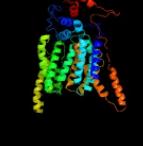
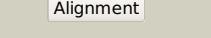
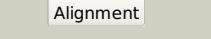
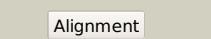
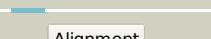
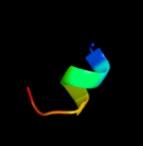


Phyre²

Email	mdejesus@rockefeller.edu
Description	RVBD3805c_(-)_4267131_4269014
Date	Fri Aug 9 18:20:51 BST 2019
Unique Job ID	11153af62f9e66af

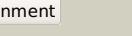
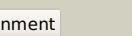
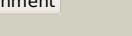
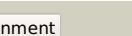
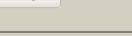
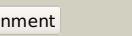
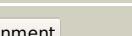
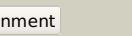
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c5f15A_			99.1	11	PDB header: transferase Chain: A; PDB Molecule: 4-amino-4-deoxy-l-arabinose (l-ara4n) transferase; PDBTitle: crystal structure of arnt from cupriavidus metallidurans bound to 2 undecaprenyl phosphate
2	c3waja_			98.2	14	PDB header: transferase Chain: A; PDB Molecule: transmembrane oligosaccharyl transferase; PDBTitle: crystal structure of the archaeoglobus fulgidus2 oligosaccharyltransferase (o29867_arcfu) complex with zn and sulfate
3	c3rceA_			98.0	16	PDB header: transferase/peptide Chain: A; PDB Molecule: oligosaccharide transferase to n-glycosylate proteins; PDBTitle: bacterial oligosaccharyltransferase pglb
4	c6p2rB_			97.4	12	PDB header: transferase Chain: B; PDB Molecule: dolichyl-phosphate-mannose--protein mannosyltransferase 2; PDBTitle: structure of s. cerevisiae protein o-mannosyltransferase pmt1-pmt22 complex bound to the sugar donor
5	c6p25A_			97.1	12	PDB header: transferase Chain: A; PDB Molecule: dolichyl-phosphate-mannose--protein mannosyltransferase 1; PDBTitle: structure of s. cerevisiae protein o-mannosyltransferase pmt1-pmt22 complex bound to the sugar donor and a peptide acceptor
6	c6eznF_			96.4	13	PDB header: membrane protein Chain: F; PDB Molecule: dolichyl-diphosphooligosaccharide--protein PDBTitle: cryo-em structure of the yeast oligosaccharyltransferase (ost) complex
7	d2d6fc2			62.9	21	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
8	d1zq1c2			58.9	26	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
9	c4j7bF_			36.1	26	PDB header: transferase Chain: F; PDB Molecule: 205 kda microtubule-associated protein; PDBTitle: crystal structure of polo-like kinase 1
10	c4j7bC_			36.1	26	PDB header: transferase Chain: C; PDB Molecule: 205 kda microtubule-associated protein; PDBTitle: crystal structure of polo-like kinase 1
11	c5uz9D_			35.3	30	PDB header: immune system/rna Chain: D; PDB Molecule: crispr-associated protein csy3; PDBTitle: cryo em structure of anti-crisprs, acrf1 and acrf2, bound to type i-f2 crrna-guided crispr surveillance complex

12	c4eogA			31.6	24	PDB header: dna binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of csx1 of pyrococcus furiosus
13	d1usua			19.8	12	Fold: Ribosomal protein S5 domain 2-like Superfamily: Ribosomal protein S5 domain 2-like Family: Hsp90 middle domain
14	d1s4na			19.0	19	Fold: Nucleotide-diphospho-sugar transferases Superfamily: Nucleotide-diphospho-sugar transferases Family: Glycolipid 2-alpha-mannosyltransferase
15	c1s4pA			17.9	19	PDB header: transferase Chain: A: PDB Molecule: glycolipid 2-alpha-mannosyltransferase; PDBTitle: crystal structure of yeast alpha1,2-mannosyltransferase kre2p/mnt1p2 ternary complex with gdp/mn and methyl-alpha-mannoside acceptor
16	d1g8fa2			17.9	22	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: ATP sulfurylase catalytic domain
17	d2prra1			17.6	7	Fold: AhpD-like Superfamily: AhpD-like Family: Atu0492-like
18	c2gx8B			17.2	22	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: nif3-related protein; PDBTitle: the crystal structure of bacillus cereus protein related to nif3
19	c5ve9C			16.9	50	PDB header: protein binding Chain: C: PDB Molecule: microtubule-actin cross-linking factor 1, isoforms 1/2/3/5; PDBTitle: structure of hacf7 ef1-ef2-gar domains
20	d1ht6a1			16.8	17	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
21	d2gx8a1		not modelled	15.7	22	Fold: NIF3 (NGG1p interacting factor 3)-like Superfamily: NIF3 (NGG1p interacting factor 3)-like Family: NIF3 (NGG1p interacting factor 3)-like
22	d1v5ra1		not modelled	15.3	38	Fold: N domain of copper amine oxidase-like Superfamily: GAS2 domain-like Family: GAS2 domain
23	c3arcl		not modelled	15.1	33	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
24	c4ub6L		not modelled	14.6	33	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
25	c4tnhl		not modelled	14.6	33	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
26	c3a0bl		not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
27	c4il6L		not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: structure of sr-substituted photosystem ii
28	c5e7cl		not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: macromolecular diffractive imaging using imperfect crystals - bragg2 data
						PDB header: electron transport,photosynthesis

29	c4tnkl	Alignment	not modelled	14.6	33	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 PDB header: oxidoreductase
30	c4rvyl	Alignment	not modelled	14.6	33	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) PDB header: photosynthesis
31	c4ixrl	Alignment	not modelled	14.6	33	Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, first illuminated state PDB header: photosynthesis
32	c4fbyl	Alignment	not modelled	14.6	33	Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: fs x-ray diffraction of photosystem ii
33	c4tnil	Alignment	not modelled	14.6	33	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
34	c4ixql	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, dark state
35	c3wu2L	Alignment	not modelled	14.6	33	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure analysis of photosystem ii complex
36	c4ub8l	Alignment	not modelled	14.6	33	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
37	c4tnjl	Alignment	not modelled	14.6	33	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
38	c3arcl	Alignment	not modelled	14.6	33	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
39	c4ub6l	Alignment	not modelled	14.6	33	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
40	c4tnil	Alignment	not modelled	14.6	33	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
41	c4ixrl	Alignment	not modelled	14.6	33	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
42	c4il6l	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: structure of sr-substituted photosystem ii
43	c3kzil	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of monomeric form of cyanobacterial photosystem ii
44	c4ixql	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: rt fs x-ray diffraction of photosystem ii, dark state
45	c3prrl	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutryl (part 2 of 2). this file contains second monomer of psii3 dimer
46	c4tnkl	Alignment	not modelled	14.6	33	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
47	c5e7cl	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: macromolecular diffractive imaging using imperfect crystals - bragg2 data
48	c4ub8L	Alignment	not modelled	14.6	33	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
49	c3a0hl	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
50	c2axtl	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
51	c1s5ll	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
52	c2axtl	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: crystal structure of photosystem ii from thermosynechococcus elongatus
53	c4fbypd	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: D: PDB Molecule: photosystem ii d2 protein; PDBTitle: fs x-ray diffraction of photosystem ii
54	c3wu2l	Alignment	not modelled	14.6	33	PDB header: electron transport, photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure analysis of photosystem ii complex
						PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I;

55	c3bz1L	Alignment	not modelled	14.6	33	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
56	d2axtl1	Alignment	not modelled	14.6	33	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein L, PsbL Family: PsbL-like
57	c1s5lL	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center I protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
58	c3prqlL	Alignment	not modelled	14.6	33	PDB header: photosynthesis Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of cyanobacterial photosystem ii in complex with2 terbutyryl (part 1 of 2). this file contains first monomer of psii3 dimer
59	c3bz2L	Alignment	not modelled	14.6	33	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
60	c4rvyl	Alignment	not modelled	14.6	33	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)
61	c3a0hL	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of i-substituted photosystem ii complex
62	c4tnjl	Alignment	not modelled	14.6	33	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
63	c4tnhl	Alignment	not modelled	14.6	33	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
64	c3a0bL	Alignment	not modelled	14.6	33	PDB header: electron transport Chain: L: PDB Molecule: photosystem ii reaction center protein I; PDBTitle: crystal structure of br-substituted photosystem ii complex
65	c4pj0l	Alignment	not modelled	14.6	33	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
66	c4pj0L	Alignment	not modelled	14.6	33	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
67	c6nd1A	Alignment	not modelled	14.3	22	PDB header: protein transport Chain: A: PDB Molecule: protein translocation protein sec63; PDBTitle: cryoem structure of the sec complex from yeast
68	d1su3a1	Alignment	not modelled	14.1	50	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
69	c3cr8C	Alignment	not modelled	14.0	18	PDB header: transferase Chain: C: PDB Molecule: sulfate adenyllyltransferase, adenyllylsulfate kinase; PDBTitle: hexameric aps kinase from thiobacillus denitrificans
70	d1pama3	Alignment	not modelled	13.9	47	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
71	d1slma1	Alignment	not modelled	13.9	50	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
72	c6hkeB	Alignment	not modelled	13.7	18	PDB header: transport protein Chain: B: PDB Molecule: possible ttc subunit of the tripartite tricarboxylate PDBTitle: matc (rpa3494) from rhodopseudomonas palustris with bound malate
73	d1t5la1	Alignment	not modelled	13.6	25	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Tandem AAA-ATPase domain
74	c3jcul	Alignment	not modelled	13.6	46	PDB header: membrane protein Chain: L: PDB Molecule: protein photosystem ii reaction center protein l; PDBTitle: cryo-em structure of spinach psii-lhcii supercomplex at 3.2 angstrom2 resolution
75	d1m55a	Alignment	not modelled	13.4	15	Fold: Origin of replication-binding domain, RBD-like Superfamily: Origin of replication-binding domain, RBD-like Family: Replication protein Rep, nuclease domain
76	d1m8pa2	Alignment	not modelled	13.3	27	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: ATP sulfurylase catalytic domain
77	c2nydB	Alignment	not modelled	13.2	15	PDB header: unknown function Chain: B: PDB Molecule: upf0135 protein sa1388; PDBTitle: crystal structure of staphylococcus aureus hypothetical protein sa1388
78	c3n3fb	Alignment	not modelled	13.1	14	PDB header: protein binding Chain: B: PDB Molecule: collagen alpha-1(xv) chain; PDBTitle: crystal structure of the human collagen xv trimerization domain: a2 potent trimerizing unit common to multiplexin collagens
79	d1x6va2	Alignment	not modelled	13.1	17	Fold: Adenine nucleotide alpha hydrolase-like Superfamily: Nucleotidyl transferase Family: ATP sulfurylase catalytic domain
80	c1r6xA	Alignment	not modelled	12.7	22	PDB header: transferase Chain: A: PDB Molecule: atp:sulfate adenyllyltransferase; PDBTitle: the crystal structure of a truncated form of yeast atp2 sulfurylase, lacking the c-terminal aps kinase-like domain,3 in complex with sulfate

81	d1kula		not modelled	12.7	12	Fold: alpha-alpha superhelix Superfamily: Sec7 domain Family: Sec7 domain
82	c3i71B		not modelled	12.6	27	PDB header: unknown function Chain: B: PDB Molecule: ethanolamine utilization protein eutk; PDBTitle: ethanolamine utilization microcompartment shell subunit, eutk c-2 terminal domain
83	c2ka6B		not modelled	12.6	35	PDB header: transcription regulator Chain: B: PDB Molecule: signal transducer and activator of transcription PDBTitle: nmr structure of the cbp-taz2/stat1-tad complex
84	c5a6eB		not modelled	12.6	25	PDB header: transport Chain: B: PDB Molecule: pore domain of potassium channel subfamily t member 1; PDBTitle: cryo-em structure of the slo2.2 na-activated k channel
85	c1oftC		not modelled	12.4	14	PDB header: bacterial cell division inhibitor Chain: C: PDB Molecule: hypothetical protein pa3008; PDBTitle: crystal structure of sula from pseudomonas aeruginosa
86	d1leaka1		not modelled	12.3	50	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
87	d1l6ja1		not modelled	12.2	50	Fold: PGBD-like Superfamily: PGBD-like Family: MMP N-terminal domain
88	clm8pB		not modelled	12.2	28	PDB header: transferase Chain: B: PDB Molecule: sulfate adenyllyltransferase; PDBTitle: crystal structure of p. chrysogenum atp sulfurylase in the t-state
89	d1sOpa		not modelled	12.0	29	Fold: N-terminal domain of adenylylcyclase associated protein, CAP Superfamily: N-terminal domain of adenylylcyclase associated protein, CAP Family: N-terminal domain of adenylylcyclase associated protein, CAP
90	c6f5dl		not modelled	11.9	27	PDB header: hydrolase Chain: I: PDB Molecule: atp synthase subunit epsilon, mitochondrial; PDBTitle: trypanosoma brucei f1-atpase
91	d1ofux		not modelled	11.9	14	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Bacterial cell division inhibitor SulA
92	c5ibwC		not modelled	11.7	13	PDB header: motor protein Chain: C: PDB Molecule: myosin ic heavy chain; PDBTitle: complex of mlcc bound to the tandem iq motif of myoc
93	d3bmva3		not modelled	11.6	47	Fold: Glycosyl hydrolase domain Superfamily: Glycosyl hydrolase domain Family: alpha-Amylases, C-terminal beta-sheet domain
94	c2d6fD		not modelled	11.5	22	PDB header: ligase/rna Chain: D: PDB Molecule: glutamyl-trna(gln) amidotransferase subunit e; PDBTitle: crystal structure of glu-trna(gln) amidotransferase in the2 complex with trna(gln)
95	d1kona		not modelled	11.5	60	Fold: YebC-like Superfamily: YebC-like Family: YebC-like
96	c3kwpA		not modelled	11.4	14	PDB header: transferase Chain: A: PDB Molecule: predicted methyltransferase; PDBTitle: crystal structure of putative methyltransferase from lactobacillus2 brevis
97	c1bm4A		not modelled	11.4	20	PDB header: viral protein Chain: A: PDB Molecule: protein (moloney murine leukemia virus capsid); PDBTitle: momlv capsid protein major homology region peptide analog
98	c5a08A		not modelled	11.4	21	PDB header: transferase Chain: A: PDB Molecule: probable mannosyltransferase ktr4; PDBTitle: x-ray structure of the mannosyltransferase ktr4p from s. cerevisiae
99	d1ewna		not modelled	11.4	16	Fold: FMT C-terminal domain-like Superfamily: FMT C-terminal domain-like Family: 3-methyladenine DNA glycosylase (AAG, ANPG, MPG)