

**Summary of integrative structure determination of Docking model of HLA class I with HLA class II (PDB ID: 9A0U, PDB-Dev ID: PDBDEV\_0000066)**

<b>1. Model Composition</b>	
<a href="#">Entry composition</a>	<ul style="list-style-type: none"> <li>- GLY residue: Chain H (1 residues)</li> <li>- Alpha-enolase: Chain G (14 residues)</li> <li>- INFLUENZA A MATRIX PROTEIN M1 (RESIDUES 58-66): Chain C (9 residues)</li> <li>- HLA class II histocompatibility antigen, DRB1-4 beta chain: Chain F (193 residues)</li> <li>- GLY residue: Chain D (1 residues)</li> <li>- CLASS I HISTOCOMPATIBILITY ANTIGEN (HLA-A*0201) (ALPHA CHAIN): Chain A (275 residues)</li> <li>- HLA class II histocompatibility antigen, DR alpha chain: Chain E (179 residues)</li> <li>- BETA 2-MICROGLOBULIN: Chain B (100 residues)</li> </ul>
<a href="#">Datasets used for modeling</a>	<ul style="list-style-type: none"> <li>- Experimental model, PDB ID: 1HHI</li> <li>- Experimental model, PDB ID: 5NI9</li> <li>- Crosslinking-MS data, Linker name and number of cross-links: DSSO, 13 cross-links</li> <li>- Other, Not available</li> <li>- Other, Not available</li> </ul>
<b>2. Representation</b>	
<a href="#">Resolution</a>	Atomic
<a href="#">Number of rigid bodies, flexible units</a>	8, 0
<a href="#">Rigid bodies</a>	<ul style="list-style-type: none"> <li>- A: 1-275</li> <li>- B: 1-100</li> <li>- C: 1-9</li> <li>- D: 1-1:None</li> <li>- E: 1-179</li> <li>- F: 1-193</li> <li>- G: 1-14</li> <li>- H: 1-1:None</li> </ul>
<a href="#">Structural coverage (rigid bodies)</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 CrossLinkRestraint: DSSO, 13 cross-links</li> <li>- 1 unique DerivedDistanceRestraint: Upper Bound Distance: 73.0</li> <li>- 14107 unique DerivedDistanceRestraint: Upper Bound Distance: 2.0</li> </ul>
<b>4. Validation</b>	
<a href="#">Number of ensembles</a>	0

<a href="#"><i>Number of models in ensembles</i></a>	Not applicable
<a href="#"><i>Number of deposited models</i></a>	2
<a href="#"><i>Model precision (uncertainty of models)</i></a>	Model precision can not be calculated with one structure
<a href="#"><i>Data quality</i></a>	Data quality has not been assessed
<a href="#"><i>Model quality: assessment of atomic segments</i></a>	- Model-1: Clashscore = 9.8, Number of Ramachandran outliers = 3, Number of sidechain outliers = 45 - Model-2: Clashscore = 10.53, Number of Ramachandran outliers = 2, Number of sidechain outliers = 50
<a href="#"><i>Model quality: assessment of excluded volume</i></a>	Not applicable
<a href="#"><i>Fit to data used for modeling</i></a>	Fit of model to information used to compute it has not been determined
<a href="#"><i>Fit to data used for validation</i></a>	Fit of model to information not used to compute it has not been determined
<b>5. Methodology and Software</b>	
<b>1. <a href="#"><i>Method</i></a></b>	Rigid-body minimization
<a href="#"><i>Name</i></a>	Rigid-body minimization in HADDOCK (it0)
<a href="#"><i>Number of computed models</i></a>	1000
<b>2. <a href="#"><i>Method</i></a></b>	Simulated annealing
<a href="#"><i>Name</i></a>	Semi-flexible SA in HADDOCK (it1)
<a href="#"><i>Number of computed models</i></a>	200
<b>3. <a href="#"><i>Method</i></a></b>	Refinement
<a href="#"><i>Name</i></a>	Water refinement in HADDOCK (itw)
<a href="#"><i>Number of computed models</i></a>	200
<a href="#"><i>Software</i></a>	<a href="#">Haddock</a> (version 2.2)