'	RG	42	3.552	-18.977	6.734	0.00	0.00
ATOM	1327	C1'	RG	42	2.321	-19.342	6.156	0.00	0.00
ATOM	1328	H1'	RG	42	1.539	-18.670	6.475	0.00	0.00
ATOM	1329	N9	RG	42	2.387	-19.280	4.684	0.00	0.00
ATOM	1330	C8	RG	42	3.471	-19.287	3.854	0.00	0.00
ATOM	1331	H8	RG	42	4.462	-19.368	4.237	0.00	0.00
ATOM	1332	N7	RG	42	3.201	-19.166	2.603	0.00	0.00
ATOM	1333	C5	RG	42	1.815	-19.115	2.578	0.00	0.00
ATOM	1334	C6	RG	42	0.896	-18.995	1.494	0.00	0.00
ATOM	1335	O6	RG	42	1.112	-18.836	0.307	0.00	0.00
ATOM	1336	N1	RG	42	-0.411	-19.086	1.881	0.00	0.00
ATOM	1337	H1	RG	42	-1.103	-19.077	1.168	0.00	0.00
ATOM	1338	C2	RG	42	-0.801	-19.243	3.154	0.00	0.00
ATOM	1339	N2	RG	42	-2.065	-19.390	3.366	0.00	0.00
ATOM	1340	H21	RG	42	-2.683	-19.458	2.594	0.00	0.00
ATOM	1341	H22	RG	42	-2.376	-19.519	4.292	0.00	0.00
ATOM	1342	N3	RG	42	0.011	-19.304	4.190	0.00	0.00
ATOM	1343	C4	RG	42	1.317	-19.238	3.841	0.00	0.00
ATOM	1344	C3'	RG	42	3.399	-21.319	6.833	0.00	0.00
ATOM	1345	H3'	RG	42	3.820	-21.570	5.875	0.00	0.00
ATOM	1346	C2'	RG	42	1.998	-20.752	6.632	0.00	0.00
ATOM	1347	1H2'	RG	42	1.464	-21.314	5.887	0.00	0.00
ATOM	1348	O2'	RG	42	1.259	-20.665	7.823	0.00	0.00
ATOM	1349	2HO'	RG	42	1.256	-20.919	8.138	0.00	0.00
ATOM	1350	O3'	RG	42	3.427	-22.417	7.708	0.00	0.00
ATOM	1351	P	RC	43	3.271	-23.884	7.186	0.00	0.00
ATOM	1352	O1P	RC	43	3.370	-24.767	8.329	0.00	0.00
ATOM	1353	O2P	RC	43	4.190	-24.071	6.090	0.00	0.00

ATOM	1354	O5'	RC	43	1.823	-24.002	6.608	0.00	0.00
ATOM	1355	C5'	RC	43	0.693	-24.073	7.427	0.00	0.00
ATOM	1356	1H5'	RC	43	0.686	-23.259	8.127	0.00	0.00
ATOM	1357	2H5'	RC	43	0.707	-24.988	7.982	0.00	0.00
ATOM	1358	C4'	RC	43	-0.591	-24.034	6.634	0.00	0.00
ATOM	1359	H4'	RC	43	-1.399	-24.082	7.334	0.00	0.00
ATOM	1360	O4'	RC	43	-0.740	-22.861	5.874	0.00	0.00
ATOM	1361	C1'	RC	43	-1.446	-23.159	4.691	0.00	0.00
ATOM	1362	H1'	RC	43	-2.341	-22.563	4.653	0.00	0.00
ATOM	1363	N1	RC	43	-0.642	-22.906	3.474	0.00	0.00
ATOM	1364	C6	RC	43	0.719	-22.913	3.495	0.00	0.00
ATOM	1365	H6	RC	43	1.239	-23.122	4.394	0.00	0.00
ATOM	1366	C5	RC	43	1.415	-22.658	2.377	0.00	0.00
ATOM	1367	H5	RC	43	2.478	-22.650	2.393	0.00	0.00
ATOM	1368	C4	RC	43	0.691	-22.386	1.213	0.00	0.00
ATOM	1369	N4	RC	43	1.308	-22.105	0.122	0.00	0.00
ATOM	1370	H41	RC	43	0.761	-21.869	-0.663	0.00	0.00
ATOM	1371	H42	RC	43	2.287	-22.073	0.120	0.00	0.00
ATOM	1372	N3	RC	43	-0.614	-22.388	1.168	0.00	0.00
ATOM	1373	C2	RC	43	-1.304	-22.668	2.281	0.00	0.00
ATOM	1374	O2	RC	43	-2.513	-22.717	2.191	0.00	0.00
ATOM	1375	C3'	RC	43	-0.749	-25.176	5.664	0.00	0.00
ATOM	1376	H3'	RC	43	0.152	-25.281	5.095	0.00	0.00
ATOM	1377	C2'	RC	43	-1.840	-24.617	4.783	0.00	0.00
ATOM	1378	1H2'	RC	43	-1.841	-25.095	3.826	0.00	0.00
ATOM	1379	O2'	RC	43	-3.106	-24.679	5.368	0.00	0.00
ATOM	1380	2HO'	RC	43	-3.331	-25.097	5.442	0.00	0.00
ATOM	1381	O3'	RC	43	-1.107	-26.378	6.270	0.00	0.00
ATOM	1382	P	RA	44	-0.755	-27.740	5.603	0.00	0.00
ATOM	1383	O1P	RA	44	-1.180	-28.789	6.502	0.00	0.00
ATOM	1384	O2P	RA	44	0.626	-27.700	5.205	0.00	0.00
ATOM	1385	O5'	RA	44	-1.618	-27.809	4.301	0.00	0.00
ATOM	1386	C5'	RA	44	-2.992	-28.033	4.348	0.00	0.00
ATOM	1387	1H5'	RA	44	-3.464	-27.335	5.005	0.00	0.00
ATOM	1388	2H5'	RA	44	-3.169	-29.008	4.730	0.00	0.00
ATOM	1389	C4'	RA	44	-3.637	-27.904	2.984	0.00	0.00
ATOM	1390	H4'	RA	44	-4.686	-28.079	3.096	0.00	0.00
ATOM	1391	O4'	RA	44	-3.472	-26.620	2.445	0.00	0.00
ATOM	1392	C1'	RA	44	-3.393	-26.727	1.042	0.00	0.00
ATOM	1393	H1'	RA	44	-4.164	-26.143	0.575	0.00	0.00
ATOM	1394	N9	RA	44	-2.085	-26.275	0.558	0.00	0.00
ATOM	1395	C8	RA	44	-0.901	-26.166	1.227	0.00	0.00
ATOM	1396	H8	RA	44	-0.781	-26.454	2.244	0.00	0.00
ATOM	1397	N7	RA	44	0.066	-25.679	0.524	0.00	0.00
ATOM	1398	C5	RA	44	-0.530	-25.462	-0.716	0.00	0.00
ATOM	1399	C6	RA	44	-0.109	-24.943	-1.950	0.00	0.00
ATOM	1400	N6	RA	44	1.075	-24.473	-2.197	0.00	0.00
ATOM	1401	H61	RA	44	1.249	-24.108	-3.098	0.00	0.00
ATOM	1402	H62	RA	44	1.739	-24.428	-1.471	0.00	0.00
ATOM	1403	N1	RA	44	-0.930	-24.892	-2.989	0.00	0.00
ATOM	1404	C2	RA	44	-2.149	-25.337	-2.831	0.00	0.00
ATOM	1405	H2	RA	44	-2.783	-25.270	-3.685	0.00	0.00
ATOM	1406	N3	RA	44	-2.693	-25.835	-1.746	0.00	0.00
ATOM	1407	C4	RA	44	-1.824	-25.865	-0.711	0.00	0.00
ATOM	1408	C3'	RA	44	-3.104	-28.868	1.943	0.00	0.00
ATOM	1409	H3'	RA	44	-2.033	-28.847	1.964	0.00	0.00
ATOM	1410	C2'	RA	44	-3.583	-28.183	0.687	0.00	0.00
ATOM	1411	1H2'	RA	44	-2.981	-28.469	-0.155	0.00	0.00
ATOM	1412	O2'	RA	44	-4.940	-28.396	0.437	0.00	0.00
ATOM	1413	2HO'	RA	44	-5.148	-28.797	0.166	0.00	0.00
ATOM	1414	O3'	RA	44	-3.571	-30.167	2.102	0.00	0.00
ATOM	1415	P	RA	45	-2.795	-31.380	1.483	0.00	0.00
ATOM	1416	O1P	RA	45	-3.479	-32.579	1.901	0.00	0.00
ATOM	1417	O2P	RA	45	-1.393	-31.242	1.794	0.00	0.00
ATOM	1418	O5'	RA	45	-2.932	-31.252	-0.066	0.00	0.00
ATOM	1419	C5'	RA	45	-4.132	-31.535	-0.715	0.00	0.00
ATOM	1420	1H5'	RA	45	-4.942	-31.005	-0.252	0.00	0.00
ATOM	1421	2H5'	RA	45	-4.325	-32.577	-0.642	0.00	0.00

ATOM	1422	C4'	RA	45	-4.097	-31.151	-2.170	0.00	0.00
ATOM	1423	H4'	RA	45	-5.056	-31.355	-2.581	0.00	0.00
ATOM	1424	O4'	RA	45	-3.823	-29.791	-2.333	0.00	0.00
ATOM	1425	C1'	RA	45	-3.064	-29.621	-3.506	0.00	0.00
ATOM	1426	H1'	RA	45	-3.554	-28.953	-4.175	0.00	0.00
ATOM	1427	N9	RA	45	-1.742	-29.090	-3.217	0.00	0.00
ATOM	1428	C8	RA	45	-1.027	-29.160	-2.080	0.00	0.00
ATOM	1429	H8	RA	45	-1.394	-29.642	-1.211	0.00	0.00
ATOM	1430	N7	RA	45	0.124	-28.589	-2.136	0.00	0.00
ATOM	1431	C5	RA	45	0.178	-28.118	-3.431	0.00	0.00
ATOM	1432	C6	RA	45	1.113	-27.422	-4.202	0.00	0.00
ATOM	1433	N6	RA	45	2.258	-26.991	-3.786	0.00	0.00
ATOM	1434	H61	RA	45	2.805	-26.457	-4.403	0.00	0.00
ATOM	1435	H62	RA	45	2.516	-27.149	-2.848	0.00	0.00
ATOM	1436	N1	RA	45	0.877	-27.137	-5.459	0.00	0.00
ATOM	1437	C2	RA	45	-0.256	-27.517	-5.964	0.00	0.00
ATOM	1438	H2	RA	45	-0.405	-27.283	-6.982	0.00	0.00
ATOM	1439	N3	RA	45	-1.226	-28.169	-5.378	0.00	0.00
ATOM	1440	C4	RA	45	-0.946	-28.438	-4.096	0.00	0.00
ATOM	1441	C3'	RA	45	-3.077	-31.892	-2.990	0.00	0.00
ATOM	1442	H3'	RA	45	-2.163	-31.925	-2.456	0.00	0.00
ATOM	1443	C2'	RA	45	-2.950	-30.969	-4.171	0.00	0.00
ATOM	1444	1H2'	RA	45	-2.003	-31.087	-4.659	0.00	0.00
ATOM	1445	O2'	RA	45	-3.992	-31.086	-5.072	0.00	0.00
ATOM	1446	2HO'	RA	45	-3.958	-31.380	-5.468	0.00	0.00
ATOM	1447	O3'	RA	45	-3.489	-33.163	-3.356	0.00	0.00
ATOM	1448	P	RG3	46	-2.457	-34.257	-3.727	0.00	0.00
ATOM	1449	O1P	RG3	46	-3.195	-35.457	-3.999	0.00	0.00
ATOM	1450	O2P	RG3	46	-1.455	-34.280	-2.717	0.00	0.00
ATOM	1451	O5'	RG3	46	-1.765	-33.793	-5.050	0.00	0.00
ATOM	1452	C5'	RG3	46	-2.410	-33.853	-6.273	0.00	0.00
ATOM	1453	1H5'	RG3	46	-3.336	-33.353	-6.211	0.00	0.00
ATOM	1454	2H5'	RG3	46	-2.603	-34.856	-6.522	0.00	0.00
ATOM	1455	C4'	RG3	46	-1.606	-33.223	-7.380	0.00	0.00
ATOM	1456	H4'	RG3	46	-2.178	-33.282	-8.265	0.00	0.00
ATOM	1457	O4'	RG3	46	-1.331	-31.889	-7.122	0.00	0.00
ATOM	1458	C1'	RG3	46	-0.082	-31.573	-7.677	0.00	0.00
ATOM	1459	H1'	RG3	46	-0.190	-30.805	-8.388	0.00	0.00
ATOM	1460	N9	RG3	46	0.840	-31.114	-6.668	0.00	0.00
ATOM	1461	C8	RG3	46	0.878	-31.388	-5.353	0.00	0.00
ATOM	1462	H8	RG3	46	0.153	-31.980	-4.871	0.00	0.00
ATOM	1463	N7	RG3	46	1.877	-30.873	-4.737	0.00	0.00
ATOM	1464	C5	RG3	46	2.559	-30.214	-5.721	0.00	0.00
ATOM	1465	C6	RG3	46	3.769	-29.478	-5.696	0.00	0.00
ATOM	1466	O6	RG3	46	4.503	-29.233	-4.776	0.00	0.00
ATOM	1467	N1	RG3	46	4.136	-29.001	-6.908	0.00	0.00
ATOM	1468	H1	RG3	46	4.970	-28.480	-6.962	0.00	0.00
ATOM	1469	C2	RG3	46	3.455	-29.222	-8.023	0.00	0.00
ATOM	1470	N2	RG3	46	3.958	-28.770	-9.111	0.00	0.00
ATOM	1471	H21	RG3	46	4.838	-28.331	-9.111	0.00	0.00
ATOM	1472	H22	RG3	46	3.473	-28.942	-9.938	0.00	0.00
ATOM	1473	N3	RG3	46	2.330	-29.884	-8.094	0.00	0.00
ATOM	1474	C4	RG3	46	1.930	-30.363	-6.909	0.00	0.00
ATOM	1475	C3'	RG3	46	-0.282	-33.870	-7.642	0.00	0.00
ATOM	1476	H3'	RG3	46	0.197	-34.060	-6.726	0.00	0.00
ATOM	1477	C2'	RG3	46	0.447	-32.786	-8.362	0.00	0.00
ATOM	1478	1H2'	RG3	46	1.499	-32.862	-8.246	0.00	0.00
ATOM	1479	O2'	RG3	46	0.111	-32.727	-9.698	0.00	0.00
ATOM	1480	2HO'	RG3	46	0.332	-32.950	-10.064	0.00	0.00
ATOM	1481	O3'	RG3	46	-0.366	-34.999	-8.410	0.00	0.00
ATOM	1482	H3T	RG3	46	-0.223	-34.993	-8.767	0.00	0.00

closed-like bulged-in/out conformation - closed-like_bulged-inout_c.pdb

REMARK MD average structure 17800 - 17900 ps

REMARK 1XPF (PDB database)

REMARK sequence chain I. residues 1-23 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK sequence chain II. residues 24-46 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK PDB format: output from Ptraj module of AMBER-8.0

ATOM	1	H5T	RC5	1	-10.017	31.941	-7.674	0.00	0.00
ATOM	2	O5'	RC5	1	-9.741	31.841	-7.601	0.00	0.00
ATOM	3	C5'	RC5	1	-8.603	31.265	-7.306	0.00	0.00
ATOM	4	1H5'	RC5	1	-8.107	31.061	-8.141	0.00	0.00
ATOM	5	2H5'	RC5	1	-8.814	30.413	-6.840	0.00	0.00
ATOM	6	C4'	RC5	1	-7.742	32.084	-6.487	0.00	0.00
ATOM	7	H4'	RC5	1	-7.612	32.987	-6.927	0.00	0.00
ATOM	8	O4'	RC5	1	-8.265	32.228	-5.280	0.00	0.00
ATOM	9	C1'	RC5	1	-7.250	32.501	-4.404	0.00	0.00
ATOM	10	H1'	RC5	1	-7.248	33.520	-4.190	0.00	0.00
ATOM	11	N1	RC5	1	-7.392	31.756	-3.174	0.00	0.00
ATOM	12	C6	RC5	1	-7.975	30.582	-3.122	0.00	0.00
ATOM	13	H6	RC5	1	-8.354	30.178	-3.982	0.00	0.00
ATOM	14	C5	RC5	1	-8.082	29.940	-1.987	0.00	0.00
ATOM	15	H5	RC5	1	-8.549	29.025	-1.946	0.00	0.00
ATOM	16	C4	RC5	1	-7.573	30.525	-0.887	0.00	0.00
ATOM	17	N4	RC5	1	-7.661	29.973	0.233	0.00	0.00
ATOM	18	H41	RC5	1	-7.245	30.404	0.978	0.00	0.00
ATOM	19	H42	RC5	1	-8.067	29.123	0.311	0.00	0.00
ATOM	20	N3	RC5	1	-6.988	31.638	-0.918	0.00	0.00
ATOM	21	C2	RC5	1	-6.883	32.271	-2.054	0.00	0.00
ATOM	22	O2	RC5	1	-6.314	33.303	-2.056	0.00	0.00
ATOM	23	C3'	RC5	1	-6.420	31.525	-6.269	0.00	0.00
ATOM	24	H3'	RC5	1	-6.546	30.547	-6.053	0.00	0.00
ATOM	25	C2'	RC5	1	-5.983	32.213	-5.096	0.00	0.00
ATOM	26	1H2'	RC5	1	-5.379	31.618	-4.540	0.00	0.00
ATOM	27	O2'	RC5	1	-5.346	33.354	-5.384	0.00	0.00
ATOM	28	2HO'	RC5	1	-4.714	33.178	-5.873	0.00	0.00
ATOM	29	O3'	RC5	1	-5.597	31.719	-7.297	0.00	0.00
ATOM	30	P	RU	2	-4.303	30.985	-7.416	0.00	0.00
ATOM	31	O1P	RU	2	-4.571	29.665	-7.127	0.00	0.00
ATOM	32	O2P	RU	2	-3.742	31.309	-8.619	0.00	0.00
ATOM	33	O5'	RU	2	-3.391	31.574	-6.344	0.00	0.00
ATOM	34	C5'	RU	2	-2.525	31.394	-6.051	0.00	0.00
ATOM	35	1H5'	RU	2	-2.259	31.437	-6.692	0.00	0.00
ATOM	36	2H5'	RU	2	-2.585	30.740	-6.006	0.00	0.00
ATOM	37	C4'	RU	2	-1.845	32.054	-4.915	0.00	0.00
ATOM	38	H4'	RU	2	-1.383	32.935	-5.262	0.00	0.00
ATOM	39	O4'	RU	2	-2.719	32.369	-3.885	0.00	0.00
ATOM	40	C1'	RU	2	-2.067	32.224	-2.662	0.00	0.00
ATOM	41	H1'	RU	2	-2.044	33.163	-2.175	0.00	0.00
ATOM	42	N1	RU	2	-2.724	31.258	-1.777	0.00	0.00
ATOM	43	C6	RU	2	-3.587	30.327	-2.223	0.00	0.00
ATOM	44	H6	RU	2	-3.765	30.251	-3.241	0.00	0.00
ATOM	45	C5	RU	2	-4.217	29.508	-1.389	0.00	0.00
ATOM	46	H5	RU	2	-4.889	28.791	-1.752	0.00	0.00
ATOM	47	C4	RU	2	-4.015	29.574	-0.008	0.00	0.00
ATOM	48	O4	RU	2	-4.562	28.897	0.812	0.00	0.00
ATOM	49	N3	RU	2	-3.119	30.497	0.364	0.00	0.00
ATOM	50	H3	RU	2	-2.930	30.559	1.318	0.00	0.00
ATOM	51	C2	RU	2	-2.441	31.329	-0.448	0.00	0.00
ATOM	52	O2	RU	2	-1.626	32.073	0.019	0.00	0.00
ATOM	53	C3'	RU	2	-0.815	31.185	-4.308	0.00	0.00
ATOM	54	H3'	RU	2	-1.212	30.213	-4.186	0.00	0.00
ATOM	55	C2'	RU	2	-0.674	31.822	-2.970	0.00	0.00
ATOM	56	1H2'	RU	2	-0.309	31.131	-2.266	0.00	0.00
ATOM	57	O2'	RU	2	0.105	32.955	-3.008	0.00	0.00
ATOM	58	2HO'	RU	2	0.653	32.874	-3.186	0.00	0.00
ATOM	59	O3'	RU	2	0.352	31.166	-5.038	0.00	0.00
ATOM	60	P	RU	3	1.287	29.954	-4.986	0.00	0.00
ATOM	61	O1P	RU	3	0.503	28.771	-5.160	0.00	0.00

ATOM	62	O2P	RU	3	2.358	30.219	-5.885	0.00	0.00
ATOM	63	O5'	RU	3	1.843	29.927	-3.550	0.00	0.00
ATOM	64	C5'	RU	3	2.816	30.810	-3.135	0.00	0.00
ATOM	65	1H5'	RU	3	2.514	31.796	-3.340	0.00	0.00
ATOM	66	2H5'	RU	3	3.703	30.623	-3.655	0.00	0.00
ATOM	67	C4'	RU	3	3.091	30.688	-1.675	0.00	0.00
ATOM	68	H4'	RU	3	3.843	31.394	-1.418	0.00	0.00
ATOM	69	O4'	RU	3	1.964	30.937	-0.913	0.00	0.00
ATOM	70	C1'	RU	3	2.053	30.210	0.274	0.00	0.00
ATOM	71	H1'	RU	3	2.148	30.885	1.081	0.00	0.00
ATOM	72	N1	RU	3	0.890	29.356	0.494	0.00	0.00
ATOM	73	C6	RU	3	0.218	28.777	-0.510	0.00	0.00
ATOM	74	H6	RU	3	0.507	28.981	-1.489	0.00	0.00
ATOM	75	C5	RU	3	-0.800	27.954	-0.275	0.00	0.00
ATOM	76	H5	RU	3	-1.313	27.509	-1.067	0.00	0.00
ATOM	77	C4	RU	3	-1.215	27.644	1.024	0.00	0.00
ATOM	78	O4	RU	3	-2.123	26.917	1.319	0.00	0.00
ATOM	79	N3	RU	3	-0.492	28.243	1.970	0.00	0.00
ATOM	80	H3	RU	3	-0.734	28.034	2.888	0.00	0.00
ATOM	81	C2	RU	3	0.549	29.076	1.775	0.00	0.00
ATOM	82	O2	RU	3	1.134	29.516	2.714	0.00	0.00
ATOM	83	C3'	RU	3	3.571	29.338	-1.264	0.00	0.00
ATOM	84	H3'	RU	3	2.954	28.602	-1.718	0.00	0.00
ATOM	85	C2'	RU	3	3.293	29.388	0.205	0.00	0.00
ATOM	86	1H2'	RU	3	3.137	28.410	0.585	0.00	0.00
ATOM	87	O2'	RU	3	4.297	30.032	0.911	0.00	0.00
ATOM	88	2HO'	RU	3	5.008	29.579	0.825	0.00	0.00
ATOM	89	O3'	RU	3	4.903	29.128	-1.570	0.00	0.00
ATOM	90	P	RG	4	5.542	27.722	-1.491	0.00	0.00
ATOM	91	O1P	RG	4	4.696	26.807	-2.145	0.00	0.00
ATOM	92	O2P	RG	4	6.879	27.830	-1.899	0.00	0.00
ATOM	93	O5'	RG	4	5.559	27.435	-0.004	0.00	0.00
ATOM	94	C5'	RG	4	5.307	26.230	0.496	0.00	0.00
ATOM	95	1H5'	RG	4	6.076	25.593	0.249	0.00	0.00
ATOM	96	2H5'	RG	4	4.447	25.860	0.100	0.00	0.00
ATOM	97	C4'	RG	4	5.170	26.323	1.957	0.00	0.00
ATOM	98	H4'	RG	4	5.950	26.916	2.334	0.00	0.00
ATOM	99	O4'	RG	4	3.957	26.878	2.311	0.00	0.00
ATOM	100	C1'	RG	4	3.475	26.254	3.465	0.00	0.00
ATOM	101	H1'	RG	4	3.303	26.971	4.231	0.00	0.00
ATOM	102	N9	RG	4	2.216	25.553	3.195	0.00	0.00
ATOM	103	C8	RG	4	1.571	25.379	2.020	0.00	0.00
ATOM	104	H8	RG	4	1.947	25.765	1.113	0.00	0.00
ATOM	105	N7	RG	4	0.472	24.711	2.099	0.00	0.00
ATOM	106	C5	RG	4	0.367	24.422	3.439	0.00	0.00
ATOM	107	C6	RG	4	-0.621	23.717	4.170	0.00	0.00
ATOM	108	O6	RG	4	-1.646	23.197	3.781	0.00	0.00
ATOM	109	N1	RG	4	-0.341	23.629	5.494	0.00	0.00
ATOM	110	H1	RG	4	-0.975	23.125	6.055	0.00	0.00
ATOM	111	C2	RG	4	0.745	24.166	6.064	0.00	0.00
ATOM	112	N2	RG	4	0.901	23.974	7.317	0.00	0.00
ATOM	113	H21	RG	4	0.246	23.432	7.818	0.00	0.00
ATOM	114	H22	RG	4	1.704	24.354	7.750	0.00	0.00
ATOM	115	N3	RG	4	1.677	24.838	5.434	0.00	0.00
ATOM	116	C4	RG	4	1.435	24.935	4.114	0.00	0.00
ATOM	117	C3'	RG	4	5.235	24.987	2.632	0.00	0.00
ATOM	118	H3'	RG	4	4.637	24.303	2.083	0.00	0.00
ATOM	119	C2'	RG	4	4.557	25.304	3.919	0.00	0.00
ATOM	120	1H2'	RG	4	4.159	24.428	4.363	0.00	0.00
ATOM	121	O2'	RG	4	5.386	25.971	4.806	0.00	0.00
ATOM	122	2HO'	RG	4	5.838	25.817	4.943	0.00	0.00
ATOM	123	O3'	RG	4	6.537	24.529	2.788	0.00	0.00
ATOM	124	P	RC	5	6.853	23.013	2.862	0.00	0.00
ATOM	125	O1P	RC	5	6.174	22.368	1.772	0.00	0.00
ATOM	126	O2P	RC	5	8.281	22.871	2.984	0.00	0.00
ATOM	127	O5'	RC	5	6.213	22.509	4.179	0.00	0.00
ATOM	128	C5'	RC	5	6.741	22.830	5.417	0.00	0.00
ATOM	129	1H5'	RC	5	6.788	23.883	5.522	0.00	0.00

ATOM	130	2H5'	RC	5	7.724	22.442	5.509	0.00	0.00
ATOM	131	C4'	RC	5	5.916	22.276	6.529	0.00	0.00
ATOM	132	H4'	RC	5	6.372	22.567	7.447	0.00	0.00
ATOM	133	O4'	RC	5	4.597	22.747	6.503	0.00	0.00
ATOM	134	C1'	RC	5	3.743	21.755	7.015	0.00	0.00
ATOM	135	H1'	RC	5	3.253	22.123	7.885	0.00	0.00
ATOM	136	N1	RC	5	2.711	21.329	6.041	0.00	0.00
ATOM	137	C6	RC	5	2.813	21.568	4.718	0.00	0.00
ATOM	138	H6	RC	5	3.666	22.070	4.348	0.00	0.00
ATOM	139	C5	RC	5	1.834	21.185	3.882	0.00	0.00
ATOM	140	H5	RC	5	1.915	21.379	2.850	0.00	0.00
ATOM	141	C4	RC	5	0.733	20.528	4.427	0.00	0.00
ATOM	142	N4	RC	5	-0.239	20.151	3.685	0.00	0.00
ATOM	143	H41	RC	5	-0.996	19.704	4.122	0.00	0.00
ATOM	144	H42	RC	5	-0.219	20.331	2.730	0.00	0.00
ATOM	145	N3	RC	5	0.626	20.264	5.686	0.00	0.00
ATOM	146	C2	RC	5	1.605	20.653	6.509	0.00	0.00
ATOM	147	O2	RC	5	1.497	20.376	7.676	0.00	0.00
ATOM	148	C3'	RC	5	5.817	20.783	6.523	0.00	0.00
ATOM	149	H3'	RC	5	5.567	20.462	5.543	0.00	0.00
ATOM	150	C2'	RC	5	4.624	20.598	7.411	0.00	0.00
ATOM	151	1H2'	RC	5	4.154	19.666	7.220	0.00	0.00
ATOM	152	O2'	RC	5	4.939	20.736	8.752	0.00	0.00
ATOM	153	2HO'	RC	5	5.331	20.456	8.975	0.00	0.00
ATOM	154	O3'	RC	5	6.966	20.152	7.003	0.00	0.00
ATOM	155	P	RU	6	7.306	18.699	6.588	0.00	0.00
ATOM	156	O1P	RU	6	7.237	18.631	5.157	0.00	0.00
ATOM	157	O2P	RU	6	8.541	18.346	7.248	0.00	0.00
ATOM	158	O5'	RU	6	6.160	17.811	7.163	0.00	0.00
ATOM	159	C5'	RU	6	6.089	17.508	8.514	0.00	0.00
ATOM	160	1H5'	RU	6	6.072	18.405	9.082	0.00	0.00
ATOM	161	2H5'	RU	6	6.951	16.952	8.800	0.00	0.00
ATOM	162	C4'	RU	6	4.867	16.697	8.857	0.00	0.00
ATOM	163	H4'	RU	6	4.883	16.521	9.903	0.00	0.00
ATOM	164	O4'	RU	6	3.670	17.346	8.524	0.00	0.00
ATOM	165	C1'	RU	6	2.680	16.375	8.272	0.00	0.00
ATOM	166	H1'	RU	6	1.926	16.428	9.029	0.00	0.00
ATOM	167	N1	RU	6	2.026	16.534	6.962	0.00	0.00
ATOM	168	C6	RU	6	2.637	17.148	5.920	0.00	0.00
ATOM	169	H6	RU	6	3.607	17.551	6.056	0.00	0.00
ATOM	170	C5	RU	6	2.020	17.248	4.727	0.00	0.00
ATOM	171	H5	RU	6	2.498	17.731	3.920	0.00	0.00
ATOM	172	C4	RU	6	0.720	16.711	4.503	0.00	0.00
ATOM	173	O4	RU	6	0.097	16.753	3.467	0.00	0.00
ATOM	174	N3	RU	6	0.191	16.097	5.575	0.00	0.00
ATOM	175	H3	RU	6	-0.698	15.684	5.453	0.00	0.00
ATOM	176	C2	RU	6	0.777	15.971	6.795	0.00	0.00
ATOM	177	O2	RU	6	0.196	15.368	7.663	0.00	0.00
ATOM	178	C3'	RU	6	4.807	15.369	8.173	0.00	0.00
ATOM	179	H3'	RU	6	4.995	15.514	7.139	0.00	0.00
ATOM	180	C2'	RU	6	3.356	15.024	8.366	0.00	0.00
ATOM	181	1H2'	RU	6	3.021	14.363	7.609	0.00	0.00
ATOM	182	O2'	RU	6	3.110	14.489	9.619	0.00	0.00
ATOM	183	2HO'	RU	6	3.543	13.886	9.737	0.00	0.00
ATOM	184	O3'	RU	6	5.683	14.431	8.717	0.00	0.00
ATOM	185	P	RG	7	6.077	13.155	7.933	0.00	0.00
ATOM	186	O1P	RG	7	6.325	13.523	6.576	0.00	0.00
ATOM	187	O2P	RG	7	7.120	12.497	8.678	0.00	0.00
ATOM	188	O5'	RG	7	4.804	12.261	7.945	0.00	0.00
ATOM	189	C5'	RG	7	4.450	11.514	9.052	0.00	0.00
ATOM	190	1H5'	RG	7	4.302	12.155	9.882	0.00	0.00
ATOM	191	2H5'	RG	7	5.234	10.837	9.284	0.00	0.00
ATOM	192	C4'	RG	7	3.197	10.714	8.814	0.00	0.00
ATOM	193	H4'	RG	7	3.003	10.146	9.690	0.00	0.00
ATOM	194	O4'	RG	7	2.078	11.514	8.547	0.00	0.00
ATOM	195	C1'	RG	7	1.213	10.828	7.672	0.00	0.00
ATOM	196	H1'	RG	7	0.257	10.674	8.129	0.00	0.00
ATOM	197	N9	RG	7	1.018	11.591	6.439	0.00	0.00

ATOM	198	C8	RG	7	1.905	12.362	5.769	0.00	0.00
ATOM	199	H8	RG	7	2.883	12.551	6.142	0.00	0.00
ATOM	200	N7	RG	7	1.470	12.829	4.648	0.00	0.00
ATOM	201	C5	RG	7	0.192	12.313	4.555	0.00	0.00
ATOM	202	C6	RG	7	-0.796	12.408	3.532	0.00	0.00
ATOM	203	O6	RG	7	-0.744	12.979	2.464	0.00	0.00
ATOM	204	N1	RG	7	-1.941	11.728	3.810	0.00	0.00
ATOM	205	H1	RG	7	-2.664	11.743	3.131	0.00	0.00
ATOM	206	C2	RG	7	-2.133	11.045	4.938	0.00	0.00
ATOM	207	N2	RG	7	-3.272	10.469	5.067	0.00	0.00
ATOM	208	H21	RG	7	-3.934	10.507	4.336	0.00	0.00
ATOM	209	H22	RG	7	-3.439	9.975	5.894	0.00	0.00
ATOM	210	N3	RG	7	-1.252	10.920	5.911	0.00	0.00
ATOM	211	C4	RG	7	-0.098	11.574	5.659	0.00	0.00
ATOM	212	C3'	RG	7	3.311	9.748	7.674	0.00	0.00
ATOM	213	H3'	RG	7	3.753	10.239	6.837	0.00	0.00
ATOM	214	C2'	RG	7	1.850	9.486	7.381	0.00	0.00
ATOM	215	1H2'	RG	7	1.706	9.199	6.363	0.00	0.00
ATOM	216	O2'	RG	7	1.307	8.524	8.236	0.00	0.00
ATOM	217	2HO'	RG	7	1.744	7.787	8.135	0.00	0.00
ATOM	218	O3'	RG	7	4.052	8.625	8.027	0.00	0.00
ATOM	219	P	RA	8	4.509	7.568	7.086	0.00	0.00
ATOM	220	O1P	RA	8	4.423	8.074	5.764	0.00	0.00
ATOM	221	O2P	RA	8	5.707	7.083	7.562	0.00	0.00
ATOM	222	O5'	RA	8	3.480	6.465	7.280	0.00	0.00
ATOM	223	C5'	RA	8	3.472	5.635	8.380	0.00	0.00
ATOM	224	1H5'	RA	8	3.363	6.210	9.261	0.00	0.00
ATOM	225	2H5'	RA	8	4.385	5.120	8.429	0.00	0.00
ATOM	226	C4'	RA	8	2.379	4.619	8.307	0.00	0.00
ATOM	227	H4'	RA	8	2.449	3.987	9.148	0.00	0.00
ATOM	228	O4'	RA	8	1.133	5.212	8.324	0.00	0.00
ATOM	229	C1'	RA	8	0.269	4.461	7.537	0.00	0.00
ATOM	230	H1'	RA	8	-0.540	4.119	8.114	0.00	0.00
ATOM	231	N9	RA	8	-0.243	5.302	6.495	0.00	0.00
ATOM	232	C8	RA	8	0.343	5.872	5.532	0.00	0.00
ATOM	233	H8	RA	8	1.321	5.784	5.441	0.00	0.00
ATOM	234	N7	RA	8	-0.385	6.539	4.743	0.00	0.00
ATOM	235	C5	RA	8	-1.551	6.402	5.226	0.00	0.00
ATOM	236	C6	RA	8	-2.762	6.842	4.865	0.00	0.00
ATOM	237	N6	RA	8	-3.068	7.559	3.872	0.00	0.00
ATOM	238	H61	RA	8	-3.947	7.816	3.711	0.00	0.00
ATOM	239	H62	RA	8	-2.413	7.845	3.319	0.00	0.00
ATOM	240	N1	RA	8	-3.714	6.544	5.538	0.00	0.00
ATOM	241	C2	RA	8	-3.497	5.817	6.557	0.00	0.00
ATOM	242	H2	RA	8	-4.286	5.596	7.082	0.00	0.00
ATOM	243	N3	RA	8	-2.424	5.325	7.015	0.00	0.00
ATOM	244	C4	RA	8	-1.474	5.658	6.297	0.00	0.00
ATOM	245	C3'	RA	8	2.437	3.749	7.087	0.00	0.00
ATOM	246	H3'	RA	8	2.642	4.357	6.245	0.00	0.00
ATOM	247	C2'	RA	8	1.024	3.264	7.023	0.00	0.00
ATOM	248	1H2'	RA	8	0.743	3.005	6.036	0.00	0.00
ATOM	249	O2'	RA	8	0.791	2.194	7.871	0.00	0.00
ATOM	250	2HO'	RA	8	1.292	1.485	7.603	0.00	0.00
ATOM	251	O3'	RA	8	3.385	2.743	7.190	0.00	0.00
ATOM	252	P	RG	9	3.719	1.769	6.041	0.00	0.00
ATOM	253	O1P	RG	9	3.261	2.343	4.814	0.00	0.00
ATOM	254	O2P	RG	9	5.088	1.401	6.169	0.00	0.00
ATOM	255	O5'	RG	9	2.856	0.512	6.343	0.00	0.00
ATOM	256	C5'	RG	9	3.231	-0.408	7.311	0.00	0.00
ATOM	257	1H5'	RG	9	3.360	0.090	8.232	0.00	0.00
ATOM	258	2H5'	RG	9	4.146	-0.857	7.041	0.00	0.00
ATOM	259	C4'	RG	9	2.209	-1.490	7.480	0.00	0.00
ATOM	260	H4'	RG	9	2.544	-2.141	8.254	0.00	0.00
ATOM	261	O4'	RG	9	0.989	-0.940	7.883	0.00	0.00
ATOM	262	C1'	RG	9	-0.045	-1.445	7.096	0.00	0.00
ATOM	263	H1'	RG	9	-0.841	-1.769	7.726	0.00	0.00
ATOM	264	N9	RG	9	-0.587	-0.390	6.235	0.00	0.00
ATOM	265	C8	RG	9	-0.142	0.083	5.052	0.00	0.00

ATOM	266	H8	RG	9	0.741	-0.262	4.596	0.00	0.00
ATOM	267	N7	RG	9	-0.873	1.009	4.529	0.00	0.00
ATOM	268	C5	RG	9	-1.893	1.158	5.428	0.00	0.00
ATOM	269	C6	RG	9	-3.013	2.024	5.430	0.00	0.00
ATOM	270	O6	RG	9	-3.332	2.869	4.622	0.00	0.00
ATOM	271	N1	RG	9	-3.809	1.855	6.505	0.00	0.00
ATOM	272	H1	RG	9	-4.622	2.401	6.553	0.00	0.00
ATOM	273	C2	RG	9	-3.561	0.976	7.478	0.00	0.00
ATOM	274	N2	RG	9	-4.380	0.964	8.454	0.00	0.00
ATOM	275	H21	RG	9	-5.143	1.581	8.462	0.00	0.00
ATOM	276	H22	RG	9	-4.210	0.329	9.180	0.00	0.00
ATOM	277	N3	RG	9	-2.536	0.162	7.530	0.00	0.00
ATOM	278	C4	RG	9	-1.731	0.298	6.468	0.00	0.00
ATOM	279	C3'	RG	9	1.979	-2.321	6.246	0.00	0.00
ATOM	280	H3'	RG	9	2.139	-1.715	5.384	0.00	0.00
ATOM	281	C2'	RG	9	0.507	-2.644	6.365	0.00	0.00
ATOM	282	1H2'	RG	9	0.053	-2.753	5.409	0.00	0.00
ATOM	283	O2'	RG	9	0.281	-3.780	7.144	0.00	0.00
ATOM	284	2HO'	RG	9	0.719	-4.453	6.814	0.00	0.00
ATOM	285	O3'	RG	9	2.809	-3.449	6.210	0.00	0.00
ATOM	286	P	RG	10	2.832	-4.444	5.021	0.00	0.00
ATOM	287	O1P	RG	10	2.398	-5.673	5.525	0.00	0.00
ATOM	288	O2P	RG	10	2.151	-3.887	3.897	0.00	0.00
ATOM	289	O5'	RG	10	4.300	-4.569	4.623	0.00	0.00
ATOM	290	C5'	RG	10	5.255	-5.020	5.509	0.00	0.00
ATOM	291	1H5'	RG	10	4.883	-5.832	6.053	0.00	0.00
ATOM	292	2H5'	RG	10	5.470	-4.238	6.182	0.00	0.00
ATOM	293	C4'	RG	10	6.529	-5.456	4.825	0.00	0.00
ATOM	294	H4'	RG	10	7.250	-5.652	5.585	0.00	0.00
ATOM	295	O4'	RG	10	6.345	-6.642	4.101	0.00	0.00
ATOM	296	C1'	RG	10	6.994	-6.553	2.856	0.00	0.00
ATOM	297	H1'	RG	10	7.603	-7.418	2.679	0.00	0.00
ATOM	298	N9	RG	10	6.000	-6.484	1.780	0.00	0.00
ATOM	299	C8	RG	10	4.644	-6.485	1.880	0.00	0.00
ATOM	300	H8	RG	10	4.144	-6.443	2.818	0.00	0.00
ATOM	301	N7	RG	10	4.021	-6.588	0.753	0.00	0.00
ATOM	302	C5	RG	10	5.047	-6.653	-0.176	0.00	0.00
ATOM	303	C6	RG	10	5.026	-6.804	-1.592	0.00	0.00
ATOM	304	O6	RG	10	4.074	-6.939	-2.336	0.00	0.00
ATOM	305	N1	RG	10	6.265	-6.801	-2.164	0.00	0.00
ATOM	306	H1	RG	10	6.313	-6.903	-3.149	0.00	0.00
ATOM	307	C2	RG	10	7.404	-6.693	-1.468	0.00	0.00
ATOM	308	N2	RG	10	8.498	-6.667	-2.151	0.00	0.00
ATOM	309	H21	RG	10	8.462	-6.703	-3.139	0.00	0.00
ATOM	310	H22	RG	10	9.353	-6.591	-1.662	0.00	0.00
ATOM	311	N3	RG	10	7.480	-6.584	-0.156	0.00	0.00
ATOM	312	C4	RG	10	6.261	-6.568	0.444	0.00	0.00
ATOM	313	C3'	RG	10	7.128	-4.437	3.894	0.00	0.00
ATOM	314	H3'	RG	10	6.353	-3.920	3.377	0.00	0.00
ATOM	315	C2'	RG	10	7.875	-5.330	2.925	0.00	0.00
ATOM	316	1H2'	RG	10	7.984	-4.866	1.970	0.00	0.00
ATOM	317	O2'	RG	10	9.123	-5.720	3.417	0.00	0.00
ATOM	318	2HO'	RG	10	9.435	-5.274	3.739	0.00	0.00
ATOM	319	O3'	RG	10	7.993	-3.559	4.548	0.00	0.00
ATOM	320	P	RU	11	8.178	-2.101	4.070	0.00	0.00
ATOM	321	O1P	RU	11	6.875	-1.508	3.978	0.00	0.00
ATOM	322	O2P	RU	11	9.159	-1.485	4.919	0.00	0.00
ATOM	323	O5'	RU	11	8.770	-2.193	2.637	0.00	0.00
ATOM	324	C5'	RU	11	10.116	-2.449	2.397	0.00	0.00
ATOM	325	1H5'	RU	11	10.392	-3.377	2.835	0.00	0.00
ATOM	326	2H5'	RU	11	10.707	-1.679	2.831	0.00	0.00
ATOM	327	C4'	RU	11	10.419	-2.501	0.924	0.00	0.00
ATOM	328	H4'	RU	11	11.470	-2.646	0.801	0.00	0.00
ATOM	329	O4'	RU	11	9.754	-3.562	0.292	0.00	0.00
ATOM	330	C1'	RU	11	9.442	-3.180	-1.027	0.00	0.00
ATOM	331	H1'	RU	11	9.922	-3.852	-1.711	0.00	0.00
ATOM	332	N1	RU	11	7.991	-3.210	-1.292	0.00	0.00
ATOM	333	C6	RU	11	7.063	-3.086	-0.301	0.00	0.00

ATOM	334	H6	RU	11	7.383	-2.917	0.696	0.00	0.00
ATOM	335	C5	RU	11	5.749	-3.191	-0.567	0.00	0.00
ATOM	336	H5	RU	11	5.034	-3.094	0.212	0.00	0.00
ATOM	337	C4	RU	11	5.276	-3.420	-1.892	0.00	0.00
ATOM	338	O4	RU	11	4.121	-3.564	-2.211	0.00	0.00
ATOM	339	N3	RU	11	6.248	-3.490	-2.830	0.00	0.00
ATOM	340	H3	RU	11	5.955	-3.618	-3.766	0.00	0.00
ATOM	341	C2	RU	11	7.583	-3.372	-2.604	0.00	0.00
ATOM	342	O2	RU	11	8.348	-3.413	-3.544	0.00	0.00
ATOM	343	C3'	RU	11	10.036	-1.253	0.170	0.00	0.00
ATOM	344	H3'	RU	11	9.052	-0.968	0.461	0.00	0.00
ATOM	345	C2'	RU	11	10.008	-1.787	-1.232	0.00	0.00
ATOM	346	1H2'	RU	11	9.382	-1.194	-1.850	0.00	0.00
ATOM	347	O2'	RU	11	11.278	-1.900	-1.786	0.00	0.00
ATOM	348	2HO'	RU	11	11.598	-1.435	-1.823	0.00	0.00
ATOM	349	O3'	RU	11	10.937	-0.195	0.333	0.00	0.00
ATOM	350	P	RG	12	10.484	1.289	0.127	0.00	0.00
ATOM	351	O1P	RG	12	9.234	1.477	0.826	0.00	0.00
ATOM	352	O2P	RG	12	11.605	2.142	0.463	0.00	0.00
ATOM	353	O5'	RG	12	10.199	1.432	-1.405	0.00	0.00
ATOM	354	C5'	RG	12	11.240	1.536	-2.332	0.00	0.00
ATOM	355	1H5'	RG	12	11.903	0.707	-2.225	0.00	0.00
ATOM	356	2H5'	RG	12	11.791	2.432	-2.157	0.00	0.00
ATOM	357	C4'	RG	12	10.724	1.563	-3.751	0.00	0.00
ATOM	358	H4'	RG	12	11.561	1.640	-4.414	0.00	0.00
ATOM	359	O4'	RG	12	10.009	0.397	-4.062	0.00	0.00
ATOM	360	C1'	RG	12	9.000	0.715	-4.986	0.00	0.00
ATOM	361	H1'	RG	12	9.153	0.176	-5.899	0.00	0.00
ATOM	362	N9	RG	12	7.671	0.358	-4.468	0.00	0.00
ATOM	363	C8	RG	12	7.240	0.267	-3.183	0.00	0.00
ATOM	364	H8	RG	12	7.869	0.490	-2.355	0.00	0.00
ATOM	365	N7	RG	12	6.013	-0.124	-3.057	0.00	0.00
ATOM	366	C5	RG	12	5.578	-0.272	-4.367	0.00	0.00
ATOM	367	C6	RG	12	4.319	-0.662	-4.915	0.00	0.00
ATOM	368	O6	RG	12	3.302	-1.011	-4.348	0.00	0.00
ATOM	369	N1	RG	12	4.282	-0.616	-6.281	0.00	0.00
ATOM	370	H1	RG	12	3.432	-0.865	-6.730	0.00	0.00
ATOM	371	C2	RG	12	5.332	-0.275	-7.039	0.00	0.00
ATOM	372	N2	RG	12	5.153	-0.272	-8.308	0.00	0.00
ATOM	373	H21	RG	12	4.268	-0.501	-8.687	0.00	0.00
ATOM	374	H22	RG	12	5.915	-0.030	-8.879	0.00	0.00
ATOM	375	N3	RG	12	6.522	0.067	-6.585	0.00	0.00
ATOM	376	C4	RG	12	6.585	0.052	-5.232	0.00	0.00
ATOM	377	C3'	RG	12	9.808	2.725	-4.048	0.00	0.00
ATOM	378	H3'	RG	12	9.108	2.830	-3.248	0.00	0.00
ATOM	379	C2'	RG	12	9.098	2.200	-5.267	0.00	0.00
ATOM	380	1H2'	RG	12	8.133	2.642	-5.361	0.00	0.00
ATOM	381	O2'	RG	12	9.841	2.385	-6.429	0.00	0.00
ATOM	382	2HO'	RG	12	9.935	3.095	-6.564	0.00	0.00
ATOM	383	O3'	RG	12	10.517	3.916	-4.285	0.00	0.00
ATOM	384	P	RC	13	9.826	5.313	-4.191	0.00	0.00
ATOM	385	O1P	RC	13	9.052	5.343	-2.980	0.00	0.00
ATOM	386	O2P	RC	13	10.839	6.320	-4.402	0.00	0.00
ATOM	387	O5'	RC	13	8.854	5.352	-5.406	0.00	0.00
ATOM	388	C5'	RC	13	8.630	5.783	-6.232	0.00	0.00
ATOM	389	1H5'	RC	13	9.197	5.782	-6.408	0.00	0.00
ATOM	390	2H5'	RC	13	8.620	6.323	-5.953	0.00	0.00
ATOM	391	C4'	RC	13	7.629	5.500	-7.298	0.00	0.00
ATOM	392	H4'	RC	13	8.088	5.671	-8.237	0.00	0.00
ATOM	393	O4'	RC	13	7.179	4.172	-7.240	0.00	0.00
ATOM	394	C1'	RC	13	5.832	4.119	-7.633	0.00	0.00
ATOM	395	H1'	RC	13	5.739	3.496	-8.494	0.00	0.00
ATOM	396	N1	RC	13	4.952	3.583	-6.573	0.00	0.00
ATOM	397	C6	RC	13	5.261	3.676	-5.259	0.00	0.00
ATOM	398	H6	RC	13	6.166	4.142	-4.967	0.00	0.00
ATOM	399	C5	RC	13	4.436	3.176	-4.324	0.00	0.00
ATOM	400	H5	RC	13	4.687	3.253	-3.297	0.00	0.00
ATOM	401	C4	RC	13	3.252	2.575	-4.761	0.00	0.00

ATOM	402	N4	RC	13	2.432	2.065	-3.912	0.00	0.00
ATOM	403	H41	RC	13	1.634	1.605	-4.262	0.00	0.00
ATOM	404	H42	RC	13	2.648	2.085	-2.959	0.00	0.00
ATOM	405	N3	RC	13	2.928	2.477	-6.016	0.00	0.00
ATOM	406	C2	RC	13	3.759	2.987	-6.937	0.00	0.00
ATOM	407	O2	RC	13	3.422	2.917	-8.102	0.00	0.00
ATOM	408	C3'	RC	13	6.412	6.368	-7.225	0.00	0.00
ATOM	409	H3'	RC	13	6.088	6.416	-6.216	0.00	0.00
ATOM	410	C2'	RC	13	5.444	5.531	-8.010	0.00	0.00
ATOM	411	1H2'	RC	13	4.448	5.744	-7.731	0.00	0.00
ATOM	412	O2'	RC	13	5.607	5.677	-9.377	0.00	0.00
ATOM	413	2HO'	RC	13	5.427	6.080	-9.611	0.00	0.00
ATOM	414	O3'	RC	13	6.620	7.649	-7.756	0.00	0.00
ATOM	415	P	RA	14	5.713	8.857	-7.348	0.00	0.00
ATOM	416	O1P	RA	14	5.543	8.836	-5.912	0.00	0.00
ATOM	417	O2P	RA	14	6.270	10.041	-7.971	0.00	0.00
ATOM	418	O5'	RA	14	4.310	8.580	-7.985	0.00	0.00
ATOM	419	C5'	RA	14	4.080	8.752	-9.348	0.00	0.00
ATOM	420	1H5'	RA	14	4.826	8.229	-9.904	0.00	0.00
ATOM	421	2H5'	RA	14	4.141	9.783	-9.603	0.00	0.00
ATOM	422	C4'	RA	14	2.709	8.242	-9.743	0.00	0.00
ATOM	423	H4'	RA	14	2.606	8.366	-10.801	0.00	0.00
ATOM	424	O4'	RA	14	2.554	6.875	-9.441	0.00	0.00
ATOM	425	C1'	RA	14	1.213	6.636	-9.075	0.00	0.00
ATOM	426	H1'	RA	14	0.782	5.887	-9.707	0.00	0.00
ATOM	427	N9	RA	14	1.122	6.174	-7.683	0.00	0.00
ATOM	428	C8	RA	14	1.956	6.411	-6.634	0.00	0.00
ATOM	429	H8	RA	14	2.818	7.031	-6.712	0.00	0.00
ATOM	430	N7	RA	14	1.630	5.803	-5.542	0.00	0.00
ATOM	431	C5	RA	14	0.464	5.136	-5.891	0.00	0.00
ATOM	432	C6	RA	14	-0.442	4.295	-5.228	0.00	0.00
ATOM	433	N6	RA	14	-0.330	3.898	-3.994	0.00	0.00
ATOM	434	H61	RA	14	-1.019	3.285	-3.635	0.00	0.00
ATOM	435	H62	RA	14	0.452	4.177	-3.464	0.00	0.00
ATOM	436	N1	RA	14	-1.513	3.829	-5.838	0.00	0.00
ATOM	437	C2	RA	14	-1.712	4.180	-7.086	0.00	0.00
ATOM	438	H2	RA	14	-2.591	3.795	-7.544	0.00	0.00
ATOM	439	N3	RA	14	-0.957	4.943	-7.844	0.00	0.00
ATOM	440	C4	RA	14	0.132	5.389	-7.181	0.00	0.00
ATOM	441	C3'	RA	14	1.555	8.966	-9.080	0.00	0.00
ATOM	442	H3'	RA	14	1.763	9.075	-8.035	0.00	0.00
ATOM	443	C2'	RA	14	0.465	7.938	-9.265	0.00	0.00
ATOM	444	1H2'	RA	14	-0.302	8.055	-8.530	0.00	0.00
ATOM	445	O2'	RA	14	-0.078	7.952	-10.548	0.00	0.00
ATOM	446	2HO'	RA	14	-0.338	8.585	-10.711	0.00	0.00
ATOM	447	O3'	RA	14	1.255	10.200	-9.677	0.00	0.00
ATOM	448	P	RC	15	0.518	11.332	-8.900	0.00	0.00
ATOM	449	O1P	RC	15	1.134	11.456	-7.597	0.00	0.00
ATOM	450	O2P	RC	15	0.471	12.489	-9.772	0.00	0.00
ATOM	451	O5'	RC	15	-0.950	10.824	-8.686	0.00	0.00
ATOM	452	C5'	RC	15	-1.892	10.848	-9.712	0.00	0.00
ATOM	453	1H5'	RC	15	-1.457	10.465	-10.602	0.00	0.00
ATOM	454	2H5'	RC	15	-2.194	11.851	-9.896	0.00	0.00
ATOM	455	C4'	RC	15	-3.118	10.023	-9.381	0.00	0.00
ATOM	456	H4'	RC	15	-3.747	10.012	-10.249	0.00	0.00
ATOM	457	O4'	RC	15	-2.774	8.693	-9.057	0.00	0.00
ATOM	458	C1'	RC	15	-3.700	8.188	-8.119	0.00	0.00
ATOM	459	H1'	RC	15	-4.178	7.316	-8.518	0.00	0.00
ATOM	460	N1	RC	15	-3.087	7.842	-6.818	0.00	0.00
ATOM	461	C6	RC	15	-1.975	8.458	-6.345	0.00	0.00
ATOM	462	H6	RC	15	-1.484	9.187	-6.933	0.00	0.00
ATOM	463	C5	RC	15	-1.490	8.155	-5.136	0.00	0.00
ATOM	464	H5	RC	15	-0.620	8.639	-4.771	0.00	0.00
ATOM	465	C4	RC	15	-2.185	7.207	-4.383	0.00	0.00
ATOM	466	N4	RC	15	-1.775	6.880	-3.213	0.00	0.00
ATOM	467	H41	RC	15	-2.280	6.184	-2.732	0.00	0.00
ATOM	468	H42	RC	15	-0.959	7.288	-2.853	0.00	0.00
ATOM	469	N3	RC	15	-3.262	6.617	-4.809	0.00	0.00

ATOM	470	C2	RC	15	-3.731	6.915	-6.025	0.00	0.00
ATOM	471	O2	RC	15	-4.746	6.365	-6.393	0.00	0.00
ATOM	472	C3'	RC	15	-3.955	10.524	-8.227	0.00	0.00
ATOM	473	H3'	RC	15	-3.308	10.750	-7.404	0.00	0.00
ATOM	474	C2'	RC	15	-4.742	9.264	-7.931	0.00	0.00
ATOM	475	1H2'	RC	15	-5.116	9.272	-6.929	0.00	0.00
ATOM	476	O2'	RC	15	-5.780	9.039	-8.843	0.00	0.00
ATOM	477	2HO'	RC	15	-6.137	9.443	-8.972	0.00	0.00
ATOM	478	O3'	RC	15	-4.801	11.600	-8.524	0.00	0.00
ATOM	479	P	RA	16	-5.262	12.587	-7.410	0.00	0.00
ATOM	480	O1P	RA	16	-4.079	13.136	-6.806	0.00	0.00
ATOM	481	O2P	RA	16	-6.216	13.491	-8.014	0.00	0.00
ATOM	482	O5'	RA	16	-6.006	11.742	-6.314	0.00	0.00
ATOM	483	C5'	RA	16	-7.287	11.231	-6.519	0.00	0.00
ATOM	484	1H5'	RA	16	-7.313	10.728	-7.456	0.00	0.00
ATOM	485	2H5'	RA	16	-7.989	12.032	-6.551	0.00	0.00
ATOM	486	C4'	RA	16	-7.707	10.257	-5.438	0.00	0.00
ATOM	487	H4'	RA	16	-8.620	9.805	-5.749	0.00	0.00
ATOM	488	O4'	RA	16	-6.760	9.237	-5.234	0.00	0.00
ATOM	489	C1'	RA	16	-6.728	8.890	-3.875	0.00	0.00
ATOM	490	H1'	RA	16	-6.885	7.836	-3.740	0.00	0.00
ATOM	491	N9	RA	16	-5.446	9.248	-3.258	0.00	0.00
ATOM	492	C8	RA	16	-4.495	10.101	-3.704	0.00	0.00
ATOM	493	H8	RA	16	-4.576	10.620	-4.626	0.00	0.00
ATOM	494	N7	RA	16	-3.485	10.226	-2.914	0.00	0.00
ATOM	495	C5	RA	16	-3.799	9.385	-1.859	0.00	0.00
ATOM	496	C6	RA	16	-3.185	9.021	-0.655	0.00	0.00
ATOM	497	N6	RA	16	-2.045	9.461	-0.238	0.00	0.00
ATOM	498	H61	RA	16	-1.709	9.160	0.633	0.00	0.00
ATOM	499	H62	RA	16	-1.553	10.103	-0.788	0.00	0.00
ATOM	500	N1	RA	16	-3.750	8.181	0.180	0.00	0.00
ATOM	501	C2	RA	16	-4.915	7.698	-0.153	0.00	0.00
ATOM	502	H2	RA	16	-5.343	7.020	0.539	0.00	0.00
ATOM	503	N3	RA	16	-5.613	7.936	-1.236	0.00	0.00
ATOM	504	C4	RA	16	-4.989	8.792	-2.062	0.00	0.00
ATOM	505	C3'	RA	16	-7.971	10.875	-4.090	0.00	0.00
ATOM	506	H3'	RA	16	-7.179	11.555	-3.868	0.00	0.00
ATOM	507	C2'	RA	16	-7.863	9.643	-3.220	0.00	0.00
ATOM	508	1H2'	RA	16	-7.633	9.898	-2.208	0.00	0.00
ATOM	509	O2'	RA	16	-8.999	8.825	-3.265	0.00	0.00
ATOM	510	2HO'	RA	16	-9.333	8.792	-2.961	0.00	0.00
ATOM	511	O3'	RA	16	-9.219	11.492	-3.987	0.00	0.00
ATOM	512	P	RC	17	-9.481	12.629	-2.958	0.00	0.00
ATOM	513	O1P	RC	17	-8.506	13.670	-3.189	0.00	0.00
ATOM	514	O2P	RC	17	-10.879	12.966	-3.040	0.00	0.00
ATOM	515	O5'	RC	17	-9.208	12.026	-1.539	0.00	0.00
ATOM	516	C5'	RC	17	-10.072	11.105	-0.932	0.00	0.00
ATOM	517	1H5'	RC	17	-10.257	10.291	-1.599	0.00	0.00
ATOM	518	2H5'	RC	17	-11.009	11.576	-0.721	0.00	0.00
ATOM	519	C4'	RC	17	-9.506	10.545	0.357	0.00	0.00
ATOM	520	H4'	RC	17	-10.179	9.793	0.720	0.00	0.00
ATOM	521	O4'	RC	17	-8.233	9.959	0.194	0.00	0.00
ATOM	522	C1'	RC	17	-7.452	10.177	1.354	0.00	0.00
ATOM	523	H1'	RC	17	-7.154	9.236	1.777	0.00	0.00
ATOM	524	N1	RC	17	-6.236	10.972	1.081	0.00	0.00
ATOM	525	C6	RC	17	-6.104	11.728	-0.038	0.00	0.00
ATOM	526	H6	RC	17	-6.892	11.768	-0.747	0.00	0.00
ATOM	527	C5	RC	17	-4.980	12.413	-0.255	0.00	0.00
ATOM	528	H5	RC	17	-4.875	12.991	-1.138	0.00	0.00
ATOM	529	C4	RC	17	-3.972	12.332	0.709	0.00	0.00
ATOM	530	N4	RC	17	-2.872	12.962	0.535	0.00	0.00
ATOM	531	H41	RC	17	-2.180	12.877	1.224	0.00	0.00
ATOM	532	H42	RC	17	-2.749	13.490	-0.280	0.00	0.00
ATOM	533	N3	RC	17	-4.074	11.629	1.800	0.00	0.00
ATOM	534	C2	RC	17	-5.202	10.943	2.006	0.00	0.00
ATOM	535	O2	RC	17	-5.284	10.300	3.036	0.00	0.00
ATOM	536	C3'	RC	17	-9.349	11.579	1.444	0.00	0.00
ATOM	537	H3'	RC	17	-8.897	12.453	1.023	0.00	0.00

ATOM	538	C2'	RC	17	-8.357	10.877	2.345	0.00	0.00
ATOM	539	1H2'	RC	17	-7.822	11.582	2.938	0.00	0.00
ATOM	540	O2'	RC	17	-8.940	9.898	3.144	0.00	0.00
ATOM	541	2HO'	RC	17	-9.239	10.030	3.553	0.00	0.00
ATOM	542	O3'	RC	17	-10.561	11.883	2.073	0.00	0.00
ATOM	543	P	RA	18	-10.770	13.228	2.830	0.00	0.00
ATOM	544	O1P	RA	18	-10.270	14.296	2.005	0.00	0.00
ATOM	545	O2P	RA	18	-12.143	13.272	3.273	0.00	0.00
ATOM	546	O5'	RA	18	-9.852	13.138	4.091	0.00	0.00
ATOM	547	C5'	RA	18	-10.182	12.346	5.188	0.00	0.00
ATOM	548	1H5'	RA	18	-10.378	11.350	4.869	0.00	0.00
ATOM	549	2H5'	RA	18	-11.059	12.735	5.650	0.00	0.00
ATOM	550	C4'	RA	18	-9.073	12.321	6.214	0.00	0.00
ATOM	551	H4'	RA	18	-9.379	11.681	7.011	0.00	0.00
ATOM	552	O4'	RA	18	-7.863	11.825	5.694	0.00	0.00
ATOM	553	C1'	RA	18	-6.790	12.503	6.299	0.00	0.00
ATOM	554	H1'	RA	18	-6.105	11.807	6.741	0.00	0.00
ATOM	555	N9	RA	18	-6.061	13.310	5.322	0.00	0.00
ATOM	556	C8	RA	18	-6.480	13.797	4.129	0.00	0.00
ATOM	557	H8	RA	18	-7.454	13.625	3.751	0.00	0.00
ATOM	558	N7	RA	18	-5.600	14.486	3.490	0.00	0.00
ATOM	559	C5	RA	18	-4.514	14.467	4.350	0.00	0.00
ATOM	560	C6	RA	18	-3.230	15.011	4.331	0.00	0.00
ATOM	561	N6	RA	18	-2.728	15.705	3.356	0.00	0.00
ATOM	562	H61	RA	18	-1.810	16.041	3.445	0.00	0.00
ATOM	563	H62	RA	18	-3.265	15.864	2.550	0.00	0.00
ATOM	564	N1	RA	18	-2.405	14.844	5.340	0.00	0.00
ATOM	565	C2	RA	18	-2.824	14.153	6.368	0.00	0.00
ATOM	566	H2	RA	18	-2.134	14.038	7.166	0.00	0.00
ATOM	567	N3	RA	18	-3.989	13.584	6.537	0.00	0.00
ATOM	568	C4	RA	18	-4.796	13.774	5.475	0.00	0.00
ATOM	569	C3'	RA	18	-8.756	13.672	6.795	0.00	0.00
ATOM	570	H3'	RA	18	-8.666	14.375	5.996	0.00	0.00
ATOM	571	C2'	RA	18	-7.389	13.384	7.370	0.00	0.00
ATOM	572	1H2'	RA	18	-6.827	14.282	7.488	0.00	0.00
ATOM	573	O2'	RA	18	-7.428	12.667	8.564	0.00	0.00
ATOM	574	2HO'	RA	18	-7.490	12.856	9.003	0.00	0.00
ATOM	575	O3'	RA	18	-9.692	14.112	7.729	0.00	0.00
ATOM	576	P	RG	19	-9.860	15.630	8.045	0.00	0.00
ATOM	577	O1P	RG	19	-9.891	16.358	6.801	0.00	0.00
ATOM	578	O2P	RG	19	-10.974	15.763	8.952	0.00	0.00
ATOM	579	O5'	RG	19	-8.556	16.034	8.800	0.00	0.00
ATOM	580	C5'	RG	19	-8.327	15.624	10.105	0.00	0.00
ATOM	581	1H5'	RG	19	-8.464	14.577	10.180	0.00	0.00
ATOM	582	2H5'	RG	19	-9.022	16.098	10.753	0.00	0.00
ATOM	583	C4'	RG	19	-6.931	15.944	10.568	0.00	0.00
ATOM	584	H4'	RG	19	-6.806	15.535	11.545	0.00	0.00
ATOM	585	O4'	RG	19	-5.948	15.384	9.738	0.00	0.00
ATOM	586	C1'	RG	19	-4.837	16.245	9.705	0.00	0.00
ATOM	587	H1'	RG	19	-3.946	15.732	10.007	0.00	0.00
ATOM	588	N9	RG	19	-4.616	16.790	8.366	0.00	0.00
ATOM	589	C8	RG	19	-5.450	16.837	7.297	0.00	0.00
ATOM	590	H8	RG	19	-6.436	16.446	7.324	0.00	0.00
ATOM	591	N7	RG	19	-4.944	17.388	6.250	0.00	0.00
ATOM	592	C5	RG	19	-3.679	17.770	6.663	0.00	0.00
ATOM	593	C6	RG	19	-2.628	18.454	5.996	0.00	0.00
ATOM	594	O6	RG	19	-2.568	18.835	4.847	0.00	0.00
ATOM	595	N1	RG	19	-1.559	18.723	6.799	0.00	0.00
ATOM	596	H1	RG	19	-0.822	19.253	6.412	0.00	0.00
ATOM	597	C2	RG	19	-1.477	18.348	8.078	0.00	0.00
ATOM	598	N2	RG	19	-0.431	18.701	8.731	0.00	0.00
ATOM	599	H21	RG	19	0.257	19.264	8.297	0.00	0.00
ATOM	600	H22	RG	19	-0.364	18.443	9.676	0.00	0.00
ATOM	601	N3	RG	19	-2.397	17.676	8.721	0.00	0.00
ATOM	602	C4	RG	19	-3.486	17.424	7.963	0.00	0.00
ATOM	603	C3'	RG	19	-6.627	17.408	10.641	0.00	0.00
ATOM	604	H3'	RG	19	-6.949	17.881	9.741	0.00	0.00
ATOM	605	C2'	RG	19	-5.115	17.358	10.676	0.00	0.00

ATOM	606	1H2'	RG	19	-4.695	18.283	10.355	0.00	0.00
ATOM	607	O2'	RG	19	-4.614	16.991	11.920	0.00	0.00
ATOM	608	2HO'	RG	19	-4.867	17.259	12.404	0.00	0.00
ATOM	609	O3'	RG	19	-7.177	18.022	11.760	0.00	0.00
ATOM	610	P	RC	20	-7.487	19.540	11.765	0.00	0.00
ATOM	611	O1P	RC	20	-8.212	19.849	10.562	0.00	0.00
ATOM	612	O2P	RC	20	-8.092	19.844	13.033	0.00	0.00
ATOM	613	O5'	RC	20	-6.104	20.258	11.686	0.00	0.00
ATOM	614	C5'	RC	20	-5.235	20.291	12.774	0.00	0.00
ATOM	615	1H5'	RC	20	-5.041	19.306	13.114	0.00	0.00
ATOM	616	2H5'	RC	20	-5.683	20.829	13.571	0.00	0.00
ATOM	617	C4'	RC	20	-3.926	20.946	12.445	0.00	0.00
ATOM	618	H4'	RC	20	-3.310	20.882	13.312	0.00	0.00
ATOM	619	O4'	RC	20	-3.263	20.332	11.380	0.00	0.00
ATOM	620	C1'	RC	20	-2.496	21.294	10.700	0.00	0.00
ATOM	621	H1'	RC	20	-1.462	21.049	10.776	0.00	0.00
ATOM	622	N1	RC	20	-2.845	21.408	9.278	0.00	0.00
ATOM	623	C6	RC	20	-4.034	20.994	8.802	0.00	0.00
ATOM	624	H6	RC	20	-4.732	20.547	9.455	0.00	0.00
ATOM	625	C5	RC	20	-4.322	21.141	7.510	0.00	0.00
ATOM	626	H5	RC	20	-5.248	20.807	7.133	0.00	0.00
ATOM	627	C4	RC	20	-3.370	21.750	6.700	0.00	0.00
ATOM	628	N4	RC	20	-3.588	21.921	5.458	0.00	0.00
ATOM	629	H41	RC	20	-2.878	22.333	4.924	0.00	0.00
ATOM	630	H42	RC	20	-4.408	21.585	5.066	0.00	0.00
ATOM	631	N3	RC	20	-2.229	22.172	7.140	0.00	0.00
ATOM	632	C2	RC	20	-1.948	22.010	8.428	0.00	0.00
ATOM	633	O2	RC	20	-0.889	22.434	8.828	0.00	0.00
ATOM	634	C3'	RC	20	-4.048	22.392	12.077	0.00	0.00
ATOM	635	H3'	RC	20	-4.833	22.505	11.369	0.00	0.00
ATOM	636	C2'	RC	20	-2.726	22.596	11.396	0.00	0.00
ATOM	637	1H2'	RC	20	-2.778	23.400	10.709	0.00	0.00
ATOM	638	O2'	RC	20	-1.696	22.791	12.289	0.00	0.00
ATOM	639	2HO'	RC	20	-1.775	23.414	12.600	0.00	0.00
ATOM	640	O3'	RC	20	-4.246	23.216	13.180	0.00	0.00
ATOM	641	P	RA	21	-4.625	24.720	13.014	0.00	0.00
ATOM	642	O1P	RA	21	-5.643	24.826	12.017	0.00	0.00
ATOM	643	O2P	RA	21	-4.872	25.245	14.316	0.00	0.00
ATOM	644	O5'	RA	21	-3.342	25.392	12.482	0.00	0.00
ATOM	645	C5'	RA	21	-2.804	26.140	12.269	0.00	0.00
ATOM	646	1H5'	RA	21	-2.864	26.252	12.715	0.00	0.00
ATOM	647	2H5'	RA	21	-3.208	26.318	12.101	0.00	0.00
ATOM	648	C4'	RA	21	-1.557	26.568	11.672	0.00	0.00
ATOM	649	H4'	RA	21	-0.821	26.586	12.401	0.00	0.00
ATOM	650	O4'	RA	21	-1.182	25.723	10.650	0.00	0.00
ATOM	651	C1'	RA	21	-0.657	26.468	9.622	0.00	0.00
ATOM	652	H1'	RA	21	0.297	26.124	9.373	0.00	0.00
ATOM	653	N9	RA	21	-1.503	26.353	8.448	0.00	0.00
ATOM	654	C8	RA	21	-2.658	25.685	8.312	0.00	0.00
ATOM	655	H8	RA	21	-3.132	25.212	9.119	0.00	0.00
ATOM	656	N7	RA	21	-3.125	25.666	7.124	0.00	0.00
ATOM	657	C5	RA	21	-2.193	26.378	6.418	0.00	0.00
ATOM	658	C6	RA	21	-2.025	26.721	5.087	0.00	0.00
ATOM	659	N6	RA	21	-2.819	26.384	4.134	0.00	0.00
ATOM	660	H61	RA	21	-2.594	26.661	3.225	0.00	0.00
ATOM	661	H62	RA	21	-3.605	25.845	4.331	0.00	0.00
ATOM	662	N1	RA	21	-0.999	27.420	4.695	0.00	0.00
ATOM	663	C2	RA	21	-0.138	27.785	5.592	0.00	0.00
ATOM	664	H2	RA	21	0.674	28.355	5.246	0.00	0.00
ATOM	665	N3	RA	21	-0.145	27.528	6.865	0.00	0.00
ATOM	666	C4	RA	21	-1.211	26.810	7.220	0.00	0.00
ATOM	667	C3'	RA	21	-1.631	27.923	11.118	0.00	0.00
ATOM	668	H3'	RA	21	-2.538	28.029	10.618	0.00	0.00
ATOM	669	C2'	RA	21	-0.548	27.876	10.126	0.00	0.00
ATOM	670	1H2'	RA	21	-0.701	28.577	9.368	0.00	0.00
ATOM	671	O2'	RA	21	0.686	28.046	10.701	0.00	0.00
ATOM	672	2HO'	RA	21	0.742	28.420	11.023	0.00	0.00
ATOM	673	O3'	RA	21	-1.445	28.891	12.088	0.00	0.00

ATOM	674	P	RA	22	-2.138	30.252	11.996	0.00	0.00
ATOM	675	O1P	RA	22	-3.504	30.031	11.650	0.00	0.00
ATOM	676	O2P	RA	22	-1.834	30.967	13.196	0.00	0.00
ATOM	677	O5'	RA	22	-1.465	30.980	10.815	0.00	0.00
ATOM	678	C5'	RA	22	-0.149	31.395	10.865	0.00	0.00
ATOM	679	1H5'	RA	22	0.481	30.558	10.960	0.00	0.00
ATOM	680	2H5'	RA	22	0.002	32.006	11.708	0.00	0.00
ATOM	681	C4'	RA	22	0.249	32.169	9.646	0.00	0.00
ATOM	682	H4'	RA	22	1.277	32.396	9.743	0.00	0.00
ATOM	683	O4'	RA	22	0.044	31.417	8.496	0.00	0.00
ATOM	684	C1'	RA	22	-0.872	32.070	7.683	0.00	0.00
ATOM	685	H1'	RA	22	-0.356	32.646	6.956	0.00	0.00
ATOM	686	N9	RA	22	-1.746	31.132	7.008	0.00	0.00
ATOM	687	C8	RA	22	-2.679	30.314	7.526	0.00	0.00
ATOM	688	H8	RA	22	-2.808	30.200	8.564	0.00	0.00
ATOM	689	N7	RA	22	-3.396	29.699	6.659	0.00	0.00
ATOM	690	C5	RA	22	-2.889	30.160	5.466	0.00	0.00
ATOM	691	C6	RA	22	-3.187	29.958	4.122	0.00	0.00
ATOM	692	N6	RA	22	-4.132	29.205	3.670	0.00	0.00
ATOM	693	H61	RA	22	-4.252	29.122	2.704	0.00	0.00
ATOM	694	H62	RA	22	-4.678	28.710	4.303	0.00	0.00
ATOM	695	N1	RA	22	-2.513	30.559	3.181	0.00	0.00
ATOM	696	C2	RA	22	-1.551	31.349	3.542	0.00	0.00
ATOM	697	H2	RA	22	-1.023	31.816	2.763	0.00	0.00
ATOM	698	N3	RA	22	-1.151	31.641	4.746	0.00	0.00
ATOM	699	C4	RA	22	-1.872	31.010	5.675	0.00	0.00
ATOM	700	C3'	RA	22	-0.508	33.451	9.489	0.00	0.00
ATOM	701	H3'	RA	22	-0.872	33.778	10.424	0.00	0.00
ATOM	702	C2'	RA	22	-1.612	33.005	8.570	0.00	0.00
ATOM	703	1H2'	RA	22	-2.323	32.460	9.138	0.00	0.00
ATOM	704	O2'	RA	22	-2.266	34.005	7.879	0.00	0.00
ATOM	705	2HO'	RA	22	-1.677	34.655	7.668	0.00	0.00
ATOM	706	O3'	RA	22	0.371	34.368	8.930	0.00	0.00
ATOM	707	P	RG3	23	0.102	35.875	8.878	0.00	0.00
ATOM	708	O1P	RG3	23	-0.852	36.198	9.862	0.00	0.00
ATOM	709	O2P	RG3	23	1.346	36.554	8.873	0.00	0.00
ATOM	710	O5'	RG3	23	-0.551	36.061	7.497	0.00	0.00
ATOM	711	C5'	RG3	23	0.181	36.083	6.357	0.00	0.00
ATOM	712	1H5'	RG3	23	0.724	35.210	6.276	0.00	0.00
ATOM	713	2H5'	RG3	23	0.845	36.887	6.406	0.00	0.00
ATOM	714	C4'	RG3	23	-0.646	36.234	5.143	0.00	0.00
ATOM	715	H4'	RG3	23	-0.009	36.451	4.350	0.00	0.00
ATOM	716	O4'	RG3	23	-1.321	35.072	4.826	0.00	0.00
ATOM	717	C1'	RG3	23	-2.496	35.427	4.246	0.00	0.00
ATOM	718	H1'	RG3	23	-2.320	35.766	3.278	0.00	0.00
ATOM	719	N9	RG3	23	-3.467	34.359	4.168	0.00	0.00
ATOM	720	C8	RG3	23	-4.077	33.690	5.145	0.00	0.00
ATOM	721	H8	RG3	23	-3.845	33.831	6.150	0.00	0.00
ATOM	722	N7	RG3	23	-4.962	32.863	4.754	0.00	0.00
ATOM	723	C5	RG3	23	-4.948	32.999	3.405	0.00	0.00
ATOM	724	C6	RG3	23	-5.706	32.379	2.400	0.00	0.00
ATOM	725	O6	RG3	23	-6.555	31.539	2.489	0.00	0.00
ATOM	726	N1	RG3	23	-5.421	32.827	1.176	0.00	0.00
ATOM	727	H1	RG3	23	-5.938	32.453	0.440	0.00	0.00
ATOM	728	C2	RG3	23	-4.513	33.751	0.925	0.00	0.00
ATOM	729	N2	RG3	23	-4.377	34.105	-0.279	0.00	0.00
ATOM	730	H21	RG3	23	-4.990	33.770	-0.954	0.00	0.00
ATOM	731	H22	RG3	23	-3.727	34.800	-0.478	0.00	0.00
ATOM	732	N3	RG3	23	-3.774	34.336	1.811	0.00	0.00
ATOM	733	C4	RG3	23	-4.039	33.920	3.042	0.00	0.00
ATOM	734	C3'	RG3	23	-1.648	37.311	5.240	0.00	0.00
ATOM	735	H3'	RG3	23	-1.623	37.773	6.166	0.00	0.00
ATOM	736	C2'	RG3	23	-2.913	36.577	5.050	0.00	0.00
ATOM	737	1H2'	RG3	23	-3.236	36.242	5.962	0.00	0.00
ATOM	738	O2'	RG3	23	-3.856	37.299	4.435	0.00	0.00
ATOM	739	2HO'	RG3	23	-4.148	37.568	4.597	0.00	0.00
ATOM	740	O3'	RG3	23	-1.484	38.217	4.258	0.00	0.00
ATOM	741	H3T	RG3	23	-1.839	38.568	4.177	0.00	0.00

ATOM	742	H5T	RC5	24	10.548	-27.109	-11.732	0.00	0.00
ATOM	743	O5'	RC5	24	10.294	-26.875	-11.943	0.00	0.00
ATOM	744	C5'	RC5	24	9.131	-26.297	-11.680	0.00	0.00
ATOM	745	1H5'	RC5	24	8.996	-25.523	-12.327	0.00	0.00
ATOM	746	2H5'	RC5	24	9.160	-25.933	-10.741	0.00	0.00
ATOM	747	C4'	RC5	24	8.003	-27.221	-11.814	0.00	0.00
ATOM	748	H4'	RC5	24	8.045	-27.660	-12.745	0.00	0.00
ATOM	749	O4'	RC5	24	8.020	-28.178	-10.835	0.00	0.00
ATOM	750	C1'	RC5	24	6.726	-28.602	-10.565	0.00	0.00
ATOM	751	H1'	RC5	24	6.602	-29.582	-10.923	0.00	0.00
ATOM	752	N1	RC5	24	6.416	-28.599	-9.132	0.00	0.00
ATOM	753	C6	RC5	24	7.038	-27.822	-8.280	0.00	0.00
ATOM	754	H6	RC5	24	7.760	-27.172	-8.644	0.00	0.00
ATOM	755	C5	RC5	24	6.750	-27.877	-6.983	0.00	0.00
ATOM	756	H5	RC5	24	7.242	-27.274	-6.315	0.00	0.00
ATOM	757	C4	RC5	24	5.795	-28.756	-6.558	0.00	0.00
ATOM	758	N4	RC5	24	5.484	-28.875	-5.329	0.00	0.00
ATOM	759	H41	RC5	24	4.778	-29.481	-5.086	0.00	0.00
ATOM	760	H42	RC5	24	5.909	-28.327	-4.683	0.00	0.00
ATOM	761	N3	RC5	24	5.167	-29.497	-7.359	0.00	0.00
ATOM	762	C2	RC5	24	5.458	-29.429	-8.651	0.00	0.00
ATOM	763	O2	RC5	24	4.842	-30.116	-9.380	0.00	0.00
ATOM	764	C3'	RC5	24	6.693	-26.558	-11.680	0.00	0.00
ATOM	765	H3'	RC5	24	6.731	-25.928	-10.861	0.00	0.00
ATOM	766	C2'	RC5	24	5.828	-27.706	-11.353	0.00	0.00
ATOM	767	1H2'	RC5	24	5.003	-27.398	-10.797	0.00	0.00
ATOM	768	O2'	RC5	24	5.435	-28.366	-12.472	0.00	0.00
ATOM	769	2HO'	RC5	24	5.163	-27.927	-12.962	0.00	0.00
ATOM	770	O3'	RC5	24	6.308	-25.890	-12.817	0.00	0.00
ATOM	771	P	RU	25	5.280	-24.763	-12.772	0.00	0.00
ATOM	772	O1P	RU	25	5.591	-23.931	-11.675	0.00	0.00
ATOM	773	O2P	RU	25	5.224	-24.181	-14.071	0.00	0.00
ATOM	774	O5'	RU	25	3.939	-25.466	-12.466	0.00	0.00
ATOM	775	C5'	RU	25	3.222	-26.120	-13.440	0.00	0.00
ATOM	776	1H5'	RU	25	3.823	-26.842	-13.903	0.00	0.00
ATOM	777	2H5'	RU	25	2.913	-25.424	-14.170	0.00	0.00
ATOM	778	C4'	RU	25	2.013	-26.812	-12.892	0.00	0.00
ATOM	779	H4'	RU	25	1.528	-27.311	-13.692	0.00	0.00
ATOM	780	O4'	RU	25	2.344	-27.759	-11.914	0.00	0.00
ATOM	781	C1'	RU	25	1.299	-27.843	-10.990	0.00	0.00
ATOM	782	H1'	RU	25	0.884	-28.826	-11.017	0.00	0.00
ATOM	783	N1	RU	25	1.741	-27.568	-9.617	0.00	0.00
ATOM	784	C6	RU	25	2.792	-26.778	-9.341	0.00	0.00
ATOM	785	H6	RU	25	3.286	-26.295	-10.136	0.00	0.00
ATOM	786	C5	RU	25	3.215	-26.606	-8.082	0.00	0.00
ATOM	787	H5	RU	25	4.040	-25.993	-7.876	0.00	0.00
ATOM	788	C4	RU	25	2.575	-27.232	-6.991	0.00	0.00
ATOM	789	O4	RU	25	2.900	-27.152	-5.834	0.00	0.00
ATOM	790	N3	RU	25	1.500	-27.948	-7.335	0.00	0.00
ATOM	791	H3	RU	25	0.985	-28.344	-6.596	0.00	0.00
ATOM	792	C2	RU	25	1.028	-28.127	-8.590	0.00	0.00
ATOM	793	O2	RU	25	0.014	-28.744	-8.750	0.00	0.00
ATOM	794	C3'	RU	25	1.025	-25.889	-12.266	0.00	0.00
ATOM	795	H3'	RU	25	1.536	-25.217	-11.627	0.00	0.00
ATOM	796	C2'	RU	25	0.249	-26.870	-11.440	0.00	0.00
ATOM	797	1H2'	RU	25	-0.207	-26.391	-10.617	0.00	0.00
ATOM	798	O2'	RU	25	-0.685	-27.571	-12.186	0.00	0.00
ATOM	799	2HO'	RU	25	-1.152	-27.273	-12.367	0.00	0.00
ATOM	800	O3'	RU	25	0.243	-25.203	-13.190	0.00	0.00
ATOM	801	P	RU	26	-0.476	-23.887	-12.811	0.00	0.00
ATOM	802	O1P	RU	26	0.481	-23.031	-12.182	0.00	0.00
ATOM	803	O2P	RU	26	-1.160	-23.423	-13.989	0.00	0.00
ATOM	804	O5'	RU	26	-1.533	-24.267	-11.739	0.00	0.00
ATOM	805	C5'	RU	26	-2.723	-24.884	-12.085	0.00	0.00
ATOM	806	1H5'	RU	26	-2.520	-25.734	-12.678	0.00	0.00
ATOM	807	2H5'	RU	26	-3.312	-24.220	-12.655	0.00	0.00
ATOM	808	C4'	RU	26	-3.507	-25.302	-10.875	0.00	0.00
ATOM	809	H4'	RU	26	-4.373	-25.816	-11.214	0.00	0.00

ATOM	810	O4'	RU	26	-2.774	-26.151	-10.042	0.00	0.00
ATOM	811	C1'	RU	26	-3.203	-25.979	-8.715	0.00	0.00
ATOM	812	H1'	RU	26	-3.663	-26.883	-8.379	0.00	0.00
ATOM	813	N1	RU	26	-2.099	-25.643	-7.799	0.00	0.00
ATOM	814	C6	RU	26	-1.013	-24.943	-8.201	0.00	0.00
ATOM	815	H6	RU	26	-0.948	-24.626	-9.203	0.00	0.00
ATOM	816	C5	RU	26	-0.024	-24.646	-7.341	0.00	0.00
ATOM	817	H5	RU	26	0.821	-24.104	-7.662	0.00	0.00
ATOM	818	C4	RU	26	-0.075	-25.028	-5.982	0.00	0.00
ATOM	819	O4	RU	26	0.776	-24.810	-5.157	0.00	0.00
ATOM	820	N3	RU	26	-1.194	-25.695	-5.648	0.00	0.00
ATOM	821	H3	RU	26	-1.285	-25.940	-4.701	0.00	0.00
ATOM	822	C2	RU	26	-2.222	-26.006	-6.482	0.00	0.00
ATOM	823	O2	RU	26	-3.191	-26.565	-6.045	0.00	0.00
ATOM	824	C3'	RU	26	-3.963	-24.169	-10.008	0.00	0.00
ATOM	825	H3'	RU	26	-3.160	-23.501	-9.865	0.00	0.00
ATOM	826	C2'	RU	26	-4.248	-24.891	-8.729	0.00	0.00
ATOM	827	1H2'	RU	26	-4.150	-24.239	-7.895	0.00	0.00
ATOM	828	O2'	RU	26	-5.501	-25.482	-8.730	0.00	0.00
ATOM	829	2HO'	RU	26	-6.027	-24.971	-8.830	0.00	0.00
ATOM	830	O3'	RU	26	-5.066	-23.520	-10.527	0.00	0.00
ATOM	831	P	RG	27	-5.475	-22.123	-10.032	0.00	0.00
ATOM	832	O1P	RG	27	-4.320	-21.312	-10.012	0.00	0.00
ATOM	833	O2P	RG	27	-6.592	-21.721	-10.815	0.00	0.00
ATOM	834	O5'	RG	27	-5.938	-22.327	-8.567	0.00	0.00
ATOM	835	C5'	RG	27	-6.638	-22.199	-7.924	0.00	0.00
ATOM	836	1H5'	RG	27	-7.053	-22.412	-8.257	0.00	0.00
ATOM	837	2H5'	RG	27	-6.647	-21.613	-8.103	0.00	0.00
ATOM	838	C4'	RG	27	-6.841	-22.584	-6.518	0.00	0.00
ATOM	839	H4'	RG	27	-7.800	-23.014	-6.438	0.00	0.00
ATOM	840	O4'	RG	27	-5.884	-23.495	-6.086	0.00	0.00
ATOM	841	C1'	RG	27	-5.575	-23.270	-4.745	0.00	0.00
ATOM	842	H1'	RG	27	-5.790	-24.126	-4.165	0.00	0.00
ATOM	843	N9	RG	27	-4.161	-22.955	-4.556	0.00	0.00
ATOM	844	C8	RG	27	-3.243	-22.566	-5.470	0.00	0.00
ATOM	845	H8	RG	27	-3.488	-22.429	-6.493	0.00	0.00
ATOM	846	N7	RG	27	-2.055	-22.386	-4.993	0.00	0.00
ATOM	847	C5	RG	27	-2.197	-22.655	-3.643	0.00	0.00
ATOM	848	C6	RG	27	-1.268	-22.622	-2.561	0.00	0.00
ATOM	849	O6	RG	27	-0.078	-22.372	-2.567	0.00	0.00
ATOM	850	N1	RG	27	-1.836	-22.907	-1.355	0.00	0.00
ATOM	851	H1	RG	27	-1.246	-22.886	-0.557	0.00	0.00
ATOM	852	C2	RG	27	-3.129	-23.219	-1.194	0.00	0.00
ATOM	853	N2	RG	27	-3.533	-23.440	0.005	0.00	0.00
ATOM	854	H21	RG	27	-2.901	-23.369	0.765	0.00	0.00
ATOM	855	H22	RG	27	-4.481	-23.678	0.137	0.00	0.00
ATOM	856	N3	RG	27	-4.019	-23.282	-2.163	0.00	0.00
ATOM	857	C4	RG	27	-3.494	-22.985	-3.370	0.00	0.00
ATOM	858	C3'	RG	27	-6.773	-21.442	-5.577	0.00	0.00
ATOM	859	H3'	RG	27	-5.964	-20.825	-5.837	0.00	0.00
ATOM	860	C2'	RG	27	-6.442	-22.143	-4.299	0.00	0.00
ATOM	861	1H2'	RG	27	-5.916	-21.507	-3.637	0.00	0.00
ATOM	862	O2'	RG	27	-7.563	-22.658	-3.701	0.00	0.00
ATOM	863	2HO'	RG	27	-8.081	-22.027	-3.540	0.00	0.00
ATOM	864	O3'	RG	27	-7.967	-20.739	-5.551	0.00	0.00
ATOM	865	P	RC	28	-8.050	-19.336	-4.894	0.00	0.00
ATOM	866	O1P	RC	28	-7.004	-18.535	-5.430	0.00	0.00
ATOM	867	O2P	RC	28	-9.399	-18.902	-5.020	0.00	0.00
ATOM	868	O5'	RC	28	-7.768	-19.585	-3.386	0.00	0.00
ATOM	869	C5'	RC	28	-7.135	-18.656	-2.585	0.00	0.00
ATOM	870	1H5'	RC	28	-7.759	-17.815	-2.470	0.00	0.00
ATOM	871	2H5'	RC	28	-6.240	-18.344	-3.038	0.00	0.00
ATOM	872	C4'	RC	28	-6.821	-19.235	-1.234	0.00	0.00
ATOM	873	H4'	RC	28	-7.715	-19.631	-0.813	0.00	0.00
ATOM	874	O4'	RC	28	-5.860	-20.251	-1.303	0.00	0.00
ATOM	875	C1'	RC	28	-4.921	-20.114	-0.256	0.00	0.00
ATOM	876	H1'	RC	28	-4.849	-21.035	0.285	0.00	0.00
ATOM	877	N1	RC	28	-3.571	-19.760	-0.757	0.00	0.00

ATOM	878	C6	RC	28	-3.339	-19.471	-2.060	0.00	0.00
ATOM	879	H6	RC	28	-4.144	-19.464	-2.752	0.00	0.00
ATOM	880	C5	RC	28	-2.092	-19.219	-2.485	0.00	0.00
ATOM	881	H5	RC	28	-1.917	-19.010	-3.508	0.00	0.00
ATOM	882	C4	RC	28	-1.060	-19.267	-1.544	0.00	0.00
ATOM	883	N4	RC	28	0.149	-19.035	-1.896	0.00	0.00
ATOM	884	H41	RC	28	0.850	-19.130	-1.209	0.00	0.00
ATOM	885	H42	RC	28	0.343	-18.824	-2.827	0.00	0.00
ATOM	886	N3	RC	28	-1.252	-19.548	-0.295	0.00	0.00
ATOM	887	C2	RC	28	-2.499	-19.797	0.123	0.00	0.00
ATOM	888	O2	RC	28	-2.648	-20.056	1.296	0.00	0.00
ATOM	889	C3'	RC	28	-6.261	-18.189	-0.295	0.00	0.00
ATOM	890	H3'	RC	28	-5.580	-17.567	-0.832	0.00	0.00
ATOM	891	C2'	RC	28	-5.484	-19.054	0.664	0.00	0.00
ATOM	892	1H2'	RC	28	-4.720	-18.487	1.161	0.00	0.00
ATOM	893	O2'	RC	28	-6.312	-19.686	1.595	0.00	0.00
ATOM	894	2HO'	RC	28	-6.707	-19.410	1.829	0.00	0.00
ATOM	895	O3'	RC	28	-7.254	-17.437	0.331	0.00	0.00
ATOM	896	P	RU	29	-6.982	-15.969	0.786	0.00	0.00
ATOM	897	O1P	RU	29	-6.477	-15.245	-0.348	0.00	0.00
ATOM	898	O2P	RU	29	-8.175	-15.492	1.440	0.00	0.00
ATOM	899	O5'	RU	29	-5.835	-16.045	1.843	0.00	0.00
ATOM	900	C5'	RU	29	-6.056	-16.486	3.140	0.00	0.00
ATOM	901	1H5'	RU	29	-6.407	-17.489	3.116	0.00	0.00
ATOM	902	2H5'	RU	29	-6.795	-15.879	3.603	0.00	0.00
ATOM	903	C4'	RU	29	-4.816	-16.416	3.987	0.00	0.00
ATOM	904	H4'	RU	29	-5.072	-16.731	4.973	0.00	0.00
ATOM	905	O4'	RU	29	-3.785	-17.236	3.509	0.00	0.00
ATOM	906	C1'	RU	29	-2.546	-16.664	3.873	0.00	0.00
ATOM	907	H1'	RU	29	-2.057	-17.300	4.583	0.00	0.00
ATOM	908	N1	RU	29	-1.643	-16.493	2.715	0.00	0.00
ATOM	909	C6	RU	29	-2.112	-16.354	1.444	0.00	0.00
ATOM	910	H6	RU	29	-3.162	-16.350	1.271	0.00	0.00
ATOM	911	C5	RU	29	-1.258	-16.238	0.410	0.00	0.00
ATOM	912	H5	RU	29	-1.632	-16.149	-0.579	0.00	0.00
ATOM	913	C4	RU	29	0.156	-16.242	0.596	0.00	0.00
ATOM	914	O4	RU	29	0.990	-16.161	-0.276	0.00	0.00
ATOM	915	N3	RU	29	0.545	-16.349	1.887	0.00	0.00
ATOM	916	H3	RU	29	1.522	-16.334	2.061	0.00	0.00
ATOM	917	C2	RU	29	-0.281	-16.455	2.962	0.00	0.00
ATOM	918	O2	RU	29	0.203	-16.510	4.075	0.00	0.00
ATOM	919	C3'	RU	29	-4.241	-15.027	4.089	0.00	0.00
ATOM	920	H3'	RU	29	-4.201	-14.599	3.116	0.00	0.00
ATOM	921	C2'	RU	29	-2.842	-15.336	4.546	0.00	0.00
ATOM	922	1H2'	RU	29	-2.170	-14.580	4.225	0.00	0.00
ATOM	923	O2'	RU	29	-2.769	-15.504	5.918	0.00	0.00
ATOM	924	2HO'	RU	29	-3.048	-14.918	6.270	0.00	0.00
ATOM	925	O3'	RU	29	-4.955	-14.214	4.980	0.00	0.00
ATOM	926	P	RG	30	-4.913	-12.662	4.883	0.00	0.00
ATOM	927	O1P	RG	30	-5.027	-12.307	3.503	0.00	0.00
ATOM	928	O2P	RG	30	-5.877	-12.142	5.820	0.00	0.00
ATOM	929	O5'	RG	30	-3.486	-12.268	5.358	0.00	0.00
ATOM	930	C5'	RG	30	-3.155	-12.174	6.701	0.00	0.00
ATOM	931	1H5'	RG	30	-3.375	-13.095	7.180	0.00	0.00
ATOM	932	2H5'	RG	30	-3.730	-11.402	7.158	0.00	0.00
ATOM	933	C4'	RG	30	-1.698	-11.854	6.891	0.00	0.00
ATOM	934	H4'	RG	30	-1.510	-11.758	7.932	0.00	0.00
ATOM	935	O4'	RG	30	-0.875	-12.876	6.380	0.00	0.00
ATOM	936	C1'	RG	30	0.322	-12.307	5.911	0.00	0.00
ATOM	937	H1'	RG	30	1.158	-12.684	6.461	0.00	0.00
ATOM	938	N9	RG	30	0.535	-12.619	4.498	0.00	0.00
ATOM	939	C8	RG	30	-0.354	-12.624	3.470	0.00	0.00
ATOM	940	H8	RG	30	-1.395	-12.458	3.621	0.00	0.00
ATOM	941	N7	RG	30	0.169	-12.839	2.309	0.00	0.00
ATOM	942	C5	RG	30	1.524	-12.966	2.582	0.00	0.00
ATOM	943	C6	RG	30	2.655	-13.158	1.732	0.00	0.00
ATOM	944	O6	RG	30	2.698	-13.278	0.523	0.00	0.00
ATOM	945	N1	RG	30	3.844	-13.194	2.404	0.00	0.00

ATOM	946	H1	RG	30	4.676	-13.296	1.870	0.00	0.00
ATOM	947	C2	RG	30	3.953	-13.071	3.730	0.00	0.00
ATOM	948	N2	RG	30	5.136	-13.121	4.231	0.00	0.00
ATOM	949	H21	RG	30	5.920	-13.212	3.639	0.00	0.00
ATOM	950	H22	RG	30	5.226	-13.027	5.205	0.00	0.00
ATOM	951	N3	RG	30	2.945	-12.897	4.557	0.00	0.00
ATOM	952	C4	RG	30	1.747	-12.845	3.922	0.00	0.00
ATOM	953	C3'	RG	30	-1.263	-10.580	6.229	0.00	0.00
ATOM	954	H3'	RG	30	-1.678	-10.544	5.248	0.00	0.00
ATOM	955	C2'	RG	30	0.226	-10.816	6.132	0.00	0.00
ATOM	956	1H2'	RG	30	0.645	-10.282	5.316	0.00	0.00
ATOM	957	O2'	RG	30	0.885	-10.502	7.312	0.00	0.00
ATOM	958	2HO'	RG	30	0.799	-9.737	7.482	0.00	0.00
ATOM	959	O3'	RG	30	-1.586	-9.430	6.958	0.00	0.00
ATOM	960	P	RA	31	-1.720	-8.037	6.288	0.00	0.00
ATOM	961	O1P	RA	31	-1.132	-7.080	7.166	0.00	0.00
ATOM	962	O2P	RA	31	-1.256	-8.111	4.937	0.00	0.00
ATOM	963	O5'	RA	31	-3.239	-7.765	6.290	0.00	0.00
ATOM	964	C5'	RA	31	-4.102	-8.466	5.490	0.00	0.00
ATOM	965	1H5'	RA	31	-3.974	-9.493	5.667	0.00	0.00
ATOM	966	2H5'	RA	31	-3.900	-8.275	4.485	0.00	0.00
ATOM	967	C4'	RA	31	-5.521	-8.090	5.753	0.00	0.00
ATOM	968	H4'	RA	31	-6.139	-8.670	5.125	0.00	0.00
ATOM	969	O4'	RA	31	-5.860	-8.355	7.063	0.00	0.00
ATOM	970	C1'	RA	31	-6.678	-7.344	7.529	0.00	0.00
ATOM	971	H1'	RA	31	-7.571	-7.742	7.908	0.00	0.00
ATOM	972	N9	RA	31	-6.020	-6.626	8.589	0.00	0.00
ATOM	973	C8	RA	31	-4.742	-6.581	8.918	0.00	0.00
ATOM	974	H8	RA	31	-4.022	-7.057	8.362	0.00	0.00
ATOM	975	N7	RA	31	-4.480	-5.930	9.970	0.00	0.00
ATOM	976	C5	RA	31	-5.690	-5.492	10.352	0.00	0.00
ATOM	977	C6	RA	31	-6.155	-4.744	11.387	0.00	0.00
ATOM	978	N6	RA	31	-5.454	-4.261	12.327	0.00	0.00
ATOM	979	H61	RA	31	-5.886	-3.747	12.995	0.00	0.00
ATOM	980	H62	RA	31	-4.508	-4.386	12.317	0.00	0.00
ATOM	981	N1	RA	31	-7.396	-4.481	11.490	0.00	0.00
ATOM	982	C2	RA	31	-8.188	-4.945	10.596	0.00	0.00
ATOM	983	H2	RA	31	-9.182	-4.719	10.708	0.00	0.00
ATOM	984	N3	RA	31	-7.909	-5.661	9.579	0.00	0.00
ATOM	985	C4	RA	31	-6.626	-5.903	9.509	0.00	0.00
ATOM	986	C3'	RA	31	-5.847	-6.660	5.476	0.00	0.00
ATOM	987	H3'	RA	31	-5.050	-6.057	5.800	0.00	0.00
ATOM	988	C2'	RA	31	-7.004	-6.457	6.370	0.00	0.00
ATOM	989	1H2'	RA	31	-7.075	-5.449	6.657	0.00	0.00
ATOM	990	O2'	RA	31	-8.191	-6.881	5.801	0.00	0.00
ATOM	991	2HO'	RA	31	-8.195	-6.797	5.080	0.00	0.00
ATOM	992	O3'	RA	31	-6.196	-6.415	4.159	0.00	0.00
ATOM	993	P	RG	32	-5.795	-5.106	3.449	0.00	0.00
ATOM	994	O1P	RG	32	-4.359	-5.011	3.491	0.00	0.00
ATOM	995	O2P	RG	32	-6.460	-5.101	2.180	0.00	0.00
ATOM	996	O5'	RG	32	-6.365	-3.939	4.290	0.00	0.00
ATOM	997	C5'	RG	32	-7.724	-3.632	4.322	0.00	0.00
ATOM	998	1H5'	RG	32	-8.285	-4.506	4.513	0.00	0.00
ATOM	999	2H5'	RG	32	-8.025	-3.239	3.388	0.00	0.00
ATOM	1000	C4'	RG	32	-8.029	-2.627	5.382	0.00	0.00
ATOM	1001	H4'	RG	32	-9.079	-2.432	5.353	0.00	0.00
ATOM	1002	O4'	RG	32	-7.682	-3.090	6.648	0.00	0.00
ATOM	1003	C1'	RG	32	-7.426	-2.009	7.476	0.00	0.00
ATOM	1004	H1'	RG	32	-8.263	-1.878	8.100	0.00	0.00
ATOM	1005	N9	RG	32	-6.235	-2.147	8.316	0.00	0.00
ATOM	1006	C8	RG	32	-6.073	-1.642	9.538	0.00	0.00
ATOM	1007	H8	RG	32	-6.842	-1.120	10.024	0.00	0.00
ATOM	1008	N7	RG	32	-4.914	-1.834	10.053	0.00	0.00
ATOM	1009	C5	RG	32	-4.249	-2.545	9.097	0.00	0.00
ATOM	1010	C6	RG	32	-2.935	-3.074	9.077	0.00	0.00
ATOM	1011	O6	RG	32	-2.070	-3.012	9.907	0.00	0.00
ATOM	1012	N1	RG	32	-2.635	-3.729	7.949	0.00	0.00
ATOM	1013	H1	RG	32	-1.745	-4.133	7.872	0.00	0.00

ATOM	1014	C2	RG	32	-3.468	-3.819	6.932	0.00	0.00
ATOM	1015	N2	RG	32	-3.017	-4.409	5.906	0.00	0.00
ATOM	1016	H21	RG	32	-2.155	-4.872	5.931	0.00	0.00
ATOM	1017	H22	RG	32	-3.626	-4.528	5.150	0.00	0.00
ATOM	1018	N3	RG	32	-4.677	-3.324	6.892	0.00	0.00
ATOM	1019	C4	RG	32	-5.037	-2.715	8.018	0.00	0.00
ATOM	1020	C3'	RG	32	-7.312	-1.329	5.217	0.00	0.00
ATOM	1021	H3'	RG	32	-6.310	-1.520	4.948	0.00	0.00
ATOM	1022	C2'	RG	32	-7.320	-0.800	6.609	0.00	0.00
ATOM	1023	1H2'	RG	32	-6.425	-0.290	6.796	0.00	0.00
ATOM	1024	O2'	RG	32	-8.398	0.001	6.843	0.00	0.00
ATOM	1025	2HO'	RG	32	-8.411	0.639	6.196	0.00	0.00
ATOM	1026	O3'	RG	32	-7.940	-0.509	4.285	0.00	0.00
ATOM	1027	P	RG	33	-7.350	0.853	3.909	0.00	0.00
ATOM	1028	O1P	RG	33	-7.689	1.763	4.930	0.00	0.00
ATOM	1029	O2P	RG	33	-5.989	0.659	3.584	0.00	0.00
ATOM	1030	O5'	RG	33	-8.102	1.271	2.617	0.00	0.00
ATOM	1031	C5'	RG	33	-9.442	1.602	2.612	0.00	0.00
ATOM	1032	1H5'	RG	33	-9.636	2.308	3.370	0.00	0.00
ATOM	1033	2H5'	RG	33	-10.008	0.730	2.806	0.00	0.00
ATOM	1034	C4'	RG	33	-9.886	2.196	1.307	0.00	0.00
ATOM	1035	H4'	RG	33	-10.944	2.285	1.331	0.00	0.00
ATOM	1036	O4'	RG	33	-9.358	3.482	1.131	0.00	0.00
ATOM	1037	C1'	RG	33	-8.942	3.648	-0.203	0.00	0.00
ATOM	1038	H1'	RG	33	-9.369	4.539	-0.624	0.00	0.00
ATOM	1039	N9	RG	33	-7.480	3.771	-0.278	0.00	0.00
ATOM	1040	C8	RG	33	-6.558	3.553	0.692	0.00	0.00
ATOM	1041	H8	RG	33	-6.823	3.187	1.654	0.00	0.00
ATOM	1042	N7	RG	33	-5.342	3.831	0.353	0.00	0.00
ATOM	1043	C5	RG	33	-5.463	4.278	-0.949	0.00	0.00
ATOM	1044	C6	RG	33	-4.491	4.769	-1.870	0.00	0.00
ATOM	1045	O6	RG	33	-3.295	4.922	-1.716	0.00	0.00
ATOM	1046	N1	RG	33	-5.016	5.110	-3.082	0.00	0.00
ATOM	1047	H1	RG	33	-4.396	5.502	-3.751	0.00	0.00
ATOM	1048	C2	RG	33	-6.320	5.020	-3.378	0.00	0.00
ATOM	1049	N2	RG	33	-6.673	5.362	-4.567	0.00	0.00
ATOM	1050	H21	RG	33	-5.993	5.663	-5.223	0.00	0.00
ATOM	1051	H22	RG	33	-7.629	5.297	-4.804	0.00	0.00
ATOM	1052	N3	RG	33	-7.259	4.586	-2.559	0.00	0.00
ATOM	1053	C4	RG	33	-6.768	4.228	-1.349	0.00	0.00
ATOM	1054	C3'	RG	33	-9.520	1.380	0.094	0.00	0.00
ATOM	1055	H3'	RG	33	-8.551	0.959	0.226	0.00	0.00
ATOM	1056	C2'	RG	33	-9.445	2.448	-0.969	0.00	0.00
ATOM	1057	1H2'	RG	33	-8.770	2.166	-1.741	0.00	0.00
ATOM	1058	O2'	RG	33	-10.693	2.757	-1.499	0.00	0.00
ATOM	1059	2HO'	RG	33	-10.979	2.296	-1.752	0.00	0.00
ATOM	1060	O3'	RG	33	-10.470	0.391	-0.191	0.00	0.00
ATOM	1061	P	RU	34	-10.100	-0.874	-1.024	0.00	0.00
ATOM	1062	O1P	RU	34	-8.943	-1.479	-0.413	0.00	0.00
ATOM	1063	O2P	RU	34	-11.298	-1.659	-1.173	0.00	0.00
ATOM	1064	O5'	RU	34	-9.711	-0.323	-2.434	0.00	0.00
ATOM	1065	C5'	RU	34	-9.253	-0.586	-3.312	0.00	0.00
ATOM	1066	1H5'	RU	34	-9.648	-1.050	-3.434	0.00	0.00
ATOM	1067	2H5'	RU	34	-8.785	-0.887	-3.014	0.00	0.00
ATOM	1068	C4'	RU	34	-8.882	0.184	-4.520	0.00	0.00
ATOM	1069	H4'	RU	34	-9.755	0.354	-5.093	0.00	0.00
ATOM	1070	O4'	RU	34	-8.284	1.406	-4.185	0.00	0.00
ATOM	1071	C1'	RU	34	-7.242	1.686	-5.086	0.00	0.00
ATOM	1072	H1'	RU	34	-7.415	2.632	-5.546	0.00	0.00
ATOM	1073	N1	RU	34	-5.914	1.729	-4.431	0.00	0.00
ATOM	1074	C6	RU	34	-5.709	1.239	-3.172	0.00	0.00
ATOM	1075	H6	RU	34	-6.517	0.794	-2.644	0.00	0.00
ATOM	1076	C5	RU	34	-4.496	1.316	-2.591	0.00	0.00
ATOM	1077	H5	RU	34	-4.348	0.931	-1.611	0.00	0.00
ATOM	1078	C4	RU	34	-3.381	1.910	-3.252	0.00	0.00
ATOM	1079	O4	RU	34	-2.269	2.022	-2.788	0.00	0.00
ATOM	1080	N3	RU	34	-3.659	2.388	-4.490	0.00	0.00
ATOM	1081	H3	RU	34	-2.915	2.822	-4.977	0.00	0.00

ATOM	1082	C2	RU	34	-4.867	2.319	-5.124	0.00	0.00
ATOM	1083	O2	RU	34	-4.977	2.771	-6.244	0.00	0.00
ATOM	1084	C3'	RU	34	-7.905	-0.537	-5.383	0.00	0.00
ATOM	1085	H3'	RU	34	-7.147	-0.956	-4.769	0.00	0.00
ATOM	1086	C2'	RU	34	-7.321	0.610	-6.142	0.00	0.00
ATOM	1087	1H2'	RU	34	-6.363	0.371	-6.522	0.00	0.00
ATOM	1088	O2'	RU	34	-8.166	1.028	-7.161	0.00	0.00
ATOM	1089	2HO'	RU	34	-8.437	0.541	-7.506	0.00	0.00
ATOM	1090	O3'	RU	34	-8.499	-1.504	-6.204	0.00	0.00
ATOM	1091	P	RG	35	-7.694	-2.722	-6.736	0.00	0.00
ATOM	1092	O1P	RG	35	-6.973	-3.294	-5.627	0.00	0.00
ATOM	1093	O2P	RG	35	-8.609	-3.556	-7.490	0.00	0.00
ATOM	1094	O5'	RG	35	-6.641	-2.138	-7.723	0.00	0.00
ATOM	1095	C5'	RG	35	-7.005	-1.704	-8.990	0.00	0.00
ATOM	1096	1H5'	RG	35	-7.812	-1.018	-8.920	0.00	0.00
ATOM	1097	2H5'	RG	35	-7.328	-2.536	-9.574	0.00	0.00
ATOM	1098	C4'	RG	35	-5.852	-1.039	-9.700	0.00	0.00
ATOM	1099	H4'	RG	35	-6.204	-0.695	-10.649	0.00	0.00
ATOM	1100	O4'	RG	35	-5.353	0.066	-8.983	0.00	0.00
ATOM	1101	C1'	RG	35	-3.960	0.156	-9.198	0.00	0.00
ATOM	1102	H1'	RG	35	-3.705	1.109	-9.619	0.00	0.00
ATOM	1103	N9	RG	35	-3.209	0.009	-7.946	0.00	0.00
ATOM	1104	C8	RG	35	-3.570	-0.602	-6.784	0.00	0.00
ATOM	1105	H8	RG	35	-4.507	-1.098	-6.673	0.00	0.00
ATOM	1106	N7	RG	35	-2.692	-0.508	-5.836	0.00	0.00
ATOM	1107	C5	RG	35	-1.648	0.199	-6.420	0.00	0.00
ATOM	1108	C6	RG	35	-0.382	0.628	-5.912	0.00	0.00
ATOM	1109	O6	RG	35	0.081	0.510	-4.791	0.00	0.00
ATOM	1110	N1	RG	35	0.402	1.250	-6.846	0.00	0.00
ATOM	1111	H1	RG	35	1.301	1.568	-6.563	0.00	0.00
ATOM	1112	C2	RG	35	0.014	1.468	-8.109	0.00	0.00
ATOM	1113	N2	RG	35	0.854	2.061	-8.882	0.00	0.00
ATOM	1114	H21	RG	35	1.741	2.343	-8.535	0.00	0.00
ATOM	1115	H22	RG	35	0.582	2.232	-9.810	0.00	0.00
ATOM	1116	N3	RG	35	-1.155	1.122	-8.617	0.00	0.00
ATOM	1117	C4	RG	35	-1.949	0.485	-7.721	0.00	0.00
ATOM	1118	C3'	RG	35	-4.680	-1.951	-9.954	0.00	0.00
ATOM	1119	H3'	RG	35	-4.462	-2.500	-9.066	0.00	0.00
ATOM	1120	C2'	RG	35	-3.590	-0.928	-10.185	0.00	0.00
ATOM	1121	1H2'	RG	35	-2.625	-1.336	-9.973	0.00	0.00
ATOM	1122	O2'	RG	35	-3.624	-0.384	-11.467	0.00	0.00
ATOM	1123	2HO'	RG	35	-3.483	-0.734	-11.894	0.00	0.00
ATOM	1124	O3'	RG	35	-4.880	-2.805	-11.045	0.00	0.00
ATOM	1125	P	RC	36	-4.103	-4.146	-11.182	0.00	0.00
ATOM	1126	O1P	RC	36	-4.164	-4.828	-9.918	0.00	0.00
ATOM	1127	O2P	RC	36	-4.604	-4.815	-12.357	0.00	0.00
ATOM	1128	O5'	RC	36	-2.614	-3.754	-11.444	0.00	0.00
ATOM	1129	C5'	RC	36	-2.189	-3.275	-12.679	0.00	0.00
ATOM	1130	1H5'	RC	36	-2.828	-2.483	-12.993	0.00	0.00
ATOM	1131	2H5'	RC	36	-2.245	-4.057	-13.403	0.00	0.00
ATOM	1132	C4'	RC	36	-0.772	-2.753	-12.630	0.00	0.00
ATOM	1133	H4'	RC	36	-0.535	-2.362	-13.597	0.00	0.00
ATOM	1134	O4'	RC	36	-0.620	-1.723	-11.676	0.00	0.00
ATOM	1135	C1'	RC	36	0.696	-1.758	-11.166	0.00	0.00
ATOM	1136	H1'	RC	36	1.189	-0.835	-11.395	0.00	0.00
ATOM	1137	N1	RC	36	0.739	-1.955	-9.703	0.00	0.00
ATOM	1138	C6	RC	36	-0.220	-2.641	-9.038	0.00	0.00
ATOM	1139	H6	RC	36	-1.046	-3.044	-9.568	0.00	0.00
ATOM	1140	C5	RC	36	-0.131	-2.807	-7.712	0.00	0.00
ATOM	1141	H5	RC	36	-0.885	-3.337	-7.189	0.00	0.00
ATOM	1142	C4	RC	36	0.986	-2.267	-7.066	0.00	0.00
ATOM	1143	N4	RC	36	1.117	-2.383	-5.796	0.00	0.00
ATOM	1144	H41	RC	36	1.893	-1.953	-5.367	0.00	0.00
ATOM	1145	H42	RC	36	0.428	-2.854	-5.281	0.00	0.00
ATOM	1146	N3	RC	36	1.924	-1.613	-7.681	0.00	0.00
ATOM	1147	C2	RC	36	1.825	-1.457	-9.007	0.00	0.00
ATOM	1148	O2	RC	36	2.727	-0.878	-9.568	0.00	0.00
ATOM	1149	C3'	RC	36	0.269	-3.791	-12.295	0.00	0.00

ATOM	1150	H3'	RC	36	-0.062	-4.356	-11.451	0.00	0.00
ATOM	1151	C2'	RC	36	1.406	-2.884	-11.884	0.00	0.00
ATOM	1152	1H2'	RC	36	2.086	-3.389	-11.239	0.00	0.00
ATOM	1153	O2'	RC	36	2.077	-2.342	-12.977	0.00	0.00
ATOM	1154	2HO'	RC	36	2.389	-2.739	-13.326	0.00	0.00
ATOM	1155	O3'	RC	36	0.588	-4.628	-13.374	0.00	0.00
ATOM	1156	P	RA	37	1.257	-6.025	-13.155	0.00	0.00
ATOM	1157	O1P	RA	37	0.549	-6.698	-12.100	0.00	0.00
ATOM	1158	O2P	RA	37	1.360	-6.667	-14.447	0.00	0.00
ATOM	1159	O5'	RA	37	2.701	-5.735	-12.633	0.00	0.00
ATOM	1160	C5'	RA	37	3.713	-5.299	-13.479	0.00	0.00
ATOM	1161	1H5'	RA	37	3.372	-4.463	-14.040	0.00	0.00
ATOM	1162	2H5'	RA	37	3.976	-6.075	-14.160	0.00	0.00
ATOM	1163	C4'	RA	37	4.953	-4.895	-12.719	0.00	0.00
ATOM	1164	H4'	RA	37	5.667	-4.530	-13.425	0.00	0.00
ATOM	1165	O4'	RA	37	4.689	-3.877	-11.785	0.00	0.00
ATOM	1166	C1'	RA	37	5.520	-4.062	-10.665	0.00	0.00
ATOM	1167	H1'	RA	37	6.107	-3.185	-10.483	0.00	0.00
ATOM	1168	N9	RA	37	4.726	-4.340	-9.467	0.00	0.00
ATOM	1169	C8	RA	37	3.486	-4.882	-9.353	0.00	0.00
ATOM	1170	H8	RA	37	2.924	-5.210	-10.191	0.00	0.00
ATOM	1171	N7	RA	37	3.042	-4.950	-8.143	0.00	0.00
ATOM	1172	C5	RA	37	4.093	-4.445	-7.392	0.00	0.00
ATOM	1173	C6	RA	37	4.330	-4.229	-6.029	0.00	0.00
ATOM	1174	N6	RA	37	3.485	-4.451	-5.071	0.00	0.00
ATOM	1175	H61	RA	37	3.760	-4.249	-4.149	0.00	0.00
ATOM	1176	H62	RA	37	2.590	-4.784	-5.290	0.00	0.00
ATOM	1177	N1	RA	37	5.490	-3.768	-5.606	0.00	0.00
ATOM	1178	C2	RA	37	6.408	-3.506	-6.499	0.00	0.00
ATOM	1179	H2	RA	37	7.326	-3.134	-6.124	0.00	0.00
ATOM	1180	N3	RA	37	6.330	-3.632	-7.803	0.00	0.00
ATOM	1181	C4	RA	37	5.132	-4.103	-8.190	0.00	0.00
ATOM	1182	C3'	RA	37	5.611	-6.018	-11.952	0.00	0.00
ATOM	1183	H3'	RA	37	4.861	-6.563	-11.424	0.00	0.00
ATOM	1184	C2'	RA	37	6.443	-5.221	-10.979	0.00	0.00
ATOM	1185	1H2'	RA	37	6.670	-5.791	-10.105	0.00	0.00
ATOM	1186	O2'	RA	37	7.609	-4.715	-11.550	0.00	0.00
ATOM	1187	2HO'	RA	37	8.012	-5.067	-11.733	0.00	0.00
ATOM	1188	O3'	RA	37	6.379	-6.860	-12.761	0.00	0.00
ATOM	1189	P	RC	38	6.667	-8.336	-12.351	0.00	0.00
ATOM	1190	O1P	RC	38	5.412	-8.944	-11.972	0.00	0.00
ATOM	1191	O2P	RC	38	7.441	-8.938	-13.420	0.00	0.00
ATOM	1192	O5'	RC	38	7.563	-8.245	-11.072	0.00	0.00
ATOM	1193	C5'	RC	38	8.908	-7.887	-11.141	0.00	0.00
ATOM	1194	1H5'	RC	38	9.008	-6.973	-11.675	0.00	0.00
ATOM	1195	2H5'	RC	38	9.451	-8.642	-11.662	0.00	0.00
ATOM	1196	C4'	RC	38	9.518	-7.722	-9.766	0.00	0.00
ATOM	1197	H4'	RC	38	10.537	-7.420	-9.888	0.00	0.00
ATOM	1198	O4'	RC	38	8.860	-6.737	-9.008	0.00	0.00
ATOM	1199	C1'	RC	38	8.931	-7.086	-7.644	0.00	0.00
ATOM	1200	H1'	RC	38	9.484	-6.337	-7.108	0.00	0.00
ATOM	1201	N1	RC	38	7.596	-7.217	-7.031	0.00	0.00
ATOM	1202	C6	RC	38	6.507	-7.592	-7.742	0.00	0.00
ATOM	1203	H6	RC	38	6.598	-7.763	-8.782	0.00	0.00
ATOM	1204	C5	RC	38	5.325	-7.750	-7.140	0.00	0.00
ATOM	1205	H5	RC	38	4.471	-8.033	-7.699	0.00	0.00
ATOM	1206	C4	RC	38	5.273	-7.529	-5.767	0.00	0.00
ATOM	1207	N4	RC	38	4.171	-7.661	-5.132	0.00	0.00
ATOM	1208	H41	RC	38	4.165	-7.416	-4.183	0.00	0.00
ATOM	1209	H42	RC	38	3.356	-7.866	-5.628	0.00	0.00
ATOM	1210	N3	RC	38	6.303	-7.188	-5.057	0.00	0.00
ATOM	1211	C2	RC	38	7.478	-7.031	-5.670	0.00	0.00
ATOM	1212	O2	RC	38	8.430	-6.729	-4.983	0.00	0.00
ATOM	1213	C3'	RC	38	9.516	-8.984	-8.941	0.00	0.00
ATOM	1214	H3'	RC	38	8.557	-9.452	-9.011	0.00	0.00
ATOM	1215	C2'	RC	38	9.689	-8.390	-7.555	0.00	0.00
ATOM	1216	1H2'	RC	38	9.272	-9.039	-6.815	0.00	0.00
ATOM	1217	O2'	RC	38	11.022	-8.106	-7.253	0.00	0.00

ATOM	1218	2HO'	RC	38	11.440	-8.863	-7.184	0.00	0.00
ATOM	1219	O3'	RC	38	10.527	-9.879	-9.313	0.00	0.00
ATOM	1220	P	RA	39	10.642	-11.295	-8.672	0.00	0.00
ATOM	1221	O1P	RA	39	9.332	-11.861	-8.605	0.00	0.00
ATOM	1222	O2P	RA	39	11.690	-12.008	-9.350	0.00	0.00
ATOM	1223	O5'	RA	39	11.150	-10.987	-7.240	0.00	0.00
ATOM	1224	C5'	RA	39	10.858	-11.767	-6.165	0.00	0.00
ATOM	1225	1H5'	RA	39	11.369	-12.674	-6.256	0.00	0.00
ATOM	1226	2H5'	RA	39	9.842	-11.958	-6.131	0.00	0.00
ATOM	1227	C4'	RA	39	11.266	-11.086	-4.903	0.00	0.00
ATOM	1228	H4'	RA	39	12.239	-10.701	-5.013	0.00	0.00
ATOM	1229	O4'	RA	39	10.393	-10.055	-4.582	0.00	0.00
ATOM	1230	C1'	RA	39	10.253	-9.953	-3.195	0.00	0.00
ATOM	1231	H1'	RA	39	10.560	-8.987	-2.858	0.00	0.00
ATOM	1232	N9	RA	39	8.854	-10.139	-2.816	0.00	0.00
ATOM	1233	C8	RA	39	7.781	-10.341	-3.608	0.00	0.00
ATOM	1234	H8	RA	39	7.863	-10.419	-4.658	0.00	0.00
ATOM	1235	N7	RA	39	6.655	-10.419	-2.987	0.00	0.00
ATOM	1236	C5	RA	39	7.015	-10.236	-1.670	0.00	0.00
ATOM	1237	C6	RA	39	6.329	-10.168	-0.459	0.00	0.00
ATOM	1238	N6	RA	39	5.051	-10.273	-0.317	0.00	0.00
ATOM	1239	H61	RA	39	4.679	-10.199	0.582	0.00	0.00
ATOM	1240	H62	RA	39	4.494	-10.429	-1.106	0.00	0.00
ATOM	1241	N1	RA	39	6.962	-9.959	0.669	0.00	0.00
ATOM	1242	C2	RA	39	8.254	-9.807	0.618	0.00	0.00
ATOM	1243	H2	RA	39	8.734	-9.634	1.543	0.00	0.00
ATOM	1244	N3	RA	39	9.033	-9.842	-0.430	0.00	0.00
ATOM	1245	C4	RA	39	8.348	-10.062	-1.559	0.00	0.00
ATOM	1246	C3'	RA	39	11.267	-12.005	-3.720	0.00	0.00
ATOM	1247	H3'	RA	39	10.390	-12.597	-3.743	0.00	0.00
ATOM	1248	C2'	RA	39	11.166	-11.007	-2.603	0.00	0.00
ATOM	1249	1H2'	RA	39	10.746	-11.461	-1.737	0.00	0.00
ATOM	1250	O2'	RA	39	12.389	-10.415	-2.298	0.00	0.00
ATOM	1251	2HO'	RA	39	12.786	-10.679	-2.219	0.00	0.00
ATOM	1252	O3'	RA	39	12.419	-12.782	-3.647	0.00	0.00
ATOM	1253	P	RC	40	12.376	-14.232	-3.125	0.00	0.00
ATOM	1254	O1P	RC	40	11.347	-14.931	-3.851	0.00	0.00
ATOM	1255	O2P	RC	40	13.720	-14.741	-3.149	0.00	0.00
ATOM	1256	O5'	RC	40	11.926	-14.122	-1.638	0.00	0.00
ATOM	1257	C5'	RC	40	12.769	-13.630	-0.639	0.00	0.00
ATOM	1258	1H5'	RC	40	13.141	-12.672	-0.922	0.00	0.00
ATOM	1259	2H5'	RC	40	13.598	-14.287	-0.518	0.00	0.00
ATOM	1260	C4'	RC	40	12.059	-13.500	0.688	0.00	0.00
ATOM	1261	H4'	RC	40	12.763	-13.130	1.403	0.00	0.00
ATOM	1262	O4'	RC	40	10.972	-12.608	0.621	0.00	0.00
ATOM	1263	C1'	RC	40	9.949	-13.045	1.492	0.00	0.00
ATOM	1264	H1'	RC	40	9.760	-12.288	2.230	0.00	0.00
ATOM	1265	N1	RC	40	8.681	-13.329	0.771	0.00	0.00
ATOM	1266	C6	RC	40	8.637	-13.591	-0.558	0.00	0.00
ATOM	1267	H6	RC	40	9.543	-13.634	-1.106	0.00	0.00
ATOM	1268	C5	RC	40	7.461	-13.778	-1.181	0.00	0.00
ATOM	1269	H5	RC	40	7.435	-13.966	-2.222	0.00	0.00
ATOM	1270	C4	RC	40	6.301	-13.710	-0.409	0.00	0.00
ATOM	1271	N4	RC	40	5.145	-13.839	-0.960	0.00	0.00
ATOM	1272	H41	RC	40	4.353	-13.744	-0.386	0.00	0.00
ATOM	1273	H42	RC	40	5.078	-13.980	-1.928	0.00	0.00
ATOM	1274	N3	RC	40	6.312	-13.486	0.870	0.00	0.00
ATOM	1275	C2	RC	40	7.494	-13.307	1.482	0.00	0.00
ATOM	1276	O2	RC	40	7.478	-13.119	2.679	0.00	0.00
ATOM	1277	C3'	RC	40	11.507	-14.799	1.214	0.00	0.00
ATOM	1278	H3'	RC	40	11.012	-15.316	0.418	0.00	0.00
ATOM	1279	C2'	RC	40	10.482	-14.277	2.191	0.00	0.00
ATOM	1280	1H2'	RC	40	9.715	-15.003	2.358	0.00	0.00
ATOM	1281	O2'	RC	40	11.054	-13.878	3.401	0.00	0.00
ATOM	1282	2HO'	RC	40	11.386	-14.329	3.714	0.00	0.00
ATOM	1283	O3'	RC	40	12.491	-15.596	1.812	0.00	0.00
ATOM	1284	P	RA	41	12.321	-17.142	1.939	0.00	0.00
ATOM	1285	O1P	RA	41	11.856	-17.647	0.671	0.00	0.00

ATOM	1286	O2P	RA	41	13.546	-17.670	2.491	0.00	0.00
ATOM	1287	O5'	RA	41	11.174	-17.346	2.980	0.00	0.00
ATOM	1288	C5'	RA	41	11.390	-17.181	4.347	0.00	0.00
ATOM	1289	1H5'	RA	41	11.856	-16.243	4.530	0.00	0.00
ATOM	1290	2H5'	RA	41	12.038	-17.948	4.702	0.00	0.00
ATOM	1291	C4'	RA	41	10.104	-17.235	5.134	0.00	0.00
ATOM	1292	H4'	RA	41	10.334	-17.056	6.165	0.00	0.00
ATOM	1293	O4'	RA	41	9.196	-16.250	4.703	0.00	0.00
ATOM	1294	C1'	RA	41	7.886	-16.754	4.809	0.00	0.00
ATOM	1295	H1'	RA	41	7.304	-16.128	5.454	0.00	0.00
ATOM	1296	N9	RA	41	7.225	-16.809	3.499	0.00	0.00
ATOM	1297	C8	RA	41	7.765	-16.987	2.269	0.00	0.00
ATOM	1298	H8	RA	41	8.807	-17.126	2.116	0.00	0.00
ATOM	1299	N7	RA	41	6.911	-16.941	1.295	0.00	0.00
ATOM	1300	C5	RA	41	5.699	-16.762	1.947	0.00	0.00
ATOM	1301	C6	RA	41	4.355	-16.645	1.548	0.00	0.00
ATOM	1302	N6	RA	41	3.923	-16.647	0.319	0.00	0.00
ATOM	1303	H61	RA	41	2.953	-16.533	0.159	0.00	0.00
ATOM	1304	H62	RA	41	4.571	-16.707	-0.413	0.00	0.00
ATOM	1305	N1	RA	41	3.393	-16.511	2.439	0.00	0.00
ATOM	1306	C2	RA	41	3.728	-16.498	3.709	0.00	0.00
ATOM	1307	H2	RA	41	2.928	-16.395	4.396	0.00	0.00
ATOM	1308	N3	RA	41	4.929	-16.590	4.237	0.00	0.00
ATOM	1309	C4	RA	41	5.883	-16.717	3.290	0.00	0.00
ATOM	1310	C3'	RA	41	9.389	-18.561	5.053	0.00	0.00
ATOM	1311	H3'	RA	41	9.406	-18.899	4.037	0.00	0.00
ATOM	1312	C2'	RA	41	7.985	-18.131	5.417	0.00	0.00
ATOM	1313	1H2'	RA	41	7.259	-18.791	4.994	0.00	0.00
ATOM	1314	O2'	RA	41	7.803	-18.024	6.798	0.00	0.00
ATOM	1315	2HO'	RA	41	7.825	-18.734	7.113	0.00	0.00
ATOM	1316	O3'	RA	41	9.928	-19.524	5.920	0.00	0.00
ATOM	1317	P	RG	42	9.503	-21.029	5.840	0.00	0.00
ATOM	1318	O1P	RG	42	9.536	-21.433	4.450	0.00	0.00
ATOM	1319	O2P	RG	42	10.303	-21.750	6.800	0.00	0.00
ATOM	1320	O5'	RG	42	8.020	-21.041	6.347	0.00	0.00
ATOM	1321	C5'	RG	42	7.153	-21.698	6.221	0.00	0.00
ATOM	1322	1H5'	RG	42	7.429	-22.315	6.566	0.00	0.00
ATOM	1323	2H5'	RG	42	7.190	-21.857	5.492	0.00	0.00
ATOM	1324	C4'	RG	42	5.762	-21.334	6.639	0.00	0.00
ATOM	1325	H4'	RG	42	5.734	-21.243	7.697	0.00	0.00
ATOM	1326	O4'	RG	42	5.356	-20.119	6.065	0.00	0.00
ATOM	1327	C1'	RG	42	4.018	-20.220	5.646	0.00	0.00
ATOM	1328	H1'	RG	42	3.438	-19.413	6.045	0.00	0.00
ATOM	1329	N9	RG	42	3.938	-20.163	4.181	0.00	0.00
ATOM	1330	C8	RG	42	4.945	-20.185	3.274	0.00	0.00
ATOM	1331	H8	RG	42	5.968	-20.279	3.555	0.00	0.00
ATOM	1332	N7	RG	42	4.562	-20.069	2.046	0.00	0.00
ATOM	1333	C5	RG	42	3.185	-19.962	2.139	0.00	0.00
ATOM	1334	C6	RG	42	2.177	-19.806	1.140	0.00	0.00
ATOM	1335	O6	RG	42	2.296	-19.695	-0.064	0.00	0.00
ATOM	1336	N1	RG	42	0.909	-19.786	1.643	0.00	0.00
ATOM	1337	H1	RG	42	0.156	-19.735	0.995	0.00	0.00
ATOM	1338	C2	RG	42	0.628	-19.881	2.947	0.00	0.00
ATOM	1339	N2	RG	42	-0.621	-19.896	3.268	0.00	0.00
ATOM	1340	H21	RG	42	-1.320	-19.904	2.563	0.00	0.00
ATOM	1341	H22	RG	42	-0.850	-19.968	4.227	0.00	0.00
ATOM	1342	N3	RG	42	1.525	-19.991	3.911	0.00	0.00
ATOM	1343	C4	RG	42	2.795	-20.036	3.445	0.00	0.00
ATOM	1344	C3'	RG	42	4.741	-22.369	6.236	0.00	0.00
ATOM	1345	H3'	RG	42	4.965	-22.713	5.253	0.00	0.00
ATOM	1346	C2'	RG	42	3.486	-21.532	6.194	0.00	0.00
ATOM	1347	1H2'	RG	42	2.750	-21.966	5.554	0.00	0.00
ATOM	1348	O2'	RG	42	2.961	-21.305	7.466	0.00	0.00
ATOM	1349	2HO'	RG	42	2.890	-21.670	7.787	0.00	0.00
ATOM	1350	O3'	RG	42	4.667	-23.424	7.153	0.00	0.00
ATOM	1351	P	RC	43	4.224	-24.855	6.713	0.00	0.00
ATOM	1352	O1P	RC	43	4.981	-25.207	5.538	0.00	0.00
ATOM	1353	O2P	RC	43	4.293	-25.714	7.878	0.00	0.00

ATOM	1354	O5'	RC	43	2.723	-24.723	6.292	0.00	0.00
ATOM	1355	C5'	RC	43	1.703	-24.556	7.227	0.00	0.00
ATOM	1356	1H5'	RC	43	1.893	-23.696	7.827	0.00	0.00
ATOM	1357	2H5'	RC	43	1.668	-25.410	7.871	0.00	0.00
ATOM	1358	C4'	RC	43	0.351	-24.404	6.571	0.00	0.00
ATOM	1359	H4'	RC	43	-0.381	-24.298	7.340	0.00	0.00
ATOM	1360	O4'	RC	43	0.280	-23.274	5.734	0.00	0.00
ATOM	1361	C1'	RC	43	-0.593	-23.556	4.657	0.00	0.00
ATOM	1362	H1'	RC	43	-1.414	-22.866	4.670	0.00	0.00
ATOM	1363	N1	RC	43	0.072	-23.449	3.342	0.00	0.00
ATOM	1364	C6	RC	43	1.417	-23.544	3.199	0.00	0.00
ATOM	1365	H6	RC	43	2.021	-23.730	4.052	0.00	0.00
ATOM	1366	C5	RC	43	1.984	-23.388	1.993	0.00	0.00
ATOM	1367	H5	RC	43	3.038	-23.461	1.890	0.00	0.00
ATOM	1368	C4	RC	43	1.136	-23.152	0.904	0.00	0.00
ATOM	1369	N4	RC	43	1.621	-22.981	-0.269	0.00	0.00
ATOM	1370	H41	RC	43	0.999	-22.782	-1.010	0.00	0.00
ATOM	1371	H42	RC	43	2.592	-22.994	-0.389	0.00	0.00
ATOM	1372	N3	RC	43	-0.158	-23.080	1.010	0.00	0.00
ATOM	1373	C2	RC	43	-0.711	-23.237	2.221	0.00	0.00
ATOM	1374	O2	RC	43	-1.922	-23.213	2.297	0.00	0.00
ATOM	1375	C3'	RC	43	-0.047	-25.583	5.724	0.00	0.00
ATOM	1376	H3'	RC	43	0.773	-25.848	5.099	0.00	0.00
ATOM	1377	C2'	RC	43	-1.131	-24.953	4.885	0.00	0.00
ATOM	1378	1H2'	RC	43	-1.263	-25.478	3.971	0.00	0.00
ATOM	1379	O2'	RC	43	-2.337	-24.855	5.562	0.00	0.00
ATOM	1380	2HO'	RC	43	-2.498	-25.377	5.907	0.00	0.00
ATOM	1381	O3'	RC	43	-0.497	-26.672	6.476	0.00	0.00
ATOM	1382	P	RA	44	-0.419	-28.116	5.921	0.00	0.00
ATOM	1383	O1P	RA	44	0.880	-28.297	5.334	0.00	0.00
ATOM	1384	O2P	RA	44	-0.843	-29.015	6.967	0.00	0.00
ATOM	1385	O5'	RA	44	-1.472	-28.172	4.775	0.00	0.00
ATOM	1386	C5'	RA	44	-2.835	-28.265	5.038	0.00	0.00
ATOM	1387	1H5'	RA	44	-3.144	-27.468	5.666	0.00	0.00
ATOM	1388	2H5'	RA	44	-3.029	-29.181	5.539	0.00	0.00
ATOM	1389	C4'	RA	44	-3.664	-28.224	3.780	0.00	0.00
ATOM	1390	H4'	RA	44	-4.692	-28.295	4.061	0.00	0.00
ATOM	1391	O4'	RA	44	-3.489	-27.032	3.060	0.00	0.00
ATOM	1392	C1'	RA	44	-3.610	-27.312	1.688	0.00	0.00
ATOM	1393	H1'	RA	44	-4.387	-26.719	1.249	0.00	0.00
ATOM	1394	N9	RA	44	-2.356	-27.013	0.998	0.00	0.00
ATOM	1395	C8	RA	44	-1.099	-26.914	1.500	0.00	0.00
ATOM	1396	H8	RA	44	-0.875	-27.100	2.520	0.00	0.00
ATOM	1397	N7	RA	44	-0.203	-26.553	0.645	0.00	0.00
ATOM	1398	C5	RA	44	-0.929	-26.436	-0.529	0.00	0.00
ATOM	1399	C6	RA	44	-0.632	-26.091	-1.850	0.00	0.00
ATOM	1400	N6	RA	44	0.535	-25.717	-2.287	0.00	0.00
ATOM	1401	H61	RA	44	0.618	-25.471	-3.238	0.00	0.00
ATOM	1402	H62	RA	44	1.289	-25.646	-1.658	0.00	0.00
ATOM	1403	N1	RA	44	-1.564	-26.104	-2.783	0.00	0.00
ATOM	1404	C2	RA	44	-2.779	-26.444	-2.434	0.00	0.00
ATOM	1405	H2	RA	44	-3.502	-26.446	-3.212	0.00	0.00
ATOM	1406	N3	RA	44	-3.219	-26.765	-1.243	0.00	0.00
ATOM	1407	C4	RA	44	-2.233	-26.743	-0.325	0.00	0.00
ATOM	1408	C3'	RA	44	-3.369	-29.344	2.821	0.00	0.00
ATOM	1409	H3'	RA	44	-2.313	-29.439	2.702	0.00	0.00
ATOM	1410	C2'	RA	44	-3.972	-28.770	1.564	0.00	0.00
ATOM	1411	1H2'	RA	44	-3.541	-29.205	0.693	0.00	0.00
ATOM	1412	O2'	RA	44	-5.357	-28.874	1.526	0.00	0.00
ATOM	1413	2HO'	RA	44	-5.580	-29.390	1.533	0.00	0.00
ATOM	1414	O3'	RA	44	-3.939	-30.555	3.199	0.00	0.00
ATOM	1415	P	RA	45	-3.346	-31.906	2.713	0.00	0.00
ATOM	1416	O1P	RA	45	-1.918	-31.868	2.906	0.00	0.00
ATOM	1417	O2P	RA	45	-4.105	-32.960	3.337	0.00	0.00
ATOM	1418	O5'	RA	45	-3.618	-31.954	1.179	0.00	0.00
ATOM	1419	C5'	RA	45	-4.883	-32.224	0.669	0.00	0.00
ATOM	1420	1H5'	RA	45	-5.591	-31.561	1.092	0.00	0.00
ATOM	1421	2H5'	RA	45	-5.163	-33.216	0.917	0.00	0.00

ATOM	1422	C4'	RA	45	-4.930	-32.082	-0.827	0.00	0.00
ATOM	1423	H4'	RA	45	-5.923	-32.299	-1.141	0.00	0.00
ATOM	1424	O4'	RA	45	-4.604	-30.792	-1.251	0.00	0.00
ATOM	1425	C1'	RA	45	-3.959	-30.867	-2.492	0.00	0.00
ATOM	1426	H1'	RA	45	-4.484	-30.295	-3.223	0.00	0.00
ATOM	1427	N9	RA	45	-2.596	-30.347	-2.407	0.00	0.00
ATOM	1428	C8	RA	45	-1.774	-30.254	-1.343	0.00	0.00
ATOM	1429	H8	RA	45	-2.061	-30.577	-0.378	0.00	0.00
ATOM	1430	N7	RA	45	-0.618	-29.743	-1.602	0.00	0.00
ATOM	1431	C5	RA	45	-0.683	-29.488	-2.954	0.00	0.00
ATOM	1432	C6	RA	45	0.184	-28.952	-3.911	0.00	0.00
ATOM	1433	N6	RA	45	1.377	-28.513	-3.679	0.00	0.00
ATOM	1434	H61	RA	45	1.889	-28.122	-4.423	0.00	0.00
ATOM	1435	H62	RA	45	1.721	-28.534	-2.765	0.00	0.00
ATOM	1436	N1	RA	45	-0.159	-28.872	-5.169	0.00	0.00
ATOM	1437	C2	RA	45	-1.348	-29.297	-5.496	0.00	0.00
ATOM	1438	H2	RA	45	-1.594	-29.219	-6.519	0.00	0.00
ATOM	1439	N3	RA	45	-2.275	-29.805	-4.724	0.00	0.00
ATOM	1440	C4	RA	45	-1.876	-29.874	-3.449	0.00	0.00
ATOM	1441	C3'	RA	45	-4.000	-32.996	-1.561	0.00	0.00
ATOM	1442	H3'	RA	45	-3.039	-32.939	-1.117	0.00	0.00
ATOM	1443	C2'	RA	45	-3.954	-32.312	-2.893	0.00	0.00
ATOM	1444	1H2'	RA	45	-3.072	-32.566	-3.428	0.00	0.00
ATOM	1445	O2'	RA	45	-5.080	-32.554	-3.661	0.00	0.00
ATOM	1446	2HO'	RA	45	-5.201	-33.081	-3.804	0.00	0.00
ATOM	1447	O3'	RA	45	-4.454	-34.304	-1.625	0.00	0.00
ATOM	1448	P	RG3	46	-3.467	-35.462	-1.814	0.00	0.00
ATOM	1449	O1P	RG3	46	-2.383	-35.280	-0.903	0.00	0.00
ATOM	1450	O2P	RG3	46	-4.228	-36.682	-1.760	0.00	0.00
ATOM	1451	O5'	RG3	46	-2.892	-35.279	-3.249	0.00	0.00
ATOM	1452	C5'	RG3	46	-3.636	-35.576	-4.361	0.00	0.00
ATOM	1453	1H5'	RG3	46	-4.539	-35.048	-4.338	0.00	0.00
ATOM	1454	2H5'	RG3	46	-3.865	-36.601	-4.362	0.00	0.00
ATOM	1455	C4'	RG3	46	-2.916	-35.238	-5.627	0.00	0.00
ATOM	1456	H4'	RG3	46	-3.552	-35.485	-6.428	0.00	0.00
ATOM	1457	O4'	RG3	46	-2.605	-33.892	-5.718	0.00	0.00
ATOM	1458	C1'	RG3	46	-1.408	-33.734	-6.409	0.00	0.00
ATOM	1459	H1'	RG3	46	-1.547	-33.168	-7.282	0.00	0.00
ATOM	1460	N9	RG3	46	-0.410	-33.055	-5.616	0.00	0.00
ATOM	1461	C8	RG3	46	-0.229	-33.069	-4.290	0.00	0.00
ATOM	1462	H8	RG3	46	-0.888	-33.567	-3.634	0.00	0.00
ATOM	1463	N7	RG3	46	0.818	-32.443	-3.902	0.00	0.00
ATOM	1464	C5	RG3	46	1.382	-31.986	-5.065	0.00	0.00
ATOM	1465	C6	RG3	46	2.567	-31.256	-5.323	0.00	0.00
ATOM	1466	O6	RG3	46	3.396	-30.849	-4.557	0.00	0.00
ATOM	1467	N1	RG3	46	2.787	-31.018	-6.633	0.00	0.00
ATOM	1468	H1	RG3	46	3.610	-30.535	-6.880	0.00	0.00
ATOM	1469	C2	RG3	46	1.981	-31.434	-7.595	0.00	0.00
ATOM	1470	N2	RG3	46	2.333	-31.184	-8.794	0.00	0.00
ATOM	1471	H21	RG3	46	3.190	-30.749	-8.985	0.00	0.00
ATOM	1472	H22	RG3	46	1.751	-31.494	-9.513	0.00	0.00
ATOM	1473	N3	RG3	46	0.876	-32.101	-7.408	0.00	0.00
ATOM	1474	C4	RG3	46	0.627	-32.351	-6.116	0.00	0.00
ATOM	1475	C3'	RG3	46	-1.642	-35.965	-5.818	0.00	0.00
ATOM	1476	H3'	RG3	46	-1.110	-35.976	-4.933	0.00	0.00
ATOM	1477	C2'	RG3	46	-0.941	-35.087	-6.783	0.00	0.00
ATOM	1478	1H2'	RG3	46	0.082	-35.162	-6.682	0.00	0.00
ATOM	1479	O2'	RG3	46	-1.303	-35.355	-8.052	0.00	0.00
ATOM	1480	2HO'	RG3	46	-1.208	-35.686	-8.290	0.00	0.00
ATOM	1481	O3'	RG3	46	-1.788	-37.227	-6.300	0.00	0.00
ATOM	1482	H3T	RG3	46	-1.602	-37.474	-6.369	0.00	0.00

closed-like bulged-in conformation - closed-like_bulged-in_c.pdb

REMARK MD average structure 15100 - 15200 ps
REMARK 2D19 (PDB database)
REMARK sequence chain I. residues 1-17 5'(GCUGAGGUGCACACAGC)3'
REMARK sequence chain II. residues 18-34 5'(GCUGAGGUGCACACAGC)3'
REMARK PDB format: output from Ptraj module of AMBER-8.0

ATOM	1	H5T	RG5	1	16.141	6.528	-8.802	0.00	0.00
ATOM	2	O5'	RG5	1	16.127	6.190	-8.942	0.00	0.00
ATOM	3	C5'	RG5	1	15.583	5.084	-8.468	0.00	0.00
ATOM	4	1H5'	RG5	1	14.701	4.896	-8.965	0.00	0.00
ATOM	5	2H5'	RG5	1	15.396	5.216	-7.487	0.00	0.00
ATOM	6	C4'	RG5	1	16.458	3.951	-8.644	0.00	0.00
ATOM	7	H4'	RG5	1	16.719	3.889	-9.634	0.00	0.00
ATOM	8	O4'	RG5	1	17.587	4.065	-7.864	0.00	0.00
ATOM	9	C1'	RG5	1	17.953	2.832	-7.379	0.00	0.00
ATOM	10	H1'	RG5	1	18.934	2.593	-7.666	0.00	0.00
ATOM	11	N9	RG5	1	17.918	2.821	-5.929	0.00	0.00
ATOM	12	C8	RG5	1	17.496	3.774	-5.095	0.00	0.00
ATOM	13	H8	RG5	1	17.074	4.665	-5.440	0.00	0.00
ATOM	14	N7	RG5	1	17.665	3.518	-3.853	0.00	0.00
ATOM	15	C5	RG5	1	18.249	2.291	-3.857	0.00	0.00
ATOM	16	C6	RG5	1	18.701	1.475	-2.806	0.00	0.00
ATOM	17	O6	RG5	1	18.702	1.685	-1.620	0.00	0.00
ATOM	18	N1	RG5	1	19.200	0.301	-3.224	0.00	0.00
ATOM	19	H1	RG5	1	19.496	-0.328	-2.535	0.00	0.00
ATOM	20	C2	RG5	1	19.298	-0.040	-4.501	0.00	0.00
ATOM	21	N2	RG5	1	19.782	-1.183	-4.752	0.00	0.00
ATOM	22	H21	RG5	1	20.027	-1.777	-4.015	0.00	0.00
ATOM	23	H22	RG5	1	19.869	-1.447	-5.687	0.00	0.00
ATOM	24	N3	RG5	1	18.926	0.693	-5.508	0.00	0.00
ATOM	25	C4	RG5	1	18.398	1.855	-5.126	0.00	0.00
ATOM	26	C3'	RG5	1	15.816	2.689	-8.281	0.00	0.00
ATOM	27	H3'	RG5	1	15.289	2.823	-7.402	0.00	0.00
ATOM	28	C2'	RG5	1	17.004	1.863	-8.001	0.00	0.00
ATOM	29	1H2'	RG5	1	16.782	1.092	-7.345	0.00	0.00
ATOM	30	O2'	RG5	1	17.555	1.380	-9.145	0.00	0.00
ATOM	31	2HO'	RG5	1	17.143	1.114	-9.529	0.00	0.00
ATOM	32	O3'	RG5	1	15.012	2.192	-9.295	0.00	0.00
ATOM	33	P	RC	2	13.766	1.356	-9.004	0.00	0.00
ATOM	34	O1P	RC	2	13.116	1.091	-10.254	0.00	0.00
ATOM	35	O2P	RC	2	13.035	2.005	-7.977	0.00	0.00
ATOM	36	O5'	RC	2	14.301	0.034	-8.431	0.00	0.00
ATOM	37	C5'	RC	2	14.901	-0.909	-9.230	0.00	0.00
ATOM	38	1H5'	RC	2	15.653	-0.457	-9.803	0.00	0.00
ATOM	39	2H5'	RC	2	14.179	-1.323	-9.886	0.00	0.00
ATOM	40	C4'	RC	2	15.529	-2.010	-8.431	0.00	0.00
ATOM	41	H4'	RC	2	15.996	-2.675	-9.114	0.00	0.00
ATOM	42	O4'	RC	2	16.503	-1.529	-7.541	0.00	0.00
ATOM	43	C1'	RC	2	16.509	-2.319	-6.386	0.00	0.00
ATOM	44	H1'	RC	2	17.480	-2.746	-6.250	0.00	0.00
ATOM	45	N1	RC	2	16.167	-1.567	-5.169	0.00	0.00
ATOM	46	C6	RC	2	15.514	-0.393	-5.208	0.00	0.00
ATOM	47	H6	RC	2	15.190	-0.011	-6.137	0.00	0.00
ATOM	48	C5	RC	2	15.298	0.293	-4.084	0.00	0.00
ATOM	49	H5	RC	2	14.806	1.220	-4.119	0.00	0.00
ATOM	50	C4	RC	2	15.746	-0.263	-2.888	0.00	0.00
ATOM	51	N4	RC	2	15.618	0.362	-1.780	0.00	0.00
ATOM	52	H41	RC	2	15.995	-0.053	-0.974	0.00	0.00
ATOM	53	H42	RC	2	15.221	1.251	-1.769	0.00	0.00
ATOM	54	N3	RC	2	16.328	-1.409	-2.822	0.00	0.00
ATOM	55	C2	RC	2	16.540	-2.084	-3.949	0.00	0.00
ATOM	56	O2	RC	2	17.062	-3.165	-3.859	0.00	0.00
ATOM	57	C3'	RC	2	14.563	-2.802	-7.610	0.00	0.00
ATOM	58	H3'	RC	2	13.914	-2.142	-7.093	0.00	0.00
ATOM	59	C2'	RC	2	15.524	-3.426	-6.635	0.00	0.00
ATOM	60	1H2'	RC	2	15.023	-3.708	-5.745	0.00	0.00

ATOM	61	O2'	RC	2	16.216	-4.498	-7.182	0.00	0.00
ATOM	62	2HO'	RC	2	15.891	-4.933	-7.468	0.00	0.00
ATOM	63	O3'	RC	2	13.849	-3.757	-8.331	0.00	0.00
ATOM	64	P	RU	3	12.441	-4.224	-7.871	0.00	0.00
ATOM	65	O1P	RU	3	12.021	-5.273	-8.752	0.00	0.00
ATOM	66	O2P	RU	3	11.613	-3.069	-7.756	0.00	0.00
ATOM	67	O5'	RU	3	12.630	-4.809	-6.451	0.00	0.00
ATOM	68	C5'	RU	3	13.218	-6.039	-6.234	0.00	0.00
ATOM	69	1H5'	RU	3	14.154	-6.085	-6.727	0.00	0.00
ATOM	70	2H5'	RU	3	12.586	-6.796	-6.627	0.00	0.00
ATOM	71	C4'	RU	3	13.450	-6.305	-4.778	0.00	0.00
ATOM	72	H4'	RU	3	13.960	-7.227	-4.685	0.00	0.00
ATOM	73	O4'	RU	3	14.233	-5.316	-4.171	0.00	0.00
ATOM	74	C1'	RU	3	13.848	-5.176	-2.843	0.00	0.00
ATOM	75	H1'	RU	3	14.668	-5.447	-2.217	0.00	0.00
ATOM	76	N1	RU	3	13.455	-3.816	-2.505	0.00	0.00
ATOM	77	C6	RU	3	12.935	-2.974	-3.413	0.00	0.00
ATOM	78	H6	RU	3	12.826	-3.289	-4.408	0.00	0.00
ATOM	79	C5	RU	3	12.560	-1.753	-3.060	0.00	0.00
ATOM	80	H5	RU	3	12.164	-1.101	-3.775	0.00	0.00
ATOM	81	C4	RU	3	12.678	-1.290	-1.733	0.00	0.00
ATOM	82	O4	RU	3	12.367	-0.206	-1.345	0.00	0.00
ATOM	83	N3	RU	3	13.189	-2.182	-0.883	0.00	0.00
ATOM	84	H3	RU	3	13.284	-1.901	0.048	0.00	0.00
ATOM	85	C2	RU	3	13.567	-3.431	-1.197	0.00	0.00
ATOM	86	O2	RU	3	13.964	-4.155	-0.333	0.00	0.00
ATOM	87	C3'	RU	3	12.184	-6.409	-3.991	0.00	0.00
ATOM	88	H3'	RU	3	11.531	-5.630	-4.287	0.00	0.00
ATOM	89	C2'	RU	3	12.709	-6.135	-2.614	0.00	0.00
ATOM	90	1H2'	RU	3	11.954	-5.705	-2.021	0.00	0.00
ATOM	91	O2'	RU	3	13.221	-7.258	-2.010	0.00	0.00
ATOM	92	2HO'	RU	3	12.649	-7.811	-2.002	0.00	0.00
ATOM	93	O3'	RU	3	11.568	-7.651	-4.127	0.00	0.00
ATOM	94	P	RG	4	10.106	-7.902	-3.640	0.00	0.00
ATOM	95	O1P	RG	4	9.637	-9.112	-4.279	0.00	0.00
ATOM	96	O2P	RG	4	9.353	-6.684	-3.825	0.00	0.00
ATOM	97	O5'	RG	4	10.240	-8.157	-2.096	0.00	0.00
ATOM	98	C5'	RG	4	10.739	-9.345	-1.565	0.00	0.00
ATOM	99	1H5'	RG	4	11.749	-9.488	-1.882	0.00	0.00
ATOM	100	2H5'	RG	4	10.162	-10.160	-1.935	0.00	0.00
ATOM	101	C4'	RG	4	10.703	-9.344	-0.046	0.00	0.00
ATOM	102	H4'	RG	4	11.106	-10.274	0.297	0.00	0.00
ATOM	103	O4'	RG	4	11.529	-8.319	0.449	0.00	0.00
ATOM	104	C1'	RG	4	10.918	-7.679	1.539	0.00	0.00
ATOM	105	H1'	RG	4	11.582	-7.670	2.384	0.00	0.00
ATOM	106	N9	RG	4	10.586	-6.288	1.222	0.00	0.00
ATOM	107	C8	RG	4	10.166	-5.745	0.053	0.00	0.00
ATOM	108	H8	RG	4	9.957	-6.329	-0.806	0.00	0.00
ATOM	109	N7	RG	4	10.076	-4.460	0.053	0.00	0.00
ATOM	110	C5	RG	4	10.394	-4.122	1.355	0.00	0.00
ATOM	111	C6	RG	4	10.441	-2.863	2.016	0.00	0.00
ATOM	112	O6	RG	4	10.261	-1.752	1.566	0.00	0.00
ATOM	113	N1	RG	4	10.734	-2.955	3.343	0.00	0.00
ATOM	114	H1	RG	4	10.766	-2.112	3.866	0.00	0.00
ATOM	115	C2	RG	4	10.957	-4.108	3.978	0.00	0.00
ATOM	116	N2	RG	4	11.194	-4.028	5.240	0.00	0.00
ATOM	117	H21	RG	4	11.146	-3.155	5.703	0.00	0.00
ATOM	118	H22	RG	4	11.370	-4.862	5.726	0.00	0.00
ATOM	119	N3	RG	4	10.960	-5.297	3.407	0.00	0.00
ATOM	120	C4	RG	4	10.666	-5.242	2.086	0.00	0.00
ATOM	121	C3'	RG	4	9.335	-9.176	0.590	0.00	0.00
ATOM	122	H3'	RG	4	8.727	-8.502	0.019	0.00	0.00
ATOM	123	C2'	RG	4	9.696	-8.483	1.888	0.00	0.00
ATOM	124	1H2'	RG	4	8.898	-7.857	2.215	0.00	0.00
ATOM	125	O2'	RG	4	10.045	-9.386	2.889	0.00	0.00
ATOM	126	2HO'	RG	4	9.519	-10.031	2.865	0.00	0.00
ATOM	127	O3'	RG	4	8.647	-10.355	0.917	0.00	0.00
ATOM	128	P	RA	5	7.730	-11.151	-0.066	0.00	0.00

ATOM	129	O1P	RA	5	7.026	-12.116	0.751	0.00	0.00
ATOM	130	O2P	RA	5	8.518	-11.635	-1.180	0.00	0.00
ATOM	131	O5'	RA	5	6.654	-10.134	-0.572	0.00	0.00
ATOM	132	C5'	RA	5	6.818	-9.366	-1.729	0.00	0.00
ATOM	133	1H5'	RA	5	6.631	-9.947	-2.578	0.00	0.00
ATOM	134	2H5'	RA	5	7.795	-9.002	-1.806	0.00	0.00
ATOM	135	C4'	RA	5	5.879	-8.227	-1.720	0.00	0.00
ATOM	136	H4'	RA	5	4.904	-8.607	-1.652	0.00	0.00
ATOM	137	O4'	RA	5	6.108	-7.416	-0.636	0.00	0.00
ATOM	138	C1'	RA	5	5.752	-6.120	-0.949	0.00	0.00
ATOM	139	H1'	RA	5	4.693	-6.049	-0.971	0.00	0.00
ATOM	140	N9	RA	5	6.271	-5.091	-0.035	0.00	0.00
ATOM	141	C8	RA	5	6.359	-3.766	-0.270	0.00	0.00
ATOM	142	H8	RA	5	6.142	-3.348	-1.213	0.00	0.00
ATOM	143	N7	RA	5	6.711	-3.053	0.738	0.00	0.00
ATOM	144	C5	RA	5	6.867	-3.983	1.734	0.00	0.00
ATOM	145	C6	RA	5	7.194	-3.923	3.088	0.00	0.00
ATOM	146	N6	RA	5	7.452	-2.849	3.754	0.00	0.00
ATOM	147	H61	RA	5	7.667	-2.933	4.705	0.00	0.00
ATOM	148	H62	RA	5	7.413	-1.989	3.303	0.00	0.00
ATOM	149	N1	RA	5	7.252	-4.998	3.822	0.00	0.00
ATOM	150	C2	RA	5	6.976	-6.128	3.242	0.00	0.00
ATOM	151	H2	RA	5	7.026	-6.980	3.856	0.00	0.00
ATOM	152	N3	RA	5	6.649	-6.346	1.997	0.00	0.00
ATOM	153	C4	RA	5	6.611	-5.225	1.276	0.00	0.00
ATOM	154	C3'	RA	5	5.990	-7.359	-2.955	0.00	0.00
ATOM	155	H3'	RA	5	6.822	-7.679	-3.555	0.00	0.00
ATOM	156	C2'	RA	5	6.269	-5.995	-2.341	0.00	0.00
ATOM	157	1H2'	RA	5	7.316	-5.860	-2.289	0.00	0.00
ATOM	158	O2'	RA	5	5.695	-4.930	-2.988	0.00	0.00
ATOM	159	2HO'	RA	5	4.959	-5.211	-3.421	0.00	0.00
ATOM	160	O3'	RA	5	4.779	-7.462	-3.659	0.00	0.00
ATOM	161	P	RA	6	4.631	-7.050	-5.157	0.00	0.00
ATOM	162	O1P	RA	6	3.646	-7.910	-5.767	0.00	0.00
ATOM	163	O2P	RA	6	5.952	-6.966	-5.742	0.00	0.00
ATOM	164	O5'	RA	6	4.050	-5.599	-5.090	0.00	0.00
ATOM	165	C5'	RA	6	2.681	-5.311	-5.015	0.00	0.00
ATOM	166	1H5'	RA	6	2.192	-5.686	-5.884	0.00	0.00
ATOM	167	2H5'	RA	6	2.569	-4.254	-5.016	0.00	0.00
ATOM	168	C4'	RA	6	1.979	-5.860	-3.797	0.00	0.00
ATOM	169	H4'	RA	6	1.995	-6.925	-3.835	0.00	0.00
ATOM	170	O4'	RA	6	2.604	-5.406	-2.615	0.00	0.00
ATOM	171	C1'	RA	6	1.635	-4.850	-1.780	0.00	0.00
ATOM	172	H1'	RA	6	1.157	-5.633	-1.231	0.00	0.00
ATOM	173	N9	RA	6	2.216	-3.897	-0.824	0.00	0.00
ATOM	174	C8	RA	6	2.267	-2.550	-0.870	0.00	0.00
ATOM	175	H8	RA	6	1.932	-2.003	-1.711	0.00	0.00
ATOM	176	N7	RA	6	2.756	-1.989	0.190	0.00	0.00
ATOM	177	C5	RA	6	3.029	-3.058	1.015	0.00	0.00
ATOM	178	C6	RA	6	3.525	-3.210	2.316	0.00	0.00
ATOM	179	N6	RA	6	3.892	-2.246	3.104	0.00	0.00
ATOM	180	H61	RA	6	4.195	-2.472	4.008	0.00	0.00
ATOM	181	H62	RA	6	3.862	-1.324	2.786	0.00	0.00
ATOM	182	N1	RA	6	3.635	-4.394	2.865	0.00	0.00
ATOM	183	C2	RA	6	3.292	-5.431	2.145	0.00	0.00
ATOM	184	H2	RA	6	3.403	-6.374	2.609	0.00	0.00
ATOM	185	N3	RA	6	2.816	-5.453	0.919	0.00	0.00
ATOM	186	C4	RA	6	2.704	-4.220	0.404	0.00	0.00
ATOM	187	C3'	RA	6	0.534	-5.382	-3.753	0.00	0.00
ATOM	188	H3'	RA	6	0.198	-5.008	-4.703	0.00	0.00
ATOM	189	C2'	RA	6	0.632	-4.260	-2.739	0.00	0.00
ATOM	190	1H2'	RA	6	1.048	-3.396	-3.214	0.00	0.00
ATOM	191	O2'	RA	6	-0.586	-3.945	-2.135	0.00	0.00
ATOM	192	2HO'	RA	6	-0.963	-4.587	-1.925	0.00	0.00
ATOM	193	O3'	RA	6	-0.321	-6.384	-3.266	0.00	0.00
ATOM	194	P	RG	7	-1.114	-7.312	-4.251	0.00	0.00
ATOM	195	O1P	RG	7	-1.931	-8.212	-3.465	0.00	0.00
ATOM	196	O2P	RG	7	-0.185	-7.868	-5.208	0.00	0.00

ATOM	197	O5'	RG	7	-2.058	-6.328	-5.024	0.00	0.00
ATOM	198	C5'	RG	7	-3.079	-5.635	-4.387	0.00	0.00
ATOM	199	1H5'	RG	7	-2.704	-5.145	-3.525	0.00	0.00
ATOM	200	2H5'	RG	7	-3.836	-6.314	-4.092	0.00	0.00
ATOM	201	C4'	RG	7	-3.686	-4.614	-5.303	0.00	0.00
ATOM	202	H4'	RG	7	-3.967	-5.086	-6.215	0.00	0.00
ATOM	203	O4'	RG	7	-4.815	-4.063	-4.701	0.00	0.00
ATOM	204	C1'	RG	7	-5.015	-2.764	-5.202	0.00	0.00
ATOM	205	H1'	RG	7	-5.916	-2.724	-5.781	0.00	0.00
ATOM	206	N9	RG	7	-5.123	-1.773	-4.123	0.00	0.00
ATOM	207	C8	RG	7	-4.810	-1.893	-2.806	0.00	0.00
ATOM	208	H8	RG	7	-4.421	-2.797	-2.399	0.00	0.00
ATOM	209	N7	RG	7	-5.040	-0.830	-2.097	0.00	0.00
ATOM	210	C5	RG	7	-5.563	0.068	-3.018	0.00	0.00
ATOM	211	C6	RG	7	-6.044	1.408	-2.882	0.00	0.00
ATOM	212	O6	RG	7	-6.138	2.103	-1.884	0.00	0.00
ATOM	213	N1	RG	7	-6.440	1.967	-4.067	0.00	0.00
ATOM	214	H1	RG	7	-6.768	2.904	-4.048	0.00	0.00
ATOM	215	C2	RG	7	-6.400	1.322	-5.245	0.00	0.00
ATOM	216	N2	RG	7	-6.754	1.988	-6.292	0.00	0.00
ATOM	217	H21	RG	7	-7.038	2.935	-6.207	0.00	0.00
ATOM	218	H22	RG	7	-6.741	1.520	-7.163	0.00	0.00
ATOM	219	N3	RG	7	-5.985	0.083	-5.422	0.00	0.00
ATOM	220	C4	RG	7	-5.585	-0.499	-4.264	0.00	0.00
ATOM	221	C3'	RG	7	-2.800	-3.436	-5.633	0.00	0.00
ATOM	222	H3'	RG	7	-2.361	-3.091	-4.722	0.00	0.00
ATOM	223	C2'	RG	7	-3.838	-2.452	-6.100	0.00	0.00
ATOM	224	1H2'	RG	7	-3.496	-1.457	-5.965	0.00	0.00
ATOM	225	O2'	RG	7	-4.215	-2.671	-7.420	0.00	0.00
ATOM	226	2HO'	RG	7	-3.759	-2.618	-7.833	0.00	0.00
ATOM	227	O3'	RG	7	-1.822	-3.685	-6.607	0.00	0.00
ATOM	228	P	RU	8	-0.608	-2.707	-6.823	0.00	0.00
ATOM	229	O1P	RU	8	0.302	-3.335	-7.758	0.00	0.00
ATOM	230	O2P	RU	8	-0.101	-2.277	-5.533	0.00	0.00
ATOM	231	O5'	RU	8	-1.214	-1.434	-7.511	0.00	0.00
ATOM	232	C5'	RU	8	-1.551	-1.397	-8.866	0.00	0.00
ATOM	233	1H5'	RU	8	-2.289	-2.142	-9.082	0.00	0.00
ATOM	234	2H5'	RU	8	-0.687	-1.606	-9.453	0.00	0.00
ATOM	235	C4'	RU	8	-2.081	-0.034	-9.261	0.00	0.00
ATOM	236	H4'	RU	8	-2.329	-0.066	-10.305	0.00	0.00
ATOM	237	O4'	RU	8	-3.230	0.341	-8.541	0.00	0.00
ATOM	238	C1'	RU	8	-3.222	1.747	-8.353	0.00	0.00
ATOM	239	H1'	RU	8	-4.107	2.172	-8.790	0.00	0.00
ATOM	240	N1	RU	8	-3.176	2.132	-6.921	0.00	0.00
ATOM	241	C6	RU	8	-2.675	1.302	-5.963	0.00	0.00
ATOM	242	H6	RU	8	-2.282	0.356	-6.245	0.00	0.00
ATOM	243	C5	RU	8	-2.676	1.663	-4.665	0.00	0.00
ATOM	244	H5	RU	8	-2.289	1.006	-3.926	0.00	0.00
ATOM	245	C4	RU	8	-3.183	2.922	-4.236	0.00	0.00
ATOM	246	O4	RU	8	-3.235	3.307	-3.089	0.00	0.00
ATOM	247	N3	RU	8	-3.642	3.707	-5.241	0.00	0.00
ATOM	248	H3	RU	8	-3.977	4.604	-4.981	0.00	0.00
ATOM	249	C2	RU	8	-3.645	3.387	-6.567	0.00	0.00
ATOM	250	O2	RU	8	-4.035	4.205	-7.374	0.00	0.00
ATOM	251	C3'	RU	8	-1.087	1.088	-9.049	0.00	0.00
ATOM	252	H3'	RU	8	-0.671	1.010	-8.064	0.00	0.00
ATOM	253	C2'	RU	8	-2.011	2.279	-9.095	0.00	0.00
ATOM	254	1H2'	RU	8	-1.573	3.126	-8.601	0.00	0.00
ATOM	255	O2'	RU	8	-2.392	2.615	-10.401	0.00	0.00
ATOM	256	2HO'	RU	8	-1.949	2.631	-10.852	0.00	0.00
ATOM	257	O3'	RU	8	-0.083	1.130	-10.016	0.00	0.00
ATOM	258	P	RG	9	1.318	1.739	-9.691	0.00	0.00
ATOM	259	O1P	RG	9	2.144	1.570	-10.860	0.00	0.00
ATOM	260	O2P	RG	9	1.764	1.196	-8.433	0.00	0.00
ATOM	261	O5'	RG	9	1.071	3.268	-9.482	0.00	0.00
ATOM	262	C5'	RG	9	0.815	4.117	-10.555	0.00	0.00
ATOM	263	1H5'	RG	9	-0.014	3.750	-11.118	0.00	0.00
ATOM	264	2H5'	RG	9	1.667	4.150	-11.191	0.00	0.00

ATOM	265	C4'	RG	9	0.517	5.522	-10.099	0.00	0.00
ATOM	266	H4'	RG	9	0.339	6.119	-10.968	0.00	0.00
ATOM	267	O4'	RG	9	-0.622	5.581	-9.284	0.00	0.00
ATOM	268	C1'	RG	9	-0.459	6.636	-8.358	0.00	0.00
ATOM	269	H1'	RG	9	-1.239	7.365	-8.482	0.00	0.00
ATOM	270	N9	RG	9	-0.518	6.135	-6.977	0.00	0.00
ATOM	271	C8	RG	9	-0.276	4.884	-6.501	0.00	0.00
ATOM	272	H8	RG	9	0.016	4.079	-7.136	0.00	0.00
ATOM	273	N7	RG	9	-0.450	4.755	-5.225	0.00	0.00
ATOM	274	C5	RG	9	-0.805	6.031	-4.809	0.00	0.00
ATOM	275	C6	RG	9	-1.120	6.561	-3.518	0.00	0.00
ATOM	276	O6	RG	9	-1.197	5.989	-2.444	0.00	0.00
ATOM	277	N1	RG	9	-1.355	7.908	-3.526	0.00	0.00
ATOM	278	H1	RG	9	-1.555	8.345	-2.657	0.00	0.00
ATOM	279	C2	RG	9	-1.324	8.663	-4.634	0.00	0.00
ATOM	280	N2	RG	9	-1.548	9.919	-4.487	0.00	0.00
ATOM	281	H21	RG	9	-1.706	10.291	-3.582	0.00	0.00
ATOM	282	H22	RG	9	-1.532	10.490	-5.287	0.00	0.00
ATOM	283	N3	RG	9	-1.075	8.217	-5.852	0.00	0.00
ATOM	284	C4	RG	9	-0.819	6.885	-5.878	0.00	0.00
ATOM	285	C3'	RG	9	1.638	6.167	-9.317	0.00	0.00
ATOM	286	H3'	RG	9	1.980	5.481	-8.574	0.00	0.00
ATOM	287	C2'	RG	9	0.882	7.288	-8.645	0.00	0.00
ATOM	288	1H2'	RG	9	1.369	7.598	-7.746	0.00	0.00
ATOM	289	O2'	RG	9	0.673	8.373	-9.498	0.00	0.00
ATOM	290	2HO'	RG	9	1.041	8.686	-9.624	0.00	0.00
ATOM	291	O3'	RG	9	2.690	6.607	-10.132	0.00	0.00
ATOM	292	P	RC	10	4.140	6.748	-9.581	0.00	0.00
ATOM	293	O1P	RC	10	4.988	7.131	-10.689	0.00	0.00
ATOM	294	O2P	RC	10	4.460	5.551	-8.837	0.00	0.00
ATOM	295	O5'	RC	10	4.090	7.940	-8.570	0.00	0.00
ATOM	296	C5'	RC	10	4.005	9.268	-8.998	0.00	0.00
ATOM	297	1H5'	RC	10	3.190	9.379	-9.679	0.00	0.00
ATOM	298	2H5'	RC	10	4.907	9.544	-9.500	0.00	0.00
ATOM	299	C4'	RC	10	3.800	10.218	-7.838	0.00	0.00
ATOM	300	H4'	RC	10	3.740	11.215	-8.229	0.00	0.00
ATOM	301	O4'	RC	10	2.612	9.940	-7.136	0.00	0.00
ATOM	302	C1'	RC	10	2.781	10.310	-5.784	0.00	0.00
ATOM	303	H1'	RC	10	2.096	11.103	-5.545	0.00	0.00
ATOM	304	N1	RC	10	2.541	9.175	-4.860	0.00	0.00
ATOM	305	C6	RC	10	2.835	7.892	-5.189	0.00	0.00
ATOM	306	H6	RC	10	3.208	7.671	-6.157	0.00	0.00
ATOM	307	C5	RC	10	2.646	6.903	-4.298	0.00	0.00
ATOM	308	H5	RC	10	2.867	5.900	-4.562	0.00	0.00
ATOM	309	C4	RC	10	2.154	7.248	-3.035	0.00	0.00
ATOM	310	N4	RC	10	1.944	6.343	-2.145	0.00	0.00
ATOM	311	H41	RC	10	1.546	6.617	-1.284	0.00	0.00
ATOM	312	H42	RC	10	2.127	5.406	-2.359	0.00	0.00
ATOM	313	N3	RC	10	1.877	8.471	-2.692	0.00	0.00
ATOM	314	C2	RC	10	2.076	9.449	-3.590	0.00	0.00
ATOM	315	O2	RC	10	1.848	10.585	-3.240	0.00	0.00
ATOM	316	C3'	RC	10	4.903	10.184	-6.809	0.00	0.00
ATOM	317	H3'	RC	10	5.118	9.164	-6.565	0.00	0.00
ATOM	318	C2'	RC	10	4.198	10.834	-5.640	0.00	0.00
ATOM	319	1H2'	RC	10	4.639	10.537	-4.713	0.00	0.00
ATOM	320	O2'	RC	10	4.161	12.224	-5.746	0.00	0.00
ATOM	321	2HO'	RC	10	4.707	12.502	-5.803	0.00	0.00
ATOM	322	O3'	RC	10	6.060	10.866	-7.214	0.00	0.00
ATOM	323	P	RA	11	7.448	10.531	-6.589	0.00	0.00
ATOM	324	O1P	RA	11	8.441	11.314	-7.297	0.00	0.00
ATOM	325	O2P	RA	11	7.586	9.095	-6.547	0.00	0.00
ATOM	326	O5'	RA	11	7.375	11.042	-5.112	0.00	0.00
ATOM	327	C5'	RA	11	7.490	12.396	-4.796	0.00	0.00
ATOM	328	1H5'	RA	11	6.787	12.959	-5.366	0.00	0.00
ATOM	329	2H5'	RA	11	8.471	12.738	-5.036	0.00	0.00
ATOM	330	C4'	RA	11	7.246	12.648	-3.328	0.00	0.00
ATOM	331	H4'	RA	11	7.333	13.701	-3.158	0.00	0.00
ATOM	332	O4'	RA	11	5.964	12.235	-2.930	0.00	0.00

ATOM	333	C1'	RA	11	6.021	11.795	-1.591	0.00	0.00
ATOM	334	H1'	RA	11	5.368	12.381	-0.981	0.00	0.00
ATOM	335	N9	RA	11	5.630	10.387	-1.474	0.00	0.00
ATOM	336	C8	RA	11	5.784	9.369	-2.359	0.00	0.00
ATOM	337	H8	RA	11	6.231	9.507	-3.313	0.00	0.00
ATOM	338	N7	RA	11	5.342	8.224	-1.948	0.00	0.00
ATOM	339	C5	RA	11	4.877	8.509	-0.672	0.00	0.00
ATOM	340	C6	RA	11	4.287	7.769	0.365	0.00	0.00
ATOM	341	N6	RA	11	3.984	6.503	0.321	0.00	0.00
ATOM	342	H61	RA	11	3.565	6.094	1.116	0.00	0.00
ATOM	343	H62	RA	11	4.151	5.996	-0.505	0.00	0.00
ATOM	344	N1	RA	11	3.997	8.331	1.522	0.00	0.00
ATOM	345	C2	RA	11	4.255	9.609	1.667	0.00	0.00
ATOM	346	H2	RA	11	4.003	10.027	2.608	0.00	0.00
ATOM	347	N3	RA	11	4.781	10.436	0.790	0.00	0.00
ATOM	348	C4	RA	11	5.072	9.817	-0.372	0.00	0.00
ATOM	349	C3'	RA	11	8.223	11.953	-2.408	0.00	0.00
ATOM	350	H3'	RA	11	8.340	10.939	-2.728	0.00	0.00
ATOM	351	C2'	RA	11	7.440	11.983	-1.118	0.00	0.00
ATOM	352	1H2'	RA	11	7.738	11.186	-0.471	0.00	0.00
ATOM	353	O2'	RA	11	7.538	13.205	-0.460	0.00	0.00
ATOM	354	2HO'	RA	11	8.270	13.335	-0.294	0.00	0.00
ATOM	355	O3'	RA	11	9.461	12.603	-2.325	0.00	0.00
ATOM	356	P	RC	12	10.713	11.889	-1.748	0.00	0.00
ATOM	357	O1P	RC	12	11.803	12.824	-1.795	0.00	0.00
ATOM	358	O2P	RC	12	10.847	10.615	-2.405	0.00	0.00
ATOM	359	O5'	RC	12	10.359	11.656	-0.257	0.00	0.00
ATOM	360	C5'	RC	12	10.612	10.967	0.548	0.00	0.00
ATOM	361	1H5'	RC	12	11.288	11.161	0.654	0.00	0.00
ATOM	362	2H5'	RC	12	10.646	10.364	0.161	0.00	0.00
ATOM	363	C4'	RC	12	9.904	10.814	1.841	0.00	0.00
ATOM	364	H4'	RC	12	9.942	11.737	2.353	0.00	0.00
ATOM	365	O4'	RC	12	8.575	10.421	1.659	0.00	0.00
ATOM	366	C1'	RC	12	8.176	9.605	2.718	0.00	0.00
ATOM	367	H1'	RC	12	7.370	10.056	3.232	0.00	0.00
ATOM	368	N1	RC	12	7.741	8.269	2.268	0.00	0.00
ATOM	369	C6	RC	12	7.997	7.802	1.027	0.00	0.00
ATOM	370	H6	RC	12	8.506	8.412	0.329	0.00	0.00
ATOM	371	C5	RC	12	7.608	6.572	0.676	0.00	0.00
ATOM	372	H5	RC	12	7.804	6.211	-0.299	0.00	0.00
ATOM	373	C4	RC	12	6.933	5.809	1.627	0.00	0.00
ATOM	374	N4	RC	12	6.518	4.633	1.343	0.00	0.00
ATOM	375	H41	RC	12	6.024	4.140	2.034	0.00	0.00
ATOM	376	H42	RC	12	6.664	4.275	0.445	0.00	0.00
ATOM	377	N3	RC	12	6.679	6.234	2.822	0.00	0.00
ATOM	378	C2	RC	12	7.065	7.467	3.160	0.00	0.00
ATOM	379	O2	RC	12	6.823	7.840	4.282	0.00	0.00
ATOM	380	C3'	RC	12	10.504	9.780	2.727	0.00	0.00
ATOM	381	H3'	RC	12	10.681	8.906	2.158	0.00	0.00
ATOM	382	C2'	RC	12	9.359	9.529	3.651	0.00	0.00
ATOM	383	1H2'	RC	12	9.438	8.576	4.108	0.00	0.00
ATOM	384	O2'	RC	12	9.233	10.524	4.613	0.00	0.00
ATOM	385	2HO'	RC	12	9.630	10.681	4.929	0.00	0.00
ATOM	386	O3'	RC	12	11.648	10.214	3.397	0.00	0.00
ATOM	387	P	RA	13	12.759	9.222	3.805	0.00	0.00
ATOM	388	O1P	RA	13	13.740	9.961	4.554	0.00	0.00
ATOM	389	O2P	RA	13	13.164	8.525	2.627	0.00	0.00
ATOM	390	O5'	RA	13	12.097	8.181	4.750	0.00	0.00
ATOM	391	C5'	RA	13	11.752	8.500	6.049	0.00	0.00
ATOM	392	1H5'	RA	13	11.118	9.346	6.050	0.00	0.00
ATOM	393	2H5'	RA	13	12.626	8.737	6.604	0.00	0.00
ATOM	394	C4'	RA	13	11.048	7.364	6.732	0.00	0.00
ATOM	395	H4'	RA	13	10.777	7.684	7.707	0.00	0.00
ATOM	396	O4'	RA	13	9.879	6.973	6.053	0.00	0.00
ATOM	397	C1'	RA	13	9.717	5.596	6.189	0.00	0.00
ATOM	398	H1'	RA	13	8.787	5.380	6.657	0.00	0.00
ATOM	399	N9	RA	13	9.721	4.948	4.886	0.00	0.00
ATOM	400	C8	RA	13	10.239	5.381	3.725	0.00	0.00

ATOM	401	H8	RA	13	10.754	6.295	3.648	0.00	0.00
ATOM	402	N7	RA	13	10.056	4.589	2.730	0.00	0.00
ATOM	403	C5	RA	13	9.351	3.550	3.286	0.00	0.00
ATOM	404	C6	RA	13	8.803	2.362	2.812	0.00	0.00
ATOM	405	N6	RA	13	8.839	1.958	1.590	0.00	0.00
ATOM	406	H61	RA	13	8.457	1.087	1.386	0.00	0.00
ATOM	407	H62	RA	13	9.281	2.505	0.920	0.00	0.00
ATOM	408	N1	RA	13	8.191	1.535	3.607	0.00	0.00
ATOM	409	C2	RA	13	8.112	1.860	4.862	0.00	0.00
ATOM	410	H2	RA	13	7.615	1.173	5.481	0.00	0.00
ATOM	411	N3	RA	13	8.558	2.933	5.454	0.00	0.00
ATOM	412	C4	RA	13	9.167	3.751	4.599	0.00	0.00
ATOM	413	C3'	RA	13	11.899	6.142	6.889	0.00	0.00
ATOM	414	H3'	RA	13	12.415	5.965	5.987	0.00	0.00
ATOM	415	C2'	RA	13	10.844	5.096	7.066	0.00	0.00
ATOM	416	1H2'	RA	13	11.192	4.154	6.748	0.00	0.00
ATOM	417	O2'	RA	13	10.391	5.025	8.364	0.00	0.00
ATOM	418	2HO'	RA	13	10.861	4.952	8.809	0.00	0.00
ATOM	419	O3'	RA	13	12.780	6.241	7.970	0.00	0.00
ATOM	420	P	RC	14	14.053	5.362	8.079	0.00	0.00
ATOM	421	O1P	RC	14	14.828	5.851	9.203	0.00	0.00
ATOM	422	O2P	RC	14	14.672	5.296	6.778	0.00	0.00
ATOM	423	O5'	RC	14	13.542	3.928	8.419	0.00	0.00
ATOM	424	C5'	RC	14	13.143	3.552	9.701	0.00	0.00
ATOM	425	1H5'	RC	14	12.345	4.172	10.030	0.00	0.00
ATOM	426	2H5'	RC	14	13.959	3.668	10.376	0.00	0.00
ATOM	427	C4'	RC	14	12.691	2.110	9.739	0.00	0.00
ATOM	428	H4'	RC	14	12.437	1.869	10.752	0.00	0.00
ATOM	429	O4'	RC	14	11.564	1.868	8.931	0.00	0.00
ATOM	430	C1'	RC	14	11.640	0.562	8.395	0.00	0.00
ATOM	431	H1'	RC	14	10.793	-0.008	8.715	0.00	0.00
ATOM	432	N1	RC	14	11.668	0.575	6.915	0.00	0.00
ATOM	433	C6	RC	14	12.187	1.609	6.219	0.00	0.00
ATOM	434	H6	RC	14	12.621	2.423	6.743	0.00	0.00
ATOM	435	C5	RC	14	12.156	1.616	4.876	0.00	0.00
ATOM	436	H5	RC	14	12.556	2.433	4.341	0.00	0.00
ATOM	437	C4	RC	14	11.586	0.516	4.234	0.00	0.00
ATOM	438	N4	RC	14	11.517	0.478	2.950	0.00	0.00
ATOM	439	H41	RC	14	11.091	-0.293	2.515	0.00	0.00
ATOM	440	H42	RC	14	11.883	1.217	2.424	0.00	0.00
ATOM	441	N3	RC	14	11.103	-0.499	4.875	0.00	0.00
ATOM	442	C2	RC	14	11.156	-0.501	6.215	0.00	0.00
ATOM	443	O2	RC	14	10.748	-1.486	6.781	0.00	0.00
ATOM	444	C3'	RC	14	13.745	1.137	9.274	0.00	0.00
ATOM	445	H3'	RC	14	14.169	1.493	8.358	0.00	0.00
ATOM	446	C2'	RC	14	12.885	-0.069	8.970	0.00	0.00
ATOM	447	1H2'	RC	14	13.353	-0.717	8.266	0.00	0.00
ATOM	448	O2'	RC	14	12.540	-0.773	10.116	0.00	0.00
ATOM	449	2HO'	RC	14	13.027	-0.868	10.543	0.00	0.00
ATOM	450	O3'	RC	14	14.732	0.894	10.232	0.00	0.00
ATOM	451	P	RG	15	16.195	0.553	9.821	0.00	0.00
ATOM	452	O1P	RG	15	17.002	0.546	11.020	0.00	0.00
ATOM	453	O2P	RG	15	16.573	1.411	8.727	0.00	0.00
ATOM	454	O5'	RG	15	16.124	-0.899	9.267	0.00	0.00
ATOM	455	C5'	RG	15	16.068	-2.000	10.108	0.00	0.00
ATOM	456	1H5'	RG	15	15.238	-1.900	10.765	0.00	0.00
ATOM	457	2H5'	RG	15	16.953	-2.051	10.687	0.00	0.00
ATOM	458	C4'	RG	15	15.935	-3.293	9.344	0.00	0.00
ATOM	459	H4'	RG	15	15.974	-4.092	10.047	0.00	0.00
ATOM	460	O4'	RG	15	14.719	-3.373	8.654	0.00	0.00
ATOM	461	C1'	RG	15	14.929	-4.073	7.448	0.00	0.00
ATOM	462	H1'	RG	15	14.249	-4.892	7.356	0.00	0.00
ATOM	463	N9	RG	15	14.738	-3.190	6.300	0.00	0.00
ATOM	464	C8	RG	15	14.755	-1.841	6.248	0.00	0.00
ATOM	465	H8	RG	15	14.937	-1.242	7.107	0.00	0.00
ATOM	466	N7	RG	15	14.536	-1.348	5.080	0.00	0.00
ATOM	467	C5	RG	15	14.395	-2.466	4.278	0.00	0.00
ATOM	468	C6	RG	15	14.165	-2.611	2.879	0.00	0.00

ATOM	469	O6	RG	15	13.982	-1.759	2.039	0.00	0.00
ATOM	470	N1	RG	15	14.181	-3.901	2.452	0.00	0.00
ATOM	471	H1	RG	15	14.077	-4.060	1.482	0.00	0.00
ATOM	472	C2	RG	15	14.369	-4.944	3.263	0.00	0.00
ATOM	473	N2	RG	15	14.419	-6.102	2.721	0.00	0.00
ATOM	474	H21	RG	15	14.358	-6.209	1.748	0.00	0.00
ATOM	475	H22	RG	15	14.561	-6.869	3.309	0.00	0.00
ATOM	476	N3	RG	15	14.546	-4.865	4.563	0.00	0.00
ATOM	477	C4	RG	15	14.555	-3.594	5.017	0.00	0.00
ATOM	478	C3'	RG	15	17.012	-3.535	8.315	0.00	0.00
ATOM	479	H3'	RG	15	17.127	-2.654	7.728	0.00	0.00
ATOM	480	C2'	RG	15	16.345	-4.593	7.480	0.00	0.00
ATOM	481	1H2'	RG	15	16.772	-4.648	6.502	0.00	0.00
ATOM	482	O2'	RG	15	16.352	-5.849	8.078	0.00	0.00
ATOM	483	2HO'	RG	15	16.717	-6.152	8.131	0.00	0.00
ATOM	484	O3'	RG	15	18.236	-3.947	8.841	0.00	0.00
ATOM	485	P	RG	16	19.558	-3.662	8.076	0.00	0.00
ATOM	486	O1P	RG	16	20.644	-4.208	8.857	0.00	0.00
ATOM	487	O2P	RG	16	19.580	-2.264	7.738	0.00	0.00
ATOM	488	O5'	RG	16	19.468	-4.468	6.735	0.00	0.00
ATOM	489	C5'	RG	16	19.572	-5.856	6.701	0.00	0.00
ATOM	490	1H5'	RG	16	18.858	-6.281	7.361	0.00	0.00
ATOM	491	2H5'	RG	16	20.542	-6.153	7.023	0.00	0.00
ATOM	492	C4'	RG	16	19.336	-6.412	5.318	0.00	0.00
ATOM	493	H4'	RG	16	19.407	-7.474	5.372	0.00	0.00
ATOM	494	O4'	RG	16	18.074	-6.081	4.806	0.00	0.00
ATOM	495	C1'	RG	16	18.178	-5.877	3.420	0.00	0.00
ATOM	496	H1'	RG	16	17.487	-6.496	2.888	0.00	0.00
ATOM	497	N9	RG	16	17.897	-4.487	3.070	0.00	0.00
ATOM	498	C8	RG	16	17.842	-3.391	3.866	0.00	0.00
ATOM	499	H8	RG	16	18.036	-3.431	4.910	0.00	0.00
ATOM	500	N7	RG	16	17.519	-2.308	3.250	0.00	0.00
ATOM	501	C5	RG	16	17.371	-2.710	1.933	0.00	0.00
ATOM	502	C6	RG	16	17.029	-1.994	0.751	0.00	0.00
ATOM	503	O6	RG	16	16.738	-0.827	0.618	0.00	0.00
ATOM	504	N1	RG	16	17.056	-2.756	-0.376	0.00	0.00
ATOM	505	H1	RG	16	16.871	-2.307	-1.237	0.00	0.00
ATOM	506	C2	RG	16	17.315	-4.061	-0.379	0.00	0.00
ATOM	507	N2	RG	16	17.333	-4.647	-1.518	0.00	0.00
ATOM	508	H21	RG	16	17.209	-4.127	-2.348	0.00	0.00
ATOM	509	H22	RG	16	17.544	-5.601	-1.539	0.00	0.00
ATOM	510	N3	RG	16	17.595	-4.775	0.685	0.00	0.00
ATOM	511	C4	RG	16	17.618	-4.040	1.818	0.00	0.00
ATOM	512	C3'	RG	16	20.336	-5.952	4.301	0.00	0.00
ATOM	513	H3'	RG	16	20.467	-4.901	4.393	0.00	0.00
ATOM	514	C2'	RG	16	19.585	-6.248	3.029	0.00	0.00
ATOM	515	1H2'	RG	16	19.939	-5.657	2.218	0.00	0.00
ATOM	516	O2'	RG	16	19.606	-7.600	2.696	0.00	0.00
ATOM	517	2HO'	RG	16	19.956	-7.863	2.580	0.00	0.00
ATOM	518	O3'	RG	16	21.546	-6.627	4.395	0.00	0.00
ATOM	519	P	RC3	17	22.866	-5.966	3.952	0.00	0.00
ATOM	520	O1P	RC3	17	23.919	-6.905	4.211	0.00	0.00
ATOM	521	O2P	RC3	17	22.941	-4.675	4.559	0.00	0.00
ATOM	522	O5'	RC3	17	22.746	-5.766	2.415	0.00	0.00
ATOM	523	C5'	RC3	17	22.810	-6.821	1.531	0.00	0.00
ATOM	524	1H5'	RC3	17	22.064	-7.521	1.764	0.00	0.00
ATOM	525	2H5'	RC3	17	23.746	-7.292	1.619	0.00	0.00
ATOM	526	C4'	RC3	17	22.620	-6.391	0.111	0.00	0.00
ATOM	527	H4'	RC3	17	22.678	-7.241	-0.502	0.00	0.00
ATOM	528	O4'	RC3	17	21.389	-5.796	-0.102	0.00	0.00
ATOM	529	C1'	RC3	17	21.531	-4.776	-1.026	0.00	0.00
ATOM	530	H1'	RC3	17	21.021	-5.032	-1.900	0.00	0.00
ATOM	531	N1	RC3	17	21.023	-3.501	-0.545	0.00	0.00
ATOM	532	C6	RC3	17	21.079	-3.156	0.751	0.00	0.00
ATOM	533	H6	RC3	17	21.453	-3.836	1.458	0.00	0.00
ATOM	534	C5	RC3	17	20.677	-1.959	1.141	0.00	0.00
ATOM	535	H5	RC3	17	20.719	-1.691	2.155	0.00	0.00
ATOM	536	C4	RC3	17	20.211	-1.097	0.163	0.00	0.00

ATOM	537	N4	RC3	17	19.825	0.066	0.466	0.00	0.00
ATOM	538	H41	RC3	17	19.451	0.610	-0.248	0.00	0.00
ATOM	539	H42	RC3	17	19.827	0.337	1.395	0.00	0.00
ATOM	540	N3	RC3	17	20.150	-1.403	-1.083	0.00	0.00
ATOM	541	C2	RC3	17	20.548	-2.604	-1.460	0.00	0.00
ATOM	542	O2	RC3	17	20.492	-2.861	-2.631	0.00	0.00
ATOM	543	C3'	RC3	17	23.639	-5.425	-0.350	0.00	0.00
ATOM	544	H3'	RC3	17	23.874	-4.840	0.392	0.00	0.00
ATOM	545	C2'	RC3	17	22.965	-4.686	-1.334	0.00	0.00
ATOM	546	1H2'	RC3	17	23.237	-3.777	-1.301	0.00	0.00
ATOM	547	O2'	RC3	17	23.214	-5.173	-2.469	0.00	0.00
ATOM	548	2HO'	RC3	17	23.523	-5.202	-2.700	0.00	0.00
ATOM	549	O3'	RC3	17	24.709	-5.939	-0.874	0.00	0.00
ATOM	550	H3T	RC3	17	25.003	-5.795	-1.086	0.00	0.00
ATOM	551	H5T	RG5	18	-22.382	1.033	9.685	0.00	0.00
ATOM	552	O5'	RG5	18	-22.160	0.780	9.739	0.00	0.00
ATOM	553	C5'	RG5	18	-21.030	0.177	9.398	0.00	0.00
ATOM	554	1H5'	RG5	18	-20.251	0.579	9.941	0.00	0.00
ATOM	555	2H5'	RG5	18	-20.869	0.329	8.404	0.00	0.00
ATOM	556	C4'	RG5	18	-21.078	-1.237	9.671	0.00	0.00
ATOM	557	H4'	RG5	18	-21.316	-1.375	10.668	0.00	0.00
ATOM	558	O4'	RG5	18	-21.999	-1.855	8.865	0.00	0.00
ATOM	559	C1'	RG5	18	-21.535	-3.093	8.479	0.00	0.00
ATOM	560	H1'	RG5	18	-22.206	-3.843	8.766	0.00	0.00
ATOM	561	N9	RG5	18	-21.389	-3.155	7.027	0.00	0.00
ATOM	562	C8	RG5	18	-21.533	-2.183	6.124	0.00	0.00
ATOM	563	H8	RG5	18	-21.748	-1.206	6.408	0.00	0.00
ATOM	564	N7	RG5	18	-21.411	-2.545	4.896	0.00	0.00
ATOM	565	C5	RG5	18	-21.161	-3.869	4.991	0.00	0.00
ATOM	566	C6	RG5	18	-20.951	-4.838	3.993	0.00	0.00
ATOM	567	O6	RG5	18	-20.975	-4.724	2.790	0.00	0.00
ATOM	568	N1	RG5	18	-20.696	-6.053	4.497	0.00	0.00
ATOM	569	H1	RG5	18	-20.490	-6.761	3.856	0.00	0.00
ATOM	570	C2	RG5	18	-20.695	-6.329	5.800	0.00	0.00
ATOM	571	N2	RG5	18	-20.437	-7.518	6.131	0.00	0.00
ATOM	572	H21	RG5	18	-20.230	-8.176	5.440	0.00	0.00
ATOM	573	H22	RG5	18	-20.442	-7.740	7.088	0.00	0.00
ATOM	574	N3	RG5	18	-20.917	-5.476	6.759	0.00	0.00
ATOM	575	C4	RG5	18	-21.139	-4.251	6.293	0.00	0.00
ATOM	576	C3'	RG5	18	-19.800	-1.906	9.434	0.00	0.00
ATOM	577	H3'	RG5	18	-19.408	-1.551	8.536	0.00	0.00
ATOM	578	C2'	RG5	18	-20.251	-3.286	9.217	0.00	0.00
ATOM	579	1H2'	RG5	18	-19.569	-3.820	8.642	0.00	0.00
ATOM	580	O2'	RG5	18	-20.498	-3.921	10.409	0.00	0.00
ATOM	581	2HO'	RG5	18	-20.069	-3.967	10.779	0.00	0.00
ATOM	582	O3'	RG5	18	-18.918	-1.758	10.493	0.00	0.00
ATOM	583	P	RC	19	-17.407	-1.749	10.276	0.00	0.00
ATOM	584	O1P	RC	19	-16.796	-1.513	11.553	0.00	0.00
ATOM	585	O2P	RC	19	-17.124	-0.868	9.195	0.00	0.00
ATOM	586	O5'	RC	19	-17.045	-3.165	9.808	0.00	0.00
ATOM	587	C5'	RC	19	-17.035	-4.227	10.684	0.00	0.00
ATOM	588	1H5'	RC	19	-17.950	-4.278	11.200	0.00	0.00
ATOM	589	2H5'	RC	19	-16.265	-4.096	11.403	0.00	0.00
ATOM	590	C4'	RC	19	-16.825	-5.522	9.966	0.00	0.00
ATOM	591	H4'	RC	19	-16.848	-6.297	10.694	0.00	0.00
ATOM	592	O4'	RC	19	-17.823	-5.769	9.006	0.00	0.00
ATOM	593	C1'	RC	19	-17.274	-6.471	7.927	0.00	0.00
ATOM	594	H1'	RC	19	-17.781	-7.397	7.810	0.00	0.00
ATOM	595	N1	RC	19	-17.361	-5.738	6.650	0.00	0.00
ATOM	596	C6	RC	19	-17.540	-4.419	6.595	0.00	0.00
ATOM	597	H6	RC	19	-17.595	-3.869	7.494	0.00	0.00
ATOM	598	C5	RC	19	-17.659	-3.806	5.413	0.00	0.00
ATOM	599	H5	RC	19	-17.810	-2.775	5.375	0.00	0.00
ATOM	600	C4	RC	19	-17.574	-4.576	4.259	0.00	0.00
ATOM	601	N4	RC	19	-17.707	-4.056	3.098	0.00	0.00
ATOM	602	H41	RC	19	-17.664	-4.638	2.313	0.00	0.00
ATOM	603	H42	RC	19	-17.873	-3.109	3.019	0.00	0.00
ATOM	604	N3	RC	19	-17.363	-5.836	4.285	0.00	0.00

ATOM	605	C2	RC	19	-17.253	-6.438	5.471	0.00	0.00
ATOM	606	O2	RC	19	-17.044	-7.611	5.468	0.00	0.00
ATOM	607	C3'	RC	19	-15.526	-5.614	9.237	0.00	0.00
ATOM	608	H3'	RC	19	-15.372	-4.727	8.675	0.00	0.00
ATOM	609	C2'	RC	19	-15.844	-6.743	8.299	0.00	0.00
ATOM	610	1H2'	RC	19	-15.207	-6.725	7.447	0.00	0.00
ATOM	611	O2'	RC	19	-15.789	-7.976	8.933	0.00	0.00
ATOM	612	2HO'	RC	19	-15.323	-8.095	9.295	0.00	0.00
ATOM	613	O3'	RC	19	-14.438	-5.896	10.067	0.00	0.00
ATOM	614	P	RU	20	-13.008	-5.440	9.678	0.00	0.00
ATOM	615	O1P	RU	20	-12.100	-5.976	10.664	0.00	0.00
ATOM	616	O2P	RU	20	-13.039	-4.024	9.481	0.00	0.00
ATOM	617	O5'	RU	20	-12.704	-6.097	8.292	0.00	0.00
ATOM	618	C5'	RU	20	-12.400	-7.439	8.176	0.00	0.00
ATOM	619	1H5'	RU	20	-13.153	-8.018	8.641	0.00	0.00
ATOM	620	2H5'	RU	20	-11.479	-7.631	8.669	0.00	0.00
ATOM	621	C4'	RU	20	-12.287	-7.873	6.734	0.00	0.00
ATOM	622	H4'	RU	20	-12.092	-8.913	6.723	0.00	0.00
ATOM	623	O4'	RU	20	-13.463	-7.644	6.001	0.00	0.00
ATOM	624	C1'	RU	20	-13.137	-7.389	4.656	0.00	0.00
ATOM	625	H1'	RU	20	-13.556	-8.150	4.035	0.00	0.00
ATOM	626	N1	RU	20	-13.627	-6.100	4.175	0.00	0.00
ATOM	627	C6	RU	20	-13.836	-5.063	5.012	0.00	0.00
ATOM	628	H6	RU	20	-13.693	-5.186	6.057	0.00	0.00
ATOM	629	C5	RU	20	-14.202	-3.879	4.526	0.00	0.00
ATOM	630	H5	RU	20	-14.357	-3.074	5.184	0.00	0.00
ATOM	631	C4	RU	20	-14.380	-3.656	3.130	0.00	0.00
ATOM	632	O4	RU	20	-14.693	-2.621	2.618	0.00	0.00
ATOM	633	N3	RU	20	-14.156	-4.731	2.360	0.00	0.00
ATOM	634	H3	RU	20	-14.262	-4.615	1.386	0.00	0.00
ATOM	635	C2	RU	20	-13.776	-5.941	2.811	0.00	0.00
ATOM	636	O2	RU	20	-13.571	-6.816	2.012	0.00	0.00
ATOM	637	C3'	RU	20	-11.188	-7.199	5.976	0.00	0.00
ATOM	638	H3'	RU	20	-11.223	-6.162	6.186	0.00	0.00
ATOM	639	C2'	RU	20	-11.640	-7.450	4.555	0.00	0.00
ATOM	640	1H2'	RU	20	-11.260	-6.705	3.909	0.00	0.00
ATOM	641	O2'	RU	20	-11.289	-8.703	4.099	0.00	0.00
ATOM	642	2HO'	RU	20	-10.538	-8.771	4.120	0.00	0.00
ATOM	643	O3'	RU	20	-9.931	-7.721	6.273	0.00	0.00
ATOM	644	P	RG	21	-8.627	-7.011	5.805	0.00	0.00
ATOM	645	O1P	RG	21	-7.537	-7.599	6.556	0.00	0.00
ATOM	646	O2P	RG	21	-8.838	-5.590	5.882	0.00	0.00
ATOM	647	O5'	RG	21	-8.476	-7.392	4.288	0.00	0.00
ATOM	648	C5'	RG	21	-8.042	-8.647	3.884	0.00	0.00
ATOM	649	1H5'	RG	21	-8.709	-9.389	4.238	0.00	0.00
ATOM	650	2H5'	RG	21	-7.089	-8.838	4.309	0.00	0.00
ATOM	651	C4'	RG	21	-7.939	-8.760	2.371	0.00	0.00
ATOM	652	H4'	RG	21	-7.644	-9.758	2.122	0.00	0.00
ATOM	653	O4'	RG	21	-9.167	-8.496	1.745	0.00	0.00
ATOM	654	C1'	RG	21	-8.940	-7.825	0.533	0.00	0.00
ATOM	655	H1'	RG	21	-9.367	-8.371	-0.291	0.00	0.00
ATOM	656	N9	RG	21	-9.554	-6.490	0.555	0.00	0.00
ATOM	657	C8	RG	21	-9.761	-5.660	1.606	0.00	0.00
ATOM	658	H8	RG	21	-9.452	-5.899	2.597	0.00	0.00
ATOM	659	N7	RG	21	-10.380	-4.564	1.308	0.00	0.00
ATOM	660	C5	RG	21	-10.575	-4.655	-0.062	0.00	0.00
ATOM	661	C6	RG	21	-11.186	-3.764	-1.000	0.00	0.00
ATOM	662	O6	RG	21	-11.725	-2.692	-0.810	0.00	0.00
ATOM	663	N1	RG	21	-11.145	-4.212	-2.290	0.00	0.00
ATOM	664	H1	RG	21	-11.515	-3.622	-3.000	0.00	0.00
ATOM	665	C2	RG	21	-10.587	-5.372	-2.647	0.00	0.00
ATOM	666	N2	RG	21	-10.606	-5.654	-3.903	0.00	0.00
ATOM	667	H21	RG	21	-11.002	-5.023	-4.555	0.00	0.00
ATOM	668	H22	RG	21	-10.215	-6.509	-4.174	0.00	0.00
ATOM	669	N3	RG	21	-10.033	-6.239	-1.818	0.00	0.00
ATOM	670	C4	RG	21	-10.052	-5.825	-0.529	0.00	0.00
ATOM	671	C3'	RG	21	-6.925	-7.832	1.761	0.00	0.00
ATOM	672	H3'	RG	21	-7.004	-6.869	2.229	0.00	0.00

ATOM	673	C2'	RG	21	-7.446	-7.747	0.343	0.00	0.00
ATOM	674	1H2'	RG	21	-7.161	-6.829	-0.112	0.00	0.00
ATOM	675	O2'	RG	21	-7.032	-8.825	-0.442	0.00	0.00
ATOM	676	2HO'	RG	21	-6.153	-8.822	-0.446	0.00	0.00
ATOM	677	O3'	RG	21	-5.630	-8.321	1.820	0.00	0.00
ATOM	678	P	RA	22	-4.378	-7.783	2.112	0.00	0.00
ATOM	679	O1P	RA	22	-3.797	-7.569	0.975	0.00	0.00
ATOM	680	O2P	RA	22	-3.801	-8.663	2.915	0.00	0.00
ATOM	681	O5'	RA	22	-4.644	-6.417	2.824	0.00	0.00
ATOM	682	C5'	RA	22	-3.659	-5.690	3.474	0.00	0.00
ATOM	683	1H5'	RA	22	-2.831	-5.577	2.830	0.00	0.00
ATOM	684	2H5'	RA	22	-3.341	-6.225	4.323	0.00	0.00
ATOM	685	C4'	RA	22	-4.116	-4.311	3.912	0.00	0.00
ATOM	686	H4'	RA	22	-3.309	-3.874	4.471	0.00	0.00
ATOM	687	O4'	RA	22	-4.355	-3.509	2.785	0.00	0.00
ATOM	688	C1'	RA	22	-5.722	-3.204	2.688	0.00	0.00
ATOM	689	H1'	RA	22	-5.877	-2.182	2.981	0.00	0.00
ATOM	690	N9	RA	22	-6.182	-3.393	1.306	0.00	0.00
ATOM	691	C8	RA	22	-5.835	-4.349	0.421	0.00	0.00
ATOM	692	H8	RA	22	-5.140	-5.105	0.669	0.00	0.00
ATOM	693	N7	RA	22	-6.405	-4.260	-0.739	0.00	0.00
ATOM	694	C5	RA	22	-7.170	-3.126	-0.615	0.00	0.00
ATOM	695	C6	RA	22	-8.001	-2.395	-1.474	0.00	0.00
ATOM	696	N6	RA	22	-8.251	-2.677	-2.721	0.00	0.00
ATOM	697	H61	RA	22	-8.785	-2.032	-3.244	0.00	0.00
ATOM	698	H62	RA	22	-7.834	-3.465	-3.130	0.00	0.00
ATOM	699	N1	RA	22	-8.603	-1.309	-1.067	0.00	0.00
ATOM	700	C2	RA	22	-8.392	-0.929	0.167	0.00	0.00
ATOM	701	H2	RA	22	-8.888	-0.049	0.461	0.00	0.00
ATOM	702	N3	RA	22	-7.637	-1.490	1.084	0.00	0.00
ATOM	703	C4	RA	22	-7.043	-2.596	0.626	0.00	0.00
ATOM	704	C3'	RA	22	-5.385	-4.294	4.758	0.00	0.00
ATOM	705	H3'	RA	22	-5.543	-5.225	5.267	0.00	0.00
ATOM	706	C2'	RA	22	-6.437	-4.099	3.680	0.00	0.00
ATOM	707	1H2'	RA	22	-6.634	-5.048	3.221	0.00	0.00
ATOM	708	O2'	RA	22	-7.639	-3.560	4.150	0.00	0.00
ATOM	709	2HO'	RA	22	-7.991	-4.140	4.760	0.00	0.00
ATOM	710	O3'	RA	22	-5.359	-3.204	5.650	0.00	0.00
ATOM	711	P	RA	23	-4.830	-3.339	7.119	0.00	0.00
ATOM	712	O1P	RA	23	-5.425	-4.517	7.705	0.00	0.00
ATOM	713	O2P	RA	23	-5.030	-2.069	7.778	0.00	0.00
ATOM	714	O5'	RA	23	-3.286	-3.585	7.029	0.00	0.00
ATOM	715	C5'	RA	23	-2.388	-2.552	6.784	0.00	0.00
ATOM	716	1H5'	RA	23	-2.436	-1.864	7.588	0.00	0.00
ATOM	717	2H5'	RA	23	-2.637	-2.054	5.882	0.00	0.00
ATOM	718	C4'	RA	23	-0.985	-3.090	6.683	0.00	0.00
ATOM	719	H4'	RA	23	-0.782	-3.651	7.552	0.00	0.00
ATOM	720	O4'	RA	23	-0.871	-3.906	5.573	0.00	0.00
ATOM	721	C1'	RA	23	0.138	-3.481	4.746	0.00	0.00
ATOM	722	H1'	RA	23	0.906	-4.185	4.776	0.00	0.00
ATOM	723	N9	RA	23	-0.335	-3.386	3.358	0.00	0.00
ATOM	724	C8	RA	23	-0.111	-4.270	2.390	0.00	0.00
ATOM	725	H8	RA	23	0.481	-5.123	2.551	0.00	0.00
ATOM	726	N7	RA	23	-0.694	-4.012	1.272	0.00	0.00
ATOM	727	C5	RA	23	-1.358	-2.847	1.518	0.00	0.00
ATOM	728	C6	RA	23	-2.198	-2.013	0.781	0.00	0.00
ATOM	729	N6	RA	23	-2.563	-2.192	-0.430	0.00	0.00
ATOM	730	H61	RA	23	-3.179	-1.554	-0.834	0.00	0.00
ATOM	731	H62	RA	23	-2.241	-2.976	-0.878	0.00	0.00
ATOM	732	N1	RA	23	-2.696	-0.935	1.278	0.00	0.00
ATOM	733	C2	RA	23	-2.388	-0.680	2.507	0.00	0.00
ATOM	734	H2	RA	23	-2.803	0.193	2.889	0.00	0.00
ATOM	735	N3	RA	23	-1.623	-1.358	3.322	0.00	0.00
ATOM	736	C4	RA	23	-1.133	-2.451	2.775	0.00	0.00
ATOM	737	C3'	RA	23	0.055	-2.023	6.538	0.00	0.00
ATOM	738	H3'	RA	23	-0.346	-1.207	6.500	0.00	0.00
ATOM	739	C2'	RA	23	0.665	-2.239	5.363	0.00	0.00
ATOM	740	1H2'	RA	23	0.496	-1.558	4.827	0.00	0.00

ATOM	741	O2'	RA	23	1.826	-2.272	5.618	0.00	0.00
ATOM	742	2HO'	RA	23	2.041	-1.841	6.147	0.00	0.00
ATOM	743	O3'	RA	23	0.955	-1.998	7.379	0.00	0.00
ATOM	744	P	RG	24	0.745	-1.421	8.581	0.00	0.00
ATOM	745	O1P	RG	24	0.915	-2.229	9.263	0.00	0.00
ATOM	746	O2P	RG	24	-0.250	-1.025	8.496	0.00	0.00
ATOM	747	O5'	RG	24	1.642	-0.298	8.984	0.00	0.00
ATOM	748	C5'	RG	24	2.009	-0.122	10.271	0.00	0.00
ATOM	749	1H5'	RG	24	2.515	-0.953	10.595	0.00	0.00
ATOM	750	2H5'	RG	24	1.149	-0.012	10.871	0.00	0.00
ATOM	751	C4'	RG	24	2.884	1.070	10.439	0.00	0.00
ATOM	752	H4'	RG	24	3.055	1.200	11.474	0.00	0.00
ATOM	753	O4'	RG	24	4.118	0.917	9.789	0.00	0.00
ATOM	754	C1'	RG	24	4.502	2.134	9.209	0.00	0.00
ATOM	755	H1'	RG	24	5.491	2.399	9.496	0.00	0.00
ATOM	756	N9	RG	24	4.470	2.059	7.749	0.00	0.00
ATOM	757	C8	RG	24	4.023	1.056	6.955	0.00	0.00
ATOM	758	H8	RG	24	3.608	0.163	7.350	0.00	0.00
ATOM	759	N7	RG	24	4.159	1.274	5.687	0.00	0.00
ATOM	760	C5	RG	24	4.728	2.531	5.631	0.00	0.00
ATOM	761	C6	RG	24	5.127	3.341	4.531	0.00	0.00
ATOM	762	O6	RG	24	5.071	3.105	3.339	0.00	0.00
ATOM	763	N1	RG	24	5.643	4.546	4.907	0.00	0.00
ATOM	764	H1	RG	24	5.939	5.160	4.190	0.00	0.00
ATOM	765	C2	RG	24	5.786	4.929	6.180	0.00	0.00
ATOM	766	N2	RG	24	6.261	6.104	6.389	0.00	0.00
ATOM	767	H21	RG	24	6.487	6.693	5.628	0.00	0.00
ATOM	768	H22	RG	24	6.354	6.408	7.323	0.00	0.00
ATOM	769	N3	RG	24	5.456	4.210	7.227	0.00	0.00
ATOM	770	C4	RG	24	4.923	3.014	6.892	0.00	0.00
ATOM	771	C3'	RG	24	2.294	2.332	9.928	0.00	0.00
ATOM	772	H3'	RG	24	1.860	2.154	8.984	0.00	0.00
ATOM	773	C2'	RG	24	3.535	3.155	9.729	0.00	0.00
ATOM	774	1H2'	RG	24	3.377	3.934	9.024	0.00	0.00
ATOM	775	O2'	RG	24	4.022	3.663	10.924	0.00	0.00
ATOM	776	2HO'	RG	24	3.789	3.980	11.196	0.00	0.00
ATOM	777	O3'	RG	24	1.386	2.902	10.812	0.00	0.00
ATOM	778	P	RU	25	0.227	3.795	10.299	0.00	0.00
ATOM	779	O1P	RU	25	-0.526	4.222	11.441	0.00	0.00
ATOM	780	O2P	RU	25	-0.450	3.083	9.261	0.00	0.00
ATOM	781	O5'	RU	25	0.882	5.052	9.652	0.00	0.00
ATOM	782	C5'	RU	25	1.452	6.054	10.414	0.00	0.00
ATOM	783	1H5'	RU	25	2.251	5.659	10.985	0.00	0.00
ATOM	784	2H5'	RU	25	0.729	6.450	11.074	0.00	0.00
ATOM	785	C4'	RU	25	1.960	7.190	9.570	0.00	0.00
ATOM	786	H4'	RU	25	2.347	7.936	10.226	0.00	0.00
ATOM	787	O4'	RU	25	2.972	6.801	8.686	0.00	0.00
ATOM	788	C1'	RU	25	2.939	7.665	7.567	0.00	0.00
ATOM	789	H1'	RU	25	3.837	8.246	7.553	0.00	0.00
ATOM	790	N1	RU	25	2.831	6.938	6.286	0.00	0.00
ATOM	791	C6	RU	25	2.270	5.699	6.194	0.00	0.00
ATOM	792	H6	RU	25	1.918	5.220	7.075	0.00	0.00
ATOM	793	C5	RU	25	2.168	5.076	5.004	0.00	0.00
ATOM	794	H5	RU	25	1.736	4.108	4.943	0.00	0.00
ATOM	795	C4	RU	25	2.632	5.681	3.796	0.00	0.00
ATOM	796	O4	RU	25	2.576	5.189	2.691	0.00	0.00
ATOM	797	N3	RU	25	3.178	6.909	3.965	0.00	0.00
ATOM	798	H3	RU	25	3.502	7.367	3.150	0.00	0.00
ATOM	799	C2	RU	25	3.279	7.583	5.145	0.00	0.00
ATOM	800	O2	RU	25	3.735	8.705	5.153	0.00	0.00
ATOM	801	C3'	RU	25	0.898	7.837	8.716	0.00	0.00
ATOM	802	H3'	RU	25	0.376	7.075	8.186	0.00	0.00
ATOM	803	C2'	RU	25	1.765	8.602	7.756	0.00	0.00
ATOM	804	1H2'	RU	25	1.249	8.784	6.844	0.00	0.00
ATOM	805	O2'	RU	25	2.225	9.798	8.299	0.00	0.00
ATOM	806	2HO'	RU	25	1.739	10.206	8.527	0.00	0.00
ATOM	807	O3'	RU	25	0.017	8.647	9.433	0.00	0.00
ATOM	808	P	RG	26	-1.412	8.952	8.894	0.00	0.00

ATOM	809	O1P	RG	26	-2.112	9.699	9.911	0.00	0.00
ATOM	810	O2P	RG	26	-1.979	7.718	8.419	0.00	0.00
ATOM	811	O5'	RG	26	-1.201	9.893	7.666	0.00	0.00
ATOM	812	C5'	RG	26	-0.909	11.248	7.826	0.00	0.00
ATOM	813	1H5'	RG	26	-0.073	11.352	8.473	0.00	0.00
ATOM	814	2H5'	RG	26	-1.738	11.748	8.267	0.00	0.00
ATOM	815	C4'	RG	26	-0.603	11.924	6.519	0.00	0.00
ATOM	816	H4'	RG	26	-0.359	12.944	6.724	0.00	0.00
ATOM	817	O4'	RG	26	0.485	11.326	5.861	0.00	0.00
ATOM	818	C1'	RG	26	0.309	11.473	4.471	0.00	0.00
ATOM	819	H1'	RG	26	1.108	12.049	4.054	0.00	0.00
ATOM	820	N9	RG	26	0.285	10.173	3.789	0.00	0.00
ATOM	821	C8	RG	26	-0.071	8.950	4.263	0.00	0.00
ATOM	822	H8	RG	26	-0.395	8.805	5.265	0.00	0.00
ATOM	823	N7	RG	26	0.029	7.993	3.399	0.00	0.00
ATOM	824	C5	RG	26	0.452	8.631	2.244	0.00	0.00
ATOM	825	C6	RG	26	0.728	8.144	0.930	0.00	0.00
ATOM	826	O6	RG	26	0.700	7.001	0.502	0.00	0.00
ATOM	827	N1	RG	26	1.054	9.134	0.045	0.00	0.00
ATOM	828	H1	RG	26	1.241	8.872	-0.894	0.00	0.00
ATOM	829	C2	RG	26	1.142	10.429	0.378	0.00	0.00
ATOM	830	N2	RG	26	1.456	11.252	-0.554	0.00	0.00
ATOM	831	H21	RG	26	1.608	10.922	-1.476	0.00	0.00
ATOM	832	H22	RG	26	1.531	12.202	-0.325	0.00	0.00
ATOM	833	N3	RG	26	0.933	10.921	1.582	0.00	0.00
ATOM	834	C4	RG	26	0.584	9.970	2.477	0.00	0.00
ATOM	835	C3'	RG	26	-1.741	11.921	5.535	0.00	0.00
ATOM	836	H3'	RG	26	-2.149	10.936	5.483	0.00	0.00
ATOM	837	C2'	RG	26	-0.989	12.216	4.263	0.00	0.00
ATOM	838	1H2'	RG	26	-1.514	11.848	3.414	0.00	0.00
ATOM	839	O2'	RG	26	-0.698	13.569	4.123	0.00	0.00
ATOM	840	2HO'	RG	26	-1.132	13.908	4.033	0.00	0.00
ATOM	841	O3'	RG	26	-2.723	12.873	5.832	0.00	0.00
ATOM	842	P	RC	27	-4.175	12.726	5.293	0.00	0.00
ATOM	843	O1P	RC	27	-4.948	13.822	5.841	0.00	0.00
ATOM	844	O2P	RC	27	-4.608	11.373	5.541	0.00	0.00
ATOM	845	O5'	RC	27	-4.081	12.919	3.744	0.00	0.00
ATOM	846	C5'	RC	27	-3.920	14.181	3.176	0.00	0.00
ATOM	847	1H5'	RC	27	-3.085	14.669	3.619	0.00	0.00
ATOM	848	2H5'	RC	27	-4.785	14.775	3.361	0.00	0.00
ATOM	849	C4'	RC	27	-3.708	14.102	1.683	0.00	0.00
ATOM	850	H4'	RC	27	-3.555	15.097	1.316	0.00	0.00
ATOM	851	O4'	RC	27	-2.585	13.323	1.353	0.00	0.00
ATOM	852	C1'	RC	27	-2.793	12.731	0.090	0.00	0.00
ATOM	853	H1'	RC	27	-2.079	13.125	-0.603	0.00	0.00
ATOM	854	N1	RC	27	-2.665	11.256	0.126	0.00	0.00
ATOM	855	C6	RC	27	-3.029	10.525	1.209	0.00	0.00
ATOM	856	H6	RC	27	-3.373	11.020	2.082	0.00	0.00
ATOM	857	C5	RC	27	-2.951	9.185	1.180	0.00	0.00
ATOM	858	H5	RC	27	-3.228	8.615	2.032	0.00	0.00
ATOM	859	C4	RC	27	-2.501	8.585	0.000	0.00	0.00
ATOM	860	N4	RC	27	-2.396	7.306	-0.082	0.00	0.00
ATOM	861	H41	RC	27	-2.023	6.925	-0.910	0.00	0.00
ATOM	862	H42	RC	27	-2.623	6.751	0.691	0.00	0.00
ATOM	863	N3	RC	27	-2.150	9.263	-1.053	0.00	0.00
ATOM	864	C2	RC	27	-2.240	10.601	-1.014	0.00	0.00
ATOM	865	O2	RC	27	-1.952	11.212	-2.019	0.00	0.00
ATOM	866	C3'	RC	27	-4.867	13.511	0.925	0.00	0.00
ATOM	867	H3'	RC	27	-5.189	12.624	1.428	0.00	0.00
ATOM	868	C2'	RC	27	-4.175	13.137	-0.365	0.00	0.00
ATOM	869	1H2'	RC	27	-4.678	12.331	-0.845	0.00	0.00
ATOM	870	O2'	RC	27	-4.062	14.222	-1.230	0.00	0.00
ATOM	871	2HO'	RC	27	-4.746	14.505	-1.374	0.00	0.00
ATOM	872	O3'	RC	27	-5.926	14.413	0.751	0.00	0.00
ATOM	873	P	RA	28	-7.354	13.928	0.344	0.00	0.00
ATOM	874	O1P	RA	28	-8.226	15.077	0.370	0.00	0.00
ATOM	875	O2P	RA	28	-7.685	12.785	1.150	0.00	0.00
ATOM	876	O5'	RA	28	-7.219	13.463	-1.139	0.00	0.00

ATOM	877	C5'	RA	28	-7.496	13.556	-2.062	0.00	0.00
ATOM	878	1H5'	RA	28	-7.459	14.117	-2.015	0.00	0.00
ATOM	879	2H5'	RA	28	-8.033	13.487	-1.896	0.00	0.00
ATOM	880	C4'	RA	28	-7.103	13.000	-3.381	0.00	0.00
ATOM	881	H4'	RA	28	-7.102	13.793	-4.083	0.00	0.00
ATOM	882	O4'	RA	28	-5.827	12.418	-3.330	0.00	0.00
ATOM	883	C1'	RA	28	-5.803	11.288	-4.156	0.00	0.00
ATOM	884	H1'	RA	28	-5.013	11.356	-4.866	0.00	0.00
ATOM	885	N9	RA	28	-5.611	10.065	-3.363	0.00	0.00
ATOM	886	C8	RA	28	-5.824	9.857	-2.038	0.00	0.00
ATOM	887	H8	RA	28	-6.188	10.615	-1.393	0.00	0.00
ATOM	888	N7	RA	28	-5.542	8.666	-1.628	0.00	0.00
ATOM	889	C5	RA	28	-5.123	8.030	-2.786	0.00	0.00
ATOM	890	C6	RA	28	-4.672	6.743	-3.104	0.00	0.00
ATOM	891	N6	RA	28	-4.504	5.775	-2.250	0.00	0.00
ATOM	892	H61	RA	28	-4.146	4.914	-2.579	0.00	0.00
ATOM	893	H62	RA	28	-4.693	5.932	-1.299	0.00	0.00
ATOM	894	N1	RA	28	-4.378	6.414	-4.346	0.00	0.00
ATOM	895	C2	RA	28	-4.504	7.334	-5.273	0.00	0.00
ATOM	896	H2	RA	28	-4.253	7.036	-6.260	0.00	0.00
ATOM	897	N3	RA	28	-4.890	8.580	-5.131	0.00	0.00
ATOM	898	C4	RA	28	-5.188	8.869	-3.848	0.00	0.00
ATOM	899	C3'	RA	28	-8.029	11.949	-3.896	0.00	0.00
ATOM	900	H3'	RA	28	-8.255	11.273	-3.110	0.00	0.00
ATOM	901	C2'	RA	28	-7.128	11.264	-4.878	0.00	0.00
ATOM	902	1H2'	RA	28	-7.446	10.267	-5.065	0.00	0.00
ATOM	903	O2'	RA	28	-7.009	11.973	-6.069	0.00	0.00
ATOM	904	2HO'	RA	28	-7.493	12.137	-6.346	0.00	0.00
ATOM	905	O3'	RA	28	-9.186	12.466	-4.487	0.00	0.00
ATOM	906	P	RC	29	-10.513	11.663	-4.481	0.00	0.00
ATOM	907	O1P	RC	29	-11.496	12.442	-5.204	0.00	0.00
ATOM	908	O2P	RC	29	-10.787	11.289	-3.124	0.00	0.00
ATOM	909	O5'	RC	29	-10.230	10.352	-5.278	0.00	0.00
ATOM	910	C5'	RC	29	-10.101	10.360	-6.657	0.00	0.00
ATOM	911	1H5'	RC	29	-9.388	11.091	-6.936	0.00	0.00
ATOM	912	2H5'	RC	29	-11.033	10.616	-7.102	0.00	0.00
ATOM	913	C4'	RC	29	-9.651	9.026	-7.194	0.00	0.00
ATOM	914	H4'	RC	29	-9.502	9.126	-8.244	0.00	0.00
ATOM	915	O4'	RC	29	-8.449	8.594	-6.610	0.00	0.00
ATOM	916	C1'	RC	29	-8.412	7.188	-6.621	0.00	0.00
ATOM	917	H1'	RC	29	-7.627	6.862	-7.270	0.00	0.00
ATOM	918	N1	RC	29	-8.186	6.602	-5.289	0.00	0.00
ATOM	919	C6	RC	29	-8.527	7.245	-4.148	0.00	0.00
ATOM	920	H6	RC	29	-8.932	8.225	-4.197	0.00	0.00
ATOM	921	C5	RC	29	-8.354	6.640	-2.965	0.00	0.00
ATOM	922	H5	RC	29	-8.611	7.141	-2.069	0.00	0.00
ATOM	923	C4	RC	29	-7.827	5.342	-2.966	0.00	0.00
ATOM	924	N4	RC	29	-7.634	4.711	-1.865	0.00	0.00
ATOM	925	H41	RC	29	-7.198	3.829	-1.907	0.00	0.00
ATOM	926	H42	RC	29	-7.824	5.158	-1.020	0.00	0.00
ATOM	927	N3	RC	29	-7.506	4.701	-4.046	0.00	0.00
ATOM	928	C2	RC	29	-7.683	5.315	-5.219	0.00	0.00
ATOM	929	O2	RC	29	-7.396	4.697	-6.218	0.00	0.00
ATOM	930	C3'	RC	29	-10.635	7.915	-6.990	0.00	0.00
ATOM	931	H3'	RC	29	-10.969	7.937	-5.979	0.00	0.00
ATOM	932	C2'	RC	29	-9.728	6.726	-7.195	0.00	0.00
ATOM	933	1H2'	RC	29	-10.099	5.876	-6.678	0.00	0.00
ATOM	934	O2'	RC	29	-9.515	6.430	-8.534	0.00	0.00
ATOM	935	2HO'	RC	29	-10.059	6.006	-8.810	0.00	0.00
ATOM	936	O3'	RC	29	-11.720	7.968	-7.875	0.00	0.00
ATOM	937	P	RA	30	-12.987	7.085	-7.671	0.00	0.00
ATOM	938	O1P	RA	30	-14.004	7.576	-8.573	0.00	0.00
ATOM	939	O2P	RA	30	-13.269	7.029	-6.258	0.00	0.00
ATOM	940	O5'	RA	30	-12.587	5.645	-8.132	0.00	0.00
ATOM	941	C5'	RA	30	-12.460	5.310	-9.475	0.00	0.00
ATOM	942	1H5'	RA	30	-11.810	6.002	-9.950	0.00	0.00
ATOM	943	2H5'	RA	30	-13.407	5.368	-9.954	0.00	0.00
ATOM	944	C4'	RA	30	-11.909	3.914	-9.652	0.00	0.00

ATOM	945	H4'	RA	30	-11.719	3.764	-10.691	0.00	0.00
ATOM	946	O4'	RA	30	-10.708	3.727	-8.946	0.00	0.00
ATOM	947	C1'	RA	30	-10.632	2.389	-8.505	0.00	0.00
ATOM	948	H1'	RA	30	-9.748	1.918	-8.885	0.00	0.00
ATOM	949	N9	RA	30	-10.597	2.307	-7.043	0.00	0.00
ATOM	950	C8	RA	30	-11.003	3.215	-6.123	0.00	0.00
ATOM	951	H8	RA	30	-11.451	4.138	-6.399	0.00	0.00
ATOM	952	N7	RA	30	-10.795	2.867	-4.893	0.00	0.00
ATOM	953	C5	RA	30	-10.226	1.610	-5.015	0.00	0.00
ATOM	954	C6	RA	30	-9.745	0.643	-4.117	0.00	0.00
ATOM	955	N6	RA	30	-9.702	0.769	-2.822	0.00	0.00
ATOM	956	H61	RA	30	-9.337	0.016	-2.293	0.00	0.00
ATOM	957	H62	RA	30	-10.022	1.598	-2.403	0.00	0.00
ATOM	958	N1	RA	30	-9.267	-0.504	-4.545	0.00	0.00
ATOM	959	C2	RA	30	-9.249	-0.712	-5.838	0.00	0.00
ATOM	960	H2	RA	30	-8.859	-1.648	-6.145	0.00	0.00
ATOM	961	N3	RA	30	-9.649	0.091	-6.803	0.00	0.00
ATOM	962	C4	RA	30	-10.129	1.253	-6.319	0.00	0.00
ATOM	963	C3'	RA	30	-12.834	2.815	-9.208	0.00	0.00
ATOM	964	H3'	RA	30	-13.237	3.069	-8.256	0.00	0.00
ATOM	965	C2'	RA	30	-11.847	1.679	-9.049	0.00	0.00
ATOM	966	1H2'	RA	30	-12.212	0.943	-8.370	0.00	0.00
ATOM	967	O2'	RA	30	-11.489	1.095	-10.259	0.00	0.00
ATOM	968	2HO'	RA	30	-11.859	0.716	-10.474	0.00	0.00
ATOM	969	O3'	RA	30	-13.845	2.550	-10.135	0.00	0.00
ATOM	970	P	RC	31	-15.130	1.768	-9.734	0.00	0.00
ATOM	971	O1P	RC	31	-16.010	1.774	-10.875	0.00	0.00
ATOM	972	O2P	RC	31	-15.612	2.302	-8.487	0.00	0.00
ATOM	973	O5'	RC	31	-14.677	0.292	-9.472	0.00	0.00
ATOM	974	C5'	RC	31	-14.335	-0.575	-10.511	0.00	0.00
ATOM	975	1H5'	RC	31	-13.612	-0.111	-11.141	0.00	0.00
ATOM	976	2H5'	RC	31	-15.196	-0.792	-11.094	0.00	0.00
ATOM	977	C4'	RC	31	-13.760	-1.875	-9.984	0.00	0.00
ATOM	978	H4'	RC	31	-13.431	-2.455	-10.820	0.00	0.00
ATOM	979	O4'	RC	31	-12.666	-1.660	-9.129	0.00	0.00
ATOM	980	C1'	RC	31	-12.619	-2.693	-8.166	0.00	0.00
ATOM	981	H1'	RC	31	-11.719	-3.261	-8.297	0.00	0.00
ATOM	982	N1	RC	31	-12.652	-2.177	-6.780	0.00	0.00
ATOM	983	C6	RC	31	-13.262	-1.014	-6.462	0.00	0.00
ATOM	984	H6	RC	31	-13.726	-0.441	-7.226	0.00	0.00
ATOM	985	C5	RC	31	-13.277	-0.584	-5.193	0.00	0.00
ATOM	986	H5	RC	31	-13.747	0.332	-4.951	0.00	0.00
ATOM	987	C4	RC	31	-12.664	-1.386	-4.223	0.00	0.00
ATOM	988	N4	RC	31	-12.649	-1.020	-2.994	0.00	0.00
ATOM	989	H41	RC	31	-12.169	-1.582	-2.343	0.00	0.00
ATOM	990	H42	RC	31	-13.026	-0.151	-2.751	0.00	0.00
ATOM	991	N3	RC	31	-12.097	-2.518	-4.494	0.00	0.00
ATOM	992	C2	RC	31	-12.078	-2.930	-5.770	0.00	0.00
ATOM	993	O2	RC	31	-11.543	-3.990	-6.004	0.00	0.00
ATOM	994	C3'	RC	31	-14.747	-2.715	-9.212	0.00	0.00
ATOM	995	H3'	RC	31	-15.283	-2.086	-8.535	0.00	0.00
ATOM	996	C2'	RC	31	-13.798	-3.603	-8.435	0.00	0.00
ATOM	997	1H2'	RC	31	-14.252	-3.936	-7.525	0.00	0.00
ATOM	998	O2'	RC	31	-13.353	-4.697	-9.180	0.00	0.00
ATOM	999	2HO'	RC	31	-14.048	-5.237	-9.298	0.00	0.00
ATOM	1000	O3'	RC	31	-15.626	-3.411	-10.050	0.00	0.00
ATOM	1001	P	RG	32	-16.778	-4.295	-9.481	0.00	0.00
ATOM	1002	O1P	RG	32	-17.622	-4.682	-10.571	0.00	0.00
ATOM	1003	O2P	RG	32	-17.341	-3.611	-8.360	0.00	0.00
ATOM	1004	O5'	RG	32	-16.048	-5.576	-8.997	0.00	0.00
ATOM	1005	C5'	RG	32	-16.501	-6.333	-7.945	0.00	0.00
ATOM	1006	1H5'	RG	32	-17.391	-6.823	-8.230	0.00	0.00
ATOM	1007	2H5'	RG	32	-16.697	-5.719	-7.119	0.00	0.00
ATOM	1008	C4'	RG	32	-15.471	-7.342	-7.554	0.00	0.00
ATOM	1009	H4'	RG	32	-15.228	-7.923	-8.409	0.00	0.00
ATOM	1010	O4'	RG	32	-14.310	-6.728	-7.060	0.00	0.00
ATOM	1011	C1'	RG	32	-13.894	-7.354	-5.867	0.00	0.00
ATOM	1012	H1'	RG	32	-12.848	-7.558	-5.886	0.00	0.00

ATOM	1013	N9	RG	32	-14.169	-6.490	-4.715	0.00	0.00
ATOM	1014	C8	RG	32	-14.749	-5.269	-4.698	0.00	0.00
ATOM	1015	H8	RG	32	-15.095	-4.788	-5.580	0.00	0.00
ATOM	1016	N7	RG	32	-14.863	-4.750	-3.527	0.00	0.00
ATOM	1017	C5	RG	32	-14.295	-5.693	-2.692	0.00	0.00
ATOM	1018	C6	RG	32	-14.111	-5.717	-1.282	0.00	0.00
ATOM	1019	O6	RG	32	-14.422	-4.885	-0.461	0.00	0.00
ATOM	1020	N1	RG	32	-13.496	-6.844	-0.826	0.00	0.00
ATOM	1021	H1	RG	32	-13.374	-6.933	0.153	0.00	0.00
ATOM	1022	C2	RG	32	-13.089	-7.830	-1.623	0.00	0.00
ATOM	1023	N2	RG	32	-12.535	-8.845	-1.065	0.00	0.00
ATOM	1024	H21	RG	32	-12.436	-8.914	-0.087	0.00	0.00
ATOM	1025	H22	RG	32	-12.227	-9.561	-1.659	0.00	0.00
ATOM	1026	N3	RG	32	-13.238	-7.854	-2.931	0.00	0.00
ATOM	1027	C4	RG	32	-13.854	-6.753	-3.415	0.00	0.00
ATOM	1028	C3'	RG	32	-15.960	-8.264	-6.472	0.00	0.00
ATOM	1029	H3'	RG	32	-16.543	-7.711	-5.779	0.00	0.00
ATOM	1030	C2'	RG	32	-14.663	-8.649	-5.805	0.00	0.00
ATOM	1031	1H2'	RG	32	-14.817	-8.978	-4.797	0.00	0.00
ATOM	1032	O2'	RG	32	-13.967	-9.610	-6.529	0.00	0.00
ATOM	1033	2HO'	RG	32	-14.322	-10.040	-6.873	0.00	0.00
ATOM	1034	O3'	RG	32	-16.657	-9.358	-6.974	0.00	0.00
ATOM	1035	P	RG	33	-17.841	-9.983	-6.198	0.00	0.00
ATOM	1036	O1P	RG	33	-18.334	-11.095	-6.965	0.00	0.00
ATOM	1037	O2P	RG	33	-18.745	-8.929	-5.852	0.00	0.00
ATOM	1038	O5'	RG	33	-17.233	-10.526	-4.863	0.00	0.00
ATOM	1039	C5'	RG	33	-16.451	-11.668	-4.814	0.00	0.00
ATOM	1040	1H5'	RG	33	-15.609	-11.545	-5.442	0.00	0.00
ATOM	1041	2H5'	RG	33	-17.009	-12.495	-5.165	0.00	0.00
ATOM	1042	C4'	RG	33	-15.981	-11.971	-3.413	0.00	0.00
ATOM	1043	H4'	RG	33	-15.416	-12.868	-3.437	0.00	0.00
ATOM	1044	O4'	RG	33	-15.168	-10.963	-2.892	0.00	0.00
ATOM	1045	C1'	RG	33	-15.462	-10.785	-1.530	0.00	0.00
ATOM	1046	H1'	RG	33	-14.578	-10.829	-0.928	0.00	0.00
ATOM	1047	N9	RG	33	-16.083	-9.488	-1.310	0.00	0.00
ATOM	1048	C8	RG	33	-16.545	-8.592	-2.214	0.00	0.00
ATOM	1049	H8	RG	33	-16.531	-8.777	-3.256	0.00	0.00
ATOM	1050	N7	RG	33	-16.974	-7.497	-1.707	0.00	0.00
ATOM	1051	C5	RG	33	-16.802	-7.685	-0.349	0.00	0.00
ATOM	1052	C6	RG	33	-17.070	-6.846	0.759	0.00	0.00
ATOM	1053	O6	RG	33	-17.490	-5.715	0.771	0.00	0.00
ATOM	1054	N1	RG	33	-16.820	-7.435	1.961	0.00	0.00
ATOM	1055	H1	RG	33	-17.036	-6.923	2.772	0.00	0.00
ATOM	1056	C2	RG	33	-16.311	-8.654	2.096	0.00	0.00
ATOM	1057	N2	RG	33	-16.148	-9.091	3.289	0.00	0.00
ATOM	1058	H21	RG	33	-16.446	-8.555	4.059	0.00	0.00
ATOM	1059	H22	RG	33	-15.808	-9.999	3.409	0.00	0.00
ATOM	1060	N3	RG	33	-15.995	-9.444	1.107	0.00	0.00
ATOM	1061	C4	RG	33	-16.276	-8.909	-0.101	0.00	0.00
ATOM	1062	C3'	RG	33	-17.097	-12.168	-2.439	0.00	0.00
ATOM	1063	H3'	RG	33	-17.832	-11.419	-2.600	0.00	0.00
ATOM	1064	C2'	RG	33	-16.382	-11.905	-1.136	0.00	0.00
ATOM	1065	1H2'	RG	33	-17.060	-11.615	-0.375	0.00	0.00
ATOM	1066	O2'	RG	33	-15.614	-12.983	-0.715	0.00	0.00
ATOM	1067	2HO'	RG	33	-15.789	-13.470	-0.696	0.00	0.00
ATOM	1068	O3'	RG	33	-17.646	-13.439	-2.499	0.00	0.00
ATOM	1069	P	RC3	34	-19.135	-13.680	-2.191	0.00	0.00
ATOM	1070	O1P	RC3	34	-19.394	-15.077	-2.355	0.00	0.00
ATOM	1071	O2P	RC3	34	-19.905	-12.751	-2.965	0.00	0.00
ATOM	1072	O5'	RC3	34	-19.302	-13.323	-0.690	0.00	0.00
ATOM	1073	C5'	RC3	34	-18.808	-14.126	0.323	0.00	0.00
ATOM	1074	1H5'	RC3	34	-17.770	-14.236	0.223	0.00	0.00
ATOM	1075	2H5'	RC3	34	-19.251	-15.072	0.251	0.00	0.00
ATOM	1076	C4'	RC3	34	-19.086	-13.577	1.683	0.00	0.00
ATOM	1077	H4'	RC3	34	-18.706	-14.246	2.400	0.00	0.00
ATOM	1078	O4'	RC3	34	-18.478	-12.363	1.887	0.00	0.00
ATOM	1079	C1'	RC3	34	-19.289	-11.584	2.672	0.00	0.00
ATOM	1080	H1'	RC3	34	-18.830	-11.446	3.594	0.00	0.00

ATOM	1081	N1	RC3	34	-19.569	-10.288	2.087	0.00	0.00
ATOM	1082	C6	RC3	34	-19.634	-10.108	0.760	0.00	0.00
ATOM	1083	H6	RC3	34	-19.429	-10.907	0.120	0.00	0.00
ATOM	1084	C5	RC3	34	-19.955	-8.932	0.256	0.00	0.00
ATOM	1085	H5	RC3	34	-19.999	-8.794	-0.783	0.00	0.00
ATOM	1086	C4	RC3	34	-20.230	-7.922	1.148	0.00	0.00
ATOM	1087	N4	RC3	34	-20.547	-6.773	0.735	0.00	0.00
ATOM	1088	H41	RC3	34	-20.661	-6.080	1.400	0.00	0.00
ATOM	1089	H42	RC3	34	-20.561	-6.599	-0.218	0.00	0.00
ATOM	1090	N3	RC3	34	-20.186	-8.068	2.424	0.00	0.00
ATOM	1091	C2	RC3	34	-19.852	-9.246	2.916	0.00	0.00
ATOM	1092	O2	RC3	34	-19.829	-9.363	4.110	0.00	0.00
ATOM	1093	C3'	RC3	34	-20.522	-13.389	1.951	0.00	0.00
ATOM	1094	H3'	RC3	34	-20.962	-13.101	1.124	0.00	0.00
ATOM	1095	C2'	RC3	34	-20.520	-12.337	2.877	0.00	0.00
ATOM	1096	1H2'	RC3	34	-21.258	-11.762	2.723	0.00	0.00
ATOM	1097	O2'	RC3	34	-20.566	-12.824	4.032	0.00	0.00
ATOM	1098	2HO'	RC3	34	-20.915	-13.058	4.226	0.00	0.00
ATOM	1099	O3'	RC3	34	-21.159	-14.412	2.465	0.00	0.00
ATOM	1100	H3T	RC3	34	-21.435	-14.457	2.628	0.00	0.00

closed conformation - closed_c.pdb

REMARK MD average structure 3000 - 3100 ps

REMARK 1JJM (PDB database)

REMARK sequence chain I. residues 1-23 5'(CUUGCUGAAGCGCGCACAGCAAG)3'

REMARK sequence chain II. residues 24-46 5'(CUUGCUGAAGCGCGCACAGCAAG)3'

REMARK PDB format: output from Ptraj module of AMBER-8.0

ATOM	1	H5T	RC5	1	-12.417	19.671	-8.595	0.00	0.00
ATOM	2	O5'	RC5	1	-12.139	19.580	-8.579	0.00	0.00
ATOM	3	C5'	RC5	1	-10.821	19.430	-8.541	0.00	0.00
ATOM	4	1H5'	RC5	1	-10.564	18.644	-9.140	0.00	0.00
ATOM	5	2H5'	RC5	1	-10.512	19.232	-7.576	0.00	0.00
ATOM	6	C4'	RC5	1	-10.148	20.613	-9.021	0.00	0.00
ATOM	7	H4'	RC5	1	-10.544	20.875	-9.956	0.00	0.00
ATOM	8	O4'	RC5	1	-10.294	21.641	-8.136	0.00	0.00
ATOM	9	C1'	RC5	1	-9.205	22.472	-8.205	0.00	0.00
ATOM	10	H1'	RC5	1	-9.496	23.378	-8.644	0.00	0.00
ATOM	11	N1	RC5	1	-8.601	22.756	-6.889	0.00	0.00
ATOM	12	C6	RC5	1	-8.809	22.005	-5.829	0.00	0.00
ATOM	13	H6	RC5	1	-9.397	21.168	-5.928	0.00	0.00
ATOM	14	C5	RC5	1	-8.307	22.342	-4.640	0.00	0.00
ATOM	15	H5	RC5	1	-8.493	21.759	-3.808	0.00	0.00
ATOM	16	C4	RC5	1	-7.550	23.469	-4.553	0.00	0.00
ATOM	17	N4	RC5	1	-7.083	23.874	-3.436	0.00	0.00
ATOM	18	H41	RC5	1	-7.263	23.387	-2.631	0.00	0.00
ATOM	19	H42	RC5	1	-6.550	24.683	-3.437	0.00	0.00
ATOM	20	N3	RC5	1	-7.299	24.188	-5.562	0.00	0.00
ATOM	21	C2	RC5	1	-7.807	23.841	-6.750	0.00	0.00
ATOM	22	O2	RC5	1	-7.538	24.509	-7.683	0.00	0.00
ATOM	23	C3'	RC5	1	-8.708	20.422	-9.151	0.00	0.00
ATOM	24	H3'	RC5	1	-8.341	19.940	-8.289	0.00	0.00
ATOM	25	C2'	RC5	1	-8.261	21.806	-9.113	0.00	0.00
ATOM	26	1H2'	RC5	1	-7.288	21.865	-8.746	0.00	0.00
ATOM	27	O2'	RC5	1	-8.359	22.385	-10.349	0.00	0.00
ATOM	28	2HO'	RC5	1	-8.046	21.918	-10.857	0.00	0.00
ATOM	29	O3'	RC5	1	-8.378	19.771	-10.321	0.00	0.00
ATOM	30	P	RU	2	-7.044	19.021	-10.440	0.00	0.00
ATOM	31	O1P	RU	2	-7.050	18.395	-11.713	0.00	0.00
ATOM	32	O2P	RU	2	-6.845	18.227	-9.265	0.00	0.00
ATOM	33	O5'	RU	2	-5.959	20.102	-10.422	0.00	0.00
ATOM	34	C5'	RU	2	-5.654	20.795	-11.546	0.00	0.00
ATOM	35	1H5'	RU	2	-6.518	21.262	-11.951	0.00	0.00
ATOM	36	2H5'	RU	2	-5.284	20.143	-12.255	0.00	0.00
ATOM	37	C4'	RU	2	-4.622	21.811	-11.256	0.00	0.00
ATOM	38	H4'	RU	2	-4.433	22.306	-12.161	0.00	0.00
ATOM	39	O4'	RU	2	-5.043	22.726	-10.345	0.00	0.00
ATOM	40	C1'	RU	2	-3.944	23.187	-9.596	0.00	0.00
ATOM	41	H1'	RU	2	-3.836	24.219	-9.749	0.00	0.00
ATOM	42	N1	RU	2	-4.055	22.932	-8.170	0.00	0.00
ATOM	43	C6	RU	2	-4.766	21.924	-7.684	0.00	0.00
ATOM	44	H6	RU	2	-5.223	21.258	-8.344	0.00	0.00
ATOM	45	C5	RU	2	-4.870	21.763	-6.371	0.00	0.00
ATOM	46	H5	RU	2	-5.429	20.984	-5.996	0.00	0.00
ATOM	47	C4	RU	2	-4.251	22.618	-5.449	0.00	0.00
ATOM	48	O4	RU	2	-4.311	22.549	-4.260	0.00	0.00
ATOM	49	N3	RU	2	-3.531	23.560	-6.007	0.00	0.00
ATOM	50	H3	RU	2	-3.058	24.149	-5.393	0.00	0.00
ATOM	51	C2	RU	2	-3.378	23.749	-7.321	0.00	0.00
ATOM	52	O2	RU	2	-2.664	24.605	-7.685	0.00	0.00
ATOM	53	C3'	RU	2	-3.323	21.283	-10.689	0.00	0.00
ATOM	54	H3'	RU	2	-3.521	20.619	-9.904	0.00	0.00
ATOM	55	C2'	RU	2	-2.739	22.509	-10.125	0.00	0.00
ATOM	56	1H2'	RU	2	-2.025	22.285	-9.361	0.00	0.00
ATOM	57	O2'	RU	2	-2.208	23.323	-11.082	0.00	0.00
ATOM	58	2HO'	RU	2	-1.847	23.097	-11.380	0.00	0.00
ATOM	59	O3'	RU	2	-2.545	20.696	-11.624	0.00	0.00
ATOM	60	P	RU	3	-1.459	19.673	-11.243	0.00	0.00
ATOM	61	O1P	RU	3	-0.903	19.226	-12.441	0.00	0.00

ATOM	62	O2P	RU	3	-2.034	18.737	-10.384	0.00	0.00
ATOM	63	O5'	RU	3	-0.351	20.396	-10.449	0.00	0.00
ATOM	64	C5'	RU	3	0.526	21.239	-11.035	0.00	0.00
ATOM	65	1H5'	RU	3	-0.021	21.942	-11.610	0.00	0.00
ATOM	66	2H5'	RU	3	1.156	20.707	-11.658	0.00	0.00
ATOM	67	C4'	RU	3	1.378	21.944	-10.035	0.00	0.00
ATOM	68	H4'	RU	3	1.995	22.607	-10.554	0.00	0.00
ATOM	69	O4'	RU	3	0.621	22.673	-9.152	0.00	0.00
ATOM	70	C1'	RU	3	1.329	22.764	-7.937	0.00	0.00
ATOM	71	H1'	RU	3	1.617	23.779	-7.773	0.00	0.00
ATOM	72	N1	RU	3	0.524	22.328	-6.801	0.00	0.00
ATOM	73	C6	RU	3	-0.413	21.358	-6.916	0.00	0.00
ATOM	74	H6	RU	3	-0.585	20.910	-7.854	0.00	0.00
ATOM	75	C5	RU	3	-1.106	20.953	-5.850	0.00	0.00
ATOM	76	H5	RU	3	-1.833	20.197	-5.940	0.00	0.00
ATOM	77	C4	RU	3	-0.887	21.516	-4.573	0.00	0.00
ATOM	78	O4	RU	3	-1.476	21.214	-3.573	0.00	0.00
ATOM	79	N3	RU	3	0.068	22.457	-4.534	0.00	0.00
ATOM	80	H3	RU	3	0.272	22.848	-3.655	0.00	0.00
ATOM	81	C2	RU	3	0.803	22.886	-5.576	0.00	0.00
ATOM	82	O2	RU	3	1.662	23.710	-5.394	0.00	0.00
ATOM	83	C3'	RU	3	2.274	21.048	-9.220	0.00	0.00
ATOM	84	H3'	RU	3	1.714	20.228	-8.884	0.00	0.00
ATOM	85	C2'	RU	3	2.589	21.935	-8.068	0.00	0.00
ATOM	86	1H2'	RU	3	2.787	21.355	-7.209	0.00	0.00
ATOM	87	O2'	RU	3	3.653	22.770	-8.318	0.00	0.00
ATOM	88	2HO'	RU	3	4.371	22.263	-8.365	0.00	0.00
ATOM	89	O3'	RU	3	3.394	20.622	-9.908	0.00	0.00
ATOM	90	P	RG	4	4.375	19.565	-9.328	0.00	0.00
ATOM	91	O1P	RG	4	5.314	19.235	-10.334	0.00	0.00
ATOM	92	O2P	RG	4	3.595	18.539	-8.742	0.00	0.00
ATOM	93	O5'	RG	4	5.154	20.330	-8.236	0.00	0.00
ATOM	94	C5'	RG	4	5.631	19.727	-7.110	0.00	0.00
ATOM	95	1H5'	RG	4	6.438	19.094	-7.359	0.00	0.00
ATOM	96	2H5'	RG	4	4.875	19.148	-6.685	0.00	0.00
ATOM	97	C4'	RG	4	6.103	20.744	-6.128	0.00	0.00
ATOM	98	H4'	RG	4	6.834	21.358	-6.588	0.00	0.00
ATOM	99	O4'	RG	4	5.038	21.528	-5.676	0.00	0.00
ATOM	100	C1'	RG	4	5.191	21.785	-4.302	0.00	0.00
ATOM	101	H1'	RG	4	5.191	22.842	-4.114	0.00	0.00
ATOM	102	N9	RG	4	4.061	21.182	-3.558	0.00	0.00
ATOM	103	C8	RG	4	3.044	20.405	-4.036	0.00	0.00
ATOM	104	H8	RG	4	2.989	20.095	-5.052	0.00	0.00
ATOM	105	N7	RG	4	2.151	20.089	-3.154	0.00	0.00
ATOM	106	C5	RG	4	2.609	20.704	-1.994	0.00	0.00
ATOM	107	C6	RG	4	2.081	20.730	-0.666	0.00	0.00
ATOM	108	O6	RG	4	1.049	20.243	-0.244	0.00	0.00
ATOM	109	N1	RG	4	2.869	21.413	0.226	0.00	0.00
ATOM	110	H1	RG	4	2.569	21.440	1.173	0.00	0.00
ATOM	111	C2	RG	4	4.013	22.032	-0.117	0.00	0.00
ATOM	112	N2	RG	4	4.667	22.609	0.836	0.00	0.00
ATOM	113	H21	RG	4	4.354	22.505	1.776	0.00	0.00
ATOM	114	H22	RG	4	5.518	23.068	0.628	0.00	0.00
ATOM	115	N3	RG	4	4.524	22.069	-1.335	0.00	0.00
ATOM	116	C4	RG	4	3.784	21.366	-2.231	0.00	0.00
ATOM	117	C3'	RG	4	6.743	20.119	-4.920	0.00	0.00
ATOM	118	H3'	RG	4	6.176	19.270	-4.623	0.00	0.00
ATOM	119	C2'	RG	4	6.533	21.211	-3.901	0.00	0.00
ATOM	120	1H2'	RG	4	6.515	20.824	-2.907	0.00	0.00
ATOM	121	O2'	RG	4	7.501	22.219	-3.983	0.00	0.00
ATOM	122	2HO'	RG	4	7.981	22.185	-3.822	0.00	0.00
ATOM	123	O3'	RG	4	8.092	19.810	-5.162	0.00	0.00
ATOM	124	P	RC	5	8.776	18.557	-4.527	0.00	0.00
ATOM	125	O1P	RC	5	10.117	18.456	-5.068	0.00	0.00
ATOM	126	O2P	RC	5	7.880	17.430	-4.667	0.00	0.00
ATOM	127	O5'	RC	5	8.892	18.869	-3.003	0.00	0.00
ATOM	128	C5'	RC	5	9.871	19.729	-2.502	0.00	0.00
ATOM	129	1H5'	RC	5	9.845	20.675	-3.006	0.00	0.00

ATOM	130	2H5'	RC	5	10.840	19.290	-2.648	0.00	0.00
ATOM	131	C4'	RC	5	9.658	19.977	-1.019	0.00	0.00
ATOM	132	H4'	RC	5	10.451	20.615	-0.661	0.00	0.00
ATOM	133	O4'	RC	5	8.428	20.626	-0.777	0.00	0.00
ATOM	134	C1'	RC	5	7.907	20.190	0.465	0.00	0.00
ATOM	135	H1'	RC	5	7.760	21.040	1.113	0.00	0.00
ATOM	136	N1	RC	5	6.617	19.477	0.326	0.00	0.00
ATOM	137	C6	RC	5	6.229	18.903	-0.844	0.00	0.00
ATOM	138	H6	RC	5	6.864	18.960	-1.698	0.00	0.00
ATOM	139	C5	RC	5	5.043	18.276	-0.932	0.00	0.00
ATOM	140	H5	RC	5	4.743	17.841	-1.858	0.00	0.00
ATOM	141	C4	RC	5	4.243	18.229	0.218	0.00	0.00
ATOM	142	N4	RC	5	3.089	17.662	0.195	0.00	0.00
ATOM	143	H41	RC	5	2.556	17.685	1.033	0.00	0.00
ATOM	144	H42	RC	5	2.741	17.280	-0.646	0.00	0.00
ATOM	145	N3	RC	5	4.608	18.727	1.371	0.00	0.00
ATOM	146	C2	RC	5	5.795	19.354	1.440	0.00	0.00
ATOM	147	O2	RC	5	6.124	19.795	2.526	0.00	0.00
ATOM	148	C3'	RC	5	9.650	18.724	-0.159	0.00	0.00
ATOM	149	H3'	RC	5	9.016	17.994	-0.629	0.00	0.00
ATOM	150	C2'	RC	5	8.966	19.282	1.073	0.00	0.00
ATOM	151	1H2'	RC	5	8.519	18.491	1.650	0.00	0.00
ATOM	152	O2'	RC	5	9.816	20.053	1.869	0.00	0.00
ATOM	153	2HO'	RC	5	10.463	19.844	1.946	0.00	0.00
ATOM	154	O3'	RC	5	10.917	18.193	0.135	0.00	0.00
ATOM	155	P	RU	6	11.103	16.659	0.418	0.00	0.00
ATOM	156	O1P	RU	6	12.500	16.442	0.734	0.00	0.00
ATOM	157	O2P	RU	6	10.525	15.941	-0.702	0.00	0.00
ATOM	158	O5'	RU	6	10.250	16.323	1.699	0.00	0.00
ATOM	159	C5'	RU	6	10.636	16.727	2.986	0.00	0.00
ATOM	160	1H5'	RU	6	10.916	17.763	2.972	0.00	0.00
ATOM	161	2H5'	RU	6	11.479	16.146	3.313	0.00	0.00
ATOM	162	C4'	RU	6	9.527	16.564	4.008	0.00	0.00
ATOM	163	H4'	RU	6	9.846	17.034	4.922	0.00	0.00
ATOM	164	O4'	RU	6	8.338	17.196	3.589	0.00	0.00
ATOM	165	C1'	RU	6	7.216	16.454	4.022	0.00	0.00
ATOM	166	H1'	RU	6	6.577	17.091	4.612	0.00	0.00
ATOM	167	N1	RU	6	6.397	15.890	2.913	0.00	0.00
ATOM	168	C6	RU	6	6.872	15.747	1.647	0.00	0.00
ATOM	169	H6	RU	6	7.871	16.044	1.431	0.00	0.00
ATOM	170	C5	RU	6	6.093	15.252	0.665	0.00	0.00
ATOM	171	H5	RU	6	6.467	15.163	-0.327	0.00	0.00
ATOM	172	C4	RU	6	4.743	14.861	0.907	0.00	0.00
ATOM	173	O4	RU	6	3.989	14.404	0.073	0.00	0.00
ATOM	174	N3	RU	6	4.332	15.036	2.189	0.00	0.00
ATOM	175	H3	RU	6	3.402	14.761	2.406	0.00	0.00
ATOM	176	C2	RU	6	5.104	15.494	3.216	0.00	0.00
ATOM	177	O2	RU	6	4.658	15.509	4.350	0.00	0.00
ATOM	178	C3'	RU	6	9.146	15.130	4.337	0.00	0.00
ATOM	179	H3'	RU	6	9.082	14.570	3.422	0.00	0.00
ATOM	180	C2'	RU	6	7.763	15.359	4.925	0.00	0.00
ATOM	181	1H2'	RU	6	7.166	14.464	4.892	0.00	0.00
ATOM	182	O2'	RU	6	7.805	15.889	6.229	0.00	0.00
ATOM	183	2HO'	RU	6	8.235	15.854	6.551	0.00	0.00
ATOM	184	O3'	RU	6	10.024	14.525	5.245	0.00	0.00
ATOM	185	P	RG	7	10.065	12.962	5.437	0.00	0.00
ATOM	186	O1P	RG	7	11.116	12.683	6.392	0.00	0.00
ATOM	187	O2P	RG	7	10.135	12.359	4.130	0.00	0.00
ATOM	188	O5'	RG	7	8.700	12.515	6.079	0.00	0.00
ATOM	189	C5'	RG	7	8.365	12.798	7.407	0.00	0.00
ATOM	190	1H5'	RG	7	8.345	13.859	7.550	0.00	0.00
ATOM	191	2H5'	RG	7	9.096	12.392	8.065	0.00	0.00
ATOM	192	C4'	RG	7	7.020	12.224	7.797	0.00	0.00
ATOM	193	H4'	RG	7	6.766	12.627	8.758	0.00	0.00
ATOM	194	O4'	RG	7	6.025	12.603	6.864	0.00	0.00
ATOM	195	C1'	RG	7	5.431	11.431	6.366	0.00	0.00
ATOM	196	H1'	RG	7	4.568	11.191	6.967	0.00	0.00
ATOM	197	N9	RG	7	5.002	11.587	4.967	0.00	0.00

ATOM	198	C8	RG	7	5.747	11.912	3.874	0.00	0.00
ATOM	199	H8	RG	7	6.786	12.150	3.940	0.00	0.00
ATOM	200	N7	RG	7	5.094	11.910	2.753	0.00	0.00
ATOM	201	C5	RG	7	3.811	11.519	3.129	0.00	0.00
ATOM	202	C6	RG	7	2.617	11.311	2.368	0.00	0.00
ATOM	203	O6	RG	7	2.436	11.406	1.164	0.00	0.00
ATOM	204	N1	RG	7	1.551	10.914	3.127	0.00	0.00
ATOM	205	H1	RG	7	0.678	10.777	2.668	0.00	0.00
ATOM	206	C2	RG	7	1.610	10.712	4.453	0.00	0.00
ATOM	207	N2	RG	7	0.519	10.351	5.033	0.00	0.00
ATOM	208	H21	RG	7	-0.309	10.218	4.502	0.00	0.00
ATOM	209	H22	RG	7	0.551	10.204	6.006	0.00	0.00
ATOM	210	N3	RG	7	2.687	10.884	5.200	0.00	0.00
ATOM	211	C4	RG	7	3.757	11.305	4.481	0.00	0.00
ATOM	212	C3'	RG	7	7.027	10.704	7.883	0.00	0.00
ATOM	213	H3'	RG	7	8.019	10.311	8.010	0.00	0.00
ATOM	214	C2'	RG	7	6.460	10.335	6.532	0.00	0.00
ATOM	215	1H2'	RG	7	7.229	10.443	5.785	0.00	0.00
ATOM	216	O2'	RG	7	5.917	9.042	6.493	0.00	0.00
ATOM	217	2HO'	RG	7	5.652	8.829	7.020	0.00	0.00
ATOM	218	O3'	RG	7	6.165	10.256	8.902	0.00	0.00
ATOM	219	P	RA	8	6.638	10.125	10.397	0.00	0.00
ATOM	220	O1P	RA	8	5.450	10.044	11.222	0.00	0.00
ATOM	221	O2P	RA	8	7.612	11.167	10.679	0.00	0.00
ATOM	222	O5'	RA	8	7.394	8.752	10.497	0.00	0.00
ATOM	223	C5'	RA	8	6.771	7.542	10.226	0.00	0.00
ATOM	224	1H5'	RA	8	6.637	7.438	9.192	0.00	0.00
ATOM	225	2H5'	RA	8	5.838	7.501	10.687	0.00	0.00
ATOM	226	C4'	RA	8	7.620	6.433	10.741	0.00	0.00
ATOM	227	H4'	RA	8	8.618	6.631	10.476	0.00	0.00
ATOM	228	O4'	RA	8	7.538	6.389	12.123	0.00	0.00
ATOM	229	C1'	RA	8	7.609	5.069	12.529	0.00	0.00
ATOM	230	H1'	RA	8	8.624	4.768	12.510	0.00	0.00
ATOM	231	N9	RA	8	7.058	4.811	13.855	0.00	0.00
ATOM	232	C8	RA	8	7.564	4.011	14.790	0.00	0.00
ATOM	233	H8	RA	8	8.474	3.519	14.649	0.00	0.00
ATOM	234	N7	RA	8	6.852	3.892	15.853	0.00	0.00
ATOM	235	C5	RA	8	5.782	4.676	15.597	0.00	0.00
ATOM	236	C6	RA	8	4.641	5.026	16.299	0.00	0.00
ATOM	237	N6	RA	8	4.329	4.614	17.482	0.00	0.00
ATOM	238	H61	RA	8	3.501	4.921	17.877	0.00	0.00
ATOM	239	H62	RA	8	4.919	4.010	17.929	0.00	0.00
ATOM	240	N1	RA	8	3.771	5.826	15.796	0.00	0.00
ATOM	241	C2	RA	8	4.002	6.275	14.604	0.00	0.00
ATOM	242	H2	RA	8	3.275	6.904	14.210	0.00	0.00
ATOM	243	N3	RA	8	5.013	6.041	13.815	0.00	0.00
ATOM	244	C4	RA	8	5.888	5.231	14.378	0.00	0.00
ATOM	245	C3'	RA	8	7.256	5.052	10.216	0.00	0.00
ATOM	246	H3'	RA	8	6.420	5.097	9.547	0.00	0.00
ATOM	247	C2'	RA	8	6.890	4.296	11.468	0.00	0.00
ATOM	248	1H2'	RA	8	5.848	4.369	11.627	0.00	0.00
ATOM	249	O2'	RA	8	7.288	2.968	11.506	0.00	0.00
ATOM	250	2HO'	RA	8	6.887	2.501	10.881	0.00	0.00
ATOM	251	O3'	RA	8	8.377	4.509	9.584	0.00	0.00
ATOM	252	P	RA	9	8.320	3.916	8.145	0.00	0.00
ATOM	253	O1P	RA	9	9.680	3.671	7.719	0.00	0.00
ATOM	254	O2P	RA	9	7.493	4.771	7.339	0.00	0.00
ATOM	255	O5'	RA	9	7.595	2.547	8.310	0.00	0.00
ATOM	256	C5'	RA	9	8.258	1.421	8.778	0.00	0.00
ATOM	257	1H5'	RA	9	8.770	1.669	9.686	0.00	0.00
ATOM	258	2H5'	RA	9	8.977	1.109	8.055	0.00	0.00
ATOM	259	C4'	RA	9	7.313	0.271	9.029	0.00	0.00
ATOM	260	H4'	RA	9	7.899	-0.551	9.376	0.00	0.00
ATOM	261	O4'	RA	9	6.392	0.619	10.025	0.00	0.00
ATOM	262	C1'	RA	9	5.104	0.251	9.618	0.00	0.00
ATOM	263	H1'	RA	9	4.929	-0.773	9.882	0.00	0.00
ATOM	264	N9	RA	9	4.069	1.106	10.227	0.00	0.00
ATOM	265	C8	RA	9	2.944	1.620	9.662	0.00	0.00

ATOM	266	H8	RA	9	2.708	1.481	8.639	0.00	0.00
ATOM	267	N7	RA	9	2.199	2.303	10.460	0.00	0.00
ATOM	268	C5	RA	9	2.869	2.204	11.661	0.00	0.00
ATOM	269	C6	RA	9	2.628	2.668	12.948	0.00	0.00
ATOM	270	N6	RA	9	1.614	3.388	13.308	0.00	0.00
ATOM	271	H61	RA	9	1.561	3.681	14.238	0.00	0.00
ATOM	272	H62	RA	9	0.937	3.631	12.648	0.00	0.00
ATOM	273	N1	RA	9	3.455	2.397	13.931	0.00	0.00
ATOM	274	C2	RA	9	4.506	1.669	13.662	0.00	0.00
ATOM	275	H2	RA	9	5.154	1.460	14.472	0.00	0.00
ATOM	276	N3	RA	9	4.854	1.148	12.519	0.00	0.00
ATOM	277	C4	RA	9	3.997	1.465	11.536	0.00	0.00
ATOM	278	C3'	RA	9	6.544	-0.168	7.790	0.00	0.00
ATOM	279	H3'	RA	9	6.941	0.291	6.909	0.00	0.00
ATOM	280	C2'	RA	9	5.163	0.348	8.110	0.00	0.00
ATOM	281	1H2'	RA	9	5.109	1.374	7.835	0.00	0.00
ATOM	282	O2'	RA	9	4.135	-0.365	7.495	0.00	0.00
ATOM	283	2HO'	RA	9	4.476	-0.904	6.864	0.00	0.00
ATOM	284	O3'	RA	9	6.628	-1.569	7.745	0.00	0.00
ATOM	285	P	RG	10	6.475	-2.358	6.404	0.00	0.00
ATOM	286	O1P	RG	10	5.311	-1.864	5.698	0.00	0.00
ATOM	287	O2P	RG	10	6.546	-3.760	6.725	0.00	0.00
ATOM	288	O5'	RG	10	7.725	-1.958	5.562	0.00	0.00
ATOM	289	C5'	RG	10	9.023	-2.298	5.945	0.00	0.00
ATOM	290	1H5'	RG	10	9.026	-2.887	6.829	0.00	0.00
ATOM	291	2H5'	RG	10	9.561	-1.404	6.148	0.00	0.00
ATOM	292	C4'	RG	10	9.754	-3.075	4.869	0.00	0.00
ATOM	293	H4'	RG	10	10.760	-3.230	5.207	0.00	0.00
ATOM	294	O4'	RG	10	9.173	-4.337	4.646	0.00	0.00
ATOM	295	C1'	RG	10	9.298	-4.686	3.284	0.00	0.00
ATOM	296	H1'	RG	10	9.832	-5.614	3.188	0.00	0.00
ATOM	297	N9	RG	10	7.976	-4.860	2.656	0.00	0.00
ATOM	298	C8	RG	10	6.757	-4.414	3.068	0.00	0.00
ATOM	299	H8	RG	10	6.644	-3.839	3.956	0.00	0.00
ATOM	300	N7	RG	10	5.763	-4.782	2.323	0.00	0.00
ATOM	301	C5	RG	10	6.366	-5.527	1.316	0.00	0.00
ATOM	302	C6	RG	10	5.827	-6.233	0.195	0.00	0.00
ATOM	303	O6	RG	10	4.659	-6.391	-0.126	0.00	0.00
ATOM	304	N1	RG	10	6.780	-6.812	-0.600	0.00	0.00
ATOM	305	H1	RG	10	6.475	-7.292	-1.416	0.00	0.00
ATOM	306	C2	RG	10	8.093	-6.752	-0.345	0.00	0.00
ATOM	307	N2	RG	10	8.881	-7.316	-1.190	0.00	0.00
ATOM	308	H21	RG	10	8.508	-7.731	-2.013	0.00	0.00
ATOM	309	H22	RG	10	9.847	-7.297	-1.009	0.00	0.00
ATOM	310	N3	RG	10	8.634	-6.156	0.700	0.00	0.00
ATOM	311	C4	RG	10	7.720	-5.554	1.504	0.00	0.00
ATOM	312	C3'	RG	10	9.814	-2.386	3.516	0.00	0.00
ATOM	313	H3'	RG	10	8.849	-1.989	3.274	0.00	0.00
ATOM	314	C2'	RG	10	10.093	-3.578	2.623	0.00	0.00
ATOM	315	1H2'	RG	10	9.754	-3.399	1.622	0.00	0.00
ATOM	316	O2'	RG	10	11.440	-3.944	2.631	0.00	0.00
ATOM	317	2HO'	RG	10	11.839	-3.486	2.541	0.00	0.00
ATOM	318	O3'	RG	10	10.829	-1.408	3.440	0.00	0.00
ATOM	319	P	RC	11	10.782	-0.259	2.379	0.00	0.00
ATOM	320	O1P	RC	11	11.988	0.547	2.564	0.00	0.00
ATOM	321	O2P	RC	11	9.493	0.404	2.468	0.00	0.00
ATOM	322	O5'	RC	11	10.857	-0.952	0.962	0.00	0.00
ATOM	323	C5'	RC	11	12.077	-1.365	0.411	0.00	0.00
ATOM	324	1H5'	RC	11	12.575	-2.039	1.078	0.00	0.00
ATOM	325	2H5'	RC	11	12.709	-0.508	0.272	0.00	0.00
ATOM	326	C4'	RC	11	11.893	-2.042	-0.930	0.00	0.00
ATOM	327	H4'	RC	11	12.866	-2.323	-1.289	0.00	0.00
ATOM	328	O4'	RC	11	11.100	-3.211	-0.856	0.00	0.00
ATOM	329	C1'	RC	11	10.408	-3.377	-2.080	0.00	0.00
ATOM	330	H1'	RC	11	10.709	-4.301	-2.541	0.00	0.00
ATOM	331	N1	RC	11	8.938	-3.387	-1.890	0.00	0.00
ATOM	332	C6	RC	11	8.340	-2.729	-0.859	0.00	0.00
ATOM	333	H6	RC	11	8.932	-2.176	-0.172	0.00	0.00

ATOM	334	C5	RC	11	7.002	-2.765	-0.727	0.00	0.00
ATOM	335	H5	RC	11	6.523	-2.252	0.071	0.00	0.00
ATOM	336	C4	RC	11	6.269	-3.488	-1.680	0.00	0.00
ATOM	337	N4	RC	11	4.989	-3.588	-1.583	0.00	0.00
ATOM	338	H41	RC	11	4.526	-4.147	-2.257	0.00	0.00
ATOM	339	H42	RC	11	4.530	-3.223	-0.792	0.00	0.00
ATOM	340	N3	RC	11	6.819	-4.118	-2.677	0.00	0.00
ATOM	341	C2	RC	11	8.150	-4.061	-2.809	0.00	0.00
ATOM	342	O2	RC	11	8.645	-4.615	-3.771	0.00	0.00
ATOM	343	C3'	RC	11	11.242	-1.172	-1.979	0.00	0.00
ATOM	344	H3'	RC	11	10.367	-0.725	-1.550	0.00	0.00
ATOM	345	C2'	RC	11	10.825	-2.232	-2.984	0.00	0.00
ATOM	346	1H2'	RC	11	10.014	-1.886	-3.597	0.00	0.00
ATOM	347	O2'	RC	11	11.898	-2.681	-3.767	0.00	0.00
ATOM	348	2HO'	RC	11	12.014	-2.472	-4.228	0.00	0.00
ATOM	349	O3'	RC	11	12.093	-0.196	-2.515	0.00	0.00
ATOM	350	P	RG	12	11.508	1.070	-3.241	0.00	0.00
ATOM	351	O1P	RG	12	12.624	1.912	-3.634	0.00	0.00
ATOM	352	O2P	RG	12	10.458	1.640	-2.416	0.00	0.00
ATOM	353	O5'	RG	12	10.814	0.539	-4.552	0.00	0.00
ATOM	354	C5'	RG	12	11.556	0.170	-5.688	0.00	0.00
ATOM	355	1H5'	RG	12	12.241	-0.608	-5.444	0.00	0.00
ATOM	356	2H5'	RG	12	12.129	1.000	-6.036	0.00	0.00
ATOM	357	C4'	RG	12	10.672	-0.301	-6.822	0.00	0.00
ATOM	358	H4'	RG	12	11.301	-0.515	-7.671	0.00	0.00
ATOM	359	O4'	RG	12	9.952	-1.464	-6.494	0.00	0.00
ATOM	360	C1'	RG	12	8.697	-1.423	-7.145	0.00	0.00
ATOM	361	H1'	RG	12	8.555	-2.280	-7.779	0.00	0.00
ATOM	362	N9	RG	12	7.618	-1.413	-6.143	0.00	0.00
ATOM	363	C8	RG	12	7.623	-0.920	-4.874	0.00	0.00
ATOM	364	H8	RG	12	8.467	-0.421	-4.464	0.00	0.00
ATOM	365	N7	RG	12	6.527	-1.108	-4.217	0.00	0.00
ATOM	366	C5	RG	12	5.711	-1.763	-5.127	0.00	0.00
ATOM	367	C6	RG	12	4.372	-2.247	-5.022	0.00	0.00
ATOM	368	O6	RG	12	3.607	-2.246	-4.075	0.00	0.00
ATOM	369	N1	RG	12	3.901	-2.798	-6.179	0.00	0.00
ATOM	370	H1	RG	12	2.963	-3.134	-6.190	0.00	0.00
ATOM	371	C2	RG	12	4.622	-2.883	-7.302	0.00	0.00
ATOM	372	N2	RG	12	4.042	-3.418	-8.317	0.00	0.00
ATOM	373	H21	RG	12	3.099	-3.717	-8.245	0.00	0.00
ATOM	374	H22	RG	12	4.573	-3.521	-9.133	0.00	0.00
ATOM	375	N3	RG	12	5.869	-2.467	-7.444	0.00	0.00
ATOM	376	C4	RG	12	6.364	-1.914	-6.319	0.00	0.00
ATOM	377	C3'	RG	12	9.644	0.721	-7.248	0.00	0.00
ATOM	378	H3'	RG	12	9.150	1.123	-6.378	0.00	0.00
ATOM	379	C2'	RG	12	8.668	-0.166	-7.992	0.00	0.00
ATOM	380	1H2'	RG	12	7.684	0.269	-8.022	0.00	0.00
ATOM	381	O2'	RG	12	9.114	-0.488	-9.293	0.00	0.00
ATOM	382	2HO'	RG	12	9.200	-0.139	-9.648	0.00	0.00
ATOM	383	O3'	RG	12	10.179	1.746	-8.055	0.00	0.00
ATOM	384	P	RC	13	9.549	3.181	-8.055	0.00	0.00
ATOM	385	O1P	RC	13	10.360	3.989	-8.952	0.00	0.00
ATOM	386	O2P	RC	13	9.355	3.619	-6.684	0.00	0.00
ATOM	387	O5'	RC	13	8.124	3.006	-8.682	0.00	0.00
ATOM	388	C5'	RC	13	7.952	2.831	-10.064	0.00	0.00
ATOM	389	1H5'	RC	13	8.543	2.002	-10.403	0.00	0.00
ATOM	390	2H5'	RC	13	8.278	3.717	-10.566	0.00	0.00
ATOM	391	C4'	RC	13	6.503	2.557	-10.430	0.00	0.00
ATOM	392	H4'	RC	13	6.435	2.487	-11.504	0.00	0.00
ATOM	393	O4'	RC	13	6.036	1.354	-9.865	0.00	0.00
ATOM	394	C1'	RC	13	4.645	1.470	-9.616	0.00	0.00
ATOM	395	H1'	RC	13	4.115	0.738	-10.200	0.00	0.00
ATOM	396	N1	RC	13	4.326	1.257	-8.180	0.00	0.00
ATOM	397	C6	RC	13	5.170	1.616	-7.182	0.00	0.00
ATOM	398	H6	RC	13	6.127	2.018	-7.417	0.00	0.00
ATOM	399	C5	RC	13	4.798	1.493	-5.896	0.00	0.00
ATOM	400	H5	RC	13	5.466	1.761	-5.120	0.00	0.00
ATOM	401	C4	RC	13	3.528	0.974	-5.629	0.00	0.00

ATOM	402	N4	RC	13	3.126	0.817	-4.412	0.00	0.00
ATOM	403	H41	RC	13	2.223	0.440	-4.267	0.00	0.00
ATOM	404	H42	RC	13	3.715	1.065	-3.669	0.00	0.00
ATOM	405	N3	RC	13	2.699	0.617	-6.565	0.00	0.00
ATOM	406	C2	RC	13	3.080	0.751	-7.847	0.00	0.00
ATOM	407	O2	RC	13	2.288	0.419	-8.704	0.00	0.00
ATOM	408	C3'	RC	13	5.540	3.618	-9.958	0.00	0.00
ATOM	409	H3'	RC	13	5.753	3.825	-8.923	0.00	0.00
ATOM	410	C2'	RC	13	4.230	2.863	-10.056	0.00	0.00
ATOM	411	1H2'	RC	13	3.487	3.291	-9.407	0.00	0.00
ATOM	412	O2'	RC	13	3.756	2.779	-11.368	0.00	0.00
ATOM	413	2HO'	RC	13	3.509	3.338	-11.608	0.00	0.00
ATOM	414	O3'	RC	13	5.584	4.794	-10.722	0.00	0.00
ATOM	415	P	RG	14	5.103	6.153	-10.107	0.00	0.00
ATOM	416	O1P	RG	14	5.424	7.196	-11.067	0.00	0.00
ATOM	417	O2P	RG	14	5.636	6.261	-8.754	0.00	0.00
ATOM	418	O5'	RG	14	3.542	6.048	-9.970	0.00	0.00
ATOM	419	C5'	RG	14	2.702	6.140	-11.086	0.00	0.00
ATOM	420	1H5'	RG	14	3.050	5.498	-11.873	0.00	0.00
ATOM	421	2H5'	RG	14	2.710	7.148	-11.456	0.00	0.00
ATOM	422	C4'	RG	14	1.277	5.745	-10.755	0.00	0.00
ATOM	423	H4'	RG	14	0.704	5.779	-11.663	0.00	0.00
ATOM	424	O4'	RG	14	1.203	4.434	-10.231	0.00	0.00
ATOM	425	C1'	RG	14	0.173	4.384	-9.265	0.00	0.00
ATOM	426	H1'	RG	14	-0.527	3.601	-9.504	0.00	0.00
ATOM	427	N9	RG	14	0.707	4.114	-7.914	0.00	0.00
ATOM	428	C8	RG	14	1.905	4.463	-7.364	0.00	0.00
ATOM	429	H8	RG	14	2.664	4.958	-7.922	0.00	0.00
ATOM	430	N7	RG	14	2.056	4.110	-6.126	0.00	0.00
ATOM	431	C5	RG	14	0.840	3.503	-5.810	0.00	0.00
ATOM	432	C6	RG	14	0.345	2.935	-4.593	0.00	0.00
ATOM	433	O6	RG	14	0.897	2.808	-3.513	0.00	0.00
ATOM	434	N1	RG	14	-0.951	2.497	-4.688	0.00	0.00
ATOM	435	H1	RG	14	-1.377	2.133	-3.864	0.00	0.00
ATOM	436	C2	RG	14	-1.683	2.571	-5.813	0.00	0.00
ATOM	437	N2	RG	14	-2.887	2.127	-5.748	0.00	0.00
ATOM	438	H21	RG	14	-3.257	1.813	-4.881	0.00	0.00
ATOM	439	H22	RG	14	-3.448	2.156	-6.556	0.00	0.00
ATOM	440	N3	RG	14	-1.269	3.063	-6.967	0.00	0.00
ATOM	441	C4	RG	14	0.010	3.520	-6.902	0.00	0.00
ATOM	442	C3'	RG	14	0.586	6.652	-9.764	0.00	0.00
ATOM	443	H3'	RG	14	1.255	6.842	-8.941	0.00	0.00
ATOM	444	C2'	RG	14	-0.529	5.729	-9.306	0.00	0.00
ATOM	445	1H2'	RG	14	-0.889	6.010	-8.331	0.00	0.00
ATOM	446	O2'	RG	14	-1.586	5.629	-10.229	0.00	0.00
ATOM	447	2HO'	RG	14	-1.906	6.088	-10.329	0.00	0.00
ATOM	448	O3'	RG	14	0.116	7.849	-10.330	0.00	0.00
ATOM	449	P	RC	15	-0.175	9.119	-9.453	0.00	0.00
ATOM	450	O1P	RC	15	-0.518	10.208	-10.345	0.00	0.00
ATOM	451	O2P	RC	15	0.944	9.297	-8.559	0.00	0.00
ATOM	452	O5'	RC	15	-1.434	8.777	-8.582	0.00	0.00
ATOM	453	C5'	RC	15	-2.709	8.718	-9.141	0.00	0.00
ATOM	454	1H5'	RC	15	-2.672	8.171	-10.054	0.00	0.00
ATOM	455	2H5'	RC	15	-3.053	9.708	-9.356	0.00	0.00
ATOM	456	C4'	RC	15	-3.712	8.039	-8.223	0.00	0.00
ATOM	457	H4'	RC	15	-4.636	7.929	-8.764	0.00	0.00
ATOM	458	O4'	RC	15	-3.288	6.745	-7.837	0.00	0.00
ATOM	459	C1'	RC	15	-3.752	6.471	-6.524	0.00	0.00
ATOM	460	H1'	RC	15	-4.345	5.570	-6.533	0.00	0.00
ATOM	461	N1	RC	15	-2.650	6.307	-5.539	0.00	0.00
ATOM	462	C6	RC	15	-1.428	6.884	-5.698	0.00	0.00
ATOM	463	H6	RC	15	-1.228	7.463	-6.567	0.00	0.00
ATOM	464	C5	RC	15	-0.475	6.733	-4.766	0.00	0.00
ATOM	465	H5	RC	15	0.479	7.184	-4.895	0.00	0.00
ATOM	466	C4	RC	15	-0.795	5.989	-3.629	0.00	0.00
ATOM	467	N4	RC	15	0.071	5.817	-2.692	0.00	0.00
ATOM	468	H41	RC	15	-0.186	5.264	-1.914	0.00	0.00
ATOM	469	H42	RC	15	0.970	6.190	-2.783	0.00	0.00

ATOM	470	N3	RC	15	-1.960	5.438	-3.443	0.00	0.00
ATOM	471	C2	RC	15	-2.904	5.593	-4.381	0.00	0.00
ATOM	472	O2	RC	15	-3.997	5.099	-4.166	0.00	0.00
ATOM	473	C3'	RC	15	-4.024	8.786	-6.938	0.00	0.00
ATOM	474	H3'	RC	15	-3.102	9.107	-6.487	0.00	0.00
ATOM	475	C2'	RC	15	-4.638	7.643	-6.141	0.00	0.00
ATOM	476	1H2'	RC	15	-4.606	7.848	-5.085	0.00	0.00
ATOM	477	O2'	RC	15	-5.947	7.327	-6.554	0.00	0.00
ATOM	478	2HO'	RC	15	-6.355	7.637	-6.491	0.00	0.00
ATOM	479	O3'	RC	15	-4.903	9.869	-7.098	0.00	0.00
ATOM	480	P	RA	16	-4.979	11.029	-6.036	0.00	0.00
ATOM	481	O1P	RA	16	-6.008	11.962	-6.476	0.00	0.00
ATOM	482	O2P	RA	16	-3.628	11.532	-5.808	0.00	0.00
ATOM	483	O5'	RA	16	-5.463	10.383	-4.679	0.00	0.00
ATOM	484	C5'	RA	16	-6.779	9.925	-4.489	0.00	0.00
ATOM	485	1H5'	RA	16	-7.062	9.258	-5.279	0.00	0.00
ATOM	486	2H5'	RA	16	-7.460	10.755	-4.492	0.00	0.00
ATOM	487	C4'	RA	16	-6.920	9.185	-3.168	0.00	0.00
ATOM	488	H4'	RA	16	-7.928	8.820	-3.084	0.00	0.00
ATOM	489	O4'	RA	16	-6.047	8.080	-3.062	0.00	0.00
ATOM	490	C1'	RA	16	-5.563	7.998	-1.732	0.00	0.00
ATOM	491	H1'	RA	16	-5.739	7.014	-1.336	0.00	0.00
ATOM	492	N9	RA	16	-4.119	8.279	-1.673	0.00	0.00
ATOM	493	C8	RA	16	-3.316	8.883	-2.593	0.00	0.00
ATOM	494	H8	RA	16	-3.687	9.273	-3.514	0.00	0.00
ATOM	495	N7	RA	16	-2.070	8.951	-2.258	0.00	0.00
ATOM	496	C5	RA	16	-2.047	8.339	-1.013	0.00	0.00
ATOM	497	C6	RA	16	-1.052	8.051	-0.064	0.00	0.00
ATOM	498	N6	RA	16	0.216	8.315	-0.196	0.00	0.00
ATOM	499	H61	RA	16	0.808	8.074	0.549	0.00	0.00
ATOM	500	H62	RA	16	0.516	8.791	-1.004	0.00	0.00
ATOM	501	N1	RA	16	-1.354	7.479	1.087	0.00	0.00
ATOM	502	C2	RA	16	-2.609	7.181	1.316	0.00	0.00
ATOM	503	H2	RA	16	-2.822	6.716	2.249	0.00	0.00
ATOM	504	N3	RA	16	-3.648	7.375	0.530	0.00	0.00
ATOM	505	C4	RA	16	-3.296	7.963	-0.637	0.00	0.00
ATOM	506	C3'	RA	16	-6.669	10.055	-1.958	0.00	0.00
ATOM	507	H3'	RA	16	-5.792	10.639	-2.136	0.00	0.00
ATOM	508	C2'	RA	16	-6.348	9.001	-0.914	0.00	0.00
ATOM	509	1H2'	RA	16	-5.749	9.414	-0.122	0.00	0.00
ATOM	510	O2'	RA	16	-7.494	8.377	-0.393	0.00	0.00
ATOM	511	2HO'	RA	16	-7.832	8.651	-0.117	0.00	0.00
ATOM	512	O3'	RA	16	-7.771	10.833	-1.610	0.00	0.00
ATOM	513	P	RC	17	-7.592	12.240	-0.990	0.00	0.00
ATOM	514	O1P	RC	17	-8.912	12.789	-0.814	0.00	0.00
ATOM	515	O2P	RC	17	-6.635	12.956	-1.804	0.00	0.00
ATOM	516	O5'	RC	17	-6.947	11.994	0.422	0.00	0.00
ATOM	517	C5'	RC	17	-7.665	11.454	1.492	0.00	0.00
ATOM	518	1H5'	RC	17	-8.206	10.594	1.164	0.00	0.00
ATOM	519	2H5'	RC	17	-8.373	12.172	1.835	0.00	0.00
ATOM	520	C4'	RC	17	-6.751	11.051	2.642	0.00	0.00
ATOM	521	H4'	RC	17	-7.356	10.599	3.404	0.00	0.00
ATOM	522	O4'	RC	17	-5.783	10.105	2.233	0.00	0.00
ATOM	523	C1'	RC	17	-4.593	10.311	2.967	0.00	0.00
ATOM	524	H1'	RC	17	-4.338	9.405	3.486	0.00	0.00
ATOM	525	N1	RC	17	-3.442	10.684	2.103	0.00	0.00
ATOM	526	C6	RC	17	-3.605	11.273	0.890	0.00	0.00
ATOM	527	H6	RC	17	-4.587	11.419	0.505	0.00	0.00
ATOM	528	C5	RC	17	-2.538	11.672	0.178	0.00	0.00
ATOM	529	H5	RC	17	-2.672	12.137	-0.769	0.00	0.00
ATOM	530	C4	RC	17	-1.273	11.471	0.736	0.00	0.00
ATOM	531	N4	RC	17	-0.223	11.853	0.102	0.00	0.00
ATOM	532	H41	RC	17	0.656	11.701	0.523	0.00	0.00
ATOM	533	H42	RC	17	-0.314	12.291	-0.776	0.00	0.00
ATOM	534	N3	RC	17	-1.082	10.902	1.892	0.00	0.00
ATOM	535	C2	RC	17	-2.156	10.491	2.594	0.00	0.00
ATOM	536	O2	RC	17	-1.961	9.962	3.672	0.00	0.00
ATOM	537	C3'	RC	17	-5.976	12.182	3.286	0.00	0.00

ATOM	538	H3'	RC	17	-5.565	12.785	2.503	0.00	0.00
ATOM	539	C2'	RC	17	-4.875	11.408	3.979	0.00	0.00
ATOM	540	1H2'	RC	17	-4.010	12.021	4.128	0.00	0.00
ATOM	541	O2'	RC	17	-5.267	10.815	5.180	0.00	0.00
ATOM	542	2HO'	RC	17	-5.091	10.775	5.581	0.00	0.00
ATOM	543	O3'	RC	17	-6.728	12.981	4.163	0.00	0.00
ATOM	544	P	RG	18	-6.197	14.374	4.674	0.00	0.00
ATOM	545	O1P	RG	18	-7.311	15.063	5.310	0.00	0.00
ATOM	546	O2P	RG	18	-5.509	15.035	3.579	0.00	0.00
ATOM	547	O5'	RG	18	-5.113	14.096	5.780	0.00	0.00
ATOM	548	C5'	RG	18	-5.454	13.649	7.067	0.00	0.00
ATOM	549	1H5'	RG	18	-5.943	12.700	6.987	0.00	0.00
ATOM	550	2H5'	RG	18	-6.126	14.346	7.523	0.00	0.00
ATOM	551	C4'	RG	18	-4.234	13.506	7.971	0.00	0.00
ATOM	552	H4'	RG	18	-4.577	13.201	8.945	0.00	0.00
ATOM	553	O4'	RG	18	-3.319	12.537	7.496	0.00	0.00
ATOM	554	C1'	RG	18	-1.999	12.990	7.707	0.00	0.00
ATOM	555	H1'	RG	18	-1.406	12.241	8.200	0.00	0.00
ATOM	556	N9	RG	18	-1.343	13.327	6.434	0.00	0.00
ATOM	557	C8	RG	18	-1.907	13.466	5.201	0.00	0.00
ATOM	558	H8	RG	18	-2.956	13.367	5.041	0.00	0.00
ATOM	559	N7	RG	18	-1.087	13.755	4.246	0.00	0.00
ATOM	560	C5	RG	18	0.130	13.844	4.901	0.00	0.00
ATOM	561	C6	RG	18	1.427	14.170	4.415	0.00	0.00
ATOM	562	O6	RG	18	1.776	14.410	3.279	0.00	0.00
ATOM	563	N1	RG	18	2.384	14.226	5.395	0.00	0.00
ATOM	564	H1	RG	18	3.292	14.528	5.137	0.00	0.00
ATOM	565	C2	RG	18	2.142	13.933	6.677	0.00	0.00
ATOM	566	N2	RG	18	3.126	14.004	7.506	0.00	0.00
ATOM	567	H21	RG	18	4.031	14.251	7.204	0.00	0.00
ATOM	568	H22	RG	18	2.954	13.771	8.446	0.00	0.00
ATOM	569	N3	RG	18	0.964	13.606	7.170	0.00	0.00
ATOM	570	C4	RG	18	-0.016	13.584	6.236	0.00	0.00
ATOM	571	C3'	RG	18	-3.443	14.788	8.134	0.00	0.00
ATOM	572	H3'	RG	18	-3.305	15.239	7.166	0.00	0.00
ATOM	573	C2'	RG	18	-2.112	14.217	8.598	0.00	0.00
ATOM	574	1H2'	RG	18	-1.302	14.906	8.438	0.00	0.00
ATOM	575	O2'	RG	18	-2.125	13.808	9.945	0.00	0.00
ATOM	576	2HO'	RG	18	-2.468	14.068	10.341	0.00	0.00
ATOM	577	O3'	RG	18	-4.003	15.700	9.049	0.00	0.00
ATOM	578	P	RG	19	-3.781	17.247	8.879	0.00	0.00
ATOM	579	O1P	RG	19	-4.452	17.912	9.992	0.00	0.00
ATOM	580	O2P	RG	19	-4.176	17.597	7.521	0.00	0.00
ATOM	581	O5'	RG	19	-2.229	17.481	9.018	0.00	0.00
ATOM	582	C5'	RG	19	-1.576	17.384	10.260	0.00	0.00
ATOM	583	1H5'	RG	19	-1.745	16.418	10.683	0.00	0.00
ATOM	584	2H5'	RG	19	-1.967	18.111	10.938	0.00	0.00
ATOM	585	C4'	RG	19	-0.087	17.607	10.129	0.00	0.00
ATOM	586	H4'	RG	19	0.344	17.517	11.113	0.00	0.00
ATOM	587	O4'	RG	19	0.530	16.659	9.295	0.00	0.00
ATOM	588	C1'	RG	19	1.543	17.315	8.549	0.00	0.00
ATOM	589	H1'	RG	19	2.480	16.799	8.636	0.00	0.00
ATOM	590	N9	RG	19	1.172	17.355	7.122	0.00	0.00
ATOM	591	C8	RG	19	-0.002	17.016	6.525	0.00	0.00
ATOM	592	H8	RG	19	-0.849	16.698	7.084	0.00	0.00
ATOM	593	N7	RG	19	-0.006	17.103	5.236	0.00	0.00
ATOM	594	C5	RG	19	1.272	17.560	4.942	0.00	0.00
ATOM	595	C6	RG	19	1.907	17.857	3.699	0.00	0.00
ATOM	596	O6	RG	19	1.483	17.711	2.566	0.00	0.00
ATOM	597	N1	RG	19	3.159	18.383	3.848	0.00	0.00
ATOM	598	H1	RG	19	3.644	18.635	3.019	0.00	0.00
ATOM	599	C2	RG	19	3.773	18.536	5.027	0.00	0.00
ATOM	600	N2	RG	19	4.948	19.071	5.003	0.00	0.00
ATOM	601	H21	RG	19	5.353	19.363	4.143	0.00	0.00
ATOM	602	H22	RG	19	5.390	19.242	5.870	0.00	0.00
ATOM	603	N3	RG	19	3.254	18.219	6.202	0.00	0.00
ATOM	604	C4	RG	19	1.986	17.742	6.096	0.00	0.00
ATOM	605	C3'	RG	19	0.270	18.974	9.598	0.00	0.00

ATOM	606	H3'	RG	19	-0.351	19.205	8.755	0.00	0.00
ATOM	607	C2'	RG	19	1.682	18.718	9.110	0.00	0.00
ATOM	608	1H2'	RG	19	1.976	19.423	8.353	0.00	0.00
ATOM	609	O2'	RG	19	2.624	18.698	10.161	0.00	0.00
ATOM	610	2HO'	RG	19	2.544	19.201	10.673	0.00	0.00
ATOM	611	O3'	RG	19	0.229	19.975	10.573	0.00	0.00
ATOM	612	P	RC	20	-0.158	21.436	10.215	0.00	0.00
ATOM	613	O1P	RC	20	-0.029	22.229	11.415	0.00	0.00
ATOM	614	O2P	RC	20	-1.436	21.385	9.549	0.00	0.00
ATOM	615	O5'	RC	20	0.914	21.927	9.194	0.00	0.00
ATOM	616	C5'	RC	20	2.201	22.282	9.603	0.00	0.00
ATOM	617	1H5'	RC	20	2.657	21.445	10.083	0.00	0.00
ATOM	618	2H5'	RC	20	2.151	23.086	10.306	0.00	0.00
ATOM	619	C4'	RC	20	3.062	22.726	8.447	0.00	0.00
ATOM	620	H4'	RC	20	4.021	23.009	8.834	0.00	0.00
ATOM	621	O4'	RC	20	3.242	21.701	7.503	0.00	0.00
ATOM	622	C1'	RC	20	3.394	22.268	6.220	0.00	0.00
ATOM	623	H1'	RC	20	4.373	22.055	5.845	0.00	0.00
ATOM	624	N1	RC	20	2.396	21.767	5.243	0.00	0.00
ATOM	625	C6	RC	20	1.170	21.322	5.615	0.00	0.00
ATOM	626	H6	RC	20	0.914	21.280	6.648	0.00	0.00
ATOM	627	C5	RC	20	0.284	20.920	4.688	0.00	0.00
ATOM	628	H5	RC	20	-0.676	20.571	4.983	0.00	0.00
ATOM	629	C4	RC	20	0.668	20.995	3.341	0.00	0.00
ATOM	630	N4	RC	20	-0.142	20.631	2.418	0.00	0.00
ATOM	631	H41	RC	20	0.184	20.702	1.493	0.00	0.00
ATOM	632	H42	RC	20	-1.047	20.337	2.661	0.00	0.00
ATOM	633	N3	RC	20	1.836	21.418	2.959	0.00	0.00
ATOM	634	C2	RC	20	2.718	21.815	3.892	0.00	0.00
ATOM	635	O2	RC	20	3.793	22.211	3.506	0.00	0.00
ATOM	636	C3'	RC	20	2.483	23.892	7.689	0.00	0.00
ATOM	637	H3'	RC	20	1.443	23.712	7.511	0.00	0.00
ATOM	638	C2'	RC	20	3.249	23.761	6.391	0.00	0.00
ATOM	639	1H2'	RC	20	2.699	24.193	5.581	0.00	0.00
ATOM	640	O2'	RC	20	4.515	24.325	6.481	0.00	0.00
ATOM	641	2HO'	RC	20	4.446	25.117	6.673	0.00	0.00
ATOM	642	O3'	RC	20	2.668	25.125	8.327	0.00	0.00
ATOM	643	P	RA	21	1.937	26.409	7.839	0.00	0.00
ATOM	644	O1P	RA	21	2.336	27.479	8.730	0.00	0.00
ATOM	645	O2P	RA	21	0.532	26.109	7.685	0.00	0.00
ATOM	646	O5'	RA	21	2.574	26.697	6.429	0.00	0.00
ATOM	647	C5'	RA	21	1.826	27.117	5.347	0.00	0.00
ATOM	648	1H5'	RA	21	1.485	28.091	5.525	0.00	0.00
ATOM	649	2H5'	RA	21	0.993	26.491	5.215	0.00	0.00
ATOM	650	C4'	RA	21	2.656	27.112	4.095	0.00	0.00
ATOM	651	H4'	RA	21	3.598	27.551	4.327	0.00	0.00
ATOM	652	O4'	RA	21	2.853	25.818	3.605	0.00	0.00
ATOM	653	C1'	RA	21	2.803	25.827	2.190	0.00	0.00
ATOM	654	H1'	RA	21	3.683	25.375	1.791	0.00	0.00
ATOM	655	N9	RA	21	1.640	25.071	1.710	0.00	0.00
ATOM	656	C8	RA	21	0.586	24.599	2.419	0.00	0.00
ATOM	657	H8	RA	21	0.476	24.772	3.464	0.00	0.00
ATOM	658	N7	RA	21	-0.277	23.934	1.725	0.00	0.00
ATOM	659	C5	RA	21	0.264	23.948	0.446	0.00	0.00
ATOM	660	C6	RA	21	-0.095	23.405	-0.800	0.00	0.00
ATOM	661	N6	RA	21	-1.141	22.661	-1.011	0.00	0.00
ATOM	662	H61	RA	21	-1.289	22.310	-1.922	0.00	0.00
ATOM	663	H62	RA	21	-1.753	22.474	-0.263	0.00	0.00
ATOM	664	N1	RA	21	0.641	23.594	-1.871	0.00	0.00
ATOM	665	C2	RA	21	1.721	24.314	-1.736	0.00	0.00
ATOM	666	H2	RA	21	2.290	24.452	-2.622	0.00	0.00
ATOM	667	N3	RA	21	2.200	24.879	-0.648	0.00	0.00
ATOM	668	C4	RA	21	1.419	24.654	0.425	0.00	0.00
ATOM	669	C3'	RA	21	2.016	27.876	2.964	0.00	0.00
ATOM	670	H3'	RA	21	0.988	27.611	2.916	0.00	0.00
ATOM	671	C2'	RA	21	2.726	27.271	1.784	0.00	0.00
ATOM	672	1H2'	RA	21	2.170	27.390	0.872	0.00	0.00
ATOM	673	O2'	RA	21	4.021	27.743	1.639	0.00	0.00

ATOM	674	2HO'	RA	21	4.170	28.015	1.238	0.00	0.00
ATOM	675	O3'	RA	21	2.191	29.241	3.095	0.00	0.00
ATOM	676	P	RA	22	1.174	30.236	2.480	0.00	0.00
ATOM	677	O1P	RA	22	1.600	31.551	2.839	0.00	0.00
ATOM	678	O2P	RA	22	-0.132	29.817	2.853	0.00	0.00
ATOM	679	O5'	RA	22	1.295	30.067	0.944	0.00	0.00
ATOM	680	C5'	RA	22	2.381	30.511	0.250	0.00	0.00
ATOM	681	1H5'	RA	22	3.261	30.117	0.674	0.00	0.00
ATOM	682	2H5'	RA	22	2.442	31.561	0.331	0.00	0.00
ATOM	683	C4'	RA	22	2.301	30.116	-1.199	0.00	0.00
ATOM	684	H4'	RA	22	3.150	30.486	-1.682	0.00	0.00
ATOM	685	O4'	RA	22	2.270	28.740	-1.379	0.00	0.00
ATOM	686	C1'	RA	22	1.468	28.447	-2.499	0.00	0.00
ATOM	687	H1'	RA	22	2.017	27.916	-3.209	0.00	0.00
ATOM	688	N9	RA	22	0.329	27.661	-2.140	0.00	0.00
ATOM	689	C8	RA	22	-0.280	27.548	-0.953	0.00	0.00
ATOM	690	H8	RA	22	0.018	28.082	-0.091	0.00	0.00
ATOM	691	N7	RA	22	-1.254	26.731	-0.961	0.00	0.00
ATOM	692	C5	RA	22	-1.300	26.289	-2.265	0.00	0.00
ATOM	693	C6	RA	22	-2.088	25.403	-2.995	0.00	0.00
ATOM	694	N6	RA	22	-3.056	24.706	-2.527	0.00	0.00
ATOM	695	H61	RA	22	-3.514	24.090	-3.135	0.00	0.00
ATOM	696	H62	RA	22	-3.273	24.763	-1.585	0.00	0.00
ATOM	697	N1	RA	22	-1.903	25.206	-4.279	0.00	0.00
ATOM	698	C2	RA	22	-0.942	25.853	-4.839	0.00	0.00
ATOM	699	H2	RA	22	-0.814	25.681	-5.868	0.00	0.00
ATOM	700	N3	RA	22	-0.123	26.699	-4.292	0.00	0.00
ATOM	701	C4	RA	22	-0.351	26.865	-2.989	0.00	0.00
ATOM	702	C3'	RA	22	1.104	30.643	-1.914	0.00	0.00
ATOM	703	H3'	RA	22	0.275	30.475	-1.316	0.00	0.00
ATOM	704	C2'	RA	22	1.051	29.727	-3.095	0.00	0.00
ATOM	705	1H2'	RA	22	0.089	29.658	-3.514	0.00	0.00
ATOM	706	O2'	RA	22	1.937	30.059	-4.061	0.00	0.00
ATOM	707	2HO'	RA	22	1.944	30.474	-4.266	0.00	0.00
ATOM	708	O3'	RA	22	1.218	31.950	-2.256	0.00	0.00
ATOM	709	P	RG3	23	-0.014	32.829	-2.424	0.00	0.00
ATOM	710	O1P	RG3	23	0.429	34.132	-2.665	0.00	0.00
ATOM	711	O2P	RG3	23	-0.850	32.579	-1.328	0.00	0.00
ATOM	712	O5'	RG3	23	-0.758	32.334	-3.698	0.00	0.00
ATOM	713	C5'	RG3	23	-0.324	32.591	-4.950	0.00	0.00
ATOM	714	1H5'	RG3	23	0.659	32.255	-5.011	0.00	0.00
ATOM	715	2H5'	RG3	23	-0.338	33.605	-5.122	0.00	0.00
ATOM	716	C4'	RG3	23	-1.160	31.949	-6.017	0.00	0.00
ATOM	717	H4'	RG3	23	-0.758	32.179	-6.937	0.00	0.00
ATOM	718	O4'	RG3	23	-1.181	30.620	-5.883	0.00	0.00
ATOM	719	C1'	RG3	23	-2.414	30.197	-6.240	0.00	0.00
ATOM	720	H1'	RG3	23	-2.390	29.677	-7.108	0.00	0.00
ATOM	721	N9	RG3	23	-2.972	29.356	-5.241	0.00	0.00
ATOM	722	C8	RG3	23	-2.900	29.478	-3.918	0.00	0.00
ATOM	723	H8	RG3	23	-2.322	30.204	-3.418	0.00	0.00
ATOM	724	N7	RG3	23	-3.605	28.637	-3.300	0.00	0.00
ATOM	725	C5	RG3	23	-4.200	27.911	-4.306	0.00	0.00
ATOM	726	C6	RG3	23	-5.130	26.864	-4.286	0.00	0.00
ATOM	727	O6	RG3	23	-5.624	26.336	-3.351	0.00	0.00
ATOM	728	N1	RG3	23	-5.506	26.419	-5.507	0.00	0.00
ATOM	729	H1	RG3	23	-6.165	25.698	-5.557	0.00	0.00
ATOM	730	C2	RG3	23	-5.065	26.917	-6.623	0.00	0.00
ATOM	731	N2	RG3	23	-5.530	26.414	-7.700	0.00	0.00
ATOM	732	H21	RG3	23	-6.213	25.727	-7.677	0.00	0.00
ATOM	733	H22	RG3	23	-5.215	26.777	-8.529	0.00	0.00
ATOM	734	N3	RG3	23	-4.203	27.874	-6.694	0.00	0.00
ATOM	735	C4	RG3	23	-3.803	28.337	-5.500	0.00	0.00
ATOM	736	C3'	RG3	23	-2.553	32.392	-6.058	0.00	0.00
ATOM	737	H3'	RG3	23	-2.797	32.587	-5.238	0.00	0.00
ATOM	738	C2'	RG3	23	-3.194	31.373	-6.473	0.00	0.00
ATOM	739	1H2'	RG3	23	-3.889	31.291	-6.066	0.00	0.00
ATOM	740	O2'	RG3	23	-3.442	31.580	-7.555	0.00	0.00
ATOM	741	2HO'	RG3	23	-3.862	31.551	-7.694	0.00	0.00

ATOM	742	O3'	RG3	23	-2.878	33.300	-6.797	0.00	0.00
ATOM	743	H3T	RG3	23	-3.327	33.425	-6.913	0.00	0.00
ATOM	744	H5T	RC5	24	5.947	-21.452	-6.840	0.00	0.00
ATOM	745	O5'	RC5	24	5.634	-21.871	-7.146	0.00	0.00
ATOM	746	C5'	RC5	24	5.797	-22.001	-8.506	0.00	0.00
ATOM	747	1H5'	RC5	24	6.494	-22.759	-8.696	0.00	0.00
ATOM	748	2H5'	RC5	24	6.172	-21.102	-8.898	0.00	0.00
ATOM	749	C4'	RC5	24	4.540	-22.334	-9.233	0.00	0.00
ATOM	750	H4'	RC5	24	4.749	-22.332	-10.273	0.00	0.00
ATOM	751	O4'	RC5	24	4.073	-23.598	-8.895	0.00	0.00
ATOM	752	C1'	RC5	24	2.663	-23.616	-8.992	0.00	0.00
ATOM	753	H1'	RC5	24	2.374	-24.340	-9.730	0.00	0.00
ATOM	754	N1	RC5	24	2.021	-23.972	-7.701	0.00	0.00
ATOM	755	C6	RC5	24	2.645	-23.832	-6.523	0.00	0.00
ATOM	756	H6	RC5	24	3.619	-23.438	-6.502	0.00	0.00
ATOM	757	C5	RC5	24	2.046	-24.204	-5.386	0.00	0.00
ATOM	758	H5	RC5	24	2.543	-24.101	-4.467	0.00	0.00
ATOM	759	C4	RC5	24	0.771	-24.747	-5.467	0.00	0.00
ATOM	760	N4	RC5	24	0.166	-25.147	-4.415	0.00	0.00
ATOM	761	H41	RC5	24	0.597	-25.067	-3.550	0.00	0.00
ATOM	762	H42	RC5	24	-0.737	-25.491	-4.508	0.00	0.00
ATOM	763	N3	RC5	24	0.138	-24.871	-6.583	0.00	0.00
ATOM	764	C2	RC5	24	0.741	-24.467	-7.708	0.00	0.00
ATOM	765	O2	RC5	24	0.123	-24.566	-8.734	0.00	0.00
ATOM	766	C3'	RC5	24	3.393	-21.384	-9.019	0.00	0.00
ATOM	767	H3'	RC5	24	3.282	-21.201	-7.974	0.00	0.00
ATOM	768	C2'	RC5	24	2.257	-22.249	-9.475	0.00	0.00
ATOM	769	1H2'	RC5	24	1.349	-21.935	-9.029	0.00	0.00
ATOM	770	O2'	RC5	24	2.147	-22.300	-10.853	0.00	0.00
ATOM	771	2HO'	RC5	24	2.290	-21.606	-11.172	0.00	0.00
ATOM	772	O3'	RC5	24	3.507	-20.185	-9.725	0.00	0.00
ATOM	773	P	RU	25	2.706	-18.902	-9.309	0.00	0.00
ATOM	774	O1P	RU	25	3.106	-17.819	-10.185	0.00	0.00
ATOM	775	O2P	RU	25	2.803	-18.710	-7.874	0.00	0.00
ATOM	776	O5'	RU	25	1.208	-19.234	-9.601	0.00	0.00
ATOM	777	C5'	RU	25	0.681	-19.218	-10.896	0.00	0.00
ATOM	778	1H5'	RU	25	1.203	-19.920	-11.518	0.00	0.00
ATOM	779	2H5'	RU	25	0.772	-18.242	-11.316	0.00	0.00
ATOM	780	C4'	RU	25	-0.776	-19.608	-10.880	0.00	0.00
ATOM	781	H4'	RU	25	-1.142	-19.591	-11.890	0.00	0.00
ATOM	782	O4'	RU	25	-0.985	-20.894	-10.348	0.00	0.00
ATOM	783	C1'	RU	25	-2.223	-20.916	-9.658	0.00	0.00
ATOM	784	H1'	RU	25	-2.862	-21.658	-10.104	0.00	0.00
ATOM	785	N1	RU	25	-2.061	-21.230	-8.222	0.00	0.00
ATOM	786	C6	RU	25	-0.896	-21.015	-7.552	0.00	0.00
ATOM	787	H6	RU	25	-0.089	-20.553	-8.060	0.00	0.00
ATOM	788	C5	RU	25	-0.745	-21.412	-6.277	0.00	0.00
ATOM	789	H5	RU	25	0.171	-21.257	-5.767	0.00	0.00
ATOM	790	C4	RU	25	-1.799	-22.057	-5.570	0.00	0.00
ATOM	791	O4	RU	25	-1.734	-22.477	-4.441	0.00	0.00
ATOM	792	N3	RU	25	-2.946	-22.179	-6.273	0.00	0.00
ATOM	793	H3	RU	25	-3.721	-22.573	-5.797	0.00	0.00
ATOM	794	C2	RU	25	-3.141	-21.784	-7.564	0.00	0.00
ATOM	795	O2	RU	25	-4.226	-21.917	-8.066	0.00	0.00
ATOM	796	C3'	RU	25	-1.639	-18.672	-10.055	0.00	0.00
ATOM	797	H3'	RU	25	-1.159	-18.505	-9.104	0.00	0.00
ATOM	798	C2'	RU	25	-2.859	-19.546	-9.849	0.00	0.00
ATOM	799	1H2'	RU	25	-3.421	-19.245	-8.983	0.00	0.00
ATOM	800	O2'	RU	25	-3.683	-19.594	-10.982	0.00	0.00
ATOM	801	2HO'	RU	25	-4.236	-19.381	-10.967	0.00	0.00
ATOM	802	O3'	RU	25	-1.913	-17.452	-10.696	0.00	0.00
ATOM	803	P	RU	26	-2.279	-16.153	-9.887	0.00	0.00
ATOM	804	O1P	RU	26	-2.452	-15.076	-10.860	0.00	0.00
ATOM	805	O2P	RU	26	-1.289	-15.992	-8.809	0.00	0.00
ATOM	806	O5'	RU	26	-3.677	-16.470	-9.234	0.00	0.00
ATOM	807	C5'	RU	26	-4.858	-16.485	-10.003	0.00	0.00
ATOM	808	1H5'	RU	26	-4.701	-17.078	-10.884	0.00	0.00
ATOM	809	2H5'	RU	26	-5.100	-15.487	-10.317	0.00	0.00

ATOM	810	C4'	RU	26	-6.044	-17.051	-9.238	0.00	0.00
ATOM	811	H4'	RU	26	-6.881	-17.097	-9.919	0.00	0.00
ATOM	812	O4'	RU	26	-5.793	-18.354	-8.751	0.00	0.00
ATOM	813	C1'	RU	26	-6.487	-18.539	-7.532	0.00	0.00
ATOM	814	H1'	RU	26	-7.185	-19.356	-7.636	0.00	0.00
ATOM	815	N1	RU	26	-5.571	-18.841	-6.400	0.00	0.00
ATOM	816	C6	RU	26	-4.271	-18.420	-6.378	0.00	0.00
ATOM	817	H6	RU	26	-3.897	-17.819	-7.177	0.00	0.00
ATOM	818	C5	RU	26	-3.465	-18.748	-5.345	0.00	0.00
ATOM	819	H5	RU	26	-2.453	-18.419	-5.337	0.00	0.00
ATOM	820	C4	RU	26	-3.932	-19.518	-4.230	0.00	0.00
ATOM	821	O4	RU	26	-3.274	-19.863	-3.272	0.00	0.00
ATOM	822	N3	RU	26	-5.242	-19.861	-4.311	0.00	0.00
ATOM	823	H3	RU	26	-5.612	-20.368	-3.539	0.00	0.00
ATOM	824	C2	RU	26	-6.092	-19.553	-5.330	0.00	0.00
ATOM	825	O2	RU	26	-7.247	-19.898	-5.260	0.00	0.00
ATOM	826	C3'	RU	26	-6.464	-16.223	-8.038	0.00	0.00
ATOM	827	H3'	RU	26	-5.590	-15.946	-7.470	0.00	0.00
ATOM	828	C2'	RU	26	-7.278	-17.260	-7.275	0.00	0.00
ATOM	829	1H2'	RU	26	-7.323	-17.021	-6.231	0.00	0.00
ATOM	830	O2'	RU	26	-8.570	-17.428	-7.805	0.00	0.00
ATOM	831	2HO'	RU	26	-9.037	-17.451	-7.468	0.00	0.00
ATOM	832	O3'	RU	26	-7.212	-15.095	-8.411	0.00	0.00
ATOM	833	P	RG	27	-7.372	-13.855	-7.458	0.00	0.00
ATOM	834	O1P	RG	27	-8.199	-12.879	-8.149	0.00	0.00
ATOM	835	O2P	RG	27	-6.057	-13.441	-7.007	0.00	0.00
ATOM	836	O5'	RG	27	-8.151	-14.362	-6.193	0.00	0.00
ATOM	837	C5'	RG	27	-9.543	-14.525	-6.196	0.00	0.00
ATOM	838	1H5'	RG	27	-9.830	-15.177	-6.993	0.00	0.00
ATOM	839	2H5'	RG	27	-10.004	-13.577	-6.355	0.00	0.00
ATOM	840	C4'	RG	27	-10.053	-15.079	-4.888	0.00	0.00
ATOM	841	H4'	RG	27	-11.128	-15.127	-4.951	0.00	0.00
ATOM	842	O4'	RG	27	-9.559	-16.372	-4.630	0.00	0.00
ATOM	843	C1'	RG	27	-9.440	-16.537	-3.225	0.00	0.00
ATOM	844	H1'	RG	27	-10.040	-17.370	-2.895	0.00	0.00
ATOM	845	N9	RG	27	-8.040	-16.798	-2.842	0.00	0.00
ATOM	846	C8	RG	27	-6.894	-16.457	-3.491	0.00	0.00
ATOM	847	H8	RG	27	-6.891	-15.933	-4.422	0.00	0.00
ATOM	848	N7	RG	27	-5.804	-16.822	-2.882	0.00	0.00
ATOM	849	C5	RG	27	-6.262	-17.411	-1.711	0.00	0.00
ATOM	850	C6	RG	27	-5.571	-17.960	-0.584	0.00	0.00
ATOM	851	O6	RG	27	-4.378	-18.108	-0.407	0.00	0.00
ATOM	852	N1	RG	27	-6.402	-18.350	0.429	0.00	0.00
ATOM	853	H1	RG	27	-5.984	-18.721	1.251	0.00	0.00
ATOM	854	C2	RG	27	-7.737	-18.261	0.367	0.00	0.00
ATOM	855	N2	RG	27	-8.401	-18.625	1.409	0.00	0.00
ATOM	856	H21	RG	27	-7.915	-18.920	2.221	0.00	0.00
ATOM	857	H22	RG	27	-9.381	-18.536	1.376	0.00	0.00
ATOM	858	N3	RG	27	-8.427	-17.785	-0.652	0.00	0.00
ATOM	859	C4	RG	27	-7.633	-17.371	-1.669	0.00	0.00
ATOM	860	C3'	RG	27	-9.687	-14.250	-3.666	0.00	0.00
ATOM	861	H3'	RG	27	-8.631	-14.042	-3.701	0.00	0.00
ATOM	862	C2'	RG	27	-9.953	-15.264	-2.572	0.00	0.00
ATOM	863	1H2'	RG	27	-9.402	-15.017	-1.682	0.00	0.00
ATOM	864	O2'	RG	27	-11.318	-15.423	-2.289	0.00	0.00
ATOM	865	2HO'	RG	27	-11.655	-14.872	-2.163	0.00	0.00
ATOM	866	O3'	RG	27	-10.424	-13.069	-3.519	0.00	0.00
ATOM	867	P	RC	28	-9.849	-11.852	-2.707	0.00	0.00
ATOM	868	O1P	RC	28	-10.804	-10.760	-2.813	0.00	0.00
ATOM	869	O2P	RC	28	-8.477	-11.621	-3.144	0.00	0.00
ATOM	870	O5'	RC	28	-9.799	-12.311	-1.201	0.00	0.00
ATOM	871	C5'	RC	28	-10.976	-12.476	-0.440	0.00	0.00
ATOM	872	1H5'	RC	28	-11.679	-13.076	-0.988	0.00	0.00
ATOM	873	2H5'	RC	28	-11.419	-11.518	-0.250	0.00	0.00
ATOM	874	C4'	RC	28	-10.699	-13.139	0.897	0.00	0.00
ATOM	875	H4'	RC	28	-11.642	-13.301	1.396	0.00	0.00
ATOM	876	O4'	RC	28	-10.044	-14.383	0.742	0.00	0.00
ATOM	877	C1'	RC	28	-9.209	-14.604	1.865	0.00	0.00

ATOM	878	H1'	RC	28	-9.530	-15.497	2.378	0.00	0.00
ATOM	879	N1	RC	28	-7.779	-14.769	1.506	0.00	0.00
ATOM	880	C6	RC	28	-7.253	-14.263	0.358	0.00	0.00
ATOM	881	H6	RC	28	-7.890	-13.761	-0.331	0.00	0.00
ATOM	882	C5	RC	28	-5.933	-14.390	0.105	0.00	0.00
ATOM	883	H5	RC	28	-5.528	-14.001	-0.798	0.00	0.00
ATOM	884	C4	RC	28	-5.138	-15.031	1.069	0.00	0.00
ATOM	885	N4	RC	28	-3.874	-15.203	0.875	0.00	0.00
ATOM	886	H41	RC	28	-3.366	-15.729	1.543	0.00	0.00
ATOM	887	H42	RC	28	-3.459	-14.860	0.045	0.00	0.00
ATOM	888	N3	RC	28	-5.611	-15.507	2.185	0.00	0.00
ATOM	889	C2	RC	28	-6.930	-15.389	2.420	0.00	0.00
ATOM	890	O2	RC	28	-7.342	-15.835	3.471	0.00	0.00
ATOM	891	C3'	RC	28	-9.820	-12.312	1.824	0.00	0.00
ATOM	892	H3'	RC	28	-8.965	-11.955	1.272	0.00	0.00
ATOM	893	C2'	RC	28	-9.393	-13.406	2.790	0.00	0.00
ATOM	894	1H2'	RC	28	-8.475	-13.131	3.286	0.00	0.00
ATOM	895	O2'	RC	28	-10.392	-13.728	3.729	0.00	0.00
ATOM	896	2HO'	RC	28	-10.420	-13.547	4.155	0.00	0.00
ATOM	897	O3'	RC	28	-10.497	-11.262	2.481	0.00	0.00
ATOM	898	P	RU	29	-9.722	-10.013	3.015	0.00	0.00
ATOM	899	O1P	RU	29	-10.698	-9.143	3.658	0.00	0.00
ATOM	900	O2P	RU	29	-8.926	-9.488	1.919	0.00	0.00
ATOM	901	O5'	RU	29	-8.718	-10.544	4.119	0.00	0.00
ATOM	902	C5'	RU	29	-9.153	-10.966	5.380	0.00	0.00
ATOM	903	1H5'	RU	29	-9.972	-11.649	5.264	0.00	0.00
ATOM	904	2H5'	RU	29	-9.501	-10.121	5.942	0.00	0.00
ATOM	905	C4'	RU	29	-8.042	-11.655	6.156	0.00	0.00
ATOM	906	H4'	RU	29	-8.473	-12.063	7.053	0.00	0.00
ATOM	907	O4'	RU	29	-7.458	-12.718	5.430	0.00	0.00
ATOM	908	C1'	RU	29	-6.092	-12.830	5.773	0.00	0.00
ATOM	909	H1'	RU	29	-5.911	-13.803	6.192	0.00	0.00
ATOM	910	N1	RU	29	-5.177	-12.653	4.623	0.00	0.00
ATOM	911	C6	RU	29	-5.524	-11.940	3.517	0.00	0.00
ATOM	912	H6	RU	29	-6.487	-11.488	3.462	0.00	0.00
ATOM	913	C5	RU	29	-4.657	-11.788	2.496	0.00	0.00
ATOM	914	H5	RU	29	-4.938	-11.209	1.650	0.00	0.00
ATOM	915	C4	RU	29	-3.343	-12.350	2.528	0.00	0.00
ATOM	916	O4	RU	29	-2.523	-12.268	1.642	0.00	0.00
ATOM	917	N3	RU	29	-3.054	-13.035	3.666	0.00	0.00
ATOM	918	H3	RU	29	-2.139	-13.412	3.742	0.00	0.00
ATOM	919	C2	RU	29	-3.901	-13.197	4.727	0.00	0.00
ATOM	920	O2	RU	29	-3.505	-13.789	5.713	0.00	0.00
ATOM	921	C3'	RU	29	-6.910	-10.750	6.585	0.00	0.00
ATOM	922	H3'	RU	29	-6.628	-10.122	5.765	0.00	0.00
ATOM	923	C2'	RU	29	-5.823	-11.778	6.829	0.00	0.00
ATOM	924	1H2'	RU	29	-4.861	-11.346	6.710	0.00	0.00
ATOM	925	O2'	RU	29	-5.932	-12.389	8.063	0.00	0.00
ATOM	926	2HO'	RU	29	-6.072	-11.806	8.611	0.00	0.00
ATOM	927	O3'	RU	29	-7.224	-10.002	7.735	0.00	0.00
ATOM	928	P	RG	30	-6.381	-8.749	8.178	0.00	0.00
ATOM	929	O1P	RG	30	-7.108	-8.082	9.236	0.00	0.00
ATOM	930	O2P	RG	30	-6.026	-7.997	6.994	0.00	0.00
ATOM	931	O5'	RG	30	-5.047	-9.295	8.785	0.00	0.00
ATOM	932	C5'	RG	30	-4.993	-9.947	10.019	0.00	0.00
ATOM	933	1H5'	RG	30	-5.597	-10.830	9.986	0.00	0.00
ATOM	934	2H5'	RG	30	-5.377	-9.319	10.795	0.00	0.00
ATOM	935	C4'	RG	30	-3.580	-10.334	10.403	0.00	0.00
ATOM	936	H4'	RG	30	-3.635	-10.961	11.273	0.00	0.00
ATOM	937	O4'	RG	30	-2.962	-11.070	9.362	0.00	0.00
ATOM	938	C1'	RG	30	-1.816	-10.376	8.932	0.00	0.00
ATOM	939	H1'	RG	30	-0.949	-10.774	9.437	0.00	0.00
ATOM	940	N9	RG	30	-1.619	-10.482	7.480	0.00	0.00
ATOM	941	C8	RG	30	-2.403	-10.021	6.469	0.00	0.00
ATOM	942	H8	RG	30	-3.326	-9.541	6.679	0.00	0.00
ATOM	943	N7	RG	30	-1.931	-10.194	5.280	0.00	0.00
ATOM	944	C5	RG	30	-0.713	-10.798	5.503	0.00	0.00
ATOM	945	C6	RG	30	0.318	-11.198	4.609	0.00	0.00

ATOM	946	O6	RG	30	0.365	-11.130	3.391	0.00	0.00
ATOM	947	N1	RG	30	1.405	-11.723	5.239	0.00	0.00
ATOM	948	H1	RG	30	2.155	-12.032	4.671	0.00	0.00
ATOM	949	C2	RG	30	1.500	-11.857	6.576	0.00	0.00
ATOM	950	N2	RG	30	2.590	-12.339	7.049	0.00	0.00
ATOM	951	H21	RG	30	3.333	-12.569	6.431	0.00	0.00
ATOM	952	H22	RG	30	2.659	-12.446	8.031	0.00	0.00
ATOM	953	N3	RG	30	0.566	-11.515	7.440	0.00	0.00
ATOM	954	C4	RG	30	-0.523	-10.978	6.847	0.00	0.00
ATOM	955	C3'	RG	30	-2.703	-9.134	10.724	0.00	0.00
ATOM	956	H3'	RG	30	-3.291	-8.268	10.973	0.00	0.00
ATOM	957	C2'	RG	30	-1.989	-8.936	9.384	0.00	0.00
ATOM	958	1H2'	RG	30	-2.661	-8.415	8.721	0.00	0.00
ATOM	959	O2'	RG	30	-0.770	-8.231	9.472	0.00	0.00
ATOM	960	2HO'	RG	30	-0.969	-7.320	9.585	0.00	0.00
ATOM	961	O3'	RG	30	-1.798	-9.457	11.763	0.00	0.00
ATOM	962	P	RA	31	-2.197	-9.357	13.285	0.00	0.00
ATOM	963	O1P	RA	31	-1.213	-10.120	14.048	0.00	0.00
ATOM	964	O2P	RA	31	-3.605	-9.675	13.441	0.00	0.00
ATOM	965	O5'	RA	31	-1.979	-7.846	13.620	0.00	0.00
ATOM	966	C5'	RA	31	-3.019	-6.958	13.781	0.00	0.00
ATOM	967	1H5'	RA	31	-3.508	-7.143	14.706	0.00	0.00
ATOM	968	2H5'	RA	31	-3.723	-7.092	12.999	0.00	0.00
ATOM	969	C4'	RA	31	-2.555	-5.520	13.733	0.00	0.00
ATOM	970	H4'	RA	31	-3.395	-4.881	13.864	0.00	0.00
ATOM	971	O4'	RA	31	-1.626	-5.224	14.730	0.00	0.00
ATOM	972	C1'	RA	31	-0.786	-4.198	14.265	0.00	0.00
ATOM	973	H1'	RA	31	-0.961	-3.312	14.832	0.00	0.00
ATOM	974	N9	RA	31	0.589	-4.599	14.486	0.00	0.00
ATOM	975	C8	RA	31	1.425	-5.276	13.714	0.00	0.00
ATOM	976	H8	RA	31	1.133	-5.637	12.793	0.00	0.00
ATOM	977	N7	RA	31	2.594	-5.451	14.205	0.00	0.00
ATOM	978	C5	RA	31	2.524	-4.835	15.390	0.00	0.00
ATOM	979	C6	RA	31	3.407	-4.601	16.414	0.00	0.00
ATOM	980	N6	RA	31	4.624	-4.994	16.469	0.00	0.00
ATOM	981	H61	RA	31	5.148	-4.764	17.239	0.00	0.00
ATOM	982	H62	RA	31	4.988	-5.489	15.750	0.00	0.00
ATOM	983	N1	RA	31	3.047	-3.940	17.448	0.00	0.00
ATOM	984	C2	RA	31	1.834	-3.505	17.476	0.00	0.00
ATOM	985	H2	RA	31	1.565	-2.975	18.320	0.00	0.00
ATOM	986	N3	RA	31	0.897	-3.634	16.602	0.00	0.00
ATOM	987	C4	RA	31	1.308	-4.312	15.569	0.00	0.00
ATOM	988	C3'	RA	31	-1.912	-5.149	12.422	0.00	0.00
ATOM	989	H3'	RA	31	-1.212	-5.924	12.159	0.00	0.00
ATOM	990	C2'	RA	31	-1.138	-3.904	12.831	0.00	0.00
ATOM	991	1H2'	RA	31	-0.275	-3.772	12.222	0.00	0.00
ATOM	992	O2'	RA	31	-1.922	-2.748	12.821	0.00	0.00
ATOM	993	2HO'	RA	31	-1.822	-2.337	12.085	0.00	0.00
ATOM	994	O3'	RA	31	-2.868	-4.957	11.407	0.00	0.00
ATOM	995	P	RA	32	-2.459	-4.840	9.898	0.00	0.00
ATOM	996	O1P	RA	32	-3.643	-5.083	9.089	0.00	0.00
ATOM	997	O2P	RA	32	-1.275	-5.655	9.676	0.00	0.00
ATOM	998	O5'	RA	32	-2.042	-3.333	9.720	0.00	0.00
ATOM	999	C5'	RA	32	-2.983	-2.302	9.757	0.00	0.00
ATOM	1000	1H5'	RA	32	-3.577	-2.396	10.644	0.00	0.00
ATOM	1001	2H5'	RA	32	-3.626	-2.386	8.912	0.00	0.00
ATOM	1002	C4'	RA	32	-2.344	-0.923	9.755	0.00	0.00
ATOM	1003	H4'	RA	32	-3.117	-0.210	9.952	0.00	0.00
ATOM	1004	O4'	RA	32	-1.377	-0.836	10.784	0.00	0.00
ATOM	1005	C1'	RA	32	-0.121	-0.546	10.209	0.00	0.00
ATOM	1006	H1'	RA	32	0.033	0.518	10.243	0.00	0.00
ATOM	1007	N9	RA	32	0.997	-1.199	10.909	0.00	0.00
ATOM	1008	C8	RA	32	2.005	-1.938	10.414	0.00	0.00
ATOM	1009	H8	RA	32	2.037	-2.211	9.402	0.00	0.00
ATOM	1010	N7	RA	32	2.911	-2.281	11.264	0.00	0.00
ATOM	1011	C5	RA	32	2.486	-1.697	12.419	0.00	0.00
ATOM	1012	C6	RA	32	2.979	-1.624	13.720	0.00	0.00
ATOM	1013	N6	RA	32	4.069	-2.167	14.147	0.00	0.00

ATOM	1014	H61	RA	32	4.315	-2.025	15.084	0.00	0.00
ATOM	1015	H62	RA	32	4.642	-2.633	13.526	0.00	0.00
ATOM	1016	N1	RA	32	2.337	-0.982	14.645	0.00	0.00
ATOM	1017	C2	RA	32	1.237	-0.385	14.294	0.00	0.00
ATOM	1018	H2	RA	32	0.744	0.137	15.053	0.00	0.00
ATOM	1019	N3	RA	32	0.652	-0.354	13.120	0.00	0.00
ATOM	1020	C4	RA	32	1.333	-1.032	12.209	0.00	0.00
ATOM	1021	C3'	RA	32	-1.670	-0.553	8.444	0.00	0.00
ATOM	1022	H3'	RA	32	-2.076	-1.105	7.617	0.00	0.00
ATOM	1023	C2'	RA	32	-0.247	-0.958	8.763	0.00	0.00
ATOM	1024	1H2'	RA	32	-0.174	-2.025	8.698	0.00	0.00
ATOM	1025	O2'	RA	32	0.715	-0.359	7.944	0.00	0.00
ATOM	1026	2HO'	RA	32	0.303	0.143	7.301	0.00	0.00
ATOM	1027	O3'	RA	32	-1.830	0.831	8.276	0.00	0.00
ATOM	1028	P	RG	33	-1.723	1.557	6.888	0.00	0.00
ATOM	1029	O1P	RG	33	-0.616	0.974	6.148	0.00	0.00
ATOM	1030	O2P	RG	33	-1.704	2.980	7.166	0.00	0.00
ATOM	1031	O5'	RG	33	-3.048	1.223	6.119	0.00	0.00
ATOM	1032	C5'	RG	33	-4.317	1.578	6.576	0.00	0.00
ATOM	1033	1H5'	RG	33	-4.253	2.330	7.330	0.00	0.00
ATOM	1034	2H5'	RG	33	-4.764	0.721	7.011	0.00	0.00
ATOM	1035	C4'	RG	33	-5.224	2.084	5.483	0.00	0.00
ATOM	1036	H4'	RG	33	-6.198	2.223	5.900	0.00	0.00
ATOM	1037	O4'	RG	33	-4.786	3.327	5.001	0.00	0.00
ATOM	1038	C1'	RG	33	-4.980	3.394	3.599	0.00	0.00
ATOM	1039	H1'	RG	33	-5.540	4.270	3.331	0.00	0.00
ATOM	1040	N9	RG	33	-3.694	3.459	2.896	0.00	0.00
ATOM	1041	C8	RG	33	-2.437	3.347	3.406	0.00	0.00
ATOM	1042	H8	RG	33	-2.259	3.152	4.437	0.00	0.00
ATOM	1043	N7	RG	33	-1.484	3.523	2.544	0.00	0.00
ATOM	1044	C5	RG	33	-2.160	3.779	1.362	0.00	0.00
ATOM	1045	C6	RG	33	-1.680	4.108	0.058	0.00	0.00
ATOM	1046	O6	RG	33	-0.527	4.250	-0.331	0.00	0.00
ATOM	1047	N1	RG	33	-2.684	4.314	-0.851	0.00	0.00
ATOM	1048	H1	RG	33	-2.420	4.553	-1.780	0.00	0.00
ATOM	1049	C2	RG	33	-3.995	4.234	-0.550	0.00	0.00
ATOM	1050	N2	RG	33	-4.834	4.429	-1.518	0.00	0.00
ATOM	1051	H21	RG	33	-5.803	4.358	-1.317	0.00	0.00
ATOM	1052	H22	RG	33	-4.483	4.605	-2.432	0.00	0.00
ATOM	1053	N3	RG	33	-4.484	3.958	0.642	0.00	0.00
ATOM	1054	C4	RG	33	-3.515	3.729	1.566	0.00	0.00
ATOM	1055	C3'	RG	33	-5.374	1.164	4.286	0.00	0.00
ATOM	1056	H3'	RG	33	-4.417	0.748	4.051	0.00	0.00
ATOM	1057	C2'	RG	33	-5.772	2.155	3.214	0.00	0.00
ATOM	1058	1H2'	RG	33	-5.496	1.802	2.246	0.00	0.00
ATOM	1059	O2'	RG	33	-7.132	2.469	3.259	0.00	0.00
ATOM	1060	2HO'	RG	33	-7.494	2.111	3.199	0.00	0.00
ATOM	1061	O3'	RG	33	-6.349	0.176	4.483	0.00	0.00
ATOM	1062	P	RC	34	-6.280	-1.199	3.752	0.00	0.00
ATOM	1063	O1P	RC	34	-7.468	-1.935	4.116	0.00	0.00
ATOM	1064	O2P	RC	34	-4.997	-1.781	4.041	0.00	0.00
ATOM	1065	O5'	RC	34	-6.337	-0.882	2.221	0.00	0.00
ATOM	1066	C5'	RC	34	-7.533	-0.570	1.569	0.00	0.00
ATOM	1067	1H5'	RC	34	-7.998	0.274	2.036	0.00	0.00
ATOM	1068	2H5'	RC	34	-8.203	-1.404	1.632	0.00	0.00
ATOM	1069	C4'	RC	34	-7.323	-0.263	0.100	0.00	0.00
ATOM	1070	H4'	RC	34	-8.273	-0.047	-0.343	0.00	0.00
ATOM	1071	O4'	RC	34	-6.465	0.844	-0.077	0.00	0.00
ATOM	1072	C1'	RC	34	-5.827	0.717	-1.333	0.00	0.00
ATOM	1073	H1'	RC	34	-6.188	1.487	-1.987	0.00	0.00
ATOM	1074	N1	RC	34	-4.354	0.810	-1.243	0.00	0.00
ATOM	1075	C6	RC	34	-3.664	0.436	-0.130	0.00	0.00
ATOM	1076	H6	RC	34	-4.193	0.093	0.727	0.00	0.00
ATOM	1077	C5	RC	34	-2.319	0.515	-0.115	0.00	0.00
ATOM	1078	H5	RC	34	-1.772	0.221	0.751	0.00	0.00
ATOM	1079	C4	RC	34	-1.677	0.972	-1.281	0.00	0.00
ATOM	1080	N4	RC	34	-0.391	1.068	-1.324	0.00	0.00
ATOM	1081	H41	RC	34	-0.000	1.379	-2.175	0.00	0.00

ATOM	1082	H42	RC	34	0.145	0.788	-0.552	0.00	0.00
ATOM	1083	N3	RC	34	-2.317	1.350	-2.350	0.00	0.00
ATOM	1084	C2	RC	34	-3.659	1.254	-2.357	0.00	0.00
ATOM	1085	O2	RC	34	-4.240	1.560	-3.384	0.00	0.00
ATOM	1086	C3'	RC	34	-6.706	-1.392	-0.691	0.00	0.00
ATOM	1087	H3'	RC	34	-5.860	-1.741	-0.140	0.00	0.00
ATOM	1088	C2'	RC	34	-6.238	-0.630	-1.906	0.00	0.00
ATOM	1089	1H2'	RC	34	-5.414	-1.127	-2.359	0.00	0.00
ATOM	1090	O2'	RC	34	-7.256	-0.411	-2.823	0.00	0.00
ATOM	1091	2HO'	RC	34	-7.399	-0.934	-3.194	0.00	0.00
ATOM	1092	O3'	RC	34	-7.599	-2.441	-0.991	0.00	0.00
ATOM	1093	P	RG	35	-7.069	-3.853	-1.443	0.00	0.00
ATOM	1094	O1P	RG	35	-8.202	-4.771	-1.505	0.00	0.00
ATOM	1095	O2P	RG	35	-5.913	-4.201	-0.625	0.00	0.00
ATOM	1096	O5'	RG	35	-6.536	-3.634	-2.913	0.00	0.00
ATOM	1097	C5'	RG	35	-7.390	-3.562	-4.025	0.00	0.00
ATOM	1098	1H5'	RG	35	-8.086	-2.752	-3.901	0.00	0.00
ATOM	1099	2H5'	RG	35	-7.942	-4.477	-4.122	0.00	0.00
ATOM	1100	C4'	RG	35	-6.603	-3.350	-5.306	0.00	0.00
ATOM	1101	H4'	RG	35	-7.291	-3.363	-6.134	0.00	0.00
ATOM	1102	O4'	RG	35	-5.906	-2.125	-5.319	0.00	0.00
ATOM	1103	C1'	RG	35	-4.710	-2.282	-6.080	0.00	0.00
ATOM	1104	H1'	RG	35	-4.685	-1.595	-6.911	0.00	0.00
ATOM	1105	N9	RG	35	-3.528	-2.023	-5.239	0.00	0.00
ATOM	1106	C8	RG	35	-3.366	-2.231	-3.898	0.00	0.00
ATOM	1107	H8	RG	35	-4.125	-2.674	-3.291	0.00	0.00
ATOM	1108	N7	RG	35	-2.214	-1.858	-3.440	0.00	0.00
ATOM	1109	C5	RG	35	-1.552	-1.365	-4.562	0.00	0.00
ATOM	1110	C6	RG	35	-0.247	-0.788	-4.725	0.00	0.00
ATOM	1111	O6	RG	35	0.608	-0.524	-3.889	0.00	0.00
ATOM	1112	N1	RG	35	0.055	-0.497	-6.033	0.00	0.00
ATOM	1113	H1	RG	35	0.960	-0.134	-6.227	0.00	0.00
ATOM	1114	C2	RG	35	-0.792	-0.709	-7.056	0.00	0.00
ATOM	1115	N2	RG	35	-0.377	-0.385	-8.228	0.00	0.00
ATOM	1116	H21	RG	35	0.550	-0.053	-8.347	0.00	0.00
ATOM	1117	H22	RG	35	-0.984	-0.526	-8.979	0.00	0.00
ATOM	1118	N3	RG	35	-2.013	-1.202	-6.952	0.00	0.00
ATOM	1119	C4	RG	35	-2.339	-1.515	-5.673	0.00	0.00
ATOM	1120	C3'	RG	35	-5.548	-4.410	-5.550	0.00	0.00
ATOM	1121	H3'	RG	35	-4.956	-4.547	-4.658	0.00	0.00
ATOM	1122	C2'	RG	35	-4.700	-3.710	-6.606	0.00	0.00
ATOM	1123	1H2'	RG	35	-3.700	-4.112	-6.641	0.00	0.00
ATOM	1124	O2'	RG	35	-5.298	-3.735	-7.876	0.00	0.00
ATOM	1125	2HO'	RG	35	-4.930	-3.888	-8.359	0.00	0.00
ATOM	1126	O3'	RG	35	-6.098	-5.641	-5.963	0.00	0.00
ATOM	1127	P	RC	36	-5.341	-6.998	-5.734	0.00	0.00
ATOM	1128	O1P	RC	36	-6.246	-8.070	-6.152	0.00	0.00
ATOM	1129	O2P	RC	36	-4.814	-7.027	-4.360	0.00	0.00
ATOM	1130	O5'	RC	36	-4.118	-6.960	-6.729	0.00	0.00
ATOM	1131	C5'	RC	36	-4.293	-7.089	-8.121	0.00	0.00
ATOM	1132	1H5'	RC	36	-5.053	-6.409	-8.459	0.00	0.00
ATOM	1133	2H5'	RC	36	-4.601	-8.093	-8.355	0.00	0.00
ATOM	1134	C4'	RC	36	-3.015	-6.793	-8.893	0.00	0.00
ATOM	1135	H4'	RC	36	-3.219	-6.919	-9.946	0.00	0.00
ATOM	1136	O4'	RC	36	-2.556	-5.471	-8.672	0.00	0.00
ATOM	1137	C1'	RC	36	-1.136	-5.457	-8.685	0.00	0.00
ATOM	1138	H1'	RC	36	-0.792	-4.787	-9.458	0.00	0.00
ATOM	1139	N1	RC	36	-0.565	-5.020	-7.375	0.00	0.00
ATOM	1140	C6	RC	36	-1.213	-5.223	-6.196	0.00	0.00
ATOM	1141	H6	RC	36	-2.140	-5.749	-6.192	0.00	0.00
ATOM	1142	C5	RC	36	-0.698	-4.768	-5.042	0.00	0.00
ATOM	1143	H5	RC	36	-1.218	-4.916	-4.122	0.00	0.00
ATOM	1144	C4	RC	36	0.548	-4.129	-5.105	0.00	0.00
ATOM	1145	N4	RC	36	1.102	-3.698	-4.037	0.00	0.00
ATOM	1146	H41	RC	36	1.980	-3.257	-4.119	0.00	0.00
ATOM	1147	H42	RC	36	0.661	-3.830	-3.169	0.00	0.00
ATOM	1148	N3	RC	36	1.201	-3.929	-6.221	0.00	0.00
ATOM	1149	C2	RC	36	0.667	-4.381	-7.370	0.00	0.00

ATOM	1150	O2	RC	36	1.303	-4.215	-8.395	0.00	0.00
ATOM	1151	C3'	RC	36	-1.866	-7.709	-8.535	0.00	0.00
ATOM	1152	H3'	RC	36	-1.799	-7.808	-7.462	0.00	0.00
ATOM	1153	C2'	RC	36	-0.695	-6.870	-9.037	0.00	0.00
ATOM	1154	1H2'	RC	36	0.219	-7.142	-8.541	0.00	0.00
ATOM	1155	O2'	RC	36	-0.531	-6.953	-10.435	0.00	0.00
ATOM	1156	2HO'	RC	36	-0.348	-7.510	-10.651	0.00	0.00
ATOM	1157	O3'	RC	36	-1.949	-8.975	-9.148	0.00	0.00
ATOM	1158	P	RG	37	-1.224	-10.230	-8.533	0.00	0.00
ATOM	1159	O1P	RG	37	-1.583	-11.402	-9.325	0.00	0.00
ATOM	1160	O2P	RG	37	-1.468	-10.244	-7.100	0.00	0.00
ATOM	1161	O5'	RG	37	0.309	-9.948	-8.735	0.00	0.00
ATOM	1162	C5'	RG	37	0.936	-10.100	-9.977	0.00	0.00
ATOM	1163	1H5'	RG	37	0.419	-9.534	-10.725	0.00	0.00
ATOM	1164	2H5'	RG	37	0.917	-11.133	-10.261	0.00	0.00
ATOM	1165	C4'	RG	37	2.381	-9.623	-9.918	0.00	0.00
ATOM	1166	H4'	RG	37	2.812	-9.760	-10.894	0.00	0.00
ATOM	1167	O4'	RG	37	2.500	-8.257	-9.575	0.00	0.00
ATOM	1168	C1'	RG	37	3.669	-8.077	-8.798	0.00	0.00
ATOM	1169	H1'	RG	37	4.311	-7.337	-9.243	0.00	0.00
ATOM	1170	N9	RG	37	3.319	-7.625	-7.439	0.00	0.00
ATOM	1171	C8	RG	37	2.175	-7.816	-6.727	0.00	0.00
ATOM	1172	H8	RG	37	1.357	-8.389	-7.098	0.00	0.00
ATOM	1173	N7	RG	37	2.153	-7.235	-5.568	0.00	0.00
ATOM	1174	C5	RG	37	3.410	-6.648	-5.475	0.00	0.00
ATOM	1175	C6	RG	37	4.035	-5.885	-4.442	0.00	0.00
ATOM	1176	O6	RG	37	3.579	-5.491	-3.383	0.00	0.00
ATOM	1177	N1	RG	37	5.338	-5.574	-4.712	0.00	0.00
ATOM	1178	H1	RG	37	5.855	-5.113	-4.001	0.00	0.00
ATOM	1179	C2	RG	37	5.960	-5.892	-5.858	0.00	0.00
ATOM	1180	N2	RG	37	7.197	-5.569	-5.964	0.00	0.00
ATOM	1181	H21	RG	37	7.663	-5.143	-5.205	0.00	0.00
ATOM	1182	H22	RG	37	7.656	-5.782	-6.810	0.00	0.00
ATOM	1183	N3	RG	37	5.416	-6.549	-6.863	0.00	0.00
ATOM	1184	C4	RG	37	4.135	-6.914	-6.610	0.00	0.00
ATOM	1185	C3'	RG	37	3.233	-10.381	-8.924	0.00	0.00
ATOM	1186	H3'	RG	37	2.705	-10.452	-7.990	0.00	0.00
ATOM	1187	C2'	RG	37	4.394	-9.409	-8.761	0.00	0.00
ATOM	1188	1H2'	RG	37	4.899	-9.554	-7.824	0.00	0.00
ATOM	1189	O2'	RG	37	5.308	-9.462	-9.831	0.00	0.00
ATOM	1190	2HO'	RG	37	5.496	-10.015	-10.015	0.00	0.00
ATOM	1191	O3'	RG	37	3.630	-11.642	-9.395	0.00	0.00
ATOM	1192	P	RC	38	3.846	-12.836	-8.422	0.00	0.00
ATOM	1193	O1P	RC	38	4.147	-14.015	-9.199	0.00	0.00
ATOM	1194	O2P	RC	38	2.721	-12.871	-7.522	0.00	0.00
ATOM	1195	O5'	RC	38	5.108	-12.464	-7.593	0.00	0.00
ATOM	1196	C5'	RC	38	6.384	-12.508	-8.141	0.00	0.00
ATOM	1197	1H5'	RC	38	6.390	-11.983	-9.065	0.00	0.00
ATOM	1198	2H5'	RC	38	6.673	-13.522	-8.321	0.00	0.00
ATOM	1199	C4'	RC	38	7.396	-11.875	-7.232	0.00	0.00
ATOM	1200	H4'	RC	38	8.356	-11.954	-7.703	0.00	0.00
ATOM	1201	O4'	RC	38	7.112	-10.515	-6.970	0.00	0.00
ATOM	1202	C1'	RC	38	7.589	-10.192	-5.685	0.00	0.00
ATOM	1203	H1'	RC	38	8.349	-9.442	-5.776	0.00	0.00
ATOM	1204	N1	RC	38	6.521	-9.689	-4.784	0.00	0.00
ATOM	1205	C6	RC	38	5.233	-10.105	-4.885	0.00	0.00
ATOM	1206	H6	RC	38	4.971	-10.756	-5.676	0.00	0.00
ATOM	1207	C5	RC	38	4.297	-9.683	-4.014	0.00	0.00
ATOM	1208	H5	RC	38	3.288	-9.998	-4.108	0.00	0.00
ATOM	1209	C4	RC	38	4.709	-8.817	-2.998	0.00	0.00
ATOM	1210	N4	RC	38	3.859	-8.378	-2.137	0.00	0.00
ATOM	1211	H41	RC	38	4.158	-7.719	-1.472	0.00	0.00
ATOM	1212	H42	RC	38	2.916	-8.626	-2.220	0.00	0.00
ATOM	1213	N3	RC	38	5.939	-8.412	-2.876	0.00	0.00
ATOM	1214	C2	RC	38	6.865	-8.837	-3.753	0.00	0.00
ATOM	1215	O2	RC	38	8.007	-8.462	-3.594	0.00	0.00
ATOM	1216	C3'	RC	38	7.494	-12.528	-5.886	0.00	0.00
ATOM	1217	H3'	RC	38	6.516	-12.641	-5.469	0.00	0.00

ATOM	1218	C2'	RC	38	8.209	-11.450	-5.120	0.00	0.00
ATOM	1219	1H2'	RC	38	8.013	-11.542	-4.078	0.00	0.00
ATOM	1220	O2'	RC	38	9.576	-11.421	-5.376	0.00	0.00
ATOM	1221	2HO'	RC	38	9.919	-11.489	-4.965	0.00	0.00
ATOM	1222	O3'	RC	38	8.166	-13.767	-5.905	0.00	0.00
ATOM	1223	P	RA	39	7.924	-14.836	-4.779	0.00	0.00
ATOM	1224	O1P	RA	39	8.683	-16.024	-5.130	0.00	0.00
ATOM	1225	O2P	RA	39	6.494	-14.959	-4.550	0.00	0.00
ATOM	1226	O5'	RA	39	8.546	-14.214	-3.481	0.00	0.00
ATOM	1227	C5'	RA	39	9.929	-14.139	-3.293	0.00	0.00
ATOM	1228	1H5'	RA	39	10.389	-13.609	-4.103	0.00	0.00
ATOM	1229	2H5'	RA	39	10.340	-15.122	-3.270	0.00	0.00
ATOM	1230	C4'	RA	39	10.264	-13.434	-1.992	0.00	0.00
ATOM	1231	H4'	RA	39	11.332	-13.403	-1.894	0.00	0.00
ATOM	1232	O4'	RA	39	9.766	-12.121	-1.962	0.00	0.00
ATOM	1233	C1'	RA	39	9.379	-11.789	-0.649	0.00	0.00
ATOM	1234	H1'	RA	39	9.915	-10.936	-0.298	0.00	0.00
ATOM	1235	N9	RA	39	7.939	-11.472	-0.590	0.00	0.00
ATOM	1236	C8	RA	39	6.918	-11.933	-1.361	0.00	0.00
ATOM	1237	H8	RA	39	7.068	-12.618	-2.157	0.00	0.00
ATOM	1238	N7	RA	39	5.759	-11.463	-1.048	0.00	0.00
ATOM	1239	C5	RA	39	6.031	-10.650	0.039	0.00	0.00
ATOM	1240	C6	RA	39	5.280	-9.842	0.902	0.00	0.00
ATOM	1241	N6	RA	39	4.002	-9.654	0.833	0.00	0.00
ATOM	1242	H61	RA	39	3.589	-9.035	1.475	0.00	0.00
ATOM	1243	H62	RA	39	3.489	-10.084	0.113	0.00	0.00
ATOM	1244	N1	RA	39	5.837	-9.200	1.896	0.00	0.00
ATOM	1245	C2	RA	39	7.129	-9.319	2.052	0.00	0.00
ATOM	1246	H2	RA	39	7.554	-8.805	2.875	0.00	0.00
ATOM	1247	N3	RA	39	7.969	-10.028	1.340	0.00	0.00
ATOM	1248	C4	RA	39	7.351	-10.669	0.329	0.00	0.00
ATOM	1249	C3'	RA	39	9.706	-14.119	-0.763	0.00	0.00
ATOM	1250	H3'	RA	39	8.698	-14.425	-0.939	0.00	0.00
ATOM	1251	C2'	RA	39	9.712	-12.979	0.226	0.00	0.00
ATOM	1252	1H2'	RA	39	8.977	-13.128	0.994	0.00	0.00
ATOM	1253	O2'	RA	39	10.974	-12.788	0.798	0.00	0.00
ATOM	1254	2HO'	RA	39	11.390	-13.537	0.862	0.00	0.00
ATOM	1255	O3'	RA	39	10.498	-15.183	-0.324	0.00	0.00
ATOM	1256	P	RC	40	9.854	-16.484	0.225	0.00	0.00
ATOM	1257	O1P	RC	40	10.928	-17.361	0.633	0.00	0.00
ATOM	1258	O2P	RC	40	8.908	-16.949	-0.765	0.00	0.00
ATOM	1259	O5'	RC	40	9.048	-16.052	1.501	0.00	0.00
ATOM	1260	C5'	RC	40	9.675	-15.779	2.716	0.00	0.00
ATOM	1261	1H5'	RC	40	10.396	-15.002	2.584	0.00	0.00
ATOM	1262	2H5'	RC	40	10.175	-16.652	3.064	0.00	0.00
ATOM	1263	C4'	RC	40	8.696	-15.354	3.793	0.00	0.00
ATOM	1264	H4'	RC	40	9.231	-15.278	4.719	0.00	0.00
ATOM	1265	O4'	RC	40	8.102	-14.114	3.499	0.00	0.00
ATOM	1266	C1'	RC	40	6.900	-14.026	4.238	0.00	0.00
ATOM	1267	H1'	RC	40	7.040	-13.363	5.074	0.00	0.00
ATOM	1268	N1	RC	40	5.766	-13.543	3.439	0.00	0.00
ATOM	1269	C6	RC	40	5.645	-13.849	2.123	0.00	0.00
ATOM	1270	H6	RC	40	6.429	-14.369	1.627	0.00	0.00
ATOM	1271	C5	RC	40	4.537	-13.509	1.464	0.00	0.00
ATOM	1272	H5	RC	40	4.450	-13.758	0.434	0.00	0.00
ATOM	1273	C4	RC	40	3.536	-12.832	2.168	0.00	0.00
ATOM	1274	N4	RC	40	2.459	-12.477	1.587	0.00	0.00
ATOM	1275	H41	RC	40	1.767	-12.024	2.127	0.00	0.00
ATOM	1276	H42	RC	40	2.361	-12.628	0.622	0.00	0.00
ATOM	1277	N3	RC	40	3.625	-12.529	3.434	0.00	0.00
ATOM	1278	C2	RC	40	4.732	-12.885	4.088	0.00	0.00
ATOM	1279	O2	RC	40	4.778	-12.621	5.276	0.00	0.00
ATOM	1280	C3'	RC	40	7.537	-16.296	4.005	0.00	0.00
ATOM	1281	H3'	RC	40	7.090	-16.506	3.054	0.00	0.00
ATOM	1282	C2'	RC	40	6.604	-15.406	4.784	0.00	0.00
ATOM	1283	1H2'	RC	40	5.598	-15.691	4.587	0.00	0.00
ATOM	1284	O2'	RC	40	6.884	-15.399	6.148	0.00	0.00
ATOM	1285	2HO'	RC	40	6.897	-16.218	6.427	0.00	0.00

ATOM	1286	O3'	RC	40	7.852	-17.492	4.675	0.00	0.00
ATOM	1287	P	RG	41	6.803	-18.652	4.808	0.00	0.00
ATOM	1288	O1P	RG	41	7.502	-19.867	5.193	0.00	0.00
ATOM	1289	O2P	RG	41	5.974	-18.676	3.609	0.00	0.00
ATOM	1290	O5'	RG	41	5.853	-18.246	6.007	0.00	0.00
ATOM	1291	C5'	RG	41	6.207	-18.459	7.353	0.00	0.00
ATOM	1292	1H5'	RG	41	7.095	-17.902	7.589	0.00	0.00
ATOM	1293	2H5'	RG	41	6.403	-19.503	7.510	0.00	0.00
ATOM	1294	C4'	RG	41	5.082	-18.040	8.294	0.00	0.00
ATOM	1295	H4'	RG	41	5.410	-18.219	9.303	0.00	0.00
ATOM	1296	O4'	RG	41	4.750	-16.672	8.176	0.00	0.00
ATOM	1297	C1'	RG	41	3.357	-16.527	8.412	0.00	0.00
ATOM	1298	H1'	RG	41	3.176	-15.811	9.198	0.00	0.00
ATOM	1299	N9	RG	41	2.667	-16.072	7.194	0.00	0.00
ATOM	1300	C8	RG	41	3.112	-16.077	5.913	0.00	0.00
ATOM	1301	H8	RG	41	4.079	-16.437	5.663	0.00	0.00
ATOM	1302	N7	RG	41	2.279	-15.607	5.048	0.00	0.00
ATOM	1303	C5	RG	41	1.169	-15.285	5.812	0.00	0.00
ATOM	1304	C6	RG	41	-0.105	-14.760	5.454	0.00	0.00
ATOM	1305	O6	RG	41	-0.526	-14.413	4.362	0.00	0.00
ATOM	1306	N1	RG	41	-0.952	-14.636	6.518	0.00	0.00
ATOM	1307	H1	RG	41	-1.859	-14.292	6.326	0.00	0.00
ATOM	1308	C2	RG	41	-0.630	-14.955	7.780	0.00	0.00
ATOM	1309	N2	RG	41	-1.534	-14.818	8.675	0.00	0.00
ATOM	1310	H21	RG	41	-2.447	-14.556	8.436	0.00	0.00
ATOM	1311	H22	RG	41	-1.312	-15.085	9.590	0.00	0.00
ATOM	1312	N3	RG	41	0.532	-15.425	8.162	0.00	0.00
ATOM	1313	C4	RG	41	1.399	-15.580	7.127	0.00	0.00
ATOM	1314	C3'	RG	41	3.781	-18.804	8.089	0.00	0.00
ATOM	1315	H3'	RG	41	3.534	-18.807	7.042	0.00	0.00
ATOM	1316	C2'	RG	41	2.827	-17.885	8.827	0.00	0.00
ATOM	1317	1H2'	RG	41	1.811	-18.045	8.511	0.00	0.00
ATOM	1318	O2'	RG	41	2.920	-17.983	10.221	0.00	0.00
ATOM	1319	2HO'	RG	41	2.618	-18.187	10.575	0.00	0.00
ATOM	1320	O3'	RG	41	3.794	-20.114	8.613	0.00	0.00
ATOM	1321	P	RG	42	2.854	-21.225	8.033	0.00	0.00
ATOM	1322	O1P	RG	42	3.084	-22.437	8.805	0.00	0.00
ATOM	1323	O2P	RG	42	3.067	-21.272	6.590	0.00	0.00
ATOM	1324	O5'	RG	42	1.385	-20.734	8.300	0.00	0.00
ATOM	1325	C5'	RG	42	0.820	-20.747	9.591	0.00	0.00
ATOM	1326	1H5'	RG	42	1.419	-20.161	10.258	0.00	0.00
ATOM	1327	2H5'	RG	42	0.790	-21.750	9.957	0.00	0.00
ATOM	1328	C4'	RG	42	-0.587	-20.194	9.605	0.00	0.00
ATOM	1329	H4'	RG	42	-0.947	-20.226	10.620	0.00	0.00
ATOM	1330	O4'	RG	42	-0.650	-18.863	9.140	0.00	0.00
ATOM	1331	C1'	RG	42	-1.855	-18.680	8.439	0.00	0.00
ATOM	1332	H1'	RG	42	-2.423	-17.870	8.864	0.00	0.00
ATOM	1333	N9	RG	42	-1.610	-18.368	7.015	0.00	0.00
ATOM	1334	C8	RG	42	-0.499	-18.586	6.258	0.00	0.00
ATOM	1335	H8	RG	42	0.373	-19.043	6.655	0.00	0.00
ATOM	1336	N7	RG	42	-0.597	-18.177	5.033	0.00	0.00
ATOM	1337	C5	RG	42	-1.879	-17.662	4.960	0.00	0.00
ATOM	1338	C6	RG	42	-2.603	-17.073	3.877	0.00	0.00
ATOM	1339	O6	RG	42	-2.254	-16.843	2.727	0.00	0.00
ATOM	1340	N1	RG	42	-3.889	-16.749	4.211	0.00	0.00
ATOM	1341	H1	RG	42	-4.476	-16.390	3.497	0.00	0.00
ATOM	1342	C2	RG	42	-4.418	-16.939	5.430	0.00	0.00
ATOM	1343	N2	RG	42	-5.663	-16.637	5.571	0.00	0.00
ATOM	1344	H21	RG	42	-6.183	-16.316	4.788	0.00	0.00
ATOM	1345	H22	RG	42	-6.090	-16.814	6.440	0.00	0.00
ATOM	1346	N3	RG	42	-3.779	-17.442	6.468	0.00	0.00
ATOM	1347	C4	RG	42	-2.507	-17.786	6.173	0.00	0.00
ATOM	1348	C3'	RG	42	-1.549	-20.991	8.759	0.00	0.00
ATOM	1349	H3'	RG	42	-1.107	-21.206	7.801	0.00	0.00
ATOM	1350	C2'	RG	42	-2.649	-19.965	8.593	0.00	0.00
ATOM	1351	1H2'	RG	42	-3.252	-20.171	7.730	0.00	0.00
ATOM	1352	O2'	RG	42	-3.451	-19.847	9.743	0.00	0.00
ATOM	1353	2HO'	RG	42	-3.666	-20.336	9.985	0.00	0.00

ATOM	1354	O3'	RG	42	-1.984	-22.158	9.408	0.00	0.00
ATOM	1355	P	RC	43	-2.484	-23.387	8.596	0.00	0.00
ATOM	1356	O1P	RC	43	-2.791	-24.435	9.552	0.00	0.00
ATOM	1357	O2P	RC	43	-1.519	-23.649	7.548	0.00	0.00
ATOM	1358	O5'	RC	43	-3.825	-22.945	7.929	0.00	0.00
ATOM	1359	C5'	RC	43	-5.006	-22.803	8.666	0.00	0.00
ATOM	1360	1H5'	RC	43	-4.826	-22.172	9.511	0.00	0.00
ATOM	1361	2H5'	RC	43	-5.321	-23.758	9.033	0.00	0.00
ATOM	1362	C4'	RC	43	-6.117	-22.214	7.837	0.00	0.00
ATOM	1363	H4'	RC	43	-6.986	-22.123	8.463	0.00	0.00
ATOM	1364	O4'	RC	43	-5.802	-20.933	7.341	0.00	0.00
ATOM	1365	C1'	RC	43	-6.477	-20.736	6.109	0.00	0.00
ATOM	1366	H1'	RC	43	-7.155	-19.906	6.201	0.00	0.00
ATOM	1367	N1	RC	43	-5.553	-20.461	4.981	0.00	0.00
ATOM	1368	C6	RC	43	-4.273	-20.899	4.972	0.00	0.00
ATOM	1369	H6	RC	43	-3.900	-21.428	5.815	0.00	0.00
ATOM	1370	C5	RC	43	-3.489	-20.696	3.895	0.00	0.00
ATOM	1371	H5	RC	43	-2.493	-21.058	3.877	0.00	0.00
ATOM	1372	C4	RC	43	-4.050	-20.011	2.806	0.00	0.00
ATOM	1373	N4	RC	43	-3.351	-19.777	1.750	0.00	0.00
ATOM	1374	H41	RC	43	-3.757	-19.246	1.025	0.00	0.00
ATOM	1375	H42	RC	43	-2.415	-20.073	1.724	0.00	0.00
ATOM	1376	N3	RC	43	-5.268	-19.565	2.796	0.00	0.00
ATOM	1377	C2	RC	43	-6.044	-19.787	3.875	0.00	0.00
ATOM	1378	O2	RC	43	-7.193	-19.404	3.835	0.00	0.00
ATOM	1379	C3'	RC	43	-6.519	-23.038	6.638	0.00	0.00
ATOM	1380	H3'	RC	43	-5.637	-23.304	6.086	0.00	0.00
ATOM	1381	C2'	RC	43	-7.292	-21.996	5.853	0.00	0.00
ATOM	1382	1H2'	RC	43	-7.320	-22.240	4.808	0.00	0.00
ATOM	1383	O2'	RC	43	-8.588	-21.805	6.361	0.00	0.00
ATOM	1384	2HO'	RC	43	-8.907	-22.460	6.538	0.00	0.00
ATOM	1385	O3'	RC	43	-7.286	-24.163	6.972	0.00	0.00
ATOM	1386	P	RA	44	-7.384	-25.384	5.995	0.00	0.00
ATOM	1387	O1P	RA	44	-8.150	-26.421	6.656	0.00	0.00
ATOM	1388	O2P	RA	44	-6.056	-25.708	5.526	0.00	0.00
ATOM	1389	O5'	RA	44	-8.202	-24.861	4.762	0.00	0.00
ATOM	1390	C5'	RA	44	-9.585	-24.705	4.807	0.00	0.00
ATOM	1391	1H5'	RA	44	-9.850	-24.082	5.632	0.00	0.00
ATOM	1392	2H5'	RA	44	-10.042	-25.656	4.950	0.00	0.00
ATOM	1393	C4'	RA	44	-10.140	-24.100	3.532	0.00	0.00
ATOM	1394	H4'	RA	44	-11.198	-23.981	3.659	0.00	0.00
ATOM	1395	O4'	RA	44	-9.585	-22.837	3.238	0.00	0.00
ATOM	1396	C1'	RA	44	-9.497	-22.688	1.833	0.00	0.00
ATOM	1397	H1'	RA	44	-10.014	-21.805	1.508	0.00	0.00
ATOM	1398	N9	RA	44	-8.091	-22.587	1.405	0.00	0.00
ATOM	1399	C8	RA	44	-6.967	-23.007	2.052	0.00	0.00
ATOM	1400	H8	RA	44	-7.004	-23.529	2.982	0.00	0.00
ATOM	1401	N7	RA	44	-5.861	-22.715	1.448	0.00	0.00
ATOM	1402	C5	RA	44	-6.297	-22.086	0.287	0.00	0.00
ATOM	1403	C6	RA	44	-5.670	-21.519	-0.831	0.00	0.00
ATOM	1404	N6	RA	44	-4.379	-21.410	-0.990	0.00	0.00
ATOM	1405	H61	RA	44	-4.050	-20.950	-1.800	0.00	0.00
ATOM	1406	H62	RA	44	-3.782	-21.710	-0.270	0.00	0.00
ATOM	1407	N1	RA	44	-6.363	-21.024	-1.838	0.00	0.00
ATOM	1408	C2	RA	44	-7.674	-21.063	-1.751	0.00	0.00
ATOM	1409	H2	RA	44	-8.207	-20.655	-2.575	0.00	0.00
ATOM	1410	N3	RA	44	-8.409	-21.544	-0.763	0.00	0.00
ATOM	1411	C4	RA	44	-7.649	-22.035	0.236	0.00	0.00
ATOM	1412	C3'	RA	44	-9.923	-24.950	2.298	0.00	0.00
ATOM	1413	H3'	RA	44	-8.901	-25.272	2.272	0.00	0.00
ATOM	1414	C2'	RA	44	-10.155	-23.905	1.222	0.00	0.00
ATOM	1415	1H2'	RA	44	-9.678	-24.192	0.303	0.00	0.00
ATOM	1416	O2'	RA	44	-11.514	-23.616	1.008	0.00	0.00
ATOM	1417	2HO'	RA	44	-11.831	-23.878	0.802	0.00	0.00
ATOM	1418	O3'	RA	44	-10.795	-26.039	2.196	0.00	0.00
ATOM	1419	P	RA	45	-10.433	-27.293	1.332	0.00	0.00
ATOM	1420	O1P	RA	45	-11.506	-28.255	1.507	0.00	0.00
ATOM	1421	O2P	RA	45	-9.082	-27.695	1.652	0.00	0.00

ATOM	1422	O5'	RA	45	-10.435	-26.801	-0.154	0.00	0.00
ATOM	1423	C5'	RA	45	-11.633	-26.544	-0.829	0.00	0.00
ATOM	1424	1H5'	RA	45	-12.239	-25.895	-0.238	0.00	0.00
ATOM	1425	2H5'	RA	45	-12.163	-27.455	-0.965	0.00	0.00
ATOM	1426	C4'	RA	45	-11.404	-25.913	-2.186	0.00	0.00
ATOM	1427	H4'	RA	45	-12.362	-25.717	-2.625	0.00	0.00
ATOM	1428	O4'	RA	45	-10.696	-24.698	-2.088	0.00	0.00
ATOM	1429	C1'	RA	45	-9.885	-24.553	-3.238	0.00	0.00
ATOM	1430	H1'	RA	45	-10.094	-23.629	-3.741	0.00	0.00
ATOM	1431	N9	RA	45	-8.466	-24.566	-2.869	0.00	0.00
ATOM	1432	C8	RA	45	-7.862	-25.097	-1.769	0.00	0.00
ATOM	1433	H8	RA	45	-8.405	-25.587	-0.993	0.00	0.00
ATOM	1434	N7	RA	45	-6.573	-24.972	-1.759	0.00	0.00
ATOM	1435	C5	RA	45	-6.308	-24.300	-2.946	0.00	0.00
ATOM	1436	C6	RA	45	-5.156	-23.815	-3.594	0.00	0.00
ATOM	1437	N6	RA	45	-3.949	-23.884	-3.110	0.00	0.00
ATOM	1438	H61	RA	45	-3.207	-23.474	-3.627	0.00	0.00
ATOM	1439	H62	RA	45	-3.824	-24.269	-2.216	0.00	0.00
ATOM	1440	N1	RA	45	-5.228	-23.236	-4.775	0.00	0.00
ATOM	1441	C2	RA	45	-6.406	-23.119	-5.328	0.00	0.00
ATOM	1442	H2	RA	45	-6.434	-22.639	-6.277	0.00	0.00
ATOM	1443	N3	RA	45	-7.574	-23.503	-4.854	0.00	0.00
ATOM	1444	C4	RA	45	-7.455	-24.081	-3.639	0.00	0.00
ATOM	1445	C3'	RA	45	-10.631	-26.768	-3.159	0.00	0.00
ATOM	1446	H3'	RA	45	-9.759	-27.159	-2.670	0.00	0.00
ATOM	1447	C2'	RA	45	-10.203	-25.711	-4.159	0.00	0.00
ATOM	1448	1H2'	RA	45	-9.346	-26.031	-4.721	0.00	0.00
ATOM	1449	O2'	RA	45	-11.241	-25.324	-5.016	0.00	0.00
ATOM	1450	2HO'	RA	45	-11.693	-25.937	-5.236	0.00	0.00
ATOM	1451	O3'	RA	45	-11.385	-27.789	-3.740	0.00	0.00
ATOM	1452	P	RG3	46	-10.687	-29.060	-4.331	0.00	0.00
ATOM	1453	O1P	RG3	46	-11.738	-29.953	-4.796	0.00	0.00
ATOM	1454	O2P	RG3	46	-9.741	-29.562	-3.354	0.00	0.00
ATOM	1455	O5'	RG3	46	-9.861	-28.559	-5.569	0.00	0.00
ATOM	1456	C5'	RG3	46	-10.473	-28.222	-6.782	0.00	0.00
ATOM	1457	1H5'	RG3	46	-11.208	-27.478	-6.615	0.00	0.00
ATOM	1458	2H5'	RG3	46	-10.960	-29.077	-7.186	0.00	0.00
ATOM	1459	C4'	RG3	46	-9.495	-27.688	-7.805	0.00	0.00
ATOM	1460	H4'	RG3	46	-10.048	-27.448	-8.689	0.00	0.00
ATOM	1461	O4'	RG3	46	-8.829	-26.529	-7.372	0.00	0.00
ATOM	1462	C1'	RG3	46	-7.518	-26.542	-7.881	0.00	0.00
ATOM	1463	H1'	RG3	46	-7.338	-25.669	-8.471	0.00	0.00
ATOM	1464	N9	RG3	46	-6.530	-26.581	-6.803	0.00	0.00
ATOM	1465	C8	RG3	46	-6.637	-27.100	-5.549	0.00	0.00
ATOM	1466	H8	RG3	46	-7.558	-27.483	-5.176	0.00	0.00
ATOM	1467	N7	RG3	46	-5.547	-27.062	-4.862	0.00	0.00
ATOM	1468	C5	RG3	46	-4.631	-26.490	-5.738	0.00	0.00
ATOM	1469	C6	RG3	46	-3.238	-26.211	-5.607	0.00	0.00
ATOM	1470	O6	RG3	46	-2.496	-26.404	-4.662	0.00	0.00
ATOM	1471	N1	RG3	46	-2.678	-25.655	-6.724	0.00	0.00
ATOM	1472	H1	RG3	46	-1.706	-25.444	-6.700	0.00	0.00
ATOM	1473	C2	RG3	46	-3.362	-25.403	-7.843	0.00	0.00
ATOM	1474	N2	RG3	46	-2.701	-24.900	-8.831	0.00	0.00
ATOM	1475	H21	RG3	46	-1.723	-24.787	-8.785	0.00	0.00
ATOM	1476	H22	RG3	46	-3.192	-24.698	-9.666	0.00	0.00
ATOM	1477	N3	RG3	46	-4.647	-25.634	-8.010	0.00	0.00
ATOM	1478	C4	RG3	46	-5.231	-26.187	-6.919	0.00	0.00
ATOM	1479	C3'	RG3	46	-8.432	-28.664	-8.204	0.00	0.00
ATOM	1480	H3'	RG3	46	-8.040	-29.143	-7.344	0.00	0.00
ATOM	1481	C2'	RG3	46	-7.384	-27.755	-8.766	0.00	0.00
ATOM	1482	1H2'	RG3	46	-6.417	-28.198	-8.689	0.00	0.00
ATOM	1483	O2'	RG3	46	-7.636	-27.395	-10.089	0.00	0.00
ATOM	1484	2HO'	RG3	46	-7.489	-27.676	-10.524	0.00	0.00
ATOM	1485	O3'	RG3	46	-8.858	-29.568	-9.150	0.00	0.00
ATOM	1486	H3T	RG3	46	-8.845	-29.972	-9.146	0.00	0.00

3R-bulged-out conformation - 3R_bulged_out_c.pdb

REMARK MD average structure 26700 - 26800 ps

REMARK 1XPF (PDB database)

REMARK sequence chain I. residues 1-23 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK sequence chain II. residues 24-46 5'(CUUGCUGAGGUGCACACAGCAAG)3'

REMARK PDB format: output from Ptraj module of AMBER-8.0

ATOM	1	H5T	RC5	1	-12.002	24.760	-4.840	0.00	0.00
ATOM	2	O5'	RC5	1	-11.617	25.065	-4.972	0.00	0.00
ATOM	3	C5'	RC5	1	-10.368	24.541	-5.091	0.00	0.00
ATOM	4	1H5'	RC5	1	-10.356	23.863	-5.873	0.00	0.00
ATOM	5	2H5'	RC5	1	-10.136	24.034	-4.225	0.00	0.00
ATOM	6	C4'	RC5	1	-9.372	25.599	-5.341	0.00	0.00
ATOM	7	H4'	RC5	1	-9.690	26.171	-6.167	0.00	0.00
ATOM	8	O4'	RC5	1	-9.212	26.404	-4.235	0.00	0.00
ATOM	9	C1'	RC5	1	-7.922	26.926	-4.237	0.00	0.00
ATOM	10	H1'	RC5	1	-7.991	27.960	-4.464	0.00	0.00
ATOM	11	N1	RC5	1	-7.249	26.775	-2.932	0.00	0.00
ATOM	12	C6	RC5	1	-7.568	25.827	-2.070	0.00	0.00
ATOM	13	H6	RC5	1	-8.327	25.159	-2.329	0.00	0.00
ATOM	14	C5	RC5	1	-6.945	25.765	-0.891	0.00	0.00
ATOM	15	H5	RC5	1	-7.202	25.034	-0.212	0.00	0.00
ATOM	16	C4	RC5	1	-5.971	26.690	-0.599	0.00	0.00
ATOM	17	N4	RC5	1	-5.364	26.695	0.525	0.00	0.00
ATOM	18	H41	RC5	1	-4.697	27.375	0.705	0.00	0.00
ATOM	19	H42	RC5	1	-5.574	26.025	1.174	0.00	0.00
ATOM	20	N3	RC5	1	-5.639	27.594	-1.421	0.00	0.00
ATOM	21	C2	RC5	1	-6.258	27.645	-2.598	0.00	0.00
ATOM	22	O2	RC5	1	-5.903	28.476	-3.368	0.00	0.00
ATOM	23	C3'	RC5	1	-8.012	25.051	-5.625	0.00	0.00
ATOM	24	H3'	RC5	1	-7.799	24.292	-4.935	0.00	0.00
ATOM	25	C2'	RC5	1	-7.174	26.229	-5.331	0.00	0.00
ATOM	26	1H2'	RC5	1	-6.214	25.933	-5.017	0.00	0.00
ATOM	27	O2'	RC5	1	-7.113	27.073	-6.397	0.00	0.00
ATOM	28	2HO'	RC5	1	-6.870	26.820	-6.935	0.00	0.00
ATOM	29	O3'	RC5	1	-7.888	24.579	-6.916	0.00	0.00
ATOM	30	P	RU	2	-6.767	23.558	-7.293	0.00	0.00
ATOM	31	O1P	RU	2	-7.005	23.141	-8.656	0.00	0.00
ATOM	32	O2P	RU	2	-6.715	22.558	-6.259	0.00	0.00
ATOM	33	O5'	RU	2	-5.432	24.365	-7.232	0.00	0.00
ATOM	34	C5'	RU	2	-5.031	25.207	-8.264	0.00	0.00
ATOM	35	1H5'	RU	2	-5.777	25.955	-8.426	0.00	0.00
ATOM	36	2H5'	RU	2	-4.921	24.660	-9.173	0.00	0.00
ATOM	37	C4'	RU	2	-3.699	25.857	-7.956	0.00	0.00
ATOM	38	H4'	RU	2	-3.413	26.463	-8.792	0.00	0.00
ATOM	39	O4'	RU	2	-3.753	26.679	-6.815	0.00	0.00
ATOM	40	C1'	RU	2	-2.489	26.672	-6.166	0.00	0.00
ATOM	41	H1'	RU	2	-2.061	27.656	-6.203	0.00	0.00
ATOM	42	N1	RU	2	-2.582	26.258	-4.750	0.00	0.00
ATOM	43	C6	RU	2	-3.546	25.414	-4.311	0.00	0.00
ATOM	44	H6	RU	2	-4.216	24.988	-5.015	0.00	0.00
ATOM	45	C5	RU	2	-3.656	25.118	-3.002	0.00	0.00
ATOM	46	H5	RU	2	-4.421	24.467	-2.667	0.00	0.00
ATOM	47	C4	RU	2	-2.772	25.659	-2.032	0.00	0.00
ATOM	48	O4	RU	2	-2.812	25.437	-0.844	0.00	0.00
ATOM	49	N3	RU	2	-1.804	26.445	-2.548	0.00	0.00
ATOM	50	H3	RU	2	-1.161	26.830	-1.904	0.00	0.00
ATOM	51	C2	RU	2	-1.642	26.747	-3.865	0.00	0.00
ATOM	52	O2	RU	2	-0.691	27.406	-4.196	0.00	0.00
ATOM	53	C3'	RU	2	-2.572	24.873	-7.704	0.00	0.00
ATOM	54	H3'	RU	2	-2.933	24.093	-7.061	0.00	0.00
ATOM	55	C2'	RU	2	-1.591	25.747	-6.949	0.00	0.00
ATOM	56	1H2'	RU	2	-0.983	25.152	-6.297	0.00	0.00
ATOM	57	O2'	RU	2	-0.786	26.496	-7.821	0.00	0.00
ATOM	58	2HO'	RU	2	-0.405	25.923	-8.329	0.00	0.00
ATOM	59	O3'	RU	2	-2.043	24.337	-8.890	0.00	0.00
ATOM	60	P	RU	3	-1.092	23.099	-8.875	0.00	0.00
ATOM	61	O1P	RU	3	-0.791	22.754	-10.239	0.00	0.00

ATOM	62	O2P	RU	3	-1.654	22.114	-8.001	0.00	0.00
ATOM	63	O5'	RU	3	0.210	23.677	-8.247	0.00	0.00
ATOM	64	C5'	RU	3	1.032	22.925	-7.453	0.00	0.00
ATOM	65	1H5'	RU	3	1.531	22.208	-8.052	0.00	0.00
ATOM	66	2H5'	RU	3	0.467	22.434	-6.713	0.00	0.00
ATOM	67	C4'	RU	3	2.042	23.802	-6.766	0.00	0.00
ATOM	68	H4'	RU	3	2.616	24.339	-7.488	0.00	0.00
ATOM	69	O4'	RU	3	1.419	24.714	-5.896	0.00	0.00
ATOM	70	C1'	RU	3	2.172	24.827	-4.704	0.00	0.00
ATOM	71	H1'	RU	3	2.408	25.856	-4.521	0.00	0.00
ATOM	72	N1	RU	3	1.428	24.315	-3.520	0.00	0.00
ATOM	73	C6	RU	3	0.310	23.544	-3.650	0.00	0.00
ATOM	74	H6	RU	3	-0.021	23.264	-4.620	0.00	0.00
ATOM	75	C5	RU	3	-0.402	23.156	-2.563	0.00	0.00
ATOM	76	H5	RU	3	-1.284	22.572	-2.675	0.00	0.00
ATOM	77	C4	RU	3	-0.019	23.514	-1.237	0.00	0.00
ATOM	78	O4	RU	3	-0.614	23.217	-0.217	0.00	0.00
ATOM	79	N3	RU	3	1.103	24.269	-1.187	0.00	0.00
ATOM	80	H3	RU	3	1.415	24.530	-0.283	0.00	0.00
ATOM	81	C2	RU	3	1.848	24.694	-2.253	0.00	0.00
ATOM	82	O2	RU	3	2.835	25.364	-2.051	0.00	0.00
ATOM	83	C3'	RU	3	2.997	23.010	-5.926	0.00	0.00
ATOM	84	H3'	RU	3	2.437	22.264	-5.404	0.00	0.00
ATOM	85	C2'	RU	3	3.455	24.060	-4.954	0.00	0.00
ATOM	86	1H2'	RU	3	3.819	23.609	-4.060	0.00	0.00
ATOM	87	O2'	RU	3	4.413	24.910	-5.516	0.00	0.00
ATOM	88	2HO'	RU	3	4.836	24.907	-5.580	0.00	0.00
ATOM	89	O3'	RU	3	4.031	22.433	-6.676	0.00	0.00
ATOM	90	P	RG	4	4.716	21.123	-6.232	0.00	0.00
ATOM	91	O1P	RG	4	5.695	20.796	-7.251	0.00	0.00
ATOM	92	O2P	RG	4	3.692	20.156	-5.910	0.00	0.00
ATOM	93	O5'	RG	4	5.451	21.458	-4.902	0.00	0.00
ATOM	94	C5'	RG	4	6.653	22.178	-4.904	0.00	0.00
ATOM	95	1H5'	RG	4	6.531	23.095	-5.437	0.00	0.00
ATOM	96	2H5'	RG	4	7.413	21.611	-5.389	0.00	0.00
ATOM	97	C4'	RG	4	7.136	22.488	-3.502	0.00	0.00
ATOM	98	H4'	RG	4	8.060	23.034	-3.585	0.00	0.00
ATOM	99	O4'	RG	4	6.206	23.275	-2.798	0.00	0.00
ATOM	100	C1'	RG	4	6.245	22.923	-1.429	0.00	0.00
ATOM	101	H1'	RG	4	6.454	23.786	-0.828	0.00	0.00
ATOM	102	N9	RG	4	4.960	22.355	-0.990	0.00	0.00
ATOM	103	C8	RG	4	3.946	21.844	-1.737	0.00	0.00
ATOM	104	H8	RG	4	3.991	21.780	-2.803	0.00	0.00
ATOM	105	N7	RG	4	2.916	21.470	-1.053	0.00	0.00
ATOM	106	C5	RG	4	3.284	21.717	0.264	0.00	0.00
ATOM	107	C6	RG	4	2.593	21.520	1.500	0.00	0.00
ATOM	108	O6	RG	4	1.464	21.111	1.697	0.00	0.00
ATOM	109	N1	RG	4	3.356	21.826	2.600	0.00	0.00
ATOM	110	H1	RG	4	2.952	21.682	3.499	0.00	0.00
ATOM	111	C2	RG	4	4.602	22.304	2.536	0.00	0.00
ATOM	112	N2	RG	4	5.198	22.527	3.661	0.00	0.00
ATOM	113	H21	RG	4	4.733	22.308	4.503	0.00	0.00
ATOM	114	H22	RG	4	6.111	22.893	3.642	0.00	0.00
ATOM	115	N3	RG	4	5.262	22.552	1.420	0.00	0.00
ATOM	116	C4	RG	4	4.552	22.229	0.308	0.00	0.00
ATOM	117	C3'	RG	4	7.378	21.262	-2.639	0.00	0.00
ATOM	118	H3'	RG	4	6.538	20.592	-2.727	0.00	0.00
ATOM	119	C2'	RG	4	7.354	21.908	-1.267	0.00	0.00
ATOM	120	1H2'	RG	4	7.127	21.195	-0.495	0.00	0.00
ATOM	121	O2'	RG	4	8.546	22.585	-0.973	0.00	0.00
ATOM	122	2HO'	RG	4	9.071	22.250	-1.078	0.00	0.00
ATOM	123	O3'	RG	4	8.587	20.607	-2.919	0.00	0.00
ATOM	124	P	RC	5	8.773	19.078	-2.616	0.00	0.00
ATOM	125	O1P	RC	5	10.106	18.704	-3.052	0.00	0.00
ATOM	126	O2P	RC	5	7.638	18.365	-3.171	0.00	0.00
ATOM	127	O5'	RC	5	8.702	18.931	-1.062	0.00	0.00
ATOM	128	C5'	RC	5	9.760	19.332	-0.242	0.00	0.00
ATOM	129	1H5'	RC	5	10.058	20.327	-0.489	0.00	0.00

ATOM	130	2H5'	RC	5	10.593	18.688	-0.402	0.00	0.00
ATOM	131	C4'	RC	5	9.391	19.302	1.232	0.00	0.00
ATOM	132	H4'	RC	5	10.218	19.703	1.785	0.00	0.00
ATOM	133	O4'	RC	5	8.255	20.097	1.492	0.00	0.00
ATOM	134	C1'	RC	5	7.545	19.529	2.574	0.00	0.00
ATOM	135	H1'	RC	5	7.474	20.241	3.376	0.00	0.00
ATOM	136	N1	RC	5	6.180	19.094	2.199	0.00	0.00
ATOM	137	C6	RC	5	5.807	18.883	0.910	0.00	0.00
ATOM	138	H6	RC	5	6.504	19.022	0.123	0.00	0.00
ATOM	139	C5	RC	5	4.548	18.505	0.624	0.00	0.00
ATOM	140	H5	RC	5	4.249	18.349	-0.383	0.00	0.00
ATOM	141	C4	RC	5	3.661	18.347	1.695	0.00	0.00
ATOM	142	N4	RC	5	2.439	18.019	1.483	0.00	0.00
ATOM	143	H41	RC	5	1.846	17.966	2.270	0.00	0.00
ATOM	144	H42	RC	5	2.119	17.905	0.566	0.00	0.00
ATOM	145	N3	RC	5	4.003	18.514	2.942	0.00	0.00
ATOM	146	C2	RC	5	5.261	18.877	3.218	0.00	0.00
ATOM	147	O2	RC	5	5.575	19.007	4.387	0.00	0.00
ATOM	148	C3'	RC	5	9.093	17.931	1.808	0.00	0.00
ATOM	149	H3'	RC	5	8.421	17.415	1.146	0.00	0.00
ATOM	150	C2'	RC	5	8.367	18.353	3.065	0.00	0.00
ATOM	151	1H2'	RC	5	7.754	17.558	3.449	0.00	0.00
ATOM	152	O2'	RC	5	9.242	18.813	4.058	0.00	0.00
ATOM	153	2HO'	RC	5	9.863	18.435	4.082	0.00	0.00
ATOM	154	O3'	RC	5	10.245	17.177	2.095	0.00	0.00
ATOM	155	P	RU	6	10.182	15.612	2.192	0.00	0.00
ATOM	156	O1P	RU	6	11.515	15.132	2.535	0.00	0.00
ATOM	157	O2P	RU	6	9.561	15.130	0.972	0.00	0.00
ATOM	158	O5'	RU	6	9.212	15.271	3.391	0.00	0.00
ATOM	159	C5'	RU	6	9.599	15.422	4.730	0.00	0.00
ATOM	160	1H5'	RU	6	9.919	16.432	4.897	0.00	0.00
ATOM	161	2H5'	RU	6	10.409	14.755	4.946	0.00	0.00
ATOM	162	C4'	RU	6	8.454	15.114	5.672	0.00	0.00
ATOM	163	H4'	RU	6	8.791	15.315	6.672	0.00	0.00
ATOM	164	O4'	RU	6	7.309	15.894	5.426	0.00	0.00
ATOM	165	C1'	RU	6	6.162	15.166	5.822	0.00	0.00
ATOM	166	H1'	RU	6	5.725	15.641	6.684	0.00	0.00
ATOM	167	N1	RU	6	5.137	15.086	4.765	0.00	0.00
ATOM	168	C6	RU	6	5.460	15.122	3.434	0.00	0.00
ATOM	169	H6	RU	6	6.483	15.220	3.153	0.00	0.00
ATOM	170	C5	RU	6	4.491	15.042	2.492	0.00	0.00
ATOM	171	H5	RU	6	4.731	15.084	1.455	0.00	0.00
ATOM	172	C4	RU	6	3.105	14.904	2.841	0.00	0.00
ATOM	173	O4	RU	6	2.179	14.813	2.065	0.00	0.00
ATOM	174	N3	RU	6	2.874	14.860	4.172	0.00	0.00
ATOM	175	H3	RU	6	1.931	14.724	4.463	0.00	0.00
ATOM	176	C2	RU	6	3.816	14.914	5.158	0.00	0.00
ATOM	177	O2	RU	6	3.477	14.793	6.316	0.00	0.00
ATOM	178	C3'	RU	6	8.015	13.668	5.612	0.00	0.00
ATOM	179	H3'	RU	6	7.928	13.365	4.586	0.00	0.00
ATOM	180	C2'	RU	6	6.630	13.774	6.229	0.00	0.00
ATOM	181	1H2'	RU	6	5.992	13.008	5.837	0.00	0.00
ATOM	182	O2'	RU	6	6.669	13.709	7.627	0.00	0.00
ATOM	183	2HO'	RU	6	7.028	12.983	7.831	0.00	0.00
ATOM	184	O3'	RU	6	8.900	12.836	6.318	0.00	0.00
ATOM	185	P	RG	7	8.747	11.277	6.311	0.00	0.00
ATOM	186	O1P	RG	7	9.884	10.719	7.013	0.00	0.00
ATOM	187	O2P	RG	7	8.487	10.863	4.951	0.00	0.00
ATOM	188	O5'	RG	7	7.478	11.030	7.195	0.00	0.00
ATOM	189	C5'	RG	7	6.681	9.901	7.080	0.00	0.00
ATOM	190	1H5'	RG	7	7.221	9.071	7.439	0.00	0.00
ATOM	191	2H5'	RG	7	6.441	9.738	6.072	0.00	0.00
ATOM	192	C4'	RG	7	5.397	10.078	7.875	0.00	0.00
ATOM	193	H4'	RG	7	5.650	10.462	8.846	0.00	0.00
ATOM	194	O4'	RG	7	4.537	10.974	7.200	0.00	0.00
ATOM	195	C1'	RG	7	3.377	10.280	6.789	0.00	0.00
ATOM	196	H1'	RG	7	2.600	10.436	7.521	0.00	0.00
ATOM	197	N9	RG	7	2.904	10.743	5.475	0.00	0.00

ATOM	198	C8	RG	7	3.631	11.040	4.372	0.00	0.00
ATOM	199	H8	RG	7	4.695	10.985	4.363	0.00	0.00
ATOM	200	N7	RG	7	2.919	11.385	3.341	0.00	0.00
ATOM	201	C5	RG	7	1.615	11.305	3.796	0.00	0.00
ATOM	202	C6	RG	7	0.363	11.535	3.139	0.00	0.00
ATOM	203	O6	RG	7	0.140	11.874	1.991	0.00	0.00
ATOM	204	N1	RG	7	-0.719	11.326	3.939	0.00	0.00
ATOM	205	H1	RG	7	-1.623	11.476	3.548	0.00	0.00
ATOM	206	C2	RG	7	-0.627	10.930	5.216	0.00	0.00
ATOM	207	N2	RG	7	-1.730	10.782	5.862	0.00	0.00
ATOM	208	H21	RG	7	-2.605	10.930	5.414	0.00	0.00
ATOM	209	H22	RG	7	-1.686	10.503	6.806	0.00	0.00
ATOM	210	N3	RG	7	0.504	10.675	5.861	0.00	0.00
ATOM	211	C4	RG	7	1.600	10.896	5.098	0.00	0.00
ATOM	212	C3'	RG	7	4.644	8.760	8.030	0.00	0.00
ATOM	213	H3'	RG	7	5.309	7.912	8.002	0.00	0.00
ATOM	214	C2'	RG	7	3.740	8.809	6.808	0.00	0.00
ATOM	215	1H2'	RG	7	4.313	8.585	5.926	0.00	0.00
ATOM	216	O2'	RG	7	2.625	7.951	6.886	0.00	0.00
ATOM	217	2HO'	RG	7	2.912	7.068	6.881	0.00	0.00
ATOM	218	O3'	RG	7	3.880	8.772	9.206	0.00	0.00
ATOM	219	P	RA	8	4.467	8.291	10.574	0.00	0.00
ATOM	220	O1P	RA	8	3.428	8.445	11.563	0.00	0.00
ATOM	221	O2P	RA	8	5.751	8.933	10.788	0.00	0.00
ATOM	222	O5'	RA	8	4.728	6.762	10.399	0.00	0.00
ATOM	223	C5'	RA	8	3.749	5.891	9.921	0.00	0.00
ATOM	224	1H5'	RA	8	3.535	6.144	8.914	0.00	0.00
ATOM	225	2H5'	RA	8	2.859	5.985	10.484	0.00	0.00
ATOM	226	C4'	RA	8	4.251	4.476	9.991	0.00	0.00
ATOM	227	H4'	RA	8	5.261	4.464	9.658	0.00	0.00
ATOM	228	O4'	RA	8	4.181	4.032	11.303	0.00	0.00
ATOM	229	C1'	RA	8	3.949	2.658	11.352	0.00	0.00
ATOM	230	H1'	RA	8	4.814	2.174	11.724	0.00	0.00
ATOM	231	N9	RA	8	2.828	2.305	12.212	0.00	0.00
ATOM	232	C8	RA	8	2.783	1.358	13.107	0.00	0.00
ATOM	233	H8	RA	8	3.616	0.800	13.303	0.00	0.00
ATOM	234	N7	RA	8	1.650	1.206	13.688	0.00	0.00
ATOM	235	C5	RA	8	0.872	2.102	13.117	0.00	0.00
ATOM	236	C6	RA	8	-0.450	2.453	13.246	0.00	0.00
ATOM	237	N6	RA	8	-1.296	1.973	14.073	0.00	0.00
ATOM	238	H61	RA	8	-2.199	2.292	14.070	0.00	0.00
ATOM	239	H62	RA	8	-1.011	1.326	14.683	0.00	0.00
ATOM	240	N1	RA	8	-0.950	3.339	12.525	0.00	0.00
ATOM	241	C2	RA	8	-0.160	3.892	11.679	0.00	0.00
ATOM	242	H2	RA	8	-0.571	4.622	11.118	0.00	0.00
ATOM	243	N3	RA	8	1.101	3.684	11.448	0.00	0.00
ATOM	244	C4	RA	8	1.572	2.763	12.203	0.00	0.00
ATOM	245	C3'	RA	8	3.473	3.471	9.165	0.00	0.00
ATOM	246	H3'	RA	8	2.434	3.695	9.208	0.00	0.00
ATOM	247	C2'	RA	8	3.732	2.195	9.933	0.00	0.00
ATOM	248	1H2'	RA	8	2.889	1.542	9.872	0.00	0.00
ATOM	249	O2'	RA	8	4.874	1.542	9.499	0.00	0.00
ATOM	250	2HO'	RA	8	4.944	1.637	8.634	0.00	0.00
ATOM	251	O3'	RA	8	3.910	3.273	7.857	0.00	0.00
ATOM	252	P	RG	9	3.257	3.955	6.636	0.00	0.00
ATOM	253	O1P	RG	9	3.752	3.261	5.471	0.00	0.00
ATOM	254	O2P	RG	9	3.489	5.384	6.729	0.00	0.00
ATOM	255	O5'	RG	9	1.719	3.689	6.744	0.00	0.00
ATOM	256	C5'	RG	9	1.139	2.456	6.399	0.00	0.00
ATOM	257	1H5'	RG	9	1.549	2.098	5.486	0.00	0.00
ATOM	258	2H5'	RG	9	0.104	2.605	6.267	0.00	0.00
ATOM	259	C4'	RG	9	1.317	1.413	7.468	0.00	0.00
ATOM	260	H4'	RG	9	2.346	1.347	7.704	0.00	0.00
ATOM	261	O4'	RG	9	0.585	1.736	8.607	0.00	0.00
ATOM	262	C1'	RG	9	0.256	0.582	9.306	0.00	0.00
ATOM	263	H1'	RG	9	0.804	0.538	10.213	0.00	0.00
ATOM	264	N9	RG	9	-1.139	0.557	9.667	0.00	0.00
ATOM	265	C8	RG	9	-2.169	1.063	9.054	0.00	0.00

ATOM	266	H8	RG	9	-2.058	1.577	8.167	0.00	0.00
ATOM	267	N7	RG	9	-3.280	0.903	9.655	0.00	0.00
ATOM	268	C5	RG	9	-2.963	0.207	10.745	0.00	0.00
ATOM	269	C6	RG	9	-3.744	-0.272	11.804	0.00	0.00
ATOM	270	O6	RG	9	-4.908	-0.174	12.003	0.00	0.00
ATOM	271	N1	RG	9	-3.057	-0.934	12.694	0.00	0.00
ATOM	272	H1	RG	9	-3.553	-1.314	13.431	0.00	0.00
ATOM	273	C2	RG	9	-1.765	-1.114	12.596	0.00	0.00
ATOM	274	N2	RG	9	-1.240	-1.716	13.531	0.00	0.00
ATOM	275	H21	RG	9	-1.795	-2.065	14.240	0.00	0.00
ATOM	276	H22	RG	9	-0.299	-1.826	13.487	0.00	0.00
ATOM	277	N3	RG	9	-1.000	-0.676	11.646	0.00	0.00
ATOM	278	C4	RG	9	-1.657	-0.021	10.744	0.00	0.00
ATOM	279	C3'	RG	9	0.882	0.025	7.063	0.00	0.00
ATOM	280	H3'	RG	9	-0.037	0.080	6.527	0.00	0.00
ATOM	281	C2'	RG	9	0.633	-0.586	8.419	0.00	0.00
ATOM	282	1H2'	RG	9	-0.157	-1.287	8.371	0.00	0.00
ATOM	283	O2'	RG	9	1.763	-1.170	8.940	0.00	0.00
ATOM	284	2HO'	RG	9	2.025	-1.812	8.351	0.00	0.00
ATOM	285	O3'	RG	9	1.869	-0.614	6.310	0.00	0.00
ATOM	286	P	RG	10	1.653	-2.035	5.687	0.00	0.00
ATOM	287	O1P	RG	10	0.616	-1.920	4.687	0.00	0.00
ATOM	288	O2P	RG	10	1.499	-2.981	6.772	0.00	0.00
ATOM	289	O5'	RG	10	3.003	-2.335	4.950	0.00	0.00
ATOM	290	C5'	RG	10	4.190	-2.514	5.661	0.00	0.00
ATOM	291	1H5'	RG	10	4.030	-3.225	6.429	0.00	0.00
ATOM	292	2H5'	RG	10	4.477	-1.590	6.105	0.00	0.00
ATOM	293	C4'	RG	10	5.332	-2.986	4.791	0.00	0.00
ATOM	294	H4'	RG	10	6.238	-2.893	5.357	0.00	0.00
ATOM	295	O4'	RG	10	5.187	-4.345	4.448	0.00	0.00
ATOM	296	C1'	RG	10	5.350	-4.504	3.059	0.00	0.00
ATOM	297	H1'	RG	10	5.946	-5.371	2.851	0.00	0.00
ATOM	298	N9	RG	10	4.042	-4.687	2.402	0.00	0.00
ATOM	299	C8	RG	10	2.792	-4.712	2.951	0.00	0.00
ATOM	300	H8	RG	10	2.620	-4.540	3.992	0.00	0.00
ATOM	301	N7	RG	10	1.832	-4.986	2.117	0.00	0.00
ATOM	302	C5	RG	10	2.499	-5.190	0.915	0.00	0.00
ATOM	303	C6	RG	10	2.027	-5.570	-0.382	0.00	0.00
ATOM	304	O6	RG	10	0.893	-5.842	-0.744	0.00	0.00
ATOM	305	N1	RG	10	3.014	-5.635	-1.328	0.00	0.00
ATOM	306	H1	RG	10	2.742	-5.899	-2.252	0.00	0.00
ATOM	307	C2	RG	10	4.309	-5.400	-1.068	0.00	0.00
ATOM	308	N2	RG	10	5.119	-5.465	-2.078	0.00	0.00
ATOM	309	H21	RG	10	4.767	-5.680	-2.984	0.00	0.00
ATOM	310	H22	RG	10	6.076	-5.283	-1.902	0.00	0.00
ATOM	311	N3	RG	10	4.804	-5.061	0.112	0.00	0.00
ATOM	312	C4	RG	10	3.846	-4.978	1.079	0.00	0.00
ATOM	313	C3'	RG	10	5.515	-2.208	3.515	0.00	0.00
ATOM	314	H3'	RG	10	4.569	-1.890	3.127	0.00	0.00
ATOM	315	C2'	RG	10	6.085	-3.266	2.591	0.00	0.00
ATOM	316	1H2'	RG	10	5.859	-3.027	1.567	0.00	0.00
ATOM	317	O2'	RG	10	7.465	-3.447	2.771	0.00	0.00
ATOM	318	2HO'	RG	10	7.801	-3.002	2.972	0.00	0.00
ATOM	319	O3'	RG	10	6.387	-1.125	3.694	0.00	0.00
ATOM	320	P	RU	11	6.148	0.249	2.993	0.00	0.00
ATOM	321	O1P	RU	11	7.240	1.125	3.371	0.00	0.00
ATOM	322	O2P	RU	11	4.788	0.661	3.292	0.00	0.00
ATOM	323	O5'	RU	11	6.247	-0.013	1.445	0.00	0.00
ATOM	324	C5'	RU	11	7.479	-0.233	0.820	0.00	0.00
ATOM	325	1H5'	RU	11	8.017	-0.986	1.351	0.00	0.00
ATOM	326	2H5'	RU	11	8.054	0.664	0.848	0.00	0.00
ATOM	327	C4'	RU	11	7.342	-0.667	-0.624	0.00	0.00
ATOM	328	H4'	RU	11	8.332	-0.776	-1.030	0.00	0.00
ATOM	329	O4'	RU	11	6.669	-1.905	-0.753	0.00	0.00
ATOM	330	C1'	RU	11	5.940	-1.914	-1.967	0.00	0.00
ATOM	331	H1'	RU	11	6.273	-2.732	-2.588	0.00	0.00
ATOM	332	N1	RU	11	4.469	-2.042	-1.769	0.00	0.00
ATOM	333	C6	RU	11	3.867	-1.806	-0.561	0.00	0.00

ATOM	334	H6	RU	11	4.461	-1.509	0.276	0.00	0.00
ATOM	335	C5	RU	11	2.533	-1.949	-0.415	0.00	0.00
ATOM	336	H5	RU	11	2.078	-1.761	0.528	0.00	0.00
ATOM	337	C4	RU	11	1.693	-2.354	-1.503	0.00	0.00
ATOM	338	O4	RU	11	0.488	-2.517	-1.457	0.00	0.00
ATOM	339	N3	RU	11	2.361	-2.575	-2.666	0.00	0.00
ATOM	340	H3	RU	11	1.814	-2.851	-3.445	0.00	0.00
ATOM	341	C2	RU	11	3.707	-2.425	-2.868	0.00	0.00
ATOM	342	O2	RU	11	4.175	-2.618	-3.978	0.00	0.00
ATOM	343	C3'	RU	11	6.580	0.302	-1.507	0.00	0.00
ATOM	344	H3'	RU	11	5.658	0.554	-1.011	0.00	0.00
ATOM	345	C2'	RU	11	6.279	-0.610	-2.678	0.00	0.00
ATOM	346	1H2'	RU	11	5.449	-0.235	-3.247	0.00	0.00
ATOM	347	O2'	RU	11	7.390	-0.827	-3.510	0.00	0.00
ATOM	348	2HO'	RU	11	7.649	-0.553	-3.735	0.00	0.00
ATOM	349	O3'	RU	11	7.294	1.469	-1.882	0.00	0.00
ATOM	350	P	RG	12	6.538	2.711	-2.494	0.00	0.00
ATOM	351	O1P	RG	12	7.483	3.829	-2.604	0.00	0.00
ATOM	352	O2P	RG	12	5.308	2.920	-1.737	0.00	0.00
ATOM	353	O5'	RG	12	6.116	2.296	-3.954	0.00	0.00
ATOM	354	C5'	RG	12	7.055	2.151	-4.995	0.00	0.00
ATOM	355	1H5'	RG	12	7.795	1.418	-4.734	0.00	0.00
ATOM	356	2H5'	RG	12	7.560	3.084	-5.163	0.00	0.00
ATOM	357	C4'	RG	12	6.367	1.736	-6.285	0.00	0.00
ATOM	358	H4'	RG	12	7.120	1.603	-7.046	0.00	0.00
ATOM	359	O4'	RG	12	5.651	0.523	-6.162	0.00	0.00
ATOM	360	C1'	RG	12	4.452	0.614	-6.910	0.00	0.00
ATOM	361	H1'	RG	12	4.391	-0.203	-7.609	0.00	0.00
ATOM	362	N9	RG	12	3.278	0.515	-6.018	0.00	0.00
ATOM	363	C8	RG	12	3.181	0.780	-4.686	0.00	0.00
ATOM	364	H8	RG	12	3.995	1.180	-4.129	0.00	0.00
ATOM	365	N7	RG	12	2.039	0.481	-4.146	0.00	0.00
ATOM	366	C5	RG	12	1.290	0.013	-5.219	0.00	0.00
ATOM	367	C6	RG	12	-0.058	-0.477	-5.307	0.00	0.00
ATOM	368	O6	RG	12	-0.884	-0.650	-4.422	0.00	0.00
ATOM	369	N1	RG	12	-0.451	-0.785	-6.581	0.00	0.00
ATOM	370	H1	RG	12	-1.386	-1.112	-6.703	0.00	0.00
ATOM	371	C2	RG	12	0.352	-0.672	-7.654	0.00	0.00
ATOM	372	N2	RG	12	-0.160	-0.972	-8.801	0.00	0.00
ATOM	373	H21	RG	12	-1.113	-1.241	-8.859	0.00	0.00
ATOM	374	H22	RG	12	0.402	-0.874	-9.598	0.00	0.00
ATOM	375	N3	RG	12	1.615	-0.266	-7.619	0.00	0.00
ATOM	376	C4	RG	12	2.033	0.070	-6.372	0.00	0.00
ATOM	377	C3'	RG	12	5.396	2.777	-6.796	0.00	0.00
ATOM	378	H3'	RG	12	4.815	3.166	-5.976	0.00	0.00
ATOM	379	C2'	RG	12	4.492	1.926	-7.678	0.00	0.00
ATOM	380	1H2'	RG	12	3.508	2.355	-7.764	0.00	0.00
ATOM	381	O2'	RG	12	5.040	1.689	-8.946	0.00	0.00
ATOM	382	2HO'	RG	12	5.359	2.278	-9.216	0.00	0.00
ATOM	383	O3'	RG	12	6.070	3.795	-7.502	0.00	0.00
ATOM	384	P	RC	13	5.619	5.286	-7.448	0.00	0.00
ATOM	385	O1P	RC	13	6.616	6.072	-8.156	0.00	0.00
ATOM	386	O2P	RC	13	5.320	5.620	-6.063	0.00	0.00
ATOM	387	O5'	RC	13	4.283	5.312	-8.268	0.00	0.00
ATOM	388	C5'	RC	13	4.276	5.231	-9.666	0.00	0.00
ATOM	389	1H5'	RC	13	4.926	4.447	-9.987	0.00	0.00
ATOM	390	2H5'	RC	13	4.635	6.150	-10.078	0.00	0.00
ATOM	391	C4'	RC	13	2.896	4.960	-10.212	0.00	0.00
ATOM	392	H4'	RC	13	2.955	4.933	-11.283	0.00	0.00
ATOM	393	O4'	RC	13	2.384	3.726	-9.753	0.00	0.00
ATOM	394	C1'	RC	13	0.978	3.815	-9.638	0.00	0.00
ATOM	395	H1'	RC	13	0.517	3.123	-10.318	0.00	0.00
ATOM	396	N1	RC	13	0.519	3.502	-8.264	0.00	0.00
ATOM	397	C6	RC	13	1.227	3.882	-7.161	0.00	0.00
ATOM	398	H6	RC	13	2.150	4.406	-7.276	0.00	0.00
ATOM	399	C5	RC	13	0.776	3.591	-5.924	0.00	0.00
ATOM	400	H5	RC	13	1.332	3.886	-5.066	0.00	0.00
ATOM	401	C4	RC	13	-0.450	2.910	-5.835	0.00	0.00

ATOM	402	N4	RC	13	-0.940	2.599	-4.684	0.00	0.00
ATOM	403	H41	RC	13	-1.788	2.092	-4.652	0.00	0.00
ATOM	404	H42	RC	13	-0.472	2.878	-3.868	0.00	0.00
ATOM	405	N3	RC	13	-1.153	2.548	-6.877	0.00	0.00
ATOM	406	C2	RC	13	-0.681	2.828	-8.107	0.00	0.00
ATOM	407	O2	RC	13	-1.354	2.491	-9.067	0.00	0.00
ATOM	408	C3'	RC	13	1.875	6.007	-9.844	0.00	0.00
ATOM	409	H3'	RC	13	1.977	6.228	-8.802	0.00	0.00
ATOM	410	C2'	RC	13	0.588	5.219	-10.057	0.00	0.00
ATOM	411	1H2'	RC	13	-0.204	5.603	-9.455	0.00	0.00
ATOM	412	O2'	RC	13	0.213	5.175	-11.401	0.00	0.00
ATOM	413	2HO'	RC	13	0.101	5.778	-11.668	0.00	0.00
ATOM	414	O3'	RC	13	1.970	7.179	-10.615	0.00	0.00
ATOM	415	P	RA	14	1.375	8.527	-10.088	0.00	0.00
ATOM	416	O1P	RA	14	1.761	9.565	-11.021	0.00	0.00
ATOM	417	O2P	RA	14	1.749	8.668	-8.698	0.00	0.00
ATOM	418	O5'	RA	14	-0.187	8.348	-10.148	0.00	0.00
ATOM	419	C5'	RA	14	-0.895	8.441	-11.349	0.00	0.00
ATOM	420	1H5'	RA	14	-0.509	7.747	-12.063	0.00	0.00
ATOM	421	2H5'	RA	14	-0.800	9.426	-11.752	0.00	0.00
ATOM	422	C4'	RA	14	-2.372	8.150	-11.141	0.00	0.00
ATOM	423	H4'	RA	14	-2.863	8.263	-12.092	0.00	0.00
ATOM	424	O4'	RA	14	-2.577	6.835	-10.671	0.00	0.00
ATOM	425	C1'	RA	14	-3.677	6.821	-9.787	0.00	0.00
ATOM	426	H1'	RA	14	-4.422	6.116	-10.115	0.00	0.00
ATOM	427	N9	RA	14	-3.244	6.452	-8.427	0.00	0.00
ATOM	428	C8	RA	14	-2.099	6.752	-7.768	0.00	0.00
ATOM	429	H8	RA	14	-1.345	7.343	-8.205	0.00	0.00
ATOM	430	N7	RA	14	-2.007	6.273	-6.565	0.00	0.00
ATOM	431	C5	RA	14	-3.208	5.624	-6.411	0.00	0.00
ATOM	432	C6	RA	14	-3.812	4.899	-5.372	0.00	0.00
ATOM	433	N6	RA	14	-3.286	4.627	-4.209	0.00	0.00
ATOM	434	H61	RA	14	-3.781	4.065	-3.572	0.00	0.00
ATOM	435	H62	RA	14	-2.382	4.930	-4.019	0.00	0.00
ATOM	436	N1	RA	14	-5.029	4.442	-5.503	0.00	0.00
ATOM	437	C2	RA	14	-5.643	4.653	-6.646	0.00	0.00
ATOM	438	H2	RA	14	-6.614	4.246	-6.718	0.00	0.00
ATOM	439	N3	RA	14	-5.205	5.285	-7.710	0.00	0.00
ATOM	440	C4	RA	14	-3.972	5.758	-7.527	0.00	0.00
ATOM	441	C3'	RA	14	-3.072	9.073	-10.162	0.00	0.00
ATOM	442	H3'	RA	14	-2.449	9.204	-9.294	0.00	0.00
ATOM	443	C2'	RA	14	-4.272	8.214	-9.804	0.00	0.00
ATOM	444	1H2'	RA	14	-4.667	8.470	-8.840	0.00	0.00
ATOM	445	O2'	RA	14	-5.284	8.292	-10.771	0.00	0.00
ATOM	446	2HO'	RA	14	-5.541	9.161	-10.819	0.00	0.00
ATOM	447	O3'	RA	14	-3.414	10.323	-10.695	0.00	0.00
ATOM	448	P	RC	15	-3.920	11.492	-10.034	0.00	0.00
ATOM	449	O1P	RC	15	-5.265	11.418	-10.139	0.00	0.00
ATOM	450	O2P	RC	15	-3.338	12.537	-10.620	0.00	0.00
ATOM	451	O5'	RC	15	-3.393	11.390	-8.547	0.00	0.00
ATOM	452	C5'	RC	15	-4.122	11.802	-7.416	0.00	0.00
ATOM	453	1H5'	RC	15	-4.525	12.772	-7.590	0.00	0.00
ATOM	454	2H5'	RC	15	-3.449	11.867	-6.593	0.00	0.00
ATOM	455	C4'	RC	15	-5.247	10.863	-7.040	0.00	0.00
ATOM	456	H4'	RC	15	-5.964	10.828	-7.830	0.00	0.00
ATOM	457	O4'	RC	15	-4.797	9.557	-6.782	0.00	0.00
ATOM	458	C1'	RC	15	-5.602	8.936	-5.796	0.00	0.00
ATOM	459	H1'	RC	15	-6.107	8.084	-6.215	0.00	0.00
ATOM	460	N1	RC	15	-4.785	8.481	-4.633	0.00	0.00
ATOM	461	C6	RC	15	-3.485	8.842	-4.481	0.00	0.00
ATOM	462	H6	RC	15	-3.020	9.491	-5.184	0.00	0.00
ATOM	463	C5	RC	15	-2.772	8.368	-3.443	0.00	0.00
ATOM	464	H5	RC	15	-1.749	8.644	-3.327	0.00	0.00
ATOM	465	C4	RC	15	-3.420	7.518	-2.542	0.00	0.00
ATOM	466	N4	RC	15	-2.771	7.009	-1.559	0.00	0.00
ATOM	467	H41	RC	15	-3.257	6.402	-0.954	0.00	0.00
ATOM	468	H42	RC	15	-1.818	7.228	-1.453	0.00	0.00
ATOM	469	N3	RC	15	-4.670	7.165	-2.660	0.00	0.00

ATOM	470	C2	RC	15	-5.368	7.630	-3.705	0.00	0.00
ATOM	471	O2	RC	15	-6.530	7.284	-3.797	0.00	0.00
ATOM	472	C3'	RC	15	-5.946	11.274	-5.762	0.00	0.00
ATOM	473	H3'	RC	15	-5.201	11.497	-5.026	0.00	0.00
ATOM	474	C2'	RC	15	-6.634	9.972	-5.399	0.00	0.00
ATOM	475	1H2'	RC	15	-6.869	9.927	-4.353	0.00	0.00
ATOM	476	O2'	RC	15	-7.784	9.757	-6.167	0.00	0.00
ATOM	477	2HO'	RC	15	-8.163	10.327	-6.261	0.00	0.00
ATOM	478	O3'	RC	15	-6.850	12.318	-5.928	0.00	0.00
ATOM	479	P	RA	16	-7.096	13.371	-4.800	0.00	0.00
ATOM	480	O1P	RA	16	-8.111	14.276	-5.265	0.00	0.00
ATOM	481	O2P	RA	16	-5.823	13.891	-4.401	0.00	0.00
ATOM	482	O5'	RA	16	-7.663	12.566	-3.594	0.00	0.00
ATOM	483	C5'	RA	16	-8.982	12.115	-3.549	0.00	0.00
ATOM	484	1H5'	RA	16	-9.187	11.550	-4.432	0.00	0.00
ATOM	485	2H5'	RA	16	-9.652	12.942	-3.500	0.00	0.00
ATOM	486	C4'	RA	16	-9.223	11.237	-2.337	0.00	0.00
ATOM	487	H4'	RA	16	-10.242	10.913	-2.364	0.00	0.00
ATOM	488	O4'	RA	16	-8.389	10.113	-2.340	0.00	0.00
ATOM	489	C1'	RA	16	-8.048	9.794	-1.019	0.00	0.00
ATOM	490	H1'	RA	16	-8.323	8.784	-0.796	0.00	0.00
ATOM	491	N9	RA	16	-6.608	9.962	-0.812	0.00	0.00
ATOM	492	C8	RA	16	-5.712	10.656	-1.555	0.00	0.00
ATOM	493	H8	RA	16	-5.986	11.191	-2.425	0.00	0.00
ATOM	494	N7	RA	16	-4.494	10.576	-1.142	0.00	0.00
ATOM	495	C5	RA	16	-4.601	9.782	-0.015	0.00	0.00
ATOM	496	C6	RA	16	-3.698	9.285	0.928	0.00	0.00
ATOM	497	N6	RA	16	-2.414	9.456	0.917	0.00	0.00
ATOM	498	H61	RA	16	-1.886	9.062	1.636	0.00	0.00
ATOM	499	H62	RA	16	-2.007	9.981	0.202	0.00	0.00
ATOM	500	N1	RA	16	-4.119	8.575	1.947	0.00	0.00
ATOM	501	C2	RA	16	-5.403	8.318	2.031	0.00	0.00
ATOM	502	H2	RA	16	-5.705	7.744	2.861	0.00	0.00
ATOM	503	N3	RA	16	-6.357	8.680	1.211	0.00	0.00
ATOM	504	C4	RA	16	-5.889	9.424	0.198	0.00	0.00
ATOM	505	C3'	RA	16	-9.009	11.923	-1.005	0.00	0.00
ATOM	506	H3'	RA	16	-8.097	12.482	-1.050	0.00	0.00
ATOM	507	C2'	RA	16	-8.829	10.724	-0.111	0.00	0.00
ATOM	508	1H2'	RA	16	-8.276	10.977	0.772	0.00	0.00
ATOM	509	O2'	RA	16	-10.043	10.101	0.224	0.00	0.00
ATOM	510	2HO'	RA	16	-10.412	10.282	0.389	0.00	0.00
ATOM	511	O3'	RA	16	-10.091	12.718	-0.599	0.00	0.00
ATOM	512	P	RC	17	-9.887	13.966	0.295	0.00	0.00
ATOM	513	O1P	RC	17	-11.200	14.499	0.605	0.00	0.00
ATOM	514	O2P	RC	17	-8.915	14.816	-0.364	0.00	0.00
ATOM	515	O5'	RC	17	-9.241	13.447	1.631	0.00	0.00
ATOM	516	C5'	RC	17	-9.977	12.717	2.579	0.00	0.00
ATOM	517	1H5'	RC	17	-10.463	11.891	2.105	0.00	0.00
ATOM	518	2H5'	RC	17	-10.732	13.349	3.011	0.00	0.00
ATOM	519	C4'	RC	17	-9.088	12.194	3.689	0.00	0.00
ATOM	520	H4'	RC	17	-9.702	11.650	4.386	0.00	0.00
ATOM	521	O4'	RC	17	-8.084	11.325	3.209	0.00	0.00
ATOM	522	C1'	RC	17	-6.916	11.467	4.004	0.00	0.00
ATOM	523	H1'	RC	17	-6.677	10.521	4.458	0.00	0.00
ATOM	524	N1	RC	17	-5.750	11.919	3.194	0.00	0.00
ATOM	525	C6	RC	17	-5.892	12.617	2.038	0.00	0.00
ATOM	526	H6	RC	17	-6.863	12.868	1.685	0.00	0.00
ATOM	527	C5	RC	17	-4.803	13.003	1.339	0.00	0.00
ATOM	528	H5	RC	17	-4.921	13.541	0.430	0.00	0.00
ATOM	529	C4	RC	17	-3.539	12.665	1.843	0.00	0.00
ATOM	530	N4	RC	17	-2.477	12.984	1.192	0.00	0.00
ATOM	531	H41	RC	17	-1.601	12.687	1.544	0.00	0.00
ATOM	532	H42	RC	17	-2.572	13.457	0.346	0.00	0.00
ATOM	533	N3	RC	17	-3.377	12.008	2.954	0.00	0.00
ATOM	534	C2	RC	17	-4.469	11.628	3.645	0.00	0.00
ATOM	535	O2	RC	17	-4.290	11.029	4.685	0.00	0.00
ATOM	536	C3'	RC	17	-8.369	13.278	4.456	0.00	0.00
ATOM	537	H3'	RC	17	-7.933	13.970	3.758	0.00	0.00

ATOM	538	C2'	RC	17	-7.264	12.463	5.103	0.00	0.00
ATOM	539	1H2'	RC	17	-6.426	13.082	5.359	0.00	0.00
ATOM	540	O2'	RC	17	-7.716	11.740	6.220	0.00	0.00
ATOM	541	2HO'	RC	17	-8.088	12.153	6.685	0.00	0.00
ATOM	542	O3'	RC	17	-9.208	13.925	5.392	0.00	0.00
ATOM	543	P	RA	18	-8.907	15.381	5.887	0.00	0.00
ATOM	544	O1P	RA	18	-10.006	15.782	6.759	0.00	0.00
ATOM	545	O2P	RA	18	-8.583	16.195	4.727	0.00	0.00
ATOM	546	O5'	RA	18	-7.604	15.236	6.751	0.00	0.00
ATOM	547	C5'	RA	18	-7.637	14.717	8.051	0.00	0.00
ATOM	548	1H5'	RA	18	-8.123	13.765	8.033	0.00	0.00
ATOM	549	2H5'	RA	18	-8.192	15.372	8.691	0.00	0.00
ATOM	550	C4'	RA	18	-6.245	14.540	8.616	0.00	0.00
ATOM	551	H4'	RA	18	-6.345	14.119	9.599	0.00	0.00
ATOM	552	O4'	RA	18	-5.458	13.675	7.835	0.00	0.00
ATOM	553	C1'	RA	18	-4.105	14.093	7.907	0.00	0.00
ATOM	554	H1'	RA	18	-3.488	13.297	8.283	0.00	0.00
ATOM	555	N9	RA	18	-3.598	14.472	6.581	0.00	0.00
ATOM	556	C8	RA	18	-4.282	14.931	5.496	0.00	0.00
ATOM	557	H8	RA	18	-5.337	15.096	5.512	0.00	0.00
ATOM	558	N7	RA	18	-3.548	15.143	4.445	0.00	0.00
ATOM	559	C5	RA	18	-2.266	14.824	4.889	0.00	0.00
ATOM	560	C6	RA	18	-0.978	14.822	4.313	0.00	0.00
ATOM	561	N6	RA	18	-0.701	15.105	3.069	0.00	0.00
ATOM	562	H61	RA	18	0.241	15.065	2.765	0.00	0.00
ATOM	563	H62	RA	18	-1.438	15.350	2.463	0.00	0.00
ATOM	564	N1	RA	18	0.092	14.497	5.020	0.00	0.00
ATOM	565	C2	RA	18	-0.088	14.163	6.278	0.00	0.00
ATOM	566	H2	RA	18	0.794	13.906	6.819	0.00	0.00
ATOM	567	N3	RA	18	-1.219	14.104	6.955	0.00	0.00
ATOM	568	C4	RA	18	-2.287	14.444	6.194	0.00	0.00
ATOM	569	C3'	RA	18	-5.458	15.826	8.739	0.00	0.00
ATOM	570	H3'	RA	18	-5.546	16.369	7.821	0.00	0.00
ATOM	571	C2'	RA	18	-4.062	15.267	8.865	0.00	0.00
ATOM	572	1H2'	RA	18	-3.330	15.983	8.560	0.00	0.00
ATOM	573	O2'	RA	18	-3.790	14.794	10.142	0.00	0.00
ATOM	574	2HO'	RA	18	-3.954	15.205	10.642	0.00	0.00
ATOM	575	O3'	RA	18	-5.831	16.613	9.839	0.00	0.00
ATOM	576	P	RG	19	-5.519	18.135	9.894	0.00	0.00
ATOM	577	O1P	RG	19	-6.163	18.652	11.085	0.00	0.00
ATOM	578	O2P	RG	19	-5.841	18.715	8.609	0.00	0.00
ATOM	579	O5'	RG	19	-3.963	18.245	10.083	0.00	0.00
ATOM	580	C5'	RG	19	-3.352	17.999	11.317	0.00	0.00
ATOM	581	1H5'	RG	19	-3.651	17.045	11.693	0.00	0.00
ATOM	582	2H5'	RG	19	-3.659	18.737	12.016	0.00	0.00
ATOM	583	C4'	RG	19	-1.843	18.028	11.223	0.00	0.00
ATOM	584	H4'	RG	19	-1.437	17.750	12.173	0.00	0.00
ATOM	585	O4'	RG	19	-1.360	17.129	10.254	0.00	0.00
ATOM	586	C1'	RG	19	-0.208	17.668	9.645	0.00	0.00
ATOM	587	H1'	RG	19	0.634	17.023	9.785	0.00	0.00
ATOM	588	N9	RG	19	-0.392	17.831	8.192	0.00	0.00
ATOM	589	C8	RG	19	-1.542	17.907	7.480	0.00	0.00
ATOM	590	H8	RG	19	-2.502	17.881	7.938	0.00	0.00
ATOM	591	N7	RG	19	-1.375	17.985	6.200	0.00	0.00
ATOM	592	C5	RG	19	0.005	18.002	6.053	0.00	0.00
ATOM	593	C6	RG	19	0.833	18.095	4.897	0.00	0.00
ATOM	594	O6	RG	19	0.519	18.141	3.719	0.00	0.00
ATOM	595	N1	RG	19	2.169	18.170	5.193	0.00	0.00
ATOM	596	H1	RG	19	2.794	18.311	4.435	0.00	0.00
ATOM	597	C2	RG	19	2.665	18.120	6.437	0.00	0.00
ATOM	598	N2	RG	19	3.939	18.250	6.562	0.00	0.00
ATOM	599	H21	RG	19	4.492	18.448	5.766	0.00	0.00
ATOM	600	H22	RG	19	4.329	18.275	7.464	0.00	0.00
ATOM	601	N3	RG	19	1.944	17.997	7.531	0.00	0.00
ATOM	602	C4	RG	19	0.613	17.942	7.275	0.00	0.00
ATOM	603	C3'	RG	19	-1.288	19.383	10.852	0.00	0.00
ATOM	604	H3'	RG	19	-1.872	19.803	10.061	0.00	0.00
ATOM	605	C2'	RG	19	0.072	18.989	10.324	0.00	0.00

ATOM	606	1H2'	RG	19	0.440	19.720	9.637	0.00	0.00
ATOM	607	O2'	RG	19	0.992	18.779	11.357	0.00	0.00
ATOM	608	2HO'	RG	19	1.054	19.233	11.763	0.00	0.00
ATOM	609	O3'	RG	19	-1.221	20.252	11.949	0.00	0.00
ATOM	610	P	RC	20	-1.260	21.809	11.770	0.00	0.00
ATOM	611	O1P	RC	20	-1.280	22.385	13.105	0.00	0.00
ATOM	612	O2P	RC	20	-2.325	22.145	10.846	0.00	0.00
ATOM	613	O5'	RC	20	0.107	22.184	11.082	0.00	0.00
ATOM	614	C5'	RC	20	1.310	22.244	11.805	0.00	0.00
ATOM	615	1H5'	RC	20	1.448	21.336	12.352	0.00	0.00
ATOM	616	2H5'	RC	20	1.268	23.061	12.494	0.00	0.00
ATOM	617	C4'	RC	20	2.505	22.449	10.889	0.00	0.00
ATOM	618	H4'	RC	20	3.388	22.450	11.502	0.00	0.00
ATOM	619	O4'	RC	20	2.617	21.407	9.933	0.00	0.00
ATOM	620	C1'	RC	20	3.195	21.930	8.755	0.00	0.00
ATOM	621	H1'	RC	20	4.114	21.410	8.547	0.00	0.00
ATOM	622	N1	RC	20	2.301	21.786	7.574	0.00	0.00
ATOM	623	C6	RC	20	0.944	21.730	7.686	0.00	0.00
ATOM	624	H6	RC	20	0.492	21.785	8.645	0.00	0.00
ATOM	625	C5	RC	20	0.179	21.591	6.593	0.00	0.00
ATOM	626	H5	RC	20	-0.880	21.529	6.678	0.00	0.00
ATOM	627	C4	RC	20	0.826	21.530	5.359	0.00	0.00
ATOM	628	N4	RC	20	0.141	21.374	4.283	0.00	0.00
ATOM	629	H41	RC	20	0.637	21.295	3.444	0.00	0.00
ATOM	630	H42	RC	20	-0.834	21.274	4.335	0.00	0.00
ATOM	631	N3	RC	20	2.116	21.608	5.222	0.00	0.00
ATOM	632	C2	RC	20	2.873	21.754	6.312	0.00	0.00
ATOM	633	O2	RC	20	4.059	21.891	6.141	0.00	0.00
ATOM	634	C3'	RC	20	2.478	23.736	10.102	0.00	0.00
ATOM	635	H3'	RC	20	1.510	23.873	9.653	0.00	0.00
ATOM	636	C2'	RC	20	3.497	23.392	9.031	0.00	0.00
ATOM	637	1H2'	RC	20	3.357	23.996	8.155	0.00	0.00
ATOM	638	O2'	RC	20	4.826	23.478	9.489	0.00	0.00
ATOM	639	2HO'	RC	20	5.016	24.035	9.652	0.00	0.00
ATOM	640	O3'	RC	20	2.852	24.865	10.865	0.00	0.00
ATOM	641	P	RA	21	2.419	26.309	10.426	0.00	0.00
ATOM	642	O1P	RA	21	2.862	27.237	11.460	0.00	0.00
ATOM	643	O2P	RA	21	1.003	26.273	10.091	0.00	0.00
ATOM	644	O5'	RA	21	3.210	26.611	9.104	0.00	0.00
ATOM	645	C5'	RA	21	4.578	26.935	9.117	0.00	0.00
ATOM	646	1H5'	RA	21	5.125	26.182	9.641	0.00	0.00
ATOM	647	2H5'	RA	21	4.714	27.866	9.622	0.00	0.00
ATOM	648	C4'	RA	21	5.136	27.047	7.716	0.00	0.00
ATOM	649	H4'	RA	21	6.185	27.277	7.796	0.00	0.00
ATOM	650	O4'	RA	21	5.009	25.847	6.979	0.00	0.00
ATOM	651	C1'	RA	21	4.800	26.171	5.617	0.00	0.00
ATOM	652	H1'	RA	21	5.545	25.701	5.010	0.00	0.00
ATOM	653	N9	RA	21	3.475	25.715	5.164	0.00	0.00
ATOM	654	C8	RA	21	2.371	25.422	5.898	0.00	0.00
ATOM	655	H8	RA	21	2.342	25.555	6.954	0.00	0.00
ATOM	656	N7	RA	21	1.364	24.991	5.209	0.00	0.00
ATOM	657	C5	RA	21	1.844	25.017	3.901	0.00	0.00
ATOM	658	C6	RA	21	1.324	24.676	2.640	0.00	0.00
ATOM	659	N6	RA	21	0.136	24.196	2.415	0.00	0.00
ATOM	660	H61	RA	21	-0.102	23.938	1.490	0.00	0.00
ATOM	661	H62	RA	21	-0.461	24.009	3.174	0.00	0.00
ATOM	662	N1	RA	21	2.033	24.846	1.539	0.00	0.00
ATOM	663	C2	RA	21	3.243	25.330	1.657	0.00	0.00
ATOM	664	H2	RA	21	3.781	25.458	0.754	0.00	0.00
ATOM	665	N3	RA	21	3.867	25.699	2.758	0.00	0.00
ATOM	666	C4	RA	21	3.114	25.495	3.862	0.00	0.00
ATOM	667	C3'	RA	21	4.483	28.123	6.876	0.00	0.00
ATOM	668	H3'	RA	21	3.414	28.032	6.966	0.00	0.00
ATOM	669	C2'	RA	21	4.916	27.672	5.499	0.00	0.00
ATOM	670	1H2'	RA	21	4.264	28.053	4.736	0.00	0.00
ATOM	671	O2'	RA	21	6.248	27.997	5.212	0.00	0.00
ATOM	672	2HO'	RA	21	6.409	28.614	5.359	0.00	0.00
ATOM	673	O3'	RA	21	4.916	29.417	7.211	0.00	0.00

ATOM	674	P	RA	22	4.065	30.677	6.830	0.00	0.00
ATOM	675	O1P	RA	22	4.721	31.843	7.408	0.00	0.00
ATOM	676	O2P	RA	22	2.682	30.414	7.177	0.00	0.00
ATOM	677	O5'	RA	22	4.125	30.792	5.263	0.00	0.00
ATOM	678	C5'	RA	22	5.266	31.243	4.618	0.00	0.00
ATOM	679	1H5'	RA	22	6.114	30.691	4.934	0.00	0.00
ATOM	680	2H5'	RA	22	5.450	32.262	4.861	0.00	0.00
ATOM	681	C4'	RA	22	5.129	31.117	3.124	0.00	0.00
ATOM	682	H4'	RA	22	6.038	31.443	2.707	0.00	0.00
ATOM	683	O4'	RA	22	4.885	29.811	2.702	0.00	0.00
ATOM	684	C1'	RA	22	4.051	29.820	1.558	0.00	0.00
ATOM	685	H1'	RA	22	4.499	29.301	0.754	0.00	0.00
ATOM	686	N9	RA	22	2.783	29.174	1.820	0.00	0.00
ATOM	687	C8	RA	22	2.156	28.973	2.997	0.00	0.00
ATOM	688	H8	RA	22	2.558	29.311	3.924	0.00	0.00
ATOM	689	N7	RA	22	1.036	28.336	2.896	0.00	0.00
ATOM	690	C5	RA	22	0.903	28.121	1.533	0.00	0.00
ATOM	691	C6	RA	22	-0.035	27.498	0.694	0.00	0.00
ATOM	692	N6	RA	22	-1.112	26.904	1.088	0.00	0.00
ATOM	693	H61	RA	22	-1.690	26.463	0.414	0.00	0.00
ATOM	694	H62	RA	22	-1.282	26.851	2.054	0.00	0.00
ATOM	695	N1	RA	22	0.115	27.475	-0.618	0.00	0.00
ATOM	696	C2	RA	22	1.185	28.025	-1.105	0.00	0.00
ATOM	697	H2	RA	22	1.276	27.984	-2.157	0.00	0.00
ATOM	698	N3	RA	22	2.166	28.615	-0.455	0.00	0.00
ATOM	699	C4	RA	22	1.961	28.631	0.873	0.00	0.00
ATOM	700	C3'	RA	22	4.034	31.917	2.528	0.00	0.00
ATOM	701	H3'	RA	22	3.157	31.775	3.078	0.00	0.00
ATOM	702	C2'	RA	22	3.859	31.235	1.196	0.00	0.00
ATOM	703	1H2'	RA	22	2.901	31.400	0.764	0.00	0.00
ATOM	704	O2'	RA	22	4.846	31.580	0.319	0.00	0.00
ATOM	705	2HO'	RA	22	5.062	32.278	0.409	0.00	0.00
ATOM	706	O3'	RA	22	4.378	33.235	2.425	0.00	0.00
ATOM	707	P	RG3	23	3.308	34.295	2.411	0.00	0.00
ATOM	708	O1P	RG3	23	3.973	35.538	2.348	0.00	0.00
ATOM	709	O2P	RG3	23	2.443	34.061	3.480	0.00	0.00
ATOM	710	O5'	RG3	23	2.513	34.042	1.087	0.00	0.00
ATOM	711	C5'	RG3	23	3.017	34.407	-0.137	0.00	0.00
ATOM	712	1H5'	RG3	23	3.958	33.974	-0.270	0.00	0.00
ATOM	713	2H5'	RG3	23	3.131	35.445	-0.161	0.00	0.00
ATOM	714	C4'	RG3	23	2.123	33.974	-1.279	0.00	0.00
ATOM	715	H4'	RG3	23	2.568	34.271	-2.174	0.00	0.00
ATOM	716	O4'	RG3	23	1.921	32.622	-1.337	0.00	0.00
ATOM	717	C1'	RG3	23	0.637	32.349	-1.816	0.00	0.00
ATOM	718	H1'	RG3	23	0.659	31.783	-2.707	0.00	0.00
ATOM	719	N9	RG3	23	-0.128	31.618	-0.848	0.00	0.00
ATOM	720	C8	RG3	23	-0.038	31.639	0.494	0.00	0.00
ATOM	721	H8	RG3	23	0.686	32.202	1.019	0.00	0.00
ATOM	722	N7	RG3	23	-0.925	30.938	1.076	0.00	0.00
ATOM	723	C5	RG3	23	-1.666	30.414	0.035	0.00	0.00
ATOM	724	C6	RG3	23	-2.816	29.596	0.010	0.00	0.00
ATOM	725	O6	RG3	23	-3.423	29.130	0.938	0.00	0.00
ATOM	726	N1	RG3	23	-3.284	29.340	-1.240	0.00	0.00
ATOM	727	H1	RG3	23	-4.089	28.783	-1.329	0.00	0.00
ATOM	728	C2	RG3	23	-2.732	29.804	-2.340	0.00	0.00
ATOM	729	N2	RG3	23	-3.318	29.536	-3.453	0.00	0.00
ATOM	730	H21	RG3	23	-4.194	29.092	-3.467	0.00	0.00
ATOM	731	H22	RG3	23	-2.932	29.917	-4.257	0.00	0.00
ATOM	732	N3	RG3	23	-1.672	30.554	-2.374	0.00	0.00
ATOM	733	C4	RG3	23	-1.181	30.829	-1.147	0.00	0.00
ATOM	734	C3'	RG3	23	0.784	34.575	-1.249	0.00	0.00
ATOM	735	H3'	RG3	23	0.436	34.569	-0.265	0.00	0.00
ATOM	736	C2'	RG3	23	-0.014	33.634	-2.107	0.00	0.00
ATOM	737	1H2'	RG3	23	-1.018	33.622	-1.834	0.00	0.00
ATOM	738	O2'	RG3	23	0.101	33.906	-3.455	0.00	0.00
ATOM	739	2HO'	RG3	23	-0.105	34.102	-3.723	0.00	0.00
ATOM	740	O3'	RG3	23	0.747	35.831	-1.759	0.00	0.00
ATOM	741	H3T	RG3	23	0.404	35.882	-2.098	0.00	0.00

ATOM	742	H5T	RC5	24	11.967	-22.885	-11.527	0.00	0.00
ATOM	743	O5'	RC5	24	11.628	-22.777	-11.567	0.00	0.00
ATOM	744	C5'	RC5	24	10.699	-21.829	-11.268	0.00	0.00
ATOM	745	1H5'	RC5	24	10.810	-21.023	-11.911	0.00	0.00
ATOM	746	2H5'	RC5	24	10.856	-21.501	-10.304	0.00	0.00
ATOM	747	C4'	RC5	24	9.329	-22.358	-11.401	0.00	0.00
ATOM	748	H4'	RC5	24	9.213	-22.770	-12.354	0.00	0.00
ATOM	749	O4'	RC5	24	9.117	-23.318	-10.424	0.00	0.00
ATOM	750	C1'	RC5	24	8.041	-22.952	-9.636	0.00	0.00
ATOM	751	H1'	RC5	24	7.165	-23.312	-10.105	0.00	0.00
ATOM	752	N1	RC5	24	8.133	-23.539	-8.297	0.00	0.00
ATOM	753	C6	RC5	24	8.591	-22.864	-7.241	0.00	0.00
ATOM	754	H6	RC5	24	8.958	-21.899	-7.371	0.00	0.00
ATOM	755	C5	RC5	24	8.589	-23.409	-6.031	0.00	0.00
ATOM	756	H5	RC5	24	8.941	-22.877	-5.209	0.00	0.00
ATOM	757	C4	RC5	24	8.095	-24.682	-5.904	0.00	0.00
ATOM	758	N4	RC5	24	8.044	-25.253	-4.771	0.00	0.00
ATOM	759	H41	RC5	24	7.611	-26.116	-4.724	0.00	0.00
ATOM	760	H42	RC5	24	8.338	-24.791	-3.982	0.00	0.00
ATOM	761	N3	RC5	24	7.637	-25.350	-6.900	0.00	0.00
ATOM	762	C2	RC5	24	7.641	-24.796	-8.104	0.00	0.00
ATOM	763	O2	RC5	24	7.178	-25.438	-9.002	0.00	0.00
ATOM	764	C3'	RC5	24	8.293	-21.297	-11.215	0.00	0.00
ATOM	765	H3'	RC5	24	8.675	-20.330	-11.425	0.00	0.00
ATOM	766	C2'	RC5	24	8.006	-21.468	-9.745	0.00	0.00
ATOM	767	1H2'	RC5	24	8.811	-21.038	-9.208	0.00	0.00
ATOM	768	O2'	RC5	24	6.822	-20.935	-9.301	0.00	0.00
ATOM	769	2HO'	RC5	24	6.470	-20.425	-9.974	0.00	0.00
ATOM	770	O3'	RC5	24	7.222	-21.602	-12.042	0.00	0.00
ATOM	771	P	RU	25	6.098	-20.625	-12.400	0.00	0.00
ATOM	772	O1P	RU	25	6.232	-20.332	-13.767	0.00	0.00
ATOM	773	O2P	RU	25	6.064	-19.554	-11.436	0.00	0.00
ATOM	774	O5'	RU	25	4.854	-21.459	-12.179	0.00	0.00
ATOM	775	C5'	RU	25	4.455	-22.423	-13.084	0.00	0.00
ATOM	776	1H5'	RU	25	5.298	-22.932	-13.462	0.00	0.00
ATOM	777	2H5'	RU	25	3.965	-21.957	-13.891	0.00	0.00
ATOM	778	C4'	RU	25	3.525	-23.429	-12.483	0.00	0.00
ATOM	779	H4'	RU	25	3.179	-24.070	-13.261	0.00	0.00
ATOM	780	O4'	RU	25	4.176	-24.211	-11.528	0.00	0.00
ATOM	781	C1'	RU	25	3.227	-24.670	-10.608	0.00	0.00
ATOM	782	H1'	RU	25	3.137	-25.731	-10.688	0.00	0.00
ATOM	783	N1	RU	25	3.615	-24.340	-9.231	0.00	0.00
ATOM	784	C6	RU	25	4.384	-23.274	-8.924	0.00	0.00
ATOM	785	H6	RU	25	4.701	-22.623	-9.693	0.00	0.00
ATOM	786	C5	RU	25	4.763	-23.056	-7.664	0.00	0.00
ATOM	787	H5	RU	25	5.379	-22.229	-7.436	0.00	0.00
ATOM	788	C4	RU	25	4.390	-23.923	-6.610	0.00	0.00
ATOM	789	O4	RU	25	4.743	-23.844	-5.467	0.00	0.00
ATOM	790	N3	RU	25	3.574	-24.917	-6.983	0.00	0.00
ATOM	791	H3	RU	25	3.252	-25.516	-6.274	0.00	0.00
ATOM	792	C2	RU	25	3.148	-25.161	-8.233	0.00	0.00
ATOM	793	O2	RU	25	2.377	-26.064	-8.417	0.00	0.00
ATOM	794	C3'	RU	25	2.331	-22.857	-11.789	0.00	0.00
ATOM	795	H3'	RU	25	2.647	-22.075	-11.136	0.00	0.00
ATOM	796	C2'	RU	25	1.911	-24.051	-10.977	0.00	0.00
ATOM	797	1H2'	RU	25	1.367	-23.755	-10.118	0.00	0.00
ATOM	798	O2'	RU	25	1.196	-24.975	-11.736	0.00	0.00
ATOM	799	2HO'	RU	25	0.705	-24.623	-12.183	0.00	0.00
ATOM	800	O3'	RU	25	1.334	-22.418	-12.659	0.00	0.00
ATOM	801	P	RU	26	0.299	-21.329	-12.216	0.00	0.00
ATOM	802	O1P	RU	26	-0.591	-21.113	-13.324	0.00	0.00
ATOM	803	O2P	RU	26	1.030	-20.201	-11.680	0.00	0.00
ATOM	804	O5'	RU	26	-0.516	-21.974	-11.054	0.00	0.00
ATOM	805	C5'	RU	26	-1.500	-22.934	-11.282	0.00	0.00
ATOM	806	1H5'	RU	26	-1.095	-23.718	-11.883	0.00	0.00
ATOM	807	2H5'	RU	26	-2.308	-22.498	-11.810	0.00	0.00
ATOM	808	C4'	RU	26	-2.049	-23.511	-10.012	0.00	0.00
ATOM	809	H4'	RU	26	-2.787	-24.241	-10.266	0.00	0.00

ATOM	810	O4'	RU	26	-1.054	-24.117	-9.240	0.00	0.00
ATOM	811	C1'	RU	26	-1.485	-24.119	-7.903	0.00	0.00
ATOM	812	H1'	RU	26	-1.772	-25.118	-7.628	0.00	0.00
ATOM	813	N1	RU	26	-0.434	-23.634	-6.982	0.00	0.00
ATOM	814	C6	RU	26	0.416	-22.627	-7.307	0.00	0.00
ATOM	815	H6	RU	26	0.350	-22.193	-8.270	0.00	0.00
ATOM	816	C5	RU	26	1.321	-22.170	-6.430	0.00	0.00
ATOM	817	H5	RU	26	1.984	-21.387	-6.704	0.00	0.00
ATOM	818	C4	RU	26	1.440	-22.713	-5.126	0.00	0.00
ATOM	819	O4	RU	26	2.233	-22.368	-4.276	0.00	0.00
ATOM	820	N3	RU	26	0.561	-23.707	-4.873	0.00	0.00
ATOM	821	H3	RU	26	0.579	-24.095	-3.969	0.00	0.00
ATOM	822	C2	RU	26	-0.387	-24.185	-5.724	0.00	0.00
ATOM	823	O2	RU	26	-1.144	-25.050	-5.344	0.00	0.00
ATOM	824	C3'	RU	26	-2.702	-22.489	-9.124	0.00	0.00
ATOM	825	H3'	RU	26	-2.055	-21.639	-9.035	0.00	0.00
ATOM	826	C2'	RU	26	-2.722	-23.251	-7.819	0.00	0.00
ATOM	827	1H2'	RU	26	-2.661	-22.570	-6.998	0.00	0.00
ATOM	828	O2'	RU	26	-3.837	-24.083	-7.697	0.00	0.00
ATOM	829	2HO'	RU	26	-4.552	-23.555	-7.616	0.00	0.00
ATOM	830	O3'	RU	26	-3.966	-22.112	-9.587	0.00	0.00
ATOM	831	P	RG	27	-4.781	-20.952	-8.920	0.00	0.00
ATOM	832	O1P	RG	27	-5.957	-20.743	-9.729	0.00	0.00
ATOM	833	O2P	RG	27	-3.889	-19.834	-8.664	0.00	0.00
ATOM	834	O5'	RG	27	-5.243	-21.573	-7.557	0.00	0.00
ATOM	835	C5'	RG	27	-5.250	-20.853	-6.367	0.00	0.00
ATOM	836	1H5'	RG	27	-6.009	-20.119	-6.405	0.00	0.00
ATOM	837	2H5'	RG	27	-4.312	-20.376	-6.228	0.00	0.00
ATOM	838	C4'	RG	27	-5.503	-21.780	-5.197	0.00	0.00
ATOM	839	H4'	RG	27	-6.379	-22.366	-5.390	0.00	0.00
ATOM	840	O4'	RG	27	-4.419	-22.645	-4.993	0.00	0.00
ATOM	841	C1'	RG	27	-4.152	-22.767	-3.613	0.00	0.00
ATOM	842	H1'	RG	27	-4.095	-23.800	-3.327	0.00	0.00
ATOM	843	N9	RG	27	-2.864	-22.126	-3.278	0.00	0.00
ATOM	844	C8	RG	27	-2.043	-21.366	-4.064	0.00	0.00
ATOM	845	H8	RG	27	-2.293	-21.101	-5.067	0.00	0.00
ATOM	846	N7	RG	27	-0.953	-20.977	-3.488	0.00	0.00
ATOM	847	C5	RG	27	-1.046	-21.526	-2.215	0.00	0.00
ATOM	848	C6	RG	27	-0.165	-21.474	-1.095	0.00	0.00
ATOM	849	O6	RG	27	0.925	-20.936	-1.003	0.00	0.00
ATOM	850	N1	RG	27	-0.634	-22.148	0.008	0.00	0.00
ATOM	851	H1	RG	27	-0.067	-22.132	0.825	0.00	0.00
ATOM	852	C2	RG	27	-1.803	-22.807	0.042	0.00	0.00
ATOM	853	N2	RG	27	-2.118	-23.385	1.155	0.00	0.00
ATOM	854	H21	RG	27	-1.536	-23.270	1.950	0.00	0.00
ATOM	855	H22	RG	27	-2.967	-23.891	1.199	0.00	0.00
ATOM	856	N3	RG	27	-2.651	-22.889	-0.971	0.00	0.00
ATOM	857	C4	RG	27	-2.220	-22.221	-2.078	0.00	0.00
ATOM	858	C3'	RG	27	-5.705	-21.036	-3.893	0.00	0.00
ATOM	859	H3'	RG	27	-5.000	-20.228	-3.838	0.00	0.00
ATOM	860	C2'	RG	27	-5.319	-22.111	-2.896	0.00	0.00
ATOM	861	1H2'	RG	27	-5.032	-21.683	-1.954	0.00	0.00
ATOM	862	O2'	RG	27	-6.329	-23.079	-2.718	0.00	0.00
ATOM	863	2HO'	RG	27	-6.484	-23.206	-2.126	0.00	0.00
ATOM	864	O3'	RG	27	-7.021	-20.587	-3.723	0.00	0.00
ATOM	865	P	RC	28	-7.337	-19.301	-2.890	0.00	0.00
ATOM	866	O1P	RC	28	-8.775	-19.112	-2.928	0.00	0.00
ATOM	867	O2P	RC	28	-6.477	-18.233	-3.370	0.00	0.00
ATOM	868	O5'	RC	28	-6.924	-19.642	-1.414	0.00	0.00
ATOM	869	C5'	RC	28	-7.669	-20.534	-0.624	0.00	0.00
ATOM	870	1H5'	RC	28	-7.772	-21.462	-1.139	0.00	0.00
ATOM	871	2H5'	RC	28	-8.647	-20.148	-0.454	0.00	0.00
ATOM	872	C4'	RC	28	-7.014	-20.787	0.717	0.00	0.00
ATOM	873	H4'	RC	28	-7.634	-21.472	1.266	0.00	0.00
ATOM	874	O4'	RC	28	-5.718	-21.338	0.580	0.00	0.00
ATOM	875	C1'	RC	28	-4.902	-20.870	1.627	0.00	0.00
ATOM	876	H1'	RC	28	-4.544	-21.715	2.183	0.00	0.00
ATOM	877	N1	RC	28	-3.737	-20.070	1.142	0.00	0.00

ATOM	878	C6	RC	28	-3.690	-19.510	-0.095	0.00	0.00
ATOM	879	H6	RC	28	-4.510	-19.625	-0.764	0.00	0.00
ATOM	880	C5	RC	28	-2.596	-18.837	-0.502	0.00	0.00
ATOM	881	H5	RC	28	-2.547	-18.416	-1.477	0.00	0.00
ATOM	882	C4	RC	28	-1.533	-18.734	0.402	0.00	0.00
ATOM	883	N4	RC	28	-0.437	-18.147	0.063	0.00	0.00
ATOM	884	H41	RC	28	0.313	-18.178	0.703	0.00	0.00
ATOM	885	H42	RC	28	-0.353	-17.771	-0.838	0.00	0.00
ATOM	886	N3	RC	28	-1.570	-19.239	1.604	0.00	0.00
ATOM	887	C2	RC	28	-2.669	-19.896	2.000	0.00	0.00
ATOM	888	O2	RC	28	-2.687	-20.335	3.133	0.00	0.00
ATOM	889	C3'	RC	28	-6.856	-19.555	1.574	0.00	0.00
ATOM	890	H3'	RC	28	-6.460	-18.751	0.981	0.00	0.00
ATOM	891	C2'	RC	28	-5.790	-20.032	2.533	0.00	0.00
ATOM	892	1H2'	RC	28	-5.265	-19.196	2.960	0.00	0.00
ATOM	893	O2'	RC	28	-6.307	-20.869	3.540	0.00	0.00
ATOM	894	2HO'	RC	28	-6.707	-20.752	3.818	0.00	0.00
ATOM	895	O3'	RC	28	-8.036	-19.168	2.245	0.00	0.00
ATOM	896	P	RU	29	-8.263	-17.691	2.697	0.00	0.00
ATOM	897	O1P	RU	29	-9.551	-17.624	3.363	0.00	0.00
ATOM	898	O2P	RU	29	-8.035	-16.845	1.551	0.00	0.00
ATOM	899	O5'	RU	29	-7.142	-17.379	3.758	0.00	0.00
ATOM	900	C5'	RU	29	-7.205	-17.913	5.053	0.00	0.00
ATOM	901	1H5'	RU	29	-7.332	-18.975	5.020	0.00	0.00
ATOM	902	2H5'	RU	29	-8.067	-17.510	5.544	0.00	0.00
ATOM	903	C4'	RU	29	-5.978	-17.585	5.874	0.00	0.00
ATOM	904	H4'	RU	29	-6.083	-18.050	6.837	0.00	0.00
ATOM	905	O4'	RU	29	-4.787	-18.078	5.296	0.00	0.00
ATOM	906	C1'	RU	29	-3.714	-17.235	5.655	0.00	0.00
ATOM	907	H1'	RU	29	-2.998	-17.782	6.247	0.00	0.00
ATOM	908	N1	RU	29	-2.999	-16.674	4.485	0.00	0.00
ATOM	909	C6	RU	29	-3.599	-16.533	3.265	0.00	0.00
ATOM	910	H6	RU	29	-4.616	-16.832	3.147	0.00	0.00
ATOM	911	C5	RU	29	-2.908	-16.034	2.214	0.00	0.00
ATOM	912	H5	RU	29	-3.359	-15.938	1.255	0.00	0.00
ATOM	913	C4	RU	29	-1.539	-15.633	2.339	0.00	0.00
ATOM	914	O4	RU	29	-0.842	-15.207	1.447	0.00	0.00
ATOM	915	N3	RU	29	-1.035	-15.758	3.587	0.00	0.00
ATOM	916	H3	RU	29	-0.099	-15.462	3.730	0.00	0.00
ATOM	917	C2	RU	29	-1.692	-16.250	4.671	0.00	0.00
ATOM	918	O2	RU	29	-1.129	-16.278	5.748	0.00	0.00
ATOM	919	C3'	RU	29	-5.742	-16.100	6.093	0.00	0.00
ATOM	920	H3'	RU	29	-5.835	-15.585	5.153	0.00	0.00
ATOM	921	C2'	RU	29	-4.284	-16.126	6.514	0.00	0.00
ATOM	922	1H2'	RU	29	-3.822	-15.176	6.326	0.00	0.00
ATOM	923	O2'	RU	29	-4.143	-16.493	7.859	0.00	0.00
ATOM	924	2HO'	RU	29	-4.696	-16.210	8.288	0.00	0.00
ATOM	925	O3'	RU	29	-6.576	-15.545	7.083	0.00	0.00
ATOM	926	P	RG	30	-6.917	-14.012	7.090	0.00	0.00
ATOM	927	O1P	RG	30	-7.768	-13.767	8.250	0.00	0.00
ATOM	928	O2P	RG	30	-7.414	-13.645	5.776	0.00	0.00
ATOM	929	O5'	RG	30	-5.541	-13.281	7.297	0.00	0.00
ATOM	930	C5'	RG	30	-4.916	-13.196	8.545	0.00	0.00
ATOM	931	1H5'	RG	30	-4.724	-14.181	8.914	0.00	0.00
ATOM	932	2H5'	RG	30	-5.561	-12.693	9.237	0.00	0.00
ATOM	933	C4'	RG	30	-3.621	-12.416	8.483	0.00	0.00
ATOM	934	H4'	RG	30	-3.215	-12.359	9.476	0.00	0.00
ATOM	935	O4'	RG	30	-2.670	-13.019	7.647	0.00	0.00
ATOM	936	C1'	RG	30	-1.801	-12.012	7.155	0.00	0.00
ATOM	937	H1'	RG	30	-0.817	-12.127	7.578	0.00	0.00
ATOM	938	N9	RG	30	-1.691	-12.103	5.689	0.00	0.00
ATOM	939	C8	RG	30	-2.665	-12.324	4.765	0.00	0.00
ATOM	940	H8	RG	30	-3.678	-12.501	5.046	0.00	0.00
ATOM	941	N7	RG	30	-2.243	-12.311	3.538	0.00	0.00
ATOM	942	C5	RG	30	-0.878	-12.059	3.655	0.00	0.00
ATOM	943	C6	RG	30	0.160	-11.915	2.672	0.00	0.00
ATOM	944	O6	RG	30	0.096	-12.010	1.453	0.00	0.00
ATOM	945	N1	RG	30	1.392	-11.644	3.215	0.00	0.00

ATOM	946	H1	RG	30	2.171	-11.564	2.604	0.00	0.00
ATOM	947	C2	RG	30	1.612	-11.522	4.532	0.00	0.00
ATOM	948	N2	RG	30	2.831	-11.299	4.893	0.00	0.00
ATOM	949	H21	RG	30	3.547	-11.208	4.212	0.00	0.00
ATOM	950	H22	RG	30	3.007	-11.208	5.852	0.00	0.00
ATOM	951	N3	RG	30	0.691	-11.644	5.479	0.00	0.00
ATOM	952	C4	RG	30	-0.544	-11.910	4.974	0.00	0.00
ATOM	953	C3'	RG	30	-3.795	-11.003	7.977	0.00	0.00
ATOM	954	H3'	RG	30	-4.413	-11.015	7.096	0.00	0.00
ATOM	955	C2'	RG	30	-2.366	-10.663	7.578	0.00	0.00
ATOM	956	1H2'	RG	30	-2.368	-9.960	6.774	0.00	0.00
ATOM	957	O2'	RG	30	-1.615	-10.182	8.658	0.00	0.00
ATOM	958	2HO'	RG	30	-1.959	-9.448	8.912	0.00	0.00
ATOM	959	O3'	RG	30	-4.304	-10.128	8.953	0.00	0.00
ATOM	960	P	RA	31	-5.331	-9.013	8.590	0.00	0.00
ATOM	961	O1P	RA	31	-5.523	-8.207	9.786	0.00	0.00
ATOM	962	O2P	RA	31	-6.470	-9.641	7.965	0.00	0.00
ATOM	963	O5'	RA	31	-4.599	-8.151	7.507	0.00	0.00
ATOM	964	C5'	RA	31	-4.885	-6.804	7.311	0.00	0.00
ATOM	965	1H5'	RA	31	-4.400	-6.214	8.054	0.00	0.00
ATOM	966	2H5'	RA	31	-5.939	-6.651	7.397	0.00	0.00
ATOM	967	C4'	RA	31	-4.444	-6.359	5.938	0.00	0.00
ATOM	968	H4'	RA	31	-4.651	-5.307	5.841	0.00	0.00
ATOM	969	O4'	RA	31	-3.054	-6.531	5.782	0.00	0.00
ATOM	970	C1'	RA	31	-2.791	-6.838	4.455	0.00	0.00
ATOM	971	H1'	RA	31	-2.879	-5.954	3.885	0.00	0.00
ATOM	972	N9	RA	31	-1.461	-7.441	4.200	0.00	0.00
ATOM	973	C8	RA	31	-1.108	-8.256	3.169	0.00	0.00
ATOM	974	H8	RA	31	-1.815	-8.638	2.472	0.00	0.00
ATOM	975	N7	RA	31	0.159	-8.499	3.063	0.00	0.00
ATOM	976	C5	RA	31	0.700	-7.792	4.122	0.00	0.00
ATOM	977	C6	RA	31	2.008	-7.591	4.617	0.00	0.00
ATOM	978	N6	RA	31	3.107	-8.064	4.097	0.00	0.00
ATOM	979	H61	RA	31	3.974	-7.835	4.506	0.00	0.00
ATOM	980	H62	RA	31	3.045	-8.505	3.219	0.00	0.00
ATOM	981	N1	RA	31	2.228	-6.854	5.686	0.00	0.00
ATOM	982	C2	RA	31	1.190	-6.300	6.256	0.00	0.00
ATOM	983	H2	RA	31	1.396	-5.702	7.109	0.00	0.00
ATOM	984	N3	RA	31	-0.083	-6.383	5.914	0.00	0.00
ATOM	985	C4	RA	31	-0.275	-7.157	4.828	0.00	0.00
ATOM	986	C3'	RA	31	-5.119	-7.121	4.805	0.00	0.00
ATOM	987	H3'	RA	31	-5.753	-7.895	5.173	0.00	0.00
ATOM	988	C2'	RA	31	-3.934	-7.735	4.111	0.00	0.00
ATOM	989	1H2'	RA	31	-3.753	-8.670	4.528	0.00	0.00
ATOM	990	O2'	RA	31	-4.123	-7.859	2.774	0.00	0.00
ATOM	991	2HO'	RA	31	-4.771	-8.032	2.617	0.00	0.00
ATOM	992	O3'	RA	31	-5.812	-6.252	3.937	0.00	0.00
ATOM	993	P	RG	32	-7.336	-5.946	4.113	0.00	0.00
ATOM	994	O1P	RG	32	-8.021	-7.190	4.444	0.00	0.00
ATOM	995	O2P	RG	32	-7.781	-5.203	2.931	0.00	0.00
ATOM	996	O5'	RG	32	-7.453	-4.991	5.364	0.00	0.00
ATOM	997	C5'	RG	32	-6.958	-3.674	5.334	0.00	0.00
ATOM	998	1H5'	RG	32	-7.500	-3.101	4.607	0.00	0.00
ATOM	999	2H5'	RG	32	-5.920	-3.659	5.061	0.00	0.00
ATOM	1000	C4'	RG	32	-7.127	-3.022	6.689	0.00	0.00
ATOM	1001	H4'	RG	32	-8.168	-2.924	6.931	0.00	0.00
ATOM	1002	O4'	RG	32	-6.498	-3.796	7.684	0.00	0.00
ATOM	1003	C1'	RG	32	-6.157	-2.973	8.764	0.00	0.00
ATOM	1004	H1'	RG	32	-6.864	-3.103	9.563	0.00	0.00
ATOM	1005	N9	RG	32	-4.820	-3.340	9.255	0.00	0.00
ATOM	1006	C8	RG	32	-4.484	-3.678	10.519	0.00	0.00
ATOM	1007	H8	RG	32	-5.209	-3.720	11.295	0.00	0.00
ATOM	1008	N7	RG	32	-3.234	-3.962	10.678	0.00	0.00
ATOM	1009	C5	RG	32	-2.682	-3.774	9.424	0.00	0.00
ATOM	1010	C6	RG	32	-1.341	-3.910	8.940	0.00	0.00
ATOM	1011	O6	RG	32	-0.334	-4.233	9.545	0.00	0.00
ATOM	1012	N1	RG	32	-1.205	-3.629	7.620	0.00	0.00
ATOM	1013	H1	RG	32	-0.298	-3.697	7.220	0.00	0.00

ATOM	1014	C2	RG	32	-2.219	-3.231	6.842	0.00	0.00
ATOM	1015	N2	RG	32	-1.942	-2.888	5.642	0.00	0.00
ATOM	1016	H21	RG	32	-1.002	-2.906	5.325	0.00	0.00
ATOM	1017	H22	RG	32	-2.686	-2.573	5.084	0.00	0.00
ATOM	1018	N3	RG	32	-3.464	-3.069	7.244	0.00	0.00
ATOM	1019	C4	RG	32	-3.648	-3.381	8.548	0.00	0.00
ATOM	1020	C3'	RG	32	-6.465	-1.658	6.779	0.00	0.00
ATOM	1021	H3'	RG	32	-5.515	-1.692	6.272	0.00	0.00
ATOM	1022	C2'	RG	32	-6.247	-1.536	8.280	0.00	0.00
ATOM	1023	1H2'	RG	32	-5.336	-1.003	8.462	0.00	0.00
ATOM	1024	O2'	RG	32	-7.324	-0.917	8.919	0.00	0.00
ATOM	1025	2HO'	RG	32	-7.414	-0.100	8.544	0.00	0.00
ATOM	1026	O3'	RG	32	-7.266	-0.639	6.220	0.00	0.00
ATOM	1027	P	RG	33	-6.719	0.800	6.040	0.00	0.00
ATOM	1028	O1P	RG	33	-5.517	0.718	5.272	0.00	0.00
ATOM	1029	O2P	RG	33	-6.706	1.428	7.321	0.00	0.00
ATOM	1030	O5'	RG	33	-7.782	1.534	5.156	0.00	0.00
ATOM	1031	C5'	RG	33	-9.014	1.932	5.655	0.00	0.00
ATOM	1032	1H5'	RG	33	-8.879	2.482	6.543	0.00	0.00
ATOM	1033	2H5'	RG	33	-9.573	1.068	5.886	0.00	0.00
ATOM	1034	C4'	RG	33	-9.806	2.797	4.687	0.00	0.00
ATOM	1035	H4'	RG	33	-10.800	2.874	5.068	0.00	0.00
ATOM	1036	O4'	RG	33	-9.282	4.094	4.605	0.00	0.00
ATOM	1037	C1'	RG	33	-9.233	4.499	3.247	0.00	0.00
ATOM	1038	H1'	RG	33	-9.624	5.496	3.123	0.00	0.00
ATOM	1039	N9	RG	33	-7.840	4.495	2.784	0.00	0.00
ATOM	1040	C8	RG	33	-6.724	4.121	3.469	0.00	0.00
ATOM	1041	H8	RG	33	-6.768	3.727	4.462	0.00	0.00
ATOM	1042	N7	RG	33	-5.614	4.296	2.821	0.00	0.00
ATOM	1043	C5	RG	33	-6.021	4.849	1.612	0.00	0.00
ATOM	1044	C6	RG	33	-5.273	5.279	0.471	0.00	0.00
ATOM	1045	O6	RG	33	-4.067	5.271	0.308	0.00	0.00
ATOM	1046	N1	RG	33	-6.050	5.769	-0.545	0.00	0.00
ATOM	1047	H1	RG	33	-5.587	6.126	-1.352	0.00	0.00
ATOM	1048	C2	RG	33	-7.389	5.862	-0.474	0.00	0.00
ATOM	1049	N2	RG	33	-7.989	6.338	-1.509	0.00	0.00
ATOM	1050	H21	RG	33	-7.472	6.631	-2.310	0.00	0.00
ATOM	1051	H22	RG	33	-8.982	6.404	-1.484	0.00	0.00
ATOM	1052	N3	RG	33	-8.129	5.482	0.559	0.00	0.00
ATOM	1053	C4	RG	33	-7.387	4.974	1.580	0.00	0.00
ATOM	1054	C3'	RG	33	-9.907	2.242	3.281	0.00	0.00
ATOM	1055	H3'	RG	33	-8.971	1.803	2.995	0.00	0.00
ATOM	1056	C2'	RG	33	-10.101	3.516	2.482	0.00	0.00
ATOM	1057	1H2'	RG	33	-9.768	3.398	1.468	0.00	0.00
ATOM	1058	O2'	RG	33	-11.427	3.982	2.523	0.00	0.00
ATOM	1059	2HO'	RG	33	-11.812	3.751	2.650	0.00	0.00
ATOM	1060	O3'	RG	33	-10.966	1.336	3.125	0.00	0.00
ATOM	1061	P	RU	34	-10.919	0.216	2.035	0.00	0.00
ATOM	1062	O1P	RU	34	-12.159	-0.531	2.129	0.00	0.00
ATOM	1063	O2P	RU	34	-9.662	-0.494	2.176	0.00	0.00
ATOM	1064	O5'	RU	34	-10.907	0.941	0.648	0.00	0.00
ATOM	1065	C5'	RU	34	-12.063	1.532	0.109	0.00	0.00
ATOM	1066	1H5'	RU	34	-12.398	2.332	0.731	0.00	0.00
ATOM	1067	2H5'	RU	34	-12.842	0.808	0.039	0.00	0.00
ATOM	1068	C4'	RU	34	-11.820	2.082	-1.275	0.00	0.00
ATOM	1069	H4'	RU	34	-12.765	2.418	-1.663	0.00	0.00
ATOM	1070	O4'	RU	34	-10.907	3.156	-1.289	0.00	0.00
ATOM	1071	C1'	RU	34	-10.235	3.153	-2.538	0.00	0.00
ATOM	1072	H1'	RU	34	-10.452	4.070	-3.056	0.00	0.00
ATOM	1073	N1	RU	34	-8.764	3.035	-2.389	0.00	0.00
ATOM	1074	C6	RU	34	-8.178	2.483	-1.282	0.00	0.00
ATOM	1075	H6	RU	34	-8.792	2.115	-0.493	0.00	0.00
ATOM	1076	C5	RU	34	-6.835	2.424	-1.165	0.00	0.00
ATOM	1077	H5	RU	34	-6.389	2.010	-0.287	0.00	0.00
ATOM	1078	C4	RU	34	-5.971	2.938	-2.185	0.00	0.00
ATOM	1079	O4	RU	34	-4.755	2.967	-2.140	0.00	0.00
ATOM	1080	N3	RU	34	-6.620	3.473	-3.251	0.00	0.00
ATOM	1081	H3	RU	34	-6.054	3.821	-3.988	0.00	0.00

ATOM	1082	C2	RU	34	-7.973	3.520	-3.424	0.00	0.00
ATOM	1083	O2	RU	34	-8.426	3.971	-4.463	0.00	0.00
ATOM	1084	C3'	RU	34	-11.253	1.067	-2.243	0.00	0.00
ATOM	1085	H3'	RU	34	-10.392	0.612	-1.787	0.00	0.00
ATOM	1086	C2'	RU	34	-10.797	1.993	-3.350	0.00	0.00
ATOM	1087	1H2'	RU	34	-10.046	1.530	-3.956	0.00	0.00
ATOM	1088	O2'	RU	34	-11.849	2.464	-4.149	0.00	0.00
ATOM	1089	2HO'	RU	34	-11.746	2.492	-4.774	0.00	0.00
ATOM	1090	O3'	RU	34	-12.185	0.090	-2.637	0.00	0.00
ATOM	1091	P	RG	35	-11.697	-1.315	-3.134	0.00	0.00
ATOM	1092	O1P	RG	35	-12.882	-2.122	-3.361	0.00	0.00
ATOM	1093	O2P	RG	35	-10.677	-1.799	-2.215	0.00	0.00
ATOM	1094	O5'	RG	35	-11.012	-1.063	-4.513	0.00	0.00
ATOM	1095	C5'	RG	35	-11.748	-0.713	-5.643	0.00	0.00
ATOM	1096	1H5'	RG	35	-12.383	0.123	-5.430	0.00	0.00
ATOM	1097	2H5'	RG	35	-12.367	-1.531	-5.932	0.00	0.00
ATOM	1098	C4'	RG	35	-10.847	-0.370	-6.805	0.00	0.00
ATOM	1099	H4'	RG	35	-11.456	-0.101	-7.645	0.00	0.00
ATOM	1100	O4'	RG	35	-10.004	0.713	-6.497	0.00	0.00
ATOM	1101	C1'	RG	35	-8.785	0.539	-7.181	0.00	0.00
ATOM	1102	H1'	RG	35	-8.623	1.366	-7.850	0.00	0.00
ATOM	1103	N9	RG	35	-7.665	0.491	-6.234	0.00	0.00
ATOM	1104	C8	RG	35	-7.635	0.085	-4.932	0.00	0.00
ATOM	1105	H8	RG	35	-8.500	-0.308	-4.449	0.00	0.00
ATOM	1106	N7	RG	35	-6.488	0.224	-4.355	0.00	0.00
ATOM	1107	C5	RG	35	-5.669	0.733	-5.354	0.00	0.00
ATOM	1108	C6	RG	35	-4.289	1.108	-5.363	0.00	0.00
ATOM	1109	O6	RG	35	-3.476	1.123	-4.455	0.00	0.00
ATOM	1110	N1	RG	35	-3.840	1.490	-6.594	0.00	0.00
ATOM	1111	H1	RG	35	-2.881	1.749	-6.680	0.00	0.00
ATOM	1112	C2	RG	35	-4.622	1.568	-7.679	0.00	0.00
ATOM	1113	N2	RG	35	-4.062	1.973	-8.764	0.00	0.00
ATOM	1114	H21	RG	35	-3.092	2.164	-8.791	0.00	0.00
ATOM	1115	H22	RG	35	-4.628	2.071	-9.564	0.00	0.00
ATOM	1116	N3	RG	35	-5.917	1.298	-7.709	0.00	0.00
ATOM	1117	C4	RG	35	-6.384	0.870	-6.510	0.00	0.00
ATOM	1118	C3'	RG	35	-9.946	-1.505	-7.254	0.00	0.00
ATOM	1119	H3'	RG	35	-9.495	-1.970	-6.397	0.00	0.00
ATOM	1120	C2'	RG	35	-8.883	-0.734	-7.999	0.00	0.00
ATOM	1121	1H2'	RG	35	-7.954	-1.271	-8.021	0.00	0.00
ATOM	1122	O2'	RG	35	-9.289	-0.406	-9.291	0.00	0.00
ATOM	1123	2HO'	RG	35	-9.562	-0.951	-9.616	0.00	0.00
ATOM	1124	O3'	RG	35	-10.621	-2.439	-8.060	0.00	0.00
ATOM	1125	P	RC	36	-10.189	-3.941	-8.127	0.00	0.00
ATOM	1126	O1P	RC	36	-11.153	-4.635	-8.964	0.00	0.00
ATOM	1127	O2P	RC	36	-9.976	-4.397	-6.770	0.00	0.00
ATOM	1128	O5'	RC	36	-8.798	-3.939	-8.853	0.00	0.00
ATOM	1129	C5'	RC	36	-8.686	-3.739	-10.232	0.00	0.00
ATOM	1130	1H5'	RC	36	-9.253	-2.876	-10.508	0.00	0.00
ATOM	1131	2H5'	RC	36	-9.069	-4.590	-10.757	0.00	0.00
ATOM	1132	C4'	RC	36	-7.255	-3.510	-10.647	0.00	0.00
ATOM	1133	H4'	RC	36	-7.246	-3.279	-11.694	0.00	0.00
ATOM	1134	O4'	RC	36	-6.695	-2.418	-9.969	0.00	0.00
ATOM	1135	C1'	RC	36	-5.304	-2.615	-9.832	0.00	0.00
ATOM	1136	H1'	RC	36	-4.789	-1.878	-10.420	0.00	0.00
ATOM	1137	N1	RC	36	-4.863	-2.507	-8.418	0.00	0.00
ATOM	1138	C6	RC	36	-5.621	-2.972	-7.386	0.00	0.00
ATOM	1139	H6	RC	36	-6.568	-3.417	-7.578	0.00	0.00
ATOM	1140	C5	RC	36	-5.170	-2.868	-6.121	0.00	0.00
ATOM	1141	H5	RC	36	-5.762	-3.223	-5.310	0.00	0.00
ATOM	1142	C4	RC	36	-3.903	-2.292	-5.927	0.00	0.00
ATOM	1143	N4	RC	36	-3.440	-2.143	-4.730	0.00	0.00
ATOM	1144	H41	RC	36	-2.561	-1.692	-4.628	0.00	0.00
ATOM	1145	H42	RC	36	-3.964	-2.444	-3.953	0.00	0.00
ATOM	1146	N3	RC	36	-3.159	-1.860	-6.900	0.00	0.00
ATOM	1147	C2	RC	36	-3.617	-1.963	-8.152	0.00	0.00
ATOM	1148	O2	RC	36	-2.903	-1.576	-9.052	0.00	0.00
ATOM	1149	C3'	RC	36	-6.334	-4.687	-10.426	0.00	0.00

ATOM	1150	H3'	RC	36	-6.538	-5.097	-9.458	0.00	0.00
ATOM	1151	C2'	RC	36	-4.990	-3.993	-10.397	0.00	0.00
ATOM	1152	1H2'	RC	36	-4.313	-4.532	-9.767	0.00	0.00
ATOM	1153	O2'	RC	36	-4.449	-3.822	-11.668	0.00	0.00
ATOM	1154	2HO'	RC	36	-4.299	-4.624	-11.991	0.00	0.00
ATOM	1155	O3'	RC	36	-6.441	-5.667	-11.432	0.00	0.00
ATOM	1156	P	RA	37	-5.740	-7.064	-11.291	0.00	0.00
ATOM	1157	O1P	RA	37	-6.140	-7.860	-12.421	0.00	0.00
ATOM	1158	O2P	RA	37	-5.974	-7.557	-9.958	0.00	0.00
ATOM	1159	O5'	RA	37	-4.222	-6.728	-11.455	0.00	0.00
ATOM	1160	C5'	RA	37	-3.223	-7.411	-10.768	0.00	0.00
ATOM	1161	1H5'	RA	37	-3.104	-8.381	-11.181	0.00	0.00
ATOM	1162	2H5'	RA	37	-3.484	-7.505	-9.746	0.00	0.00
ATOM	1163	C4'	RA	37	-1.909	-6.679	-10.862	0.00	0.00
ATOM	1164	H4'	RA	37	-1.653	-6.559	-11.890	0.00	0.00
ATOM	1165	O4'	RA	37	-1.986	-5.411	-10.259	0.00	0.00
ATOM	1166	C1'	RA	37	-0.815	-5.146	-9.514	0.00	0.00
ATOM	1167	H1'	RA	37	-0.385	-4.209	-9.802	0.00	0.00
ATOM	1168	N9	RA	37	-1.123	-5.092	-8.078	0.00	0.00
ATOM	1169	C8	RA	37	-2.252	-5.500	-7.439	0.00	0.00
ATOM	1170	H8	RA	37	-3.070	-5.953	-7.951	0.00	0.00
ATOM	1171	N7	RA	37	-2.249	-5.283	-6.162	0.00	0.00
ATOM	1172	C5	RA	37	-1.020	-4.682	-5.937	0.00	0.00
ATOM	1173	C6	RA	37	-0.358	-4.157	-4.814	0.00	0.00
ATOM	1174	N6	RA	37	-0.857	-4.102	-3.612	0.00	0.00
ATOM	1175	H61	RA	37	-0.317	-3.708	-2.881	0.00	0.00
ATOM	1176	H62	RA	37	-1.762	-4.465	-3.471	0.00	0.00
ATOM	1177	N1	RA	37	0.852	-3.647	-4.918	0.00	0.00
ATOM	1178	C2	RA	37	1.420	-3.634	-6.102	0.00	0.00
ATOM	1179	H2	RA	37	2.403	-3.222	-6.142	0.00	0.00
ATOM	1180	N3	RA	37	0.927	-4.064	-7.249	0.00	0.00
ATOM	1181	C4	RA	37	-0.316	-4.583	-7.097	0.00	0.00
ATOM	1182	C3'	RA	37	-0.786	-7.412	-10.161	0.00	0.00
ATOM	1183	H3'	RA	37	-1.157	-7.818	-9.244	0.00	0.00
ATOM	1184	C2'	RA	37	0.149	-6.271	-9.838	0.00	0.00
ATOM	1185	1H2'	RA	37	0.778	-6.520	-9.006	0.00	0.00
ATOM	1186	O2'	RA	37	0.921	-5.895	-10.937	0.00	0.00
ATOM	1187	2HO'	RA	37	1.156	-6.291	-11.194	0.00	0.00
ATOM	1188	O3'	RA	37	-0.214	-8.392	-10.988	0.00	0.00
ATOM	1189	P	RC	38	0.383	-9.712	-10.403	0.00	0.00
ATOM	1190	O1P	RC	38	0.866	-10.491	-11.527	0.00	0.00
ATOM	1191	O2P	RC	38	-0.591	-10.298	-9.507	0.00	0.00
ATOM	1192	O5'	RC	38	1.623	-9.272	-9.535	0.00	0.00
ATOM	1193	C5'	RC	38	2.821	-8.866	-10.124	0.00	0.00
ATOM	1194	1H5'	RC	38	2.604	-8.145	-10.881	0.00	0.00
ATOM	1195	2H5'	RC	38	3.307	-9.698	-10.572	0.00	0.00
ATOM	1196	C4'	RC	38	3.767	-8.249	-9.115	0.00	0.00
ATOM	1197	H4'	RC	38	4.661	-7.965	-9.637	0.00	0.00
ATOM	1198	O4'	RC	38	3.210	-7.108	-8.497	0.00	0.00
ATOM	1199	C1'	RC	38	3.726	-6.989	-7.181	0.00	0.00
ATOM	1200	H1'	RC	38	4.241	-6.050	-7.072	0.00	0.00
ATOM	1201	N1	RC	38	2.688	-7.089	-6.133	0.00	0.00
ATOM	1202	C6	RC	38	1.485	-7.696	-6.342	0.00	0.00
ATOM	1203	H6	RC	38	1.268	-8.111	-7.296	0.00	0.00
ATOM	1204	C5	RC	38	0.593	-7.803	-5.345	0.00	0.00
ATOM	1205	H5	RC	38	-0.339	-8.290	-5.514	0.00	0.00
ATOM	1206	C4	RC	38	0.956	-7.275	-4.098	0.00	0.00
ATOM	1207	N4	RC	38	0.142	-7.346	-3.111	0.00	0.00
ATOM	1208	H41	RC	38	0.416	-6.893	-2.271	0.00	0.00
ATOM	1209	H42	RC	38	-0.748	-7.741	-3.238	0.00	0.00
ATOM	1210	N3	RC	38	2.100	-6.694	-3.875	0.00	0.00
ATOM	1211	C2	RC	38	2.983	-6.592	-4.871	0.00	0.00
ATOM	1212	O2	RC	38	4.058	-6.075	-4.622	0.00	0.00
ATOM	1213	C3'	RC	38	4.188	-9.163	-7.982	0.00	0.00
ATOM	1214	H3'	RC	38	3.308	-9.615	-7.565	0.00	0.00
ATOM	1215	C2'	RC	38	4.725	-8.122	-7.018	0.00	0.00
ATOM	1216	1H2'	RC	38	4.758	-8.509	-6.018	0.00	0.00
ATOM	1217	O2'	RC	38	5.984	-7.639	-7.409	0.00	0.00

ATOM	1218	2HO'	RC	38	6.410	-8.202	-7.707	0.00	0.00
ATOM	1219	O3'	RC	38	5.167	-10.123	-8.310	0.00	0.00
ATOM	1220	P	RA	39	5.435	-11.370	-7.384	0.00	0.00
ATOM	1221	O1P	RA	39	6.442	-12.185	-8.040	0.00	0.00
ATOM	1222	O2P	RA	39	4.149	-11.967	-7.069	0.00	0.00
ATOM	1223	O5'	RA	39	6.051	-10.832	-6.039	0.00	0.00
ATOM	1224	C5'	RA	39	7.367	-10.328	-5.978	0.00	0.00
ATOM	1225	1H5'	RA	39	7.502	-9.623	-6.769	0.00	0.00
ATOM	1226	2H5'	RA	39	8.075	-11.116	-6.126	0.00	0.00
ATOM	1227	C4'	RA	39	7.679	-9.641	-4.669	0.00	0.00
ATOM	1228	H4'	RA	39	8.590	-9.090	-4.796	0.00	0.00
ATOM	1229	O4'	RA	39	6.668	-8.733	-4.274	0.00	0.00
ATOM	1230	C1'	RA	39	6.602	-8.716	-2.865	0.00	0.00
ATOM	1231	H1'	RA	39	6.804	-7.724	-2.508	0.00	0.00
ATOM	1232	N9	RA	39	5.262	-9.105	-2.400	0.00	0.00
ATOM	1233	C8	RA	39	4.214	-9.654	-3.075	0.00	0.00
ATOM	1234	H8	RA	39	4.286	-9.944	-4.101	0.00	0.00
ATOM	1235	N7	RA	39	3.113	-9.766	-2.382	0.00	0.00
ATOM	1236	C5	RA	39	3.475	-9.249	-1.135	0.00	0.00
ATOM	1237	C6	RA	39	2.821	-9.013	0.089	0.00	0.00
ATOM	1238	N6	RA	39	1.567	-9.232	0.341	0.00	0.00
ATOM	1239	H61	RA	39	1.244	-9.017	1.249	0.00	0.00
ATOM	1240	H62	RA	39	0.996	-9.636	-0.352	0.00	0.00
ATOM	1241	N1	RA	39	3.471	-8.522	1.139	0.00	0.00
ATOM	1242	C2	RA	39	4.747	-8.248	0.990	0.00	0.00
ATOM	1243	H2	RA	39	5.233	-7.857	1.854	0.00	0.00
ATOM	1244	N3	RA	39	5.490	-8.381	-0.091	0.00	0.00
ATOM	1245	C4	RA	39	4.789	-8.890	-1.129	0.00	0.00
ATOM	1246	C3'	RA	39	7.889	-10.595	-3.514	0.00	0.00
ATOM	1247	H3'	RA	39	7.105	-11.322	-3.524	0.00	0.00
ATOM	1248	C2'	RA	39	7.692	-9.650	-2.358	0.00	0.00
ATOM	1249	1H2'	RA	39	7.373	-10.181	-1.488	0.00	0.00
ATOM	1250	O2'	RA	39	8.832	-8.879	-2.098	0.00	0.00
ATOM	1251	2HO'	RA	39	9.223	-9.094	-1.906	0.00	0.00
ATOM	1252	O3'	RA	39	9.169	-11.174	-3.532	0.00	0.00
ATOM	1253	P	RC	40	9.447	-12.539	-2.833	0.00	0.00
ATOM	1254	O1P	RC	40	10.843	-12.862	-3.074	0.00	0.00
ATOM	1255	O2P	RC	40	8.427	-13.477	-3.254	0.00	0.00
ATOM	1256	O5'	RC	40	9.241	-12.301	-1.295	0.00	0.00
ATOM	1257	C5'	RC	40	10.152	-11.566	-0.520	0.00	0.00
ATOM	1258	1H5'	RC	40	10.356	-10.629	-0.988	0.00	0.00
ATOM	1259	2H5'	RC	40	11.074	-12.109	-0.439	0.00	0.00
ATOM	1260	C4'	RC	40	9.612	-11.299	0.885	0.00	0.00
ATOM	1261	H4'	RC	40	10.350	-10.726	1.423	0.00	0.00
ATOM	1262	O4'	RC	40	8.415	-10.545	0.859	0.00	0.00
ATOM	1263	C1'	RC	40	7.565	-10.968	1.912	0.00	0.00
ATOM	1264	H1'	RC	40	7.328	-10.123	2.537	0.00	0.00
ATOM	1265	N1	RC	40	6.281	-11.538	1.404	0.00	0.00
ATOM	1266	C6	RC	40	6.178	-12.131	0.188	0.00	0.00
ATOM	1267	H6	RC	40	7.051	-12.253	-0.412	0.00	0.00
ATOM	1268	C5	RC	40	4.982	-12.531	-0.276	0.00	0.00
ATOM	1269	H5	RC	40	4.902	-12.963	-1.243	0.00	0.00
ATOM	1270	C4	RC	40	3.861	-12.347	0.545	0.00	0.00
ATOM	1271	N4	RC	40	2.678	-12.656	0.120	0.00	0.00
ATOM	1272	H41	RC	40	1.908	-12.512	0.716	0.00	0.00
ATOM	1273	H42	RC	40	2.577	-13.009	-0.798	0.00	0.00
ATOM	1274	N3	RC	40	3.938	-11.826	1.733	0.00	0.00
ATOM	1275	C2	RC	40	5.138	-11.423	2.185	0.00	0.00
ATOM	1276	O2	RC	40	5.189	-10.955	3.302	0.00	0.00
ATOM	1277	C3'	RC	40	9.312	-12.547	1.685	0.00	0.00
ATOM	1278	H3'	RC	40	8.782	-13.252	1.073	0.00	0.00
ATOM	1279	C2'	RC	40	8.353	-11.982	2.723	0.00	0.00
ATOM	1280	1H2'	RC	40	7.713	-12.744	3.125	0.00	0.00
ATOM	1281	O2'	RC	40	9.021	-11.290	3.743	0.00	0.00
ATOM	1282	2HO'	RC	40	9.567	-11.627	3.979	0.00	0.00
ATOM	1283	O3'	RC	40	10.464	-13.127	2.250	0.00	0.00
ATOM	1284	P	RA	41	10.497	-14.640	2.658	0.00	0.00
ATOM	1285	O1P	RA	41	11.838	-14.947	3.140	0.00	0.00

ATOM	1286	O2P	RA	41	9.943	-15.426	1.569	0.00	0.00
ATOM	1287	O5'	RA	41	9.500	-14.763	3.863	0.00	0.00
ATOM	1288	C5'	RA	41	9.841	-14.353	5.163	0.00	0.00
ATOM	1289	1H5'	RA	41	10.141	-13.323	5.151	0.00	0.00
ATOM	1290	2H5'	RA	41	10.666	-14.935	5.521	0.00	0.00
ATOM	1291	C4'	RA	41	8.678	-14.510	6.134	0.00	0.00
ATOM	1292	H4'	RA	41	9.022	-14.225	7.108	0.00	0.00
ATOM	1293	O4'	RA	41	7.582	-13.688	5.795	0.00	0.00
ATOM	1294	C1'	RA	41	6.373	-14.365	6.095	0.00	0.00
ATOM	1295	H1'	RA	41	5.743	-13.765	6.733	0.00	0.00
ATOM	1296	N9	RA	41	5.626	-14.649	4.862	0.00	0.00
ATOM	1297	C8	RA	41	6.095	-14.839	3.596	0.00	0.00
ATOM	1298	H8	RA	41	7.138	-14.864	3.364	0.00	0.00
ATOM	1299	N7	RA	41	5.176	-14.958	2.693	0.00	0.00
ATOM	1300	C5	RA	41	3.998	-14.902	3.433	0.00	0.00
ATOM	1301	C6	RA	41	2.623	-15.004	3.137	0.00	0.00
ATOM	1302	N6	RA	41	2.111	-15.132	1.939	0.00	0.00
ATOM	1303	H61	RA	41	1.127	-15.176	1.834	0.00	0.00
ATOM	1304	H62	RA	41	2.719	-15.143	1.163	0.00	0.00
ATOM	1305	N1	RA	41	1.712	-14.955	4.089	0.00	0.00
ATOM	1306	C2	RA	41	2.128	-14.803	5.320	0.00	0.00
ATOM	1307	H2	RA	41	1.367	-14.764	6.065	0.00	0.00
ATOM	1308	N3	RA	41	3.366	-14.686	5.760	0.00	0.00
ATOM	1309	C4	RA	41	4.265	-14.739	4.754	0.00	0.00
ATOM	1310	C3'	RA	41	8.121	-15.918	6.218	0.00	0.00
ATOM	1311	H3'	RA	41	8.000	-16.301	5.224	0.00	0.00
ATOM	1312	C2'	RA	41	6.752	-15.643	6.817	0.00	0.00
ATOM	1313	1H2'	RA	41	6.064	-16.440	6.597	0.00	0.00
ATOM	1314	O2'	RA	41	6.785	-15.400	8.193	0.00	0.00
ATOM	1315	2HO'	RA	41	7.437	-15.654	8.519	0.00	0.00
ATOM	1316	O3'	RA	41	8.897	-16.773	6.996	0.00	0.00
ATOM	1317	P	RG	42	8.947	-18.300	6.702	0.00	0.00
ATOM	1318	O1P	RG	42	9.919	-18.892	7.603	0.00	0.00
ATOM	1319	O2P	RG	42	9.102	-18.487	5.272	0.00	0.00
ATOM	1320	O5'	RG	42	7.523	-18.823	7.106	0.00	0.00
ATOM	1321	C5'	RG	42	7.134	-18.931	8.454	0.00	0.00
ATOM	1322	1H5'	RG	42	7.354	-18.019	8.967	0.00	0.00
ATOM	1323	2H5'	RG	42	7.693	-19.709	8.929	0.00	0.00
ATOM	1324	C4'	RG	42	5.658	-19.260	8.619	0.00	0.00
ATOM	1325	H4'	RG	42	5.438	-19.333	9.669	0.00	0.00
ATOM	1326	O4'	RG	42	4.840	-18.260	8.062	0.00	0.00
ATOM	1327	C1'	RG	42	3.676	-18.865	7.533	0.00	0.00
ATOM	1328	H1'	RG	42	2.792	-18.434	7.972	0.00	0.00
ATOM	1329	N9	RG	42	3.597	-18.674	6.077	0.00	0.00
ATOM	1330	C8	RG	42	4.580	-18.374	5.197	0.00	0.00
ATOM	1331	H8	RG	42	5.599	-18.241	5.487	0.00	0.00
ATOM	1332	N7	RG	42	4.178	-18.242	3.967	0.00	0.00
ATOM	1333	C5	RG	42	2.816	-18.502	4.040	0.00	0.00
ATOM	1334	C6	RG	42	1.793	-18.543	3.038	0.00	0.00
ATOM	1335	O6	RG	42	1.867	-18.300	1.849	0.00	0.00
ATOM	1336	N1	RG	42	0.572	-18.930	3.526	0.00	0.00
ATOM	1337	H1	RG	42	-0.170	-19.045	2.869	0.00	0.00
ATOM	1338	C2	RG	42	0.338	-19.231	4.805	0.00	0.00
ATOM	1339	N2	RG	42	-0.841	-19.666	5.105	0.00	0.00
ATOM	1340	H21	RG	42	-1.510	-19.826	4.389	0.00	0.00
ATOM	1341	H22	RG	42	-1.008	-19.935	6.040	0.00	0.00
ATOM	1342	N3	RG	42	1.235	-19.164	5.769	0.00	0.00
ATOM	1343	C4	RG	42	2.462	-18.799	5.327	0.00	0.00
ATOM	1344	C3'	RG	42	5.239	-20.556	7.972	0.00	0.00
ATOM	1345	H3'	RG	42	5.643	-20.598	6.977	0.00	0.00
ATOM	1346	C2'	RG	42	3.731	-20.332	7.897	0.00	0.00
ATOM	1347	1H2'	RG	42	3.293	-20.945	7.133	0.00	0.00
ATOM	1348	O2'	RG	42	3.079	-20.513	9.129	0.00	0.00
ATOM	1349	2HO'	RG	42	3.123	-20.825	9.425	0.00	0.00
ATOM	1350	O3'	RG	42	5.603	-21.671	8.724	0.00	0.00
ATOM	1351	P	RC	43	5.789	-23.066	8.054	0.00	0.00
ATOM	1352	O1P	RC	43	6.160	-23.991	9.106	0.00	0.00
ATOM	1353	O2P	RC	43	6.679	-22.915	6.918	0.00	0.00

ATOM	1354	O5'	RC	43	4.369	-23.477	7.517	0.00	0.00
ATOM	1355	C5'	RC	43	3.343	-23.894	8.376	0.00	0.00
ATOM	1356	1H5'	RC	43	3.159	-23.154	9.121	0.00	0.00
ATOM	1357	2H5'	RC	43	3.642	-24.791	8.871	0.00	0.00
ATOM	1358	C4'	RC	43	2.045	-24.160	7.637	0.00	0.00
ATOM	1359	H4'	RC	43	1.309	-24.504	8.338	0.00	0.00
ATOM	1360	O4'	RC	43	1.530	-23.013	7.011	0.00	0.00
ATOM	1361	C1'	RC	43	0.834	-23.398	5.843	0.00	0.00
ATOM	1362	H1'	RC	43	-0.196	-23.110	5.927	0.00	0.00
ATOM	1363	N1	RC	43	1.420	-22.797	4.622	0.00	0.00
ATOM	1364	C6	RC	43	2.721	-22.395	4.559	0.00	0.00
ATOM	1365	H6	RC	43	3.349	-22.486	5.417	0.00	0.00
ATOM	1366	C5	RC	43	3.211	-21.875	3.423	0.00	0.00
ATOM	1367	H5	RC	43	4.227	-21.558	3.377	0.00	0.00
ATOM	1368	C4	RC	43	2.341	-21.790	2.323	0.00	0.00
ATOM	1369	N4	RC	43	2.758	-21.291	1.216	0.00	0.00
ATOM	1370	H41	RC	43	2.101	-21.172	0.490	0.00	0.00
ATOM	1371	H42	RC	43	3.674	-20.973	1.146	0.00	0.00
ATOM	1372	N3	RC	43	1.091	-22.165	2.362	0.00	0.00
ATOM	1373	C2	RC	43	0.617	-22.693	3.494	0.00	0.00
ATOM	1374	O2	RC	43	-0.532	-23.084	3.488	0.00	0.00
ATOM	1375	C3'	RC	43	2.159	-25.193	6.556	0.00	0.00
ATOM	1376	H3'	RC	43	3.017	-24.955	5.960	0.00	0.00
ATOM	1377	C2'	RC	43	0.897	-24.910	5.769	0.00	0.00
ATOM	1378	1H2'	RC	43	0.984	-25.261	4.765	0.00	0.00
ATOM	1379	O2'	RC	43	-0.260	-25.430	6.371	0.00	0.00
ATOM	1380	2HO'	RC	43	-0.405	-25.973	6.316	0.00	0.00
ATOM	1381	O3'	RC	43	2.243	-26.507	7.027	0.00	0.00
ATOM	1382	P	RA	44	2.889	-27.634	6.155	0.00	0.00
ATOM	1383	O1P	RA	44	2.933	-28.836	6.964	0.00	0.00
ATOM	1384	O2P	RA	44	4.123	-27.121	5.583	0.00	0.00
ATOM	1385	O5'	RA	44	1.877	-27.876	4.983	0.00	0.00
ATOM	1386	C5'	RA	44	0.663	-28.532	5.194	0.00	0.00
ATOM	1387	1H5'	RA	44	0.121	-28.054	5.974	0.00	0.00
ATOM	1388	2H5'	RA	44	0.847	-29.536	5.500	0.00	0.00
ATOM	1389	C4'	RA	44	-0.196	-28.563	3.959	0.00	0.00
ATOM	1390	H4'	RA	44	-1.110	-29.067	4.211	0.00	0.00
ATOM	1391	O4'	RA	44	-0.503	-27.277	3.481	0.00	0.00
ATOM	1392	C1'	RA	44	-0.596	-27.327	2.075	0.00	0.00
ATOM	1393	H1'	RA	44	-1.557	-26.996	1.746	0.00	0.00
ATOM	1394	N9	RA	44	0.416	-26.471	1.451	0.00	0.00
ATOM	1395	C8	RA	44	1.617	-26.066	1.934	0.00	0.00
ATOM	1396	H8	RA	44	1.968	-26.356	2.898	0.00	0.00
ATOM	1397	N7	RA	44	2.275	-25.278	1.149	0.00	0.00
ATOM	1398	C5	RA	44	1.457	-25.193	0.030	0.00	0.00
ATOM	1399	C6	RA	44	1.521	-24.549	-1.214	0.00	0.00
ATOM	1400	N6	RA	44	2.477	-23.767	-1.617	0.00	0.00
ATOM	1401	H61	RA	44	2.391	-23.340	-2.505	0.00	0.00
ATOM	1402	H62	RA	44	3.220	-23.565	-1.003	0.00	0.00
ATOM	1403	N1	RA	44	0.567	-24.695	-2.112	0.00	0.00
ATOM	1404	C2	RA	44	-0.447	-25.462	-1.809	0.00	0.00
ATOM	1405	H2	RA	44	-1.193	-25.558	-2.563	0.00	0.00
ATOM	1406	N3	RA	44	-0.660	-26.124	-0.690	0.00	0.00
ATOM	1407	C4	RA	44	0.337	-25.940	0.200	0.00	0.00
ATOM	1408	C3'	RA	44	0.434	-29.301	2.811	0.00	0.00
ATOM	1409	H3'	RA	44	1.441	-28.961	2.695	0.00	0.00
ATOM	1410	C2'	RA	44	-0.405	-28.770	1.674	0.00	0.00
ATOM	1411	1H2'	RA	44	0.123	-28.843	0.746	0.00	0.00
ATOM	1412	O2'	RA	44	-1.663	-29.380	1.584	0.00	0.00
ATOM	1413	2HO'	RA	44	-1.696	-29.906	1.392	0.00	0.00
ATOM	1414	O3'	RA	44	0.375	-30.696	2.962	0.00	0.00
ATOM	1415	P	RA	45	1.356	-31.637	2.188	0.00	0.00
ATOM	1416	O1P	RA	45	1.169	-32.983	2.689	0.00	0.00
ATOM	1417	O2P	RA	45	2.676	-31.048	2.214	0.00	0.00
ATOM	1418	O5'	RA	45	0.869	-31.594	0.710	0.00	0.00
ATOM	1419	C5'	RA	45	-0.296	-32.240	0.299	0.00	0.00
ATOM	1420	1H5'	RA	45	-1.123	-31.935	0.907	0.00	0.00
ATOM	1421	2H5'	RA	45	-0.183	-33.297	0.397	0.00	0.00

ATOM	1422	C4'	RA	45	-0.615	-31.929	-1.143	0.00	0.00
ATOM	1423	H4'	RA	45	-1.536	-32.404	-1.410	0.00	0.00
ATOM	1424	O4'	RA	45	-0.762	-30.547	-1.340	0.00	0.00
ATOM	1425	C1'	RA	45	-0.231	-30.199	-2.598	0.00	0.00
ATOM	1426	H1'	RA	45	-0.975	-29.700	-3.186	0.00	0.00
ATOM	1427	N9	RA	45	0.905	-29.283	-2.460	0.00	0.00
ATOM	1428	C8	RA	45	1.775	-29.119	-1.437	0.00	0.00
ATOM	1429	H8	RA	45	1.717	-29.694	-0.553	0.00	0.00
ATOM	1430	N7	RA	45	2.660	-28.195	-1.626	0.00	0.00
ATOM	1431	C5	RA	45	2.362	-27.725	-2.888	0.00	0.00
ATOM	1432	C6	RA	45	2.896	-26.760	-3.748	0.00	0.00
ATOM	1433	N6	RA	45	3.904	-25.989	-3.489	0.00	0.00
ATOM	1434	H61	RA	45	4.179	-25.317	-4.156	0.00	0.00
ATOM	1435	H62	RA	45	4.320	-26.052	-2.613	0.00	0.00
ATOM	1436	N1	RA	45	2.393	-26.562	-4.940	0.00	0.00
ATOM	1437	C2	RA	45	1.375	-27.295	-5.301	0.00	0.00
ATOM	1438	H2	RA	45	0.984	-27.098	-6.264	0.00	0.00
ATOM	1439	N3	RA	45	0.749	-28.225	-4.614	0.00	0.00
ATOM	1440	C4	RA	45	1.302	-28.392	-3.405	0.00	0.00
ATOM	1441	C3'	RA	45	0.443	-32.386	-2.119	0.00	0.00
ATOM	1442	H3'	RA	45	1.401	-32.165	-1.713	0.00	0.00
ATOM	1443	C2'	RA	45	0.176	-31.480	-3.293	0.00	0.00
ATOM	1444	1H2'	RA	45	1.055	-31.347	-3.889	0.00	0.00
ATOM	1445	O2'	RA	45	-0.892	-31.929	-4.077	0.00	0.00
ATOM	1446	2HO'	RA	45	-0.963	-32.481	-4.196	0.00	0.00
ATOM	1447	O3'	RA	45	0.326	-33.730	-2.448	0.00	0.00
ATOM	1448	P	RG3	46	1.558	-34.563	-2.864	0.00	0.00
ATOM	1449	O1P	RG3	46	1.119	-35.925	-3.020	0.00	0.00
ATOM	1450	O2P	RG3	46	2.611	-34.271	-1.929	0.00	0.00
ATOM	1451	O5'	RG3	46	1.978	-34.012	-4.258	0.00	0.00
ATOM	1452	C5'	RG3	46	1.240	-34.280	-5.411	0.00	0.00
ATOM	1453	1H5'	RG3	46	0.248	-33.969	-5.267	0.00	0.00
ATOM	1454	2H5'	RG3	46	1.246	-35.324	-5.595	0.00	0.00
ATOM	1455	C4'	RG3	46	1.778	-33.587	-6.620	0.00	0.00
ATOM	1456	H4'	RG3	46	1.141	-33.827	-7.440	0.00	0.00
ATOM	1457	O4'	RG3	46	1.789	-32.203	-6.441	0.00	0.00
ATOM	1458	C1'	RG3	46	2.947	-31.687	-6.922	0.00	0.00
ATOM	1459	H1'	RG3	46	2.782	-31.153	-7.754	0.00	0.00
ATOM	1460	N9	RG3	46	3.616	-30.807	-6.010	0.00	0.00
ATOM	1461	C8	RG3	46	3.858	-30.981	-4.696	0.00	0.00
ATOM	1462	H8	RG3	46	3.452	-31.788	-4.149	0.00	0.00
ATOM	1463	N7	RG3	46	4.631	-30.100	-4.189	0.00	0.00
ATOM	1464	C5	RG3	46	4.931	-29.272	-5.247	0.00	0.00
ATOM	1465	C6	RG3	46	5.782	-28.149	-5.351	0.00	0.00
ATOM	1466	O6	RG3	46	6.467	-27.628	-4.515	0.00	0.00
ATOM	1467	N1	RG3	46	5.834	-27.614	-6.589	0.00	0.00
ATOM	1468	H1	RG3	46	6.443	-26.850	-6.730	0.00	0.00
ATOM	1469	C2	RG3	46	5.182	-28.118	-7.624	0.00	0.00
ATOM	1470	N2	RG3	46	5.380	-27.554	-8.745	0.00	0.00
ATOM	1471	H21	RG3	46	6.018	-26.804	-8.823	0.00	0.00
ATOM	1472	H22	RG3	46	4.950	-27.932	-9.527	0.00	0.00
ATOM	1473	N3	RG3	46	4.389	-29.157	-7.587	0.00	0.00
ATOM	1474	C4	RG3	46	4.298	-29.695	-6.360	0.00	0.00
ATOM	1475	C3'	RG3	46	3.157	-33.999	-6.975	0.00	0.00
ATOM	1476	H3'	RG3	46	3.589	-34.364	-6.237	0.00	0.00
ATOM	1477	C2'	RG3	46	3.741	-32.820	-7.271	0.00	0.00
ATOM	1478	1H2'	RG3	46	4.445	-32.746	-6.842	0.00	0.00
ATOM	1479	O2'	RG3	46	3.944	-32.860	-8.341	0.00	0.00
ATOM	1480	2HO'	RG3	46	4.398	-33.046	-8.429	0.00	0.00
ATOM	1481	O3'	RG3	46	3.299	-34.794	-7.957	0.00	0.00
ATOM	1482	H3T	RG3	46	3.771	-34.721	-8.251	0.00	0.00