

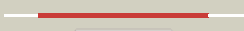



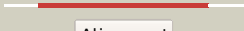








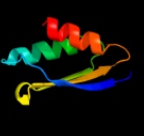
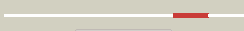









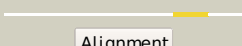

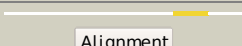



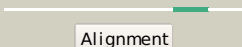

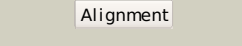
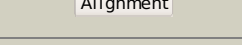




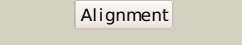
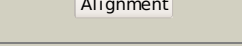
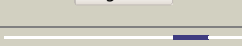
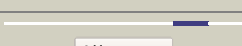

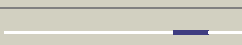



Phyre2




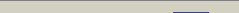
Email	l.a.kelley@imperial.ac.uk
Description	P77726
Date	Thu Jan 5 12:32:08 GMT 2012
Unique Job ID	c3328e9df60909bc

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1pv7a_	 Alignment		100.0	16	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: LacY-like proton/sugar symporter
2	d1pw4a_	 Alignment		100.0	10	Fold: MFS general substrate transporter Superfamily: MFS general substrate transporter Family: Glycerol-3-phosphate transporter
3	c2gfpA_	 Alignment		100.0	19	PDB header: membrane protein Chain: A: PDB Molecule: multidrug resistance protein d; PDBTitle: structure of the multidrug transporter emrd from2 escherichia coli
4	c3o7pA_	 Alignment		99.9	12	PDB header: transport protein Chain: A: PDB Molecule: l-fucose-proton symporter; PDBTitle: crystal structure of the e.coli fucose:proton symporter, fucp (n162a)
5	c2xutC_	 Alignment		99.9	13	PDB header: transport protein Chain: C: PDB Molecule: proton/peptide symporter family protein; PDBTitle: crystal structure of a proton dependent oligopeptide (pot)2 family transporter.
6	c2ofhX_	 Alignment		95.0	14	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
7	c2l1d1A_	 Alignment		94.7	16	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transporting atpase; PDBTitle: nmr solution structure of ziaa sub mutant
8	c2l3mA_	 Alignment		93.2	22	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
9	d1osda_	 Alignment		92.7	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
10	d1afia_	 Alignment		92.5	19	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
11	d2qifa1	 Alignment		92.3	20	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain

12	dlcpza_	Alignment		92.3	20	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
13	c1yjrA_	Alignment		92.1	17	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
14	dlq8la_	Alignment		92.0	8	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
15	c2kkaA_	Alignment		91.7	17	PDB header: metal transport Chain: A: PDB Molecule: putative heavy metal transporter; PDBTitle: structure of the zinc binding domain of the atpase hma4
16	c2kt2A_	Alignment		91.6	17	PDB header: oxidoreductase Chain: A: PDB Molecule: mercuric reductase; PDBTitle: structure of nmera, the n-terminal hma domain of tn501 mercuric2 reductase
17	dlkvja_	Alignment		91.2	18	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
18	c2ga7A_	Alignment		91.2	13	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)
19	c3dxsX_	Alignment		91.2	17	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
20	dl6ua_	Alignment		90.2	9	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
21	d2aw0a_	Alignment	not modelled	90.0	13	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
22	c2ropA_	Alignment	not modelled	89.5	15	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 2; PDBTitle: solution structure of domains 3 and 4 of human atp7b
23	c2ew9A_	Alignment	not modelled	89.4	20	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 2; PDBTitle: solution structure of apowln5-6
24	dlp6ta1	Alignment	not modelled	88.9	14	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
25	c1y3ka_	Alignment	not modelled	87.3	19	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
26	dlp6ta2	Alignment	not modelled	87.1	16	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
27	c3j09A_	Alignment	not modelled	85.9	18	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
28	d2ggpb1	Alignment	not modelled	84.5	15	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
29	c1vg0A_	Alignment	not modelled	84.4	17	PDB header: metal transport Chain: A: PDB Molecule: cop associated protein;

						PDBTitle: solution structure of apo-copp from helicobacter pylori
30	c2rmlA		Alignment	not modelled	82.0	16 PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting p-type atpase copa; PDBTitle: solution structure of the n-terminal soluble domains of2 bacillus subtilis copa
31	c2rogA		Alignment	not modelled	78.3	20 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
32	c2k2pA		Alignment	not modelled	72.8	18 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
33	c2gcfA		Alignment	not modelled	72.7	15 PDB header: hydrolase Chain: A: PDB Molecule: cation-transporting atpase pacs; PDBTitle: solution structure of the n-terminal domain of the coppfer(i) atpase2 pacs in its apo form
34	d1sb6a		Alignment	not modelled	72.4	16 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
35	d1cc8a		Alignment	not modelled	52.0	16 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
36	c2crlA		Alignment	not modelled	49.7	16 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
37	c1qupA		Alignment	not modelled	47.2	20 PDB header: chaperone Chain: A: PDB Molecule: superoxide dismutase 1 copper chaperone; PDBTitle: crystal structure of the copper chaperone for superoxide2 dismutase
38	c2kyzA		Alignment	not modelled	42.8	17 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
39	d1qupa2		Alignment	not modelled	42.2	20 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
40	c1jk9D		Alignment	not modelled	41.4	20 PDB header: oxidoreductase Chain: D: PDB Molecule: copper chaperone for superoxide dismutase; PDBTitle: heterodimer between h48f-yso1 and yccs
41	c2aj1A		Alignment	not modelled	39.9	13 PDB header: hydrolase Chain: A: PDB Molecule: probable cadmium-transporting atpase; PDBTitle: solution structure of apocada
42	d1mwza		Alignment	not modelled	28.6	16 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
43	c2g9pA		Alignment	not modelled	17.6	43 PDB header: antimicrobial protein Chain: A: PDB Molecule: antimicrobial peptide laticin 2a; PDBTitle: nmr structure of a novel antimicrobial peptide, laticin 2a,2 from spider (lachesana tarabaevi) venom
44	d1fe0a		Alignment	not modelled	17.4	12 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
45	c3hd6A		Alignment	not modelled	15.3	9 PDB header: membrane protein, transport protein Chain: A: PDB Molecule: ammonium transporter rh type c; PDBTitle: crystal structure of the human rhesus glycoprotein rhcg
46	c3ff5B		Alignment	not modelled	11.1	31 PDB header: protein transport Chain: B: PDB Molecule: peroxisomal biogenesis factor 14; PDBTitle: crystal structure of the conserved n-terminal domain of the2 peroxisomal matrix-protein-import receptor, pex14p
47	d2czra1		Alignment	not modelled	7.5	19 Fold: Restriction endonuclease-like Superfamily: TBP-interacting protein-like Family: TBP-interacting protein-like
48	c2w85A		Alignment	not modelled	6.9	31 PDB header: protein transport Chain: A: PDB Molecule: peroxisomal membrane anchor protein pex14; PDBTitle: structure of pex14 in complex with pex19
49	d1wi6a1		Alignment	not modelled	6.9	15 Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
50	d2p02a3		Alignment	not modelled	6.3	9 Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase
51	d1weya		Alignment	not modelled	6.3	6 Fold: Ferredoxin-like Superfamily: RNA-binding domain, RBD Family: Canonical RBD
52	c3fryB		Alignment	not modelled	6.2	15 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
53	c2pc6C		Alignment	not modelled	5.4	16 PDB header: lyase Chain: C: PDB Molecule: probable acetolactate synthase isozyme iii (small subunit); PDBTitle: crystal structure of putative acetolactate synthase- small subunit2 from nitrosomonas europaea
54	d1mxaa3		Alignment	not modelled	5.4	11 Fold: S-adenosylmethionine synthetase Superfamily: S-adenosylmethionine synthetase Family: S-adenosylmethionine synthetase

55	c2e1aD_	 Alignment	not modelled	5.3	20	PDB header: transcription Chain: D: PDB Molecule: 75aa long hypothetical regulatory protein asnc; PDBTitle: crystal structure of ffrp-dm1
56	c2zbcH_	 Alignment	not modelled	5.3	14	PDB header: transcription Chain: H: PDB Molecule: 83aa long hypothetical transcriptional regulator asnc; PDBTitle: crystal structure of sts042, a stand-alone ram module protein, from2 hyperthermophilic archaeon sulfolobus tokodaii strain7.
57	c2f1fA_	 Alignment	not modelled	5.3	17	PDB header: transferase Chain: A: PDB Molecule: acetolactate synthase isozyme iii small subunit; PDBTitle: crystal structure of the regulatory subunit of2 acetoxyhydroxyacid synthase isozyme iii from e. coli
58	c3fw2A_	 Alignment	not modelled	5.1	11	PDB header: oxidoreductase Chain: A: PDB Molecule: thiol-disulfide oxidoreductase; PDBTitle: c-terminal domain of putative thiol-disulfide oxidoreductase from2 bacteroides thetaiotaomicron.