

Summary of integrative structure determination of CLOCK-BMAL1 bound to the native Por nucleosome (PDB ID: 9A3P, PDB-Dev ID: PDBDEV_00000210)

1. Model Composition	
<p>Entry composition</p>	<ul style="list-style-type: none"> - Histone H2A: Chain C (133 residues) - Circadian locomoter output cycles protein kaput: Chain K (84 residues) - DNA (147-MER): Chain J (147 residues) - Histone H3.1: Chain E (139 residues) - Circadian locomoter output cycles protein kaput: Chain K (280 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain L (71 residues) - Circadian locomoter output cycles protein kaput: Chain M (84 residues) - Circadian locomoter output cycles protein kaput: Chain M (280 residues) - DNA (147-MER): Chain I (147 residues) - Histone H2B: Chain D (128 residues) - Circadian locomoter output cycles protein kaput: Chain M (11 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain L (8 residues) - Histone H4: Chain F (106 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain N (305 residues) - Histone H3.1: Chain A (139 residues) - Circadian locomoter output cycles protein kaput: Chain K (11 residues) - Histone H2B: Chain H (128 residues) - Histone H2A: Chain G (133 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain N (71 residues) - Histone H4: Chain B (106 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain N (8 residues) - Basic helix-loop-helix ARNT-like protein 1: Chain L (305 residues)
<p>Datasets used for modeling</p>	<ul style="list-style-type: none"> - Crosslinking-MS data, Linker name and number of cross-links: DSSO, 59 cross-links - 3DEM volume, EMDB: EMD-17160 - Experimental model, PDB ID: 6T93 - Experimental model, PDB ID: 4F3L - Experimental model, PDB ID: 8OSL
2. Representation	
<p>Resolution</p>	Atomic
<p>Number of rigid bodies, flexible units</p>	0, 22

<i>Flexible units</i>	<ul style="list-style-type: none"> - A: 1-139 - L: 1-71, 72-376, 377-384 - N: 1-71, 72-376, 377-384 - M: 1-84, 85-364, 365-375 - K: 1-84, 85-364, 365-375 - E: 1-139 - B: 1-106 - F: 1-106 - C: 1-133 - G: 1-133 - D: 1-128 - H: 1-128 - I: 1-147 - J: 1-147
<i>Structural coverage (rigid bodies)</i>	100%
3. Restraints	
<i>Physical principles</i>	Information about physical principles was not provided
<i>Experimental data</i>	<ul style="list-style-type: none"> - 1 unique CrossLinkRestraint: DSSO, 59 cross-links - 1 unique EM3DRestraint: None
4. Validation	
<i>Number of ensembles</i>	0
<i>Number of models in ensembles</i>	Not applicable
<i>Number of deposited models</i>	1
<i>Model precision (uncertainty of models)</i>	Model precision can not be calculated with one structure
<i>Data quality</i>	Data quality has not been assessed
<i>Model quality: assessment of atomic segments</i>	Model-1: Clashscore = 2.34, Number of Ramachandran outliers = 43, Number of sidechain outliers = 29
<i>Model quality: assessment of excluded volume</i>	Not applicable
<i>Fit to data used for modeling</i>	Fit of model to information used to compute it has not been determined
<i>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>Method</i>	MDFF with distance and map restraints
<i>Name</i>	MDFF

Software

- ChimeraX/Isolde (version Not available)
- [Coot](#) (version 0.9.6)