

Summary of integrative structure determination of Modeling of the interaction between doublecortin and microtubule, NDCs fixed at diagonal (#1) orientation (PDB ID: 9A0Z | pdb_00009a0z, PDB-Dev ID: PDBDEV_00000071)

1. Model Composition	
1.1. Entry composition	- Doublecortin: chain(s) A, B (365 residues) - Alpha-Tubulin: chain(s) C, D, E, F, G, H, I, J, K (451 residues) - Beta-Tubulin: chain(s) L, M, N, O, P, Q, R, S, T (445 residues)
1.2. Datasets used for modeling	- Experimental model, PDB: pdb_00004atu - Experimental model, PDB: pdb_00006fnz - Experimental model, PDB: pdb_00006evz - Crosslinking-MS data, Zenodo: 10.5281/zenodo.4526498
2. Representation	
2.1. Number of representations	1
2.2. Scale	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
2.3. Number of rigid and flexible segments	40, 4
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	- 1 unique CrossLinkRestraint: LCSDA, 445 crosslinks
4. Validation	
4.2. Number of ensembles	1
4.3. Number of models in ensembles	30000
4.4. Number of deposited models	1
4.5. Model precision	Not available
4.6. Data quality	Data quality has not been assessed
4.7. Model quality: assessment of excluded volume	Satisfaction: 99.94%
4.8. Fit to data used for modeling	Satisfaction of crosslinks: 22.95%
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

<i>5.2. Method type</i>	Replica exchange monte carlo
<i>5.4. Number of computed models</i>	240000
<i>5.5. Software</i>	- IMP PMI module (version 2.14.0) - Integrative Modeling Platform (IMP) (version 2.14.0)