

Summary of integrative structure determination of Integrative model of Nup116 knockout (at 25C) yeast nuclear pore complex (PDB ID: 9A0G, PDB-Dev ID: PDBDEV_0000052)

1. Model Composition	
<p>Entry composition</p>	<ul style="list-style-type: none"> - Nsp1: Chain J2 (823 residues) - Nup145c: Chain M2 (712 residues) - Nup49: Chain I3 (472 residues) - Seh1: Chain O1 (349 residues) - Nup57: Chain H3 (541 residues) - Nup49: Chain I4 (472 residues) - Sec13: Chain N2 (297 residues) - Nup84: Chain L2 (726 residues) - Nup157: Chain D1 (1391 residues) - Nup49: Chain I1 (472 residues) - Nsp1: Chain J3 (823 residues) - Nup133: Chain K2 (1157 residues) - Nup120: Chain R2 (1037 residues) - Nup57: Chain H2 (541 residues) - Nic96: Chain A1 (839 residues) - Nup145c: Chain M1 (712 residues) - Nup133: Chain K1 (1157 residues) - Nup188: Chain B2 (1655 residues) - Nup192: Chain C1 (1683 residues) - Nic96: Chain A3 (839 residues) - Nup84: Chain L1 (726 residues) - Seh1: Chain O2 (349 residues) - Nsp1: Chain J4 (823 residues) - Sec13: Chain N1 (297 residues) - Nup85: Chain P1 (744 residues) - Nup57: Chain H1 (541 residues) - Nup120: Chain R1 (1037 residues) - Nup157: Chain D2 (1391 residues) - Nup57: Chain H4 (541 residues) - Nup49: Chain I2 (472 residues) - Nup192: Chain C2 (1683 residues) - Nup170: Chain d1 (1502 residues) - Nup170: Chain d2 (1502 residues) - Nup188: Chain B1 (1655 residues) - Nic96: Chain A4 (839 residues) - Nsp1: Chain J1 (823 residues) - Nup85: Chain P2 (744 residues) - Nic96: Chain A2 (839 residues)
<p>Datasets used for modeling</p>	<ul style="list-style-type: none"> - 3DEM volume, EMD: EMD-10660 - 3DEM volume, File: 10.5281/zenodo.3820319 - Integrative model, PDB-Dev: PDBDEV_0000051 - Integrative model, PDB-Dev: PDBDEV_0000051 - Integrative model, PDB-Dev: PDBDEV_0000051 - Other, File: https://doi.org/10.1038/nsmb1194
2. Representation	
<p>Resolution</p>	<p>Atomic</p>
<p>Number of rigid bodies, flexible units</p>	<p>0, 38</p>

<i>Flexible units</i>	<ul style="list-style-type: none"> - K1: 1-1157 - L1: 1-726 - M1: 1-712 - N1: 1-297 - O1: 1-349 - P1: 1-744 - R1: 1-1037 - K2: 1-1157 - L2: 1-726 - M2: 1-712 - N2: 1-297 - O2: 1-349 - P2: 1-744 - R2: 1-1037 - A1: 1-839 - B1: 1-1655 - D1: 1-1391 - H1: 1-541 - I1: 1-472 - J1: 1-823 - A2: 1-839 - C1: 1-1683 - H2: 1-541 - I2: 1-472 - J2: 1-823 - d1: 1-1502 - A3: 1-839 - C2: 1-1683 - H3: 1-541 - I3: 1-472 - J3: 1-823 - d2: 1-1502 - A4: 1-839 - B2: 1-1655 - D2: 1-1391 - H4: 1-541 - I4: 1-472 - J4: 1-823
<u>Structural coverage (rigid bodies)</u>	100%
3. Restraints	
<u>Physical principles</u>	Information about physical principles was not provided
<u>Experimental data</u>	- 1 unique EM3DRestraint: None
4. Validation	
<u>Number of ensembles</u>	0
<u>Number of models in ensembles</u>	Not applicable
<u>Number of deposited models</u>	1
<u>Model precision (uncertainty of models)</u>	Model precision can not be calculated with one structure

<i>Data quality</i>	Data quality has not been assessed
<i>Model quality: assessment of atomic segments</i>	Model-1: Clashscore = 786.4, Number of Ramachandran outliers = 973, Number of sidechain outliers = 1306
<i>Model quality: assessment of excluded volume</i>	Not applicable
<i>Fit to data used for modeling</i>	Fit of model to information used to compute it has not been determined
<i>Fit to data used for validation</i>	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. <i>Method</i>	Monte Carlo simulated annealing optimization of multiple rigid bodies with IMP
<i>Name</i>	Monte Carlo simulated annealing optimization for CR Y-complex, NR Y-complex and IR asymmetric unit
<i>Software</i>	Integrative Modeling Platform (IMP) (version 2.9.0)