

**Summary of integrative structure determination of The HCN Channel Voltage Sensor Undergoes A Large Downward Motion During Hyperpolarization (PDB ID: 8ZZW, PDB-Dev ID: PDBDEV\_0000032)**

<b>1. Model Composition</b>	
<a href="#">Entry composition</a>	<ul style="list-style-type: none"> <li>- HCN Voltage Gated Ion Channel: Chain 2 (491 residues)</li> <li>- HCN Voltage Gated Ion Channel: Chain 4 (491 residues)</li> <li>- HCN Voltage Gated Ion Channel: Chain 3 (491 residues)</li> <li>- HCN Voltage Gated Ion Channel: Chain 1 (491 residues)</li> </ul>
<a href="#">Datasets used for modeling</a>	<ul style="list-style-type: none"> <li>- Comparative model, template PDB ID: Not available</li> <li>- Single molecule FRET data, File: 10.5281/zenodo.3066494</li> <li>- Single molecule FRET data, File: 10.5281/zenodo.3066494</li> <li>- Experimental model, PDB ID: 5U6O</li> </ul>
<b>2. Representation</b>	
<a href="#">Resolution</a>	Atomic
<a href="#">Number of <i>rigid bodies</i>, <i>flexible units</i></a>	0, 4
<a href="#">Flexible units</a>	<ul style="list-style-type: none"> <li>- 1: 167-657</li> <li>- 2: 167-657</li> <li>- 3: 167-657</li> <li>- 4: 167-657</li> </ul>
<a href="#">Structural coverage (<i>rigid bodies</i>)</a>	100%
<b>3. Restraints</b>	
<a href="#">Physical principles</a>	Information about physical principles was not provided
<a href="#">Experimental data</a>	<ul style="list-style-type: none"> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 23.9-24.9</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 22.2-23.2</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 17.9-18.9</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 13.8-14.8</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 19.0-20.0</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 12.2-13.2</li> <li>- 2 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 16.4-17.4</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 14.2-15.2</li> <li>- 1 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 13.0-14.0</li> </ul>

<b>4. Validation</b>	
<a href="#">Number of ensembles</a>	0
<a href="#">Number of models in ensembles</a>	Not applicable
<a href="#">Number of deposited models</a>	2
<a href="#">Model precision (uncertainty of models)</a>	Model precision can not be calculated with one structure
<a href="#">Data quality</a>	Data quality has not been assessed
<a href="#">Model quality: assessment of atomic segments</a>	- Model-1: Clashscore = 0.0, Number of Ramachandran outliers = 0, Number of sidechain outliers = 0 - Model-2: Clashscore = 0.0, Number of Ramachandran outliers = 0, Number of sidechain outliers = 0
<a href="#">Model quality: assessment of excluded volume</a>	Not applicable
<a href="#">Fit to data used for modeling</a>	Fit of model to information used to compute it has not been determined
<a href="#">Fit to data used for validation</a>	Fit of model to information not used to compute it has not been determined
<b>5. Methodology and Software</b>	
1. <a href="#">Method</a>	None
<a href="#">Name</a>	Rosetta Relax
<a href="#">Software</a>	- <a href="#">Rosetta</a> (version Rosetta version unknown:5f5eba092eb978ce62ba80b58d7d04cf6a6f9727) - <a href="#">HHpred</a> (version website)