
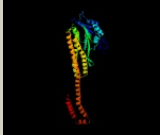



















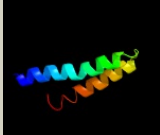


Phyre2

Email mdejesus@rockefeller.edu
 Description RVBD1239c_(corA)_1381948_1383048
 Date Wed Jul 31 22:05:33 BST 2019
 Unique Job ID 4511745b02595aff

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2bbjB_	 Alignment		100.0	27	PDB header: metal transport/membrane protein Chain: B: PDB Molecule: divalent cation transport-related protein; PDBTitle: crystal structure of the cora mg2+ transporter
2	c5n9yB_	 Alignment		100.0	16	PDB header: membrane protein Chain: B: PDB Molecule: zinc transport protein zntb; PDBTitle: the full-length structure of zntb
3	c4ev6E_	 Alignment		100.0	18	PDB header: metal transport Chain: E: PDB Molecule: magnesium transport protein cora; PDBTitle: the complete structure of cora magnesium transporter from2 methanocaldococcus jannaschii
4	d2iuba1	 Alignment		100.0	24	Fold: CorA soluble domain-like Superfamily: CorA soluble domain-like Family: CorA soluble domain-like
5	c2hn1A_	 Alignment		100.0	25	PDB header: metal transport Chain: A: PDB Molecule: magnesium and cobalt transporter; PDBTitle: crystal structure of a cora soluble domain from a. fulgidus in complex2 with co2+
6	c5n77A_	 Alignment		100.0	13	PDB header: transport protein Chain: A: PDB Molecule: magnesium transport protein cora; PDBTitle: crystal structure of the cytosolic domain of the cora magnesium2 channel from escherichia coli in complex with magnesium
7	c4egwB_	 Alignment		100.0	14	PDB header: metal transport Chain: B: PDB Molecule: magnesium transport protein cora; PDBTitle: the structure of the soluble domain of cora from methanocaldococcus2 jannaschii
8	c3nwiC_	 Alignment		100.0	16	PDB header: transport protein Chain: C: PDB Molecule: zinc transport protein zntb; PDBTitle: the soluble domain structure of the zntb zn2+ efflux system
9	d2bbha1	 Alignment		100.0	24	Fold: CorA soluble domain-like Superfamily: CorA soluble domain-like Family: CorA soluble domain-like
10	c3ck6E_	 Alignment		100.0	11	PDB header: structural protein Chain: E: PDB Molecule: putative membrane transport protein; PDBTitle: crystal structure of zntb cytoplasmic domain from vibrio2 paraaerolyticus rimd 2210633
11	d2iuba2	 Alignment		99.4	30	Fold: Transmembrane helix hairpin Superfamily: Magnesium transport protein CorA, transmembrane region Family: Magnesium transport protein CorA, transmembrane region

12	c3rkqA_	Alignment		95.9	11	PDB header: metal transport Chain: A: PDB Molecule: magnesium transporter mrs2, mitochondrial; PDBTitle: structural and functional characterization of the yeast mg2+ channel2 mrs2
13	c6adqP_	Alignment		84.5	9	PDB header: electron transport Chain: P: PDB Molecule: prokaryotic respiratory supercomplex associate factor 1 PDBTitle: respiratory complex ciii2civ2sod2 from mycobacterium smegmatis
14	c6o7ua_	Alignment		58.4	17	PDB header: membrane protein Chain: A: PDB Molecule: PDBTitle: saccharomyces cerevisiae v-atpase stv1-vo
15	c3fseB_	Alignment		57.1	7	PDB header: hydrolase Chain: B: PDB Molecule: two-domain protein containing dj-1/thij/pfpi-like and PDBTitle: crystal structure of a two-domain protein containing dj-1/thij/pfpi-2 like and ferritin-like domains (ava_4496) from anabaena variabilis3 atcc 29413 at 1.90 a resolution
16	d3cx5d2	Alignment		53.8	19	Fold: Single transmembrane helix Superfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
17	d1ppjd2	Alignment		52.8	25	Fold: Single transmembrane helix Superfamily: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor Family: Cytochrome c1 subunit of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase), transmembrane anchor
18	c5voxb_	Alignment		50.9	10	PDB header: hydrolase Chain: B: PDB Molecule: v-type proton atpase subunit b; PDBTitle: yeast v-atpase in complex with legionella pneumophila effector sidk2 (rotational state 1)
19	c3kyiA_	Alignment		40.0	12	PDB header: transferase Chain: A: PDB Molecule: putative histidine protein kinase; PDBTitle: crystal structure of the phosphorylated p1 domain of chea3 in complex2 with chey6 from r. sphaeroides
20	c6akfC_	Alignment		35.8	11	PDB header: membrane protein/toxin Chain: C: PDB Molecule: claudin-3; PDBTitle: crystal structure of mouse claudin-3 p134a mutant in complex with c-2 terminal fragment of clostridium perfringens enterotoxin
21	d1iyka1	Alignment	not modelled	31.4	18	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-myristoyl transferase, NMT
22	c6gcsD_	Alignment	not modelled	30.9	21	PDB header: oxidoreductase Chain: D: PDB Molecule: nimm subunit; PDBTitle: cryo-em structure of respiratory complex i from yarrowia lipolytica
23	c5sv0C_	Alignment	not modelled	30.8	9	PDB header: transport protein Chain: C: PDB Molecule: biopolymer transport protein exbb; PDBTitle: structure of the exbb/exbd complex from e. coli at ph 7.0
24	d1u5pa1	Alignment	not modelled	30.5	9	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
25	c1p84D_	Alignment	not modelled	29.8	19	PDB header: oxidoreductase Chain: D: PDB Molecule: cytochrome c1, heme protein; PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
26	c3j01A_	Alignment	not modelled	29.7	7	PDB header: ribosome/ribosomal protein Chain: A: PDB Molecule: preprotein translocase secy subunit; PDBTitle: structure of the ribosome-secy complex in the membrane environment
27	c1qcrD_	Alignment	not modelled	29.3	25	PDB header: oxidoreductase Chain: D: PDB Molecule: ubiquinol cytochrome c oxidoreductase; PDBTitle: crystal structure of bovine mitochondrial cytochrome bc12 complex, alpha carbon atoms only
28	c3cwbQ_	Alignment	not modelled	29.2	19	PDB header: oxidoreductase Chain: Q: PDB Molecule: mitochondrial cytochrome c1, heme protein; PDBTitle: chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
29	c1pxyA_	Alignment	not modelled	27.8	13	PDB header: cell cycle Chain: A: PDB Molecule: bipolar kinesin krp-130;

29	c3pxvA	Alignment	not modelled	27.8	15	PDBTitle: structural basis for the assembly of the mitotic motor kinesin-5 into2 bipolar tetramers PDB header: oxidoreductase
30	c2yiuE	Alignment	not modelled	27.8	16	Chain: E: PDB Molecule: cytochrome c1, heme protein; PDBTitle: x-ray structure of the dimeric cytochrome bc1 complex from2 the soil bacterium paracoccus denitrificans at 2.73 angstrom resolution
31	c2fynH	Alignment	not modelled	27.8	19	PDB header: oxidoreductase Chain: H: PDB Molecule: cytochrome c1; PDBTitle: crystal structure analysis of the double mutant rhodobacter2 sphaeroides bc1 complex
32	c3dl8H	Alignment	not modelled	27.1	5	PDB header: protein transport Chain: H: PDB Molecule: preprotein translocase subunit secy; PDBTitle: structure of the complex of aquifex aeolicus secyeg and bacillus2 subtilis seca
33	c2gtlO	Alignment	not modelled	25.3	28	PDB header: oxygen storage/transport Chain: O: PDB Molecule: extracellular hemoglobin linker l3 subunit; PDBTitle: lumbricus erythrocruurin at 3.5a resolution
34	c5dirD	Alignment	not modelled	25.0	14	PDB header: hydrolase Chain: D: PDB Molecule: lipoprotein signal peptidase; PDBTitle: membrane protein at 2.8 angstroms
35	d1gqea	Alignment	not modelled	23.2	14	Fold: Release factor Superfamily: Release factor Family: Release factor
36	d1iica1	Alignment	not modelled	23.1	16	Fold: Acyl-CoA N-acyltransferases (Nat) Superfamily: Acyl-CoA N-acyltransferases (Nat) Family: N-myristoyl transferase, NMT
37	c1zrtD	Alignment	not modelled	23.1	22	PDB header: oxidoreductase/metal transport Chain: D: PDB Molecule: cytochrome c1; PDBTitle: rhodobacter capsulatus cytochrome bc1 complex with2 stigmatellin bound
38	c4cadF	Alignment	not modelled	22.9	8	PDB header: protein binding Chain: F: PDB Molecule: ras and a-factor converting enzyme 1, rce1; PDBTitle: mechanism of farnesylated caax protein processing by the integral2 membrane protease rce1
39	c1xyr6	Alignment	not modelled	22.5	28	PDB header: virus Chain: 6: PDB Molecule: genome polyprotein, coat protein vp3; PDB Fragment: residues 620-630 PDBTitle: poliovirus 135s cell entry intermediate
40	c5aymA	Alignment	not modelled	21.9	8	PDB header: transport protein Chain: A: PDB Molecule: solute carrier family 39 (iron-regulated transporter); PDBTitle: crystal structure of a bacterial homologue of iron transporter2 ferroportin in outward-facing state with soaked iron
41	c3rfuC	Alignment	not modelled	21.8	18	PDB header: hydrolase, membrane protein Chain: C: PDB Molecule: copper efflux atpase; PDBTitle: crystal structure of a copper-transporting pib-type atpase
42	c1iicA	Alignment	not modelled	21.5	16	PDB header: transferase Chain: A: PDB Molecule: peptide n-myristoyltransferase; PDBTitle: crystal structure of saccharomyces cerevisiae n-myristoyltransferase2 with bound myristoylcoa
43	d1tqga	Alignment	not modelled	21.0	13	Fold: Four-helical up-and-down bundle Superfamily: Histidine-containing phosphotransfer domain, HPT domain Family: Chemotaxis protein CheA P1 domain
44	c2wuuA	Alignment	not modelled	20.5	9	PDB header: transferase Chain: A: PDB Molecule: n-myristoyltransferase; PDBTitle: structure of n-myristoyltransferase from l. donovani
45	c2akiY	Alignment	not modelled	20.3	7	PDB header: protein transport Chain: Y: PDB Molecule: preprotein translocase secy subunit; PDBTitle: normal mode-based flexible fitted coordinates of a translocating2 secyeg protein-conducting channel into the cryo-em map of a secyeg-3 nascent chain-70s ribosome complex from e. coli
46	d1wh5a	Alignment	not modelled	20.2	9	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
47	c3d5cX	Alignment	not modelled	19.4	9	PDB header: ribosome Chain: X: PDB Molecule: peptide chain release factor 1; PDBTitle: structural basis for translation termination on the 70s ribosome. this2 file contains the 30s subunit, release factor 1 (rf1), two trna, and3 mrna molecules of the second 70s ribosome. the entire crystal4 structure contains two 70s ribosomes as described in remark 400.
48	c3mkuA	Alignment	not modelled	19.2	12	PDB header: transport protein Chain: A: PDB Molecule: multi antimicrobial extrusion protein (na+)/drug PDBTitle: structure of a cation-bound multidrug and toxin compound extrusion2 (mate) transporter
49	c4a95B	Alignment	not modelled	18.5	12	PDB header: transferase Chain: B: PDB Molecule: glycylpeptide n-tetradecanoyltransferase; PDBTitle: plasmodium vivax n-myristoyltransferase with quinoline inhibitor
50	c6mjpG	Alignment	not modelled	17.9	20	PDB header: lipid transport Chain: G: PDB Molecule: lps export abc transporter permease lptg; PDBTitle: lptb(e163q)fgc from vibrio cholerae
51	c5ijpA	Alignment	not modelled	17.8	12	PDB header: inositol phosphate binding protein Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of the spx domain of chaetomium thermophilum vtc4 in2 complex with inositol hexakisphosphate (insp6).
52	c3ci9B	Alignment	not modelled	17.7	19	PDB header: transcription Chain: B: PDB Molecule: heat shock factor-binding protein 1; PDBTitle: crystal structure of the human hsbp1
53	c4w6vA	Alignment	not modelled	17.6	12	PDB header: transport protein Chain: A: PDB Molecule: di-/tripeptide transporter; PDBTitle: crystal structure of a peptide transporter from yersinia2

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54	d1cuna2	Alignment	not modelled	17.4	10	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
55	d1s35a1	Alignment	not modelled	17.4	7	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
56	c4djiA	Alignment	not modelled	17.0	12	PDB header: transport protein Chain: A: PDB Molecule: probable glutamate/gamma-aminobutyrate antiporter; PDBTitle: structure of glutamate-gaba antiporter gadc
57	d1e52a	Alignment	not modelled	16.8	14	Fold: Long alpha-hairpin Superfamily: C-terminal UvrC-binding domain of UvrB Family: C-terminal UvrC-binding domain of UvrB
58	c3nvtA	Alignment	not modelled	16.8	13	PDB header: transferase/isomerase Chain: A: PDB Molecule: 3-deoxy-d-arabino-heptulosonate 7-phosphate synthase; PDBTitle: 1.95 angstrom crystal structure of a bifunctional 3-deoxy-7-2 phosphoheptulonate synthase/chorismate mutase (aroa) from listeria3 monocytogenes egd-e
59	c3ednB	Alignment	not modelled	16.6	19	PDB header: biosynthetic protein Chain: B: PDB Molecule: phenazine biosynthesis protein, phzf family; PDBTitle: crystal structure of the bacillus anthracis phenazine2 biosynthesis protein, phzf family
60	d1s35a2	Alignment	not modelled	16.5	9	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
61	c5l75G	Alignment	not modelled	16.3	17	PDB header: transport protein Chain: G: PDB Molecule: fig000906: predicted permease; PDBTitle: a protein structure
62	c1s1lj	Alignment	not modelled	15.9	71	PDB header: ribosome Chain: J: PDB Molecule: 60s ribosomal protein l11; PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from yeast2 obtained by docking atomic models for rna and protein components into3 a 11.7 a cryo-em map. this file, 1s1i, contains 60s subunit. the 40s4 ribosomal subunit is in file 1s1h.
63	c3r1fO	Alignment	not modelled	15.8	16	PDB header: transcription Chain: O: PDB Molecule: esx-1 secretion-associated regulator espr; PDBTitle: crystal structure of a key regulator of virulence in mycobacterium2 tuberculosis
64	c2p6fA	Alignment	not modelled	15.8	16	PDB header: transferase Chain: A: PDB Molecule: glycylpeptide n-tetradecanoyltransferase; PDBTitle: crystal structures of saccharomyces cerevisiae n-myristoyltransferase2 with bound myristoyl-coa and inhibitors
65	c4lunU	Alignment	not modelled	15.5	3	PDB header: rna binding protein Chain: U: PDB Molecule: nonsense-mediated mrna decay protein 2; PDBTitle: structure of the n-terminal mif4g domain from s. cerevisiae upf2, a2 protein involved in the degradation of mrnas containing premature3 stop codons
66	c2lp4A	Alignment	not modelled	15.4	8	PDB header: transferase/signaling protein Chain: A: PDB Molecule: chemotaxis protein chea; PDBTitle: solution structure of p1-chey/p2 complex in bacterial chemotaxis
67	c5ir6B	Alignment	not modelled	15.2	12	PDB header: oxidoreductase Chain: B: PDB Molecule: bd-type quinol oxidase subunit ii; PDBTitle: the structure of bd oxidase from geobacillus thermodenitrificans
68	c2m20B	Alignment	not modelled	14.9	17	PDB header: signaling protein Chain: B: PDB Molecule: epidermal growth factor receptor; PDBTitle: egfr transmembrane - juxtamembrane (tm-jm) segment in bicelles: md2 guided nmr refined structure.
69	d1e3oc1	Alignment	not modelled	14.8	10	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
70	c5x62A	Alignment	not modelled	14.7	9	PDB header: transferase Chain: A: PDB Molecule: carnosine n-methyltransferase; PDBTitle: crystal structure of a carnosine n-methyltransferase bound by adohcy
71	c3bunB	Alignment	not modelled	14.6	15	PDB header: ligase/signaling protein Chain: B: PDB Molecule: e3 ubiquitin-protein ligase cbl; PDBTitle: crystal structure of c-cbl-tkb domain complexed with its binding motif2 in sprouty4
72	c4cadC	Alignment	not modelled	14.5	8	PDB header: protein binding Chain: C: PDB Molecule: ras and a-factor converting enzyme 1, rce1; PDBTitle: mechanism of farnesylated caax protein processing by the integral2 membrane protease rce1
73	d1i6za	Alignment	not modelled	14.4	12	Fold: Spectrin repeat-like Superfamily: BAG domain Family: BAG domain
74	c5go2D	Alignment	not modelled	14.2	10	PDB header: isomerase Chain: D: PDB Molecule: protein aroa(g); PDBTitle: crystal structure of chorismate mutase like domain of bifunctional2 dahp synthase of bacillus subtilis in complex with citrate
75	c4cawA	Alignment	not modelled	14.0	21	PDB header: transferase Chain: A: PDB Molecule: glycylpeptide n-tetradecanoyltransferase; PDBTitle: crystal structure of aspergillus fumigatus n-myristoyl2 transferase in complex with myristoyl coa and a pyrazole3 sulphonamide ligand
76	c2xdjF	Alignment	not modelled	13.9	10	PDB header: unknown function Chain: F: PDB Molecule: uncharacterized protein ybgf; PDBTitle: crystal structure of the n-terminal domain of e.coli ybgf
77	c2cblA	Alignment	not modelled	13.7	15	PDB header: complex (proto-oncogene/peptide) Chain: A: PDB Molecule: proto-oncogene cbl; PDBTitle: n-terminal domain of cbl in complex with its binding site2

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78	c2cpbA	Alignment	not modelled	13.6	14 PDB header: viral protein Chain: A: PDB Molecule: m13 major coat protein; PDBTitle: solution nmr structures of the major coat protein of2 filamentous bacteriophage m13 solubilized in3 dodecylphosphocholine micelles, 25 lowest energy structures
79	c5fv8B	Alignment	not modelled	13.6	24 PDB header: structural protein Chain: B: PDB Molecule: fosw; PDBTitle: structure of cjun-fosw coiled coil complex.
80	c5tj5A	Alignment	not modelled	13.5	11 PDB header: motor protein Chain: A: PDB Molecule: v-type proton atpase subunit a; PDBTitle: atomic model for the membrane-embedded motor of a eukaryotic v-atpase
81	c6k1hF	Alignment	not modelled	13.5	6 PDB header: protein transport Chain: F: PDB Molecule: pts system mannose-specific eiid component; PDBTitle: structure of membrane protein
82	c2akfA	Alignment	not modelled	13.4	15 PDB header: protein binding Chain: A: PDB Molecule: coronin-1a; PDBTitle: crystal structure of the coiled-coil domain of coronin 1
83	c2akfC	Alignment	not modelled	13.4	15 PDB header: protein binding Chain: C: PDB Molecule: coronin-1a; PDBTitle: crystal structure of the coiled-coil domain of coronin 1
84	c2akfB	Alignment	not modelled	13.4	15 PDB header: protein binding Chain: B: PDB Molecule: coronin-1a; PDBTitle: crystal structure of the coiled-coil domain of coronin 1
85	c5fv8A	Alignment	not modelled	13.4	24 PDB header: structural protein Chain: A: PDB Molecule: fosw; PDBTitle: structure of cjun-fosw coiled coil complex.
86	c3uunA	Alignment	not modelled	13.4	12 PDB header: structural protein Chain: A: PDB Molecule: dystrophin; PDBTitle: crystal structure of n-terminal first spectrin repeat of dystrophin
87	c2ks1B	Alignment	not modelled	13.3	17 PDB header: transferase Chain: B: PDB Molecule: epidermal growth factor receptor; PDBTitle: heterodimeric association of transmembrane domains of erbb1 and erbb2 receptors enabling kinase activation
88	c1qoyA	Alignment	not modelled	13.2	16 PDB header: toxin Chain: A: PDB Molecule: hemolysin e; PDBTitle: e.coli hemolysin e (hlye, clya, shea)
89	c4pguA	Alignment	not modelled	13.0	14 PDB header: membrane protein Chain: A: PDB Molecule: uncharacterized protein yetj; PDBTitle: crystal structure of yetj from bacillus subtilis at ph 7 by soaking
90	c4a1cD	Alignment	not modelled	12.9	56 PDB header: ribosome Chain: D: PDB Molecule: 60s ribosomal protein l11; PDBTitle: t.thermophila 60s ribosomal subunit in complex with2 initiation factor 6. this file contains 5s rrna,3 5.8s rrna and proteins of molecule 4.
91	c1ytrA	Alignment	not modelled	12.9	29 PDB header: antibiotic Chain: A: PDB Molecule: bacteriocin plantaricin a; PDBTitle: nmr structure of plantaricin a in dpc micelles, 202 structures
92	d1o4xa1	Alignment	not modelled	12.8	13 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
93	c3zf7L	Alignment	not modelled	12.7	86 PDB header: ribosome Chain: L: PDB Molecule: 60s ribosomal protein l11, putative; PDBTitle: high-resolution cryo-electron microscopy structure of the trypanosoma2 brucei ribosome
94	c5ue8B	Alignment	not modelled	12.7	9 PDB header: exocytosis Chain: B: PDB Molecule: protein unc-13 homolog a; PDBTitle: the crystal structure of munc13-1 c1c2mun domain
95	c5mg3D	Alignment	not modelled	12.6	8 PDB header: chaperone Chain: D: PDB Molecule: protein translocase subunit secd; PDBTitle: em fitted model of bacterial holo-translocon
96	d1wpga4	Alignment	not modelled	12.2	10 Fold: Calcium ATPase, transmembrane domain M Superfamily: Calcium ATPase, transmembrane domain M Family: Calcium ATPase, transmembrane domain M
97	c3ixzA	Alignment	not modelled	12.2	16 PDB header: hydrolase Chain: A: PDB Molecule: potassium-transporting atpase alpha; PDBTitle: pig gastric h+/k+-atpase complexed with aluminium fluoride
98	d1luhsa	Alignment	not modelled	12.0	21 Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
99	c3okqA	Alignment	not modelled	11.9	13 PDB header: protein binding Chain: A: PDB Molecule: bud site selection protein 6; PDBTitle: crystal structure of a core domain of yeast actin nucleation cofactor2 bud6