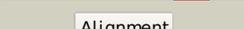
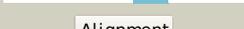
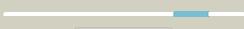
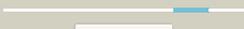
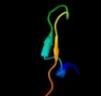


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P19642
Date	Thu Jan 5 11:37:27 GMT 2012
Unique Job ID	8c024cd681570eaf

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3qnqD_	 Alignment		100.0	15	PDB header: membrane protein, transport protein Chain: D: PDB Molecule: pts system, cellobiose-specific iic component; PDBTitle: crystal structure of the transporter chbc, the iic component from the 2 n,n'-diacetylchitobiose-specific phosphotransferase system
2	d3bp8c1	 Alignment		99.9	41	Fold: Homing endonuclease-like Superfamily: Glucose permease domain IIB Family: Glucose permease domain IIB
3	c1ibaA_	 Alignment		99.9	41	PDB header: phosphotransferase Chain: A: PDB Molecule: glucose permease; PDBTitle: glucose permease (domain iib), nmr, 11 structures
4	c3ipjB_	 Alignment		99.8	28	PDB header: transferase Chain: B: PDB Molecule: pts system, iiabc component; PDBTitle: the crystal structure of one domain of the pts system, iiabc component2 from clostridium difficile
5	c3mp7A_	 Alignment		47.0	16	PDB header: protein transport Chain: A: PDB Molecule: preprotein translocase subunit secy; PDBTitle: lateral opening of a translocon upon entry of protein suggests the 2 mechanism of insertion into membranes
6	d1xmea1	 Alignment		45.8	13	Fold: Cytochrome c oxidase subunit I-like Superfamily: Cytochrome c oxidase subunit I-like Family: Cytochrome c oxidase subunit I-like
7	c3b9yA_	 Alignment		39.8	13	PDB header: transport protein Chain: A: PDB Molecule: ammonium transporter family rh-like protein; PDBTitle: crystal structure of the nitrosomonas europaea rh protein
8	c2hnhA_	 Alignment		38.1	35	PDB header: transferase Chain: A: PDB Molecule: dna polymerase iii alpha subunit; PDBTitle: crystal structure of the catalytic alpha subunit of e. coli 2 replicative dna polymerase iii
9	d1gpri_	 Alignment		37.8	8	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
10	c2dlaB_	 Alignment		36.9	29	PDB header: replication Chain: B: PDB Molecule: 397aa long hypothetical protein; PDBTitle: primase large subunit amino terminal domain from pyrococcus horikoshii
11	d2gpri_	 Alignment		33.6	3	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like

12	d1glaf_	Alignment		27.6	5	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
13	d2f3ga_	Alignment		27.6	9	Fold: Barrel-sandwich hybrid Superfamily: Duplicated hybrid motif Family: Glucose permease-like
14	c3e0dA_	Alignment		25.9	35	PDB header: transferase/dna Chain: A: PDB Molecule: dna polymerase iii subunit alpha; PDBTitle: insights into the replisome from the crystal structure of2 the ternary complex of the eubacterial dna polymerase iii3 alpha-subunit
15	c2rddB_	Alignment		25.7	39	PDB header: membrane protein/transport protein Chain: B: PDB Molecule: upf0092 membrane protein yajc; PDBTitle: x-ray crystal structure of acrb in complex with a novel2 transmembrane helix.
16	d1nh8a2	Alignment		24.9	18	Fold: Ferredoxin-like Superfamily: GlnB-like Family: ATP phosphoribosyltransferase (ATP-PRTase, HisG), regulatory C-terminal domain
17	c3zqsB_	Alignment		18.8	35	PDB header: ligase Chain: B: PDB Molecule: e3 ubiquitin-protein ligase fanc1; PDBTitle: human fanc1 central domain
18	d2nr9a1	Alignment		18.5	17	Fold: Rhomboid-like Superfamily: Rhomboid-like Family: Rhomboid-like
19	d1h3da2	Alignment		16.6	24	Fold: Ferredoxin-like Superfamily: GlnB-like Family: ATP phosphoribosyltransferase (ATP-PRTase, HisG), regulatory C-terminal domain
20	d1l0wa3	Alignment		16.2	14	Fold: Class II aaRS and biotin synthetases Superfamily: Class II aaRS and biotin synthetases Family: Class II aminoacyl-tRNA synthetase (aaRS)-like, catalytic domain
21	d1losda_	Alignment	not modelled	15.2	17	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
22	d1cpza_	Alignment	not modelled	14.9	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
23	d1st6a5	Alignment	not modelled	14.6	19	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
24	c2ci2l_	Alignment	not modelled	14.1	30	PDB header: proteinase inhibitor (chymotrypsin) Chain: I: PDB Molecule: chymotrypsin inhibitor 2; PDBTitle: crystal and molecular structure of the serine proteinase2 inhibitor ci-2 from barley seeds
25	c1p68A_	Alignment	not modelled	14.1	55	PDB header: de novo protein Chain: A: PDB Molecule: de novo designed protein s-824; PDBTitle: solution structure of s-824, a de novo designed four helix2 bundle
26	d2cfua2	Alignment	not modelled	13.2	19	Fold: Metallo-hydrolase/oxidoreductase Superfamily: Metallo-hydrolase/oxidoreductase Family: Alkylsulfatase-like
27	d1q8la_	Alignment	not modelled	13.0	12	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
28	d1kvja_	Alignment	not modelled	12.6	14	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
29	c2na7A_	Alignment	not modelled	12.6	21	PDB header: hydrolase Chain: A: PDB Molecule: copper-transporting atpase 1;

29	c2ga7A	Alignment	not modelled	12.0	41	PDBTitle: solution structure of the copper(i) form of the third metal-2 binding domain of atp7a protein (menkes disease protein)
30	d1fzda	Alignment	not modelled	12.4	29	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
31	d1j7na3	Alignment	not modelled	12.1	15	Fold: ADP-ribosylation Superfamily: ADP-ribosylation Family: ADP-ribosylating toxins
32	c2ldiA	Alignment	not modelled	11.7	19	PDB header: hydrolase Chain: A: PDB Molecule: zinc-transporting atpase; PDBTitle: nmr solution structure of ziaan sub mutant
33	d2axtk1	Alignment	not modelled	11.4	40	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein K, PsbK Family: PsbK-like
34	c2cfuA	Alignment	not modelled	11.2	19	PDB header: hydrolase Chain: A: PDB Molecule: sdsa1; PDBTitle: crystal structure of sdsa1, an alkylsulfatase from <i>Pseudomonas aeruginosa</i> , in complex with 1-decane-sulfonic-3 acid.
35	c1vjra	Alignment	not modelled	11.1	12	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
36	c3f2cA	Alignment	not modelled	10.6	26	PDB header: transferase/dna Chain: A: PDB Molecule: geobacillus kaustophilus dna polc; PDBTitle: dna polymerase polc from geobacillus kaustophilus complex with dna, 2 dgtp and mn
37	d1u7ga	Alignment	not modelled	10.3	3	Fold: Ammonium transporter Superfamily: Ammonium transporter Family: Ammonium transporter
38	d2ifqa1	Alignment	not modelled	10.3	14	Fold: Thioredoxin fold Superfamily: Thioredoxin-like Family: Thioltransferase
39	d1f9ga	Alignment	not modelled	10.1	10	Fold: IL8-like Superfamily: Interleukin 8-like chemokines Family: Interleukin 8-like chemokines
40	c2w2eA	Alignment	not modelled	10.1	7	PDB header: membrane protein Chain: A: PDB Molecule: aquaporin; PDBTitle: 1.15 angstrom crystal structure of p.pastoris aquaporin, 2 aqy1, in a closed conformation at pH 3.5
41	d2a9da1	Alignment	not modelled	10.0	43	Fold: Immunoglobulin-like beta-sandwich Superfamily: E set domains Family: Molybdenum-containing oxidoreductases-like dimerisation domain
42	d1p6ta1	Alignment	not modelled	9.7	12	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
43	c3a0bK	Alignment	not modelled	9.7	33	PDB header: electron transport Chain: K: PDB Molecule: photosystem ii reaction center protein k; PDBTitle: crystal structure of br-substituted photosystem ii complex
44	c3a0bk	Alignment	not modelled	9.7	33	PDB header: electron transport Chain: K: PDB Molecule: photosystem ii reaction center protein k; PDBTitle: crystal structure of br-substituted photosystem ii complex
45	d2qifa1	Alignment	not modelled	9.2	21	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
46	c2l3mA	Alignment	not modelled	9.0	17	PDB header: metal binding protein Chain: A: PDB Molecule: copper-ion-binding protein; PDBTitle: solution structure of the putative copper-ion-binding protein from <i>Bacillus anthracis</i> str. ames
47	d3pvia	Alignment	not modelled	9.0	16	Fold: Restriction endonuclease-like Superfamily: Restriction endonuclease-like Family: Restriction endonuclease PvuII
48	d1afia	Alignment	not modelled	9.0	19	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
49	c3e6qL	Alignment	not modelled	8.9	24	PDB header: isomerase Chain: L: PDB Molecule: putative 5-carboxymethyl-2-hydroxymuconate isomerase; PDBTitle: putative 5-carboxymethyl-2-hydroxymuconate isomerase from <i>Pseudomonas aeruginosa</i> .
50	c3a0hk	Alignment	not modelled	8.7	33	PDB header: electron transport Chain: K: PDB Molecule: photosystem ii reaction center protein k; PDBTitle: crystal structure of i-substituted photosystem ii complex
51	d1pfma	Alignment	not modelled	8.5	10	Fold: IL8-like Superfamily: Interleukin 8-like chemokines Family: Interleukin 8-like chemokines
52	d1fida	Alignment	not modelled	8.3	24	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
53	d2axti1	Alignment	not modelled	7.8	23	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein I, PsbI Family: PsbI-like
54	d1plfa	Alignment	not modelled	7.7	10	Fold: IL8-like Superfamily: Interleukin 8-like chemokines Family: Interleukin 8-like chemokines
55	c3eh4A	Alignment	not modelled	7.7	13	PDB header: oxidoreductase Chain: A: PDB Molecule: cytochrome c oxidase subunit 1; PDBTitle: structure of the reduced form of cytochrome ba3 oxidase from <i>Thermophilus</i>

56	c1vbwA	Alignment	not modelled	7.5	24	PDB header: protein binding Chain: A: PDB Molecule: trypsin inhibitor bgit; PDBTitle: crystal structure of bitter gourd trypsin inhibitor
57	d1lwuc1	Alignment	not modelled	7.5	31	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
58	d1wf3a2	Alignment	not modelled	7.4	21	Fold: Alpha-lytic protease prodomain-like Superfamily: Prokaryotic type KH domain (KH-domain type II) Family: Prokaryotic type KH domain (KH-domain type II)
59	d1ypci	Alignment	not modelled	7.4	29	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
60	d1f9ra	Alignment	not modelled	7.2	10	Fold: IL8-like Superfamily: Interleukin 8-like chemokines Family: Interleukin 8-like chemokines
61	c3l7qD	Alignment	not modelled	7.2	16	PDB header: translation Chain: D: PDB Molecule: putative translation initiation inhibitor, aldr regulator- PDBTitle: crystal structure of aldr from streptococcus mutans
62	d1to2i	Alignment	not modelled	7.0	29	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
63	c1q1kA	Alignment	not modelled	7.0	17	PDB header: transferase Chain: A: PDB Molecule: atp phosphoribosyltransferase; PDBTitle: structure of atp-phosphoribosyltransferase from e. coli complexed with2 pr-atp
64	d1h7sa2	Alignment	not modelled	6.9	37	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
65	clu5tB	Alignment	not modelled	6.9	14	PDB header: transport protein Chain: B: PDB Molecule: defective in vacuolar protein sorting; vps36p; PDBTitle: structure of the escrt-ii endosomal trafficking complex
66	c1hgvA	Alignment	not modelled	6.9	10	PDB header: virus Chain: A: PDB Molecule: ph75 inovirus major coat protein; PDBTitle: filamentous bacteriophage ph75
67	d2snii	Alignment	not modelled	6.9	30	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
68	c3dxsX	Alignment	not modelled	6.8	19	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
69	d1z9ha1	Alignment	not modelled	6.8	17	Fold: GST C-terminal domain-like Superfamily: GST C-terminal domain-like Family: Glutathione S-transferase (GST), C-terminal domain
70	d1dwma	Alignment	not modelled	6.7	31	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
71	c1y3kA	Alignment	not modelled	6.6	14	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
72	c1tinA	Alignment	not modelled	6.6	35	PDB header: serine protease inhibitor Chain: A: PDB Molecule: trypsin inhibitor v; PDBTitle: three-dimensional structure in solution of cucurbita maxima2 trypsin inhibitor-v determined by nmr spectroscopy
73	d1bkna2	Alignment	not modelled	6.6	26	Fold: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Superfamily: ATPase domain of HSP90 chaperone/DNA topoisomerase II/histidine kinase Family: DNA gyrase/MutL, N-terminal domain
74	d1s6ua	Alignment	not modelled	6.5	12	Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
75	d1l0wa2	Alignment	not modelled	6.4	16	Fold: DCoH-like Superfamily: GAD domain-like Family: GAD domain
76	c3hd7A	Alignment	not modelled	6.4	15	PDB header: exocytosis Chain: A: PDB Molecule: vesicle-associated membrane protein 2; PDBTitle: helical extension of the neuronal snare complex into the membrane,2 spacegroup c 1 2 1
77	d1egla	Alignment	not modelled	6.3	18	Fold: Cl-2 family of serine protease inhibitors Superfamily: Cl-2 family of serine protease inhibitors Family: Cl-2 family of serine protease inhibitors
78	c3qd1X	Alignment	not modelled	6.3	26	PDB header: sugar binding protein Chain: X: PDB Molecule: platelet binding protein gspb; PDBTitle: gspb plus alpha-2,3-sialyl (1-thioethyl)galactose
79	c2j61B	Alignment	not modelled	6.2	35	PDB header: lectin Chain: B: PDB Molecule: ficolin-2; PDBTitle: I-ficolin complexed to n-acetylglucosamine (forme c)
80	d1lwub1	Alignment	not modelled	6.2	19	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
81	d1m1jc1	Alignment	not modelled	6.2	30	Fold: Fibrinogen C-terminal domain-like Superfamily: Fibrinogen C-terminal domain-like Family: Fibrinogen C-terminal domain-like
82	d1wffa	Alignment	not modelled	6.1	30	Fold: AN1-like Zinc finger Superfamily: AN1-like Zinc finger

					Family:AN1-like Zinc finger
83	d1xrga_	Alignment	not modelled	6.1	16 Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: YjgF/L-PSP
84	d2aw0a_	Alignment	not modelled	6.1	17 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
85	d1wgl_	Alignment	not modelled	6.0	21 Fold: RuvA C-terminal domain-like Superfamily: UBA-like Family: CUE domain
86	c2hqnA_	Alignment	not modelled	6.0	21 PDB header: signaling protein Chain: A: PDB Molecule: putative transcriptional regulator; PDBTitle: structure of a atypical orphan response regulator protein revealed a2 new phosphorylation-independent regulatory mechanism
87	c1yg0A_	Alignment	not modelled	5.9	14 PDB header: metal transport Chain: A: PDB Molecule: cop associated protein; PDBTitle: solution structure of apo-copp from helicobacter pylori
88	c3cjsA_	Alignment	not modelled	5.9	15 PDB header: transferase/ribosomal protein Chain: A: PDB Molecule: ribosomal protein l11 methyltransferase; PDBTitle: minimal recognition complex between prma and ribosomal protein l11
89	c2ofhX_	Alignment	not modelled	5.8	17 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
90	c1a0oH_	Alignment	not modelled	5.7	15 PDB header: chemotaxis Chain: H: PDB Molecule: chea; PDBTitle: chey-binding domain of chea in complex with chey
91	d1jmkc_	Alignment	not modelled	5.7	9 Fold: alpha/beta-Hydrolases Superfamily: alpha/beta-Hydrolases Family: Thioesterase domain of polypeptide, polyketide and fatty acid synthases
92	c2kncA_	Alignment	not modelled	5.7	10 PDB header: cell adhesion Chain: A: PDB Molecule: integrin alpha-iiB; PDBTitle: platelet integrin alfaIIb-beta3 transmembrane-cytoplasmic2 heterocomplex
93	c1deqF_	Alignment	not modelled	5.6	24 PDB header: PDB COMPND:
94	c1w7pD_	Alignment	not modelled	5.6	14 PDB header: protein transport Chain: D: PDB Molecule: vps36p, ylr417w; PDBTitle: the crystal structure of endosomal complex escrt-ii2 (vps22/vps25/vps36)
95	d1qaha_	Alignment	not modelled	5.6	23 Fold: Bacillus chorismate mutase-like Superfamily: YjgF-like Family: YjgF/L-PSP
96	d1p6ta2	Alignment	not modelled	5.6	14 Fold: Ferredoxin-like Superfamily: HMA, heavy metal-associated domain Family: HMA, heavy metal-associated domain
97	c1b9uA_	Alignment	not modelled	5.6	22 PDB header: hydrolase Chain: A: PDB Molecule: protein (atp synthase); PDBTitle: membrane domain of the subunit b of the e.coli atp synthase
98	c3bvhC_	Alignment	not modelled	5.5	24 PDB header: blood clotting Chain: C: PDB Molecule: fibrinogen gamma chain; PDBTitle: crystal structure of recombinant gamma364a fibrinogen fragment d with2 the peptide ligand gly-pro-arg-pro-amide
99	c2hpcF_	Alignment	not modelled	5.5	24 PDB header: blood clotting Chain: F: PDB Molecule: fibrinogen, gamma polypeptide; PDBTitle: crystal structure of fragment d from human fibrinogen complexed with2 gly-pro-arg-pro-amide.