

Summary of integrative structure determination of Structure determination of the HgcAB complex using metagenome sequence data, coevolution analysis, and ab initio structure calculations (PDB ID: 9A0B, PDB-Dev ID: PDBDEV_00000047)

1. Model Composition	
Entry composition	<ul style="list-style-type: none"> - HgcB: Chain B (95 residues) - HgcA: Chain A (329 residues)
Datasets used for modeling	<ul style="list-style-type: none"> - Other, Not available - De Novo model, Not available - De Novo model, Not available - De Novo model, Not available - Experimental model, PDB ID: 2FDN - Experimental model, PDB ID: 6FFV
2. Representation	
Resolution	Atomic
Number of rigid bodies, flexible units	0, 2
Flexible units	<ul style="list-style-type: none"> - A: 1-329 - B: 1-95 - C: - - D: - - E: -
Structural coverage (rigid bodies)	100%
3. Restraints	
Physical principles	Information about physical principles was not provided
	<ul style="list-style-type: none"> - 18 unique DerivedDistanceRestraint: restraint type HarmonicDistanceRestraintExperimental model - 2 unique PredictedContactRestraint: Distance: 10.16 - 1 unique PredictedContactRestraint: Distance: 11.145 - 1 unique PredictedContactRestraint: Distance: 10.303 - 6 unique PredictedContactRestraint: Distance: 8.72 - 1 unique PredictedContactRestraint: Distance: 7.083 - 4 unique PredictedContactRestraint: Distance: 6.904 - 4 unique PredictedContactRestraint: Distance: 6.957 - 5 unique PredictedContactRestraint: Distance: 6.929 - 1 unique PredictedContactRestraint: Distance: 7.114 - 1 unique PredictedContactRestraint: Distance: 7.484 - 5 unique PredictedContactRestraint: Distance: 6.166

[Experimental data](#)

- 2 unique PredictedContactRestrict: Distance: 8.037
- 1 unique PredictedContactRestrict: Distance: 9.738
- 2 unique PredictedContactRestrict: Distance: 10.45
- 3 unique PredictedContactRestrict: Distance: 8.603
- 1 unique PredictedContactRestrict: Distance: 6.592
- 7 unique PredictedContactRestrict: Distance: 7.812
- 1 unique PredictedContactRestrict: Distance: 8.402
- 1 unique PredictedContactRestrict: Distance: 9.088
- 2 unique PredictedContactRestrict: Distance: 6.864
- 3 unique PredictedContactRestrict: Distance: 11.076
- 2 unique PredictedContactRestrict: Distance: 12.244
- 1 unique PredictedContactRestrict: Distance: 6.451
- 1 unique PredictedContactRestrict: Distance: 8.168
- 1 unique PredictedContactRestrict: Distance: 7.683
- 1 unique PredictedContactRestrict: Distance: 8.215
- 2 unique PredictedContactRestrict: Distance: 6.801
- 1 unique PredictedContactRestrict: Distance: 8.961
- 1 unique PredictedContactRestrict: Distance: 7.361
- 2 unique PredictedContactRestrict: Distance: 9.542
- 3 unique PredictedContactRestrict: Distance: 5.778
- 1 unique PredictedContactRestrict: Distance: 8.367
- 1 unique PredictedContactRestrict: Distance: 9.294
- 1 unique PredictedContactRestrict: Distance: 8.068
- 2 unique PredictedContactRestrict: Distance: 6.328
- 6 unique PredictedContactRestrict: Distance: 7.832
- 2 unique PredictedContactRestrict: Distance: 8.393
- 1 unique PredictedContactRestrict: Distance: 7.115
- 3 unique PredictedContactRestrict: Distance: 9.85
- 2 unique PredictedContactRestrict: Distance: 5.643
- 2 unique PredictedContactRestrict: Distance: 9.5
- 1 unique PredictedContactRestrict: Distance: 10.027
- 1 unique PredictedContactRestrict: Distance: 6.12
- 1 unique PredictedContactRestrict: Distance: 6.677
- 1 unique PredictedContactRestrict: Distance:

	5.739 - 1 unique PredictedContactRestraint: Distance: 10.267 - 1 unique PredictedContactRestraint: Distance: 11.507 - 1 unique PredictedContactRestraint: Distance: 11.061 - 1 unique PredictedContactRestraint: Distance: 9.6 - 1 unique PredictedContactRestraint: Distance: 7.914 - 1 unique PredictedContactRestraint: Distance: 8.711 - 1 unique PredictedContactRestraint: Distance: 10.43 - 1 unique PredictedContactRestraint: Distance: 9.987 - 2 unique PredictedContactRestraint: Distance: 10.241 - 1 unique PredictedContactRestraint: Distance: 10.276 - 1 unique PredictedContactRestraint: Distance: 9.303 - 1 unique PredictedContactRestraint: Distance: 8.185 - 1 unique PredictedContactRestraint: Distance: 7.89 - 1 unique PredictedContactRestraint: Distance: 9.299 - 1 unique PredictedContactRestraint: Distance: 7.259 - 1 unique PredictedContactRestraint: Distance: 10.236 - 1 unique PredictedContactRestraint: Distance: 6.679 - 1 unique PredictedContactRestraint: Distance: 7.831 - 1 unique PredictedContactRestraint: Distance: 6.36 - 2 unique PredictedContactRestraint: Distance: 8.552 - 1 unique PredictedContactRestraint: Distance: 10.181 - 1 unique PredictedContactRestraint: Distance: 8.009 - 1 unique PredictedContactRestraint: Distance: 9.462
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: Clashescore = 0.0, Number of Ramachandran outliers = 3, Number of sidechain outliers = 0

<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>	modeling with restraints from coevolution analysis
<i>Name</i>	ab initio modeling
<i>Number of computed models</i>	1500
<i>Software</i>	<ul style="list-style-type: none"> - HH-Suite (version Not available) - HMMER (version 3.1b1) - GREMLIN (version Not available) - ROSETTA (version Not available)