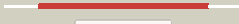



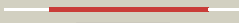




























Phyre2

Email	mdejesus@rockefeller.edu
Description	RVBD1677_(dsbF)_1901755_1902303
Date	Fri Aug 2 13:30:27 BST 2019
Unique Job ID	109ca3d5eba9eda9

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2hyxA_	 Alignment		100.0	16	PDB header: unknown function Chain: A: PDB Molecule: protein dipz; PDBTitle: structure of the c-terminal domain of dipz from mycobacterium2 tuberculosis
2	dlzooa1	 Alignment		100.0	100	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
3	c6gc1A_	 Alignment		100.0	18	PDB header: unknown function Chain: A: PDB Molecule: nhl repeat-containing protein 2; PDBTitle: crystal structure of trx-like and nhl repeat containing domains of2 human nhlrc2
4	dl1u4a_	 Alignment		99.9	55	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
5	d1knga_	 Alignment		99.9	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
6	c4pq1B_	 Alignment		99.9	17	PDB header: oxidoreductase Chain: B: PDB Molecule: putative electron transport related protein; PDBTitle: crystal structure and functional implications of a dsbf homologue from2 corynebacterium diphtheriae
7	c3lwaA_	 Alignment		99.9	15	PDB header: isomerase Chain: A: PDB Molecule: secreted thiol-disulfide isomerase; PDBTitle: the crystal structure of a secreted thiol-disulfide isomerase from2 corynebacterium glutamicum to 1.75a
8	c3kh7A_	 Alignment		99.9	23	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of the periplasmic soluble domain of reduced ccmg2 from pseudomonas aeruginosa
9	c4ka0C_	 Alignment		99.9	19	PDB header: oxidoreductase Chain: C: PDB Molecule: putative thiol-disulfide oxidoreductase; PDBTitle: crystal structure of a putative thiol-disulfide oxidoreductase from2 bacteroides vulgatus (target nysgrc-011676), space group p21221
10	d1jfua_	 Alignment		99.9	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
11	c3or5A_	 Alignment		99.9	27	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein, thioredoxin family PDBTitle: crystal structure of thiol:disulfide interchange protein, thioredoxin2 family protein from chlorobium tepidum t1s

12	c4evmA	Alignment		99.9	24	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin family protein; PDBTitle: 1.5 angstrom crystal structure of soluble domain of membrane-anchored2 thioredoxin family protein from streptococcus pneumoniae strain3 canada mdr_19a
13	c2l5oA	Alignment		99.9	22	PDB header: oxidoreductase Chain: A: PDB Molecule: putative thioredoxin; PDBTitle: solution structure of a putative thioredoxin from neisseria2 meningitidis
14	c3lorB	Alignment		99.9	17	PDB header: isomerase Chain: B: PDB Molecule: thiol-disulfide isomerase and thioredoxins; PDBTitle: the crystal structure of a thiol-disulfide isomerase from2 corynebacterium glutamicum to 2.2a
15	d2fy6a1	Alignment		99.9	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
16	c3ha9A	Alignment		99.9	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized thioredoxin-like protein; PDBTitle: the 1.7a crystal structure of a thioredoxin-like protein from2 aeropyrum pernix
17	c4nmuB	Alignment		99.9	22	PDB header: oxidoreductase Chain: B: PDB Molecule: thiol-disulfide oxidoreductase resa; PDBTitle: crystal structure of thiol-disulfide oxidoreductase from bacillus str.2 'ames ancestor'
18	d2b5xa1	Alignment		99.9	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
19	c5um7B	Alignment		99.9	20	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin signature protein; PDBTitle: crystal structure of the reduced state of the thiol-disulfide2 reductase sdba from streptococcus gordonii
20	c4tr3A	Alignment		99.9	15	PDB header: oxidoreductase Chain: A: PDB Molecule: type iii iodothyronine deiodinase; PDBTitle: mouse iodothyronine deiodinase 3 catalytic core, semet-labeled active2 site mutant secys->cys
21	d1st9a	Alignment	not modelled	99.9	22	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
22	c3erwG	Alignment	not modelled	99.9	24	PDB header: oxidoreductase Chain: G: PDB Molecule: sporulation thiol-disulfide oxidoreductase a; PDBTitle: crystal structure of stoa from bacillus subtilis
23	c2ywiA	Alignment	not modelled	99.9	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical conserved protein; PDBTitle: crystal structure of uncharacterized conserved protein from2 geobacillus kaustophilus
24	c3kcmC	Alignment	not modelled	99.9	23	PDB header: oxidoreductase Chain: C: PDB Molecule: thioredoxin family protein; PDBTitle: the crystal structure of thioredoxin protein from geobacter2 metallireducens
25	c2b1kA	Alignment	not modelled	99.9	23	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein dsbe; PDBTitle: crystal structure of e. coli ccmg protein
26	c3u5rG	Alignment	not modelled	99.9	16	PDB header: structural genomics, unknown function Chain: G: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a hypothetical protein smc02350 from2 sinorhizobium meliloti 1021
27	c3razA	Alignment	not modelled	99.9	17	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin-related protein; PDBTitle: the crystal structure of thioredoxin-related protein from neisseria2 meningitidis serogroup b
28	c2yp6A	Alignment	not modelled	99.9	21	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin family protein; PDBTitle: crystal structure of the pneumococcal exposed lipoprotein2 thioredoxin sp_1000 (etrx2) from streptococcus pneumoniae3 strain tigr4 in complex with cyclofos 3 tm
						PDB header: structural genomics, unknown function

29	c3hczA	Alignment	not modelled	99.9	13	Chain: A: PDB Molecule: possible thiol-disulfide isomerase; PDBTitle: the crystal structure of a domain of possible thiol-disulfide2 isomerase from cytophaga hutchinsonii atcc 33406.
30	c3hdcA	Alignment	not modelled	99.9	25	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin family protein; PDBTitle: the crystal structure of thioredoxin protein from geobacter2 metallireducens
31	d2cvba1	Alignment	not modelled	99.9	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
32	c2lrtA	Alignment	not modelled	99.9	9	PDB header: oxidoreductase Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of a putative thiol:disulfide interchange protein2 bv_u_1432 from bacteroides vulgatus
33	c3eytA	Alignment	not modelled	99.9	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein spoa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spoa0173
34	c3gl3D	Alignment	not modelled	99.9	23	PDB header: oxidoreductase Chain: D: PDB Molecule: putative thiol:disulfide interchange protein PDBTitle: crystal structure of a putative thiol:disulfide interchange2 protein dsbe from chlorobium tepidum
35	c3ewlA	Alignment	not modelled	99.9	16	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized conserved protein bf1870; PDBTitle: crystal structure of conserved protein bf1870 of unknown function from2 bacteroides fragilis
36	d1z5ye1	Alignment	not modelled	99.9	23	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
37	c4yodA	Alignment	not modelled	99.9	11	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin-like protein; PDBTitle: crystal structure of a thioredoxin-like protein (baccac_02376) from2 bacteroides caccae atcc 43185 at 1.90 a resolution
38	c3cynC	Alignment	not modelled	99.9	16	PDB header: oxidoreductase Chain: C: PDB Molecule: probable glutathione peroxidase 8; PDBTitle: the structure of human gpx8
39	c4eo3A	Alignment	not modelled	99.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: bacterioferritin comigratory protein/nadh dehydrogenase; PDBTitle: peroxiredoxin nitroreductase fusion enzyme
40	c2lrnA	Alignment	not modelled	99.9	18	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol:disulfide interchange protein; PDBTitle: solution structure of a thiol:disulfide interchange protein from2 bacteroides sp.
41	c2p5qA	Alignment	not modelled	99.9	17	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 5; PDBTitle: crystal structure of the poplar glutathione peroxidase 5 in the2 reduced form
42	c3ia1A	Alignment	not modelled	99.9	26	PDB header: oxidoreductase Chain: A: PDB Molecule: thio-disulfide isomerase/thioredoxin; PDBTitle: crystal structure of thio-disulfide isomerase from thermus2 thermophilus
43	c3fkfC	Alignment	not modelled	99.9	17	PDB header: oxidoreductase Chain: C: PDB Molecule: thiol-disulfide oxidoreductase; PDBTitle: thiol-disulfide oxidoreductase from bacteroides fragilis nctc 9343
44	c2m72A	Alignment	not modelled	99.9	23	PDB header: unknown function Chain: A: PDB Molecule: uncharacterized thioredoxin-like protein; PDBTitle: solution structure of uncharacterized thioredoxin-like protein pg_21752 from porphyromonas gingivalis
45	c4fyuB	Alignment	not modelled	99.9	20	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin; PDBTitle: crystal structure of thioredoxin from wuchereria bancrofti at 2.02 angstrom
46	c2v1mA	Alignment	not modelled	99.9	12	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase; PDBTitle: crystal structure of schistosoma mansoni glutathione peroxidase
47	c3fw2A	Alignment	not modelled	99.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol-disulfide oxidoreductase; PDBTitle: c-terminal domain of putative thiol-disulfide oxidoreductase from2 bacteroides thetaiotaomicron.
48	d1qmva	Alignment	not modelled	99.9	20	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
49	c3eurA	Alignment	not modelled	99.9	8	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the c-terminal domain of uncharacterized protein2 from bacteroides fragilis nctc 9343
50	d1gp1a	Alignment	not modelled	99.9	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
51	c2ls5A	Alignment	not modelled	99.9	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: solution structure of a putative protein disulfide isomerase from2 bacteroides thetaiotaomicron
52	c2he3A	Alignment	not modelled	99.9	17	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase 2; PDBTitle: crystal structure of the selenocysteine to cysteine mutant of human2 glutathione peroxidase 2 (gpx2)
53	c3cmiA	Alignment	not modelled	99.9	13	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxiredoxin hyr1; PDBTitle: crystal structure of glutathione-dependent phospholipid peroxidase2 hyr1 from the yeast saccharomyces cerevisiae
54	c2yzhD	Alignment	not modelled	99.9	19	PDB header: oxidoreductase Chain: D: PDB Molecule: probable thiol peroxidase; PDBTitle: crystal structure of peroxiredoxin-like protein from

					aquifex aeolicus PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxide reductase/ thiol specific antioxidant/ PDBTitle: crystal structure of an alkyl hydroperoxide reductase from burkholderia2 ambifaria
55	c5enuB_	Alignment	not modelled	99.9	18
56	c2p31B_	Alignment	not modelled	99.9	19
57	d2f8aa1	Alignment	not modelled	99.9	16
58	d1uula_	Alignment	not modelled	99.9	19
59	c3kebB_	Alignment	not modelled	99.9	15
60	c3me8B_	Alignment	not modelled	99.9	14
61	c3dvwB_	Alignment	not modelled	99.9	15
62	d1o8xa_	Alignment	not modelled	99.9	20
63	c4fo5A_	Alignment	not modelled	99.9	10
64	c2obiA_	Alignment	not modelled	99.9	16
65	c3gknA_	Alignment	not modelled	99.9	13
66	c6feuj_	Alignment	not modelled	99.9	19
67	c3tkpB_	Alignment	not modelled	99.8	18
68	c2r37A_	Alignment	not modelled	99.8	14
69	d2bmx1	Alignment	not modelled	99.8	19
70	c3drnB_	Alignment	not modelled	99.8	14
71	d1o73a_	Alignment	not modelled	99.8	20
72	d1zyea1	Alignment	not modelled	99.8	19
73	d1wp0a1	Alignment	not modelled	99.8	18
74	c2rliA_	Alignment	not modelled	99.8	17
75	c2jszA_	Alignment	not modelled	99.8	16
76	d1xvwa1	Alignment	not modelled	99.8	22
77	d2cx4a1	Alignment	not modelled	99.8	20
78	c3ixrA_	Alignment	not modelled	99.8	12
79	c5ykJA_	Alignment	not modelled	99.8	18
80	d1i5ga_	Alignment	not modelled	99.8	18

						Family: Glutathione peroxidase-like
81	c3tueB_	Alignment	not modelled	99.8	18	PDB header: oxidoreductase Chain: B: PDB Molecule: tryparedoxin peroxidase; PDBTitle: the structure of tryparedoxin peroxidase i from leishmania major
82	c2bmxB_	Alignment	not modelled	99.8	20	PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxidase c; PDBTitle: mycobacterium tuberculosis ahpc
83	c3s9fA_	Alignment	not modelled	99.8	17	PDB header: electron transport Chain: A: PDB Molecule: tryparedoxin; PDBTitle: the structure of tryparedoxin i from leishmania major
84	d2b7ka1	Alignment	not modelled	99.8	16	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
85	c5y63E_	Alignment	not modelled	99.8	21	PDB header: oxidoreductase Chain: E: PDB Molecule: alkyl hydroperoxide reductase, c subunit; PDBTitle: crystal structure of enterococcus faecalis ahpc
86	d1n8ja_	Alignment	not modelled	99.8	16	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
87	c5ovqL_	Alignment	not modelled	99.8	19	PDB header: oxidoreductase Chain: L: PDB Molecule: peroxiredoxin; PDBTitle: crystal structure of the peroxiredoxin (ahpc2) from the2 hyperthermophilic bacteria aquifex aeolicus vf
88	c2lusA_	Alignment	not modelled	99.8	17	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin; PDBTitle: nmr structure of carcinoscorpis rotundicauda thioredoxin related2 protein 16 and its role in regulating transcription factor nf-kb3 activity
89	c3sbcG_	Alignment	not modelled	99.8	20	PDB header: oxidoreductase Chain: G: PDB Molecule: peroxiredoxin tsa1; PDBTitle: crystal structure of saccharomyces cerevisiae tsa1c47s mutant protein
90	d2zcta1	Alignment	not modelled	99.8	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
91	c5jcgC_	Alignment	not modelled	99.8	22	PDB header: oxidoreductase Chain: C: PDB Molecule: thioredoxin-dependent peroxide reductase, mitochondrial; PDBTitle: structure of human peroxiredoxin 3 as three stacked rings
92	c1zyeL_	Alignment	not modelled	99.8	22	PDB header: oxidoreductase Chain: L: PDB Molecule: thioredoxin-dependent peroxide reductase; PDBTitle: crystal structre analysis of bovine mitochondrial peroxiredoxin iii
93	c2i81B_	Alignment	not modelled	99.8	20	PDB header: oxidoreductase Chain: B: PDB Molecule: 2-cys peroxiredoxin; PDBTitle: crystal structure of plasmodium vivax 2-cys peroxiredoxin,2 reduced
94	c3ztlB_	Alignment	not modelled	99.8	18	PDB header: oxidoreductase Chain: B: PDB Molecule: thioredoxin peroxidase; PDBTitle: crystal structure of decameric form of peroxiredoxin i from2 schistosoma mansoni
95	d1e2ya_	Alignment	not modelled	99.8	20	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
96	c2c0dA_	Alignment	not modelled	99.8	14	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin peroxidase 2; PDBTitle: structure of the mitochondrial 2-cys peroxiredoxin from2 plasmodium falciparum
97	c2xpdC_	Alignment	not modelled	99.8	16	PDB header: oxidoreductase Chain: C: PDB Molecule: thiol peroxidase; PDBTitle: reduced thiol peroxidase (tpx) from yersinia pseudotuberculosis
98	c2b7kD_	Alignment	not modelled	99.8	16	PDB header: metal binding protein Chain: D: PDB Molecule: sco1 protein; PDBTitle: crystal structure of yeast sco1
99	d2h01a1	Alignment	not modelled	99.8	22	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
100	c3w6gP_	Alignment	not modelled	99.8	23	PDB header: oxidoreductase Chain: P: PDB Molecule: probable peroxiredoxin; PDBTitle: structure of peroxiredoxin from anaerobic hyperthermophilic archaeon2 pyrococcus horikoshii
101	c2v2gC_	Alignment	not modelled	99.8	19	PDB header: oxidoreductase Chain: C: PDB Molecule: peroxiredoxin 6; PDBTitle: crystal structure of the c45s mutant of the peroxiredoxin 62 of arenicola marina. monoclinic form
102	d2a4va1	Alignment	not modelled	99.8	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
103	c4je1A_	Alignment	not modelled	99.8	19	PDB header: oxidoreductase Chain: A: PDB Molecule: probable thiol peroxidase; PDBTitle: crystal structure of thiol peroxidase from burkholderia cenocepacia2 j2315
104	c6n5uC_	Alignment	not modelled	99.8	18	PDB header: metal binding protein Chain: C: PDB Molecule: protein sco1 homolog 1, mitochondrial; PDBTitle: crystal structure of arabidopsis thaliana scoi with copper bound
105	d1xcca_	Alignment	not modelled	99.8	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
						Fold: Thioredoxin fold

106	d1qq2a_	Alignment	not modelled	99.8	18	Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
107	d1psqa_	Alignment	not modelled	99.8	14	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
108	d1prxa_	Alignment	not modelled	99.8	18	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
109	c4txoB_	Alignment	not modelled	99.8	14	PDB header: oxidoreductase/copper binding protein Chain: B: PDB Molecule: blr1131 protein; PDBTitle: crystal structure of the mixed disulfide complex of thioredoxin-like2 tlpas(c110s) and copper chaperone scois(c74s)
110	c4hdeA_	Alignment	not modelled	99.8	20	PDB header: lipid binding protein Chain: A: PDB Molecule: sco1/senc family lipoprotein; PDBTitle: the crystal structure of a sco1/senc family lipoprotein from bacillus2 anthracis str. ames
111	c1zofB_	Alignment	not modelled	99.8	19	PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxide-reductase; PDBTitle: crystal structure of alkyl hydroperoxide-reductase (ahpc)2 from helicobacter pylori
112	c5epfA_	Alignment	not modelled	99.8	26	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxidoxin; PDBTitle: crystal structure of peroxidoxin bcpb from mycobacterium tuberculosis
113	d1q98a_	Alignment	not modelled	99.8	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
114	c5zteA_	Alignment	not modelled	99.8	15	PDB header: oxidoreductase Chain: A: PDB Molecule: 2-cys peroxidoxin bas1, chloroplastic; PDBTitle: crystal structure of prxa c119s mutant from arabidopsis thaliana
115	c2h66G_	Alignment	not modelled	99.8	19	PDB header: structural genomics/oxidoreductase Chain: G: PDB Molecule: pv-pf14_0368; PDBTitle: the crystal structure of plasmodium vivax 2-cys2 peroxidoxin
116	d1zofa1	Alignment	not modelled	99.8	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
117	d1we0a1	Alignment	not modelled	99.8	20	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
118	d1yexa1	Alignment	not modelled	99.8	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
119	c4kb3B_	Alignment	not modelled	99.8	15	PDB header: oxidoreductase Chain: B: PDB Molecule: peroxidoxin; PDBTitle: crystal structure of the mitochondrial peroxidoxin from leishmania2 braziliensis in the decameric form
120	d1qxha_	Alignment	not modelled	99.8	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like