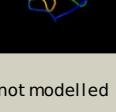


Phyre²

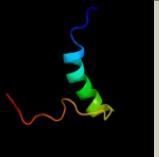
Email	i.a.kelley@imperial.ac.uk
Description	P77375
Date	Thu Jan 5 12:28:17 GMT 2012
Unique Job ID	74667aaa0d8ba03b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2ivfB_	Alignment		100.0	27	PDB header: oxidoreductase Chain: B; PDB Molecule: ethylbenzene dehydrogenase beta-subunit; PDBTitle: ethylbenzene dehydrogenase from <i>aromatoleum aromaticum</i>
2	c1ti2F_	Alignment		100.0	26	PDB header: oxidoreductase Chain: F; PDB Molecule: pyrogallol hydroxytransferase small subunit; PDBTitle: crystal structure of pyrogallol-phloroglucinol 2 transhydroxylase from <i>pelobacter acidigallici</i>
3	c2vpyB_	Alignment		100.0	38	PDB header: oxidoreductase Chain: B; PDB Molecule: nrfc protein; PDBTitle: polysulfide reductase with bound quinone inhibitor, 2 pentachlorophenol (pcp)
4	c1kqfB_	Alignment		100.0	28	PDB header: oxidoreductase Chain: B; PDB Molecule: formate dehydrogenase, nitrate-inducible, iron-sulfur PDBTitle: formate dehydrogenase n from <i>e. coli</i>
5	d1vlfn2	Alignment		100.0	25	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
6	d1kqfb1	Alignment		100.0	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
7	d1y5ib1	Alignment		100.0	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
8	d1h0hb_	Alignment		100.0	23	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
9	c2zvsB_	Alignment		99.4	24	PDB header: electron transport Chain: B; PDB Molecule: uncharacterized ferredoxin-like protein yfh1; PDBTitle: crystal structure of the 2[4fe-4s] ferredoxin from <i>escherichia coli</i>
10	d2fug91	Alignment		99.3	35	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
11	c2fugG_	Alignment		99.3	35	PDB header: oxidoreductase Chain: G; PDB Molecule: nadh-quinone oxidoreductase chain 9; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from <i>thermus thermophilus</i>

12	d1xera_	Alignment		99.3	36	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Archaeal ferredoxins
13	c1gthD_	Alignment		99.3	29	PDB header: oxidoreductase Chain: D: PDB Molecule: dihydropyrimidine dehydrogenase; PDBTitle: dihydropyrimidine dehydrogenase (dpd) from pig, ternary2 complex with nadph and 5-iodouracil
14	c2fgoa_	Alignment		99.3	19	PDB header: electron transport Chain: A: PDB Molecule: ferredoxin; PDBTitle: structure of the 2[4fe-4s] ferredoxin from pseudomonas2 aeruginosa
15	d1hfel2	Alignment		99.2	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
16	c3gyxl_	Alignment		99.2	30	PDB header: oxidoreductase Chain: J: PDB Molecule: adenylylsulfate reductase; PDBTitle: crystal structure of adenylylsulfate reductase from2 desulfovibrio gigas
17	c1hfel_	Alignment		99.2	25	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
18	c1gx7A_	Alignment		99.2	26	PDB header: oxidoreductase Chain: A: PDB Molecule: periplasmic [fe] hydrogenase large subunit; PDBTitle: best model of the electron transfer complex between2 cytochrome c3 and [fe]-hydrogenase
19	d1bla_	Alignment		99.2	21	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
20	d1bc6a_	Alignment		99.2	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
21	d1rgva_	Alignment	not modelled	99.2	23	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
22	d3c8ya3	Alignment	not modelled	99.2	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
23	d7fd1a_	Alignment	not modelled	99.2	34	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
24	d1gtea5	Alignment	not modelled	99.2	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
25	d1jnrB_	Alignment	not modelled	99.1	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
26	d1h98a_	Alignment	not modelled	99.1	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
27	d1jb0c_	Alignment	not modelled	99.1	35	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
28	c2v2kB_	Alignment	not modelled	99.1	17	PDB header: electron transport Chain: B: PDB Molecule: ferredoxin; PDBTitle: the crystal structure of fdxa, a 7fe ferredoxin from2 mycobacterium smegmatis PDB header: oxidoreductase Chain: A: PDB Molecule: electron transfer flavoprotein-ubiquinone
29	c2gmbA	Alignment	not modelled	99.1	24	

29	c2ymia	Alignment	not modelled	99.1	24	PDBTitle: structure of porcine electron transfer flavoprotein-2 ubiquinone oxidoreductase in complexed with ubiquinone PDB header: oxidoreductase Chain: A: PDB Molecule: pyruvate-ferredoxin oxidoreductase; PDBTitle: crystal structure of the radical form of2 pyruvate-ferredoxin oxidoreductase from desulfovibrio3 africanus
30	c2c3yA	Alignment	not modelled	99.0	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
31	d2c42a5	Alignment	not modelled	99.0	18	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
32	d2fdna	Alignment	not modelled	99.0	33	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
33	d1dura	Alignment	not modelled	99.0	33	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
34	d1fcaa	Alignment	not modelled	99.0	33	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
35	d3c7bb1	Alignment	not modelled	98.9	24	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
36	d1clfA	Alignment	not modelled	98.9	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
37	d2fug34	Alignment	not modelled	98.8	22	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
38	d1vjwa	Alignment	not modelled	98.8	25	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
39	d1iqza	Alignment	not modelled	98.8	26	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
40	d2gmha3	Alignment	not modelled	98.7	19	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: ETF-QO domain-like
41	c1dwIA	Alignment	not modelled	98.6	23	PDB header: electron transfer Chain: A: PDB Molecule: ferredoxin i; PDBTitle: the ferredoxin-cytochrome complex using heteronuclear nmr2 and docking simulation
42	d1sj1a	Alignment	not modelled	98.6	24	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
43	c1c4cA	Alignment	not modelled	98.6	24	PDB header: oxidoreductase Chain: A: PDB Molecule: protein (fe-only hydrogenase); PDBTitle: binding of exogenously added carbon monoxide at the active2 site of the fe-only hydrogenase (cpi) from clostridium3 pasteurianum
44	d1fxra	Alignment	not modelled	98.6	22	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
45	c3c7bE	Alignment	not modelled	98.5	24	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit beta; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
46	c2v4jE	Alignment	not modelled	98.2	22	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
47	c2v4jA	Alignment	not modelled	98.2	16	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
48	c3c7bA	Alignment	not modelled	98.1	17	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit alpha; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
49	c3bk7A	Alignment	not modelled	98.0	26	PDB header: hydrolyase/translation Chain: A: PDB Molecule: abc transporter atp-binding protein; PDBTitle: structure of the complete abc1/rnase-l inhibitor protein2 from pyrococcus abyssi
50	c2fugC	Alignment	not modelled	98.0	17	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
51	d2bs2b1	Alignment	not modelled	97.8	17	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
52	d1kf6b1	Alignment	not modelled	97.6	27	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
53	d1nekb1	Alignment	not modelled	97.4	17	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain PDB header: oxidoreductase Chain: E: PDB Molecule: protein (fe-only hydrogenase);

54	c2bs2E	Alignment	not modelled	97.4	17	Chain: E: PDB Molecule: quinol-tumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinella succinogenes
55	c1nekB	Alignment	not modelled	96.9	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
56	c2b76N	Alignment	not modelled	96.5	36	PDB header: oxidoreductase Chain: N: PDB Molecule: fumarate reductase iron-sulfur protein; PDBTitle: e. coli quinol fumarate reductase frda e49q mutation
57	c2h89B	Alignment	not modelled	96.5	22	PDB header: oxidoreductase Chain: B: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
58	c3cf4A	Alignment	not modelled	96.4	20	PDB header: oxidoreductase Chain: A: PDB Molecule: acetyl-coa decarboxylase/synthase alpha subunit; PDBTitle: structure of the codh component of the m. barkeri aacs complex
59	d2v4jb1	Alignment	not modelled	96.1	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
60	d2v4ja1	Alignment	not modelled	93.2	26	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
61	d3c7ba1	Alignment	not modelled	93.1	26	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
62	c2pq4B	Alignment		92.0	17	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
63	c2vdcl	Alignment	not modelled	90.2	15	PDB header: oxidoreductase Chain: I: PDB Molecule: glutamate synthase [nadph] small chain; PDBTitle: the 9.5 a resolution structure of glutamate synthase from2 cryo-electron microscopy and its oligomerization behavior3 in solution: functional implications.
64	c2e76D	Alignment	not modelled	85.3	15	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
65	c1p84E	Alignment	not modelled	79.9	16	PDB header: oxidoreductase Chain: E: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur PDBTitle: hdbt inhibited yeast cytochrome bc1 complex
66	c2fynO	Alignment	not modelled	77.5	17	PDB header: oxidoreductase Chain: O: PDB Molecule: ubiquinol-cytochrome c reductase iron-sulfur PDBTitle: crystal structure analysis of the double mutant rhodobacter2 sphaeroiodes bc1 complex
67	c2fyuE	Alignment	not modelled	71.6	12	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
68	d1fxda	Alignment	not modelled	69.1	24	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
69	c2htfA	Alignment	not modelled	61.9	38	PDB header: transferase Chain: A: PDB Molecule: dna polymerase mu; PDBTitle: the solution structure of the brct domain from human2 polymerase reveals homology with the tdt brct domain
70	d1gtea1	Alignment	not modelled	37.8	50	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Dihydropyrimidine dehydrogenase, N-terminal domain
71	c1g8jC	Alignment	not modelled	21.4	17	PDB header: oxidoreductase Chain: C: PDB Molecule: arsenite oxidase; PDBTitle: crystal structure analysis of arsenite oxidase from2 alcaligenes faecalis
72	d1djqa3	Alignment	not modelled	17.5	40	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: N-terminal domain of adrenodoxin reductase-like
73	c2eqpA	Alignment	not modelled	14.0	36	PDB header: transcription Chain: A: PDB Molecule: tumor necrosis factor receptor superfamily PDBTitle: solution structure of the stn_tnfrsf12a_tnfr domain of2 tumor necrosis factor receptor superfamily member 12a3 precursor
74	c2dtgE	Alignment	not modelled	9.0	23	PDB header: hormone receptor/immune system Chain: E: PDB Molecule: insulin receptor; PDBTitle: insulin receptor (ir) ectodomain in complex with fab's
75	d2f6ma1	Alignment	not modelled	9.0	18	Fold: Long alpha-hairpin Superfamily: Endosomal sorting complex assembly domain Family: VPS23 C-terminal domain
76	c2cazD	Alignment	not modelled	8.3	18	PDB header: protein transport Chain: D: PDB Molecule: suppressor protein stp22 of temperature- PDBTitle: escr1 core
77	d2e74d2	Alignment	not modelled	8.0	12	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
						PDB header: transferase/growth factor

78	c1moxB_		Alignment	not modelled	7.8	24	Chain: B: PDB Molecule: epidermal growth factor receptor; PDBTitle: crystal structure of human epidermal growth factor receptor (residues 2 1-501) in complex with tgf-alpha
79	c2kn0A_		Alignment	not modelled	7.8	36	PDB header: apoptosis Chain: A: PDB Molecule: fn14; PDBTitle: solution nmr structure of xenopus fn14
80	d2adra2		Alignment	not modelled	7.2	44	Fold: beta-beta-alpha zinc fingers Superfamily: beta-beta-alpha zinc fingers Family: Classic zinc finger, C2H2
81	d1yuza2		Alignment	not modelled	7.0	24	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
82	c3geiB_		Alignment	not modelled	6.9	63	PDB header: hydrolase Chain: B: PDB Molecule: tRNA modification gtpase mnme; PDBTitle: crystal structure of mnme from chlorobium tepidum in complex2 with gcp
83	d1dxga_		Alignment	not modelled	6.7	23	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Desulfurodoxin
84	c2hr7B_		Alignment	not modelled	6.6	17	PDB header: transferase Chain: B: PDB Molecule: insulin receptor; PDBTitle: insulin receptor (domains 1-3)
85	c2dunA_		Alignment	not modelled	6.6	33	PDB header: transferase Chain: A: PDB Molecule: dNA polymerase mu; PDBTitle: solution structure of brct domain of dNA polymerase mu
86	c1egpB_		Alignment	not modelled	6.5	6	PDB header: proteinase inhibitor Chain: B: PDB Molecule: eglin-c; PDBTitle: proteinase inhibitor eglin c with hydrolysed reactive center
87	c1skzA_		Alignment	not modelled	6.4	25	PDB header: serine protease inhibitor Chain: A: PDB Molecule: antistasin; PDBTitle: protease inhibitor
88	c1xzqA_		Alignment	not modelled	5.3	50	PDB header: hydrolase Chain: A: PDB Molecule: probable tRNA modification gtpase trme; PDBTitle: structure of the gtp-binding protein trme from thermotoga2 maritima complexed with 5-formyl-thf
89	c2a91A_		Alignment	not modelled	5.3	31	PDB header: signaling protein,transferase,membrane p Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbB-2; PDBTitle: crystal structure of erbB2 domains 1-3