

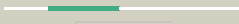

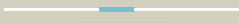










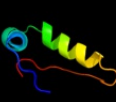



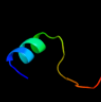


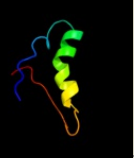

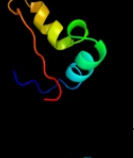
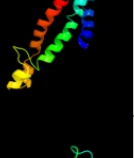

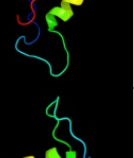
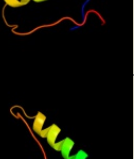
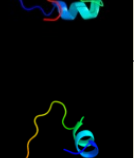
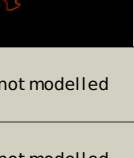


Phyre2

























Email	I.a.kelley@imperial.ac.uk
Description	P39365
Date	Thu Jan 5 11:59:56 GMT 2012
Unique Job ID	7b2c078e2a315500

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c2nscA_	 Alignment		41.6	20	PDB header: chaperone Chain: A: PDB Molecule: trigger factor; PDBTitle: structures of and interactions between domains of trigger factor from <i>Thermotoga maritima</i>
2	c3k3gA_	 Alignment		40.5	10	PDB header: transport protein Chain: A: PDB Molecule: urea transporter; PDBTitle: crystal structure of the urea transporter from <i>Desulfovibrio vulgaris</i> bound to 1,3-dimethylurea
3	dlw26a2	 Alignment		36.2	20	Fold: Ribosome binding domain-like Superfamily: Trigger factor ribosome-binding domain Family: Trigger factor ribosome-binding domain
4	dlp9ya_	 Alignment		35.0	20	Fold: Ribosome binding domain-like Superfamily: Trigger factor ribosome-binding domain Family: Trigger factor ribosome-binding domain
5	dlt11a2	 Alignment		34.6	15	Fold: Ribosome binding domain-like Superfamily: Trigger factor ribosome-binding domain Family: Trigger factor ribosome-binding domain
6	c2d3o1_	 Alignment		31.1	20	PDB header: ribosome Chain: 1: PDB Molecule: trigger factor; PDBTitle: structure of ribosome binding domain of the trigger factor2 on the 50s ribosomal subunit from <i>D. radiodurans</i>
7	c1t11A_	 Alignment		28.2	15	PDB header: chaperone Chain: A: PDB Molecule: trigger factor; PDBTitle: trigger factor
8	dlcpza_	 Alignment		27.7	12	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
9	dlosda_	 Alignment		27.6	6	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
10	c2qgoA_	 Alignment		25.8	13	PDB header: biosynthetic protein Chain: A: PDB Molecule: putative Fe-S biosynthesis protein; PDBTitle: crystal structure of a putative Fe-S biosynthesis protein from <i>Lactobacillus acidophilus</i>
11	c1vg0A_	 Alignment		25.5	6	PDB header: metal transport Chain: A: PDB Molecule: cop associated protein; PDBTitle: solution structure of apo-cop from <i>Helicobacter pylori</i>

12	d1p6ta2	Alignment		24.5	12	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
13	c1y3kA	Alignment		24.5	12	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
14	d1mwza	Alignment		24.4	3	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
15	c2yvxD	Alignment		24.1	18	PDB header: transport protein Chain: D: PDB Molecule: mg2+ transporter mgte; PDBTitle: crystal structure of magnesium transporter mgte
16	c2k2pA	Alignment		21.6	12	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein atu1203; PDBTitle: solution nmr structure of protein atu1203 from agrobacterium2 tumefaciens. northeast structural genomics consortium (nesg) target3 att10, ontario center for structural proteomics target atc1183
17	c2ga7A	Alignment		21.3	12	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1; PDBTitle: solution structure of the copper(ii) form of the third metal-2 binding domain of atp7a protein (menkes disease protein)
18	c2ofhX	Alignment		18.7	15	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
19	d2qifa1	Alignment		18.5	9	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
20	d2p2ea1	Alignment		18.1	26	Fold: HesB-like domain Superfamily: HesB-like domain Family: HesB-like domain
21	c2aj1A	Alignment	not modelled	18.0	9	PDB header: hydrolase Chain: A: PDB Molecule: probable cadmium-transporting atpase; PDBTitle: solution structure of apocada
22	d2aw0a	Alignment	not modelled	17.2	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
23	d1afia	Alignment	not modelled	16.4	6	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
24	d1p6ta1	Alignment	not modelled	15.9	9	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
25	d1qb2a	Alignment	not modelled	15.8	17	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
26	c3dxsX	Alignment	not modelled	15.8	12	PDB header: hydrolase Chain: X: PDB Molecule: copper-transporting atpase ran1; PDBTitle: crystal structure of a copper binding domain from hma7, a p-2 type atpase
27	c2kt2A	Alignment	not modelled	15.1	21	PDB header: oxidoreductase Chain: A: PDB Molecule: mercuric reductase; PDBTitle: structure of nmera, the n-terminal hma domain of tn501 mercuric2 reductase
28	d1vyva2	Alignment	not modelled	14.2	29	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
						Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex

29	d1w4ha1	Alignment	not modelled	14.2	29	Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
30	c3bd1A_	Alignment	not modelled	14.2	33	PDB header: hydrolase Chain: A: PDB Molecule: staphylococcal nuclease domain-containing PDBTitle: crystal structure of a truncated human tudor-sn
31	d1kvja_	Alignment	not modelled	13.9	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
32	d1qzxa2	Alignment	not modelled	13.8	21	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
33	c2kkhA_	Alignment	not modelled	13.8	21	PDB header: metal transport Chain: A: PDB Molecule: putative heavy metal transporter; PDBTitle: structure of the zinc binding domain of the atpase hma4
34	d1jw2a_	Alignment	not modelled	13.8	36	Fold: Open three-helical up-and-down bundle Superfamily: Hemolysin expression modulating protein HHA Family: Hemolysin expression modulating protein HHA
35	c2e75E_	Alignment	not modelled	13.7	29	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex with 2-nonyl-4-2 hydroxyquinoline n-oxide (nqno) from m.laminosus
36	c2e74E_	Alignment	not modelled	13.7	29	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex from m.laminosus
37	c2e76E_	Alignment	not modelled	13.7	29	PDB header: photosynthesis Chain: E: PDB Molecule: cytochrome b6-f complex subunit 6; PDBTitle: crystal structure of the cytochrome b6f complex with tridecyl-2 stigmatellin (tds) from m.laminosus
38	d2e74e1	Alignment	not modelled	13.7	29	Fold: Single transmembrane helix Superfamily: PetL subunit of the cytochrome b6f complex Family: PetL subunit of the cytochrome b6f complex
39	c1vf5R_	Alignment	not modelled	13.7	29	PDB header: photosynthesis Chain: R: PDB Molecule: protein pet l; PDBTitle: crystal structure of cytochrome b6f complex from m.laminosus
40	d2aq0a1	Alignment	not modelled	13.6	10	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
41	d1uwda_	Alignment	not modelled	13.0	11	Fold: Alpha-lytic protease prodomain-like Superfamily: Fe-S cluster assembly (FSCA) domain-like Family: PaaD-like
42	d1s6ua_	Alignment	not modelled	12.3	18	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
43	d2cyua1	Alignment	not modelled	12.1	29	Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
44	c2rogA_	Alignment	not modelled	10.5	12	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	d2ffha2	Alignment	not modelled	10.2	17	Fold: Signal peptide-binding domain Superfamily: Signal peptide-binding domain Family: Signal peptide-binding domain
46	c1yjrA_	Alignment	not modelled	10.1	15	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
47	c1w26B_	Alignment	not modelled	10.0	20	PDB header: chaperone Chain: B: PDB Molecule: trigger factor; PDBTitle: trigger factor in complex with the ribosome forms a2 molecular cradle for nascent proteins
48	c2iy3A_	Alignment	not modelled	9.9	21	PDB header: rna-binding Chain: A: PDB Molecule: signal recognition particle protein ffh; PDBTitle: structure of the e. coli signal recognition particle2 bound to a translating ribosome
49	d1sb6a_	Alignment	not modelled	9.5	6	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
50	c2l3mA_	Alignment	not modelled	9.4	12	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
51	d1vs6z1	Alignment	not modelled	9.2	25	Fold: L28p-like Superfamily: L28p-like Family: Ribosomal protein L31p
52	d3elga1	Alignment	not modelled	8.8	31	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
53	d1x2ia1	Alignment	not modelled	8.7	29	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
54	d1fra1	Alignment	not modelled	8.6	16	Fold: Ferredoxin-like Superfamily: Formylmethanofuran:tetrahydromethanopterin formyltransferase Family: Formylmethanofuran:tetrahydromethanopterin formyltransferase

55	c2vzkD	 Alignment	not modelled	8.0	32	PDB header: transferase Chain: D: PDB Molecule: glutamate n-acetyltransferase 2 beta chain; PDBTitle: structure of the acyl-enzyme complex of an n-terminal2 nucleophile (ntn) hydrolase, oat2
56	c1qzwC	 Alignment	not modelled	7.5	21	PDB header: signaling protein/rna Chain: C: PDB Molecule: signal recognition 54 kda protein; PDBTitle: crystal structure of the complete core of archaeal srp and2 implications for inter-domain communication
57	d1q8la	 Alignment	not modelled	7.5	18	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
58	d2ggpb1	 Alignment	not modelled	7.4	6	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
59	d2a1jb1	 Alignment	not modelled	7.3	14	Fold: SAM domain-like Superfamily: RuvA domain 2-like Family: Hef domain-like
60	c3j09A	 Alignment	not modelled	7.1	6	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
61	c2ksdA	 Alignment	not modelled	6.8	14	PDB header: transferase Chain: A: PDB Molecule: aerobic respiration control sensor protein arcb; PDBTitle: backbone structure of the membrane domain of e. coli2 histidine kinase receptor arcb, center for structures of3 membrane proteins (csmp) target 4310c
62	c2dbcA	 Alignment	not modelled	6.7	16	PDB header: signaling protein Chain: A: PDB Molecule: unnamed protein product; PDBTitle: solution structure of the thioredoxin-like domain of2 phosducin-like protein 2(pdcl2)
63	c1vf5E	 Alignment	not modelled	6.7	27	PDB header: photosynthesis Chain: E: PDB Molecule: protein pet l; PDBTitle: crystal structure of cytochrome b6f complex from m.laminosus
64	c1xbsA	 Alignment	not modelled	6.6	8	PDB header: transcription, cell cycle Chain: A: PDB Molecule: dim1-like protein; PDBTitle: crystal structure of human dim2: a dim1-like protein
65	c2kncA	 Alignment	not modelled	6.5	23	PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiib; PDBTitle: platelet integrin alfa-iib-beta3 transmembrane-cytoplasmic2 heterocomplex
66	c3dv0I	 Alignment	not modelled	6.4	11	PDB header: oxidoreductase/transferase Chain: I: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: snapshots of catalysis in the e1 subunit of the pyruvate2 dehydrogenase multi-enzyme complex
67	c2ldiA	 Alignment	not modelled	6.4	6	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transporting atpase; PDBTitle: nmr solution structure of ziaan sub mutant
68	c3bvsA	 Alignment	not modelled	6.4	12	PDB header: hydrolase Chain: A: PDB Molecule: alkylpurine dna glycosylase alkd; PDBTitle: crystal structure of bacillus cereus alkylpurine dna glycosylase alkd
69	d3duea1	 Alignment	not modelled	6.3	25	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
70	c2kelB	 Alignment	not modelled	6.1	21	PDB header: transcription repressor Chain: B: PDB Molecule: uncharacterized protein 56b; PDBTitle: structure of the transcription regulator svtr from the2 hyperthermophilic archaeal virus sirv1
71	c2q9rA	 Alignment	not modelled	6.1	7	PDB header: unknown function Chain: A: PDB Molecule: protein of unknown function; PDBTitle: crystal structure of a duf416 family protein (sbal_3149) from2 shewanella baltica os155 at 1.91 a resolution
72	d1nyta2	 Alignment	not modelled	6.0	33	Fold: Aminoacid dehydrogenase-like, N-terminal domain Superfamily: Aminoacid dehydrogenase-like, N-terminal domain Family: Shikimate dehydrogenase-like
73	d1w85I	 Alignment	not modelled	5.8	13	Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
74	c3b1qD	 Alignment	not modelled	5.6	22	PDB header: transferase Chain: D: PDB Molecule: ribokinase, putative; PDBTitle: structure of burkholderia thailandensis nucleoside kinase (bthnk) in2 complex with inosine
75	c2eq9C	 Alignment	not modelled	5.6	11	PDB header: oxidoreductase Chain: C: PDB Molecule: pyruvate dehydrogenase complex, dihydrolipoamide PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdb
76	c2wwaj	 Alignment	not modelled	5.6	14	PDB header: ribosome Chain: J: PDB Molecule: 60s ribosomal protein l19; PDBTitle: cryo-em structure of idle yeast ssh1 complex bound to the2 yeast 80s ribosome
77	d2c4ka1	 Alignment	not modelled	5.6	27	Fold: PRTase-like Superfamily: PRTase-like Family: Phosphoribosylpyrophosphate synthetase-like
78	d1vyua2	 Alignment	not modelled	5.5	29	Fold: P-loop containing nucleoside triphosphate hydrolases Superfamily: P-loop containing nucleoside triphosphate hydrolases Family: Nucleotide and nucleoside kinases
79	d1xs5a	 Alignment	not modelled	5.5	18	Fold: Periplasmic binding protein-like II Superfamily: Periplasmic binding protein-like II

					Family: Phosphate binding protein-like
80	c2eq7C_	Alignment	not modelled	5.5	13 PDB header: oxidoreductase Chain: C: PDB Molecule: 2-oxoglutarate dehydrogenase e2 component; PDBTitle: crystal structure of lipoamide dehydrogenase from thermus thermophilus2 hb8 with psbdo
81	c2gcfA_	Alignment	not modelled	5.5	15 PDB header: hydrolase Chain: A: PDB Molecule: cation-transporting atpase pacs; PDBTitle: solution structure of the n-terminal domain of the copppe(r)i atpase2 pacs in its apo form
82	c3tqwA_	Alignment	not modelled	5.4	17 PDB header: transport protein Chain: A: PDB Molecule: methionine-binding protein; PDBTitle: structure of a abc transporter, periplasmic substrate-binding protein2 from coxiella burnetii
83	c1w3dA_	Alignment	not modelled	5.4	11 PDB header: transferase Chain: A: PDB Molecule: dihydrolipoyllysine-residue acetyltransferase PDBTitle: nmr structure of the peripheral-subunit binding domain of2 bacillus stearothermophilus e2p
84	d1bala_	Alignment	not modelled	5.4	26 Fold: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Superfamily: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex Family: Peripheral subunit-binding domain of 2-oxo acid dehydrogenase complex
85	d1vkpa_	Alignment	not modelled	5.3	15 Fold: Pentain, beta/alpha-propeller Superfamily: Pentain Family: Porphyrromonas-type peptidylarginine deiminase
86	d2axoa1	Alignment	not modelled	5.2	44 Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Atu2684-like
87	c3pwzA_	Alignment	not modelled	5.2	44 PDB header: oxidoreductase Chain: A: PDB Molecule: shikimate dehydrogenase 3; PDBTitle: crystal structure of an ael1 enzyme from pseudomonas putida
88	d2brja1	Alignment	not modelled	5.2	25 Fold: AOC barrel-like Superfamily: Allene oxide cyclase-like Family: Allene oxide cyclase-like