Summary of integrative structure determination of molecular architecture of the yeast mediator complex (PDBDEV00000003)

| 1. Model Composition | |
|---|--|
| Entry composition | - med3: Chain R (401 residues) - med9: Chain J (149 residues) - med7: Chain I (222 residues) - med22: Chain G (121 residues) - med5: Chain S (1146 residues) - med11: Chain C (115 residues) - med2: Chain Q (436 residues) - med2: Chain T (1094 residues) - med21: Chain L (140 residues) - med21: Chain K (127 residues) - med31: Chain K (127 residues) - med10: Chain M (157 residues) - med16: Chain U (986 residues) - med18: Chain E (307 residues) - med6: Chain A (295 residues) - med14: Chain O (1082 residues) - med20: Chain F (210 residues) - med20: Chain H (284 residues) - med4: Chain B (223 residues) - med19: Chain P (220 residues) - med19: Chain N (566 residues) - med17: Chain D (687 residues) |
| Datasets used for modeling | - Experimental model, PDB ID: 4GWP - Comparative model, template PDB ID: Not listed - Comparative model, template PDB ID: Not listed - Experimental model, PDB ID: 3FBI - Experimental model, PDB ID: Not listed - Experimental model, template PDB ID: Not listed - Mass Spectrometry data, MSV000079237 - CX-MS data, Linker name and number of cross-links: DSS, 359 cross-links - 3DEM volume, EMDB ID: EMD-2634 - 3DEM volume, EMDB ID: Not listed |
| 2. Representation | |
| Atomic structural coverage | 10% |
| Number of <u>rigid bodies</u> , <u>flexible units</u> | 12, 50 |

| | - A: - - B: - - C: - - D: - - E: - |
|---------------------|--|
| Rigid bodies | - F: G: H: 37-127:Comparative model/None I: 12-84:Experimental model/None, 112- 206:Experimental model/None J: 65-149:Comparative model/None K: 19-110:Experimental model/None L: 2-128:Experimental model/None M: N: O: P: Q: R: S: T: U: 8-49:Comparative model/None, 94-150:Comparative model/None, 165-174:Comparative model/None, 231- 406:Comparative model/None, 437-476:Comparative model/None, 503-538:Comparative model/None. |
| Flexible units | - A: 1-60, 61-82, 83-192, 193-295 B: 1-22, 23-173, 174-181, 182-214, 215-223 C: 1-3, 4-115 D: 123-181, 182-371, 372-377, 378-661, 662-669, 670-687, 1-122 E: 1-1, 2-110, 111-157, 158-301, 302-307 F: 1-1, 2-210 G: 1-121 H: 1-36, 128-284 I: 1-11, 85-111, 207-222 J: 1-64 K: 1-18, 111-127 L: 1-1, 129-140 M: 1-157 N: 1-566 O: 1-1082 P: 1-220 Q: 1-436 R: 1-401 S: 1-1146 T: 1-1094 U: 50-93, 151-164, 175-230, 407-436, 477-502, 539-986. |
| Resolution | - Rigid bodies: 1 residue per bead. - Flexible regions: N/A |
| 3. Restraints | |
| Physical principles | Information about physical principles was not provided |
| Experimental data | - 1 unique CrossLinkRestraint: DSS, 359 cross-links - 1 unique EM3DRestraint: Gaussian mixture models, 29 - 1 unique EM3DRestraint: Gaussian mixture models, 49 |
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| Sampling validation | - Information related to sampling validation has not been provided |
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| Clustering algorithm ,clustering feature | Distance threshold-based clustering used if ensembles are deposited, RMSD |
| Number of ensembles | 4 |
| Number of models in ensembles | 142, 192, 39, 126 |
| Model precision (uncertainty of models) | 19.519Å, 21.833Å, 25.289Å, 21.061Å |
| Quality of data | - Quality of input data has not be assessed |
| Model quality: assessment of atomic segments | Not applicable |
| Model quality: assessment of excluded volume | - Model-1: Number of violations-6332.0 - Model-2: Number of violations-6318.0 - Model-3: Number of violations-6347.0 - Model-4: Number of violations-6337.0 |
| Fit of the model to information used to compute it | - CX-MS Fit of medioid: model # 1, percentage satisfied 88.86% - CX-MS Fit of medioid: model # 2, percentage satisfied 90.53% - CX-MS Fit of medioid: model # 3, percentage satisfied 88.3% - CX-MS Fit of medioid: model # 4, percentage satisfied 88.86% |
| 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) - Protein Prospector (version 5.13.1) - Situs (version 2.7) - Phyre2 (version 2.0) - No location specified |