

Summary of integrative structure determination of Structure of *Saccharomyces cerevisiae* exosome determined with CX-MS (PDB ID: 8ZZ2, PDB-Dev ID: PDBDEV_00000002)

1. Model Composition	
<u>Entry composition</u>	<ul style="list-style-type: none"> - Dis3: chain(s) A (1001 residues) - Rrp45: chain(s) B (305 residues) - Rrp4: chain(s) C (359 residues) - Csl4: chain(s) D (292 residues) - Mtr3: chain(s) E (250 residues) - Rrp40: chain(s) F (240 residues) - Rrp42: chain(s) G (265 residues) - Ski6: chain(s) H (265 residues) - Rrp46_gfp: chain(s) I (475 residues) - Rrp43: chain(s) J (394 residues) - Lrp1: chain(s) K (184 residues) - Rrp6: chain(s) L (733 residues) - MPP6: chain(s) M (186 residues) - Ski7: chain(s) N (747 residues)
<u>Datasets used for modeling</u>	<ul style="list-style-type: none"> - Experimental model, PDB: 4IFD - Experimental model, PDB: 1GFL - Experimental model, PDB: 2HBJ - Comparative model, Zenodo: 10.5281/zenodo.583313 - Crosslinking-MS data, Zenodo: 10.5281/zenodo.583313
2. Representation	
<u>Number of representations</u>	1
<u>Scale</u>	Multiscale: Coarse-grained: 1 - 5 residue(s) per bead
<u>Number of rigid and flexible segments</u>	30, 31
3. Restraints	
<u>Physical principles</u>	Information about physical principles was not provided
<u>Experimental data</u>	- 1 unique CrossLinkRestraint: DSS, 218 crosslinks
4. Validation	
<u>Number of ensembles</u>	4
<u>Number of models in ensembles</u>	69, 131, 159, 41
<u>Number of deposited models</u>	4

<u>Model precision (uncertainty of models)</u>	- 24.37, Å - 19.26, Å - 9.80, Å - 11.52, Å
<u>Data quality</u>	Data quality has not been assessed
<u>Model quality: assessment of excluded volume</u>	Satisfaction: 99.89-99.89%
<u>Fit to data used for modeling</u>	Satisfaction of crosslinks: 75.17-81.66%
<u>Fit to data used for validation</u>	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. <u>Name</u>	Sampling
<u>Method</u>	Replica exchange monte carlo
<u>Number of computed models</u>	50000
2. <u>Name</u>	Sampling
<u>Method</u>	Replica exchange monte carlo
<u>Number of computed models</u>	50000
<u>Software</u>	- Integrative Modeling Platform (IMP) (version develop-0a5706e202) - IMP PMI module (version 67456c0) - Phyre2 (version 2.0)