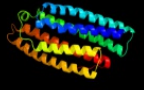
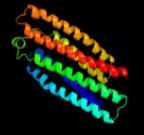
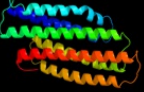
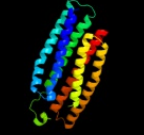
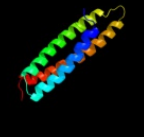
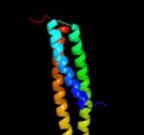
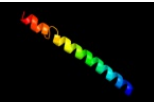
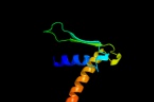
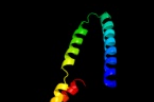


Phyre2

Email	l.a.kelley@imperial.ac.uk
Description	P0AF43
Date	Thu Jan 5 11:25:06 GMT 2012
Unique Job ID	a3566806da25abee

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	dlsumb_	 Alignment		99.9	12	Fold: Spectrin repeat-like Superfamily: PhoU-like Family: PhoU-like
2	dlt72a_	 Alignment		99.9	12	Fold: Spectrin repeat-like Superfamily: PhoU-like Family: PhoU-like
3	dlxwma_	 Alignment		99.9	11	Fold: Spectrin repeat-like Superfamily: PhoU-like Family: PhoU-like
4	c2i0mA_	 Alignment		99.9	15	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: phosphate transport system protein phou; PDBTitle: crystal structure of the phosphate transport system regulatory protein2 phou from streptococcus pneumoniae
5	c3l39A_	 Alignment		99.5	13	PDB header: phosphate-binding protein Chain: A: PDB Molecule: putative phou-like phosphate regulatory protein; PDBTitle: crystal structure of putative phou-like phosphate regulatory2 protein (bt4638) from bacteroides thetaiotaomicron vpi-54823 at 1.93 a resolution
6	c2ol1B_	 Alignment		99.3	12	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein; PDBTitle: crystal structure of a phou-like protein (so_3770) from shewanella2 oneidensis mr-1 at 2.00 a resolution
7	dlvcta1	 Alignment		98.8	18	Fold: Spectrin repeat-like Superfamily: PhoU-like Family: PhoU-like
8	c2bknA_	 Alignment		98.4	17	PDB header: membrane protein Chain: A: PDB Molecule: hypothetical protein ph0236; PDBTitle: structure analysis of unknown function protein
9	c3pjaK_	 Alignment		59.3	12	PDB header: hydrolase Chain: K: PDB Molecule: translin-associated protein x; PDBTitle: crystal structure of human c3po complex
10	c2wb7B_	 Alignment		59.2	13	PDB header: unknown function Chain: B: PDB Molecule: pt26-6p; PDBTitle: pt26-6p
11	c3ke4B_	 Alignment		54.9	11	PDB header: transferase Chain: B: PDB Molecule: hypothetical cytosolic protein; PDBTitle: crystal structure of a pduo-type atp:cob(i)alamin adenosyltransferase2 from bacillus cereus

12	c2z5hB_	Alignment		48.2	20	PDB header: contractile protein Chain: B: PDB Molecule: general control protein gcn4 and tropomyosin PDBTitle: crystal structure of the head-to-tail junction of2 tropomyosin complexed with a fragment of tnt
13	dlp1ja1	Alignment		46.2	35	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
14	d2o8pa1	Alignment		44.2	9	Fold: alpha-alpha superhelix Superfamily: 14-3-3 protein Family: 14-3-3 protein
15	dlvkoa1	Alignment		43.5	24	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
16	dlrtyb_	Alignment		43.2	18	Fold: Ferritin-like Superfamily: Cobalamin adenosyltransferase-like Family: Cobalamin adenosyltransferase
17	dljlja_	Alignment		41.0	16	Fold: alpha-alpha superhelix Superfamily: Translin Family: Translin
18	dlxppa_	Alignment		35.3	10	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RBP11/RpoL
19	c2hn1A_	Alignment		33.6	10	PDB header: metal transport Chain: A: PDB Molecule: magnesium and cobalt transporter; PDBTitle: crystal structure of a cora soluble domain from a. fulgidus in complex2 with co2+
20	c3qd8M_	Alignment		33.5	9	PDB header: metal binding protein Chain: M: PDB Molecule: probable bacterioferritin bfrb; PDBTitle: crystal structure of mycobacterium tuberculosis bfrb
21	dli5na_	Alignment	not modelled	32.4	9	Fold: Four-helical up-and-down bundle Superfamily: Histidine-containing phosphotransfer domain, HPT domain Family: Chemotaxis protein CheA P1 domain
22	c3t6gB_	Alignment	not modelled	32.1	12	PDB header: signaling protein, cell adhesion Chain: B: PDB Molecule: breast cancer anti-estrogen resistance protein 1; PDBTitle: structure of the complex between nsp3 (shep1) and p130cas
23	dls3qa1	Alignment	not modelled	30.9	8	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
24	c2yu0A_	Alignment	not modelled	30.7	25	PDB header: signaling protein Chain: A: PDB Molecule: interferon-activable protein 205; PDBTitle: solution structures of the paad_dapin domain of mus2 musculus interferon-activatable protein 205
25	c3p5nA_	Alignment	not modelled	30.0	13	PDB header: transport protein Chain: A: PDB Molecule: riboflavin uptake protein; PDBTitle: structure and mechanism of the s component of a bacterial ecf2 transporter
26	c2jd8C_	Alignment	not modelled	29.8	7	PDB header: metal transport Chain: C: PDB Molecule: ferritin homolog; PDBTitle: crystal structure of the zn-soaked ferritin from the2 hyperthermophilic archaeal anaerobe pyrococcus furiosus
27	c1vkoA_	Alignment	not modelled	29.4	24	PDB header: isomerase Chain: A: PDB Molecule: inositol-3-phosphate synthase; PDBTitle: crystal structure of inositol-3-phosphate synthase (ce21227) from2 caenorhabditis elegans at 2.30 a resolution
28	c2lchA_	Alignment	not modelled	29.4	11	PDB header: de novo protein Chain: A: PDB Molecule: protein or38; PDBTitle: solution nmr structure of a protein with a redesigned hydrophobic2 core, northeast structural genomics consortium target or38

29	c1plhD_	Alignment	not modelled	29.3	35	PDB header: isomerase Chain: D: PDB Molecule: inositol-3-phosphate synthase; PDBTitle: crystal structure of the 1l-myo-inositol/nad+ complex
30	d1k6ka_	Alignment	not modelled	29.2	14	Fold: Double Clp-N motif Superfamily: Double Clp-N motif Family: Double Clp-N motif
31	c1kmiZ_	Alignment	not modelled	28.6	6	PDB header: signaling protein Chain: Z: PDB Molecule: chemotaxis protein chez; PDBTitle: crystal structure of an e.coli chemotaxis protein, chez
32	d2e74f1	Alignment	not modelled	28.1	29	Fold: Single transmembrane helix Superfamily: PetM subunit of the cytochrome b6f complex Family: PetM subunit of the cytochrome b6f complex
33	d1zwwa1	Alignment	not modelled	27.3	11	Fold: BAR/IMD domain-like Superfamily: BAR/IMD domain-like Family: BAR domain
34	c1p58C_	Alignment	not modelled	27.2	33	PDB header: virus Chain: C: PDB Molecule: major envelope protein e; PDBTitle: complex organization of dengue virus membrane proteins as revealed by2 9.5 angstrom cryo-em reconstruction
35	d2o02a1	Alignment	not modelled	27.1	14	Fold: alpha-alpha superhelix Superfamily: 14-3-3 protein Family: 14-3-3 protein
36	c2gzdC_	Alignment	not modelled	26.8	26	PDB header: protein transport Chain: C: PDB Molecule: rab11 family-interacting protein 2; PDBTitle: crystal structure of rab11 in complex with rab11-fip2
37	c2qrxA_	Alignment	not modelled	25.9	9	PDB header: dna binding protein Chain: A: PDB Molecule: gm27569p; PDBTitle: crystal structure of drosophila melanogaster translin2 protein
38	d1eq1a_	Alignment	not modelled	25.8	11	Fold: Apolipoprotein-III Superfamily: Apolipoprotein-III Family: Apolipoprotein-III
39	c2qr4B_	Alignment	not modelled	25.7	5	PDB header: hydrolase Chain: B: PDB Molecule: peptidase m3b, oligoendopeptidase f; PDBTitle: crystal structure of oligoendopeptidase-f from enterococcus faecium
40	d1vlga_	Alignment	not modelled	25.6	4	Fold: Ferritin-like Superfamily: Ferritin-like Family: Ferritin
41	c1ha0A_	Alignment	not modelled	23.9	10	PDB header: viral protein Chain: A: PDB Molecule: protein (hemagglutinin precursor); PDBTitle: hemagglutinin precursor ha0
42	d1ul1a1	Alignment	not modelled	23.8	18	Fold: NAD(P)-binding Rossmann-fold domains Superfamily: NAD(P)-binding Rossmann-fold domains Family: Glyceraldehyde-3-phosphate dehydrogenase-like, N-terminal domain
43	d1or4a_	Alignment	not modelled	23.8	13	Fold: Globin-like Superfamily: Globin-like Family: Globins
44	c3fb2B_	Alignment	not modelled	23.8	8	PDB header: structural protein Chain: B: PDB Molecule: spectrin alpha chain, brain spectrin; PDBTitle: crystal structure of the human brain alpha spectrin repeats2 15 and 16. northeast structural genomics consortium target3 hr5563a.
45	d2elba1	Alignment	not modelled	23.4	11	Fold: BAR/IMD domain-like Superfamily: BAR/IMD domain-like Family: BAR domain
46	c3kp3B_	Alignment	not modelled	22.3	17	PDB header: transcription regulator/antibiotic Chain: B: PDB Molecule: transcriptional regulator tcar; PDBTitle: staphylococcus epidermidis in complex with ampicillin
47	c3hnbW_	Alignment	not modelled	22.2	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a basic coiled-coil protein of unknown function2 from eubacterium eligens atcc 27750
48	c2kvcA_	Alignment	not modelled	22.2	10	PDB header: unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: solution structure of the mycobacterium tuberculosis protein rv0543c,2 a member of the duf3349 superfamily. seattle structural genomics3 center for infectious disease target mytud.17112.a
49	c2wr2B_	Alignment	not modelled	22.1	10	PDB header: viral protein Chain: B: PDB Molecule: hemagglutinin; PDBTitle: structure of influenza h2 avian hemagglutinin with avian2 receptor
50	d2axti1	Alignment	not modelled	22.0	14	Fold: Single transmembrane helix Superfamily: Photosystem II reaction center protein I, Psbl Family: Psbl-like
51	d1dlca3	Alignment	not modelled	21.9	9	Fold: Toxins' membrane translocation domains Superfamily: delta-Endotoxin (insecticide), N-terminal domain Family: delta-Endotoxin (insecticide), N-terminal domain
52	d2d2sa1	Alignment	not modelled	21.6	10	Fold: alpha-alpha superhelix Superfamily: Cullin repeat-like Family: Exocyst complex component
53	c3lk5A_	Alignment	not modelled	21.6	13	PDB header: transferase Chain: A: PDB Molecule: geranylgeranyl pyrophosphate synthase; PDBTitle: crystal structure of putative geranylgeranyl pyrophosphate synthase2 from corynebacterium glutamicum
54	c2nt8A_	Alignment	not modelled	19.8	13	PDB header: transferase Chain: A: PDB Molecule: cobalamin adenosyltransferase; PDBTitle: atp bound at the active site of a pduo type atp:co(i)rrinoid2 adenosyltransferase from lactobacillus reuteri
						PDB header: viral protein

55	c1xn1A_	Alignment	not modelled	19.8	44	Chain: A: PDB Molecule: membrane protein gp37; PDBTitle: aslv fusion peptide
56	c3kyiA_	Alignment	not modelled	19.8	13	PDB header: transferase Chain: A: PDB Molecule: putative histidine protein kinase; PDBTitle: crystal structure of the phosphorylated p1 domain of chea3 in complex2 with chey6 from r. sphaeroides
57	d1tqga_	Alignment	not modelled	19.7	12	Fold: Four-helical up-and-down bundle Superfamily: Histidine-containing phosphotransfer domain, HPT domain Family: Chemotaxis protein CheA P1 domain
58	c2zhzC_	Alignment	not modelled	19.6	14	PDB header: transferase Chain: C: PDB Molecule: atp:cob(i)alamin adenosyltransferase, putative; PDBTitle: crystal structure of a pduo-type atp:cobalamin adenosyltransferase2 from burkholderia thailandensis
59	d1twfk_	Alignment	not modelled	19.5	24	Fold: DCoH-like Superfamily: RBP11-like subunits of RNA polymerase Family: RBP11/RpoL
60	c3nmdA_	Alignment	not modelled	19.4	17	PDB header: transferase Chain: A: PDB Molecule: cgmp dependent protein kinase; PDBTitle: crystal structure of the leucine zipper domain of cgmp dependent2 protein kinase i beta
61	c1b9uA_	Alignment	not modelled	19.2	13	PDB header: hydrolase Chain: A: PDB Molecule: protein (atp synthase); PDBTitle: membrane domain of the subunit b of the e.coli atp synthase
62	d1t01a1	Alignment	not modelled	19.2	14	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
63	c2bbjB_	Alignment	not modelled	18.7	6	PDB header: metal transport/membrane protein Chain: B: PDB Molecule: divalent cation transport-related protein; PDBTitle: crystal structure of the cora mg2+ transporter
64	c3axjB_	Alignment	not modelled	18.7	14	PDB header: dna binding protein Chain: B: PDB Molecule: translin associated factor x, isoform b; PDBTitle: high resolution crystal structure of c3po
65	d256ba_	Alignment	not modelled	18.5	17	Fold: Four-helical up-and-down bundle Superfamily: Cytochromes Family: Cytochrome b562
66	c2c5iT_	Alignment	not modelled	18.5	6	PDB header: protein transport Chain: T: PDB Molecule: t-snare affecting a late golgi compartment PDBTitle: n-terminal domain of tlg1 complexed with n-terminus of2 vps51 in distorted conformation
67	c2ariA_	Alignment	not modelled	18.4	30	PDB header: viral protein Chain: A: PDB Molecule: envelope polypeptide gp160; PDBTitle: solution structure of micelle-bound fusion domain of hiv-12 gp41
68	d1rkea1	Alignment	not modelled	18.3	13	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
69	c1j1dF_	Alignment	not modelled	18.3	20	PDB header: contractile protein Chain: F: PDB Molecule: troponin i; PDBTitle: crystal structure of the 46kda domain of human cardiac2 troponin in the ca2+ saturated form
70	c3mp7B_	Alignment	not modelled	18.3	33	PDB header: protein transport Chain: B: PDB Molecule: preprotein translocase subunit sece; PDBTitle: lateral opening of a translocon upon entry of protein suggests the2 mechanism of insertion into membranes
71	d1io1a_	Alignment	not modelled	18.2	19	Fold: Phase 1 flagellin Superfamily: Phase 1 flagellin Family: Phase 1 flagellin
72	c2k6sB_	Alignment	not modelled	18.2	26	PDB header: protein transport Chain: B: PDB Molecule: rab11fip2 protein; PDBTitle: structure of rab11-fip2 c-terminal coiled-coil domain
73	c2p90B_	Alignment	not modelled	18.1	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein cgl1923; PDBTitle: the crystal structure of a protein of unknown function from2 corynebacterium glutamicum atcc 13032
74	c1ykuB_	Alignment	not modelled	18.1	13	PDB header: unknown function Chain: B: PDB Molecule: hypothetical protein pxo2-61; PDBTitle: crystal structure of a sensor domain homolog
75	c3hj1A_	Alignment	not modelled	18.0	12	PDB header: proton transport Chain: A: PDB Molecule: flagellar motor switch protein flig; PDBTitle: the structure of full-length flig from aquifex aeolicus
76	c1ytzI_	Alignment	not modelled	18.0	11	PDB header: contractile protein Chain: I: PDB Molecule: troponin i; PDBTitle: crystal structure of skeletal muscle troponin in the ca2+-2 activated state
77	c3sogA_	Alignment	not modelled	18.0	7	PDB header: structural protein Chain: A: PDB Molecule: amphiphysin; PDBTitle: crystal structure of the bar domain of human amphiphysin, isoform 1
78	d1xata_	Alignment	not modelled	17.7	20	Fold: Single-stranded left-handed beta-helix Superfamily: Trimeric LpxA-like enzymes Family: Galactoside acetyltransferase-like
79	c3bt6B_	Alignment	not modelled	17.5	14	PDB header: viral protein Chain: B: PDB Molecule: influenza b hemagglutinin (ha); PDBTitle: crystal structure of influenza b virus hemagglutinin
80	c3a0bX_	Alignment	not modelled	17.5	19	PDB header: electron transport Chain: X: PDB Molecule: photosystem ii reaction center protein x; PDBTitle: crystal structure of br-substituted photosystem ii complex
81	c3a0bx_	Alignment	not modelled	17.5	19	PDB header: electron transport Chain: X: PDB Molecule: photosystem ii reaction center protein x;

					PDBTitle: crystal structure of br-substituted photosystem ii complex
82	c3a0hX_	Alignment	not modelled	17.5	19 PDB header: electron transport Chain: X: PDB Molecule: photosystem ii reaction center protein x; PDBTitle: crystal structure of i-substituted photosystem ii complex
83	c3a0hx_	Alignment	not modelled	17.5	19 PDB header: electron transport Chain: X: PDB Molecule: photosystem ii reaction center protein x; PDBTitle: crystal structure of i-substituted photosystem ii complex
84	d1ciia1	Alignment	not modelled	17.5	15 Fold: Toxins' membrane translocation domains Superfamily: Colicin Family: Colicin
85	d1s35a2	Alignment	not modelled	17.5	7 Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
86	d1t6ua_	Alignment	not modelled	17.5	13 Fold: Four-helical up-and-down bundle Superfamily: Nickel-containing superoxide dismutase, NiSOD Family: Nickel-containing superoxide dismutase, NiSOD
87	d2iuba1	Alignment	not modelled	17.3	10 Fold: CorA soluble domain-like Superfamily: CorA soluble domain-like Family: CorA soluble domain-like
88	c3ci9B_	Alignment	not modelled	17.3	14 PDB header: transcription Chain: B: PDB Molecule: heat shock factor-binding protein 1; PDBTitle: crystal structure of the human hsbp1
89	c1yv0l_	Alignment	not modelled	17.3	11 PDB header: contractile protein Chain: I: PDB Molecule: troponin i, fast skeletal muscle; PDBTitle: crystal structure of skeletal muscle troponin in the ca2+-2 free state
90	c1hf9B_	Alignment	not modelled	17.3	23 PDB header: atpase inhibitor Chain: B: PDB Molecule: atpase inhibitor (mitochondrial); PDBTitle: c-terminal coiled-coil domain from bovine if1
91	c1dlcA_	Alignment	not modelled	17.2	9 PDB header: toxin Chain: A: PDB Molecule: delta-endotoxin cryiiiia; PDBTitle: crystal structure of insecticidal delta-endotoxin from2 bacillus thuringiensis at 2.5 angstroms resolution
92	c1zxb_	Alignment	not modelled	17.2	10 PDB header: structural genomics, unknown function Chain: B: PDB Molecule: hypothetical protein mg377 homolog; PDBTitle: crystal structure of the hypthetical mycoplasma protein,2 mpn555
93	c1t6fA_	Alignment	not modelled	17.1	19 PDB header: cell cycle Chain: A: PDB Molecule: geminin; PDBTitle: crystal structure of the coiled-coil dimerization motif of2 geminin
94	c3o3nA_	Alignment	not modelled	16.9	12 PDB header: lyase Chain: A: PDB Molecule: alpha-subunit 2-hydroxyisocaproyl-coa dehydratase; PDBTitle: (r)-2-hydroxyisocaproyl-coa dehydratase in complex with its substrate2 (r)-2-hydroxyisocaproyl-coa
95	c3pl4A_	Alignment	not modelled	16.9	13 PDB header: motor protein Chain: A: PDB Molecule: flagellar motor switch protein; PDBTitle: crystal structure of flig (residue 116-343) from h. pylori
96	c3l8jA_	Alignment	not modelled	16.8	12 PDB header: protein binding Chain: A: PDB Molecule: programmed cell death protein 10; PDBTitle: crystal structure of ccm3, a cerebral cavernous malformation protein2 critical for vascular integrity
97	d2etsa1	Alignment	not modelled	16.8	5 Fold: Four-helical up-and-down bundle Superfamily: YppE-like Family: YppE-like
98	c1s5lx_	Alignment	not modelled	16.6	19 PDB header: photosynthesis Chain: X: PDB Molecule: photosystem ii psbx protein; PDBTitle: architecture of the photosynthetic oxygen evolving center
99	c2ah6B_	Alignment	not modelled	16.5	18 PDB header: transferase Chain: B: PDB Molecule: bh1595, unknown conserved protein; PDBTitle: crystal structure of a putative cobalamin adenosyltransferase (bh1595)2 from bacillus halodurans c-125 at 1.60 a resolution