Summary of integrative structure determination of Modeling of the interaction between doublecortin and microtubule, NDCs fixed at diagonal (#2) orientation (PDB ID: 9A12 | pdb_00009a12, PDB-Dev ID: PDBDEV_00000074)

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: 35.51%
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	240000
5.5. Software	- IMP PMI module (version 2.14.0) - Integrative Modeling Platform (IMP) (version 2.14.0)