



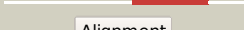




























Phyre2

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Description	RVBD0218 (-) _260924_262252
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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1xdya_	 Alignment		100.0	28	Fold: Oxidoreductase molybdopterin-binding domain Superfamily: Oxidoreductase molybdopterin-binding domain Family: Oxidoreductase molybdopterin-binding domain
2	c1xdyC_	 Alignment		100.0	28	PDB header: oxidoreductase Chain: C: PDB Molecule: bacterial sulfite oxidase; PDBTitle: structural and biochemical identification of a novel2 bacterial oxidoreductase, w-containing cofactor
3	c2xtsC_	 Alignment		100.0	25	PDB header: oxidoreductase/electron transport Chain: C: PDB Molecule: sulfite dehydrogenase; PDBTitle: crystal structure of the sulfane dehydrogenase soxcd from paracoccus2 pantotrophus
4	c1soxB_	 Alignment		100.0	28	PDB header: oxidoreductase Chain: B: PDB Molecule: sulfite oxidase; PDBTitle: sulfite oxidase from chicken liver
5	c2bpbA_	 Alignment		100.0	29	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite\;cytochrome c oxidoreductase subunit a; PDBTitle: sulfite dehydrogenase from starkeya novella
6	c2bjhA_	 Alignment		100.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: nitrate reductase [nadph]; PDBTitle: crystal structure of the molybdenum-containing nitrate2 reducing fragment of pichia angusta assimilatory nitrate3 reductase
7	c1ogpD_	 Alignment		100.0	28	PDB header: oxidoreductase Chain: D: PDB Molecule: sulfite oxidase; PDBTitle: the crystal structure of plant sulfite oxidase provides2 insight into sulfite oxidation in plants and animals
8	d1ogpa2	 Alignment		100.0	27	Fold: Oxidoreductase molybdopterin-binding domain Superfamily: Oxidoreductase molybdopterin-binding domain Family: Oxidoreductase molybdopterin-binding domain
9	c2a9dB_	 Alignment		100.0	26	PDB header: oxidoreductase Chain: B: PDB Molecule: sulfite oxidase; PDBTitle: crystal structure of recombinant chicken sulfite oxidase with arg at2 residue 161
10	c2bjiA_	 Alignment		100.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: nitrate reductase [nadph]; PDBTitle: crystal structure of nitrate-reducing fragment of2 assimilatory nitrate reductase from pichia angusta
11	d2a9da2	 Alignment		100.0	27	Fold: Oxidoreductase molybdopterin-binding domain Superfamily: Oxidoreductase molybdopterin-binding domain Family: Oxidoreductase molybdopterin-binding domain

12	c4pw3B_	Alignment		100.0	26	PDB header: oxidoreductase Chain: B: PDB Molecule: putative sulfite oxidase; PDBTitle: crystal structure of the sulfite dehydrogenase sort from sinorhizobium2 meliloti
13	d1kqfc_	Alignment		98.4	15	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Formate dehydrogenase N, cytochrome (gamma) subunit
14	c4gd3A_	Alignment		97.9	21	PDB header: oxidoreductase/electron transport Chain: A: PDB Molecule: ni/fe-hydrogenase 1 b-type cytochrome subunit; PDBTitle: structure of e. coli hydrogenase-1 in complex with cytochrome b
15	c4gd3B_	Alignment		97.9	21	PDB header: oxidoreductase/electron transport Chain: B: PDB Molecule: ni/fe-hydrogenase 1 b-type cytochrome subunit; PDBTitle: structure of e. coli hydrogenase-1 in complex with cytochrome b
16	c5oc0A_	Alignment		96.9	15	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome b561; PDBTitle: structure of e. coli superoxide oxidase
17	c6hwhb_	Alignment		95.0	20	PDB header: electron transport Chain: B: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit; PDBTitle: structure of a functional obligate respiratory supercomplex from2 mycobacterium smegmatis
18	c2qjkm_	Alignment		94.5	20	PDB header: electron transport Chain: M: PDB Molecule: cytochrome b; PDBTitle: crystal structure analysis of mutant rhodobacter2 sphaeroides bc1 with stigmatellin and antimycin
19	d1q90b_	Alignment		92.9	19	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Cytochrome b of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
20	d2e74a1	Alignment		91.7	19	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Cytochrome b of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
21	d1ppjc2	Alignment	not modelled	89.6	17	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Cytochrome b of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
22	c3cwbC_	Alignment	not modelled	89.1	20	PDB header: oxidoreductase Chain: C: PDB Molecule: cytochrome b; PDBTitle: chicken cytochrome bc1 complex inhibited by an iodinated analogue of2 the polyketide crocacin-d
23	c3cx5N_	Alignment	not modelled	88.9	15	PDB header: oxidoreductase Chain: N: PDB Molecule: cytochrome b; PDBTitle: structure of complex iii with bound cytochrome c in reduced state and2 definition of a minimal core interface for electron transfer.
24	d3cx5c2	Alignment	not modelled	87.7	15	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Cytochrome b of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
25	d1bccc3	Alignment	not modelled	81.2	20	Fold: Heme-binding four-helical bundle Superfamily: Transmembrane di-heme cytochromes Family: Cytochrome b of cytochrome bc1 complex (Ubiquinol-cytochrome c reductase)
26	c6f0kC_	Alignment	not modelled	72.8	16	PDB header: membrane protein Chain: C: PDB Molecule: polysulphide reductase nrfd; PDBTitle: alternative complex iii
27	c2e76D_	Alignment	not modelled	61.8	14	PDB header: photosynthesis Chain: D: PDB Molecule: cytochrome b6-f complex iron-sulfur subunit; PDBTitle: crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus PDB header: electron transport Chain: B: PDB Molecule: ubiquinol-cytochrome c reductase iron-

28	c6hwhB_	Alignment	not modelled	50.4	21	sulfur subunit; PDBTitle: structure of a functional obligate respiratory supercomplex from2 mycobacterium smegmatis PDB header: membrane protein
29	c6btmC_	Alignment	not modelled	39.4	18	Chain: C: PDB Molecule: alternative complex iii subunit c; PDBTitle: structure of alternative complex iii from flavobacterium johnsoniae2 (wild type)
30	d1nkza_	Alignment	not modelled	34.3	24	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
31	d1ny721	Alignment	not modelled	27.7	26	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: Positive stranded ssRNA viruses Family: Comoviridae-like VP
32	d1pgw21	Alignment	not modelled	27.0	26	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: Positive stranded ssRNA viruses Family: Comoviridae-like VP
33	d1pgl21	Alignment	not modelled	25.9	26	Fold: Nucleoplasmin-like/VP (viral coat and capsid proteins) Superfamily: Positive stranded ssRNA viruses Family: Comoviridae-like VP
34	c2fyuE_	Alignment	not modelled	24.1	23	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit, PDBTitle: crystal structure of bovine heart mitochondrial bc1 with jg1442 inhibitor
35	c5npxL_	Alignment	not modelled	23.7	29	PDB header: virus Chain: L: PDB Molecule: polyprotein; PDBTitle: atomic structure of the broad bean stain virus (bbsv) by cryo-em
36	c4o2tB_	Alignment	not modelled	22.0	29	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a duf4827 family protein (bdi_1692) from2 parabacteroides distansonis atcc 8503 at 2.40 a resolution
37	d2axta1	Alignment	not modelled	21.8	29	Fold: Bacterial photosystem II reaction centre, L and M subunits Superfamily: Bacterial photosystem II reaction centre, L and M subunits Family: Bacterial photosystem II reaction centre, L and M subunits
38	d1ijda_	Alignment	not modelled	20.7	25	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
39	c1bmv2_	Alignment	not modelled	19.8	25	PDB header: virus/rna Chain: 2: PDB Molecule: protein (icosahedral virus - b and c domain); PDBTitle: protein-rna interactions in an icosahedral virus at 3.02 angstroms resolution
40	c1vw4b_	Alignment	not modelled	19.1	27	PDB header: ribosome Chain: B: PDB Molecule: PDBTitle: structure of the yeast mitochondrial large ribosomal subunit
41	c2fynO_	Alignment	not modelled	17.7	24	PDB header: oxidoreductase Chain: O: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur PDBTitle: crystal structure analysis of the double mutant rhodobacter2 sphaeroides bc1 complex
42	d1h9aa2	Alignment	not modelled	15.0	18	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
43	d2evea1	Alignment	not modelled	13.1	23	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
44	c6igzH_	Alignment	not modelled	11.5	20	PDB header: plant protein Chain: H: PDB Molecule: psah; PDBTitle: structure of psi-lhci
45	c4e9iB_	Alignment	not modelled	11.3	18	PDB header: oxidoreductase Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: glucose-6-p dehydrogenase (apo form) from trypanosoma cruzi
46	c2ky9A_	Alignment	not modelled	10.8	40	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein ydhk; PDBTitle: solution nmr structure of ydhk c-terminal domain from b.subtilis,2 northeast structural genomics consortium target target sr518
47	d2g2xa1	Alignment	not modelled	9.9	36	Fold: PUA domain-like Superfamily: PUA domain-like Family: Atu2648/PH1033-like
48	c1h9aA_	Alignment	not modelled	9.2	18	PDB header: oxidoreductase (choh(d) - nad(p)) Chain: A: PDB Molecule: glucose 6-phosphate 1-dehydrogenase; PDBTitle: complex of active mutant (q365->c) of glucose 6-phosphate2 dehydrogenase from l. mesenteroides with coenzyme nadp
49	c4lqvA_	Alignment	not modelled	8.8	15	PDB header: oxidoreductase Chain: A: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray crystal structure of glucose-6-phosphate 1-dehydrogenase from2 mycobacterium avium
50	c2bfuL_	Alignment	not modelled	8.7	26	PDB header: virus Chain: L: PDB Molecule: cowpea mosaic virus, large (l) subunit; PDBTitle: x-ray structure of cpmv top component
51	c2bhlB_	Alignment	not modelled	8.4	27	PDB header: oxidoreductase Chain: B: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose-6-phosphate dehydrogenase (deletion2 variant) complexed with glucose-6-phosphate
52	c1qkiE_	Alignment	not modelled	8.3	21	PDB header: oxidoreductase Chain: E: PDB Molecule: glucose-6-phosphate 1-dehydrogenase; PDBTitle: x-ray structure of human glucose 6-phosphate dehydrogenase (variant2 canton r459l) complexed with structural nadp+

53	c1p84E_	Alignment	not modelled	8.1	9	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur subunit; PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
54	c1ej6D_	Alignment	not modelled	7.9	13	PDB header: virus Chain: D: PDB Molecule: sigma2; PDBTitle: reovirus core
55	c3diiB_	Alignment	not modelled	7.7	20	PDB header: oxidoreductase Chain: B: PDB Molecule: short-chain dehydrogenase/reductase sdr; PDBTitle: crystal structure of a carbohydrate specific scor enzyme2 from clostridium thermocellum, ligand-free form
56	d1qkia2	Alignment	not modelled	7.7	21	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: Glucose 6-phosphate dehydrogenase-like
57	c2o01H_	Alignment	not modelled	7.7	14	PDB header: photosynthesis Chain: H: PDB Molecule: photosystem i reaction center subunit vi, chloroplast; PDBTitle: the structure of a plant photosystem i supercomplex at 3.4 angstrom2 resolution
58	c6fo2R_	Alignment	not modelled	7.6	16	PDB header: membrane protein Chain: R: PDB Molecule: cytochrome b-c1 complex subunit rieske, mitochondrial; PDBTitle: cryoem structure of bovine cytochrome bc1 with no ligand bound
59	c2pq4B_	Alignment	not modelled	6.9	24	PDB header: chaperone/oxidoreductase Chain: B: PDB Molecule: periplasmic nitrate reductase precursor; PDBTitle: nmr solution structure of napd in complex with napa1-352 signal peptide
60	c5zjih_	Alignment	not modelled	6.6	12	PDB header: membrane protein Chain: H: PDB Molecule: photosystem i reaction center subunit vi, chloroplastic; PDBTitle: structure of photosystem i supercomplex with light-harvesting2 complexes i and ii
61	c5ghaF_	Alignment	not modelled	6.1	33	PDB header: transferase/transport protein Chain: F: PDB Molecule: sulfur carrier ttub; PDBTitle: sulfur transferase ttua in complex with sulfur carrier ttub
62	d1r6oc1	Alignment	not modelled	6.1	9	Fold: ClpS-like Superfamily: ClpS-like Family: Adaptor protein ClpS (YljA)
63	c2ol5B_	Alignment	not modelled	6.0	7	PDB header: transcription regulator Chain: B: PDB Molecule: pai 2 protein; PDBTitle: crystal structure of a protease synthase and sporulation negative2 regulatory protein pai 2 from bacillus stearothermophilus
64	c5ykaA_	Alignment	not modelled	5.9	18	PDB header: biosynthetic protein Chain: A: PDB Molecule: uncharacterized protein kdo0; PDBTitle: crystal structure of the kdo hydroxylase kdo0, a non-heme fe(ii)2 alphaketoglutarate dependent dioxygenase in complex with cobalt(ii)
65	c3llkA_	Alignment	not modelled	5.5	35	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfhydryl oxidase 1; PDBTitle: sulfhydryl oxidase fragment of human qsox1
66	d1f46a_	Alignment	not modelled	5.1	13	Fold: TBP-like Superfamily: Cell-division protein ZipA, C-terminal domain Family: Cell-division protein ZipA, C-terminal domain
67	d2i5nl1	Alignment	not modelled	5.1	23	Fold: Bacterial photosystem II reaction centre, L and M subunits Superfamily: Bacterial photosystem II reaction centre, L and M subunits Family: Bacterial photosystem II reaction centre, L and M subunits