

Summary of integrative structure determination of Molecular architecture of the major membrane ring component, Pom152, of the yeast nuclear pore complex (PDB ID: 8ZZH | pdb_00008zzh, PDB-Dev ID: PDBDEV_00000017)

1. Model Composition	
1.1. Entry composition	pom152: chain(s) A (1337 residues)
1.2. Datasets used for modeling	- Experimental model, PDB: pdb_00005tvz - Comparative model, Zenodo: 10.5281/zenodo.1231518 - Comparative model, Zenodo: 10.5281/zenodo.1231518 - Comparative model, Zenodo: 10.5281/zenodo.1231518 - Comparative model, Zenodo: 10.5281/zenodo.1231518 - Comparative model, Zenodo: 10.5281/zenodo.1231518 - Comparative model, Zenodo: 10.5281/zenodo.1231518 - 3DEM volume, EMD: EMD-8543 - 3DEM volume, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - 2DEM class average, Zenodo: 10.5281/zenodo.1231518 - SAS data, SASBDB: SASDBV9 - SAS data, SASBDB: SASDBW9 - SAS data, SASBDB: SASDBX9 - SAS data, SASBDB: SASDBY9 - SAS data, SASBDB: SASDBZ9
2. Representation	
2.1. Number of representations	1
2.2. Scale	Multiscale: Coarse-grained: 1 - 100 residue(s) per bead
2.3. Number of rigid and flexible segments	9, 9
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	- 1 unique EM3DRestraint: Gaussian mixture models - 6 unique EM2DRestraint: Number of micrographs: None, Image resolution: 50.0 - 2 unique EM2DRestraint: Number of micrographs: None, Image resolution: 60.0 - 5 unique SASRestraint: Assembly name: SAXS subassembly Fitting method: FoXS Multi-state: False
4. Validation	
4.2. Number of ensembles	1
4.3. Number of models in ensembles	364

4.4. Number of deposited models	1
4.5. Model precision	7.00, Å
4.6. Data quality	- SASDBV9: Rg from Gunier is 1.77 nm and Rg from p(r) is 1.82 nm - SASDBW9: Rg from Gunier is 2.71 nm and Rg from p(r) is 2.79 nm - SASDBX9: Rg from Gunier is 2.78 nm and Rg from p(r) is 2.64 nm - SASDBY9: Rg from Gunier is 2.95 nm and Rg from p(r) is 2.98 nm - SASDBZ9: Rg from Gunier is 4.34 nm and Rg from p(r) is 4.63 nm - EMD-8543: resolution is 25.00 Å
4.7. Model quality: assessment of excluded volume	Satisfaction: 99.46%
4.8. Fit to data used for modeling	- SASDBV9: Fit 1 with X² value 1.28 - SASDBV9: Fit 2 with X² value 1.1 - SASDBW9: Fit 1 with X² value 1.97 - SASDBX9: Fit 1 with X² value 2.86 - SASDBY9: Fit 1 with X² value 2.02 - SASDBZ9: Fit 1 with X² value 1.94
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	100000
5.5. Software	- Integrative Modeling Platform (IMP) (version develop-0a5706e202) - IMP PMI module (version 67456c0) - MODELLER (version 9.13)