

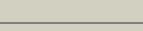
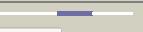
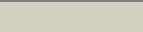
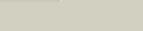
Phyre²

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Description	P02929
Date	Thu Jan 5 10:57:41 GMT 2012
Unique Job ID	dd13c5ac9b59d242

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1xx3A_	Alignment		99.8	100	PDB header: transport protein Chain: A; PDB Molecule: tonb protein; PDBTitle: solution structure of escherichia coli tonb-ctd
2	d1u07a_	Alignment		99.8	100	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
3	c2grxC_	Alignment		99.8	100	PDB header: metal transport Chain: C; PDB Molecule: protein tonb; PDBTitle: crystal structure of tonb in complex with fhua, e. coli2 outer membrane receptor for ferrichrome
4	d2gskb1	Alignment		99.8	100	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
5	d1ihra_	Alignment		99.7	100	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TonB
6	c2k9kA_	Alignment		99.7	31	PDB header: metal transport Chain: A; PDB Molecule: tonb2; PDBTitle: molecular characterization of the tonb2 protein from vibrio2 anguillarum
7	d1lr0a_	Alignment		99.4	22	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TolA
8	c2x9aB_	Alignment		99.2	11	PDB header: viral protein Chain: B; PDB Molecule: membrane spanning protein, required for outer membrane PDBTitle: crystal structure of g3p from phage if1 in complex with its2 coreceptor, the c-terminal domain of tola
9	d1tola2	Alignment		99.1	10	Fold: TolA/TonB C-terminal domain Superfamily: TolA/TonB C-terminal domain Family: TolA
10	c1tola_	Alignment		98.7	10	PDB header: viral protein Chain: A; PDB Molecule: protein (fusion protein consisting of minor coat PDBTitle: fusion of n-terminal domain of the minor coat protein from2 gene iii in phage m13, and c-terminal domain of e. coli3 protein-tola
11	c1ybxA_	Alignment		64.2	11	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: conserved hypothetical protein; PDBTitle: conserved hypothetical protein cth-383 from clostridium thermocellum

12	c3onrl_	Alignment		60.8	21	PDB header: metal binding protein Chain: I; PDB Molecule: protein transport protein sece2; PDBTitle: crystal structure of the calcium chelating immunodominant antigen,2 calcium dodec (rv0379),from mycobacterium tuberculosis with a novel3 calcium-binding site
13	c2h66G_	Alignment		60.0	9	PDB header: structural genomics/oxidoreductase Chain: G; PDB Molecule: pv-pf14_0368; PDBTitle: the crystal structure of plasmodium vivax 2-cys2 peroxiredoxin
14	c3kebB_	Alignment		57.6	6	PDB header: oxidoreductase Chain: B; PDB Molecule: probable thiol peroxidase; PDBTitle: thiol peroxidase from chromobacterium violaceum
15	d1j8ba_	Alignment		57.6	17	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
16	d1puga_	Alignment		52.2	22	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
17	d2cv4a1	Alignment		50.7	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
18	c3drnB_	Alignment		47.4	20	PDB header: oxidoreductase Chain: B; PDB Molecule: peroxiredoxin, bacterioferritin comigratory protein PDBTitle: the crystal structure of bcp1 from sulfolobus sulfataricus
19	d2ux9a1	Alignment		45.5	25	Fold: Dodecin subunit-like Superfamily: Dodecin-like Family: Dodecin-like
20	d1weo0a1	Alignment		43.6	21	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
21	d1zyea1	Alignment	not modelled	42.8	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
22	d2h01a1	Alignment	not modelled	41.6	9	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
23	c2vxal_	Alignment	not modelled	40.3	32	PDB header: flavoprotein Chain: L; PDB Molecule: dodecin; PDBTitle: h.halophila dodecin in complex with riboflavin
24	d1e2ya_	Alignment	not modelled	38.3	19	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
25	c2bmxB_	Alignment	not modelled	36.4	17	PDB header: oxidoreductase Chain: B; PDB Molecule: alkyl hydroperoxidase c; PDBTitle: mycobacterium tuberculosis ahpc
26	d1qq2a_	Alignment	not modelled	33.8	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
27	d1qmvb_	Alignment	not modelled	33.5	9	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
28	c3hd7A_	Alignment	not modelled	31.6	15	PDB header: exocytosis Chain: A; PDB Molecule: vesicle-associated membrane protein 2; PDBTitle: helical extension of the neuronal snare complex into the membrane,2 spacegroup c 1 2 1
29	d1n8ja_	Alignment	not modelled	31.4	13	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like

30	c3oqtP		Alignment	not modelled	31.1	14	PDB header: flavoprotein Chain: P; PDB Molecule: rv1498a protein; PDBTitle: crystal structure of rv1498a protein from mycobacterium tuberculosis
31	d1uula		Alignment	not modelled	30.9	9	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
32	d1m98a2		Alignment	not modelled	30.5	23	Fold: Cystatin-like Superfamily: NTF2-like Family: Orange carotenoid protein, C-terminal domain
33	c3ddtl		Alignment	not modelled	29.6	22	PDB header: structural genomics, unknown function Chain: I; PDB Molecule: invasion-associated protein b; PDBTitle: crystal structure of invasion associated protein b from bartonella2 henselae
34	d1psqa		Alignment	not modelled	29.1	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
35	d1xvqa		Alignment	not modelled	29.0	16	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
36	c2ii1A		Alignment	not modelled	28.7	17	PDB header: hydrolase Chain: A; PDB Molecule: acetamidase; PDBTitle: crystal structure of acetamidase (10172637) from bacillus halodurans2 at 1.95 a resolution
37	c2kzxA		Alignment	not modelled	28.7	19	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: uncharacterized protein; PDBTitle: solution nmr structure of a3dh5 from clostridium thermocellum2 northeast structural genomics consortium target cmr116
38	c2yzhD		Alignment	not modelled	26.1	24	PDB header: oxidoreductase Chain: D; PDB Molecule: probable thiol peroxidase; PDBTitle: crystal structure of peroxiredoxin-like protein from aquifex aeolicus
39	c2xpdc		Alignment	not modelled	25.3	6	PDB header: oxidoreductase Chain: C; PDB Molecule: thiol peroxidase; PDBTitle: reduced thiol peroxidase (tpx) from yersinia pseudotuberculosis
40	d1ijda		Alignment	not modelled	24.5	21	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
41	d2cx4a1		Alignment	not modelled	23.6	24	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
42	d1nkza		Alignment	not modelled	22.1	17	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
43	d2bmxa1		Alignment	not modelled	21.9	17	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
44	d2vnud4		Alignment	not modelled	21.3	14	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RNB domain-like
45	c2c0dA		Alignment	not modelled	20.9	11	PDB header: oxidoreductase Chain: A; PDB Molecule: thioredoxin peroxidase 2; PDBTitle: structure of the mitochondrial 2-cys peroxiredoxin from2 plasmodium falciparum
46	d1zofa1		Alignment	not modelled	20.7	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
47	c3o6uB		Alignment	not modelled	20.4	19	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein cpe2226; PDBTitle: crystal structure of cpe2226 protein from clostridium perfringens2 northeast structural genomics consortium target cpr195
48	c2r7fA		Alignment	not modelled	18.9	27	PDB header: hydrolase Chain: A; PDB Molecule: ribonuclease ii family protein; PDBTitle: crystal structure of ribonuclease ii family protein from deinococcus2 radiodurans, hexagonal crystal form. northeast structural genomics3 target drr63
49	d2r7da2		Alignment	not modelled	18.4	27	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RNB domain-like
50	c3lwxA		Alignment	not modelled	18.1	9	PDB header: oxidoreductase Chain: A; PDB Molecule: nadh:ubiquinone oxidoreductase, na translocating, PDBTitle: crystal structure of na(+) -translocating nadh-quinone2 reductase subunit c (yp_001302508.1) from parabacteroides3 distasonis atcc 8503 at 1.10 a resolution
51	d1knga		Alignment	not modelled	18.0	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
52	c1zyeL		Alignment	not modelled	17.9	15	PDB header: oxidoreductase Chain: L; PDB Molecule: thioredoxin-dependent peroxide reductase; PDBTitle: crystal strucuture analysis of bovine mitochondrial peroxiredoxin iii
53	c2egta		Alignment	not modelled	15.5	8	PDB header: structural genomics, unknown function Chain: A; PDB Molecule: hypothetical protein aq_1549; PDBTitle: crystal structure of hypothetical protein (aq1549) from aquifex2 aeolicus
54	c2jszA		Alignment	not modelled	14.8	15	PDB header: oxidoreductase Chain: A; PDB Molecule: probable thiol peroxidase; PDBTitle: solution structure of tpx in the reduced state
							Fold: YbaB-like

55	d1pugb	Alignment	not modelled	13.8	22	Superfamily: YbaB-like Family: YbaB-like
56	c3eytA	Alignment	not modelled	13.6	6	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein spoa0173; PDBTitle: crystal structure of thioredoxin-like superfamily protein spoa0173
57	c1h2aL	Alignment	not modelled	12.8	30	PDB header: oxidoreductase Chain: L: PDB Molecule: hydrogenase; PDBTitle: single crystals of hydrogenase from desulfovibrio vulgaris
58	d1iwla	Alignment	not modelled	12.7	10	Fold: LolA-like prokaryotic lipoproteins and lipoprotein localization factors Superfamily: Prokaryotic lipoproteins and lipoprotein localization factors Family: Outer-membrane lipoproteins carrier protein LolA
59	c2ywnA	Alignment	not modelled	12.3	7	PDB header: oxidoreductase Chain: A: PDB Molecule: peroxiredoxin-like protein; PDBTitle: crystal structure of peroxiredoxin-like protein from2 sulfolobus tokodaii
60	c1zofB	Alignment	not modelled	11.1	12	PDB header: oxidoreductase Chain: B: PDB Molecule: alkyl hydroperoxide-reductase; PDBTitle: crystal structure of alkyl hydroperoxide-reductase (ahpc)2 from helicobacter pylori
61	d2idla1	Alignment	not modelled	11.0	14	Fold: elF1-like Superfamily: TM1457-like Family: TM1457-like
62	d1xvwa1	Alignment	not modelled	10.9	14	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
63	d2zcta1	Alignment	not modelled	10.7	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
64	d1wui1	Alignment	not modelled	10.5	31	Fold: HydB/Nqo4-like Superfamily: HydB/Nqo4-like Family: Nickel-iron hydrogenase, large subunit
65	c3mjjD	Alignment	not modelled	10.3	19	PDB header: hydrolase Chain: D: PDB Molecule: predicted acetamidase/formamidase; PDBTitle: crystal structure analysis of a recombinant predicted2 acetamidase/formamidase from the thermophile thermoanaerobacter3 tengcongensis
66	c2b7kD	Alignment	not modelled	10.1	6	PDB header: metal binding protein Chain: D: PDB Molecule: sco1 protein; PDBTitle: crystal structure of yeast sco1
67	d2ix0a4	Alignment	not modelled	9.6	18	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: RNB domain-like
68	d1xccA	Alignment	not modelled	9.5	10	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
69	c3myrB	Alignment	not modelled	9.2	18	PDB header: oxidoreductase Chain: B: PDB Molecule: nickel-dependent hydrogenase large subunit; PDBTitle: crystal structure of [nife] hydrogenase from allochromatium vinosum in2 its ni-a state
70	c2fug4	Alignment	not modelled	8.9	8	PDB header: oxidoreductase Chain: 4: PDB Molecule: nahd-quinone oxidoreductase chain 4; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
71	d2fug41	Alignment	not modelled	8.9	8	Fold: HydB/Nqo4-like Superfamily: HydB/Nqo4-like Family: Nqo4-like
72	c3gknA	Alignment	not modelled	8.6	26	PDB header: oxidoreductase Chain: A: PDB Molecule: bacterioferritin comigratory protein; PDBTitle: insights into the alkyl peroxide reduction activity of xanthomonas2 campestris bacterioferritin comigratory protein from the trapped3 intermediate/ligand complex structures
73	c1vqzA	Alignment	not modelled	8.6	21	PDB header: ligase Chain: A: PDB Molecule: lipote-protein ligase, putative; PDBTitle: crystal structure of a putative lipote-protein ligase a (sp_1160)2 from streptococcus pneumoniae tigr4 at 1.99 a resolution
74	c2vnuD	Alignment	not modelled	8.2	14	PDB header: hydrolase/rna Chain: D: PDB Molecule: exosome complex exonuclease rrp44; PDBTitle: crystal structure of sc rrp44
75	c2kl8A	Alignment	not modelled	8.1	22	PDB header: de novo protein Chain: A: PDB Molecule: or15; PDBTitle: solution nmr structure of de novo designed ferredoxin-like2 fold protein, northeast structural genomics consortium3 target or15
76	c3kh7A	Alignment	not modelled	7.9	6	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
77	c3razA	Alignment	not modelled	7.8	15	PDB header: oxidoreductase Chain: A: PDB Molecule: thioredoxin-related protein; PDBTitle: the crystal structure of thioredoxin-related protein from neisseria2 meningitidis serogroup b
78	d2b7ka1	Alignment	not modelled	7.7	6	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
79	d1yexa1	Alignment	not modelled	7.6	15	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
80	c2kncA	Alignment	not modelled	7.4	19	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB;

80	c2n1ca	Alignment	not modelled	7.4	19	PDBTitle: platelet integrin alfa1/beta3 transmembrane-cytoplasmic2 heterocomplex
81	d1qxha	Alignment	not modelled	7.4	12	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
82	d1xrda1	Alignment	not modelled	7.2	16	Fold: Light-harvesting complex subunits Superfamily: Light-harvesting complex subunits Family: Light-harvesting complex subunits
83	c2nr1A	Alignment	not modelled	7.2	39	PDB header: receptor Chain: A: PDB Molecule: nr1 m2; PDBTitle: transmembrane segment 2 of nmda receptor nr1, nmr, 102 structures
84	d1rjlc	Alignment	not modelled	7.1	31	Fold: open-sided beta-meander Superfamily: Outer surface protein Family: Outer surface protein
85	d1yg9h1	Alignment	not modelled	6.9	30	Fold: HydB/Nqo4-like Superfamily: HydB/Nqo4-like Family: Nickel-iron hydrogenase, large subunit
86	c2v1mA	Alignment	not modelled	6.9	15	PDB header: oxidoreductase Chain: A: PDB Molecule: glutathione peroxidase; PDBTitle: crystal structure of schistosoma mansoni glutathione2 peroxidase
87	d1q98a	Alignment	not modelled	6.1	11	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Glutathione peroxidase-like
88	d1frfl	Alignment	not modelled	6.1	30	Fold: HydB/Nqo4-like Superfamily: HydB/Nqo4-like Family: Nickel-iron hydrogenase, large subunit
89	c3f8xD	Alignment	not modelled	6.0	7	PDB header: isomerase Chain: D: PDB Molecule: putative delta-5-3-ketosteroid isomerase; PDBTitle: crystal structure of a putative delta-5-3-ketosteroid isomerase2 (eca2236) from pectobacterium atrosepticum scri1043 at 1.55 a3 resolution
90	d1e3db	Alignment	not modelled	5.8	25	Fold: HydB/Nqo4-like Superfamily: HydB/Nqo4-like Family: Nickel-iron hydrogenase, large subunit
91	c2boyC	Alignment	not modelled	5.7	12	PDB header: oxidoreductase Chain: C: PDB Molecule: 3-chlorocatechol 1,2-dioxygenase; PDBTitle: crystal structure of 3-chlorocatechol 1,2-dioxygenase from2 rhodococcus opacus 1cp
92	c3flijA	Alignment	not modelled	5.3	3	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein conserved in bacteria with a PDBTitle: crystal structure of uncharacterized protein conserved in bacteria2 with a cystatin-like fold (yp_168589.1) from silicibacter pomeroyi3 dss-3 at 2.00 a resolution
93	c2qtsA	Alignment	not modelled	5.1	8	PDB header: membrane protein Chain: A: PDB Molecule: acid-sensing ion channel; PDBTitle: structure of an acid-sensing ion channel 1 at 1.9 a resolution and low2 ph
94	c2wpnB	Alignment	not modelled	5.0	33	PDB header: oxidoreductase Chain: B: PDB Molecule: periplasmic [nifese] hydrogenase, large subunit, PDBTitle: structure of the oxidised, as-isolated nifese hydrogenase2 from d. vulgaris hildenborough
95	c2rlia	Alignment	not modelled	5.0	19	PDB header: metal transport Chain: A: PDB Molecule: sco2 protein homolog, mitochondrial; PDBTitle: solution structure of cu(i) human sco2
96	d3bzka5	Alignment	not modelled	5.0	5	Fold: Ribonuclease H-like motif Superfamily: Ribonuclease H-like Family: Tex RuvX-like domain-like