Summary of integrative structure determination of Integrative structure of the epithelial desmosomal outer plaque (PDB ID: 9A8U)

1. Model Composition	
Entry composition	- Plakophilin-1: Chain C (726 residues) - Junction plakoglobin: Chain H (745 residues) - Desmocollin-1: Chain P (180 residues) - Desmoglein-1: Chain R (273 residues) - Plakophilin-1: Chain G (726 residues) - Plakophilin-1: Chain A (726 residues) - Junction plakoglobin: Chain I (745 residues) - Desmoglein-1: Chain S (273 residues) - Junction plakoglobin: Chain K (745 residues) - Plakophilin-1: Chain F (726 residues) - Plakophilin-1: Chain D (726 residues) - Desmoplakin: Chain N (584 residues) - Junction plakoglobin: Chain J (745 residues) - Plakophilin-1: Chain B (726 residues) - Desmoplakin: Chain M (584 residues) - Plakophilin-1: Chain E (726 residues) - Desmoplakin: Chain O (584 residues) - Desmoplakin: Chain L (584 residues) - Desmocollin-1: Chain Q (180 residues)
Datasets used for modeling	- 3DEM volume, EMDB: EMD-1703 - Other, File: 10.1242/jcs.112.23.4325 - Comparative model, template PDB ID: Not available - Comparative model, template PDB ID: Not available - Yeast two-hybrid screening data, File: 10.1242/jcs.112.23.4325 - Other, File: 10.1242/jcs.112.23.4325 - Experimental model, PDB ID: 3IFQ - Experimental model, PDB ID: 1XM9 - Experimental model, PDB ID: 3R6N
2. Representation	
Resolution	Coarse-grained: 3, 5, 7, 9, 14, 23, 31, 33 residue(s) per bead
Number of rigid bodies, flexible units	9, 16

Rigid bodies	- A: - - B: - - C: - - D: - - E: 244-387, 397-480, 509-700 - F: 244-387, 397-480, 509-700 - G: 244-387, 397-480, 509-700 - H: - - I: - - J: - - K: - - L: - - M: - - N: - - O: - - P: - - Q: - - R: - - S: -
Flexible units	- A: 1-726 - B: 1-726 - C: 1-726 - D: 1-726 - E: - - F: - - G: - - H: 1-745 - I: 1-745 - J: 1-745 - K: 1-745 - L: 1-584 - M: 1-584 - N: 1-584 - O: 1-584 - P: 1-180 - Q: 1-180 - R: 1-273 - S: 1-273
Structural coverage (rigid bodies)	12%
3. Restraints	
Physical principles	Information about physical principles was not provided
Experimental data	- 1 unique EM3DRestraint: Gaussian mixture models
4. Validation	
Number of ensembles	1
Number of models in ensembles	24866
Number of deposited models	1
Model precision (uncertainty of models)	67.0, Å

Data quality	Data quality has not been assessed
Model quality: assessment of excluded volume	Satisfaction: 99.49-99.49%
Fit to data used for modeling	Fit of model to information used to compute it has not been determined
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. Method	Sampling
Name	Replica exchange monte carlo
Number of computed models	2250000
Software	- IMP PMI module (version 2.17.0) - Integrative Modeling Platform (IMP) (version 2.17.0)