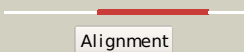
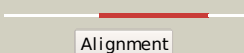
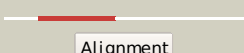
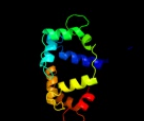
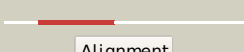
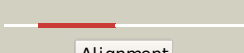


Phyre2

Email	I.a.kelley@imperial.ac.uk
Description	D6W196
Date	Mon Jul 2 19:10:02 BST 2012
Unique Job ID	849b39711f9bb1ae

Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d1okca_	 Alignment		100.0	20	Fold: Mitochondrial carrier Superfamily: Mitochondrial carrier Family: Mitochondrial carrier
2	c2lckA_	 Alignment		100.0	16	PDB header: transport protein Chain: A: PDB Molecule: mitochondrial uncoupling protein 2; PDBTitle: structure of the mitochondrial uncoupling protein 2 determined by nmr2 molecular fragment replacement
3	c3evrA_	 Alignment		99.8	16	PDB header: signaling protein Chain: A: PDB Molecule: myosin light chain kinase, green fluorescent PDBTitle: crystal structure of calcium bound monomeric gcamp2
4	c3sibA_	 Alignment		99.8	13	PDB header: dna binding protein Chain: A: PDB Molecule: ure3-bp sequence specific dna binding protein; PDBTitle: crystal structure of ure3-binding protein, wild-type
5	c3ek7A_	 Alignment		99.8	20	PDB header: fluorescent protein Chain: A: PDB Molecule: myosin light chain kinase, green fluorescent PDBTitle: calcium-saturated gcamp2 dimer
6	d1kfus_	 Alignment		99.8	15	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
7	d1df0a1	 Alignment		99.8	13	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
8	d1k94a_	 Alignment		99.8	13	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
9	c1kfxL_	 Alignment		99.8	13	PDB header: hydrolase Chain: L: PDB Molecule: m-calpain large subunit; PDBTitle: crystal structure of human m-calpain form i
10	d1dvia_	 Alignment		99.8	16	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
11	d1kful1	 Alignment		99.8	13	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins

12	d1alva_	Alignment		99.8	15	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
13	d1gjya_	Alignment		99.8	15	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
14	c1juoB_	Alignment		99.8	16	PDB header: metal transport Chain: B: PDB Molecule: sorcin; PDBTitle: crystal structure of calcium-free human sorcin: a member of2 the penta-ef-hand protein family
15	d1juoa_	Alignment		99.8	16	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
16	d1ylxa_	Alignment		99.7	16	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
17	d1np8a_	Alignment		99.7	17	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
18	c3cs1A_	Alignment		99.7	16	PDB header: metal binding protein Chain: A: PDB Molecule: flagellar calcium-binding protein; PDBTitle: flagellar calcium-binding protein (fcabp) from t. cruzi
19	c3lijA_	Alignment		99.7	20	PDB header: transferase Chain: A: PDB Molecule: calcium/calmodulin dependent protein kinase with PDBTitle: crystal structure of full length cpcdpk3 (cgd5_820) in2 complex with ca2+ and amppnp
20	d1ij5a_	Alignment	99.7	18	Fold: EF Hand-like Superfamily: EF-hand Family: Cbp40 (plasmodial specific CaII-binding protein LAV1-2)	
21	c3q5iA_	Alignment	not modelled	99.7	21	PDB header: transferase Chain: A: PDB Molecule: protein kinase; PDBTitle: crystal structure of pbanka_031420
22	d2zfda1	Alignment	not modelled	99.7	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
23	c2zfda_	Alignment	not modelled	99.7	21	PDB header: signaling protein/transferase Chain: A: PDB Molecule: calcineurin b-like protein 2; PDBTitle: the crystal structure of plant specific calcium binding protein atcbl22 in complex with the regulatory domain of atc1pk14
24	c3a8rB_	Alignment	not modelled	99.7	14	PDB header: calcium binding protein Chain: B: PDB Molecule: putative uncharacterized protein; PDBTitle: the structure of the n-terminal regulatory domain of a plant nadph2 oxidase
25	c2ehbA_	Alignment	not modelled	99.7	22	PDB header: signalling protein/transferase Chain: A: PDB Molecule: calcineurin b-like protein 4; PDBTitle: the structure of the c-terminal domain of the protein kinase atos22 bound to the calcium sensor atos3
26	c2hpkA_	Alignment	not modelled	99.7	17	PDB header: luminescent protein Chain: A: PDB Molecule: photoprotein berovin; PDBTitle: crystal structure of photoprotein berovin from beroe2 abyssicola
27	d1jf0a_	Alignment	not modelled	99.7	25	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
28	d1sl8a_	Alignment	not modelled	99.6	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
						Fold: EF Hand-like

29	d1jbaa_	Alignment	not modelled	99.6	13	Superfamily: EF-hand Family: Calmodulin-like
30	d2sasa_	Alignment	not modelled	99.6	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
31	c2f33A_	Alignment	not modelled	99.6	14	PDB header: metal binding protein Chain: A: PDB Molecule: calbindin; PDBTitle: nmr solution structure of ca2+-loaded calbindin d28k
32	d1fpwa_	Alignment	not modelled	99.6	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
33	d1qv0a_	Alignment	not modelled	99.6	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
34	c2becA_	Alignment	not modelled	99.6	22	PDB header: metal binding protein/transport protein Chain: A: PDB Molecule: calcineurin b homologous protein 2; PDBTitle: crystal structure of chp2 in complex with its binding2 region in nhe1 and insights into the mechanism of ph3 regulation
35	c2doqA_	Alignment	not modelled	99.6	22	PDB header: cell cycle Chain: A: PDB Molecule: cell division control protein 31; PDBTitle: crystal structure of sfi1p/cdc31p complex
36	d1g8ia_	Alignment	not modelled	99.6	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
37	d1hqva_	Alignment	not modelled	99.6	18	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
38	c2l2eA_	Alignment	not modelled	99.6	16	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein ncs-1; PDBTitle: solution nmr structure of myristoylated ncs1p in apo form
39	d1bjfa_	Alignment	not modelled	99.6	17	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
40	c2aucC_	Alignment	not modelled	99.6	15	PDB header: membrane protein Chain: C: PDB Molecule: myosin a tail interacting protein; PDBTitle: structure of the plasmodium mtip-myoa complex, a key component of the2 parasite invasion motor
41	d1omra_	Alignment	not modelled	99.6	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
42	c3mseB_	Alignment	not modelled	99.6	20	PDB header: transferase Chain: B: PDB Molecule: calcium-dependent protein kinase, putative; PDBTitle: crystal structure of c-terminal domain of pf110239.
43	c1s1eA_	Alignment	not modelled	99.6	17	PDB header: transport protein Chain: A: PDB Molecule: kv channel interacting protein 1; PDBTitle: crystal structure of kv channel-interacting protein 12 (kchip-1)
44	c2r2iA_	Alignment	not modelled	99.6	21	PDB header: lyase activator Chain: A: PDB Molecule: guanylyl cyclase-activating protein 1; PDBTitle: myristoylated guanylate cyclase activating protein-1 with2 calcium bound
45	d2scpa_	Alignment	not modelled	99.6	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
46	c2ct9A_	Alignment	not modelled	99.6	21	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein p22; PDBTitle: the crystal structure of calcineurin b homologous proein 1 (chp1)
47	c3akbA_	Alignment	not modelled	99.6	21	PDB header: metal binding protein Chain: A: PDB Molecule: putative calcium binding protein; PDBTitle: structural basis for prokaryotic calcium-mediated regulation by a2 streptomyces coelicolor calcium-binding protein
48	d1qxp2_	Alignment	not modelled	99.6	14	Fold: EF Hand-like Superfamily: EF-hand Family: Penta-EF-hand proteins
49	c3e3rB_	Alignment	not modelled	99.6	20	PDB header: calcium binding protein Chain: B: PDB Molecule: calcyphosin; PDBTitle: crystal structure and biochemical characterization of recombinant2 human calcyphosine delineates a novel ef-hand-containing protein3 family
50	c2hq8B_	Alignment	not modelled	99.6	15	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: coelenterazine-binding protein ca-bound apo form; PDBTitle: crystal structure of coelenterazine-binding protein from2 renilla muelleri in the ca loaded apo form
51	d1s6ca_	Alignment	not modelled	99.5	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
52	c2jula_	Alignment	not modelled	99.5	16	PDB header: dna binding protein Chain: A: PDB Molecule: calsenilin; PDBTitle: nmr structure of dream
53	c1eg4A_	Alignment	not modelled	99.5	17	PDB header: structural protein Chain: A: PDB Molecule: dystrophin; PDBTitle: structure of a dystrophin ww domain fragment in complex2 with a beta-dystroglycan peptide
54	d1uhka1	Alignment	not modelled	99.5	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
55	d2mysb_	Alignment	not modelled	99.5	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like

56	d1lkja_	Alignment	not modelled	99.5	20	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
57	c2i7aA_	Alignment	not modelled	99.5	13	PDB header: hydrolase Chain: A: PDB Molecule: calpain 13; PDBTitle: domain iv of human calpain 13
58	c2ccmB_	Alignment	not modelled	99.5	16	PDB header: signaling protein Chain: B: PDB Molecule: calexcitin; PDBTitle: x-ray structure of calexcitin from loligo pealeii at 1.8a
59	c2ggmA_	Alignment	not modelled	99.5	22	PDB header: cell cycle Chain: A: PDB Molecule: centrin-2; PDBTitle: human centrin 2 xeroderma pigmentosum group c protein2 complex
60	d1wdcb_	Alignment	not modelled	99.5	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
61	c3l19B_	Alignment	not modelled	99.5	22	PDB header: transferase Chain: B: PDB Molecule: calcium/calmodulin dependent protein kinase with a kinase PDBTitle: crystal structure of calcium binding domain of cpdcpk3, cgd5_820
62	d1sl7a_	Alignment	not modelled	99.5	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
63	c2ggzB_	Alignment	not modelled	99.5	19	PDB header: lyase activator Chain: B: PDB Molecule: guanylyl cyclase-activating protein 3; PDBTitle: crystal structure of human guanylate cyclase activating2 protein-3
64	d1wdcc_	Alignment	not modelled	99.5	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
65	d1xo5a_	Alignment	not modelled	99.5	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
66	c1qxpB_	Alignment	not modelled	99.5	17	PDB header: hydrolase chimera Chain: B: PDB Molecule: mu-like calpain; PDBTitle: crystal structure of a mu-like calpain
67	d2obha1	Alignment	not modelled	99.5	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
68	c3k21A_	Alignment	not modelled	99.5	19	PDB header: transferase Chain: A: PDB Molecule: calcium-dependent protein kinase 3; PDBTitle: crystal structure of carboxy-terminus of pfc0420w.
69	c3ox6C_	Alignment	not modelled	99.4	15	PDB header: calcium binding protein Chain: C: PDB Molecule: calcium-binding protein 1; PDBTitle: crystal structure of the calcium sensor calcium-binding protein 12 (cabp1)
70	c2q4uA_	Alignment	not modelled	99.4	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: protein zgc:100843; PDBTitle: ensemble refinement of the crystal structure of an ef-hand protein2 from danio rerio dr.36843
71	d1nyaa_	Alignment	not modelled	99.4	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
72	d1rfja_	Alignment	not modelled	99.4	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
73	d2o5ga1	Alignment	not modelled	99.4	20	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
74	c2aaoA_	Alignment	not modelled	99.4	22	PDB header: transferase Chain: A: PDB Molecule: calcium-dependent protein kinase, isoform ak1; PDBTitle: regulatory apparatus of calcium dependent protein kinase from2 arabidopsis thaliana
75	d1ggwa_	Alignment	not modelled	99.4	24	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
76	d1exra_	Alignment	not modelled	99.4	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
77	d1tn4a_	Alignment	not modelled	99.4	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
78	c2bl0C_	Alignment	not modelled	99.4	15	PDB header: muscle protein Chain: C: PDB Molecule: myosin regulatory light chain; PDBTitle: physarum polycephalum myosin ii regulatory domain
79	c2ekwC_	Alignment	not modelled	99.4	15	PDB header: contractile protein Chain: C: PDB Molecule: myosin catalytic light chain lc-1, mantle muscle; PDBTitle: the crystal structure of squid myosin s1 in the presence of2 so4 2-
80	c3pm8B_	Alignment	not modelled	99.4	18	PDB header: transferase Chain: B: PDB Molecule: calcium-dependent protein kinase 2; PDBTitle: cad domain of pff0520w, calcium dependent protein kinase
81	c2bl0B_	Alignment	not modelled	99.4	17	PDB header: muscle protein Chain: B: PDB Molecule: myosin regulatory light chain; PDBTitle: physarum polycephalum myosin ii regulatory domain
						PDB header: contractile protein

82	c3dtpF_	Alignment	not modelled	99.4	15	Chain: F: PDB Molecule: myosin regulatory light chain; PDBTitle: tarantula heavy meromyosin obtained by flexible docking to2 tarantula muscle thick filament cryo-em 3d-map
83	c2l4hA_	Alignment	not modelled	99.4	20	PDB header: metal binding protein Chain: A: PDB Molecule: calcium and integrin-binding protein 1; PDBTitle: the solution structure of calcium bound cib1
84	c2jnfA_	Alignment	not modelled	99.4	18	PDB header: metal binding protein Chain: A: PDB Molecule: troponin c; PDBTitle: solution structure of fly troponin c, isoform f1
85	d1h4ba_	Alignment	not modelled	99.4	14	Fold: EF Hand-like Superfamily: EF-hand Family: Polcalcin
86	c3igoA_	Alignment	not modelled	99.3	23	PDB header: transferase Chain: A: PDB Molecule: calmodulin-domain protein kinase 1; PDBTitle: crystal structure of cryptosporidium parvum cdpk1, cgd3_920
87	d1dtla_	Alignment	not modelled	99.3	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
88	c2oy6B_	Alignment	not modelled	99.3	14	PDB header: contractile protein Chain: B: PDB Molecule: myosin regulatory light chain lc-2; PDBTitle: crystal structure of squid mg.adp myosin s1
89	d1s6ia_	Alignment	not modelled	99.3	22	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
90	d1ggza_	Alignment	not modelled	99.3	21	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
91	c3ku2A_	Alignment	not modelled	99.3	21	PDB header: transferase Chain: A: PDB Molecule: calmodulin-domain protein kinase 1; PDBTitle: crystal structure of inactivated form of cdpk1 from toxoplasma gondii,2 tgme49.101440
92	c3j04E_	Alignment	not modelled	99.3	16	PDB header: structural protein Chain: E: PDB Molecule: myosin regulatory light chain 2, smooth muscle major PDBTitle: em structure of the heavy meromyosin subfragment of chick smooth2 muscle myosin with regulatory light chain in phosphorylated state
93	d1topa_	Alignment	not modelled	99.3	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
94	c2kn2A_	Alignment	not modelled	99.3	16	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin; PDBTitle: solution structure of the c-terminal domain of soybean calmodulin2 isoform 4 fused with the calmodulin-binding domain of ntnkp1
95	c3kheB_	Alignment	not modelled	99.3	21	PDB header: metal binding protein Chain: B: PDB Molecule: calmodulin-like domain protein kinase isoform 3; PDBTitle: crystal structure of the calcium-loaded calmodulin-like domain of the2 cdpk, 541.m00134 from toxoplasma gondii
96	c1djyB_	Alignment	not modelled	99.3	8	PDB header: lipid degradation Chain: B: PDB Molecule: phosphoinositide-specific phospholipase c, PDBTitle: phosphoinositide-specific phospholipase c-delta1 from rat2 complexed with inositol-2,4,5-trisphosphate
97	d2mysc_	Alignment	not modelled	99.3	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
98	d1jfja_	Alignment	not modelled	99.3	26	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
99	d1lauib_	Alignment	not modelled	99.3	20	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
100	d1m45a_	Alignment	not modelled	99.3	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
101	c2f2oB_	Alignment	not modelled	99.3	20	PDB header: metal binding protein Chain: B: PDB Molecule: calmodulin fused with calmodulin-binding domain PDBTitle: structure of calmodulin bound to a calcineurin peptide: a2 new way of making an old binding mode
102	d1dxb1	Alignment	not modelled	99.2	13	Fold: EF Hand-like Superfamily: EF-hand Family: EF-hand modules in multidomain proteins
103	d1w7jb1	Alignment	not modelled	99.2	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
104	d2opoa1	Alignment	not modelled	99.2	15	Fold: EF Hand-like Superfamily: EF-hand Family: Polcalcin
105	c2g2bA_	Alignment	not modelled	99.2	17	PDB header: immune system Chain: A: PDB Molecule: allograft inflammatory factor 1; PDBTitle: nmr structure of the human allograft inflammatory factor 1
106	d1bu3a_	Alignment	not modelled	99.2	24	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
107	d1oqpa_	Alignment	not modelled	99.2	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like

108	c3hzta_	 Alignment	not modelled	99.2	22	PDB header: transferase Chain: A: PDB Molecule: calcium-dependent protein kinase 3; PDBTitle: crystal structure of toxoplasma gondii cdpk3, tgme49_105860
109	c3h4sE_	 Alignment	not modelled	99.2	10	PDB header: motor protein/calcium binding protein Chain: E: PDB Molecule: kcbp interacting ca2+-binding protein; PDBTitle: structure of the complex of a mitotic kinesin with its2 calcium binding regulator
110	c2vtgA_	 Alignment	not modelled	99.2	17	PDB header: metal-binding protein Chain: A: PDB Molecule: ionized calcium-binding adapter molecule 2; PDBTitle: crystal structure of human iba2, trigonal crystal form
111	c2ktgA_	 Alignment	not modelled	99.2	13	PDB header: ca-binding protein Chain: A: PDB Molecule: calmodulin, putative; PDBTitle: calmodulin like protein from entamoeba histolytica: solution structure2 and calcium binding properties of a partially folded protein
112	c3ctnA_	 Alignment	not modelled	99.2	20	PDB header: calcium-binding protein Chain: A: PDB Molecule: troponin c; PDBTitle: structure of calcium-saturated cardiac troponin c, nmr, 302 structures
113	d1n0yb_	 Alignment	not modelled	99.2	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
114	d1wrka1	 Alignment	not modelled	99.2	11	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
115	d1br1b_	 Alignment	not modelled	99.2	11	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
116	c2amiA_	 Alignment	not modelled	99.2	18	PDB header: cell cycle Chain: A: PDB Molecule: caltractin; PDBTitle: solution structure of the calcium-loaded n-terminal sensor2 domain of centrin
117	d1ap4a_	 Alignment	not modelled	99.1	11	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
118	d1avsa_	 Alignment	not modelled	99.1	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
119	d2pvba_	 Alignment	not modelled	99.1	18	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
120	d1n0ya_	 Alignment	not modelled	99.1	12	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like