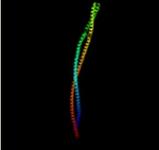
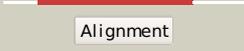
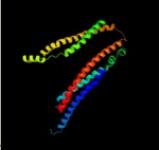
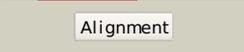
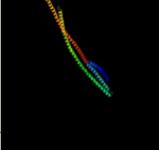
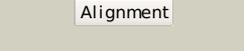
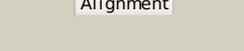
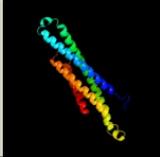
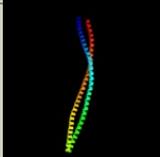
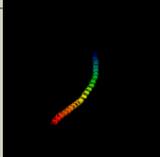
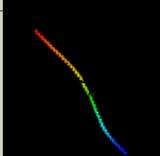


Phyre2

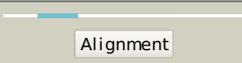
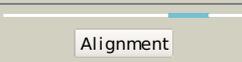
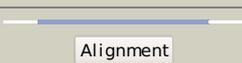
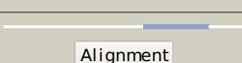
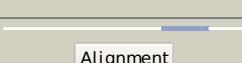
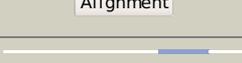
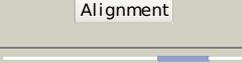
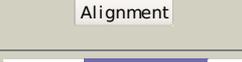
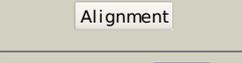
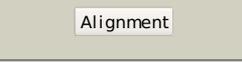
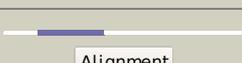
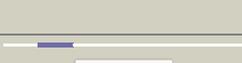
Email	l.a.kelley@imperial.ac.uk
Description	P77658
Date	Thu Jan 5 12:31:27 GMT 2012
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Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	c1c1gA_	 Alignment		99.0	6	PDB header: contractile protein Chain: A; PDB Molecule: tropomyosin; PDBTitle: crystal structure of tropomyosin at 7 angstroms resolution2 in the spermine-induced crystal form
2	c2ch7A_	 Alignment		98.4	10	PDB header: chemotaxis Chain: A; PDB Molecule: methyl-accepting chemotaxis protein; PDBTitle: crystal structure of the cytoplasmic domain of a bacterial2 chemoreceptor from thermotoga maritima
3	c2oexA_	 Alignment		97.6	7	PDB header: protein transport Chain: A; PDB Molecule: programmed cell death 6-interacting protein; PDBTitle: crystal structure of alix/aipl1
4	c2efrB_	 Alignment		97.3	12	PDB header: contractile protein Chain: B; PDB Molecule: general control protein gcn4 and tropomyosin 1 alpha chain; PDBTitle: crystal structure of the c-terminal tropomyosin fragment with n- and2 c-terminal extensions of the leucine zipper at 1.8 angstroms3 resolution
5	c2oexB_	 Alignment		97.1	8	PDB header: protein transport Chain: B; PDB Molecule: programmed cell death 6-interacting protein; PDBTitle: structure of alix/aipl1 v domain
6	c1ciiA_	 Alignment		96.9	12	PDB header: transmembrane protein Chain: A; PDB Molecule: colicin ia; PDBTitle: colicin ia
7	c3ojaB_	 Alignment		96.3	10	PDB header: protein binding Chain: B; PDB Molecule: anopheles plasmodium-responsive leucine-rich repeat protein PDBTitle: crystal structure of Irim1/apl1c complex
8	c1yvlB_	 Alignment		95.3	9	PDB header: signaling protein Chain: B; PDB Molecule: signal transducer and activator of transcription PDBTitle: structure of unphosphorylated stat1
9	c2d3eD_	 Alignment		95.3	13	PDB header: contractile protein Chain: D; PDB Molecule: general control protein gcn4 and tropomyosin 1 PDBTitle: crystal structure of the c-terminal fragment of rabbit2 skeletal alpha-tropomyosin
10	c3u59C_	 Alignment		94.9	6	PDB header: contractile protein Chain: C; PDB Molecule: tropomyosin beta chain; PDBTitle: n-terminal 98-aa fragment of smooth muscle tropomyosin beta
11	c2fxmB_	 Alignment		94.6	8	PDB header: contractile protein Chain: B; PDB Molecule: myosin heavy chain, cardiac muscle beta isoform; PDBTitle: structure of the human beta-myosin s2 fragment

12	c2b9cA_	Alignment		94.5	9	PDB header: contractile protein Chain: A: PDB Molecule: striated-muscle alpha tropomyosin; PDBTitle: structure of tropomyosin's mid-region: bending and binding2 sites for actin
13	c1bg1A_	Alignment		94.5	13	PDB header: transcription/dna Chain: A: PDB Molecule: protein (transcription factor stat3b); PDBTitle: transcription factor stat3b/dna complex
14	c3l9oA_	Alignment		94.2	8	PDB header: hydrolase Chain: A: PDB Molecule: atp-dependent rna helicase dob1; PDBTitle: crystal structure of mtr4, a co-factor of the nuclear exosome
15	c3g67A_	Alignment		94.0	13	PDB header: signaling protein Chain: A: PDB Molecule: methyl-accepting chemotaxis protein; PDBTitle: crystal structure of a soluble chemoreceptor from thermotoga2 maritima
16	c3na7A_	Alignment		93.7	10	PDB header: gene regulation, chaperone Chain: A: PDB Molecule: hp0958; PDBTitle: 2.2 angstrom structure of the hp0958 protein from helicobacter pylori2 ccug 17874
17	c1bf5A_	Alignment		93.7	8	PDB header: gene regulation/dna Chain: A: PDB Molecule: signal transducer and activator of transcription PDBTitle: tyrosine phosphorylated stat-1/dna complex
18	c3ol1A_	Alignment		93.7	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
19	c3o0zD_	Alignment		93.7	11	PDB header: transferase Chain: D: PDB Molecule: rho-associated protein kinase 1; PDBTitle: crystal structure of a coiled-coil domain from human rock i
20	c3cwgA_	Alignment		93.5	11	PDB header: transcription Chain: A: PDB Molecule: signal transducer and activator of transcription PDBTitle: unphosphorylated mouse stat3 core fragment
21	c3ghgK_	Alignment	not modelled	93.4	10	PDB header: blood clotting Chain: K: PDB Molecule: fibrinogen beta chain; PDBTitle: crystal structure of human fibrinogen
22	c4a55B_	Alignment	not modelled	93.0	5	PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit alpha; PDBTitle: crystal structure of p110alpha in complex with ish2 of p85alpha and2 the inhibitor pik-108
23	c2gl2B_	Alignment	not modelled	92.7	13	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
24	c1degO_	Alignment	not modelled	92.2	12	PDB header: PDB COMPND:
25	c1qu7A_	Alignment	not modelled	90.9	12	PDB header: signaling protein Chain: A: PDB Molecule: methyl-accepting chemotaxis protein i; PDBTitle: four helical-bundle structure of the cytoplasmic domain of a serine2 chemotaxis receptor
26	c2y3aB_	Alignment	not modelled	89.5	8	PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit beta; PDBTitle: crystal structure of p110beta in complex with icsh2 of p85beta and2 the drug gdc-0941
27	c1y4cA_	Alignment	not modelled	89.1	13	PDB header: de novo protein Chain: A: PDB Molecule: maltose binding protein fused with designed PDBTitle: designed helical protein fusion mbp
28	c1ei3E_	Alignment	not modelled	88.6	6	PDB header: PDB COMPND:

29	c2v66C	Alignment	not modelled	87.9	9	PDB header: structural protein Chain: C: PDB Molecule: nuclear distribution protein nude-like 1; PDBTitle: crystal structure of the coiled-coil domain of nde1 (a.a.2 58 to 169)c
30	c2wpaA	Alignment	not modelled	86.8	8	PDB header: membrane protein Chain: A: PDB Molecule: trimeric autotransporter adhesin fragment; PDBTitle: salmonella enterica sada 479-519 fused to gcn4 adaptors (2 sadak3, in-register fusion)
31	c1deqF	Alignment	not modelled	85.9	11	PDB header: PDB COMPND:
32	c2dq3A	Alignment	not modelled	83.9	16	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: crystal structure of aq_298
33	c1deqD	Alignment	not modelled	83.1	8	PDB header: PDB COMPND:
34	c2v1yB	Alignment	not modelled	80.9	8	PDB header: transferase Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit alpha; PDBTitle: structure of a phosphoinositide 3-kinase alpha adaptor-2 binding domain (abd) in a complex with the ish2 domain3 from p85 alpha
35	c2v71A	Alignment	not modelled	80.2	13	PDB header: nuclear protein Chain: A: PDB Molecule: nuclear distribution protein nude-like 1; PDBTitle: coiled-coil region of nudel
36	c1hciB	Alignment	not modelled	80.0	8	PDB header: triple-helix coiled coil Chain: B: PDB Molecule: alpha-actinin 2; PDBTitle: crystal structure of the rod domain of alpha-actinin
37	c1ei3C	Alignment	not modelled	79.0	8	PDB header: PDB COMPND:
38	c3dtpA	Alignment	not modelled	78.9	10	PDB header: contractile protein Chain: A: PDB Molecule: myosin 2 heavy chain chimera of smooth and PDBTitle: tarantula heavy meromyosin obtained by flexible docking to2 tarantula muscle thick filament cryo-em 3d-map
39	c3u1aC	Alignment	not modelled	77.0	6	PDB header: contractile protein Chain: C: PDB Molecule: smooth muscle tropomyosin alpha; PDBTitle: n-terminal 81-aa fragment of smooth muscle tropomyosin alpha
40	c2e7sM	Alignment	not modelled	75.8	14	PDB header: endocytosis/exocytosis Chain: M: PDB Molecule: rab guanine nucleotide exchange factor sec2; PDBTitle: crystal structure of the yeast sec2p gef domain
41	c3ojaA	Alignment	not modelled	73.8	10	PDB header: protein binding Chain: A: PDB Molecule: leucine-rich immune molecule 1; PDBTitle: crystal structure of lrim1/apl1c complex
42	c1jchC	Alignment	not modelled	73.6	9	PDB header: ribosome inhibitor, hydrolase Chain: C: PDB Molecule: colicin e3; PDBTitle: crystal structure of colicin e3 in complex with its immunity protein
43	c3hnbB	Alignment	not modelled	72.6	7	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
44	c2i1jA	Alignment	not modelled	69.9	9	PDB header: cell adhesion, membrane protein Chain: A: PDB Molecule: moesin; PDBTitle: moesin from spodoptera frugiperda at 2.1 angstroms resolution
45	c1l8dB	Alignment	not modelled	69.4	13	PDB header: replication Chain: B: PDB Molecule: dna double-strand break repair rad50 atpase; PDBTitle: rad50 coiled-coil zn hook
46	c3a7pB	Alignment	not modelled	69.4	15	PDB header: protein transport Chain: B: PDB Molecule: autophagy protein 16; PDBTitle: the crystal structure of saccharomyces cerevisiae atg16
47	c2qihA	Alignment	not modelled	66.3	13	PDB header: cell adhesion Chain: A: PDB Molecule: protein uspa1; PDBTitle: crystal structure of 527-665 fragment of uspa1 protein from2 moraxella catarrhalis
48	c3hizB	Alignment	not modelled	64.6	8	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
49	c3iv1F	Alignment	not modelled	56.7	11	PDB header: hydrolase Chain: F: PDB Molecule: tumor susceptibility gene 101 protein; PDBTitle: coiled-coil domain of tumor susceptibility gene 101
50	c3r6nA	Alignment	not modelled	56.2	7	PDB header: cell adhesion Chain: A: PDB Molecule: desmoplakin; PDBTitle: crystal structure of a rigid four spectrin repeat fragment of the2 human desmoplakin plakin domain
51	c2rd0B	Alignment	not modelled	53.3	9	PDB header: transferase/oncoprotein Chain: B: PDB Molecule: phosphatidylinositol 3-kinase regulatory subunit alpha; PDBTitle: structure of a human p110alpha/p85alpha complex
52	c3qh9A	Alignment	not modelled	49.8	16	PDB header: structural protein Chain: A: PDB Molecule: liprin-beta-2; PDBTitle: human liprin-beta2 coiled-coil
53	c2eqbC	Alignment	not modelled	43.9	12	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

54	c3layF_		Alignment	not modelled	42.0	14	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. lt2
55	c2jeeA_		Alignment	not modelled	38.6	12	PDB header: cell cycle Chain: A: PDB Molecule: yiii; PDBTitle: xray structure of e. coli yiii
56	c1ic2B_		Alignment	not modelled	34.7	9	PDB header: contractile protein Chain: B: PDB Molecule: tropomyosin alpha chain, skeletal muscle; PDBTitle: deciphering the design of the tropomyosin molecule
57	c2v4hA_		Alignment	not modelled	32.9	18	PDB header: transcription Chain: A: PDB Molecule: nf-kappa-b essential modulator; PDBTitle: nemo cc2-lz domain - 1d5 darpin complex
58	c2xdjF_		Alignment	not modelled	32.8	10	PDB header: unknown function Chain: F: PDB Molecule: uncharacterized protein ybgf; PDBTitle: crystal structure of the n-terminal domain of e.coli ybgf
59	c3ipkA_		Alignment	not modelled	30.1	11	PDB header: cell adhesion Chain: A: PDB Molecule: agi/ii; PDBTitle: crystal structure of a3vp1 of agi/ii of streptococcus mutans
60	c1s1jB_		Alignment	not modelled	29.7	10	PDB header: contractile protein Chain: B: PDB Molecule: actinin; PDBTitle: cryo-em structure of chicken gizzard smooth muscle alpha-2 actinin
61	c2no2A_		Alignment	not modelled	29.4	10	PDB header: cell adhesion Chain: A: PDB Molecule: huntingtin-interacting protein 1; PDBTitle: crystal structure of the dlrk-containing coiled-coil2 domain of huntingtin-interacting protein 1
62	d1seta1		Alignment	not modelled	28.2	11	Fold: Long alpha-hairpin Superfamily: tRNA-binding arm Family: Seryl-tRNA synthetase (SerRS)
63	c3m9bK_		Alignment	not modelled	24.8	5	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
64	c3n4xB_		Alignment	not modelled	22.4	8	PDB header: replication Chain: B: PDB Molecule: monopolin complex subunit csm1; PDBTitle: structure of csm1 full-length
65	c1ci6A_		Alignment	not modelled	22.0	14	PDB header: transcription Chain: A: PDB Molecule: transcription factor atf-4; PDBTitle: transcription factor atf4-c/ebp beta bzip heterodimer
66	c3qo8A_		Alignment	not modelled	21.7	14	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase, cytoplasmic; PDBTitle: crystal structure of seryl-trna synthetase from candida albicans
67	c1gd2G_		Alignment	not modelled	21.3	10	PDB header: transcription/dna Chain: G: PDB Molecule: transcription factor pap1; PDBTitle: crystal structure of bzip transcription factor pap1 bound2 to dna
68	c1gk4A_		Alignment	not modelled	20.4	8	PDB header: vimentin Chain: A: PDB Molecule: vimentin; PDBTitle: human vimentin coil 2b fragment (cys2)
69	c3q0xA_		Alignment	not modelled	18.8	13	PDB header: structural protein Chain: A: PDB Molecule: centriole protein; PDBTitle: n-terminal coiled-coil dimer domain of c. reinhardtii sas-6 homolog2 bld12p
70	d2ap3a1		Alignment	not modelled	17.9	7	Fold: Four-helical up-and-down bundle Superfamily: MW0975(SA0943)-like Family: MW0975(SA0943)-like
71	c1x8yA_		Alignment	not modelled	17.6	11	PDB header: structural protein Chain: A: PDB Molecule: lamin a/c; PDBTitle: human lamin coil 2b
72	c2wt7B_		Alignment	not modelled	16.7	14	PDB header: transcription Chain: B: PDB Molecule: transcription factor mafb; PDBTitle: crystal structure of the bzip heterodimeric complex2 mafb:cfos bound to dna
73	c1wt6B_		Alignment	not modelled	16.5	20	PDB header: transferase Chain: B: PDB Molecule: myotoniin-protein kinase; PDBTitle: coiled-coil domain of dmpk
74	c2zvnf_		Alignment	not modelled	15.8	17	PDB header: signaling protein/transcription Chain: F: PDB Molecule: nf-kappa-b essential modulator; PDBTitle: nemo cozi domain incomplex with diubiquitin in p2121212 space group
75	c2x7aB_		Alignment	not modelled	15.5	5	PDB header: immune system Chain: B: PDB Molecule: bone marrow stromal antigen 2; PDBTitle: structural basis of hiv-1 tethering to membranes by the2 bst2-tetherin ectodomain
76	c2bsgA_		Alignment	not modelled	15.5	9	PDB header: viral protein Chain: A: PDB Molecule: fibrinin; PDBTitle: the modeled structure of fibrinin (gpwac) of bacteriophage2 t4 based on cryo-em reconstruction of the extended tail of3 bacteriophage t4
77	c2pmsD_		Alignment	not modelled	15.5	11	PDB header: metal transport, hydrolase Chain: D: PDB Molecule: pneumococcal surface protein a (pspa); PDBTitle: crystal structure of the complex of human lactoferrin n-lobe and2 lactoferrin-binding domain of pneumococcal surface protein a
78	c1fosF_		Alignment	not modelled	15.4	10	PDB header: transcription/dna Chain: F: PDB Molecule: c-jun proto-oncogene protein; PDBTitle: two human c-fos:c-jun:dna complexes
79	c2k4A_		Alignment	not modelled	15.4	12	PDB header: membrane protein Chain: A: PDB Molecule: cdc42-interacting protein 4;

79	c3ke4A_	Alignment	not modelled	13.4	12	PDBTitle: the nmr structure of the tc10 and cdc42 interacting domain2 of cip4 PDB header: contractile protein Chain: B: PDB Molecule: myosin heavy chain, striated muscle/general PDBTitle: crystal structure of the n-terminal region of the scallop2 myosin rod, monoclinic (p21) form
80	c3batB_	Alignment	not modelled	15.2	14	PDB header: signaling protein Chain: A: PDB Molecule: homer protein homolog 3; PDBTitle: crystal structure of the carboxy terminus of homer3
81	c3cvfA_	Alignment	not modelled	14.8	18	PDB header: blood clotting Chain: C: PDB Molecule: fibrin gamma chain; PDBTitle: fibrin d-dimer, lamprey complexed with the peptide ligand: gly-his-2 arg-pro-amide
82	c1n73C_	Alignment	not modelled	14.6	6	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.
83	c2hpcF_	Alignment	not modelled	13.3	9	PDB header: transcription/dna Chain: D: PDB Molecule: cyclic-amp-dependent transcription factor atf-2; PDBTitle: structure of the dna binding domains of irf3, atf-2 and jun2 bound to dna
84	c1t2kD_	Alignment	not modelled	11.4	10	PDB header: transport protein Chain: C: PDB Molecule: protein srn2; PDBTitle: structure of the yeast esct-1 heterotetramer core
85	c2p22C_	Alignment	not modelled	11.2	15	PDB header: structural protein Chain: B: PDB Molecule: myosin ii heavy chain fused to alpha-actinin 3; PDBTitle: structure of a genetically engineered molecular motor
86	c1g8xB_	Alignment	not modelled	10.9	8	PDB header: signaling protein Chain: C: PDB Molecule: homer protein homolog 1; PDBTitle: crystal structure of the carboxy terminus of homer1
87	c3cveC_	Alignment	not modelled	10.7	17	PDB header: contractile protein Chain: I: PDB Molecule: troponin i, fast skeletal muscle; PDBTitle: crystal structure of skeletal muscle troponin in the ca2+-free state
88	c1yv0L_	Alignment	not modelled	10.4	8	PDB header: transcription regulation Chain: B: PDB Molecule: c-jun homodimer; PDBTitle: nmr study of c-jun homodimer
89	c1junB_	Alignment	not modelled	10.4	11	PDB header: antiviral protein Chain: C: PDB Molecule: bone marrow stromal antigen 2; PDBTitle: crystal structure of bst2/tetherin
90	c3mkxC_	Alignment	not modelled	9.9	13	PDB header: protein binding Chain: F: PDB Molecule: tf receptor-associated factor 2; PDBTitle: crystal structure of traf2
91	c3m06F_	Alignment	not modelled	9.6	10	PDB header: transcription/dna Chain: E: PDB Molecule: p55-c-fos proto-oncogene protein; PDBTitle: two human c-fos:c-jun:dna complexes
92	c1fosE_	Alignment	not modelled	9.2	13	PDB header: structural protein Chain: B: PDB Molecule: spectrin alpha chain, brain; PDBTitle: crystal structure of repeats 15, 16 and 17 of chicken brain2 alpha spectrin
93	c1u4qB_	Alignment	not modelled	9.1	12	PDB header: viral protein Chain: B: PDB Molecule: hemagglutinin; PDBTitle: 1934 human h1 hemagglutinin
94	c1ru7B_	Alignment	not modelled	9.0	15	PDB header: hydrolase/rna Chain: A: PDB Molecule: atp-dependent rna helicase dob1; PDBTitle: structure of mtr4, a dexh helicase involved in nuclear rna2 processing and surveillance
95	c2xgiA_	Alignment	not modelled	8.8	18	PDB header: transcription/dna Chain: A: PDB Molecule: ccaat/enhancer-binding protein beta; PDBTitle: crystal structure of c/ebpbeta bzip homodimer k269a mutant2 bound to a high affinity dna fragment
96	c2e43A_	Alignment	not modelled	8.7	11	PDB header: ligase Chain: A: PDB Molecule: seryl-trna synthetase; PDBTitle: trypanosoma brucei seryl-trna synthetase in complex with atp
97	c3lssA_	Alignment	not modelled	8.6	9	PDB header: gene regulation/ligase Chain: B: PDB Molecule: dna repair protein xrcc4; PDBTitle: crystal structure of a xrcc4-dna ligase iv complex
98	c1ik9B_	Alignment	not modelled	8.0	8	PDB header: signaling protein Chain: B: PDB Molecule: arf gtpase-activating protein git1; PDBTitle: x-ray structure of the dimeric git1 coiled-coil domain
99	c2w6aB_	Alignment	not modelled	7.9	11	