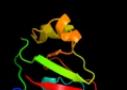
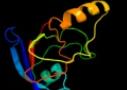


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A9R4
Date	Thu Jan 5 11:11:04 GMT 2012
Unique Job ID	98d03a314aee974f

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1i7ha_	Alignment		100.0	100	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
2	c3ah7A_	Alignment		100.0	58	PDB header: metal binding protein Chain: A: PDB Molecule: [2fe-2s]ferredoxin; PDBTitle: crystal structure of the isc-like [2fe-2s] ferredoxin (fdxb) from2 pseudomonas putida jcm 20004
3	c3huiA_	Alignment		99.9	38	PDB header: electron transport Chain: A: PDB Molecule: ferredoxin; PDBTitle: crystal structure of the mutant a105r of [2fe-2s] ferredoxin2 in the class i cyp199a2 system from rhodopseudomonas3 palustris
4	c2wlB_	Alignment		99.9	45	PDB header: electron transport Chain: B: PDB Molecule: electron transfer protein 1, mitochondrial; PDBTitle: adrenodoxin-like ferredoxin etp1fd(516-618) of2 schizosaccharomyces pombe mitochondria
5	c3lxfC_	Alignment		99.9	36	PDB header: metal binding protein Chain: C: PDB Molecule: ferredoxin; PDBTitle: crystal structure of [2fe-2s] ferredoxin arx from novosphingobium2 aromaticivorans
6	d2bt6a1	Alignment		99.9	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
7	d1b9ra_	Alignment		99.9	28	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
8	d1xlqg1	Alignment		99.9	36	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
9	d1e9ma_	Alignment		99.9	37	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
10	c1l6vA_	Alignment		99.8	33	PDB header: electron transport Chain: A: PDB Molecule: adrenodoxin 1; PDBTitle: structure of reduced bovine adrenodoxin
11	d1l5pa_	Alignment		99.8	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related

12	d1krha_	Alignment		99.8	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
13	d1ivea_	Alignment		99.8	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
14	c1krhA_	Alignment		99.8	29	PDB header: oxidoreductase Chain: A: PDB Molecule: benzoate 1,2-dioxygenase reductase; PDBTitle: x-ray stucture of benzoate dioxygenase reductase
15	d1fxia_	Alignment		99.8	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
16	d1jq4a_	Alignment		99.8	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
17	d1pfda_	Alignment		99.7	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
18	d1frra_	Alignment		99.7	31	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
19	d4fxca_	Alignment		99.7	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
20	d1czpa_	Alignment		99.7	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
21	d1offa_	Alignment	not modelled	99.7	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
22	d1frda_	Alignment	not modelled	99.7	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
23	d1awda_	Alignment	not modelled	99.7	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
24	d1a70a_	Alignment	not modelled	99.7	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
25	d2cjoa_	Alignment	not modelled	99.7	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
26	d1gaqb_	Alignment	not modelled	99.7	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
27	d1wria_	Alignment	not modelled	99.7	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
28	d2piaa3	Alignment	not modelled	99.6	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
29	d1doia_	Alignment	not modelled	99.6	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like

					Family: 2Fe-2S ferredoxin-related
30	d1e0za	Alignment	not modelled	99.5	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
31	c2piaA	Alignment	not modelled	99.4	PDB header: reductase Chain: A: PDB Molecule: phthalate dioxygenase reductase; PDBTitle: phthalate dioxygenase reductase: a modular structure for 2 electron transfer from pyridine nucleotides to [2fe-2s]
32	d2fug33	Alignment	not modelled	99.1	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
33	d3c8ya2	Alignment	not modelled	99.0	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
34	c1c4ca	Alignment	not modelled	98.8	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
35	c2fugC	Alignment	not modelled	98.7	PDB header: oxidoreductase Chain: C: PDB Molecule: nahd-quinone oxidoreductase chain 3; PDBTitle: crystal structure of the hydrophilic domain of respiratory complex i2 from thermus thermophilus
36	d1vlba2	Alignment	not modelled	98.1	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
37	d1dgja2	Alignment	not modelled	98.0	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
38	d1t3qa2	Alignment	not modelled	97.8	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
39	d1n62a2	Alignment	not modelled	97.5	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
40	c1t3qD	Alignment	not modelled	97.5	PDB header: oxidoreductase Chain: D: PDB Molecule: quinoline 2-oxidoreductase small subunit; PDBTitle: crystal structure of quinoline 2-oxidoreductase from pseudomonas2 putida 86
41	c3hrdH	Alignment	not modelled	97.3	PDB header: oxidoreductase Chain: H: PDB Molecule: nicotinate dehydrogenase small fes subunit; PDBTitle: crystal structure of nicotinate dehydrogenase
42	c1n60D	Alignment	not modelled	97.2	PDB header: oxidoreductase Chain: D: PDB Molecule: carbon monoxide dehydrogenase small chain; PDBTitle: crystal structure of the cu,mo-co dehydrogenase (codh); cyanide-2 inactivated form
43	d1ffva2	Alignment	not modelled	97.2	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
44	d1rm6c2	Alignment	not modelled	97.2	PDB header: oxidoreductase Chain: E: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
45	c1rm6F	Alignment	not modelled	97.1	PDB header: oxidoreductase Chain: F: PDB Molecule: 4-hydroxybenzoyl-coa reductase gamma subunit; PDBTitle: structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica
46	c1ffuA	Alignment	not modelled	96.9	PDB header: hydrolase Chain: A: PDB Molecule: cuts, iron-sulfur protein of carbon monoxide PDBTitle: carbon monoxide dehydrogenase from hydrogenophaga2 pseudoflava which lacks the mo-pyranopterin moiety of the3 molybdenum cofactor
47	c2h89B	Alignment	not modelled	96.6	PDB header: oxidoreductase Chain: B: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
48	d1jroa2	Alignment	not modelled	96.5	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
49	d1v97a2	Alignment	not modelled	96.4	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
50	c2w3rG	Alignment	not modelled	96.3	PDB header: oxidoreductase Chain: G: PDB Molecule: xanthine dehydrogenase; PDBTitle: crystal structure of xanthine dehydrogenase (desulfo form)2 from rhodobacter capsulatus in complex with hypoxanthine
51	d2bs2b2	Alignment	not modelled	96.3	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
52	c3eubJ	Alignment	not modelled	96.2	PDB header: oxidoreductase Chain: J: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of desulfo-xanthine oxidase with xanthine
53	d1kf6b2	Alignment	not modelled	96.2	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
54	c3b9j1	Alignment	not modelled	96.2	PDB header: oxidoreductase Chain: I: PDB Molecule: xanthine oxidase; PDBTitle: structure of xanthine oxidase with 2-hydroxy-6-methylpurine

55	c2bs2E		Alignment	not modelled	96.1	16	PDB header: oxidoreductase Chain: E: PDB Molecule: quino-fumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinella succinogenes
56	c2b76N		Alignment	not modelled	96.1	19	PDB header: oxidoreductase Chain: N: PDB Molecule: fumarate reductase iron-sulfur protein; PDBTitle: e. coli quinol fumarate reductase frda e49q mutation
57	c1dgjA		Alignment	not modelled	96.1	14	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde oxidoreductase; PDBTitle: crystal structure of the aldehyde oxidoreductase from2 desulfovibrio desulfuricans atcc 27774
58	c1viba		Alignment	not modelled	96.0	18	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde oxidoreductase; PDBTitle: structure refinement of the aldehyde oxidoreductase from2 desulfovibrio gigas at 1.28 a
59	c1nekB		Alignment	not modelled	94.5	23	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
60	d1nekb2		Alignment	not modelled	94.0	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
61	c1wygA		Alignment	not modelled	91.9	18	PDB header: oxidoreductase Chain: A: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of a rat xanthine dehydrogenase triple mutant2 (c535a, c992r and c1324s)
62	c1x31A		Alignment	not modelled	91.6	23	PDB header: oxidoreductase Chain: A: PDB Molecule: sarcosine oxidase alpha subunit; PDBTitle: crystal structure of heterotetrameric sarcosine oxidase from2 corynebacterium sp. u-96
63	c1y56A		Alignment	not modelled	91.3	28	PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical protein ph1363; PDBTitle: crystal structure of l-proline dehydrogenase from p.horikoshii
64	d1tkeal		Alignment	not modelled	89.9	42	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
65	c1tkeA		Alignment	not modelled	84.9	42	PDB header: ligase Chain: A: PDB Molecule: threonyl-tRNA synthetase; PDBTitle: crystal structure of the editing domain of threonyl-tRNA2 synthetase complexed with serine
66	c1ep3B		Alignment	not modelled	80.4	24	PDB header: oxidoreductase Chain: B: PDB Molecule: dihydroorotate dehydrogenase b (pyrk subunit); PDBTitle: crystal structure of lactococcus lactis dihydroorotate dehydrogenase2 b. data collected under cryogenic conditions.
67	d1ep3b2		Alignment	not modelled	80.4	24	Fold: Ferrodoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferrodoxin reductase-like, C-terminal NADP-linked domain Family: Dihydroorotate dehydrogenase B, PyrK subunit
68	c2kmmA		Alignment	not modelled	57.1	26	PDB header: hydrolase Chain: A: PDB Molecule: guanosine-3',5'-bis(diphosphate) 3'- PDBTitle: solution nmr structure of the tgs domain of pg1808 from2 porphyromonas gingivalis. northeast structural genomics3 consortium target pgr122a (418-481)
69	c3hvzB		Alignment	not modelled	52.6	32	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of the tgs domain of the cloleop_03100 protein from2 clostroidium leptum, northeast structural genomics consortium target3 qlr13a
70	c3na0C		Alignment	not modelled	45.9	60	PDB header: oxidoreductase, electron transport Chain: C: PDB Molecule: adrenodoxin, mitochondrial; PDBTitle: crystal structure of human cyp11a1 in complex with 20,22-2 dihydroxycholesterol
71	c1rrbA		Alignment	not modelled	41.3	18	PDB header: transferase Chain: A: PDB Molecule: raf proto-oncogene serine/threonine-protein PDBTitle: the ras-binding domain of raf-1 from rat, nmr, 1 structure
72	c1qf6A		Alignment	not modelled	38.6	40	PDB header: ligase/rna Chain: A: PDB Molecule: threonyl-tRNA synthetase; PDBTitle: structure of e. coli threonyl-tRNA synthetase complexed with its2 cognate tRNA
73	c2105A		Alignment	not modelled	38.0	26	PDB header: transferase Chain: A: PDB Molecule: serine/threonine-protein kinase b-raf; PDBTitle: solution nmr structure of the ras-binding domain of serine/threonine-2 protein kinase b-raf from homo sapiens, northeast structural genomics3 consortium target hr4694f
74	d1c1yb		Alignment	not modelled	35.7	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
75	d1nyra2		Alignment	not modelled	32.8	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: TGS-like Family: TGS domain
76	d1e0ga		Alignment	not modelled	29.8	25	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
77	c1wwtA		Alignment	not modelled	26.1	30	PDB header: ligase Chain: A: PDB Molecule: threonyl-tRNA synthetase, cytoplasmic; PDBTitle: solution structure of the tgs domain from human threonyl-2 tRNA synthetase
78	d1zud21		Alignment	not modelled	24.5	11	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/ThiS Family: ThiS
79	d1wxma1		Alignment	not modelled	23.9	18	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD

80	c1nyqA	Alignment	not modelled	21.2	33	PDB header: ligase Chain: A: PDB Molecule: threonyl-tRNA synthetase 1; PDBTitle: structure of staphylococcus aureus threonyl-tRNA synthetase2 complexed with an analogue of threonyl adenylate
81	c2hj1A	Alignment	not modelled	19.8	25	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a 3d domain-swapped dimer of protein hi0395 from2 haemophilus influenzae
82	d2hj1a1	Alignment	not modelled	19.8	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/This Family: H10395-like
83	c3c75L	Alignment	not modelled	18.7	28	PDB header: oxidoreductase Chain: L: PDB Molecule: methylamine dehydrogenase light chain; PDBTitle: paracoccus versutus methylamine dehydrogenase in complex2 with amicyanin
84	d2bbkl	Alignment	not modelled	18.5	28	Fold: Methylamine dehydrogenase, L chain Superfamily: Methylamine dehydrogenase, L chain Family: Methylamine dehydrogenase, L chain
85	d1mdal	Alignment	not modelled	18.3	28	Fold: Methylamine dehydrogenase, L chain Superfamily: Methylamine dehydrogenase, L chain Family: Methylamine dehydrogenase, L chain
86	d1rwsa	Alignment	not modelled	18.3	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: MoaD/This Family: This
87	d1y7ma2	Alignment	not modelled	17.2	19	Fold: LysM domain Superfamily: LysM domain Family: LysM domain
88	c2iurD	Alignment	not modelled	13.8	28	PDB header: oxidoreductase Chain: D: PDB Molecule: aromatic amine dehydrogenase beta subunit; PDBTitle: crystal structure of n-quinol form of aromatic amine2 dehydrogenase (aadH) from alcaligenes faecalis, form a3 cocrystal
89	c3bw7A	Alignment	not modelled	13.5	21	PDB header: oxidoreductase Chain: A: PDB Molecule: cytokinin dehydrogenase 1; PDBTitle: maize cytokinin oxidase/dehydrogenase complexed with the allelic2 cytokinin analog ha-1
90	c2g1eA	Alignment	not modelled	11.8	12	PDB header: transferase Chain: A: PDB Molecule: hypothetical protein ta0895; PDBTitle: solution structure of ta0895
91	c2po8A	Alignment	not modelled	11.4	22	PDB header: plant protein Chain: A: PDB Molecule: mco1-ii; PDBTitle: the structure of a two-disulfide intermediate of mco1-ii
92	c2c1dB	Alignment	not modelled	11.2	33	PDB header: oxidoreductase Chain: B: PDB Molecule: soxx; PDBTitle: crystal structure of soxxa from p. pantotrophus
93	d1rutx4	Alignment	not modelled	11.1	33	Fold: Glucocorticoid receptor-like (DNA-binding domain) Superfamily: Glucocorticoid receptor-like (DNA-binding domain) Family: LIM domain
94	c1y7mB	Alignment	not modelled	10.8	19	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein bsu14040; PDBTitle: crystal structure of the b. subtilis ykud protein at 2 a2 resolution
95	d1iqca1	Alignment	not modelled	10.0	30	Fold: Cytochrome c Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase
96	c2it8A	Alignment	not modelled	9.9	25	PDB header: plant protein Chain: A: PDB Molecule: trypsin inhibitor 2; PDBTitle: solution structure of a linear analog of the cyclic squash2 trypsin inhibitor mco1-ii
97	d2it8a1	Alignment	not modelled	9.9	25	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Plant inhibitors of proteinases and amylases Family: Plant inhibitors of proteinases and amylases
98	d2al3a1	Alignment	not modelled	9.7	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: UBX domain
99	d1eb7a1	Alignment	not modelled	9.2	44	Fold: Cytochrome c Superfamily: Cytochrome c Family: Di-heme cytochrome c peroxidase