

Summary of integrative structure determination of Integrative structure of human SNAPc-DNA (PDB ID: 9A8W)

1. Model Composition	
<u>Entry composition</u>	<ul style="list-style-type: none"> - NT strand: Chain G (20 residues) - snRNA-activating protein complex subunit 3: Chain B (411 residues) - snRNA-activating protein complex subunit 2: Chain A (334 residues) - snRNA-activating protein complex subunit 4: Chain E (1519 residues) - snRNA-activating protein complex subunit 5: Chain C (98 residues) - T strand: Chain F (20 residues) - snRNA-activating protein complex subunit 1: Chain D (368 residues)
<u>Datasets used for modeling</u>	<ul style="list-style-type: none"> - Crosslinking-MS data, ID: PXD053341; Linker name and number of cross-links: SDA, 268 cross-links - 3DEM volume, File: 10.5281/zenodo.14009872 - 3DEM volume, File: 10.5281/zenodo.14009872 - De Novo model, MODEL ARCHIVE: ma-pgtjz - Experimental model, PDB ID: 9FS0 - Experimental model, PDB ID: 7ZX8 - Experimental model, PDB ID: 7XUR - 3DEM volume, EMDB: EMD-50730
2. Representation	
<u>Resolution</u>	Coarse-grained: 1, 2, 3, 4, 5, 7, 9, 23 residue(s) per bead
<u>Number of rigid bodies, flexible units</u>	16, 16
<i>Rigid bodies</i>	<ul style="list-style-type: none"> - B: 27-411 - E: 122-163, 182-416, 424-541, 706-799, 806-859, 1304-1434 - C: 3-52 - D: 1-141, 162-234 - A: 29-87, 97-160, 201-271, 304-334 - F: 1-20 - G: 1-20
<i>Flexible units</i>	<ul style="list-style-type: none"> - B: 1-26 - E: 41-121, 164-181, 417-423, 542-705, 800-805, 860-1303, 1435-1519 - C: 1-2, 53-98 - D: 142-161, 235-368 - A: 1-28, 88-96, 161-200, 272-303 - F: - - G: -
<u>Structural coverage (rigid bodies)</u>	58%

3. Restraints	
Physical principles	Information about physical principles was not provided
Experimental data	<ul style="list-style-type: none"> - 1 unique CrossLinkRestraint: SDA, 268 cross-links - 1 unique EM3DRestraint: Gaussian mixture models
4. Validation	
Number of ensembles	1
Number of models in ensembles	5766
Number of deposited models	1
Model precision (uncertainty of models)	None, Å
Data quality	Data quality has not been assessed
Model quality: assessment of excluded volume	Satisfaction: 99.71-99.71%
Fit to data used for modeling	Fit of model to information used to compute it has not been determined
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. Method	Sampling
Name	Replica exchange monte carlo
Number of computed models	320000
Software	<ul style="list-style-type: none"> - IMP PMI module (version 2.20.0) - Integrative Modeling Platform (IMP) (version 2.20.0) - AlphaPulldown (version 0.30.7) - AlphaFold2 (version 2.3.2)