

Summary of integrative structure determination of CLOCK-BMAL1 bound to a nucleosome at SHL -6.2 (PDB ID: 9A3O | pdb_00009a3o, PDB-Dev ID: PDBDEV_00000209)

1. Model Composition	
1.1. Entry composition	- Histone H3.1: chain(s) A, E (139 residues) - Histone H4: chain(s) B, F (106 residues) - Histone H2A: chain(s) C, G (133 residues) - Histone H2B: chain(s) D, H (128 residues) - DNA (128-MER): chain(s) I (153 residues) - DNA (128-MER): chain(s) J (153 residues) - Circadian locomotor output cycles protein kaput: chain(s) K [M] (375 residues) - Basic helix-loop-helix ARNT-like protein 1: chain(s) L [N] (384 residues)
1.2. Datasets used for modeling	- 3DEM volume, EMDB: EMD-17155 - Crosslinking-MS data, PRIDE: PXD033181 - Experimental model, PDB: pdb_00006t93 - Experimental model, PDB: pdb_00004f31 - Experimental model, PDB: pdb_00008osj
2. Representation	
2.1. Number of representations	1
2.2. Scale	Atomic
2.3. Number of rigid and flexible segments	0, 16
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	- 1 unique CrossLinkRestraint: DSSO, 42 crosslinks - 1 unique EM3DRestraint: None
4. Validation	
4.2. Number of ensembles	0
4.3. Number of models in ensembles	Not applicable
4.4. Number of deposited models	1
4.5. Model precision	Not available
4.6. Data quality	EMD-17155: resolution is 6.20 Å
4.7. Model quality: assessment of atomic segments	- Clashscore: 0.92 - Ramachandran outliers: 22 - Sidechain outliers: 10

<i>4.8. Fit to data used for modeling</i>	- Satisfaction of crosslinks: 0.00% - 3DEM q-score(s): 0.17 - 3DEM atom inclusion score(s): 0.90
<i>4.9. Fit to data used for validation</i>	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. <i>5.1. Method name</i>	Manual fitting
<i>5.2. Method type</i>	Manual fitting
2. <i>5.1. Method name</i>	Rosetta Dock with crosslink filter and density scoring
<i>5.2. Method type</i>	Rosetta Dock
<i>5.5. Software</i>	- Coot (version 0.9.6) - Rosetta (version Not available)