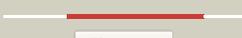
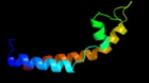
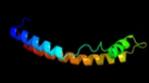
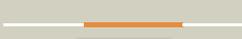
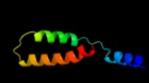
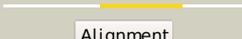
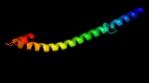
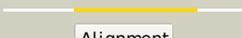
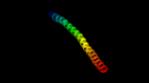


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	P0AAA9
Date	Thu Jan 5 11:12:24 GMT 2012
Unique Job ID	694373eff02fad96

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c3layF_	 Alignment		99.8	71	PDB header: metal binding protein Chain: F: PDB Molecule: zinc resistance-associated protein; PDBTitle: alpha-helical barrel formed by the decamer of the zinc resistance-2 associated protein (stm4172) from salmonella enterica subsp. enterica3 serovar typhimurium str. It2
2	c3epvB_	 Alignment		99.3	16	PDB header: metal binding protein Chain: B: PDB Molecule: nickel and cobalt resistance protein cnrr; PDBTitle: x-ray structure of the metal-sensor cnrx in both the apo- and copper-2 bound forms
3	c3qzCA_	 Alignment		99.0	17	PDB header: signaling protein Chain: A: PDB Molecule: periplasmic protein cpxp; PDBTitle: structure of the periplasmic stress response protein cpxp
4	c3oeoD_	 Alignment		98.9	17	PDB header: signaling protein Chain: D: PDB Molecule: spheroplast protein y; PDBTitle: the crystal structure e. coli spy
5	c3o39A_	 Alignment		98.9	17	PDB header: chaperone Chain: A: PDB Molecule: periplasmic protein related to spheroblast formation; PDBTitle: crystal structure of spy
6	c3itfA_	 Alignment		98.9	14	PDB header: signaling protein Chain: A: PDB Molecule: periplasmic adaptor protein cpxp; PDBTitle: structural basis for the inhibitory function of the cpxp adaptor2 protein
7	d1gqea_	 Alignment		83.6	22	Fold: Release factor Superfamily: Release factor Family: Release factor
8	c1j1eC_	 Alignment		78.7	17	PDB header: contractile protein Chain: C: PDB Molecule: troponin i; PDBTitle: crystal structure of the 52kda domain of human cardiac2 troponin in the ca2+ saturated form
9	c2w6aB_	 Alignment		77.0	20	PDB header: signaling protein Chain: B: PDB Molecule: arf gtpase-activating protein git1; PDBTitle: x-ray structure of the dimeric git1 coiled-coil domain
10	c2gl2B_	 Alignment		75.4	15	PDB header: cell adhesion Chain: B: PDB Molecule: adhesion a; PDBTitle: crystal structure of the tetra mutant (t66g,r67g,f68g,2 y69g) of bacterial adhesin fada
11	c1ei3E_	 Alignment		73.7	5	PDB header: PDB COMPND:

12	c3ojaB_	Alignment		72.3	15	PDB header: protein binding Chain: B: PDB Molecule: anopheles plasmodium-responsive leucine-rich repeat protein PDBTitle: crystal structure of Irim1/apl1c complex
13	c3ghgK_	Alignment		70.9	8	PDB header: blood clotting Chain: K: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of human fibrinogen
14	c1deqF_	Alignment		68.7	12	PDB header: PDB COMPND:
15	c3bt6B_	Alignment		68.0	21	PDB header: viral protein Chain: B: PDB Molecule: influenza b hemagglutinin (ha); PDBTitle: crystal structure of influenza b virus hemagglutinin
16	c2ke4A_	Alignment		67.8	16	PDB header: membrane protein Chain: A: PDB Molecule: cdc42-interacting protein 4; PDBTitle: the nmr structure of the tc10 and cdc42 interacting domain2 of cip4
17	c1deqO_	Alignment		67.7	8	PDB header: PDB COMPND:
18	c3hnwB_	Alignment		67.3	13	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
19	d1cuna2	Alignment		67.1	16	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
20	c1yv0I_	Alignment		66.8	21	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
21	c2gd7B_	Alignment	not modelled	63.5	12	PDB header: transcription Chain: B: PDB Molecule: hexim1 protein; PDBTitle: the structure of the cyclin t-binding domain of hexim12 reveals the molecular basis for regulation of3 transcription elongation
22	d1s35a2	Alignment	not modelled	63.4	16	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
23	c3kltB_	Alignment	not modelled	59.4	13	PDB header: structural protein Chain: B: PDB Molecule: vimentin; PDBTitle: crystal structure of a vimentin fragment
24	c2w9yA_	Alignment	not modelled	53.6	12	PDB header: lipid transport Chain: A: PDB Molecule: fatty acid/retinol binding protein protein 7, PDBTitle: the structure of the lipid binding protein ce-far-7 from2 caenorhabditis elegans
25	c2iakA_	Alignment	not modelled	53.3	16	PDB header: cell adhesion Chain: A: PDB Molecule: bullous pemphigoid antigen 1, isoform 5; PDBTitle: crystal structure of a protease resistant fragment of the plakin2 domain of bullous pemphigoid antigen1 (bpag1)
26	d2spca_	Alignment	not modelled	51.1	19	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
27	c2v7sA_	Alignment	not modelled	50.2	19	PDB header: unknown function Chain: A: PDB Molecule: probable conserved lipoprotein lppa; PDBTitle: crystal structure of the putative lipoprotein lppa from2 mycobacterium tuberculosis
28	d2oeza1	Alignment	not modelled	49.1	23	Fold: YacF-like Superfamily: YacF-like Family: YacF-like

29	c2jo8B_	Alignment	not modelled	49.0	10	PDB header: transferase Chain: B: PDB Molecule: serine/threonine-protein kinase 4; PDBTitle: solution structure of c-terminal domain of human mammalian2 sterile 20-like kinase 1 (mst1)
30	c3m9bK_	Alignment	not modelled	48.1	17	PDB header: chaperone Chain: K: PDB Molecule: proteasome-associated atpase; PDBTitle: crystal structure of the amino terminal coiled coil domain and the2 inter domain of the mycobacterium tuberculosis proteasomal atpase mpa
31	d1vqov1	Alignment	not modelled	48.0	17	Fold: Long alpha-hairpin Superfamily: Ribosomal protein L29 (L29p) Family: Ribosomal protein L29 (L29p)
32	c2a3dA_	Alignment	not modelled	46.5	23	PDB header: three-helix bundle Chain: A: PDB Molecule: protein (de novo three-helix bundle); PDBTitle: solution structure of a de novo designed single chain three-2 helix bundle (a3d)
33	c3d5cX_	Alignment	not modelled	46.5	17	PDB header: ribosome Chain: X: PDB Molecule: peptide chain release factor 1; PDBTitle: structural basis for translation termination on the 70s ribosome. this2 file contains the 30s subunit, release factor 1 (rf1), two trna, and3 mrna molecules of the second 70s ribosome. the entire crystal4 structure contains two 70s ribosomes as described in remark 400.
34	c3ls1A_	Alignment	not modelled	45.4	18	PDB header: photosynthesis Chain: A: PDB Molecule: sll1638 protein; PDBTitle: crystal structure of cyanobacterial psbq from synechocystis2 sp. pcc 6803 complexed with zn2+
35	d1quua1	Alignment	not modelled	44.3	16	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
36	c1wpaA_	Alignment	not modelled	42.6	17	PDB header: cell adhesion Chain: A: PDB Molecule: occludin; PDBTitle: 1.5 angstrom crystal structure of human occludin fragment2 413-522
37	c1xzqA_	Alignment	not modelled	40.9	13	PDB header: hydrolase Chain: A: PDB Molecule: probable trna modification gtpase trme; PDBTitle: structure of the gtp-binding protein trme from thermotoga2 maritima complexed with 5-formyl-thf
38	c2xdjF_	Alignment	not modelled	40.8	12	PDB header: unknown function Chain: F: PDB Molecule: uncharacterized protein ybgf; PDBTitle: crystal structure of the n-terminal domain of e.coli ybgf
39	c2js5B_	Alignment	not modelled	40.1	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: uncharacterized protein; PDBTitle: nmr structure of protein q60c73_metca. northeast structural2 genomics consortium target mcr1
40	d1u5pa1	Alignment	not modelled	39.7	16	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
41	c2fxmB_	Alignment	not modelled	38.5	10	PDB header: contractile protein Chain: B: PDB Molecule: myosin heavy chain, cardiac muscle beta isoform; PDBTitle: structure of the human beta-myosin s2 fragment
42	c1deqD_	Alignment	not modelled	38.3	17	PDB header: PDB COMPND:
43	c2j375_	Alignment	not modelled	38.1	16	PDB header: ribosome Chain: 5: PDB Molecule: ribosomal protein l35; PDBTitle: model of mammalian srp bound to 80s rncs
44	c2eqbC_	Alignment	not modelled	38.0	13	PDB header: endocytosis/exocytosis Chain: C: PDB Molecule: rab guanine nucleotide exchange factor sec2; PDBTitle: crystal structure of the rab gtpase sec4p, the sec2p gef2 domain, and phosphate complex
45	d1u5pa2	Alignment	not modelled	37.8	14	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
46	c3kbtA_	Alignment	not modelled	37.4	13	PDB header: structural protein Chain: A: PDB Molecule: spectrin beta chain, erythrocyte; PDBTitle: crystal structure of the ankyrin binding domain of human erythroid2 beta spectrin (repeats 13-15) in complex with the spectrin binding3 domain of human erythroid ankyrin (zu5-ank)
47	d1s35a1	Alignment	not modelled	36.4	9	Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
48	d1cxzb_	Alignment	not modelled	36.3	14	Fold: Long alpha-hairpin Superfamily: HR1 repeat Family: HR1 repeat
49	c3hizB_	Alignment	not modelled	36.2	15	PDB header: transferase/oncoprotein Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit PDBTitle: crystal structure of p110alpha h1047r mutant in complex with2 nish2 of p85alpha
50	c2oszA_	Alignment	not modelled	35.8	10	PDB header: structural protein Chain: A: PDB Molecule: nucleoporin p58/p45; PDBTitle: structure of nup58/45 suggests flexible nuclear pore diameter by2 intermolecular sliding
51	c2c5iT_	Alignment	not modelled	35.7	20	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
52	c2p2uA_	Alignment	not modelled	35.4	15	PDB header: dna binding protein Chain: A: PDB Molecule: host-nuclease inhibitor protein gam, putative; PDBTitle: crystal structure of putative host-nuclease inhibitor2 protein gam from desulfovibrio vulgaris PDB header: ribosomal protein/rna

53	c2zkrv_	Alignment	not modelled	34.2	11	Chain: V: PDB Molecule: rna expansion segment es9 part2; PDBTitle: structure of a mammalian ribosomal 60s subunit within an 2 80s complex obtained by docking homology models of the rna3 and proteins into an 8.7 a cryo-em map
54	c3csxA_	Alignment	not modelled	33.4	18	PDB header: metal binding protein,unknown function Chain: A: PDB Molecule: putative uncharacterized protein; PDBTitle: structural characterization of a protein in the duf6832 family- crystal structure of cce_0567 from the3 cyanobacterium cyanothece 51142.
55	d1st6a3	Alignment	not modelled	32.3	19	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
56	c3ol1A_	Alignment	not modelled	30.7	8	PDB header: structural protein Chain: A: PDB Molecule: vimentin; PDBTitle: crystal structure of vimentin (fragment 144-251) from homo sapiens,2 northeast structural genomics consortium target hr4796b
57	d1uklc_	Alignment	not modelled	30.6	22	Fold: HLH-like Superfamily: HLH, helix-loop-helix DNA-binding domain Family: HLH, helix-loop-helix DNA-binding domain
58	d1olma1	Alignment	not modelled	29.8	17	Fold: RuvA C-terminal domain-like Superfamily: CRAL/TRIO N-terminal domain Family: CRAL/TRIO N-terminal domain
59	c3f31B_	Alignment	not modelled	29.4	17	PDB header: actin binding, structural protein Chain: B: PDB Molecule: spectrin alpha chain, brain; PDBTitle: crystal structure of the n-terminal region of alpha-i-spectrin2 tetramerization domain
60	c3m0dC_	Alignment	not modelled	29.4	13	PDB header: signaling protein Chain: C: PDB Molecule: tnf receptor-associated factor 1; PDBTitle: crystal structure of the traf1:traf2:ciap2 complex
61	c2ihr1_	Alignment	not modelled	28.8	26	PDB header: translation Chain: 1: PDB Molecule: peptidi chain release factor 2; PDBTitle: rf2 of thermus thermophilus
62	c3gehA_	Alignment	not modelled	28.7	16	PDB header: hydrolase Chain: A: PDB Molecule: trna modification gtpase mnme; PDBTitle: crystal structure of mnme from nostoc in complex with gdp, folinic2 acid and zn
63	c3hfdA_	Alignment	not modelled	28.6	9	PDB header: chaperone, protein transport Chain: A: PDB Molecule: nucleosome assembly protein 1; PDBTitle: nucleosome assembly protein 1 from plasmodium knowlesi
64	c2j8pA_	Alignment	not modelled	27.9	22	PDB header: nuclear protein Chain: A: PDB Molecule: cleavage stimulation factor 64 kda subunit; PDBTitle: nmr structure of c-terminal domain of human cstf-64
65	c3fs3A_	Alignment	not modelled	27.3	11	PDB header: chaperone Chain: A: PDB Molecule: nucleosome assembly protein 1, putative; PDBTitle: crystal structure of malaria parasite nucleosome assembly protein2 (nap)
66	c2an7A_	Alignment	not modelled	26.9	15	PDB header: dna binding protein Chain: A: PDB Molecule: protein pard; PDBTitle: solution structure of the bacterial antidote pard
67	c3ni0A_	Alignment	not modelled	26.9	20	PDB header: immune system Chain: A: PDB Molecule: bone marrow stromal antigen 2; PDBTitle: crystal structure of mouse bst-2/tetherin ectodomain
68	c1xawA_	Alignment	not modelled	26.6	19	PDB header: cell adhesion Chain: A: PDB Molecule: occludin; PDBTitle: crystal structure of the cytoplasmic distal c-terminal2 domain of occludin
69	c1s35A_	Alignment	not modelled	26.4	16	PDB header: structural protein Chain: A: PDB Molecule: spectrin beta chain, erythrocyte; PDBTitle: crystal structure of repeats 8 and 9 of human erythroid2 spectrin
70	d1st6a4	Alignment	not modelled	26.0	27	Fold: Four-helical up-and-down bundle Superfamily: alpha-catenin/vinculin-like Family: alpha-catenin/vinculin
71	d1ydx1	Alignment	not modelled	25.6	13	Fold: DNA methylase specificity domain Superfamily: DNA methylase specificity domain Family: Type I restriction modification DNA specificity domain
72	c3bhpA_	Alignment	not modelled	25.5	19	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: upf0291 protein yznc; PDBTitle: crystal structure of upf0291 protein yznc from bacillus2 subtilis at resolution 2.0 a. northeast structural3 genomics consortium target sr384
73	d1akha_	Alignment	not modelled	25.4	7	Fold: DNA/RNA-binding 3-helical bundle Superfamily: Homeodomain-like Family: Homeodomain
74	c3ghgD_	Alignment	not modelled	25.0	15	PDB header: blood clotting Chain: D: PDB Molecule: fibrinogen alpha chain; PDBTitle: crystal structure of human fibrinogen
75	d1lvaa3	Alignment	not modelled	24.7	5	Fold: DNA/RNA-binding 3-helical bundle Superfamily: "Winged helix" DNA-binding domain Family: C-terminal fragment of elongation factor SelB
76	c2no2A_	Alignment	not modelled	24.5	14	PDB header: cell adhesion Chain: A: PDB Molecule: huntingtin-interacting protein 1; PDBTitle: crystal structure of the dl1rkn-containing coiled-coil2 domain of huntingtin-interacting protein 1
77	c3u59C_	Alignment	not modelled	24.3	10	PDB header: contractile protein Chain: C: PDB Molecule: tropomyosin beta chain; PDBTitle: n-terminal 98-aa fragment of smooth muscle tropomyosin beta
78	c3qh9A_	Alianment	not modelled	23.9	13	PDB header: structural protein Chain: A: PDB Molecule: liprin-beta-2;

					PDBTitle: human liprin-beta2 coiled-coil
79	d1ykhb1	Alignment	not modelled	23.7	16 Fold: Mediator hinge subcomplex-like Superfamily: Mediator hinge subcomplex-like Family: CSE2-like
80	d1hcia4	Alignment	not modelled	23.5	12 Fold: Spectrin repeat-like Superfamily: Spectrin repeat Family: Spectrin repeat
81	c3m5gD_	Alignment	not modelled	22.4	16 PDB header: viral protein Chain: D: PDB Molecule: hemagglutinin; PDBTitle: crystal structure of a h7 influenza virus hemagglutinin
82	c2nrjA_	Alignment	not modelled	22.2	14 PDB header: toxin Chain: A: PDB Molecule: hbl b protein; PDBTitle: crystal structure of hemolysin binding component from2 bacillus cereus
83	c3a7mA_	Alignment	not modelled	21.9	12 PDB header: gene regulation, chaperone Chain: A: PDB Molecule: flagellar protein flit; PDBTitle: structure of flit, the flagellar type iii chaperone for flid
84	c2q9qC_	Alignment	not modelled	21.9	16 PDB header: replication Chain: C: PDB Molecule: dna replication complex gins protein psf1; PDBTitle: the crystal structure of full length human gins complex
85	c2jeeA_	Alignment	not modelled	21.8	14 PDB header: cell cycle Chain: A: PDB Molecule: yiii; PDBTitle: xray structure of e. coli yiii
86	c2xusA_	Alignment	not modelled	21.6	20 PDB header: protein binding Chain: A: PDB Molecule: breast cancer metastasis-suppressor 1; PDBTitle: crystal structure of the brms1 n-terminal region
87	c1jccC_	Alignment	not modelled	21.5	11 PDB header: membrane protein Chain: C: PDB Molecule: major outer membrane lipoprotein; PDBTitle: crystal structure of a novel alanine-zipper trimer at 1.7 a2 resolution, v13a,l16a,v20a,l23a,v27a,m30a,v34a mutations
88	d2e9xa1	Alignment	not modelled	21.5	16 Fold: GIN5 helical bundle-like Superfamily: GIN5 helical bundle-like Family: PSF1 N-terminal domain-like
89	c2v6lI_	Alignment	not modelled	21.3	20 PDB header: protein transport Chain: I: PDB Molecule: mxih; PDBTitle: molecular model of a type iii secretion system needle
90	c1gk6B_	Alignment	not modelled	21.3	10 PDB header: vimentin Chain: B: PDB Molecule: vimentin; PDBTitle: human vimentin coil 2b fragment linked to gcn4 leucine2 zipper (z2b)
91	c1m1jA_	Alignment	not modelled	21.2	17 PDB header: blood clotting Chain: A: PDB Molecule: fibrinogen alpha subunit; PDBTitle: crystal structure of native chicken fibrinogen with two different2 bound ligands
92	c1avyA_	Alignment	not modelled	20.0	30 PDB header: coiled coil Chain: A: PDB Molecule: fibritin; PDBTitle: fibritin deletion mutant m (bacteriophage t4)
93	c3geiB_	Alignment	not modelled	19.8	18 PDB header: hydrolase Chain: B: PDB Molecule: trna modification gtpase mnme; PDBTitle: crystal structure of mnme from chlorobium tepidum in complex2 with gcp
94	d2hgg11	Alignment	not modelled	19.7	13 Fold: Long alpha-hairpin Superfamily: Ribosomal protein L29 (L29p) Family: Ribosomal protein L29 (L29p)
95	c1cunC_	Alignment	not modelled	19.7	16 PDB header: structural protein Chain: C: PDB Molecule: protein (alpha spectrin); PDBTitle: crystal structure of repeats 16 and 17 of chicken brain2 alpha spectrin
96	c3b7qA_	Alignment	not modelled	19.4	19 PDB header: signaling protein Chain: A: PDB Molecule: uncharacterized protein ykl091c; PDBTitle: crystal structure of yeast sec14 homolog sfh1 in complex with2 phosphatidylcholine
97	c1ox3A_	Alignment	not modelled	19.2	26 PDB header: chaperone Chain: A: PDB Molecule: fibritin; PDBTitle: crystal structure of mini-fibritin
98	c1stzB_	Alignment	not modelled	18.7	18 PDB header: transcription Chain: B: PDB Molecule: heat-inducible transcription repressor hrca homolog; PDBTitle: crystal structure of a hypothetical protein at 2.2 a resolution
99	c1jsdB_	Alignment	not modelled	18.6	18 PDB header: viral protein Chain: B: PDB Molecule: haemagglutinin (ha2 chain); PDBTitle: crystal structure of swine h9 haemagglutinin