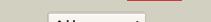
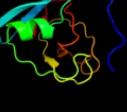
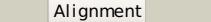
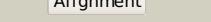
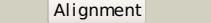
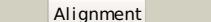
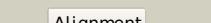


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P75863
Date	Thu Jan 5 12:15:13 GMT 2012
Unique Job ID	986b362cc329d8ca

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2exna1	 Alignment		100.0	13	Fold: MOSC N-terminal domain-like Superfamily: MOSC N-terminal domain-like Family: MOSC N-terminal domain-like
2	c2piaA_	 Alignment		99.8	29	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]
3	d2piaa3	 Alignment		99.7	28	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
4	d1orua_	 Alignment		99.7	21	Fold: PK beta-barrel domain-like Superfamily: PK beta-barrel domain-like Family: MOSC (MOCO sulphurase C-terminal) domain
5	d1a70a_	 Alignment		99.7	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
6	d1fxia_	 Alignment		99.7	30	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
7	d1frfa_	 Alignment		99.7	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
8	d1loff_a	 Alignment		99.7	28	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
9	d1luea_	 Alignment		99.7	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
10	d1pfda_	 Alignment		99.7	34	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
11	d1czpa_	 Alignment		99.7	30	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related

12	c1krhA	Alignment		99.7	27	PDB header: oxidoreductase Chain: A: PDB Molecule: benzoate 1,2-dioxygenase reductase; PDBTitle: x-ray stucture of benzoate dioxygenase reductase
13	d1frda	Alignment		99.7	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
14	d1awda	Alignment		99.7	30	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
15	d1doia	Alignment		99.7	32	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
16	d1gagb	Alignment		99.7	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
17	d4fxca	Alignment		99.7	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
18	d2cjoa	Alignment		99.6	34	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
19	d1wria	Alignment		99.6	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
20	d1e0za	Alignment		99.6	29	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
21	d1jq4a	Alignment	not modelled	99.6	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
22	d1krha3	Alignment	not modelled	99.6	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
23	c3ah7A	Alignment	not modelled	99.2	16	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
24	d1i7ha	Alignment	not modelled	99.2	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
25	d1l5pa	Alignment	not modelled	99.1	17	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
26	c2wlB	Alignment	not modelled	99.0	21	PDB header: electron transport Chain: B: PDB Molecule: electron transfer protein 1, mitochondrial; PDBTitle: adrenodoxin-like ferredoxin etp1fd(516-618) of2 schizosaccharomyces pombe mitochondria
27	d1xlq1	Alignment	not modelled	98.9	16	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
28	d1e9ma	Alignment	not modelled	98.8	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related

29	d1o65a_	Alignment	not modelled	98.7	15	Superfamily: PK beta-barrel domain-like Family: MOSC (MOCO sulphurase C-terminal) domain
30	d2bt6a1	Alignment	not modelled	98.7	21	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
31	c3huiA_	Alignment	not modelled	98.7	18	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
32	c3lxfc_	Alignment	not modelled	98.7	22	PDB header: metal binding protein Chain: C: PDB Molecule: ferredoxin; PDBTitle: crystal structure of [2fe-2s] ferredoxin arx from novosphingobium2 aromaticivorans
33	d1b9ra_	Alignment	not modelled	98.6	26	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin-related
34	d2fug33	Alignment	not modelled	98.5	13	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
35	d3c8ya2	Alignment	not modelled	98.0	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
36	c1l6vA_	Alignment	not modelled	97.9	17	PDB header: electron transport Chain: A: PDB Molecule: adrenodoxin 1; PDBTitle: structure of reduced bovine adrenodoxin
37	c1c4cA_	Alignment	not modelled	97.8	22	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
38	d1dgja2	Alignment	not modelled	97.4	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
39	d1t3qg2	Alignment	not modelled	97.4	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
40	d1viba2	Alignment	not modelled	97.4	25	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
41	d1ffva2	Alignment	not modelled	97.3	20	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
42	d1n62a2	Alignment	not modelled	97.3	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
43	d1rm6c2	Alignment	not modelled	97.2	22	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
44	c1t3qD_	Alignment	not modelled	97.2	22	PDB header: oxidoreductase Chain: D: PDB Molecule: quinoline 2-oxidoreductase small subunit; PDBTitle: crystal structure of quinoline 2-oxidoreductase from pseudomonas2 putida 86
45	c2fugC_	Alignment	not modelled	97.1	18	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
46	c1rm6F_	Alignment	not modelled	96.9	22	PDB header: oxidoreductase Chain: F: PDB Molecule: 4-hydroxybenzoyl-coa reductase gamma subunit; PDBTitle: structure of 4-hydroxybenzoyl-coa reductase from thauera2 aromatica
47	c3hrdH_	Alignment	not modelled	96.9	24	PDB header: oxidoreductase Chain: H: PDB Molecule: nicotinate dehydrogenase small fes subunit; PDBTitle: crystal structure of nicotinate dehydrogenase
48	d1kf6b2	Alignment	not modelled	96.8	29	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
49	d2bs2b2	Alignment	not modelled	96.8	27	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
50	c1n60D_	Alignment	not modelled	96.7	22	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
51	c1ffuA_	Alignment	not modelled	96.7	20	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
52	d1nekb2	Alignment	not modelled	96.5	29	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
53	c2h89B_	Alignment	not modelled	96.4	37	PDB header: oxidoreductase Chain: B: PDB Molecule: succinate dehydrogenase ip subunit; PDBTitle: avian respiratory complex ii with malonate bound
54	d1jroa2	Alignment	not modelled	96.0	33	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like

						Family: 2Fe-2S ferredoxin domains from multidomain proteins
55	c2b76N	Alignment	not modelled	95.9	27	PDB header: oxidoreductase Chain: N: PDB Molecule: fumarate reductase iron-sulfur protein; PDBTitle: e. coli quinol fumarate reductase frda e49q mutation
56	c2bs2E	Alignment	not modelled	95.9	27	PDB header: oxidoreductase Chain: E: PDB Molecule: quinol-fumarate reductase iron-sulfur subunit b; PDBTitle: quinol:fumarate reductase from wolinella succinogenes
57	c1nekB	Alignment	not modelled	95.8	29	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
58	c1vlbA	Alignment	not modelled	95.6	30	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde oxidoreductase; PDBTitle: structure refinement of the aldehyde oxidoreductase from2 desulfovibrio gigas at 1.28 a
59	c2w3rG	Alignment	not modelled	95.5	30	PDB header: oxidoreductase Chain: G: PDB Molecule: xanthine dehydrogenase; PDBTitle: crystal structure of xanthine dehydrogenase (desulfo form2 from rhodobacter capsulatus in complex with hypoxanthine
60	d1v97a2	Alignment	not modelled	95.1	24	Fold: beta-Grasp (ubiquitin-like) Superfamily: 2Fe-2S ferredoxin-like Family: 2Fe-2S ferredoxin domains from multidomain proteins
61	c1dgjA	Alignment	not modelled	95.0	20	PDB header: oxidoreductase Chain: A: PDB Molecule: aldehyde oxidoreductase; PDBTitle: crystal structure of the aldehyde oxidoreductase from2 desulfovibrio desulfuricans atcc 27774
62	c3eubJ	Alignment	not modelled	95.0	28	PDB header: oxidoreductase Chain: J: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of desulfo-xanthine oxidase with xanthine
63	c3b9jI	Alignment	not modelled	94.9	29	PDB header: oxidoreductase Chain: I: PDB Molecule: xanthine oxidase; PDBTitle: structure of xanthine oxidase with 2-hydroxy-6-methylpurine
64	c1ep3B	Alignment	not modelled	94.4	23	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.
65	d1ep3b2	Alignment	not modelled	92.9	23	Fold: Ferredoxin reductase-like, C-terminal NADP-linked domain Superfamily: Ferredoxin reductase-like, C-terminal NADP-linked domain Family: Dihydroorotate dehydrogenase B, PyrK subunit
66	c1wygA	Alignment	not modelled	92.2	23	PDB header: oxidoreductase Chain: A: PDB Molecule: xanthine dehydrogenase/oxidase; PDBTitle: crystal structure of a rat xanthine dehydrogenase triple mutant2 (c535a, c992r and c1324s)
67	c1x31A	Alignment	not modelled	89.9	11	PDB header: oxidoreductase Chain: A: PDB Molecule: sarcosine oxidase alpha subunit; PDBTitle: crystal structure of heterotetrameric sarcosine oxidase from2 corynebacterium sp. u-96
68	c1y56A	Alignment	not modelled	86.5	20	PDB header: oxidoreductase Chain: A: PDB Molecule: hypothetical protein ph1363; PDBTitle: crystal structure of l-proline dehydrogenase from p.horikoshii
69	c3esgA	Alignment	not modelled	56.2	20	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: crystal structure of hutd from pseudomonas fluorescens sbw25
70	d1ylla1	Alignment	not modelled	44.6	26	Fold: Double-stranded beta-helix Superfamily: RmlC-like cupins Family: PA5104-like
71	c2k5hA	Alignment	not modelled	29.4	31	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: conserved protein; PDBTitle: solution nmr structure of protein encoded by mth693 from2 methanobacterium thermoautotrophicum: northeast structural3 genomics consortium target tt824a
72	d1kk1a1	Alignment	not modelled	27.8	58	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
73	d1g7sa2	Alignment	not modelled	27.0	12	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
74	d1s0ua1	Alignment	not modelled	26.8	53	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
75	d2qn6a1	Alignment	not modelled	26.2	24	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
76	d2gy9q1	Alignment	not modelled	25.5	26	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
77	c3bbnQ	Alignment	not modelled	24.5	22	PDB header: ribosome Chain: Q: PDB Molecule: ribosomal protein s17; PDBTitle: homology model for the spinach chloroplast 30s subunit2 fitted to 9.4 a cryo-em map of the 70s chlororibosome.
78	d1i94q	Alignment	not modelled	22.6	35	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
79	d2uubq1	Alignment	not modelled	21.7	30	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
						PDB header: ribosome Chain: Q: PDB Molecule: 40s ribosomal protein s11;

80	c1s1h0_	Alignment	not modelled	20.7	22	PDBTitle: structure of the ribosomal 80s-eef2-sordarin complex from2 yeast obtained by docking atomic models for rna and protein3 components into a 11.7 a cryo-em map. this file, 1s1h,4 contains 40s subunit; the 60s ribosomal subunit is in file5 1s1i.
81	d2c78a1	Alignment	not modelled	17.7	57	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
82	d2exda1	Alignment	not modelled	16.2	24	Fold: OB-fold Superfamily: NfeD domain-like Family: NfeD domain-like
83	c2zkqq_	Alignment	not modelled	16.2	31	PDB header: ribosomal protein/rna Chain: Q: PDB Molecule: PDBTitle: structure of a mammalian ribosomal 40s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
84	d2o3aa1	Alignment	not modelled	15.8	25	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: AF0751-like
85	c2xznQ_	Alignment	not modelled	15.3	13	PDB header: ribosome Chain: Q: PDB Molecule: ribosomal protein s17 containing protein; PDBTitle: crystal structure of the eukaryotic 40s ribosomal2 subunit in complex with initiation factor 1. this file3 contains the 40s subunit and initiation factor for4 molecule 2
86	c2zkrt_	Alignment	not modelled	15.2	50	PDB header: ribosomal protein/rna Chain: T: PDB Molecule: rna expansion segment es39 part iii; PDBTitle: structure of a mammalian ribosomal 60s subunit within an2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
87	c3cxgA_	Alignment	not modelled	14.9	19	PDB header: oxidoreductase Chain: A: PDB Molecule: putative thioredoxin; PDBTitle: crystal structure of plasmodium falciparum thioredoxin, pfi0790w
88	d1xn7a_	Alignment	not modelled	14.2	50	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: Hypothetical protein YngG
89	d1zunb1	Alignment	not modelled	13.8	36	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
90	d2ngra1	Alignment	not modelled	13.7	29	Fold: beta-clip Superfamily: MoeA C-terminal domain-like Family: MoeA C-terminal domain-like
91	d1vfsa1	Alignment	not modelled	13.5	27	Fold: Domain of alpha and beta subunits of F1 ATP synthase-like Superfamily: Alanine racemase C-terminal domain-like Family: Alanine racemase
92	d1qvpa_	Alignment	not modelled	12.9	33	Fold: SH3-like barrel Superfamily: C-terminal domain of transcriptional repressors Family: FeoA-like
93	d1f60a1	Alignment	not modelled	12.8	36	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
94	d2zjru1	Alignment	not modelled	12.5	43	Fold: L28p-like Superfamily: L28p-like Family: Ribosomal protein L28
95	clssfA_	Alignment	not modelled	12.4	17	PDB header: cell cycle Chain: A: PDB Molecule: transformation related protein 53 binding PDBTitle: solution structure of the mouse 53bp1 fragment (residues2 1463-1617)
96	d1efca1	Alignment	not modelled	12.2	57	Fold: Reductase/isomerase/elongation factor common domain Superfamily: Translation proteins Family: Elongation factors
97	c4a1cS_	Alignment	not modelled	12.1	50	PDB header: ribosome Chain: S: PDB Molecule: rpl26; PDBTitle: t thermophilic 60s ribosomal subunit in complex with initiation factor 6. this file contains 5s rrna,3 5.8s rrna and proteins of molecule 4.
98	d1wt8a1	Alignment	not modelled	12.1	50	Fold: Knottins (small inhibitors, toxins, lectins) Superfamily: Scorpion toxin-like Family: Short-chain scorpion toxins
99	d1vqot1	Alignment	not modelled	10.8	50	Fold: SH3-like barrel Superfamily: Translation proteins SH3-like domain Family: Ribosomal proteins L24p and L21e