Table S1: Summary of Integrative Structure Determination of Structure of the Nup84 sub-complex of the Nuclear Pore Complex (PDBDEV00000001)

1. Model Composition	
Entry composition	- Nup84: Chain A (726 residues) - Nup85: Chain B (744 residues) - Nup120: Chain C (1037 residues) - Nup133: Chain D (1157 residues) - Nup145c: Chain E (712 residues) - Seh1: Chain F (349 residues) - Sec13: Chain G (297 residues) - Nup84: Chain A (726 residues) - Nup85: Chain B (744 residues) - Nup120: Chain C (1037 residues) - Nup133: Chain D (1157 residues) - Nup145c: Chain E (712 residues) - Seh1: Chain F (349 residues) - Sec13: Chain G (297 residues)
Datasets used for modeling	 Experimental model, PDB ID: 3JRO Experimental model, PDB ID: 3F3F Experimental model, PDB ID: 3IKO Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3CQC Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 4LCT Experimental model, PDB ID: 2QX5 Experimental model, PDB ID: 3EWE Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3F7F Experimental model, PDB ID: 3HXR Experimental model, PDB ID: 4FHN Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 4Q9T Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3I4R Experimental model, PDB ID: 3BG0 Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3BG1 Experimental model, PDB ID: 3BG0 Comparative model, template PDB ID: Not listed Experimental model, PDB ID: 3F3F Experimental model, PDB ID: 2PM7 CX-MS data, Linker name and number of cross-links: DSS, 164 cross-links CX-MS data, Linker name and number of cross-links: EDC, 127 cross-links EM raw micrographs, EMDB ID: Not listed 2DEM class average, EMDB ID: Not listed
2. Representation	
Atomic structural coverage	84%
Number of <u>rigid bodies</u> , <u>flexible units</u>	40, 42
	- A: 7-20:Comparative model/None, 27- 80:Comparative model/None, 96-126:Comparative

Rigid regions	model/None, 136-364:Comparative model/None, 372-483:Comparative model/None, 506-562:Comparative model/None, 575-726:Comparative model/None, 575-726:Comparative model/None, 135-427:Comparative model/None, 461-529:Comparative model/None, 533-602:Comparative model/None, 620-671:Comparative model/None, 680-743:Comparative model/None, 53-212:Comparative model/None, 221-305:Comparative model/None, 311-429:Comparative model/None, 311-429:Comparative model/None, 711-712:Comparative model/None, 727-781:Comparative model/None, 805-892:Comparative model/None, 903-910:Comparative model/None, 903-910:Comparative model/None, 1023-1037:Comparative model/None, 1023-1037:Comparative model/None, 133-144:Comparative model/None, 133-144:Comparative model/None, 162-184:Comparative model/None, 206-249:Comparative model/None, 206-249:Comparative model/None, 490-763:Comparative model/None, 490-763:Comparative model/None, 72-1155:Comparative model/None, 72-1155:Comparative model/None, 490-763:Comparative model/None, 490-763:Comparative model/None, 490-763:Comparative model/None, 72-1155:Comparative model/None, 72-1155:Comparative model/None, 490-763:Comparative model/None, 490-763:Compara
Flexible units	- A: 1-6, 21-26, 81-95, 127-135, 365-371, 484-505, 563-574 B: 1-66, 123-134, 428-460, 530-532, 603-619, 672-679, 744-744 C: 30-52, 213-220, 306-310, 430-439, 713-726, 782-804, 893-902, 911-920, 1011-1022 D: 1-55, 79-85, 126-132, 145-161, 185-192, 201-205, 250-257, 481-489, 764-771, 1156-1157 E: 1-125, 145-150, 176-181, 554-712 F: 249-287, 347-349 G: 1-1, 159-165, 297-297.
Resolution	Rigid bodies: 1 residue per bead. Flexible regions: 50 residues per bead.
3. Restraints	
Physical principles	Excluded volume and Sequence connectivity.
Experimental data	 1 unique CrossLinkRestraint: DSS, 164 cross-links 1 unique CrossLinkRestraint: EDC, 127 cross-links 1 unique EM2DRestraint: Number of micrographs: 800, Image resolution: 30.0

4. Validation	
Sampling validation	Information related to sampling validation has not been provided
Clustering algorithm ,clustering feature	Distance threshold-based clustering, dRMSD
Number of ensembles	2
Number of models in ensembles	1257, 1010
Model precision (uncertainty of models)	15.4Å, 12.7Å
Quality of data	Quality of input data has not be assessed
Assessment of atomic regions	Not applicable
Assessment of excluded volume	1. Model-1: Number of violations-10899.0 2. Model-2: Number of violations-10935.0
Fit of the model to information used to compute it	Fit of model to information used to compute it has not been determined
Fit of the model to information not used to compute it	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
<u>Method</u>	Sampling
<u>Name</u>	Replica exchange Monte Carlo
<u>Details</u>	- Method details unspecified
<u>Software</u>	- Integrative Modeling Platform (IMP) (version develop-0a5706e202) - IMP PMI module (version 67456c0) - HHpred (version 2.0.16) - PSIPRED (version 4.0) - DISOPRED (version 3) - MODELLER (version 9.12) - No location specified