

Summary of integrative structure determination of MLLT3_YEATS domain with SL4 of 7SK nc-RNA (PDB ID: 9AA8 | [pdb_00009aa8](#))

1. Model Composition	
1.1. Entry composition	- Protein AF-9: chain(s) A (140 residues) - RNA (37-MER): chain(s) B (37 residues)
1.2. Datasets used for modeling	- Experimental model, PDB: pdb_00005hjb - Experimental model, PDB: pdb_00007slp - NMR data, Not available - NMR data, BMRB: 53503 - Other, Not available
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	1
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: 7.71 - Ramachandran outliers: 0 - Sidechain outliers: 8
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	Not available

<u>5.3. Method description</u>	Initial PDBs (5HJB for MLLT3 with H3K9Cr and 7SLP for 7SK_SL4) were removed. Both PDBs were processed in such way that non-essential components (H3K9Cr peptide from 5HJB and 7sk core RNP from 7SLP) were submitted to HADDOCK webserver for docking using default parameters. Active residues were defined for both components. For MLLT3 : Residues H56, R61, K63, C66, K67 were defined as active residues from our NMR chemical shift perturbation (CSP) data. For 7SK_SL4: C324 was defined as active base for the interaction based on our Photoactivatable-Ribonucleoside-Enhanced Cross linking and Immunoprecipitation (PAR-CLIP) data. No other restraints used except the active residues.
<u>5.5. Software</u>	<u>HADDOCK</u> (version Not available)
