

Table S1: Summary of Integrative Structure Determination of Structure of complement C3(H2O) revealed by quantitative cross-linking/mass spectrometry and modeling (PDBDEV0000021)

1. Model Composition	
Entry composition	<ul style="list-style-type: none"> - beta: Chain A (645 residues) - alpha: Chain B (992 residues) - beta: Chain A (645 residues) - alpha: Chain B (992 residues) - beta: Chain A (645 residues) - alpha: Chain B (992 residues) - beta: Chain A (645 residues) - alpha: Chain B (992 residues)
Datasets used for modeling	<ul style="list-style-type: none"> - Experimental model, PDB ID: 2A73 - Experimental model, PDB ID: 2I07 - Mass Spectrometry data, PXD003486 - CX-MS data, Linker name: B, Number of cross-links: S
2. Representation	
Atomic structural coverage	98%
Number of rigid bodies , flexible units	13, 12
Rigid regions	<ul style="list-style-type: none"> - A: 1-73:Experimental model/2A73, 80-289:Experimental model/2A73, 292-643:Experimental model/2A73. - B: 2-70:Experimental model/2A73, 80-96:Experimental model/2A73, 97-155:Experimental model/2A73, 158-261:Experimental model/2A73, 264-312:Experimental model/2A73, 315-457:Experimental model/2A73, 464-618:Experimental model/2A73, 621-680:Experimental model/2A73, 683-824:Experimental model/2A73, 827-992:Experimental model/2A73.
Flexible units	<ul style="list-style-type: none"> - A: 74-79, 290-291, 644-645. - B: 1-1, 71-79, 156-157, 262-263, 313-314, 458-463, 619-620, 681-682, 825-826.
Resolution	Rigid bodies: 1 residue per bead. Flexible regions: 50 residues per bead.
3. Restraints	
Physical principles	Excluded volume and Sequence connectivity.
Experimental data	- 1 unique CrossLinkRestraint: BS3, 115 cross-links
4. Validation	
Sampling validation	1. Information related to sampling validation has not been provided

<i>Clustering algorithm ,clustering feature</i>	distance threshold-based clustering, RMSD
<i>Number of ensembles</i>	4
<i>Number of models in ensembles</i>	200, 200, 89, 111
<i>Model precision (uncertainty of models)</i>	18.709Å, 10.436Å, 16.24Å, 14.615Å
<i>Quality of data</i>	1. Quality of input data has not be assessed
<i>Assessment of atomic regions</i>	Not applicable
<i>Assessment of excluded volume</i>	1. Model-1: Number of violations-3677.0 2. Model-2: Number of violations-3514.0 3. Model-3: Number of violations-3754.0 4. Model-4: Number of violations-3684.0
<i>Fit of the model to information used to compute it</i>	1. Fit of model to information used to compute it has not been determined
<i>Fit of the model to information not used to compute it</i>	1. Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
<i>Method</i>	Sampling
<i>Name</i>	Replica exchange Monte Carlo
<i>Details</i>	- Method details unspecified
<i>Software</i>	- Integrative Modeling Platform (IMP) (version develop-0a5706e202) - IMP PMI module (version 67456c0) - No location specified