Summary of integrative structure determination of Integrated Structure of pRN1 DNA Primase in Complex with the First Base Pair (PDB ID: 9AAN | pdb_00009aan)

1. Model Composition	
1.1. Entry composition	- SF3 helicase domain-containing protein: chain(s) A [B] (331 residues) - DNA (5'-D(*AP*CP*TP*GP*TP*GP*CP*TP*CP*A)-3'): chain(s) B [A] (10 residues) - 2'-DEOXYGUANOSINE-5'-TRIPHOSPHATE: chain(s) C - ADENOSINE-5'-TRIPHOSPHATE: chain(s) D [C] - MAGNESIUM ION: chain(s) E [C], F [C], G [C] - ZINC ION: chain(s) H [C]
1.2. Datasets used for modeling	- NMR data, BMRB: 53262 - Experimental model, PDB: pdb_00003m1m - Experimental model, PDB: pdb_00007qaz - Experimental model, PDB: pdb_00009rtj - NMR data, BMRbig: Bmrbig142
2. Representation	
2.1. Number of representations	1
2.2. Scale	Atomic
2.3. Number of rigid and flexible segments	0, 2
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	
4. Validation	
4.2. Number of ensembles	0
4.3. Number of models in ensembles	Not applicable
4.4. Number of deposited models	20
4.5. Model precision	Not available
4.6. Data quality	Data quality has not been assessed
4.7. Model quality: assessment of atomic segments	- Clashscore: 2.05-4.10 - Ramachandran outliers: 2-5 - Sidechain outliers: 6-13
4.8. Fit to data used for modeling	Fit of model to information used to compute it has not been determined

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