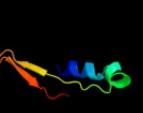
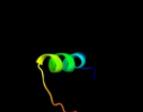
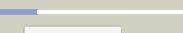
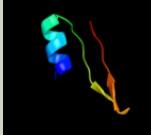
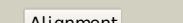
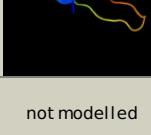
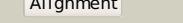
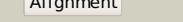
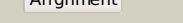
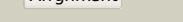
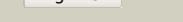
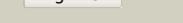
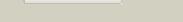
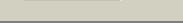


Phyre²

Email	I.a.kelley@imperial.ac.uk
Description	P76156
Date	Thu Jan 5 12:19:48 GMT 2012
Unique Job ID	4a402311fca61ba6

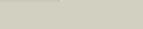
Detailed template information

#	Template	Alignment Coverage	3D Model	Confidence	% i.d.	Template Information
1	d2hh8a1	Alignment		100.0	100	Fold: YdfO-like Superfamily: YdfO-like Family: YdfO-like
2	d3elga1	Alignment		88.3	8	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
3	d3duea1	Alignment		79.7	6	Fold: BLIP-like Superfamily: BT0923-like Family: BT0923-like
4	c2w3nA_	Alignment		25.1	24	PDB header: lyase Chain: A: PDB Molecule: carbonic anhydrase 2; PDBTitle: structure and inhibition of the co2-sensing carbonic2 anhydrase can2 from the pathogenic fungus cryptococcus neoformans
5	c2qlxA_	Alignment		23.9	15	PDB header: isomerase Chain: A: PDB Molecule: l-rhamnose mutarotase; PDBTitle: crystal structure of rhamnose mutarotase rhau of rhizobium2 leguminosarum in complex with l-rhamnose
6	c2qlwA_	Alignment		23.9	15	PDB header: isomerase Chain: A: PDB Molecule: rhou; PDBTitle: crystal structure of rhamnose mutarotase rhou of rhizobium2 leguminosarum
7	c1irjG_	Alignment		23.2	15	PDB header: metal binding protein Chain: G: PDB Molecule: migration inhibitory factor-related protein 14; PDBTitle: crystal structure of the mrp14 complexed with chaps
8	c3I23A_	Alignment		21.7	11	PDB header: isomerase Chain: A: PDB Molecule: sugar phosphate isomerase/epimerase; PDBTitle: crystal structure of sugar phosphate isomerase/epimerase2 (yp_001303399.1) from parabacteroides distasonis atcc 8503 at 1.70 a3 resolution
9	c3fm2A_	Alignment		21.3	11	PDB header: heme-binding protein Chain: A: PDB Molecule: uncharacterized protein, distantly related to a heme PDBTitle: crystal structure of a putative heme-binding protein (ava_4353) from2 anabaena variabilis atcc 29413 at 1.80 a resolution
10	d1avsa_	Alignment		21.1	16	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
11	c3ot2A_	Alignment		20.7	17	PDB header: structural genomics, unknown function Chain: A: PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative nuclease belonging to duf8202 (ava_3926) from anabaena variabilis atcc 29413 at 1.96 a resolution

12	c3ot2B_			20.7	17	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein; PDBTitle: crystal structure of a putative nuclease belonging to duf8202 (ava_3926) from anabaena variabilis atcc 29413 at 1.96 a resolution
13	d1urra_			20.5	21	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
14	c2ph7B_			19.4	33	PDB header: structural genomics, unknown function Chain: B; PDB Molecule: uncharacterized protein af_2093; PDBTitle: crystal structure of af2093 from archaeoglobus fulgidus
15	d1lapsa_			17.3	10	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
16	c3obeB_			17.0	11	PDB header: isomerase Chain: B; PDB Molecule: sugar phosphate isomerase/epimerase; PDBTitle: crystal structure of a sugar phosphate isomerase/epimerase (bdi_3400)2 from parabacteroides distasonis atcc 8503 at 1.70 a resolution
17	d1xk4a1			16.2	16	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
18	d1j3ea_			15.5	24	Fold: Replication modulator SeqA, C-terminal DNA-binding domain Superfamily: Replication modulator SeqA, C-terminal DNA-binding domain Family: Replication modulator SeqA, C-terminal DNA-binding domain
19	c2hkIB_			14.4	10	PDB header: transferase Chain: B; PDB Molecule: l,d-transpeptidase; PDBTitle: crystal structure of enterococcus faecium l,d-2 transpeptidase c442s mutant
20	d2acya_			14.0	14	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
21	d1x8da1		not modelled	14.0	21	Fold: Ferredoxin-like Superfamily: Dimeric alpha+beta barrel Family: YiiL-like
22	c2bjea_		not modelled	13.5	17	PDB header: hydrolase Chain: A; PDB Molecule: acylphosphatase; PDBTitle: acylphosphatase from sulfolobus solfataricus. monclinic p212 space group
23	c2k7ba_		not modelled	13.3	6	PDB header: metal binding protein Chain: A; PDB Molecule: calcium-binding protein 1; PDBTitle: nmr structure of mg2+-bound cabp1 n-domain
24	d1w2ia_		not modelled	12.9	21	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
25	d1k8ua_		not modelled	12.7	27	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
26	c1f8ab_		not modelled	12.4	12	PDB header: isomerase Chain: B; PDB Molecule: peptidyl-prolyl cis-trans isomerase nima; PDBTitle: structural basis for the phosphoserine-proline recognition2 by group iv ww domains
27	d1i6pa_		not modelled	12.3	14	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
28	d4icba_		not modelled	12.2	18	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K
29	d1j55a_		not modelled	12.0	12	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins

30	d1ekja	Alignment	not modelled	12.0	14	Fold: Resolvase-like Superfamily: beta-carbonic anhydrase, cab Family: beta-carbonic anhydrase, cab
31	d1ulra	Alignment	not modelled	11.4	16	Fold: Ferredoxin-like Superfamily: Acylphosphatase/BLUF domain-like Family: Acylphosphatase-like
32	c2a4jA	Alignment	not modelled	11.4	14	PDB header: structural protein Chain: A: PDB Molecule: centrin 2; PDBTitle: solution structure of the c-terminal domain (t94-y172) of2 the human centrin 2 in complex with a 17 residues peptide3 (p1-xpc) from xeroderma pigmentosum group c protein
33	d1m39a	Alignment	not modelled	11.4	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
34	d1dj0a	Alignment	not modelled	11.4	12	Fold: Pseudouridine synthase Superfamily: Pseudouridine synthase Family: Pseudouridine synthase I TruA
35	d2gaxa1	Alignment	not modelled	11.3	17	Fold: Peptidyl-tRNA hydrolase II Superfamily: Peptidyl-tRNA hydrolase II Family: Peptidyl-tRNA hydrolase II
36	c2ggmA	Alignment	not modelled	11.1	14	PDB header: cell cycle Chain: A: PDB Molecule: centrin-2; PDBTitle: human centrin 2 xeroderma pigmentosum group c protein2 complex
37	c2kaxA	Alignment	not modelled	11.1	23	PDB header: metal binding protein Chain: A: PDB Molecule: protein s100-a5; PDBTitle: solution structure and dynamics of s100a5 in the apo and2 ca2+ -bound states
38	d1e8aa	Alignment	not modelled	11.0	19	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
39	c2k7wB	Alignment	not modelled	10.8	35	PDB header: apoptosis Chain: B: PDB Molecule: bcl-2-like protein 11; PDBTitle: bax activation is initiated at a novel interaction site
40	d1pvaa	Alignment	not modelled	10.6	13	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
41	d1c7va	Alignment	not modelled	10.2	9	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
42	c3br8A	Alignment	not modelled	10.1	10	PDB header: hydrolase Chain: A: PDB Molecule: probable acylphosphatase; PDBTitle: crystal structure of acylphosphatase from bacillus subtilis
43	d2g0wa1	Alignment	not modelled	10.1	15	Fold: TIM beta/alpha-barrel Superfamily: Xylose isomerase-like Family: loll-like
44	d2o5ha1	Alignment	not modelled	10.1	17	Fold: NMB0513-like Superfamily: NMB0513-like Family: NMB0513-like
45	c3p6IA	Alignment	not modelled	9.9	4	PDB header: isomerase Chain: A: PDB Molecule: sugar phosphate isomerase/epimerase; PDBTitle: crystal structure of a sugar phosphate isomerase/epimerase (bdi_1903)2 from parabacteroides distasonis atcc 8503 at 1.85 a resolution
46	c2rgiA	Alignment	not modelled	9.9	23	PDB header: metal binding protein Chain: A: PDB Molecule: protein s100-a2; PDBTitle: crystal structure of ca2+-free s100a2 at 1.6 a resolution
47	c2rqsa	Alignment	not modelled	9.9	16	PDB header: isomerase Chain: A: PDB Molecule: parvulin-like peptidyl-prolyl isomerase; PDBTitle: 3d structure of pin from the psychrophilic archeon cenarcheaum2 symbiosum (cspin)
48	c2i18A	Alignment	not modelled	9.9	7	PDB header: metal binding protein Chain: A: PDB Molecule: calcium-binding protein; PDBTitle: the refined structure of c-terminal domain of an ef-hand2 calcium binding protein from entamoeba histolytica
49	c2kz2A	Alignment	not modelled	9.7	7	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin; PDBTitle: calmodulin, c-terminal domain, f92e mutant
50	c1ponB	Alignment	not modelled	9.5	30	PDB header: calcium-binding protein Chain: B: PDB Molecule: troponin c; PDBTitle: site iii-site iv troponin c heterodimer, nmr
51	d1xk4c1	Alignment	not modelled	9.5	15	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
52	d1j6ya	Alignment	not modelled	9.3	12	Fold: FKBP-like Superfamily: FKBP-like Family: FKBP immunophilin/proline isomerase
53	c2b1uA	Alignment	not modelled	9.3	11	PDB header: metal binding protein Chain: A: PDB Molecule: calmodulin-like protein 5; PDBTitle: solution structure of calmodulin-like skin protein c2 terminal domain
54	d1oqpa	Alignment	not modelled	9.1	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
55	d5pala	Alignment	not modelled	9.0	25	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
56	c2ciuA	Alignment	not modelled	9.0	16	PDB header: protein transport Chain: A: PDB Molecule: import inner membrane translocase subunit tim21

					PDBTitle: structure of the ims domain of the mitochondrial import2 protein tim21 from <i>s. cerevisiae</i>
57	d2p5zx2	Alignment	not modelled	8.9	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
58	d1m45a	Alignment	not modelled	8.7	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
59	d1a4pa	Alignment	not modelled	8.7	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
60	d1cb1a	Alignment	not modelled	8.5	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K
61	d1zmba1	Alignment	not modelled	8.4	Fold: Flavodoxin-like Superfamily: SGNH hydrolase Family: Putative acetylxyran esterase-like
62	d2pq3a1	Alignment	not modelled	8.3	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
63	c210vB	Alignment	not modelled	8.2	PDB header: metal binding protein Chain: B: PDB Molecule: protein s100-a16; PDBTitle: solution structure of calcium(ii) bound s100a16
64	c3ucoB	Alignment	not modelled	8.2	PDB header: lyase/lyase inhibitor Chain: B: PDB Molecule: carbonic anhydrase; PDBTitle: cocomyx beta-carbonic anhydrase in complex with iodide
65	d1ksoa	Alignment	not modelled	8.2	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
66	c3cnyA	Alignment	not modelled	8.2	PDB header: biosynthetic protein Chain: A: PDB Molecule: inositol catabolism protein iole; PDBTitle: crystal structure of a putative inositol catabolism protein iole2 (iole, lp_3607) from lactobacillus plantarum wcf51 at 1.85 a3 resolution
67	d1g33a	Alignment	not modelled	8.2	Fold: EF Hand-like Superfamily: EF-hand Family: Parvalbumin
68	d1qlka	Alignment	not modelled	7.9	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
69	d1wrka1	Alignment	not modelled	7.8	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
70	d1qx2a	Alignment	not modelled	7.8	Fold: EF Hand-like Superfamily: EF-hand Family: Calbindin D9K
71	c3h4sE	Alignment	not modelled	7.7	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
72	c2p5zX	Alignment	not modelled	7.7	PDB header: structural genomics, unknown function Chain: X: PDB Molecule: type vi secretion system component; PDBTitle: the e. coli c3393 protein is a component of the type vi secretion2 system and exhibits structural similarity to t4 bacteriophage tail3 proteins gp27 and gp5
73	d1yuta1	Alignment	not modelled	7.6	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
74	c3fs7D	Alignment	not modelled	7.6	PDB header: metal binding protein Chain: D: PDB Molecule: parvalbumin, thymic; PDBTitle: crystal structure of gallus gallus beta-parvalbumin (avian2 thymic hormone)
75	c3lmzA	Alignment	not modelled	7.5	PDB header: isomerase Chain: A: PDB Molecule: putative sugar isomerase; PDBTitle: crystal structure of putative sugar isomerase. (yp_001305105.1) from2 parabacteroides distasonis atcc 8503 at 1.44 a resolution
76	d1ggza	Alignment	not modelled	7.5	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
77	c2ktgA	Alignment	not modelled	7.5	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
78	d3d37a1	Alignment	not modelled	7.5	Fold: Phage tail proteins Superfamily: Phage tail proteins Family: Baseplate protein-like
79	c1vs3B	Alignment	not modelled	7.4	PDB header: isomerase Chain: B: PDB Molecule: tRNA pseudouridine synthase a; PDBTitle: crystal structure of the tRNA pseudouridine synthase trua from thermus2 thermophilus hb8
80	d1zaca	Alignment	not modelled	7.4	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
81	c3ec8A	Alignment	not modelled	7.3	PDB header: cell adhesion Chain: A: PDB Molecule: putative uncharacterized protein flj10324; PDBTitle: the crystal structure of the ra domain of flj10324 (radil) Fold: beta-Grasp (ubiquitin-like)

82	d1wxaal		not modelled	7.2	5	Superfamily: Ubiquitin-like Family: Ras-binding domain, RBD
83	d1sw8a_		not modelled	7.2	13	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
84	c1bomB_		not modelled	7.1	17	PDB header: insulin-like brain-secretory peptide Chain: B: PDB Molecule: bombyxin-ii, bombyxin a-6; PDBTitle: three-dimensional structure of bombyxin-ii, an insulin-2 related brain-secretory peptide of the silkworm bombyx3 mori: comparison with insulin and relaxin
85	c3ngfA_		not modelled	7.1	22	PDB header: isomerase Chain: A: PDB Molecule: ap endonuclease, family 2; PDBTitle: crystal structure of ap endonuclease, family 2 from brucella2 melitensis
86	c2dk6A_		not modelled	7.1	21	PDB header: signaling protein Chain: A: PDB Molecule: parp11 protein; PDBTitle: solution structure of wwe domain in poly (adp-ribose)2 polymerase family, member 11 (parp 11)
87	clozsA_		not modelled	7.0	13	PDB header: structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: c-domain of human cardiac troponin c in complex with the2 inhibitory region of human cardiac troponin i
88	c2kdhA_		not modelled	7.0	15	PDB header: structural protein Chain: A: PDB Molecule: troponin c, slow skeletal and cardiac muscles; PDBTitle: the solution structure of human cardiac troponin c in2 complex with the green tea polyphenol; (-)-3 epigallocatechin-3-gallate
89	d2obha1		not modelled	7.0	15	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
90	c2pmvB_		not modelled	6.8	21	PDB header: structural genomics, unknown function Chain: B: PDB Molecule: ras and ef-hand domain-containing protein; PDBTitle: ef-hand domain of human rasef
91	c2gv1A_		not modelled	6.8	23	PDB header: hydrolase Chain: A: PDB Molecule: probable acylphosphatase; PDBTitle: nmr solution structure of the acylphosphatase from2 eschaerichia coli
92	c2z4hb_		not modelled	6.7	8	PDB header: signaling protein activator Chain: B: PDB Molecule: copper homeostasis protein cufc; PDBTitle: crystal structure of the cpx pathway activator nlpe from2 escherichia coli
93	c2a8cE_		not modelled	6.7	11	PDB header: lyase Chain: E: PDB Molecule: carbonic anhydrase 2; PDBTitle: haemophilus influenzae beta-carbonic anhydrase
94	c1jc2A_		not modelled	6.7	19	PDB header: structural protein Chain: A: PDB Molecule: troponin c, skeletal muscle; PDBTitle: complex of the c-domain of troponin c with residues 1-40 of2 troponin i
95	d1jc2a_		not modelled	6.7	19	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like
96	c1q88B_		not modelled	6.6	9	PDB header: dna binding protein Chain: B: PDB Molecule: 39 kda initiator binding protein; PDBTitle: crystal structure of the c-domain of the t.vaginalis inr2 binding protein, ibp39 (monoclinic form)
97	d3c1va1		not modelled	6.4	43	Fold: EF Hand-like Superfamily: EF-hand Family: S100 proteins
98	c2vtgA_		not modelled	6.4	7	PDB header: metal-binding protein Chain: A: PDB Molecule: ionized calcium-binding adapter molecule 2; PDBTitle: crystal structure of human iba2, trigonal crystal form
99	d1cmga_		not modelled	6.4	3	Fold: EF Hand-like Superfamily: EF-hand Family: Calmodulin-like