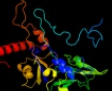


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AAJ8
Date	Thu Jan 5 11:13:07 GMT 2012
Unique Job ID	c4917b3c3056173b

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1kqfB_	 Alignment		100.0	25	PDB header: oxidoreductase Chain: B: PDB Molecule: formate dehydrogenase, nitrate-inducible, iron-sulfur PDBTitle: formate dehydrogenase n from e. coli
2	d1kqfb1	 Alignment		100.0	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
3	c2ivfB_	 Alignment		100.0	24	PDB header: oxidoreductase Chain: B: PDB Molecule: ethylbenzene dehydrogenase beta-subunit; PDBTitle: ethylbenzene dehydrogenase from aromatoleum aromaticum
4	d1h0hb_	 Alignment		100.0	26	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
5	c1ti2F_	 Alignment		100.0	21	PDB header: oxidoreductase Chain: F: PDB Molecule: pyrogallol hydroxytransferase small subunit; PDBTitle: crystal structure of pyrogallol-phloroglucinol2 transhydroxylase from pelobacter acidigallici
6	c2vpyB_	 Alignment		100.0	30	PDB header: oxidoreductase Chain: B: PDB Molecule: nrfc protein; PDBTitle: polysulfide reductase with bound quinone inhibitor, 2 pentachlorophenol (pcp)
7	d1y5ib1	 Alignment		100.0	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
8	d1vifn2	 Alignment		100.0	26	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
9	d1jnrb_	 Alignment		99.4	15	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
10	d7fd1a_	 Alignment		99.4	24	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
11	d3c7bb1	 Alignment		99.3	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins

12	c2v2kB_	Alignment		99.3	24	PDB header: electron transport Chain: B: PDB Molecule: ferredoxin; PDBTitle: the crystal structure of fdxa, a 7fe ferredoxin from2 mycobacterium smegmatis
13	c2zvsB_	Alignment		99.3	20	PDB header: electron transport Chain: B: PDB Molecule: uncharacterized ferredoxin-like protein yfhl; PDBTitle: crystal structure of the 2[4fe-4s] ferredoxin from escherichia coli
14	d1h98a_	Alignment		99.3	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
15	c3gyxj_	Alignment		99.3	14	PDB header: oxidoreductase Chain: J: PDB Molecule: adenylylsulfate reductase; PDBTitle: crystal structure of adenylylsulfate reductase from2 desulfovibrio gigas
16	c2fgoA_	Alignment		99.2	22	PDB header: electron transport Chain: A: PDB Molecule: ferredoxin; PDBTitle: structure of the 2[4fe-4s] ferredoxin from pseudomonas2 aeruginosa
17	d1xera_	Alignment		99.2	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Archaeal ferredoxins
18	d1bc6a_	Alignment		99.2	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
19	c1gthD_	Alignment		99.2	22	PDB header: oxidoreductase Chain: D: PDB Molecule: dihydropyrimidine dehydrogenase; PDBTitle: dihydropyrimidine dehydrogenase (dpd) from pig, ternary2 complex with nadph and 5-iodouracil
20	d1blua_	Alignment		99.2	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
21	c2fugG_	Alignment	not modelled	99.1	34	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
22	d2fug91	Alignment	not modelled	99.1	34	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
23	d1rgva_	Alignment	not modelled	99.1	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
24	d1hfeI2	Alignment	not modelled	99.0	21	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
25	d2gmha3	Alignment	not modelled	99.0	14	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: ETF-QO domain-like
26	c2c3yA_	Alignment	not modelled	99.0	24	PDB header: oxidoreductase Chain: A: PDB Molecule: pyruvate-ferredoxin oxidoreductase; PDBTitle: crystal structure of the radical form of2 pyruvate:ferredoxin oxidoreductase from desulfovibrio3 africanus
27	d1clfa_	Alignment	not modelled	98.9	33	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
28	d1jb0c_	Alignment	not modelled	98.9	28	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: 7-Fe ferredoxin
29	c2gmh4	Alignment	not modelled	98.9	14	PDB header: oxidoreductase Chain: A: PDB Molecule: electron transfer flavoprotein-ubiquinone

29	c2gmlA	Alignment	not modelled	98.9	14	PDBTitle: structure of porcine electron transfer flavoprotein-2 ubiquinone oxidoreductase in complexed with ubiquinone
30	d1fcaa	Alignment	not modelled	98.9	31	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
31	d3c8ya3	Alignment	not modelled	98.9	22	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
32	d1dura	Alignment	not modelled	98.9	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
33	c1hfeL	Alignment	not modelled	98.8	18	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
34	d1gtea5	Alignment	not modelled	98.8	21	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
35	c1gx7A	Alignment	not modelled	98.8	22	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
36	d2fug34	Alignment	not modelled	98.8	20	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
37	c3c7bE	Alignment	not modelled	98.8	30	PDB header: oxidoreductase Chain: E: PDB Molecule: sulfite reductase, dissimilatory-type subunit beta; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
38	d2fdna	Alignment	not modelled	98.8	30	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Short-chain ferredoxins
39	d2c42a5	Alignment	not modelled	98.7	23	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
40	c2v4jE	Alignment	not modelled	98.5	30	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
41	c1c4cA	Alignment	not modelled	98.5	20	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
42	c3bk7A	Alignment	not modelled	98.5	29	PDB header: hydrolase/translation Chain: A: PDB Molecule: abc transporter atp-binding protein; PDBTitle: structure of the complete abce1/rnaase-l inhibitor protein2 from pyrococcus abyssi
43	d1sj1a	Alignment	not modelled	98.4	27	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
44	c1dwlA	Alignment	not modelled	98.4	25	PDB header: electron transfer Chain: A: PDB Molecule: ferredoxin i; PDBTitle: the ferredoxin-cytochrome complex using heteronuclear nmr2 and docking simulation
45	d1iqza	Alignment	not modelled	98.4	19	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
46	d1vjwa	Alignment	not modelled	98.4	16	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
47	c2fugC	Alignment	not modelled	98.4	22	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
48	c3c7bA	Alignment	not modelled	98.3	22	PDB header: oxidoreductase Chain: A: PDB Molecule: sulfite reductase, dissimilatory-type subunit alpha; PDBTitle: structure of the dissimilatory sulfite reductase from archaeoglobus2 fulgidus
49	d1fxra	Alignment	not modelled	98.2	20	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
50	c2v4jA	Alignment	not modelled	98.2	23	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
51	c3cf4A	Alignment	not modelled	97.5	29	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
52	d2bs2b1	Alignment	not modelled	97.5	26	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
53	c2b76N	Alignment	not modelled	97.2	25	PDB header: oxidoreductase Chain: N: PDB Molecule: fumarate reductase iron-sulfur protein;

						PDBTitle: e. coli quinol fumarate reductase frda e49q mutation
54	c2bs2E	Alignment	not modelled	97.2	23	PDB header: oxidoreductase Chain: E: PDB Molecule: quinol-fumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinetella succinogenes
55	c1nekB	Alignment	not modelled	97.1	18	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	d2v4jb1	Alignment	not modelled	97.1	33	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
57	d1kf6b1	Alignment	not modelled	97.1	27	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
58	d1nekb1	Alignment	not modelled	97.0	28	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Fumarate reductase/Succinate dehydrogenase iron-sulfur protein, C-terminal domain
59	c2h89B	Alignment	not modelled	96.7	22	PDB header: oxidoreductase Chain: B: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
60	c2vdcl	Alignment	not modelled	95.1	30	PDB header: oxidoreductase Chain: I: PDB Molecule: glutamate synthase [nadh] small chain; PDBTitle: the 9.5 a resolution structure of glutamate synthase from2 cryo-electron microscopy and its oligomerization behavior3 in solution: functional implications.
61	d2v4ja1	Alignment	not modelled	94.7	29	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
62	d3c7ba1	Alignment	not modelled	94.0	32	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Ferredoxin domains from multidomain proteins
63	c2e76D	Alignment		92.3	27	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
64	d1gtea1	Alignment	not modelled	87.9	33	Fold: Globin-like Superfamily: alpha-helical ferredoxin Family: Dihydropyrimidine dehydrogenase, N-terminal domain
65	c1p84E	Alignment	not modelled	84.4	9	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	82.4	29	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
67	c2pq4B	Alignment	not modelled	81.4	34	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
68	c2fyuE	Alignment	not modelled	73.1	14	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
69	d1fxda	Alignment	not modelled	56.6	20	Fold: Ferredoxin-like Superfamily: 4Fe-4S ferredoxins Family: Single 4Fe-4S cluster ferredoxin
70	d2q50a3	Alignment	not modelled	41.5	19	Fold: Pyruvate kinase C-terminal domain-like Superfamily: PK C-terminal domain-like Family: Pyruvate kinase, C-terminal domain
71	d2r4qa1	Alignment	not modelled	37.7	33	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
72	d1djqa3	Alignment	not modelled	34.8	33	Fold: Nucleotide-binding domain Superfamily: Nucleotide-binding domain Family: N-terminal domain of adrenodoxin reductase-like
73	d2e74d2	Alignment	not modelled	30.0	32	Fold: Single transmembrane helix Superfamily: ISP transmembrane anchor Family: ISP transmembrane anchor
74	c1g8jC	Alignment	not modelled	28.7	28	PDB header: oxidoreductase Chain: C: PDB Molecule: arsenite oxidase; PDBTitle: crystal structure analysis of arsenite oxidase from2 alcaligenes faecalis
75	c2kb1A	Alignment	not modelled	24.6	15	PDB header: membrane protein Chain: A: PDB Molecule: wsk3; PDBTitle: nmr studies of a channel protein without membrane:2 structure and dynamics of water-solubilized kcsa
76	c3p11A	Alignment	not modelled	23.4	22	PDB header: immune system Chain: A: PDB Molecule: receptor tyrosine-protein kinase erbb-3; PDBTitle: anti-egfr/her3 fab dl11 in complex with domains i-iii of the her32 extracellular region
77	c2dtgE	Alignment	not modelled	23.0	29	PDB header: hormone receptor/immune system Chain: E: PDB Molecule: insulin receptor; PDBTitle: insulin receptor (ir) ectodomain in complex with fab's
						PDB header: oxidoreductase

78	c2fugA_	Alignment	not modelled	20.7	27	Chain: A: PDB Molecule: nadh-quinone oxidoreductase chain 1; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
79	c1knwA_	Alignment	not modelled	19.5	8	PDB header: lyase Chain: A: PDB Molecule: diaminopimelate decarboxylase; PDBTitle: crystal structure of diaminopimelate decarboxylase
80	c1moxB_	Alignment	not modelled	19.4	22	PDB header: transferase/growth factor Chain: B: PDB Molecule: epidermal growth factor receptor; PDBTitle: crystal structure of human epidermal growth factor receptor (residues2 1-501) in complex with tgf-alpha
81	c1skzA_	Alignment	not modelled	18.9	29	PDB header: serine protease inhibitor Chain: A: PDB Molecule: antistasin; PDBTitle: protease inhibitor
82	d2r48a1	Alignment	not modelled	17.4	28	Fold: Phosphotyrosine protein phosphatases I-like Superfamily: PTS system IIB component-like Family: PTS system, Fructose specific IIB subunit-like
83	c1igrA_	Alignment	not modelled	17.2	29	PDB header: hormone receptor Chain: A: PDB Molecule: insulin-like growth factor receptor 1; PDBTitle: type 1 insulin-like growth factor receptor (domains 1-3)
84	c2hr7B_	Alignment	not modelled	17.1	25	PDB header: transferase Chain: B: PDB Molecule: insulin receptor; PDBTitle: insulin receptor (domains 1-3)
85	c2a91A_	Alignment	not modelled	16.9	22	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
86	c2pmzS_	Alignment	not modelled	16.2	23	PDB header: translation, transferase Chain: S: PDB Molecule: dna-directed rna polymerase subunit d; PDBTitle: archaeal rna polymerase from sulfolobus solfataricus
87	c2ja1A_	Alignment	not modelled	14.3	14	PDB header: transferase Chain: A: PDB Molecule: thymidine kinase; PDBTitle: thymidine kinase from b. cereus with ttp bound as phosphate2 donor.
88	c3m0zD_	Alignment	not modelled	12.5	33	PDB header: lyase Chain: D: PDB Molecule: putative aldolase; PDBTitle: crystal structure of putative aldolase from klebsiella2 pneumoniae.
89	d1yuza2	Alignment	not modelled	12.1	33	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Rubredoxin
90	c2eqpA_	Alignment	not modelled	11.8	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
91	c3k30B_	Alignment	not modelled	11.5	38	PDB header: oxidoreductase Chain: B: PDB Molecule: histamine dehydrogenase; PDBTitle: histamine dehydrogenase from nocardioodes simplex
92	c2kncA_	Alignment	not modelled	11.4	8	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIB-beta3 transmembrane-cytoplasmic2 heterocomplex
93	c3muxB_	Alignment	not modelled	11.3	33	PDB header: lyase Chain: B: PDB Molecule: putative 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: the crystal structure of a putative 4-hydroxy-2-oxoglutarate aldolase2 from bacillus anthracis to 1.45a
94	c2htfA_	Alignment	not modelled	11.2	30	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
95	c3k7aM_	Alignment	not modelled	10.6	26	PDB header: transcription Chain: M: PDB Molecule: transcription initiation factor iib; PDBTitle: crystal structure of an rna polymerase ii-tfiib complex
96	c3m6yA_	Alignment	not modelled	10.3	33	PDB header: lyase Chain: A: PDB Molecule: 4-hydroxy-2-oxoglutarate aldolase; PDBTitle: structure of 4-hydroxy-2-oxoglutarate aldolase from bacillus cereus at2 1.45 a resolution.
97	c2kn0A_	Alignment	not modelled	9.8	36	PDB header: apoptosis Chain: A: PDB Molecule: fn14; PDBTitle: solution nmr structure of xenopus fn14
98	d1dxga_	Alignment	not modelled	9.8	64	Fold: Rubredoxin-like Superfamily: Rubredoxin-like Family: Desulfiredoxin
99	c2k1kB_	Alignment	not modelled	9.2	23	PDB header: signaling protein Chain: B: PDB Molecule: ephrin type-a receptor 1; PDBTitle: nmr structures of dimeric transmembrane domain of the2 receptor tyrosine kinase epha1 in lipid bicelles at ph 4.3