

**Summary of integrative structure determination of Integrated Structure of pRN1 DNA Primase  
in Complex with the First Two Base Pairs (PDB ID: 9AAM | pdb\_00009aam)**

<b>1. Model Composition</b>	
<a href="#">1.1. Entry composition</a>	<ul style="list-style-type: none"> <li>- SF3 helicase domain-containing protein: chain(s) A [B] (331 residues)</li> <li>- DNA (5'-D(*AP*CP*TP*GP*TP*GP*CP*TP*CP*A)-3'): chain(s) B [A] (10 residues)</li> <li>- ADENOSINE-5'-TRIPHOSPHATE: chain(s) C</li> <li>- 2'-DEOXYGUANOSINE-5'-TRIPHOSPHATE: chain(s) D [C]</li> <li>- MAGNESIUM ION: chain(s) E [C], F [C], G [C]</li> <li>- ZINC ION: chain(s) H [C]</li> </ul>
<a href="#">1.2. Datasets used for modeling</a>	<ul style="list-style-type: none"> <li>- NMR data, BMRB: <a href="#">53266</a></li> <li>- Experimental model, PDB: <a href="#">pdb_00003m1m</a></li> <li>- Experimental model, PDB: <a href="#">pdb_00007qaz</a></li> <li>- Experimental model, PDB: <a href="#">pdb_00009rtj</a></li> <li>- NMR data, BMRbig: <a href="#">Bmrbig143</a></li> </ul>
<b>2. Representation</b>	
<a href="#">2.1. Number of representations</a>	1
<a href="#">2.2. Scale</a>	Atomic
<a href="#">2.3. Number of rigid and flexible segments</a>	0, 2
<b>3. Restraints</b>	
<a href="#">3.1. Physical principles</a>	Information about physical principles was not provided
<a href="#">3.2. Experimental data</a>	
<b>4. Validation</b>	
<a href="#">4.2. Number of ensembles</a>	0
<a href="#">4.3. Number of models in ensembles</a>	Not applicable
<a href="#">4.4. Number of deposited models</a>	20
<a href="#">4.5. Model precision</a>	Not available
<a href="#">4.6. Data quality</a>	Data quality has not been assessed
<a href="#">4.7. Model quality: assessment of atomic segments</a>	<ul style="list-style-type: none"> <li>- Clashscore: 1.54-3.07</li> <li>- Ramachandran outliers: 0-1</li> <li>- Sidechain outliers: 3-14</li> </ul>
<a href="#">4.8. Fit to data used for modeling</a>	Fit of model to information used to compute it has not been determined

<a href="#">4.9. Fit to data used for validation</a>	Fit of model to information not used to compute it has not been determined
<b>5. Methodology and Software</b>	
1. <a href="#">5.1. Method name</a>	CYANA regularization
<a href="#">5.2. Method type</a>	pseudo-distance restraints
<a href="#">5.4. Number of computed models</a>	1
2. <a href="#">5.1. Method name</a>	CYANA calculation
<a href="#">5.2. Method type</a>	torsion angle dynamics combined with simulated annealing
<a href="#">5.4. Number of computed models</a>	50
3. <a href="#">5.1. Method name</a>	AMBER refinement
<a href="#">5.2. Method type</a>	Energy minimization
<a href="#">5.4. Number of computed models</a>	20
<a href="#">5.5. Software</a>	- <a href="#">CYANA</a> (version 3.98) - <a href="#">AMBER</a> (version 20)