

Summary of integrative structure determination of Modeling of Mouse NPC basket (PDB ID: 9A8L | pdb_00009a8l, PDB-Dev ID: PDBDEV_00000385)

1. Model Composition	
1.1. Entry composition	<ul style="list-style-type: none"> - Nucleoprotein TPR: chain(s) A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P (2431 residues) - Nucleoporin 153: chain(s) AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV (1462 residues) - Nuclear pore complex protein Nup160: chain(s) AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL (1402 residues) - Nuclear pore complex protein Nup85: chain(s) BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB (656 residues) - Nuclear pore complex protein Nup98-Nup96: chain(s) CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR (1816 residues) - Protein SEC13 homolog: chain(s) CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH (322 residues) - Nucleoporin SEH1: chain(s) DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX (360 residues) - Nuclear pore complex protein Nup107: chain(s) DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN (926 residues) - Nuclear pore complex protein Nup133: chain(s) EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD (1155 residues) - Nucleoporin Nup37: chain(s) FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT (326 residues) - Nucleoporin Nup43: chain(s) FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ (380 residues) - Nuclear pore complex protein Nup50: chain(s) Q, R, S, T, U, V, W, X, Y, Z, AA, AB, AC, AD, AE, AF (466 residues)
1.2. Datasets used for modeling	<ul style="list-style-type: none"> - De Novo model, Zenodo: 10.5281/zenodo.13131753 - Experimental model, PDB: pdb_00007r5j - Comparative model, Zenodo: 10.5281/zenodo.13131753 - 3DEM volume, EMDB: EMD-44379 - 3DEM volume, Zenodo: 10.5281/zenodo.13131753 - 3DEM volume, Zenodo: 10.5281/zenodo.13131753
2. Representation	
2.1. Number of representations	1
2.2. Scale	Multiscale: Coarse-grained: 1 - 50 residue(s) per bead
2.3. Number of rigid and flexible segments	592, 432
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided

3.2. Experimental data	- 1 unique GeometricRestraint: Bayesian EM restraint on Gaussian mixture models
4. Validation	
4.2. Number of ensembles	1
4.3. Number of models in ensembles	1
4.4. Number of deposited models	1
4.5. Model precision	41.90, Å
4.6. Data quality	EMD-44379: resolution is 35.00 Å
4.7. Model quality: assessment of excluded volume	Satisfaction: 100.00%
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	Sampling
5.2. Method type	Replica exchange monte carlo
5.4. Number of computed models	500
2. 5.1. Method name	Sampling
5.2. Method type	Replica exchange monte carlo
5.4. Number of computed models	9569309
5.5. Software	- IMP PMI module (version 2.19.0) - COCONUT (version 1.0.0) - Integrative Modeling Platform (IMP) (version 2.19.0)