

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_00009a0b, PDB-Dev ID: PDBDEV_00000047)

1. Model Composition	
1.1. Entry composition	<ul style="list-style-type: none"> - HgcA: chain(s) A (329 residues) - HgcB: chain(s) B (95 residues) - COBALAMIN: chain(s) C [A] - IRON/SULFUR CLUSTER: chain(s) D [B], E [B]
1.2. Datasets used for modeling	<ul style="list-style-type: none"> - Predicted contacts, Not available - De Novo model, Not available - De Novo model, Not available - De Novo model, Not available - Experimental model, PDB: pdb_00002fdn - Experimental model, PDB: pdb_00008c7p
2. Representation	
2.1. Number of representations	1
2.2. Scale	Atomic
2.3. Number of rigid and flexible segments	0, 3
3. Restraints	
3.1. Physical principles	Information about physical principles was not provided
3.2. Experimental data	<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 - 2 unique PredictedContactRestraint: Distance: 8.037 - 1 unique PredictedContactRestraint: Distance: 9.738 - 2 unique PredictedContactRestraint: Distance: 10.45 - 3 unique PredictedContactRestraint: Distance: 8.603 - 1 unique PredictedContactRestraint: Distance: 6.592 - 7 unique PredictedContactRestraint: Distance: 7.812 - 1 unique PredictedContactRestraint: Distance: 8.402 - 1 unique PredictedContactRestraint: Distance: 9.088 - 2 unique PredictedContactRestraint: Distance: 6.864 - 3 unique PredictedContactRestraint: Distance: 11.076 - 2 unique PredictedContactRestraint: Distance: 12.244 - 1 unique PredictedContactRestraint: Distance: 6.451 - 1 unique PredictedContactRestraint: Distance: 8.168 - 1 unique PredictedContactRestraint: Distance: 7.683 - 1 unique PredictedContactRestraint: Distance: 8.215

- 2 unique PredictedContactRestraint: Distance: 6.801
 - 1 unique PredictedContactRestraint: Distance: 8.961
 - 1 unique PredictedContactRestraint: Distance: 7.361
 - 2 unique PredictedContactRestraint: Distance: 9.542
 - 3 unique PredictedContactRestraint: Distance: 5.778
 - 1 unique PredictedContactRestraint: Distance: 8.367
 - 1 unique PredictedContactRestraint: Distance: 9.294
 - 1 unique PredictedContactRestraint: Distance: 8.068
 - 2 unique PredictedContactRestraint: Distance: 6.328
 - 6 unique PredictedContactRestraint: Distance: 7.832
 - 2 unique PredictedContactRestraint: Distance: 8.393
 - 1 unique PredictedContactRestraint: Distance: 7.115
 - 3 unique PredictedContactRestraint: Distance: 9.85
 - 2 unique PredictedContactRestraint: Distance: 5.643
 - 2 unique PredictedContactRestraint: Distance: 9.5
 - 1 unique PredictedContactRestraint: Distance: 10.027
 - 1 unique PredictedContactRestraint: Distance: 6.12
 - 1 unique PredictedContactRestraint: Distance: 6.677
 - 1 unique PredictedContactRestraint: 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	
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	Data quality has not been assessed
4.7. Model quality: assessment of atomic segments	- Clashscore: 0.00 - Ramachandran outliers: 3 - Sidechain outliers: 0
4.8. Fit to data used for modeling	Fit of model to information used to compute it has not been determined

4.9. Fit to data used for validation	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. 5.1. Method name	modeling with restraints from coevolution analysis
5.2. Method type	ab initio modeling
5.4. Number of computed models	1500
5.5. Software	<ul style="list-style-type: none">- HH-Suite (version Not available)- HMMER (version 3.1b1)- GREMLIN (version Not available)- ROSETTA (version Not available)