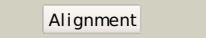
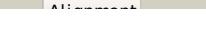


Phyre²

Email	i.a.kelley@imperial.ac.uk
Description	P0A744
Date	Thu Jan 5 11:04:46 GMT 2012
Unique Job ID	88a10c915ff45be2

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1ff3a_	Alignment		100.0	99	Fold: Ferredoxin-like Superfamily: Peptide methionine sulfoxide reductase Family: Peptide methionine sulfoxide reductase
2	c1fvaA_	Alignment		100.0	62	PDB header: oxidoreductase Chain: A; PDB Molecule: peptide methionine sulfoxide reductase; PDBTitle: crystal structure of bovine methionine sulfoxide reductase
3	d1fvga_	Alignment		100.0	60	Fold: Ferredoxin-like Superfamily: Peptide methionine sulfoxide reductase Family: Peptide methionine sulfoxide reductase
4	d1ff3c_	Alignment		100.0	99	Fold: Ferredoxin-like Superfamily: Peptide methionine sulfoxide reductase Family: Peptide methionine sulfoxide reductase
5	c2j89A_	Alignment		100.0	48	PDB header: oxidoreductase Chain: A; PDB Molecule: methionine sulfoxide reductase a; PDBTitle: functional and structural aspects of poplar cytosolic and2 plastidial type a methionine sulfoxide reductases
6	c3bqhA_	Alignment		100.0	41	PDB header: oxidoreductase Chain: A; PDB Molecule: peptide methionine sulfoxide reductase msra/msrb; PDBTitle: structure of the central domain (msra) of neisseria meningitidis pilb2 (oxidized form)
7	c3e0mB_	Alignment		100.0	36	PDB header: oxidoreductase Chain: B; PDB Molecule: peptide methionine sulfoxide reductase msra/msrb PDBTitle: crystal structure of fusion protein of msra and msrb
8	c3piA_	Alignment		100.0	33	PDB header: oxidoreductase Chain: A; PDB Molecule: peptide methionine sulfoxide reductase; PDBTitle: crystal structure of mxr1 from saccharomyces cerevisiae in reduced2 form
9	c1nwaA_	Alignment		100.0	45	PDB header: oxidoreductase Chain: A; PDB Molecule: peptide methionine sulfoxide reductase msra; PDBTitle: structure of mycobacterium tuberculosis methionine2 sulfoxide reductase a in complex with protein-bound3 methionine
10	d1nwaa_	Alignment		100.0	45	Fold: Ferredoxin-like Superfamily: Peptide methionine sulfoxide reductase Family: Peptide methionine sulfoxide reductase
11	d1kvja_	Alignment		96.1	19	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain

12	d1afia_			95.1	20	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
13	d1cpza_			95.0	17	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
14	d1q8la_			94.7	26	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
15	c1yjrA_			93.9	19	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the apo form of the sixth soluble2 domain a69p mutant of menkes protein
16	c2kkhA_			93.9	23	PDB header: metal transport Chain: A: PDB Molecule: putative heavy metal transporter; PDBTitle: structure of the zinc binding domain of the atpase hma4
17	d1p6ta2			93.9	26	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
18	d1p6ta1			93.9	24	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
19	d1s6ua_			93.7	26	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
20	c2ldiA_			93.6	28	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transporting atpase; PDBTitle: nmr solution structure of ziaan sub mutant
21	d2qifa1		not modelled	93.0	26	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
22	d1osda_		not modelled	92.6	15	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
23	c2l3mA_		not modelled	92.3	28	PDB header: metal binding protein Chain: A: PDB Molecule: copper-ion-binding protein; PDBTitle: solution structure of the putative copper-ion-binding protein from2 bacillus anthracis str. ames
24	d2aw0a_		not modelled	92.3	28	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
25	c2ga7A_		not modelled	92.3	24	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the copper(i) form of the third metal-2 binding domain of atp7a protein (menkes disease protein)
26	c2ropA_		not modelled	92.1	35	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 2; PDBTitle: solution structure of domains 3 and 4 of human atp7b
27	c2ew9A_		not modelled	92.1	13	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 2; PDBTitle: solution structure of apowln5-6
28	c2ofhX_		not modelled	92.0	26	PDB header: hydrolase, membrane protein Chain: X: PDB Molecule: zinc-transporting atpase; PDBTitle: solution structure of the n-terminal domain of the zinc(ii) atpase2 ziaa in its apo form
29	c2k42A_		not modelled	91.9	28	PDB header: oxidoreductase Chain: A: PDB Molecule: mercuric reductase;

29	c2rkaA	Alignment	not modelled	91.9	28	PDBTitle: structure of nmera, the n-terminal hma domain of tn501 mercuric2 reductase PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa PDB header: hydrolase Chain: A: PDB Molecule: copper-transferring p-type atpase copa; PDBTitle: solution structure of the n-terminal soluble domains of2 bacillus subtilis copa PDB header: hydrolase Chain: X: PDB Molecule: copper-transferring atpase ran1; PDBTitle: crystal structure of a copper binding domain from hma7, a p-2 type atpase
30	c3j09A	Alignment	not modelled	91.9	27	PDB header: hydrolase, metal transport Chain: A: PDB Molecule: copper-exporting p-type atpase a; PDBTitle: high resolution helical reconstruction of the bacterial p-type atpase2 copper transporter copa PDB header: hydrolase Chain: A: PDB Molecule: copper-transferring p-type atpase copa; PDBTitle: solution structure of the n-terminal soluble domains of2 bacillus subtilis copa PDB header: hydrolase Chain: X: PDB Molecule: copper-transferring atpase ran1; PDBTitle: crystal structure of a copper binding domain from hma7, a p-2 type atpase
31	c2rmlA	Alignment	not modelled	91.0	24	PDB header: hydrolase Chain: A: PDB Molecule: copper-transferring p-type atpase copa; PDBTitle: solution structure of the n-terminal soluble domains of2 bacillus subtilis copa PDB header: hydrolase Chain: X: PDB Molecule: copper-transferring atpase ran1; PDBTitle: crystal structure of a copper binding domain from hma7, a p-2 type atpase
32	c3dxsX	Alignment	not modelled	90.6	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
33	d2ggpb1	Alignment	not modelled	90.3	15	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the apo form of the fifth domain of2 menkes protein
34	c1y3kA	Alignment	not modelled	87.7	23	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
35	d1mwza	Alignment	not modelled	86.6	24	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the apo form of the fifth domain of2 menkes protein
36	c1yg0A	Alignment	not modelled	84.8	13	PDB header: metal transport Chain: A: PDB Molecule: cop associated protein; PDBTitle: solution structure of apo-copp from helicobacter pylori
37	c2aj1A	Alignment	not modelled	80.8	19	PDB header: hydrolase Chain: A: PDB Molecule: probable cadmium-transporting atpase; PDBTitle: solution structure of apocada
38	c2gcfA	Alignment	not modelled	79.0	24	PDB header: hydrolase Chain: A: PDB Molecule: cation-transporting atpase pacs; PDBTitle: solution structure of the n-terminal domain of the copper(i) atpase2 pacs in its apo form
39	c2k2pA	Alignment	not modelled	68.8	9	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu1203; PDBTitle: solution nmr structure of protein atu1203 from agrobacterium tumefaciens, northeast structural genomics consortium (nesg) target3 att10, ontario center for structural proteomics target atc1183
40	d1vsra	Alignment	not modelled	59.0	43	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Very short patch repair (VSR) endonuclease
41	c2f40A	Alignment	not modelled	58.5	21	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: hypothetical protein pf1455; PDBTitle: structure of a novel protein from backbone-centered nmr data and nmr-2 assisted structure prediction
42	d2phcb2	Alignment	not modelled	57.5	32	Fold: DCoH-like Superfamily: PH0987 N-terminal domain-like Family: PH0987 N-terminal domain-like
43	c2phcB	Alignment	not modelled	56.8	24	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein ph0987; PDBTitle: crystal structure of conserved uncharacterized protein ph0987 from2 pyrococcus horikoshii
44	c2rogA	Alignment	not modelled	43.4	22	PDB header: metal binding protein Chain: A: PDB Molecule: heavy metal binding protein; PDBTitle: solution structure of thermus thermophilus hb8 ttha17182 protein in living e. coli cells
45	d1lupa2	Alignment	not modelled	36.6	15	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
46	d1sb6a	Alignment	not modelled	33.8	11	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
47	d1cw0a	Alignment	not modelled	32.7	43	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Very short patch repair (VSR) endonuclease
48	c2kwaA	Alignment	not modelled	22.0	21	PDB header: transferase inhibitor Chain: A: PDB Molecule: kinase a inhibitor; PDBTitle: 1h, 13c and 15n backbone and side chain resonance assignments of the2 n-terminal domain of the histidine kinase inhibitor kipi from3 bacillus subtilis
49	d2gz1a2	Alignment	not modelled	20.3	25	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
50	c3fryB	Alignment	not modelled	19.5	12	PDB header: hydrolase Chain: B: PDB Molecule: probable copper-exporting p-type atpase a; PDBTitle: crystal structure of the copa c-terminal metal binding domain
51	d1e3ha5	Alignment	not modelled	15.6	19	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
52	d1pugb	Alignment	not modelled	14.6	25	Fold: YbaB-like Superfamily: YbaB-like Family: YbaB-like
53	c2kyzA	Alignment	not modelled	14.6	15	PDB header: metal binding protein Chain: A: PDB Molecule: heavy metal binding protein; PDBTitle: nmr structure of heavy metal binding protein tm0320 from thermotoga2 maritima
54	d1sl8a	Alignment	not modelled	12.7	25	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
						PDB header: hydrolase

55	c3mm1D	Alignment	not modelled	12.3	11	Chain: D: PDB Molecule: allophanate hydrolase subunit 1; PDBTitle: allophanate hydrolase complex from mycobacterium smegmatis, msmeg0435-2 msmeg0436 Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
56	d1t4ba2	Alignment	not modelled	11.6	17	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
57	d1pqua2	Alignment	not modelled	10.7	17	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
58	c2cr1A	Alignment	not modelled	10.7	15	PDB header: chaperone Chain: A: PDB Molecule: copper chaperone for superoxide dismutase; PDBTitle: the apo form of hma domain of copper chaperone for2 superoxide dismutase
59	d1leha2	Alignment	not modelled	10.2	19	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Aminoacid dehydrogenases
60	d1qv0a	Alignment	not modelled	9.7	24	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
61	d1cc8a	Alignment	not modelled	9.6	22	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
62	d1vqoa2	Alignment	not modelled	9.4	36	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
63	d2zjra2	Alignment	not modelled	9.4	45	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
64	c3dwqD	Alignment	not modelled	9.2	33	PDB header: toxin Chain: D: PDB Molecule: subtilase cytotoxin, subunit b; PDBTitle: crystal structure of the a-subunit of the ab5 toxin from e. coli with neu5gc-2,3gal-1,3glcnac
65	d2b0ja2	Alignment	not modelled	9.2	55	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: 6-phosphogluconate dehydrogenase-like, N-terminal domain
66	c2kd1A	Alignment	not modelled	9.1	28	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: dna integration/recombination/inversion protein; PDBTitle: solution nmr structure of the integrase-like domain from2 bacillus cereus ordered locus bc_1272. northeast3 structural genomics consortium target bcr268f
67	d2cqpa1	Alignment	not modelled	8.8	12	Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
68	d1mb4a2	Alignment	not modelled	8.7	17	Fold: FwdE/GAPDH domain-like Superfamily: Glyceraldehyde-3-phosphate dehydrogenase-like, C-terminal domain Family: GAPDH-like
69	d1r6la2	Alignment	not modelled	8.2	18	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
70	c1lqupA	Alignment	not modelled	8.1	19	PDB header: chaperone Chain: A: PDB Molecule: superoxide dismutase 1 copper chaperone; PDBTitle: crystal structure of the copper chaperone for superoxide2 dismutase
71	d1rl2a2	Alignment	not modelled	8.1	36	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
72	c3oepA	Alignment	not modelled	7.8	32	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative uncharacterized protein ttha0988; PDBTitle: crystal structure of ttha0988 in space group p43212
73	c3md1B	Alignment	not modelled	7.7	10	PDB header: rna binding protein Chain: B: PDB Molecule: nuclear and cytoplasmic polyadenylated rna-binding protein PDBTitle: crystal structure of the second rrm domain of yeast poly(u)-binding2 protein (pub1)
74	d2je6b2	Alignment	not modelled	7.7	25	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
75	c1jk9D	Alignment	not modelled	7.4	15	PDB header: oxidoreductase Chain: D: PDB Molecule: copper chaperone for superoxide dismutase; PDBTitle: heterodimer between h48f-ysod1 and yccs
76	d2nn6b2	Alignment	not modelled	6.7	23	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
77	d1uala	Alignment	not modelled	6.6	25	Fold: alpha/beta knot Superfamily: alpha/beta knot Family: tRNA(m1G37)-methyltransferase TrmD
78	c2dkhA	Alignment	not modelled	6.5	26	PDB header: oxidoreductase Chain: A: PDB Molecule: 3-hydroxybenzoate hydroxylase; PDBTitle: crystal structure of 3-hydroxybenzoate hydroxylase from comamonas2 testosteroni, in complex with the substrate
79	d2qdyb1	Alignment	not modelled	6.4	19	Fold: SH3-like barrel Superfamily: Electron transport accessory proteins Family: Nitrile hydratase beta chain
						PDB header: dna binding protein Chain: A: PDB Molecule: phage integrase:

80	c2kkpA	Alignment	not modelled	6.1	33	PDBTitle: solution nmr structure of the phage integrase sam-like2 domain from moth 1796 from moorella thermoacetica.3 northeast structural genomics consortium target mtr39k4 (residues 64-171).
81	d1fe0a	Alignment	not modelled	6.1	27	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
82	d2p02a3	Alignment	not modelled	6.0	27	Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
83	d1rlfa	Alignment	not modelled	5.8	14	Fold: beta-Grasp (ubiquitin-like) Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
84	d1epwa2	Alignment	not modelled	5.8	50	Fold: beta-Trefoil Superfamily: STI-like Family: Clostridium neurotoxins, C-terminal domain
85	d2fura1	Alignment	not modelled	5.8	19	Fold: Split barrel-like Superfamily: FMN-binding split barrel Family: PNP-oxidase like
86	c3f42A	Alignment	not modelled	5.6	26	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein hp0035; PDBTitle: crystal structure of uncharacterized protein hp0035 from helicobacter2 pylori
87	c2h8bA	Alignment	not modelled	5.5	50	PDB header: hormone/growth factor Chain: A: PDB Molecule: insulin-like 3; PDBTitle: solution structure of insl3
88	c2k6tA	Alignment	not modelled	5.5	50	PDB header: hormone Chain: A: PDB Molecule: insulin-like 3 a chain; PDBTitle: solution structure of the relaxin-like factor
89	c2k6uA	Alignment	not modelled	5.4	50	PDB header: hormone Chain: A: PDB Molecule: insulin-like 3 a chain; PDBTitle: the solution structure of a conformationally restricted2 fully active derivative of the human relaxin-like factor3 (rlf)
90	c2kptA	Alignment	not modelled	5.3	18	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: putative secreted protein; PDBTitle: solution nmr structure of the n-terminal domain of cg24962 protein from corynebacterium glutamicum. northeast3 structural genomics consortium target cgr26a
91	d2j01d2	Alignment	not modelled	5.3	33	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
92	d1uds2	Alignment	not modelled	5.2	14	Fold: Ribonuclease PH domain 2-like Superfamily: Ribonuclease PH domain 2-like Family: Ribonuclease PH domain 2-like
93	c3f46A	Alignment	not modelled	5.2	55	PDB header: oxidoreductase Chain: A: PDB Molecule: 5,10-methenyltetrahydromenopterin hydrogenase; PDBTitle: the crystal structure of c176a mutated [fe]-hydrogenase (hmd)2 holoenzyme from methanocaldococcus jannaschii
94	c2dj9A	Alignment	not modelled	5.2	80	PDB header: cytokine Chain: A: PDB Molecule: growth-blocking peptide; PDBTitle: solution structure of growth-blocking peptide of the2 cabbage armyworm, mamestra brassicae
95	d2qamc2	Alignment	not modelled	5.2	33	Fold: OB-fold Superfamily: Nucleic acid-binding proteins Family: Cold shock DNA-binding domain-like
96	c3enkB	Alignment	not modelled	5.1	30	PDB header: isomerase Chain: B: PDB Molecule: udp-glucose 4-epimerase; PDBTitle: 1.9a crystal structure of udp-glucose 4-epimerase from2 burkholderia pseudomallei
97	d2c0sa1	Alignment	not modelled	5.1	23	Fold: ROP-like Superfamily: BAS1536-like Family: BAS1536-like