
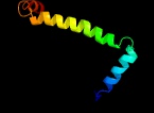
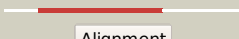
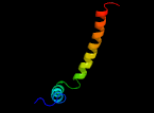
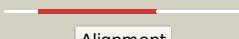









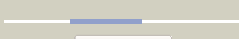

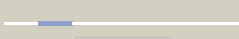





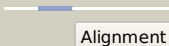

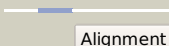

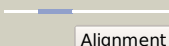

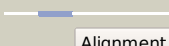

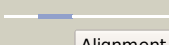

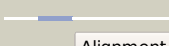
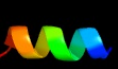
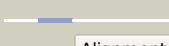

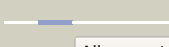


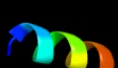


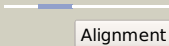

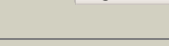
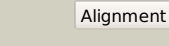

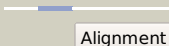


Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD2094c_(tatA)_2353054_2353305
 Date Mon Aug 5 13:25:21 BST 2019
 Unique Job ID 65ac4ee844921925

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2mi2A_	 Alignment		99.8	17	PDB header: transport protein Chain: A; PDB Molecule: sec-independent protein translocase protein tatb; PDBTitle: solution structure of the e. coli tatb protein in dpc micelles
2	c2i16A_	 Alignment		99.8	25	PDB header: protein transport Chain: A; PDB Molecule: sec-independent protein translocase protein tatad; PDBTitle: solution structure of bacillus subtilis tatad protein in dpc micelles
3	c2lzsE_	 Alignment		99.7	38	PDB header: protein transport Chain: E; PDB Molecule: sec-independent protein translocase protein tata; PDBTitle: tata oligomer
4	c4pj0L_	 Alignment		22.1	8	PDB header: oxidoreductase, electron transport Chain: L; PDB Molecule: photosystem ii reaction center protein i; PDBTitle: structure of t.elongatus photosystem ii, rows of dimers crystal2 packing
5	c4pj0L_	 Alignment		22.1	8	PDB header: oxidoreductase, electron transport Chain: L; PDB Molecule: photosystem ii reaction center protein i; PDBTitle: structure of t.elongatus photosystem ii, rows of dimers crystal2 packing
6	c3a0hi_	 Alignment		22.0	23	PDB header: electron transport Chain: I; PDB Molecule: photosystem ii reaction center protein i; PDBTitle: crystal structure of i-substituted photosystem ii complex
7	d2axti1	 Alignment		22.0	23	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein I, Psbl Family: Psbl-like
8	c6dlmA_	 Alignment		22.0	35	PDB header: de novo protein Chain: A; PDB Molecule: dhd127_a; PDBTitle: dhd127
9	c4il6L_	 Alignment		21.7	8	PDB header: electron transport Chain: L; PDB Molecule: photosystem ii reaction center protein i; PDBTitle: structure of sr-substituted photosystem ii
10	c1s5ll_	 Alignment		21.7	8	PDB header: photosynthesis Chain: L; PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
11	c3bz1L_	 Alignment		21.7	8	PDB header: electron transport Chain: L; PDB Molecule: photosystem ii reaction center protein i; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 1 of 2). this2 file contains first monomer of psii dimer

12	c4il6L_	 Alignment		21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: structure of sr-substituted photosystem ii
13	c3arcL_	 Alignment		21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
14	d2axtl1	 Alignment		21.7	8	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein L, PsbL Family: PsbL-like
15	c3kziL_	 Alignment		21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of monomeric form of cyanobacterial photosystem ii
16	c5e7cL_	 Alignment		21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: macromolecular diffractive imaging using imperfect crystals - bragg2 data
17	c5e7cL_	 Alignment		21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: macromolecular diffractive imaging using imperfect crystals - bragg2 data
18	c3a0hL_	 Alignment		21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
19	c4ub8L_	 Alignment		21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: native structure of photosystem ii (dataset-2) by a femtosecond x-ray2 laser
20	c4tnjL_	 Alignment		21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 500 ms after the 2nd illumination2 (2f) at 4.5 a resolution
21	c3prqL_	 Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 1 of 2). this file contains first monomer of psii3 dimer
22	c4ixqL_	 Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, dark state
23	c4tnjL_	 Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 500 ms after the 2nd illumination2 (2f) at 4.5 a resolution
24	c3prrL_	 Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryn (part 2 of 2). this file contains second monomer of psii3 dimer
25	c2axtl_	 Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
26	c3wu2L_	 Alignment	not modelled	21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure analysis of photosystem ii complex
27	c4ixrL_	 Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, first illuminated state
28	c1s5L_	 Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center

29	c3a0bL_	Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
30	c3wu2L_	Alignment	not modelled	21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure analysis of photosystem ii complex
31	c4ixqL_	Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, dark state
32	c4rvyL_	Alignment	not modelled	21.7	8	PDB header: oxidoreductase Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: serial time resolved crystallography of photosystem ii using a2 femtosecond x-ray laser. the s state after two flashes (s3)
33	c3bz2L_	Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii (part 2 of 2). this2 file contains second monomer of psii dimer
34	c4ixrL_	Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, first illuminated state
35	c4rvyL_	Alignment	not modelled	21.7	8	PDB header: oxidoreductase Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: serial time resolved crystallography of photosystem ii using a2 femtosecond x-ray laser. the s state after two flashes (s3)
36	c4fbyd_	Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: D: PDB Molecule: photosystem ii d2 protein; PDBTitle: fs x-ray diffraction of photosystem ii
37	c2axtL_	Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
38	c4tnkL_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 250 microsec after the third2 illumination at 5.2 a resolution
39	c3a0hl_	Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
40	c4ub6L_	Alignment	not modelled	21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: native structure of photosystem ii (dataset-1) by a femtosecond x-ray2 laser
41	c4fbyL_	Alignment	not modelled	21.7	8	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: fs x-ray diffraction of photosystem ii
42	c4tnhL_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii in the dark state at 4.9 a2 resolution
43	c4ub8L_	Alignment	not modelled	21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: native structure of photosystem ii (dataset-2) by a femtosecond x-ray2 laser
44	c4ub6L_	Alignment	not modelled	21.7	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: native structure of photosystem ii (dataset-1) by a femtosecond x-ray2 laser
45	c4tnhl_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii in the dark state at 4.9 a2 resolution
46	c4tnil_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 500 ms after the third2 illumination at 4.6 a resolution
47	c3a0bl_	Alignment	not modelled	21.7	8	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
48	c4tnkL_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 250 microsec after the third2 illumination at 5.2 a resolution
49	c4tnil_	Alignment	not modelled	21.7	8	PDB header: electron transport,photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt xfel structure of photosystem ii 500 ms after the third2 illumination at 4.6 a resolution
50	c3jcul_	Alignment	not modelled	21.5	23	PDB header: membrane protein Chain: I: PDB Molecule: protein photosystem ii reaction center protein I; PDBTitle: cryo-em structure of spinach psii-lhcii supercomplex at 3.2 angstrom2 resolution
51	c2o0cB_	Alignment	not modelled	20.9	14	PDB header: signaling protein Chain: B: PDB Molecule: alr2278 protein; PDBTitle: crystal structure of the h-nox domain from nostoc sp. pcc 71202 complexed to no
52	c3arcl_	Alignment	not modelled	20.3	8	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of oxygen-evolving photosystem ii at 1.9 angstrom2 resolution
53	c2kdcC_	Alignment	not modelled	16.3	9	PDB header: transferase Chain: C: PDB Molecule: diacylglycerol kinase; PDBTitle: nmr solution structure of e. coli diacylglycerol kinase2 (dagk) in dpc micelles
54	c3jcul_	Alignment	not modelled	13.9	15	PDB header: membrane protein Chain: L: PDB Molecule: protein photosystem ii reaction center protein I; PDBTitle: cryo-em structure of spinach psii-lhcii supercomplex at

						3.2 angstrom2 resolution
55	d2ffha2	Alignment	not modelled	12.0	10	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
56	c1by0A	Alignment	not modelled	11.9	37	PDB header: rna binding protein Chain: A: PDB Molecule: protein (hepatitis delta antigen); PDBTitle: n-terminal leucine-repeat region of hepatitis delta antigen
57	d1hq1a	Alignment	not modelled	11.6	7	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
58	c4ue4C	Alignment	not modelled	11.5	13	PDB header: translation Chain: C: PDB Molecule: signal recognition particle protein; PDBTitle: structural basis for targeting and elongation arrest of bacillus2 signal recognition particle
59	d2cqqa1	Alignment	not modelled	11.3	23	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Myb/SANT domain
60	c6fkip	Alignment	not modelled	10.7	16	PDB header: membrane protein Chain: P: PDB Molecule: atp synthase subunit c, chloroplastic; PDBTitle: chloroplast f1fo conformation 3
61	d1dula	Alignment	not modelled	10.7	7	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
62	c1a92B	Alignment	not modelled	10.2	30	PDB header: leucine zipper Chain: B: PDB Molecule: delta antigen; PDBTitle: oligomerization domain of hepatitis delta antigen
63	d2f2ea1	Alignment	not modelled	9.8	21	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: HxIR-like
64	c3a0hj	Alignment	not modelled	9.7	21	PDB header: electron transport Chain: J: PDB Molecule: photosystem ii reaction center protein j; PDBTitle: crystal structure of i-substituted photosystem ii complex
65	d2axtj1	Alignment	not modelled	9.7	21	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein J, Psbj Family: Psbj-like
66	d1m56d	Alignment	not modelled	9.0	24	Fold: Single transmembrane helix Superfamily: Bacterial aa3 type cytochrome c oxidase subunit IV Family: Bacterial aa3 type cytochrome c oxidase subunit IV
67	c5ndaA	Alignment	not modelled	8.0	21	PDB header: protein Chain: A: PDB Molecule: rsp-c33leu -recombinant pulmonary surfactant-associated PDBTitle: nmr structural characterisation of pharmaceutically relevant proteins2 obtained through a novel recombinant production: the case of the3 pulmonary surfactant polypeptide c analogue rsp-c33leu.
68	c5hs9A	Alignment	not modelled	7.3	13	PDB header: dna binding protein Chain: A: PDB Molecule: hth-type transcriptional regulator yodb; PDBTitle: crystal structure of the quinone-bound yodb from b. subtilis
69	c5xnmj	Alignment	not modelled	7.0	8	PDB header: membrane protein Chain: J: PDB Molecule: photosystem ii reaction center protein j; PDBTitle: structure of unstacked c2s2m2-type psii-lhcii supercomplex from pismus2 sativum
70	c5ireD	Alignment	not modelled	6.5	25	PDB header: virus Chain: D: PDB Molecule: m protein; PDBTitle: the cryo-em structure of zika virus
71	d1qzxa2	Alignment	not modelled	6.5	10	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
72	d1qb2a	Alignment	not modelled	6.4	14	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
73	c3jcuJ	Alignment	not modelled	6.3	21	PDB header: membrane protein Chain: J: PDB Molecule: photosystem ii reaction center protein j; PDBTitle: cryo-em structure of spinach psii-lhcii supercomplex at 3.2 angstrom2 resolution
74	c5wdaL	Alignment	not modelled	6.2	21	PDB header: protein transport Chain: L: PDB Molecule: general secretion pathway protein g; PDBTitle: structure of the pulg pseudopilus
75	c2jqeA	Alignment	not modelled	6.2	13	PDB header: signaling protein Chain: A: PDB Molecule: signal recognition 54 kda protein; PDBTitle: soution structure of af54 m-domain
76	c5hk1A	Alignment	not modelled	5.6	28	PDB header: membrane protein Chain: A: PDB Molecule: sigma non-opioid intracellular receptor 1; PDBTitle: human sigma-1 receptor bound to pd144418
77	c6c4zD	Alignment	not modelled	5.5	38	PDB header: de novo protein Chain: D: PDB Molecule: cross-alpha amyloid-like structure alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution
78	c6c4yJ	Alignment	not modelled	5.5	38	PDB header: de novo protein Chain: J: PDB Molecule: cross-alpha amyloid-like structure alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg
79	c6c4zA	Alignment	not modelled	5.5	38	PDB header: de novo protein Chain: A: PDB Molecule: cross-alpha amyloid-like structure alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution
80	c6c4yM	Alignment	not modelled	5.5	38	PDB header: de novo protein Chain: M: PDB Molecule: cross-alpha amyloid-like structure

80	c6c4yM	Alignment	not modelled	5.5	38	alphaamg; PDB header: de novo protein Chain: B; PDB Molecule: cross-alpha amyloid-like structure alphaamg
81	c6c4zB	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution PDB header: de novo protein Chain: B; PDB Molecule: cross-alpha amyloid-like structure alphaamg
82	c6c4yB	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
83	c6c4yQ	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg Chain: Q; PDB Molecule: cross-alpha amyloid-like structure alphaamg
84	c6c4zQ	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution PDB header: de novo protein
85	c6c4zL	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution Chain: L; PDB Molecule: cross-alpha amyloid-like structure alphaamg
86	c6c4yD	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
87	c6c4zG	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution Chain: G; PDB Molecule: cross-alpha amyloid-like structure alphaamg
88	c6c4zC	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution PDB header: de novo protein
89	c6c4yN	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg Chain: N; PDB Molecule: cross-alpha amyloid-like structure alphaamg
90	c6c4yR	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
91	c6c4yE	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg Chain: E; PDB Molecule: cross-alpha amyloid-like structure alphaamg
92	c6c4yH	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
93	c6c4yI	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg Chain: I; PDB Molecule: cross-alpha amyloid-like structure alphaamg
94	c6c4zI	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution PDB header: de novo protein
95	c6c4yO	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg Chain: O; PDB Molecule: cross-alpha amyloid-like structure alphaamg
96	c6c4yF	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
97	c6c4zP	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution Chain: P; PDB Molecule: cross-alpha amyloid-like structure alphaamg
98	c6c4yL	Alignment	not modelled	5.5	38	alphaamg; PDBTitle: cross-alpha amyloid-like structure alphaamg PDB header: de novo protein
99	c6c4zK	Alignment	not modelled	5.5	38	alphaamg - low PDBTitle: cross-alpha amyloid-like structure alphaamg - low resolution Chain: K; PDB Molecule: cross-alpha amyloid-like structure alphaamg