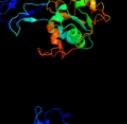


Phyre²

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Description	P19318
Date	Thu Jan 5 11:37:15 GMT 2012
Unique Job ID	e7e5ca19dfd4a59e

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1y5ib1	Alignment		100.0	78	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
2	c2ivfB_	Alignment		100.0	40	PDB header: oxidoreductase Chain: B; PDB Molecule: ethylbenzene dehydrogenase beta-subunit; PDBTitle: ethylbenzene dehydrogenase from aromatoleum aromaticum
3	c1ti2F_	Alignment		100.0	37	PDB header: oxidoreductase Chain: F; PDB Molecule: pyrogallol hydroxytransferase small subunit; PDBTitle: crystal structure of pyrogallol-phloroglucinol transhydroxylase from pelobacter acidigallici
4	c2vpyB_	Alignment		100.0	44	PDB header: oxidoreductase Chain: B; PDB Molecule: nrfc protein; PDBTitle: polysulfide reductase with bound quinone inhibitor, 2 pentachlorophenol (pcp)
5	d1kqfb1	Alignment		100.0	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
6	c1kqfB_	Alignment		100.0	26	PDB header: oxidoreductase Chain: B; PDB Molecule: formate dehydrogenase, nitrate-inducible, iron-sulfur PDBTitle: formate dehydrogenase n from e. coli
7	d1vlfn2	Alignment		100.0	35	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
8	d1h0hb_	Alignment		100.0	25	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
9	c1gx7A_	Alignment		100.0	13	PDB header: oxidoreductase Chain: A; PDB Molecule: periplasmic [fe] hydrogenase large subunit; PDBTitle: best model of the electron transfer complex between cytochrome c3 and [fe]-hydrogenase
10	c1hfeL_	Alignment		100.0	16	PDB header: hydrogenase Chain: L; PDB Molecule: protein (fe-only hydrogenase (e.c.1.18.99.1)) PDBTitle: 1.6 a resolution structure of the fe-only hydrogenase from2 desulfovibrio desulfuricans
11	c1c4cA_	Alignment		100.0	15	PDB header: oxidoreductase Chain: A; PDB Molecule: protein (fe-only hydrogenase); PDBTitle: binding of exogenously added carbon monoxide at the active site of the fe-only hydrogenase (cpi) from clostridium pasteurianum

12	d3c8ya1			99.9	13	Fold: Fe-only hydrogenase Superfamily: Fe-only hydrogenase Family: Fe-only hydrogenase
13	c3lx4B_			99.9	15	PDB header: oxidoreductase Chain: B: PDB Molecule: fe-hydrogenase; PDBTitle: stepwise [fefe]-hydrogenase h-cluster assembly revealed in the2 structure of hyda(deltaefg)
14	d1hfel1			99.9	11	Fold: Fe-only hydrogenase Superfamily: Fe-only hydrogenase Family: Fe-only hydrogenase
15	c3gyxJ_			99.4	18	PDB header: oxidoreductase Chain: J: PDB Molecule: adenylylsulfate reductase; PDBTitle: crystal structure of adenylylsulfate reductase from2 desulfovibrio gigas
16	d1jnrb_			99.4	17	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
17	c2v2kB_			99.3	19	PDB header: electron transport Chain: B: PDB Molecule: ferredoxin; PDBTitle: the crystal structure of fdxa, a 7fe ferredoxin from2 mycobacterium smegmatis
18	d7fd1a_			99.3	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
19	d3c7bb1			99.3	25	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
20	d1h98a_			99.3	22	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
21	c1gthD_		not modelled	99.2	20	PDB header: oxidoreductase Chain: D: PDB Molecule: dihydropyrimidine dehydrogenase; PDBTitle: dihydropyrimidine dehydrogenase (dpd) from pig, ternary2 complex with nadph and 5-iodouracil
22	d1bc6a_		not modelled	99.2	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
23	d1hfel2		not modelled	99.1	18	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
24	d2c42a5		not modelled	99.0	31	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
25	d1clfa_		not modelled	98.9	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
26	c2zvsB_		not modelled	98.9	19	PDB header: electron transport Chain: B: PDB Molecule: uncharacterized ferredoxin-like protein yfh; PDBTitle: crystal structure of the 2[4fe-4s] ferredoxin from escherichia coli
27	c2gmhA_		not modelled	98.9	15	PDB header: oxidoreductase Chain: A: PDB Molecule: electron transfer flavoprotein-ubiquinone PDBTitle: structure of porcine electron transfer flavoprotein-2 ubiquinone oxidoreductase in complexed with ubiquinone
28	d1dura_		not modelled	98.9	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins

29	d1gtea5		Alignment	not modelled	98.9	18	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
30	d1fcaa_		Alignment	not modelled	98.9	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
31	c3c7bE_		Alignment	not modelled	98.8	28	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit beta; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
32	d2fdna_		Alignment	not modelled	98.8	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
33	d1xera_		Alignment	not modelled	98.8	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Archaeal ferredoxins
34	c2c3yA_		Alignment	not modelled	98.8	24	PDB header: oxidoreductase Chain: A: PDB Molecule: pyruvate-ferredoxin oxioreductase; PDBTitle: crystal structure of the radical form of2 pyruvate:ferredoxin oxidoreductase from desulfovibrio3 africanus
35	d2gmha3		Alignment	not modelled	98.8	17	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: ETF-QO domain-like
36	d2fug91		Alignment	not modelled	98.8	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
37	c2fugG_		Alignment	not modelled	98.8	30	PDB header: oxidoreductase Chain: G: PDB Molecule: nadh-quinone oxidoreductase chain 9; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
38	d1bla_		Alignment	not modelled	98.7	25	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
39	c2fgoa_		Alignment	not modelled	98.6	28	PDB header: electron transport Chain: A: PDB Molecule: ferredoxin; PDBTitle: structure of the 2[4fe-4s] ferredoxin from pseudomonas2 aeruginosa
40	d1rgva_		Alignment	not modelled	98.6	32	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
41	c2v4jE_		Alignment	not modelled	98.6	24	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit PDBTitle: the crystal structure of desulfovibrio vulgaris2 dissimilatory sulfite reductase bound to dsrc provides3 novel insights into the mechanism of sulfate respiration
42	d1jb0c_		Alignment	not modelled	98.6	24	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
43	d2fug34		Alignment	not modelled	98.5	32	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
44	c3bk7A_		Alignment	not modelled	98.5	28	PDB header: hydrolyase/translation Chain: A: PDB Molecule: abc transporter atp-binding protein; PDBTitle: structure of the complete abce1/rnase-l inhibitor protein2 from pyrococcus abyssi
45	d1vija_		Alignment	not modelled	98.4	18	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
46	d3c8ya3		Alignment	not modelled	98.4	19	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
47	c3c7bA_		Alignment	not modelled	98.3	27	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit alpha; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
48	c2v4ja_		Alignment	not modelled	98.3	20	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit PDBTitle: the crystal structure of desulfovibrio vulgaris2 dissimilatory sulfite reductase bound to dsrc provides3 novel insights into the mechanism of sulfate respiration
49	c2fugC_		Alignment	not modelled	97.8	29	PDB header: oxidoreductase Chain: C: PDB Molecule: nadh-quinone oxidoreductase chain 3; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
50	d1fxra_		Alignment	not modelled	97.8	19	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
51	d1sj1a_		Alignment	not modelled	97.8	23	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
52	d1iqza_		Alignment	not modelled	97.7	19	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
53	c1dwIA_		Alignment	not modelled	97.7	23	PDB header: electron transfer Chain: A: PDB Molecule: ferredoxin i; PDBTitle: the ferredoxin-cytochrome complex using heteronuclear nmr2 and docking simulation
							Fold: Ferredoxin-like

54	d2v4jb1	Alignment	not modelled	97.5	31	Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
55	c2b76N_	Alignment	not modelled	96.9	24	PDB header: oxidoreductase Chain: N: PDB Molecule: fumarate reductase iron-sulfur protein; PDBTitle: e. coli quinol fumarate reductase frda e49q mutation
56	c3cf4A_	Alignment	not modelled	96.8	25	PDB header: oxidoreductase Chain: A: PDB Molecule: acetyl-coa decarboxylase/synthase alpha subunit; PDBTitle: structure of the codh component of the m. barkeri acds complex
57	c2bs2E_	Alignment	not modelled	96.8	31	PDB header: oxidoreductase Chain: E: PDB Molecule: quinol:fumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinella succinogenes
58	c1nekB_	Alignment	not modelled	96.0	26	PDB header: oxidoreductase/electron transport Chain: B: PDB Molecule: succinate dehydrogenase iron-sulfur protein; PDBTitle: complex ii (succinate dehydrogenase) from e. coli with2 ubiquinone bound
59	d2bs2b1	Alignment	not modelled	95.9	18	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
60	d1nekb1	Alignment	not modelled	95.7	31	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
61	d1kf6b1	Alignment	not modelled	95.4	26	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
62	c2h89B_	Alignment	not modelled	94.8	28	PDB header: oxidoreductase Chain: B: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
63	d3c7ba1	Alignment	not modelled	93.8	35	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
64	d2v4ja1	Alignment	not modelled	93.6	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
65	c2vdcl_	Alignment	not modelled	90.8	23	PDB header: oxidoreductase Chain: I: PDB Molecule: glutamate synthase [nadph] small chain; PDBTitle: the 9.5 Å resolution structure of glutamate synthase from2 cryo-electron microscopy and its oligomerization behavior3 in solution: functional implications.
66	c2dxbR_	Alignment	not modelled	70.3	22	PDB header: hydrolase Chain: R: PDB Molecule: thiocyanate hydrolase subunit gamma; PDBTitle: recombinant thiocyanate hydrolase comprising partially-modified cobalt2 centers
67	d1gtea1	Alignment	not modelled	63.3	28	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Dihydropyrimidine dehydrogenase, N-terminal domain
68	c3qyhG_	Alignment	not modelled	59.8	16	PDB header: lyase Chain: G: PDB Molecule: co-type nitrile hydratase alpha subunit; PDBTitle: crystal structure of co-type nitrile hydratase beta-h71l from2 pseudomonas putida.
69	c2z6vA_	Alignment	not modelled	57.6	29	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of sulfotransferase stf9 from2 mycobacterium avium
70	d1ugpa_	Alignment	not modelled	48.7	21	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
71	d2igs1	Alignment	not modelled	36.4	20	Fold: Lysozyme-like Superfamily: Lysozyme-like Family: PA2222-like
72	c1m2oA_	Alignment	not modelled	30.8	24	PDB header: protein transport/signaling protein Chain: A: PDB Molecule: protein transport protein sec23; PDBTitle: crystal structure of the sec23-sar1 complex
73	c1m2vB_	Alignment	not modelled	29.7	22	PDB header: protein transport Chain: B: PDB Molecule: protein transport protein sec24; PDBTitle: crystal structure of the yeast sec23/24 heterodimer
74	c1g8jC_	Alignment	not modelled	28.9	22	PDB header: oxidoreductase Chain: C: PDB Molecule: arsenate oxidase; PDBTitle: crystal structure analysis of arsenite oxidase from2 alcaligenes faecalis
75	d1v29a_	Alignment	not modelled	21.8	22	Fold: Nitrile hydratase alpha chain Superfamily: Nitrile hydratase alpha chain Family: Nitrile hydratase alpha chain
76	d1djqa3	Alignment	not modelled	21.0	33	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: N-terminal domain of adrenodoxin reductase-like
77	d1seda_	Alignment	not modelled	16.1	18	Fold: Hypothetical protein Yhal Superfamily: Hypothetical protein Yhal Family: Hypothetical protein Yhal
78	d1pyfa_	Alignment	not modelled	14.7	14	Fold: TIM beta/alpha-barrel Superfamily: NAD(P)-linked oxidoreductase Family: Aldo-keto reductases (NADP)
79	c2a91A_	Alignment	not modelled	14.6	15	PDB header: signaling protein,transferase,membrane p Chain: A: PDB Molecule: receptor tyrosine-protein kinase erb2; PDBTitle: crystal structure of erb2 domains 1-3
80	c3e09B	Alignment	not modelled	14.5	19	PDB header: protein transport Chain: B: PDB Molecule: sec24 related gene family, member d;

80	c2ey2D_	Alignment	not modelled	14.5	19	PDBTitle: crystal structure of the mammalian copii-coat protein2 sec23/24 bound to the transport signal sequence of membrin
81	c2fugA_	Alignment	not modelled	14.4	29	PDB header: oxidoreductase Chain: A: PDB Molecule: nadh-quinone oxidoreductase chain 1; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
82	c2yqfA_	Alignment	not modelled	13.1	18	PDB header: protein binding Chain: A: PDB Molecule: ankyrin-1; PDBTitle: solution structure of the death domain of ankyrin-1
83	c2ldiaA_	Alignment	not modelled	12.0	17	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transferring atpase; PDBTitle: nmr solution structure of ziaan sub mutant
84	d1fxda_	Alignment	not modelled	11.7	22	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
85	d2qw6a1	Alignment	not modelled	11.1	23	Fold: post-AAA+ oligomerization domain-like Superfamily: post-AAA+ oligomerization domain-like Family: MgsA/YrvN C-terminal domain-like
86	c2qw6A_	Alignment	not modelled	11.1	23	PDB header: hydrolase Chain: A: PDB Molecule: aaa atpase, central region; PDBTitle: crystal structure of the c-terminal domain of an aaa atpase from2 enterococcus faecium do
87	d2d6fc2	Alignment	not modelled	10.0	24	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
88	c1s6wA_	Alignment	not modelled	9.8	50	PDB header: antibiotic Chain: A: PDB Molecule: hepcidin; PDBTitle: solution structure of hybrid white striped bass hepcidin
89	d2hyec1	Alignment	not modelled	9.7	15	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: SCF ubiquitin ligase complex WHB domain
90	c2dtgE_	Alignment	not modelled	9.3	23	PDB header: hormone receptor/immune system Chain: E: PDB Molecule: insulin receptor; PDBTitle: insulin receptor (ir) ectodomain in complex with fab's
91	d2ouwa1	Alignment	not modelled	9.3	23	Fold: AhpD-like Superfamily: AhpD-like Family: TTHA0727-like
92	c2qkdA_	Alignment	not modelled	9.2	14	PDB header: signaling protein, cell cycle Chain: A: PDB Molecule: zinc finger protein zpr1; PDBTitle: crystal structure of tandem zpr1 domains
93	c2hjpA_	Alignment	not modelled	9.1	19	PDB header: hydrolase Chain: A: PDB Molecule: phosphonopyruvate hydrolase; PDBTitle: crystal structure of phosphonopyruvate hydrolase complex with2 phosphonopyruvate and mg++
94	d3c7bb3	Alignment	not modelled	8.9	18	Fold: Nitrite and sulphite reductase 4Fe-4S domain-like Superfamily: Nitrite and sulphite reductase 4Fe-4S domain-like Family: Nitrite and sulphite reductase 4Fe-4S domain-like
95	c3c6fD_	Alignment	not modelled	8.9	12	PDB header: structural genomics, unknown function Chain: D: PDB Molecule: yef protein; PDBTitle: crystal structure of protein bsu07140 from bacillus subtilis
96	d1zq1c2	Alignment	not modelled	8.8	24	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
97	c3k30B_	Alignment	not modelled	8.7	45	PDB header: oxidoreductase Chain: B: PDB Molecule: histamine dehydrogenase; PDBTitle: histamine dehydrogenase from nocardiodes simplex
98	c3egxB_	Alignment	not modelled	8.5	34	PDB header: protein transport Chain: B: PDB Molecule: protein transport protein sec24a; PDBTitle: crystal structure of the mammalian copii-coat protein2 sec23a/24a complexed with the snare protein sec22b and3 bound to the transport signal sequence of the snare protein4 bet1
99	c2pmzS_	Alignment	not modelled	8.0	19	PDB header: translation, transferase Chain: S: PDB Molecule: dna-directed rna polymerase subunit d; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus